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March 17, 2021

VIA EMAIL AND PRIVATE CARRIER

Gary Schold, Project Manager
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Maryland Department of the Environment
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Subject: Transmittal of Vapor-Intrusion Investigation and Sub-Slab-Depressurization-System, Operation Round 29 August 2020 Monitoring Report
Lockheed Martin Corporation – Middle River Complex
2323 Eastern Boulevard, Middle River, Baltimore County, Maryland

Dear Mr. Schold,

For your review, please find enclosed two hard copies with a CD of the above-referenced document. This report documents the second round of indoor air and sub-slab vapor monitoring for calendar year 2020 at the Lockheed Martin Middle River Complex in Middle River, Maryland. This report contains the Round 29 (August 2020) monitoring results for Buildings A, B, and C, and background sampling locations. This report also includes a status update of the two sub-slab-depressurization vapor -intrusion-mitigation systems originally installed at the Middle River Complex in 2008.

If possible, we respectfully request to receive MDE's document review comments by April 27, 2021.

Please let me know if you have any questions. My office phone is (301) 548-2209.

Sincerely,

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Project Lead, Environmental Remediation

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VAPOR-INTRUSION INVESTIGATION AND SUB-SLAB-DEPRESSURIZATION-SYSTEM OPERATION, ROUND 29 AUGUST 2020 MONITORING REPORT LOCKHEED MARTIN MIDDLE RIVER COMPLEX 2323 EASTERN BOULEVARD MIDDLE RIVER, MARYLAND

Prepared for:
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March 2021

Revision: 0

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ACRONYMS AND ABBREVIATIONS

AF	attenuation factor
ca	carcinogenic
CCTV	closed-circuit television
COC	chemical(s) of concern
DCA	dichloroethane
DCE	dichloroethene
DUP	duplicate
°F	degrees Fahrenheit
Freon 22	chlorodifluoromethane
GAC	granular activated-carbon
GC/MS	gas chromatograph/mass spectrometer
GC/PID	gas chromatograph/photoionization detector
HVAC	heating/ventilation/air conditioning
in. Hg	inch(es) of mercury
IA	indoor air
J	compound positively identified, but quantitation is estimated
lb(s)	pound(s)
lb(s)/day	pound(s) per day
lb(s)/month	pound(s) per month
Lockheed Martin	Lockheed Martin Corporation
MDE	Maryland Department of the Environment
µg/L	microgram(s) per liter
µg/m^3	microgram(s) per cubic meter
mph	mile(s) per hour
MPL	mechanical prototype laboratory
MRAS	MRA Systems, Inc.
MRC	Middle River Complex
MST	Mission Systems & Training
MTBE	methyl tertiary-butyl ether
nc	noncarcinogenic

OSHA	Occupational Safety and Health Administration
PCE	tetrachloroethene
PEL	permissible exposure limit
RMS	Rotary and Mission Systems
RSL	regional screening-level
PVC	polyvinyl chloride
SSD	sub-slab depressurization
SSDS	sub-slab-depressurization system
SV	sub-slab vapor
Tetra Tech	Tetra Tech, Inc.
TCA	trichloroethane
TCE	trichloroethene
TMB	trimethylbenzene
TO-15	Toxic Organic-15 analytical method
U	not detected
USEPA	United States Environmental Protection Agency
VC	vinyl chloride
VI	vapor intrusion
VMP	vapor monitoring point
VOC	volatile organic compound

SECTION 1
INTRODUCTION

Tetra Tech, Inc., (Tetra Tech) has prepared this report on behalf of Lockheed Martin Corporation (Lockheed Martin) to document the second round of indoor air (IA) and sub-slab vapor (SV) monitoring for calendar year 2020 at the Lockheed Martin Middle River Complex (MRC) in Middle River, Maryland. This report contains the Round 29 (August 2020) monitoring results for Buildings A, B, and C, and background sampling locations. This report also includes a status update of the two sub-slab-depressurization (SSD) vapor-intrusion-mitigation systems originally installed at the Middle River Complex in 2008: one beneath the Building A plating shop and the other beneath the southern portion of the Building C basement. This monitoring is part of an ongoing investigation to evaluate whether volatile organic compounds (VOCs) in sub-slab vapors (associated with soil and groundwater chemicals of concern [COC] at the site) might be moving into indoor air at Middle River Complex facilities, and to evaluate whether subsurface vapor contamination remains at concentrations dictating continued operation of the sub-slab-depressurization mitigation system, or if a transition/exit strategy can be performed. The *Vapor Intrusion Management Plan* (Tetra Tech, 2019a), including associated decision matrices, provide the basis for the vapor intrusion strategy for the site. The second monitoring round for calendar year 2020 continues investigations previously described in the reports listed in Table 1-1.

This report is organized into the following sections:

Section 2—Round 29 Indoor-Air and Vapor-Intrusion Investigation: Briefly summarizes previous investigations and interim measures and describes the sampling methodology used for the current investigation round.

Section 3—Round 29 Results: Presents the results of the August 2020 investigation.

Section 4—Sub-Slab-Depressurization-System Data Analysis: Summarizes the operation and monitoring of the sub-slab-depressurization systems in Buildings A and C for the reporting period from April 1, 2020 to September 30, 2020.

Section 5—Conclusions: Presents conclusions based on the Round 29 sampling results.

Section 6—References: Lists the references used in this report.

Tables, figures, and appendices are at the end of the report body following Section 6.

SECTION 2
ROUND 29 INDOOR-AIR-QUALITY AND VAPOR-INTRUSION INVESTIGATION

This section briefly summarizes previous investigations and interim measures and describes the sampling methodology used in the current investigation round.

2.1 PREVIOUS INVESTIGATIONS AND INTERIM MEASURES

The indoor air (IA) and sub-slab vapor (SV) investigation described herein was initially designed to evaluate whether volatile organic compounds (VOCs) associated with soil and groundwater contamination at the site might be moving into IA at Middle River Complex (MRC) facilities. Tetra Tech, Inc., (Tetra Tech) industrial hygienists chose the initial sampling locations for Buildings A, B, and C during a 2006 site reconnaissance. Additional sampling locations were selected throughout program implementation based on previous IA and SV monitoring results (Tetra Tech, 2017d).

Although IA results had predominantly been below risk-based screening levels after the first three rounds of sampling in February 2006, December 2006, and April 2007 (with one trichloroethene [TCE] exceedance in 109 samples [1]), two sub-slab depressurization (SSD) vapor intrusion mitigation systems (one beneath the former Building A plating shop and the other beneath the southern portion of the Building C basement) were installed at the MRC in 2008 (Tetra Tech, 2008d), based on elevated SV concentrations detected beneath the buildings. The Building A SSD system (SSDS) was expanded in 2010 (Tetra Tech, 2010c), in 2016 (Tetra Tech, 2016d), and again in 2017 (Tetra Tech, 2017f) after elevated SV concentrations were detected at additional locations.

[1] One TCE concentration (36 micrograms per cubic meter [µg/m^3]) out of 109 total samples (including duplicates) exceeded the previously used MDE indoor air screening level (25 µg/m^3). The exceedance was observed in the duplicate sample of a field-duplicate pair; TCE was not detected in the corresponding parent sample. Since then, the indoor air screening level has been reduced to 8.8 µg/m^3; even so, that result would have been the only exceedance.

A site-specific TCE screening-level of 35 µg/m^3 for indoor air has been derived for the Building A basement based on limited exposure potential in the basement. This screening level was approved by the Maryland Department of the Environment (MDE) in July 2017. However, the site-specific screening level for the basement does not represent a final risk-based indoor air cleanup criterion.

The Building C SSDS was expanded in 2012 (Tetra Tech, 2012c) and 2013 (Tetra Tech, 2013c) for similar reasons (elevated SV concentrations in the central portion of the basement). Subsequent rounds of IA sampling indicated that main floor contaminant concentrations in IA resulting from vapor intrusion (VI) were being controlled by the SSDSs.

However, recent investigations in Building A and the Building A basement have identified elevated TCE concentrations in SV, water (groundwater and water in sumps), and in basement IA. The following presents a list of subsequent VI investigations in Building A and the Building A basement from 2014–2018, followed by a more detailed description of each investigation:

(a.) portable gas-chromatograph/mass-spectrometer (GC/MS) surveys of IA and sub-slab air from within Building A basement floor features (e.g., sumps, drains) in February 2014 and April 2016 (Tetra Tech, 2014b, 2016b)

(b.) installation of three portable air-filtration units in January 2015 in the Building A basement to mitigate TCE exceedances in indoor air (Tetra Tech, 2016d)

(c.) installation and sampling of additional Vapor Pin™ vapor monitoring points (VMPs), including seven in the eastern wall of Building A basement, two in the Building A basement floor, and one beneath the main floor of Building A in March 2016 (Tetra Tech, 2016b)

(d.) collection of air and water samples from select floor features (i.e., sumps, drains) in Building A basement in May 2016 (Tetra Tech, 2016b, 2016c)

(e.) a continuous air-monitoring survey of SV and breathing-zone IA in the Building A basement over two months (February 24 to April 21, 2017) (Tetra Tech, 2017b)

(f.) a test to determine the effects resulting from covering select floor features (e.g., sumps and drains that had exhibited the highest TCE concentrations) on basement IA concentrations in March 2017 (Tetra Tech, 2017b)

(g.) flow testing in two sumps in the southern portion of Building A basement to determine the volume of water being discharged from each individual sump back to Lift Station #5 in March–May 2018; and sampling of water in Building A basement sumps in March 2018, including water from a sump (not previously sampled) in the utility corridor between Building A basement and the Drop Hammer Building; an assessment of the data obtained from this study sought to determine a constructible, cost-effective solution that effectively controls water and vapor accumulation in the sumps (Tetra Tech, 2018e).

Elevated TCE concentrations detected in air within, and above, select floor features (e.g., sumps) in the Building A basement led to the installation (as an interim measure) of three additional air-purifying filters (for a total of six filters) in the basement in May 2017 to target floor features that have shown elevated TCE concentrations (Tetra Tech, 2018b). The continuous air-monitoring survey also identified significant sources of IA contamination in the basement at sumps associated with abandoned and/or removed heaters (Tetra Tech, 2017b). In addition to the new air-purifying filters, additional activities were completed in the summer of 2017 in Building A and its basement to address the elevated VOC results in SV and sump water from several recent investigations. A closed-circuit television (CCTV) camera survey of floor features in the Building A basement, including the sumps in existing and former heating rooms, the air-duct network that runs behind the eastern basement wall, the storm-drain line that runs north/south under the basement floor, and the smaller floor drains, was conducted to determine their condition, identify possible breaches, and better understand their direction and design. The CCTV survey indicated that the underground network of floor drains, pipes, and manholes/sumps are interconnected. Floor drains that might have mitigated water infiltration in and near pits associated with former equipment in Building A appeared to be connected to nearby sumps and storm drains. Other floor drains appeared to have been abandoned, which is supported by information received while conducting historical interviews of on-site personnel (Tetra Tech, 2018b).

During the VI sampling events conducted in March/April 2016 (Tetra Tech, 2016b) and March 2017 (Round 22), sampling location SV-175-A (Figure 2-1) on the Building A basement floor had the highest TCE concentrations (460,000 and 650,000 micrograms per cubic meter [$\mu g/m^3$], respectively). The maximum August 2017 (Round 23) SV TCE concentration (21,000 $\mu g/m^3$) was also detected at location SV-175-A. Location SV-175-A was removed from the sampling list and not sampled in February 2018 (Round 24) since consistently elevated TCE concentrations detected during previous sampling negated the need to continue collecting data from this location at that time. High TCE SV concentrations were also noted at two locations (SV-171-A and SV-173-A) in the eastern wall of the Building A basement during 2016 (Tetra Tech, 2016b), at three locations (SV-170-A, SV-171-A, and SV-173-A) in the eastern wall of the Building A basement in 2017 (in both the March [Round 22] and August [Round 23] sampling), and at two locations (SV-171-A and SV-173-A) in the eastern wall of the Building A basement in February 2018 (Round 24).

These high TCE concentrations prompted a pilot test conducted on July 6, 2017; this test evaluated the feasibility of extracting vapors from within the basement duct system at former heater room A-9/sump HRS5 (located immediately adjacent to SV-175-A, where the highest TCE concentrations have been detected historically) using the existing SSDS (Tetra Tech, 2018b). The pilot test was successful, HRS5 was left connected to the SSDS, and the system extracted vapor from this sealed sump until it was abandoned by filling it with concrete in December 2019.

In July 2017 (Tetra Tech, 2017b), a FROG 4000™ gas-chromatograph/photoionization detector (GC/PID) survey of the main floor of Building A assessed whether TCE detected in indoor air near the basement sumps was migrating through air ducts connected to the sumps, and through the floor air-vents, to the main floor of Building A. TCE detections ranging from 32.8 µg/m^3 to 103.7 µg/m^3 were recorded in samples collected from inside the vents and in IA above the vents; therefore, in September 2017 each air vent on the main floor (regardless of screening results) was sealed using a vapor barrier and a bolted-down steel plate. Sealing these floor vents on the main floor of Building A closed off this exposure pathway and prevented further migration of TCE vapor from the basement. A subsequent FROG 4000™ survey in October 2017 verified seal integrity at the 42 air-vent locations and confirmed the absence of IA TCE near the vents. No TCE was detected in any IA sample collected; all results were non-detected (Tetra Tech, 2018c).

In January–May 2018, Tetra Tech conducted an inspection of the sump pumps in Building A basement, and conducted flow testing in two sumps (SP1/SP1A, and the utility corridor sump) in the southern portion of Building A to measure the volume of water being discharged (via polyvinyl chloride [PVC] piping) from each sump to sanitary sewer Lift Station #5. Water samples were also collected from sumps in Building A basement during this investigation. Information gained from the January–May 2018 studies was used to determine constructible, cost-effective solutions that control water and vapor accumulation in Building A basement sumps; possible solutions for mitigation currently remain under evaluation (Tetra Tech, 2018e).

The sump inspection determined that the pump in sumps SP1/SP1A was the only one in the target area (southern portion of Building A basement) that pumps a significant volume of water back to Lift Station #5, and subsequently the sanitary sewer system. Only a small amount of water (less than three gallons) was collected in the utility corridor sump over a two-month period.

The respective TCE concentrations detected in sump water at SP1/SP1A during the last three sampling events were: 120 microgram(s) per liter (µg/L) and 2,700 µg/L in May 2016; 160 µg/L and 440 µg/L in March 2017; and 160 µg/L (SP1 only)[2] in March 2018. The TCE concentration detected in the utility corridor sump was 53 µg/L. These concentrations are two to three orders of magnitude higher than the TCE concentrations (2.3 µg/L and 2.6 µg/L) detected in water samples collected from Lift Station #5, indicating that dilution is likely occurring at the lift station due to the other discharged water it receives. Various pipes discharge into the lift station, including those carrying heating, ventilation, and air conditioning (HVAC) condensate water. This additional water is likely responsible for the apparent low concentration of TCE concentrations detected at Lift Station #5 as compared to the concentrations detected at the sumps.

2.2 INVESTIGATION PROCEDURES

The sampling plan for Round 29 was based on historical detections, information obtained during site reconnaissance, and a review of historical information and reports. IA and SV samples were collected from Buildings A, B, and C during Round 29 sampling. Relevant guidance from the United States Environmental Protection Agency [USEPA] (USEPA, 1996, 2004, 2012, and 2015) and the Maryland Department of the Environment [MDE] (MDE, 2006) was used to develop the investigation methodology.

IA and SV sampling within Buildings A, B and C was completed in accordance with the work plan for Rounds 24–29 (Tetra Tech, 2017d). Background outdoor air samples were collected from the same sampling locations as had been used for the previous round (i.e., Round 28 in February 2020; see Figure 2-2). Not all existing monitoring points inside the subject buildings were sampled during Round 29. As in previous rounds, samples were selectively collected in or adjacent to areas where contaminants had been detected previously, or in areas where contaminants are currently suspected of being present.

TCE has been targeted as a primary chemical of concern (COC); it has a history of use at the site; has been detected in groundwater and soil gas; can be toxic to human health depending upon the

[2]The only sample collected in March 2018 was from SP1, as the focus at that time was on that sump. Note that sumps SP1/SP1A are connected underground.

dose received and the duration and means of exposure; and is mobile in the environment. Historical sampling locations and the sub-slab VMPs sampled in Buildings A, B, and C during this round are shown in Figures 2-3, 2-4, and 2-5, respectively. IA sampling locations were co-located with most of the monitored SV sampling locations to evaluate IA and any possible relationship between SV and IA in Building A, B, and C.

Round 29 sampling was performed on August 25 and 26, 2020. Seventy-two samples (and eight duplicates) were collected using Summa® canisters as follows:

- four background ambient-air samples were collected at the same locations used in the previous round (Fig 2-2)
- 35 IA samples (and four duplicates) from Buildings A, B, and C:
  - 15 IA samples (and two duplicates) from Building A
  - two IA samples from Building B
  - 18 IA samples (and two duplicates) from Building C
- 33 SV samples (and four duplicates) from Buildings A, B, and C:
  - 16 SV samples (and two duplicates) from Building A
  - two SV samples from Building B
  - 15 SV samples (and two duplicates) from Building C

The "-A," "-B," and "-C" suffixes in the sampling location designations correspond with Buildings A, B, and C, respectively.

Five IA samples from Building C (144-C, 145-C, 146-C, 150-C, and 152-C) were collected in the machine shop of Lockheed Martin Rotary and Mission Systems (RMS) (formerly the Lockheed Martin Mission Systems & Training [MST] mechanical prototype laboratory [MPL]). Monitoring continues in this area because TCE was detected in IA at a concentration greater than its screening level during Round 15 (August 2013). The five sampling locations that provide data for possible worker-exposure areas within the MPL are:

- 144-C: machine shop area
- 145-C: cubicle area
- 146-C: kitchen area
- 150-C: kitchen area
- 152-C: machine shop area

Six SV samples (four in the eastern wall of the Building A basement [171-A, 172-A, 173-A, and 177-A], one in the Building A basement floor [174-A], and one beneath the main floor of Building A [168-A]), were collected during Round 29 to target possible TCE sources, including a former underground storage tank and vapor degreasers associated with former plating shop operations.

Before SV sampling, the tubing for each VMP was purged of atmospheric air, allowing SV to enter the probe and tubing. Purging was performed by attaching the sample tubing to a low-flow sampling pump set to an approximate flow rate of 200 cubic centimeters per minute to minimize the potential mobilization of SV that could bias the sample. One to three volumes (i.e., the volume of the sample probe and tube) were purged to ensure that collected samples were representative of SV conditions. IA samples were collected on the ground surface, with select samples being co-located with the corresponding SV sampling location.

Each SV sample was collected over one hour and each IA sample was collected over an eight-hour period using preconditioned Summa® canisters to ensure subsurface equilibration and avoid high negative pressure that might mobilize SV and bias the IA results. The one-liter stainless-steel canisters were equipped with in-line particulate filters and integral controllers that control the rate of filling during sampling. SV samples were collected through Teflon® tubing attached to the stainless-steel Vapor Pins® or vapor implants. Each sampling location was routinely inspected during the sampling period to ensure appropriate operation of sampling devices, sample integrity, and to document conditions within the area that might affect results. Samples were collected by opening the valve on the canister, which allowed air to enter the canister at the rate set by the controller (a one-liter canister over a period of one hour [for SV] and over a period of eight hours [for IA]). Controllers were calibrated in the laboratory and shipped to the field with a sufficient flow rate that would maintain the necessary vacuum pressure in the Summa® canister for the one-hour and eight-hour sampling intervals. Samples were collected and analyzed for VOCs by USEPA Method Toxic Organic-15 (TO-15). SV samples were collected in accordance with standard operating procedures developed by the USEPA Environmental Response Team for soil vapor

sampling (USEPA, 1996), and methodologies developed by the USEPA Office of Research and Development (USEPA, 2004). After sampling had been completed, each canister was closed and sent to an off-site laboratory (Eurofins TestAmerica, Inc. in Knoxville, Tennessee) under proper chain of custody procedures.

The SSD systems in the Building C basement area and in Building A were shut down approximately 24 hours before sampling began. The SSD systems were restarted within one hour after sampling had been completed in Buildings A and C; this is consistent with previous monitoring episodes. The following observations were recorded during the August 2020 sampling:

- Mean outdoor ambient temperature during the sampling period was 81 degrees Fahrenheit (°F) on August 25, 2020 and 78°F on August 26, 2020. Barometric pressure increased slightly during the sampling period, from 29.82 inches of mercury (in. Hg) to 29.87 in. Hg. Wind direction on August 25 was from the west/southwest and from the west/northwest/southwest on August 26, with average wind speed ranging from 3 to 20 miles per hour (mph). Skies were mostly cloudy on August 25 and partly cloudy on August 26, 2020.

- 0.03 inches of precipitation (rain) was recorded on August 25, and 0.10 inches on August 26, 2020.

- Water was present in the Building B flush-mounted vault (shallow subsurface groundwater accumulation) at sampling locations 121-B and 140-B, preventing sample collection. Alternate IA and SV samples were collected at nearby locations 101-B and 100-B, respectively. SV locations are limited in this area of Building B; the closest alternate location was chosen to collect a replacement SV sample.

- IA and SV samples from 118-A and SV sample from 139-A were collected in the bond-layup room (Building A production floor), where a positive-pressure HVAC system was operating. The door adjacent to 139-A was opened and closed frequently during sampling.

- The lid for sample location 081-A could not be removed because it had been painted over when the floor was painted; therefore, an SV sample was not collected at 081-A. A replacement SV sample was collected at nearby location 139-A.

- Sampling location 015-A is in the former plating shop area (Building A production floor). After the sampling round in August 2015, this area had undergone redevelopment and construction. A new floor has been installed, and this area is now an extension of the bond-layup room. IA and SV samples from 015-A were collected in this newly expanded bond-layup room (former plating shop), where a positive-pressure HVAC system was operating.

- Sampling locations 018-A, 093-A, 116-A, and 138-A were sampled in the Building A basement. Additional samples were collected from the four basement locations added to the sampling program in the work plan (Tetra Tech, 2017d) due to ongoing TCE VI investigation there. These include four additional sampling locations in the eastern wall (171-A, 172-A, 173-A, and 177-A) and one in the floor (174-A).

- The air-purifying units in the Building A basement were operating when samples were collected.

- Several samples (018-A, 021-A, 075-A, 078-A, 079-A, 081-A, 117-A, 118-A, 100-B, and 101-B) were collected near operating overhead ceiling fans and/or floor fans used to cool the building during warmer months.

- The sample from 168-A was collected near the location of a former vapor degreaser on the main floor of Building A.

- IA and SV samples in Building C basement at locations 001-C and 004-C were collected approximately 70 feet from a bay door to the outside that was opened intermittently.

- Samples IA-144-C through IA-146-C, IA-150-C, and IA-152-C in Building C basement were collected in a positive-pressure, air-conditioned room (the RMS MPL machine shop).

- Building A is a one-story building, except for a basement corridor under an open-air loading dock on its western side. The large doors at the loading docks on the western side of the building were opened periodically to allow carts, forklifts, personnel, and equipment to pass. Increased ventilation associated with open doors might have affected concentrations in samples collected on the first floor of Building A. No personnel or other activities were observed in the Building A basement.

- The bay doors across the southern end of Building B were open during sampling. The automatic bay door at the southeastern corner of Building B was opened and closed quickly to allow carts and equipment to pass. The opening of the bay doors might affect concentrations in samples collected from the southernmost sampling locations (IA-100-B and IA-101-B).

- The Building C basement is generally accessed via two automatic rolling doors on its eastern and southern sides. These doors open and close quickly to allow carts and forklifts to pass. The automatic rolling door approximately 40 feet east of sampling location 141-C was opened and closed intermittently during the day. The bay doors at the southern and southeastern sides of the Building C basement were open during the sampling period. This might have influenced IA concentrations in the samples collected from locations 001-C and 004-C.

- The most personnel and greatest activity were observed in Building B, in locations from the thrust-reverser assembly area in the southern portion of the building to the machining area in its central portion. Less activity was observed in Building A, where activity was

generally focused in the expanded bond-layup room (former plating shop area) and autoclave areas, and in the parts and assembly areas. No activity was observed in the southern portion of Building C, except for a cart or forklift passing through the area periodically. Light activity (three people) was observed in the machine shop area in Building C basement.

- The southern end of the Building C basement is mostly vacant, having been cleared of workstations and equipment by MRA Systems, Inc. (Note that ownership of MRA Systems, Inc., now MRAS Systems LLC, [collectively, MRAS] was transferred from General Electric [GE] to Singapore Technologies Engineering, Ltd. [ST Engineering]. Some materials are being temporarily stored in this area.)

- The pressure gauges on most Summa® canisters responded instantaneously upon opening the valve by dropping to between -23 in. Hg and -30 in. Hg. The ending readings on pressure gauges of most Summa® canisters were between 2 in. Hg and -16 in. Hg when sampling was complete. One pressure gauge (SV-100-B) had an initial reading of 23 in. Hg and an ending reading of 0 in. Hg. Despite the varied pressure reading and faulty regulator, adequate volumes for analysis were collected in all Summa® canisters. Pressure readings for each Summa® canister are recorded on the chain of custody forms (Appendix A).

Samples were analyzed for the current target-compound list, last amended on February 12, 2012:

- 1,1,1-trichloroethane (1,1,1-TCA)
- 1,1,2-trichloroethane (1,1,2-TCA)
- 1,1-dichloroethane (1,1-DCA)
- 1,1-dichloroethene (1,1-DCE)
- 1,2,3-trimethylbenzene (1,2,3-TMB)
- 1,2,4-trichlorobenzene
- 1,2,4-trimethylbenzene (1,2,4-TMB)
- 1,2-dichloroethane (1,2-DCA)
- 1,3,5-trimethylbenzene (1,3,5-TMB)
- benzene
- carbon tetrachloride
- chlorodifluoromethane (Freon 22)
- chloroform
- *cis*-1,2-dichloroethene (*cis*-1,2-DCE)
- dichlorodifluoromethane
- ethylbenzene
- methylene chloride
- methyl-tertiary-butyl ether (MTBE)
- naphthalene
- tetrachloroethene (PCE)
- toluene
- *trans*-1,2-dichloroethene (*trans*-1,2-DCE)
- trichloroethene (TCE)
- vinyl chloride (VC)
- xylenes (total)

All samples collected during Round 29 were submitted to Eurofins TestAmerica in Knoxville, Tennessee for analysis via GC/MS using cryogenic concentration (as described in Sections 9 and 10 of USEPA Method TO-15 [USEPA, 1999]).

This method was used because of its low detection limits (in the parts-per-billion by volume range), and because it can quantify all VOCs of concern. Eurofins TestAmerica is certified in USEPA Method TO-15 analysis and meets all quality assurance/quality control requirements specified in the TO-15 methodology.

All samples were stored at ambient temperatures and shipped to the laboratory via overnight carrier. All samples were submitted and analyzed within the method's specified 30-day holding time. All appropriate chain of custody documentation was completed for each sample (see Appendix A). A table listing Eurofins TestAmerica' s method detection limits is in Appendix B; Appendix C contains the laboratory analytical reports. Data-validation reports and supporting documentation are in Appendix D.

Validated analytical data were qualified in accordance with USEPA *National Functional Guidelines for Organic Superfund Methods Data Review* (USEPA, 2017). Attaching data qualifiers to analytical results signifies a quality-control noncompliance. During Round 29, the following data qualifiers were applied to data after validation if applicable:

- *J*—indicates an estimated result below the reporting limit, or an estimated result greater than the reporting limit with a quality control nonconformance.
- *U*—indicates the chemical was not detected at the numerical detection limit (i.e., at the sample-specific quantitation limit).
- *UJ*—indicates the chemical was not detected at the (estimated) numerical detection limit (i.e., the sample-specific quantitation limit).
- *E*—indicates the chemical was detected above the instrument calibration range, so the sample was reanalyzed; the result reported is the from the reanalyzed sample.

(Note that in the discussion that follows, when specific samples are referenced the sampling-round suffix ["-29"] has been left off to increase readability). Field duplicate sampling results were evaluated based on the following criteria: (1) a relative percent difference of less than or equal to 50% when both original and duplicate results were greater than the reporting limit, or (2) a difference within two times the reporting limit when original and duplicate results were less than or equal to the reporting limit. Detected and nondetect results for TCE in samples IA-168-A, and IA-153-C and their corresponding duplicates were qualified as estimated (*J* and UJ, respectively)

due to field duplicate imprecision. Detected and nondetect results for methylene chloride in sample SV-153-C and its corresponding duplicate were also qualified as estimated (*J* and UJ, respectively) due to field duplicate imprecision. Detected results for TCE in sample SV-168-A and its corresponding duplicate were also qualified as estimated (*J*) due to field duplicate imprecision. No other results were qualified for field duplicate imprecision during Round 29. Original and field duplicate results were considered separately when evaluating exceedances; i.e., if an analyte's concentration in either the original or duplicate sample exceeded criteria, that exceedance is noted. In summary statistics (e.g., frequency of detection counts), field duplicate pairs were counted as one sample, and calculated averages were reported (e.g., in the "average of all values" calculation), as shown on Section 3 tables.

Note that several samples were affected by laboratory-instrument calibration-range exceedances, and were therefore reanalyzed. The results from the reanalysis are considered usable data and are reported using an *E* flag in the data summary tables.

SECTION 3
ROUND 29 RESULTS

All analytical results for indoor air (IA) and background (ambient air) samples were compared to screening levels for industrial air; these levels are based on United States Environmental Protection Agency (USEPA) *Regional Screening Levels (RSLs) for Chemical Contaminants at Superfund Sites* (USEPA, 2020). Screening the chemicals of concern (COC) uses the lower of the carcinogenic (*ca*) or noncarcinogenic (*nc*) values. Carcinogenic values are based on a 1×10^{-5} (i.e., a one-in-100,000 probability) excess cancer-risk, whereas the noncarcinogenic values are based on a hazard quotient of 1 (i.e., the "no adverse effect" level). In some tables (e.g., Tables 3-1 and 3-2), more conservative screening levels based on a 1×10^{-6} excess cancer-risk or a hazard quotient of 0.1 are referenced for informational purposes only.

These risk benchmarks were selected in accordance with Maryland Department of the Environment (MDE) requirements. Analytical results were also compared to federal Occupational Safety and Health Administration (OSHA) permissible exposure limits (PELs). Alternate values, such as the "Threshold Limit Values" published by the American Council of Governmental Industrial Hygienists, were used for chemicals without published permissible exposure limits.

Sub-slab vapor (SV) sampling results were compared to SV screening values derived in accordance with the methods discussed in USEPA's *OSWER Technical Guide for Assessing and Mitigating the Vapor Intrusion Pathway from Subsurface Sources to Indoor Air* (USEPA, 2015), and were calculated by dividing indoor-air (IA) screening levels by a conservative attenuation factor (AF) of 0.03. The AF represents the adjustment applied to IA screening levels to account for concentration reductions due to diffusive, advective, and/or other attenuating mechanisms as vapor migrates from the sub-slab to IA. Simply stated, SV is expected to dilute upon movement into IA; the AF is the ratio of the IA concentration to its SV concentration under a conservative vapor-intrusion (VI) scenario. The recommended AF in the 2015 USEPA guidance results in higher SV screening values than those used for sampling rounds before August 2012, when an earlier

USEPA AF of 0.1 was used. USEPA further acknowledges that applying the AF of 0.03 to industrial buildings is conservative (i.e., more protective of human health and the environment), because the value was developed based on residential VI studies and does not account for industrial buildings that generally have thicker building slabs and stronger heating/ventilation/air-conditioning (HVAC) systems than residential homes.

3.1 ROUND 29 DATA ANALYSIS

The sampling-round designation (29) is not included when identifying samples or sampling locations in the following text, because all data discussed in this section are from Round 29. For example, an IA sample collected from vapor monitoring point (VMP) 076 (e.g., sample IA-076-A-29) is referred to as "076-A." If comparisons are made to specific samples from previous sampling rounds, they will be identified as such in the text or by using the round-designation suffix (e.g., R06 for Round 6).

Descriptive statistics for Round 29 IA and SV samples are shown in Tables 3-1 and 3-2, respectively. Summary statistics for trichloroethene (TCE) and naphthalene in IA over time are shown in Tables 3-3 and 3-4, respectively. Figures 3-1, 3-2, and 3-3 show Round 29 exceedances in Buildings A, B, and C, respectively. The following chemicals were detected in Round 29 IA and/or SV samples at concentrations exceeding their respective MDE industrial risk-management benchmarks:

- IA—Chloroform
- SV—Naphthalene, 1,1-dichloroethane (1,1-DCA), and TCE

Building A—Tables 3-5 and 3-6 present the Building A IA and SV results, respectively. Locations with exceedances are shown on Figure 3-1. The chloroform industrial air screening level of 5.3 µg/m^3 was exceeded at one IA sampling location (19 µg/m^3 at 018-A) and in its corresponding duplicate sample (20 µg/m^3). Although chloroform was detected in several SV samples (maximum concentration of 100 *J* µg/m^3) in Building A, all concentrations were less than the SV screening level (177 µg/m^3).

TCE was the only SV analyte detected at concentrations exceeding screening levels. TCE was detected in all Round 29 SV samples and exceeded its screening level (293 µg/m^3) in three basement and two first floor samples (Figure 3-1). TCE was detected in seven of 17 IA samples, but at concentrations (2.4*J* µg/m^3 to 7.7 µg/m^3) below its screening level (8.8 µg/m^3). TCE is further discussed below.

TCE in Building A Basement

Beginning in Round 15 (August 2013), TCE has periodically been detected in IA in the Building A basement at concentrations greater than its project IA screening level (8.8 µg/m^3), including Round 17 (August–November 2014), Round 20 (February 2016), Round 22 (March 2017), Round 25 (August 2018), and Round 27 (August 2019). However, TCE concentrations have not exceeded the Building A basement-specific screening level for TCE (35 µg/m^3) approved by MDE in 2017. The basement screening-level was developed to account for reduced exposure potential in the basement, as compared to exposure on the main floor of Building A. Access to the Building A basement is controlled by management.

TCE was detected in IA at all four of the sampled Building A basement locations (018-A, 093-A, 138-A, and 174-A) in Round 29, but at concentrations less than its basement-specific screening level. Detected IA TCE concentrations were 5.8 µg/m^3 in both the parent and duplicate samples at location 018-A, 4.4 µg/m^3 at location 093-A, 7.7 µg/m^3 at location 138-A, and 6.4 µg/m^3 at location 174-A.

Note that this is the second VI sampling round since the HRS5 sump was abandoned and sealed by filling it with concrete and disconnecting its vapor extraction pipe. This sump was identified as the likely primary contributor of TCE impacts to indoor air in the Building A basement. Vapor was extracted from HRS5 continuously from June 2017 to December 2019 (five VI sampling rounds) under normal sub-slab depressurization system (SSDS) operating conditions. Per sampling protocol, the SSDS was temporarily shut down for approximately 24 hours before IA and SV sampling started, and restarted immediately after sampling had been completed.

Dissimilar to the SSDS, the indoor air filters are not shut down for the semiannual sampling event. The SSDS system and the IA filters are operating for different purposes.

The SSDS extraction prevents subsurface VOCs from passing into indoor air. Operating SSDS extraction points in the southern end of the Building A basement is difficult because of the high water table. The IA filter system circulates indoor air (potentially contaminated with VOCs) through a granular activated-carbon (GAC) medium that adsorbs any VOCs present, and then discharges the treated air back into the basement. The operation of the IA filters can therefore reduce VOCs, but not eliminate them.

TCE exceeded its SV screening level (293 µg/m^3) at three basement locations (171-A, 173-A, and 174-A) in the central portion of Building A, near or within the area of influence of the sub-slab depressurization (SSD) systems; exceedances were 2,800 µg/m^3 at 171-A, 7,600 µg/m^3 at 173-A, and 140,000 µg/m^3 at 174-A. Locations 171-A, and 173-A are in the eastern wall of the Building A basement and 174-A is in the basement floor; these locations were added to the semiannual IA/SV sampling in Round 22 (March 2017). SV TCE concentrations at sampling locations 171-A and 173-A have been exceeding the screening level since Round 22. SV TCE concentrations at sampling location 174-A also exceeded the screening level in several previous sampling rounds since it has been added to the sampling program.

TCE in First Floor of Building A

TCE was detected at two first-floor Building A IA sampling locations in Round 29. Both TCE detections were well below the IA screening level of 8.8 µg/m^3 (4.7 µg/m^3 at 117-A, and 2.4*J* µg/m^3 at 168-A).

SV TCE exceeded its screening level (293 µg/m^3) at two first floor locations, at 118-A (650*E* µg/m^3), and 136-A (480 µg/m3), during Round 29. Location 118-A is in the central portion of Building A and within the area of influence of the SSD systems. Location 118-A is within the bond-layup room, where a positive-pressure HVAC system was operating at the time of sample collection. TCE SV exceedances have been consistently observed at this location (118-A) since Round 18 (February 2015). TCE SV concentrations at 118-A in Rounds 19 through 29 (August 2015 through August 2020) ranged from 420 µg/m^3 to 2,300 µg/m^3, and are all at least one order of magnitude (i.e., a power of 10) less than the SV concentration (13,100 µg/m^3) detected in Round 18 (February 2015).

In Rounds 20 through 25 (February 2016 through August 2018), SV TCE exceedances were also noted at location 136-A (near the area of influence of the SSD system). TCE concentrations at SV 136-A in Rounds 21 through 29, ranging from 3.5 µg/m^3 to 850 µg/m^3, have decreased by a factor of approximately 100 since the SSDS was expanded to this location in 2016, after a reported TCE-vapor concentration of 35,000 µg/m^3 during Round 20. The SV TCE concentration at this location during Round 29 was 480 µg/m^3.

The SV TCE concentration at first floor location 168-A, added to the semiannual sampling in Round 22 (March 2017) (and located within the area of influence of the SSD systems), was less than the screening level during Rounds 26 through 29, but exceedances were noted at this location during previous sampling rounds including Round 25. SV TCE concentrations at sampling location 168-A exceeded the screening level in Rounds 22 through 25 (concentrations ranged from 920 µg/m^3 to 22,000 µg/m^3), but have notably decreased over time following the SSDS expansion. Concentrations at location 168-A during Rounds 26, 27, and 28 were 180 µg/m^3, 270 µg/m^3, and 100 µg/m^3, respectively, and were less than the TCE screening level (293 µg/m^3). In Round 29, the TCE concentration at sampling location 168-A was 34 *J* µg/m^3, with 180*J* µg/m^3 in the corresponding duplicate sample; both concentrations remain below the TCE screening level.

Building B—Tables 3-7 and 3-8 present Building B IA and SV results, respectively. Sampling locations within Building B are shown on Figure 3-2. No IA or SV exceedances were noted during Round 29. Similarly, no exceedances were noted in Building B IA or SV samples during Rounds 19 through 28. During Round 18, only one slight naphthalene exceedance (4.2 µg/m^3) was detected in IA at location 140-B, and this concentration only marginally exceeded its screening level (3.6 µg/m^3). No exceedances were noted in Building B IA or in SV samples during Round 17. Prior IA naphthalene exceedances were noted at locations 140-B (6.5 µg/m^3) and 0-33B (4*J* µg/m^3) during Round 16 (February 2014), 033-B (5 µg/m^3) during Round 15 (August 2013), and 057-B (3.8 µg/m^3) during Round 6 (July 2009). Prior naphthalene exceedances of the SV screening level (120 µg/m^3) were noted at several locations during Rounds 6, 9, and during Rounds 11 through 15, with the most recent exceedances at locations 140-B (250 µg/m^3) and 123-Z (160 µg/m^3) during Round 15 (August 2013).

Building C—Tables 3-9 and 3-10 present Building C IA and SV results, respectively. All detected IA concentrations in Building C were less than their associated screening levels during Round 29.

TCE was detected in four IA locations in Building C, but at low concentrations (0.27 *J* µg/m^3 to 4.8*J* µg/m^3) and less than its screening level (8.8 µg/m^3). TCE was detected in SV at 14 of 15 sampling locations in Building C, and SV TCE exceedances of the screening level (293 µg/m^3) were noted at four locations (Figure 3-3):

- 004-C (300 µg/m^3), in the southern portion of the Building C basement, and within the SSD area of influence
- 060-C (480 µg/m^3), in the east-central portion of Building C, and within the SSD area of influence
- 102-C (1,800 µg/m^3, in both the parent and corresponding duplicate sample), in the central portion of Building C near REC #31 (former Patriot plating line)
- 126-C (310 µg/m^3), in the northeastern portion of Building C

SV TCE concentrations at 102-C have consistently exceeded the screening level since Round 22, with varying concentrations ranging from 890 µg/m^3 in a duplicate sample from Round 27 to 2,500 µg/m^3 in Round 25 (August 2018). In the previous four sampling rounds (Rounds 25, 26, 27, and 28), SV TCE exceedances were also detected at location 060-C.

TCE was detected in SV at a concentration (210 µg/m^3) below the screening level at 133-C in Round 29 after having exceeded the screening level at that location during each of the four previous sampling rounds (Rounds 25 through 28). Similarly, after recent TCE exceedances (310-340 µg/m^3 in Rounds 24 through 28) at location 141-C, TCE was detected at a concentration (34 µg/m^3) well below the SV screening level in Round 29.

Although an SV TCE exceedance was detected at location 001-C in the southern portion of Building C during Rounds 21 (August 2016) and 25 (August 2018), no exceedance at that location was detected during Rounds 22 (March 2017) through 24 (February 2018), or during Rounds 26 (February 2019), 27 (August 2019), 28 (February 2020), and 29 (the current sampling round). However, a slight SV TCE exceedance was detected in Round 29 at the nearby sampling location 004-C (300 µg/m^3). Prior to Round 29, the most recent SV TCE exceedance at 004-C occurred in July 2012.

An SV TCE exceedance was detected at location 113-C, in the south-central portion of the building, during Round 21 and Round 28, but not during Rounds 22 through 27, or during the current sampling round (180 µg/m^3). SV TCE exceedances at location 152-C, in the east-central portion of Building C, were noted during Rounds 22 and 23 (August 2017), but not during Rounds 24 through 29. SV TCE exceedances in Building C appear to be sporadic and do not follow an observable spatial pattern.

The SV TCE concentration at sampling location 126-C (310 µg/m^3) slightly exceeds the screening level in Round 29. SV TCE exceeded its screening level at location 126-C during Rounds 22 through 26, but not during Rounds 27 and 28. Note that some uncertainty exists regarding Round 27 (August 2019) SV results at locations 126-C and 149-C, as historical trends indicate that the SV data for these locations may have been mislabeled. Round 27 SV TCE concentrations at locations 126-C and 149-C were 3.7 µg/m^3 and 200 µg/m^3, respectively. Round 28 SV concentrations of TCE at both locations (200 µg/m^3 at 126-C, and 2.1 µg/m^3 at 149-C) were less than the screening level (293 µg/m^3). The SV TCE concentration at sampling location 149-C (11 µg/m^3) remained below the screening level during Round 29.

No VC exceedances were observed at any Building C sampling locations during Round 29. Previously during Round 27 (August 2019), a sole VC exceedance (2,700 µg/m^3) of its screening level (933 µg/m^3) was detected in SV at location 149-C. During Rounds 28 and 29, VC was not detected at location 149-C.

SV exceedances of VC had not been detected at location 149-C during rounds of sampling prior to Round 27 (August 2019); however, SV exceedances of VC had consistently been observed at location 126-C from Round 12 (February 2012) to Round 26 (February 2019), with recent concentrations (Rounds 18 [February 2015] through 26 [February 2019]) ranging from 1,100 µg/m^3 to 16,000 µg/m^3. As mentioned previously, historical data, as compared to Round 27 data, appear to indicate that the SV samples for locations 149-C and 126-C may have been mislabeled (switched) during Round 27. Note that VC was not detected in IA during Rounds 12 through 27. No mislabeling occurred during Rounds 28 and 29. In Round 29, VC was not detected in any IA samples and was detected in only two SV samples. Although the maximum concentration of VC

in SV during Round 29 (790 µg/m^3) was detected at 126-C, this concentration is less than the screening level (933 µg/m^3).

In addition to the screening level exceedances discussed above, SV exceedances of 1,1-DCA (5,500*E* µg/m^3 in the parent sample, and 6,000*E* µg/m^3 in the corresponding duplicate sample) and naphthalene (300 µg/m^3 in the parent sample and 430 µg/m^3 in the corresponding duplicate sample) were also detected at 102-C during Round 29 (the screening level is 2,567 µg/m^3 for 1,1-DCA, and 120 µg/m^3 for naphthalene). Exceedances of 1,1-DCA and naphthalene were noted at location 102-C during Rounds 22 through 26 (March 2017 through February 2019) and Round 28 (February 2020), at concentrations ranging from 3,800 µg/m^3 to 7,900 µg/m^3 for 1,1-DCA and 140 µg/m^3 to 330*J* µg/m^3 for naphthalene. In Round 27 (August 2019), 1,1-DCA concentrations (2,900 µg/m^3 and 3800 µg/m^3 in parent and duplicate samples, respectively) exceeded its screening level, but naphthalene concentrations were less than its screening level. No exceedances for 1,1-DCA and naphthalene were detected during Round 21 (August 2016).

The SV naphthalene and 1,1-DCA concentrations in Building C do not appear to impact IA concentrations. Neither naphthalene nor 1,1-DCA were detected in IA during Round 28. In Round 29, 1,1-DCA was only detected at one IA sampling location (0.52*J* µg/m^3 at 001-C), and a trace concentration of naphthalene (1.3 µg/m^3) was detected in only the duplicate sample at location 149-C (i.e., it was not detected in the corresponding parent sample). Naphthalene and 1,1-DCA have been detected in IA during previous sampling rounds (i.e., in Rounds 10 [February 2011] and 11 [August 2011] for 1,1-DCA, and during Rounds 10, 11, 13 through 16 [August 2011 through February 2014], 18 [February 2015], 23 [August 2017], and 25 [August 2018] for naphthalene) at concentrations less than screening levels.

During Round 29, IA and SV concentrations of tetrachloroethene (PCE) did not exceed its screening levels; PCE detections in IA and SV have also been below its screening level in Rounds 18 through 28 (February 2015 through February 2020). An IA exceedance of PCE (870 µg/m^3, as compared to its IA screening level of 180 µg/m^3) was detected at location 149-C in a Round 18 (February 2015) resample, collected because the TCE concentration at the same location approached, but did not exceed, its screening level in the original sample. Before Round 18, PCE had never been detected in IA or SV in Building C.

In addition, SV PCE was not detected at 149-C during Round 18. PCE has not been detected above its detection limit in most SV samples collected at and near location 149-C over time, suggesting that the sole PCE exceedance at location 149-C during Round 18 is anomalous, and possibly attributable to some IA source rather than to VI. Note that when IA concentrations are greater than background concentrations and/or sub-slab concentrations, other interior sources are possibly contributing to IA concentrations. During Round 29 (the current sampling round), PCE was detected at 149-C in both IA (1.0 *J* µg/m^3 in the parent sample, and 0.94 *J* µg/m^3 in the duplicate sample) and SV (2.8 µg/m^3), but at concentrations well below screening levels (180 µg/m^3 for IA and 6,000 µg/m^3 for SV).

3.2 BACKGROUND AMBIENT AIR SAMPLES

Outdoor-air-quality (i.e., background) samples provide baseline concentrations for COC that can be compared to interior concentrations. Comparison to background indicates whether chemicals detected in IA are more likely associated with an exterior (i.e., background) or interior source (e.g., chemicals used in the workplace, or with past spills of chemicals absorbed to above-slab building materials, or sub-slab sources). Analytical results for Round 29 ambient (background) air samples are shown in Table 3-11. Figure 2-2 shows the background sampling locations used for Round 29; these locations are sufficiently far from site operations to avoid any possible site influence.

Table 3-12 lists chemicals detected in background samples and compares IA concentrations to the maximum detected background concentration. Ten VOCs were detected in background samples, and all chemicals detected in background samples were also detected in IA samples. All detected background concentrations are below their respective IA screening criteria. Table 3-12 evaluates whether chemical concentrations detected in IA are possibly due to interior sources, or if they simply reflect background conditions, using the following logic:

- When IA concentrations are equal to or less than background concentrations, IA concentrations likely reflect background conditions.
- When IA concentrations are greater than background concentrations and/or sub-slab concentrations, other interior sources are possibly contributing to IA concentrations.

- ❖ The presence of chlorinated degradation-products in IA samples (at concentrations less than those detected in SV samples), but not in background samples, suggests that sub-slab sources might contribute to these IA concentrations.

The only chemical exceeding screening levels in IA (i.e., chloroform in Building A) was not detected in background samples; therefore, chloroform IA exceedances in Building A are likely due to indoor (or possibly SV) sources rather than being reflective of background conditions. Although chloroform was also detected in Building A SV samples, its maximum concentration (100*J* µg/m^3) was less than its SV screening level (177 µg/m^3) but greater than the maximum IA concentration (20 µg/m^3).

IA detections of several chemicals at concentrations less than screening levels may be influenced by background. As presented in Table 3-12, chemicals with most of their indoor air detections below background (*cis*-1,2-dichloroethene, dichlorodifluoromethane, and methylene chloride) are likely influenced by ambient background contaminant sources. The remaining contaminants, detected in both ambient air and in IA, might be due to IA sources (and possibly VI to IA), and/or ambient background conditions. However, note that none of the chemicals presented on Table 3-12 were detected in SV above their respective screening levels in Round 29. In any case, all background contaminants also detected in IA in Round 29 are below IA screening levels.

SECTION 4
SUB-SLAB-DEPRESSURIZATION-SYSTEM DATA ANALYSIS

This section summarizes the operation and monitoring activities for the sub-slab-depressurization (SSD) systems (SSDS) in Buildings A and C for the reporting period from April 1, 2020 to September 30, 2020. A detailed account of these activities is in the October 2020, remedial action progress report (Appendix E). The location and layout of the SSD systems, and associated sub-slab vapor (SV) extraction points and vapor monitoring points (VMPs), along with the process and instrumentation diagrams for the Building A and Building C SSD systems, are shown in Figures 1 through 5 of Appendix E. This section discusses SV sampling results, extraction points, system influent, vacuum influence, and SSDS performance.

4.1 SUB-SLAB VAPOR MONITORING POINTS

Tables 4-1 and 4-2 summarize the concentrations of target volatile organic compounds (VOCs) detected at SV monitoring points to date near the SSD systems in Building A (in the lay-up room [former plating shop on the main floor], basement, and eastern area [on main floor]), and in the Building C basement, respectively.

4.1.1 Building A

SV samples collected to date near the Building A SSDS are listed by location in Table 4-3. VMPs 015-A (on the main floor of Building A); 078-A, 079-A, and 136-A (in the eastern area of Building A); 168-A (in the northern area of Building A); and 116-A (in the basement of Building A) were sampled in August 2020 (see Figure 2 in Appendix E).

The highest SV trichloroethene (TCE) concentrations detected at VMPs 015-A, 018-A, 079-A, 136-A, and 168-A, before and after the Building A SSDS began operation, are shown in Table 4-4. The concentrations detected at VMPs 015-A, 079-A, 136-A, and 168-A in August 2020 were at least

one order of magnitude (i.e., 10 times) lower than the concentrations detected before SSDS extraction began operating in the area.

While a significant decline in TCE concentrations has been observed at 015-A, concentrations continue to fluctuate over time, with some apparent seasonal variation (typically higher in summer [August] as compared to winter [February]) since 2017 (Figure 4-1). For example, TCE was detected at an estimated 2.3 micrograms per cubic meter ($\mu g/m^3$) in February 2017, at 51.5 $\mu g/m^3$ in August 2017, at 6.3 $\mu g/m^3$ in February 2018, at 73 $\mu g/m^3$ in August 2018, at 4 $\mu g/m^3$ in February 2019, at 10 $\mu g/m^3$ during the August 2019, at 19 $\mu g/m^3$ in February 2020, and at 28 $\mu g/m^3$ in August 2020. VOC-impacted groundwater likely provides a continuing source of VOCs to SV at 015-A. Similar fluctuations also occurred at 018-A between August 2011 and February 2014.

VMPs 079-A and 136-A are near extraction points installed during the system expansion completed in April 2016. August 2020 results show that these locations have had more than a 90% decrease in total VOCs since the SSDS was expanded. Figure 4-2 shows that since August 2016, the summer (August) sampling results at these two points are higher than the winter (February) results, with what appears to be seasonal fluctuation.

VMP 168-A is near the system extraction point SSD-39-A, installed during the third-phase of system expansion completed in July 2017; this location continued to show VOC concentration decreases in August 2020 (TCE at 34 $\mu g/m^3$) as compared to concentrations in August 2018 and August 2019 (TCE at 950 and 270 $\mu g/m^3$, respectively) and before third-phase expansion in February 2017 (TCE at 22,000 $\mu g/m^3$; see Table 4-1 and Figure 4-2).

Concentrations observed after SSDS startup were generally lower than concentrations detected before the system began operation. VOC reductions at 018-A (in the basement, and last sampled in 2014 due to consistently high groundwater levels) might be more limited than those experienced at main floor VMPs, because the shallow groundwater table (typically less than one foot below the basement slab) possibly impedes vapor flow.

4.1.2 Building C

SV samples collected to date near the Building C SSD system are listed in Table 4-5. These points are within 100 feet of the Building C SSD-system extraction points in the basement; most[3] are within the vacuum influence of SSD-system operations. VMPs 001-C, SSD-4-C (in the southern basement area); and 060-C, 088-C, 113-C, 126-C, 133-C, 141-C 149-C, 152-C, 153-C, and 155-C (in the mid-basement area) were sampled in August 2020 (see Figure 4 in Appendix E).

The highest TCE concentrations in Building C were observed at VMPs 001-C, SSD-4-C, 060-C, 113-C, and 133-C before SSDS extraction began in those areas. The most recent concentrations are summarized in Table 4-6. August 2020 TCE concentrations are lower than the concentrations measured before SSD-system startup and are apparently reaching asymptotic levels after several years of vapor extraction in the area. The August 2020 TCE concentrations at VMPs 001-C, SSD-4-C, 060-C, 113-C, 126-C, 149-C, and 152-C were higher than the concentrations measured in the previous semi-annual event (February 2020), but TCE concentrations were lower at 133-C and at 141-C (as compared to February 2020 concentrations); TCE concentrations were similar to the previous results at 088-C, 153-C, and 155-C. Historical concentrations are presented in Table 4-2 and Figure 4-3.

Concentrations of vinyl chloride (VC) observed at 126-C (north of the SSDS extraction points) have also decreased since the SSD-system expansion (see Figure 4-4), but, as shown on Figure 4-4, VC concentrations in sub-slab vapor at 126-C have varied over time with what appears to be seasonal fluctuation; summer (August) sampling results are higher than the winter (February) results. The August 2020 VC result (790 µg/m^3) was higher than the February 2020 result (120 µg/m^3); both results are the lowest VC results detected at 126-C to date. VC has not been detected in SSDS influent samples or in groundwater samples collected from a nearby well pair (MW-88A/B).

4.2 SUB-SLAB VAPOR EXTRACTION POINTS

The Building A and Building C SV extraction points are not sampled as part of the semi-annual SSDS monitoring program, because the combined influent for the Building A system is sampled

[3]Locations 001-C, SSD-4-C, 060-C, 113-C, 127-C, 133-C, 135-C, 149-C, 152-C, 153-C, 155-C, and 156-C

monthly, and the Building C system is sampled every two months (influent sampling results are presented in Section 4.4). Figure 2 in Appendix E shows the Building A extraction points (North, South, Basement North, and Basement South), horizontal extraction laterals, and vertical extraction points in Building A (SSD-34-A, SSD-35-A, SSD-36-A, SSD-37-A, SSD-38-A, and SSD-39-A), and former sump HRS-5 which was connected for vapor extraction from July 2017 until December 2019. Figure 4 in Appendix E shows the 11 vertical extraction points in Building C (SSD-21-C, SSD-23-C, SSD-26-C, SSD-27-C, SSD-28-C, SSD-29-C, SSD-30-C, SSD-31-C, SSD-32-C, SSD-33-C, and SSD-34-C).

4.3 VACUUM INFLUENCE

Induced vacuum levels of target-area sub-slab VMPs over time are shown on the following figures in Appendix E: Figure 6 (Building A lay-up room and basement), Figure 7 (Building A eastern area), Figure 8 (Building C southern basement area), and Figure 9 (Building C mid-basement area). Representative vacuum measurements from the September 15 (Building A) and September 28, 2020 (Building C) monitoring episodes are indicated on plan views on Figures 10, 11, 12, and 13 of Appendix E. Vacuum influence associated with SSDS VMPs is checked biweekly. The target vacuum is 0.01 inches of water column or greater. (Note: negative vacuums at some points indicate pressure readings that are considered not influenced by the SSDS; pressure readings are likely due to undetermined local features.)

As indicated in the October 2020 progress report (Appendix E), extraction trenches near the Building A lay-up room induce a vacuum equal to or greater than 0.01 inches water column over an approximately 5,700-square-foot area; this area encompasses all eight SV monitoring points that had elevated VOC concentrations before system startup. The trenches in the Building A basement induce a vacuum over an approximately 2,600-square-foot area that encompasses three of the four VMPs used to measure the SSDS induced vacuum in the basement. The extraction wells in the eastern area of Building A induce a vacuum over an approximately 8,900-square-foot-area and encompass 10 of 15 VMPs used to measure the SSDS induced vacuum in that area. During the reporting period, extraction point SSD-39-A in the western area of Building A is inducing vacuum at two nearby VMPs; the associated area of induced vacuum influence is approximately 1,100 square feet.

The Building C basement extraction wells induce vacuum influence over an approximately 3,900-square-foot area in the southern end of the basement, while the extraction wells in the mid-basement area induce vacuum influence over an approximately 33,000-square-foot area. In the mid-basement, 16 of 20 monitoring points are within the target area shown to have vacuum influence.

SSD systems are performing as designed by maintaining the target vacuum of 0.01 inches of water column or greater.

4.4 INFLUENT VAPOR SAMPLES

Influent-vapor samples are collected monthly to monitor the Building A SSDS operation, and once every two months to monitor the Building C SSDS operation. VOC concentrations at the granular activated-carbon (GAC) influent, midpoint (after the lead drum), and effluent (after the second drum) points are monitored to determine when the midpoint concentration reaches 50% of the influent; when the 50% breakthrough is reached, or at Tetra Tech's discretion with concurrence from Lockheed Martin Corporation (Lockheed Martin), the lead GAC drum is changed out. These samples also allow monitoring of influent-concentration trends over time. Samples are collected directly from all three sampling ports of both SSD systems by connecting a clean one-liter Summa® canister (batch certified) to the Teflon® tubing of each sampling port and opening the valve for approximately one minute. The samples were submitted to Eurofins TestAmerica Laboratories, Inc. (Eurofins TestAmerica) in Knoxville, Tennessee for VOC analysis using United States Environmental Protection Agency (USEPA) Toxic Organic Method (TO-15).

Tables 4-7A and 4-7B summarize the influent-vapor concentrations of target VOCs in samples over time (from system startup in March 2008 through September 2020). These results are displayed graphically on Figures 14 and 15 in Appendix E. Tables 4-7A and 4-7B also provide average influent concentrations for the current (April–September 2020) and previous (October 2019–March 2020) six-month reporting periods. The six-month average-influent (total) VOC concentration during the current reporting period is similar to the average-influent VOC concentration during the previous semiannual reporting period in Building A (1,490 µg/m^3 versus 1,398 µg/m^3) and in Building C (82 µg/m^3 versus 68 µg/m^3). Overall, influent VOC concentrations

for both SSD-systems have been relatively stable or slowly decreasing since 2009 (see Figures 14 and 15 in Appendix E).

The goal of the SSD systems is to maintain a negative pressure below the slab (relative to the room space), thus minimizing VOC migration from the sub-slab soil into indoor air. VOC mass removal occurs by treatment of the vapor drawn out to maintain the vacuum. VOC removal rates for SSDS influent mass in Building A ranged from 0.02 to 0.05 pounds per day (lbs/day); these rates are similar to the removal rates observed in the previous semiannual reporting period (0.037 to 0.043 lbs/day). The Building A system has removed 6.6 pounds (lbs) of VOCs during this reporting period, seven pounds during the previous reporting period, and has removed approximately 212 lbs since system startup in March 2008.

The VOC removal rate in Building C during the current reporting period ranged from 0.018 to 0.052 pounds per month. The Building C SSDS has removed 0.21 lbs of VOCs this reporting period, 0.15 lbs during the previous reporting period, and has removed 12.8 lbs since system startup in March 2008.

4.5 SYSTEM PERFORMANCE

In general, flow rates and induced vacuums for the SSD systems are performing as designed maintaining a vacuum of 0.01 inches water column in target areas and at the same time reducing sub-slab concentrations in comparison to those prior to SSDS operation. We will continue to monitor system induced vacuum performance; however, some localized areas are likely to remain not amenable to induced vacuum, due to the heterogeneous structure of subsurface soil and water accumulation in the subsurface of these older structures. The induced-vacuum influence of the Building A system is over 5,700 square-feet on the main floor (encompassing the lay-up room), 2,600 square-feet in the basement, 8,900 square-feet in the northern and eastern areas, and 1,100 square feet in the western area. The induced-vacuum influence of the Building C SSDS extends over an approximately 3,900 square-foot area in the southern basement, and over approximately 33,000 square-feet in the mid-basement area.

SECTION 5
CONCLUSIONS

5.1 CONCLUSIONS

Tetra Tech, Inc., (Tetra Tech) has completed Round 29 of vapor-intrusion (VI) monitoring (the second of two scheduled in 2020) in Buildings A, B, and C at the Middle River Complex (MRC) (owned by LMC Properties, Inc.) in Middle River, Maryland. This ongoing investigation seeks to evaluate whether volatile organic compounds (VOCs) in sub-slab vapor (associated with soil and groundwater chemicals of concern [COC] at the site) might be moving into indoor air (IA) at the Middle River Complex facilities, and whether subsurface vapor contamination remains present at concentrations that dictate continued operation of the sub-slab-depressurization (SSD) vapor-intrusion-mitigation systems (or if a transition/exit strategy can be performed). The *Vapor Intrusion Management Plan* (Tetra Tech, 2019a), including associated decision matrices, provide the basis for the vapor intrusion strategy at the site. The data set is composed of indoor air and sub-slab vapor (SV) samples collected in August 2020. Ambient air samples were also collected at four outdoor background locations around the perimeter of the Middle River Complex. All data were validated to ensure compliance with analytical method requirements.

Indoor air data were compared to risk-based screening levels for industrial air set at the 1×10^{-5} (i.e., one-in-100,000 probability) risk level for carcinogens, or at a hazard quotient of 1 for noncarcinogens (as published in the United States Environmental Protection Agency [USEPA] *Regional Screening Levels for Chemical Contaminants at Superfund Sites* [USEPA, 2020]). For samples collected in the Building A basement only, indoor air levels of trichloroethene (TCE) were compared to a Maryland Department of the Environment-approved basement-specific screening level of 35 micrograms per cubic meter ($\mu g/m^3$), based on the limited exposure potential for workers entering the basement. Indoor air samples were also compared to federal Occupational Safety and Health Administration (OSHA) permissible exposure limits (PELs). Alternate values, such as the "Threshold Limit Values" published by the American Council of Governmental

Industrial Hygienists, were used for chemicals without published permissible exposure limits. SV data were compared to screening values derived using methods described in *OSWER Technical Guide for Assessing and Mitigating the Vapor Intrusion Pathway from Subsurface Sources to Indoor Air* (USEPA, 2015) by applying an attenuation factor of 0.03 to the indoor-air screening values.

Historically, trichloroethene and naphthalene have been the prevalent contaminants of concern in indoor air at this site. In Round 29, trichloroethene was detected in indoor air in Buildings A, B, and C. Trichloroethene was detected in 11 of 35 indoor air samples collected during Round 29 (see Figure 5-1). No indoor air trichloroethene detections in basement or first floor samples were greater than the (unadjusted for the basement) screening level of 8.8 µg/m^3. The reduced trichloroethene indoor air concentrations in the Building A basement, as compared to previous years, are attributable to sealing and extracting vapors from basement sump HRS5 and then abandoning the sump; this sump was connected to the Building A sub-slab-depressurization system from June 2017 to December 2019 at which time it was abandoned by filling with concrete.

In Round 29, naphthalene was detected in only two of 35 indoor air samples at concentrations below its screening level (3.6 µg/m^3). These naphthalene detections occurred in both the parent and duplicate samples at location 018-A, collected in the western portion of the Building A basement, and the duplicate sample at location 149-C, collected in the northeastern portion of Building C; naphthalene was not detected in the corresponding parent sample at location 149-C. Sub-slab vapor naphthalene was detected in five of 33 samples. The maximum sub-slab vapor concentration of naphthalene (430 µg/m^3 in the duplicate sample at 102-C, with a concentration of 300 µg/m^3 in the corresponding parent sample), was in the central portion of Building C, and outside of the area of influence of the Building C SSDS, and was the only detected concentration higher than its screening level (120 µg/m^3). Naphthalene was not detected in indoor air in Building B.

5.1.1 Building A

Trichloroethene exceeded its screening level in sub-slab vapor during Round 29. Trichloroethene concentrations detected in Building A indoor air and sub-slab vapor are discussed below.

Basement

Trichloroethene was detected in indoor air at all four Building A basement sampling locations, but at concentrations less than its basement-specific screening level (35 µg/m^3), which was derived to account for reduced potential exposure in the basement. None of the basement locations exceeded the (unadjusted for the basement) industrial worker screening level (8.8 µg/m^3). Historical indoor air trichloroethene concentrations in the Building A basement samples have never exceeded the basement-specific screening level but have exceeded the industrial screening level.

Trichloroethene was detected at concentrations greater than the sub-slab vapor screening level (293 µg/m^3) in vapor samples collected from behind the eastern basement wall at locations 171-A, and 173-A, as well as in a sample collected from the Building A basement floor at location 174-A. Direct measurement of air above the sumps and of air trapped in the covered sumps indicates that the sumps and drains in the Building A basement are the sources of the trichloroethene.

The sole indoor air screening-level exceedances occurred in the Building A basement: chloroform (20 µg/m^3) at location 018-A in the west-central portion of the building, near operating fans used to cool the building. Chloroform was detected at 018-A in both the parent (19 µg/m^3) and duplicate (20 µg/m^3) samples at concentrations greater than the industrial screening level (5.3 µg/m^3) during Round 29. Chloroform has historically been detected in basement samples; however, note that prior to an exceedance at sampling location 093-A in Round 28, its concentrations had not exceeded its screening level since Round 17 (September 2014, at location 018-A).

Main floor

Two trichloroethene exceedances of its screening level (293 µg/m^3) were detected in sub-slab vapor at locations 118-A (650*E* µg/m^3), which is located in the bond layup room east of the former plating shop on the main floor, and 136-A (480 µg/m^3), located in the eastern portion of the building. Sample 118-A was collected where a positive-pressure heating/ventilation/air-conditioning (HVAC) system was operating. Both sampling locations (118-A and 136-A) are near the area of influence of the sub-slab depressurization systems. Indoor air concentrations of trichloroethene on the main floor of Building A were all less than the screening level.

The sub-slab-depressurization system in Building A appears to be operating as designed (except for limited vacuum influence in the SSD-136-A area) and appears to be effectively mitigating sub-slab vapor intrusion from known source areas of sub-slab vapor contamination, in concert with the indoor-air filtration units and control of vapor emissions from the sumps. Contaminants are constantly removed from soil vapor during system operation, and indoor air concentrations in the main part of Building A (excluding the basement) rarely exceed screening values. Filter cartridges are changed-out quarterly; no other maintenance is required.

Although basement occupancy is restricted, and screening levels related to restricted occupancy are not exceeded, this area will continue to be monitored as the sub-slab-depressurization system continues to operate. Figures 5-2A, 5-2B, and 5-2C show concentrations of trichloroethene and naphthalene in Building A in sub-slab vapor samples, in indoor air of the basement, and in indoor air on the first floor of the building (respectively). Direct measurement of air above the sumps and of air trapped in the covered sumps indicates that the sumps and drains in the Building A basement are the primary trichloroethene sources. Although seasonal fluctuation was noted in sub-slab vapor concentrations from some Building A locations (see Section 4), the same patterns were not observed in indoor air concentrations.

5.1.2 Building B

No exceedances were noted in the Building B indoor air or sub-slab vapor samples during Round 29. The most recent exceedance of the indoor air screening level was during Round 18 (February 2015), when one slight exceedance of naphthalene was detected.

5.1.3 Building C

Trichloroethene was detected at concentrations below its screening level in all 18 indoor air samples collected from Building C during Round 29. Sub-slab vapor screening level exceedances of trichloroethene (at concentrations ranging from 300 µg/m^3 to 1,800 µg/m^3) were detected at four locations in Round 29: at 004-C, in the southern portion of the Building C basement; at 060-C, in the east-central portion of Building C, and within the system's area of influence; at 102-C, in the central portion of Building C near the former Patriot plating line; and at 126-C, in the northeastern portion of Building C.

These Round 29 exceedances of the sub-slab vapor screening level are consistent with those observed in other recent sampling rounds (e.g., Round 21 [August 2016] through Round 28 [February 2020]). Note that although trichloroethene concentrations in sub-slab vapor have exceeded its screening level at these locations, nearby indoor air concentrations have not, suggesting that vapor intrusion is not significantly impacting indoor air concentrations, and possibly that the sub-slab-depressurization system is mitigating vapor intrusion into indoor air.

During Round 29, vinyl chloride (7.6*J* µg/m^3 [duplicate at 102-C] to 790 µg/m^3 [126-C]) was detected at two sub-slab vapor locations at concentrations below its screening level (933 µg/m^3). Vinyl chloride exceedances in sub-slab vapor have consistently occurred at location 126-C (in the eastern portion of Building C) during previous sampling (Round 18 [February 2015] through Round 26 [February 2019]). Subslab-vapor concentrations of vinyl chloride at 126-C have generally decreased since the sub-slab depressurization system was expanded in Building C, but have fluctuated over time. Vinyl chloride has not been detected in groundwater near 126-C, nor has it been detected in indoor air, despite the presence of trichloroethene in nearby groundwater monitoring well MW-88A (east of Building C) at concentrations up to 1,500 micrograms per liter (µg/L) in 2009. A trichloroethene concentration of 1,030 µg/L was detected at well MW-88A in 2019 (AECOM, 2019). A low concentration of the trichloroethene degradation product *cis*-1,2-dichloroethene (3.6 µg/L) was also detected in well MW-88A in 2019, while vinyl chloride was non-detected (AECOM, 2019).

The sub-slab vapor concentration of 1,1-dichloroethane (5,500*E* µg/m^3 in the parent sample, and 6,000*E* µg/m^3 in the corresponding duplicate sample) exceeded its screening level (2,567 µg/m^3) at location 102-C during Round 29. The sub-slab vapor concentration of naphthalene at same location (300 µg/m^3 in the parent sample, and 430 µg/m^3 in the corresponding duplicate sample) exceeded its screening level (120 µg/m^3) during Round 29 as well. Sub-slab vapor concentrations of 1,1-dichloroethane and naphthalene exceeded their screening levels at location 102-C during other recent sampling rounds (e.g., Rounds 17 [September 2014], 18 [February 2015], 20 [February 2016], and 22 through 28 [March 2017 through February 2020]).

In general, sub-slab vapor concentrations of volatile organic compounds have decreased in the southern basement area (SSD-4-C) of Building C since system startup in March 2008.

Vapor monitoring points (060-C, 088-C, 113-C, 126-C, 133-C, and 135-C) in the mid-basement area also show lower concentrations, as compared to results before system expansion in May 2013. The vapor concentrations are apparently reaching asymptotic levels after several years of vapor extraction in the areas.

The absence of any Building C indoor air screening-level exceedances for any compound suggests that vapor intrusion is likely not occurring. The sub-slab-depressurization system in Building C appears to be operating as designed and appears to be effectively mitigating sub-slab vapor intrusion from known source areas of sub-slab vapor contamination. Figures 5-3A and 5-3B show Round 29 sub-slab vapor and indoor air concentrations (respectively) of 1,1-dichororethane, trichloroethene, and vinyl chloride in Building C.

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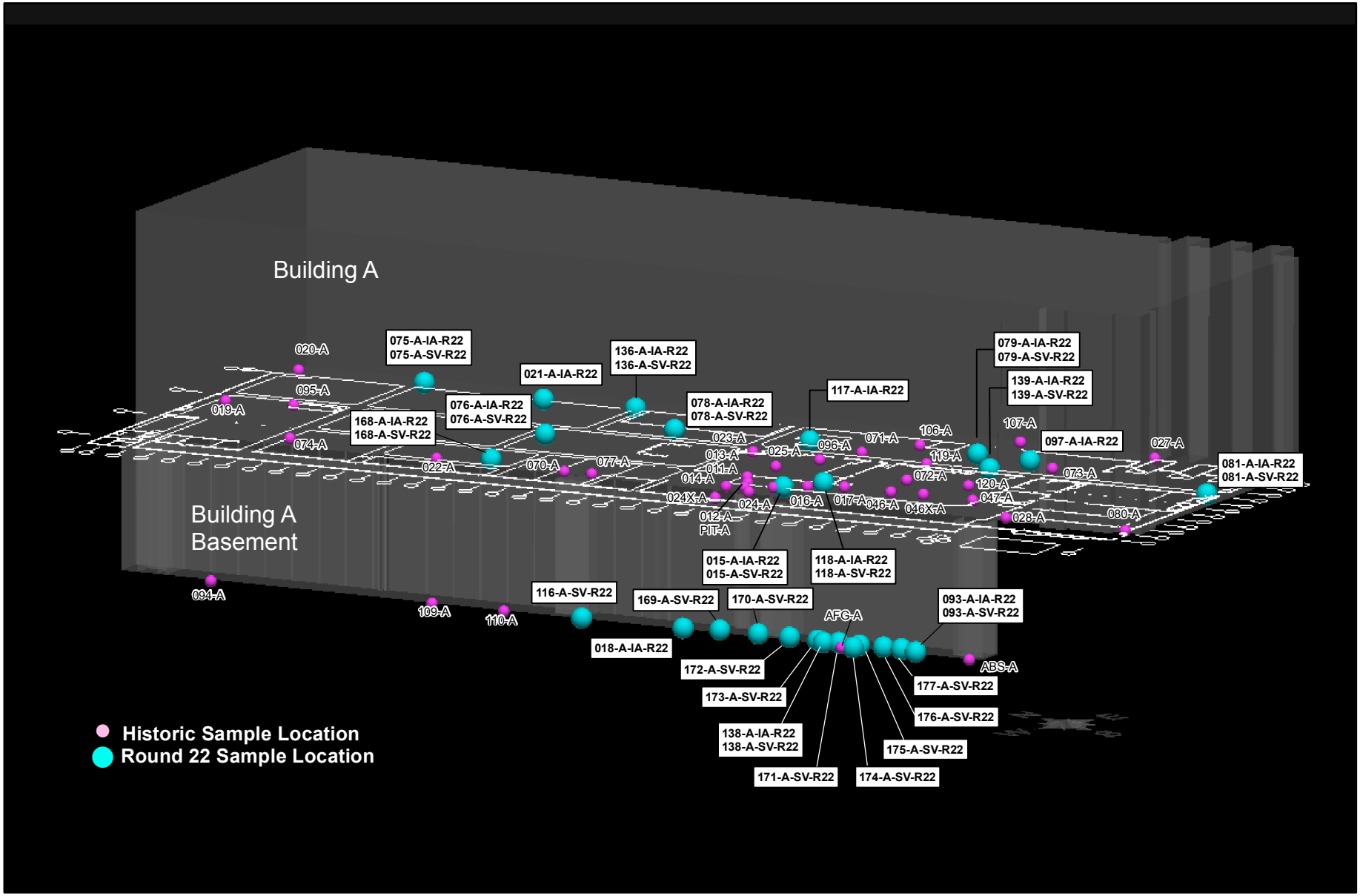
Figure 5-3B Concentrations of Select Chemicals from Round 29 – Building C – Indoor Air, Basement

Figure 2-1
Indoor Air and Sub-Slab Vapor Monitoring Locations
for Building A, Round 22, March 2017



NOR: G:\GIS_files\Lockheed_MRC\GIS\MXD\bldg_a_rnd21_locs_3d.mxd MC



MARTIN STATE AIRPORT

FIGURE 2-2

AMBIENT AIR BACKGROUND SAMPLING LOCATIONS ROUND 29, AUGUST 2020

LEGEND

- BACKGROUND SAMPLING LOCATION
- HISTORICAL BACKGROUND SAMPLING LOCATION
- SURFACE WATER

IA - indoor air
BCK-3 moved due to discovery of TCE UST adjacent to historic sample location.

Lockheed Martin Middle River Complex
Middle River, Maryland

0 200 400 Feet

N

DATE MODIFIED: 11/05/20

CREATED BY: PFO

TETRA TECH

Map Document: (P:\GIS\Middle_River\MapDocs\MXD\iaq_background_samples_rnd28.mxd)
04/02/20 PFO

Figure 2-3
Indoor Air and Sub-Slab Vapor Monitoring Locations
for Building A, Round 29, August 2020

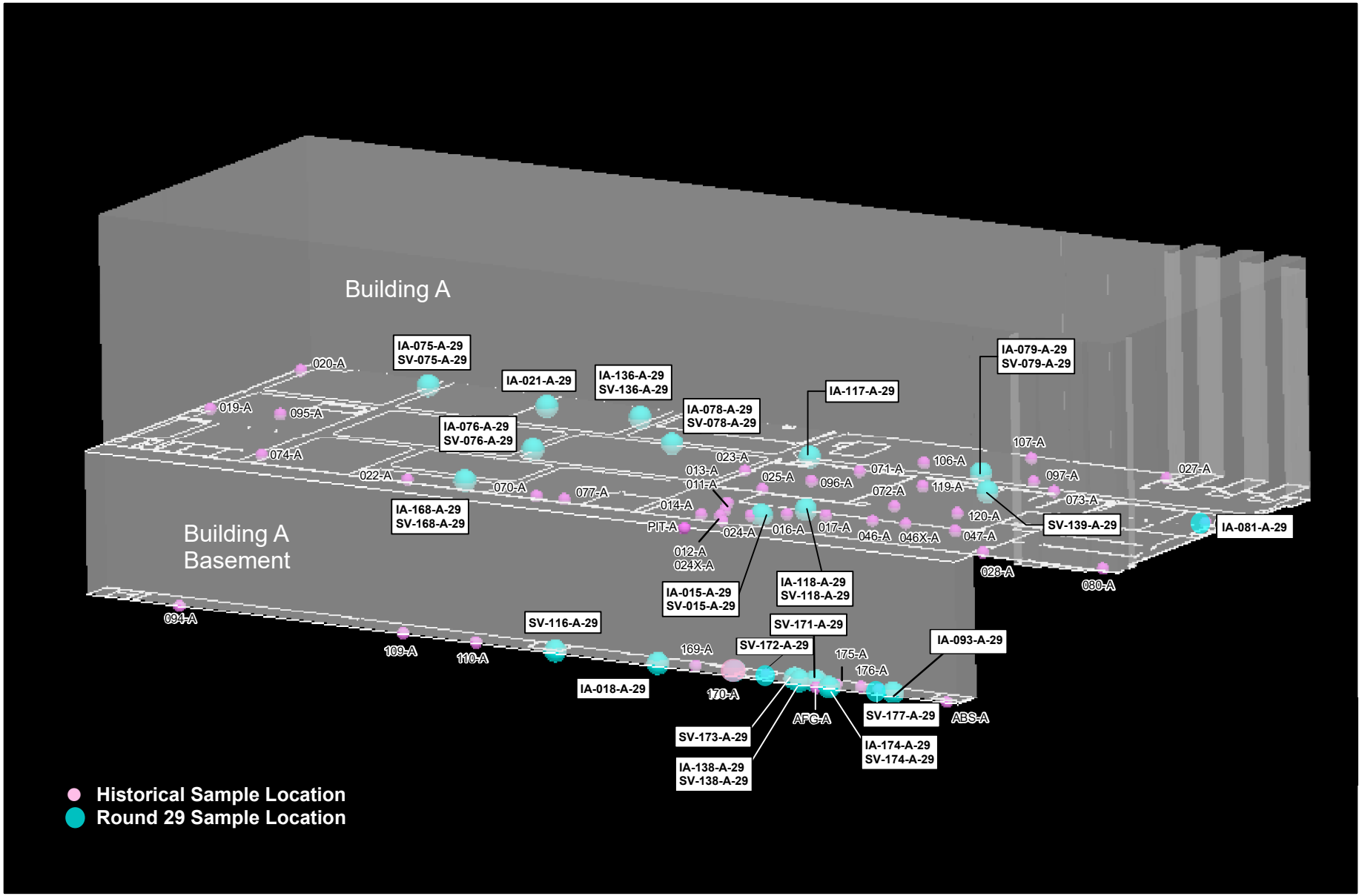


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Figure 2-4
Indoor Air and Sub-Slab Vapor Monitoring Locations
for Building B, Round 29, August 2020

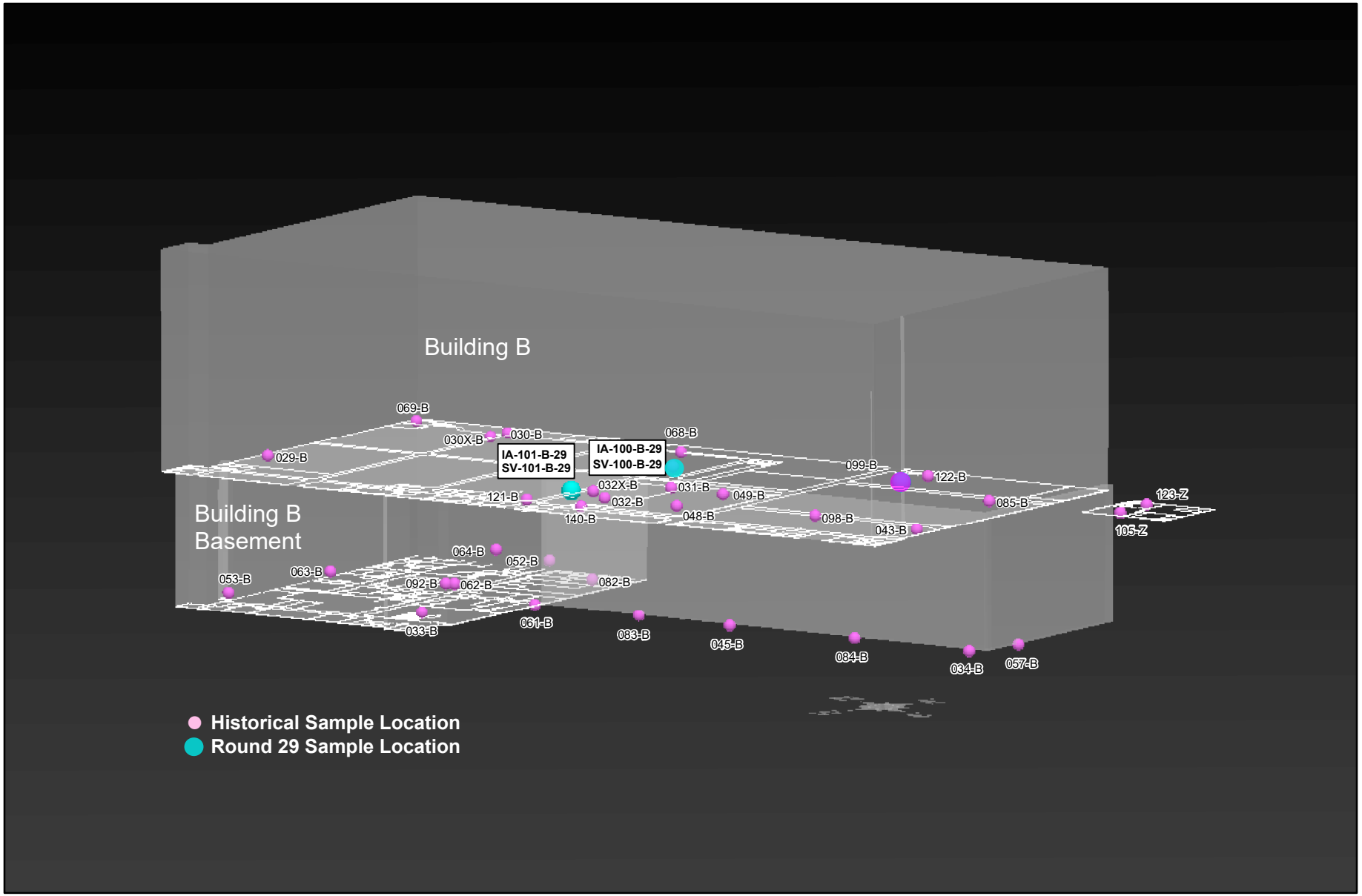

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Figure 2-5
Indoor Air and Sub-Slab Vapor Monitoring Locations
for Building C, Round 29, August 2020

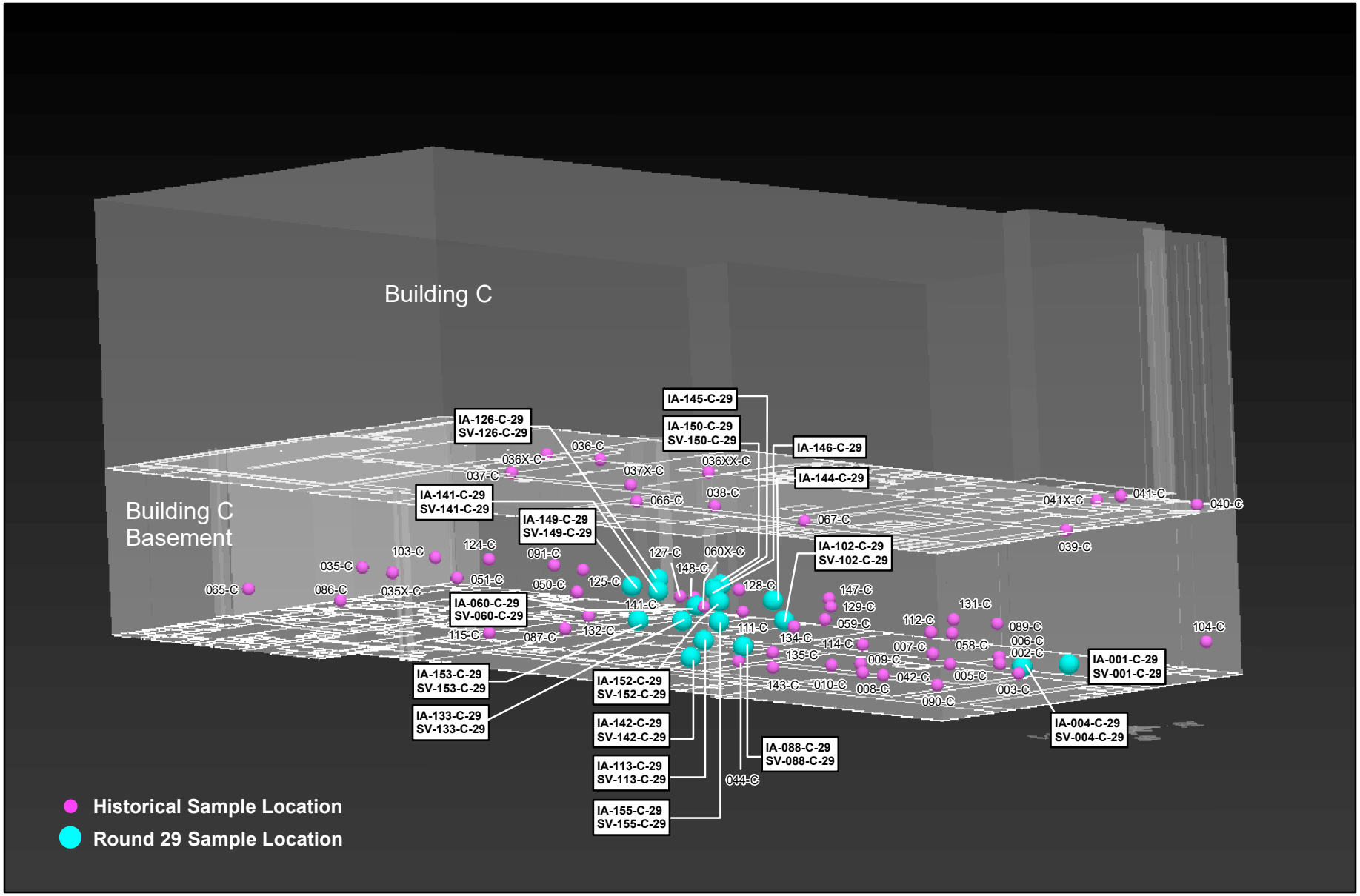

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FIGURE 3-1

ROUND 29 INDOOR AIR AND/OR SUB-SLAB VAPOR SAMPLING RESULTS GREATER THAN SCREENING LEVELS BUILDING A

019-A
020-A
095-A
094-A
075-A
074-A
021-A
022-A
109-A
076-A
168-A
SV-136-A-29
TRICHLOROETHENE 480
110-A
078-A
070-A
116-A
077-A
IA-018-A-29
CHLOROFORM 19 / 20 (DUP)
169-A
023-A
117-A
026-A
170-A
108-A
013-A
025-A
SP1A SUMP PIT
014-A
SP1 SUMP PIT
172-A
011-A
096-A
117X-A
PIT-A
012-A
024-A
071-A
024-AX
138-A
015-A
106-A
SV-171-A-29
TRICHLOROETHENE 2800
016-A
SV-118-A-29DL
TRICHLOROETHENE 650 E
093X-A
175-A
017-A
SV-174-A-29
TRICHLOROETHENE 140000
176-A
SV-173-A-29
TRICHLOROETHENE 7600
119-A
079-A
AFG-A
046-A
072-A
107-A
093-A
177-A
SUMP HRS-5
139-A
046-AX
120-A
097-A
UTILITY CORRIDOR SUMP
073-A
047-A
ABS-A
027-A
028-A
081-A
080-A

Legend

- IA, 1st Floor
- IA, Basement
- SV
- Round 29 Sampling Locations
- Sump or Sump Pit
- SSD Radius of Influence
- Buildings A, B and C
- Building A Basement
- Building B and C Basement
- Excavation Area
- SSD Treatment Unit

All results in microgram(s) per cubic meter (µg/m^3).

X - moved from original location once.

Screening Levels Exceeded

Chemical	Indoor Air	Soil Vapor
Chloroform	5.3	NA
Trichloroethene	8.8	293

DUP - duplicate sample
E - concentration was above instrument calibration range and was reanalyzed
IA - Indoor Air
SSD - Sub-slab Depressurization
SV - Soil Vapor
TCE - Trichloroethene

August 2020 Sub-Slab Vapor TCE Concentration

- 10000 ug/m3
- 1000 ug/m3
- 293 ug/m3
- 0.1 ug/m3

N

0 32 64 Feet

Lockheed Martin Middle River Complex
Middle River, Maryland

DATE MODIFIED: 12/10/20
CREATED BY: JEE

TETRA TECH

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FIGURE 3-2

ROUND 29 INDOOR AIR AND SUB-SLAB VAPOR SAMPLING RESULTS GREATER THAN SCREENING LEVELS BUILDING B

053-B
029-B
063-B
069-B
064-B
030-BX
030-B
092-B
062-B
052-B
033-B
061-B
082-B
068-B
121-B
101-B
083-B
100-B
032-BX
032-B
140-B
031-B
045-B
048-B
049-B
099-B
122-B
084-B
098-B
085-B
034-B
057-B
043-B
105-Z
123-Z

Legend

- IA, 1st Floor
- IA, Basement
- SV
- Round 29 Sampling Locations
- Buildings A, B and C
- Building B and C Basement
- Tunnel

All results in microgram(s) per cubic meter (µg/m^3).

X - moved from original location once.

Screening Levels Exceeded

Chemical	Indoor Air	Soil Vapor
Trichloroethene	8.8	293

IA - Indoor Air
SV - Soil Vapor
TCE - Trichloroethene

August 2020 Sub-Slab Vapor TCE Concentration

- 10000 ug/m3
- 1000 ug/m3
- 293 ug/m3
- 0.1 ug/m3

N

0 32 64 Feet

Lockheed Martin Middle River Complex
Middle River, Maryland

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TETRA TECH

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FIGURE 3-3

ROUND 29 INDOOR AIR AND/OR SUB-SLAB VAPOR SAMPLING RESULTS GREATER THAN SCREENING LEVELS BUILDING C

035-C
103-C
065-C
035-CX
124-C
051-C
086-C
091-C
125-C
036-CX
050-C
SV-126-C-29
TRICHLOROETHENE 310
149-C
037-C
036-C
141-C
145-C
150-C
151-C
127-C
146-C
128-C
132-C
148-C
115-C
SV-060-C-29
TRICHLOROETHENE 480
152-C
087-C
060-CX
037-CX
036-CXX
144-C
153-C
111-C
147-C
133-C
154-C
156-C
155-C
066-C
129-C
SV-102-C-29
1,1-DICHLOROETHANE 5500 E / 6000 E (DUP)
NAPHTHALENE 300 / 430 (DUP)
TRICHLOROETHENE 1800 / 1800 (DUP)
113-C
059-C
038-C
134-C
157-C
158-C
130-C
088-C
142-C
131-C
135-C
044-C
114-C
112-C
089-C
159-C
067-C
058-C
143-C
010-C
009-C
007-C
008-C
041-C
041-CX
005-C
006-C
042-C
002-C
SV-004-C-29
TRICHLOROETHENE 300
040-C
003-C
001-C
090-C
039-C
104-C

Legend

- IA, 1st Floor
- IA, Basement
- SV
- Round 29 Sampling Locations
- SSD Radius of Influence
- Buildings A, B and C
- Building B and C Basement
- Tunnel
- SSD Treatment Unit

All results in microgram(s) per cubic meter (µg/m^3).

X - moved from original location once.

Screening Levels Exceeded

Chemical	Indoor Air	Soil Vapor
1,1-Dichloroethane	400,000	2567
Naphthalene	50,000	120
Trichloroethene	8.8	293

NA – Not applicable

DUP - duplicate sample
E - concentration was above instrument calibration range and was reanalyzed
IA - Indoor Air
SSD - Sub-slab Depressurization
SV - Soil Vapor
TCE - Trichloroethene

August 2020 Sub-Slab Vapor TCE Concentration

- 10000 ug/m3
- 1000 ug/m3
- 293 ug/m3
- 0.1 ug/m3

N

0 32 64 Feet

Lockheed Martin Middle River Complex
Middle River, Maryland

DATE MODIFIED: 12/10/20

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Figure 4-1
Sub-Slab Vapor VOC Concentrations at 015-A, Building A
Lockheed Martin Corporation, Middle River Complex
Middle River, Maryland

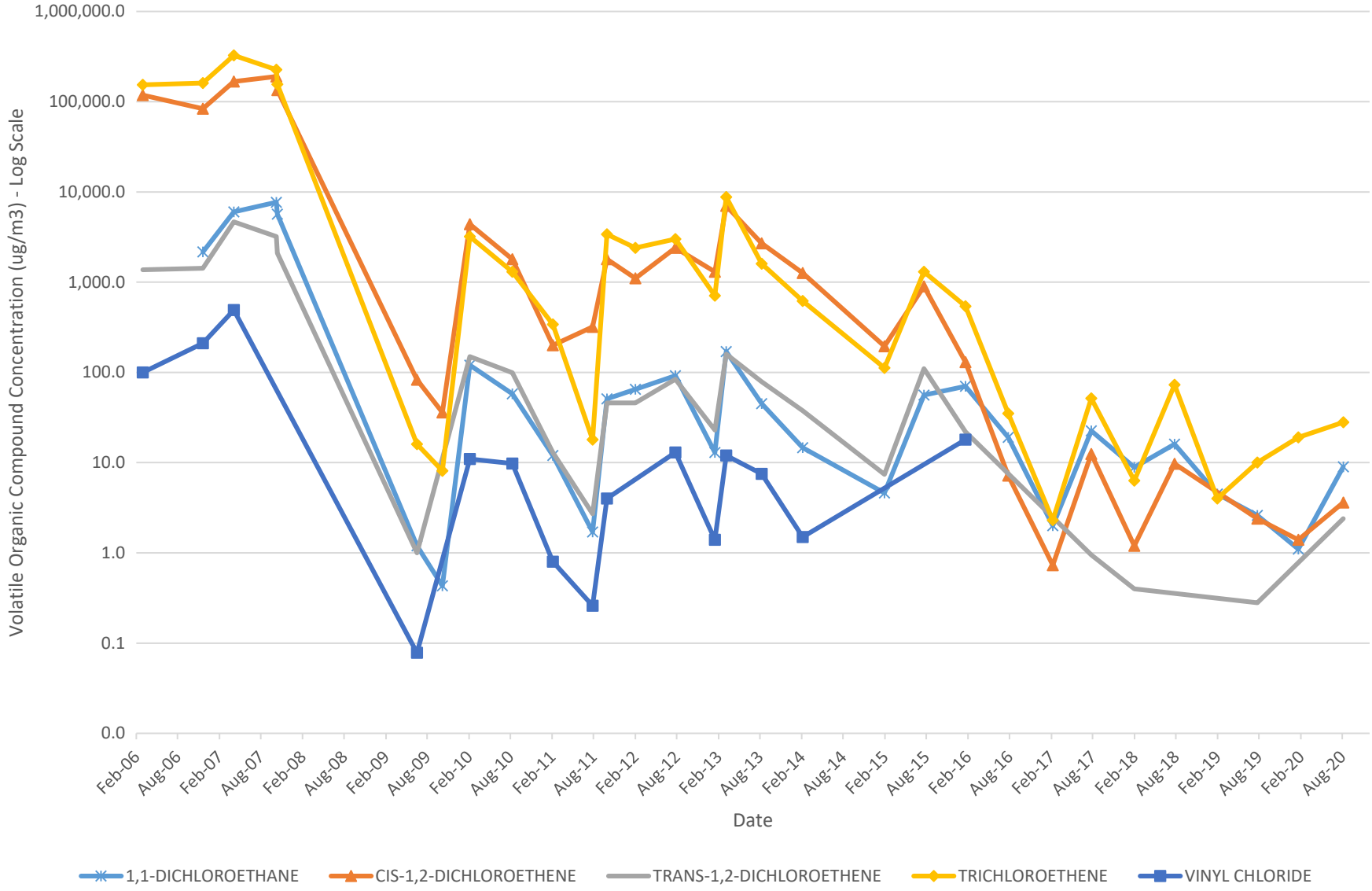


Figure 4-2
Sub-Slab Vapor TCE Concentrations at Monitoring Points Near SSD-System, Building A
Lockheed Martin Corporation, Middle River Complex
Middle River, Maryland

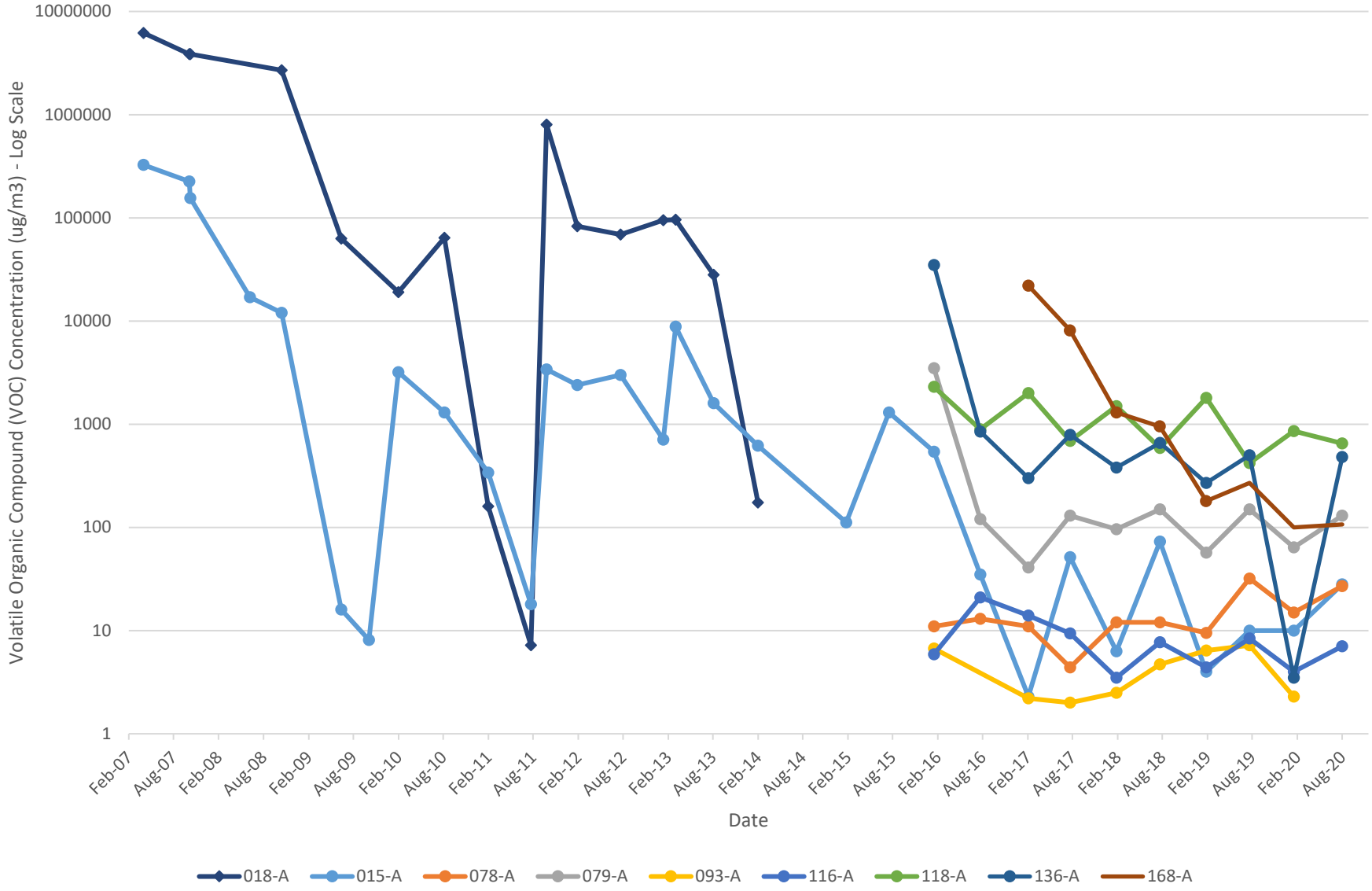


Figure 4-3
Sub-Slab Vapor TCE Concentrations at Monitoring Points Near SSD-System, Building C
Lockheed Martin Corporation, Middle River Complex
Middle River, Maryland

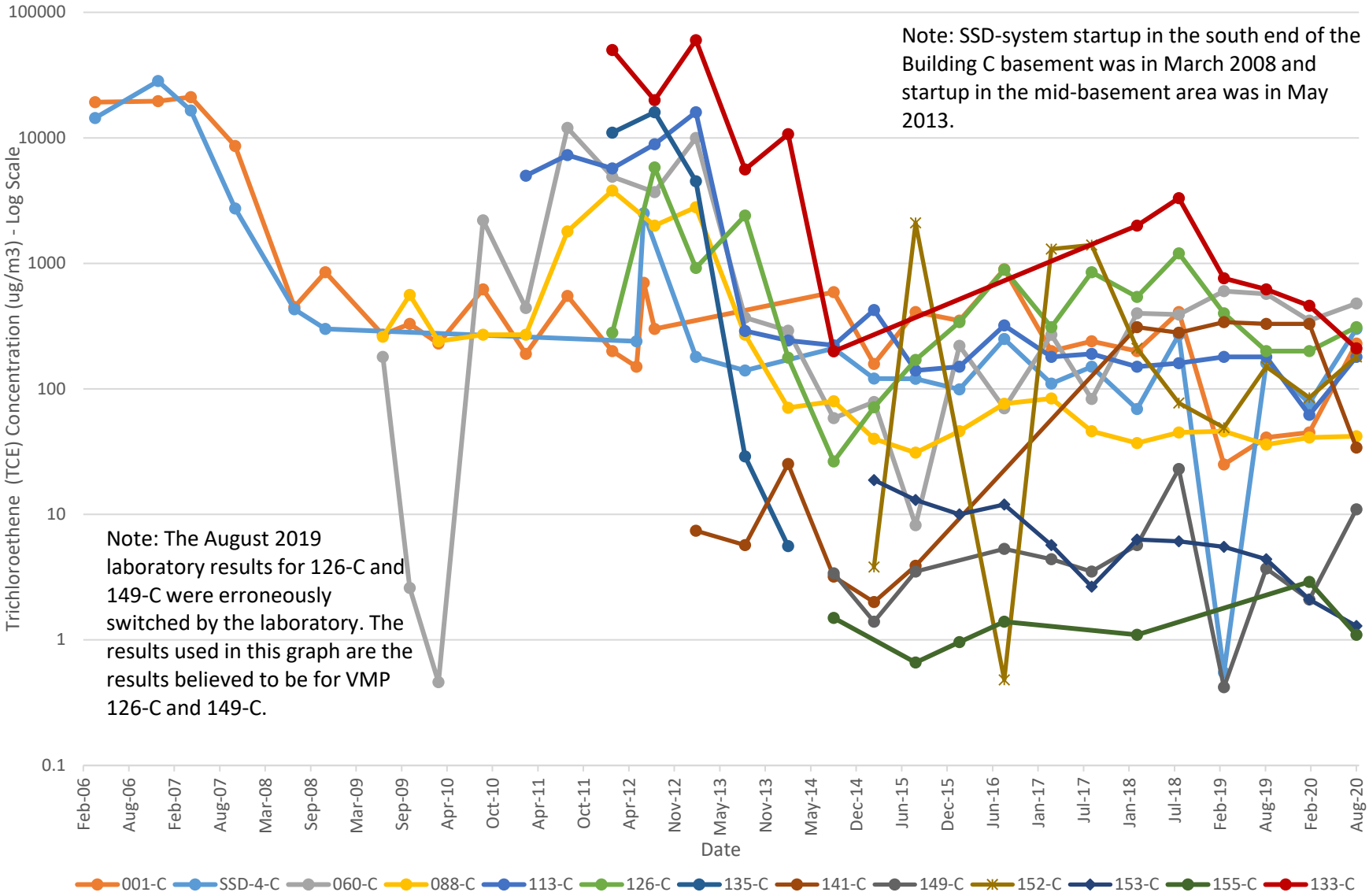
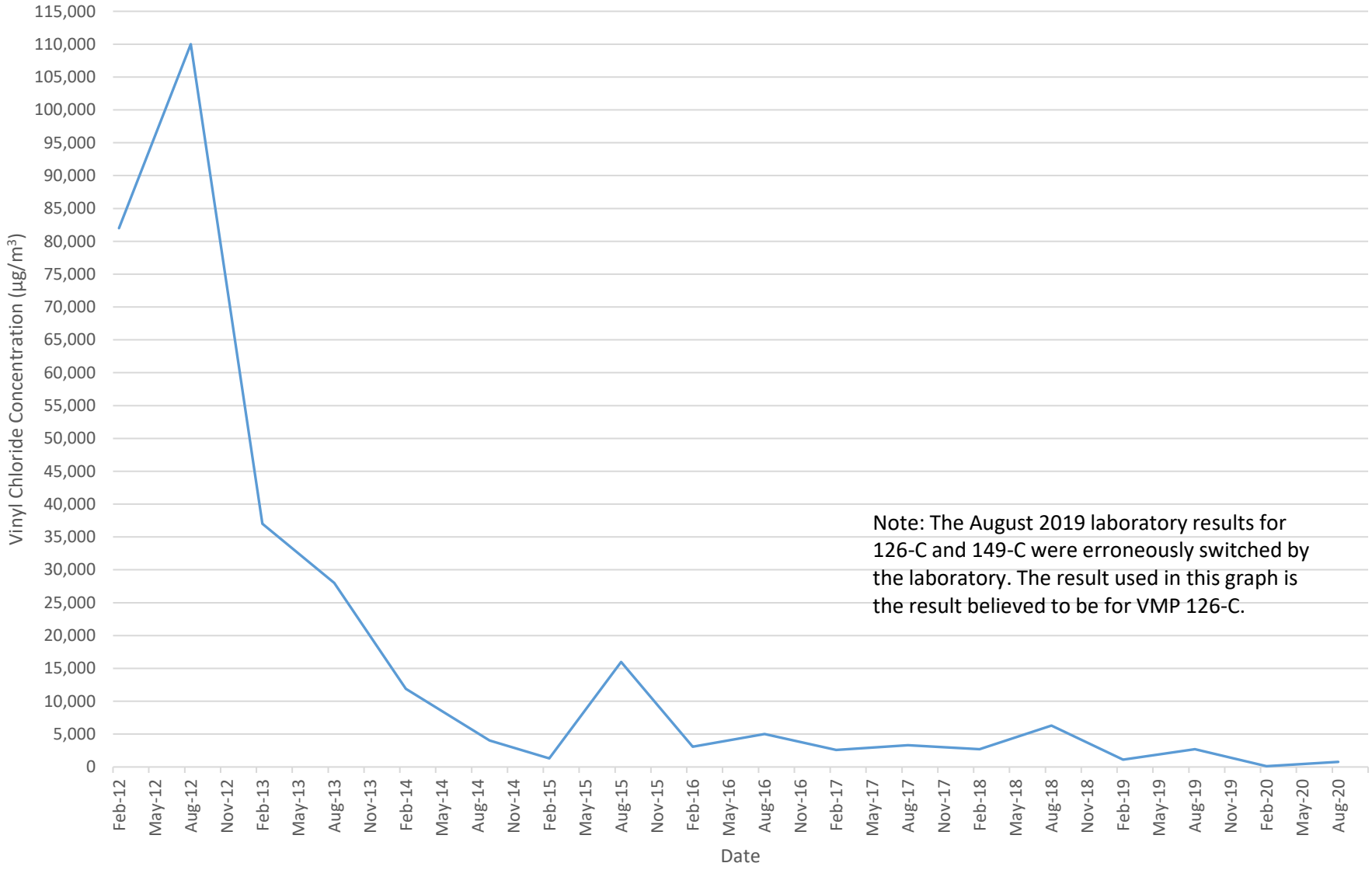


Figure 4-4
Sub-Slab Vapor Vinyl Chloride Concentrations at 126-C, Building C
Lockheed Martin Corporation, Middle River Complex
Middle River, Maryland



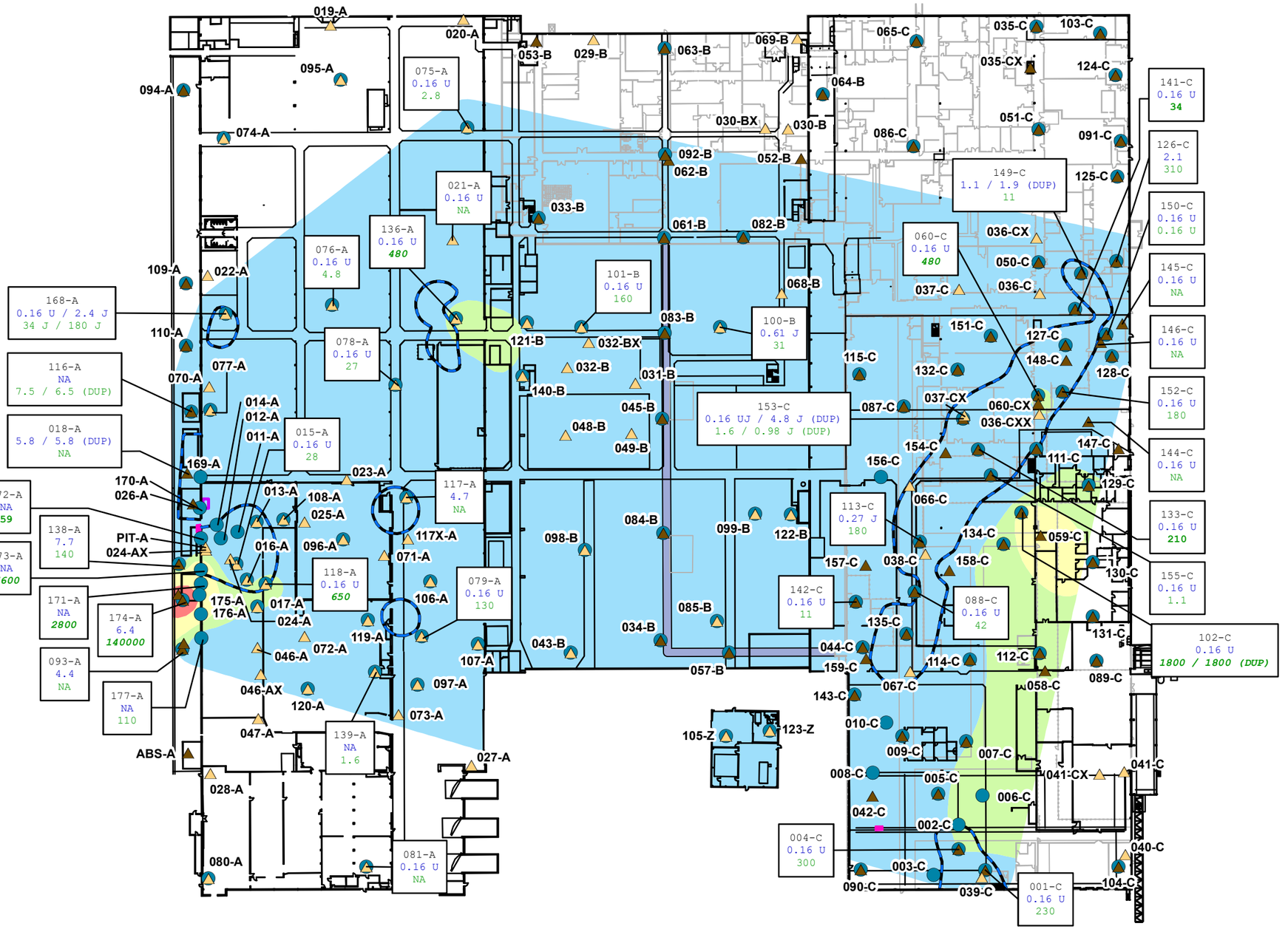


FIGURE 5-1

TRICHLOROETHENE SAMPLING RESULTS
ROUND 29
BUILDINGS A, B AND C

Legend

- IA, 1st Floor
- IA, Basement
- SV
- SSD Treatment Unit
- SSD Radius of Influence
- Buildings A, B and C
- Building B and C Basement
- Tunnel
- NA — Indicates no indoor air results were collected.
- NA — Indicates no soil vapor results were collected.

All units in µg/m^3.
All location IDs begin with "AIR-."
DUP - Duplicate sample. IA - Indoor air.
J = Estimated value. NA - Not applicable.
SSD = Sub-slab Depressurization. SV - Sub-slab vapor.
TCE - Trichloroethene. U - Not detected.

ug/m3 - microgram per cubic meter.
X - moved from original location once.
XX - moved from original location twice.
Indoor air quality results shown in blue type.
Soil vapor results shown in green type.
Exceedances labeled in ***bold italicized*** print.

Screening Levels

Indoor Air	Soil Vapor
8.8	293

August 2020 Sub-Slab Vapor TCE Concentration

- 10000 ug/m3
- 1000 ug/m3
- 293 ug/m3
- 0.1 ug/m3

Lockheed Martin Middle River Complex
Middle River, Maryland

0 60 120 Feet

N

DATE MODIFIED: 11/19/20

CREATED BY: JEE

TETRA TECH

Map Document: (P:\GIS\Middle_River\MapDocs\MXD\bldg_abc_tce_tags_rmd29_1117.mxd)
11/19/20 -- JEE

Figure 5-2A
Concentrations of Select Chemicals from Round 29
Building A - Sub-Slab Vapor

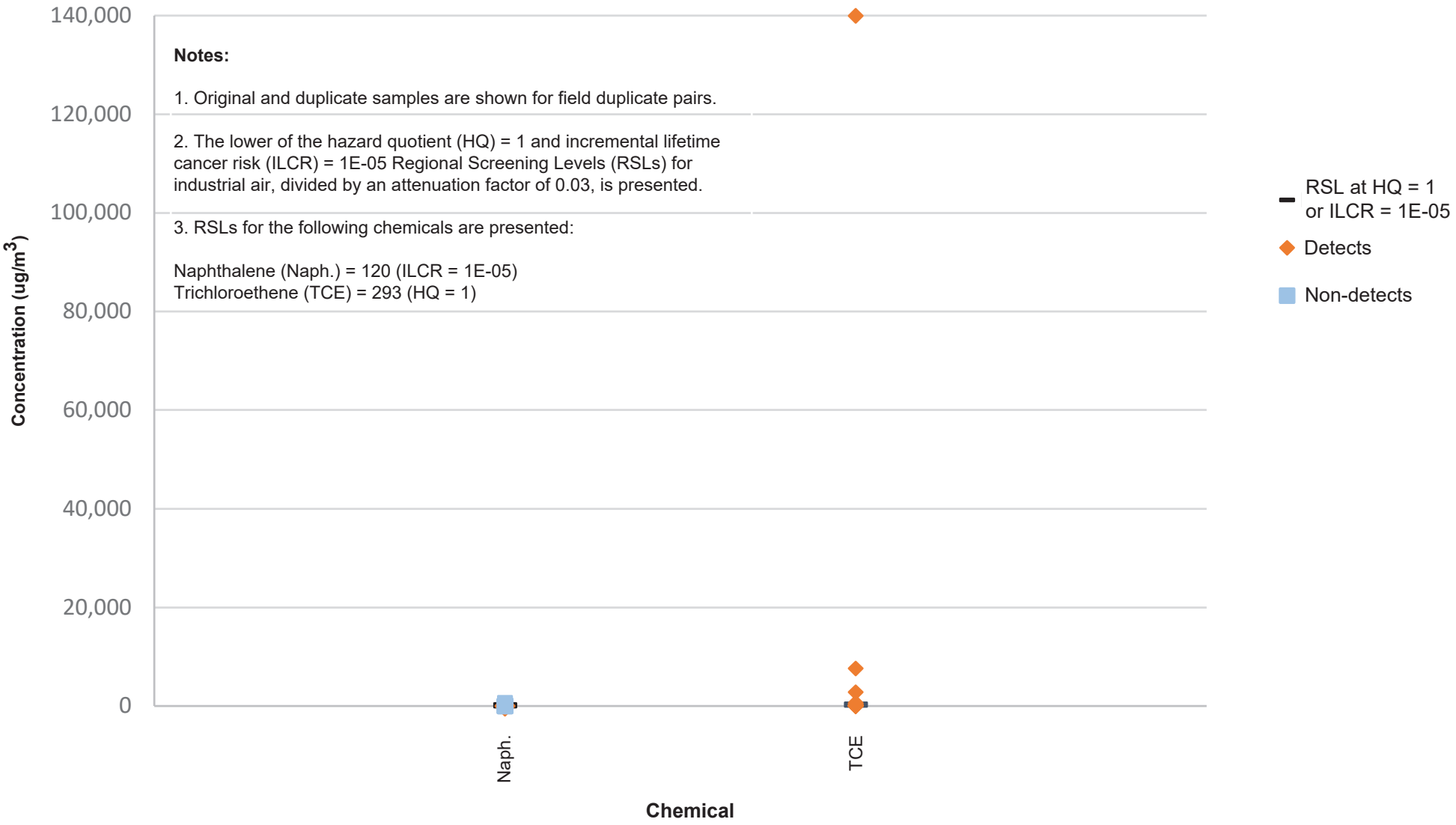


Figure 5-2B
Concentrations of Select Chemicals from Round 29
Building A - Indoor Air - Basement

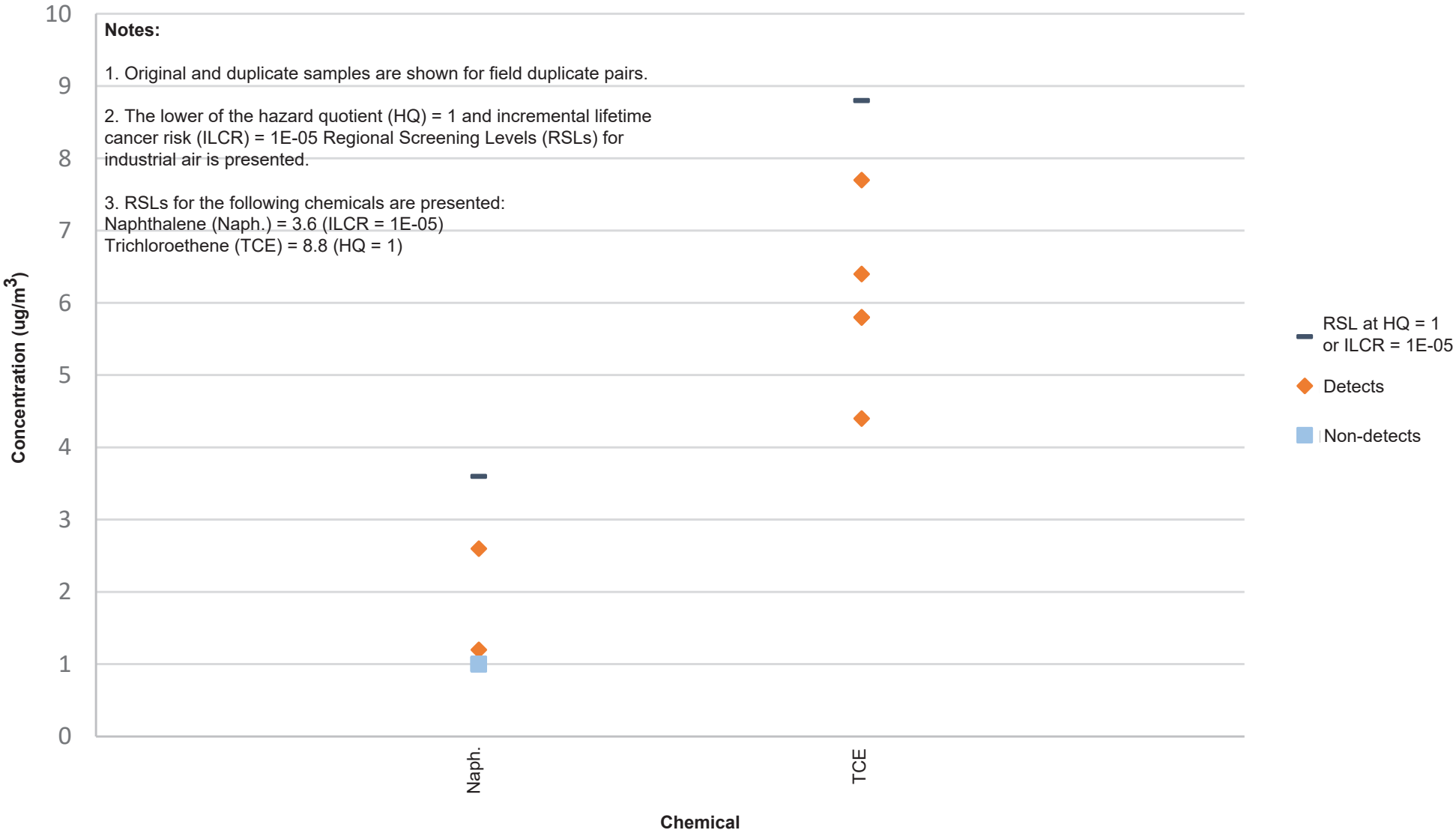


Figure 5-2C
Concentrations of Select Chemicals from Round 29
Building A - Indoor Air - First Floor

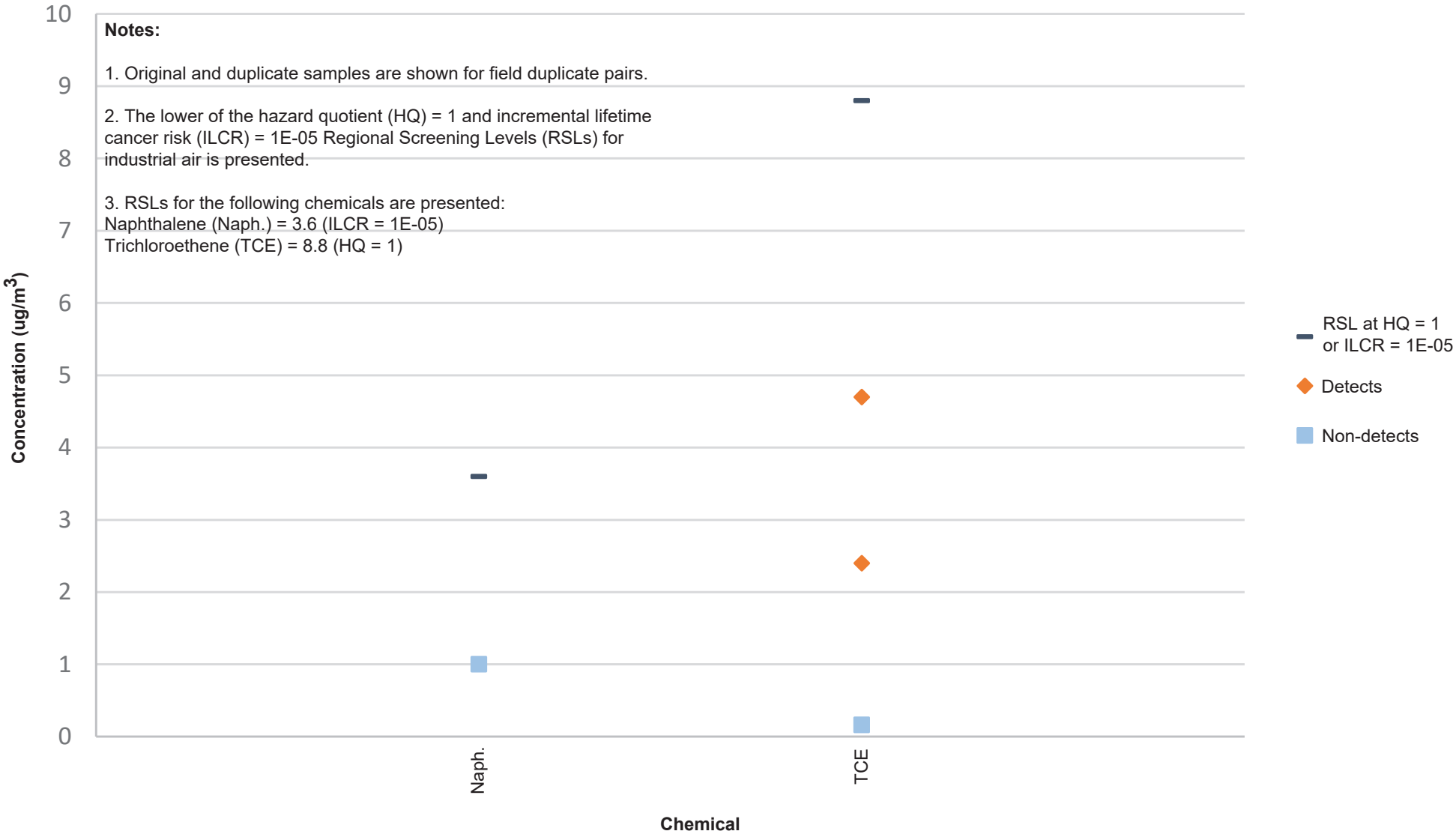


Figure 5-3A
Concentrations of Select Chemicals from Round 29
Building C - Sub-Slab Vapor

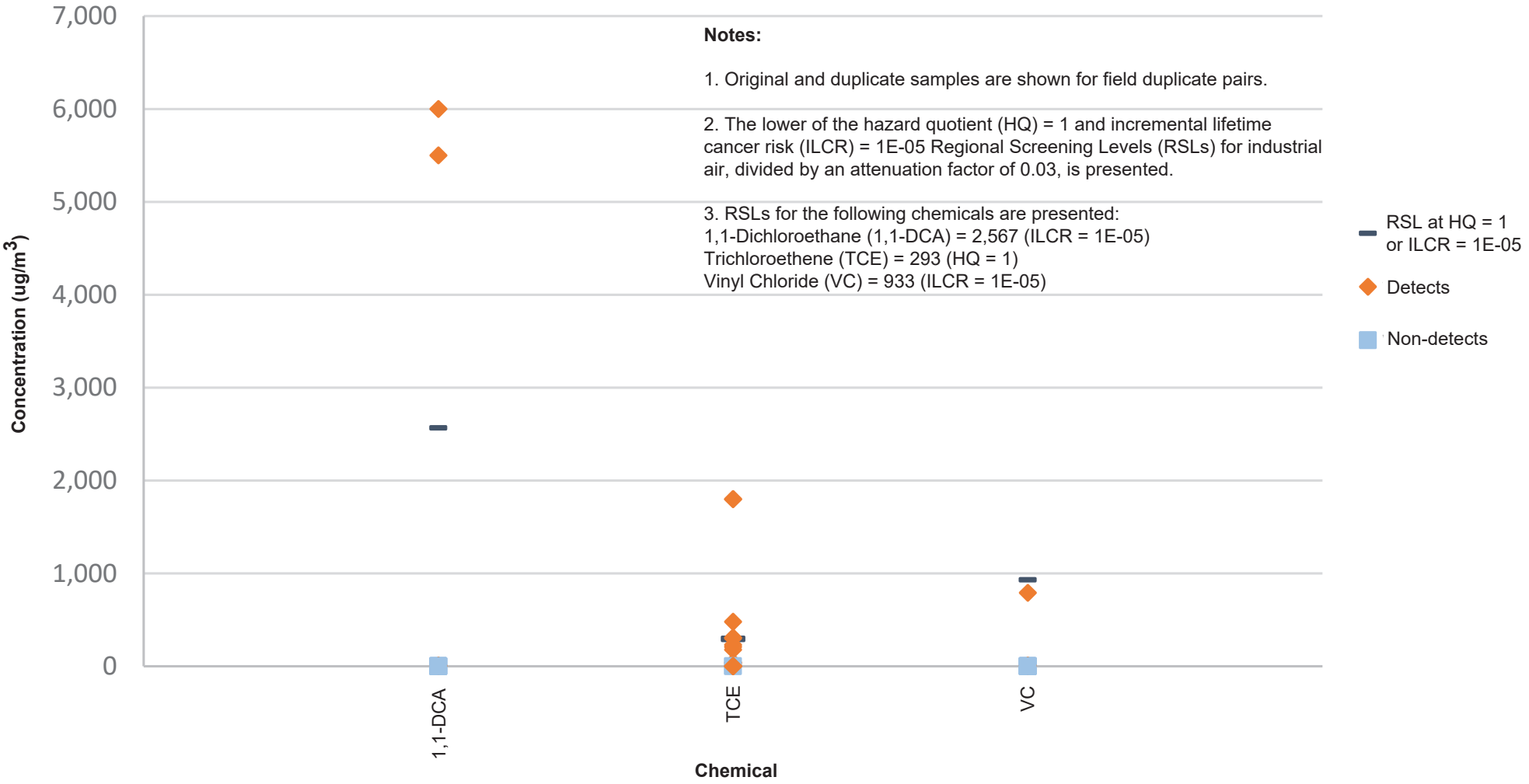


Figure 5-3B
Concentrations of Select Chemicals from Round 29
Building C - Indoor Air - Basement

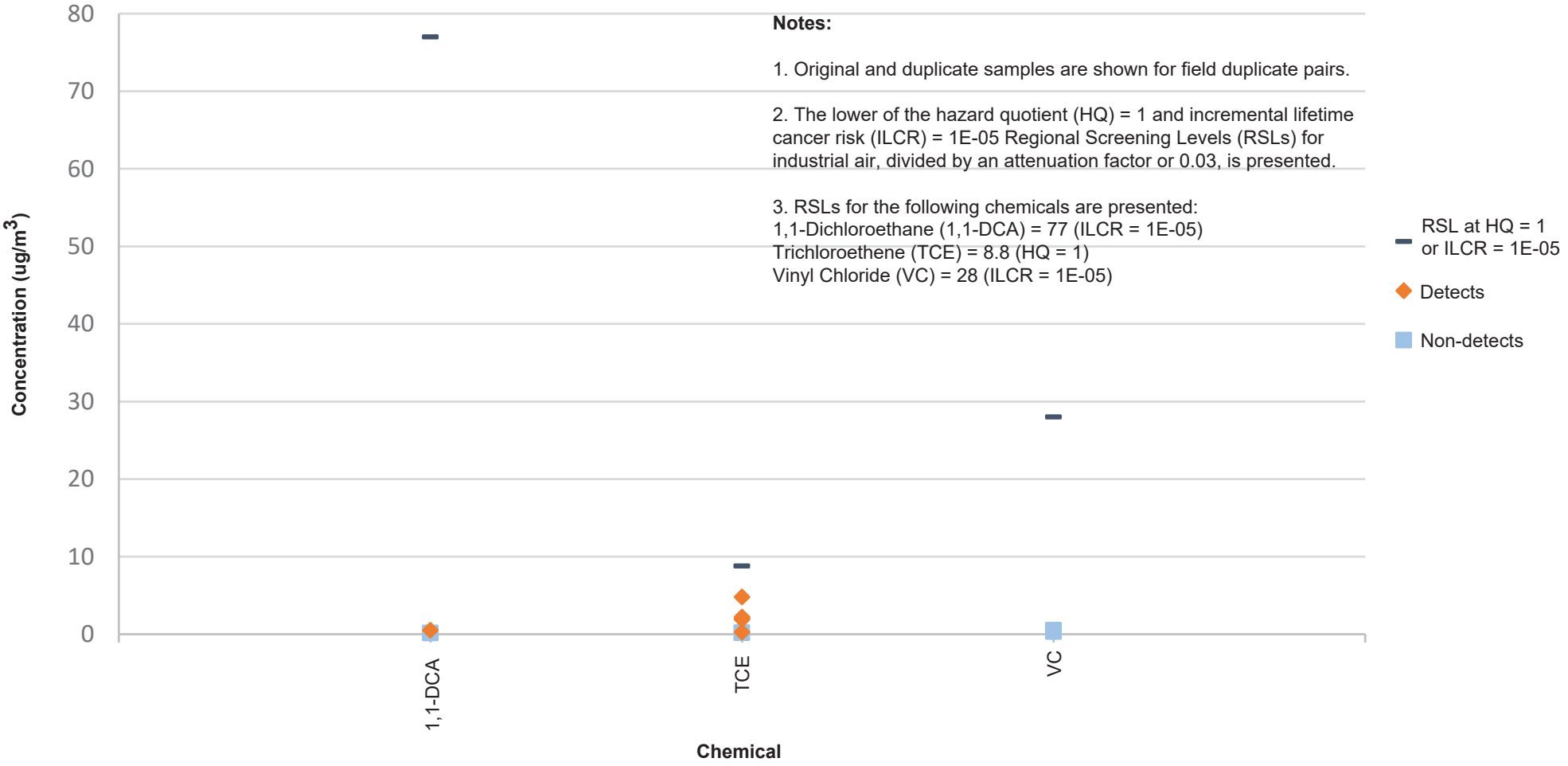


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Table 3-11 Ambient Air (Background) Sampling Results, August 2020

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Table 4-4 Trichloroethene Concentrations before and during SSDS Operation, Building A

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Table 4-6 Trichloroethene Concentrations before and during SSDS Operation, Building C

Table 4-7A Summary of VOC Detections in SSDS Influent, Building A

Table 4-7B Summary of VOC Detections in SSDS Influent, Building C

Table 1-1
Previous Investigations
Lockheed Martin Middle River Complex,
Middle River, Maryland
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Indoor-Air-Quality Investigation of Buildings A, B, C, and the (Vertical-Launch System) VLS (Facility), Lockheed Martin Middle River Complex, 2323 Eastern Boulevard Middle River, Maryland (Tetra Tech, 2007)
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Indoor-Air-Quality Investigation 2008 Summary Report, Lockheed Martin Middle River Complex, 2323 Eastern Boulevard Middle River, Maryland (Tetra Tech, 2008b)
November 2008 Sub-Slab Sampling Report, Sub-Slab-Depressurization Systems, Buildings A and C, Lockheed Martin Corporation Middle River Complex, Middle River, Maryland (Tetra Tech, 2008c)
SSD-System Installation Report for Project # EESHBDF-00897_R642, Sub-Slab Depressurization Systems Installation, Sub-Surface Vapor Intrusion Mitigation, Buildings A and C, Middle River Complex, Middle River, Maryland (Tetra Tech, 2008d)
Vapor-Intrusion Investigation and Sub-Slab-Depressurization-System Operation 2009 Summary Report, Lockheed Martin Middle River Complex, 2323 Eastern Boulevard Middle River, Maryland (Tetra Tech, 2010a)
Indoor-Air-Quality Investigation August 2010 Summary Report, Lockheed Martin Middle River Complex, 2323 Eastern Boulevard Middle River, Maryland (Tetra Tech, 2010b)
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Vapor-Intrusion Investigation and Sub-Slab-Depressurization-System Operation August 2010 Monitoring Report, Lockheed Martin Middle River Complex, 2323 Eastern Boulevard Middle River, Maryland (Tetra Tech, 2011a)
Vapor-Intrusion Investigation and Sub-Slab-Depressurization-System Operation February 2011 Monitoring Report, Lockheed Martin Middle River Complex, 2323 Eastern Boulevard Middle River, Maryland (Tetra Tech, 2011b)
Vapor-Intrusion Investigation and Sub-Slab-Depressurization-System Operation February 2012 Monitoring Report, Lockheed Martin Middle River Complex, 2323 Eastern Boulevard Middle River, Maryland (Tetra Tech, 2012a)
Vapor-Intrusion Management Plan, Lockheed Martin Middle River Complex, 2323 Eastern Boulevard Middle River, Maryland (Tetra Tech, 2012b)
Construction Documentation for EESHJAC_20052_R642, Sub-Slab Depressurization System First-Phase Expansion—Building C, Middle River Complex, Middle River, Maryland (Tetra Tech, 2012c)
Vapor-Intrusion Investigation and Sub-Slab-Depressurization-System Operation August 2012 Monitoring Report, Lockheed Martin Middle River Complex, 2323 Eastern Boulevard Middle River, Maryland (Tetra Tech, 2013a)
Vapor-Intrusion Investigation and Sub-Slab-Depressurization-System Operation February 2013 Monitoring Report, Lockheed Martin Middle River Complex, 2323 Eastern Boulevard Middle River, Maryland (Tetra Tech, 2013b)

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Construction Documentation: Sub-Slab Depressurization System Second-Phase Expansion—Building C, Middle River Complex, Middle River, Maryland (Tetra Tech, 2013c)
Vapor-Intrusion Investigation and Sub-Slab-Depressurization-System Operation August 2013 Monitoring Report, Lockheed Martin Middle River Complex, 2323 Eastern Boulevard Middle River, Maryland (Tetra Tech, 2014a)
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Vapor-Intrusion Investigation and Sub-Slab-Depressurization-System Operation February 2015 Monitoring Report, Lockheed Martin Middle River Complex, 2323 Eastern Boulevard Middle River, Maryland (Tetra Tech, 2015b)
Vapor-Intrusion Investigation and Sub-Slab-Depressurization-System Operation August 2015 Monitoring Report, Lockheed Martin Middle River Complex, 2323 Eastern Boulevard Middle River, Maryland (Tetra Tech, 2015c)
Vapor-Intrusion Investigation and Sub-Slab-Depressurization-System Operation February 2016 Monitoring Report, Lockheed Martin Middle River Complex, 2323 Eastern Boulevard Middle River, Maryland (Tetra Tech, 2016a)
Block I Building A and Building A Basement Vapor-Intrusion Investigation Report, Lockheed Martin Middle River Complex, Lockheed Martin Middle River Complex, 2323 Eastern Boulevard Middle River, Maryland (Tetra Tech, 2016b)
Block I Building A and Building A Basement Supplemental Vapor-Intrusion Investigation Report, Lockheed Martin Middle River Complex, Lockheed Martin Middle River Complex, 2323 Eastern Boulevard Middle River, Maryland (Tetra Tech, 2016c)
Construction Report, Sub-Slab Depressurization-System Second-Phase Expansion—Building A, Lockheed Martin Middle River Complex, 2323 Eastern Boulevard, Middle River, Maryland (Tetra Tech, 2016d)
Vapor-Intrusion Investigation and Sub-Slab-Depressurization-System Operation August 2016 Monitoring Report, Lockheed Martin Middle River Complex, 2323 Eastern Boulevard Middle River, Maryland (Tetra Tech, 2017a)
Block I Building A Basement Monitoring Report, Lockheed Martin Middle River Complex, 2323 Eastern Boulevard Middle River, Maryland (Tetra Tech, 2017b)
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Previous Investigations
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Construction Report, Sub-Slab Depressurization System, Third-Phase Expansion—Building A, Lockheed Martin Middle River Complex, 2323 Eastern Boulevard, Middle River, Maryland (Tetra Tech, 2017f)
Vapor-Intrusion Investigation and Sub-Slab-Depressurization-System Operation August 2017 Monitoring Report, Lockheed Martin Middle River Complex, 2323 Eastern Boulevard Middle River, Maryland (Tetra Tech, 2018a)
Block I Building A and Building A Basement Investigation Report—Summer 2017, Middle River Complex, Middle River, Maryland (Tetra Tech, 2018b)
Block I Building A Floor Air-Vent Sealing and Survey Report Middle River Complex, Middle River, Maryland (Tetra Tech, 2018c)
Vapor-Intrusion Investigation and Sub-Slab-Depressurization-System Operation February 2018 Monitoring Report, Lockheed Martin Middle River Complex, 2323 Eastern Boulevard Middle River, Maryland (Tetra Tech, 2018d)
Groundwater Leachate Management Block I Flow Testing and Additional Sump Sampling Report, Lockheed Martin Middle River Complex, 2323 Eastern Boulevard Middle River, Maryland (Tetra Tech, 2018e)
Vapor-Intrusion Investigation and Sub-Slab-Depressurization-System Operation August 2018 Monitoring Report, Lockheed Martin Middle River Complex, 2323 Eastern Boulevard Middle River, Maryland (Tetra Tech, 2018f)
Vapor-Intrusion Investigation and Sub-Slab-Depressurization-System Operation February 2019 Monitoring Report, Lockheed Martin Middle River Complex, 2323 Eastern Boulevard Middle River, Maryland (Tetra Tech, 2018g)
Vapor-Intrusion Investigation and Sub-Slab-Depressurization-System Operation August 2019 Monitoring Report, Lockheed Martin Middle River Complex, 2323 Eastern Boulevard Middle River, Maryland (Tetra Tech, 2019b)
Vapor-Intrusion Investigation and Sub-Slab-Depressurization-System Operation February 2020 Monitoring Report, Lockheed Martin Middle River Complex, 2323 Eastern Boulevard Middle River, Maryland (Tetra Tech, 2020)

TABLE 3-1

DESCRIPTIVE STATISTICS OF INDOOR AIR RESULTS, ALL BUILDINGS, AUGUST 2020
LOCKHEED MARTIN MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

Parameter	Frequency of detection[1]	Minimum detected value[1]		Maximum detected value[1]		Sample with maximum detected concentration	Location of maximum detected concentration	Minimum nondetect value[2]	Maximum nondetect value[2]	Average of detected values[1]	Average of all values[1][3]	Standard deviation[1][3]	Average of detected background values	Maximum background value	Number of detects above maximum background value[1][4]	Adjusted USEPA RSL for industrial air[5]	Number of samples above adjusted industrial RSL[1][4]
Volatile organic compounds (µg/m^3)																	
1,1,1-TRICHLOROETHANE	1/35		1	J	1	J	IA-113-C-29	AIR-113-C	1	1	1	0.514285	0.084515425	--	ND	1	22,000	0
1,1,2-TRICHLOROETHANE	1/35		0.45	J	0.45	J	IA-113-C-29	AIR-113-C	0.19	0.19	0.45	0.105142	0.060005952	--	ND	1	0.88	0
1,1-DICHLOROETHANE	1/35		0.52	J	0.52	J	IA-113-C-29	AIR-113-C	0.14	0.14	0.52	0.082857	0.076063883	--	ND	1	77	0
1,1-DICHLOROETHENE	4/35		0.73	J	1.2	J	IA-018-A-29, IA-018-A-29-D	AIR-018-A	0.16	0.16	1.0025	0.185428	0.30381247	--	ND	5	880	0
1,2,4-TRIMETHYLBENZENE	11/35		0.51	J	1.9	J	IA-149-C-29-D	AIR-149-C	0.49	0.49	0.819318	0.4255	0.365547434	0.53	**0.53 J**	9	260	0
1,2-DICHLOROETHANE	2/35		0.35	J	0.41	J	IA-153-C-29	AIR-153-C	0.2	0.2	0.3025	0.111571	0.049061358	0.28	0.28 J	2	4.7	0
1,3,5-TRIMETHYLBENZENE	14/35		0.55	J	1.8	J	IA-113-C-29	AIR-113-C	0.54	0.54	1.2675	0.669	0.534723403	--	ND	14	260	0
BENZENE	32/35		0.13	J	0.68	J	IA-060-C-29	AIR-060-C	0.13	0.13	0.435	0.403285	0.17710475	0.29	**0.43 J**	20	16	0
CARBON TETRACHLORIDE	33/35		0.24	J	1	J	IA-113-C-29	AIR-113-C	0.22	0.22	0.505151	0.482571	0.185124646	0.375	**0.45 J**	23	20	0
CHLORODIFLUOROMETHANE	35/35		1.1		65		IA-146,150-C-29	AIR-146,150-C	NULL	NULL	10.83286	10.832857	18.34080128	1.2	**1.3 J**	28	220,000	0
CHLOROFORM	23/35		0.2	J	20		IA-018-A-29-D	AIR-018-A	0.17	0.17	1.307608	0.888428	3.246654108	--	ND	26	5.3	2
CIS-1,2-DICHLOROETHENE	3/35		0.33	J	0.49	J	IA-018-A-29	AIR-018-A	0.2	0.2	0.33	0.119714	0.073173272	1.2	1.2 J	0	--	--
DICHLORODIFLUOROMETHANE	35/35		1.7	J	3		IA-113-C-29	AIR-113-C	NULL	NULL	2.2	2.2	0.40818825	1.9	**2.1**	19	440	0
ETHYLBENZENE	29/35		0.31	J	4.1		IA-075-A-29	AIR-075-A	0.28	0.28	0.796896	0.684285	0.823469296	--	ND	32	49	0
METHYLENE CHLORIDE	11/35		6.8		80		IA-117-A-29	AIR-117-A	6.8	6.8	23.74545	9.794285	15.54914302	13.6	**21**	5	2,600	0
NAPHTHALENE	2/35		1.2		2.6		IA-018-A-29-D	AIR-018-A	1	1	1.4	0.551428	0.244193063	--	ND	3	3.6	0
TETRACHLOROETHENE	6/35		0.48	J	3.3		IA-100-B-29	AIR-100-B	0.24	0.24	1.19	0.303428	0.584450183	--	ND	7	180	0
TOLUENE	33/35		1.5	J	200		IA-075-A-29	AIR-075-A	1.5	1.5	17.58106	16.619285	37.96745708	1.63	**1.8 J**	32	22,000	0
TOTAL XYLENES	31/35		1	J	17		IA-075-A-29	AIR-075-A	0.52	0.52	3.541935	3.166857	3.46962006	0.985	**1.2 J**	33	440	0
TRANS-1,2-DICHLOROETHENE	1/35		0.27	J	0.27	J	IA-113-C-29	AIR-113-C	0.14	0.14	0.27	0.075714	0.03380617	--	ND	1	--	0
TRICHLOROETHENE	11/35		0.27	J	7.7		IA-138-A-29	AIR-138-A	0.16	0.16	3.428181	1.132285	2.080510522	--	ND	13	8.8	0

A gray-shaded maximum background value indicates that the maximum detected value from the site data exceeds the maximum background value.

A bolded chemical name/criterion indicates that at least one concentration exceeds background and the industrial air RSL based on an HQ of 0.1 or an ILCR of 1×10^{-6} (i.e., one-tenth of screening value listed).

A bolded/shaded chemical name/criterion indicates that its concentration exceeds background and the industrial air RSL based on an HQ of 1 or an ILCR of 1×10^{-5} (i.e., the screening value presented).

Footnotes:

1 - Sample and duplicate are considered two separate samples when determining the minimum and maximum concentrations and number of samples exceeding criteria but are considered one sample when determining frequency of detection, average, standard deviation.

2 - Values presented are sample-specific quantitation limits.

3 - One-half the detection limit was used to represent non-detected results in calculating the average of all results and the standard deviation.

4 - Exceedance counts are based on detected results only.

5 - USEPA Regional Screening Levels (RSLs) for Chemical Contaminants at Superfund Sites, May 2019. RSLs for carcinogens were adjusted to be based on a lifetime cancer risk of 1E-05. RSLs for noncarcinogens were not adjusted and represent a hazard quotient (HQ) of 1.

6 - Occupational Safety and Health Administration (OSHA) Permissible Exposure Limit (PEL).

TABLE 3-2

DESCRIPTIVE STATISTICS OF SUB-SLAB VAPOR RESULTS, ALL BUILDINGS, AUGUST 2020
LOCKHEED MARTIN MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

Parameter	Frequency of detection[1]		Minimum detected value[1]		Maximum detected value[1]		Sample with maximum detected concentration	Location with maximum detected concentration	Minimum nondetect value[2]	Maximum nondetect value[2]	Average of detected values[1]	Average of all values[1][3]	Standard deviation[1][3]	Average of detected background values	Maximum background value	Number of detects above maximum background value[1][4]	Adjusted USEPA RSL for industrial air[5]	Number of samples above adjusted industrial RSL[1][4]
Volatile Organic Compounds (µg/m^3)																		
1,1,1-TRICHLOROETHANE	15/33		1.5		2700		SV-102-C-29	AIR-102-C	1	610	194.99	99.745454	462.2387663	--	ND	17	733,333	0
1,1-DICHLOROETHANE	13/33		0.39	J	6000		SV-102-C-29-D	AIR-102-C	0.14	1.8	480.0746	189.20182	959.6448345	--	ND	15	**2,567**	2
1,1-DICHLOROETHENE	13/33		0.57	J	23000		SV-174-A-29	AIR-174-A	0.11	0.79	2184	860.43636	4028.866343	--	ND	16	29,333	0
1,2,3-TRIMETHYLBENZENE	7/33		3.4	J	24	J	SV-102-C-29	AIR-102-C	0.59	530	8.614285	11.650757	45.94809001	--	ND	8	8,667	0
1,2,4-TRIMETHYLBENZENE	18/33		0.54	J	23	J	SV-102-C-29-D	AIR-102-C	0.49	290	4.768472	7.899621	25.16156717	0.53	**0.53 J**	20	8,667	0
1,2-DICHLOROETHANE	1/33		0.21	J	0.21	J	SV-138-A-29	AIR-138-A	0.13	120	0.21	2.297121	10.42716659	0.28	0.28 J	0	157	0
1,3,5-TRIMETHYLBENZENE	19/33		0.56	J	32	J	SV-102-C-29, SV-102-C-29-D	AIR-102-C	0.36	320	4.53	8.466666	27.90560354	--	ND	21	8,667	0
BENZENE	29/33		0.18	J	230		SV-126-C-29	AIR-126-C	0.13	77	8.749137	9.03	40.23044001	0.29	**0.43 J**	16	533	0
CARBON TETRACHLORIDE	26/33		0.26	J	42		SV-100-B-29	AIR-100-B	0.44	130	3.031153	4.743333	13.09279064	0.375	**0.45 J**	19	667	0
CHLORODIFLUOROMETHANE	25/33		1	J	67		SV-150-C-29	AIR-150-C	0.39	230	7.624	10.018333	22.60149524	1.2	**1.3 J**	26	7,333,333	0
CHLOROFORM	29/33		0.25	J	100	J	SV-174-A-29	AIR-174-A	0.17	11	10.34586	9.353484	23.19639144	--	ND	33	177	0
CIS-1,2-DICHLOROETHENE	19/33		0.29	J	1800		SV-174-A-29	AIR-174-A	0.13	0.2	131.1661	75.561212	313.8644038	1.2	**1.2 J**	17	--	--
DICHLORODIFLUOROMETHANE	28/33		1.9	J	6		SV-101-B-29	AIR-101-B	4.3	210	2.708928	6.108333	17.84315418	1.9	**2.1**	26	14,667	0
ETHYLBENZENE	19/33		0.35	J	480		SV-102-C-29-D	AIR-102-C	0.28	170	27.94868	19.129696	82.28277646	--	ND	21	1,633	0
METHYLENE CHLORIDE	10/33		8		71		SV-149-C-29	AIR-149-C	4.5	4100	21.95	83.904545	355.3791128	13.6	**21**	4	86,667	0
NAPHTHALENE	6/33		1.2		430		SV-102-C-29-D	AIR-102-C	0.7	630	64.08333	23.315151	82.16544047	--	ND	7	**120**	2
TETRACHLOROETHENE	23/33		0.27	J	73		SV-101-B-29	AIR-101-B	0.24	140	7.044782	7.515303	18.03244588	--	ND	25	6,000	0
TOLUENE	21/33		1.5	J	44		SV-149-C-29	AIR-149-C	1.5	880	7.922619	20.773484	76.14807633	1.63	**1.8 J**	18	733,333	0
TOTAL XYLENES	23/33		1.2	J	5800		SV-102-C-29	AIR-102-C	0.52	310	256.8948	184.54758	963.7111833	0.985	**1.2 J**	25	14,667	0
TRANS-1,2-DICHLOROETHENE	16/33		0.2	J	200	J	SV-174-A-29	AIR-174-A	0.093	9.1	15.65125	7.814287	34.78413703	--	ND	17	--	--
TRICHLOROETHENE	32/33		0.98	J	140000		SV-174-A-29	AIR-174-A	0.16	0.16	4879.02	4731.1733	24323.01766	--	ND	36	**293**	10
VINYL CHLORIDE	3/33		0.69		790		SV-126-C-29	AIR-126-C	0.22	200	265.9467	27.844696	137.9202626	--	ND	4	933	0

A gray-shaded maximum background value indicates that the maximum detected value from the site data exceeds the maximum background value.

A bolded chemical name/criterion indicates that the maximum concentration exceeds the industrial air RSL divided by 0.03 based on an HQ of 0.1 or an ILCR of 1×10^{-6} (i.e., one-tenth the screening value presented).

A bolded/shaded chemical name/criterion indicates that the maximum concentration exceeds the industrial air RSL divided by 0.03 based on an HQ of 1 or an ILCR of 1×10^{-5} (i.e., the screening value presented).

Footnotes:
1 - Sample and duplicate are considered two separate samples when determining the minimum and maximum concentrations and number of samples exceeding criteria but are considered one sample when determining frequency of detection, average, standard deviation.
2 - Values presented are sample-specific quantitation limits.
3 - One-half the detection limit was used to represent non-detected results in calculating the average of all results and the standard deviation
4 - Screening values derived in accordance with *Draft Guidance for Evaluating the Vapor Intrusion to Indoor Air Pathway from Groundwater and Soils* (November 2002), are equal to United States Environmental Protection Agency (USEPA) industrial air screening values divided by an attenuation factor 0.03, and correspond to a target cancer risk level of 1×10^{-5} or a hazard quotient (HQ) of 1.
5 - Exceedance counts are based on detected results only.

Definitions:
-- - no criterion available
ca - screening value based on carcinogenic effects
HQ - hazard quotient
ILCR - incremental lifetime cancer risk
J - estimated value
NA - not available
nc - screening value based on noncarcinogenic effects
RSL - regional screening level
SV - sub-slab vapor

TABLE 3-3

SUMMARY STATISTICS FOR TRICHLOROETHENE CONCENTRATIONS IN INDOOR AIR
LOCKHEED MARTIN MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

Building level or background	Dataset	Minimum detected value[1]	Maximum detected value[1]	Minimum non-detect value[1][2]	Maximum non-detect value[1][2]	Average of all values[3][4]	Average of detected values[3]	Frequency of detection[1]	Number of detections > 8.8 µg/m^3 [5][6]	95% UCL[3]
Basement	All Buildings 2006-August 2019	0.077 J	36 [7]	0.075	20	1.1	2.1	290/646	16	1.5
	All Buildings August 2019	0.54 J	9.3	0.16	0.16	1.4	4.1	7/22	0	2.5
	All Buildings February 2020	0.17 J	6.4 J	0.16	0.16	1.2	1.3	19/20	0	1.8
	All Buildings August 2020	0.27 J	7.7	0.16	0.16	1.47	3.90	8/22	0	2.5
	Building A 2006-August 2019	0.15 J	26.2	0.36	0.96	4.1	4.4	94/99	12	5.0
	Building A August 2019	3.6	9.3	-	-	6.6	6.6	4/4	0	NA[8]
	Building A February 2020	1.9	6.4 J	0.16	0.16	2.3	3.0	3/4	0	5.1
	Building A August 2020	4.4	7.7	-	-	6.08	6.08	4/4	0	7.4
	Building B 2006-September 2014[10]	0.078 J	2.5	0.075	2.7	0.60	0.68	55/80	0	0.69
	Building B August 2020[11]	-	-	-	-	-	-	-	-	NA[8][9]
	Building C 2006-August 2019	0.077 J	36 [7]	0.075	20	0.59	1.3	141/467	4	0.81
	Building C August 2019	0.54 J	1.1 J	0.16	0.16	0.21	0.88	3/18	0	0.42
	Building C February 2020	0.17 J	3.5	-	-	1.0	1.0	16/16	0	1.4
	Building C August 2020	0.27 J	4.8 J	0.16	0.16	0.44	1.72	4/18	0	0.87
First Floor	All Buildings 2006-August 2019	0.081 J	34	0.075	12	0.99	1.7	187/425	5	1.4
	All Buildings August 2019	0.21 J	0.21 J	0.16	1.6	0.15	0.21	1/13	0	NA[9]
	All Buildings February 2020	0.21 J	1.6	-	-	0.87	0.87	15/15	0	1.13
	All Buildings August 2020	0.61 J	4.7	0.16	0.16	0.6	2.2	3/13	0	1.32
	Building A 2006-August 2019	0.086 J	34	0.075	12	1.1	1.9	142/308	5	1.6
	Building A August 2019	0.21 J	0.21 J	0.16	1.6	0.16	0.21	1/11	0	NA[9]
	1st Floor A February 2020	0.21 J	1.6	-	-	0.95	0.95	11/11	0	1.23
	1st Floor A August 2020	2.4 J	4.7	0.16	0.16	0.6	3.0	2/11	0	NA[9]
	Building B 2006-August 2019	0.081 J	5.1	0.075	11	0.74	0.85	38/95	0	0.55
	Building B August 2019	-	-	0.16	0.16	-	-	0/2	0	NA[8][9]
	1st Floor B February 2020	0.39 J	1.1	-	-	0.75	0.75	2/2	0	NA[9]
	1st Floor B August 2020	0.61 J	0.61 J	0.16	0.16	0.3	0.6	1/2	0	NA[8][9]
	Building C 2006-August 2008[10]	0.5 J	7.2	0.21	2.7	1.0	2.3	7/22	0	2.1
	1st Floor C February 2020	0.41 J	0.63 J	-	-	0.52	0.52	2/2	0	NA[9]
	1st Floor C August 2020[11]	-	-	-	-	-	-	-	-	NA[8][9]
Background	2006-August 2019	0.48 J	11.9	0.075	2.7	0.56	2.8	11/98	1	0.24
	August 2019	-	-	0.16	0.16	-	-	0/4	0	NA[8][9]
	2006-February 2020 Bkg	0.18 J	100	0.075	2.7	1.57	8.07	19/114	2	3.5
	February 2020	0.18 J	7.7	-	-	4.12	4.12	0/4	0	NA[8][9]
	2006-August 2020 Bkg	0.18 J	100	0.075	2.7	1.52	8.07	19/118	2	3.4
	August 2020[11]	-	-	0.16	0.16	0.08	-	0/4	0	NA[8][9]

All results are in micrograms per cubic meter air (µg/m^3); a benchmark of 8.8 µg/m3 corresponds to hazard quotient (HQ) of 1.

(1) The original and duplicate samples are considered separate samples when determining the minimum and maximum, but one for frequency of detection

(2) Values presented are sample-specific quantitation limits.

(3) The average of the original and duplicate samples is used for determining the average of all values, average of detected values, and the 95% UCL

(4) One-half the detection limit was used to represent non-detected results in calculating the average of all results.

(5) Value is the noncarcinogenic industrial air regional screening level corresponding to HQ = 1 (USEPA, May 2019).

(7) The maximum detected concentration (36 µg/m^3) was detected in a duplicate sample, and the corresponding original sample concentration (0.75 µg/m^3) is considerably less than the maximum concentration. Resampling at the same location found concentrations that were closer to the original sample concentration.

(8) There are less than five samples; therefore, a UCL is not presented.

(9) There are less than three detections; therefore, a UCL is not presented.

(10) There are no trichloroethene results for the Building B basement.

(11) There are no trichloroethene results for the Building C first floor.

Definitions:

HQ - hazard quotient

J - estimated value

NA - not applicable/not available

UCL - upper confidence limit

USEPA - United States Environmental Protection Agency

TABLE 3-4

SUMMARY STATISTICS FOR NAPHTHALENE CONCENTRATIONS IN INDOOR AIR
LOCKHEED MARTIN MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

Building level or background	Dataset	Minimum detected value[1]	Maximum detected value[1]	Minimum non-detect value[1][2]	Maximum non-detect value[1][2]	Average of all values[3][4]	Average of detected values[3]	Frequency of detection[1]	Number of detections > 3.6 µg/m³ [5][6]	95% UCL[3]
Basement	All Buildings 2006-August 2019	0.2 J	15	0.19	96.7	1.4	2.3	271/581	55	1.3
	All Buildings August 2019	4.3	4.3	2	6.7	1.2	2.7	1/22	1	NA[7]
	All Buildings February 2020	1.4 J	1.4 J	1	1	0.5	1.0	1/20	0	NA[7]
	All Buildings August 2020	1.2	2.6	1	1	0.58	1.4	2/22	0	NA[7]
	Building A 2006-August 2019	0.47 J	15	0.19	4	2.6	3.9	58/94	24	3.2
	Building A August 2019	4.3	4.3	2	2	1.4	2.7	1/4	1	NA[7][8]
	Building A February 2020	1.4 J	1.4 J	1	1	0.6	1.0	1/4	0	NA[7][8]
	Building A August 2020	1.2	2.6	1	1	0.85	1.9	1/4	0	NA[7]
	Building B 2006-August 2019	0.23 J	5	0.19	5.6	1.1	1.6	32/53	3	1.4
	Building B August 2020	-	-	-	-	-	-	-	-	-
	Building C 2006-August 2019	0.2 J	6.9	0.19	96.7	1.2	1.9	181/434	28	1.1
	Building C August 2019	-	-	2	6.7	-	-	0/18	0	NA[7]
	Building C February 2020	-	-	1	1	0.5	-	0/16	0	NA[7]
	Building C August 2020	1.3	1.3	1	1	0.52	0.9	1/18	0	NA[7]
First Floor[9]	All Buildings 2006-August 2019	0.19 J	12 J	0.19	31	1.1	1.5	106/325	8	0.80
	All Buildings August 2019	-	-	2	20	-	-	0/13	0	NA[7]
	All Buildings February 2020	-	-	1	1	0.5	-	0/15	0	NA[7]
	All Buildings August 2020	-	-	1	1	0.50	-	0/13	0	NA[7]
	Building A 2006-August 2019	0.19 J	12 J	0.19	31	0.99	1.5	80/257	6	0.83
	Building A August 2019	-	-	2	20	-	-	0/11	0	NA[7]
	Building A February 2020	-	-	1	1	0.5	-	0/11	0	NA[7]
	Building A August 2020	-	-	1	1	0.50	-	0/11	0	NA[7]
	Building B 2006-August 2019	0.26 J	6.5 J	0.19	24	1.5	1.5	26/68	2	1.1
	Building B August 2019	-	-	2	2	-	-	0/2	0	NA[7][8]
	Building B February 2020	-	-	1	1	0.5	-	0/2	0	NA[7][8]
	Building B August 2020	-	-	1	1	0.50	-	0/2	0	NA[7][8]
	Building C February 2020	-	-	1	1	0.5	-	0/2	0	NA[7][8]
	Building C August 2020[9]	-	-	-	-	-	-	-	-	-
Background	2006-August 2019	0.2 J	8.1 J	0.19	3.8	0.82	1.5	24/82	1	0.87
	August 2019	-	-	2	2	-	-	0/4	0	NA[7][8]
	2006-February 2020 Bkg	0.2 J	8.1 J	0.19	3.8	0.8	1.5	27/94	1	1.4
	February 2020 Bkg	-	-	1	1	0.5	-	0/4	0	NA[7][8]
	2006-August 2020 Bkg	0.2 J	8.1 J	0.19	3.8	0.79	1.5	27/98	1	
	August 2020 Bkg	-	-	1	1	0.50	-	0/4	0	NA[7][8]

All results are in micrograms per cubic meter air (µg/m³); a benchmark of 3.6 µg/m³ corresponds to ILCR of 1×10^{-5}

(1) Original and duplicate samples are considered separately when determining minimum and maximum concentrations, but as one sample for frequency of detection .

(2) Values presented are sample-specific quantitation limits.

(3) The average of the original and duplicate samples is used to determine the averages of all values and detected values, and for the 95% UCL calculation.

(4) One-half the detection limit is used to represent nondetect results when calculating the average of all results.

(5) Value is the carcinogenic industrial air regional screening level corresponding to 1×10^{-5} risk level (USEPA, May 2019).

(6) Duplicate pairs are counted as one sample when determining the number of exceedances, and are considered exceedances if either the original or duplicate exceeds the screening level.

(7) There are less than three detections; therefore, a UCL is not presented.

(8) There are less than five samples; therefore, a UCL is not presented.

(9) There are no naphthalene results for the Building C first floor.

Definitions:
HQ - hazard quotient
ILCR - incremental lifetime cancer risk
J - estimated value
µg/m³ - micrograms per cubic meter
NA - not applicable (not enough samples to calculate)
UCL - upper confidence limit
USEPA - United States Environmental Protection Agency

TABLE 3-5

INDOOR AIR SAMPLING RESULTS, BUILDING A, AUGUST 2020
LOCKHEED MARTIN MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE	OSHA PEL ($\mu g/m^3$)	Industrial Air Screening Level ($\mu g/m^3$)	Key	AIR-015-A IA-015-A-29 20200826	AIR-018-A IA-018-A-29 20200826	AIR-018-A IA-018-A-29-AVG 20200826	AIR-018-A IA-018-A-29-D 20200826	AIR-021-A IA-021-A-29 20200826	AIR-075-A IA-075-A-29 20200826	AIR-076-A IA-076-A-29 20200826	AIR-078-A IA-078-A-29 20200826	AIR-079-A IA-079-A-29 20200826	AIR-081-A IA-081-A-29 20200826
Volatile organic compounds ($\mu g/m^3$)													
1,1,1-TRICHLOROETHANE	1,900,000	22,000	nc	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-TRICHLOROETHANE	45,000	0.88	nc	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
1,1-DICHLOROETHANE	400,000	77	ca	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
1,1-DICHLOROETHENE	--	880	nc	0.16 U	**1.2 J**	**1.2**	**1.2 J**	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
1,2,3-TRIMETHYLBENZENE	123,000[N]	260	nc	0.88 U	0.88 U	0.88 U	0.88 U	0.88 U	0.88 U	0.88 U	0.88 U	0.88 U	0.88 U
1,2,4-TRICHLOROBENZENE	40,000[N]	8.8	nc	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
1,2,4-TRIMETHYLBENZENE	123,000[N]	260	nc	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	**0.52 J**	0.49 U	0.49 U	0.49 U	**0.57 J**
1,2-DICHLOROETHANE	198,360	4.7	ca	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,3,5-TRIMETHYLBENZENE	123,000[N]	260	nc	**1.1 J**	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U
BENZENE	31,900	16	ca	**0.25 J**	**0.51 J**	**0.47**	**0.43 J**	**0.26 J**	**0.41 J**	0.13 U	**0.33 J**	**0.21 J**	**0.24 J**
CARBON TETRACHLORIDE	62,900	20	ca	**0.36 J**	**0.55 J**	**0.475**	**0.4 J**	**0.56 J**	**0.49 J**	**0.52 J**	**0.47 J**	**0.45 J**	**0.3 J**
CHLORODIFLUOROMETHANE	3,540,000[N]	220,000	nc	**1.2 J**	**1.2 J**	**1.15**	**1.1 J**	**1.2 J**	**3.4**	**1.1 J**	**1.8**	**1.1 J**	**1.1 J**
CHLOROFORM	240,000	5.3	ca	**0.53 J**	**19**	**19.5**	**20**	0.17 U	**0.2 J**	**0.48 J**	0.17 U	0.17 U	0.17 U
CIS-1,2-DICHLOROETHENE	790,000	--	--	0.2 U	**0.49 J**	**0.345**	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
DICHLORODIFLUOROMETHANE	4,950,000	440	nc	**2**	**1.7 J**	**1.7**	**1.7 J**	**2.2**	**1.9 J**	**1.7 J**	**1.9 J**	**1.8 J**	**2**
ETHYLBENZENE	435,000	49	ca	**0.31 J**	0.28 U	0.28 U	0.28 U	**0.72 J**	**4.1**	**0.37 J**	**0.41 J**	**0.59 J**	**3.4**
METHYL TERT-BUTYL ETHER	180,000[A]	470	ca	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U
METHYLENE CHLORIDE	87,000	2,600	nc	6.8 U	6.8 U	6.8 U	6.8 U	6.8 U	**6.8**	6.8 U	6.8 U	6.8 U	6.8 U
NAPHTHALENE	50,000	3.6	ca	1 U	**1.2**	**1.9**	**2.6**	1 U	1 U	1 U	1 U	1 U	1 U
TETRACHLOROETHENE	678,000	180	nc	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
TOLUENE	754,000	22,000	nc	**1.7 J**	1.5 U	**1.6**	**1.7 J**	**18**	**200**	**13**	**7**	**6.7**	**110**
TOTAL XYLENES	435,000	440	nc	**1.2 J**	0.52 U	0.52 U	0.52 U	**2.7 J**	**17**	**2 J**	**2 J**	**3 J**	**14**
TRANS-1,2-DICHLOROETHENE	790,000	--	--	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
TRICHLOROETHENE	537,000	8.8	nc	0.16 U	**5.8**	**5.8**	**5.8**	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
VINYL CHLORIDE	2,560	28	ca	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U

Shaded cells indicate a concentration greater than the risk-based screening level.
Bolded cells indicate that the analyte is detected in the sample.
1-This location is in the basement, where the (MDE-approved, in 2017) TCE screening level is 35 $\mu g/m^3$ (not 8.8 $\mu g/m^3$), and is not an exceedance.
Industrial Air Screening Levels from USEPA RSLs for Chemical Contaminants at Superfund Sites, May 2019
ca =carcinogenic screening values based on 1×10^{-5} carcinogenic risk
nc = noncarcinogenic screening values based on noncarcinogenic hazard quotient = 1
-- = not available
A = American Council of Governmental Industrial Hygenists Theshold Limit Value
J = estimated value
MDE = Maryland Department of the Environment
N = National Institute for Occupational Safety and Health Recommended Exposure Limit
OSHA PEL = Occupational Safety and Health Administration Pemissible Exposure Limit
RSLs= Regional Screening Levels
U = not detected
UJ = non-detected value is estimated
USEPA = United States Environmental Protection Agency

TABLE 3-5

INDOOR AIR SAMPLING RESULTS, BUILDING A, AUGUST 2020
LOCKHEED MARTIN MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE	OSHA PEL ($\mu g/m^3$)	Industrial Air Screening Level ($\mu g/m^3$)	Key	AIR-093-A IA-093-A-29 20200826	AIR-117-A IA-117-A-29 20200826	AIR-118-A IA-118-A-29 20200826	AIR-136-A IA-136-A-29 20200826	AIR-138-A IA-138-A-29 20200826	AIR-168-A IA-168-A-29 20200826	AIR-168-A IA-168-A-29-AVG 20200826	AIR-168-A IA-168-A-29-D 20200826	AIR-174-A IA-174-A-29 20200826
Volatile organic compounds ($\mu g/m^3$)												
1,1,1-TRICHLOROETHANE	1,900,000	22,000	nc	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-TRICHLOROETHANE	45,000	0.88	nc	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
1,1-DICHLOROETHANE	400,000	77	ca	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
1,1-DICHLOROETHENE	--	880	nc	**0.98 J**	0.16 U	0.16 U	0.16 U	**1.1 J**	0.16 U	0.16 U	0.16 U	**0.73 J**
1,2,3-TRIMETHYLBENZENE	123,000[N]	260	nc	0.88 U	0.88 U	0.88 U	0.88 U	0.88 U	0.88 U	0.88 U	0.88 U	0.88 U
1,2,4-TRICHLOROBENZENE	40,000[N]	8.8	nc	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
1,2,4-TRIMETHYLBENZENE	123,000[N]	260	nc	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U
1,2-DICHLOROETHANE	198,360	4.7	ca	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,3,5-TRIMETHYLBENZENE	123,000[N]	260	nc	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U
BENZENE	31,900	16	ca	**0.36 J**	**0.13 J**	**0.41 J**	**0.15 J**	**0.42 J**	**0.31 J**	**0.37**	**0.43 J**	**0.41 J**
CARBON TETRACHLORIDE	62,900	20	ca	**0.33 J**	**0.44 J**	**0.61 J**	**0.52 J**	**0.58 J**	**0.31 J**	**0.34**	**0.37 J**	0.22 U
CHLORODIFLUOROMETHANE	3,540,000[N]	220,000	nc	**1.2 J**	**1.4 J**	**1.2 J**	**1.1 J**	**1.4 J**	**1.3 J**	**1.45**	**1.6**	**1.2 J**
CHLOROFORM	240,000	5.3	ca	**0.53 J**	0.17 U	0.17 U	0.17 U	**0.62 J**	0.17 U	0.17 U	0.17 U	**0.3 J**
CIS-1,2-DICHLOROETHENE	790,000	--	--	0.2 U	**0.48 J**	0.2 U	0.2 U	0.2 U	0.2 U	**0.265**	**0.33 J**	0.2 U
DICHLORODIFLUOROMETHANE	4,950,000	440	nc	**2**	**1.9 J**	**1.8 J**	**1.7 J**	**2.1**	**2.1**	**1.9**	**1.7 J**	**2.1**
ETHYLBENZENE	435,000	49	ca	**0.41 J**	**0.63 J**	**0.54 J**	**0.42 J**	0.28 U	**0.33 J**	**0.33**	**0.33 J**	0.28 U
METHYL TERT-BUTYL ETHER	180,000[A]	470	ca	0.94 U	**0.94 J**	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U
METHYLENE CHLORIDE	87,000	2,600	nc	6.8 U	**80**	**14**	6.8 U	6.8 U	6.8 U	6.8 U	6.8 U	**7.6**
NAPHTHALENE	50,000	3.6	ca	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TETRACHLOROETHENE	678,000	180	nc	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	**0.36**	**0.48 J**	**6.4**
TOLUENE	754,000	22,000	nc	**1.5 J**	**9.5**	**4.5**	**9.5**	1.5 U	**9.8**	**9.8**	**9.8**	**1.6 J**
TOTAL XYLENES	435,000	440	nc	0.52 U	**2.9 J**	**2.8 J**	**1.8 J**	0.52 U	**1.4 J**	**1.45**	**1.5 J**	**1 J**
TRANS-1,2-DICHLOROETHENE	790,000	--	--	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
TRICHLOROETHENE	537,000	8.8	nc	**4.4**	**4.7**	0.16 U	0.16 U	**7.7**	0.16 UJ	**1.28**	**2.4 J**	**6.4**
VINYL CHLORIDE	2,560	28	ca	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U

Shaded cells indicate a concentration greater than the risk-based screening level.
Bolded cells indicate that the analyte is detected in the sample.

1-This location is in the basement, where the (MDE-approved, in 2017) TCE screening level is 35 $\mu g/m^3$ (not 8.8 $\mu g/m^3$), and is not an exceedance.

Industrial Air Screening Levels from USEPA RSLs for Chemical Contaminants at Superfund Sites, May 2019

ca =carcinogenic screening values based on 1×10^{-5} carcinogenic risk

nc = noncarcinogenic screening values based on noncarcinogenic hazard quotient = 1

-- = not available
A = American Council of Governmental Industrial Hygenists Theshold Limit Value
J = estimated value
MDE = Maryland Department of the Environment

N = National Institute for Occupational Safety and Health Recommended Exposure Limit

OSHA PEL = Occupational Safety and Health Administration Pemissible Exposure Limit

RSLs= Regional Screening Levels
U = not detected
UJ = non-detected value is estimated
USEPA = United States Environmental Protection Agency

TABLE 3-6

SUB-SLAB VAPOR SAMPLING RESULTS, BUILDING A,AUGUST 2020
LOCKHEED MARTIN MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE	Target Shallow Soil Gas Concentration (µg/m^3)[1]	Key	AIR-015-A SV-015-A-29 20200826	AIR-075-A SV-075-A-29 20200826	AIR-076-A SV-076-A-29 20200826	AIR-078-A SV-078-A-29 20200826	AIR-079-A SV-079-A-29 20200826	AIR-116-A SV-116-A-29 20200826	AIR-116-A SV-116-A-29-AVG 20200826	AIR-116-A SV-116-A-29-D 20200826	AIR-118-A SV-118-A-29 20200826	AIR-136-A SV-136-A-29 20200826
Volatile Organic Compounds (µg/m^3)												
1,1,1-TRICHLOROETHANE	733,333	nc	**9.9**	1 U	**2.1 J**	**2.9**	**2.3**	1 U	1 U	1 U	**3.9**	5 U
1,1,2-TRICHLOROETHANE	29	nc	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.95 U
1,1-DICHLOROETHANE	2,567	ca	**9**	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	**9.7**	0.71 U
1,1-DICHLOROETHENE	29,333	nc	**28**	0.16 U	0.16 U	0.16 U	0.16 U	**0.8 J**	**0.725**	**0.65 J**	**72**	0.79 U
1,2,3-TRIMETHYLBENZENE	8,667	nc	0.88 U	**3.6**	**7**	0.88 U	0.88 U	0.88 U	0.88 U	0.88 U	**3.4**	4.4 U
1,2,4-TRICHLOROBENZENE	293	nc	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	12 U
1,2,4-TRIMETHYLBENZENE	8,667	nc	**0.67 J**	**10**	**5.4**	**0.72 J**	**1.4 J**	0.49 U	0.49 U	0.49 U	**6.7**	2.5 U
1,2-DICHLOROETHANE	157	ca	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U
1,3,5-TRIMETHYLBENZENE	8,667	nc	**1.5 J**	**5.7**	**8.3**	**1.4 J**	**1.9 J**	0.54 U	0.54 U	0.54 U	**5**	2.7 U
BENZENE	533	ca	**2.7**	**0.18 J**	**0.37 J**	**0.31 J**	**0.42 J**	**0.36 J**	**0.355**	**0.35 J**	**0.23 J**	**2.6 J**
CARBON TETRACHLORIDE	667	ca	**0.56 J**	**0.54 J**	**0.53 J**	**0.47 J**	**0.48 J**	**0.37 J**	**0.36**	**0.35 J**	**0.38 J**	1.1 U
CHLORODIFLUOROMETHANE	7,333,333	nc	**1.1 J**	**8.2**	**1 J**	**1.3 J**	**2.2**	**1.4 J**	**1.3**	**1.2 J**	0.39 U	1.9 U
CHLOROFORM	177	ca	**0.93 J**	**0.38 J**	**0.25 J**	**0.98 J**	**0.74 J**	**3.9**	**3.7**	**3.5**	**1.7 J**	**1.8 J**
CIS-1,2-DICHLOROETHENE	--	--	**3.6**	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**40**	**1.8 J**
DICHLORODIFLUOROMETHANE	14,667	nc	**2.4**	**2.6**	**2.6**	**5**	**2.8**	**2.3**	**2.2**	**2.1**	**2.1**	**2.2 J**
ETHYLBENZENE	1633	ca	**5.8**	**0.49 J**	0.28 U	0.28 U	**1.7 J**	0.28 U	0.28 U	0.28 U	**6.6**	1.4 U
METHYL TERT-BUTYL ETHER	15,667	ca	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	4.7 U
METHYLENE CHLORIDE	86,667	nc	6.8 U	6.8 U	6.8 U	6.8 U	**30**	**8**	**7.4**	6.8 U	6.8 U	34 U
NAPHTHALENE	120	ca	1 U	**10**	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5.2 U
TETRACHLOROETHENE	6,000	nc	**0.52 J**	**0.89 J**	**1.3 J**	**2.9**	**13**	0.24 U	**0.285**	**0.33 J**	0.24 U	1.2 U
TOLUENE	733,333	nc	**2 J**	**7.4**	1.5 U	1.5 U	**2.7**	1.5 U	1.5 U	1.5 U	**1.5 J**	7.3 U
TOTAL XYLENES	14,667	nc	**12**	**3.2 J**	**1.6 J**	**1.4 J**	**7.2**	0.52 U	0.52 U	0.52 U	**61**	2.6 U
TRANS-1,2-DICHLOROETHENE	--	--	**2.4**	0.14 U	0.14 U	0.14 U	**0.32 J**	0.14 U	0.14 U	0.14 U	**3.2**	0.69 U
TRICHLOROETHENE	293	nc	**28**	**2.8**	**4.8**	**27**	**130**	**7.6**	**7.05**	**6.5**	**650 E**	**480**
VINYL CHLORIDE	933	ca	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	**0.69**	1.7 U

Notes: All sample concentrations are in micrograms per cubic meter (µg/m^3)
Shaded cells indicate a concentration greater than risk-based screening level.
Bolded cells indicate that the analyte is detected in the sample.
-- = not available
µg/m^3 = micrograms per cubic meter
J = estimated value
U = nondetect
E = Result exceeded calibration range and was reanalyzed. The result from the reanalysis is displayed.
ca = screening value based on carcinogenic effects
nc = screening value based on noncarcinogenic effects
1 - Screening values derived in accordance with *Draft Guidance for Evaluating the Vapor Intrusion to Indoor Air Pathway from Groundwater and Soils* (November 2002). Screening values are equal to United States Environmental Protection Agency (USEPA) Industrial Air Screening Values divided by an attenuation factor of 0.03, and correspond to a target cancer risk level of 1×10-5.

TABLE 3-6

SUB-SLAB VAPOR SAMPLING RESULTS, BUILDING A,AUGUST 2020
LOCKHEED MARTIN MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE	Target Shallow Soil Gas Concentration (µg/m^3)[1]	Key	AIR-138-A SV-138-A-29 20200826	AIR-139-A SV-139-A-29 20200826	AIR-168-A SV-168-A-29 20200826	AIR-168-A SV-168-A-29-AVG 20200826	AIR-168-A SV-168-A-29-D 20200826	AIR-171-A SV-171-A-29 20200826	AIR-172-A SV-172-A-29 20200826	AIR-173-A SV-173-A-29 20200826	AIR-174-A SV-174-A-29 20200826	AIR-177-A SV-177-A-29 20200826
Volatile Organic Compounds (µg/m^3)												
1,1,1-TRICHLOROETHANE	733,333	nc	1 U	1 U	**9.7**	**10.35**	**11**	24 U	**4**	67 U	610 U	**1.5**
1,1,2-TRICHLOROETHANE	29	nc	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	4.5 U	0.19 U	13 U	110 U	0.13 U
1,1-DICHLOROETHANE	2,567	ca	**3.7**	0.14 U	**0.73 J**	**0.75**	**0.77 J**	**10 J**	**0.39 J**	**58 J**	**630 J**	**0.53 J**
1,1-DICHLOROETHENE	29,333	nc	**16**	0.16 U	**28**	**31.5**	**35**	**320**	0.16 U	**1000**	**23000**	0.11 U
1,2,3-TRIMETHYLBENZENE	8,667	nc	0.88 U	**6.5**	0.88 U	0.88 U	0.88 U	21 U	0.88 U	58 U	530 U	0.59 U
1,2,4-TRICHLOROBENZENE	293	nc	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	55 U	2.4 U	160 U	1400 U	1.6 U
1,2,4-TRIMETHYLBENZENE	8,667	nc	0.49 U	**7.5**	0.49 U	**0.6**	**0.71 J**	11 U	**1.1 J**	32 U	290 U	**1.4**
1,2-DICHLOROETHANE	157	ca	**0.21 J**	0.2 U	0.2 U	0.2 U	0.2 U	4.7 U	0.2 U	13 U	120 U	0.13 U
1,3,5-TRIMETHYLBENZENE	8,667	nc	0.54 U	**6.5**	0.54 U	**0.97**	**1.4 J**	13 U	0.54 U	36 U	320 U	0.36 U
BENZENE	533	ca	**0.38 J**	**0.27 J**	**0.18 J**	**0.365**	**0.55 J**	3 U	**0.35 J**	8.4 U	77 U	**0.62 J**
CARBON TETRACHLORIDE	667	ca	**0.34 J**	**0.57 J**	**0.62 J**	**0.68**	**0.74 J**	5.1 U	**0.36 J**	15 U	130 U	**0.26 J**
CHLORODIFLUOROMETHANE	7,333,333	nc	**1.4**	**1.8**	**1.7**	**1.75**	**1.8**	9.1 U	**2**	26 U	230 U	**1.5**
CHLOROFORM	177	ca	**0.94 J**	0.17 U	**2.8**	**3**	**3.2**	4 U	**1.3 J**	11 U	**100 J**	**3.7**
CIS-1,2-DICHLOROETHENE	--	--	**11**	0.2 U	**0.29 J**	**0.355**	**0.42 J**	**49**	**0.62 J**	**260**	**1800**	0.13 U
DICHLORODIFLUOROMETHANE	14,667	nc	**2.1**	**2.3**	**2.5**	**2.5**	**2.5**	8.1 U	**2.6**	23 U	210 U	**2**
ETHYLBENZENE	1633	ca	0.28 U	**4.1**	0.28 U	0.28 U	0.28 U	6.6 U	**0.66 J**	19 U	170 U	**0.65 J**
METHYL TERT-BUTYL ETHER	15,667	ca	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	22 U	0.94 U	62 U	560 U	0.62 U
METHYLENE CHLORIDE	86,667	nc	6.8 U	**26**	**20**	**19.5**	**19**	160 U	6.8 U	450 U	4100 U	4.5 U
NAPHTHALENE	120	ca	1 U	**4.1**	1 U	1 U	1 U	24 U	1 U	69 U	630 U	0.7 U
TETRACHLOROETHENE	6,000	nc	**1.3 J**	**4.6**	**0.32 J**	**0.405**	**0.49 J**	5.5 U	**2.6 J**	16 U	140 U	**1.4 J**
TOLUENE	733,333	nc	1.5 U	**3.6**	1.5 U	**1.65**	**1.8 J**	34 U	**3.6**	97 U	880 U	**3.3**
TOTAL XYLENES	14,667	nc	0.52 U	**42**	0.52 U	**0.86**	**1.2 J**	12 U	**3.3 J**	34 U	310 U	**3.4**
TRANS-1,2-DICHLOROETHENE	--	--	**0.39 J**	0.14 U	0.14 U	**0.175**	**0.21 J**	3.2 U	0.14 U	9.1 U	**200 J**	0.093 U
TRICHLOROETHENE	293	nc	**140**	**1.6**	**34 J**	**107**	**180 J**	**2800**	**59**	**7600**	**140000**	**110**
VINYL CHLORIDE	933	ca	0.52 U	0.33 U	0.33 U	0.33 U	0.33 U	7.7 U	0.33 U	22 U	200 U	0.22 U

Notes: All sample concentrations are in micrograms per cubic meter (µg/m^3)
Shaded cells indicate a concentration greater than risk-based screening level.
Bolded cells indicate that the analyte is detected in the sample.
-- = not available
µg/m^3 = micrograms per cubic meter
J = estimated value
U = nondetect
E = Result exceeded calibration range and was reanalyzed. The result from the reanalysis is displayed.
ca = screening value based on carcinogenic effects
nc = screening value based on noncarcinogenic effects
1 - Screening values derived in accordance with *Draft Guidance for Evaluating the Vapor Intrusion to Indoor Air Pathway from Groundwater and Soils* (November 2002). Screening values are equal to United States Environmental Protection Agency (USEPA) Industrial Air Screening Values divided by an attenuation factor of 0.03, and correspond to a target cancer risk level of 1×10-5.

TABLE 3-7

INDOOR AIR SAMPLING RESULTS, BUILDING B, AUGUST 2020
LOCKHEED MARTIN MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE	OSHA PEL (µg/m^3)	Industrial Air Screening Level (µg/m^3)	Key	AIR-100-B IA-100-B-29 20200826	AIR-101-B IA-101-B-29 20200826
Volatile organic compounds (µg/m^3)					
1,1,1-TRICHLOROETHANE	1,900,000	22,000	nc	1 U	1 U
1,1,2-TRICHLOROETHANE	45,000	0.88	nc	0.19 U	0.19 U
1,1-DICHLOROETHANE	400,000	77	ca	0.14 U	0.14 U
1,1-DICHLOROETHENE	--	880	nc	0.16 U	0.16 U
1,2,3-TRIMETHYLBENZENE	123,000[N]	260	nc	0.88 U	0.88 U
1,2,4-TRICHLOROBENZENE	40,000[N]	8.8	nc	2.4 U	2.4 U
1,2,4-TRIMETHYLBENZENE	123,000[N]	260	nc	0.49 U	0.49 U
1,2-DICHLOROETHANE	198,360	4.7	ca	0.2 U	0.2 U
1,3,5-TRIMETHYLBENZENE	123,000[N]	260	nc	0.54 U	0.54 U
BENZENE	31,900	16	ca	0.13 U	**0.27 J**
CARBON TETRACHLORIDE	62,900	20	ca	**0.24 J**	**0.34 J**
CHLORODIFLUOROMETHANE	3,540,000[N]	220,000	nc	**2.2**	**1.5**
CHLOROFORM	240,000	5.3	ca	0.17 U	0.17 U
CIS-1,2-DICHLOROETHENE	790,000	--	--	0.2 U	0.2 U
DICHLORODIFLUOROMETHANE	4,950,000	440	nc	**1.7 J**	**1.8 J**
ETHYLBENZENE	435,000	49	ca	**0.77 J**	**0.43 J**
METHYL TERT-BUTYL ETHER	180,000[A]	470	ca	0.94 U	0.94 U
METHYLENE CHLORIDE	87,000	2,600	nc	6.8 U	**35**
NAPHTHALENE	50,000	3.6	ca	1 U	1 U
TETRACHLOROETHENE	678,000	180	nc	**3.3**	0.24 U
TOLUENE	754,000	22,000	nc	**15**	**13**
TOTAL XYLENES	435,000	440	nc	**3.2 J**	**1.9 J**
TRANS-1,2-DICHLOROETHENE	790,000	--	--	0.14 U	0.14 U
TRICHLOROETHENE	537,000	8.8	nc	**0.61 J**	0.16 U
VINYL CHLORIDE	2,560	28	ca	0.33 U	0.33 U

Shaded cells indicate a concentration greater than the risk-based screening level.

Bolded cells indicate that the analyte is detected in the sample.

Industrial Air Screening Levels from USEPA RSLs for Chemical Contaminants at Superfund Sites, May 2019

ca =carcinogenic screening values based on 1×10^{-5} carcinogenic risk

nc = noncarcinogenic screening values based on noncarcinogenic hazard quotient = 1

-- = not available

A = American Council of Governmental Industrial Hygenists Theshold Limit Value

J = estimated value

MDE = Maryland Department of the Environment

N = National Institute for Occupational Safety and Health Recommended Exposure Limit

OSHA PEL = Occupational Safety and Health Administration Pemissible Exposure Limit

RSLs= Regional Screening Levels

U = not detected

USEPA = United States Environmental Protection Agency

TABLE 3-8

SUB-SLAB VAPOR SAMPLING RESULTS, BUILDING B, AUGUST 2020
LOCKHEED MARTIN MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE	Target Shallow Soil Gas Concentration ($\mu g/m^3$)[(1)]	Key	AIR-100-B SV-100-B-29 20200826	AIR-101-B SV-101-B-29 20200826
Volatile Organic Compounds ($\mu g/m^3$)				
1,1,1-TRICHLOROETHANE	733,333	nc	**3.2**	**220**
1,1,2-TRICHLOROETHANE	29	nc	0.19 U	0.19 U
1,1-DICHLOROETHANE	2,567	ca	0.14 U	0.14 U
1,1-DICHLOROETHENE	29,333	nc	0.16 U	0.16 U
1,2,3-TRIMETHYLBENZENE	8,667	nc	0.88 U	**5.3**
1,2,4-TRICHLOROBENZENE	293	nc	2.4 U	2.4 U
1,2,4-TRIMETHYLBENZENE	8,667	nc	0.49 U	**15**
1,2-DICHLOROETHANE	157	ca	0.2 U	0.2 U
1,3,5-TRIMETHYLBENZENE	8,667	nc	**1.2 J**	**5.7**
BENZENE	533	ca	0.13 U	**0.19 J**
CARBON TETRACHLORIDE	667	ca	**42**	**6.8**
CHLORODIFLUOROMETHANE	7,333,333	nc	**1.5**	**3**
CHLOROFORM	177	ca	**6.8**	**0.87 J**
CIS-1,2-DICHLOROETHENE	--	--	0.2 U	0.2 U
DICHLORODIFLUOROMETHANE	14,667	nc	**5.1**	**6**
ETHYLBENZENE	1633	ca	0.28 U	0.28 U
METHYL TERT-BUTYL ETHER	15,667	ca	0.94 U	0.94 U
METHYLENE CHLORIDE	86,667	nc	6.8 U	6.8 U
NAPHTHALENE	120	ca	1 U	**2.9**
TETRACHLOROETHENE	6,000	nc	**5.4**	**73**
TOLUENE	733,333	nc	1.5 U	**1.7 J**
TOTAL XYLENES	14,667	nc	0.52 U	**1.7 J**
TRANS-1,2-DICHLOROETHENE	--	--	0.14 U	0.14 U
TRICHLOROETHENE	293	nc	**31**	**160**
VINYL CHLORIDE	933	ca	0.33 U	0.33 U

Notes: All sample concentrations are in micrograms per cubic meter ($\mu g/m^3$)
Shaded cells indicate a concentration greater than risk-based screening level.
Bolded cells indicate that the analyte is detected in the sample.

1 - Screening values derived in accordance with Draft Guidance for Evaluating the Vapor Intrusion to Indoor Air Pathway from Groundwater and Soils (November 2002). Screening values are equal to United States Environmental Protection Agency (USEPA) Industrial Air Screening Values divided by an attenuation factor of 0.03, and correspond to a target cancer risk level of 1×10^{-5}.

-- = not available
ca = screening value based on carcinogenic effects
J = estimated value
nc = screening value based on noncarcinogenic effects
U = nondetect

TABLE 3-9

INDOOR AIR SAMPLING RESULTS, BUILDING C, AUGUST 2020
LOCKHEED MARTIN MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND
PAGE 1 OF 2

LOCATION SAMPLE ID SAMPLE DATE	OSHA PEL ($\mu g/m^3$)	Industrial Air Screening Level ($\mu g/m^3$)	Key	AIR-001-C IA-001-C-29 20200825	AIR-004-C IA-004-C-29 20200825	AIR-060-C IA-060-C-29 20200825	AIR-088-C IA-088-C-29 20200825	AIR-102-C IA-102-C-29 20200825	AIR-113-C IA-113-C-29 20200825	AIR-126-C IA-126-C-29 20200825	AIR-133-C IA-133-C-29 20200825	AIR-141-C IA-141-C-29 20200825
Volatile organic compounds ($\mu g/m^3$)												
1,1,1-TRICHLOROETHANE	1,900,000	22,000	nc	1 U	1 U	1 U	1 U	1 U	**1 J**	1 U	1 U	1 U
1,1,2-TRICHLOROETHANE	45,000	0.88	nc	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	**0.45 J**	0.19 U	0.19 U	0.19 U
1,1-DICHLOROETHANE	400,000	77	ca	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	**0.52 J**	0.14 U	0.14 U	0.14 U
1,1-DICHLOROETHENE	--	880	nc	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
1,2,3-TRIMETHYLBENZENE	123,000[N]	260	nc	0.88 U	0.88 U	0.88 U	0.88 U	0.88 U	0.88 U	0.88 U	0.88 U	0.88 U
1,2,4-TRICHLOROBENZENE	40,000[N]	8.8	nc	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
1,2,4-TRIMETHYLBENZENE	123,000[N]	260	nc	0.49 U	0.49 U	**0.67 J**	0.49 U	0.49 U	**0.75 J**	**1.7 J**	0.49 U	**0.73 J**
1,2-DICHLOROETHANE	198,360	4.7	ca	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**0.35 J**	0.2 U	0.2 U	0.2 U
1,3,5-TRIMETHYLBENZENE	123,000[N]	260	nc	0.54 U	0.54 U	**1.4 J**	**1.3 J**	**1.3 J**	**1.8 J**	0.54 U	**1.3 J**	0.54 U
BENZENE	31,900	16	ca	**0.37 J**	**0.4 J**	**0.68 J**	**0.46 J**	**0.51 J**	**0.56 J**	**0.58 J**	**0.54 J**	**0.51 J**
CARBON TETRACHLORIDE	62,900	20	ca	**0.7 J**	**0.51 J**	**0.69 J**	**0.56 J**	**0.69 J**	**1 J**	**0.39 J**	**0.48 J**	**0.33 J**
CHLORODIFLUOROMETHANE	3,540,000[N]	220,000	nc	**2.3**	**2.1**	**19**	**4.4**	**6.5**	**4.7**	**5.9**	**9.4**	**11**
CHLOROFORM	240,000	5.3	ca	**0.49 J**	**0.34 J**	**0.56 J**	**0.27 J**	**0.33 J**	**0.66 J**	**0.63 J**	**0.34 J**	0.17 U
CIS-1,2-DICHLOROETHENE	790,000	--	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
DICHLORODIFLUOROMETHANE	4,950,000	440	nc	**2.6**	**2.6**	**2.8**	**2.5**	**2.9**	**3**	**2**	**2.3**	**1.9 J**
ETHYLBENZENE	435,000	49	ca	0.28 U	0.28 U	**0.58 J**	**0.36 J**	**0.35 J**	**0.67 J**	**1.4 J**	**0.38 J**	**0.77 J**
METHYL TERT-BUTYL ETHER	180,000[A]	470	ca	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U
METHYLENE CHLORIDE	87,000	2,600	nc	6.8 U	**8.3**	6.8 U	6.8 U	6.8 U	6.8 U	**39**	6.8 U	6.8 U
NAPHTHALENE	50,000	3.6	ca	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TETRACHLOROETHENE	678,000	180	nc	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	**0.66 J**	**1.3 J**	0.24 U	0.24 U
TOLUENE	754,000	22,000	nc	**2.3**	**3.2**	**5.2**	**4.5**	**3.1**	**4.1**	**52**	**3.1**	**5.9**
TOTAL XYLENES	435,000	440	nc	**1.5 J**	**1.3 J**	**3.3 J**	**1.9 J**	**1.7 J**	**3 J**	**7.3**	**2.1 J**	**4.3**
TRANS-1,2-DICHLOROETHENE	790,000	--	--	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	**0.27 J**	0.14 U	0.14 U	0.14 U
TRICHLOROETHENE	537,000	8.8	nc	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	**0.27 J**	**2.1**	0.16 U	0.16 U
VINYL CHLORIDE	2,560	28	ca	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U

Shaded cells indicate a concentration greater than the risk-based screening level.

Bolded cells indicate that the analyte is detected in the sample.

Industrial Air Screening Levels from USEPA RSLs for Chemical Contaminants at Superfund Sites, May 2019

ca =carcinogenic screening values based on 1×10^{-5} carcinogenic risk

nc = noncarcinogenic screening values based on noncarcinogenic hazard quotient = 1

-- = not available

A = American Council of Governmental Industrial Hygenists Theshold Limit Value

J = estimated value

MDE = Maryland Department of the Environment

N = National Institute for Occupational Safety and Health Recommended Exposure Limit

OSHA PEL = Occupational Safety and Health Administration Pemissible Exposure Limit

RSLs= Regional Screening Levels

U = not detected

UJ = non-detected value is estimated

USEPA = United States Environmental Protection Agency

TABLE 3-9

INDOOR AIR SAMPLING RESULTS, BUILDING C, AUGUST 2020
LOCKHEED MARTIN MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

AIR-142-C IA-142-C-29 20200825	AIR-144-C IA-144-C-29 20200825	AIR-145-C IA-145-C-29 20200825	AIR-146-C IA-146-C-29 20200825	AIR-149-C IA-149-C-29 20200825	AIR-149-C IA-149-C-29-AVG 20200825	AIR-149-C IA-149-C-29-D 20200825	AIR-150-C IA-150-C-29 20200825	AIR-152-C IA-152-C-29 20200825	AIR-153-C IA-153-C-29 20200825	AIR-153-C IA-153-C-29-AVG 20200825	AIR-153-C IA-153-C-29-D 20200825	AIR-155-C IA-155-C-29 20200825
1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
0.88 U	0.88 U	0.88 U	0.88 U	0.88 U	0.88 U	0.88 U	0.88 U	0.88 U	0.88 U	0.88 U	0.88 U	0.88 U
2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
0.49 U	0.49 U	0.49 U	**0.53 J**	**1.4 J**	**1.65**	**1.9 J**	**0.51 J**	**1 J**	0.49 U	**0.505**	**0.52 J**	0.49 U
0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**0.41 J**	**0.305**	0.2 U	0.2 U
1.4 J	0.54 U	**1.3 J**	**1.4 J**	0.54 U	**0.545**	**0.55 J**	**1.4 J**	**1.5 J**	0.54 U	**0.97**	**1.4 J**	**1.3 J**
0.47 J	0.13 U	**0.61 J**	**0.59 J**	**0.58 J**	**0.565**	**0.55 J**	**0.62 J**	**0.66 J**	**0.45 J**	**0.525**	**0.6 J**	**0.58 J**
0.77 J	0.22 U	**0.57 J**	**0.55 J**	**0.28 J**	**0.25**	0.22 U	**0.59 J**	**0.59 J**	**0.54 J**	**0.65**	**0.76 J**	**0.38 J**
7.8	**26**	**63**	**65**	**6.2**	**5.95**	**5.7**	**65**	**38**	**8.4**	**9.2**	**10**	**9.2**
0.96 J	0.17 U	**0.4 J**	**0.44 J**	**0.52 J**	**0.545**	**0.57 J**	**0.4 J**	**0.67 J**	**0.29 J**	**0.42**	**0.55 J**	**0.46 J**
0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
2.8	**1.9 J**	**2.5**	**2.6**	**1.9 J**	**1.85**	**1.8 J**	**2.8**	**2.7**	**2.3**	**2.55**	**2.8**	**2.5**
0.49 J	0.28 U	**0.55 J**	**0.56 J**	**1.3 J**	**1.4**	**1.5 J**	**0.61 J**	**0.67 J**	**0.38 J**	**0.47**	**0.56 J**	**0.42 J**
0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U
6.8 U	6.8 U	6.8 U	**8.8**	**33**	**36.5**	**40**	**18**	6.8 U	6.8 U	**8.9**	**11**	6.8 U
1 U	1 U	1 U	1 U	1 U	**1.15**	**1.3**	1 U	1 U	1 U	1 U	1 U	1 U
0.24 U	0.24 U	0.24 U	0.24 U	**1 J**	**0.97**	**0.94 J**	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
4.2	1.5 U	**3.2**	**3**	**47**	**48.5**	**50**	**4.2**	**4.8**	**2.9**	**3.55**	**4.2**	**3.3**
2.7 J	0.52 U	**2.7 J**	**2.9 J**	**6.8**	**7.2**	**7.6**	**3.2 J**	**3.5**	**1.8 J**	**2.15**	**2.5 J**	**2.1 J**
0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
0.16 U	0.16 U	0.16 U	0.16 U	**2.2**	**2.05**	**1.9**	0.16 U	0.16 U	0.16 UJ	**2.48**	**4.8 J**	0.16 U
0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.51 U	0.33 U	0.33 U	0.33 U	0.33 U

TABLE 3-10

SUB-SLAB VAPOR SAMPLING RESULTS, BUILDING C, AUGUST 2020
LOCKHEED MARTIN MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE	Target Shallow Soil Gas Concentration ($\mu g/m^3$)[1]	Key	AIR-001-C SV-001-C-29 20200825	AIR-004-C SV-004-C-29 20200825	AIR-060-C SV-060-C-29 20200825	AIR-088-C SV-088-C-29 20200825	AIR-102-C SV-102-C-29 20200825	AIR-102-C SV-102-C-29-AVG 20200825	AIR-102-C SV-102-C-29-D 20200825	AIR-113-C SV-113-C-29 20200825	AIR-126-C SV-126-C-29 20200825	AIR-133-C SV-133-C-29 20200825
Volatile organic compounds ($\mu g/m^3$)												
1,1,1-TRICHLOROETHANE	733,333	nc	1 U	2.5 U	**8.1 J**	1 U	**2700**	**2650**	**2600**	**1.8 J**	13 U	1 U
1,1,2-TRICHLOROETHANE	29	nc	0.19 U	0.48 U	0.95 U	0.19 U	3.3 U	3.35 U	3.4 U	0.19 U	2.4 U	0.19 U
1,1-DICHLOROETHANE	2,567	ca	0.14 U	0.35 U	**10**	0.14 U	**5500 E**	**5750**	**6000 E**	**4.6**	1.8 U	0.14 U
1,1-DICHLOROETHENE	29,333	nc	0.16 U	0.4 U	0.79 U	0.16 U	**3600**	**3700**	**3800**	**1.6**	**220**	0.16 U
1,2,3-TRIMETHYLBENZENE	8,667	nc	0.88 U	2.2 U	4.4 U	0.88 U	**24 J**	**23.5**	**23 J**	**11**	11 U	0.88 U
1,2,4-TRICHLOROBENZENE	293	nc	2.4 U	5.9 U	12 U	2.4 U	41 U	42 U	43 U	2.4 U	29 U	2.4 U
1,2,4-TRIMETHYLBENZENE	8,667	nc	0.49 U	1.2 U	2.5 U	**0.54 J**	**20 J**	**21.5**	**23 J**	**7.7**	6.1 U	0.49 U
1,2-DICHLOROETHANE	157	ca	0.2 U	0.51 U	1 U	0.2 U	3.5 U	3.55 U	3.6 U	0.2 U	2.5 U	0.2 U
1,3,5-TRIMETHYLBENZENE	8,667	nc	0.54 U	1.4 U	2.7 U	**1.4 J**	**32 J**	**32**	**32 J**	**7.5**	6.7 U	**1.2 J**
BENZENE	533	ca	**0.35 J**	**0.42 J**	**0.74 J**	**0.28 J**	**8.3 J**	**7.8**	**7.3 J**	**0.21 J**	**230**	**0.51 J**
CARBON TETRACHLORIDE	667	ca	**0.49 J**	**0.61 J**	1.1 U	**0.58 J**	**4.3 J**	**4.35**	**4.4 J**	**0.51 J**	2.7 U	**3.9**
CHLORODIFLUOROMETHANE	7,333,333	nc	**1.9**	0.97 U	**9.7**	**3.9**	6.7 U	6.85 U	7 U	**5.6 J**	4.8 U	**9.1**
CHLOROFORM	177	ca	**3.5**	**81**	**15**	**0.76 J**	**57**	**55.5**	**54**	**1.5 J**	2.1 U	**9.2**
CIS-1,2-DICHLOROETHENE	--	--	**19**	**42**	**24**	**5.4**	**48**	**59**	**70**	**15**	**150**	0.2 U
DICHLORODIFLUOROMETHANE	14,667	nc	**2.7**	**2.5 J**	**2.3 J**	**2.9**	5.9 U	6.05 U	6.2 U	**2.9**	4.3 U	**2.7**
ETHYLBENZENE	1633	ca	0.28 U	0.71 U	**9.1**	**0.47 J**	**460**	**470**	**480**	**0.53 J**	**16 J**	**0.35 J**
METHYL TERT-BUTYL ETHER	15,667	ca	0.94 U	2.3 U	4.7 U	0.94 U	16 U	16.5 U	17 U	0.94 U	12 U	0.94 U
METHYLENE CHLORIDE	86,667	nc	6.8 U	17 U	34 U	6.8 U	120 U	**120**	120 U	6.8 U	84 U	**9.1**
NAPHTHALENE	120	ca	1 U	2.6 U	5.2 U	1 U	**300**	**365**	**430**	**1.3**	13 U	1 U
TETRACHLOROETHENE	6,000	nc	**41**	**3.3 J**	1.2 U	**0.47 J**	4.1 U	4.2 U	4.3 U	**0.36 J**	2.9 U	**4.3**
TOLUENE	733,333	nc	1.5 U	3.7 U	7.3 U	**1.5 J**	**29 J**	**27.5**	26 U	**1.5 J**	**27 J**	**5.7**
TOTAL XYLENES	14,667	nc	0.52 U	1.3 U	**80**	**6.7**	**5800**	**5550**	**5300**	**5.7**	**55**	**2 J**
TRANS-1,2-DICHLOROETHENE	--	--	**9**	**3.2 J**	**1.2 J**	**0.37 J**	**4.6 J**	**4.9**	**5.2 J**	**0.22 J**	**24**	**0.2 J**
TRICHLOROETHENE	293	nc	**230**	**300**	**480**	**42**	**1800**	**1800**	**1800**	**180**	**310**	**210**
VINYL CHLORIDE	933	ca	0.33 U	0.83 U	1.7 U	0.33 U	**6.7 J**	**7.15**	**7.6 J**	0.33 U	**790**	0.33 U

All sample concentrations are in micrograms per cubic meter ($\mu g/m^3$)
Shaded cells indicate concentration greater than risk-based screening level.
Bolded cells indicate that the analyte is detected in the sample.

1-Screening values derived in accordance with *Draft Guidance for Evaluating the Vapor Intrusion to Indoor Air Pathway from Groundwater and Soils* (November 2002). Screening values are equal to USEPA industrial air screening levels divided by an attenuation factor of 0.3, and correspond to a target cancer risk level of 1×10^{-5}.

-- - not available
ca - screening value based on carcinogenic effects
E - result exceeded instrument calibration and was re-analyzed; reanalysis result is displayed
J - estimated value
nc - screening value based on noncarcinogenic effects
U - nondetect
UJ - non-detected value is estimated
USEPA - United States Environmental Protection Agency

TABLE 3-10

SUB-SLAB VAPOR SAMPLING RESULTS, BUILDING C, AUGUST 2020
LOCKHEED MARTIN MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE	Target Shallow Soil Gas Concentration ($\mu g/m^3$)[1]	Key	AIR-141-C SV-141-C-29 20200825	AIR-142-C SV-142-C-29 20200825	AIR-149-C SV-149-C-29 20200825	AIR-150-C SV-150-C-29 20200825	AIR-152-C SV-152-C-29 20200825	AIR-153-C SV-153-C-29 20200825	AIR-153-C SV-153-C-29-AVG 20200825	AIR-153-C SV-153-C-29-D 20200825	AIR-155-C SV-155-C-29 20200825
Volatile organic compounds ($\mu g/m^3$)											
1,1,1-TRICHLOROETHANE	733,333	nc	1 U	**2.1 J**	1 U	1 U	**2.7 J**	1 U	1 U	1 U	1 U
1,1,2-TRICHLOROETHANE	29	nc	0.19 U	0.19 U	0.19 U	0.19 U	0.38 U	0.19 U	0.19 U	0.19 U	0.19 U
1,1-DICHLOROETHANE	2,567	ca	0.14 U	**4.3**	0.14 U	0.14 U	0.28 U	0.14 U	0.14 U	0.14 U	0.14 U
1,1-DICHLOROETHENE	29,333	nc	**0.57 J**	**1.6**	0.16 U	1.6 U	0.32 U	0.16 U	0.16 U	0.16 U	0.16 U
1,2,3-TRIMETHYLBENZENE	8,667	nc	0.88 U	0.88 U	0.88 U	0.88 U	1.8 U	0.88 U	0.88 U	0.88 U	0.88 U
1,2,4-TRICHLOROBENZENE	293	nc	2.4 U	2.4 U	2.4 U	2.4 U	4.7 U	2.4 U	2.4 U	2.4 U	2.4 U
1,2,4-TRIMETHYLBENZENE	8,667	nc	**0.7 J**	0.49 U	**2.7**	**1.3 J**	0.98 U	**0.75 J**	**1.025**	**1.3 J**	0.49 U
1,2-DICHLOROETHANE	157	ca	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,3,5-TRIMETHYLBENZENE	8,667	nc	0.54 U	**1.3 J**	**1.6 J**	**0.56 J**	1.1 U	**1.5 J**	**1.075**	**0.65 J**	**1.4 J**
BENZENE	533	ca	**0.61 J**	**0.24 J**	**0.43 J**	**1 J**	**0.67 J**	**0.62 J**	**0.535**	**0.45 J**	**0.59 J**
CARBON TETRACHLORIDE	667	ca	**0.39 J**	**0.56 J**	**0.43 J**	**0.36 J**	0.44 U	**5.6**	**3.6**	**1.6 J**	**8.7**
CHLORODIFLUOROMETHANE	7,333,333	nc	**12**	**3.3 J**	**3.1**	**67**	**34**	**6**	**5.65**	**5.3**	**7.3**
CHLOROFORM	177	ca	**0.38 J**	**2.2**	**0.8 J**	**0.42 J**	**1.8 J**	**0.55 J**	**0.43**	**0.31 J**	**0.45 J**
CIS-1,2-DICHLOROETHENE	--	--	**1.7**	0.2 U	**0.58 J**	0.2 U	**9.1**	0.5 U	0.35 U	0.2 U	0.2 U
DICHLORODIFLUOROMETHANE	14,667	nc	**2**	**2.4**	**1.9 J**	**2.3**	**1.9 J**	**2.6**	**2.25**	**1.9 J**	**2.6**
ETHYLBENZENE	1633	ca	**2**	**0.43 J**	**5.6**	**5.5**	0.56 U	**0.38 J**	**0.515**	**0.65 J**	**0.53 J**
METHYL TERT-BUTYL ETHER	15,667	ca	0.94 U	0.94 U	0.94 U	0.94 U	1.9 U	0.94 U	0.94 U	0.94 U	0.94 U
METHYLENE CHLORIDE	86,667	nc	6.8 U	**10**	**71**	**12**	**15**	6.8 UJ	**22.9**	**39 J**	6.8 U
NAPHTHALENE	120	ca	1 U	**1.2**	1 U	1 U	2.1 U	1 U	1 U	1 U	1 U
TETRACHLOROETHENE	6,000	nc	**0.27 J**	**1.1 J**	**2.8**	0.24 U	0.47 U	**0.47 J**	**0.38**	**0.29 J**	**0.51 J**
TOLUENE	733,333	nc	**4.5**	**6.4**	**44**	**10**	**6.2**	**3**	**5.2**	**7.4**	**6.3**
TOTAL XYLENES	14,667	nc	**12**	**3.7**	**28**	**23**	1 U	**2.1 J**	**2.65**	**3.2 J**	**2.3 J**
TRANS-1,2-DICHLOROETHENE	--	--	**0.53 J**	0.14 U	0.14 U	0.14 U	**0.35 J**	0.14 U	0.14 U	0.14 U	0.14 U
TRICHLOROETHENE	293	nc	**34**	**11**	**11**	0.16 U	**180**	**1.6**	**1.29**	**0.98 J**	**1.1**
VINYL CHLORIDE	933	ca	0.33 U	0.33 U	0.33 U	0.33 U	0.66 U	0.33 U	0.33 U	0.33 U	0.33 U

All sample concentrations are in micrograms per cubic meter ($\mu g/m^3$)
Shaded cells indicate concentration greater than risk-based screening level.
Bolded cells indicate that the analyte is detected in the sample.

1-Screening values derived in accordance with *Draft Guidance for Evaluating the Vapor Intrusion to Indoor Air Pathway from Groundwater and Soils* (November 2002). Screening values are equal to USEPA industrial air screening levels divided by an attenuation factor of 0.3, and correspond to a target cancer risk level of 1×10^{-5}.

-- - not available
ca - screening value based on carcinogenic effects
E - result exceeded instrument calibration and was re-analyzed; reanalysis result is displayed
J - estimated value
nc - screening value based on noncarcinogenic effects
U - nondetect
UJ - non-detected value is estimated
USEPA - United States Environmental Protection Agency

TABLE 3-11

AMBIENT AIR (BACKGROUND) SAMPLING RESULTS, AUGUST 2020
LOCKHEED MARTIN MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

LOCATION SAMPLE ID SAMPLE DATE	OSHA PEL ($\mu g/m^3$)	Industrial Air Screening Level ($\mu g/m^3$)	Key	AIR-BCK-1 IA-BCK-1-29 20200825	AIR-BCK-2 IA-BCK-2-29 20200825	AIR-BCK-3 IA-BCK-3-29 20200825	AIR-BCK-4 IA-BCK-4-29 20200825
Volatile organic compounds ($\mu g/m^3$)							
1,1,1-TRICHLOROETHANE	1,900,000	22,000	nc	1 U	1 U	1 U	1 U
1,1,2-TRICHLOROETHANE	45,000	0.88	nc	0.19 U	0.19 U	0.19 U	0.19 U
1,1-DICHLOROETHANE	400,000	77	ca	0.14 U	0.14 U	0.14 U	0.14 U
1,1-DICHLOROETHENE	--	880	nc	0.16 U	0.16 U	0.16 U	0.16 U
1,2,3-TRIMETHYLBENZENE	123,000[N]	260	nc	0.88 U	0.88 U	0.88 U	0.88 U
1,2,4-TRICHLOROBENZENE	40,000[N]	8.8	nc	2.4 U	2.4 U	2.4 U	2.4 U
1,2,4-TRIMETHYLBENZENE	123,000[N]	260	nc	0.49 U	0.49 U	**0.53 J**	0.49 U
1,2-DICHLOROETHANE	198,360	4.7	ca	0.2 U	**0.28 J**	0.2 U	0.2 U
1,3,5-TRIMETHYLBENZENE	123,000[N]	260	nc	0.54 U	0.54 U	0.54 U	0.54 U
BENZENE	31,900	16	ca	**0.23 J**	**0.27 J**	**0.23 J**	**0.43 J**
CARBON TETRACHLORIDE	62,900	20	ca	0.22 U	0.22 U	**0.45 J**	**0.3 J**
CHLORODIFLUOROMETHANE	3,540,000[N]	220,000	nc	**1.3 J**	**1.1 J**	**1.2 J**	**1.2 J**
CHLOROFORM	240,000	5.3	ca	0.17 U	0.17 U	0.17 U	0.17 U
CIS-1,2-DICHLOROETHENE	790,000	--	--	0.2 U	0.2 U	**1.2 J**	0.2 U
DICHLORODIFLUOROMETHANE	4,950,000	440	nc	**1.7 J**	**1.9 J**	**1.9 J**	**2.1**
ETHYLBENZENE	435,000	49	ca	0.28 U	0.28 U	0.28 U	0.28 U
METHYL TERT-BUTYL ETHER	180,000[A]	470	ca	0.94 U	0.94 U	0.94 U	0.94 U
METHYLENE CHLORIDE	87,000	2,600	nc	6.8 U	**21**	**7.8**	**12**
NAPHTHALENE	50,000	3.6	ca	1 U	1 U	1 U	1 U
TETRACHLOROETHENE	678,000	180	nc	0.24 U	0.24 U	0.24 U	0.24 U
TOLUENE	754,000	22,000	nc	1.5 U	**1.6 J**	**1.5 J**	**1.8 J**
TOTAL XYLENES	435,000	440	nc	**0.99 J**	**1.1 J**	**1.2 J**	**0.65 J**
TRANS-1,2-DICHLOROETHENE	790,000	--	--	0.14 U	0.14 U	0.14 U	0.14 U
TRICHLOROETHENE	537,000	8.8	nc	0.16 U	0.16 U	0.16 U	0.16 U
VINYL CHLORIDE	2,560	28	ca	0.33 U	0.33 U	0.33 U	0.33 U

All concentrations are in micrograms per cubic meter air ($\mu g/m^3$).
Shaded cells indicate a concentration greater than the risk-based screening level.
Bolded cells indicate analyte was detetected in background sample(s).
Industrial Air Screening Levels from USEPA Regional Screening Levels for Chemical Contaminants at Superfund Sites, May 201
-- = not available
A = American Council of Governmental Industrial Hygienists Theshold Limit Value
ca = screening value based on 1×10^{-5} carcinogenic risk
J = estimated value
N = National Institute for Occupational Safety and Health Recommended Exposure Limi
nc = screening value based on noncarcinogenic hazard quotient = 1
OSHA PEL = Occupational Safety and Health Administration Pemissible Exposure Limit
U = not detected
USEPA = United States Environmental Protection Agency

TABLE 3-12
ANALYTE CONCENTRATIONS IN BACKGROUND AIR SAMPLES COMPARED TO INDOOR AIR SAMPES, AUGUST 2020
LOCKHEED MARTIN MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

Analyte	Maximum background concentration	Maximum indoor air sample concentration[1]	Number of indoor air samples with detects[1]	Number of indoor air detects < background[1][2]	Number of indoor air detects = background[1][2]	Number of indoor air detects > background[1][2]
1,2,4-TRIMETHYLBENZENE	0.53 J	1.9 J	12	3	1	8
1,2-DICHLOROETHANE	0.28 J	0.41 J	2	0	0	2
BENZENE	0.43 J	0.68 J	36	16	2	18
CARBON TETRACHLORIDE	0.45 J	1 J	36	13	1	22
CHLORODIFLUOROMETHANE	1.3 J	65	39	11	1	27
CIS-1,2-DICHLOROETHENE	1.2 J	0.49 J	3	3	0	0
DICHLORODIFLUOROMETHANE	2.1	3	39	20	3	16
METHYLENE CHLORIDE	21	80	12	7	0	5
TOLUENE	1.8 J	200	36	4	0	32
TOTAL XYLENES	1.2 J	17	34	1	1	32

All concentrations are in micrograms per cubic meter air ($\mu g/m^3$).

1 - The original and duplicate are counted as separate samples when determining the minimum and maximum concentration, and when determining the number of samples less than, equal to, or greater than background.
2 - If one sample in a duplicate pair was greater than/equal to background and the other sample was less than background, the maximum detected concentration in the pair was used to represent that sampling location.

Four background samples and 35 indoor air samples (plus 4 duplicates) were analyzed in Round 29.

TABLE 4-1

SUMMARY OF SUB-SLAB VAPOR VOC DETECTIONS NEAR SSDS, BUILDING A
LOCKHEED MARTIN MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

Location	VOC (µg/m³)	Apr-07	Oct-07	Jul-08	Nov-08	Nov-07	Jul-09	Oct-09	Feb-10	Aug-10	Feb-11	Aug-11	Oct-11	Feb-12	Aug-12	Feb-13	Mar-13	Aug-13	Feb-14	Sep-14	Feb-15	Aug-15	Feb-16	Aug-16	Feb-17	Aug-17	Feb-18	Aug-18	Feb-19	Aug-19	Feb-20	Aug-20
SSD-11-A	1,1-DICHLOROETHENE	NS	NS	3900	1900	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-11-A	BENZENE	NS	NS	-	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-11-A	CHLOROFORM	NS	NS	-	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-11-A	CIS-1,2-DICHLOROETHENE	NS	NS	79000	31000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-11-A	ETHYLBENZENE	NS	NS	-	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-11-A	METHYL TERT-BUTYL ETHER	NS	NS	-	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-11-A	TETRACHLOROETHENE	NS	NS	-	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-11-A	TOLUENE	NS	NS	500	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-11-A	TOTAL XYLENES	NS	NS	-	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-11-A	TRANS-1,2-DICHLOROETHENE	NS	NS	-	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-11-A	TRICHLOROETHENE	NS	NS	2800	850	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-11-A	VINYL CHLORIDE	NS	NS	-	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-11-A	**TOTAL VOCs**	NS	NS	**86,200**	**33,750**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
Note: SSD-11-A is also referenced as SV-11-A																																
SSD-12-A	1,1-DICHLOROETHENE	NS	NS	1800	9900	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-12-A	BENZENE	NS	NS	-	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-12-A	CARBON TETRACHLORIDE	NS	NS	-	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-12-A	CHLOROFORM	NS	NS	-	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-12-A	CIS-1,2-DICHLOROETHENE	NS	NS	1200	2900	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-12-A	ETHYLBENZENE	NS	NS	-	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-12-A	METHYL TERT-BUTYL ETHER	NS	NS	-	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-12-A	TETRACHLOROETHENE	NS	NS	-	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-12-A	TOLUENE	NS	NS	-	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-12-A	TOTAL XYLENES	NS	NS	-	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-12-A	TRANS-1,2-DICHLOROETHENE	NS	NS	-	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-12-A	TRICHLOROETHENE	NS	NS	3500	6800	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-12-A	VINYL CHLORIDE	NS	NS	-	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-12-A	**TOTAL VOCs**	NS	NS	**6,500**	**19,600**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
Note: SSD-12-A is also referenced as SV-12-A																																
SSD-13-A	1,1-DICHLOROETHANE	11000	NS	200	-	3400	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-13-A	BENZENE	-	NS	-	-	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-13-A	CHLOROFORM	64.5 J	NS	-	-	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-13-A	CIS-1,2-DICHLOROETHENE	292000	NS	3800	47	15463	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-13-A	METHYL TERT-BUTYL ETHER	-	NS	NA	NA	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-13-A	TETRACHLOROETHENE	166 J	NS	-	-	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-13-A	TOLUENE	-	NS	-	170	1093	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-13-A	TOTAL XYLENES	-	NS	-	15	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-13-A	TRANS-1,2-DICHLOROETHENE	4650	NS	-	-	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-13-A	TRICHLOROETHENE	326000	NS	4700	46	806	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-13-A	VINYL CHLORIDE	549	NS	-	-	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SV-13-A	**TOTAL VOCs**	**634,430 J**	**NS**	**8,700**	**278**	**20,762**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
Note: SSD-13-A is also referenced as SV-13-A																																
015-A	1,1,1-TRICHLOROETHANE	-	-	9800	2500	-	-	-	-	1200	380	-	1100	840	940	140	460	280	112	NS	45.6 J	1300	41 J	15	3	23.5	1.7 J	-	0.56 J	1.2 J	J	-	**9.9**
015-A	1,1-DICHLOROETHANE	6010	7690 J	320	480	5666 J	1.2	0.43 J	120	58	12	1.7	51	65 J	92	13	170	45	14.6	NS	4.6 J	56	70 J	19	3.05	22.5	2.7	16 J	4.5	2.6	1.1 J	**9**
015-A	1,1-DICHLOROETHENE	-	-	3400	6400	-	3.2	3.4	2800	1200	150	12	1100	780 J	1600	490	3100	1100 J	473	NS	71.4 J	1200	190	50	9.5	77	8.9	39	1.2 J	14 J	4.1	**28**
015-A	1,2,3-TRIMETHYLBENZENE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.85	1.3	1.1	-	NS	-	13 J	-	-	-	-	-	-	-	-	-	-	**-**
015-A	1,2-DICHLOROETHANE	-	-	-	-	-	0.082 J	-	-	-	-	-	0.53	-	-	-	0.66	0.7	-	NS	-	-	-	-	-	-	-	-	-	-	-	-	**-**
015-A	1,3,5-TRIMETHYLBENZENE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.75	1	-	NS	-	12 J	-	-	-	-	-	-	-	-	-	**1.5 J**
015-A	BENZENE	-	-	-	-	-	-	-	-	-	0.4	-	-	1.1	-	-	0.32	0.49	0.64	NS	0.64	-	-	4 J	1.2 J	3.95	2.2	7.8 J	1.2 J	2.9 J	1.4	**2.7**
015-A	CARBON TETRACHLORIDE	-	-	-	-	-	0.48 J	-	-	-	-	0.64	0.96	-	-	0.77 J	-	0.83 J	-	NS	-	-	-	-	-	-	0.48 J	-	-	0.38 J	0.47 J	**0.56 J**
015-A	CHLORODIFLUOROMETHANE	-	-	-	-	-	-	-	-	6.5 J	-	-	-	4	3.4 J	-	0.93	1.7	5.8 J	NS	3 J	-	-	3.2 J	7.4	3.4	2.9	-	1.6	1.4	1.1 J	**1.1 J**
015-A	CHLOROFORM	109	-	-	-	-	0.46	-	6.1 J	5.5 J	0.9 J	1.1	5.2	1.4 J	23 J	6.8	26	19	93.6	NS	13.8 J	9.4 J	-	-	0.58 J	1.8	0.49 J	-	-	0.34 J	0.35 J	**0.93 J**
015-A	CIS-1,2-DICHLOROETHENE	167000	190312 J	7800	20000	134804 J	83	36	4400	1800	200	320	1800	1100 J	2400	1300	7000	2700	1260	NS	195	900	130	7.2 J	0.73 J	12.5	1.2 J	9.7 J	-	2.4	1.4 J	**3.6**
015-A	DICHLORODIFLUOROMETHANE	-	-	-	-	-	2.2	3.2 J	-	-	2	2.7	2.2	2.3 J	-	2.7	2.4	2.8	2.3 J	NS	2.2	7.2 J	-	-	2.1	2.05	3.5	-	2.5	2.4	2.5	**2.4**
015-A	ETHYLBENZENE	-	-	-	-	-	1.2	4.6	-	-	2	3.6	0.79	19 J	-	2.3 K	4.5	7.5	-	NS	1 J	18	40 J	3.5 J	-	17	0.99 J	60	0.68 J	30 J	1.2 J	**5.8**
015-A	M+P-XYLENES	-	-	-	-	-	3.3	11	-	-	-	20	4.1	-	-	8.8 J	23	47	3.1 J	NS	6.9 J	-	-	-	-	-	N/A	-	-	-	-	**-**
015-A	METHYL TERT-BUTYL ETHER	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NS	-	-	-	-	-	-	-	-	-	-	-	**-**
015-A	METHYLENE CHLORIDE	-	-	-	-	-	0.94	-	-	-	-	0.92	0.6	-	-	0.74	-	0.99	31.6 J	NS	8.7	-	160 J	-	3.2 J	-	-	-	4.3 J	140 J	J	-	**-**
015-A	NAPHTHALENE	-	-	-	-	-	0.65 J	-	-	-	-	4	-	-	-	0.8	-	2.1 J	-	NS	2.1 J	-	-	-	-	-	-	-	-	-	-	-	**-**
015-A	O-XYLENE	-	-	-	-	-	1.2	2.9 J	-	-	-	7.9	1.8	-	-	8.5	8.8	10	1.6 J	NS	6.1 J	-	-	-	-	-	N/A	N/A	-	-	-	**-**
015-A	TETRACHLOROETHENE	98.5	-	-	-	-	0.26 J	-	-	-	-	-	1.4	-	-	-	1.2	3.9	-	NS	-	-	-	-	-	1.35	-	-	-	-	-	**0.52 J**
015-A	TOLUENE	14.8 J	-	-	480	-	64	210	10 J	14	27	28	15	440 J	11 J	14	160	240 J	7.1	NS	1.3	-	-	-	4.2	10.35	9.8	-	5.4	13	8.0	**2 J**
015-A	TOTAL XYLENES	-	-	-	310	-	-	-	-	-	10	-	-	120 J		-	-	-	-	NS	-	120	210	6.1 J	2.4 J	54	4.2	230	3.5	64	6.5	**12**
015-A	TRANS-1,2-DICHLOROETHENE	4660	3212 J	-	-	2101 J	1	-	150	99	13	2.7	46	46 J	84	23	160	79	37.7	NS	7.4 J	110	22 J	-	-	0.95	-	-	-	0.28 J	-	**2.4**
015-A	TRICHLOROETHENE	326000	225718 J	17000	12000	155853 J	16	8.1	3200	1300	340	18	3400	2400 J	3000	710	8800	1600	619	NS	112 J	1300	540 J	35	2.3	51.5	6.3	73	4	10	19	**28**
015-A	VINYL CHLORIDE	491	-	-	-	-	0.078 J	-	11 J	9.8	0.8	0.26	4	-	13	1.4	12	7.5 J	1.5 J	NS	-	-	-	-	-	-	-	-	-	-	-	**-**
015-A	**TOTAL VOCs**	**504,383 J**	**426,932 J**	**38,320**	**42,170**	**298,424 J**	**179 J**	**280 J**	**10,697 J**	**4,493 J**	**758 J**	**424**	**6,434**	**4,979 J**	**7,226 J**	**2,584 J**	**19,472**	**5,871 J**	**2,552 J**	NS	**482 J**	**5,046 J**	**1,403 J**	**143 J**	**40 J**	**282**	**45 J**	**436 J**	**29 J**	**285 J J**	**47**	**110**

TABLE 4-1

SUMMARY OF SUB-SLAB VAPOR VOC DETECTIONS NEAR SSDS, BUILDING A
LOCKHEED MARTIN MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

Location	VOC (µg/m^3)	Apr-07	Oct-07	Jul-08	Nov-08	Nov-07	Jul-09	Oct-09	Feb-10	Aug-10	Feb-11	Aug-11	Oct-11	Feb-12	Aug-12	Feb-13	Mar-13	Aug-13	Feb-14	Sep-14	Feb-15	Aug-15	Feb-16	Aug-16	Feb-17	Aug-17	Feb-18	Aug-18	Feb-19	Aug-19	Feb-20	Aug-20
SSD-16-A	1,1,1-TRICHLOROETHANE	NS	NS	67	420	NS	NS	NS	NS	5.7 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-16-A	1,1-DICHLOROETHANE	NS	NS	180	1400	NS	NS	NS	NS	52	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-16-A	1,1-DICHLOROETHENE	NS	NS	2100	18000	NS	NS	NS	NS	890	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-16-A	BENZENE	NS	NS	-	-	NS	NS	NS	NS	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-16-A	CARBON TETRACHLORIDE	NS	NS	-	-	NS	NS	NS	NS	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-16-A	CHLORODIFLUOROMETHANE	NS	NS	-	-	NS	NS	NS	NS	3.8 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-16-A	CHLOROFORM	NS	NS	-	-	NS	NS	NS	NS	2.5 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-16-A	CIS-1,2-DICHLOROETHENE	NS	NS	710	3000	NS	NS	NS	NS	110	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-16-A	METHYL TERT-BUTYL ETHER	NS	NS	-	-	NS	NS	NS	NS	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-16-A	TETRACHLOROETHENE	NS	NS	-	-	NS	NS	NS	NS	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-16-A	TOLUENE	NS	NS	-	-	NS	NS	NS	NS	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-16-A	TOTAL XYLENES	NS	NS	-	-	NS	NS	NS	NS	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-16-A	TRANS-1,2-DICHLOROETHENE	NS	NS	-	-	NS	NS	NS	NS	11	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-16-A	TRICHLOROETHENE	NS	NS	1300	3700	NS	NS	NS	NS	160	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-16-A	VINYL CHLORIDE	NS	NS	-	63	NS	NS	NS	NS	7.4	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-16-A	**TOTAL VOCs**	**NS**	**NS**	**4,357**	**26,583**	**NS**	**NS**	**NS**	**NS**	**1,242 J**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**
Note: SSD-16-A is also referenced as 016-A																																
017-A	1,1-DICHLOROETHANE	-	-	NS	47	-	21	6.7	8.1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
017-A	1,1-DICHLOROETHENE	-	-	NS	38	-	17	6	6.8	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
017-A	1,2-DICHLOROETHANE	-	-	NS		-	-	0.13 J	0.084 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
017-A	BENZENE	-	-	NS	-	-	0.59 J	0.41	0.14 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
017-A	CARBON TETRACHLORIDE	-	-	NS	-	-	0.57 J	0.53	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
017-A	CHLOROFORM	-	-	NS	78	-	81	27	7.2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
017-A	CIS-1,2-DICHLOROETHENE	-	-	NS	8	-	6.2	2.4	1.8	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
017-A	DICHLORODIFLUOROMETHANE	-	-	NS	-	-	2.6	2.8	2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
017-A	ETHYLBENZENE	-	-	NS	-	-	-	3.3	0.13 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
017-A	M+P-XYLENES	-	-	NS		-	1.8	9.3	0.37	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
017-A	METHYL TERT-BUTYL ETHER	-	-	NS	NA	-	-	0.51 J	0.24 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
017-A	METHYLENE CHLORIDE	-	-	NS		-	43	2.5	1.4	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
017-A	O-XYLENE	-	-	NS		-	0.56 J	2	0.14 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
017-A	TETRACHLOROETHENE	-	-	NS	-	-	1.2 J	0.81	0.58	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
017-A	TOLUENE	-	-	NS	-	-	14	58	0.54	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
017-A	TOTAL XYLENES	-	-	NS	-	-	-	-	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
017-A	TRANS-1,2-DICHLOROETHENE	-	-	NS	-	-	0.52 J	0.2 J	0.18 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
017-A	TRICHLOROETHENE	-	-	NS	310	-	170	67	56	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
017-A	VINYL CHLORIDE	-	-	NS	-	-	-	0.1 J	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
017-A	**TOTAL VOCs**	**-**	**-**	**NS**	**481**	**-**	**360 J**	**190 J**	**86 J**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**
018-A	1,1,1-TRICHLOROETHANE	-	NA	NS	-	-	-	-	-	280 J	-	-	730	300 J	160 J	270	240 J	65 J	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
018-A	1,1-DICHLOROETHANE	78600	76901 J	NS	44000	76901 J	1100	-	280	660	3	-	2200	1300	1200	410	1400 J	430 J	3.2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
018-A	1,1-DICHLOROETHENE	-	-	NS	1500000	-	43000	-	12000	32000	48	2.9	130000	69000	42000	54000	67000 J	24000 J	230	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
018-A	1,2,4-TRIMETHYLBENZENE	-	-	NS	-	-	-	-	-	-	-	-	-	-	-	-	0.85	0.75	1.7 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
018-A	1,2-DICHLOROETHANE	-	-	NS	-	-	-	-	-	750	-	-	62	-	-	44	29 J	7.4 J	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
018-A	1,3,5-TRIMETHYLBENZENE	-	-	NS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.4 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
018-A	BENZENE	-	-	NS	-	-	-	-	24000 J	-	1	0.58	7.8	-	-	23	10 J	2	0.96	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
018-A	CARBON TETRACHLORIDE	337	-	NS	-	-	-	-	-	-	-	-	6.7	-	-	7	2.7	3.5 J	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
018-A	CHLORODIFLUOROMETHANE	-	-	NS	-	-	-	-	-	-	-	-	-	-	-	-		2.6	8.9	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
018-A	CHLOROFORM	316	-	NS	-	-	-	-	-	-	0.6 J	0.65 J	14	-	-	15 J	8.3 J	2.9	1.7 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
018-A	CIS-1,2-DICHLOROETHENE	232000	249784 J	NS	170000	249784 J	4400	-	1400	3200	17	1.3	23000	6700	8200	3800	5200	1700 J	16.3	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
018-A	DICHLORODIFLUOROMETHANE	-	-	NS	-	-	-	-	150 J	-	2	2.5	2.2	-	-	2.8	2.4	3.3	2.2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
018-A	ETHYLBENZENE	-	-	NS	-	-	-	-	8100 J	-	1	2.6	0.97	-	-		0.79	1.1	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
018-A	M+P-XYLENES	-	-	NS	-	-	-	-	28000 J	-	-	11	1.1 J	-	-	0.62 J	3.2 J	4	2 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
018-A	METHYL TERT-BUTYL ETHER	-	-	NS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
018-A	METHYLENE CHLORIDE	-	-	NS	-	-	520	-	-	-	-	0.81	-	-	-	-	-	1.7 J	19.8	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
018-A	NAPHTHALENE	-	-	NS	-	-	-	-	-	-	-	11 J	-	-	450 J		2.7 J	7.1	3.1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
018-A	O-XYLENE	-	-	NS	-	-	-	-	3600 J	-	-	3.9	0.53 J	-	-	-	0.97	1.1	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
018-A	TETRACHLOROETHENE	4470	-	NS	-	-	-	-	-	-	-	-	120	-	-	110	64 J	17 J	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
018-A	TOLUENE	29.6 J	-	NS	-	-	300 J	-	1900 J	-	4	32	19	-	-	4.1	82 J	27 J	2.6	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
018-A	TOTAL XYLENES	-	-	NS	-	-	-	-	-	-	5	-	-	-	-	-	-	-	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
018-A	TRANS-1,2-DICHLOROETHENE	4160	-	NS	-	-	-	-	-	-	-	-	71	-		66	56 J	17 J	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
018-A	TRICHLOROETHENE	6200000	3869448 J	NS	2700000	3869448 J	63000	-	19000	64000	160	7.2	800000	83000	69000	95000	96000 J	28000 J	174	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
018-A	VINYL CHLORIDE	1850	-	NS	-	-	-	-	-	-	-	-	550	300 J	180 J	170	310 J	40	0.59	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
018-A	**TOTAL VOCs**	**6,521,763 J**	**4,196,133 J**	**NS**	**4,414,000**	**4,196,133 J**	**112,320 J**	**-**	**98,430 J**	**100,890 J**	**242 J**	**76 J**	**956,785 J**	**160,600 J**	**121,190 J**	**153,923 J**	**170,413 J**	**54,333 J**	**468 J**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**

TABLE 4-1

SUMMARY OF SUB-SLAB VAPOR VOC DETECTIONS NEAR SSDS, BUILDING A
LOCKHEED MARTIN MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

Location	VOC (µg/m³)	Apr-07	Oct-07	Jul-08	Nov-08	Nov-07	Jul-09	Oct-09	Feb-10	Aug-10	Feb-11	Aug-11	Oct-11	Feb-12	Aug-12	Feb-13	Mar-13	Aug-13	Feb-14	Sep-14	Feb-15	Aug-15	Feb-16	Aug-16	Feb-17	Aug-17	Feb-18	Aug-18	Feb-19	Aug-19	Feb-20	Aug-20
078-A	1,1,1-TRICHLOROETHANE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	-	-	-	-	-	0.58 J	2.8 J	-	**2.9**
078-A	1,2,3-TRIMETHYLBENZENE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	15	-	-	-	-	-	-	-	1.6 **J**	-
078-A	1,1-DICHLOROETHENE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	-	-	-	-	-	-	-	-	-
078-A	1,2,4-TRIMETHYLBENZENE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	17	0.68 J	0.67 J	1.8 J	1.7 J	2.3	1 J	1.4 J J	7.7	**0.72 J**
078-A	1,3,5-TRIMETHYLBENZENE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	-	-	-	-	-	1.1 J	0.58 J J	2.1	**1.4 J**
078-A	BENZENE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2	0.44 J	0.5 J	2.7	0.4 J	1.1 J	0.58 J	0.42 J J	0.97 J	**0.31 J**
078-A	CARBON TETRACHLORIDE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	-	-	0.53 J	0.51 J	-	-	0.32 J	0.42 J	**0.47 J**
078-A	CHLORODIFLUOROMETHANE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.3 J	1.6	2.7	2.9	1.4 J	5.4	1 J	1.4 J	1.2 J	**1.3 J**
078-A	CHLOROFORM	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	1 J	-	0.65 J	0.48 J	0.71 J	-	0.57 J	0.73 J	**0.98 J**
078-A	CIS-1,2-DICHLOROETHENE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	-	-	-	-	-	-	-	0.26 J	-
078-A	DICHLORODIFLUOROMETHANE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2.8	3	2.5	2.1	1.9 J	2	2.3	6.1	2.5	**5**
078-A	ETHYLBENZENE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.95 J	1.1 J	-	1.8	1.4 J	1.9	0.75 J	0.77 J J	4.6	-
078-A	METHYLENE CHLORIDE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	4.2	2.8 J	-	4.9	4.2	3 J	39 J J	-	-
078-A	TETRACHLOROETHENE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	2.1 J	0.73 **J**	**2.9**
078-A	TOLUENE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	4.5	2.3	2.8	12	6.9	54	4.3	26	19	-
078-A	TOTAL XYLENES	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	6.8	8.4	3 J	9.2	7	8.2	3.9	5.4	25	**1.4 J**
078-A	TRANS-1,2-DICHLOROETHENE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	-	-	-	-	-	-	-	-	-
078-A	TRICHLOROETHENE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	11	13	11	4.4	12	12	9.5	32	15	**27**
078-A	**TOTAL VOCs**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**46**	**35 J**	**26 J**	**38 J**	**39 J**	**92 J**	**28 J**	**119 J J**	**82**	**44**
079-A	1,1,1-TRICHLOROETHANE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	2.2	0.83 J	1.7 J	1.3 J	1.1 J	0.72 J	1.4 J J	1.3 **J**	**2.3**
079-A	1,2,4-TRIMETHYLBENZENE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	1.0 J	0.70 J	2.2	1.7 J	1.8 J	-	1.2 J	1.2 **J**	**1.4 J**
079-A	BENZENE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	0.78 J	0.51 J	0.95 J	0.41 J	0.84 J	-	0.54 J	0.73 **J**	**0.42 J**
079-A	CARBON TETRACHLORIDE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.31 J	0.24 **J**	**0.48 J**
079-A	CHLORODIFLUOROMETHANE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	2.6	3.4	2.5	20	2.5	1.7	1.6 J	1.3 **J**	**2.2**
079-A	CHLOROFORM	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	13	0.80 J	-	0.78 J	0.4 J	0.51 J	-	0.50 J	0.33 **J**	**0.74 J**
079-A	CIS-1,2-DICHLOROETHENE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1,400	-	-	-	-	-	-	-	-	-
079-A	DICHLORODIFLUOROMETHANE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	2.7	2.1	2.1	2.9	2	2.4	2.3	2.5	**2.8**
079-A	ETHYLBENZENE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	10	0.87 J	5.8	3.3	1.6 J	-	0.92 J	1.9	**1.7 J**
079-A	METHYLENE CHLORIDE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	3.5	2.5 J	-	4.9	8.3	4.4 J	45 J J	-	**30**
079-A	NAPHTHALENE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	1.0	-	-	-	-	-	-	-	-
079-A	TETRACHLOROETHENE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	9.9 J	7.4	1.5 J	16	30	22	8.7	19	8.5	**13**
079-A	TOLUENE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	8.3	3.8	21	2.3	11	-	5.9	5.5	**2.7**
079-A	TOTAL XYLENES	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	44	3.1 J	32	15	8	2.5 J	5.6 J	9.0	**7.2**
079-A	TRANS-1,2-DICHLOROETHENE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	300	-	-	1 J	0.53 J	0.61 J	-	0.56 J	0.28 **J**	**0.32 J**
079-A	TRICHLOROETHENE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	3,500	120	41	130	96	150	57	150	64	**130**
079-A	**TOTAL VOCs**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**3,810 J**	**204 J**	**60 J**	**216 J**	**179 J**	**210 J**	**77 J**	**235 J J**	**97**	**195**
093-A	1,1,1-TRICHLOROETHANE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	-	-	-	-	-	0.37 J	- J	-	**NS**
093-A	1,2,3-TRIMETHYLBENZENE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	-	-	-	-	-	-	-	-	**NS**
093-A	1,1-DICHLOROETHANE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	-	-	-	-	-	0.97 J	9.2 J	1.0 **J**	**NS**
093-A	1,1-DICHLOROETHENE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.98 J	0.85 J	0.30 J	0.89 J	1 J	0.53 J	1.3 J	5.3 J	0.90 **J**	**NS**
093-A	1,2,4-TRIMETHYLBENZENE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	-	-	-	-	-	-	-	-	**NS**
093-A	1,3,5-TRIMETHYLBENZENE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	-	-	-	-	-	0.72 J	- J	-	**NS**
093-A	BENZENE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.71 J	0.42 J	0.6 J	0.78 J	0.8 J	1 J	0.65 J	0.42 J J	0.69 **J**	**NS**
093-A	CARBON TETRACHLORIDE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	0.47 J	-	0.54 J	0.66 J	-	-	0.41 J	0.39 **J**	**NS**
093-A	CHLORODIFLUOROMETHANE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.1 J	1.3 J	1.7	2.1	1.4 J	3	1.2 J	- J	1.1 **J**	**NS**
093-A	CHLOROFORM	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	-	-	0.8 J	-	0.86 J	-	0.45 J	0.36 **J**	**NS**
093-A	CIS-1,2-DICHLOROETHENE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	-	-	-	0.69 J	0.52 J	-	0.79 J	-	**NS**
093-A	DICHLORODIFLUOROMETHANE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2.6	2.6	1.9 J	1.7 J	2.6	2.1	2.3	2.1	2.5	**NS**
093-A	ETHYLBENZENE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	-	-	-	-	-	-	-	-	**NS**
093-A	METHYLENE CHLORIDE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8.7	-	2.3 J	-	-	3.5	3.8 J	16 J J	-	**NS**
093-A	TOLUENE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	-	-	5.8	-	2.5	-	2.6	1.5 **J**	**NS**
093-A	TOTAL XYLENES	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	1.2 J	-	-	-	1.2 J	-	-	1.3 **J**	**NS**
093-A	TRANS-1,2-DICHLOROETHENE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	-	-	-	-	-	-	-	-	**NS**
093-A	TRICHLOROETHENE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	7	-	2	2	2.5	4.7	6.3	7.2	2.3	**NS**
093-A	**TOTAL VOCs**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	-	**21**	**7 J**	**9 J**	**15 J**	**10 J**	**20 J**	**18 J**	**44 J J**	**12**	**NS**
116-A	1,2,3-TRIMETHYLBENZENE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	0.86 J	-	-	-	-	-	-	-	-
116-A	1,1-DICHLOROETHENE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	1.7	0.42 J	-	0.34 J	1.4 J	0.28 J	0.84 J J	0.18 **J**	**0.73**
116-A	1,2,4-TRIMETHYLBENZENE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	0.94 J	-	0.63 J	-	-	-	-	-	-
116-A	BENZENE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.62 J	0.48 J	0.4 J	0.71 J	0.5 J	1 J	0.81 J	0.48 J J	0.63 **J**	**0.36**
116-A	CARBON TETRACHLORIDE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	0.5 J	0.54 J	0.55 J	0.56 J	-	-	0.49 J	0.41 **J**	**0.36**
116-A	CHLORODIFLUOROMETHANE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1 J	1.3 J	18.0	2.3	1.3 J	2.9	1.2 J	1.7 J	1.1 **J**	**1.3**
116-A	CHLOROFORM	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.39 J	2 J	0.7 J	1.5 J	0.82 J	7.7	1.7 J	1.1 J J	1.2 **J**	**3.7**
116-A	CIS-1,2-DICHLOROETHENE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	-	-	-	-	0.68 J	-	0.44 J	0.22 **J**	-
116-A	DICHLORODIFLUOROMETHANE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2.7	2.4	2.0	2	2.6	2.1	2.4	2.2	2.5	**2.2**
116-A	ETHYLBENZENE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	1.1 J	-	-	-	-	-	0.53 J	-	-
116-A	METHYLENE CHLORIDE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	3.4 J	2.4 J	26 J	-	5.9	3.2 J	170 J J	3.9 **J**	**7.4**
116-A	TOLUENE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	2.5	-	11	-	3.4	-	2.0 J	-	-
116-A	TOTAL XYLENES	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	4.6	-	-	-	-	-	-	1.1 **J**	-
116-A	TRANS-1,2-DICHLOROETHENE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	-	-	-	-	7.7	-	-	-	-
116-A	TRICHLOROETHENE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	6	21	14	9.4	3.5		4.4	6.6	4.0	**7.1**
116-A	**TOTAL VOCs**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**11**	**42 J**	**38 J**	**54 J**	**10 J**	**33 J**	**14 J**	**186 J J**	**15**	**23**
118-A	1,1,1-TRICHLOROETHANE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	-	-	-	-	-	32	3.6	-	**3.9**
118-A	1,1-DICHLOROETHANE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	-	-	-	-	-	46	11	13 **J**	**9.7**
118-A	1,1-DICHLOROETHENE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	650	150	470.00	150	230	81	300	86	120	**72**
118-A	1,2,3-TRIMETHYLBENZENE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	-	-	3.2 J	3.8	-	2.9	2.5	-	**3.4**
118-A	1,2,4-TRIMETHYLBENZENE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	10 J	3.80 J	13.00 J	5.1	9.6	-	7	5.7	-	**6.7**
118-A	1,3,5-TRIMETHYLBENZENE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	-	-	-	-	-	4.6	3.9	-	**5**
118-A	BENZENE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	-	-	-	0.6 J	-	0.97 J	0.32 J J	-	**0.23 J**
118-A	CARBON TETRACHLORIDE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	-	-	-	0.51 J	-	-	0.45 J	-	**0.38 J**
118-A	CHLORODIFLUOROMETHANE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	2.8 J	-	4.2	4.1	3.6 J	1.1 J	1.5 J	-	-
118-A	CHLOROFORM	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	-	7.8 J	3 J	2.6	3 J	1.7 J	2.3 J	-	**1.7 J**

TABLE 4-1

SUMMARY OF SUB-SLAB VAPOR VOC DETECTIONS NEAR SSDS, BUILDING A
LOCKHEED MARTIN MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

Location	VOC (µg/m³)	Apr-07	Oct-07	Jul-08	Nov-08	Nov-07	Jul-09	Oct-09	Feb-10	Aug-10	Feb-11	Aug-11	Oct-11	Feb-12	Aug-12	Feb-13	Mar-13	Aug-13	Feb-14	Sep-14	Feb-15	Aug-15	Feb-16	Aug-16	Feb-17	Aug-17	Feb-18	Aug-18	Feb-19	Aug-19	Feb-20	Aug-20
118-A	CIS-1,2-DICHLOROETHENE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	190	70	120.0	60	91	39	180	45	48	**40**
118-A	DICHLORODIFLUOROMETHANE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	-	-	2.2 J	2.9	3.7 J	2.3	2.4	-	**2.1**
118-A	ETHYLBENZENE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	12 J	5.4 J	12.0 J	12	9.8	3.5 J	7.7	6.4	4.5 **J**	**6.6**
118-A	METHYLENE CHLORIDE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	-	-	-	-	12 J	7.4	36 J	-	-
118-A	TETRACHLOROETHENE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	-	-	-	-	-	0.99 J	- J	-	-
118-A	TOLUENE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	-	-	6.5	2.4	-	4.2	3.3	-	**1.5 J**
118-A	TOTAL XYLENES	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	110	49	120	95	91	31	72	58	39	**61**
118-A	TRANS-1,2-DICHLOROETHENE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	14	5 J	10 J	6.2	8	3.8 J	12	4.0	4.2 **J**	**3.2**
118-A	TRICHLOROETHENE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2,300	890	2,000	690	1,500	590	1,800	420	860	**650**
118-A	VINYL CHLORIDE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	-	-	-	-	-	2.1	0.57	-	**0.69**
118-A	**TOTAL VOCs**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**3,286**	**1,176 J**	**2,753 J**	**1,037 J**	**1,956 J**	**771 J**	**2,483 J**	**692 J J**	**1,089**	**867**
136-A	1,2,3-TRIMETHYLBENZENE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2.40	-	-	-	-	-	-	-
136-A	1,1-DICHLOROETHENE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	0.48 J	-	-	-	-	0.34 J	0.52 J J	-	-
136-A	1,2,4-TRIMETHYLBENZENE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	0.95 J	0.79 J	-	4.4	-	0.98 J	0.69 J J	1.5 **J**	-
136-A	1,3,5-TRIMETHYLBENZENE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	-	-	-	-	-	1.1 J	- J	-	-
136-A	BENZENE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	1.8	1.4	2.7	2.0 J	3.4 J	2	4.0	1.6	**2.6 J**
136-A	CARBON TETRACHLORIDE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.51 J	-	-	-	-	0.40 J	0.33 **J**	-
136-A	CHLORODIFLUOROMETHANE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	2.0	2.4	3.7	1.7 J	-	2.6	1.8	1.1 **J**	-
136-A	CHLOROFORM	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	330	50	7.8	20	8	-	8.8	13	-	**1.8 J**
136-A	CIS-1,2-DICHLOROETHENE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	4.5	1.2 J	4.2	1.8 J	16	1.3 J	2.8 J	0.64 **J**	**1.8 J**
136-A	DICHLORODIFLUOROMETHANE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	2.5	2.2	2.2 J	2.9 J	3 J	2	2.2	2.4	**2.2 J**
136-A	ETHYLBENZENE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	1.6 J	3.1	-	5.4	3.6 J	5.1	0.95 J	1.7 **J**	-
136-A	METHYLENE CHLORIDE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	5.9	2.5 J	-	-	-	3.6 J	31 J J	6.7 **J**	-
136-A	TOLUENE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	13	9.7	12	50	12	200	25	15	-
136-A	TOTAL XYLENES	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	7.9	15	1.2 J	33	-	23	4.4	9.4	-
136-A	TRANS-1,2-DICHLOROETHENE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	0.56 J	-	-	-	-	-	0.41 J	-	-
136-A	TRICHLOROETHENE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	35,000	850 DL	300	790	380	660	270	500	3.5	**480**
136-A	**TOTAL VOCs**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**35,330**	**941 J**	**349 J**	**836 J**	**489 J**	**698 J**	**521 J**	**587 J J**	**44**	**488**
168-A	1,1,1-TRICHLOROETHANE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	59 J	22.5	9.3 J	16	4.8	13	5.5	**10.35**
168-A	1,1-DICHLOROETHANE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	70 J	14.5	3.6 J	3.4 J	1.3 J	1.2 J J	0.44 **J**	**0.75 J**
168-A	1,1-DICHLOROETHENE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	4,900	3,000	500	340	50	79	4.2	**31.5**
168-A	1,2,3-TRIMETHYLBENZENE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	-	-	-	0.88 J	- J	-	-
168-A	1,2,4-TRIMETHYLBENZENE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	-	-	-	3.8	1.1 J	1.7 **J**	-
168-A	1,3,5-TRIMETHYLBENZENE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	-	-	-	2.4 J	- J	0.54 **J**	**0.97 J**
168-A	BENZENE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	-	-	-	0.77 J	0.81 J J	0.53 **J**	**0.37 J**
168-A	CARBON TETRACHLORIDE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	-	-	-	0.51 J	0.53 J J	0.53 **J**	**0.68 J**
168-A	CHLORODIFLUOROMETHANE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	-	1.5 J	1.6 J	1.3 J	1.1 J J	1.3 **J**	**1.75**
168-A	CHLOROFORM	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	120 J	19.5	3.6 J	4.5 J	1.2 J	2.3 J	1.1 **J**	**3**
168-A	CIS-1,2-DICHLOROETHENE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	270	34.5	6.1 J	3.2 J	0.68 J	0.76 J J	0.35 **J**	**0.36 J**
168-A	DICHLORODIFLUOROMETHANE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	-	3.5 J	3.7 J	2.4	2.3	2.4 **J**	**2.5**
168-A	ETHYLBENZENE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	-	-	-	1.5 J	0.55 J J	1.4 **J**	-
168-A	METHYLENE CHLORIDE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	-	-	13 J	6.5 J	26 J J	-	**19.5**
168-A	TETRACHLOROETHENE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	-	-	-	-	0.88 J	0.38 **J**	**0.41 J**
168-A	TOLUENE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	-	-	-	11	4.5	6.7	**1.65 J**
168-A	TOTAL XYLENES	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	-	-	-	7.5	3.1 J	7.2	**0.86 J**
168-A	TRANS-1,2-DICHLOROETHENE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	-	-	-	-	0.20 J	-	**0.18 J**
168-A	TRICHLOROETHENE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	22,000	8,100	1,300	950	180	270	100	**107**
168-A	**TOTAL VOCs**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**27,419 J**	**11,191**	**1,828 J**	**1,335 J**	**277 J**	**407 J J**	**134**	**182**

Notes:

Data presented in this table is from sub-slab vapor samples.

VOC = volatile organic compound
SSDS = sub-slab depressurization system
µg/m³ = micrograms per cubic meter
- = not detected (below reporting limit)
N/A = compound not reported

J = estimated value
J+ = estimated value, may be biased high
K = value is biased high
NS = not sampled
N/A = sampling data for this location not previously included in this table

TABLE 4-2

SUMMARY OF SUB-SLAB VOC DETECTIONS NEAR SSDS, BUILDING C
LOCKHEED MARTIN MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

Location	VOC (µg/m³)	Oct-07	Jul-08	Nov-08	Jul-09	Oct-09	Feb-10	Aug-10	Feb-11	Aug-11	Feb-12	Jun-12	Jul-12	Aug-12	Feb-13	Aug-13	Feb-14	Sep-14	Feb-15	Aug-15	Feb-16	Aug-16	Feb-17	Aug-17	Feb-18	Aug-18	Feb-19	Aug-19	Feb-20	Aug-20
001-C	1,1,1-TRICHLOROETHANE	-	-	-	-	-	-	2.1	-	2.8	-	-	-	-	NS	NS	NS	2	-	1.5 J	0.43 J	2.2 J	-	0.88 J	-	-	-	-	-	-
001-C	1,1-DICHLOROETHANE	-	-	-	0.33	-	0.28	-	-	6.7	-	-	-	1.4	NS	NS	NS	5.8	-	-	-	-	-	-	-	-	-	-	-	-
001-C	1,1-DICHLOROETHENE	-	24	39	0.9	1	2.7	-	-	2.3	0.59	-	23	-	NS	NS	NS	-	-	-	0.45 J	-	-	-	-	0.69 J	-	-	-	-
001-C	1,2,4-TRIMETHYLBENZENE	-	-	-	-	-	-	-	-	-	-	-	-	-	NS	NS	NS	1.4	-	-	-	-	-	-	-	-	-	-	-	-
001-C	BENZENE	-	-	-	-	-	0.26	-	-	0.39	-	-	-	-	NS	NS	NS	-	0.81	-	0.41 J	-	-	-	-	0.42 J	-	0.21 J	0.38 J	**0.35 J**
001-C	CARBON TETRACHLORIDE	-	-	-	-	-	0.3	-	-	-	-	-	-	-	NS	NS	NS	-	-	-	-	-	-	0.57 J	-	-	-	0.34 J	0.44 J	**0.49 J**
001-C	CHLORODIFLUOROMETHANE	-	-	-	-	-	-	7.5	-	-	-	NA	NA	-	NS	NS	NS	6.3	1.8	7.9	2.1	2.8 J	2.1 J	2.3	1.5	1.9	1.2 J	1.8	1.2 J	**1.9**
001-C	CHLOROFORM	-	-	-	8.5	7.4	6.1	18	5	13	5.2	-	-	8.9	NS	NS	NS	16.3	3.4	14	13	24	4.7	4.8	3.0	6.8	0.52 J	0.66 J	0.83 J	**3.5**
001-C	CIS-1,2-DICHLOROETHENE	257714	1100	3300	270	230	300	360	120	250	100	110	1900	170	NS	NS	NS	251	64	130	110	230	74	77	72	110	8.3	8.3	7.7	**19**
001-C	DICHLORODIFLUOROMETHANE	-	-	-	2.4	2.2	0.87	-	2	2.6	3	-	-	-	NS	NS	NS	2.6	2.1	2.7 J	2.4	2.9 J	2.2 J	2	2.6	1.8 J	2.3	1.6 J	2.3	**2.7**
001-C	ETHYLBENZENE	-	-	-	0.67	-	0.45	-	-	6.6	-	-	-	-	NS	NS	NS	4.3	0.89 J	-	0.79 J	2.4 J	-	1.1 J	-	1.9	-	0.5 J	0.37 J	-
001-C	M+P-XYLENES	-	-	-	1.3	-	1	13	-	14	-	NA	NA	-	NS	NS	NS	4.8	0.98 J	-	-	-	-	-	-	-	-	-	-	-
001-C	METHYL TERT-BUTYL ETHER	-	NA	NA	-	-	-	-	1	-	-	-	-	-	NS	NS	NS	-	-	-	-	-	-	-	-	-	-	-	-	-
001-C	METHYLENE CHLORIDE	-	-	-	-	4.5	-	7.4	33	1.1	-	-	32	-	NS	NS	NS	-	-	-	2.9 J	-	-	-	2.9 J	6.3	3.9 J	7.3 J	5.6 J	-
001-C	NAPHTHALENE	-	-	-	1.6	-	2.9	-	-	3.1	-	-	-	-	NS	NS	NS	18.3	2.2 J	-	1.1	-	-	3.7	-	2.5 J	1.2	2.2	-	-
001-C	O-XYLENE	-	-	-	-	-	0.41	5.6	-	4	-	NA	NA	-	NS	NS	NS	2.5	-	-	-	-	-	-	N/A	-	-	-	-	-
001-C	TETRACHLOROETHENE	-	-	-	3.3	3	3.6	6.2	2	4.8	1.8	-	-	8.7	NS	NS	NS	7	-	4.2 J	2.6 J	8.8 J	4.1 J	2.6 J	1.7 J	4.1	-	0.44 J	0.94 J	**41**
001-C	TOLUENE	-	-	-	1.8	-	0.49	-	0.6	3.6	1.2	-	-	13	NS	NS	NS	3.2	1.2 J	-	-	-	-	18	-	-	-	-	1.9 J	-
001-C	TOTAL XYLENES	-	-	-	-	-	-	-	-	-	3.5	-	-	5.1	NS	NS	NS	-	-	-	-	-	-	2.1 J	-	2.5 J	-	1.1 J	1.7 J	-
001-C	TRANS-1,2-DICHLOROETHENE	3529	-	-	65	49	67	88	30	44	19	-	-	33	NS	NS	NS	45.7	13.5	32	24	60	20	16	15	20	1.9	2.1	2.6	**9**
001-C	TRICHLOROETHENE	8599	450	850	270	330	230	620	190	550	200	150	700	300	NS	NS	NS	591	158	410	350	900	200	240	200	410	25	41	45	**230**
001-C	VINYL CHLORIDE	-	58	40	-	-	1.4	-	-	-	-	-	14	-	NS	NS	NS	-	-	-	-	-	-	-	-	0.5 J	-	-	0.51	-
001-C	**TOTAL VOCs**	**269,842**	**1,632**	**4,229**	**626**	**627**	**618**	**1,128**	**384**	**909**	**334**	**260**	**2,669**	**540**	**NS**	**NS**	**NS**	**962**	**249 J**	**602**	**510 J**	**1,233 J**	**307 J**	**371 J**	**299 J**	**569 J**	**44 J**	**68 J**	**71**	**308**
SSD-2-C	BENZENE	NS	-	8.4	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-2-C	CHLOROFORM	NS	-	18	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-2-C	CIS-1,2-DICHLOROETHENE	NS	22	350	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-2-C	DICHLORODIFLUOROMETHANE	NS	-	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-2-C	ETHYLBENZENE	NS	-	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-2-C	METHYL TERT-BUTYL ETHER	NS	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-2-C	TETRACHLOROETHENE	NS	-	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-2-C	TOLUENE	NS	14	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-2-C	TOTAL XYLENES	NS	-	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-2-C	TRANS-1,2-DICHLOROETHENE	NS	-	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-2-C	TRICHLOROETHENE	NS	55	770	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-2-C	VINYL CHLORIDE	NS	-	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-2-C	**TOTAL VOCs**	NS	**91**	**1,146**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**

Note: SSD-2-C has been referenced as 002-C and SV-002-C

SSD-3-C	BENZENE	NS	64	-	NS	NS	NS	NS	NS	NS	NS	-	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-3-C	CARBON TETRACHLORIDE	NS	-	-	NS	NS	NS	NS	NS	NS	NS	-	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-3-C	CHLOROFORM	NS	-	-	NS	NS	NS	NS	NS	NS	NS	-	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-3-C	CIS-1,2-DICHLOROETHENE	NS	-	8.5	NS	NS	NS	NS	NS	NS	NS	-	11	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-3-C	ETHYLBENZENE	NS	-	-	NS	NS	NS	NS	NS	NS	NS	-	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-3-C	METHYL TERT-BUTYL ETHER	NS	-	-	NS	NS	NS	NS	NS	NS	NS	-	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-3-C	TETRACHLOROETHENE	NS	-	14	NS	NS	NS	NS	NS	NS	NS	-	58	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-3-C	TOLUENE	NS	-	-	NS	NS	NS	NS	NS	NS	NS	-	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-3-C	TOTAL XYLENES	NS	-	-	NS	NS	NS	NS	NS	NS	NS	8.7	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-3-C	TRANS-1,2-DICHLOROETHENE	NS	-	-	NS	NS	NS	NS	NS	NS	NS	-	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-3-C	TRICHLOROETHENE	NS	49	60	NS	NS	NS	NS	NS	NS	NS	49	310	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-3-C	**TOTAL VOCs**	NS	**113**	**83**	NS	NS	NS	NS	NS	NS	NS	**58**	**379**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**

Note: SSD-3-C has been referenced as 003-C and SV-003-C

TABLE 4-2

SUMMARY OF SUB-SLAB VOC DETECTIONS NEAR SSDS, BUILDING C
LOCKHEED MARTIN MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

Location	VOC (µg/m³)	Oct-07	Jul-08	Nov-08	Jul-09	Oct-09	Feb-10	Aug-10	Feb-11	Aug-11	Feb-12	Jun-12	Jul-12	Aug-12	Feb-13	Aug-13	Feb-14	Sep-14	Feb-15	Aug-15	Feb-16	Aug-16	Feb-17	Aug-17	Feb-18	Aug-18	Feb-19	Aug-19	Feb-20	Aug-20
SSD-4-C	1,1,1-TRICHLOROETHANE	NA	NA	NA	NS	NS	NS	NS	NS	NS	NS	NA	NA	NS	NA	NA	NS	NA	NA	NA	NA	NA	-	1.7 J	-	-	1.3 J	-	-	-
SSD-4-C	1,1-DICHLOROETHANE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	NA	NA	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6	-	-	-
SSD-4-C	1,1-DICHLOROETHENE	-	9.7	9.9	NS	NS	NS	NS	NS	NS	NS	-	-	NS	1.2	1.7	NS	-	1.1 J	0.8 J	-	0.69 J	0.37 J	0.88 J	-	0.76 J	1.3 J	0.5 J	0.24 J	-
SSD-4-C	1,2,3-TRIMETHYLBENZENE	-	-	-	NS	NS	NS	NS	NS	NS	NS	-	-	NS	0.6 J	2	NS	-	-	-	-	-	-	-	-	-	-	-	-	-
SSD-4-C	1,2,4-TRICHLOROBENZENE	-	-	-	NS	NS	NS	NS	NS	NS	NS	-	-	NS	-	-	NS	-	-	-	-	-	-	-	-	-	-	-	-	-
SSD-4-C	1,2,4-TRIMETHYLBENZENE	-	-	-	NS	NS	NS	NS	NS	NS	NS	-	-	NS	1	4.8	NS	-	-	-	-	-	-	-	-	-	-	-	-	-
SSD-4-C	1,3,5-TRIMETHYLBENZENE	-	-	-	NS	NS	NS	NS	NS	NS	NS	-	-	NS	-	1.5	NS	-	-	-	-	-	-	-	-	-	-	-	-	-
SSD-4-C	BENZENE	-	-	-	NS	NS	NS	NS	NS	NS	NS	-	-	NS	0.62	-	NS	-	-	-	-	0.37 J	-	-	-	0.44 J	1.9	0.28 J	0.23 J	**0.42 J**
SSD-4-C	CARBON TETRACHLORIDE	-	-	-	NS	NS	NS	NS	NS	NS	NS	-	-	NS	0.83 J	0.83 J	NS	-	-	-	-	3.4	-	2.9	-	0.55 J	-	0.33 J	0.36 J	**0.61 J**
SSD-4-C	CHLORODIFLUOROMETHANE	-	-	-	NS	NS	NS	NS	NS	NS	NS	NA	NA	NS	-	2.9	NS	26	1.6	2.1	0.99 J	1.7	1.8	-	1.1 J	1.5	1.1 J	0.86 J	0.69 J	-
SSD-4-C	CHLOROFORM	-	270	240	NS	NS	NS	NS	NS	NS	NS	33	46	NS	37	88	NS	34.3	15	4.7	5.9	20	4.3	180	5.5	200	-	38	5.6	**81**
SSD-4-C	CIS-1,2-DICHLOROETHENE	10705	650	520	NS	NS	NS	NS	NS	NS	NS	200	2500	NS	82	71	NS	80.4	57.2	47	39	79	38	45	22	51	-	29	17	**42**
SSD-4-C	DICHLORODIFLUOROMETHANE	-	-	-	NS	NS	NS	NS	NS	NS	NS	-	-	NS	3.4	2.3	NS	-	2.1	2.3	2.3	2.6	2.1	2.1	2.7	2	2.3	2	2.5	**2.5 J**
SSD-4-C	ETHYLBENZENE	-	-	-	NS	NS	NS	NS	NS	NS	NS	-	-	NS	-	1.5 J	NS	-	-	-	-	-	-	-	-	-	2.6	0.56 J	-	-
SSD-4-C	M+P-XYLENES	-	-	-	NS	NS	NS	NS	NS	NS	NS	NA	NA	NS	1.3 K	3.6	NS	-	-	-	-	-	-	-	N/A	-	-	-	-	-
SSD-4-C	METHYL TERT-BUTYL ETHER	-	-	NA	NS	NS	NS	NS	NS	NS	NS	-	-	NS	-	-	NS	-	-	-	-	-	-	-	-	-	-	-	-	-
SSD-4-C	METHYLENE CHLORIDE	-	-	36	NS	NS	NS	NS	NS	NS	NS	-	-	NS	1.5	1.2	NS	145	3.5 J	-	-	5.7	2.8 J	-	2.7 J	3.1 J	8.2 J	13 J	-	-
SSD-4-C	NAPHTHALENE	-	-	-	NS	NS	NS	NS	NS	NS	NS	NA	NA	NS	12	4.4	NS	-	1.2 J	-	-	1.1	-	-	-	-	-	-	-	-
SSD-4-C	O-XYLENE	-	-	-	NS	NS	NS	NS	NS	NS	NS	NA	NA	NS	0.93	1.1	NS	-	-	-	-	-	-	-	N/A	-	-	-	-	-
SSD-4-C	TETRACHLOROETHENE	-	-	-	NS	NS	NS	NS	NS	NS	NS	-	-	NS	1.1	2.2 J	NS	-	-	0.79 J	1.3 J	2.4 J	0.91 J	2.5 J	8.7	2 J	0.91 J	1.5 J	0.81 J	**3.3 J**
SSD-4-C	TOLUENE	215	-	-	NS	NS	NS	NS	NS	NS	NS	-	-	NS	1.3	14	NS	9.6 J	1.1 J	-	-	-	-	4.3	-	-	7.8	5.8	-	-
SSD-4-C	TOTAL XYLENES	-	-	-	NS	NS	NS	NS	NS	NS	NS	-	-	NS	-	-	NS	-	-	-	-	-	-	-	-	-	19	3.5	1.0 J	-
SSD-4-C	TRANS-1,2-DICHLOROETHENE	139	-	-	NS	NS	NS	NS	NS	NS	NS	-	-	NS	8.5	20	NS	12.4 J	6.2	7.4	2.2	5.1	2	2.4	1.0 J	1.9	-	1.8	1.2 J	**3.2 J**
SSD-4-C	TRICHLOROETHENE	2741	430	300	NS	NS	NS	NS	NS	NS	NS	240	2500	NS	180	140	NS	210	121	120	99	250	110	150	69	270	0.55 J	160	77	**300**
SSD-4-C	VINYL CHLORIDE	-	16	13	NS	NS	NS	NS	NS	NS	NS	-	-	NS	0.47	0.65	NS	-	-	-	-	-	-	-	-	-	-	-	-	-
004-C	**TOTAL VOCs**	**13,800**	**1,376**	**1,119**	NS	NS	NS	NS	NS	NS	NS	**473**	**5,046**	NS	**334 J**	**364 J**	NS	**518 J**	**210 J**	**185**	**151 J**	**372 J**	**162 J**	**392 J**	**113 J**	**533 J**	**50 J**	**257 J**	**107**	**433**
Note: SSD-4-C has been referenced as 004-C and SV-004-C																														
SSD-5-C	1,1,1-TRICHLOROETHANE	NS	NS	-	-	-	-	4.6	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-5-C	1,1-DICHLOROETHANE	NS	NS	-	-	-	-	0.12 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-5-C	1,2,4-TRICHLOROBENZENE	NS	NS	-	0.39 J	-	-	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-5-C	1,2-DICHLOROETHANE	NS	NS	-	0.27 J	-	-	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-5-C	BENZENE	NS	NS	-	0.86	0.36	0.22 J	0.39	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-5-C	CARBON TETRACHLORIDE	NS	NS	-	-	-	-	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-5-C	CARBON TETRACHLORIDE	NS	NS	-	0.4 J	0.44 J	0.29 J	0.61	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-5-C	CHLORODIFLUOROMETHANE	NS	NS	-	-	-	-	6.1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-5-C	CHLOROFORM	NS	NS	15	15	8.5	5.9	13	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-5-C	DICHLORODIFLUOROMETHANE	NS	NS	-	0.25 J	3.7	0.32 J	0.73	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-5-C	ETHYLBENZENE	NS	NS	-	1	0.24 J	-	0.41	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-5-C	M+P-XYLENES	NS	NS	-	3.3	0.65	0.24 J	1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-5-C	METHYL TERT-BUTYL ETHER	NS	NS	NA	-	-	-	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-5-C	METHYLENE CHLORIDE	NS	NS	-	0.59 J	-	-	0.58 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-5-C	NAPHTHALENE	NS	NS	-	1.4	0.47 J	0.33 J	0.29 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-5-C	O-XYLENE	NS	NS	-	1.8	0.43	0.16 J	0.64	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-5-C	TETRACHLOROETHENE	NS	NS	64	94	66	48	110	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-5-C	TOLUENE	NS	NS	-	4.1	0.53	0.36	0.56	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-5-C	TOTAL XYLENES	NS	NS	-	-	-	-	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-5-C	TRICHLOROETHENE	NS	NS	-	1.5	0.94	0.81	2.6	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-5-C	**TOTAL VOCs**	NS	NS	79	**125 J**	**82 J**	**57**	**142 J**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
Note: SSD-5-C has been referenced as 005-C and SV-005-C																														

TABLE 4-2

SUMMARY OF SUB-SLAB VOC DETECTIONS NEAR SSDS, BUILDING C
LOCKHEED MARTIN MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

Location	VOC (µg/m³)	Oct-07	Jul-08	Nov-08	Jul-09	Oct-09	Feb-10	Aug-10	Feb-11	Aug-11	Feb-12	Jun-12	Jul-12	Aug-12	Feb-13	Aug-13	Feb-14	Sep-14	Feb-15	Aug-15	Feb-16	Aug-16	Feb-17	Aug-17	Feb-18	Aug-18	Feb-19	Aug-19	Feb-20	Aug-20
SSD-6-C	BENZENE	NS	NS	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-6-C	CARBON TETRACHLORIDE	NS	NS	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-6-C	CHLOROFORM	NS	NS	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-6-C	DICHLORODIFLUOROMETHANE	NS	NS	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-6-C	ETHYLBENZENE	NS	NS	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-6-C	METHYL TERT-BUTYL ETHER	NS	NS	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-6-C	TETRACHLOROETHENE	NS	NS	42	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-6-C	TOLUENE	NS	NS	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-6-C	TOTAL XYLENES	NS	NS	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
SSD-6-C	**TOTAL VOCs**	NS	NS	**42**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
Note: SSD-6-C has been referenced as 006-C and SV-006-C																														
060-C	1,1,1-TRICHLOROETHANE	NS	NS	NS	-	-	-	14 J	4	33	17 J	NS	NS	9.5 J	19	19	-	0.95 J	7.9	0.76 J	51	3.9	23	11	23	29	33	19	9.8	**8.1 J**
060-C	1,1-DICHLOROETHANE	NS	NS	NS	8.5	0.29 J	-	87	21	250	120 J	NS	NS	74	43	6.9	2.3	1.8	3.1 J	0.69 J	6.8	3.2	7.6	4.5	9.3	8.3	18	16	13	**10**
060-C	1,1-DICHLOROETHENE	NS	NS	NS	-	-	-	3 J	2	17	12 J	NS	NS	4.6 J	22	7.4	0.86 J	-	-	-	0.86 J	-	1.2 J	-	2.1	1.7	5.1	3.7	2.0	-
060-C	1,2,3-TRIMETHYLBENZENE	NS	NS	NS	-	-	-	-	-	-	-	NS	NS	-	6.8	1.5 J	0.91	1 J	-	-	-	1.2 J	-	-	-	-	-	-	-	-
060-C	1,2,4-TRIMETHYLBENZENE	NS	NS	NS	-	-	-	-	-	-	64	NS	NS	-	9.5	5.4 J	3.2	4.3	3.8 J	1.5 J	4	5.2	1.2 J	-	1.6 J	2.2	-	1.8 J	-	-
060-C	1,2-DICHLOROETHANE	NS	NS	NS	-	-	-	-	-	-	-	NS	NS	-	-	0.53 J	-	-	-	-	-	-	-	-	-	-	-	-	-	-
060-C	1,3,5-TRIMETHYLBENZENE	NS	NS	NS	-	-	-	-	-	-	19 J	NS	NS	-	14 J	5.8 J	2.2	1.7	2.7 J	0.94 J	3.1	4.2	1.1 J	-	0.85 J	0.99 J	0.93 J	1.3 J	-	-
060-C	BENZENE	NS	NS	NS	2.2 J	0.53	0.64	-	1	6.5	-	NS	NS	-	5.9	0.62	0.85	-	-	-	0.48 J	-	0.4 J	3.1	0.54 J	0.99 J	0.62 J	0.95 J	0.64 J	**0.74 J**
060-C	CARBON TETRACHLORIDE	NS	NS	NS	-	0.5 J	0.38 J	-	-	-	-	NS	NS	-	-	-	-	-	-	-	-	-	-	0.74 J	0.48 J	-	-	0.4 J	0.44 J	-
060-C	CHLORODIFLUOROMETHANE	NS	NS	NS	-	-	-	190	-	-	-	NS	NS	6 J	-	260	5.8 J	9.4	6.4	62	6.8	17	3.8	14	10	34	5.5	14	6.4 CI	**9.7**
060-C	CHLOROFORM	NS	NS	NS	9.1	0.44	0.13 J	67	16	200	94 J	NS	NS	69	57	5	3.1	-	4.5	1.3 J	9.9	3.1	9.1	6.4	12	14	11	14	12	**15**
060-C	CIS-1,2-DICHLOROETHENE	NS	NS	NS	45	0.19 J	-	140	31	540	340 J	NS	NS	230	460 J	23	16.5	1.4	-	-	2.1	1.5 J	4	3.3	11	9.4	16	27	24	**24**
060-C	DICHLORODIFLUOROMETHANE	NS	NS	NS	2.7 J	2.3	1.9	-	3	7.5	-	NS	NS	-	4	3.8	2.8	3	-	3	2.4	2.9	2	2.1	2.8	2	2.2	1.9 J	2.6	**2.3 J**
060-C	ETHYLBENZENE	NS	NS	NS	490	2.8	22	53	31	270	460 J	NS	NS	160	390 J	150 J	96.5	65	234	66	190	190	34	3.3	14	15	4.9	47	1.3 J	**9.1**
060-C	M+P-XYLENES	NS	NS	NS	2200	11	95	110	-	580	-	NS	NS	-	2800	650	561	250	1240	-	-	-	-	-	N/A	-	-	-	-	-
060-C	METHYLENE CHLORIDE	NS	NS	NS	-	-	-	12 J	-	10	-	NS	NS	-	5.8	3.4	10.7	70.9	6.7 J	4.4	2.5 J	11	3 J	-	4.9	7.5	3.3 J	21 J	-	-
060-C	NAPHTHALENE	NS	NS	NS	5.8 J	0.44 J	3.2	-	-	3	770 J	NS	NS	360 J	67	4.3 J	4.4	28.6 J	7.5 J	5	10	13	4.8	-	3.6 J	4.2 J	-	-	-	-
060-C	O-XYLENE	NS	NS	NS	670	5.8	40	130	-	720	-	NS	NS	-	1300	130	230	171	455	-	-	-	-	-	N/A	-	-	-	-	-
060-C	TETRACHLOROETHENE	NS	NS	NS	3.4 J	0.26 J	21	25 J	6	88	40 J	NS	NS	26 J	23	1.2 J	2.2	2.9	-	-	1 J	1.2 J	1.1 J	140	12	1.2 J	0.72 J	0.76 J	5.7	-
060-C	TOLUENE	NS	NS	NS	50	2.4	7	7.6 J	4	14	29 J	NS	NS	10 J	8	20	13.1	8.2	18.8	14	3.4	4.8	-	160	-	2.5	-	2.9	-	-
060-C	TOTAL XYLENES	NS	NS	NS	-	-	-	-	130	-	3100 J	NS	NS	2600	-	-	-	-	-	550	1000	1200 DL	310	4.1	120	130	46	400	3.5	**80**
060-C	TRANS-1,2-DICHLOROETHENE	NS	NS	NS	2.1 J	-	-	17	5	61	38	NS	NS	24	18	3.5	1.1 J	-	-	-	1.1 J	0.96 J	0.83 J	1.1 J	0.99 J	1.2 J	1 J	1.7	1.3 J	**1.2 J**
060-C	TRICHLOROETHENE	NS	NS	NS	180	2.6	0.46	2200	440	12000	4900	NS	NS	3700	10000	370	291	58.6	78.5	8.2	220	70	270	83	400	390	600	570	350	**480**
060-C	VINYL CHLORIDE	NS	NS	NS	-	-	-	-	-	1.9	-	NS	NS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
060-C	**TOTAL VOCs**	NS	NS	NS	**3,669 J**	**30 J**	**192 J**	**3,056 J**	**694**	**14,802**	**10,003 J**	NS	NS	**7,273 J**	**15,253 J**	**1,671 J**	**1,249 J**	**679 J**	**2,069 J**	**718**	**1,515 J**	**1,533 J**	**677 J**	**437 J**	**629 J**	**654 J**	**748 J**	**1,143 J**	**433**	**640**
088-C	1,1,1-TRICHLOROETHANE	NS	NS	NS	-	-	-	0.54 J	0.6 J	0.89	-	NS	NS	-	-	0.67 J	-	-	-	0.93 J	-	1.3 J	-	-	-	-	-	-	-	-
088-C	1,1-DICHLOROETHANE	NS	NS	NS	0.2 J	0.32 J	-	-	0.14 J	0.74	-	NS	NS	-	-	-	0.66	1.6 J	-	0.22 J	-	0.23 J	-	-	-	0.26 J	-	0.16 J	-	-
088-C	1,1-DICHLOROETHENE	NS	NS	NS	0.2 J	0.43 J	0.13 J	-	-	1	3.3 J	NS	NS	-	1	0.52 J	-	-	-	-	-	-	-	-	-	-	-	-	-	-
088-C	1,2,3-TRIMETHYLBENZENE	NS	NS	NS	-	-	-	-	-	-	30	NS	NS	-	2.9	3	1.1	1.5 J	-	1.6 J	-	1.5 J	1.1 J	1.7 J	-	-	-	-	-	-
088-C	1,2,4-TRIMETHYLBENZENE	NS	NS	NS	-	-	-	-	-	-	39	NS	NS	-	5.4	5.4	1.8	2	-	1 J	-	1.8 J	0.67 J	2.2	0.68 J	1.1 J	-	0.89 J	-	**0.54 J**
088-C	1,2-DICHLOROETHANE	NS	NS	NS	-	-	-	-	-	-	-	NS	NS	-	-	0.62	-	-	-	-	-	-	-	-	-	-	-	-	-	-
088-C	1,3,5-TRIMETHYLBENZENE	NS	NS	NS	-	-	-	-	-	-	11 J	NS	NS	-	1.1	1.7	-	-	-	-	-	0.69 J	-	1 J	-	-	-	-	-	**1.4 J**
088-C	BENZENE	NS	NS	NS	2.8	2	0.93	1.3	6	2.6	-	NS	NS	-	1.1	0.97	1.2	-	1.7	0.39 J	0.59 J	0.4 J	-	0.67 J	0.4 J	0.69 J	-	0.47 J	0.54 J	**0.28 J**
088-C	CARBON TETRACHLORIDE	NS	NS	NS	0.53 J	0.64 J	0.33 J	0.66 J	-	-	-	NS	NS	-	0.77 J	-	-	-	-	-	-	0.59 J	-	-	0.51 J	-	-	0.41 J	0.43 J	**0.58 J**
088-C	CHLORODIFLUOROMETHANE	NS	NS	NS	-	-	-	49	-	-	-	NS	NS	-	-	210	3.2	6.5	3.9	35	1.8	7.1	2.2	5.6	1.9	12	1.2 J	4.0	1.3 J	**3.9**
088-C	CHLOROFORM	NS	NS	NS	4.4	1.8 J	1.4	2.8	3	11	9.7 J	NS	NS	5.1 J	6.6	2.4	-	-	-	0.96 J	0.44 J	1.4 J	0.58 J	1.2 J	-	0.78 J	0.39 J	0.51 J	0.44 J	**0.76 J**
088-C	CIS-1,2-DICHLOROETHENE	NS	NS	NS	95	140	73	73	100	620	670	NS	NS	350	470	33	17.6	17.7	8.4	7.7	12	17	14	11	7.3	8.9 J	9.6	6.5	6.8	**5.4**
088-C	DICHLORODIFLUOROMETHANE	NS	NS	NS	2.5	2.2	1.6	2.7	2	3.1	-	NS	NS	-	3.2	6.8	2.6	2.8	1.9 J	2.5	2.5	2.4	2	2.1	2.6	1.9 J	2.2	1.7 J	2.3	**2.9**
088-C	ETHYLBENZENE	NS	NS	NS	30	6.7	2.2	2.9	11	7.2	15 J	NS	NS	-	1.1	2.6 J	2.2	1.8	-	0.78 J	-	1.4 J	0.87 J	1.4 J	-	1.6 J	-	1.7 J	1.0 J	**0.47 J**
088-C	M+P-XYLENES	NS	NS	NS	110	30	11	14	-	23	-	NS	NS	-	5.5	11	10	8.7	1.9 J	-	-	-	-	-	N/A	-	-	-	-	-
088-C	METHYLENE CHLORIDE	NS	NS	NS	2.8	-	-	3.3 J	-	1.8	-	NS	NS	-	0.92	1.3	82.5	-	1.3 J	3.2 J	-	3.7	3.3 J	-	3.1 J	5.5	4.9 J	13 J	2.8 J	-
088-C	NAPHTHALENE	NS	NS	NS	17	3.5 J	1.7	3.2 J	0.9 J	3.7	540	NS	NS	290	61	15	22.3	61.7 J	4.4 J	5.4	1.8	4	1.2 J	1.7	1.1 J	1.9 J	-	2.1	-	-
088-C	O-XYLENE	NS	NS	NS	100	25	8.1	10	-	18	-	NS	NS	-	4.4	7.1	4.7	5.5	-	-	-	-	-	-	N/A	-	-	-	-	-
088-C	TETRACHLOROETHENE	NS	NS	NS	0.95 J	0.65 J	0.43 J	-	-	1.1	-	NS	NS	-	2.3	0.83 J	-	-	-	-	2.9	-	-	-	10	0.58 J	-	0.28 J	0.47 J	**0.47 J**
088-C	TOLUENE	NS	NS	NS	32	8	5.7	9.2	10	18	12 J	NS	NS	-	1.4	8.4	-	10.3	114	-	-	3.2	-	5.6	-	2.6	-	4.9	1.6 J	**1.5 J**
088-C	TOTAL XYLENES	NS	NS	NS	-	-	-	-	31	-	150	NS	NS	5 J	-	-	-	-	-	7.3	3.9	16	7.3	12	4	9.2	3.3 J	18	22	**6.7**
088-C	TRANS-1,2-DICHLOROETHENE	NS	NS	NS	1.7	3	1.2	1.4 J	2	7.5	14 J	NS	NS	6.1 J	5.4	1.9	-	0.87 J	-	-	-	1 J	0.59 J	0.89 J	-	0.71 J	-	0.45 J	0.33 J	**0.37 J**
088-C	TRICHLOROETHENE	NS	NS	NS	260	560	240	270	270	1800	3800	NS	NS	2000	2800	270	70.6	79.8	40	31	46	76	84	46	37	45	46	36	41	**42**
088-C	VINYL CHLORIDE	NS	NS	NS	-	-	-	-	-	-	-	NS	NS	-	-	-	0.49	-	-	-	-	-	-	-	-	2.4	-	-	-	-
088-C	**TOTAL VOCs**	NS	NS	NS	**660 J**	**784 J**	**348 J**	**444 J**	**437 J**	**2,520**	**5,294 J**	NS	NS	**2,656 J**	**3,374 J**	**583 J**	**221**	**201 J**	**178 J**	**98**	**72 J**	**140 J**	**118 J**	**93 J**	**69 J**	**95 J**	**68 J**	**91 J**	**81**	**67**
111-C	1,2,3-TRIMETHYLBENZENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.98 J	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
111-C	1,3,5-TRIMETHYLBENZENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1.3 J	0.76 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
111-C	CHLORODIFLUOROMETHANE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5.6	30	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
111-C	CHLOROFORM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	2	1.5 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
111-C	CIS-1,2-DICHLOROETHENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1.2 J	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
111-C	DICHLORODIFLUOROMETHANE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	2.6	2.4	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
111-C	ETHYLBENZENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1.7	2.3	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
111-C	M+P-XYLENES	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	3		NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
111-C	METHYLENE CHLORIDE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	37.4	5.3	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
111-C	NAPHTHALENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	3.9 J	1.1	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
111-C	O-XYLENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	3.7		NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
111-C	TOLUENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1.9	4.9	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
111-C	TRICHLOROETHENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	18.4	9.4	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
111-C	**TOTAL VOCs**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**84 J**	**58**	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**

TABLE 4-2

SUMMARY OF SUB-SLAB VOC DETECTIONS NEAR SSDS, BUILDING C
LOCKHEED MARTIN MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

Location	VOC (µg/m³)	Oct-07	Jul-08	Nov-08	Jul-09	Oct-09	Feb-10	Aug-10	Feb-11	Aug-11	Feb-12	Jun-12	Jul-12	Aug-12	Feb-13	Aug-13	Feb-14	Sep-14	Feb-15	Aug-15	Feb-16	Aug-16	Feb-17	Aug-17	Feb-18	Aug-18	Feb-19	Aug-19	Feb-20	Aug-20
113-C	1,1,1-TRICHLOROETHANE	NS	NS	NS	NS	NS	NS	NS	-	2.6	-	NS	NS	-	1.1 J	1.3 J	-	-	-	0.56 J	1.4 J	1 J	-	-	-	-	-	-	-	**1.8 J**
113-C	1,1-DICHLOROETHANE	NS	NS	NS	NS	NS	NS	NS	-	4.1	-	NS	NS	-	2.2 J	2.2 J	-	1.4 J	-	-	1.6	-	-	-	-	0.22 J	-	0.26 J	-	**4.6**
113-C	1,1-DICHLOROETHENE	NS	NS	NS	NS	NS	NS	NS	-	3.1	-	NS	NS	-	1.7	0.69 J	-	-	-	-	0.66 J	-	-	-	-	-	-	-	0.17 J	**1.6**
113-C	1,2-DICHLOROETHANE	NS	NS	NS	NS	NS	NS	NS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	-	-
113-C	1,2,3-TRIMETHYLBENZENE	NS	NS	NS	NS	NS	NS	NS	-	-	-	NS	NS	-	2.8 J	3 J	-	12.5	27.3	-	-	0.89 J	-	-	-	-	-	-	-	-	**11**
113-C	1,2,4-TRICHLOROBENZENE	NS	NS	NS	NS	NS	NS	NS	-	-	-	NS	NS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
113-C	1,2,4-TRIMETHYLBENZENE	NS	NS	NS	NS	NS	NS	NS	-	-	-	NS	NS	-	8.5 J	-	-	-	121	-	-	1.1 J	-	2.3	-	1.1 J	-	1.1 J	-	**7.7**
113-C	1,3,5-TRIMETHYLBENZENE	NS	NS	NS	NS	NS	NS	NS	-	-	-	NS	NS	-	2.2 J	1.9 J	-	5.2	38.9	-	-	-	-	0.85 J	-	-	-	-	-	**7.5**
113-C	BENZENE	NS	NS	NS	NS	NS	NS	NS	-	4.6	-	NS	NS	-	2 J	0.49 J	2.4	-	12.1	-	-	-	-	-	-	-	-	0.16 J	0.97 J	**0.21 J**
113-C	CARBON TETRACHLORIDE	NS	NS	NS	NS	NS	NS	NS	-	0.7	-	NS	NS	-	-	-	1.1	-	-	-	-	0.51 J	-	-	-	-	-	0.36 J	0.42 J	**0.51 J**
113-C	CHLORODIFLUOROMETHANE	NS	NS	NS	NS	NS	NS	NS	-	-	-	NS	NS	12 J	3.2	27	10.7 J	6.7	4.4	18	2.9	5.9	2.7	7.1	2.3	9 J	1.3 J	5.1	1.3 J	**5.6 J**
113-C	CHLOROFORM	NS	NS	NS	NS	NS	NS	NS	25	67	38	NS	NS	59	50 J	3 J	1.8	-	2.5	1.6 J	1.4 J	2.5	1.3 J	2.3	1.5 J	1.6 J	1.6 J	1.3 J	0.59 J	**1.5 J**
113-C	CIS-1,2-DICHLOROETHENE	NS	NS	NS	NS	NS	NS	NS	330	490	500	NS	NS	700	850 J	40	31.7 J	17.5	28.6	14	19	36	17	20	27	18	29	18	7.0	**15**
113-C	DICHLORODIFLUOROMETHANE	NS	NS	NS	NS	NS	NS	NS	-	3.6	-	NS	NS	-	3.2	2.4 J	3.8 J	3.3	2.2	2.4	2.3	3	2.1	2	2.2	2.1	2.4	1.6 J	2.3	**2.9**
113-C	ETHYLBENZENE	NS	NS	NS	NS	NS	NS	NS	11	4.6	-	NS	NS	-	1.6 J	2.6 J	-	2.3	27.5	0.98 J	-	0.65 J	-	0.72 J	-	1.2 J	-	0.84 J	0.51 J	**0.53 J**
113-C	M+P-XYLENES	NS	NS	NS	NS	NS	NS	NS	-	15	-	NS	NS	-	6.4 J	14 J	2.4 J	7.6	207	-	-	-	-	-	N/A	-	-	-	-	-
113-C	METHYLENE CHLORIDE	NS	NS	NS	NS	NS	NS	NS	-	1.7	-	NS	NS	-	0.56	0.53 J	557 J	9.4	2.4 J	-	4.8	19	2.3 J	-	3.1 J	5.6	3 J	42 B	-	-
113-C	NAPHTHALENE	NS	NS	NS	NS	NS	NS	NS	17 L	1600 J	64 J	NS	NS	30 J	51 J	47	3.7 J	233 J	27	1.4	-	3.1	-	-	-	1 J	-	-	-	**1.3**
113-C	O-XYLENE	NS	NS	NS	NS	NS	NS	NS	-	7.8	-	NS	NS	-	2.5 J	4.5 J	0.83 J	4.7	80.2	-	-	-	-	-	N/A	-	-	-	-	-
113-C	TETRACHLOROETHENE	NS	NS	NS	NS	NS	NS	NS	9 J	20	14 J	NS	NS	21 J	15 J	0.69 J	-	1.8	1.4	-	-	-	-	-	-	-	-	0.25 J	0.88 J	**0.36 J**
113-C	TOLUENE	NS	NS	NS	NS	NS	NS	NS	16	8.4	15 J	NS	NS	16 J	3 J	7 J	6.1 J	7.3	51.1	-	-	2.3	-	9.9	-	-	-	3	2.0 J	**1.5 J**
113-C	TOTAL XYLENES	NS	NS	NS	NS	NS	NS	NS	79	-	-	NS	NS	-	-	-	-	-	-	5.3	2 J	4	2.7 J	5	2.4 J	4	2 J	4.3	2.3 J	**5.7**
113-C	TRANS-1,2-DICHLOROETHENE	NS	NS	NS	NS	NS	NS	NS	-	8.3	-	NS	NS	-	5.2 J	0.6 J	-	-	-	-	-	-	-	-	-	-	-	0.26 J	0.14 J	**0.22 J**
113-C	TRICHLOROETHENE	NS	NS	NS	NS	NS	NS	NS	5000	7300	5700	NS	NS	8900	16000 J	290	243 J	222	424	140	150	320	180	190	150	160	180	180	62	**180**
113-C	VINYL CHLORIDE	NS	NS	NS	NS	NS	NS	NS	-	0.65	-	NS	NS	-	0.86	-	-	-	-	-	-	-	-	-	-	0.56	-	-	-	-
113-C	**TOTAL VOCs**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**5,487**	**9,542**	**6,331**	**NS**	**NS**	**9,738 J**	**17,013 J**	**449 J**	**865 J**	**535 J**	**1,058 J**	**184**	**186 J**	**400 J**	**208 J**	**240 J**	**189 J**	**204 J**	**219 J**	**271 J**	**81**	**250**
126-C	1,1-DICHLOROETHANE	NS	NS	NS	NS	NS	NS	NS	NS	NS	360	NS	NS	-	-	-	-	-	-	-	-	-	-	-	-	-	0.76 J	-	0.85 J	-
126-C	1,1-DICHLOROETHENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	360	NS	NS	1300	680	720	199	80.4	104	330	500	1100	620	NA	540	980	230	240	110	**220**
126-C	1,2,4-TRICHLOROBENZENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	360	NS	NS	-	-	-	-	-	-	-	-	-	-	-	-	-	3	-	-	-
126-C	1,2,3-TRIMETHYLBENZENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	-	NS	NS	-	5.5 J	5.8 J	-	1.4	-	-	-	-	-	3.1	-	-	-	-	-	-
126-C	1,2,4-TRIMETHYLBENZENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	29 J	NS	NS	-	-	6.2 J	4.3	1.7	2.1	-	-	-	-	4	1.4 J	-	0.86 J	-	1.6 J	-
126-C	1,3,5-TRIMETHYLBENZENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	-	NS	NS	-	-	-	1.1 J	-	-	-	-	-	-	1.7 J	0.69 J	-	1.1 J	-	-	-
126-C	BENZENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	86	NS	NS	270	250 J	300	88.4	29.3	40.6	120	150	290	110	300	210	280	130	200	120	**230**
126-C	CARBON TETRACHLORIDE	NS	NS	NS	NS	NS	NS	NS	NS	NS	-	NS	NS	22 J	1.2 J	-	-	-	-	-	-	-	-	3.6	1.2 J	5.2 J	0.48 J	-	-	-
126-C	CHLORODIFLUOROMETHANE	NS	NS	NS	NS	NS	NS	NS	NS	NS	20 J	NS	NS	-	-	-	-	5.3	-	6.5 J	-	-	-	-	1 J	-	0.56 J	-	0.45 J	-
126-C	CHLOROFORM	NS	NS	NS	NS	NS	NS	NS	NS	NS	-	NS	NS	-	-	2.3 J	0.84 J	-	-	-	-	-	-	1 J	0.62 J	-	-	-	0.24 J	-
126-C	CIS-1,2-DICHLOROETHENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	350	NS	NS	900	560	740	205	74.2	83.1	250	290	530	190	370	300	490	160	230	58	**150**
126-C	DICHLORODIFLUOROMETHANE	NS	NS	NS	NS	NS	NS	NS	NS	NS	-	NS	NS	-	0.96 J	0.55 J	1.5 J	3.1	1.3 J	-	-	-	-	1.8 J	2.9	-	1.6 J	-	1.6 J	-
126-C	ETHYLBENZENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	72	NS	NS	220	8.7 J	13 J	3	1.1 J	0.81 J	6.4 J	-	-	-	4.8	1.5 J	54	2.3	18 J	10	**16 J**
126-C	M+P-XYLENES	NS	NS	NS	NS	NS	NS	NS	NS	NS	-	NS	NS	-	18 J	15 J	13.4	3.9	3.6	-	-	-	-	-	N/A	-	-	-	-	-
126-C	METHYLENE CHLORIDE	NS	NS	NS	NS	NS	NS	NS	NS	NS	-	NS	NS	-	4.2 J	3.1 J	9.2	-	1.4 J	-	-	-	-	-	-	23 J	2.5 J	-	3.8 J	-
126-C	NAPHTHALENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	250	NS	NS	380	200 J	100 J	70.6	152 J	25.7	11	-	28	-	6.7	1.9 J	-	1.2	-	-	-
126-C	O-XYLENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	-	NS	NS	-	11 J	14 J	5.7	1.8	1.5 J	-	-	-	-	-	N/A	-	-	-	-	-
126-C	TETRACHLOROETHENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	-	NS	NS	-	-	-	-	1.2	-	-	-	-	-	0.94 J	11	-	2.6 J	-	0.39 J	-
126-C	TOLUENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	54	NS	NS	110	19 J	45 J	14.7	20	19.6	23	-	-	-	120	13	41	39	45	9.7	**27 J**
126-C	TOTAL XYLENES	NS	NS	NS	NS	NS	NS	NS	NS	NS	350	NS	NS	1200	-	-	-	-	-	11 J	-	-	-	12	5.1	34 J	4.1	49 J	7.7	**55**
126-C	TRANS-1,2-DICHLOROETHENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	41 J	NS	NS	95	32 J	92	-	8.5	-	31	20 J	43	16	25	30	49	9.7	40	8.1	**24**
126-C	TRICHLOROETHENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	280	NS	NS	5800 J	920 J	2400	177	26.4	71.3	170	340	890	310	850	540	1200	400	200	200	**310**
126-C	VINYL CHLORIDE	NS	NS	NS	NS	NS	NS	NS	NS	NS	82000	NS	NS	110000	37000	28000	11900	4030	1310 J	16000	3100	5000 DL	2600 J	3300	2700	6300	1100	2700	120	**790**
126-C	**TOTAL VOCs**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**84,612 J**	**NS**	**NS**	**120,297 J**	**39,711 J**	**32,457 J**	**12,694 J**	**4,440 J**	**1,665 J**	**16,959**	**4,400 J**	**7,881 J**	**3,846 J**	**5,005 J**	**4,360 J**	**9,456 J**	**2,090 J**	**3,722 J**	**652**	**1822**

Note: The August 2019 results for 126-C were mistakenly switched by the laboratory with the results for 149-C. The results in this table are the results believed to correspond to 126-C and 149-C.

TABLE 4-2

SUMMARY OF SUB-SLAB VOC DETECTIONS NEAR SSDS, BUILDING C
LOCKHEED MARTIN MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

Location	VOC (µg/m³)	Oct-07	Jul-08	Nov-08	Jul-09	Oct-09	Feb-10	Aug-10	Feb-11	Aug-11	Feb-12	Jun-12	Jul-12	Aug-12	Feb-13	Aug-13	Feb-14	Sep-14	Feb-15	Aug-15	Feb-16	Aug-16	Feb-17	Aug-17	Feb-18	Aug-18	Feb-19	Aug-19	Feb-20	Aug-20
127-C	1,1,1-TRICHLOROETHANE	NS	NS	NS	NS	NS	NS	NS	NS	NS	-	NS	NS	NS	NS	NS	NS	268	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
127-C	1,1-DICHLOROETHANE	NS	NS	NS	NS	NS	NS	NS	NS	NS	-	NS	NS	NS	NS	NS	NS	25.1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
127-C	1,2,3-TRIMETHYLBENZENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	2200	NS	NS	NS	NS	NS	NS	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
127-C	1,2,4-TRIMETHYLBENZENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	4000	NS	NS	NS	NS	NS	NS	0.91 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
127-C	1,3,5-TRIMETHYLBENZENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	1000 J	NS	NS	NS	NS	NS	NS	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
127-C	CHLORODIFLUOROMETHANE	NS	NS	NS	NS	NS	NS	NS	NS	NS	-	NS	NS	NS	NS	NS	NS	27.8	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
127-C	DICHLORODIFLUOROMETHANE	NS	NS	NS	NS	NS	NS	NS	NS	NS	-	NS	NS	NS	NS	NS	NS	4.1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
127-C	ETHYLBENZENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	-	NS	NS	NS	NS	NS	NS	1.4 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
127-C	M+P-XYLENES	NS	NS	NS	NS	NS	NS	NS	NS	NS	-	NS	NS	NS	NS	NS	NS	5.2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
127-C	METHYLENE CHLORIDE	NS	NS	NS	NS	NS	NS	NS	NS	NS	-	NS	NS	NS	NS	NS	NS	2.1 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
127-C	NAPHTHALENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	4300 J	NS	NS	NS	NS	NS	NS	5.9 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
127-C	O-XYLENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	-	NS	NS	NS	NS	NS	NS	2.6	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
127-C	TETRACHLOROETHENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	-	NS	NS	NS	NS	NS	NS	2.6	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
127-C	TOLUENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	-	NS	NS	NS	NS	NS	NS	5.9	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
127-C	TOTAL XYLENES	NS	NS	NS	NS	NS	NS	NS	NS	NS	2900 J	NS	NS	NS	NS	NS	NS	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
127-C	TRICHLOROETHENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	240000	NS	NS	NS	NS	NS	NS	410	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
127-C	VINYL CHLORIDE	NS	NS	NS	NS	NS	NS	NS	NS	NS	-	NS	NS	NS	NS	NS	NS	1.1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
127-C	**TOTAL VOCs**	NS	NS	NS	NS	NS	NS	NS	NS	NS	**254,400 J**	NS	NS	NS	NS	NS	NS	**763 J**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
133-C	1,1,1-TRICHLOROETHANE	NS	NS	NS	NS	NS	NS	NS	NS	NS	-	NS	NS	-	-	5.2	-	-	NS	NS	NS	NS	NS	NS	-	-	-	-	-	-
133-C	1,1-DICHLOROETHANE	NS	NS	NS	NS	NS	NS	NS	NS	NS	-	NS	NS	-	-	4.6 J	-	-	NS	NS	NS	NS	NS	NS	-	-	-	-	-	-
133-C	1,1-DICHLOROETHENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	-	NS	NS	-	-	1.5 J	-	-	NS	NS	NS	NS	NS	NS	-	-	-	-	-	-
133-C	1,2,3-TRIMETHYLBENZENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	-	NS	NS	-	0.95	4.1 J	-	-	NS	NS	NS	NS	NS	NS	-	-	-	-	-	-
133-C	1,2,4-TRIMETHYLBENZENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	-	NS	NS	-	2.1	28 J	-	-	NS	NS	NS	NS	NS	NS	-	-	-	-	0.57 J	-
133-C	1,2-DICHLOROETHANE	NS	NS	NS	NS	NS	NS	NS	NS	NS	-	NS	NS	-	0.7	0.66	0.92	-	NS	NS	NS	NS	NS	NS	-	-	-	-	-	-
133-C	1,3,5-TRIMETHYLBENZENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	-	NS	NS	-	0.6 J	3.6	-	-	NS	NS	NS	NS	NS	NS	-	-	-	-	-	**1.2 J**
133-C	BENZENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	-	NS	NS	-	1.3	0.71	0.87	-	NS	NS	NS	NS	NS	NS	-	-	-	-	0.31 J	**0.51 J**
133-C	CARBON TETRACHLORIDE	NS	NS	NS	NS	NS	NS	NS	NS	NS	-	NS	NS	-	2.5	0.9 J	-	-	NS	NS	NS	NS	NS	NS	0.69 J	-	-	-	0.55 J	**3.9**
133-C	CHLORODIFLUOROMETHANE	NS	NS	NS	NS	NS	NS	NS	NS	NS	1500	NS	NS	290 J	-	440 J	4.4	12.7	NS	NS	NS	NS	NS	NS	5	28 J	2.8 J	3.5 J	2.5	**9.1**
133-C	CHLOROFORM	NS	NS	NS	NS	NS	NS	NS	NS	NS	83 J	NS	NS	-	43	8.3	6.7	-	NS	NS	NS	NS	NS	NS	8.8	61	13	10	8.9	**9.2**
133-C	CIS-1,2-DICHLOROETHENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	-	NS	NS	-	33	2.5	8.7	-	NS	NS	NS	NS	NS	NS	0.66 J	-	-	-	-	-
133-C	DICHLORODIFLUOROMETHANE	NS	NS	NS	NS	NS	NS	NS	NS	NS	130 J	NS	NS	-	-	2.8 J	3.2	4.3	NS	NS	NS	NS	NS	NS	2.9	-	2.6 J	1.7 J	2.6	**2.7**
133-C	ETHYLBENZENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	-	NS	NS	-	0.93	2.5	-	1.2 J	NS	NS	NS	NS	NS	NS	-	-	-	-	0.42 J	**0.35 J**
133-C	M+P-XYLENES	NS	NS	NS	NS	NS	NS	NS	NS	NS	-	NS	NS	-	0.93 J	9.6	2 J	4	NS	NS	NS	NS	NS	NS	N/A	-	-	-	-	-
133-C	METHYLENE CHLORIDE	NS	NS	NS	NS	NS	NS	NS	NS	NS	2700 J	NS	NS	13000 J	-	0.74	20.2 J	-	NS	NS	NS	NS	NS	NS	3.4 J	-	7.1 J	420 J	-	**9.1**
133-C	NAPHTHALENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	2200	NS	NS	-	110	42 J	4.7	3.3 J	NS	NS	NS	NS	NS	NS	-	-	-	-	-	-
133-C	O-XYLENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	-	NS	NS	-	0.57 J	2.3	0.95 J	1.5	NS	NS	NS	NS	NS	NS	N/A	-	-	-	-	-
133-C	TETRACHLOROETHENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	2200	NS	NS	740	1500	77	169	3.3 J	NS	NS	NS	NS	NS	NS	53	65	16	10	15	**4.3**
133-C	TOLUENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	180 J	NS	NS	2400 J	1.3	9.2	5.5 J	5.1	NS	NS	NS	NS	NS	NS	-	-	-	-	1.7 J	**5.7**
133-C	TOTAL XYLENES	NS	NS	NS	NS	NS	NS	NS	NS	NS	170 J	NS	NS	-	-	-	-	-	NS	NS	NS	NS	NS	NS	2.1 J	-	-	-	2.1 J	**2 J**
133-C	TRANS-1,2-DICHLOROETHENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	-	NS	NS	-	25 L	3.1	3.6 J+	-	NS	NS	NS	NS	NS	NS	1.5 J	-	-	-	0.61 J	**0.2 J**
133-C	TRICHLOROETHENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	50000	NS	NS	20000	60000	5600	10700	199 J	NS	NS	NS	NS	NS	NS	2000	3300	760	620	460	**210**
133-C	VINYL CHLORIDE	NS	NS	NS	NS	NS	NS	NS	NS	NS	-	NS	NS	-	-	0.57	-	-	NS	NS	NS	NS	NS	NS	-	-	-	4.1	-	-
133-C	**TOTAL VOCs**	NS	NS	NS	NS	NS	NS	NS	NS	NS	**59,163 J**	NS	NS	**36,430 J**	**61,723 J**	**6,250 J**	**10,931 J**	**234 J**	NS	NS	NS	NS	NS	NS	**2,078 J**	**3,454 J**	**802 J**	**1,069 J**	**495**	**258**
135-C	1,1,1-TRICHLOROETHANE	NS	NS	NS	NS	NS	NS	NS	NS	NS	-	NS	NS	-	-	0.78 J	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
135-C	1,2,3-TRIMETHYLBENZENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	-	NS	NS	-	-	-	3.2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
135-C	1,2,4-TRIMETHYLBENZENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	81	NS	NS	-	4.1	2.1	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
135-C	1,2-DICHLOROETHANE	NS	NS	NS	NS	NS	NS	NS	NS	NS	-	NS	NS	-	-	0.49 J	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
135-C	1,3,5-TRIMETHYLBENZENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	27 J	NS	NS	-	1.2 J	1	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
135-C	BENZENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	-	NS	NS	-	0.75	1.1	0.33 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
135-C	CARBON TETRACHLORIDE	NS	NS	NS	NS	NS	NS	NS	NS	NS	-	NS	NS	-	52	1.7	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
135-C	CHLORODIFLUOROMETHANE	NS	NS	NS	NS	NS	NS	NS	NS	NS	-	NS	NS	-		89	2.1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
135-C	CHLOROFORM	NS	NS	NS	NS	NS	NS	NS	NS	NS	14 J	NS	NS	-	21	0.84	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
135-C	CIS-1,2-DICHLOROETHENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	220	NS	NS	260	130	-	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
135-C	DICHLORODIFLUOROMETHANE	NS	NS	NS	NS	NS	NS	NS	NS	NS	-	NS	NS	-	2.7	3.4	2.1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
135-C	ETHYLBENZENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	40 J	NS	NS	-	-	3	4.2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
135-C	M+P-XYLENES	NS	NS	NS	NS	NS	NS	NS	NS	NS	-	NS	NS	-	1.9	9.2	18.1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
135-C	METHYLENE CHLORIDE	NS	NS	NS	NS	NS	NS	NS	NS	NS	-	NS	NS	-	0.49 J	-	2.1 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
135-C	NAPHTHALENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	510	NS	NS	580	280	6.7	3.8 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
135-C	O-XYLENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	-	NS	NS	-	0.66	4.8	4.3	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
135-C	TETRACHLOROETHENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	22 J	NS	NS	-	11	-	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
135-C	TOLUENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	49	NS	NS	-	0.61	7.7	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
135-C	TOTAL XYLENES	NS	NS	NS	NS	NS	NS	NS	NS	NS	210	NS	NS	-	-	-	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
135-C	TRANS-1,2-DICHLOROETHENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	15 J	NS	NS	-	3.9	-	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
135-C	TRICHLOROETHENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	11000	NS	NS	16000	4500	29	5.6	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
135-C	**TOTAL VOCs**	NS	NS	NS	NS	NS	NS	NS	NS	NS	**12,188 J**	NS	NS	**16,840**	**5,010 J**	**161 J**	**46 J**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**

TABLE 4-2

SUMMARY OF SUB-SLAB VOC DETECTIONS NEAR SSDS, BUILDING C
LOCKHEED MARTIN MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

Location	VOC (µg/m³)	Oct-07	Jul-08	Nov-08	Jul-09	Oct-09	Feb-10	Aug-10	Feb-11	Aug-11	Feb-12	Jun-12	Jul-12	Aug-12	Feb-13	Aug-13	Feb-14	Sep-14	Feb-15	Aug-15	Feb-16	Aug-16	Feb-17	Aug-17	Feb-18	Aug-18	Feb-19	Aug-19	Feb-20	Aug-20
141-C	1,1-DICHLOROETHENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	-	0.44 J	1.7	-	-	0.69 J	NS	NS	NS	NS	3.1	2.6	1.9	2	1.3 J	**0.57 J**
141-C	1,2,3-TRIMETHYLBENZENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	3.1 J	-	-	-	-	-	NS	NS	NS	NS	-	-	-	-	-	-
141-C	1,2,4-TRIMETHYLBENZENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	7.5 J	1.9	-	1.5 J	-	-	NS	NS	NS	NS	-	0.83 J	-	-	0.83 J	-
141-C	1,3,5-TRIMETHYLBENZENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1.9 J	-	-	-	-	-	NS	NS	NS	NS	-	-	-	-	-	-
141-C	BENZENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.58 J	-	0.88	-	0.96	-	NS	NS	NS	NS	1.1 J	1.1 J	1.4	1.4	1.1 J	**0.61 J**
141-C	CARBON TETRACHLORIDE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	-	0.64 J	-	-	-	-	NS	NS	NS	NS	0.66 J	-	-	0.29 J	0.35 J	**0.39 J**
141-C	CHLORODIFLUOROMETHANE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1.7 J	3.4	2.6	19.9	2.7	90	NS	NS	NS	NS	6.2	13	4.2	31	3.7	**12**
141-C	CHLOROFORM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	-	-	-	-	-	-	NS	NS	NS	NS	-	-	-	1.0 J	0.86 J	**0.38 J**
141-C	CIS-1,2-DICHLOROETHENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS		0.73	2.2		-	0.72 J	NS	NS	NS	NS	12	13	11	14	9.1	**1.7**
141-C	DICHLORODIFLUOROMETHANE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	2.7 J	2.3	2.3	2.7	2	2.3	NS	NS	NS	NS	2.7	1.9 J	2.3	1.8 J	2.5	**2**
141-C	ETHYLBENZENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	48	1.9	2.2	2.6	-	1.2 J	NS	NS	NS	NS	-	3.3	0.85 J	1.9	1.3 J	**2**
141-C	M+P-XYLENES	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	250	10	11.6	10.3	1 J	-	NS	NS	NS	NS	N/A	-	-	-	-	-
141-C	METHYLENE CHLORIDE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1.3 J	1	39.1	1.4 J	1.8 J	7.5	NS	NS	NS	NS	3.4 J	3.2 J	3.3 J	19 J	7.2	-
141-C	NAPHTHALENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	170	1.7	4.1 J	1.5 J	-	-	NS	NS	NS	NS	-	-	-	-	-	-
141-C	O-XYLENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	62	2.4 J	3.7	4.6	-	-	NS	NS	NS	NS	N/A	-	-	-	-	-
141-C	TETRACHLOROETHENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	-	-	-	1.5	-	-	NS	NS	NS	NS	22	4.4	9	7.3	8.0	**0.27 J**
141-C	TOLUENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	3.7 J	15	3.7	5.2	2.4	33	NS	NS	NS	NS	-	-	-	2.1 J	2.3	**4.5**
141-C	TOTAL XYLENES	NS	NS	NS	NS	NS	NS	NS	NS	NS	360	NS	NS	-	-	-	-	-	-	-	-	-	-	-	-	-	5.9	12	8.3	**12**
141-C	TRANS-1,2-DICHLOROETHENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	360	NS	NS	-	-	-	-	-	-	-	-	-	-	-	-	-	3	2.6	2.2	**0.53 J**
141-C	TRICHLOROETHENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	7.4 J	5.7	25.2	3.2	2	3.9	NS	NS	NS	NS	310	280	340	330	330	**34**
141-C	VINYL CHLORIDE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	-	-	-	-	-	-	NS	NS	NS	NS	-	-	-	0.62	-	-
141-C	**TOTAL VOCs**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**560 J**	**47 J**	**99 J**	**54 J**	**13 J**	**139**	**NS**	**NS**	**NS**	**NS**	**361 J**	**323 J**	**383 J**	**426 J**	**379**	**71**

Note: Sample at location 141-C was collected in September 2013 rather than August 2013.

Location	VOC (µg/m³)	Oct-07	Jul-08	Nov-08	Jul-09	Oct-09	Feb-10	Aug-10	Feb-11	Aug-11	Feb-12	Jun-12	Jul-12	Aug-12	Feb-13	Aug-13	Feb-14	Sep-14	Feb-15	Aug-15	Feb-16	Aug-16	Feb-17	Aug-17	Feb-18	Aug-18	Feb-19	Aug-19	Feb-20	Aug-20
149-C	1,1-DICHLOROETHENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA	NA	-	-	-	-	-	-	-	-	-	-	0.29 J	-	-
149-C	1,1,1-TRICHLOROETHANE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	-	-	-	-	0.86 J	-	-	-	-	-	-	-	-
149-C	1,2,4-TRIMETHYLBENZENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1.3 J	1.2 J	-	4		-	1.9	1.9 J	2.5	0.91 J	0.84 J	1.1 J	**2.7**
149-C	BENZENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.95 J	1.9	0.45 J	1.1 J	0.6 J	0.87 J	0.88 J	1.1 J	1.3	0.86 J	1.1 J	1.3	**0.43 J**
149-C	CARBON TETRACHLORIDE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	-	-	-	-	0.54 J	-	-	0.66 J	0.55 J	-	0.45 J	0.43 J	**0.43 J**
149-C	CHLORODIFLUOROMETHANE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	8	11.7	11	3.5	3.7	0.88 J	4.8	2.3	5.3	1.6	4.2	1.2 J	**3.1**
149-C	CIS-1,2-DICHLOROETHENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA	NA	-	-	-	-	-	-	-	-	-	-	0.7 J	-	**0.58 J**
149-C	CHLOROFORM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	-	-	-	-	0.84 J	-	0.85 J	11	1.9 J	-	0.46 J	0.17 J	**0.8 J**
149-C	DICHLORODIFLUOROMETHANE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	3.4	4.6	2.3	2.4	2.7	2	2.1	2.9	1.9 J	2.3	2.0	2.3	**1.9 J**
149-C	ETHYLBENZENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	2	-	0.7 J	1.5 J	1.8	-	2.7	1.7 J	27	0.76 J	1.7 J	23	**5.6**			
149-C	M+P-XYLENES	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	7.2	2.9 J	-	-	-	-	-	N/A	-	-	-	-	-
149-C	METHYLENE CHLORIDE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	3.1 J	105	6.1	7.2	12	3.2 J	-	4.1	6.1	7.7	630 J	16	**71**
149-C	NAPHTHALENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	3.2 J	-	-	-	-	-	-	-	-	-	-	-	-
149-C	O-XYLENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	3.6	1.1 J	-	-	-	-	-	NA	-	-	-	-	-
149-C	TETRACHLOROETHENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1.6	-	-	-	0.57 J	-	-	-	0.7 J	0.97 J	-	0.25 J	**2.8**
149-C	TOLUENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	21.1	23.5	5.9	13	7.4	5.3	97	14	15	44	15	45	**44**
149-C	TOTAL XYLENES	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	-	-	-	-	12	2.6 J	15	8.7	14	3.2 J	7.9	6.0	**28**
149-C	TRANS-1,2-DICHLOROETHENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA	NA	-	-	-	-	-	-	-	-	-	-	0.16 J	-	-
149-C	TRICHLOROETHENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	3.4	1.4	3.5	-	5.3	4.4	3.5	5.7	23	0.42 J	3.7	2.1	**11**
149-C	VINYL CHLORIDE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA	NA	-	-	-	-	-	-	-	-	-	-	6.8	-	-
149-C	**TOTAL VOCs**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**59 J**	**153 J**	**30**	**33 J**	**48 J**	**19 J**	**128 J**	**54 J**	**99 J**	**63 J**	**675 J**	**99**	**172**

Note: The August 2019 results for 149-C were mistakenly switched by the laboratory with the results for 126-C. The results in this table are the results believed to correspond to 126-C and 149-C.

Location	VOC (µg/m³)	Oct-07	Jul-08	Nov-08	Jul-09	Oct-09	Feb-10	Aug-10	Feb-11	Aug-11	Feb-12	Jun-12	Jul-12	Aug-12	Feb-13	Aug-13	Feb-14	Sep-14	Feb-15	Aug-15	Feb-16	Aug-16	Feb-17	Aug-17	Feb-18	Aug-18	Feb-19	Aug-19	Feb-20	Aug-20
152-C	1,1,1-TRICHLOROETHANE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	3.7	13 J	1.1 J	0.84 J	19 J	10	-	-	0.54 J	2.8	2.2	**2.7 J**
152-C	1,1-DICHLOROETHANE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	-	-	-	-	3.3 J	1.9	-	-	-	0.43 J	0.23 J	-
152-C	1,2,4-TRIMETHYLBENZENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.98 J	-	0.97 J	0.79 J	-	1.4 J	1.3 J	1.6 J	-	1.4 J	2.0	-
152-C	1,3,5-TRIMETHYLBENZENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	-	-	-	-	-	-	-	-	-	0.80 J	0.54 J	-
152-C	BENZENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	3	-	1.5	1.3	-	0.84 J	0.95 J	0.78 J	1.1 J	0.66 J	1.2 J	**0.67 J**
152-C	CARBON TETRACHLORIDE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	-	-	-	-	-	-	-	-	-	0.53 J	0.55 J	-
152-C	CHLORODIFLUOROMETHANE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	6.6	72	18	38	19	24	17	53	11 J	22	15	**34**
152-C	CHLOROFORM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	-	-	-	0.40 J	5.5 J	5.5	1.3 J	1.3 J	0.48 J	1.6 J	1.1 J	**1.8 J**
152-C	CIS-1,2-DICHLOROETHENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	-	-	-	-	41	37	7	3	2.9	6.9	7.7	**9.1**
152-C	DICHLORODIFLUOROMETHANE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	2.6	-	2.5	2.8	-	1.8 J	2.6	2	2.3	2	2.5	**1.9 J**
152-C	ETHYLBENZENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.89 J	-	0.75 J	1.8	-	1.1 J	1.1 J	23	-	1.2 J	1.1 J	-
152-C	M+P-XYLENES	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	3.1	-	-	-	-	-	N/A	-	-	-	-	-
152-C	METHYLENE CHLORIDE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.89 J	-	4.1	12	-	-	7.1	6	4.2 J	16 J	5.2 J	**15**
152-C	NAPHTHALENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1.4 J	-	-	5	-	-	-	-	-	-	-	-
152-C	O-XYLENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1.1 J	-	-	-	-	-	N/A	-	-	-	-	-
152-C	TETRACHLOROETHENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	3.2	-	-	-	-	0.96 J	7.1	0.56 J	-	-	0.37 J	-
152-C	TOLUENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	15.1	-	4.3	5.5	-	5.9	4.5	7	-	4.8	4.8	**6.2**
152-C	TOTAL XYLENES	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	-	-	-	7.9	-	6.6	6.3	8.5	2.2 J	6.1	5.7	-
152-C	TRANS-1,2-DICHLOROETHENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	-	-	-	-	-	-	-	-	-	0.21 J	0.32 J	**0.35 J**
152-C	TRICHLOROETHENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	3.8	2100	-	0.48 J	1300	1400	210	77	49	150	85	**180**
152-C	**TOTAL VOCs**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**46 J**	**2,185**	**33 J**	**77 J**	**1,388 J**	**1,497 J**	**266 J**	**184 J**	**74 J**	**217 J**	**136**	**252**

TABLE 4-2

SUMMARY OF SUB-SLAB VOC DETECTIONS NEAR SSDS, BUILDING C
LOCKHEED MARTIN MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

Location	VOC (µg/m³)	Oct-07	Jul-08	Nov-08	Jul-09	Oct-09	Feb-10	Aug-10	Feb-11	Aug-11	Feb-12	Jun-12	Jul-12	Aug-12	Feb-13	Aug-13	Feb-14	Sep-14	Feb-15	Aug-15	Feb-16	Aug-16	Feb-17	Aug-17	Feb-18	Aug-18	Feb-19	Aug-19	Feb-20	Aug-20
153-C	1,1,1-TRICHLOROETHENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	-	-	-	-	0.57 J	-	-	N/A	-	-	-	-	-
153-C	1,2,4-TRIMETHYLBENZENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	-	0.98 J	0.81 J	1 J	0.83 J	0.64 J	1.9	0.74 J	2.3	-	1.5 J	0.87 J	**1.03 J**
153-C	BENZENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	-	2.3	1.4	0.86 J	0.38 J	-	0.8	-	0.48 J	-	0.51 J	0.87 J	**0.54 J**
153-C	CARBON TETRACHLORIDE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	-	-	-	-	0.49 J	-	-	0.57 J	0.5 J	-	0.51 J	0.47 J	**3.6 J**
153-C	CHLORODIFLUOROMETHANE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	10.7	7.6	21	3	6.7	3.8	7.45	3.3	17	2.1	7.9	1.5	**5.65**
153-C	CHLOROFORM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	-	-	-	-	0.57 J	-	0.4175	-	-	-	-	0.17 J	**0.43 J**
153-C	DICHLORODIFLUOROMETHANE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	3	2.3	2.5	2.7	2.6	1.9 J	1.95	3	1.9 J	2.4	1.7 J	2.5	**2.25 J**
153-C	ETHYLBENZENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1.8	-	1 J	1 J	1.6 J	-	1.2	-	3.7 J	-	0.8 J	0.58 J	**0.52 J**
153-C	M+P-XYLENES	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	6.9	2.3 J	-	-	-	-	-	N/A	-	-	-	-	-
153-C	METHYLENE CHLORIDE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.97 J	1.7 J	4.1	-	15	2.7 J	-	3.1 J	3.6	3.7 J	24 J	-	**22.9**
153-C	NAPHTHALENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	2.5 J	1.1 J	-	-	-	-	-	1.6 J	-	-	-	-	-
153-C	O-XYLENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	2.6	0.92 J	-	-	-	-	-	N/A	-	-	-	-	-
153-C	TETRACHLOROETHENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5	-	0.62 J	-	2.9	-	0.455	0.62 J	0.58 J	-	0.61 J	0.37 J	**0.38 J**
153-C	TOLUENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	8.6	56.9 J	3.5	-	4.9	2.6	11	-	2.7	-	3.9	2.6	**5.2**
153-C	TOTAL XYLENES	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	-	-	-	-	11	1.9 J	5.95	3.6	7.3	0.65 J	4.8	3.0 J	**2.65 J**
153-C	TRICHLOROETHENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	-	18.8 J	13	10	12	5.7	2.65	6.3	6.1	5.5	4.4	2.1	**1.29 J**
153-C	**TOTAL VOCs**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**42 J**	**95 J**	**48**	**19 J**	**60 J**	**19 J**	**34 J**	**23 J**	**46 J**	**14 J**	**51 J**	**15**	**46**
155-C	1,1-DICHLOROETHANE	NS	NS	NS	NS	NS	NS	NS	NS	NS	360	NS	NS	-	-	-	-	-	-	-	-	-	-	-	-	-	1.1 J	19	8.5	-
155-C	1,1-DICHLOROETHENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	360	NS	NS	-	-	-	-	-	-	-	-	-	-	-	-	-	0.56 J	8.4	3.9	-
155-C	1,1,1-TRICHLOROETHANE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	-	NS	-	-	0.96 J	-	-	2.3	-	0.54 J	7.9	3.1	-
155-C	1,2,4-TRIMETHYLBENZENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.91 J	NS	-	-	-	-	1.9 J	0.85 J	1.3 J	-	1.7 J	1.6 J	-
155-C	BENZENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	-	NS	-	-	-	0.48 J	0.79 J	0.37 J	0.79 J	0.46 J	0.67 J	0.96 J	**0.59 J**
155-C	CARBON TETRACHLORIDE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	-	NS	-	-	1.4 J	-	0.89 J	0.92 J	-	0.51 J	1.1 J	0.64 J	**8.7**
155-C	CHLORODIFLUOROMETHANE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	9.4	NS	22	4.4	5.7	2.9	14	5.3	20	1.8	8.3	1.9	**7.3**
155-C	CHLOROFORM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	-	NS	-	-	1.7 J	-	1.2 J	0.7 J	1.2 J	-	0.81 J	0.45 J	**0.45 J**
155-C	DICHLORODIFLUOROMETHANE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	2.9	NS	2.3	2.2	2.5	2	1.9 J	2.6	2.2	2.4	1.9 J	2.4	**2.6**
155-C	ETHYLBENZENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1.4 J	NS	0.65 J	1.3 J	1.2 J	-	1.5 J	0.94 J	15	-	2.1	2.0	**0.53 J**
155-C	M+P-XYLENES	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	4.5	NS	-	-	-	-	-	N/A	-	-	-	-	-
155-C	METHYLENE CHLORIDE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	3.4 J	NS	-	-	3.3 J	3.9 J	-	3 J	4.4	3.1 J	15 J	2.9 J	-
155-C	NAPHTHALENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1.3 J	NS	-	-	2	-	-	-	-	-	-	-	-
155-C	O-XYLENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	2.1	NS	-	-	-	-	-	N/A	-	-	-	-	-
155-C	TETRACHLOROETHENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	-	NS	-	-	5.7	-	1.1 J	2.4 J	0.58	-	2.9	1.3 J	**0.51 J**
155-C	TOLUENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	11.2	NS	-	-	2.4	2.9	18	-	6.3	-	2.7	4.7	**6.3**
155-C	TOTAL XYLENES	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	-	NS	-	-	8.6	1.2 J	8.4	5.9	5.9	2.3 J	17	13	**2.3 J**
155-C	TRICHLOROETHENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1.5 J	NS	0.66 J	0.96 J	1.4	-	-	1.1	-	-	5.9	2.9	**1.1**
155-C	**TOTAL VOCs**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**39 J**	NS	**26**	**9 J**	**37 J**	**13 J**	**50 J**	**26 J**	**58 J**	**13 J**	**95 J**	**50**	**30**
156-C	BENZENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	3.4	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
156-C	CHLORODIFLUOROMETHANE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5.3	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
156-C	DICHLORODIFLUOROMETHANE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	2.1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
156-C	M+P-XYLENES	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1.6 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
156-C	METHYLENE CHLORIDE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	22.5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
156-C	NAPHTHALENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1.3 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
156-C	TOLUENE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	9.9	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**
156-C	**TOTAL VOCs**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**46 J**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**NS**

Notes:
Data presented in this table is from sub-slab vapor samples.
µg/m³ = micrograms per cubic meter
- = not detected (below reporting limit)
DL = diluted analysis
NA = compound not reported
NS = not sampled
NA = compound not reported
K = value is biased high
L = value is biased low
VOC = volatile organic compound
SSDS = sub-slab depressurization system

TABLE 4-3

SUB-SLAB MONITORING POINTS SAMPLED NEAR SSDS, BUILDING A
LOCKHEED MARTIN MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

Date	Sub-Slab Vapor Monitoring Point												
	SSD-11-A	SSD-12-A	SSD-13-A	015-A	SSD-16-A	017-A	018-A	078-A	079-A	093-A	116-A	136-A	168-A
April-07	✓	✓	✓	✓	✓	✓	✓	N/A	N/A	N/A	N/A	N/A	N/A
October-07	-	-	✓	✓	-	-	✓	N/A	N/A	N/A	N/A	N/A	N/A
July-08	-	-	✓	✓	-	-	✓	N/A	N/A	N/A	N/A	N/A	N/A
November-08	-	-	✓	✓	-	-	✓	N/A	N/A	N/A	N/A	N/A	N/A
November-07	-	-	✓	✓	-	-	✓	N/A	N/A	N/A	N/A	N/A	N/A
July-09	✓	✓	✓	✓	✓	-	-	N/A	N/A	N/A	N/A	N/A	N/A
October-09	✓	✓	✓	✓	✓	✓	✓	N/A	N/A	N/A	N/A	N/A	N/A
July-09	-	-	-	✓	-	✓	✓	N/A	N/A	N/A	N/A	N/A	N/A
October-09	-	-	-	✓	-	✓	✓	N/A	N/A	N/A	N/A	N/A	N/A
February-10	-	-	-	✓	✓	-	✓	N/A	N/A	N/A	N/A	N/A	N/A
August-10	-	-	-	✓	-	✓	✓	N/A	N/A	N/A	N/A	N/A	N/A
February-11	-	-	-	✓	-	-	✓	N/A	N/A	N/A	N/A	N/A	N/A
August-11	-	-	-	✓	-	-	✓	N/A	N/A	N/A	N/A	N/A	N/A
October-11	-	-	-	✓	-	-	✓	N/A	N/A	N/A	N/A	N/A	N/A
February-12	-	-	-	✓	-	-	✓	N/A	N/A	N/A	N/A	N/A	N/A
August-12	-	-	-	✓	-	-	✓	N/A	N/A	N/A	N/A	N/A	N/A
February-13	-	-	-	✓	-	-	✓	N/A	N/A	N/A	N/A	N/A	N/A
March-13	-	-	-	✓	-	-	✓	N/A	N/A	N/A	N/A	N/A	N/A
August-13	-	-	-	✓	-	-	✓	N/A	N/A	N/A	N/A	N/A	N/A
February-14	-	-	-	✓	-	-	✓	N/A	N/A	N/A	N/A	N/A	N/A
September-14	-	-	-	-	-	-	-	N/A	N/A	N/A	N/A	N/A	N/A
February-15	-	-	-	✓	-	-	-	N/A	N/A	N/A	N/A	N/A	N/A
August-15	-	-	-	✓	-	-	-	N/A	N/A	N/A	N/A	N/A	N/A
February-16	-	-	-	✓	-	-	-	✓	✓	✓	✓	✓	N/A
August-16	-	-	-	✓	-	-	-	✓	✓	✓	✓	✓	N/A
February-17	-	-	-	✓	-	-	-	✓	✓	✓	✓	✓	✓
August-17	-	-	-	✓	-	-	-	✓	✓	✓	✓	✓	✓
February-18	-	-	-	✓	-	-	-	✓	✓	✓	✓	✓	✓
August-18	-	-	-	✓	-	-	-	✓	✓	✓	✓	✓	✓
February-19	-	-	-	✓	-	-	-	✓	✓	✓	✓	✓	✓
August-19	-	-	-	✓	-	-	-	✓	✓	✓	✓	✓	✓
February-20	-	-	-	✓	-	-	-	✓	✓	✓	✓	✓	✓
August-20	-	-	-	✓	-	-	-	✓	✓	-	✓	✓	✓

Notes:
- —point(s) not sampled.
N/A—point may have been sampled but the results were not applicable to the SSD-system
Points with an “SSD” designation were installed and are monitored for the SSD-system
Points without the SSD designation are used for the vapor-intrusion monitoring program.

TABLE 4-4

TRICHLOROETHENE CONCENTRATIONS BEFORE AND DURING SSDS OPERATION, BUILDING A
LOCKHEED MARTIN MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

Vapor Monitoring Point	*Before SSD-system operation**		*During SSD-system operation (most recent concentration)*	
	Date	*Sub-Slab Vapor Concentration ($\mu g/m^3$)*	*Date*	*Sub-Slab Vapor Concentration ($\mu g/m^3$)*
015-A	April 2007	326,000	August 2020	28
018-A	August 2010	64,000	February 2014	174
079-A	February 2016	3,500	August 2020	130
136-A	February 2016	35,300	August 2020	480
168-A	February 2017	22,000	August 2020	107

Notes:

*SSD-system startup for the main floor of Building A (015-A) was in March 2008, for the Building A basement (018-A) in October 2010, and April 2016 for the Building A eastern area (079-A and 136-A).
$\mu g/m^3$—microgram(s) per cubic meter air
SSD—sub-slab depressurization

TABLE 4-5

SUB-SLAB MONITORING POINTS SAMPLED NEAR SSDS, BUILDING C
LOCKHEED MARTIN MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

Date	Sub-Slab Vapor Monitoring Point																			
	001-C	SSD-2-C	SSD-3-C	SSD-4-C	SSD-5-C	SSD-6-C	060-C	088-C	111-C	113-C	126-C	127-C	133-C	135-C	141-C	149-C	152-C	153-C	155-C	156-C
Oct-07	✓	-	-	✓	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Jul-08	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nov-08	✓	✓	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Jul-09	✓	-	-	-	✓	-	✓	✓	-	-	-	-	-	-	-	-	-	-	-	-
Oct-09	✓	-	-	-	✓	-	✓	✓	-	-	-	-	-	-	-	-	-	-	-	-
Feb-10	✓	-	-	-	✓	-	✓	✓	-	-	-	-	-	-	-	-	-	-	-	
Aug-10	✓	-	-	-	✓	-	✓	✓	-	-	-	-	-	-	-	-	-	-	-	-
Feb-11	✓	-	-	-	-	-	✓	✓	-	✓	-	-	-	-	-	-	-	-	-	-
Aug-11	✓	-	-	-	-	-	✓	✓	-	✓	-	-	-	-	-	-	-	-	-	-
Feb-12	✓	-	-	-	-	-	✓	✓	-	✓	✓	✓	✓	✓	-	-	-	-	-	-
Jun-12	✓	-	✓	✓	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Jul-12	✓	-	✓	✓	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aug-12	✓	-	-	-	-	-	✓	✓	-	✓	✓	-	✓	✓	-	-	-	-	-	-
Feb-13	-	-	-	✓	-	-	✓	✓	-	✓	✓	-	✓	✓	✓	-	-	-	-	-
Aug-13	-	-	-	✓	-	-	✓	✓	-	✓	✓	-	✓	✓	✓	-	-	-	-	-
Feb-14	-	-	-	-	-	-	✓	✓	-	✓	✓	-	✓	✓	✓	-	-	-	-	-
Sep-14	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	✓	-	✓	✓	-	✓	✓	-
Feb-15	✓	-	-	✓	-	-	✓	✓	✓	✓	✓	-	-	-	✓	✓	✓	✓	-	✓
Aug-15	✓	-	-	✓	-	-	✓	✓	✓	✓	✓	-	-	-	✓	✓	✓	✓	✓	-
Feb-16	✓	-	-	✓	-	-	✓	✓	-	✓	✓	-	-	-	-	✓	✓	✓	✓	-
Aug-16	✓	-	-	✓	-	-	✓	✓	-	✓	✓	-	-	-	-	✓	✓	✓	✓	-
Feb-17	✓	-	-	✓	-	-	✓	✓	-	✓	✓	-	-	-	-	✓	✓	✓	✓	-
Aug-17	✓	-	-	✓	-	-	✓	✓	-	✓	✓	-	-	-	-	✓	✓	✓	✓	-
Feb-18	✓	-	-	✓	-	-	✓	✓	-	✓	✓	-	✓	-	✓	✓	✓	✓	✓	-
Aug-18	✓	-	-	✓	-	-	✓	✓	-	✓	✓	-	✓	-	✓	✓	✓	✓	✓	-
Feb-19	✓	-	-	✓	-	-	✓	✓	-	✓	✓	-	✓	-	✓	✓	✓	✓	✓	-
Aug-19	✓	-	-	✓	-	-	✓	✓	-	✓	✓	-	✓	-	✓	✓	✓	✓	✓	-
Feb-20	✓	-	-	✓	-	-	✓	✓	-	✓	✓	-	✓	-	✓	✓	✓	✓	✓	-
Aug-20	✓	-	-	✓	-	-	✓	✓	-	✓	✓	-	✓	-	✓	✓	✓	✓	✓	-

Notes:
- —point(s) not sampled.
N/A—point may have been sampled but the results were not applicable to the SSD-system
Points with an “SSD” designation were installed and are monitored for the SSD-system
Points without the SSD designation are used for the vapor-intrusion monitoring program.

TABLE 4-6

TRICHLOROETHENE CONCENTRATIONS BEFORE AND DURING SSDS OPERATION, BUILDING C
LOCKHEED MARTIN MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

Vapor Monitoring Point	*Before SSD-system operation**		*During SSD-system operation (most recent concentration)*	
	Date	*Sub-Slab Vapor Concentration ($\mu g/m^3$)*	*Date*	*Sub-Slab Vapor Concentration ($\mu g/m^3$)*
SOUTHERN BASEMENT AREA*				
001-C	March 2006	19,200	August 2020	230
SSD-4-C	December 2006	28,300	August 2020	300
MID-BASEMENT AREA*				
060-C	August 2011	12,000	August 2020	480
088-C	February 2012	3,800	August 2020	42
113-C	February 2013	16,000 J	August 2020	180
126-C	August 2012	5,800 J	August 2020	310
127-C	Not Sampled		September 2014	410
133-C	February 2013	60,000	August 2020	210
141-C	Not Sampled		August 2020	34
149-C	Not Sampled		August 2020	11
152-C	Not Sampled		August 2020	180
153-C	Not Sampled		August 2020	1.29
155-C	Not Sampled		August 2020	1.1

Notes:

*SSD-system startup in the south end of the Building C basement was in March 2008.

**SSD-system startup in the mid-basement area of Building C was in May 2013.

$\mu g/m^3$—microgram(s) per cubic meter air

J—estimated value

- = not detected (below reporting limit)

SSD—sub-slab depressurization

Table 4-7A
Summary of VOC Detections in SSDS Influent, Building A
Lockheed Martin Corporation, Middle River Complex, Middle River, Maryland

Building A - Influent Volatiles (µg/m^3)

Date	benzene	carbon tetrachloride	chlorodifluoromethane	chloroform	cis-1,2-dichloroethene	dichlorodifluoromethane	1,1-dichloroethane	1,2-dichloroethane	1,1-dichloroethene	ethylbenzene	methylene chloride	naphthalene	tetrachloroethene	toluene	trans-1,2-dichloroethene	1,1,1,-trichloroethane	trichloroethene	trichlorofluoromethane	1,2,3-trimethylbenzene	1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	vinyl chloride	m-xylene & p-xylene	o-xylene	Total VOCs
Mar-08	--	--	N/A	--	8,300	--	2,100	--	7,900	300	--	--	--	330	--	30,000	44,000	--	--	--	--	--	1,100	280	94,310
Apr-08	--	--	N/A	--	3,800	--	660	--	4,500	--	--	--	--	--	--	16,000	34,000	--	--	--	--	--	--	--	58,960
Apr-08	--	--	N/A	--	2,300	--	460	--	3,300	--	--	--	--	--	--	13,000	30,000	--	--	--	--	--	--	--	49,060
Apr-08	--	--	N/A	--	1,100	--	280	--	1,500	--	--	--	--	120	--	9,100	14,000	--	--	--	--	--	--	--	26,100
Apr-08	--	--	N/A	--	2,000	--	480	--	2,200	--	--	--	--	120	--	11,000	18,000	--	--	--	--	--	110	--	33,910
Apr-08	--	--	N/A	--	930	--	260	--	1,200	--	--	--	--	86	--	6,500	8,600	--	--	--	--	--	--	--	17,576
May-08	--	--	N/A	--	1,000	--	320	--	950	--	--	--	--	--	--	6,000	5,500	--	--	--	--	--	--	--	13,770
Jun-08	180	--	N/A	--	720	--	180	--	760	--	--	--	--	--	--	4,800	7,100	--	--	--	--	--	--	--	13,740
Jul-08	--	--	N/A	--	350	--	110	--	430	--	--	--	--	--	--	3,200	3,700	--	--	--	--	--	--	--	7,790
Aug-08	--	--	N/A	--	470	--	150	--	400	--	--	--	--	28	--	2,900	3,400	--	--	--	--	--	--	--	7,348
Sep-08	--	--	N/A	--	380	--	130	--	430	--	17	--	70	52	--	1,900	2,700	32	--	--	--	--	--	--	5,711
Nov-08	--	--	N/A	--	1,300	--	300	--	1,100	--	--	--	--	72	--	6,500	7,200	--	--	--	--	--	--	--	16,472
Dec-08	--	--	N/A	--	420	--	120	--	380	--	--	--	--	--	--	2,300	4,100	--	--	--	--	--	53	--	7,373
Jan-09	--	--	N/A	--	380	--	110	--	380	--	--	--	--	--	--	2,100	2,100	--	--	--	--	--	--	--	5,070
Feb-09	--	--	N/A	--	270	--	78	--	260	--	--	--	--	24	--	1,600	1,600	--	--	--	--	--	--	--	3,832
Mar-09	--	--	N/A	--	620	--	470	--	150	--	--	--	--	--	--	3,800	3,700	--	--	--	--	--	--	--	8,740
Apr-09	--	--	N/A	--	360	--	100	--	220	--	--	--	--	--	--	1,900	2,400	--	--	--	--	--	--	--	4,980
May-09	--	--	N/A	--	200	--	62	--	140	--	--	--	--	32	--	1,700	1,500	--	--	--	--	--	--	--	3,634
Jun-09	--	--	N/A	--	280	--	77	--	200	--	--	--	--	19	--	1,700	1,800	--	--	--	--	--	--	--	4,076
Jul-09	--	--	N/A	--	250	--	68	--	180	--	27	--	--	13	--	1,400	1,700	14	--	--	--	--	--	--	3,652
Aug-09	--	--	N/A	--	280	--	79	--	200	--	--	--	--	42	--	1,900	1,900	--	--	--	--	--	--	--	4,401
Sep-09	--	--	N/A	--	150	--	40	--	110	--	--	--	--	13	--	870	1,000	--	--	--	--	--	--	--	2,183
Oct-09	--	--	N/A	--	230	--	64	--	210	--	--	--	--	20	--	1,500	1,400	--	--	--	--	--	9.7	--	3,434
Nov-09	--	--	N/A	--	180	--	43	--	180	--	--	--	--	14	--	1,200	1,100	--	--	--	--	--	--	--	2,717
Dec-09	--	--	N/A	--	190	--	48	--	180	--	--	--	--	39	--	1,100	1,300	--	--	--	--	--	--	--	2,857
Jan-10	--	--	N/A	--	240	--	67	--	180	--	--	--	--	16	--	1,500	1,600	--	--	--	--	--	--	--	3,603
Feb-10	--	--	N/A	--	140	--	35	--	120	--	--	--	--	24	--	760	930	--	--	--	--	--	--	--	2,009
Mar-10	--	--	N/A	--	250	--	62	--	190	--	--	--	--	21	--	1,500	1,900	--	--	--	--	--	--	--	3,923
Apr-10	--	--	N/A	--	160	--	41	--	160	--	--	--	--	--	--	1,100	1,000	--	--	--	--	--	--	--	2,461
May-10	--	--	N/A	--	170	--	42	--	170	19	--	--	--	95	--	960	1,100	--	--	18	--	--	75	23	2,672
Jun-10	--	--	N/A	--	96	--	24	--	110	12	--	--	--	15	--	630	600	12	--	130	28	--	50	26	1,733
Jul-10	--	--	N/A	--	220	--	52	--	180	--	--	--	--	--	--	1,500	1,500	--	--	24	--	--	--	--	3,476
Aug-10	--	--	N/A	--	200	--	45	--	170	--	--	--	--	12	--	1,200	1,100	16	--	--	--	--	--	--	2,743
Sep-10	--	--	N/A	--	140	--	35	--	150	--	--	--	--	29	--	860	1,100	20	--	--	--	--	--	--	2,334
10/12/2010[a]	--	--	N/A	--	170	--	40	--	140	--	--	--	--	940	--	1,100	1,400	20	--	--	--	--	89	33	3,932
Nov-10	--	--	N/A	--	150	--	34	--	100	--	--	--	--	71	--	920	1,200	53	--	--	--	--	14	--	2,542
Dec-10	--	--	N/A	--	120	--	28	--	110	42	--	--	--	54	--	790	970	13	--	--	--	--	170	31	2,328
Jan-11	--	--	N/A	--	150	--	34	--	130	14	--	--	--	13	--	860	1,200	--	--	--	--	--	47	10	2,458
Feb-11	--	--	N/A	--	130	--	32	--	160	--	--	--	--	23	--	910	900	--	--	--	--	--	29	--	2,184
Mar-11	--	--	N/A	--	390	--	98	--	350	19	--	--	--	23	--	2,800	2,500	--	--	--	--	--	61	--	6,241
Apr-11	--	--	N/A	--	150	--	36	--	160	--	30	--	--	10	--	900	1,100	--	--	--	--	--	--	--	2,386
May-11	--	--	N/A	--	150	--	39	--	150	--	--	--	--	--	--	880	890	--	--	--	--	--	--	--	2,109
Jun-11	--	--	N/A	--	240	--	59	--	190	--	--	--	--	35	--	1,600	1,600	20	--	--	--	--	--	--	3,744
Jul-11	--	--	N/A	--	200	--	51	--	170	--	40	--	--	81	--	1,300	1,300	--	--	--	--	--	26	--	3,168
Aug-11	--	--	N/A	--	200	--	44	--	160	--	--	--	--	29	--	1,200	1,400	--	--	--	--	--	--	--	3,033
Sep-11	12	--	N/A	--	130	--	29	--	130	--	--	--	--	11	--	750	990	12	--	--	--	--	--	--	2,064
Oct-11	8.3	--	N/A	--	120	--	28	--	93	--	--	--	--	51	--	640	780	--	--	--	--	--	--	--	1,720
Nov-11	10	--	N/A	--	140	--	34	--	110	--	--	--	--	9.2	--	730	930	--	--	--	--	--	--	--	1,963
Dec-11	7.3	--	N/A	--	130	--	29	--	110	--	--	--	--	46	--	600	800	--	--	--	--	--	--	--	1,722
Jan-12	--	--	N/A	--	130	--	30	--	140	--	--	--	--	16	--	590	840	--	--	--	--	--	--	--	1,746
Feb-12	--	--	N/A	--	140	--	31	--	110	--	--	--	--	--	--	760	980	--	--	--	--	--	--	--	2,021
Mar-12	--	--	N/A	--	160	--	36	--	130	--	--	--	--	14	--	880	1,100	--	--	--	--	--	--	--	2,320
Apr-12	--	--	N/A	--	170	--	34	--	140	--	--	--	--	--	--	880	1,300	--	--	--	--	--	20	--	2,544
May-12	--	--	N/A	--	290	--	56	--	200	--	--	--	--	32	--	1,700	2,300	--	--	--	--	--	--	--	4,578
Jun-12	--	--	N/A	--	320	--	66	--	200	--	--	--	--	--	--	1,700	2,100	--	--	--	--	--	--	--	4,386
Jul-12	--	--	N/A	--	250	--	50	--	180	--	--	--	--	16	--	1,300	1,300	--	--	--	--	--	--	--	3,096
Aug-12	--	--	N/A	--	150	--	30	--	130	--	--	--	--	22	--	730	1,000	17	--	--	--	--	--	--	2,079
Sep-12	--	--	N/A	--	110	--	23	--	120	--	--	--	--	170	--	560	720	--	--	--	--	--	11	--	1,714
Oct-12	--	--	N/A	--	190	--	36	--	180	--	--	--	--	--	--	1,000	1,400	--	--	--	--	--	--	--	2,806
Nov-12	--	--	N/A	--	120	--	23	--	140	--	--	--	--	--	--	600	910	--	--	--	--	--	--	--	1,793
Dec-12	--	--	N/A	--	130	--	21	--	120	--	--	--	--	8	--	590	1,000	--	--	--	--	--	--	--	1,869

Table 4-7A
Summary of VOC Detections in SSDS Influent, Building A
Lockheed Martin Corporation, Middle River Complex, Middle River, Maryland

Building A - Influent Volatiles (µg/m^3)

Date	benzene	carbon tetrachloride	chlorodifluoromethane	chloroform	cis-1,2-dichloroethene	dichlorodifluoromethane	1,1-dichloroethane	1,2-dichloroethane	1,1-dichloroethene	ethylbenzene	methylene chloride	naphthalene	tetrachloroethene	toluene	trans-1,2-dichloroethene	1,1,1,-trichloroethane	trichloroethene	trichlorofluoromethane	1,2,3-trimethylbenzene	1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	vinyl chloride	m-xylene & p-xylene	o-xylene	Total VOCs
Jan-13	--	--	N/A	--	130	--	24	--	190	--	--	--	--	--	--	630	950	--	--	--	--	--	--	--	1,924
Feb-13	--	--	N/A	--	130	--	26	--	130	--	--	--	--	--	--	560	860	--	--	--	--	--	--	--	1,706
Mar-13	--	--	N/A	--	140	--	30	--	94	--	--	--	--	10	--	670	1,100	--	--	--	--	--	--	--	2,044
Apr-13	--	--	N/A	--	2,200	--	290	--	1,500	--	--	--	--	--	--	2,900	5,900	--	--	--	--	--	--	--	12,790
May-13	--	--	N/A	--	140	11	29	--	130	--	--	--	--	14	--	730	1,200	17	--	--	--	--	--	--	2,271
Jun-13	--	--	N/A	--	100	--	22	--	110	--	--	--	--	--	--	530	790	--	--	--	--	--	--	--	1,552
Jul-13	--	--	N/A	--	160	--	33	--	100	--	--	--	--	--	--	820	1,100	--	--	--	--	--	--	--	2,213
Aug-13	--	--	N/A	--	180	--	34	--	120	--	--	--	--	15	--	780	1,300	--	--	--	--	--	--	--	2,429
Sep-13	--	--	N/A	--	100	--	16	--	90	--	--	--	--	--	--	410	630	--	--	--	--	--	--	--	1,246
Oct-13	--	--	N/A	--	220	--	39	--	190	--	--	--	--	15	--	810	1,400	16	--	--	--	--	--	--	2,690
Nov-13	--	--	N/A	--	200	--	39	--	170	--	--	--	--	11	--	930	1,500	41	--	--	--	--	--	--	2,891
Dec-13	0.94	--	--	21.2	165	--	30.7	--	132	--	4.4	--	--	12.2	2.5	883	1,530	--	--	--	--	--	--	--	2,782
Jan-14	--	--	6.5	11.6	173	2.2	29.3	--	141	1.8	3.3	4.9	--	9,820	--	570	795	--	--	1.9	--	--	4.3	1.7	11,567
Feb-14	--	--	2.4	7.4	126	--	21.2	--	92.7	--	2.1	--	--	15.3	--	429	843	--	--	--	--	--	--	--	1,539
Mar-14	--	--	2.4	--	176	2.0	29.3	36.4	130	--	--	--	3.6	9.1	--	1,310	2,100	--	--	--	--	--	3.0	--	3,802
Apr-14	81.7	--	--	--	194	--	31.8	--	131	120	--	--	--	75.7	--	646	1,490	--	--	--	--	--	387	109	3,266
May-14	4.8	--	8.8	3.9	44.7	4.1	6.7	--	32.6	6.5	202	2.3 J	1.2	29.5	--	142	292	--	2.8	11.5	3.0	--	24.3	9.3	832
Jun-14	1,040	--	30.3	136	3,710	--	565	--	2,840	--	138	34.9 J	--	199	51.7	1,000 J	1,490	--	--	17.6 J	--	--	25.6 J	--	11,278
Jul-14	45.1	--	--	8.4 J	189	--	36.5	81.2	145	--	--	--	--	20.8 J	--	871	1,250	--	--	--	--	--	--	--	2,647
Aug-14	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Sep-14	51.1	1.1	1.0 J	54	416	4.7	104	--	323	--	0.67 J	--	2.3	8.8	8.1	1,290	3,250	--	--	2.3	0.83 J	1.5	1.5 J	1.1 J	5,522
Oct-14	46.6	--	--	--	89.0	--	16.1	--	69.8	--	17.3 J	--	--	--	--	480	819	NS	--	--	--	--	--	--	1,538
Nov-14	38.2	--	--	--	92.4	--	16.8	--	71	--	23.9 J	--	59.4	14.3 J	--	459	803	NS	--	--	--	--	--	--	1,578
Dec-14	34.3	--	--	11.8	77.6	--	18.8	--	68.6	--	19.4 J	--	--	41.5 J	--	428	741	NS	--	--	--	--	--	--	1,441
Jan-15	64.8	--	--	6.8	85.6	4.4	15.7	--	81	--	2 J	--	2.0	1.7	1.3	404	695	NS	--	--	--	--	0.90 J	--	1,365
Feb-15	1.5	--	3.7	--	8.5	--	--	--	6.5	1.9 J	46.9	4.1 J	--	13.5	--	17.0	22.4	NS	--	--	--	--	6.5	2.7	135
Mar-15	0.54	2.9	1.4	2.4	183	1.6	28.3	--	141	1.1 J	1.4 J	1.2 J	--	1.7	--	1,370	2,300	NS	--	--	--	--	4.1	1.3	4,042
Apr-15	0.73	0.78 J	2.1	7.1	147	2.2	22.7	--	112	--	3.5 J	2.7 J	0.87 J	2.7	--	617	1,090	NS	--	1.3 J	--	--	2.7 J	0.99 J	2,016
May-15	--	--	--	--	161	--	23 J	--	121	--	--	--	--	--	--	573	1,170	NS	--	--	--	--	--	--	2,048
Jun-15	--	--	--	--	143	--	19.4 J	33.4	105	133	--	--	--	--	--	536	1,110	NS	--	--	--	--	582	142	2,804
Jul-15	--	--	--	--	91	--	14	--	78	--	--	--	--	--	--	390	470	NS	--	--	--	--	N/A	N/A	1,043
Aug-15	12	--	1.3 J	2.4 J	82	2.8 J	16	--	63	--	--	--	--	12	1.4	400	590	NS	--	--	--	--	N/A	N/A	1,183
Sep-15	72	--	2.7 J	1.8 J	130	--	24	--	86	--	--	--	--	--	1.9 J	510	1,000	NS	--	--	--	--	N/A	N/A	1,828
Oct-15	78	--	1.5 J	--	130	--	24	--	91	--	--	--	--	--	2.0 J	560	900	NS	--	--	--	--	N/A	N/A	1,787
Nov-15	43	--	3.2 J	1.9 J	140	3.6	25	--	110	--	--	--	--	--	2.5 J	570	900	NS	--	--	--	--	N/A	N/A	1,799
Dec-15	34	--	3.2 J	1.4 J	120	3.2	23	--	83	--	--	--	--	--	1.8 J	490	830	NS	--	--	--	--	N/A	N/A	1,590
Jan-16	9.2	--	1.1 J	2.0	84	2.1	16	--	80	--	3 J	--	--	2.7	1.5 J	320	480	NS	--	--	--	--	N/A	N/A	1,002
Feb-16	2.6	--	1.0 J	1 J	100	2.4	20	0.60	82	--	--	--	--	--	1.6	550 EB	840	NS	--	--	--	--	N/A	N/A	1,601
Mar-16	36	0.49 J	7.9	1.5 J	130	2.4	25	0.70	98	--	2.8 J	--	0.64 J	5.3	2.0	680 E	1,300	NS	--	--	--	0.42	N/A	N/A	2,293
Apr-16	28	--	--	--	230	--	42	--	180	--	--	--	--	--	--	940	1,700	NS	--	--	--	--	N/A	N/A	3,120
Apr-16	--	--	--	--	90	--	18	--	68	--	--	--	--	--	--	490	950	NS	--	--	--	--	N/A	N/A	1,616
May-16	--	--	19.0	2 J	110	3.5 J	18	--	120	--	9	--	--	6.5	--	600 B	910	NS	--	--	--	--	N/A	N/A	1,798
Jun-16	31	--	63.0	--	150	--	26	--	140	--	--	--	--	--	3.6 J	670	1,100	NS	--	--	--	--	N/A	N/A	2,184
Jul-16	65	--	--	--	100	--	17	--	75	--	36	--	--	15	--	510	940	NS	--	--	--	--	N/A	N/A	1,758
Aug-16	20	--	--	--	92	--	17	--	68	--	--	--	--	--	--	460	860	NS	--	8.2 J	--	--	N/A	N/A	1,525
Sep-16	38	--	1.5 J	1.2 J	88	2.3 J	14	--	66	--	15	--	--	--	1.8 J	400	760	NS	--	--	--	--	N/A	N/A	1,388
Oct-16	--	--	1.7	--	81	--	14	--	68	--	--	--	--	--	--	410	630	NS	--	--	--	--	N/A	N/A	1,205
Nov-16	--	--	--	--	350	--	68	--	260	--	49 J	--	--	--	--	2,000	2,800	NS	--	--	--	--	N/A	N/A	5,527
Dec-16	11	--	2 J	--	95	3.1 J	17	--	120	--	--	--	--	--	2.5 J	600	710	NS	--	--	--	--	N/A	N/A	1,561
Jan-17	17	--	--	8.4 J	440	--	81	--	370	--	130	--	--	--	9.3 J	2,000	3,600	NS	--	--	--	--	N/A	N/A	6,656
Feb-17	33	--	--	6	110	3.7 J	19	--	100	--	--	--	--	--	2.1 J	660	1,100	NS	--	--	--	--	5.9 J*	N/A	2,040
Mar-17	21	--	--	2 J	100	3.3 J	21	--	110	--	--	--	8.5 J	--	2.2 J	590	1,000	NS	--	--	--	--	6.9 J*	N/A	1,865
Apr-17	15	--	--	1.3 J	65	--	10	--	71	--	--	--	--	--	--	370	680	NS	--	--	--	--	N/A	N/A	1,212
May-17	31	--	1.6 J	--	80	--	16	--	74	--	--	--	--	--	--	430	760	NS	--	--	--	--	N/A	N/A	1,393
Jun-17	10	--	--	3.4 J	69	--	13	--	66	--	13 JB	--	--	--	--	480	710	NS	--	--	--	--	N/A	N/A	1,364
Jul-17	25	--	7.2 J	--	94	--	20	--	120	--	--	--	--	--	4.6 J	450	1,400	NS	--	--	--	--	N/A	N/A	2,121
Aug-17	5 J	--	4.9 J	--	90	--	18	--	95	--	28 JB	--	--	--	--	480	940	NS	--	--	--	--	N/A	N/A	1,661
Sep-17	35	--	--	2.0	79	--	13	--	72	--	16 J	--	--	--	--	420	1,000	NS	--	--	--	--	N/A	N/A	1,637
Oct-17	22	ND	2.5 J	--	52	--	10	--	66	--	14 J	--	--	--	--	290	750	NS	--	--	--	--	N/A	N/A	1,207
Nov-17	4 J	ND	ND	--	83	--	17	--	88	--	--	--	--	--	--	550	1,100	NS	--	--	--	--	N/A	N/A	1,842
Dec-17	16	ND	1.5 J	--	75	3.4 J	15	--	92	--	--	--	--	--	--	500 B	990	NS	--	--	--	--	N/A	N/A	1,693

Building A - Influent Volatiles (µg/m^3)

Date	benzene	carbon tetrachloride	chlorodifluoromethane	chloroform	cis-1,2-dichloroethene	dichlorodifluoromethane	1,1-dichloroethane	1,2-dichloroethane	1,1-dichloroethene	ethylbenzene	methylene chloride	naphthalene	tetrachloroethene	toluene	trans-1,2-dichloroethene	1,1,1,-trichloroethane	trichloroethene	trichlorofluoromethane	1,2,3-trimethylbenzene	1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	vinyl chloride	m-xylene & p-xylene	o-xylene	Total VOCs
Jan-18	16	0.50 J	1.7	1.2 J	58	2.00	9	--	79	0.59 J	--	--	0.55 J	2.5 J	1.1 J	390	800	NS	--	--	--	--	N/A	N/A	1,363
Feb-18	16	ND	32	--	70	3.6 J	13	--	120	--	14 J	--	--	--	--	420	1,000	NS	--	--	--	--	N/A	N/A	1,689
Mar-18	22	ND	2.1 J	--	80	3.60 J	14	--	110	--	--	--	--	--	--	470	1,200	NS	--	--	--	--	N/A	N/A	1,902
Apr-18	10	--	--	--	67	--	13	--	89	--	12 J	--	--	--	--	430	860	NS	--	--	--	--	N/A	N/A	1,481
May-18	12	--	15	1.8 J	80	3.1 J	15	--	82	--	7.6 JB	--	2.9 J	17	1.5 J	460	870	NS	--	--	--	--	N/A	N/A	1,568
Jun-18	12	--	1.8 J	9.4	91	3.5 J	16	--	90	--	--	--	--	--	1.8 J	540	1,200	NS	--	--	--	--	N/A	N/A	1,966
Jul-18	66	--	4.0 J	19 J	140	--	25	--	140	--	40	--	--	--	--	890 B	1,800	NS	--	--	--	--	N/A	N/A	3,124
Aug-18	35	--	3.6 J	8.2 J	100	--	22	--	110	--	--	--	--	--	--	750	1,100	NS	--	--	--	--	N/A	N/A	2,129
Sep-18	14	--	3.5 J	18	79	--	15	--	72	--	13 JB	--	--	--	--	590 B	950	NS	--	5.8 J	--	--	N/A	N/A	1,760
Oct-18	5.9 J	--	--	3.9 J	58	--	12	--	56	--	12 J	--	--	--	--	430 B	800	NS	--	--	--	--	N/A	N/A	1,378
Nov-18	11	--	--	3.7 J	56	4.1	11	--	60	--	--	--	--	--	--	450	810	NS	--	--	--	--	N/A	N/A	1,406
Dec-18	6.3	--	2.7 J	3.7 J	77	--	17	--	110	--	18 JB	--	--	--	--	690	1,100	NS	--	--	--	--	N/A	N/A	2,025
Jan-19	11	--	--	2.1 J	46	--	10	--	55	--	12 J	--	--	--	--	330	700	NS	--	--	--	--	N/A	N/A	1,166
Feb-19	3.0 J	--	--	2.3 J	57	--	13	--	73	--	--	--	--	--	--	430	850	NS	--	--	--	--	N/A	N/A	1,428
Mar-19	4.4 J	--	--	--	48	--	11	--	60	--	--	--	--	--	--	330	720	NS	--	--	--	--	N/A	N/A	1,173
Apr-19	6.6	--	1.1 J	3.6	61	1.4 J	2.9	--	75	--	2.8 J	--	0.74 J	5.6	1.3 J	430	940	NS	--	--	--	0.47	2.8 J	N/A	1,535
May-19	9.1	--	1.1 J	3.1	61	2.3	12	0.54 J	70	--	5.7 J	--	0.56 J	6.4	1.2 J	430	870	NS	--	--	--	--	2.2 J	N/A	1,475
Jun-19	19	--	7.1	13	63	2.2 J	12	--	64	--	--	--	--	--	1.3 J	440	880	NS	--	--	--	--	N/A	N/A	1,502
Jul-19	58	--	--	1.6 J	57	2.9 J	11	--	65	--	14 J	--	--	--	1.4 J	440	760	NS	--	--	--	--	N/A	N/A	1,411
Aug-19	2.9 J	--	--	1.5 J	66	2.8 J	13	--	71	--	21 JB	--	--	--	1.6 J	460	830	NS	--	--	--	--	N/A	N/A	1,470
Sep-19	1.2 J	--	--	0.87 J	42	2.4 J	8.5	--	42	--	16 JB	--	--	--	1.2 J	220	510	NS	--	--	--	--	N/A	N/A	844
Oct-19	4.8 J	--	--	--	50	2.3 J	9.8	--	52	--	19 JB	--	--	--	--	290	730	NS	--	--	--	--	N/A	N/A	1,158
Nov-19	12.0	--	--	2.4 J	45	3.1 J	12	--	62	--	23 JB	--	--	--	1.3 J	400	910	NS	--	--	--	--	N/A	N/A	1,471
Dec-19	4.9 J	--	--	0.86 J	55	2.2 J	11	--	70	--	21 JB	--	--	--	1.4 J	350	1,000	NS	--	--	--	--	N/A	N/A	1,516
Jan-20	12.0	--	1.8 J	2.5 J	61	2.7 J	12	--	78	--	--	--	--	--	1.5 J	340	790	NS	--	--	--	--	N/A	N/A	1,302
Mar-20	1.3 J	--	--	1.6 J	60	2.5 J	12	--	75	--	--	--	--	7.8 J	1.3 J	380	1,000	NS	--	--	--	--	N/A	N/A	1,542
Previous 6-Month Average Apr-Sep 2019	16 J	--	3.1 J	3.9 J	58	2.3 J	9.9	--	65	--	11.9 JB	--	0.65 J	6.0 J	1.3 J	403	798	--	--	--	--	0.47	2.5 J	--	1,373
Current 6-Month Average Oct 2019-Mar 2020	7.0 J	--	1.8 J	1.8 J	54.2	2.6 J	11.4	--	67.4	--	21 JB	--	--	7.8 J	1.4 J	352 B	886	--	--	--	--	--	--	--	1,398

* value reported is for total xylenes

-- - non-detect (below detection limit)
B - compound was found in the blank and sample
D - duplicate
J - estimated value

NA - not applicable/not analyzed
NS - not sampled
SSD - sub-slab depressurization
SV - soil vapor

* value reported is for total xylenes

-- - non-detect (below detection limit)
B - compound was found in the blank and sample
D - duplicate
J - estimated value

NA - not applicable/not analyzed
NS - not sampled
SSD - sub-slab depressurization
SV - soil vapor

Table 4-7B
Summary of VOC Detections in SSDS Influent, Building C
Lockheed Martin Corporation, Middle River Complex, Middle River, Maryland

Building C - Influent Volatiles (µg/m^3)																										
Date	benzene	carbon tetrachloride	chlorodifluoromethane	chloroform	chloromethane	cis-1,2-dichloroethene	dichlorodifluoromethane	1,1-dichloroethane	1,2-dichloroethane	1,1-dichloroethene	ethylbenzene	methylene chloride	naphthalene	tetrachloroethene	toluene	trans-1,2-dichloroethene	1,1,1,-trichloroethane	trichloroethene	1,1,2-trichloro-1,2,2-trifluoroethane	1,2,3-trimethylbenzene	1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	vinyl chloride	m-xylene & p-xylene	o-xylene	Total VOCs
Mar-08	--	--	N/A	--	--	**25,000**	--	--	--	--	**320**	--	--	--	--	--	--	**550**	--	N/A	**990**	**740**	**2,100**	**1,100**	**370**	**31,170**
Apr-08	--	--	N/A	--	--	**2,700**	--	--	--	--	--	--	--	--	--	--	--	**84**	--	N/A	**63**	**56**	**320**	**65**	--	**3,288**
Apr-08	--	--	N/A	--	--	**6,600**	--	--	--	**32**	**44**	--	--	--	--	--	--	**440**	--	N/A	**180**	**170**	**690**	**180**	**68**	**8,404**
Apr-08	--	--	N/A	--	--	**4,100**	--	--	--	--	--	--	--	--	--	--	--	**600**	--	N/A	**73**	**61**	**370**	**48**	--	**5,252**
Apr-08	--	--	N/A	--	--	**2,900**	--	--	--	--	--	--	--	--	--	--	--	**670**	--	N/A	**69**	**55**	**190**	**34**	--	**3,918**
Apr-08	--	--	N/A	--	--	**2,600**	--	--	--	--	--	--	--	**28**	--	--	--	**750**	--	N/A	**85**	**70**	**130**	**32**	**17**	**3,712**
May-08	--	--	N/A	--	--	**1,600**	--	--	--	--	--	--	--	**17**	--	--	--	**650**	--	N/A	**65**	**51**	**41**	**15**	--	**2,439**
Jun-08	**7.4**	--	N/A	--	--	**300**	--	--	--	--	--	--	--	--	**110**	--	--	--	--	N/A	**23**	**19**	**8**	**9**	--	**476**
Jul-08	--	--	N/A	--	--	**1,300**	--	--	--	--	--	--	--	**14**	--	--	--	**440**	--	N/A	**45**	**36**	**35**	--	--	**1,870**
Aug-08	--	--	N/A	**16**	--	**410**	--	--	--	--	--	--	--	--	--	--	--	**58**	--	N/A	--	--	**13**	--	--	**497**
Sep-08	--	--	N/A	--	--	**730**	--	--	--	--	--	**18**	--	--	--	--	**13**	**130**	--	N/A	--	--	**20**	--	--	**911**
Nov-08	--	--	N/A	--	--	**390**	--	--	--	--	--	--	--	--	--	--	--	**110**	--	N/A	--	--	**17**	--	--	**517**
Dec-08	--	--	N/A	--	--	**420**	--	--	--	--	--	--	--	--	--	--	--	**150**	--	N/A	--	--	**22**	--	--	**592**
Jan-09	--	--	N/A	--	--	**810**	--	--	--	--	--	--	--	**170**	--	--	--	**580**	--	N/A	**37**	**29**	**38**	**17**	**14**	**1,695**
Feb-09	--	--	N/A	--	--	**630**	--	--	--	--	--	--	--	**140**	--	--	--	**270**	--	N/A	**39**	**34**	**25**	**16**	**12**	**1,166**
Mar-09	--	--	N/A	--	--	**460**	--	--	--	--	--	--	--	**160**	--	--	--	**350**	--	N/A	**62**	**51**	**16**	**14**	**13**	**1,126**
Apr-09	--	--	N/A	--	--	**200**	--	--	--	--	--	--	--	**46**	--	--	--	**86**	--	N/A	**19**	**16**	**6.1**	--	--	**373.1**
May-09	--	--	N/A	--	--	**210**	--	--	--	--	--	--	--	**24**	--	--	--	**79**	--	N/A	**14**	**14**	**5.7**	--	--	**346.7**
Jun-09	--	--	N/A	--	--	**190**	--	--	--	--	--	--	--	--	--	--	--	**58**	--	N/A	--	--	--	--	--	**248**
Jul-09	--	--	N/A	--	--	**150**	--	--	--	--	--	--	--	--	--	--	--	**55**	--	N/A	--	--	--	--	--	**205**
Aug-09	--	--	N/A	--	--	**720**	--	--	--	--	--	**17**	--	--	--	--	--	**160**	--	N/A	--	--	**13**	--	--	**910**
Sep-09	--	--	N/A	--	--	**39**	--	--	--	--	--	**110**	--	--	--	--	--	**16**	--	N/A	--	--	--	--	--	**165**
Oct-09	--	--	N/A	--	--	**200**	--	--	--	--	--	--	--	--	--	--	--	**64**	--	N/A	--	--	--	--	--	**264**
Nov-09	--	--	N/A	--	--	**190**	--	--	--	--	--	--	--	--	--	--	--	**75**	--	N/A	--	--	--	--	--	**265**
Dec-09	--	--	N/A	--	--	**96**	--	--	--	--	--	--	--	--	**26**	--	--	**45**	--	N/A	--	--	--	**8.7**	--	**176**
Jan-10	--	--	N/A	--	--	**140**	--	--	--	--	--	--	--	--	--	--	--	**57**	--	N/A	--	--	--	--	--	**197**
Feb-10	--	--	N/A	--	--	**100**	--	--	--	--	--	--	--	--	--	--	--	**37**	--	N/A	--	--	--	--	--	**137**
Mar-10	--	--	N/A	--	--	**87**	--	--	--	--	--	--	--	--	--	--	--	**33**	--	N/A	--	--	--	--	--	**120**
Apr-10	--	--	N/A	--	--	**110**	--	--	--	--	--	--	--	--	--	--	--	**39**	--	N/A	--	--	--	--	--	**149**
May-10	**58**	--	N/A	--	--	**65**	--	--	--	--	**38**	**--**	--	--	**220**	--	--	**22**	--	N/A	**25**	--	--	**140**	**39**	**607**
Jun-10	--	--	N/A	--	--	**72**	--	--	--	--	--	--	--	--	--	--	--	**25**	--	N/A	**83**	**17**	--	**30**	**17**	**244**
Jul-10	--	--	N/A	--	--	**68**	--	--	--	--	--	--	--	--	--	--	--	**34**	--	N/A	--	--	--	--	--	**102**
Aug-10	--	--	N/A	--	--	**100**	--	--	--	--	--	--	--	--	--	--	--	**31**	--	N/A	--	--	--	--	--	**131**
Sep-10	--	--	N/A	--	--	**70**	--	--	--	--	--	--	--	--	--	--	--	**33**	--	N/A	--	--	--	--	--	**103**
Oct-10	**10**	--	N/A	--	--	**160**	--	--	--	--	**11**	--	--	--	**130**	--	**110**	**70**	--	N/A	--	--	--	**23**	--	**513.5**
Nov-10	--	--	N/A	--	--	**65**	--	--	--	--	--	--	--	--	--	--	--	**35**	--	N/A	--	--	--	--	--	**100**
Dec-10	--	--	N/A	--	--	**120**	--	--	--	--	--	--	--	**19**	--	--	--	**89**	--	N/A	--	--	--	--	--	**228**
Jan-11	--	--	N/A	--	--	**160**	--	--	--	--	--	--	--	**94**	**7.7**	--	--	**250**	--	N/A	--	--	**9**	--	--	**520**
Feb-11	--	--	N/A	--	--	**180**	--	--	--	--	--	--	--	**120**	--	--	--	**270**	--	N/A	--	--	--	--	--	**570**
Mar-11	--	--	N/A	--	--	**170**	--	--	--	--	--	--	--	**110**	**34**	--	--	**180**	--	N/A	--	--	--	--	--	**494**
Apr-11	--	--	N/A	--	--	**130**	--	--	--	--	--	--	--	**37**	**10**	--	--	**90**	--	N/A	--	--	--	--	--	**267**
May-11	**8**	--	N/A	--	--	**100**	--	--	--	--	**16**	--	--	**19**	--	--	--	**82**	--	N/A	--	--	--	**9**	--	**234**
Jun-11	**26**	--	N/A	--	--	**97**	--	--	--	--	--	--	--	--	**14**	--	--	**63**	--	N/A	--	--	--	--	--	**200**
Jul-11	**20**	--	N/A	--	--	**74**	--	--	--	--	--	**37**	--	--	**62**	--	--	**26**	--	N/A	--	--	--	**21**	--	**240**
Aug-11	**14**	--	N/A	--	--	**76**	--	--	--	--	--	--	--	--	--	--	--	**34**	--	N/A	--	--	--	--	--	**124**
Sep-11	**10**	--	N/A	--	--	**22**	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	--	--	--	--	--	**32**
Oct-11	--	--	N/A	--	--	**38**	--	--	--	--	--	**27**	--	--	**20**	--	--	--	--	N/A	--	--	--	**11**	--	**96**
Nov-11	**12**	--	N/A	--	--	**45**	--	--	--	--	--	--	--	--	--	--	--	**16**	--	N/A	--	--	--	--	--	**73**
Dec-11	--	--	N/A	--	--	**62**	--	--	--	--	--	--	--	--	--	--	--	**21**	--	N/A	--	--	--	--	--	**83**

Table 4-7B
Summary of VOC Detections in SSDS Influent, Building C
Lockheed Martin Corporation, Middle River Complex, Middle River, Maryland

Building C - Influent Volatiles (µg/m^3)																									
Date	benzene	carbon tetrachloride	chlorodifluoromethane	chloroform	chloromethane	cis-1,2-dichloroethene	dichlorodifluoromethane	1,1-dichloroethane	1,2-dichloroethane	1,1-dichloroethene	ethylbenzene	methylene chloride	naphthalene	tetrachloroethene	toluene	trans-1,2-dichloroethene	1,1,1,-trichloroethane	trichloroethene	1,1,2-trichloro-1,2,2-trifluoroethane	1,2,3-trimethylbenzene	1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	vinyl chloride	m-xylene & p-xylene	o-xylene	Total VOCs
Jan-12	--	--	N/A	--	--	55	--	--	--	--	--	--	--	--	--	--	--	21	--	N/A	--	--	--	--	--	76
Feb-12	--	--	N/A	--	--	76	--	--	--	--	--	--	--	--	--	--	--	43	--	N/A	--	--	--	--	--	119
Mar-12	--	--	N/A	--	--	93	--	--	--	--	--	--	--	16	--	--	--	58	--	N/A	--	--	--	--	--	167
Apr-12	--	--	N/A	--	--	64	--	--	--	--	--	--	--	16	--	--	--	56	--	N/A	--	--	--	--	--	136
May-12	--	--	N/A	--	--	72	--	--	--	--	--	--	--	20	9.8	--	--	65	--	N/A	--	--	--	--	--	167
Jun-12	--	--	N/A	--	--	71	--	--	--	--	--	--	--	17	--	--	--	50	--	N/A	--	--	--	--	--	138
Aug-12	--	--	N/A	--	--	39	--	--	--	--	--	--	--	--	--	--	--	19	--	N/A	--	--	--	--	--	58
Sep-12	--	--	N/A	--	--	41	--	--	--	--	--	--	--	--	23	--	--	22	--	N/A	--	--	--	--	--	86
Oct-12	--	--	N/A	--	--	95	--	--	--	--	--	--	--	--	--	--	--	45	--	N/A	--	--	--	--	--	140
Nov-12	--	--	N/A	--	--	18	--	--	--	--	--	--	--	--	--	--	--	270	--	N/A	--	--	--	31	16	335
Dec-12	--	--	N/A	--	--	70	--	--	--	--	--	--	--	22	--	--	--	91	--	N/A	--	--	5.3	--	--	188
Jan-13	--	--	N/A	--	--	66	--	--	--	--	--	--	--	42	--	--	--	110	--	N/A	--	--	--	--	--	218
Feb-13	--	--	N/A	--	--	49	--	--	--	--	--	--	--	29	--	--	--	91	--	N/A	--	--	--	--	--	169
Mar-13	--	--	N/A	--	--	60	--	--	--	--	--	--	--	45	--	--	--	100	--	N/A	--	--	--	--	--	205
Apr-13	--	--	N/A	--	--	44	--	--	--	--	--	--	--	21	--	--	--	52	--	N/A	--	--	--	--	--	117
May-13	--	--	N/A	--	--	120	--	--	--	--	--	--	--	--	--	--	--	2,900	--	N/A	--	--	--	80	--	3,100
Jun-13	--	--	N/A	--	--	10	--	--	--	--	--	--	--	--	--	--	--	460	50	N/A	--	--	--	31	15	566
Jul-13	12	--	N/A	--	12	--	--	--	--	--	9.4	--	--	--	--	--	--	290	16	N/A	11	--	--	43	23	416
Aug-13	--	--	N/A	--	--	--	--	--	--	--	--	20	--	--	--	--	--	210	18	N/A	--	--	--	20	11	279
Sep-13	--	--	N/A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	150	--	N/A	--	--	--	--	--	150
Oct-13	14	--	N/A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	200	16	N/A	--	--	--	20	10	260
Nov-13	13	--	N/A	--	--	18	--	--	--	--	9.8	--	--	--	--	--	--	280	--	N/A	--	--	--	45	24	390
Dec-13	6.3	--	--	--	N/A	13	6.6	--	--	--	7.3	4.1	33.9	5.4	4.0	--	--	228	N/A	--	4.8	2.4	--	30.4	16.1	362
Jan-14	13.7	--	4.7	--	N/A	5.7	--	--	--	--	10.3	3.4	22.6	5.6	49.6	--	--	298	N/A	5.5	17.8	--	--	49.1	19.3	505
Feb-14	1.8	--	4.5	--	N/A	2.3	2.2	--	--	--	2.1	--	5.3	2.2	2.7	--	--	157	N/A	--	2.8	--	--	8.9	4.7	197
Mar-14	9.1	--	3.0	3.2	N/A	4.9	2.2	--	--	--	5.9	--	11.5	3.3	6.0	--	--	261	N/A	1.6	6.0	3.0	--	25.3	12.3	358
Apr-14	10.0	--	7.1	--	N/A	7.0	--	--	--	--	67	--	12.1	5.1	50.7	--	6.6	266	N/A	--	6.9	--	--	218	67.4	724
May-14	11.8	1.2	5.8	1.5 J	N/A	7.6	2.9	--	--	--	4.7	1.2 J	12.7	3.6	30.6	--	--	236	N/A	2.1	6.8	3.5	--	20.9	11.3	364
Jun-14	12.8	--	--	2.7	N/A	2.7	2.1	--	--	--	4.1	24.5	13.1	23.1	11.6	--	--	154	N/A	6.1	18	6.1	--	27.0	12.1	320
Jul-14	14.4	0.77 J	11.2	5.6	N/A	4.1	1.4 J	--	--	0.88 J	6.3	147	16.9	7.1	5.7	0.81 J	--	183	N/A	2.8	7.3	4.7	--	19.4	9.8	449
Aug-14	10.8	1.7	N/A	66.2	1.5	4.7	--	7.6	--	4.8	7.5	--	20.6	7.0	5.0	--	33.6	289	N/A	N/A	7.8	3.9	--	30.2	16.0	518
Sep-14	8.0	1.1	5.6	--	N/A	5.3	2.9	7.0	--	--	2.9	0.76 J	31.2	2.1	3.4	--	37.9	124	N/A	2.1	5.4	2.1	--	17.2	10.8	270
Oct-14	6.6	1.2	10.1	0.98	N/A	6.6	2.0	6.1	2.7	3.0	3.2	2.1 J	13.3	2.7	5.1	0.71 J	38.6	137	N/A	2.6	4.7	2.0	--	15.8	9.5	277
Nov-14	5.2	--	7.5	--	N/A	5.7	2.3	3.5	--	--	3.2 J	6.0	10.5	5.4	4.3	--	22.6	111	N/A	3.5 J	5.4	3.2 J	--	11.0 J	6.4	217
Dec-14	5.3	--	8.1	1.3	N/A	7.0	2.8	1.9	--	--	3.2 J	3.3 J	8.7	7.8	5.0	1.6 J	9.1	106	N/A	3.6 J	4.7	3.7 J	--	8.6	5.8	198
Jan-15	6.2	--	8.3	1.7	N/A	5.9	3.1	--	--	--	1.2 J	2.5 J	3.1 J	2.8	3.1	--	3.0	87.5	N/A	1.2	5.5	2.0	--	4.8	2.9	145
Feb-15	5.6	--	3.8	0.94	N/A	4.6	--	--	--	--	1.3 J	0.61 J	2.3 J	1.7	3.7	--		75.3	N/A	--	3.8	1.7	--	5.3	3.2	114
Mar-15	5.3	2.8	4.0	0.82	N/A	3.7	1.5 J	--	--	--	1.3 J	0.62 J	3.0 J	2.1	2.5	--	0.94 J	80.5	N/A	0.97 J	4.0	1.7	--	4.4	2.9	123
Apr-15	6.5	1.1	4.6	1.2	N/A	3.6	1.8	2.0	--	1.1 J	2.0	--	6.1	2.3	2.3	--	14.6	107	N/A	1.5 J	5.8	2.4	--	8.0	4.3	178
May-15	6.1	--	10.4	--	N/A	2.6	2.3 J	1.7 J	--	--	5.3 J	4.0 J	7.8 J	2.1 J	5.2	--	14	128	N/A	5.1 J	10	5.3 J	--	13.3 J	6.5 J	230
Jun-15	7.4	1.2	8.3	1.0	N/A	4.0	--	4.9	--	--	2.5	6.3	14.4	3.2	4.3	--	32.1	132	N/A	3.7	11.1	4.9	--	11.4	7.1	260
Jul-15	3.2	--	6.6	4.9	N/A	--	--	3.2	--	--	--	--	--	--	2.5	--	22	20	N/A	--	--	--	--	N/A	N/A	62
Aug-15	5.1	2.1 J	15	0.74 J	N/A	2.7	2.4	5.9	--	2.0	1.3 J	--	--	1.1 J	15	--	45	41	N/A	--	2.0	0.8 J	--	N/A	N/A	142
Sep-15	8.0	1.3 J	12	1.10 J	N/A	2.4	2.3	7.7	--	2.8	2.0	8.7	--	1.2 J	6.2	--	58	73	N/A	1.1 J	3.5	1.3 J	--	N/A	N/A	193
Oct-15	5.5	--	3.3	--	N/A	0.7	2.1	2.0	--	1.0	0.6 J	3.4 J	--	--	8.7	--	18	14	N/A	--	1.2	--	--	N/A	N/A	60
Nov-15	5.1	0.7 J	8.6	0.93 J	N/A	2.3	3.2	3.7	--	1.4 J	1.2 J	3.4 J	--	3.5	3.0	--	32	50	N/A	--	2.1	0.9 J	--	N/A	N/A	122
Dec-15	4.5	0.6 J	14	0.51 J	N/A	2.1	2.4	1.5 J	--	0.5 J	0.6 J	2.4 J	--	0.9 J	3.9	--	14	43	N/A	--	1.9	--	--	N/A	N/A	93

Table 4-7B
Summary of VOC Detections in SSDS Influent, Building C
Lockheed Martin Corporation, Middle River Complex, Middle River, Maryland

Building C - Influent Volatiles (µg/m^3)

Date	benzene	carbon tetrachloride	chlorodifluoromethane	chloroform	chloromethane	cis-1,2-dichloroethene	dichlorodifluoromethane	1,1-dichloroethane	1,2-dichloroethane	1,1-dichloroethene	ethylbenzene	methylene chloride	naphthalene	tetrachloroethene	toluene	trans-1,2-dichloroethene	1,1,1,-trichloroethane	trichloroethene	1,1,2-trichloro-1,2,2-trifluoroethane	1,2,3-trimethylbenzene	1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	vinyl chloride	m-xylene & p-xylene	o-xylene	Total VOCs
Jan-16	**4.4**	--	**4.8**	**0.43 J**	N/A	**0.8**	**2.0**	**0.3 J**	--	--	--	**2.4 J**	--	**1.0 J**	**5.0**	--	**2**	**30**	N/A	--	**1.3**	--	--	N/A	N/A	**55**
Mar-16	**6.4**	**0.6 J**	**12**	**0.88 J**	N/A	**1.9**	**2.3**	**0.7 J**	--	**0.3 J**	**0.8 J**	**3.3 J**	--	**0.9 J**	**10**	--	**11**	**41**	N/A	--	**2.6**	**0.9 J**	--	N/A	N/A	**96**
May-16	**2.9**	**0.5 J**	**6.6**	**1.0 J**	N/A	**1.6**	**2.9**	**0.4 J**	--	**0.5 J**	**1.1 J**	**2.8 J**	--	**0.7 J**	**73**	--	**5.4 B**	**31**	N/A	--	**1.6 J**	--	--	N/A	N/A	**132**
Jul-16	**8.0**	**1.2 J**	**13**	**2.4**	N/A	**2.5**	**2.7**	**11**	--	**5.5**	**1.3 J**	**4.2**	--	**1.1 J**	**6.2**	--	**76.0 B**	**46**	N/A	**1.20 J**	**4.4**	**1.5 J**	--	N/A	N/A	**188**
Sep-16	**8.6**	**0.52 J**	**4**	**2.5**	N/A	**2.5**	**2.4**	**4.2**	--	**1.9**	**1.4 J**	**5.3**	--	**1.0 J**	**3.2**	--	**29**	**45**	N/A	**0.93 J**	**3.5**	**1.5 J**	--	N/A	N/A	**117**
Nov-16	**9.8**	**0.80 J**	**22**	**2.7**	N/A	**2.8**	**3.0**	**1.7**	--	**0.8 J**	**1.9**	**13**	--	**1.6 J**	**14**	--	**13**	**47**	N/A	**1.20 J**	**4.3**	**1.4 J**	--	**9.1 ***	N/A	**150**
Jan-17	**2.0**	--	**6.3**	**0.80 J**	N/A	**1.9**	**1.9 J**	--	--	--	**0.9 J**	**6.2**	--	**0.9 J**	**20**	--	**1.0 J**	**33**	N/A	--	**2.0**	**0.9 J**	--	**4.5 ***	N/A	**82**
Mar-17	**3.1**	**0.58 J**	**4.8**	**0.80 J**	N/A	**3.5**	**2.7**	**0.31 J**	--	--	**2.2**	**3.3 J**	--	**3.1**	**6.2**	--	**1.0 J**	**40**	N/A	--	**1.8 J**	--	--	**12 ***	N/A	**85**
May-17	**4.9**	**0.59 J**	**1.6**	**1.1 J**	N/A	**5.3**	**2.1**	**0.36 J**	--	--	**0.9 J**	**2.6 J**	--	**2.3 J**	**4.1**	**0.41 J**	**1.4 J**	**38**	N/A	--	**2.7**	**1.0 J**	--	**5.3 ***	N/A	**75**
Jul-17	**6.1**	**0.76 J**	**15.0**	**2.9**	N/A	**5.4**	**1.9 J**	**0.42 J**	--	--	**1.9**	**5.4**	**2.0**	**1.4 J**	**7.1**	--	**1.1 JB**	**31**	N/A	--	**2.5**	**0.9 J**	--	**7.0 ***	N/A	**93**
Sep-17	**6.5**	**0.90 J**	**2.7**	**1.5 J**	N/A	**2.3**	**1.8 J**	--	--	--	**0.91 J**	**5.9**	--	**0.67 J**	**5.6**	--	**1.1 J**	**38**	N/A	--	**3.5**	**1.5 J**	--	**3.7 ***	N/A	**77**
Nov-17	**4.8**	**0.55 J**	**4.1**	**1.0 J**	N/A	**3.2**	**2.2**	--	--	--	--	**5.0**	--	**1.4 J**	**2.8**	--	**0.66 J**	**43**	N/A	--	**2.2**	**0.9 J**	--	**2.5 J***	N/A	**74**
Jan-18	**6.4**	**0.60 J**	**11**	--	N/A	**2.7**	**2.2**	--	--	--	**0.74 J**	--	--	**2.5 J**	**4.2**	--	**1.7 J**	**33**	N/A	--	**2.6**	**1.0 J**	**0.54**	**4.8 J***	N/A	**74**
Mar-18	**1.1**	**0.57 J**	**4.5**	**0.63 J**	N/A	**4.9**	**2.0**	--	--	--	**0.70 J**	**2.5 J**	--	**5.0 J**	**2.8**	--	**0.44 J**	**47**	N/A	--	**2.6**	**1.0 J**	**0.54**	**3.3 J***	N/A	**80**
May-18	**3.5**	**0.56 J**	**3.4**	**2.4**	N/A	**4.7**	**2.5**	--	--	--	**1.0 J**	**2.8 J**	--	**3.6**	**17.0**	--	**0.49 J**	**32**	N/A	--	**4.0**	**1.6 J**	--	**5.9 J***	N/A	**85**
Jul-18	**4.9**	**0.68 J**	**6.4**	**5.5**	N/A	**2.9**	**1.7 J**	--	--	--	**0.79 J**	**65**	--	**1.0 J**	**8.3**	--	**1.50 JB**	**34**	N/A	--	**3.8**	**1.4 J**	--	**4.1 ***	N/A	**142**
Sep-18	**3.2**	**0.55 J**	**8**	**1.1 J**	N/A	**1.0**	**2.9**	--	--	--	**23.00**	3 **JB**	--	**0.7 J**	**6.2**	--	**0.5 JB**	**35**	N/A	**1.2 J**	**9.3**	**2.4 J**	--	**5.2 ***	N/A	**103**
Nov-19	**2.0**	--	**3.8**	--	N/A	**2.5**	**2.5**	--	--	--	**0.86 J**	**2.8 J**	--	**0.6 J**	**2.7**	--	--	**25**	N/A	--	**3.9**	**1.3 J**	--	**1.9 ***	N/A	**50**
Jan-19	**1.6**	--	**3.0**	--	N/A	**2.3**	**1.5 J**	--	--	--	**0.88 J**	**3.2 J**	--	**0.9 J**	**5.0**	--	--	**20**	N/A	--	**2.7**	**0.9 J**	--	**4.7 ***	N/A	**47**
Mar-19	**4.9**	**0.48 J**	**2.3**	--	N/A	**2.8**	**1.5 J**	--	--	--	--	**2.7 J**	--	**1.1 J**	**2.7**	--	**0.68 J**	**26**	N/A	--	**1.9 J**	**0.8 J**	--	**1.2 ***	N/A	**49**
May-19	**8.7**	--	**3.4**	**0.43 J**	N/A	**2.9**	**2.6**	--	--	--	**0.75 J**	**3.8 J**	--	**0.82 J**	**9.4**	--	--	**24**	N/A	**0.94 J**	**4.8**	**2.1**	--	**3.3 J***	N/A	**68**
Jul-19	**10**	**0.61 J**	**5.3**	**1.00 J**	N/A	**3.2**	**2.7**	--	--	--	**0.66 J**	**9.9**	--	**1.0 J**	**6.1**	**0.36 J**	--	**36**	N/A	--	**4.4**	**1.9 J**	--	**3.0 J***	N/A	**86**
Sep-19	**7.2**	**0.44 J**	**4.0**	**0.95 J**	N/A	**3.2**	**1.4 J**	--	--	--	**0.49 J**	**6.3 JB**	--	**0.58 J**	**2.8**	**0.38 J**	--	**28**	N/A	--	**3.7**	**1.6 J**	--	**2.6 J***	N/A	**64**
Nov-19	**5.8**	**0.60 J**	**25 Cl**	**0.42 J**	N/A	**3.6**	**3.0**	--	--	--	--	**10 B**	--	**1.1 J**	**4.5**	--	--	**22**	N/A	--	**1.9 J**	**1.0 J**		**1.3 J**	N/A	**80**
Jan-20	**7.5**	**0.38 J**	**3.5**	**0.45 J**	N/A	**3.8**	**2.6**	--	--	--	**0.40 J**	**3.1 J**	--	**2.0 J**	**5.4**	--	--	**25**	N/A	--	**2.2**	**1.0 J**		**2.0 J**	N/A	**59**
Mar-20	**7.5**	**0.47 J**	**2.5**	**0.26 J**	N/A	**1.9**	**2.2**	--	**0.36 J**	--	**0.61 J**	**9.6**	--	**2.1 J**	**8.7**	**0.16 J**	--	**24**	N/A	--	**4.2**	**1.8 J**	**0.83**	**3.9**	N/A	**71**
Previous 6-Month Average Apr-Sep 2019	**8.6**	**0.5 J**	**4.2**	**0.8 J**	**NA**	**3.1**	**2.2 J**	**--**	**--**	**--**	**0.6 J**	**6.7 J**	**--**	**0.8 J**	**6.1**	**0.4 J**	**--**	**29.3**	**NA**	**--**	**4.3**	**1.9 J**	**--**	**3.0 J***	**NA**	**73**
Current 6-Month Average Oct 2019-Mar 2020	**6.9**	**0.5 J**	**10.3**	**0.4**	**NA**	**3.1**	**2.6 J**	**-- J**	**0.36 J**	**--**	**0.5 J**	**7.6 J**	**--**	**1.7 J**	**6.2**	**0.16 J**	**--**	**23.7**	**NA**	**--**	**2.8**	**1.3 J**	**--**	**2.4 J***	**NA**	**70**

* value reported is for total xylenes
-- - non-detect (below detection limit); not in total VOC calculation
B - compound was found in the blank and sample
D - duplicate

J - estimated value
NA - not applicable/not analyzed
SSD - sub-slab depressurization
SV - soil vapor

* value reported is for total xylenes
-- - non-detect (below detection limit); not in total VOC calculation
B - compound was found in the blank and sample
D - duplicate

J - estimated value
NA - not applicable/not analyzed
SSD - sub-slab depressurization
SV - soil vapor

APPENDICES

Appendix A—August 2020 Sample Log Sheets/Chain of Custody

Appendix B—Method Detection Limits

Appendix C—Laboratory Analytical Reports

Appendix D—Data Validation Reports

Appendix E—Remedial Action Progress Report #36: April 1, 2020 through September 30, 2020, Sub-Slab-Depressurization Systems, Buildings A and C, Lockheed Martin Middle River Complex

APPENDIX A—AUGUST 2020
SAMPLE LOG SHEETS/CHAIN OF CUSTODY

Baltimore #201

Eurofins TestAmerica, Knoxville
5815 Middlebrook Pike

Knoxville, TN 37921-5947
phone 865.291.3000 fax 865.584.4315

Canister Samples Chain of Custody Record

TestAmerica Laboratories, Inc. assumes no liability with respect to the collection and shipment of these samples.

eurofins | Environment Testing TestAmerica

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact Information	**Client Project Manager:** Josh Mullis	**Samples Collected By:** Josh Mullis / Walt Pryor	COC No: 1 of 6 COCs
Company Name: TETRA TECH INC	**Phone:** 410-279-2700		TALS Project #:
Address: 20251 Century Blvd Ste. 200	**Email:** josh.mullis@tetratech.com		**For Lab Use Only:**
City/State/Zip: Germantown, MD, 20878			Walk-in Client:
Phone: 410-279-2700	**Site Contact:** Josh Mullis		
FAX: —	**Tel/Fax** 410-279-2700		
Project Name: MRC Indoor Air / Soil Vapor	**Analysis Turnaround Time**		
Site/Location: Middle River Complex	Standard (Specific): —		
PO# 112EC08388	Rush (Specifiy):		

140-20175 Chain of Custody

Sample Identification	Sample Start Date	Time Start	Sample End Date	Time Stop	Canister Vacuum in Field, "Hg (Start)	Canister Vacuum in Field, "Hg (Stop)	Flow Controller ID	Canister ID	TO-14/15 (Standard / Low Level)	TO-15 SIM	EPA 3C	EPA 25C	ASTM D-1946	EPA 15/16	Other (Please specify in notes section)	Sa	Ind	Sul	Sol	Sol	Lar	Oth	Sample Specific Notes:
SV-001-C-29	8/25/2020	0908	8/25/2020	1008	-30	-3	09659	34000238	X									X					
SV-004-C-29	↓	0912	↓	1012	-30	-4	10448	09798	X									X					
SV-102-C-29	↓	0917	↓	1017	-30	-4	10436	09642	X									X					
SV-113-C-29	↓	0920	↓	1020	-30	-3	10145	10337	X									X					
SV-088-C-29	↓	0922	↓	1022	-30	-2	11936	11753	X									X					
SV-DUP1-C-29	↓	0000	↓	0000	-30	-3	7255	09669	X									X					
SV-142-C-29	↓	0927	↓	1027	-30	-4	10662	11615	X									X					
SV-155-C-29	↓	0932	↓	1032	-30	-4	7625	34000625	X									X					
SV-133-C-29	↓	0935	↓	1035	-30	-3	10140	10780	X									X					
SV-153-C-29	↓	0937	↓	1037	-30	-3	~~11272~~ JAM	~~34002153~~ JAM	X									X					FLOW 10665 / CAN 10760

Temperature (Fahrenheit)			
Start	Interior	Ambient	
Stop			

Pressure (inches of Hg)			
Start	Interior	Ambient	
Stop			

CUSTODY SEALS INTACT
RECEIVED AMBIENT RT 21.0 / CT 21.0°C
DKD 8-27-20
4 BOXES FED X # 771365697978 m PD
42 CANS / 42 FLOWS

Special Instructions/QC Requirements & Comments: MRC Indoor Air / Soil Vapor Bi-Annual Sampling

Samples Shipped by: [signature]	**Date / Time:** 8/26/2020 1200	**Samples Received by:** [signature]
Samples Relinquished by: [signature]	**Date / Time:** 8/26/20 1200	**Received by:** [signature] Damon ETA KNX 8-27-20 10:00
Relinquished by:	**Date / Time:**	**Received by:**
Lab Use Only: **Shipper Name:**	**Opened by:**	**Condition:**

Form No. CA-C-WI-003, Rev. 2.23, dated 5/4/2020

Baltimore #201

Eurofins TestAmerica, Knoxville
5815 Middlebrook Pike

Knoxville, TN 37921-5947
phone 865.291.3000 fax 865.584.4315

Canister Samples Chain of Custody Record

TestAmerica Laboratories, Inc. assumes no liability with respect to the collection and shipment of these samples.

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TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact Information	**Client Project Manager:** Josh Mullis	**Samples Collected By:** Josh Mullis / Walt Pryor	COC No: 2 of 6 COCs
Company Name: TETRA TECH INC	**Phone:** 410-279-2700		TALS Project #:
Address: 20251 Century Blvd Ste. 200	**Email:** josh.mullis@tetratech.com		**For Lab Use Only:**
City/State/Zip: Germantown, MD, 20878			Walk-in Client:
Phone: 410-279-2700	**Site Contact:** Josh Mullis		Lab Sampling:
FAX: —	**Tel/Fax** 410-279-2700		
Project Name: MRC Indoor Air / Soil Vapor	**Analysis Turnaround Time**		Job / SDG No.:
Site/Location: Middle River Complex	Standard (Specific): —		(See below for Add'l Items)
PO# 112EC08388	Rush (Specifiy):		

Sample Identification	Sample Start Date	Time Start	Sample End Date	Time Stop	Canister Vacuum in Field, "Hg (Start)	Canister Vacuum in Field, "Hg (Stop)	Flow Controller ID	Canister ID	TO-14/15 (Standard / Low Level)	TO-15 SIM	EPA 3C	EPA 25C	ASTM D-1946	EPA 15/16	Other (Please specify in notes section)	Sample Type	Indoor Air/Ambient Air	Sub-Slab	Soil Gas	Soil Vapor Extraction (SVE)	Landfill Gas	Other (Please specify in notes section)	Sample Specific Notes:
SV-DUP2-C-29	8/25/2020	0000	8/25/2020	0000	-30	-4	11272	34002453	X									X					
SV-060-C-29	↓	0941	↓	1041	-27	-2	11477	09644	X									X					
SV-150-C-29	↓	0944	↓	1044	-30	-4	7654	11284	X									X					
SV-152-C-29	↓	0947	↓	1047	-30	-4	11977	34001075	X									X					
SV-141-C-29	↓	0950	↓	1050	-30	-3	11511	11126	X									X					
SV-149-C-29	↓	0953	↓	1053	-30	-5	10158	34000628	X									X					
SV-126-C-29	↓	0956	↓	1056	-30	-4	11976	11693	X									X					

8/25/2020

Temperature (Fahrenheit)			
Start	Interior	Ambient	
Stop			

Pressure (inches of Hg)			
Start	Interior	Ambient	
Stop			

Special Instructions/QC Requirements & Comments: MRC Indoor Air / Soil Vapor Bi-Annual Sampling

Samples Shipped by:	**Date / Time:** 8/26/2020 1200	**Samples Received by:**	
Samples Relinquished by:	**Date / Time:** 8/26/20 1200	**Received by:**	
Relinquished by:	**Date / Time:**	**Received by:**	
Lab Use Only: **Shipper Name:**	**Opened by:**	**Condition:**	

Form No. CA-C-WI-003, Rev. 2.23, dated 5/4/2020

Baltimore #201

Eurofins TestAmerica, Knoxville
5815 Middlebrook Pike
Knoxville, TN 37921-5947
phone 865.291.3000 fax 865.584.4315

Canister Samples Chain of Custody Record

TestAmerica Laboratories, Inc. assumes no liability with respect to the collection and shipment of these samples.

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TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact Information	**Client Project Manager:** Josh Mullis	**Samples Collected By:** Josh Mullis/ Walt Pryor	COC No: 3 of 6 COCs
Company Name: TETRA TECH INC	Phone: 410-279-2700		TALS Project #:
Address: 10251 Century Blvd Ste. 200	Email: josh.mullis@tetratech.com		For Lab Use Only:
City/State/Zip: Germantown, MD, 20874			Walk-in Client:
Phone: 410-279-2700	Site Contact: Josh Mullis		Lab Sampling:
FAX: —	Tel/Fax 410-279-2700		Job / SDG No.:
Project Name: MRC Indoor Air / Soil Vapor	Analysis Turnaround Time		(See below for Add'l Items)
Site/Location: Middle River Complex	Standard (Specific): —		
PO # 112EC08388	Rush (Specifiy):		

Sample Identification	Sample Start Date	Time Start	Sample End Date	Time Stop	Canister Vacuum in Field, "Hg (Start)	Canister Vacuum in Field, "Hg (Stop)	Flow Controller ID	Canister ID	TO-14/15 (Standard / Low Level)	TO-15 SIM	EPA 3C	EPA 25C	ASTM D-1946	EPA 16/16	Other (Please specify in notes section)	Sample Type	Indoor Air/Ambient Air	Sub-Slab	Soil Gas	Soil Vapor Extraction (SVE)	Landfill Gas	Other (Please specify in notes section)	Sample Specific Notes:
IA-001-C-29	8/25/2020	0811	8/25/2020	1611	-30	-3	7635	340-02391	K								K						
IA-004-E-29		0814		1614	-30	-14	8563	10833	K								K						
IA-102-C-29		0822		1622	-30	-4	7588	3100642	K								K						
IA-113-C-29		0823		1623	-30	-7	8749	3100684	K								K						
IA-088-C-29		0824		1624	-30	-8	8607	11710	K								K						
IA-042-C-29		0825		1625	-28	-10	10450	3400 2421	K								K						
IA-155-C-29		0828		1628	-27	-8	8634	10492	K								K						
IA-133-C-29		0831		1631	-30	-11	8464	11665	K								K						
IA-153-C-29		0832		1632	-30	-4	0825	10335	K								K						
IA-Dup1-C-29	↓	0000	↓	0000	-30	-4	09846	10333	K								K						

Temperature (Fahrenheit)			
Start	Interior	Ambient	
Stop			

Pressure (inches of Hg)			
Start	Interior	Ambient	
Stop			

Special Instructions/QC Requirements & Comments: MRC Indoor Air / Soil Vapor Bi-Annual Sampling

Samples Shipped by:	**Date / Time:** 8/26/2020 1200	**Samples Received by:**	
Samples Relinquished by:	**Date / Time:** 8/26/20 1700	**Received by:**	FEDEX 8.27.20 10:00
Relinquished by:	**Date / Time:**	**Received by:**	
Lab Use Only: **Shipper Name:**	**Opened by:**	**Condition:**	

Form No. CA-C-WI-003, Rev. 2.23, dated 5/4/2020

09/01/2020

Baltimore #201

Eurofins TestAmerica, Knoxville
5815 Middlebrook Pike
Knoxville, TN 37921-5947
phone 865.291.3000 fax 865.584.4315

Canister Samples Chain of Custody Record

eurofins | Environment Testing TestAmerica

TestAmerica Laboratories, Inc. assumes no liability with respect to the collection and shipment of these samples.

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact Information	**Client Project Manager:** Josh Mullis	**Samples Collected By:** Josh Mullis / Walt Piper	COC No: 1 of 6 COCs
Company Name: FETNA TECH INC	Phone: 410-279-2700		TALS Project #:
Address: 10251 Century Blvd Ste. 300	Email: josh.mullis@fetnatech.com		For Lab Use Only:
City/State/Zip: Lacmonton, MD, 20878			Walk-in Client:
Phone: 410-279-2700	**Site Contact:** Josh Mullis		Lab Sampling:
FAX: —	Tel/Fax 410-279-2700		Job / SDG No.:
Project Name: MPC Indoor Air / Soil Vapor	**Analysis Turnaround Time**		(See below for Add'l Items)
Site/Location: Middle River Complex	Standard (Specific): ✓		
PO # 1122C09388	Rush (Specifiy):		

Sample Identification	Sample Start Date	Time Start	Sample End Date	Time Stop	Canister Vacuum in Field, "Hg (Start)	Canister Vacuum in Field, "Hg (Stop)	Flow Controller ID	Canister ID	TO-14/15 (Standard / Low Level)	TO-15 SIM	EPA 3C	EPA 25C	ASTM D-1946	EPA 18/16	Other (Please specify in notes section)	Sample Type	Indoor Air/Ambient Air	Sub-Slab	Soil Gas	Soil Vapor Extraction (SVE)	Landfill Gas	Other (Please specify in notes section)	Sample Specific Notes:
IA-060-C-29	8/25/2020	0835	8/26/2020	1635	-29	-5	11937	11875	X								X						
IA-152-C-29		0838		1638	-30	-4	8653	11804	X								X						
IA-150-C-29		0840		1640	-30	-3	7184	11842	X								X						
IA-145-C-29		0842		1642	-29	-1	11528	34001137	X								X						
IA-146-2-29		0843		1643	-29	-8	09655	11573	X								X						
IA-144-C-29		0845		1645	-30	-8	10870	11721	X								X						
IA-141-C-29		0848		1648	-30	-7	7617	11713	X								X						
IA-149-C-29		0850		1650	-30	-6	7187	11572	X								X						
IA-DUP2-C-29		0000		0000	-30	-8	09657	34002455	X								X						
IA-126-C-29	↓	0852	↓	1652	-30	-7	7590	09661	X								X						

Temperature (Fahrenheit)	Interior	Ambient
Start		
Stop		

Pressure (inches of Hg)	Interior	Ambient
Start		
Stop		

Special Instructions/QC Requirements & Comments: MPC Indoor Air / Soil Vapor Bi-Annual Sampling

Samples Shipped by:	**Date / Time:** 8/26/2020 1200	**Samples Received by:**
Samples Relinquished by:	**Date / Time:** 8/26/20 1700	**Received by:** ETA KW 8-27-20 10:00
Relinquished by:	**Date / Time:**	**Received by:**
Lab Use Only: **Shipper Name:**	**Opened by:**	**Condition:**

09/10/2020

Baltimore #201

Eurofins TestAmerica, Knoxville
5815 Middlebrook Pike
Knoxville, TN 37921-5947
phone 865.291.3000 fax 865.584.4315

Canister Samples Chain of Custody Record

TestAmerica Laboratories, Inc. assumes no liability with respect to the collection and shipment of these samples.

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TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact Information	**Client Project Manager:** Josh Mullis	**Samples Collected By:** Josh Mullis/ Walt Pyar
Company Name: TETRA TECH INC	Phone: 410-279-2700	
Address: 2021 Century Blvd Ste. 200	Email: josh.mullis@tetratech.com	
City/State/Zip: Lexington Park, MD, 20653		
Phone: 410-279-2700	**Site Contact:** Josh Mullis	
FAX: —	**Tel/Fax** 410-279-2700	
Project Name: MDE Indoor Air / Soil Vapor	**Analysis Turnaround Time**	
Site/Location: Middle River Complex	Standard (Specific): —	
P O # 1128208388	Rush (Specifiy):	

COC No: 5 of 6 COCs
TALS Project #:
For Lab Use Only:
Walk-in Client:
Lab Sampling:
Job / SDG No.:
(See below for Add'l Items)

Sample Identification	Sample Start Date	Time Start	Sample End Date	Time Stop	Canister Vacuum in Field, "Hg (Start)	Canister Vacuum in Field, "Hg (Stop)	Flow Controller ID	Canister ID	TO-14/15 (Standard / Low Level)	TO-15 SIM	EPA 3C	EPA 25C	ASTM D-1946	EPA 15/16	Other (Please specify in notes section)	Sample Type	Indoor Air/Ambient Air	Sub-Slab	Soil Gas	Soil Vapor Extraction (SVE)	Landfill Gas	Other (Please specify in notes section)	Sample Specific Notes:
IA-BCK-1-29	8/25/2020	0803	8/25/2020	1603	-30	-5	8780	11141	X								X						Outdoor Background Samples
IA-BCK-2-29		0807		1607	-30	-16	8727	11671	X								X						
IA-BCK-3-29		0752		1552	-23	-2	11308	10980	X								X						
IA-BCK-4-29		0757		1557	-30	-7	8689	3400650	X								X						

8/26/2020

Temperature (Fahrenheit)		
Start	Interior	Ambient
Stop		

Pressure (inches of Hg)		
Start	Interior	Ambient
Stop		

Special Instructions/QC Requirements & Comments: MDE Indoor Air / Soil Vapor Bi-Annual Sampling

Samples Shipped by:	**Date / Time:** 8/26/2020 1200	**Samples Received by:**
Samples Relinquished by:	**Date / Time:** 8/28/20 1700	**Received by:** FETA KWX 8-27-20 10:00
Relinquished by:	**Date / Time:**	**Received by:**
Lab Use Only: **Shipper Name:**	**Opened by:**	**Condition:**

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3H00077 1

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Baltimore #201

Eurofins TestAmerica, Knoxville
5815 Middlebrook Pike
Knoxville, TN 37921-5947
phone 865.291.3000 fax 865.584.4315

Canister Samples Chain of Custody Record

TestAmerica Laboratories, Inc. assumes no liability with respect to the collection and shipment of these samples.

140-20195 Chain of Custody

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact Information	**Client Project Manager:** Josh Mellis	**Samples Collected By:** Mellis / Boyer	COC No: 1 of 4 COCs
Company Name: Tetra Tech Inc	Phone: 410-279-2700		
Address: 10251 Centurion Blvd - Ste 200	Email: josh.mellis@tetratech.com		TALS Project #:
City/State/Zip: Germantown, MD 20874			For Lab Use Only:
Phone: 410-279-2700	Site Contact: Josh Mellis		Walk-in Client:
FAX:	Tel/Fax " "		Lab Sampling:
Project Name: MRC Indoor Air	**Analysis Turnaround Time**		Job / SDG No.:
Site/Location: Middle River Complex	Standard (Specific): ✓		(See below for Add'l Items)
P O # 112IC06388	Rush (Specifiy):		

Sample Identification	Sample Start Date	Time Start	Sample End Date	Time Stop	Canister Vacuum in Field, "Hg (Start)	Canister Vacuum in Field, "Hg (Stop)	Flow Controller ID	Canister ID	TO-14/15 (Standard / Low Level)	TO-15 SIM	EPA 3C	EPA 25C	ASTM D-1946	EPA 15/16	Other (Please specify in notes section)	Sample Type	Indoor Air/Ambient Air	Sub-Slab	Soil Gas	Soil Vapor Extraction (SVE)	Landfill Gas	Other (Please specify in notes section)	Sample Specific Notes:
IA-018-A-29	8/26/20	0738	8/26/20	1538	-30	-10	8556	34002427	X								X						
IA-DUP3-A-29		0000		0000	-30	-5	10856	34000268	X								X						
IA-138-A-29		0740		1540	-30	-3	7361	09787	X								X						
IA-174-A-29		0744		1544	-28	-3	09855	09632	X								X						
IA-093-A-29		0745		1545	-28	-4	11581	11592	X								X						
IA-015-A-29		0750		1550	-29	-5	09866	11806	X								X						
IA-078-A-29		0753		1553	-30	-7	8549	34002420	X								X						
IA-086-A-29		0754		1554	-30	-5	11816	11877	X								X						
IA-168-A-29		0756		1556	-30	-4	10691	11840	X								X						
IA-DUP4-A-29		0000	↓	0000	-29	0	7146	10924	X								X						

Temperature (Fahrenheit)	Interior	Ambient
Start		
Stop		

Pressure (inches of Hg)	Interior	Ambient
Start		
Stop		

Received @ ambient, 2 boxes
Fedex Pkg Custody seal intact
trk# 1713 7973 0234
" " 0370
KL 8/28/20

Special Instructions/QC Requirements & Comments:

Samples Shipped by:	Date / Time: 8/27/20 1230	**Samples Received by:**	1230
Samples Relinquished by:	Date / Time: 8/27/20 1700	**Received by:** ETA 8/28/20	1000
Relinquished by:	Date / Time:	**Received by:**	

4T
22 cans, 22 flows

Lab Use Only: **Shipper Name:** **Opened by:** **Condition:**

Baltimore #201

Eurofins TestAmerica, Knoxville
5815 Middlebrook Pike

Knoxville, TN 37921-5947
phone 865.291.3000 fax 865.584.4315

Canister Samples Chain of Custody Record

TestAmerica Laboratories, Inc. assumes no liability with respect to the collection and shipment of these samples.

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TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact Information		Client Project Manager: Josh Mullis	Samples Collected By: Mullis / Pryor	COC No: 4 of 4 COCs
Company Name: Tetra Tech Inc		Phone: 410-279-2700		TALS Project #:
Address: 20251 Century Blvd - Ste 200		Email: josh.mullis@tetratech.com		For Lab Use Only:
City/State/Zip: Germantown, MD 20874				Walk-in Client:
Phone: 410-279-2700		Site Contact: Josh Mullis		Lab Sampling:
FAX:		Tel/Fax: " "		
Project Name: MRC Indoor Air		Analysis Turnaround Time		Job / SDG No.:
Site/Location: Middle River Complex		Standard (Specific): ✓		(See below for Add'l Items)
PO# 112IC08388		Rush (Specifiy):		

Sample Identification	Sample Start Date	Time Start	Sample End Date	Time Stop	Canister Vacuum in Field, "Hg (Start)	Canister Vacuum in Field, "Hg (Stop)	Flow Controller ID	Canister ID	TO-14/15 (Standard / Low Level)	TO-15 SIM	EPA 3C	EPA 25C	ASTM D-1946	EPA 15/16	Other (Please specify in notes section)	Sample Type	Indoor Air/Ambient Air	Sub-Slab	Soil Gas	Soil Vapor Extraction (SVE)	Landfill Gas	Other (Please specify in notes section)	Sample Specific Notes:
IA-075A-29	8/26/20	0802	8/26/20	1602	-30	-5	10645	11858	X								X						
IA-021-A-29		0804		1604	-30	-8	7596	10758	X								X						
IA-136-A-29		0805		1605	-29	-9	8815	10736	X								X						
IA-117-A-29		0807		1607	-30	-4	09648	34001625	X								X						
IA-079-A-29		0809		1609	-30	-10	11500	34001971	X								X						
IA-118-A-29		0811		1611	-30	-3	11479	10739	X								X						
IA-081-A-29		0815		1615	-30	-4	6919	34000687	X								X						
IA-100-B-29		0820		1620	-30	-10	7066	11658	X								X						
IA-101-B-29		0822		1622	-30	-5	4769	34001187	X								X						

Temperature (Fahrenheit)			
Start	Interior	Ambient	
Stop			

Pressure (inches of Hg)			
Start	Interior	Ambient	
Stop			

Special Instructions/QC Requirements & Comments:

Samples Shipped by: Walt Pry	Date / Time: 8/27/20 1230	Samples Received by: [signature] 1230	
Samples Relinquished by: [signature]	Date / Time: 8/27/20 1700	Received by: [signature] ETA 8/28/20 1000	
Relinquished by:	Date / Time:	Received by:	
Lab Use Only: Shipper Name:	Opened by:	Condition:	

Form No. CA-C-WI-003, Rev. 2.23, dated 5/4/2020

Eurofins TestAmerica, Knoxville
5815 Middlebrook Pike
Knoxville, TN 37921-5947
phone 865.291.3000 fax 865.584.4315

Baltimore #201

Canister Samples Chain of Custody Record

TestAmerica Laboratories, Inc. assumes no liability with respect to the collection and shipment of these samples.

140-20194 Chain of Custody

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact Information	**Client Project Manager:** Josh Mullis	**Samples Collected By:** Josh Mullis/ Walt Pyar	COC No: 1 of 4 COCs
Company Name: TETRA TECH INC	Phone: 410-279-2700		TALS Project #:
Address: 10251 Century Blvd Ste. 200	Email: josh.mullis@tetratech.com		For Lab Use Only:
City/State/Zip Germantown, MD, 20874			Walk-in Client:
Phone: 410-279-2700	Site Contact: Josh Mullis		Lab Sampling:
FAX: —	Tel/Fax 410-279-2700		
Project Name: MAC Indoor Air / Soil Vapor	**Analysis Turnaround Time**		Job / SDG No.:
Site/Location: Middle Run Complex	Standard (Specific): ✓		(See below for Add'l Items)
P O # 1128C09388	Rush (Specifiy):		

Sample Identification	Sample Start Date	Time Start	Sample End Date	Time Stop	Canister Vacuum in Field, "Hg (Start)	Canister Vacuum in Field, "Hg (Stop)	Flow Controller ID	Canister ID	TO-14/15 (Standard / Low Level)	TO-15 SIM	EPA 3C	EPA 25C	ASTM D-1946	EPA 15/16	Other (Please specify in notes section)	Sample Type	Indoor Air/Ambient Air	Sub-Slab	Soil Gas	Soil Vapor Extraction (SVE)	Landfill Gas	Other (Please specify in notes section)	Sample Specific Notes:
SV-172-A-29	8/26/20	0840	8/26/20	1002	-30	0	10056	11720	X									R					
SV-116-A-29		0843		0958	-30	0	11894	3400 2449	X									R					
SV-DUP3-A-29		0000		0000	-28	0	11314	3400 2455	X									R					
SV-138-A-29		0848		1003	-26	+2	11260	10753	X									R					
SV-173-A-29		0850		1004	-30	0	7269	3400 2475	X									R					
SV-171-A-29		0852		1006	-30	-1	10446	11848	X									R					
SV-174-A-29		0854		1007	-30	0	11759	11751	X									R					
SV-177-A-29		0857		1008	-30	0	7259	11111	X									R					
SV-015-A-29		0903		1012	-30	-1	11924	3400 2488	X									R					
SV-078-A-29	✓	0908	✓	1016	-29	-2	11648	10960	X									R					

Temperature (Fahrenheit)	Interior	Ambient
Start		
Stop		

Pressure (inches of Hg)	Interior	Ambient
Start		
Stop		

Received @ ambient, 2 boxes
Fedex po, Custody seal intact
trk# 7713 7973 0430
7972 9951

Special Instructions/QC Requirements & Comments: MAC Indoor Air / Soil Vapor Bi-Annual Sampling KW 8/28/20

Samples Shipped by:	Date / Time: 8/27/20 1230	Samples Received by:	1230
Samples Relinquished by:	Date / Time: 8/27/20 1700	Received by: ETA 8/28/20	1000
Relinquished by:	Date / Time:	Received by:	4T
Lab Use Only: Shipper Name:	Opened by:	Condition:	20 cans, 20 flows

Form No. CA-C-WI-003, Rev. 2.23, dated 5/4/2020

Baltimore #201

Eurofins TestAmerica, Knoxville
5815 Middlebrook Pike

Knoxville, TN 37921-5947
phone 865.291.3000 fax 865.584.4315

Canister Samples Chain of Custody Record

TestAmerica Laboratories, Inc. assumes no liability with respect to the collection and shipment of these samples.

eurofins | Environment Testing TestAmerica

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact Information	**Client Project Manager:** Josh Mullis	**Samples Collected By:** Josh Mullis/ Walt Pryor	COC No: 2 of 4 COCs
Company Name: TETRA TECH INC	Phone: 410-279-2700		TALS Project #:
Address: 20251 Century Blvd Ste. 200	Email: josh.mullis@tetratech.com		**For Lab Use Only:**
City/State/Zip Germantown, MD, 20878			Walk-in Client:
Phone: 410-279-2700	Site Contact: Josh Mullis		Lab Sampling:
FAX: —	Tel/Fax 410-279-2700		
Project Name: MRC Indoor Air / Soil Vapor	**Analysis Turnaround Time**		Job / SDG No.:
Site/Location: Middle River Complex	Standard (Specific): —		(See below for Add'l Items)
P O # 112EC09388	Rush (Specifiy):		

Sample Identification	Sample Start Date	Time Start	Sample End Date	Time Stop	Canister Vacuum in Field, "Hg (Start)	Canister Vacuum in Field, "Hg (Stop)	Flow Controller ID	Canister ID	TO-14/15 (Standard / Low Level)	TO-15 SIM	EPA 3C	EPA 25C	ASTM D-1946	EPA 15/16	Other (Please specify in notes section)	Sample Type	Indoor Air/Ambient Air	Sub-Slab	Soil Gas	Soil Vapor Extraction (SVE)	Landfill Gas	Other (Please specify in notes section)	Sample Specific Notes:
SV-076-A-29	8/26/20	0912	8/26/20	1018	-30	0	~~7837~~ 7367	11830	X									X					Time = 1018, flow 7367
SV-168-A-29	↓	0916	↓	1020	-30	-2	7640	34000763	X									X					
SV-DUP4-A-29	↓	0000	↓	0000	-30	-3	8137	34002412	X									X					
SV-075-A-29	↓	0920	↓	1024	-30	-2	10301	34000730	X									X					
SV-136-A-29	↓	0924	↓	1026	-28	-3	10874	09789	X									X					
SV-101-B-29	↓	0927	↓	1027	-25	0	11582	34002178	X									X					
SV-100-B-29	↓	0930	↓	1030	+23	0	7491	11672	X									X					* regulator cracked
SV-079-A-29	↓	0935	↓	1035	-30	-3	7192	34002185	X									X					34002185
SV-139-A-29	↓	0938	↓	1038	-30	-5	11273	34000662	X									X					
SV-118-A-29	↓	0941	↓	1041	-28	-4	7437	34002461	X									X					

Temperature (Fahrenheit)			
Start	Interior	Ambient	
Stop			

Pressure (inches of Hg)			
Start	Interior	Ambient	
Stop			

Special Instructions/QC Requirements & Comments: MRC Indoor Air / Soil Vapor Bi-Annual Sampling

Samples Shipped by: Walt Pryor	**Date / Time:** 8/27/20 1230	**Samples Received by:** [signature] 1230	
Samples Relinquished by: [signature]	**Date / Time:** 8/27/20 1700	**Received by:** [signature] ETA 8/28/20 1000	
Relinquished by:	**Date / Time:**	**Received by:**	
Lab Use Only: **Shipper Name:**	**Opened by:**	**Condition:**	

Form No. CA-C-WI-003, Rev. 2.23, dated 5/4/2020

TETRA TECH

SV/IAQ SAMPLING ROUND 29, AUGUST 2020, MIDDLE RIVER COMPLEX

Date: August 25, 2020

SAMPLING DATA:

SOIL VAPOR SAMPLE (1-hour)

SV Sample ID:	SV-001-C-29
SV Canister #:	34000238
SV Regulator #:	09659
SV Start Time:	9:08 AM
SV Start Pressure:	-30
SV Stop Time:	10:08 AM
SV Stop Pressure:	-3

INDOOR AIR QUALITY SAMPLE (8-hour)

IAQ Sample ID:	IA-001-C-29
IAQ Canister #:	34002391
IAQ Regulator #:	7365
IAQ Start Time:	8:11 AM
IAQ Start Pressure:	-30
IAQ Stop Time:	4:11 AM
IAQ Stop Pressure:	-3

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected
TO-15	1 Liter Canister with timed flow regulator	☒ Yes ☐ No

OBSERVATIONS / NOTES:

Duplicate ID (if collected):

Signature:



TETRA TECH

SV/IAQ SAMPLING ROUND 29, AUGUST 2020, MIDDLE RIVER COMPLEX

Date: August 25, 2020

SAMPLING DATA:

SOIL VAPOR SAMPLE (1-hour)

SV Sample ID:	SV-004-C-29
SV Canister #:	09798
SV Regulator #:	10448
SV Start Time:	9:12 AM
SV Start Pressure:	-30
SV Stop Time:	10:12 AM
SV Stop Pressure:	-4

INDOOR AIR QUALITY SAMPLE (8-hour)

IAQ Sample ID:	IA-004-C-29
IAQ Canister #:	10833
IAQ Regulator #:	8563
IAQ Start Time:	8:14 AM
IAQ Start Pressure:	-30
IAQ Stop Time:	4:14 PM
IAQ Stop Pressure:	-14

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected
TO-15	1 Liter Canister with timed flow regulator	☒ Yes ☐ No

OBSERVATIONS / NOTES:

Duplicate ID (if collected):

Signature:



TETRA TECH

SV/IAQ SAMPLING ROUND 29, AUGUST 2020, MIDDLE RIVER COMPLEX

Date: August 26, 2020

SAMPLING DATA:

SOIL VAPOR SAMPLE (1-hour)

SV Sample ID:	SV-015-A-29
SV Canister #:	34002488
SV Regulator #:	11924
SV Start Time:	9:03 AM
SV Start Pressure:	-30
SV Stop Time:	10:12 AM
SV Stop Pressure:	-1

INDOOR AIR QUALITY SAMPLE (8-hour)

IAQ Sample ID:	IA-015-A-29
IAQ Canister #:	11806
IAQ Regulator #:	09866
IAQ Start Time:	7:50 AM
IAQ Start Pressure:	-29
IAQ Stop Time:	3:50 PM
IAQ Stop Pressure:	-5

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected
TO-15	1 Liter Canister with timed flow regulator	☒ Yes ☐ No

OBSERVATIONS / NOTES:

Duplicate ID (if collected):

Signature:



TETRA TECH

SV/IAQ SAMPLING ROUND 29, AUGUST 2020, MIDDLE RIVER COMPLEX

Date: August 26, 2020

SAMPLING DATA:

SOIL VAPOR SAMPLE (1-hour)

SV Sample ID:	
SV Canister #:	
SV Regulator #:	
SV Start Time:	
SV Start Pressure:	
SV Stop Time:	
SV Stop Pressure:	

INDOOR AIR QUALITY SAMPLE (8-hour)

IAQ Sample ID:	IA-018-A-29
IAQ Canister #:	34002427
IAQ Regulator #:	8556
IAQ Start Time:	7:38 AM
IAQ Start Pressure:	-30
IAQ Stop Time:	3:38 PM
IAQ Stop Pressure:	-10

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected
TO-15	1 Liter Canister with timed flow regulator	☒ Yes ☐ No

OBSERVATIONS / NOTES:

IA-DUP-3 collected here

Duplicate ID (if collected): IA-DUP-3-A

Signature:



TETRA TECH

SV/IAQ SAMPLING ROUND 29, AUGUST 2020, MIDDLE RIVER COMPLEX

Date: August 26, 2020

SAMPLING DATA:

SOIL VAPOR SAMPLE (1-hour)

SV Sample ID:	
SV Canister #:	
SV Regulator #:	
SV Start Time:	
SV Start Pressure:	
SV Stop Time:	
SV Stop Pressure:	

INDOOR AIR QUALITY SAMPLE (8-hour)

IAQ Sample ID:	IA-021-A-29
IAQ Canister #:	10758
IAQ Regulator #:	7596
IAQ Start Time:	8:04 AM
IAQ Start Pressure:	-30
IAQ Stop Time:	4:04 PM
IAQ Stop Pressure:	-8

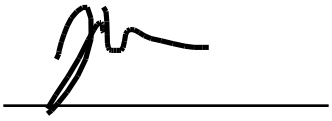
SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected
TO-15	1 Liter Canister with timed flow regulator	☒ Yes ☐ No

OBSERVATIONS / NOTES:

Duplicate ID (if collected):

Signature:



TETRA TECH

SV/IAQ SAMPLING ROUND 29, AUGUST 2020, MIDDLE RIVER COMPLEX

Date: August 25, 2020

SAMPLING DATA:

SOIL VAPOR SAMPLE (1-hour)

SV Sample ID:	SV-060-C-29
SV Canister #:	09644
SV Regulator #:	11477
SV Start Time:	9:41 AM
SV Start Pressure:	-27
SV Stop Time:	10:41 AM
SV Stop Pressure:	-2

INDOOR AIR QUALITY SAMPLE (8-hour)

IAQ Sample ID:	IA-060-C-29
IAQ Canister #:	11875
IAQ Regulator #:	11937
IAQ Start Time:	8:35 AM
IAQ Start Pressure:	-29
IAQ Stop Time:	4:35 PM
IAQ Stop Pressure:	-5

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected
TO-15	1 Liter Canister with timed flow regulator	☒ Yes ☐ No

OBSERVATIONS / NOTES:

Duplicate ID (if collected):

Signature:

TETRA TECH

SV/IAQ SAMPLING ROUND 29, AUGUST 2020, MIDDLE RIVER COMPLEX

Date: August 26, 2020

SAMPLING DATA:

SOIL VAPOR SAMPLE (1-hour)

SV Sample ID:	SV-075-A-29
SV Canister #:	34000730
SV Regulator #:	10301
SV Start Time:	9:20 AM
SV Start Pressure:	-30
SV Stop Time:	10:24 AM
SV Stop Pressure:	-2

INDOOR AIR QUALITY SAMPLE (8-hour)

IAQ Sample ID:	IA-075-A-29
IAQ Canister #:	11858
IAQ Regulator #:	10645
IAQ Start Time:	8:02 AM
IAQ Start Pressure:	-30
IAQ Stop Time:	4:02 PM
IAQ Stop Pressure:	-5

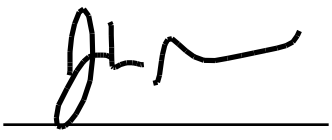
SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected
TO-15	1 Liter Canister with timed flow regulator	☒ Yes ☐ No

OBSERVATIONS / NOTES:

Duplicate ID (if collected):

Signature:



TETRA TECH

SV/IAQ SAMPLING ROUND 29, AUGUST 2020, MIDDLE RIVER COMPLEX

Date: August 26, 2020

SAMPLING DATA:

SOIL VAPOR SAMPLE (1-hour)

SV Sample ID:	SV-076-A-29
SV Canister #:	11830
SV Regulator #:	7367
SV Start Time:	9:12 AM
SV Start Pressure:	-30
SV Stop Time:	10:18 AM
SV Stop Pressure:	0

INDOOR AIR QUALITY SAMPLE (8-hour)

IAQ Sample ID:	IA-076-A-29
IAQ Canister #:	11877
IAQ Regulator #:	11816
IAQ Start Time:	7:54 AM
IAQ Start Pressure:	-30
IAQ Stop Time:	3:54 PM
IAQ Stop Pressure:	-5

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected
TO-15	1 Liter Canister with timed flow regulator	☒ Yes ☐ No

OBSERVATIONS / NOTES:

Duplicate ID (if collected):

Signature:



TETRA TECH

SV/IAQ SAMPLING ROUND 29, AUGUST 2020, MIDDLE RIVER COMPLEX

Date: August 26, 2020

SAMPLING DATA:

SOIL VAPOR SAMPLE (1-hour)

SV Sample ID:	SV-078-A-29
SV Canister #:	10960
SV Regulator #:	11648
SV Start Time:	9:08 AM
SV Start Pressure:	-29
SV Stop Time:	10:16 AM
SV Stop Pressure:	-2

INDOOR AIR QUALITY SAMPLE (8-hour)

IAQ Sample ID:	IA-078-A-29
IAQ Canister #:	34002420
IAQ Regulator #:	8549
IAQ Start Time:	7:53 AM
IAQ Start Pressure:	-30
IAQ Stop Time:	3:53 PM
IAQ Stop Pressure:	-7

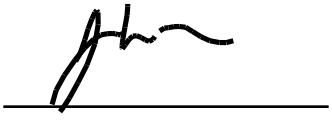
SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected
TO-15	1 Liter Canister with timed flow regulator	☒ Yes ☐ No

OBSERVATIONS / NOTES:

Duplicate ID (if collected):

Signature:



TETRA TECH

SV/IAQ SAMPLING ROUND 29, AUGUST 2020, MIDDLE RIVER COMPLEX

Date: August 26, 2020

SAMPLING DATA:

SOIL VAPOR SAMPLE (1-hour)

SV Sample ID:	SV-079-A-29
SV Canister #:	34002185
SV Regulator #:	7192
SV Start Time:	9:35 AM
SV Start Pressure:	-30
SV Stop Time:	10:35 AM
SV Stop Pressure:	-3

INDOOR AIR QUALITY SAMPLE (8-hour)

IAQ Sample ID:	IA-079-A-29
IAQ Canister #:	34001971
IAQ Regulator #:	11500
IAQ Start Time:	8:09 AM
IAQ Start Pressure:	-30
IAQ Stop Time:	4:09 PM
IAQ Stop Pressure:	-10

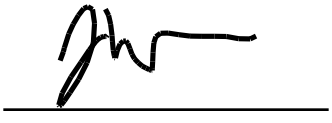
SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected
TO-15	1 Liter Canister with timed flow regulator	☒ Yes ☐ No

OBSERVATIONS / NOTES:

Duplicate ID (if collected):

Signature:



TETRA TECH

SV/IAQ SAMPLING ROUND 29, AUGUST 2020, MIDDLE RIVER COMPLEX

Date: August 26, 2020

SAMPLING DATA:

SOIL VAPOR SAMPLE (1-hour)

SV Sample ID:	
SV Canister #:	
SV Regulator #:	
SV Start Time:	
SV Start Pressure:	
SV Stop Time:	
SV Stop Pressure:	

INDOOR AIR QUALITY SAMPLE (8-hour)

IAQ Sample ID:	IA-081-A-29
IAQ Canister #:	34000687
IAQ Regulator #:	6919
IAQ Start Time:	8:15 AM
IAQ Start Pressure:	-30
IAQ Stop Time:	4:15 PM
IAQ Stop Pressure:	-4

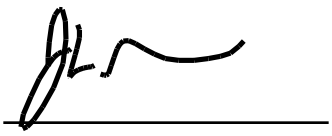
SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected
TO-15	1 Liter Canister with timed flow regulator	☒ Yes ☐ No

OBSERVATIONS / NOTES:

Duplicate ID (if collected):

Signature:



TETRA TECH

SV/IAQ SAMPLING ROUND 29, AUGUST 2020, MIDDLE RIVER COMPLEX

Date: August 25, 2020

SAMPLING DATA:

SOIL VAPOR SAMPLE (1-hour)

SV Sample ID:	SV-088-C-29
SV Canister #:	11753
SV Regulator #:	11936
SV Start Time:	9:22 AM
SV Start Pressure:	-30
SV Stop Time:	10:22 AM
SV Stop Pressure:	-2

INDOOR AIR QUALITY SAMPLE (8-hour)

IAQ Sample ID:	IA-088-C-29
IAQ Canister #:	11710
IAQ Regulator #:	8607
IAQ Start Time:	8:24 AM
IAQ Start Pressure:	-30
IAQ Stop Time:	4:24 PM
IAQ Stop Pressure:	-8

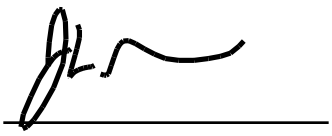
SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected
TO-15	1 Liter Canister with timed flow regulator	☒ Yes ☐ No

OBSERVATIONS / NOTES:

Duplicate ID (if collected):

Signature:



TETRA TECH

SV/IAQ SAMPLING ROUND 29, AUGUST 2020, MIDDLE RIVER COMPLEX

Date: August 26, 2020

SAMPLING DATA:

SOIL VAPOR SAMPLE (1-hour)

SV Sample ID:	
SV Canister #:	
SV Regulator #:	
SV Start Time:	
SV Start Pressure:	
SV Stop Time:	
SV Stop Pressure:	

INDOOR AIR QUALITY SAMPLE (8-hour)

IAQ Sample ID:	IA-093-A-29
IAQ Canister #:	11592
IAQ Regulator #:	11581
IAQ Start Time:	7:45 AM
IAQ Start Pressure:	-28
IAQ Stop Time:	3:45 PM
IAQ Stop Pressure:	-4

SAMPLE COLLECTION INFORMATION:

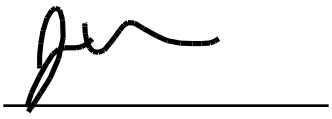
Analysis	Container Requirements	Collected
TO-15	1 Liter Canister with timed flow regulator	☒ Yes ☐ No

OBSERVATIONS / NOTES:

Water present at SV location, collect sample at 177-A instead.

Duplicate ID (if collected):

Signature:



TETRA TECH

SV/IAQ SAMPLING ROUND 29, AUGUST 2020, MIDDLE RIVER COMPLEX

Date: August 26, 2020

SAMPLING DATA:

SOIL VAPOR SAMPLE (1-hour)

SV Sample ID:	SV-100-B-29
SV Canister #:	11672
SV Regulator #:	7491
SV Start Time:	9:30 AM
SV Start Pressure:	23
SV Stop Time:	10:30 AM
SV Stop Pressure:	0

INDOOR AIR QUALITY SAMPLE (8-hour)

IAQ Sample ID:	IA-100-B-29
IAQ Canister #:	11658
IAQ Regulator #:	7066
IAQ Start Time:	8:20 AM
IAQ Start Pressure:	-30
IAQ Stop Time:	4:20 PM
IAQ Stop Pressure:	-10

SAMPLE COLLECTION INFORMATION:

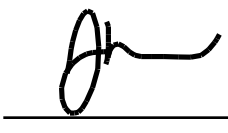
Analysis	Container Requirements	Collected
TO-15	1 Liter Canister with timed flow regulator	☒ Yes ☐ No

OBSERVATIONS / NOTES:

Drilling/concrete mixing in area

Duplicate ID (if collected):

Signature:



TETRA TECH

SV/IAQ SAMPLING ROUND 29, AUGUST 2020, MIDDLE RIVER COMPLEX

Date: August 26, 2020

SAMPLING DATA:

SOIL VAPOR SAMPLE (1-hour)

SV Sample ID:	SV-101-B-29
SV Canister #:	34002478
SV Regulator #:	11582
SV Start Time:	9:27 AM
SV Start Pressure:	-25
SV Stop Time:	10:27 AM
SV Stop Pressure:	-3

INDOOR AIR QUALITY SAMPLE (8-hour)

IAQ Sample ID:	IA-101-B-29
IAQ Canister #:	34001187
IAQ Regulator #:	4769
IAQ Start Time:	8:22 AM
IAQ Start Pressure:	-30
IAQ Stop Time:	4:22 PM
IAQ Stop Pressure:	-5

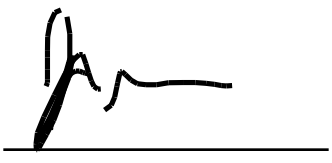
SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected
TO-15	1 Liter Canister with timed flow regulator	☒ Yes ☐ No

OBSERVATIONS / NOTES:

Duplicate ID (if collected):

Signature:



TETRA TECH

SV/IAQ SAMPLING ROUND 29, AUGUST 2020, MIDDLE RIVER COMPLEX

Date: August 25, 2020

SAMPLING DATA:

SOIL VAPOR SAMPLE (1-hour)

SV Sample ID:	SV-102-C-29
SV Canister #:	09642
SV Regulator #:	10436
SV Start Time:	9:17 AM
SV Start Pressure:	-30
SV Stop Time:	10:17 AM
SV Stop Pressure:	-4

INDOOR AIR QUALITY SAMPLE (8-hour)

IAQ Sample ID:	IA-102-C-29
IAQ Canister #:	34000642
IAQ Regulator #:	7588
IAQ Start Time:	8:22 AM
IAQ Start Pressure:	-30
IAQ Stop Time:	4:22 PM
IAQ Stop Pressure:	-4

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected
TO-15	1 Liter Canister with timed flow regulator	☒ Yes ☐ No

OBSERVATIONS / NOTES:

Duplicate 1 collected at SV-102

Duplicate ID (if collected): SV-DUP1-C-29

Signature:



TETRA TECH

SV/IAQ SAMPLING ROUND 29, AUGUST 2020, MIDDLE RIVER COMPLEX

Date: August 25, 2020

SAMPLING DATA:

SOIL VAPOR SAMPLE (1-hour)

SV Sample ID:	SV-113-C-29
SV Canister #:	10337
SV Regulator #:	10145
SV Start Time:	9:20 AM
SV Start Pressure:	-30
SV Stop Time:	10:20 AM
SV Stop Pressure:	-3

INDOOR AIR QUALITY SAMPLE (8-hour)

IAQ Sample ID:	IA-113-C-29
IAQ Canister #:	34000684
IAQ Regulator #:	8749
IAQ Start Time:	8:23 AM
IAQ Start Pressure:	-30
IAQ Stop Time:	4:23 PM
IAQ Stop Pressure:	-7

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected
TO-15	1 Liter Canister with timed flow regulator	☒ Yes ☐ No

OBSERVATIONS / NOTES:

Duplicate ID (if collected):

Signature:



TETRA TECH

SV/IAQ SAMPLING ROUND 29, AUGUST 2020, MIDDLE RIVER COMPLEX

Date: August 26, 2020

SAMPLING DATA:

SOIL VAPOR SAMPLE (1-hour)

SV Sample ID:	
SV Canister #:	
SV Regulator #:	
SV Start Time:	
SV Start Pressure:	
SV Stop Time:	
SV Stop Pressure:	

INDOOR AIR QUALITY SAMPLE (8-hour)

IAQ Sample ID:	IA-117-A-29
IAQ Canister #:	34001625
IAQ Regulator #:	09648
IAQ Start Time:	8:07 AM
IAQ Start Pressure:	-30
IAQ Stop Time:	4:07 PM
IAQ Stop Pressure:	-4

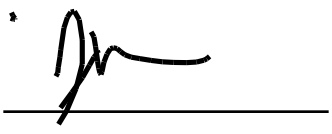
SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected
TO-15	1 Liter Canister with timed flow regulator	☒ Yes ☐ No

OBSERVATIONS / NOTES:

Duplicate ID (if collected):

Signature:



TETRA TECH

SV/IAQ SAMPLING ROUND 29, AUGUST 2020, MIDDLE RIVER COMPLEX

Date: August 26, 2020

SAMPLING DATA:

SOIL VAPOR SAMPLE (1-hour)

SV Sample ID:	SV-118-A-29
SV Canister #:	34002461
SV Regulator #:	7437
SV Start Time:	9:41 AM
SV Start Pressure:	-28
SV Stop Time:	10:41 AM
SV Stop Pressure:	-4

INDOOR AIR QUALITY SAMPLE (8-hour)

IAQ Sample ID:	IA-118-A-29
IAQ Canister #:	10739
IAQ Regulator #:	11479
IAQ Start Time:	8:11 AM
IAQ Start Pressure:	-30
IAQ Stop Time:	4:11 PM
IAQ Stop Pressure:	-3

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected
TO-15	1 Liter Canister with timed flow regulator	☒ Yes ☐ No

OBSERVATIONS / NOTES:

Duplicate ID (if collected):

Signature:



TETRA TECH

SV/IAQ SAMPLING ROUND 29, AUGUST 2020, MIDDLE RIVER COMPLEX

Date: August 25, 2020

SAMPLING DATA:

SOIL VAPOR SAMPLE (1-hour)

SV Sample ID:	SV-126-C-29
SV Canister #:	11693
SV Regulator #:	11976
SV Start Time:	9:56 AM
SV Start Pressure:	-30
SV Stop Time:	10:56 AM
SV Stop Pressure:	-4

INDOOR AIR QUALITY SAMPLE (8-hour)

IAQ Sample ID:	IA-126-C-29
IAQ Canister #:	09661
IAQ Regulator #:	7590
IAQ Start Time:	8:52 AM
IAQ Start Pressure:	-30
IAQ Stop Time:	4:52 PM
IAQ Stop Pressure:	-7

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected
TO-15	1 Liter Canister with timed flow regulator	☒ Yes ☐ No

OBSERVATIONS / NOTES:

Paints and aerosols in the area, in museum area.

Duplicate ID (if collected):

Signature:



TETRA TECH

SV/IAQ SAMPLING ROUND 29, AUGUST 2020, MIDDLE RIVER COMPLEX

Date: August 25, 2020

SAMPLING DATA:

SOIL VAPOR SAMPLE (1-hour)

SV Sample ID:	SV-133-C-29
SV Canister #:	10780
SV Regulator #:	10140
SV Start Time:	9:35 AM
SV Start Pressure:	-30
SV Stop Time:	10:35 AM
SV Stop Pressure:	-3

INDOOR AIR QUALITY SAMPLE (8-hour)

IAQ Sample ID:	IA-133-C-29
IAQ Canister #:	11665
IAQ Regulator #:	8464
IAQ Start Time:	8:31 AM
IAQ Start Pressure:	-30
IAQ Stop Time:	4:31 PM
IAQ Stop Pressure:	-11

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected
TO-15	1 Liter Canister with timed flow regulator	☒ Yes ☐ No

OBSERVATIONS / NOTES:

Duplicate ID (if collected):

Signature:



TETRA TECH

SV/IAQ SAMPLING ROUND 29, AUGUST 2020, MIDDLE RIVER COMPLEX

Date: August 26, 2020

SAMPLING DATA:

SOIL VAPOR SAMPLE (1-hour)

SV Sample ID:	SV-136-A-29
SV Canister #:	09789
SV Regulator #:	10874
SV Start Time:	9:24 AM
SV Start Pressure:	-28
SV Stop Time:	10:26 AM
SV Stop Pressure:	-3

INDOOR AIR QUALITY SAMPLE (8-hour)

IAQ Sample ID:	IA-136-A-29
IAQ Canister #:	10736
IAQ Regulator #:	8815
IAQ Start Time:	8:05 AM
IAQ Start Pressure:	-29
IAQ Stop Time:	4:05 PM
IAQ Stop Pressure:	-9

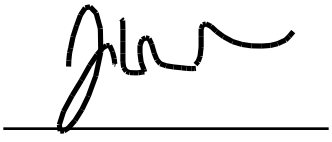
SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected
TO-15	1 Liter Canister with timed flow regulator	☒ Yes ☐ No

OBSERVATIONS / NOTES:

Duplicate ID (if collected):

Signature:



TETRA TECH

SV/IAQ SAMPLING ROUND 29, AUGUST 2020, MIDDLE RIVER COMPLEX

Date: August 26, 2020

SAMPLING DATA:

SOIL VAPOR SAMPLE (1-hour)

SV Sample ID:	SV-138-A-29
SV Canister #:	10753
SV Regulator #:	11260
SV Start Time:	8:48 AM
SV Start Pressure:	-26
SV Stop Time:	10:03 AM
SV Stop Pressure:	2

INDOOR AIR QUALITY SAMPLE (8-hour)

IAQ Sample ID:	IA-138-A-29
IAQ Canister #:	09787
IAQ Regulator #:	7361
IAQ Start Time:	7:40 AM
IAQ Start Pressure:	-30
IAQ Stop Time:	3:40 PM
IAQ Stop Pressure:	-3

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected
TO-15	1 Liter Canister with timed flow regulator	☒ Yes ☐ No

OBSERVATIONS / NOTES:

Duplicate ID (if collected):

Signature:



TETRA TECH

SV/IAQ SAMPLING ROUND 29, AUGUST 2020, MIDDLE RIVER COMPLEX

Date: August 25, 2020

SAMPLING DATA:

SOIL VAPOR SAMPLE (1-hour)

SV Sample ID:	SV-141-C-29
SV Canister #:	11126
SV Regulator #:	11511
SV Start Time:	9:50 AM
SV Start Pressure:	-30
SV Stop Time:	10:50 AM
SV Stop Pressure:	-3

INDOOR AIR QUALITY SAMPLE (8-hour)

IAQ Sample ID:	IA-141-C-29
IAQ Canister #:	11743
IAQ Regulator #:	7617
IAQ Start Time:	8:48 AM
IAQ Start Pressure:	-30
IAQ Stop Time:	4:48 PM
IAQ Stop Pressure:	-7

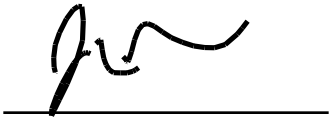
SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected
TO-15	1 Liter Canister with timed flow regulator	☒ Yes ☐ No

OBSERVATIONS / NOTES:

Duplicate ID (if collected):

Signature:



TETRA TECH

SV/IAQ SAMPLING ROUND 29, AUGUST 2020, MIDDLE RIVER COMPLEX

Date: August 25, 2020

SAMPLING DATA:

SOIL VAPOR SAMPLE (1-hour)

SV Sample ID:	SV-142-C-29
SV Canister #:	11615
SV Regulator #:	10662
SV Start Time:	9:27 AM
SV Start Pressure:	-30
SV Stop Time:	10:27 AM
SV Stop Pressure:	-4

INDOOR AIR QUALITY SAMPLE (8-hour)

IAQ Sample ID:	IA-142-C-29
IAQ Canister #:	340002421
IAQ Regulator #:	10450
IAQ Start Time:	8:25 AM
IAQ Start Pressure:	-28
IAQ Stop Time:	4:25 PM
IAQ Stop Pressure:	-10

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected
TO-15	1 Liter Canister with timed flow regulator	☒ Yes ☐ No

OBSERVATIONS / NOTES:

Duplicate ID (if collected):

Signature:



TETRA TECH

SV/IAQ SAMPLING ROUND 29, AUGUST 2020, MIDDLE RIVER COMPLEX

Date: August 25, 2020

SAMPLING DATA:

SOIL VAPOR SAMPLE (1-hour)		INDOOR AIR QUALITY SAMPLE (8-hour)	
SV Sample ID:		IAQ Sample ID:	IA-144-C-29
SV Canister #:		IAQ Canister #:	11721
SV Regulator #:		IAQ Regulator #:	10870
SV Start Time:		IAQ Start Time:	8:45 AM
SV Start Pressure:		IAQ Start Pressure:	-30
SV Stop Time:		IAQ Stop Time:	4:45 PM
SV Stop Pressure:		IAQ Stop Pressure:	-8

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected
TO-15	1 Liter Canister with timed flow regulator	☒ Yes ☐ No

OBSERVATIONS / NOTES:

Duplicate ID (if collected):

Signature:



TETRA TECH

SV/IAQ SAMPLING ROUND 29, AUGUST 2020, MIDDLE RIVER COMPLEX

Date: August 25, 2020

SAMPLING DATA:

SOIL VAPOR SAMPLE (1-hour)

SV Sample ID:	
SV Canister #:	
SV Regulator #:	
SV Start Time:	
SV Start Pressure:	
SV Stop Time:	
SV Stop Pressure:	

INDOOR AIR QUALITY SAMPLE (8-hour)

IAQ Sample ID:	IA-145-C-29
IAQ Canister #:	34001137
IAQ Regulator #:	11528
IAQ Start Time:	8:42 AM
IAQ Start Pressure:	-29
IAQ Stop Time:	4:42 PM
IAQ Stop Pressure:	-1

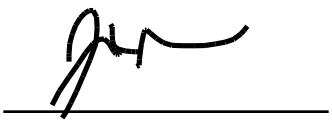
SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected
TO-15	1 Liter Canister with timed flow regulator	☒ Yes ☐ No

OBSERVATIONS / NOTES:

Duplicate ID (if collected):

Signature:



TETRA TECH

SV/IAQ SAMPLING ROUND 29, AUGUST 2020, MIDDLE RIVER COMPLEX

Date: August 25, 2020

SAMPLING DATA:

SOIL VAPOR SAMPLE (1-hour)		INDOOR AIR QUALITY SAMPLE (8-hour)	
SV Sample ID:		IAQ Sample ID:	IA-146-C-29
SV Canister #:		IAQ Canister #:	11573
SV Regulator #:		IAQ Regulator #:	09655
SV Start Time:		IAQ Start Time:	8:43 AM
SV Start Pressure:		IAQ Start Pressure:	-29
SV Stop Time:		IAQ Stop Time:	4:43 PM
SV Stop Pressure:		IAQ Stop Pressure:	-8

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected
TO-15	1 Liter Canister with timed flow regulator	☒ Yes ☐ No

OBSERVATIONS / NOTES:

Duplicate ID (if collected):

Signature:

TETRA TECH

SV/IAQ SAMPLING ROUND 29, AUGUST 2020, MIDDLE RIVER COMPLEX

Date: August 25, 2020

SAMPLING DATA:

SOIL VAPOR SAMPLE (1-hour)

SV Sample ID:	SV-149-C-29
SV Canister #:	34000628
SV Regulator #:	10158
SV Start Time:	9:53 AM
SV Start Pressure:	-30
SV Stop Time:	10:53 AM
SV Stop Pressure:	-5

INDOOR AIR QUALITY SAMPLE (8-hour)

IAQ Sample ID:	IA-149-C-29
IAQ Canister #:	11572
IAQ Regulator #:	7107
IAQ Start Time:	8:50 AM
IAQ Start Pressure:	-30
IAQ Stop Time:	4:50 PM
IAQ Stop Pressure:	-6

SAMPLE COLLECTION INFORMATION:

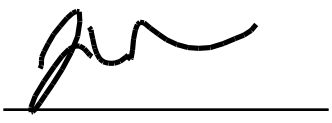
Analysis	Container Requirements	Collected
TO-15	1 Liter Canister with timed flow regulator	☒ Yes ☐ No

OBSERVATIONS / NOTES:

IA-DUP-2 collected at IA-149-C

Duplicate ID (if collected): IA-DUP-2

Signature:



TETRA TECH

SV/IAQ SAMPLING ROUND 29, AUGUST 2020, MIDDLE RIVER COMPLEX

Date: August 25, 2020

SAMPLING DATA:

SOIL VAPOR SAMPLE (1-hour)

SV Sample ID:	SV-150-C-29
SV Canister #:	11284
SV Regulator #:	7654
SV Start Time:	9:44 AM
SV Start Pressure:	-30
SV Stop Time:	10:44 AM
SV Stop Pressure:	-4

INDOOR AIR QUALITY SAMPLE (8-hour)

IAQ Sample ID:	IA-150-C-29
IAQ Canister #:	11842
IAQ Regulator #:	7184
IAQ Start Time:	8:40 AM
IAQ Start Pressure:	-30
IAQ Stop Time:	4:40 PM
IAQ Stop Pressure:	-3

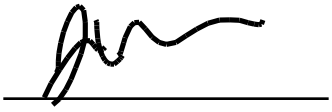
SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected
TO-15	1 Liter Canister with timed flow regulator	☒ Yes ☐ No

OBSERVATIONS / NOTES:

Duplicate ID (if collected):

Signature:



TETRA TECH

SV/IAQ SAMPLING ROUND 29, AUGUST 2020, MIDDLE RIVER COMPLEX

Date: August 25, 2020

SAMPLING DATA:

SOIL VAPOR SAMPLE (1-hour)

SV Sample ID:	SV-152-C-29
SV Canister #:	340001075
SV Regulator #:	11977
SV Start Time:	9:47 AM
SV Start Pressure:	-30
SV Stop Time:	10:47 AM
SV Stop Pressure:	-4

INDOOR AIR QUALITY SAMPLE (8-hour)

IAQ Sample ID:	IA-152-C-29
IAQ Canister #:	11804
IAQ Regulator #:	8653
IAQ Start Time:	8:38 AM
IAQ Start Pressure:	-30
IAQ Stop Time:	4:38 PM
IAQ Stop Pressure:	-4

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected
TO-15	1 Liter Canister with timed flow regulator	☒ Yes ☐ No

OBSERVATIONS / NOTES:

Duplicate ID (if collected):

Signature:



TETRA TECH

SV/IAQ SAMPLING ROUND 29, AUGUST 2020, MIDDLE RIVER COMPLEX

Date: August 25, 2020

SAMPLING DATA:

SOIL VAPOR SAMPLE (1-hour)

SV Sample ID:	SV-153-C-29
SV Canister #:	10760
SV Regulator #:	10665
SV Start Time:	9:37 AM
SV Start Pressure:	-30
SV Stop Time:	10:37 AM
SV Stop Pressure:	-3

INDOOR AIR QUALITY SAMPLE (8-hour)

IAQ Sample ID:	IA-153-C-29
IAQ Canister #:	10335
IAQ Regulator #:	8825
IAQ Start Time:	8:32 AM
IAQ Start Pressure:	-30
IAQ Stop Time:	4:32 PM
IAQ Stop Pressure:	-4

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected
TO-15	1 Liter Canister with timed flow regulator	☒ Yes ☐ No

OBSERVATIONS / NOTES:

IA-DUP-1 collected at IA-153
SV-DUP-2 collected at SV-153

Duplicate ID (if collected): IA-DUP-1, SV-DUP-2

Signature:



TETRA TECH

SV/IAQ SAMPLING ROUND 29, AUGUST 2020, MIDDLE RIVER COMPLEX

Date: August 25, 2020

SAMPLING DATA:

SOIL VAPOR SAMPLE (1-hour)

SV Sample ID:	SV-155-C-29
SV Canister #:	34000625
SV Regulator #:	7625
SV Start Time:	9:32 AM
SV Start Pressure:	-30
SV Stop Time:	10:32 AM
SV Stop Pressure:	-4

INDOOR AIR QUALITY SAMPLE (8-hour)

IAQ Sample ID:	IA-155-C-29
IAQ Canister #:	10492
IAQ Regulator #:	8634
IAQ Start Time:	8:28 AM
IAQ Start Pressure:	-27
IAQ Stop Time:	4:28 PM
IAQ Stop Pressure:	-8

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected
TO-15	1 Liter Canister with timed flow regulator	☒ Yes ☐ No

OBSERVATIONS / NOTES:

Duplicate ID (if collected):

Signature:



TETRA TECH

SV/IAQ SAMPLING ROUND 29, AUGUST 2020, MIDDLE RIVER COMPLEX

Date: August 26, 2020

SAMPLING DATA:

SOIL VAPOR SAMPLE (1-hour)

SV Sample ID:	SV-168-A-29
SV Canister #:	34000763
SV Regulator #:	7640
SV Start Time:	9:16 AM
SV Start Pressure:	-30
SV Stop Time:	10:20 AM
SV Stop Pressure:	-2

INDOOR AIR QUALITY SAMPLE (8-hour)

IAQ Sample ID:	IA-168-A-29
IAQ Canister #:	11840
IAQ Regulator #:	10691
IAQ Start Time:	7:56 AM
IAQ Start Pressure:	-30
IAQ Stop Time:	3:56 PM
IAQ Stop Pressure:	-4

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected
TO-15	1 Liter Canister with timed flow regulator	☒ Yes ☐ No

OBSERVATIONS / NOTES:

IA-DUP-4 and SV-DUP-4 collected here

Duplicate ID (if collected): IA-DUP-4-A, SV-DUP-4-A

Signature:



TETRA TECH

SV/IAQ SAMPLING ROUND 29, AUGUST 2020, MIDDLE RIVER COMPLEX

Date: August 26, 2020

SAMPLING DATA:

SOIL VAPOR SAMPLE (1-hour)

SV Sample ID:	SV-174-A-29
SV Canister #:	11751
SV Regulator #:	11759
SV Start Time:	8:54 AM
SV Start Pressure:	-30
SV Stop Time:	10:07 AM
SV Stop Pressure:	0

INDOOR AIR QUALITY SAMPLE (8-hour)

IAQ Sample ID:	IA-174-A-29
IAQ Canister #:	09632
IAQ Regulator #:	09855
IAQ Start Time:	7:44 AM
IAQ Start Pressure:	-28
IAQ Stop Time:	3:44 PM
IAQ Stop Pressure:	-3

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected
TO-15	1 Liter Canister with timed flow regulator	☒ Yes ☐ No

OBSERVATIONS / NOTES:

Duplicate ID (if collected):

Signature:



TETRA TECH

SV/IAQ SAMPLING ROUND 29, AUGUST 2020, MIDDLE RIVER COMPLEX

Date: August 25, 2020

SAMPLING DATA:

SOIL VAPOR SAMPLE (1-hour)		INDOOR AIR QUALITY SAMPLE (8-hour)	
SV Sample ID:		IAQ Sample ID:	IA-BCK-1-29
SV Canister #:		IAQ Canister #:	11141
SV Regulator #:		IAQ Regulator #:	8780
SV Start Time:		IAQ Start Time:	8:03 AM
SV Start Pressure:		IAQ Start Pressure:	-30
SV Stop Time:		IAQ Stop Time:	4:03 PM
SV Stop Pressure:		IAQ Stop Pressure:	-5

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected
TO-15	1 Liter Canister with timed flow regulator	☒ Yes ☐ No

OBSERVATIONS / NOTES:

Duplicate ID (if collected):

Signature:

TETRA TECH

SV/IAQ SAMPLING ROUND 29, AUGUST 2020, MIDDLE RIVER COMPLEX

Date: August 25, 2020

SAMPLING DATA:

SOIL VAPOR SAMPLE (1-hour)

SV Sample ID:	
SV Canister #:	
SV Regulator #:	
SV Start Time:	
SV Start Pressure:	
SV Stop Time:	
SV Stop Pressure:	

INDOOR AIR QUALITY SAMPLE (8-hour)

IAQ Sample ID:	IA-BCK-2-29
IAQ Canister #:	11671
IAQ Regulator #:	8727
IAQ Start Time:	8:07 AM
IAQ Start Pressure:	-30
IAQ Stop Time:	4:07 PM
IAQ Stop Pressure:	-16

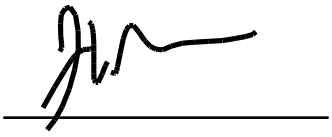
SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected
TO-15	1 Liter Canister with timed flow regulator	☒ Yes ☐ No

OBSERVATIONS / NOTES:

Duplicate ID (if collected):

Signature:



TETRA TECH

SV/IAQ SAMPLING ROUND 29, AUGUST 2020, MIDDLE RIVER COMPLEX

Date: August 25, 2020

SAMPLING DATA:

SOIL VAPOR SAMPLE (1-hour)		INDOOR AIR QUALITY SAMPLE (8-hour)	
SV Sample ID:		IAQ Sample ID:	IA-BCK-3-29
SV Canister #:		IAQ Canister #:	10980
SV Regulator #:		IAQ Regulator #:	11308
SV Start Time:		IAQ Start Time:	7:52 AM
SV Start Pressure:		IAQ Start Pressure:	-23
SV Stop Time:		IAQ Stop Time:	3:52 PM
SV Stop Pressure:		IAQ Stop Pressure:	-2

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected
TO-15	1 Liter Canister with timed flow regulator	☒ Yes ☐ No

OBSERVATIONS / NOTES:

Duplicate ID (if collected):

Signature:

TETRA TECH

SV/IAQ SAMPLING ROUND 29, AUGUST 2020, MIDDLE RIVER COMPLEX

Date: August 25, 2020

SAMPLING DATA:

SOIL VAPOR SAMPLE (1-hour)		INDOOR AIR QUALITY SAMPLE (8-hour)	
SV Sample ID:		IAQ Sample ID:	IA-BCK-4-29
SV Canister #:		IAQ Canister #:	34001650
SV Regulator #:		IAQ Regulator #:	8689
SV Start Time:		IAQ Start Time:	7:57 AM
SV Start Pressure:		IAQ Start Pressure:	-30
SV Stop Time:		IAQ Stop Time:	3:57 PM
SV Stop Pressure:		IAQ Stop Pressure:	-7

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected
TO-15	1 Liter Canister with timed flow regulator	☒ Yes ☐ No

OBSERVATIONS / NOTES:

Duplicate ID (if collected):

Signature:

TETRA TECH

SV/IAQ SAMPLING ROUND 29, AUGUST 2020, MIDDLE RIVER COMPLEX

Date: August 25, 2020

SAMPLING DATA:

SOIL VAPOR SAMPLE (1-hour)

SV Sample ID:	SV-DUP-1-C-29
SV Canister #:	09669
SV Regulator #:	7255
SV Start Time:	
SV Start Pressure:	-30
SV Stop Time:	
SV Stop Pressure:	-3

INDOOR AIR QUALITY SAMPLE (8-hour)

IAQ Sample ID:	IA-DUP-1-C-29
IAQ Canister #:	10333
IAQ Regulator #:	09846
IAQ Start Time:	
IAQ Start Pressure:	-30
IAQ Stop Time:	
IAQ Stop Pressure:	-4

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected
TO-15	1 Liter Canister with timed flow regulator	☒ Yes ☐ No

OBSERVATIONS / NOTES:

SV-DUP-1-C goes with SV-102-C
IA-DUP-1-C goes with IA-153-C

Duplicate ID (if collected):

Signature:



TETRA TECH

SV/IAQ SAMPLING ROUND 29, AUGUST 2020, MIDDLE RIVER COMPLEX

Date: August 25, 2020

SAMPLING DATA:

SOIL VAPOR SAMPLE (1-hour)

SV Sample ID:	SV-DUP-2-C-29
SV Canister #:	34002453
SV Regulator #:	11272
SV Start Time:	
SV Start Pressure:	-30
SV Stop Time:	
SV Stop Pressure:	-4

INDOOR AIR QUALITY SAMPLE (8-hour)

IAQ Sample ID:	IA-DUP-2-C-29
IAQ Canister #:	34002485
IAQ Regulator #:	09657
IAQ Start Time:	
IAQ Start Pressure:	-30
IAQ Stop Time:	
IAQ Stop Pressure:	-8

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected
TO-15	1 Liter Canister with timed flow regulator	☒ Yes ☐ No

OBSERVATIONS / NOTES:

SV-DUP-2-C goes with SV-153-C
IA-DUP-2-C goes with IA-149-C

Duplicate ID (if collected):

Signature:



TETRA TECH

SV/IAQ SAMPLING ROUND 29, AUGUST 2020, MIDDLE RIVER COMPLEX

Date: August 26, 2020

SAMPLING DATA:

SOIL VAPOR SAMPLE (1-hour)

SV Sample ID:	SV-DUP-3-A-29
SV Canister #:	34002455
SV Regulator #:	11314
SV Start Time:	
SV Start Pressure:	-28
SV Stop Time:	
SV Stop Pressure:	0

INDOOR AIR QUALITY SAMPLE (8-hour)

IAQ Sample ID:	IA-DUP-3-A-29
IAQ Canister #:	34000768
IAQ Regulator #:	10856
IAQ Start Time:	
IAQ Start Pressure:	-30
IAQ Stop Time:	
IAQ Stop Pressure:	-5

SAMPLE COLLECTION INFORMATION:

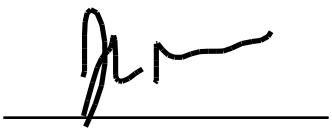
Analysis	Container Requirements	Collected
TO-15	1 Liter Canister with timed flow regulator	☒ Yes ☐ No

OBSERVATIONS / NOTES:

SV-DUP-3-A goes with SV-116-A
IA-DUP-3-A goes with IA-018-A

Duplicate ID (if collected):

Signature:



TETRA TECH

SV/IAQ SAMPLING ROUND 29, AUGUST 2020, MIDDLE RIVER COMPLEX

Date: August 26, 2020

SAMPLING DATA:

SOIL VAPOR SAMPLE (1-hour)

SV Sample ID:	SV-DUP-4-A-29
SV Canister #:	34002412
SV Regulator #:	8137
SV Start Time:	
SV Start Pressure:	-30
SV Stop Time:	
SV Stop Pressure:	-3

INDOOR AIR QUALITY SAMPLE (8-hour)

IAQ Sample ID:	IA-DUP-4-A-29
IAQ Canister #:	10924
IAQ Regulator #:	7146
IAQ Start Time:	
IAQ Start Pressure:	-29
IAQ Stop Time:	
IAQ Stop Pressure:	0

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected
TO-15	1 Liter Canister with timed flow regulator	☒ Yes ☐ No

OBSERVATIONS / NOTES:

SV-DUP-4-A goes with SV-168-A
IA-DUP-4-A goes with IA-168-A

Duplicate ID (if collected):

Signature:

TETRA TECH

SV/IAQ SAMPLING ROUND 29, AUGUST 2020, MIDDLE RIVER COMPLEX

Date: August 26, 2020

SAMPLING DATA:

SOIL VAPOR SAMPLE (1-hour)

SV Sample ID:	SV-116-A-29
SV Canister #:	34002449
SV Regulator #:	11894
SV Start Time:	8:43 AM
SV Start Pressure:	-30
SV Stop Time:	9:58 AM
SV Stop Pressure:	0

INDOOR AIR QUALITY SAMPLE (8-hour)

IAQ Sample ID:	
IAQ Canister #:	
IAQ Regulator #:	
IAQ Start Time:	
IAQ Start Pressure:	
IAQ Stop Time:	
IAQ Stop Pressure:	

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected
TO-15	1 Liter Canister with timed flow regulator	☒ Yes ☐ No

OBSERVATIONS / NOTES:

SV-DUP3 collected here

Duplicate ID (if collected): SV-DUP-3-A-29

Signature:



TETRA TECH

SV/IAQ SAMPLING ROUND 29, AUGUST 2020, MIDDLE RIVER COMPLEX

Date: August 26, 2020

SAMPLING DATA:

SOIL VAPOR SAMPLE (1-hour)

SV Sample ID:	SV-139-A-29
SV Canister #:	34000662
SV Regulator #:	11273
SV Start Time:	9:38 AM
SV Start Pressure:	-30
SV Stop Time:	10:38 AM
SV Stop Pressure:	-5

INDOOR AIR QUALITY SAMPLE (8-hour)

IAQ Sample ID:	
IAQ Canister #:	
IAQ Regulator #:	
IAQ Start Time:	
IAQ Start Pressure:	
IAQ Stop Time:	
IAQ Stop Pressure:	

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected
TO-15	1 Liter Canister with timed flow regulator	☒ Yes ☐ No

OBSERVATIONS / NOTES:

Sample due to 081-A being epoxied shut

Duplicate ID (if collected):

Signature:

TETRA TECH

SV/IAQ SAMPLING ROUND 29, AUGUST 2020, MIDDLE RIVER COMPLEX

Date: August 26, 2020

SAMPLING DATA:

SOIL VAPOR SAMPLE (1-hour)

SV Sample ID:	SV-171-A-29
SV Canister #:	11848
SV Regulator #:	10446
SV Start Time:	8:52 AM
SV Start Pressure:	-30
SV Stop Time:	10:06 AM
SV Stop Pressure:	-1

INDOOR AIR QUALITY SAMPLE (8-hour)

IAQ Sample ID:	
IAQ Canister #:	
IAQ Regulator #:	
IAQ Start Time:	
IAQ Start Pressure:	
IAQ Stop Time:	
IAQ Stop Pressure:	

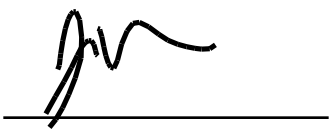
SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected
TO-15	1 Liter Canister with timed flow regulator	☒ Yes ☐ No

OBSERVATIONS / NOTES:

Duplicate ID (if collected):

Signature:



TETRA TECH

SV/IAQ SAMPLING ROUND 29, AUGUST 2020, MIDDLE RIVER COMPLEX

Date: August 26, 2020

SAMPLING DATA:

SOIL VAPOR SAMPLE (1-hour)

SV Sample ID:	SV-172-A-29
SV Canister #:	11720
SV Regulator #:	10056
SV Start Time:	8:40 AM
SV Start Pressure:	-30
SV Stop Time:	10:02 AM
SV Stop Pressure:	0

INDOOR AIR QUALITY SAMPLE (8-hour)

IAQ Sample ID:	
IAQ Canister #:	
IAQ Regulator #:	
IAQ Start Time:	
IAQ Start Pressure:	
IAQ Stop Time:	
IAQ Stop Pressure:	

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected
TO-15	1 Liter Canister with timed flow regulator	☒ Yes ☐ No

OBSERVATIONS / NOTES:

Sampled due to SV-170-A containing water

Duplicate ID (if collected):

Signature:

TETRA TECH

SV/IAQ SAMPLING ROUND 29, AUGUST 2020, MIDDLE RIVER COMPLEX

Date: August 26, 2020

SAMPLING DATA:

SOIL VAPOR SAMPLE (1-hour)

SV Sample ID:	SV-173-A-29
SV Canister #:	34002475
SV Regulator #:	7269
SV Start Time:	8:50 AM
SV Start Pressure:	-30
SV Stop Time:	10:04 AM
SV Stop Pressure:	0

INDOOR AIR QUALITY SAMPLE (8-hour)

IAQ Sample ID:	
IAQ Canister #:	
IAQ Regulator #:	
IAQ Start Time:	
IAQ Start Pressure:	
IAQ Stop Time:	
IAQ Stop Pressure:	

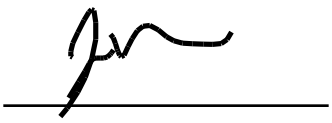
SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected
TO-15	1 Liter Canister with timed flow regulator	☒ Yes ☐ No

OBSERVATIONS / NOTES:

Duplicate ID (if collected):

Signature:



TETRA TECH

SV/IAQ SAMPLING ROUND 29, AUGUST 2020, MIDDLE RIVER COMPLEX

Date: August 26, 2020

SAMPLING DATA:

SOIL VAPOR SAMPLE (1-hour)

SV Sample ID:	SV-177-A-29
SV Canister #:	11111
SV Regulator #:	7259
SV Start Time:	8:57 AM
SV Start Pressure:	-30
SV Stop Time:	10:08 AM
SV Stop Pressure:	0

INDOOR AIR QUALITY SAMPLE (8-hour)

IAQ Sample ID:	
IAQ Canister #:	
IAQ Regulator #:	
IAQ Start Time:	
IAQ Start Pressure:	
IAQ Stop Time:	
IAQ Stop Pressure:	

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected
TO-15	1 Liter Canister with timed flow regulator	☒ Yes ☐ No

OBSERVATIONS / NOTES:

Water present at 093-A, sample 177-A instead.

Duplicate ID (if collected):

Signature:



APPENDIX B—METHOD DETECTION LIMITS

TestAmerica Laboratories - Knoxville, TN
Method Detection Limits and Reporting Limits for TO-15

Analyte	CAS #	MW	MDL (PPBV)	REPORTING LIMIT (PPBV)	MDL (UG/M$^{3)}$	REPORTING LIMIT (UG/M3)	LCS LOWER QC LIMIT	LCS UPPER QC LIMIT	DUPLICATE RPD
1,1,1-TRICHLOROETHANE	71-55-6	133.40	0.06	0.4	0.33	2.2	70	130	25
1,1,2-TRICHLOROETHANE	79-00-5	133.40	0.11	0.4	0.57	2.2	70	130	25
1,1-DICHLOROETHANE	75-34-3	98.96	0.05	0.4	0.2	1.6	70	130	25
1,1-DICHLOROETHENE	75-35-4	96.94	0.07	0.4	0.28	1.6	70	130	25
1,2,3-TRIMETHYLBENZENE	526-73-8	120.19	0.17	0.4	0.84	2	70	130	25
1,2,4-TRICHLOROBENZENE	120-82-1	181.45	0.2	0.4	1.4	3	60	140	25
1,2,4-TRIMETHYLBENZENE	95-63-6	120.19	0.13	0.4	0.61	2	70	130	25
1,2-DICHLOROETHANE	107-06-2	187.86	0.095	0.4	0.38	1.6	70	130	25
1,3,5-TRIMETHYLBENZENE	108-67-8	120.19	0.13	0.4	0.64	2	70	130	25
BENZENE	71-43-2	78.11	0.12	0.4	0.37	1.3	70	130	25
CARBON TETRACHLORIDE	56-23-5	153.82	0.075	0.4	0.47	2.5	70	130	25
CHLORODIFLUOROMETHANE	75-45-6	86.46	0.075	0.4	0.27	1.4	60	140	25
CHLOROFORM	67-66-3	119.37	0.075	0.4	0.37	2	70	130	25
CIS-1,2-DICHLOROETHENE	156-59-2	96.94	0.12	0.4	0.48	1.6	70	130	25
DICHLORODIFLUOROMETHANE	75-71-8	120.91	0.14	0.4	0.67	2	60	140	25
ETHYLBENZENE	100-41-4	106.16	0.14	0.4	0.59	1.7	70	130	25
METHYL TERT-BUTYL ETHER	1634-04-4	88.14	0.34	2	1.2	7.2	60	140	25
METHYLENE CHLORIDE	75-09-2	84.93	0.65	1	2.3	3.5	70	130	25
NAPHTHALENE	91-20-3	128.17	0.2	0.2	1	1	60	140	25
TETRACHLOROETHENE	127-18-4	165.83	0.08	0.4	0.54	2.7	70	130	25
TOLUENE	108-88-3	92.14	0.6	0.6	2.3	2.3	70	130	25
TOTAL XYLENES	1330-20-7	106.16	0.12	0.8	0.52	3.5	70	130	25
TRANS-1,2-DICHLOROETHENE	156-60-5	96.94	0.1	0.4	0.4	1.6	70	130	25
TRICHLOROETHENE	79-01-6	131.38	0.07	0.2	0.38	1.1	70	130	25
VINYL CHLORIDE	75-01-4	62.49	0.15	0.4	0.37	1	70	130	25

APPENDIX C—LABORATORY ANALYTICAL REPORTS

ANALYTICAL REPORT

Job Number: 140-20175-1

Job Description: Middle River - MRC

For:
Tetra Tech, Inc.
20251 Century Blvd
Suite 200
Germantown, MD 20874

Attention: Samantha Brenner



Approved for release.
Diana L Lange
Project Management Assistant II
9/10/2020 11:57 AM

Designee for
Jamie A McKinney, Senior Project Manager
5815 Middlebrook Pike, Knoxville, TN, 37921
(865)291-3000
Jamie.McKinney@Eurofinset.com
09/10/2020

cc: Amy Thomson

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

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Definitions/Glossary

Client: Tetra Tech, Inc. Job ID: 140-20175-1
Project/Site: Middle River - MRC

Qualifiers

Air - GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
CI	The peak identified by the data system exhibited chromatographic interference that could not be resolved. There is reason to suspect there may be a high bias.
E	Result exceeded calibration range.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job Narrative
140-20175-1

Comments
No additional comments.

Receipt
The samples were received on 8/27/2020 10:00 AM; the samples arrived in good condition, and where required, properly preserved and on ice.

Air - GC/MS VOA
Methods 3005A, TO 15 LL, TO-14A, TO-15: EPA methods TO-14A and TO-15 specify the use of humidified "zero air" as the blank reagent for canister cleaning, instrument calibration and sample analysis. Ultra-high purity humidified nitrogen from a cryogenic reservoir is used in place of "zero air" by TestAmerica Knoxville.

Methods TO 15 LL, TO-15: Although the BFB is flagged as outside control limits for TO-14 on batch 140-42399, the results are within limits for TO-15, which is required for this project.

Method TO 15 LL: The continuing calibration verification (CCV) associated with batch 140-42498 recovered above the upper control limit for 1,2,4-Trichlorobenzene, 1,2,4-Trimethylbenzene, Carbon tetrachloride and Naphthalene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: (CCVIS 140-42498/9).

Method TO 15 LL: The laboratory control sample (LCS) for analytical batch 140-42498 recovered outside control limits for the following analytes: 1,2,4-Trimethylbenzene and Carbon tetrachloride. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method TO 15 LL: The continuing calibration verification (CCV) associated with batch 140-42503 exhibited % difference of > 30% for the following analyte(s) :1,2,3-Trimethylbenzene;however, the results were within the LCS acceptance limits. The EPA method requires that all target analytes in the continuing calibration verification standard be within 30% difference from the initial calibration. According to the laboratory standard operating procedure, the continuing calibration is acceptable if it meets the laboratory control sample acceptance criteria and is within marginal exceedance criteria.

Method TO 15 LL: The laboratory control sample (LCS) for analytical batch 140-42503 recovered outside control limits for the following analytes: 1,2,3-Trimethylbenzene. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: Tetra Tech, Inc.
Project/Site: Middle River - MRC

Job ID: 140-20175-1

Client Sample ID: SV-001-C-29 — Lab Sample ID: 140-20175-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.11	J	0.40	0.040	ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.078	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Chlorodifluoromethane	0.53		0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Chloroform	0.72		0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	4.8		0.40	0.050	ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.54		0.40	0.070	ppb v/v	1		TO 15 LL	Total/NA
Tetrachloroethene	6.1		0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
trans-1,2-Dichloroethene	2.3		0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Trichloroethene	43		0.20	0.030	ppb v/v	1		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.35	J	1.3	0.13	ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.49	J	2.5	0.22	ug/m3	1		TO 15 LL	Total/NA
Chlorodifluoromethane	1.9		1.4	0.39	ug/m3	1		TO 15 LL	Total/NA
Chloroform	3.5		2.0	0.17	ug/m3	1		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	19		1.6	0.20	ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.7		2.0	0.35	ug/m3	1		TO 15 LL	Total/NA
Tetrachloroethene	41		2.7	0.24	ug/m3	1		TO 15 LL	Total/NA
trans-1,2-Dichloroethene	9.0		1.6	0.14	ug/m3	1		TO 15 LL	Total/NA
Trichloroethene	230		1.1	0.16	ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: SV-004-C-29 — Lab Sample ID: 140-20175-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.13	J	1.0	0.10	ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.097	J	1.0	0.088	ppb v/v	1		TO 15 LL	Total/NA
Chloroform	17		1.0	0.088	ppb v/v	1		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	11		1.0	0.13	ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.50	J	1.0	0.18	ppb v/v	1		TO 15 LL	Total/NA
Tetrachloroethene	0.49	J	1.0	0.088	ppb v/v	1		TO 15 LL	Total/NA
trans-1,2-Dichloroethene	0.81	J	1.0	0.088	ppb v/v	1		TO 15 LL	Total/NA
Trichloroethene	56		0.50	0.075	ppb v/v	1		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.42	J	3.2	0.32	ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.61	J	6.3	0.55	ug/m3	1		TO 15 LL	Total/NA
Chloroform	81		4.9	0.43	ug/m3	1		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	42		4.0	0.50	ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.5	J	4.9	0.87	ug/m3	1		TO 15 LL	Total/NA
Tetrachloroethene	3.3	J	6.8	0.59	ug/m3	1		TO 15 LL	Total/NA
trans-1,2-Dichloroethene	3.2	J	4.0	0.35	ug/m3	1		TO 15 LL	Total/NA
Trichloroethene	300		2.7	0.40	ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: SV-102-C-29 — Lab Sample ID: 140-20175-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	2.6	J	6.9	0.69	ppb v/v	3.43		TO 15 LL	Total/NA
Carbon tetrachloride	0.68	J	6.9	0.60	ppb v/v	3.43		TO 15 LL	Total/NA
Chloroform	12		6.9	0.60	ppb v/v	3.43		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	12		6.9	0.86	ppb v/v	3.43		TO 15 LL	Total/NA
1,1-Dichloroethane	2000	E	6.9	0.60	ppb v/v	3.43		TO 15 LL	Total/NA
1,1-Dichloroethene	910		6.9	0.69	ppb v/v	3.43		TO 15 LL	Total/NA
Ethylbenzene	110		6.9	1.1	ppb v/v	3.43		TO 15 LL	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SV-102-C-29 (Continued)

Lab Sample ID: 140-20175-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	57		3.4	3.4	ppb v/v	3.43		TO 15 LL	Total/NA
Toluene	7.6	J	10	6.7	ppb v/v	3.43		TO 15 LL	Total/NA
trans-1,2-Dichloroethene	1.2	J	6.9	0.60	ppb v/v	3.43		TO 15 LL	Total/NA
1,1,1-Trichloroethane	500		6.9	3.2	ppb v/v	3.43		TO 15 LL	Total/NA
Trichloroethene	330		3.4	0.51	ppb v/v	3.43		TO 15 LL	Total/NA
1,2,3-Trimethylbenzene	4.9	J	6.9	3.1	ppb v/v	3.43		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	4.1	J	6.9	1.7	ppb v/v	3.43		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	6.5	J	6.9	1.9	ppb v/v	3.43		TO 15 LL	Total/NA
Vinyl chloride	2.6	J	3.4	2.2	ppb v/v	3.43		TO 15 LL	Total/NA
Xylenes, Total	1300		14	2.1	ppb v/v	3.43		TO 15 LL	Total/NA
1,1-Dichloroethane - DL	1400		12	1.1	ppb v/v	3.43		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	8.3	J	22	2.2	ug/m3	3.43		TO 15 LL	Total/NA
Carbon tetrachloride	4.3	J	43	3.8	ug/m3	3.43		TO 15 LL	Total/NA
Chloroform	57		33	2.9	ug/m3	3.43		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	48		27	3.4	ug/m3	3.43		TO 15 LL	Total/NA
1,1-Dichloroethane	8200	E	28	2.4	ug/m3	3.43		TO 15 LL	Total/NA
1,1-Dichloroethene	3600		27	2.7	ug/m3	3.43		TO 15 LL	Total/NA
Ethylbenzene	460		30	4.8	ug/m3	3.43		TO 15 LL	Total/NA
Naphthalene	300		18	18	ug/m3	3.43		TO 15 LL	Total/NA
Toluene	29	J	39	25	ug/m3	3.43		TO 15 LL	Total/NA
trans-1,2-Dichloroethene	4.6	J	27	2.4	ug/m3	3.43		TO 15 LL	Total/NA
1,1,1-Trichloroethane	2700		37	17	ug/m3	3.43		TO 15 LL	Total/NA
Trichloroethene	1800		18	2.8	ug/m3	3.43		TO 15 LL	Total/NA
1,2,3-Trimethylbenzene	24	J	34	15	ug/m3	3.43		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	20	J	34	8.4	ug/m3	3.43		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	32	J	34	9.3	ug/m3	3.43		TO 15 LL	Total/NA
Vinyl chloride	6.7	J	8.8	5.7	ug/m3	3.43		TO 15 LL	Total/NA
Xylenes, Total	5800		60	8.9	ug/m3	3.43		TO 15 LL	Total/NA
1,1-Dichloroethane - DL	5500		50	4.4	ug/m3	3.43		TO 15 LL	Total/NA

Client Sample ID: SV-113-C-29

Lab Sample ID: 140-20175-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.067	J	0.40	0.040	ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.081	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Chlorodifluoromethane	1.6	CI	0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Chloroform	0.31	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	3.7		0.40	0.050	ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.58		0.40	0.070	ppb v/v	1		TO 15 LL	Total/NA
1,1-Dichloroethane	1.1		0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
1,1-Dichloroethene	0.41		0.40	0.040	ppb v/v	1		TO 15 LL	Total/NA
Ethylbenzene	0.12	J	0.40	0.065	ppb v/v	1		TO 15 LL	Total/NA
Naphthalene	0.25		0.20	0.20	ppb v/v	1		TO 15 LL	Total/NA
Tetrachloroethene	0.053	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Toluene	0.40	J	0.60	0.39	ppb v/v	1		TO 15 LL	Total/NA
trans-1,2-Dichloroethene	0.055	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
1,1,1-Trichloroethane	0.33	J	0.40	0.19	ppb v/v	1		TO 15 LL	Total/NA
Trichloroethene	33		0.20	0.030	ppb v/v	1		TO 15 LL	Total/NA
1,2,3-Trimethylbenzene	2.3		0.40	0.18	ppb v/v	1		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	1.6		0.40	0.10	ppb v/v	1		TO 15 LL	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SV-113-C-29 (Continued)

Lab Sample ID: 140-20175-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,3,5-Trimethylbenzene	1.5		0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Xylenes, Total	1.3		0.80	0.12	ppb v/v	1		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.21	J	1.3	0.13	ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.51	J	2.5	0.22	ug/m3	1		TO 15 LL	Total/NA
Chlorodifluoromethane	5.6	CI	1.4	0.39	ug/m3	1		TO 15 LL	Total/NA
Chloroform	1.5	J	2.0	0.17	ug/m3	1		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	15		1.6	0.20	ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.9		2.0	0.35	ug/m3	1		TO 15 LL	Total/NA
1,1-Dichloroethane	4.6		1.6	0.14	ug/m3	1		TO 15 LL	Total/NA
1,1-Dichloroethene	1.6		1.6	0.16	ug/m3	1		TO 15 LL	Total/NA
Ethylbenzene	0.53	J	1.7	0.28	ug/m3	1		TO 15 LL	Total/NA
Naphthalene	1.3		1.0	1.0	ug/m3	1		TO 15 LL	Total/NA
Tetrachloroethene	0.36	J	2.7	0.24	ug/m3	1		TO 15 LL	Total/NA
Toluene	1.5	J	2.3	1.5	ug/m3	1		TO 15 LL	Total/NA
trans-1,2-Dichloroethene	0.22	J	1.6	0.14	ug/m3	1		TO 15 LL	Total/NA
1,1,1-Trichloroethane	1.8	J	2.2	1.0	ug/m3	1		TO 15 LL	Total/NA
Trichloroethene	180		1.1	0.16	ug/m3	1		TO 15 LL	Total/NA
1,2,3-Trimethylbenzene	11		2.0	0.88	ug/m3	1		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	7.7		2.0	0.49	ug/m3	1		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	7.5		2.0	0.54	ug/m3	1		TO 15 LL	Total/NA
Xylenes, Total	5.7		3.5	0.52	ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: SV-088-C-29

Lab Sample ID: 140-20175-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.089	J	0.40	0.040	ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.092	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Chlorodifluoromethane	1.1		0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Chloroform	0.15	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	1.4		0.40	0.050	ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.58		0.40	0.070	ppb v/v	1		TO 15 LL	Total/NA
Ethylbenzene	0.11	J	0.40	0.065	ppb v/v	1		TO 15 LL	Total/NA
Tetrachloroethene	0.070	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Toluene	0.40	J	0.60	0.39	ppb v/v	1		TO 15 LL	Total/NA
trans-1,2-Dichloroethene	0.092	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Trichloroethene	7.9		0.20	0.030	ppb v/v	1		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	0.11	J	0.40	0.10	ppb v/v	1		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	0.28	J	0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Xylenes, Total	1.6		0.80	0.12	ppb v/v	1		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.28	J	1.3	0.13	ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.58	J	2.5	0.22	ug/m3	1		TO 15 LL	Total/NA
Chlorodifluoromethane	3.9		1.4	0.39	ug/m3	1		TO 15 LL	Total/NA
Chloroform	0.76	J	2.0	0.17	ug/m3	1		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	5.4		1.6	0.20	ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.9		2.0	0.35	ug/m3	1		TO 15 LL	Total/NA
Ethylbenzene	0.47	J	1.7	0.28	ug/m3	1		TO 15 LL	Total/NA
Tetrachloroethene	0.47	J	2.7	0.24	ug/m3	1		TO 15 LL	Total/NA
Toluene	1.5	J	2.3	1.5	ug/m3	1		TO 15 LL	Total/NA
trans-1,2-Dichloroethene	0.37	J	1.6	0.14	ug/m3	1		TO 15 LL	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SV-088-C-29 (Continued)

Lab Sample ID: 140-20175-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	42		1.1	0.16	ug/m3	1		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	0.54	J	2.0	0.49	ug/m3	1		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	1.4	J	2.0	0.54	ug/m3	1		TO 15 LL	Total/NA
Xylenes, Total	6.7		3.5	0.52	ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: SV-DUP1-C-29

Lab Sample ID: 140-20175-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	2.3	J	7.2	0.72	ppb v/v	3.6		TO 15 LL	Total/NA
Carbon tetrachloride	0.69	J	7.2	0.63	ppb v/v	3.6		TO 15 LL	Total/NA
Chloroform	11		7.2	0.63	ppb v/v	3.6		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	18		7.2	0.90	ppb v/v	3.6		TO 15 LL	Total/NA
1,1-Dichloroethane	2100	E	7.2	0.63	ppb v/v	3.6		TO 15 LL	Total/NA
1,1-Dichloroethene	960		7.2	0.72	ppb v/v	3.6		TO 15 LL	Total/NA
Ethylbenzene	110		7.2	1.2	ppb v/v	3.6		TO 15 LL	Total/NA
Naphthalene	82		3.6	3.6	ppb v/v	3.6		TO 15 LL	Total/NA
trans-1,2-Dichloroethene	1.3	J	7.2	0.63	ppb v/v	3.6		TO 15 LL	Total/NA
1,1,1-Trichloroethane	480		7.2	3.3	ppb v/v	3.6		TO 15 LL	Total/NA
Trichloroethene	330		3.6	0.54	ppb v/v	3.6		TO 15 LL	Total/NA
1,2,3-Trimethylbenzene	4.7	J	7.2	3.2	ppb v/v	3.6		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	4.6	J	7.2	1.8	ppb v/v	3.6		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	6.5	J	7.2	2.0	ppb v/v	3.6		TO 15 LL	Total/NA
Vinyl chloride	3.0	J	3.6	2.3	ppb v/v	3.6		TO 15 LL	Total/NA
Xylenes, Total	1200		14	2.2	ppb v/v	3.6		TO 15 LL	Total/NA
1,1-Dichloroethane - DL	1500		13	1.1	ppb v/v	3.6		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	7.3	J	23	2.3	ug/m3	3.6		TO 15 LL	Total/NA
Carbon tetrachloride	4.4	J	45	4.0	ug/m3	3.6		TO 15 LL	Total/NA
Chloroform	54		35	3.1	ug/m3	3.6		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	70		29	3.6	ug/m3	3.6		TO 15 LL	Total/NA
1,1-Dichloroethane	8300	E	29	2.5	ug/m3	3.6		TO 15 LL	Total/NA
1,1-Dichloroethene	3800		29	2.9	ug/m3	3.6		TO 15 LL	Total/NA
Ethylbenzene	480		31	5.1	ug/m3	3.6		TO 15 LL	Total/NA
Naphthalene	430		19	19	ug/m3	3.6		TO 15 LL	Total/NA
trans-1,2-Dichloroethene	5.2	J	29	2.5	ug/m3	3.6		TO 15 LL	Total/NA
1,1,1-Trichloroethane	2600		39	18	ug/m3	3.6		TO 15 LL	Total/NA
Trichloroethene	1800		19	2.9	ug/m3	3.6		TO 15 LL	Total/NA
1,2,3-Trimethylbenzene	23	J	35	16	ug/m3	3.6		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	23	J	35	8.8	ug/m3	3.6		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	32	J	35	9.7	ug/m3	3.6		TO 15 LL	Total/NA
Vinyl chloride	7.6	J	9.2	6.0	ug/m3	3.6		TO 15 LL	Total/NA
Xylenes, Total	5300		63	9.4	ug/m3	3.6		TO 15 LL	Total/NA
1,1-Dichloroethane - DL	6000		53	4.6	ug/m3	3.6		TO 15 LL	Total/NA

Client Sample ID: SV-142-C-29

Lab Sample ID: 140-20175-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.075	J	0.40	0.040	ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.089	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Chlorodifluoromethane	0.93	CI	0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Chloroform	0.45		0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.49		0.40	0.070	ppb v/v	1		TO 15 LL	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SV-142-C-29 (Continued)

Lab Sample ID: 140-20175-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	1.1		0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
1,1-Dichloroethene	0.40		0.40	0.040	ppb v/v	1		TO 15 LL	Total/NA
Ethylbenzene	0.10	J	0.40	0.065	ppb v/v	1		TO 15 LL	Total/NA
Methylene Chloride	3.0		2.0	2.0	ppb v/v	1		TO 15 LL	Total/NA
Naphthalene	0.23		0.20	0.20	ppb v/v	1		TO 15 LL	Total/NA
Tetrachloroethene	0.16	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Toluene	1.7		0.60	0.39	ppb v/v	1		TO 15 LL	Total/NA
1,1,1-Trichloroethane	0.39	J	0.40	0.19	ppb v/v	1		TO 15 LL	Total/NA
Trichloroethene	2.0		0.20	0.030	ppb v/v	1		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	0.27	J	0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Xylenes, Total	0.86		0.80	0.12	ppb v/v	1		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.24	J	1.3	0.13	ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.56	J	2.5	0.22	ug/m3	1		TO 15 LL	Total/NA
Chlorodifluoromethane	3.3	CI	1.4	0.39	ug/m3	1		TO 15 LL	Total/NA
Chloroform	2.2		2.0	0.17	ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.4		2.0	0.35	ug/m3	1		TO 15 LL	Total/NA
1,1-Dichloroethane	4.3		1.6	0.14	ug/m3	1		TO 15 LL	Total/NA
1,1-Dichloroethene	1.6		1.6	0.16	ug/m3	1		TO 15 LL	Total/NA
Ethylbenzene	0.43	J	1.7	0.28	ug/m3	1		TO 15 LL	Total/NA
Methylene Chloride	10		6.9	6.8	ug/m3	1		TO 15 LL	Total/NA
Naphthalene	1.2		1.0	1.0	ug/m3	1		TO 15 LL	Total/NA
Tetrachloroethene	1.1	J	2.7	0.24	ug/m3	1		TO 15 LL	Total/NA
Toluene	6.4		2.3	1.5	ug/m3	1		TO 15 LL	Total/NA
1,1,1-Trichloroethane	2.1	J	2.2	1.0	ug/m3	1		TO 15 LL	Total/NA
Trichloroethene	11		1.1	0.16	ug/m3	1		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	1.3	J	2.0	0.54	ug/m3	1		TO 15 LL	Total/NA
Xylenes, Total	3.7		3.5	0.52	ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: SV-155-C-29

Lab Sample ID: 140-20175-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.18	J	0.40	0.040	ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	1.4		0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Chlorodifluoromethane	2.1		0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Chloroform	0.093	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.52		0.40	0.070	ppb v/v	1		TO 15 LL	Total/NA
Ethylbenzene	0.12	J	0.40	0.065	ppb v/v	1		TO 15 LL	Total/NA
Tetrachloroethene	0.075	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Toluene	1.7		0.60	0.39	ppb v/v	1		TO 15 LL	Total/NA
Trichloroethene	0.21		0.20	0.030	ppb v/v	1		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	0.28	J	0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Xylenes, Total	0.52	J	0.80	0.12	ppb v/v	1		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.59	J	1.3	0.13	ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	8.7		2.5	0.22	ug/m3	1		TO 15 LL	Total/NA
Chlorodifluoromethane	7.3		1.4	0.39	ug/m3	1		TO 15 LL	Total/NA
Chloroform	0.45	J	2.0	0.17	ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.6		2.0	0.35	ug/m3	1		TO 15 LL	Total/NA
Ethylbenzene	0.53	J	1.7	0.28	ug/m3	1		TO 15 LL	Total/NA
Tetrachloroethene	0.51	J	2.7	0.24	ug/m3	1		TO 15 LL	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SV-155-C-29 (Continued) — Lab Sample ID: 140-20175-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Toluene	6.3		2.3	1.5	ug/m3	1		TO 15 LL	Total/NA
Trichloroethene	1.1		1.1	0.16	ug/m3	1		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	1.4	J	2.0	0.54	ug/m3	1		TO 15 LL	Total/NA
Xylenes, Total	2.3	J	3.5	0.52	ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: SV-133-C-29 — Lab Sample ID: 140-20175-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.16	J	0.40	0.040	ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.62		0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Chlorodifluoromethane	2.6		0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Chloroform	1.9		0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.54		0.40	0.070	ppb v/v	1		TO 15 LL	Total/NA
Ethylbenzene	0.081	J	0.40	0.065	ppb v/v	1		TO 15 LL	Total/NA
Methylene Chloride	2.6		2.0	2.0	ppb v/v	1		TO 15 LL	Total/NA
Tetrachloroethene	0.64		0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Toluene	1.5		0.60	0.39	ppb v/v	1		TO 15 LL	Total/NA
trans-1,2-Dichloroethene	0.050	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Trichloroethene	40		0.20	0.030	ppb v/v	1		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	0.25	J	0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Xylenes, Total	0.47	J	0.80	0.12	ppb v/v	1		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.51	J	1.3	0.13	ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	3.9		2.5	0.22	ug/m3	1		TO 15 LL	Total/NA
Chlorodifluoromethane	9.1		1.4	0.39	ug/m3	1		TO 15 LL	Total/NA
Chloroform	9.2		2.0	0.17	ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.7		2.0	0.35	ug/m3	1		TO 15 LL	Total/NA
Ethylbenzene	0.35	J	1.7	0.28	ug/m3	1		TO 15 LL	Total/NA
Methylene Chloride	9.1		6.9	6.8	ug/m3	1		TO 15 LL	Total/NA
Tetrachloroethene	4.3		2.7	0.24	ug/m3	1		TO 15 LL	Total/NA
Toluene	5.7		2.3	1.5	ug/m3	1		TO 15 LL	Total/NA
trans-1,2-Dichloroethene	0.20	J	1.6	0.14	ug/m3	1		TO 15 LL	Total/NA
Trichloroethene	210		1.1	0.16	ug/m3	1		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	1.2	J	2.0	0.54	ug/m3	1		TO 15 LL	Total/NA
Xylenes, Total	2.0	J	3.5	0.52	ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: SV-153-C-29 — Lab Sample ID: 140-20175-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.19	J	0.40	0.040	ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.89		0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Chlorodifluoromethane	1.7		0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Chloroform	0.11	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.52		0.40	0.070	ppb v/v	1		TO 15 LL	Total/NA
Ethylbenzene	0.087	J	0.40	0.065	ppb v/v	1		TO 15 LL	Total/NA
Tetrachloroethene	0.070	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Toluene	0.79		0.60	0.39	ppb v/v	1		TO 15 LL	Total/NA
Trichloroethene	0.29		0.20	0.030	ppb v/v	1		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	0.15	J	0.40	0.10	ppb v/v	1		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	0.31	J	0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Xylenes, Total	0.49	J	0.80	0.12	ppb v/v	1		TO 15 LL	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SV-153-C-29 (Continued)

Lab Sample ID: 140-20175-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.62	J	1.3	0.13	ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	5.6		2.5	0.22	ug/m3	1		TO 15 LL	Total/NA
Chlorodifluoromethane	6.0		1.4	0.39	ug/m3	1		TO 15 LL	Total/NA
Chloroform	0.55	J	2.0	0.17	ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.6		2.0	0.35	ug/m3	1		TO 15 LL	Total/NA
Ethylbenzene	0.38	J	1.7	0.28	ug/m3	1		TO 15 LL	Total/NA
Tetrachloroethene	0.47	J	2.7	0.24	ug/m3	1		TO 15 LL	Total/NA
Toluene	3.0		2.3	1.5	ug/m3	1		TO 15 LL	Total/NA
Trichloroethene	1.6		1.1	0.16	ug/m3	1		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	0.75	J	2.0	0.49	ug/m3	1		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	1.5	J	2.0	0.54	ug/m3	1		TO 15 LL	Total/NA
Xylenes, Total	2.1	J	3.5	0.52	ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: SV-DUP2-C-29

Lab Sample ID: 140-20175-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.14	J	0.40	0.040	ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.25	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Chlorodifluoromethane	1.5		0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Chloroform	0.063	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.38	J	0.40	0.070	ppb v/v	1		TO 15 LL	Total/NA
Ethylbenzene	0.15	J	0.40	0.065	ppb v/v	1		TO 15 LL	Total/NA
Methylene Chloride	11		2.0	2.0	ppb v/v	1		TO 15 LL	Total/NA
Tetrachloroethene	0.042	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Toluene	2.0		0.60	0.39	ppb v/v	1		TO 15 LL	Total/NA
Trichloroethene	0.18	J	0.20	0.030	ppb v/v	1		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	0.25	J	0.40	0.10	ppb v/v	1		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	0.13	J	0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Xylenes, Total	0.73	J	0.80	0.12	ppb v/v	1		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.45	J	1.3	0.13	ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	1.6	J	2.5	0.22	ug/m3	1		TO 15 LL	Total/NA
Chlorodifluoromethane	5.3		1.4	0.39	ug/m3	1		TO 15 LL	Total/NA
Chloroform	0.31	J	2.0	0.17	ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	1.9	J	2.0	0.35	ug/m3	1		TO 15 LL	Total/NA
Ethylbenzene	0.65	J	1.7	0.28	ug/m3	1		TO 15 LL	Total/NA
Methylene Chloride	39		6.9	6.8	ug/m3	1		TO 15 LL	Total/NA
Tetrachloroethene	0.29	J	2.7	0.24	ug/m3	1		TO 15 LL	Total/NA
Toluene	7.4		2.3	1.5	ug/m3	1		TO 15 LL	Total/NA
Trichloroethene	0.98	J	1.1	0.16	ug/m3	1		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	1.3	J	2.0	0.49	ug/m3	1		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	0.65	J	2.0	0.54	ug/m3	1		TO 15 LL	Total/NA
Xylenes, Total	3.2	J	3.5	0.52	ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: SV-060-C-29

Lab Sample ID: 140-20175-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.23	J	2.0	0.20	ppb v/v	1		TO 15 LL	Total/NA
Chlorodifluoromethane	2.7		2.0	0.55	ppb v/v	1		TO 15 LL	Total/NA
Chloroform	3.0		2.0	0.18	ppb v/v	1		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	5.9		2.0	0.25	ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.47	J	2.0	0.35	ppb v/v	1		TO 15 LL	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SV-060-C-29 (Continued)

Lab Sample ID: 140-20175-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	2.5		2.0	0.18	ppb v/v	1		TO 15 LL	Total/NA
Ethylbenzene	2.1		2.0	0.33	ppb v/v	1		TO 15 LL	Total/NA
trans-1,2-Dichloroethene	0.30	J	2.0	0.18	ppb v/v	1		TO 15 LL	Total/NA
1,1,1-Trichloroethane	1.5	J	2.0	0.93	ppb v/v	1		TO 15 LL	Total/NA
Trichloroethene	89		1.0	0.15	ppb v/v	1		TO 15 LL	Total/NA
Xylenes, Total	18		4.0	0.60	ppb v/v	1		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.74	J	6.4	0.64	ug/m3	1		TO 15 LL	Total/NA
Chlorodifluoromethane	9.7		7.1	1.9	ug/m3	1		TO 15 LL	Total/NA
Chloroform	15		9.8	0.85	ug/m3	1		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	24		7.9	0.99	ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.3	J	9.9	1.7	ug/m3	1		TO 15 LL	Total/NA
1,1-Dichloroethane	10		8.1	0.71	ug/m3	1		TO 15 LL	Total/NA
Ethylbenzene	9.1		8.7	1.4	ug/m3	1		TO 15 LL	Total/NA
trans-1,2-Dichloroethene	1.2	J	7.9	0.69	ug/m3	1		TO 15 LL	Total/NA
1,1,1-Trichloroethane	8.1	J	11	5.0	ug/m3	1		TO 15 LL	Total/NA
Trichloroethene	480		5.4	0.81	ug/m3	1		TO 15 LL	Total/NA
Xylenes, Total	80		17	2.6	ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: SV-150-C-29

Lab Sample ID: 140-20175-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.31	J	0.40	0.040	ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.057	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Chlorodifluoromethane	19		0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Chloroform	0.086	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.47		0.40	0.070	ppb v/v	1		TO 15 LL	Total/NA
Ethylbenzene	1.3		0.40	0.065	ppb v/v	1		TO 15 LL	Total/NA
Methylene Chloride	3.4		2.0	2.0	ppb v/v	1		TO 15 LL	Total/NA
Toluene	2.7		0.60	0.39	ppb v/v	1		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	0.27	J	0.40	0.10	ppb v/v	1		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	0.11	J	0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Xylenes, Total	5.4		0.80	0.12	ppb v/v	1		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1.0	J	1.3	0.13	ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.36	J	2.5	0.22	ug/m3	1		TO 15 LL	Total/NA
Chlorodifluoromethane	67		1.4	0.39	ug/m3	1		TO 15 LL	Total/NA
Chloroform	0.42	J	2.0	0.17	ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.3		2.0	0.35	ug/m3	1		TO 15 LL	Total/NA
Ethylbenzene	5.5		1.7	0.28	ug/m3	1		TO 15 LL	Total/NA
Methylene Chloride	12		6.9	6.8	ug/m3	1		TO 15 LL	Total/NA
Toluene	10		2.3	1.5	ug/m3	1		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	1.3	J	2.0	0.49	ug/m3	1		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	0.56	J	2.0	0.54	ug/m3	1		TO 15 LL	Total/NA
Xylenes, Total	23		3.5	0.52	ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: SV-152-C-29

Lab Sample ID: 140-20175-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.21	J	0.80	0.080	ppb v/v	1		TO 15 LL	Total/NA
Chlorodifluoromethane	9.6		0.80	0.22	ppb v/v	1		TO 15 LL	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SV-152-C-29 (Continued)

Lab Sample ID: 140-20175-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	0.37	J	0.80	0.070	ppb v/v	1		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	2.3		0.80	0.10	ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.38	J	0.80	0.14	ppb v/v	1		TO 15 LL	Total/NA
Methylene Chloride	4.3		4.0	3.9	ppb v/v	1		TO 15 LL	Total/NA
Toluene	1.7		1.2	0.78	ppb v/v	1		TO 15 LL	Total/NA
trans-1,2-Dichloroethene	0.088	J	0.80	0.070	ppb v/v	1		TO 15 LL	Total/NA
1,1,1-Trichloroethane	0.50	J	0.80	0.37	ppb v/v	1		TO 15 LL	Total/NA
Trichloroethene	33		0.40	0.060	ppb v/v	1		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.67	J	2.6	0.26	ug/m3	1		TO 15 LL	Total/NA
Chlorodifluoromethane	34		2.8	0.78	ug/m3	1		TO 15 LL	Total/NA
Chloroform	1.8	J	3.9	0.34	ug/m3	1		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	9.1		3.2	0.40	ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	1.9	J	4.0	0.69	ug/m3	1		TO 15 LL	Total/NA
Methylene Chloride	15		14	14	ug/m3	1		TO 15 LL	Total/NA
Toluene	6.2		4.5	2.9	ug/m3	1		TO 15 LL	Total/NA
trans-1,2-Dichloroethene	0.35	J	3.2	0.28	ug/m3	1		TO 15 LL	Total/NA
1,1,1-Trichloroethane	2.7	J	4.4	2.0	ug/m3	1		TO 15 LL	Total/NA
Trichloroethene	180		2.1	0.32	ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: SV-141-C-29

Lab Sample ID: 140-20175-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.19	J	0.40	0.040	ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.062	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Chlorodifluoromethane	3.5		0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Chloroform	0.079	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	0.44		0.40	0.050	ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.40		0.40	0.070	ppb v/v	1		TO 15 LL	Total/NA
1,1-Dichloroethene	0.14	J	0.40	0.040	ppb v/v	1		TO 15 LL	Total/NA
Ethylbenzene	0.47		0.40	0.065	ppb v/v	1		TO 15 LL	Total/NA
Tetrachloroethene	0.040	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Toluene	1.2		0.60	0.39	ppb v/v	1		TO 15 LL	Total/NA
trans-1,2-Dichloroethene	0.13	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Trichloroethene	6.4		0.20	0.030	ppb v/v	1		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	0.14	J	0.40	0.10	ppb v/v	1		TO 15 LL	Total/NA
Xylenes, Total	2.7		0.80	0.12	ppb v/v	1		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.61	J	1.3	0.13	ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.39	J	2.5	0.22	ug/m3	1		TO 15 LL	Total/NA
Chlorodifluoromethane	12		1.4	0.39	ug/m3	1		TO 15 LL	Total/NA
Chloroform	0.38	J	2.0	0.17	ug/m3	1		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	1.7		1.6	0.20	ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.0		2.0	0.35	ug/m3	1		TO 15 LL	Total/NA
1,1-Dichloroethene	0.57	J	1.6	0.16	ug/m3	1		TO 15 LL	Total/NA
Ethylbenzene	2.0		1.7	0.28	ug/m3	1		TO 15 LL	Total/NA
Tetrachloroethene	0.27	J	2.7	0.24	ug/m3	1		TO 15 LL	Total/NA
Toluene	4.5		2.3	1.5	ug/m3	1		TO 15 LL	Total/NA
trans-1,2-Dichloroethene	0.53	J	1.6	0.14	ug/m3	1		TO 15 LL	Total/NA
Trichloroethene	34		1.1	0.16	ug/m3	1		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	0.70	J	2.0	0.49	ug/m3	1		TO 15 LL	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SV-141-C-29 (Continued)

Lab Sample ID: 140-20175-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Xylenes, Total	12		3.5	0.52	ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: SV-149-C-29

Lab Sample ID: 140-20175-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.14	J	0.40	0.040	ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.069	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Chlorodifluoromethane	0.89		0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Chloroform	0.16	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	0.15	J	0.40	0.050	ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.39	J	0.40	0.070	ppb v/v	1		TO 15 LL	Total/NA
Ethylbenzene	1.3		0.40	0.065	ppb v/v	1		TO 15 LL	Total/NA
Methylene Chloride	21		2.0	2.0	ppb v/v	1		TO 15 LL	Total/NA
Tetrachloroethene	0.41		0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Toluene	12		0.60	0.39	ppb v/v	1		TO 15 LL	Total/NA
Trichloroethene	2.1		0.20	0.030	ppb v/v	1		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	0.54		0.40	0.10	ppb v/v	1		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	0.32	J	0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Xylenes, Total	6.5		0.80	0.12	ppb v/v	1		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.43	J	1.3	0.13	ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.43	J	2.5	0.22	ug/m3	1		TO 15 LL	Total/NA
Chlorodifluoromethane	3.1		1.4	0.39	ug/m3	1		TO 15 LL	Total/NA
Chloroform	0.80	J	2.0	0.17	ug/m3	1		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	0.58	J	1.6	0.20	ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	1.9	J	2.0	0.35	ug/m3	1		TO 15 LL	Total/NA
Ethylbenzene	5.6		1.7	0.28	ug/m3	1		TO 15 LL	Total/NA
Methylene Chloride	71		6.9	6.8	ug/m3	1		TO 15 LL	Total/NA
Tetrachloroethene	2.8		2.7	0.24	ug/m3	1		TO 15 LL	Total/NA
Toluene	44		2.3	1.5	ug/m3	1		TO 15 LL	Total/NA
Trichloroethene	11		1.1	0.16	ug/m3	1		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	2.7		2.0	0.49	ug/m3	1		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	1.6	J	2.0	0.54	ug/m3	1		TO 15 LL	Total/NA
Xylenes, Total	28		3.5	0.52	ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: SV-126-C-29

Lab Sample ID: 140-20175-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	71		5.0	0.50	ppb v/v	12.39		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	37		5.0	0.62	ppb v/v	12.39		TO 15 LL	Total/NA
1,1-Dichloroethene	55		5.0	0.50	ppb v/v	12.39		TO 15 LL	Total/NA
Ethylbenzene	3.7	J	5.0	0.81	ppb v/v	12.39		TO 15 LL	Total/NA
Toluene	7.1	J	7.4	4.8	ppb v/v	12.39		TO 15 LL	Total/NA
trans-1,2-Dichloroethene	6.0		5.0	0.43	ppb v/v	12.39		TO 15 LL	Total/NA
Trichloroethene	58		2.5	0.37	ppb v/v	12.39		TO 15 LL	Total/NA
Vinyl chloride	310		2.5	1.6	ppb v/v	12.39		TO 15 LL	Total/NA
Xylenes, Total	13		9.9	1.5	ppb v/v	12.39		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	230		16	1.6	ug/m3	12.39		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	150		20	2.5	ug/m3	12.39		TO 15 LL	Total/NA
1,1-Dichloroethene	220		20	2.0	ug/m3	12.39		TO 15 LL	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SV-126-C-29 (Continued) — Lab Sample ID: 140-20175-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Ethylbenzene	16	J	22	3.5	ug/m3	12.39		TO 15 LL	Total/NA
Toluene	27	J	28	18	ug/m3	12.39		TO 15 LL	Total/NA
trans-1,2-Dichloroethene	24		20	1.7	ug/m3	12.39		TO 15 LL	Total/NA
Trichloroethene	310		13	2.0	ug/m3	12.39		TO 15 LL	Total/NA
Vinyl chloride	790		6.3	4.1	ug/m3	12.39		TO 15 LL	Total/NA
Xylenes, Total	55		43	6.5	ug/m3	12.39		TO 15 LL	Total/NA

Client Sample ID: IA-001-C-29 — Lab Sample ID: 140-20175-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.12	J	0.40	0.040	ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.11	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Chlorodifluoromethane	0.64		0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Chloroform	0.099	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.52		0.40	0.070	ppb v/v	1		TO 15 LL	Total/NA
Toluene	0.61		0.60	0.39	ppb v/v	1		TO 15 LL	Total/NA
Xylenes, Total	0.35	J	0.80	0.12	ppb v/v	1		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.37	J	1.3	0.13	ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.70	J	2.5	0.22	ug/m3	1		TO 15 LL	Total/NA
Chlorodifluoromethane	2.3		1.4	0.39	ug/m3	1		TO 15 LL	Total/NA
Chloroform	0.49	J	2.0	0.17	ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.6		2.0	0.35	ug/m3	1		TO 15 LL	Total/NA
Toluene	2.3		2.3	1.5	ug/m3	1		TO 15 LL	Total/NA
Xylenes, Total	1.5	J	3.5	0.52	ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: IA-004-C-29 — Lab Sample ID: 140-20175-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.13	J	0.40	0.040	ppb v/v	1.77		TO 15 LL	Total/NA
Carbon tetrachloride	0.081	J	0.40	0.035	ppb v/v	1.77		TO 15 LL	Total/NA
Chlorodifluoromethane	0.59		0.40	0.11	ppb v/v	1.77		TO 15 LL	Total/NA
Chloroform	0.070	J	0.40	0.035	ppb v/v	1.77		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.53		0.40	0.070	ppb v/v	1.77		TO 15 LL	Total/NA
Methylene Chloride	2.4		2.0	2.0	ppb v/v	1.77		TO 15 LL	Total/NA
Toluene	0.85		0.60	0.39	ppb v/v	1.77		TO 15 LL	Total/NA
Xylenes, Total	0.30	J	0.80	0.12	ppb v/v	1.77		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.40	J	1.3	0.13	ug/m3	1.77		TO 15 LL	Total/NA
Carbon tetrachloride	0.51	J	2.5	0.22	ug/m3	1.77		TO 15 LL	Total/NA
Chlorodifluoromethane	2.1		1.4	0.39	ug/m3	1.77		TO 15 LL	Total/NA
Chloroform	0.34	J	2.0	0.17	ug/m3	1.77		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.6		2.0	0.35	ug/m3	1.77		TO 15 LL	Total/NA
Methylene Chloride	8.3		6.9	6.8	ug/m3	1.77		TO 15 LL	Total/NA
Toluene	3.2		2.3	1.5	ug/m3	1.77		TO 15 LL	Total/NA
Xylenes, Total	1.3	J	3.5	0.52	ug/m3	1.77		TO 15 LL	Total/NA

Client Sample ID: IA-102-C-29 — Lab Sample ID: 140-20175-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.16	J	0.40	0.040	ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.11	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: IA-102-C-29 (Continued)

Lab Sample ID: 140-20175-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chlorodifluoromethane	1.8		0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Chloroform	0.067	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.58		0.40	0.070	ppb v/v	1		TO 15 LL	Total/NA
Ethylbenzene	0.082	J	0.40	0.065	ppb v/v	1		TO 15 LL	Total/NA
Toluene	0.82		0.60	0.39	ppb v/v	1		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	0.26	J	0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Xylenes, Total	0.40	J	0.80	0.12	ppb v/v	1		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.51	J	1.3	0.13	ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.69	J	2.5	0.22	ug/m3	1		TO 15 LL	Total/NA
Chlorodifluoromethane	6.5		1.4	0.39	ug/m3	1		TO 15 LL	Total/NA
Chloroform	0.33	J	2.0	0.17	ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.9		2.0	0.35	ug/m3	1		TO 15 LL	Total/NA
Ethylbenzene	0.35	J	1.7	0.28	ug/m3	1		TO 15 LL	Total/NA
Toluene	3.1		2.3	1.5	ug/m3	1		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	1.3	J	2.0	0.54	ug/m3	1		TO 15 LL	Total/NA
Xylenes, Total	1.7	J	3.5	0.52	ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: IA-113-C-29

Lab Sample ID: 140-20175-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.18	J	0.40	0.040	ppb v/v	1.33		TO 15 LL	Total/NA
Carbon tetrachloride	0.16	J *	0.40	0.035	ppb v/v	1.33		TO 15 LL	Total/NA
Chlorodifluoromethane	1.3		0.40	0.11	ppb v/v	1.33		TO 15 LL	Total/NA
Chloroform	0.14	J	0.40	0.035	ppb v/v	1.33		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.61		0.40	0.070	ppb v/v	1.33		TO 15 LL	Total/NA
1,1-Dichloroethane	0.13	J	0.40	0.035	ppb v/v	1.33		TO 15 LL	Total/NA
1,2-Dichloroethane	0.088	J	0.40	0.050	ppb v/v	1.33		TO 15 LL	Total/NA
Ethylbenzene	0.15	J	0.40	0.065	ppb v/v	1.33		TO 15 LL	Total/NA
Tetrachloroethene	0.097	J	0.40	0.035	ppb v/v	1.33		TO 15 LL	Total/NA
Toluene	1.1		0.60	0.39	ppb v/v	1.33		TO 15 LL	Total/NA
trans-1,2-Dichloroethene	0.067	J	0.40	0.035	ppb v/v	1.33		TO 15 LL	Total/NA
1,1,1-Trichloroethane	0.19	J	0.40	0.19	ppb v/v	1.33		TO 15 LL	Total/NA
1,1,2-Trichloroethane	0.082	J	0.40	0.035	ppb v/v	1.33		TO 15 LL	Total/NA
Trichloroethene	0.050	J	0.20	0.030	ppb v/v	1.33		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	0.15	J *	0.40	0.10	ppb v/v	1.33		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	0.36	J	0.40	0.11	ppb v/v	1.33		TO 15 LL	Total/NA
Xylenes, Total	0.70	J	0.80	0.12	ppb v/v	1.33		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.56	J	1.3	0.13	ug/m3	1.33		TO 15 LL	Total/NA
Carbon tetrachloride	1.0	J *	2.5	0.22	ug/m3	1.33		TO 15 LL	Total/NA
Chlorodifluoromethane	4.7		1.4	0.39	ug/m3	1.33		TO 15 LL	Total/NA
Chloroform	0.66	J	2.0	0.17	ug/m3	1.33		TO 15 LL	Total/NA
Dichlorodifluoromethane	3.0		2.0	0.35	ug/m3	1.33		TO 15 LL	Total/NA
1,1-Dichloroethane	0.52	J	1.6	0.14	ug/m3	1.33		TO 15 LL	Total/NA
1,2-Dichloroethane	0.35	J	1.6	0.20	ug/m3	1.33		TO 15 LL	Total/NA
Ethylbenzene	0.67	J	1.7	0.28	ug/m3	1.33		TO 15 LL	Total/NA
Tetrachloroethene	0.66	J	2.7	0.24	ug/m3	1.33		TO 15 LL	Total/NA
Toluene	4.1		2.3	1.5	ug/m3	1.33		TO 15 LL	Total/NA
trans-1,2-Dichloroethene	0.27	J	1.6	0.14	ug/m3	1.33		TO 15 LL	Total/NA
1,1,1-Trichloroethane	1.0	J	2.2	1.0	ug/m3	1.33		TO 15 LL	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: IA-113-C-29 (Continued)

Lab Sample ID: 140-20175-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,2-Trichloroethane	0.45	J	2.2	0.19	ug/m3	1.33		TO 15 LL	Total/NA
Trichloroethene	0.27	J	1.1	0.16	ug/m3	1.33		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	0.75	J *	2.0	0.49	ug/m3	1.33		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	1.8	J	2.0	0.54	ug/m3	1.33		TO 15 LL	Total/NA
Xylenes, Total	3.0	J	3.5	0.52	ug/m3	1.33		TO 15 LL	Total/NA

Client Sample ID: IA-088-C-29

Lab Sample ID: 140-20175-22

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.15	J	0.40	0.040	ppb v/v	1.35		TO 15 LL	Total/NA
Carbon tetrachloride	0.089	J *	0.40	0.035	ppb v/v	1.35		TO 15 LL	Total/NA
Chlorodifluoromethane	1.3		0.40	0.11	ppb v/v	1.35		TO 15 LL	Total/NA
Chloroform	0.054	J	0.40	0.035	ppb v/v	1.35		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.51		0.40	0.070	ppb v/v	1.35		TO 15 LL	Total/NA
Ethylbenzene	0.083	J	0.40	0.065	ppb v/v	1.35		TO 15 LL	Total/NA
Toluene	1.2		0.60	0.39	ppb v/v	1.35		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	0.26	J	0.40	0.11	ppb v/v	1.35		TO 15 LL	Total/NA
Xylenes, Total	0.43	J	0.80	0.12	ppb v/v	1.35		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.46	J	1.3	0.13	ug/m3	1.35		TO 15 LL	Total/NA
Carbon tetrachloride	0.56	J *	2.5	0.22	ug/m3	1.35		TO 15 LL	Total/NA
Chlorodifluoromethane	4.4		1.4	0.39	ug/m3	1.35		TO 15 LL	Total/NA
Chloroform	0.27	J	2.0	0.17	ug/m3	1.35		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.5		2.0	0.35	ug/m3	1.35		TO 15 LL	Total/NA
Ethylbenzene	0.36	J	1.7	0.28	ug/m3	1.35		TO 15 LL	Total/NA
Toluene	4.5		2.3	1.5	ug/m3	1.35		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	1.3	J	2.0	0.54	ug/m3	1.35		TO 15 LL	Total/NA
Xylenes, Total	1.9	J	3.5	0.52	ug/m3	1.35		TO 15 LL	Total/NA

Client Sample ID: IA-142-C-29

Lab Sample ID: 140-20175-23

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.15	J	0.40	0.040	ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.12	J *	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Chlorodifluoromethane	2.2		0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Chloroform	0.20	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.57		0.40	0.070	ppb v/v	1		TO 15 LL	Total/NA
Ethylbenzene	0.11	J	0.40	0.065	ppb v/v	1		TO 15 LL	Total/NA
Toluene	1.1		0.60	0.39	ppb v/v	1		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	0.28	J	0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Xylenes, Total	0.62	J	0.80	0.12	ppb v/v	1		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.47	J	1.3	0.13	ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.77	J *	2.5	0.22	ug/m3	1		TO 15 LL	Total/NA
Chlorodifluoromethane	7.8		1.4	0.39	ug/m3	1		TO 15 LL	Total/NA
Chloroform	0.96	J	2.0	0.17	ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.8		2.0	0.35	ug/m3	1		TO 15 LL	Total/NA
Ethylbenzene	0.49	J	1.7	0.28	ug/m3	1		TO 15 LL	Total/NA
Toluene	4.2		2.3	1.5	ug/m3	1		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	1.4	J	2.0	0.54	ug/m3	1		TO 15 LL	Total/NA
Xylenes, Total	2.7	J	3.5	0.52	ug/m3	1		TO 15 LL	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Tetra Tech, Inc.
Project/Site: Middle River - MRC

Job ID: 140-20175-1

Client Sample ID: IA-155-C-29 — Lab Sample ID: 140-20175-24

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.18	J	0.40	0.040	ppb v/v	1.43		TO 15 LL	Total/NA
Carbon tetrachloride	0.060	J *	0.40	0.035	ppb v/v	1.43		TO 15 LL	Total/NA
Chlorodifluoromethane	2.6		0.40	0.11	ppb v/v	1.43		TO 15 LL	Total/NA
Chloroform	0.094	J	0.40	0.035	ppb v/v	1.43		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.50		0.40	0.070	ppb v/v	1.43		TO 15 LL	Total/NA
Ethylbenzene	0.097	J	0.40	0.065	ppb v/v	1.43		TO 15 LL	Total/NA
Toluene	0.87		0.60	0.39	ppb v/v	1.43		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	0.26	J	0.40	0.11	ppb v/v	1.43		TO 15 LL	Total/NA
Xylenes, Total	0.49	J	0.80	0.12	ppb v/v	1.43		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.58	J	1.3	0.13	ug/m3	1.43		TO 15 LL	Total/NA
Carbon tetrachloride	0.38	J *	2.5	0.22	ug/m3	1.43		TO 15 LL	Total/NA
Chlorodifluoromethane	9.2		1.4	0.39	ug/m3	1.43		TO 15 LL	Total/NA
Chloroform	0.46	J	2.0	0.17	ug/m3	1.43		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.5		2.0	0.35	ug/m3	1.43		TO 15 LL	Total/NA
Ethylbenzene	0.42	J	1.7	0.28	ug/m3	1.43		TO 15 LL	Total/NA
Toluene	3.3		2.3	1.5	ug/m3	1.43		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	1.3	J	2.0	0.54	ug/m3	1.43		TO 15 LL	Total/NA
Xylenes, Total	2.1	J	3.5	0.52	ug/m3	1.43		TO 15 LL	Total/NA

Client Sample ID: IA-133-C-29 — Lab Sample ID: 140-20175-25

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.17	J	0.40	0.040	ppb v/v	1.56		TO 15 LL	Total/NA
Carbon tetrachloride	0.076	J *	0.40	0.035	ppb v/v	1.56		TO 15 LL	Total/NA
Chlorodifluoromethane	2.7		0.40	0.11	ppb v/v	1.56		TO 15 LL	Total/NA
Chloroform	0.069	J	0.40	0.035	ppb v/v	1.56		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.47		0.40	0.070	ppb v/v	1.56		TO 15 LL	Total/NA
Ethylbenzene	0.087	J	0.40	0.065	ppb v/v	1.56		TO 15 LL	Total/NA
Toluene	0.82		0.60	0.39	ppb v/v	1.56		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	0.27	J	0.40	0.11	ppb v/v	1.56		TO 15 LL	Total/NA
Xylenes, Total	0.49	J	0.80	0.12	ppb v/v	1.56		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.54	J	1.3	0.13	ug/m3	1.56		TO 15 LL	Total/NA
Carbon tetrachloride	0.48	J *	2.5	0.22	ug/m3	1.56		TO 15 LL	Total/NA
Chlorodifluoromethane	9.4		1.4	0.39	ug/m3	1.56		TO 15 LL	Total/NA
Chloroform	0.34	J	2.0	0.17	ug/m3	1.56		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.3		2.0	0.35	ug/m3	1.56		TO 15 LL	Total/NA
Ethylbenzene	0.38	J	1.7	0.28	ug/m3	1.56		TO 15 LL	Total/NA
Toluene	3.1		2.3	1.5	ug/m3	1.56		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	1.3	J	2.0	0.54	ug/m3	1.56		TO 15 LL	Total/NA
Xylenes, Total	2.1	J	3.5	0.52	ug/m3	1.56		TO 15 LL	Total/NA

Client Sample ID: IA-153-C-29 — Lab Sample ID: 140-20175-26

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.14	J	0.40	0.040	ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.086	J *	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Chlorodifluoromethane	2.4		0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Chloroform	0.060	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.47		0.40	0.070	ppb v/v	1		TO 15 LL	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: IA-153-C-29 (Continued)

Lab Sample ID: 140-20175-26

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2-Dichloroethane	0.10	J	0.40	0.050	ppb v/v	1		TO 15 LL	Total/NA
Ethylbenzene	0.086	J	0.40	0.065	ppb v/v	1		TO 15 LL	Total/NA
Toluene	0.77		0.60	0.39	ppb v/v	1		TO 15 LL	Total/NA
Xylenes, Total	0.42	J	0.80	0.12	ppb v/v	1		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.45	J	1.3	0.13	ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.54	J *	2.5	0.22	ug/m3	1		TO 15 LL	Total/NA
Chlorodifluoromethane	8.4		1.4	0.39	ug/m3	1		TO 15 LL	Total/NA
Chloroform	0.29	J	2.0	0.17	ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.3		2.0	0.35	ug/m3	1		TO 15 LL	Total/NA
1,2-Dichloroethane	0.41	J	1.6	0.20	ug/m3	1		TO 15 LL	Total/NA
Ethylbenzene	0.38	J	1.7	0.28	ug/m3	1		TO 15 LL	Total/NA
Toluene	2.9		2.3	1.5	ug/m3	1		TO 15 LL	Total/NA
Xylenes, Total	1.8	J	3.5	0.52	ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: IA-DUP1-C-29

Lab Sample ID: 140-20175-27

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.19	J	0.40	0.040	ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.12	J *	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Chlorodifluoromethane	2.9		0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Chloroform	0.11	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.57		0.40	0.070	ppb v/v	1		TO 15 LL	Total/NA
Ethylbenzene	0.13	J	0.40	0.065	ppb v/v	1		TO 15 LL	Total/NA
Methylene Chloride	3.2		2.0	2.0	ppb v/v	1		TO 15 LL	Total/NA
Toluene	1.1		0.60	0.39	ppb v/v	1		TO 15 LL	Total/NA
Trichloroethene	0.89		0.20	0.030	ppb v/v	1		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	0.11	J *	0.40	0.10	ppb v/v	1		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	0.28	J	0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Xylenes, Total	0.58	J	0.80	0.12	ppb v/v	1		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.60	J	1.3	0.13	ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.76	J *	2.5	0.22	ug/m3	1		TO 15 LL	Total/NA
Chlorodifluoromethane	10		1.4	0.39	ug/m3	1		TO 15 LL	Total/NA
Chloroform	0.55	J	2.0	0.17	ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.8		2.0	0.35	ug/m3	1		TO 15 LL	Total/NA
Ethylbenzene	0.56	J	1.7	0.28	ug/m3	1		TO 15 LL	Total/NA
Methylene Chloride	11		6.9	6.8	ug/m3	1		TO 15 LL	Total/NA
Toluene	4.2		2.3	1.5	ug/m3	1		TO 15 LL	Total/NA
Trichloroethene	4.8		1.1	0.16	ug/m3	1		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	0.52	J *	2.0	0.49	ug/m3	1		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	1.4	J	2.0	0.54	ug/m3	1		TO 15 LL	Total/NA
Xylenes, Total	2.5	J	3.5	0.52	ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: IA-060-C-29

Lab Sample ID: 140-20175-28

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.21	J	0.40	0.040	ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.11	J *	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Chlorodifluoromethane	5.5		0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Chloroform	0.11	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: IA-060-C-29 (Continued)

Lab Sample ID: 140-20175-28

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dichlorodifluoromethane	0.56		0.40	0.070	ppb v/v	1		TO 15 LL	Total/NA
Ethylbenzene	0.13	J	0.40	0.065	ppb v/v	1		TO 15 LL	Total/NA
Toluene	1.4		0.60	0.39	ppb v/v	1		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	0.14	J *	0.40	0.10	ppb v/v	1		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	0.28	J	0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Xylenes, Total	0.77	J	0.80	0.12	ppb v/v	1		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.68	J	1.3	0.13	ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.69	J *	2.5	0.22	ug/m3	1		TO 15 LL	Total/NA
Chlorodifluoromethane	19		1.4	0.39	ug/m3	1		TO 15 LL	Total/NA
Chloroform	0.56	J	2.0	0.17	ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.8		2.0	0.35	ug/m3	1		TO 15 LL	Total/NA
Ethylbenzene	0.58	J	1.7	0.28	ug/m3	1		TO 15 LL	Total/NA
Toluene	5.2		2.3	1.5	ug/m3	1		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	0.67	J *	2.0	0.49	ug/m3	1		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	1.4	J	2.0	0.54	ug/m3	1		TO 15 LL	Total/NA
Xylenes, Total	3.3	J	3.5	0.52	ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: IA-152-C-29

Lab Sample ID: 140-20175-29

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.21	J	0.40	0.040	ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.093	J *	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Chlorodifluoromethane	11		0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Chloroform	0.14	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.55		0.40	0.070	ppb v/v	1		TO 15 LL	Total/NA
Ethylbenzene	0.15	J	0.40	0.065	ppb v/v	1		TO 15 LL	Total/NA
Toluene	1.3		0.60	0.39	ppb v/v	1		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	0.21	J *	0.40	0.10	ppb v/v	1		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	0.30	J	0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Xylenes, Total	0.81		0.80	0.12	ppb v/v	1		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.66	J	1.3	0.13	ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.59	J *	2.5	0.22	ug/m3	1		TO 15 LL	Total/NA
Chlorodifluoromethane	38		1.4	0.39	ug/m3	1		TO 15 LL	Total/NA
Chloroform	0.67	J	2.0	0.17	ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.7		2.0	0.35	ug/m3	1		TO 15 LL	Total/NA
Ethylbenzene	0.67	J	1.7	0.28	ug/m3	1		TO 15 LL	Total/NA
Toluene	4.8		2.3	1.5	ug/m3	1		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	1.0	J *	2.0	0.49	ug/m3	1		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	1.5	J	2.0	0.54	ug/m3	1		TO 15 LL	Total/NA
Xylenes, Total	3.5		3.5	0.52	ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: IA-150-C-29

Lab Sample ID: 140-20175-30

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.20	J	0.40	0.040	ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.094	J *	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Chlorodifluoromethane	18		0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Chloroform	0.082	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.56		0.40	0.070	ppb v/v	1		TO 15 LL	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: IA-150-C-29 (Continued)

Lab Sample ID: 140-20175-30

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Ethylbenzene	0.14	J	0.40	0.065	ppb v/v	1		TO 15 LL	Total/NA
Methylene Chloride	5.2		2.0	2.0	ppb v/v	1		TO 15 LL	Total/NA
Toluene	1.1		0.60	0.39	ppb v/v	1		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	0.10	J *	0.40	0.10	ppb v/v	1		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	0.28	J	0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Xylenes, Total	0.73	J	0.80	0.12	ppb v/v	1		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.62	J	1.3	0.13	ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.59	J *	2.5	0.22	ug/m3	1		TO 15 LL	Total/NA
Chlorodifluoromethane	65		1.4	0.39	ug/m3	1		TO 15 LL	Total/NA
Chloroform	0.40	J	2.0	0.17	ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.8		2.0	0.35	ug/m3	1		TO 15 LL	Total/NA
Ethylbenzene	0.61	J	1.7	0.28	ug/m3	1		TO 15 LL	Total/NA
Methylene Chloride	18		6.9	6.8	ug/m3	1		TO 15 LL	Total/NA
Toluene	4.2		2.3	1.5	ug/m3	1		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	0.51	J *	2.0	0.49	ug/m3	1		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	1.4	J	2.0	0.54	ug/m3	1		TO 15 LL	Total/NA
Xylenes, Total	3.2	J	3.5	0.52	ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: IA-145-C-29

Lab Sample ID: 140-20175-31

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.19	J	0.40	0.040	ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.091	J *	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Chlorodifluoromethane	18		0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Chloroform	0.082	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.51		0.40	0.070	ppb v/v	1		TO 15 LL	Total/NA
Ethylbenzene	0.13	J	0.40	0.065	ppb v/v	1		TO 15 LL	Total/NA
Toluene	0.85		0.60	0.39	ppb v/v	1		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	0.26	J	0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Xylenes, Total	0.63	J	0.80	0.12	ppb v/v	1		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.61	J	1.3	0.13	ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.57	J *	2.5	0.22	ug/m3	1		TO 15 LL	Total/NA
Chlorodifluoromethane	63		1.4	0.39	ug/m3	1		TO 15 LL	Total/NA
Chloroform	0.40	J	2.0	0.17	ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.5		2.0	0.35	ug/m3	1		TO 15 LL	Total/NA
Ethylbenzene	0.55	J	1.7	0.28	ug/m3	1		TO 15 LL	Total/NA
Toluene	3.2		2.3	1.5	ug/m3	1		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	1.3	J	2.0	0.54	ug/m3	1		TO 15 LL	Total/NA
Xylenes, Total	2.7	J	3.5	0.52	ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: IA-146-C-29

Lab Sample ID: 140-20175-32

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.19	J	0.40	0.040	ppb v/v	1.48		TO 15 LL	Total/NA
Carbon tetrachloride	0.088	J *	0.40	0.035	ppb v/v	1.48		TO 15 LL	Total/NA
Chlorodifluoromethane	18		0.40	0.11	ppb v/v	1.48		TO 15 LL	Total/NA
Chloroform	0.090	J	0.40	0.035	ppb v/v	1.48		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.53		0.40	0.070	ppb v/v	1.48		TO 15 LL	Total/NA
Ethylbenzene	0.13	J	0.40	0.065	ppb v/v	1.48		TO 15 LL	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: IA-146-C-29 (Continued) — Lab Sample ID: 140-20175-32

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	2.5		2.0	2.0	ppb v/v	1.48		TO 15 LL	Total/NA
Toluene	0.79		0.60	0.39	ppb v/v	1.48		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	0.11	J *	0.40	0.10	ppb v/v	1.48		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	0.28	J	0.40	0.11	ppb v/v	1.48		TO 15 LL	Total/NA
Xylenes, Total	0.67	J	0.80	0.12	ppb v/v	1.48		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.59	J	1.3	0.13	ug/m3	1.48		TO 15 LL	Total/NA
Carbon tetrachloride	0.55	J *	2.5	0.22	ug/m3	1.48		TO 15 LL	Total/NA
Chlorodifluoromethane	65		1.4	0.39	ug/m3	1.48		TO 15 LL	Total/NA
Chloroform	0.44	J	2.0	0.17	ug/m3	1.48		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.6		2.0	0.35	ug/m3	1.48		TO 15 LL	Total/NA
Ethylbenzene	0.56	J	1.7	0.28	ug/m3	1.48		TO 15 LL	Total/NA
Methylene Chloride	8.8		6.9	6.8	ug/m3	1.48		TO 15 LL	Total/NA
Toluene	3.0		2.3	1.5	ug/m3	1.48		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	0.53	J *	2.0	0.49	ug/m3	1.48		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	1.4	J	2.0	0.54	ug/m3	1.48		TO 15 LL	Total/NA
Xylenes, Total	2.9	J	3.5	0.52	ug/m3	1.48		TO 15 LL	Total/NA

Client Sample ID: IA-144-C-29 — Lab Sample ID: 140-20175-33

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chlorodifluoromethane	7.4		0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.38	J	0.40	0.070	ppb v/v	1		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chlorodifluoromethane	26		1.4	0.39	ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	1.9	J	2.0	0.35	ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: IA-141-C-29 — Lab Sample ID: 140-20175-34

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.16	J	0.40	0.040	ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.052	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Chlorodifluoromethane	3.2		0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.38	J	0.40	0.070	ppb v/v	1		TO 15 LL	Total/NA
Ethylbenzene	0.18	J	0.40	0.065	ppb v/v	1		TO 15 LL	Total/NA
Toluene	1.6		0.60	0.39	ppb v/v	1		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	0.15	J	0.40	0.10	ppb v/v	1		TO 15 LL	Total/NA
Xylenes, Total	0.98		0.80	0.12	ppb v/v	1		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.51	J	1.3	0.13	ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.33	J	2.5	0.22	ug/m3	1		TO 15 LL	Total/NA
Chlorodifluoromethane	11		1.4	0.39	ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	1.9	J	2.0	0.35	ug/m3	1		TO 15 LL	Total/NA
Ethylbenzene	0.77	J	1.7	0.28	ug/m3	1		TO 15 LL	Total/NA
Toluene	5.9		2.3	1.5	ug/m3	1		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	0.73	J	2.0	0.49	ug/m3	1		TO 15 LL	Total/NA
Xylenes, Total	4.3		3.5	0.52	ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: IA-149-C-29 — Lab Sample ID: 140-20175-35

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.18	J	0.40	0.040	ppb v/v	1		TO 15 LL	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: IA-149-C-29 (Continued)

Lab Sample ID: 140-20175-35

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon tetrachloride	0.045	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Chlorodifluoromethane	1.7		0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Chloroform	0.11	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.38	J	0.40	0.070	ppb v/v	1		TO 15 LL	Total/NA
Ethylbenzene	0.31	J	0.40	0.065	ppb v/v	1		TO 15 LL	Total/NA
Methylene Chloride	9.6		2.0	2.0	ppb v/v	1		TO 15 LL	Total/NA
Tetrachloroethene	0.15	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Toluene	13		0.60	0.39	ppb v/v	1		TO 15 LL	Total/NA
Trichloroethene	0.41		0.20	0.030	ppb v/v	1		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	0.29	J	0.40	0.10	ppb v/v	1		TO 15 LL	Total/NA
Xylenes, Total	1.6		0.80	0.12	ppb v/v	1		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.58	J	1.3	0.13	ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.28	J	2.5	0.22	ug/m3	1		TO 15 LL	Total/NA
Chlorodifluoromethane	6.2		1.4	0.39	ug/m3	1		TO 15 LL	Total/NA
Chloroform	0.52	J	2.0	0.17	ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	1.9	J	2.0	0.35	ug/m3	1		TO 15 LL	Total/NA
Ethylbenzene	1.3	J	1.7	0.28	ug/m3	1		TO 15 LL	Total/NA
Methylene Chloride	33		6.9	6.8	ug/m3	1		TO 15 LL	Total/NA
Tetrachloroethene	1.0	J	2.7	0.24	ug/m3	1		TO 15 LL	Total/NA
Toluene	47		2.3	1.5	ug/m3	1		TO 15 LL	Total/NA
Trichloroethene	2.2		1.1	0.16	ug/m3	1		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	1.4	J	2.0	0.49	ug/m3	1		TO 15 LL	Total/NA
Xylenes, Total	6.8		3.5	0.52	ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: IA-DUP2-C-29

Lab Sample ID: 140-20175-36

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.17	J	0.40	0.040	ppb v/v	1.4		TO 15 LL	Total/NA
Chlorodifluoromethane	1.6		0.40	0.11	ppb v/v	1.4		TO 15 LL	Total/NA
Chloroform	0.12	J	0.40	0.035	ppb v/v	1.4		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.36	J	0.40	0.070	ppb v/v	1.4		TO 15 LL	Total/NA
Ethylbenzene	0.35	J	0.40	0.065	ppb v/v	1.4		TO 15 LL	Total/NA
Methylene Chloride	11		2.0	2.0	ppb v/v	1.4		TO 15 LL	Total/NA
Naphthalene	0.24		0.20	0.20	ppb v/v	1.4		TO 15 LL	Total/NA
Tetrachloroethene	0.14	J	0.40	0.035	ppb v/v	1.4		TO 15 LL	Total/NA
Toluene	13		0.60	0.39	ppb v/v	1.4		TO 15 LL	Total/NA
Trichloroethene	0.36		0.20	0.030	ppb v/v	1.4		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	0.38	J	0.40	0.10	ppb v/v	1.4		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	0.11	J	0.40	0.11	ppb v/v	1.4		TO 15 LL	Total/NA
Xylenes, Total	1.8		0.80	0.12	ppb v/v	1.4		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.55	J	1.3	0.13	ug/m3	1.4		TO 15 LL	Total/NA
Chlorodifluoromethane	5.7		1.4	0.39	ug/m3	1.4		TO 15 LL	Total/NA
Chloroform	0.57	J	2.0	0.17	ug/m3	1.4		TO 15 LL	Total/NA
Dichlorodifluoromethane	1.8	J	2.0	0.35	ug/m3	1.4		TO 15 LL	Total/NA
Ethylbenzene	1.5	J	1.7	0.28	ug/m3	1.4		TO 15 LL	Total/NA
Methylene Chloride	40		6.9	6.8	ug/m3	1.4		TO 15 LL	Total/NA
Naphthalene	1.3		1.0	1.0	ug/m3	1.4		TO 15 LL	Total/NA
Tetrachloroethene	0.94	J	2.7	0.24	ug/m3	1.4		TO 15 LL	Total/NA
Toluene	50		2.3	1.5	ug/m3	1.4		TO 15 LL	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: IA-DUP2-C-29 (Continued)

Lab Sample ID: 140-20175-36

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	1.9		1.1	0.16	ug/m3	1.4		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	1.9	J	2.0	0.49	ug/m3	1.4		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	0.55	J	2.0	0.54	ug/m3	1.4		TO 15 LL	Total/NA
Xylenes, Total	7.6		3.5	0.52	ug/m3	1.4		TO 15 LL	Total/NA

Client Sample ID: IA-126-C-29

Lab Sample ID: 140-20175-37

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.18	J	0.40	0.040	ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.062	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Chlorodifluoromethane	1.7		0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Chloroform	0.13	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.40		0.40	0.070	ppb v/v	1		TO 15 LL	Total/NA
Ethylbenzene	0.32	J	0.40	0.065	ppb v/v	1		TO 15 LL	Total/NA
Methylene Chloride	11		2.0	2.0	ppb v/v	1		TO 15 LL	Total/NA
Tetrachloroethene	0.18	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Toluene	14		0.60	0.39	ppb v/v	1		TO 15 LL	Total/NA
Trichloroethene	0.39		0.20	0.030	ppb v/v	1		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	0.35	J	0.40	0.10	ppb v/v	1		TO 15 LL	Total/NA
Xylenes, Total	1.7		0.80	0.12	ppb v/v	1		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.58	J	1.3	0.13	ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.39	J	2.5	0.22	ug/m3	1		TO 15 LL	Total/NA
Chlorodifluoromethane	5.9		1.4	0.39	ug/m3	1		TO 15 LL	Total/NA
Chloroform	0.63	J	2.0	0.17	ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.0		2.0	0.35	ug/m3	1		TO 15 LL	Total/NA
Ethylbenzene	1.4	J	1.7	0.28	ug/m3	1		TO 15 LL	Total/NA
Methylene Chloride	39		6.9	6.8	ug/m3	1		TO 15 LL	Total/NA
Tetrachloroethene	1.3	J	2.7	0.24	ug/m3	1		TO 15 LL	Total/NA
Toluene	52		2.3	1.5	ug/m3	1		TO 15 LL	Total/NA
Trichloroethene	2.1		1.1	0.16	ug/m3	1		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	1.7	J	2.0	0.49	ug/m3	1		TO 15 LL	Total/NA
Xylenes, Total	7.3		3.5	0.52	ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: IA-BCK-1-29

Lab Sample ID: 140-20175-38

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.073	J	0.40	0.040	ppb v/v	1		TO 15 LL	Total/NA
Chlorodifluoromethane	0.35	J	0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.35	J	0.40	0.070	ppb v/v	1		TO 15 LL	Total/NA
Xylenes, Total	0.23	J	0.80	0.12	ppb v/v	1		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.23	J	1.3	0.13	ug/m3	1		TO 15 LL	Total/NA
Chlorodifluoromethane	1.3	J	1.4	0.39	ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	1.7	J	2.0	0.35	ug/m3	1		TO 15 LL	Total/NA
Xylenes, Total	0.99	J	3.5	0.52	ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: IA-BCK-2-29

Lab Sample ID: 140-20175-39

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.084	J	0.40	0.040	ppb v/v	2.29		TO 15 LL	Total/NA
Chlorodifluoromethane	0.31	J	0.40	0.11	ppb v/v	2.29		TO 15 LL	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: IA-BCK-2-29 (Continued)

Lab Sample ID: 140-20175-39

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dichlorodifluoromethane	0.38	J	0.40	0.070	ppb v/v	2.29		TO 15 LL	Total/NA
1,2-Dichloroethane	0.068	J	0.40	0.050	ppb v/v	2.29		TO 15 LL	Total/NA
Methylene Chloride	6.1		2.0	2.0	ppb v/v	2.29		TO 15 LL	Total/NA
Toluene	0.42	J	0.60	0.39	ppb v/v	2.29		TO 15 LL	Total/NA
Xylenes, Total	0.24	J	0.80	0.12	ppb v/v	2.29		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.27	J	1.3	0.13	ug/m3	2.29		TO 15 LL	Total/NA
Chlorodifluoromethane	1.1	J	1.4	0.39	ug/m3	2.29		TO 15 LL	Total/NA
Dichlorodifluoromethane	1.9	J	2.0	0.35	ug/m3	2.29		TO 15 LL	Total/NA
1,2-Dichloroethane	0.28	J	1.6	0.20	ug/m3	2.29		TO 15 LL	Total/NA
Methylene Chloride	21		6.9	6.8	ug/m3	2.29		TO 15 LL	Total/NA
Toluene	1.6	J	2.3	1.5	ug/m3	2.29		TO 15 LL	Total/NA
Xylenes, Total	1.1	J	3.5	0.52	ug/m3	2.29		TO 15 LL	Total/NA

Client Sample ID: IA-BCK-3-29

Lab Sample ID: 140-20175-40

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.071	J	0.40	0.040	ppb v/v	1.59		TO 15 LL	Total/NA
Carbon tetrachloride	0.072	J	0.40	0.035	ppb v/v	1.59		TO 15 LL	Total/NA
Chlorodifluoromethane	0.34	J	0.40	0.11	ppb v/v	1.59		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	0.31	J	0.40	0.050	ppb v/v	1.59		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.39	J	0.40	0.070	ppb v/v	1.59		TO 15 LL	Total/NA
Methylene Chloride	2.2		2.0	2.0	ppb v/v	1.59		TO 15 LL	Total/NA
Toluene	0.41	J	0.60	0.39	ppb v/v	1.59		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	0.11	J	0.40	0.10	ppb v/v	1.59		TO 15 LL	Total/NA
Xylenes, Total	0.27	J	0.80	0.12	ppb v/v	1.59		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.23	J	1.3	0.13	ug/m3	1.59		TO 15 LL	Total/NA
Carbon tetrachloride	0.45	J	2.5	0.22	ug/m3	1.59		TO 15 LL	Total/NA
Chlorodifluoromethane	1.2	J	1.4	0.39	ug/m3	1.59		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	1.2	J	1.6	0.20	ug/m3	1.59		TO 15 LL	Total/NA
Dichlorodifluoromethane	1.9	J	2.0	0.35	ug/m3	1.59		TO 15 LL	Total/NA
Methylene Chloride	7.8		6.9	6.8	ug/m3	1.59		TO 15 LL	Total/NA
Toluene	1.5	J	2.3	1.5	ug/m3	1.59		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	0.53	J	2.0	0.49	ug/m3	1.59		TO 15 LL	Total/NA
Xylenes, Total	1.2	J	3.5	0.52	ug/m3	1.59		TO 15 LL	Total/NA

Client Sample ID: IA-BCK-4-29

Lab Sample ID: 140-20175-41

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.14	J	0.40	0.040	ppb v/v	1.52		TO 15 LL	Total/NA
Carbon tetrachloride	0.048	J	0.40	0.035	ppb v/v	1.52		TO 15 LL	Total/NA
Chlorodifluoromethane	0.35	J	0.40	0.11	ppb v/v	1.52		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.42		0.40	0.070	ppb v/v	1.52		TO 15 LL	Total/NA
Methylene Chloride	3.6		2.0	2.0	ppb v/v	1.52		TO 15 LL	Total/NA
Toluene	0.49	J	0.60	0.39	ppb v/v	1.52		TO 15 LL	Total/NA
Xylenes, Total	0.15	J	0.80	0.12	ppb v/v	1.52		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.43	J	1.3	0.13	ug/m3	1.52		TO 15 LL	Total/NA
Carbon tetrachloride	0.30	J	2.5	0.22	ug/m3	1.52		TO 15 LL	Total/NA
Chlorodifluoromethane	1.2	J	1.4	0.39	ug/m3	1.52		TO 15 LL	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: IA-BCK-4-29 (Continued)

Lab Sample ID: 140-20175-41

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dichlorodifluoromethane	2.1		2.0	0.35	ug/m3	1.52		TO 15 LL	Total/NA
Methylene Chloride	12		6.9	6.8	ug/m3	1.52		TO 15 LL	Total/NA
Toluene	1.8	J	2.3	1.5	ug/m3	1.52		TO 15 LL	Total/NA
Xylenes, Total	0.65	J	3.5	0.52	ug/m3	1.52		TO 15 LL	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SV-001-C-29 Lab Sample ID: 140-20175-1

Date Collected: 08/25/20 10:08 **Matrix: Air**
Date Received: 08/27/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.11**	**J**	0.40	0.040	ppb v/v			09/03/20 22:20	1
Carbon tetrachloride	**0.078**	**J**	0.40	0.035	ppb v/v			09/03/20 22:20	1
Chlorodifluoromethane	**0.53**		0.40	0.11	ppb v/v			09/03/20 22:20	1
Chloroform	**0.72**		0.40	0.035	ppb v/v			09/03/20 22:20	1
cis-1,2-Dichloroethene	**4.8**		0.40	0.050	ppb v/v			09/03/20 22:20	1
Dichlorodifluoromethane	**0.54**		0.40	0.070	ppb v/v			09/03/20 22:20	1
1,1-Dichloroethane	ND		0.40	0.035	ppb v/v			09/03/20 22:20	1
1,2-Dichloroethane	ND		0.40	0.050	ppb v/v			09/03/20 22:20	1
1,1-Dichloroethene	ND		0.40	0.040	ppb v/v			09/03/20 22:20	1
Ethylbenzene	ND		0.40	0.065	ppb v/v			09/03/20 22:20	1
Methylene Chloride	ND		2.0	2.0	ppb v/v			09/03/20 22:20	1
Methyl tert-butyl ether	ND		2.0	0.26	ppb v/v			09/03/20 22:20	1
Naphthalene	ND		0.20	0.20	ppb v/v			09/03/20 22:20	1
Tetrachloroethene	**6.1**		0.40	0.035	ppb v/v			09/03/20 22:20	1
Toluene	ND		0.60	0.39	ppb v/v			09/03/20 22:20	1
trans-1,2-Dichloroethene	**2.3**		0.40	0.035	ppb v/v			09/03/20 22:20	1
1,2,4-Trichlorobenzene	ND		0.40	0.32	ppb v/v			09/03/20 22:20	1
1,1,1-Trichloroethane	ND		0.40	0.19	ppb v/v			09/03/20 22:20	1
1,1,2-Trichloroethane	ND		0.40	0.035	ppb v/v			09/03/20 22:20	1
Trichloroethene	**43**		0.20	0.030	ppb v/v			09/03/20 22:20	1
1,2,3-Trimethylbenzene	ND		0.40	0.18	ppb v/v			09/03/20 22:20	1
1,2,4-Trimethylbenzene	ND		0.40	0.10	ppb v/v			09/03/20 22:20	1
1,3,5-Trimethylbenzene	ND		0.40	0.11	ppb v/v			09/03/20 22:20	1
Vinyl chloride	ND		0.20	0.13	ppb v/v			09/03/20 22:20	1
Xylenes, Total	ND		0.80	0.12	ppb v/v			09/03/20 22:20	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.35**	**J**	1.3	0.13	ug/m3			09/03/20 22:20	1
Carbon tetrachloride	**0.49**	**J**	2.5	0.22	ug/m3			09/03/20 22:20	1
Chlorodifluoromethane	**1.9**		1.4	0.39	ug/m3			09/03/20 22:20	1
Chloroform	**3.5**		2.0	0.17	ug/m3			09/03/20 22:20	1
cis-1,2-Dichloroethene	**19**		1.6	0.20	ug/m3			09/03/20 22:20	1
Dichlorodifluoromethane	**2.7**		2.0	0.35	ug/m3			09/03/20 22:20	1
1,1-Dichloroethane	ND		1.6	0.14	ug/m3			09/03/20 22:20	1
1,2-Dichloroethane	ND		1.6	0.20	ug/m3			09/03/20 22:20	1
1,1-Dichloroethene	ND		1.6	0.16	ug/m3			09/03/20 22:20	1
Ethylbenzene	ND		1.7	0.28	ug/m3			09/03/20 22:20	1
Methylene Chloride	ND		6.9	6.8	ug/m3			09/03/20 22:20	1
Methyl tert-butyl ether	ND		7.2	0.94	ug/m3			09/03/20 22:20	1
Naphthalene	ND		1.0	1.0	ug/m3			09/03/20 22:20	1
Tetrachloroethene	**41**		2.7	0.24	ug/m3			09/03/20 22:20	1
Toluene	ND		2.3	1.5	ug/m3			09/03/20 22:20	1
trans-1,2-Dichloroethene	**9.0**		1.6	0.14	ug/m3			09/03/20 22:20	1
1,2,4-Trichlorobenzene	ND		3.0	2.4	ug/m3			09/03/20 22:20	1
1,1,1-Trichloroethane	ND		2.2	1.0	ug/m3			09/03/20 22:20	1
1,1,2-Trichloroethane	ND		2.2	0.19	ug/m3			09/03/20 22:20	1
Trichloroethene	**230**		1.1	0.16	ug/m3			09/03/20 22:20	1
1,2,3-Trimethylbenzene	ND		2.0	0.88	ug/m3			09/03/20 22:20	1
1,2,4-Trimethylbenzene	ND		2.0	0.49	ug/m3			09/03/20 22:20	1

Client Sample ID: SV-001-C-29 **Lab Sample ID: 140-20175-1**
Date Collected: 08/25/20 10:08 **Matrix: Air**
Date Received: 08/27/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		2.0	0.54	ug/m3			09/03/20 22:20	1
Vinyl chloride	ND		0.51	0.33	ug/m3			09/03/20 22:20	1
Xylenes, Total	ND		3.5	0.52	ug/m3			09/03/20 22:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*60 - 140*		*09/03/20 22:20*	*1*

Client Sample ID: SV-004-C-29

Date Collected: 08/25/20 10:12
Date Received: 08/27/20 10:00
Sample Container: Summa Canister 1L

Lab Sample ID: 140-20175-2

Matrix: Air

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.13**	**J**	1.0	0.10	ppb v/v			09/03/20 23:13	1
Carbon tetrachloride	**0.097**	**J**	1.0	0.088	ppb v/v			09/03/20 23:13	1
Chlorodifluoromethane	ND		1.0	0.28	ppb v/v			09/03/20 23:13	1
Chloroform	**17**		1.0	0.088	ppb v/v			09/03/20 23:13	1
cis-1,2-Dichloroethene	**11**		1.0	0.13	ppb v/v			09/03/20 23:13	1
Dichlorodifluoromethane	**0.50**	**J**	1.0	0.18	ppb v/v			09/03/20 23:13	1
1,1-Dichloroethane	ND		1.0	0.088	ppb v/v			09/03/20 23:13	1
1,2-Dichloroethane	ND		1.0	0.13	ppb v/v			09/03/20 23:13	1
1,1-Dichloroethene	ND		1.0	0.10	ppb v/v			09/03/20 23:13	1
Ethylbenzene	ND		1.0	0.16	ppb v/v			09/03/20 23:13	1
Methylene Chloride	ND		5.0	4.9	ppb v/v			09/03/20 23:13	1
Methyl tert-butyl ether	ND		5.0	0.65	ppb v/v			09/03/20 23:13	1
Naphthalene	ND		0.50	0.50	ppb v/v			09/03/20 23:13	1
Tetrachloroethene	**0.49**	**J**	1.0	0.088	ppb v/v			09/03/20 23:13	1
Toluene	ND		1.5	0.98	ppb v/v			09/03/20 23:13	1
trans-1,2-Dichloroethene	**0.81**	**J**	1.0	0.088	ppb v/v			09/03/20 23:13	1
1,2,4-Trichlorobenzene	ND		1.0	0.80	ppb v/v			09/03/20 23:13	1
1,1,1-Trichloroethane	ND		1.0	0.46	ppb v/v			09/03/20 23:13	1
1,1,2-Trichloroethane	ND		1.0	0.088	ppb v/v			09/03/20 23:13	1
Trichloroethene	**56**		0.50	0.075	ppb v/v			09/03/20 23:13	1
1,2,3-Trimethylbenzene	ND		1.0	0.45	ppb v/v			09/03/20 23:13	1
1,2,4-Trimethylbenzene	ND		1.0	0.25	ppb v/v			09/03/20 23:13	1
1,3,5-Trimethylbenzene	ND		1.0	0.28	ppb v/v			09/03/20 23:13	1
Vinyl chloride	ND		0.50	0.33	ppb v/v			09/03/20 23:13	1
Xylenes, Total	ND		2.0	0.30	ppb v/v			09/03/20 23:13	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.42**	**J**	3.2	0.32	ug/m3			09/03/20 23:13	1
Carbon tetrachloride	**0.61**	**J**	6.3	0.55	ug/m3			09/03/20 23:13	1
Chlorodifluoromethane	ND		3.5	0.97	ug/m3			09/03/20 23:13	1
Chloroform	**81**		4.9	0.43	ug/m3			09/03/20 23:13	1
cis-1,2-Dichloroethene	**42**		4.0	0.50	ug/m3			09/03/20 23:13	1
Dichlorodifluoromethane	**2.5**	**J**	4.9	0.87	ug/m3			09/03/20 23:13	1
1,1-Dichloroethane	ND		4.0	0.35	ug/m3			09/03/20 23:13	1
1,2-Dichloroethane	ND		4.0	0.51	ug/m3			09/03/20 23:13	1
1,1-Dichloroethene	ND		4.0	0.40	ug/m3			09/03/20 23:13	1
Ethylbenzene	ND		4.3	0.71	ug/m3			09/03/20 23:13	1
Methylene Chloride	ND		17	17	ug/m3			09/03/20 23:13	1
Methyl tert-butyl ether	ND		18	2.3	ug/m3			09/03/20 23:13	1
Naphthalene	ND		2.6	2.6	ug/m3			09/03/20 23:13	1
Tetrachloroethene	**3.3**	**J**	6.8	0.59	ug/m3			09/03/20 23:13	1
Toluene	ND		5.7	3.7	ug/m3			09/03/20 23:13	1
trans-1,2-Dichloroethene	**3.2**	**J**	4.0	0.35	ug/m3			09/03/20 23:13	1
1,2,4-Trichlorobenzene	ND		7.4	5.9	ug/m3			09/03/20 23:13	1
1,1,1-Trichloroethane	ND		5.5	2.5	ug/m3			09/03/20 23:13	1
1,1,2-Trichloroethane	ND		5.5	0.48	ug/m3			09/03/20 23:13	1
Trichloroethene	**300**		2.7	0.40	ug/m3			09/03/20 23:13	1
1,2,3-Trimethylbenzene	ND		4.9	2.2	ug/m3			09/03/20 23:13	1
1,2,4-Trimethylbenzene	ND		4.9	1.2	ug/m3			09/03/20 23:13	1

Client Sample ID: SV-004-C-29 **Lab Sample ID: 140-20175-2**
Date Collected: 08/25/20 10:12 **Matrix: Air**
Date Received: 08/27/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		4.9	1.4	ug/m3			09/03/20 23:13	1
Vinyl chloride	ND		1.3	0.83	ug/m3			09/03/20 23:13	1
Xylenes, Total	ND		8.7	1.3	ug/m3			09/03/20 23:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*60 - 140*		*09/03/20 23:13*	*1*

Client Sample ID: SV-102-C-29

Lab Sample ID: 140-20175-3

Date Collected: 08/25/20 10:17
Matrix: Air
Date Received: 08/27/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**2.6**	**J**	6.9	0.69	ppb v/v			09/04/20 00:08	3.43
Carbon tetrachloride	**0.68**	**J**	6.9	0.60	ppb v/v			09/04/20 00:08	3.43
Chlorodifluoromethane	ND		6.9	1.9	ppb v/v			09/04/20 00:08	3.43
Chloroform	**12**		6.9	0.60	ppb v/v			09/04/20 00:08	3.43
cis-1,2-Dichloroethene	**12**		6.9	0.86	ppb v/v			09/04/20 00:08	3.43
Dichlorodifluoromethane	ND		6.9	1.2	ppb v/v			09/04/20 00:08	3.43
1,1-Dichloroethane	**2000**	**E**	6.9	0.60	ppb v/v			09/04/20 00:08	3.43
1,2-Dichloroethane	ND		6.9	0.86	ppb v/v			09/04/20 00:08	3.43
1,1-Dichloroethene	**910**		6.9	0.69	ppb v/v			09/04/20 00:08	3.43
Ethylbenzene	**110**		6.9	1.1	ppb v/v			09/04/20 00:08	3.43
Methylene Chloride	ND		34	33	ppb v/v			09/04/20 00:08	3.43
Methyl tert-butyl ether	ND		34	4.5	ppb v/v			09/04/20 00:08	3.43
Naphthalene	**57**		3.4	3.4	ppb v/v			09/04/20 00:08	3.43
Tetrachloroethene	ND		6.9	0.60	ppb v/v			09/04/20 00:08	3.43
Toluene	**7.6**	**J**	10	6.7	ppb v/v			09/04/20 00:08	3.43
trans-1,2-Dichloroethene	**1.2**	**J**	6.9	0.60	ppb v/v			09/04/20 00:08	3.43
1,2,4-Trichlorobenzene	ND		6.9	5.5	ppb v/v			09/04/20 00:08	3.43
1,1,1-Trichloroethane	**500**		6.9	3.2	ppb v/v			09/04/20 00:08	3.43
1,1,2-Trichloroethane	ND		6.9	0.60	ppb v/v			09/04/20 00:08	3.43
Trichloroethene	**330**		3.4	0.51	ppb v/v			09/04/20 00:08	3.43
1,2,3-Trimethylbenzene	**4.9**	**J**	6.9	3.1	ppb v/v			09/04/20 00:08	3.43
1,2,4-Trimethylbenzene	**4.1**	**J**	6.9	1.7	ppb v/v			09/04/20 00:08	3.43
1,3,5-Trimethylbenzene	**6.5**	**J**	6.9	1.9	ppb v/v			09/04/20 00:08	3.43
Vinyl chloride	**2.6**	**J**	3.4	2.2	ppb v/v			09/04/20 00:08	3.43
Xylenes, Total	**1300**		14	2.1	ppb v/v			09/04/20 00:08	3.43

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**8.3**	**J**	22	2.2	ug/m3			09/04/20 00:08	3.43
Carbon tetrachloride	**4.3**	**J**	43	3.8	ug/m3			09/04/20 00:08	3.43
Chlorodifluoromethane	ND		24	6.7	ug/m3			09/04/20 00:08	3.43
Chloroform	**57**		33	2.9	ug/m3			09/04/20 00:08	3.43
cis-1,2-Dichloroethene	**48**		27	3.4	ug/m3			09/04/20 00:08	3.43
Dichlorodifluoromethane	ND		34	5.9	ug/m3			09/04/20 00:08	3.43
1,1-Dichloroethane	**8200**	**E**	28	2.4	ug/m3			09/04/20 00:08	3.43
1,2-Dichloroethane	ND		28	3.5	ug/m3			09/04/20 00:08	3.43
1,1-Dichloroethene	**3600**		27	2.7	ug/m3			09/04/20 00:08	3.43
Ethylbenzene	**460**		30	4.8	ug/m3			09/04/20 00:08	3.43
Methylene Chloride	ND		120	120	ug/m3			09/04/20 00:08	3.43
Methyl tert-butyl ether	ND		120	16	ug/m3			09/04/20 00:08	3.43
Naphthalene	**300**		18	18	ug/m3			09/04/20 00:08	3.43
Tetrachloroethene	ND		47	4.1	ug/m3			09/04/20 00:08	3.43
Toluene	**29**	**J**	39	25	ug/m3			09/04/20 00:08	3.43
trans-1,2-Dichloroethene	**4.6**	**J**	27	2.4	ug/m3			09/04/20 00:08	3.43
1,2,4-Trichlorobenzene	ND		51	41	ug/m3			09/04/20 00:08	3.43
1,1,1-Trichloroethane	**2700**		37	17	ug/m3			09/04/20 00:08	3.43
1,1,2-Trichloroethane	ND		37	3.3	ug/m3			09/04/20 00:08	3.43
Trichloroethene	**1800**		18	2.8	ug/m3			09/04/20 00:08	3.43
1,2,3-Trimethylbenzene	**24**	**J**	34	15	ug/m3			09/04/20 00:08	3.43
1,2,4-Trimethylbenzene	**20**	**J**	34	8.4	ug/m3			09/04/20 00:08	3.43

Client Sample ID: SV-102-C-29 Lab Sample ID: 140-20175-3

Date Collected: 08/25/20 10:17 **Matrix: Air**
Date Received: 08/27/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	32	J	34	9.3	ug/m3			09/04/20 00:08	3.43
Vinyl chloride	6.7	J	8.8	5.7	ug/m3			09/04/20 00:08	3.43
Xylenes, Total	5800		60	8.9	ug/m3			09/04/20 00:08	3.43

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*60 - 140*		*09/04/20 00:08*	*3.43*

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	1400		12	1.1	ppb v/v			09/08/20 18:03	3.43

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	5500		50	4.4	ug/m3			09/08/20 18:03	3.43

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*60 - 140*		*09/08/20 18:03*	*3.43*

Client Sample ID: SV-113-C-29

Lab Sample ID: 140-20175-4

Date Collected: 08/25/20 10:20
Matrix: Air
Date Received: 08/27/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.067**	**J**	0.40	0.040	ppb v/v			09/04/20 01:04	1
Carbon tetrachloride	**0.081**	**J**	0.40	0.035	ppb v/v			09/04/20 01:04	1
Chlorodifluoromethane	**1.6**	**CI**	0.40	0.11	ppb v/v			09/04/20 01:04	1
Chloroform	**0.31**	**J**	0.40	0.035	ppb v/v			09/04/20 01:04	1
cis-1,2-Dichloroethene	**3.7**		0.40	0.050	ppb v/v			09/04/20 01:04	1
Dichlorodifluoromethane	**0.58**		0.40	0.070	ppb v/v			09/04/20 01:04	1
1,1-Dichloroethane	**1.1**		0.40	0.035	ppb v/v			09/04/20 01:04	1
1,2-Dichloroethane	ND		0.40	0.050	ppb v/v			09/04/20 01:04	1
1,1-Dichloroethene	**0.41**		0.40	0.040	ppb v/v			09/04/20 01:04	1
Ethylbenzene	**0.12**	**J**	0.40	0.065	ppb v/v			09/04/20 01:04	1
Methylene Chloride	ND		2.0	2.0	ppb v/v			09/04/20 01:04	1
Methyl tert-butyl ether	ND		2.0	0.26	ppb v/v			09/04/20 01:04	1
Naphthalene	**0.25**		0.20	0.20	ppb v/v			09/04/20 01:04	1
Tetrachloroethene	**0.053**	**J**	0.40	0.035	ppb v/v			09/04/20 01:04	1
Toluene	**0.40**	**J**	0.60	0.39	ppb v/v			09/04/20 01:04	1
trans-1,2-Dichloroethene	**0.055**	**J**	0.40	0.035	ppb v/v			09/04/20 01:04	1
1,2,4-Trichlorobenzene	ND		0.40	0.32	ppb v/v			09/04/20 01:04	1
1,1,1-Trichloroethane	**0.33**	**J**	0.40	0.19	ppb v/v			09/04/20 01:04	1
1,1,2-Trichloroethane	ND		0.40	0.035	ppb v/v			09/04/20 01:04	1
Trichloroethene	**33**		0.20	0.030	ppb v/v			09/04/20 01:04	1
1,2,3-Trimethylbenzene	**2.3**		0.40	0.18	ppb v/v			09/04/20 01:04	1
1,2,4-Trimethylbenzene	**1.6**		0.40	0.10	ppb v/v			09/04/20 01:04	1
1,3,5-Trimethylbenzene	**1.5**		0.40	0.11	ppb v/v			09/04/20 01:04	1
Vinyl chloride	ND		0.20	0.13	ppb v/v			09/04/20 01:04	1
Xylenes, Total	**1.3**		0.80	0.12	ppb v/v			09/04/20 01:04	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.21**	**J**	1.3	0.13	ug/m3			09/04/20 01:04	1
Carbon tetrachloride	**0.51**	**J**	2.5	0.22	ug/m3			09/04/20 01:04	1
Chlorodifluoromethane	**5.6**	**CI**	1.4	0.39	ug/m3			09/04/20 01:04	1
Chloroform	**1.5**	**J**	2.0	0.17	ug/m3			09/04/20 01:04	1
cis-1,2-Dichloroethene	**15**		1.6	0.20	ug/m3			09/04/20 01:04	1
Dichlorodifluoromethane	**2.9**		2.0	0.35	ug/m3			09/04/20 01:04	1
1,1-Dichloroethane	**4.6**		1.6	0.14	ug/m3			09/04/20 01:04	1
1,2-Dichloroethane	ND		1.6	0.20	ug/m3			09/04/20 01:04	1
1,1-Dichloroethene	**1.6**		1.6	0.16	ug/m3			09/04/20 01:04	1
Ethylbenzene	**0.53**	**J**	1.7	0.28	ug/m3			09/04/20 01:04	1
Methylene Chloride	ND		6.9	6.8	ug/m3			09/04/20 01:04	1
Methyl tert-butyl ether	ND		7.2	0.94	ug/m3			09/04/20 01:04	1
Naphthalene	**1.3**		1.0	1.0	ug/m3			09/04/20 01:04	1
Tetrachloroethene	**0.36**	**J**	2.7	0.24	ug/m3			09/04/20 01:04	1
Toluene	**1.5**	**J**	2.3	1.5	ug/m3			09/04/20 01:04	1
trans-1,2-Dichloroethene	**0.22**	**J**	1.6	0.14	ug/m3			09/04/20 01:04	1
1,2,4-Trichlorobenzene	ND		3.0	2.4	ug/m3			09/04/20 01:04	1
1,1,1-Trichloroethane	**1.8**	**J**	2.2	1.0	ug/m3			09/04/20 01:04	1
1,1,2-Trichloroethane	ND		2.2	0.19	ug/m3			09/04/20 01:04	1
Trichloroethene	**180**		1.1	0.16	ug/m3			09/04/20 01:04	1
1,2,3-Trimethylbenzene	**11**		2.0	0.88	ug/m3			09/04/20 01:04	1
1,2,4-Trimethylbenzene	**7.7**		2.0	0.49	ug/m3			09/04/20 01:04	1

Client Sample ID: SV-113-C-29 **Lab Sample ID: 140-20175-4**
Date Collected: 08/25/20 10:20 **Matrix: Air**
Date Received: 08/27/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	**7.5**		2.0	0.54	ug/m3			09/04/20 01:04	1
Vinyl chloride	ND		0.51	0.33	ug/m3			09/04/20 01:04	1
Xylenes, Total	**5.7**		3.5	0.52	ug/m3			09/04/20 01:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*60 - 140*		*09/04/20 01:04*	*1*

Client Sample ID: SV-088-C-29

Date Collected: 08/25/20 10:22
Date Received: 08/27/20 10:00
Sample Container: Summa Canister 1L

Lab Sample ID: 140-20175-5

Matrix: Air

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.089**	**J**	0.40	0.040	ppb v/v			09/04/20 01:58	1
Carbon tetrachloride	**0.092**	**J**	0.40	0.035	ppb v/v			09/04/20 01:58	1
Chlorodifluoromethane	**1.1**		0.40	0.11	ppb v/v			09/04/20 01:58	1
Chloroform	**0.15**	**J**	0.40	0.035	ppb v/v			09/04/20 01:58	1
cis-1,2-Dichloroethene	**1.4**		0.40	0.050	ppb v/v			09/04/20 01:58	1
Dichlorodifluoromethane	**0.58**		0.40	0.070	ppb v/v			09/04/20 01:58	1
1,1-Dichloroethane	ND		0.40	0.035	ppb v/v			09/04/20 01:58	1
1,2-Dichloroethane	ND		0.40	0.050	ppb v/v			09/04/20 01:58	1
1,1-Dichloroethene	ND		0.40	0.040	ppb v/v			09/04/20 01:58	1
Ethylbenzene	**0.11**	**J**	0.40	0.065	ppb v/v			09/04/20 01:58	1
Methylene Chloride	ND		2.0	2.0	ppb v/v			09/04/20 01:58	1
Methyl tert-butyl ether	ND		2.0	0.26	ppb v/v			09/04/20 01:58	1
Naphthalene	ND		0.20	0.20	ppb v/v			09/04/20 01:58	1
Tetrachloroethene	**0.070**	**J**	0.40	0.035	ppb v/v			09/04/20 01:58	1
Toluene	**0.40**	**J**	0.60	0.39	ppb v/v			09/04/20 01:58	1
trans-1,2-Dichloroethene	**0.092**	**J**	0.40	0.035	ppb v/v			09/04/20 01:58	1
1,2,4-Trichlorobenzene	ND		0.40	0.32	ppb v/v			09/04/20 01:58	1
1,1,1-Trichloroethane	ND		0.40	0.19	ppb v/v			09/04/20 01:58	1
1,1,2-Trichloroethane	ND		0.40	0.035	ppb v/v			09/04/20 01:58	1
Trichloroethene	**7.9**		0.20	0.030	ppb v/v			09/04/20 01:58	1
1,2,3-Trimethylbenzene	ND		0.40	0.18	ppb v/v			09/04/20 01:58	1
1,2,4-Trimethylbenzene	**0.11**	**J**	0.40	0.10	ppb v/v			09/04/20 01:58	1
1,3,5-Trimethylbenzene	**0.28**	**J**	0.40	0.11	ppb v/v			09/04/20 01:58	1
Vinyl chloride	ND		0.20	0.13	ppb v/v			09/04/20 01:58	1
Xylenes, Total	**1.6**		0.80	0.12	ppb v/v			09/04/20 01:58	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.28**	**J**	1.3	0.13	ug/m3			09/04/20 01:58	1
Carbon tetrachloride	**0.58**	**J**	2.5	0.22	ug/m3			09/04/20 01:58	1
Chlorodifluoromethane	**3.9**		1.4	0.39	ug/m3			09/04/20 01:58	1
Chloroform	**0.76**	**J**	2.0	0.17	ug/m3			09/04/20 01:58	1
cis-1,2-Dichloroethene	**5.4**		1.6	0.20	ug/m3			09/04/20 01:58	1
Dichlorodifluoromethane	**2.9**		2.0	0.35	ug/m3			09/04/20 01:58	1
1,1-Dichloroethane	ND		1.6	0.14	ug/m3			09/04/20 01:58	1
1,2-Dichloroethane	ND		1.6	0.20	ug/m3			09/04/20 01:58	1
1,1-Dichloroethene	ND		1.6	0.16	ug/m3			09/04/20 01:58	1
Ethylbenzene	**0.47**	**J**	1.7	0.28	ug/m3			09/04/20 01:58	1
Methylene Chloride	ND		6.9	6.8	ug/m3			09/04/20 01:58	1
Methyl tert-butyl ether	ND		7.2	0.94	ug/m3			09/04/20 01:58	1
Naphthalene	ND		1.0	1.0	ug/m3			09/04/20 01:58	1
Tetrachloroethene	**0.47**	**J**	2.7	0.24	ug/m3			09/04/20 01:58	1
Toluene	**1.5**	**J**	2.3	1.5	ug/m3			09/04/20 01:58	1
trans-1,2-Dichloroethene	**0.37**	**J**	1.6	0.14	ug/m3			09/04/20 01:58	1
1,2,4-Trichlorobenzene	ND		3.0	2.4	ug/m3			09/04/20 01:58	1
1,1,1-Trichloroethane	ND		2.2	1.0	ug/m3			09/04/20 01:58	1
1,1,2-Trichloroethane	ND		2.2	0.19	ug/m3			09/04/20 01:58	1
Trichloroethene	**42**		1.1	0.16	ug/m3			09/04/20 01:58	1
1,2,3-Trimethylbenzene	ND		2.0	0.88	ug/m3			09/04/20 01:58	1
1,2,4-Trimethylbenzene	**0.54**	**J**	2.0	0.49	ug/m3			09/04/20 01:58	1

Client Sample ID: SV-088-C-29 **Lab Sample ID: 140-20175-5**
Date Collected: 08/25/20 10:22 **Matrix: Air**
Date Received: 08/27/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	**1.4**	**J**	2.0	0.54	ug/m3			09/04/20 01:58	1
Vinyl chloride	ND		0.51	0.33	ug/m3			09/04/20 01:58	1
Xylenes, Total	**6.7**		3.5	0.52	ug/m3			09/04/20 01:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*85*		*60 - 140*		*09/04/20 01:58*	*1*

Client Sample ID: SV-DUP1-C-29

Lab Sample ID: 140-20175-6

Date Collected: 08/25/20 00:00
Matrix: Air
Date Received: 08/27/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**2.3**	**J**	7.2	0.72	ppb v/v			09/04/20 02:50	3.6
Carbon tetrachloride	**0.69**	**J**	7.2	0.63	ppb v/v			09/04/20 02:50	3.6
Chlorodifluoromethane	ND		7.2	2.0	ppb v/v			09/04/20 02:50	3.6
Chloroform	**11**		7.2	0.63	ppb v/v			09/04/20 02:50	3.6
cis-1,2-Dichloroethene	**18**		7.2	0.90	ppb v/v			09/04/20 02:50	3.6
Dichlorodifluoromethane	ND		7.2	1.3	ppb v/v			09/04/20 02:50	3.6
1,1-Dichloroethane	**2100**	**E**	7.2	0.63	ppb v/v			09/04/20 02:50	3.6
1,2-Dichloroethane	ND		7.2	0.90	ppb v/v			09/04/20 02:50	3.6
1,1-Dichloroethene	**960**		7.2	0.72	ppb v/v			09/04/20 02:50	3.6
Ethylbenzene	**110**		7.2	1.2	ppb v/v			09/04/20 02:50	3.6
Methylene Chloride	ND		36	35	ppb v/v			09/04/20 02:50	3.6
Methyl tert-butyl ether	ND		36	4.7	ppb v/v			09/04/20 02:50	3.6
Naphthalene	**82**		3.6	3.6	ppb v/v			09/04/20 02:50	3.6
Tetrachloroethene	ND		7.2	0.63	ppb v/v			09/04/20 02:50	3.6
Toluene	ND		11	7.0	ppb v/v			09/04/20 02:50	3.6
trans-1,2-Dichloroethene	**1.3**	**J**	7.2	0.63	ppb v/v			09/04/20 02:50	3.6
1,2,4-Trichlorobenzene	ND		7.2	5.8	ppb v/v			09/04/20 02:50	3.6
1,1,1-Trichloroethane	**480**		7.2	3.3	ppb v/v			09/04/20 02:50	3.6
1,1,2-Trichloroethane	ND		7.2	0.63	ppb v/v			09/04/20 02:50	3.6
Trichloroethene	**330**		3.6	0.54	ppb v/v			09/04/20 02:50	3.6
1,2,3-Trimethylbenzene	**4.7**	**J**	7.2	3.2	ppb v/v			09/04/20 02:50	3.6
1,2,4-Trimethylbenzene	**4.6**	**J**	7.2	1.8	ppb v/v			09/04/20 02:50	3.6
1,3,5-Trimethylbenzene	**6.5**	**J**	7.2	2.0	ppb v/v			09/04/20 02:50	3.6
Vinyl chloride	**3.0**	**J**	3.6	2.3	ppb v/v			09/04/20 02:50	3.6
Xylenes, Total	**1200**		14	2.2	ppb v/v			09/04/20 02:50	3.6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**7.3**	**J**	23	2.3	ug/m3			09/04/20 02:50	3.6
Carbon tetrachloride	**4.4**	**J**	45	4.0	ug/m3			09/04/20 02:50	3.6
Chlorodifluoromethane	ND		25	7.0	ug/m3			09/04/20 02:50	3.6
Chloroform	**54**		35	3.1	ug/m3			09/04/20 02:50	3.6
cis-1,2-Dichloroethene	**70**		29	3.6	ug/m3			09/04/20 02:50	3.6
Dichlorodifluoromethane	ND		36	6.2	ug/m3			09/04/20 02:50	3.6
1,1-Dichloroethane	**8300**	**E**	29	2.5	ug/m3			09/04/20 02:50	3.6
1,2-Dichloroethane	ND		29	3.6	ug/m3			09/04/20 02:50	3.6
1,1-Dichloroethene	**3800**		29	2.9	ug/m3			09/04/20 02:50	3.6
Ethylbenzene	**480**		31	5.1	ug/m3			09/04/20 02:50	3.6
Methylene Chloride	ND		130	120	ug/m3			09/04/20 02:50	3.6
Methyl tert-butyl ether	ND		130	17	ug/m3			09/04/20 02:50	3.6
Naphthalene	**430**		19	19	ug/m3			09/04/20 02:50	3.6
Tetrachloroethene	ND		49	4.3	ug/m3			09/04/20 02:50	3.6
Toluene	ND		41	26	ug/m3			09/04/20 02:50	3.6
trans-1,2-Dichloroethene	**5.2**	**J**	29	2.5	ug/m3			09/04/20 02:50	3.6
1,2,4-Trichlorobenzene	ND		53	43	ug/m3			09/04/20 02:50	3.6
1,1,1-Trichloroethane	**2600**		39	18	ug/m3			09/04/20 02:50	3.6
1,1,2-Trichloroethane	ND		39	3.4	ug/m3			09/04/20 02:50	3.6
Trichloroethene	**1800**		19	2.9	ug/m3			09/04/20 02:50	3.6
1,2,3-Trimethylbenzene	**23**	**J**	35	16	ug/m3			09/04/20 02:50	3.6
1,2,4-Trimethylbenzene	**23**	**J**	35	8.8	ug/m3			09/04/20 02:50	3.6

Client Sample ID: SV-DUP1-C-29 Lab Sample ID: 140-20175-6

Date Collected: 08/25/20 00:00 **Matrix: Air**
Date Received: 08/27/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	32	J	35	9.7	ug/m3			09/04/20 02:50	3.6
Vinyl chloride	7.6	J	9.2	6.0	ug/m3			09/04/20 02:50	3.6
Xylenes, Total	5300		63	9.4	ug/m3			09/04/20 02:50	3.6

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*60 - 140*		*09/04/20 02:50*	*3.6*

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	1500		13	1.1	ppb v/v			09/08/20 18:49	3.6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	6000		53	4.6	ug/m3			09/08/20 18:49	3.6

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*60 - 140*		*09/08/20 18:49*	*3.6*

Client Sample ID: SV-142-C-29 Lab Sample ID: 140-20175-7

Date Collected: 08/25/20 10:27 **Matrix: Air**
Date Received: 08/27/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.075**	**J**	0.40	0.040	ppb v/v			09/04/20 04:41	1
Carbon tetrachloride	**0.089**	**J**	0.40	0.035	ppb v/v			09/04/20 04:41	1
Chlorodifluoromethane	**0.93**	**CI**	0.40	0.11	ppb v/v			09/04/20 04:41	1
Chloroform	**0.45**		0.40	0.035	ppb v/v			09/04/20 04:41	1
cis-1,2-Dichloroethene	ND		0.40	0.050	ppb v/v			09/04/20 04:41	1
Dichlorodifluoromethane	**0.49**		0.40	0.070	ppb v/v			09/04/20 04:41	1
1,1-Dichloroethane	**1.1**		0.40	0.035	ppb v/v			09/04/20 04:41	1
1,2-Dichloroethane	ND		0.40	0.050	ppb v/v			09/04/20 04:41	1
1,1-Dichloroethene	**0.40**		0.40	0.040	ppb v/v			09/04/20 04:41	1
Ethylbenzene	**0.10**	**J**	0.40	0.065	ppb v/v			09/04/20 04:41	1
Methylene Chloride	**3.0**		2.0	2.0	ppb v/v			09/04/20 04:41	1
Methyl tert-butyl ether	ND		2.0	0.26	ppb v/v			09/04/20 04:41	1
Naphthalene	**0.23**		0.20	0.20	ppb v/v			09/04/20 04:41	1
Tetrachloroethene	**0.16**	**J**	0.40	0.035	ppb v/v			09/04/20 04:41	1
Toluene	**1.7**		0.60	0.39	ppb v/v			09/04/20 04:41	1
trans-1,2-Dichloroethene	ND		0.40	0.035	ppb v/v			09/04/20 04:41	1
1,2,4-Trichlorobenzene	ND		0.40	0.32	ppb v/v			09/04/20 04:41	1
1,1,1-Trichloroethane	**0.39**	**J**	0.40	0.19	ppb v/v			09/04/20 04:41	1
1,1,2-Trichloroethane	ND		0.40	0.035	ppb v/v			09/04/20 04:41	1
Trichloroethene	**2.0**		0.20	0.030	ppb v/v			09/04/20 04:41	1
1,2,3-Trimethylbenzene	ND		0.40	0.18	ppb v/v			09/04/20 04:41	1
1,2,4-Trimethylbenzene	ND		0.40	0.10	ppb v/v			09/04/20 04:41	1
1,3,5-Trimethylbenzene	**0.27**	**J**	0.40	0.11	ppb v/v			09/04/20 04:41	1
Vinyl chloride	ND		0.20	0.13	ppb v/v			09/04/20 04:41	1
Xylenes, Total	**0.86**		0.80	0.12	ppb v/v			09/04/20 04:41	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.24**	**J**	1.3	0.13	ug/m3			09/04/20 04:41	1
Carbon tetrachloride	**0.56**	**J**	2.5	0.22	ug/m3			09/04/20 04:41	1
Chlorodifluoromethane	**3.3**	**CI**	1.4	0.39	ug/m3			09/04/20 04:41	1
Chloroform	**2.2**		2.0	0.17	ug/m3			09/04/20 04:41	1
cis-1,2-Dichloroethene	ND		1.6	0.20	ug/m3			09/04/20 04:41	1
Dichlorodifluoromethane	**2.4**		2.0	0.35	ug/m3			09/04/20 04:41	1
1,1-Dichloroethane	**4.3**		1.6	0.14	ug/m3			09/04/20 04:41	1
1,2-Dichloroethane	ND		1.6	0.20	ug/m3			09/04/20 04:41	1
1,1-Dichloroethene	**1.6**		1.6	0.16	ug/m3			09/04/20 04:41	1
Ethylbenzene	**0.43**	**J**	1.7	0.28	ug/m3			09/04/20 04:41	1
Methylene Chloride	**10**		6.9	6.8	ug/m3			09/04/20 04:41	1
Methyl tert-butyl ether	ND		7.2	0.94	ug/m3			09/04/20 04:41	1
Naphthalene	**1.2**		1.0	1.0	ug/m3			09/04/20 04:41	1
Tetrachloroethene	**1.1**	**J**	2.7	0.24	ug/m3			09/04/20 04:41	1
Toluene	**6.4**		2.3	1.5	ug/m3			09/04/20 04:41	1
trans-1,2-Dichloroethene	ND		1.6	0.14	ug/m3			09/04/20 04:41	1
1,2,4-Trichlorobenzene	ND		3.0	2.4	ug/m3			09/04/20 04:41	1
1,1,1-Trichloroethane	**2.1**	**J**	2.2	1.0	ug/m3			09/04/20 04:41	1
1,1,2-Trichloroethane	ND		2.2	0.19	ug/m3			09/04/20 04:41	1
Trichloroethene	**11**		1.1	0.16	ug/m3			09/04/20 04:41	1
1,2,3-Trimethylbenzene	ND		2.0	0.88	ug/m3			09/04/20 04:41	1
1,2,4-Trimethylbenzene	ND		2.0	0.49	ug/m3			09/04/20 04:41	1

Client Sample ID: SV-142-C-29 **Lab Sample ID: 140-20175-7**
Date Collected: 08/25/20 10:27 **Matrix: Air**
Date Received: 08/27/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	**1.3**	**J**	2.0	0.54	ug/m3			09/04/20 04:41	1
Vinyl chloride	ND		0.51	0.33	ug/m3			09/04/20 04:41	1
Xylenes, Total	**3.7**		3.5	0.52	ug/m3			09/04/20 04:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*60 - 140*		*09/04/20 04:41*	*1*

Client Sample ID: SV-155-C-29

Lab Sample ID: 140-20175-8

Date Collected: 08/25/20 10:32
Matrix: Air
Date Received: 08/27/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.18**	**J**	0.40	0.040	ppb v/v			09/04/20 05:38	1
Carbon tetrachloride	**1.4**		0.40	0.035	ppb v/v			09/04/20 05:38	1
Chlorodifluoromethane	**2.1**		0.40	0.11	ppb v/v			09/04/20 05:38	1
Chloroform	**0.093**	**J**	0.40	0.035	ppb v/v			09/04/20 05:38	1
cis-1,2-Dichloroethene	ND		0.40	0.050	ppb v/v			09/04/20 05:38	1
Dichlorodifluoromethane	**0.52**		0.40	0.070	ppb v/v			09/04/20 05:38	1
1,1-Dichloroethane	ND		0.40	0.035	ppb v/v			09/04/20 05:38	1
1,2-Dichloroethane	ND		0.40	0.050	ppb v/v			09/04/20 05:38	1
1,1-Dichloroethene	ND		0.40	0.040	ppb v/v			09/04/20 05:38	1
Ethylbenzene	**0.12**	**J**	0.40	0.065	ppb v/v			09/04/20 05:38	1
Methylene Chloride	ND		2.0	2.0	ppb v/v			09/04/20 05:38	1
Methyl tert-butyl ether	ND		2.0	0.26	ppb v/v			09/04/20 05:38	1
Naphthalene	ND		0.20	0.20	ppb v/v			09/04/20 05:38	1
Tetrachloroethene	**0.075**	**J**	0.40	0.035	ppb v/v			09/04/20 05:38	1
Toluene	**1.7**		0.60	0.39	ppb v/v			09/04/20 05:38	1
trans-1,2-Dichloroethene	ND		0.40	0.035	ppb v/v			09/04/20 05:38	1
1,2,4-Trichlorobenzene	ND		0.40	0.32	ppb v/v			09/04/20 05:38	1
1,1,1-Trichloroethane	ND		0.40	0.19	ppb v/v			09/04/20 05:38	1
1,1,2-Trichloroethane	ND		0.40	0.035	ppb v/v			09/04/20 05:38	1
Trichloroethene	**0.21**		0.20	0.030	ppb v/v			09/04/20 05:38	1
1,2,3-Trimethylbenzene	ND		0.40	0.18	ppb v/v			09/04/20 05:38	1
1,2,4-Trimethylbenzene	ND		0.40	0.10	ppb v/v			09/04/20 05:38	1
1,3,5-Trimethylbenzene	**0.28**	**J**	0.40	0.11	ppb v/v			09/04/20 05:38	1
Vinyl chloride	ND		0.20	0.13	ppb v/v			09/04/20 05:38	1
Xylenes, Total	**0.52**	**J**	0.80	0.12	ppb v/v			09/04/20 05:38	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.59**	**J**	1.3	0.13	ug/m3			09/04/20 05:38	1
Carbon tetrachloride	**8.7**		2.5	0.22	ug/m3			09/04/20 05:38	1
Chlorodifluoromethane	**7.3**		1.4	0.39	ug/m3			09/04/20 05:38	1
Chloroform	**0.45**	**J**	2.0	0.17	ug/m3			09/04/20 05:38	1
cis-1,2-Dichloroethene	ND		1.6	0.20	ug/m3			09/04/20 05:38	1
Dichlorodifluoromethane	**2.6**		2.0	0.35	ug/m3			09/04/20 05:38	1
1,1-Dichloroethane	ND		1.6	0.14	ug/m3			09/04/20 05:38	1
1,2-Dichloroethane	ND		1.6	0.20	ug/m3			09/04/20 05:38	1
1,1-Dichloroethene	ND		1.6	0.16	ug/m3			09/04/20 05:38	1
Ethylbenzene	**0.53**	**J**	1.7	0.28	ug/m3			09/04/20 05:38	1
Methylene Chloride	ND		6.9	6.8	ug/m3			09/04/20 05:38	1
Methyl tert-butyl ether	ND		7.2	0.94	ug/m3			09/04/20 05:38	1
Naphthalene	ND		1.0	1.0	ug/m3			09/04/20 05:38	1
Tetrachloroethene	**0.51**	**J**	2.7	0.24	ug/m3			09/04/20 05:38	1
Toluene	**6.3**		2.3	1.5	ug/m3			09/04/20 05:38	1
trans-1,2-Dichloroethene	ND		1.6	0.14	ug/m3			09/04/20 05:38	1
1,2,4-Trichlorobenzene	ND		3.0	2.4	ug/m3			09/04/20 05:38	1
1,1,1-Trichloroethane	ND		2.2	1.0	ug/m3			09/04/20 05:38	1
1,1,2-Trichloroethane	ND		2.2	0.19	ug/m3			09/04/20 05:38	1
Trichloroethene	**1.1**		1.1	0.16	ug/m3			09/04/20 05:38	1
1,2,3-Trimethylbenzene	ND		2.0	0.88	ug/m3			09/04/20 05:38	1
1,2,4-Trimethylbenzene	ND		2.0	0.49	ug/m3			09/04/20 05:38	1

Client Sample ID: SV-155-C-29
Lab Sample ID: 140-20175-8
Date Collected: 08/25/20 10:32
Matrix: Air
Date Received: 08/27/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	**1.4**	**J**	2.0	0.54	ug/m3			09/04/20 05:38	1
Vinyl chloride	ND		0.51	0.33	ug/m3			09/04/20 05:38	1
Xylenes, Total	**2.3**	**J**	3.5	0.52	ug/m3			09/04/20 05:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*84*		*60 - 140*		*09/04/20 05:38*	*1*

Client Sample ID: SV-133-C-29

Date Collected: 08/25/20 10:35
Date Received: 08/27/20 10:00
Sample Container: Summa Canister 1L

Lab Sample ID: 140-20175-9

Matrix: Air

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.16**	**J**	0.40	0.040	ppb v/v			09/04/20 06:35	1
Carbon tetrachloride	**0.62**		0.40	0.035	ppb v/v			09/04/20 06:35	1
Chlorodifluoromethane	**2.6**		0.40	0.11	ppb v/v			09/04/20 06:35	1
Chloroform	**1.9**		0.40	0.035	ppb v/v			09/04/20 06:35	1
cis-1,2-Dichloroethene	ND		0.40	0.050	ppb v/v			09/04/20 06:35	1
Dichlorodifluoromethane	**0.54**		0.40	0.070	ppb v/v			09/04/20 06:35	1
1,1-Dichloroethane	ND		0.40	0.035	ppb v/v			09/04/20 06:35	1
1,2-Dichloroethane	ND		0.40	0.050	ppb v/v			09/04/20 06:35	1
1,1-Dichloroethene	ND		0.40	0.040	ppb v/v			09/04/20 06:35	1
Ethylbenzene	**0.081**	**J**	0.40	0.065	ppb v/v			09/04/20 06:35	1
Methylene Chloride	**2.6**		2.0	2.0	ppb v/v			09/04/20 06:35	1
Methyl tert-butyl ether	ND		2.0	0.26	ppb v/v			09/04/20 06:35	1
Naphthalene	ND		0.20	0.20	ppb v/v			09/04/20 06:35	1
Tetrachloroethene	**0.64**		0.40	0.035	ppb v/v			09/04/20 06:35	1
Toluene	**1.5**		0.60	0.39	ppb v/v			09/04/20 06:35	1
trans-1,2-Dichloroethene	**0.050**	**J**	0.40	0.035	ppb v/v			09/04/20 06:35	1
1,2,4-Trichlorobenzene	ND		0.40	0.32	ppb v/v			09/04/20 06:35	1
1,1,1-Trichloroethane	ND		0.40	0.19	ppb v/v			09/04/20 06:35	1
1,1,2-Trichloroethane	ND		0.40	0.035	ppb v/v			09/04/20 06:35	1
Trichloroethene	**40**		0.20	0.030	ppb v/v			09/04/20 06:35	1
1,2,3-Trimethylbenzene	ND		0.40	0.18	ppb v/v			09/04/20 06:35	1
1,2,4-Trimethylbenzene	ND		0.40	0.10	ppb v/v			09/04/20 06:35	1
1,3,5-Trimethylbenzene	**0.25**	**J**	0.40	0.11	ppb v/v			09/04/20 06:35	1
Vinyl chloride	ND		0.20	0.13	ppb v/v			09/04/20 06:35	1
Xylenes, Total	**0.47**	**J**	0.80	0.12	ppb v/v			09/04/20 06:35	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.51**	**J**	1.3	0.13	ug/m3			09/04/20 06:35	1
Carbon tetrachloride	**3.9**		2.5	0.22	ug/m3			09/04/20 06:35	1
Chlorodifluoromethane	**9.1**		1.4	0.39	ug/m3			09/04/20 06:35	1
Chloroform	**9.2**		2.0	0.17	ug/m3			09/04/20 06:35	1
cis-1,2-Dichloroethene	ND		1.6	0.20	ug/m3			09/04/20 06:35	1
Dichlorodifluoromethane	**2.7**		2.0	0.35	ug/m3			09/04/20 06:35	1
1,1-Dichloroethane	ND		1.6	0.14	ug/m3			09/04/20 06:35	1
1,2-Dichloroethane	ND		1.6	0.20	ug/m3			09/04/20 06:35	1
1,1-Dichloroethene	ND		1.6	0.16	ug/m3			09/04/20 06:35	1
Ethylbenzene	**0.35**	**J**	1.7	0.28	ug/m3			09/04/20 06:35	1
Methylene Chloride	**9.1**		6.9	6.8	ug/m3			09/04/20 06:35	1
Methyl tert-butyl ether	ND		7.2	0.94	ug/m3			09/04/20 06:35	1
Naphthalene	ND		1.0	1.0	ug/m3			09/04/20 06:35	1
Tetrachloroethene	**4.3**		2.7	0.24	ug/m3			09/04/20 06:35	1
Toluene	**5.7**		2.3	1.5	ug/m3			09/04/20 06:35	1
trans-1,2-Dichloroethene	**0.20**	**J**	1.6	0.14	ug/m3			09/04/20 06:35	1
1,2,4-Trichlorobenzene	ND		3.0	2.4	ug/m3			09/04/20 06:35	1
1,1,1-Trichloroethane	ND		2.2	1.0	ug/m3			09/04/20 06:35	1
1,1,2-Trichloroethane	ND		2.2	0.19	ug/m3			09/04/20 06:35	1
Trichloroethene	**210**		1.1	0.16	ug/m3			09/04/20 06:35	1
1,2,3-Trimethylbenzene	ND		2.0	0.88	ug/m3			09/04/20 06:35	1
1,2,4-Trimethylbenzene	ND		2.0	0.49	ug/m3			09/04/20 06:35	1

Client Sample ID: SV-133-C-29 **Lab Sample ID: 140-20175-9**
Date Collected: 08/25/20 10:35 **Matrix: Air**
Date Received: 08/27/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	**1.2**	**J**	2.0	0.54	ug/m3			09/04/20 06:35	1
Vinyl chloride	ND		0.51	0.33	ug/m3			09/04/20 06:35	1
Xylenes, Total	**2.0**	**J**	3.5	0.52	ug/m3			09/04/20 06:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*87*		*60 - 140*		*09/04/20 06:35*	*1*

Client Sample ID: SV-153-C-29 Lab Sample ID: 140-20175-10

Date Collected: 08/25/20 10:37 **Matrix: Air**
Date Received: 08/27/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.19**	**J**	0.40	0.040	ppb v/v			09/04/20 07:30	1
Carbon tetrachloride	**0.89**		0.40	0.035	ppb v/v			09/04/20 07:30	1
Chlorodifluoromethane	**1.7**		0.40	0.11	ppb v/v			09/04/20 07:30	1
Chloroform	**0.11**	**J**	0.40	0.035	ppb v/v			09/04/20 07:30	1
cis-1,2-Dichloroethene	ND		0.40	0.050	ppb v/v			09/04/20 07:30	1
Dichlorodifluoromethane	**0.52**		0.40	0.070	ppb v/v			09/04/20 07:30	1
1,1-Dichloroethane	ND		0.40	0.035	ppb v/v			09/04/20 07:30	1
1,2-Dichloroethane	ND		0.40	0.050	ppb v/v			09/04/20 07:30	1
1,1-Dichloroethene	ND		0.40	0.040	ppb v/v			09/04/20 07:30	1
Ethylbenzene	**0.087**	**J**	0.40	0.065	ppb v/v			09/04/20 07:30	1
Methylene Chloride	ND		2.0	2.0	ppb v/v			09/04/20 07:30	1
Methyl tert-butyl ether	ND		2.0	0.26	ppb v/v			09/04/20 07:30	1
Naphthalene	ND		0.20	0.20	ppb v/v			09/04/20 07:30	1
Tetrachloroethene	**0.070**	**J**	0.40	0.035	ppb v/v			09/04/20 07:30	1
Toluene	**0.79**		0.60	0.39	ppb v/v			09/04/20 07:30	1
trans-1,2-Dichloroethene	ND		0.40	0.035	ppb v/v			09/04/20 07:30	1
1,2,4-Trichlorobenzene	ND		0.40	0.32	ppb v/v			09/04/20 07:30	1
1,1,1-Trichloroethane	ND		0.40	0.19	ppb v/v			09/04/20 07:30	1
1,1,2-Trichloroethane	ND		0.40	0.035	ppb v/v			09/04/20 07:30	1
Trichloroethene	**0.29**		0.20	0.030	ppb v/v			09/04/20 07:30	1
1,2,3-Trimethylbenzene	ND		0.40	0.18	ppb v/v			09/04/20 07:30	1
1,2,4-Trimethylbenzene	**0.15**	**J**	0.40	0.10	ppb v/v			09/04/20 07:30	1
1,3,5-Trimethylbenzene	**0.31**	**J**	0.40	0.11	ppb v/v			09/04/20 07:30	1
Vinyl chloride	ND		0.20	0.13	ppb v/v			09/04/20 07:30	1
Xylenes, Total	**0.49**	**J**	0.80	0.12	ppb v/v			09/04/20 07:30	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.62**	**J**	1.3	0.13	ug/m3			09/04/20 07:30	1
Carbon tetrachloride	**5.6**		2.5	0.22	ug/m3			09/04/20 07:30	1
Chlorodifluoromethane	**6.0**		1.4	0.39	ug/m3			09/04/20 07:30	1
Chloroform	**0.55**	**J**	2.0	0.17	ug/m3			09/04/20 07:30	1
cis-1,2-Dichloroethene	ND		1.6	0.20	ug/m3			09/04/20 07:30	1
Dichlorodifluoromethane	**2.6**		2.0	0.35	ug/m3			09/04/20 07:30	1
1,1-Dichloroethane	ND		1.6	0.14	ug/m3			09/04/20 07:30	1
1,2-Dichloroethane	ND		1.6	0.20	ug/m3			09/04/20 07:30	1
1,1-Dichloroethene	ND		1.6	0.16	ug/m3			09/04/20 07:30	1
Ethylbenzene	**0.38**	**J**	1.7	0.28	ug/m3			09/04/20 07:30	1
Methylene Chloride	ND		6.9	6.8	ug/m3			09/04/20 07:30	1
Methyl tert-butyl ether	ND		7.2	0.94	ug/m3			09/04/20 07:30	1
Naphthalene	ND		1.0	1.0	ug/m3			09/04/20 07:30	1
Tetrachloroethene	**0.47**	**J**	2.7	0.24	ug/m3			09/04/20 07:30	1
Toluene	**3.0**		2.3	1.5	ug/m3			09/04/20 07:30	1
trans-1,2-Dichloroethene	ND		1.6	0.14	ug/m3			09/04/20 07:30	1
1,2,4-Trichlorobenzene	ND		3.0	2.4	ug/m3			09/04/20 07:30	1
1,1,1-Trichloroethane	ND		2.2	1.0	ug/m3			09/04/20 07:30	1
1,1,2-Trichloroethane	ND		2.2	0.19	ug/m3			09/04/20 07:30	1
Trichloroethene	**1.6**		1.1	0.16	ug/m3			09/04/20 07:30	1
1,2,3-Trimethylbenzene	ND		2.0	0.88	ug/m3			09/04/20 07:30	1
1,2,4-Trimethylbenzene	**0.75**	**J**	2.0	0.49	ug/m3			09/04/20 07:30	1

Client Sample ID: SV-153-C-29 **Lab Sample ID: 140-20175-10**
Date Collected: 08/25/20 10:37 **Matrix: Air**
Date Received: 08/27/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	**1.5**	**J**	2.0	0.54	ug/m3			09/04/20 07:30	1
Vinyl chloride	ND		0.51	0.33	ug/m3			09/04/20 07:30	1
Xylenes, Total	**2.1**	**J**	3.5	0.52	ug/m3			09/04/20 07:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*60 - 140*		*09/04/20 07:30*	*1*

Client Sample ID: SV-DUP2-C-29

Date Collected: 08/25/20 00:00
Date Received: 08/27/20 10:00

Lab Sample ID: 140-20175-11

Matrix: Air

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.14**	**J**	0.40	0.040	ppb v/v			09/08/20 01:28	1
Carbon tetrachloride	**0.25**	**J**	0.40	0.035	ppb v/v			09/08/20 01:28	1
Chlorodifluoromethane	**1.5**		0.40	0.11	ppb v/v			09/08/20 01:28	1
Chloroform	**0.063**	**J**	0.40	0.035	ppb v/v			09/08/20 01:28	1
cis-1,2-Dichloroethene	ND		0.40	0.050	ppb v/v			09/08/20 01:28	1
Dichlorodifluoromethane	**0.38**	**J**	0.40	0.070	ppb v/v			09/08/20 01:28	1
1,1-Dichloroethane	ND		0.40	0.035	ppb v/v			09/08/20 01:28	1
1,2-Dichloroethane	ND		0.40	0.050	ppb v/v			09/08/20 01:28	1
1,1-Dichloroethene	ND		0.40	0.040	ppb v/v			09/08/20 01:28	1
Ethylbenzene	**0.15**	**J**	0.40	0.065	ppb v/v			09/08/20 01:28	1
Methylene Chloride	**11**		2.0	2.0	ppb v/v			09/08/20 01:28	1
Methyl tert-butyl ether	ND		2.0	0.26	ppb v/v			09/08/20 01:28	1
Naphthalene	ND		0.20	0.20	ppb v/v			09/08/20 01:28	1
Tetrachloroethene	**0.042**	**J**	0.40	0.035	ppb v/v			09/08/20 01:28	1
Toluene	**2.0**		0.60	0.39	ppb v/v			09/08/20 01:28	1
trans-1,2-Dichloroethene	ND		0.40	0.035	ppb v/v			09/08/20 01:28	1
1,2,4-Trichlorobenzene	ND		0.40	0.32	ppb v/v			09/08/20 01:28	1
1,1,1-Trichloroethane	ND		0.40	0.19	ppb v/v			09/08/20 01:28	1
1,1,2-Trichloroethane	ND		0.40	0.035	ppb v/v			09/08/20 01:28	1
Trichloroethene	**0.18**	**J**	0.20	0.030	ppb v/v			09/08/20 01:28	1
1,2,3-Trimethylbenzene	ND		0.40	0.18	ppb v/v			09/08/20 01:28	1
1,2,4-Trimethylbenzene	**0.25**	**J**	0.40	0.10	ppb v/v			09/08/20 01:28	1
1,3,5-Trimethylbenzene	**0.13**	**J**	0.40	0.11	ppb v/v			09/08/20 01:28	1
Vinyl chloride	ND		0.20	0.13	ppb v/v			09/08/20 01:28	1
Xylenes, Total	**0.73**	**J**	0.80	0.12	ppb v/v			09/08/20 01:28	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.45**	**J**	1.3	0.13	ug/m3			09/08/20 01:28	1
Carbon tetrachloride	**1.6**	**J**	2.5	0.22	ug/m3			09/08/20 01:28	1
Chlorodifluoromethane	**5.3**		1.4	0.39	ug/m3			09/08/20 01:28	1
Chloroform	**0.31**	**J**	2.0	0.17	ug/m3			09/08/20 01:28	1
cis-1,2-Dichloroethene	ND		1.6	0.20	ug/m3			09/08/20 01:28	1
Dichlorodifluoromethane	**1.9**	**J**	2.0	0.35	ug/m3			09/08/20 01:28	1
1,1-Dichloroethane	ND		1.6	0.14	ug/m3			09/08/20 01:28	1
1,2-Dichloroethane	ND		1.6	0.20	ug/m3			09/08/20 01:28	1
1,1-Dichloroethene	ND		1.6	0.16	ug/m3			09/08/20 01:28	1
Ethylbenzene	**0.65**	**J**	1.7	0.28	ug/m3			09/08/20 01:28	1
Methylene Chloride	**39**		6.9	6.8	ug/m3			09/08/20 01:28	1
Methyl tert-butyl ether	ND		7.2	0.94	ug/m3			09/08/20 01:28	1
Naphthalene	ND		1.0	1.0	ug/m3			09/08/20 01:28	1
Tetrachloroethene	**0.29**	**J**	2.7	0.24	ug/m3			09/08/20 01:28	1
Toluene	**7.4**		2.3	1.5	ug/m3			09/08/20 01:28	1
trans-1,2-Dichloroethene	ND		1.6	0.14	ug/m3			09/08/20 01:28	1
1,2,4-Trichlorobenzene	ND		3.0	2.4	ug/m3			09/08/20 01:28	1
1,1,1-Trichloroethane	ND		2.2	1.0	ug/m3			09/08/20 01:28	1
1,1,2-Trichloroethane	ND		2.2	0.19	ug/m3			09/08/20 01:28	1
Trichloroethene	**0.98**	**J**	1.1	0.16	ug/m3			09/08/20 01:28	1
1,2,3-Trimethylbenzene	ND		2.0	0.88	ug/m3			09/08/20 01:28	1
1,2,4-Trimethylbenzene	**1.3**	**J**	2.0	0.49	ug/m3			09/08/20 01:28	1
1,3,5-Trimethylbenzene	**0.65**	**J**	2.0	0.54	ug/m3			09/08/20 01:28	1

Client Sample ID: SV-DUP2-C-29
Lab Sample ID: 140-20175-11
Date Collected: 08/25/20 00:00
Matrix: Air
Date Received: 08/27/20 10:00

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		0.51	0.33	ug/m3			09/08/20 01:28	1
Xylenes, Total	**3.2**	**J**	3.5	0.52	ug/m3			09/08/20 01:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*60 - 140*		*09/08/20 01:28*	*1*

Client Sample ID: SV-060-C-29 Lab Sample ID: 140-20175-12

Date Collected: 08/25/20 10:41 **Matrix: Air**
Date Received: 08/27/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.23**	**J**	2.0	0.20	ppb v/v			09/03/20 22:15	1
Carbon tetrachloride	ND		2.0	0.18	ppb v/v			09/03/20 22:15	1
Chlorodifluoromethane	**2.7**		2.0	0.55	ppb v/v			09/03/20 22:15	1
Chloroform	**3.0**		2.0	0.18	ppb v/v			09/03/20 22:15	1
cis-1,2-Dichloroethene	**5.9**		2.0	0.25	ppb v/v			09/03/20 22:15	1
Dichlorodifluoromethane	**0.47**	**J**	2.0	0.35	ppb v/v			09/03/20 22:15	1
1,1-Dichloroethane	**2.5**		2.0	0.18	ppb v/v			09/03/20 22:15	1
1,2-Dichloroethane	ND		2.0	0.25	ppb v/v			09/03/20 22:15	1
1,1-Dichloroethene	ND		2.0	0.20	ppb v/v			09/03/20 22:15	1
Ethylbenzene	**2.1**		2.0	0.33	ppb v/v			09/03/20 22:15	1
Methylene Chloride	ND		10	9.8	ppb v/v			09/03/20 22:15	1
Methyl tert-butyl ether	ND		10	1.3	ppb v/v			09/03/20 22:15	1
Naphthalene	ND		1.0	1.0	ppb v/v			09/03/20 22:15	1
Tetrachloroethene	ND		2.0	0.18	ppb v/v			09/03/20 22:15	1
Toluene	ND		3.0	2.0	ppb v/v			09/03/20 22:15	1
trans-1,2-Dichloroethene	**0.30**	**J**	2.0	0.18	ppb v/v			09/03/20 22:15	1
1,2,4-Trichlorobenzene	ND		2.0	1.6	ppb v/v			09/03/20 22:15	1
1,1,1-Trichloroethane	**1.5**	**J**	2.0	0.93	ppb v/v			09/03/20 22:15	1
1,1,2-Trichloroethane	ND		2.0	0.18	ppb v/v			09/03/20 22:15	1
Trichloroethene	**89**		1.0	0.15	ppb v/v			09/03/20 22:15	1
1,2,3-Trimethylbenzene	ND		2.0	0.90	ppb v/v			09/03/20 22:15	1
1,2,4-Trimethylbenzene	ND		2.0	0.50	ppb v/v			09/03/20 22:15	1
1,3,5-Trimethylbenzene	ND		2.0	0.55	ppb v/v			09/03/20 22:15	1
Vinyl chloride	ND		1.0	0.65	ppb v/v			09/03/20 22:15	1
Xylenes, Total	**18**		4.0	0.60	ppb v/v			09/03/20 22:15	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.74**	**J**	6.4	0.64	ug/m3			09/03/20 22:15	1
Carbon tetrachloride	ND		13	1.1	ug/m3			09/03/20 22:15	1
Chlorodifluoromethane	**9.7**		7.1	1.9	ug/m3			09/03/20 22:15	1
Chloroform	**15**		9.8	0.85	ug/m3			09/03/20 22:15	1
cis-1,2-Dichloroethene	**24**		7.9	0.99	ug/m3			09/03/20 22:15	1
Dichlorodifluoromethane	**2.3**	**J**	9.9	1.7	ug/m3			09/03/20 22:15	1
1,1-Dichloroethane	**10**		8.1	0.71	ug/m3			09/03/20 22:15	1
1,2-Dichloroethane	ND		8.1	1.0	ug/m3			09/03/20 22:15	1
1,1-Dichloroethene	ND		7.9	0.79	ug/m3			09/03/20 22:15	1
Ethylbenzene	**9.1**		8.7	1.4	ug/m3			09/03/20 22:15	1
Methylene Chloride	ND		35	34	ug/m3			09/03/20 22:15	1
Methyl tert-butyl ether	ND		36	4.7	ug/m3			09/03/20 22:15	1
Naphthalene	ND		5.2	5.2	ug/m3			09/03/20 22:15	1
Tetrachloroethene	ND		14	1.2	ug/m3			09/03/20 22:15	1
Toluene	ND		11	7.3	ug/m3			09/03/20 22:15	1
trans-1,2-Dichloroethene	**1.2**	**J**	7.9	0.69	ug/m3			09/03/20 22:15	1
1,2,4-Trichlorobenzene	ND		15	12	ug/m3			09/03/20 22:15	1
1,1,1-Trichloroethane	**8.1**	**J**	11	5.0	ug/m3			09/03/20 22:15	1
1,1,2-Trichloroethane	ND		11	0.95	ug/m3			09/03/20 22:15	1
Trichloroethene	**480**		5.4	0.81	ug/m3			09/03/20 22:15	1
1,2,3-Trimethylbenzene	ND		9.8	4.4	ug/m3			09/03/20 22:15	1
1,2,4-Trimethylbenzene	ND		9.8	2.5	ug/m3			09/03/20 22:15	1

Client Sample ID: SV-060-C-29 **Lab Sample ID: 140-20175-12**
Date Collected: 08/25/20 10:41 **Matrix: Air**
Date Received: 08/27/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		9.8	2.7	ug/m3			09/03/20 22:15	1
Vinyl chloride	ND		2.6	1.7	ug/m3			09/03/20 22:15	1
Xylenes, Total	**80**		17	2.6	ug/m3			09/03/20 22:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*60 - 140*		*09/03/20 22:15*	*1*

Client Sample ID: SV-150-C-29

Lab Sample ID: 140-20175-13

Date Collected: 08/25/20 10:44
Matrix: Air
Date Received: 08/27/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.31**	**J**	0.40	0.040	ppb v/v			09/04/20 02:51	1
Carbon tetrachloride	**0.057**	**J**	0.40	0.035	ppb v/v			09/04/20 02:51	1
Chlorodifluoromethane	**19**		0.40	0.11	ppb v/v			09/04/20 02:51	1
Chloroform	**0.086**	**J**	0.40	0.035	ppb v/v			09/04/20 02:51	1
cis-1,2-Dichloroethene	ND		0.40	0.050	ppb v/v			09/04/20 02:51	1
Dichlorodifluoromethane	**0.47**		0.40	0.070	ppb v/v			09/04/20 02:51	1
1,1-Dichloroethane	ND		0.40	0.035	ppb v/v			09/04/20 02:51	1
1,2-Dichloroethane	ND		0.40	0.050	ppb v/v			09/04/20 02:51	1
1,1-Dichloroethene	ND		0.40	0.040	ppb v/v			09/04/20 02:51	1
Ethylbenzene	**1.3**		0.40	0.065	ppb v/v			09/04/20 02:51	1
Methylene Chloride	**3.4**		2.0	2.0	ppb v/v			09/04/20 02:51	1
Methyl tert-butyl ether	ND		2.0	0.26	ppb v/v			09/04/20 02:51	1
Naphthalene	ND		0.20	0.20	ppb v/v			09/04/20 02:51	1
Tetrachloroethene	ND		0.40	0.035	ppb v/v			09/04/20 02:51	1
Toluene	**2.7**		0.60	0.39	ppb v/v			09/04/20 02:51	1
trans-1,2-Dichloroethene	ND		0.40	0.035	ppb v/v			09/04/20 02:51	1
1,2,4-Trichlorobenzene	ND		0.40	0.32	ppb v/v			09/04/20 02:51	1
1,1,1-Trichloroethane	ND		0.40	0.19	ppb v/v			09/04/20 02:51	1
1,1,2-Trichloroethane	ND		0.40	0.035	ppb v/v			09/04/20 02:51	1
Trichloroethene	ND		0.20	0.030	ppb v/v			09/04/20 02:51	1
1,2,3-Trimethylbenzene	ND		0.40	0.18	ppb v/v			09/04/20 02:51	1
1,2,4-Trimethylbenzene	**0.27**	**J**	0.40	0.10	ppb v/v			09/04/20 02:51	1
1,3,5-Trimethylbenzene	**0.11**	**J**	0.40	0.11	ppb v/v			09/04/20 02:51	1
Vinyl chloride	ND		0.20	0.13	ppb v/v			09/04/20 02:51	1
Xylenes, Total	**5.4**		0.80	0.12	ppb v/v			09/04/20 02:51	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**1.0**	**J**	1.3	0.13	ug/m3			09/04/20 02:51	1
Carbon tetrachloride	**0.36**	**J**	2.5	0.22	ug/m3			09/04/20 02:51	1
Chlorodifluoromethane	**67**		1.4	0.39	ug/m3			09/04/20 02:51	1
Chloroform	**0.42**	**J**	2.0	0.17	ug/m3			09/04/20 02:51	1
cis-1,2-Dichloroethene	ND		1.6	0.20	ug/m3			09/04/20 02:51	1
Dichlorodifluoromethane	**2.3**		2.0	0.35	ug/m3			09/04/20 02:51	1
1,1-Dichloroethane	ND		1.6	0.14	ug/m3			09/04/20 02:51	1
1,2-Dichloroethane	ND		1.6	0.20	ug/m3			09/04/20 02:51	1
1,1-Dichloroethene	ND		1.6	0.16	ug/m3			09/04/20 02:51	1
Ethylbenzene	**5.5**		1.7	0.28	ug/m3			09/04/20 02:51	1
Methylene Chloride	**12**		6.9	6.8	ug/m3			09/04/20 02:51	1
Methyl tert-butyl ether	ND		7.2	0.94	ug/m3			09/04/20 02:51	1
Naphthalene	ND		1.0	1.0	ug/m3			09/04/20 02:51	1
Tetrachloroethene	ND		2.7	0.24	ug/m3			09/04/20 02:51	1
Toluene	**10**		2.3	1.5	ug/m3			09/04/20 02:51	1
trans-1,2-Dichloroethene	ND		1.6	0.14	ug/m3			09/04/20 02:51	1
1,2,4-Trichlorobenzene	ND		3.0	2.4	ug/m3			09/04/20 02:51	1
1,1,1-Trichloroethane	ND		2.2	1.0	ug/m3			09/04/20 02:51	1
1,1,2-Trichloroethane	ND		2.2	0.19	ug/m3			09/04/20 02:51	1
Trichloroethene	ND		1.1	0.16	ug/m3			09/04/20 02:51	1
1,2,3-Trimethylbenzene	ND		2.0	0.88	ug/m3			09/04/20 02:51	1
1,2,4-Trimethylbenzene	**1.3**	**J**	2.0	0.49	ug/m3			09/04/20 02:51	1

Client Sample ID: SV-150-C-29 **Lab Sample ID: 140-20175-13**
Date Collected: 08/25/20 10:44 **Matrix: Air**
Date Received: 08/27/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	**0.56**	**J**	2.0	0.54	ug/m3			09/04/20 02:51	1
Vinyl chloride	ND		0.51	0.33	ug/m3			09/04/20 02:51	1
Xylenes, Total	**23**		3.5	0.52	ug/m3			09/04/20 02:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*115*		*60 - 140*		*09/04/20 02:51*	*1*

Client Sample ID: SV-152-C-29

Lab Sample ID: 140-20175-14

Date Collected: 08/25/20 10:47
Matrix: Air
Date Received: 08/27/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.21**	**J**	0.80	0.080	ppb v/v			09/03/20 23:05	1
Carbon tetrachloride	ND		0.80	0.070	ppb v/v			09/03/20 23:05	1
Chlorodifluoromethane	**9.6**		0.80	0.22	ppb v/v			09/03/20 23:05	1
Chloroform	**0.37**	**J**	0.80	0.070	ppb v/v			09/03/20 23:05	1
cis-1,2-Dichloroethene	**2.3**		0.80	0.10	ppb v/v			09/03/20 23:05	1
Dichlorodifluoromethane	**0.38**	**J**	0.80	0.14	ppb v/v			09/03/20 23:05	1
1,1-Dichloroethane	ND		0.80	0.070	ppb v/v			09/03/20 23:05	1
1,2-Dichloroethane	ND		0.80	0.10	ppb v/v			09/03/20 23:05	1
1,1-Dichloroethene	ND		0.80	0.080	ppb v/v			09/03/20 23:05	1
Ethylbenzene	ND		0.80	0.13	ppb v/v			09/03/20 23:05	1
Methylene Chloride	**4.3**		4.0	3.9	ppb v/v			09/03/20 23:05	1
Methyl tert-butyl ether	ND		4.0	0.52	ppb v/v			09/03/20 23:05	1
Naphthalene	ND		0.40	0.40	ppb v/v			09/03/20 23:05	1
Tetrachloroethene	ND		0.80	0.070	ppb v/v			09/03/20 23:05	1
Toluene	**1.7**		1.2	0.78	ppb v/v			09/03/20 23:05	1
trans-1,2-Dichloroethene	**0.088**	**J**	0.80	0.070	ppb v/v			09/03/20 23:05	1
1,2,4-Trichlorobenzene	ND		0.80	0.64	ppb v/v			09/03/20 23:05	1
1,1,1-Trichloroethane	**0.50**	**J**	0.80	0.37	ppb v/v			09/03/20 23:05	1
1,1,2-Trichloroethane	ND		0.80	0.070	ppb v/v			09/03/20 23:05	1
Trichloroethene	**33**		0.40	0.060	ppb v/v			09/03/20 23:05	1
1,2,3-Trimethylbenzene	ND		0.80	0.36	ppb v/v			09/03/20 23:05	1
1,2,4-Trimethylbenzene	ND		0.80	0.20	ppb v/v			09/03/20 23:05	1
1,3,5-Trimethylbenzene	ND		0.80	0.22	ppb v/v			09/03/20 23:05	1
Vinyl chloride	ND		0.40	0.26	ppb v/v			09/03/20 23:05	1
Xylenes, Total	ND		1.6	0.24	ppb v/v			09/03/20 23:05	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.67**	**J**	2.6	0.26	ug/m3			09/03/20 23:05	1
Carbon tetrachloride	ND		5.0	0.44	ug/m3			09/03/20 23:05	1
Chlorodifluoromethane	**34**		2.8	0.78	ug/m3			09/03/20 23:05	1
Chloroform	**1.8**	**J**	3.9	0.34	ug/m3			09/03/20 23:05	1
cis-1,2-Dichloroethene	**9.1**		3.2	0.40	ug/m3			09/03/20 23:05	1
Dichlorodifluoromethane	**1.9**	**J**	4.0	0.69	ug/m3			09/03/20 23:05	1
1,1-Dichloroethane	ND		3.2	0.28	ug/m3			09/03/20 23:05	1
1,2-Dichloroethane	ND		3.2	0.40	ug/m3			09/03/20 23:05	1
1,1-Dichloroethene	ND		3.2	0.32	ug/m3			09/03/20 23:05	1
Ethylbenzene	ND		3.5	0.56	ug/m3			09/03/20 23:05	1
Methylene Chloride	**15**		14	14	ug/m3			09/03/20 23:05	1
Methyl tert-butyl ether	ND		14	1.9	ug/m3			09/03/20 23:05	1
Naphthalene	ND		2.1	2.1	ug/m3			09/03/20 23:05	1
Tetrachloroethene	ND		5.4	0.47	ug/m3			09/03/20 23:05	1
Toluene	**6.2**		4.5	2.9	ug/m3			09/03/20 23:05	1
trans-1,2-Dichloroethene	**0.35**	**J**	3.2	0.28	ug/m3			09/03/20 23:05	1
1,2,4-Trichlorobenzene	ND		5.9	4.7	ug/m3			09/03/20 23:05	1
1,1,1-Trichloroethane	**2.7**	**J**	4.4	2.0	ug/m3			09/03/20 23:05	1
1,1,2-Trichloroethane	ND		4.4	0.38	ug/m3			09/03/20 23:05	1
Trichloroethene	**180**		2.1	0.32	ug/m3			09/03/20 23:05	1
1,2,3-Trimethylbenzene	ND		3.9	1.8	ug/m3			09/03/20 23:05	1
1,2,4-Trimethylbenzene	ND		3.9	0.98	ug/m3			09/03/20 23:05	1

Client Sample ID: SV-152-C-29 **Lab Sample ID: 140-20175-14**
Date Collected: 08/25/20 10:47 **Matrix: Air**
Date Received: 08/27/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		3.9	1.1	ug/m3			09/03/20 23:05	1
Vinyl chloride	ND		1.0	0.66	ug/m3			09/03/20 23:05	1
Xylenes, Total	ND		6.9	1.0	ug/m3			09/03/20 23:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*60 - 140*		*09/03/20 23:05*	*1*

Client Sample ID: SV-141-C-29 Lab Sample ID: 140-20175-15

Date Collected: 08/25/20 10:50 **Matrix: Air**
Date Received: 08/27/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.19**	**J**	0.40	0.040	ppb v/v			09/03/20 23:53	1
Carbon tetrachloride	**0.062**	**J**	0.40	0.035	ppb v/v			09/03/20 23:53	1
Chlorodifluoromethane	**3.5**		0.40	0.11	ppb v/v			09/03/20 23:53	1
Chloroform	**0.079**	**J**	0.40	0.035	ppb v/v			09/03/20 23:53	1
cis-1,2-Dichloroethene	**0.44**		0.40	0.050	ppb v/v			09/03/20 23:53	1
Dichlorodifluoromethane	**0.40**		0.40	0.070	ppb v/v			09/03/20 23:53	1
1,1-Dichloroethane	ND		0.40	0.035	ppb v/v			09/03/20 23:53	1
1,2-Dichloroethane	ND		0.40	0.050	ppb v/v			09/03/20 23:53	1
1,1-Dichloroethene	**0.14**	**J**	0.40	0.040	ppb v/v			09/03/20 23:53	1
Ethylbenzene	**0.47**		0.40	0.065	ppb v/v			09/03/20 23:53	1
Methylene Chloride	ND		2.0	2.0	ppb v/v			09/03/20 23:53	1
Methyl tert-butyl ether	ND		2.0	0.26	ppb v/v			09/03/20 23:53	1
Naphthalene	ND		0.20	0.20	ppb v/v			09/03/20 23:53	1
Tetrachloroethene	**0.040**	**J**	0.40	0.035	ppb v/v			09/03/20 23:53	1
Toluene	**1.2**		0.60	0.39	ppb v/v			09/03/20 23:53	1
trans-1,2-Dichloroethene	**0.13**	**J**	0.40	0.035	ppb v/v			09/03/20 23:53	1
1,2,4-Trichlorobenzene	ND		0.40	0.32	ppb v/v			09/03/20 23:53	1
1,1,1-Trichloroethane	ND		0.40	0.19	ppb v/v			09/03/20 23:53	1
1,1,2-Trichloroethane	ND		0.40	0.035	ppb v/v			09/03/20 23:53	1
Trichloroethene	**6.4**		0.20	0.030	ppb v/v			09/03/20 23:53	1
1,2,3-Trimethylbenzene	ND		0.40	0.18	ppb v/v			09/03/20 23:53	1
1,2,4-Trimethylbenzene	**0.14**	**J**	0.40	0.10	ppb v/v			09/03/20 23:53	1
1,3,5-Trimethylbenzene	ND		0.40	0.11	ppb v/v			09/03/20 23:53	1
Vinyl chloride	ND		0.20	0.13	ppb v/v			09/03/20 23:53	1
Xylenes, Total	**2.7**		0.80	0.12	ppb v/v			09/03/20 23:53	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.61**	**J**	1.3	0.13	ug/m3			09/03/20 23:53	1
Carbon tetrachloride	**0.39**	**J**	2.5	0.22	ug/m3			09/03/20 23:53	1
Chlorodifluoromethane	**12**		1.4	0.39	ug/m3			09/03/20 23:53	1
Chloroform	**0.38**	**J**	2.0	0.17	ug/m3			09/03/20 23:53	1
cis-1,2-Dichloroethene	**1.7**		1.6	0.20	ug/m3			09/03/20 23:53	1
Dichlorodifluoromethane	**2.0**		2.0	0.35	ug/m3			09/03/20 23:53	1
1,1-Dichloroethane	ND		1.6	0.14	ug/m3			09/03/20 23:53	1
1,2-Dichloroethane	ND		1.6	0.20	ug/m3			09/03/20 23:53	1
1,1-Dichloroethene	**0.57**	**J**	1.6	0.16	ug/m3			09/03/20 23:53	1
Ethylbenzene	**2.0**		1.7	0.28	ug/m3			09/03/20 23:53	1
Methylene Chloride	ND		6.9	6.8	ug/m3			09/03/20 23:53	1
Methyl tert-butyl ether	ND		7.2	0.94	ug/m3			09/03/20 23:53	1
Naphthalene	ND		1.0	1.0	ug/m3			09/03/20 23:53	1
Tetrachloroethene	**0.27**	**J**	2.7	0.24	ug/m3			09/03/20 23:53	1
Toluene	**4.5**		2.3	1.5	ug/m3			09/03/20 23:53	1
trans-1,2-Dichloroethene	**0.53**	**J**	1.6	0.14	ug/m3			09/03/20 23:53	1
1,2,4-Trichlorobenzene	ND		3.0	2.4	ug/m3			09/03/20 23:53	1
1,1,1-Trichloroethane	ND		2.2	1.0	ug/m3			09/03/20 23:53	1
1,1,2-Trichloroethane	ND		2.2	0.19	ug/m3			09/03/20 23:53	1
Trichloroethene	**34**		1.1	0.16	ug/m3			09/03/20 23:53	1
1,2,3-Trimethylbenzene	ND		2.0	0.88	ug/m3			09/03/20 23:53	1
1,2,4-Trimethylbenzene	**0.70**	**J**	2.0	0.49	ug/m3			09/03/20 23:53	1

Client Sample ID: SV-141-C-29 **Lab Sample ID: 140-20175-15**
Date Collected: 08/25/20 10:50 **Matrix: Air**
Date Received: 08/27/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		2.0	0.54	ug/m3			09/03/20 23:53	1
Vinyl chloride	ND		0.51	0.33	ug/m3			09/03/20 23:53	1
Xylenes, Total	**12**		3.5	0.52	ug/m3			09/03/20 23:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*60 - 140*		*09/03/20 23:53*	*1*

Client Sample ID: SV-149-C-29 Lab Sample ID: 140-20175-16

Date Collected: 08/25/20 10:53 **Matrix: Air**
Date Received: 08/27/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.14**	**J**	0.40	0.040	ppb v/v			09/04/20 00:41	1
Carbon tetrachloride	**0.069**	**J**	0.40	0.035	ppb v/v			09/04/20 00:41	1
Chlorodifluoromethane	**0.89**		0.40	0.11	ppb v/v			09/04/20 00:41	1
Chloroform	**0.16**	**J**	0.40	0.035	ppb v/v			09/04/20 00:41	1
cis-1,2-Dichloroethene	**0.15**	**J**	0.40	0.050	ppb v/v			09/04/20 00:41	1
Dichlorodifluoromethane	**0.39**	**J**	0.40	0.070	ppb v/v			09/04/20 00:41	1
1,1-Dichloroethane	ND		0.40	0.035	ppb v/v			09/04/20 00:41	1
1,2-Dichloroethane	ND		0.40	0.050	ppb v/v			09/04/20 00:41	1
1,1-Dichloroethene	ND		0.40	0.040	ppb v/v			09/04/20 00:41	1
Ethylbenzene	**1.3**		0.40	0.065	ppb v/v			09/04/20 00:41	1
Methylene Chloride	**21**		2.0	2.0	ppb v/v			09/04/20 00:41	1
Methyl tert-butyl ether	ND		2.0	0.26	ppb v/v			09/04/20 00:41	1
Naphthalene	ND		0.20	0.20	ppb v/v			09/04/20 00:41	1
Tetrachloroethene	**0.41**		0.40	0.035	ppb v/v			09/04/20 00:41	1
Toluene	**12**		0.60	0.39	ppb v/v			09/04/20 00:41	1
trans-1,2-Dichloroethene	ND		0.40	0.035	ppb v/v			09/04/20 00:41	1
1,2,4-Trichlorobenzene	ND		0.40	0.32	ppb v/v			09/04/20 00:41	1
1,1,1-Trichloroethane	ND		0.40	0.19	ppb v/v			09/04/20 00:41	1
1,1,2-Trichloroethane	ND		0.40	0.035	ppb v/v			09/04/20 00:41	1
Trichloroethene	**2.1**		0.20	0.030	ppb v/v			09/04/20 00:41	1
1,2,3-Trimethylbenzene	ND		0.40	0.18	ppb v/v			09/04/20 00:41	1
1,2,4-Trimethylbenzene	**0.54**		0.40	0.10	ppb v/v			09/04/20 00:41	1
1,3,5-Trimethylbenzene	**0.32**	**J**	0.40	0.11	ppb v/v			09/04/20 00:41	1
Vinyl chloride	ND		0.20	0.13	ppb v/v			09/04/20 00:41	1
Xylenes, Total	**6.5**		0.80	0.12	ppb v/v			09/04/20 00:41	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.43**	**J**	1.3	0.13	ug/m3			09/04/20 00:41	1
Carbon tetrachloride	**0.43**	**J**	2.5	0.22	ug/m3			09/04/20 00:41	1
Chlorodifluoromethane	**3.1**		1.4	0.39	ug/m3			09/04/20 00:41	1
Chloroform	**0.80**	**J**	2.0	0.17	ug/m3			09/04/20 00:41	1
cis-1,2-Dichloroethene	**0.58**	**J**	1.6	0.20	ug/m3			09/04/20 00:41	1
Dichlorodifluoromethane	**1.9**	**J**	2.0	0.35	ug/m3			09/04/20 00:41	1
1,1-Dichloroethane	ND		1.6	0.14	ug/m3			09/04/20 00:41	1
1,2-Dichloroethane	ND		1.6	0.20	ug/m3			09/04/20 00:41	1
1,1-Dichloroethene	ND		1.6	0.16	ug/m3			09/04/20 00:41	1
Ethylbenzene	**5.6**		1.7	0.28	ug/m3			09/04/20 00:41	1
Methylene Chloride	**71**		6.9	6.8	ug/m3			09/04/20 00:41	1
Methyl tert-butyl ether	ND		7.2	0.94	ug/m3			09/04/20 00:41	1
Naphthalene	ND		1.0	1.0	ug/m3			09/04/20 00:41	1
Tetrachloroethene	**2.8**		2.7	0.24	ug/m3			09/04/20 00:41	1
Toluene	**44**		2.3	1.5	ug/m3			09/04/20 00:41	1
trans-1,2-Dichloroethene	ND		1.6	0.14	ug/m3			09/04/20 00:41	1
1,2,4-Trichlorobenzene	ND		3.0	2.4	ug/m3			09/04/20 00:41	1
1,1,1-Trichloroethane	ND		2.2	1.0	ug/m3			09/04/20 00:41	1
1,1,2-Trichloroethane	ND		2.2	0.19	ug/m3			09/04/20 00:41	1
Trichloroethene	**11**		1.1	0.16	ug/m3			09/04/20 00:41	1
1,2,3-Trimethylbenzene	ND		2.0	0.88	ug/m3			09/04/20 00:41	1
1,2,4-Trimethylbenzene	**2.7**		2.0	0.49	ug/m3			09/04/20 00:41	1

Client Sample ID: SV-149-C-29 **Lab Sample ID: 140-20175-16**
Date Collected: 08/25/20 10:53 **Matrix: Air**
Date Received: 08/27/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	**1.6**	**J**	2.0	0.54	ug/m3			09/04/20 00:41	1
Vinyl chloride	ND		0.51	0.33	ug/m3			09/04/20 00:41	1
Xylenes, Total	**28**		3.5	0.52	ug/m3			09/04/20 00:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*60 - 140*		*09/04/20 00:41*	*1*

Client Sample ID: SV-126-C-29

Lab Sample ID: 140-20175-17

Date Collected: 08/25/20 10:56
Matrix: Air
Date Received: 08/27/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**71**		5.0	0.50	ppb v/v			09/09/20 07:56	12.39
Carbon tetrachloride	ND		5.0	0.43	ppb v/v			09/09/20 07:56	12.39
Chlorodifluoromethane	ND		5.0	1.4	ppb v/v			09/09/20 07:56	12.39
Chloroform	ND		5.0	0.43	ppb v/v			09/09/20 07:56	12.39
cis-1,2-Dichloroethene	**37**		5.0	0.62	ppb v/v			09/09/20 07:56	12.39
Dichlorodifluoromethane	ND		5.0	0.87	ppb v/v			09/09/20 07:56	12.39
1,1-Dichloroethane	ND		5.0	0.43	ppb v/v			09/09/20 07:56	12.39
1,2-Dichloroethane	ND		5.0	0.62	ppb v/v			09/09/20 07:56	12.39
1,1-Dichloroethene	**55**		5.0	0.50	ppb v/v			09/09/20 07:56	12.39
Ethylbenzene	**3.7**	**J**	5.0	0.81	ppb v/v			09/09/20 07:56	12.39
Methylene Chloride	ND		25	24	ppb v/v			09/09/20 07:56	12.39
Methyl tert-butyl ether	ND		25	3.2	ppb v/v			09/09/20 07:56	12.39
Naphthalene	ND		2.5	2.5	ppb v/v			09/09/20 07:56	12.39
Tetrachloroethene	ND		5.0	0.43	ppb v/v			09/09/20 07:56	12.39
Toluene	**7.1**	**J**	7.4	4.8	ppb v/v			09/09/20 07:56	12.39
trans-1,2-Dichloroethene	**6.0**		5.0	0.43	ppb v/v			09/09/20 07:56	12.39
1,2,4-Trichlorobenzene	ND		5.0	4.0	ppb v/v			09/09/20 07:56	12.39
1,1,1-Trichloroethane	ND		5.0	2.3	ppb v/v			09/09/20 07:56	12.39
1,1,2-Trichloroethane	ND		5.0	0.43	ppb v/v			09/09/20 07:56	12.39
Trichloroethene	**58**		2.5	0.37	ppb v/v			09/09/20 07:56	12.39
1,2,3-Trimethylbenzene	ND	*	5.0	2.2	ppb v/v			09/09/20 07:56	12.39
1,2,4-Trimethylbenzene	ND		5.0	1.2	ppb v/v			09/09/20 07:56	12.39
1,3,5-Trimethylbenzene	ND		5.0	1.4	ppb v/v			09/09/20 07:56	12.39
Vinyl chloride	**310**		2.5	1.6	ppb v/v			09/09/20 07:56	12.39
Xylenes, Total	**13**		9.9	1.5	ppb v/v			09/09/20 07:56	12.39

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**230**		16	1.6	ug/m3			09/09/20 07:56	12.39
Carbon tetrachloride	ND		31	2.7	ug/m3			09/09/20 07:56	12.39
Chlorodifluoromethane	ND		18	4.8	ug/m3			09/09/20 07:56	12.39
Chloroform	ND		24	2.1	ug/m3			09/09/20 07:56	12.39
cis-1,2-Dichloroethene	**150**		20	2.5	ug/m3			09/09/20 07:56	12.39
Dichlorodifluoromethane	ND		25	4.3	ug/m3			09/09/20 07:56	12.39
1,1-Dichloroethane	ND		20	1.8	ug/m3			09/09/20 07:56	12.39
1,2-Dichloroethane	ND		20	2.5	ug/m3			09/09/20 07:56	12.39
1,1-Dichloroethene	**220**		20	2.0	ug/m3			09/09/20 07:56	12.39
Ethylbenzene	**16**	**J**	22	3.5	ug/m3			09/09/20 07:56	12.39
Methylene Chloride	ND		86	84	ug/m3			09/09/20 07:56	12.39
Methyl tert-butyl ether	ND		89	12	ug/m3			09/09/20 07:56	12.39
Naphthalene	ND		13	13	ug/m3			09/09/20 07:56	12.39
Tetrachloroethene	ND		34	2.9	ug/m3			09/09/20 07:56	12.39
Toluene	**27**	**J**	28	18	ug/m3			09/09/20 07:56	12.39
trans-1,2-Dichloroethene	**24**		20	1.7	ug/m3			09/09/20 07:56	12.39
1,2,4-Trichlorobenzene	ND		37	29	ug/m3			09/09/20 07:56	12.39
1,1,1-Trichloroethane	ND		27	13	ug/m3			09/09/20 07:56	12.39
1,1,2-Trichloroethane	ND		27	2.4	ug/m3			09/09/20 07:56	12.39
Trichloroethene	**310**		13	2.0	ug/m3			09/09/20 07:56	12.39
1,2,3-Trimethylbenzene	ND	*	24	11	ug/m3			09/09/20 07:56	12.39
1,2,4-Trimethylbenzene	ND		24	6.1	ug/m3			09/09/20 07:56	12.39

Client Sample ID: SV-126-C-29 **Lab Sample ID: 140-20175-17**
Date Collected: 08/25/20 10:56 **Matrix: Air**
Date Received: 08/27/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		24	6.7	ug/m3			09/09/20 07:56	12.39
Vinyl chloride	**790**		6.3	4.1	ug/m3			09/09/20 07:56	12.39
Xylenes, Total	**55**		43	6.5	ug/m3			09/09/20 07:56	12.39

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*60 - 140*		*09/09/20 07:56*	*12.39*

Client Sample ID: IA-001-C-29

Date Collected: 08/25/20 16:11
Date Received: 08/27/20 10:00

Lab Sample ID: 140-20175-18

Matrix: Air

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.12**	**J**	0.40	0.040	ppb v/v			09/05/20 16:20	1
Carbon tetrachloride	**0.11**	**J**	0.40	0.035	ppb v/v			09/05/20 16:20	1
Chlorodifluoromethane	**0.64**		0.40	0.11	ppb v/v			09/05/20 16:20	1
Chloroform	**0.099**	**J**	0.40	0.035	ppb v/v			09/05/20 16:20	1
cis-1,2-Dichloroethene	ND		0.40	0.050	ppb v/v			09/05/20 16:20	1
Dichlorodifluoromethane	**0.52**		0.40	0.070	ppb v/v			09/05/20 16:20	1
1,1-Dichloroethane	ND		0.40	0.035	ppb v/v			09/05/20 16:20	1
1,2-Dichloroethane	ND		0.40	0.050	ppb v/v			09/05/20 16:20	1
1,1-Dichloroethene	ND		0.40	0.040	ppb v/v			09/05/20 16:20	1
Ethylbenzene	ND		0.40	0.065	ppb v/v			09/05/20 16:20	1
Methylene Chloride	ND		2.0	2.0	ppb v/v			09/05/20 16:20	1
Methyl tert-butyl ether	ND		2.0	0.26	ppb v/v			09/05/20 16:20	1
Naphthalene	ND		0.20	0.20	ppb v/v			09/05/20 16:20	1
Tetrachloroethene	ND		0.40	0.035	ppb v/v			09/05/20 16:20	1
Toluene	**0.61**		0.60	0.39	ppb v/v			09/05/20 16:20	1
trans-1,2-Dichloroethene	ND		0.40	0.035	ppb v/v			09/05/20 16:20	1
1,2,4-Trichlorobenzene	ND		0.40	0.32	ppb v/v			09/05/20 16:20	1
1,1,1-Trichloroethane	ND		0.40	0.19	ppb v/v			09/05/20 16:20	1
1,1,2-Trichloroethane	ND		0.40	0.035	ppb v/v			09/05/20 16:20	1
Trichloroethene	ND		0.20	0.030	ppb v/v			09/05/20 16:20	1
1,2,3-Trimethylbenzene	ND		0.40	0.18	ppb v/v			09/05/20 16:20	1
1,2,4-Trimethylbenzene	ND		0.40	0.10	ppb v/v			09/05/20 16:20	1
1,3,5-Trimethylbenzene	ND		0.40	0.11	ppb v/v			09/05/20 16:20	1
Vinyl chloride	ND		0.20	0.13	ppb v/v			09/05/20 16:20	1
Xylenes, Total	**0.35**	**J**	0.80	0.12	ppb v/v			09/05/20 16:20	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.37**	**J**	1.3	0.13	ug/m3			09/05/20 16:20	1
Carbon tetrachloride	**0.70**	**J**	2.5	0.22	ug/m3			09/05/20 16:20	1
Chlorodifluoromethane	**2.3**		1.4	0.39	ug/m3			09/05/20 16:20	1
Chloroform	**0.49**	**J**	2.0	0.17	ug/m3			09/05/20 16:20	1
cis-1,2-Dichloroethene	ND		1.6	0.20	ug/m3			09/05/20 16:20	1
Dichlorodifluoromethane	**2.6**		2.0	0.35	ug/m3			09/05/20 16:20	1
1,1-Dichloroethane	ND		1.6	0.14	ug/m3			09/05/20 16:20	1
1,2-Dichloroethane	ND		1.6	0.20	ug/m3			09/05/20 16:20	1
1,1-Dichloroethene	ND		1.6	0.16	ug/m3			09/05/20 16:20	1
Ethylbenzene	ND		1.7	0.28	ug/m3			09/05/20 16:20	1
Methylene Chloride	ND		6.9	6.8	ug/m3			09/05/20 16:20	1
Methyl tert-butyl ether	ND		7.2	0.94	ug/m3			09/05/20 16:20	1
Naphthalene	ND		1.0	1.0	ug/m3			09/05/20 16:20	1
Tetrachloroethene	ND		2.7	0.24	ug/m3			09/05/20 16:20	1
Toluene	**2.3**		2.3	1.5	ug/m3			09/05/20 16:20	1
trans-1,2-Dichloroethene	ND		1.6	0.14	ug/m3			09/05/20 16:20	1
1,2,4-Trichlorobenzene	ND		3.0	2.4	ug/m3			09/05/20 16:20	1
1,1,1-Trichloroethane	ND		2.2	1.0	ug/m3			09/05/20 16:20	1
1,1,2-Trichloroethane	ND		2.2	0.19	ug/m3			09/05/20 16:20	1
Trichloroethene	ND		1.1	0.16	ug/m3			09/05/20 16:20	1
1,2,3-Trimethylbenzene	ND		2.0	0.88	ug/m3			09/05/20 16:20	1
1,2,4-Trimethylbenzene	ND		2.0	0.49	ug/m3			09/05/20 16:20	1
1,3,5-Trimethylbenzene	ND		2.0	0.54	ug/m3			09/05/20 16:20	1

Client Sample ID: IA-001-C-29
Lab Sample ID: 140-20175-18

Date Collected: 08/25/20 16:11
Matrix: Air
Date Received: 08/27/20 10:00

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		0.51	0.33	ug/m3			09/05/20 16:20	1
Xylenes, Total	**1.5**	**J**	3.5	0.52	ug/m3			09/05/20 16:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*60 - 140*		*09/05/20 16:20*	*1*

Client Sample ID: IA-004-C-29
Lab Sample ID: 140-20175-19

Date Collected: 08/25/20 16:14
Matrix: Air
Date Received: 08/27/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.13**	**J**	0.40	0.040	ppb v/v			09/05/20 17:18	1.77
Carbon tetrachloride	**0.081**	**J**	0.40	0.035	ppb v/v			09/05/20 17:18	1.77
Chlorodifluoromethane	**0.59**		0.40	0.11	ppb v/v			09/05/20 17:18	1.77
Chloroform	**0.070**	**J**	0.40	0.035	ppb v/v			09/05/20 17:18	1.77
cis-1,2-Dichloroethene	ND		0.40	0.050	ppb v/v			09/05/20 17:18	1.77
Dichlorodifluoromethane	**0.53**		0.40	0.070	ppb v/v			09/05/20 17:18	1.77
1,1-Dichloroethane	ND		0.40	0.035	ppb v/v			09/05/20 17:18	1.77
1,2-Dichloroethane	ND		0.40	0.050	ppb v/v			09/05/20 17:18	1.77
1,1-Dichloroethene	ND		0.40	0.040	ppb v/v			09/05/20 17:18	1.77
Ethylbenzene	ND		0.40	0.065	ppb v/v			09/05/20 17:18	1.77
Methylene Chloride	**2.4**		2.0	2.0	ppb v/v			09/05/20 17:18	1.77
Methyl tert-butyl ether	ND		2.0	0.26	ppb v/v			09/05/20 17:18	1.77
Naphthalene	ND		0.20	0.20	ppb v/v			09/05/20 17:18	1.77
Tetrachloroethene	ND		0.40	0.035	ppb v/v			09/05/20 17:18	1.77
Toluene	**0.85**		0.60	0.39	ppb v/v			09/05/20 17:18	1.77
trans-1,2-Dichloroethene	ND		0.40	0.035	ppb v/v			09/05/20 17:18	1.77
1,2,4-Trichlorobenzene	ND		0.40	0.32	ppb v/v			09/05/20 17:18	1.77
1,1,1-Trichloroethane	ND		0.40	0.19	ppb v/v			09/05/20 17:18	1.77
1,1,2-Trichloroethane	ND		0.40	0.035	ppb v/v			09/05/20 17:18	1.77
Trichloroethene	ND		0.20	0.030	ppb v/v			09/05/20 17:18	1.77
1,2,3-Trimethylbenzene	ND		0.40	0.18	ppb v/v			09/05/20 17:18	1.77
1,2,4-Trimethylbenzene	ND		0.40	0.10	ppb v/v			09/05/20 17:18	1.77
1,3,5-Trimethylbenzene	ND		0.40	0.11	ppb v/v			09/05/20 17:18	1.77
Vinyl chloride	ND		0.20	0.13	ppb v/v			09/05/20 17:18	1.77
Xylenes, Total	**0.30**	**J**	0.80	0.12	ppb v/v			09/05/20 17:18	1.77

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.40**	**J**	1.3	0.13	ug/m3			09/05/20 17:18	1.77
Carbon tetrachloride	**0.51**	**J**	2.5	0.22	ug/m3			09/05/20 17:18	1.77
Chlorodifluoromethane	**2.1**		1.4	0.39	ug/m3			09/05/20 17:18	1.77
Chloroform	**0.34**	**J**	2.0	0.17	ug/m3			09/05/20 17:18	1.77
cis-1,2-Dichloroethene	ND		1.6	0.20	ug/m3			09/05/20 17:18	1.77
Dichlorodifluoromethane	**2.6**		2.0	0.35	ug/m3			09/05/20 17:18	1.77
1,1-Dichloroethane	ND		1.6	0.14	ug/m3			09/05/20 17:18	1.77
1,2-Dichloroethane	ND		1.6	0.20	ug/m3			09/05/20 17:18	1.77
1,1-Dichloroethene	ND		1.6	0.16	ug/m3			09/05/20 17:18	1.77
Ethylbenzene	ND		1.7	0.28	ug/m3			09/05/20 17:18	1.77
Methylene Chloride	**8.3**		6.9	6.8	ug/m3			09/05/20 17:18	1.77
Methyl tert-butyl ether	ND		7.2	0.94	ug/m3			09/05/20 17:18	1.77
Naphthalene	ND		1.0	1.0	ug/m3			09/05/20 17:18	1.77
Tetrachloroethene	ND		2.7	0.24	ug/m3			09/05/20 17:18	1.77
Toluene	**3.2**		2.3	1.5	ug/m3			09/05/20 17:18	1.77
trans-1,2-Dichloroethene	ND		1.6	0.14	ug/m3			09/05/20 17:18	1.77
1,2,4-Trichlorobenzene	ND		3.0	2.4	ug/m3			09/05/20 17:18	1.77
1,1,1-Trichloroethane	ND		2.2	1.0	ug/m3			09/05/20 17:18	1.77
1,1,2-Trichloroethane	ND		2.2	0.19	ug/m3			09/05/20 17:18	1.77
Trichloroethene	ND		1.1	0.16	ug/m3			09/05/20 17:18	1.77
1,2,3-Trimethylbenzene	ND		2.0	0.88	ug/m3			09/05/20 17:18	1.77
1,2,4-Trimethylbenzene	ND		2.0	0.49	ug/m3			09/05/20 17:18	1.77

Client Sample ID: IA-004-C-29 **Lab Sample ID: 140-20175-19**
Date Collected: 08/25/20 16:14 **Matrix: Air**
Date Received: 08/27/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		2.0	0.54	ug/m3			09/05/20 17:18	1.77
Vinyl chloride	ND		0.51	0.33	ug/m3			09/05/20 17:18	1.77
Xylenes, Total	**1.3**	**J**	3.5	0.52	ug/m3			09/05/20 17:18	1.77

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*83*		*60 - 140*		*09/05/20 17:18*	*1.77*

Client Sample ID: IA-102-C-29 Lab Sample ID: 140-20175-20

Date Collected: 08/25/20 16:22 **Matrix: Air**
Date Received: 08/27/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.16**	**J**	0.40	0.040	ppb v/v			09/05/20 18:14	1
Carbon tetrachloride	**0.11**	**J**	0.40	0.035	ppb v/v			09/05/20 18:14	1
Chlorodifluoromethane	**1.8**		0.40	0.11	ppb v/v			09/05/20 18:14	1
Chloroform	**0.067**	**J**	0.40	0.035	ppb v/v			09/05/20 18:14	1
cis-1,2-Dichloroethene	ND		0.40	0.050	ppb v/v			09/05/20 18:14	1
Dichlorodifluoromethane	**0.58**		0.40	0.070	ppb v/v			09/05/20 18:14	1
1,1-Dichloroethane	ND		0.40	0.035	ppb v/v			09/05/20 18:14	1
1,2-Dichloroethane	ND		0.40	0.050	ppb v/v			09/05/20 18:14	1
1,1-Dichloroethene	ND		0.40	0.040	ppb v/v			09/05/20 18:14	1
Ethylbenzene	**0.082**	**J**	0.40	0.065	ppb v/v			09/05/20 18:14	1
Methylene Chloride	ND		2.0	2.0	ppb v/v			09/05/20 18:14	1
Methyl tert-butyl ether	ND		2.0	0.26	ppb v/v			09/05/20 18:14	1
Naphthalene	ND		0.20	0.20	ppb v/v			09/05/20 18:14	1
Tetrachloroethene	ND		0.40	0.035	ppb v/v			09/05/20 18:14	1
Toluene	**0.82**		0.60	0.39	ppb v/v			09/05/20 18:14	1
trans-1,2-Dichloroethene	ND		0.40	0.035	ppb v/v			09/05/20 18:14	1
1,2,4-Trichlorobenzene	ND		0.40	0.32	ppb v/v			09/05/20 18:14	1
1,1,1-Trichloroethane	ND		0.40	0.19	ppb v/v			09/05/20 18:14	1
1,1,2-Trichloroethane	ND		0.40	0.035	ppb v/v			09/05/20 18:14	1
Trichloroethene	ND		0.20	0.030	ppb v/v			09/05/20 18:14	1
1,2,3-Trimethylbenzene	ND		0.40	0.18	ppb v/v			09/05/20 18:14	1
1,2,4-Trimethylbenzene	ND		0.40	0.10	ppb v/v			09/05/20 18:14	1
1,3,5-Trimethylbenzene	**0.26**	**J**	0.40	0.11	ppb v/v			09/05/20 18:14	1
Vinyl chloride	ND		0.20	0.13	ppb v/v			09/05/20 18:14	1
Xylenes, Total	**0.40**	**J**	0.80	0.12	ppb v/v			09/05/20 18:14	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.51**	**J**	1.3	0.13	ug/m3			09/05/20 18:14	1
Carbon tetrachloride	**0.69**	**J**	2.5	0.22	ug/m3			09/05/20 18:14	1
Chlorodifluoromethane	**6.5**		1.4	0.39	ug/m3			09/05/20 18:14	1
Chloroform	**0.33**	**J**	2.0	0.17	ug/m3			09/05/20 18:14	1
cis-1,2-Dichloroethene	ND		1.6	0.20	ug/m3			09/05/20 18:14	1
Dichlorodifluoromethane	**2.9**		2.0	0.35	ug/m3			09/05/20 18:14	1
1,1-Dichloroethane	ND		1.6	0.14	ug/m3			09/05/20 18:14	1
1,2-Dichloroethane	ND		1.6	0.20	ug/m3			09/05/20 18:14	1
1,1-Dichloroethene	ND		1.6	0.16	ug/m3			09/05/20 18:14	1
Ethylbenzene	**0.35**	**J**	1.7	0.28	ug/m3			09/05/20 18:14	1
Methylene Chloride	ND		6.9	6.8	ug/m3			09/05/20 18:14	1
Methyl tert-butyl ether	ND		7.2	0.94	ug/m3			09/05/20 18:14	1
Naphthalene	ND		1.0	1.0	ug/m3			09/05/20 18:14	1
Tetrachloroethene	ND		2.7	0.24	ug/m3			09/05/20 18:14	1
Toluene	**3.1**		2.3	1.5	ug/m3			09/05/20 18:14	1
trans-1,2-Dichloroethene	ND		1.6	0.14	ug/m3			09/05/20 18:14	1
1,2,4-Trichlorobenzene	ND		3.0	2.4	ug/m3			09/05/20 18:14	1
1,1,1-Trichloroethane	ND		2.2	1.0	ug/m3			09/05/20 18:14	1
1,1,2-Trichloroethane	ND		2.2	0.19	ug/m3			09/05/20 18:14	1
Trichloroethene	ND		1.1	0.16	ug/m3			09/05/20 18:14	1
1,2,3-Trimethylbenzene	ND		2.0	0.88	ug/m3			09/05/20 18:14	1
1,2,4-Trimethylbenzene	ND		2.0	0.49	ug/m3			09/05/20 18:14	1

Client Sample ID: IA-102-C-29
Lab Sample ID: 140-20175-20
Date Collected: 08/25/20 16:22
Matrix: Air
Date Received: 08/27/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	**1.3**	**J**	2.0	0.54	ug/m3			09/05/20 18:14	1
Vinyl chloride	ND		0.51	0.33	ug/m3			09/05/20 18:14	1
Xylenes, Total	**1.7**	**J**	3.5	0.52	ug/m3			09/05/20 18:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*78*		*60 - 140*		*09/05/20 18:14*	*1*

Client Sample ID: IA-113-C-29

Lab Sample ID: 140-20175-21

Date Collected: 08/25/20 16:23
Matrix: Air
Date Received: 08/27/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.18**	**J**	0.40	0.040	ppb v/v			09/06/20 19:30	1.33
Carbon tetrachloride	**0.16**	**J ***	0.40	0.035	ppb v/v			09/06/20 19:30	1.33
Chlorodifluoromethane	**1.3**		0.40	0.11	ppb v/v			09/06/20 19:30	1.33
Chloroform	**0.14**	**J**	0.40	0.035	ppb v/v			09/06/20 19:30	1.33
cis-1,2-Dichloroethene	ND		0.40	0.050	ppb v/v			09/06/20 19:30	1.33
Dichlorodifluoromethane	**0.61**		0.40	0.070	ppb v/v			09/06/20 19:30	1.33
1,1-Dichloroethane	**0.13**	**J**	0.40	0.035	ppb v/v			09/06/20 19:30	1.33
1,2-Dichloroethane	**0.088**	**J**	0.40	0.050	ppb v/v			09/06/20 19:30	1.33
1,1-Dichloroethene	ND		0.40	0.040	ppb v/v			09/06/20 19:30	1.33
Ethylbenzene	**0.15**	**J**	0.40	0.065	ppb v/v			09/06/20 19:30	1.33
Methylene Chloride	ND		2.0	2.0	ppb v/v			09/06/20 19:30	1.33
Methyl tert-butyl ether	ND		2.0	0.26	ppb v/v			09/06/20 19:30	1.33
Naphthalene	ND		0.20	0.20	ppb v/v			09/06/20 19:30	1.33
Tetrachloroethene	**0.097**	**J**	0.40	0.035	ppb v/v			09/06/20 19:30	1.33
Toluene	**1.1**		0.60	0.39	ppb v/v			09/06/20 19:30	1.33
trans-1,2-Dichloroethene	**0.067**	**J**	0.40	0.035	ppb v/v			09/06/20 19:30	1.33
1,2,4-Trichlorobenzene	ND		0.40	0.32	ppb v/v			09/06/20 19:30	1.33
1,1,1-Trichloroethane	**0.19**	**J**	0.40	0.19	ppb v/v			09/06/20 19:30	1.33
1,1,2-Trichloroethane	**0.082**	**J**	0.40	0.035	ppb v/v			09/06/20 19:30	1.33
Trichloroethene	**0.050**	**J**	0.20	0.030	ppb v/v			09/06/20 19:30	1.33
1,2,3-Trimethylbenzene	ND		0.40	0.18	ppb v/v			09/06/20 19:30	1.33
1,2,4-Trimethylbenzene	**0.15**	**J ***	0.40	0.10	ppb v/v			09/06/20 19:30	1.33
1,3,5-Trimethylbenzene	**0.36**	**J**	0.40	0.11	ppb v/v			09/06/20 19:30	1.33
Vinyl chloride	ND		0.20	0.13	ppb v/v			09/06/20 19:30	1.33
Xylenes, Total	**0.70**	**J**	0.80	0.12	ppb v/v			09/06/20 19:30	1.33

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.56**	**J**	1.3	0.13	ug/m3			09/06/20 19:30	1.33
Carbon tetrachloride	**1.0**	**J ***	2.5	0.22	ug/m3			09/06/20 19:30	1.33
Chlorodifluoromethane	**4.7**		1.4	0.39	ug/m3			09/06/20 19:30	1.33
Chloroform	**0.66**	**J**	2.0	0.17	ug/m3			09/06/20 19:30	1.33
cis-1,2-Dichloroethene	ND		1.6	0.20	ug/m3			09/06/20 19:30	1.33
Dichlorodifluoromethane	**3.0**		2.0	0.35	ug/m3			09/06/20 19:30	1.33
1,1-Dichloroethane	**0.52**	**J**	1.6	0.14	ug/m3			09/06/20 19:30	1.33
1,2-Dichloroethane	**0.35**	**J**	1.6	0.20	ug/m3			09/06/20 19:30	1.33
1,1-Dichloroethene	ND		1.6	0.16	ug/m3			09/06/20 19:30	1.33
Ethylbenzene	**0.67**	**J**	1.7	0.28	ug/m3			09/06/20 19:30	1.33
Methylene Chloride	ND		6.9	6.8	ug/m3			09/06/20 19:30	1.33
Methyl tert-butyl ether	ND		7.2	0.94	ug/m3			09/06/20 19:30	1.33
Naphthalene	ND		1.0	1.0	ug/m3			09/06/20 19:30	1.33
Tetrachloroethene	**0.66**	**J**	2.7	0.24	ug/m3			09/06/20 19:30	1.33
Toluene	**4.1**		2.3	1.5	ug/m3			09/06/20 19:30	1.33
trans-1,2-Dichloroethene	**0.27**	**J**	1.6	0.14	ug/m3			09/06/20 19:30	1.33
1,2,4-Trichlorobenzene	ND		3.0	2.4	ug/m3			09/06/20 19:30	1.33
1,1,1-Trichloroethane	**1.0**	**J**	2.2	1.0	ug/m3			09/06/20 19:30	1.33
1,1,2-Trichloroethane	**0.45**	**J**	2.2	0.19	ug/m3			09/06/20 19:30	1.33
Trichloroethene	**0.27**	**J**	1.1	0.16	ug/m3			09/06/20 19:30	1.33
1,2,3-Trimethylbenzene	ND		2.0	0.88	ug/m3			09/06/20 19:30	1.33
1,2,4-Trimethylbenzene	**0.75**	**J ***	2.0	0.49	ug/m3			09/06/20 19:30	1.33

Client Sample ID: IA-113-C-29 **Lab Sample ID: 140-20175-21**
Date Collected: 08/25/20 16:23 **Matrix: Air**
Date Received: 08/27/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	**1.8**	**J**	2.0	0.54	ug/m3			09/06/20 19:30	1.33
Vinyl chloride	ND		0.51	0.33	ug/m3			09/06/20 19:30	1.33
Xylenes, Total	**3.0**	**J**	3.5	0.52	ug/m3			09/06/20 19:30	1.33

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*84*		*60 - 140*		*09/06/20 19:30*	*1.33*

Client Sample ID: IA-088-C-29

Lab Sample ID: 140-20175-22

Date Collected: 08/25/20 16:24
Matrix: Air
Date Received: 08/27/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.15**	**J**	0.40	0.040	ppb v/v			09/06/20 20:26	1.35
Carbon tetrachloride	**0.089**	**J ***	0.40	0.035	ppb v/v			09/06/20 20:26	1.35
Chlorodifluoromethane	**1.3**		0.40	0.11	ppb v/v			09/06/20 20:26	1.35
Chloroform	**0.054**	**J**	0.40	0.035	ppb v/v			09/06/20 20:26	1.35
cis-1,2-Dichloroethene	ND		0.40	0.050	ppb v/v			09/06/20 20:26	1.35
Dichlorodifluoromethane	**0.51**		0.40	0.070	ppb v/v			09/06/20 20:26	1.35
1,1-Dichloroethane	ND		0.40	0.035	ppb v/v			09/06/20 20:26	1.35
1,2-Dichloroethane	ND		0.40	0.050	ppb v/v			09/06/20 20:26	1.35
1,1-Dichloroethene	ND		0.40	0.040	ppb v/v			09/06/20 20:26	1.35
Ethylbenzene	**0.083**	**J**	0.40	0.065	ppb v/v			09/06/20 20:26	1.35
Methylene Chloride	ND		2.0	2.0	ppb v/v			09/06/20 20:26	1.35
Methyl tert-butyl ether	ND		2.0	0.26	ppb v/v			09/06/20 20:26	1.35
Naphthalene	ND		0.20	0.20	ppb v/v			09/06/20 20:26	1.35
Tetrachloroethene	ND		0.40	0.035	ppb v/v			09/06/20 20:26	1.35
Toluene	**1.2**		0.60	0.39	ppb v/v			09/06/20 20:26	1.35
trans-1,2-Dichloroethene	ND		0.40	0.035	ppb v/v			09/06/20 20:26	1.35
1,2,4-Trichlorobenzene	ND		0.40	0.32	ppb v/v			09/06/20 20:26	1.35
1,1,1-Trichloroethane	ND		0.40	0.19	ppb v/v			09/06/20 20:26	1.35
1,1,2-Trichloroethane	ND		0.40	0.035	ppb v/v			09/06/20 20:26	1.35
Trichloroethene	ND		0.20	0.030	ppb v/v			09/06/20 20:26	1.35
1,2,3-Trimethylbenzene	ND		0.40	0.18	ppb v/v			09/06/20 20:26	1.35
1,2,4-Trimethylbenzene	ND	*	0.40	0.10	ppb v/v			09/06/20 20:26	1.35
1,3,5-Trimethylbenzene	**0.26**	**J**	0.40	0.11	ppb v/v			09/06/20 20:26	1.35
Vinyl chloride	ND		0.20	0.13	ppb v/v			09/06/20 20:26	1.35
Xylenes, Total	**0.43**	**J**	0.80	0.12	ppb v/v			09/06/20 20:26	1.35

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.46**	**J**	1.3	0.13	ug/m3			09/06/20 20:26	1.35
Carbon tetrachloride	**0.56**	**J ***	2.5	0.22	ug/m3			09/06/20 20:26	1.35
Chlorodifluoromethane	**4.4**		1.4	0.39	ug/m3			09/06/20 20:26	1.35
Chloroform	**0.27**	**J**	2.0	0.17	ug/m3			09/06/20 20:26	1.35
cis-1,2-Dichloroethene	ND		1.6	0.20	ug/m3			09/06/20 20:26	1.35
Dichlorodifluoromethane	**2.5**		2.0	0.35	ug/m3			09/06/20 20:26	1.35
1,1-Dichloroethane	ND		1.6	0.14	ug/m3			09/06/20 20:26	1.35
1,2-Dichloroethane	ND		1.6	0.20	ug/m3			09/06/20 20:26	1.35
1,1-Dichloroethene	ND		1.6	0.16	ug/m3			09/06/20 20:26	1.35
Ethylbenzene	**0.36**	**J**	1.7	0.28	ug/m3			09/06/20 20:26	1.35
Methylene Chloride	ND		6.9	6.8	ug/m3			09/06/20 20:26	1.35
Methyl tert-butyl ether	ND		7.2	0.94	ug/m3			09/06/20 20:26	1.35
Naphthalene	ND		1.0	1.0	ug/m3			09/06/20 20:26	1.35
Tetrachloroethene	ND		2.7	0.24	ug/m3			09/06/20 20:26	1.35
Toluene	**4.5**		2.3	1.5	ug/m3			09/06/20 20:26	1.35
trans-1,2-Dichloroethene	ND		1.6	0.14	ug/m3			09/06/20 20:26	1.35
1,2,4-Trichlorobenzene	ND		3.0	2.4	ug/m3			09/06/20 20:26	1.35
1,1,1-Trichloroethane	ND		2.2	1.0	ug/m3			09/06/20 20:26	1.35
1,1,2-Trichloroethane	ND		2.2	0.19	ug/m3			09/06/20 20:26	1.35
Trichloroethene	ND		1.1	0.16	ug/m3			09/06/20 20:26	1.35
1,2,3-Trimethylbenzene	ND		2.0	0.88	ug/m3			09/06/20 20:26	1.35
1,2,4-Trimethylbenzene	ND	*	2.0	0.49	ug/m3			09/06/20 20:26	1.35

Client Sample ID: IA-088-C-29 **Lab Sample ID: 140-20175-22**
Date Collected: 08/25/20 16:24 **Matrix: Air**
Date Received: 08/27/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	**1.3**	**J**	2.0	0.54	ug/m3			09/06/20 20:26	1.35
Vinyl chloride	ND		0.51	0.33	ug/m3			09/06/20 20:26	1.35
Xylenes, Total	**1.9**	**J**	3.5	0.52	ug/m3			09/06/20 20:26	1.35

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*60 - 140*		*09/06/20 20:26*	*1.35*

Client Sample ID: IA-142-C-29

Date Collected: 08/25/20 16:25
Date Received: 08/27/20 10:00

Lab Sample ID: 140-20175-23

Matrix: Air

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.15**	**J**	0.40	0.040	ppb v/v			09/06/20 21:23	1
Carbon tetrachloride	**0.12**	**J ***	0.40	0.035	ppb v/v			09/06/20 21:23	1
Chlorodifluoromethane	**2.2**		0.40	0.11	ppb v/v			09/06/20 21:23	1
Chloroform	**0.20**	**J**	0.40	0.035	ppb v/v			09/06/20 21:23	1
cis-1,2-Dichloroethene	ND		0.40	0.050	ppb v/v			09/06/20 21:23	1
Dichlorodifluoromethane	**0.57**		0.40	0.070	ppb v/v			09/06/20 21:23	1
1,1-Dichloroethane	ND		0.40	0.035	ppb v/v			09/06/20 21:23	1
1,2-Dichloroethane	ND		0.40	0.050	ppb v/v			09/06/20 21:23	1
1,1-Dichloroethene	ND		0.40	0.040	ppb v/v			09/06/20 21:23	1
Ethylbenzene	**0.11**	**J**	0.40	0.065	ppb v/v			09/06/20 21:23	1
Methylene Chloride	ND		2.0	2.0	ppb v/v			09/06/20 21:23	1
Methyl tert-butyl ether	ND		2.0	0.26	ppb v/v			09/06/20 21:23	1
Naphthalene	ND		0.20	0.20	ppb v/v			09/06/20 21:23	1
Tetrachloroethene	ND		0.40	0.035	ppb v/v			09/06/20 21:23	1
Toluene	**1.1**		0.60	0.39	ppb v/v			09/06/20 21:23	1
trans-1,2-Dichloroethene	ND		0.40	0.035	ppb v/v			09/06/20 21:23	1
1,2,4-Trichlorobenzene	ND		0.40	0.32	ppb v/v			09/06/20 21:23	1
1,1,1-Trichloroethane	ND		0.40	0.19	ppb v/v			09/06/20 21:23	1
1,1,2-Trichloroethane	ND		0.40	0.035	ppb v/v			09/06/20 21:23	1
Trichloroethene	ND		0.20	0.030	ppb v/v			09/06/20 21:23	1
1,2,3-Trimethylbenzene	ND		0.40	0.18	ppb v/v			09/06/20 21:23	1
1,2,4-Trimethylbenzene	ND	*	0.40	0.10	ppb v/v			09/06/20 21:23	1
1,3,5-Trimethylbenzene	**0.28**	**J**	0.40	0.11	ppb v/v			09/06/20 21:23	1
Vinyl chloride	ND		0.20	0.13	ppb v/v			09/06/20 21:23	1
Xylenes, Total	**0.62**	**J**	0.80	0.12	ppb v/v			09/06/20 21:23	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.47**	**J**	1.3	0.13	ug/m3			09/06/20 21:23	1
Carbon tetrachloride	**0.77**	**J ***	2.5	0.22	ug/m3			09/06/20 21:23	1
Chlorodifluoromethane	**7.8**		1.4	0.39	ug/m3			09/06/20 21:23	1
Chloroform	**0.96**	**J**	2.0	0.17	ug/m3			09/06/20 21:23	1
cis-1,2-Dichloroethene	ND		1.6	0.20	ug/m3			09/06/20 21:23	1
Dichlorodifluoromethane	**2.8**		2.0	0.35	ug/m3			09/06/20 21:23	1
1,1-Dichloroethane	ND		1.6	0.14	ug/m3			09/06/20 21:23	1
1,2-Dichloroethane	ND		1.6	0.20	ug/m3			09/06/20 21:23	1
1,1-Dichloroethene	ND		1.6	0.16	ug/m3			09/06/20 21:23	1
Ethylbenzene	**0.49**	**J**	1.7	0.28	ug/m3			09/06/20 21:23	1
Methylene Chloride	ND		6.9	6.8	ug/m3			09/06/20 21:23	1
Methyl tert-butyl ether	ND		7.2	0.94	ug/m3			09/06/20 21:23	1
Naphthalene	ND		1.0	1.0	ug/m3			09/06/20 21:23	1
Tetrachloroethene	ND		2.7	0.24	ug/m3			09/06/20 21:23	1
Toluene	**4.2**		2.3	1.5	ug/m3			09/06/20 21:23	1
trans-1,2-Dichloroethene	ND		1.6	0.14	ug/m3			09/06/20 21:23	1
1,2,4-Trichlorobenzene	ND		3.0	2.4	ug/m3			09/06/20 21:23	1
1,1,1-Trichloroethane	ND		2.2	1.0	ug/m3			09/06/20 21:23	1
1,1,2-Trichloroethane	ND		2.2	0.19	ug/m3			09/06/20 21:23	1
Trichloroethene	ND		1.1	0.16	ug/m3			09/06/20 21:23	1
1,2,3-Trimethylbenzene	ND		2.0	0.88	ug/m3			09/06/20 21:23	1
1,2,4-Trimethylbenzene	ND	*	2.0	0.49	ug/m3			09/06/20 21:23	1
1,3,5-Trimethylbenzene	**1.4**	**J**	2.0	0.54	ug/m3			09/06/20 21:23	1

Client Sample ID: IA-142-C-29
Lab Sample ID: 140-20175-23
Date Collected: 08/25/20 16:25
Matrix: Air
Date Received: 08/27/20 10:00

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		0.51	0.33	ug/m3			09/06/20 21:23	1
Xylenes, Total	**2.7**	**J**	3.5	0.52	ug/m3			09/06/20 21:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*84*		*60 - 140*		*09/06/20 21:23*	*1*

Client Sample ID: IA-155-C-29 Lab Sample ID: 140-20175-24

Date Collected: 08/25/20 16:28 **Matrix: Air**
Date Received: 08/27/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.18**	**J**	0.40	0.040	ppb v/v			09/06/20 22:17	1.43
Carbon tetrachloride	**0.060**	**J ***	0.40	0.035	ppb v/v			09/06/20 22:17	1.43
Chlorodifluoromethane	**2.6**		0.40	0.11	ppb v/v			09/06/20 22:17	1.43
Chloroform	**0.094**	**J**	0.40	0.035	ppb v/v			09/06/20 22:17	1.43
cis-1,2-Dichloroethene	ND		0.40	0.050	ppb v/v			09/06/20 22:17	1.43
Dichlorodifluoromethane	**0.50**		0.40	0.070	ppb v/v			09/06/20 22:17	1.43
1,1-Dichloroethane	ND		0.40	0.035	ppb v/v			09/06/20 22:17	1.43
1,2-Dichloroethane	ND		0.40	0.050	ppb v/v			09/06/20 22:17	1.43
1,1-Dichloroethene	ND		0.40	0.040	ppb v/v			09/06/20 22:17	1.43
Ethylbenzene	**0.097**	**J**	0.40	0.065	ppb v/v			09/06/20 22:17	1.43
Methylene Chloride	ND		2.0	2.0	ppb v/v			09/06/20 22:17	1.43
Methyl tert-butyl ether	ND		2.0	0.26	ppb v/v			09/06/20 22:17	1.43
Naphthalene	ND		0.20	0.20	ppb v/v			09/06/20 22:17	1.43
Tetrachloroethene	ND		0.40	0.035	ppb v/v			09/06/20 22:17	1.43
Toluene	**0.87**		0.60	0.39	ppb v/v			09/06/20 22:17	1.43
trans-1,2-Dichloroethene	ND		0.40	0.035	ppb v/v			09/06/20 22:17	1.43
1,2,4-Trichlorobenzene	ND		0.40	0.32	ppb v/v			09/06/20 22:17	1.43
1,1,1-Trichloroethane	ND		0.40	0.19	ppb v/v			09/06/20 22:17	1.43
1,1,2-Trichloroethane	ND		0.40	0.035	ppb v/v			09/06/20 22:17	1.43
Trichloroethene	ND		0.20	0.030	ppb v/v			09/06/20 22:17	1.43
1,2,3-Trimethylbenzene	ND		0.40	0.18	ppb v/v			09/06/20 22:17	1.43
1,2,4-Trimethylbenzene	ND	*	0.40	0.10	ppb v/v			09/06/20 22:17	1.43
1,3,5-Trimethylbenzene	**0.26**	**J**	0.40	0.11	ppb v/v			09/06/20 22:17	1.43
Vinyl chloride	ND		0.20	0.13	ppb v/v			09/06/20 22:17	1.43
Xylenes, Total	**0.49**	**J**	0.80	0.12	ppb v/v			09/06/20 22:17	1.43

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.58**	**J**	1.3	0.13	ug/m3			09/06/20 22:17	1.43
Carbon tetrachloride	**0.38**	**J ***	2.5	0.22	ug/m3			09/06/20 22:17	1.43
Chlorodifluoromethane	**9.2**		1.4	0.39	ug/m3			09/06/20 22:17	1.43
Chloroform	**0.46**	**J**	2.0	0.17	ug/m3			09/06/20 22:17	1.43
cis-1,2-Dichloroethene	ND		1.6	0.20	ug/m3			09/06/20 22:17	1.43
Dichlorodifluoromethane	**2.5**		2.0	0.35	ug/m3			09/06/20 22:17	1.43
1,1-Dichloroethane	ND		1.6	0.14	ug/m3			09/06/20 22:17	1.43
1,2-Dichloroethane	ND		1.6	0.20	ug/m3			09/06/20 22:17	1.43
1,1-Dichloroethene	ND		1.6	0.16	ug/m3			09/06/20 22:17	1.43
Ethylbenzene	**0.42**	**J**	1.7	0.28	ug/m3			09/06/20 22:17	1.43
Methylene Chloride	ND		6.9	6.8	ug/m3			09/06/20 22:17	1.43
Methyl tert-butyl ether	ND		7.2	0.94	ug/m3			09/06/20 22:17	1.43
Naphthalene	ND		1.0	1.0	ug/m3			09/06/20 22:17	1.43
Tetrachloroethene	ND		2.7	0.24	ug/m3			09/06/20 22:17	1.43
Toluene	**3.3**		2.3	1.5	ug/m3			09/06/20 22:17	1.43
trans-1,2-Dichloroethene	ND		1.6	0.14	ug/m3			09/06/20 22:17	1.43
1,2,4-Trichlorobenzene	ND		3.0	2.4	ug/m3			09/06/20 22:17	1.43
1,1,1-Trichloroethane	ND		2.2	1.0	ug/m3			09/06/20 22:17	1.43
1,1,2-Trichloroethane	ND		2.2	0.19	ug/m3			09/06/20 22:17	1.43
Trichloroethene	ND		1.1	0.16	ug/m3			09/06/20 22:17	1.43
1,2,3-Trimethylbenzene	ND		2.0	0.88	ug/m3			09/06/20 22:17	1.43
1,2,4-Trimethylbenzene	ND	*	2.0	0.49	ug/m3			09/06/20 22:17	1.43

Client Sample ID: IA-155-C-29 **Lab Sample ID: 140-20175-24**
Date Collected: 08/25/20 16:28 **Matrix: Air**
Date Received: 08/27/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	**1.3**	**J**	2.0	0.54	ug/m3			09/06/20 22:17	1.43
Vinyl chloride	ND		0.51	0.33	ug/m3			09/06/20 22:17	1.43
Xylenes, Total	**2.1**	**J**	3.5	0.52	ug/m3			09/06/20 22:17	1.43

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*60 - 140*		*09/06/20 22:17*	*1.43*

Client Sample ID: IA-133-C-29

Lab Sample ID: 140-20175-25

Date Collected: 08/25/20 16:31
Matrix: Air
Date Received: 08/27/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.17**	**J**	0.40	0.040	ppb v/v			09/06/20 23:11	1.56
Carbon tetrachloride	**0.076**	**J ***	0.40	0.035	ppb v/v			09/06/20 23:11	1.56
Chlorodifluoromethane	**2.7**		0.40	0.11	ppb v/v			09/06/20 23:11	1.56
Chloroform	**0.069**	**J**	0.40	0.035	ppb v/v			09/06/20 23:11	1.56
cis-1,2-Dichloroethene	ND		0.40	0.050	ppb v/v			09/06/20 23:11	1.56
Dichlorodifluoromethane	**0.47**		0.40	0.070	ppb v/v			09/06/20 23:11	1.56
1,1-Dichloroethane	ND		0.40	0.035	ppb v/v			09/06/20 23:11	1.56
1,2-Dichloroethane	ND		0.40	0.050	ppb v/v			09/06/20 23:11	1.56
1,1-Dichloroethene	ND		0.40	0.040	ppb v/v			09/06/20 23:11	1.56
Ethylbenzene	**0.087**	**J**	0.40	0.065	ppb v/v			09/06/20 23:11	1.56
Methylene Chloride	ND		2.0	2.0	ppb v/v			09/06/20 23:11	1.56
Methyl tert-butyl ether	ND		2.0	0.26	ppb v/v			09/06/20 23:11	1.56
Naphthalene	ND		0.20	0.20	ppb v/v			09/06/20 23:11	1.56
Tetrachloroethene	ND		0.40	0.035	ppb v/v			09/06/20 23:11	1.56
Toluene	**0.82**		0.60	0.39	ppb v/v			09/06/20 23:11	1.56
trans-1,2-Dichloroethene	ND		0.40	0.035	ppb v/v			09/06/20 23:11	1.56
1,2,4-Trichlorobenzene	ND		0.40	0.32	ppb v/v			09/06/20 23:11	1.56
1,1,1-Trichloroethane	ND		0.40	0.19	ppb v/v			09/06/20 23:11	1.56
1,1,2-Trichloroethane	ND		0.40	0.035	ppb v/v			09/06/20 23:11	1.56
Trichloroethene	ND		0.20	0.030	ppb v/v			09/06/20 23:11	1.56
1,2,3-Trimethylbenzene	ND		0.40	0.18	ppb v/v			09/06/20 23:11	1.56
1,2,4-Trimethylbenzene	ND	*	0.40	0.10	ppb v/v			09/06/20 23:11	1.56
1,3,5-Trimethylbenzene	**0.27**	**J**	0.40	0.11	ppb v/v			09/06/20 23:11	1.56
Vinyl chloride	ND		0.20	0.13	ppb v/v			09/06/20 23:11	1.56
Xylenes, Total	**0.49**	**J**	0.80	0.12	ppb v/v			09/06/20 23:11	1.56

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.54**	**J**	1.3	0.13	ug/m3			09/06/20 23:11	1.56
Carbon tetrachloride	**0.48**	**J ***	2.5	0.22	ug/m3			09/06/20 23:11	1.56
Chlorodifluoromethane	**9.4**		1.4	0.39	ug/m3			09/06/20 23:11	1.56
Chloroform	**0.34**	**J**	2.0	0.17	ug/m3			09/06/20 23:11	1.56
cis-1,2-Dichloroethene	ND		1.6	0.20	ug/m3			09/06/20 23:11	1.56
Dichlorodifluoromethane	**2.3**		2.0	0.35	ug/m3			09/06/20 23:11	1.56
1,1-Dichloroethane	ND		1.6	0.14	ug/m3			09/06/20 23:11	1.56
1,2-Dichloroethane	ND		1.6	0.20	ug/m3			09/06/20 23:11	1.56
1,1-Dichloroethene	ND		1.6	0.16	ug/m3			09/06/20 23:11	1.56
Ethylbenzene	**0.38**	**J**	1.7	0.28	ug/m3			09/06/20 23:11	1.56
Methylene Chloride	ND		6.9	6.8	ug/m3			09/06/20 23:11	1.56
Methyl tert-butyl ether	ND		7.2	0.94	ug/m3			09/06/20 23:11	1.56
Naphthalene	ND		1.0	1.0	ug/m3			09/06/20 23:11	1.56
Tetrachloroethene	ND		2.7	0.24	ug/m3			09/06/20 23:11	1.56
Toluene	**3.1**		2.3	1.5	ug/m3			09/06/20 23:11	1.56
trans-1,2-Dichloroethene	ND		1.6	0.14	ug/m3			09/06/20 23:11	1.56
1,2,4-Trichlorobenzene	ND		3.0	2.4	ug/m3			09/06/20 23:11	1.56
1,1,1-Trichloroethane	ND		2.2	1.0	ug/m3			09/06/20 23:11	1.56
1,1,2-Trichloroethane	ND		2.2	0.19	ug/m3			09/06/20 23:11	1.56
Trichloroethene	ND		1.1	0.16	ug/m3			09/06/20 23:11	1.56
1,2,3-Trimethylbenzene	ND		2.0	0.88	ug/m3			09/06/20 23:11	1.56
1,2,4-Trimethylbenzene	ND	*	2.0	0.49	ug/m3			09/06/20 23:11	1.56

Client Sample ID: IA-133-C-29 **Lab Sample ID: 140-20175-25**
Date Collected: 08/25/20 16:31 **Matrix: Air**
Date Received: 08/27/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	**1.3**	**J**	2.0	0.54	ug/m3			09/06/20 23:11	1.56
Vinyl chloride	ND		0.51	0.33	ug/m3			09/06/20 23:11	1.56
Xylenes, Total	**2.1**	**J**	3.5	0.52	ug/m3			09/06/20 23:11	1.56

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*60 - 140*		*09/06/20 23:11*	*1.56*

Client Sample ID: IA-153-C-29

Lab Sample ID: 140-20175-26

Date Collected: 08/25/20 16:32
Matrix: Air
Date Received: 08/27/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.14**	**J**	0.40	0.040	ppb v/v			09/07/20 00:04	1
Carbon tetrachloride	**0.086**	**J ***	0.40	0.035	ppb v/v			09/07/20 00:04	1
Chlorodifluoromethane	**2.4**		0.40	0.11	ppb v/v			09/07/20 00:04	1
Chloroform	**0.060**	**J**	0.40	0.035	ppb v/v			09/07/20 00:04	1
cis-1,2-Dichloroethene	ND		0.40	0.050	ppb v/v			09/07/20 00:04	1
Dichlorodifluoromethane	**0.47**		0.40	0.070	ppb v/v			09/07/20 00:04	1
1,1-Dichloroethane	ND		0.40	0.035	ppb v/v			09/07/20 00:04	1
1,2-Dichloroethane	**0.10**	**J**	0.40	0.050	ppb v/v			09/07/20 00:04	1
1,1-Dichloroethene	ND		0.40	0.040	ppb v/v			09/07/20 00:04	1
Ethylbenzene	**0.086**	**J**	0.40	0.065	ppb v/v			09/07/20 00:04	1
Methylene Chloride	ND		2.0	2.0	ppb v/v			09/07/20 00:04	1
Methyl tert-butyl ether	ND		2.0	0.26	ppb v/v			09/07/20 00:04	1
Naphthalene	ND		0.20	0.20	ppb v/v			09/07/20 00:04	1
Tetrachloroethene	ND		0.40	0.035	ppb v/v			09/07/20 00:04	1
Toluene	**0.77**		0.60	0.39	ppb v/v			09/07/20 00:04	1
trans-1,2-Dichloroethene	ND		0.40	0.035	ppb v/v			09/07/20 00:04	1
1,2,4-Trichlorobenzene	ND		0.40	0.32	ppb v/v			09/07/20 00:04	1
1,1,1-Trichloroethane	ND		0.40	0.19	ppb v/v			09/07/20 00:04	1
1,1,2-Trichloroethane	ND		0.40	0.035	ppb v/v			09/07/20 00:04	1
Trichloroethene	ND		0.20	0.030	ppb v/v			09/07/20 00:04	1
1,2,3-Trimethylbenzene	ND		0.40	0.18	ppb v/v			09/07/20 00:04	1
1,2,4-Trimethylbenzene	ND	*	0.40	0.10	ppb v/v			09/07/20 00:04	1
1,3,5-Trimethylbenzene	ND		0.40	0.11	ppb v/v			09/07/20 00:04	1
Vinyl chloride	ND		0.20	0.13	ppb v/v			09/07/20 00:04	1
Xylenes, Total	**0.42**	**J**	0.80	0.12	ppb v/v			09/07/20 00:04	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.45**	**J**	1.3	0.13	ug/m3			09/07/20 00:04	1
Carbon tetrachloride	**0.54**	**J ***	2.5	0.22	ug/m3			09/07/20 00:04	1
Chlorodifluoromethane	**8.4**		1.4	0.39	ug/m3			09/07/20 00:04	1
Chloroform	**0.29**	**J**	2.0	0.17	ug/m3			09/07/20 00:04	1
cis-1,2-Dichloroethene	ND		1.6	0.20	ug/m3			09/07/20 00:04	1
Dichlorodifluoromethane	**2.3**		2.0	0.35	ug/m3			09/07/20 00:04	1
1,1-Dichloroethane	ND		1.6	0.14	ug/m3			09/07/20 00:04	1
1,2-Dichloroethane	**0.41**	**J**	1.6	0.20	ug/m3			09/07/20 00:04	1
1,1-Dichloroethene	ND		1.6	0.16	ug/m3			09/07/20 00:04	1
Ethylbenzene	**0.38**	**J**	1.7	0.28	ug/m3			09/07/20 00:04	1
Methylene Chloride	ND		6.9	6.8	ug/m3			09/07/20 00:04	1
Methyl tert-butyl ether	ND		7.2	0.94	ug/m3			09/07/20 00:04	1
Naphthalene	ND		1.0	1.0	ug/m3			09/07/20 00:04	1
Tetrachloroethene	ND		2.7	0.24	ug/m3			09/07/20 00:04	1
Toluene	**2.9**		2.3	1.5	ug/m3			09/07/20 00:04	1
trans-1,2-Dichloroethene	ND		1.6	0.14	ug/m3			09/07/20 00:04	1
1,2,4-Trichlorobenzene	ND		3.0	2.4	ug/m3			09/07/20 00:04	1
1,1,1-Trichloroethane	ND		2.2	1.0	ug/m3			09/07/20 00:04	1
1,1,2-Trichloroethane	ND		2.2	0.19	ug/m3			09/07/20 00:04	1
Trichloroethene	ND		1.1	0.16	ug/m3			09/07/20 00:04	1
1,2,3-Trimethylbenzene	ND		2.0	0.88	ug/m3			09/07/20 00:04	1
1,2,4-Trimethylbenzene	ND	*	2.0	0.49	ug/m3			09/07/20 00:04	1

Client Sample ID: IA-153-C-29
Lab Sample ID: 140-20175-26
Date Collected: 08/25/20 16:32
Matrix: Air
Date Received: 08/27/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		2.0	0.54	ug/m3			09/07/20 00:04	1
Vinyl chloride	ND		0.51	0.33	ug/m3			09/07/20 00:04	1
Xylenes, Total	**1.8**	**J**	3.5	0.52	ug/m3			09/07/20 00:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*60 - 140*		*09/07/20 00:04*	*1*

Client Sample ID: IA-DUP1-C-29 Lab Sample ID: 140-20175-27

Date Collected: 08/25/20 00:00 **Matrix: Air**
Date Received: 08/27/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.19**	**J**	0.40	0.040	ppb v/v			09/07/20 00:57	1
Carbon tetrachloride	**0.12**	**J ***	0.40	0.035	ppb v/v			09/07/20 00:57	1
Chlorodifluoromethane	**2.9**		0.40	0.11	ppb v/v			09/07/20 00:57	1
Chloroform	**0.11**	**J**	0.40	0.035	ppb v/v			09/07/20 00:57	1
cis-1,2-Dichloroethene	ND		0.40	0.050	ppb v/v			09/07/20 00:57	1
Dichlorodifluoromethane	**0.57**		0.40	0.070	ppb v/v			09/07/20 00:57	1
1,1-Dichloroethane	ND		0.40	0.035	ppb v/v			09/07/20 00:57	1
1,2-Dichloroethane	ND		0.40	0.050	ppb v/v			09/07/20 00:57	1
1,1-Dichloroethene	ND		0.40	0.040	ppb v/v			09/07/20 00:57	1
Ethylbenzene	**0.13**	**J**	0.40	0.065	ppb v/v			09/07/20 00:57	1
Methylene Chloride	**3.2**		2.0	2.0	ppb v/v			09/07/20 00:57	1
Methyl tert-butyl ether	ND		2.0	0.26	ppb v/v			09/07/20 00:57	1
Naphthalene	ND		0.20	0.20	ppb v/v			09/07/20 00:57	1
Tetrachloroethene	ND		0.40	0.035	ppb v/v			09/07/20 00:57	1
Toluene	**1.1**		0.60	0.39	ppb v/v			09/07/20 00:57	1
trans-1,2-Dichloroethene	ND		0.40	0.035	ppb v/v			09/07/20 00:57	1
1,2,4-Trichlorobenzene	ND		0.40	0.32	ppb v/v			09/07/20 00:57	1
1,1,1-Trichloroethane	ND		0.40	0.19	ppb v/v			09/07/20 00:57	1
1,1,2-Trichloroethane	ND		0.40	0.035	ppb v/v			09/07/20 00:57	1
Trichloroethene	**0.89**		0.20	0.030	ppb v/v			09/07/20 00:57	1
1,2,3-Trimethylbenzene	ND		0.40	0.18	ppb v/v			09/07/20 00:57	1
1,2,4-Trimethylbenzene	**0.11**	**J ***	0.40	0.10	ppb v/v			09/07/20 00:57	1
1,3,5-Trimethylbenzene	**0.28**	**J**	0.40	0.11	ppb v/v			09/07/20 00:57	1
Vinyl chloride	ND		0.20	0.13	ppb v/v			09/07/20 00:57	1
Xylenes, Total	**0.58**	**J**	0.80	0.12	ppb v/v			09/07/20 00:57	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.60**	**J**	1.3	0.13	ug/m3			09/07/20 00:57	1
Carbon tetrachloride	**0.76**	**J ***	2.5	0.22	ug/m3			09/07/20 00:57	1
Chlorodifluoromethane	**10**		1.4	0.39	ug/m3			09/07/20 00:57	1
Chloroform	**0.55**	**J**	2.0	0.17	ug/m3			09/07/20 00:57	1
cis-1,2-Dichloroethene	ND		1.6	0.20	ug/m3			09/07/20 00:57	1
Dichlorodifluoromethane	**2.8**		2.0	0.35	ug/m3			09/07/20 00:57	1
1,1-Dichloroethane	ND		1.6	0.14	ug/m3			09/07/20 00:57	1
1,2-Dichloroethane	ND		1.6	0.20	ug/m3			09/07/20 00:57	1
1,1-Dichloroethene	ND		1.6	0.16	ug/m3			09/07/20 00:57	1
Ethylbenzene	**0.56**	**J**	1.7	0.28	ug/m3			09/07/20 00:57	1
Methylene Chloride	**11**		6.9	6.8	ug/m3			09/07/20 00:57	1
Methyl tert-butyl ether	ND		7.2	0.94	ug/m3			09/07/20 00:57	1
Naphthalene	ND		1.0	1.0	ug/m3			09/07/20 00:57	1
Tetrachloroethene	ND		2.7	0.24	ug/m3			09/07/20 00:57	1
Toluene	**4.2**		2.3	1.5	ug/m3			09/07/20 00:57	1
trans-1,2-Dichloroethene	ND		1.6	0.14	ug/m3			09/07/20 00:57	1
1,2,4-Trichlorobenzene	ND		3.0	2.4	ug/m3			09/07/20 00:57	1
1,1,1-Trichloroethane	ND		2.2	1.0	ug/m3			09/07/20 00:57	1
1,1,2-Trichloroethane	ND		2.2	0.19	ug/m3			09/07/20 00:57	1
Trichloroethene	**4.8**		1.1	0.16	ug/m3			09/07/20 00:57	1
1,2,3-Trimethylbenzene	ND		2.0	0.88	ug/m3			09/07/20 00:57	1
1,2,4-Trimethylbenzene	**0.52**	**J ***	2.0	0.49	ug/m3			09/07/20 00:57	1

Client Sample ID: IA-DUP1-C-29 **Lab Sample ID: 140-20175-27**
Date Collected: 08/25/20 00:00 **Matrix: Air**
Date Received: 08/27/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	**1.4**	**J**	2.0	0.54	ug/m3			09/07/20 00:57	1
Vinyl chloride	ND		0.51	0.33	ug/m3			09/07/20 00:57	1
Xylenes, Total	**2.5**	**J**	3.5	0.52	ug/m3			09/07/20 00:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*60 - 140*		*09/07/20 00:57*	*1*

Client Sample ID: IA-060-C-29

Lab Sample ID: 140-20175-28

Date Collected: 08/25/20 16:35
Matrix: Air
Date Received: 08/27/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.21**	**J**	0.40	0.040	ppb v/v			09/07/20 01:52	1
Carbon tetrachloride	**0.11**	**J ***	0.40	0.035	ppb v/v			09/07/20 01:52	1
Chlorodifluoromethane	**5.5**		0.40	0.11	ppb v/v			09/07/20 01:52	1
Chloroform	**0.11**	**J**	0.40	0.035	ppb v/v			09/07/20 01:52	1
cis-1,2-Dichloroethene	ND		0.40	0.050	ppb v/v			09/07/20 01:52	1
Dichlorodifluoromethane	**0.56**		0.40	0.070	ppb v/v			09/07/20 01:52	1
1,1-Dichloroethane	ND		0.40	0.035	ppb v/v			09/07/20 01:52	1
1,2-Dichloroethane	ND		0.40	0.050	ppb v/v			09/07/20 01:52	1
1,1-Dichloroethene	ND		0.40	0.040	ppb v/v			09/07/20 01:52	1
Ethylbenzene	**0.13**	**J**	0.40	0.065	ppb v/v			09/07/20 01:52	1
Methylene Chloride	ND		2.0	2.0	ppb v/v			09/07/20 01:52	1
Methyl tert-butyl ether	ND		2.0	0.26	ppb v/v			09/07/20 01:52	1
Naphthalene	ND		0.20	0.20	ppb v/v			09/07/20 01:52	1
Tetrachloroethene	ND		0.40	0.035	ppb v/v			09/07/20 01:52	1
Toluene	**1.4**		0.60	0.39	ppb v/v			09/07/20 01:52	1
trans-1,2-Dichloroethene	ND		0.40	0.035	ppb v/v			09/07/20 01:52	1
1,2,4-Trichlorobenzene	ND		0.40	0.32	ppb v/v			09/07/20 01:52	1
1,1,1-Trichloroethane	ND		0.40	0.19	ppb v/v			09/07/20 01:52	1
1,1,2-Trichloroethane	ND		0.40	0.035	ppb v/v			09/07/20 01:52	1
Trichloroethene	ND		0.20	0.030	ppb v/v			09/07/20 01:52	1
1,2,3-Trimethylbenzene	ND		0.40	0.18	ppb v/v			09/07/20 01:52	1
1,2,4-Trimethylbenzene	**0.14**	**J ***	0.40	0.10	ppb v/v			09/07/20 01:52	1
1,3,5-Trimethylbenzene	**0.28**	**J**	0.40	0.11	ppb v/v			09/07/20 01:52	1
Vinyl chloride	ND		0.20	0.13	ppb v/v			09/07/20 01:52	1
Xylenes, Total	**0.77**	**J**	0.80	0.12	ppb v/v			09/07/20 01:52	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.68**	**J**	1.3	0.13	ug/m3			09/07/20 01:52	1
Carbon tetrachloride	**0.69**	**J ***	2.5	0.22	ug/m3			09/07/20 01:52	1
Chlorodifluoromethane	**19**		1.4	0.39	ug/m3			09/07/20 01:52	1
Chloroform	**0.56**	**J**	2.0	0.17	ug/m3			09/07/20 01:52	1
cis-1,2-Dichloroethene	ND		1.6	0.20	ug/m3			09/07/20 01:52	1
Dichlorodifluoromethane	**2.8**		2.0	0.35	ug/m3			09/07/20 01:52	1
1,1-Dichloroethane	ND		1.6	0.14	ug/m3			09/07/20 01:52	1
1,2-Dichloroethane	ND		1.6	0.20	ug/m3			09/07/20 01:52	1
1,1-Dichloroethene	ND		1.6	0.16	ug/m3			09/07/20 01:52	1
Ethylbenzene	**0.58**	**J**	1.7	0.28	ug/m3			09/07/20 01:52	1
Methylene Chloride	ND		6.9	6.8	ug/m3			09/07/20 01:52	1
Methyl tert-butyl ether	ND		7.2	0.94	ug/m3			09/07/20 01:52	1
Naphthalene	ND		1.0	1.0	ug/m3			09/07/20 01:52	1
Tetrachloroethene	ND		2.7	0.24	ug/m3			09/07/20 01:52	1
Toluene	**5.2**		2.3	1.5	ug/m3			09/07/20 01:52	1
trans-1,2-Dichloroethene	ND		1.6	0.14	ug/m3			09/07/20 01:52	1
1,2,4-Trichlorobenzene	ND		3.0	2.4	ug/m3			09/07/20 01:52	1
1,1,1-Trichloroethane	ND		2.2	1.0	ug/m3			09/07/20 01:52	1
1,1,2-Trichloroethane	ND		2.2	0.19	ug/m3			09/07/20 01:52	1
Trichloroethene	ND		1.1	0.16	ug/m3			09/07/20 01:52	1
1,2,3-Trimethylbenzene	ND		2.0	0.88	ug/m3			09/07/20 01:52	1
1,2,4-Trimethylbenzene	**0.67**	**J ***	2.0	0.49	ug/m3			09/07/20 01:52	1

Client Sample ID: IA-060-C-29
Lab Sample ID: 140-20175-28
Date Collected: 08/25/20 16:35
Matrix: Air
Date Received: 08/27/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	**1.4**	**J**	2.0	0.54	ug/m3			09/07/20 01:52	1
Vinyl chloride	ND		0.51	0.33	ug/m3			09/07/20 01:52	1
Xylenes, Total	**3.3**	**J**	3.5	0.52	ug/m3			09/07/20 01:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*60 - 140*		*09/07/20 01:52*	*1*

Client Sample ID: IA-152-C-29

Lab Sample ID: 140-20175-29

Date Collected: 08/25/20 16:38
Matrix: Air
Date Received: 08/27/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.21**	**J**	0.40	0.040	ppb v/v			09/07/20 02:48	1
Carbon tetrachloride	**0.093**	**J ***	0.40	0.035	ppb v/v			09/07/20 02:48	1
Chlorodifluoromethane	**11**		0.40	0.11	ppb v/v			09/07/20 02:48	1
Chloroform	**0.14**	**J**	0.40	0.035	ppb v/v			09/07/20 02:48	1
cis-1,2-Dichloroethene	ND		0.40	0.050	ppb v/v			09/07/20 02:48	1
Dichlorodifluoromethane	**0.55**		0.40	0.070	ppb v/v			09/07/20 02:48	1
1,1-Dichloroethane	ND		0.40	0.035	ppb v/v			09/07/20 02:48	1
1,2-Dichloroethane	ND		0.40	0.050	ppb v/v			09/07/20 02:48	1
1,1-Dichloroethene	ND		0.40	0.040	ppb v/v			09/07/20 02:48	1
Ethylbenzene	**0.15**	**J**	0.40	0.065	ppb v/v			09/07/20 02:48	1
Methylene Chloride	ND		2.0	2.0	ppb v/v			09/07/20 02:48	1
Methyl tert-butyl ether	ND		2.0	0.26	ppb v/v			09/07/20 02:48	1
Naphthalene	ND		0.20	0.20	ppb v/v			09/07/20 02:48	1
Tetrachloroethene	ND		0.40	0.035	ppb v/v			09/07/20 02:48	1
Toluene	**1.3**		0.60	0.39	ppb v/v			09/07/20 02:48	1
trans-1,2-Dichloroethene	ND		0.40	0.035	ppb v/v			09/07/20 02:48	1
1,2,4-Trichlorobenzene	ND		0.40	0.32	ppb v/v			09/07/20 02:48	1
1,1,1-Trichloroethane	ND		0.40	0.19	ppb v/v			09/07/20 02:48	1
1,1,2-Trichloroethane	ND		0.40	0.035	ppb v/v			09/07/20 02:48	1
Trichloroethene	ND		0.20	0.030	ppb v/v			09/07/20 02:48	1
1,2,3-Trimethylbenzene	ND		0.40	0.18	ppb v/v			09/07/20 02:48	1
1,2,4-Trimethylbenzene	**0.21**	**J ***	0.40	0.10	ppb v/v			09/07/20 02:48	1
1,3,5-Trimethylbenzene	**0.30**	**J**	0.40	0.11	ppb v/v			09/07/20 02:48	1
Vinyl chloride	ND		0.20	0.13	ppb v/v			09/07/20 02:48	1
Xylenes, Total	**0.81**		0.80	0.12	ppb v/v			09/07/20 02:48	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.66**	**J**	1.3	0.13	ug/m3			09/07/20 02:48	1
Carbon tetrachloride	**0.59**	**J ***	2.5	0.22	ug/m3			09/07/20 02:48	1
Chlorodifluoromethane	**38**		1.4	0.39	ug/m3			09/07/20 02:48	1
Chloroform	**0.67**	**J**	2.0	0.17	ug/m3			09/07/20 02:48	1
cis-1,2-Dichloroethene	ND		1.6	0.20	ug/m3			09/07/20 02:48	1
Dichlorodifluoromethane	**2.7**		2.0	0.35	ug/m3			09/07/20 02:48	1
1,1-Dichloroethane	ND		1.6	0.14	ug/m3			09/07/20 02:48	1
1,2-Dichloroethane	ND		1.6	0.20	ug/m3			09/07/20 02:48	1
1,1-Dichloroethene	ND		1.6	0.16	ug/m3			09/07/20 02:48	1
Ethylbenzene	**0.67**	**J**	1.7	0.28	ug/m3			09/07/20 02:48	1
Methylene Chloride	ND		6.9	6.8	ug/m3			09/07/20 02:48	1
Methyl tert-butyl ether	ND		7.2	0.94	ug/m3			09/07/20 02:48	1
Naphthalene	ND		1.0	1.0	ug/m3			09/07/20 02:48	1
Tetrachloroethene	ND		2.7	0.24	ug/m3			09/07/20 02:48	1
Toluene	**4.8**		2.3	1.5	ug/m3			09/07/20 02:48	1
trans-1,2-Dichloroethene	ND		1.6	0.14	ug/m3			09/07/20 02:48	1
1,2,4-Trichlorobenzene	ND		3.0	2.4	ug/m3			09/07/20 02:48	1
1,1,1-Trichloroethane	ND		2.2	1.0	ug/m3			09/07/20 02:48	1
1,1,2-Trichloroethane	ND		2.2	0.19	ug/m3			09/07/20 02:48	1
Trichloroethene	ND		1.1	0.16	ug/m3			09/07/20 02:48	1
1,2,3-Trimethylbenzene	ND		2.0	0.88	ug/m3			09/07/20 02:48	1
1,2,4-Trimethylbenzene	**1.0**	**J ***	2.0	0.49	ug/m3			09/07/20 02:48	1

Client Sample ID: IA-152-C-29 **Lab Sample ID: 140-20175-29**
Date Collected: 08/25/20 16:38 **Matrix: Air**
Date Received: 08/27/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	**1.5**	**J**	2.0	0.54	ug/m3			09/07/20 02:48	1
Vinyl chloride	ND		0.51	0.33	ug/m3			09/07/20 02:48	1
Xylenes, Total	**3.5**		3.5	0.52	ug/m3			09/07/20 02:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*60 - 140*		*09/07/20 02:48*	*1*

Client Sample ID: IA-150-C-29

Lab Sample ID: 140-20175-30

Date Collected: 08/25/20 16:40
Matrix: Air
Date Received: 08/27/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.20**	**J**	0.40	0.040	ppb v/v			09/07/20 03:43	1
Carbon tetrachloride	**0.094**	**J ***	0.40	0.035	ppb v/v			09/07/20 03:43	1
Chlorodifluoromethane	**18**		0.40	0.11	ppb v/v			09/07/20 03:43	1
Chloroform	**0.082**	**J**	0.40	0.035	ppb v/v			09/07/20 03:43	1
cis-1,2-Dichloroethene	ND		0.40	0.050	ppb v/v			09/07/20 03:43	1
Dichlorodifluoromethane	**0.56**		0.40	0.070	ppb v/v			09/07/20 03:43	1
1,1-Dichloroethane	ND		0.40	0.035	ppb v/v			09/07/20 03:43	1
1,2-Dichloroethane	ND		0.40	0.050	ppb v/v			09/07/20 03:43	1
1,1-Dichloroethene	ND		0.40	0.040	ppb v/v			09/07/20 03:43	1
Ethylbenzene	**0.14**	**J**	0.40	0.065	ppb v/v			09/07/20 03:43	1
Methylene Chloride	**5.2**		2.0	2.0	ppb v/v			09/07/20 03:43	1
Methyl tert-butyl ether	ND		2.0	0.26	ppb v/v			09/07/20 03:43	1
Naphthalene	ND		0.20	0.20	ppb v/v			09/07/20 03:43	1
Tetrachloroethene	ND		0.40	0.035	ppb v/v			09/07/20 03:43	1
Toluene	**1.1**		0.60	0.39	ppb v/v			09/07/20 03:43	1
trans-1,2-Dichloroethene	ND		0.40	0.035	ppb v/v			09/07/20 03:43	1
1,2,4-Trichlorobenzene	ND		0.40	0.32	ppb v/v			09/07/20 03:43	1
1,1,1-Trichloroethane	ND		0.40	0.19	ppb v/v			09/07/20 03:43	1
1,1,2-Trichloroethane	ND		0.40	0.035	ppb v/v			09/07/20 03:43	1
Trichloroethene	ND		0.20	0.030	ppb v/v			09/07/20 03:43	1
1,2,3-Trimethylbenzene	ND		0.40	0.18	ppb v/v			09/07/20 03:43	1
1,2,4-Trimethylbenzene	**0.10**	**J ***	0.40	0.10	ppb v/v			09/07/20 03:43	1
1,3,5-Trimethylbenzene	**0.28**	**J**	0.40	0.11	ppb v/v			09/07/20 03:43	1
Vinyl chloride	ND		0.20	0.13	ppb v/v			09/07/20 03:43	1
Xylenes, Total	**0.73**	**J**	0.80	0.12	ppb v/v			09/07/20 03:43	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.62**	**J**	1.3	0.13	ug/m3			09/07/20 03:43	1
Carbon tetrachloride	**0.59**	**J ***	2.5	0.22	ug/m3			09/07/20 03:43	1
Chlorodifluoromethane	**65**		1.4	0.39	ug/m3			09/07/20 03:43	1
Chloroform	**0.40**	**J**	2.0	0.17	ug/m3			09/07/20 03:43	1
cis-1,2-Dichloroethene	ND		1.6	0.20	ug/m3			09/07/20 03:43	1
Dichlorodifluoromethane	**2.8**		2.0	0.35	ug/m3			09/07/20 03:43	1
1,1-Dichloroethane	ND		1.6	0.14	ug/m3			09/07/20 03:43	1
1,2-Dichloroethane	ND		1.6	0.20	ug/m3			09/07/20 03:43	1
1,1-Dichloroethene	ND		1.6	0.16	ug/m3			09/07/20 03:43	1
Ethylbenzene	**0.61**	**J**	1.7	0.28	ug/m3			09/07/20 03:43	1
Methylene Chloride	**18**		6.9	6.8	ug/m3			09/07/20 03:43	1
Methyl tert-butyl ether	ND		7.2	0.94	ug/m3			09/07/20 03:43	1
Naphthalene	ND		1.0	1.0	ug/m3			09/07/20 03:43	1
Tetrachloroethene	ND		2.7	0.24	ug/m3			09/07/20 03:43	1
Toluene	**4.2**		2.3	1.5	ug/m3			09/07/20 03:43	1
trans-1,2-Dichloroethene	ND		1.6	0.14	ug/m3			09/07/20 03:43	1
1,2,4-Trichlorobenzene	ND		3.0	2.4	ug/m3			09/07/20 03:43	1
1,1,1-Trichloroethane	ND		2.2	1.0	ug/m3			09/07/20 03:43	1
1,1,2-Trichloroethane	ND		2.2	0.19	ug/m3			09/07/20 03:43	1
Trichloroethene	ND		1.1	0.16	ug/m3			09/07/20 03:43	1
1,2,3-Trimethylbenzene	ND		2.0	0.88	ug/m3			09/07/20 03:43	1
1,2,4-Trimethylbenzene	**0.51**	**J ***	2.0	0.49	ug/m3			09/07/20 03:43	1

Client Sample ID: IA-150-C-29 **Lab Sample ID: 140-20175-30**
Date Collected: 08/25/20 16:40 **Matrix: Air**
Date Received: 08/27/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	**1.4**	**J**	2.0	0.54	ug/m3			09/07/20 03:43	1
Vinyl chloride	ND		0.51	0.33	ug/m3			09/07/20 03:43	1
Xylenes, Total	**3.2**	**J**	3.5	0.52	ug/m3			09/07/20 03:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*87*		*60 - 140*		*09/07/20 03:43*	*1*

Client Sample ID: IA-145-C-29

Lab Sample ID: 140-20175-31

Date Collected: 08/25/20 16:42
Matrix: Air
Date Received: 08/27/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.19**	**J**	0.40	0.040	ppb v/v			09/07/20 04:36	1
Carbon tetrachloride	**0.091**	**J ***	0.40	0.035	ppb v/v			09/07/20 04:36	1
Chlorodifluoromethane	**18**		0.40	0.11	ppb v/v			09/07/20 04:36	1
Chloroform	**0.082**	**J**	0.40	0.035	ppb v/v			09/07/20 04:36	1
cis-1,2-Dichloroethene	ND		0.40	0.050	ppb v/v			09/07/20 04:36	1
Dichlorodifluoromethane	**0.51**		0.40	0.070	ppb v/v			09/07/20 04:36	1
1,1-Dichloroethane	ND		0.40	0.035	ppb v/v			09/07/20 04:36	1
1,2-Dichloroethane	ND		0.40	0.050	ppb v/v			09/07/20 04:36	1
1,1-Dichloroethene	ND		0.40	0.040	ppb v/v			09/07/20 04:36	1
Ethylbenzene	**0.13**	**J**	0.40	0.065	ppb v/v			09/07/20 04:36	1
Methylene Chloride	ND		2.0	2.0	ppb v/v			09/07/20 04:36	1
Methyl tert-butyl ether	ND		2.0	0.26	ppb v/v			09/07/20 04:36	1
Naphthalene	ND		0.20	0.20	ppb v/v			09/07/20 04:36	1
Tetrachloroethene	ND		0.40	0.035	ppb v/v			09/07/20 04:36	1
Toluene	**0.85**		0.60	0.39	ppb v/v			09/07/20 04:36	1
trans-1,2-Dichloroethene	ND		0.40	0.035	ppb v/v			09/07/20 04:36	1
1,2,4-Trichlorobenzene	ND		0.40	0.32	ppb v/v			09/07/20 04:36	1
1,1,1-Trichloroethane	ND		0.40	0.19	ppb v/v			09/07/20 04:36	1
1,1,2-Trichloroethane	ND		0.40	0.035	ppb v/v			09/07/20 04:36	1
Trichloroethene	ND		0.20	0.030	ppb v/v			09/07/20 04:36	1
1,2,3-Trimethylbenzene	ND		0.40	0.18	ppb v/v			09/07/20 04:36	1
1,2,4-Trimethylbenzene	ND	*	0.40	0.10	ppb v/v			09/07/20 04:36	1
1,3,5-Trimethylbenzene	**0.26**	**J**	0.40	0.11	ppb v/v			09/07/20 04:36	1
Vinyl chloride	ND		0.20	0.13	ppb v/v			09/07/20 04:36	1
Xylenes, Total	**0.63**	**J**	0.80	0.12	ppb v/v			09/07/20 04:36	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.61**	**J**	1.3	0.13	ug/m3			09/07/20 04:36	1
Carbon tetrachloride	**0.57**	**J ***	2.5	0.22	ug/m3			09/07/20 04:36	1
Chlorodifluoromethane	**63**		1.4	0.39	ug/m3			09/07/20 04:36	1
Chloroform	**0.40**	**J**	2.0	0.17	ug/m3			09/07/20 04:36	1
cis-1,2-Dichloroethene	ND		1.6	0.20	ug/m3			09/07/20 04:36	1
Dichlorodifluoromethane	**2.5**		2.0	0.35	ug/m3			09/07/20 04:36	1
1,1-Dichloroethane	ND		1.6	0.14	ug/m3			09/07/20 04:36	1
1,2-Dichloroethane	ND		1.6	0.20	ug/m3			09/07/20 04:36	1
1,1-Dichloroethene	ND		1.6	0.16	ug/m3			09/07/20 04:36	1
Ethylbenzene	**0.55**	**J**	1.7	0.28	ug/m3			09/07/20 04:36	1
Methylene Chloride	ND		6.9	6.8	ug/m3			09/07/20 04:36	1
Methyl tert-butyl ether	ND		7.2	0.94	ug/m3			09/07/20 04:36	1
Naphthalene	ND		1.0	1.0	ug/m3			09/07/20 04:36	1
Tetrachloroethene	ND		2.7	0.24	ug/m3			09/07/20 04:36	1
Toluene	**3.2**		2.3	1.5	ug/m3			09/07/20 04:36	1
trans-1,2-Dichloroethene	ND		1.6	0.14	ug/m3			09/07/20 04:36	1
1,2,4-Trichlorobenzene	ND		3.0	2.4	ug/m3			09/07/20 04:36	1
1,1,1-Trichloroethane	ND		2.2	1.0	ug/m3			09/07/20 04:36	1
1,1,2-Trichloroethane	ND		2.2	0.19	ug/m3			09/07/20 04:36	1
Trichloroethene	ND		1.1	0.16	ug/m3			09/07/20 04:36	1
1,2,3-Trimethylbenzene	ND		2.0	0.88	ug/m3			09/07/20 04:36	1
1,2,4-Trimethylbenzene	ND	*	2.0	0.49	ug/m3			09/07/20 04:36	1

Client Sample ID: IA-145-C-29
Lab Sample ID: 140-20175-31
Date Collected: 08/25/20 16:42
Matrix: Air
Date Received: 08/27/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	**1.3**	**J**	2.0	0.54	ug/m3			09/07/20 04:36	1
Vinyl chloride	ND		0.51	0.33	ug/m3			09/07/20 04:36	1
Xylenes, Total	**2.7**	**J**	3.5	0.52	ug/m3			09/07/20 04:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*60 - 140*		*09/07/20 04:36*	*1*

Client Sample ID: IA-146-C-29 Lab Sample ID: 140-20175-32

Date Collected: 08/25/20 16:43 **Matrix: Air**
Date Received: 08/27/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.19**	**J**	0.40	0.040	ppb v/v			09/07/20 05:30	1.48
Carbon tetrachloride	**0.088**	**J ***	0.40	0.035	ppb v/v			09/07/20 05:30	1.48
Chlorodifluoromethane	**18**		0.40	0.11	ppb v/v			09/07/20 05:30	1.48
Chloroform	**0.090**	**J**	0.40	0.035	ppb v/v			09/07/20 05:30	1.48
cis-1,2-Dichloroethene	ND		0.40	0.050	ppb v/v			09/07/20 05:30	1.48
Dichlorodifluoromethane	**0.53**		0.40	0.070	ppb v/v			09/07/20 05:30	1.48
1,1-Dichloroethane	ND		0.40	0.035	ppb v/v			09/07/20 05:30	1.48
1,2-Dichloroethane	ND		0.40	0.050	ppb v/v			09/07/20 05:30	1.48
1,1-Dichloroethene	ND		0.40	0.040	ppb v/v			09/07/20 05:30	1.48
Ethylbenzene	**0.13**	**J**	0.40	0.065	ppb v/v			09/07/20 05:30	1.48
Methylene Chloride	**2.5**		2.0	2.0	ppb v/v			09/07/20 05:30	1.48
Methyl tert-butyl ether	ND		2.0	0.26	ppb v/v			09/07/20 05:30	1.48
Naphthalene	ND		0.20	0.20	ppb v/v			09/07/20 05:30	1.48
Tetrachloroethene	ND		0.40	0.035	ppb v/v			09/07/20 05:30	1.48
Toluene	**0.79**		0.60	0.39	ppb v/v			09/07/20 05:30	1.48
trans-1,2-Dichloroethene	ND		0.40	0.035	ppb v/v			09/07/20 05:30	1.48
1,2,4-Trichlorobenzene	ND		0.40	0.32	ppb v/v			09/07/20 05:30	1.48
1,1,1-Trichloroethane	ND		0.40	0.19	ppb v/v			09/07/20 05:30	1.48
1,1,2-Trichloroethane	ND		0.40	0.035	ppb v/v			09/07/20 05:30	1.48
Trichloroethene	ND		0.20	0.030	ppb v/v			09/07/20 05:30	1.48
1,2,3-Trimethylbenzene	ND		0.40	0.18	ppb v/v			09/07/20 05:30	1.48
1,2,4-Trimethylbenzene	**0.11**	**J ***	0.40	0.10	ppb v/v			09/07/20 05:30	1.48
1,3,5-Trimethylbenzene	**0.28**	**J**	0.40	0.11	ppb v/v			09/07/20 05:30	1.48
Vinyl chloride	ND		0.20	0.13	ppb v/v			09/07/20 05:30	1.48
Xylenes, Total	**0.67**	**J**	0.80	0.12	ppb v/v			09/07/20 05:30	1.48

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.59**	**J**	1.3	0.13	ug/m3			09/07/20 05:30	1.48
Carbon tetrachloride	**0.55**	**J ***	2.5	0.22	ug/m3			09/07/20 05:30	1.48
Chlorodifluoromethane	**65**		1.4	0.39	ug/m3			09/07/20 05:30	1.48
Chloroform	**0.44**	**J**	2.0	0.17	ug/m3			09/07/20 05:30	1.48
cis-1,2-Dichloroethene	ND		1.6	0.20	ug/m3			09/07/20 05:30	1.48
Dichlorodifluoromethane	**2.6**		2.0	0.35	ug/m3			09/07/20 05:30	1.48
1,1-Dichloroethane	ND		1.6	0.14	ug/m3			09/07/20 05:30	1.48
1,2-Dichloroethane	ND		1.6	0.20	ug/m3			09/07/20 05:30	1.48
1,1-Dichloroethene	ND		1.6	0.16	ug/m3			09/07/20 05:30	1.48
Ethylbenzene	**0.56**	**J**	1.7	0.28	ug/m3			09/07/20 05:30	1.48
Methylene Chloride	**8.8**		6.9	6.8	ug/m3			09/07/20 05:30	1.48
Methyl tert-butyl ether	ND		7.2	0.94	ug/m3			09/07/20 05:30	1.48
Naphthalene	ND		1.0	1.0	ug/m3			09/07/20 05:30	1.48
Tetrachloroethene	ND		2.7	0.24	ug/m3			09/07/20 05:30	1.48
Toluene	**3.0**		2.3	1.5	ug/m3			09/07/20 05:30	1.48
trans-1,2-Dichloroethene	ND		1.6	0.14	ug/m3			09/07/20 05:30	1.48
1,2,4-Trichlorobenzene	ND		3.0	2.4	ug/m3			09/07/20 05:30	1.48
1,1,1-Trichloroethane	ND		2.2	1.0	ug/m3			09/07/20 05:30	1.48
1,1,2-Trichloroethane	ND		2.2	0.19	ug/m3			09/07/20 05:30	1.48
Trichloroethene	ND		1.1	0.16	ug/m3			09/07/20 05:30	1.48
1,2,3-Trimethylbenzene	ND		2.0	0.88	ug/m3			09/07/20 05:30	1.48
1,2,4-Trimethylbenzene	**0.53**	**J ***	2.0	0.49	ug/m3			09/07/20 05:30	1.48

Client Sample ID: IA-146-C-29 **Lab Sample ID: 140-20175-32**
Date Collected: 08/25/20 16:43 **Matrix: Air**
Date Received: 08/27/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	**1.4**	**J**	2.0	0.54	ug/m3			09/07/20 05:30	1.48
Vinyl chloride	ND		0.51	0.33	ug/m3			09/07/20 05:30	1.48
Xylenes, Total	**2.9**	**J**	3.5	0.52	ug/m3			09/07/20 05:30	1.48

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*60 - 140*		*09/07/20 05:30*	*1.48*

Client Sample ID: IA-144-C-29
Lab Sample ID: 140-20175-33

Date Collected: 08/25/20 16:45
Matrix: Air
Date Received: 08/27/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.40	0.040	ppb v/v			09/07/20 18:39	1
Carbon tetrachloride	ND		0.40	0.035	ppb v/v			09/07/20 18:39	1
Chlorodifluoromethane	**7.4**		0.40	0.11	ppb v/v			09/07/20 18:39	1
Chloroform	ND		0.40	0.035	ppb v/v			09/07/20 18:39	1
cis-1,2-Dichloroethene	ND		0.40	0.050	ppb v/v			09/07/20 18:39	1
Dichlorodifluoromethane	**0.38**	**J**	0.40	0.070	ppb v/v			09/07/20 18:39	1
1,1-Dichloroethane	ND		0.40	0.035	ppb v/v			09/07/20 18:39	1
1,2-Dichloroethane	ND		0.40	0.050	ppb v/v			09/07/20 18:39	1
1,1-Dichloroethene	ND		0.40	0.040	ppb v/v			09/07/20 18:39	1
Ethylbenzene	ND		0.40	0.065	ppb v/v			09/07/20 18:39	1
Methylene Chloride	ND		2.0	2.0	ppb v/v			09/07/20 18:39	1
Methyl tert-butyl ether	ND		2.0	0.26	ppb v/v			09/07/20 18:39	1
Naphthalene	ND		0.20	0.20	ppb v/v			09/07/20 18:39	1
Tetrachloroethene	ND		0.40	0.035	ppb v/v			09/07/20 18:39	1
Toluene	ND		0.60	0.39	ppb v/v			09/07/20 18:39	1
trans-1,2-Dichloroethene	ND		0.40	0.035	ppb v/v			09/07/20 18:39	1
1,2,4-Trichlorobenzene	ND		0.40	0.32	ppb v/v			09/07/20 18:39	1
1,1,1-Trichloroethane	ND		0.40	0.19	ppb v/v			09/07/20 18:39	1
1,1,2-Trichloroethane	ND		0.40	0.035	ppb v/v			09/07/20 18:39	1
Trichloroethene	ND		0.20	0.030	ppb v/v			09/07/20 18:39	1
1,2,3-Trimethylbenzene	ND		0.40	0.18	ppb v/v			09/07/20 18:39	1
1,2,4-Trimethylbenzene	ND		0.40	0.10	ppb v/v			09/07/20 18:39	1
1,3,5-Trimethylbenzene	ND		0.40	0.11	ppb v/v			09/07/20 18:39	1
Vinyl chloride	ND		0.20	0.13	ppb v/v			09/07/20 18:39	1
Xylenes, Total	ND		0.80	0.12	ppb v/v			09/07/20 18:39	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.3	0.13	ug/m3			09/07/20 18:39	1
Carbon tetrachloride	ND		2.5	0.22	ug/m3			09/07/20 18:39	1
Chlorodifluoromethane	**26**		1.4	0.39	ug/m3			09/07/20 18:39	1
Chloroform	ND		2.0	0.17	ug/m3			09/07/20 18:39	1
cis-1,2-Dichloroethene	ND		1.6	0.20	ug/m3			09/07/20 18:39	1
Dichlorodifluoromethane	**1.9**	**J**	2.0	0.35	ug/m3			09/07/20 18:39	1
1,1-Dichloroethane	ND		1.6	0.14	ug/m3			09/07/20 18:39	1
1,2-Dichloroethane	ND		1.6	0.20	ug/m3			09/07/20 18:39	1
1,1-Dichloroethene	ND		1.6	0.16	ug/m3			09/07/20 18:39	1
Ethylbenzene	ND		1.7	0.28	ug/m3			09/07/20 18:39	1
Methylene Chloride	ND		6.9	6.8	ug/m3			09/07/20 18:39	1
Methyl tert-butyl ether	ND		7.2	0.94	ug/m3			09/07/20 18:39	1
Naphthalene	ND		1.0	1.0	ug/m3			09/07/20 18:39	1
Tetrachloroethene	ND		2.7	0.24	ug/m3			09/07/20 18:39	1
Toluene	ND		2.3	1.5	ug/m3			09/07/20 18:39	1
trans-1,2-Dichloroethene	ND		1.6	0.14	ug/m3			09/07/20 18:39	1
1,2,4-Trichlorobenzene	ND		3.0	2.4	ug/m3			09/07/20 18:39	1
1,1,1-Trichloroethane	ND		2.2	1.0	ug/m3			09/07/20 18:39	1
1,1,2-Trichloroethane	ND		2.2	0.19	ug/m3			09/07/20 18:39	1
Trichloroethene	ND		1.1	0.16	ug/m3			09/07/20 18:39	1
1,2,3-Trimethylbenzene	ND		2.0	0.88	ug/m3			09/07/20 18:39	1
1,2,4-Trimethylbenzene	ND		2.0	0.49	ug/m3			09/07/20 18:39	1

Client Sample ID: IA-144-C-29
Lab Sample ID: 140-20175-33
Date Collected: 08/25/20 16:45
Matrix: Air
Date Received: 08/27/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		2.0	0.54	ug/m3			09/07/20 18:39	1
Vinyl chloride	ND		0.51	0.33	ug/m3			09/07/20 18:39	1
Xylenes, Total	ND		3.5	0.52	ug/m3			09/07/20 18:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*60 - 140*		*09/07/20 18:39*	*1*

Client Sample ID: IA-141-C-29 Lab Sample ID: 140-20175-34

Date Collected: 08/25/20 16:48 **Matrix: Air**
Date Received: 08/27/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.16**	**J**	0.40	0.040	ppb v/v			09/07/20 19:25	1
Carbon tetrachloride	**0.052**	**J**	0.40	0.035	ppb v/v			09/07/20 19:25	1
Chlorodifluoromethane	**3.2**		0.40	0.11	ppb v/v			09/07/20 19:25	1
Chloroform	ND		0.40	0.035	ppb v/v			09/07/20 19:25	1
cis-1,2-Dichloroethene	ND		0.40	0.050	ppb v/v			09/07/20 19:25	1
Dichlorodifluoromethane	**0.38**	**J**	0.40	0.070	ppb v/v			09/07/20 19:25	1
1,1-Dichloroethane	ND		0.40	0.035	ppb v/v			09/07/20 19:25	1
1,2-Dichloroethane	ND		0.40	0.050	ppb v/v			09/07/20 19:25	1
1,1-Dichloroethene	ND		0.40	0.040	ppb v/v			09/07/20 19:25	1
Ethylbenzene	**0.18**	**J**	0.40	0.065	ppb v/v			09/07/20 19:25	1
Methylene Chloride	ND		2.0	2.0	ppb v/v			09/07/20 19:25	1
Methyl tert-butyl ether	ND		2.0	0.26	ppb v/v			09/07/20 19:25	1
Naphthalene	ND		0.20	0.20	ppb v/v			09/07/20 19:25	1
Tetrachloroethene	ND		0.40	0.035	ppb v/v			09/07/20 19:25	1
Toluene	**1.6**		0.60	0.39	ppb v/v			09/07/20 19:25	1
trans-1,2-Dichloroethene	ND		0.40	0.035	ppb v/v			09/07/20 19:25	1
1,2,4-Trichlorobenzene	ND		0.40	0.32	ppb v/v			09/07/20 19:25	1
1,1,1-Trichloroethane	ND		0.40	0.19	ppb v/v			09/07/20 19:25	1
1,1,2-Trichloroethane	ND		0.40	0.035	ppb v/v			09/07/20 19:25	1
Trichloroethene	ND		0.20	0.030	ppb v/v			09/07/20 19:25	1
1,2,3-Trimethylbenzene	ND		0.40	0.18	ppb v/v			09/07/20 19:25	1
1,2,4-Trimethylbenzene	**0.15**	**J**	0.40	0.10	ppb v/v			09/07/20 19:25	1
1,3,5-Trimethylbenzene	ND		0.40	0.11	ppb v/v			09/07/20 19:25	1
Vinyl chloride	ND		0.20	0.13	ppb v/v			09/07/20 19:25	1
Xylenes, Total	**0.98**		0.80	0.12	ppb v/v			09/07/20 19:25	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.51**	**J**	1.3	0.13	ug/m3			09/07/20 19:25	1
Carbon tetrachloride	**0.33**	**J**	2.5	0.22	ug/m3			09/07/20 19:25	1
Chlorodifluoromethane	**11**		1.4	0.39	ug/m3			09/07/20 19:25	1
Chloroform	ND		2.0	0.17	ug/m3			09/07/20 19:25	1
cis-1,2-Dichloroethene	ND		1.6	0.20	ug/m3			09/07/20 19:25	1
Dichlorodifluoromethane	**1.9**	**J**	2.0	0.35	ug/m3			09/07/20 19:25	1
1,1-Dichloroethane	ND		1.6	0.14	ug/m3			09/07/20 19:25	1
1,2-Dichloroethane	ND		1.6	0.20	ug/m3			09/07/20 19:25	1
1,1-Dichloroethene	ND		1.6	0.16	ug/m3			09/07/20 19:25	1
Ethylbenzene	**0.77**	**J**	1.7	0.28	ug/m3			09/07/20 19:25	1
Methylene Chloride	ND		6.9	6.8	ug/m3			09/07/20 19:25	1
Methyl tert-butyl ether	ND		7.2	0.94	ug/m3			09/07/20 19:25	1
Naphthalene	ND		1.0	1.0	ug/m3			09/07/20 19:25	1
Tetrachloroethene	ND		2.7	0.24	ug/m3			09/07/20 19:25	1
Toluene	**5.9**		2.3	1.5	ug/m3			09/07/20 19:25	1
trans-1,2-Dichloroethene	ND		1.6	0.14	ug/m3			09/07/20 19:25	1
1,2,4-Trichlorobenzene	ND		3.0	2.4	ug/m3			09/07/20 19:25	1
1,1,1-Trichloroethane	ND		2.2	1.0	ug/m3			09/07/20 19:25	1
1,1,2-Trichloroethane	ND		2.2	0.19	ug/m3			09/07/20 19:25	1
Trichloroethene	ND		1.1	0.16	ug/m3			09/07/20 19:25	1
1,2,3-Trimethylbenzene	ND		2.0	0.88	ug/m3			09/07/20 19:25	1
1,2,4-Trimethylbenzene	**0.73**	**J**	2.0	0.49	ug/m3			09/07/20 19:25	1

Client Sample ID: IA-141-C-29
Lab Sample ID: 140-20175-34
Date Collected: 08/25/20 16:48
Matrix: Air
Date Received: 08/27/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		2.0	0.54	ug/m3			09/07/20 19:25	1
Vinyl chloride	ND		0.51	0.33	ug/m3			09/07/20 19:25	1
Xylenes, Total	**4.3**		3.5	0.52	ug/m3			09/07/20 19:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*60 - 140*		*09/07/20 19:25*	*1*

Client Sample ID: IA-149-C-29
Lab Sample ID: 140-20175-35

Date Collected: 08/25/20 16:50
Matrix: Air
Date Received: 08/27/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.18**	**J**	0.40	0.040	ppb v/v			09/07/20 20:13	1
Carbon tetrachloride	**0.045**	**J**	0.40	0.035	ppb v/v			09/07/20 20:13	1
Chlorodifluoromethane	**1.7**		0.40	0.11	ppb v/v			09/07/20 20:13	1
Chloroform	**0.11**	**J**	0.40	0.035	ppb v/v			09/07/20 20:13	1
cis-1,2-Dichloroethene	ND		0.40	0.050	ppb v/v			09/07/20 20:13	1
Dichlorodifluoromethane	**0.38**	**J**	0.40	0.070	ppb v/v			09/07/20 20:13	1
1,1-Dichloroethane	ND		0.40	0.035	ppb v/v			09/07/20 20:13	1
1,2-Dichloroethane	ND		0.40	0.050	ppb v/v			09/07/20 20:13	1
1,1-Dichloroethene	ND		0.40	0.040	ppb v/v			09/07/20 20:13	1
Ethylbenzene	**0.31**	**J**	0.40	0.065	ppb v/v			09/07/20 20:13	1
Methylene Chloride	**9.6**		2.0	2.0	ppb v/v			09/07/20 20:13	1
Methyl tert-butyl ether	ND		2.0	0.26	ppb v/v			09/07/20 20:13	1
Naphthalene	ND		0.20	0.20	ppb v/v			09/07/20 20:13	1
Tetrachloroethene	**0.15**	**J**	0.40	0.035	ppb v/v			09/07/20 20:13	1
Toluene	**13**		0.60	0.39	ppb v/v			09/07/20 20:13	1
trans-1,2-Dichloroethene	ND		0.40	0.035	ppb v/v			09/07/20 20:13	1
1,2,4-Trichlorobenzene	ND		0.40	0.32	ppb v/v			09/07/20 20:13	1
1,1,1-Trichloroethane	ND		0.40	0.19	ppb v/v			09/07/20 20:13	1
1,1,2-Trichloroethane	ND		0.40	0.035	ppb v/v			09/07/20 20:13	1
Trichloroethene	**0.41**		0.20	0.030	ppb v/v			09/07/20 20:13	1
1,2,3-Trimethylbenzene	ND		0.40	0.18	ppb v/v			09/07/20 20:13	1
1,2,4-Trimethylbenzene	**0.29**	**J**	0.40	0.10	ppb v/v			09/07/20 20:13	1
1,3,5-Trimethylbenzene	ND		0.40	0.11	ppb v/v			09/07/20 20:13	1
Vinyl chloride	ND		0.20	0.13	ppb v/v			09/07/20 20:13	1
Xylenes, Total	**1.6**		0.80	0.12	ppb v/v			09/07/20 20:13	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.58**	**J**	1.3	0.13	ug/m3			09/07/20 20:13	1
Carbon tetrachloride	**0.28**	**J**	2.5	0.22	ug/m3			09/07/20 20:13	1
Chlorodifluoromethane	**6.2**		1.4	0.39	ug/m3			09/07/20 20:13	1
Chloroform	**0.52**	**J**	2.0	0.17	ug/m3			09/07/20 20:13	1
cis-1,2-Dichloroethene	ND		1.6	0.20	ug/m3			09/07/20 20:13	1
Dichlorodifluoromethane	**1.9**	**J**	2.0	0.35	ug/m3			09/07/20 20:13	1
1,1-Dichloroethane	ND		1.6	0.14	ug/m3			09/07/20 20:13	1
1,2-Dichloroethane	ND		1.6	0.20	ug/m3			09/07/20 20:13	1
1,1-Dichloroethene	ND		1.6	0.16	ug/m3			09/07/20 20:13	1
Ethylbenzene	**1.3**	**J**	1.7	0.28	ug/m3			09/07/20 20:13	1
Methylene Chloride	**33**		6.9	6.8	ug/m3			09/07/20 20:13	1
Methyl tert-butyl ether	ND		7.2	0.94	ug/m3			09/07/20 20:13	1
Naphthalene	ND		1.0	1.0	ug/m3			09/07/20 20:13	1
Tetrachloroethene	**1.0**	**J**	2.7	0.24	ug/m3			09/07/20 20:13	1
Toluene	**47**		2.3	1.5	ug/m3			09/07/20 20:13	1
trans-1,2-Dichloroethene	ND		1.6	0.14	ug/m3			09/07/20 20:13	1
1,2,4-Trichlorobenzene	ND		3.0	2.4	ug/m3			09/07/20 20:13	1
1,1,1-Trichloroethane	ND		2.2	1.0	ug/m3			09/07/20 20:13	1
1,1,2-Trichloroethane	ND		2.2	0.19	ug/m3			09/07/20 20:13	1
Trichloroethene	**2.2**		1.1	0.16	ug/m3			09/07/20 20:13	1
1,2,3-Trimethylbenzene	ND		2.0	0.88	ug/m3			09/07/20 20:13	1
1,2,4-Trimethylbenzene	**1.4**	**J**	2.0	0.49	ug/m3			09/07/20 20:13	1

Client Sample ID: IA-149-C-29
Lab Sample ID: 140-20175-35
Date Collected: 08/25/20 16:50
Matrix: Air
Date Received: 08/27/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		2.0	0.54	ug/m3			09/07/20 20:13	1
Vinyl chloride	ND		0.51	0.33	ug/m3			09/07/20 20:13	1
Xylenes, Total	**6.8**		3.5	0.52	ug/m3			09/07/20 20:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*60 - 140*		*09/07/20 20:13*	*1*

Client Sample ID: IA-DUP2-C-29

Date Collected: 08/25/20 00:00
Date Received: 08/27/20 10:00

Lab Sample ID: 140-20175-36

Matrix: Air

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.17**	**J**	0.40	0.040	ppb v/v			09/07/20 20:56	1.4
Carbon tetrachloride	ND		0.40	0.035	ppb v/v			09/07/20 20:56	1.4
Chlorodifluoromethane	**1.6**		0.40	0.11	ppb v/v			09/07/20 20:56	1.4
Chloroform	**0.12**	**J**	0.40	0.035	ppb v/v			09/07/20 20:56	1.4
cis-1,2-Dichloroethene	ND		0.40	0.050	ppb v/v			09/07/20 20:56	1.4
Dichlorodifluoromethane	**0.36**	**J**	0.40	0.070	ppb v/v			09/07/20 20:56	1.4
1,1-Dichloroethane	ND		0.40	0.035	ppb v/v			09/07/20 20:56	1.4
1,2-Dichloroethane	ND		0.40	0.050	ppb v/v			09/07/20 20:56	1.4
1,1-Dichloroethene	ND		0.40	0.040	ppb v/v			09/07/20 20:56	1.4
Ethylbenzene	**0.35**	**J**	0.40	0.065	ppb v/v			09/07/20 20:56	1.4
Methylene Chloride	**11**		2.0	2.0	ppb v/v			09/07/20 20:56	1.4
Methyl tert-butyl ether	ND		2.0	0.26	ppb v/v			09/07/20 20:56	1.4
Naphthalene	**0.24**		0.20	0.20	ppb v/v			09/07/20 20:56	1.4
Tetrachloroethene	**0.14**	**J**	0.40	0.035	ppb v/v			09/07/20 20:56	1.4
Toluene	**13**		0.60	0.39	ppb v/v			09/07/20 20:56	1.4
trans-1,2-Dichloroethene	ND		0.40	0.035	ppb v/v			09/07/20 20:56	1.4
1,2,4-Trichlorobenzene	ND		0.40	0.32	ppb v/v			09/07/20 20:56	1.4
1,1,1-Trichloroethane	ND		0.40	0.19	ppb v/v			09/07/20 20:56	1.4
1,1,2-Trichloroethane	ND		0.40	0.035	ppb v/v			09/07/20 20:56	1.4
Trichloroethene	**0.36**		0.20	0.030	ppb v/v			09/07/20 20:56	1.4
1,2,3-Trimethylbenzene	ND		0.40	0.18	ppb v/v			09/07/20 20:56	1.4
1,2,4-Trimethylbenzene	**0.38**	**J**	0.40	0.10	ppb v/v			09/07/20 20:56	1.4
1,3,5-Trimethylbenzene	**0.11**	**J**	0.40	0.11	ppb v/v			09/07/20 20:56	1.4
Vinyl chloride	ND		0.20	0.13	ppb v/v			09/07/20 20:56	1.4
Xylenes, Total	**1.8**		0.80	0.12	ppb v/v			09/07/20 20:56	1.4

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.55**	**J**	1.3	0.13	ug/m3			09/07/20 20:56	1.4
Carbon tetrachloride	ND		2.5	0.22	ug/m3			09/07/20 20:56	1.4
Chlorodifluoromethane	**5.7**		1.4	0.39	ug/m3			09/07/20 20:56	1.4
Chloroform	**0.57**	**J**	2.0	0.17	ug/m3			09/07/20 20:56	1.4
cis-1,2-Dichloroethene	ND		1.6	0.20	ug/m3			09/07/20 20:56	1.4
Dichlorodifluoromethane	**1.8**	**J**	2.0	0.35	ug/m3			09/07/20 20:56	1.4
1,1-Dichloroethane	ND		1.6	0.14	ug/m3			09/07/20 20:56	1.4
1,2-Dichloroethane	ND		1.6	0.20	ug/m3			09/07/20 20:56	1.4
1,1-Dichloroethene	ND		1.6	0.16	ug/m3			09/07/20 20:56	1.4
Ethylbenzene	**1.5**	**J**	1.7	0.28	ug/m3			09/07/20 20:56	1.4
Methylene Chloride	**40**		6.9	6.8	ug/m3			09/07/20 20:56	1.4
Methyl tert-butyl ether	ND		7.2	0.94	ug/m3			09/07/20 20:56	1.4
Naphthalene	**1.3**		1.0	1.0	ug/m3			09/07/20 20:56	1.4
Tetrachloroethene	**0.94**	**J**	2.7	0.24	ug/m3			09/07/20 20:56	1.4
Toluene	**50**		2.3	1.5	ug/m3			09/07/20 20:56	1.4
trans-1,2-Dichloroethene	ND		1.6	0.14	ug/m3			09/07/20 20:56	1.4
1,2,4-Trichlorobenzene	ND		3.0	2.4	ug/m3			09/07/20 20:56	1.4
1,1,1-Trichloroethane	ND		2.2	1.0	ug/m3			09/07/20 20:56	1.4
1,1,2-Trichloroethane	ND		2.2	0.19	ug/m3			09/07/20 20:56	1.4
Trichloroethene	**1.9**		1.1	0.16	ug/m3			09/07/20 20:56	1.4
1,2,3-Trimethylbenzene	ND		2.0	0.88	ug/m3			09/07/20 20:56	1.4
1,2,4-Trimethylbenzene	**1.9**	**J**	2.0	0.49	ug/m3			09/07/20 20:56	1.4
1,3,5-Trimethylbenzene	**0.55**	**J**	2.0	0.54	ug/m3			09/07/20 20:56	1.4

Client Sample ID: IA-DUP2-C-29
Lab Sample ID: 140-20175-36
Date Collected: 08/25/20 00:00
Matrix: Air
Date Received: 08/27/20 10:00

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		0.51	0.33	ug/m3			09/07/20 20:56	1.4
Xylenes, Total	**7.6**		3.5	0.52	ug/m3			09/07/20 20:56	1.4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*60 - 140*		*09/07/20 20:56*	*1.4*

Client Sample ID: IA-126-C-29

Lab Sample ID: 140-20175-37

Date Collected: 08/25/20 16:52
Matrix: Air
Date Received: 08/27/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.18**	**J**	0.40	0.040	ppb v/v			09/07/20 21:40	1
Carbon tetrachloride	**0.062**	**J**	0.40	0.035	ppb v/v			09/07/20 21:40	1
Chlorodifluoromethane	**1.7**		0.40	0.11	ppb v/v			09/07/20 21:40	1
Chloroform	**0.13**	**J**	0.40	0.035	ppb v/v			09/07/20 21:40	1
cis-1,2-Dichloroethene	ND		0.40	0.050	ppb v/v			09/07/20 21:40	1
Dichlorodifluoromethane	**0.40**		0.40	0.070	ppb v/v			09/07/20 21:40	1
1,1-Dichloroethane	ND		0.40	0.035	ppb v/v			09/07/20 21:40	1
1,2-Dichloroethane	ND		0.40	0.050	ppb v/v			09/07/20 21:40	1
1,1-Dichloroethene	ND		0.40	0.040	ppb v/v			09/07/20 21:40	1
Ethylbenzene	**0.32**	**J**	0.40	0.065	ppb v/v			09/07/20 21:40	1
Methylene Chloride	**11**		2.0	2.0	ppb v/v			09/07/20 21:40	1
Methyl tert-butyl ether	ND		2.0	0.26	ppb v/v			09/07/20 21:40	1
Naphthalene	ND		0.20	0.20	ppb v/v			09/07/20 21:40	1
Tetrachloroethene	**0.18**	**J**	0.40	0.035	ppb v/v			09/07/20 21:40	1
Toluene	**14**		0.60	0.39	ppb v/v			09/07/20 21:40	1
trans-1,2-Dichloroethene	ND		0.40	0.035	ppb v/v			09/07/20 21:40	1
1,2,4-Trichlorobenzene	ND		0.40	0.32	ppb v/v			09/07/20 21:40	1
1,1,1-Trichloroethane	ND		0.40	0.19	ppb v/v			09/07/20 21:40	1
1,1,2-Trichloroethane	ND		0.40	0.035	ppb v/v			09/07/20 21:40	1
Trichloroethene	**0.39**		0.20	0.030	ppb v/v			09/07/20 21:40	1
1,2,3-Trimethylbenzene	ND		0.40	0.18	ppb v/v			09/07/20 21:40	1
1,2,4-Trimethylbenzene	**0.35**	**J**	0.40	0.10	ppb v/v			09/07/20 21:40	1
1,3,5-Trimethylbenzene	ND		0.40	0.11	ppb v/v			09/07/20 21:40	1
Vinyl chloride	ND		0.20	0.13	ppb v/v			09/07/20 21:40	1
Xylenes, Total	**1.7**		0.80	0.12	ppb v/v			09/07/20 21:40	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.58**	**J**	1.3	0.13	ug/m3			09/07/20 21:40	1
Carbon tetrachloride	**0.39**	**J**	2.5	0.22	ug/m3			09/07/20 21:40	1
Chlorodifluoromethane	**5.9**		1.4	0.39	ug/m3			09/07/20 21:40	1
Chloroform	**0.63**	**J**	2.0	0.17	ug/m3			09/07/20 21:40	1
cis-1,2-Dichloroethene	ND		1.6	0.20	ug/m3			09/07/20 21:40	1
Dichlorodifluoromethane	**2.0**		2.0	0.35	ug/m3			09/07/20 21:40	1
1,1-Dichloroethane	ND		1.6	0.14	ug/m3			09/07/20 21:40	1
1,2-Dichloroethane	ND		1.6	0.20	ug/m3			09/07/20 21:40	1
1,1-Dichloroethene	ND		1.6	0.16	ug/m3			09/07/20 21:40	1
Ethylbenzene	**1.4**	**J**	1.7	0.28	ug/m3			09/07/20 21:40	1
Methylene Chloride	**39**		6.9	6.8	ug/m3			09/07/20 21:40	1
Methyl tert-butyl ether	ND		7.2	0.94	ug/m3			09/07/20 21:40	1
Naphthalene	ND		1.0	1.0	ug/m3			09/07/20 21:40	1
Tetrachloroethene	**1.3**	**J**	2.7	0.24	ug/m3			09/07/20 21:40	1
Toluene	**52**		2.3	1.5	ug/m3			09/07/20 21:40	1
trans-1,2-Dichloroethene	ND		1.6	0.14	ug/m3			09/07/20 21:40	1
1,2,4-Trichlorobenzene	ND		3.0	2.4	ug/m3			09/07/20 21:40	1
1,1,1-Trichloroethane	ND		2.2	1.0	ug/m3			09/07/20 21:40	1
1,1,2-Trichloroethane	ND		2.2	0.19	ug/m3			09/07/20 21:40	1
Trichloroethene	**2.1**		1.1	0.16	ug/m3			09/07/20 21:40	1
1,2,3-Trimethylbenzene	ND		2.0	0.88	ug/m3			09/07/20 21:40	1
1,2,4-Trimethylbenzene	**1.7**	**J**	2.0	0.49	ug/m3			09/07/20 21:40	1

Client Sample ID: IA-126-C-29 **Lab Sample ID: 140-20175-37**
Date Collected: 08/25/20 16:52 **Matrix: Air**
Date Received: 08/27/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		2.0	0.54	ug/m3			09/07/20 21:40	1
Vinyl chloride	ND		0.51	0.33	ug/m3			09/07/20 21:40	1
Xylenes, Total	**7.3**		3.5	0.52	ug/m3			09/07/20 21:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*60 - 140*		*09/07/20 21:40*	*1*

Client Sample ID: IA-BCK-1-29 Lab Sample ID: 140-20175-38

Date Collected: 08/25/20 16:03 **Matrix: Air**
Date Received: 08/27/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.073**	**J**	0.40	0.040	ppb v/v			09/07/20 22:24	1
Carbon tetrachloride	ND		0.40	0.035	ppb v/v			09/07/20 22:24	1
Chlorodifluoromethane	**0.35**	**J**	0.40	0.11	ppb v/v			09/07/20 22:24	1
Chloroform	ND		0.40	0.035	ppb v/v			09/07/20 22:24	1
cis-1,2-Dichloroethene	ND		0.40	0.050	ppb v/v			09/07/20 22:24	1
Dichlorodifluoromethane	**0.35**	**J**	0.40	0.070	ppb v/v			09/07/20 22:24	1
1,1-Dichloroethane	ND		0.40	0.035	ppb v/v			09/07/20 22:24	1
1,2-Dichloroethane	ND		0.40	0.050	ppb v/v			09/07/20 22:24	1
1,1-Dichloroethene	ND		0.40	0.040	ppb v/v			09/07/20 22:24	1
Ethylbenzene	ND		0.40	0.065	ppb v/v			09/07/20 22:24	1
Methylene Chloride	ND		2.0	2.0	ppb v/v			09/07/20 22:24	1
Methyl tert-butyl ether	ND		2.0	0.26	ppb v/v			09/07/20 22:24	1
Naphthalene	ND		0.20	0.20	ppb v/v			09/07/20 22:24	1
Tetrachloroethene	ND		0.40	0.035	ppb v/v			09/07/20 22:24	1
Toluene	ND		0.60	0.39	ppb v/v			09/07/20 22:24	1
trans-1,2-Dichloroethene	ND		0.40	0.035	ppb v/v			09/07/20 22:24	1
1,2,4-Trichlorobenzene	ND		0.40	0.32	ppb v/v			09/07/20 22:24	1
1,1,1-Trichloroethane	ND		0.40	0.19	ppb v/v			09/07/20 22:24	1
1,1,2-Trichloroethane	ND		0.40	0.035	ppb v/v			09/07/20 22:24	1
Trichloroethene	ND		0.20	0.030	ppb v/v			09/07/20 22:24	1
1,2,3-Trimethylbenzene	ND		0.40	0.18	ppb v/v			09/07/20 22:24	1
1,2,4-Trimethylbenzene	ND		0.40	0.10	ppb v/v			09/07/20 22:24	1
1,3,5-Trimethylbenzene	ND		0.40	0.11	ppb v/v			09/07/20 22:24	1
Vinyl chloride	ND		0.20	0.13	ppb v/v			09/07/20 22:24	1
Xylenes, Total	**0.23**	**J**	0.80	0.12	ppb v/v			09/07/20 22:24	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.23**	**J**	1.3	0.13	ug/m3			09/07/20 22:24	1
Carbon tetrachloride	ND		2.5	0.22	ug/m3			09/07/20 22:24	1
Chlorodifluoromethane	**1.3**	**J**	1.4	0.39	ug/m3			09/07/20 22:24	1
Chloroform	ND		2.0	0.17	ug/m3			09/07/20 22:24	1
cis-1,2-Dichloroethene	ND		1.6	0.20	ug/m3			09/07/20 22:24	1
Dichlorodifluoromethane	**1.7**	**J**	2.0	0.35	ug/m3			09/07/20 22:24	1
1,1-Dichloroethane	ND		1.6	0.14	ug/m3			09/07/20 22:24	1
1,2-Dichloroethane	ND		1.6	0.20	ug/m3			09/07/20 22:24	1
1,1-Dichloroethene	ND		1.6	0.16	ug/m3			09/07/20 22:24	1
Ethylbenzene	ND		1.7	0.28	ug/m3			09/07/20 22:24	1
Methylene Chloride	ND		6.9	6.8	ug/m3			09/07/20 22:24	1
Methyl tert-butyl ether	ND		7.2	0.94	ug/m3			09/07/20 22:24	1
Naphthalene	ND		1.0	1.0	ug/m3			09/07/20 22:24	1
Tetrachloroethene	ND		2.7	0.24	ug/m3			09/07/20 22:24	1
Toluene	ND		2.3	1.5	ug/m3			09/07/20 22:24	1
trans-1,2-Dichloroethene	ND		1.6	0.14	ug/m3			09/07/20 22:24	1
1,2,4-Trichlorobenzene	ND		3.0	2.4	ug/m3			09/07/20 22:24	1
1,1,1-Trichloroethane	ND		2.2	1.0	ug/m3			09/07/20 22:24	1
1,1,2-Trichloroethane	ND		2.2	0.19	ug/m3			09/07/20 22:24	1
Trichloroethene	ND		1.1	0.16	ug/m3			09/07/20 22:24	1
1,2,3-Trimethylbenzene	ND		2.0	0.88	ug/m3			09/07/20 22:24	1
1,2,4-Trimethylbenzene	ND		2.0	0.49	ug/m3			09/07/20 22:24	1

Client Sample ID: IA-BCK-1-29 **Lab Sample ID: 140-20175-38**
Date Collected: 08/25/20 16:03 **Matrix: Air**
Date Received: 08/27/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		2.0	0.54	ug/m3			09/07/20 22:24	1
Vinyl chloride	ND		0.51	0.33	ug/m3			09/07/20 22:24	1
Xylenes, Total	**0.99**	**J**	3.5	0.52	ug/m3			09/07/20 22:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*60 - 140*		*09/07/20 22:24*	*1*

Client Sample ID: IA-BCK-2-29
Lab Sample ID: 140-20175-39

Date Collected: 08/25/20 16:07
Matrix: Air
Date Received: 08/27/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.084**	**J**	0.40	0.040	ppb v/v			09/07/20 23:09	2.29
Carbon tetrachloride	ND		0.40	0.035	ppb v/v			09/07/20 23:09	2.29
Chlorodifluoromethane	**0.31**	**J**	0.40	0.11	ppb v/v			09/07/20 23:09	2.29
Chloroform	ND		0.40	0.035	ppb v/v			09/07/20 23:09	2.29
cis-1,2-Dichloroethene	ND		0.40	0.050	ppb v/v			09/07/20 23:09	2.29
Dichlorodifluoromethane	**0.38**	**J**	0.40	0.070	ppb v/v			09/07/20 23:09	2.29
1,1-Dichloroethane	ND		0.40	0.035	ppb v/v			09/07/20 23:09	2.29
1,2-Dichloroethane	**0.068**	**J**	0.40	0.050	ppb v/v			09/07/20 23:09	2.29
1,1-Dichloroethene	ND		0.40	0.040	ppb v/v			09/07/20 23:09	2.29
Ethylbenzene	ND		0.40	0.065	ppb v/v			09/07/20 23:09	2.29
Methylene Chloride	**6.1**		2.0	2.0	ppb v/v			09/07/20 23:09	2.29
Methyl tert-butyl ether	ND		2.0	0.26	ppb v/v			09/07/20 23:09	2.29
Naphthalene	ND		0.20	0.20	ppb v/v			09/07/20 23:09	2.29
Tetrachloroethene	ND		0.40	0.035	ppb v/v			09/07/20 23:09	2.29
Toluene	**0.42**	**J**	0.60	0.39	ppb v/v			09/07/20 23:09	2.29
trans-1,2-Dichloroethene	ND		0.40	0.035	ppb v/v			09/07/20 23:09	2.29
1,2,4-Trichlorobenzene	ND		0.40	0.32	ppb v/v			09/07/20 23:09	2.29
1,1,1-Trichloroethane	ND		0.40	0.19	ppb v/v			09/07/20 23:09	2.29
1,1,2-Trichloroethane	ND		0.40	0.035	ppb v/v			09/07/20 23:09	2.29
Trichloroethene	ND		0.20	0.030	ppb v/v			09/07/20 23:09	2.29
1,2,3-Trimethylbenzene	ND		0.40	0.18	ppb v/v			09/07/20 23:09	2.29
1,2,4-Trimethylbenzene	ND		0.40	0.10	ppb v/v			09/07/20 23:09	2.29
1,3,5-Trimethylbenzene	ND		0.40	0.11	ppb v/v			09/07/20 23:09	2.29
Vinyl chloride	ND		0.20	0.13	ppb v/v			09/07/20 23:09	2.29
Xylenes, Total	**0.24**	**J**	0.80	0.12	ppb v/v			09/07/20 23:09	2.29

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.27**	**J**	1.3	0.13	ug/m3			09/07/20 23:09	2.29
Carbon tetrachloride	ND		2.5	0.22	ug/m3			09/07/20 23:09	2.29
Chlorodifluoromethane	**1.1**	**J**	1.4	0.39	ug/m3			09/07/20 23:09	2.29
Chloroform	ND		2.0	0.17	ug/m3			09/07/20 23:09	2.29
cis-1,2-Dichloroethene	ND		1.6	0.20	ug/m3			09/07/20 23:09	2.29
Dichlorodifluoromethane	**1.9**	**J**	2.0	0.35	ug/m3			09/07/20 23:09	2.29
1,1-Dichloroethane	ND		1.6	0.14	ug/m3			09/07/20 23:09	2.29
1,2-Dichloroethane	**0.28**	**J**	1.6	0.20	ug/m3			09/07/20 23:09	2.29
1,1-Dichloroethene	ND		1.6	0.16	ug/m3			09/07/20 23:09	2.29
Ethylbenzene	ND		1.7	0.28	ug/m3			09/07/20 23:09	2.29
Methylene Chloride	**21**		6.9	6.8	ug/m3			09/07/20 23:09	2.29
Methyl tert-butyl ether	ND		7.2	0.94	ug/m3			09/07/20 23:09	2.29
Naphthalene	ND		1.0	1.0	ug/m3			09/07/20 23:09	2.29
Tetrachloroethene	ND		2.7	0.24	ug/m3			09/07/20 23:09	2.29
Toluene	**1.6**	**J**	2.3	1.5	ug/m3			09/07/20 23:09	2.29
trans-1,2-Dichloroethene	ND		1.6	0.14	ug/m3			09/07/20 23:09	2.29
1,2,4-Trichlorobenzene	ND		3.0	2.4	ug/m3			09/07/20 23:09	2.29
1,1,1-Trichloroethane	ND		2.2	1.0	ug/m3			09/07/20 23:09	2.29
1,1,2-Trichloroethane	ND		2.2	0.19	ug/m3			09/07/20 23:09	2.29
Trichloroethene	ND		1.1	0.16	ug/m3			09/07/20 23:09	2.29
1,2,3-Trimethylbenzene	ND		2.0	0.88	ug/m3			09/07/20 23:09	2.29
1,2,4-Trimethylbenzene	ND		2.0	0.49	ug/m3			09/07/20 23:09	2.29

Client Sample ID: IA-BCK-2-29 **Lab Sample ID: 140-20175-39**
Date Collected: 08/25/20 16:07 **Matrix: Air**
Date Received: 08/27/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		2.0	0.54	ug/m3			09/07/20 23:09	2.29
Vinyl chloride	ND		0.51	0.33	ug/m3			09/07/20 23:09	2.29
Xylenes, Total	**1.1**	**J**	3.5	0.52	ug/m3			09/07/20 23:09	2.29

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*60 - 140*		*09/07/20 23:09*	*2.29*

Client Sample ID: IA-BCK-3-29 Lab Sample ID: 140-20175-40

Date Collected: 08/25/20 15:52 **Matrix: Air**
Date Received: 08/27/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.071**	**J**	0.40	0.040	ppb v/v			09/07/20 23:56	1.59
Carbon tetrachloride	**0.072**	**J**	0.40	0.035	ppb v/v			09/07/20 23:56	1.59
Chlorodifluoromethane	**0.34**	**J**	0.40	0.11	ppb v/v			09/07/20 23:56	1.59
Chloroform	ND		0.40	0.035	ppb v/v			09/07/20 23:56	1.59
cis-1,2-Dichloroethene	**0.31**	**J**	0.40	0.050	ppb v/v			09/07/20 23:56	1.59
Dichlorodifluoromethane	**0.39**	**J**	0.40	0.070	ppb v/v			09/07/20 23:56	1.59
1,1-Dichloroethane	ND		0.40	0.035	ppb v/v			09/07/20 23:56	1.59
1,2-Dichloroethane	ND		0.40	0.050	ppb v/v			09/07/20 23:56	1.59
1,1-Dichloroethene	ND		0.40	0.040	ppb v/v			09/07/20 23:56	1.59
Ethylbenzene	ND		0.40	0.065	ppb v/v			09/07/20 23:56	1.59
Methylene Chloride	**2.2**		2.0	2.0	ppb v/v			09/07/20 23:56	1.59
Methyl tert-butyl ether	ND		2.0	0.26	ppb v/v			09/07/20 23:56	1.59
Naphthalene	ND		0.20	0.20	ppb v/v			09/07/20 23:56	1.59
Tetrachloroethene	ND		0.40	0.035	ppb v/v			09/07/20 23:56	1.59
Toluene	**0.41**	**J**	0.60	0.39	ppb v/v			09/07/20 23:56	1.59
trans-1,2-Dichloroethene	ND		0.40	0.035	ppb v/v			09/07/20 23:56	1.59
1,2,4-Trichlorobenzene	ND		0.40	0.32	ppb v/v			09/07/20 23:56	1.59
1,1,1-Trichloroethane	ND		0.40	0.19	ppb v/v			09/07/20 23:56	1.59
1,1,2-Trichloroethane	ND		0.40	0.035	ppb v/v			09/07/20 23:56	1.59
Trichloroethene	ND		0.20	0.030	ppb v/v			09/07/20 23:56	1.59
1,2,3-Trimethylbenzene	ND		0.40	0.18	ppb v/v			09/07/20 23:56	1.59
1,2,4-Trimethylbenzene	**0.11**	**J**	0.40	0.10	ppb v/v			09/07/20 23:56	1.59
1,3,5-Trimethylbenzene	ND		0.40	0.11	ppb v/v			09/07/20 23:56	1.59
Vinyl chloride	ND		0.20	0.13	ppb v/v			09/07/20 23:56	1.59
Xylenes, Total	**0.27**	**J**	0.80	0.12	ppb v/v			09/07/20 23:56	1.59

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.23**	**J**	1.3	0.13	ug/m3			09/07/20 23:56	1.59
Carbon tetrachloride	**0.45**	**J**	2.5	0.22	ug/m3			09/07/20 23:56	1.59
Chlorodifluoromethane	**1.2**	**J**	1.4	0.39	ug/m3			09/07/20 23:56	1.59
Chloroform	ND		2.0	0.17	ug/m3			09/07/20 23:56	1.59
cis-1,2-Dichloroethene	**1.2**	**J**	1.6	0.20	ug/m3			09/07/20 23:56	1.59
Dichlorodifluoromethane	**1.9**	**J**	2.0	0.35	ug/m3			09/07/20 23:56	1.59
1,1-Dichloroethane	ND		1.6	0.14	ug/m3			09/07/20 23:56	1.59
1,2-Dichloroethane	ND		1.6	0.20	ug/m3			09/07/20 23:56	1.59
1,1-Dichloroethene	ND		1.6	0.16	ug/m3			09/07/20 23:56	1.59
Ethylbenzene	ND		1.7	0.28	ug/m3			09/07/20 23:56	1.59
Methylene Chloride	**7.8**		6.9	6.8	ug/m3			09/07/20 23:56	1.59
Methyl tert-butyl ether	ND		7.2	0.94	ug/m3			09/07/20 23:56	1.59
Naphthalene	ND		1.0	1.0	ug/m3			09/07/20 23:56	1.59
Tetrachloroethene	ND		2.7	0.24	ug/m3			09/07/20 23:56	1.59
Toluene	**1.5**	**J**	2.3	1.5	ug/m3			09/07/20 23:56	1.59
trans-1,2-Dichloroethene	ND		1.6	0.14	ug/m3			09/07/20 23:56	1.59
1,2,4-Trichlorobenzene	ND		3.0	2.4	ug/m3			09/07/20 23:56	1.59
1,1,1-Trichloroethane	ND		2.2	1.0	ug/m3			09/07/20 23:56	1.59
1,1,2-Trichloroethane	ND		2.2	0.19	ug/m3			09/07/20 23:56	1.59
Trichloroethene	ND		1.1	0.16	ug/m3			09/07/20 23:56	1.59
1,2,3-Trimethylbenzene	ND		2.0	0.88	ug/m3			09/07/20 23:56	1.59
1,2,4-Trimethylbenzene	**0.53**	**J**	2.0	0.49	ug/m3			09/07/20 23:56	1.59

Client Sample ID: IA-BCK-3-29 **Lab Sample ID: 140-20175-40**
Date Collected: 08/25/20 15:52 **Matrix: Air**
Date Received: 08/27/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		2.0	0.54	ug/m3			09/07/20 23:56	1.59
Vinyl chloride	ND		0.51	0.33	ug/m3			09/07/20 23:56	1.59
Xylenes, Total	**1.2**	**J**	3.5	0.52	ug/m3			09/07/20 23:56	1.59

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*60 - 140*		*09/07/20 23:56*	*1.59*

Client Sample ID: IA-BCK-4-29 Lab Sample ID: 140-20175-41

Date Collected: 08/25/20 15:57 **Matrix: Air**
Date Received: 08/27/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.14**	**J**	0.40	0.040	ppb v/v			09/08/20 00:42	1.52
Carbon tetrachloride	**0.048**	**J**	0.40	0.035	ppb v/v			09/08/20 00:42	1.52
Chlorodifluoromethane	**0.35**	**J**	0.40	0.11	ppb v/v			09/08/20 00:42	1.52
Chloroform	ND		0.40	0.035	ppb v/v			09/08/20 00:42	1.52
cis-1,2-Dichloroethene	ND		0.40	0.050	ppb v/v			09/08/20 00:42	1.52
Dichlorodifluoromethane	**0.42**		0.40	0.070	ppb v/v			09/08/20 00:42	1.52
1,1-Dichloroethane	ND		0.40	0.035	ppb v/v			09/08/20 00:42	1.52
1,2-Dichloroethane	ND		0.40	0.050	ppb v/v			09/08/20 00:42	1.52
1,1-Dichloroethene	ND		0.40	0.040	ppb v/v			09/08/20 00:42	1.52
Ethylbenzene	ND		0.40	0.065	ppb v/v			09/08/20 00:42	1.52
Methylene Chloride	**3.6**		2.0	2.0	ppb v/v			09/08/20 00:42	1.52
Methyl tert-butyl ether	ND		2.0	0.26	ppb v/v			09/08/20 00:42	1.52
Naphthalene	ND		0.20	0.20	ppb v/v			09/08/20 00:42	1.52
Tetrachloroethene	ND		0.40	0.035	ppb v/v			09/08/20 00:42	1.52
Toluene	**0.49**	**J**	0.60	0.39	ppb v/v			09/08/20 00:42	1.52
trans-1,2-Dichloroethene	ND		0.40	0.035	ppb v/v			09/08/20 00:42	1.52
1,2,4-Trichlorobenzene	ND		0.40	0.32	ppb v/v			09/08/20 00:42	1.52
1,1,1-Trichloroethane	ND		0.40	0.19	ppb v/v			09/08/20 00:42	1.52
1,1,2-Trichloroethane	ND		0.40	0.035	ppb v/v			09/08/20 00:42	1.52
Trichloroethene	ND		0.20	0.030	ppb v/v			09/08/20 00:42	1.52
1,2,3-Trimethylbenzene	ND		0.40	0.18	ppb v/v			09/08/20 00:42	1.52
1,2,4-Trimethylbenzene	ND		0.40	0.10	ppb v/v			09/08/20 00:42	1.52
1,3,5-Trimethylbenzene	ND		0.40	0.11	ppb v/v			09/08/20 00:42	1.52
Vinyl chloride	ND		0.20	0.13	ppb v/v			09/08/20 00:42	1.52
Xylenes, Total	**0.15**	**J**	0.80	0.12	ppb v/v			09/08/20 00:42	1.52

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.43**	**J**	1.3	0.13	ug/m3			09/08/20 00:42	1.52
Carbon tetrachloride	**0.30**	**J**	2.5	0.22	ug/m3			09/08/20 00:42	1.52
Chlorodifluoromethane	**1.2**	**J**	1.4	0.39	ug/m3			09/08/20 00:42	1.52
Chloroform	ND		2.0	0.17	ug/m3			09/08/20 00:42	1.52
cis-1,2-Dichloroethene	ND		1.6	0.20	ug/m3			09/08/20 00:42	1.52
Dichlorodifluoromethane	**2.1**		2.0	0.35	ug/m3			09/08/20 00:42	1.52
1,1-Dichloroethane	ND		1.6	0.14	ug/m3			09/08/20 00:42	1.52
1,2-Dichloroethane	ND		1.6	0.20	ug/m3			09/08/20 00:42	1.52
1,1-Dichloroethene	ND		1.6	0.16	ug/m3			09/08/20 00:42	1.52
Ethylbenzene	ND		1.7	0.28	ug/m3			09/08/20 00:42	1.52
Methylene Chloride	**12**		6.9	6.8	ug/m3			09/08/20 00:42	1.52
Methyl tert-butyl ether	ND		7.2	0.94	ug/m3			09/08/20 00:42	1.52
Naphthalene	ND		1.0	1.0	ug/m3			09/08/20 00:42	1.52
Tetrachloroethene	ND		2.7	0.24	ug/m3			09/08/20 00:42	1.52
Toluene	**1.8**	**J**	2.3	1.5	ug/m3			09/08/20 00:42	1.52
trans-1,2-Dichloroethene	ND		1.6	0.14	ug/m3			09/08/20 00:42	1.52
1,2,4-Trichlorobenzene	ND		3.0	2.4	ug/m3			09/08/20 00:42	1.52
1,1,1-Trichloroethane	ND		2.2	1.0	ug/m3			09/08/20 00:42	1.52
1,1,2-Trichloroethane	ND		2.2	0.19	ug/m3			09/08/20 00:42	1.52
Trichloroethene	ND		1.1	0.16	ug/m3			09/08/20 00:42	1.52
1,2,3-Trimethylbenzene	ND		2.0	0.88	ug/m3			09/08/20 00:42	1.52
1,2,4-Trimethylbenzene	ND		2.0	0.49	ug/m3			09/08/20 00:42	1.52

Client Sample ID: IA-BCK-4-29
Lab Sample ID: 140-20175-41
Date Collected: 08/25/20 15:57
Matrix: Air
Date Received: 08/27/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		2.0	0.54	ug/m3			09/08/20 00:42	1.52
Vinyl chloride	ND		0.51	0.33	ug/m3			09/08/20 00:42	1.52
Xylenes, Total	**0.65**	**J**	3.5	0.52	ug/m3			09/08/20 00:42	1.52

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*60 - 140*		*09/08/20 00:42*	*1.52*

Default Detection Limits

Client: Tetra Tech, Inc.
Project/Site: Middle River - MRC

Job ID: 140-20175-1

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	RL	MDL	Units
1,1,1-Trichloroethane	0.080	0.037	ppb v/v
1,1,1-Trichloroethane	0.44	0.20	ug/m3
1,1,2-Trichloroethane	0.080	0.0070	ppb v/v
1,1,2-Trichloroethane	0.44	0.038	ug/m3
1,1-Dichloroethane	0.080	0.0070	ppb v/v
1,1-Dichloroethane	0.32	0.028	ug/m3
1,1-Dichloroethene	0.080	0.0080	ppb v/v
1,1-Dichloroethene	0.32	0.032	ug/m3
1,2,3-Trimethylbenzene	0.080	0.036	ppb v/v
1,2,3-Trimethylbenzene	0.39	0.18	ug/m3
1,2,4-Trichlorobenzene	0.080	0.064	ppb v/v
1,2,4-Trichlorobenzene	0.59	0.47	ug/m3
1,2,4-Trimethylbenzene	0.080	0.020	ppb v/v
1,2,4-Trimethylbenzene	0.39	0.098	ug/m3
1,2-Dichloroethane	0.080	0.010	ppb v/v
1,2-Dichloroethane	0.32	0.040	ug/m3
1,3,5-Trimethylbenzene	0.080	0.022	ppb v/v
1,3,5-Trimethylbenzene	0.39	0.11	ug/m3
Benzene	0.080	0.0080	ppb v/v
Benzene	0.26	0.026	ug/m3
Carbon tetrachloride	0.080	0.0070	ppb v/v
Carbon tetrachloride	0.50	0.044	ug/m3
Chlorodifluoromethane	0.080	0.022	ppb v/v
Chlorodifluoromethane	0.28	0.078	ug/m3
Chloroform	0.080	0.0070	ppb v/v
Chloroform	0.39	0.034	ug/m3
cis-1,2-Dichloroethene	0.080	0.010	ppb v/v
cis-1,2-Dichloroethene	0.32	0.040	ug/m3
Dichlorodifluoromethane	0.080	0.014	ppb v/v
Dichlorodifluoromethane	0.40	0.069	ug/m3
Ethylbenzene	0.080	0.013	ppb v/v
Ethylbenzene	0.35	0.056	ug/m3
Methyl tert-butyl ether	0.40	0.052	ppb v/v
Methyl tert-butyl ether	1.4	0.19	ug/m3
Methylene Chloride	0.40	0.39	ppb v/v
Methylene Chloride	1.4	1.4	ug/m3
Naphthalene	0.040	0.040	ppb v/v
Naphthalene	0.21	0.21	ug/m3
Tetrachloroethene	0.080	0.0070	ppb v/v
Tetrachloroethene	0.54	0.047	ug/m3
Toluene	0.12	0.078	ppb v/v
Toluene	0.45	0.29	ug/m3
trans-1,2-Dichloroethene	0.080	0.0070	ppb v/v
trans-1,2-Dichloroethene	0.32	0.028	ug/m3
Trichloroethene	0.040	0.0060	ppb v/v
Trichloroethene	0.21	0.032	ug/m3
Vinyl chloride	0.040	0.026	ppb v/v
Vinyl chloride	0.10	0.066	ug/m3
Xylenes, Total	0.16	0.024	ppb v/v
Xylenes, Total	0.69	0.10	ug/m3

Surrogate Summary

Client: Tetra Tech, Inc.
Project/Site: Middle River - MRC

Job ID: 140-20175-1

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Matrix: Air **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	BFB (60-140)							
140-20175-1	SV-001-C-29	91							
140-20175-2	SV-004-C-29	97							
140-20175-3	SV-102-C-29	112							
140-20175-3 - DL	SV-102-C-29	101							
140-20175-4	SV-113-C-29	95							
140-20175-5	SV-088-C-29	85							
140-20175-6	SV-DUP1-C-29	108							
140-20175-6 - DL	SV-DUP1-C-29	98							
140-20175-7	SV-142-C-29	96							
140-20175-8	SV-155-C-29	84							
140-20175-9	SV-133-C-29	87							
140-20175-10	SV-153-C-29	96							
140-20175-11	SV-DUP2-C-29	99							
140-20175-12	SV-060-C-29	102							
140-20175-13	SV-150-C-29	115							
140-20175-14	SV-152-C-29	100							
140-20175-15	SV-141-C-29	101							
140-20175-16	SV-149-C-29	103							
140-20175-17	SV-126-C-29	101							
140-20175-18	IA-001-C-29	95							
140-20175-19	IA-004-C-29	83							
140-20175-20	IA-102-C-29	78							
140-20175-21	IA-113-C-29	84							
140-20175-22	IA-088-C-29	91							
140-20175-23	IA-142-C-29	84							
140-20175-24	IA-155-C-29	96							
140-20175-25	IA-133-C-29	90							
140-20175-26	IA-153-C-29	89							
140-20175-27	IA-DUP1-C-29	95							
140-20175-28	IA-060-C-29	99							
140-20175-29	IA-152-C-29	106							
140-20175-30	IA-150-C-29	87							
140-20175-31	IA-145-C-29	91							
140-20175-32	IA-146-C-29	93							
140-20175-33	IA-144-C-29	96							
140-20175-34	IA-141-C-29	103							
140-20175-35	IA-149-C-29	101							
140-20175-36	IA-DUP2-C-29	99							
140-20175-37	IA-126-C-29	98							
140-20175-38	IA-BCK-1-29	101							
140-20175-39	IA-BCK-2-29	101							
140-20175-40	IA-BCK-3-29	100							
140-20175-41	IA-BCK-4-29	101							
LCS 140-42399/1002	Lab Control Sample	111							
LCS 140-42409/1002	Lab Control Sample	108							
LCS 140-42482/1003	Lab Control Sample	111							
LCS 140-42498/1009	Lab Control Sample	112							
LCS 140-42500/1002	Lab Control Sample	102							
LCS 140-42503/1002	Lab Control Sample	104							

Surrogate Summary

Client: Tetra Tech, Inc. Job ID: 140-20175-1
Project/Site: Middle River - MRC

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Matrix: Air **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	BFB (60-140)							
MB 140-42399/4	Method Blank	78							
MB 140-42409/8	Method Blank	99							
MB 140-42482/5	Method Blank	90							
MB 140-42498/4	Method Blank	75							
MB 140-42500/4	Method Blank	97							
MB 140-42503/5	Method Blank	98							

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Lab Sample ID: MB 140-42399/4
Matrix: Air
Analysis Batch: 42399

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.080	0.0080	ppb v/v			09/03/20 12:59	1
Carbon tetrachloride	ND		0.080	0.0070	ppb v/v			09/03/20 12:59	1
Chlorodifluoromethane	ND		0.080	0.022	ppb v/v			09/03/20 12:59	1
Chloroform	ND		0.080	0.0070	ppb v/v			09/03/20 12:59	1
cis-1,2-Dichloroethene	ND		0.080	0.010	ppb v/v			09/03/20 12:59	1
Dichlorodifluoromethane	ND		0.080	0.014	ppb v/v			09/03/20 12:59	1
1,1-Dichloroethane	ND		0.080	0.0070	ppb v/v			09/03/20 12:59	1
1,2-Dichloroethane	ND		0.080	0.010	ppb v/v			09/03/20 12:59	1
1,1-Dichloroethene	ND		0.080	0.0080	ppb v/v			09/03/20 12:59	1
Ethylbenzene	ND		0.080	0.013	ppb v/v			09/03/20 12:59	1
Methylene Chloride	ND		0.40	0.39	ppb v/v			09/03/20 12:59	1
Methyl tert-butyl ether	ND		0.40	0.052	ppb v/v			09/03/20 12:59	1
Naphthalene	ND		0.040	0.040	ppb v/v			09/03/20 12:59	1
Tetrachloroethene	ND		0.080	0.0070	ppb v/v			09/03/20 12:59	1
Toluene	ND		0.12	0.078	ppb v/v			09/03/20 12:59	1
trans-1,2-Dichloroethene	ND		0.080	0.0070	ppb v/v			09/03/20 12:59	1
1,2,4-Trichlorobenzene	ND		0.080	0.064	ppb v/v			09/03/20 12:59	1
1,1,1-Trichloroethane	ND		0.080	0.037	ppb v/v			09/03/20 12:59	1
1,1,2-Trichloroethane	ND		0.080	0.0070	ppb v/v			09/03/20 12:59	1
Trichloroethene	ND		0.040	0.0060	ppb v/v			09/03/20 12:59	1
1,2,3-Trimethylbenzene	ND		0.080	0.036	ppb v/v			09/03/20 12:59	1
1,2,4-Trimethylbenzene	ND		0.080	0.020	ppb v/v			09/03/20 12:59	1
1,3,5-Trimethylbenzene	ND		0.080	0.022	ppb v/v			09/03/20 12:59	1
Vinyl chloride	ND		0.040	0.026	ppb v/v			09/03/20 12:59	1
Xylenes, Total	ND		0.16	0.024	ppb v/v			09/03/20 12:59	1

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.26	0.026	ug/m3			09/03/20 12:59	1
Carbon tetrachloride	ND		0.50	0.044	ug/m3			09/03/20 12:59	1
Chlorodifluoromethane	ND		0.28	0.078	ug/m3			09/03/20 12:59	1
Chloroform	ND		0.39	0.034	ug/m3			09/03/20 12:59	1
cis-1,2-Dichloroethene	ND		0.32	0.040	ug/m3			09/03/20 12:59	1
Dichlorodifluoromethane	ND		0.40	0.069	ug/m3			09/03/20 12:59	1
1,1-Dichloroethane	ND		0.32	0.028	ug/m3			09/03/20 12:59	1
1,2-Dichloroethane	ND		0.32	0.040	ug/m3			09/03/20 12:59	1
1,1-Dichloroethene	ND		0.32	0.032	ug/m3			09/03/20 12:59	1
Ethylbenzene	ND		0.35	0.056	ug/m3			09/03/20 12:59	1
Methylene Chloride	ND		1.4	1.4	ug/m3			09/03/20 12:59	1
Methyl tert-butyl ether	ND		1.4	0.19	ug/m3			09/03/20 12:59	1
Naphthalene	ND		0.21	0.21	ug/m3			09/03/20 12:59	1
Tetrachloroethene	ND		0.54	0.047	ug/m3			09/03/20 12:59	1
Toluene	ND		0.45	0.29	ug/m3			09/03/20 12:59	1
trans-1,2-Dichloroethene	ND		0.32	0.028	ug/m3			09/03/20 12:59	1
1,2,4-Trichlorobenzene	ND		0.59	0.47	ug/m3			09/03/20 12:59	1
1,1,1-Trichloroethane	ND		0.44	0.20	ug/m3			09/03/20 12:59	1
1,1,2-Trichloroethane	ND		0.44	0.038	ug/m3			09/03/20 12:59	1
Trichloroethene	ND		0.21	0.032	ug/m3			09/03/20 12:59	1
1,2,3-Trimethylbenzene	ND		0.39	0.18	ug/m3			09/03/20 12:59	1

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Lab Sample ID: MB 140-42399/4
Matrix: Air
Analysis Batch: 42399

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.39	0.098	ug/m3			09/03/20 12:59	1
1,3,5-Trimethylbenzene	ND		0.39	0.11	ug/m3			09/03/20 12:59	1
Vinyl chloride	ND		0.10	0.066	ug/m3			09/03/20 12:59	1
Xylenes, Total	ND		0.69	0.10	ug/m3			09/03/20 12:59	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*78*		*60 - 140*		*09/03/20 12:59*	*1*

Lab Sample ID: LCS 140-42399/1002
Matrix: Air
Analysis Batch: 42399

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	1.60	1.56		ppb v/v		97	70 - 130
Carbon tetrachloride	1.60	1.92		ppb v/v		120	70 - 130
Chlorodifluoromethane	1.60	1.57		ppb v/v		98	60 - 140
Chloroform	1.60	1.56		ppb v/v		98	70 - 130
cis-1,2-Dichloroethene	1.60	1.35		ppb v/v		84	70 - 130
Dichlorodifluoromethane	1.60	1.66		ppb v/v		104	60 - 140
1,1-Dichloroethane	1.60	1.49		ppb v/v		93	70 - 130
1,2-Dichloroethane	1.60	1.53		ppb v/v		96	70 - 130
1,1-Dichloroethene	1.60	1.34		ppb v/v		84	70 - 130
Ethylbenzene	1.60	1.44		ppb v/v		90	70 - 130
Methylene Chloride	1.60	1.62		ppb v/v		101	70 - 130
Methyl tert-butyl ether	1.60	1.32		ppb v/v		83	60 - 140
Naphthalene	1.60	1.34		ppb v/v		83	60 - 140
Tetrachloroethene	1.60	1.46		ppb v/v		92	70 - 130
Toluene	1.60	1.50		ppb v/v		94	70 - 130
trans-1,2-Dichloroethene	1.60	1.49		ppb v/v		93	70 - 130
1,2,4-Trichlorobenzene	1.60	1.41		ppb v/v		88	60 - 140
1,1,1-Trichloroethane	1.60	1.53		ppb v/v		96	70 - 130
1,1,2-Trichloroethane	1.60	1.56		ppb v/v		97	70 - 130
Trichloroethene	1.60	1.48		ppb v/v		93	70 - 130
1,2,3-Trimethylbenzene	1.60	1.83		ppb v/v		114	70 - 130
1,2,4-Trimethylbenzene	1.60	1.75		ppb v/v		109	70 - 130
1,3,5-Trimethylbenzene	1.60	1.44		ppb v/v		90	70 - 130
Vinyl chloride	1.60	1.36		ppb v/v		85	70 - 130
Xylenes, Total	4.80	4.57		ppb v/v		95	70 - 130

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	5.1	4.97		ug/m3		97	70 - 130
Carbon tetrachloride	10	12.1		ug/m3		120	70 - 130
Chlorodifluoromethane	5.7	5.57		ug/m3		98	60 - 140
Chloroform	7.8	7.62		ug/m3		98	70 - 130
cis-1,2-Dichloroethene	6.3	5.35		ug/m3		84	70 - 130
Dichlorodifluoromethane	7.9	8.22		ug/m3		104	60 - 140
1,1-Dichloroethane	6.5	6.04		ug/m3		93	70 - 130

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Lab Sample ID: LCS 140-42399/1002
Matrix: Air
Analysis Batch: 42399

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloroethane	6.5	6.21		ug/m3		96	70 - 130
1,1-Dichloroethene	6.3	5.30		ug/m3		84	70 - 130
Ethylbenzene	6.9	6.27		ug/m3		90	70 - 130
Methylene Chloride	5.6	5.63		ug/m3		101	70 - 130
Methyl tert-butyl ether	5.8	4.76		ug/m3		83	60 - 140
Naphthalene	8.4	7.00		ug/m3		83	60 - 140
Tetrachloroethene	11	9.93		ug/m3		92	70 - 130
Toluene	6.0	5.67		ug/m3		94	70 - 130
trans-1,2-Dichloroethene	6.3	5.92		ug/m3		93	70 - 130
1,2,4-Trichlorobenzene	12	10.5		ug/m3		88	60 - 140
1,1,1-Trichloroethane	8.7	8.37		ug/m3		96	70 - 130
1,1,2-Trichloroethane	8.7	8.49		ug/m3		97	70 - 130
Trichloroethene	8.6	7.97		ug/m3		93	70 - 130
1,2,3-Trimethylbenzene	7.9	9.00		ug/m3		114	70 - 130
1,2,4-Trimethylbenzene	7.9	8.58		ug/m3		109	70 - 130
1,3,5-Trimethylbenzene	7.9	7.08		ug/m3		90	70 - 130
Vinyl chloride	4.1	3.48		ug/m3		85	70 - 130
Xylenes, Total	21	19.8		ug/m3		95	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*111*		*60 - 140*

Lab Sample ID: MB 140-42409/8
Matrix: Air
Analysis Batch: 42409

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.080	0.0080	ppb v/v			09/03/20 11:52	1
Carbon tetrachloride	ND		0.080	0.0070	ppb v/v			09/03/20 11:52	1
Chlorodifluoromethane	ND		0.080	0.022	ppb v/v			09/03/20 11:52	1
Chloroform	ND		0.080	0.0070	ppb v/v			09/03/20 11:52	1
cis-1,2-Dichloroethene	ND		0.080	0.010	ppb v/v			09/03/20 11:52	1
Dichlorodifluoromethane	ND		0.080	0.014	ppb v/v			09/03/20 11:52	1
1,1-Dichloroethane	ND		0.080	0.0070	ppb v/v			09/03/20 11:52	1
1,2-Dichloroethane	ND		0.080	0.010	ppb v/v			09/03/20 11:52	1
1,1-Dichloroethene	ND		0.080	0.0080	ppb v/v			09/03/20 11:52	1
Ethylbenzene	ND		0.080	0.013	ppb v/v			09/03/20 11:52	1
Methylene Chloride	ND		0.40	0.39	ppb v/v			09/03/20 11:52	1
Methyl tert-butyl ether	ND		0.40	0.052	ppb v/v			09/03/20 11:52	1
Naphthalene	ND		0.040	0.040	ppb v/v			09/03/20 11:52	1
Tetrachloroethene	ND		0.080	0.0070	ppb v/v			09/03/20 11:52	1
Toluene	ND		0.12	0.078	ppb v/v			09/03/20 11:52	1
trans-1,2-Dichloroethene	ND		0.080	0.0070	ppb v/v			09/03/20 11:52	1
1,2,4-Trichlorobenzene	ND		0.080	0.064	ppb v/v			09/03/20 11:52	1
1,1,1-Trichloroethane	ND		0.080	0.037	ppb v/v			09/03/20 11:52	1
1,1,2-Trichloroethane	ND		0.080	0.0070	ppb v/v			09/03/20 11:52	1
Trichloroethene	ND		0.040	0.0060	ppb v/v			09/03/20 11:52	1

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Lab Sample ID: MB 140-42409/8
Matrix: Air
Analysis Batch: 42409

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trimethylbenzene	ND		0.080	0.036	ppb v/v			09/03/20 11:52	1
1,2,4-Trimethylbenzene	ND		0.080	0.020	ppb v/v			09/03/20 11:52	1
1,3,5-Trimethylbenzene	ND		0.080	0.022	ppb v/v			09/03/20 11:52	1
Vinyl chloride	ND		0.040	0.026	ppb v/v			09/03/20 11:52	1
Xylenes, Total	ND		0.16	0.024	ppb v/v			09/03/20 11:52	1

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.26	0.026	ug/m3			09/03/20 11:52	1
Carbon tetrachloride	ND		0.50	0.044	ug/m3			09/03/20 11:52	1
Chlorodifluoromethane	ND		0.28	0.078	ug/m3			09/03/20 11:52	1
Chloroform	ND		0.39	0.034	ug/m3			09/03/20 11:52	1
cis-1,2-Dichloroethene	ND		0.32	0.040	ug/m3			09/03/20 11:52	1
Dichlorodifluoromethane	ND		0.40	0.069	ug/m3			09/03/20 11:52	1
1,1-Dichloroethane	ND		0.32	0.028	ug/m3			09/03/20 11:52	1
1,2-Dichloroethane	ND		0.32	0.040	ug/m3			09/03/20 11:52	1
1,1-Dichloroethene	ND		0.32	0.032	ug/m3			09/03/20 11:52	1
Ethylbenzene	ND		0.35	0.056	ug/m3			09/03/20 11:52	1
Methylene Chloride	ND		1.4	1.4	ug/m3			09/03/20 11:52	1
Methyl tert-butyl ether	ND		1.4	0.19	ug/m3			09/03/20 11:52	1
Naphthalene	ND		0.21	0.21	ug/m3			09/03/20 11:52	1
Tetrachloroethene	ND		0.54	0.047	ug/m3			09/03/20 11:52	1
Toluene	ND		0.45	0.29	ug/m3			09/03/20 11:52	1
trans-1,2-Dichloroethene	ND		0.32	0.028	ug/m3			09/03/20 11:52	1
1,2,4-Trichlorobenzene	ND		0.59	0.47	ug/m3			09/03/20 11:52	1
1,1,1-Trichloroethane	ND		0.44	0.20	ug/m3			09/03/20 11:52	1
1,1,2-Trichloroethane	ND		0.44	0.038	ug/m3			09/03/20 11:52	1
Trichloroethene	ND		0.21	0.032	ug/m3			09/03/20 11:52	1
1,2,3-Trimethylbenzene	ND		0.39	0.18	ug/m3			09/03/20 11:52	1
1,2,4-Trimethylbenzene	ND		0.39	0.098	ug/m3			09/03/20 11:52	1
1,3,5-Trimethylbenzene	ND		0.39	0.11	ug/m3			09/03/20 11:52	1
Vinyl chloride	ND		0.10	0.066	ug/m3			09/03/20 11:52	1
Xylenes, Total	ND		0.69	0.10	ug/m3			09/03/20 11:52	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*60 - 140*		*09/03/20 11:52*	*1*

Lab Sample ID: LCS 140-42409/1002
Matrix: Air
Analysis Batch: 42409

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	1.60	1.56		ppb v/v		97	70 - 130
Carbon tetrachloride	1.60	1.64		ppb v/v		103	70 - 130
Chlorodifluoromethane	1.60	1.48		ppb v/v		92	60 - 140
Chloroform	1.60	1.43		ppb v/v		89	70 - 130
cis-1,2-Dichloroethene	1.60	1.51		ppb v/v		94	70 - 130
Dichlorodifluoromethane	1.60	1.33		ppb v/v		83	60 - 140

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Lab Sample ID: LCS 140-42409/1002
Matrix: Air
Analysis Batch: 42409

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	1.60	1.52		ppb v/v		95	70 - 130
1,2-Dichloroethane	1.60	1.56		ppb v/v		98	70 - 130
1,1-Dichloroethene	1.60	1.31		ppb v/v		82	70 - 130
Ethylbenzene	1.60	1.48		ppb v/v		92	70 - 130
Methylene Chloride	1.60	1.45		ppb v/v		91	70 - 130
Methyl tert-butyl ether	1.60	1.51		ppb v/v		94	60 - 140
Naphthalene	1.60	1.34		ppb v/v		84	60 - 140
Tetrachloroethene	1.60	1.27		ppb v/v		80	70 - 130
Toluene	1.60	1.45		ppb v/v		90	70 - 130
trans-1,2-Dichloroethene	1.60	1.38		ppb v/v		86	70 - 130
1,2,4-Trichlorobenzene	1.60	1.28		ppb v/v		80	60 - 140
1,1,1-Trichloroethane	1.60	1.41		ppb v/v		88	70 - 130
1,1,2-Trichloroethane	1.60	1.42		ppb v/v		89	70 - 130
Trichloroethene	1.60	1.33		ppb v/v		83	70 - 130
1,2,3-Trimethylbenzene	1.60	1.27		ppb v/v		79	70 - 130
1,2,4-Trimethylbenzene	1.60	1.45		ppb v/v		91	70 - 130
1,3,5-Trimethylbenzene	1.60	1.59		ppb v/v		100	70 - 130
Vinyl chloride	1.60	1.51		ppb v/v		94	70 - 130
Xylenes, Total	4.80	4.37		ppb v/v		91	70 - 130

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	5.1	4.98		ug/m3		97	70 - 130
Carbon tetrachloride	10	10.3		ug/m3		103	70 - 130
Chlorodifluoromethane	5.7	5.22		ug/m3		92	60 - 140
Chloroform	7.8	6.99		ug/m3		89	70 - 130
cis-1,2-Dichloroethene	6.3	5.97		ug/m3		94	70 - 130
Dichlorodifluoromethane	7.9	6.57		ug/m3		83	60 - 140
1,1-Dichloroethane	6.5	6.15		ug/m3		95	70 - 130
1,2-Dichloroethane	6.5	6.33		ug/m3		98	70 - 130
1,1-Dichloroethene	6.3	5.21		ug/m3		82	70 - 130
Ethylbenzene	6.9	6.42		ug/m3		92	70 - 130
Methylene Chloride	5.6	5.04		ug/m3		91	70 - 130
Methyl tert-butyl ether	5.8	5.43		ug/m3		94	60 - 140
Naphthalene	8.4	7.04		ug/m3		84	60 - 140
Tetrachloroethene	11	8.65		ug/m3		80	70 - 130
Toluene	6.0	5.46		ug/m3		90	70 - 130
trans-1,2-Dichloroethene	6.3	5.48		ug/m3		86	70 - 130
1,2,4-Trichlorobenzene	12	9.54		ug/m3		80	60 - 140
1,1,1-Trichloroethane	8.7	7.70		ug/m3		88	70 - 130
1,1,2-Trichloroethane	8.7	7.75		ug/m3		89	70 - 130
Trichloroethene	8.6	7.13		ug/m3		83	70 - 130
1,2,3-Trimethylbenzene	7.9	6.23		ug/m3		79	70 - 130
1,2,4-Trimethylbenzene	7.9	7.14		ug/m3		91	70 - 130
1,3,5-Trimethylbenzene	7.9	7.83		ug/m3		100	70 - 130
Vinyl chloride	4.1	3.86		ug/m3		94	70 - 130
Xylenes, Total	21	19.0		ug/m3		91	70 - 130

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Lab Sample ID: LCS 140-42409/1002
Matrix: Air
Analysis Batch: 42409

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	*108*		*60 - 140*

Lab Sample ID: MB 140-42482/5
Matrix: Air
Analysis Batch: 42482

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.080	0.0080	ppb v/v			09/05/20 15:25	1
Carbon tetrachloride	ND		0.080	0.0070	ppb v/v			09/05/20 15:25	1
Chlorodifluoromethane	ND		0.080	0.022	ppb v/v			09/05/20 15:25	1
Chloroform	ND		0.080	0.0070	ppb v/v			09/05/20 15:25	1
cis-1,2-Dichloroethene	ND		0.080	0.010	ppb v/v			09/05/20 15:25	1
Dichlorodifluoromethane	ND		0.080	0.014	ppb v/v			09/05/20 15:25	1
1,1-Dichloroethane	ND		0.080	0.0070	ppb v/v			09/05/20 15:25	1
1,2-Dichloroethane	ND		0.080	0.010	ppb v/v			09/05/20 15:25	1
1,1-Dichloroethene	ND		0.080	0.0080	ppb v/v			09/05/20 15:25	1
Ethylbenzene	ND		0.080	0.013	ppb v/v			09/05/20 15:25	1
Methylene Chloride	ND		0.40	0.39	ppb v/v			09/05/20 15:25	1
Methyl tert-butyl ether	ND		0.40	0.052	ppb v/v			09/05/20 15:25	1
Naphthalene	ND		0.040	0.040	ppb v/v			09/05/20 15:25	1
Tetrachloroethene	ND		0.080	0.0070	ppb v/v			09/05/20 15:25	1
Toluene	ND		0.12	0.078	ppb v/v			09/05/20 15:25	1
trans-1,2-Dichloroethene	ND		0.080	0.0070	ppb v/v			09/05/20 15:25	1
1,2,4-Trichlorobenzene	ND		0.080	0.064	ppb v/v			09/05/20 15:25	1
1,1,1-Trichloroethane	ND		0.080	0.037	ppb v/v			09/05/20 15:25	1
1,1,2-Trichloroethane	ND		0.080	0.0070	ppb v/v			09/05/20 15:25	1
Trichloroethene	ND		0.040	0.0060	ppb v/v			09/05/20 15:25	1
1,2,3-Trimethylbenzene	ND		0.080	0.036	ppb v/v			09/05/20 15:25	1
1,2,4-Trimethylbenzene	ND		0.080	0.020	ppb v/v			09/05/20 15:25	1
1,3,5-Trimethylbenzene	ND		0.080	0.022	ppb v/v			09/05/20 15:25	1
Vinyl chloride	ND		0.040	0.026	ppb v/v			09/05/20 15:25	1
Xylenes, Total	ND		0.16	0.024	ppb v/v			09/05/20 15:25	1

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.26	0.026	ug/m3			09/05/20 15:25	1
Carbon tetrachloride	ND		0.50	0.044	ug/m3			09/05/20 15:25	1
Chlorodifluoromethane	ND		0.28	0.078	ug/m3			09/05/20 15:25	1
Chloroform	ND		0.39	0.034	ug/m3			09/05/20 15:25	1
cis-1,2-Dichloroethene	ND		0.32	0.040	ug/m3			09/05/20 15:25	1
Dichlorodifluoromethane	ND		0.40	0.069	ug/m3			09/05/20 15:25	1
1,1-Dichloroethane	ND		0.32	0.028	ug/m3			09/05/20 15:25	1
1,2-Dichloroethane	ND		0.32	0.040	ug/m3			09/05/20 15:25	1
1,1-Dichloroethene	ND		0.32	0.032	ug/m3			09/05/20 15:25	1
Ethylbenzene	ND		0.35	0.056	ug/m3			09/05/20 15:25	1
Methylene Chloride	ND		1.4	1.4	ug/m3			09/05/20 15:25	1
Methyl tert-butyl ether	ND		1.4	0.19	ug/m3			09/05/20 15:25	1
Naphthalene	ND		0.21	0.21	ug/m3			09/05/20 15:25	1

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Lab Sample ID: MB 140-42482/5
Matrix: Air
Analysis Batch: 42482

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		0.54	0.047	ug/m3			09/05/20 15:25	1
Toluene	ND		0.45	0.29	ug/m3			09/05/20 15:25	1
trans-1,2-Dichloroethene	ND		0.32	0.028	ug/m3			09/05/20 15:25	1
1,2,4-Trichlorobenzene	ND		0.59	0.47	ug/m3			09/05/20 15:25	1
1,1,1-Trichloroethane	ND		0.44	0.20	ug/m3			09/05/20 15:25	1
1,1,2-Trichloroethane	ND		0.44	0.038	ug/m3			09/05/20 15:25	1
Trichloroethene	ND		0.21	0.032	ug/m3			09/05/20 15:25	1
1,2,3-Trimethylbenzene	ND		0.39	0.18	ug/m3			09/05/20 15:25	1
1,2,4-Trimethylbenzene	ND		0.39	0.098	ug/m3			09/05/20 15:25	1
1,3,5-Trimethylbenzene	ND		0.39	0.11	ug/m3			09/05/20 15:25	1
Vinyl chloride	ND		0.10	0.066	ug/m3			09/05/20 15:25	1
Xylenes, Total	ND		0.69	0.10	ug/m3			09/05/20 15:25	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*60 - 140*		*09/05/20 15:25*	*1*

Lab Sample ID: LCS 140-42482/1003
Matrix: Air
Analysis Batch: 42482

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	1.60	1.44		ppb v/v		90	70 - 130
Carbon tetrachloride	1.60	1.90		ppb v/v		119	70 - 130
Chlorodifluoromethane	1.60	1.56		ppb v/v		97	60 - 140
Chloroform	1.60	1.52		ppb v/v		95	70 - 130
cis-1,2-Dichloroethene	1.60	1.21		ppb v/v		76	70 - 130
Dichlorodifluoromethane	1.60	1.64		ppb v/v		102	60 - 140
1,1-Dichloroethane	1.60	1.41		ppb v/v		88	70 - 130
1,2-Dichloroethane	1.60	1.42		ppb v/v		89	70 - 130
1,1-Dichloroethene	1.60	1.16		ppb v/v		73	70 - 130
Ethylbenzene	1.60	1.28		ppb v/v		80	70 - 130
Methylene Chloride	1.60	1.57		ppb v/v		98	70 - 130
Methyl tert-butyl ether	1.60	1.20		ppb v/v		75	60 - 140
Naphthalene	1.60	1.37		ppb v/v		86	60 - 140
Tetrachloroethene	1.60	1.43		ppb v/v		89	70 - 130
Toluene	1.60	1.36		ppb v/v		85	70 - 130
trans-1,2-Dichloroethene	1.60	1.39		ppb v/v		87	70 - 130
1,2,4-Trichlorobenzene	1.60	1.49		ppb v/v		93	60 - 140
1,1,1-Trichloroethane	1.60	1.50		ppb v/v		94	70 - 130
1,1,2-Trichloroethane	1.60	1.51		ppb v/v		94	70 - 130
Trichloroethene	1.60	1.39		ppb v/v		87	70 - 130
1,2,3-Trimethylbenzene	1.60	1.85		ppb v/v		116	70 - 130
1,2,4-Trimethylbenzene	1.60	1.77		ppb v/v		110	70 - 130
1,3,5-Trimethylbenzene	1.60	1.44		ppb v/v		90	70 - 130
Vinyl chloride	1.60	1.28		ppb v/v		80	70 - 130
Xylenes, Total	4.80	4.10		ppb v/v		85	70 - 130

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			5.1	4.59		ug/m3		90	70 - 130		
Carbon tetrachloride			10	11.9		ug/m3		119	70 - 130		
Chlorodifluoromethane			5.7	5.50		ug/m3		97	60 - 140		
Chloroform			7.8	7.41		ug/m3		95	70 - 130		
cis-1,2-Dichloroethene			6.3	4.79		ug/m3		76	70 - 130		
Dichlorodifluoromethane			7.9	8.10		ug/m3		102	60 - 140		
1,1-Dichloroethane			6.5	5.72		ug/m3		88	70 - 130		
1,2-Dichloroethane			6.5	5.74		ug/m3		89	70 - 130		
1,1-Dichloroethene			6.3	4.61		ug/m3		73	70 - 130		
Ethylbenzene			6.9	5.55		ug/m3		80	70 - 130		
Methylene Chloride			5.6	5.47		ug/m3		98	70 - 130		
Methyl tert-butyl ether			5.8	4.33		ug/m3		75	60 - 140		
Naphthalene			8.4	7.21		ug/m3		86	60 - 140		
Tetrachloroethene			11	9.71		ug/m3		89	70 - 130		
Toluene			6.0	5.11		ug/m3		85	70 - 130		
trans-1,2-Dichloroethene			6.3	5.49		ug/m3		87	70 - 130		
1,2,4-Trichlorobenzene			12	11.1		ug/m3		93	60 - 140		
1,1,1-Trichloroethane			8.7	8.20		ug/m3		94	70 - 130		
1,1,2-Trichloroethane			8.7	8.23		ug/m3		94	70 - 130		
Trichloroethene			8.6	7.48		ug/m3		87	70 - 130		
1,2,3-Trimethylbenzene			7.9	9.11		ug/m3		116	70 - 130		
1,2,4-Trimethylbenzene			7.9	8.69		ug/m3		110	70 - 130		
1,3,5-Trimethylbenzene			7.9	7.08		ug/m3		90	70 - 130		
Vinyl chloride			4.1	3.27		ug/m3		80	70 - 130		
Xylenes, Total			21	17.8		ug/m3		85	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*111*		*60 - 140*

Lab Sample ID: MB 140-42498/4
Matrix: Air
Analysis Batch: 42498

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.080	0.0080	ppb v/v			09/06/20 18:36	1
Carbon tetrachloride	ND		0.080	0.0070	ppb v/v			09/06/20 18:36	1
Chlorodifluoromethane	ND		0.080	0.022	ppb v/v			09/06/20 18:36	1
Chloroform	ND		0.080	0.0070	ppb v/v			09/06/20 18:36	1
cis-1,2-Dichloroethene	ND		0.080	0.010	ppb v/v			09/06/20 18:36	1
Dichlorodifluoromethane	ND		0.080	0.014	ppb v/v			09/06/20 18:36	1
1,1-Dichloroethane	ND		0.080	0.0070	ppb v/v			09/06/20 18:36	1
1,2-Dichloroethane	ND		0.080	0.010	ppb v/v			09/06/20 18:36	1
1,1-Dichloroethene	ND		0.080	0.0080	ppb v/v			09/06/20 18:36	1
Ethylbenzene	ND		0.080	0.013	ppb v/v			09/06/20 18:36	1
Methylene Chloride	ND		0.40	0.39	ppb v/v			09/06/20 18:36	1
Methyl tert-butyl ether	ND		0.40	0.052	ppb v/v			09/06/20 18:36	1
Naphthalene	ND		0.040	0.040	ppb v/v			09/06/20 18:36	1
Tetrachloroethene	ND		0.080	0.0070	ppb v/v			09/06/20 18:36	1
Toluene	ND		0.12	0.078	ppb v/v			09/06/20 18:36	1
trans-1,2-Dichloroethene	ND		0.080	0.0070	ppb v/v			09/06/20 18:36	1

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Lab Sample ID: MB 140-42498/4
Matrix: Air
Analysis Batch: 42498

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		0.080	0.064	ppb v/v			09/06/20 18:36	1
1,1,1-Trichloroethane	ND		0.080	0.037	ppb v/v			09/06/20 18:36	1
1,1,2-Trichloroethane	ND		0.080	0.0070	ppb v/v			09/06/20 18:36	1
Trichloroethene	ND		0.040	0.0060	ppb v/v			09/06/20 18:36	1
1,2,3-Trimethylbenzene	ND		0.080	0.036	ppb v/v			09/06/20 18:36	1
1,2,4-Trimethylbenzene	ND		0.080	0.020	ppb v/v			09/06/20 18:36	1
1,3,5-Trimethylbenzene	ND		0.080	0.022	ppb v/v			09/06/20 18:36	1
Vinyl chloride	ND		0.040	0.026	ppb v/v			09/06/20 18:36	1
Xylenes, Total	ND		0.16	0.024	ppb v/v			09/06/20 18:36	1

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.26	0.026	ug/m3			09/06/20 18:36	1
Carbon tetrachloride	ND		0.50	0.044	ug/m3			09/06/20 18:36	1
Chlorodifluoromethane	ND		0.28	0.078	ug/m3			09/06/20 18:36	1
Chloroform	ND		0.39	0.034	ug/m3			09/06/20 18:36	1
cis-1,2-Dichloroethene	ND		0.32	0.040	ug/m3			09/06/20 18:36	1
Dichlorodifluoromethane	ND		0.40	0.069	ug/m3			09/06/20 18:36	1
1,1-Dichloroethane	ND		0.32	0.028	ug/m3			09/06/20 18:36	1
1,2-Dichloroethane	ND		0.32	0.040	ug/m3			09/06/20 18:36	1
1,1-Dichloroethene	ND		0.32	0.032	ug/m3			09/06/20 18:36	1
Ethylbenzene	ND		0.35	0.056	ug/m3			09/06/20 18:36	1
Methylene Chloride	ND		1.4	1.4	ug/m3			09/06/20 18:36	1
Methyl tert-butyl ether	ND		1.4	0.19	ug/m3			09/06/20 18:36	1
Naphthalene	ND		0.21	0.21	ug/m3			09/06/20 18:36	1
Tetrachloroethene	ND		0.54	0.047	ug/m3			09/06/20 18:36	1
Toluene	ND		0.45	0.29	ug/m3			09/06/20 18:36	1
trans-1,2-Dichloroethene	ND		0.32	0.028	ug/m3			09/06/20 18:36	1
1,2,4-Trichlorobenzene	ND		0.59	0.47	ug/m3			09/06/20 18:36	1
1,1,1-Trichloroethane	ND		0.44	0.20	ug/m3			09/06/20 18:36	1
1,1,2-Trichloroethane	ND		0.44	0.038	ug/m3			09/06/20 18:36	1
Trichloroethene	ND		0.21	0.032	ug/m3			09/06/20 18:36	1
1,2,3-Trimethylbenzene	ND		0.39	0.18	ug/m3			09/06/20 18:36	1
1,2,4-Trimethylbenzene	ND		0.39	0.098	ug/m3			09/06/20 18:36	1
1,3,5-Trimethylbenzene	ND		0.39	0.11	ug/m3			09/06/20 18:36	1
Vinyl chloride	ND		0.10	0.066	ug/m3			09/06/20 18:36	1
Xylenes, Total	ND		0.69	0.10	ug/m3			09/06/20 18:36	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*75*		*60 - 140*		*09/06/20 18:36*	*1*

Lab Sample ID: LCS 140-42498/1009
Matrix: Air
Analysis Batch: 42498

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			1.60	1.72		ppb v/v		107	70 - 130		
Carbon tetrachloride			1.60	2.29	*	ppb v/v		143	70 - 130		

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Lab Sample ID: LCS 140-42498/1009
Matrix: Air
Analysis Batch: 42498

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chlorodifluoromethane	1.60	1.72		ppb v/v		108	60 - 140
Chloroform	1.60	1.72		ppb v/v		107	70 - 130
cis-1,2-Dichloroethene	1.60	1.63		ppb v/v		102	70 - 130
Dichlorodifluoromethane	1.60	1.85		ppb v/v		116	60 - 140
1,1-Dichloroethane	1.60	1.70		ppb v/v		106	70 - 130
1,2-Dichloroethane	1.60	1.79		ppb v/v		112	70 - 130
1,1-Dichloroethene	1.60	1.64		ppb v/v		103	70 - 130
Ethylbenzene	1.60	1.69		ppb v/v		106	70 - 130
Methylene Chloride	1.60	1.64		ppb v/v		103	70 - 130
Methyl tert-butyl ether	1.60	1.59		ppb v/v		100	60 - 140
Naphthalene	1.60	2.18		ppb v/v		136	60 - 140
Tetrachloroethene	1.60	1.73		ppb v/v		108	70 - 130
Toluene	1.60	1.74		ppb v/v		109	70 - 130
trans-1,2-Dichloroethene	1.60	1.67		ppb v/v		105	70 - 130
1,2,4-Trichlorobenzene	1.60	2.18		ppb v/v		136	60 - 140
1,1,1-Trichloroethane	1.60	1.68		ppb v/v		105	70 - 130
1,1,2-Trichloroethane	1.60	1.75		ppb v/v		110	70 - 130
Trichloroethene	1.60	1.71		ppb v/v		107	70 - 130
1,2,3-Trimethylbenzene	1.60	1.58		ppb v/v		99	70 - 130
1,2,4-Trimethylbenzene	1.60	2.12	*	ppb v/v		132	70 - 130
1,3,5-Trimethylbenzene	1.60	2.02		ppb v/v		126	70 - 130
Vinyl chloride	1.60	1.66		ppb v/v		104	70 - 130
Xylenes, Total	4.80	5.51		ppb v/v		115	70 - 130

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	5.1	5.48		ug/m3		107	70 - 130
Carbon tetrachloride	10	14.4	*	ug/m3		143	70 - 130
Chlorodifluoromethane	5.7	6.10		ug/m3		108	60 - 140
Chloroform	7.8	8.38		ug/m3		107	70 - 130
cis-1,2-Dichloroethene	6.3	6.46		ug/m3		102	70 - 130
Dichlorodifluoromethane	7.9	9.15		ug/m3		116	60 - 140
1,1-Dichloroethane	6.5	6.87		ug/m3		106	70 - 130
1,2-Dichloroethane	6.5	7.23		ug/m3		112	70 - 130
1,1-Dichloroethene	6.3	6.52		ug/m3		103	70 - 130
Ethylbenzene	6.9	7.33		ug/m3		106	70 - 130
Methylene Chloride	5.6	5.70		ug/m3		103	70 - 130
Methyl tert-butyl ether	5.8	5.75		ug/m3		100	60 - 140
Naphthalene	8.4	11.4		ug/m3		136	60 - 140
Tetrachloroethene	11	11.7		ug/m3		108	70 - 130
Toluene	6.0	6.57		ug/m3		109	70 - 130
trans-1,2-Dichloroethene	6.3	6.64		ug/m3		105	70 - 130
1,2,4-Trichlorobenzene	12	16.2		ug/m3		136	60 - 140
1,1,1-Trichloroethane	8.7	9.16		ug/m3		105	70 - 130
1,1,2-Trichloroethane	8.7	9.58		ug/m3		110	70 - 130
Trichloroethene	8.6	9.21		ug/m3		107	70 - 130
1,2,3-Trimethylbenzene	7.9	7.75		ug/m3		99	70 - 130
1,2,4-Trimethylbenzene	7.9	10.4	*	ug/m3		132	70 - 130

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Lab Sample ID: LCS 140-42498/1009
Matrix: Air
Analysis Batch: 42498

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,3,5-Trimethylbenzene			7.9	9.93		ug/m3		126	70 - 130		
Vinyl chloride			4.1	4.24		ug/m3		104	70 - 130		
Xylenes, Total			21	23.9		ug/m3		115	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*112*		*60 - 140*

Lab Sample ID: MB 140-42500/4
Matrix: Air
Analysis Batch: 42500

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.080	0.0080	ppb v/v			09/07/20 10:21	1
Carbon tetrachloride	ND		0.080	0.0070	ppb v/v			09/07/20 10:21	1
Chlorodifluoromethane	ND		0.080	0.022	ppb v/v			09/07/20 10:21	1
Chloroform	ND		0.080	0.0070	ppb v/v			09/07/20 10:21	1
cis-1,2-Dichloroethene	ND		0.080	0.010	ppb v/v			09/07/20 10:21	1
Dichlorodifluoromethane	ND		0.080	0.014	ppb v/v			09/07/20 10:21	1
1,1-Dichloroethane	ND		0.080	0.0070	ppb v/v			09/07/20 10:21	1
1,2-Dichloroethane	ND		0.080	0.010	ppb v/v			09/07/20 10:21	1
1,1-Dichloroethene	ND		0.080	0.0080	ppb v/v			09/07/20 10:21	1
Ethylbenzene	ND		0.080	0.013	ppb v/v			09/07/20 10:21	1
Methylene Chloride	ND		0.40	0.39	ppb v/v			09/07/20 10:21	1
Methyl tert-butyl ether	ND		0.40	0.052	ppb v/v			09/07/20 10:21	1
Naphthalene	ND		0.040	0.040	ppb v/v			09/07/20 10:21	1
Tetrachloroethene	ND		0.080	0.0070	ppb v/v			09/07/20 10:21	1
Toluene	ND		0.12	0.078	ppb v/v			09/07/20 10:21	1
trans-1,2-Dichloroethene	ND		0.080	0.0070	ppb v/v			09/07/20 10:21	1
1,2,4-Trichlorobenzene	ND		0.080	0.064	ppb v/v			09/07/20 10:21	1
1,1,1-Trichloroethane	ND		0.080	0.037	ppb v/v			09/07/20 10:21	1
1,1,2-Trichloroethane	ND		0.080	0.0070	ppb v/v			09/07/20 10:21	1
Trichloroethene	ND		0.040	0.0060	ppb v/v			09/07/20 10:21	1
1,2,3-Trimethylbenzene	ND		0.080	0.036	ppb v/v			09/07/20 10:21	1
1,2,4-Trimethylbenzene	ND		0.080	0.020	ppb v/v			09/07/20 10:21	1
1,3,5-Trimethylbenzene	ND		0.080	0.022	ppb v/v			09/07/20 10:21	1
Vinyl chloride	ND		0.040	0.026	ppb v/v			09/07/20 10:21	1
Xylenes, Total	ND		0.16	0.024	ppb v/v			09/07/20 10:21	1

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.26	0.026	ug/m3			09/07/20 10:21	1
Carbon tetrachloride	ND		0.50	0.044	ug/m3			09/07/20 10:21	1
Chlorodifluoromethane	ND		0.28	0.078	ug/m3			09/07/20 10:21	1
Chloroform	ND		0.39	0.034	ug/m3			09/07/20 10:21	1
cis-1,2-Dichloroethene	ND		0.32	0.040	ug/m3			09/07/20 10:21	1
Dichlorodifluoromethane	ND		0.40	0.069	ug/m3			09/07/20 10:21	1
1,1-Dichloroethane	ND		0.32	0.028	ug/m3			09/07/20 10:21	1
1,2-Dichloroethane	ND		0.32	0.040	ug/m3			09/07/20 10:21	1

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Lab Sample ID: MB 140-42500/4
Matrix: Air
Analysis Batch: 42500

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		0.32	0.032	ug/m3			09/07/20 10:21	1
Ethylbenzene	ND		0.35	0.056	ug/m3			09/07/20 10:21	1
Methylene Chloride	ND		1.4	1.4	ug/m3			09/07/20 10:21	1
Methyl tert-butyl ether	ND		1.4	0.19	ug/m3			09/07/20 10:21	1
Naphthalene	ND		0.21	0.21	ug/m3			09/07/20 10:21	1
Tetrachloroethene	ND		0.54	0.047	ug/m3			09/07/20 10:21	1
Toluene	ND		0.45	0.29	ug/m3			09/07/20 10:21	1
trans-1,2-Dichloroethene	ND		0.32	0.028	ug/m3			09/07/20 10:21	1
1,2,4-Trichlorobenzene	ND		0.59	0.47	ug/m3			09/07/20 10:21	1
1,1,1-Trichloroethane	ND		0.44	0.20	ug/m3			09/07/20 10:21	1
1,1,2-Trichloroethane	ND		0.44	0.038	ug/m3			09/07/20 10:21	1
Trichloroethene	ND		0.21	0.032	ug/m3			09/07/20 10:21	1
1,2,3-Trimethylbenzene	ND		0.39	0.18	ug/m3			09/07/20 10:21	1
1,2,4-Trimethylbenzene	ND		0.39	0.098	ug/m3			09/07/20 10:21	1
1,3,5-Trimethylbenzene	ND		0.39	0.11	ug/m3			09/07/20 10:21	1
Vinyl chloride	ND		0.10	0.066	ug/m3			09/07/20 10:21	1
Xylenes, Total	ND		0.69	0.10	ug/m3			09/07/20 10:21	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*60 - 140*		*09/07/20 10:21*	*1*

Lab Sample ID: LCS 140-42500/1002
Matrix: Air
Analysis Batch: 42500

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	1.60	1.36		ppb v/v		85	70 - 130
Carbon tetrachloride	1.60	1.37		ppb v/v		86	70 - 130
Chlorodifluoromethane	1.60	1.55		ppb v/v		97	60 - 140
Chloroform	1.60	1.46		ppb v/v		91	70 - 130
cis-1,2-Dichloroethene	1.60	1.47		ppb v/v		92	70 - 130
Dichlorodifluoromethane	1.60	1.43		ppb v/v		90	60 - 140
1,1-Dichloroethane	1.60	1.56		ppb v/v		97	70 - 130
1,2-Dichloroethane	1.60	1.41		ppb v/v		88	70 - 130
1,1-Dichloroethene	1.60	1.43		ppb v/v		89	70 - 130
Ethylbenzene	1.60	1.49		ppb v/v		93	70 - 130
Methylene Chloride	1.60	1.48		ppb v/v		92	70 - 130
Methyl tert-butyl ether	1.60	1.77		ppb v/v		111	60 - 140
Naphthalene	1.60	1.52		ppb v/v		95	60 - 140
Tetrachloroethene	1.60	1.24		ppb v/v		77	70 - 130
Toluene	1.60	1.47		ppb v/v		92	70 - 130
trans-1,2-Dichloroethene	1.60	1.42		ppb v/v		89	70 - 130
1,2,4-Trichlorobenzene	1.60	1.57		ppb v/v		98	60 - 140
1,1,1-Trichloroethane	1.60	1.48		ppb v/v		93	70 - 130
1,1,2-Trichloroethane	1.60	1.48		ppb v/v		92	70 - 130
Trichloroethene	1.60	1.20		ppb v/v		75	70 - 130
1,2,3-Trimethylbenzene	1.60	1.82		ppb v/v		114	70 - 130

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Lab Sample ID: LCS 140-42500/1002
Matrix: Air
Analysis Batch: 42500

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trimethylbenzene	1.60	1.52		ppb v/v		95	70 - 130
1,3,5-Trimethylbenzene	1.60	1.53		ppb v/v		96	70 - 130
Vinyl chloride	1.60	1.55		ppb v/v		97	70 - 130
Xylenes, Total	4.80	4.36		ppb v/v		91	70 - 130

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	5.1	4.34		ug/m3		85	70 - 130
Carbon tetrachloride	10	8.62		ug/m3		86	70 - 130
Chlorodifluoromethane	5.7	5.47		ug/m3		97	60 - 140
Chloroform	7.8	7.12		ug/m3		91	70 - 130
cis-1,2-Dichloroethene	6.3	5.84		ug/m3		92	70 - 130
Dichlorodifluoromethane	7.9	7.09		ug/m3		90	60 - 140
1,1-Dichloroethane	6.5	6.31		ug/m3		97	70 - 130
1,2-Dichloroethane	6.5	5.69		ug/m3		88	70 - 130
1,1-Dichloroethene	6.3	5.65		ug/m3		89	70 - 130
Ethylbenzene	6.9	6.47		ug/m3		93	70 - 130
Methylene Chloride	5.6	5.13		ug/m3		92	70 - 130
Methyl tert-butyl ether	5.8	6.38		ug/m3		111	60 - 140
Naphthalene	8.4	7.95		ug/m3		95	60 - 140
Tetrachloroethene	11	8.39		ug/m3		77	70 - 130
Toluene	6.0	5.53		ug/m3		92	70 - 130
trans-1,2-Dichloroethene	6.3	5.62		ug/m3		89	70 - 130
1,2,4-Trichlorobenzene	12	11.6		ug/m3		98	60 - 140
1,1,1-Trichloroethane	8.7	8.08		ug/m3		93	70 - 130
1,1,2-Trichloroethane	8.7	8.07		ug/m3		92	70 - 130
Trichloroethene	8.6	6.46		ug/m3		75	70 - 130
1,2,3-Trimethylbenzene	7.9	8.93		ug/m3		114	70 - 130
1,2,4-Trimethylbenzene	7.9	7.46		ug/m3		95	70 - 130
1,3,5-Trimethylbenzene	7.9	7.53		ug/m3		96	70 - 130
Vinyl chloride	4.1	3.96		ug/m3		97	70 - 130
Xylenes, Total	21	18.9		ug/m3		91	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*60 - 140*

Lab Sample ID: MB 140-42503/5
Matrix: Air
Analysis Batch: 42503

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.080	0.0080	ppb v/v			09/08/20 17:16	1
Carbon tetrachloride	ND		0.080	0.0070	ppb v/v			09/08/20 17:16	1
Chlorodifluoromethane	ND		0.080	0.022	ppb v/v			09/08/20 17:16	1
Chloroform	ND		0.080	0.0070	ppb v/v			09/08/20 17:16	1
cis-1,2-Dichloroethene	ND		0.080	0.010	ppb v/v			09/08/20 17:16	1
Dichlorodifluoromethane	ND		0.080	0.014	ppb v/v			09/08/20 17:16	1
1,1-Dichloroethane	ND		0.080	0.0070	ppb v/v			09/08/20 17:16	1

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Lab Sample ID: MB 140-42503/5
Matrix: Air
Analysis Batch: 42503

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	ND		0.080	0.010	ppb v/v			09/08/20 17:16	1
1,1-Dichloroethene	ND		0.080	0.0080	ppb v/v			09/08/20 17:16	1
Ethylbenzene	ND		0.080	0.013	ppb v/v			09/08/20 17:16	1
Methylene Chloride	ND		0.40	0.39	ppb v/v			09/08/20 17:16	1
Methyl tert-butyl ether	ND		0.40	0.052	ppb v/v			09/08/20 17:16	1
Naphthalene	ND		0.040	0.040	ppb v/v			09/08/20 17:16	1
Tetrachloroethene	ND		0.080	0.0070	ppb v/v			09/08/20 17:16	1
Toluene	ND		0.12	0.078	ppb v/v			09/08/20 17:16	1
trans-1,2-Dichloroethene	ND		0.080	0.0070	ppb v/v			09/08/20 17:16	1
1,2,4-Trichlorobenzene	ND		0.080	0.064	ppb v/v			09/08/20 17:16	1
1,1,1-Trichloroethane	ND		0.080	0.037	ppb v/v			09/08/20 17:16	1
1,1,2-Trichloroethane	ND		0.080	0.0070	ppb v/v			09/08/20 17:16	1
Trichloroethene	ND		0.040	0.0060	ppb v/v			09/08/20 17:16	1
1,2,3-Trimethylbenzene	ND		0.080	0.036	ppb v/v			09/08/20 17:16	1
1,2,4-Trimethylbenzene	ND		0.080	0.020	ppb v/v			09/08/20 17:16	1
1,3,5-Trimethylbenzene	ND		0.080	0.022	ppb v/v			09/08/20 17:16	1
Vinyl chloride	ND		0.040	0.026	ppb v/v			09/08/20 17:16	1
Xylenes, Total	ND		0.16	0.024	ppb v/v			09/08/20 17:16	1

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.26	0.026	ug/m3			09/08/20 17:16	1
Carbon tetrachloride	ND		0.50	0.044	ug/m3			09/08/20 17:16	1
Chlorodifluoromethane	ND		0.28	0.078	ug/m3			09/08/20 17:16	1
Chloroform	ND		0.39	0.034	ug/m3			09/08/20 17:16	1
cis-1,2-Dichloroethene	ND		0.32	0.040	ug/m3			09/08/20 17:16	1
Dichlorodifluoromethane	ND		0.40	0.069	ug/m3			09/08/20 17:16	1
1,1-Dichloroethane	ND		0.32	0.028	ug/m3			09/08/20 17:16	1
1,2-Dichloroethane	ND		0.32	0.040	ug/m3			09/08/20 17:16	1
1,1-Dichloroethene	ND		0.32	0.032	ug/m3			09/08/20 17:16	1
Ethylbenzene	ND		0.35	0.056	ug/m3			09/08/20 17:16	1
Methylene Chloride	ND		1.4	1.4	ug/m3			09/08/20 17:16	1
Methyl tert-butyl ether	ND		1.4	0.19	ug/m3			09/08/20 17:16	1
Naphthalene	ND		0.21	0.21	ug/m3			09/08/20 17:16	1
Tetrachloroethene	ND		0.54	0.047	ug/m3			09/08/20 17:16	1
Toluene	ND		0.45	0.29	ug/m3			09/08/20 17:16	1
trans-1,2-Dichloroethene	ND		0.32	0.028	ug/m3			09/08/20 17:16	1
1,2,4-Trichlorobenzene	ND		0.59	0.47	ug/m3			09/08/20 17:16	1
1,1,1-Trichloroethane	ND		0.44	0.20	ug/m3			09/08/20 17:16	1
1,1,2-Trichloroethane	ND		0.44	0.038	ug/m3			09/08/20 17:16	1
Trichloroethene	ND		0.21	0.032	ug/m3			09/08/20 17:16	1
1,2,3-Trimethylbenzene	ND		0.39	0.18	ug/m3			09/08/20 17:16	1
1,2,4-Trimethylbenzene	ND		0.39	0.098	ug/m3			09/08/20 17:16	1
1,3,5-Trimethylbenzene	ND		0.39	0.11	ug/m3			09/08/20 17:16	1
Vinyl chloride	ND		0.10	0.066	ug/m3			09/08/20 17:16	1
Xylenes, Total	ND		0.69	0.10	ug/m3			09/08/20 17:16	1

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Lab Sample ID: MB 140-42503/5
Matrix: Air
Analysis Batch: 42503

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		60 - 140		09/08/20 17:16	1

Lab Sample ID: LCS 140-42503/1002
Matrix: Air
Analysis Batch: 42503

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	1.60	1.41		ppb v/v		88	70 - 130
Carbon tetrachloride	1.60	1.51		ppb v/v		95	70 - 130
Chlorodifluoromethane	1.60	1.73		ppb v/v		108	60 - 140
Chloroform	1.60	1.49		ppb v/v		93	70 - 130
cis-1,2-Dichloroethene	1.60	1.49		ppb v/v		93	70 - 130
Dichlorodifluoromethane	1.60	1.48		ppb v/v		92	60 - 140
1,1-Dichloroethane	1.60	1.65		ppb v/v		103	70 - 130
1,2-Dichloroethane	1.60	1.46		ppb v/v		91	70 - 130
1,1-Dichloroethene	1.60	1.54		ppb v/v		96	70 - 130
Ethylbenzene	1.60	1.39		ppb v/v		87	70 - 130
Methylene Chloride	1.60	1.54		ppb v/v		96	70 - 130
Methyl tert-butyl ether	1.60	1.52		ppb v/v		95	60 - 140
Naphthalene	1.60	1.17		ppb v/v		73	60 - 140
Tetrachloroethene	1.60	1.24		ppb v/v		77	70 - 130
Toluene	1.60	1.37		ppb v/v		85	70 - 130
trans-1,2-Dichloroethene	1.60	1.44		ppb v/v		90	70 - 130
1,2,4-Trichlorobenzene	1.60	1.13		ppb v/v		71	60 - 140
1,1,1-Trichloroethane	1.60	1.45		ppb v/v		91	70 - 130
1,1,2-Trichloroethane	1.60	1.36		ppb v/v		85	70 - 130
Trichloroethene	1.60	1.26		ppb v/v		79	70 - 130
1,2,3-Trimethylbenzene	1.60	1.09	*	ppb v/v		68	70 - 130
1,2,4-Trimethylbenzene	1.60	1.26		ppb v/v		78	70 - 130
1,3,5-Trimethylbenzene	1.60	1.46		ppb v/v		91	70 - 130
Vinyl chloride	1.60	1.73		ppb v/v		108	70 - 130
Xylenes, Total	4.80	4.10		ppb v/v		85	70 - 130

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	5.1	4.50		ug/m3		88	70 - 130
Carbon tetrachloride	10	9.53		ug/m3		95	70 - 130
Chlorodifluoromethane	5.7	6.13		ug/m3		108	60 - 140
Chloroform	7.8	7.29		ug/m3		93	70 - 130
cis-1,2-Dichloroethene	6.3	5.90		ug/m3		93	70 - 130
Dichlorodifluoromethane	7.9	7.30		ug/m3		92	60 - 140
1,1-Dichloroethane	6.5	6.66		ug/m3		103	70 - 130
1,2-Dichloroethane	6.5	5.92		ug/m3		91	70 - 130
1,1-Dichloroethene	6.3	6.11		ug/m3		96	70 - 130
Ethylbenzene	6.9	6.04		ug/m3		87	70 - 130
Methylene Chloride	5.6	5.36		ug/m3		96	70 - 130
Methyl tert-butyl ether	5.8	5.49		ug/m3		95	60 - 140
Naphthalene	8.4	6.14		ug/m3		73	60 - 140

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Lab Sample ID: LCS 140-42503/1002
Matrix: Air
Analysis Batch: 42503

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Tetrachloroethene	11	8.40		ug/m3		77	70 - 130
Toluene	6.0	5.15		ug/m3		85	70 - 130
trans-1,2-Dichloroethene	6.3	5.71		ug/m3		90	70 - 130
1,2,4-Trichlorobenzene	12	8.40		ug/m3		71	60 - 140
1,1,1-Trichloroethane	8.7	7.90		ug/m3		91	70 - 130
1,1,2-Trichloroethane	8.7	7.41		ug/m3		85	70 - 130
Trichloroethene	8.6	6.78		ug/m3		79	70 - 130
1,2,3-Trimethylbenzene	7.9	5.38	*	ug/m3		68	70 - 130
1,2,4-Trimethylbenzene	7.9	6.17		ug/m3		78	70 - 130
1,3,5-Trimethylbenzene	7.9	7.16		ug/m3		91	70 - 130
Vinyl chloride	4.1	4.43		ug/m3		108	70 - 130
Xylenes, Total	21	17.8		ug/m3		85	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*104*		*60 - 140*

Air - GC/MS VOA

Analysis Batch: 42399

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-20175-1	SV-001-C-29	Total/NA	Air	TO 15 LL	
140-20175-2	SV-004-C-29	Total/NA	Air	TO 15 LL	
140-20175-3	SV-102-C-29	Total/NA	Air	TO 15 LL	
140-20175-4	SV-113-C-29	Total/NA	Air	TO 15 LL	
140-20175-5	SV-088-C-29	Total/NA	Air	TO 15 LL	
140-20175-6	SV-DUP1-C-29	Total/NA	Air	TO 15 LL	
140-20175-7	SV-142-C-29	Total/NA	Air	TO 15 LL	
140-20175-8	SV-155-C-29	Total/NA	Air	TO 15 LL	
140-20175-9	SV-133-C-29	Total/NA	Air	TO 15 LL	
140-20175-10	SV-153-C-29	Total/NA	Air	TO 15 LL	
MB 140-42399/4	Method Blank	Total/NA	Air	TO 15 LL	
LCS 140-42399/1002	Lab Control Sample	Total/NA	Air	TO 15 LL	

Analysis Batch: 42409

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-20175-12	SV-060-C-29	Total/NA	Air	TO 15 LL	
140-20175-13	SV-150-C-29	Total/NA	Air	TO 15 LL	
140-20175-14	SV-152-C-29	Total/NA	Air	TO 15 LL	
140-20175-15	SV-141-C-29	Total/NA	Air	TO 15 LL	
140-20175-16	SV-149-C-29	Total/NA	Air	TO 15 LL	
MB 140-42409/8	Method Blank	Total/NA	Air	TO 15 LL	
LCS 140-42409/1002	Lab Control Sample	Total/NA	Air	TO 15 LL	

Analysis Batch: 42482

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-20175-18	IA-001-C-29	Total/NA	Air	TO 15 LL	
140-20175-19	IA-004-C-29	Total/NA	Air	TO 15 LL	
140-20175-20	IA-102-C-29	Total/NA	Air	TO 15 LL	
MB 140-42482/5	Method Blank	Total/NA	Air	TO 15 LL	
LCS 140-42482/1003	Lab Control Sample	Total/NA	Air	TO 15 LL	

Analysis Batch: 42498

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-20175-21	IA-113-C-29	Total/NA	Air	TO 15 LL	
140-20175-22	IA-088-C-29	Total/NA	Air	TO 15 LL	
140-20175-23	IA-142-C-29	Total/NA	Air	TO 15 LL	
140-20175-24	IA-155-C-29	Total/NA	Air	TO 15 LL	
140-20175-25	IA-133-C-29	Total/NA	Air	TO 15 LL	
140-20175-26	IA-153-C-29	Total/NA	Air	TO 15 LL	
140-20175-27	IA-DUP1-C-29	Total/NA	Air	TO 15 LL	
140-20175-28	IA-060-C-29	Total/NA	Air	TO 15 LL	
140-20175-29	IA-152-C-29	Total/NA	Air	TO 15 LL	
140-20175-30	IA-150-C-29	Total/NA	Air	TO 15 LL	
140-20175-31	IA-145-C-29	Total/NA	Air	TO 15 LL	
140-20175-32	IA-146-C-29	Total/NA	Air	TO 15 LL	
MB 140-42498/4	Method Blank	Total/NA	Air	TO 15 LL	
LCS 140-42498/1009	Lab Control Sample	Total/NA	Air	TO 15 LL	

Analysis Batch: 42500

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-20175-11	SV-DUP2-C-29	Total/NA	Air	TO 15 LL	

Air - GC/MS VOA (Continued)

Analysis Batch: 42500 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-20175-33	IA-144-C-29	Total/NA	Air	TO 15 LL	
140-20175-34	IA-141-C-29	Total/NA	Air	TO 15 LL	
140-20175-35	IA-149-C-29	Total/NA	Air	TO 15 LL	
140-20175-36	IA-DUP2-C-29	Total/NA	Air	TO 15 LL	
140-20175-37	IA-126-C-29	Total/NA	Air	TO 15 LL	
140-20175-38	IA-BCK-1-29	Total/NA	Air	TO 15 LL	
140-20175-39	IA-BCK-2-29	Total/NA	Air	TO 15 LL	
140-20175-40	IA-BCK-3-29	Total/NA	Air	TO 15 LL	
140-20175-41	IA-BCK-4-29	Total/NA	Air	TO 15 LL	
MB 140-42500/4	Method Blank	Total/NA	Air	TO 15 LL	
LCS 140-42500/1002	Lab Control Sample	Total/NA	Air	TO 15 LL	

Analysis Batch: 42503

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-20175-3 - DL	SV-102-C-29	Total/NA	Air	TO 15 LL	
140-20175-6 - DL	SV-DUP1-C-29	Total/NA	Air	TO 15 LL	
140-20175-17	SV-126-C-29	Total/NA	Air	TO 15 LL	
MB 140-42503/5	Method Blank	Total/NA	Air	TO 15 LL	
LCS 140-42503/1002	Lab Control Sample	Total/NA	Air	TO 15 LL	

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Middle River - MRC

Job ID: 140-20175-1

Client Sample ID: SV-001-C-29
Date Collected: 08/25/20 10:08
Date Received: 08/27/20 10:00

Lab Sample ID: 140-20175-1
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	100 mL	500 mL	42399	09/03/20 22:20	S1K	TAL KNX
	Instrument ID: MH									

Client Sample ID: SV-004-C-29
Date Collected: 08/25/20 10:12
Date Received: 08/27/20 10:00

Lab Sample ID: 140-20175-2
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	40 mL	500 mL	42399	09/03/20 23:13	S1K	TAL KNX
	Instrument ID: MH									

Client Sample ID: SV-102-C-29
Date Collected: 08/25/20 10:17
Date Received: 08/27/20 10:00

Lab Sample ID: 140-20175-3
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL	DL	3.43	11 mL	500 mL	42503	09/08/20 18:03	AFB	TAL KNX
	Instrument ID: MG									
Total/NA	Analysis	TO 15 LL		3.43	20 mL	500 mL	42399	09/04/20 00:08	S1K	TAL KNX
	Instrument ID: MH									

Client Sample ID: SV-113-C-29
Date Collected: 08/25/20 10:20
Date Received: 08/27/20 10:00

Lab Sample ID: 140-20175-4
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	100 mL	500 mL	42399	09/04/20 01:04	S1K	TAL KNX
	Instrument ID: MH									

Client Sample ID: SV-088-C-29
Date Collected: 08/25/20 10:22
Date Received: 08/27/20 10:00

Lab Sample ID: 140-20175-5
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	100 mL	500 mL	42399	09/04/20 01:58	S1K	TAL KNX
	Instrument ID: MH									

Client Sample ID: SV-DUP1-C-29
Date Collected: 08/25/20 00:00
Date Received: 08/27/20 10:00

Lab Sample ID: 140-20175-6
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL	DL	3.6	11 mL	500 mL	42503	09/08/20 18:49	AFB	TAL KNX
	Instrument ID: MG									
Total/NA	Analysis	TO 15 LL		3.6	20 mL	500 mL	42399	09/04/20 02:50	S1K	TAL KNX
	Instrument ID: MH									

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Middle River - MRC

Job ID: 140-20175-1

Client Sample ID: SV-142-C-29
Lab Sample ID: 140-20175-7
Date Collected: 08/25/20 10:27
Matrix: Air
Date Received: 08/27/20 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	100 mL	500 mL	42399	09/04/20 04:41	S1K	TAL KNX
	Instrument ID: MH									

Client Sample ID: SV-155-C-29
Lab Sample ID: 140-20175-8
Date Collected: 08/25/20 10:32
Matrix: Air
Date Received: 08/27/20 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	100 mL	500 mL	42399	09/04/20 05:38	S1K	TAL KNX
	Instrument ID: MH									

Client Sample ID: SV-133-C-29
Lab Sample ID: 140-20175-9
Date Collected: 08/25/20 10:35
Matrix: Air
Date Received: 08/27/20 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	100 mL	500 mL	42399	09/04/20 06:35	S1K	TAL KNX
	Instrument ID: MH									

Client Sample ID: SV-153-C-29
Lab Sample ID: 140-20175-10
Date Collected: 08/25/20 10:37
Matrix: Air
Date Received: 08/27/20 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	100 mL	500 mL	42399	09/04/20 07:30	S1K	TAL KNX
	Instrument ID: MH									

Client Sample ID: SV-DUP2-C-29
Lab Sample ID: 140-20175-11
Date Collected: 08/25/20 00:00
Matrix: Air
Date Received: 08/27/20 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	100 mL	500 mL	42500	09/08/20 01:28	AFB	TAL KNX
	Instrument ID: MG									

Client Sample ID: SV-060-C-29
Lab Sample ID: 140-20175-12
Date Collected: 08/25/20 10:41
Matrix: Air
Date Received: 08/27/20 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	20 mL	500 mL	42409	09/03/20 22:15	HMT	TAL KNX
	Instrument ID: MG									

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Middle River - MRC

Job ID: 140-20175-1

Client Sample ID: SV-150-C-29
Lab Sample ID: 140-20175-13
Date Collected: 08/25/20 10:44
Matrix: Air
Date Received: 08/27/20 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	100 mL	500 mL	42409	09/04/20 02:51	HMT	TAL KNX
	Instrument ID: MG									

Client Sample ID: SV-152-C-29
Lab Sample ID: 140-20175-14
Date Collected: 08/25/20 10:47
Matrix: Air
Date Received: 08/27/20 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	50 mL	500 mL	42409	09/03/20 23:05	HMT	TAL KNX
	Instrument ID: MG									

Client Sample ID: SV-141-C-29
Lab Sample ID: 140-20175-15
Date Collected: 08/25/20 10:50
Matrix: Air
Date Received: 08/27/20 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	100 mL	500 mL	42409	09/03/20 23:53	HMT	TAL KNX
	Instrument ID: MG									

Client Sample ID: SV-149-C-29
Lab Sample ID: 140-20175-16
Date Collected: 08/25/20 10:53
Matrix: Air
Date Received: 08/27/20 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	100 mL	500 mL	42409	09/04/20 00:41	HMT	TAL KNX
	Instrument ID: MG									

Client Sample ID: SV-126-C-29
Lab Sample ID: 140-20175-17
Date Collected: 08/25/20 10:56
Matrix: Air
Date Received: 08/27/20 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		12.39	100 mL	500 mL	42503	09/09/20 07:56	AFB	TAL KNX
	Instrument ID: MG									

Client Sample ID: IA-001-C-29
Lab Sample ID: 140-20175-18
Date Collected: 08/25/20 16:11
Matrix: Air
Date Received: 08/27/20 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	100 mL	500 mL	42482	09/05/20 16:20	HMT	TAL KNX
	Instrument ID: MH									

Client Sample ID: IA-004-C-29
Date Collected: 08/25/20 16:14
Date Received: 08/27/20 10:00

Lab Sample ID: 140-20175-19
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1.77	177 mL	500 mL	42482	09/05/20 17:18	HMT	TAL KNX
	Instrument ID: MH									

Client Sample ID: IA-102-C-29
Date Collected: 08/25/20 16:22
Date Received: 08/27/20 10:00

Lab Sample ID: 140-20175-20
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	100 mL	500 mL	42482	09/05/20 18:14	HMT	TAL KNX
	Instrument ID: MH									

Client Sample ID: IA-113-C-29
Date Collected: 08/25/20 16:23
Date Received: 08/27/20 10:00

Lab Sample ID: 140-20175-21
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1.33	133 mL	500 mL	42498	09/06/20 19:30	HMT	TAL KNX
	Instrument ID: MH									

Client Sample ID: IA-088-C-29
Date Collected: 08/25/20 16:24
Date Received: 08/27/20 10:00

Lab Sample ID: 140-20175-22
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1.35	135 mL	500 mL	42498	09/06/20 20:26	HMT	TAL KNX
	Instrument ID: MH									

Client Sample ID: IA-142-C-29
Date Collected: 08/25/20 16:25
Date Received: 08/27/20 10:00

Lab Sample ID: 140-20175-23
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	100 mL	500 mL	42498	09/06/20 21:23	HMT	TAL KNX
	Instrument ID: MH									

Client Sample ID: IA-155-C-29
Date Collected: 08/25/20 16:28
Date Received: 08/27/20 10:00

Lab Sample ID: 140-20175-24
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1.43	143 mL	500 mL	42498	09/06/20 22:17	HMT	TAL KNX
	Instrument ID: MH									

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Middle River - MRC

Job ID: 140-20175-1

Client Sample ID: IA-133-C-29
Date Collected: 08/25/20 16:31
Date Received: 08/27/20 10:00

Lab Sample ID: 140-20175-25
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1.56	156 mL	500 mL	42498	09/06/20 23:11	HMT	TAL KNX
	Instrument ID: MH									

Client Sample ID: IA-153-C-29
Date Collected: 08/25/20 16:32
Date Received: 08/27/20 10:00

Lab Sample ID: 140-20175-26
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	100 mL	500 mL	42498	09/07/20 00:04	HMT	TAL KNX
	Instrument ID: MH									

Client Sample ID: IA-DUP1-C-29
Date Collected: 08/25/20 00:00
Date Received: 08/27/20 10:00

Lab Sample ID: 140-20175-27
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	100 mL	500 mL	42498	09/07/20 00:57	HMT	TAL KNX
	Instrument ID: MH									

Client Sample ID: IA-060-C-29
Date Collected: 08/25/20 16:35
Date Received: 08/27/20 10:00

Lab Sample ID: 140-20175-28
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	100 mL	500 mL	42498	09/07/20 01:52	HMT	TAL KNX
	Instrument ID: MH									

Client Sample ID: IA-152-C-29
Date Collected: 08/25/20 16:38
Date Received: 08/27/20 10:00

Lab Sample ID: 140-20175-29
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	100 mL	500 mL	42498	09/07/20 02:48	HMT	TAL KNX
	Instrument ID: MH									

Client Sample ID: IA-150-C-29
Date Collected: 08/25/20 16:40
Date Received: 08/27/20 10:00

Lab Sample ID: 140-20175-30
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	100 mL	500 mL	42498	09/07/20 03:43	HMT	TAL KNX
	Instrument ID: MH									

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Middle River - MRC

Job ID: 140-20175-1

Client Sample ID: IA-145-C-29
Date Collected: 08/25/20 16:42
Date Received: 08/27/20 10:00

Lab Sample ID: 140-20175-31
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	100 mL	500 mL	42498	09/07/20 04:36	HMT	TAL KNX
	Instrument ID: MH									

Client Sample ID: IA-146-C-29
Date Collected: 08/25/20 16:43
Date Received: 08/27/20 10:00

Lab Sample ID: 140-20175-32
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1.48	148 mL	500 mL	42498	09/07/20 05:30	HMT	TAL KNX
	Instrument ID: MH									

Client Sample ID: IA-144-C-29
Date Collected: 08/25/20 16:45
Date Received: 08/27/20 10:00

Lab Sample ID: 140-20175-33
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	100 mL	500 mL	42500	09/07/20 18:39	AFB	TAL KNX
	Instrument ID: MG									

Client Sample ID: IA-141-C-29
Date Collected: 08/25/20 16:48
Date Received: 08/27/20 10:00

Lab Sample ID: 140-20175-34
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	100 mL	500 mL	42500	09/07/20 19:25	AFB	TAL KNX
	Instrument ID: MG									

Client Sample ID: IA-149-C-29
Date Collected: 08/25/20 16:50
Date Received: 08/27/20 10:00

Lab Sample ID: 140-20175-35
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	100 mL	500 mL	42500	09/07/20 20:13	AFB	TAL KNX
	Instrument ID: MG									

Client Sample ID: IA-DUP2-C-29
Date Collected: 08/25/20 00:00
Date Received: 08/27/20 10:00

Lab Sample ID: 140-20175-36
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1.4	140 mL	500 mL	42500	09/07/20 20:56	AFB	TAL KNX
	Instrument ID: MG									

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Middle River - MRC

Job ID: 140-20175-1

Client Sample ID: IA-126-C-29
Date Collected: 08/25/20 16:52
Date Received: 08/27/20 10:00

Lab Sample ID: 140-20175-37
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	100 mL	500 mL	42500	09/07/20 21:40	AFB	TAL KNX
	Instrument ID: MG									

Client Sample ID: IA-BCK-1-29
Date Collected: 08/25/20 16:03
Date Received: 08/27/20 10:00

Lab Sample ID: 140-20175-38
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	100 mL	500 mL	42500	09/07/20 22:24	AFB	TAL KNX
	Instrument ID: MG									

Client Sample ID: IA-BCK-2-29
Date Collected: 08/25/20 16:07
Date Received: 08/27/20 10:00

Lab Sample ID: 140-20175-39
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		2.29	229 mL	500 mL	42500	09/07/20 23:09	AFB	TAL KNX
	Instrument ID: MG									

Client Sample ID: IA-BCK-3-29
Date Collected: 08/25/20 15:52
Date Received: 08/27/20 10:00

Lab Sample ID: 140-20175-40
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1.59	159 mL	500 mL	42500	09/07/20 23:56	AFB	TAL KNX
	Instrument ID: MG									

Client Sample ID: IA-BCK-4-29
Date Collected: 08/25/20 15:57
Date Received: 08/27/20 10:00

Lab Sample ID: 140-20175-41
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1.52	152 mL	500 mL	42500	09/08/20 00:42	AFB	TAL KNX
	Instrument ID: MG									

Client Sample ID: Method Blank
Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 140-42399/4
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	500 mL	500 mL	42399	09/03/20 12:59	S1K	TAL KNX
	Instrument ID: MH									

Client Sample ID: Method Blank
Lab Sample ID: MB 140-42409/8
Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	500 mL	500 mL	42409	09/03/20 11:52	HMT	TAL KNX
	Instrument ID: MG									

Client Sample ID: Method Blank
Lab Sample ID: MB 140-42482/5
Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	500 mL	500 mL	42482	09/05/20 15:25	HMT	TAL KNX
	Instrument ID: MH									

Client Sample ID: Method Blank
Lab Sample ID: MB 140-42498/4
Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	500 mL	500 mL	42498	09/06/20 18:36	HMT	TAL KNX
	Instrument ID: MH									

Client Sample ID: Method Blank
Lab Sample ID: MB 140-42500/4
Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	500 mL	500 mL	42500	09/07/20 10:21	AFB	TAL KNX
	Instrument ID: MG									

Client Sample ID: Method Blank
Lab Sample ID: MB 140-42503/5
Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	500 mL	500 mL	42503	09/08/20 17:16	AFB	TAL KNX
	Instrument ID: MG									

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 140-42399/1002
Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	500 mL	500 mL	42399	09/03/20 10:16	S1K	TAL KNX
	Instrument ID: MH									

Client Sample ID: Lab Control Sample — Lab Sample ID: LCS 140-42409/1002

Date Collected: N/A **Matrix: Air**
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	500 mL	500 mL	42409	09/03/20 07:55	HMT	TAL KNX
	Instrument ID: MG									

Client Sample ID: Lab Control Sample — Lab Sample ID: LCS 140-42482/1003

Date Collected: N/A **Matrix: Air**
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	500 mL	500 mL	42482	09/05/20 12:41	HMT	TAL KNX
	Instrument ID: MH									

Client Sample ID: Lab Control Sample — Lab Sample ID: LCS 140-42498/1009

Date Collected: N/A **Matrix: Air**
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	500 mL	500 mL	42498	09/06/20 17:12	HMT	TAL KNX
	Instrument ID: MH									

Client Sample ID: Lab Control Sample — Lab Sample ID: LCS 140-42500/1002

Date Collected: N/A **Matrix: Air**
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	500 mL	500 mL	42500	09/07/20 08:06	AFB	TAL KNX
	Instrument ID: MG									

Client Sample ID: Lab Control Sample — Lab Sample ID: LCS 140-42503/1002

Date Collected: N/A **Matrix: Air**
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	500 mL	500 mL	42503	09/08/20 15:52	AFB	TAL KNX
	Instrument ID: MG									

Laboratory References:

TAL KNX = Eurofins TestAmerica, Knoxville, 5815 Middlebrook Pike, Knoxville, TN 37921, TEL (865)291-3000

Method Summary

Client: Tetra Tech, Inc.
Project/Site: Middle River - MRC

Job ID: 140-20175-1

Method	Method Description	Protocol	Laboratory
TO 15 LL	Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)	EPA	TAL KNX

Protocol References:

EPA = US Environmental Protection Agency

Laboratory References:

TAL KNX = Eurofins TestAmerica, Knoxville, 5815 Middlebrook Pike, Knoxville, TN 37921, TEL (865)291-3000

Sample Summary

Client: Tetra Tech, Inc.
Project/Site: Middle River - MRC

Job ID: 140-20175-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
140-20175-1	SV-001-C-29	Air	08/25/20 10:08	08/27/20 10:00	Air Canister (1-Liter) #34000238
140-20175-2	SV-004-C-29	Air	08/25/20 10:12	08/27/20 10:00	Air Canister (1-Liter) #09798
140-20175-3	SV-102-C-29	Air	08/25/20 10:17	08/27/20 10:00	Air Canister (1-Liter) #09642
140-20175-4	SV-113-C-29	Air	08/25/20 10:20	08/27/20 10:00	Air Canister (1-Liter) #10337
140-20175-5	SV-088-C-29	Air	08/25/20 10:22	08/27/20 10:00	Air Canister (1-Liter) #11753
140-20175-6	SV-DUP1-C-29	Air	08/25/20 00:00	08/27/20 10:00	Air Canister (1-Liter) #09669
140-20175-7	SV-142-C-29	Air	08/25/20 10:27	08/27/20 10:00	Air Canister (1-Liter) #11615
140-20175-8	SV-155-C-29	Air	08/25/20 10:32	08/27/20 10:00	Air Canister (1-Liter) #34000625
140-20175-9	SV-133-C-29	Air	08/25/20 10:35	08/27/20 10:00	Air Canister (1-Liter) #10780
140-20175-10	SV-153-C-29	Air	08/25/20 10:37	08/27/20 10:00	Air Canister (1-Liter) #10760
140-20175-11	SV-DUP2-C-29	Air	08/25/20 00:00	08/27/20 10:00	Air Canister (1-Liter) #34002453
140-20175-12	SV-060-C-29	Air	08/25/20 10:41	08/27/20 10:00	Air Canister (1-Liter) #09644
140-20175-13	SV-150-C-29	Air	08/25/20 10:44	08/27/20 10:00	Air Canister (1-Liter) #11284
140-20175-14	SV-152-C-29	Air	08/25/20 10:47	08/27/20 10:00	Air Canister (1-Liter) #34001075
140-20175-15	SV-141-C-29	Air	08/25/20 10:50	08/27/20 10:00	Air Canister (1-Liter) #11126
140-20175-16	SV-149-C-29	Air	08/25/20 10:53	08/27/20 10:00	Air Canister (1-Liter) #34000628
140-20175-17	SV-126-C-29	Air	08/25/20 10:56	08/27/20 10:00	Air Canister (1-Liter) #11693
140-20175-18	IA-001-C-29	Air	08/25/20 16:11	08/27/20 10:00	Air Canister (1-Liter) #34002391
140-20175-19	IA-004-C-29	Air	08/25/20 16:14	08/27/20 10:00	Air Canister (1-Liter) #10833
140-20175-20	IA-102-C-29	Air	08/25/20 16:22	08/27/20 10:00	Air Canister (1-Liter) #34000642
140-20175-21	IA-113-C-29	Air	08/25/20 16:23	08/27/20 10:00	Air Canister (1-Liter) #34000684
140-20175-22	IA-088-C-29	Air	08/25/20 16:24	08/27/20 10:00	Air Canister (1-Liter) #11710
140-20175-23	IA-142-C-29	Air	08/25/20 16:25	08/27/20 10:00	Air Canister (1-Liter) #34002471
140-20175-24	IA-155-C-29	Air	08/25/20 16:28	08/27/20 10:00	Air Canister (1-Liter) #10492
140-20175-25	IA-133-C-29	Air	08/25/20 16:31	08/27/20 10:00	Air Canister (1-Liter) #11665
140-20175-26	IA-153-C-29	Air	08/25/20 16:32	08/27/20 10:00	Air Canister (1-Liter) #10335
140-20175-27	IA-DUP1-C-29	Air	08/25/20 00:00	08/27/20 10:00	Air Canister (1-Liter) #10333
140-20175-28	IA-060-C-29	Air	08/25/20 16:35	08/27/20 10:00	Air Canister (1-Liter) #11875
140-20175-29	IA-152-C-29	Air	08/25/20 16:38	08/27/20 10:00	Air Canister (1-Liter) #11804
140-20175-30	IA-150-C-29	Air	08/25/20 16:40	08/27/20 10:00	Air Canister (1-Liter) #11842
140-20175-31	IA-145-C-29	Air	08/25/20 16:42	08/27/20 10:00	Air Canister (1-Liter) #34001137
140-20175-32	IA-146-C-29	Air	08/25/20 16:43	08/27/20 10:00	Air Canister (1-Liter) #11573
140-20175-33	IA-144-C-29	Air	08/25/20 16:45	08/27/20 10:00	Air Canister (1-Liter) #11721
140-20175-34	IA-141-C-29	Air	08/25/20 16:48	08/27/20 10:00	Air Canister (1-Liter) #11743
140-20175-35	IA-149-C-29	Air	08/25/20 16:50	08/27/20 10:00	Air Canister (1-Liter) #11572
140-20175-36	IA-DUP2-C-29	Air	08/25/20 00:00	08/27/20 10:00	Air Canister (1-Liter) #34002485
140-20175-37	IA-126-C-29	Air	08/25/20 16:52	08/27/20 10:00	Air Canister (1-Liter) #09661
140-20175-38	IA-BCK-1-29	Air	08/25/20 16:03	08/27/20 10:00	Air Canister (1-Liter) #11141
140-20175-39	IA-BCK-2-29	Air	08/25/20 16:07	08/27/20 10:00	Air Canister (1-Liter) #11671
140-20175-40	IA-BCK-3-29	Air	08/25/20 15:52	08/27/20 10:00	Air Canister (1-Liter) #10980
140-20175-41	IA-BCK-4-29	Air	08/25/20 15:57	08/27/20 10:00	Air Canister (1-Liter) #34001650

Method TO15 Low Level

Volatile Organic Compounds - Low level (GC/MS) by Method TO 15

FORM II
AIR - GC/MS VOA SURROGATE RECOVERY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Matrix: Air Level: Low

GC Column (1): RTX-5 ID: 0.32(mm)

Client Sample ID	Lab Sample ID	BFB #
SV-001-C-29	140-20175-1	91
SV-004-C-29	140-20175-2	97
SV-102-C-29	140-20175-3	112
SV-102-C-29 DL	140-20175-3 DL	101
SV-113-C-29	140-20175-4	95
SV-088-C-29	140-20175-5	85
SV-DUP1-C-29	140-20175-6	108
SV-DUP1-C-29 DL	140-20175-6 DL	98
SV-142-C-29	140-20175-7	96
SV-155-C-29	140-20175-8	84
SV-133-C-29	140-20175-9	87
SV-153-C-29	140-20175-10	96
SV-DUP2-C-29	140-20175-11	99
SV-060-C-29	140-20175-12	102
SV-150-C-29	140-20175-13	115
SV-152-C-29	140-20175-14	100
SV-141-C-29	140-20175-15	101
SV-149-C-29	140-20175-16	103
SV-126-C-29	140-20175-17	101
IA-001-C-29	140-20175-18	95
IA-004-C-29	140-20175-19	83
IA-102-C-29	140-20175-20	78
IA-113-C-29	140-20175-21	84
IA-088-C-29	140-20175-22	91
IA-142-C-29	140-20175-23	84
IA-155-C-29	140-20175-24	96
IA-133-C-29	140-20175-25	90
IA-153-C-29	140-20175-26	89
IA-DUP1-C-29	140-20175-27	95
IA-060-C-29	140-20175-28	99
IA-152-C-29	140-20175-29	106
IA-150-C-29	140-20175-30	87
IA-145-C-29	140-20175-31	91
IA-146-C-29	140-20175-32	93
IA-144-C-29	140-20175-33	96

	QC LIMITS
BFB = 4-Bromofluorobenzene (Surr)	60-140

Column to be used to flag recovery values

FORM II TO 15 LL

FORM II
AIR - GC/MS VOA SURROGATE RECOVERY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Matrix: Air Level: Low

GC Column (1): RTX-5 ID: 0.32(mm)

Client Sample ID	Lab Sample ID	BFB #
IA-141-C-29	140-20175-34	103
IA-149-C-29	140-20175-35	101
IA-DUP2-C-29	140-20175-36	99
IA-126-C-29	140-20175-37	98
IA-BCK-1-29	140-20175-38	101
IA-BCK-2-29	140-20175-39	101
IA-BCK-3-29	140-20175-40	100
IA-BCK-4-29	140-20175-41	101
	MB 140-42399/4	78
	MB 140-42409/8	99
	MB 140-42482/5	90
	MB 140-42498/4	75
	MB 140-42500/4	97
	MB 140-42503/5	98
	LCS 140-42399/1002	111
	LCS 140-42409/1002	108
	LCS 140-42482/1003	111
	LCS 140-42498/1009	112
	LCS 140-42500/1002	102
	LCS 140-42503/1002	104

	QC LIMITS
BFB = 4-Bromofluorobenzene (Surr)	60-140

Column to be used to flag recovery values

FORM II TO 15 LL

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Matrix: Air Level: Low Lab File ID: HCCVI03-LCS.d

Lab ID: LCS 140-42399/1002 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Benzene	1.60	1.56	97	70-130	
Carbon tetrachloride	1.60	1.92	120	70-130	
Chlorodifluoromethane	1.60	1.57	98	60-140	
Chloroform	1.60	1.56	98	70-130	
cis-1,2-Dichloroethene	1.60	1.35	84	70-130	
Dichlorodifluoromethane	1.60	1.66	104	60-140	
1,1-Dichloroethane	1.60	1.49	93	70-130	
1,2-Dichloroethane	1.60	1.53	96	70-130	
1,1-Dichloroethene	1.60	1.34	84	70-130	
Ethylbenzene	1.60	1.44	90	70-130	
Methylene Chloride	1.60	1.62	101	70-130	
Methyl tert-butyl ether	1.60	1.32	83	60-140	
Naphthalene	1.60	1.34	83	60-140	
Tetrachloroethene	1.60	1.46	92	70-130	
Toluene	1.60	1.50	94	70-130	
trans-1,2-Dichloroethene	1.60	1.49	93	70-130	
1,2,4-Trichlorobenzene	1.60	1.41	88	60-140	
1,1,1-Trichloroethane	1.60	1.53	96	70-130	
1,1,2-Trichloroethane	1.60	1.56	97	70-130	
Trichloroethene	1.60	1.48	93	70-130	
1,2,3-Trimethylbenzene	1.60	1.83	114	70-130	
1,2,4-Trimethylbenzene	1.60	1.75	109	70-130	
1,3,5-Trimethylbenzene	1.60	1.44	90	70-130	
Vinyl chloride	1.60	1.36	85	70-130	
Xylenes, Total	4.80	4.57	95	70-130	

Column to be used to flag recovery and RPD values

FORM III TO 15 LL

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Matrix: Air Level: Low Lab File ID: GCCVI03-LCS.d

Lab ID: LCS 140-42409/1002 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Benzene	1.60	1.56	97	70-130	
Carbon tetrachloride	1.60	1.64	103	70-130	
Chlorodifluoromethane	1.60	1.48	92	60-140	
Chloroform	1.60	1.43	89	70-130	
cis-1,2-Dichloroethene	1.60	1.51	94	70-130	
Dichlorodifluoromethane	1.60	1.33	83	60-140	
1,1-Dichloroethane	1.60	1.52	95	70-130	
1,2-Dichloroethane	1.60	1.56	98	70-130	
1,1-Dichloroethene	1.60	1.31	82	70-130	
Ethylbenzene	1.60	1.48	92	70-130	
Methylene Chloride	1.60	1.45	91	70-130	
Methyl tert-butyl ether	1.60	1.51	94	60-140	
Naphthalene	1.60	1.34	84	60-140	
Tetrachloroethene	1.60	1.27	80	70-130	
Toluene	1.60	1.45	90	70-130	
trans-1,2-Dichloroethene	1.60	1.38	86	70-130	
1,2,4-Trichlorobenzene	1.60	1.28	80	60-140	
1,1,1-Trichloroethane	1.60	1.41	88	70-130	
1,1,2-Trichloroethane	1.60	1.42	89	70-130	
Trichloroethene	1.60	1.33	83	70-130	
1,2,3-Trimethylbenzene	1.60	1.27	79	70-130	
1,2,4-Trimethylbenzene	1.60	1.45	91	70-130	
1,3,5-Trimethylbenzene	1.60	1.59	100	70-130	
Vinyl chloride	1.60	1.51	94	70-130	
Xylenes, Total	4.80	4.37	91	70-130	

Column to be used to flag recovery and RPD values

FORM III TO 15 LL

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Matrix: Air Level: Low Lab File ID: HCCVI05A-LCS.d

Lab ID: LCS 140-42482/1003 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Benzene	1.60	1.44	90	70-130	
Carbon tetrachloride	1.60	1.90	119	70-130	
Chlorodifluoromethane	1.60	1.56	97	60-140	
Chloroform	1.60	1.52	95	70-130	
cis-1,2-Dichloroethene	1.60	1.21	76	70-130	
Dichlorodifluoromethane	1.60	1.64	102	60-140	
1,1-Dichloroethane	1.60	1.41	88	70-130	
1,2-Dichloroethane	1.60	1.42	89	70-130	
1,1-Dichloroethene	1.60	1.16	73	70-130	
Ethylbenzene	1.60	1.28	80	70-130	
Methylene Chloride	1.60	1.57	98	70-130	
Methyl tert-butyl ether	1.60	1.20	75	60-140	
Naphthalene	1.60	1.37	86	60-140	
Tetrachloroethene	1.60	1.43	89	70-130	
Toluene	1.60	1.36	85	70-130	
trans-1,2-Dichloroethene	1.60	1.39	87	70-130	
1,2,4-Trichlorobenzene	1.60	1.49	93	60-140	
1,1,1-Trichloroethane	1.60	1.50	94	70-130	
1,1,2-Trichloroethane	1.60	1.51	94	70-130	
Trichloroethene	1.60	1.39	87	70-130	
1,2,3-Trimethylbenzene	1.60	1.85	116	70-130	
1,2,4-Trimethylbenzene	1.60	1.77	110	70-130	
1,3,5-Trimethylbenzene	1.60	1.44	90	70-130	
Vinyl chloride	1.60	1.28	80	70-130	
Xylenes, Total	4.80	4.10	85	70-130	

Column to be used to flag recovery and RPD values

FORM III TO 15 LL

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Matrix: Air Level: Low Lab File ID: HCCVH06b-LCS.d

Lab ID: LCS 140-42498/1009 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Benzene	1.60	1.72	107	70-130	
Carbon tetrachloride	1.60	2.29	143	70-130	*
Chlorodifluoromethane	1.60	1.72	108	60-140	
Chloroform	1.60	1.72	107	70-130	
cis-1,2-Dichloroethene	1.60	1.63	102	70-130	
Dichlorodifluoromethane	1.60	1.85	116	60-140	
1,1-Dichloroethane	1.60	1.70	106	70-130	
1,2-Dichloroethane	1.60	1.79	112	70-130	
1,1-Dichloroethene	1.60	1.64	103	70-130	
Ethylbenzene	1.60	1.69	106	70-130	
Methylene Chloride	1.60	1.64	103	70-130	
Methyl tert-butyl ether	1.60	1.59	100	60-140	
Naphthalene	1.60	2.18	136	60-140	
Tetrachloroethene	1.60	1.73	108	70-130	
Toluene	1.60	1.74	109	70-130	
trans-1,2-Dichloroethene	1.60	1.67	105	70-130	
1,2,4-Trichlorobenzene	1.60	2.18	136	60-140	
1,1,1-Trichloroethane	1.60	1.68	105	70-130	
1,1,2-Trichloroethane	1.60	1.75	110	70-130	
Trichloroethene	1.60	1.71	107	70-130	
1,2,3-Trimethylbenzene	1.60	1.58	99	70-130	
1,2,4-Trimethylbenzene	1.60	2.12	132	70-130	*
1,3,5-Trimethylbenzene	1.60	2.02	126	70-130	
Vinyl chloride	1.60	1.66	104	70-130	
Xylenes, Total	4.80	5.51	115	70-130	

Column to be used to flag recovery and RPD values

FORM III TO 15 LL

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Matrix: Air Level: Low Lab File ID: GCCVI07-LCS.d

Lab ID: LCS 140-42500/1002 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Benzene	1.60	1.36	85	70-130	
Carbon tetrachloride	1.60	1.37	86	70-130	
Chlorodifluoromethane	1.60	1.55	97	60-140	
Chloroform	1.60	1.46	91	70-130	
cis-1,2-Dichloroethene	1.60	1.47	92	70-130	
Dichlorodifluoromethane	1.60	1.43	90	60-140	
1,1-Dichloroethane	1.60	1.56	97	70-130	
1,2-Dichloroethane	1.60	1.41	88	70-130	
1,1-Dichloroethene	1.60	1.43	89	70-130	
Ethylbenzene	1.60	1.49	93	70-130	
Methylene Chloride	1.60	1.48	92	70-130	
Methyl tert-butyl ether	1.60	1.77	111	60-140	
Naphthalene	1.60	1.52	95	60-140	
Tetrachloroethene	1.60	1.24	77	70-130	
Toluene	1.60	1.47	92	70-130	
trans-1,2-Dichloroethene	1.60	1.42	89	70-130	
1,2,4-Trichlorobenzene	1.60	1.57	98	60-140	
1,1,1-Trichloroethane	1.60	1.48	93	70-130	
1,1,2-Trichloroethane	1.60	1.48	92	70-130	
Trichloroethene	1.60	1.20	75	70-130	
1,2,3-Trimethylbenzene	1.60	1.82	114	70-130	
1,2,4-Trimethylbenzene	1.60	1.52	95	70-130	
1,3,5-Trimethylbenzene	1.60	1.53	96	70-130	
Vinyl chloride	1.60	1.55	97	70-130	
Xylenes, Total	4.80	4.36	91	70-130	

Column to be used to flag recovery and RPD values

FORM III TO 15 LL

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Matrix: Air Level: Low Lab File ID: GCCVI08Z-LCS.d

Lab ID: LCS 140-42503/1002 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Benzene	1.60	1.41	88	70-130	
Carbon tetrachloride	1.60	1.51	95	70-130	
Chlorodifluoromethane	1.60	1.73	108	60-140	
Chloroform	1.60	1.49	93	70-130	
cis-1,2-Dichloroethene	1.60	1.49	93	70-130	
Dichlorodifluoromethane	1.60	1.48	92	60-140	
1,1-Dichloroethane	1.60	1.65	103	70-130	
1,2-Dichloroethane	1.60	1.46	91	70-130	
1,1-Dichloroethene	1.60	1.54	96	70-130	
Ethylbenzene	1.60	1.39	87	70-130	
Methylene Chloride	1.60	1.54	96	70-130	
Methyl tert-butyl ether	1.60	1.52	95	60-140	
Naphthalene	1.60	1.17	73	60-140	
Tetrachloroethene	1.60	1.24	77	70-130	
Toluene	1.60	1.37	85	70-130	
trans-1,2-Dichloroethene	1.60	1.44	90	70-130	
1,2,4-Trichlorobenzene	1.60	1.13	71	60-140	
1,1,1-Trichloroethane	1.60	1.45	91	70-130	
1,1,2-Trichloroethane	1.60	1.36	85	70-130	
Trichloroethene	1.60	1.26	79	70-130	
1,2,3-Trimethylbenzene	1.60	1.09	68	70-130	*
1,2,4-Trimethylbenzene	1.60	1.26	78	70-130	
1,3,5-Trimethylbenzene	1.60	1.46	91	70-130	
Vinyl chloride	1.60	1.73	108	70-130	
Xylenes, Total	4.80	4.10	85	70-130	

Column to be used to flag recovery and RPD values

FORM III TO 15 LL

FORM IV
AIR - GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Lab File ID: I03L20237X.D Lab Sample ID: MB 140-42409/8

Matrix: Air Heated Purge:(Y/N) N

Instrument ID: MG Date Analyzed: 09/03/2020 11:52

GC Column: RTX-5 ID: 0.32(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 140-42409/1002	GCCVI03-LCS.d	09/03/2020 07:55
SV-060-C-29	140-20175-12	GI03P111.D	09/03/2020 22:15
SV-152-C-29	140-20175-14	GI03P112.D	09/03/2020 23:05
SV-141-C-29	140-20175-15	GI03P113.D	09/03/2020 23:53
SV-149-C-29	140-20175-16	GI03P114.D	09/04/2020 00:41
SV-150-C-29	140-20175-13	GI03P116D.D	09/04/2020 02:51

FORM IV
AIR - GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Lab File ID: G500BI07.D Lab Sample ID: MB 140-42500/4

Matrix: Air Heated Purge:(Y/N) N

Instrument ID: MG Date Analyzed: 09/07/2020 10:21

GC Column: RTX-5 ID: 0.32(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 140-42500/1002	GCCVI07-LCS.d	09/07/2020 08:06
IA-144-C-29	140-20175-33	GBI07P107.D	09/07/2020 18:39
IA-141-C-29	140-20175-34	GBI07P108.D	09/07/2020 19:25
IA-149-C-29	140-20175-35	GBI07P109.D	09/07/2020 20:13
IA-DUP2-C-29	140-20175-36	GBI07P110.D	09/07/2020 20:56
IA-126-C-29	140-20175-37	GBI07P111.D	09/07/2020 21:40
IA-BCK-1-29	140-20175-38	GBI07P112.D	09/07/2020 22:24
IA-BCK-2-29	140-20175-39	GBI07P113.D	09/07/2020 23:09
IA-BCK-3-29	140-20175-40	GBI07P114.D	09/07/2020 23:56
IA-BCK-4-29	140-20175-41	GBI07P115.D	09/08/2020 00:42
SV-DUP2-C-29	140-20175-11	GBI07P116.D	09/08/2020 01:28

FORM IV
AIR - GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Lab File ID: G500BI08.D Lab Sample ID: MB 140-42503/5

Matrix: Air Heated Purge:(Y/N) N

Instrument ID: MG Date Analyzed: 09/08/2020 17:16

GC Column: RTX-5 ID: 0.32(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 140-42503/1002	GCCVI08Z-LCS.d	09/08/2020 15:52
SV-102-C-29 DL	140-20175-3 DL	GI08P102.D	09/08/2020 18:03
SV-DUP1-C-29 DL	140-20175-6 DL	GI08P103.D	09/08/2020 18:49
SV-126-C-29	140-20175-17	GI08P104R.D	09/09/2020 07:56

FORM IV
AIR - GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Lab File ID: H500BI03.D Lab Sample ID: MB 140-42399/4

Matrix: Air Heated Purge:(Y/N) N

Instrument ID: MH Date Analyzed: 09/03/2020 12:59

GC Column: RTX-5 ID: 0.32(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 140-42399/1002	HCCVI03-LCS.d	09/03/2020 10:16
SV-001-C-29	140-20175-1	HI03P110.D	09/03/2020 22:20
SV-004-C-29	140-20175-2	HI03P111.D	09/03/2020 23:13
SV-102-C-29	140-20175-3	HI03P112.D	09/04/2020 00:08
SV-113-C-29	140-20175-4	HI03P113.D	09/04/2020 01:04
SV-088-C-29	140-20175-5	HI03P114.D	09/04/2020 01:58
SV-DUP1-C-29	140-20175-6	HI03P115.D	09/04/2020 02:50
SV-142-C-29	140-20175-7	HI03P116D.D	09/04/2020 04:41
SV-155-C-29	140-20175-8	HI03P201.D	09/04/2020 05:38
SV-133-C-29	140-20175-9	HI03P202.D	09/04/2020 06:35
SV-153-C-29	140-20175-10	HI03P203.D	09/04/2020 07:30

FORM IV
AIR - GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Lab File ID: H500BI05RN.D Lab Sample ID: MB 140-42482/5

Matrix: Air Heated Purge:(Y/N) N

Instrument ID: MH Date Analyzed: 09/05/2020 15:25

GC Column: RTX-5 ID: 0.32(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 140-42482/1003	HCCVI05A-LCS.d	09/05/2020 12:41
IA-001-C-29	140-20175-18	HI05P101.D	09/05/2020 16:20
IA-004-C-29	140-20175-19	HI05P102.D	09/05/2020 17:18
IA-102-C-29	140-20175-20	HI05P103.D	09/05/2020 18:14

FORM IV
AIR - GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Lab File ID: HB500I06.D Lab Sample ID: MB 140-42498/4

Matrix: Air Heated Purge:(Y/N) N

Instrument ID: MH Date Analyzed: 09/06/2020 18:36

GC Column: RTX-5 ID: 0.32(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 140-42498/1009	HCCVH06b-LCS.d	09/06/2020 17:12
IA-113-C-29	140-20175-21	HI07P104.D	09/06/2020 19:30
IA-088-C-29	140-20175-22	HI07P105.D	09/06/2020 20:26
IA-142-C-29	140-20175-23	HI07P106.D	09/06/2020 21:23
IA-155-C-29	140-20175-24	HI07P107.D	09/06/2020 22:17
IA-133-C-29	140-20175-25	HI07P108.D	09/06/2020 23:11
IA-153-C-29	140-20175-26	HI07P109.D	09/07/2020 00:04
IA-DUP1-C-29	140-20175-27	HI07P110.D	09/07/2020 00:57
IA-060-C-29	140-20175-28	HI07P111.D	09/07/2020 01:52
IA-152-C-29	140-20175-29	HI07P112.D	09/07/2020 02:48
IA-150-C-29	140-20175-30	HI07P113.D	09/07/2020 03:43
IA-145-C-29	140-20175-31	HI07P114.D	09/07/2020 04:36
IA-146-C-29	140-20175-32	HI07P115.D	09/07/2020 05:30

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Lab File ID: GI01BFB.D BFB Injection Date: 09/01/2020

Instrument ID: MG BFB Injection Time: 16:42

Analysis Batch No.: 42295

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	33.0	
75	30.0 - 60.0 % of mass 95	54.3	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.2	
173	Less than 2.0 % of mass 174	0.3	(0.5) 1
174	Greater than 50% of mass 95	73.8	
175	5.0 - 9.0 % of mass 174	5.3	(7.1) 1
176	95.0 - 101.0 % of mass 174	71.8	(97.2) 1
177	5.0 - 9.0 % of mass 176	4.5	(6.3) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 140-42295/3	GI01IC10.D	09/01/2020	18:07
	IC 140-42295/5	GI01IC09.D	09/01/2020	19:43
	IC 140-42295/7	GI01IC08.D	09/01/2020	21:19
	IC 140-42295/9	GI01IC01.D	09/01/2020	22:55
	IC 140-42295/10	GI01IC02.D	09/01/2020	23:39
	IC 140-42295/11	GI01IC03.D	09/02/2020	0:24
	IC 140-42295/12	GI01IC04.D	09/02/2020	1:08
	IC 140-42295/13	GI01IC05.D	09/02/2020	1:52
	IC 140-42295/14	GI01IC06.D	09/02/2020	2:38
	ICIS 140-42295/15	GI01IC07.D	09/02/2020	3:27
	ICV 140-42295/22	GI01ICVR.D	09/02/2020	8:56

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Lab File ID: GBFBI03.D BFB Injection Date: 09/03/2020

Instrument ID: MG BFB Injection Time: 07:22

Analysis Batch No.: 42409

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE		
50	15.0 - 40.0 % of mass 95	37.2		
75	30.0 - 60.0 % of mass 95	56.7		
95	Base Peak, 100% relative abundance	100.0		
96	5.0 - 9.0 % of mass 95	6.5		
173	Less than 2.0 % of mass 174	0.4	(0.7) 1	
174	Greater than 50% of mass 95	67.1		
175	5.0 - 9.0 % of mass 174	4.5	(6.7) 1	
176	95.0 - 101.0 % of mass 174	62.9	(93.8) 1	*
177	5.0 - 9.0 % of mass 176	4.3	(6.9) 2	

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 140-42409/2	GCCVI03.D	09/03/2020	7:55
	LCS 140-42409/1002	GCCVI03-LCS.d	09/03/2020	7:55
	MB 140-42409/8	I03L20237X.D	09/03/2020	11:52
SV-060-C-29	140-20175-12	GI03P111.D	09/03/2020	22:15
SV-152-C-29	140-20175-14	GI03P112.D	09/03/2020	23:05
SV-141-C-29	140-20175-15	GI03P113.D	09/03/2020	23:53
SV-149-C-29	140-20175-16	GI03P114.D	09/04/2020	0:41
SV-150-C-29	140-20175-13	GI03P116D.D	09/04/2020	2:51

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Lab File ID: GBFBI07.D BFB Injection Date: 09/07/2020

Instrument ID: MG BFB Injection Time: 07:32

Analysis Batch No.: 42500

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	38.4	
75	30.0 - 60.0 % of mass 95	55.1	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.3	
173	Less than 2.0 % of mass 174	0.4	(0.5) 1
174	Greater than 50% of mass 95	71.4	
175	5.0 - 9.0 % of mass 174	4.9	(6.9) 1
176	95.0 - 101.0 % of mass 174	68.0	(95.2) 1
177	5.0 - 9.0 % of mass 176	4.4	(6.4) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 140-42500/2	GCCVI07.D	09/07/2020	8:06
	LCS 140-42500/1002	GCCVI07-LCS.d	09/07/2020	8:06
	MB 140-42500/4	G500BI07.D	09/07/2020	10:21
IA-144-C-29	140-20175-33	GBI07P107.D	09/07/2020	18:39
IA-141-C-29	140-20175-34	GBI07P108.D	09/07/2020	19:25
IA-149-C-29	140-20175-35	GBI07P109.D	09/07/2020	20:13
IA-DUP2-C-29	140-20175-36	GBI07P110.D	09/07/2020	20:56
IA-126-C-29	140-20175-37	GBI07P111.D	09/07/2020	21:40
IA-BCK-1-29	140-20175-38	GBI07P112.D	09/07/2020	22:24
IA-BCK-2-29	140-20175-39	GBI07P113.D	09/07/2020	23:09
IA-BCK-3-29	140-20175-40	GBI07P114.D	09/07/2020	23:56
IA-BCK-4-29	140-20175-41	GBI07P115.D	09/08/2020	0:42
SV-DUP2-C-29	140-20175-11	GBI07P116.D	09/08/2020	1:28

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Lab File ID: GBFBI08Z.D BFB Injection Date: 09/08/2020

Instrument ID: MG BFB Injection Time: 14:50

Analysis Batch No.: 42503

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	39.4	
75	30.0 - 60.0 % of mass 95	57.1	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.4	
173	Less than 2.0 % of mass 174	0.5	(0.7) 1
174	Greater than 50% of mass 95	68.9	
175	5.0 - 9.0 % of mass 174	4.7	(6.8) 1
176	95.0 - 101.0 % of mass 174	67.9	(98.5) 1
177	5.0 - 9.0 % of mass 176	4.6	(6.8) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 140-42503/2	GCCVI08Z.D	09/08/2020	15:52
	LCS 140-42503/1002	GCCVI08Z-LCS.	09/08/2020	15:52
	MB 140-42503/5	G500BI08.D	09/08/2020	17:16
SV-102-C-29 DL	140-20175-3 DL	GI08P102.D	09/08/2020	18:03
SV-DUP1-C-29 DL	140-20175-6 DL	GI08P103.D	09/08/2020	18:49
SV-126-C-29	140-20175-17	GI08P104R.D	09/09/2020	7:56

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Lab File ID: HBFBH29.D BFB Injection Date: 08/29/2020

Instrument ID: MH BFB Injection Time: 10:00

Analysis Batch No.: 42290

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	23.2	
75	30.0 - 60.0 % of mass 95	49.8	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.8	
173	Less than 2.0 % of mass 174	0.6	(0.7) 1
174	Greater than 50% of mass 95	89.4	
175	5.0 - 9.0 % of mass 174	6.5	(7.3) 1
176	95.0 - 101.0 % of mass 174	87.1	(97.4) 1
177	5.0 - 9.0 % of mass 176	5.7	(6.5) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 140-42290/3	HH29IC10.D	08/29/2020	12:34
	IC 140-42290/5	HH29IC09.D	08/29/2020	14:25
	IC 140-42290/7	HH29IC08.D	08/29/2020	16:25
	IC 140-42290/9	HH29IC01.D	08/29/2020	18:16
	IC 140-42290/10	HH29IC02.D	08/29/2020	19:13
	IC 140-42290/11	HH29IC03.D	08/29/2020	20:11
	IC 140-42290/12	HH29IC04.D	08/29/2020	21:03
	IC 140-42290/13	HH29IC05.D	08/29/2020	21:58
	IC 140-42290/14	HH29IC06.D	08/29/2020	22:57
	ICIS 140-42290/15	HH29IC07.D	08/29/2020	23:57
	ICV 140-42290/18	HH29LCS.D	08/30/2020	2:47

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Lab File ID: HBFBI03.D BFB Injection Date: 09/03/2020

Instrument ID: MH BFB Injection Time: 09:43

Analysis Batch No.: 42399

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE		
50	15.0 - 40.0 % of mass 95	22.4		
75	30.0 - 60.0 % of mass 95	47.7		
95	Base Peak, 100% relative abundance	100.0		
96	5.0 - 9.0 % of mass 95	6.6		
173	Less than 2.0 % of mass 174	0.7	(0.8) 1	
174	Greater than 50% of mass 95	83.6		
175	5.0 - 9.0 % of mass 174	5.9	(7.1) 1	
176	95.0 - 101.0 % of mass 174	79.2	(94.7) 1	*
177	5.0 - 9.0 % of mass 176	5.2	(6.6) 2	

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 140-42399/2	HCCVI03.D	09/03/2020	10:16
	LCS 140-42399/1002	HCCVI03-LCS.d	09/03/2020	10:16
	MB 140-42399/4	H500BI03.D	09/03/2020	12:59
SV-001-C-29	140-20175-1	HI03P110.D	09/03/2020	22:20
SV-004-C-29	140-20175-2	HI03P111.D	09/03/2020	23:13
SV-102-C-29	140-20175-3	HI03P112.D	09/04/2020	0:08
SV-113-C-29	140-20175-4	HI03P113.D	09/04/2020	1:04
SV-088-C-29	140-20175-5	HI03P114.D	09/04/2020	1:58
SV-DUP1-C-29	140-20175-6	HI03P115.D	09/04/2020	2:50
SV-142-C-29	140-20175-7	HI03P116D.D	09/04/2020	4:41
SV-155-C-29	140-20175-8	HI03P201.D	09/04/2020	5:38
SV-133-C-29	140-20175-9	HI03P202.D	09/04/2020	6:35
SV-153-C-29	140-20175-10	HI03P203.D	09/04/2020	7:30

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Lab File ID: HDNUI05X.D BFB Injection Date: 09/05/2020

Instrument ID: MH BFB Injection Time: 11:09

Analysis Batch No.: 42482

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	23.0
75	30.0 - 60.0 % of mass 95	47.5
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	6.8
173	Less than 2.0 % of mass 174	0.9 (1.0) 1
174	Greater than 50% of mass 95	89.5
175	5.0 - 9.0 % of mass 174	6.4 (7.1) 1
176	95.0 - 101.0 % of mass 174	86.5 (96.7) 1
177	5.0 - 9.0 % of mass 176	5.7 (6.6) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 140-42482/3	HCCVI05A.D	09/05/2020	12:41
	LCS 140-42482/1003	HCCVI05A-LCS.	09/05/2020	12:41
	MB 140-42482/5	H500BI05RN.D	09/05/2020	15:25
IA-001-C-29	140-20175-18	HI05P101.D	09/05/2020	16:20
IA-004-C-29	140-20175-19	HI05P102.D	09/05/2020	17:18
IA-102-C-29	140-20175-20	HI05P103.D	09/05/2020	18:14

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Lab File ID: HBFBH06a.D BFB Injection Date: 09/06/2020

Instrument ID: MH BFB Injection Time: 15:49

Analysis Batch No.: 42498

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	24.3	
75	30.0 - 60.0 % of mass 95	48.3	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.7	
173	Less than 2.0 % of mass 174	0.8	(0.9) 1
174	Greater than 50% of mass 95	84.7	
175	5.0 - 9.0 % of mass 174	5.9	(6.9) 1
176	95.0 - 101.0 % of mass 174	82.0	(96.9) 1
177	5.0 - 9.0 % of mass 176	5.6	(6.8) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 140-42498/9	HCCVH06b.D	09/06/2020	17:12
	LCS 140-42498/1009	HCCVH06b-LCS.	09/06/2020	17:12
	MB 140-42498/4	HB500I06.D	09/06/2020	18:36
IA-113-C-29	140-20175-21	HI07P104.D	09/06/2020	19:30
IA-088-C-29	140-20175-22	HI07P105.D	09/06/2020	20:26
IA-142-C-29	140-20175-23	HI07P106.D	09/06/2020	21:23
IA-155-C-29	140-20175-24	HI07P107.D	09/06/2020	22:17
IA-133-C-29	140-20175-25	HI07P108.D	09/06/2020	23:11
IA-153-C-29	140-20175-26	HI07P109.D	09/07/2020	0:04
IA-DUP1-C-29	140-20175-27	HI07P110.D	09/07/2020	0:57
IA-060-C-29	140-20175-28	HI07P111.D	09/07/2020	1:52
IA-152-C-29	140-20175-29	HI07P112.D	09/07/2020	2:48
IA-150-C-29	140-20175-30	HI07P113.D	09/07/2020	3:43
IA-145-C-29	140-20175-31	HI07P114.D	09/07/2020	4:36
IA-146-C-29	140-20175-32	HI07P115.D	09/07/2020	5:30

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Sample No.: ICIS 140-42295/15 Date Analyzed: 09/02/2020 03:27

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm)

Lab File ID (Standard): GI01IC07.D Heated Purge: (Y/N) N

Calibration ID: 2602

		CBM		DFBZ		CBZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		155264	8.81	774405	11.00	759403	15.73
UPPER LIMIT		217370	9.14	1084167	11.33	1063164	16.06
LOWER LIMIT		93158	8.48	464643	10.67	455642	15.40
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 140-42295/22		147601	8.81	795164	11.00	773847	15.73

CBM = Chlorobromomethane (IS)
DFBZ = 1,4-Difluorobenzene
CBZd5 = Chlorobenzene-d5 (IS)

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO 15 LL

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Sample No.: CCVIS 140-42409/2 Date Analyzed: 09/03/2020 07:55

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm)

Lab File ID (Standard): GCCVI03.D Heated Purge: (Y/N) N

Calibration ID: 2602

		CBM		DFBZ		CBZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		123190	8.81	577691	11.00	619386	15.73
UPPER LIMIT		172466	9.14	808767	11.33	867140	16.06
LOWER LIMIT		73914	8.48	346615	10.67	371632	15.40
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 140-42409/1002		123190	8.81	577691	11.00	619386	15.73
MB 140-42409/8		126458	8.81	674635	11.00	648613	15.73
140-20175-12	SV-060-C-29	105140	8.81	579099	10.99	550873	15.73
140-20175-14	SV-152-C-29	100553	8.81	552080	11.00	529665	15.73
140-20175-15	SV-141-C-29	105409	8.81	592140	10.99	562261	15.73
140-20175-16	SV-149-C-29	107317	8.81	600962	10.99	568970	15.72
140-20175-13	SV-150-C-29	122983	8.81	689449	11.00	719081	15.73

CBM = Chlorobromomethane (IS)
DFBZ = 1,4-Difluorobenzene
CBZd5 = Chlorobenzene-d5 (IS)

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO 15 LL

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Sample No.: CCVIS 140-42500/2 Date Analyzed: 09/07/2020 08:06

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm)

Lab File ID (Standard): GCCVI07.D Heated Purge: (Y/N) N

Calibration ID: 2602

		CBM		DFBZ		CBZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		111190	8.81	599538	11.00	593917	15.73
UPPER LIMIT		155666	9.14	839353	11.33	831484	16.06
LOWER LIMIT		66714	8.48	359723	10.67	356350	15.40
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 140-42500/1002		111190	8.81	599538	11.00	593917	15.73
MB 140-42500/4		111064	8.81	569575	10.99	557368	15.73
140-20175-33	IA-144-C-29	106151	8.81	586385	10.99	570501	15.73
140-20175-34	IA-141-C-29	105842	8.81	582821	10.99	560836	15.72
140-20175-35	IA-149-C-29	107478	8.81	567029	10.99	554939	15.73
140-20175-36	IA-DUP2-C-29	108291	8.82	591254	11.00	579156	15.72
140-20175-37	IA-126-C-29	105788	8.81	596448	10.99	584242	15.72
140-20175-38	IA-BCK-1-29	105198	8.80	596948	10.98	571257	15.72
140-20175-39	IA-BCK-2-29	108441	8.81	606996	10.99	576944	15.72
140-20175-40	IA-BCK-3-29	104188	8.81	561438	10.99	569586	15.73
140-20175-41	IA-BCK-4-29	100244	8.81	551622	10.99	520267	15.72
140-20175-11	SV-DUP2-C-29	105624	8.81	577580	11.00	546269	15.72

CBM = Chlorobromomethane (IS)
DFBZ = 1,4-Difluorobenzene
CBZd5 = Chlorobenzene-d5 (IS)

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO 15 LL

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Sample No.: CCVIS 140-42503/2 Date Analyzed: 09/08/2020 15:52

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm)

Lab File ID (Standard): GCCVI08Z.D Heated Purge: (Y/N) N

Calibration ID: 2602

		CBM		DFBZ		CBZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		85639	8.81	429335	10.99	458464	15.72
UPPER LIMIT		119895	9.14	601069	11.32	641850	16.05
LOWER LIMIT		51383	8.48	257601	10.66	275078	15.39
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 140-42503/1002		85639	8.81	429335	10.99	458464	15.72
MB 140-42503/5		92424	8.81	511454	10.99	492844	15.73
140-20175-3 DL	SV-102-C-29 DL	72039	8.81	335564	11.00	339613	15.72
140-20175-6 DL	SV-DUP1-C-29 DL	89902	8.81	481249	10.99	466074	15.72
140-20175-17	SV-126-C-29	78300	8.81	366946	10.99	398277	15.72

CBM = Chlorobromomethane (IS)
DFBZ = 1,4-Difluorobenzene
CBZd5 = Chlorobenzene-d5 (IS)

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO 15 LL

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Sample No.: ICIS 140-42290/15 Date Analyzed: 08/29/2020 23:57

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm)

Lab File ID (Standard): HH29IC07.D Heated Purge: (Y/N) N

Calibration ID: 2592

		CBM		DFBZ		CBZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		124211	9.44	547740	11.60	401461	16.26
UPPER LIMIT		173895	9.77	766836	11.93	562045	16.59
LOWER LIMIT		74527	9.11	328644	11.27	240877	15.93
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 140-42290/18		125635	9.43	541139	11.59	407551	16.26

CBM = Chlorobromomethane (IS)
DFBZ = 1,4-Difluorobenzene
CBZd5 = Chlorobenzene-d5 (IS)

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO 15 LL

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Sample No.: CCVIS 140-42399/2 Date Analyzed: 09/03/2020 10:16

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm)

Lab File ID (Standard): HCCVI03.D Heated Purge: (Y/N) N

Calibration ID: 2592

		CBM		DFBZ		CBZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		102360	9.44	437376	11.59	328807	16.26
UPPER LIMIT		143304	9.77	612326	11.92	460330	16.59
LOWER LIMIT		61416	9.11	262426	11.26	197284	15.93
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 140-42399/1002		102360	9.44	437376	11.59	328807	16.26
MB 140-42399/4		109088	9.43	445803	11.59	307157	16.26
140-20175-1	SV-001-C-29	102877	9.43	406737	11.59	264723	16.26
140-20175-2	SV-004-C-29	100071	9.43	389816	11.59	261316	16.26
140-20175-3	SV-102-C-29	94451	9.43	375223	11.59	255415	16.26
140-20175-4	SV-113-C-29	113176	9.43	446569	11.59	282466	16.26
140-20175-5	SV-088-C-29	96953	9.43	389257	11.59	254913	16.26
140-20175-6	SV-DUP1-C-29	105447	9.43	409892	11.59	313538	16.26
140-20175-7	SV-142-C-29	113516	9.43	459567	11.59	293565	16.26
140-20175-8	SV-155-C-29	106055	9.43	433788	11.59	309342	16.26
140-20175-9	SV-133-C-29	102150	9.43	421804	11.59	304872	16.26
140-20175-10	SV-153-C-29	106027	9.43	420740	11.59	310339	16.26

CBM = Chlorobromomethane (IS)
DFBZ = 1,4-Difluorobenzene
CBZd5 = Chlorobenzene-d5 (IS)

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO 15 LL

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Sample No.: CCVIS 140-42482/3 Date Analyzed: 09/05/2020 12:41

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm)

Lab File ID (Standard): HCCVI05A.D Heated Purge: (Y/N) N

Calibration ID: 2592

		CBM		DFBZ		CBZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		96483	9.44	419421	11.59	298882	16.26
UPPER LIMIT		135076	9.77	587189	11.92	418435	16.59
LOWER LIMIT		57890	9.11	251653	11.26	179329	15.93
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 140-42482/1003		96483	9.44	419421	11.59	298882	16.26
MB 140-42482/5		106353	9.43	381351	11.59	254972	16.26
140-20175-18	IA-001-C-29	90837	9.43	363248	11.59	242567	16.26
140-20175-19	IA-004-C-29	91115	9.43	368208	11.59	261236	16.26
140-20175-20	IA-102-C-29	85391	9.43	342569	11.60	279069	16.26

CBM = Chlorobromomethane (IS)
DFBZ = 1,4-Difluorobenzene
CBZd5 = Chlorobenzene-d5 (IS)

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO 15 LL

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Sample No.: CCVIS 140-42498/9 Date Analyzed: 09/06/2020 17:12

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm)

Lab File ID (Standard): HCCVH06b.D Heated Purge: (Y/N) N

Calibration ID: 2592

		CBM		DFBZ		CBZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		122536	9.43	491945	11.59	362338	16.26
UPPER LIMIT		171550	9.76	688723	11.92	507273	16.59
LOWER LIMIT		73522	9.10	295167	11.26	217403	15.93
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 140-42498/1009		122536	9.43	491945	11.59	362338	16.26
MB 140-42498/4		100504	9.43	421238	11.59	248813	16.26
140-20175-21	IA-113-C-29	96857	9.43	404330	11.59	264517	16.26
140-20175-22	IA-088-C-29	106797	9.44	431186	11.59	292750	16.26
140-20175-23	IA-142-C-29	96074	9.43	382955	11.59	292544	16.26
140-20175-24	IA-155-C-29	105613	9.43	386630	11.59	313320	16.26
140-20175-25	IA-133-C-29	105562	9.43	383858	11.59	284256	16.26
140-20175-26	IA-153-C-29	99987	9.43	388940	11.59	262723	16.26
140-20175-27	IA-DUP1-C-29	99189	9.43	347780	11.59	267383	16.26
140-20175-28	IA-060-C-29	92287	9.44	364744	11.59	265631	16.26
140-20175-29	IA-152-C-29	99489	9.44	402246	11.59	302959	16.26
140-20175-30	IA-150-C-29	100616	9.44	398071	11.59	282692	16.26
140-20175-31	IA-145-C-29	106815	9.43	429409	11.59	299473	16.26
140-20175-32	IA-146-C-29	98293	9.44	374024	11.59	293987	16.26

CBM = Chlorobromomethane (IS)
DFBZ = 1,4-Difluorobenzene
CBZd5 = Chlorobenzene-d5 (IS)

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO 15 LL

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: SV-001-C-29 Lab Sample ID: 140-20175-1

Matrix: Air Lab File ID: HI03P110.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 10:08

Sample wt/vol: 100(mL) Date Analyzed: 09/03/2020 22:20

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42399 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.11	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.078	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	0.53		0.40	0.11
67-66-3	Chloroform	119.38	0.72		0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	4.8		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.54		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	ND		0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	6.1		0.40	0.035
108-88-3	Toluene	92.14	ND		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	2.3		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	43		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	ND		0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	91		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: SV-001-C-29 Lab Sample ID: 140-20175-1

Matrix: Air Lab File ID: HI03P110.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 10:08

Sample wt/vol: 100(mL) Date Analyzed: 09/03/2020 22:20

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42399 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.35	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.49	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	1.9		1.4	0.39
67-66-3	Chloroform	119.38	3.5		2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	19		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.7		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	ND		1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	41		2.7	0.24
108-88-3	Toluene	92.14	ND		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	9.0		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	230		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	ND		3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	91		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P110.D				
Lims ID:	140-20175-A-1				
Client ID:	SV-001-C-29				
Sample Type:	Client				
Inject. Date:	03-Sep-2020 22:20:30	ALS Bottle#:	10	Worklist Smp#:	14
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016480-014				
Misc. Info.:	140-20175-a-1				
Operator ID:	HMT	Instrument ID:	MH		
Method:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\MH_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	04-Sep-2020 10:26:09	Calib Date:	29-Aug-2020 23:57:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1061				
First Level Reviewer: khachitpongpanits		Date:	04-Sep-2020 10:26:09		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.431	9.436	-0.005	98	102877	4.80	
* 2 1,4-Difluorobenzene	114	11.591	11.591	0.000	95	406737	4.80	
* 3 Chlorobenzene-d5 (IS)	117	16.258	16.258	0.000	88	264723	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.876	17.876	0.000	90	130173	4.23	
6 Chlorodifluoromethane	51	3.916	3.921	-0.005	96	6077	0.1059	
8 Dichlorodifluoromethane	85	3.983	3.986	-0.005	100	8432	0.1084	
34 trans-1,2-Dichloroethene	96	7.617	7.613	-0.005	96	11887	0.4564	
42 cis-1,2-Dichloroethene	96	9.079	9.079	-0.005	96	25549	0.9687	
44 Chloroform	83	9.436	9.431	0.000	30	9002	0.1441	
47 1,1,1-Trichloroethane	97	10.490	10.473	0.005	10	1093	0.0193	
51 Benzene	78	11.064	11.074	-0.010	84	1638	0.0219	
52 Carbon tetrachloride	117	11.085	11.095	-0.010	57	720	0.0156	
58 Trichloroethene	130	12.294	12.294	0.000	95	289784	8.63	
73 Tetrachloroethene	129	15.436	15.436	0.000	92	34728	1.21	

Reagents:

40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

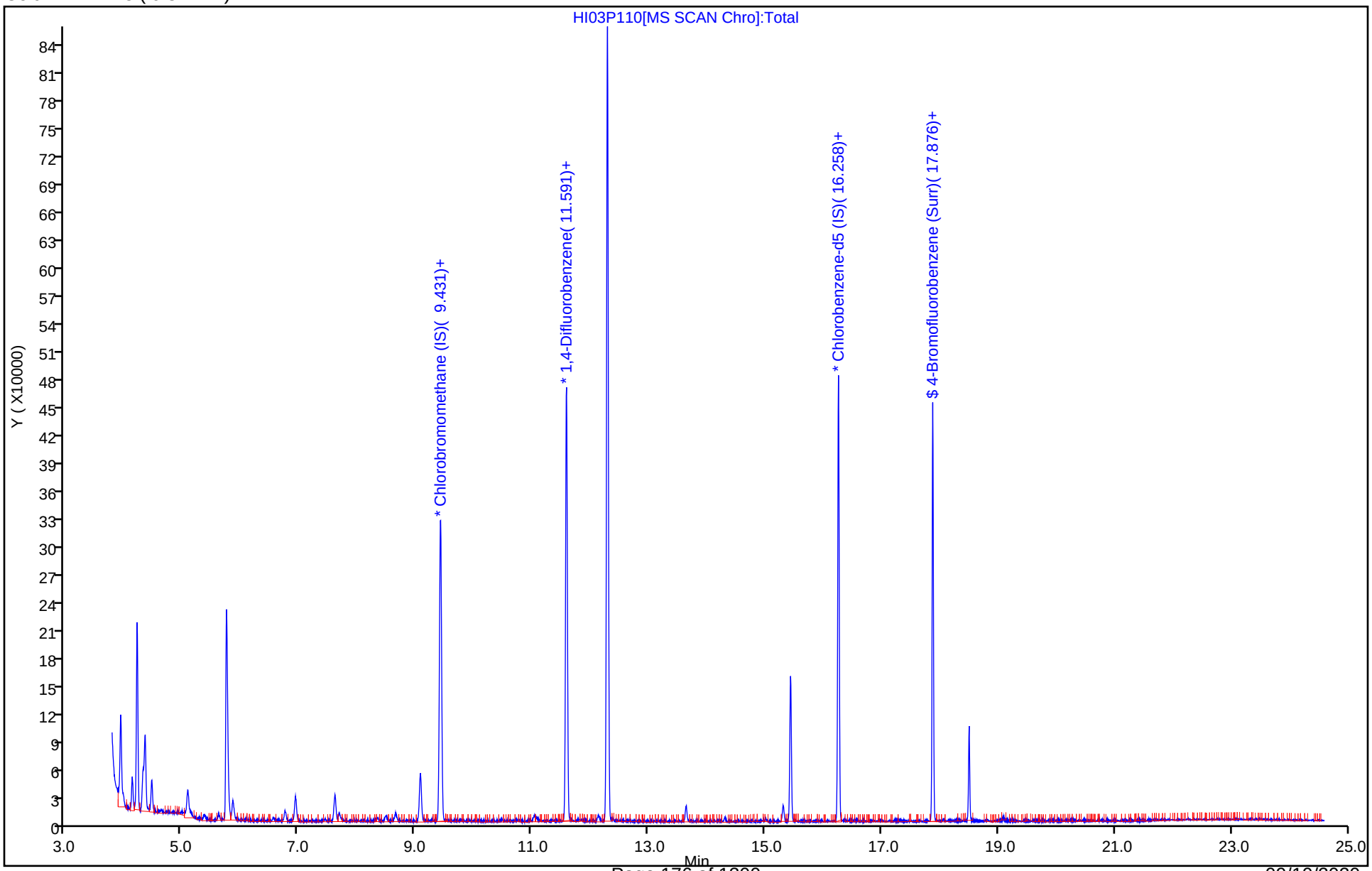
Report Date: 04-Sep-2020 10:26:09 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P110.D

Injection Date:	03-Sep-2020 22:20:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	140-20175-A-1	Lab Sample ID:	140-20175-1	Worklist Smp#:	14
Client ID:	SV-001-C-29				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

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Lims ID:	140-20175-A-1				
Client ID:	SV-001-C-29				
Sample Type:	Client				
Inject. Date:	03-Sep-2020 22:20:30	ALS Bottle#:	10	Worklist Smp#:	14
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016480-014				
Misc. Info.:	140-20175-a-1				
Operator ID:	HMT	Instrument ID:	MH		
Method:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\MH_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	04-Sep-2020 10:26:09	Calib Date:	29-Aug-2020 23:57:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1061				

First Level Reviewer: khachitpongpanits Date: 04-Sep-2020 10:26:09

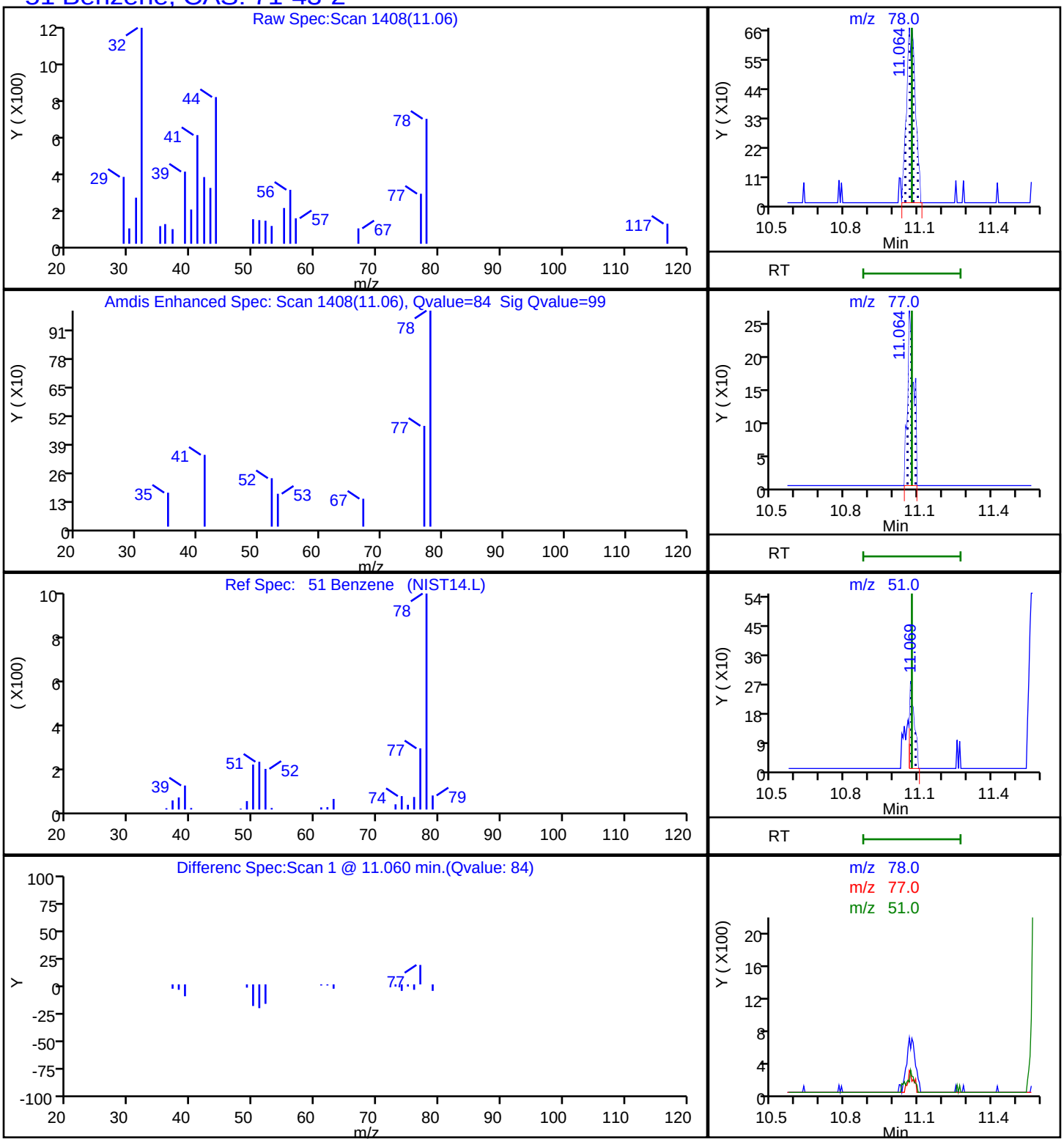
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	4.23	91.21

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P110.D

Injection Date:	03-Sep-2020 22:20:30	Instrument ID:	MH		
Lims ID:	140-20175-A-1	Lab Sample ID:	140-20175-1		
Client ID:	SV-001-C-29				
Operator ID:	HMT	ALS Bottle#:	10	Worklist Smp#:	14
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

51 Benzene, CAS: 71-43-2

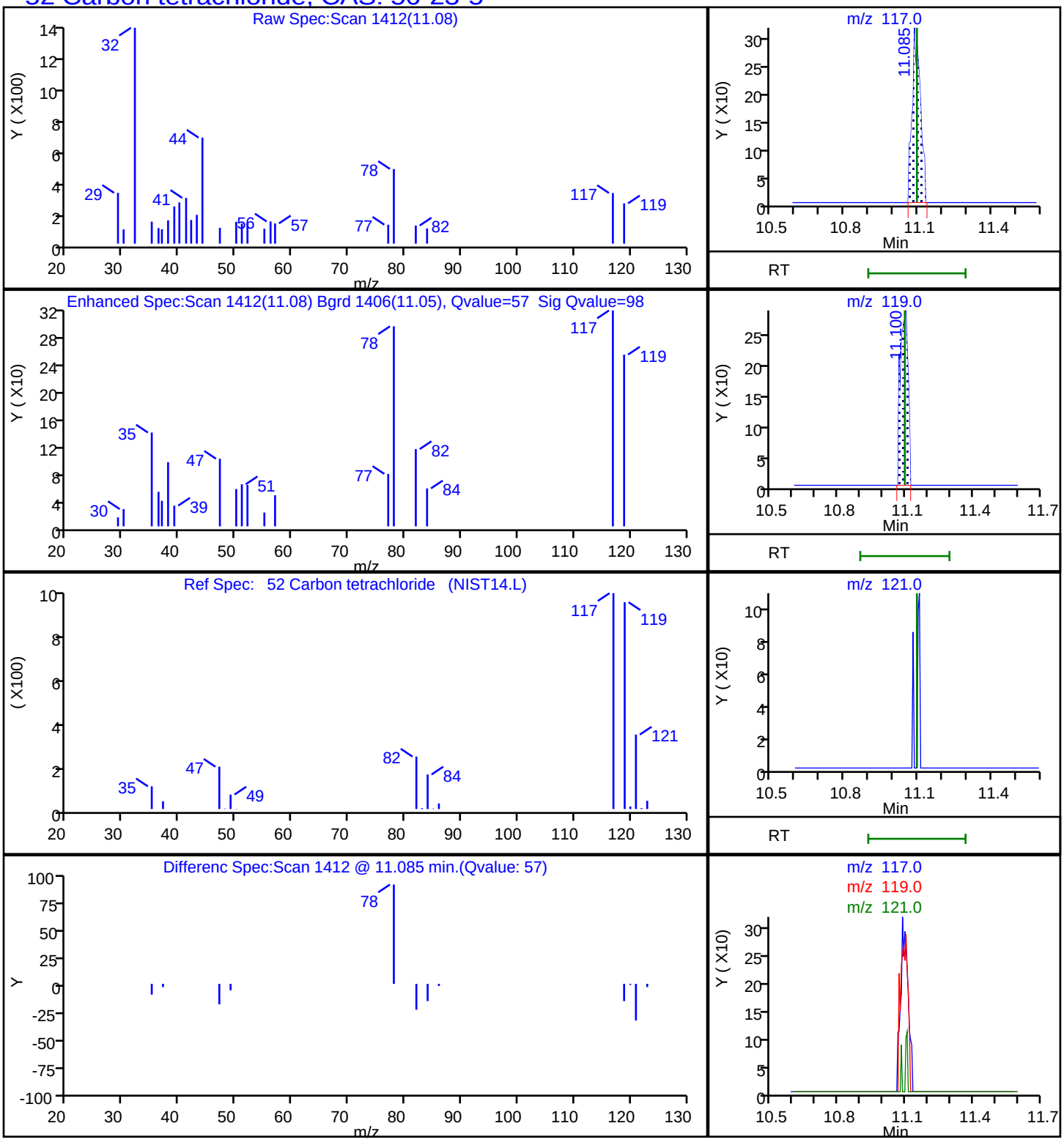


Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P110.D

Injection Date:	03-Sep-2020 22:20:30	Instrument ID:	MH		
Lims ID:	140-20175-A-1	Lab Sample ID:	140-20175-1		
Client ID:	SV-001-C-29				
Operator ID:	HMT	ALS Bottle#:	10	Worklist Smp#:	14
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

52 Carbon tetrachloride, CAS: 56-23-5

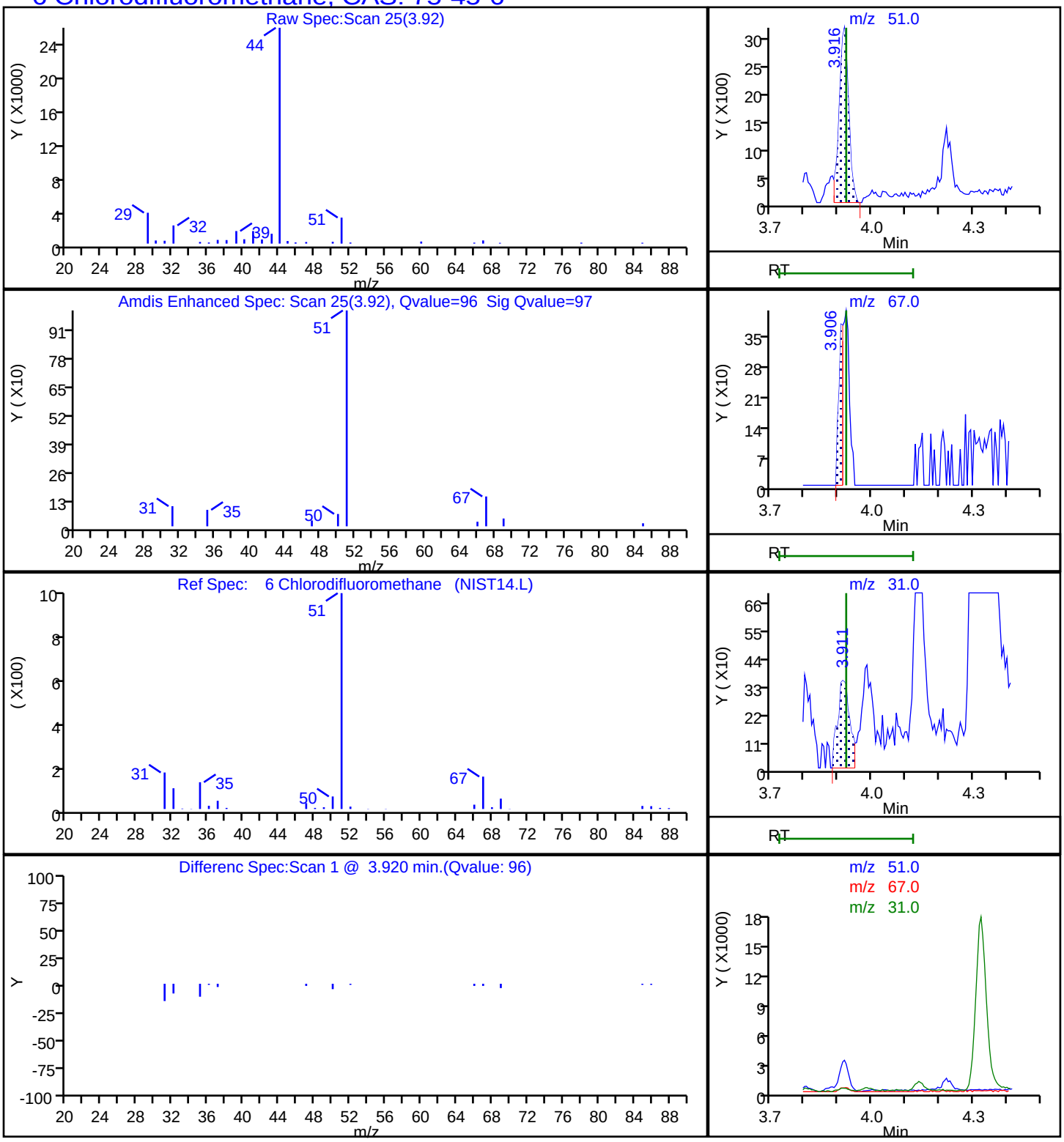


Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P110.D

Injection Date:	03-Sep-2020 22:20:30	Instrument ID:	MH		
Lims ID:	140-20175-A-1	Lab Sample ID:	140-20175-1		
Client ID:	SV-001-C-29				
Operator ID:	HMT	ALS Bottle#:	10	Worklist Smp#:	14
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

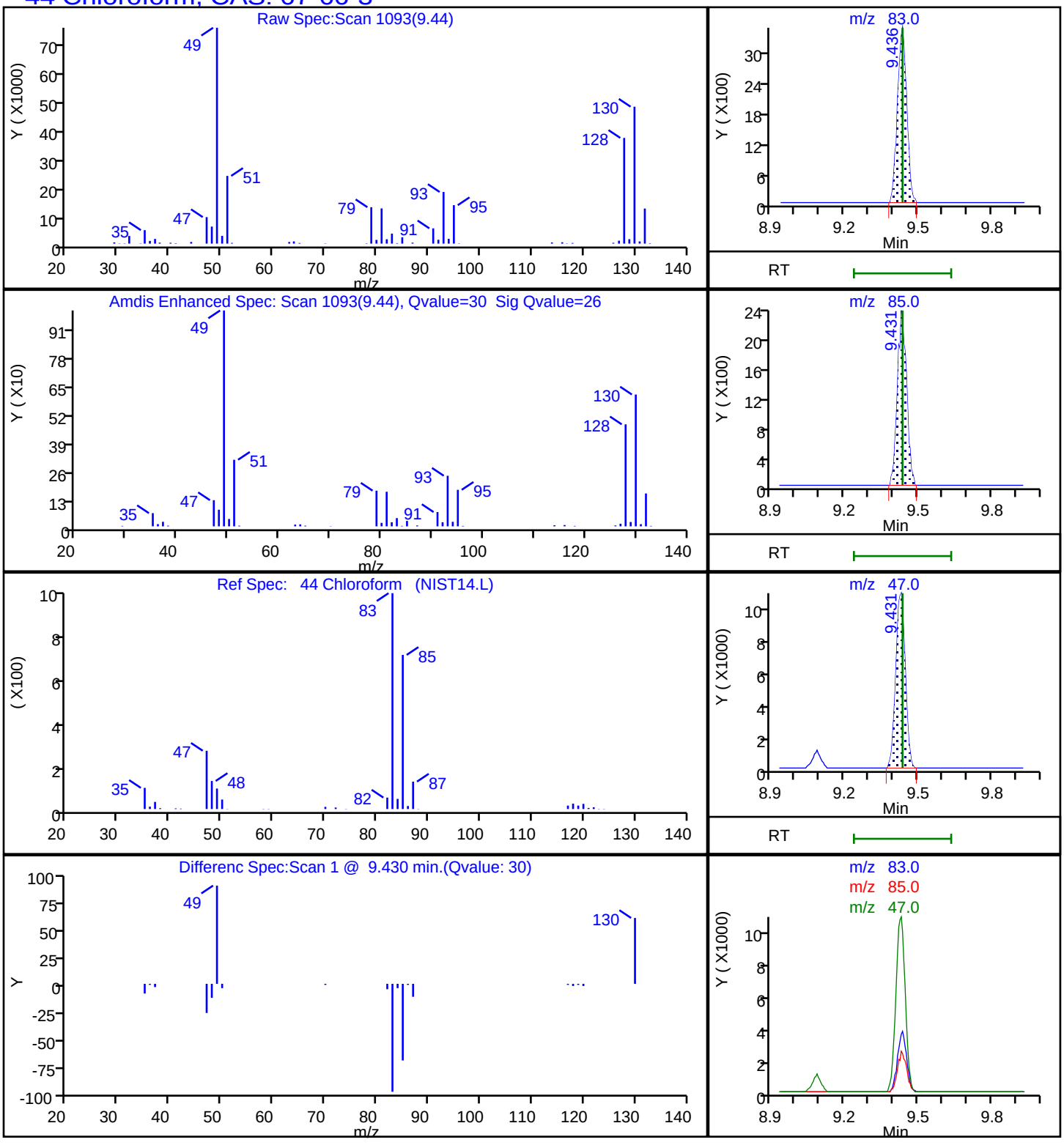
6 Chlorodifluoromethane, CAS: 75-45-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P110.D				
Injection Date:	03-Sep-2020 22:20:30	Instrument ID:	MH		
Lims ID:	140-20175-A-1	Lab Sample ID:	140-20175-1		
Client ID:	SV-001-C-29				
Operator ID:	HMT	ALS Bottle#:	10	Worklist Smp#:	14
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

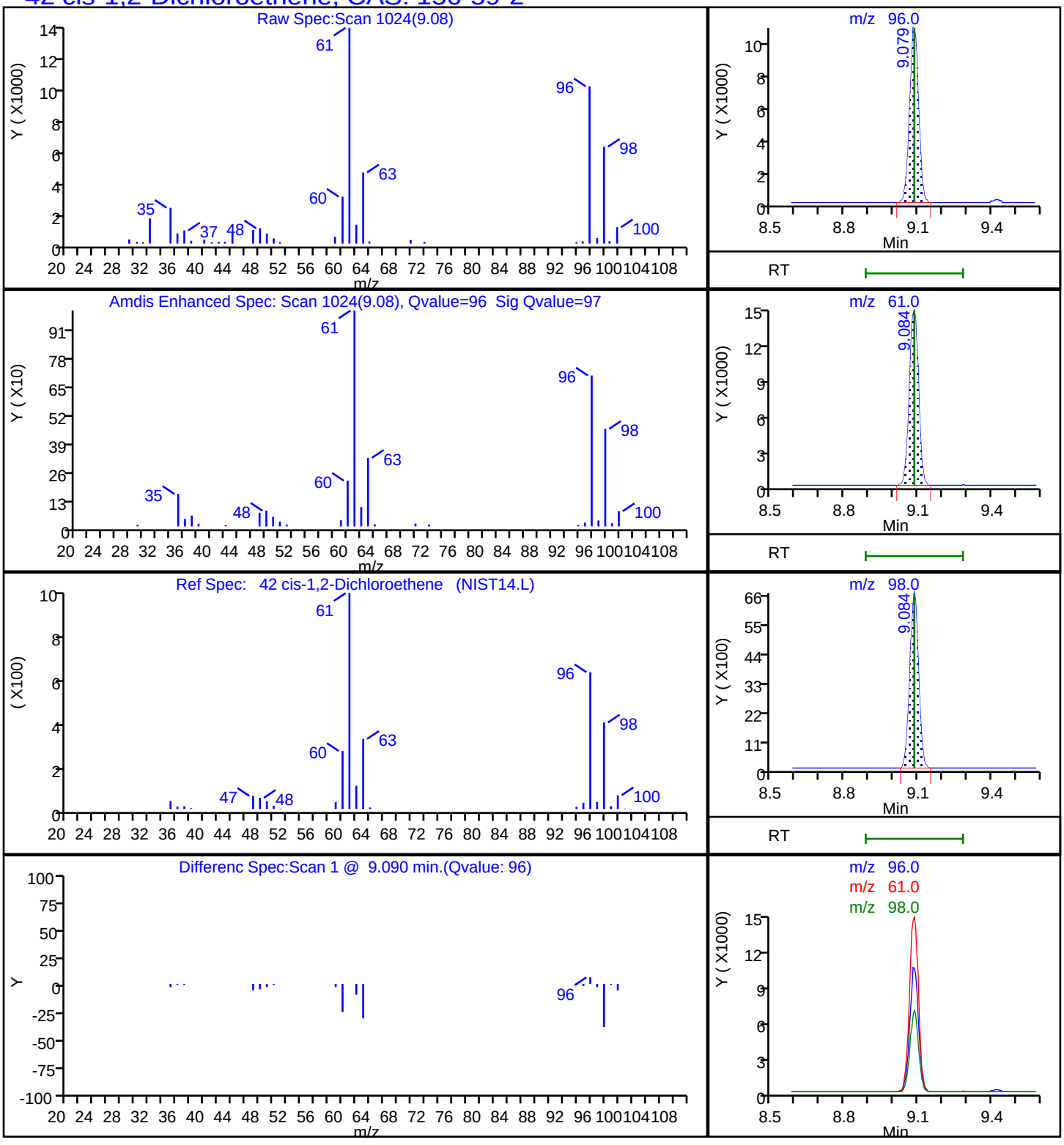
44 Chloroform, CAS: 67-66-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P110.D				
Injection Date:	03-Sep-2020 22:20:30	Instrument ID:	MH		
Lims ID:	140-20175-A-1	Lab Sample ID:	140-20175-1		
Client ID:	SV-001-C-29				
Operator ID:	HMT	ALS Bottle#:	10	Worklist Smp#:	14
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

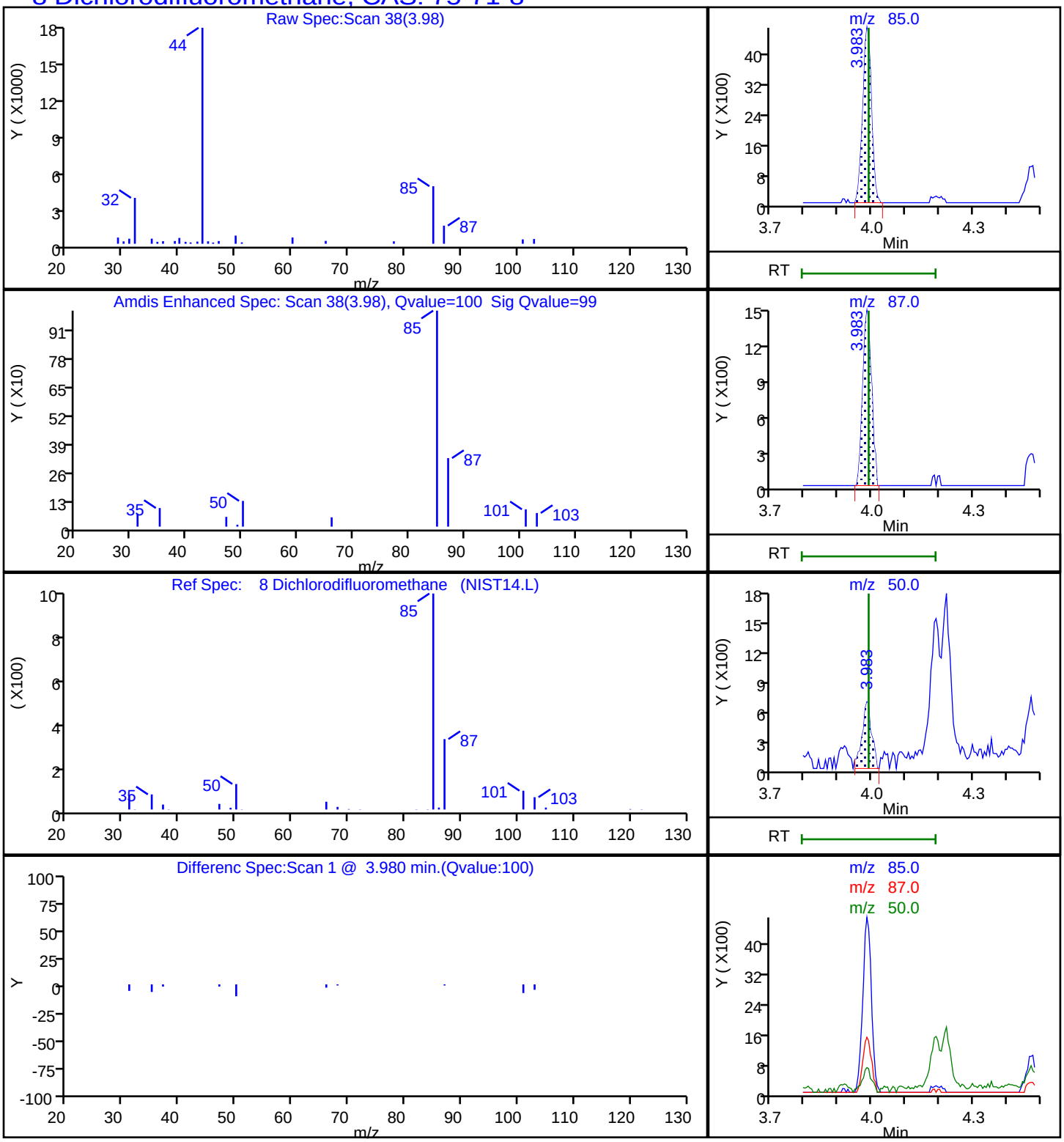
42 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P110.D				
Injection Date:	03-Sep-2020 22:20:30	Instrument ID:	MH		
Lims ID:	140-20175-A-1	Lab Sample ID:	140-20175-1		
Client ID:	SV-001-C-29				
Operator ID:	HMT	ALS Bottle#:	10	Worklist Smp#:	14
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

8 Dichlorodifluoromethane, CAS: 75-71-8

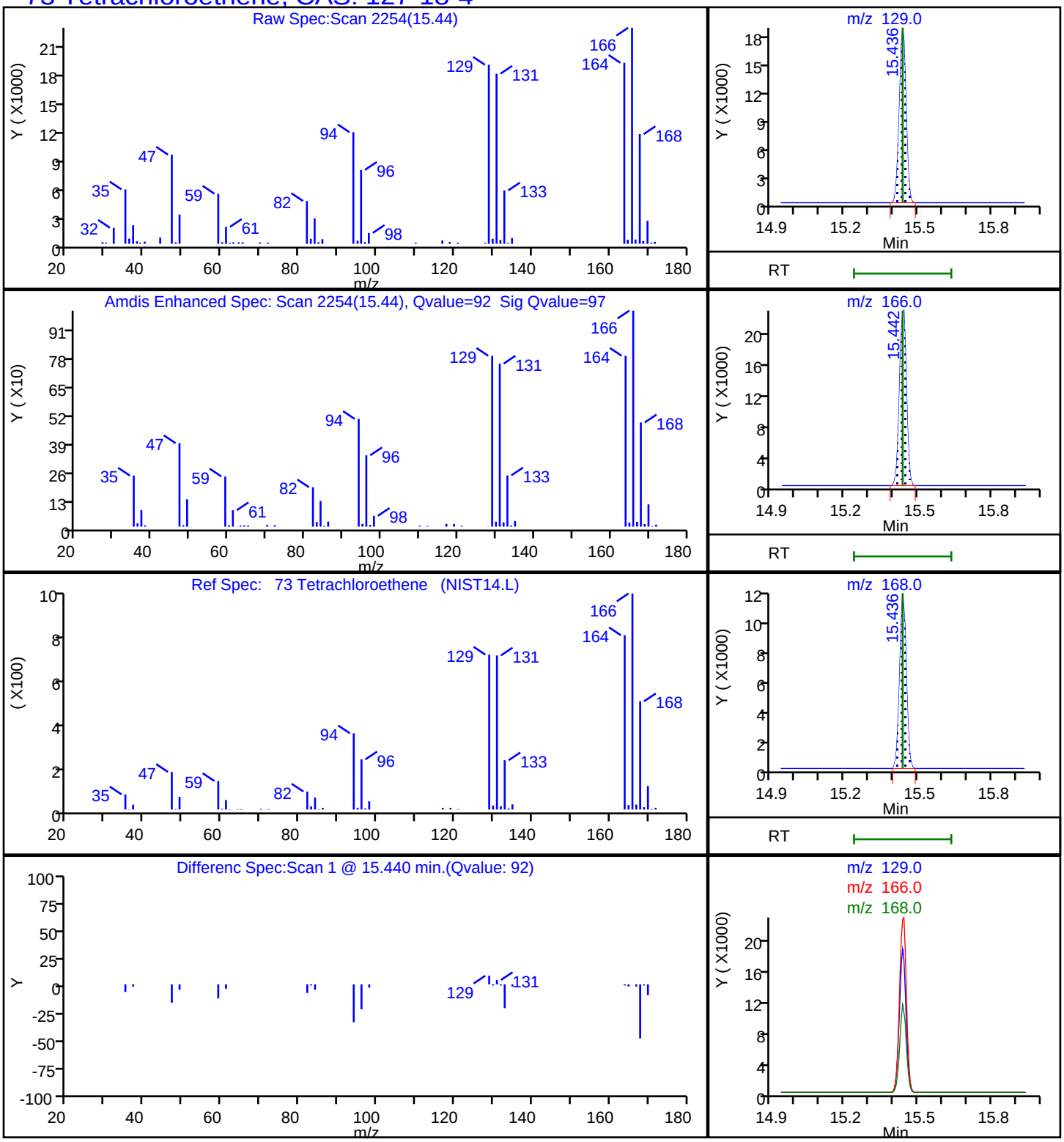


Report Date: 04-Sep-2020 10:26:09 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P110.D				
Injection Date:	03-Sep-2020 22:20:30	Instrument ID:	MH		
Lims ID:	140-20175-A-1	Lab Sample ID:	140-20175-1		
Client ID:	SV-001-C-29				
Operator ID:	HMT	ALS Bottle#:	10	Worklist Smp#:	14
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

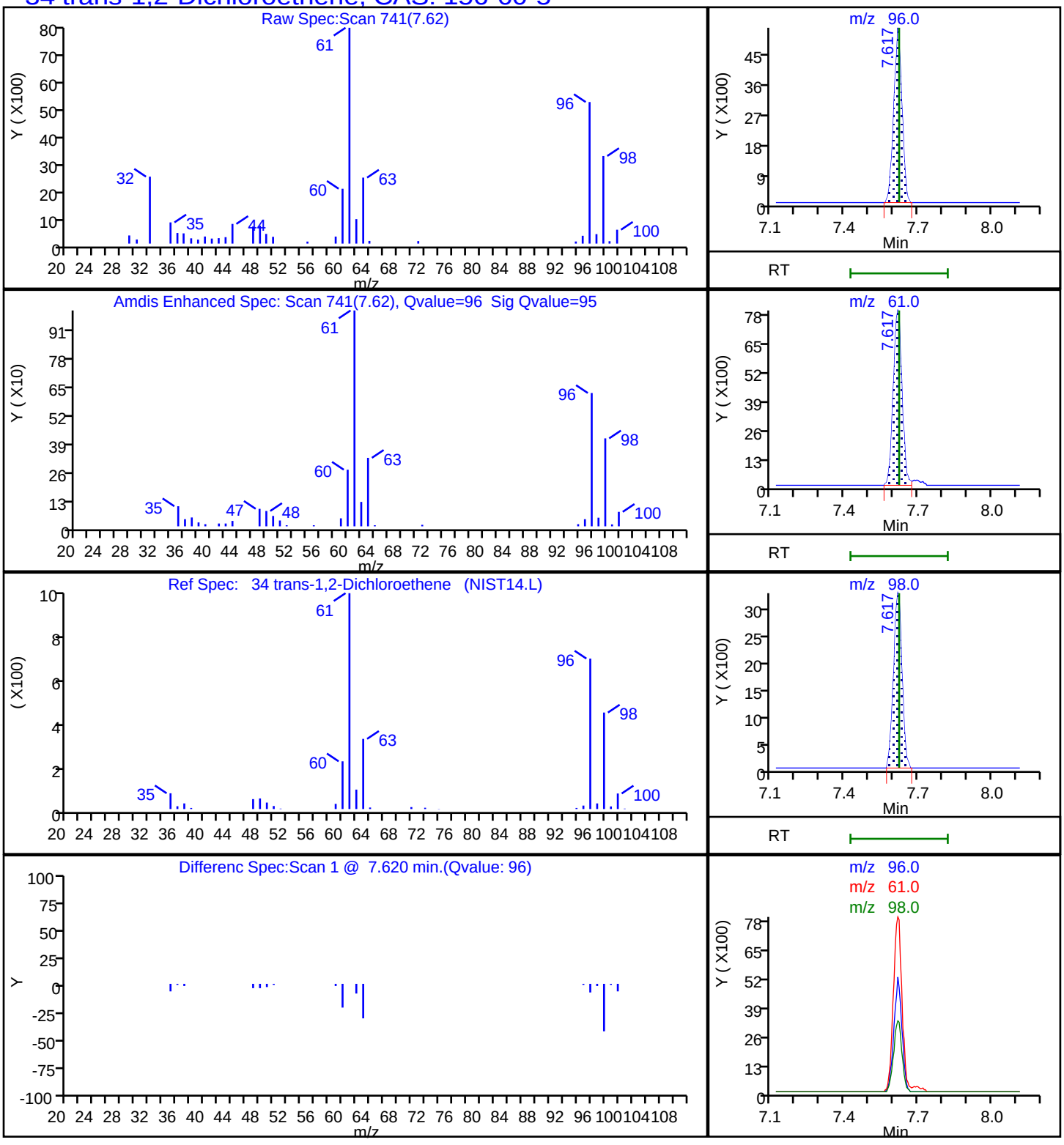
73 Tetrachloroethene, CAS: 127-18-4



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P110.D				
Injection Date:	03-Sep-2020 22:20:30	Instrument ID:	MH		
Lims ID:	140-20175-A-1	Lab Sample ID:	140-20175-1		
Client ID:	SV-001-C-29				
Operator ID:	HMT	ALS Bottle#:	10	Worklist Smp#:	14
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

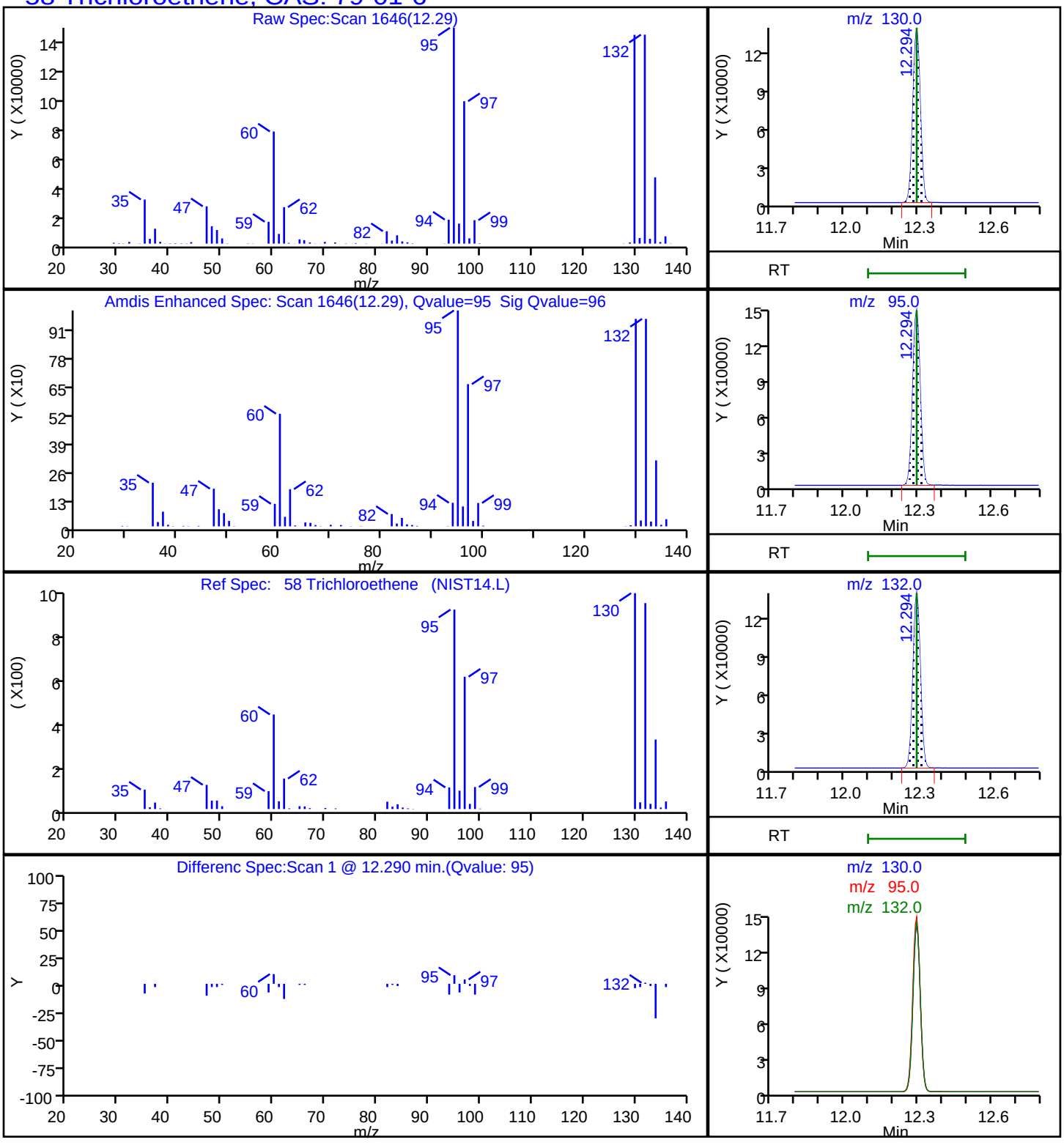
34 trans-1,2-Dichloroethene, CAS: 156-60-5



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P110.D		
Injection Date:	03-Sep-2020 22:20:30	Instrument ID:	MH
Lims ID:	140-20175-A-1	Lab Sample ID:	140-20175-1
Client ID:	SV-001-C-29		
Operator ID:	HMT	ALS Bottle#:	10 Worklist Smp#: 14
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

58 Trichloroethene, CAS: 79-01-6



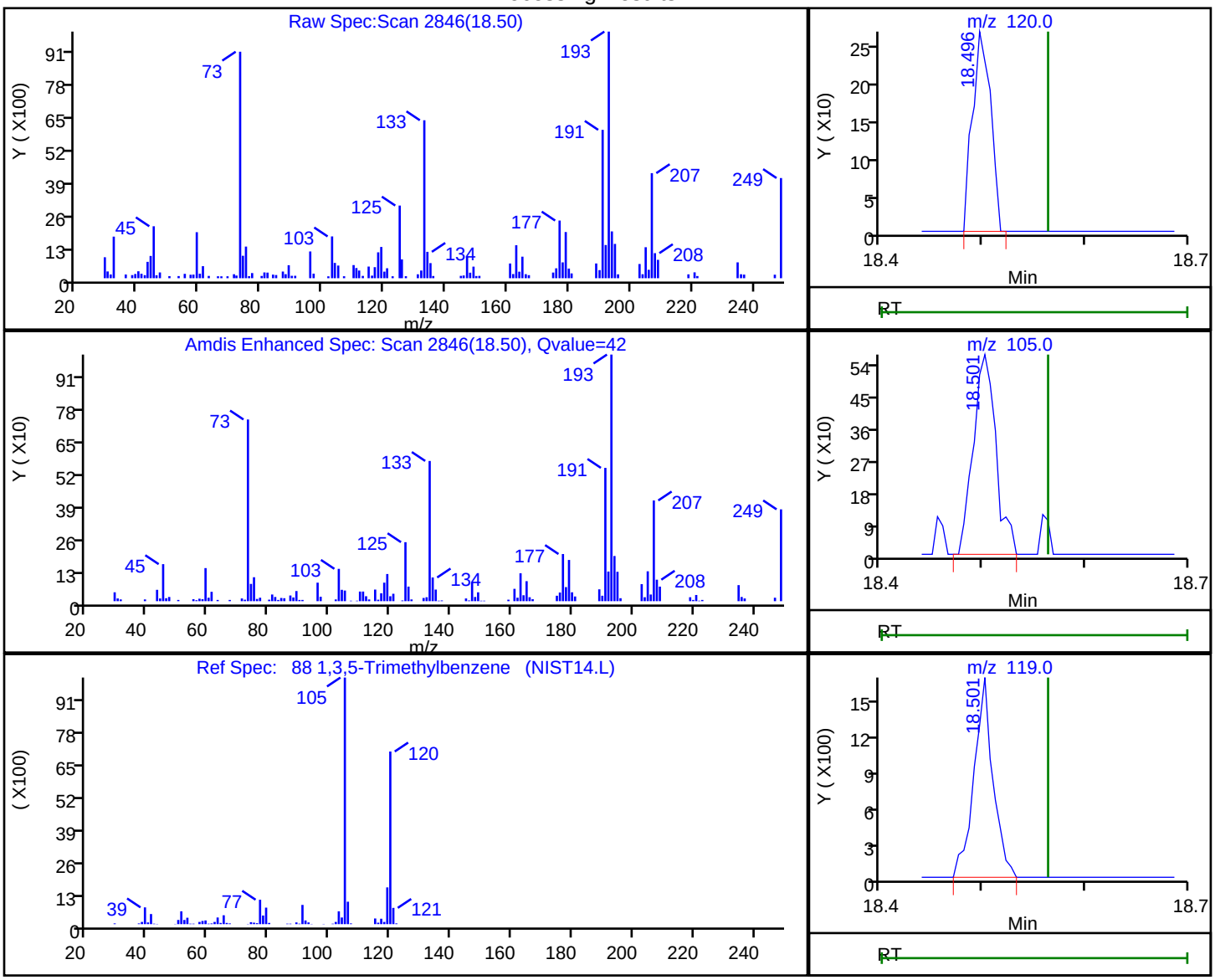
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P110.D				
Injection Date:	03-Sep-2020 22:20:30	Instrument ID:	MH		
Lims ID:	140-20175-A-1	Lab Sample ID:	140-20175-1		
Client ID:	SV-001-C-29				
Operator ID:	HMT	ALS Bottle#:	10	Worklist Smp#:	14
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

88 1,3,5-Trimethylbenzene, CAS: 108-67-8

Processing Results



RT	Mass	Response	Amount
18.50	120.00	325	0.055267
18.50	105.00	867	
18.50	119.00	2117	

Reviewer: khachitpongpanits, 04-Sep-2020 10:25:56

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: SV-004-C-29 Lab Sample ID: 140-20175-2

Matrix: Air Lab File ID: HI03P111.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 10:12

Sample wt/vol: 40(mL) Date Analyzed: 09/03/2020 23:13

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42399 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.13	J	1.0	0.10
56-23-5	Carbon tetrachloride	153.81	0.097	J	1.0	0.088
75-45-6	Chlorodifluoromethane	86.47	ND		1.0	0.28
67-66-3	Chloroform	119.38	17		1.0	0.088
156-59-2	cis-1,2-Dichloroethene	96.94	11		1.0	0.13
75-71-8	Dichlorodifluoromethane	120.91	0.50	J	1.0	0.18
75-34-3	1,1-Dichloroethane	98.96	ND		1.0	0.088
107-06-2	1,2-Dichloroethane	98.96	ND		1.0	0.13
75-35-4	1,1-Dichloroethene	96.94	ND		1.0	0.10
100-41-4	Ethylbenzene	106.17	ND		1.0	0.16
75-09-2	Methylene Chloride	84.93	ND		5.0	4.9
1634-04-4	Methyl tert-butyl ether	88.15	ND		5.0	0.65
91-20-3	Naphthalene	128.17	ND		0.50	0.50
127-18-4	Tetrachloroethene	165.83	0.49	J	1.0	0.088
108-88-3	Toluene	92.14	ND		1.5	0.98
156-60-5	trans-1,2-Dichloroethene	96.94	0.81	J	1.0	0.088
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		1.0	0.80
71-55-6	1,1,1-Trichloroethane	133.41	ND		1.0	0.46
79-00-5	1,1,2-Trichloroethane	133.41	ND		1.0	0.088
79-01-6	Trichloroethene	131.39	56		0.50	0.075
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		1.0	0.45
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		1.0	0.25
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		1.0	0.28
75-01-4	Vinyl chloride	62.50	ND		0.50	0.33
1330-20-7	Xylenes, Total	106.17	ND		2.0	0.30

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	97		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: SV-004-C-29 Lab Sample ID: 140-20175-2

Matrix: Air Lab File ID: HI03P111.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 10:12

Sample wt/vol: 40(mL) Date Analyzed: 09/03/2020 23:13

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42399 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.42	J	3.2	0.32
56-23-5	Carbon tetrachloride	153.81	0.61	J	6.3	0.55
75-45-6	Chlorodifluoromethane	86.47	ND		3.5	0.97
67-66-3	Chloroform	119.38	81		4.9	0.43
156-59-2	cis-1,2-Dichloroethene	96.94	42		4.0	0.50
75-71-8	Dichlorodifluoromethane	120.91	2.5	J	4.9	0.87
75-34-3	1,1-Dichloroethane	98.96	ND		4.0	0.35
107-06-2	1,2-Dichloroethane	98.96	ND		4.0	0.51
75-35-4	1,1-Dichloroethene	96.94	ND		4.0	0.40
100-41-4	Ethylbenzene	106.17	ND		4.3	0.71
75-09-2	Methylene Chloride	84.93	ND		17	17
1634-04-4	Methyl tert-butyl ether	88.15	ND		18	2.3
91-20-3	Naphthalene	128.17	ND		2.6	2.6
127-18-4	Tetrachloroethene	165.83	3.3	J	6.8	0.59
108-88-3	Toluene	92.14	ND		5.7	3.7
156-60-5	trans-1,2-Dichloroethene	96.94	3.2	J	4.0	0.35
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		7.4	5.9
71-55-6	1,1,1-Trichloroethane	133.41	ND		5.5	2.5
79-00-5	1,1,2-Trichloroethane	133.41	ND		5.5	0.48
79-01-6	Trichloroethene	131.39	300		2.7	0.40
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		4.9	2.2
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		4.9	1.2
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		4.9	1.4
75-01-4	Vinyl chloride	62.50	ND		1.3	0.83
1330-20-7	Xylenes, Total	106.17	ND		8.7	1.3

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	97		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P111.D				
Lims ID:	140-20175-A-2				
Client ID:	SV-004-C-29				
Sample Type:	Client				
Inject. Date:	03-Sep-2020 23:13:30	ALS Bottle#:	11	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016480-015				
Misc. Info.:	140-20175-a-2				
Operator ID:	HMT	Instrument ID:	MH		
Method:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\MH_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	04-Sep-2020 11:00:02	Calib Date:	29-Aug-2020 23:57:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1061				
First Level Reviewer: khachitpongpanits		Date:	04-Sep-2020 11:00:10		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.426	9.436	-0.010	96	100071	4.80	
* 2 1,4-Difluorobenzene	114	11.591	11.591	0.000	95	389816	4.80	
* 3 Chlorobenzene-d5 (IS)	117	16.258	16.258	0.000	88	261316	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.876	17.876	0.000	91	136055	4.48	
8 Dichlorodifluoromethane	85	3.983	3.984	-0.005	98	3012	0.0398	
34 trans-1,2-Dichloroethene	96	7.617	7.613	-0.005	93	1642	0.0648	
42 cis-1,2-Dichloroethene	96	9.084	9.074	0.000	97	21590	0.8415	
44 Chloroform	83	9.431	9.426	-0.005	87	81055	1.33	
47 1,1,1-Trichloroethane	97	10.490	10.474	0.005	33	850	0.0154	
51 Benzene	78	11.059	11.074	-0.015	23	759	0.0106	
52 Carbon tetrachloride	117	11.090	11.095	-0.005	14	344	0.007764	
58 Trichloroethene	130	12.289	12.294	-0.005	95	143141	4.45	
73 Tetrachloroethene	129	15.441	15.436	0.005	91	1098	0.0389	

Reagents:

40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

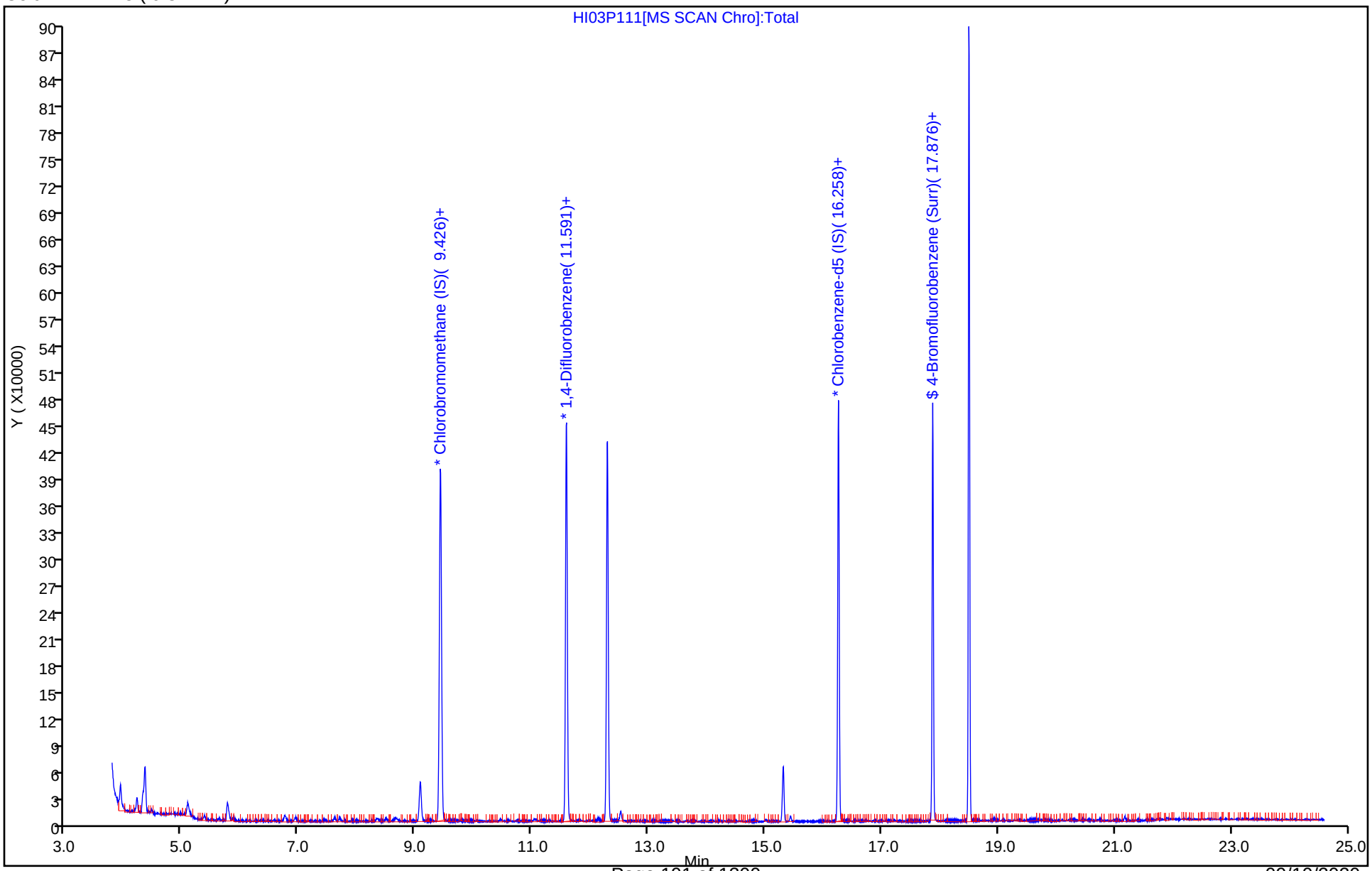
Report Date: 04-Sep-2020 11:00:10 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P111.D

Injection Date:	03-Sep-2020 23:13:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	140-20175-A-2	Lab Sample ID:	140-20175-2	Worklist Smp#:	15
Client ID:	SV-004-C-29				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P111.D				
Lims ID:	140-20175-A-2				
Client ID:	SV-004-C-29				
Sample Type:	Client				
Inject. Date:	03-Sep-2020 23:13:30	ALS Bottle#:	11	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016480-015				
Misc. Info.:	140-20175-a-2				
Operator ID:	HMT	Instrument ID:	MH		
Method:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\MH_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	04-Sep-2020 11:00:02	Calib Date:	29-Aug-2020 23:57:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1061				

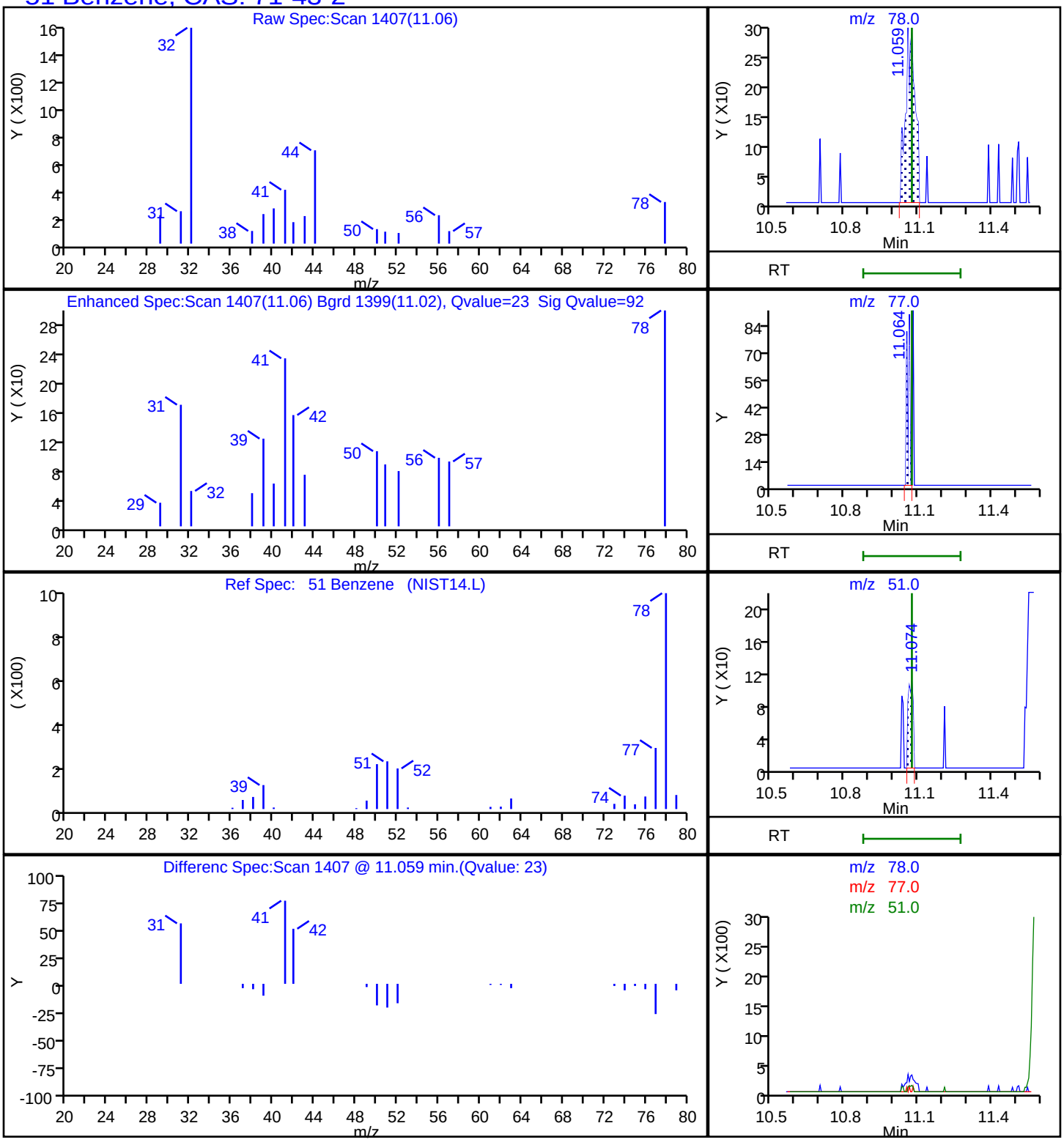
First Level Reviewer: khachitpongpanits Date: 04-Sep-2020 11:00:10

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	4.48	96.57

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P111.D				
Injection Date:	03-Sep-2020 23:13:30	Instrument ID:	MH		
Lims ID:	140-20175-A-2	Lab Sample ID:	140-20175-2		
Client ID:	SV-004-C-29				
Operator ID:	HMT	ALS Bottle#:	11	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

51 Benzene, CAS: 71-43-2

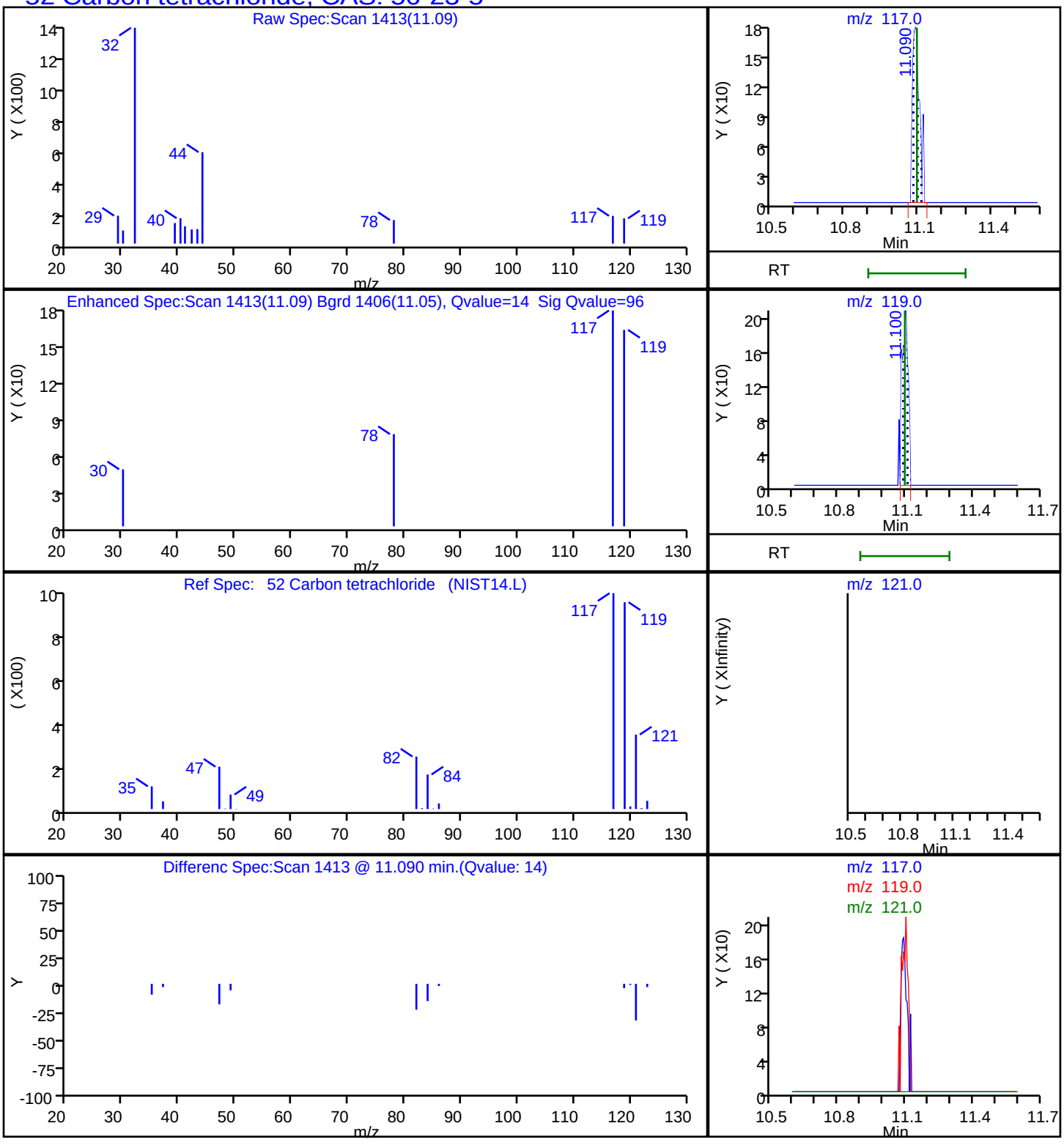


Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P111.D

Injection Date:	03-Sep-2020 23:13:30	Instrument ID:	MH		
Lims ID:	140-20175-A-2	Lab Sample ID:	140-20175-2		
Client ID:	SV-004-C-29				
Operator ID:	HMT	ALS Bottle#:	11	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

52 Carbon tetrachloride, CAS: 56-23-5



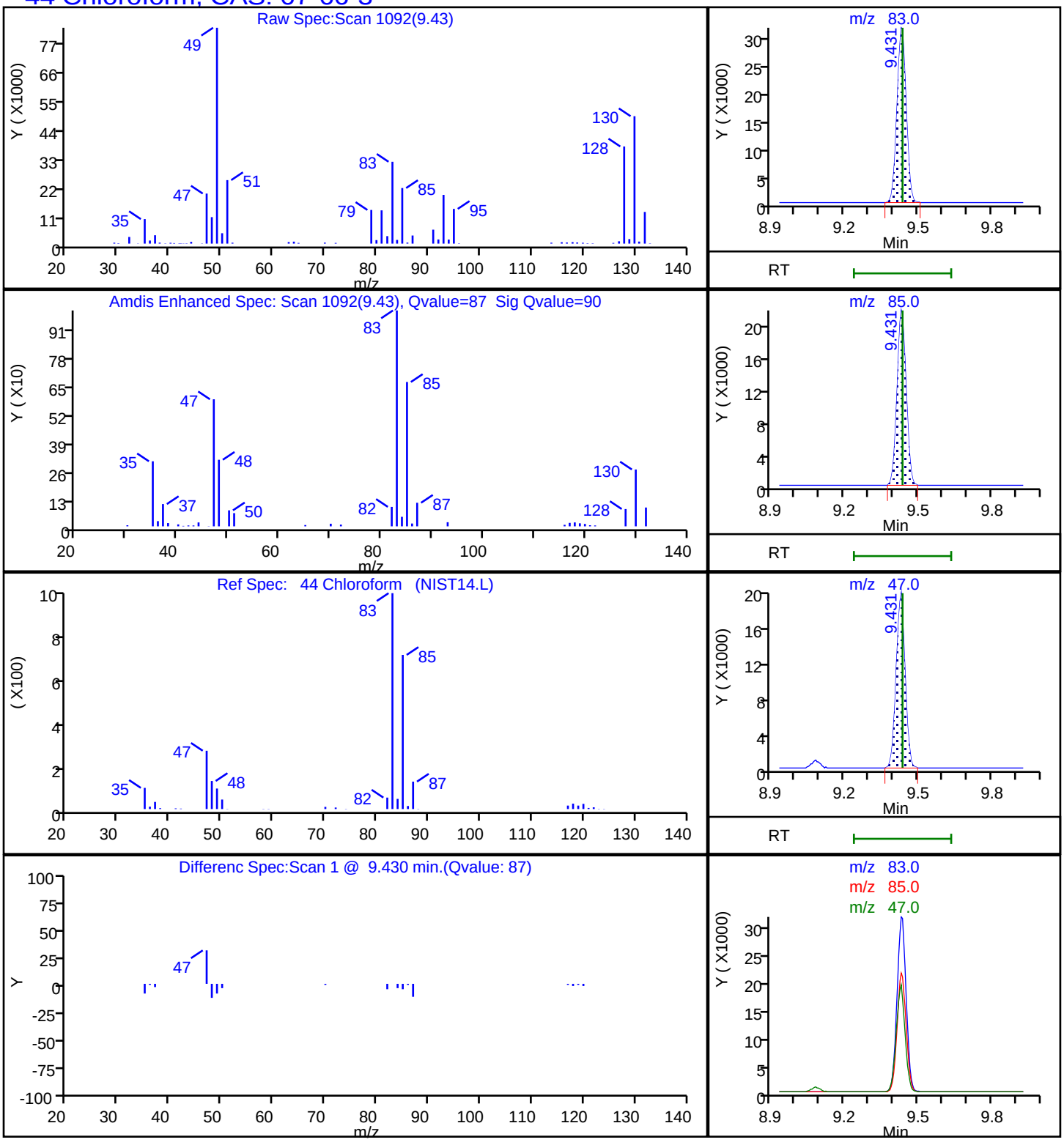
Report Date: 04-Sep-2020 11:00:10 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P111.D

Injection Date:	03-Sep-2020 23:13:30	Instrument ID:	MH		
Lims ID:	140-20175-A-2	Lab Sample ID:	140-20175-2		
Client ID:	SV-004-C-29				
Operator ID:	HMT	ALS Bottle#:	11	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

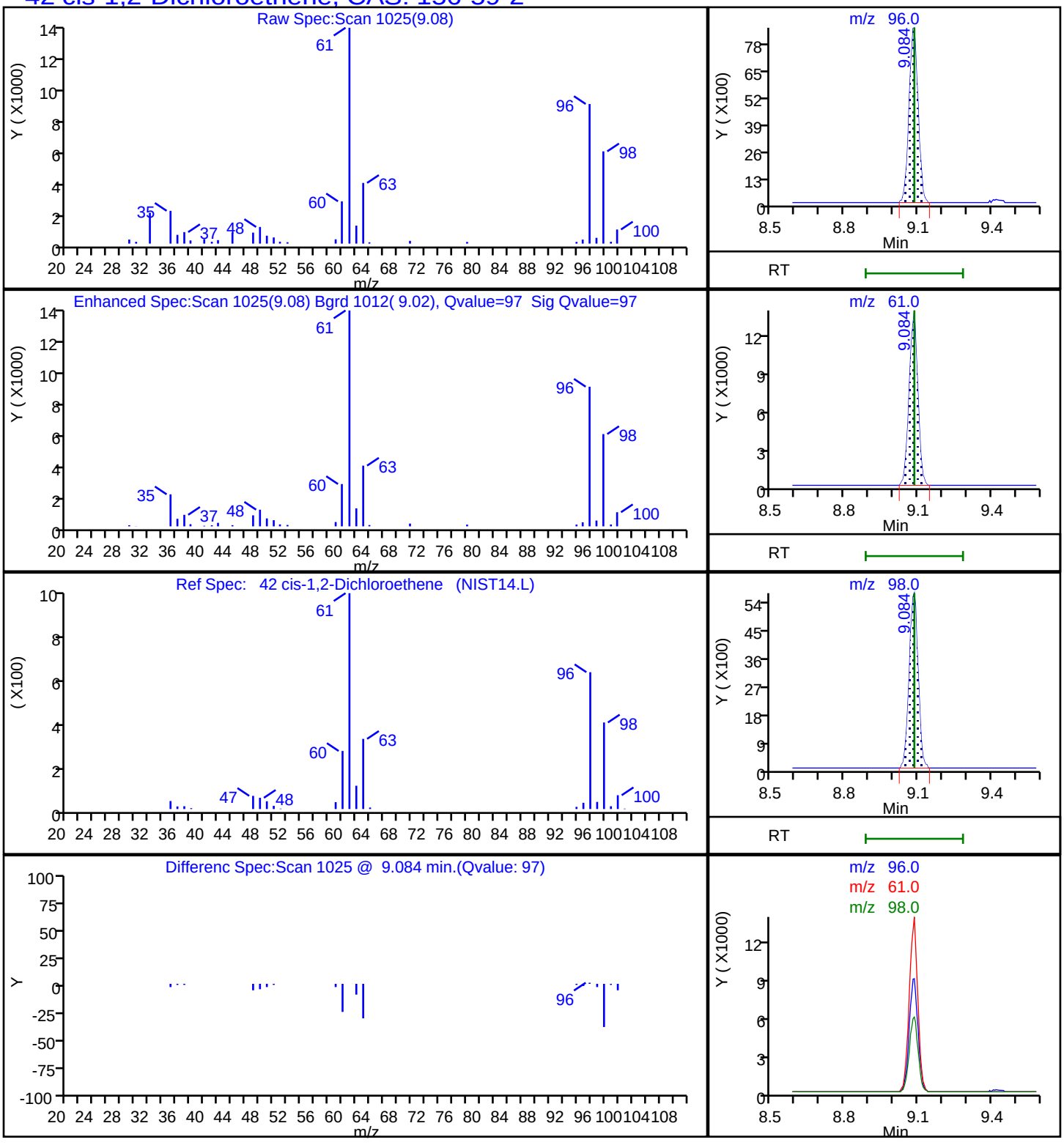
44 Chloroform, CAS: 67-66-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P111.D				
Injection Date:	03-Sep-2020 23:13:30	Instrument ID:	MH		
Lims ID:	140-20175-A-2	Lab Sample ID:	140-20175-2		
Client ID:	SV-004-C-29				
Operator ID:	HMT	ALS Bottle#:	11	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

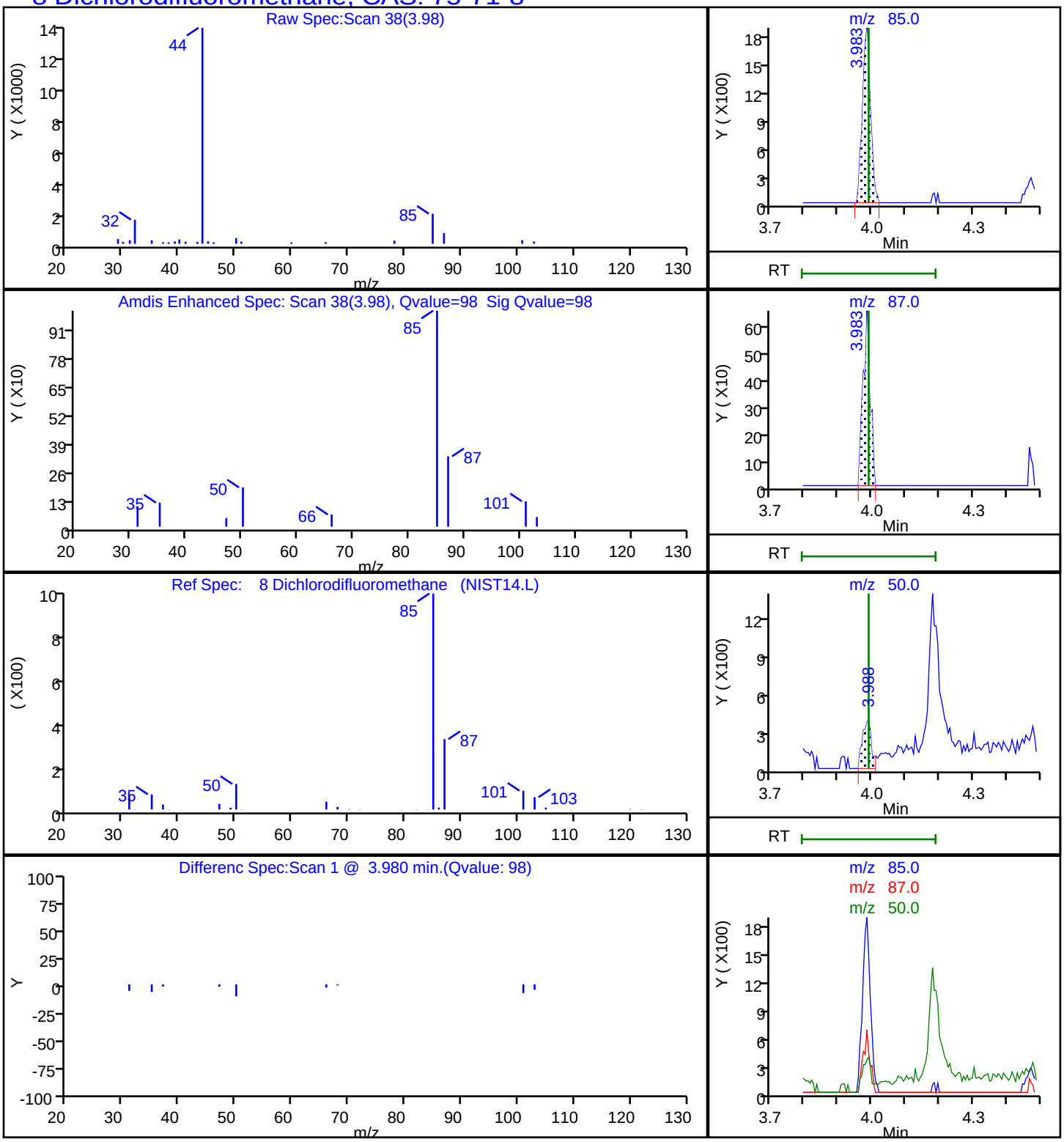
42 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P111.D				
Injection Date:	03-Sep-2020 23:13:30	Instrument ID:	MH		
Lims ID:	140-20175-A-2	Lab Sample ID:	140-20175-2		
Client ID:	SV-004-C-29				
Operator ID:	HMT	ALS Bottle#:	11	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

8 Dichlorodifluoromethane, CAS: 75-71-8

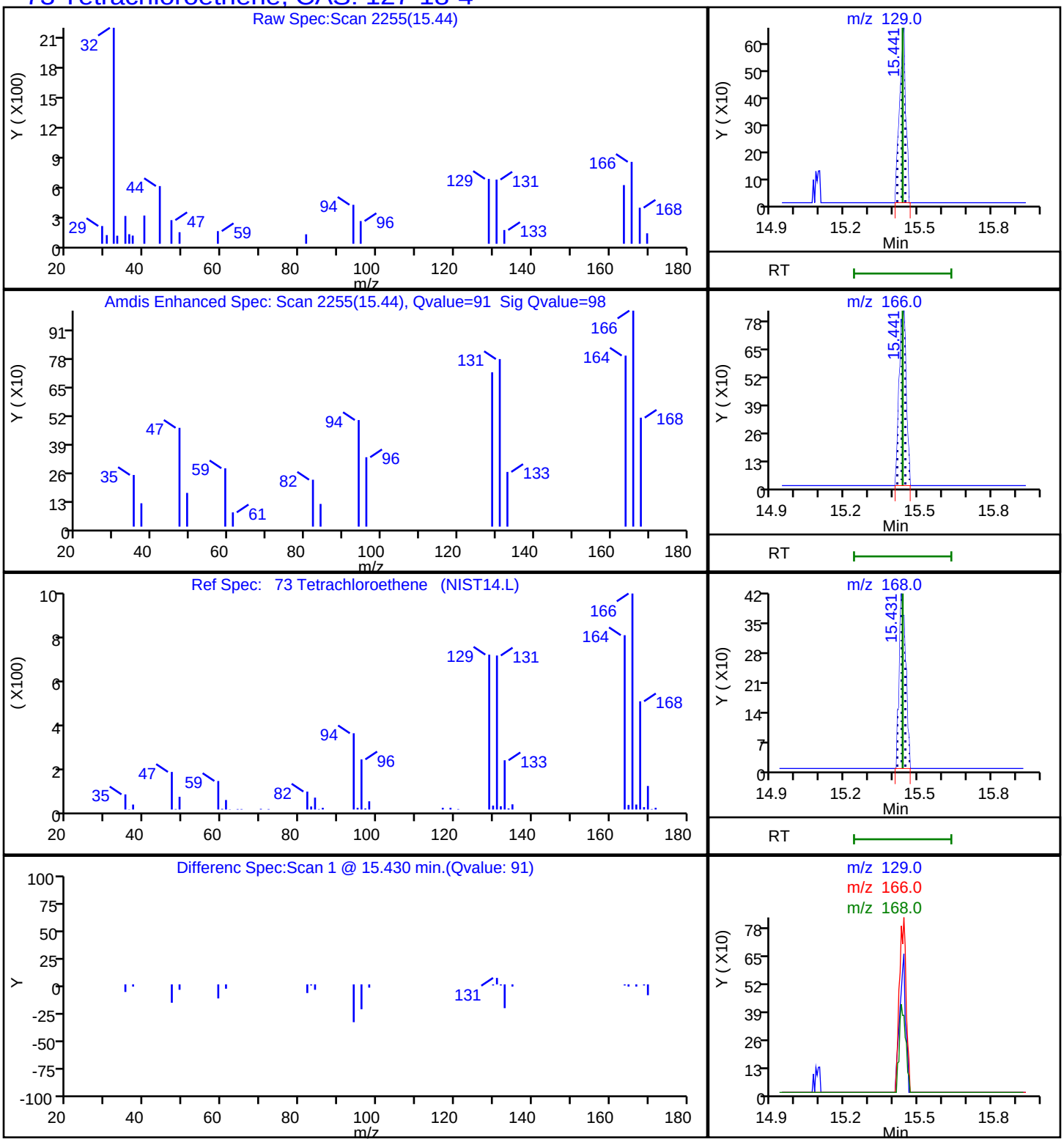


Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P111.D

Injection Date:	03-Sep-2020 23:13:30	Instrument ID:	MH		
Lims ID:	140-20175-A-2	Lab Sample ID:	140-20175-2		
Client ID:	SV-004-C-29				
Operator ID:	HMT	ALS Bottle#:	11	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

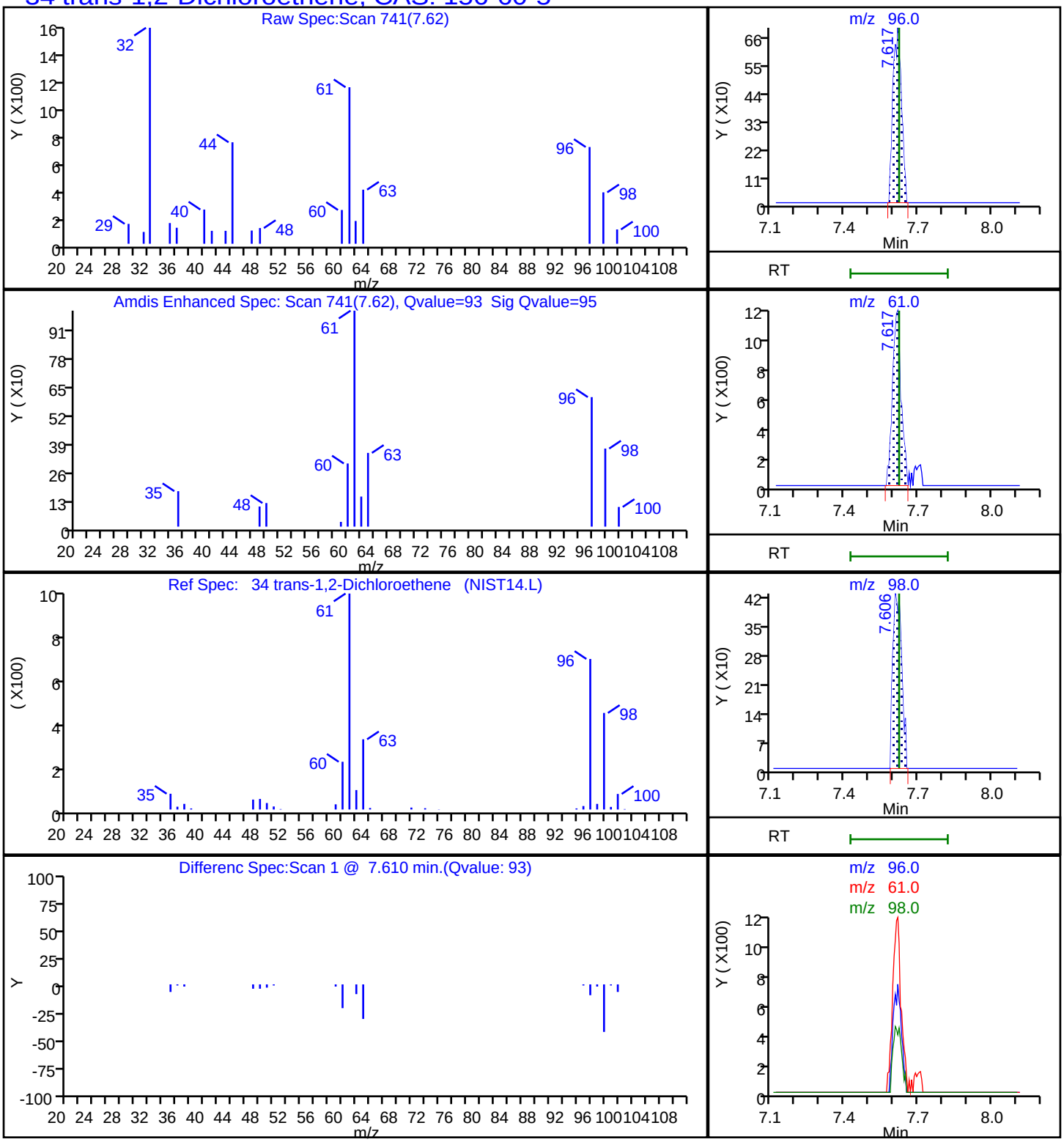
73 Tetrachloroethene, CAS: 127-18-4



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P111.D				
Injection Date:	03-Sep-2020 23:13:30	Instrument ID:	MH		
Lims ID:	140-20175-A-2	Lab Sample ID:	140-20175-2		
Client ID:	SV-004-C-29				
Operator ID:	HMT	ALS Bottle#:	11	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

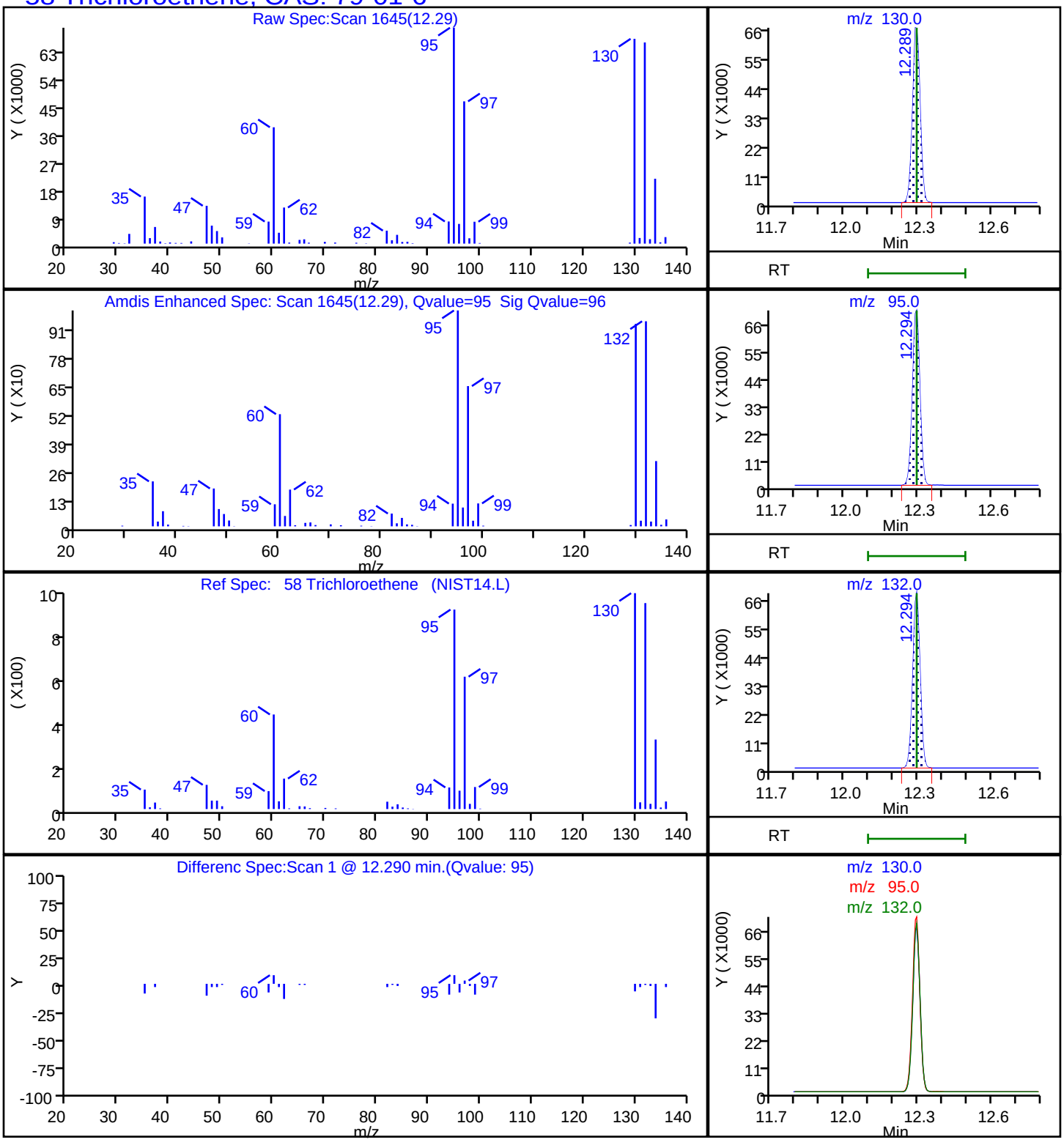
34 trans-1,2-Dichloroethene, CAS: 156-60-5



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P111.D		
Injection Date:	03-Sep-2020 23:13:30	Instrument ID:	MH
Lims ID:	140-20175-A-2	Lab Sample ID:	140-20175-2
Client ID:	SV-004-C-29		
Operator ID:	HMT	ALS Bottle#:	11 Worklist Smp#: 15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

58 Trichloroethene, CAS: 79-01-6



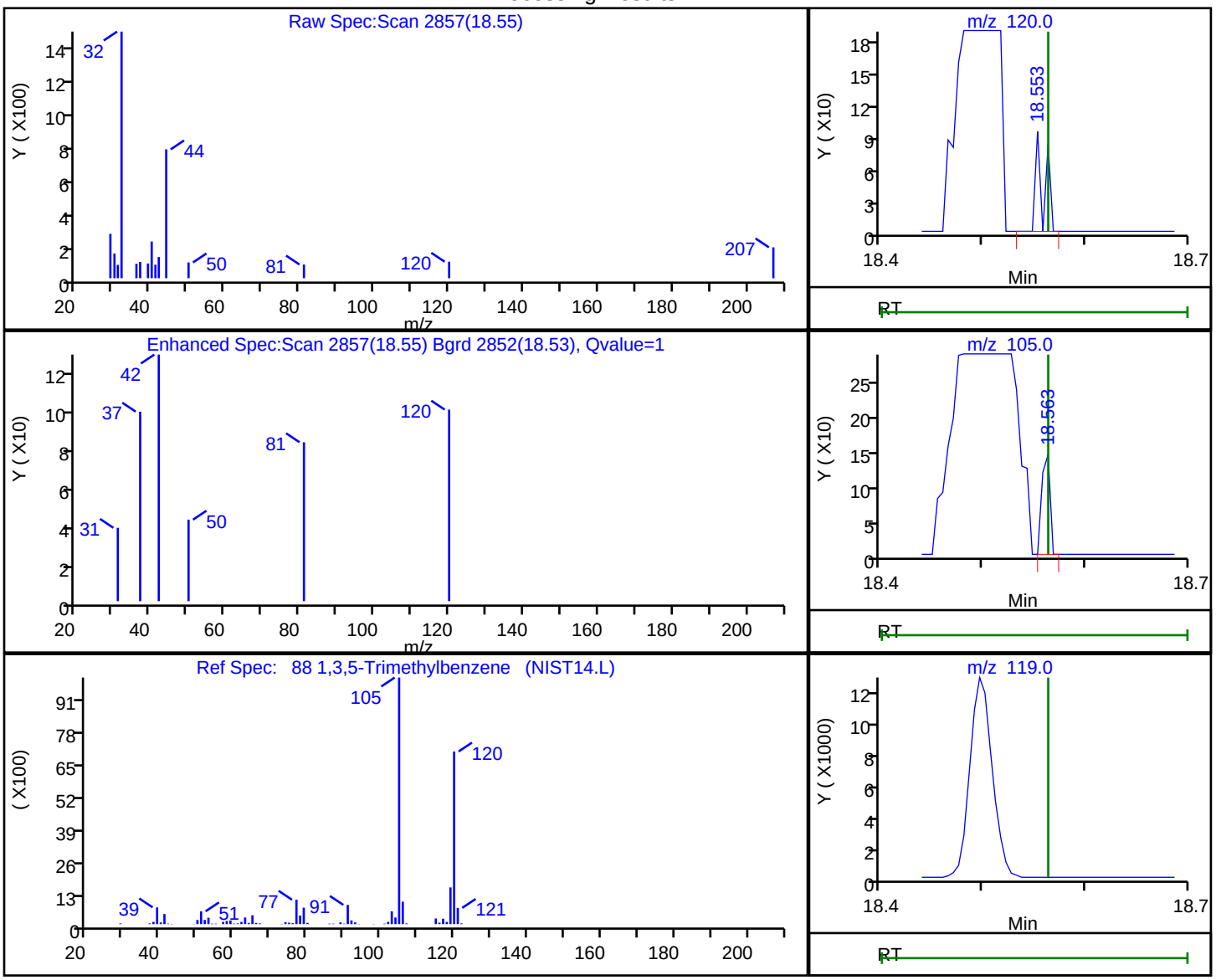
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P111.D				
Injection Date:	03-Sep-2020 23:13:30	Instrument ID:	MH		
Lims ID:	140-20175-A-2	Lab Sample ID:	140-20175-2		
Client ID:	SV-004-C-29				
Operator ID:	HMT	ALS Bottle#:	11	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

88 1,3,5-Trimethylbenzene, CAS: 108-67-8

Processing Results



RT	Mass	Response	Amount
18.55	120.00	55	0.048789
18.56	105.00	82	
18.56	119.00	0	

Reviewer: khachitpongpanits, 04-Sep-2020 11:00:01

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: SV-102-C-29 Lab Sample ID: 140-20175-3

Matrix: Air Lab File ID: HI03P112.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 10:17

Sample wt/vol: 20(mL) Date Analyzed: 09/04/2020 00:08

Soil Aliquot Vol: Dilution Factor: 3.43

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42399 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	2.6	J	6.9	0.69
56-23-5	Carbon tetrachloride	153.81	0.68	J	6.9	0.60
75-45-6	Chlorodifluoromethane	86.47	ND		6.9	1.9
67-66-3	Chloroform	119.38	12		6.9	0.60
156-59-2	cis-1,2-Dichloroethene	96.94	12		6.9	0.86
75-71-8	Dichlorodifluoromethane	120.91	ND		6.9	1.2
75-34-3	*1,1-Dichloroethane*	*98.96*	*2000*	*E*	*6.9*	*0.60*
107-06-2	1,2-Dichloroethane	98.96	ND		6.9	0.86
75-35-4	1,1-Dichloroethene	96.94	910		6.9	0.69
100-41-4	Ethylbenzene	106.17	110		6.9	1.1
75-09-2	Methylene Chloride	84.93	ND		34	33
1634-04-4	Methyl tert-butyl ether	88.15	ND		34	4.5
91-20-3	Naphthalene	128.17	57		3.4	3.4
127-18-4	Tetrachloroethene	165.83	ND		6.9	0.60
108-88-3	Toluene	92.14	7.6	J	10	6.7
156-60-5	trans-1,2-Dichloroethene	96.94	1.2	J	6.9	0.60
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		6.9	5.5
71-55-6	1,1,1-Trichloroethane	133.41	500		6.9	3.2
79-00-5	1,1,2-Trichloroethane	133.41	ND		6.9	0.60
79-01-6	Trichloroethene	131.39	330		3.4	0.51
526-73-8	1,2,3-Trimethylbenzene	120.19	4.9	J	6.9	3.1
95-63-6	1,2,4-Trimethylbenzene	120.20	4.1	J	6.9	1.7
108-67-8	1,3,5-Trimethylbenzene	120.20	6.5	J	6.9	1.9
75-01-4	Vinyl chloride	62.50	2.6	J	3.4	2.2
1330-20-7	Xylenes, Total	106.17	1300		14	2.1

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	112		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: SV-102-C-29 Lab Sample ID: 140-20175-3

Matrix: Air Lab File ID: HI03P112.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 10:17

Sample wt/vol: 20(mL) Date Analyzed: 09/04/2020 00:08

Soil Aliquot Vol: Dilution Factor: 3.43

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42399 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	8.3	J	22	2.2
56-23-5	Carbon tetrachloride	153.81	4.3	J	43	3.8
75-45-6	Chlorodifluoromethane	86.47	ND		24	6.7
67-66-3	Chloroform	119.38	57		33	2.9
156-59-2	cis-1,2-Dichloroethene	96.94	48		27	3.4
75-71-8	Dichlorodifluoromethane	120.91	ND		34	5.9
75-34-3	*1,1-Dichloroethane*	*98.96*	*8200*	*E*	*28*	*2.4*
107-06-2	1,2-Dichloroethane	98.96	ND		28	3.5
75-35-4	1,1-Dichloroethene	96.94	3600		27	2.7
100-41-4	Ethylbenzene	106.17	460		30	4.8
75-09-2	Methylene Chloride	84.93	ND		120	120
1634-04-4	Methyl tert-butyl ether	88.15	ND		120	16
91-20-3	Naphthalene	128.17	300		18	18
127-18-4	Tetrachloroethene	165.83	ND		47	4.1
108-88-3	Toluene	92.14	29	J	39	25
156-60-5	trans-1,2-Dichloroethene	96.94	4.6	J	27	2.4
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		51	41
71-55-6	1,1,1-Trichloroethane	133.41	2700		37	17
79-00-5	1,1,2-Trichloroethane	133.41	ND		37	3.3
79-01-6	Trichloroethene	131.39	1800		18	2.8
526-73-8	1,2,3-Trimethylbenzene	120.19	24	J	34	15
95-63-6	1,2,4-Trimethylbenzene	120.20	20	J	34	8.4
108-67-8	1,3,5-Trimethylbenzene	120.20	32	J	34	9.3
75-01-4	Vinyl chloride	62.50	6.7	J	8.8	5.7
1330-20-7	Xylenes, Total	106.17	5800		60	8.9

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	112		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P112.D				
Lims ID:	140-20175-A-3				
Client ID:	SV-102-C-29				
Sample Type:	Client				
Inject. Date:	04-Sep-2020 00:08:30	ALS Bottle#:	12	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	3.4300		
Sample Info:	140-0016480-016				
Misc. Info.:	140-20175-a-3@3.43				
Operator ID:	HMT	Instrument ID:	MH		
Method:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\MH_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	04-Sep-2020 12:59:42	Calib Date:	29-Aug-2020 23:57:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1061				
First Level Reviewer: khachitpongpanits		Date:	04-Sep-2020 12:59:42		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.431	9.436	-0.005	98	94451	4.80	
* 2 1,4-Difluorobenzene	114	11.591	11.591	0.000	95	375223	4.80	
* 3 Chlorobenzene-d5 (IS)	117	16.258	16.258	0.000	89	255415	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.876	17.876	0.000	90	154740	5.21	
12 Vinyl chloride	62	4.381	4.379	0.000	32	953	0.0304	
27 1,1-Dichloroethene	96	6.392	6.393	-0.005	96	243817	10.6	
34 trans-1,2-Dichloroethene	96	7.627	7.618	0.005	17	323	0.0135	
37 1,1-Dichloroethane	63	8.061	8.057	0.000	100	1127894	23.8	E
42 cis-1,2-Dichloroethene	96	9.079	9.080	-0.005	97	3440	0.1421	
44 Chloroform	83	9.431	9.431	-0.005	30	7851	0.1369	
47 1,1,1-Trichloroethane	97	10.485	10.479	0.000	97	303624	5.84	
51 Benzene	78	11.079	11.074	0.005	97	2077	0.0301	
52 Carbon tetrachloride	117	11.105	11.095	0.010	26	337	0.007902	
58 Trichloroethene	130	12.299	12.294	0.005	95	118302	3.82	
67 Toluene	91	14.310	14.310	0.000	91	5843	0.0888	
76 Ethylbenzene	91	16.584	16.584	0.000	99	99147	1.24	
77 m-Xylene & p-Xylene	91	16.739	16.739	0.000	98	748138	11.9	
81 o-Xylene	91	17.266	17.266	0.000	99	258514	3.92	
88 1,3,5-Trimethylbenzene	120	18.568	18.563	0.005	92	1150	0.0761	
92 1,2,4-Trimethylbenzene	105	18.992	18.987	0.005	97	3646	0.0478	
98 1,2,3-Trimethylbenzene	105	19.447	19.447	0.000	90	4183	0.0571	
109 Naphthalene	128	21.556	21.556	0.000	99	40101	0.6688	
S 116 Xylenes, Total	100				0		15.8	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Reagents:

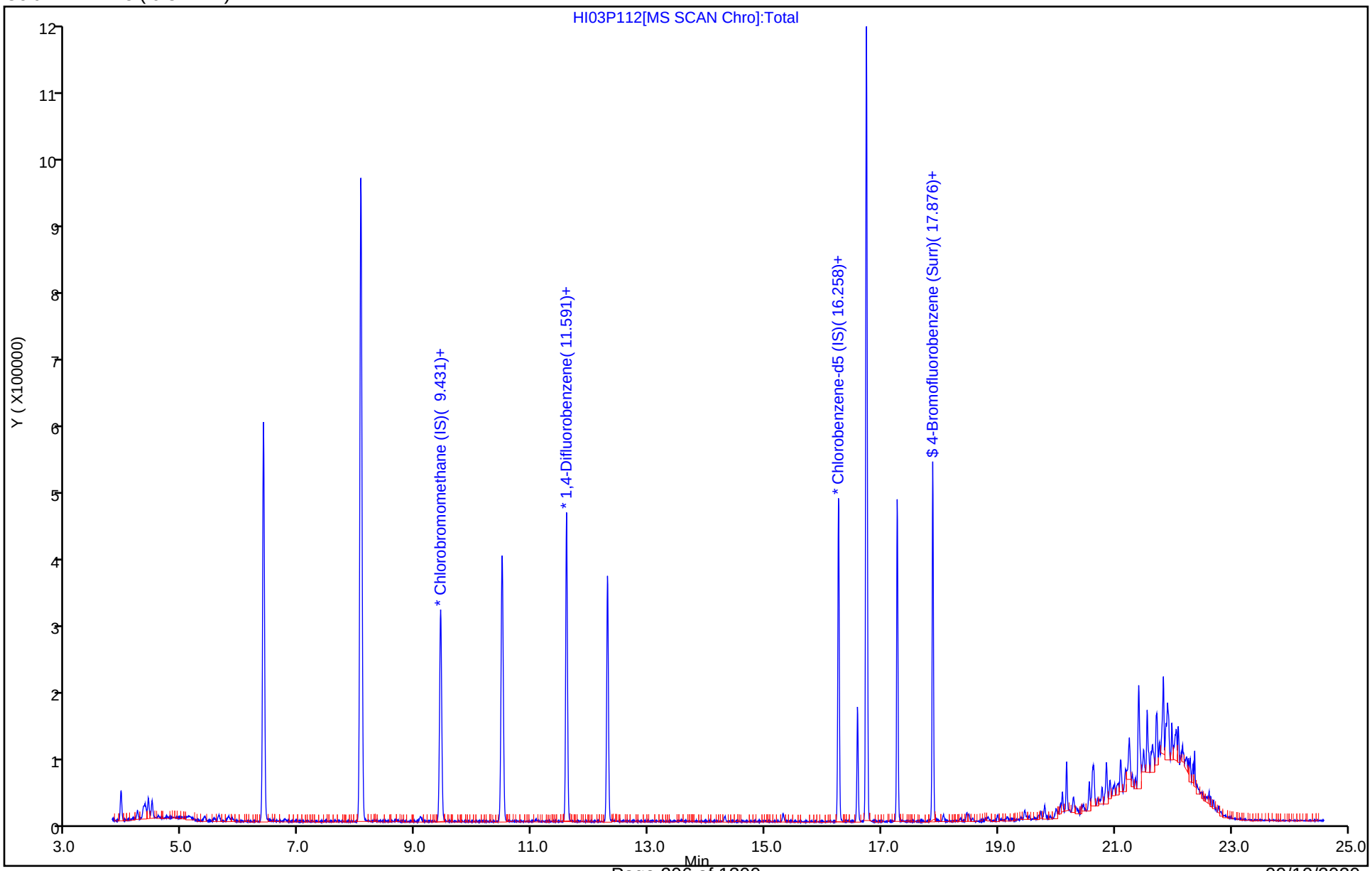
40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

Report Date: 04-Sep-2020 12:59:43 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P112.D				
Injection Date:	04-Sep-2020 00:08:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	140-20175-A-3	Lab Sample ID:	140-20175-3	Worklist Smp#:	16
Client ID:	SV-102-C-29				
Purge Vol:	500.000 mL	Dil. Factor:	3.4300	ALS Bottle#:	12
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P112.D				
Lims ID:	140-20175-A-3				
Client ID:	SV-102-C-29				
Sample Type:	Client				
Inject. Date:	04-Sep-2020 00:08:30	ALS Bottle#:	12	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	3.4300		
Sample Info:	140-0016480-016				
Misc. Info.:	140-20175-a-3@3.43				
Operator ID:	HMT	Instrument ID:	MH		
Method:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\MH_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	04-Sep-2020 12:59:42	Calib Date:	29-Aug-2020 23:57:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1061				

First Level Reviewer: khachitpongpanits Date: 04-Sep-2020 12:59:42

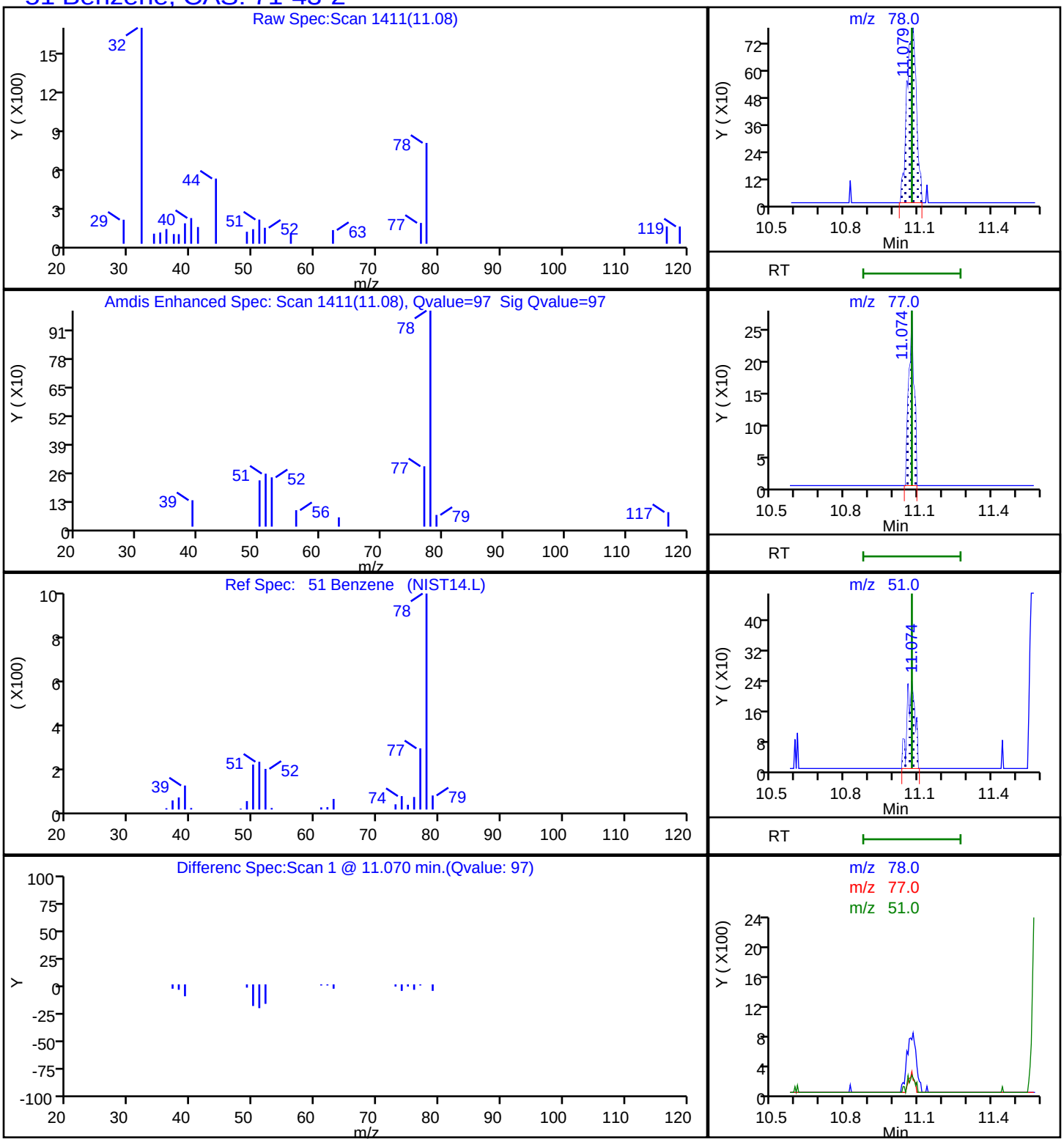
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	5.21	112.38

Report Date: 04-Sep-2020 12:59:43 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P112.D				
Injection Date:	04-Sep-2020 00:08:30	Instrument ID:	MH		
Lims ID:	140-20175-A-3	Lab Sample ID:	140-20175-3		
Client ID:	SV-102-C-29				
Operator ID:	HMT	ALS Bottle#:	12	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	3.4300		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

51 Benzene, CAS: 71-43-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P112.D				
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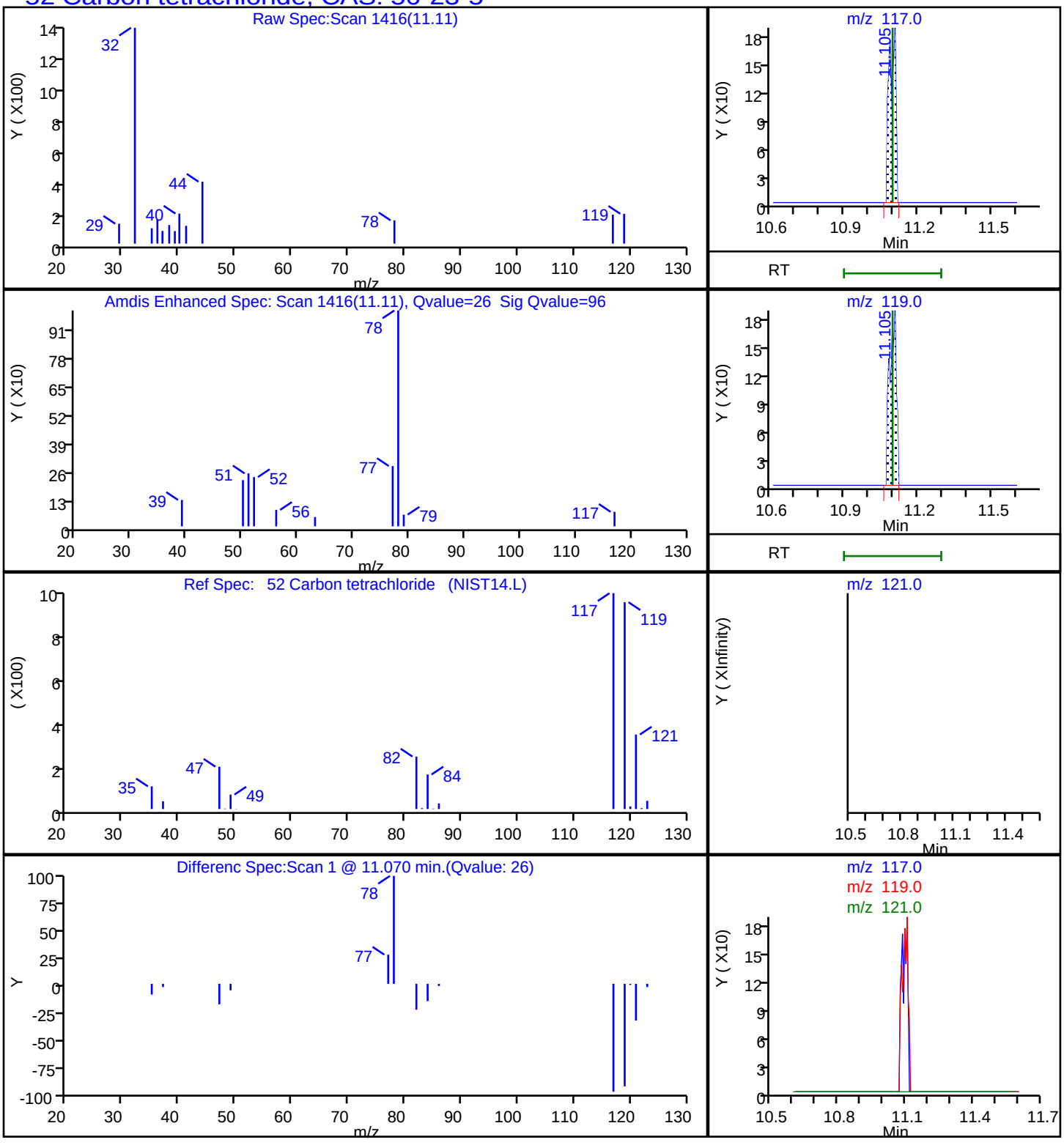
Lims ID:	140-20175-A-3	Lab Sample ID:	140-20175-3		
Client ID:	SV-102-C-29				
Operator ID:	HMT	ALS Bottle#:	12	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	3.4300		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

52 Carbon tetrachloride, CAS: 56-23-5

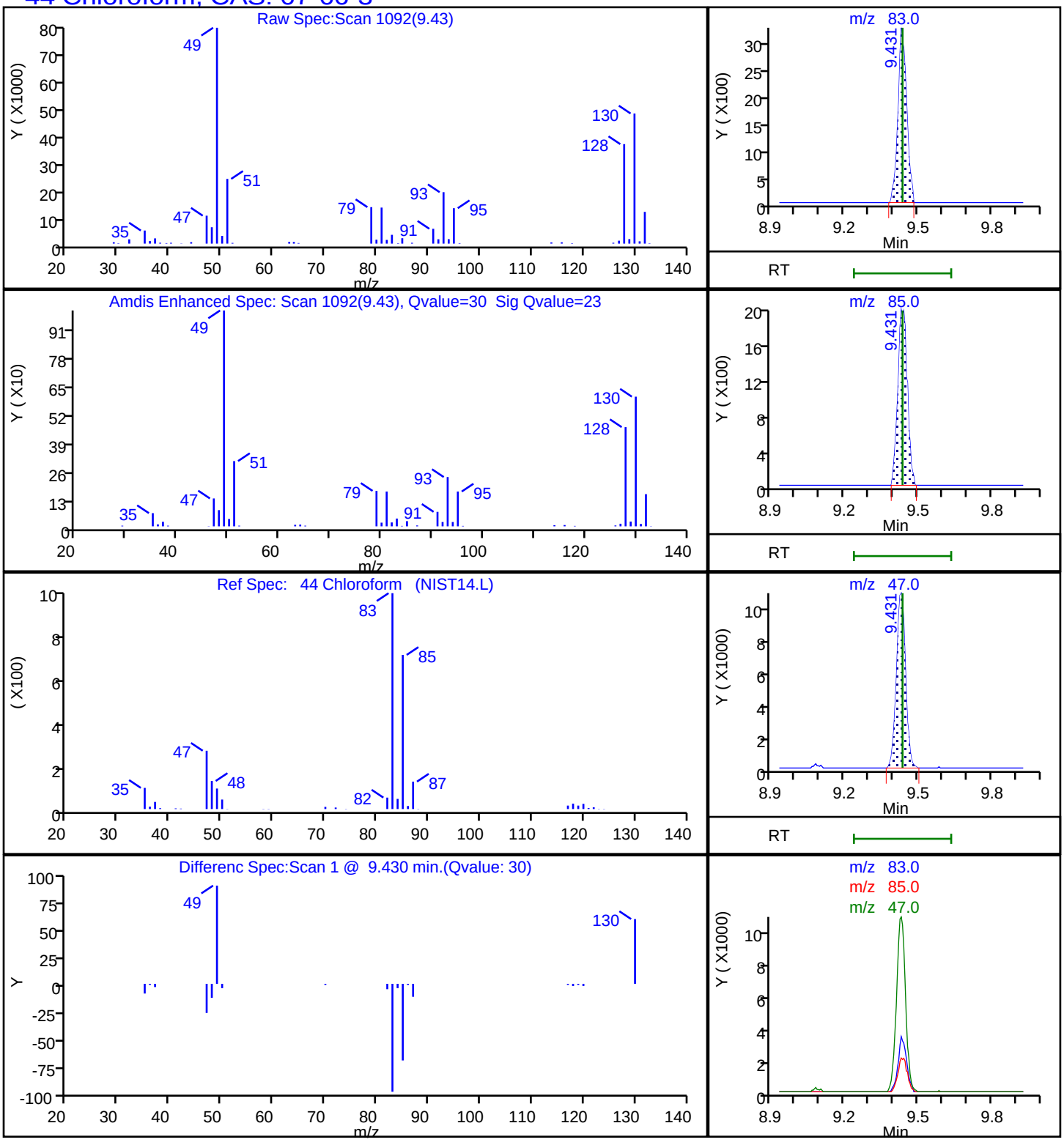


Report Date: 04-Sep-2020 12:59:43 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P112.D				
Injection Date:	04-Sep-2020 00:08:30	Instrument ID:	MH		
Lims ID:	140-20175-A-3	Lab Sample ID:	140-20175-3		
Client ID:	SV-102-C-29				
Operator ID:	HMT	ALS Bottle#:	12	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	3.4300		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

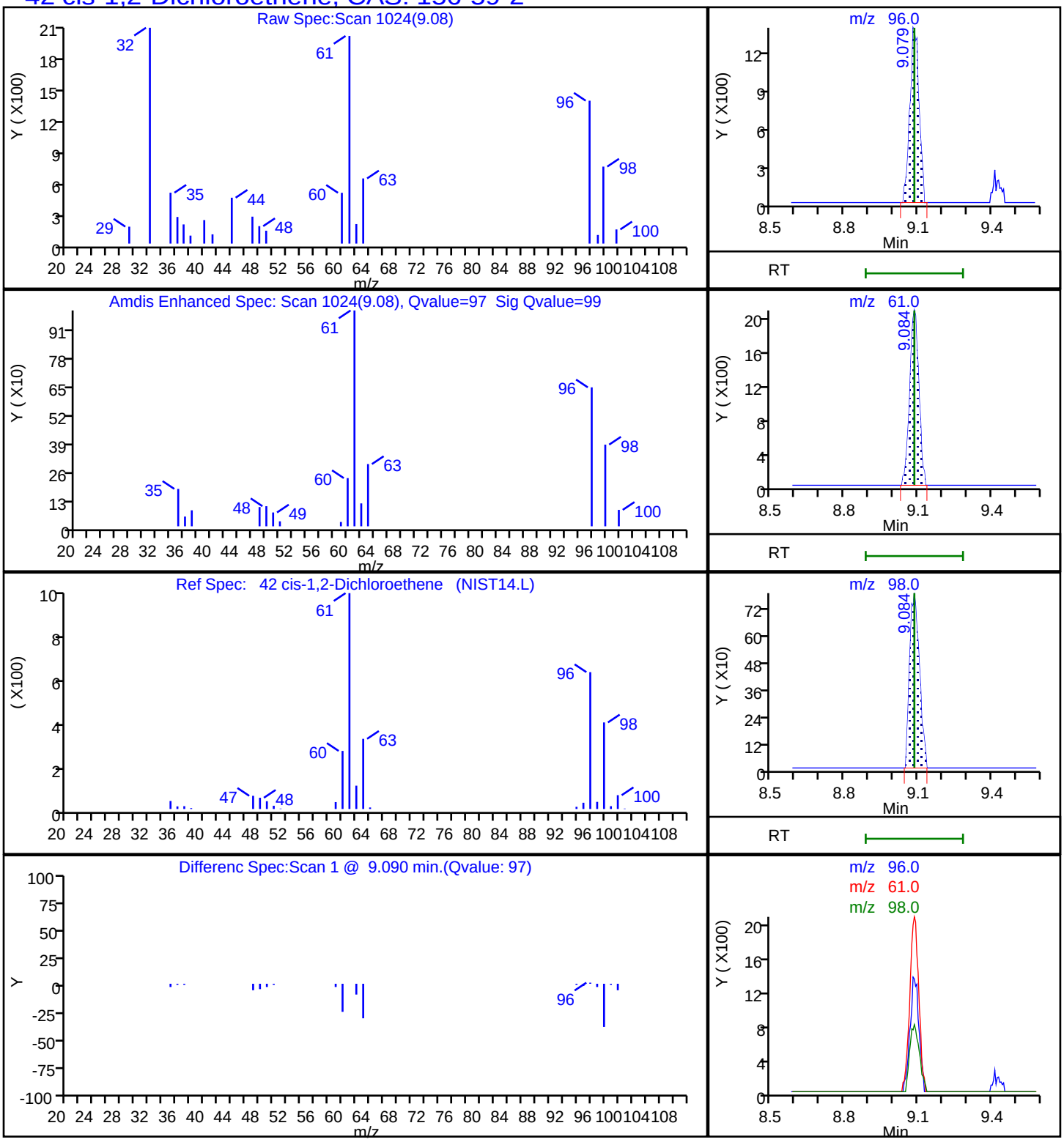
44 Chloroform, CAS: 67-66-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P112.D				
Injection Date:	04-Sep-2020 00:08:30	Instrument ID:	MH		
Lims ID:	140-20175-A-3	Lab Sample ID:	140-20175-3		
Client ID:	SV-102-C-29				
Operator ID:	HMT	ALS Bottle#:	12	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	3.4300		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

42 cis-1,2-Dichloroethene, CAS: 156-59-2

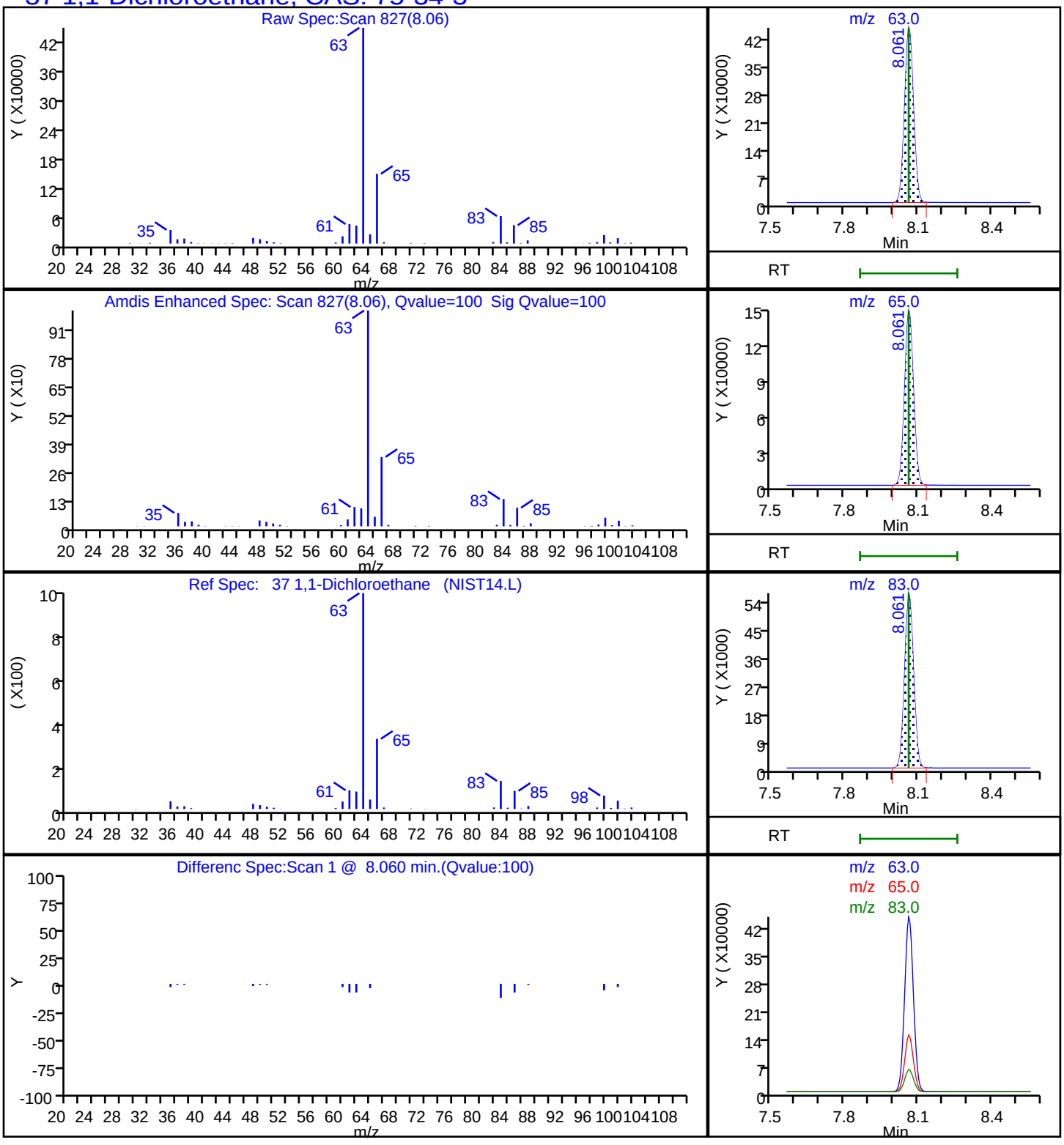


Report Date: 04-Sep-2020 12:59:43 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P112.D		
Injection Date:	04-Sep-2020 00:08:30	Instrument ID:	MH
Lims ID:	140-20175-A-3	Lab Sample ID:	140-20175-3
Client ID:	SV-102-C-29		
Operator ID:	HMT	ALS Bottle#:	12 Worklist Smp#: 16
Purge Vol:	500.000 mL	Dil. Factor:	3.4300
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

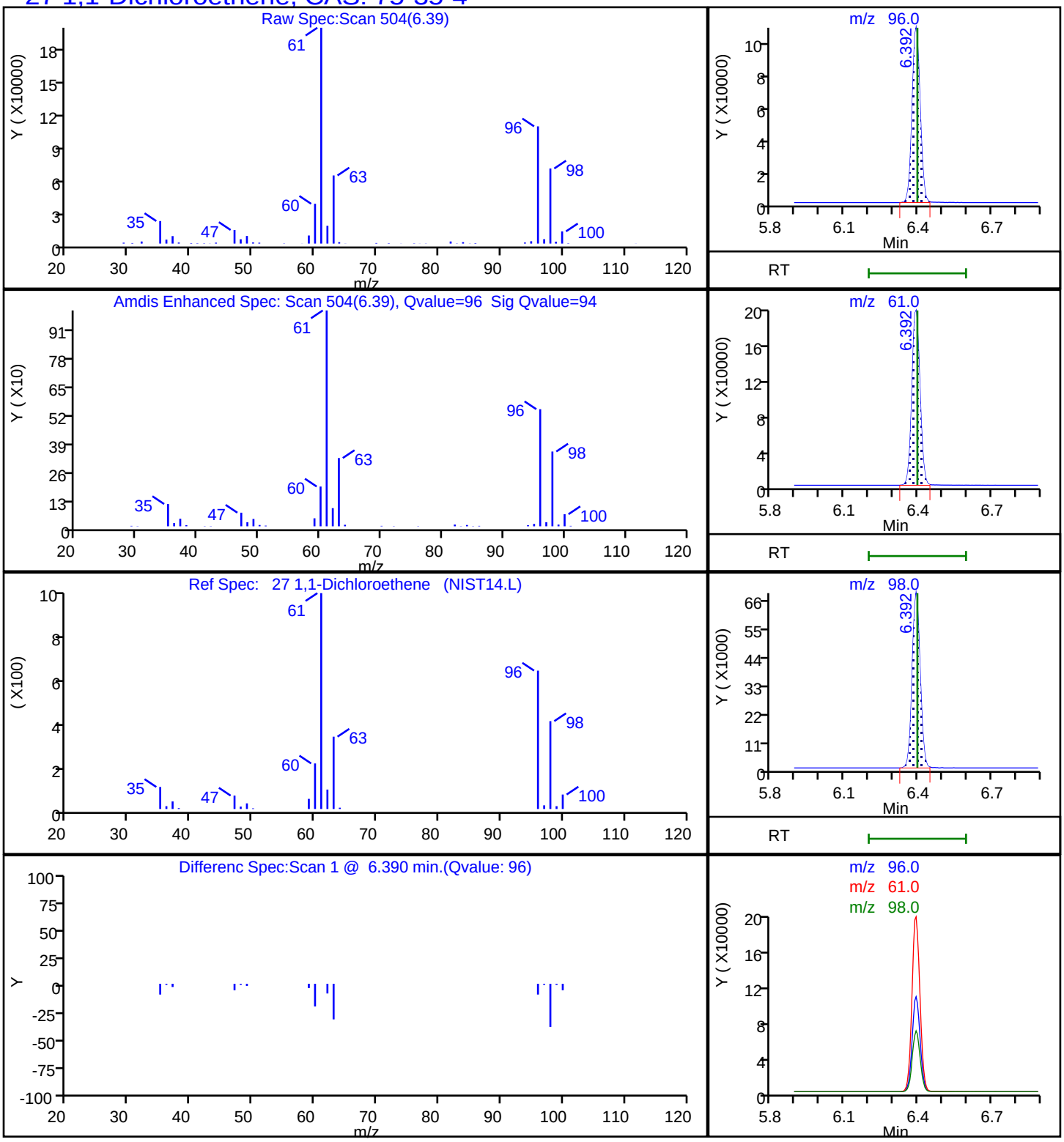
37 1,1-Dichloroethane, CAS: 75-34-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P112.D		
Injection Date:	04-Sep-2020 00:08:30	Instrument ID:	MH
Lims ID:	140-20175-A-3	Lab Sample ID:	140-20175-3
Client ID:	SV-102-C-29		
Operator ID:	HMT	ALS Bottle#:	12 Worklist Smp#: 16
Purge Vol:	500.000 mL	Dil. Factor:	3.4300
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

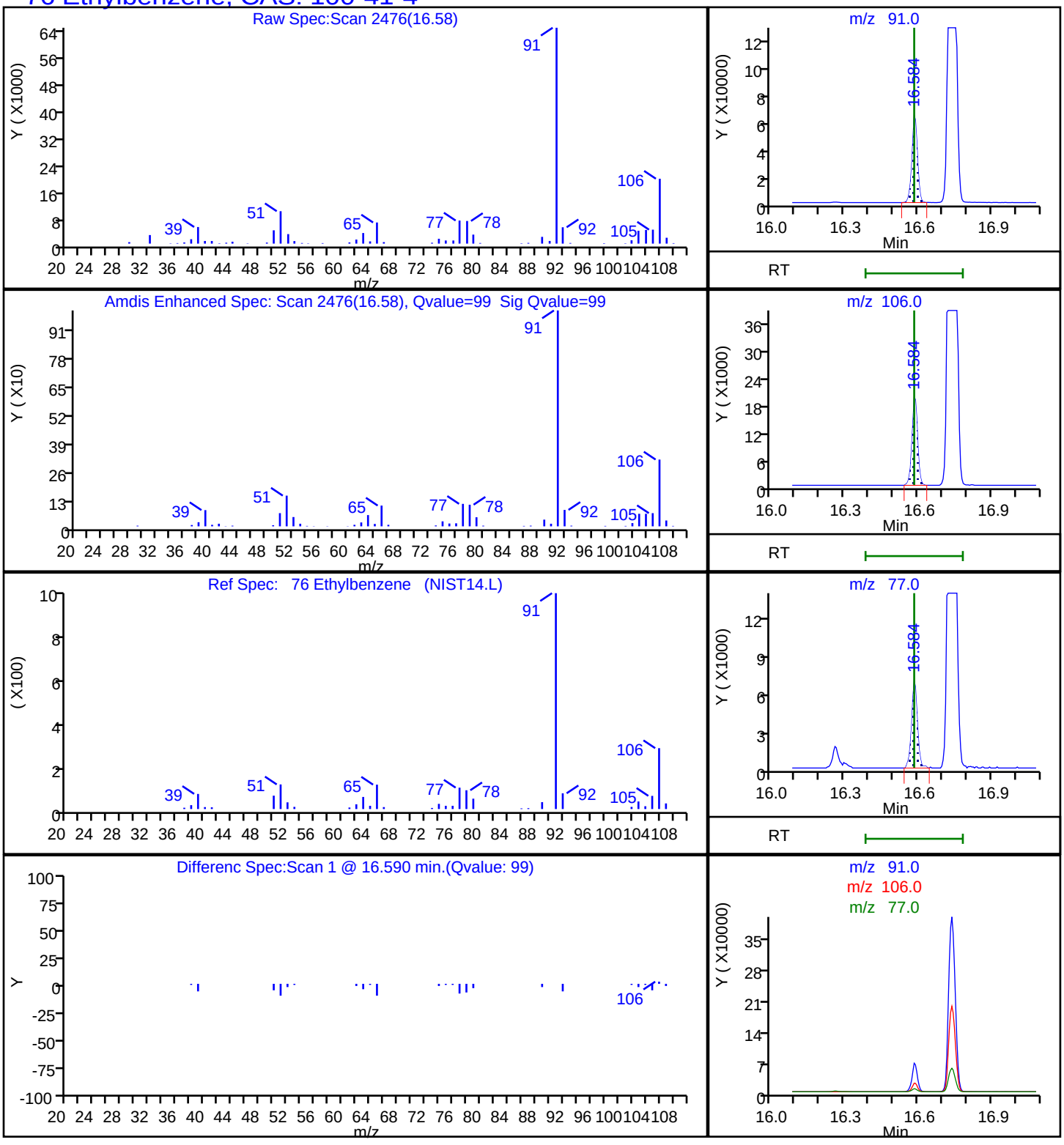
27 1,1-Dichloroethene, CAS: 75-35-4



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P112.D				
Injection Date:	04-Sep-2020 00:08:30	Instrument ID:	MH		
Lims ID:	140-20175-A-3	Lab Sample ID:	140-20175-3		
Client ID:	SV-102-C-29				
Operator ID:	HMT	ALS Bottle#:	12	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	3.4300		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

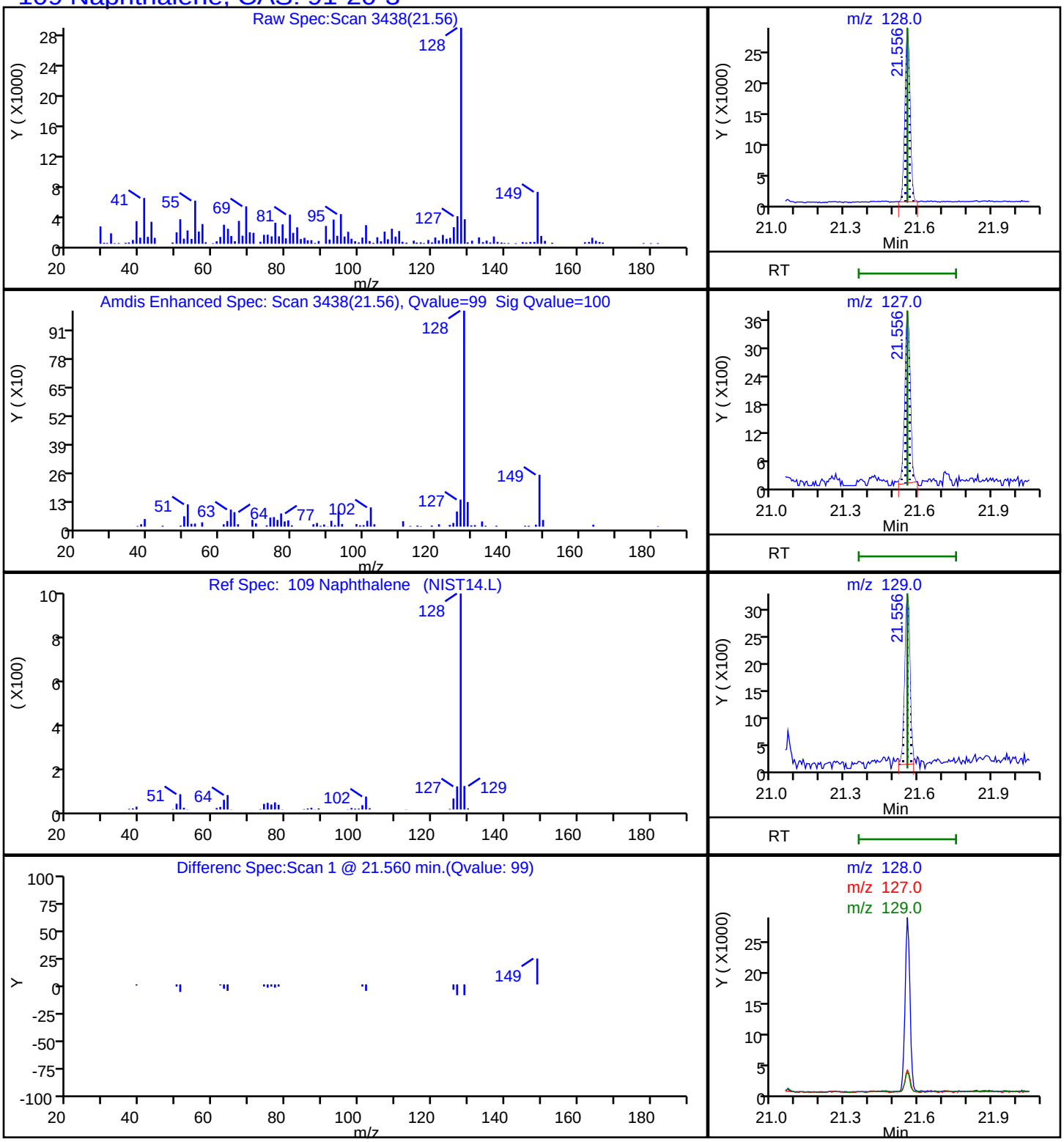
76 Ethylbenzene, CAS: 100-41-4



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P112.D		
Injection Date:	04-Sep-2020 00:08:30	Instrument ID:	MH
Lims ID:	140-20175-A-3	Lab Sample ID:	140-20175-3
Client ID:	SV-102-C-29		
Operator ID:	HMT	ALS Bottle#:	12 Worklist Smp#: 16
Purge Vol:	500.000 mL	Dil. Factor:	3.4300
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

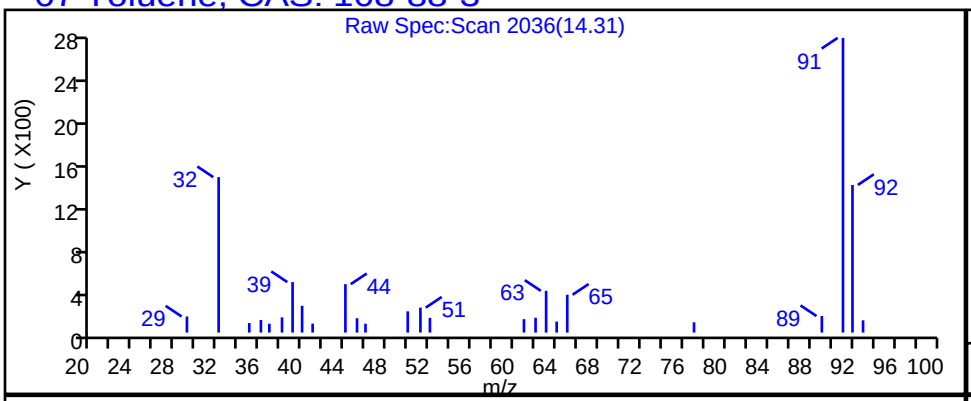
109 Naphthalene, CAS: 91-20-3

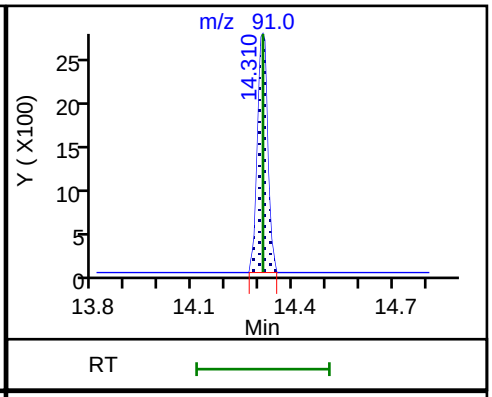


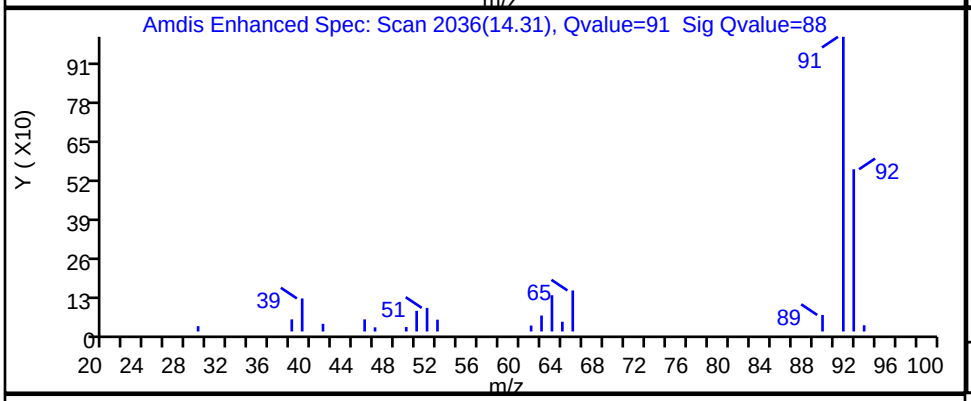
Eurofins TestAmerica, Knoxville

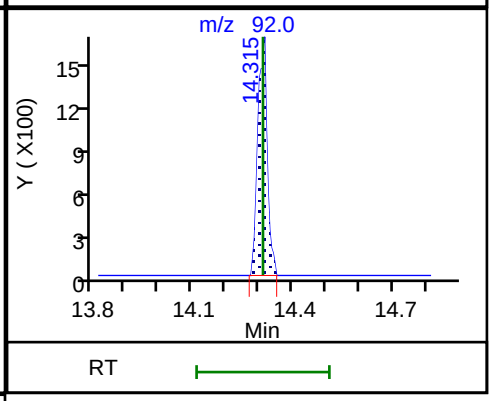
Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P112.D				
Injection Date:	04-Sep-2020 00:08:30	Instrument ID:	MH		
Lims ID:	140-20175-A-3	Lab Sample ID:	140-20175-3		
Client ID:	SV-102-C-29				
Operator ID:	HMT	ALS Bottle#:	12	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	3.4300		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

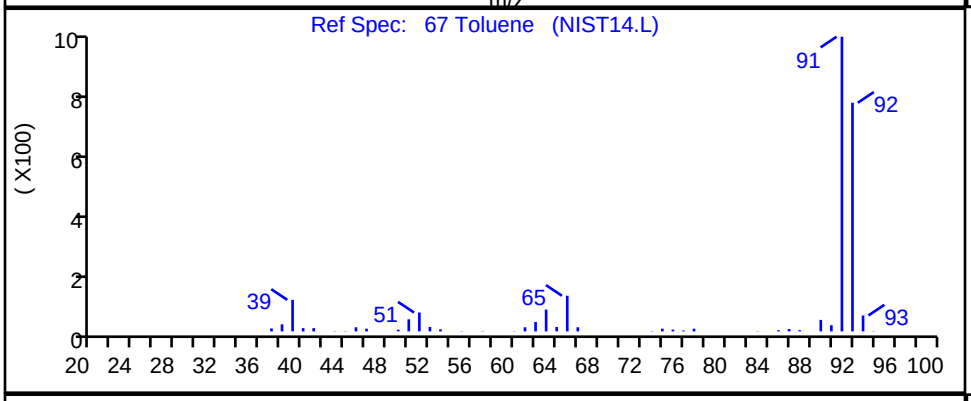
67 Toluene, CAS: 108-88-3

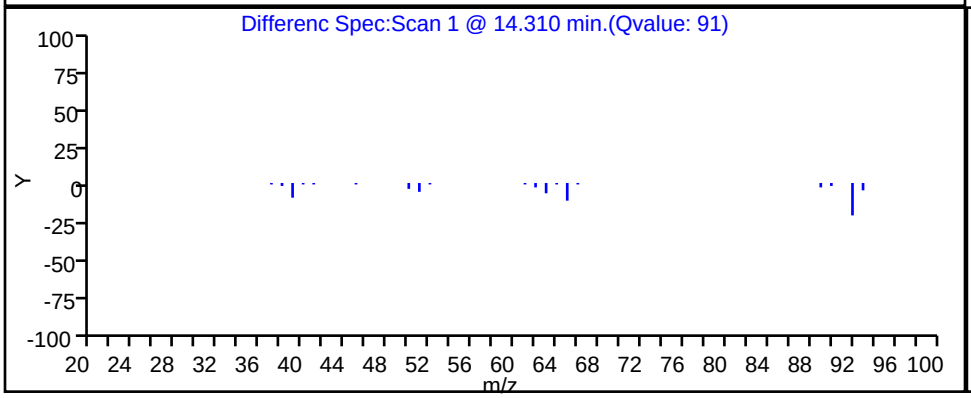


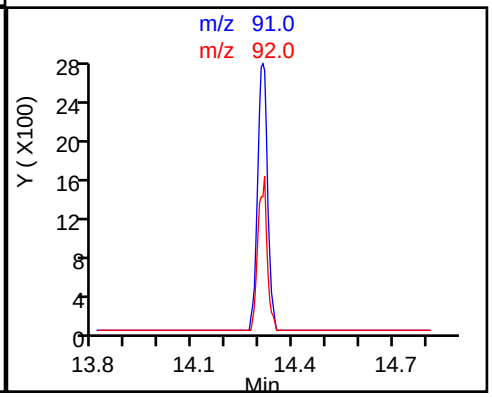








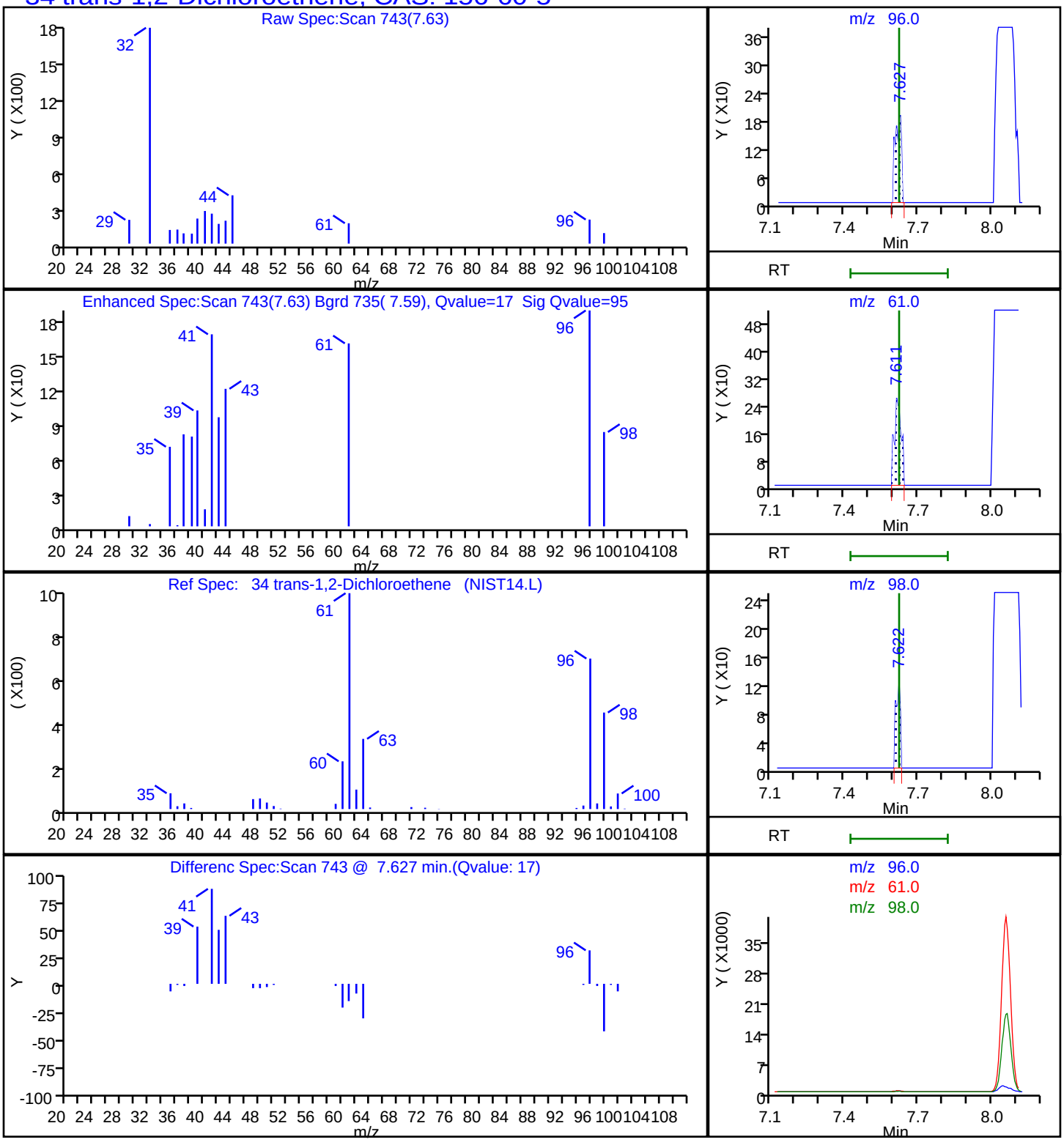




Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P112.D				
Injection Date:	04-Sep-2020 00:08:30	Instrument ID:	MH		
Lims ID:	140-20175-A-3	Lab Sample ID:	140-20175-3		
Client ID:	SV-102-C-29				
Operator ID:	HMT	ALS Bottle#:	12	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	3.4300		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

34 trans-1,2-Dichloroethene, CAS: 156-60-5

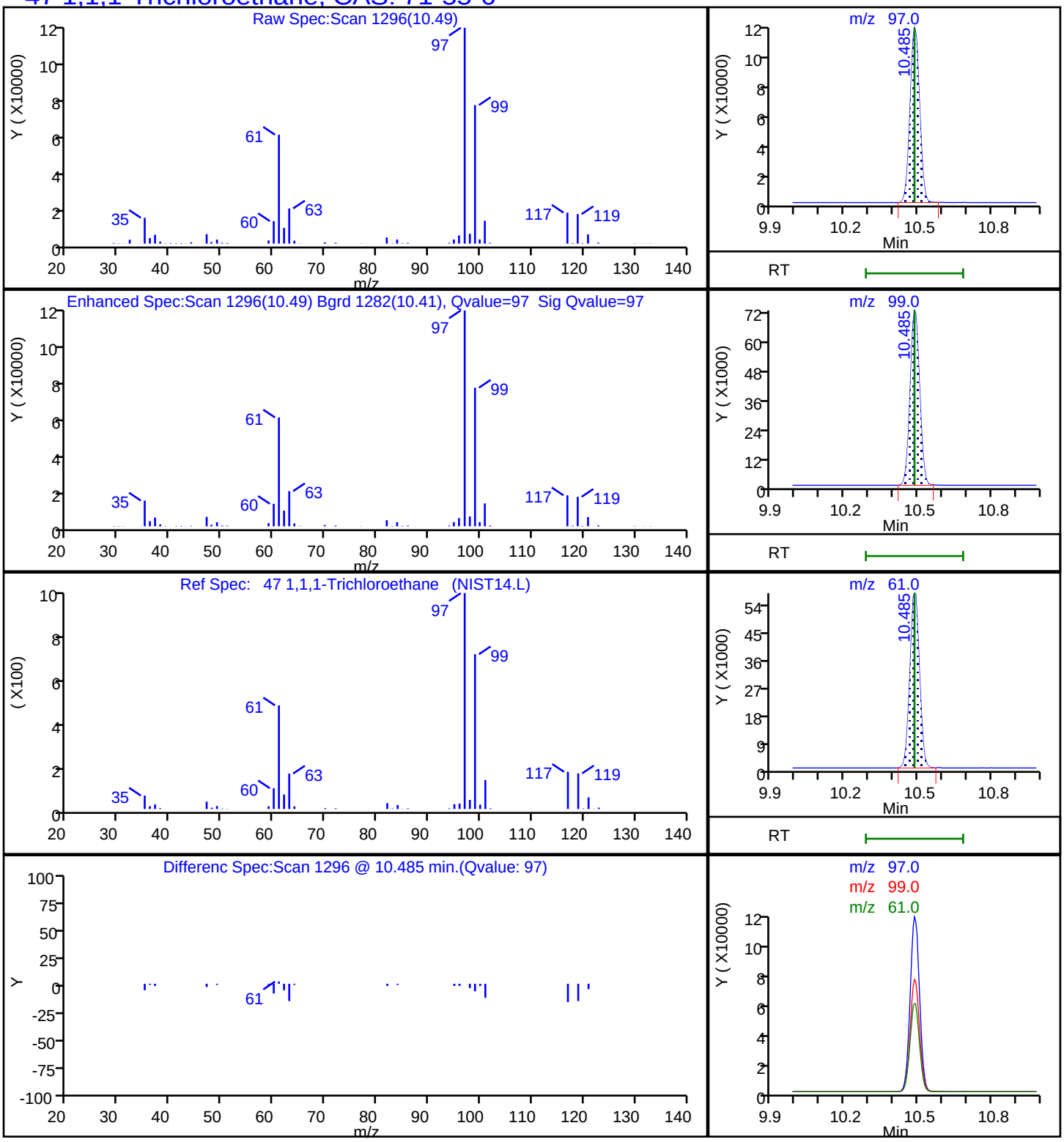


Report Date: 04-Sep-2020 12:59:43 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P112.D				
Injection Date:	04-Sep-2020 00:08:30	Instrument ID:	MH		
Lims ID:	140-20175-A-3	Lab Sample ID:	140-20175-3		
Client ID:	SV-102-C-29				
Operator ID:	HMT	ALS Bottle#:	12	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	3.4300		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

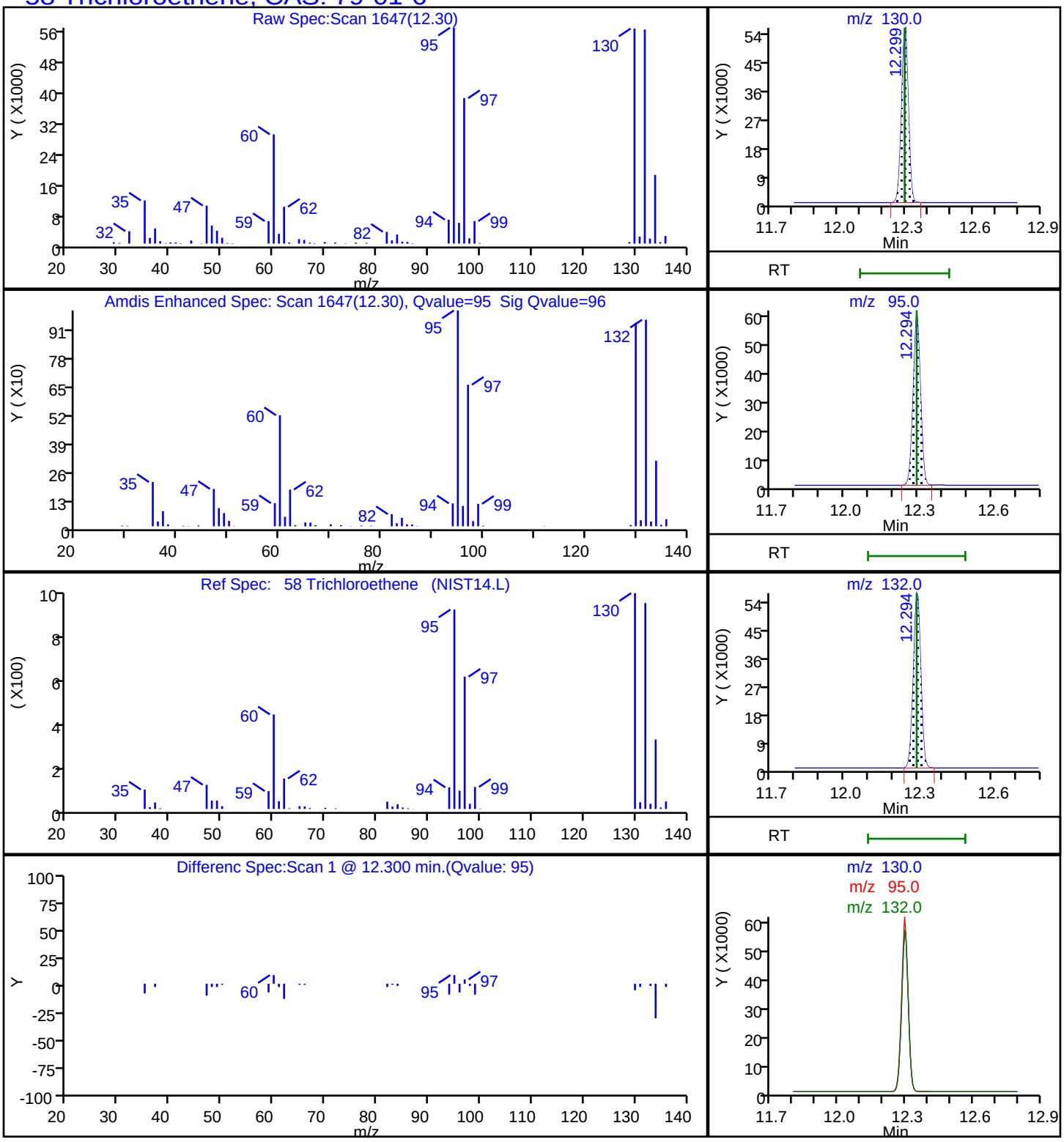
47 1,1,1-Trichloroethane, CAS: 71-55-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P112.D		
Injection Date:	04-Sep-2020 00:08:30	Instrument ID:	MH
Lims ID:	140-20175-A-3	Lab Sample ID:	140-20175-3
Client ID:	SV-102-C-29		
Operator ID:	HMT	ALS Bottle#:	12 Worklist Smp#: 16
Purge Vol:	500.000 mL	Dil. Factor:	3.4300
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

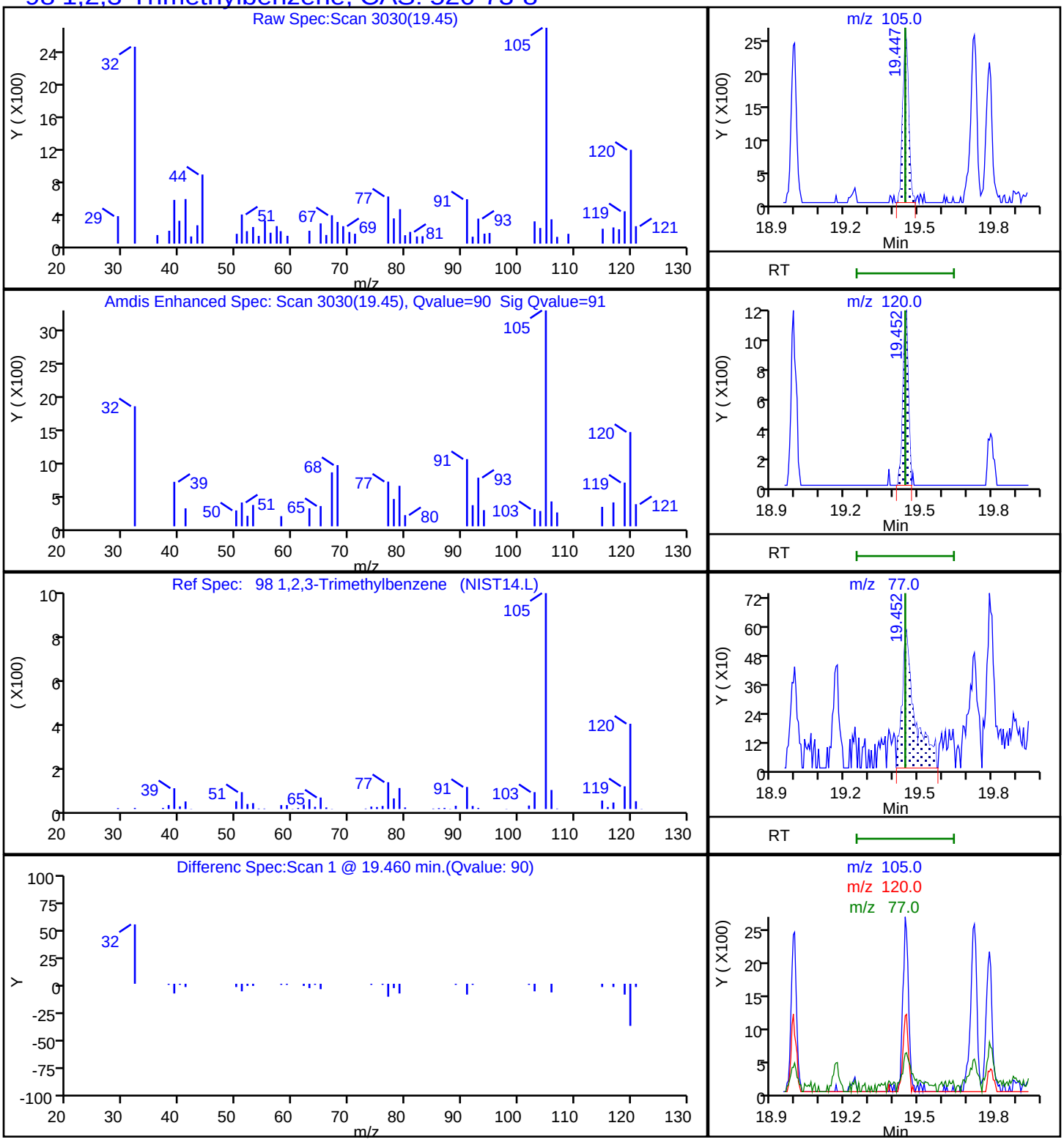
58 Trichloroethene, CAS: 79-01-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P112.D				
Injection Date:	04-Sep-2020 00:08:30	Instrument ID:	MH		
Lims ID:	140-20175-A-3	Lab Sample ID:	140-20175-3		
Client ID:	SV-102-C-29				
Operator ID:	HMT	ALS Bottle#:	12	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	3.4300		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

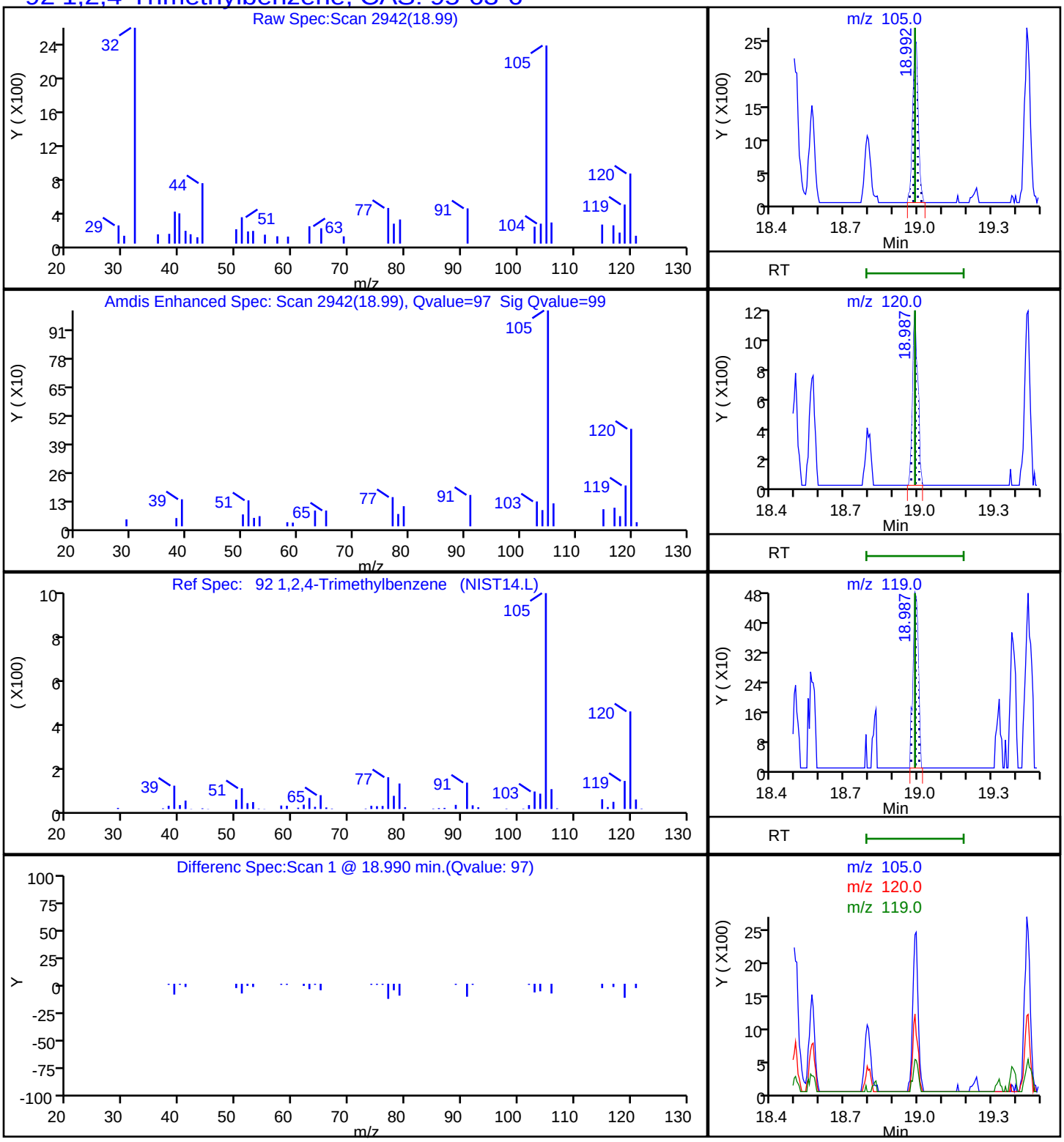
98 1,2,3-Trimethylbenzene, CAS: 526-73-8



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P112.D				
Injection Date:	04-Sep-2020 00:08:30	Instrument ID:	MH		
Lims ID:	140-20175-A-3	Lab Sample ID:	140-20175-3		
Client ID:	SV-102-C-29				
Operator ID:	HMT	ALS Bottle#:	12	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	3.4300		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

92 1,2,4-Trimethylbenzene, CAS: 95-63-6

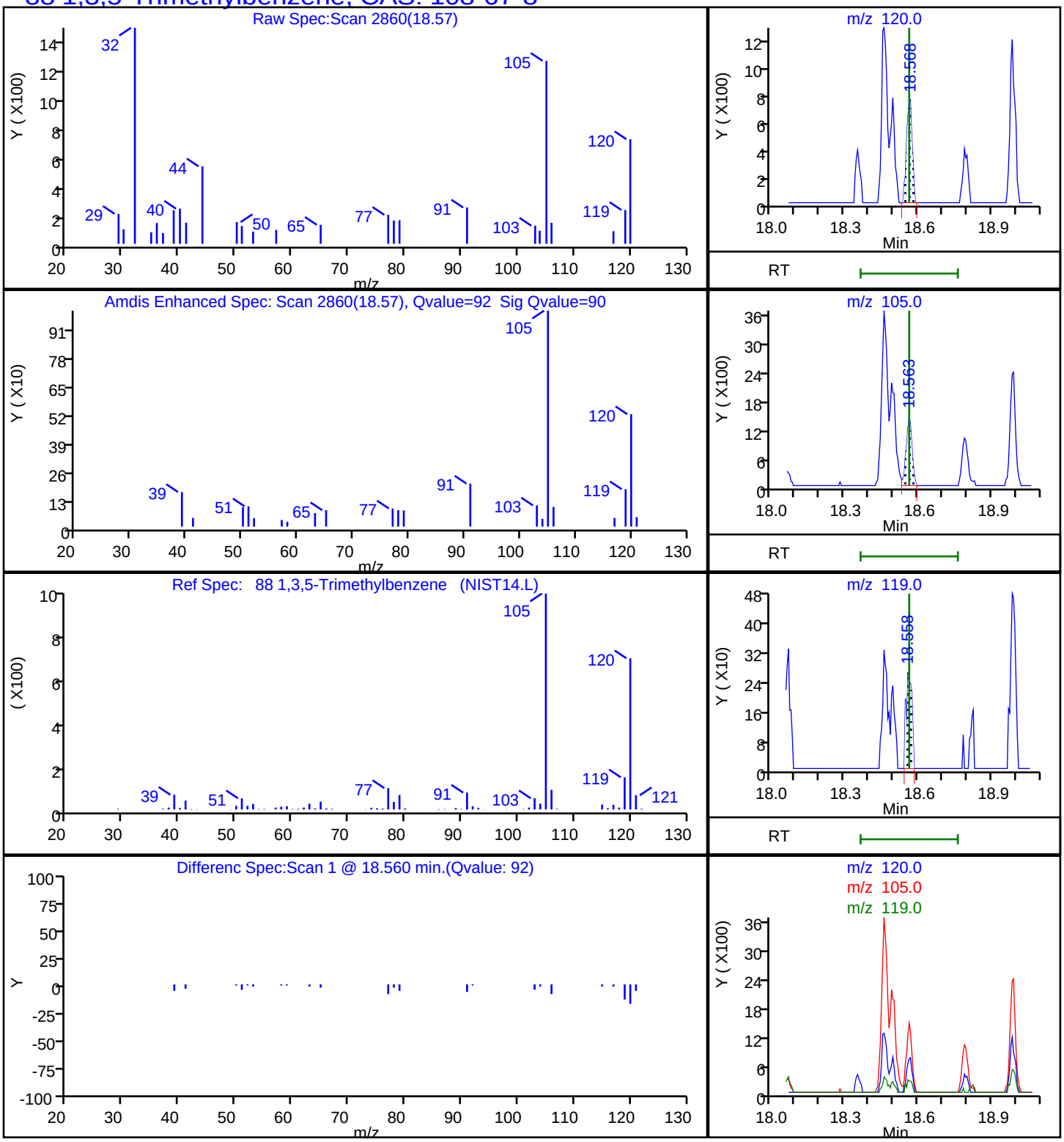


Report Date: 04-Sep-2020 12:59:43 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P112.D				
Injection Date:	04-Sep-2020 00:08:30	Instrument ID:	MH		
Lims ID:	140-20175-A-3	Lab Sample ID:	140-20175-3		
Client ID:	SV-102-C-29				
Operator ID:	HMT	ALS Bottle#:	12	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	3.4300		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

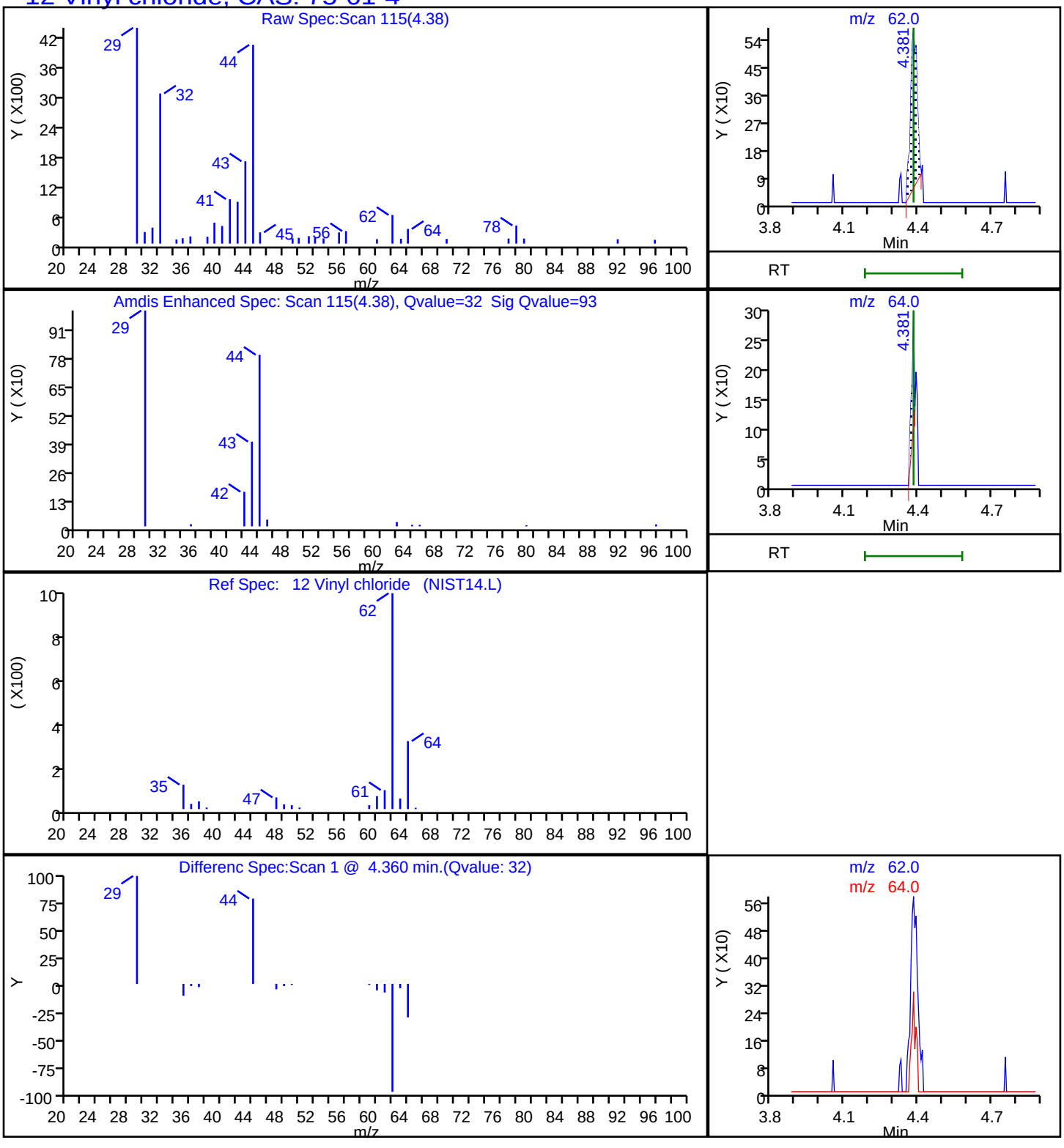
88 1,3,5-Trimethylbenzene, CAS: 108-67-8



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P112.D				
Injection Date:	04-Sep-2020 00:08:30	Instrument ID:	MH		
Lims ID:	140-20175-A-3	Lab Sample ID:	140-20175-3		
Client ID:	SV-102-C-29				
Operator ID:	HMT	ALS Bottle#:	12	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	3.4300		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

12 Vinyl chloride, CAS: 75-01-4

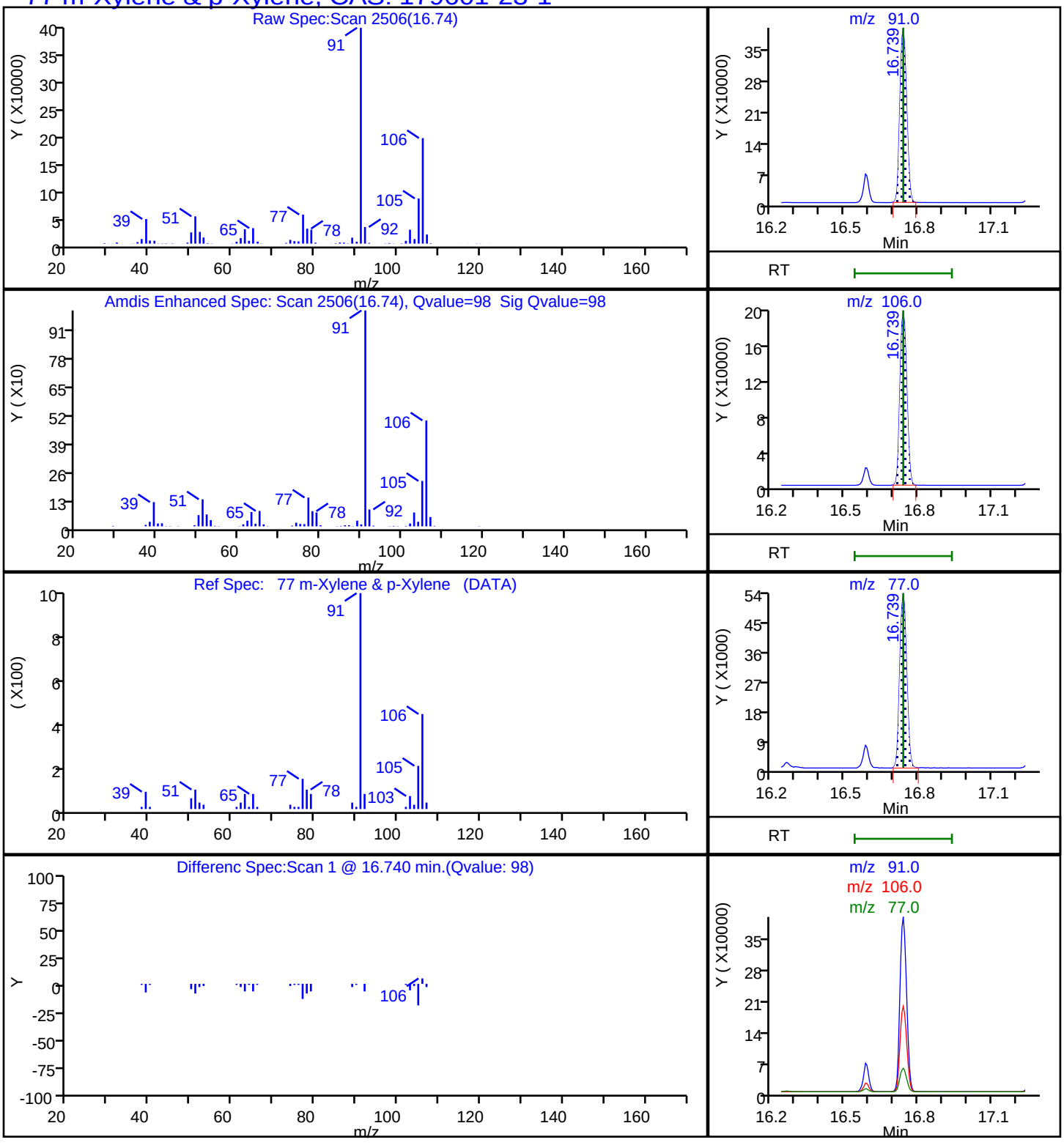


Report Date: 04-Sep-2020 12:59:43 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P112.D				
Injection Date:	04-Sep-2020 00:08:30	Instrument ID:	MH		
Lims ID:	140-20175-A-3	Lab Sample ID:	140-20175-3		
Client ID:	SV-102-C-29				
Operator ID:	HMT	ALS Bottle#:	12	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	3.4300		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

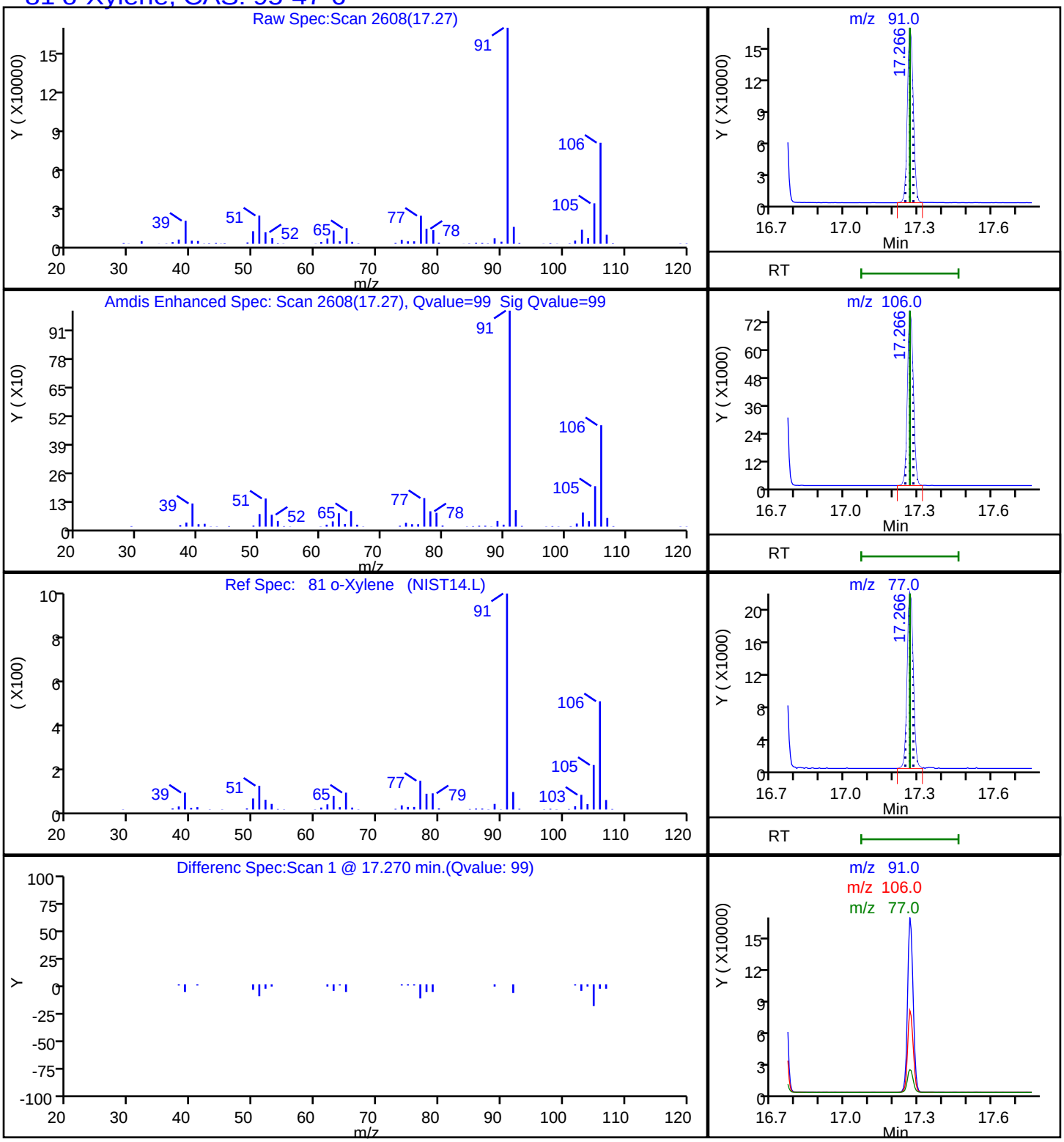
77 m-Xylene & p-Xylene, CAS: 179601-23-1



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P112.D				
Injection Date:	04-Sep-2020 00:08:30	Instrument ID:	MH		
Lims ID:	140-20175-A-3	Lab Sample ID:	140-20175-3		
Client ID:	SV-102-C-29				
Operator ID:	HMT	ALS Bottle#:	12	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	3.4300		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

81 o-Xylene, CAS: 95-47-6



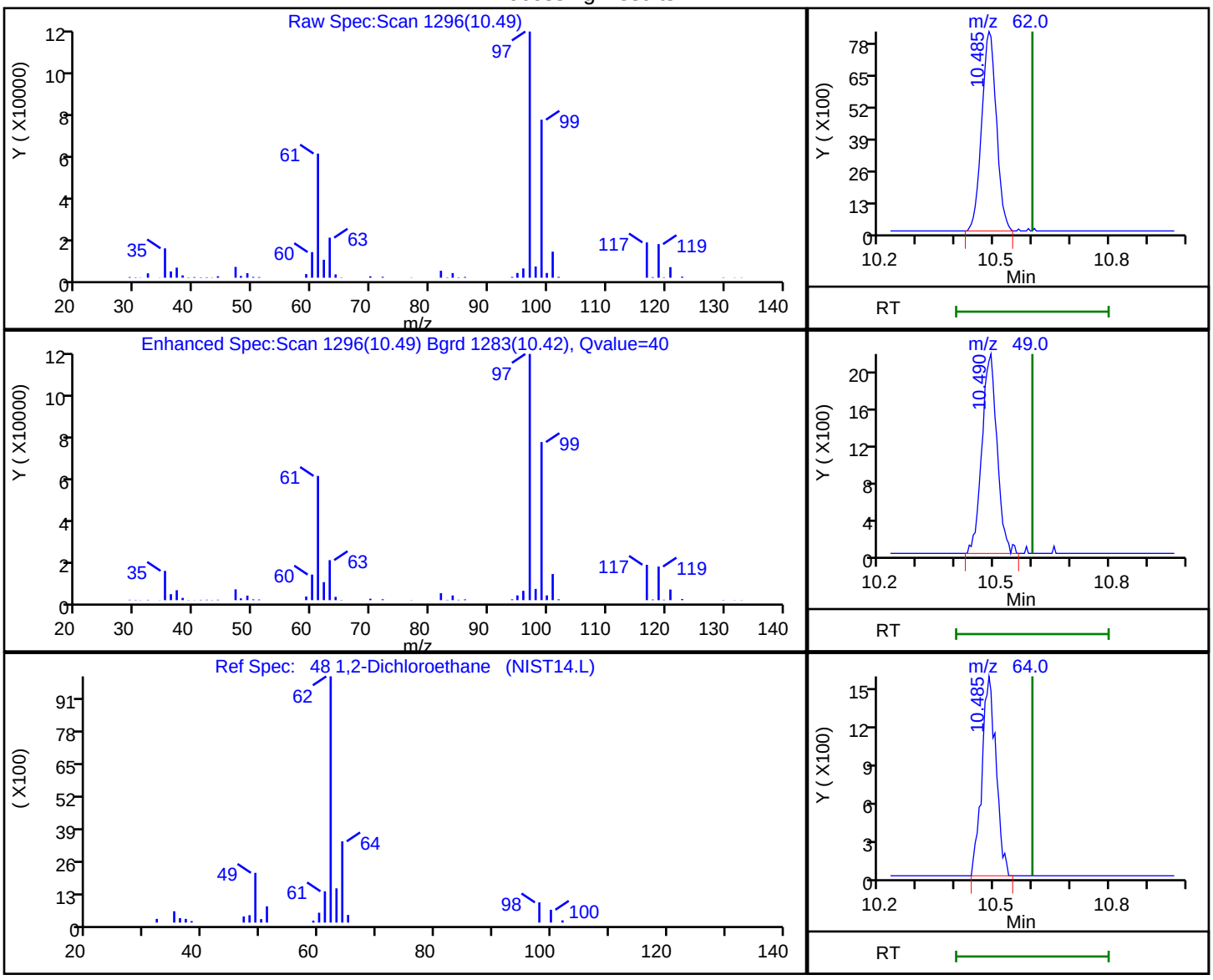
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P112.D				
Injection Date:	04-Sep-2020 00:08:30	Instrument ID:	MH		
Lims ID:	140-20175-A-3	Lab Sample ID:	140-20175-3		
Client ID:	SV-102-C-29				
Operator ID:	HMT	ALS Bottle#:	12	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	3.4300		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

48 1,2-Dichloroethane, CAS: 107-06-2

Processing Results



RT	Mass	Response	Amount
10.49	62.00	22038	0.645929
10.49	49.00	6028	
10.49	64.00	3878	

Reviewer: khachitpongpanits, 04-Sep-2020 12:59:12

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

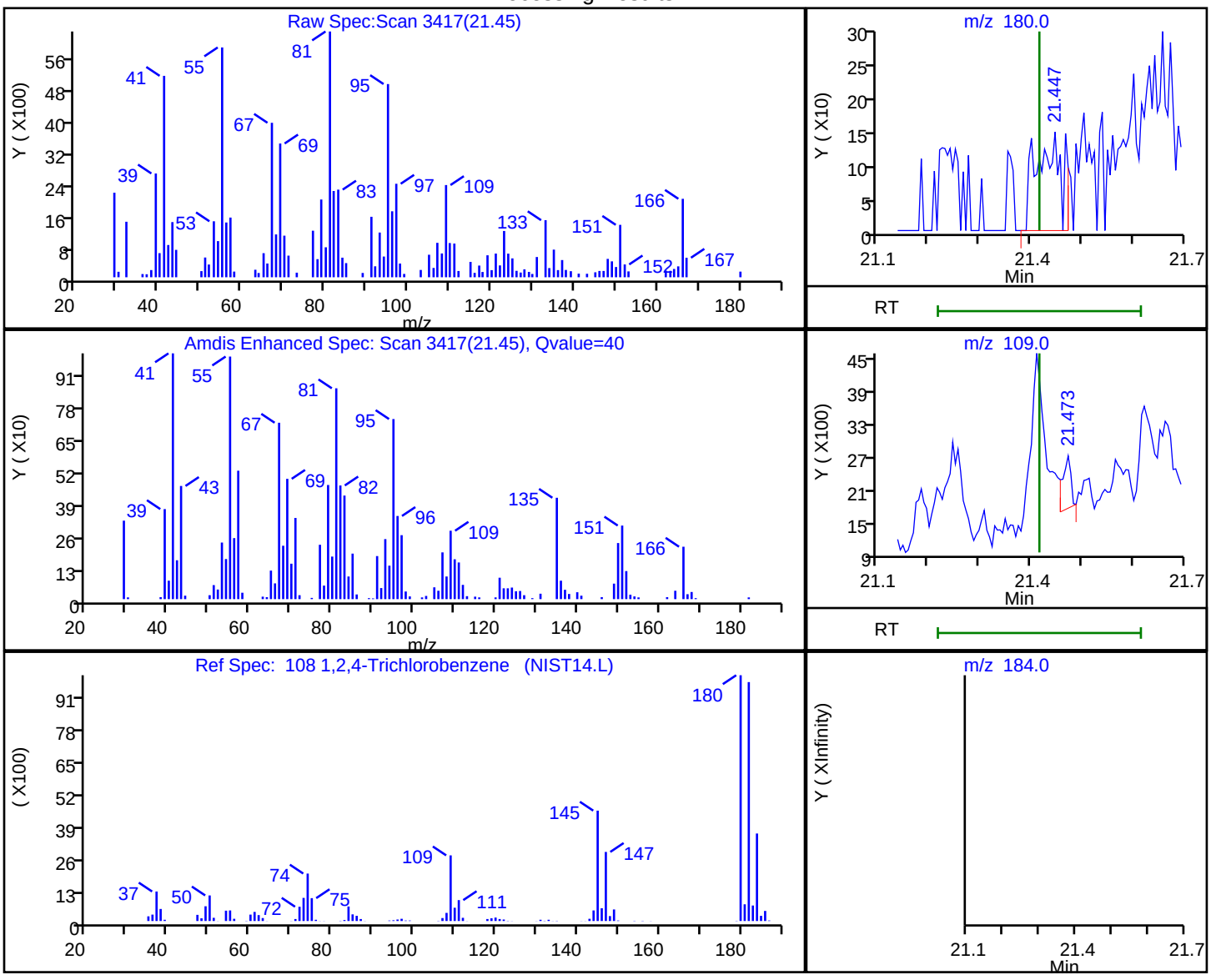
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P112.D				
Injection Date:	04-Sep-2020 00:08:30	Instrument ID:	MH		
Lims ID:	140-20175-A-3	Lab Sample ID:	140-20175-3		
Client ID:	SV-102-C-29				
Operator ID:	HMT	ALS Bottle#:	12	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	3.4300		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

108 1,2,4-Trichlorobenzene, CAS: 120-82-1

Processing Results



RT	Mass	Response	Amount
21.45	180.00	489	0.103220
21.47	109.00	1087	
21.42	184.00	0	

Reviewer: khachitpongpanits, 04-Sep-2020 12:59:21

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: SV-102-C-29 DL Lab Sample ID: 140-20175-3 DL

Matrix: Air Lab File ID: GI08P102.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 10:17

Sample wt/vol: 11(mL) Date Analyzed: 09/08/2020 18:03

Soil Aliquot Vol: Dilution Factor: 3.43

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42503 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
75-34-3	1,1-Dichloroethane	98.96	1400		12	1.1

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	101		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: SV-102-C-29 DL Lab Sample ID: 140-20175-3 DL

Matrix: Air Lab File ID: GI08P102.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 10:17

Sample wt/vol: 11(mL) Date Analyzed: 09/08/2020 18:03

Soil Aliquot Vol: Dilution Factor: 3.43

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42503 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
75-34-3	1,1-Dichloroethane	98.96	5500		50	4.4

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	101		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P102.D
Lims ID: 140-20175-A-3
Client ID: SV-102-C-29
Sample Type: Client
Inject. Date: 08-Sep-2020 18:03:30 ALS Bottle#: 2 Worklist Smp#: 7
Purge Vol: 500.000 mL Dil. Factor: 3.4300
Sample Info: 140-0016519-007
Misc. Info.: 140-20175-a-3@3.43
Operator ID: HMT Instrument ID: MG

Method: \\chromfs\Knoxville\ChromData\MG\20200904-16519.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 09-Sep-2020 14:03:02 Calib Date: 02-Sep-2020 03:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1034

First Level Reviewer: barlozhetskayaa Date: 09-Sep-2020 14:03:02

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.811	8.806	0.005	85	72039	4.80	
* 2 1,4-Difluorobenzene	114	10.995	10.990	0.005	98	335564	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.724	15.724	0.000	96	339613	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.369	17.369	0.000	79	250541	4.70	
27 1,1-Dichloroethene	96	5.937	5.921	0.016	88	102260	5.76	
37 1,1-Dichloroethane	63	7.501	7.495	0.006	98	451727	8.67	
42 cis-1,2-Dichloroethene	96	8.482	8.482	0.000	91	2359	0.1062	
44 Chloroform	83	8.828	8.817	0.011	36	3295	0.0652	
47 1,1,1-Trichloroethane	97	9.847	9.852	-0.005	92	126448	2.60	
50 Benzene	78	10.451	10.445	0.006	3	1012	0.0147	
58 Trichloroethene	130	11.707	11.702	0.005	87	51709	1.72	
78 Ethylbenzene	91	16.064	16.064	0.000	98	50634	0.5260	
79 m-Xylene & p-Xylene	91	16.226	16.231	-0.005	97	251789	3.31	
83 o-Xylene	91	16.754	16.754	0.000	97	96606	1.25	
90 1,3,5-Trimethylbenzene	120	18.108	18.108	0.000	90	1212	0.0300	
95 1,2,4-Trimethylbenzene	105	18.545	18.545	0.001	95	3471	0.0393	a
101 1,2,3-Trimethylbenzene	105	19.019	19.014	0.005	92	2706	0.0366	
112 Naphthalene	128	21.090	21.090	0.000	97	32951	0.2571	
S 124 Xylenes, Total	100				0		4.56	

QC Flag Legend

Review Flags
a - User Assigned ID

Reagents:

40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

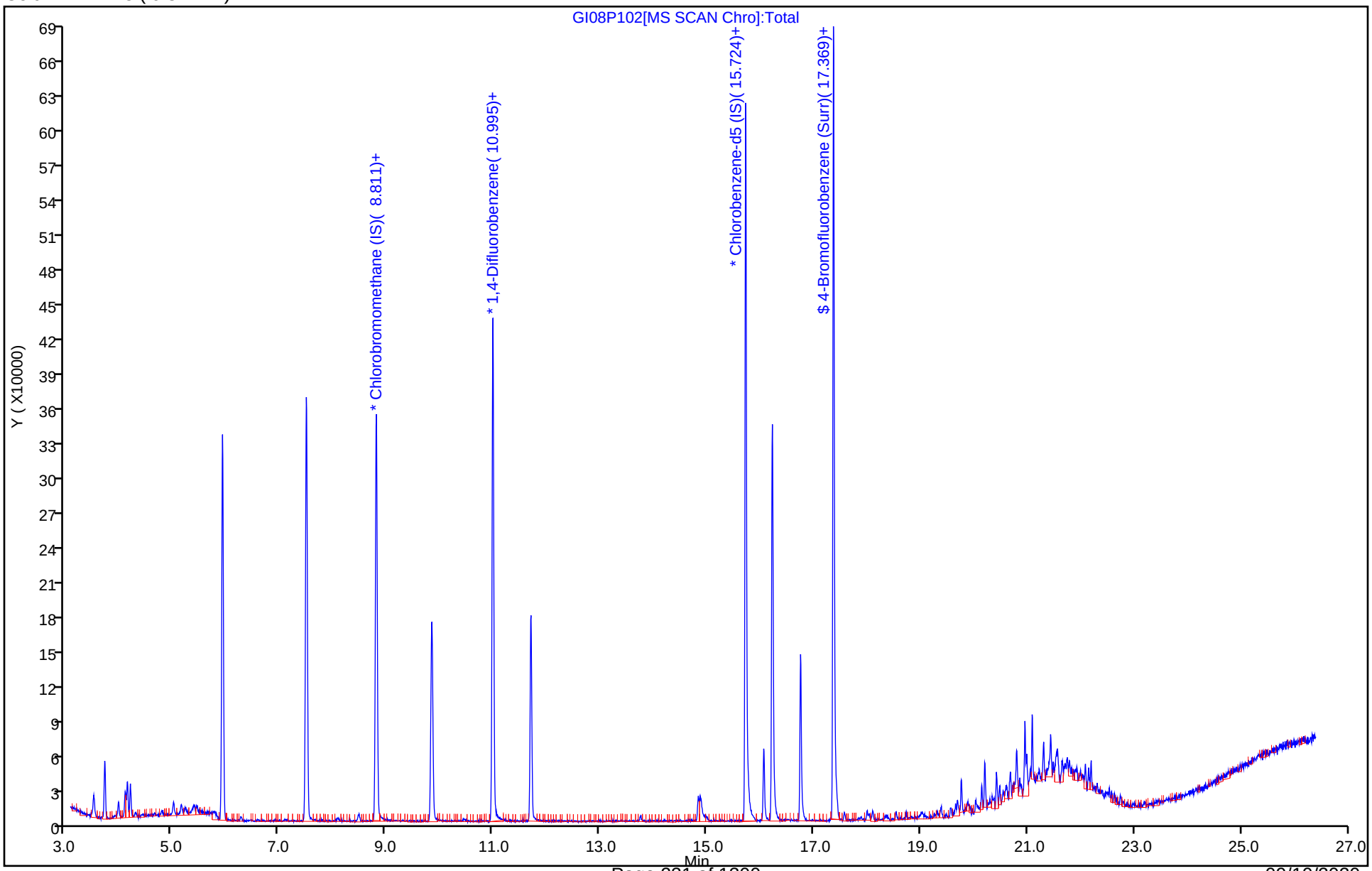
Report Date: 09-Sep-2020 14:03:02 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P102.D

Injection Date:	08-Sep-2020 18:03:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	140-20175-A-3	Lab Sample ID:	140-20175-3	Worklist Smp#:	7
Client ID:	SV-102-C-29				
Purge Vol:	500.000 mL	Dil. Factor:	3.4300	ALS Bottle#:	2
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P102.D				
Lims ID:	140-20175-A-3				
Client ID:	SV-102-C-29				
Sample Type:	Client				
Inject. Date:	08-Sep-2020 18:03:30	ALS Bottle#:	2	Worklist Smp#:	7
Purge Vol:	500.000 mL	Dil. Factor:	3.4300		
Sample Info:	140-0016519-007				
Misc. Info.:	140-20175-a-3@3.43				
Operator ID:	HMT	Instrument ID:	MG		
Method:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\MG_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	09-Sep-2020 14:03:02	Calib Date:	02-Sep-2020 03:27:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1034				

First Level Reviewer: barlozhetskayaa Date: 09-Sep-2020 14:03:02

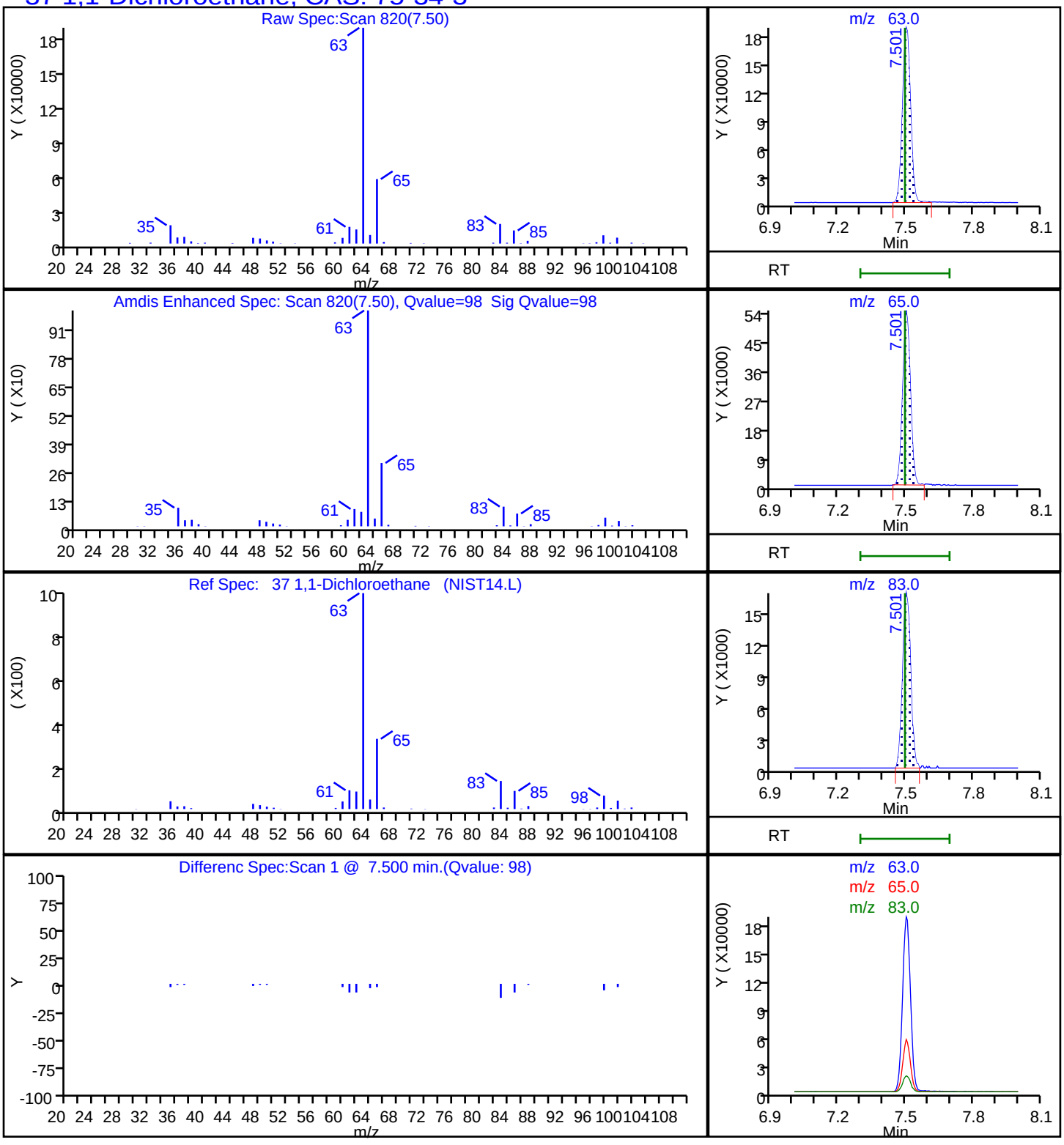
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	4.70	101.32

Report Date: 09-Sep-2020 14:03:02 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P102.D		
Injection Date:	08-Sep-2020 18:03:30	Instrument ID:	MG
Lims ID:	140-20175-A-3	Lab Sample ID:	140-20175-3
Client ID:	SV-102-C-29		
Operator ID:	HMT	ALS Bottle#:	2 Worklist Smp#: 7
Purge Vol:	500.000 mL	Dil. Factor:	3.4300
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

37 1,1-Dichloroethane, CAS: 75-34-3



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: SV-113-C-29 Lab Sample ID: 140-20175-4

Matrix: Air Lab File ID: HI03P113.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 10:20

Sample wt/vol: 100(mL) Date Analyzed: 09/04/2020 01:04

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42399 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.067	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.081	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	1.6	CI	0.40	0.11
67-66-3	Chloroform	119.38	0.31	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	3.7		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.58		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	1.1		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	0.41		0.40	0.040
100-41-4	Ethylbenzene	106.17	0.12	J	0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	0.25		0.20	0.20
127-18-4	Tetrachloroethene	165.83	0.053	J	0.40	0.035
108-88-3	Toluene	92.14	0.40	J	0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	0.055	J	0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	0.33	J	0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	33		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	2.3		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	1.6		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	1.5		0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	1.3		0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	95		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: SV-113-C-29 Lab Sample ID: 140-20175-4

Matrix: Air Lab File ID: HI03P113.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 10:20

Sample wt/vol: 100(mL) Date Analyzed: 09/04/2020 01:04

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42399 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.21	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.51	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	5.6	CI	1.4	0.39
67-66-3	Chloroform	119.38	1.5	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	15		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.9		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	4.6		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	1.6		1.6	0.16
100-41-4	Ethylbenzene	106.17	0.53	J	1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	1.3		1.0	1.0
127-18-4	Tetrachloroethene	165.83	0.36	J	2.7	0.24
108-88-3	Toluene	92.14	1.5	J	2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	0.22	J	1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	1.8	J	2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	180		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	11		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	7.7		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	7.5		2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	5.7		3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	95		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P113.D
Lims ID: 140-20175-A-4
Client ID: SV-113-C-29
Sample Type: Client
Inject. Date: 04-Sep-2020 01:04:30 ALS Bottle#: 13 Worklist Smp#: 17
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016480-017
Misc. Info.: 140-20175-a-4
Operator ID: HMT Instrument ID: MH

Method: \\chromfs\Knoxville\ChromData\MH\20200902-16480.b\MH_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 04-Sep-2020 12:59:42 Calib Date: 29-Aug-2020 23:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1061

First Level Reviewer: khachitpongpanits Date: 04-Sep-2020 13:01:31

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.431	9.436	-0.005	98	113176	4.80	
* 2 1,4-Difluorobenzene	114	11.591	11.591	0.000	95	446569	4.80	
* 3 Chlorobenzene-d5 (IS)	117	16.258	16.258	0.000	88	282466	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.876	17.876	0.000	90	144030	4.39	
6 Chlorodifluoromethane	51	3.916	3.919	-0.005	96	19995	0.3166	
8 Dichlorodifluoromethane	85	3.988	3.986	0.000	99	9925	0.1160	
27 1,1-Dichloroethene	96	6.397	6.393	0.000	96	2253	0.0821	
34 trans-1,2-Dichloroethene	96	7.622	7.618	0.000	17	313	0.0109	
37 1,1-Dichloroethane	63	8.061	8.057	0.000	99	12939	0.2274	
42 cis-1,2-Dichloroethene	96	9.084	9.080	0.000	96	21416	0.7381	
44 Chloroform	83	9.431	9.431	-0.005	28	4225	0.0615	
47 1,1,1-Trichloroethane	97	10.490	10.479	0.005	96	4158	0.0667	
51 Benzene	78	11.069	11.074	-0.005	53	1095	0.0134	
52 Carbon tetrachloride	117	11.095	11.095	0.000	60	821	0.0162	
58 Trichloroethene	130	12.294	12.294	0.000	95	245417	6.66	
67 Toluene	91	14.305	14.310	-0.005	91	5806	0.0798	
73 Tetrachloroethene	129	15.442	15.436	0.006	83	325	0.0107	
76 Ethylbenzene	91	16.584	16.584	0.000	96	2166	0.0246	
77 m-Xylene & p-Xylene	91	16.739	16.739	0.000	95	8998	0.1292	
81 o-Xylene	91	17.266	17.266	0.000	98	9612	0.1318	
88 1,3,5-Trimethylbenzene	120	18.568	18.563	0.005	93	11385	0.3041	
92 1,2,4-Trimethylbenzene	105	18.992	18.987	0.005	99	26483	0.3142	
98 1,2,3-Trimethylbenzene	105	19.447	19.447	0.000	98	37151	0.4588	
109 Naphthalene	128	21.556	21.556	0.000	97	3381	0.0509	
S 116 Xylenes, Total	100				0		0.2611	

Reagents:

40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

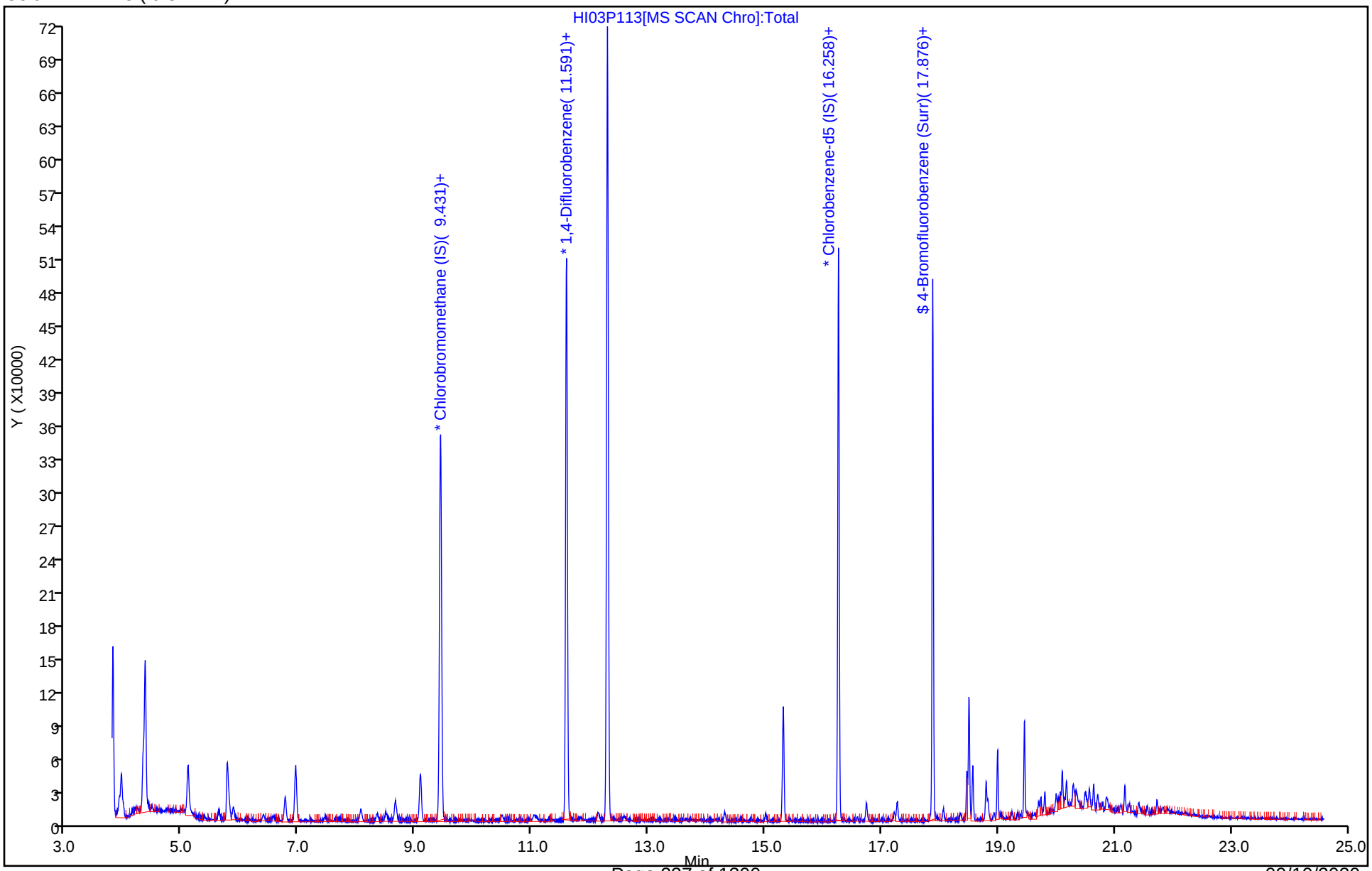
Report Date: 04-Sep-2020 13:01:31 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P113.D

Injection Date:	04-Sep-2020 01:04:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	140-20175-A-4	Lab Sample ID:	140-20175-4	Worklist Smp#:	17
Client ID:	SV-113-C-29				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

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Lims ID:	140-20175-A-4				
Client ID:	SV-113-C-29				
Sample Type:	Client				
Inject. Date:	04-Sep-2020 01:04:30	ALS Bottle#:	13	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016480-017				
Misc. Info.:	140-20175-a-4				
Operator ID:	HMT	Instrument ID:	MH		
Method:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\MH_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	04-Sep-2020 12:59:42	Calib Date:	29-Aug-2020 23:57:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1061				
First Level Reviewer: khachitpongpanits		Date:	04-Sep-2020 13:01:31		

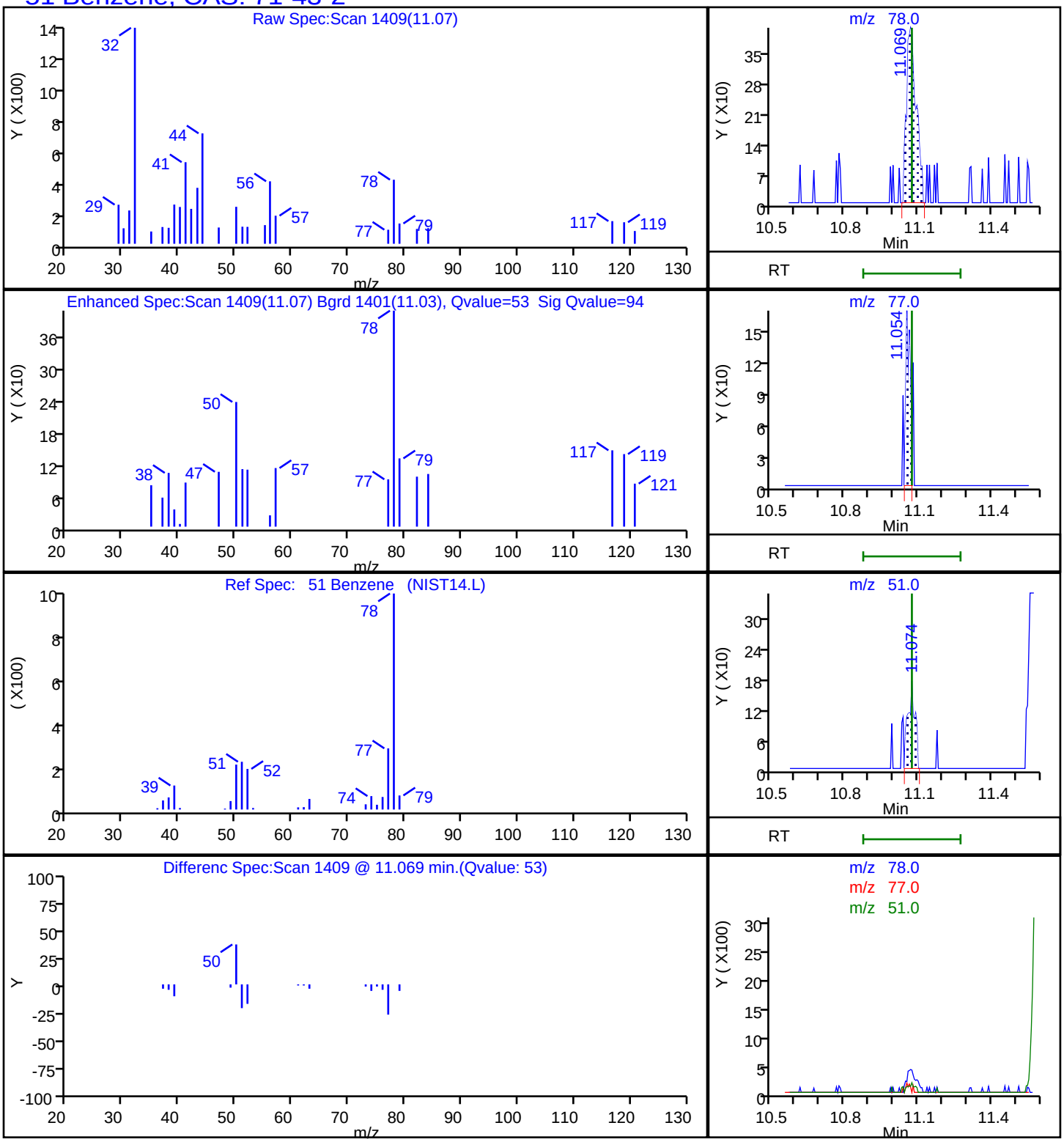
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	4.39	94.58

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P113.D

Injection Date:	04-Sep-2020 01:04:30	Instrument ID:	MH
Lims ID:	140-20175-A-4	Lab Sample ID:	140-20175-4
Client ID:	SV-113-C-29		
Operator ID:	HMT	ALS Bottle#:	13 Worklist Smp#: 17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

51 Benzene, CAS: 71-43-2



Report Date: 04-Sep-2020 13:01:31 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

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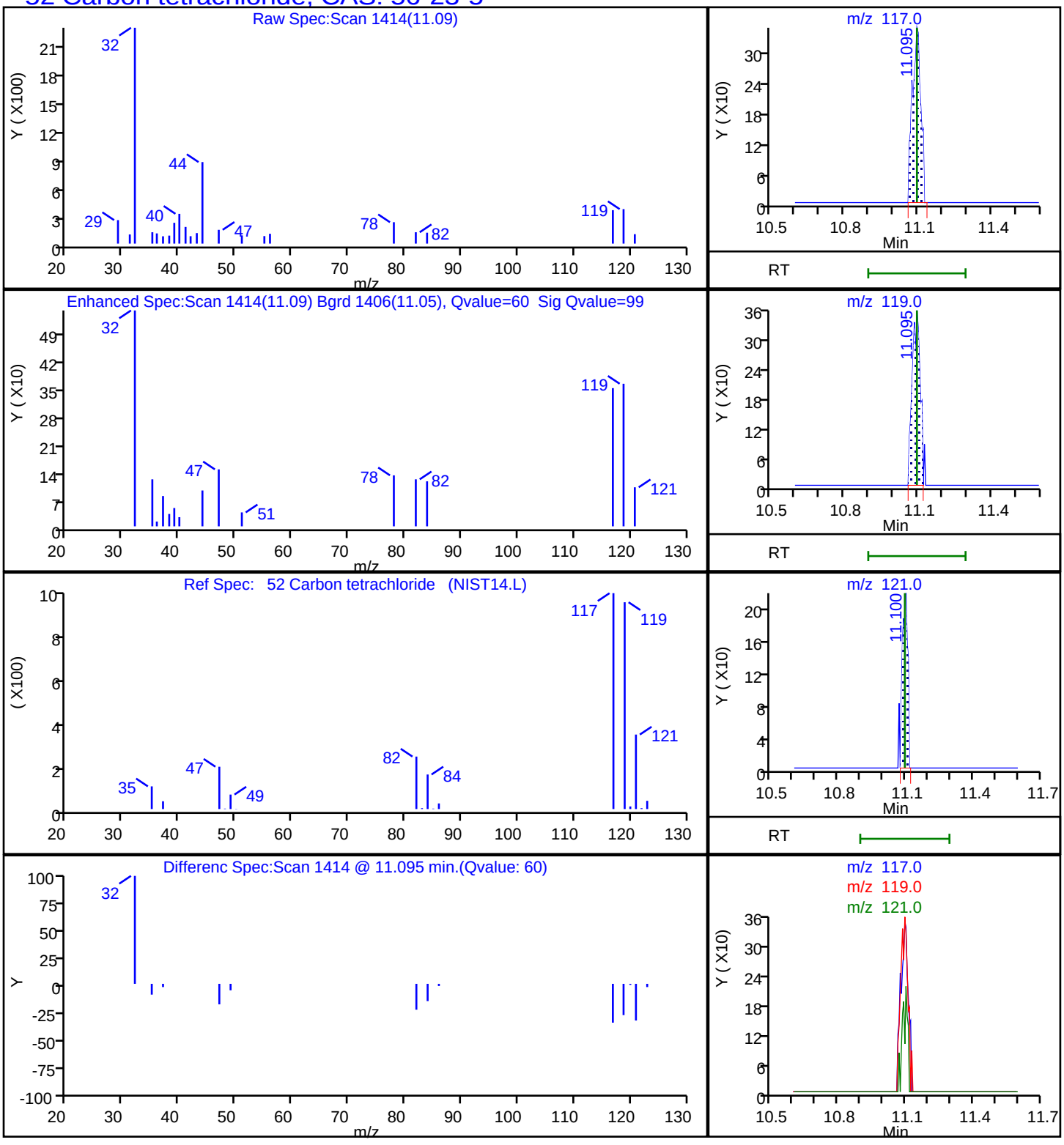
Injection Date:	04-Sep-2020 01:04:30	Instrument ID:	MH		
Lims ID:	140-20175-A-4	Lab Sample ID:	140-20175-4		
Client ID:	SV-113-C-29				
Operator ID:	HMT	ALS Bottle#:	13	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

52 Carbon tetrachloride, CAS: 56-23-5



Eurofins TestAmerica, Knoxville

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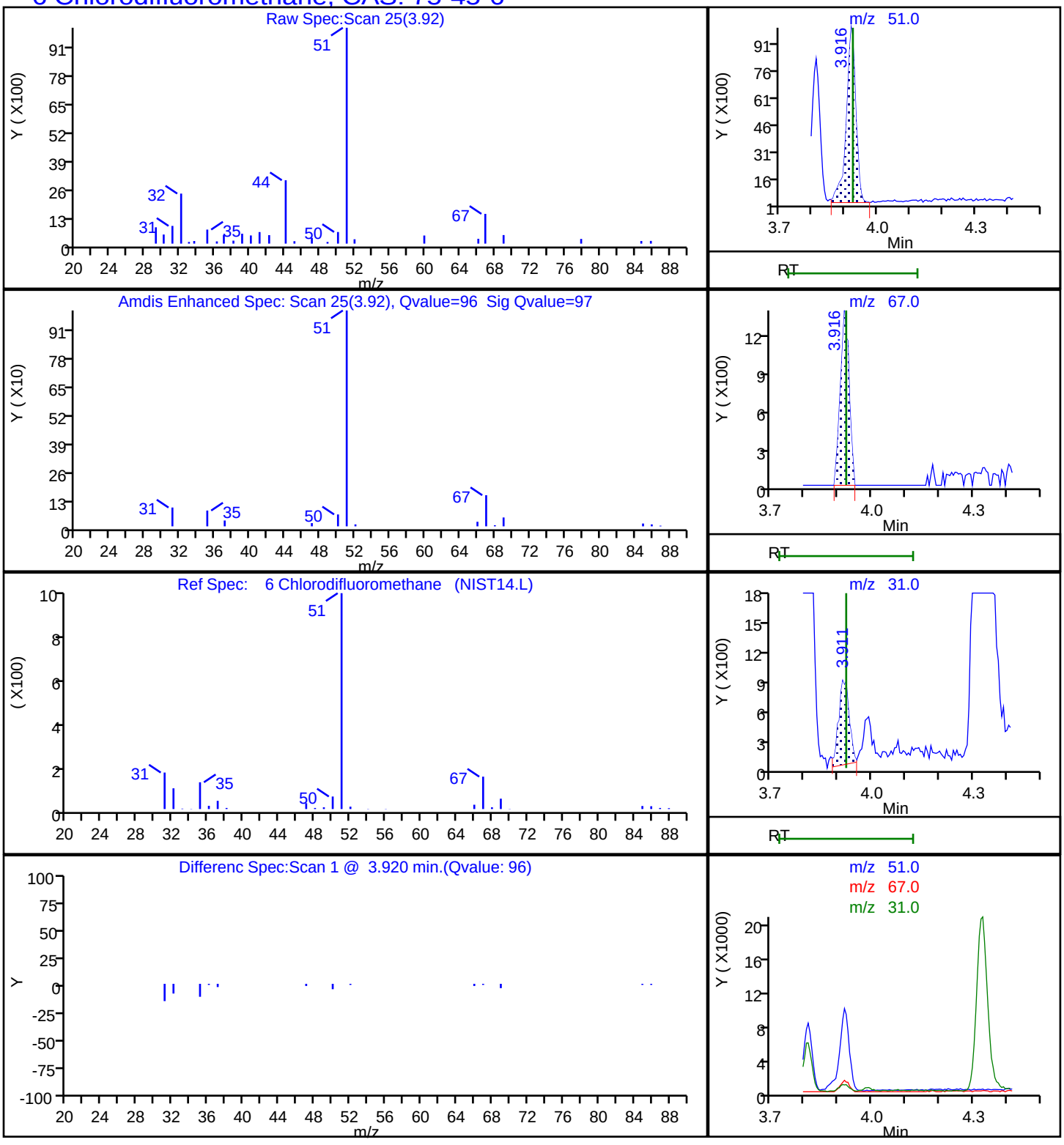
Lims ID:	140-20175-A-4	Lab Sample ID:	140-20175-4		
Client ID:	SV-113-C-29				
Operator ID:	HMT	ALS Bottle#:	13	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

6 Chlorodifluoromethane, CAS: 75-45-6



Eurofins TestAmerica, Knoxville

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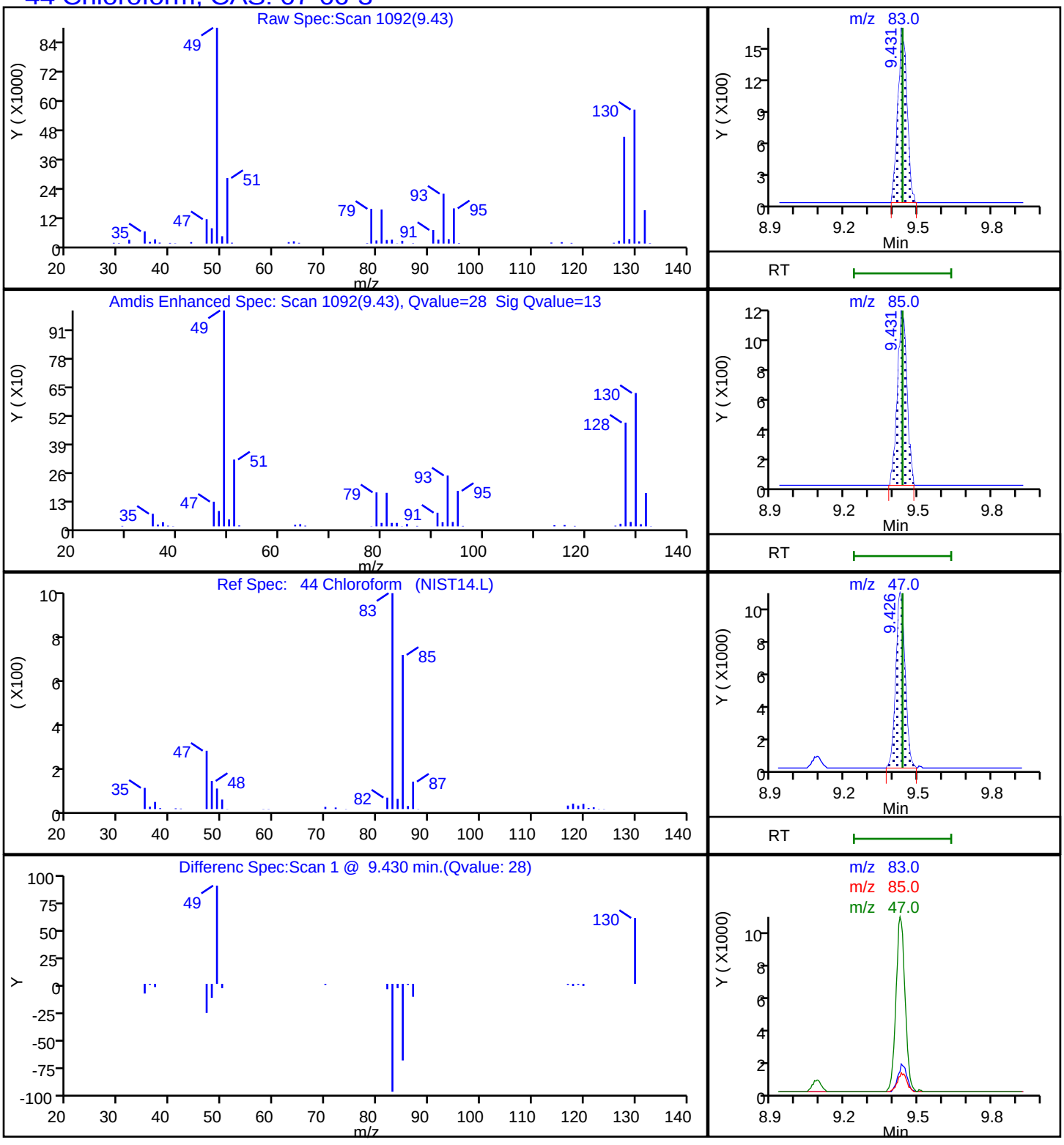
Lims ID:	140-20175-A-4	Lab Sample ID:	140-20175-4		
Client ID:	SV-113-C-29				
Operator ID:	HMT	ALS Bottle#:	13	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

44 Chloroform, CAS: 67-66-3



Eurofins TestAmerica, Knoxville

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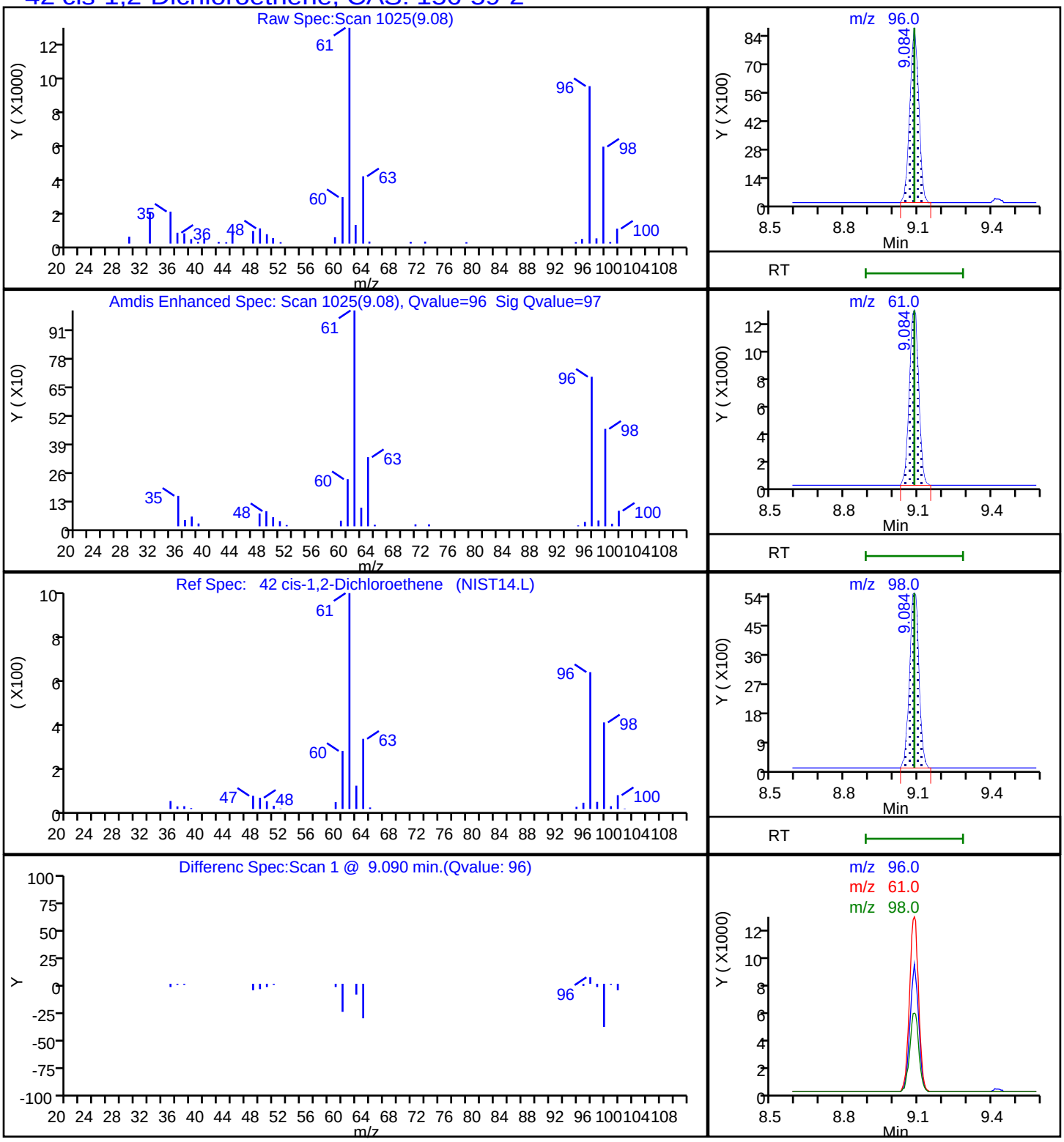
Injection Date:	04-Sep-2020 01:04:30	Instrument ID:	MH		
Lims ID:	140-20175-A-4	Lab Sample ID:	140-20175-4		
Client ID:	SV-113-C-29				
Operator ID:	HMT	ALS Bottle#:	13	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

42 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P113.D				
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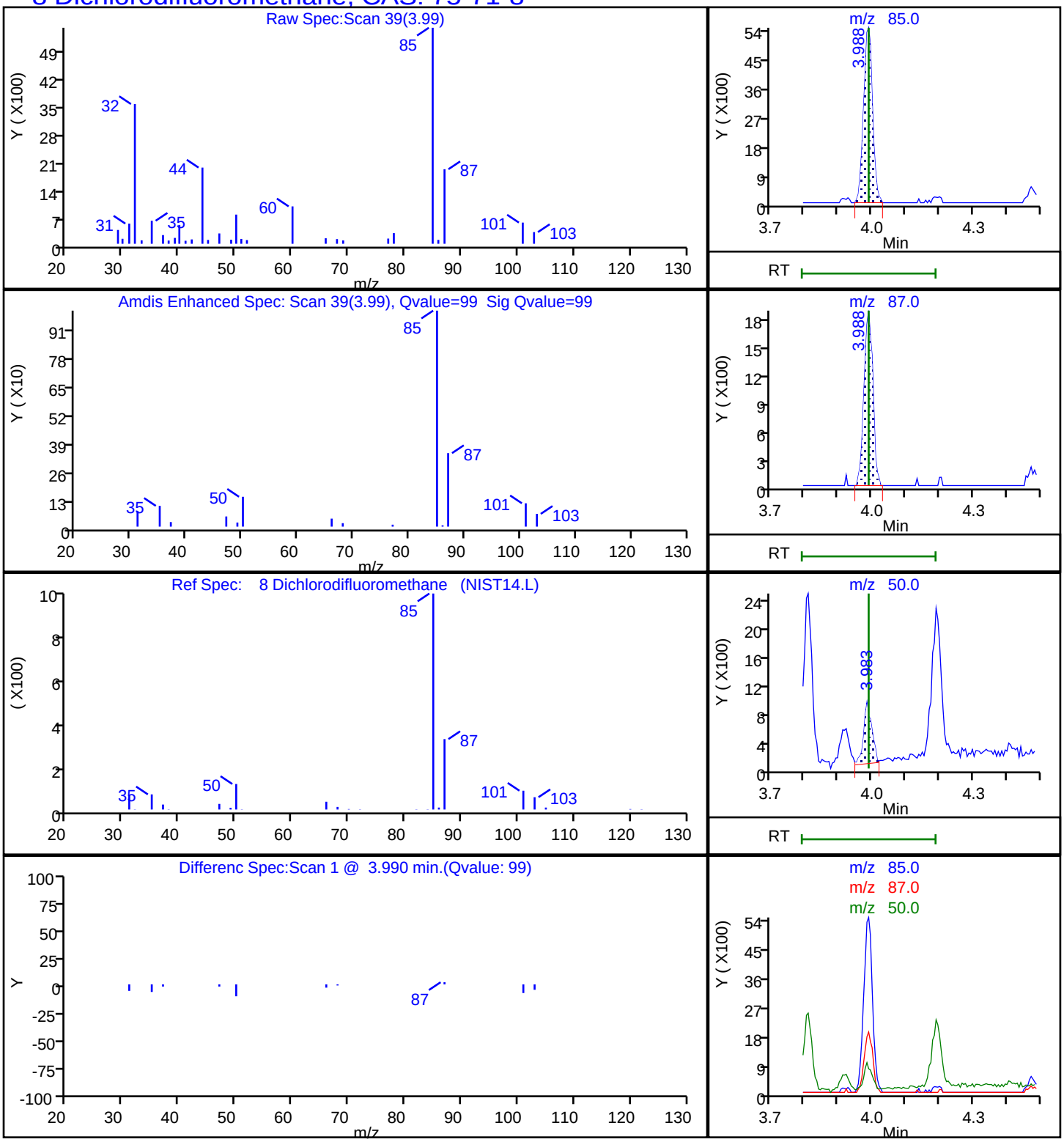
Lims ID:	140-20175-A-4	Lab Sample ID:	140-20175-4		
Client ID:	SV-113-C-29				
Operator ID:	HMT	ALS Bottle#:	13	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

8 Dichlorodifluoromethane, CAS: 75-71-8



Eurofins TestAmerica, Knoxville

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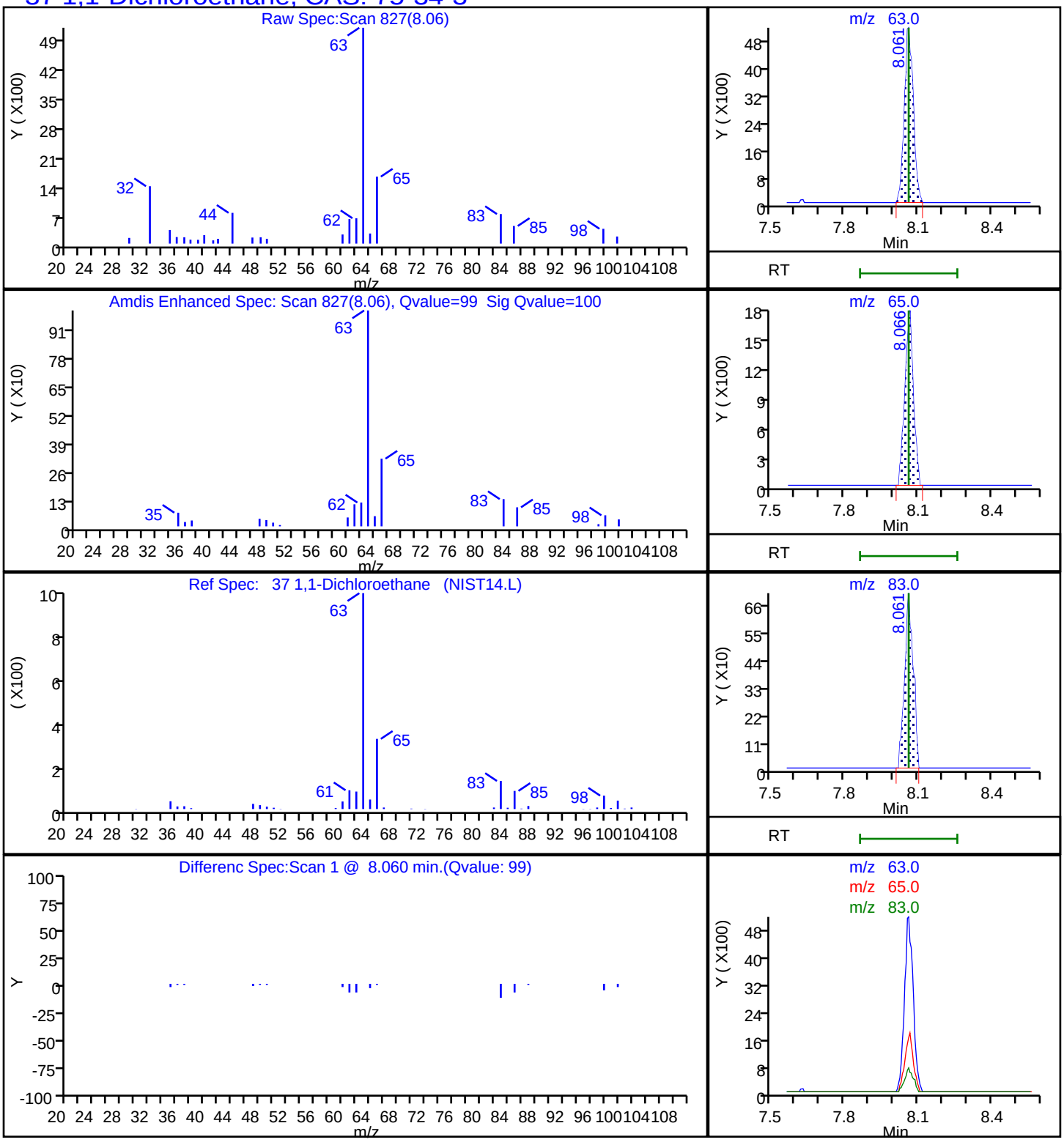
Lims ID:	140-20175-A-4	Lab Sample ID:	140-20175-4
Client ID:	SV-113-C-29		
Operator ID:	HMT	ALS Bottle#:	13 Worklist Smp#: 17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

37 1,1-Dichloroethane, CAS: 75-34-3



Eurofins TestAmerica, Knoxville

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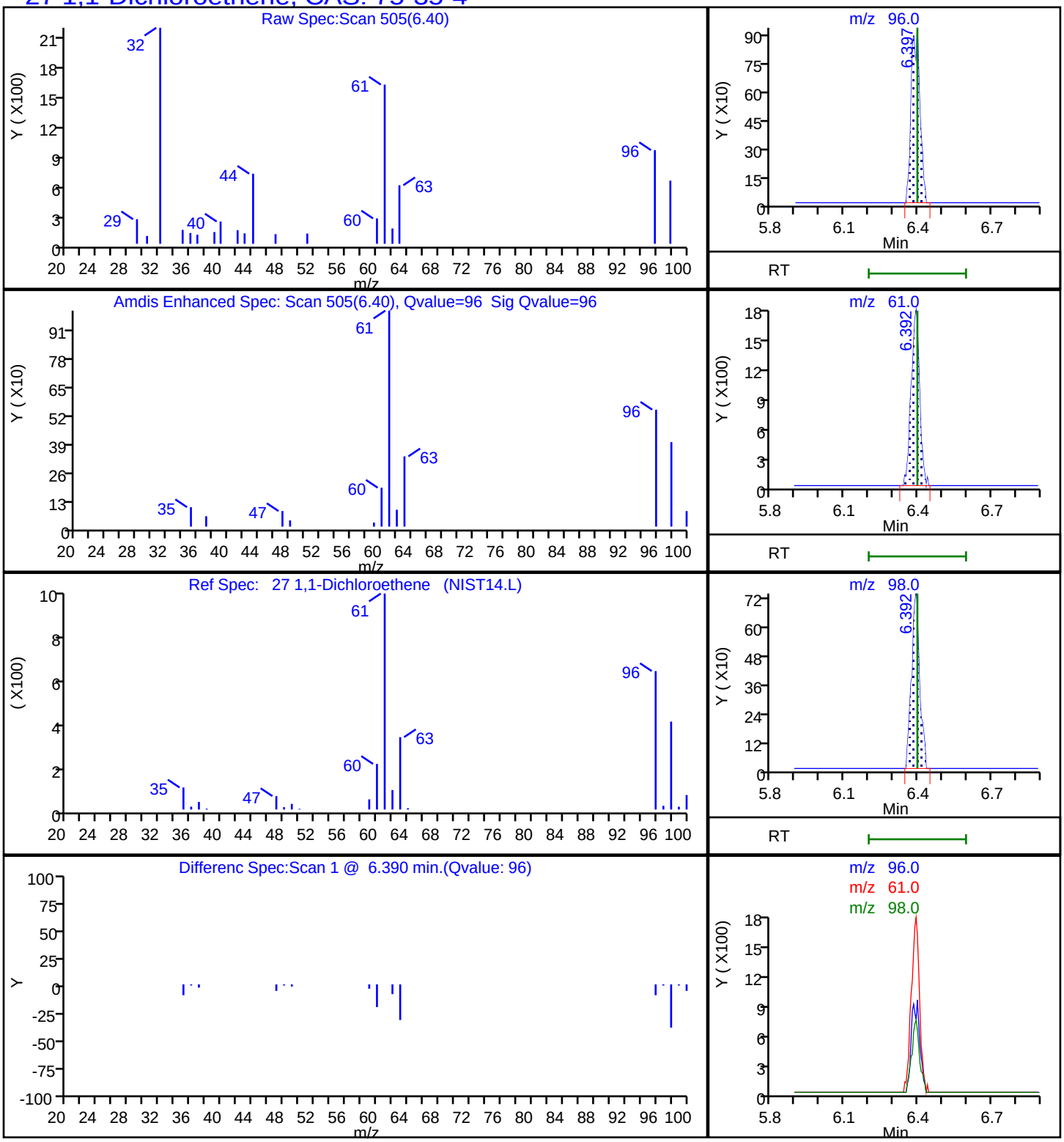
Injection Date:	04-Sep-2020 01:04:30	Instrument ID:	MH		
Lims ID:	140-20175-A-4	Lab Sample ID:	140-20175-4		
Client ID:	SV-113-C-29				
Operator ID:	HMT	ALS Bottle#:	13	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

27 1,1-Dichloroethene, CAS: 75-35-4

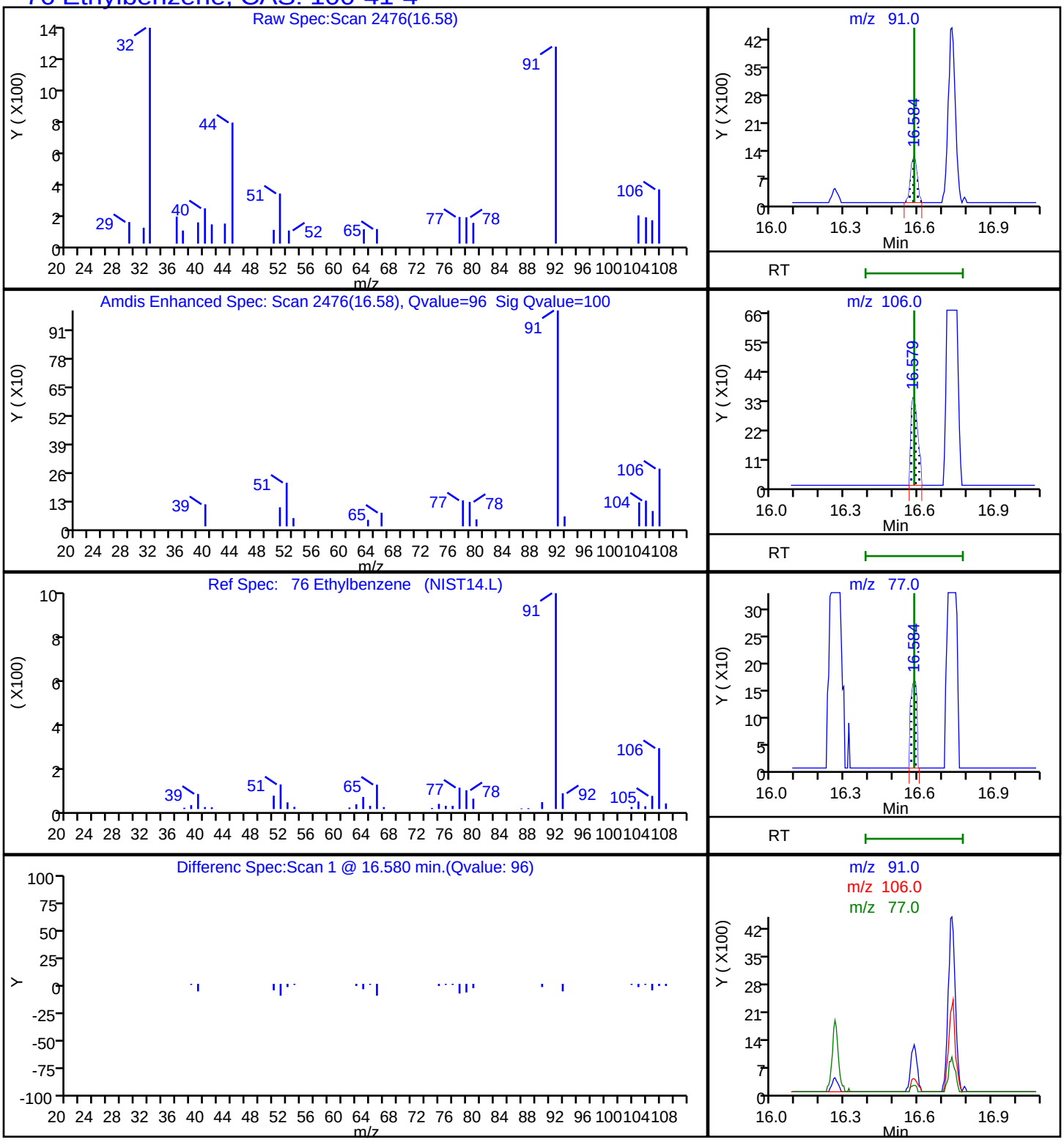


Report Date: 04-Sep-2020 13:01:31 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P113.D				
Injection Date:	04-Sep-2020 01:04:30	Instrument ID:	MH		
Lims ID:	140-20175-A-4	Lab Sample ID:	140-20175-4		
Client ID:	SV-113-C-29				
Operator ID:	HMT	ALS Bottle#:	13	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

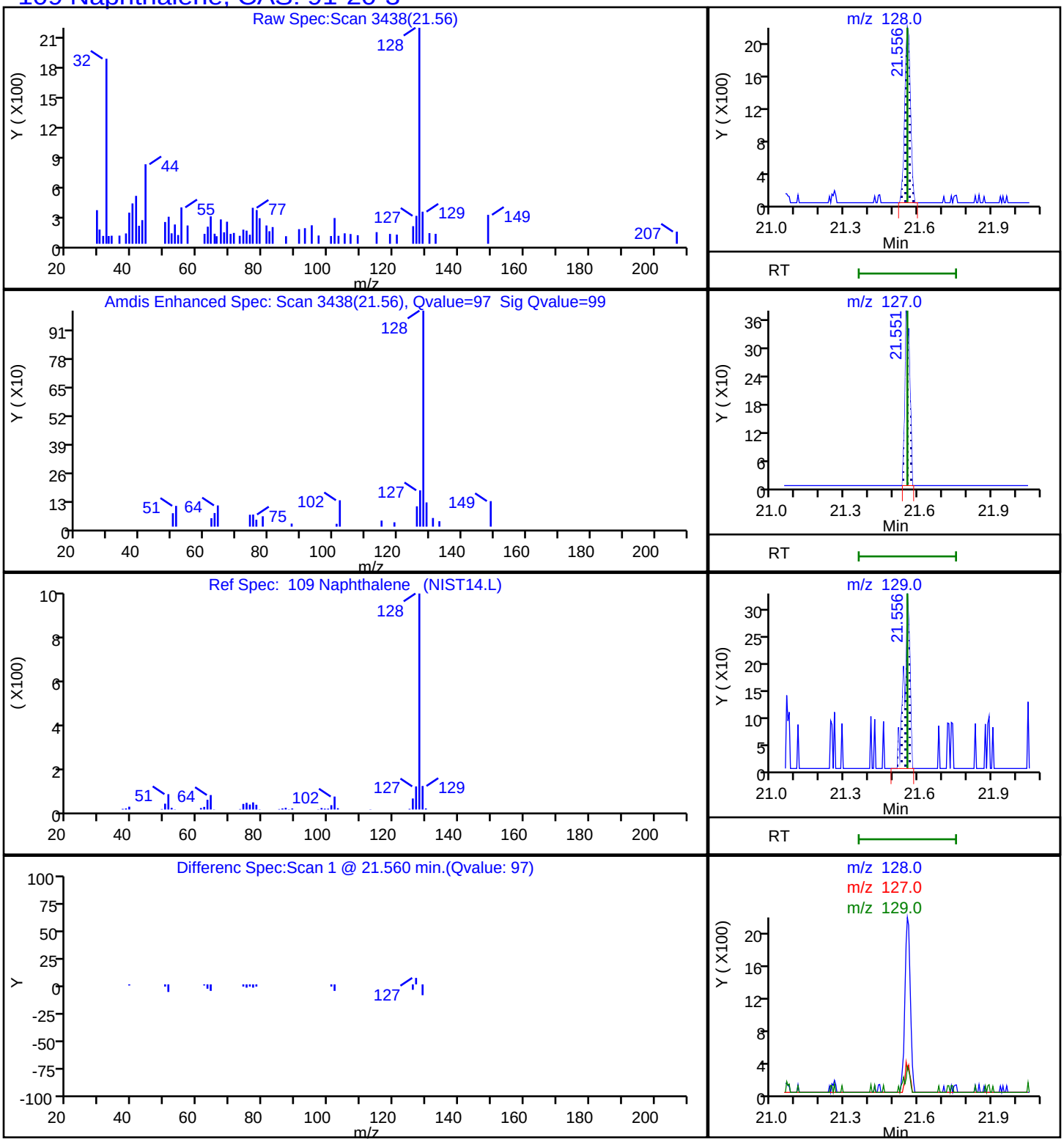
76 Ethylbenzene, CAS: 100-41-4



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P113.D		
Injection Date:	04-Sep-2020 01:04:30	Instrument ID:	MH
Lims ID:	140-20175-A-4	Lab Sample ID:	140-20175-4
Client ID:	SV-113-C-29		
Operator ID:	HMT	ALS Bottle#:	13 Worklist Smp#: 17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

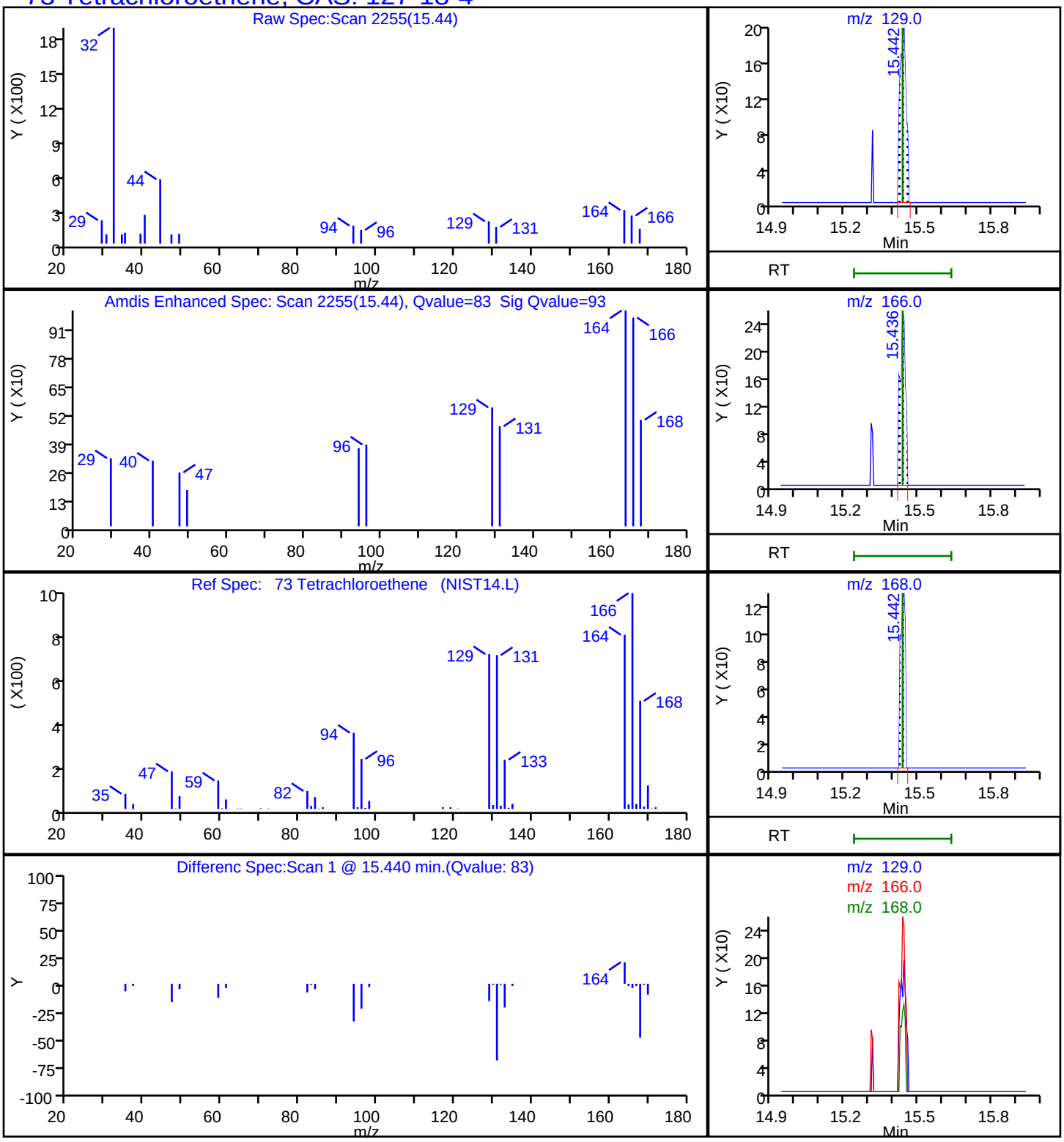
109 Naphthalene, CAS: 91-20-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P113.D				
Injection Date:	04-Sep-2020 01:04:30	Instrument ID:	MH		
Lims ID:	140-20175-A-4	Lab Sample ID:	140-20175-4		
Client ID:	SV-113-C-29				
Operator ID:	HMT	ALS Bottle#:	13	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

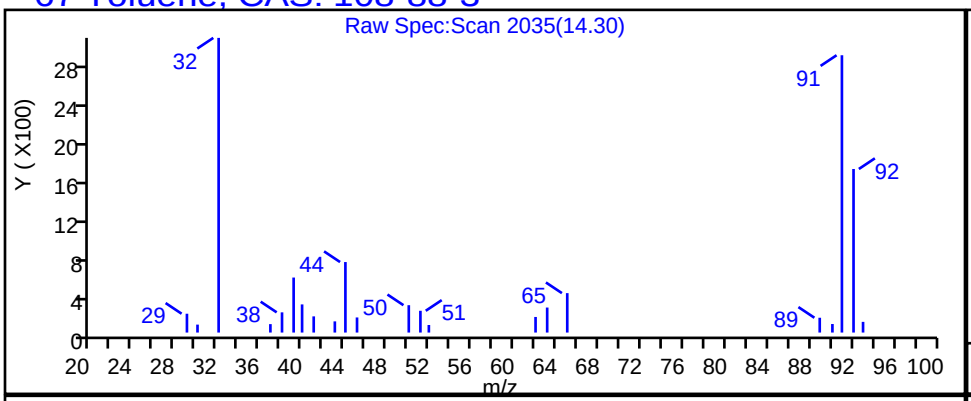
73 Tetrachloroethene, CAS: 127-18-4

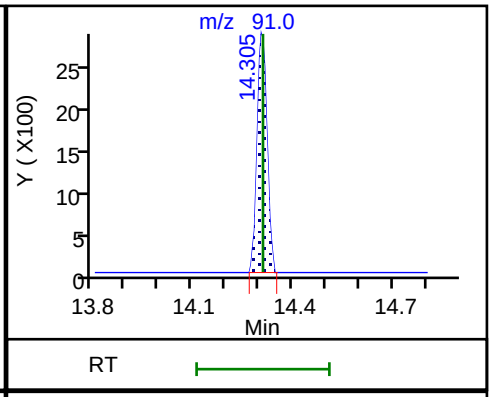


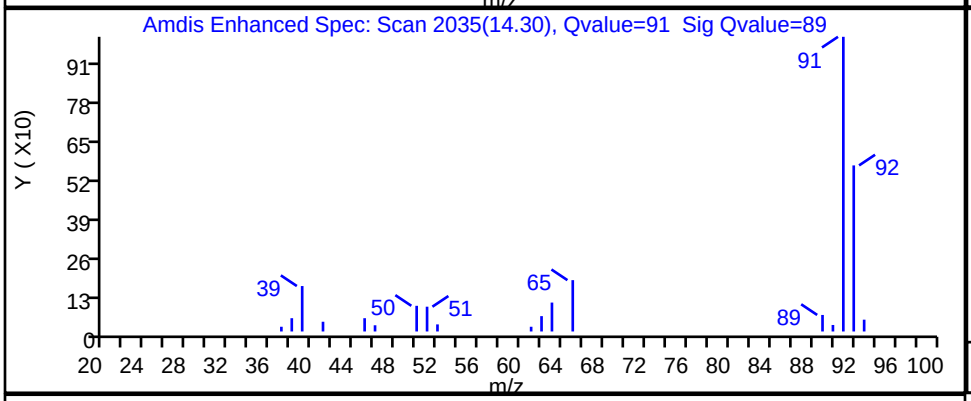
Eurofins TestAmerica, Knoxville

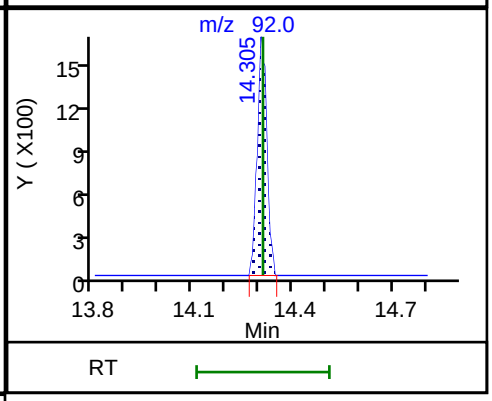
Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P113.D				
Injection Date:	04-Sep-2020 01:04:30	Instrument ID:	MH		
Lims ID:	140-20175-A-4	Lab Sample ID:	140-20175-4		
Client ID:	SV-113-C-29				
Operator ID:	HMT	ALS Bottle#:	13	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

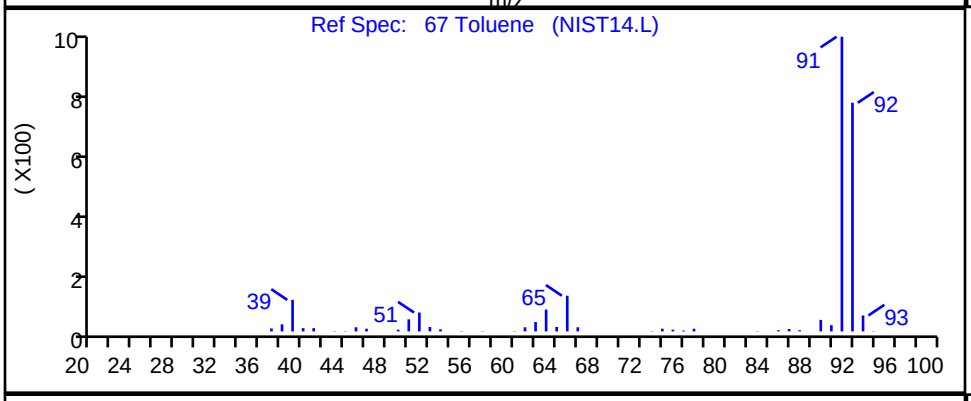
67 Toluene, CAS: 108-88-3

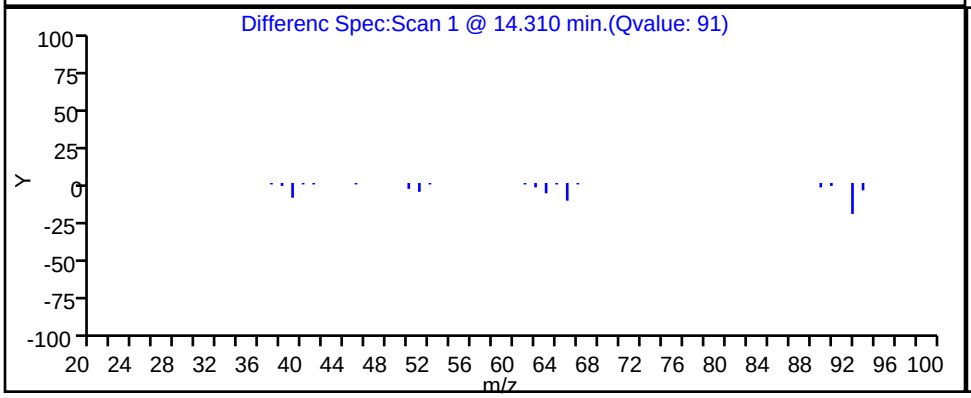


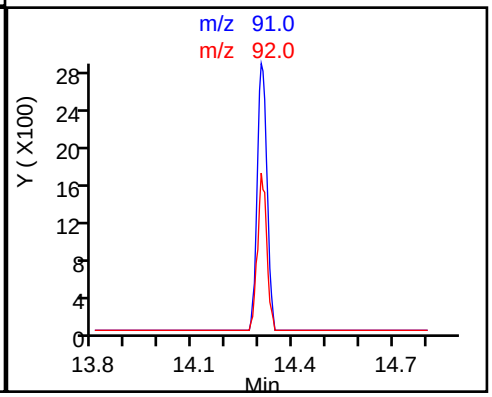








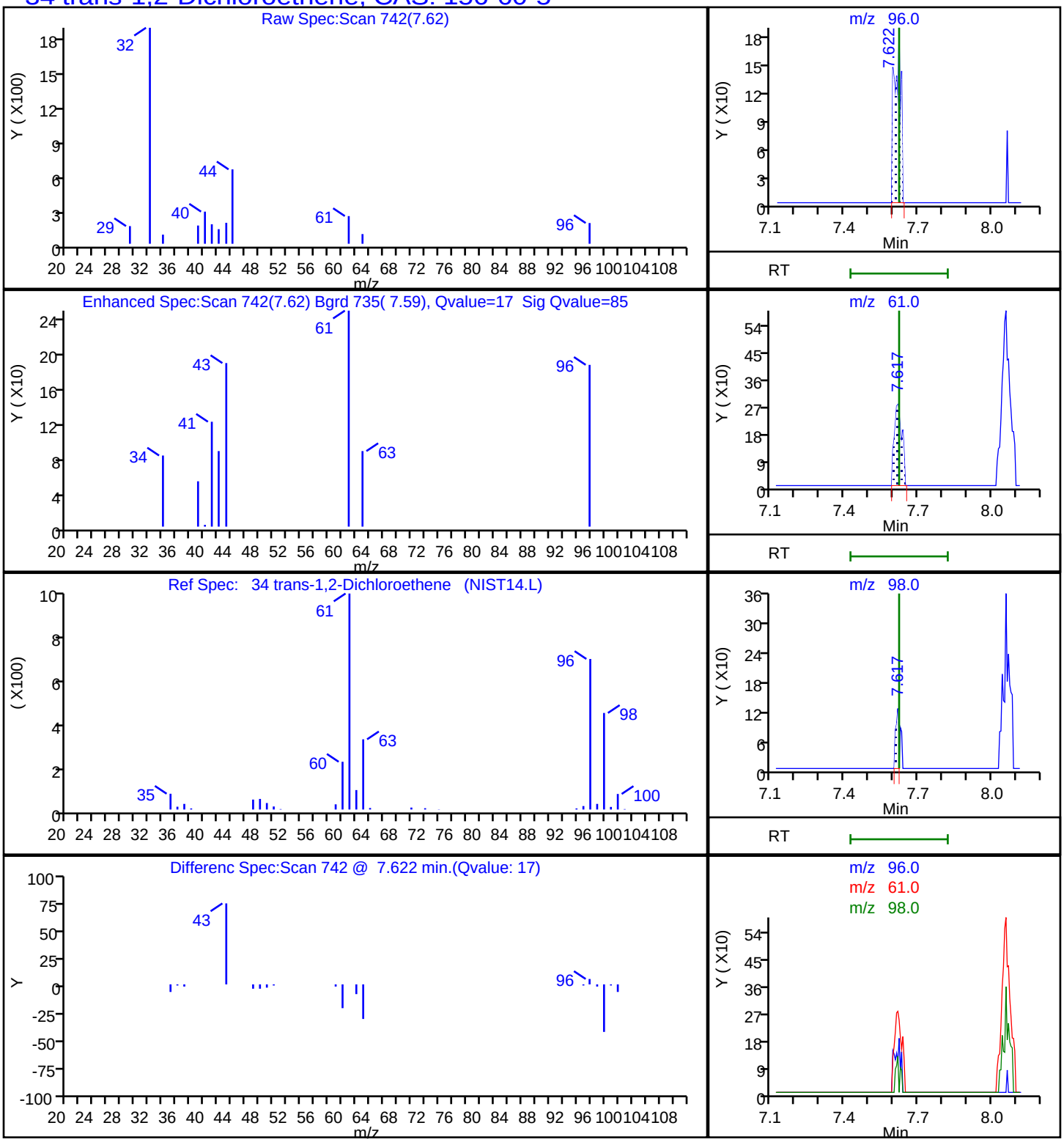




Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P113.D				
Injection Date:	04-Sep-2020 01:04:30	Instrument ID:	MH		
Lims ID:	140-20175-A-4	Lab Sample ID:	140-20175-4		
Client ID:	SV-113-C-29				
Operator ID:	HMT	ALS Bottle#:	13	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

34 trans-1,2-Dichloroethene, CAS: 156-60-5

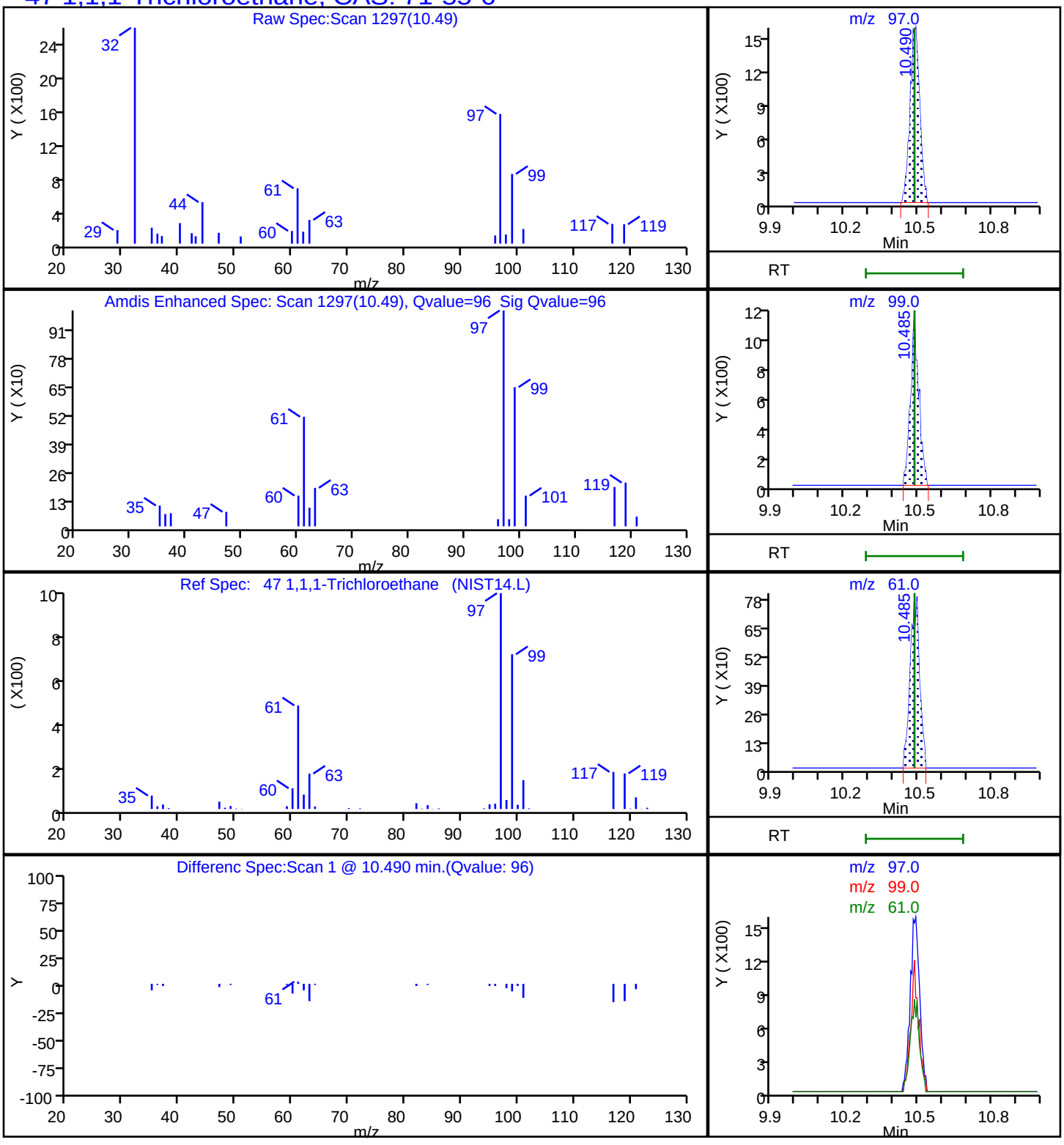


Report Date: 04-Sep-2020 13:01:31 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P113.D				
Injection Date:	04-Sep-2020 01:04:30	Instrument ID:	MH		
Lims ID:	140-20175-A-4	Lab Sample ID:	140-20175-4		
Client ID:	SV-113-C-29				
Operator ID:	HMT	ALS Bottle#:	13	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

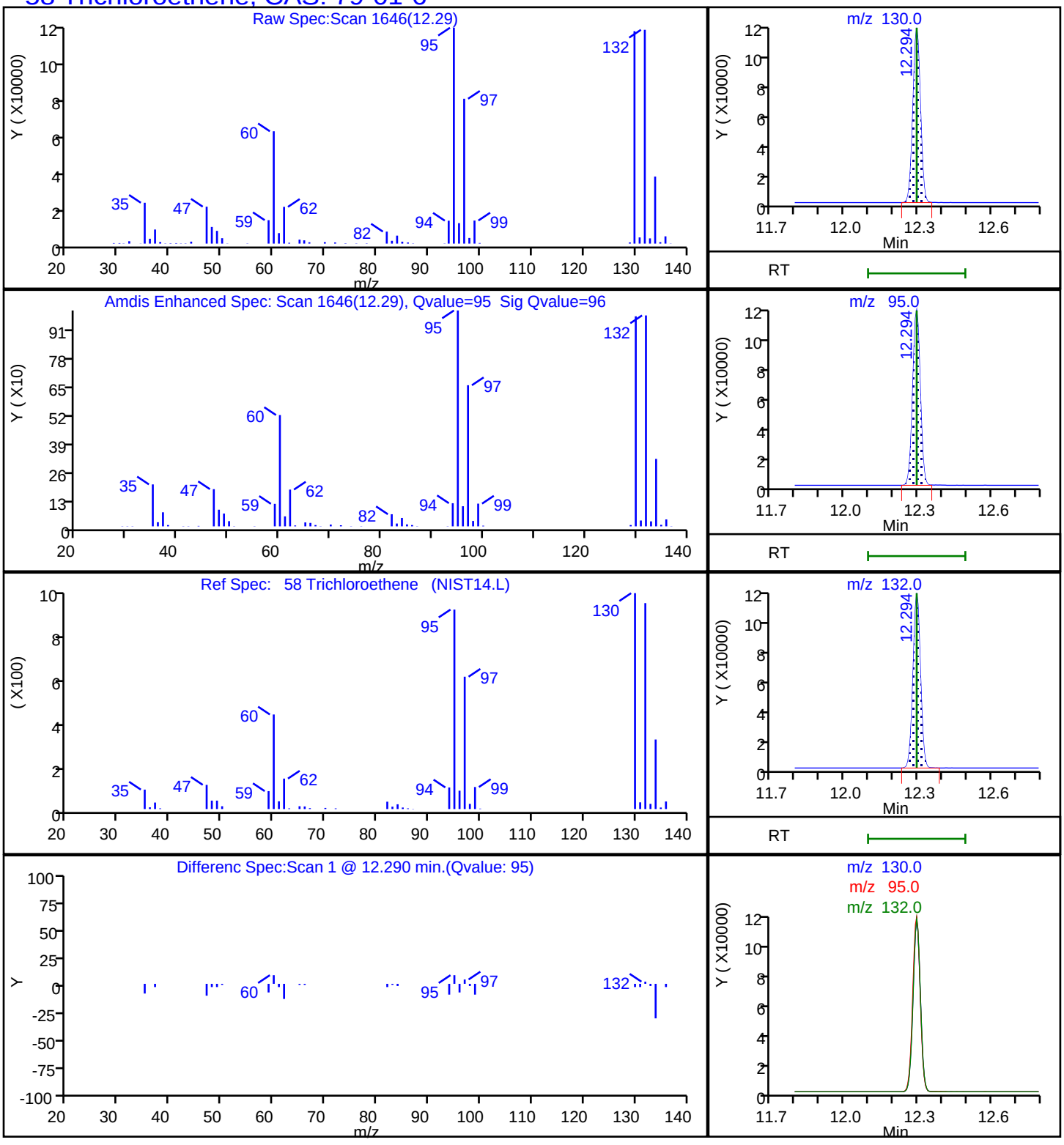
47 1,1,1-Trichloroethane, CAS: 71-55-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P113.D		
Injection Date:	04-Sep-2020 01:04:30	Instrument ID:	MH
Lims ID:	140-20175-A-4	Lab Sample ID:	140-20175-4
Client ID:	SV-113-C-29		
Operator ID:	HMT	ALS Bottle#:	13 Worklist Smp#: 17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

58 Trichloroethene, CAS: 79-01-6

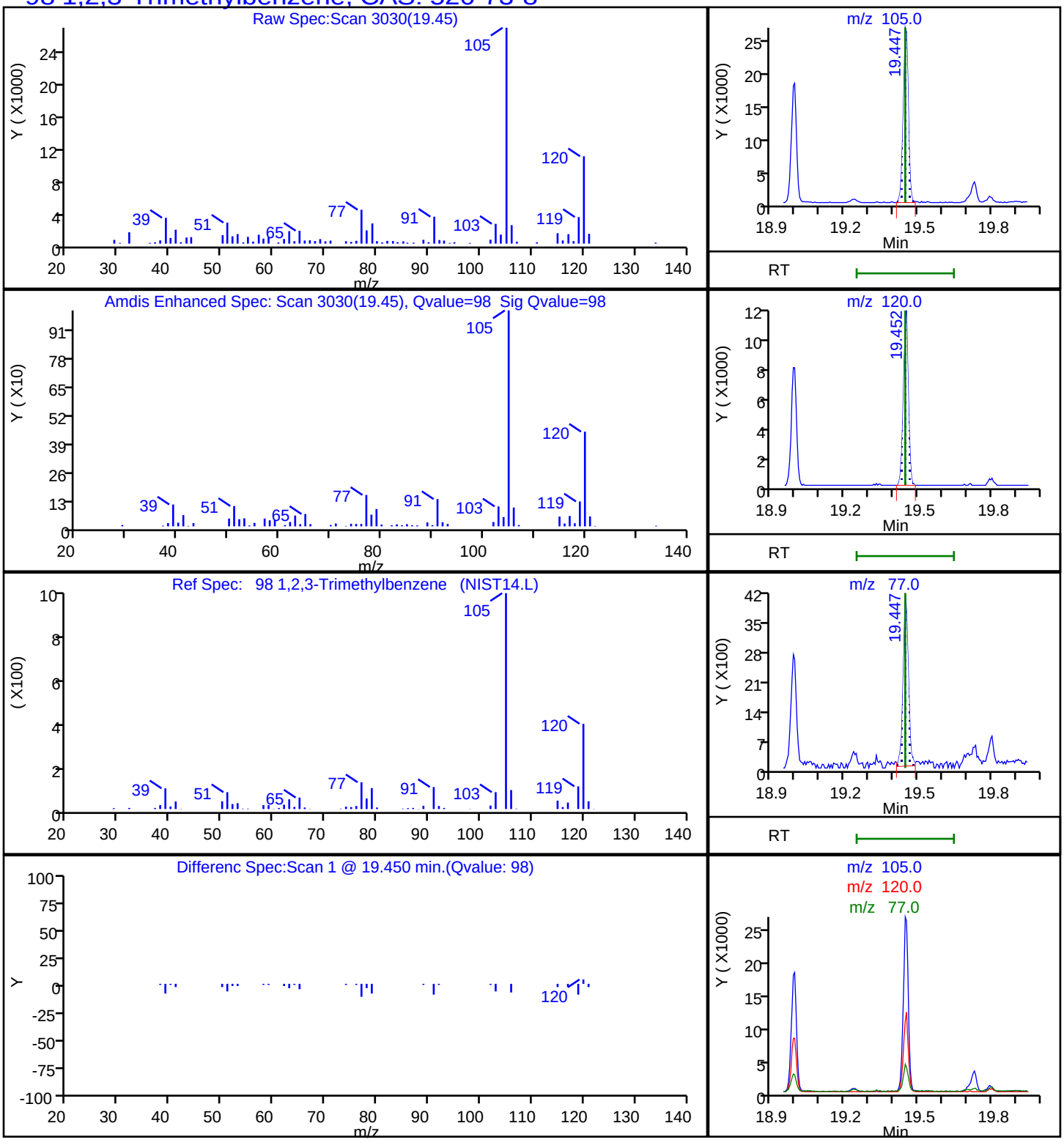


Report Date: 04-Sep-2020 13:01:32 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P113.D				
Injection Date:	04-Sep-2020 01:04:30	Instrument ID:	MH		
Lims ID:	140-20175-A-4	Lab Sample ID:	140-20175-4		
Client ID:	SV-113-C-29				
Operator ID:	HMT	ALS Bottle#:	13	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

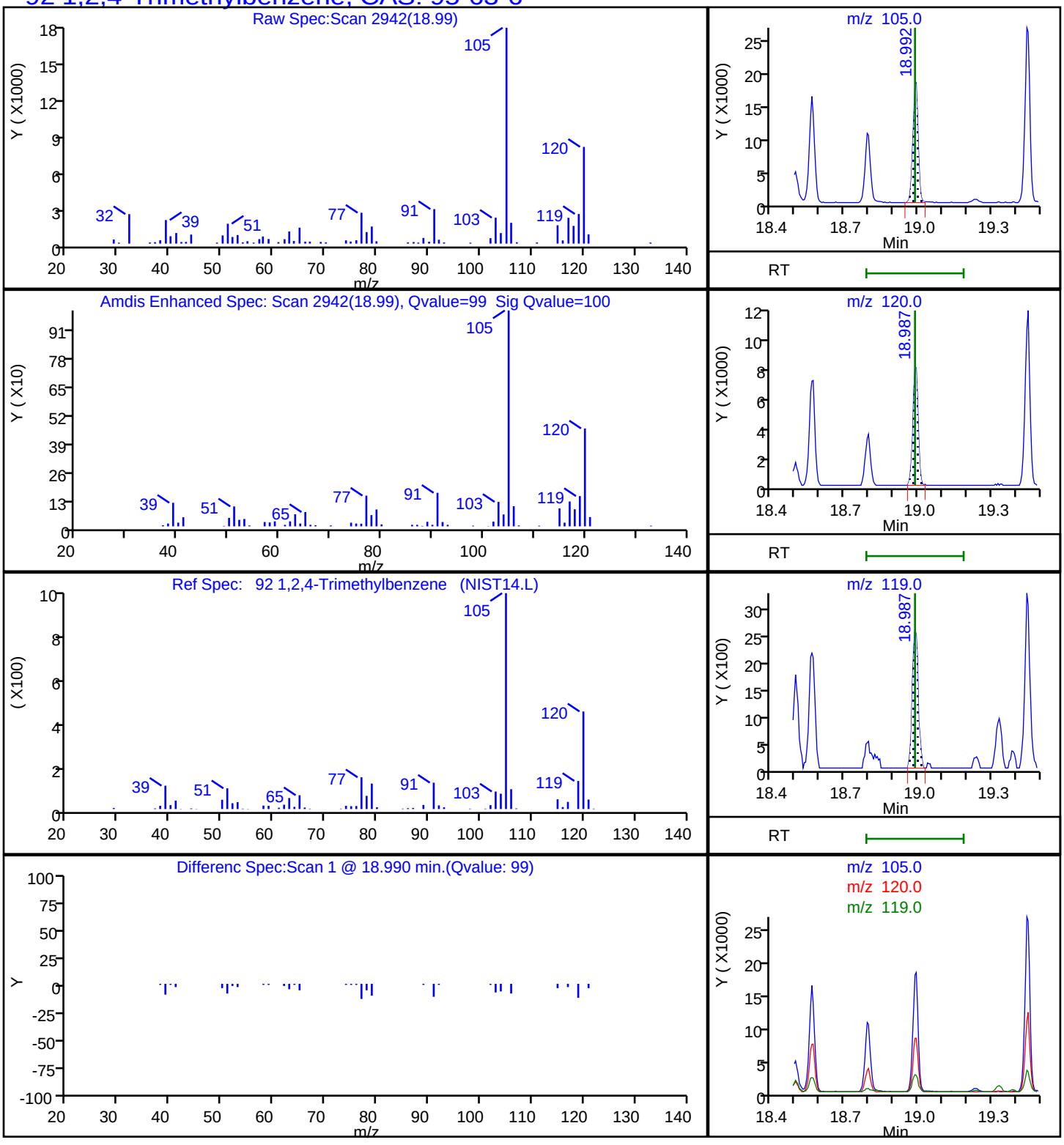
98 1,2,3-Trimethylbenzene, CAS: 526-73-8



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P113.D				
Injection Date:	04-Sep-2020 01:04:30	Instrument ID:	MH		
Lims ID:	140-20175-A-4	Lab Sample ID:	140-20175-4		
Client ID:	SV-113-C-29				
Operator ID:	HMT	ALS Bottle#:	13	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

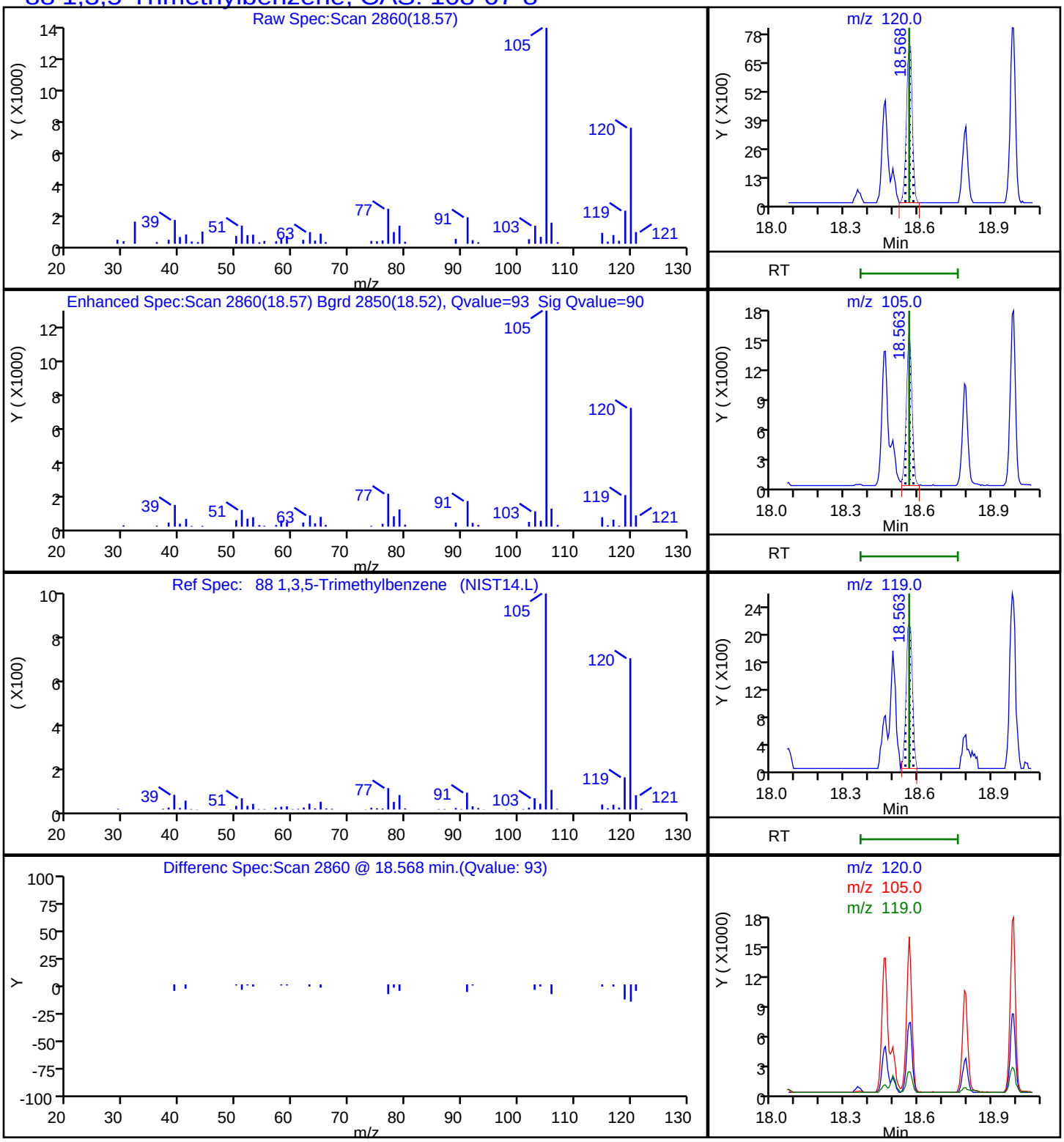
92 1,2,4-Trimethylbenzene, CAS: 95-63-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P113.D				
Injection Date:	04-Sep-2020 01:04:30	Instrument ID:	MH		
Lims ID:	140-20175-A-4	Lab Sample ID:	140-20175-4		
Client ID:	SV-113-C-29				
Operator ID:	HMT	ALS Bottle#:	13	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

88 1,3,5-Trimethylbenzene, CAS: 108-67-8

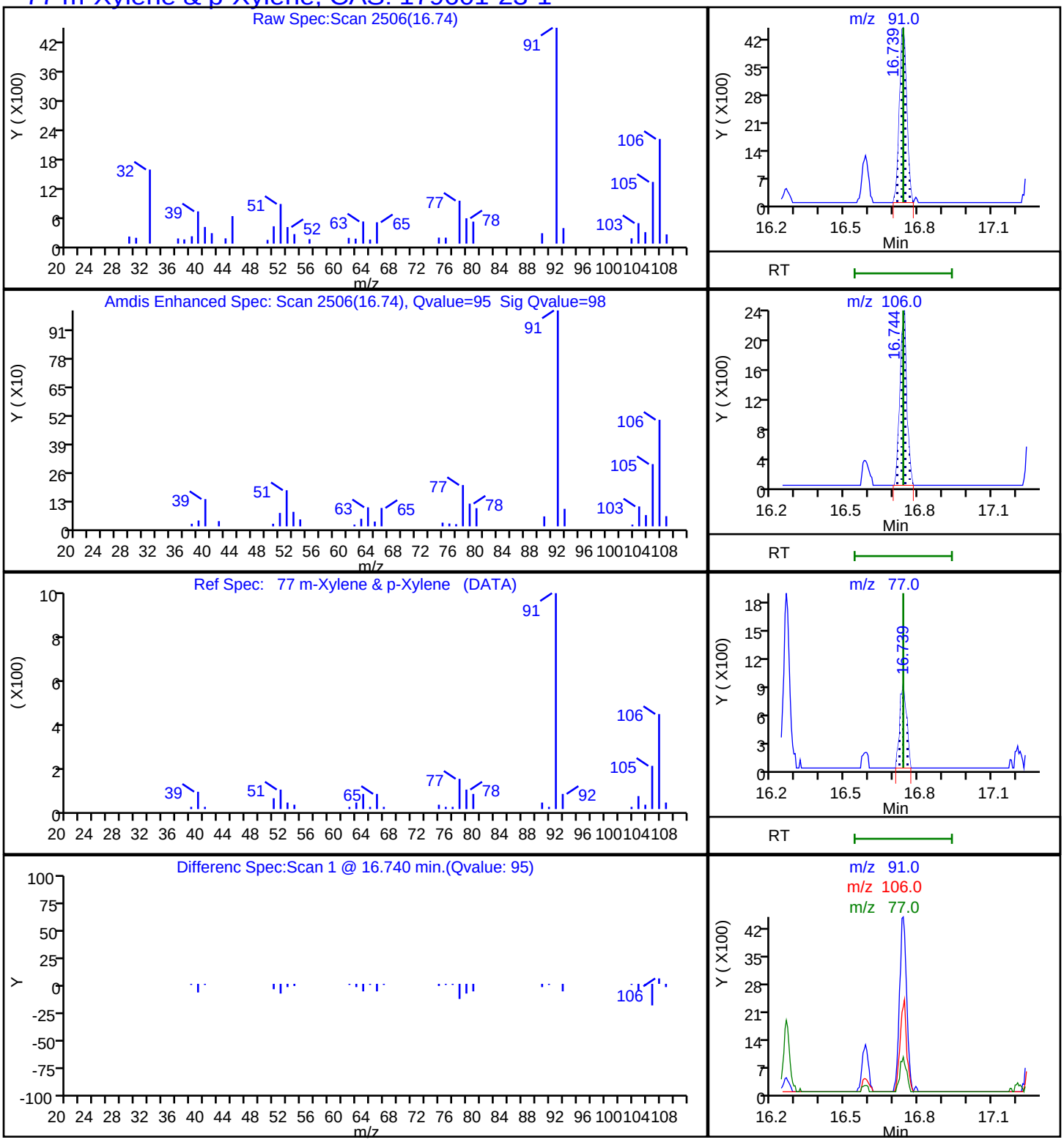


Report Date: 04-Sep-2020 13:01:31 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P113.D				
Injection Date:	04-Sep-2020 01:04:30	Instrument ID:	MH		
Lims ID:	140-20175-A-4	Lab Sample ID:	140-20175-4		
Client ID:	SV-113-C-29				
Operator ID:	HMT	ALS Bottle#:	13	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

77 m-Xylene & p-Xylene, CAS: 179601-23-1



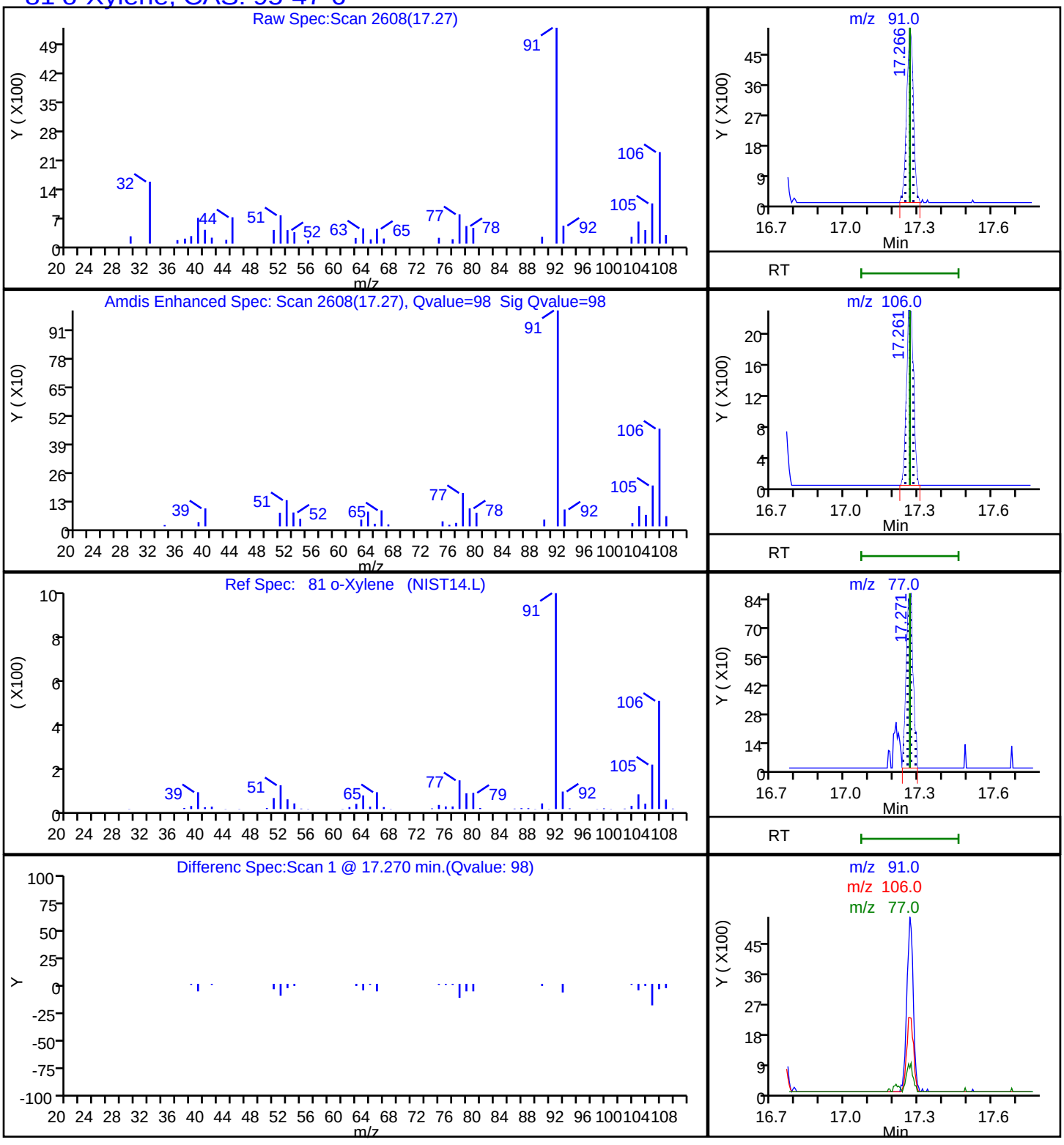
Report Date: 04-Sep-2020 13:01:31 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P113.D

Injection Date:	04-Sep-2020 01:04:30	Instrument ID:	MH		
Lims ID:	140-20175-A-4	Lab Sample ID:	140-20175-4		
Client ID:	SV-113-C-29				
Operator ID:	HMT	ALS Bottle#:	13	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

81 o-Xylene, CAS: 95-47-6



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: SV-088-C-29 Lab Sample ID: 140-20175-5

Matrix: Air Lab File ID: HI03P114.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 10:22

Sample wt/vol: 100(mL) Date Analyzed: 09/04/2020 01:58

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42399 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.089	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.092	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	1.1		0.40	0.11
67-66-3	Chloroform	119.38	0.15	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	1.4		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.58		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	0.11	J	0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	0.070	J	0.40	0.035
108-88-3	Toluene	92.14	0.40	J	0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	0.092	J	0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	7.9		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	0.11	J	0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	0.28	J	0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	1.6		0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	85		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: SV-088-C-29 Lab Sample ID: 140-20175-5

Matrix: Air Lab File ID: HI03P114.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 10:22

Sample wt/vol: 100(mL) Date Analyzed: 09/04/2020 01:58

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42399 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.28	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.58	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	3.9		1.4	0.39
67-66-3	Chloroform	119.38	0.76	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	5.4		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.9		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	0.47	J	1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	0.47	J	2.7	0.24
108-88-3	Toluene	92.14	1.5	J	2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	0.37	J	1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	42		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	0.54	J	2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	1.4	J	2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	6.7		3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	85		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P114.D
Lims ID: 140-20175-A-5
Client ID: SV-088-C-29
Sample Type: Client
Inject. Date: 04-Sep-2020 01:58:30 ALS Bottle#: 14 Worklist Smp#: 18
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016480-018
Misc. Info.: 140-20175-a-5
Operator ID: HMT Instrument ID: MH

Method: \\chromfs\Knoxville\ChromData\MH\20200902-16480.b\MH_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 04-Sep-2020 14:00:42 Calib Date: 29-Aug-2020 23:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1061

First Level Reviewer: khachitpongpanits Date: 04-Sep-2020 14:00:42

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.431	9.436	-0.005	98	96953	4.80	
* 2 1,4-Difluorobenzene	114	11.591	11.591	0.000	95	389257	4.80	
* 3 Chlorobenzene-d5 (IS)	117	16.258	16.258	0.000	88	254913	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.876	17.876	0.000	90	117351	3.96	
6 Chlorodifluoromethane	51	3.921	3.921	0.000	96	11835	0.2188	M
8 Dichlorodifluoromethane	85	3.988	3.986	0.000	100	8493	0.1159	
34 trans-1,2-Dichloroethene	96	7.617	7.618	-0.005	42	453	0.0185	
42 cis-1,2-Dichloroethene	96	9.084	9.079	0.000	96	6719	0.2703	
44 Chloroform	83	9.436	9.431	0.000	32	1824	0.0310	
51 Benzene	78	11.069	11.074	-0.005	90	1275	0.0178	
52 Carbon tetrachloride	117	11.095	11.095	0.000	76	814	0.0184	
58 Trichloroethene	130	12.294	12.294	0.000	95	50481	1.57	
67 Toluene	91	14.310	14.310	0.000	93	5310	0.0809	
73 Tetrachloroethene	129	15.436	15.436	0.000	77	385	0.0140	
76 Ethylbenzene	91	16.584	16.584	0.000	95	1715	0.0216	
77 m-Xylene & p-Xylene	91	16.739	16.739	0.000	94	8607	0.1370	
81 o-Xylene	91	17.266	17.266	0.000	98	11500	0.1748	
88 1,3,5-Trimethylbenzene	120	18.558	18.558	-0.005	25	343	0.0560	a
92 1,2,4-Trimethylbenzene	105	18.992	18.987	0.005	97	1676	0.0220	
S 116 Xylenes, Total	100				0		0.3118	

QC Flag Legend

Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

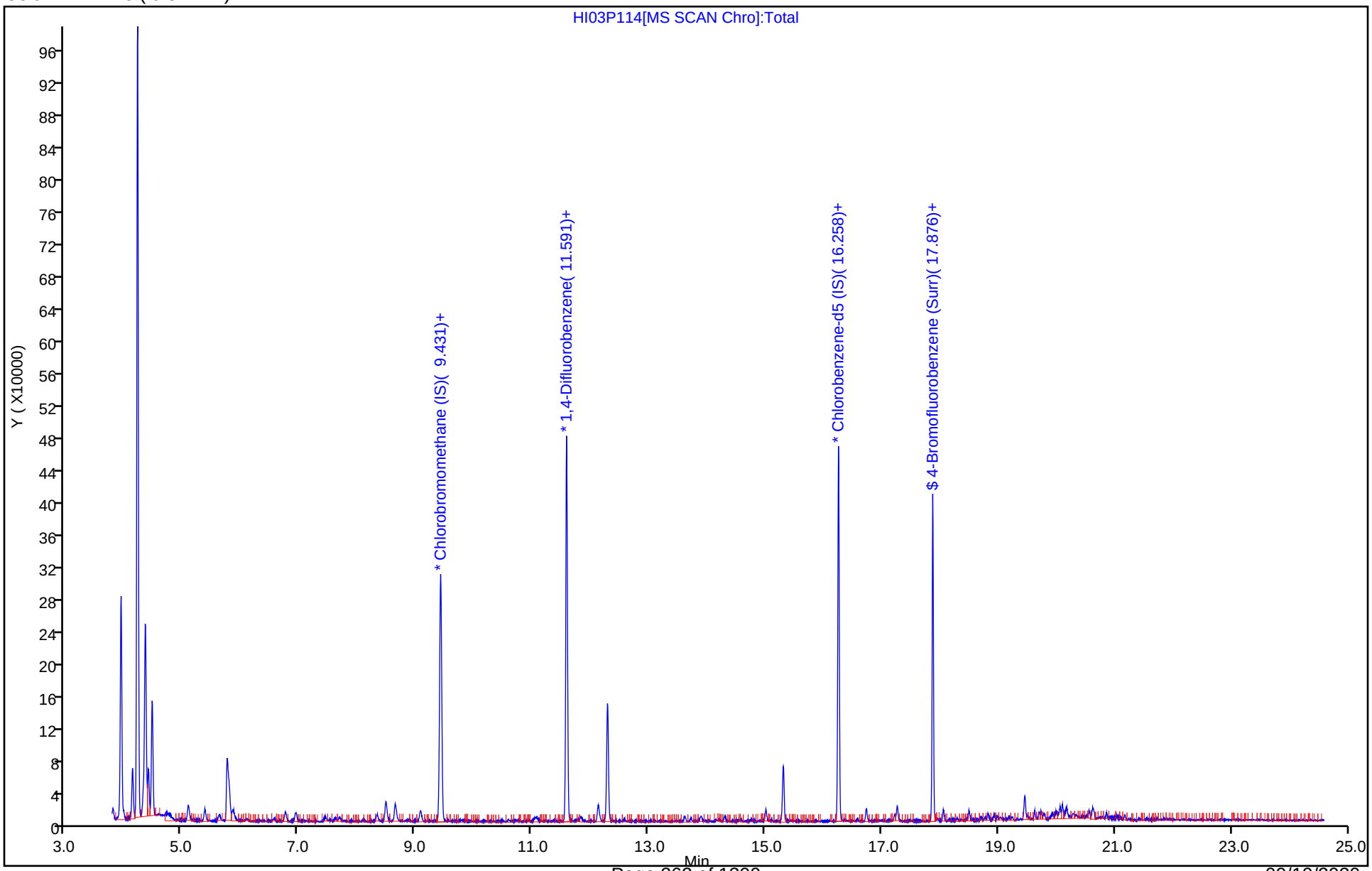
Report Date: 04-Sep-2020 14:00:42 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P114.D

Injection Date:	04-Sep-2020 01:58:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	140-20175-A-5	Lab Sample ID:	140-20175-5	Worklist Smp#:	18
Client ID:	SV-088-C-29				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P114.D				
Lims ID:	140-20175-A-5				
Client ID:	SV-088-C-29				
Sample Type:	Client				
Inject. Date:	04-Sep-2020 01:58:30	ALS Bottle#:	14	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016480-018				
Misc. Info.:	140-20175-a-5				
Operator ID:	HMT	Instrument ID:	MH		
Method:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\MH_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	04-Sep-2020 14:00:42	Calib Date:	29-Aug-2020 23:57:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1061				

First Level Reviewer: khachitpongpanits Date: 04-Sep-2020 14:00:42

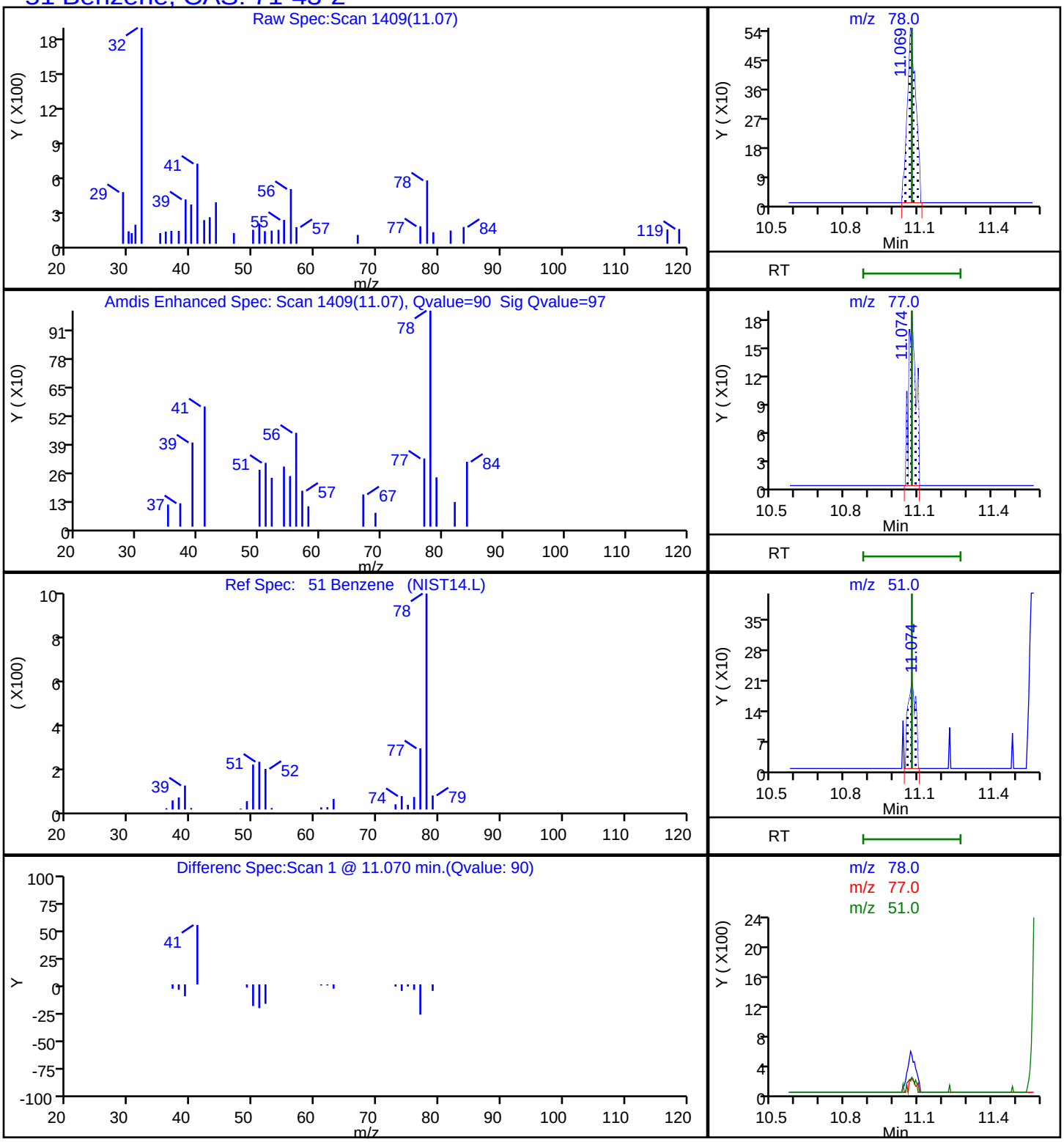
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	3.96	85.39

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P114.D

Injection Date:	04-Sep-2020 01:58:30	Instrument ID:	MH		
Lims ID:	140-20175-A-5	Lab Sample ID:	140-20175-5		
Client ID:	SV-088-C-29				
Operator ID:	HMT	ALS Bottle#:	14	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

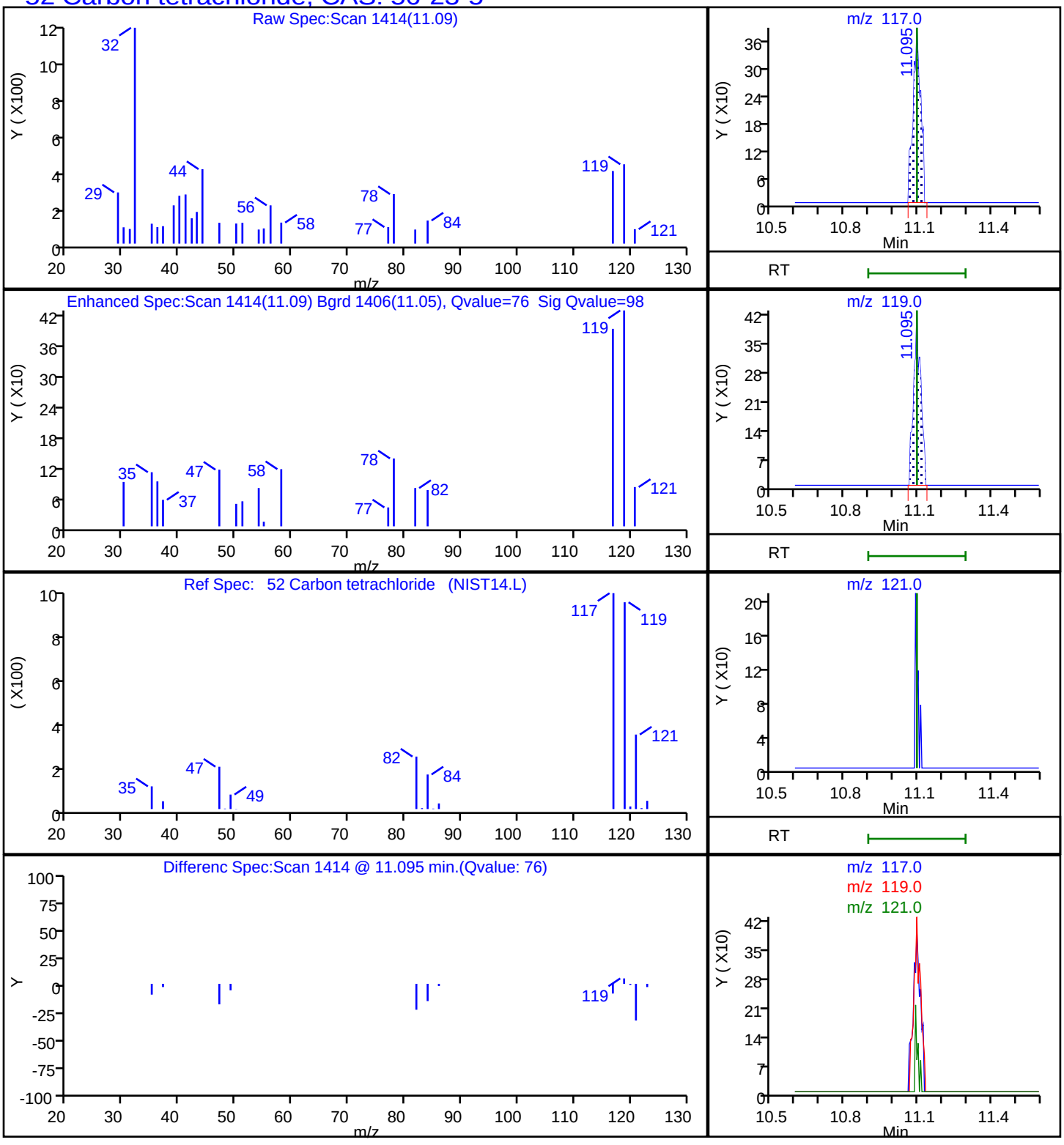
51 Benzene, CAS: 71-43-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P114.D				
Injection Date:	04-Sep-2020 01:58:30	Instrument ID:	MH		
Lims ID:	140-20175-A-5	Lab Sample ID:	140-20175-5		
Client ID:	SV-088-C-29				
Operator ID:	HMT	ALS Bottle#:	14	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

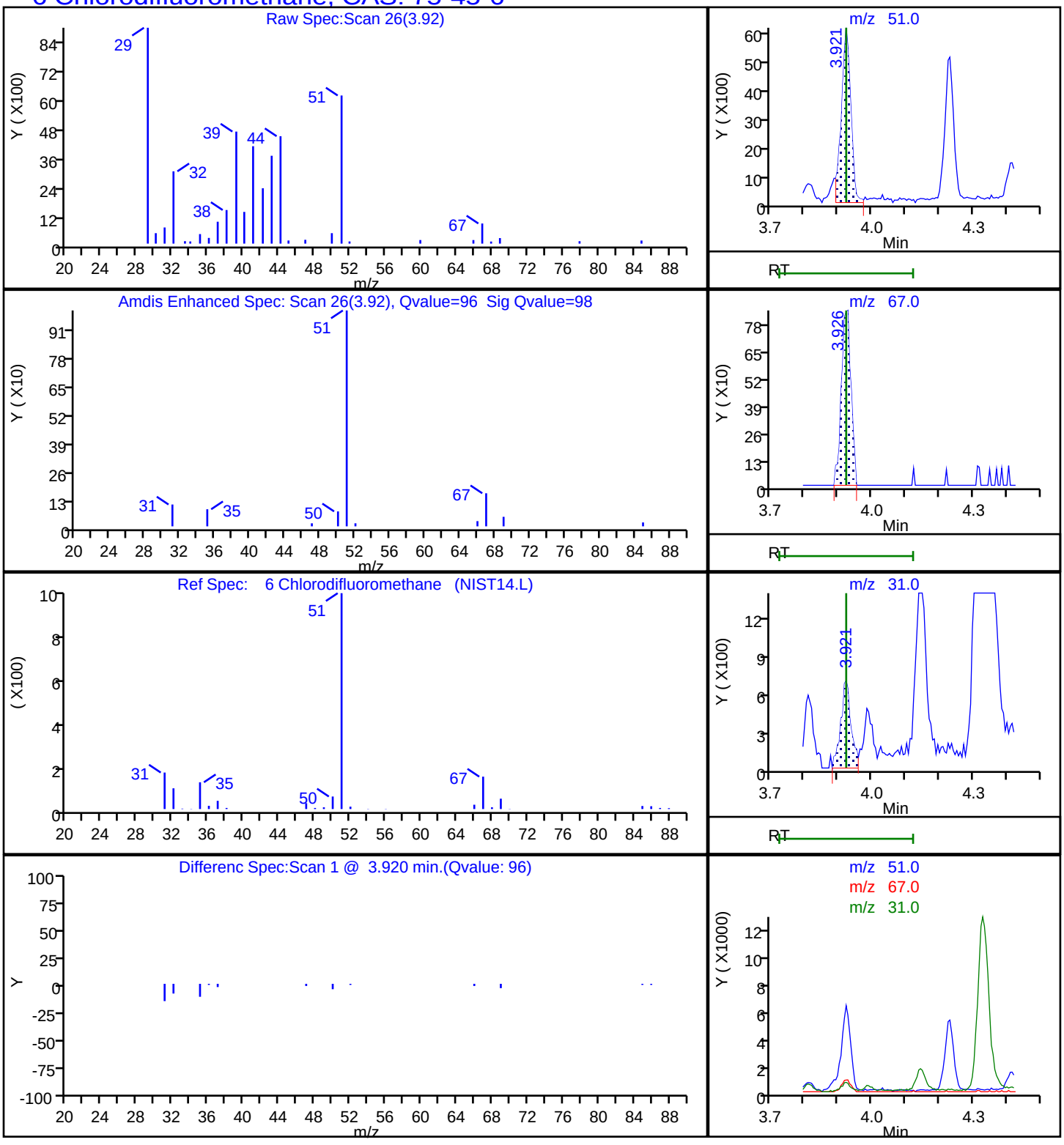
52 Carbon tetrachloride, CAS: 56-23-5



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P114.D				
Injection Date:	04-Sep-2020 01:58:30	Instrument ID:	MH		
Lims ID:	140-20175-A-5	Lab Sample ID:	140-20175-5		
Client ID:	SV-088-C-29				
Operator ID:	HMT	ALS Bottle#:	14	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

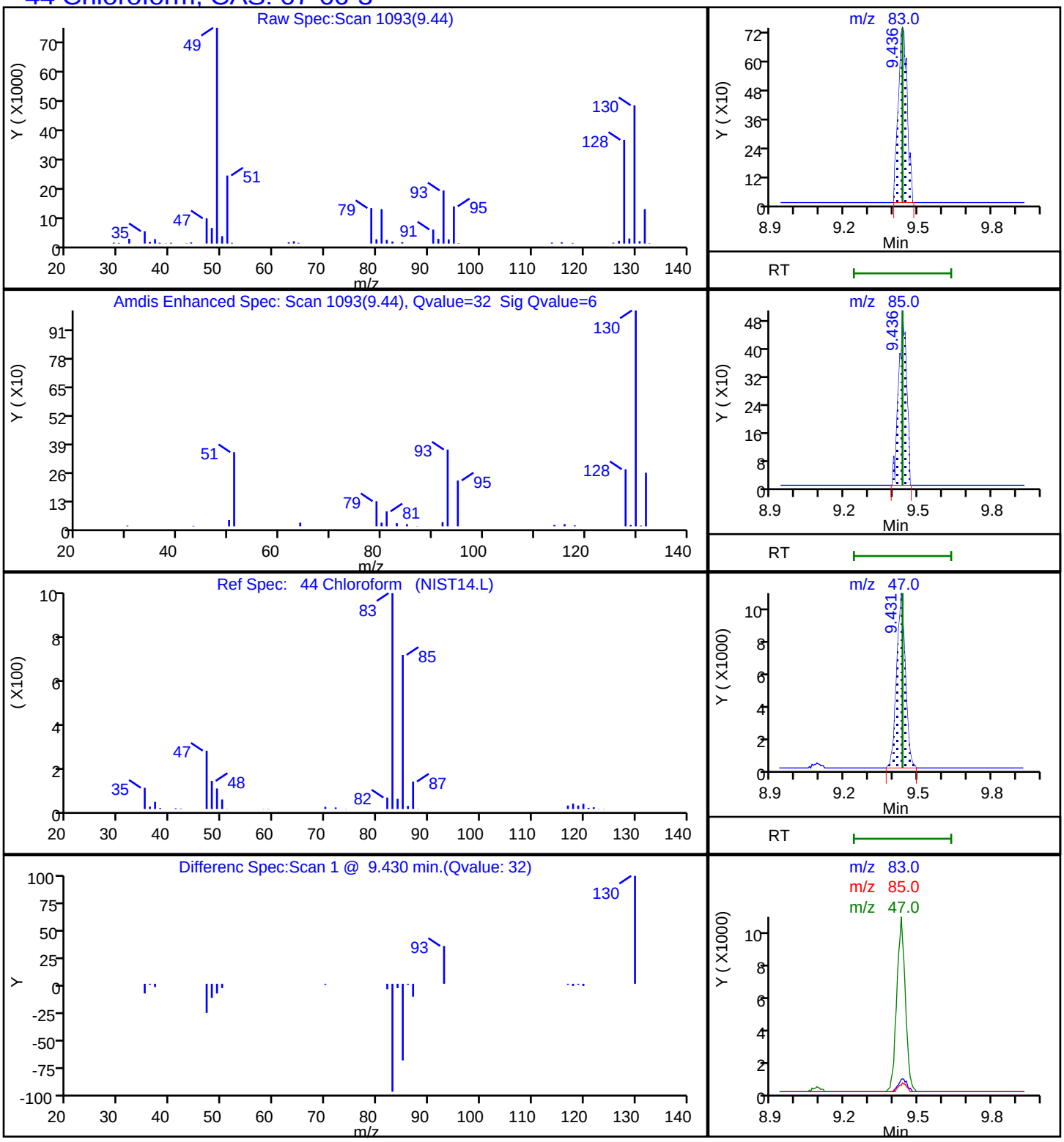
6 Chlorodifluoromethane, CAS: 75-45-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P114.D				
Injection Date:	04-Sep-2020 01:58:30	Instrument ID:	MH		
Lims ID:	140-20175-A-5	Lab Sample ID:	140-20175-5		
Client ID:	SV-088-C-29				
Operator ID:	HMT	ALS Bottle#:	14	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

44 Chloroform, CAS: 67-66-3

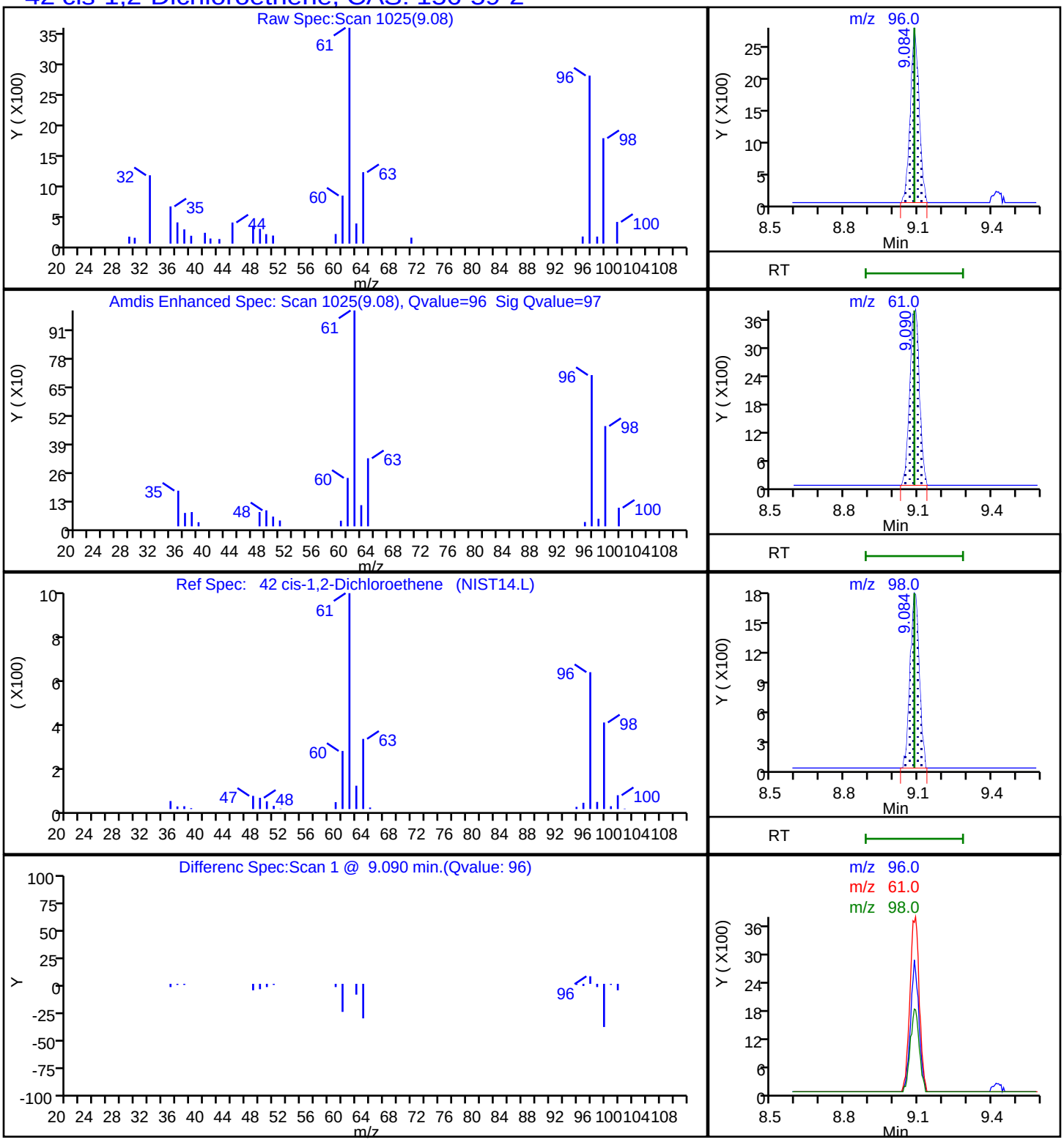


Report Date: 04-Sep-2020 14:00:42 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P114.D				
Injection Date:	04-Sep-2020 01:58:30	Instrument ID:	MH		
Lims ID:	140-20175-A-5	Lab Sample ID:	140-20175-5		
Client ID:	SV-088-C-29				
Operator ID:	HMT	ALS Bottle#:	14	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

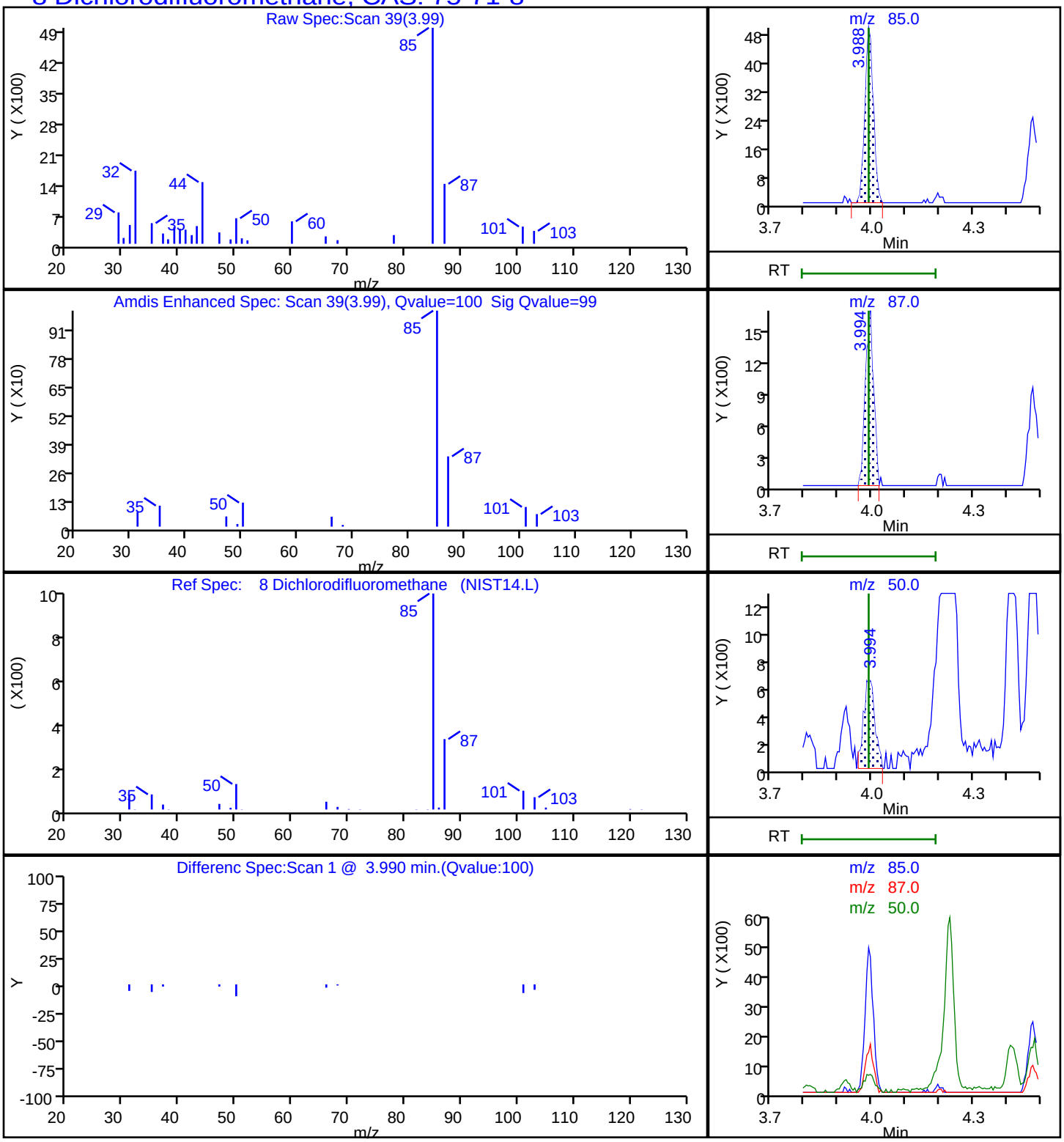
42 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P114.D		
Injection Date:	04-Sep-2020 01:58:30	Instrument ID:	MH
Lims ID:	140-20175-A-5	Lab Sample ID:	140-20175-5
Client ID:	SV-088-C-29		
Operator ID:	HMT	ALS Bottle#:	14 Worklist Smp#: 18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

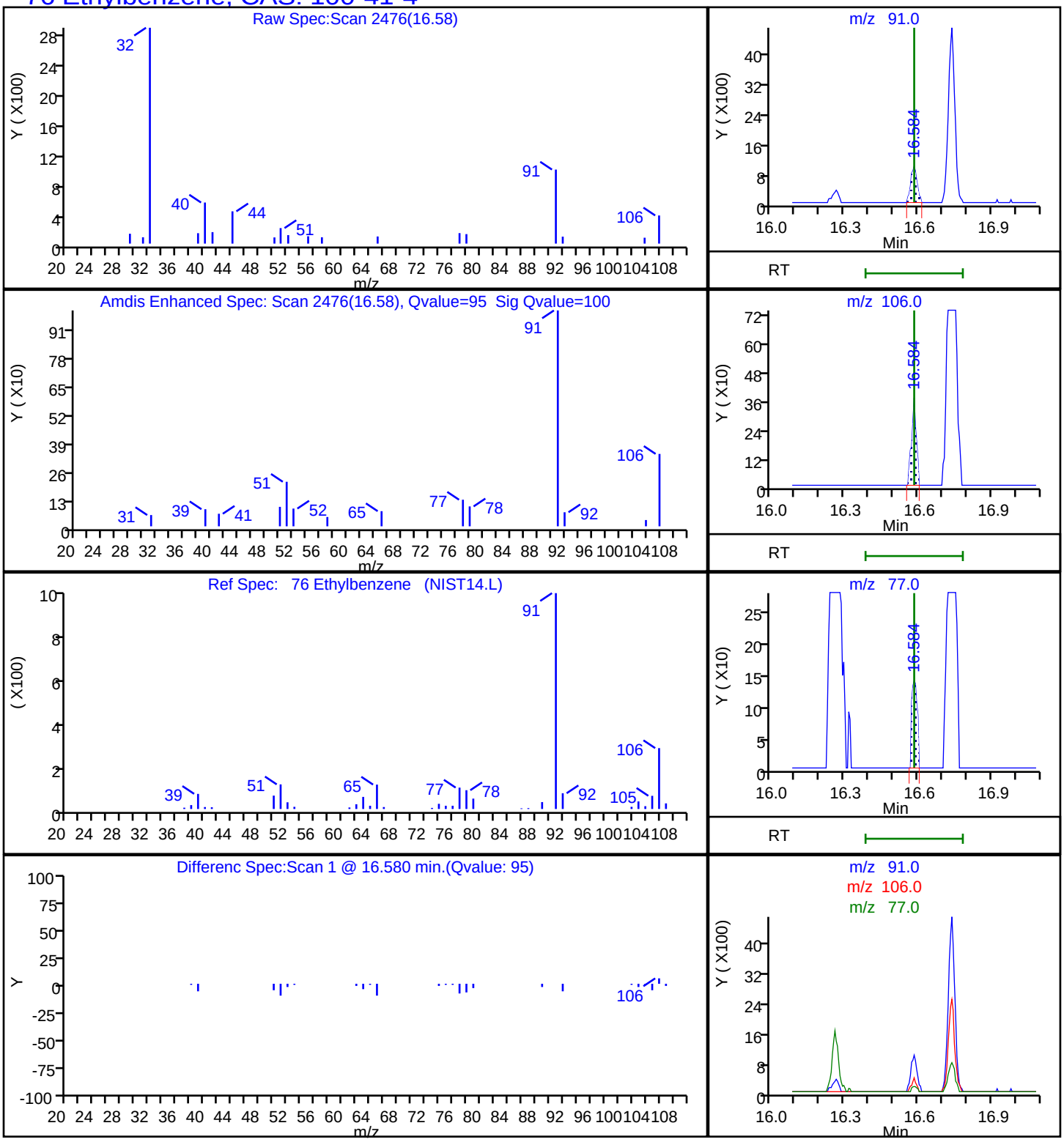
8 Dichlorodifluoromethane, CAS: 75-71-8



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P114.D				
Injection Date:	04-Sep-2020 01:58:30	Instrument ID:	MH		
Lims ID:	140-20175-A-5	Lab Sample ID:	140-20175-5		
Client ID:	SV-088-C-29				
Operator ID:	HMT	ALS Bottle#:	14	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

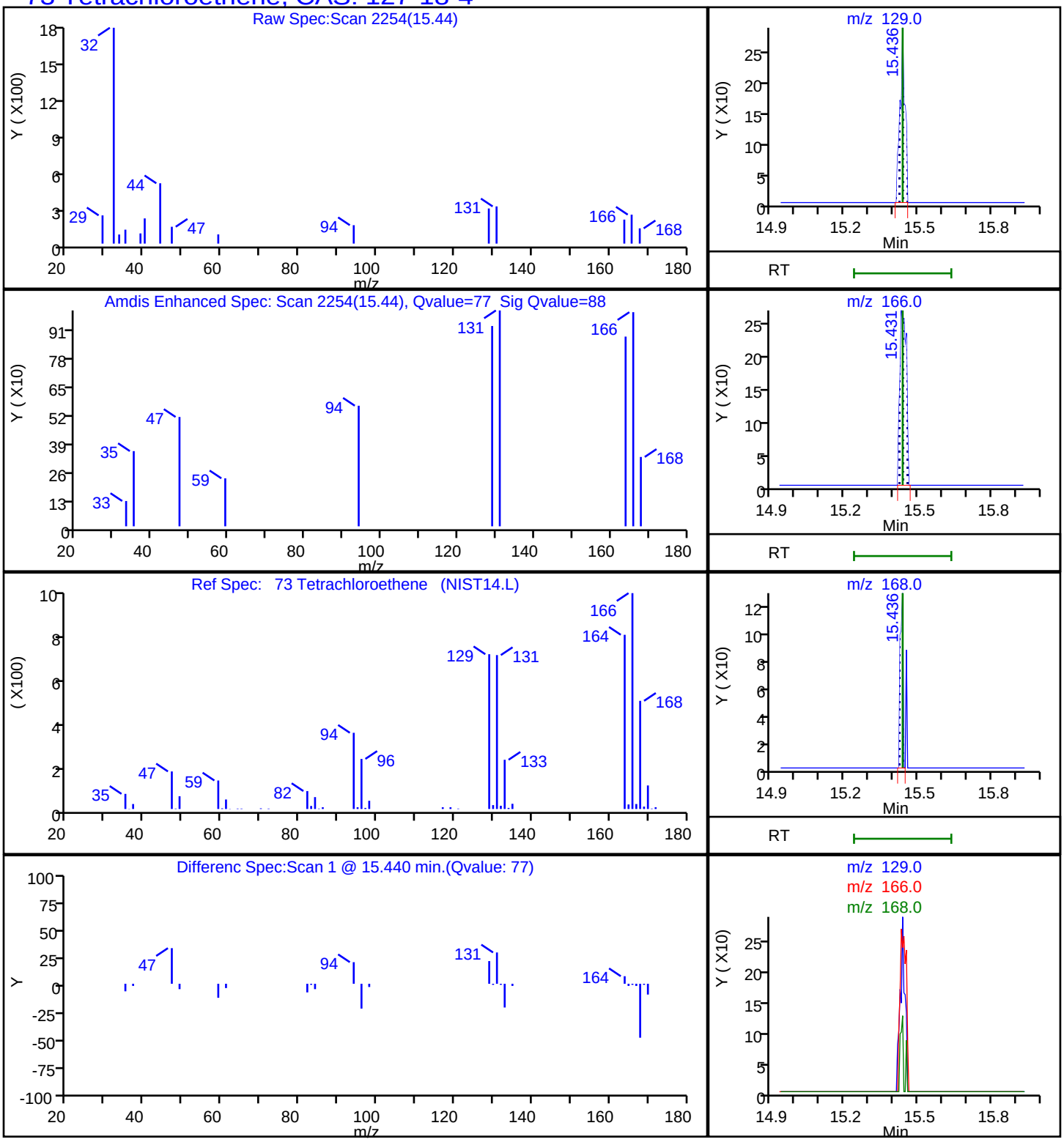
76 Ethylbenzene, CAS: 100-41-4



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P114.D				
Injection Date:	04-Sep-2020 01:58:30	Instrument ID:	MH		
Lims ID:	140-20175-A-5	Lab Sample ID:	140-20175-5		
Client ID:	SV-088-C-29				
Operator ID:	HMT	ALS Bottle#:	14	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

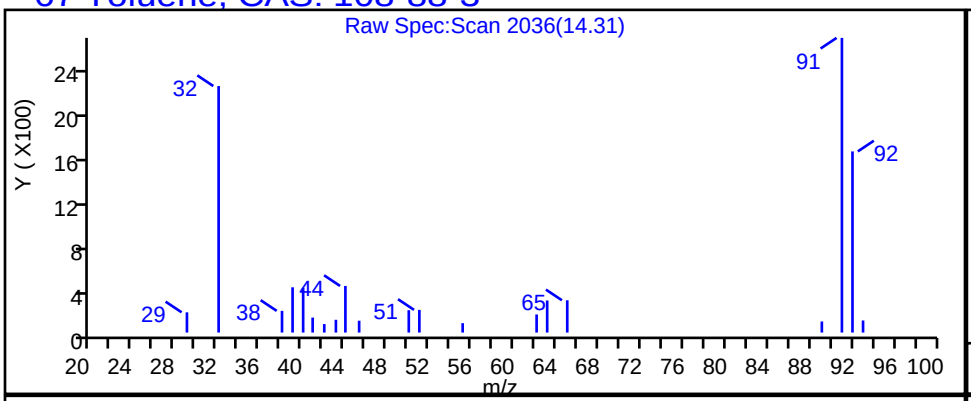
73 Tetrachloroethene, CAS: 127-18-4

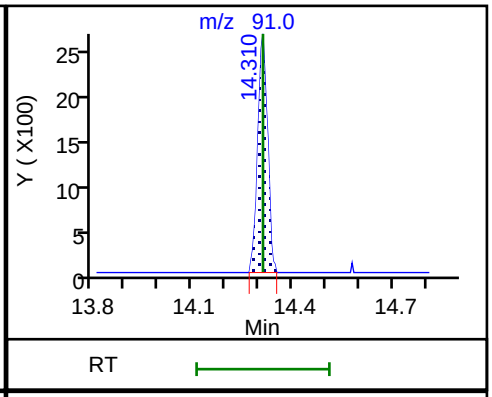


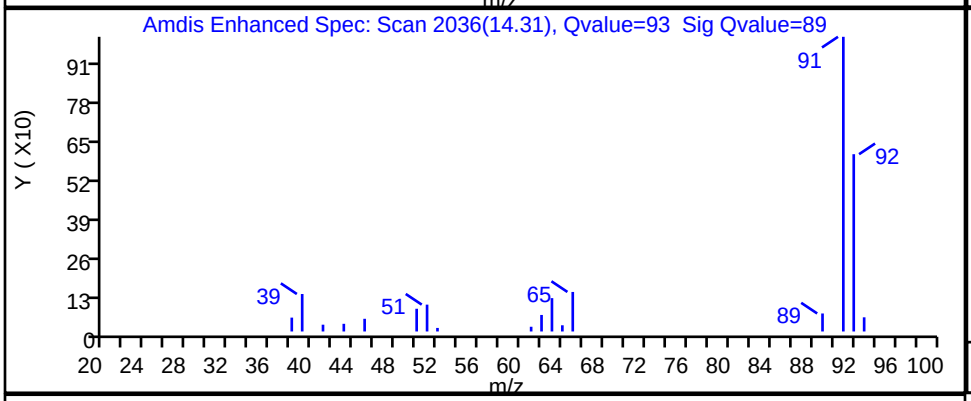
Eurofins TestAmerica, Knoxville

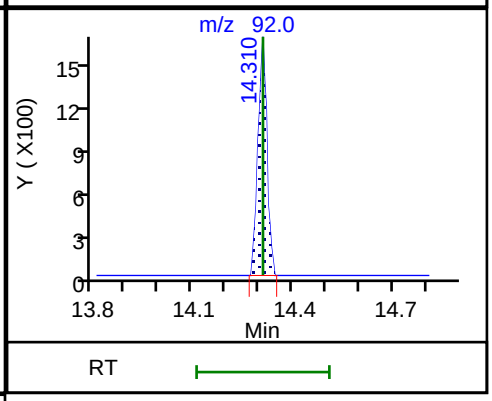
Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P114.D				
Injection Date:	04-Sep-2020 01:58:30	Instrument ID:	MH		
Lims ID:	140-20175-A-5	Lab Sample ID:	140-20175-5		
Client ID:	SV-088-C-29				
Operator ID:	HMT	ALS Bottle#:	14	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

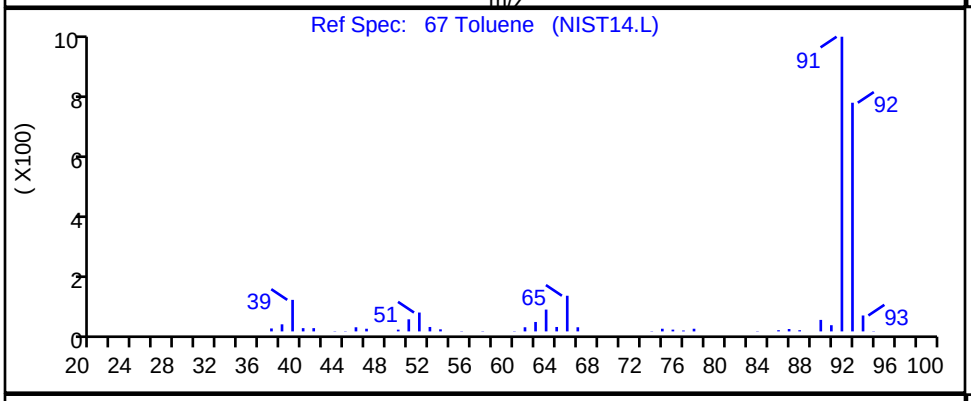
67 Toluene, CAS: 108-88-3

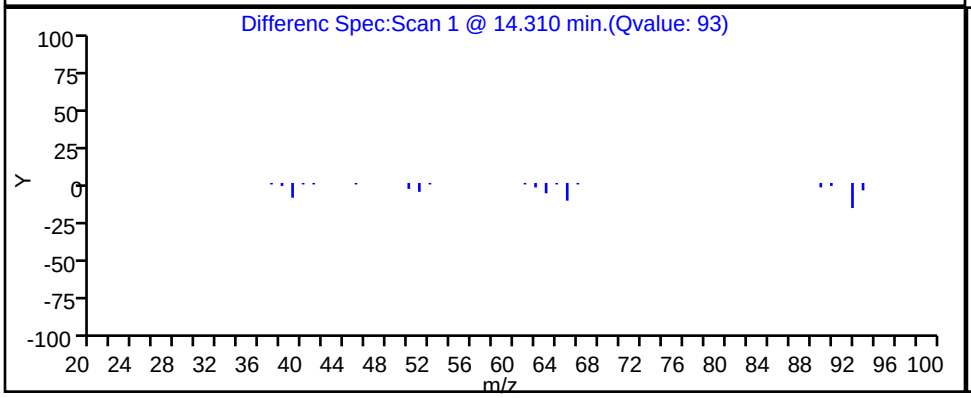


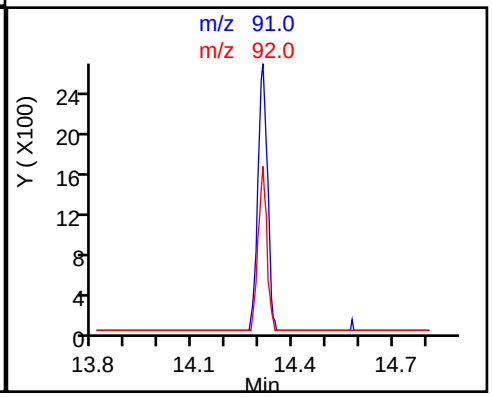








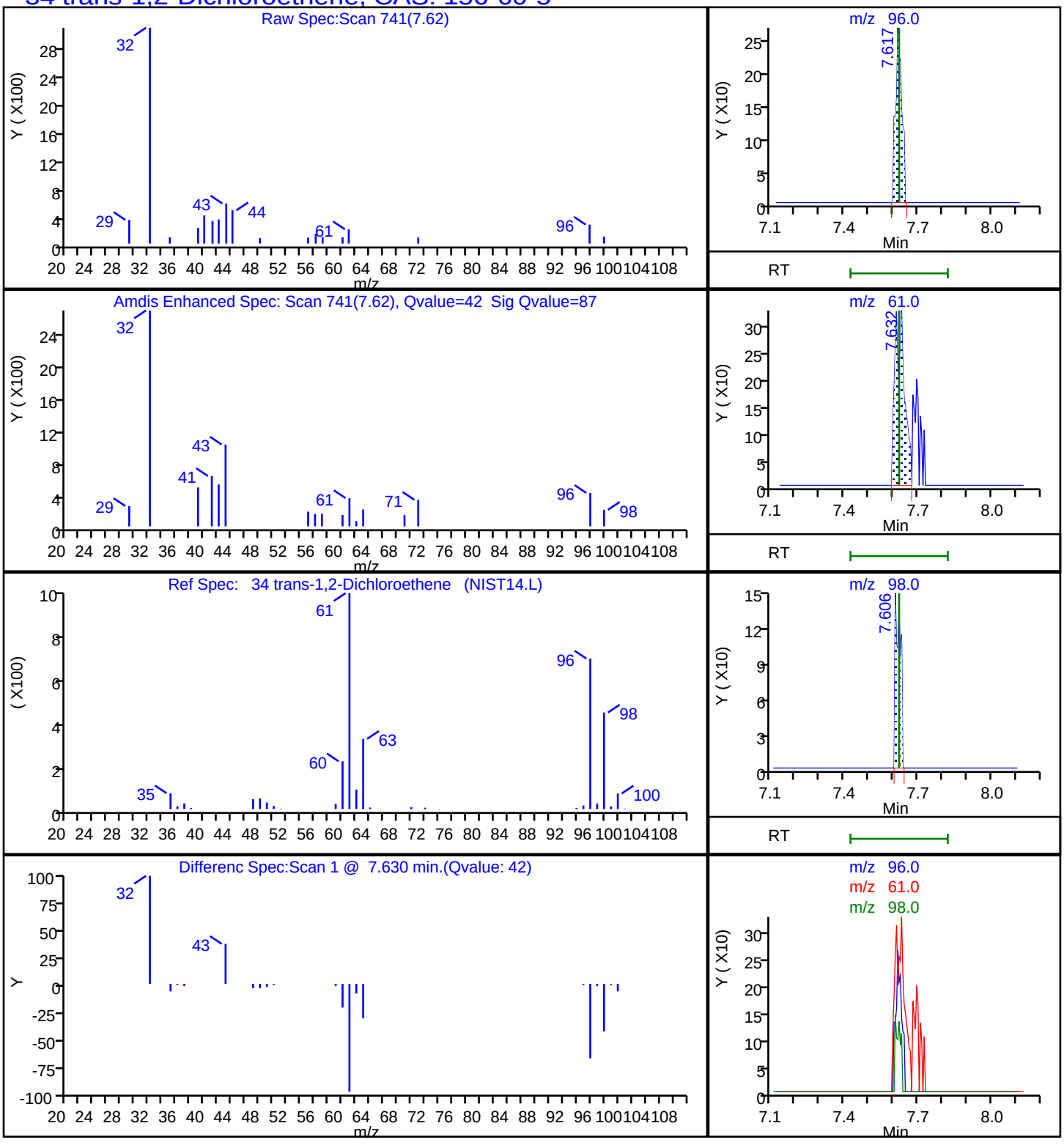




Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P114.D				
Injection Date:	04-Sep-2020 01:58:30	Instrument ID:	MH		
Lims ID:	140-20175-A-5	Lab Sample ID:	140-20175-5		
Client ID:	SV-088-C-29				
Operator ID:	HMT	ALS Bottle#:	14	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

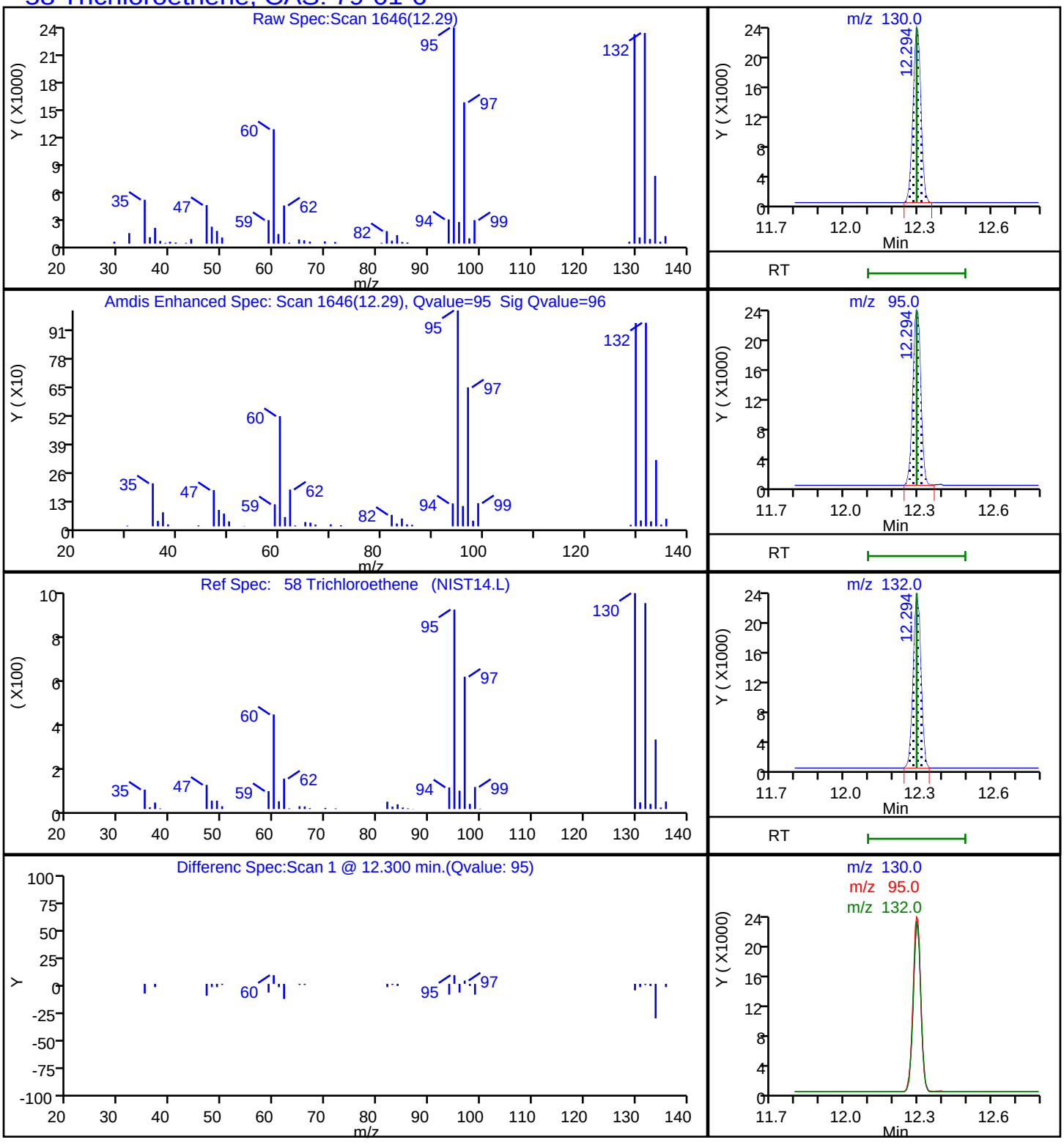
34 trans-1,2-Dichloroethene, CAS: 156-60-5



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P114.D				
Injection Date:	04-Sep-2020 01:58:30	Instrument ID:	MH		
Lims ID:	140-20175-A-5	Lab Sample ID:	140-20175-5		
Client ID:	SV-088-C-29				
Operator ID:	HMT	ALS Bottle#:	14	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

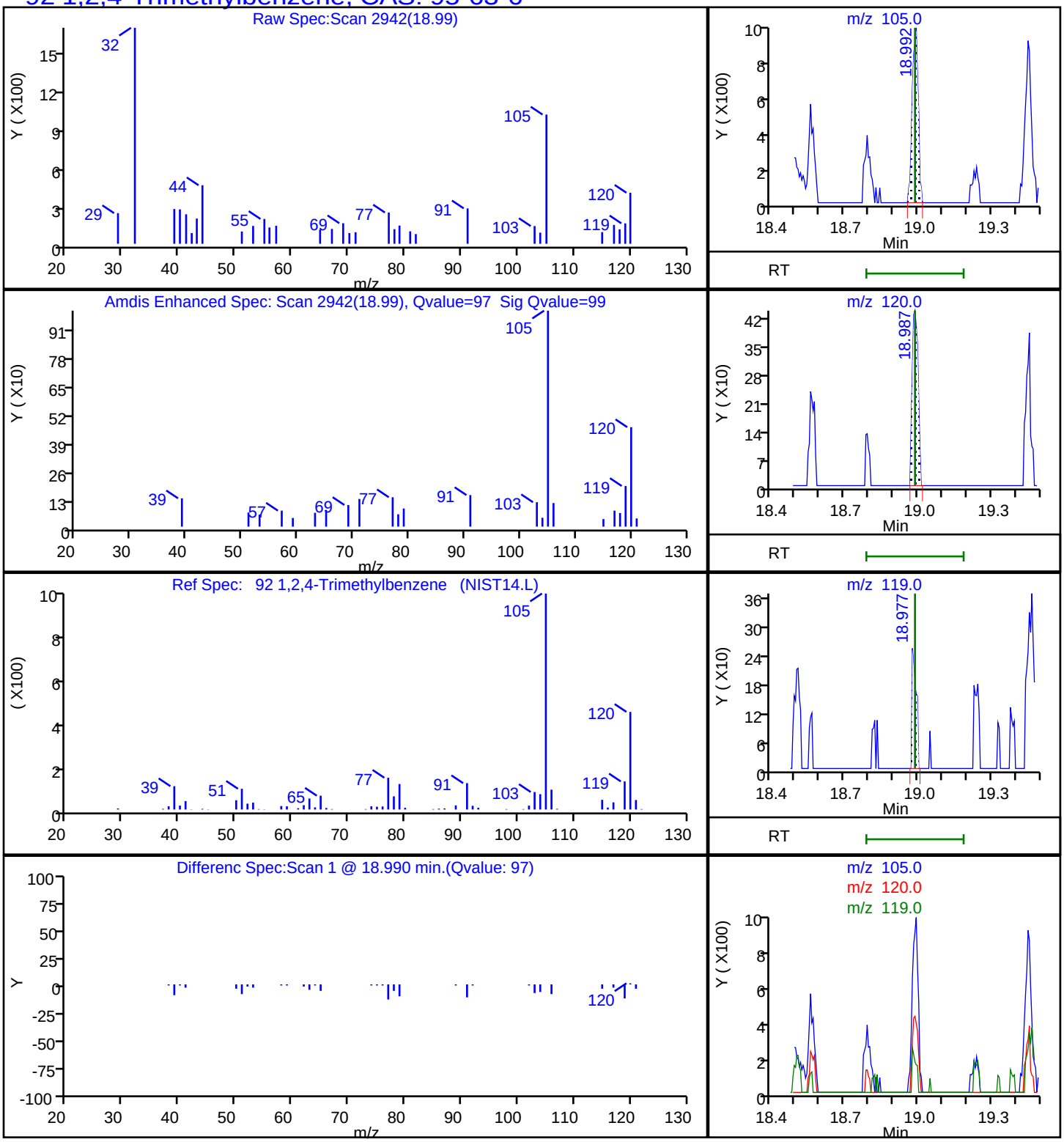
58 Trichloroethene, CAS: 79-01-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P114.D				
Injection Date:	04-Sep-2020 01:58:30	Instrument ID:	MH		
Lims ID:	140-20175-A-5	Lab Sample ID:	140-20175-5		
Client ID:	SV-088-C-29				
Operator ID:	HMT	ALS Bottle#:	14	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

92 1,2,4-Trimethylbenzene, CAS: 95-63-6

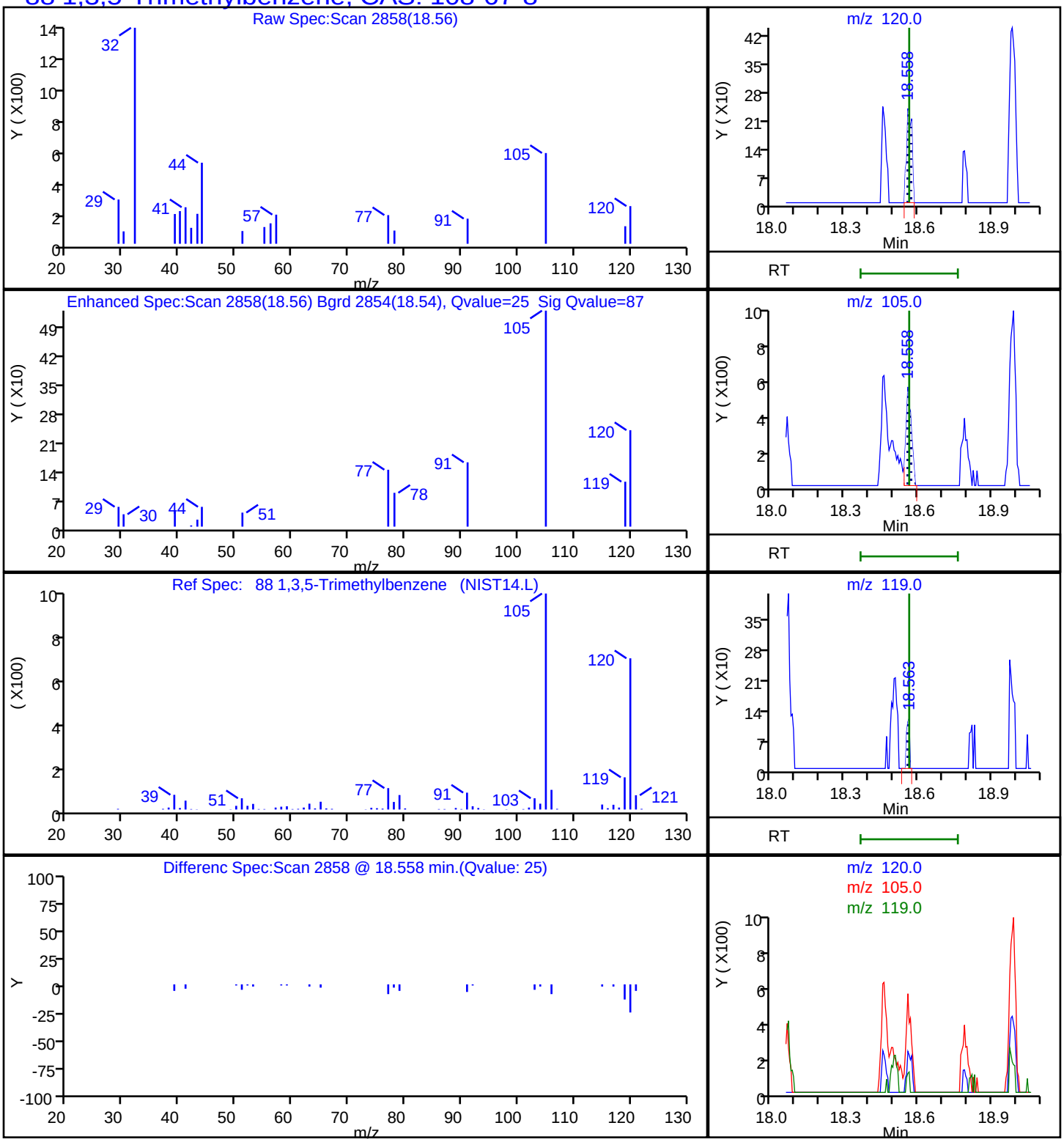


Report Date: 04-Sep-2020 14:00:43 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P114.D				
Injection Date:	04-Sep-2020 01:58:30	Instrument ID:	MH		
Lims ID:	140-20175-A-5	Lab Sample ID:	140-20175-5		
Client ID:	SV-088-C-29				
Operator ID:	HMT	ALS Bottle#:	14	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

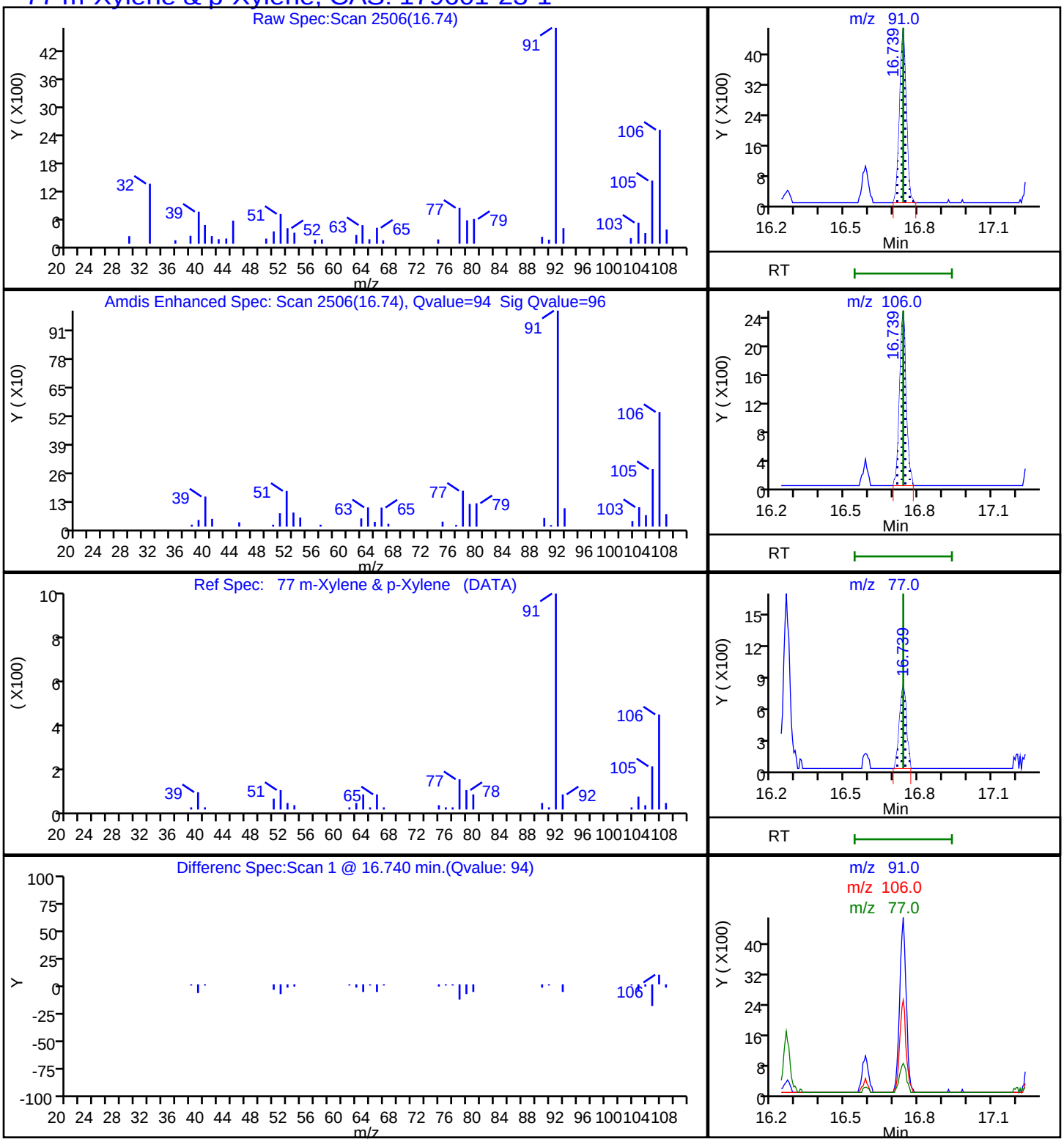
88 1,3,5-Trimethylbenzene, CAS: 108-67-8



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P114.D				
Injection Date:	04-Sep-2020 01:58:30	Instrument ID:	MH		
Lims ID:	140-20175-A-5	Lab Sample ID:	140-20175-5		
Client ID:	SV-088-C-29				
Operator ID:	HMT	ALS Bottle#:	14	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

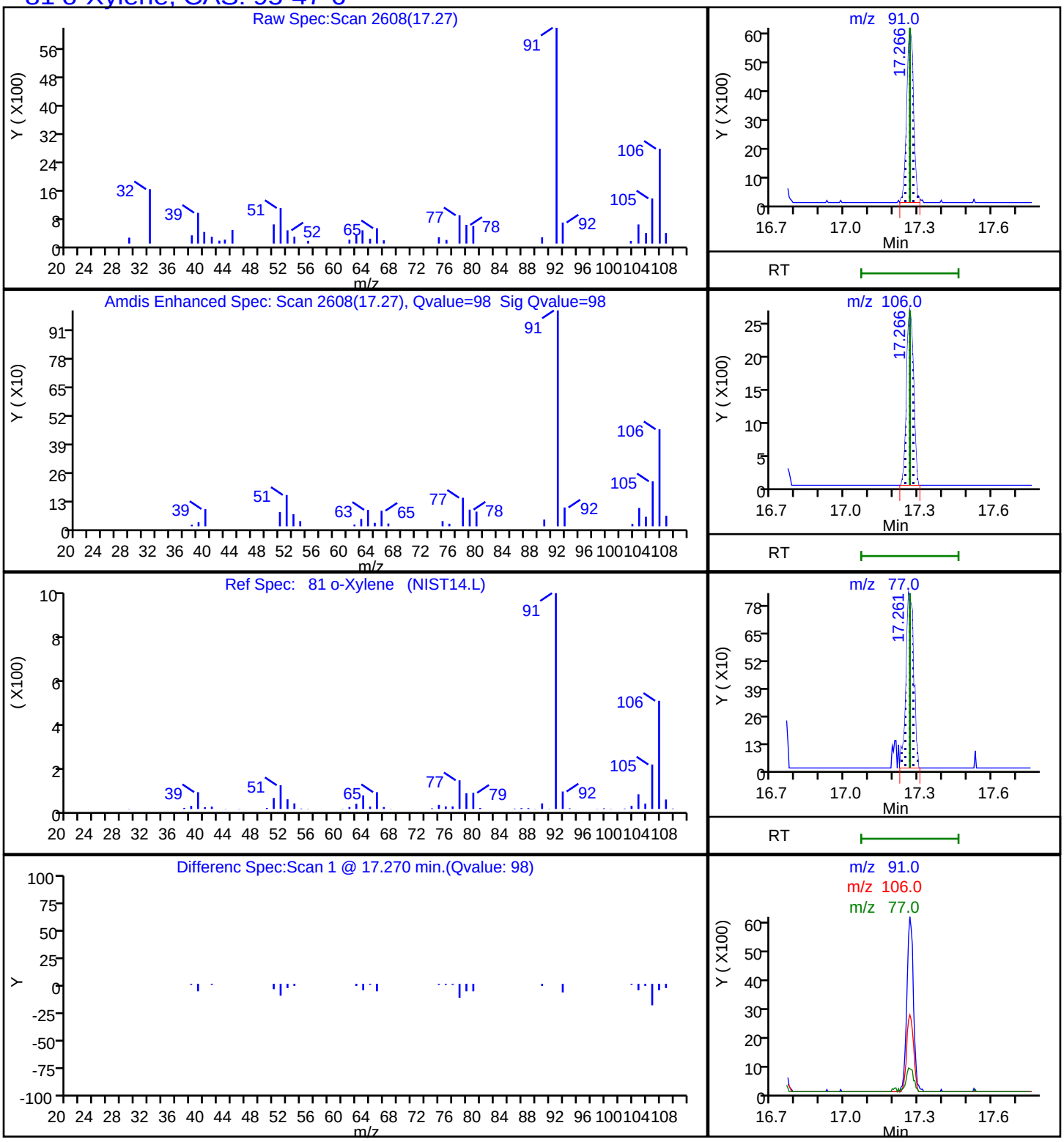
77 m-Xylene & p-Xylene, CAS: 179601-23-1



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P114.D				
Injection Date:	04-Sep-2020 01:58:30	Instrument ID:	MH		
Lims ID:	140-20175-A-5	Lab Sample ID:	140-20175-5		
Client ID:	SV-088-C-29				
Operator ID:	HMT	ALS Bottle#:	14	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

81 o-Xylene, CAS: 95-47-6



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Knoxville

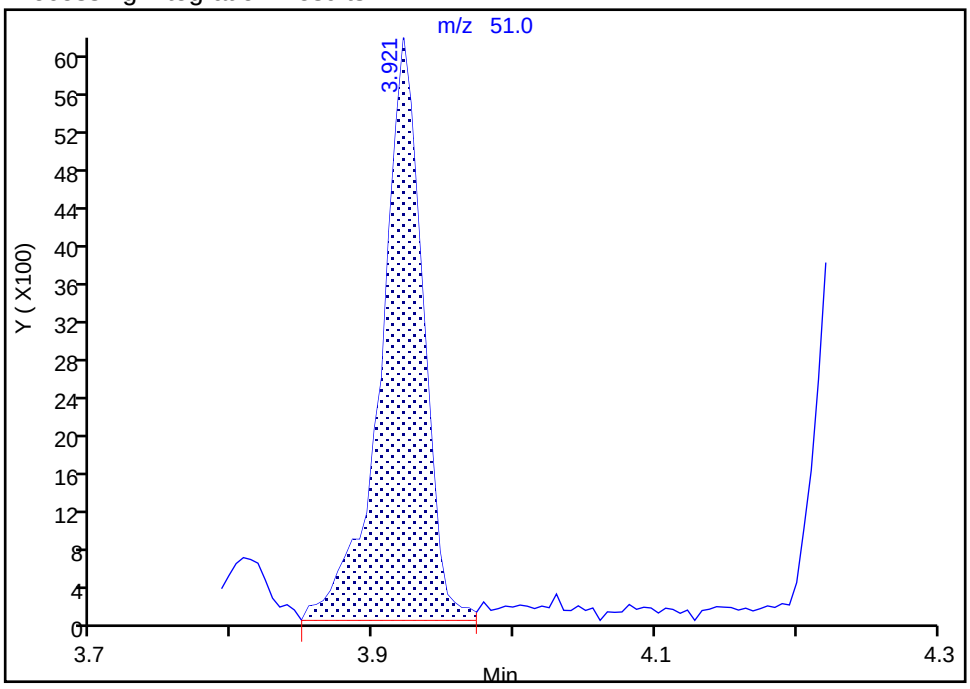
Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P114.D				
Injection Date:	04-Sep-2020 01:58:30	Instrument ID:	MH		
Lims ID:	140-20175-A-5	Lab Sample ID:	140-20175-5		
Client ID:	SV-088-C-29				
Operator ID:	HMT	ALS Bottle#:	14	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

6 Chlorodifluoromethane, CAS: 75-45-6

Signal: 1

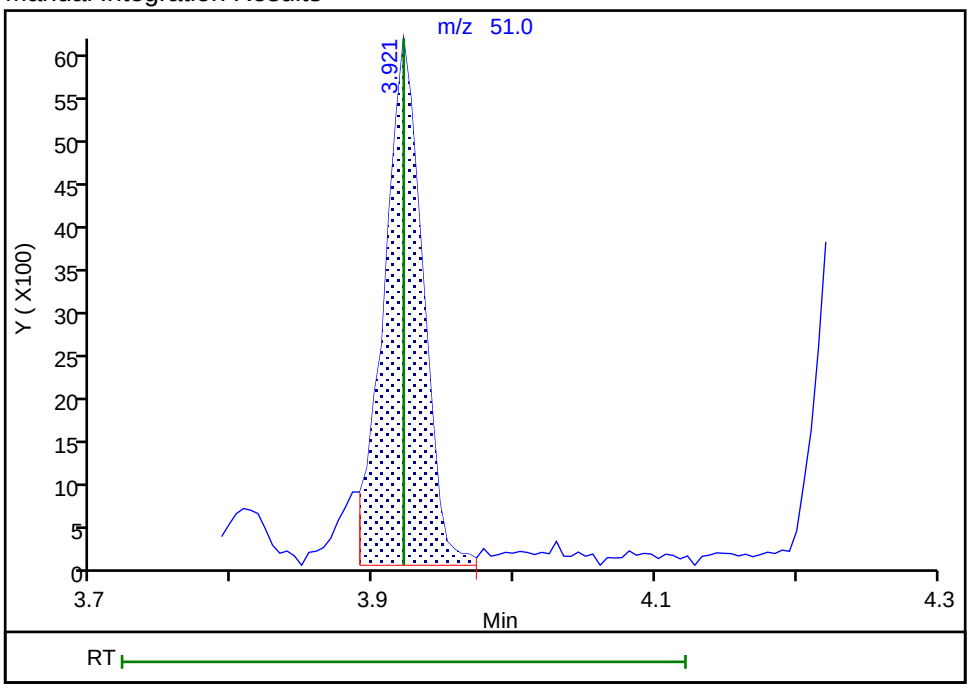
Processing Integration Results

RT: 3.92
Area: 12733
Amount: 0.235349
Amount Units: ppb v/v



Manual Integration Results

RT: 3.92
Area: 11835
Amount: 0.218751
Amount Units: ppb v/v



Reviewer: khachitpongpanits, 04-Sep-2020 14:00:00

Audit Action: Split an Integrated Peak Audit Reason: Split Peak

Eurofins TestAmerica, Knoxville

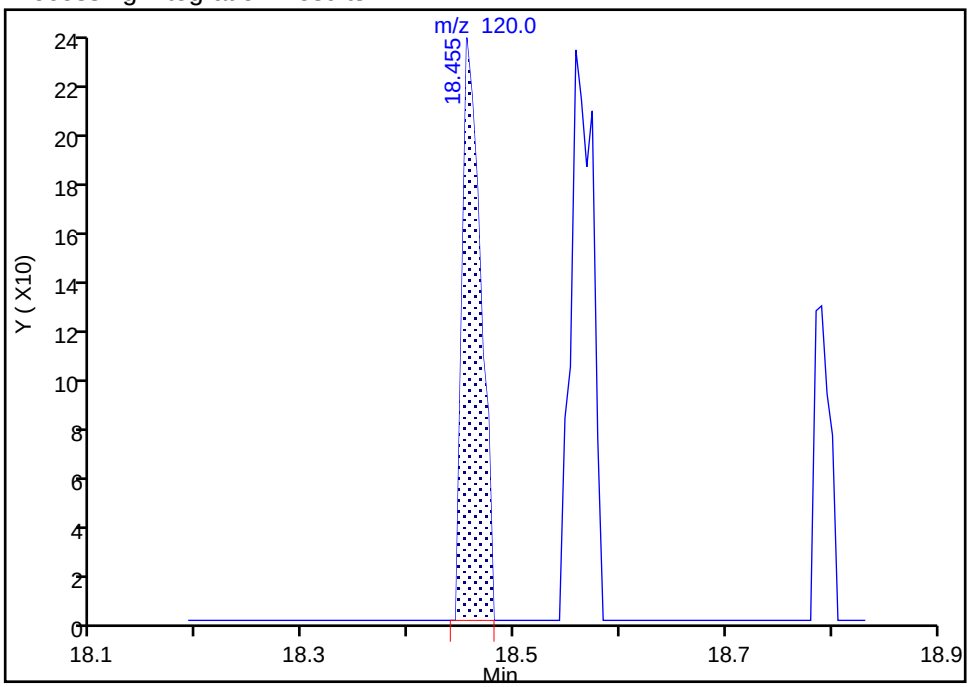
Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P114.D				
Injection Date:	04-Sep-2020 01:58:30	Instrument ID:	MH		
Lims ID:	140-20175-A-5	Lab Sample ID:	140-20175-5		
Client ID:	SV-088-C-29				
Operator ID:	HMT	ALS Bottle#:	14	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

88 1,3,5-Trimethylbenzene, CAS: 108-67-8

Signal: 1

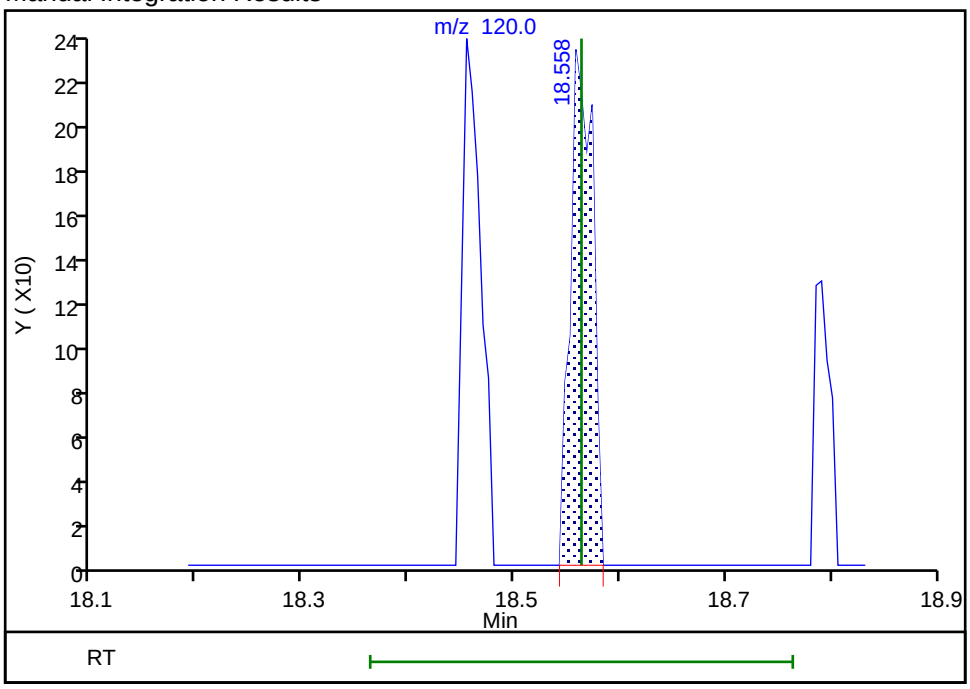
Processing Integration Results

RT: 18.45
Area: 293
Amount: 0.054769
Amount Units: ppb v/v



Manual Integration Results

RT: 18.56
Area: 343
Amount: 0.056018
Amount Units: ppb v/v



Reviewer: khachitpongpanits, 04-Sep-2020 14:00:28
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: SV-DUP1-C-29 Lab Sample ID: 140-20175-6

Matrix: Air Lab File ID: HI03P115.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 00:00

Sample wt/vol: 20(mL) Date Analyzed: 09/04/2020 02:50

Soil Aliquot Vol: Dilution Factor: 3.6

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42399 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	2.3	J	7.2	0.72
56-23-5	Carbon tetrachloride	153.81	0.69	J	7.2	0.63
75-45-6	Chlorodifluoromethane	86.47	ND		7.2	2.0
67-66-3	Chloroform	119.38	11		7.2	0.63
156-59-2	cis-1,2-Dichloroethene	96.94	18		7.2	0.90
75-71-8	Dichlorodifluoromethane	120.91	ND		7.2	1.3
75-34-3	*1,1-Dichloroethane*	*98.96*	*2100*	*E*	*7.2*	*0.63*
107-06-2	1,2-Dichloroethane	98.96	ND		7.2	0.90
75-35-4	1,1-Dichloroethene	96.94	960		7.2	0.72
100-41-4	Ethylbenzene	106.17	110		7.2	1.2
75-09-2	Methylene Chloride	84.93	ND		36	35
1634-04-4	Methyl tert-butyl ether	88.15	ND		36	4.7
91-20-3	Naphthalene	128.17	82		3.6	3.6
127-18-4	Tetrachloroethene	165.83	ND		7.2	0.63
108-88-3	Toluene	92.14	ND		11	7.0
156-60-5	trans-1,2-Dichloroethene	96.94	1.3	J	7.2	0.63
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		7.2	5.8
71-55-6	1,1,1-Trichloroethane	133.41	480		7.2	3.3
79-00-5	1,1,2-Trichloroethane	133.41	ND		7.2	0.63
79-01-6	Trichloroethene	131.39	330		3.6	0.54
526-73-8	1,2,3-Trimethylbenzene	120.19	4.7	J	7.2	3.2
95-63-6	1,2,4-Trimethylbenzene	120.20	4.6	J	7.2	1.8
108-67-8	1,3,5-Trimethylbenzene	120.20	6.5	J	7.2	2.0
75-01-4	Vinyl chloride	62.50	3.0	J	3.6	2.3
1330-20-7	Xylenes, Total	106.17	1200		14	2.2

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	108		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: SV-DUP1-C-29 Lab Sample ID: 140-20175-6

Matrix: Air Lab File ID: HI03P115.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 00:00

Sample wt/vol: 20(mL) Date Analyzed: 09/04/2020 02:50

Soil Aliquot Vol: Dilution Factor: 3.6

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42399 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	7.3	J	23	2.3
56-23-5	Carbon tetrachloride	153.81	4.4	J	45	4.0
75-45-6	Chlorodifluoromethane	86.47	ND		25	7.0
67-66-3	Chloroform	119.38	54		35	3.1
156-59-2	cis-1,2-Dichloroethene	96.94	70		29	3.6
75-71-8	Dichlorodifluoromethane	120.91	ND		36	6.2
75-34-3	*1,1-Dichloroethane*	*98.96*	*8300*	*E*	*29*	*2.5*
107-06-2	1,2-Dichloroethane	98.96	ND		29	3.6
75-35-4	1,1-Dichloroethene	96.94	3800		29	2.9
100-41-4	Ethylbenzene	106.17	480		31	5.1
75-09-2	Methylene Chloride	84.93	ND		130	120
1634-04-4	Methyl tert-butyl ether	88.15	ND		130	17
91-20-3	Naphthalene	128.17	430		19	19
127-18-4	Tetrachloroethene	165.83	ND		49	4.3
108-88-3	Toluene	92.14	ND		41	26
156-60-5	trans-1,2-Dichloroethene	96.94	5.2	J	29	2.5
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		53	43
71-55-6	1,1,1-Trichloroethane	133.41	2600		39	18
79-00-5	1,1,2-Trichloroethane	133.41	ND		39	3.4
79-01-6	Trichloroethene	131.39	1800		19	2.9
526-73-8	1,2,3-Trimethylbenzene	120.19	23	J	35	16
95-63-6	1,2,4-Trimethylbenzene	120.20	23	J	35	8.8
108-67-8	1,3,5-Trimethylbenzene	120.20	32	J	35	9.7
75-01-4	Vinyl chloride	62.50	7.6	J	9.2	6.0
1330-20-7	Xylenes, Total	106.17	5300		63	9.4

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	108		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P115.D				
Lims ID:	140-20175-A-6				
Client ID:	SV-DUP1-C-29				
Sample Type:	Client				
Inject. Date:	04-Sep-2020 02:50:30	ALS Bottle#:	15	Worklist Smp#:	19
Purge Vol:	500.000 mL	Dil. Factor:	3.6000		
Sample Info:	140-0016480-019				
Misc. Info.:	140-20175-a-6@3.60				
Operator ID:	HMT	Instrument ID:	MH		
Method:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\MH_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	04-Sep-2020 14:54:56	Calib Date:	29-Aug-2020 23:57:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1061				
First Level Reviewer: khachitpongpanits		Date:	04-Sep-2020 14:54:56		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.431	9.436	-0.005	98	105447	4.80	
* 2 1,4-Difluorobenzene	114	11.591	11.591	0.000	95	409892	4.80	
* 3 Chlorobenzene-d5 (IS)	117	16.258	16.258	0.000	88	313538	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.876	17.876	0.000	91	181728	4.99	
12 Vinyl chloride	62	4.371	4.379	-0.010	98	1155	0.0330	
27 1,1-Dichloroethene	96	6.386	6.393	-0.011	96	272533	10.7	
34 trans-1,2-Dichloroethene	96	7.606	7.618	-0.016	40	389	0.0146	
37 1,1-Dichloroethane	63	8.061	8.057	0.000	100	1208719	22.8	E
42 cis-1,2-Dichloroethene	96	9.079	9.079	-0.005	96	5281	0.1953	
44 Chloroform	83	9.436	9.431	0.000	29	7909	0.1235	
47 1,1,1-Trichloroethane	97	10.485	10.479	0.000	97	308859	5.32	
51 Benzene	78	11.059	11.074	-0.015	75	1899	0.0252	
52 Carbon tetrachloride	117	11.095	11.095	0.000	40	358	0.007685	
58 Trichloroethene	130	12.294	12.294	0.000	95	125180	3.70	
67 Toluene	91	14.310	14.310	0.000	90	5990	0.0742	
76 Ethylbenzene	91	16.584	16.584	0.000	99	120411	1.23	
77 m-Xylene & p-Xylene	91	16.739	16.739	0.000	98	779528	10.1	
81 o-Xylene	91	17.266	17.266	0.000	99	280248	3.46	
88 1,3,5-Trimethylbenzene	120	18.563	18.563	0.000	90	1215	0.0721	
92 1,2,4-Trimethylbenzene	105	18.992	18.987	0.005	98	4809	0.0514	
98 1,2,3-Trimethylbenzene	105	19.447	19.447	0.000	96	4721	0.0525	
109 Naphthalene	128	21.556	21.556	0.000	99	66961	0.9104	
S 116 Xylenes, Total	100				0		13.6	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Reagents:

40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

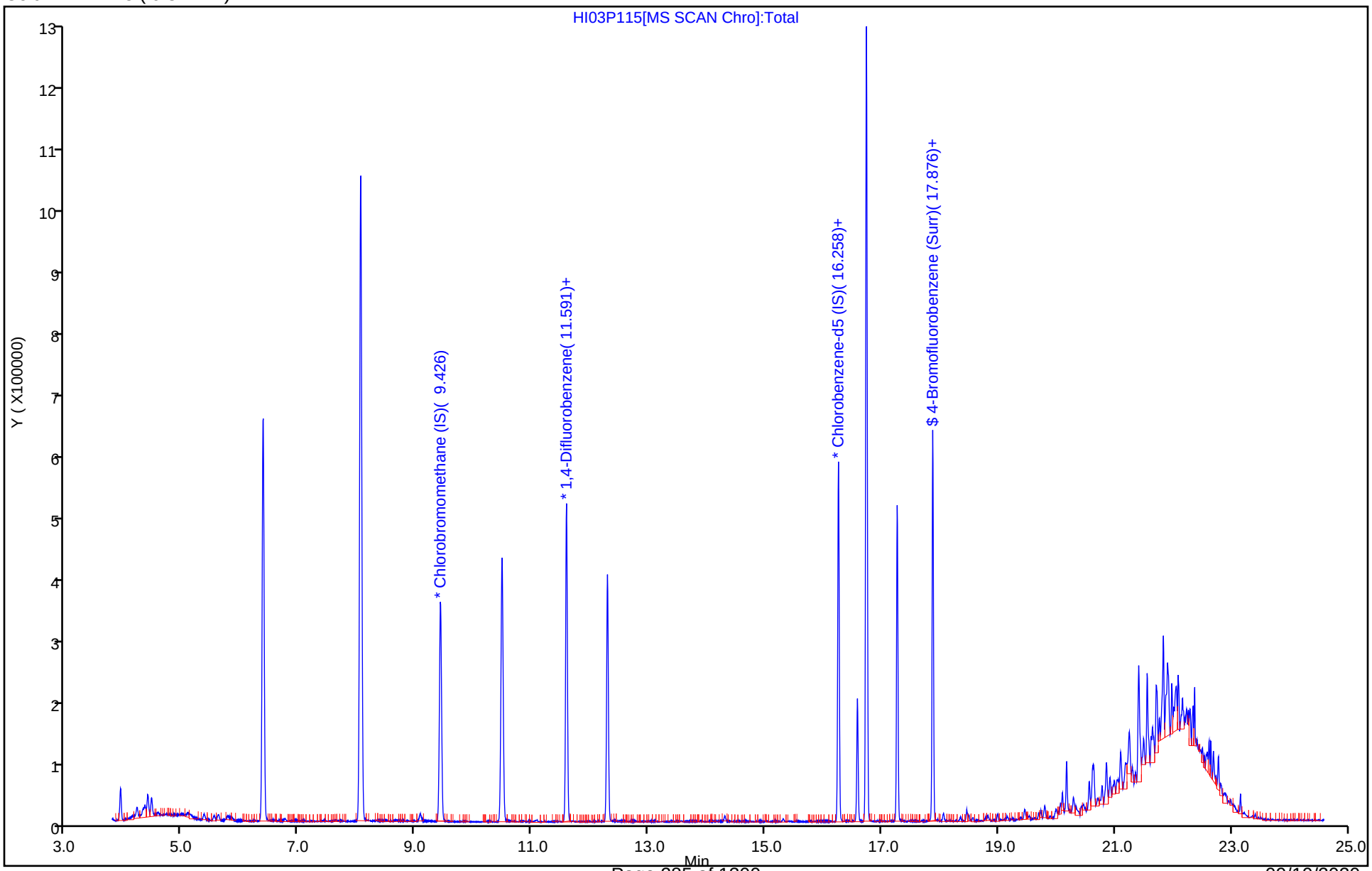
Report Date: 04-Sep-2020 14:54:57 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P115.D

Injection Date:	04-Sep-2020 02:50:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	140-20175-A-6	Lab Sample ID:	140-20175-6	Worklist Smp#:	19
Client ID:	SV-DUP1-C-29				
Purge Vol:	500.000 mL	Dil. Factor:	3.6000	ALS Bottle#:	15
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P115.D				
Lims ID:	140-20175-A-6				
Client ID:	SV-DUP1-C-29				
Sample Type:	Client				
Inject. Date:	04-Sep-2020 02:50:30	ALS Bottle#:	15	Worklist Smp#:	19
Purge Vol:	500.000 mL	Dil. Factor:	3.6000		
Sample Info:	140-0016480-019				
Misc. Info.:	140-20175-a-6@3.60				
Operator ID:	HMT	Instrument ID:	MH		
Method:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\MH_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	04-Sep-2020 14:54:56	Calib Date:	29-Aug-2020 23:57:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1061				

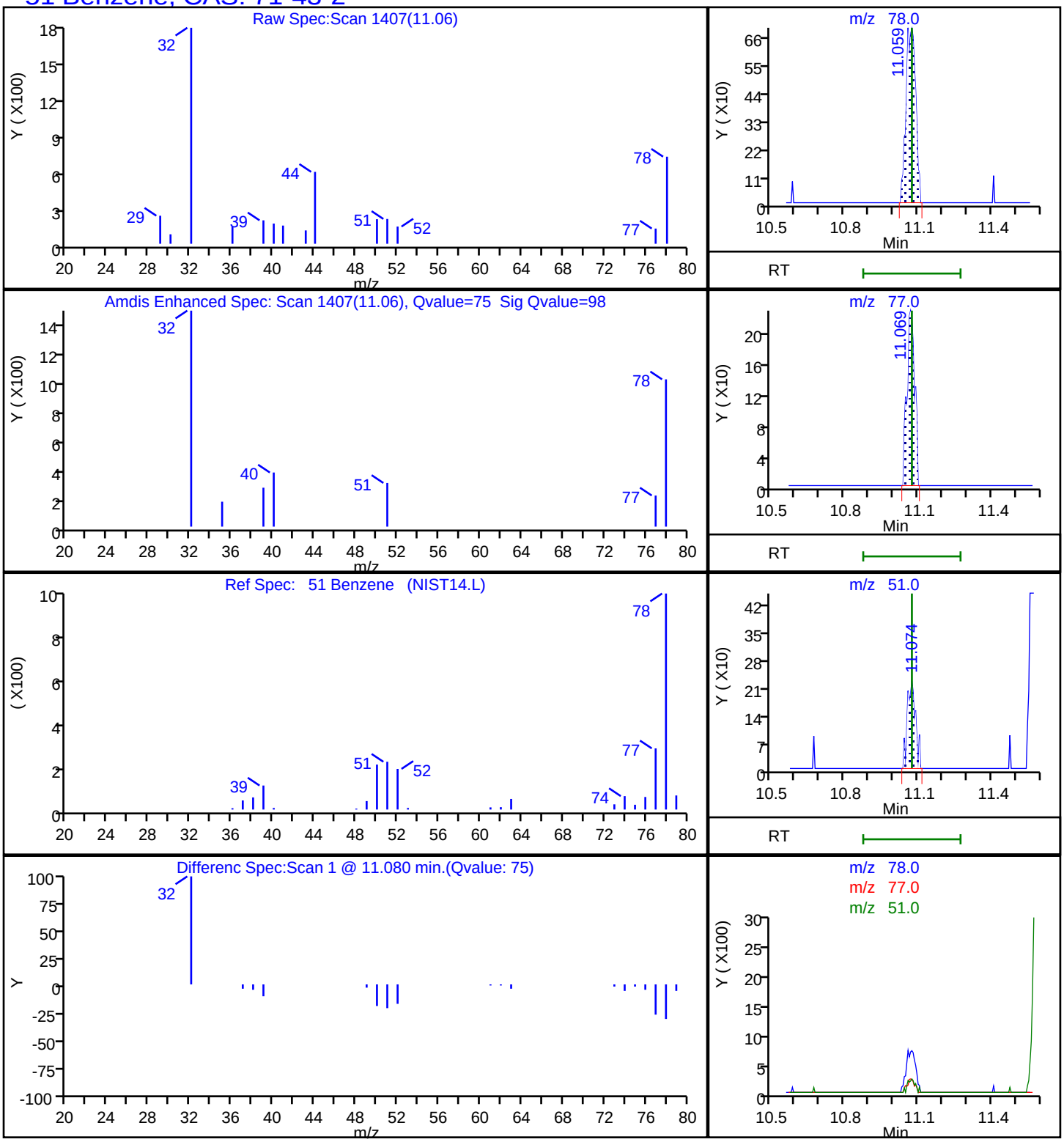
First Level Reviewer: khachitpongpanits Date: 04-Sep-2020 14:54:56

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	4.99	107.51

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P115.D				
Injection Date:	04-Sep-2020 02:50:30	Instrument ID:	MH		
Lims ID:	140-20175-A-6	Lab Sample ID:	140-20175-6		
Client ID:	SV-DUP1-C-29				
Operator ID:	HMT	ALS Bottle#:	15	Worklist Smp#:	19
Purge Vol:	500.000 mL	Dil. Factor:	3.6000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

51 Benzene, CAS: 71-43-2



Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P115.D

Injection Date: 04-Sep-2020 02:50:30 Instrument ID: MH

Lims ID: 140-20175-A-6 Lab Sample ID: 140-20175-6

Client ID: SV-DUP1-C-29

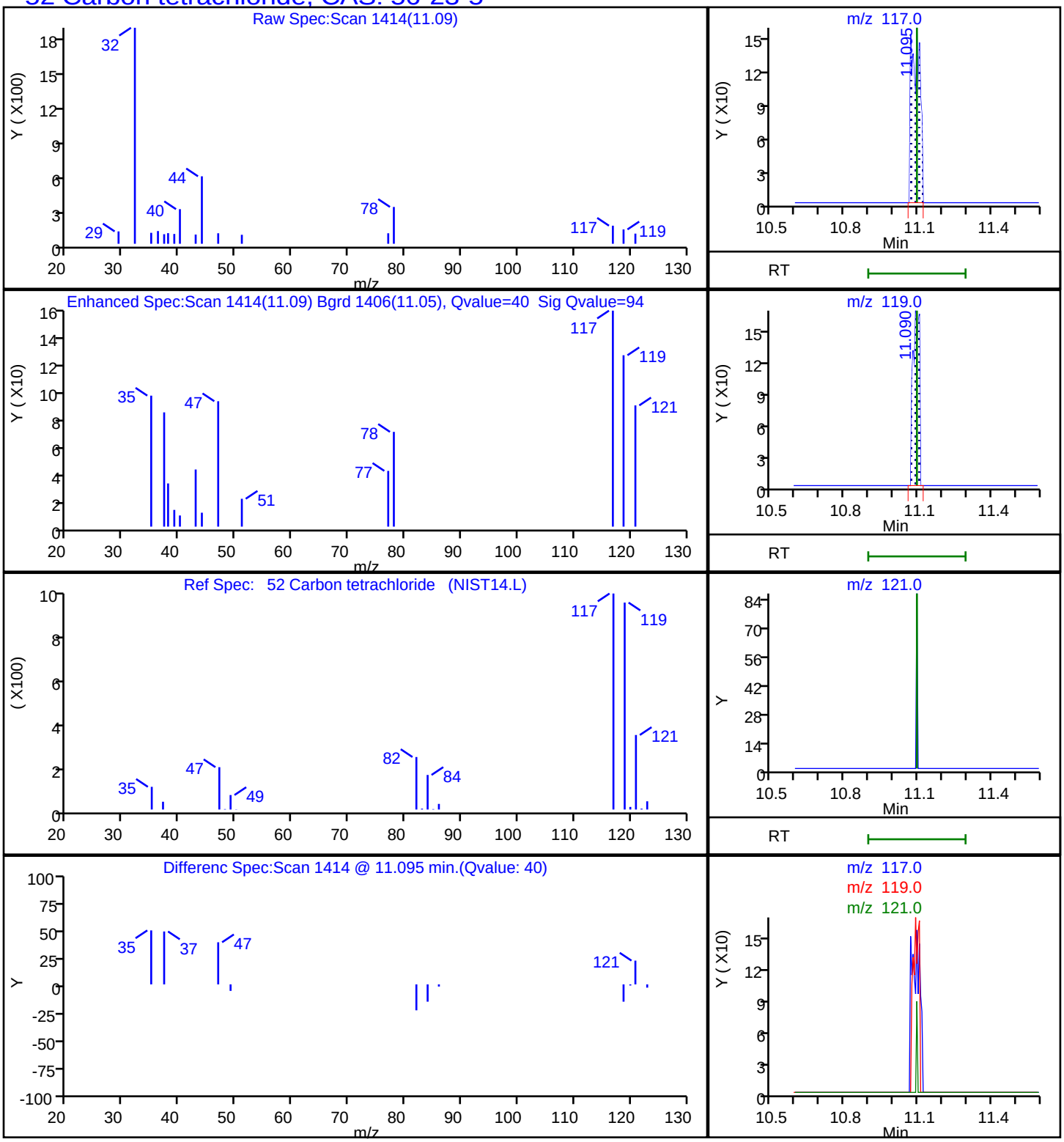
Operator ID: HMT ALS Bottle#: 15 Worklist Smp#: 19

Purge Vol: 500.000 mL Dil. Factor: 3.6000

Method: MH_TO15 Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm) Detector MS SCAN

52 Carbon tetrachloride, CAS: 56-23-5



Eurofins TestAmerica, Knoxville

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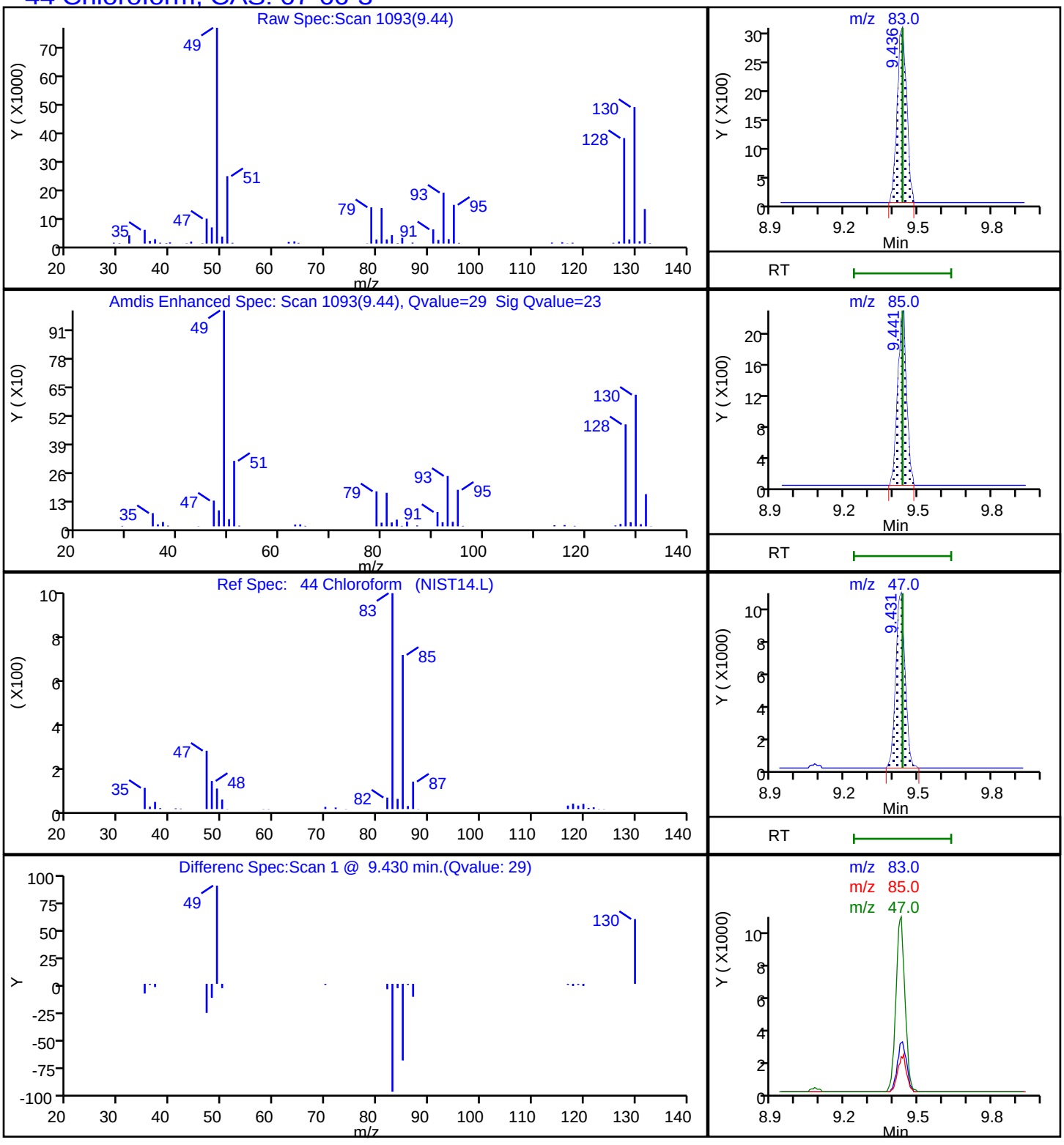
Lims ID:	140-20175-A-6	Lab Sample ID:	140-20175-6		
Client ID:	SV-DUP1-C-29				
Operator ID:	HMT	ALS Bottle#:	15	Worklist Smp#:	19
Purge Vol:	500.000 mL	Dil. Factor:	3.6000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

44 Chloroform, CAS: 67-66-3



Eurofins TestAmerica, Knoxville

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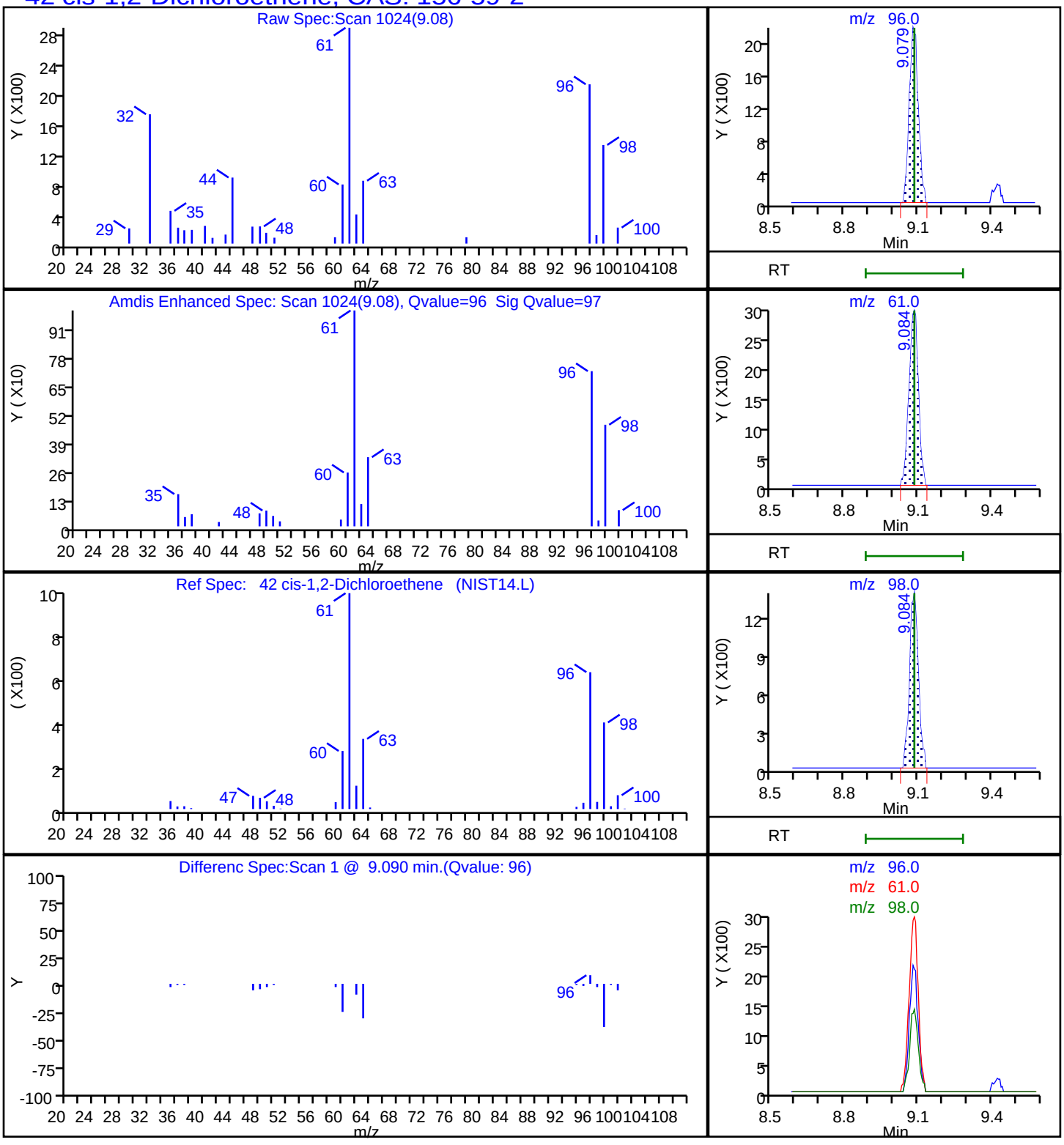
Lims ID:	140-20175-A-6	Lab Sample ID:	140-20175-6		
Client ID:	SV-DUP1-C-29				
Operator ID:	HMT	ALS Bottle#:	15	Worklist Smp#:	19
Purge Vol:	500.000 mL	Dil. Factor:	3.6000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

42 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P115.D		
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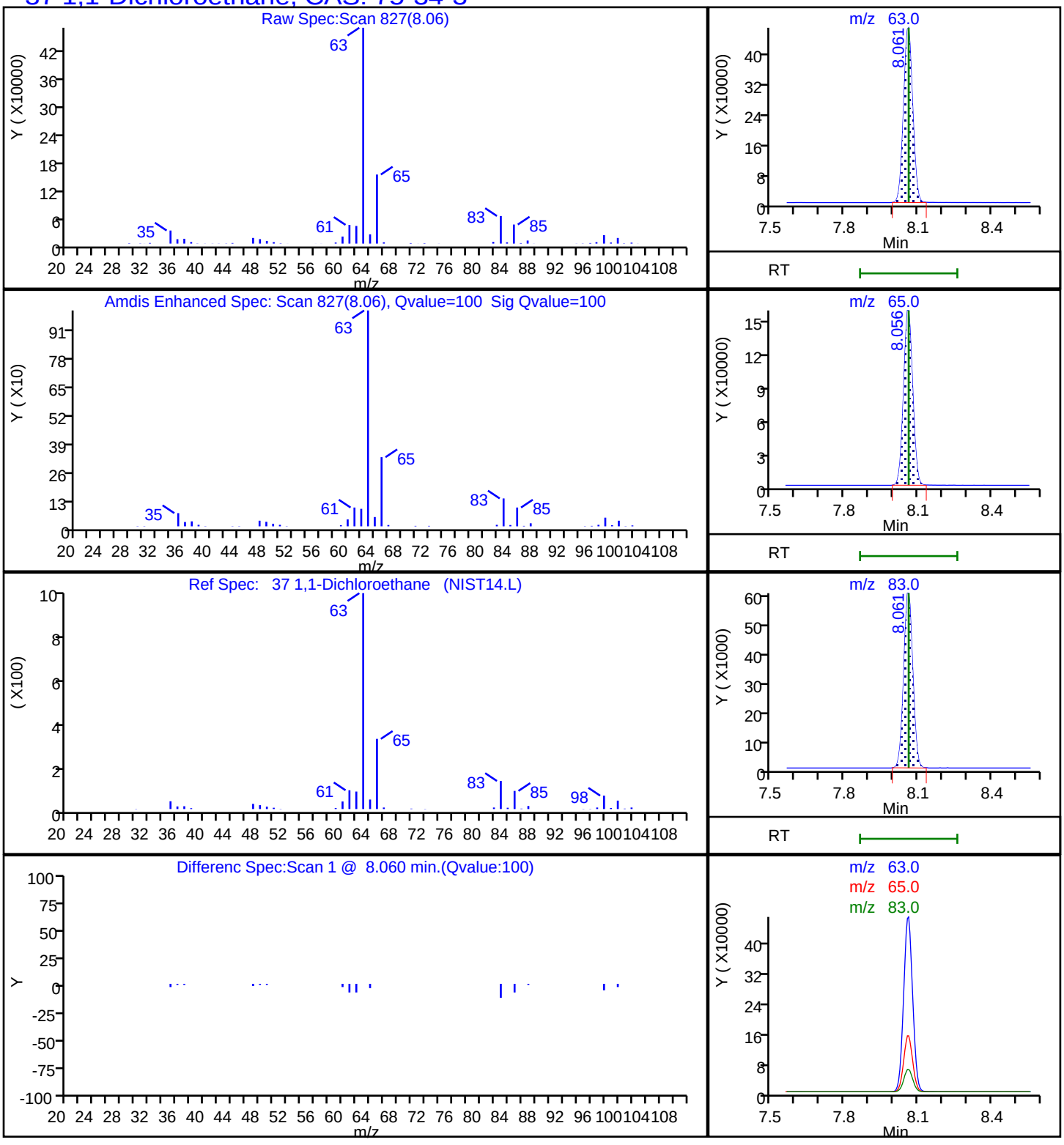
Lims ID:	140-20175-A-6	Lab Sample ID:	140-20175-6
Client ID:	SV-DUP1-C-29		
Operator ID:	HMT	ALS Bottle#:	15 Worklist Smp#: 19
Purge Vol:	500.000 mL	Dil. Factor:	3.6000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

37 1,1-Dichloroethane, CAS: 75-34-3



Report Date: 04-Sep-2020 14:54:57 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P115.D				
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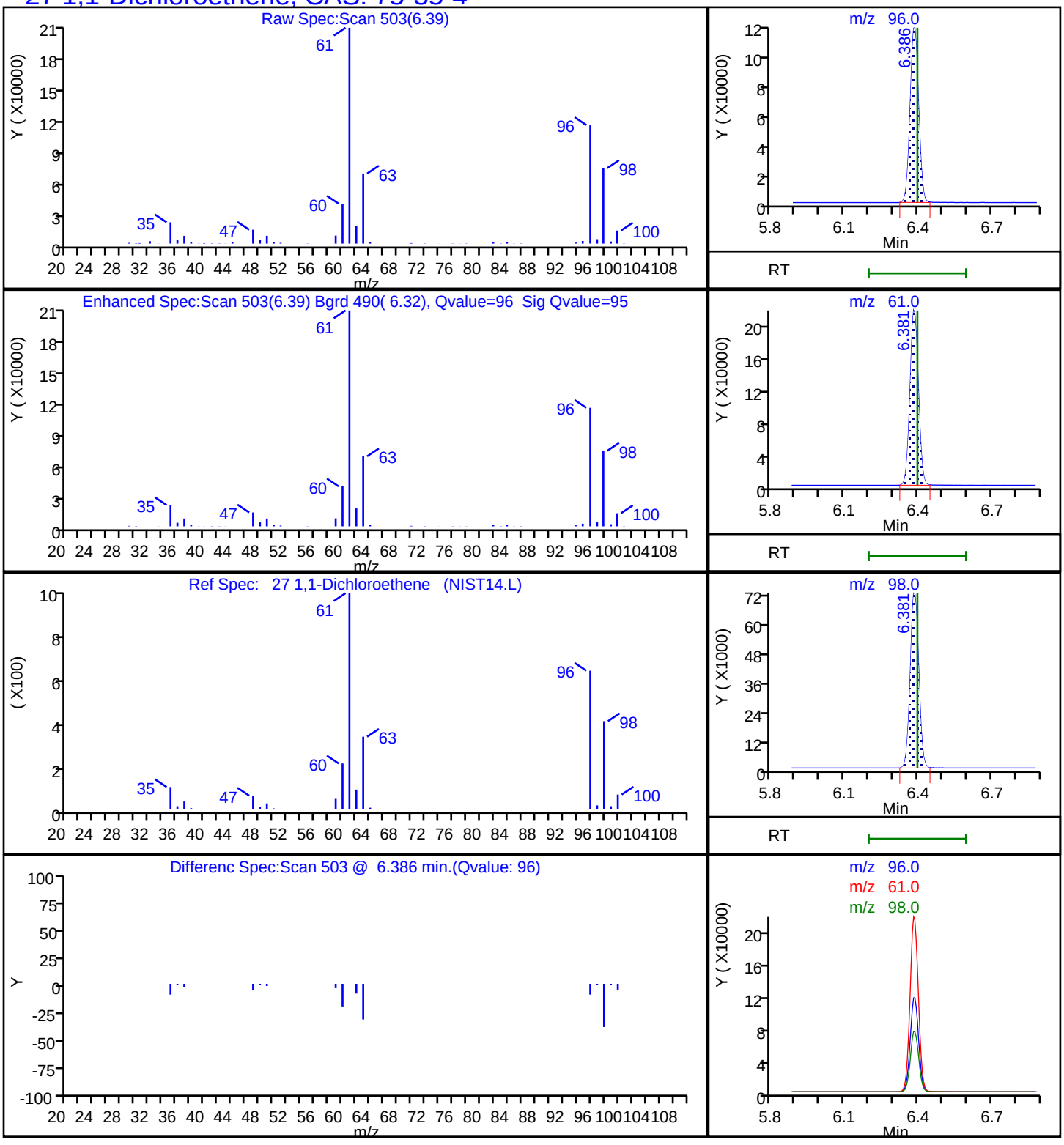
Lims ID:	140-20175-A-6	Lab Sample ID:	140-20175-6		
Client ID:	SV-DUP1-C-29				
Operator ID:	HMT	ALS Bottle#:	15	Worklist Smp#:	19
Purge Vol:	500.000 mL	Dil. Factor:	3.6000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

27 1,1-Dichloroethene, CAS: 75-35-4



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P115.D				
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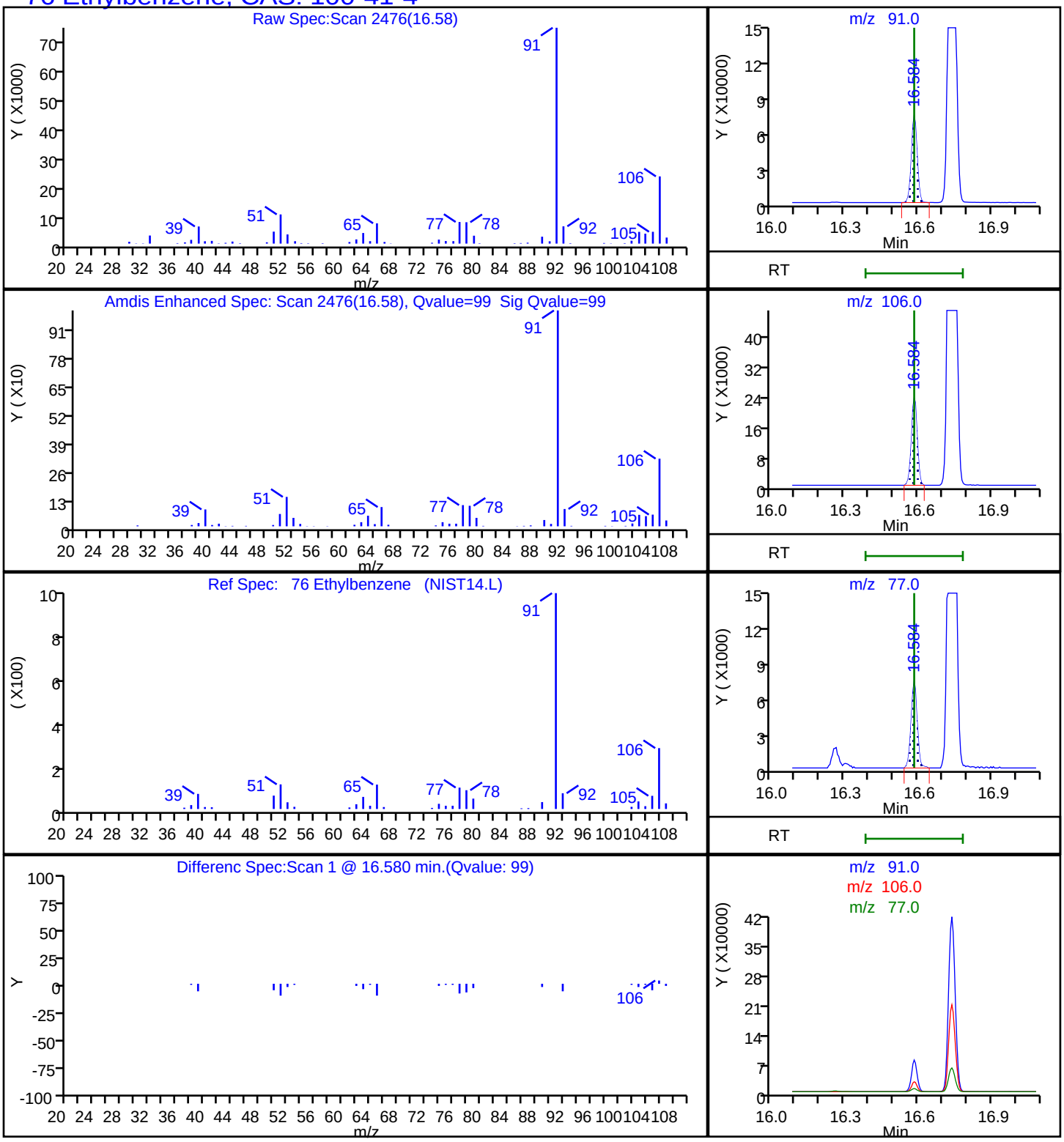
Lims ID:	140-20175-A-6	Lab Sample ID:	140-20175-6		
Client ID:	SV-DUP1-C-29				
Operator ID:	HMT	ALS Bottle#:	15	Worklist Smp#:	19
Purge Vol:	500.000 mL	Dil. Factor:	3.6000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

76 Ethylbenzene, CAS: 100-41-4

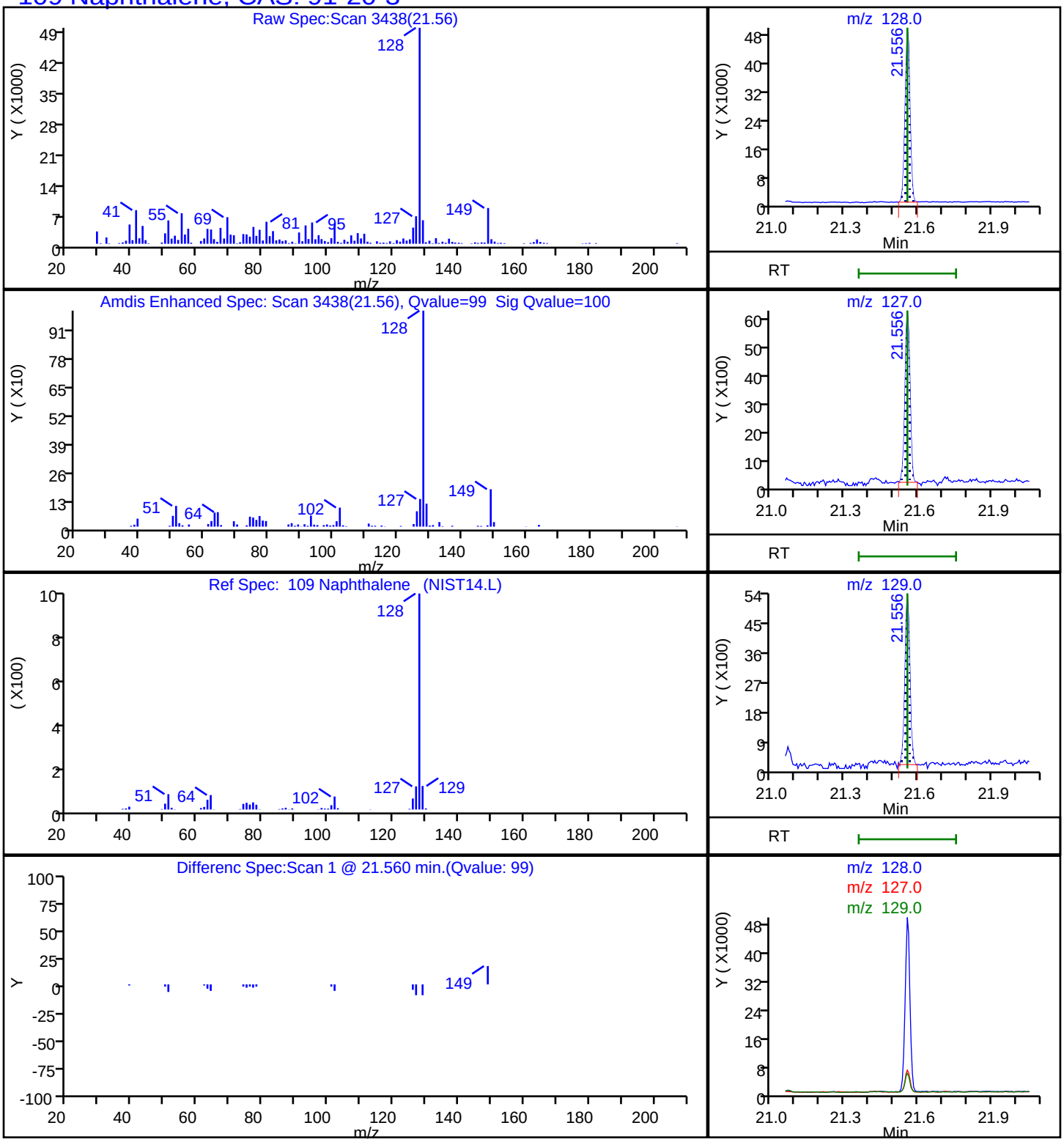


Report Date: 04-Sep-2020 14:54:57 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P115.D		
Injection Date:	04-Sep-2020 02:50:30	Instrument ID:	MH
Lims ID:	140-20175-A-6	Lab Sample ID:	140-20175-6
Client ID:	SV-DUP1-C-29		
Operator ID:	HMT	ALS Bottle#:	15 Worklist Smp#: 19
Purge Vol:	500.000 mL	Dil. Factor:	3.6000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

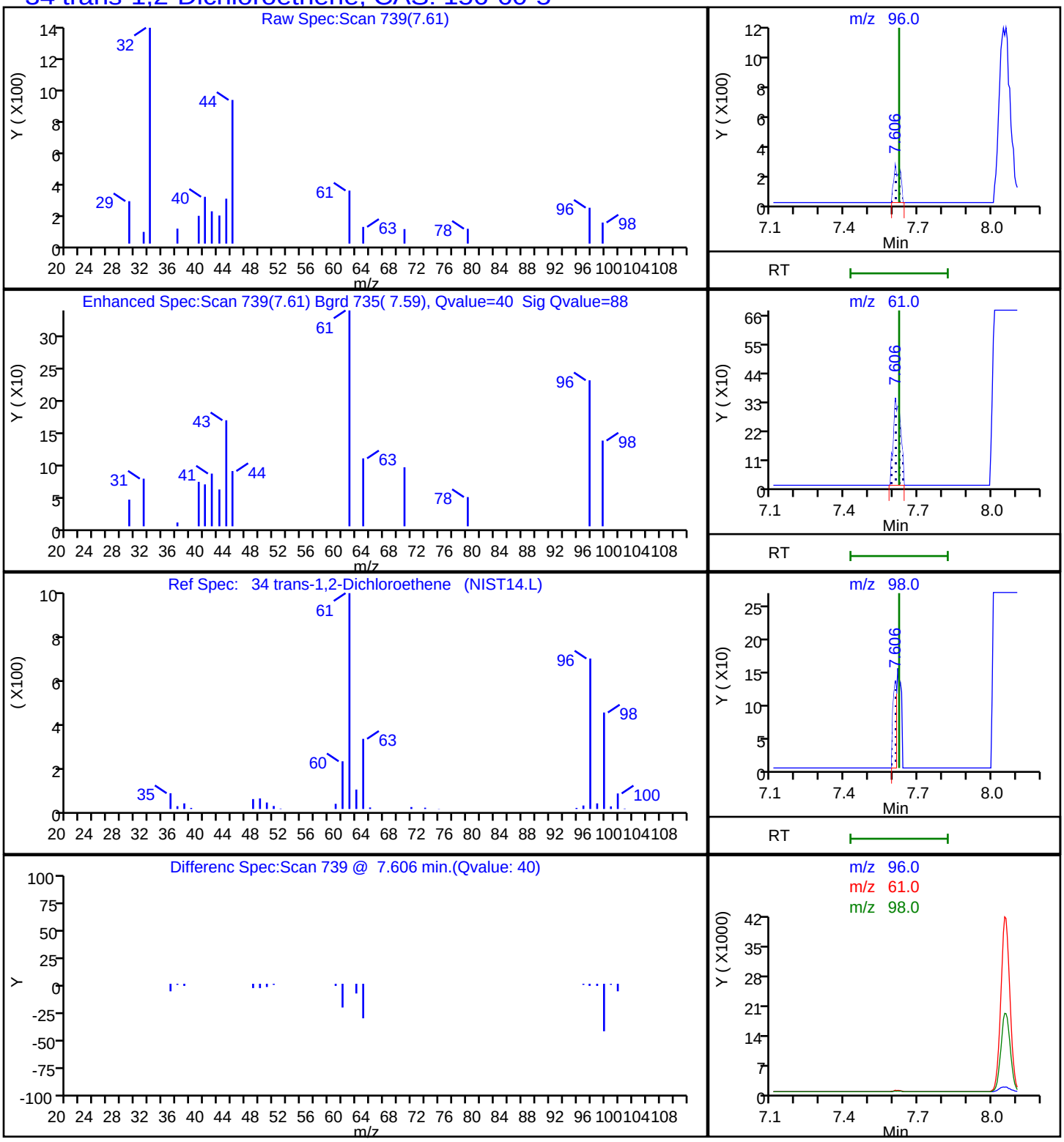
109 Naphthalene, CAS: 91-20-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P115.D				
Injection Date:	04-Sep-2020 02:50:30	Instrument ID:	MH		
Lims ID:	140-20175-A-6	Lab Sample ID:	140-20175-6		
Client ID:	SV-DUP1-C-29				
Operator ID:	HMT	ALS Bottle#:	15	Worklist Smp#:	19
Purge Vol:	500.000 mL	Dil. Factor:	3.6000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

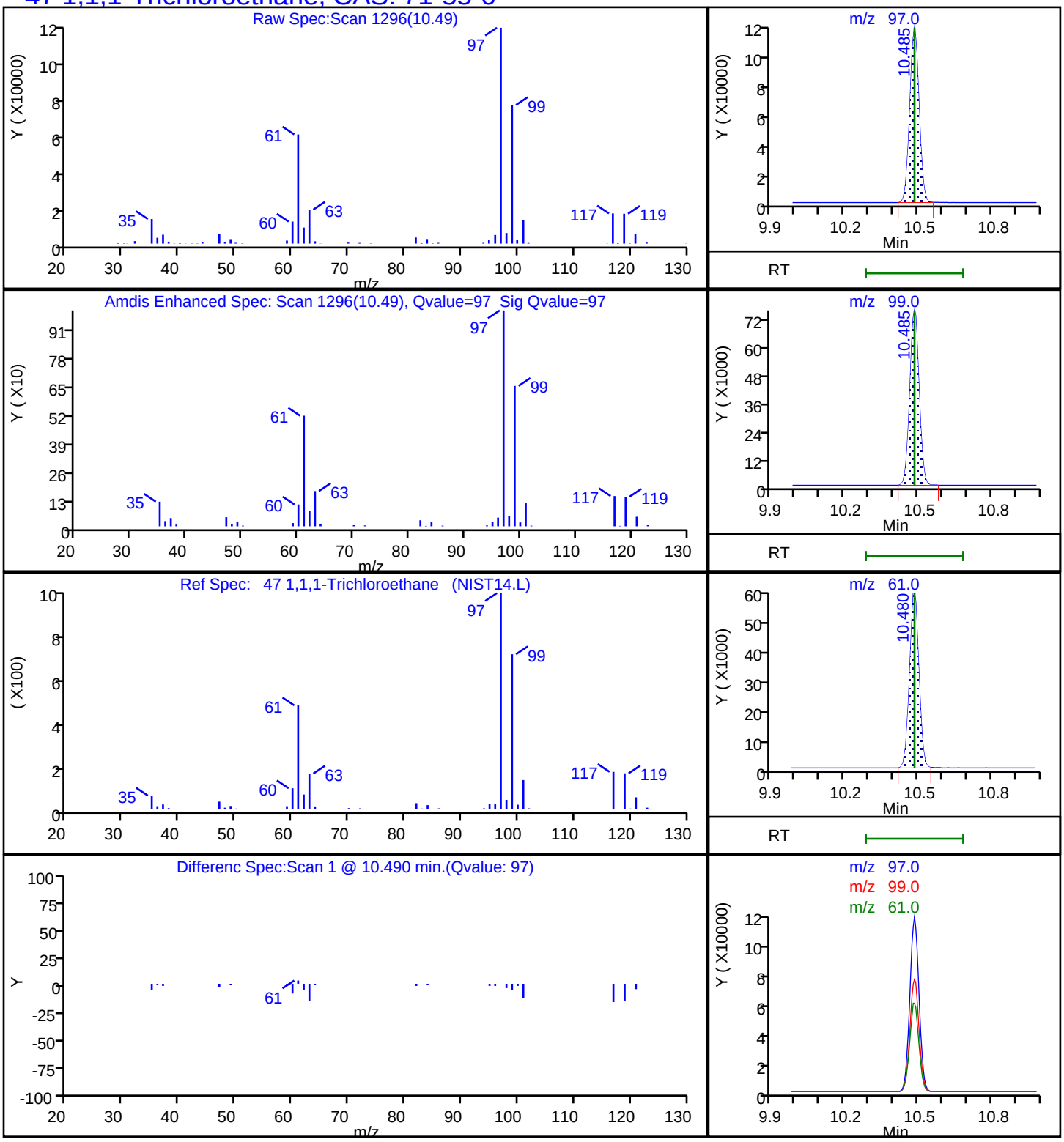
34 trans-1,2-Dichloroethene, CAS: 156-60-5



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P115.D				
Injection Date:	04-Sep-2020 02:50:30	Instrument ID:	MH		
Lims ID:	140-20175-A-6	Lab Sample ID:	140-20175-6		
Client ID:	SV-DUP1-C-29				
Operator ID:	HMT	ALS Bottle#:	15	Worklist Smp#:	19
Purge Vol:	500.000 mL	Dil. Factor:	3.6000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

47 1,1,1-Trichloroethane, CAS: 71-55-6



Report Date: 04-Sep-2020 14:54:57 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P115.D

Injection Date: 04-Sep-2020 02:50:30 Instrument ID: MH

Lims ID: 140-20175-A-6 Lab Sample ID: 140-20175-6

Client ID: SV-DUP1-C-29

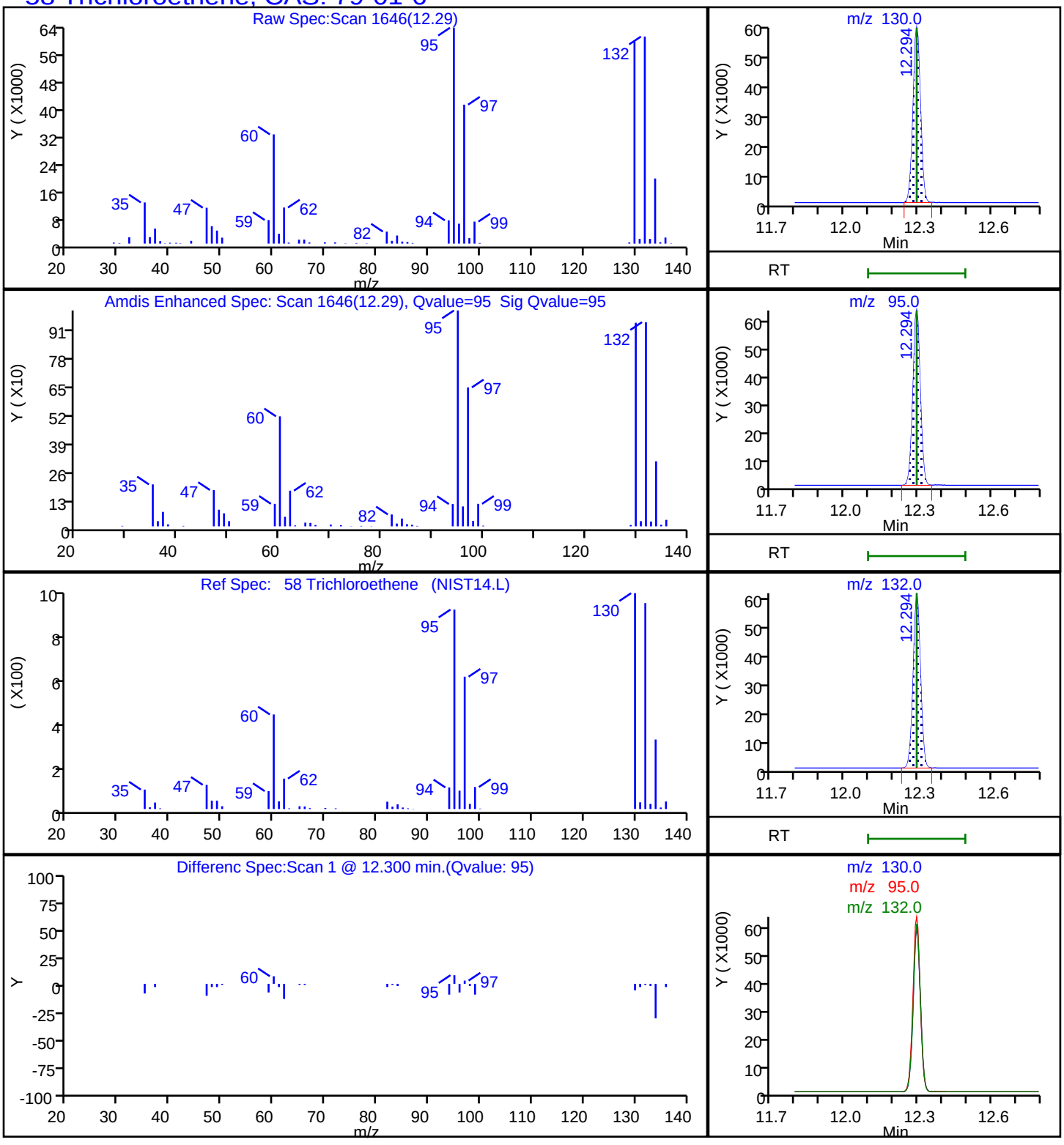
Operator ID: HMT ALS Bottle#: 15 Worklist Smp#: 19

Purge Vol: 500.000 mL Dil. Factor: 3.6000

Method: MH_TO15 Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm) Detector MS SCAN

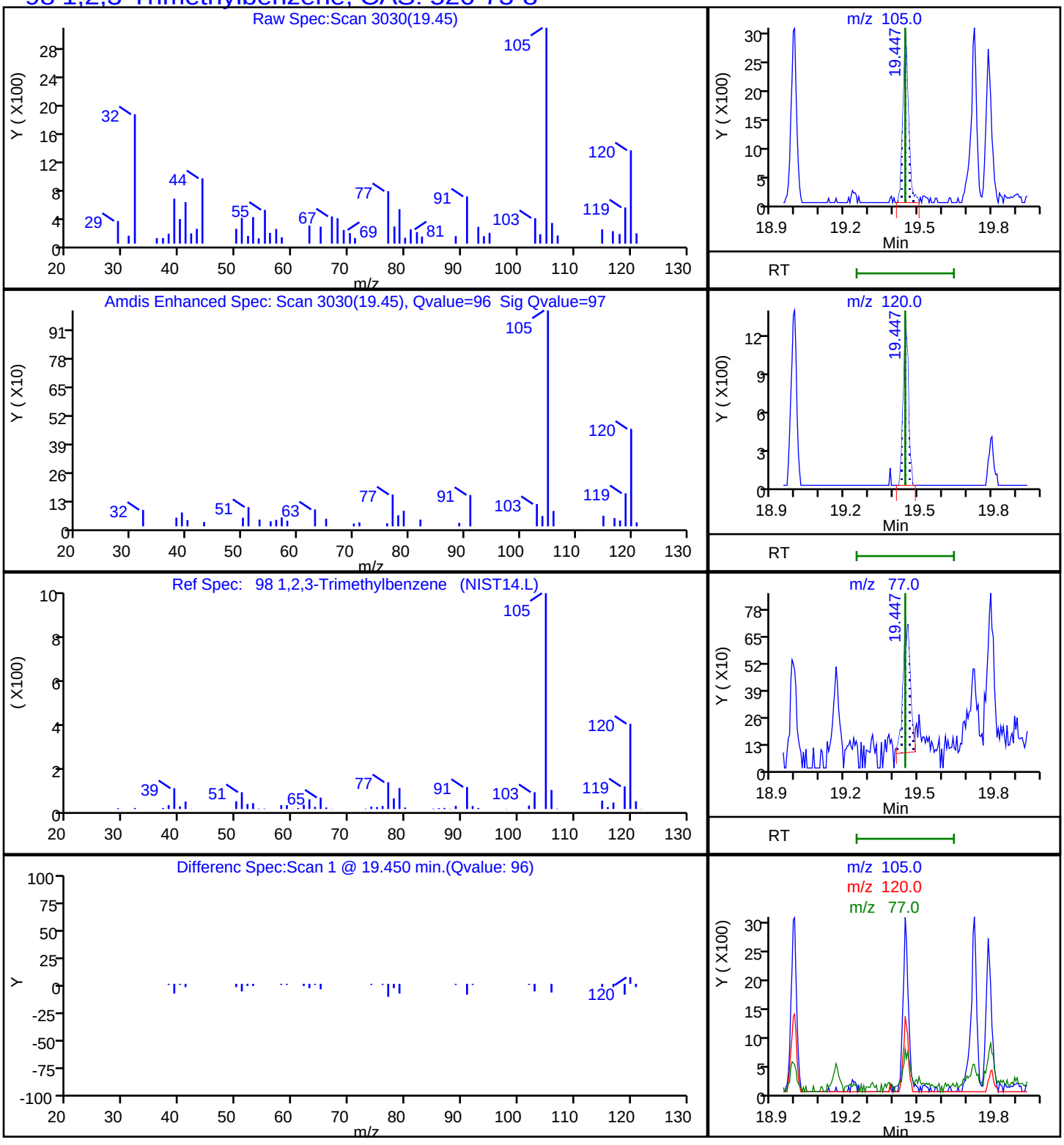
58 Trichloroethene, CAS: 79-01-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P115.D		
Injection Date:	04-Sep-2020 02:50:30	Instrument ID:	MH
Lims ID:	140-20175-A-6	Lab Sample ID:	140-20175-6
Client ID:	SV-DUP1-C-29		
Operator ID:	HMT	ALS Bottle#:	15 Worklist Smp#: 19
Purge Vol:	500.000 mL	Dil. Factor:	3.6000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

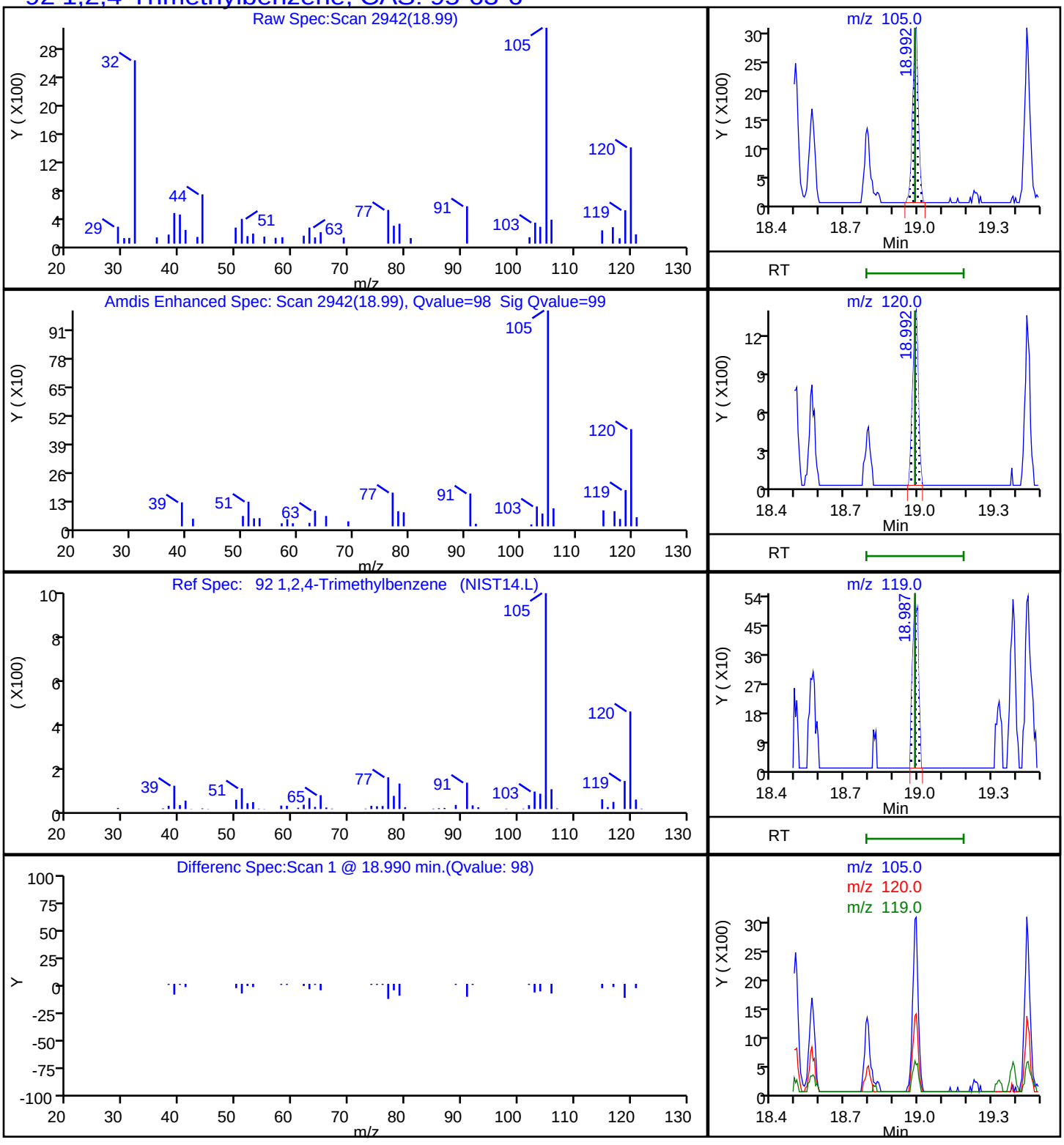
98 1,2,3-Trimethylbenzene, CAS: 526-73-8



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P115.D				
Injection Date:	04-Sep-2020 02:50:30	Instrument ID:	MH		
Lims ID:	140-20175-A-6	Lab Sample ID:	140-20175-6		
Client ID:	SV-DUP1-C-29				
Operator ID:	HMT	ALS Bottle#:	15	Worklist Smp#:	19
Purge Vol:	500.000 mL	Dil. Factor:	3.6000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

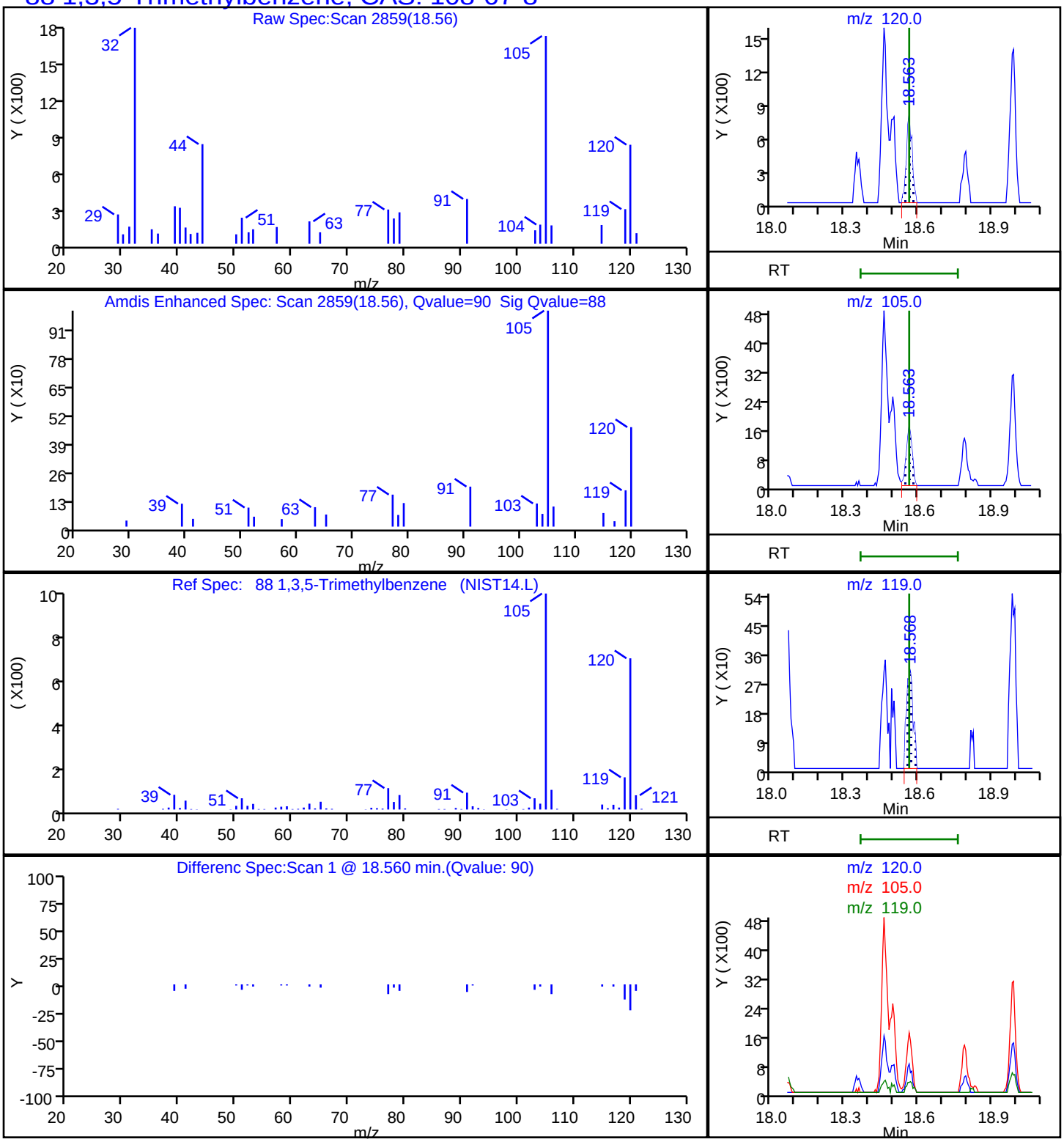
92 1,2,4-Trimethylbenzene, CAS: 95-63-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P115.D		
Injection Date:	04-Sep-2020 02:50:30	Instrument ID:	MH
Lims ID:	140-20175-A-6	Lab Sample ID:	140-20175-6
Client ID:	SV-DUP1-C-29		
Operator ID:	HMT	ALS Bottle#:	15 Worklist Smp#: 19
Purge Vol:	500.000 mL	Dil. Factor:	3.6000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

88 1,3,5-Trimethylbenzene, CAS: 108-67-8



Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P115.D

Injection Date: 04-Sep-2020 02:50:30 Instrument ID: MH

Lims ID: 140-20175-A-6 Lab Sample ID: 140-20175-6

Client ID: SV-DUP1-C-29

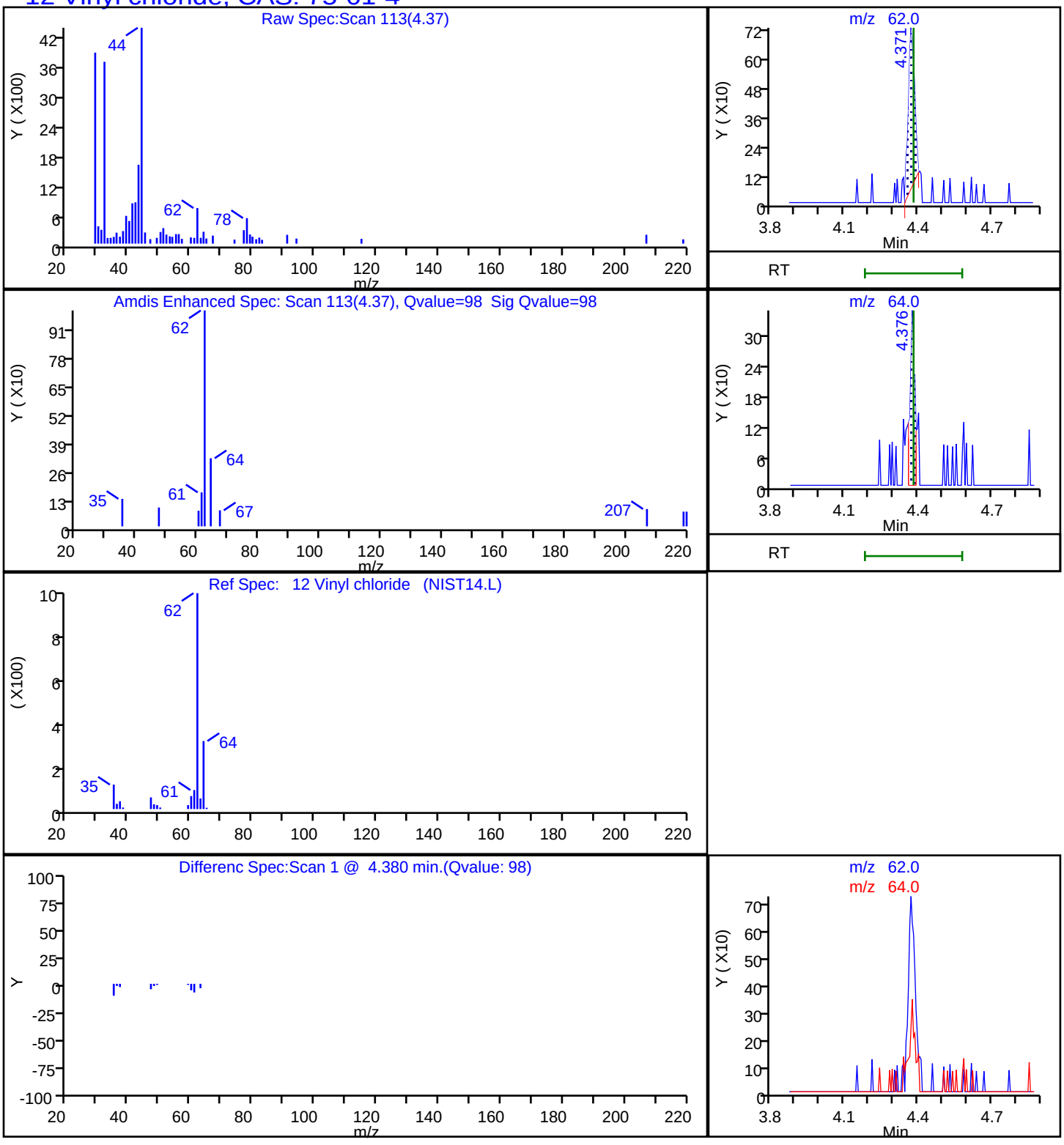
Operator ID: HMT ALS Bottle#: 15 Worklist Smp#: 19

Purge Vol: 500.000 mL Dil. Factor: 3.6000

Method: MH_TO15 Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm) Detector MS SCAN

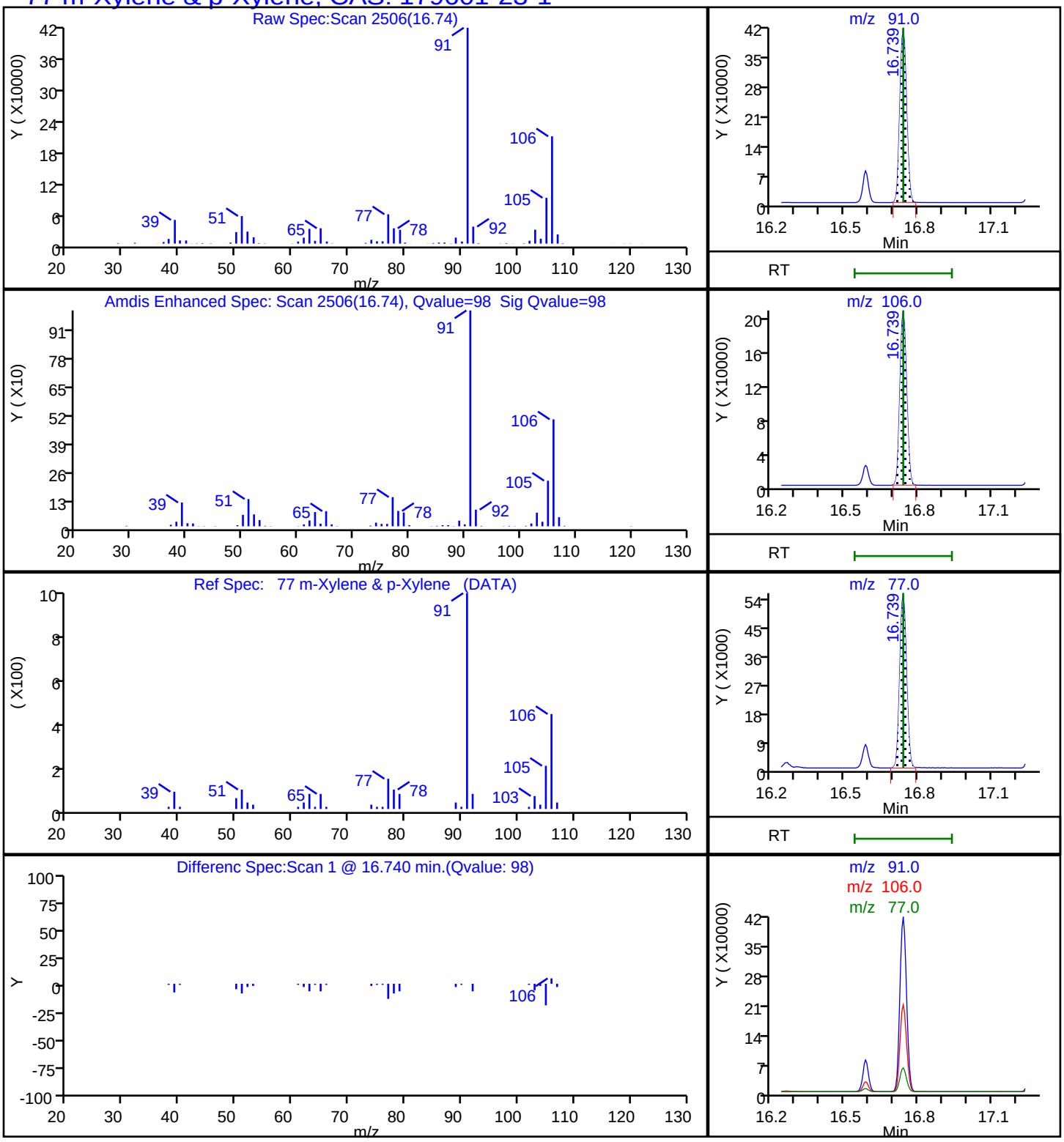
12 Vinyl chloride, CAS: 75-01-4



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P115.D				
Injection Date:	04-Sep-2020 02:50:30	Instrument ID:	MH		
Lims ID:	140-20175-A-6	Lab Sample ID:	140-20175-6		
Client ID:	SV-DUP1-C-29				
Operator ID:	HMT	ALS Bottle#:	15	Worklist Smp#:	19
Purge Vol:	500.000 mL	Dil. Factor:	3.6000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

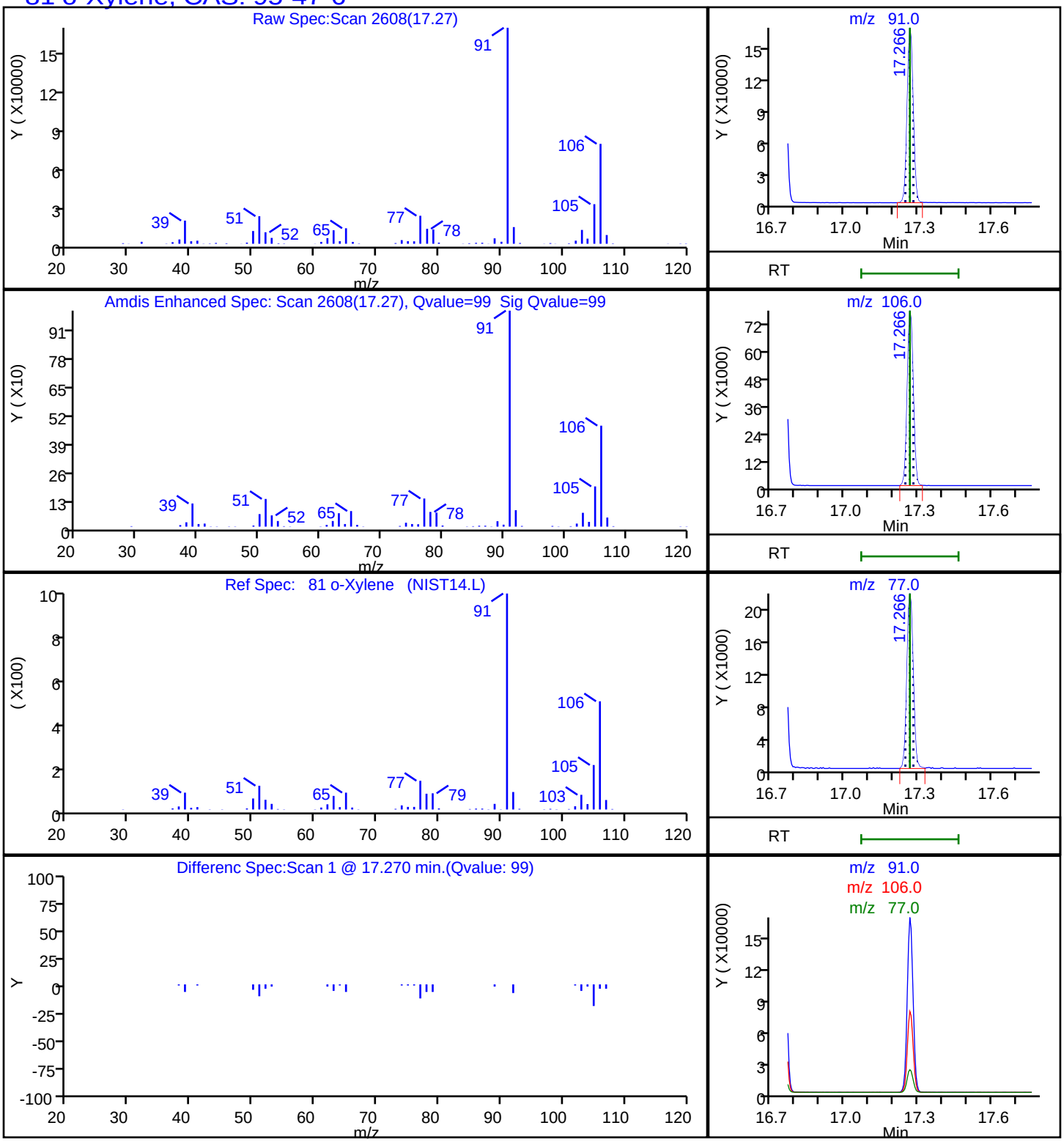
77 m-Xylene & p-Xylene, CAS: 179601-23-1



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P115.D		
Injection Date:	04-Sep-2020 02:50:30	Instrument ID:	MH
Lims ID:	140-20175-A-6	Lab Sample ID:	140-20175-6
Client ID:	SV-DUP1-C-29		
Operator ID:	HMT	ALS Bottle#:	15 Worklist Smp#: 19
Purge Vol:	500.000 mL	Dil. Factor:	3.6000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

81 o-Xylene, CAS: 95-47-6



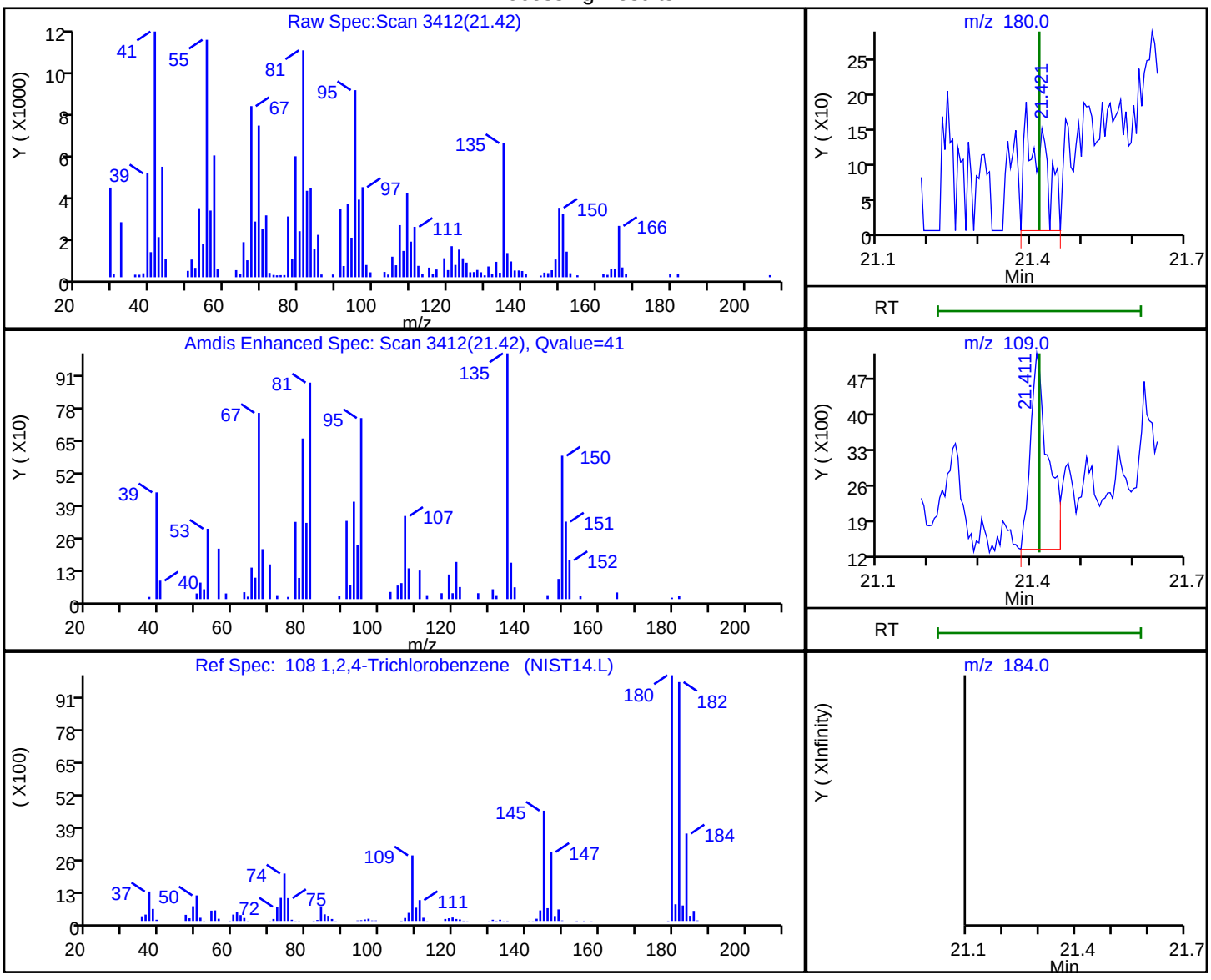
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P115.D				
Injection Date:	04-Sep-2020 02:50:30	Instrument ID:	MH		
Lims ID:	140-20175-A-6	Lab Sample ID:	140-20175-6		
Client ID:	SV-DUP1-C-29				
Operator ID:	HMT	ALS Bottle#:	15	Worklist Smp#:	19
Purge Vol:	500.000 mL	Dil. Factor:	3.6000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

108 1,2,4-Trichlorobenzene, CAS: 120-82-1

Processing Results



RT	Mass	Response	Amount
21.42	180.00	457	0.097774
21.41	109.00	9023	
21.42	184.00	0	

Reviewer: khachitpongpanits, 04-Sep-2020 14:54:50

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: SV-DUP1-C-29 DL Lab Sample ID: 140-20175-6 DL

Matrix: Air Lab File ID: GI08P103.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 00:00

Sample wt/vol: 11(mL) Date Analyzed: 09/08/2020 18:49

Soil Aliquot Vol: Dilution Factor: 3.6

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42503 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
75-34-3	1,1-Dichloroethane	98.96	1500		13	1.1

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	98		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: SV-DUP1-C-29 DL Lab Sample ID: 140-20175-6 DL

Matrix: Air Lab File ID: GI08P103.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 00:00

Sample wt/vol: 11(mL) Date Analyzed: 09/08/2020 18:49

Soil Aliquot Vol: Dilution Factor: 3.6

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42503 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
75-34-3	1,1-Dichloroethane	98.96	6000		53	4.6

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	98		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P103.D
Lims ID: 140-20175-A-6
Client ID: SV-DUP1-C-29
Sample Type: Client
Inject. Date: 08-Sep-2020 18:49:30 ALS Bottle#: 3 Worklist Smp#: 8
Purge Vol: 500.000 mL Dil. Factor: 3.6000
Sample Info: 140-0016519-008
Misc. Info.: 140-20175-a-6@3.60
Operator ID: HMT Instrument ID: MG

Method: \\chromfs\Knoxville\ChromData\MG\20200904-16519.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 09-Sep-2020 14:03:43 Calib Date: 02-Sep-2020 03:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1034

First Level Reviewer: barlozhetskayaa Date: 09-Sep-2020 14:03:43

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.806	8.806	0.000	85	89902	4.80	
* 2 1,4-Difluorobenzene	114	10.990	10.990	0.000	98	481249	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.724	15.724	0.000	96	466074	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.369	17.369	0.000	80	331313	4.53	
27 1,1-Dichloroethene	96	5.926	5.921	0.005	89	108928	4.92	
37 1,1-Dichloroethane	63	7.495	7.495	0.000	98	588610	9.05	
42 cis-1,2-Dichloroethene	96	8.472	8.482	-0.010	90	2159	0.0779	
44 Chloroform	83	8.822	8.817	0.005	27	2841	0.0451	
47 1,1,1-Trichloroethane	97	9.852	9.852	0.000	92	127482	2.10	
50 Benzene	78	10.451	10.445	0.005	0	939	0.009492	
58 Trichloroethene	130	11.707	11.702	0.005	89	47329	1.10	
78 Ethylbenzene	91	16.059	16.064	-0.005	98	25033	0.1895	
79 m-Xylene & p-Xylene	91	16.226	16.231	-0.005	97	125298	1.20	
83 o-Xylene	91	16.754	16.754	0.000	98	47002	0.4444	
112 Naphthalene	128	21.090	21.090	0.000	97	27580	0.1568	
S 124 Xylenes, Total	100				0		1.64	

Reagents:

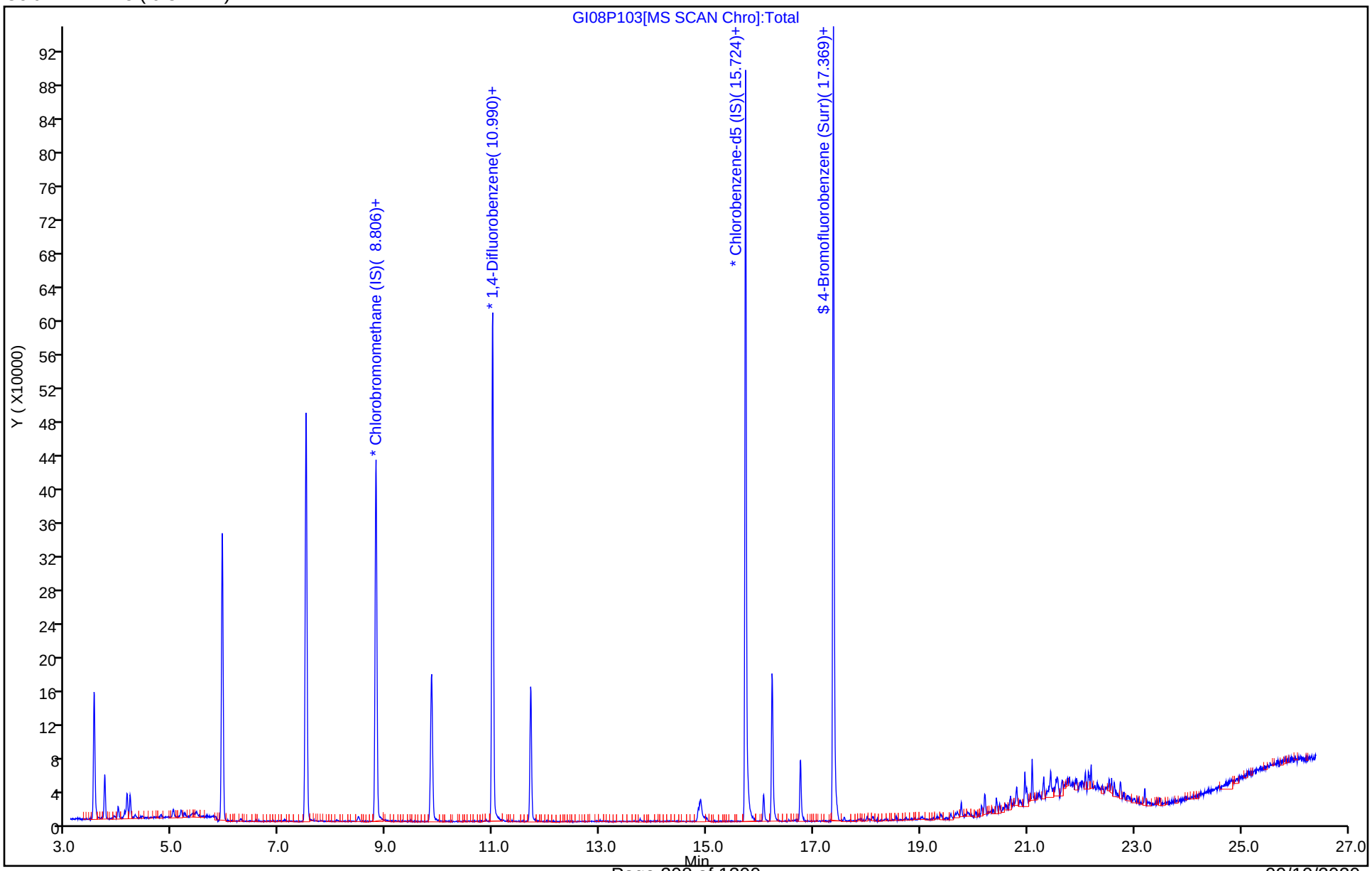
40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

Report Date: 09-Sep-2020 14:03:43 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P103.D				
Injection Date:	08-Sep-2020 18:49:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	140-20175-A-6	Lab Sample ID:	140-20175-6	Worklist Smp#:	8
Client ID:	SV-DUP1-C-29				
Purge Vol:	500.000 mL	Dil. Factor:	3.6000	ALS Bottle#:	3
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P103.D				
Lims ID:	140-20175-A-6				
Client ID:	SV-DUP1-C-29				
Sample Type:	Client				
Inject. Date:	08-Sep-2020 18:49:30	ALS Bottle#:	3	Worklist Smp#:	8
Purge Vol:	500.000 mL	Dil. Factor:	3.6000		
Sample Info:	140-0016519-008				
Misc. Info.:	140-20175-a-6@3.60				
Operator ID:	HMT	Instrument ID:	MG		
Method:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\MG_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	09-Sep-2020 14:03:43	Calib Date:	02-Sep-2020 03:27:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1034				

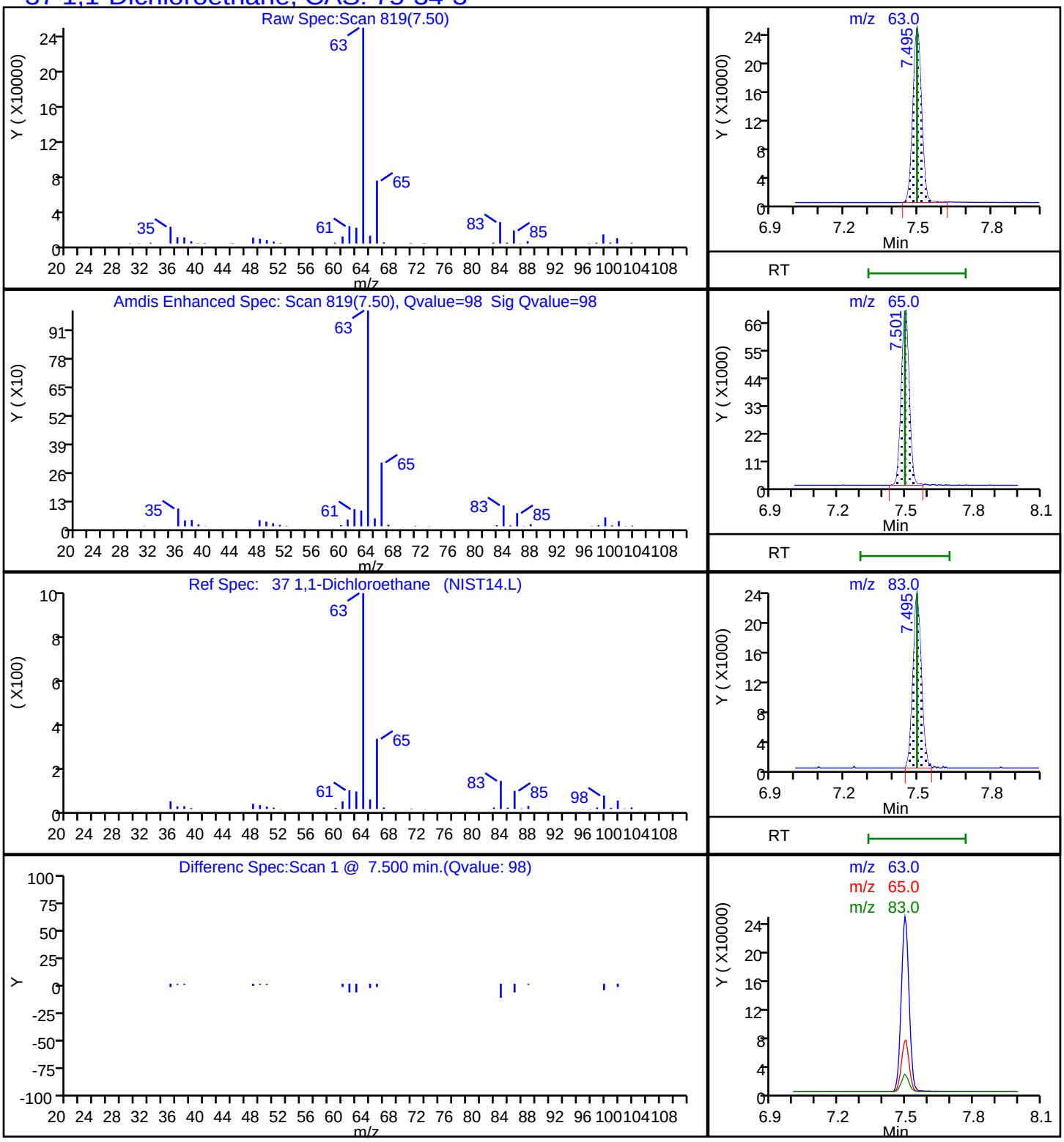
First Level Reviewer: barlozhetskayaa Date: 09-Sep-2020 14:03:43

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	4.53	97.63

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P103.D		
Injection Date:	08-Sep-2020 18:49:30	Instrument ID:	MG
Lims ID:	140-20175-A-6	Lab Sample ID:	140-20175-6
Client ID:	SV-DUP1-C-29		
Operator ID:	HMT	ALS Bottle#:	3 Worklist Smp#: 8
Purge Vol:	500.000 mL	Dil. Factor:	3.6000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

37 1,1-Dichloroethane, CAS: 75-34-3



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: SV-142-C-29 Lab Sample ID: 140-20175-7

Matrix: Air Lab File ID: HI03P116D.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 10:27

Sample wt/vol: 100(mL) Date Analyzed: 09/04/2020 04:41

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42399 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.075	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.089	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	0.93	CI	0.40	0.11
67-66-3	Chloroform	119.38	0.45		0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.49		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	1.1		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	0.40		0.40	0.040
100-41-4	Ethylbenzene	106.17	0.10	J	0.40	0.065
75-09-2	Methylene Chloride	84.93	3.0		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	0.23		0.20	0.20
127-18-4	Tetrachloroethene	165.83	0.16	J	0.40	0.035
108-88-3	Toluene	92.14	1.7		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	0.39	J	0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	2.0		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	0.27	J	0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.86		0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	96		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: SV-142-C-29 Lab Sample ID: 140-20175-7

Matrix: Air Lab File ID: HI03P116D.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 10:27

Sample wt/vol: 100(mL) Date Analyzed: 09/04/2020 04:41

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42399 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.24	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.56	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	3.3	CI	1.4	0.39
67-66-3	Chloroform	119.38	2.2		2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.4		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	4.3		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	1.6		1.6	0.16
100-41-4	Ethylbenzene	106.17	0.43	J	1.7	0.28
75-09-2	Methylene Chloride	84.93	10		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	1.2		1.0	1.0
127-18-4	Tetrachloroethene	165.83	1.1	J	2.7	0.24
108-88-3	Toluene	92.14	6.4		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	2.1	J	2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	11		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	1.3	J	2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	3.7		3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	96		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P116D.D
Lims ID: 140-20175-A-7
Client ID: SV-142-C-29
Sample Type: Client
Inject. Date: 04-Sep-2020 04:41:30 ALS Bottle#: 16 Worklist Smp#: 21
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016480-021
Misc. Info.: 140-20175-a-7
Operator ID: HMT Instrument ID: MH

Method: \\chromfs\Knoxville\ChromData\MH\20200902-16480.b\MH_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 04-Sep-2020 16:42:55 Calib Date: 29-Aug-2020 23:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1061

First Level Reviewer: khachitpongpanits Date: 04-Sep-2020 16:42:55

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.431	9.436	-0.005	98	113516	4.80	
* 2 1,4-Difluorobenzene	114	11.591	11.591	0.000	95	459567	4.80	
* 3 Chlorobenzene-d5 (IS)	117	16.258	16.258	0.000	88	293565	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.876	17.876	0.000	91	152154	4.46	
6 Chlorodifluoromethane	51	3.921	3.919	0.000	97	11770	0.1858	
8 Dichlorodifluoromethane	85	3.988	3.986	0.000	100	8472	0.0987	
27 1,1-Dichloroethene	96	6.397	6.393	0.000	96	2179	0.0792	
31 Methylene Chloride	84	6.764	6.760	0.000	96	16696	0.6000	
37 1,1-Dichloroethane	63	8.061	8.057	0.000	99	12038	0.2109	
44 Chloroform	83	9.441	9.431	0.005	29	6142	0.0891	
47 1,1,1-Trichloroethane	97	10.495	10.479	0.010	96	4817	0.0771	
51 Benzene	78	11.069	11.074	-0.005	93	1268	0.0150	
52 Carbon tetrachloride	117	11.100	11.095	0.005	84	929	0.0178	
58 Trichloroethene	130	12.299	12.294	0.005	96	15244	0.4018	
67 Toluene	91	14.309	14.310	-0.001	92	25591	0.3384	
73 Tetrachloroethene	129	15.436	15.436	0.000	90	1028	0.0324	
76 Ethylbenzene	91	16.584	16.584	0.000	96	1834	0.0200	
77 m-Xylene & p-Xylene	91	16.744	16.739	0.005	95	7699	0.1064	
81 o-Xylene	91	17.271	17.266	0.005	96	4948	0.0653	
88 1,3,5-Trimethylbenzene	120	18.568	18.568	0.005	1	293	0.0538	a
109 Naphthalene	128	21.556	21.555	0.000	97	3172	0.0459	
S 116 Xylenes, Total	100				0		0.1717	

QC Flag Legend

Review Flags
a - User Assigned ID

Reagents:

40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

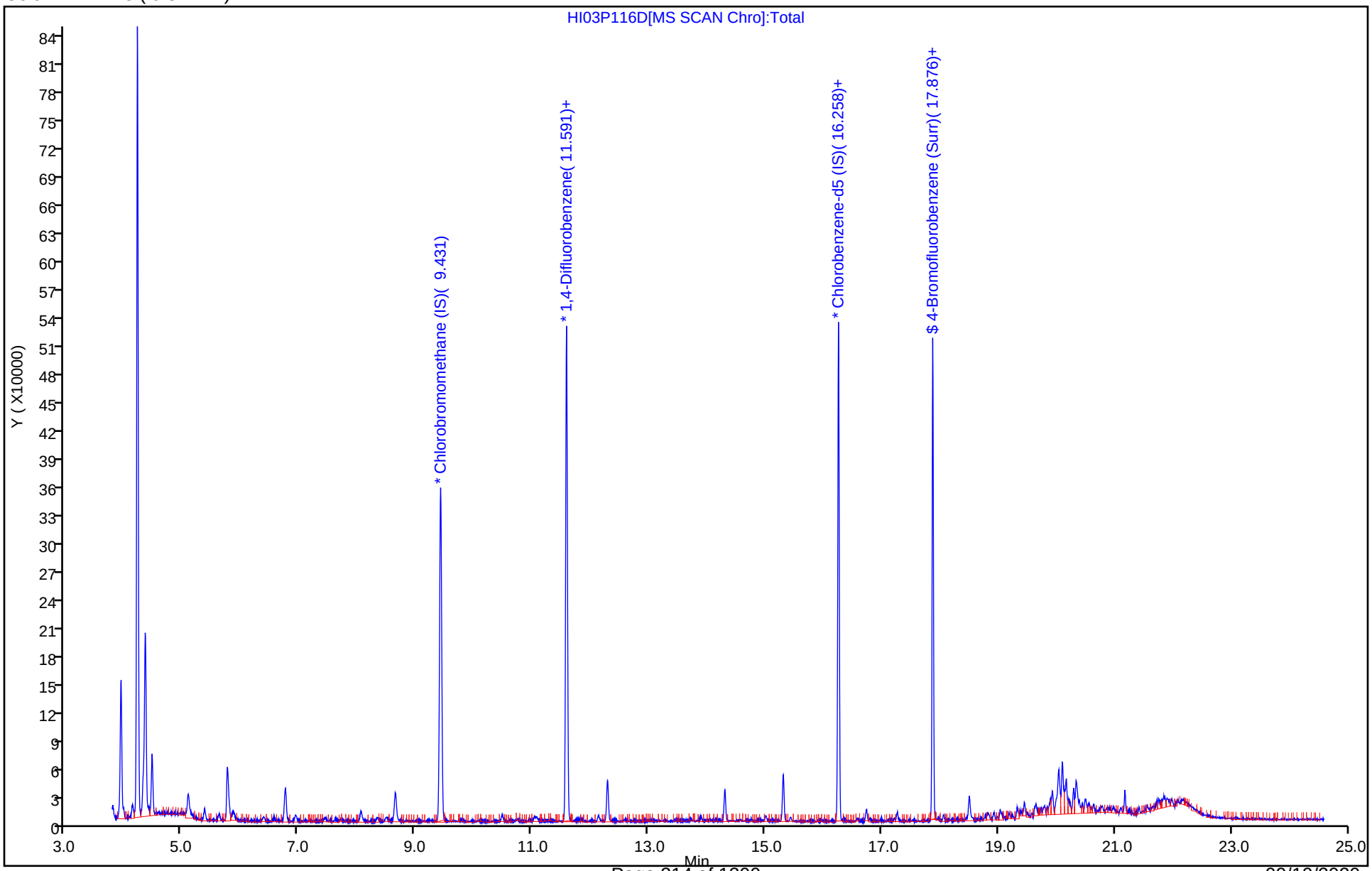
Report Date: 04-Sep-2020 16:42:56 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P116D.D

Injection Date:	04-Sep-2020 04:41:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	140-20175-A-7	Lab Sample ID:	140-20175-7	Worklist Smp#:	21
Client ID:	SV-142-C-29				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P116D.D				
Lims ID:	140-20175-A-7				
Client ID:	SV-142-C-29				
Sample Type:	Client				
Inject. Date:	04-Sep-2020 04:41:30	ALS Bottle#:	16	Worklist Smp#:	21
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016480-021				
Misc. Info.:	140-20175-a-7				
Operator ID:	HMT	Instrument ID:	MH		
Method:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\MH_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	04-Sep-2020 16:42:55	Calib Date:	29-Aug-2020 23:57:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1061				

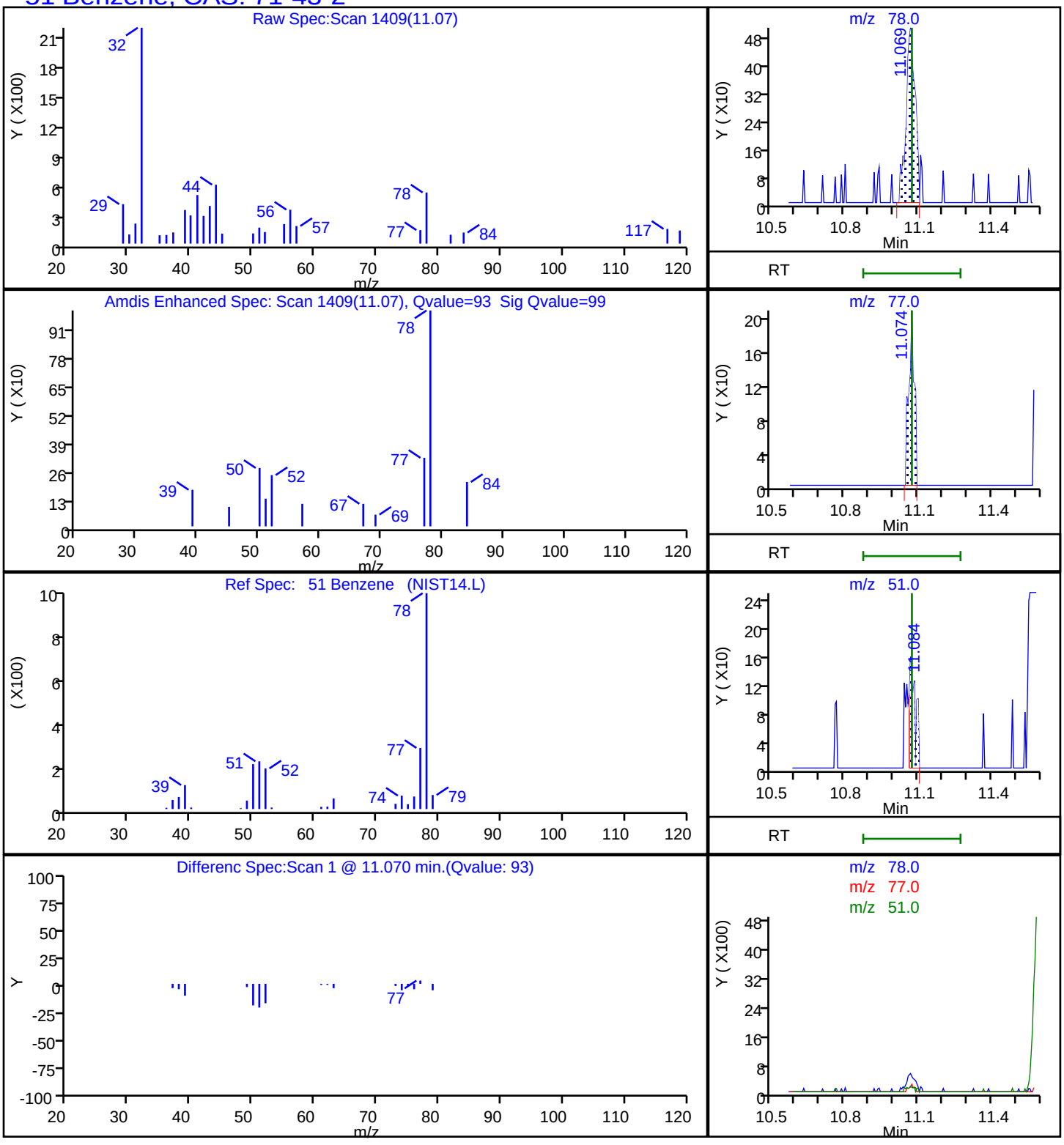
First Level Reviewer: khachitpongpanits Date: 04-Sep-2020 16:42:55

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	4.46	96.14

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P116D.D				
Injection Date:	04-Sep-2020 04:41:30	Instrument ID:	MH		
Lims ID:	140-20175-A-7	Lab Sample ID:	140-20175-7		
Client ID:	SV-142-C-29				
Operator ID:	HMT	ALS Bottle#:	16	Worklist Smp#:	21
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

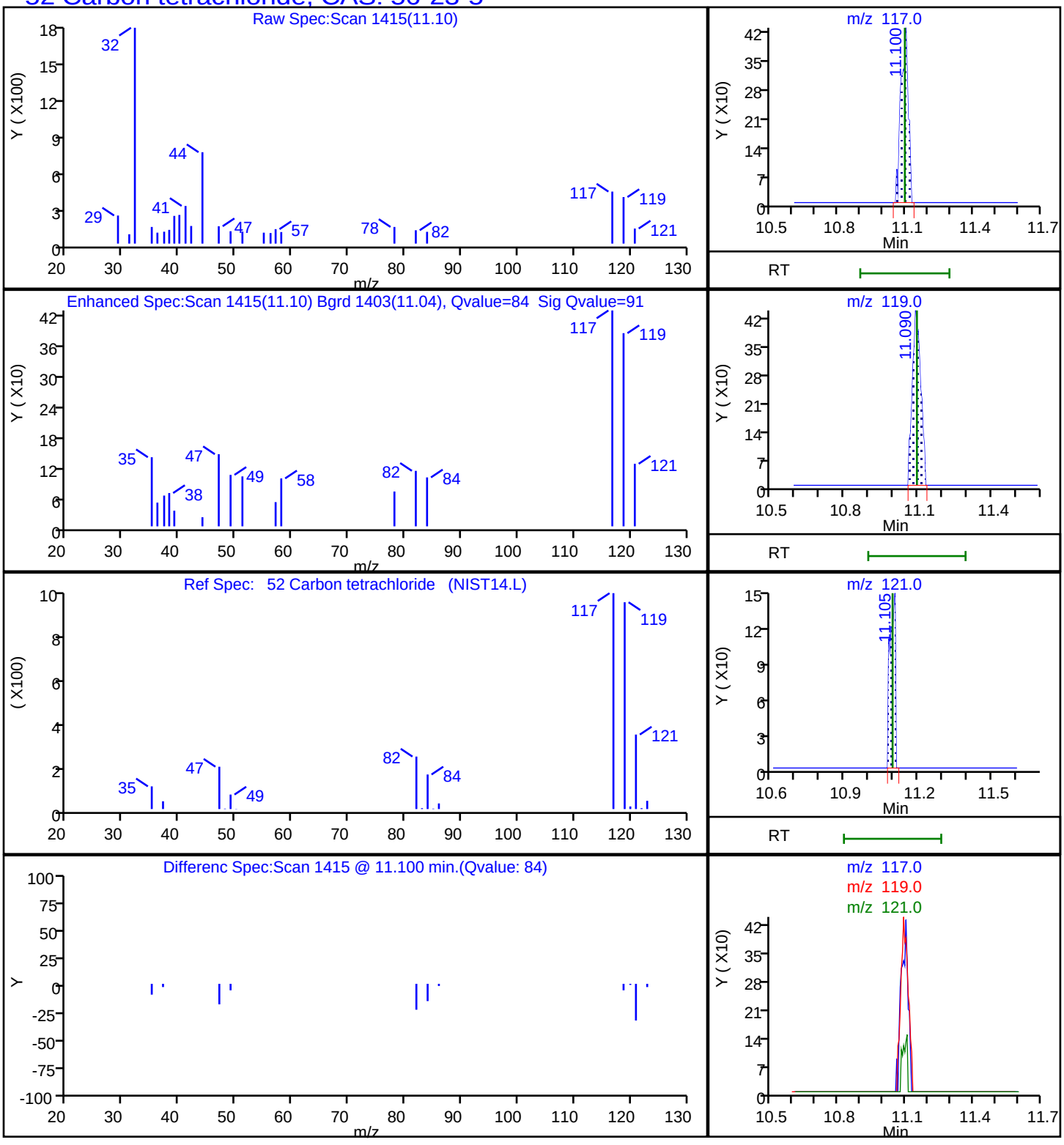
51 Benzene, CAS: 71-43-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P116D.D				
Injection Date:	04-Sep-2020 04:41:30	Instrument ID:	MH		
Lims ID:	140-20175-A-7	Lab Sample ID:	140-20175-7		
Client ID:	SV-142-C-29				
Operator ID:	HMT	ALS Bottle#:	16	Worklist Smp#:	21
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

52 Carbon tetrachloride, CAS: 56-23-5



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P116D.D				
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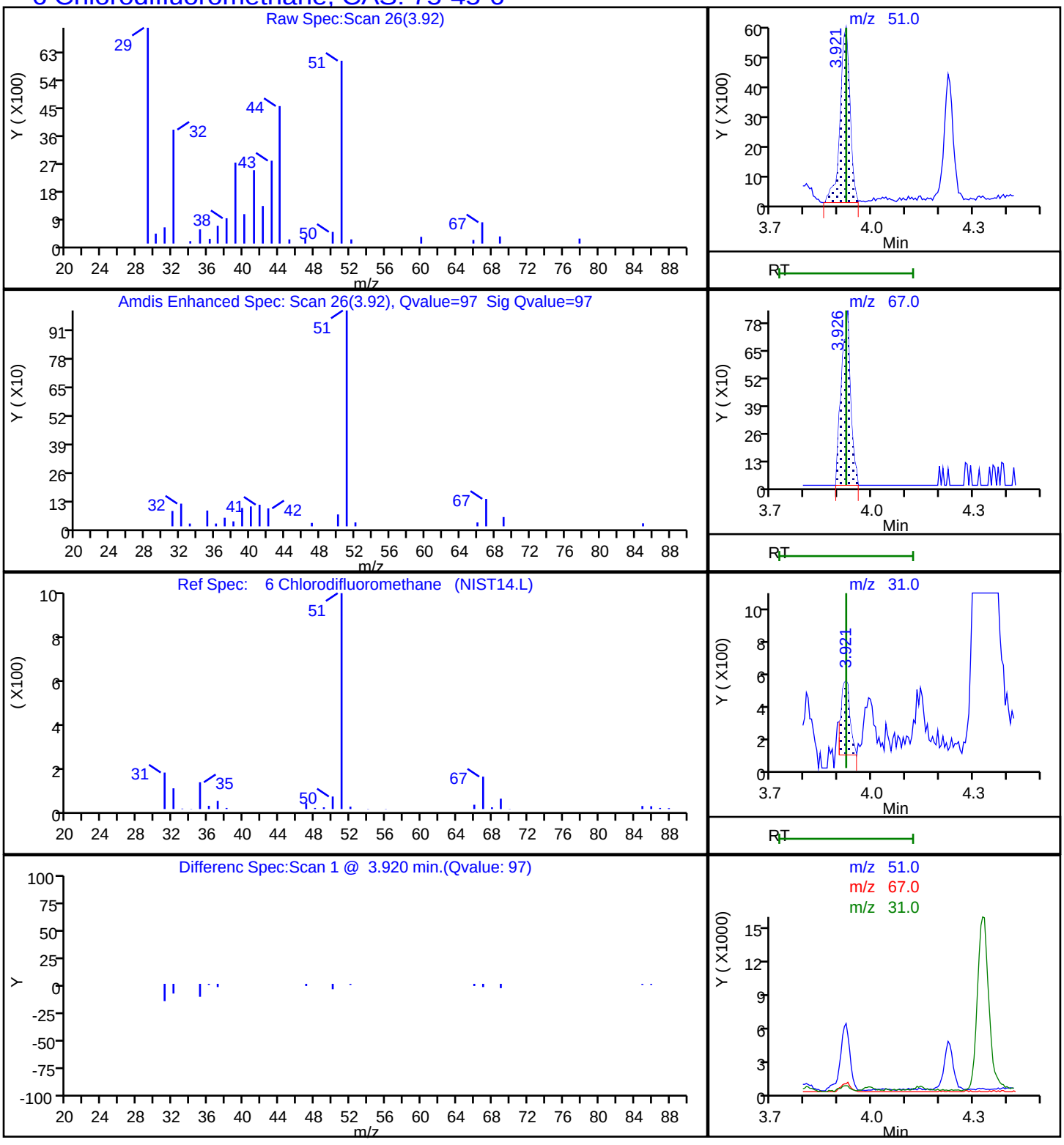
Lims ID:	140-20175-A-7	Lab Sample ID:	140-20175-7		
Client ID:	SV-142-C-29				
Operator ID:	HMT	ALS Bottle#:	16	Worklist Smp#:	21
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

6 Chlorodifluoromethane, CAS: 75-45-6



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Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P116D.D		
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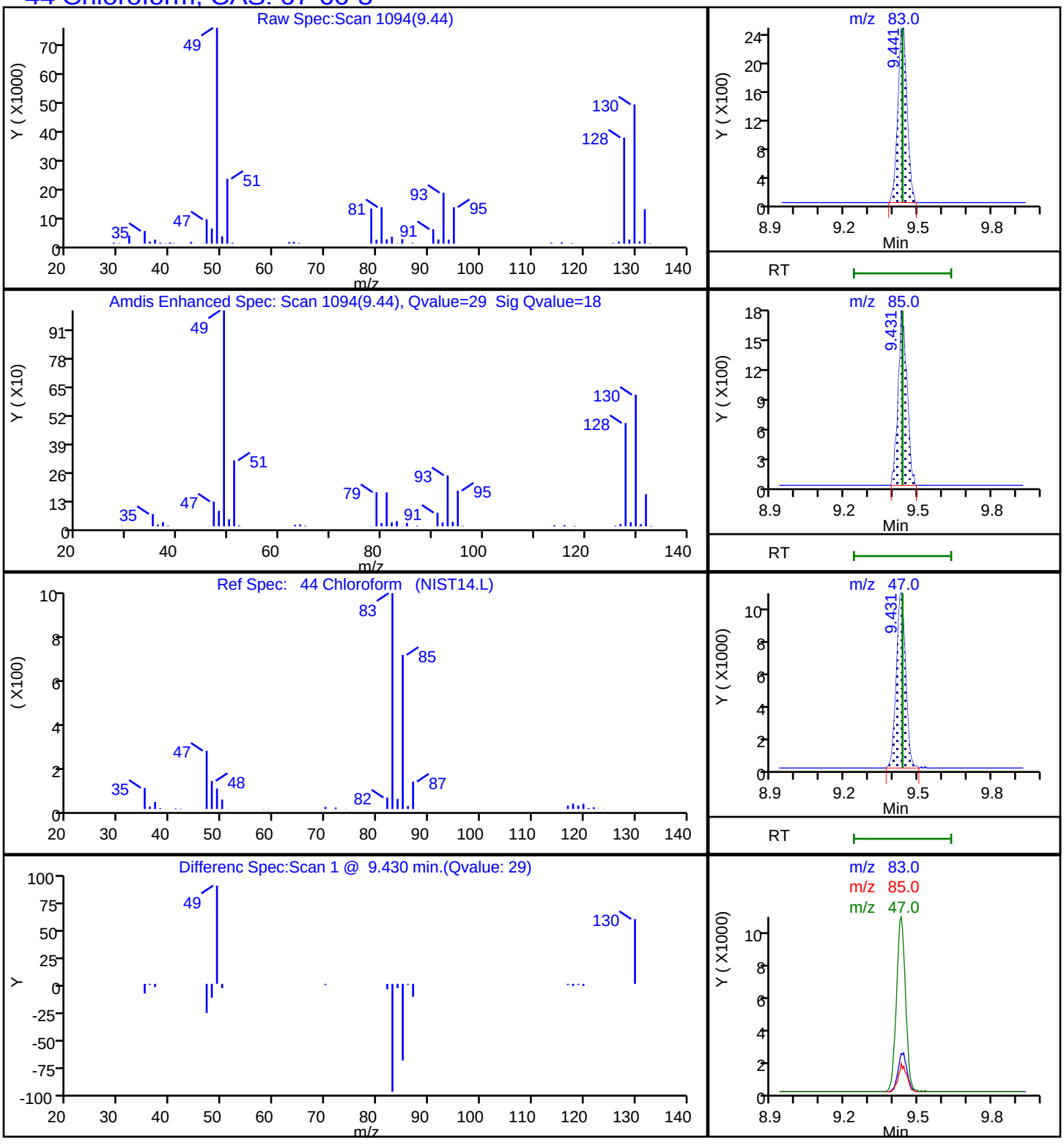
Lims ID:	140-20175-A-7	Lab Sample ID:	140-20175-7
Client ID:	SV-142-C-29		
Operator ID:	HMT	ALS Bottle#:	16 Worklist Smp#: 21
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

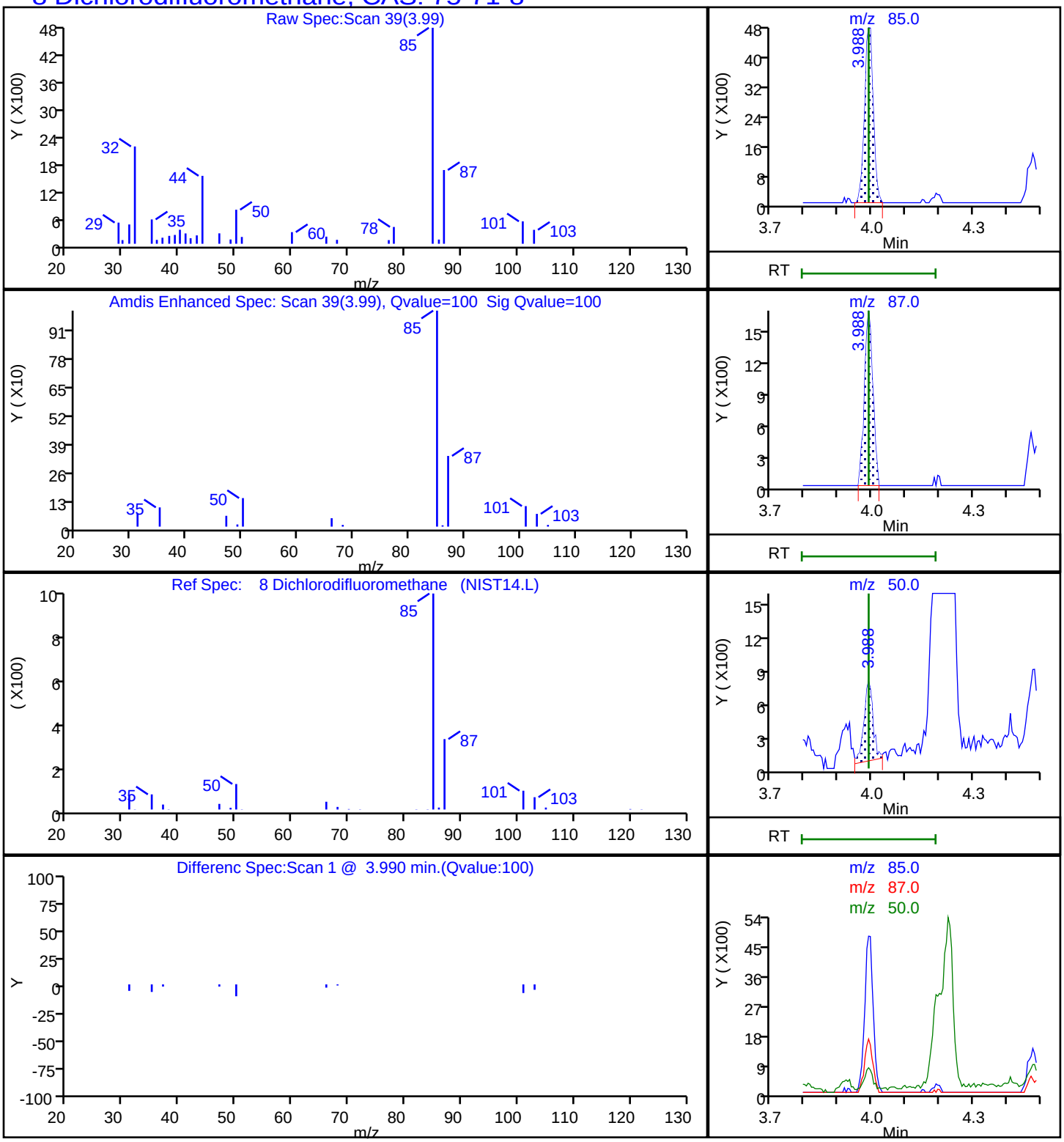
44 Chloroform, CAS: 67-66-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P116D.D				
Injection Date:	04-Sep-2020 04:41:30	Instrument ID:	MH		
Lims ID:	140-20175-A-7	Lab Sample ID:	140-20175-7		
Client ID:	SV-142-C-29				
Operator ID:	HMT	ALS Bottle#:	16	Worklist Smp#:	21
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

8 Dichlorodifluoromethane, CAS: 75-71-8



Eurofins TestAmerica, Knoxville

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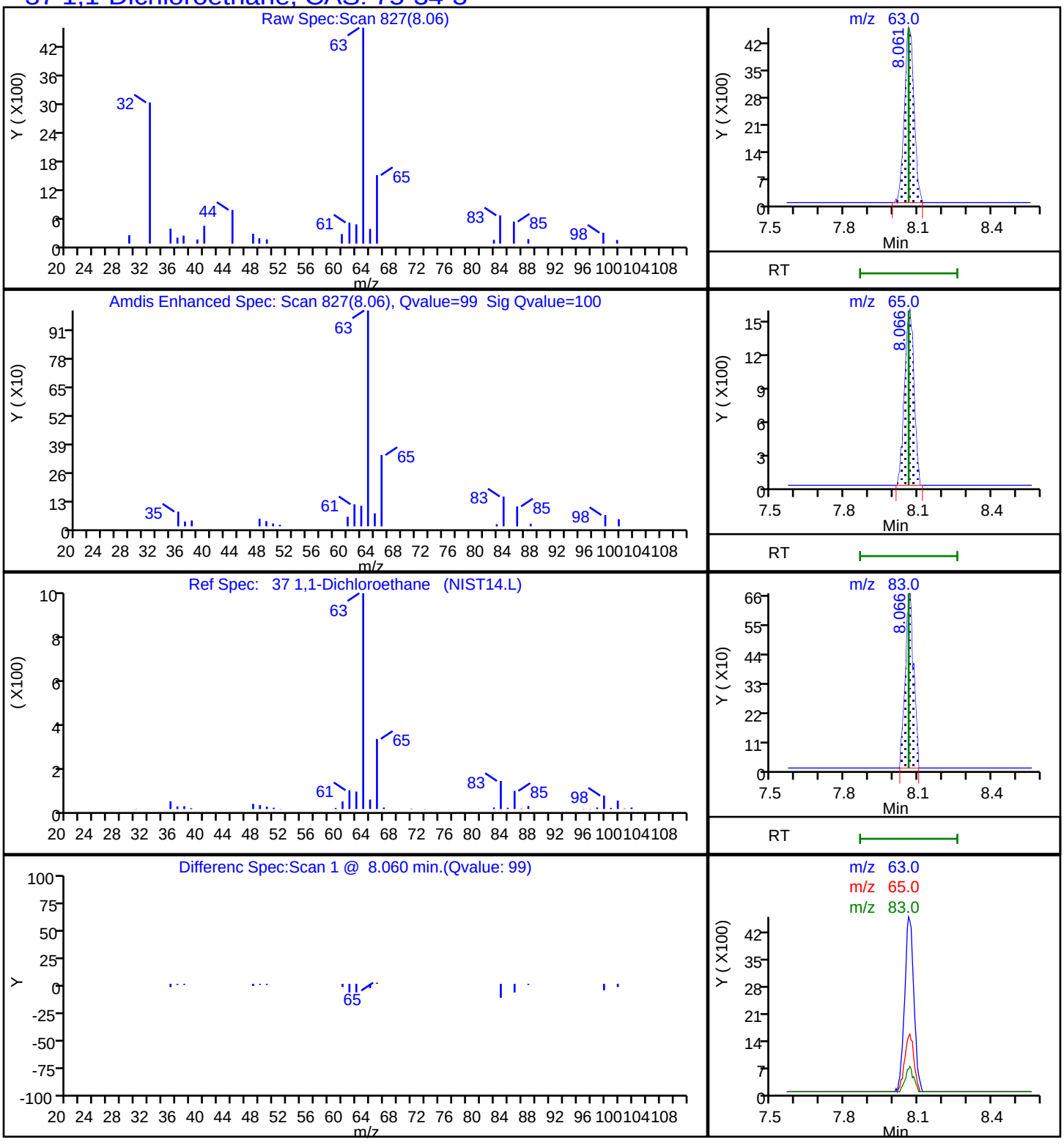
Injection Date:	04-Sep-2020 04:41:30	Instrument ID:	MH
Lims ID:	140-20175-A-7	Lab Sample ID:	140-20175-7
Client ID:	SV-142-C-29		
Operator ID:	HMT	ALS Bottle#:	16 Worklist Smp#: 21
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

37 1,1-Dichloroethane, CAS: 75-34-3



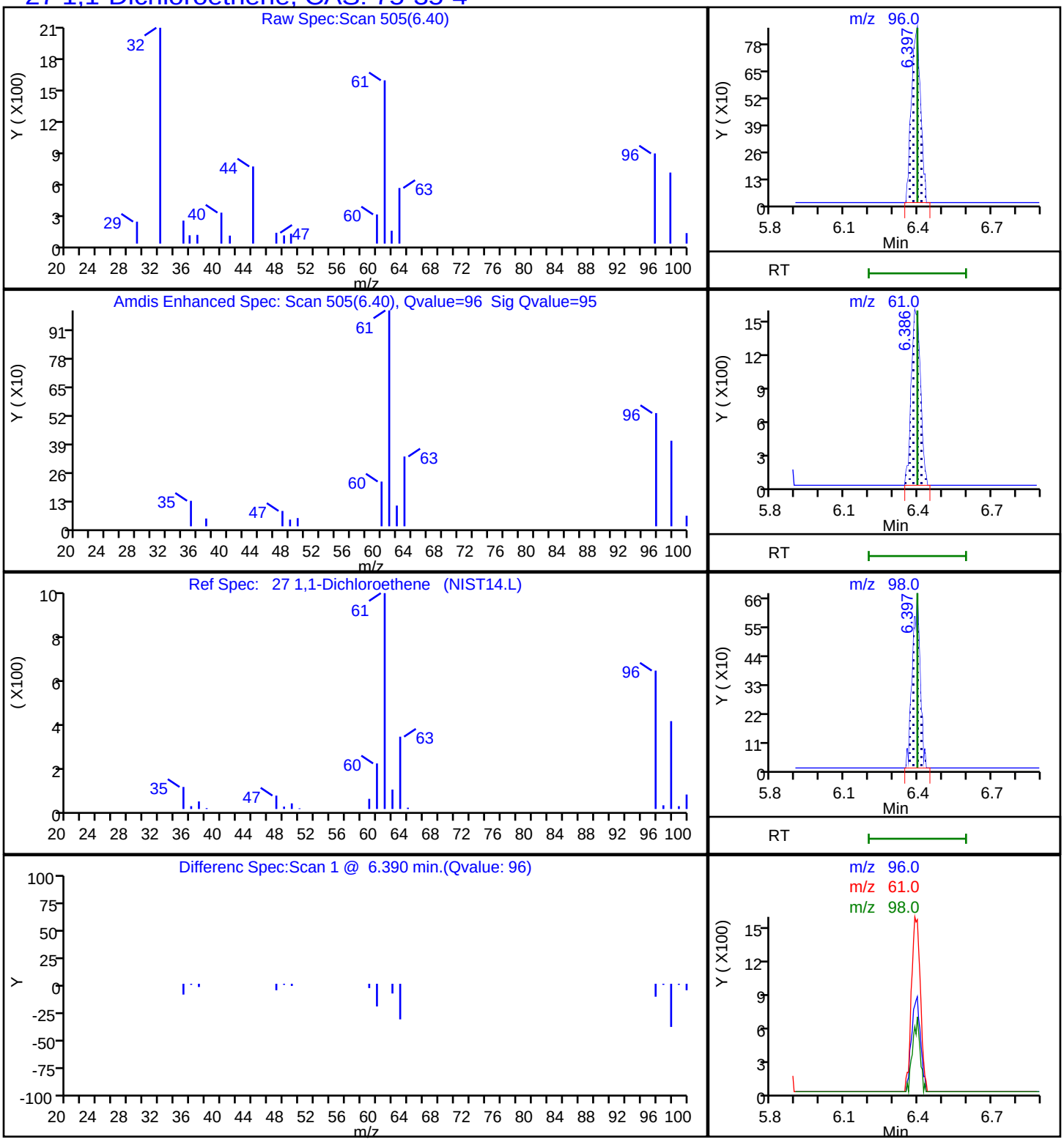
Report Date: 04-Sep-2020 16:42:56 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P116D.D

Injection Date:	04-Sep-2020 04:41:30	Instrument ID:	MH		
Lims ID:	140-20175-A-7	Lab Sample ID:	140-20175-7		
Client ID:	SV-142-C-29				
Operator ID:	HMT	ALS Bottle#:	16	Worklist Smp#:	21
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

27 1,1-Dichloroethene, CAS: 75-35-4



Eurofins TestAmerica, Knoxville

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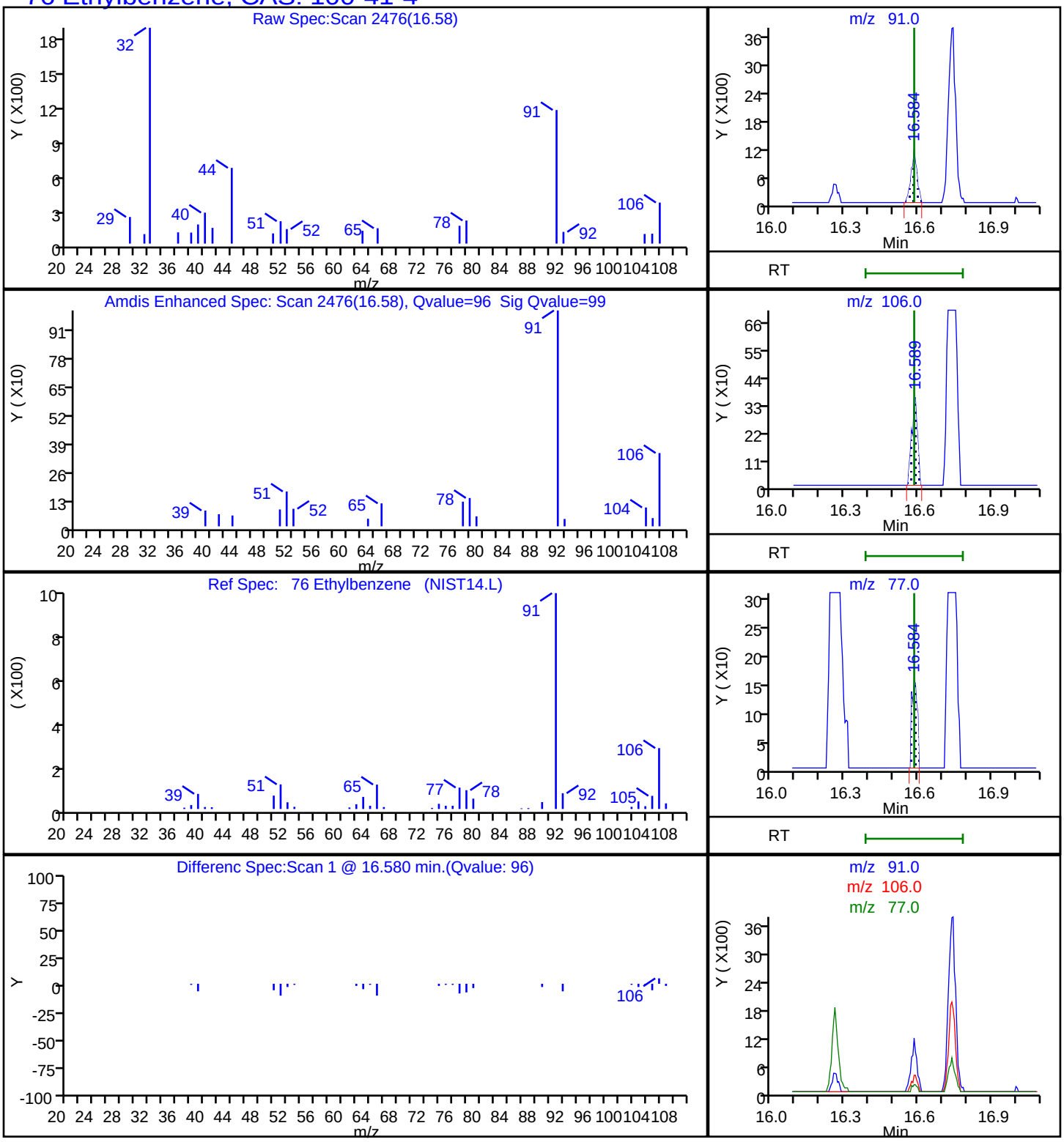
Lims ID:	140-20175-A-7	Lab Sample ID:	140-20175-7		
Client ID:	SV-142-C-29				
Operator ID:	HMT	ALS Bottle#:	16	Worklist Smp#:	21
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

76 Ethylbenzene, CAS: 100-41-4



Report Date: 04-Sep-2020 16:42:56 Chrom Revision: 2.3 20-Aug-2020 13:57:12

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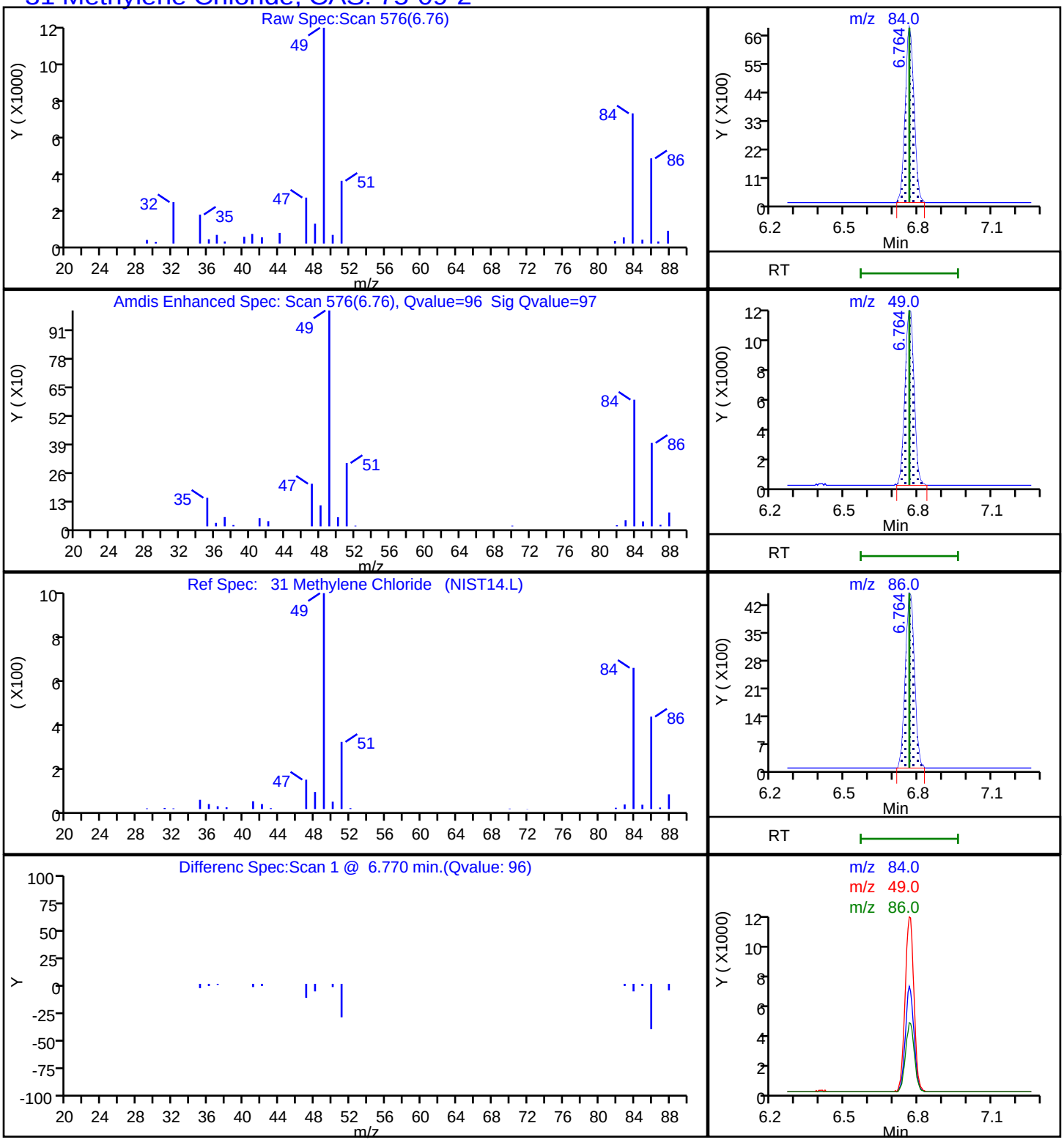
Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P116D.D				
Injection Date:	04-Sep-2020 04:41:30	Instrument ID:	MH		
Lims ID:	140-20175-A-7	Lab Sample ID:	140-20175-7		
Client ID:	SV-142-C-29				
Operator ID:	HMT	ALS Bottle#:	16	Worklist Smp#:	21
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

31 Methylene Chloride, CAS: 75-09-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P116D.D		
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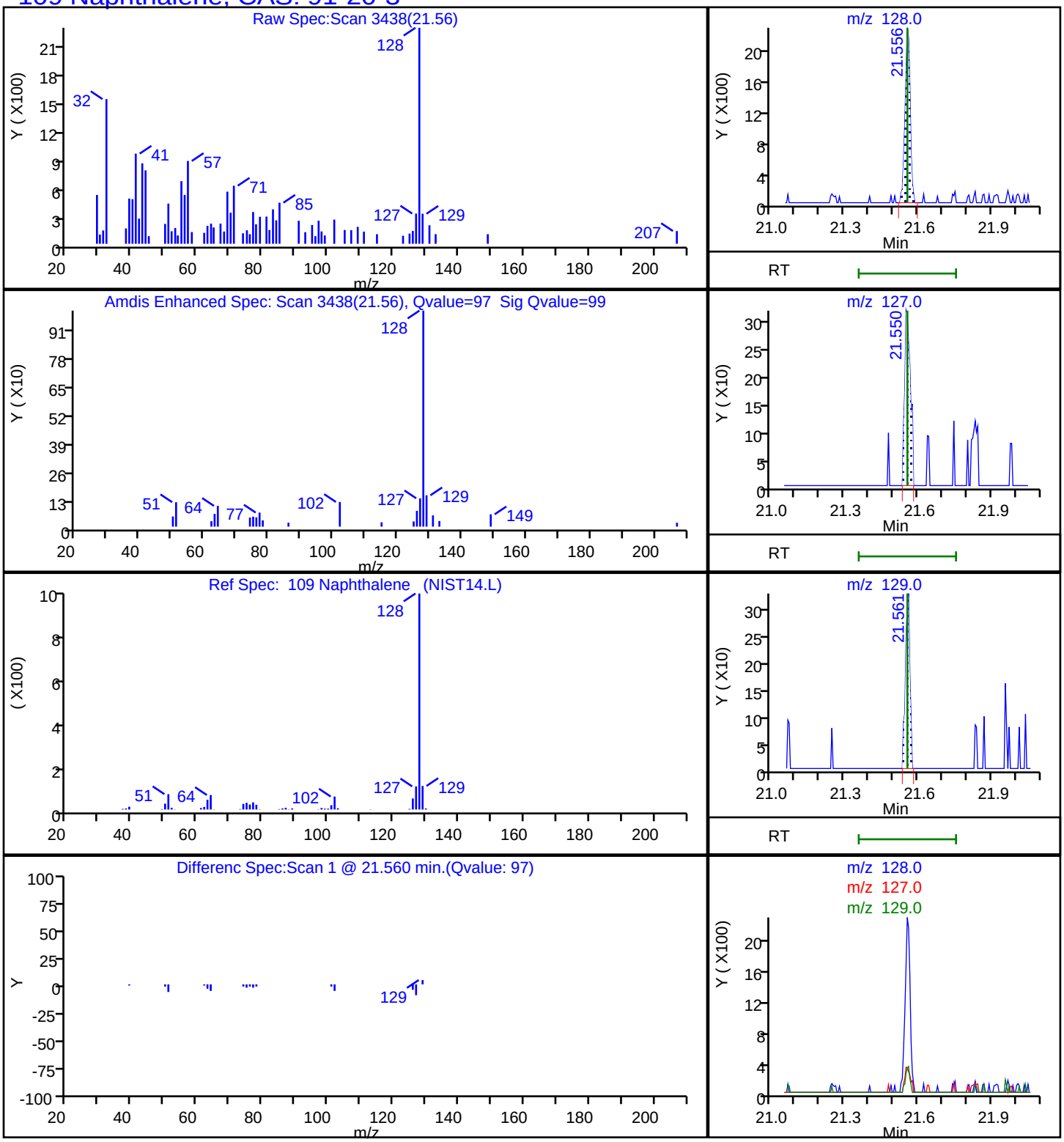
Lims ID:	140-20175-A-7	Lab Sample ID:	140-20175-7
Client ID:	SV-142-C-29		
Operator ID:	HMT	ALS Bottle#:	16 Worklist Smp#: 21
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

109 Naphthalene, CAS: 91-20-3

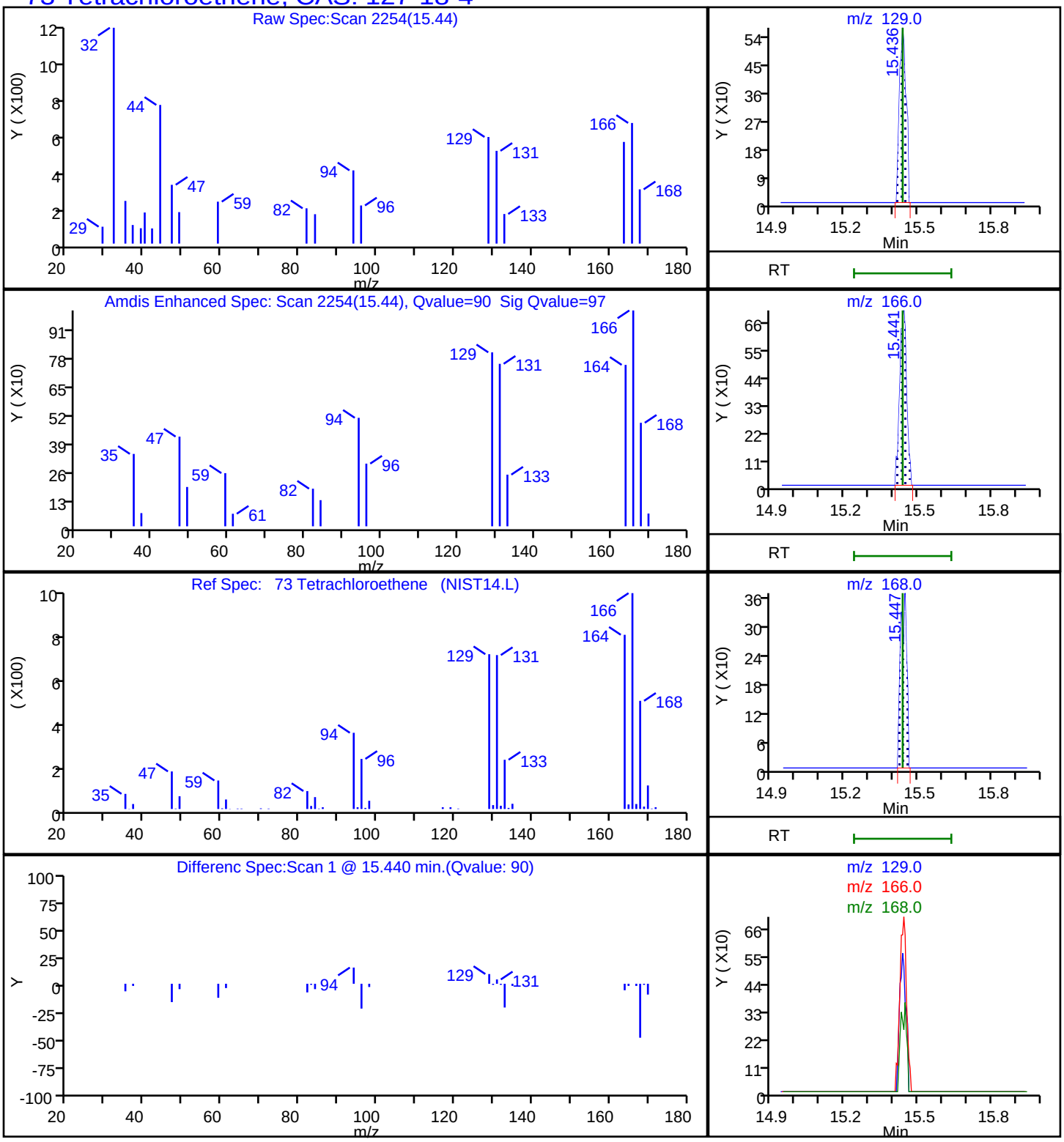


Report Date: 04-Sep-2020 16:42:56 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P116D.D				
Injection Date:	04-Sep-2020 04:41:30	Instrument ID:	MH		
Lims ID:	140-20175-A-7	Lab Sample ID:	140-20175-7		
Client ID:	SV-142-C-29				
Operator ID:	HMT	ALS Bottle#:	16	Worklist Smp#:	21
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

73 Tetrachloroethene, CAS: 127-18-4



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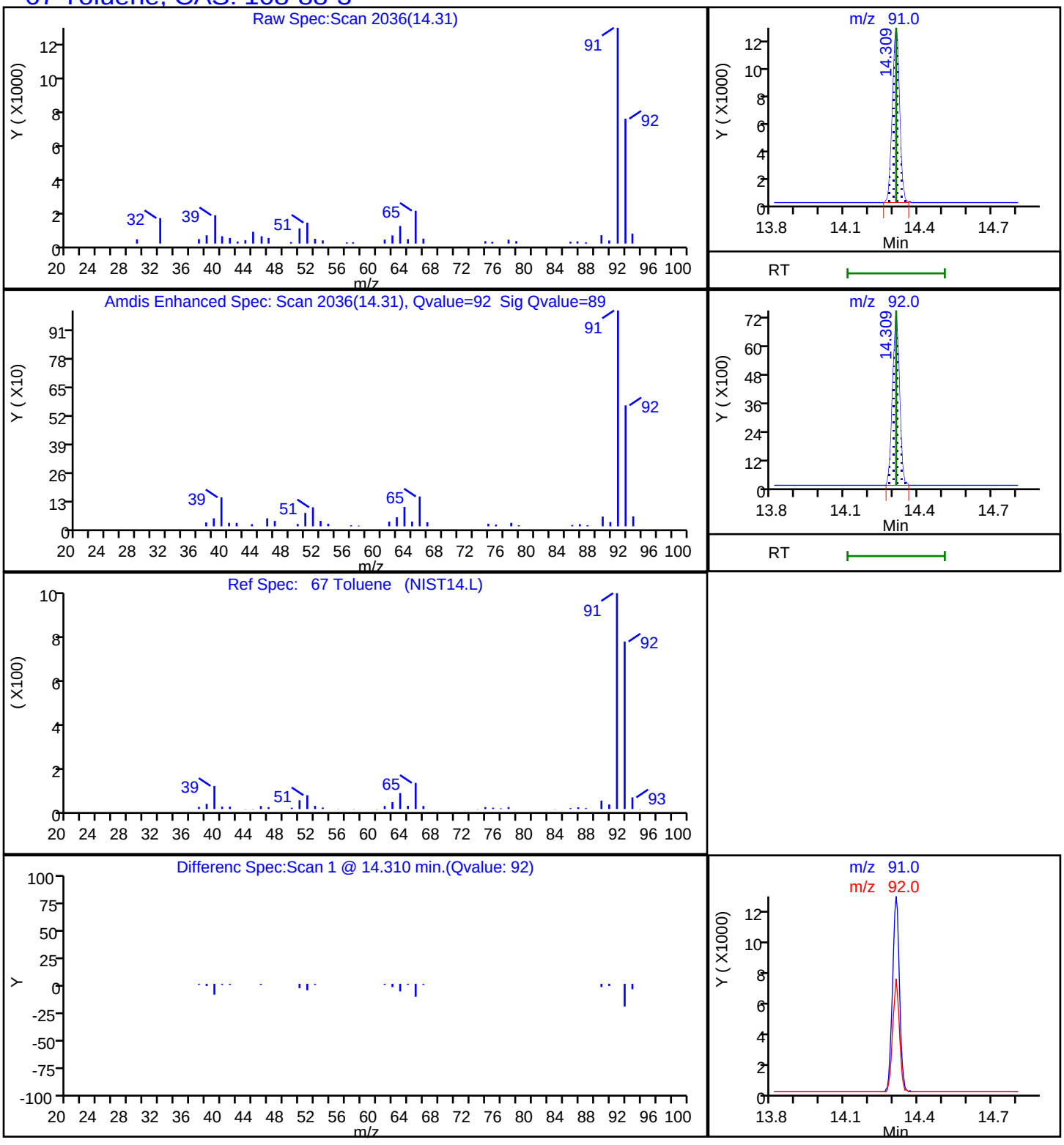
Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P116D.D				
Injection Date:	04-Sep-2020 04:41:30	Instrument ID:	MH		
Lims ID:	140-20175-A-7	Lab Sample ID:	140-20175-7		
Client ID:	SV-142-C-29				
Operator ID:	HMT	ALS Bottle#:	16	Worklist Smp#:	21
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

67 Toluene, CAS: 108-88-3

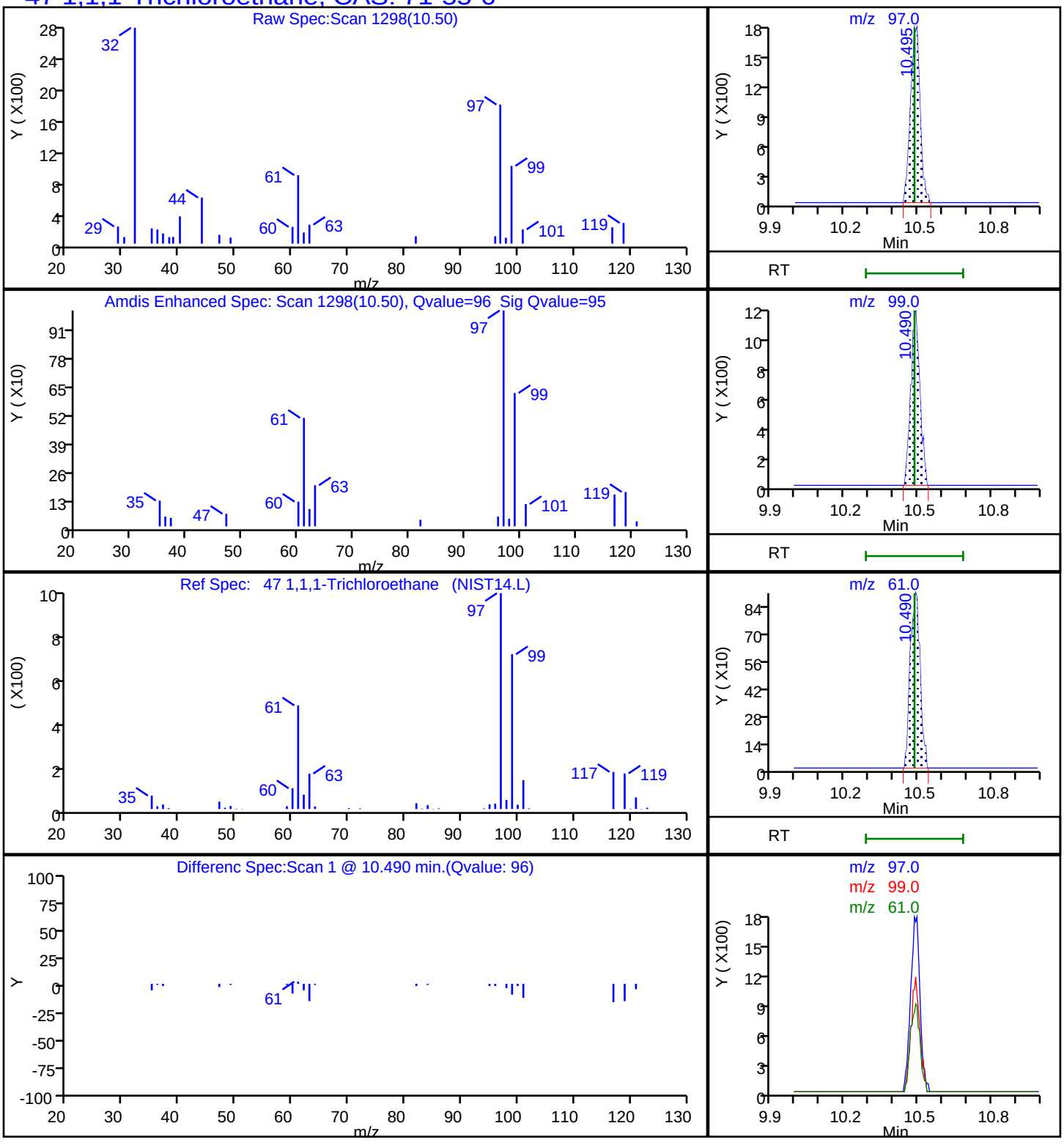


Report Date: 04-Sep-2020 16:42:56 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P116D.D				
Injection Date:	04-Sep-2020 04:41:30	Instrument ID:	MH		
Lims ID:	140-20175-A-7	Lab Sample ID:	140-20175-7		
Client ID:	SV-142-C-29				
Operator ID:	HMT	ALS Bottle#:	16	Worklist Smp#:	21
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

47 1,1,1-Trichloroethane, CAS: 71-55-6



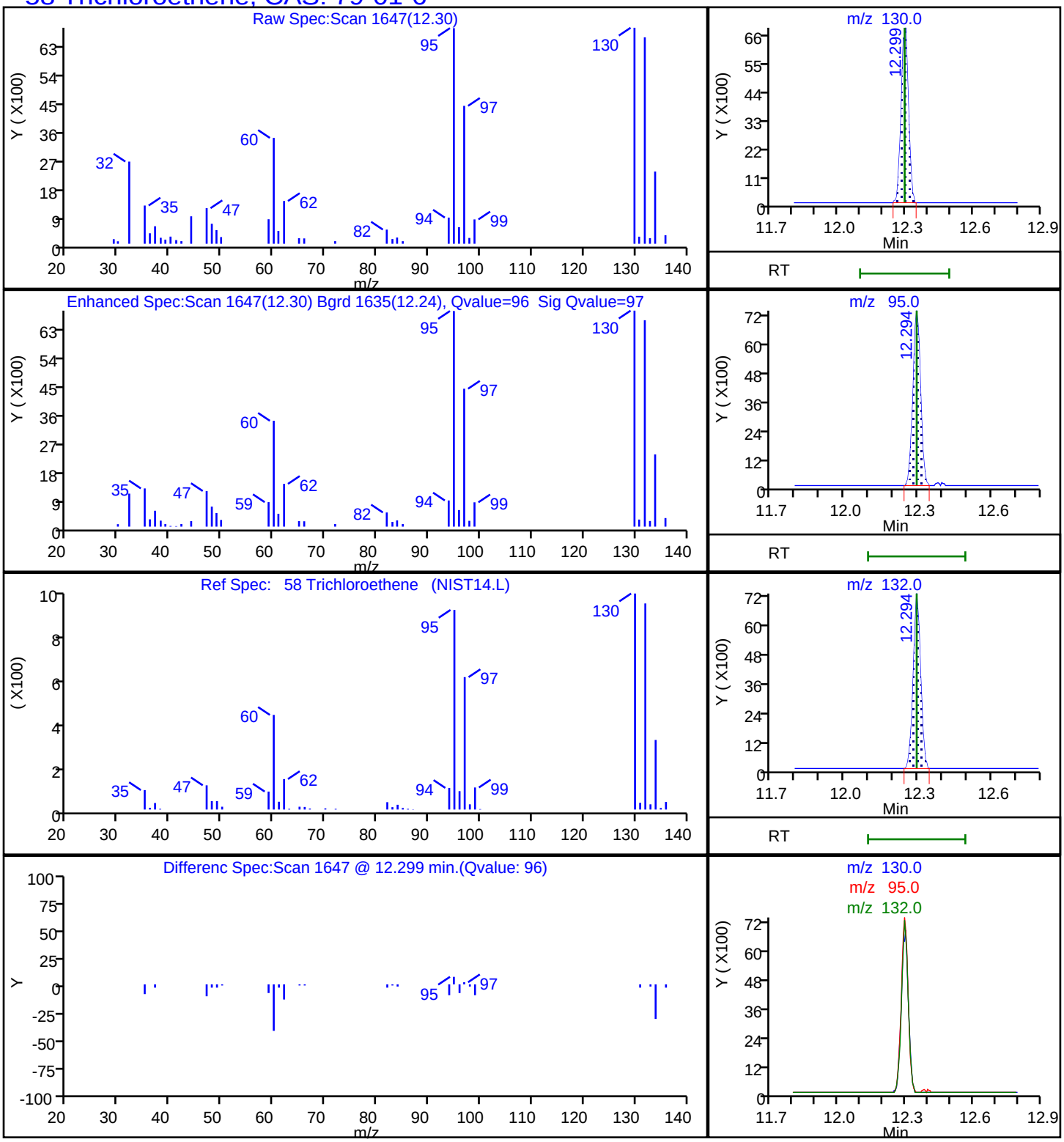
Report Date: 04-Sep-2020 16:42:56 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P116D.D

Injection Date:	04-Sep-2020 04:41:30	Instrument ID:	MH		
Lims ID:	140-20175-A-7	Lab Sample ID:	140-20175-7		
Client ID:	SV-142-C-29				
Operator ID:	HMT	ALS Bottle#:	16	Worklist Smp#:	21
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

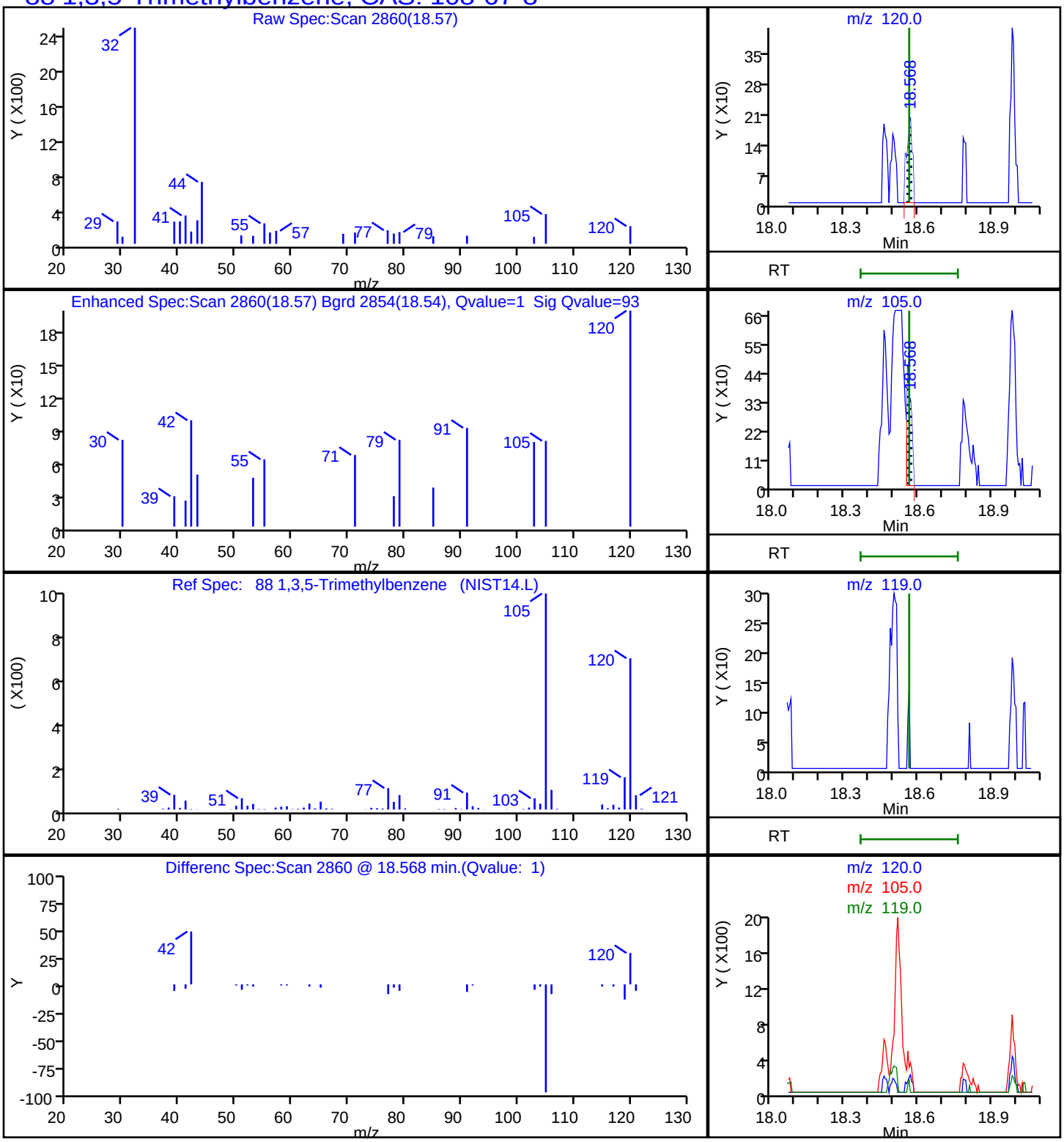
58 Trichloroethene, CAS: 79-01-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P116D.D				
Injection Date:	04-Sep-2020 04:41:30	Instrument ID:	MH		
Lims ID:	140-20175-A-7	Lab Sample ID:	140-20175-7		
Client ID:	SV-142-C-29				
Operator ID:	HMT	ALS Bottle#:	16	Worklist Smp#:	21
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

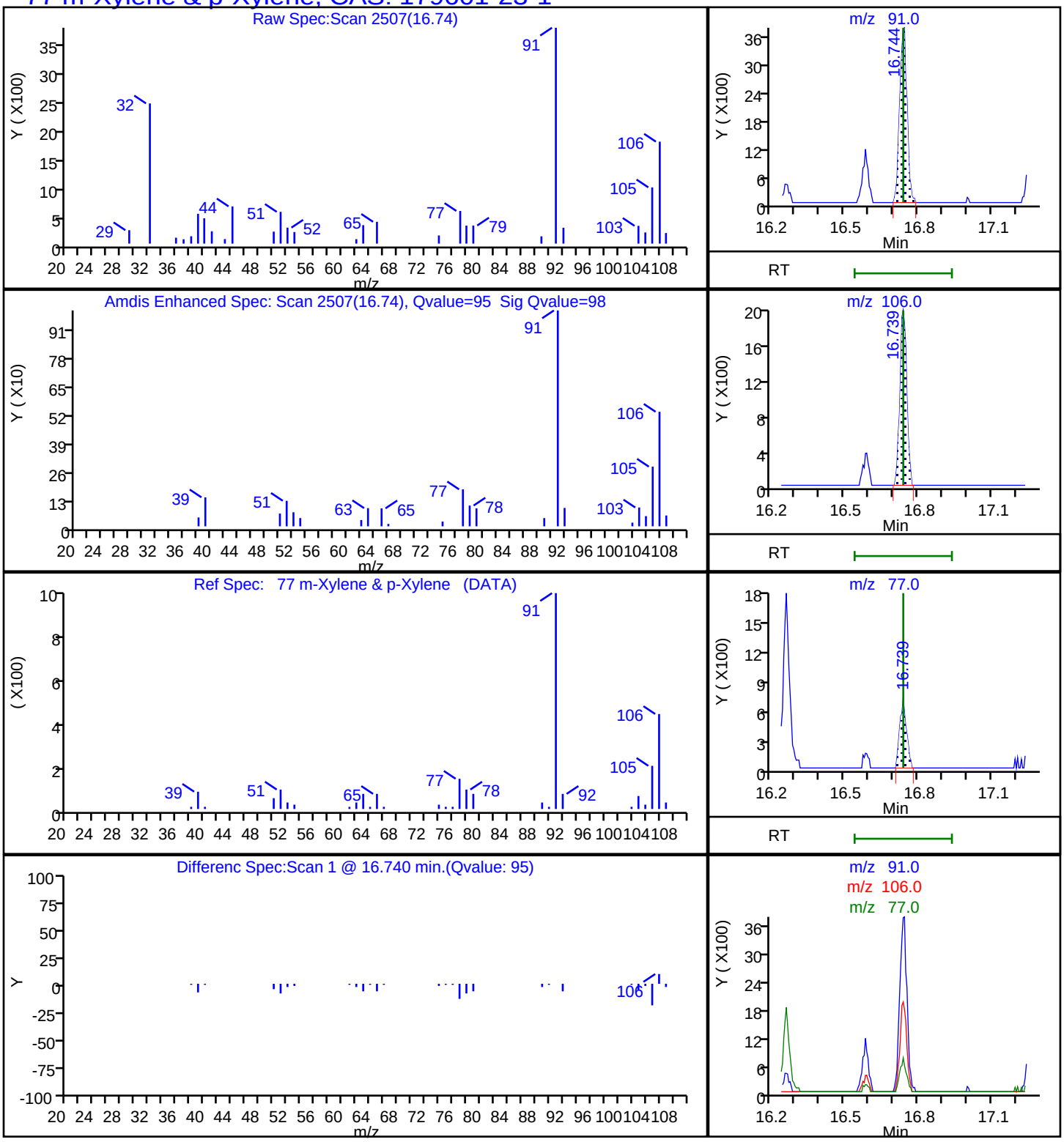
88 1,3,5-Trimethylbenzene, CAS: 108-67-8



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P116D.D				
Injection Date:	04-Sep-2020 04:41:30	Instrument ID:	MH		
Lims ID:	140-20175-A-7	Lab Sample ID:	140-20175-7		
Client ID:	SV-142-C-29				
Operator ID:	HMT	ALS Bottle#:	16	Worklist Smp#:	21
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

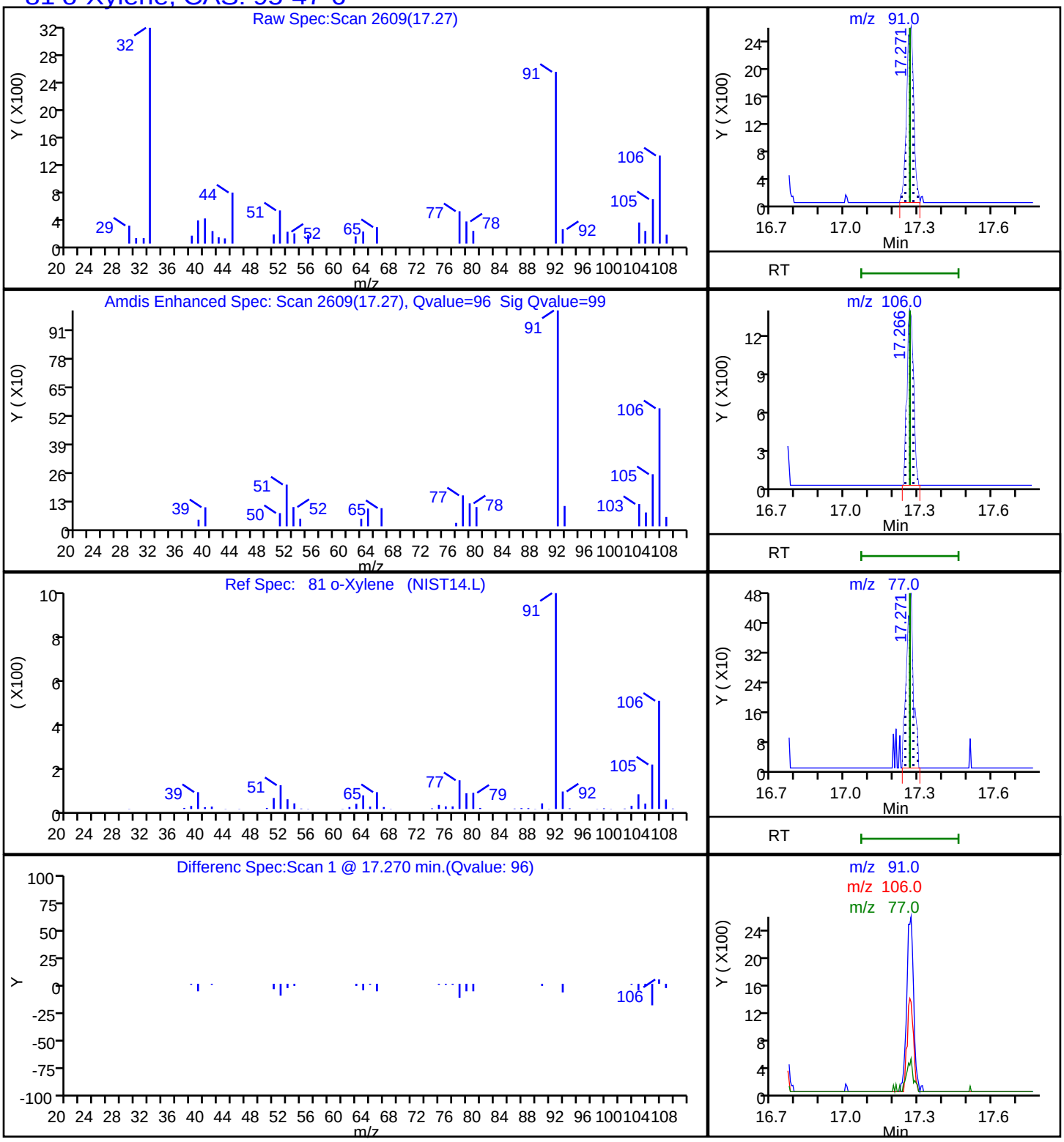
77 m-Xylene & p-Xylene, CAS: 179601-23-1



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P116D.D				
Injection Date:	04-Sep-2020 04:41:30	Instrument ID:	MH		
Lims ID:	140-20175-A-7	Lab Sample ID:	140-20175-7		
Client ID:	SV-142-C-29				
Operator ID:	HMT	ALS Bottle#:	16	Worklist Smp#:	21
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

81 o-Xylene, CAS: 95-47-6



Eurofins TestAmerica, Knoxville

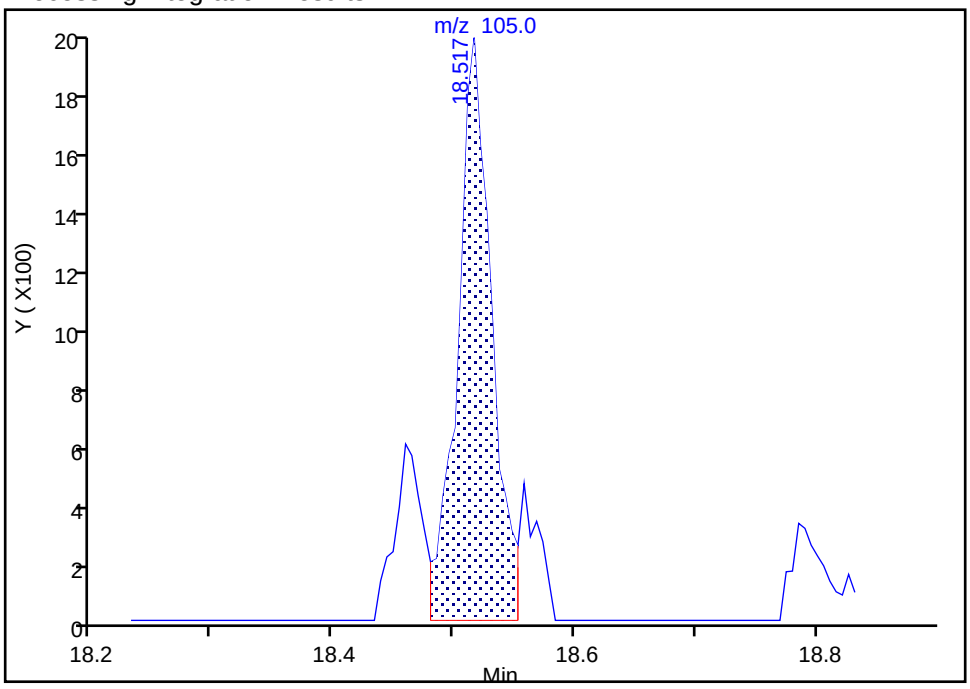
Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P116D.D				
Injection Date:	04-Sep-2020 04:41:30	Instrument ID:	MH		
Lims ID:	140-20175-A-7	Lab Sample ID:	140-20175-7		
Client ID:	SV-142-C-29				
Operator ID:	HMT	ALS Bottle#:	16	Worklist Smp#:	21
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

88 1,3,5-Trimethylbenzene, CAS: 108-67-8

Signal: 2

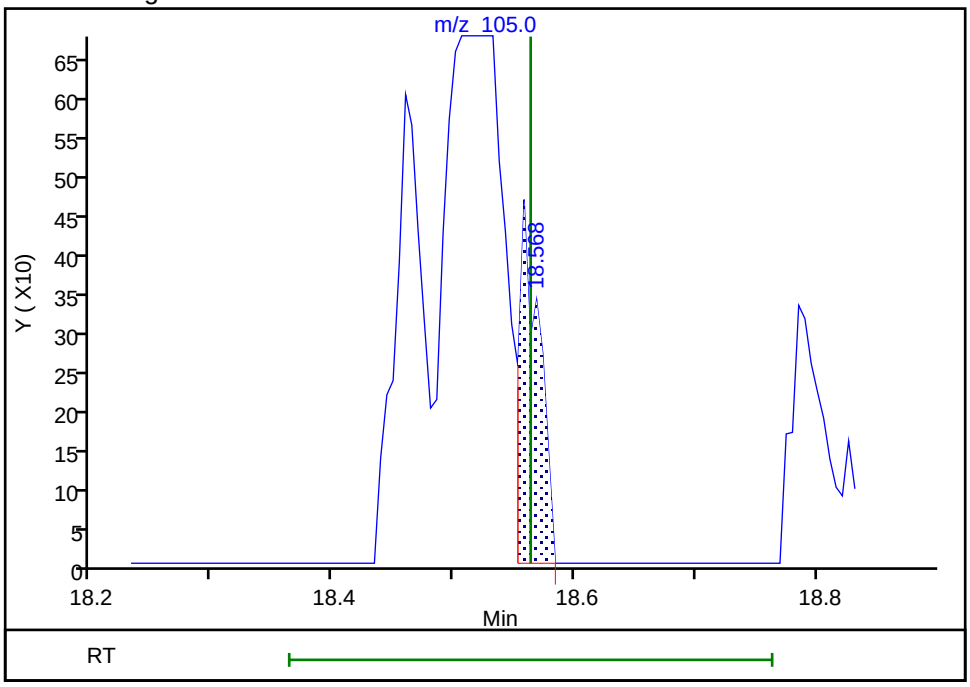
Processing Integration Results

RT: 18.52
Area: 3864
Amount: 0.052156
Amount Units: ppb v/v



Manual Integration Results

RT: 18.57
Area: 538
Amount: 0.053805
Amount Units: ppb v/v



Reviewer: khachitpongpanits, 04-Sep-2020 16:42:33
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Knoxville

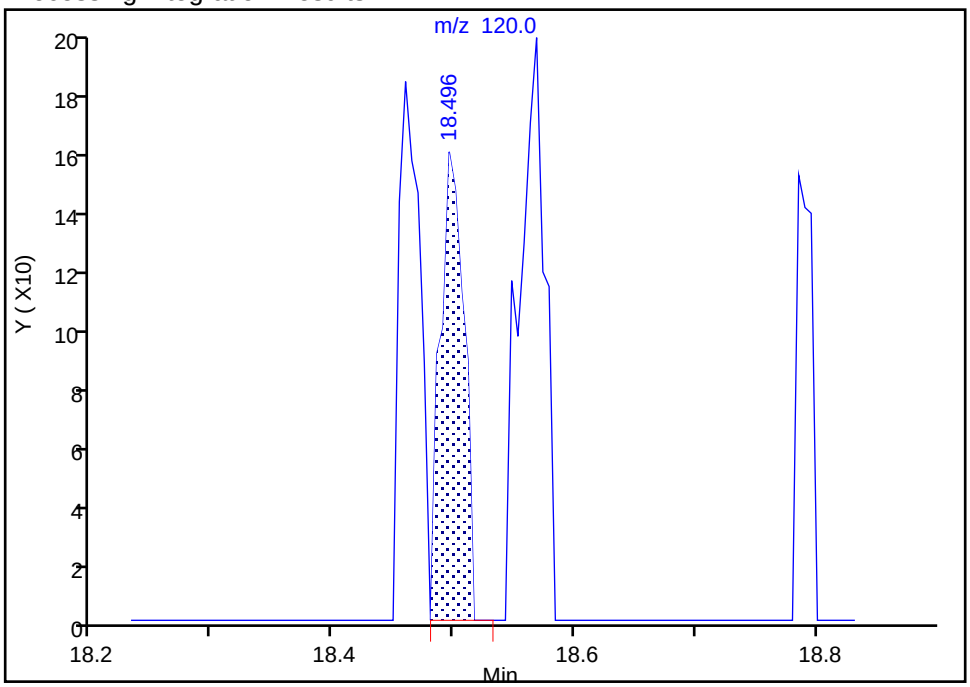
Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P116D.D				
Injection Date:	04-Sep-2020 04:41:30	Instrument ID:	MH		
Lims ID:	140-20175-A-7	Lab Sample ID:	140-20175-7		
Client ID:	SV-142-C-29				
Operator ID:	HMT	ALS Bottle#:	16	Worklist Smp#:	21
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

88 1,3,5-Trimethylbenzene, CAS: 108-67-8

Signal: 1

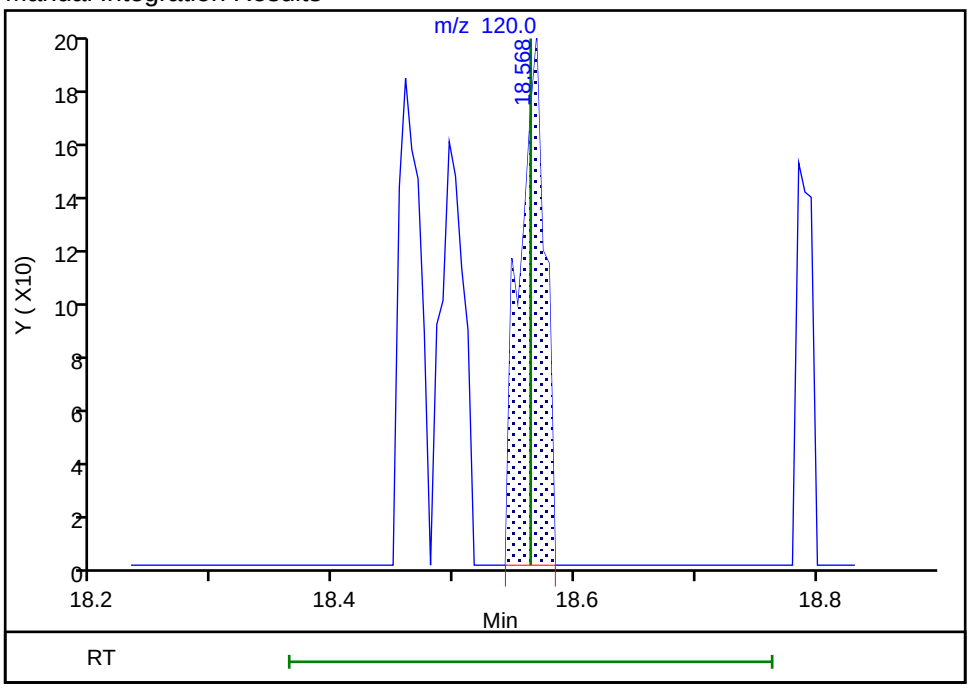
Processing Integration Results

RT: 18.50
Area: 217
Amount: 0.052156
Amount Units: ppb v/v



Manual Integration Results

RT: 18.57
Area: 293
Amount: 0.053805
Amount Units: ppb v/v



Reviewer: khachitpongpanits, 04-Sep-2020 16:42:39

Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: SV-155-C-29 Lab Sample ID: 140-20175-8

Matrix: Air Lab File ID: HI03P201.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 10:32

Sample wt/vol: 100(mL) Date Analyzed: 09/04/2020 05:38

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42399 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.18	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	1.4		0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	2.1		0.40	0.11
67-66-3	Chloroform	119.38	0.093	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.52		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	0.12	J	0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	0.075	J	0.40	0.035
108-88-3	Toluene	92.14	1.7		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	0.21		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	0.28	J	0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.52	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	84		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: SV-155-C-29 Lab Sample ID: 140-20175-8

Matrix: Air Lab File ID: HI03P201.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 10:32

Sample wt/vol: 100(mL) Date Analyzed: 09/04/2020 05:38

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42399 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.59	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	8.7		2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	7.3		1.4	0.39
67-66-3	Chloroform	119.38	0.45	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.6		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	0.53	J	1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	0.51	J	2.7	0.24
108-88-3	Toluene	92.14	6.3		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	1.1		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	1.4	J	2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	2.3	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	84		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P201.D				
Lims ID:	140-20175-A-8				
Client ID:	SV-155-C-29				
Sample Type:	Client				
Inject. Date:	04-Sep-2020 05:38:30	ALS Bottle#:	1	Worklist Smp#:	22
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016480-022				
Misc. Info.:	140-20175-a-8				
Operator ID:	HMT	Instrument ID:	MH		
Method:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\MH_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	04-Sep-2020 05:19:50	Calib Date:	29-Aug-2020 23:57:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1020				
First Level Reviewer: tajh		Date:	04-Sep-2020 07:23:14		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.431	9.436	-0.005	98	106055	4.80	
* 2 1,4-Difluorobenzene	114	11.591	11.591	0.000	95	433788	4.80	
* 3 Chlorobenzene-d5 (IS)	117	16.258	16.258	0.000	88	309342	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.876	17.876	0.000	90	139400	3.88	
6 Chlorodifluoromethane	51	3.921	3.919	0.000	96	24509	0.4141	
8 Dichlorodifluoromethane	85	3.993	3.986	0.005	99	8358	0.1043	
44 Chloroform	83	9.436	9.431	0.000	28	1194	0.0185	
51 Benzene	78	11.074	11.074	0.000	56	2941	0.0369	
52 Carbon tetrachloride	117	11.095	11.095	0.000	96	13600	0.2758	
58 Trichloroethene	130	12.294	12.294	0.000	93	1502	0.0419	
67 Toluene	91	14.310	14.310	0.000	92	26807	0.3364	
73 Tetrachloroethene	129	15.441	15.436	0.005	87	503	0.0151	
76 Ethylbenzene	91	16.584	16.584	0.000	94	2366	0.0245	
77 m-Xylene & p-Xylene	91	16.739	16.739	0.000	97	5923	0.0777	
81 o-Xylene	91	17.271	17.266	0.005	95	2118	0.0265	
88 1,3,5-Trimethylbenzene	120	18.475	18.563	-0.088	81	408	0.0558	
S 116 Xylenes, Total	100				0		0.1042	

Reagents:

40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

Report Date: 04-Sep-2020 07:23:14 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P201.D

Injection Date:	04-Sep-2020 05:38:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	140-20175-A-8	Lab Sample ID:	140-20175-8	Worklist Smp#:	22
Client ID:	SV-155-C-29				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

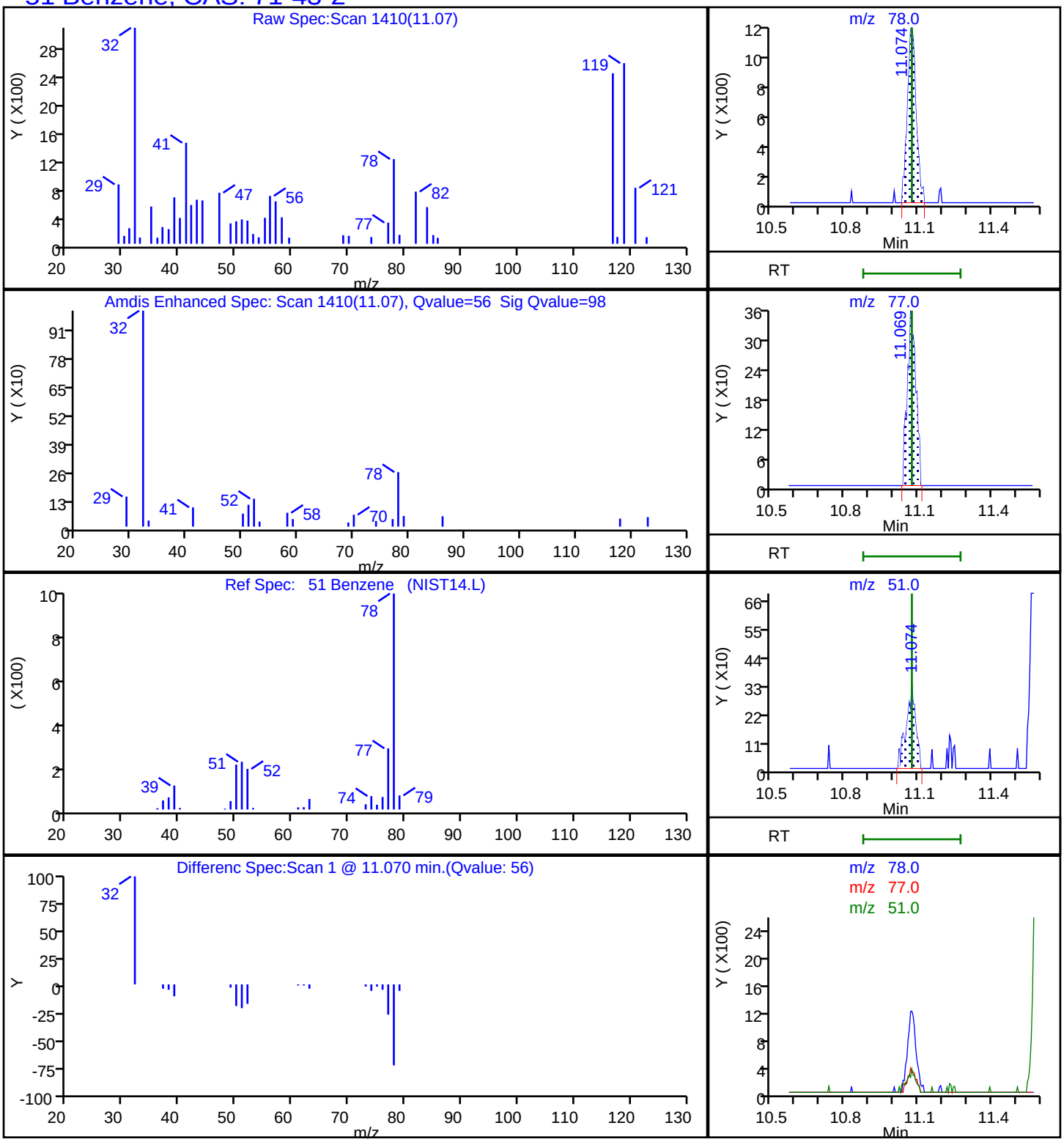
Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P201.D				
Lims ID:	140-20175-A-8				
Client ID:	SV-155-C-29				
Sample Type:	Client				
Inject. Date:	04-Sep-2020 05:38:30	ALS Bottle#:	1	Worklist Smp#:	22
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016480-022				
Misc. Info.:	140-20175-a-8				
Operator ID:	HMT	Instrument ID:	MH		
Method:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\MH_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	04-Sep-2020 05:19:50	Calib Date:	29-Aug-2020 23:57:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1020				
First Level Reviewer: tajh		Date:	04-Sep-2020 07:23:14		

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	3.88	83.59

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P201.D		
Injection Date:	04-Sep-2020 05:38:30	Instrument ID:	MH
Lims ID:	140-20175-A-8	Lab Sample ID:	140-20175-8
Client ID:	SV-155-C-29		
Operator ID:	HMT	ALS Bottle#:	1 Worklist Smp#: 22
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

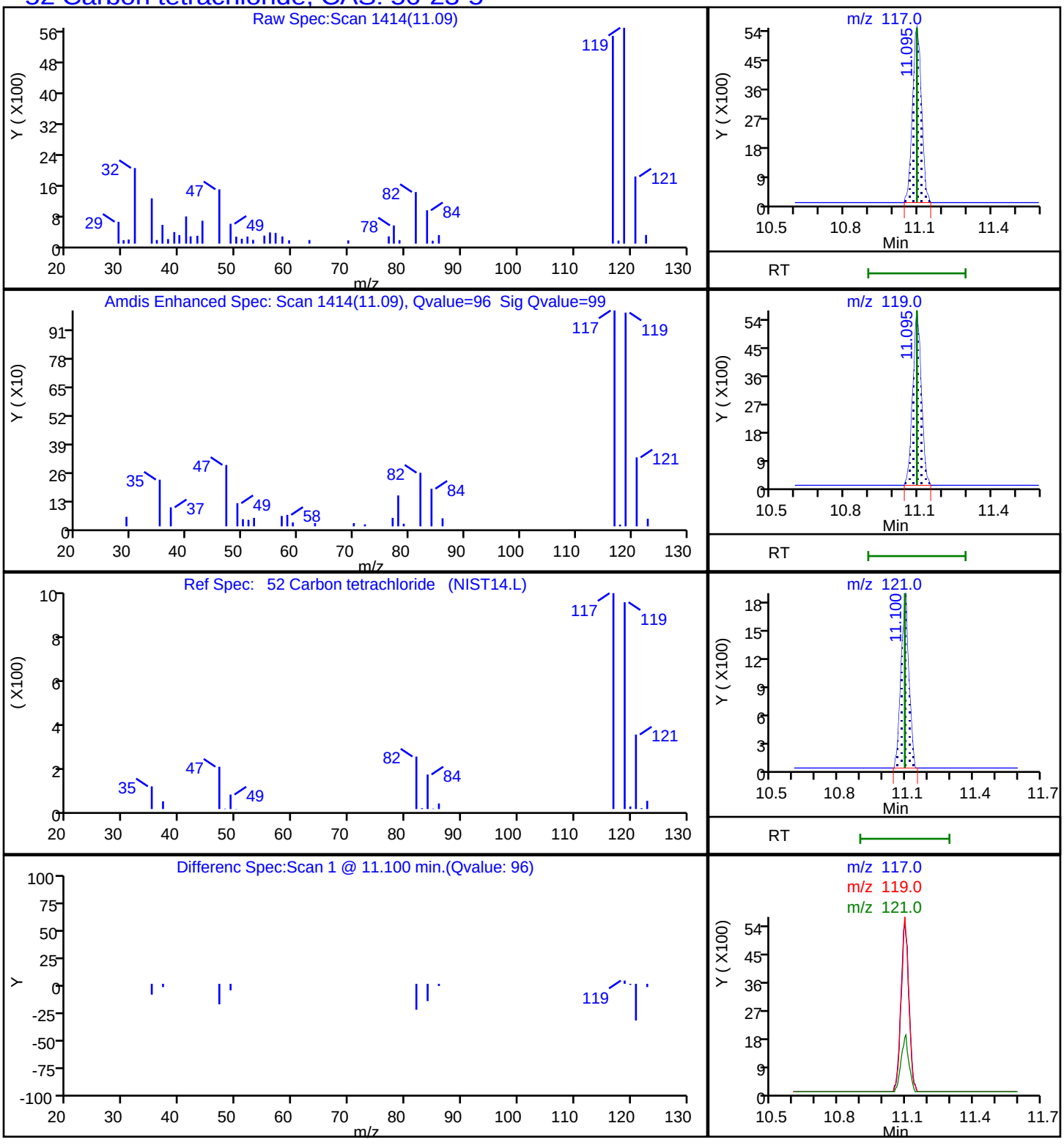
51 Benzene, CAS: 71-43-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P201.D		
Injection Date:	04-Sep-2020 05:38:30	Instrument ID:	MH
Lims ID:	140-20175-A-8	Lab Sample ID:	140-20175-8
Client ID:	SV-155-C-29		
Operator ID:	HMT	ALS Bottle#:	1 Worklist Smp#: 22
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

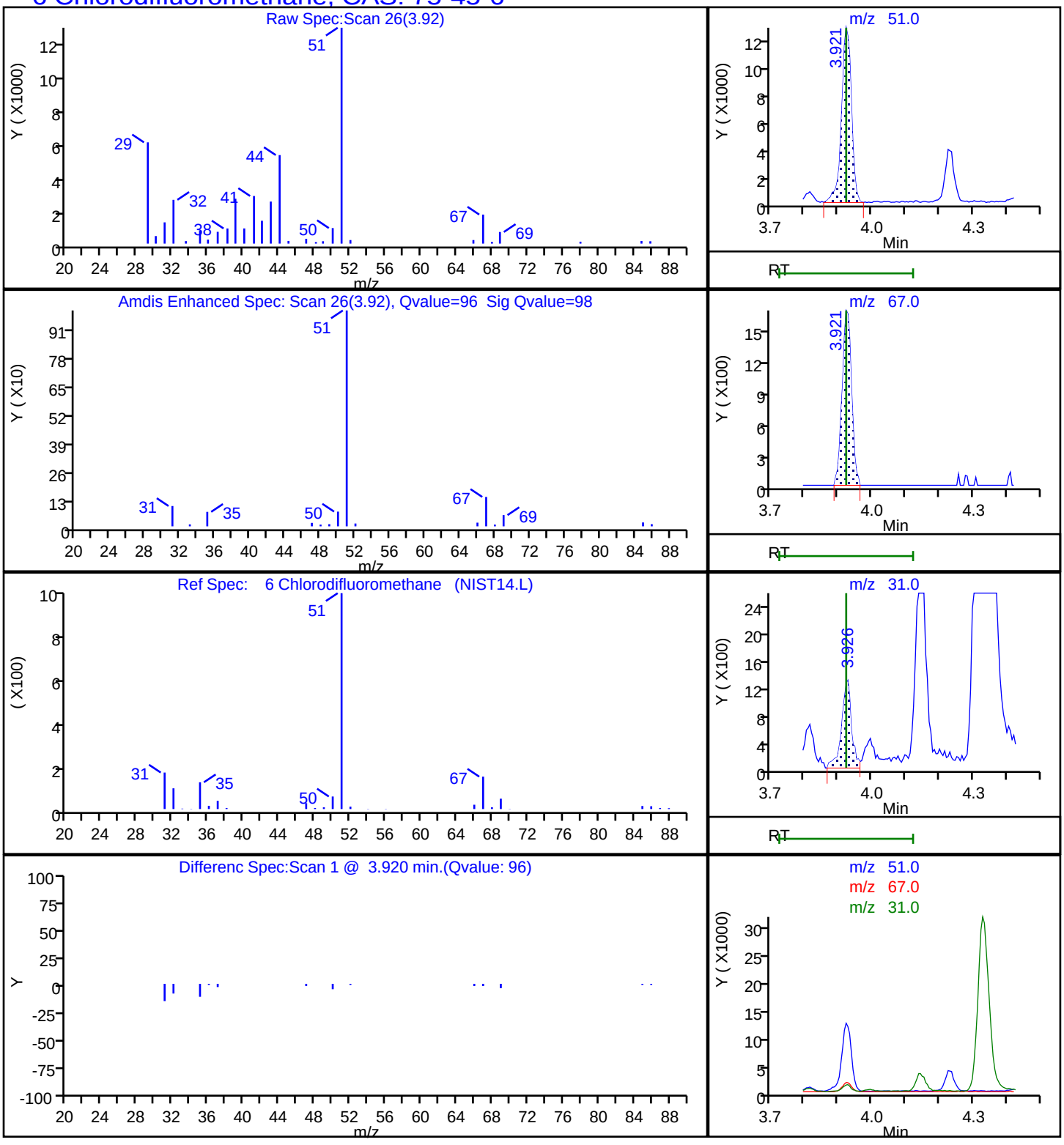
52 Carbon tetrachloride, CAS: 56-23-5



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P201.D				
Injection Date:	04-Sep-2020 05:38:30	Instrument ID:	MH		
Lims ID:	140-20175-A-8	Lab Sample ID:	140-20175-8		
Client ID:	SV-155-C-29				
Operator ID:	HMT	ALS Bottle#:	1	Worklist Smp#:	22
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

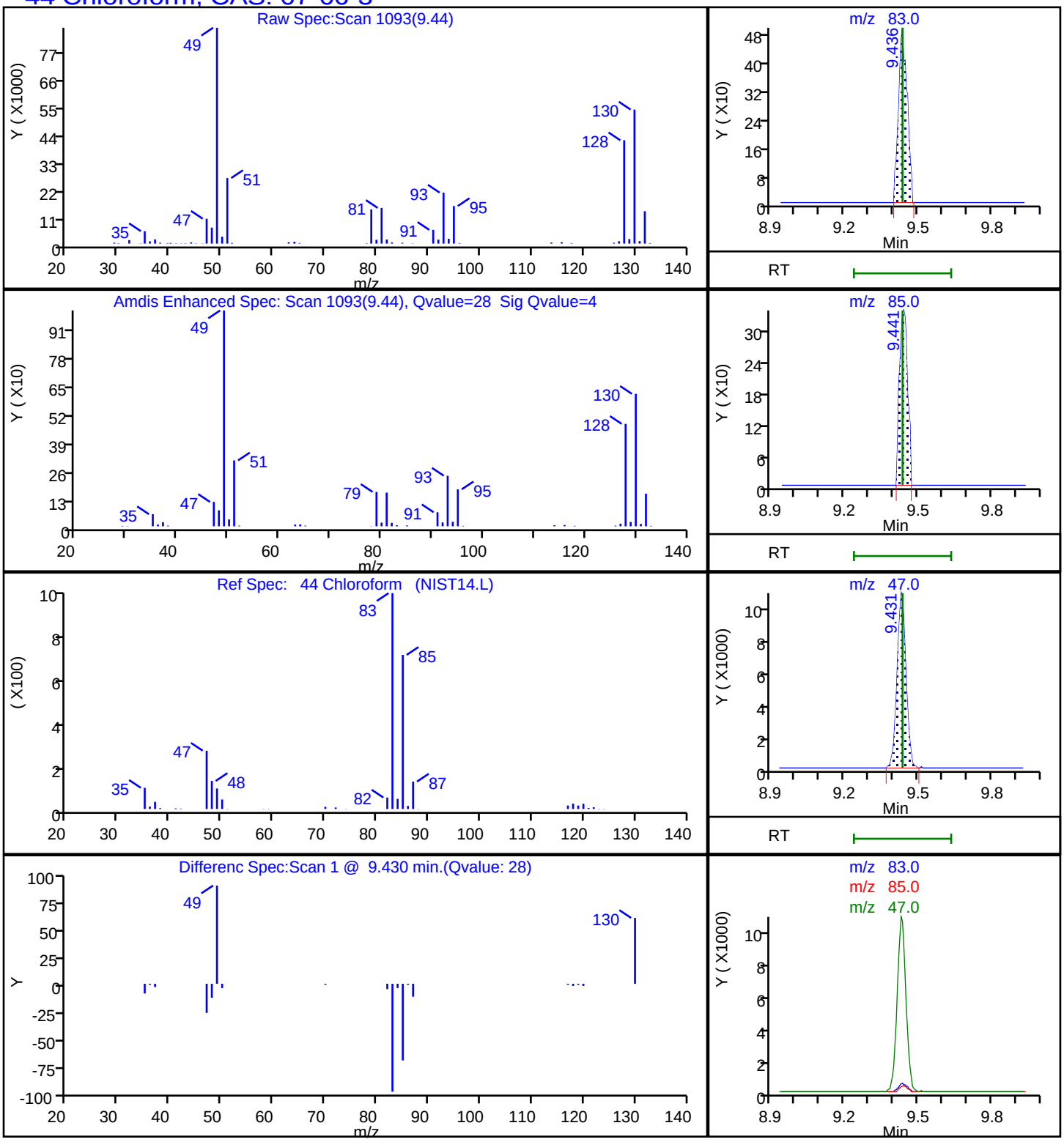
6 Chlorodifluoromethane, CAS: 75-45-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P201.D				
Injection Date:	04-Sep-2020 05:38:30	Instrument ID:	MH		
Lims ID:	140-20175-A-8	Lab Sample ID:	140-20175-8		
Client ID:	SV-155-C-29				
Operator ID:	HMT	ALS Bottle#:	1	Worklist Smp#:	22
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

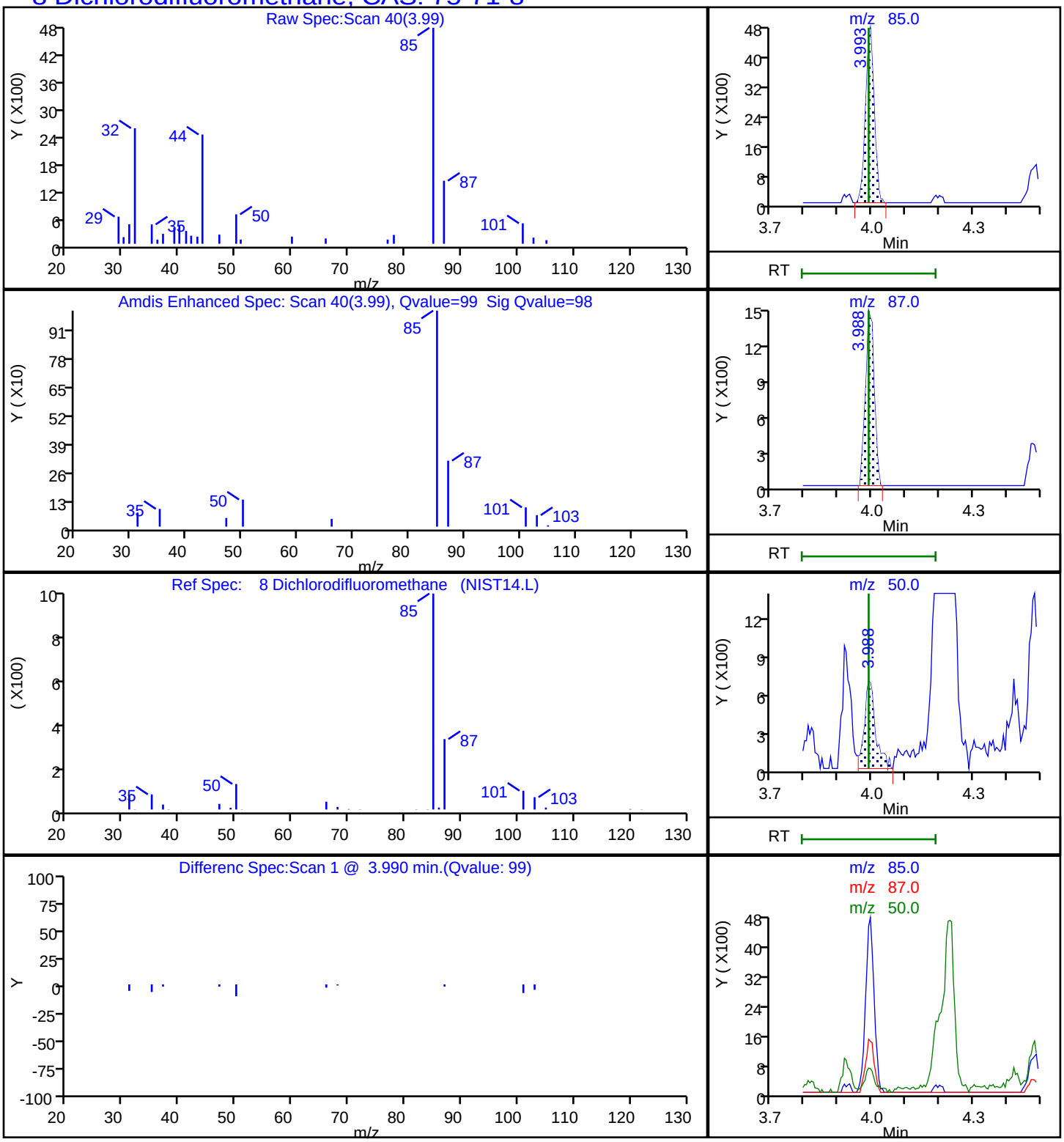
44 Chloroform, CAS: 67-66-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P201.D				
Injection Date:	04-Sep-2020 05:38:30	Instrument ID:	MH		
Lims ID:	140-20175-A-8	Lab Sample ID:	140-20175-8		
Client ID:	SV-155-C-29				
Operator ID:	HMT	ALS Bottle#:	1	Worklist Smp#:	22
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

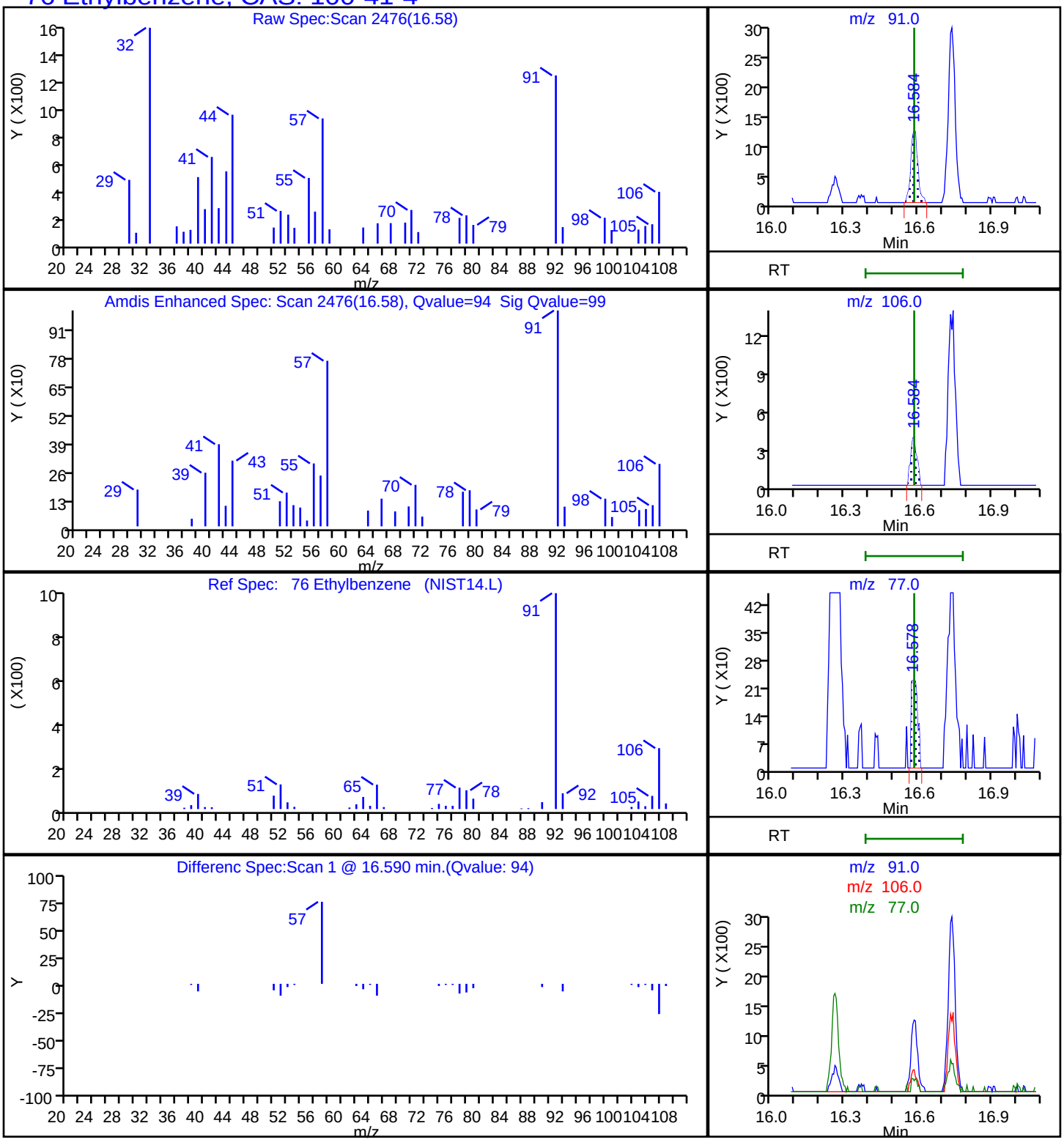
8 Dichlorodifluoromethane, CAS: 75-71-8



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P201.D				
Injection Date:	04-Sep-2020 05:38:30	Instrument ID:	MH		
Lims ID:	140-20175-A-8	Lab Sample ID:	140-20175-8		
Client ID:	SV-155-C-29				
Operator ID:	HMT	ALS Bottle#:	1	Worklist Smp#:	22
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

76 Ethylbenzene, CAS: 100-41-4

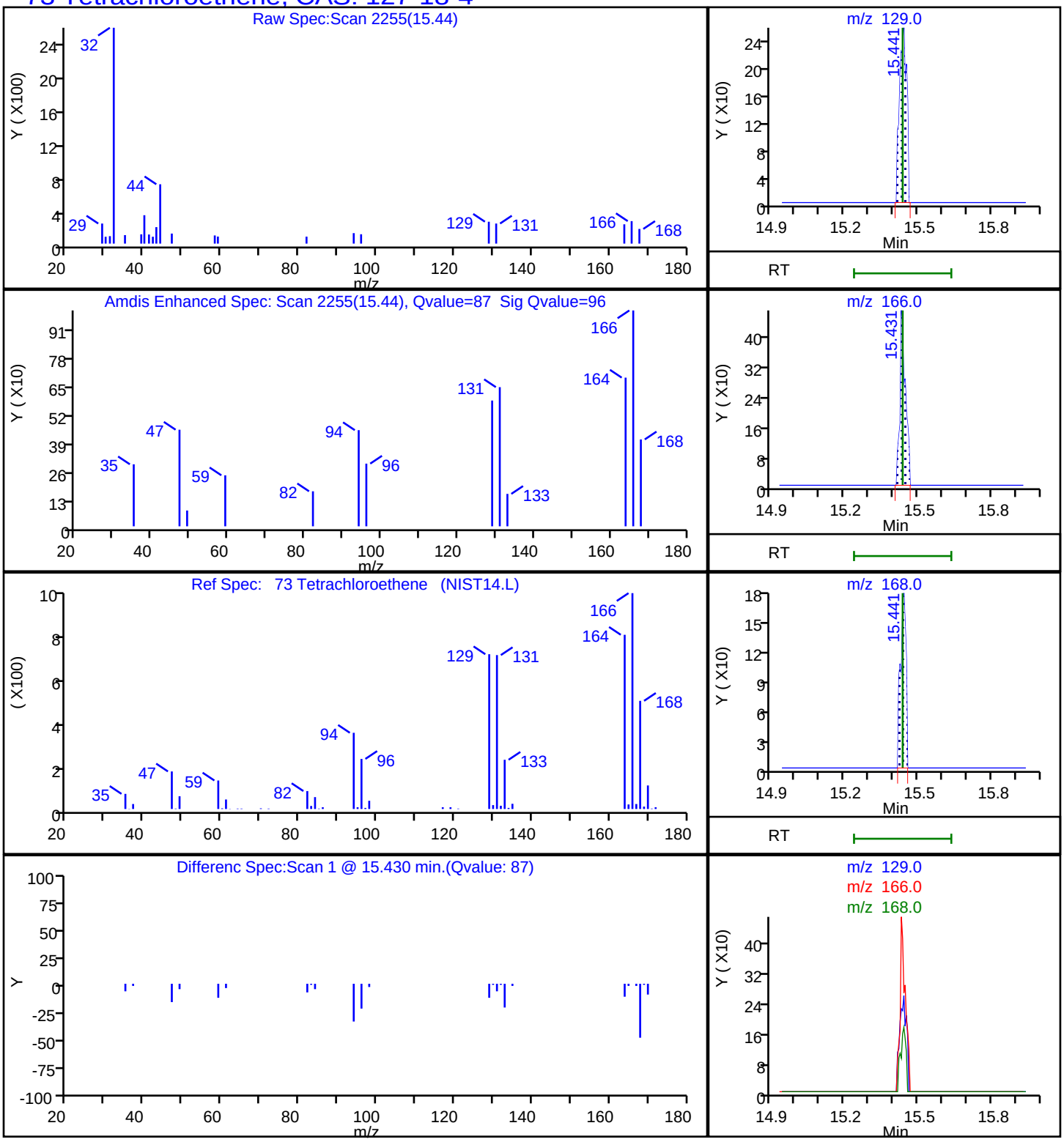


Report Date: 04-Sep-2020 07:23:14 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P201.D				
Injection Date:	04-Sep-2020 05:38:30	Instrument ID:	MH		
Lims ID:	140-20175-A-8	Lab Sample ID:	140-20175-8		
Client ID:	SV-155-C-29				
Operator ID:	HMT	ALS Bottle#:	1	Worklist Smp#:	22
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

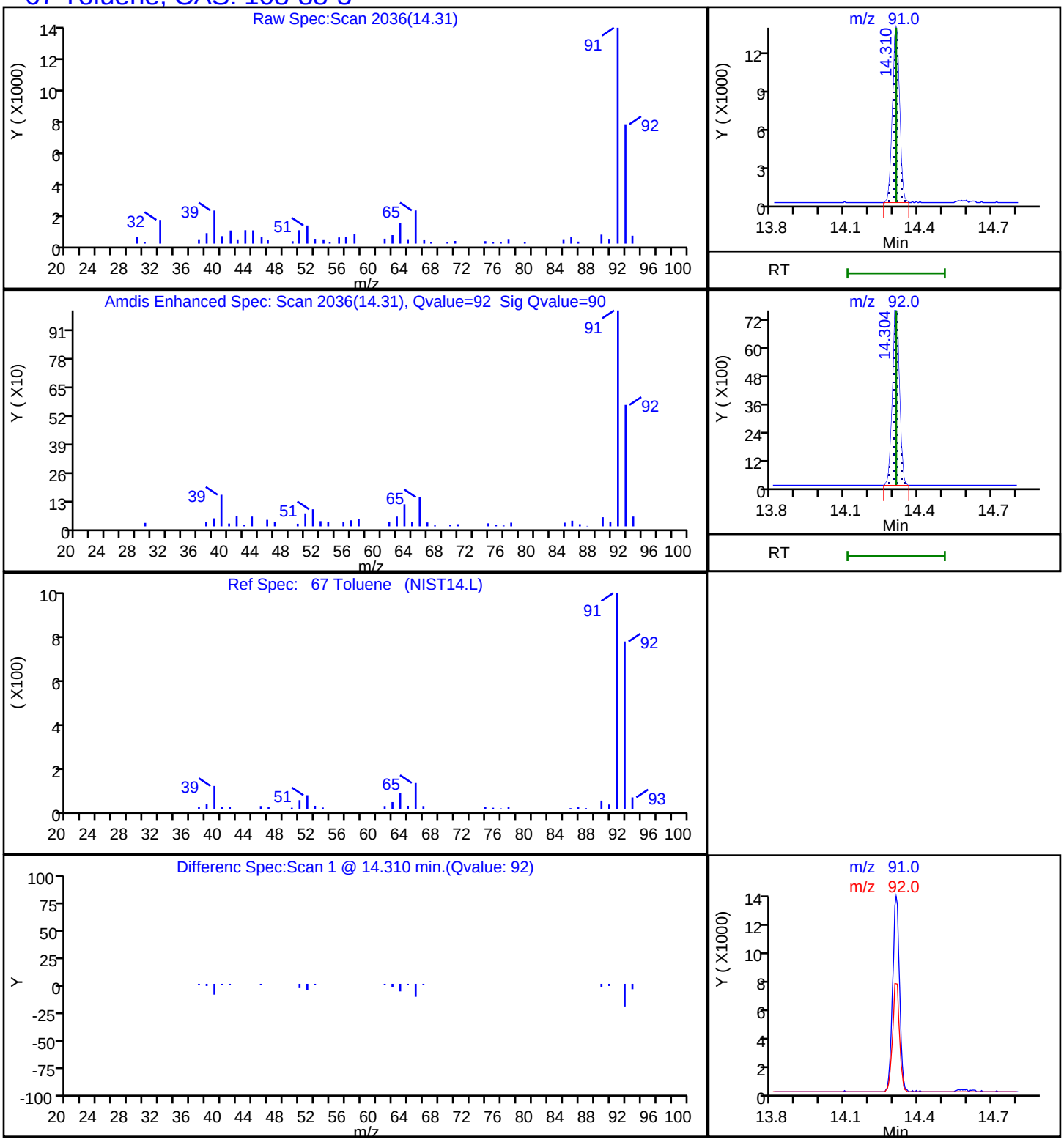
73 Tetrachloroethene, CAS: 127-18-4



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P201.D		
Injection Date:	04-Sep-2020 05:38:30	Instrument ID:	MH
Lims ID:	140-20175-A-8	Lab Sample ID:	140-20175-8
Client ID:	SV-155-C-29		
Operator ID:	HMT	ALS Bottle#:	1 Worklist Smp#: 22
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

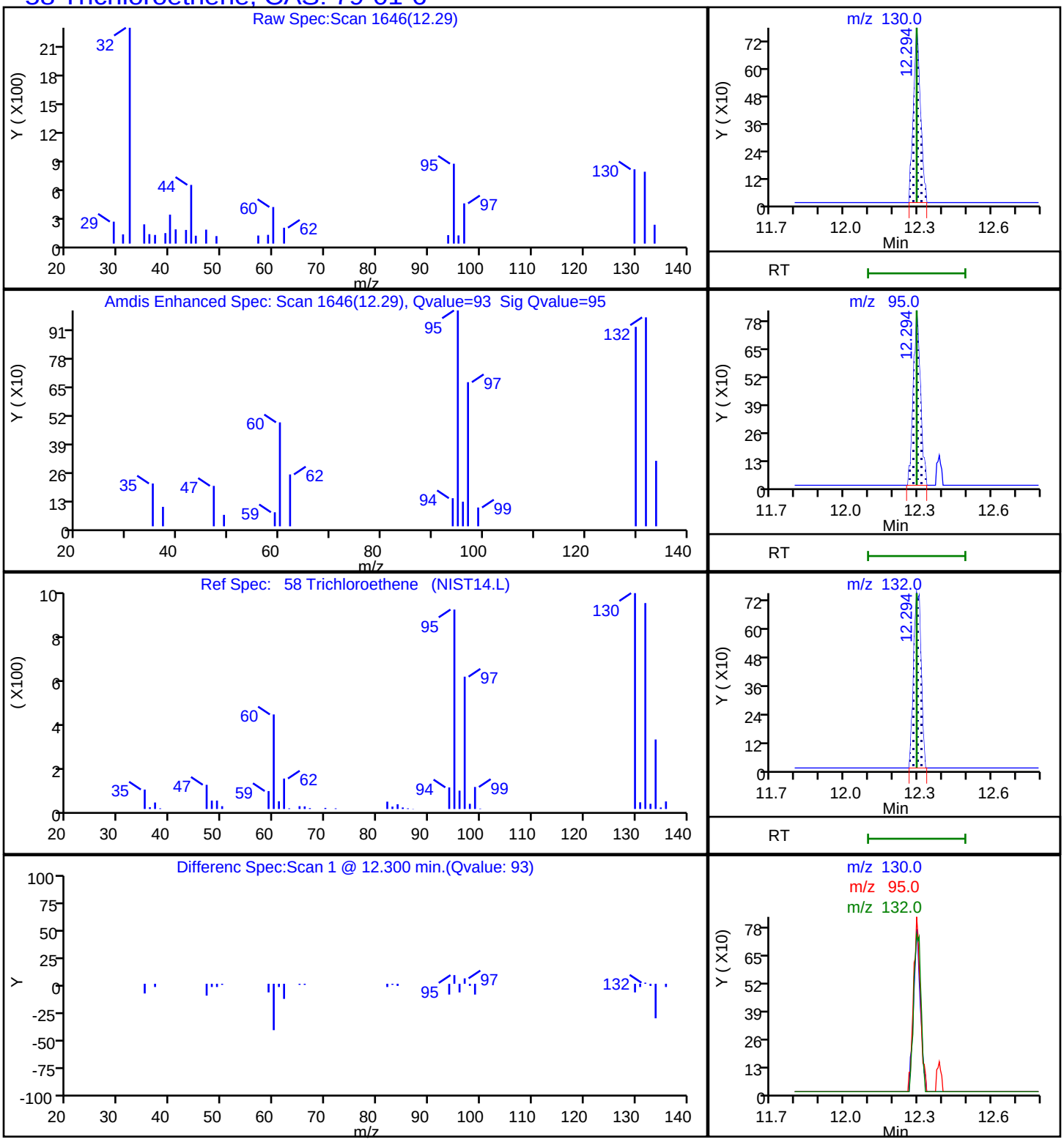
67 Toluene, CAS: 108-88-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P201.D		
Injection Date:	04-Sep-2020 05:38:30	Instrument ID:	MH
Lims ID:	140-20175-A-8	Lab Sample ID:	140-20175-8
Client ID:	SV-155-C-29		
Operator ID:	HMT	ALS Bottle#:	1 Worklist Smp#: 22
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

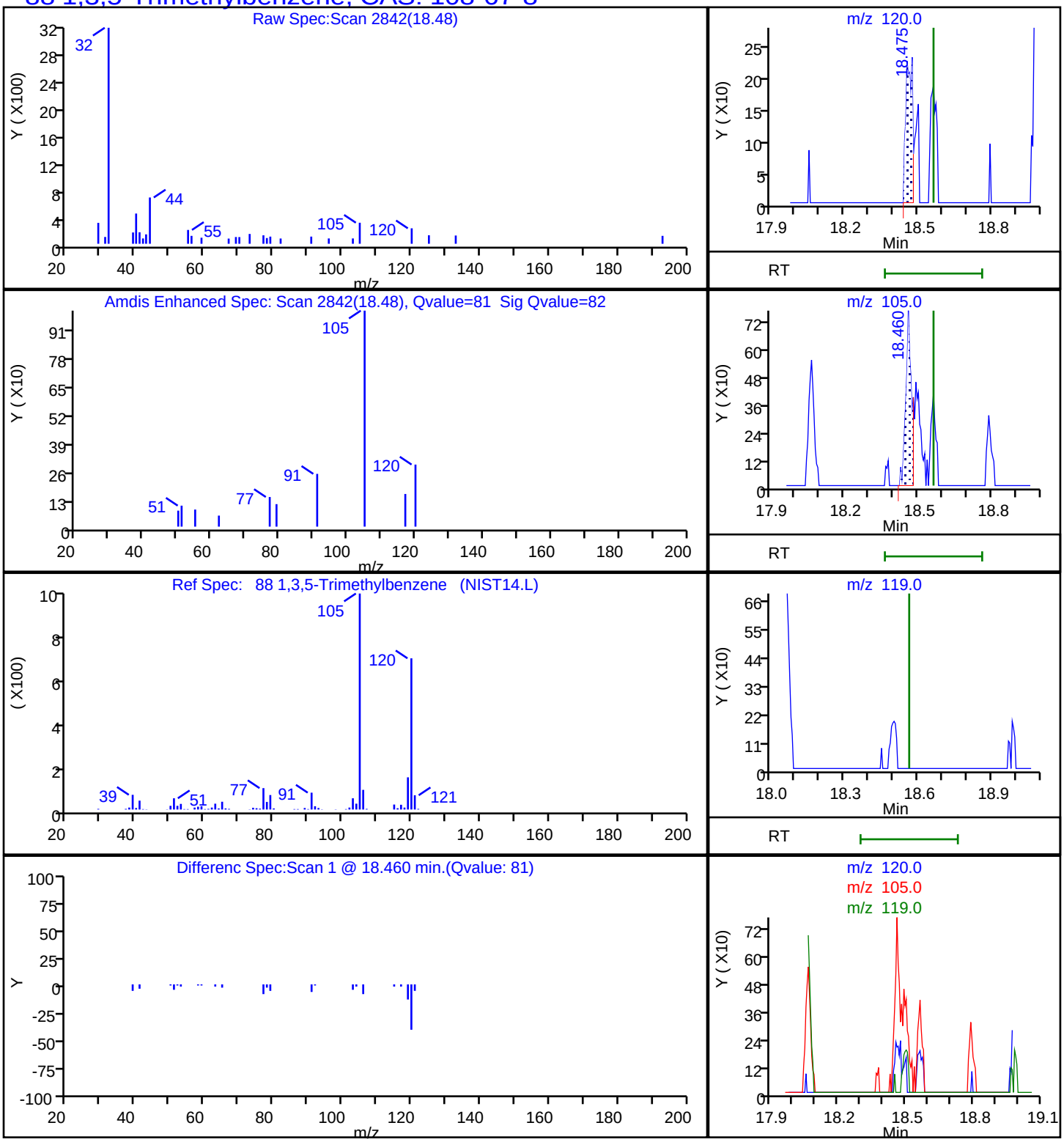
58 Trichloroethene, CAS: 79-01-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P201.D		
Injection Date:	04-Sep-2020 05:38:30	Instrument ID:	MH
Lims ID:	140-20175-A-8	Lab Sample ID:	140-20175-8
Client ID:	SV-155-C-29		
Operator ID:	HMT	ALS Bottle#:	1 Worklist Smp#: 22
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

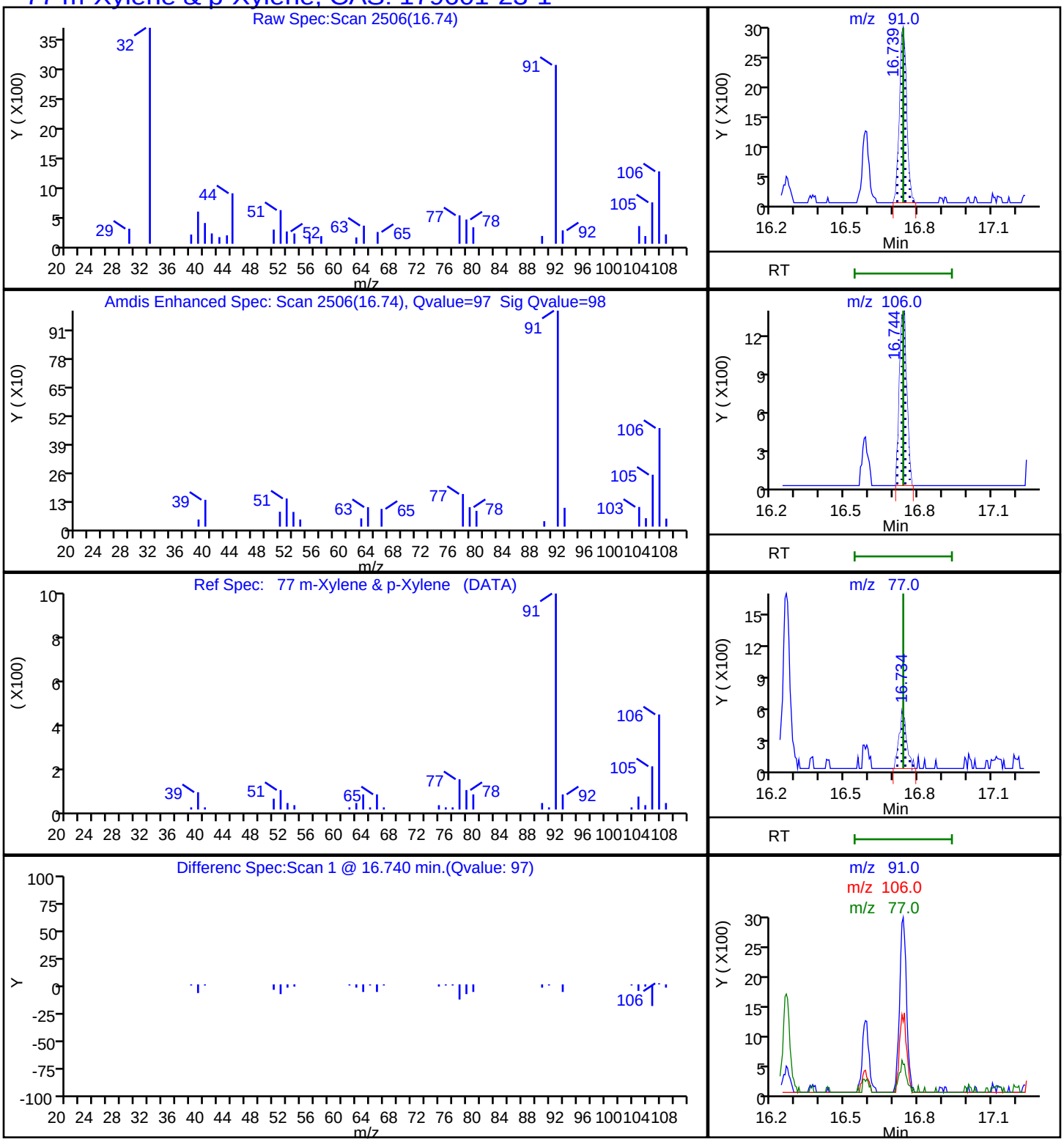
88 1,3,5-Trimethylbenzene, CAS: 108-67-8



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P201.D		
Injection Date:	04-Sep-2020 05:38:30	Instrument ID:	MH
Lims ID:	140-20175-A-8	Lab Sample ID:	140-20175-8
Client ID:	SV-155-C-29		
Operator ID:	HMT	ALS Bottle#:	1 Worklist Smp#: 22
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

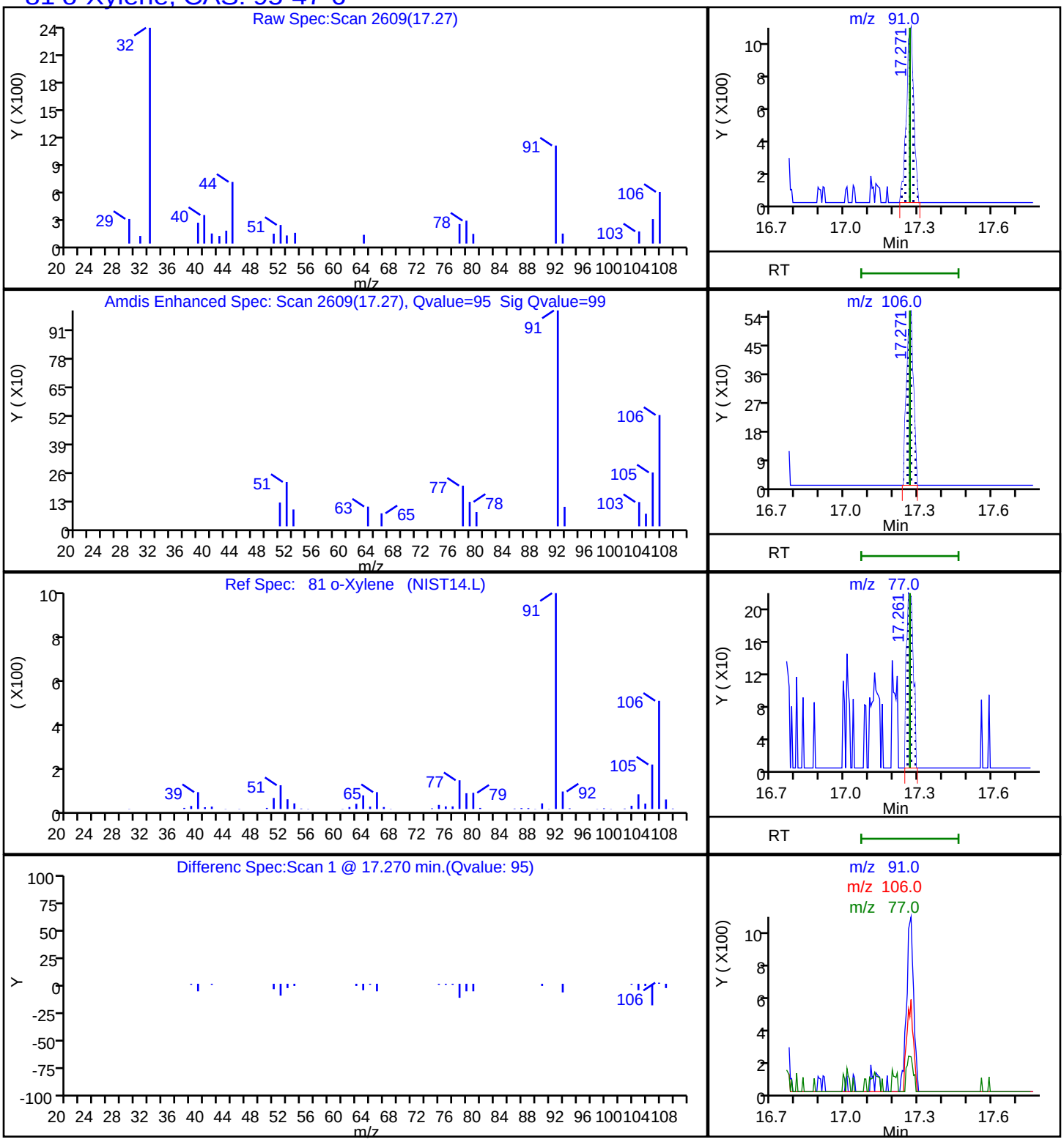
77 m-Xylene & p-Xylene, CAS: 179601-23-1



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P201.D				
Injection Date:	04-Sep-2020 05:38:30	Instrument ID:	MH		
Lims ID:	140-20175-A-8	Lab Sample ID:	140-20175-8		
Client ID:	SV-155-C-29				
Operator ID:	HMT	ALS Bottle#:	1	Worklist Smp#:	22
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

81 o-Xylene, CAS: 95-47-6



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: SV-133-C-29 Lab Sample ID: 140-20175-9

Matrix: Air Lab File ID: HI03P202.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 10:35

Sample wt/vol: 100(mL) Date Analyzed: 09/04/2020 06:35

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42399 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.16	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.62		0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	2.6		0.40	0.11
67-66-3	Chloroform	119.38	1.9		0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.54		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	0.081	J	0.40	0.065
75-09-2	Methylene Chloride	84.93	2.6		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	0.64		0.40	0.035
108-88-3	Toluene	92.14	1.5		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	0.050	J	0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	40		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	0.25	J	0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.47	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	87		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: SV-133-C-29 Lab Sample ID: 140-20175-9

Matrix: Air Lab File ID: HI03P202.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 10:35

Sample wt/vol: 100(mL) Date Analyzed: 09/04/2020 06:35

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42399 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.51	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	3.9		2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	9.1		1.4	0.39
67-66-3	Chloroform	119.38	9.2		2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.7		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	0.35	J	1.7	0.28
75-09-2	Methylene Chloride	84.93	9.1		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	4.3		2.7	0.24
108-88-3	Toluene	92.14	5.7		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	0.20	J	1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	210		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	1.2	J	2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	2.0	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	87		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P202.D				
Lims ID:	140-20175-A-9				
Client ID:	SV-133-C-29				
Sample Type:	Client				
Inject. Date:	04-Sep-2020 06:35:30	ALS Bottle#:	2	Worklist Smp#:	23
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016480-023				
Misc. Info.:	140-20175-a-9				
Operator ID:	HMT	Instrument ID:	MH		
Method:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\MH_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	04-Sep-2020 07:23:30	Calib Date:	29-Aug-2020 23:57:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1020				
First Level Reviewer: tajh		Date:	04-Sep-2020 07:23:52		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.431	9.436	-0.005	98	102150	4.80	
* 2 1,4-Difluorobenzene	114	11.591	11.591	0.000	95	421804	4.80	
* 3 Chlorobenzene-d5 (IS)	117	16.258	16.258	0.000	88	304872	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.876	17.876	0.000	90	142821	4.03	
6 Chlorodifluoromethane	51	3.921	3.919	0.000	97	29248	0.5131	
8 Dichlorodifluoromethane	85	3.994	3.986	0.006	99	8283	0.1073	
31 Methylene Chloride	84	6.769	6.760	0.005	96	13135	0.5245	
34 trans-1,2-Dichloroethene	96	7.622	7.618	0.000	23	260	0.0101	
44 Chloroform	83	9.436	9.431	0.000	36	23474	0.3784	
51 Benzene	78	11.069	11.074	-0.005	92	2468	0.0319	
52 Carbon tetrachloride	117	11.095	11.095	0.000	95	5944	0.1240	
58 Trichloroethene	130	12.294	12.294	0.000	95	276594	7.94	
67 Toluene	91	14.310	14.310	0.000	92	23558	0.2999	
73 Tetrachloroethene	129	15.436	15.436	0.000	90	4213	0.1280	
76 Ethylbenzene	91	16.584	16.584	0.000	95	1542	0.0162	
77 m-Xylene & p-Xylene	91	16.739	16.739	0.000	96	4217	0.0561	
81 o-Xylene	91	17.266	17.266	0.000	46	2941	0.0374	
88 1,3,5-Trimethylbenzene	120	18.558	18.563	-0.005	1	138	0.0503	
S 116 Xylenes, Total	100				0		0.0935	

Reagents:

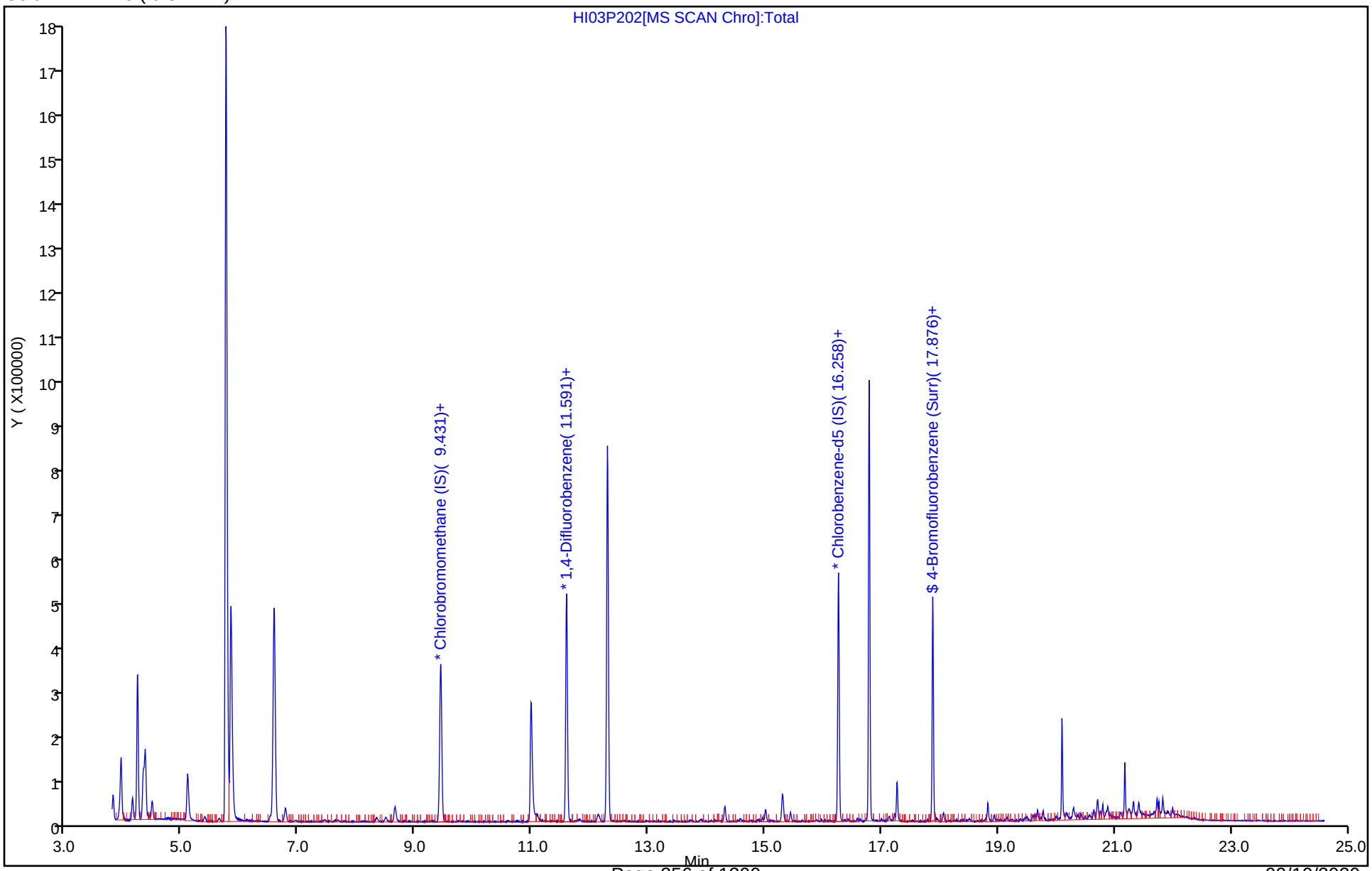
40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

Report Date: 04-Sep-2020 07:23:53 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P202.D				
Injection Date:	04-Sep-2020 06:35:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	140-20175-A-9	Lab Sample ID:	140-20175-9	Worklist Smp#:	23
Client ID:	SV-133-C-29				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

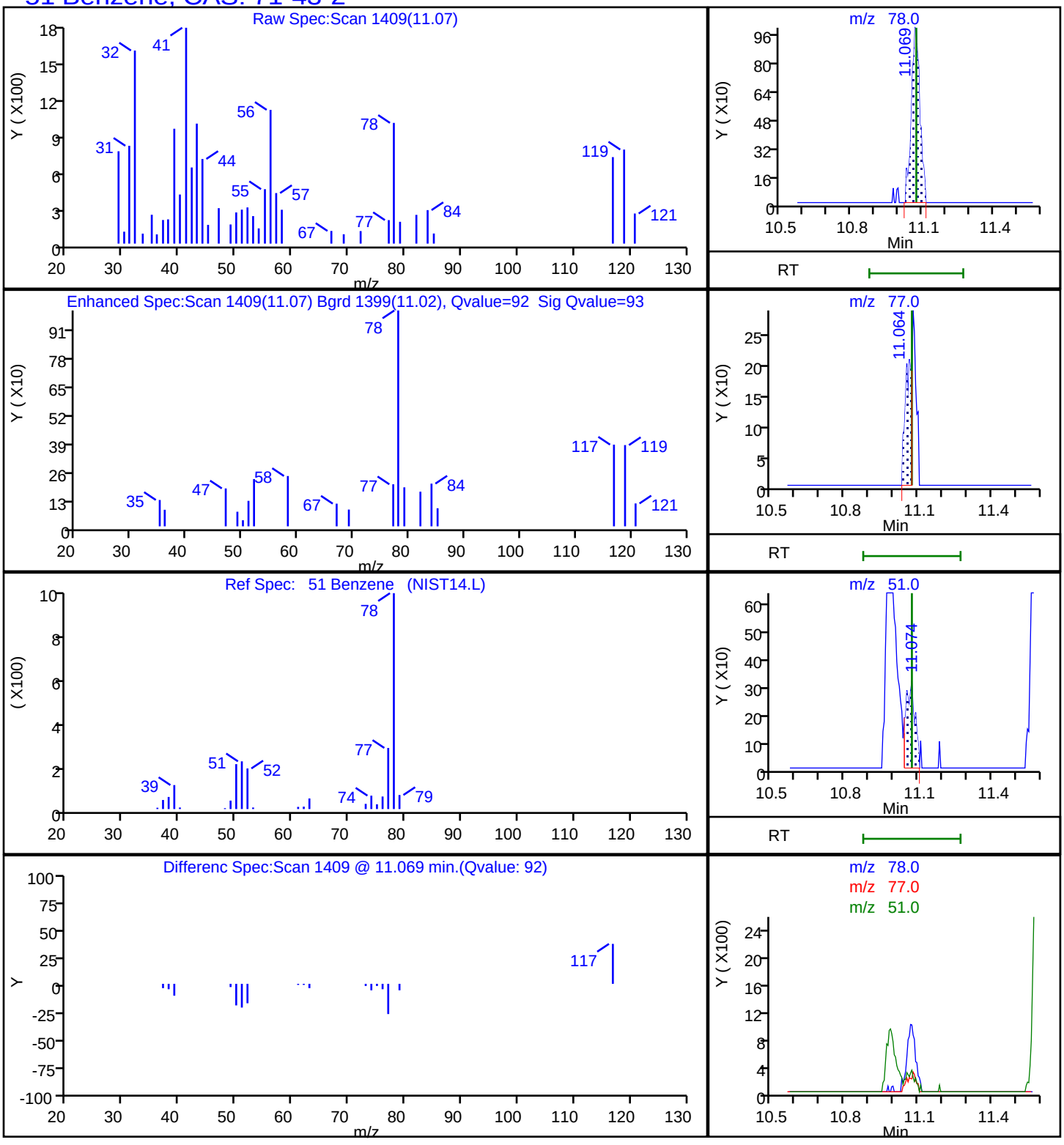
Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P202.D				
Lims ID:	140-20175-A-9				
Client ID:	SV-133-C-29				
Sample Type:	Client				
Inject. Date:	04-Sep-2020 06:35:30	ALS Bottle#:	2	Worklist Smp#:	23
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016480-023				
Misc. Info.:	140-20175-a-9				
Operator ID:	HMT	Instrument ID:	MH		
Method:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\MH_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	04-Sep-2020 07:23:30	Calib Date:	29-Aug-2020 23:57:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1020				
First Level Reviewer: tajh		Date:	04-Sep-2020 07:23:52		

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	4.03	86.89

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P202.D				
Injection Date:	04-Sep-2020 06:35:30	Instrument ID:	MH		
Lims ID:	140-20175-A-9	Lab Sample ID:	140-20175-9		
Client ID:	SV-133-C-29				
Operator ID:	HMT	ALS Bottle#:	2	Worklist Smp#:	23
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

51 Benzene, CAS: 71-43-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P202.D				
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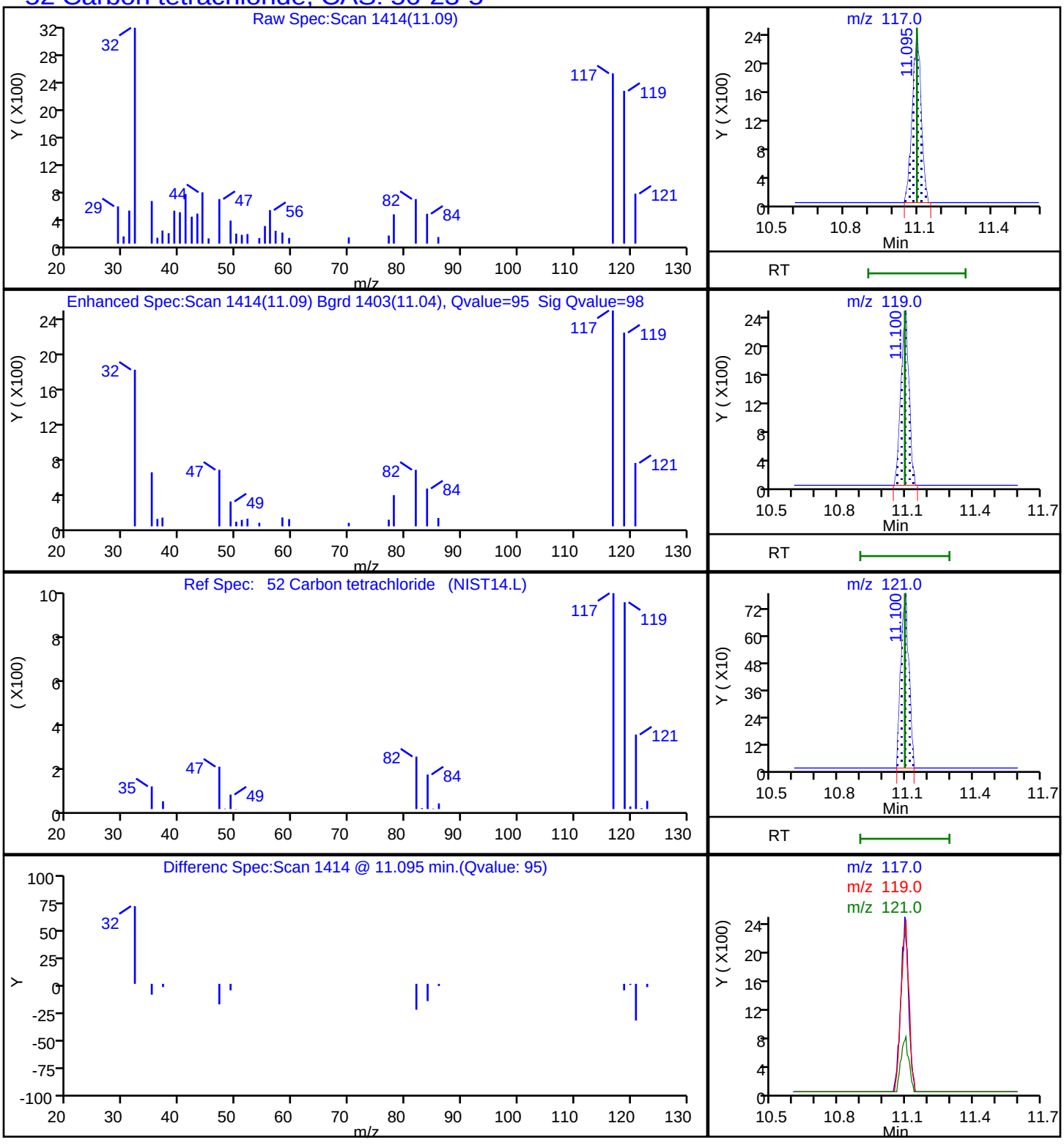
Lims ID:	140-20175-A-9	Lab Sample ID:	140-20175-9		
Client ID:	SV-133-C-29				
Operator ID:	HMT	ALS Bottle#:	2	Worklist Smp#:	23
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

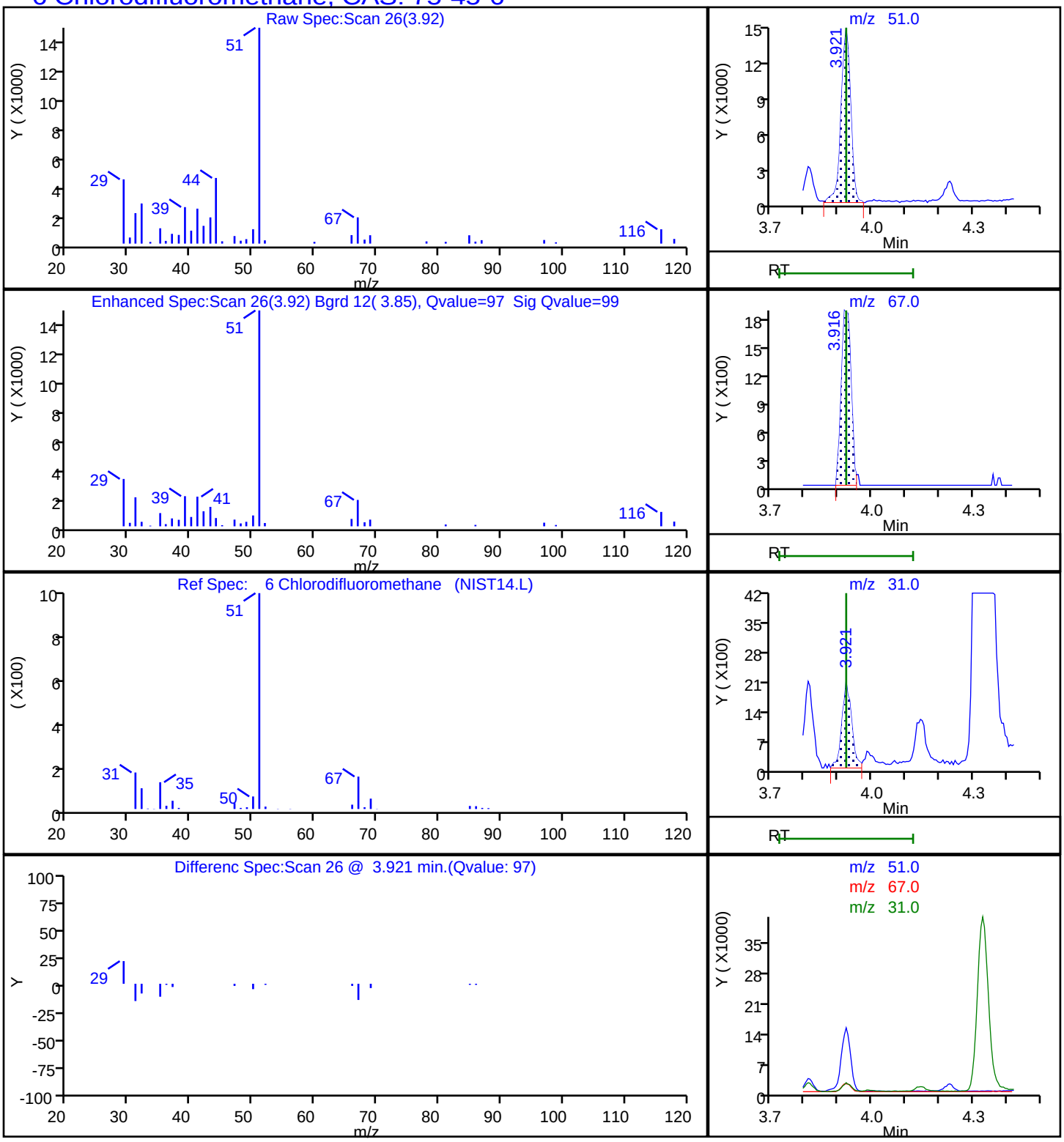
52 Carbon tetrachloride, CAS: 56-23-5



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P202.D				
Injection Date:	04-Sep-2020 06:35:30	Instrument ID:	MH		
Lims ID:	140-20175-A-9	Lab Sample ID:	140-20175-9		
Client ID:	SV-133-C-29				
Operator ID:	HMT	ALS Bottle#:	2	Worklist Smp#:	23
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

6 Chlorodifluoromethane, CAS: 75-45-6

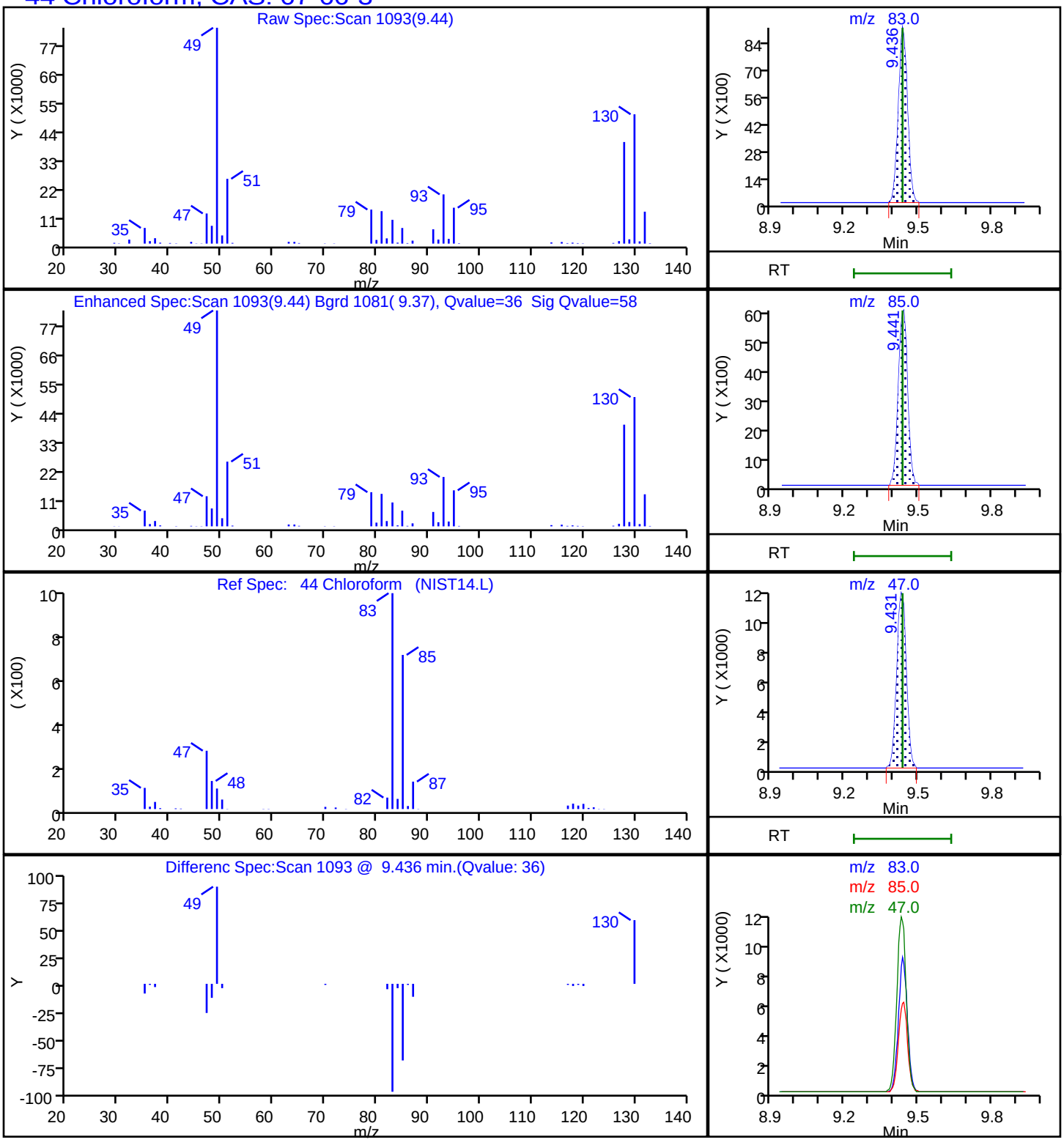


Report Date: 04-Sep-2020 07:23:53 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P202.D				
Injection Date:	04-Sep-2020 06:35:30	Instrument ID:	MH		
Lims ID:	140-20175-A-9	Lab Sample ID:	140-20175-9		
Client ID:	SV-133-C-29				
Operator ID:	HMT	ALS Bottle#:	2	Worklist Smp#:	23
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

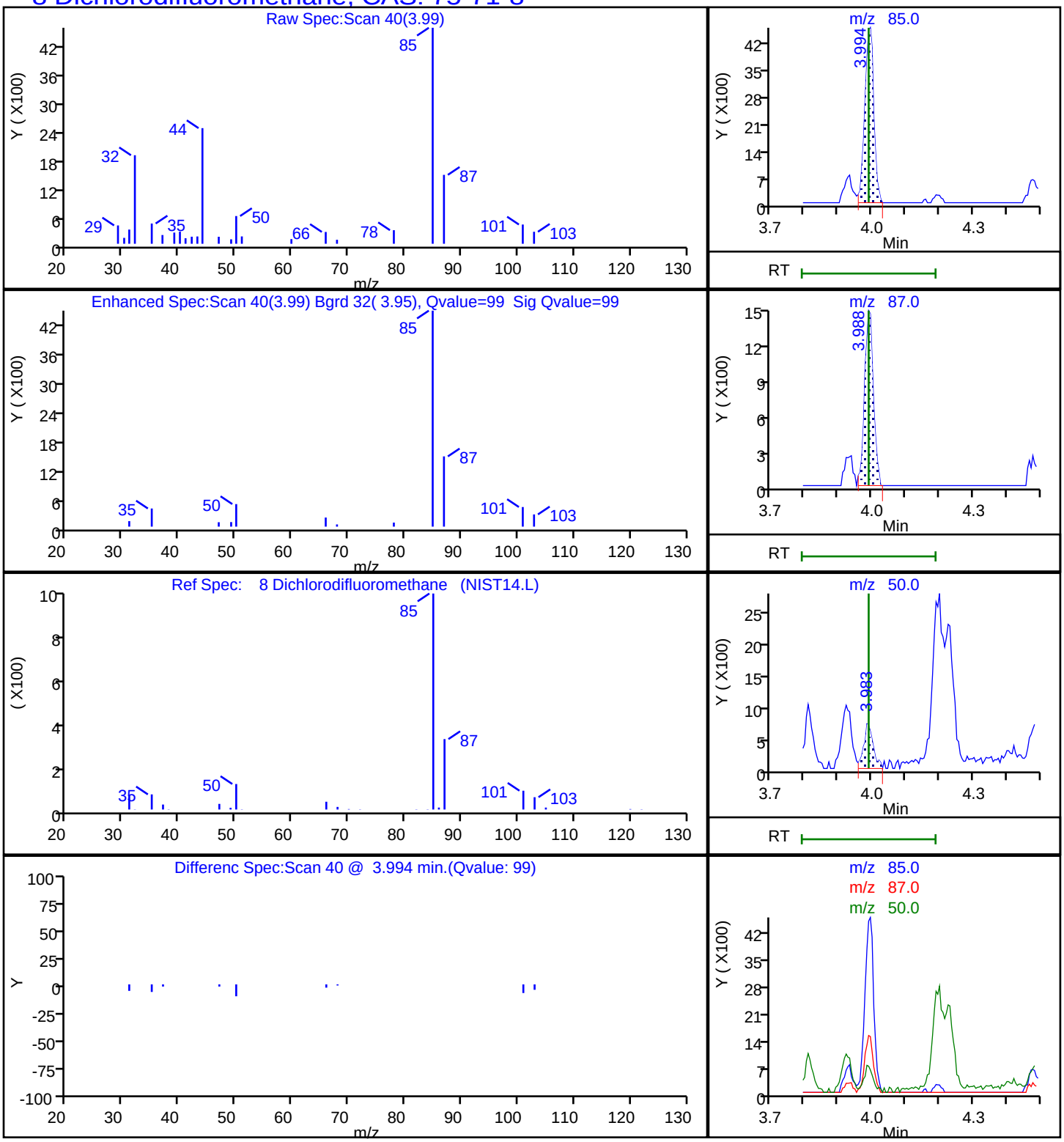
44 Chloroform, CAS: 67-66-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P202.D				
Injection Date:	04-Sep-2020 06:35:30	Instrument ID:	MH		
Lims ID:	140-20175-A-9	Lab Sample ID:	140-20175-9		
Client ID:	SV-133-C-29				
Operator ID:	HMT	ALS Bottle#:	2	Worklist Smp#:	23
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

8 Dichlorodifluoromethane, CAS: 75-71-8

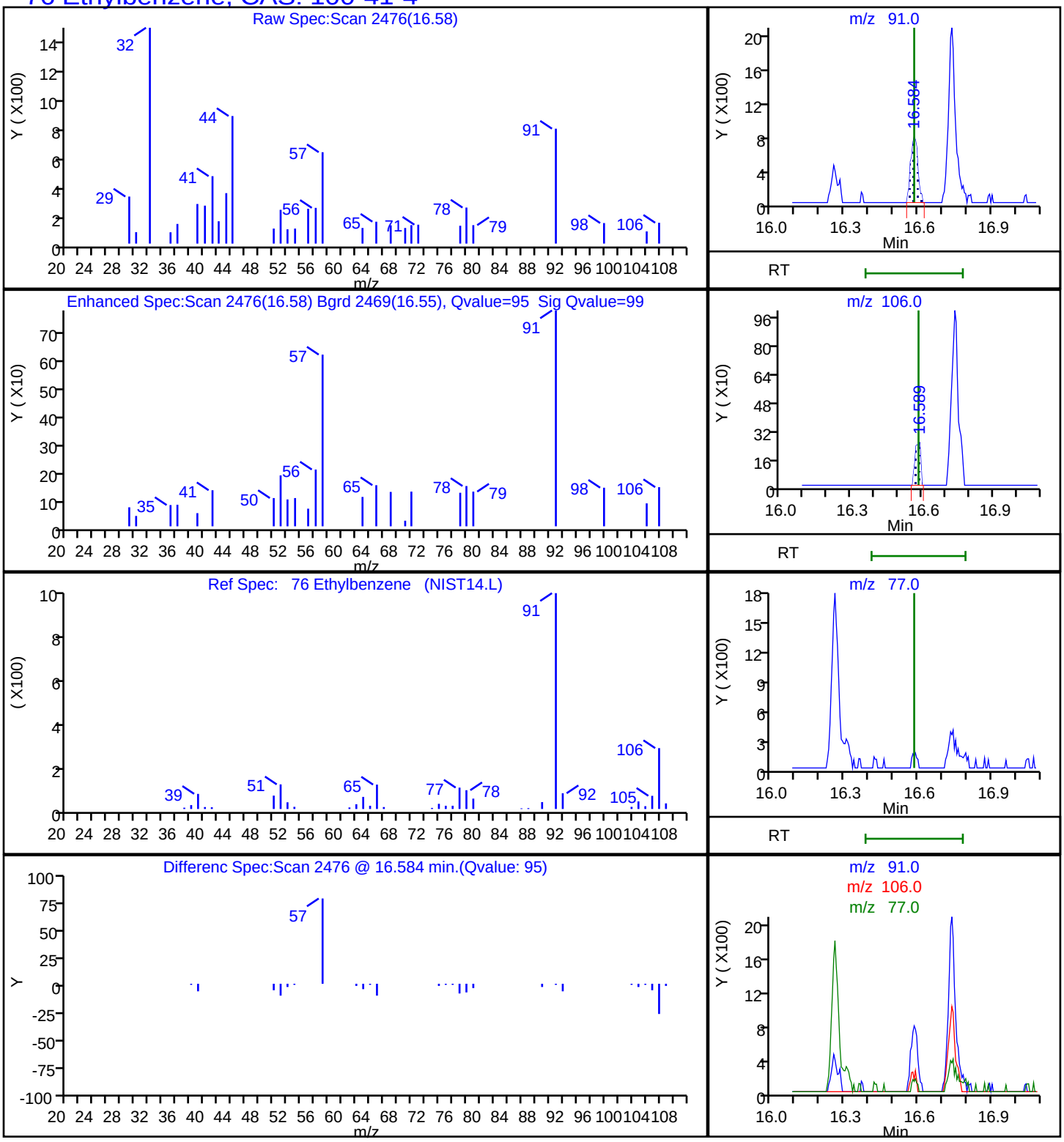


Report Date: 04-Sep-2020 07:23:53 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P202.D				
Injection Date:	04-Sep-2020 06:35:30	Instrument ID:	MH		
Lims ID:	140-20175-A-9	Lab Sample ID:	140-20175-9		
Client ID:	SV-133-C-29				
Operator ID:	HMT	ALS Bottle#:	2	Worklist Smp#:	23
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

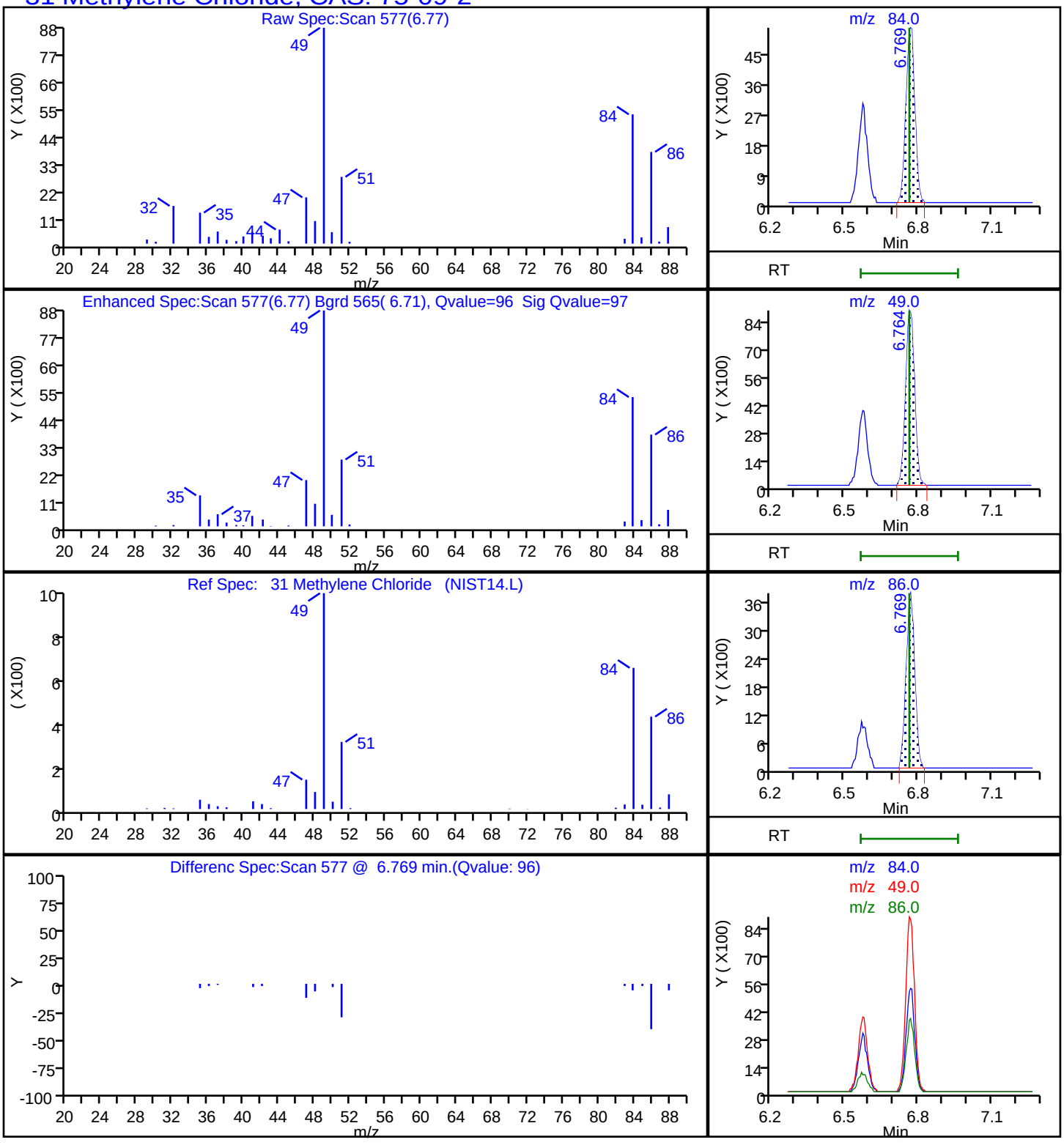
76 Ethylbenzene, CAS: 100-41-4



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P202.D				
Injection Date:	04-Sep-2020 06:35:30	Instrument ID:	MH		
Lims ID:	140-20175-A-9	Lab Sample ID:	140-20175-9		
Client ID:	SV-133-C-29				
Operator ID:	HMT	ALS Bottle#:	2	Worklist Smp#:	23
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

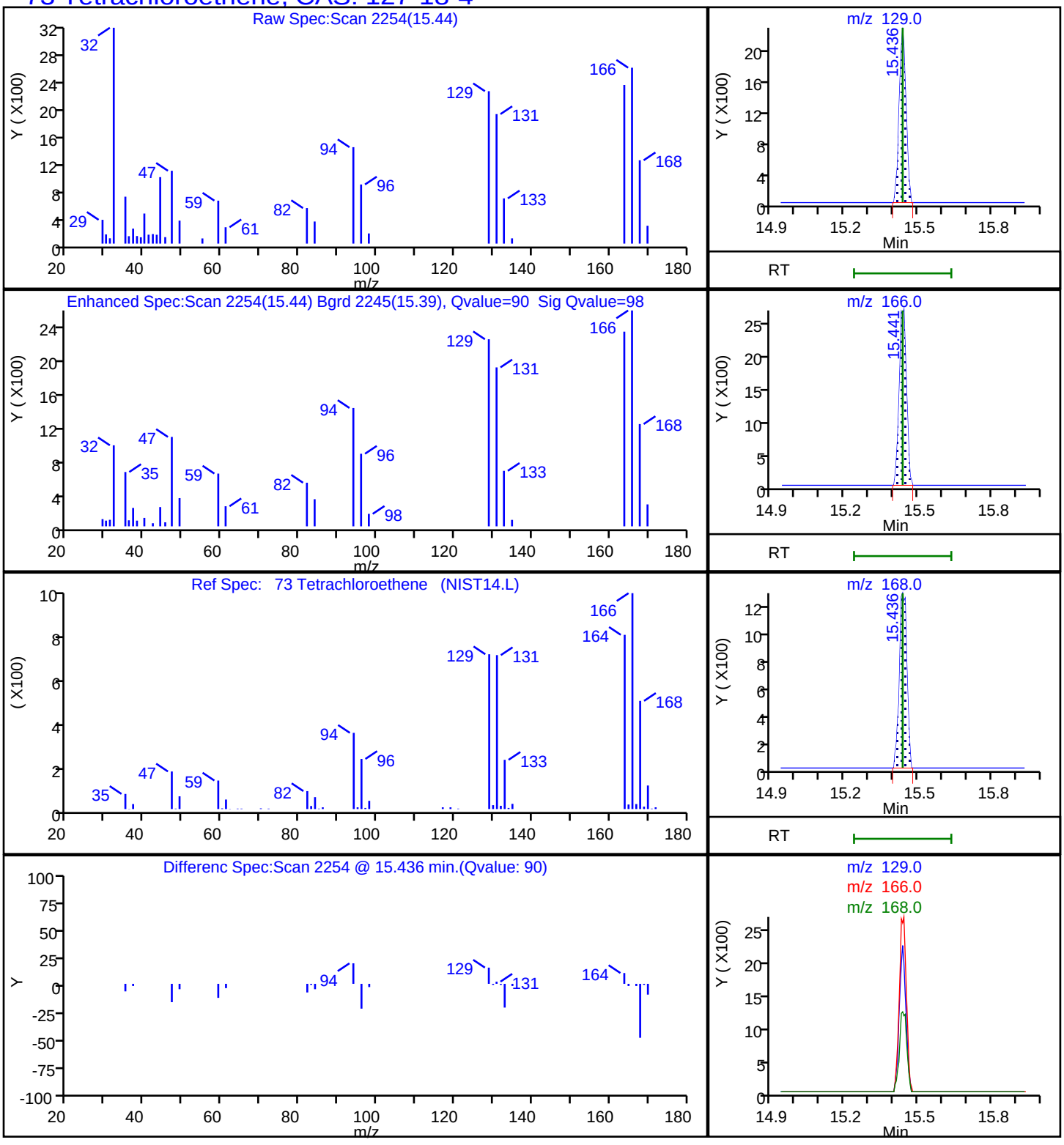
31 Methylene Chloride, CAS: 75-09-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P202.D				
Injection Date:	04-Sep-2020 06:35:30	Instrument ID:	MH		
Lims ID:	140-20175-A-9	Lab Sample ID:	140-20175-9		
Client ID:	SV-133-C-29				
Operator ID:	HMT	ALS Bottle#:	2	Worklist Smp#:	23
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

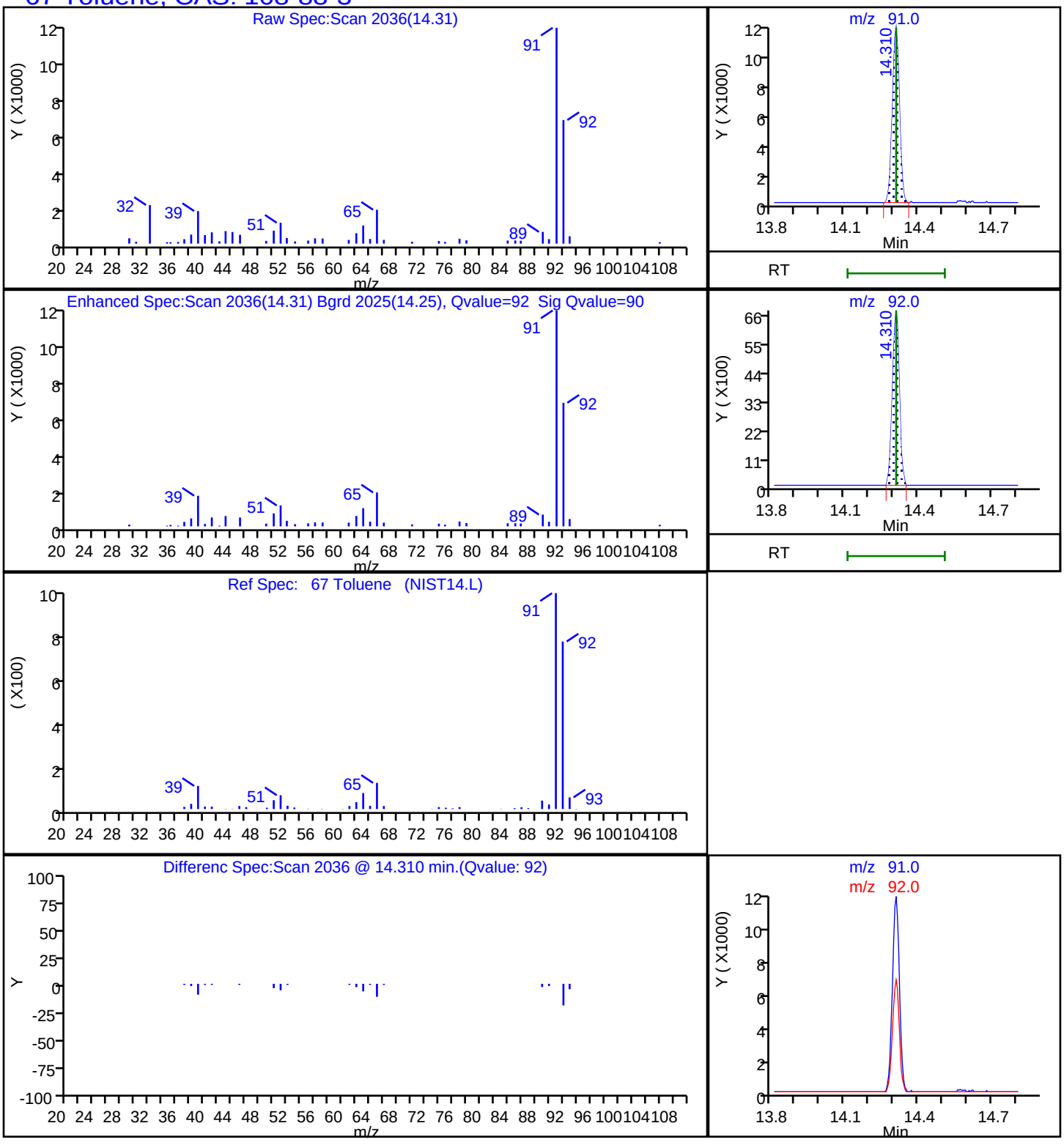
73 Tetrachloroethene, CAS: 127-18-4



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P202.D		
Injection Date:	04-Sep-2020 06:35:30	Instrument ID:	MH
Lims ID:	140-20175-A-9	Lab Sample ID:	140-20175-9
Client ID:	SV-133-C-29		
Operator ID:	HMT	ALS Bottle#:	2 Worklist Smp#: 23
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

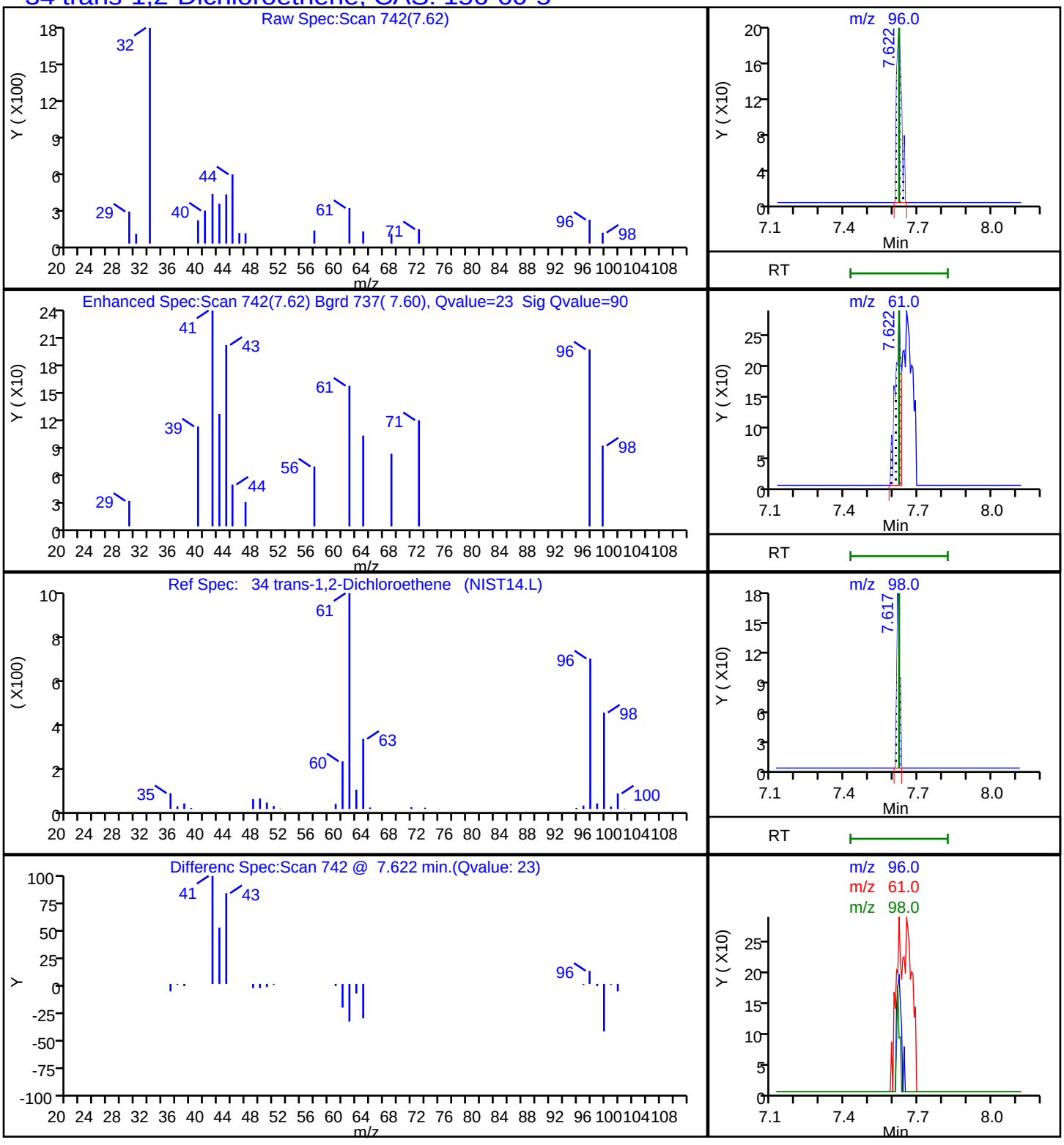
67 Toluene, CAS: 108-88-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P202.D				
Injection Date:	04-Sep-2020 06:35:30	Instrument ID:	MH		
Lims ID:	140-20175-A-9	Lab Sample ID:	140-20175-9		
Client ID:	SV-133-C-29				
Operator ID:	HMT	ALS Bottle#:	2	Worklist Smp#:	23
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

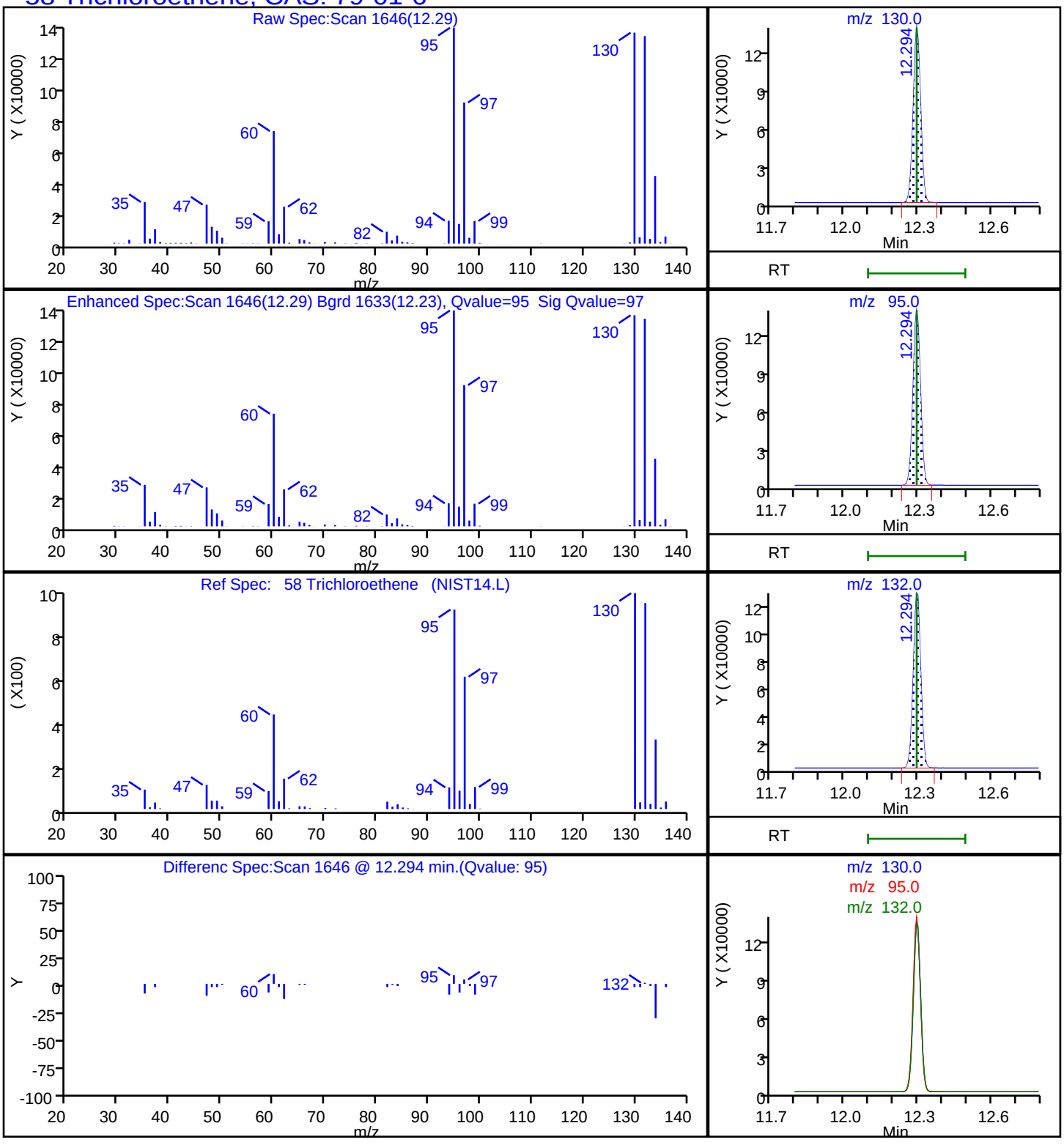
34 trans-1,2-Dichloroethene, CAS: 156-60-5



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P202.D		
Injection Date:	04-Sep-2020 06:35:30	Instrument ID:	MH
Lims ID:	140-20175-A-9	Lab Sample ID:	140-20175-9
Client ID:	SV-133-C-29		
Operator ID:	HMT	ALS Bottle#:	2 Worklist Smp#: 23
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

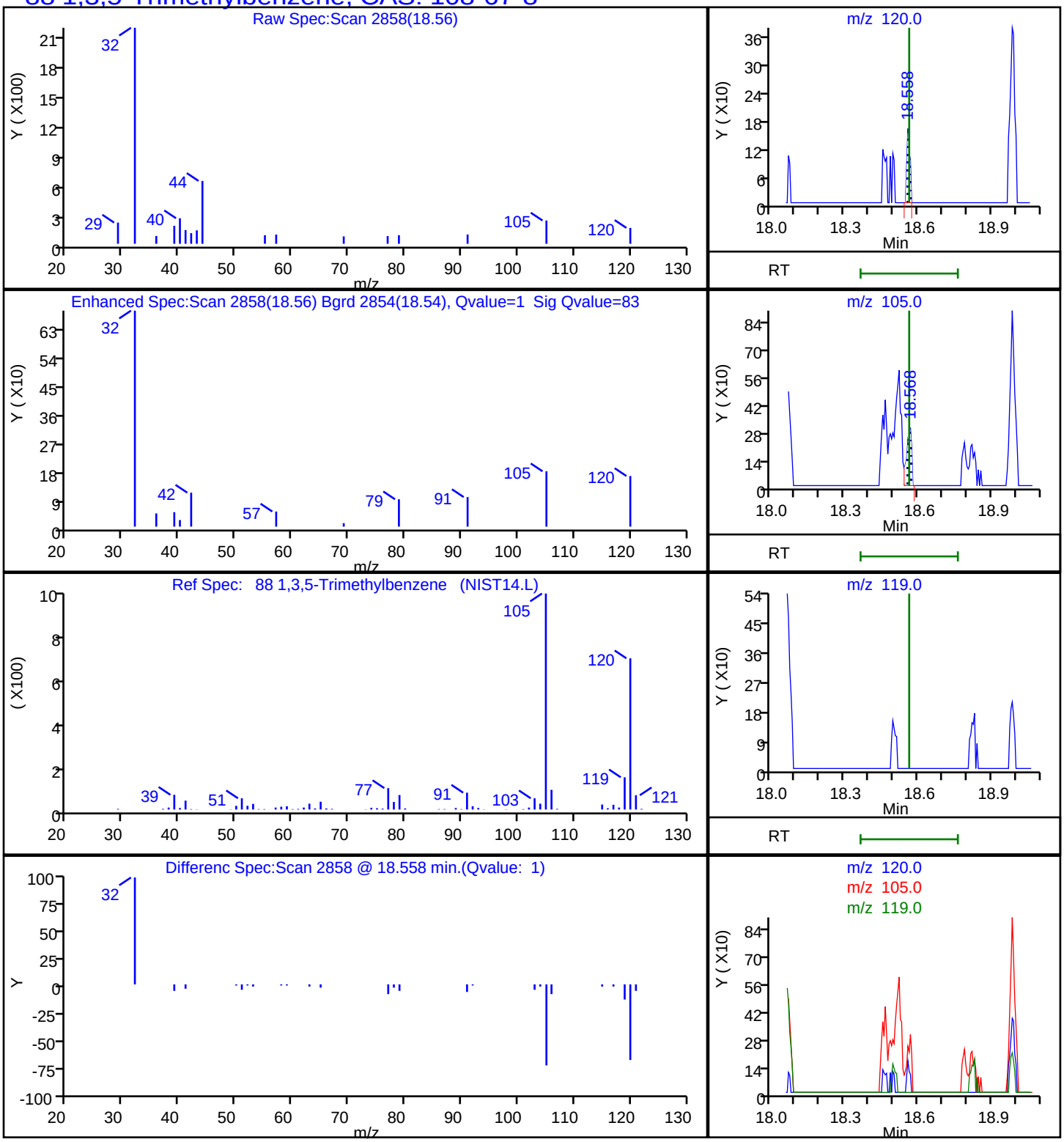
58 Trichloroethene, CAS: 79-01-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P202.D				
Injection Date:	04-Sep-2020 06:35:30	Instrument ID:	MH		
Lims ID:	140-20175-A-9	Lab Sample ID:	140-20175-9		
Client ID:	SV-133-C-29				
Operator ID:	HMT	ALS Bottle#:	2	Worklist Smp#:	23
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

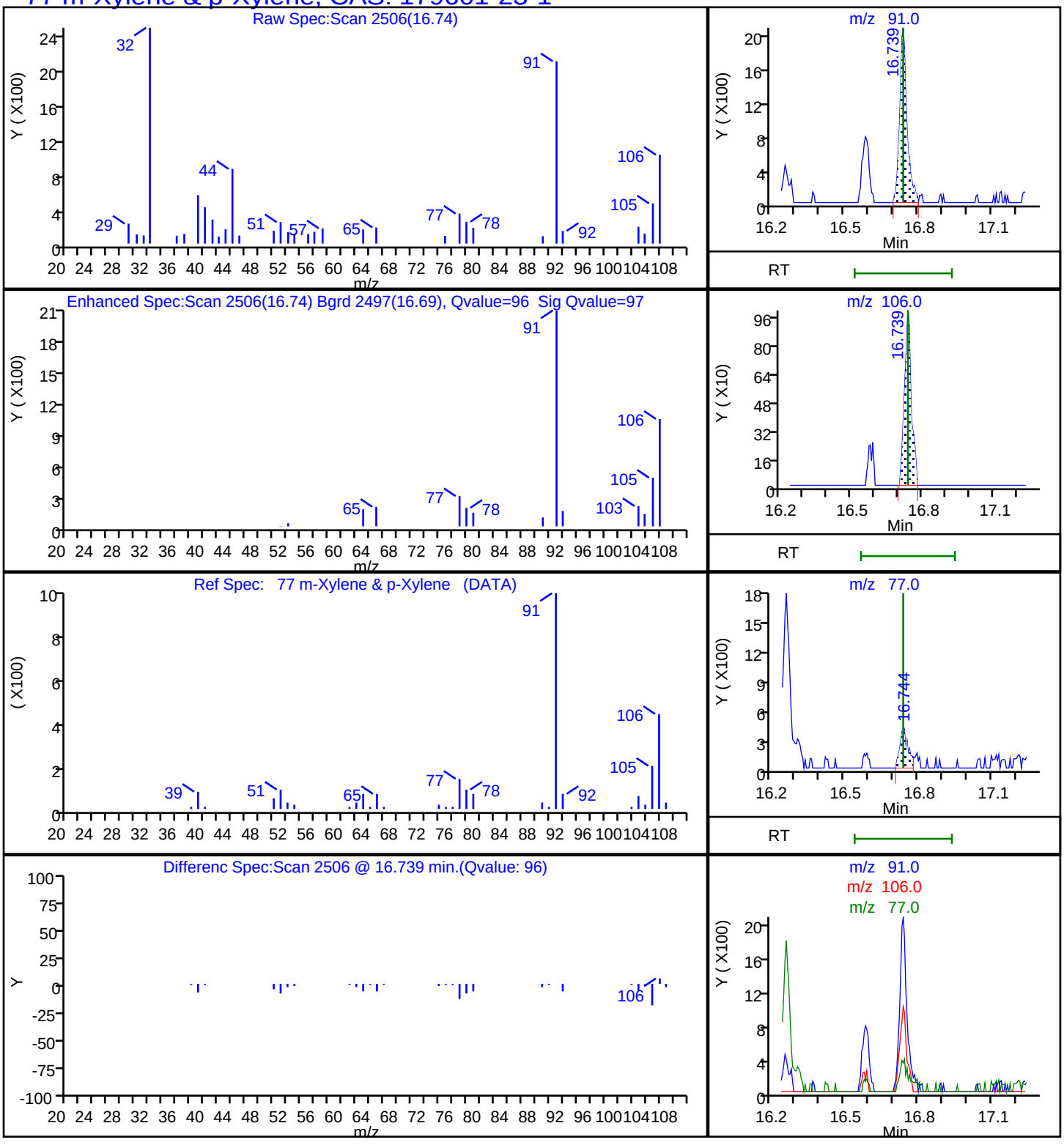
88 1,3,5-Trimethylbenzene, CAS: 108-67-8



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P202.D				
Injection Date:	04-Sep-2020 06:35:30	Instrument ID:	MH		
Lims ID:	140-20175-A-9	Lab Sample ID:	140-20175-9		
Client ID:	SV-133-C-29				
Operator ID:	HMT	ALS Bottle#:	2	Worklist Smp#:	23
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

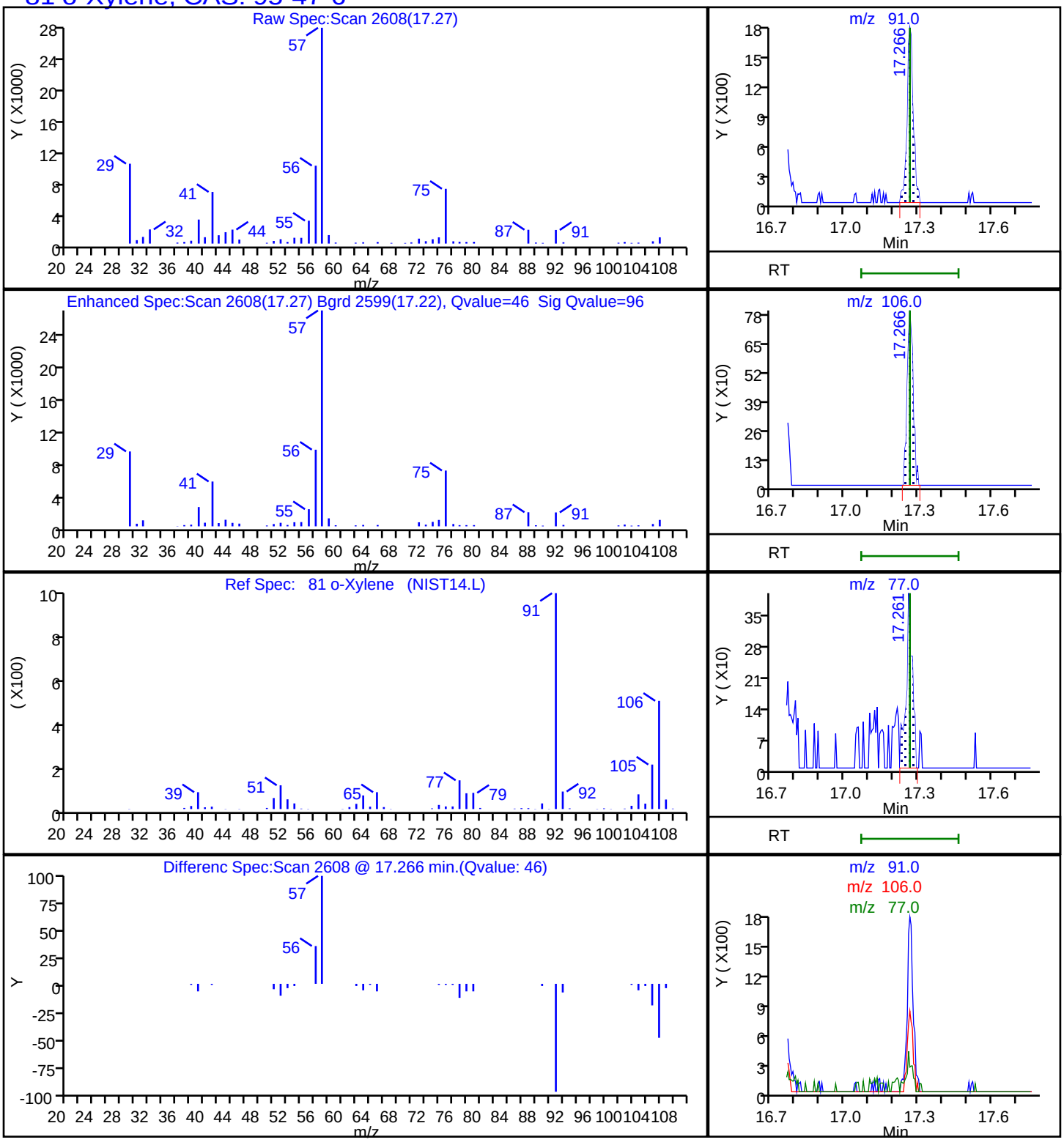
77 m-Xylene & p-Xylene, CAS: 179601-23-1



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P202.D		
Injection Date:	04-Sep-2020 06:35:30	Instrument ID:	MH
Lims ID:	140-20175-A-9	Lab Sample ID:	140-20175-9
Client ID:	SV-133-C-29		
Operator ID:	HMT	ALS Bottle#:	2 Worklist Smp#: 23
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

81 o-Xylene, CAS: 95-47-6



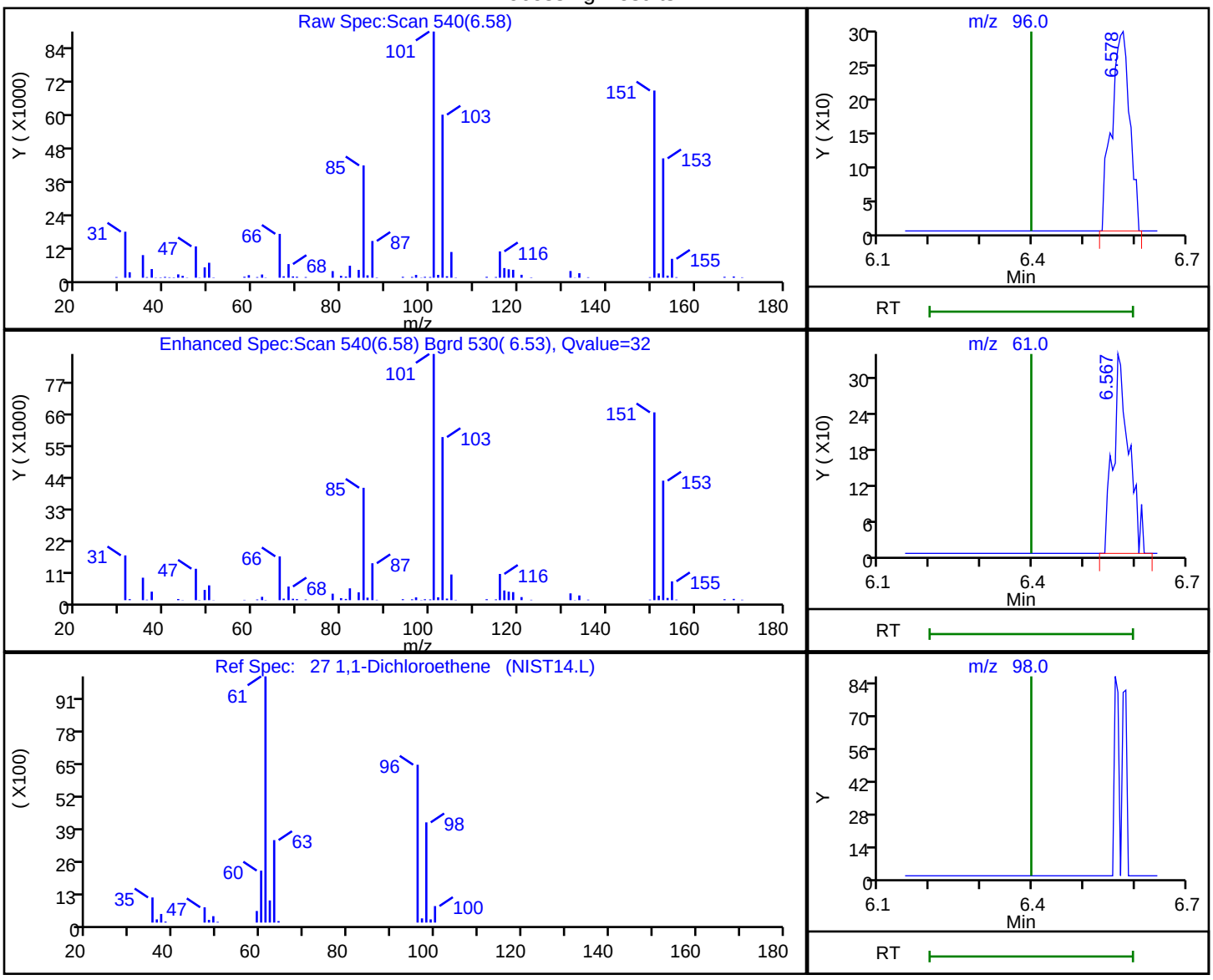
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P202.D				
Injection Date:	04-Sep-2020 06:35:30	Instrument ID:	MH		
Lims ID:	140-20175-A-9	Lab Sample ID:	140-20175-9		
Client ID:	SV-133-C-29				
Operator ID:	HMT	ALS Bottle#:	2	Worklist Smp#:	23
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

27 1,1-Dichloroethene, CAS: 75-35-4

Processing Results



RT	Mass	Response	Amount
6.58	96.00	718	0.028996
6.57	61.00	720	
6.40	98.00	0	

Reviewer: tajh, 04-Sep-2020 07:23:28

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: SV-153-C-29 Lab Sample ID: 140-20175-10

Matrix: Air Lab File ID: HI03P203.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 10:37

Sample wt/vol: 100(mL) Date Analyzed: 09/04/2020 07:30

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42399 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.19	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.89		0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	1.7		0.40	0.11
67-66-3	Chloroform	119.38	0.11	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.52		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	0.087	J	0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	0.070	J	0.40	0.035
108-88-3	Toluene	92.14	0.79		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	0.29		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	0.15	J	0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	0.31	J	0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.49	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	96		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: SV-153-C-29 Lab Sample ID: 140-20175-10

Matrix: Air Lab File ID: HI03P203.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 10:37

Sample wt/vol: 100(mL) Date Analyzed: 09/04/2020 07:30

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42399 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.62	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	5.6		2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	6.0		1.4	0.39
67-66-3	Chloroform	119.38	0.55	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.6		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	0.38	J	1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	0.47	J	2.7	0.24
108-88-3	Toluene	92.14	3.0		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	1.6		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	0.75	J	2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	1.5	J	2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	2.1	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	96		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P203.D
Lims ID: 140-20175-A-10
Client ID: SV-153-C-29
Sample Type: Client
Inject. Date: 04-Sep-2020 07:30:30 ALS Bottle#: 3 Worklist Smp#: 24
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016480-024
Misc. Info.: 140-20175-a-10
Operator ID: HMT Instrument ID: MH

Method: \\chromfs\Knoxville\ChromData\MH\20200902-16480.b\MH_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 04-Sep-2020 06:13:51 Calib Date: 29-Aug-2020 23:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1020

First Level Reviewer: tajh Date: 04-Sep-2020 08:47:18

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.426	9.436	-0.010	98	106027	4.80	
* 2 1,4-Difluorobenzene	114	11.591	11.591	0.000	95	420740	4.80	
* 3 Chlorobenzene-d5 (IS)	117	16.258	16.258	0.000	88	310339	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.876	17.876	0.000	90	160078	4.44	
6 Chlorodifluoromethane	51	3.916	3.917	-0.005	96	20070	0.3392	
8 Dichlorodifluoromethane	85	3.983	3.984	-0.005	99	8384	0.1046	
44 Chloroform	83	9.431	9.426	-0.005	28	1461	0.0227	
51 Benzene	78	11.064	11.074	-0.010	96	3012	0.0390	
52 Carbon tetrachloride	117	11.095	11.095	0.000	96	8475	0.1772	
58 Trichloroethene	130	12.289	12.294	-0.005	94	2049	0.0590	
67 Toluene	91	14.310	14.310	0.000	89	12608	0.1577	
73 Tetrachloroethene	129	15.436	15.436	0.000	88	468	0.0140	
76 Ethylbenzene	91	16.584	16.584	0.000	96	1690	0.0175	
77 m-Xylene & p-Xylene	91	16.739	16.739	0.000	96	4686	0.0613	
81 o-Xylene	91	17.261	17.266	-0.005	92	2854	0.0356	
88 1,3,5-Trimethylbenzene	120	18.568	18.563	0.005	93	697	0.0618	
92 1,2,4-Trimethylbenzene	105	18.987	18.987	0.000	95	2843	0.0307	
S 116 Xylenes, Total	100				0		0.0969	

Reagents:

40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

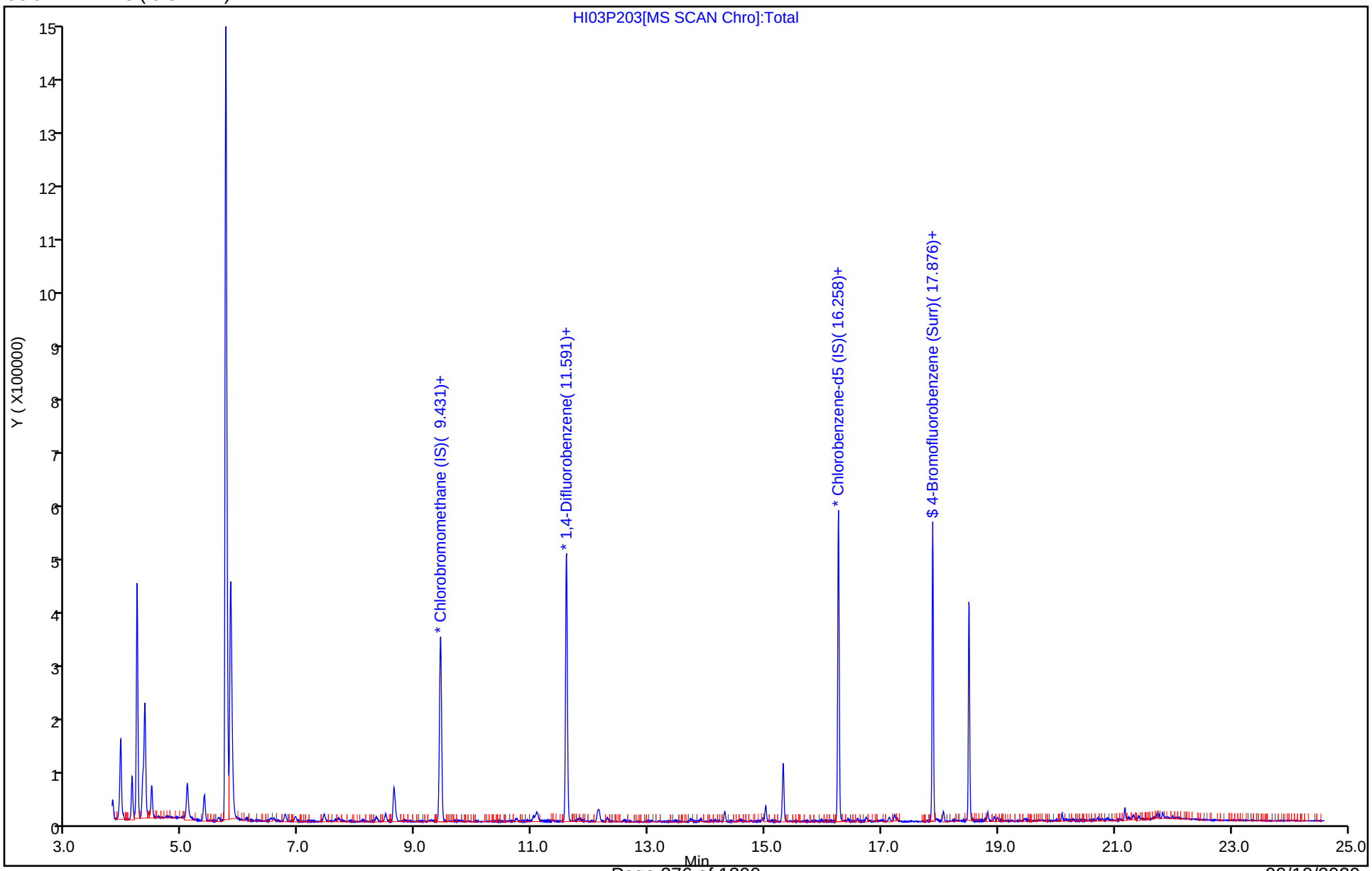
Report Date: 04-Sep-2020 08:47:19 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P203.D

Injection Date:	04-Sep-2020 07:30:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	140-20175-A-10	Lab Sample ID:	140-20175-10	Worklist Smp#:	24
Client ID:	SV-153-C-29				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

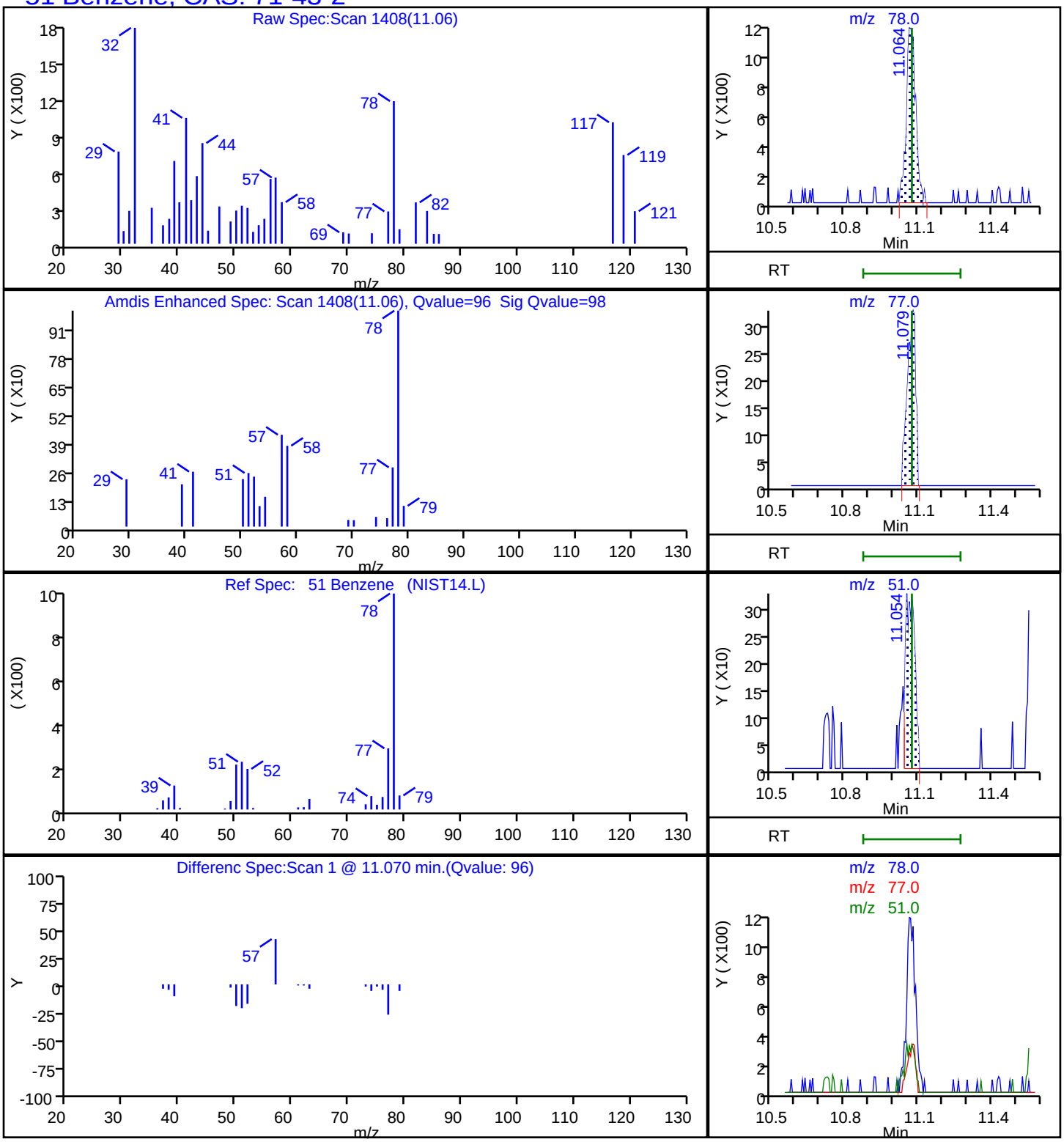
Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P203.D				
Lims ID:	140-20175-A-10				
Client ID:	SV-153-C-29				
Sample Type:	Client				
Inject. Date:	04-Sep-2020 07:30:30	ALS Bottle#:	3	Worklist Smp#:	24
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016480-024				
Misc. Info.:	140-20175-a-10				
Operator ID:	HMT	Instrument ID:	MH		
Method:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\MH_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	04-Sep-2020 06:13:51	Calib Date:	29-Aug-2020 23:57:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1020				
First Level Reviewer: tajh		Date:	04-Sep-2020 08:47:18		

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	4.44	95.68

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P203.D		
Injection Date:	04-Sep-2020 07:30:30	Instrument ID:	MH
Lims ID:	140-20175-A-10	Lab Sample ID:	140-20175-10
Client ID:	SV-153-C-29		
Operator ID:	HMT	ALS Bottle#:	3 Worklist Smp#: 24
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

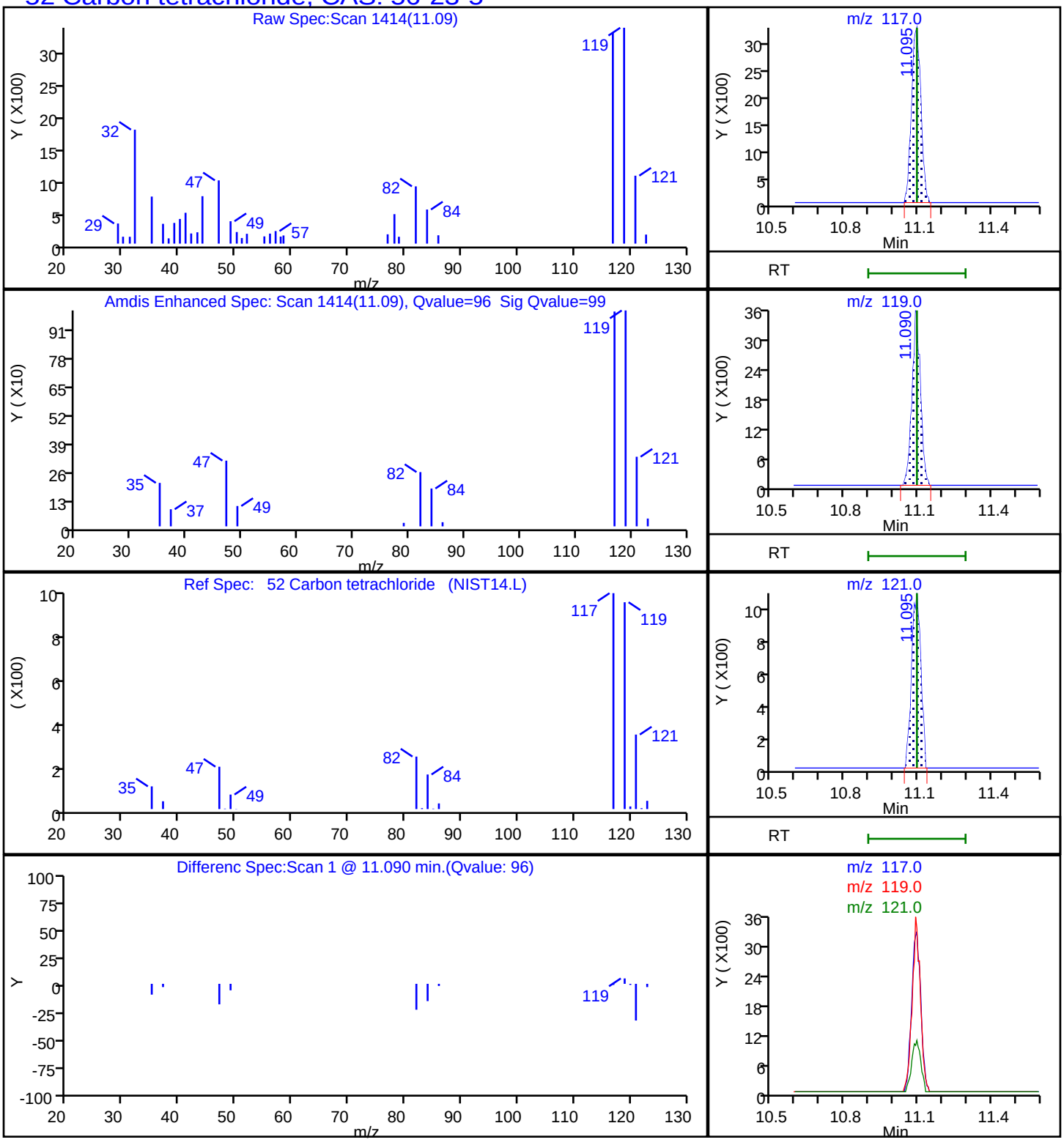
51 Benzene, CAS: 71-43-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P203.D		
Injection Date:	04-Sep-2020 07:30:30	Instrument ID:	MH
Lims ID:	140-20175-A-10	Lab Sample ID:	140-20175-10
Client ID:	SV-153-C-29		
Operator ID:	HMT	ALS Bottle#:	3 Worklist Smp#: 24
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

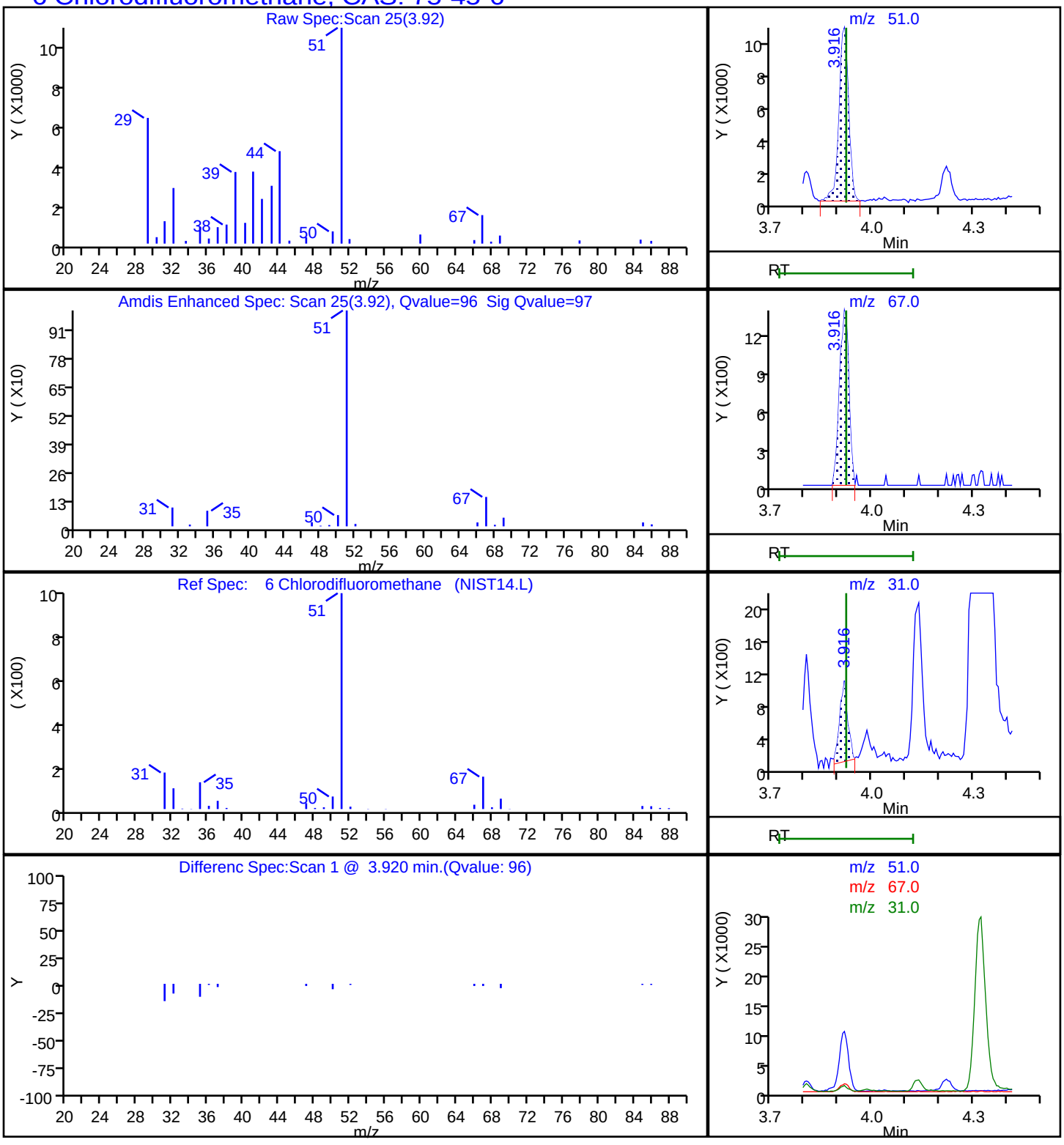
52 Carbon tetrachloride, CAS: 56-23-5



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P203.D		
Injection Date:	04-Sep-2020 07:30:30	Instrument ID:	MH
Lims ID:	140-20175-A-10	Lab Sample ID:	140-20175-10
Client ID:	SV-153-C-29		
Operator ID:	HMT	ALS Bottle#:	3 Worklist Smp#: 24
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

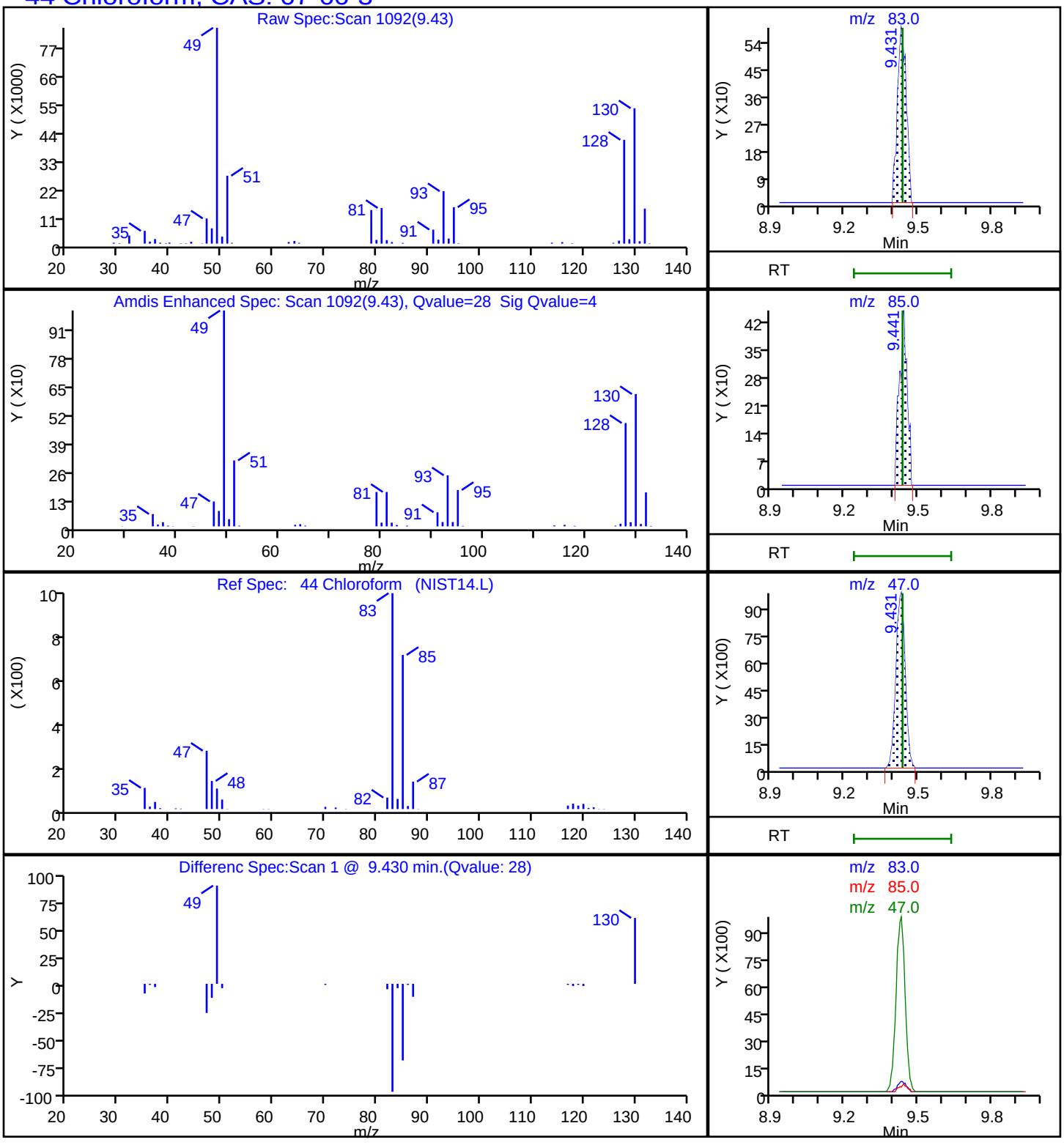
6 Chlorodifluoromethane, CAS: 75-45-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P203.D		
Injection Date:	04-Sep-2020 07:30:30	Instrument ID:	MH
Lims ID:	140-20175-A-10	Lab Sample ID:	140-20175-10
Client ID:	SV-153-C-29		
Operator ID:	HMT	ALS Bottle#:	3 Worklist Smp#: 24
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

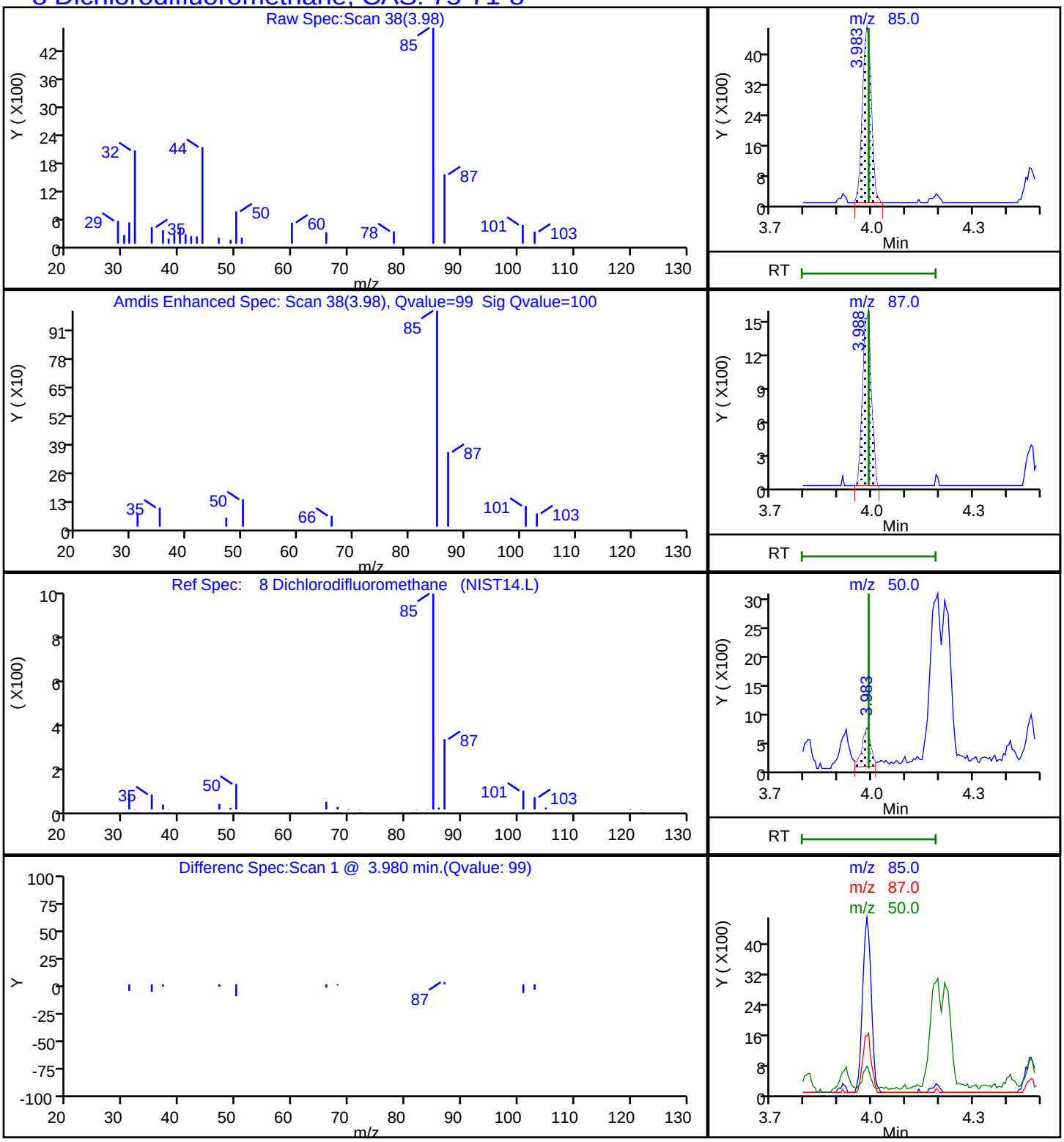
44 Chloroform, CAS: 67-66-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P203.D				
Injection Date:	04-Sep-2020 07:30:30	Instrument ID:	MH		
Lims ID:	140-20175-A-10	Lab Sample ID:	140-20175-10		
Client ID:	SV-153-C-29				
Operator ID:	HMT	ALS Bottle#:	3	Worklist Smp#:	24
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

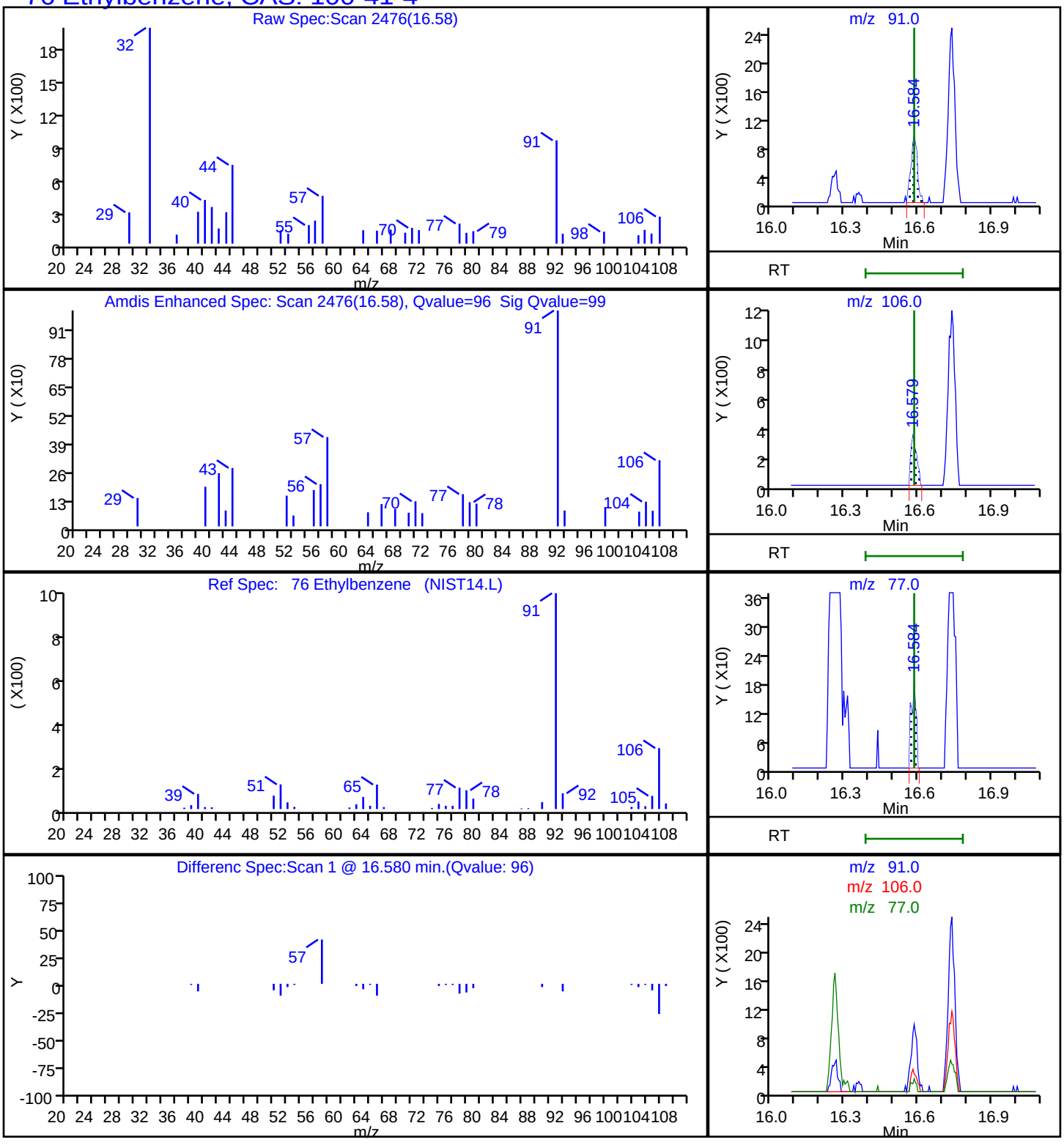
8 Dichlorodifluoromethane, CAS: 75-71-8



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P203.D				
Injection Date:	04-Sep-2020 07:30:30	Instrument ID:	MH		
Lims ID:	140-20175-A-10	Lab Sample ID:	140-20175-10		
Client ID:	SV-153-C-29				
Operator ID:	HMT	ALS Bottle#:	3	Worklist Smp#:	24
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

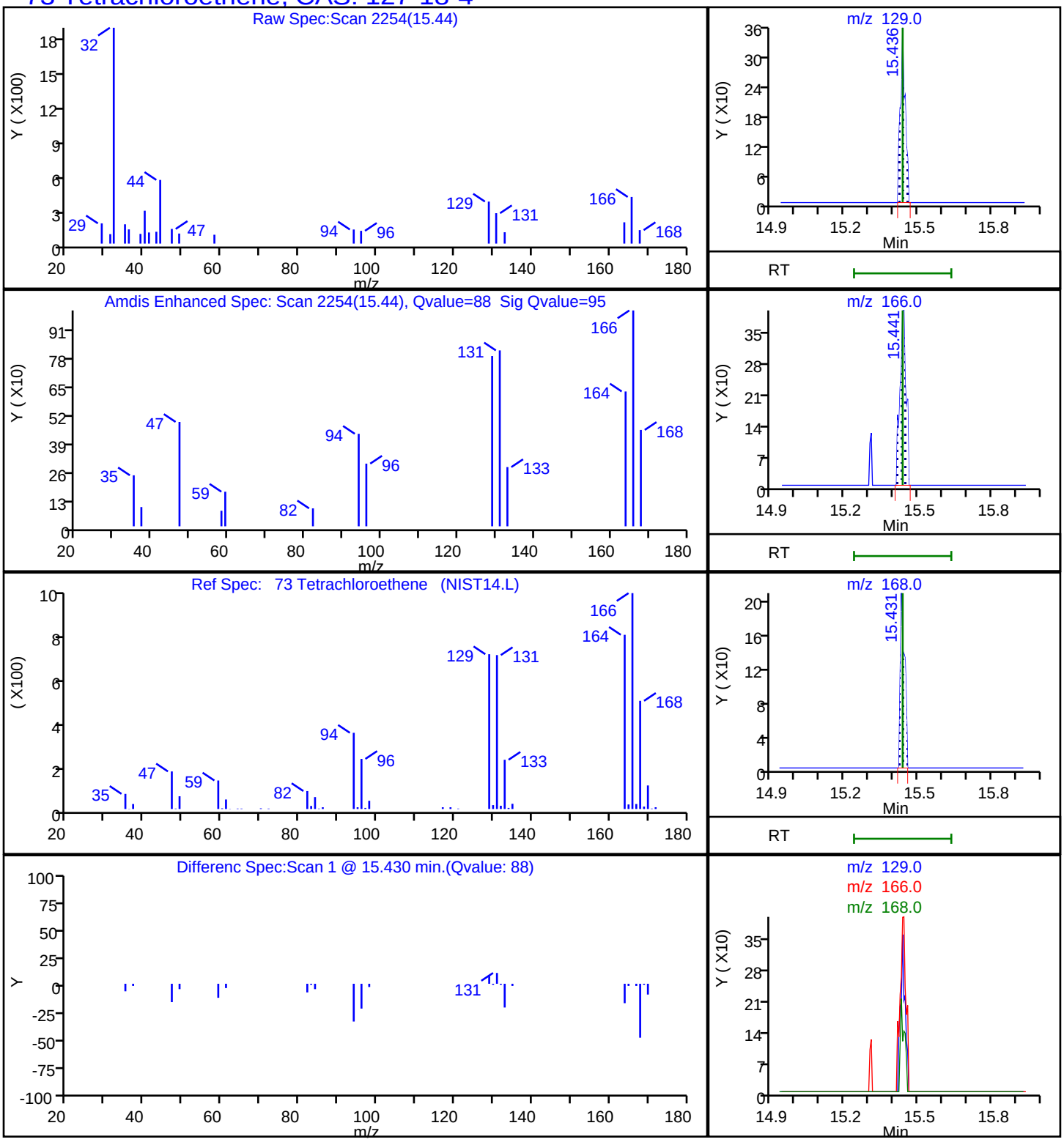
76 Ethylbenzene, CAS: 100-41-4



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P203.D				
Injection Date:	04-Sep-2020 07:30:30	Instrument ID:	MH		
Lims ID:	140-20175-A-10	Lab Sample ID:	140-20175-10		
Client ID:	SV-153-C-29				
Operator ID:	HMT	ALS Bottle#:	3	Worklist Smp#:	24
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

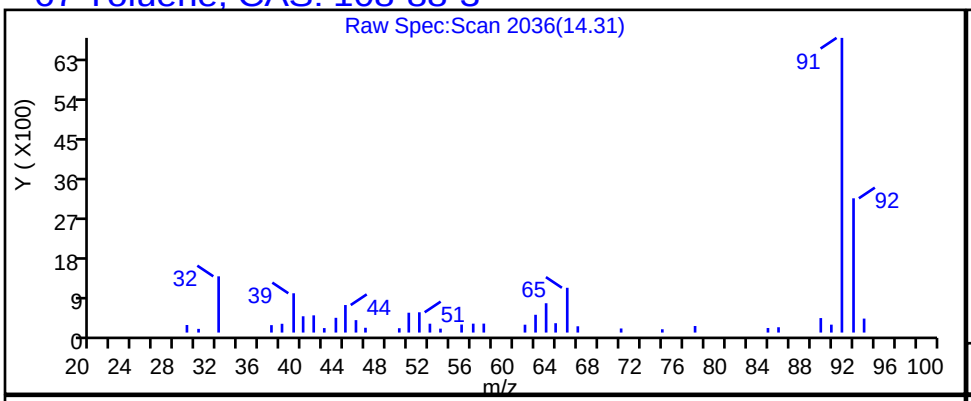
73 Tetrachloroethene, CAS: 127-18-4

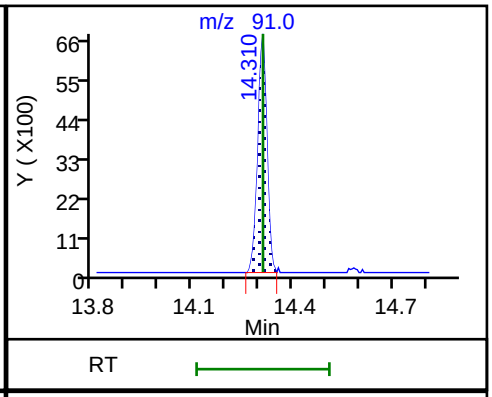


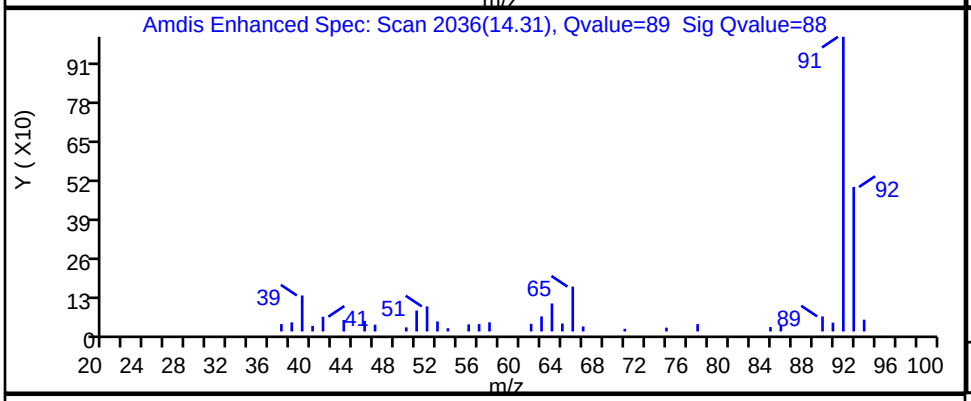
Eurofins TestAmerica, Knoxville

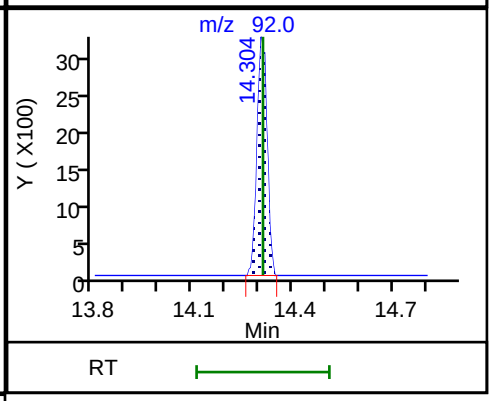
Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P203.D		
Injection Date:	04-Sep-2020 07:30:30	Instrument ID:	MH
Lims ID:	140-20175-A-10	Lab Sample ID:	140-20175-10
Client ID:	SV-153-C-29		
Operator ID:	HMT	ALS Bottle#:	3 Worklist Smp#: 24
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

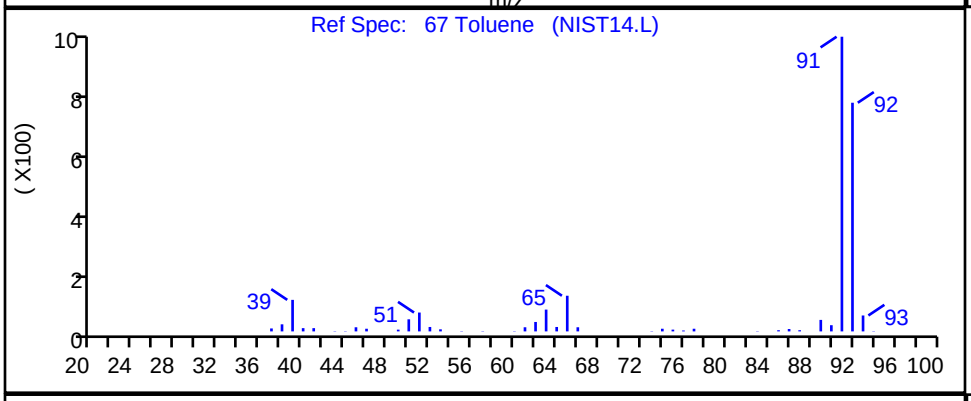
67 Toluene, CAS: 108-88-3

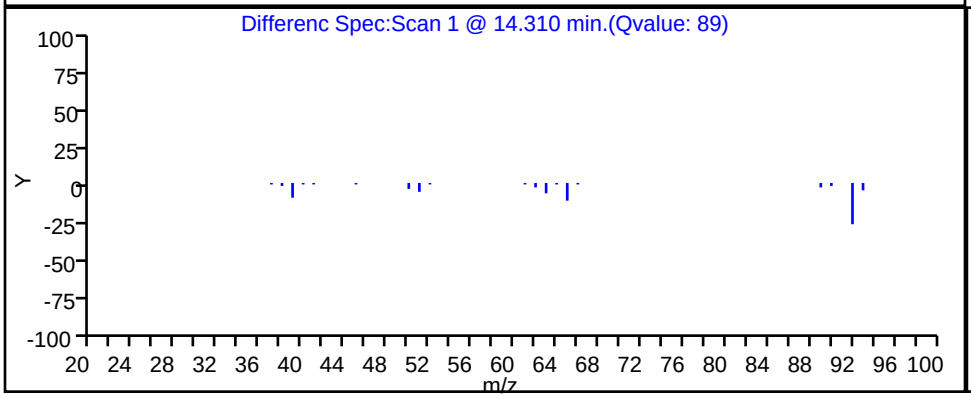


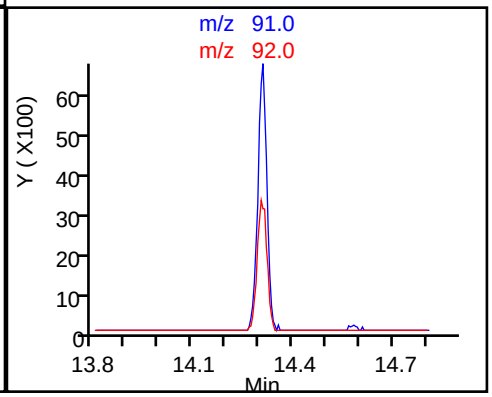












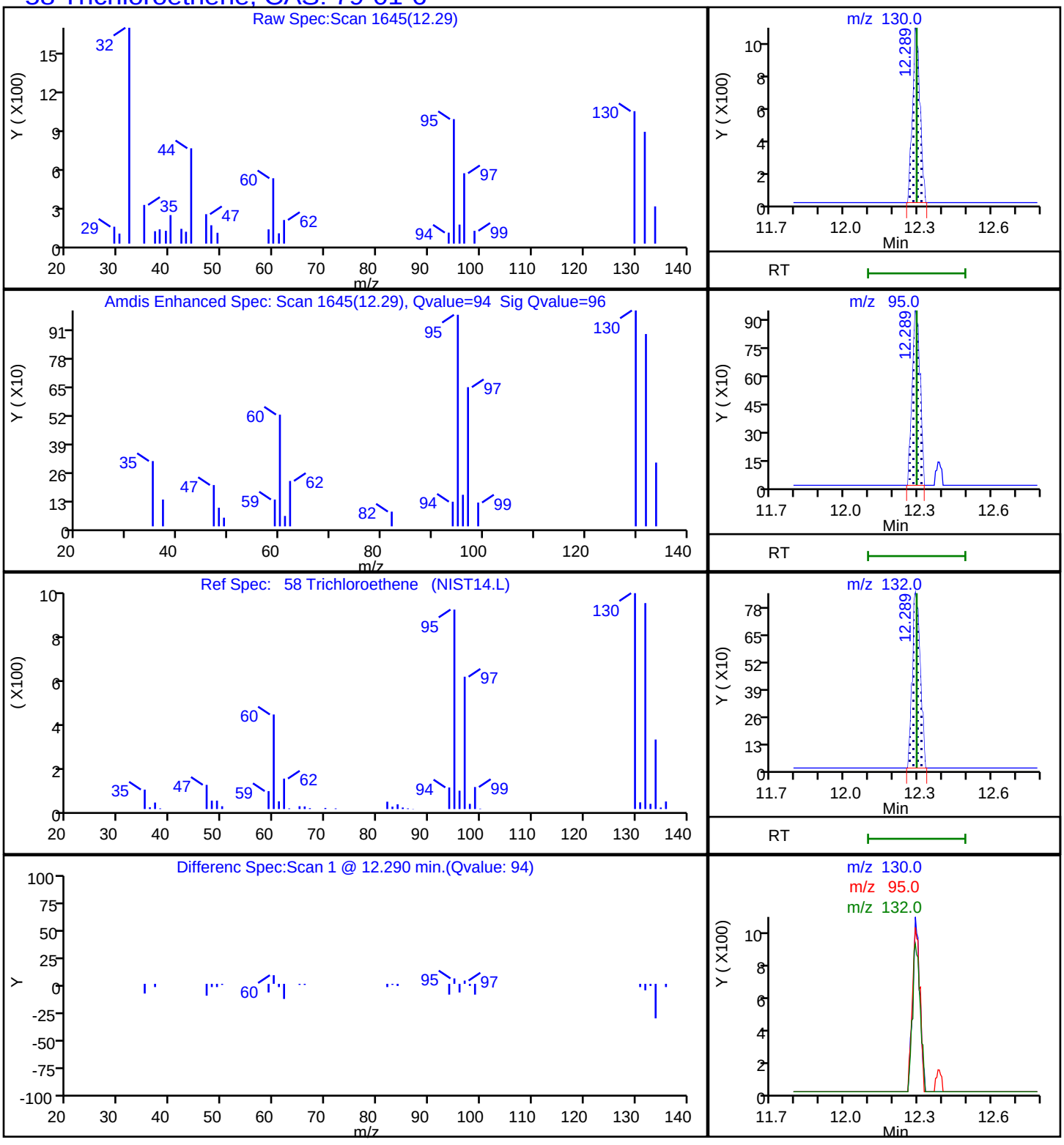
Report Date: 04-Sep-2020 08:47:19 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P203.D

Injection Date:	04-Sep-2020 07:30:30	Instrument ID:	MH		
Lims ID:	140-20175-A-10	Lab Sample ID:	140-20175-10		
Client ID:	SV-153-C-29				
Operator ID:	HMT	ALS Bottle#:	3	Worklist Smp#:	24
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

58 Trichloroethene, CAS: 79-01-6

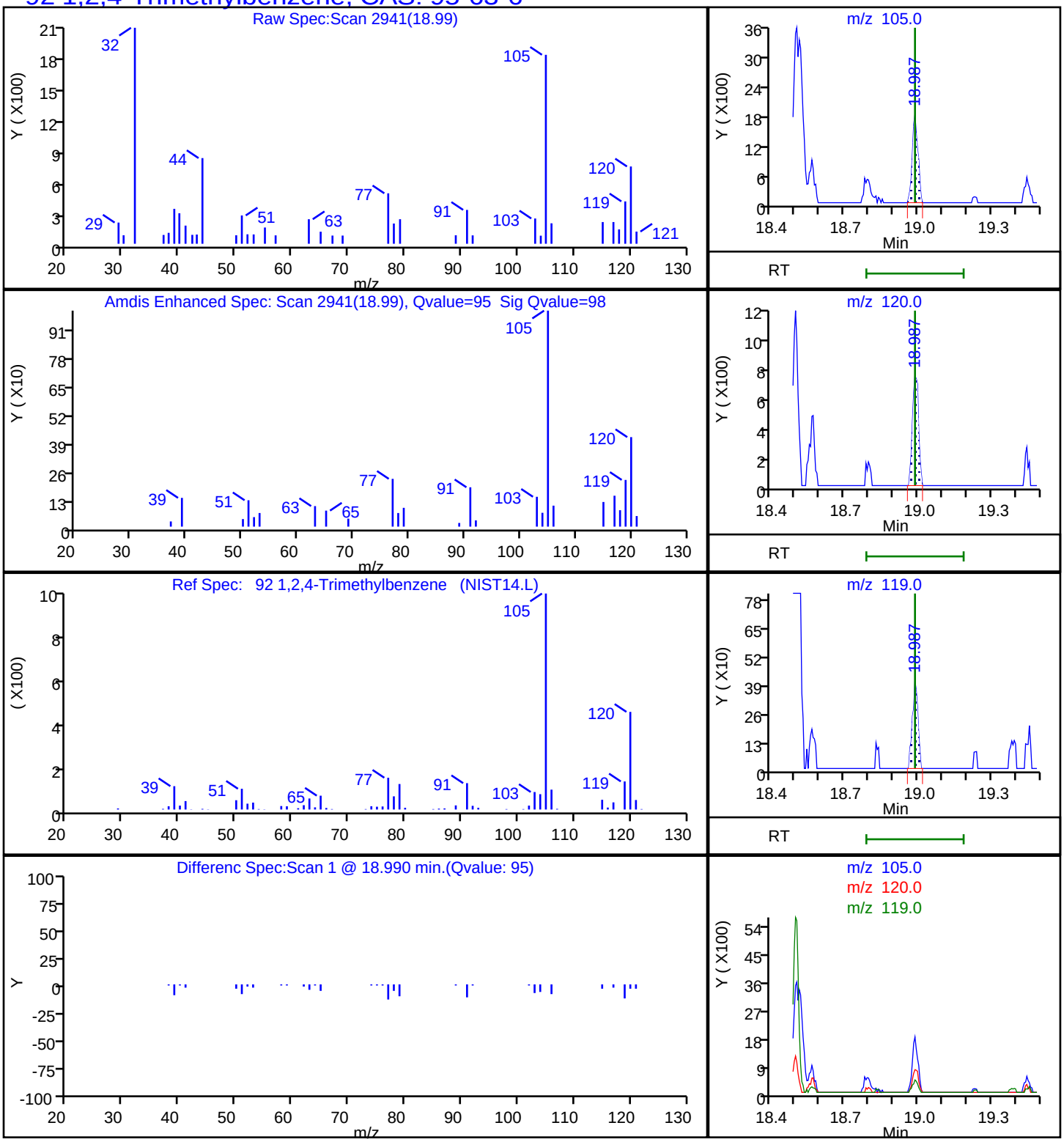


Report Date: 04-Sep-2020 08:47:19 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P203.D				
Injection Date:	04-Sep-2020 07:30:30	Instrument ID:	MH		
Lims ID:	140-20175-A-10	Lab Sample ID:	140-20175-10		
Client ID:	SV-153-C-29				
Operator ID:	HMT	ALS Bottle#:	3	Worklist Smp#:	24
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

92 1,2,4-Trimethylbenzene, CAS: 95-63-6

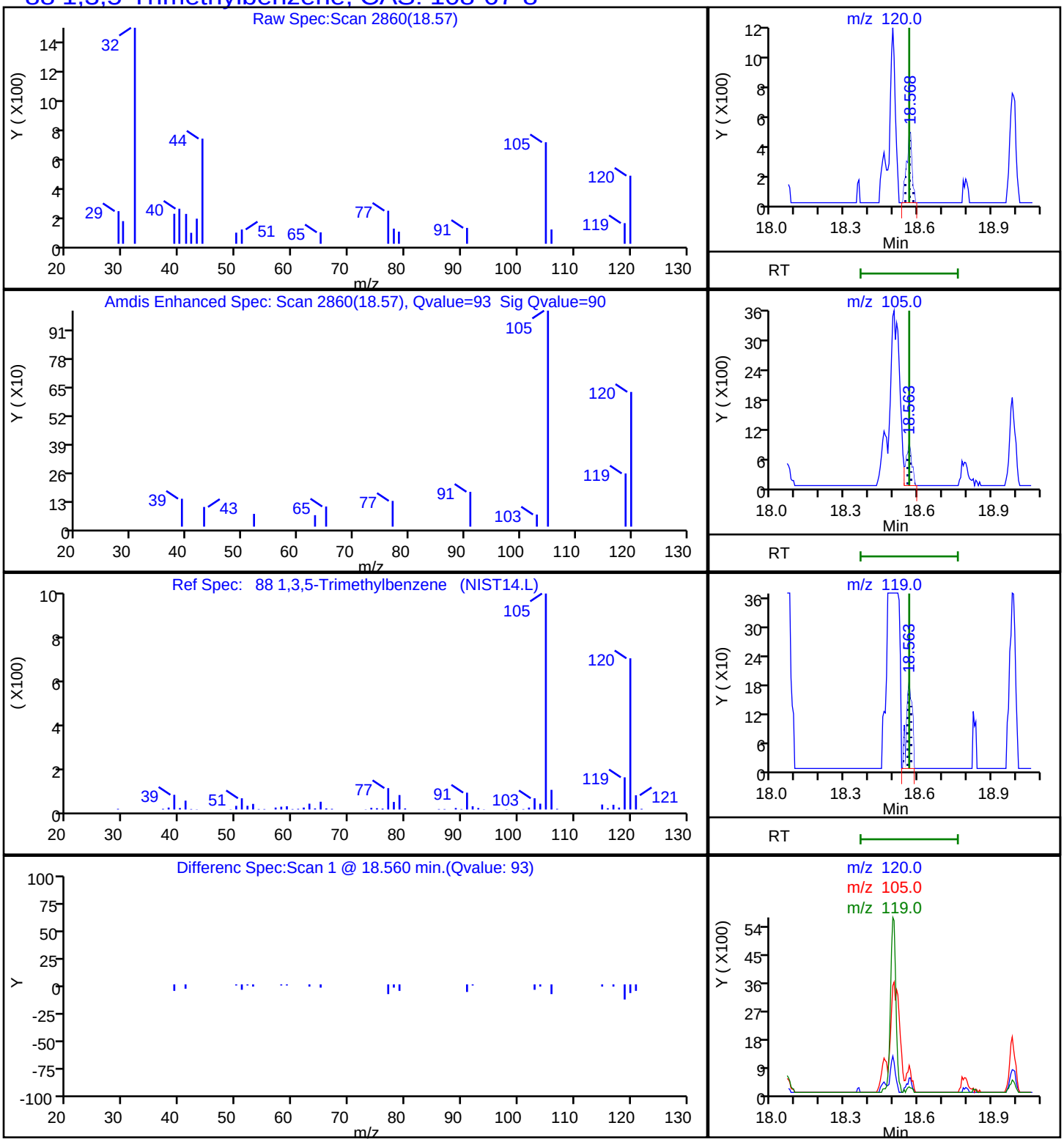


Report Date: 04-Sep-2020 08:47:19 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P203.D				
Injection Date:	04-Sep-2020 07:30:30	Instrument ID:	MH		
Lims ID:	140-20175-A-10	Lab Sample ID:	140-20175-10		
Client ID:	SV-153-C-29				
Operator ID:	HMT	ALS Bottle#:	3	Worklist Smp#:	24
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

88 1,3,5-Trimethylbenzene, CAS: 108-67-8

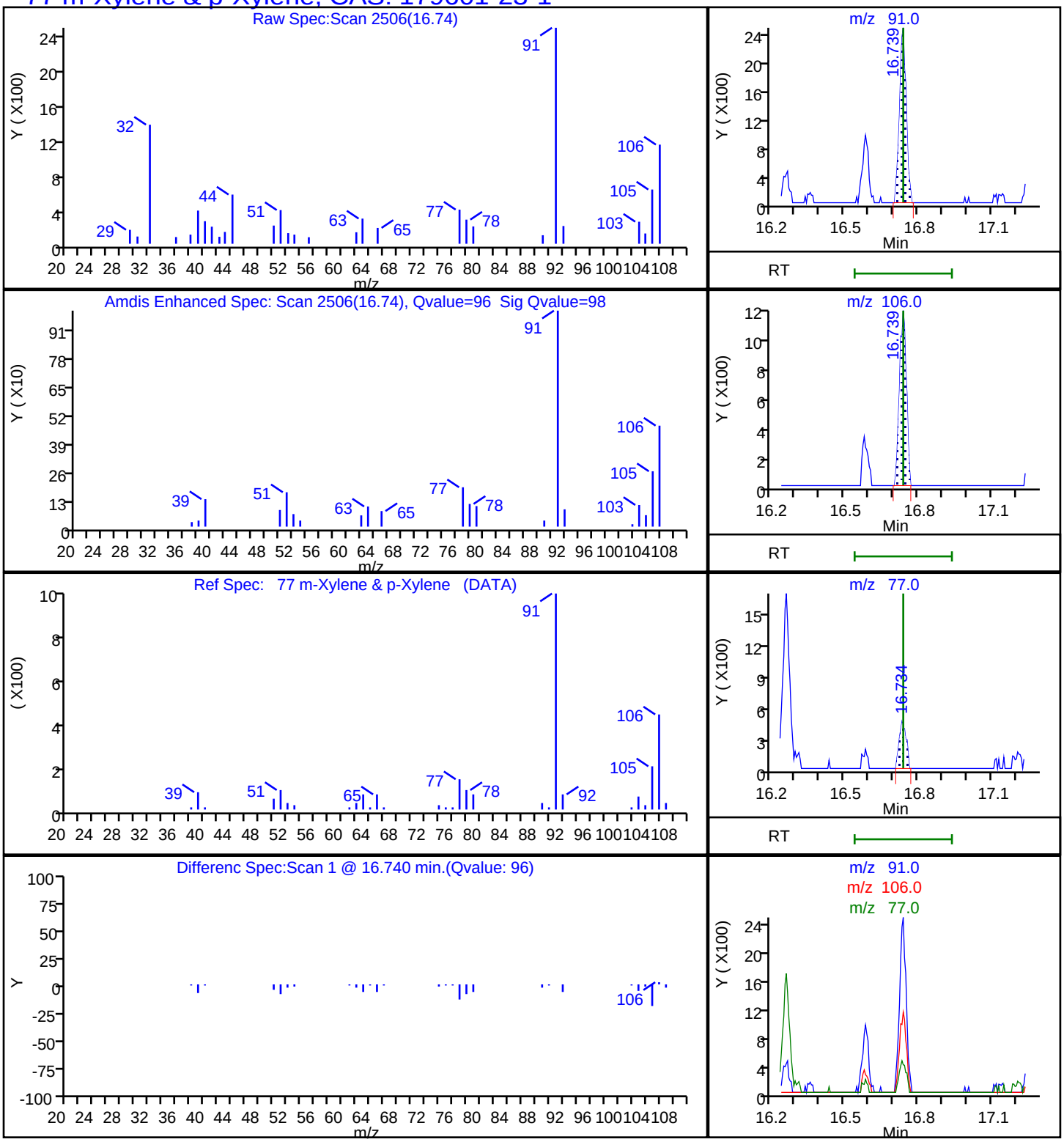


Report Date: 04-Sep-2020 08:47:19 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P203.D				
Injection Date:	04-Sep-2020 07:30:30	Instrument ID:	MH		
Lims ID:	140-20175-A-10	Lab Sample ID:	140-20175-10		
Client ID:	SV-153-C-29				
Operator ID:	HMT	ALS Bottle#:	3	Worklist Smp#:	24
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

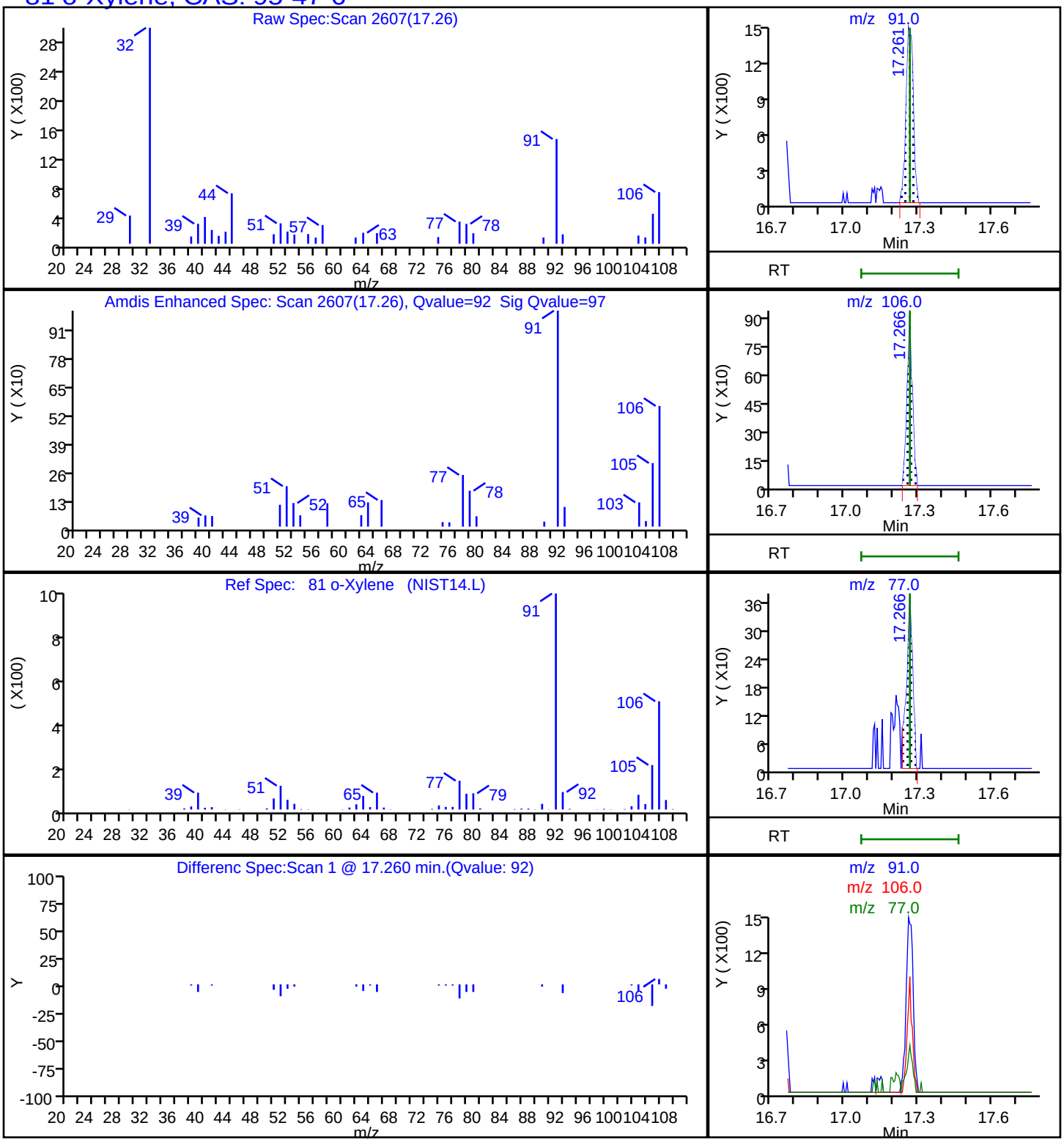
77 m-Xylene & p-Xylene, CAS: 179601-23-1



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HI03P203.D		
Injection Date:	04-Sep-2020 07:30:30	Instrument ID:	MH
Lims ID:	140-20175-A-10	Lab Sample ID:	140-20175-10
Client ID:	SV-153-C-29		
Operator ID:	HMT	ALS Bottle#:	3 Worklist Smp#: 24
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

81 o-Xylene, CAS: 95-47-6



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: SV-DUP2-C-29 Lab Sample ID: 140-20175-11

Matrix: Air Lab File ID: GBI07P116.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 00:00

Sample wt/vol: 100(mL) Date Analyzed: 09/08/2020 01:28

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42500 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.14	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.25	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	1.5		0.40	0.11
67-66-3	Chloroform	119.38	0.063	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.38	J	0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	0.15	J	0.40	0.065
75-09-2	Methylene Chloride	84.93	11		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	0.042	J	0.40	0.035
108-88-3	Toluene	92.14	2.0		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	0.18	J	0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	0.25	J	0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	0.13	J	0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.73	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	99		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: SV-DUP2-C-29 Lab Sample ID: 140-20175-11

Matrix: Air Lab File ID: GBI07P116.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 00:00

Sample wt/vol: 100(mL) Date Analyzed: 09/08/2020 01:28

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42500 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.45	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	1.6	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	5.3		1.4	0.39
67-66-3	Chloroform	119.38	0.31	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	1.9	J	2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	0.65	J	1.7	0.28
75-09-2	Methylene Chloride	84.93	39		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	0.29	J	2.7	0.24
108-88-3	Toluene	92.14	7.4		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	0.98	J	1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	1.3	J	2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	0.65	J	2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	3.2	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	99		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P116.D				
Lims ID:	140-20175-A-11				
Client ID:	SV-DUP2-C-29				
Sample Type:	Client				
Inject. Date:	08-Sep-2020 01:28:30	ALS Bottle#:	16	Worklist Smp#:	22
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016516-022				
Misc. Info.:	140-20175-a-11				
Operator ID:	AFB	Instrument ID:	MG		
Method:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\MG_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	08-Sep-2020 13:24:08	Calib Date:	02-Sep-2020 03:27:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1021				
First Level Reviewer: barlozhetskayaa		Date:	08-Sep-2020 13:24:08		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.811	8.806	0.005	86	105624	4.80	
* 2 1,4-Difluorobenzene	114	10.995	10.995	0.000	98	577580	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.724	15.730	-0.006	96	546269	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.369	17.369	0.000	79	392064	4.57	
6 Chlorodifluoromethane	51	3.705	3.705	0.006	96	28375	0.2998	M
8 Dichlorodifluoromethane	85	3.764	3.759	0.005	95	7982	0.0754	
31 Methylene Chloride	84	6.271	6.271	0.000	87	58832	2.26	
44 Chloroform	83	8.838	8.817	0.016	27	929	0.0125	
50 Benzene	78	10.451	10.440	0.006	68	3363	0.0283	
52 Carbon tetrachloride	117	10.483	10.467	0.011	77	3721	0.0507	
58 Trichloroethene	130	11.712	11.701	0.005	89	1882	0.0364	
67 Toluene	91	13.756	13.756	0.000	91	47588	0.3950	
73 Tetrachloroethene	129	14.899	14.894	0.000	27	385	0.008476	
78 Ethylbenzene	91	16.064	16.064	0.000	97	4623	0.0299	
79 m-Xylene & p-Xylene	91	16.226	16.231	-0.005	92	11958	0.0976	
83 o-Xylene	91	16.760	16.754	0.006	96	6004	0.0484	
90 1,3,5-Trimethylbenzene	120	18.113	18.086	0.000	66	1716	0.0264	
95 1,2,4-Trimethylbenzene	105	18.545	18.545	0.001	95	7238	0.0509	
S 124 Xylenes, Total	100				0		0.1460	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

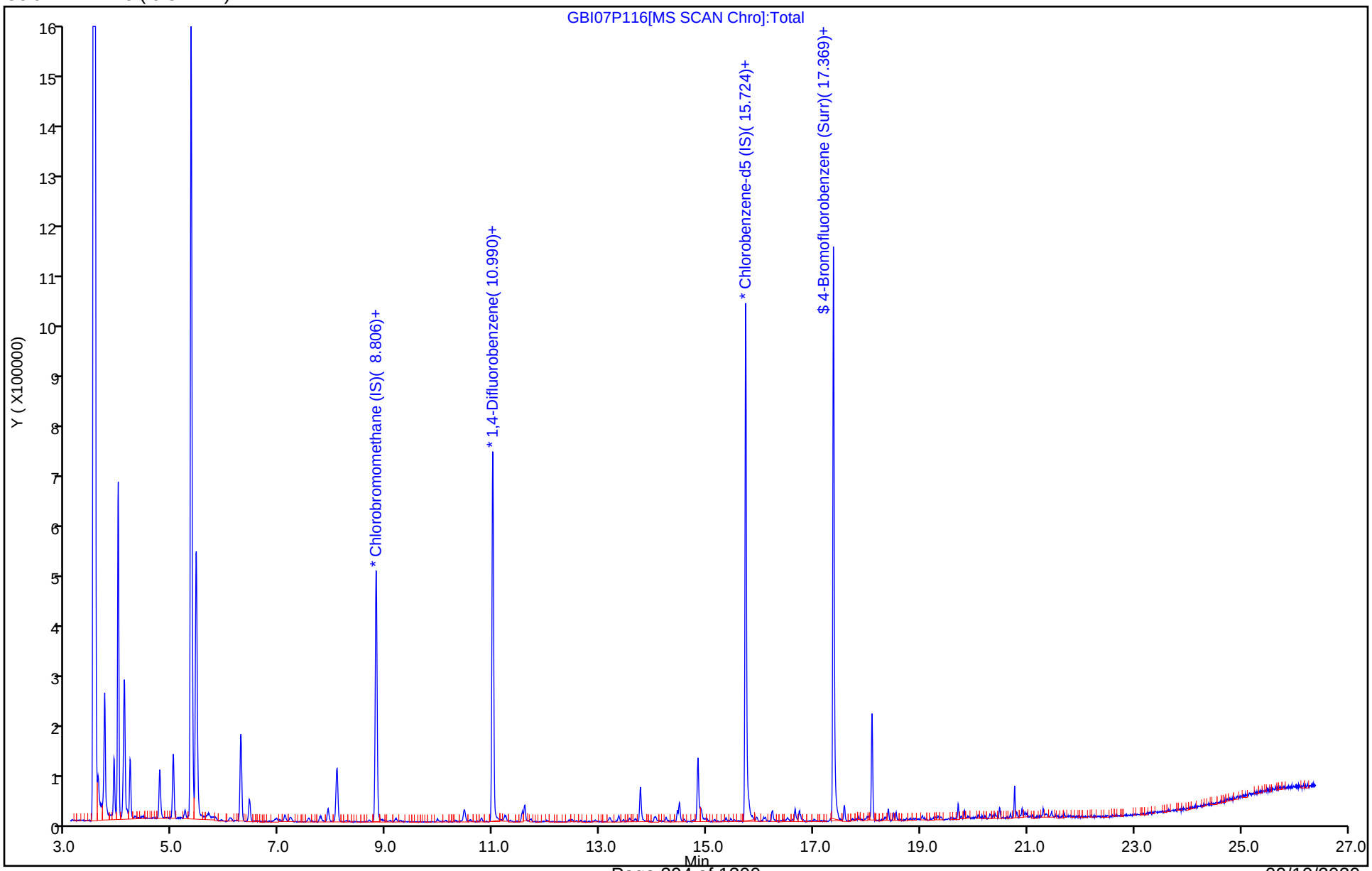
40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

Report Date: 08-Sep-2020 13:24:09 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P116.D				
Injection Date:	08-Sep-2020 01:28:30	Instrument ID:	MG	Operator ID:	AFB
Lims ID:	140-20175-A-11	Lab Sample ID:	140-20175-11	Worklist Smp#:	22
Client ID:	SV-DUP2-C-29				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P116.D				
Lims ID:	140-20175-A-11				
Client ID:	SV-DUP2-C-29				
Sample Type:	Client				
Inject. Date:	08-Sep-2020 01:28:30	ALS Bottle#:	16	Worklist Smp#:	22
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016516-022				
Misc. Info.:	140-20175-a-11				
Operator ID:	AFB	Instrument ID:	MG		
Method:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\MG_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	08-Sep-2020 13:24:08	Calib Date:	02-Sep-2020 03:27:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1021				

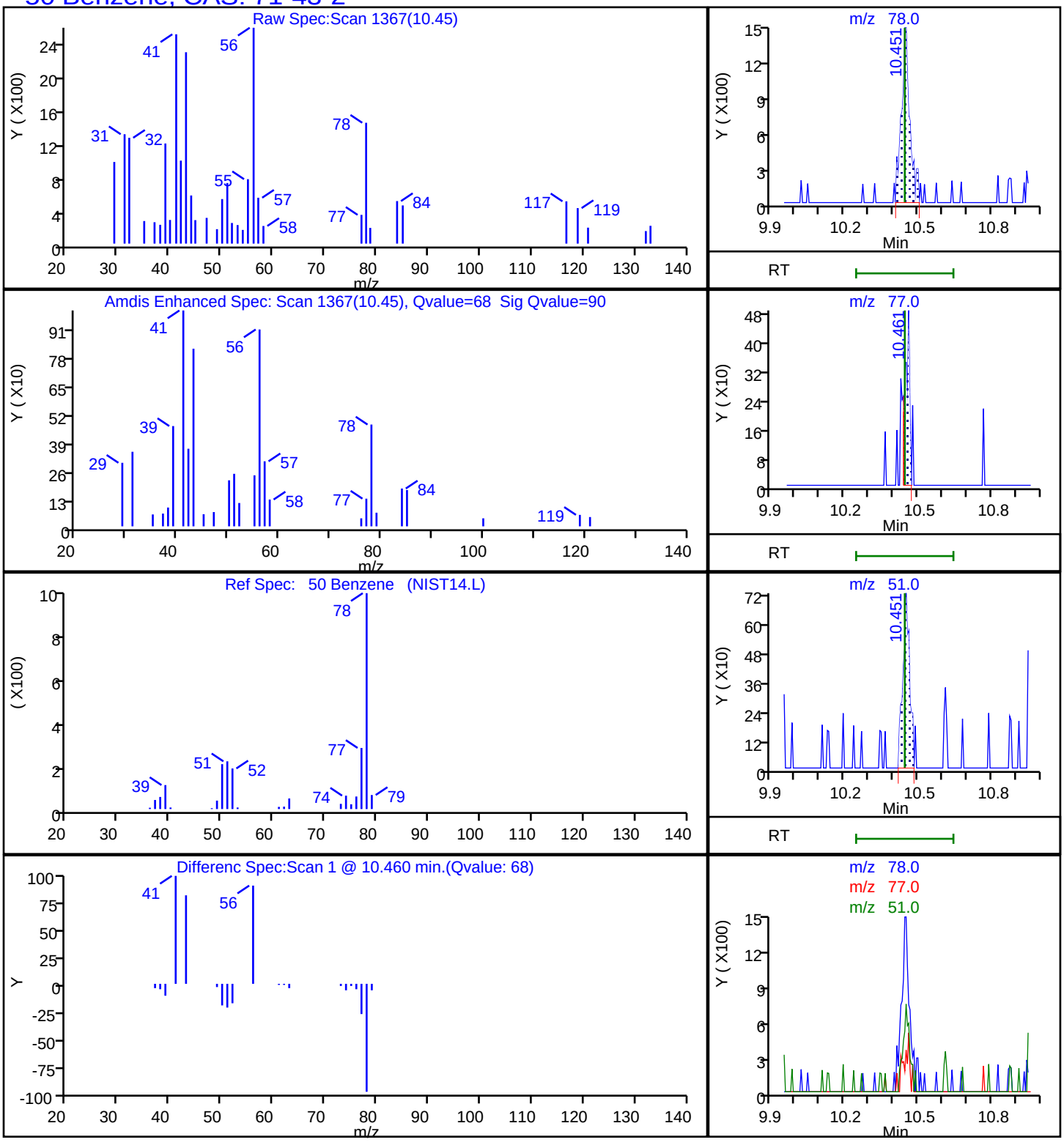
First Level Reviewer: barlozhetskayaa Date: 08-Sep-2020 13:24:08

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	4.57	98.57

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P116.D		
Injection Date:	08-Sep-2020 01:28:30	Instrument ID:	MG
Lims ID:	140-20175-A-11	Lab Sample ID:	140-20175-11
Client ID:	SV-DUP2-C-29		
Operator ID:	AFB	ALS Bottle#:	16 Worklist Smp#: 22
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

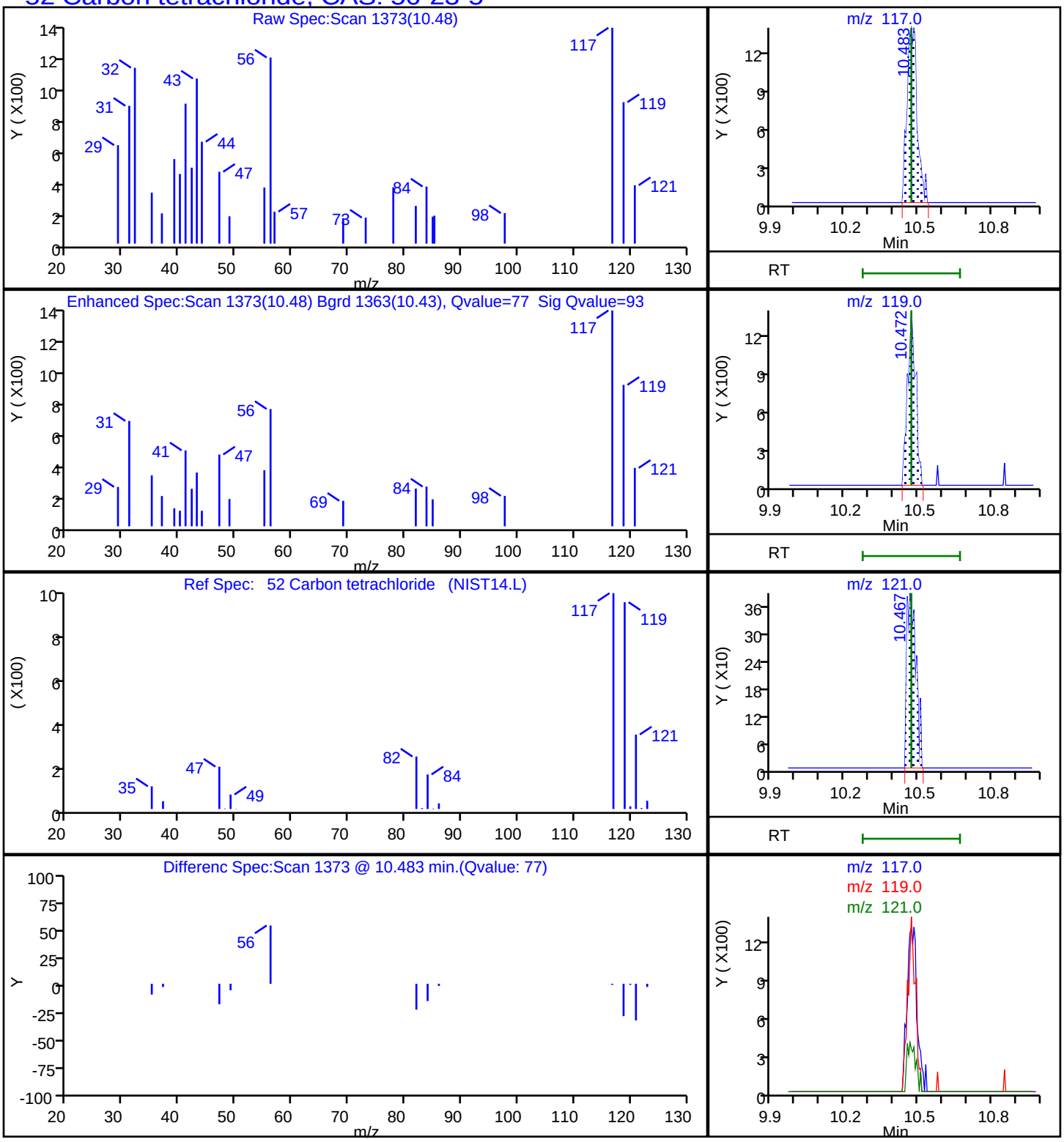
50 Benzene, CAS: 71-43-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P116.D		
Injection Date:	08-Sep-2020 01:28:30	Instrument ID:	MG
Lims ID:	140-20175-A-11	Lab Sample ID:	140-20175-11
Client ID:	SV-DUP2-C-29		
Operator ID:	AFB	ALS Bottle#:	16 Worklist Smp#: 22
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

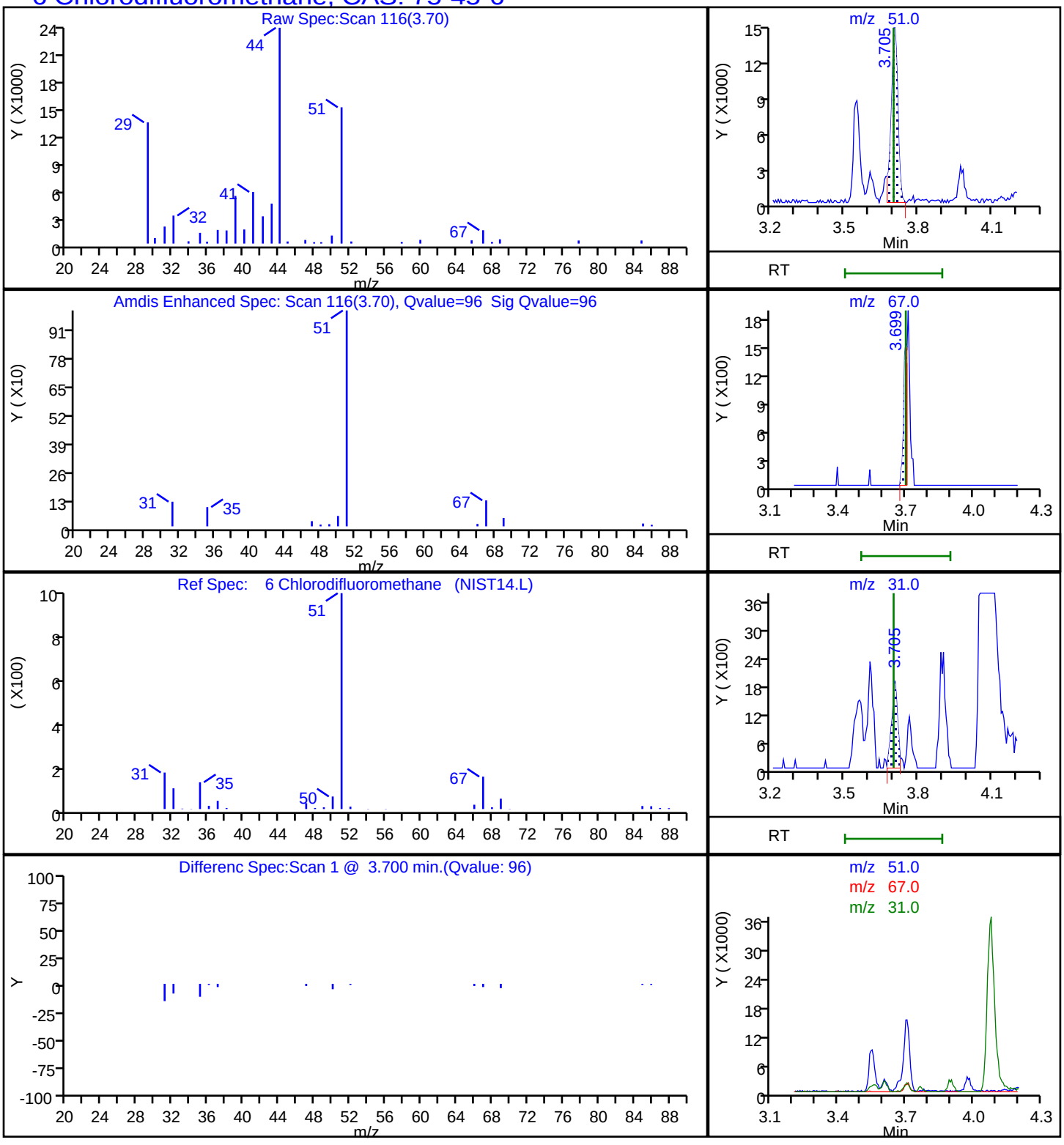
52 Carbon tetrachloride, CAS: 56-23-5



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P116.D				
Injection Date:	08-Sep-2020 01:28:30	Instrument ID:	MG		
Lims ID:	140-20175-A-11	Lab Sample ID:	140-20175-11		
Client ID:	SV-DUP2-C-29				
Operator ID:	AFB	ALS Bottle#:	16	Worklist Smp#:	22
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

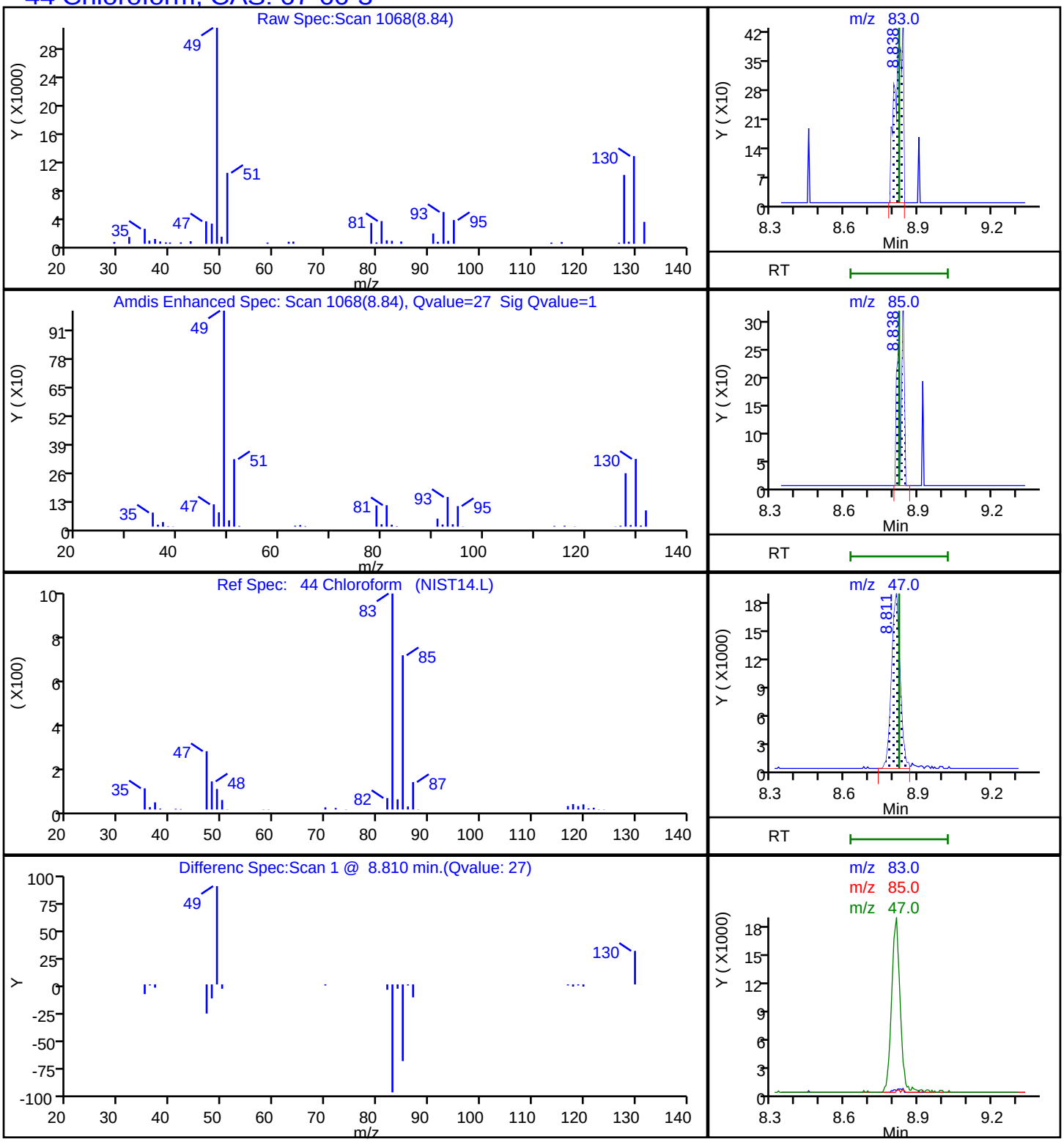
6 Chlorodifluoromethane, CAS: 75-45-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P116.D		
Injection Date:	08-Sep-2020 01:28:30	Instrument ID:	MG
Lims ID:	140-20175-A-11	Lab Sample ID:	140-20175-11
Client ID:	SV-DUP2-C-29		
Operator ID:	AFB	ALS Bottle#:	16 Worklist Smp#: 22
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

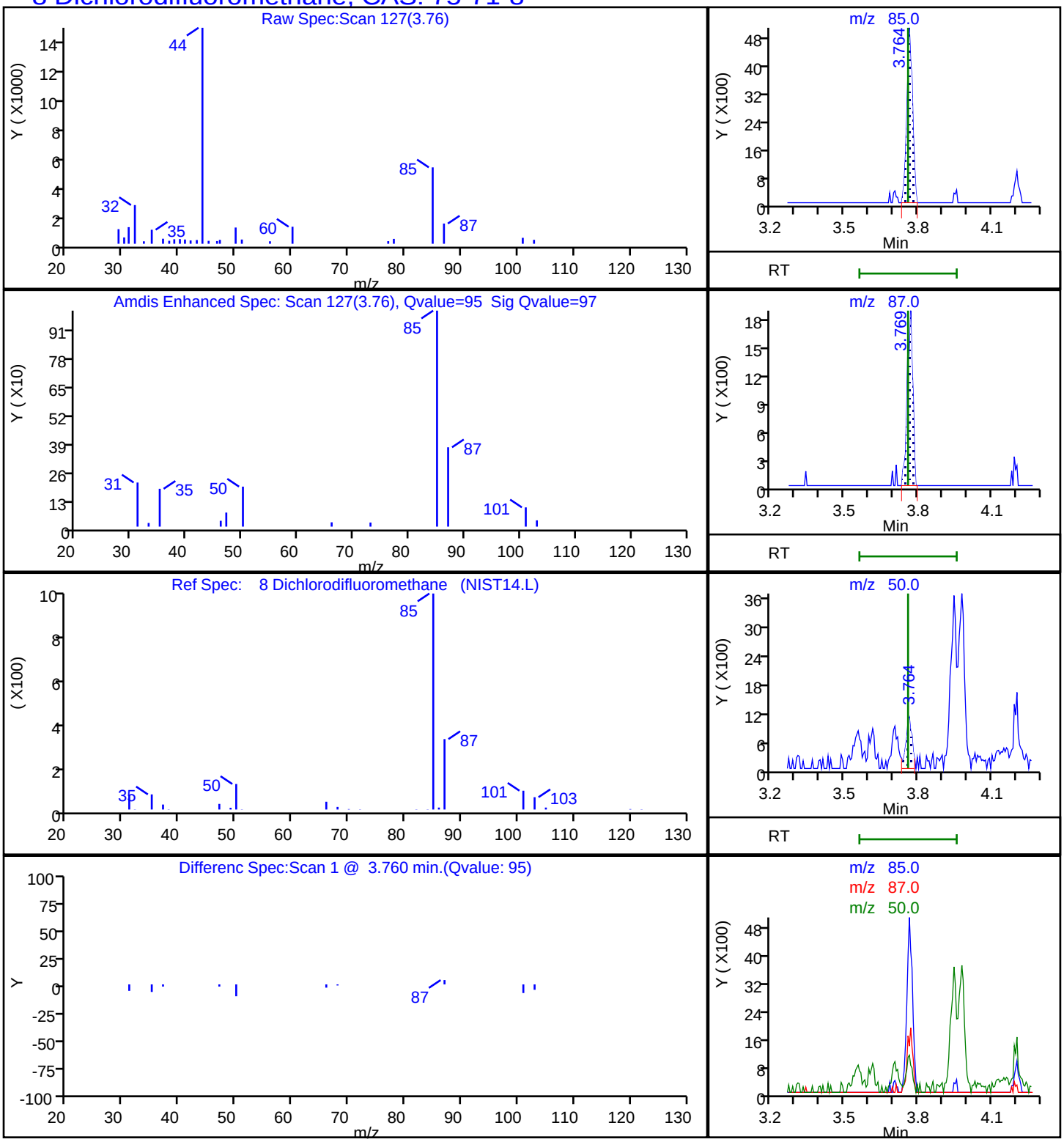
44 Chloroform, CAS: 67-66-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P116.D				
Injection Date:	08-Sep-2020 01:28:30	Instrument ID:	MG		
Lims ID:	140-20175-A-11	Lab Sample ID:	140-20175-11		
Client ID:	SV-DUP2-C-29				
Operator ID:	AFB	ALS Bottle#:	16	Worklist Smp#:	22
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

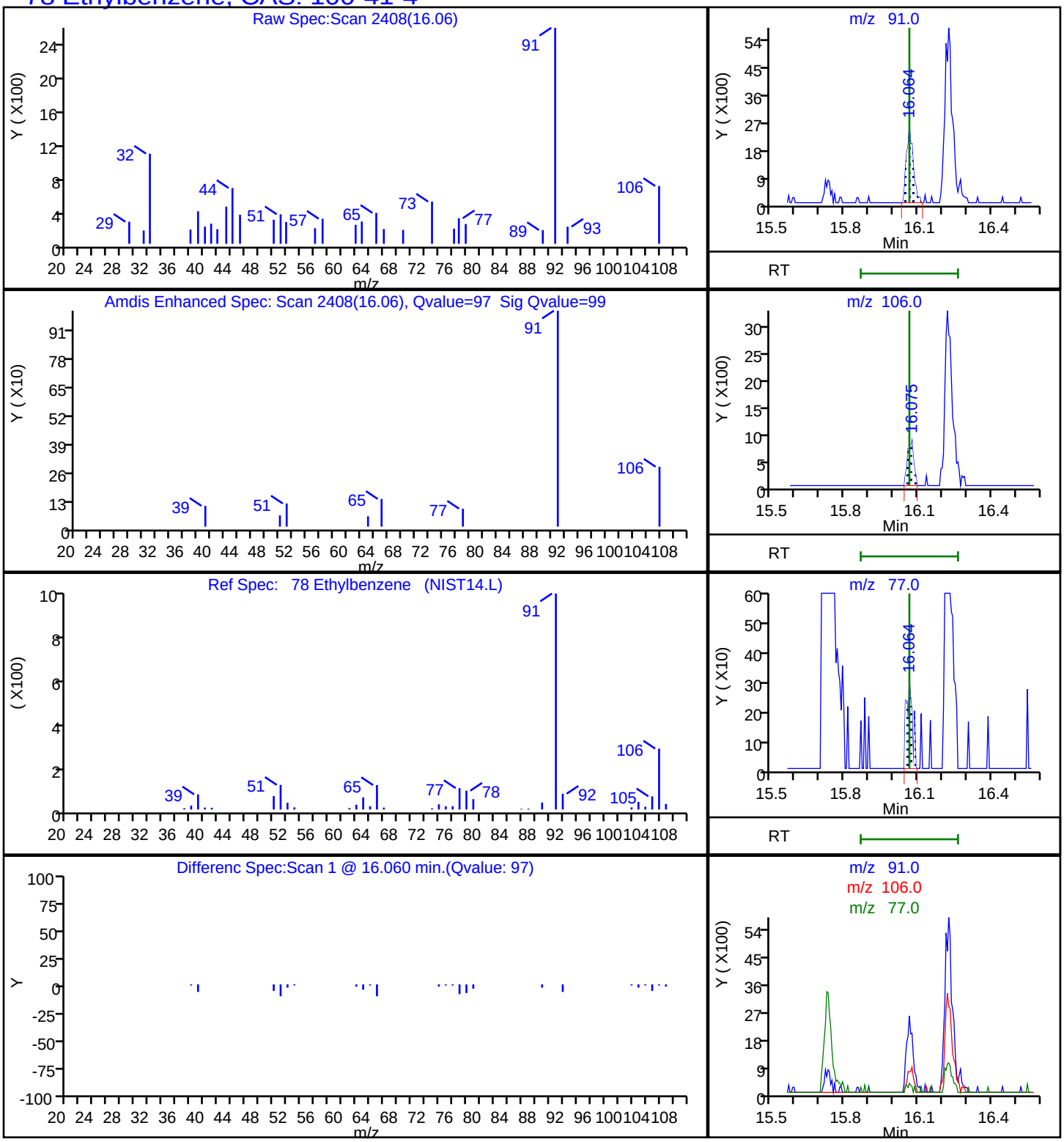
8 Dichlorodifluoromethane, CAS: 75-71-8



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P116.D		
Injection Date:	08-Sep-2020 01:28:30	Instrument ID:	MG
Lims ID:	140-20175-A-11	Lab Sample ID:	140-20175-11
Client ID:	SV-DUP2-C-29		
Operator ID:	AFB	ALS Bottle#:	16 Worklist Smp#: 22
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

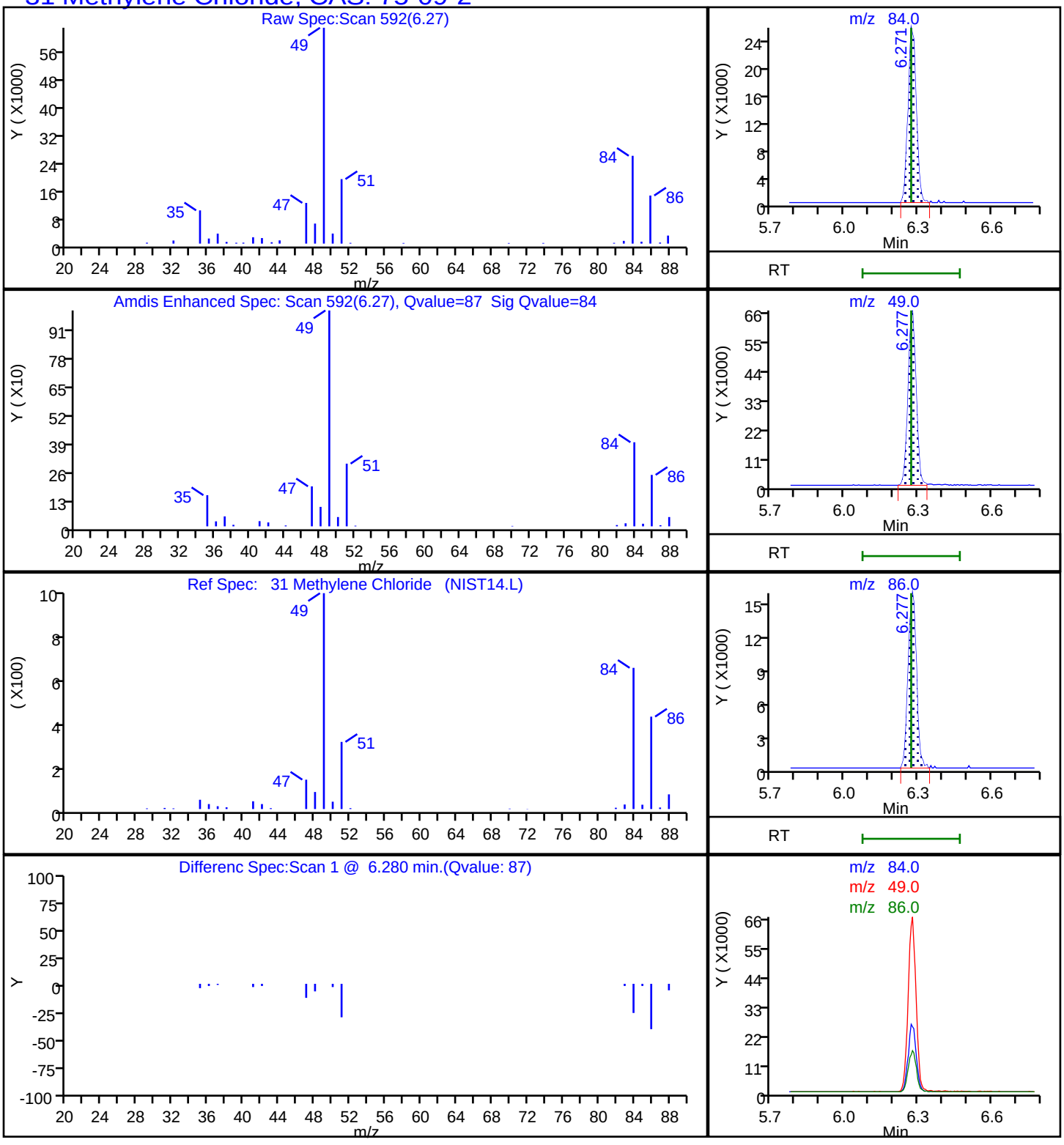
78 Ethylbenzene, CAS: 100-41-4



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P116.D		
Injection Date:	08-Sep-2020 01:28:30	Instrument ID:	MG
Lims ID:	140-20175-A-11	Lab Sample ID:	140-20175-11
Client ID:	SV-DUP2-C-29		
Operator ID:	AFB	ALS Bottle#:	16 Worklist Smp#: 22
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

31 Methylene Chloride, CAS: 75-09-2

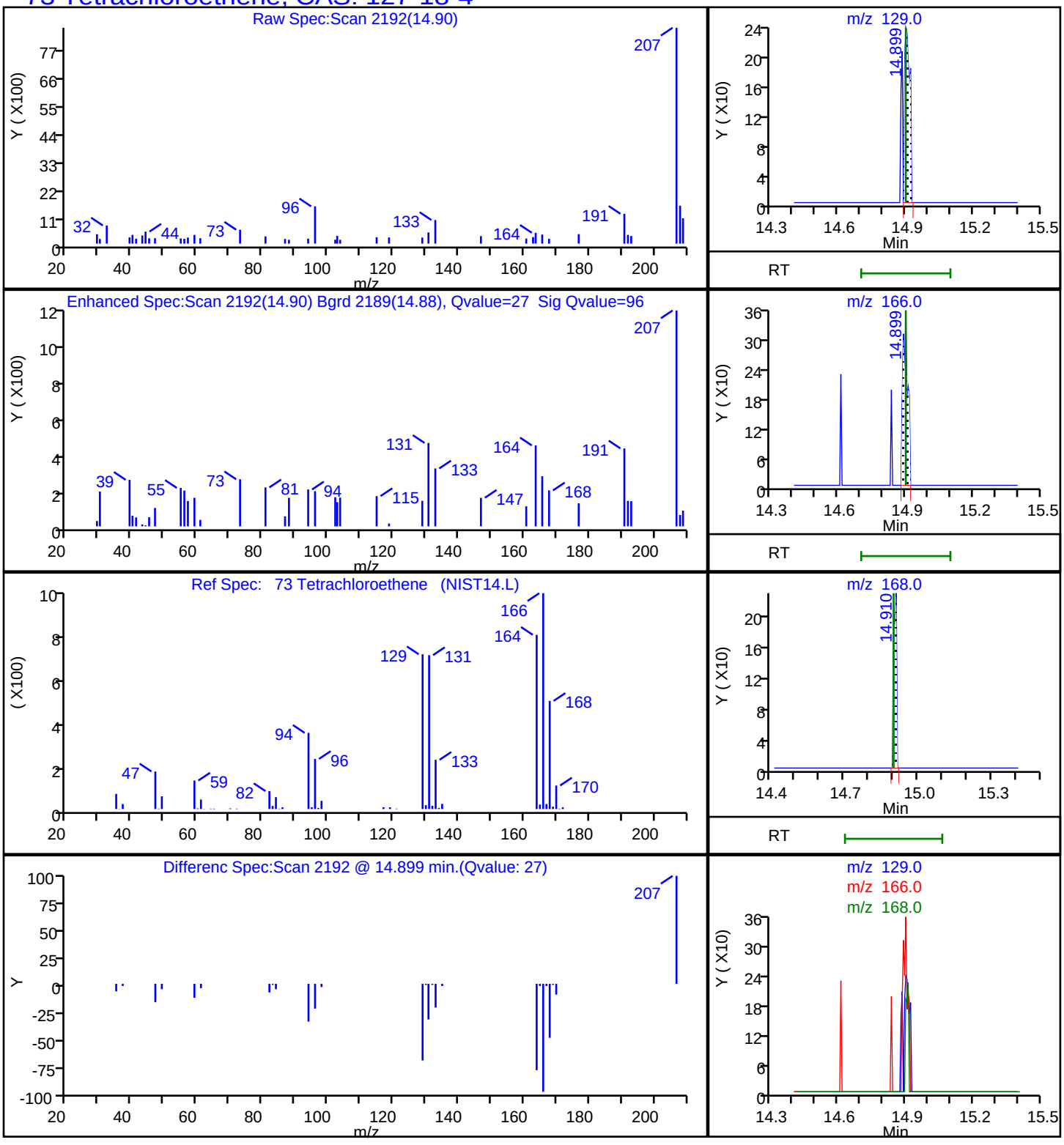


Report Date: 08-Sep-2020 13:24:09 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P116.D		
Injection Date:	08-Sep-2020 01:28:30	Instrument ID:	MG
Lims ID:	140-20175-A-11	Lab Sample ID:	140-20175-11
Client ID:	SV-DUP2-C-29		
Operator ID:	AFB	ALS Bottle#:	16 Worklist Smp#: 22
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

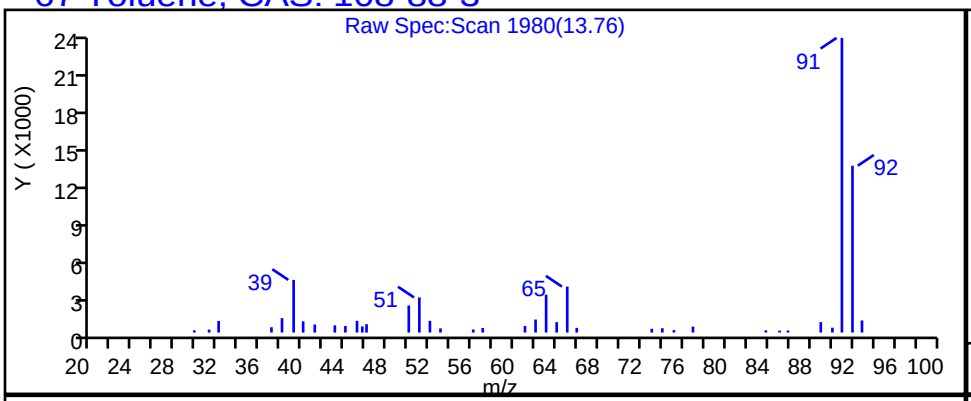
73 Tetrachloroethene, CAS: 127-18-4

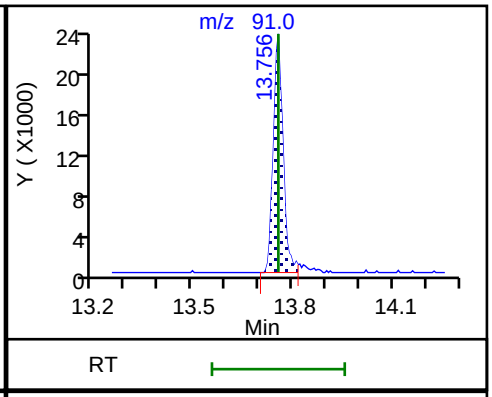


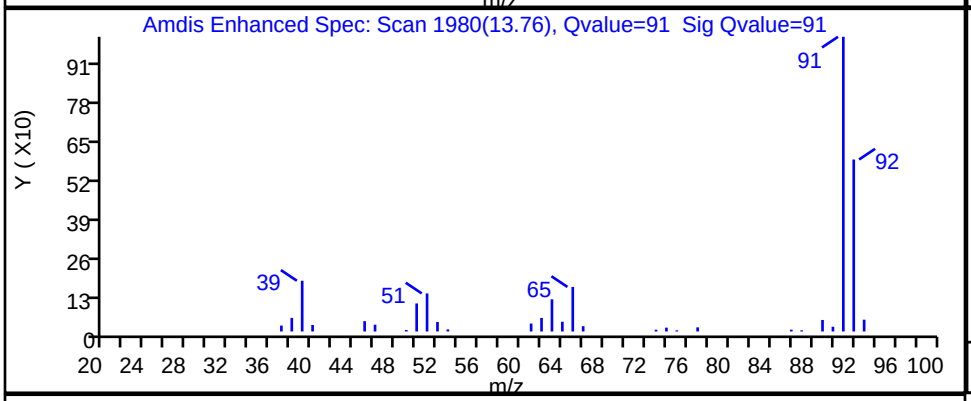
Eurofins TestAmerica, Knoxville

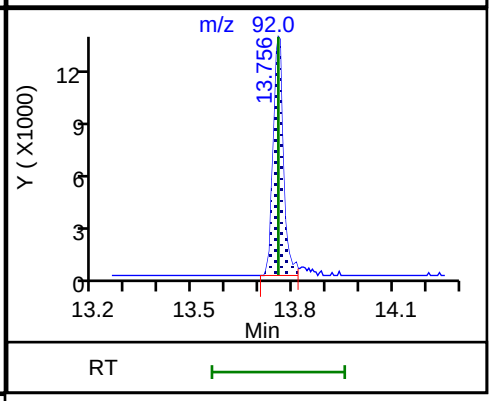
Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P116.D		
Injection Date:	08-Sep-2020 01:28:30	Instrument ID:	MG
Lims ID:	140-20175-A-11	Lab Sample ID:	140-20175-11
Client ID:	SV-DUP2-C-29		
Operator ID:	AFB	ALS Bottle#:	16 Worklist Smp#: 22
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

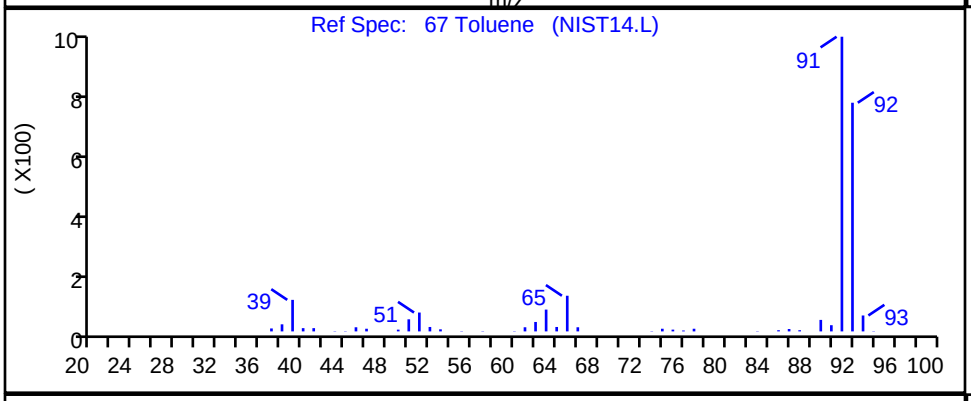
67 Toluene, CAS: 108-88-3

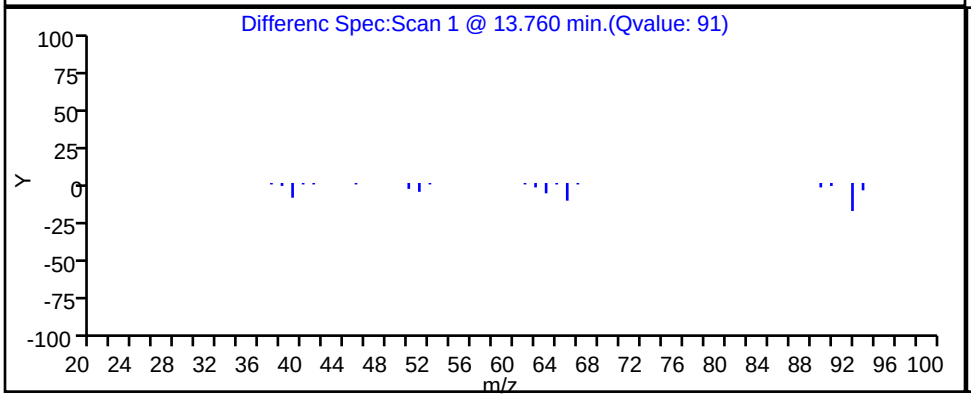


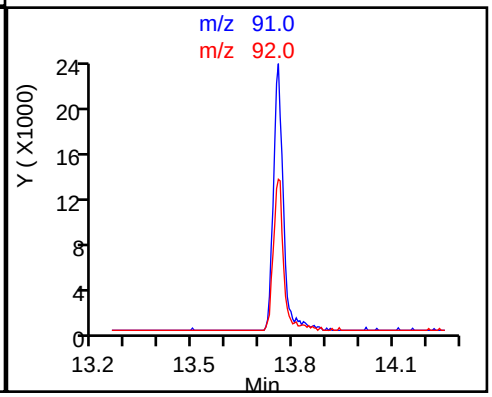








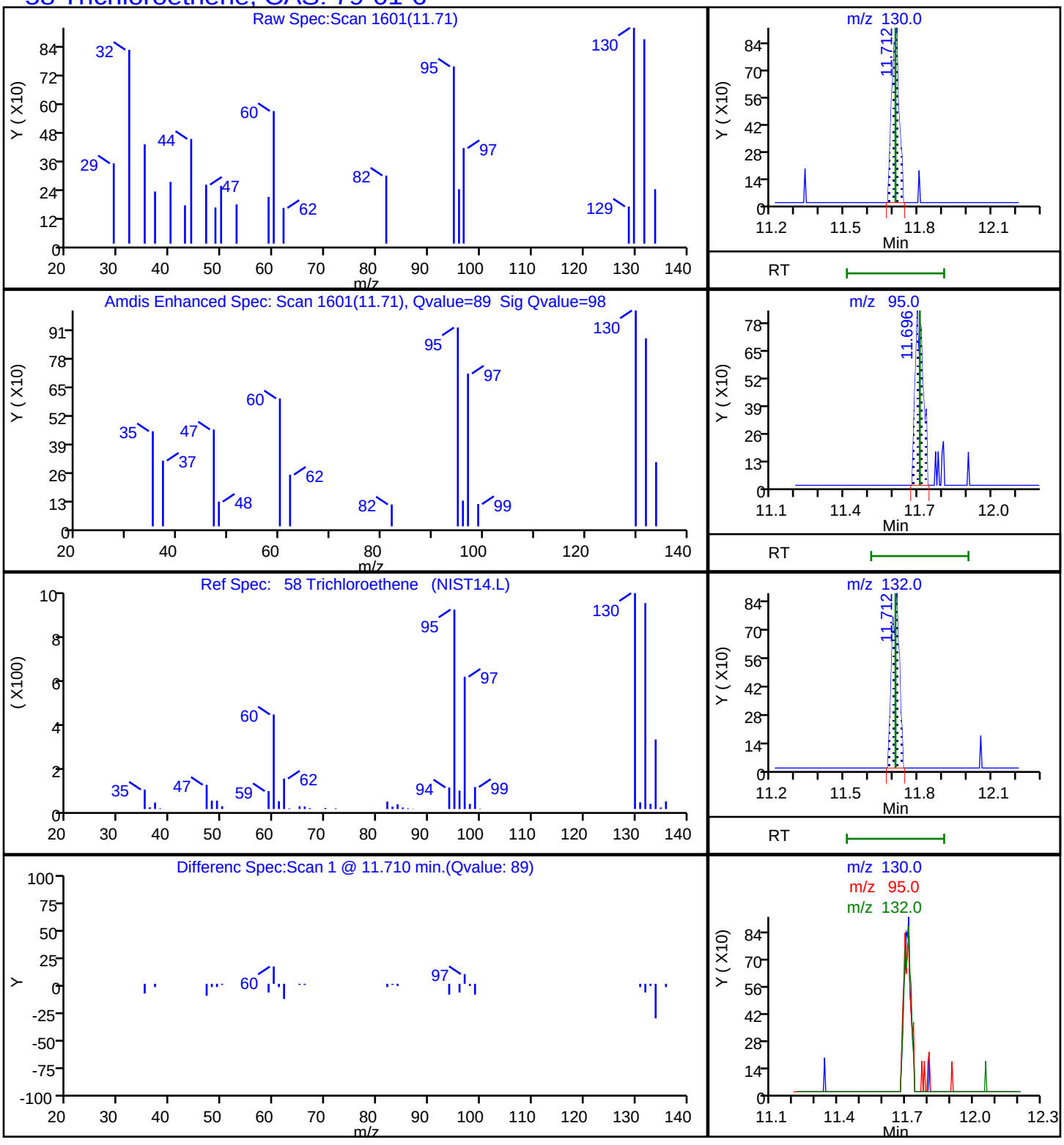




Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P116.D		
Injection Date:	08-Sep-2020 01:28:30	Instrument ID:	MG
Lims ID:	140-20175-A-11	Lab Sample ID:	140-20175-11
Client ID:	SV-DUP2-C-29		
Operator ID:	AFB	ALS Bottle#:	16 Worklist Smp#: 22
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

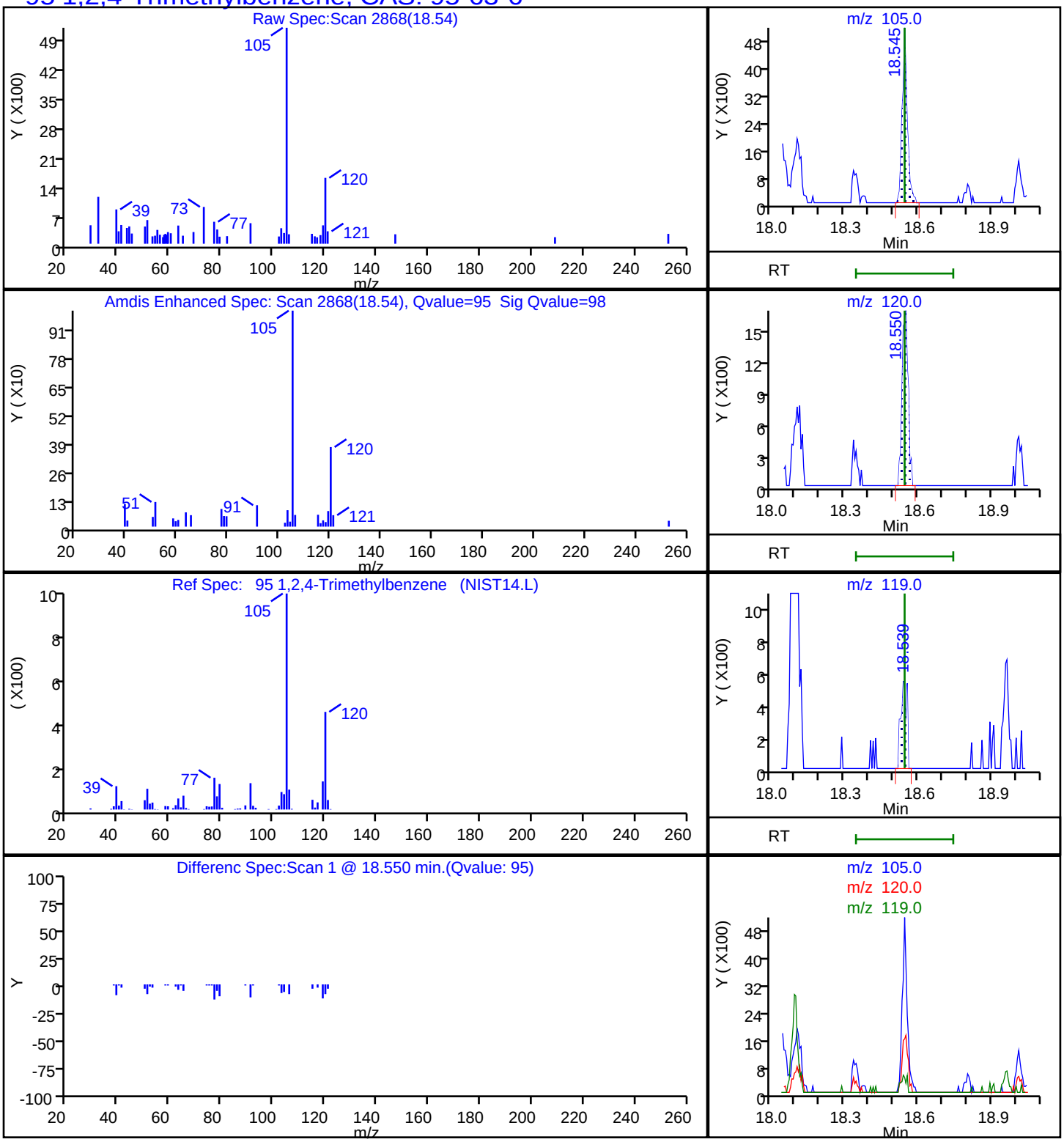
58 Trichloroethene, CAS: 79-01-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P116.D		
Injection Date:	08-Sep-2020 01:28:30	Instrument ID:	MG
Lims ID:	140-20175-A-11	Lab Sample ID:	140-20175-11
Client ID:	SV-DUP2-C-29		
Operator ID:	AFB	ALS Bottle#:	16 Worklist Smp#: 22
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

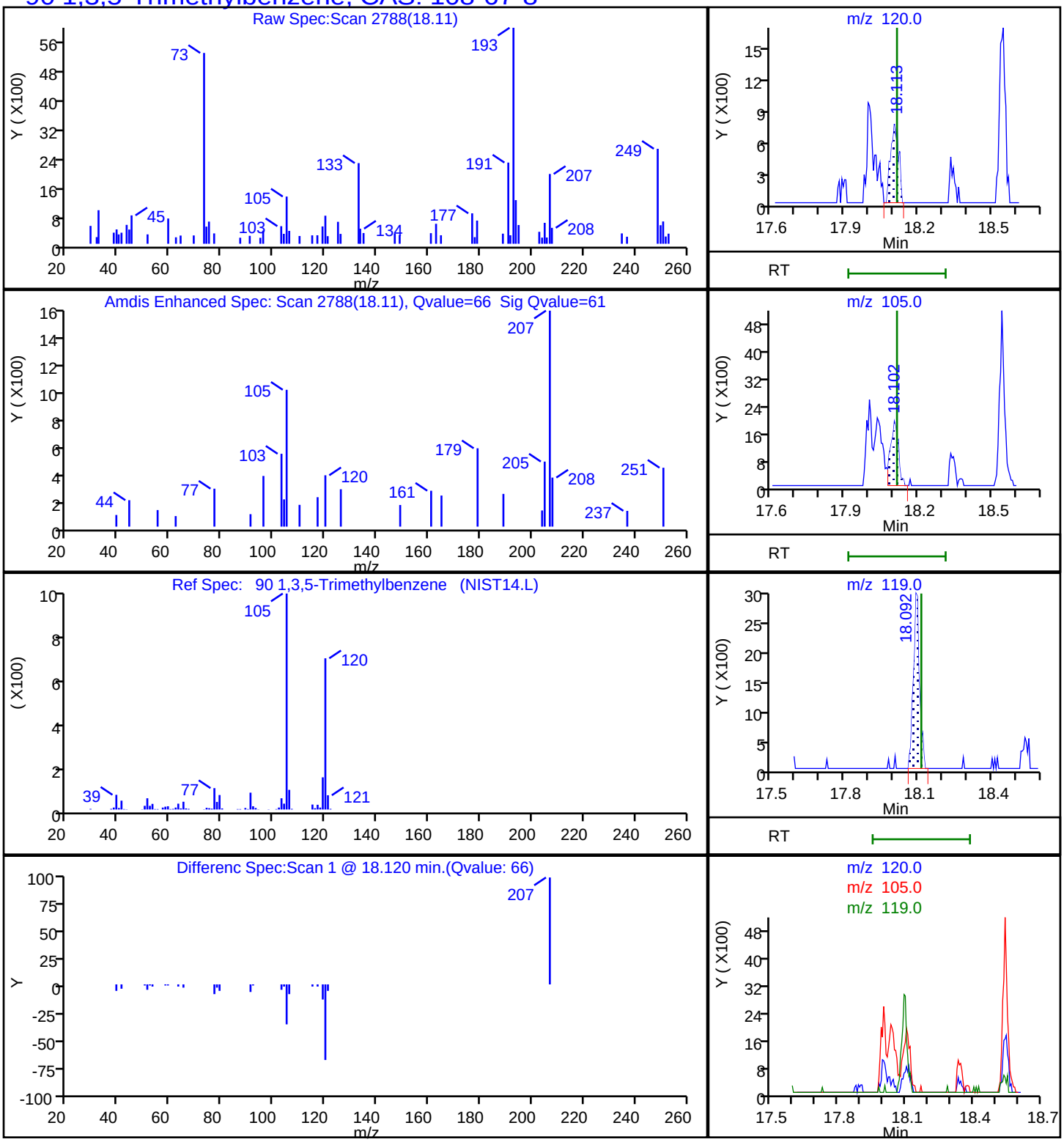
95 1,2,4-Trimethylbenzene, CAS: 95-63-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P116.D				
Injection Date:	08-Sep-2020 01:28:30	Instrument ID:	MG		
Lims ID:	140-20175-A-11	Lab Sample ID:	140-20175-11		
Client ID:	SV-DUP2-C-29				
Operator ID:	AFB	ALS Bottle#:	16	Worklist Smp#:	22
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

90 1,3,5-Trimethylbenzene, CAS: 108-67-8

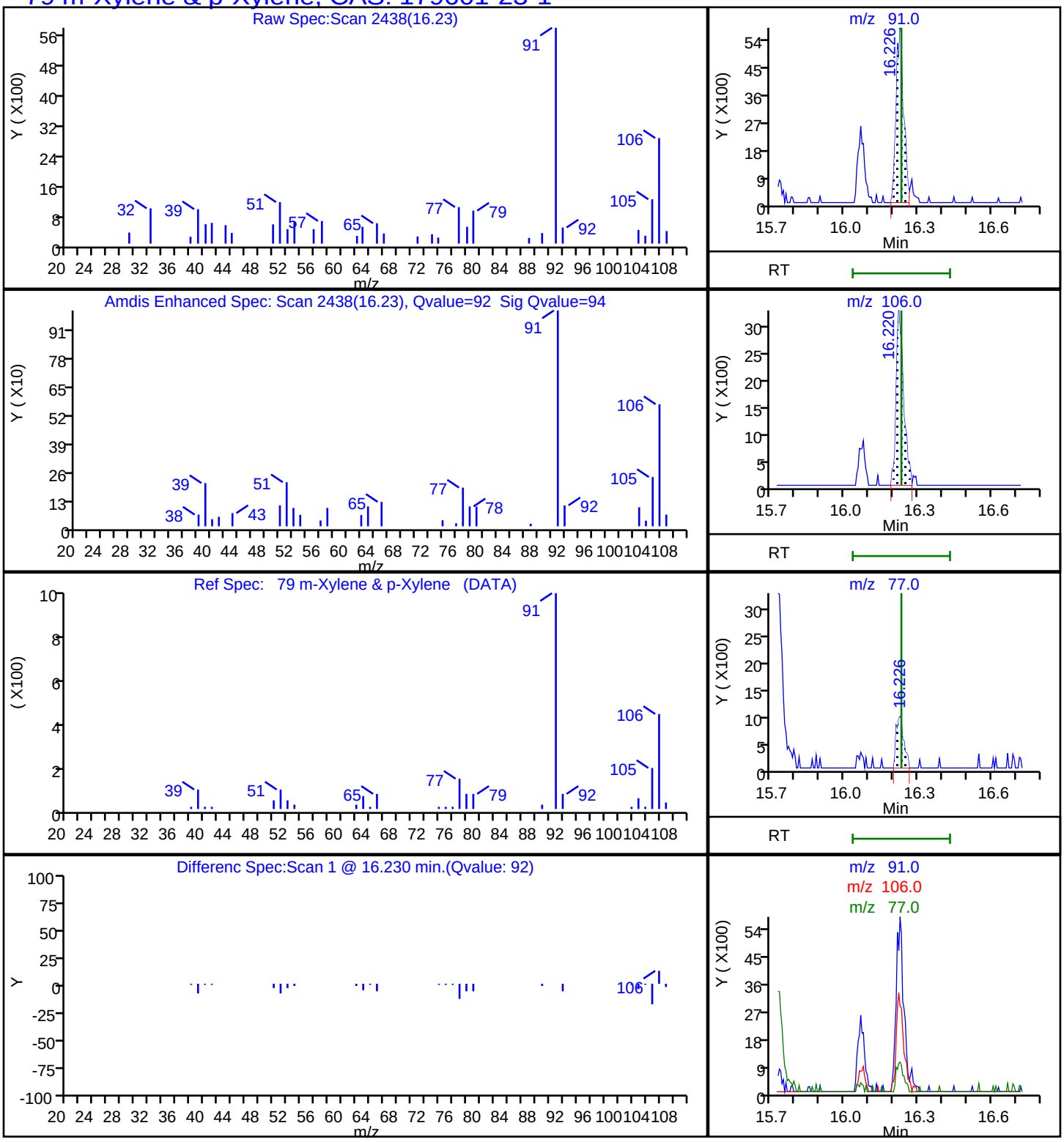


Report Date: 08-Sep-2020 13:24:09 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P116.D				
Injection Date:	08-Sep-2020 01:28:30	Instrument ID:	MG		
Lims ID:	140-20175-A-11	Lab Sample ID:	140-20175-11		
Client ID:	SV-DUP2-C-29				
Operator ID:	AFB	ALS Bottle#:	16	Worklist Smp#:	22
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

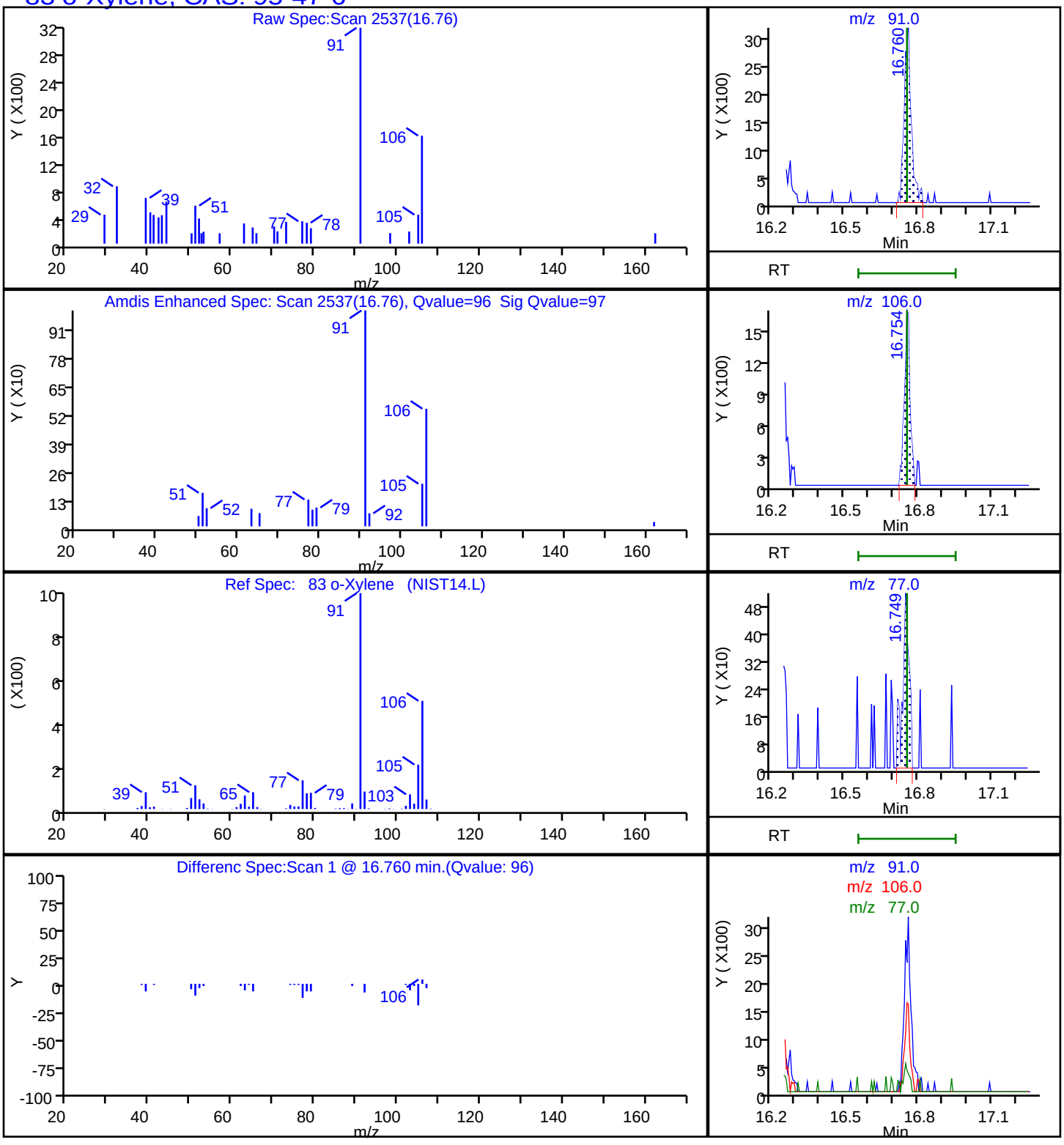
79 m-Xylene & p-Xylene, CAS: 179601-23-1



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P116.D		
Injection Date:	08-Sep-2020 01:28:30	Instrument ID:	MG
Lims ID:	140-20175-A-11	Lab Sample ID:	140-20175-11
Client ID:	SV-DUP2-C-29		
Operator ID:	AFB	ALS Bottle#:	16 Worklist Smp#: 22
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

83 o-Xylene, CAS: 95-47-6



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Knoxville

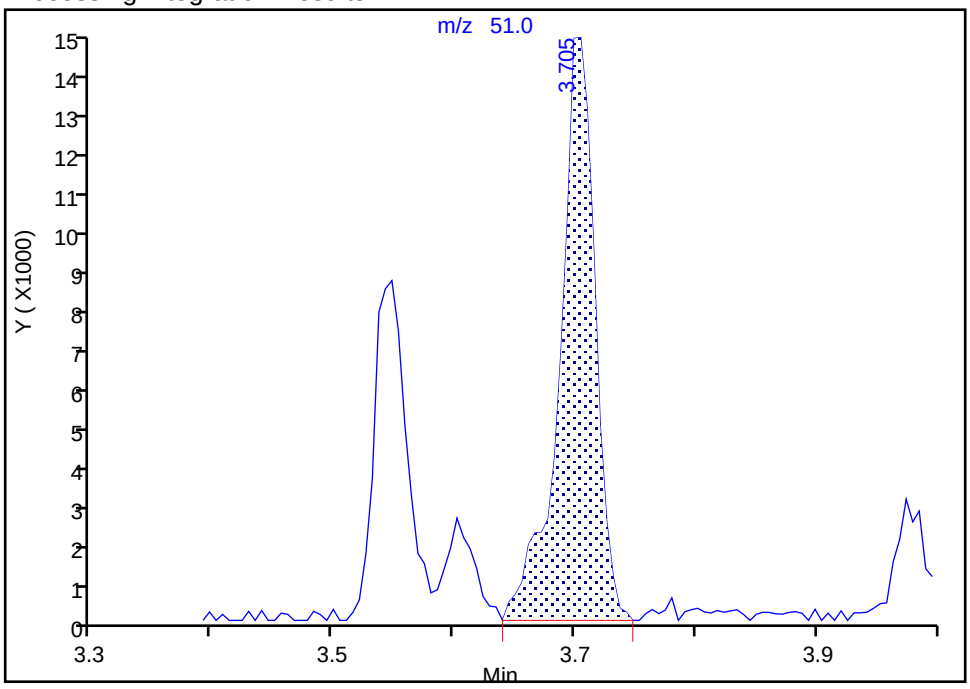
Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P116.D				
Injection Date:	08-Sep-2020 01:28:30	Instrument ID:	MG		
Lims ID:	140-20175-A-11	Lab Sample ID:	140-20175-11		
Client ID:	SV-DUP2-C-29				
Operator ID:	AFB	ALS Bottle#:	16	Worklist Smp#:	22
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

6 Chlorodifluoromethane, CAS: 75-45-6

Signal: 1

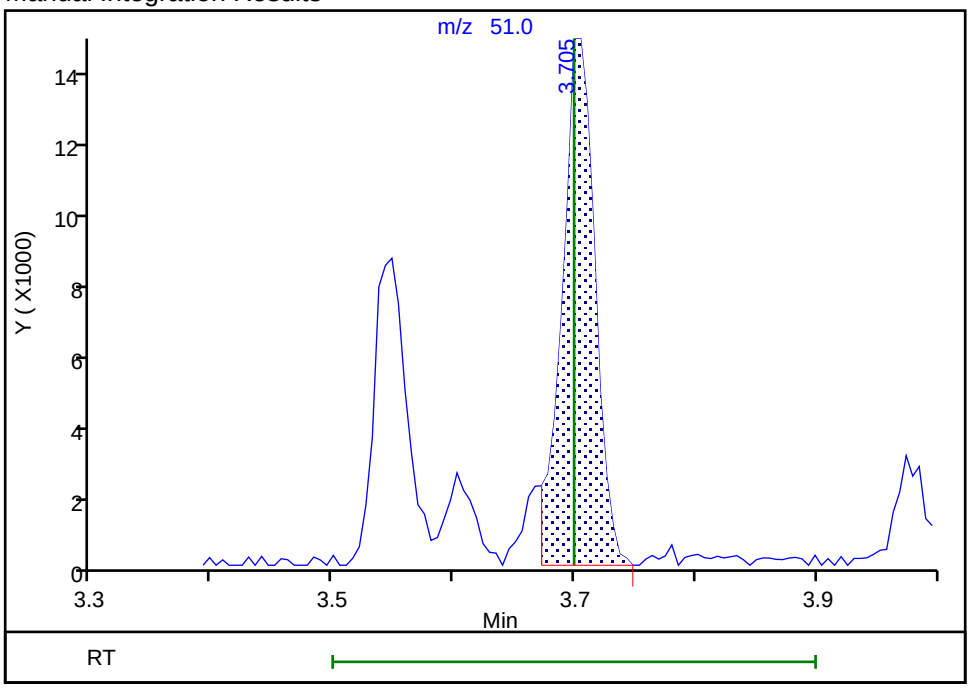
Processing Integration Results

RT: 3.70
Area: 30402
Amount: 0.321223
Amount Units: ppb v/v



Manual Integration Results

RT: 3.70
Area: 28375
Amount: 0.299806
Amount Units: ppb v/v



Reviewer: barlozhetskayaa, 08-Sep-2020 13:23:52

Audit Action: Split an Integrated Peak Audit Reason: Split Peak

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: SV-060-C-29 Lab Sample ID: 140-20175-12

Matrix: Air Lab File ID: GI03P111.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 10:41

Sample wt/vol: 20(mL) Date Analyzed: 09/03/2020 22:15

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42409 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.23	J	2.0	0.20
56-23-5	Carbon tetrachloride	153.81	ND		2.0	0.18
75-45-6	Chlorodifluoromethane	86.47	2.7		2.0	0.55
67-66-3	Chloroform	119.38	3.0		2.0	0.18
156-59-2	cis-1,2-Dichloroethene	96.94	5.9		2.0	0.25
75-71-8	Dichlorodifluoromethane	120.91	0.47	J	2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	2.5		2.0	0.18
107-06-2	1,2-Dichloroethane	98.96	ND		2.0	0.25
75-35-4	1,1-Dichloroethene	96.94	ND		2.0	0.20
100-41-4	Ethylbenzene	106.17	2.1		2.0	0.33
75-09-2	Methylene Chloride	84.93	ND		10	9.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		10	1.3
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.0	0.18
108-88-3	Toluene	92.14	ND		3.0	2.0
156-60-5	trans-1,2-Dichloroethene	96.94	0.30	J	2.0	0.18
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		2.0	1.6
71-55-6	1,1,1-Trichloroethane	133.41	1.5	J	2.0	0.93
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.0	0.18
79-01-6	Trichloroethene	131.39	89		1.0	0.15
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.90
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		2.0	0.50
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.55
75-01-4	Vinyl chloride	62.50	ND		1.0	0.65
1330-20-7	Xylenes, Total	106.17	18		4.0	0.60

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	102		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: SV-060-C-29 Lab Sample ID: 140-20175-12

Matrix: Air Lab File ID: GI03P111.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 10:41

Sample wt/vol: 20(mL) Date Analyzed: 09/03/2020 22:15

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42409 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.74	J	6.4	0.64
56-23-5	Carbon tetrachloride	153.81	ND		13	1.1
75-45-6	Chlorodifluoromethane	86.47	9.7		7.1	1.9
67-66-3	Chloroform	119.38	15		9.8	0.85
156-59-2	cis-1,2-Dichloroethene	96.94	24		7.9	0.99
75-71-8	Dichlorodifluoromethane	120.91	2.3	J	9.9	1.7
75-34-3	1,1-Dichloroethane	98.96	10		8.1	0.71
107-06-2	1,2-Dichloroethane	98.96	ND		8.1	1.0
75-35-4	1,1-Dichloroethene	96.94	ND		7.9	0.79
100-41-4	Ethylbenzene	106.17	9.1		8.7	1.4
75-09-2	Methylene Chloride	84.93	ND		35	34
1634-04-4	Methyl tert-butyl ether	88.15	ND		36	4.7
91-20-3	Naphthalene	128.17	ND		5.2	5.2
127-18-4	Tetrachloroethene	165.83	ND		14	1.2
108-88-3	Toluene	92.14	ND		11	7.3
156-60-5	trans-1,2-Dichloroethene	96.94	1.2	J	7.9	0.69
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		15	12
71-55-6	1,1,1-Trichloroethane	133.41	8.1	J	11	5.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		11	0.95
79-01-6	Trichloroethene	131.39	480		5.4	0.81
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		9.8	4.4
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		9.8	2.5
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		9.8	2.7
75-01-4	Vinyl chloride	62.50	ND		2.6	1.7
1330-20-7	Xylenes, Total	106.17	80		17	2.6

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	102		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200902-16486.b\GI03P111.D
Lims ID: 140-20175-A-12
Client ID: SV-060-C-29
Sample Type: Client
Inject. Date: 03-Sep-2020 22:15:30 ALS Bottle#: 11 Worklist Smp#: 21
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016486-021
Misc. Info.: 140-20175-a-12
Operator ID: HMT Instrument ID: MG

Method: \\chromfs\Knoxville\ChromData\MG\20200902-16486.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 04-Sep-2020 10:03:51 Calib Date: 02-Sep-2020 03:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1061

First Level Reviewer: khachitpongpanits Date: 04-Sep-2020 10:04:30

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.806	8.811	-0.005	86	105140	4.80	
* 2 1,4-Difluorobenzene	114	10.990	10.995	-0.005	98	579099	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.730	15.730	0.000	96	550873	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.369	17.374	-0.005	82	408282	4.72	
6 Chlorodifluoromethane	51	3.699	3.697	0.000	98	10357	0.1099	
8 Dichlorodifluoromethane	85	3.759	3.762	-0.005	96	1984	0.0188	
34 trans-1,2-Dichloroethene	96	7.064	7.080	-0.016	1	363	0.0119	
37 1,1-Dichloroethane	63	7.496	7.496	-0.005	99	7624	0.1002	
42 cis-1,2-Dichloroethene	96	8.477	8.477	0.000	91	7717	0.2379	
44 Chloroform	83	8.822	8.822	0.000	95	8780	0.1191	
47 1,1,1-Trichloroethane	97	9.847	9.846	-0.005	93	4221	0.0595	
50 Benzene	78	10.456	10.445	0.006	66	1109	0.009316	
58 Trichloroethene	130	11.702	11.701	-0.005	87	184129	3.55	
78 Ethylbenzene	91	16.069	16.069	0.000	97	13050	0.0836	
79 m-Xylene & p-Xylene	91	16.226	16.231	-0.005	96	61444	0.4974	
83 o-Xylene	91	16.754	16.760	-0.006	97	31963	0.2557	
S 124 Xylenes, Total	100				0		0.7530	

Reagents:

40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

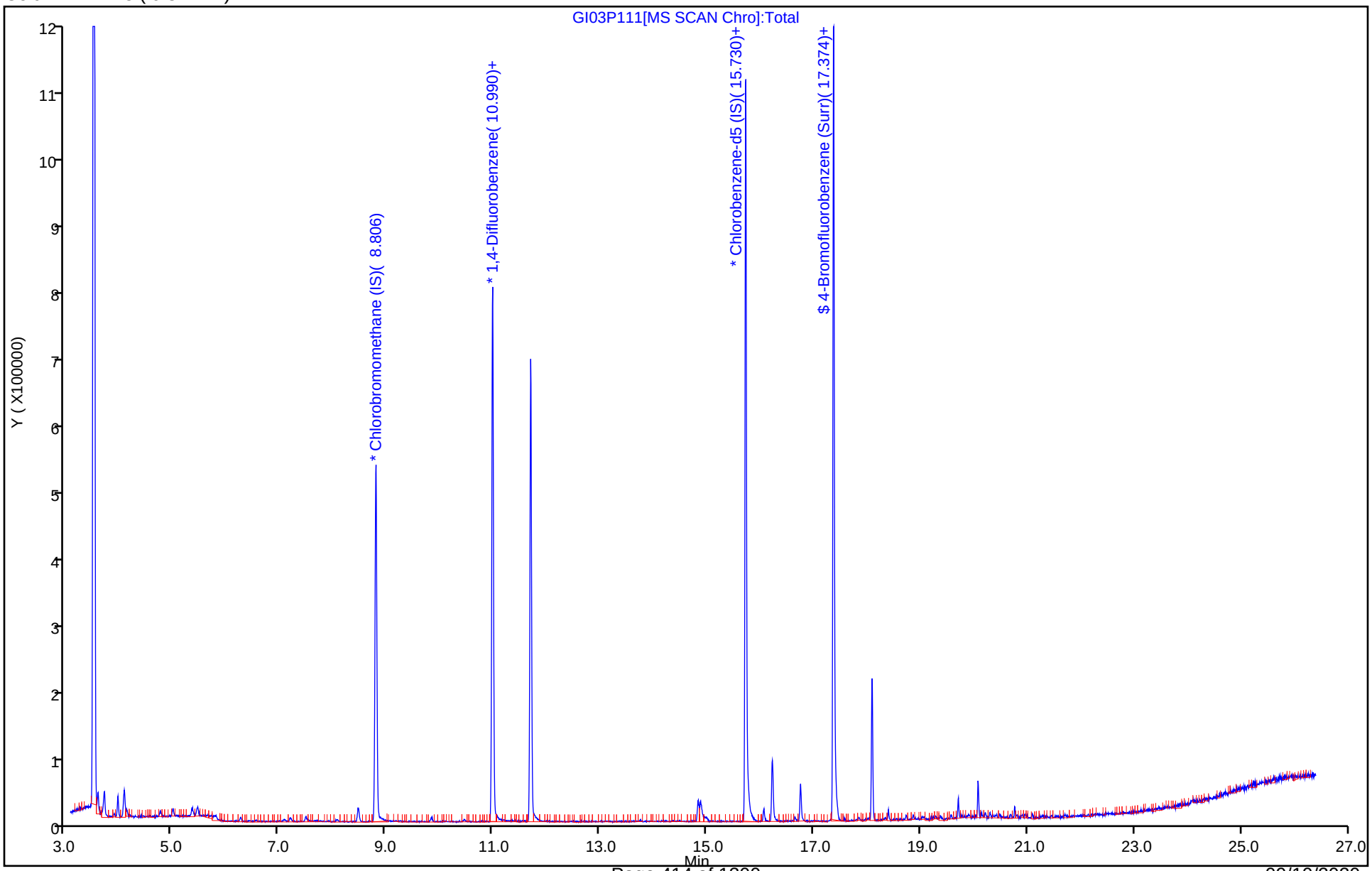
Report Date: 04-Sep-2020 10:04:30 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200902-16486.b\GI03P111.D

Injection Date:	03-Sep-2020 22:15:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	140-20175-A-12	Lab Sample ID:	140-20175-12	Worklist Smp#:	21
Client ID:	SV-060-C-29				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MG\20200902-16486.b\GI03P111.D				
Lims ID:	140-20175-A-12				
Client ID:	SV-060-C-29				
Sample Type:	Client				
Inject. Date:	03-Sep-2020 22:15:30	ALS Bottle#:	11	Worklist Smp#:	21
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016486-021				
Misc. Info.:	140-20175-a-12				
Operator ID:	HMT	Instrument ID:	MG		
Method:	\\chromfs\Knoxville\ChromData\MG\20200902-16486.b\MG_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	04-Sep-2020 10:03:51	Calib Date:	02-Sep-2020 03:27:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1061				
First Level Reviewer: khachitpongpanits		Date:	04-Sep-2020 10:04:30		

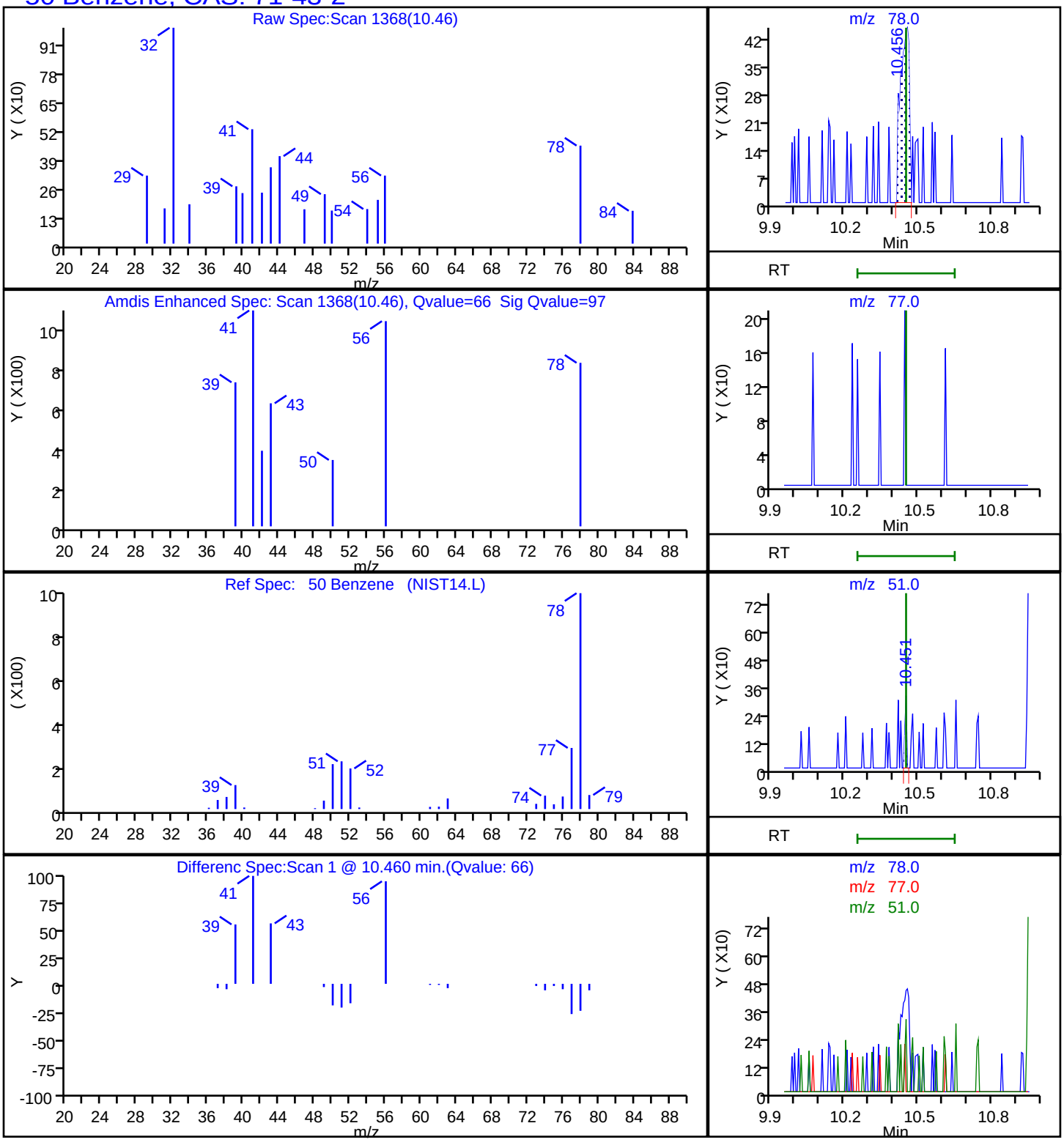
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	4.72	101.79

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200902-16486.b\GI03P111.D

Injection Date:	03-Sep-2020 22:15:30	Instrument ID:	MG		
Lims ID:	140-20175-A-12	Lab Sample ID:	140-20175-12		
Client ID:	SV-060-C-29				
Operator ID:	HMT	ALS Bottle#:	11	Worklist Smp#:	21
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

50 Benzene, CAS: 71-43-2

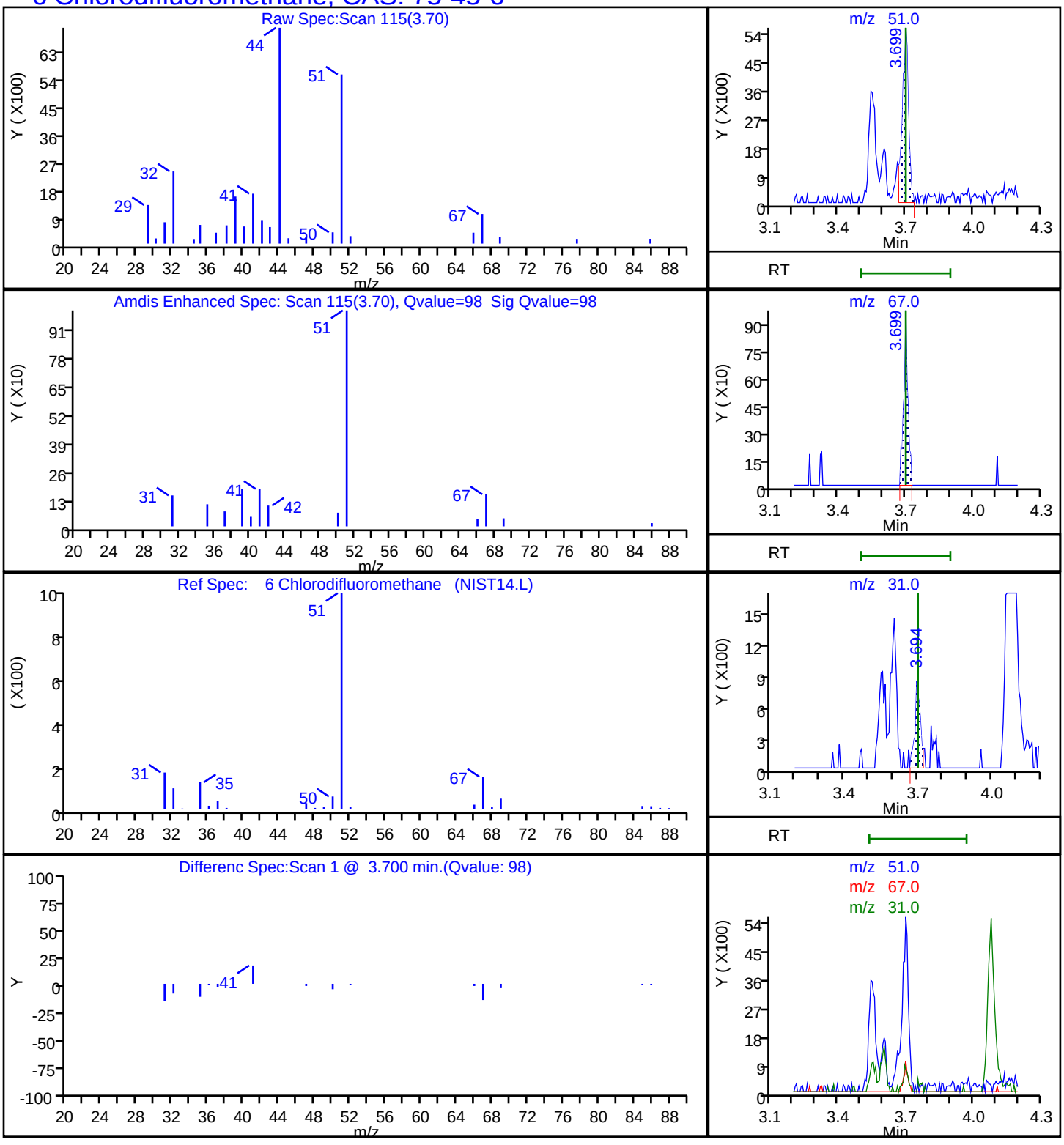


Report Date: 04-Sep-2020 10:04:30 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200902-16486.b\GI03P111.D				
Injection Date:	03-Sep-2020 22:15:30	Instrument ID:	MG		
Lims ID:	140-20175-A-12	Lab Sample ID:	140-20175-12		
Client ID:	SV-060-C-29				
Operator ID:	HMT	ALS Bottle#:	11	Worklist Smp#:	21
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

6 Chlorodifluoromethane, CAS: 75-45-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200902-16486.b\GI03P111.D				
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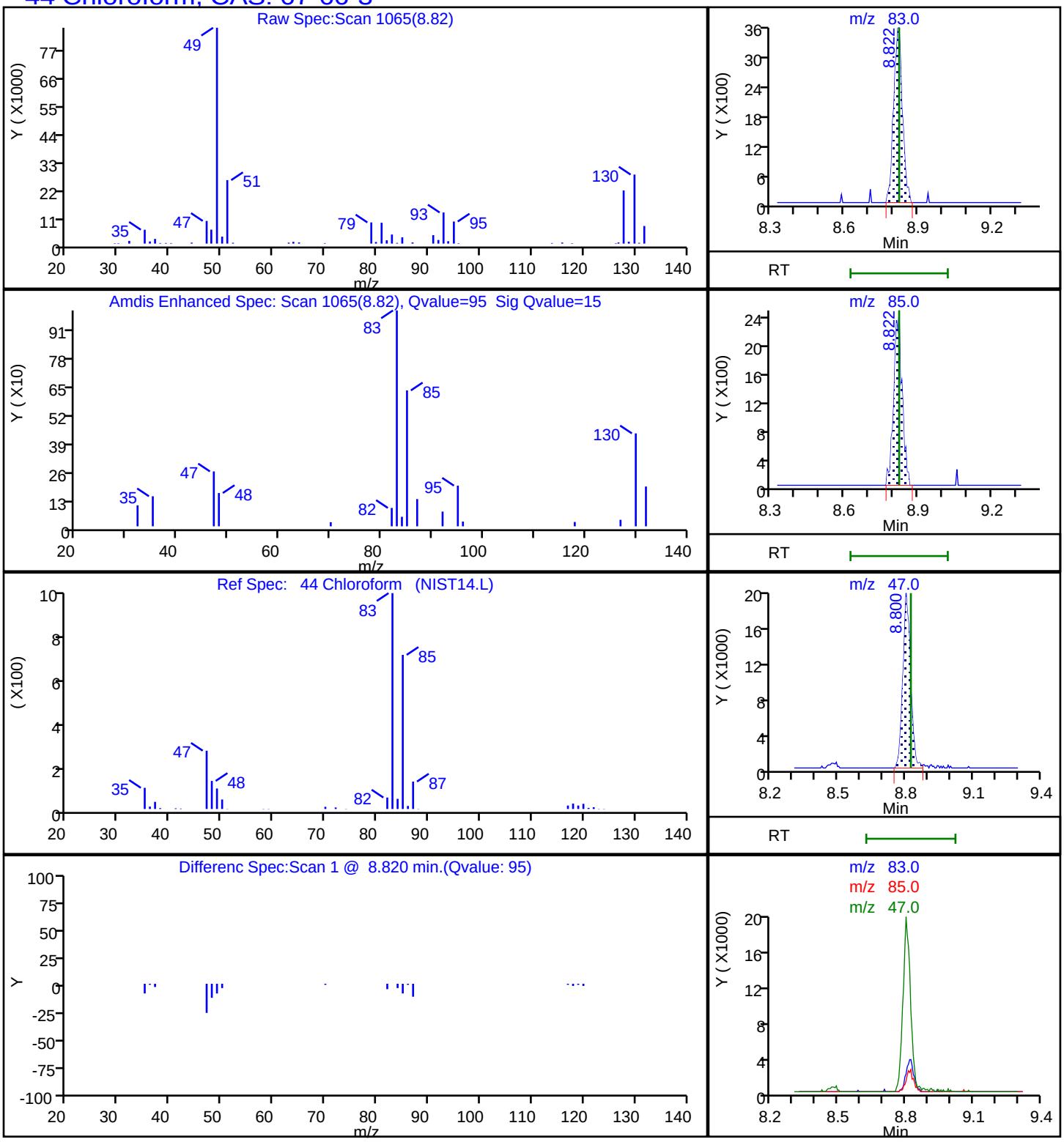
Lims ID:	140-20175-A-12	Lab Sample ID:	140-20175-12		
Client ID:	SV-060-C-29				
Operator ID:	HMT	ALS Bottle#:	11	Worklist Smp#:	21
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

44 Chloroform, CAS: 67-66-3

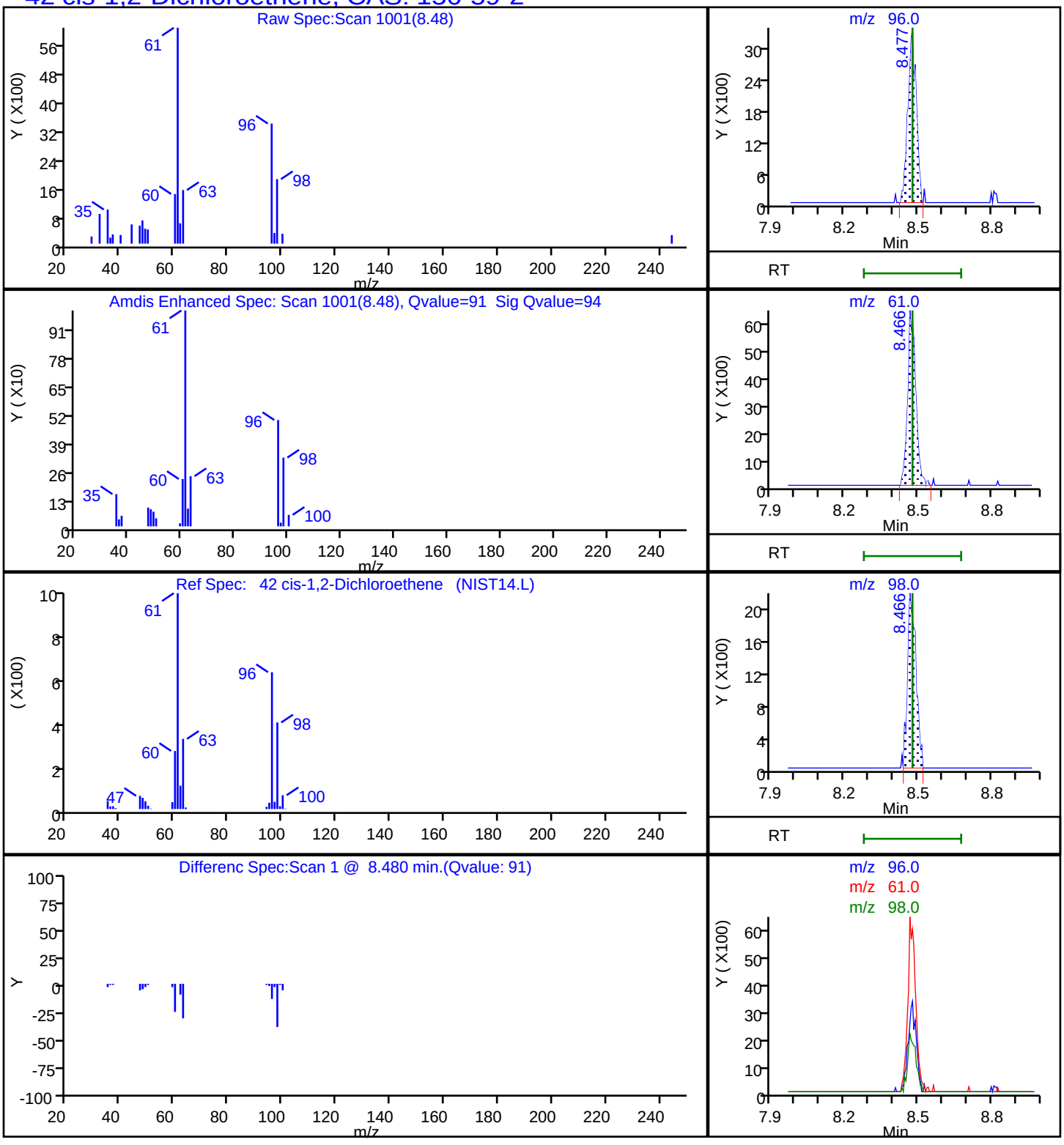


Report Date: 04-Sep-2020 10:04:30 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200902-16486.b\GI03P111.D				
Injection Date:	03-Sep-2020 22:15:30	Instrument ID:	MG		
Lims ID:	140-20175-A-12	Lab Sample ID:	140-20175-12		
Client ID:	SV-060-C-29				
Operator ID:	HMT	ALS Bottle#:	11	Worklist Smp#:	21
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

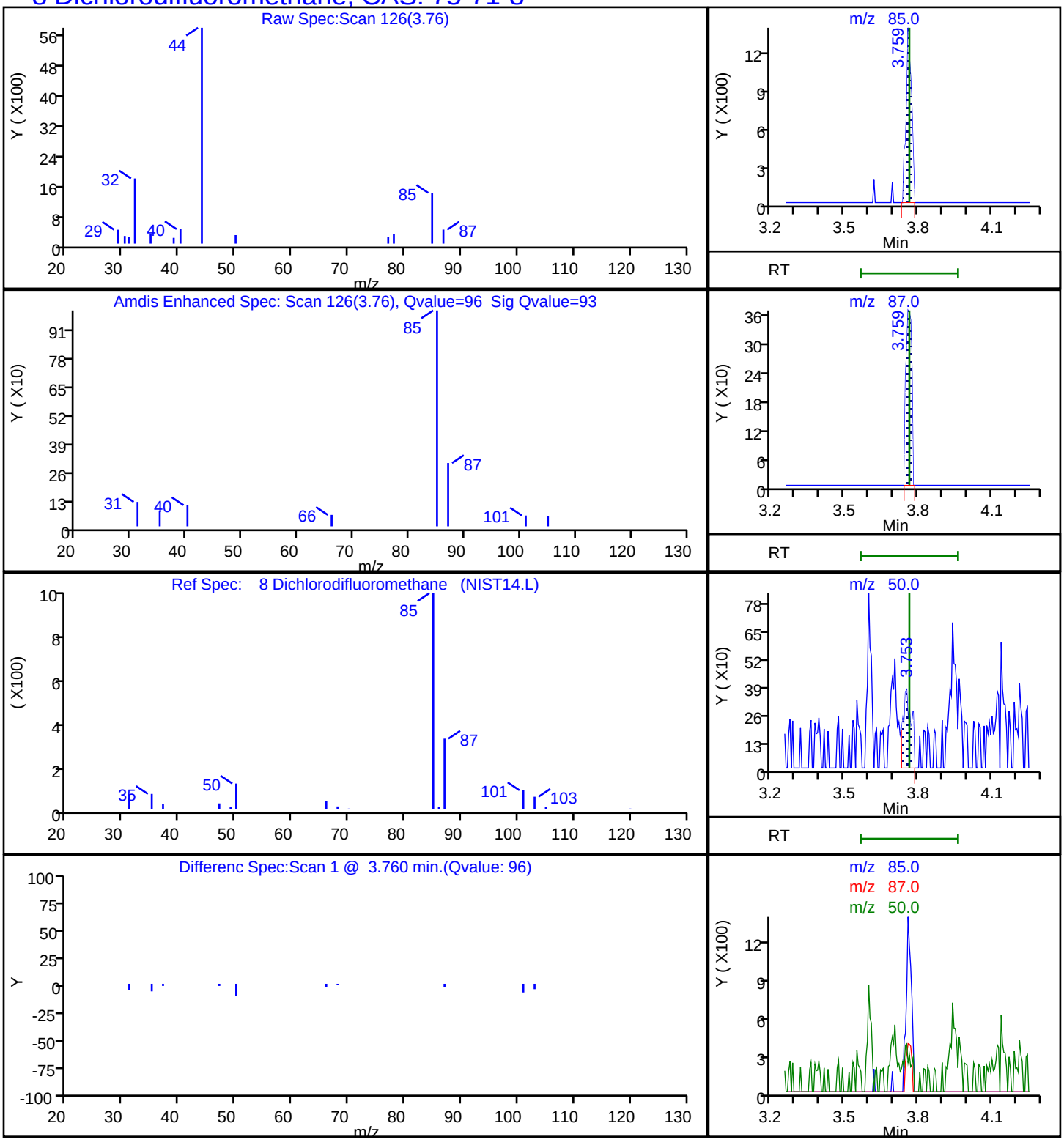
42 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200902-16486.b\GI03P111.D				
Injection Date:	03-Sep-2020 22:15:30	Instrument ID:	MG		
Lims ID:	140-20175-A-12	Lab Sample ID:	140-20175-12		
Client ID:	SV-060-C-29				
Operator ID:	HMT	ALS Bottle#:	11	Worklist Smp#:	21
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

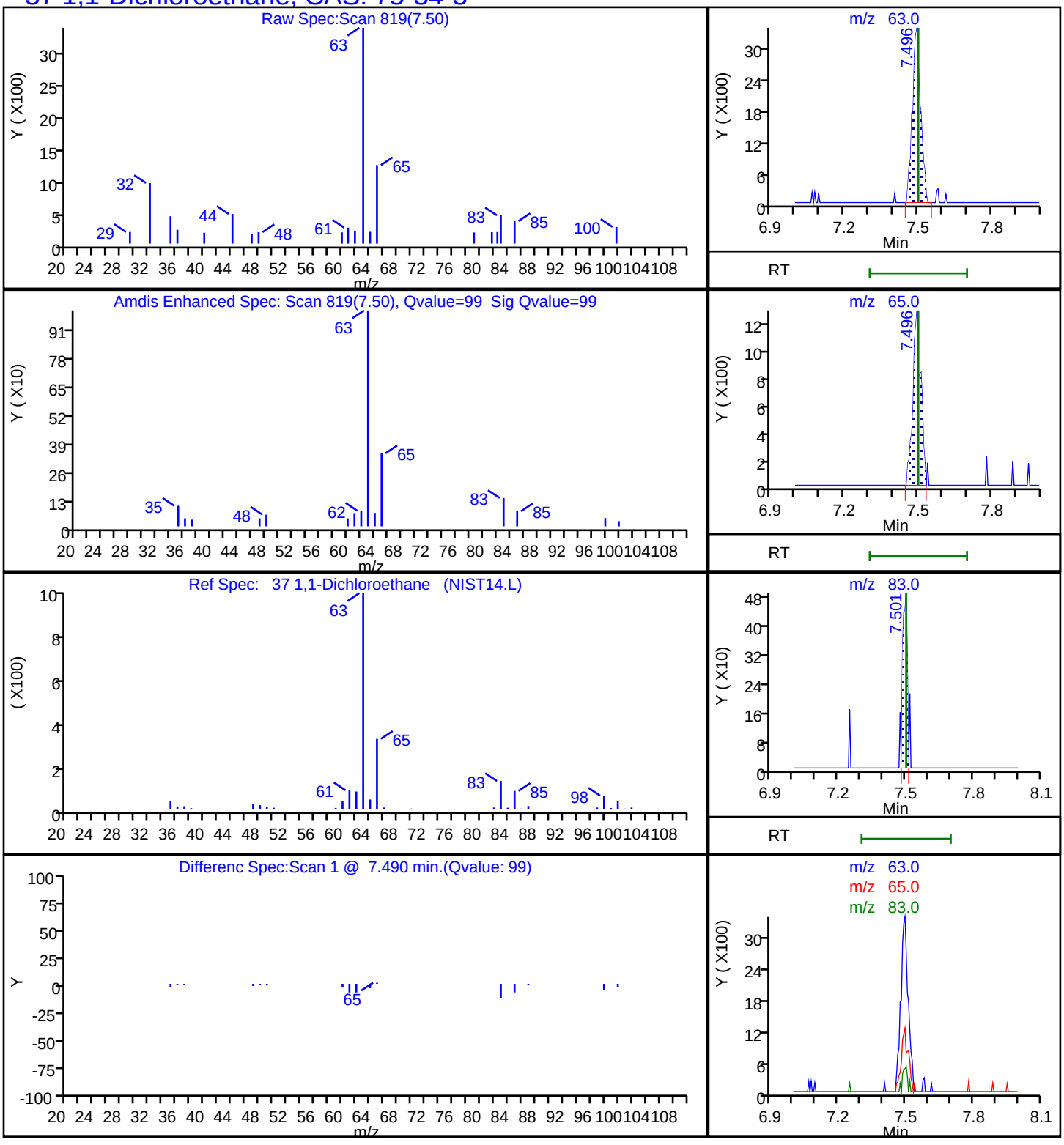
8 Dichlorodifluoromethane, CAS: 75-71-8



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200902-16486.b\GI03P111.D		
Injection Date:	03-Sep-2020 22:15:30	Instrument ID:	MG
Lims ID:	140-20175-A-12	Lab Sample ID:	140-20175-12
Client ID:	SV-060-C-29		
Operator ID:	HMT	ALS Bottle#:	11 Worklist Smp#: 21
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

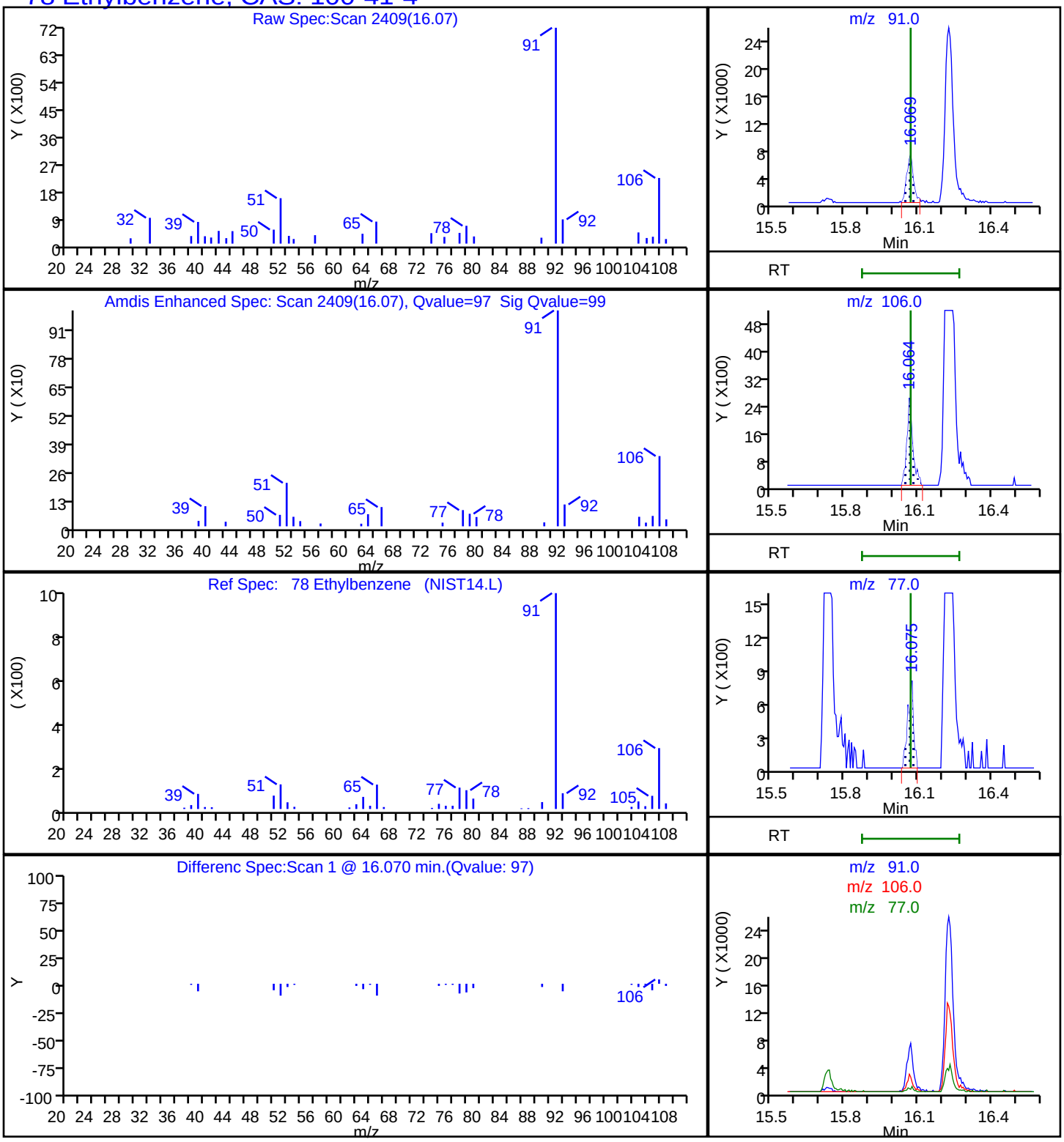
37 1,1-Dichloroethane, CAS: 75-34-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200902-16486.b\GI03P111.D				
Injection Date:	03-Sep-2020 22:15:30	Instrument ID:	MG		
Lims ID:	140-20175-A-12	Lab Sample ID:	140-20175-12		
Client ID:	SV-060-C-29				
Operator ID:	HMT	ALS Bottle#:	11	Worklist Smp#:	21
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

78 Ethylbenzene, CAS: 100-41-4

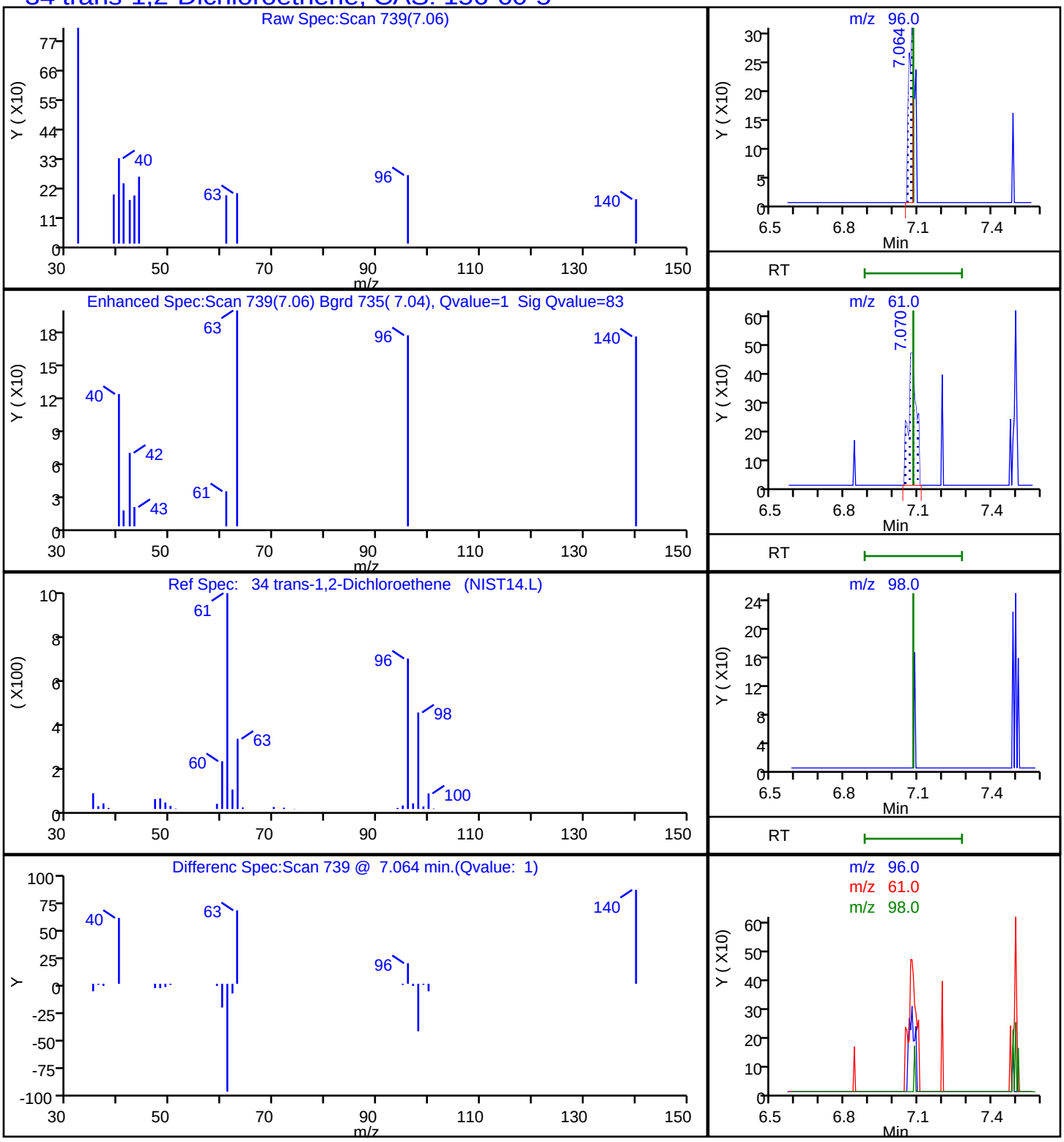


Report Date: 04-Sep-2020 10:04:30 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200902-16486.b\GI03P111.D				
Injection Date:	03-Sep-2020 22:15:30	Instrument ID:	MG		
Lims ID:	140-20175-A-12	Lab Sample ID:	140-20175-12		
Client ID:	SV-060-C-29				
Operator ID:	HMT	ALS Bottle#:	11	Worklist Smp#:	21
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

34 trans-1,2-Dichloroethene, CAS: 156-60-5



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200902-16486.b\GI03P111.D				
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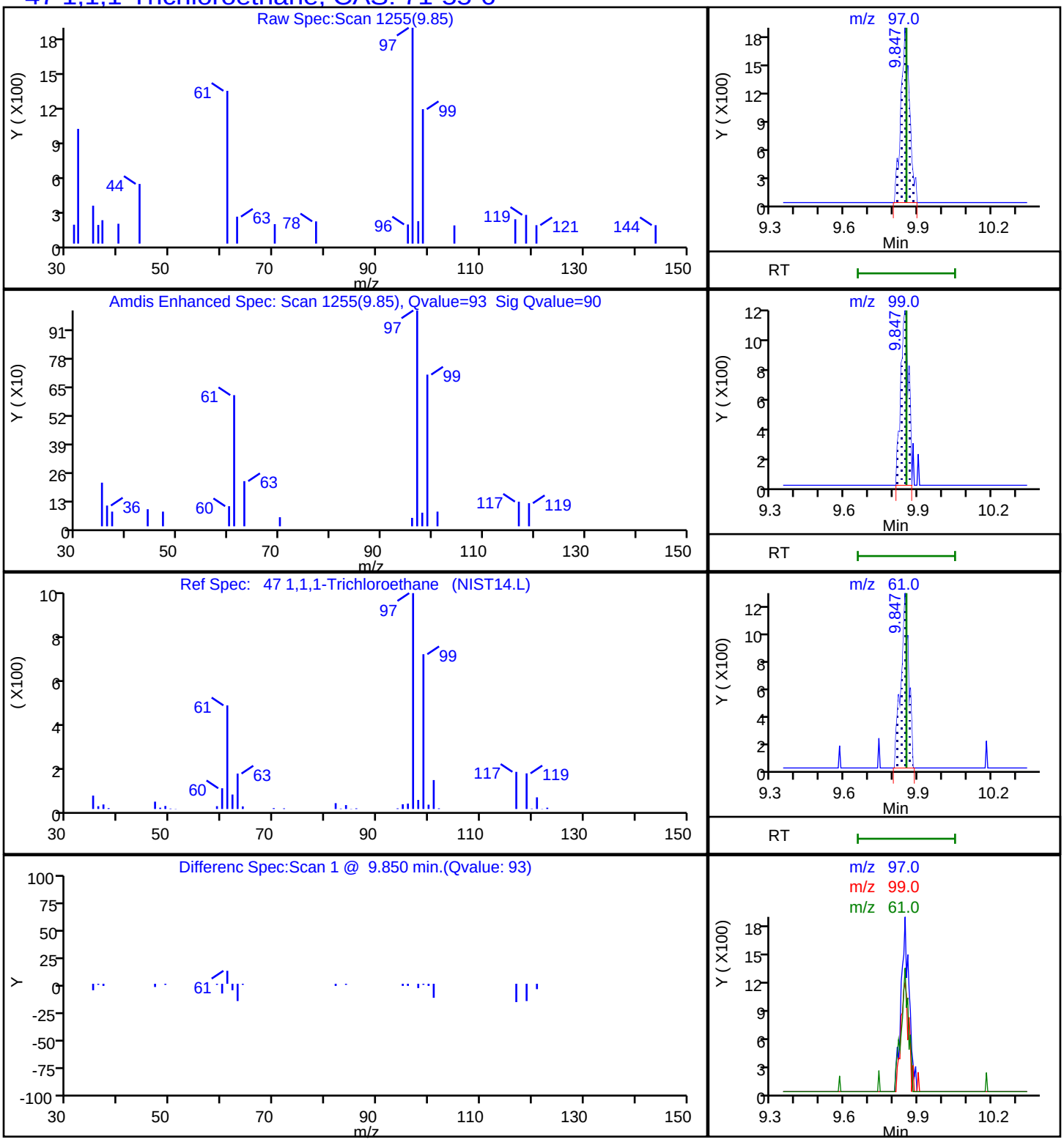
Lims ID:	140-20175-A-12	Lab Sample ID:	140-20175-12		
Client ID:	SV-060-C-29				
Operator ID:	HMT	ALS Bottle#:	11	Worklist Smp#:	21
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

47 1,1,1-Trichloroethane, CAS: 71-55-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200902-16486.b\GI03P111.D		
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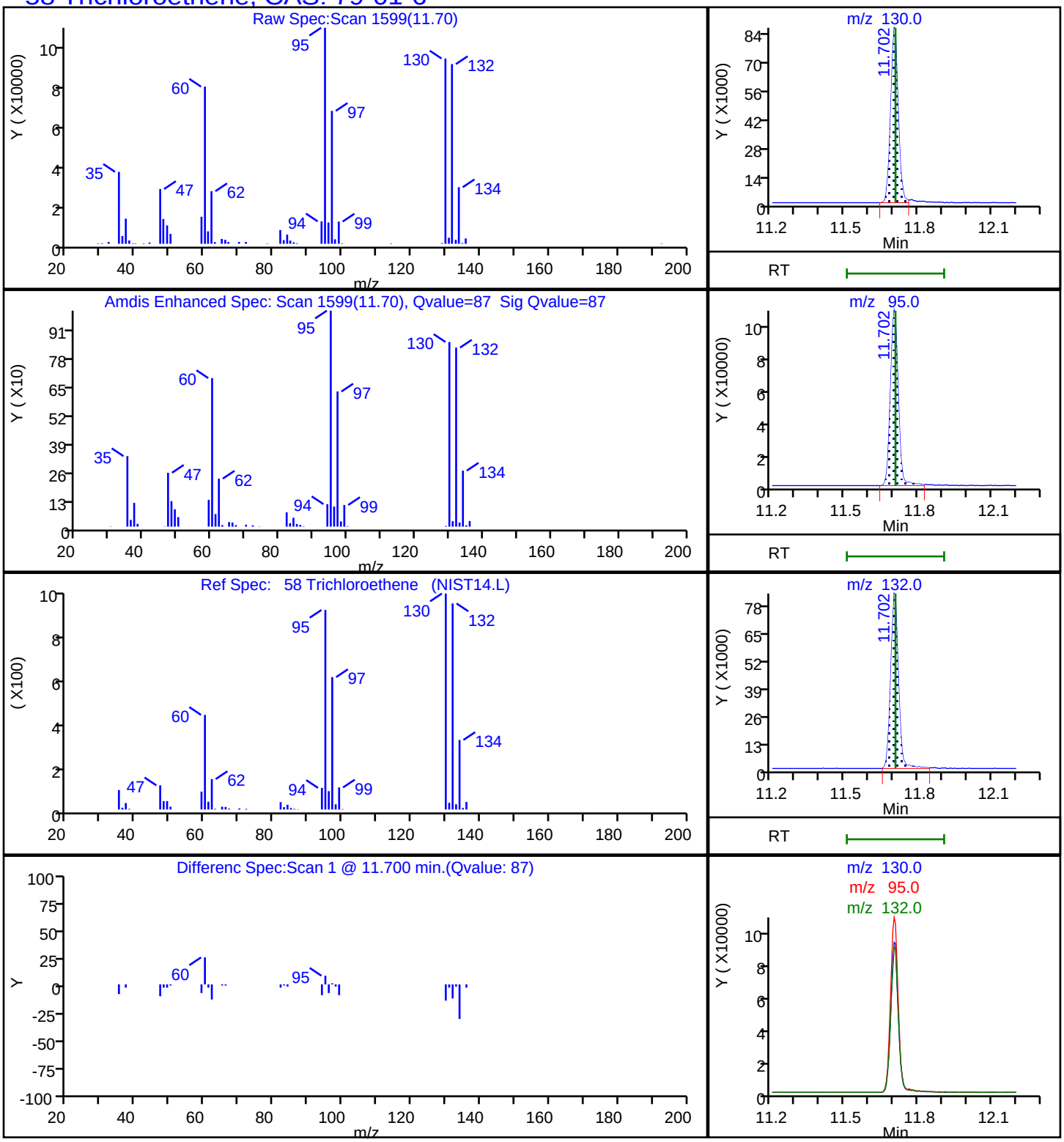
Lims ID:	140-20175-A-12	Lab Sample ID:	140-20175-12
Client ID:	SV-060-C-29		
Operator ID:	HMT	ALS Bottle#:	11 Worklist Smp#: 21
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

58 Trichloroethene, CAS: 79-01-6

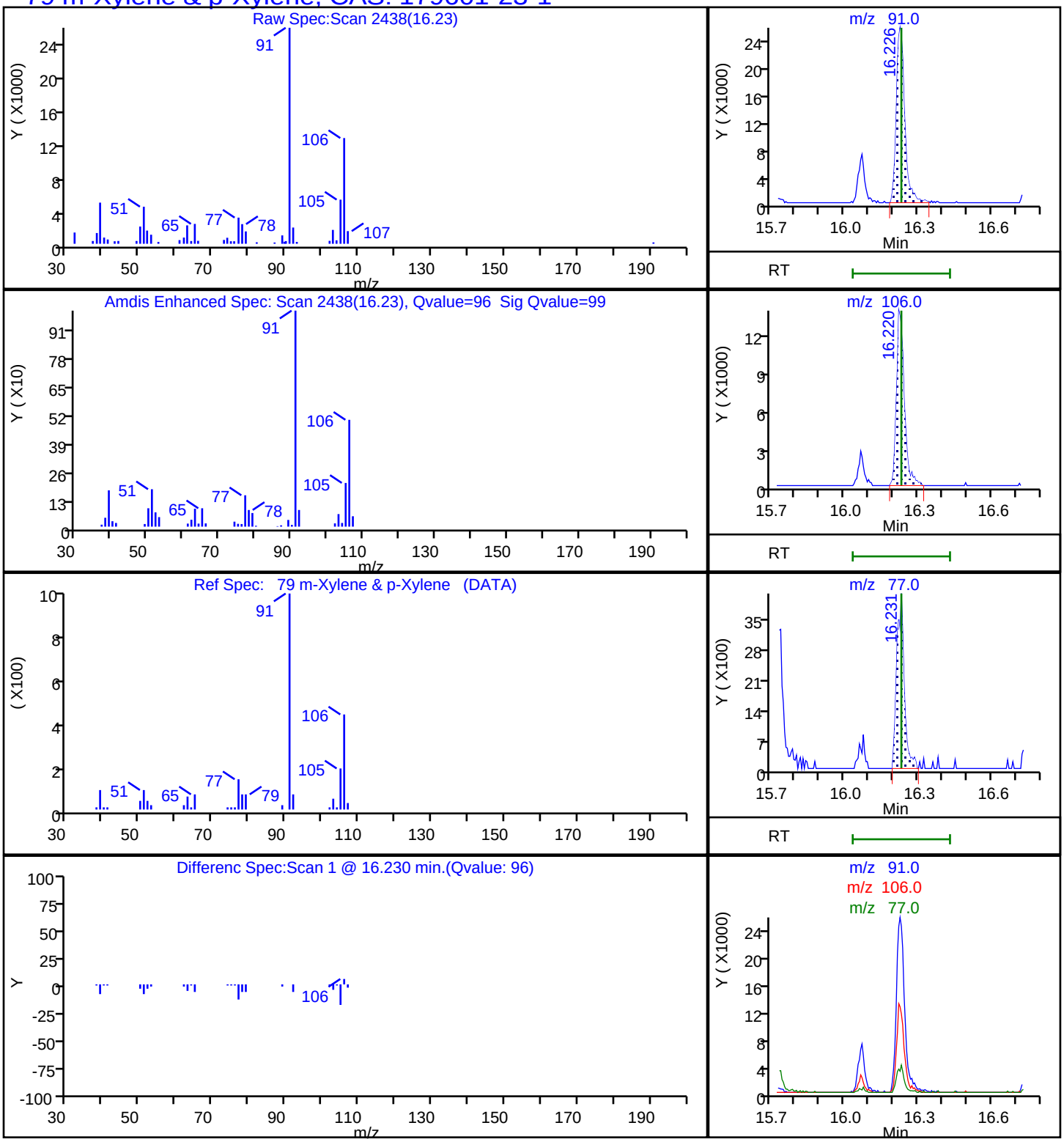


Report Date: 04-Sep-2020 10:04:30 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200902-16486.b\GI03P111.D				
Injection Date:	03-Sep-2020 22:15:30	Instrument ID:	MG		
Lims ID:	140-20175-A-12	Lab Sample ID:	140-20175-12		
Client ID:	SV-060-C-29				
Operator ID:	HMT	ALS Bottle#:	11	Worklist Smp#:	21
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

79 m-Xylene & p-Xylene, CAS: 179601-23-1

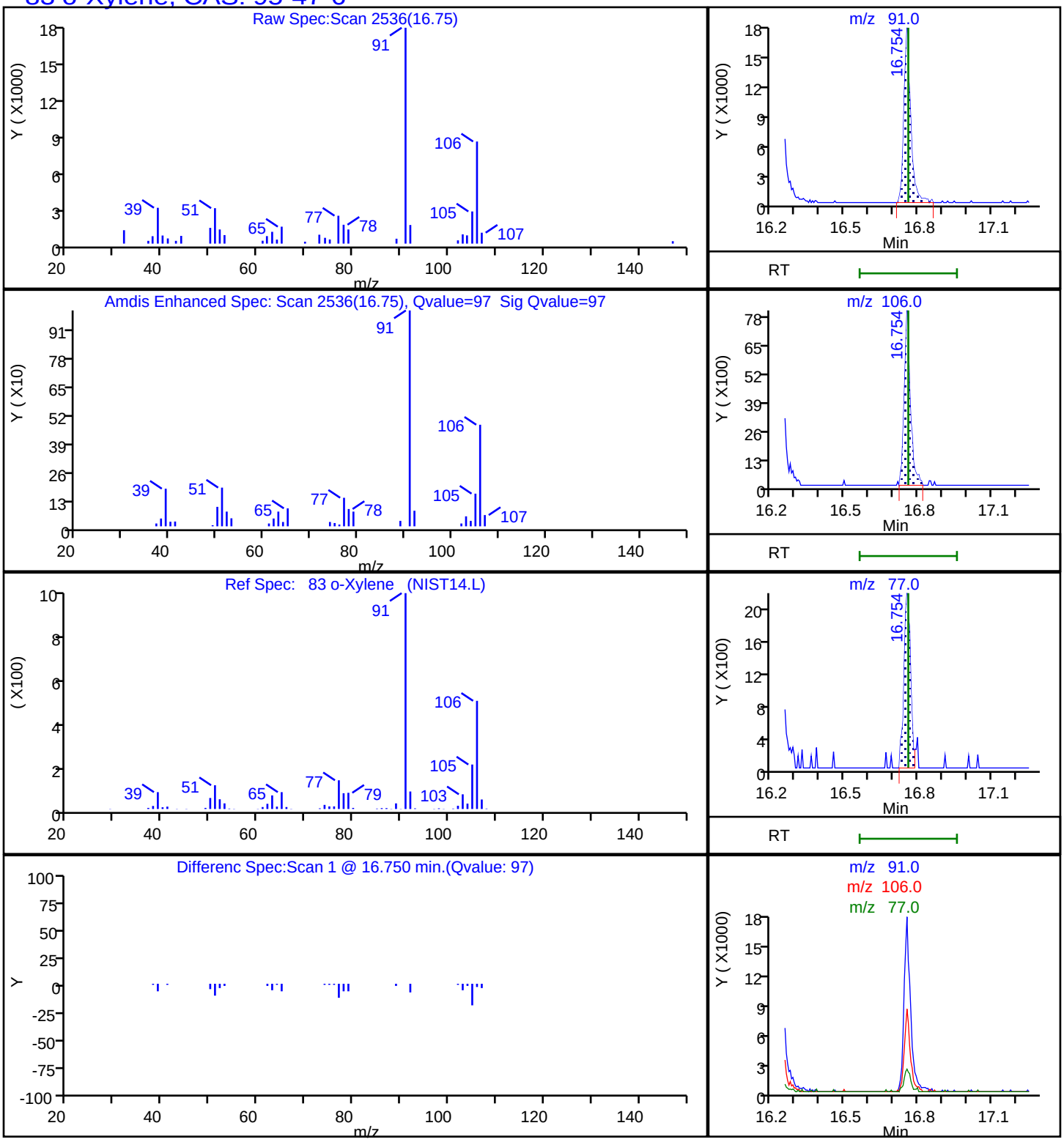


Report Date: 04-Sep-2020 10:04:30 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200902-16486.b\GI03P111.D				
Injection Date:	03-Sep-2020 22:15:30	Instrument ID:	MG		
Lims ID:	140-20175-A-12	Lab Sample ID:	140-20175-12		
Client ID:	SV-060-C-29				
Operator ID:	HMT	ALS Bottle#:	11	Worklist Smp#:	21
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

83 o-Xylene, CAS: 95-47-6



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: SV-150-C-29 Lab Sample ID: 140-20175-13

Matrix: Air Lab File ID: GI03P116D.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 10:44

Sample wt/vol: 100(mL) Date Analyzed: 09/04/2020 02:51

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42409 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.31	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.057	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	19		0.40	0.11
67-66-3	Chloroform	119.38	0.086	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.47		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	1.3		0.40	0.065
75-09-2	Methylene Chloride	84.93	3.4		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.035
108-88-3	Toluene	92.14	2.7		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	ND		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	0.27	J	0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	0.11	J	0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	5.4		0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	115		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: SV-150-C-29 Lab Sample ID: 140-20175-13

Matrix: Air Lab File ID: GI03P116D.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 10:44

Sample wt/vol: 100(mL) Date Analyzed: 09/04/2020 02:51

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42409 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	1.0	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.36	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	67		1.4	0.39
67-66-3	Chloroform	119.38	0.42	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.3		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	5.5		1.7	0.28
75-09-2	Methylene Chloride	84.93	12		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.24
108-88-3	Toluene	92.14	10		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	ND		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	1.3	J	2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	0.56	J	2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	23		3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	115		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200902-16486.b\GI03P116D.D
Lims ID: 140-20175-A-13
Client ID: SV-150-C-29
Sample Type: Client
Inject. Date: 04-Sep-2020 02:51:30 ALS Bottle#: 16 Worklist Smp#: 27
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016486-027
Misc. Info.: 140-20175-a-13
Operator ID: HMT Instrument ID: MG

Method: \\chromfs\Knoxville\ChromData\MG\20200902-16486.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 04-Sep-2020 14:26:44 Calib Date: 02-Sep-2020 03:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1061

First Level Reviewer: khachitpongpanits Date: 04-Sep-2020 14:26:44

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.811	8.811	0.000	86	122983	4.80	
* 2 1,4-Difluorobenzene	114	10.995	10.995	0.000	98	689449	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.730	15.730	0.000	94	719081	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.374	17.374	0.000	81	603831	5.35	
6 Chlorodifluoromethane	51	3.705	3.699	0.006	97	417650	3.79	
8 Dichlorodifluoromethane	85	3.769	3.764	0.005	97	11514	0.0935	
31 Methylene Chloride	84	6.277	6.277	0.000	90	20546	0.6775	
44 Chloroform	83	8.822	8.822	0.000	27	1480	0.0172	
50 Benzene	78	10.456	10.450	0.006	86	8878	0.0626	
52 Carbon tetrachloride	117	10.477	10.472	0.005	45	1001	0.0114	
67 Toluene	91	13.756	13.761	-0.005	91	84482	0.5327	
78 Ethylbenzene	91	16.069	16.069	0.000	98	51255	0.2515	
79 m-Xylene & p-Xylene	91	16.226	16.231	-0.005	98	128498	0.7968	
83 o-Xylene	91	16.754	16.760	-0.006	97	46370	0.2842	
90 1,3,5-Trimethylbenzene	120	18.102	18.102	-0.011	47	1942	0.0227	a
95 1,2,4-Trimethylbenzene	105	18.550	18.550	0.000	97	10153	0.0543	
S 124 Xylenes, Total	100				0		1.08	

QC Flag Legend

Review Flags
a - User Assigned ID

Reagents:

40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

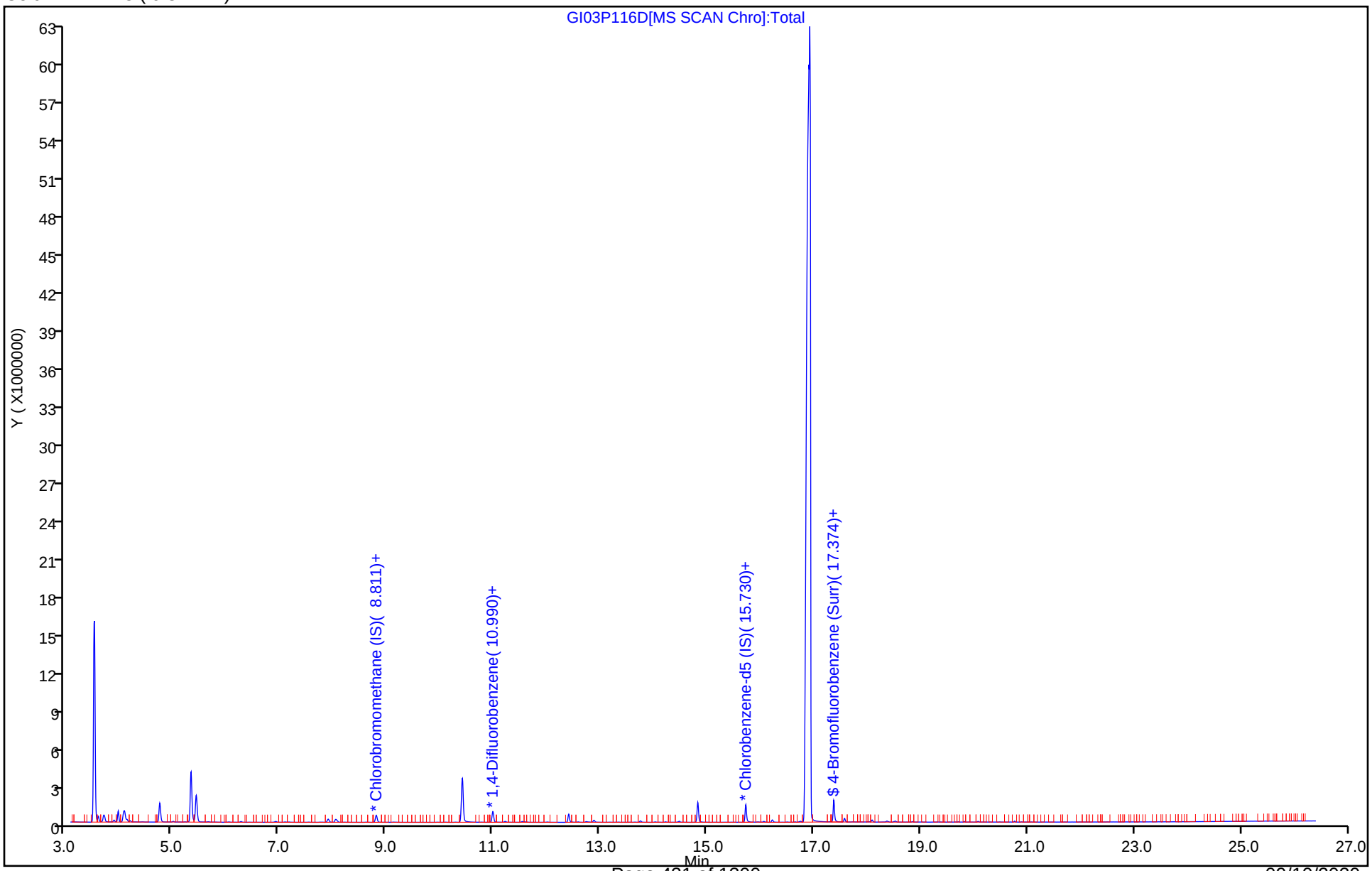
Report Date: 04-Sep-2020 14:26:44 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200902-16486.b\GI03P116D.D

Injection Date:	04-Sep-2020 02:51:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	140-20175-A-13	Lab Sample ID:	140-20175-13	Worklist Smp#:	27
Client ID:	SV-150-C-29				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

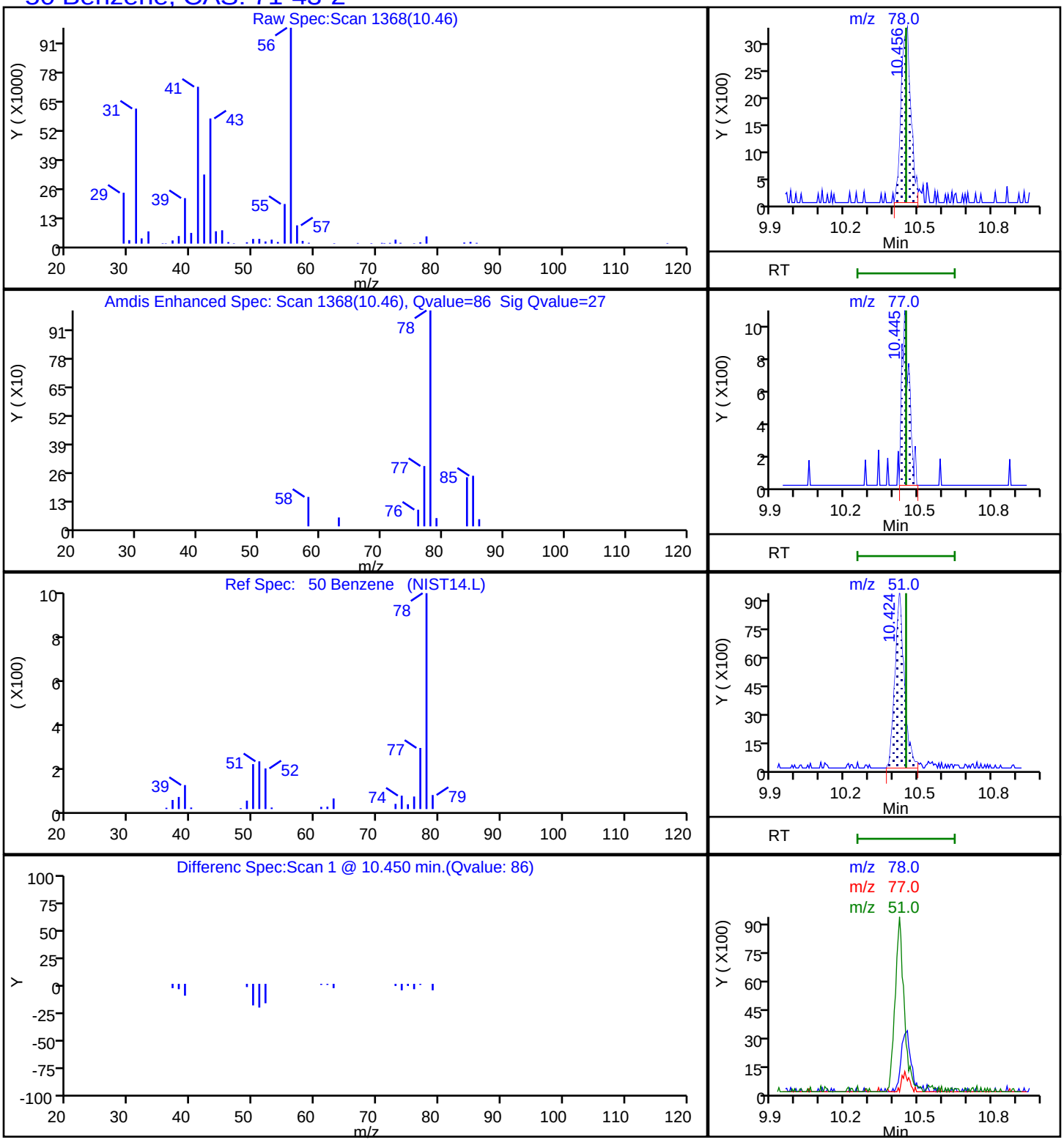
Data File:	\\chromfs\Knoxville\ChromData\MG\20200902-16486.b\GI03P116D.D				
Lims ID:	140-20175-A-13				
Client ID:	SV-150-C-29				
Sample Type:	Client				
Inject. Date:	04-Sep-2020 02:51:30	ALS Bottle#:	16	Worklist Smp#:	27
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016486-027				
Misc. Info.:	140-20175-a-13				
Operator ID:	HMT	Instrument ID:	MG		
Method:	\\chromfs\Knoxville\ChromData\MG\20200902-16486.b\MG_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	04-Sep-2020 14:26:44	Calib Date:	02-Sep-2020 03:27:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1061				
First Level Reviewer: khachitpongpanits		Date:	04-Sep-2020 14:26:44		

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	5.35	115.33

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200902-16486.b\GI03P116D.D		
Injection Date:	04-Sep-2020 02:51:30	Instrument ID:	MG
Lims ID:	140-20175-A-13	Lab Sample ID:	140-20175-13
Client ID:	SV-150-C-29		
Operator ID:	HMT	ALS Bottle#:	16 Worklist Smp#: 27
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

50 Benzene, CAS: 71-43-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200902-16486.b\GI03P116D.D				
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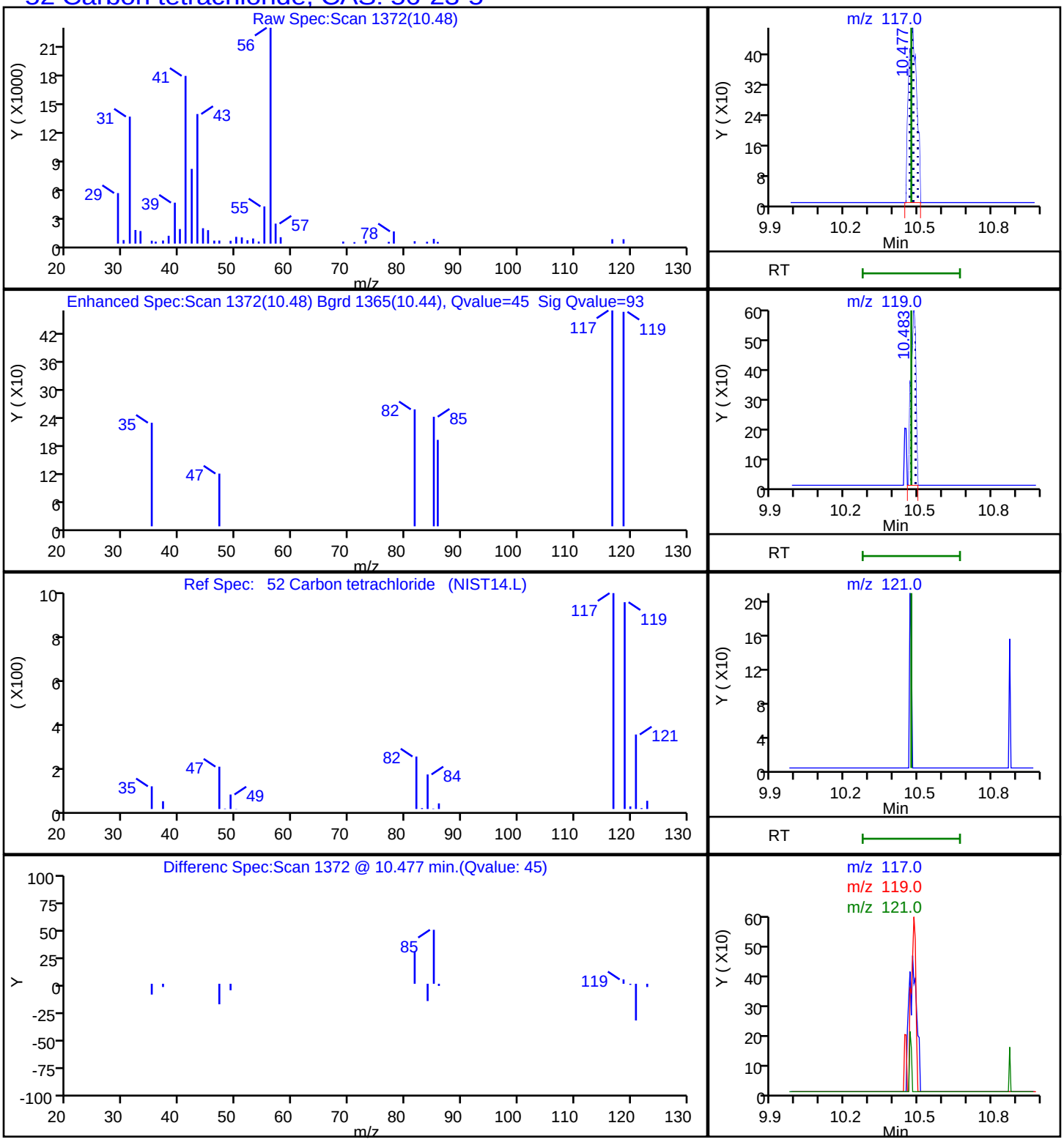
Lims ID:	140-20175-A-13	Lab Sample ID:	140-20175-13		
Client ID:	SV-150-C-29				
Operator ID:	HMT	ALS Bottle#:	16	Worklist Smp#:	27
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

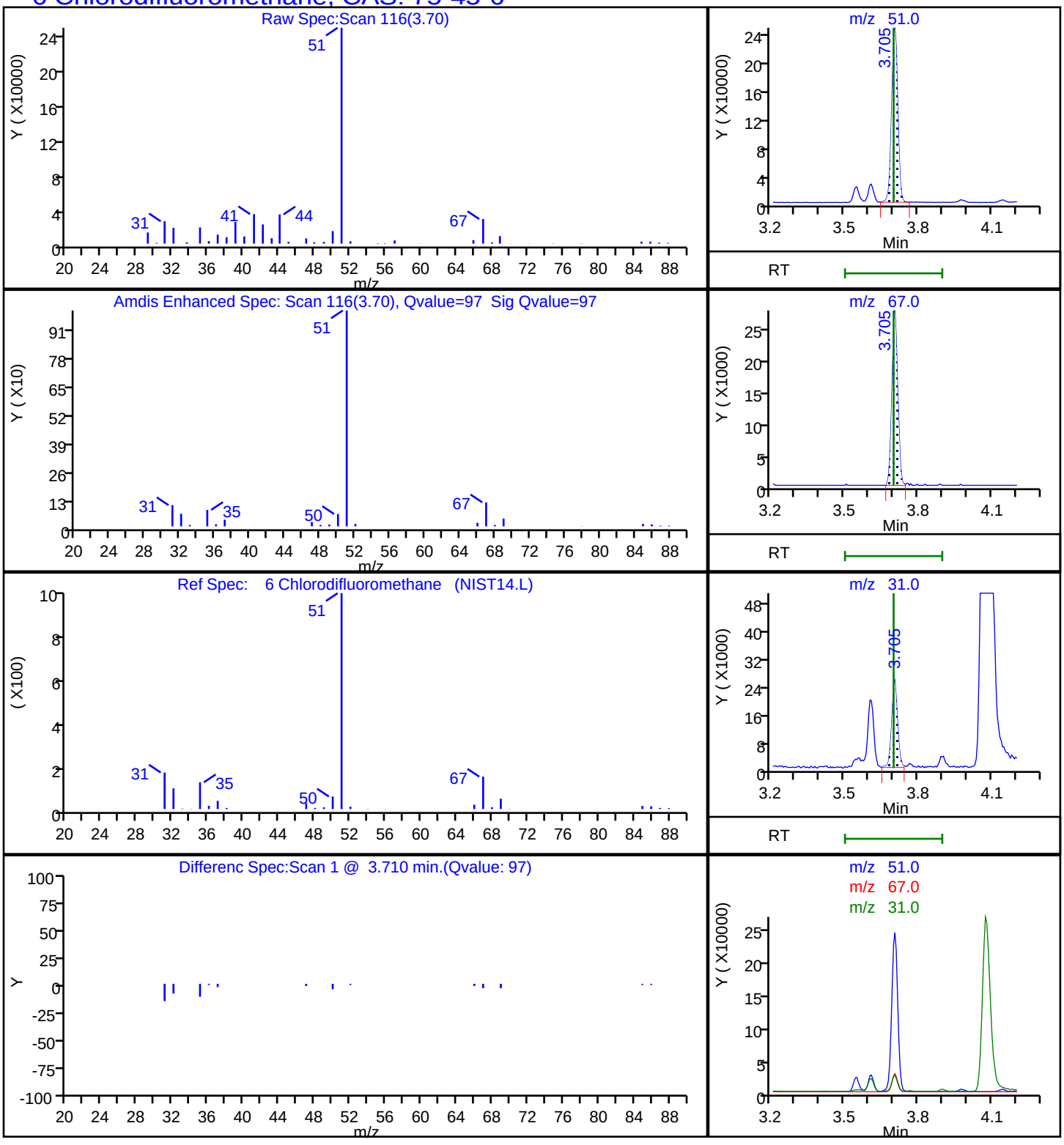
52 Carbon tetrachloride, CAS: 56-23-5



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200902-16486.b\GI03P116D.D				
Injection Date:	04-Sep-2020 02:51:30	Instrument ID:	MG		
Lims ID:	140-20175-A-13	Lab Sample ID:	140-20175-13		
Client ID:	SV-150-C-29				
Operator ID:	HMT	ALS Bottle#:	16	Worklist Smp#:	27
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

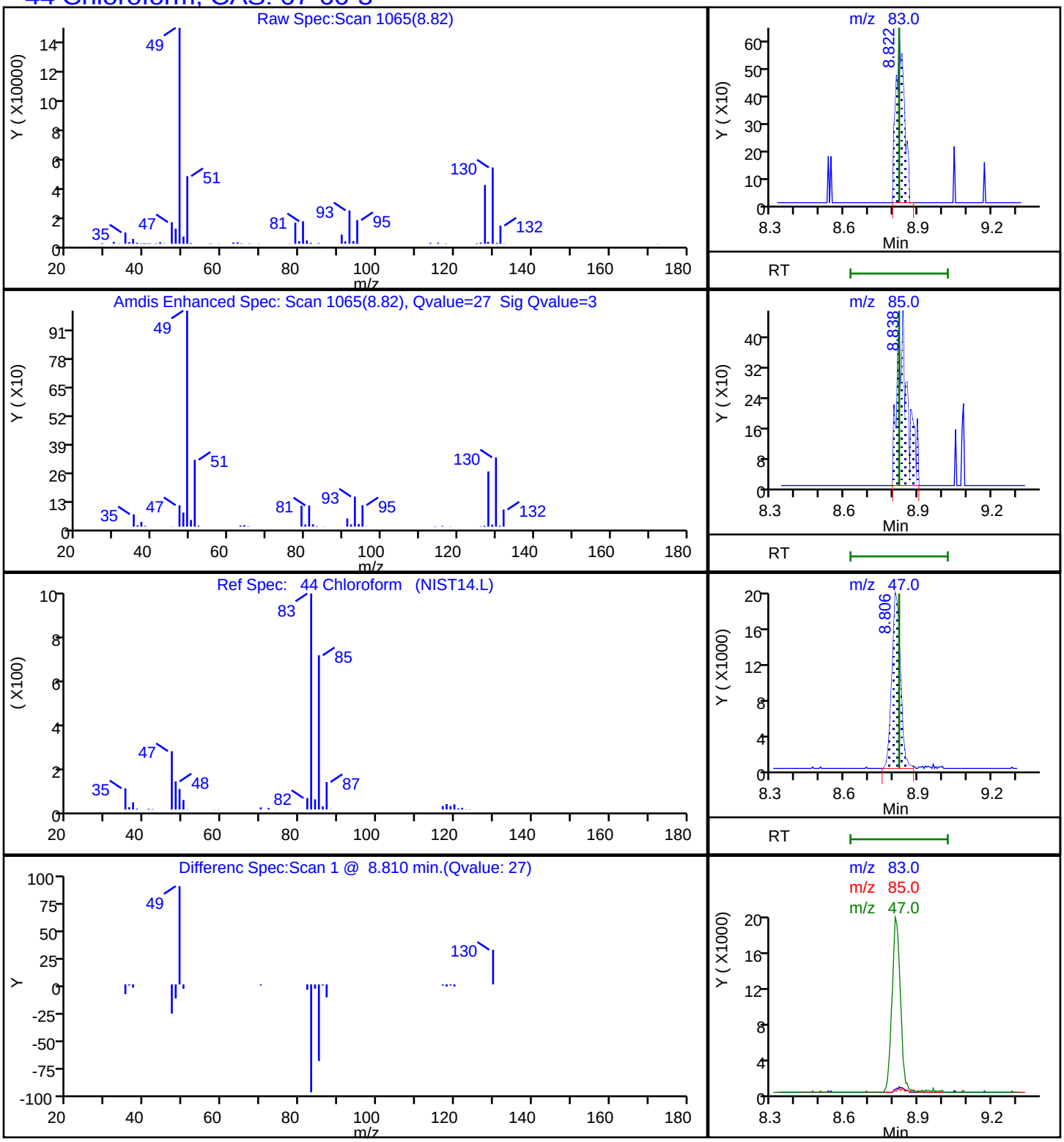
6 Chlorodifluoromethane, CAS: 75-45-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200902-16486.b\GI03P116D.D				
Injection Date:	04-Sep-2020 02:51:30	Instrument ID:	MG		
Lims ID:	140-20175-A-13	Lab Sample ID:	140-20175-13		
Client ID:	SV-150-C-29				
Operator ID:	HMT	ALS Bottle#:	16	Worklist Smp#:	27
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

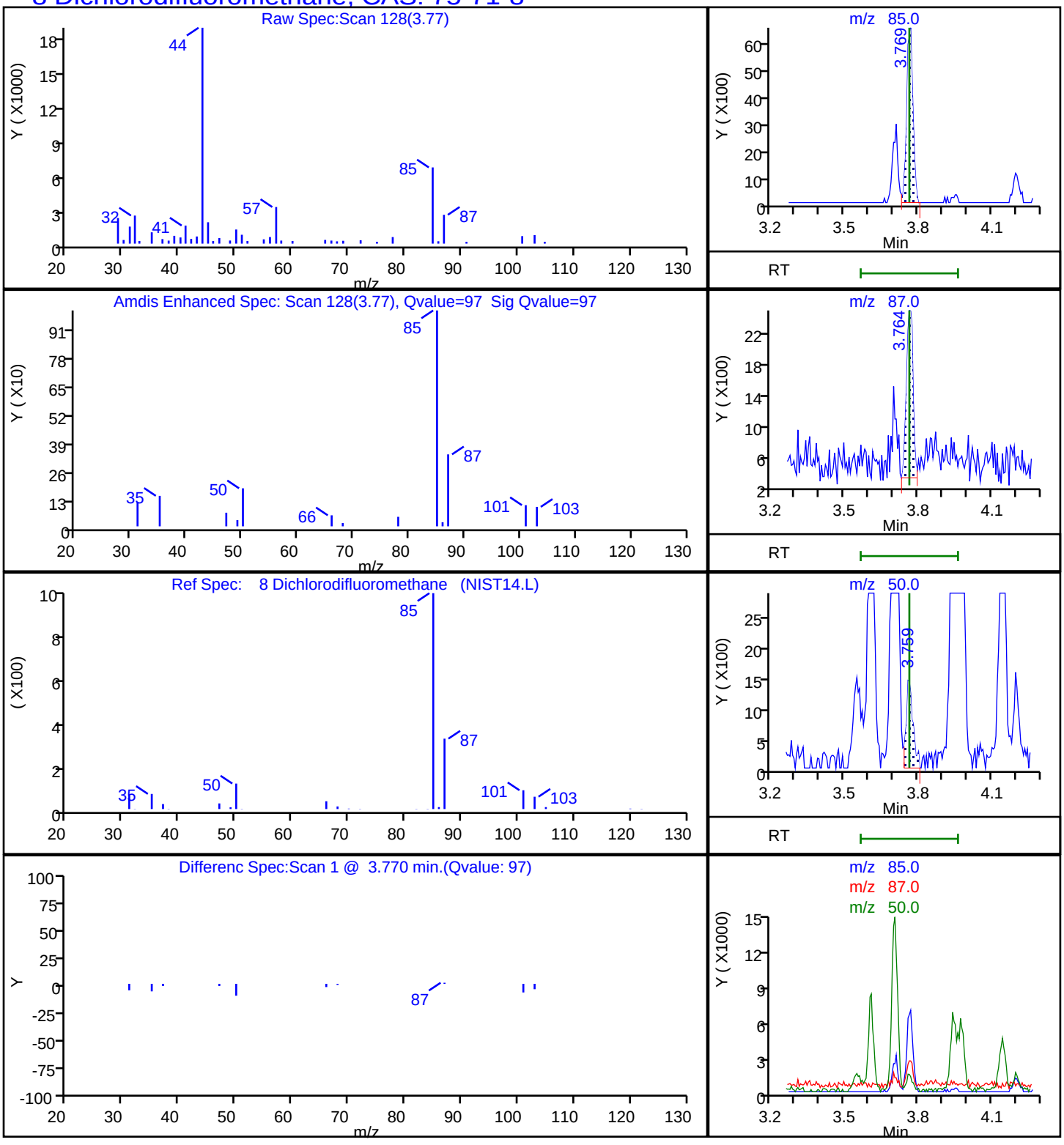
44 Chloroform, CAS: 67-66-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200902-16486.b\GI03P116D.D				
Injection Date:	04-Sep-2020 02:51:30	Instrument ID:	MG		
Lims ID:	140-20175-A-13	Lab Sample ID:	140-20175-13		
Client ID:	SV-150-C-29				
Operator ID:	HMT	ALS Bottle#:	16	Worklist Smp#:	27
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

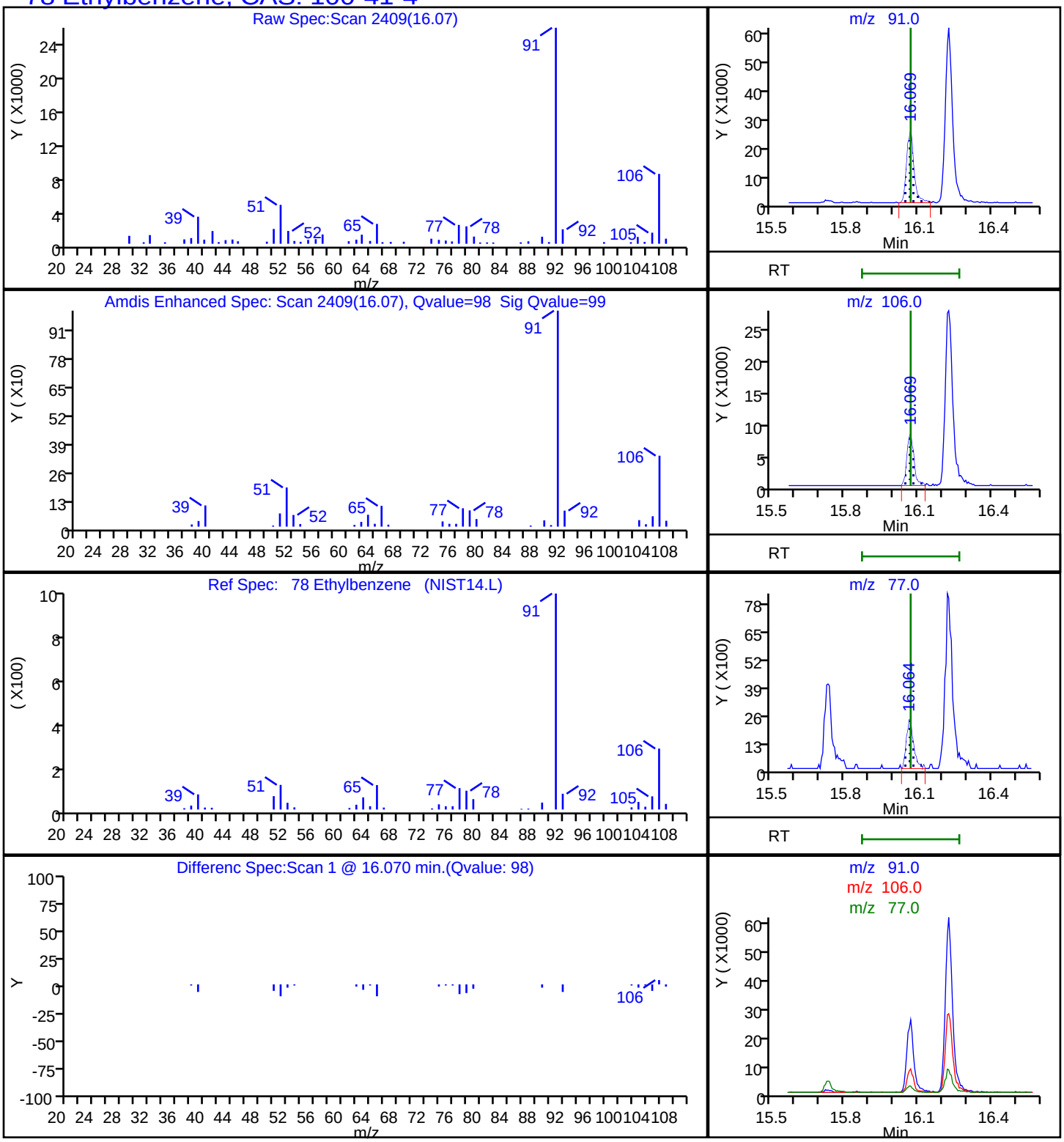
8 Dichlorodifluoromethane, CAS: 75-71-8



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200902-16486.b\GI03P116D.D				
Injection Date:	04-Sep-2020 02:51:30	Instrument ID:	MG		
Lims ID:	140-20175-A-13	Lab Sample ID:	140-20175-13		
Client ID:	SV-150-C-29				
Operator ID:	HMT	ALS Bottle#:	16	Worklist Smp#:	27
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

78 Ethylbenzene, CAS: 100-41-4



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Data File:	\\chromfs\Knoxville\ChromData\MG\20200902-16486.b\GI03P116D.D				
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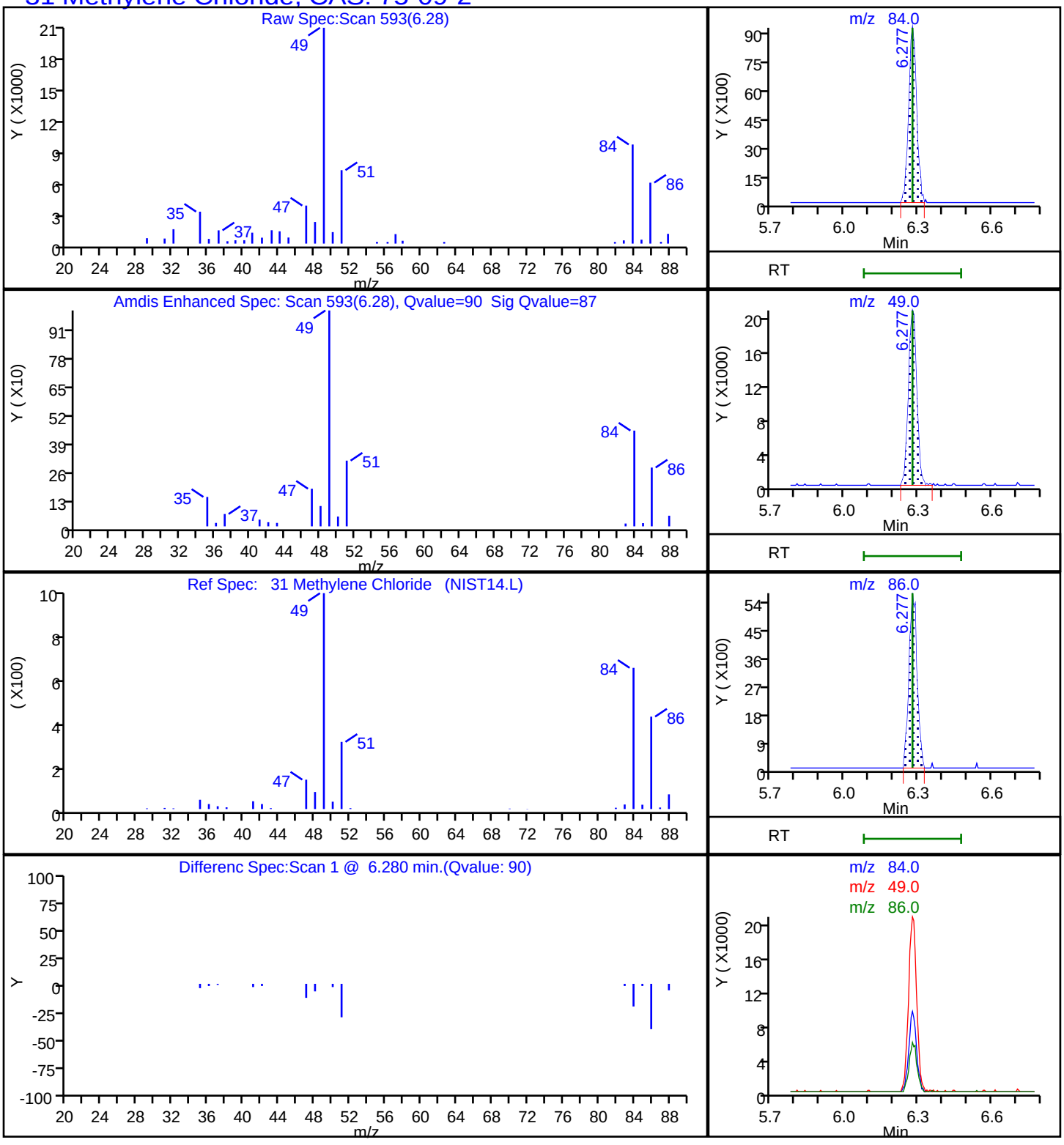
Lims ID:	140-20175-A-13	Lab Sample ID:	140-20175-13		
Client ID:	SV-150-C-29				
Operator ID:	HMT	ALS Bottle#:	16	Worklist Smp#:	27
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

31 Methylene Chloride, CAS: 75-09-2



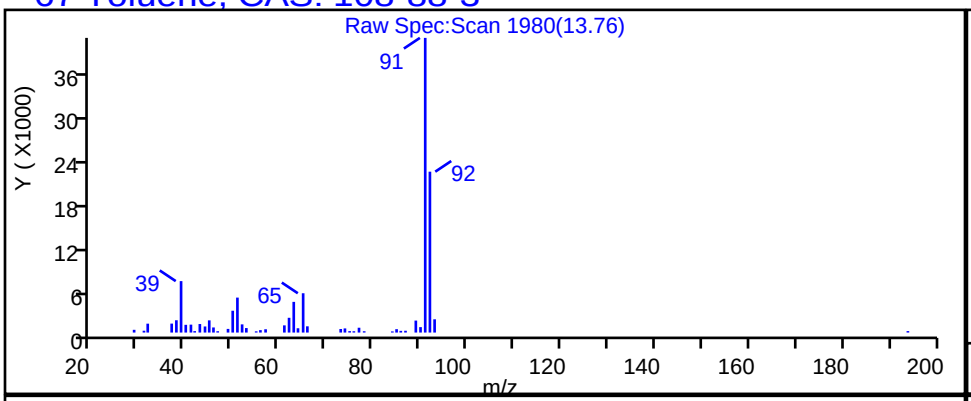
Report Date: 04-Sep-2020 14:26:45 Chrom Revision: 2.3 20-Aug-2020 13:57:12

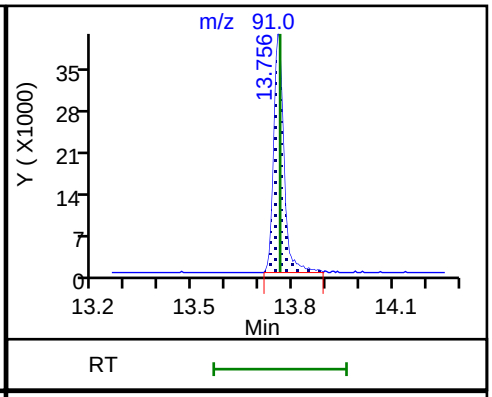
Eurofins TestAmerica, Knoxville

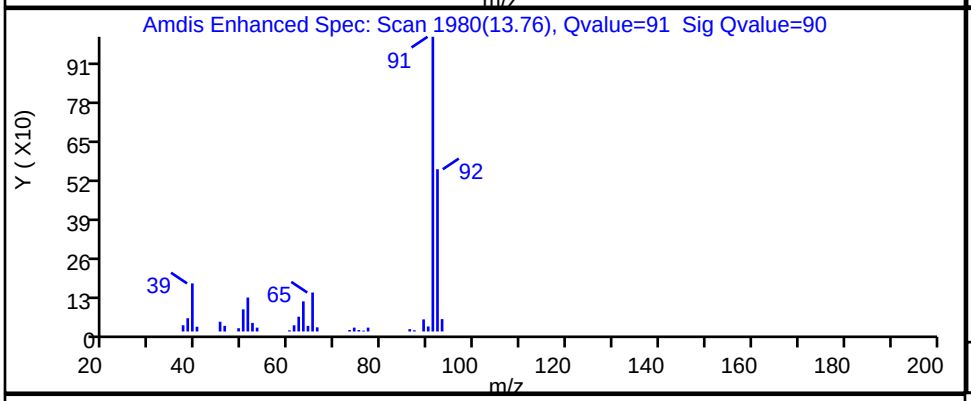
Data File: \\chromfs\Knoxville\ChromData\MG\20200902-16486.b\GI03P116D.D

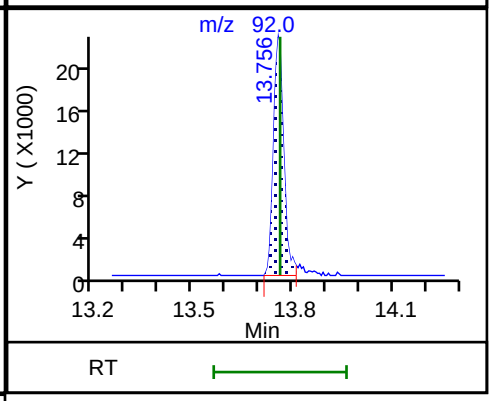
Injection Date:	04-Sep-2020 02:51:30	Instrument ID:	MG		
Lims ID:	140-20175-A-13	Lab Sample ID:	140-20175-13		
Client ID:	SV-150-C-29				
Operator ID:	HMT	ALS Bottle#:	16	Worklist Smp#:	27
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

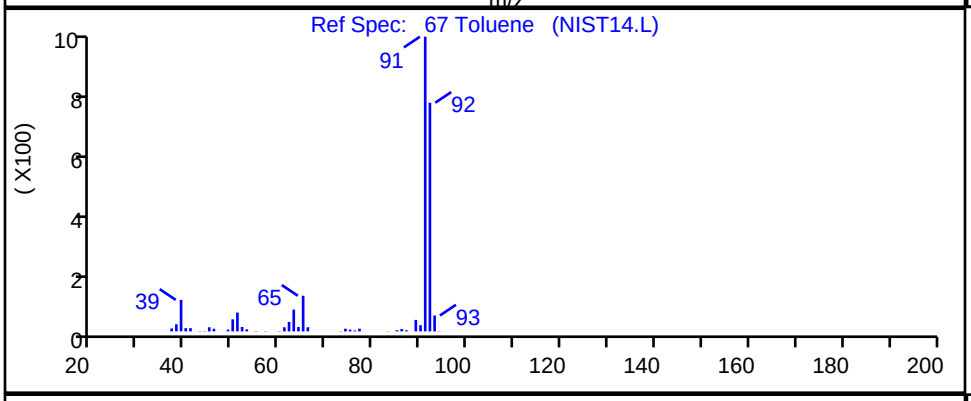
67 Toluene, CAS: 108-88-3

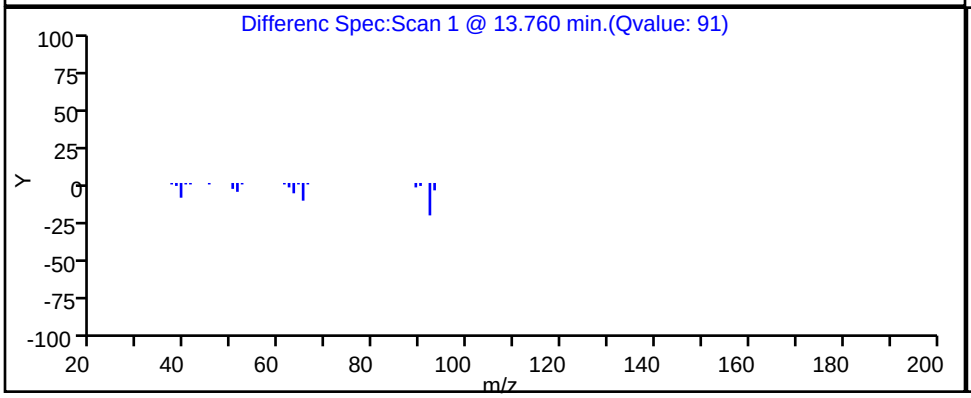


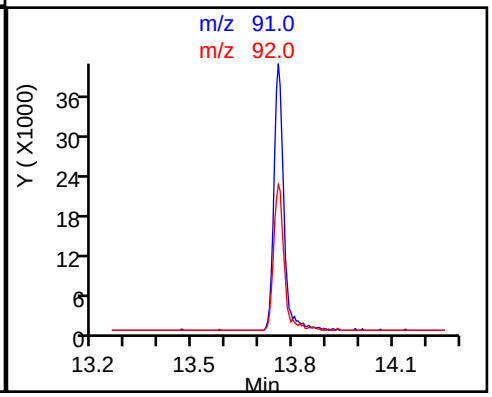










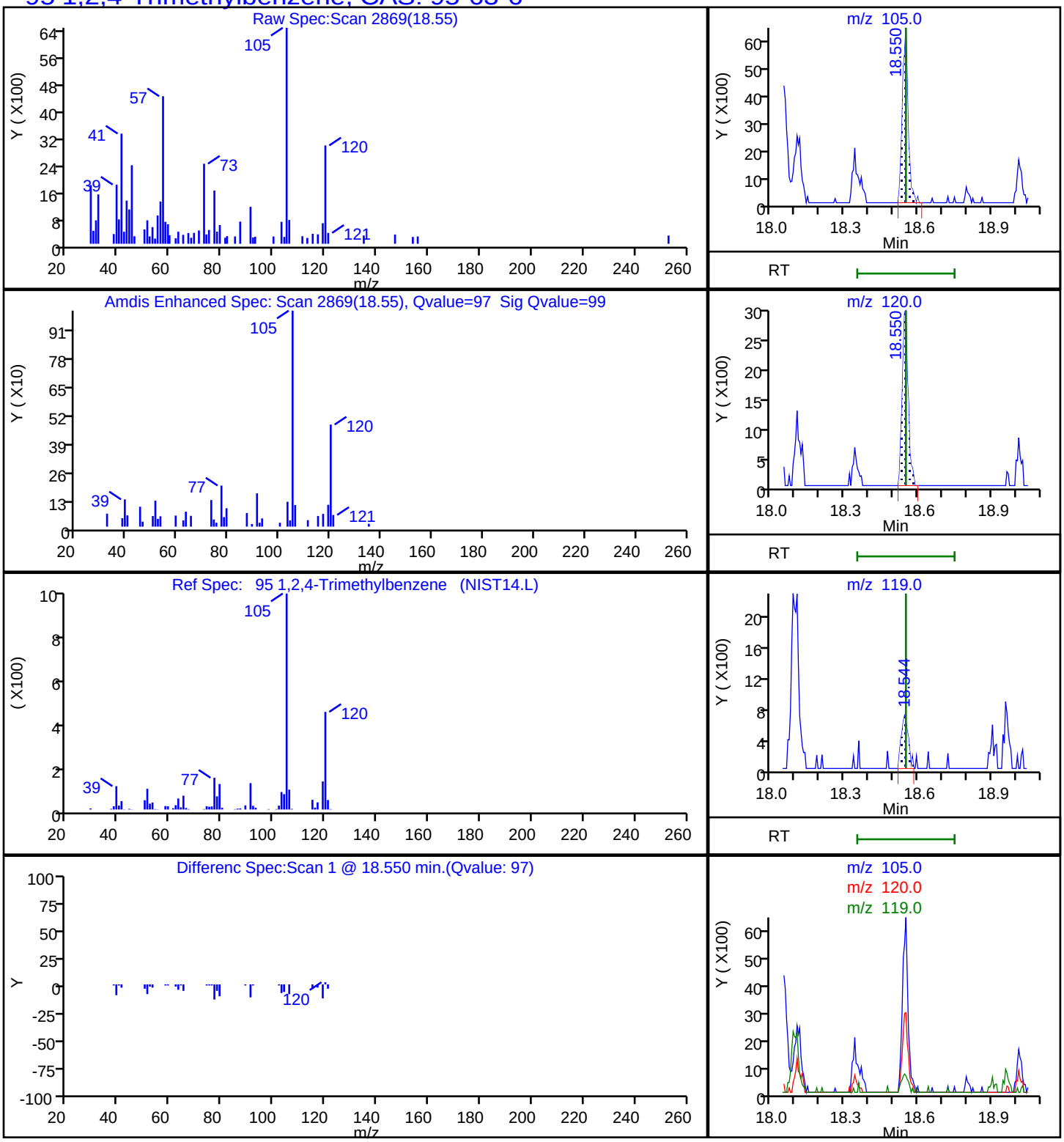


Report Date: 04-Sep-2020 14:26:45 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200902-16486.b\GI03P116D.D				
Injection Date:	04-Sep-2020 02:51:30	Instrument ID:	MG		
Lims ID:	140-20175-A-13	Lab Sample ID:	140-20175-13		
Client ID:	SV-150-C-29				
Operator ID:	HMT	ALS Bottle#:	16	Worklist Smp#:	27
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

95 1,2,4-Trimethylbenzene, CAS: 95-63-6

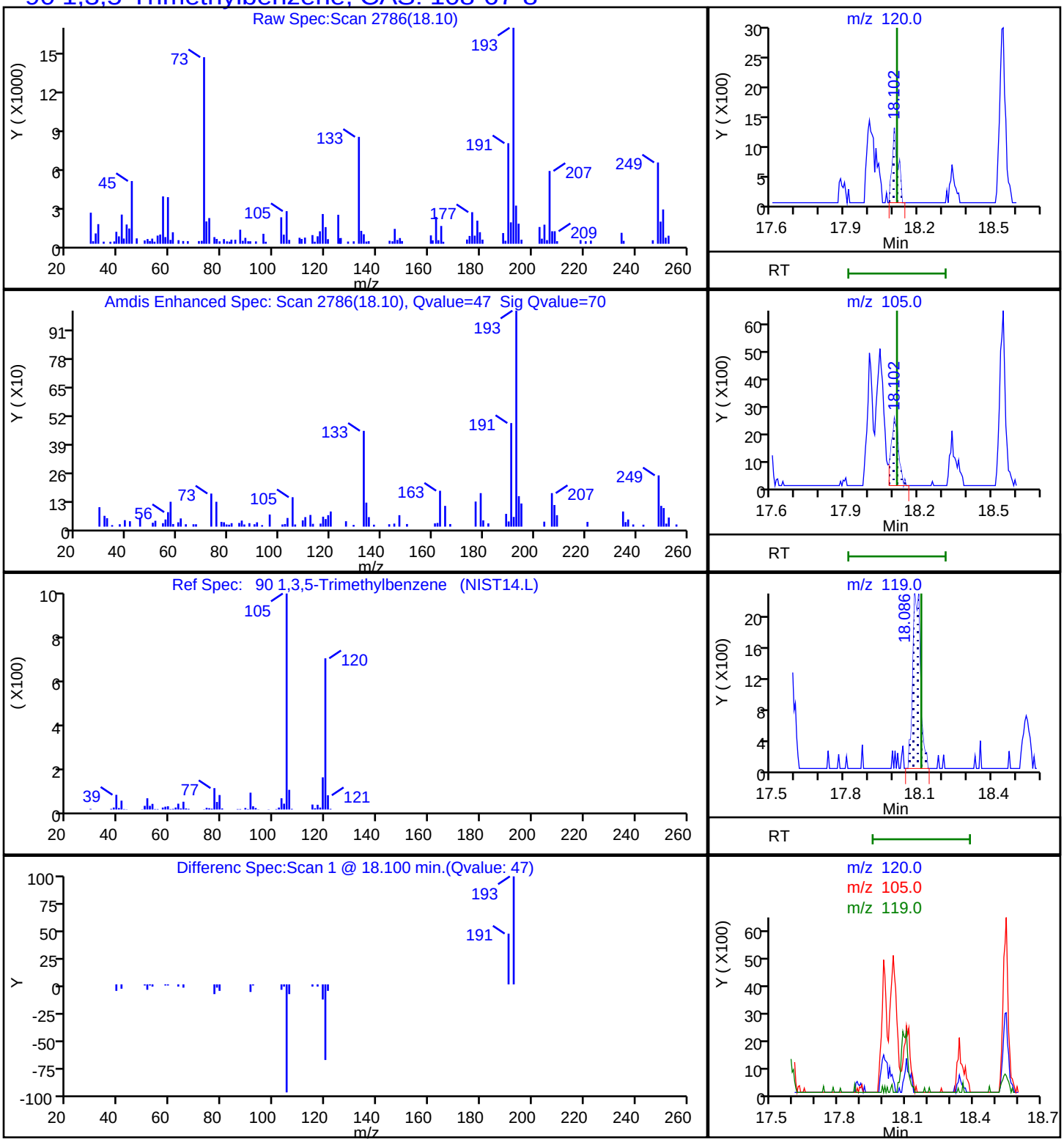


Report Date: 04-Sep-2020 14:26:45 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200902-16486.b\GI03P116D.D				
Injection Date:	04-Sep-2020 02:51:30	Instrument ID:	MG		
Lims ID:	140-20175-A-13	Lab Sample ID:	140-20175-13		
Client ID:	SV-150-C-29				
Operator ID:	HMT	ALS Bottle#:	16	Worklist Smp#:	27
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

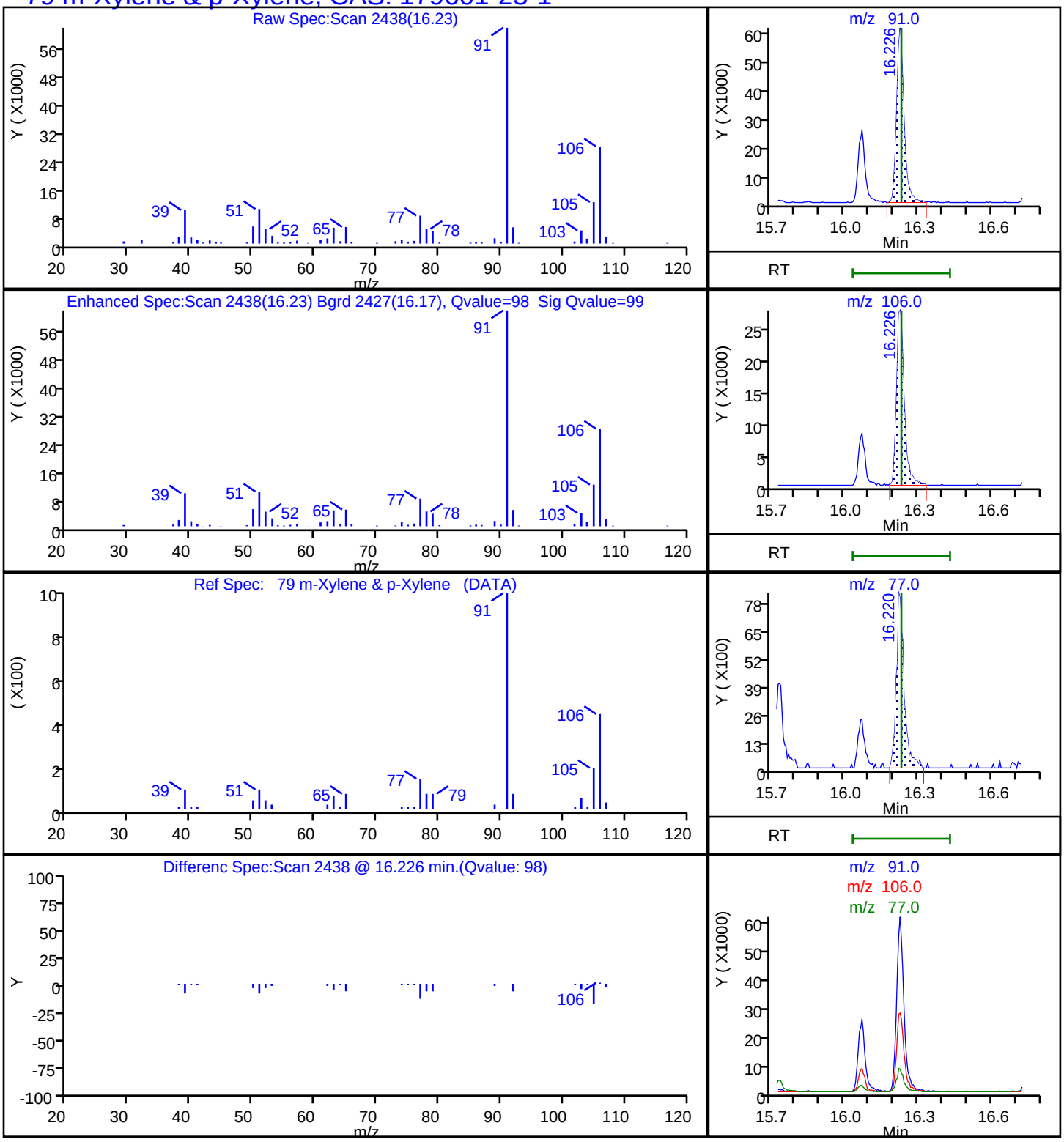
90 1,3,5-Trimethylbenzene, CAS: 108-67-8



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200902-16486.b\GI03P116D.D				
Injection Date:	04-Sep-2020 02:51:30	Instrument ID:	MG		
Lims ID:	140-20175-A-13	Lab Sample ID:	140-20175-13		
Client ID:	SV-150-C-29				
Operator ID:	HMT	ALS Bottle#:	16	Worklist Smp#:	27
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

79 m-Xylene & p-Xylene, CAS: 179601-23-1



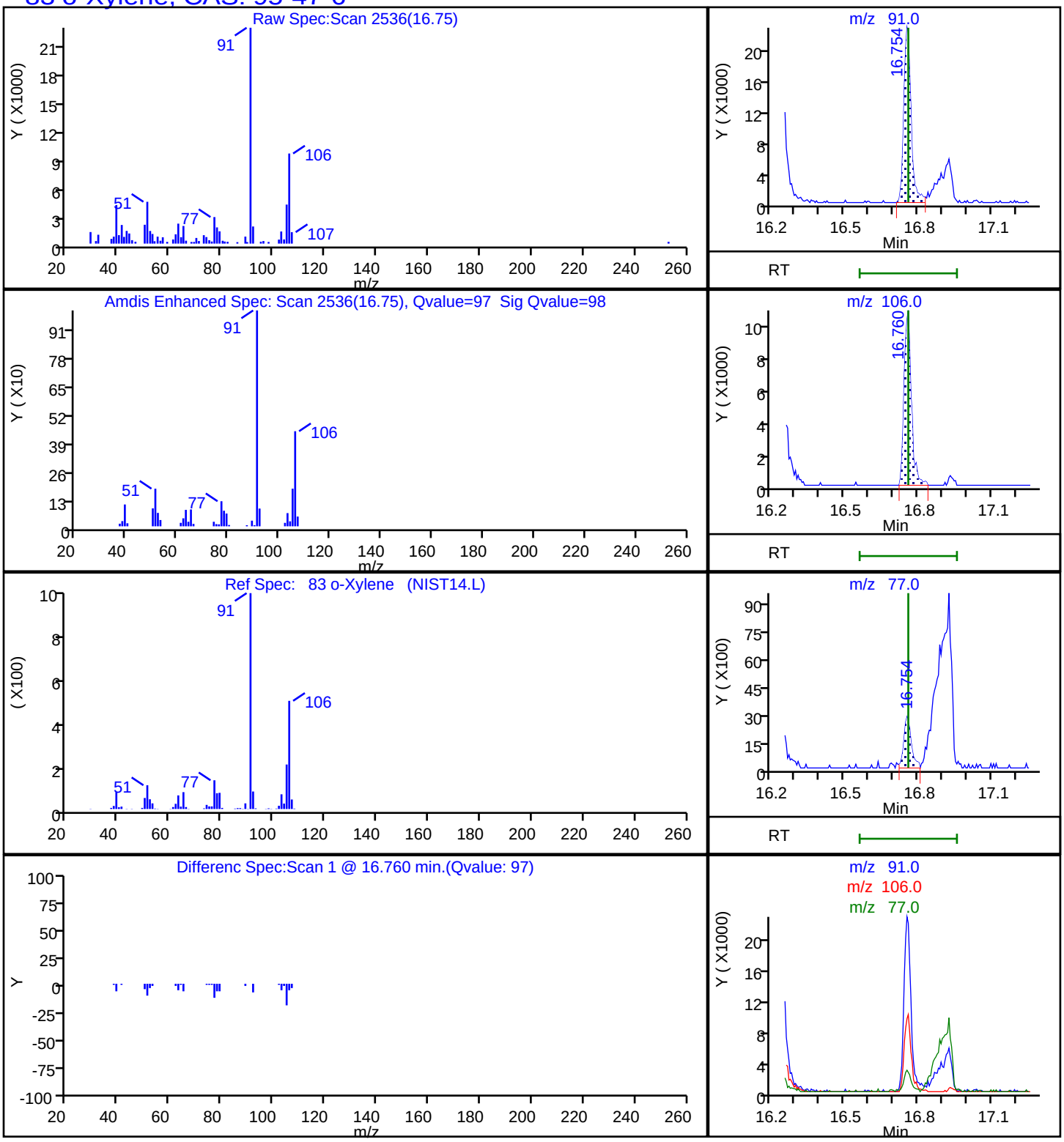
Report Date: 04-Sep-2020 14:26:45 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200902-16486.b\GI03P116D.D

Injection Date:	04-Sep-2020 02:51:30	Instrument ID:	MG
Lims ID:	140-20175-A-13	Lab Sample ID:	140-20175-13
Client ID:	SV-150-C-29		
Operator ID:	HMT	ALS Bottle#:	16 Worklist Smp#: 27
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

83 o-Xylene, CAS: 95-47-6



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Knoxville

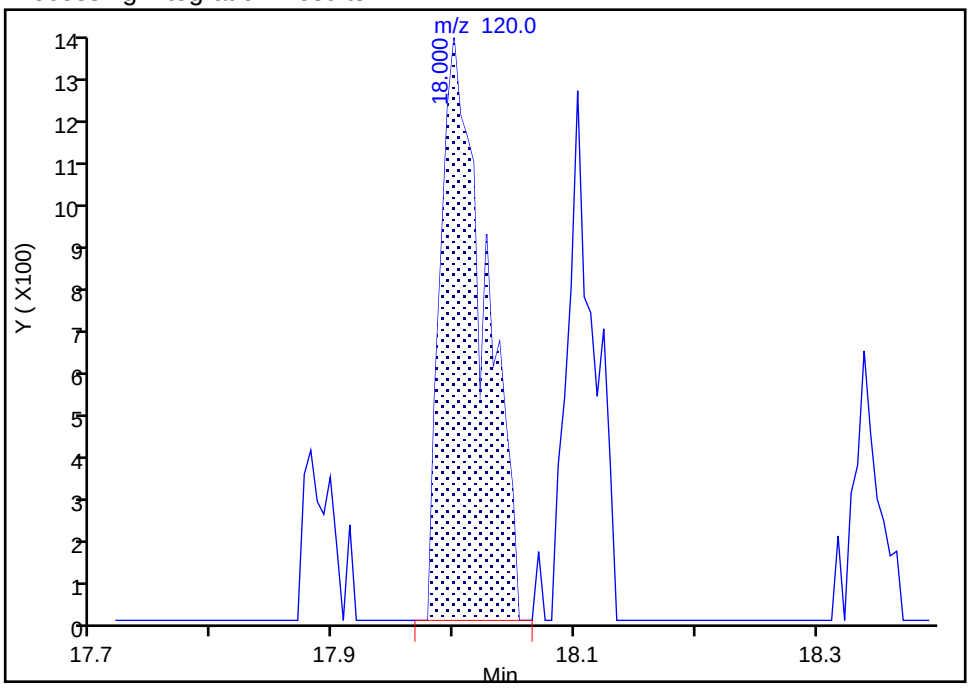
Data File:	\\chromfs\Knoxville\ChromData\MG\20200902-16486.b\GI03P116D.D				
Injection Date:	04-Sep-2020 02:51:30	Instrument ID:	MG		
Lims ID:	140-20175-A-13	Lab Sample ID:	140-20175-13		
Client ID:	SV-150-C-29				
Operator ID:	HMT	ALS Bottle#:	16	Worklist Smp#:	27
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

90 1,3,5-Trimethylbenzene, CAS: 108-67-8

Signal: 1

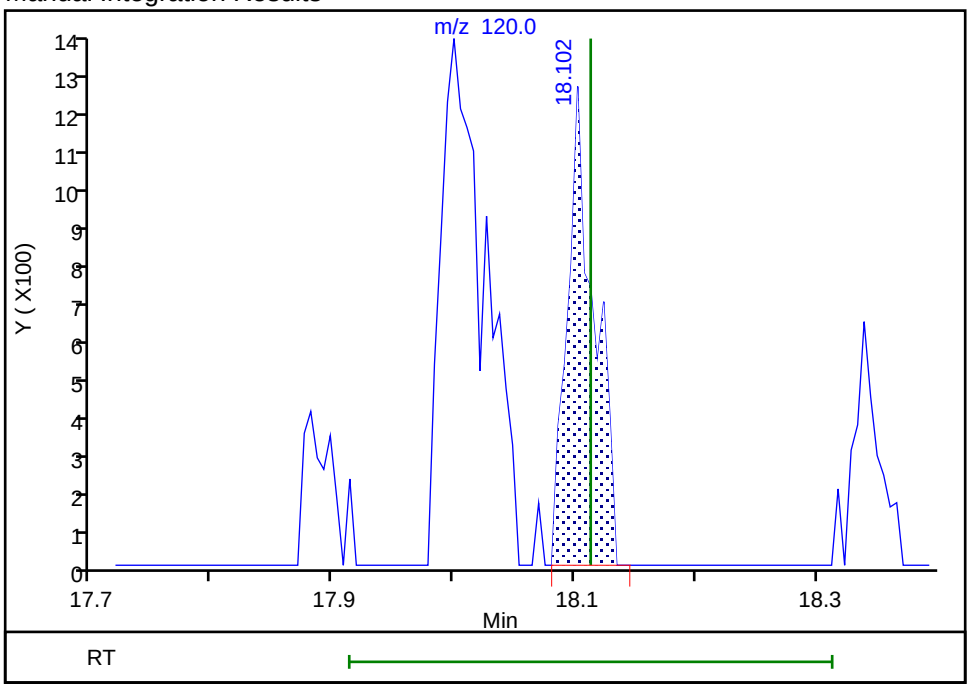
Processing Integration Results

RT: 18.00
Area: 3499
Amount: 0.040894
Amount Units: ppb v/v



Manual Integration Results

RT: 18.10
Area: 1942
Amount: 0.022697
Amount Units: ppb v/v



Reviewer: khachitpongpanits, 04-Sep-2020 14:26:32

Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: SV-152-C-29 Lab Sample ID: 140-20175-14

Matrix: Air Lab File ID: GI03P112.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 10:47

Sample wt/vol: 50(mL) Date Analyzed: 09/03/2020 23:05

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42409 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.21	J	0.80	0.080
56-23-5	Carbon tetrachloride	153.81	ND		0.80	0.070
75-45-6	Chlorodifluoromethane	86.47	9.6		0.80	0.22
67-66-3	Chloroform	119.38	0.37	J	0.80	0.070
156-59-2	cis-1,2-Dichloroethene	96.94	2.3		0.80	0.10
75-71-8	Dichlorodifluoromethane	120.91	0.38	J	0.80	0.14
75-34-3	1,1-Dichloroethane	98.96	ND		0.80	0.070
107-06-2	1,2-Dichloroethane	98.96	ND		0.80	0.10
75-35-4	1,1-Dichloroethene	96.94	ND		0.80	0.080
100-41-4	Ethylbenzene	106.17	ND		0.80	0.13
75-09-2	Methylene Chloride	84.93	4.3		4.0	3.9
1634-04-4	Methyl tert-butyl ether	88.15	ND		4.0	0.52
91-20-3	Naphthalene	128.17	ND		0.40	0.40
127-18-4	Tetrachloroethene	165.83	ND		0.80	0.070
108-88-3	Toluene	92.14	1.7		1.2	0.78
156-60-5	trans-1,2-Dichloroethene	96.94	0.088	J	0.80	0.070
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.80	0.64
71-55-6	1,1,1-Trichloroethane	133.41	0.50	J	0.80	0.37
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.80	0.070
79-01-6	Trichloroethene	131.39	33		0.40	0.060
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.80	0.36
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.80	0.20
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.80	0.22
75-01-4	Vinyl chloride	62.50	ND		0.40	0.26
1330-20-7	Xylenes, Total	106.17	ND		1.6	0.24

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	100		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: SV-152-C-29 Lab Sample ID: 140-20175-14

Matrix: Air Lab File ID: GI03P112.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 10:47

Sample wt/vol: 50(mL) Date Analyzed: 09/03/2020 23:05

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42409 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.67	J	2.6	0.26
56-23-5	Carbon tetrachloride	153.81	ND		5.0	0.44
75-45-6	Chlorodifluoromethane	86.47	34		2.8	0.78
67-66-3	Chloroform	119.38	1.8	J	3.9	0.34
156-59-2	cis-1,2-Dichloroethene	96.94	9.1		3.2	0.40
75-71-8	Dichlorodifluoromethane	120.91	1.9	J	4.0	0.69
75-34-3	1,1-Dichloroethane	98.96	ND		3.2	0.28
107-06-2	1,2-Dichloroethane	98.96	ND		3.2	0.40
75-35-4	1,1-Dichloroethene	96.94	ND		3.2	0.32
100-41-4	Ethylbenzene	106.17	ND		3.5	0.56
75-09-2	Methylene Chloride	84.93	15		14	14
1634-04-4	Methyl tert-butyl ether	88.15	ND		14	1.9
91-20-3	Naphthalene	128.17	ND		2.1	2.1
127-18-4	Tetrachloroethene	165.83	ND		5.4	0.47
108-88-3	Toluene	92.14	6.2		4.5	2.9
156-60-5	trans-1,2-Dichloroethene	96.94	0.35	J	3.2	0.28
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		5.9	4.7
71-55-6	1,1,1-Trichloroethane	133.41	2.7	J	4.4	2.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		4.4	0.38
79-01-6	Trichloroethene	131.39	180		2.1	0.32
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		3.9	1.8
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		3.9	0.98
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		3.9	1.1
75-01-4	Vinyl chloride	62.50	ND		1.0	0.66
1330-20-7	Xylenes, Total	106.17	ND		6.9	1.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	100		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MG\20200902-16486.b\GI03P112.D				
Lims ID:	140-20175-A-14				
Client ID:	SV-152-C-29				
Sample Type:	Client				
Inject. Date:	03-Sep-2020 23:05:30	ALS Bottle#:	12	Worklist Smp#:	22
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016486-022				
Misc. Info.:	140-20175-a-14				
Operator ID:	HMT	Instrument ID:	MG		
Method:	\\chromfs\Knoxville\ChromData\MG\20200902-16486.b\MG_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	03-Sep-2020 21:39:30	Calib Date:	02-Sep-2020 03:27:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1061				
First Level Reviewer: khachitpongpanits		Date:	04-Sep-2020 11:00:35		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.806	8.811	-0.005	85	100553	4.80	
* 2 1,4-Difluorobenzene	114	10.995	10.995	0.000	98	552080	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.730	15.730	0.000	96	529665	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.369	17.374	-0.005	92	385969	4.64	
6 Chlorodifluoromethane	51	3.699	3.697	0.000	97	86672	0.9619	
8 Dichlorodifluoromethane	85	3.769	3.762	0.005	95	3854	0.0383	
31 Methylene Chloride	84	6.282	6.273	0.005	87	10576	0.4265	
34 trans-1,2-Dichloroethene	96	7.091	7.076	0.011	42	258	0.008841	
42 cis-1,2-Dichloroethene	96	8.482	8.472	0.005	95	7130	0.2299	
44 Chloroform	83	8.822	8.817	0.000	27	2609	0.0370	
47 1,1,1-Trichloroethane	97	9.847	9.846	-0.005	91	3418	0.0504	
50 Benzene	78	10.451	10.450	0.000	45	2373	0.0209	
58 Trichloroethene	130	11.707	11.707	0.000	87	163896	3.31	
67 Toluene	91	13.761	13.761	0.000	92	19286	0.1651	

Reagents:

40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

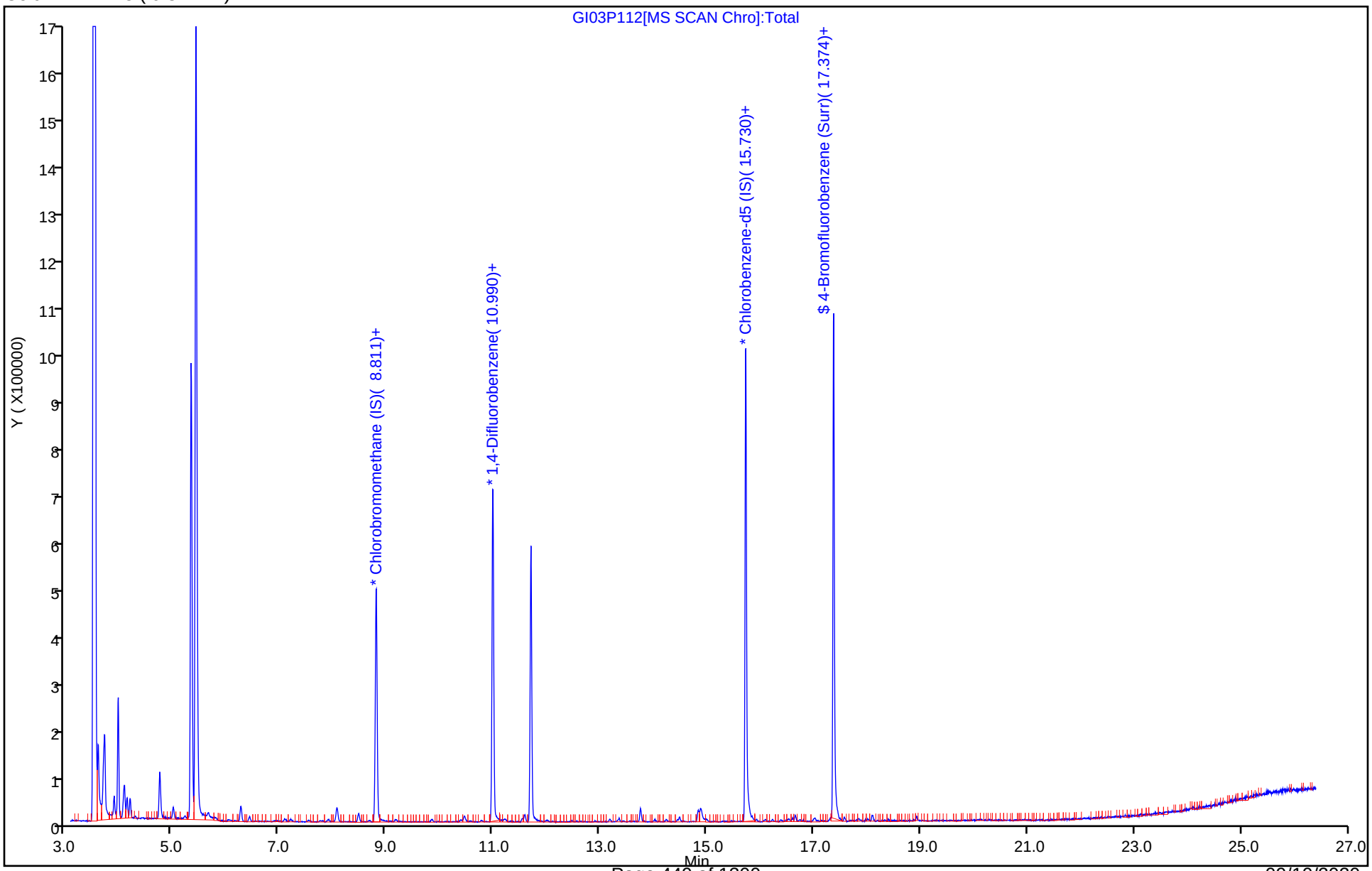
Report Date: 04-Sep-2020 11:00:35 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200902-16486.b\GI03P112.D

Injection Date:	03-Sep-2020 23:05:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	140-20175-A-14	Lab Sample ID:	140-20175-14	Worklist Smp#:	22
Client ID:	SV-152-C-29				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MG\20200902-16486.b\GI03P112.D				
Lims ID:	140-20175-A-14				
Client ID:	SV-152-C-29				
Sample Type:	Client				
Inject. Date:	03-Sep-2020 23:05:30	ALS Bottle#:	12	Worklist Smp#:	22
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016486-022				
Misc. Info.:	140-20175-a-14				
Operator ID:	HMT	Instrument ID:	MG		
Method:	\\chromfs\Knoxville\ChromData\MG\20200902-16486.b\MG_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	03-Sep-2020 21:39:30	Calib Date:	02-Sep-2020 03:27:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1061				
First Level Reviewer: khachitpongpanits		Date:	04-Sep-2020 11:00:35		

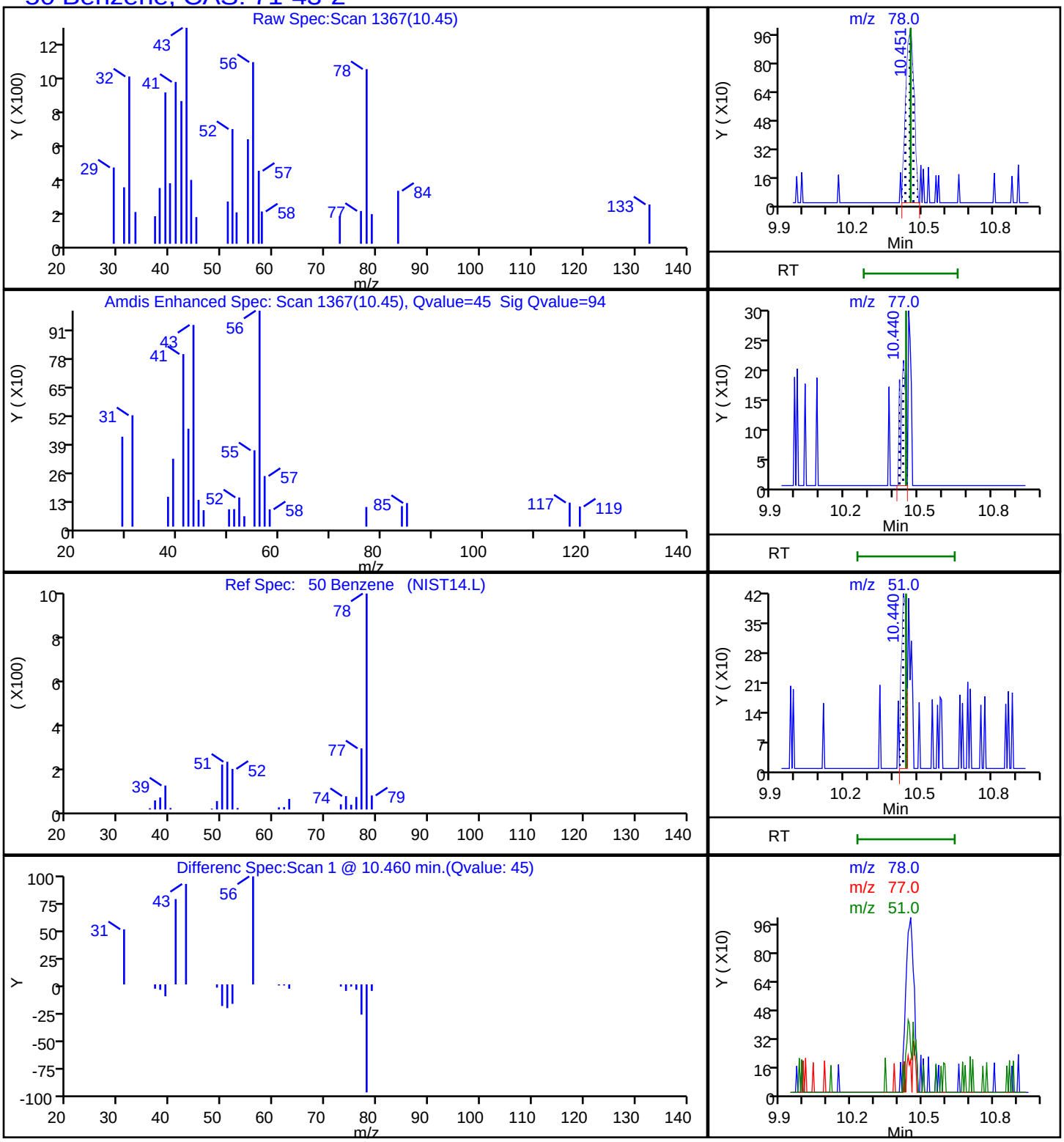
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	4.64	100.08

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200902-16486.b\GI03P112.D

Injection Date:	03-Sep-2020 23:05:30	Instrument ID:	MG
Lims ID:	140-20175-A-14	Lab Sample ID:	140-20175-14
Client ID:	SV-152-C-29		
Operator ID:	HMT	ALS Bottle#:	12 Worklist Smp#: 22
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

50 Benzene, CAS: 71-43-2



Report Date: 04-Sep-2020 11:00:35 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

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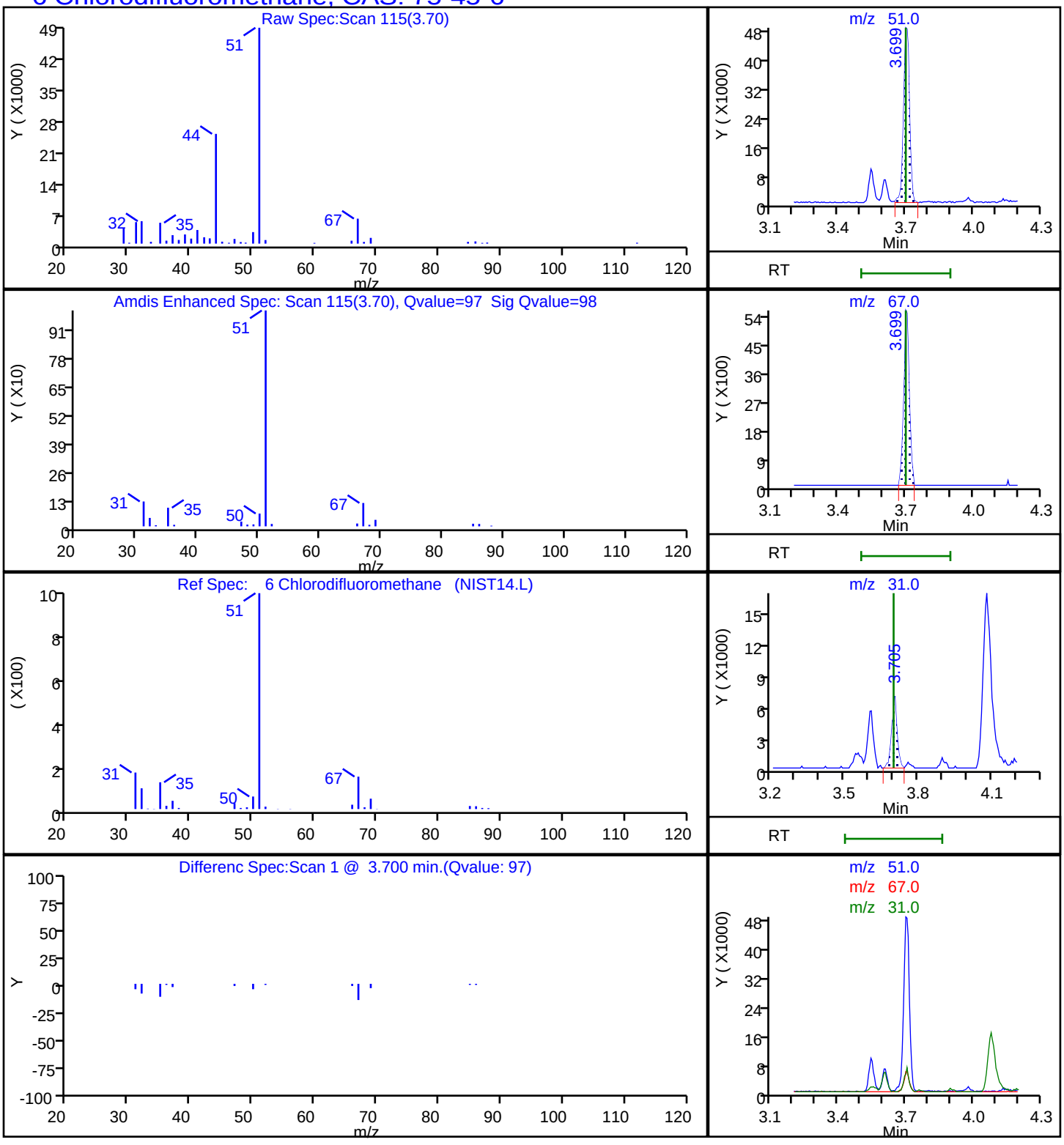
Lims ID:	140-20175-A-14	Lab Sample ID:	140-20175-14		
Client ID:	SV-152-C-29				
Operator ID:	HMT	ALS Bottle#:	12	Worklist Smp#:	22
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

6 Chlorodifluoromethane, CAS: 75-45-6



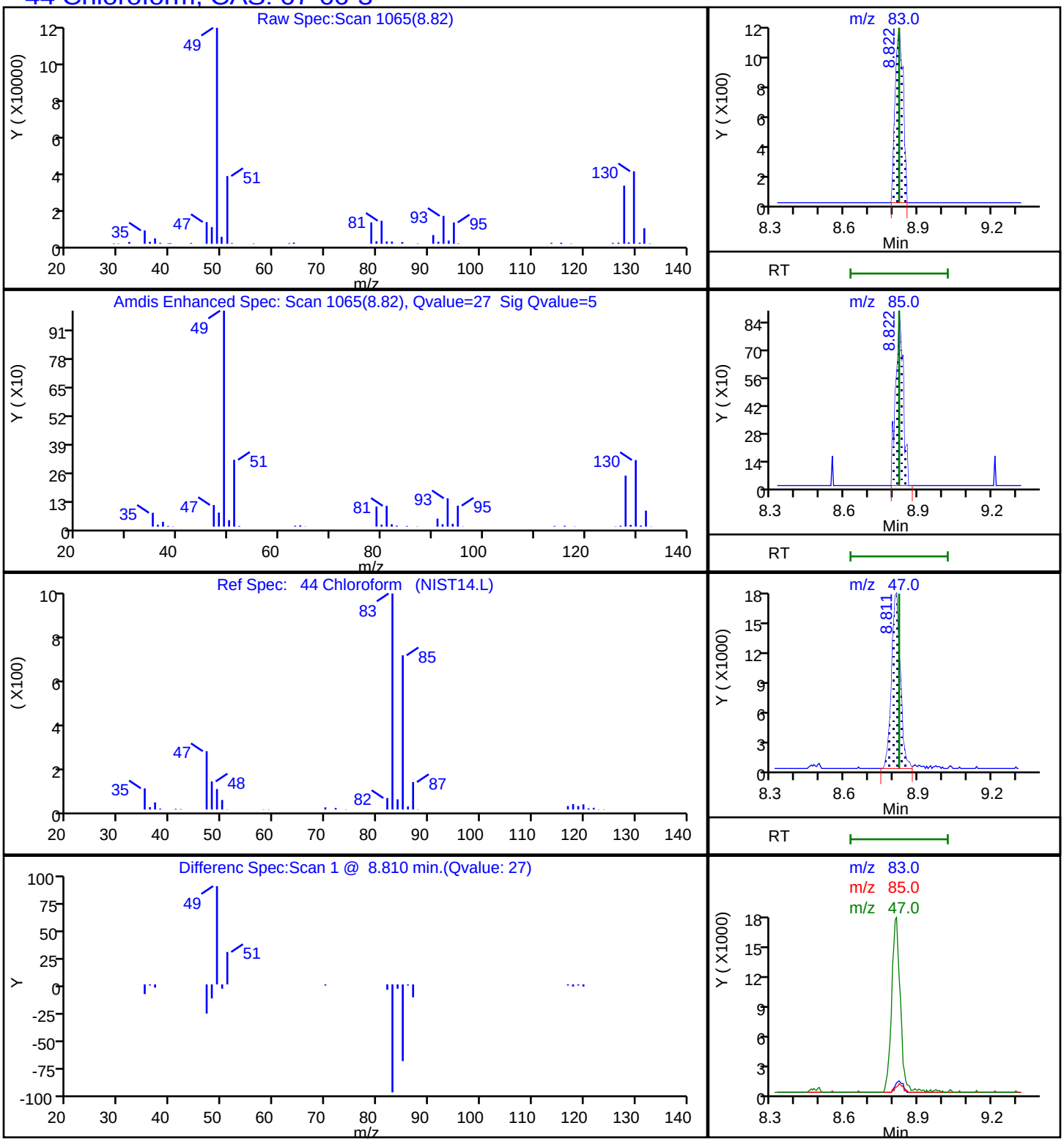
Report Date: 04-Sep-2020 11:00:35 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200902-16486.b\GI03P112.D

Injection Date:	03-Sep-2020 23:05:30	Instrument ID:	MG		
Lims ID:	140-20175-A-14	Lab Sample ID:	140-20175-14		
Client ID:	SV-152-C-29				
Operator ID:	HMT	ALS Bottle#:	12	Worklist Smp#:	22
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

44 Chloroform, CAS: 67-66-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200902-16486.b\GI03P112.D		
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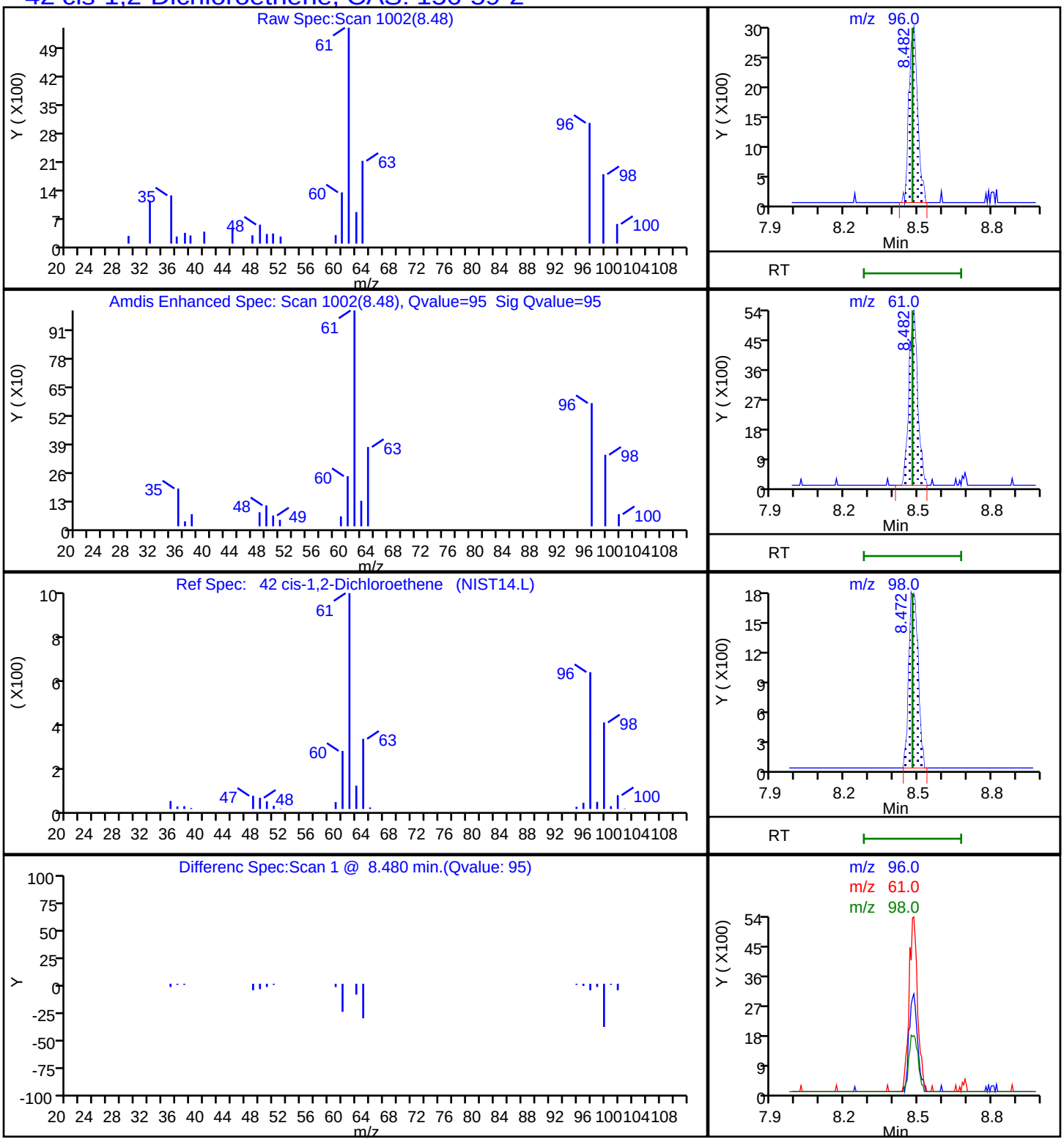
Lims ID:	140-20175-A-14	Lab Sample ID:	140-20175-14
Client ID:	SV-152-C-29		
Operator ID:	HMT	ALS Bottle#:	12 Worklist Smp#: 22
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

42 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins TestAmerica, Knoxville

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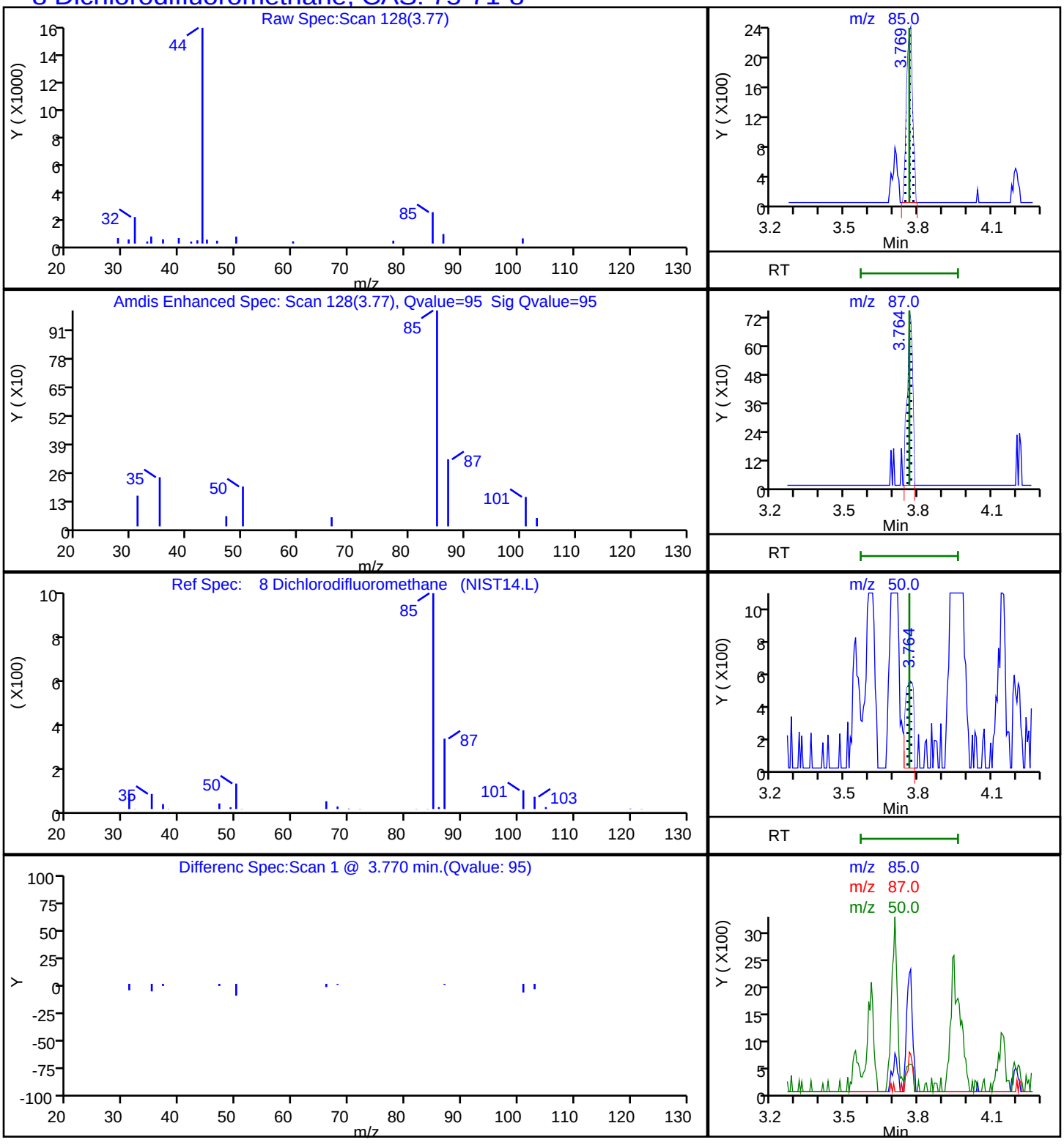
Lims ID:	140-20175-A-14	Lab Sample ID:	140-20175-14		
Client ID:	SV-152-C-29				
Operator ID:	HMT	ALS Bottle#:	12	Worklist Smp#:	22
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

8 Dichlorodifluoromethane, CAS: 75-71-8



Report Date: 04-Sep-2020 11:00:35 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

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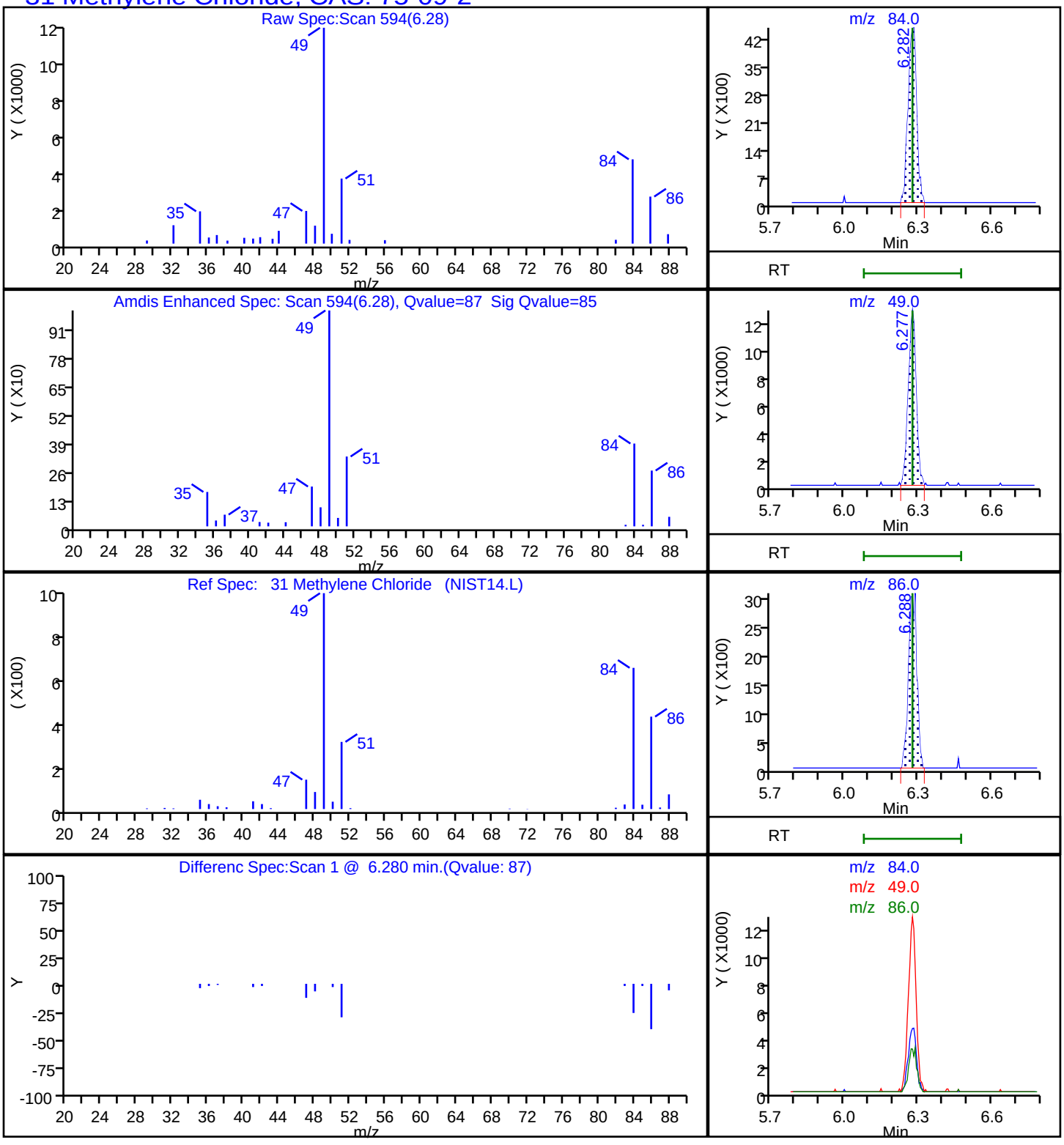
Injection Date:	03-Sep-2020 23:05:30	Instrument ID:	MG		
Lims ID:	140-20175-A-14	Lab Sample ID:	140-20175-14		
Client ID:	SV-152-C-29				
Operator ID:	HMT	ALS Bottle#:	12	Worklist Smp#:	22
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

31 Methylene Chloride, CAS: 75-09-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200902-16486.b\GI03P112.D				
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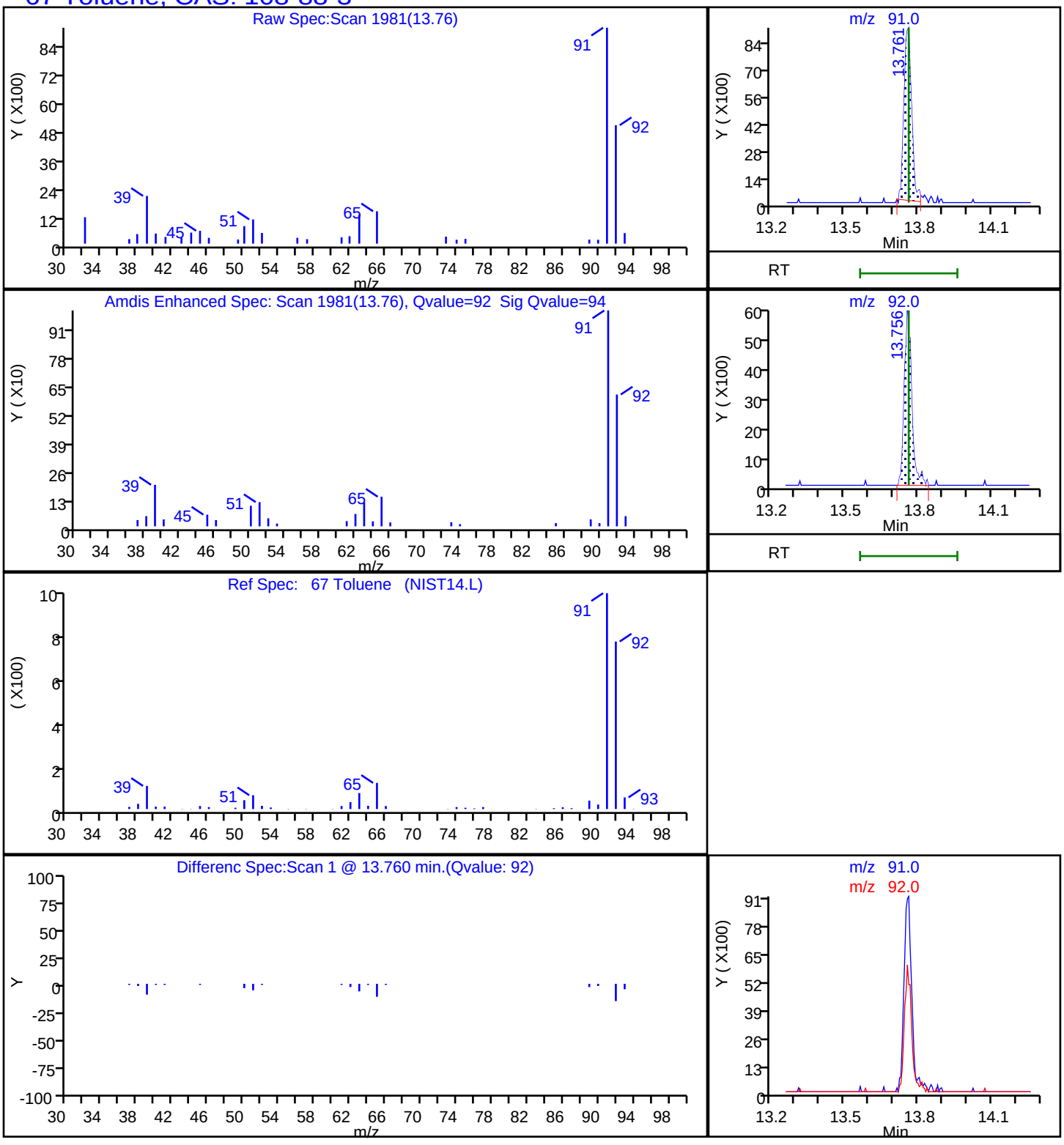
Lims ID:	140-20175-A-14	Lab Sample ID:	140-20175-14		
Client ID:	SV-152-C-29				
Operator ID:	HMT	ALS Bottle#:	12	Worklist Smp#:	22
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

67 Toluene, CAS: 108-88-3



Eurofins TestAmerica, Knoxville

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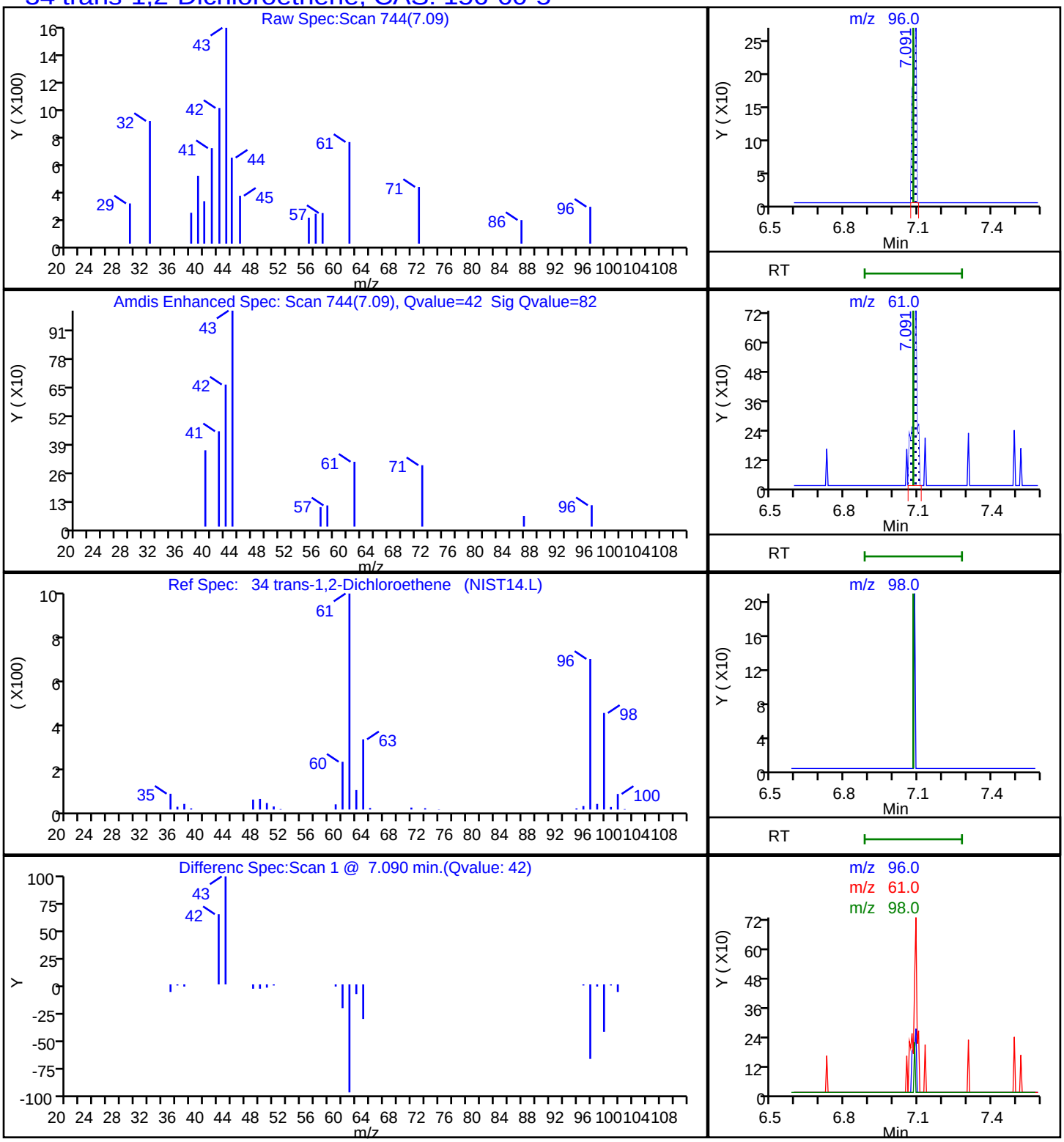
Lims ID:	140-20175-A-14	Lab Sample ID:	140-20175-14		
Client ID:	SV-152-C-29				
Operator ID:	HMT	ALS Bottle#:	12	Worklist Smp#:	22
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

34 trans-1,2-Dichloroethene, CAS: 156-60-5



Report Date: 04-Sep-2020 11:00:35 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

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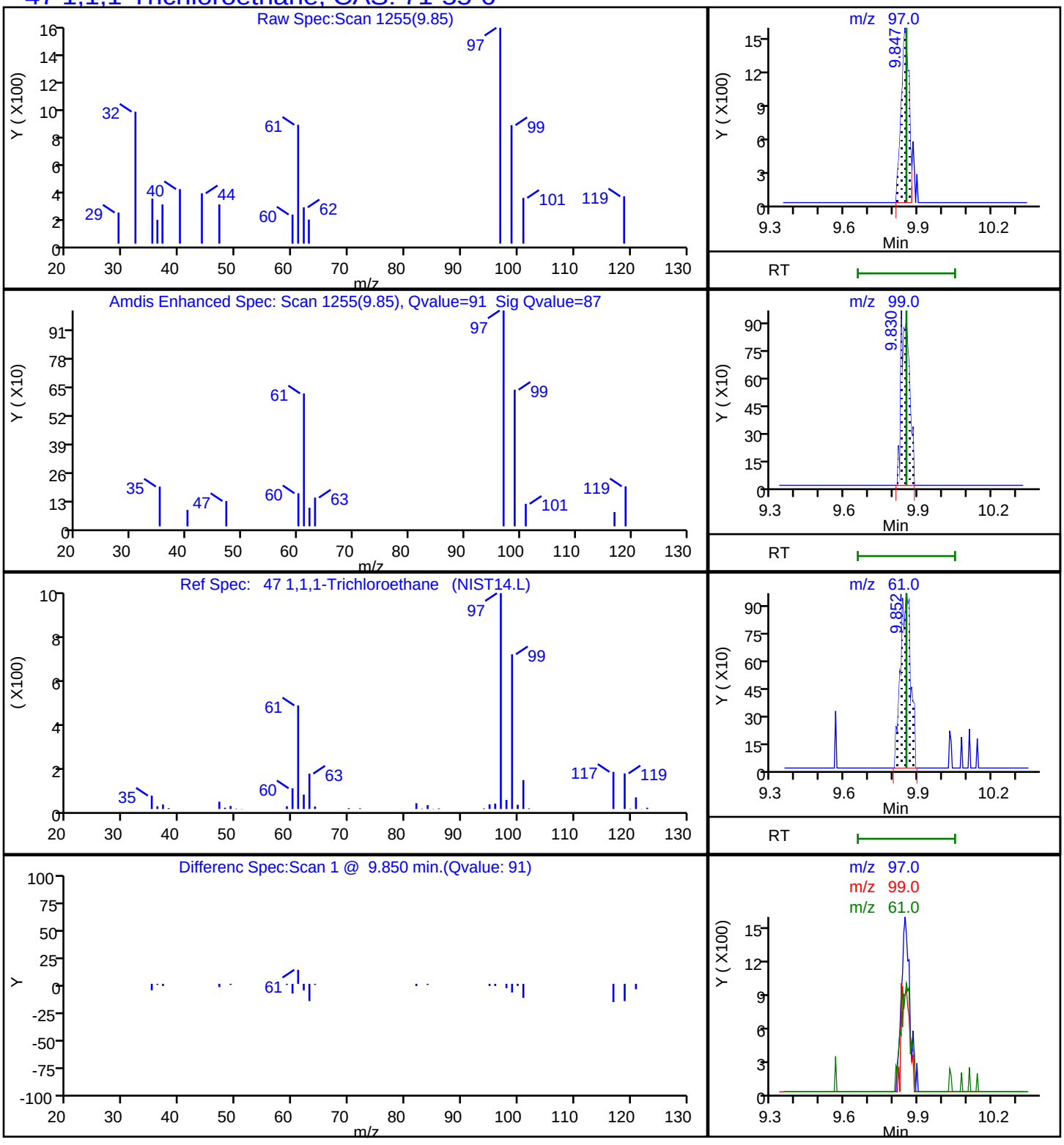
Injection Date:	03-Sep-2020 23:05:30	Instrument ID:	MG		
Lims ID:	140-20175-A-14	Lab Sample ID:	140-20175-14		
Client ID:	SV-152-C-29				
Operator ID:	HMT	ALS Bottle#:	12	Worklist Smp#:	22
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

47 1,1,1-Trichloroethane, CAS: 71-55-6

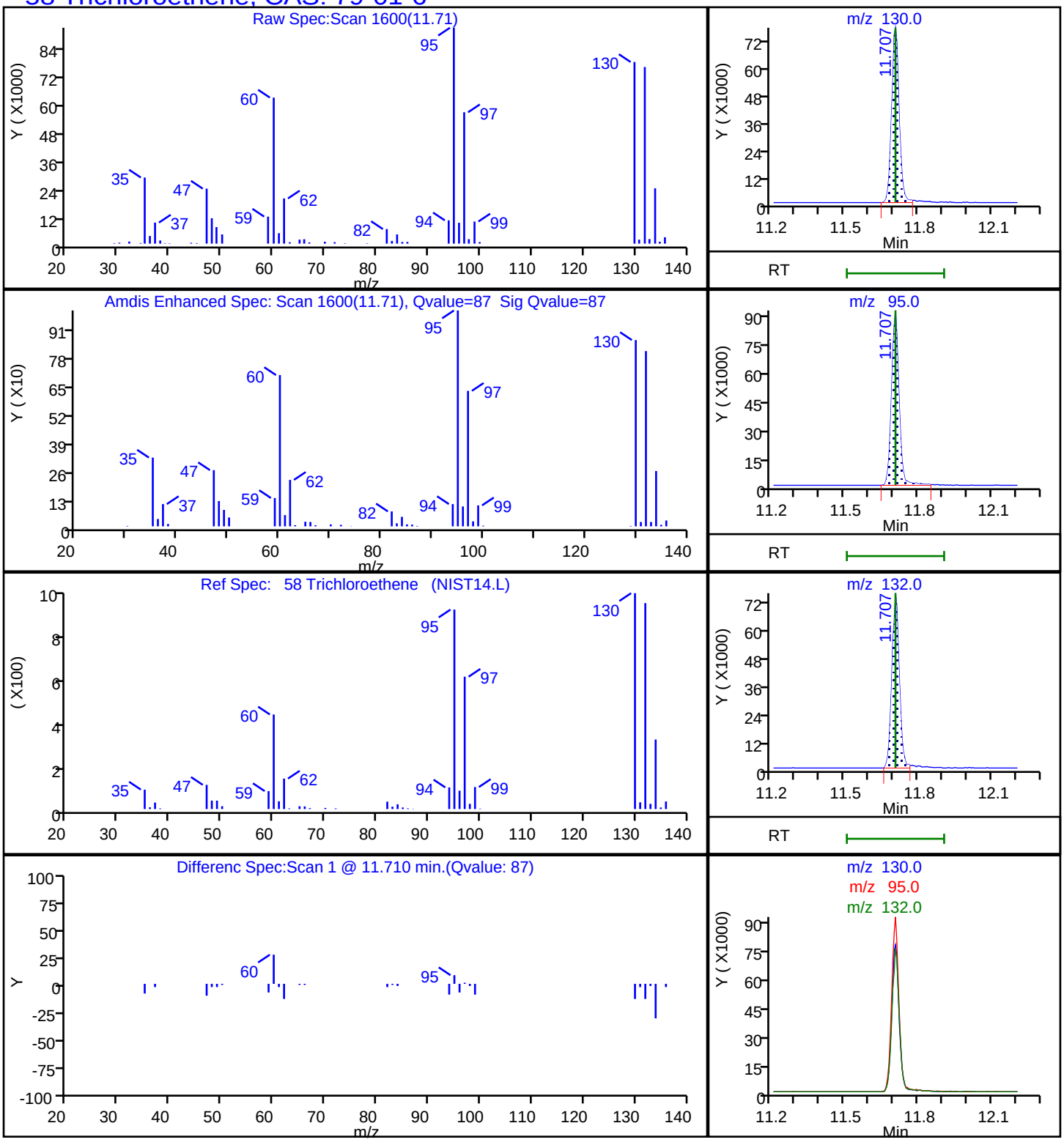


Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200902-16486.b\GI03P112.D

Injection Date:	03-Sep-2020 23:05:30	Instrument ID:	MG
Lims ID:	140-20175-A-14	Lab Sample ID:	140-20175-14
Client ID:	SV-152-C-29		
Operator ID:	HMT	ALS Bottle#:	12 Worklist Smp#: 22
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

58 Trichloroethene, CAS: 79-01-6



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: SV-141-C-29 Lab Sample ID: 140-20175-15

Matrix: Air Lab File ID: GI03P113.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 10:50

Sample wt/vol: 100(mL) Date Analyzed: 09/03/2020 23:53

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42409 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.19	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.062	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	3.5		0.40	0.11
67-66-3	Chloroform	119.38	0.079	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	0.44		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.40		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	0.14	J	0.40	0.040
100-41-4	Ethylbenzene	106.17	0.47		0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	0.040	J	0.40	0.035
108-88-3	Toluene	92.14	1.2		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	0.13	J	0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	6.4		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	0.14	J	0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	2.7		0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	101		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: SV-141-C-29 Lab Sample ID: 140-20175-15

Matrix: Air Lab File ID: GI03P113.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 10:50

Sample wt/vol: 100(mL) Date Analyzed: 09/03/2020 23:53

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42409 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.61	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.39	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	12		1.4	0.39
67-66-3	Chloroform	119.38	0.38	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	1.7		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.0		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	0.57	J	1.6	0.16
100-41-4	Ethylbenzene	106.17	2.0		1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	0.27	J	2.7	0.24
108-88-3	Toluene	92.14	4.5		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	0.53	J	1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	34		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	0.70	J	2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	12		3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	101		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200902-16486.b\GI03P113.D
Lims ID: 140-20175-A-15
Client ID: SV-141-C-29
Sample Type: Client
Inject. Date: 03-Sep-2020 23:53:30 ALS Bottle#: 13 Worklist Smp#: 23
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016486-023
Misc. Info.: 140-20175-a-15
Operator ID: HMT Instrument ID: MG

Method: \\chromfs\Knoxville\ChromData\MG\20200902-16486.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 04-Sep-2020 13:02:00 Calib Date: 02-Sep-2020 03:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1061

First Level Reviewer: khachitpongpanits Date: 04-Sep-2020 13:02:15

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.806	8.811	-0.005	86	105409	4.80	
* 2 1,4-Difluorobenzene	114	10.990	10.995	-0.005	98	592140	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.730	15.730	0.000	96	562261	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.369	17.374	-0.005	78	412504	4.68	
6 Chlorodifluoromethane	51	3.699	3.699	0.000	97	66182	0.7007	
8 Dichlorodifluoromethane	85	3.764	3.764	0.000	97	8436	0.0799	
27 1,1-Dichloroethene	96	5.926	5.926	0.000	61	752	0.0289	
34 trans-1,2-Dichloroethene	96	7.086	7.080	0.006	41	822	0.0269	
42 cis-1,2-Dichloroethene	96	8.472	8.477	-0.005	91	2863	0.0881	
44 Chloroform	83	8.828	8.822	0.006	27	1163	0.0157	
50 Benzene	78	10.451	10.445	0.001	65	4685	0.0385	
52 Carbon tetrachloride	117	10.472	10.467	0.000	30	926	0.0123	
58 Trichloroethene	130	11.707	11.701	0.000	88	68067	1.28	
67 Toluene	91	13.762	13.761	0.001	92	29534	0.2382	
73 Tetrachloroethene	129	14.894	14.899	-0.005	16	375	0.008021	
78 Ethylbenzene	91	16.064	16.069	-0.005	98	15010	0.0942	
79 m-Xylene & p-Xylene	91	16.226	16.231	-0.005	96	51244	0.4064	
83 o-Xylene	91	16.760	16.759	0.000	98	17998	0.1411	
95 1,2,4-Trimethylbenzene	105	18.550	18.550	0.000	91	4188	0.0286	
S 124 Xylenes, Total	100				0		0.5475	

Reagents:

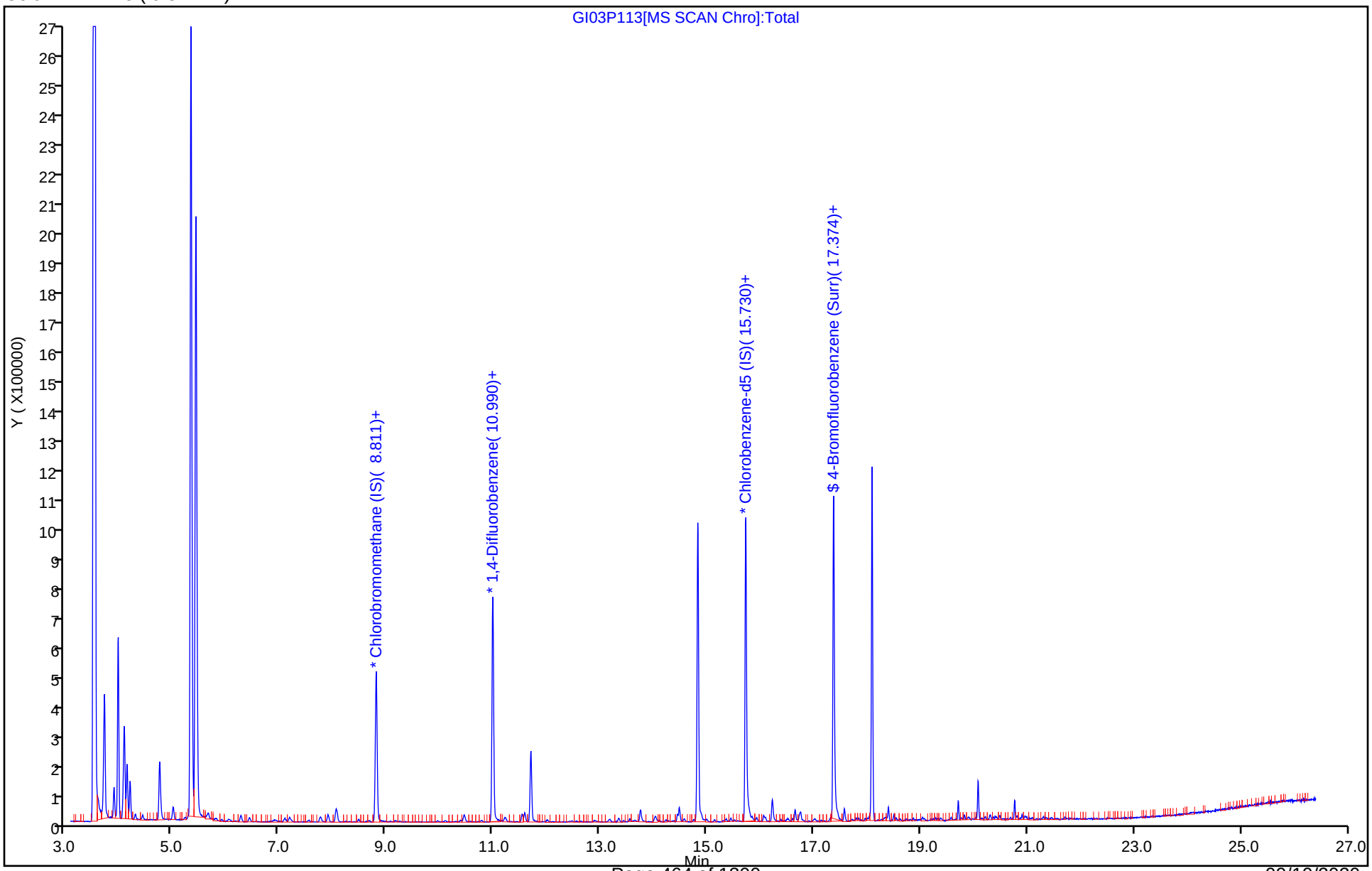
40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

Report Date: 04-Sep-2020 13:02:15 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200902-16486.b\GI03P113.D				
Injection Date:	03-Sep-2020 23:53:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	140-20175-A-15	Lab Sample ID:	140-20175-15	Worklist Smp#:	23
Client ID:	SV-141-C-29				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MG\20200902-16486.b\GI03P113.D				
Lims ID:	140-20175-A-15				
Client ID:	SV-141-C-29				
Sample Type:	Client				
Inject. Date:	03-Sep-2020 23:53:30	ALS Bottle#:	13	Worklist Smp#:	23
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016486-023				
Misc. Info.:	140-20175-a-15				
Operator ID:	HMT	Instrument ID:	MG		
Method:	\\chromfs\Knoxville\ChromData\MG\20200902-16486.b\MG_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	04-Sep-2020 13:02:00	Calib Date:	02-Sep-2020 03:27:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1061				
First Level Reviewer: khachitpongpanits		Date:	04-Sep-2020 13:02:15		

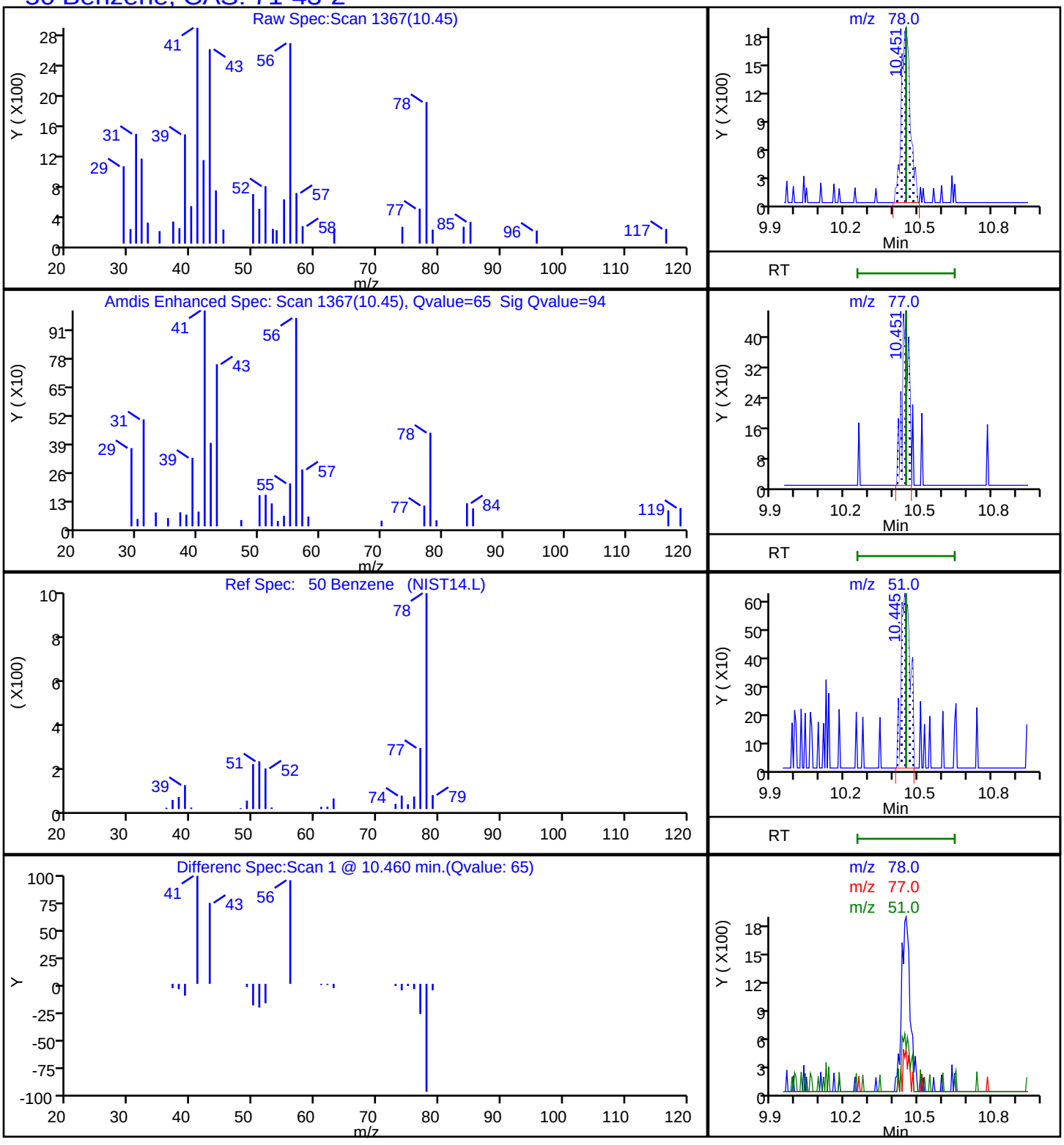
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	4.68	100.76

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200902-16486.b\GI03P113.D

Injection Date:	03-Sep-2020 23:53:30	Instrument ID:	MG
Lims ID:	140-20175-A-15	Lab Sample ID:	140-20175-15
Client ID:	SV-141-C-29		
Operator ID:	HMT	ALS Bottle#:	13 Worklist Smp#: 23
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

50 Benzene, CAS: 71-43-2



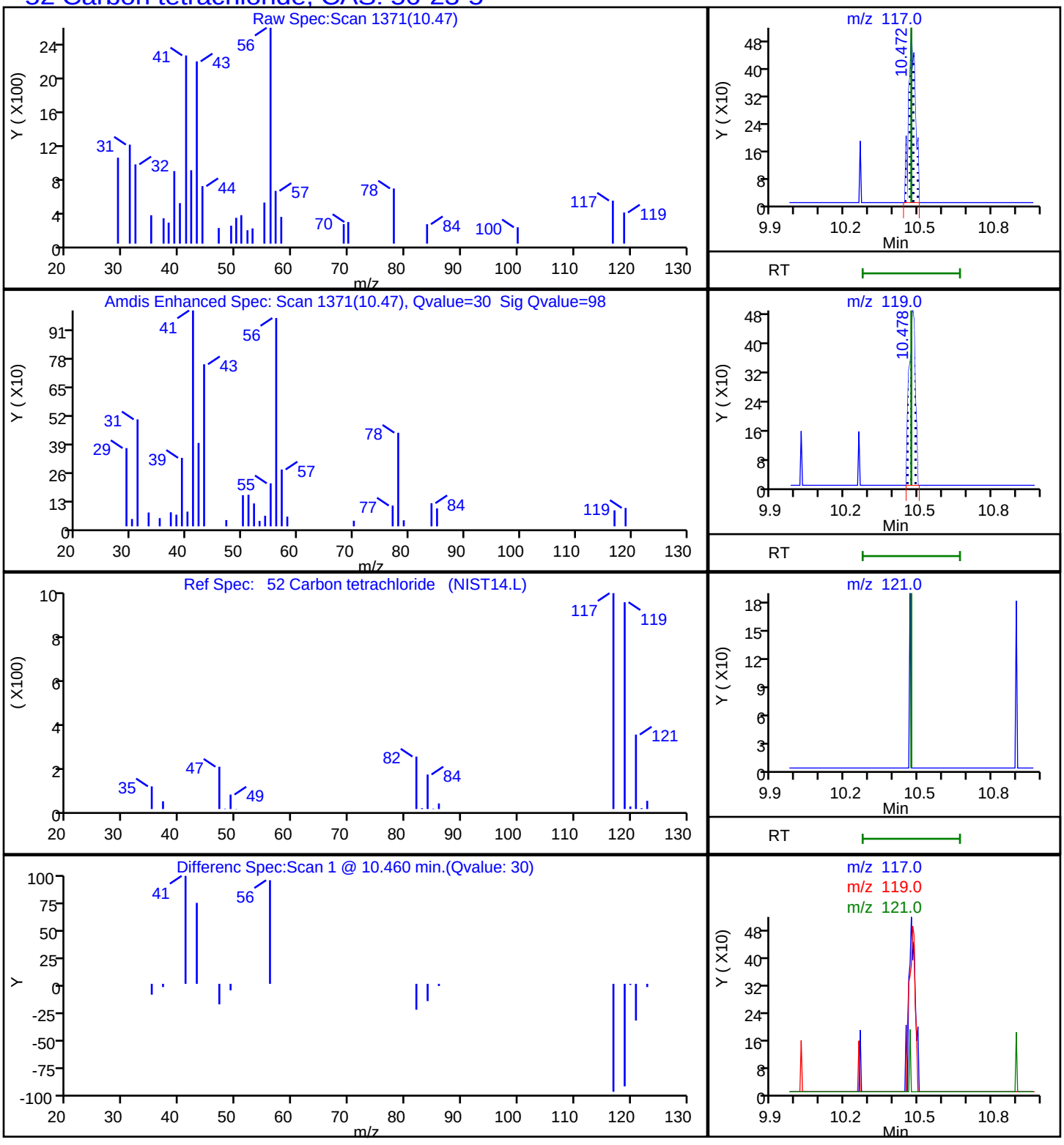
Report Date: 04-Sep-2020 13:02:15 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200902-16486.b\GI03P113.D

Injection Date:	03-Sep-2020 23:53:30	Instrument ID:	MG		
Lims ID:	140-20175-A-15	Lab Sample ID:	140-20175-15		
Client ID:	SV-141-C-29				
Operator ID:	HMT	ALS Bottle#:	13	Worklist Smp#:	23
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

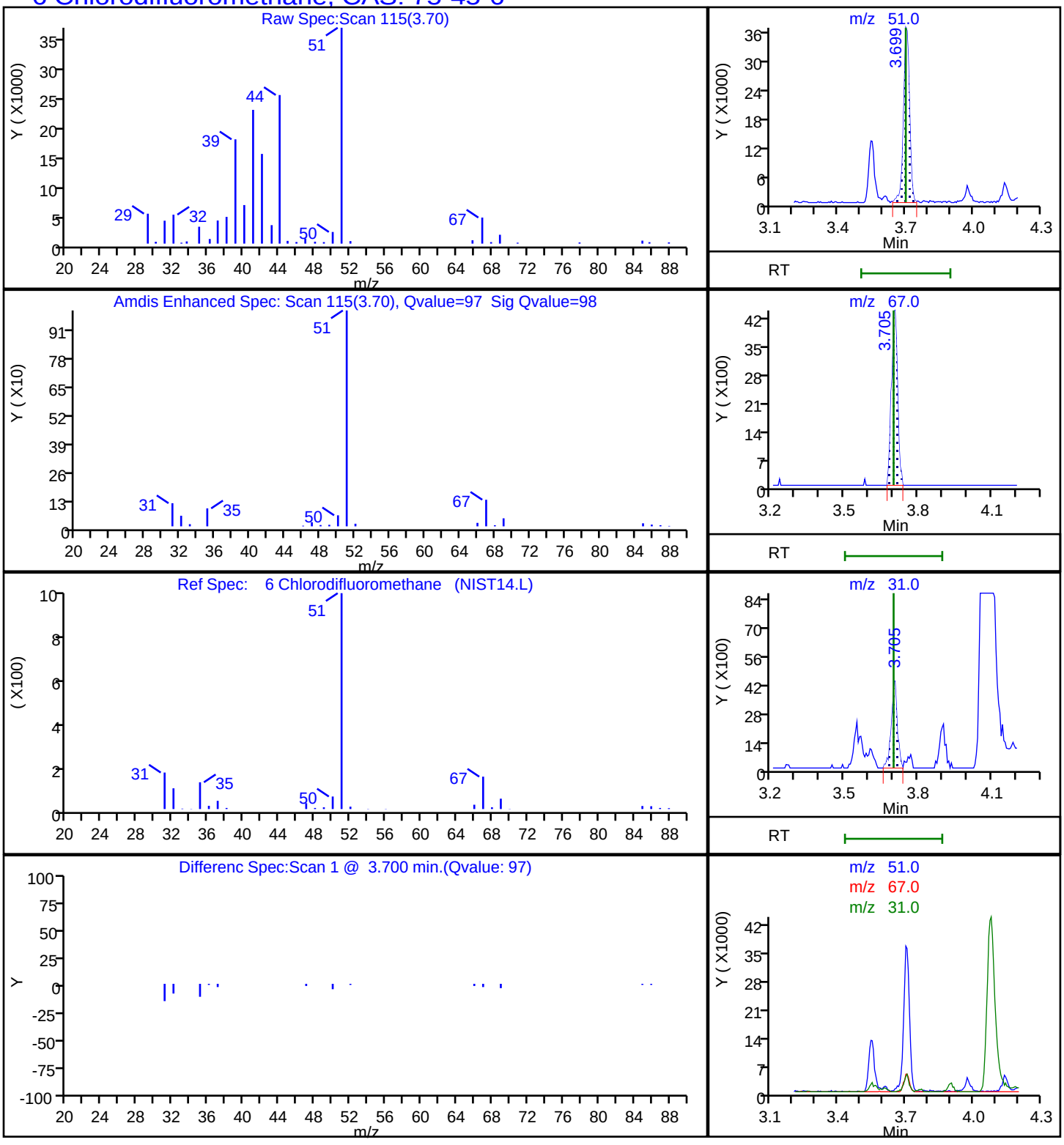
52 Carbon tetrachloride, CAS: 56-23-5



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200902-16486.b\GI03P113.D				
Injection Date:	03-Sep-2020 23:53:30	Instrument ID:	MG		
Lims ID:	140-20175-A-15	Lab Sample ID:	140-20175-15		
Client ID:	SV-141-C-29				
Operator ID:	HMT	ALS Bottle#:	13	Worklist Smp#:	23
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

6 Chlorodifluoromethane, CAS: 75-45-6

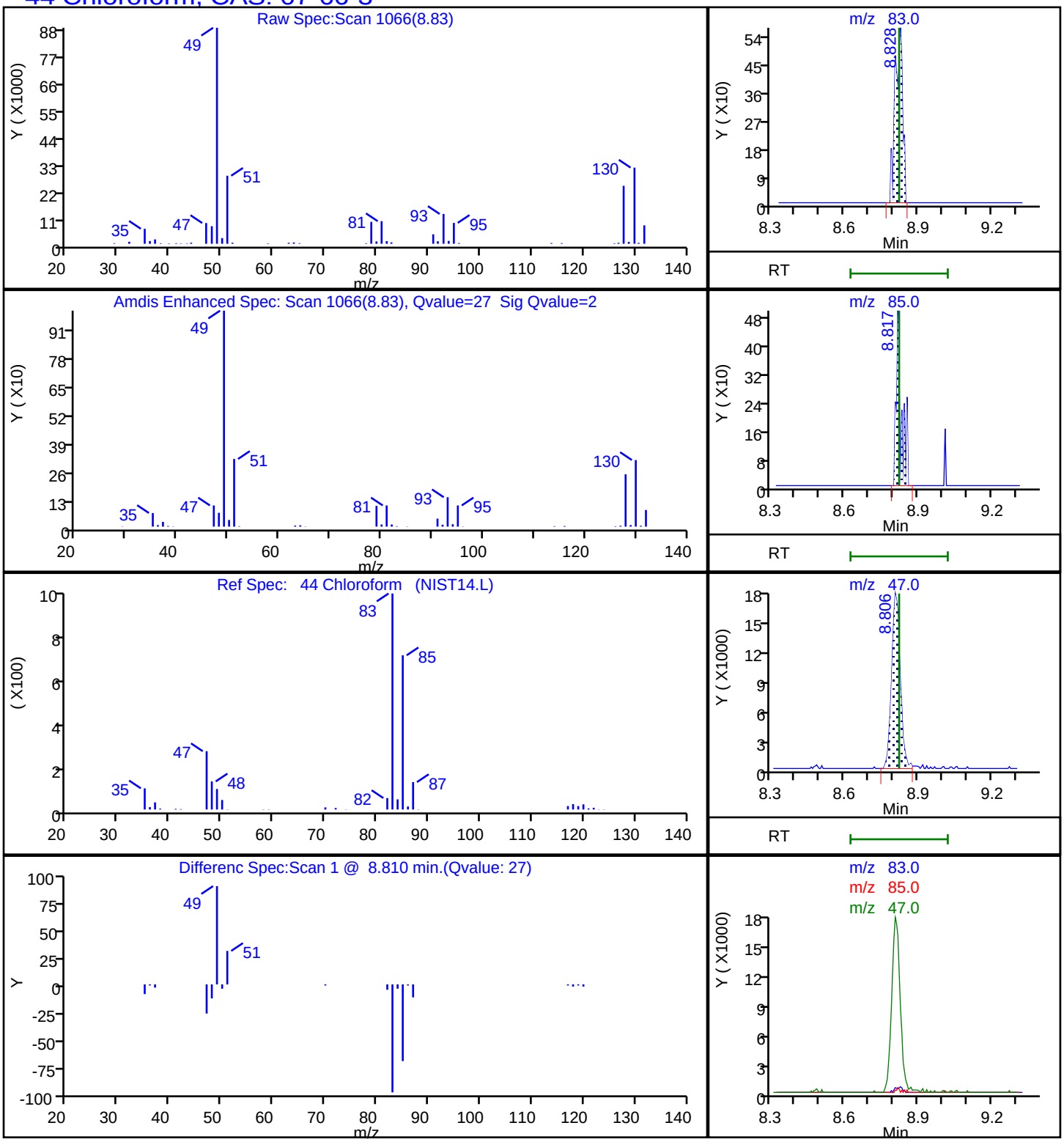


Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200902-16486.b\GI03P113.D

Injection Date:	03-Sep-2020 23:53:30	Instrument ID:	MG
Lims ID:	140-20175-A-15	Lab Sample ID:	140-20175-15
Client ID:	SV-141-C-29		
Operator ID:	HMT	ALS Bottle#:	13 Worklist Smp#: 23
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

44 Chloroform, CAS: 67-66-3

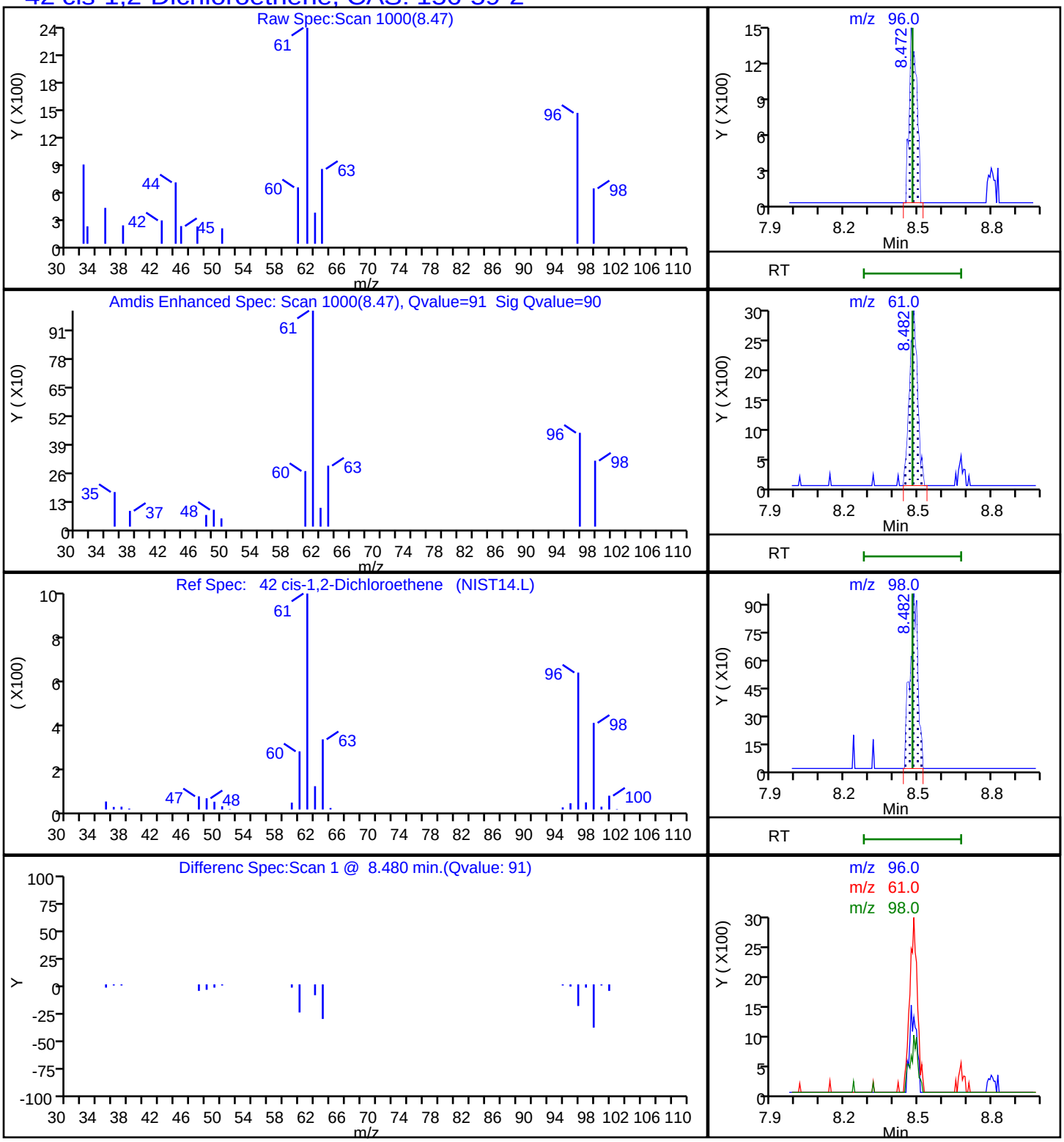


Report Date: 04-Sep-2020 13:02:15 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200902-16486.b\GI03P113.D				
Injection Date:	03-Sep-2020 23:53:30	Instrument ID:	MG		
Lims ID:	140-20175-A-15	Lab Sample ID:	140-20175-15		
Client ID:	SV-141-C-29				
Operator ID:	HMT	ALS Bottle#:	13	Worklist Smp#:	23
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

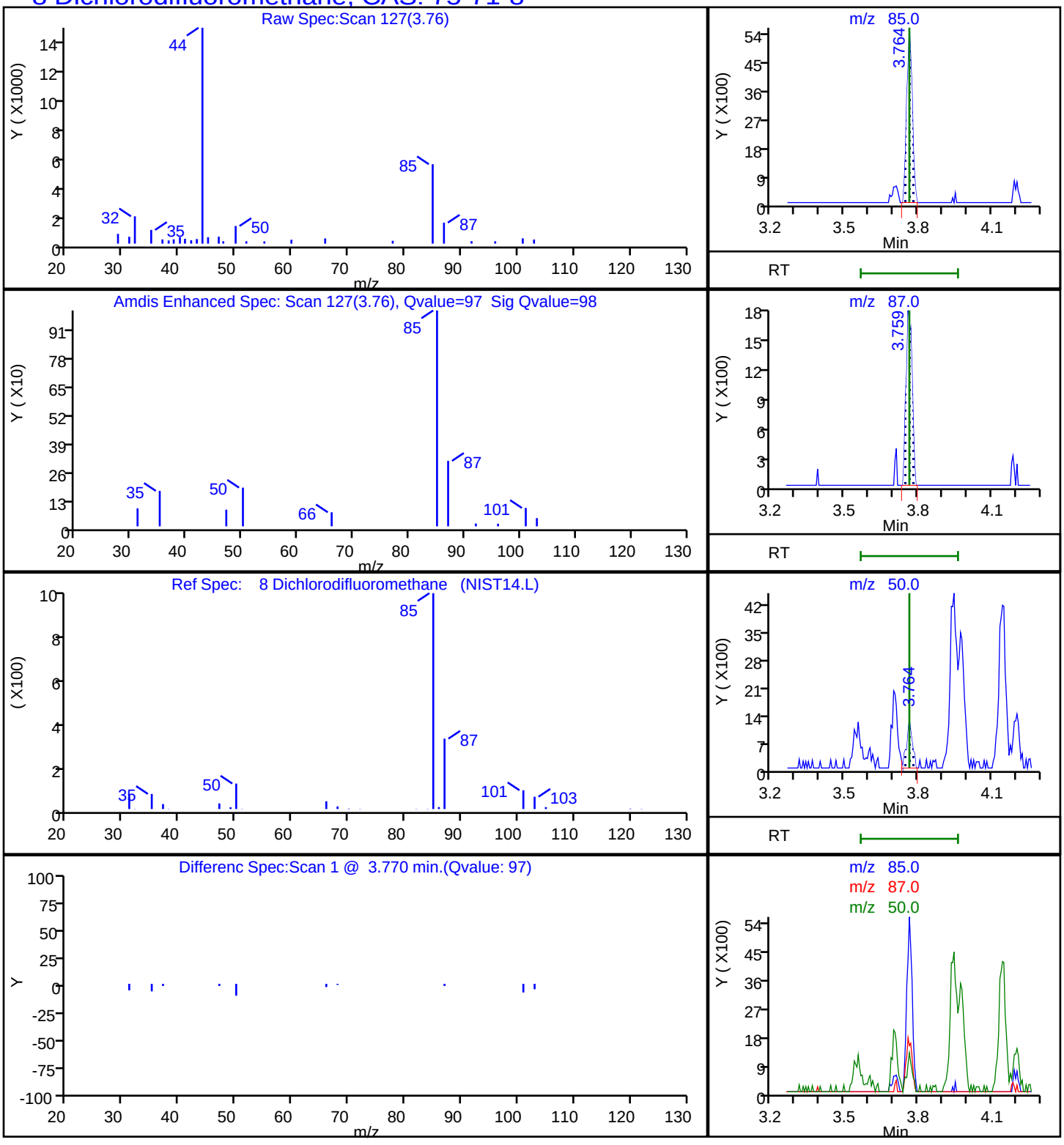
42 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200902-16486.b\GI03P113.D				
Injection Date:	03-Sep-2020 23:53:30	Instrument ID:	MG		
Lims ID:	140-20175-A-15	Lab Sample ID:	140-20175-15		
Client ID:	SV-141-C-29				
Operator ID:	HMT	ALS Bottle#:	13	Worklist Smp#:	23
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

8 Dichlorodifluoromethane, CAS: 75-71-8

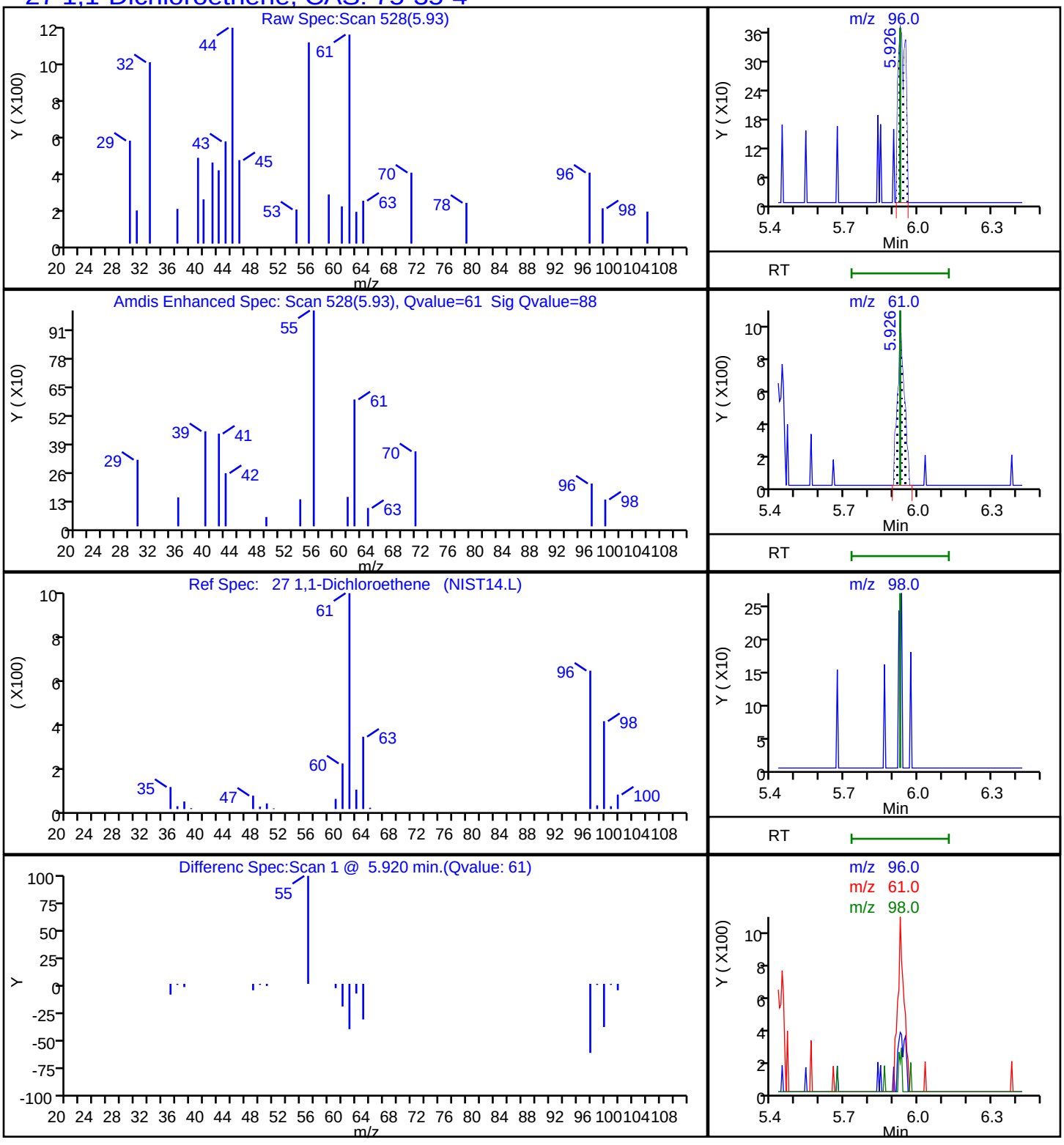


Report Date: 04-Sep-2020 13:02:15 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200902-16486.b\GI03P113.D				
Injection Date:	03-Sep-2020 23:53:30	Instrument ID:	MG		
Lims ID:	140-20175-A-15	Lab Sample ID:	140-20175-15		
Client ID:	SV-141-C-29				
Operator ID:	HMT	ALS Bottle#:	13	Worklist Smp#:	23
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

27 1,1-Dichloroethene, CAS: 75-35-4

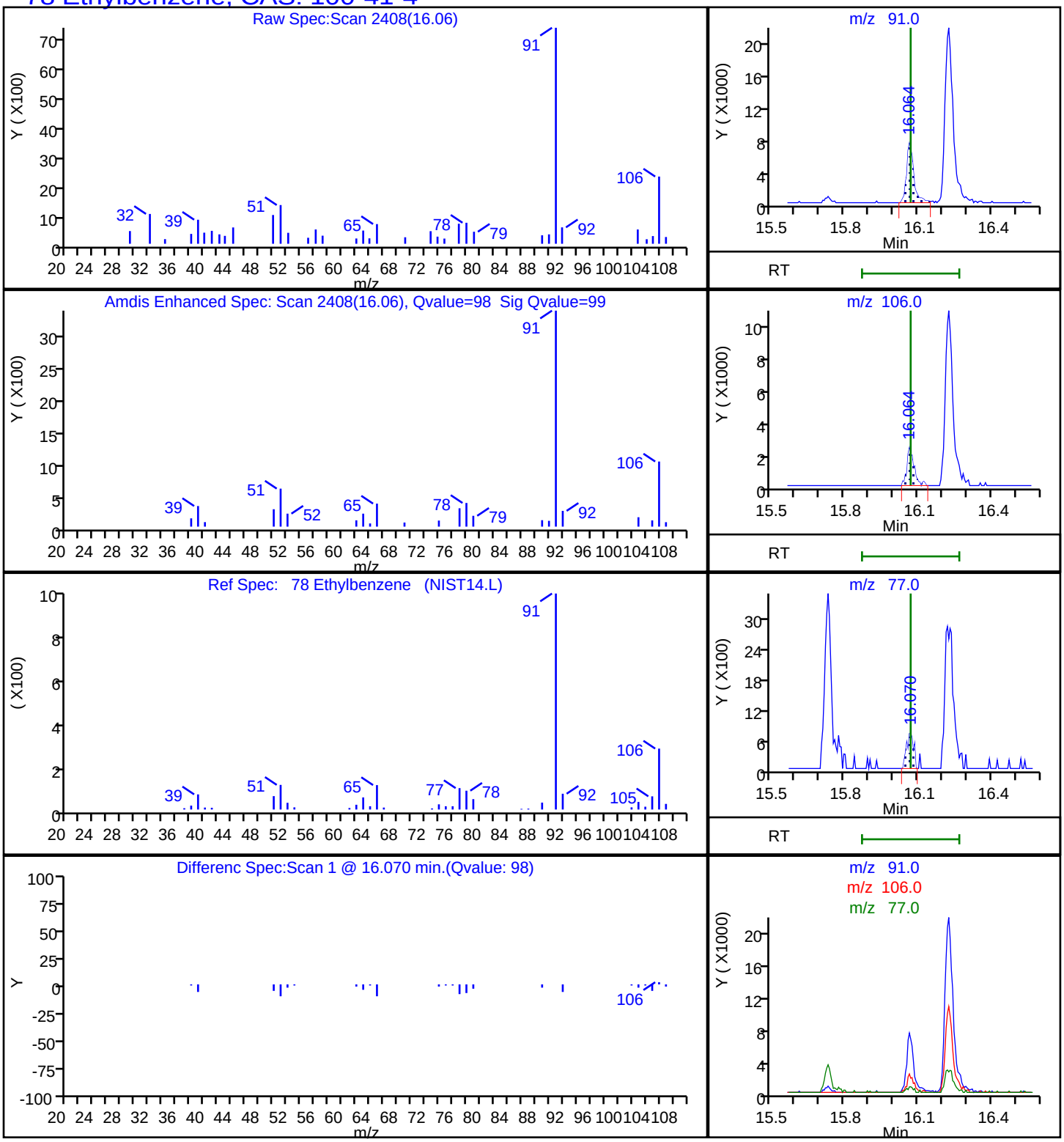


Report Date: 04-Sep-2020 13:02:15 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200902-16486.b\GI03P113.D				
Injection Date:	03-Sep-2020 23:53:30	Instrument ID:	MG		
Lims ID:	140-20175-A-15	Lab Sample ID:	140-20175-15		
Client ID:	SV-141-C-29				
Operator ID:	HMT	ALS Bottle#:	13	Worklist Smp#:	23
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

78 Ethylbenzene, CAS: 100-41-4

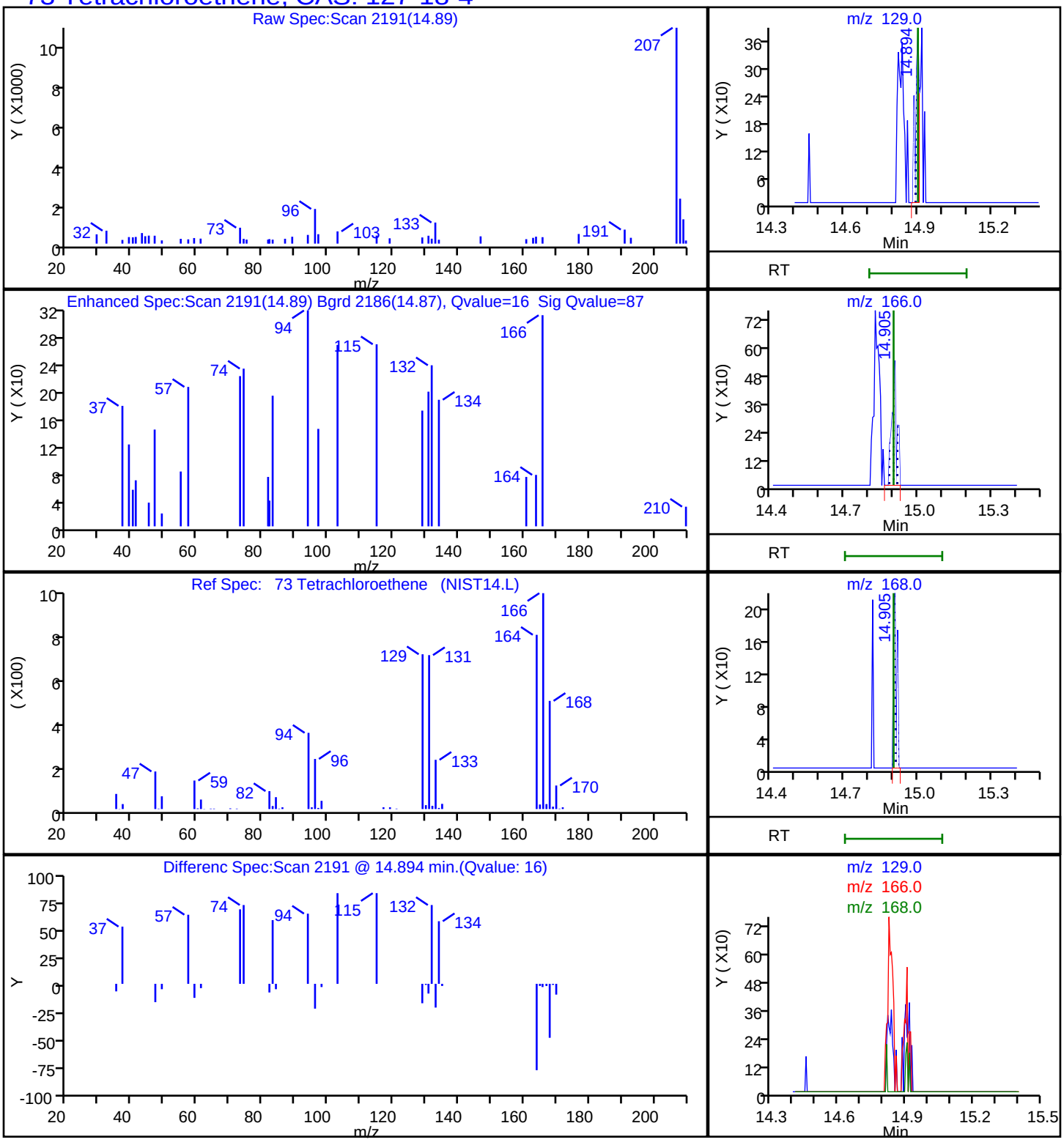


Report Date: 04-Sep-2020 13:02:15 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200902-16486.b\GI03P113.D				
Injection Date:	03-Sep-2020 23:53:30	Instrument ID:	MG		
Lims ID:	140-20175-A-15	Lab Sample ID:	140-20175-15		
Client ID:	SV-141-C-29				
Operator ID:	HMT	ALS Bottle#:	13	Worklist Smp#:	23
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

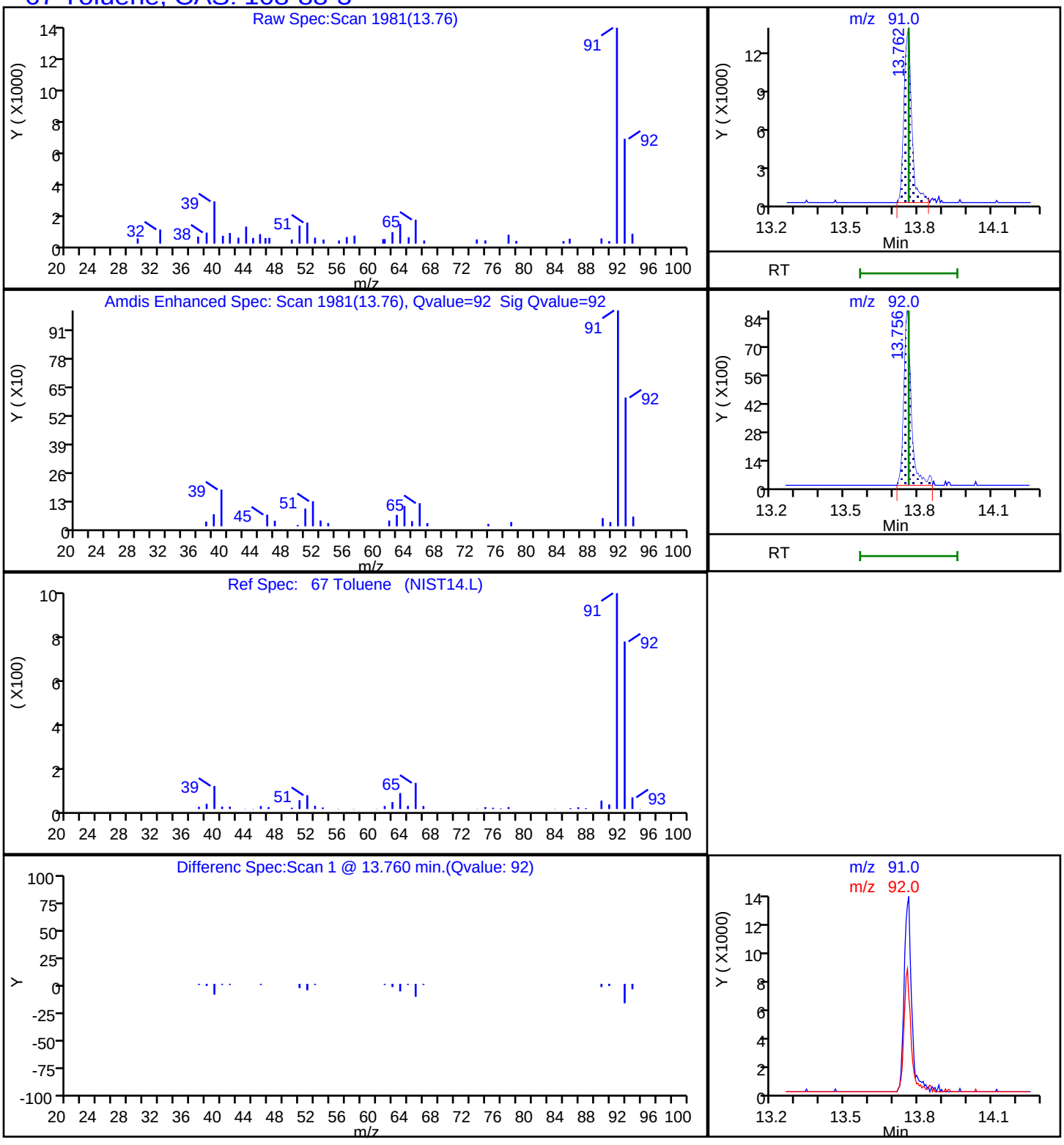
73 Tetrachloroethene, CAS: 127-18-4



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200902-16486.b\GI03P113.D				
Injection Date:	03-Sep-2020 23:53:30	Instrument ID:	MG		
Lims ID:	140-20175-A-15	Lab Sample ID:	140-20175-15		
Client ID:	SV-141-C-29				
Operator ID:	HMT	ALS Bottle#:	13	Worklist Smp#:	23
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

67 Toluene, CAS: 108-88-3

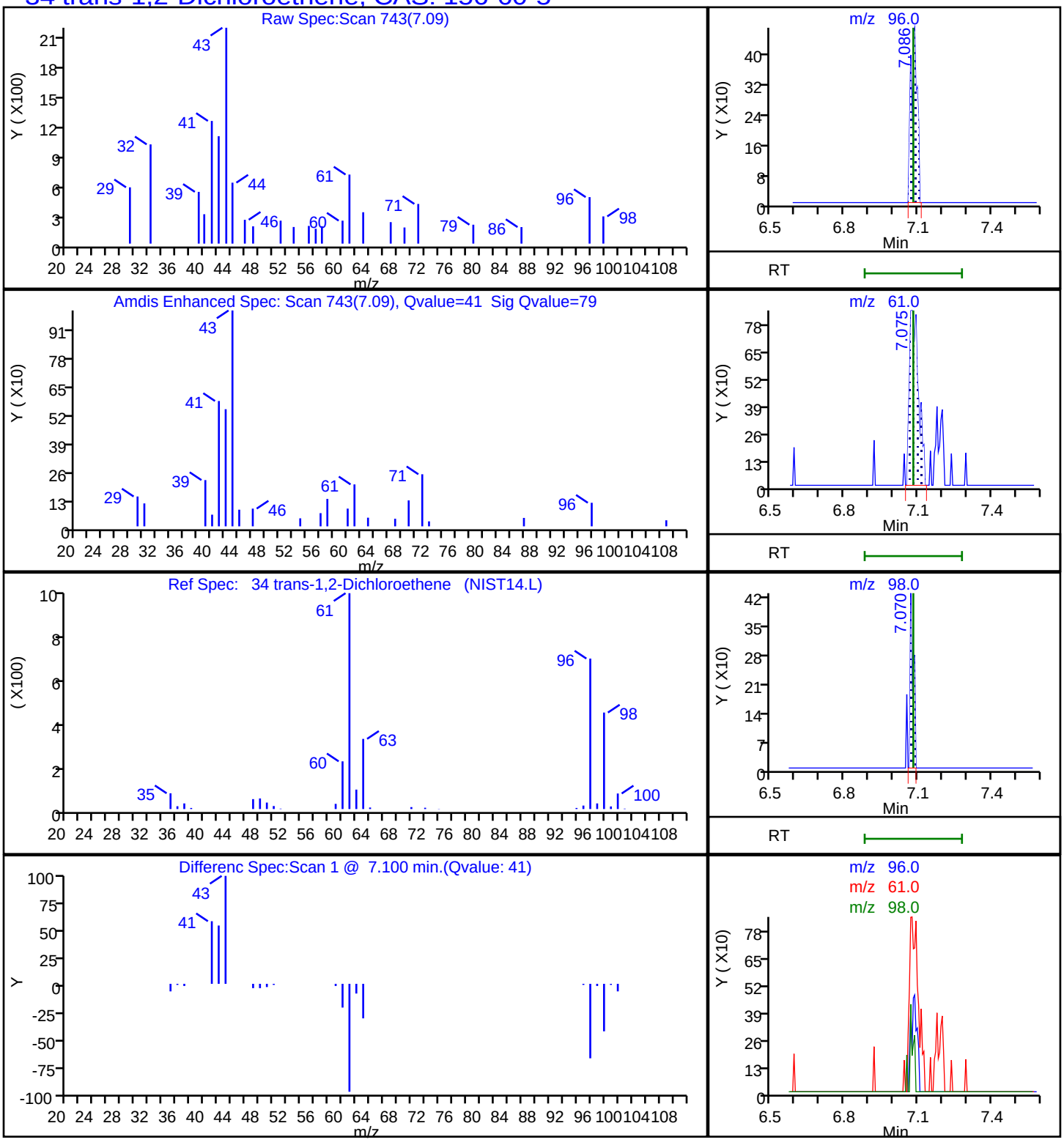


Report Date: 04-Sep-2020 13:02:15 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200902-16486.b\GI03P113.D				
Injection Date:	03-Sep-2020 23:53:30	Instrument ID:	MG		
Lims ID:	140-20175-A-15	Lab Sample ID:	140-20175-15		
Client ID:	SV-141-C-29				
Operator ID:	HMT	ALS Bottle#:	13	Worklist Smp#:	23
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

34 trans-1,2-Dichloroethene, CAS: 156-60-5

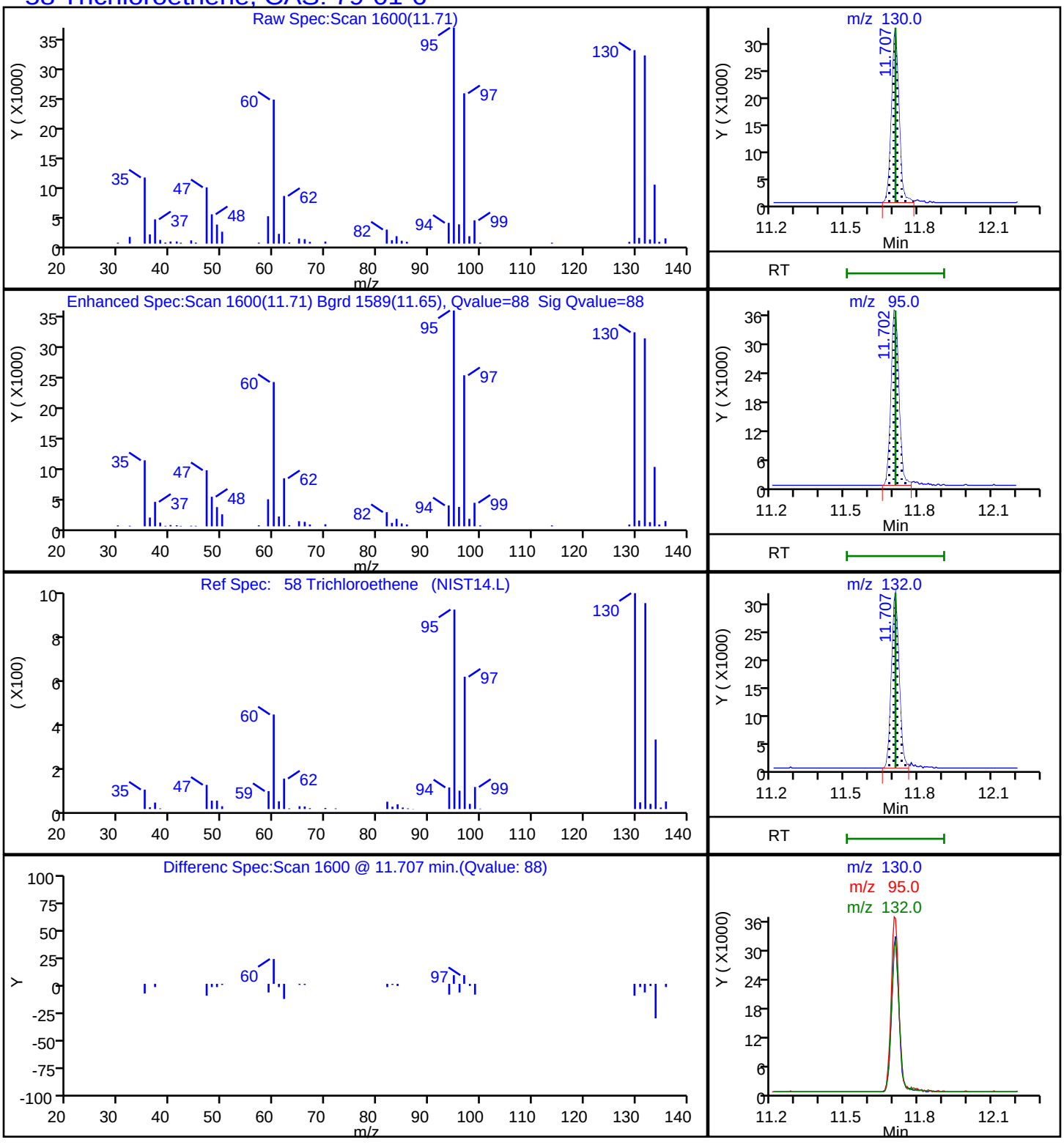


Report Date: 04-Sep-2020 13:02:15 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200902-16486.b\GI03P113.D				
Injection Date:	03-Sep-2020 23:53:30	Instrument ID:	MG		
Lims ID:	140-20175-A-15	Lab Sample ID:	140-20175-15		
Client ID:	SV-141-C-29				
Operator ID:	HMT	ALS Bottle#:	13	Worklist Smp#:	23
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

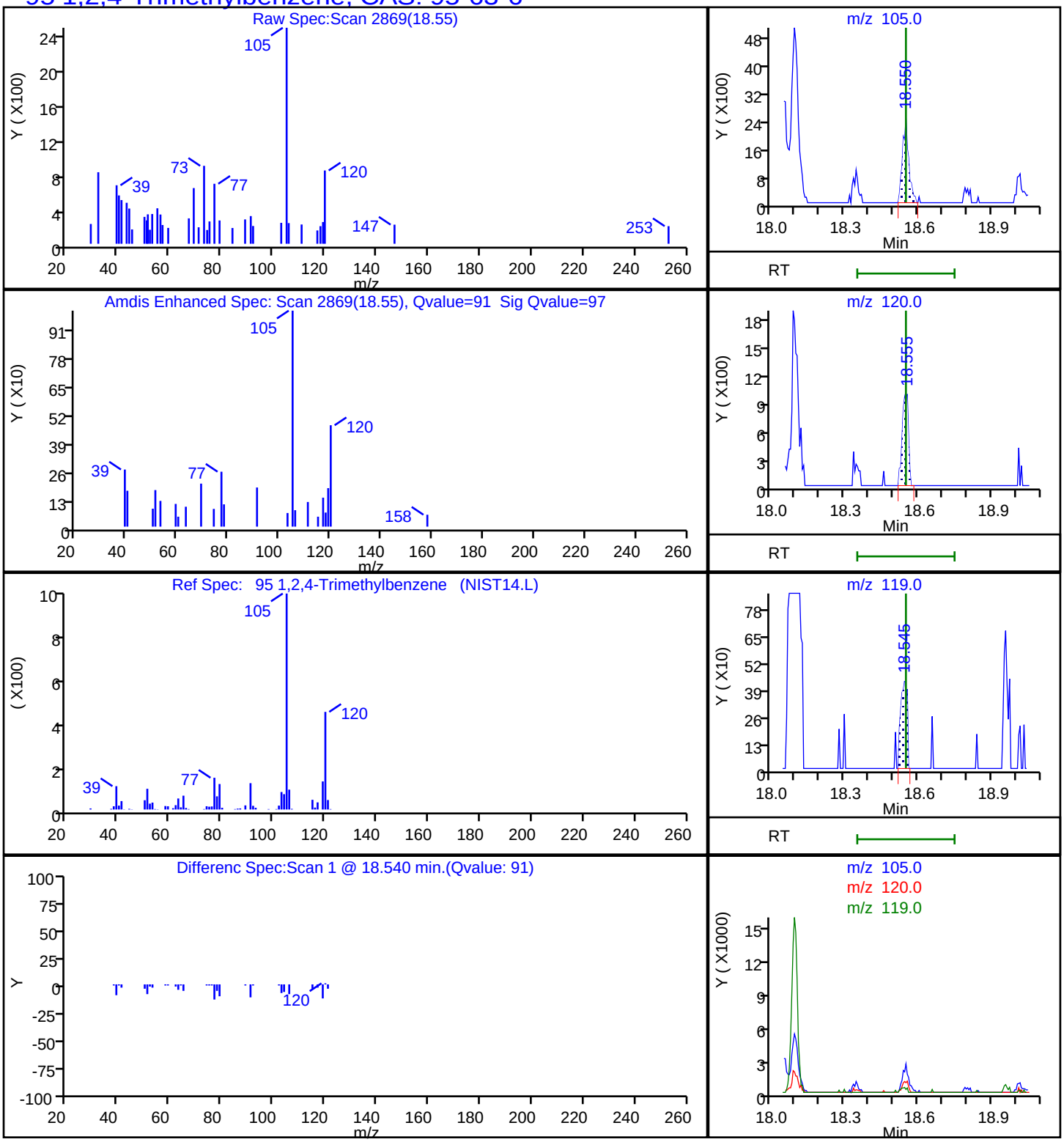
58 Trichloroethene, CAS: 79-01-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200902-16486.b\GI03P113.D				
Injection Date:	03-Sep-2020 23:53:30	Instrument ID:	MG		
Lims ID:	140-20175-A-15	Lab Sample ID:	140-20175-15		
Client ID:	SV-141-C-29				
Operator ID:	HMT	ALS Bottle#:	13	Worklist Smp#:	23
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

95 1,2,4-Trimethylbenzene, CAS: 95-63-6

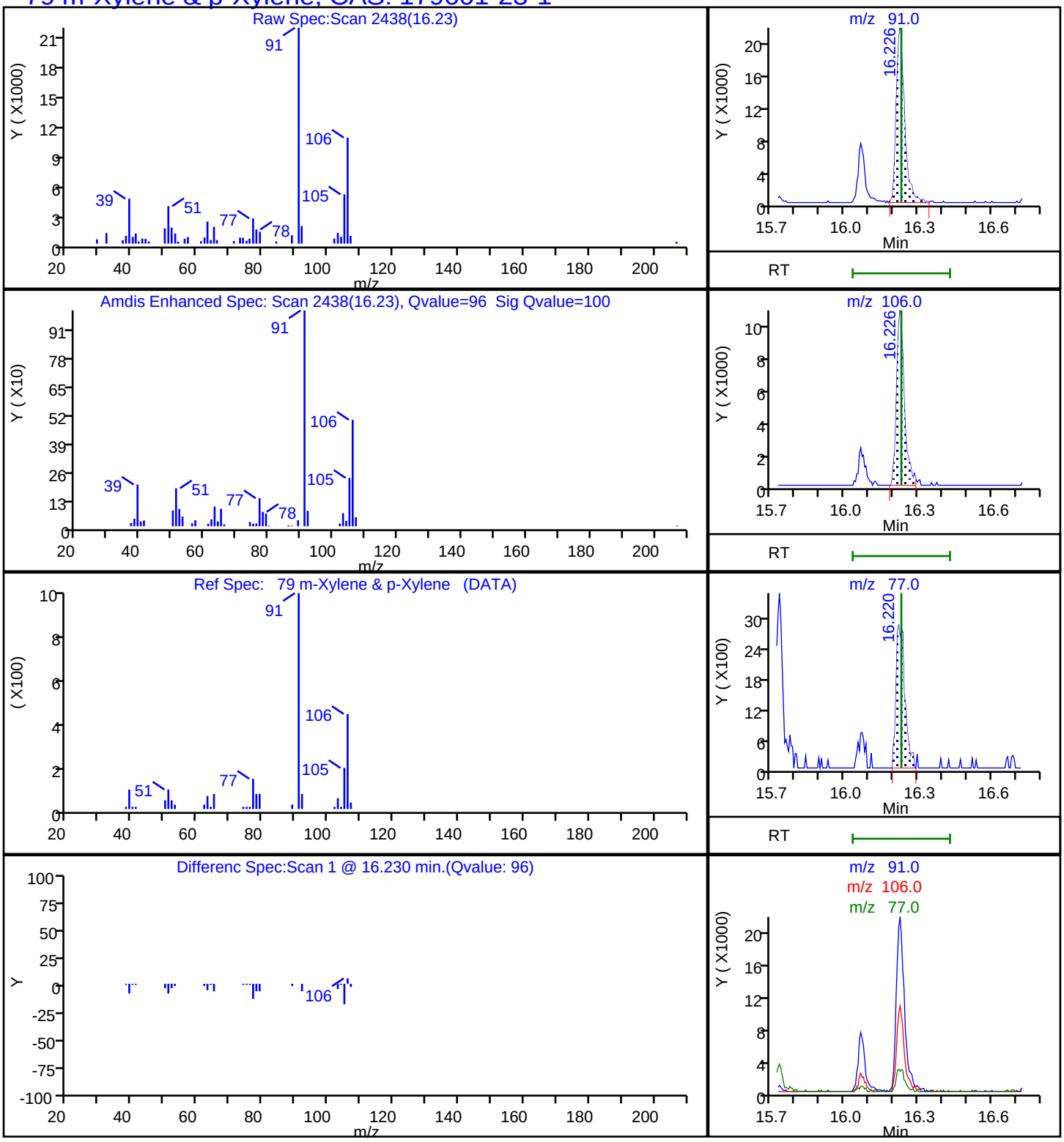


Report Date: 04-Sep-2020 13:02:15 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200902-16486.b\GI03P113.D				
Injection Date:	03-Sep-2020 23:53:30	Instrument ID:	MG		
Lims ID:	140-20175-A-15	Lab Sample ID:	140-20175-15		
Client ID:	SV-141-C-29				
Operator ID:	HMT	ALS Bottle#:	13	Worklist Smp#:	23
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

79 m-Xylene & p-Xylene, CAS: 179601-23-1

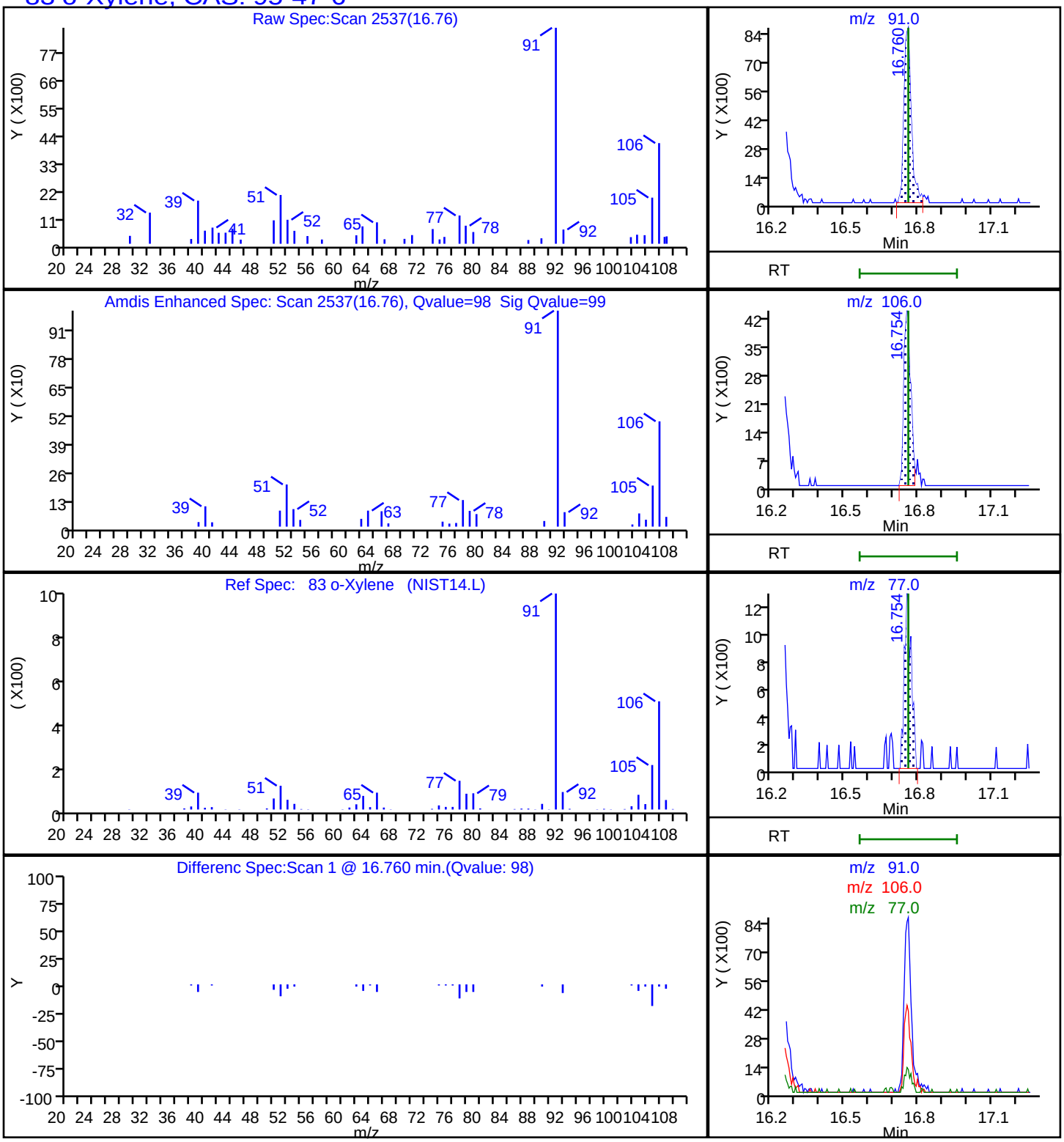


Report Date: 04-Sep-2020 13:02:15 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200902-16486.b\GI03P113.D				
Injection Date:	03-Sep-2020 23:53:30	Instrument ID:	MG		
Lims ID:	140-20175-A-15	Lab Sample ID:	140-20175-15		
Client ID:	SV-141-C-29				
Operator ID:	HMT	ALS Bottle#:	13	Worklist Smp#:	23
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

83 o-Xylene, CAS: 95-47-6



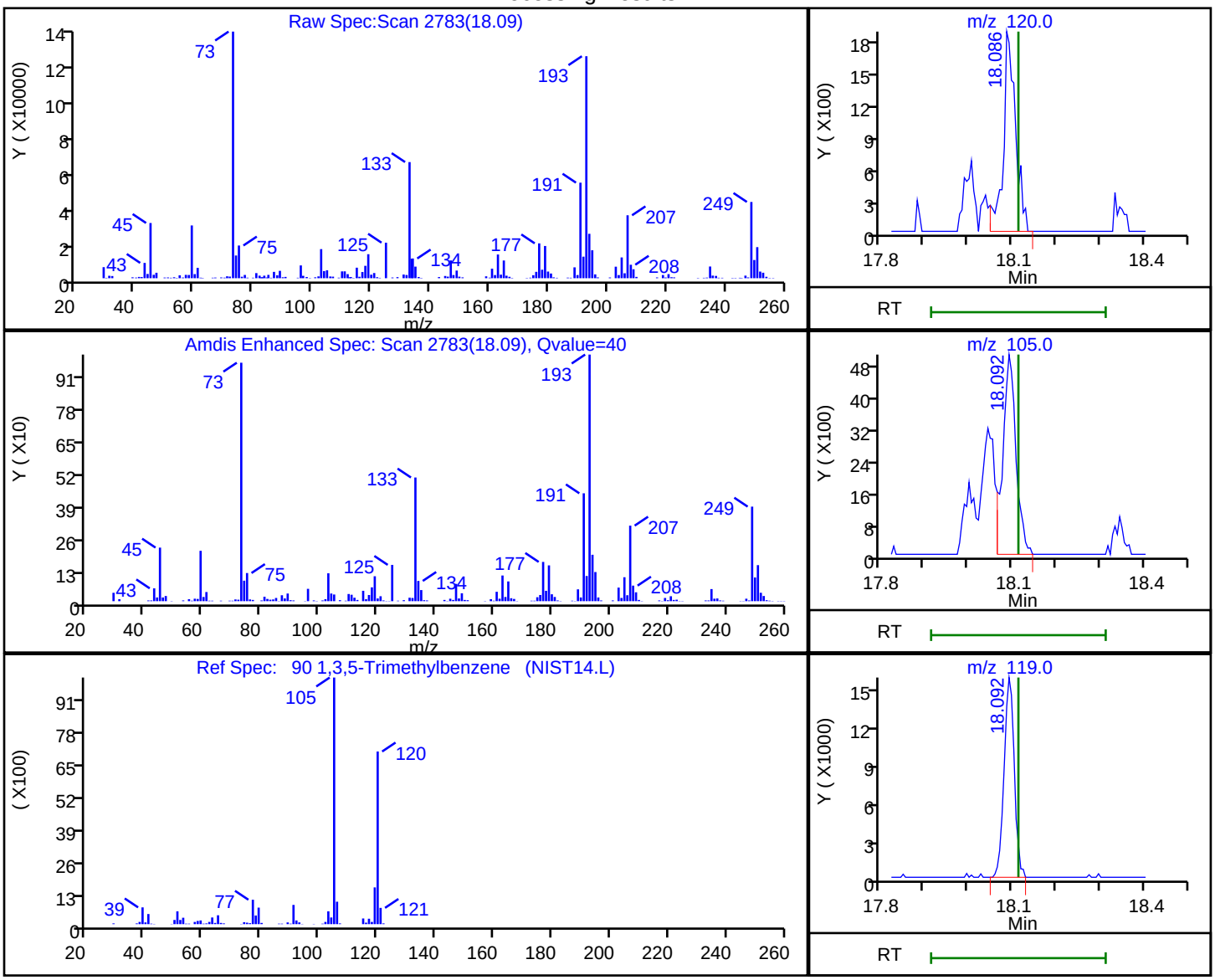
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200902-16486.b\GI03P113.D				
Injection Date:	03-Sep-2020 23:53:30	Instrument ID:	MG		
Lims ID:	140-20175-A-15	Lab Sample ID:	140-20175-15		
Client ID:	SV-141-C-29				
Operator ID:	HMT	ALS Bottle#:	13	Worklist Smp#:	23
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

90 1,3,5-Trimethylbenzene, CAS: 108-67-8

Processing Results



RT	Mass	Response	Amount
18.09	120.00	3644	0.054466
18.09	105.00	10490	
18.09	119.00	24605	

Reviewer: khachitpongpanits, 04-Sep-2020 13:01:59

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: SV-149-C-29 Lab Sample ID: 140-20175-16

Matrix: Air Lab File ID: GI03P114.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 10:53

Sample wt/vol: 100(mL) Date Analyzed: 09/04/2020 00:41

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42409 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.14	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.069	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	0.89		0.40	0.11
67-66-3	Chloroform	119.38	0.16	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	0.15	J	0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.39	J	0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	1.3		0.40	0.065
75-09-2	Methylene Chloride	84.93	21		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	0.41		0.40	0.035
108-88-3	Toluene	92.14	12		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	2.1		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	0.54		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	0.32	J	0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	6.5		0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	103		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: SV-149-C-29 Lab Sample ID: 140-20175-16

Matrix: Air Lab File ID: GI03P114.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 10:53

Sample wt/vol: 100(mL) Date Analyzed: 09/04/2020 00:41

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42409 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.43	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.43	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	3.1		1.4	0.39
67-66-3	Chloroform	119.38	0.80	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	0.58	J	1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	1.9	J	2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	5.6		1.7	0.28
75-09-2	Methylene Chloride	84.93	71		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	2.8		2.7	0.24
108-88-3	Toluene	92.14	44		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	11		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	2.7		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	1.6	J	2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	28		3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	103		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200902-16486.b\GI03P114.D
Lims ID: 140-20175-A-16
Client ID: SV-149-C-29
Sample Type: Client
Inject. Date: 04-Sep-2020 00:41:30 ALS Bottle#: 14 Worklist Smp#: 24
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016486-024
Misc. Info.: 140-20175-a-16
Operator ID: HMT Instrument ID: MG

Method: \\chromfs\Knoxville\ChromData\MG\20200902-16486.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 04-Sep-2020 13:03:21 Calib Date: 02-Sep-2020 03:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1061

First Level Reviewer: khachitpongpanits Date: 04-Sep-2020 13:03:21

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.806	8.811	-0.005	85	107317	4.80	
* 2 1,4-Difluorobenzene	114	10.990	10.995	-0.005	98	600962	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.724	15.730	-0.006	96	568970	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.369	17.374	-0.005	78	426335	4.78	
6 Chlorodifluoromethane	51	3.699	3.699	0.000	61	17085	0.1777	
8 Dichlorodifluoromethane	85	3.759	3.764	-0.005	95	8309	0.0773	
31 Methylene Chloride	84	6.271	6.277	-0.006	87	108577	4.10	
42 cis-1,2-Dichloroethene	96	8.488	8.477	0.011	74	976	0.0295	
44 Chloroform	83	8.822	8.822	0.000	27	2458	0.0327	
50 Benzene	78	10.451	10.445	0.001	46	3339	0.0270	
52 Carbon tetrachloride	117	10.478	10.467	0.006	25	1055	0.0138	
58 Trichloroethene	130	11.707	11.701	0.000	86	22645	0.4204	
67 Toluene	91	13.756	13.761	-0.005	92	291895	2.33	
73 Tetrachloroethene	129	14.899	14.899	0.000	80	3872	0.0818	
78 Ethylbenzene	91	16.064	16.069	-0.005	99	41503	0.2573	
79 m-Xylene & p-Xylene	91	16.220	16.231	-0.011	97	125889	0.9866	
83 o-Xylene	91	16.754	16.759	-0.006	97	42195	0.3268	
90 1,3,5-Trimethylbenzene	120	18.108	18.108	-0.005	40	4296	0.0635	a
95 1,2,4-Trimethylbenzene	105	18.545	18.550	-0.005	97	16131	0.1089	
S 124 Xylenes, Total	100				0		1.31	

QC Flag Legend

Review Flags
a - User Assigned ID

Reagents:

40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

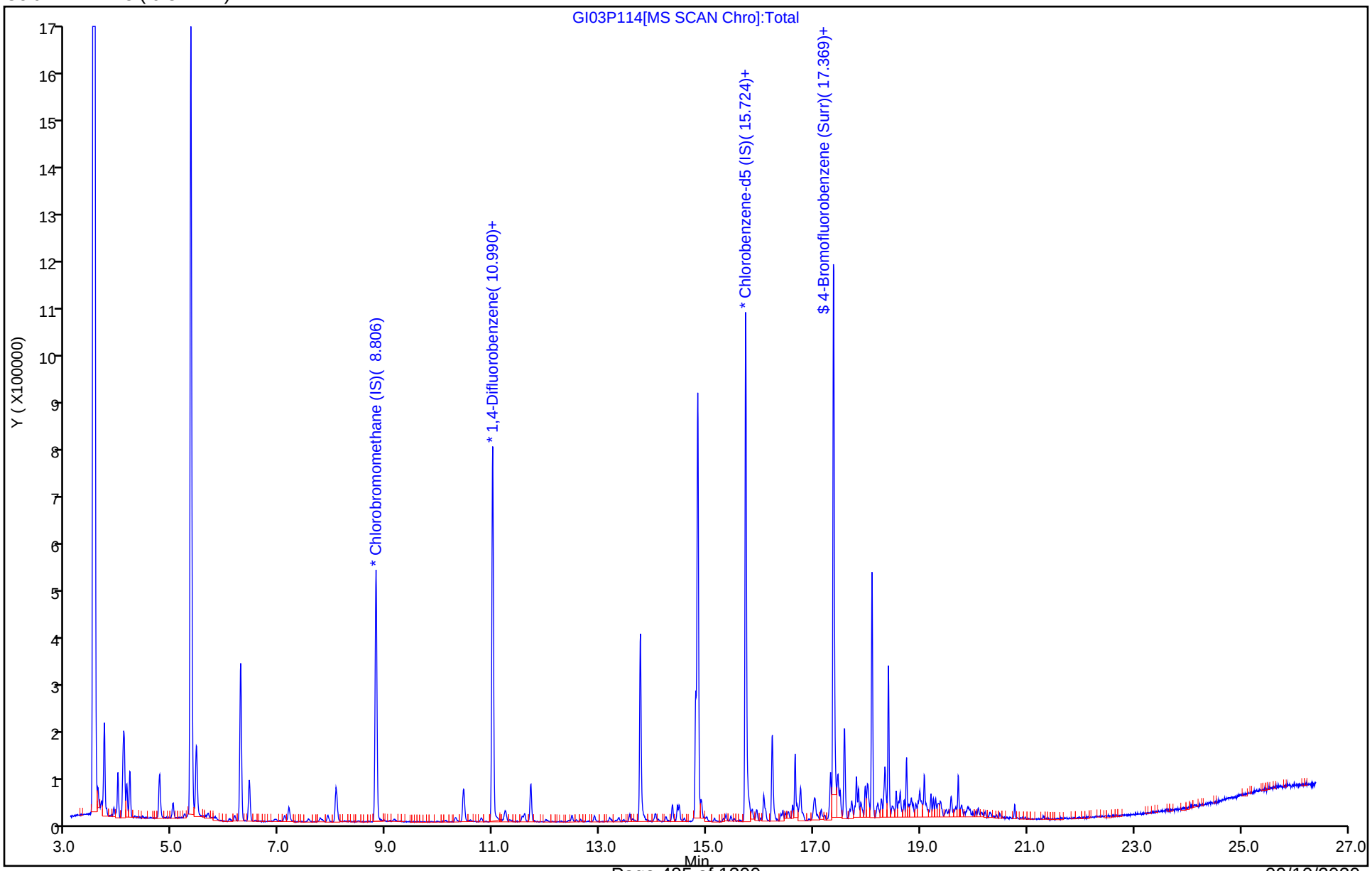
Report Date: 04-Sep-2020 13:03:21 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200902-16486.b\GI03P114.D

Injection Date:	04-Sep-2020 00:41:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	140-20175-A-16	Lab Sample ID:	140-20175-16	Worklist Smp#:	24
Client ID:	SV-149-C-29				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MG\20200902-16486.b\GI03P114.D				
Lims ID:	140-20175-A-16				
Client ID:	SV-149-C-29				
Sample Type:	Client				
Inject. Date:	04-Sep-2020 00:41:30	ALS Bottle#:	14	Worklist Smp#:	24
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016486-024				
Misc. Info.:	140-20175-a-16				
Operator ID:	HMT	Instrument ID:	MG		
Method:	\\chromfs\Knoxville\ChromData\MG\20200902-16486.b\MG_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	04-Sep-2020 13:03:21	Calib Date:	02-Sep-2020 03:27:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1061				
First Level Reviewer: khachitpongpanits		Date:	04-Sep-2020 13:03:21		

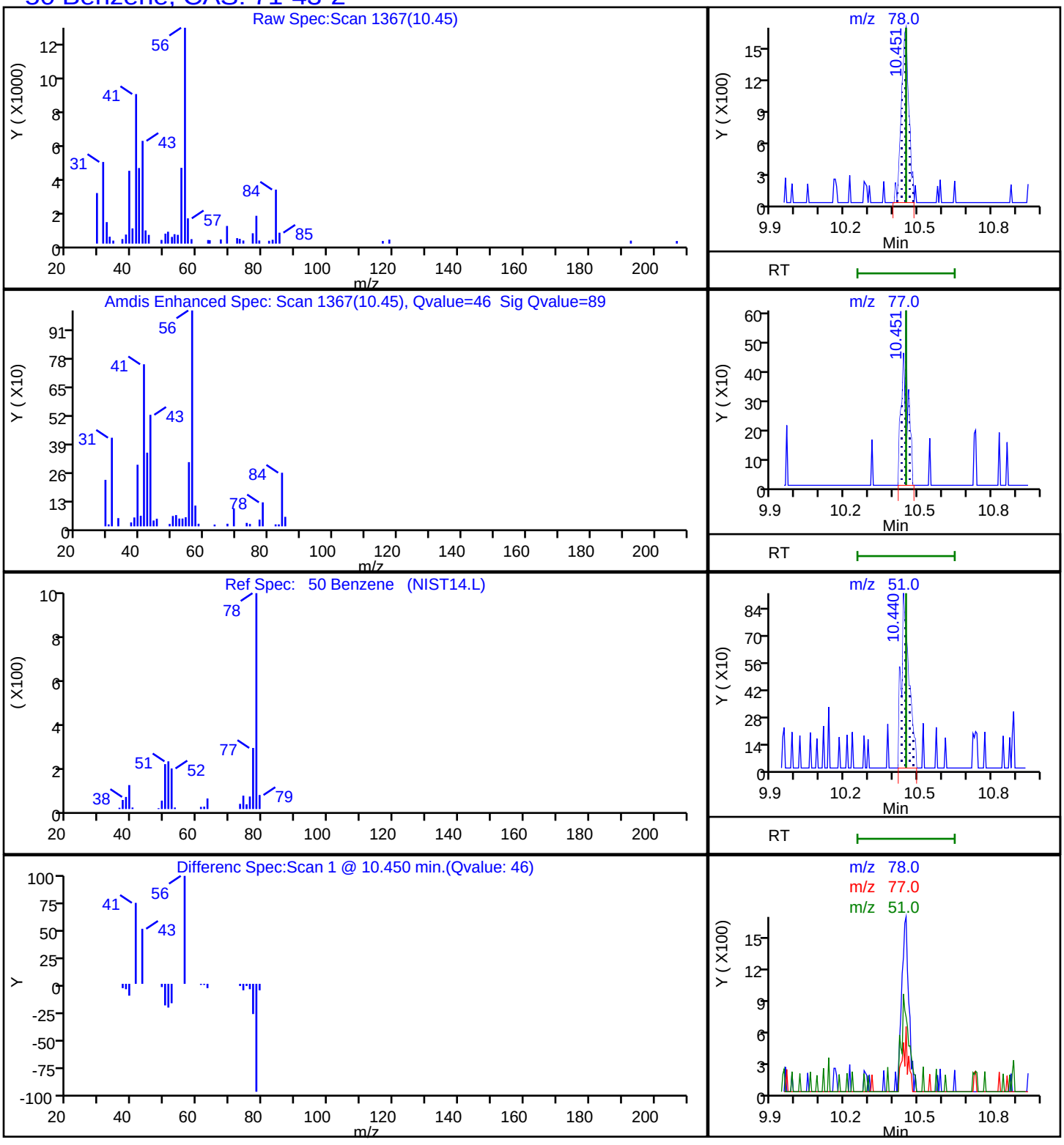
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	4.78	102.91

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200902-16486.b\GI03P114.D

Injection Date:	04-Sep-2020 00:41:30	Instrument ID:	MG		
Lims ID:	140-20175-A-16	Lab Sample ID:	140-20175-16		
Client ID:	SV-149-C-29				
Operator ID:	HMT	ALS Bottle#:	14	Worklist Smp#:	24
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

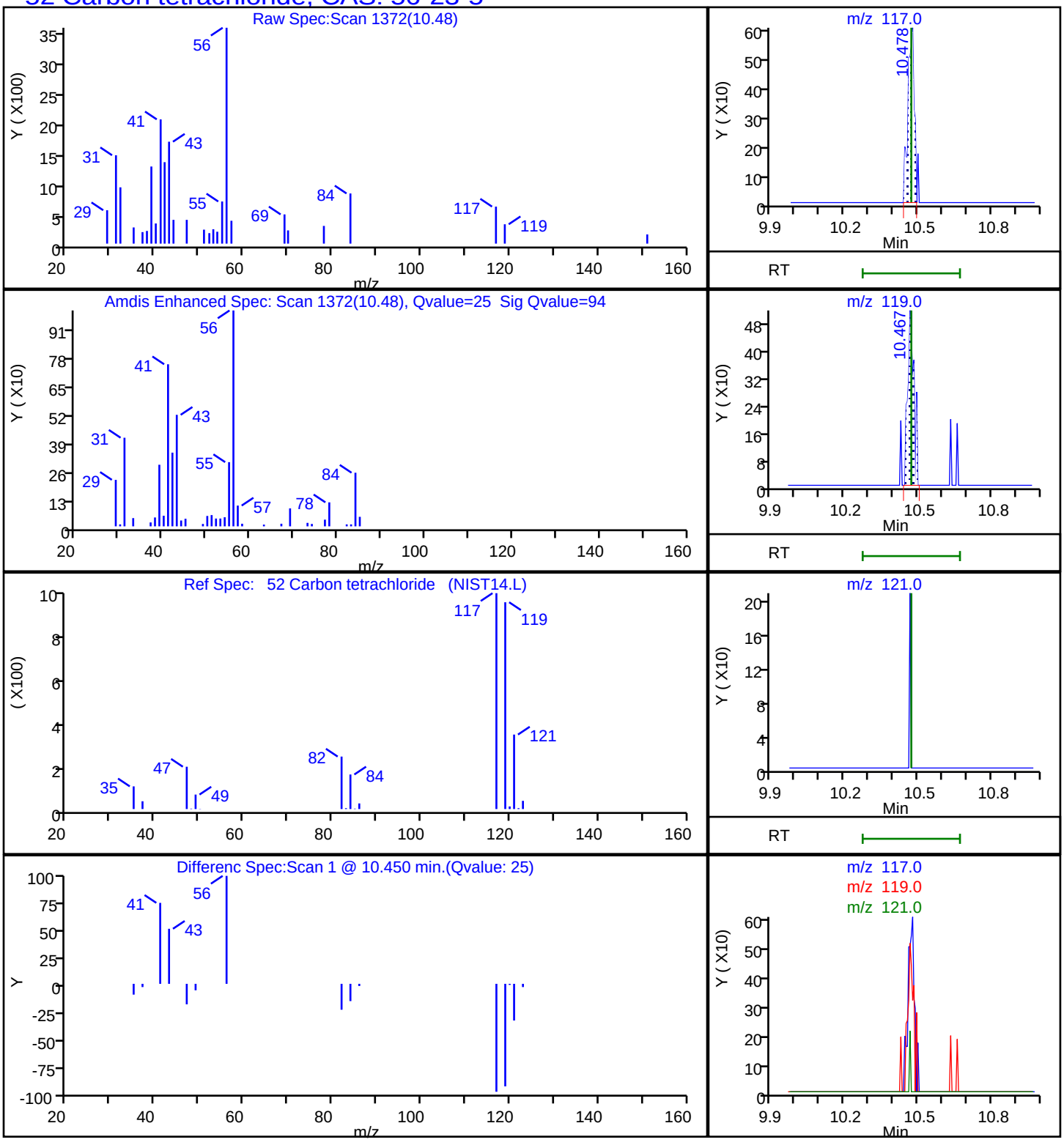
50 Benzene, CAS: 71-43-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200902-16486.b\GI03P114.D		
Injection Date:	04-Sep-2020 00:41:30	Instrument ID:	MG
Lims ID:	140-20175-A-16	Lab Sample ID:	140-20175-16
Client ID:	SV-149-C-29		
Operator ID:	HMT	ALS Bottle#:	14 Worklist Smp#: 24
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

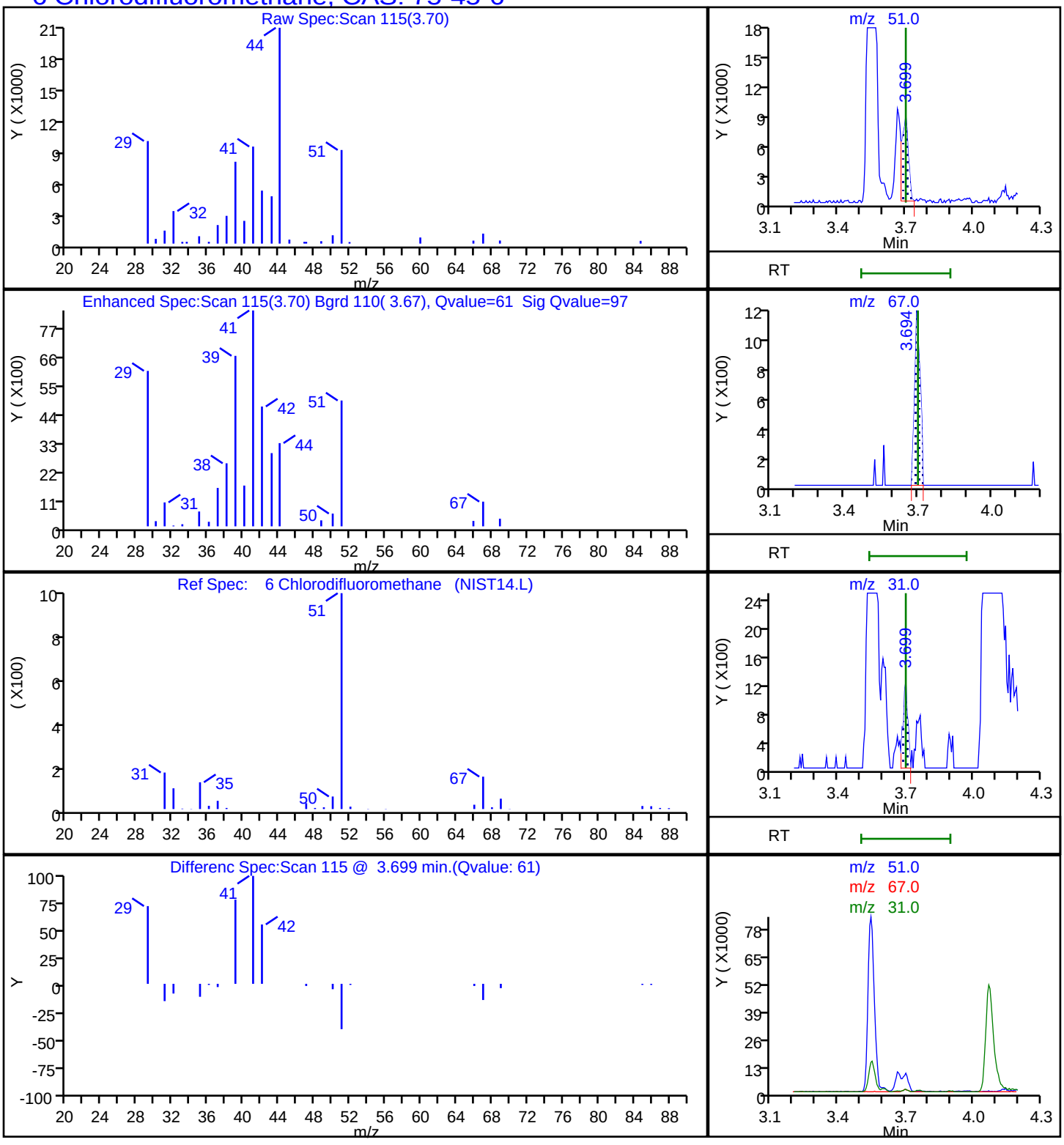
52 Carbon tetrachloride, CAS: 56-23-5



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200902-16486.b\GI03P114.D				
Injection Date:	04-Sep-2020 00:41:30	Instrument ID:	MG		
Lims ID:	140-20175-A-16	Lab Sample ID:	140-20175-16		
Client ID:	SV-149-C-29				
Operator ID:	HMT	ALS Bottle#:	14	Worklist Smp#:	24
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

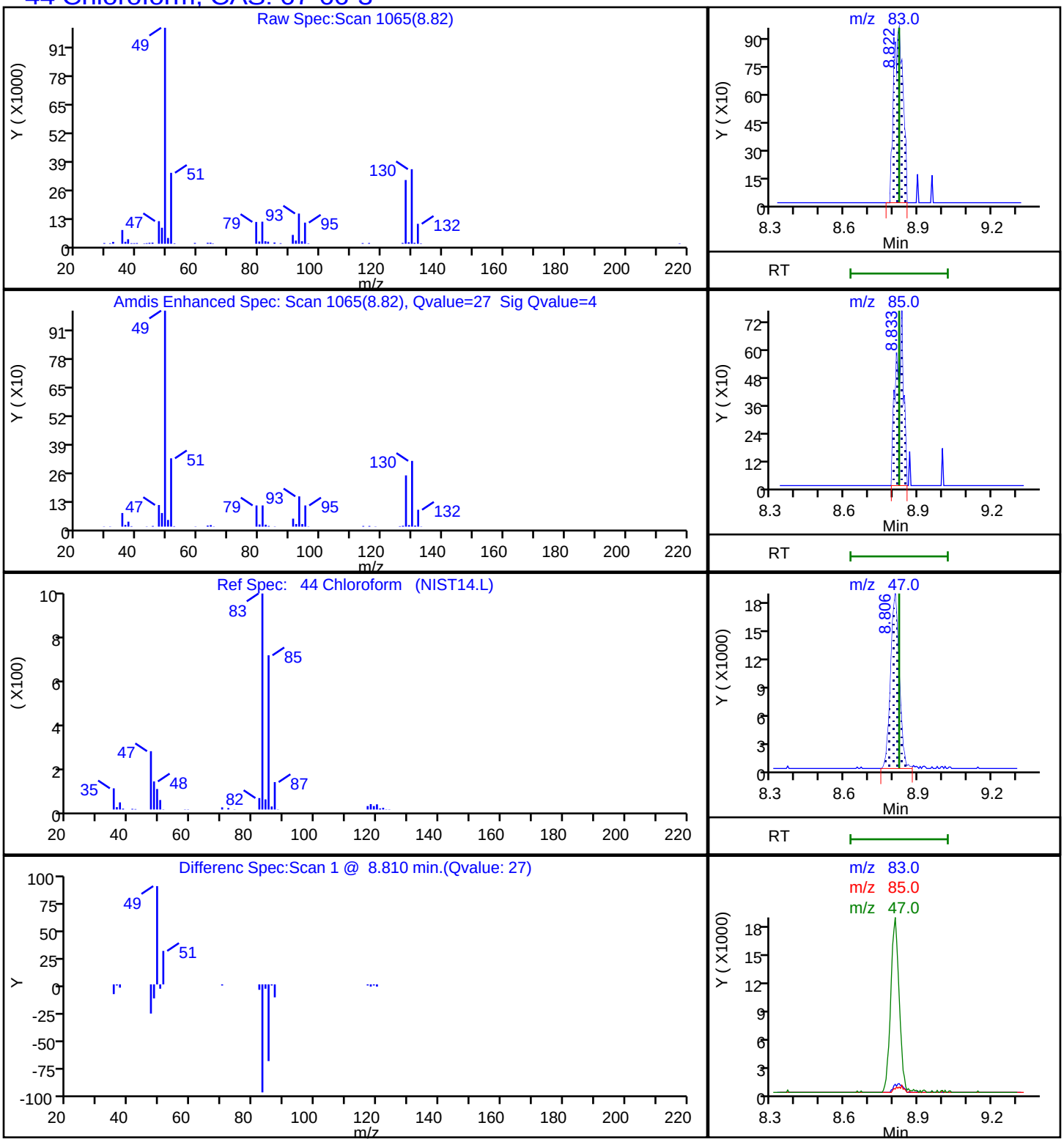
6 Chlorodifluoromethane, CAS: 75-45-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200902-16486.b\GI03P114.D				
Injection Date:	04-Sep-2020 00:41:30	Instrument ID:	MG		
Lims ID:	140-20175-A-16	Lab Sample ID:	140-20175-16		
Client ID:	SV-149-C-29				
Operator ID:	HMT	ALS Bottle#:	14	Worklist Smp#:	24
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

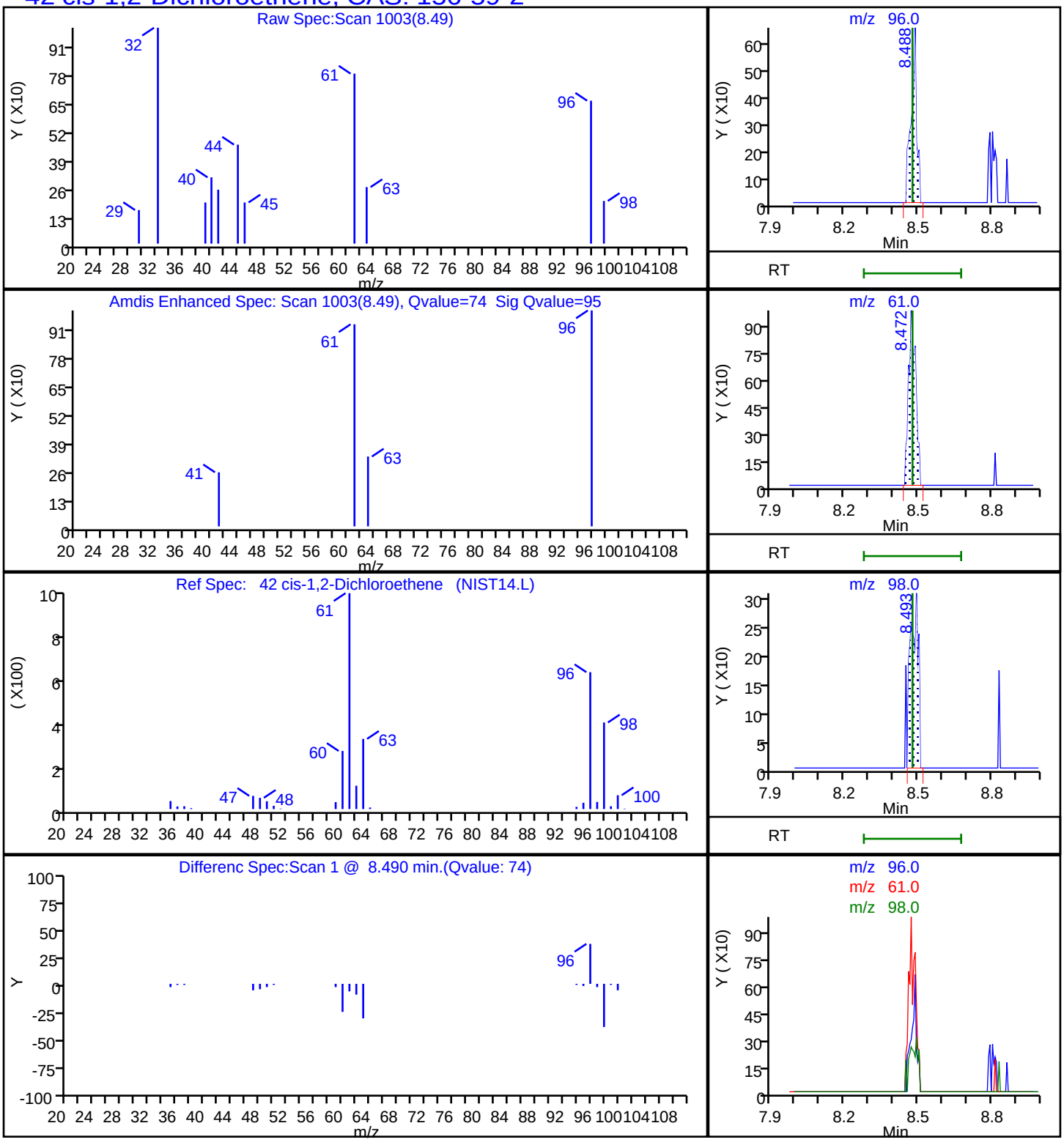
44 Chloroform, CAS: 67-66-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200902-16486.b\GI03P114.D				
Injection Date:	04-Sep-2020 00:41:30	Instrument ID:	MG		
Lims ID:	140-20175-A-16	Lab Sample ID:	140-20175-16		
Client ID:	SV-149-C-29				
Operator ID:	HMT	ALS Bottle#:	14	Worklist Smp#:	24
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

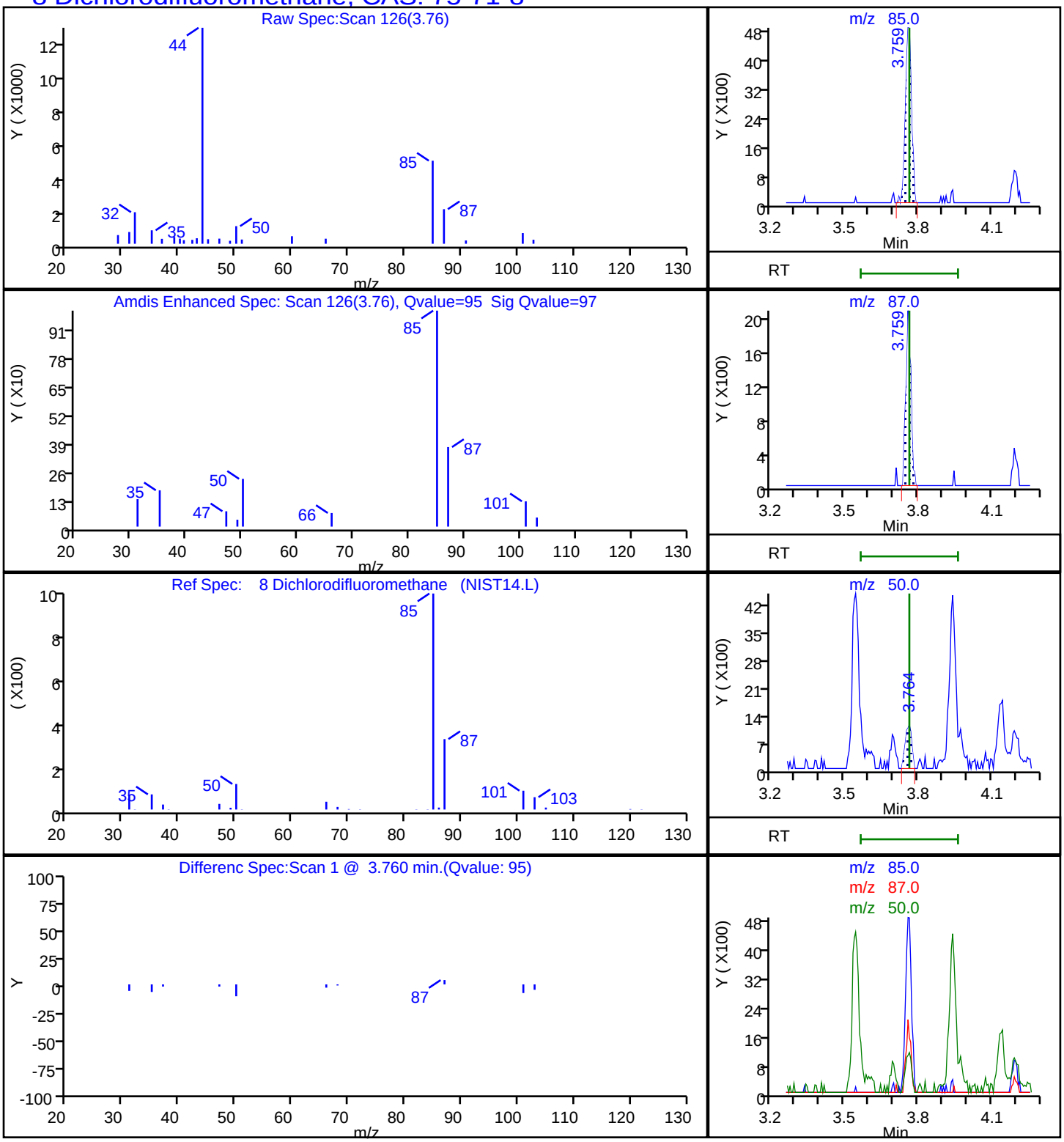
42 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200902-16486.b\GI03P114.D				
Injection Date:	04-Sep-2020 00:41:30	Instrument ID:	MG		
Lims ID:	140-20175-A-16	Lab Sample ID:	140-20175-16		
Client ID:	SV-149-C-29				
Operator ID:	HMT	ALS Bottle#:	14	Worklist Smp#:	24
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

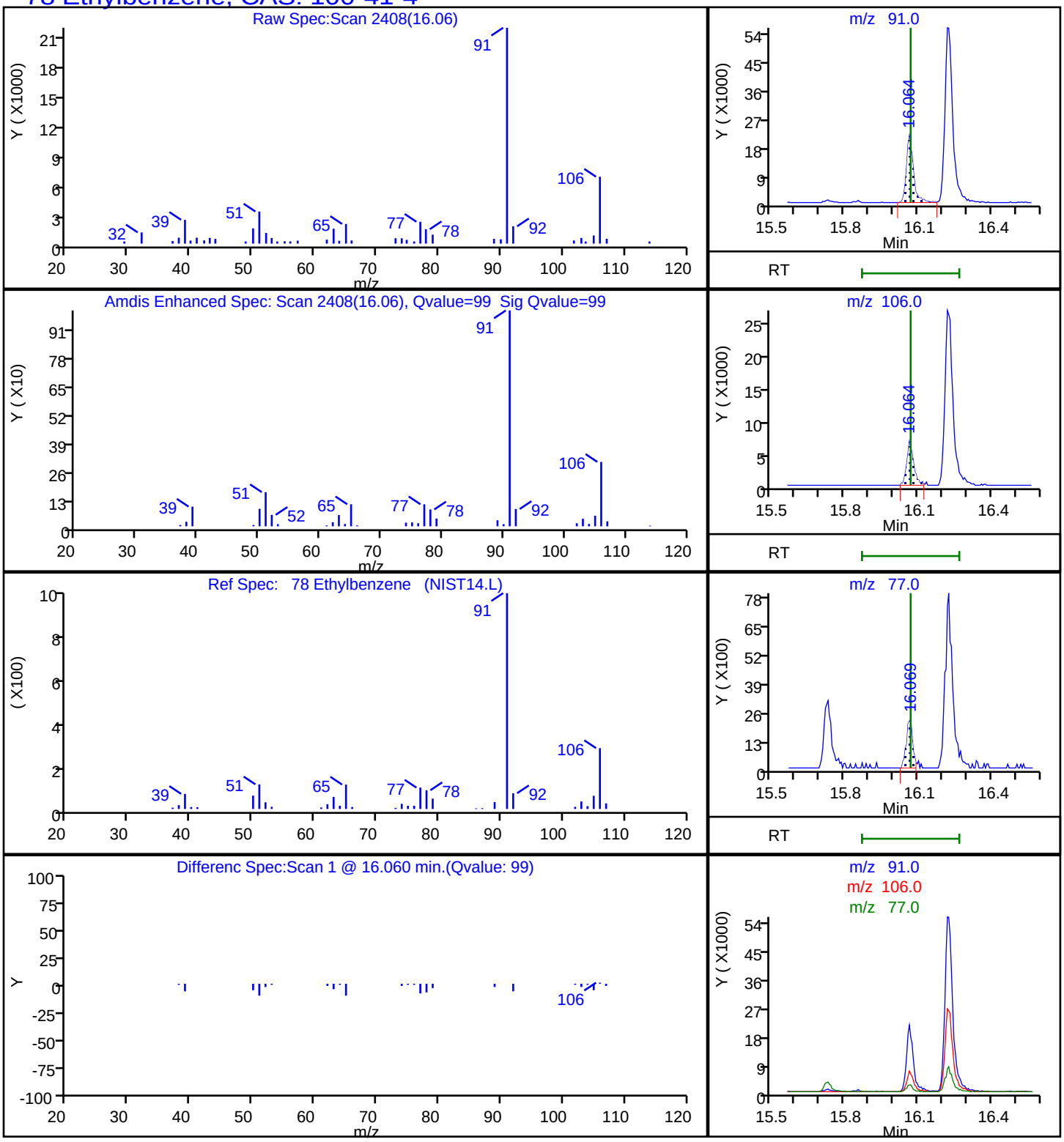
8 Dichlorodifluoromethane, CAS: 75-71-8



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200902-16486.b\GI03P114.D				
Injection Date:	04-Sep-2020 00:41:30	Instrument ID:	MG		
Lims ID:	140-20175-A-16	Lab Sample ID:	140-20175-16		
Client ID:	SV-149-C-29				
Operator ID:	HMT	ALS Bottle#:	14	Worklist Smp#:	24
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

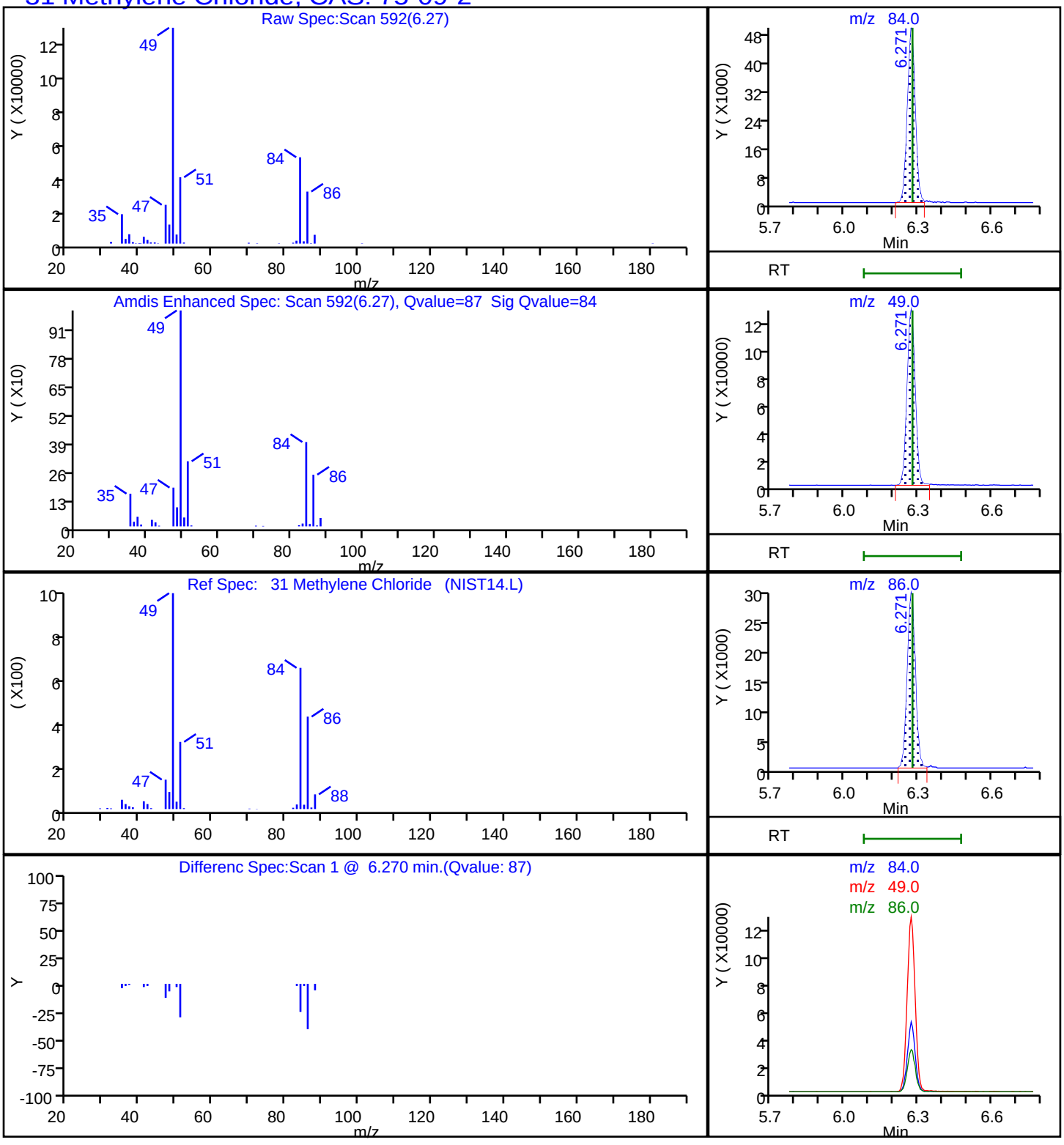
78 Ethylbenzene, CAS: 100-41-4



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200902-16486.b\GI03P114.D				
Injection Date:	04-Sep-2020 00:41:30	Instrument ID:	MG		
Lims ID:	140-20175-A-16	Lab Sample ID:	140-20175-16		
Client ID:	SV-149-C-29				
Operator ID:	HMT	ALS Bottle#:	14	Worklist Smp#:	24
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

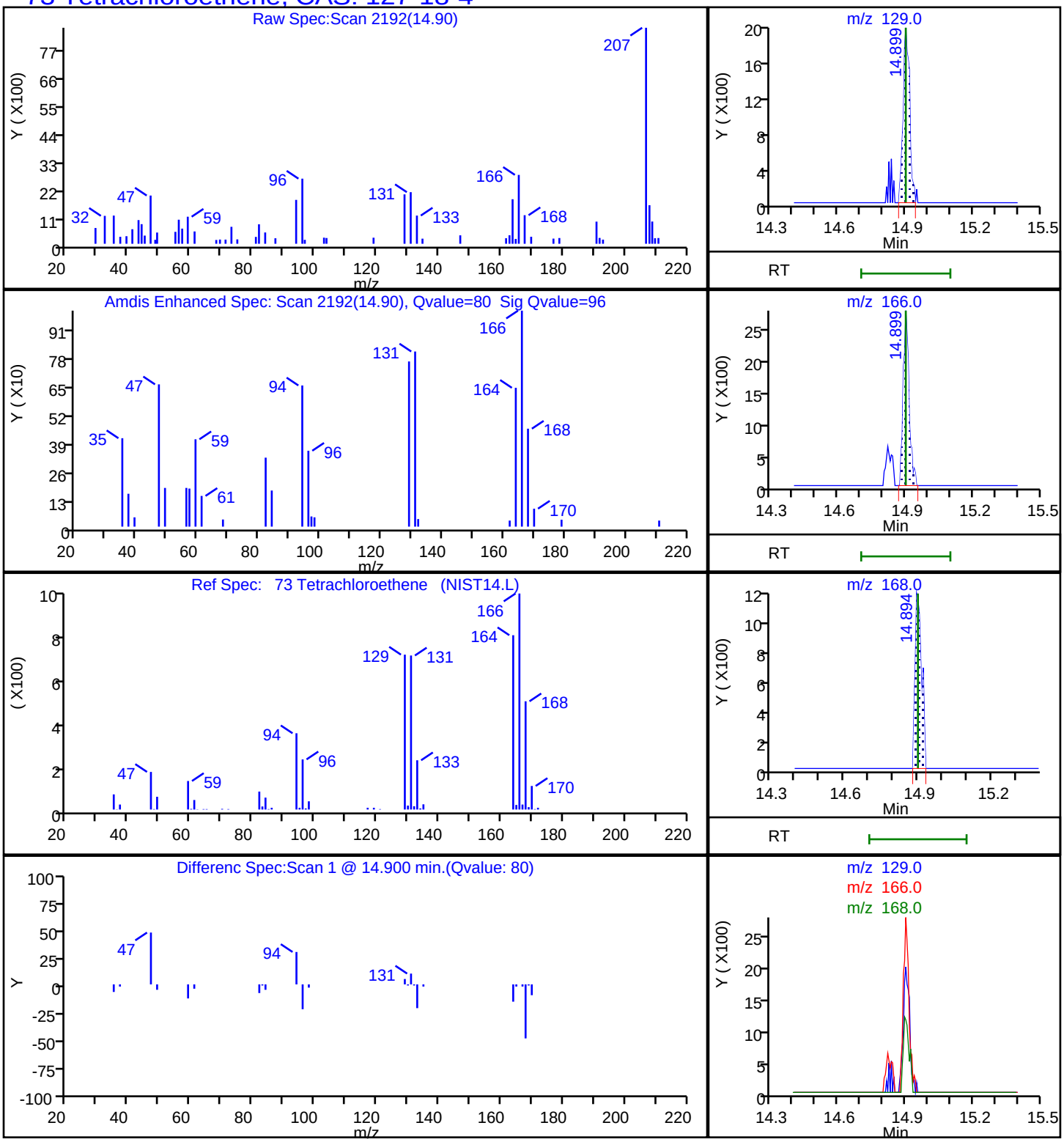
31 Methylene Chloride, CAS: 75-09-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200902-16486.b\GI03P114.D		
Injection Date:	04-Sep-2020 00:41:30	Instrument ID:	MG
Lims ID:	140-20175-A-16	Lab Sample ID:	140-20175-16
Client ID:	SV-149-C-29		
Operator ID:	HMT	ALS Bottle#:	14 Worklist Smp#: 24
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

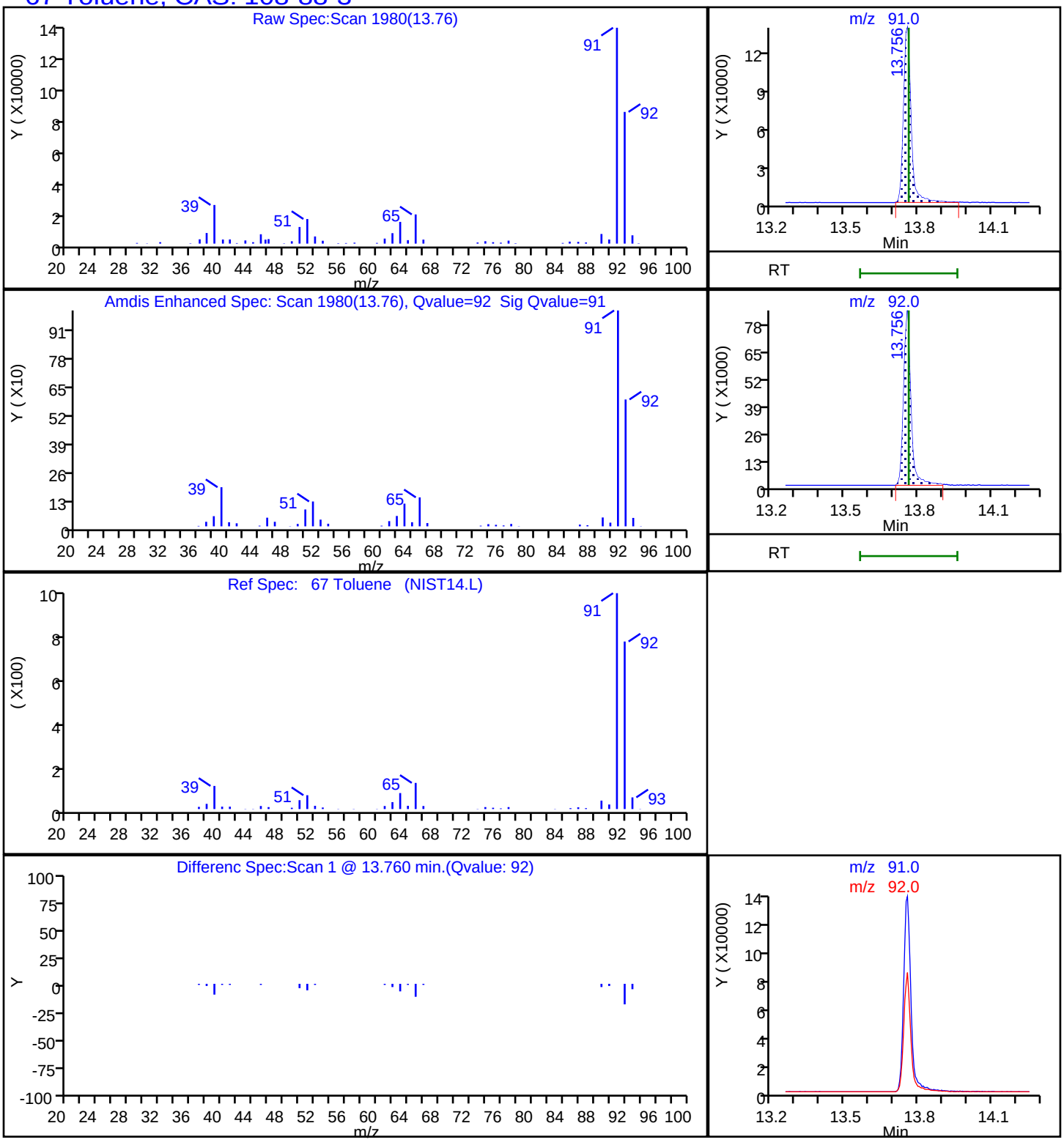
73 Tetrachloroethene, CAS: 127-18-4



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200902-16486.b\GI03P114.D		
Injection Date:	04-Sep-2020 00:41:30	Instrument ID:	MG
Lims ID:	140-20175-A-16	Lab Sample ID:	140-20175-16
Client ID:	SV-149-C-29		
Operator ID:	HMT	ALS Bottle#:	14 Worklist Smp#: 24
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

67 Toluene, CAS: 108-88-3

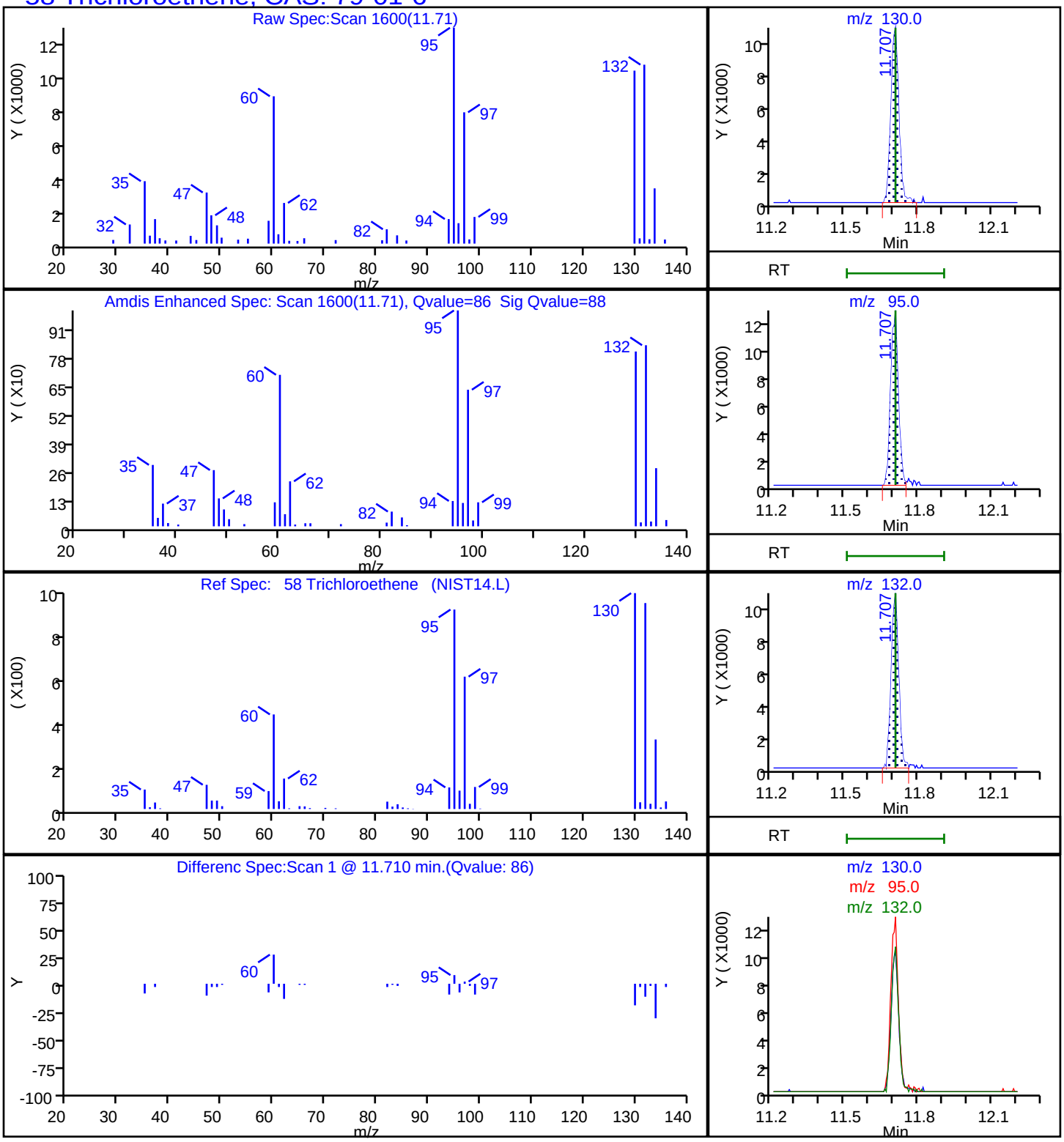


Report Date: 04-Sep-2020 13:03:22 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200902-16486.b\GI03P114.D		
Injection Date:	04-Sep-2020 00:41:30	Instrument ID:	MG
Lims ID:	140-20175-A-16	Lab Sample ID:	140-20175-16
Client ID:	SV-149-C-29		
Operator ID:	HMT	ALS Bottle#:	14 Worklist Smp#: 24
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

58 Trichloroethene, CAS: 79-01-6

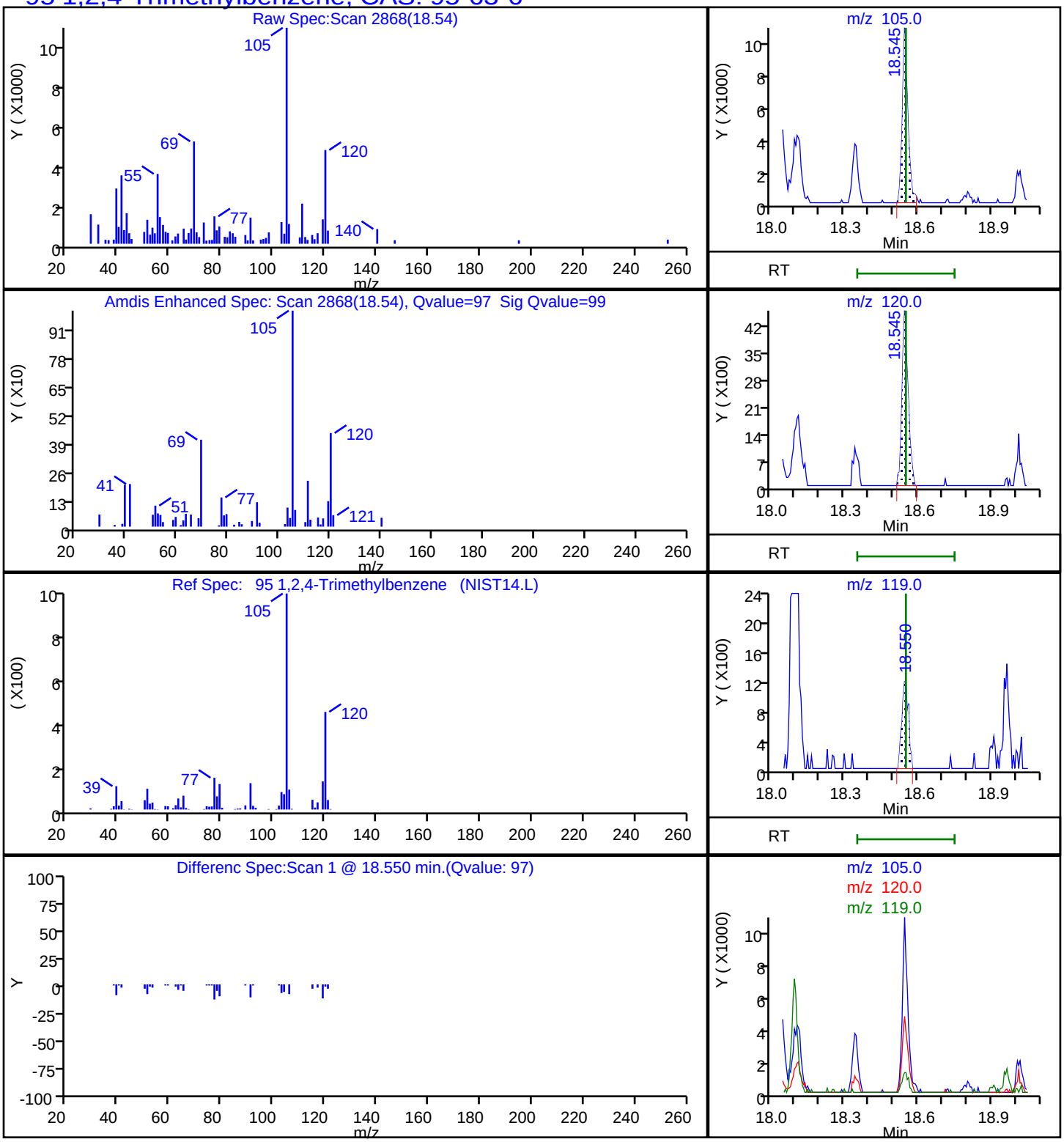


Report Date: 04-Sep-2020 13:03:22 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200902-16486.b\GI03P114.D				
Injection Date:	04-Sep-2020 00:41:30	Instrument ID:	MG		
Lims ID:	140-20175-A-16	Lab Sample ID:	140-20175-16		
Client ID:	SV-149-C-29				
Operator ID:	HMT	ALS Bottle#:	14	Worklist Smp#:	24
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

95 1,2,4-Trimethylbenzene, CAS: 95-63-6

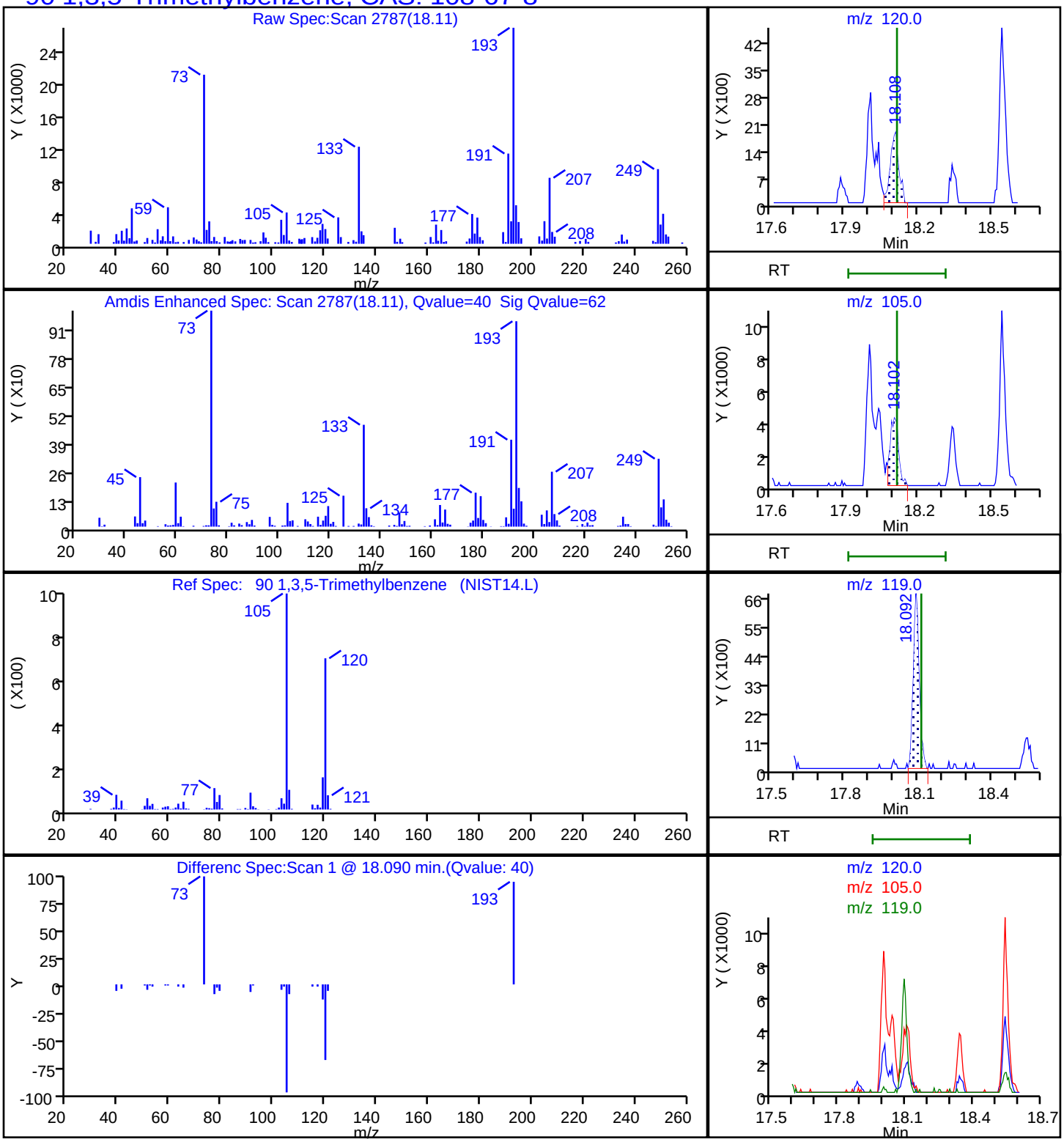


Report Date: 04-Sep-2020 13:03:22 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200902-16486.b\GI03P114.D				
Injection Date:	04-Sep-2020 00:41:30	Instrument ID:	MG		
Lims ID:	140-20175-A-16	Lab Sample ID:	140-20175-16		
Client ID:	SV-149-C-29				
Operator ID:	HMT	ALS Bottle#:	14	Worklist Smp#:	24
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

90 1,3,5-Trimethylbenzene, CAS: 108-67-8

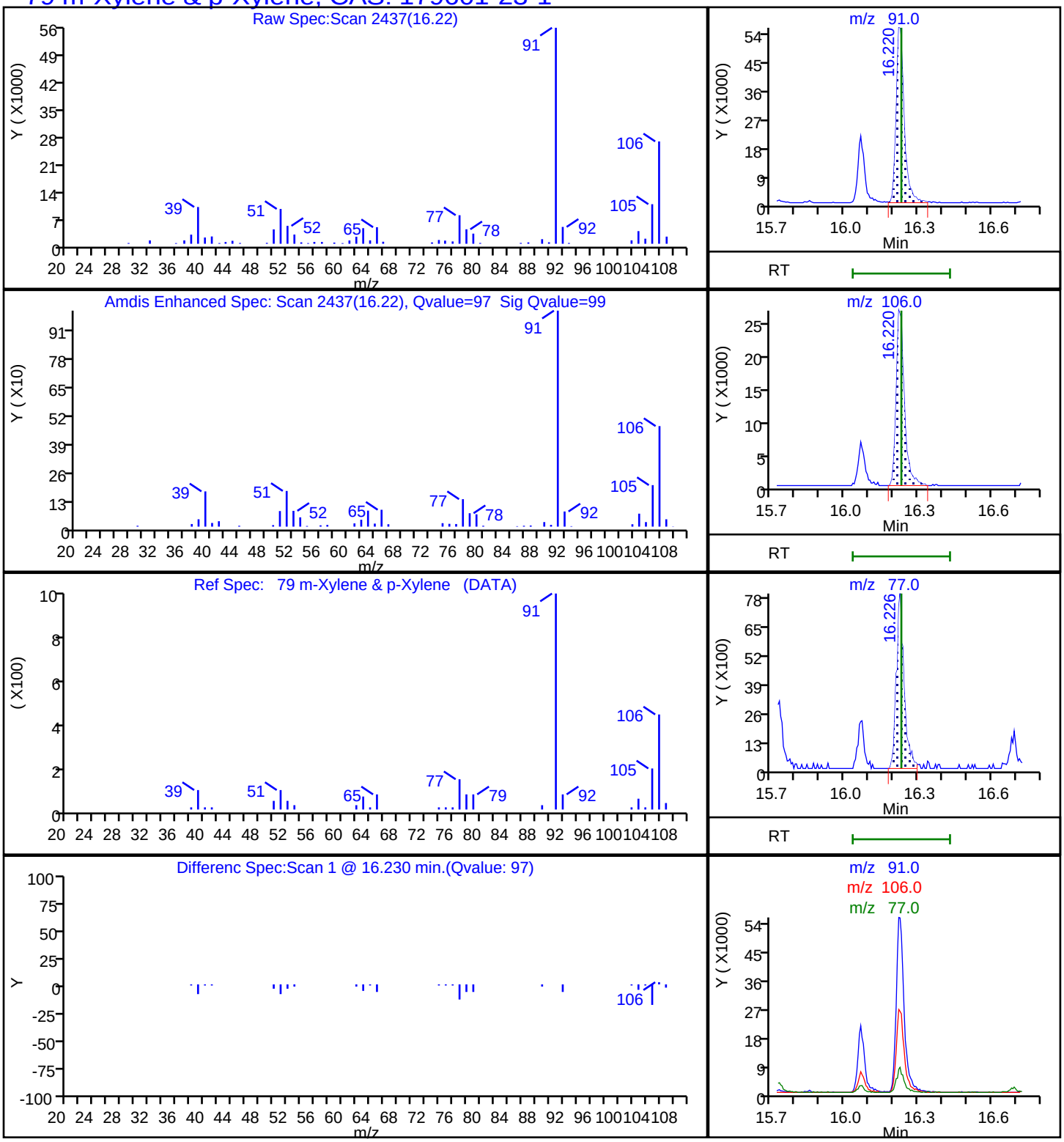


Report Date: 04-Sep-2020 13:03:22 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200902-16486.b\GI03P114.D				
Injection Date:	04-Sep-2020 00:41:30	Instrument ID:	MG		
Lims ID:	140-20175-A-16	Lab Sample ID:	140-20175-16		
Client ID:	SV-149-C-29				
Operator ID:	HMT	ALS Bottle#:	14	Worklist Smp#:	24
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

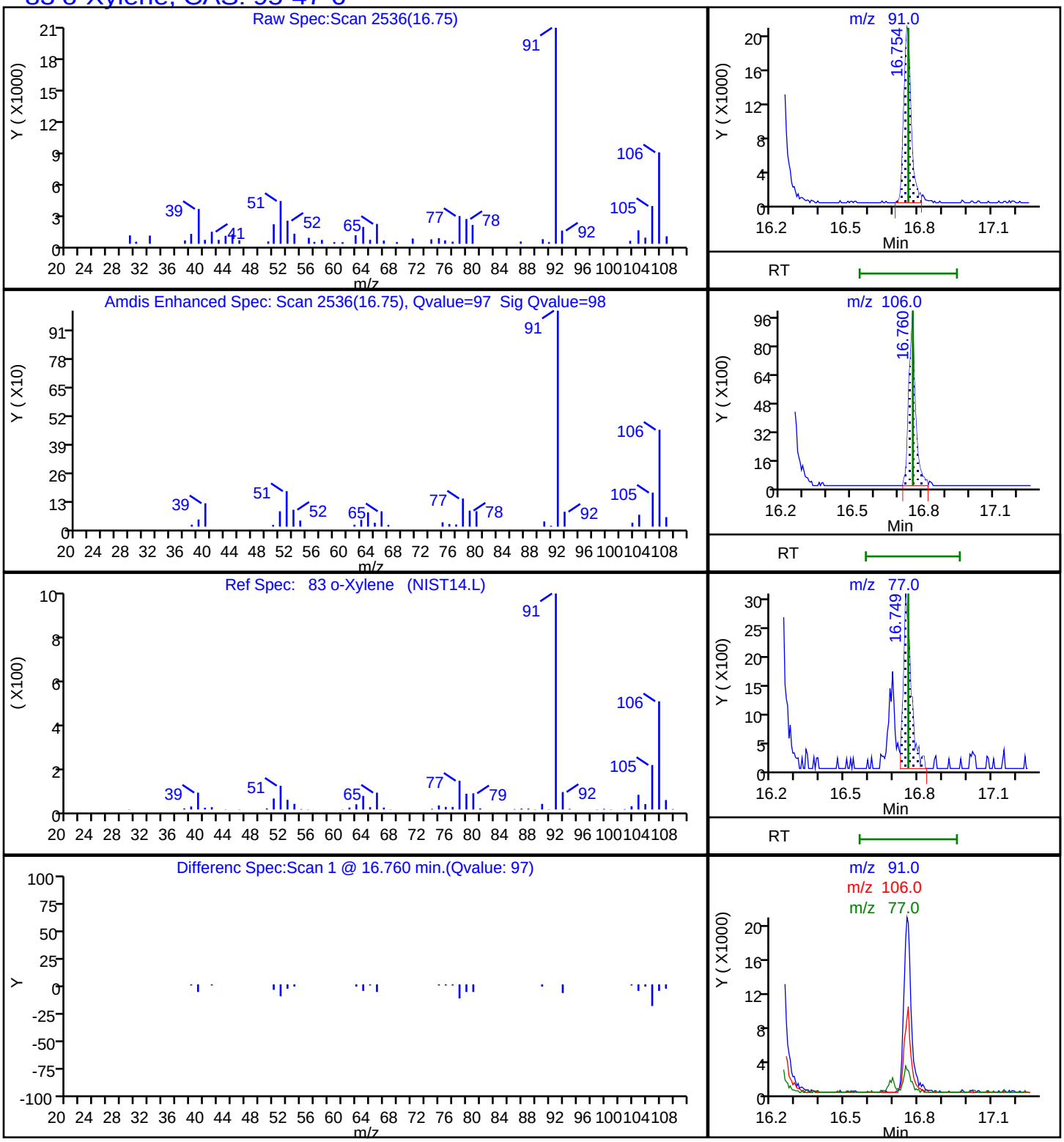
79 m-Xylene & p-Xylene, CAS: 179601-23-1



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200902-16486.b\GI03P114.D				
Injection Date:	04-Sep-2020 00:41:30	Instrument ID:	MG		
Lims ID:	140-20175-A-16	Lab Sample ID:	140-20175-16		
Client ID:	SV-149-C-29				
Operator ID:	HMT	ALS Bottle#:	14	Worklist Smp#:	24
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

83 o-Xylene, CAS: 95-47-6



Eurofins TestAmerica, Knoxville

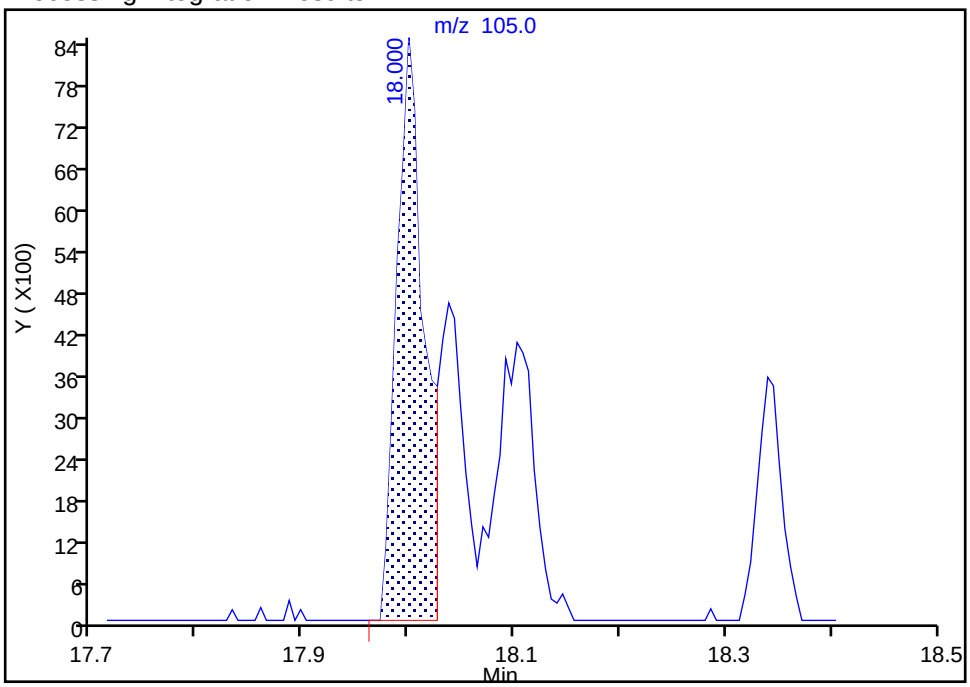
Data File:	\\chromfs\Knoxville\ChromData\MG\20200902-16486.b\GI03P114.D				
Injection Date:	04-Sep-2020 00:41:30	Instrument ID:	MG		
Lims ID:	140-20175-A-16	Lab Sample ID:	140-20175-16		
Client ID:	SV-149-C-29				
Operator ID:	HMT	ALS Bottle#:	14	Worklist Smp#:	24
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

90 1,3,5-Trimethylbenzene, CAS: 108-67-8

Signal: 2

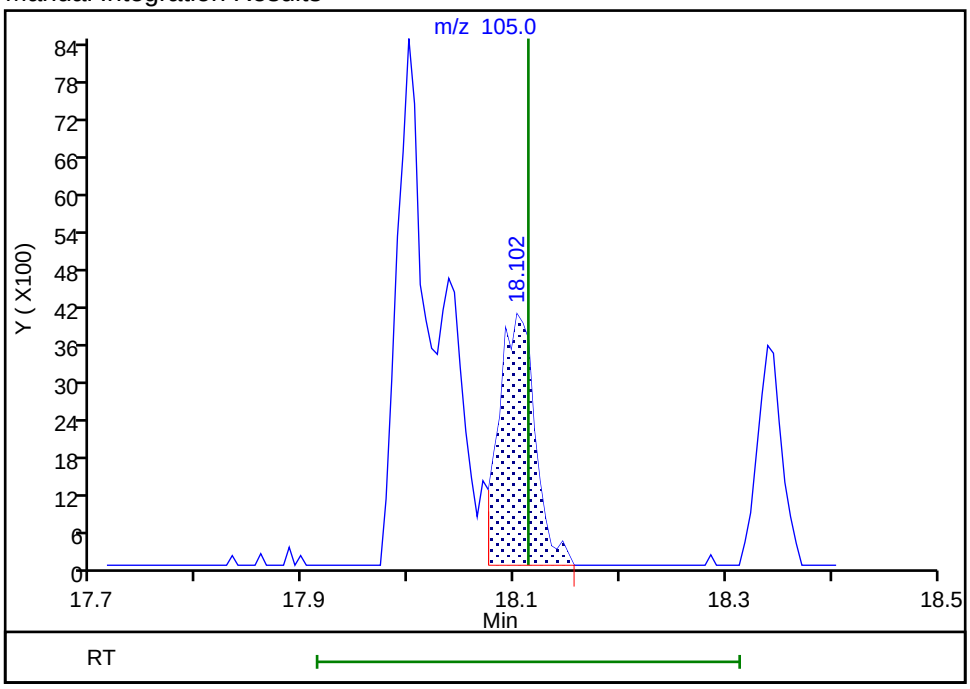
Processing Integration Results

RT: 18.00
Area: 15177
Amount: 0.092671
Amount Units: ppb v/v



Manual Integration Results

RT: 18.10
Area: 9535
Amount: 0.063455
Amount Units: ppb v/v



Reviewer: khachitpongpanits, 04-Sep-2020 13:02:46
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Knoxville

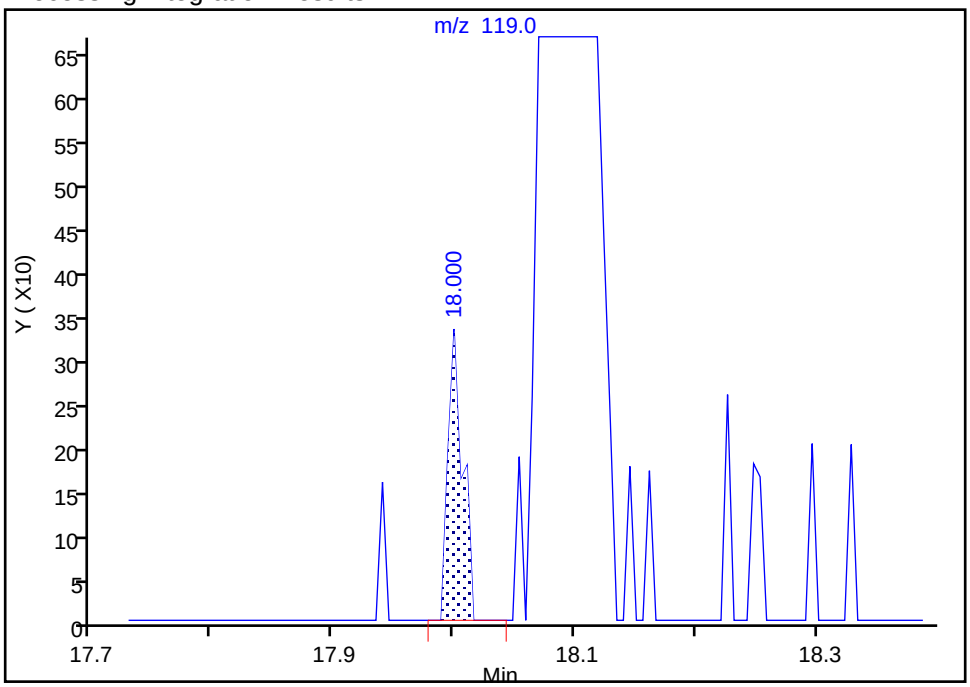
Data File:	\\chromfs\Knoxville\ChromData\MG\20200902-16486.b\GI03P114.D				
Injection Date:	04-Sep-2020 00:41:30	Instrument ID:	MG		
Lims ID:	140-20175-A-16	Lab Sample ID:	140-20175-16		
Client ID:	SV-149-C-29				
Operator ID:	HMT	ALS Bottle#:	14	Worklist Smp#:	24
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

90 1,3,5-Trimethylbenzene, CAS: 108-67-8

Signal: 3

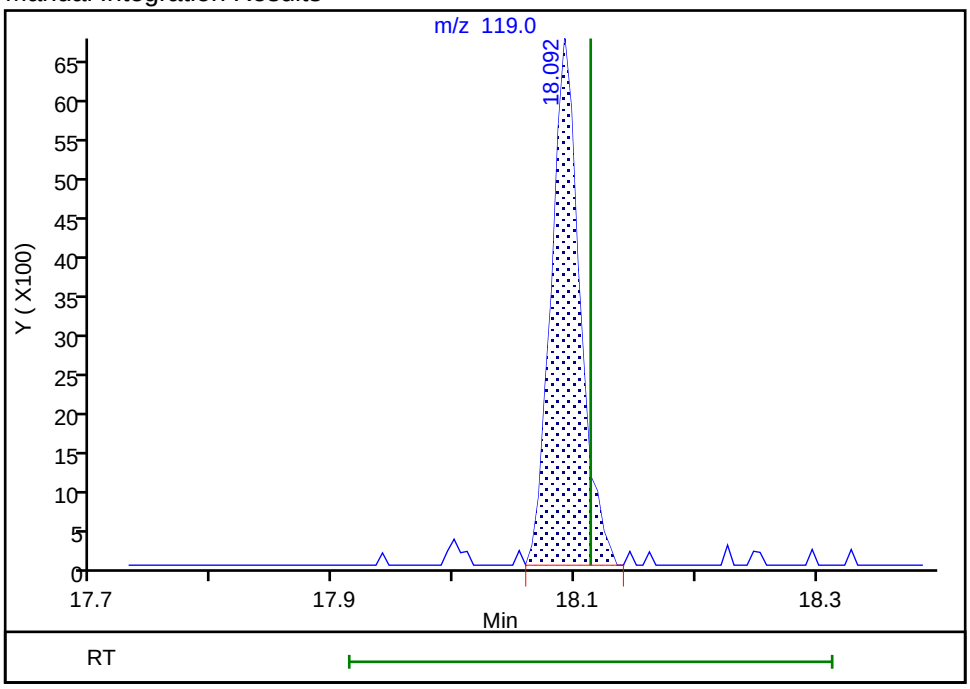
Processing Integration Results

RT: 18.00
Area: 276
Amount: 0.092671
Amount Units: ppb v/v



Manual Integration Results

RT: 18.09
Area: 11098
Amount: 0.063455
Amount Units: ppb v/v



Reviewer: khachitpongpanits, 04-Sep-2020 13:02:46
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: SV-126-C-29 Lab Sample ID: 140-20175-17

Matrix: Air Lab File ID: GI08P104R.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 10:56

Sample wt/vol: 100(mL) Date Analyzed: 09/09/2020 07:56

Soil Aliquot Vol: Dilution Factor: 12.39

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42503 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	71		5.0	0.50
56-23-5	Carbon tetrachloride	153.81	ND		5.0	0.43
75-45-6	Chlorodifluoromethane	86.47	ND		5.0	1.4
67-66-3	Chloroform	119.38	ND		5.0	0.43
156-59-2	cis-1,2-Dichloroethene	96.94	37		5.0	0.62
75-71-8	Dichlorodifluoromethane	120.91	ND		5.0	0.87
75-34-3	1,1-Dichloroethane	98.96	ND		5.0	0.43
107-06-2	1,2-Dichloroethane	98.96	ND		5.0	0.62
75-35-4	1,1-Dichloroethene	96.94	55		5.0	0.50
100-41-4	Ethylbenzene	106.17	3.7	J	5.0	0.81
75-09-2	Methylene Chloride	84.93	ND		25	24
1634-04-4	Methyl tert-butyl ether	88.15	ND		25	3.2
91-20-3	Naphthalene	128.17	ND		2.5	2.5
127-18-4	Tetrachloroethene	165.83	ND		5.0	0.43
108-88-3	Toluene	92.14	7.1	J	7.4	4.8
156-60-5	trans-1,2-Dichloroethene	96.94	6.0		5.0	0.43
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		5.0	4.0
71-55-6	1,1,1-Trichloroethane	133.41	ND		5.0	2.3
79-00-5	1,1,2-Trichloroethane	133.41	ND		5.0	0.43
79-01-6	Trichloroethene	131.39	58		2.5	0.37
526-73-8	1,2,3-Trimethylbenzene	120.19	ND	*	5.0	2.2
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		5.0	1.2
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		5.0	1.4
75-01-4	Vinyl chloride	62.50	310		2.5	1.6
1330-20-7	Xylenes, Total	106.17	13		9.9	1.5

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	101		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: SV-126-C-29 Lab Sample ID: 140-20175-17

Matrix: Air Lab File ID: GI08P104R.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 10:56

Sample wt/vol: 100(mL) Date Analyzed: 09/09/2020 07:56

Soil Aliquot Vol: Dilution Factor: 12.39

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42503 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	230		16	1.6
56-23-5	Carbon tetrachloride	153.81	ND		31	2.7
75-45-6	Chlorodifluoromethane	86.47	ND		18	4.8
67-66-3	Chloroform	119.38	ND		24	2.1
156-59-2	cis-1,2-Dichloroethene	96.94	150		20	2.5
75-71-8	Dichlorodifluoromethane	120.91	ND		25	4.3
75-34-3	1,1-Dichloroethane	98.96	ND		20	1.8
107-06-2	1,2-Dichloroethane	98.96	ND		20	2.5
75-35-4	1,1-Dichloroethene	96.94	220		20	2.0
100-41-4	Ethylbenzene	106.17	16	J	22	3.5
75-09-2	Methylene Chloride	84.93	ND		86	84
1634-04-4	Methyl tert-butyl ether	88.15	ND		89	12
91-20-3	Naphthalene	128.17	ND		13	13
127-18-4	Tetrachloroethene	165.83	ND		34	2.9
108-88-3	Toluene	92.14	27	J	28	18
156-60-5	trans-1,2-Dichloroethene	96.94	24		20	1.7
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		37	29
71-55-6	1,1,1-Trichloroethane	133.41	ND		27	13
79-00-5	1,1,2-Trichloroethane	133.41	ND		27	2.4
79-01-6	Trichloroethene	131.39	310		13	2.0
526-73-8	1,2,3-Trimethylbenzene	120.19	ND	*	24	11
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		24	6.1
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		24	6.7
75-01-4	Vinyl chloride	62.50	790		6.3	4.1
1330-20-7	Xylenes, Total	106.17	55		43	6.5

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	101		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P104R.D
Lims ID: 140-20175-A-17
Client ID: SV-126-C-29
Sample Type: Client
Inject. Date: 09-Sep-2020 07:56:30 ALS Bottle#: 4 Worklist Smp#: 27
Purge Vol: 500.000 mL Dil. Factor: 12.3900
Sample Info: 140-0016519-027
Misc. Info.: 140-20175-a-17@12.39
Operator ID: HMT Instrument ID: MG

Method: \\chromfs\Knoxville\ChromData\MG\20200904-16519.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 09-Sep-2020 14:19:05 Calib Date: 02-Sep-2020 03:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1034

First Level Reviewer: barlozhetskayaa Date: 09-Sep-2020 14:19:39

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.806	8.806	0.000	85	78300	4.80	
* 2 1,4-Difluorobenzene	114	10.990	10.990	0.000	98	366946	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.724	15.724	0.000	96	398277	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.369	17.369	0.000	79	292165	4.67	
12 Vinyl chloride	62	4.115	4.109	0.005	99	194828	4.97	
27 1,1-Dichloroethene	96	5.921	5.917	0.000	90	17082	0.8850	
34 trans-1,2-Dichloroethene	96	7.075	7.081	-0.011	86	2209	0.0972	
42 cis-1,2-Dichloroethene	96	8.472	8.482	-0.010	94	14422	0.5971	
50 Benzene	78	10.440	10.445	-0.005	94	86338	1.14	
58 Trichloroethene	130	11.702	11.702	0.000	84	30700	0.9335	
67 Toluene	91	13.751	13.756	-0.005	92	10071	0.1147	
78 Ethylbenzene	91	16.064	16.064	0.000	97	6723	0.0596	
79 m-Xylene & p-Xylene	91	16.220	16.231	-0.011	96	12743	0.1427	
83 o-Xylene	91	16.749	16.754	-0.005	94	5684	0.0629	
S 124 Xylenes, Total	100				0		0.2056	

Reagents:

40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

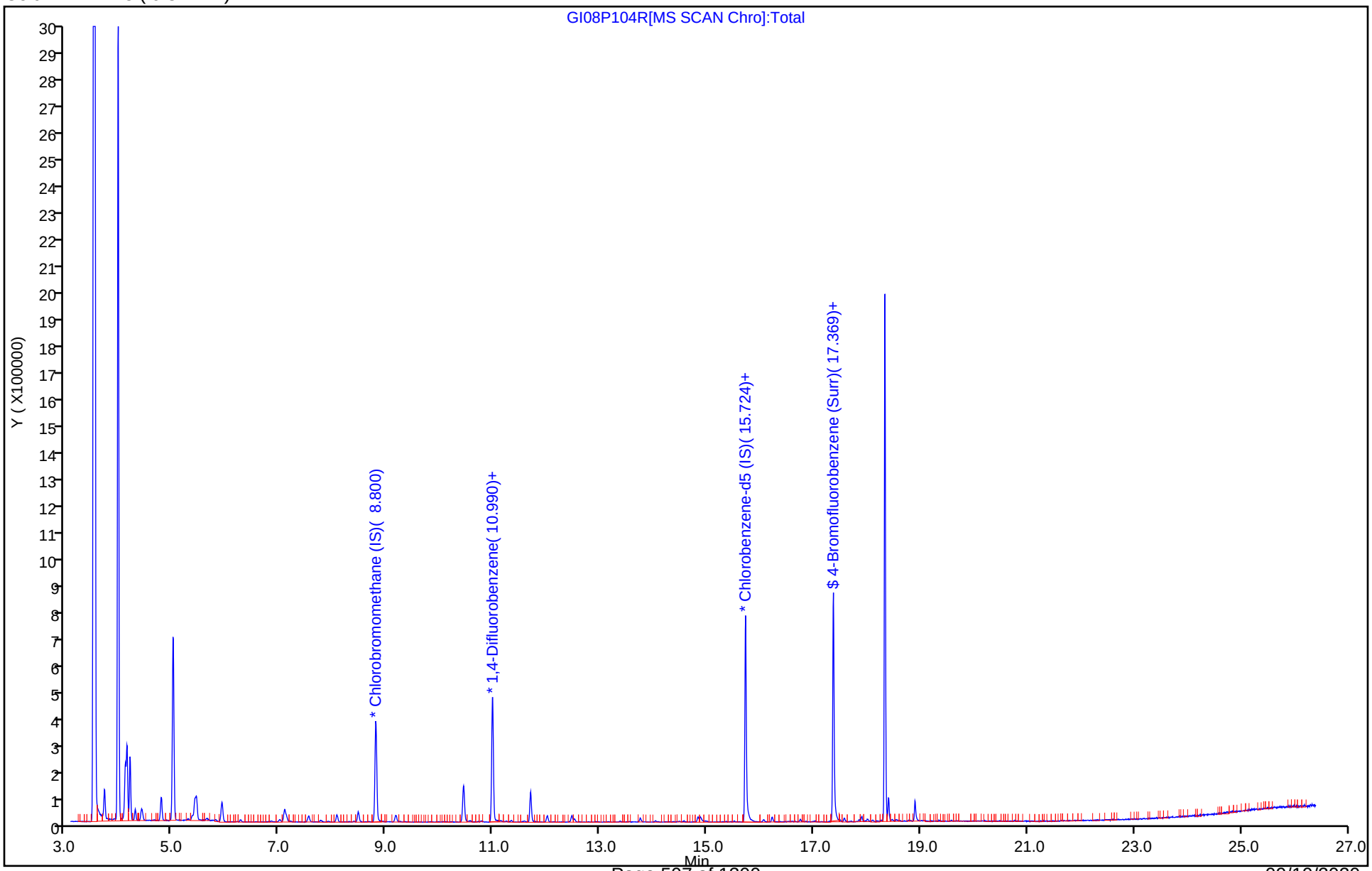
Report Date: 09-Sep-2020 14:19:40 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P104R.D

Injection Date:	09-Sep-2020 07:56:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	140-20175-A-17	Lab Sample ID:	140-20175-17	Worklist Smp#:	27
Client ID:	SV-126-C-29				
Purge Vol:	500.000 mL	Dil. Factor:	12.3900	ALS Bottle#:	4
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

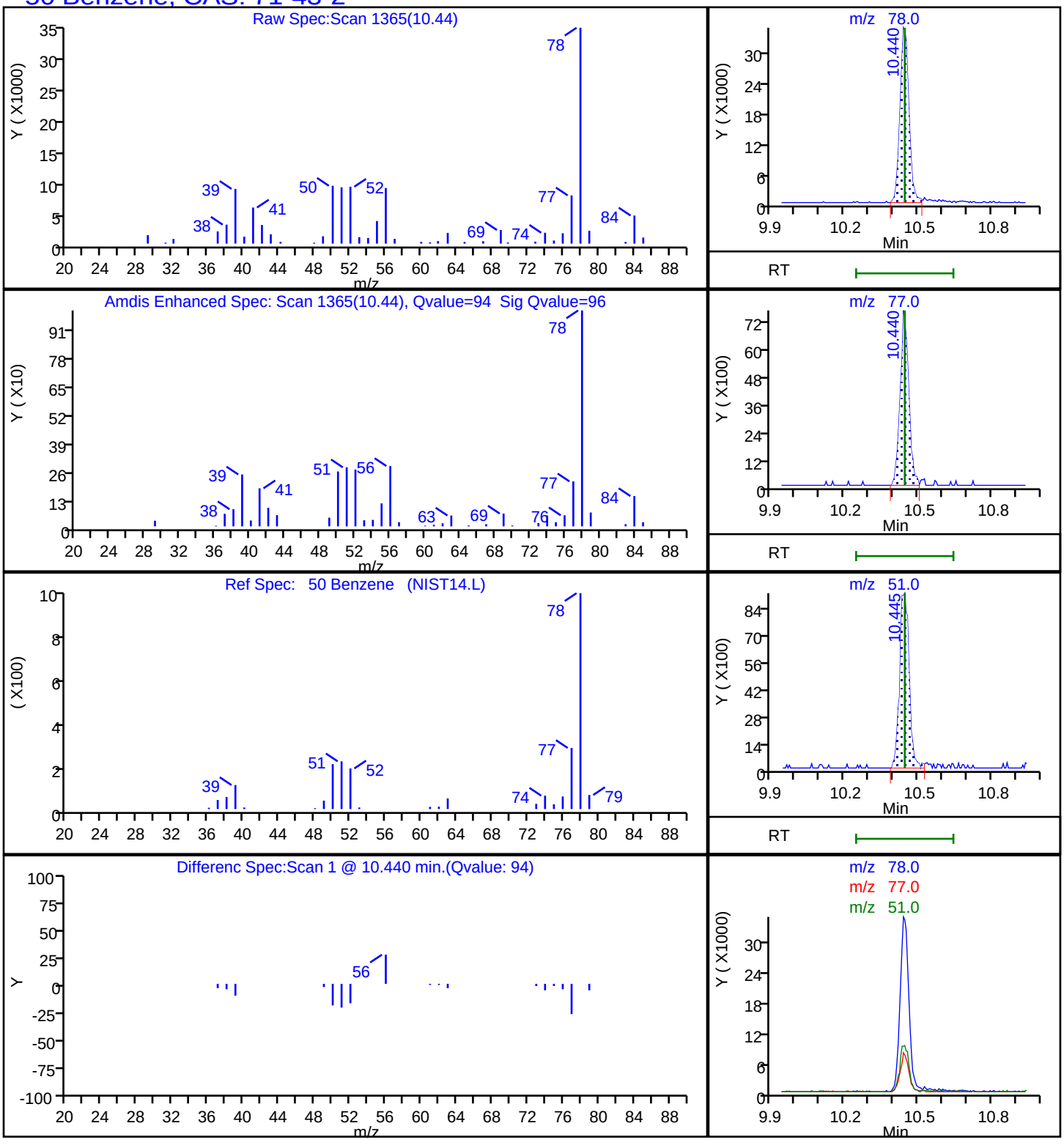
Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P104R.D				
Lims ID:	140-20175-A-17				
Client ID:	SV-126-C-29				
Sample Type:	Client				
Inject. Date:	09-Sep-2020 07:56:30	ALS Bottle#:	4	Worklist Smp#:	27
Purge Vol:	500.000 mL	Dil. Factor:	12.3900		
Sample Info:	140-0016519-027				
Misc. Info.:	140-20175-a-17@12.39				
Operator ID:	HMT	Instrument ID:	MG		
Method:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\MG_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	09-Sep-2020 14:19:05	Calib Date:	02-Sep-2020 03:27:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1034				
First Level Reviewer: barlozhetskayaa		Date:	09-Sep-2020 14:19:39		

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	4.67	100.75

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P104R.D		
Injection Date:	09-Sep-2020 07:56:30	Instrument ID:	MG
Lims ID:	140-20175-A-17	Lab Sample ID:	140-20175-17
Client ID:	SV-126-C-29		
Operator ID:	HMT	ALS Bottle#:	4 Worklist Smp#: 27
Purge Vol:	500.000 mL	Dil. Factor:	12.3900
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

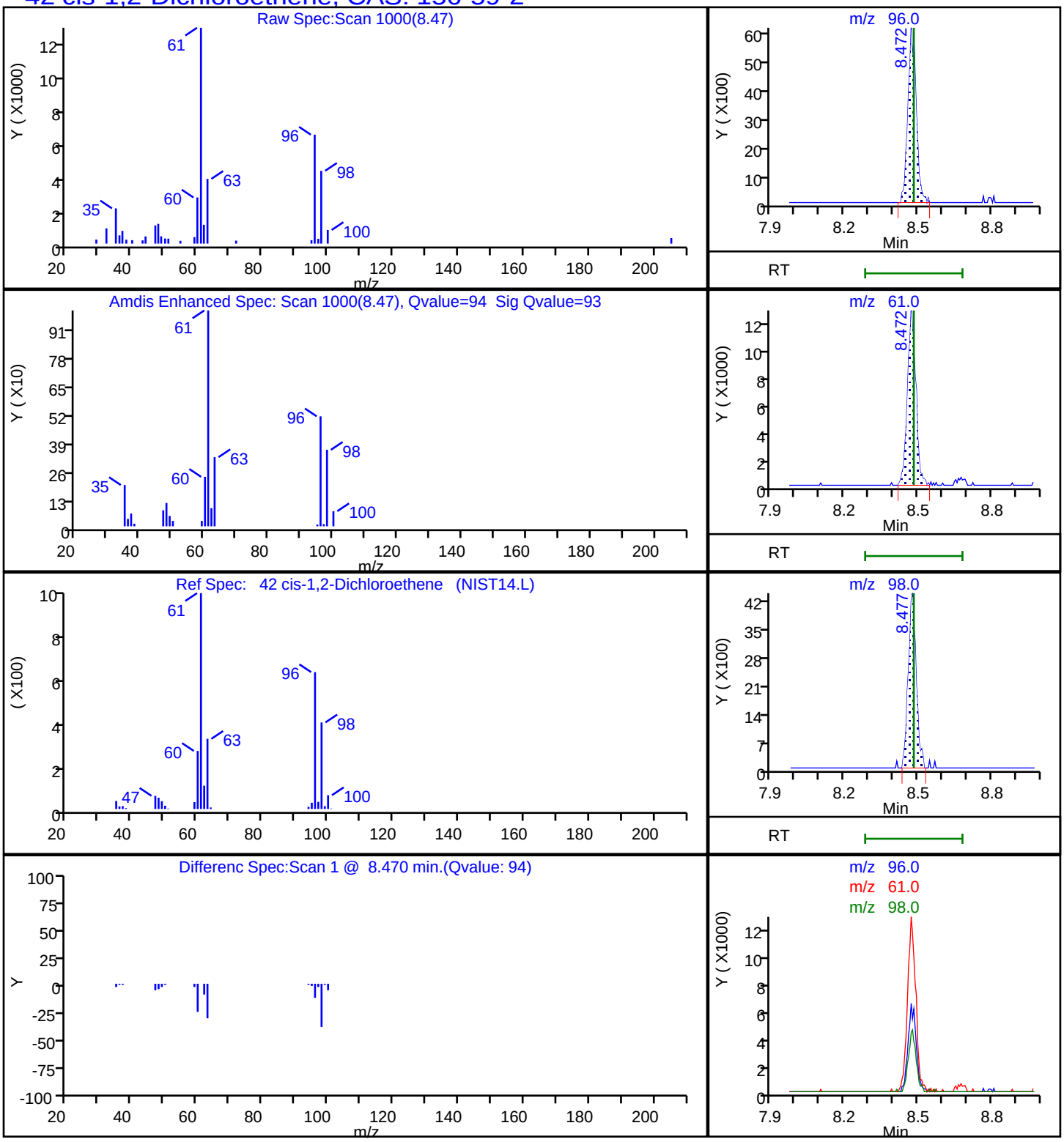
50 Benzene, CAS: 71-43-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P104R.D		
Injection Date:	09-Sep-2020 07:56:30	Instrument ID:	MG
Lims ID:	140-20175-A-17	Lab Sample ID:	140-20175-17
Client ID:	SV-126-C-29		
Operator ID:	HMT	ALS Bottle#:	4 Worklist Smp#: 27
Purge Vol:	500.000 mL	Dil. Factor:	12.3900
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

42 cis-1,2-Dichloroethene, CAS: 156-59-2



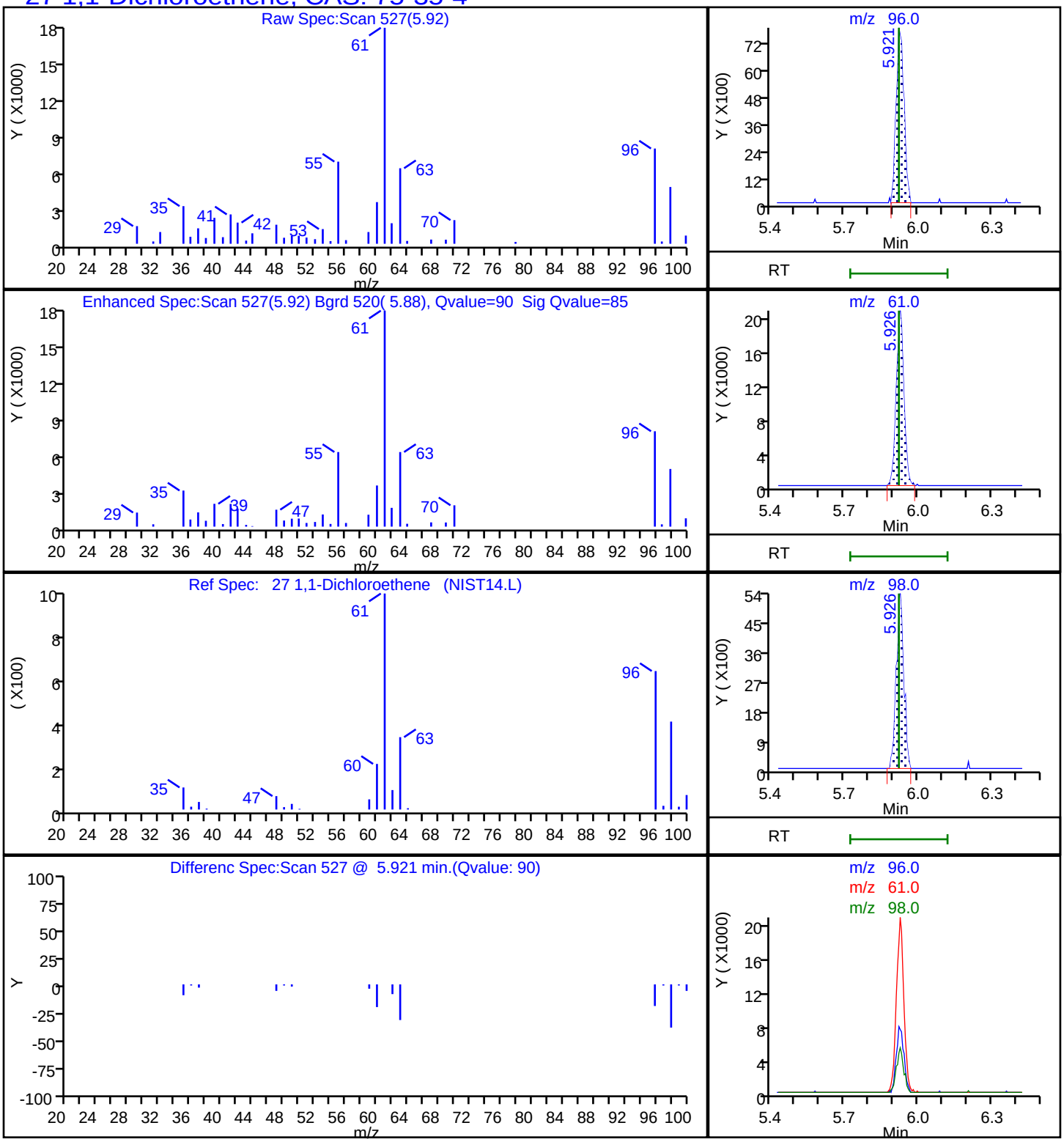
Report Date: 09-Sep-2020 14:19:40 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P104R.D

Injection Date:	09-Sep-2020 07:56:30	Instrument ID:	MG		
Lims ID:	140-20175-A-17	Lab Sample ID:	140-20175-17		
Client ID:	SV-126-C-29				
Operator ID:	HMT	ALS Bottle#:	4	Worklist Smp#:	27
Purge Vol:	500.000 mL	Dil. Factor:	12.3900		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

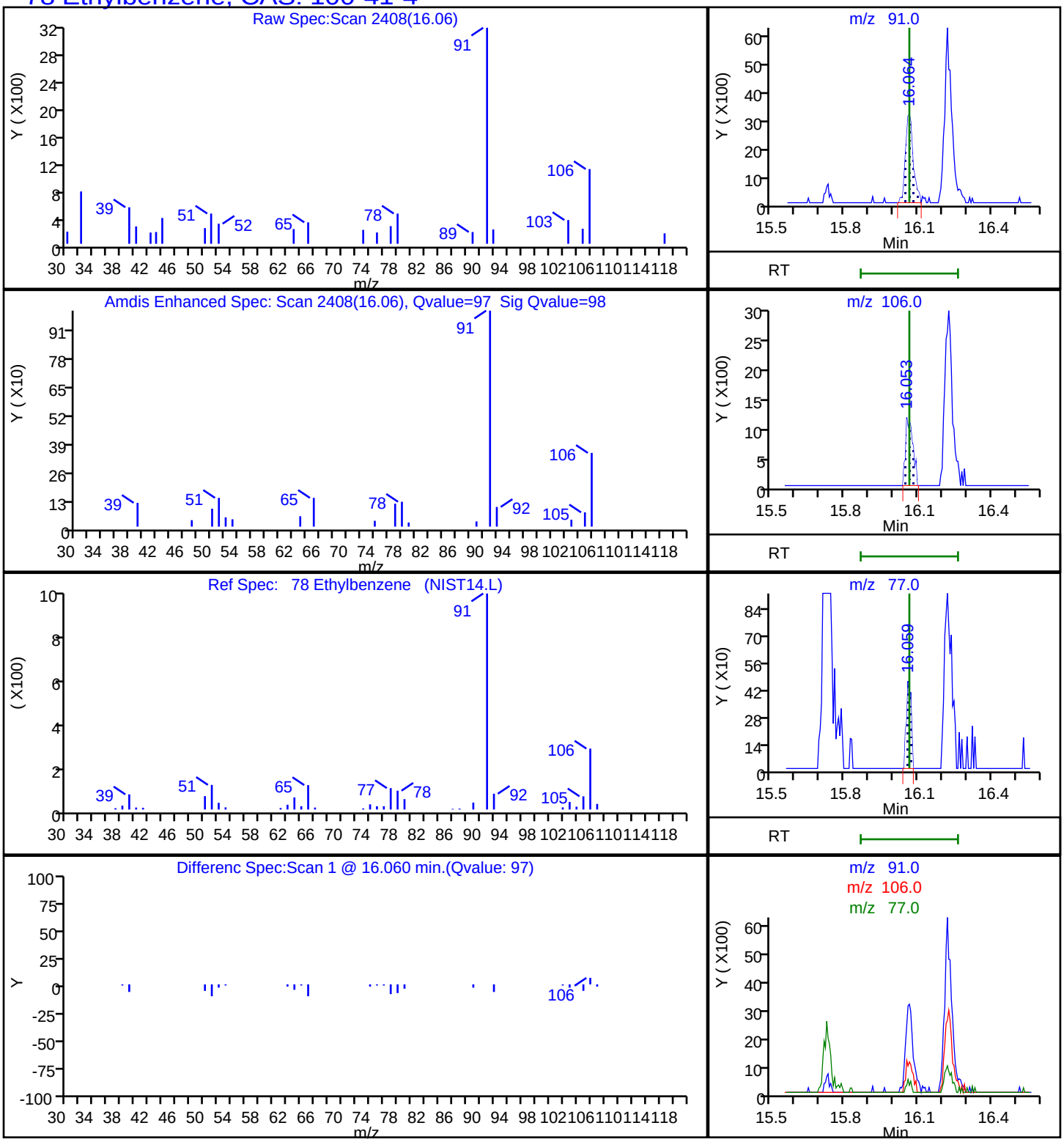
27 1,1-Dichloroethene, CAS: 75-35-4



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P104R.D				
Injection Date:	09-Sep-2020 07:56:30	Instrument ID:	MG		
Lims ID:	140-20175-A-17	Lab Sample ID:	140-20175-17		
Client ID:	SV-126-C-29				
Operator ID:	HMT	ALS Bottle#:	4	Worklist Smp#:	27
Purge Vol:	500.000 mL	Dil. Factor:	12.3900		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

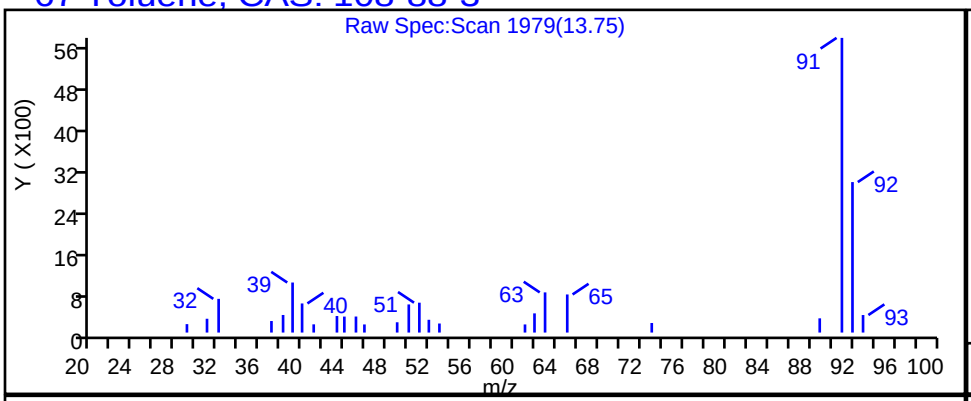
78 Ethylbenzene, CAS: 100-41-4

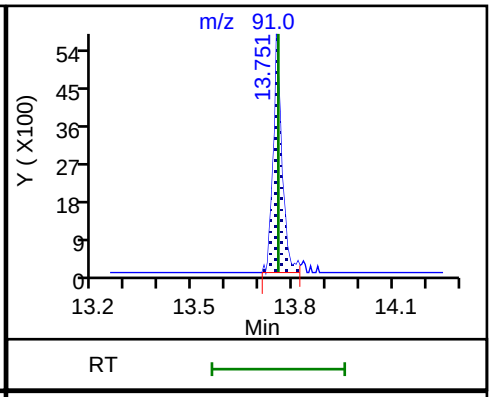


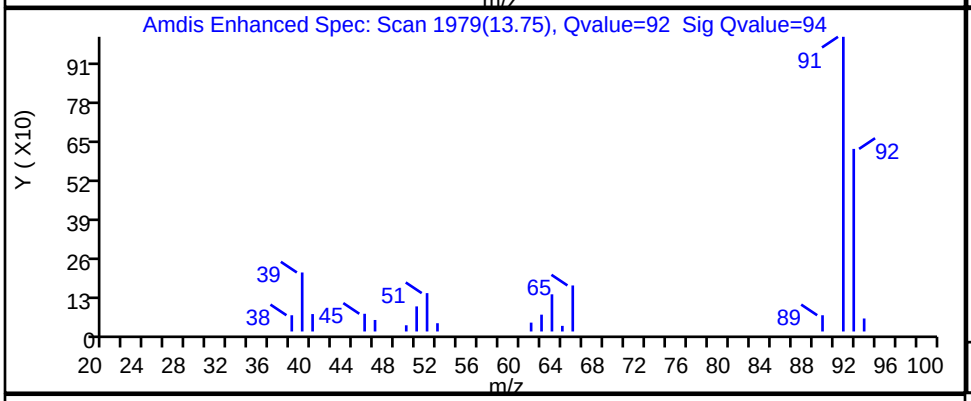
Eurofins TestAmerica, Knoxville

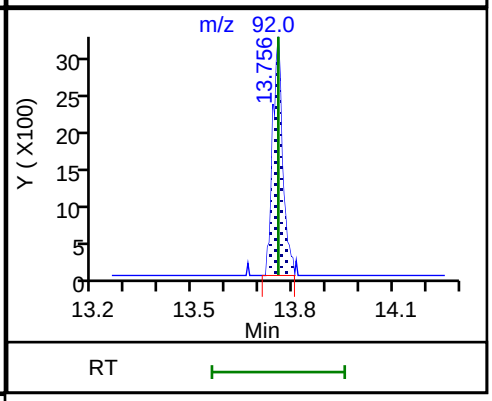
Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P104R.D		
Injection Date:	09-Sep-2020 07:56:30	Instrument ID:	MG
Lims ID:	140-20175-A-17	Lab Sample ID:	140-20175-17
Client ID:	SV-126-C-29		
Operator ID:	HMT	ALS Bottle#:	4 Worklist Smp#: 27
Purge Vol:	500.000 mL	Dil. Factor:	12.3900
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

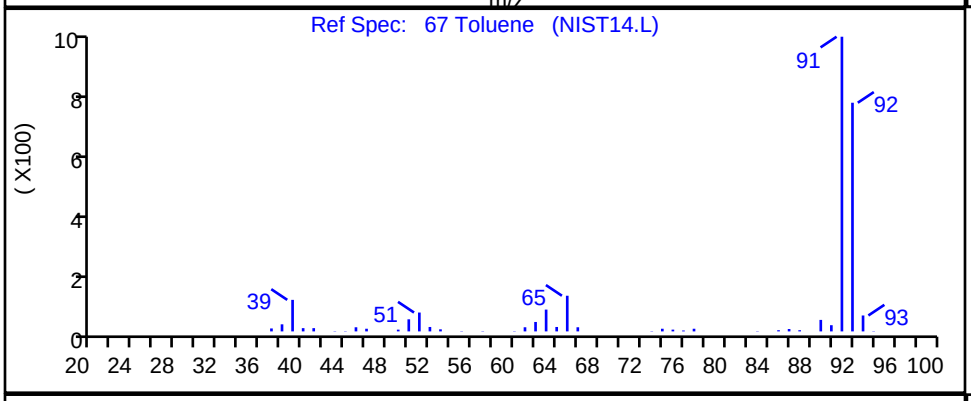
67 Toluene, CAS: 108-88-3

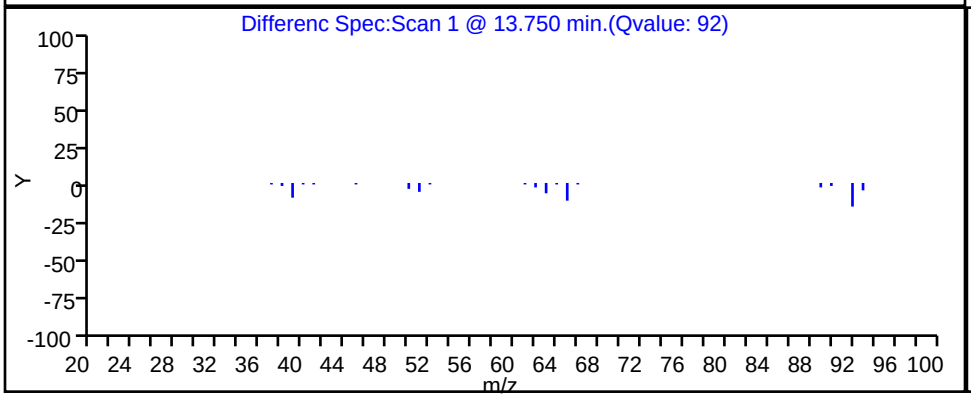


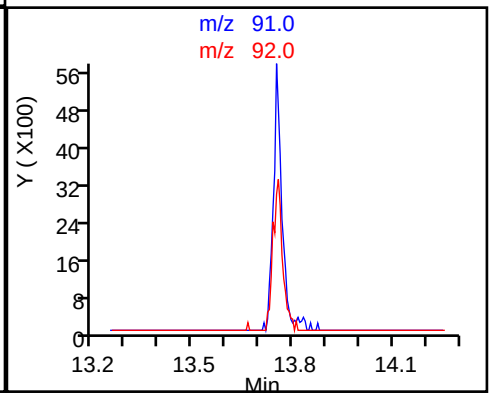








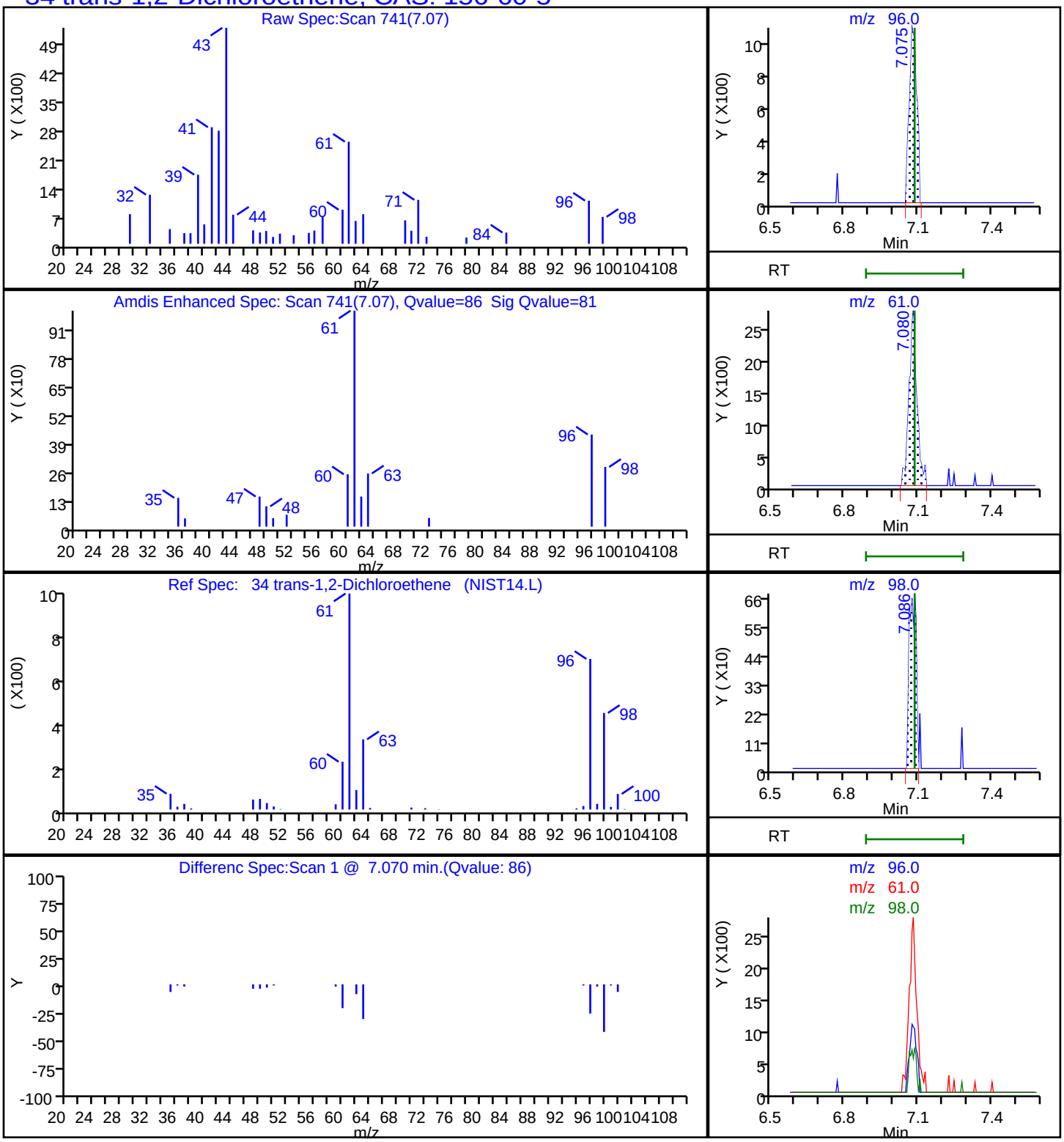




Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P104R.D		
Injection Date:	09-Sep-2020 07:56:30	Instrument ID:	MG
Lims ID:	140-20175-A-17	Lab Sample ID:	140-20175-17
Client ID:	SV-126-C-29		
Operator ID:	HMT	ALS Bottle#:	4 Worklist Smp#: 27
Purge Vol:	500.000 mL	Dil. Factor:	12.3900
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

34 trans-1,2-Dichloroethene, CAS: 156-60-5

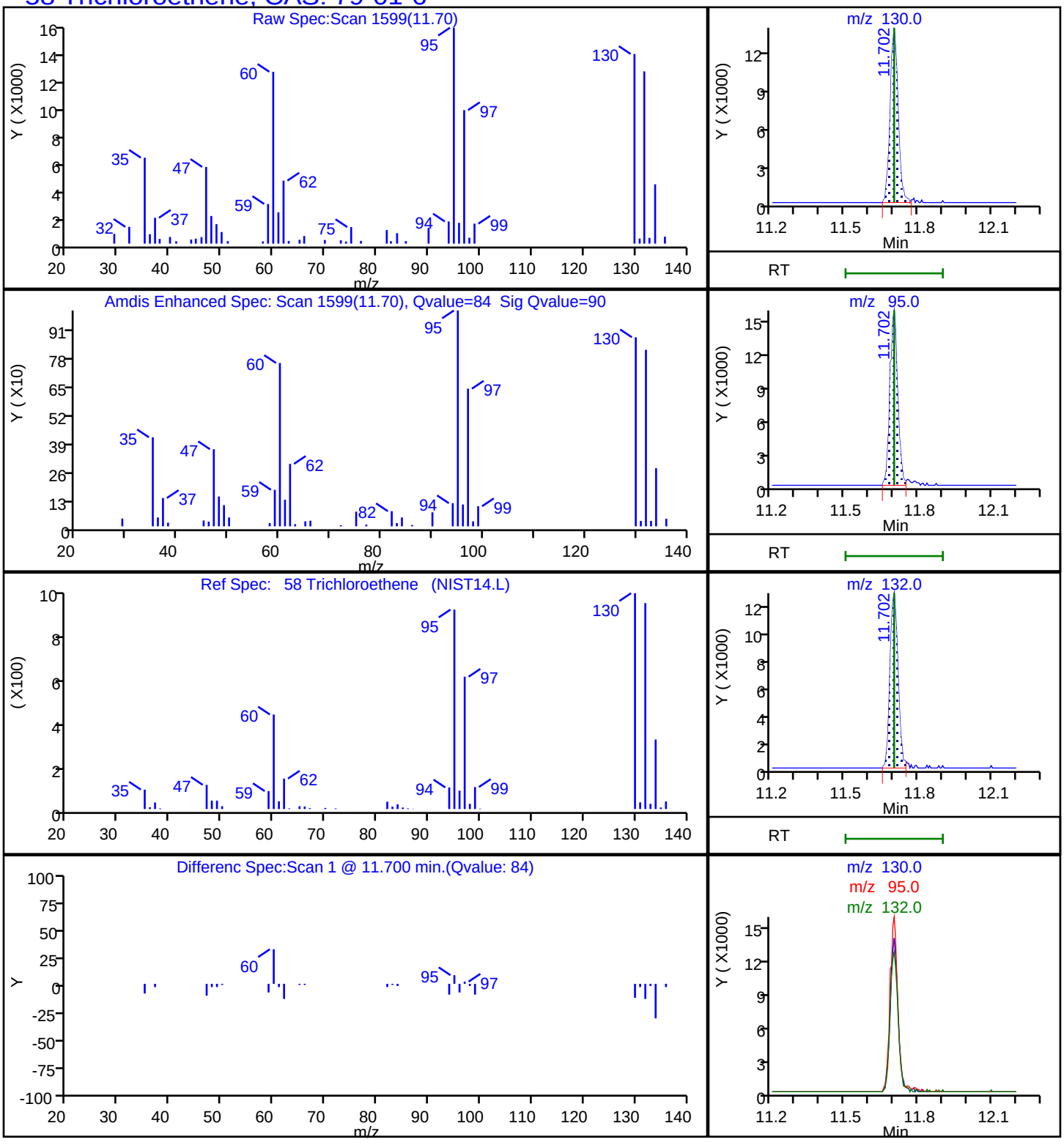


Report Date: 09-Sep-2020 14:19:40 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P104R.D		
Injection Date:	09-Sep-2020 07:56:30	Instrument ID:	MG
Lims ID:	140-20175-A-17	Lab Sample ID:	140-20175-17
Client ID:	SV-126-C-29		
Operator ID:	HMT	ALS Bottle#:	4 Worklist Smp#: 27
Purge Vol:	500.000 mL	Dil. Factor:	12.3900
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

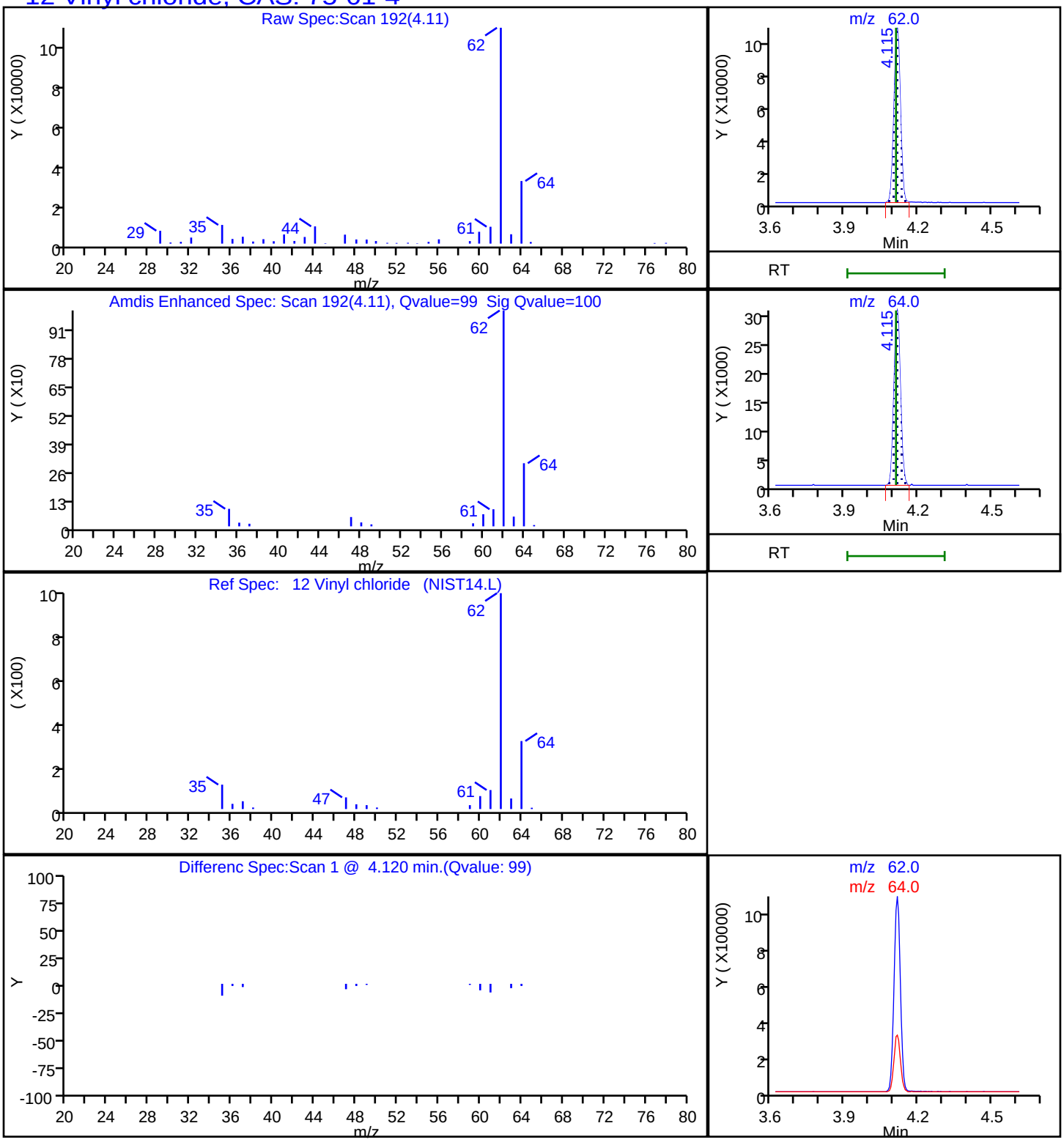
58 Trichloroethene, CAS: 79-01-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P104R.D		
Injection Date:	09-Sep-2020 07:56:30	Instrument ID:	MG
Lims ID:	140-20175-A-17	Lab Sample ID:	140-20175-17
Client ID:	SV-126-C-29		
Operator ID:	HMT	ALS Bottle#:	4 Worklist Smp#: 27
Purge Vol:	500.000 mL	Dil. Factor:	12.3900
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

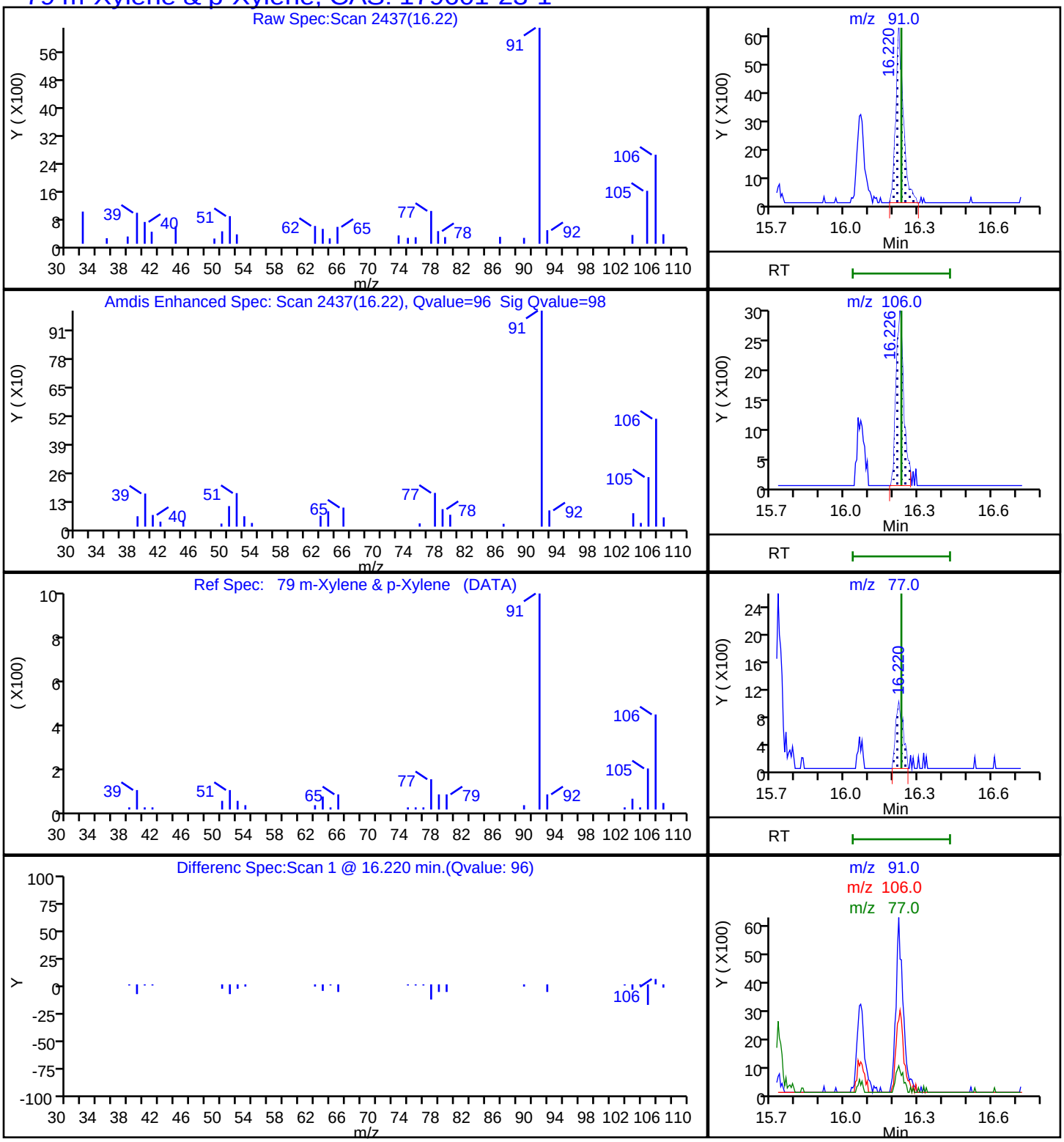
12 Vinyl chloride, CAS: 75-01-4



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P104R.D				
Injection Date:	09-Sep-2020 07:56:30	Instrument ID:	MG		
Lims ID:	140-20175-A-17	Lab Sample ID:	140-20175-17		
Client ID:	SV-126-C-29				
Operator ID:	HMT	ALS Bottle#:	4	Worklist Smp#:	27
Purge Vol:	500.000 mL	Dil. Factor:	12.3900		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

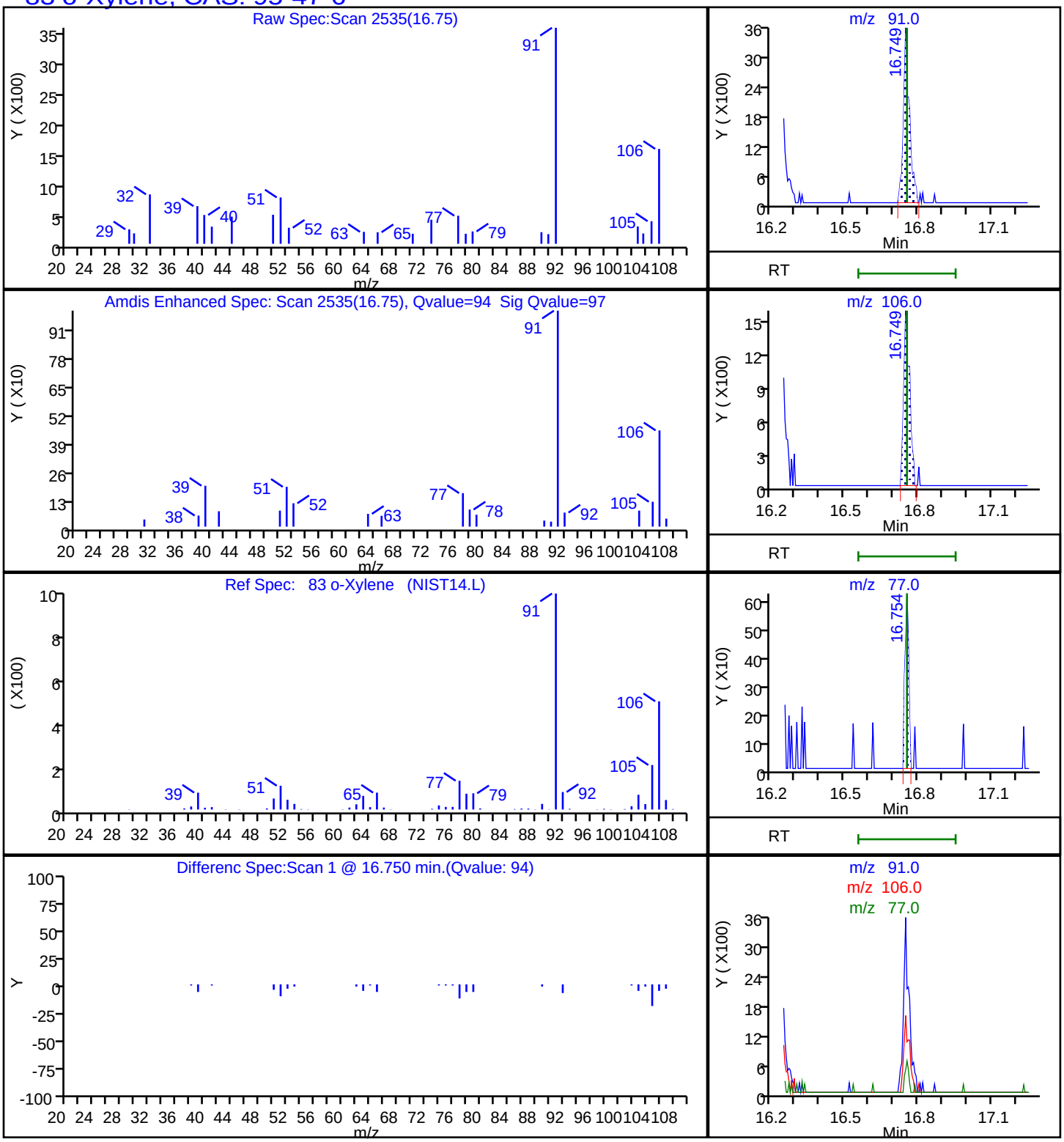
79 m-Xylene & p-Xylene, CAS: 179601-23-1



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P104R.D				
Injection Date:	09-Sep-2020 07:56:30	Instrument ID:	MG		
Lims ID:	140-20175-A-17	Lab Sample ID:	140-20175-17		
Client ID:	SV-126-C-29				
Operator ID:	HMT	ALS Bottle#:	4	Worklist Smp#:	27
Purge Vol:	500.000 mL	Dil. Factor:	12.3900		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

83 o-Xylene, CAS: 95-47-6



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: IA-001-C-29 Lab Sample ID: 140-20175-18

Matrix: Air Lab File ID: HI05P101.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 16:11

Sample wt/vol: 100(mL) Date Analyzed: 09/05/2020 16:20

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42482 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.12	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.11	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	0.64		0.40	0.11
67-66-3	Chloroform	119.38	0.099	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.52		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	ND		0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.035
108-88-3	Toluene	92.14	0.61		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	ND		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.35	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	95		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: IA-001-C-29 Lab Sample ID: 140-20175-18

Matrix: Air Lab File ID: HI05P101.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 16:11

Sample wt/vol: 100(mL) Date Analyzed: 09/05/2020 16:20

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42482 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.37	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.70	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	2.3		1.4	0.39
67-66-3	Chloroform	119.38	0.49	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.6		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	ND		1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.24
108-88-3	Toluene	92.14	2.3		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	ND		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	1.5	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	95		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MH\20200904-16507.b\HI05P101.D
Lims ID: 140-20175-A-18
Client ID: IA-001-C-29
Sample Type: Client
Inject. Date: 05-Sep-2020 16:20:30 ALS Bottle#: 1 Worklist Smp#: 6
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016507-006
Misc. Info.: 140-20175-a-18
Operator ID: HMT Instrument ID: MH

Method: \\chromfs\Knoxville\ChromData\MH\20200904-16507.b\MH_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 06-Sep-2020 10:10:44 Calib Date: 29-Aug-2020 23:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1044

First Level Reviewer: tajh Date: 06-Sep-2020 07:19:19

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.431	9.436	-0.005	97	90837	4.80	
* 2 1,4-Difluorobenzene	114	11.591	11.591	0.000	95	363248	4.80	
* 3 Chlorobenzene-d5 (IS)	117	16.258	16.258	0.000	88	242567	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.876	17.876	0.000	90	123585	4.38	
6 Chlorodifluoromethane	51	3.916	3.921	-0.005	97	6497	0.1282	
8 Dichlorodifluoromethane	85	3.988	3.993	-0.005	99	7147	0.1041	
44 Chloroform	83	9.436	9.436	0.000	28	1096	0.0199	
51 Benzene	78	11.074	11.069	0.005	84	1546	0.0232	
52 Carbon tetrachloride	117	11.084	11.095	-0.011	76	922	0.0223	
67 Toluene	91	14.310	14.310	0.000	90	7589	0.1214	
77 m-Xylene & p-Xylene	91	16.739	16.744	-0.005	94	2369	0.0396	
81 o-Xylene	91	17.271	17.266	0.005	93	1843	0.0294	
S 116 Xylenes, Total	100				0		0.0691	

Reagents:

40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

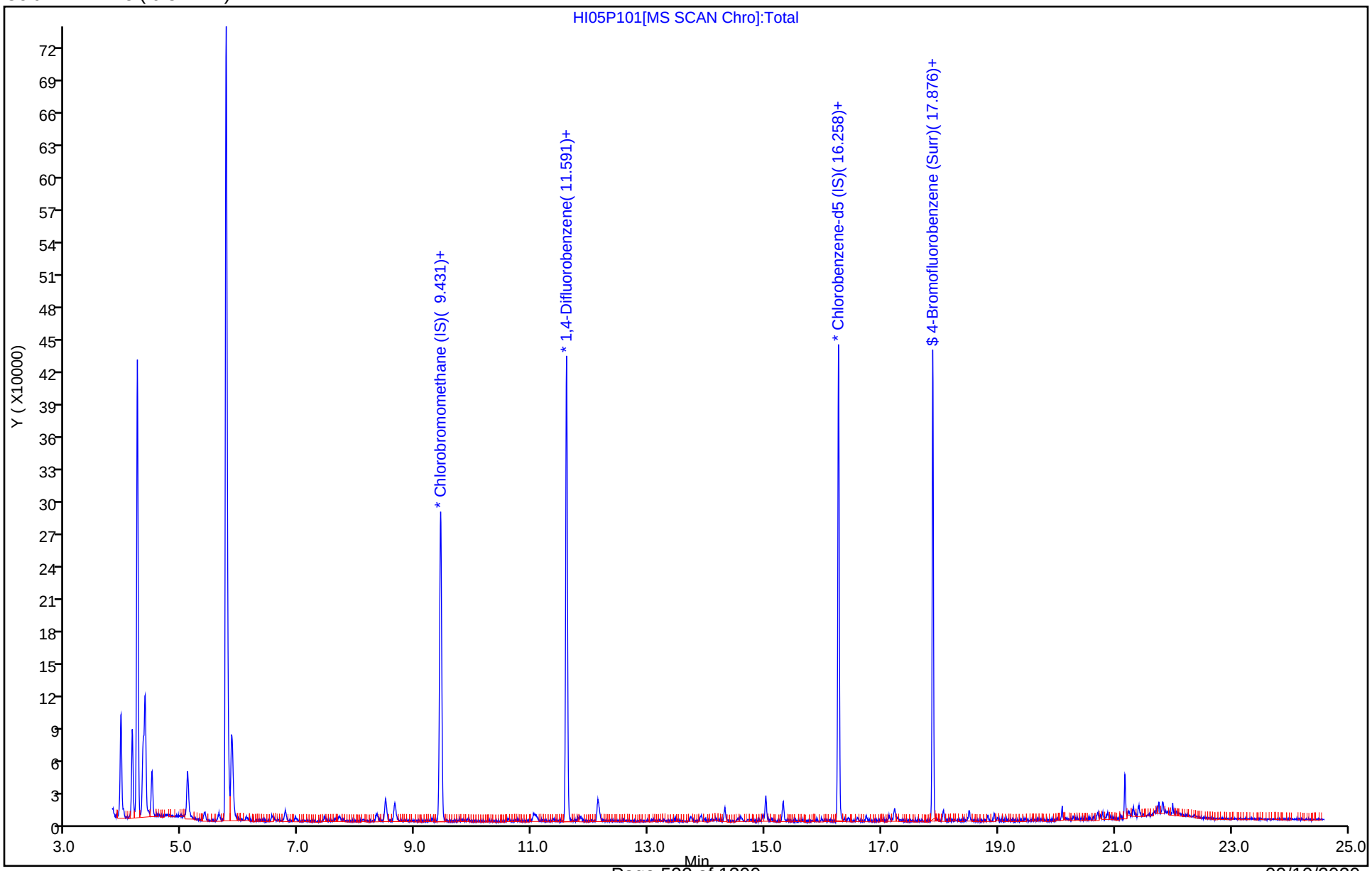
Report Date: 06-Sep-2020 10:10:50 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200904-16507.b\HI05P101.D

Injection Date:	05-Sep-2020 16:20:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	140-20175-A-18	Lab Sample ID:	140-20175-18	Worklist Smp#:	6
Client ID:	IA-001-C-29				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16507.b\HI05P101.D				
Lims ID:	140-20175-A-18				
Client ID:	IA-001-C-29				
Sample Type:	Client				
Inject. Date:	05-Sep-2020 16:20:30	ALS Bottle#:	1	Worklist Smp#:	6
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016507-006				
Misc. Info.:	140-20175-a-18				
Operator ID:	HMT	Instrument ID:	MH		
Method:	\\chromfs\Knoxville\ChromData\MH\20200904-16507.b\MH_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	06-Sep-2020 10:10:44	Calib Date:	29-Aug-2020 23:57:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1044				

First Level Reviewer: tajh Date: 06-Sep-2020 07:19:19

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	4.38	94.50

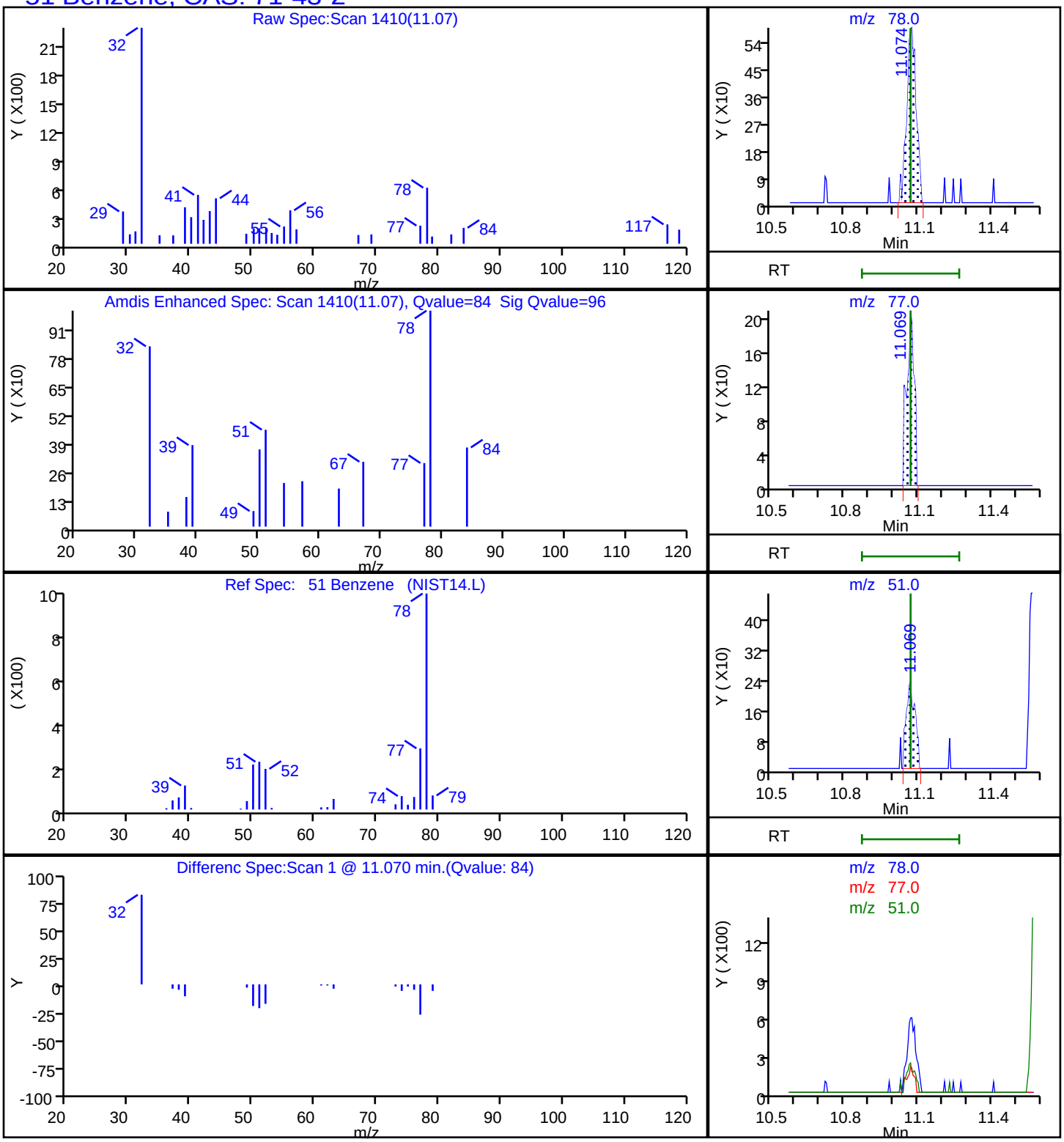
Report Date: 06-Sep-2020 10:10:51 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200904-16507.b\HI05P101.D

Injection Date:	05-Sep-2020 16:20:30	Instrument ID:	MH
Lims ID:	140-20175-A-18	Lab Sample ID:	140-20175-18
Client ID:	IA-001-C-29		
Operator ID:	HMT	ALS Bottle#:	1 Worklist Smp#: 6
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

51 Benzene, CAS: 71-43-2

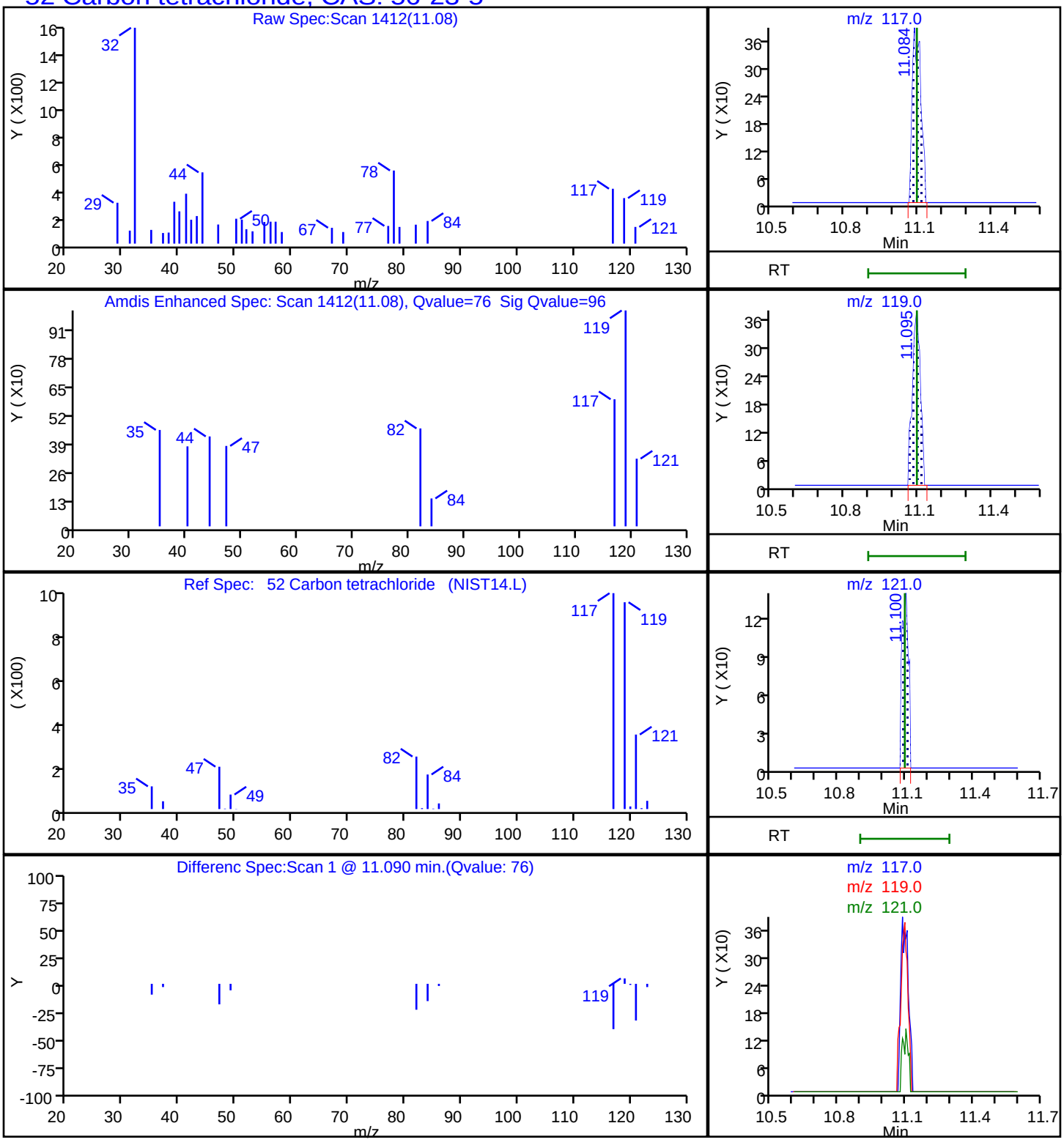


Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200904-16507.b\HI05P101.D

Injection Date:	05-Sep-2020 16:20:30	Instrument ID:	MH
Lims ID:	140-20175-A-18	Lab Sample ID:	140-20175-18
Client ID:	IA-001-C-29		
Operator ID:	HMT	ALS Bottle#:	1 Worklist Smp#: 6
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

52 Carbon tetrachloride, CAS: 56-23-5



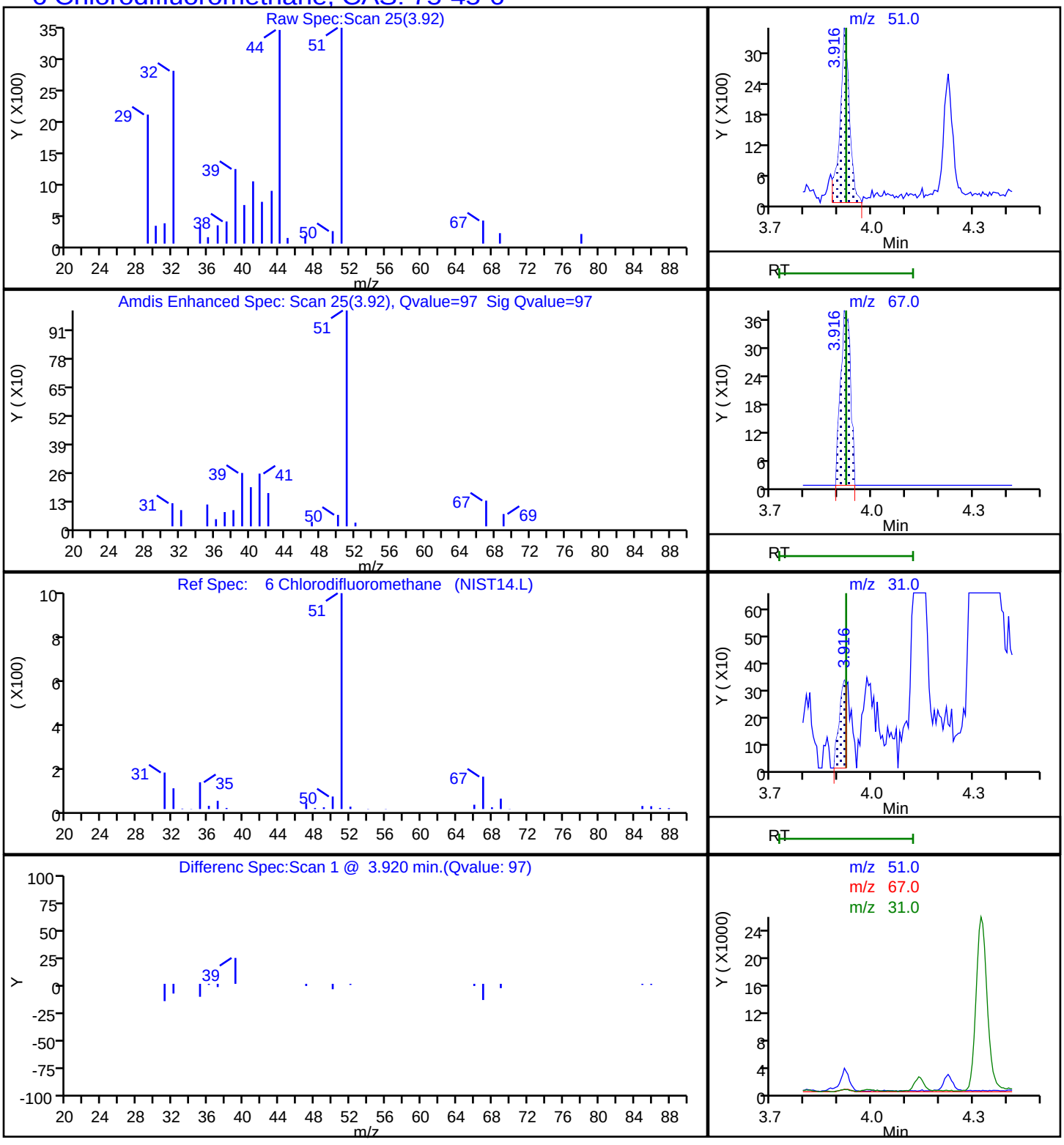
Report Date: 06-Sep-2020 10:10:50 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200904-16507.b\HI05P101.D

Injection Date:	05-Sep-2020 16:20:30	Instrument ID:	MH		
Lims ID:	140-20175-A-18	Lab Sample ID:	140-20175-18		
Client ID:	IA-001-C-29				
Operator ID:	HMT	ALS Bottle#:	1	Worklist Smp#:	6
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

6 Chlorodifluoromethane, CAS: 75-45-6

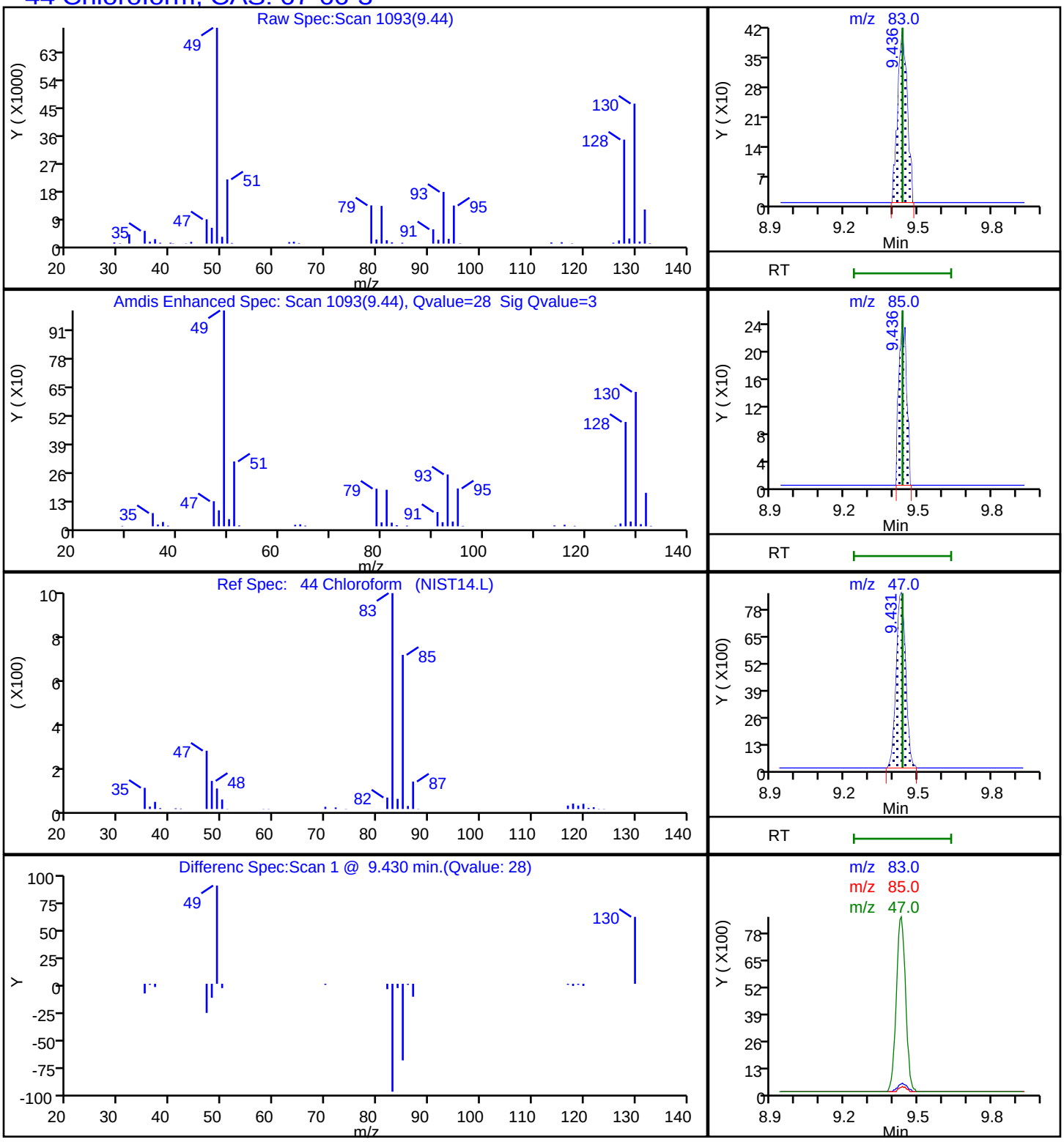


Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200904-16507.b\HI05P101.D

Injection Date:	05-Sep-2020 16:20:30	Instrument ID:	MH		
Lims ID:	140-20175-A-18	Lab Sample ID:	140-20175-18		
Client ID:	IA-001-C-29				
Operator ID:	HMT	ALS Bottle#:	1	Worklist Smp#:	6
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

44 Chloroform, CAS: 67-66-3

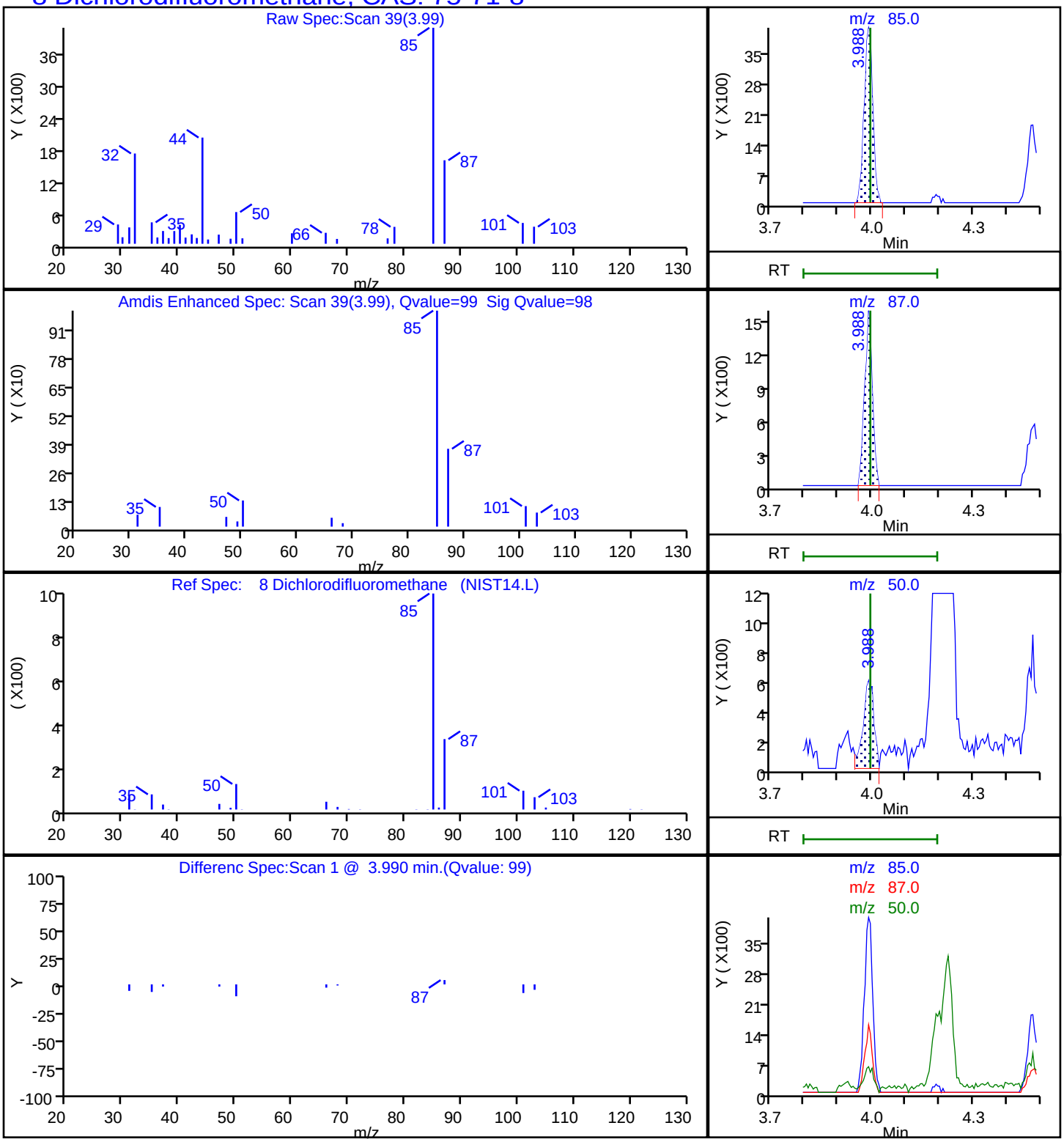


Report Date: 06-Sep-2020 10:10:50 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16507.b\HI05P101.D		
Injection Date:	05-Sep-2020 16:20:30	Instrument ID:	MH
Lims ID:	140-20175-A-18	Lab Sample ID:	140-20175-18
Client ID:	IA-001-C-29		
Operator ID:	HMT	ALS Bottle#:	1 Worklist Smp#: 6
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

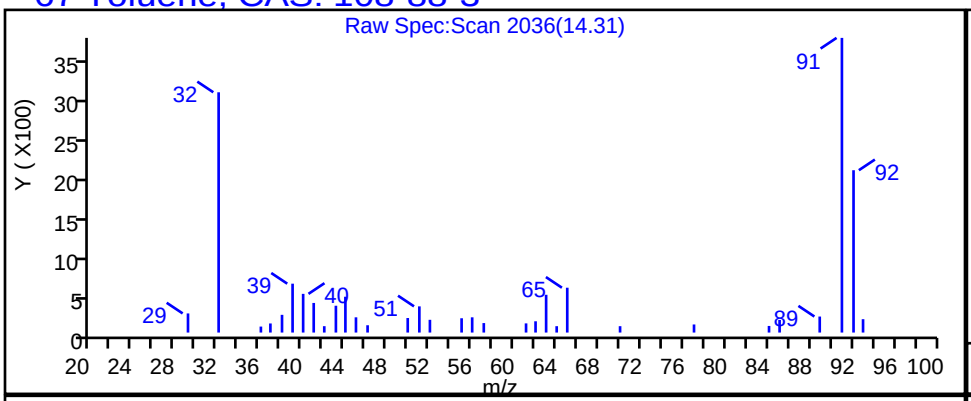
8 Dichlorodifluoromethane, CAS: 75-71-8

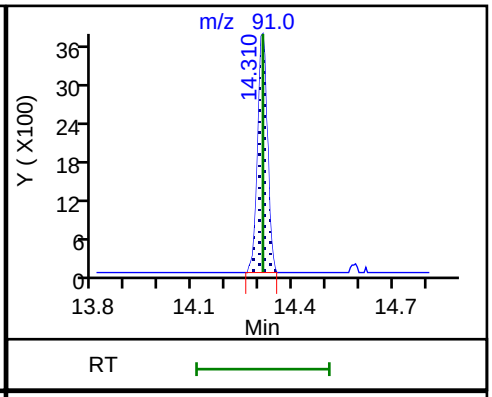


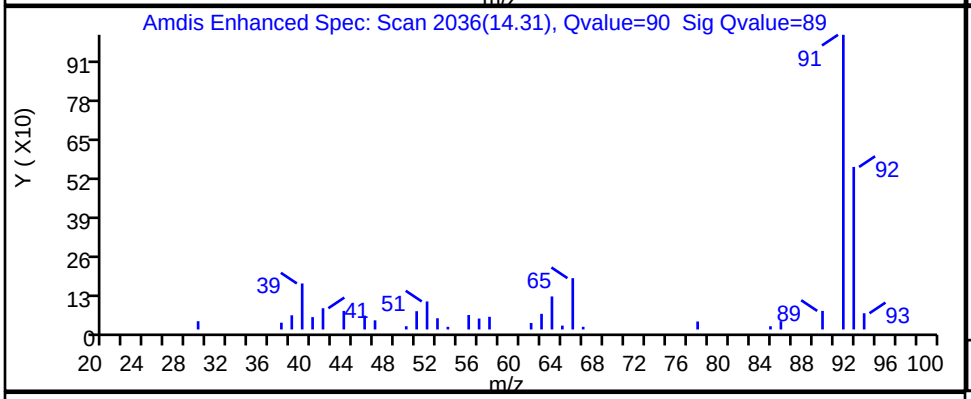
Eurofins TestAmerica, Knoxville

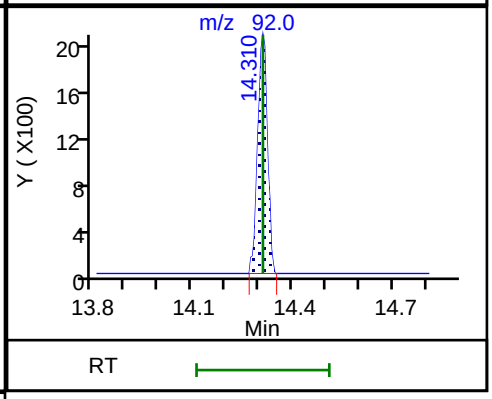
Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16507.b\HI05P101.D		
Injection Date:	05-Sep-2020 16:20:30	Instrument ID:	MH
Lims ID:	140-20175-A-18	Lab Sample ID:	140-20175-18
Client ID:	IA-001-C-29		
Operator ID:	HMT	ALS Bottle#:	1 Worklist Smp#: 6
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

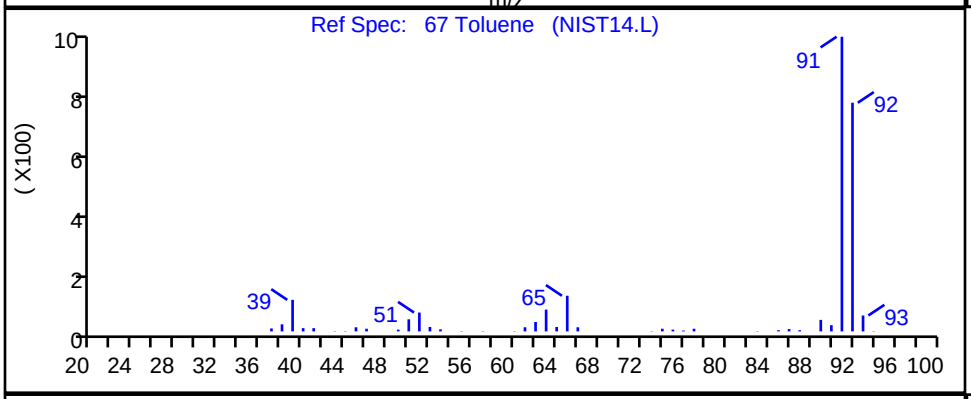
67 Toluene, CAS: 108-88-3

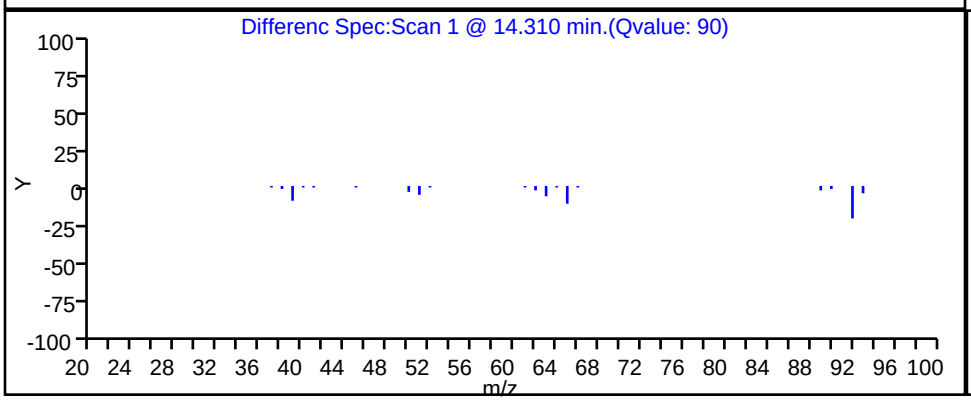


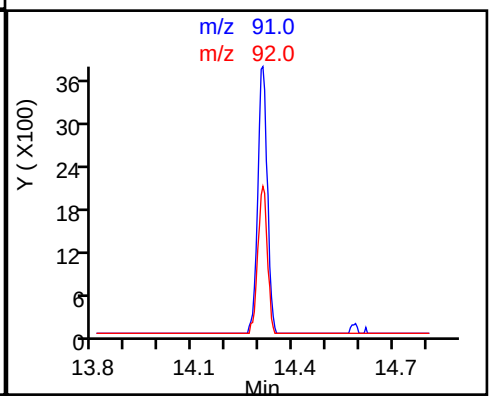








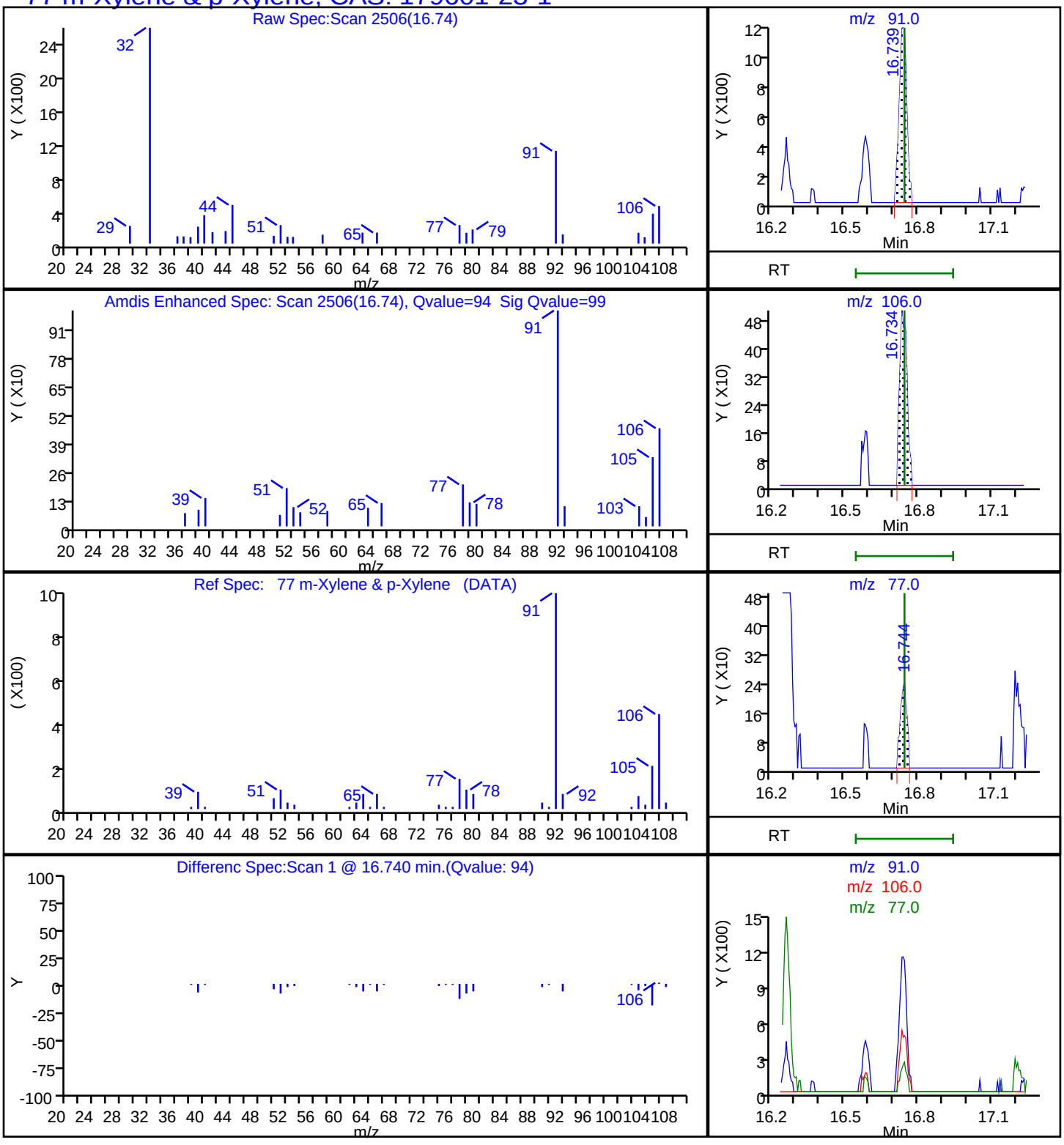




Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16507.b\HI05P101.D				
Injection Date:	05-Sep-2020 16:20:30	Instrument ID:	MH		
Lims ID:	140-20175-A-18	Lab Sample ID:	140-20175-18		
Client ID:	IA-001-C-29				
Operator ID:	HMT	ALS Bottle#:	1	Worklist Smp#:	6
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

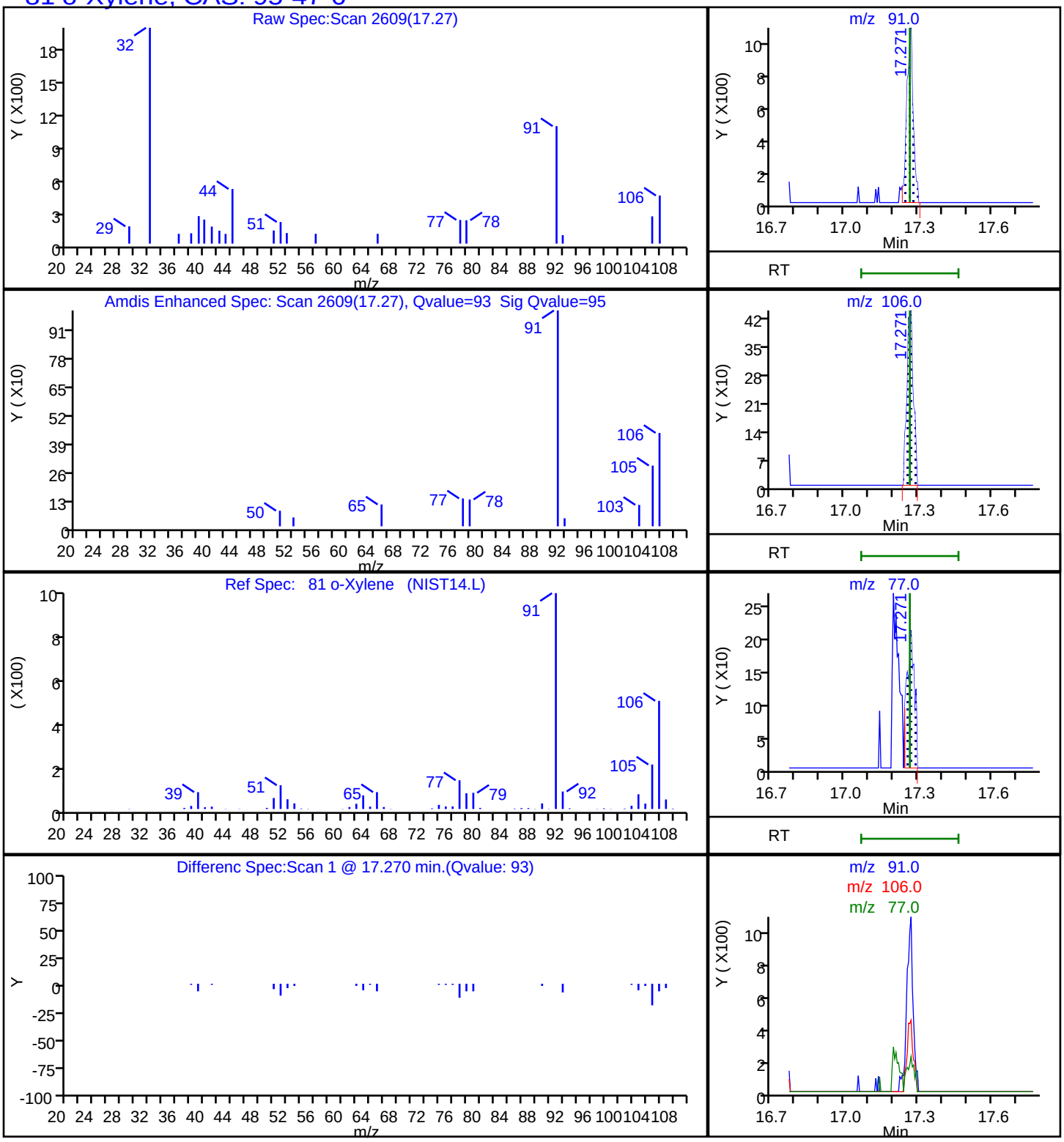
77 m-Xylene & p-Xylene, CAS: 179601-23-1



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16507.b\HI05P101.D		
Injection Date:	05-Sep-2020 16:20:30	Instrument ID:	MH
Lims ID:	140-20175-A-18	Lab Sample ID:	140-20175-18
Client ID:	IA-001-C-29		
Operator ID:	HMT	ALS Bottle#:	1 Worklist Smp#: 6
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

81 o-Xylene, CAS: 95-47-6



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: IA-004-C-29 Lab Sample ID: 140-20175-19

Matrix: Air Lab File ID: HI05P102.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 16:14

Sample wt/vol: 177(mL) Date Analyzed: 09/05/2020 17:18

Soil Aliquot Vol: Dilution Factor: 1.77

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42482 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.13	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.081	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	0.59		0.40	0.11
67-66-3	Chloroform	119.38	0.070	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.53		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	ND		0.40	0.065
75-09-2	Methylene Chloride	84.93	2.4		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.035
108-88-3	Toluene	92.14	0.85		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	ND		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.30	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	83		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: IA-004-C-29 Lab Sample ID: 140-20175-19

Matrix: Air Lab File ID: HI05P102.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 16:14

Sample wt/vol: 177(mL) Date Analyzed: 09/05/2020 17:18

Soil Aliquot Vol: Dilution Factor: 1.77

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42482 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.40	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.51	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	2.1		1.4	0.39
67-66-3	Chloroform	119.38	0.34	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.6		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	ND		1.7	0.28
75-09-2	Methylene Chloride	84.93	8.3		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.24
108-88-3	Toluene	92.14	3.2		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	ND		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	1.3	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	83		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MH\20200904-16507.b\HI05P102.D
Lims ID: 140-20175-A-19
Client ID: IA-004-C-29
Sample Type: Client
Inject. Date: 05-Sep-2020 17:18:30 ALS Bottle#: 2 Worklist Smp#: 7
Purge Vol: 500.000 mL Dil. Factor: 1.7700
Sample Info: 140-0016507-007
Misc. Info.: 140-20175-a-19@1.77
Operator ID: HMT Instrument ID: MH

Method: \\chromfs\Knoxville\ChromData\MH\20200904-16507.b\MH_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 06-Sep-2020 10:10:44 Calib Date: 29-Aug-2020 23:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1044

First Level Reviewer: tajh Date: 06-Sep-2020 10:09:47

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.431	9.436	-0.005	97	91115	4.80	
* 2 1,4-Difluorobenzene	114	11.591	11.591	0.000	95	368208	4.80	
* 3 Chlorobenzene-d5 (IS)	117	16.258	16.258	0.000	88	261236	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.876	17.876	0.000	90	116402	3.83	
6 Chlorodifluoromethane	51	3.921	3.921	0.000	96	6024	0.1185	
8 Dichlorodifluoromethane	85	3.994	3.993	0.001	100	7307	0.1061	
31 Methylene Chloride	84	6.769	6.769	0.000	96	10710	0.4795	
44 Chloroform	83	9.441	9.436	0.005	28	771	0.0139	
51 Benzene	78	11.069	11.069	0.000	94	1698	0.0251	
52 Carbon tetrachloride	117	11.100	11.095	0.005	67	678	0.0162	
67 Toluene	91	14.310	14.310	0.000	89	11425	0.1697	
77 m-Xylene & p-Xylene	91	16.739	16.744	-0.005	94	2517	0.0391	
81 o-Xylene	91	17.266	17.266	0.000	94	1372	0.0203	
S 116 Xylenes, Total	100				0		0.0594	

Reagents:

40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

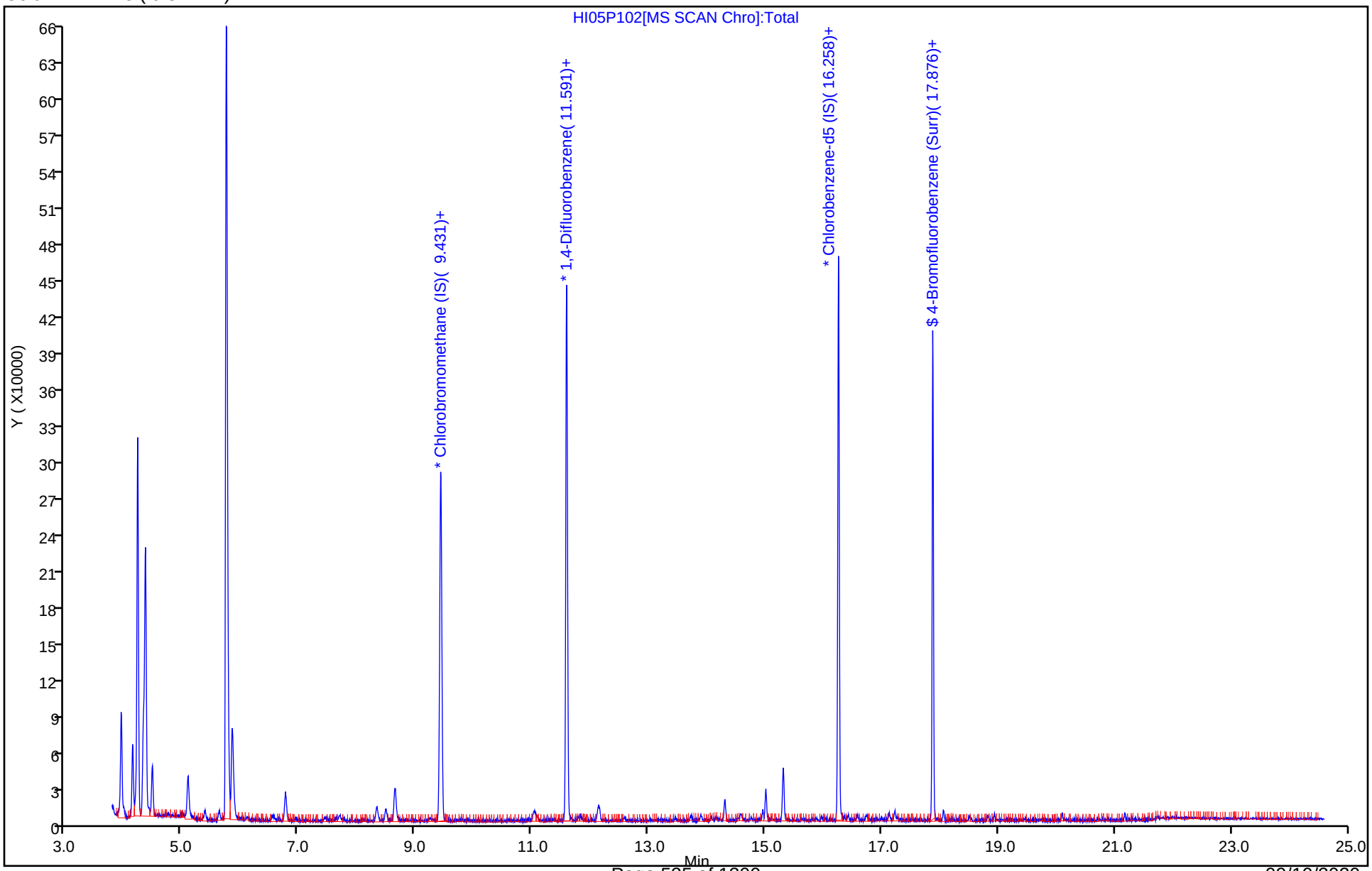
Report Date: 06-Sep-2020 10:10:52 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200904-16507.b\HI05P102.D

Injection Date:	05-Sep-2020 17:18:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	140-20175-A-19	Lab Sample ID:	140-20175-19	Worklist Smp#:	7
Client ID:	IA-004-C-29				
Purge Vol:	500.000 mL	Dil. Factor:	1.7700	ALS Bottle#:	2
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16507.b\HI05P102.D				
Lims ID:	140-20175-A-19				
Client ID:	IA-004-C-29				
Sample Type:	Client				
Inject. Date:	05-Sep-2020 17:18:30	ALS Bottle#:	2	Worklist Smp#:	7
Purge Vol:	500.000 mL	Dil. Factor:	1.7700		
Sample Info:	140-0016507-007				
Misc. Info.:	140-20175-a-19@1.77				
Operator ID:	HMT	Instrument ID:	MH		
Method:	\\chromfs\Knoxville\ChromData\MH\20200904-16507.b\MH_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	06-Sep-2020 10:10:44	Calib Date:	29-Aug-2020 23:57:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1044				

First Level Reviewer: tajh Date: 06-Sep-2020 10:09:47

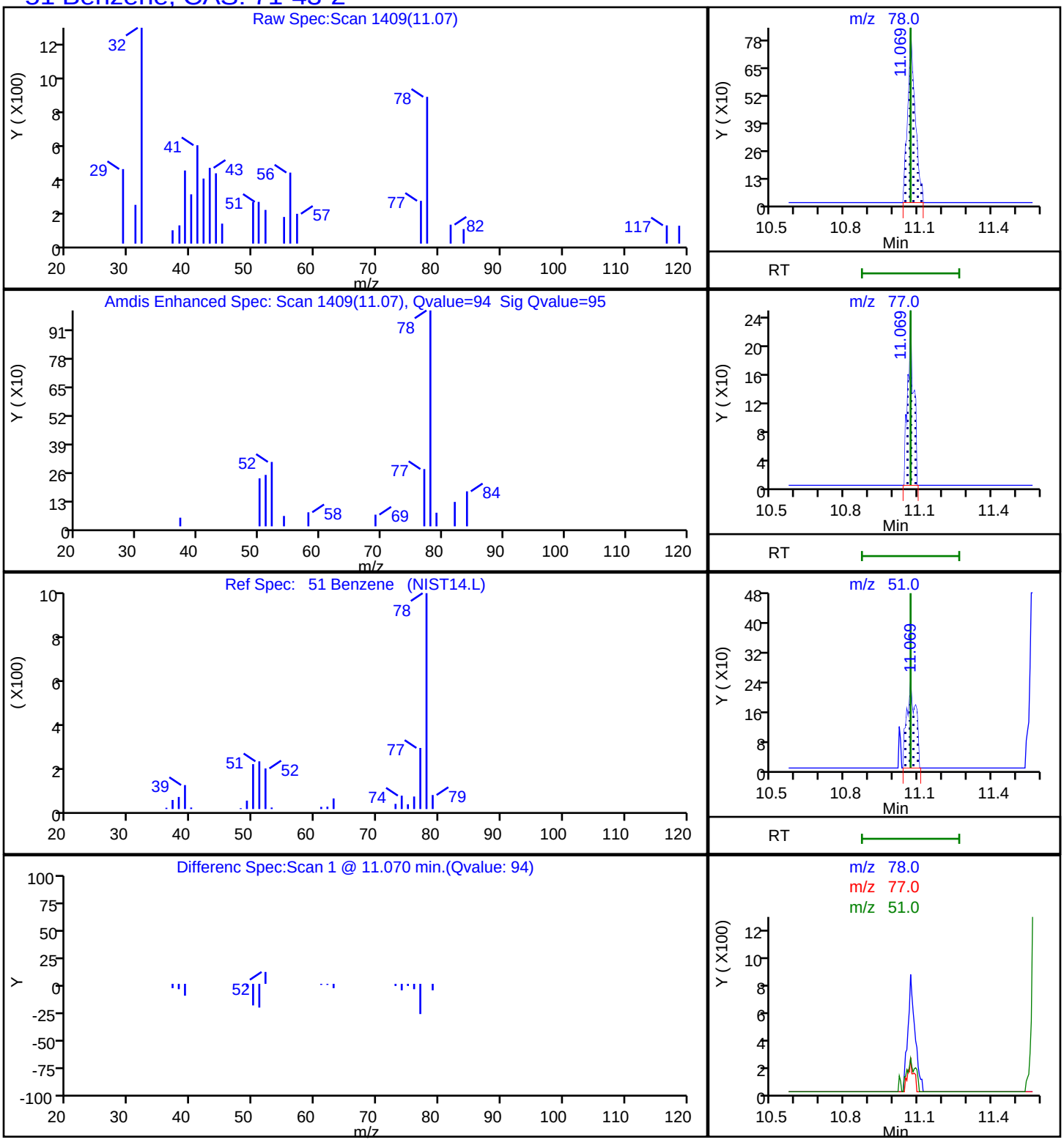
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	3.83	82.65

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200904-16507.b\HI05P102.D

Injection Date:	05-Sep-2020 17:18:30	Instrument ID:	MH
Lims ID:	140-20175-A-19	Lab Sample ID:	140-20175-19
Client ID:	IA-004-C-29		
Operator ID:	HMT	ALS Bottle#:	2 Worklist Smp#: 7
Purge Vol:	500.000 mL	Dil. Factor:	1.7700
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

51 Benzene, CAS: 71-43-2

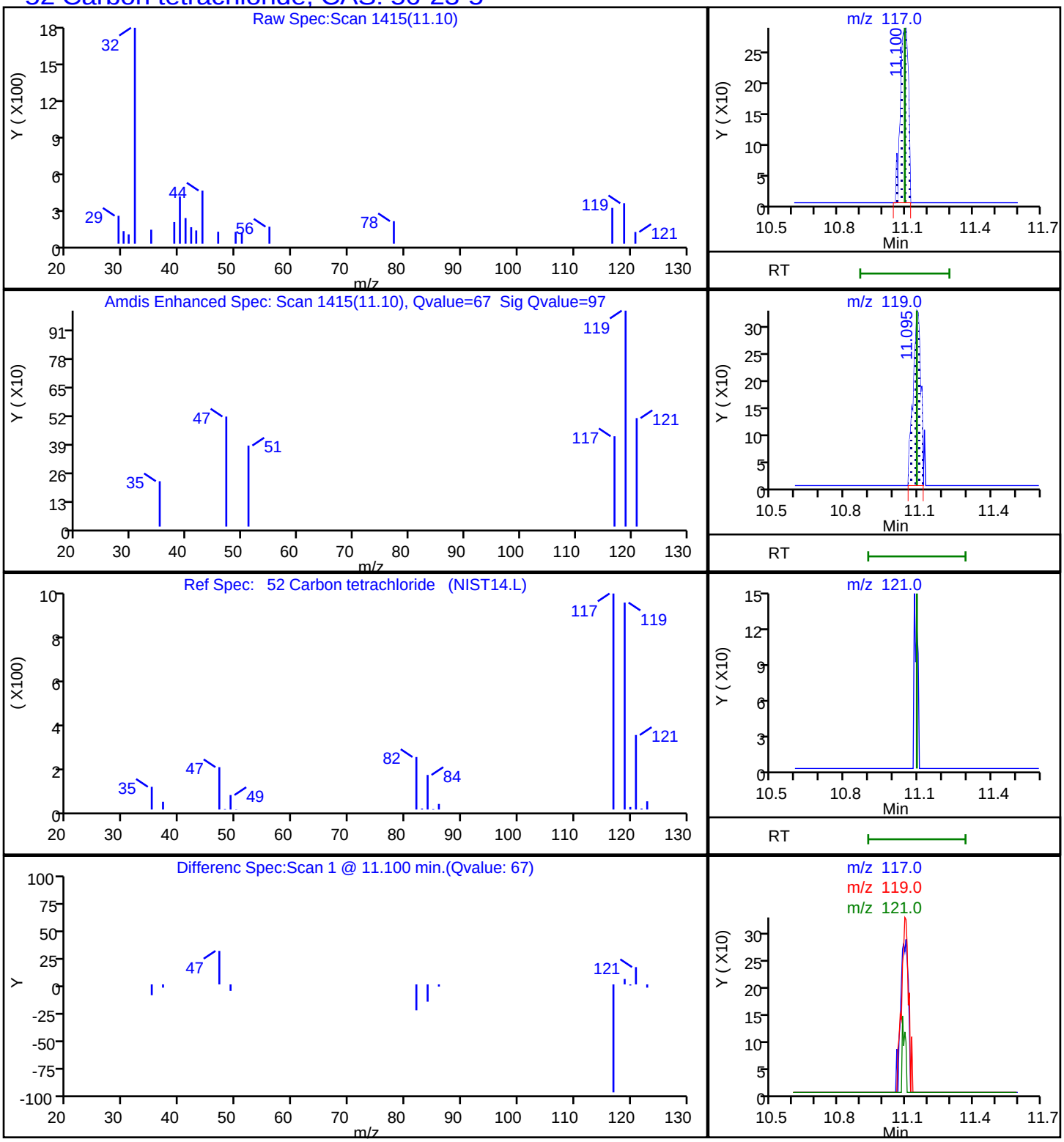


Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200904-16507.b\HI05P102.D

Injection Date:	05-Sep-2020 17:18:30	Instrument ID:	MH		
Lims ID:	140-20175-A-19	Lab Sample ID:	140-20175-19		
Client ID:	IA-004-C-29				
Operator ID:	HMT	ALS Bottle#:	2	Worklist Smp#:	7
Purge Vol:	500.000 mL	Dil. Factor:	1.7700		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

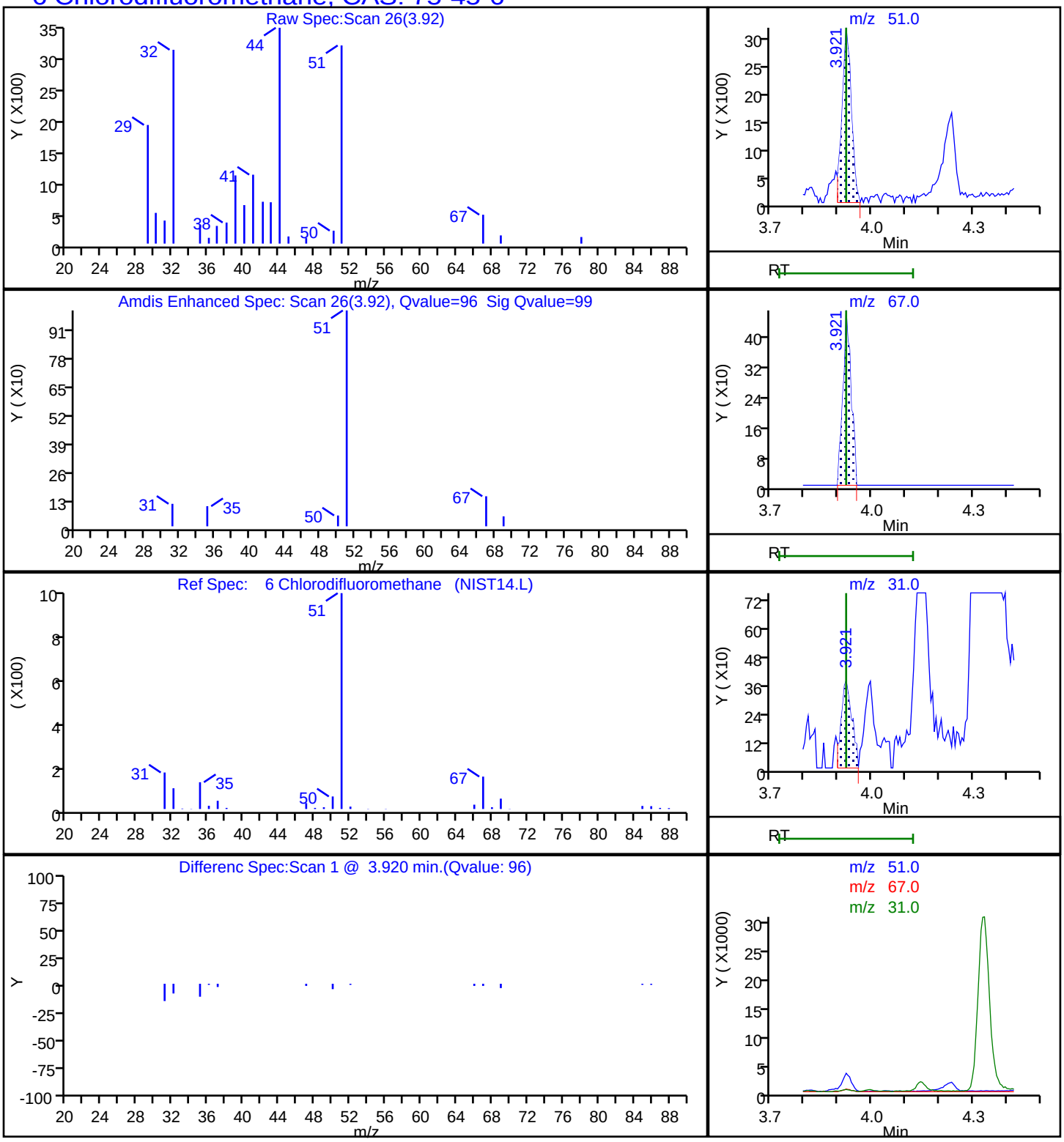
52 Carbon tetrachloride, CAS: 56-23-5



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16507.b\HI05P102.D				
Injection Date:	05-Sep-2020 17:18:30	Instrument ID:	MH		
Lims ID:	140-20175-A-19	Lab Sample ID:	140-20175-19		
Client ID:	IA-004-C-29				
Operator ID:	HMT	ALS Bottle#:	2	Worklist Smp#:	7
Purge Vol:	500.000 mL	Dil. Factor:	1.7700		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

6 Chlorodifluoromethane, CAS: 75-45-6

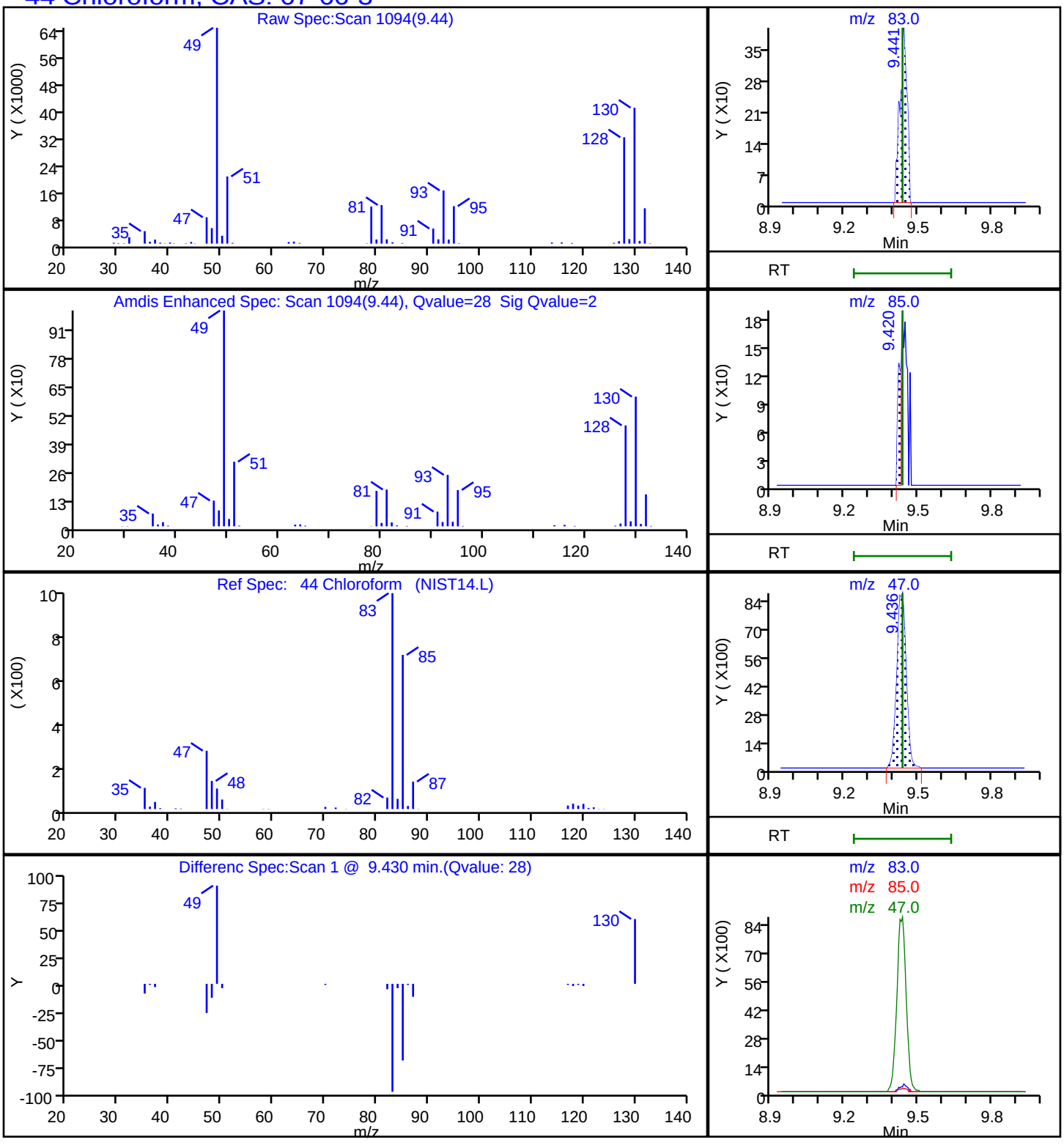


Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200904-16507.b\HI05P102.D

Injection Date:	05-Sep-2020 17:18:30	Instrument ID:	MH		
Lims ID:	140-20175-A-19	Lab Sample ID:	140-20175-19		
Client ID:	IA-004-C-29				
Operator ID:	HMT	ALS Bottle#:	2	Worklist Smp#:	7
Purge Vol:	500.000 mL	Dil. Factor:	1.7700		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

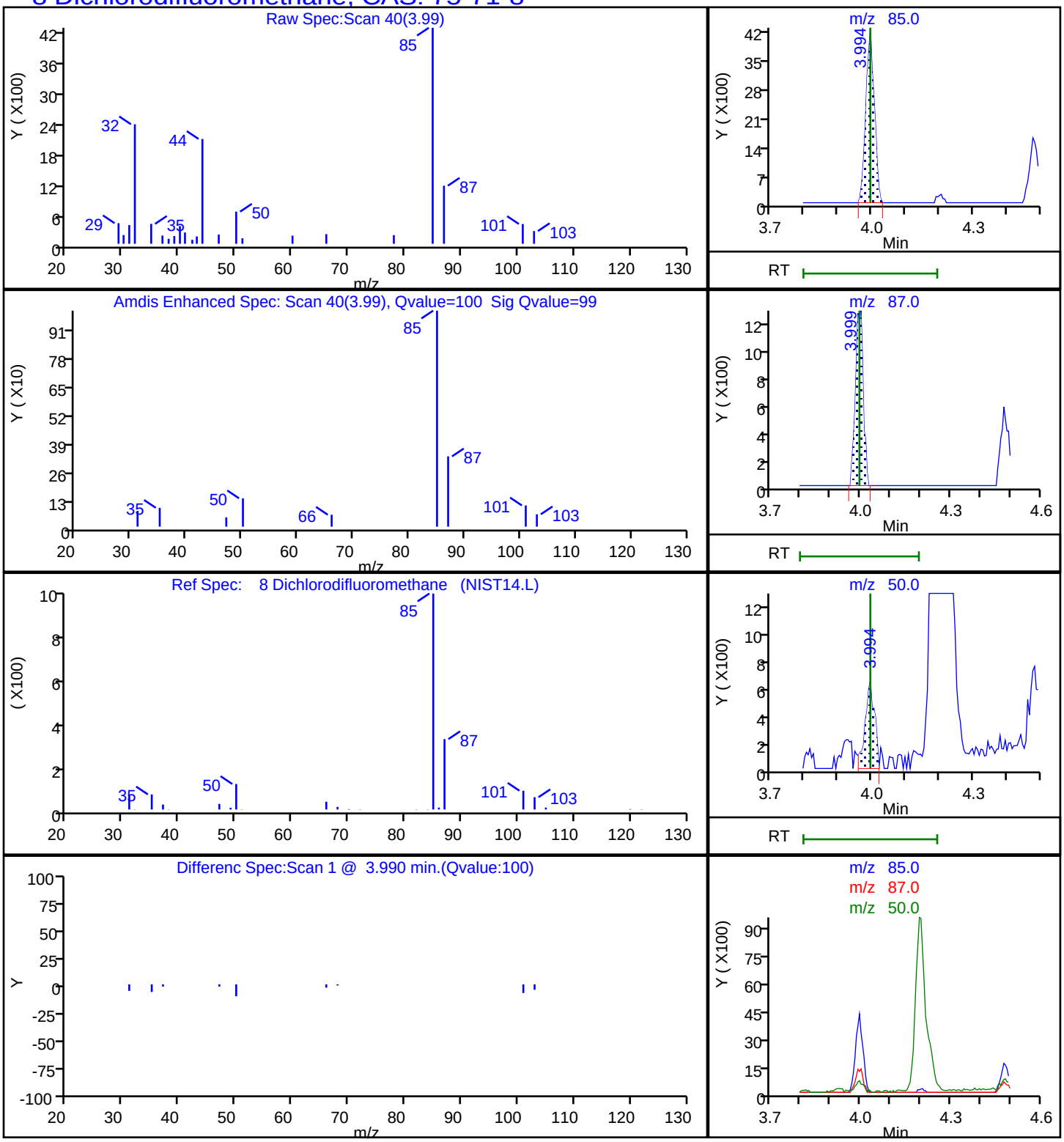
44 Chloroform, CAS: 67-66-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16507.b\HI05P102.D		
Injection Date:	05-Sep-2020 17:18:30	Instrument ID:	MH
Lims ID:	140-20175-A-19	Lab Sample ID:	140-20175-19
Client ID:	IA-004-C-29		
Operator ID:	HMT	ALS Bottle#:	2 Worklist Smp#: 7
Purge Vol:	500.000 mL	Dil. Factor:	1.7700
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

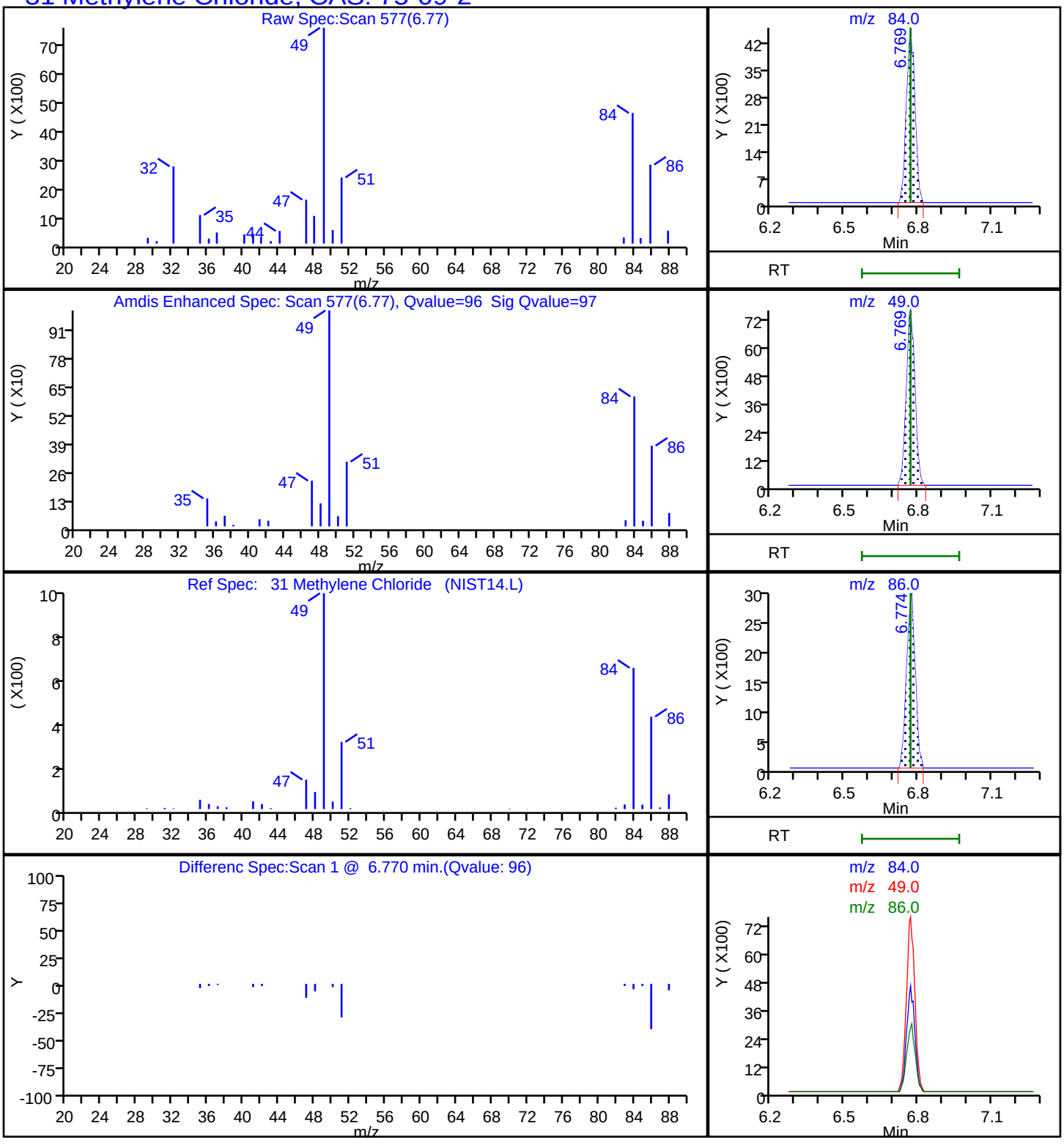
8 Dichlorodifluoromethane, CAS: 75-71-8



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16507.b\HI05P102.D		
Injection Date:	05-Sep-2020 17:18:30	Instrument ID:	MH
Lims ID:	140-20175-A-19	Lab Sample ID:	140-20175-19
Client ID:	IA-004-C-29		
Operator ID:	HMT	ALS Bottle#:	2 Worklist Smp#: 7
Purge Vol:	500.000 mL	Dil. Factor:	1.7700
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

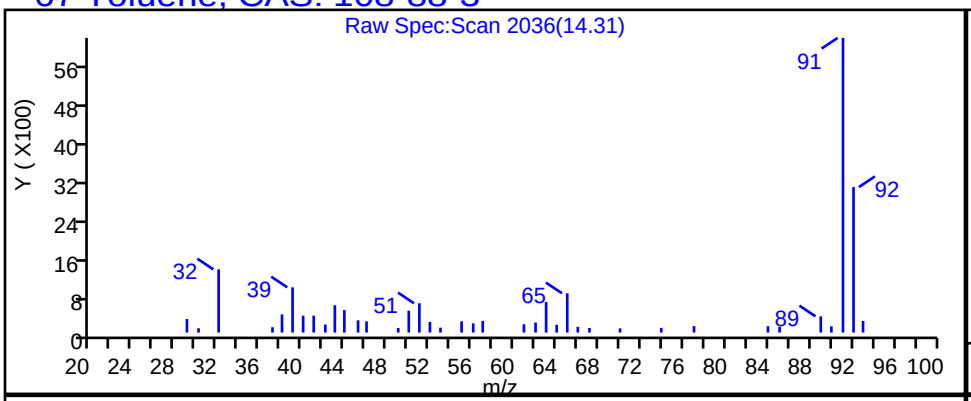
31 Methylene Chloride, CAS: 75-09-2

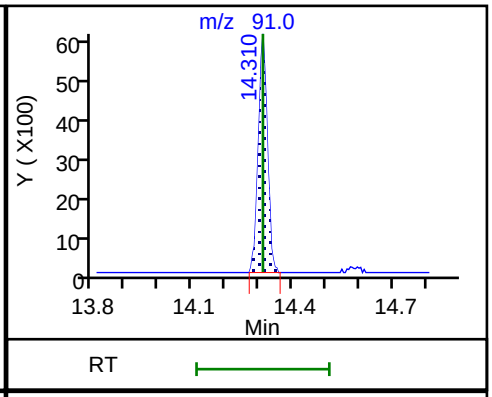


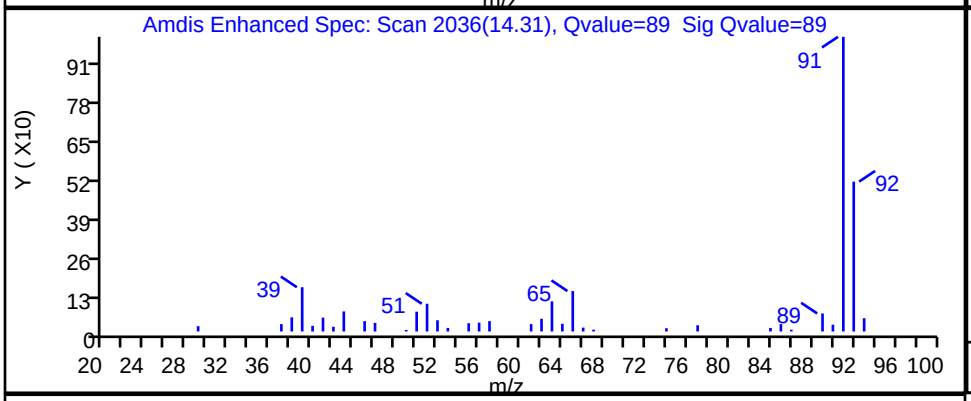
Eurofins TestAmerica, Knoxville

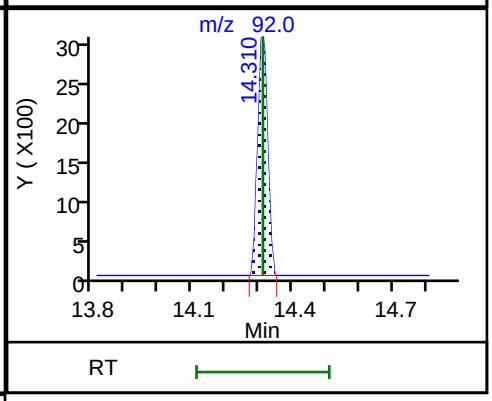
Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16507.b\HI05P102.D		
Injection Date:	05-Sep-2020 17:18:30	Instrument ID:	MH
Lims ID:	140-20175-A-19	Lab Sample ID:	140-20175-19
Client ID:	IA-004-C-29		
Operator ID:	HMT	ALS Bottle#:	2 Worklist Smp#: 7
Purge Vol:	500.000 mL	Dil. Factor:	1.7700
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

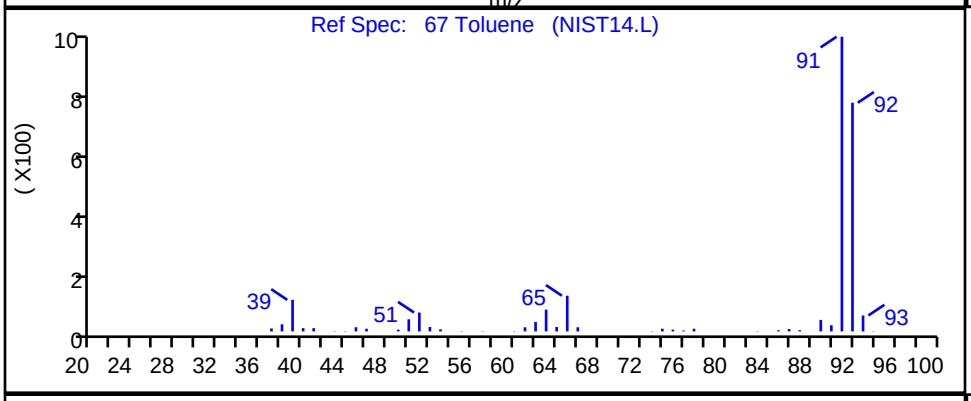
67 Toluene, CAS: 108-88-3

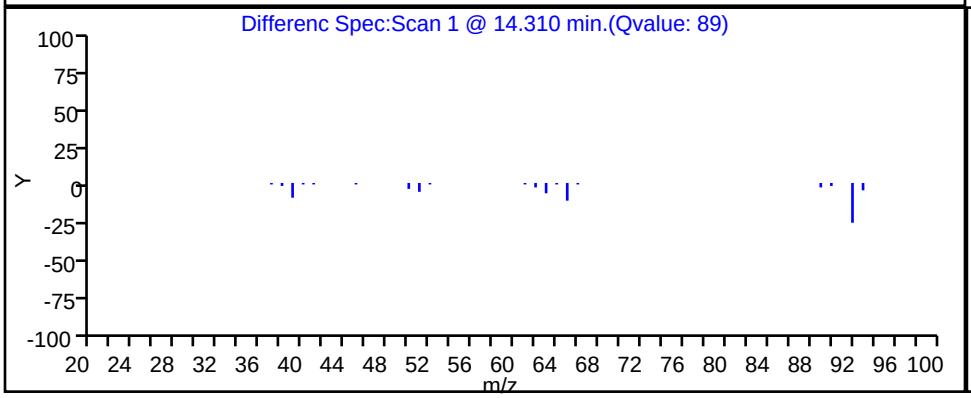


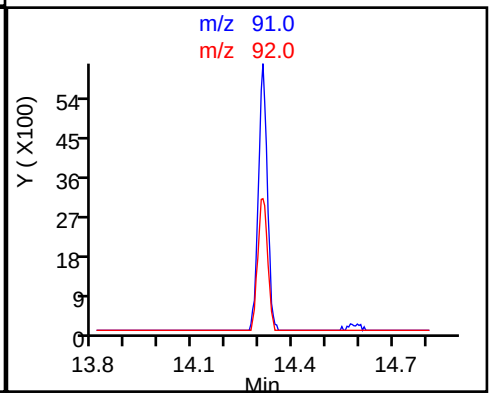










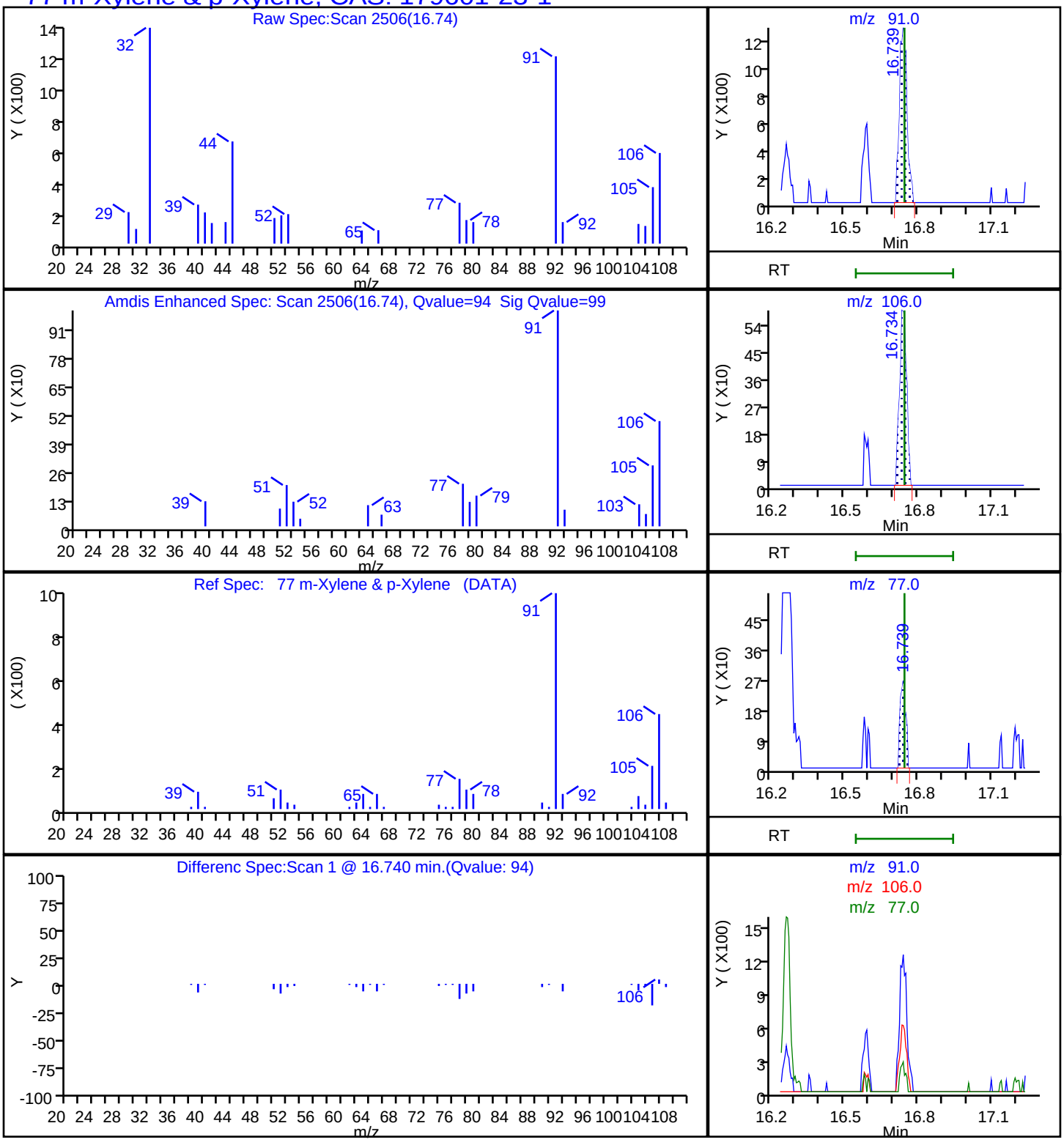


Report Date: 06-Sep-2020 10:10:52 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16507.b\HI05P102.D				
Injection Date:	05-Sep-2020 17:18:30	Instrument ID:	MH		
Lims ID:	140-20175-A-19	Lab Sample ID:	140-20175-19		
Client ID:	IA-004-C-29				
Operator ID:	HMT	ALS Bottle#:	2	Worklist Smp#:	7
Purge Vol:	500.000 mL	Dil. Factor:	1.7700		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

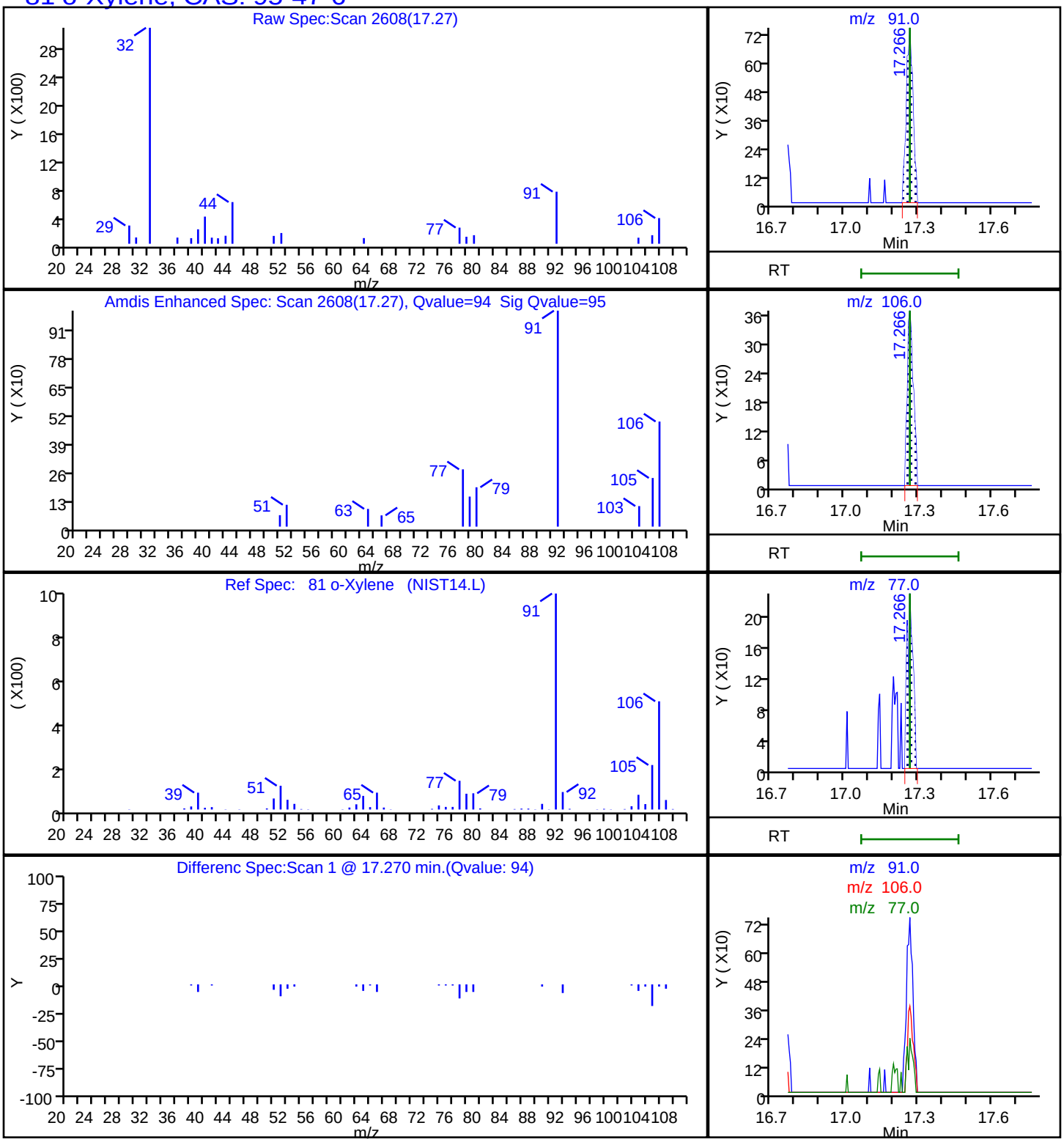
77 m-Xylene & p-Xylene, CAS: 179601-23-1



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16507.b\HI05P102.D		
Injection Date:	05-Sep-2020 17:18:30	Instrument ID:	MH
Lims ID:	140-20175-A-19	Lab Sample ID:	140-20175-19
Client ID:	IA-004-C-29		
Operator ID:	HMT	ALS Bottle#:	2 Worklist Smp#: 7
Purge Vol:	500.000 mL	Dil. Factor:	1.7700
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

81 o-Xylene, CAS: 95-47-6



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: IA-102-C-29 Lab Sample ID: 140-20175-20

Matrix: Air Lab File ID: HI05P103.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 16:22

Sample wt/vol: 100(mL) Date Analyzed: 09/05/2020 18:14

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42482 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.16	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.11	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	1.8		0.40	0.11
67-66-3	Chloroform	119.38	0.067	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.58		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	0.082	J	0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.035
108-88-3	Toluene	92.14	0.82		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	ND		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	0.26	J	0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.40	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	78		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: IA-102-C-29 Lab Sample ID: 140-20175-20

Matrix: Air Lab File ID: HI05P103.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 16:22

Sample wt/vol: 100(mL) Date Analyzed: 09/05/2020 18:14

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42482 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.51	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.69	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	6.5		1.4	0.39
67-66-3	Chloroform	119.38	0.33	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.9		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	0.35	J	1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.24
108-88-3	Toluene	92.14	3.1		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	ND		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	1.3	J	2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	1.7	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	78		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MH\20200904-16507.b\HI05P103.D
Lims ID: 140-20175-A-20
Client ID: IA-102-C-29
Sample Type: Client
Inject. Date: 05-Sep-2020 18:14:30 ALS Bottle#: 3 Worklist Smp#: 8
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016507-008
Misc. Info.: 140-20175-a-20
Operator ID: HMT Instrument ID: MH

Method: \\chromfs\Knoxville\ChromData\MH\20200904-16507.b\MH_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 06-Sep-2020 10:10:44 Calib Date: 29-Aug-2020 23:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1044

First Level Reviewer: tajh Date: 06-Sep-2020 10:10:37

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.431	9.436	-0.005	98	85391	4.80	
* 2 1,4-Difluorobenzene	114	11.596	11.591	0.005	95	342569	4.80	
* 3 Chlorobenzene-d5 (IS)	117	16.258	16.258	0.000	88	279069	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.876	17.876	0.000	91	117460	3.62	
6 Chlorodifluoromethane	51	3.921	3.921	0.000	96	17615	0.3697	
8 Dichlorodifluoromethane	85	3.994	3.993	0.001	99	7444	0.1153	
44 Chloroform	83	9.436	9.436	0.000	28	695	0.0134	
51 Benzene	78	11.069	11.069	0.000	68	2001	0.0318	
52 Carbon tetrachloride	117	11.105	11.095	0.010	69	858	0.0220	
67 Toluene	91	14.310	14.310	0.000	89	11821	0.1644	
76 Ethylbenzene	91	16.584	16.584	0.000	82	1420	0.0163	
77 m-Xylene & p-Xylene	91	16.739	16.744	-0.005	95	3719	0.0541	
81 o-Xylene	91	17.271	17.266	0.005	87	1843	0.0256	
88 1,3,5-Trimethylbenzene	120	18.568	18.563	0.005	1	212	0.0523	
S 116 Xylenes, Total	100				0		0.0797	

Reagents:

40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

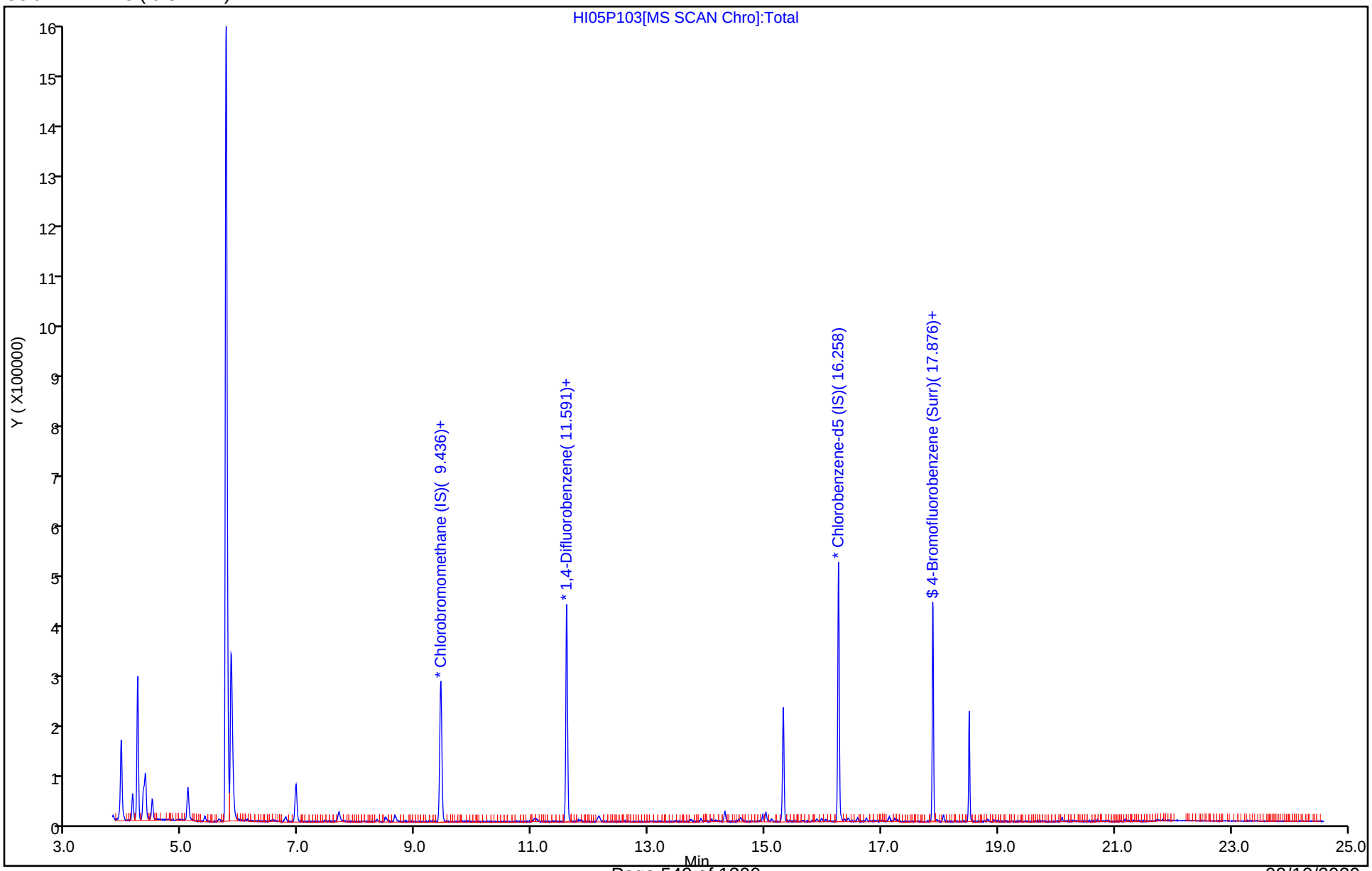
Report Date: 06-Sep-2020 10:10:53 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200904-16507.b\HI05P103.D

Injection Date:	05-Sep-2020 18:14:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	140-20175-A-20	Lab Sample ID:	140-20175-20	Worklist Smp#:	8
Client ID:	IA-102-C-29				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16507.b\HI05P103.D				
Lims ID:	140-20175-A-20				
Client ID:	IA-102-C-29				
Sample Type:	Client				
Inject. Date:	05-Sep-2020 18:14:30	ALS Bottle#:	3	Worklist Smp#:	8
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016507-008				
Misc. Info.:	140-20175-a-20				
Operator ID:	HMT	Instrument ID:	MH		
Method:	\\chromfs\Knoxville\ChromData\MH\20200904-16507.b\MH_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	06-Sep-2020 10:10:44	Calib Date:	29-Aug-2020 23:57:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1044				
First Level Reviewer: tajh		Date:	06-Sep-2020 10:10:37		

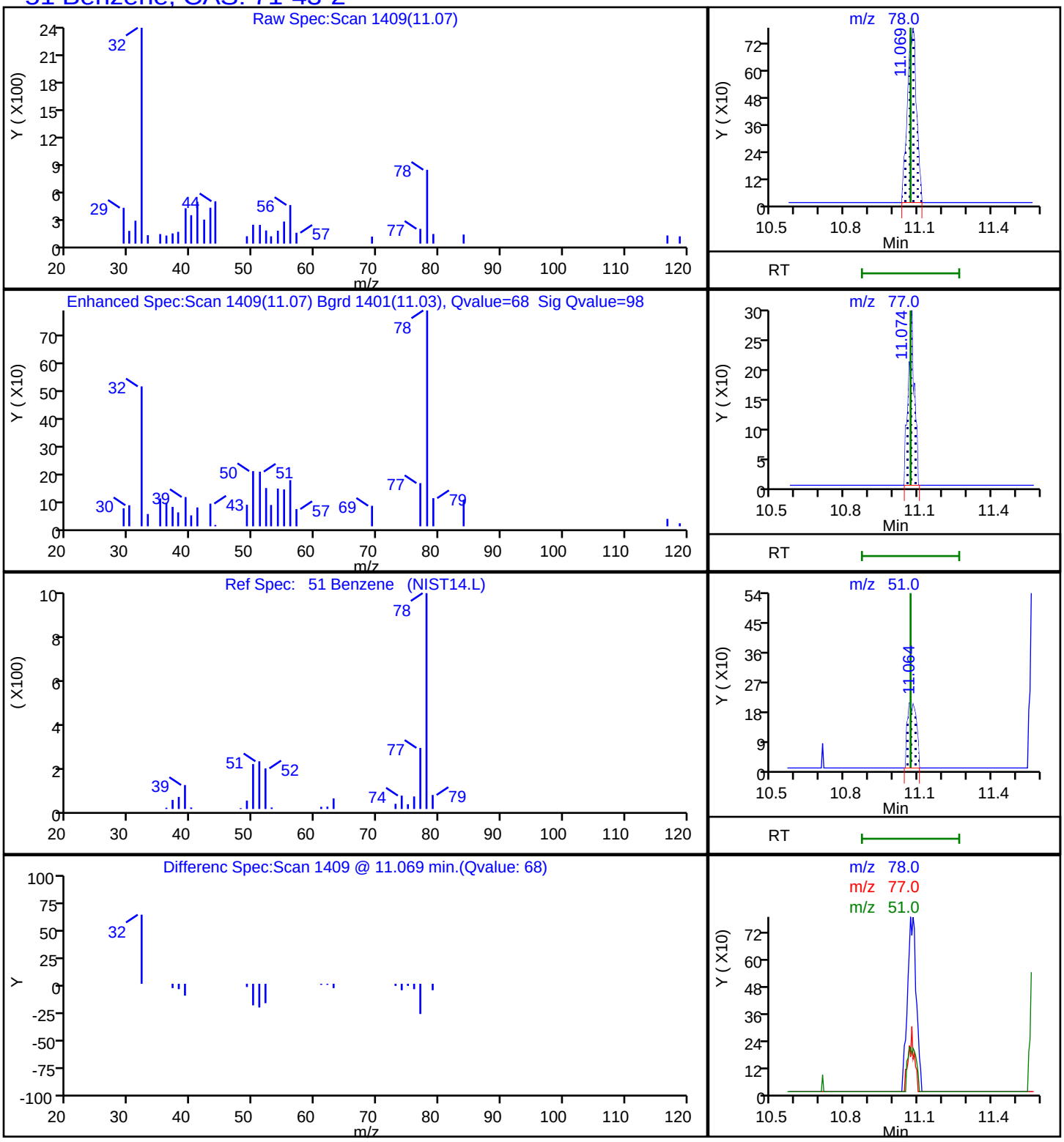
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	3.62	78.07

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200904-16507.b\HI05P103.D

Injection Date:	05-Sep-2020 18:14:30	Instrument ID:	MH		
Lims ID:	140-20175-A-20	Lab Sample ID:	140-20175-20		
Client ID:	IA-102-C-29				
Operator ID:	HMT	ALS Bottle#:	3	Worklist Smp#:	8
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

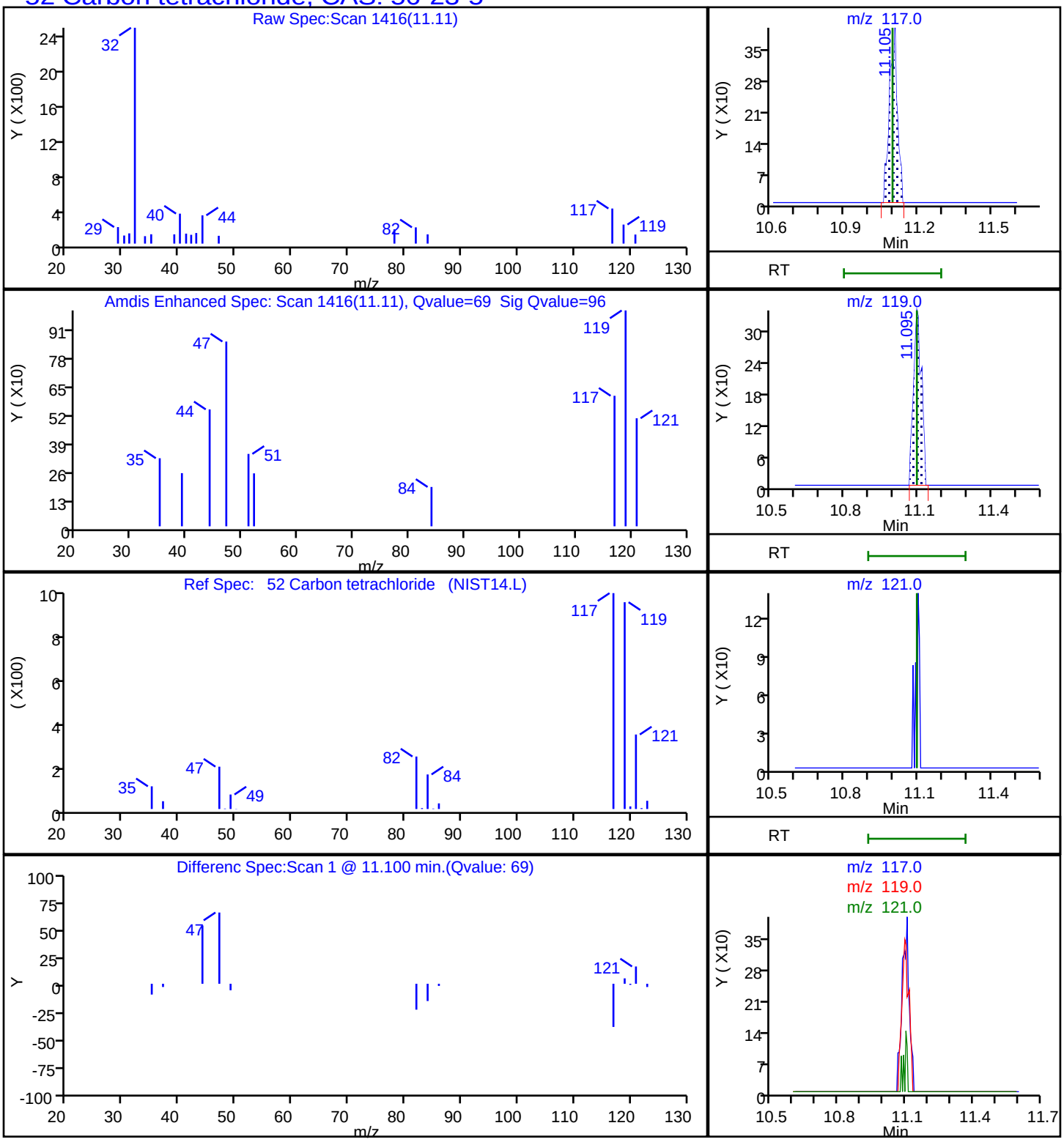
51 Benzene, CAS: 71-43-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16507.b\HI05P103.D		
Injection Date:	05-Sep-2020 18:14:30	Instrument ID:	MH
Lims ID:	140-20175-A-20	Lab Sample ID:	140-20175-20
Client ID:	IA-102-C-29		
Operator ID:	HMT	ALS Bottle#:	3 Worklist Smp#: 8
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

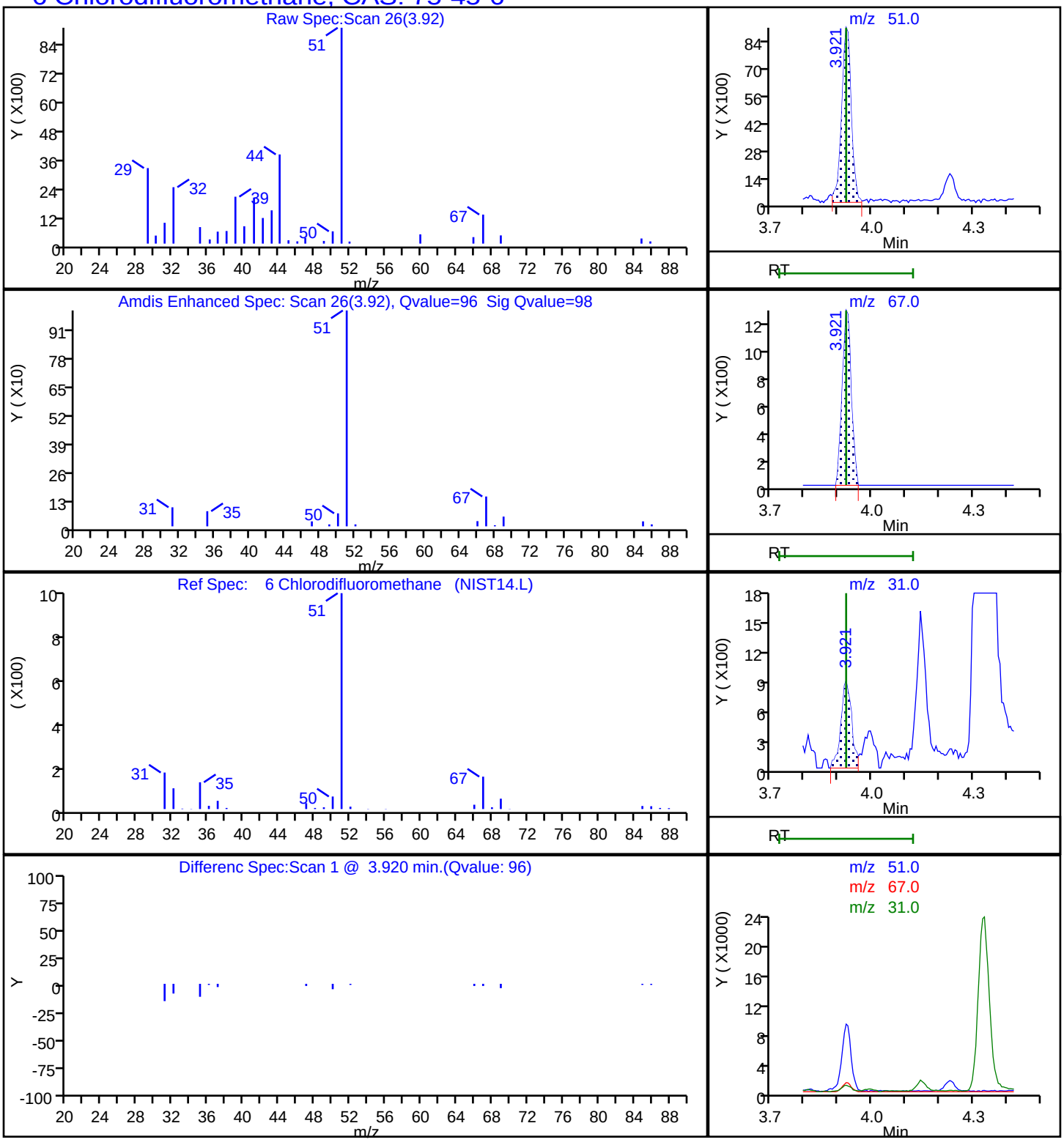
52 Carbon tetrachloride, CAS: 56-23-5



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16507.b\HI05P103.D		
Injection Date:	05-Sep-2020 18:14:30	Instrument ID:	MH
Lims ID:	140-20175-A-20	Lab Sample ID:	140-20175-20
Client ID:	IA-102-C-29		
Operator ID:	HMT	ALS Bottle#:	3 Worklist Smp#: 8
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

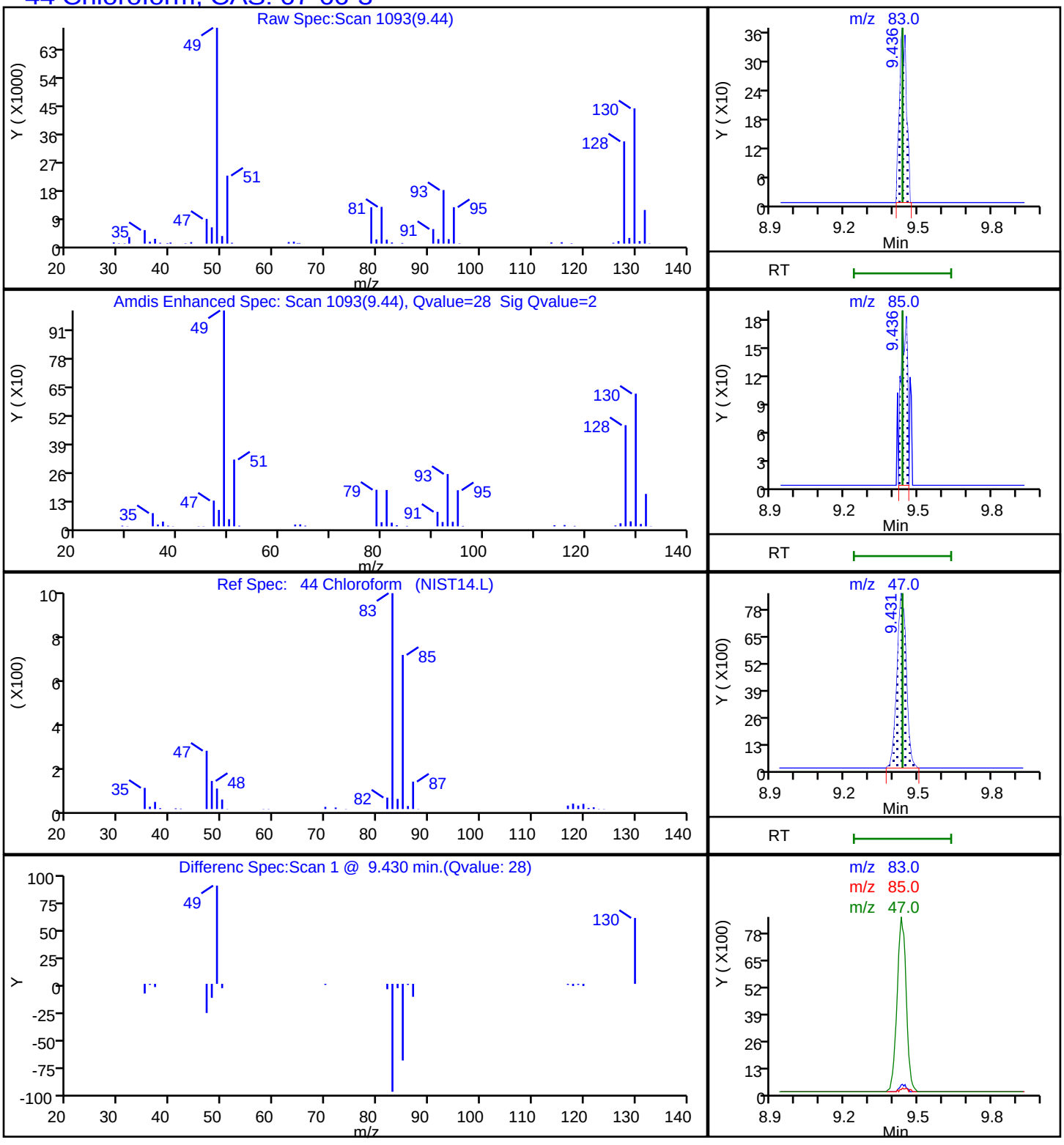
6 Chlorodifluoromethane, CAS: 75-45-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16507.b\HI05P103.D		
Injection Date:	05-Sep-2020 18:14:30	Instrument ID:	MH
Lims ID:	140-20175-A-20	Lab Sample ID:	140-20175-20
Client ID:	IA-102-C-29		
Operator ID:	HMT	ALS Bottle#:	3 Worklist Smp#: 8
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

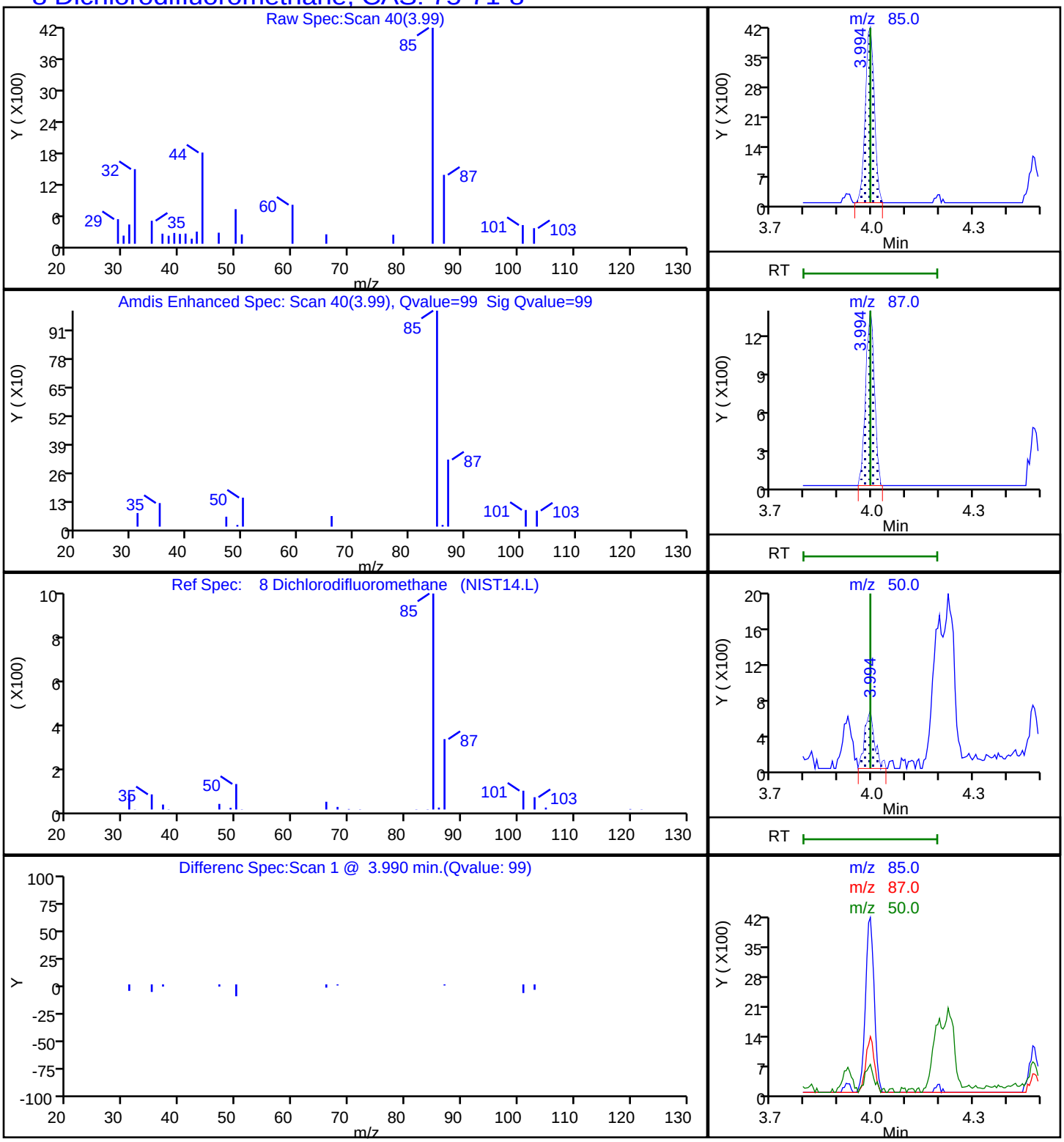
44 Chloroform, CAS: 67-66-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16507.b\HI05P103.D		
Injection Date:	05-Sep-2020 18:14:30	Instrument ID:	MH
Lims ID:	140-20175-A-20	Lab Sample ID:	140-20175-20
Client ID:	IA-102-C-29		
Operator ID:	HMT	ALS Bottle#:	3 Worklist Smp#: 8
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

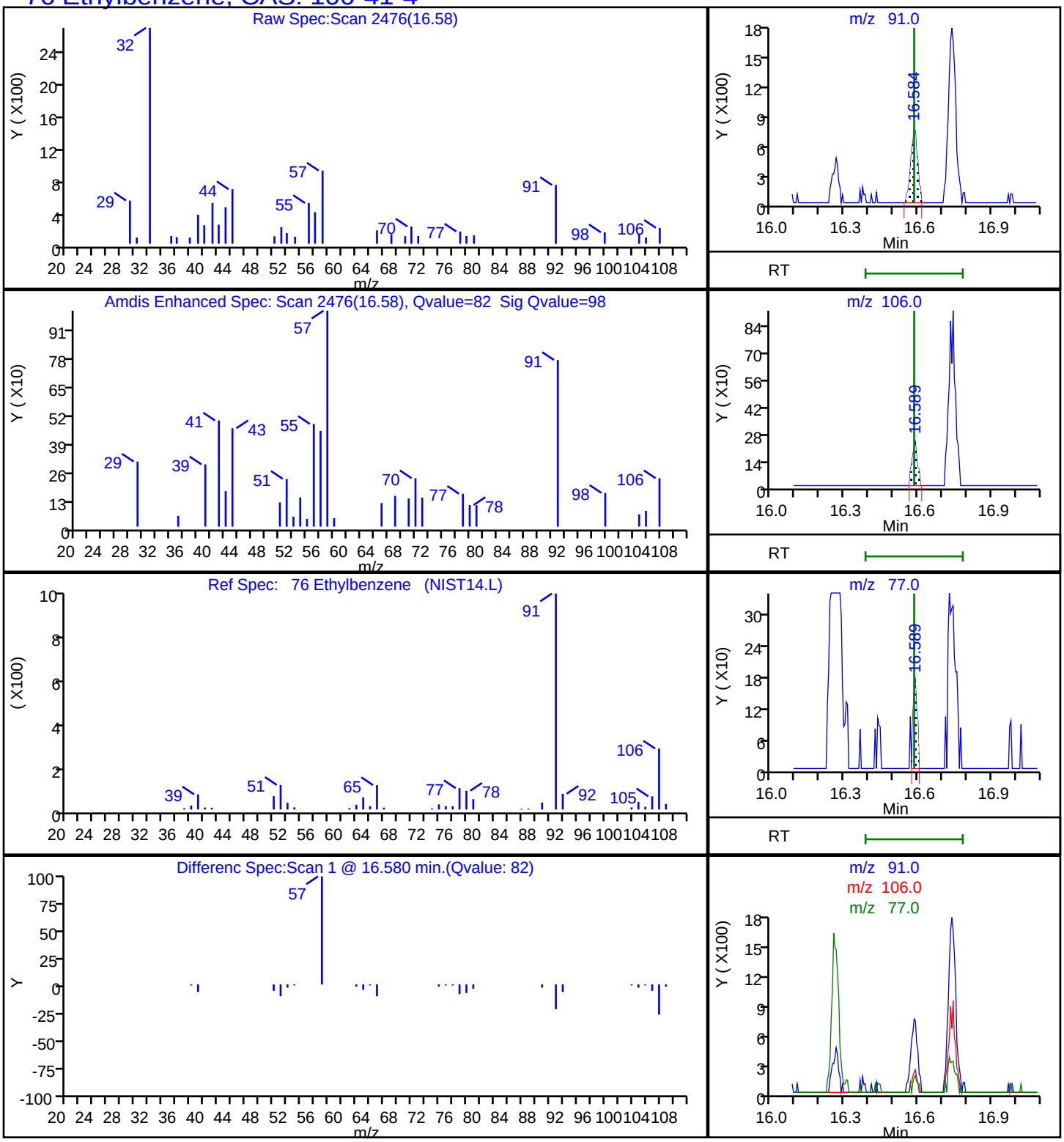
8 Dichlorodifluoromethane, CAS: 75-71-8



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16507.b\HI05P103.D				
Injection Date:	05-Sep-2020 18:14:30	Instrument ID:	MH		
Lims ID:	140-20175-A-20	Lab Sample ID:	140-20175-20		
Client ID:	IA-102-C-29				
Operator ID:	HMT	ALS Bottle#:	3	Worklist Smp#:	8
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

76 Ethylbenzene, CAS: 100-41-4

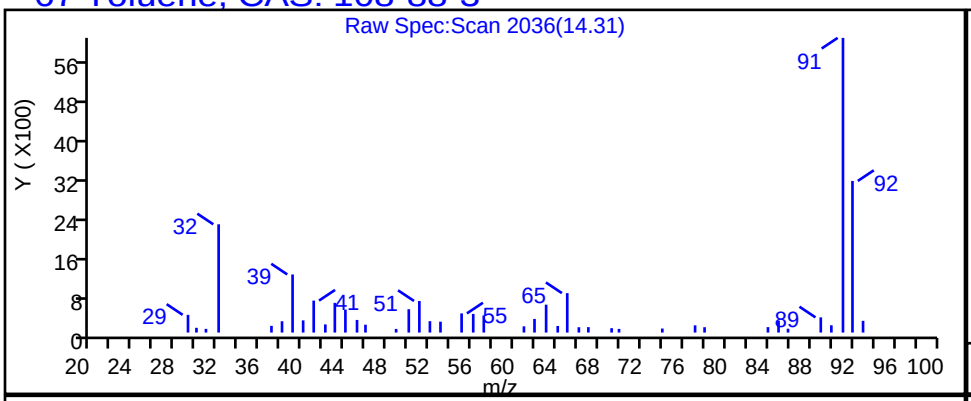


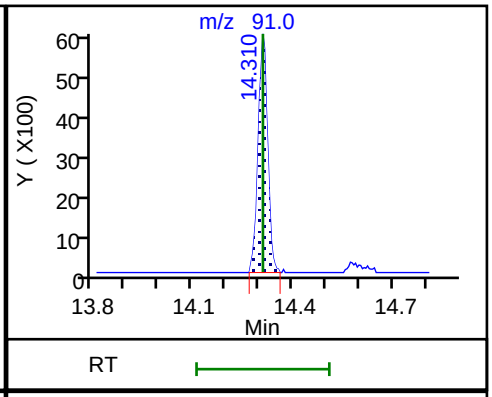
Report Date: 06-Sep-2020 10:10:54 Chrom Revision: 2.3 20-Aug-2020 13:57:12

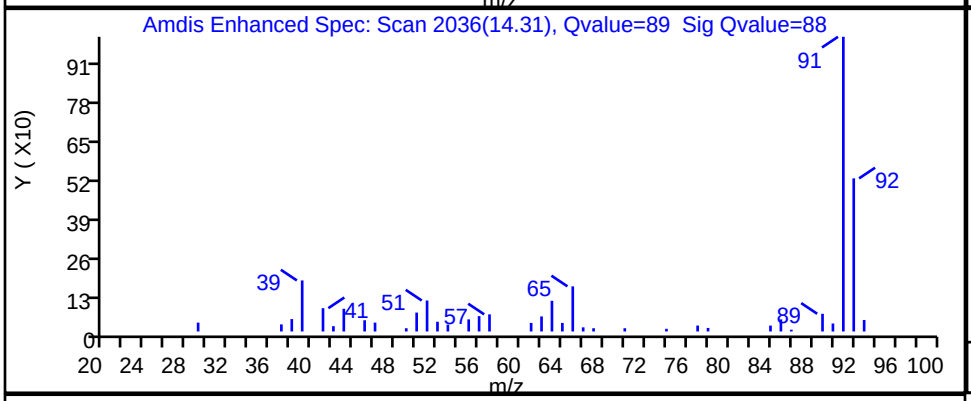
Eurofins TestAmerica, Knoxville

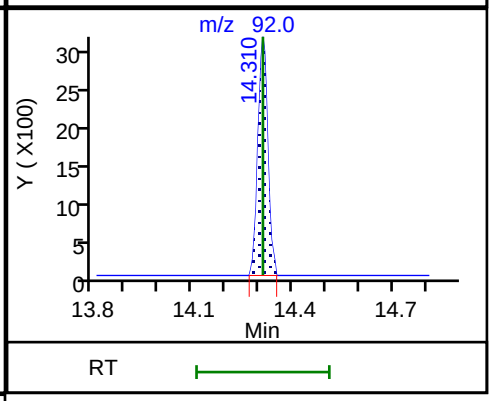
Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16507.b\HI05P103.D				
Injection Date:	05-Sep-2020 18:14:30	Instrument ID:	MH		
Lims ID:	140-20175-A-20	Lab Sample ID:	140-20175-20		
Client ID:	IA-102-C-29				
Operator ID:	HMT	ALS Bottle#:	3	Worklist Smp#:	8
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

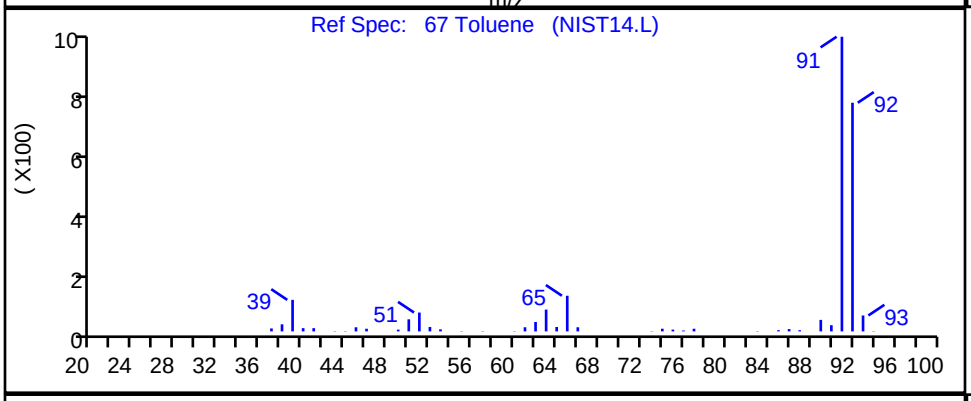
67 Toluene, CAS: 108-88-3

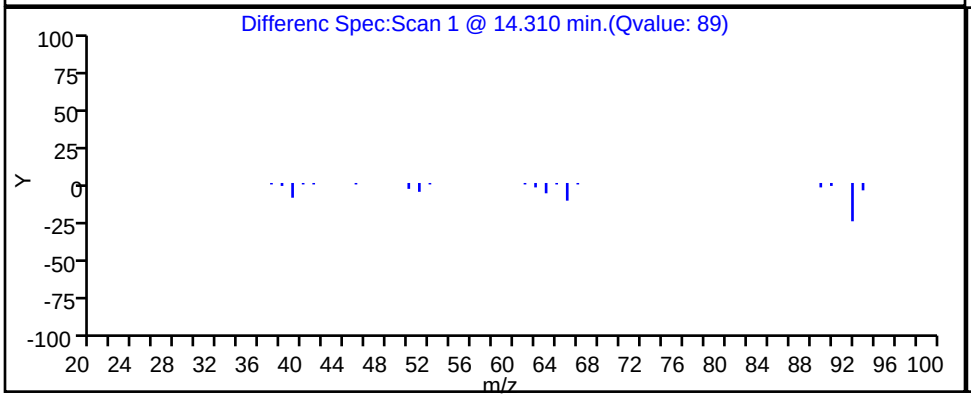


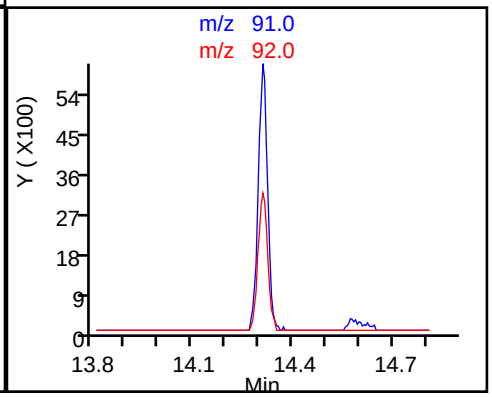










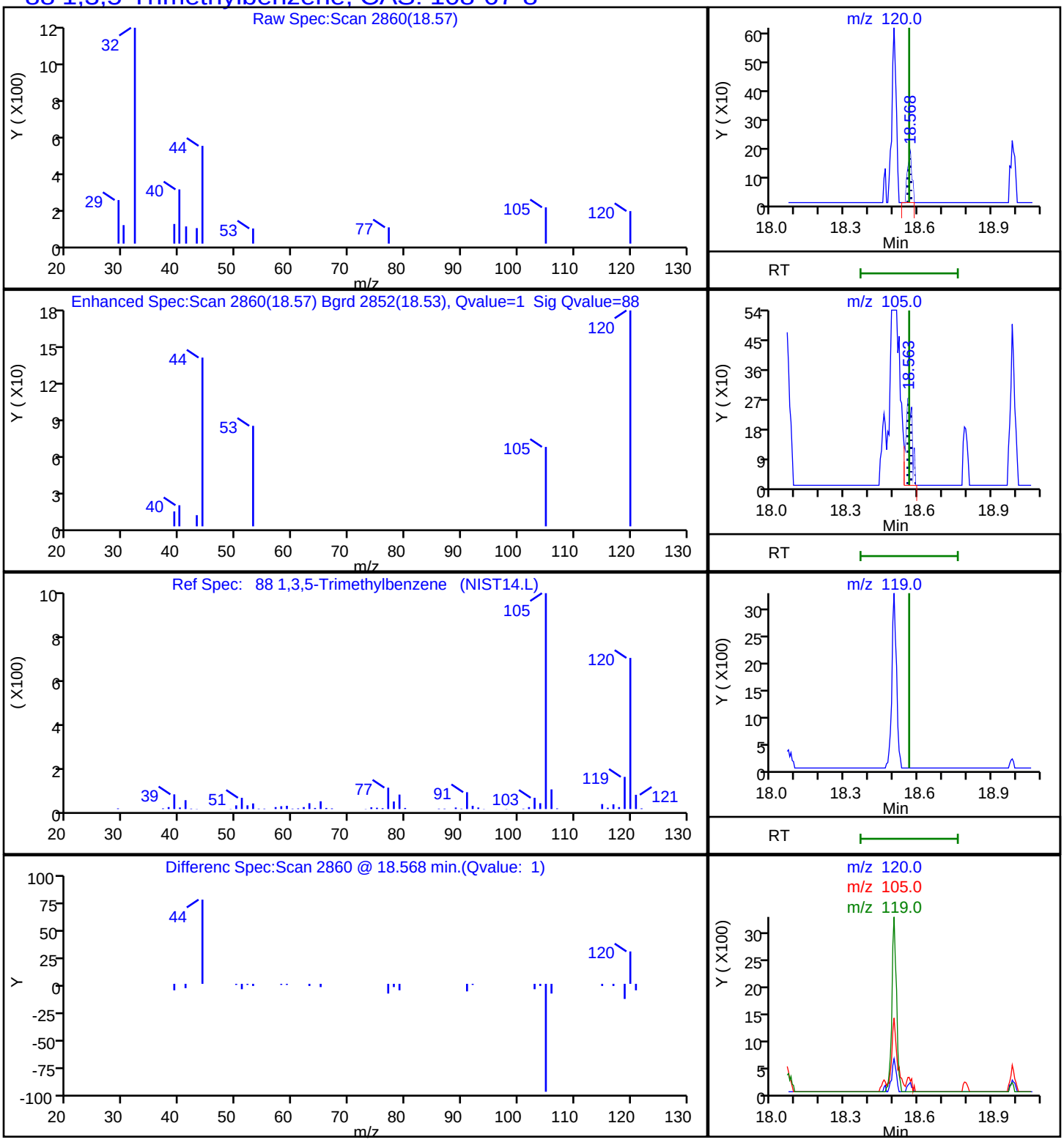


Report Date: 06-Sep-2020 10:10:54 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16507.b\HI05P103.D				
Injection Date:	05-Sep-2020 18:14:30	Instrument ID:	MH		
Lims ID:	140-20175-A-20	Lab Sample ID:	140-20175-20		
Client ID:	IA-102-C-29				
Operator ID:	HMT	ALS Bottle#:	3	Worklist Smp#:	8
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

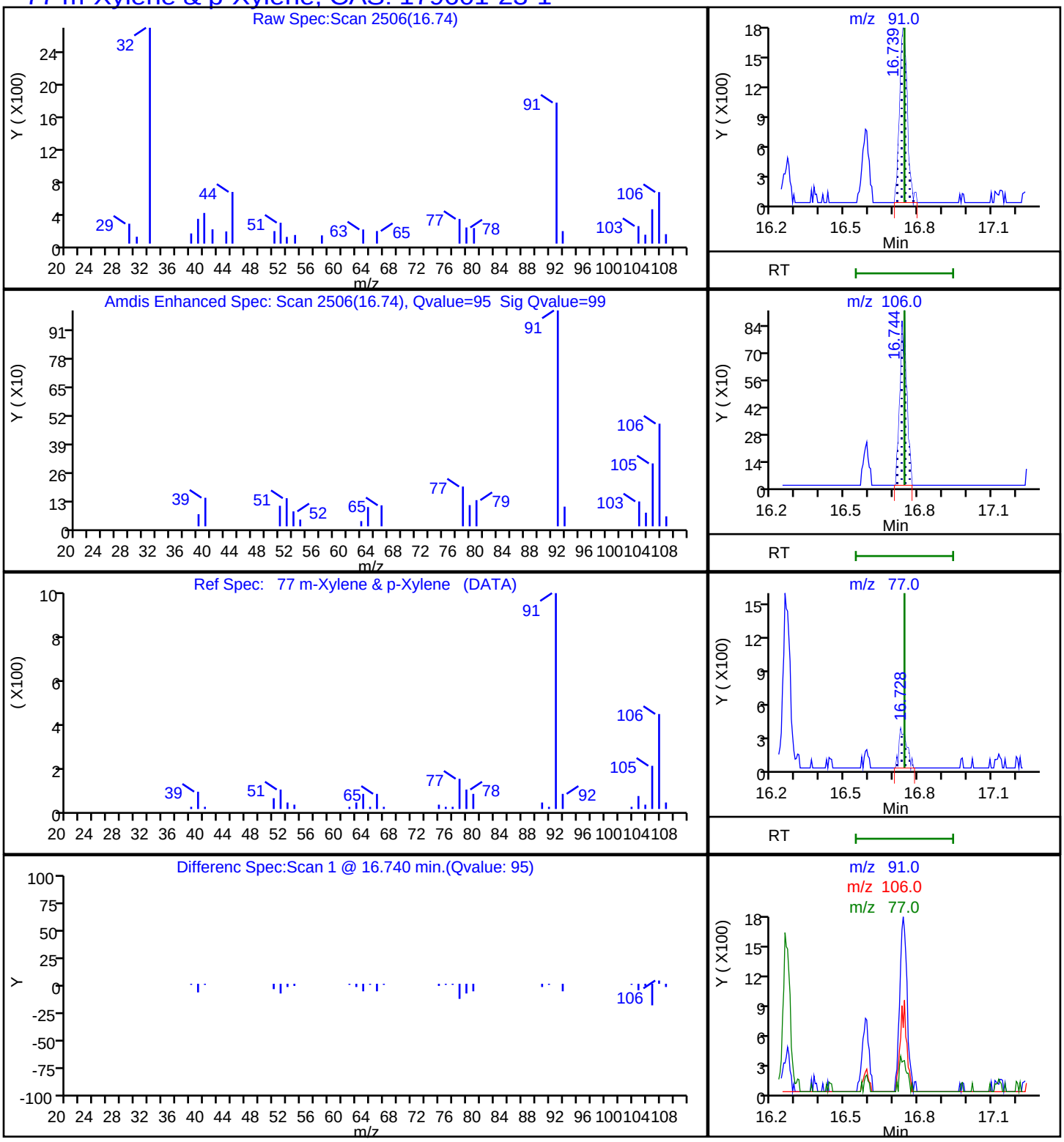
88 1,3,5-Trimethylbenzene, CAS: 108-67-8



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16507.b\HI05P103.D				
Injection Date:	05-Sep-2020 18:14:30	Instrument ID:	MH		
Lims ID:	140-20175-A-20	Lab Sample ID:	140-20175-20		
Client ID:	IA-102-C-29				
Operator ID:	HMT	ALS Bottle#:	3	Worklist Smp#:	8
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

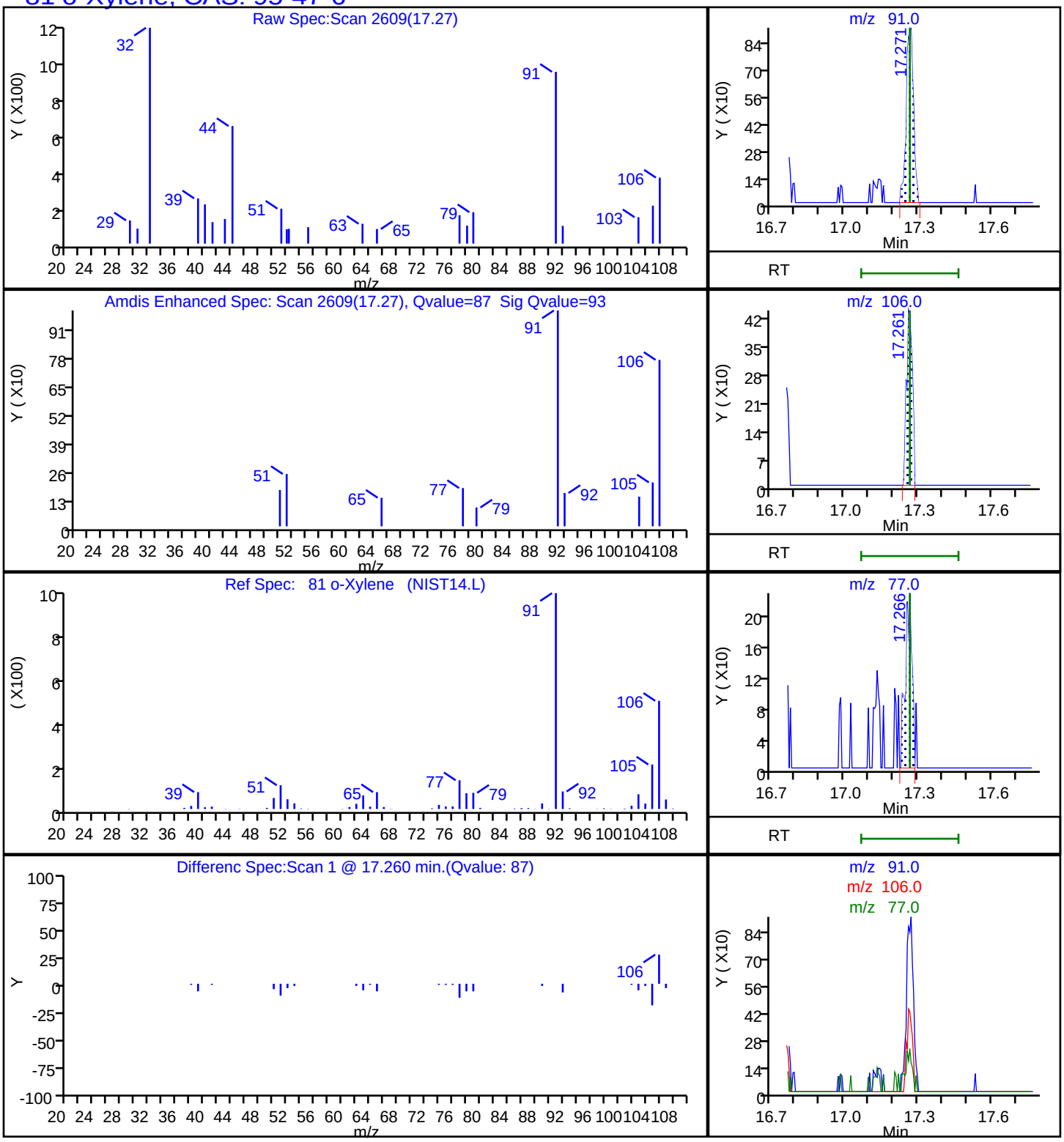
77 m-Xylene & p-Xylene, CAS: 179601-23-1



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16507.b\HI05P103.D				
Injection Date:	05-Sep-2020 18:14:30	Instrument ID:	MH		
Lims ID:	140-20175-A-20	Lab Sample ID:	140-20175-20		
Client ID:	IA-102-C-29				
Operator ID:	HMT	ALS Bottle#:	3	Worklist Smp#:	8
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

81 o-Xylene, CAS: 95-47-6



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: IA-113-C-29 Lab Sample ID: 140-20175-21

Matrix: Air Lab File ID: HI07P104.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 16:23

Sample wt/vol: 133(mL) Date Analyzed: 09/06/2020 19:30

Soil Aliquot Vol: Dilution Factor: 1.33

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42498 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.18	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.16	J *	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	1.3		0.40	0.11
67-66-3	Chloroform	119.38	0.14	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.61		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	0.13	J	0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	0.088	J	0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	0.15	J	0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	0.097	J	0.40	0.035
108-88-3	Toluene	92.14	1.1		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	0.067	J	0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	0.19	J	0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	0.082	J	0.40	0.035
79-01-6	Trichloroethene	131.39	0.050	J	0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	0.15	J *	0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	0.36	J	0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.70	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	84		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: IA-113-C-29 Lab Sample ID: 140-20175-21

Matrix: Air Lab File ID: HI07P104.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 16:23

Sample wt/vol: 133(mL) Date Analyzed: 09/06/2020 19:30

Soil Aliquot Vol: Dilution Factor: 1.33

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42498 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.56	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	1.0	J *	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	4.7		1.4	0.39
67-66-3	Chloroform	119.38	0.66	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	3.0		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	0.52	J	1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	0.35	J	1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	0.67	J	1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	0.66	J	2.7	0.24
108-88-3	Toluene	92.14	4.1		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	0.27	J	1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	1.0	J	2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	0.45	J	2.2	0.19
79-01-6	Trichloroethene	131.39	0.27	J	1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	0.75	J *	2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	1.8	J	2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	3.0	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	84		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P104.D				
Lims ID:	140-20175-A-21				
Client ID:	IA-113-C-29				
Sample Type:	Client				
Inject. Date:	06-Sep-2020 19:30:30	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	500.000 mL	Dil. Factor:	1.3300		
Sample Info:	140-0016514-005				
Misc. Info.:	140-20175-a-21@1.33				
Operator ID:	HMT	Instrument ID:	MH		
Method:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\MH_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	07-Sep-2020 07:43:45	Calib Date:	29-Aug-2020 23:57:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1015				
First Level Reviewer: tajh		Date:	07-Sep-2020 07:40:41		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.431	9.431	0.000	98	96857	4.80	
* 2 1,4-Difluorobenzene	114	11.591	11.591	0.000	95	404330	4.80	
* 3 Chlorobenzene-d5 (IS)	117	16.258	16.258	0.000	88	264517	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.876	17.876	0.000	90	120074	3.91	
6 Chlorodifluoromethane	51	3.921	3.916	0.005	95	14279	0.2642	
8 Dichlorodifluoromethane	85	3.994	3.983	0.011	99	8872	0.1212	
34 trans-1,2-Dichloroethene	96	7.637	7.617	0.020	41	330	0.0135	
37 1,1-Dichloroethane	63	8.066	8.061	0.005	25	1263	0.0259	
44 Chloroform	83	9.436	9.436	0.000	32	1591	0.0270	
47 1,1,1-Trichloroethane	97	10.490	10.485	0.005	93	1998	0.0375	
48 1,2-Dichloroethane	62	10.594	10.599	-0.005	11	644	0.0175	
51 Benzene	78	11.069	11.074	-0.005	96	2607	0.0351	
52 Carbon tetrachloride	117	11.095	11.095	0.000	93	1500	0.0326	
58 Trichloroethene	130	12.289	12.294	-0.005	17	333	0.0100	
67 Toluene	91	14.310	14.310	0.000	91	14749	0.2164	
68 1,1,2-Trichloroethane	83	14.377	14.382	-0.005	1	401	0.0164	
73 Tetrachloroethene	129	15.441	15.436	0.005	61	554	0.0194	
76 Ethylbenzene	91	16.589	16.584	0.005	95	2531	0.0307	
77 m-Xylene & p-Xylene	91	16.744	16.744	0.000	96	5809	0.0891	
81 o-Xylene	91	17.266	17.266	0.000	96	3464	0.0507	
88 1,3,5-Trimethylbenzene	120	18.563	18.563	0.000	92	1045	0.0726	
92 1,2,4-Trimethylbenzene	105	18.987	18.987	0.000	91	2404	0.0305	
S 116 Xylenes, Total	100				0		0.1398	

Reagents:

40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

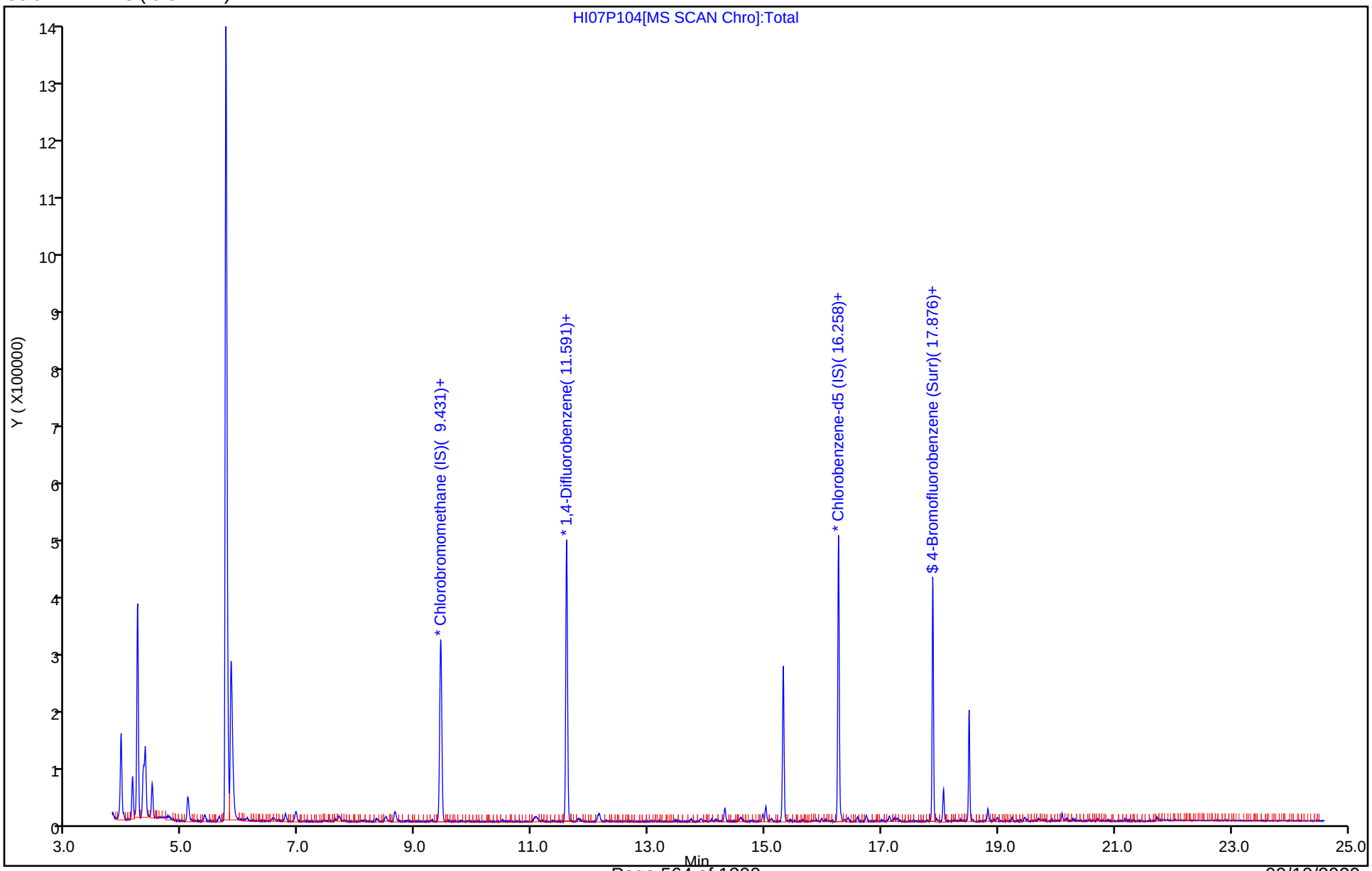
Report Date: 07-Sep-2020 07:43:55 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P104.D

Injection Date:	06-Sep-2020 19:30:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	140-20175-A-21	Lab Sample ID:	140-20175-21	Worklist Smp#:	5
Client ID:	IA-113-C-29				
Purge Vol:	500.000 mL	Dil. Factor:	1.3300	ALS Bottle#:	4
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

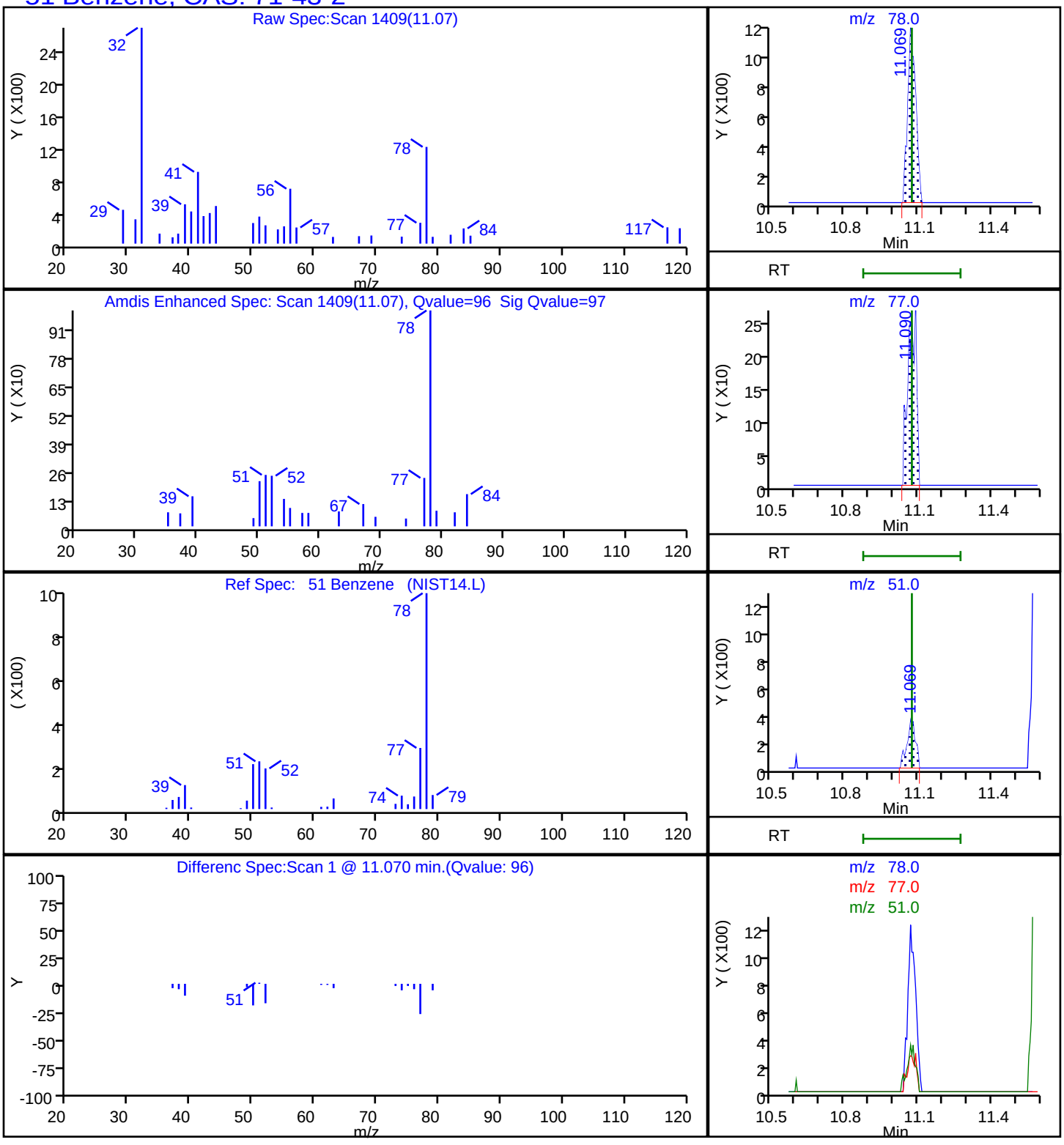
Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P104.D				
Lims ID:	140-20175-A-21				
Client ID:	IA-113-C-29				
Sample Type:	Client				
Inject. Date:	06-Sep-2020 19:30:30	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	500.000 mL	Dil. Factor:	1.3300		
Sample Info:	140-0016514-005				
Misc. Info.:	140-20175-a-21@1.33				
Operator ID:	HMT	Instrument ID:	MH		
Method:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\MH_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	07-Sep-2020 07:43:45	Calib Date:	29-Aug-2020 23:57:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1015				
First Level Reviewer: tajh		Date:	07-Sep-2020 07:40:41		

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	3.91	84.20

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P104.D		
Injection Date:	06-Sep-2020 19:30:30	Instrument ID:	MH
Lims ID:	140-20175-A-21	Lab Sample ID:	140-20175-21
Client ID:	IA-113-C-29		
Operator ID:	HMT	ALS Bottle#:	4 Worklist Smp#: 5
Purge Vol:	500.000 mL	Dil. Factor:	1.3300
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

51 Benzene, CAS: 71-43-2



Eurofins TestAmerica, Knoxville

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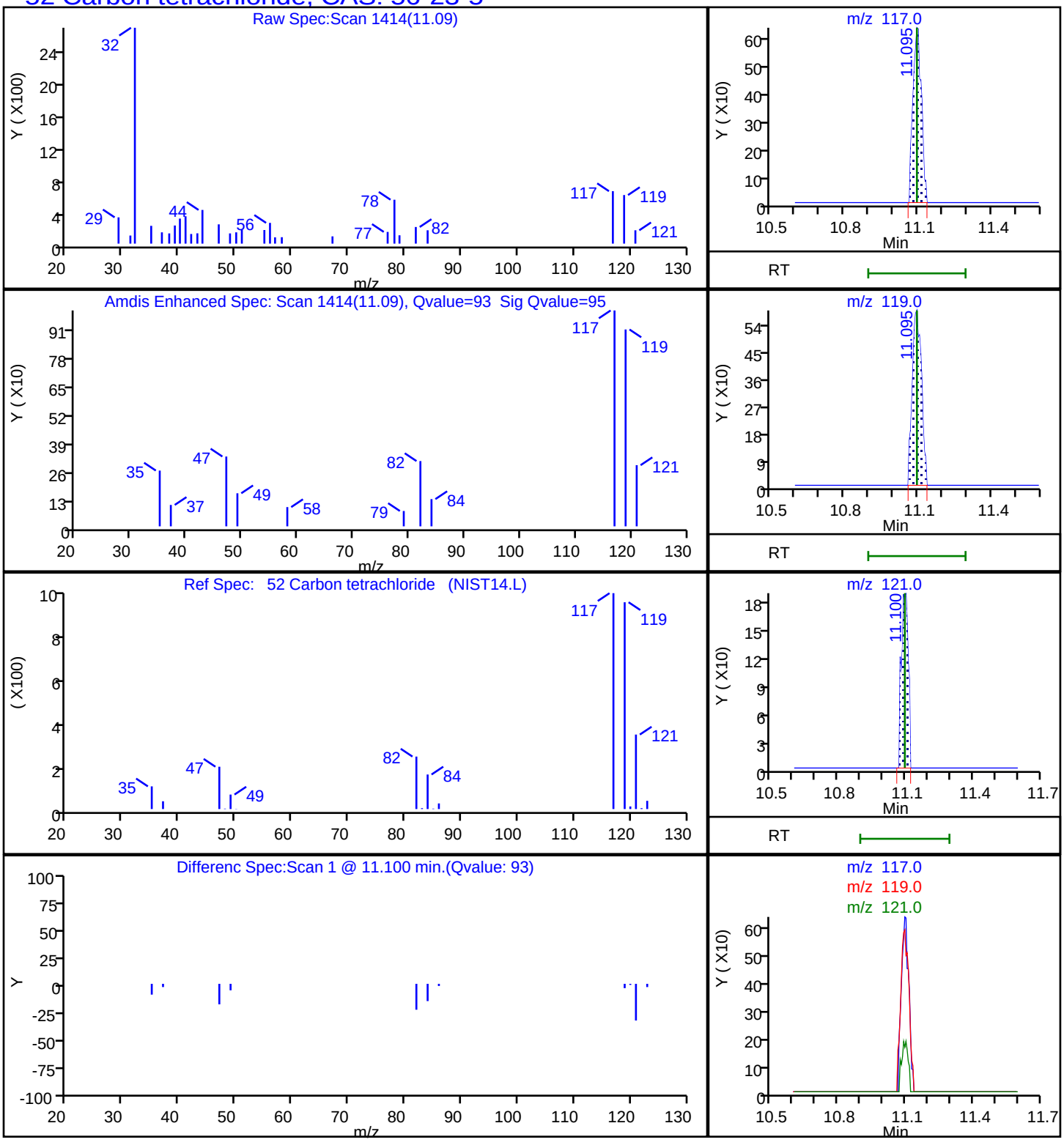
Injection Date:	06-Sep-2020 19:30:30	Instrument ID:	MH
Lims ID:	140-20175-A-21	Lab Sample ID:	140-20175-21
Client ID:	IA-113-C-29		
Operator ID:	HMT	ALS Bottle#:	4 Worklist Smp#: 5
Purge Vol:	500.000 mL	Dil. Factor:	1.3300
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

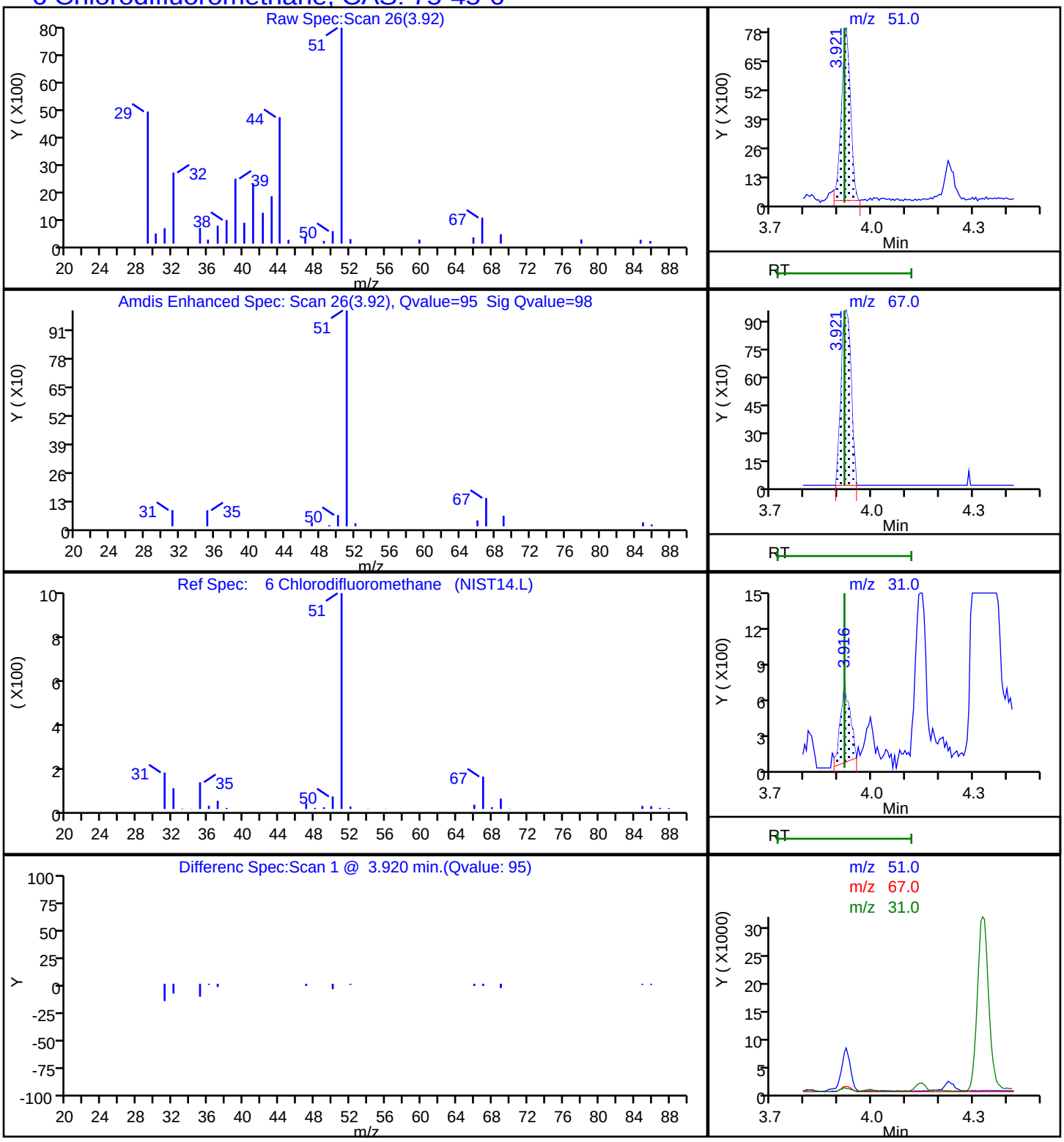
52 Carbon tetrachloride, CAS: 56-23-5



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P104.D		
Injection Date:	06-Sep-2020 19:30:30	Instrument ID:	MH
Lims ID:	140-20175-A-21	Lab Sample ID:	140-20175-21
Client ID:	IA-113-C-29		
Operator ID:	HMT	ALS Bottle#:	4 Worklist Smp#: 5
Purge Vol:	500.000 mL	Dil. Factor:	1.3300
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

6 Chlorodifluoromethane, CAS: 75-45-6

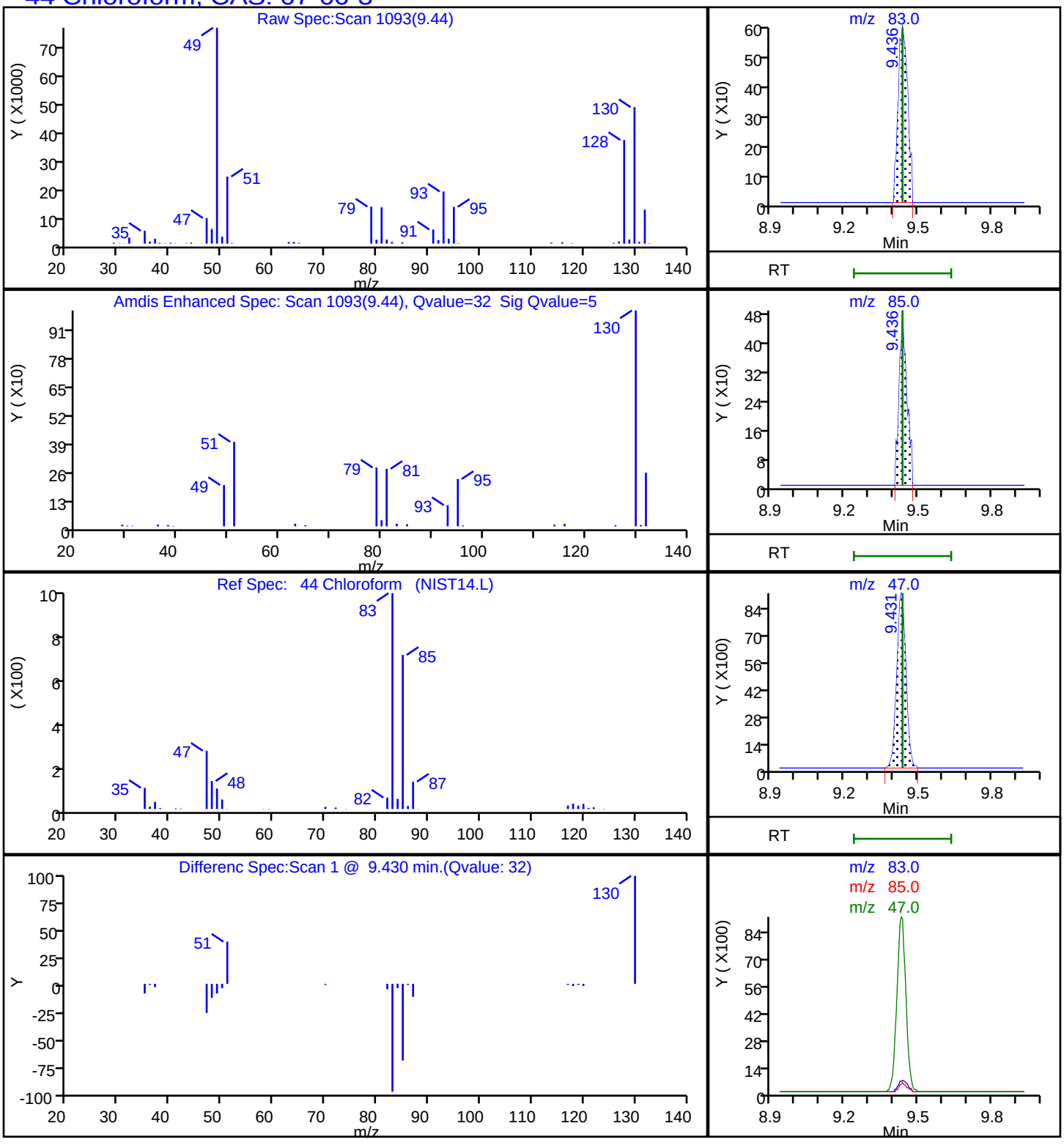


Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P104.D

Injection Date:	06-Sep-2020 19:30:30	Instrument ID:	MH
Lims ID:	140-20175-A-21	Lab Sample ID:	140-20175-21
Client ID:	IA-113-C-29		
Operator ID:	HMT	ALS Bottle#:	4 Worklist Smp#: 5
Purge Vol:	500.000 mL	Dil. Factor:	1.3300
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

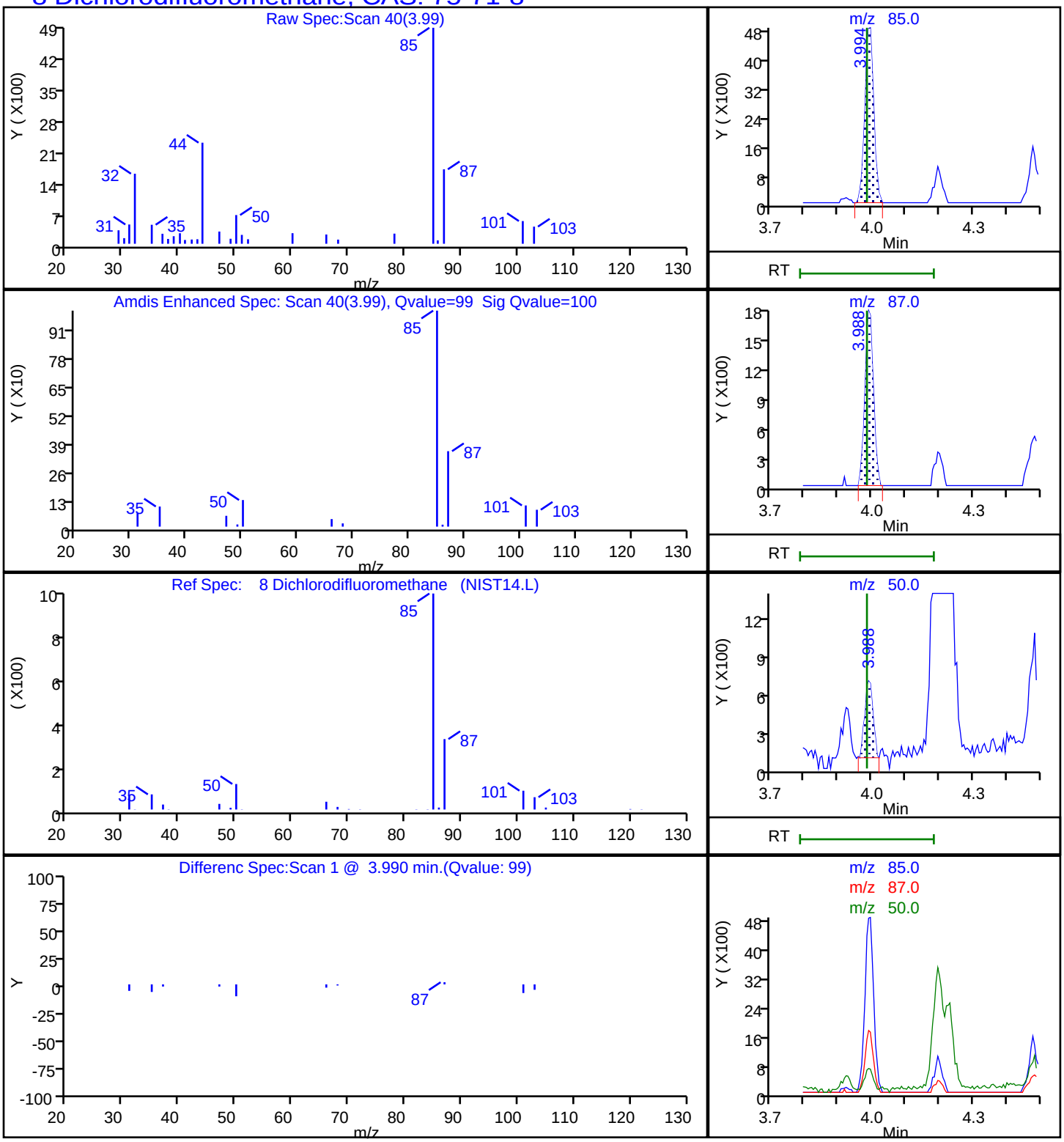
44 Chloroform, CAS: 67-66-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P104.D		
Injection Date:	06-Sep-2020 19:30:30	Instrument ID:	MH
Lims ID:	140-20175-A-21	Lab Sample ID:	140-20175-21
Client ID:	IA-113-C-29		
Operator ID:	HMT	ALS Bottle#:	4 Worklist Smp#: 5
Purge Vol:	500.000 mL	Dil. Factor:	1.3300
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

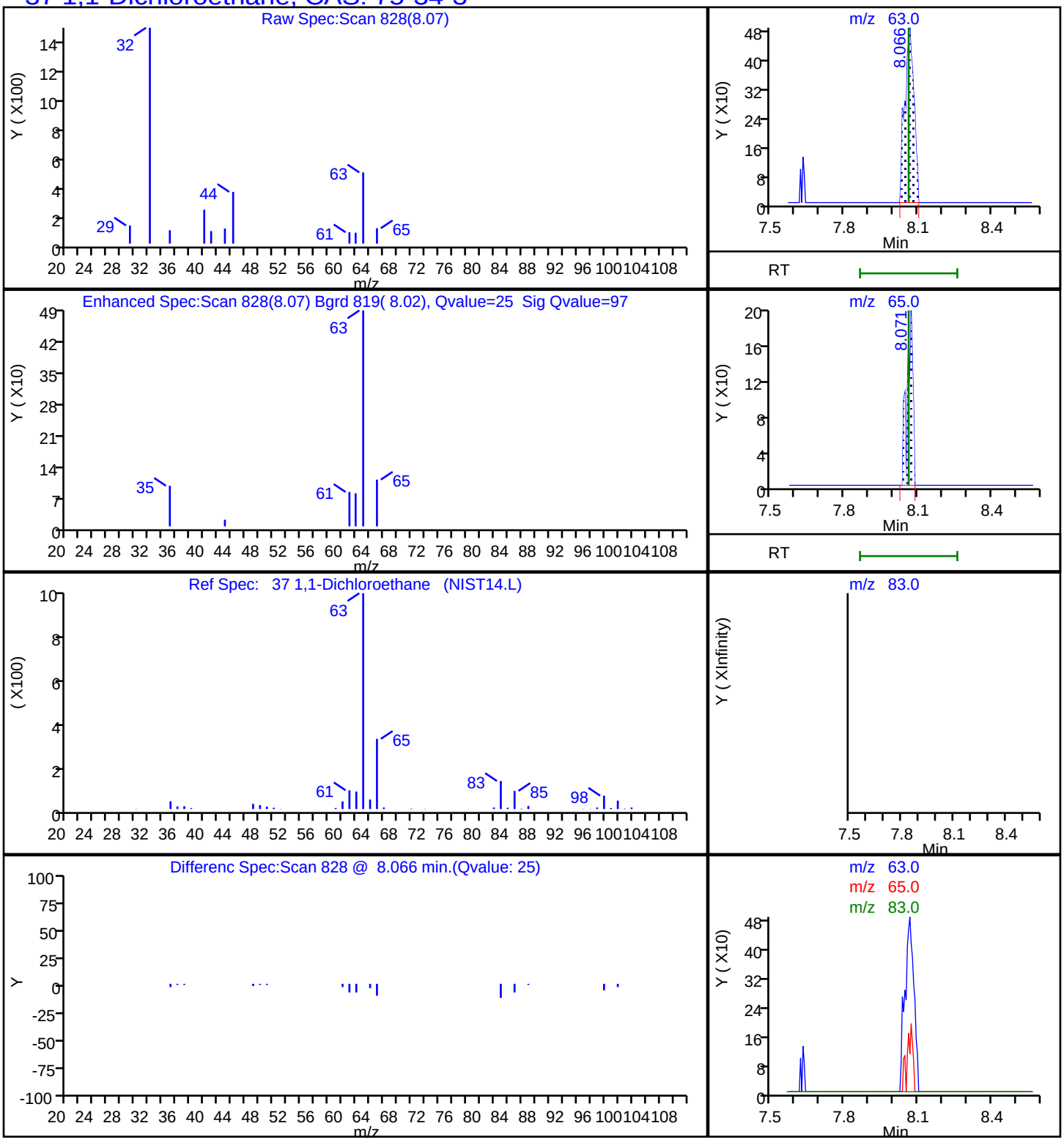
8 Dichlorodifluoromethane, CAS: 75-71-8



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P104.D		
Injection Date:	06-Sep-2020 19:30:30	Instrument ID:	MH
Lims ID:	140-20175-A-21	Lab Sample ID:	140-20175-21
Client ID:	IA-113-C-29		
Operator ID:	HMT	ALS Bottle#:	4 Worklist Smp#: 5
Purge Vol:	500.000 mL	Dil. Factor:	1.3300
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

37 1,1-Dichloroethane, CAS: 75-34-3

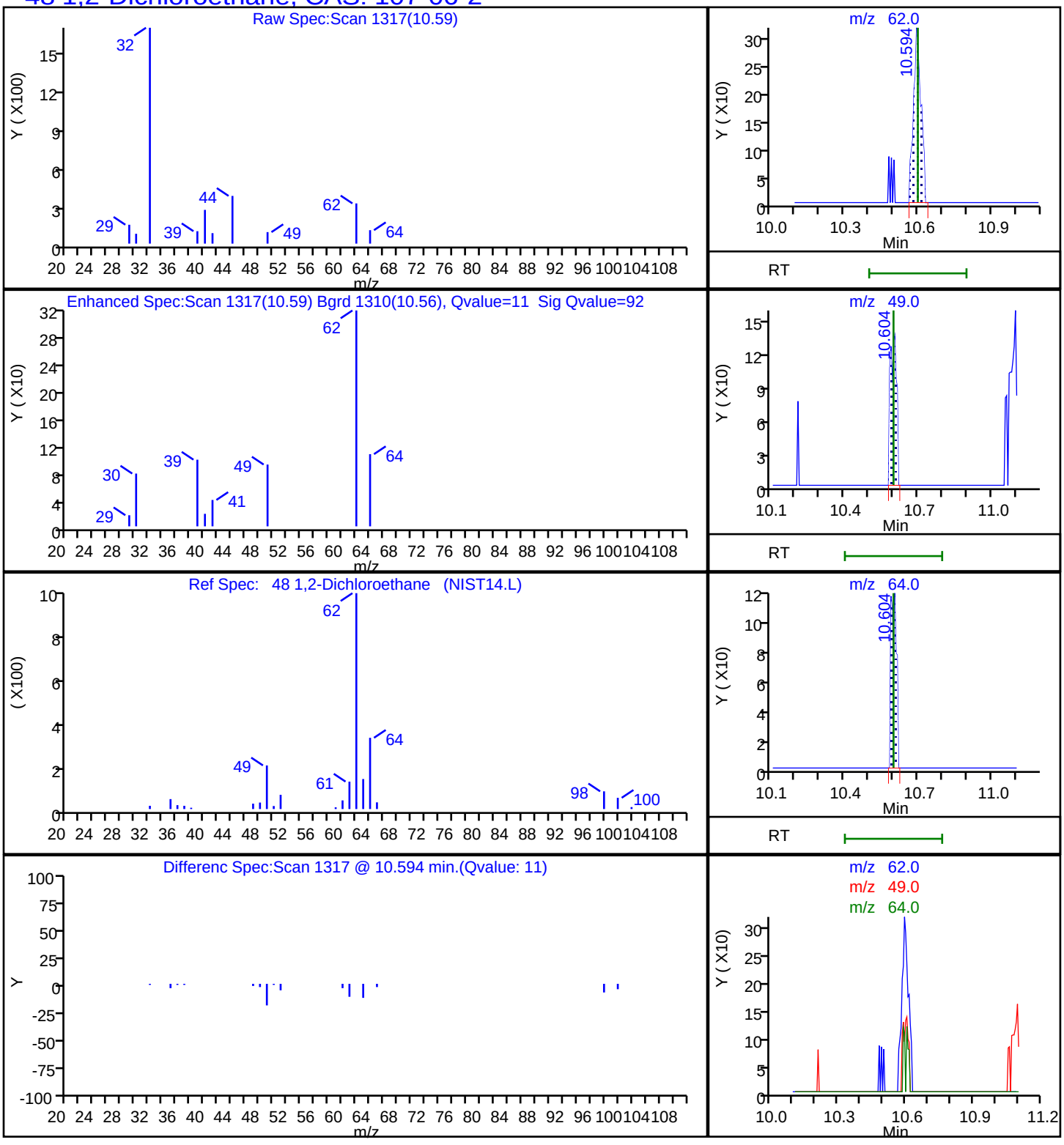


Report Date: 07-Sep-2020 07:43:55 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P104.D		
Injection Date:	06-Sep-2020 19:30:30	Instrument ID:	MH
Lims ID:	140-20175-A-21	Lab Sample ID:	140-20175-21
Client ID:	IA-113-C-29		
Operator ID:	HMT	ALS Bottle#:	4 Worklist Smp#: 5
Purge Vol:	500.000 mL	Dil. Factor:	1.3300
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

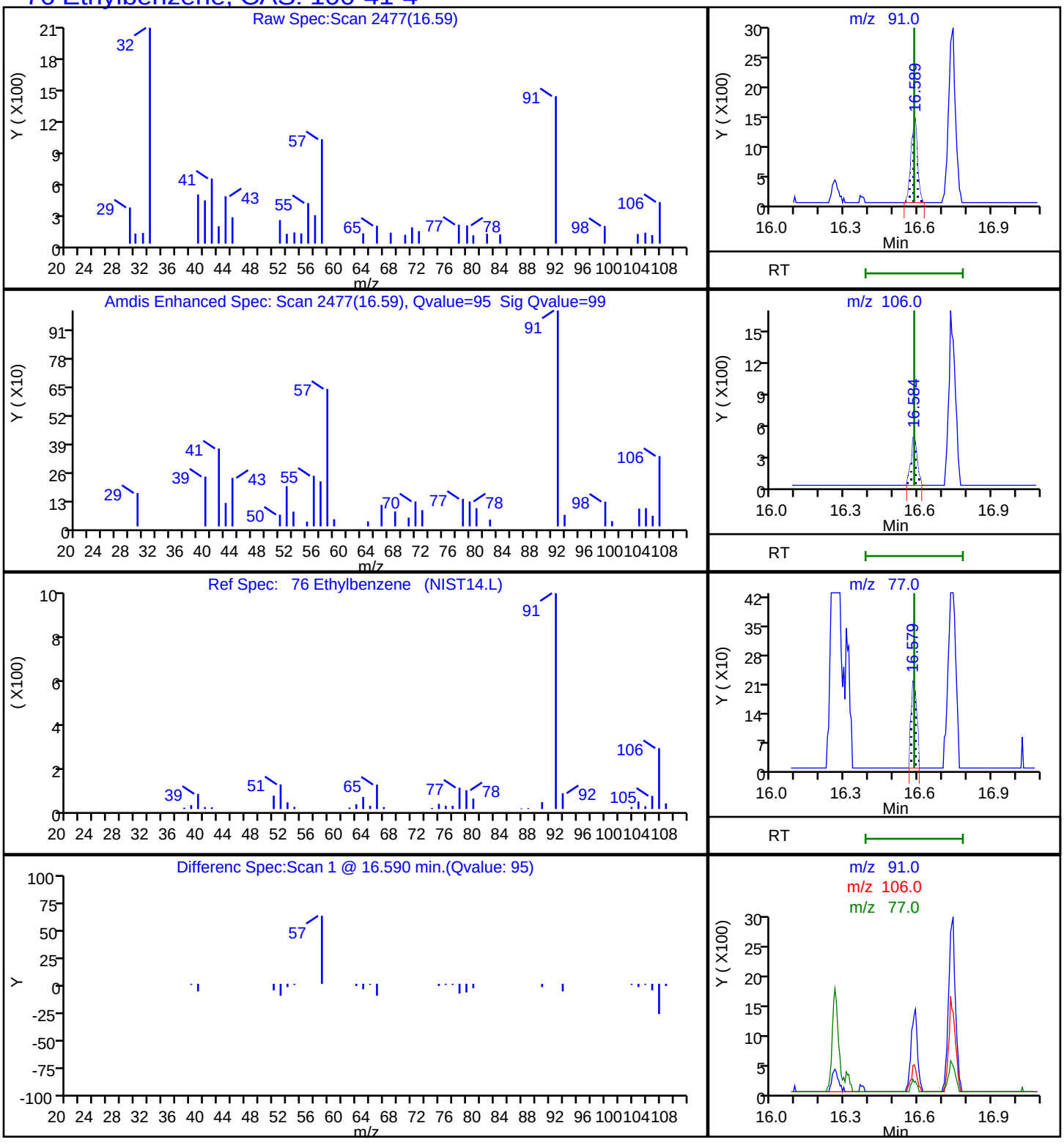
48 1,2-Dichloroethane, CAS: 107-06-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P104.D		
Injection Date:	06-Sep-2020 19:30:30	Instrument ID:	MH
Lims ID:	140-20175-A-21	Lab Sample ID:	140-20175-21
Client ID:	IA-113-C-29		
Operator ID:	HMT	ALS Bottle#:	4 Worklist Smp#: 5
Purge Vol:	500.000 mL	Dil. Factor:	1.3300
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

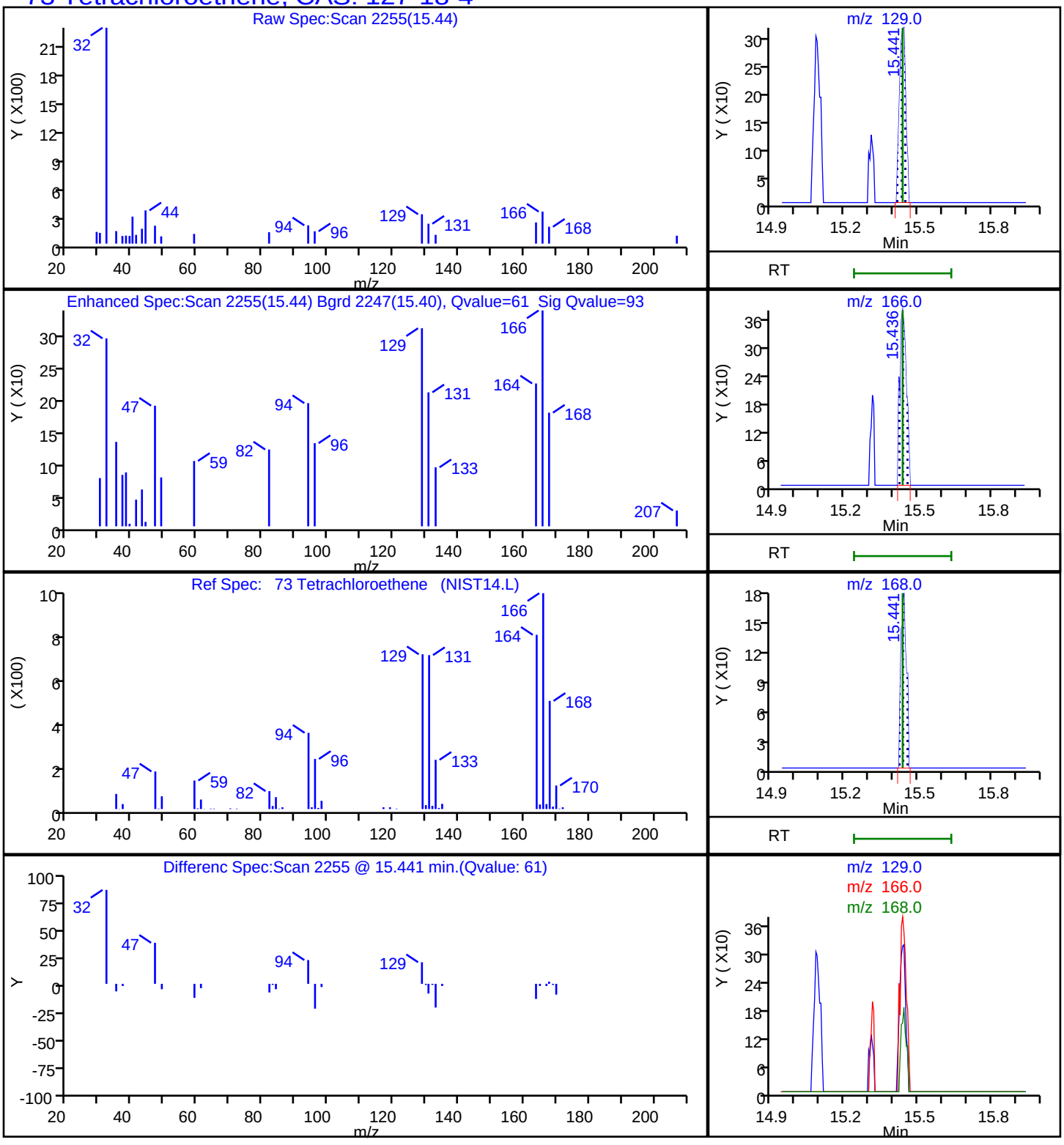
76 Ethylbenzene, CAS: 100-41-4



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P104.D		
Injection Date:	06-Sep-2020 19:30:30	Instrument ID:	MH
Lims ID:	140-20175-A-21	Lab Sample ID:	140-20175-21
Client ID:	IA-113-C-29		
Operator ID:	HMT	ALS Bottle#:	4 Worklist Smp#: 5
Purge Vol:	500.000 mL	Dil. Factor:	1.3300
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

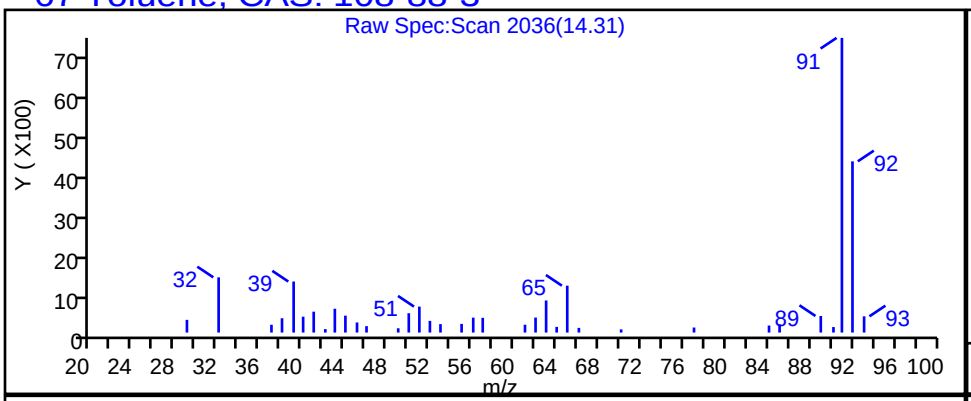
73 Tetrachloroethene, CAS: 127-18-4

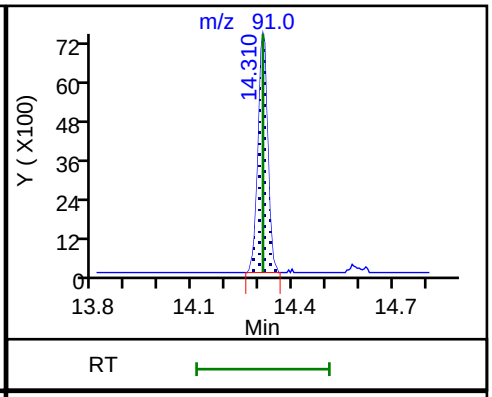


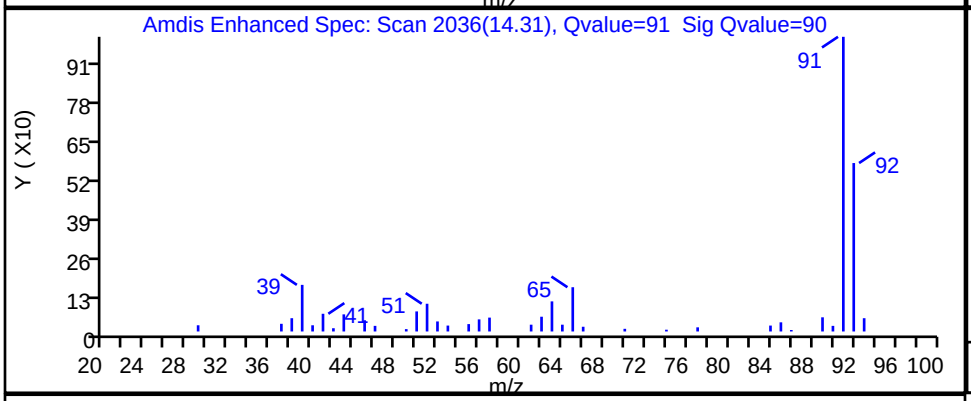
Eurofins TestAmerica, Knoxville

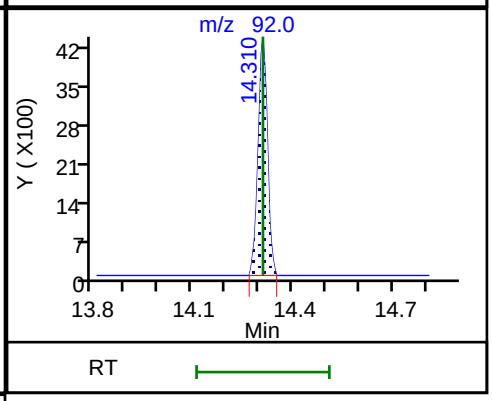
Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P104.D		
Injection Date:	06-Sep-2020 19:30:30	Instrument ID:	MH
Lims ID:	140-20175-A-21	Lab Sample ID:	140-20175-21
Client ID:	IA-113-C-29		
Operator ID:	HMT	ALS Bottle#:	4 Worklist Smp#: 5
Purge Vol:	500.000 mL	Dil. Factor:	1.3300
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

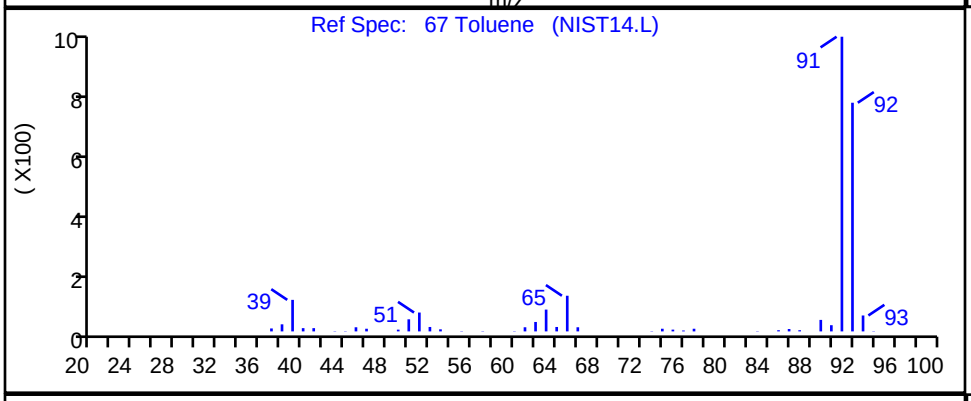
67 Toluene, CAS: 108-88-3

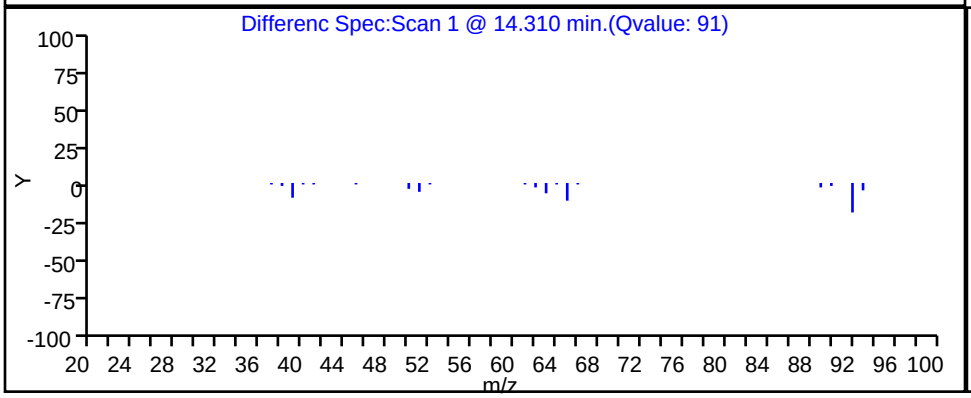


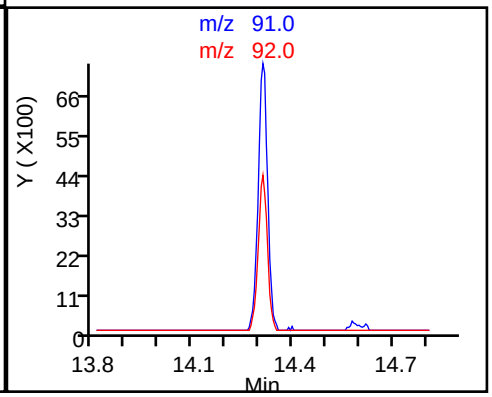








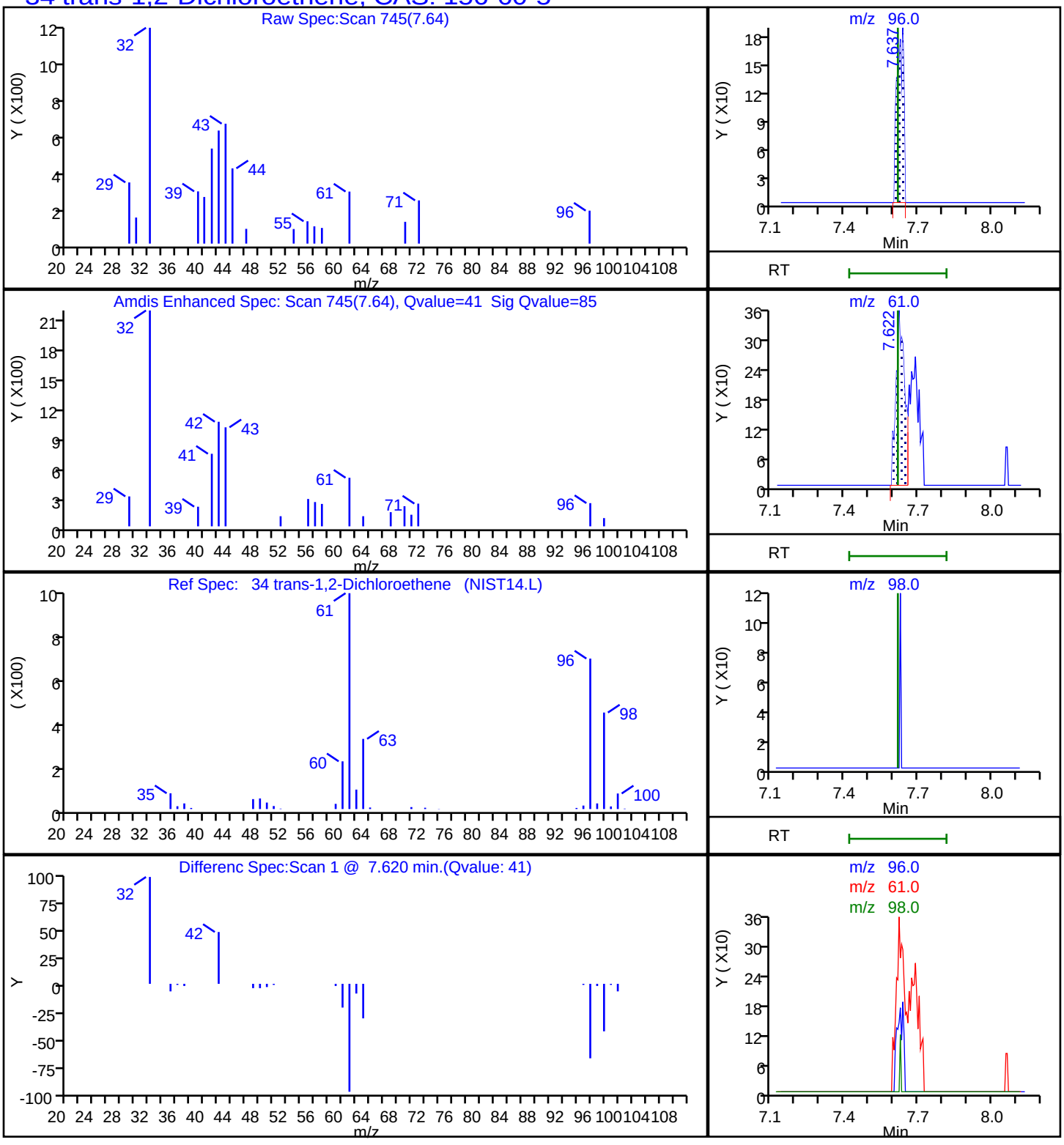




Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P104.D		
Injection Date:	06-Sep-2020 19:30:30	Instrument ID:	MH
Lims ID:	140-20175-A-21	Lab Sample ID:	140-20175-21
Client ID:	IA-113-C-29		
Operator ID:	HMT	ALS Bottle#:	4 Worklist Smp#: 5
Purge Vol:	500.000 mL	Dil. Factor:	1.3300
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

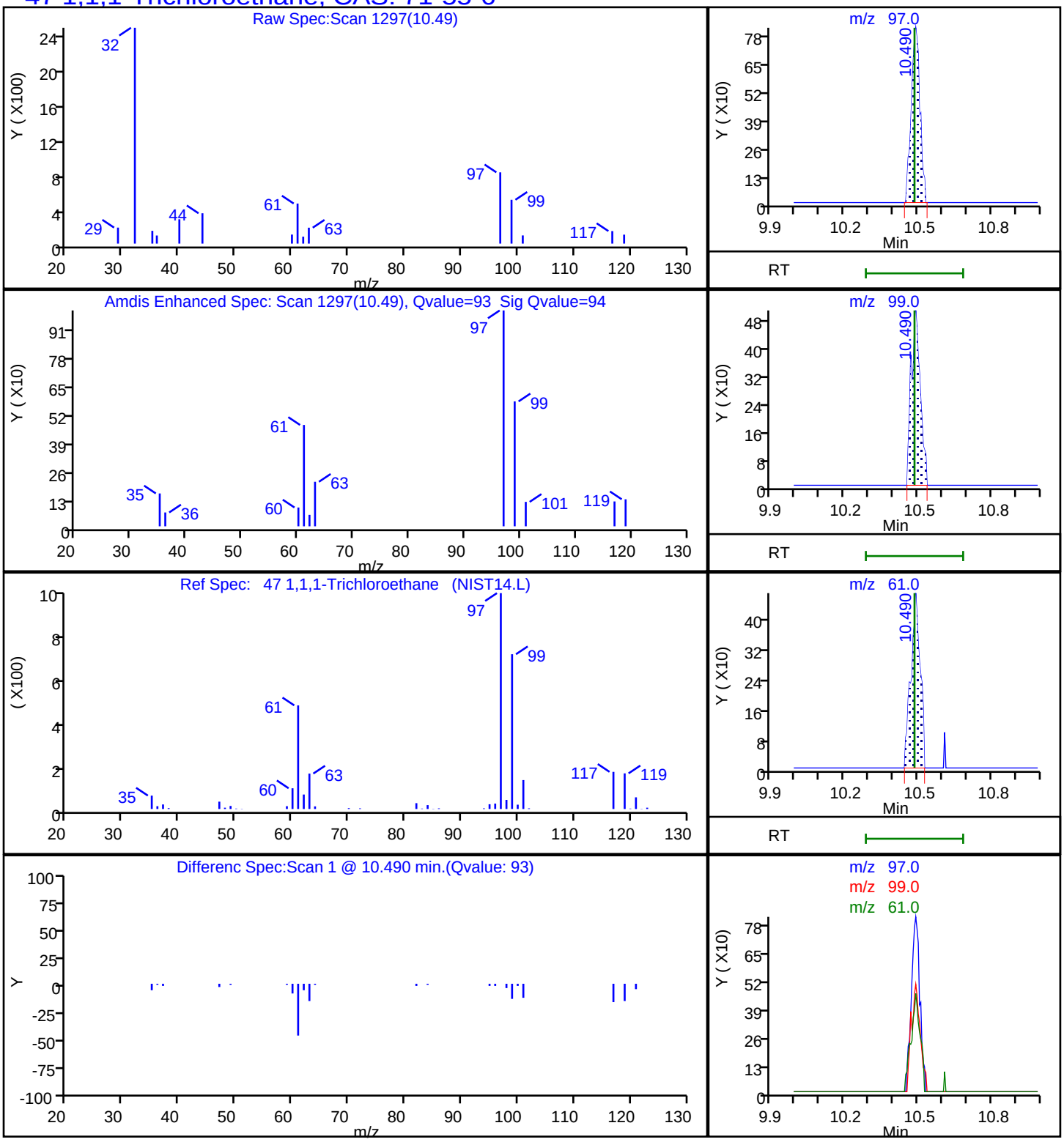
34 trans-1,2-Dichloroethene, CAS: 156-60-5



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P104.D		
Injection Date:	06-Sep-2020 19:30:30	Instrument ID:	MH
Lims ID:	140-20175-A-21	Lab Sample ID:	140-20175-21
Client ID:	IA-113-C-29		
Operator ID:	HMT	ALS Bottle#:	4 Worklist Smp#: 5
Purge Vol:	500.000 mL	Dil. Factor:	1.3300
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

47 1,1,1-Trichloroethane, CAS: 71-55-6



Report Date: 07-Sep-2020 07:43:55 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P104.D

Injection Date: 06-Sep-2020 19:30:30 Instrument ID: MH

Lims ID: 140-20175-A-21 Lab Sample ID: 140-20175-21

Client ID: IA-113-C-29

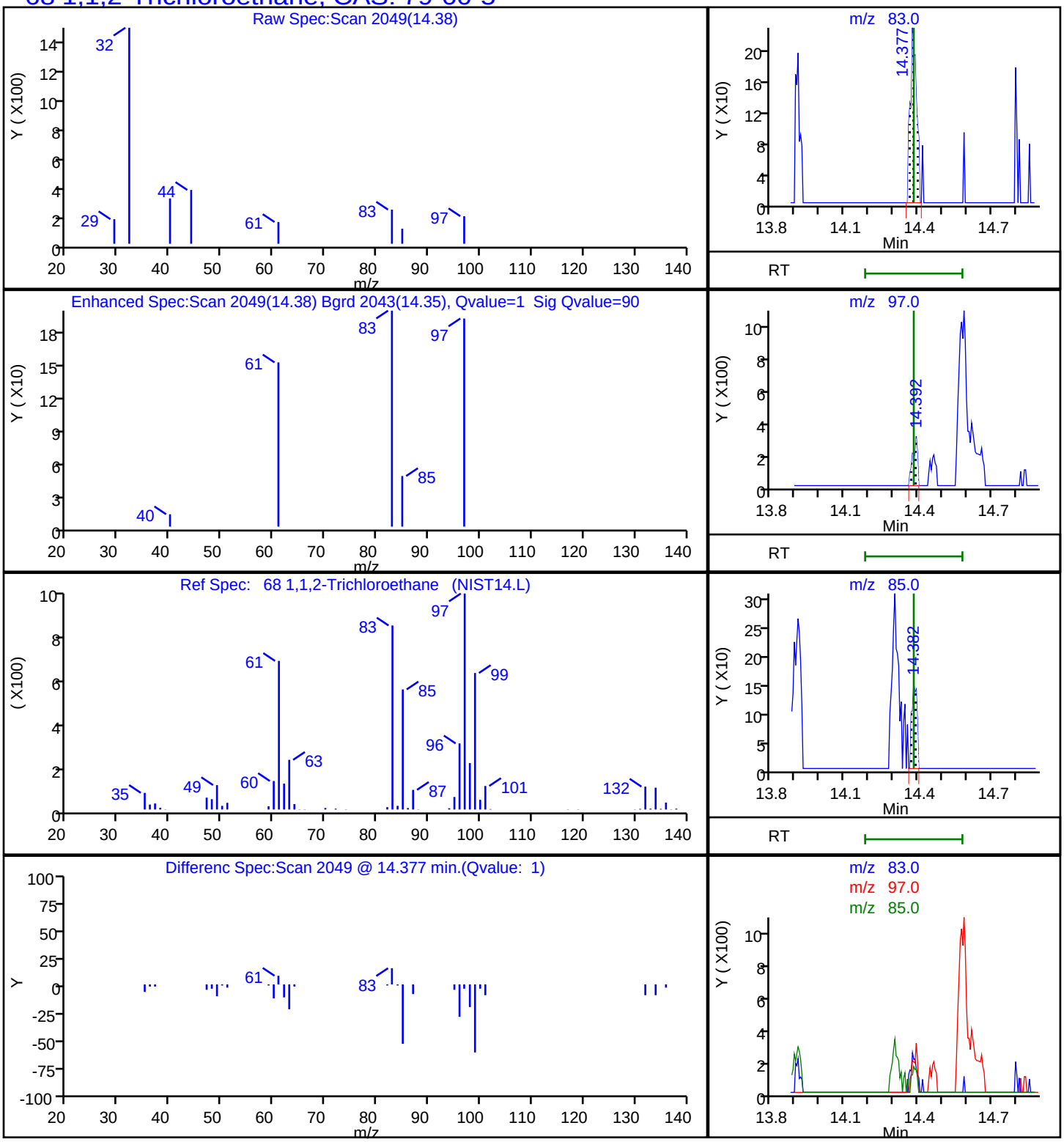
Operator ID: HMT ALS Bottle#: 4 Worklist Smp#: 5

Purge Vol: 500.000 mL Dil. Factor: 1.3300

Method: MH_TO15 Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm) Detector MS SCAN

68 1,1,2-Trichloroethane, CAS: 79-00-5



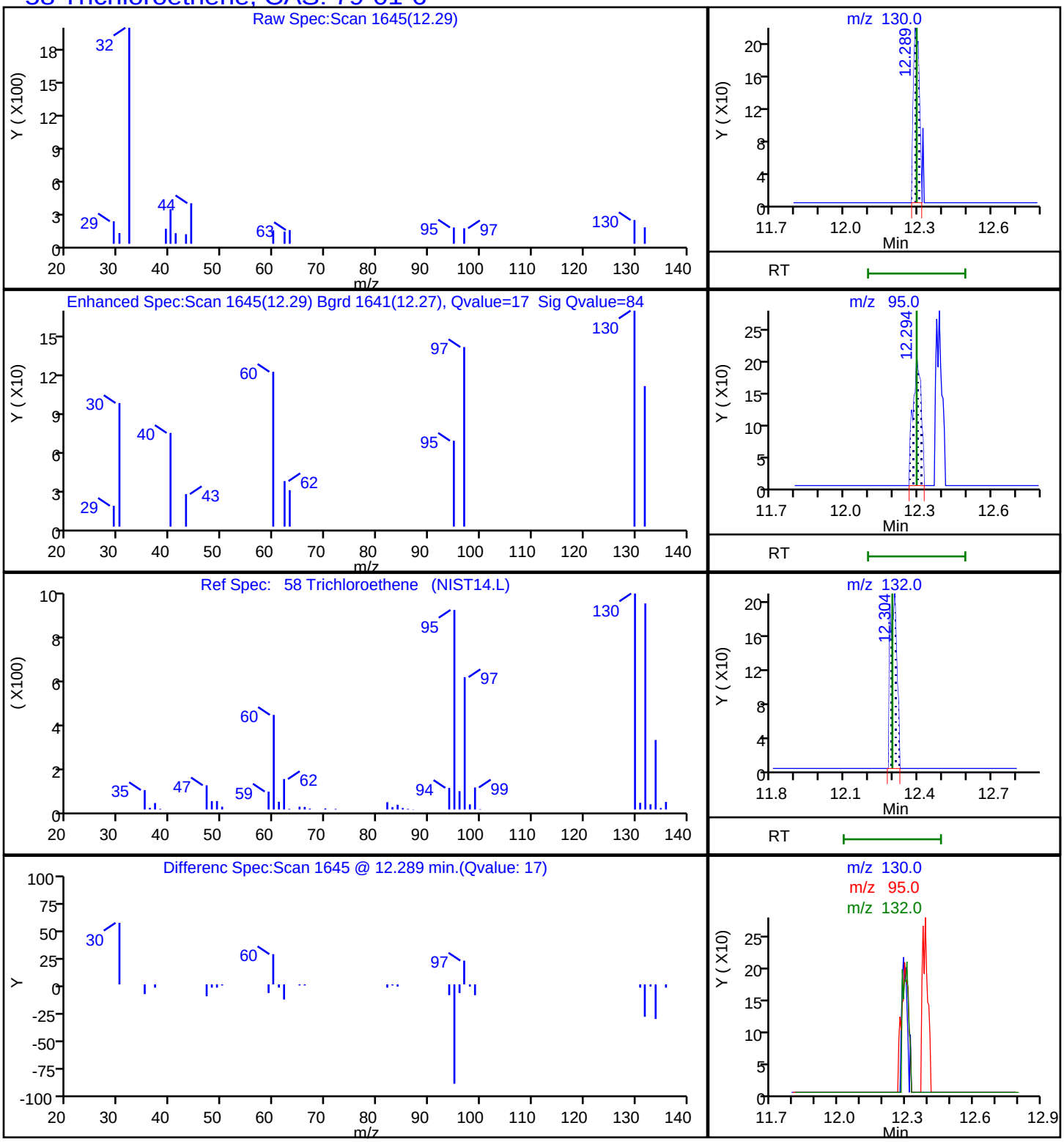
Report Date: 07-Sep-2020 07:43:55 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P104.D

Injection Date:	06-Sep-2020 19:30:30	Instrument ID:	MH
Lims ID:	140-20175-A-21	Lab Sample ID:	140-20175-21
Client ID:	IA-113-C-29		
Operator ID:	HMT	ALS Bottle#:	4 Worklist Smp#: 5
Purge Vol:	500.000 mL	Dil. Factor:	1.3300
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

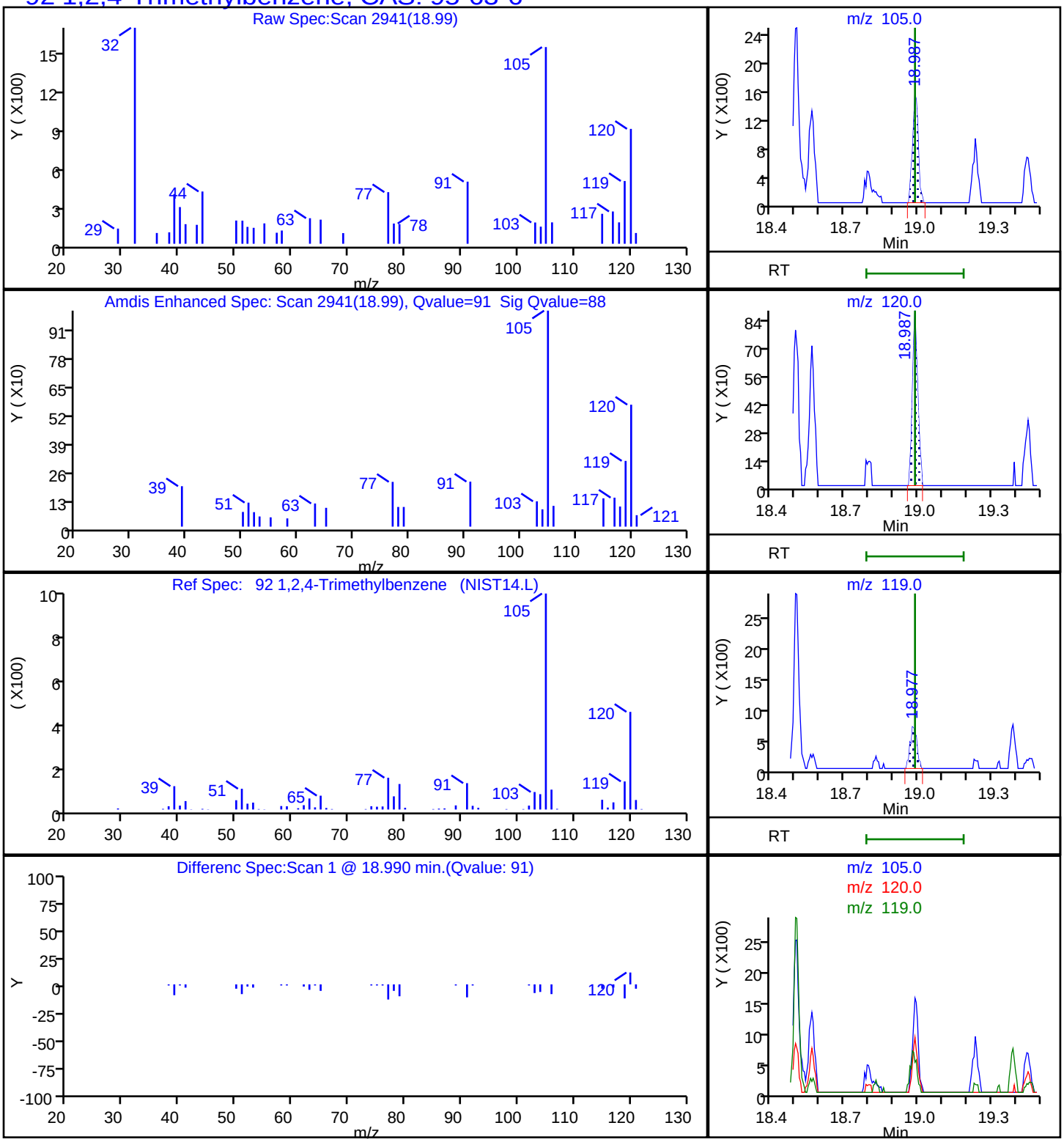
58 Trichloroethene, CAS: 79-01-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P104.D		
Injection Date:	06-Sep-2020 19:30:30	Instrument ID:	MH
Lims ID:	140-20175-A-21	Lab Sample ID:	140-20175-21
Client ID:	IA-113-C-29		
Operator ID:	HMT	ALS Bottle#:	4 Worklist Smp#: 5
Purge Vol:	500.000 mL	Dil. Factor:	1.3300
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

92 1,2,4-Trimethylbenzene, CAS: 95-63-6



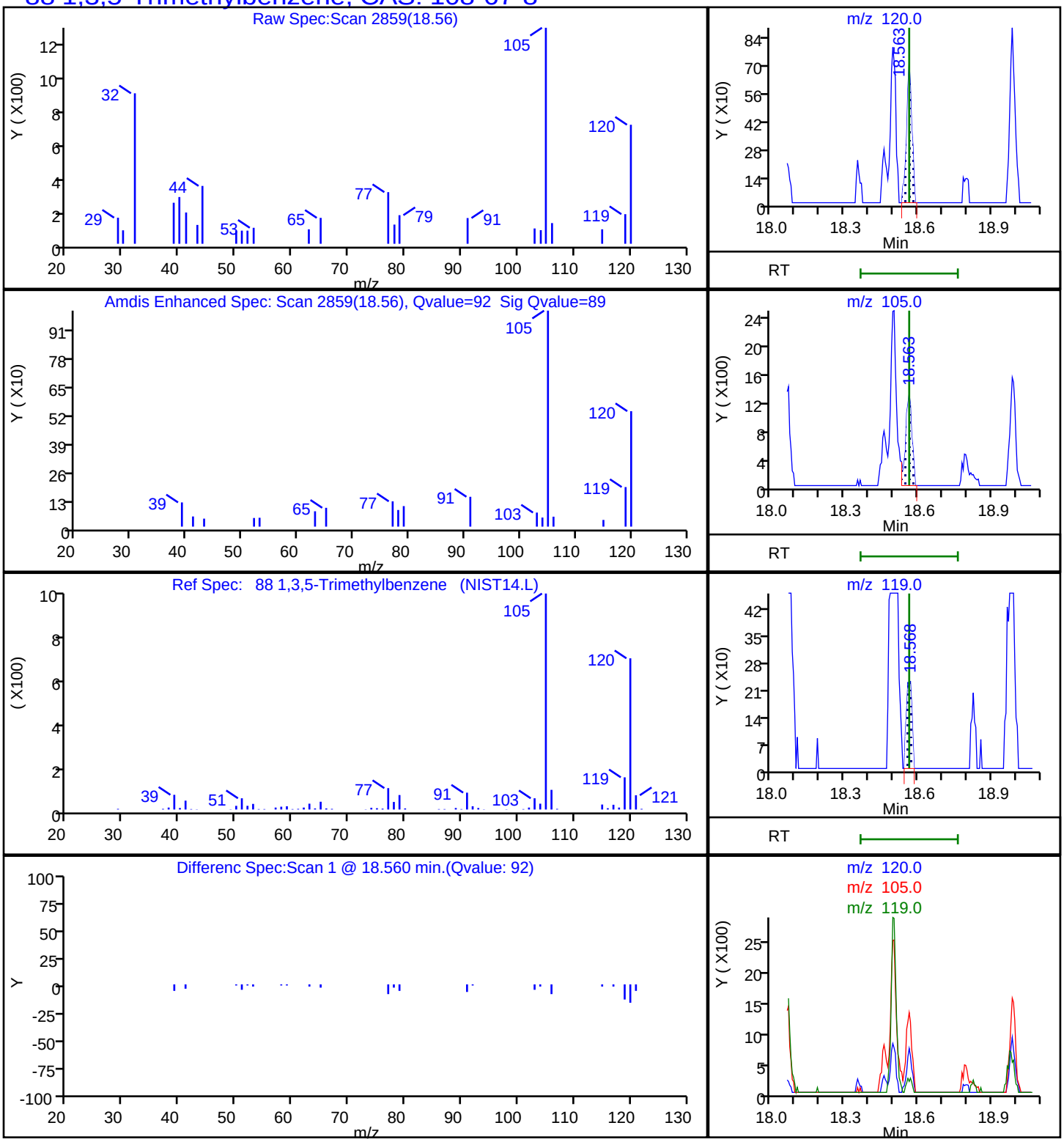
Report Date: 07-Sep-2020 07:43:55 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P104.D

Injection Date:	06-Sep-2020 19:30:30	Instrument ID:	MH
Lims ID:	140-20175-A-21	Lab Sample ID:	140-20175-21
Client ID:	IA-113-C-29		
Operator ID:	HMT	ALS Bottle#:	4 Worklist Smp#: 5
Purge Vol:	500.000 mL	Dil. Factor:	1.3300
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

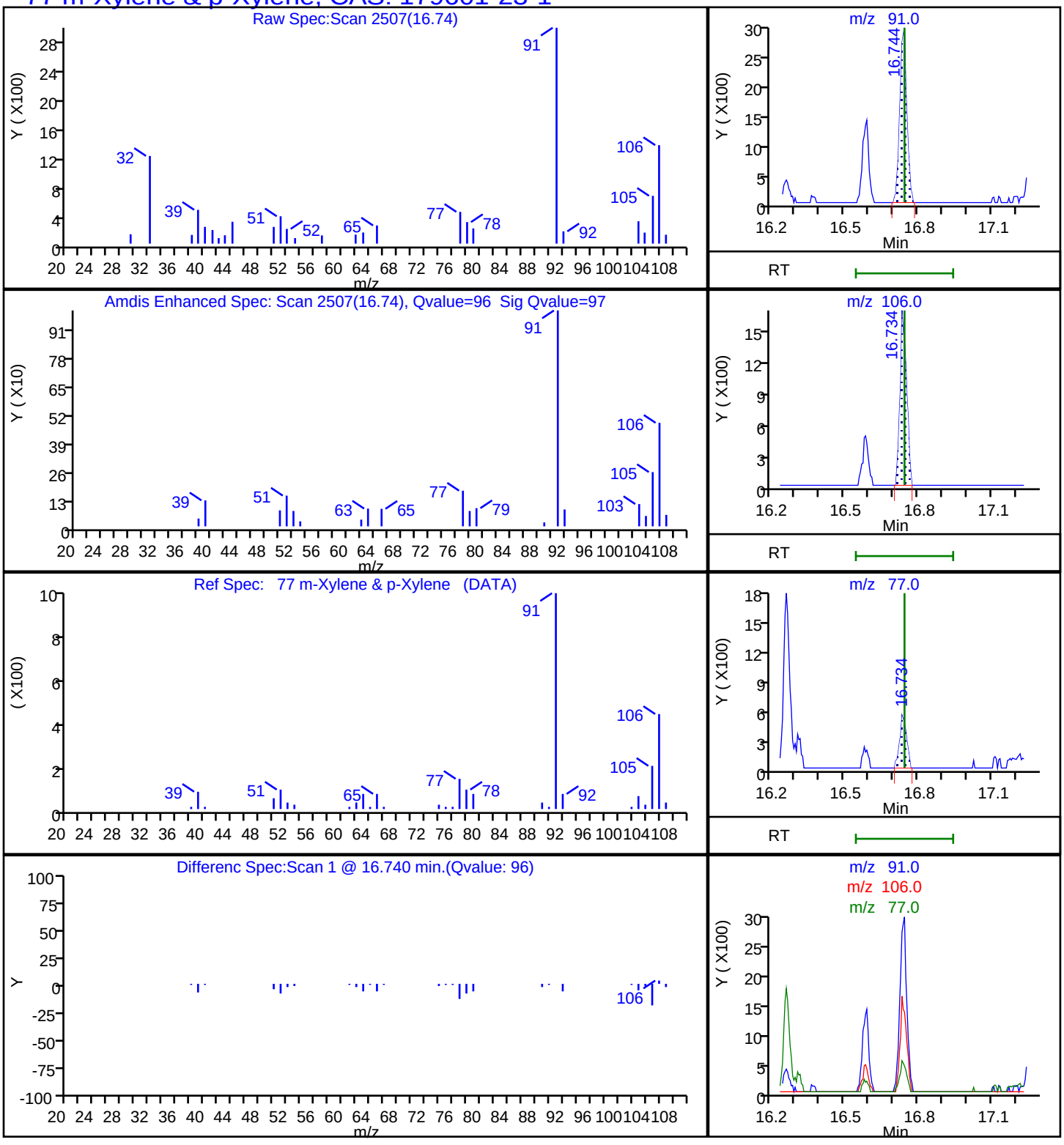
88 1,3,5-Trimethylbenzene, CAS: 108-67-8



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P104.D				
Injection Date:	06-Sep-2020 19:30:30	Instrument ID:	MH		
Lims ID:	140-20175-A-21	Lab Sample ID:	140-20175-21		
Client ID:	IA-113-C-29				
Operator ID:	HMT	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	500.000 mL	Dil. Factor:	1.3300		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

77 m-Xylene & p-Xylene, CAS: 179601-23-1



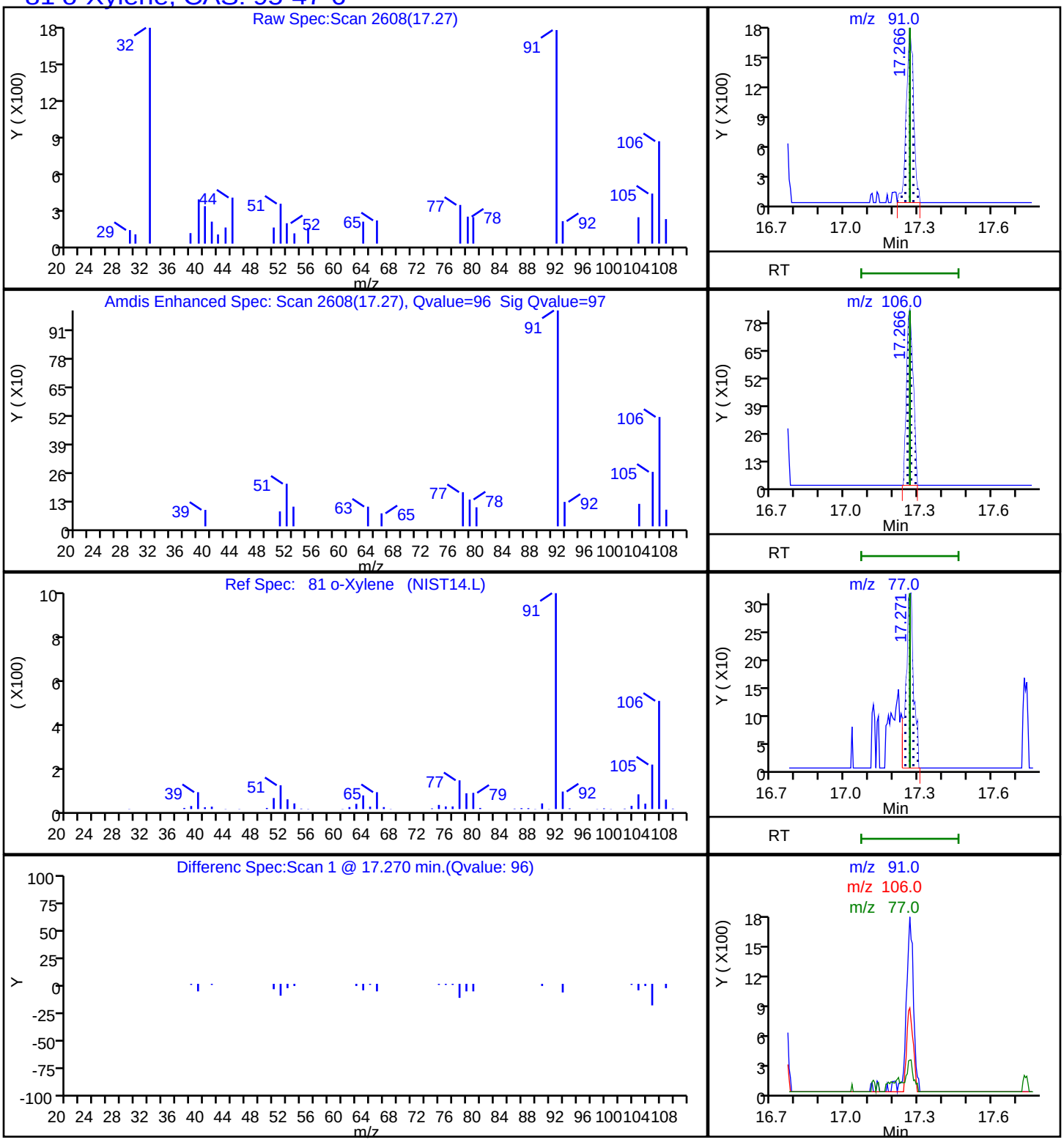
Report Date: 07-Sep-2020 07:43:55 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P104.D

Injection Date:	06-Sep-2020 19:30:30	Instrument ID:	MH		
Lims ID:	140-20175-A-21	Lab Sample ID:	140-20175-21		
Client ID:	IA-113-C-29				
Operator ID:	HMT	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	500.000 mL	Dil. Factor:	1.3300		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

81 o-Xylene, CAS: 95-47-6



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: IA-088-C-29 Lab Sample ID: 140-20175-22

Matrix: Air Lab File ID: HI07P105.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 16:24

Sample wt/vol: 135(mL) Date Analyzed: 09/06/2020 20:26

Soil Aliquot Vol: Dilution Factor: 1.35

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42498 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.15	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.089	J *	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	1.3		0.40	0.11
67-66-3	Chloroform	119.38	0.054	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.51		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	0.083	J	0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.035
108-88-3	Toluene	92.14	1.2		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	ND		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND	*	0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	0.26	J	0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.43	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	91		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: IA-088-C-29 Lab Sample ID: 140-20175-22

Matrix: Air Lab File ID: HI07P105.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 16:24

Sample wt/vol: 135(mL) Date Analyzed: 09/06/2020 20:26

Soil Aliquot Vol: Dilution Factor: 1.35

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42498 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.46	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.56	J *	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	4.4		1.4	0.39
67-66-3	Chloroform	119.38	0.27	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.5		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	0.36	J	1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.24
108-88-3	Toluene	92.14	4.5		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	ND		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	ND	*	2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	1.3	J	2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	1.9	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	91		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P105.D				
Lims ID:	140-20175-A-22				
Client ID:	IA-088-C-29				
Sample Type:	Client				
Inject. Date:	06-Sep-2020 20:26:30	ALS Bottle#:	5	Worklist Smp#:	10
Purge Vol:	500.000 mL	Dil. Factor:	1.3500		
Sample Info:	140-0016514-010				
Misc. Info.:	140-20175-a-22@1.35				
Operator ID:	HMT	Instrument ID:	MH		
Method:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\MH_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	07-Sep-2020 07:43:45	Calib Date:	29-Aug-2020 23:57:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1015				
First Level Reviewer: tajh		Date:	07-Sep-2020 07:40:53		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.436	9.431	0.005	98	106797	4.80	
* 2 1,4-Difluorobenzene	114	11.591	11.591	0.000	95	431186	4.80	
* 3 Chlorobenzene-d5 (IS)	117	16.258	16.258	0.000	89	292750	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.876	17.876	0.000	91	142886	4.20	
6 Chlorodifluoromethane	51	3.921	3.916	0.005	96	14950	0.2509	
8 Dichlorodifluoromethane	85	3.988	3.983	0.005	99	8226	0.1019	
44 Chloroform	83	9.431	9.436	-0.005	32	706	0.0109	
51 Benzene	78	11.079	11.074	0.005	95	2304	0.0291	
52 Carbon tetrachloride	117	11.090	11.095	-0.005	81	871	0.0178	
67 Toluene	91	14.310	14.310	0.000	90	18072	0.2396	
76 Ethylbenzene	91	16.584	16.584	0.000	95	1515	0.0166	
77 m-Xylene & p-Xylene	91	16.739	16.744	-0.005	94	3684	0.0511	
81 o-Xylene	91	17.266	17.266	0.000	95	2590	0.0343	
88 1,3,5-Trimethylbenzene	120	18.558	18.563	-0.005	1	243	0.0527	
S 116 Xylenes, Total	100				0		0.0853	

Reagents:

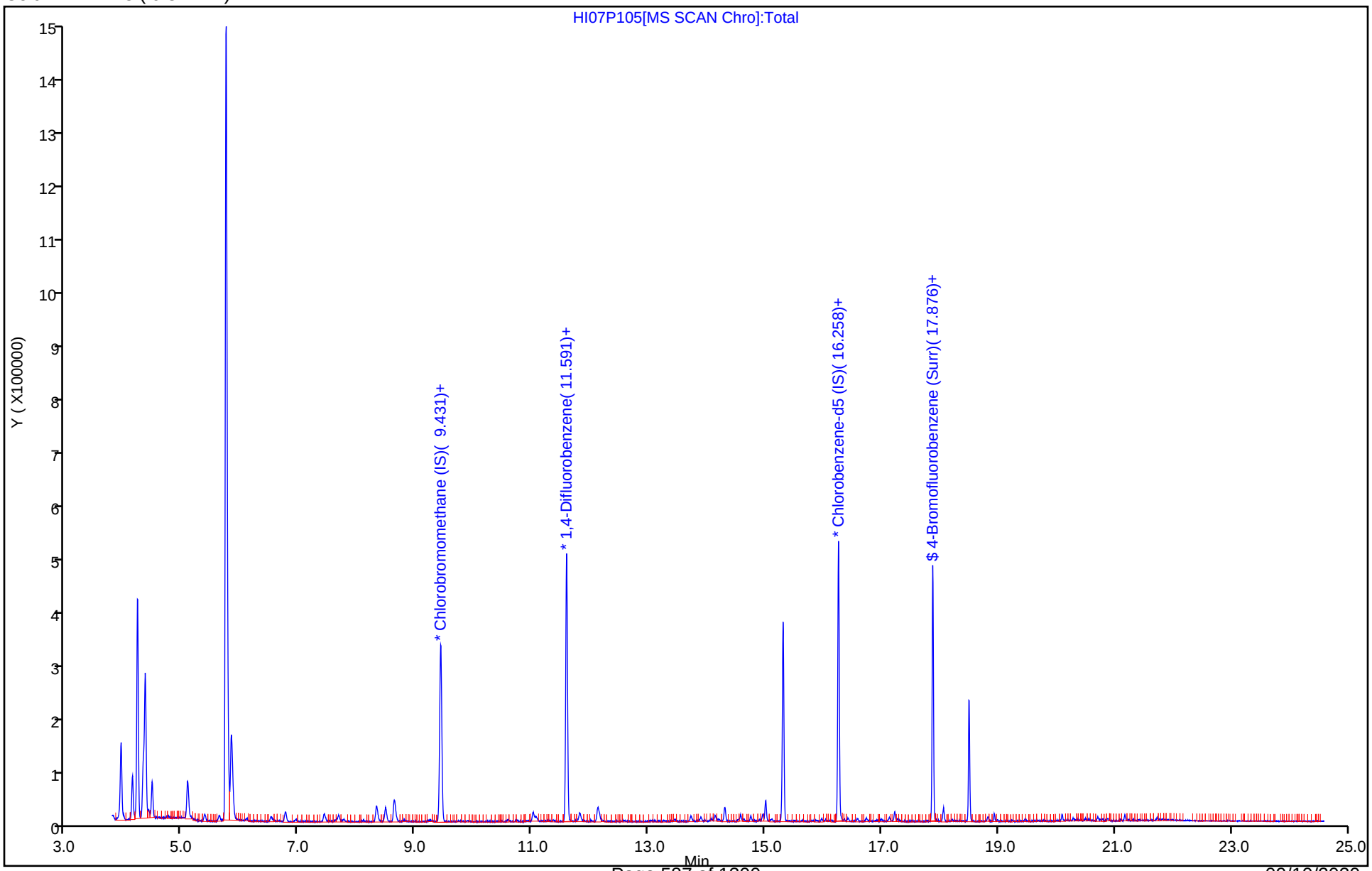
40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

Report Date: 07-Sep-2020 07:43:56 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P105.D				
Injection Date:	06-Sep-2020 20:26:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	140-20175-A-22	Lab Sample ID:	140-20175-22	Worklist Smp#:	10
Client ID:	IA-088-C-29				
Purge Vol:	500.000 mL	Dil. Factor:	1.3500	ALS Bottle#:	5
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

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Lims ID:	140-20175-A-22				
Client ID:	IA-088-C-29				
Sample Type:	Client				
Inject. Date:	06-Sep-2020 20:26:30	ALS Bottle#:	5	Worklist Smp#:	10
Purge Vol:	500.000 mL	Dil. Factor:	1.3500		
Sample Info:	140-0016514-010				
Misc. Info.:	140-20175-a-22@1.35				
Operator ID:	HMT	Instrument ID:	MH		
Method:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\MH_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	07-Sep-2020 07:43:45	Calib Date:	29-Aug-2020 23:57:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1015				
First Level Reviewer: tajh		Date:	07-Sep-2020 07:40:53		

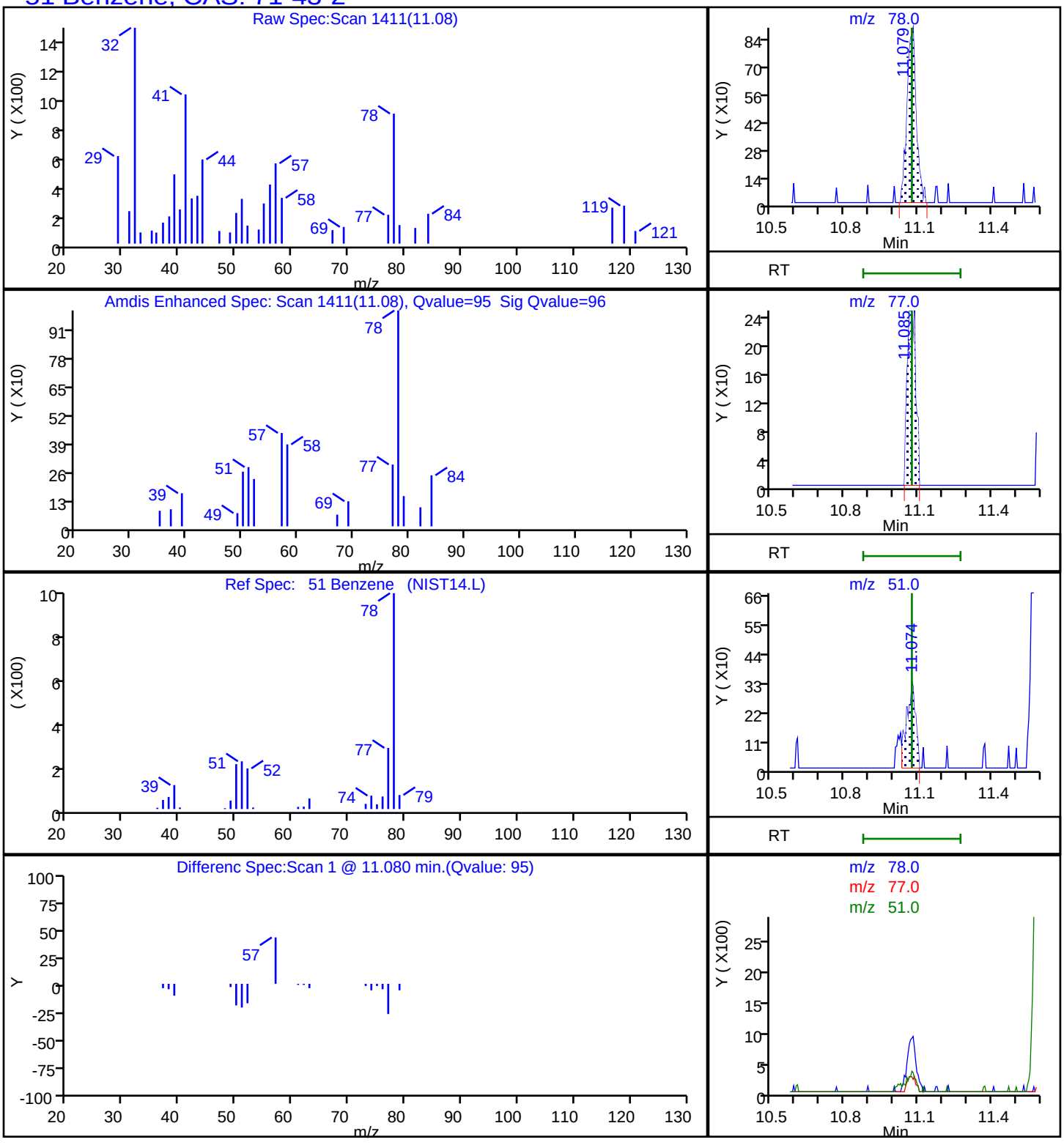
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	4.20	90.53

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P105.D

Injection Date:	06-Sep-2020 20:26:30	Instrument ID:	MH
Lims ID:	140-20175-A-22	Lab Sample ID:	140-20175-22
Client ID:	IA-088-C-29		
Operator ID:	HMT	ALS Bottle#:	5 Worklist Smp#: 10
Purge Vol:	500.000 mL	Dil. Factor:	1.3500
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

51 Benzene, CAS: 71-43-2



Eurofins TestAmerica, Knoxville

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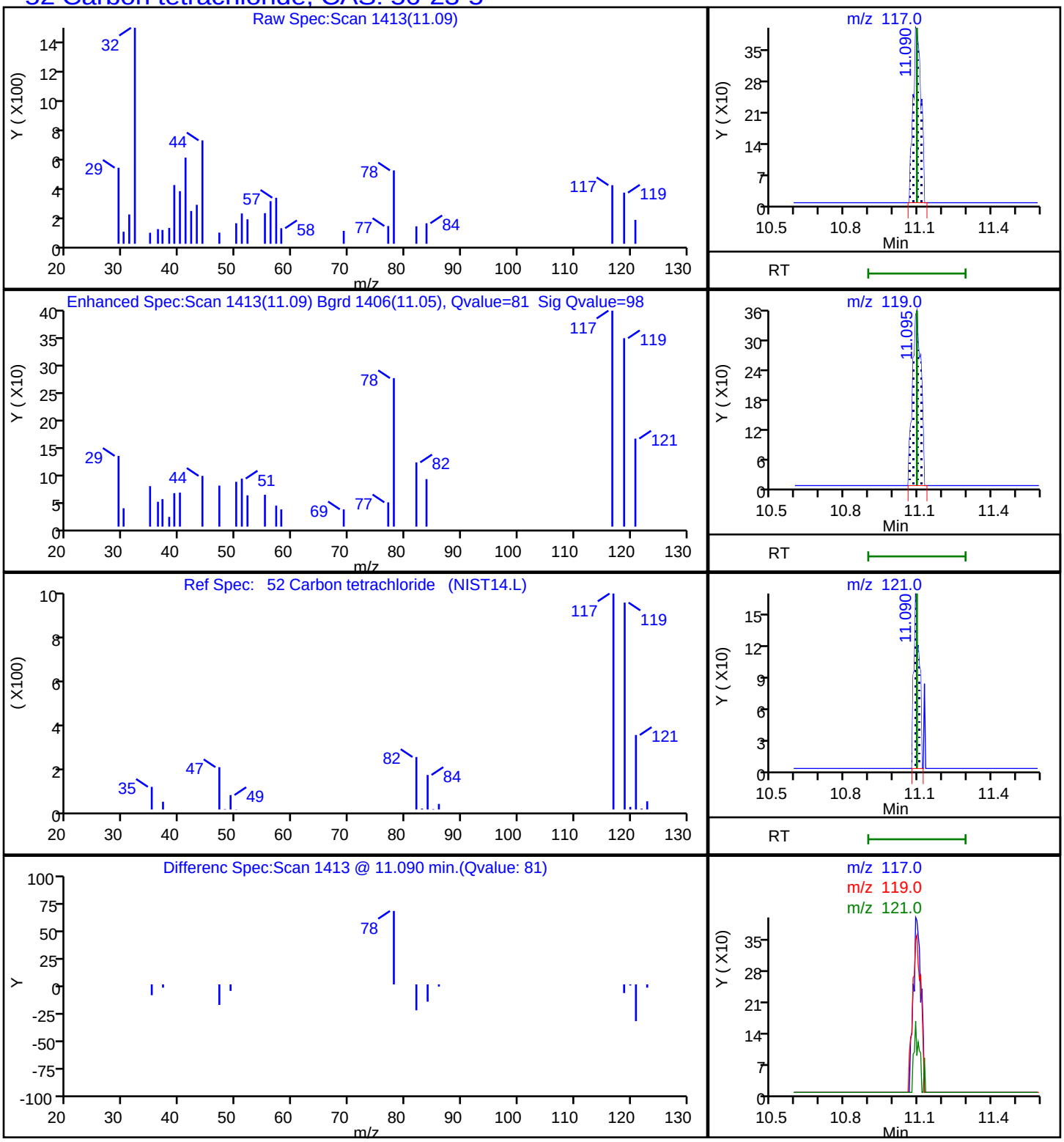
Lims ID:	140-20175-A-22	Lab Sample ID:	140-20175-22
Client ID:	IA-088-C-29		
Operator ID:	HMT	ALS Bottle#:	5 Worklist Smp#: 10
Purge Vol:	500.000 mL	Dil. Factor:	1.3500
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

52 Carbon tetrachloride, CAS: 56-23-5



Report Date: 07-Sep-2020 07:43:56 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

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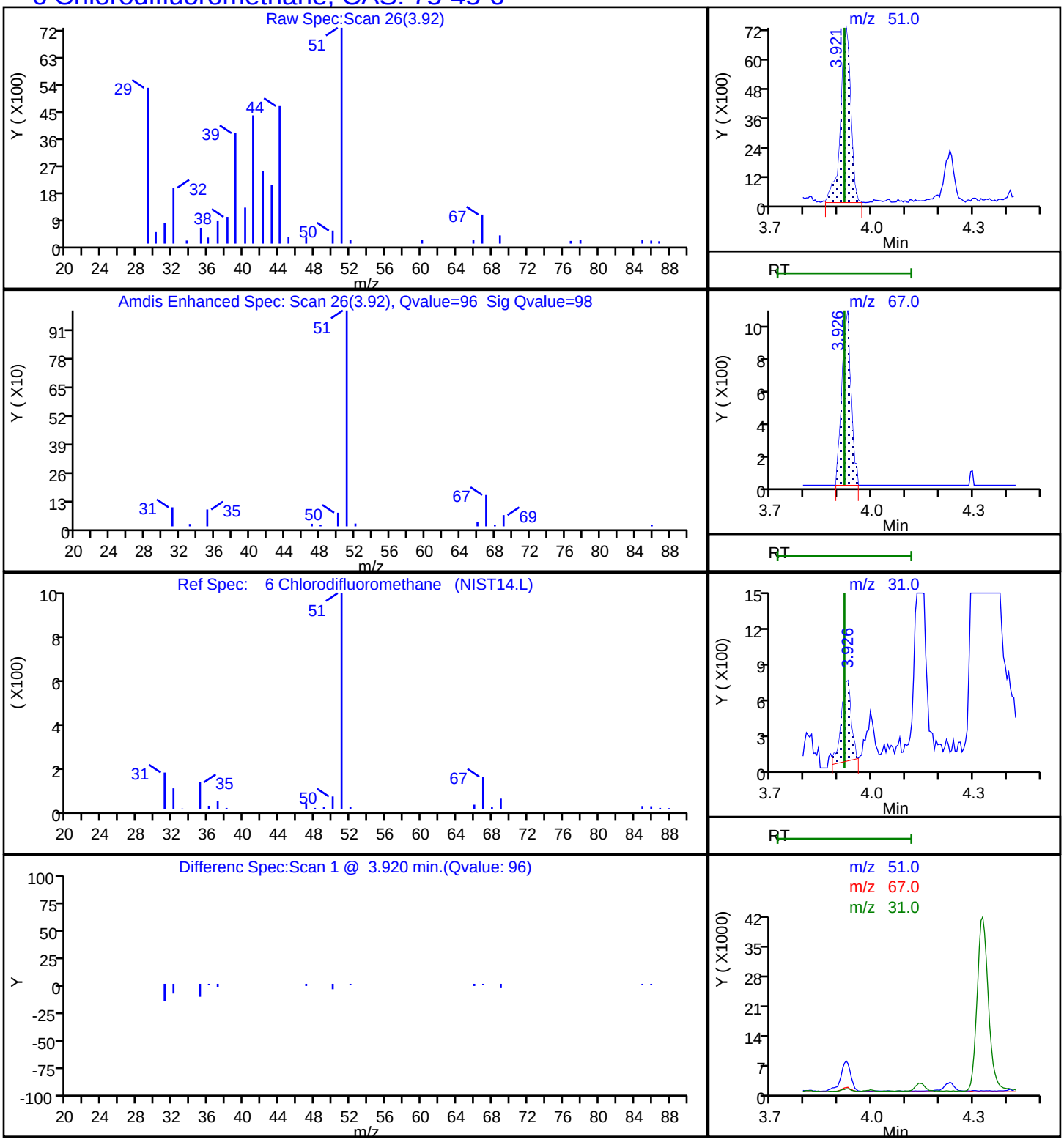
Lims ID:	140-20175-A-22	Lab Sample ID:	140-20175-22		
Client ID:	IA-088-C-29				
Operator ID:	HMT	ALS Bottle#:	5	Worklist Smp#:	10
Purge Vol:	500.000 mL	Dil. Factor:	1.3500		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

6 Chlorodifluoromethane, CAS: 75-45-6



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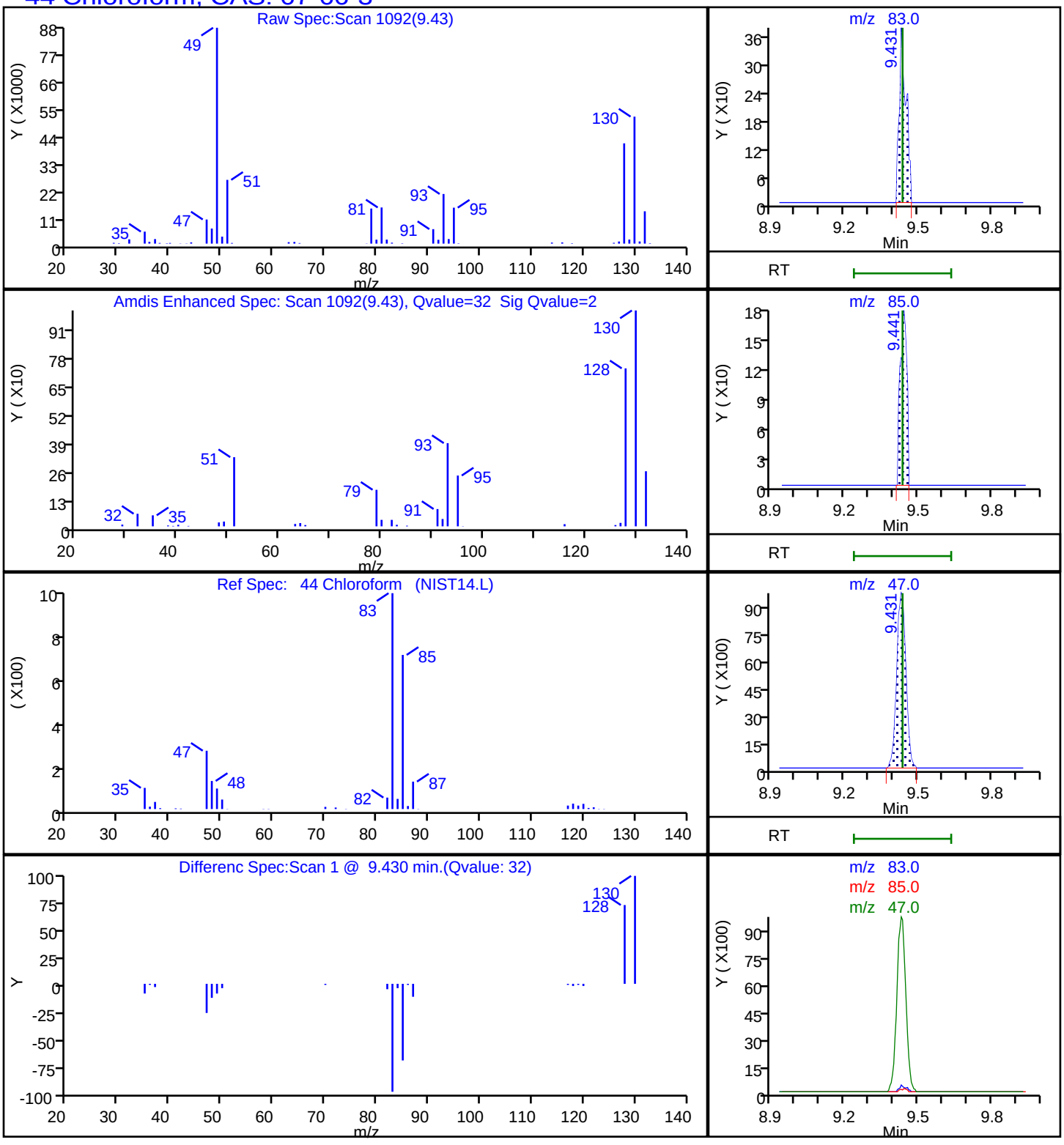
Lims ID:	140-20175-A-22	Lab Sample ID:	140-20175-22
Client ID:	IA-088-C-29		
Operator ID:	HMT	ALS Bottle#:	5 Worklist Smp#: 10
Purge Vol:	500.000 mL	Dil. Factor:	1.3500
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

44 Chloroform, CAS: 67-66-3



Eurofins TestAmerica, Knoxville

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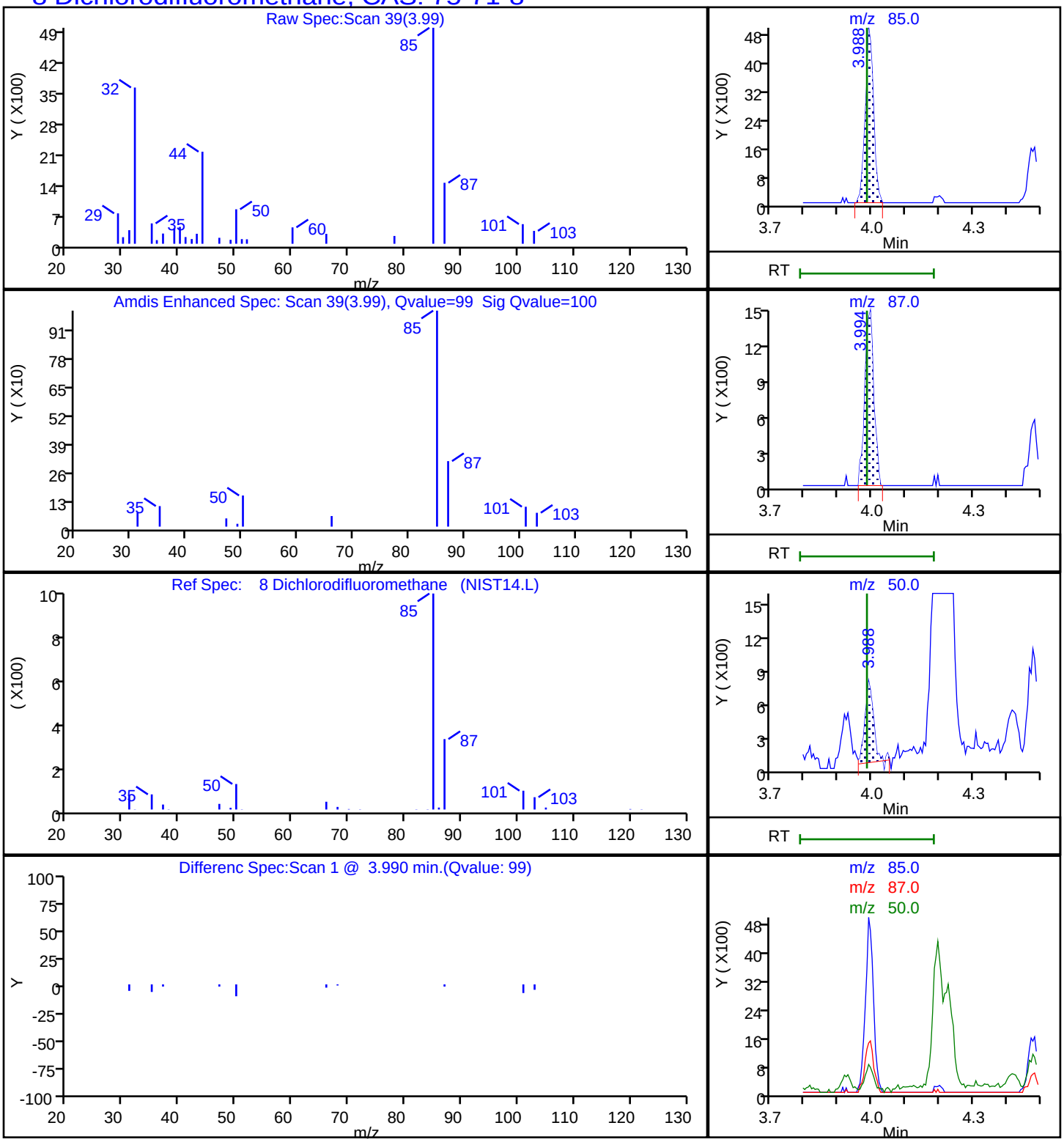
Lims ID:	140-20175-A-22	Lab Sample ID:	140-20175-22
Client ID:	IA-088-C-29		
Operator ID:	HMT	ALS Bottle#:	5 Worklist Smp#: 10
Purge Vol:	500.000 mL	Dil. Factor:	1.3500
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

8 Dichlorodifluoromethane, CAS: 75-71-8



Eurofins TestAmerica, Knoxville

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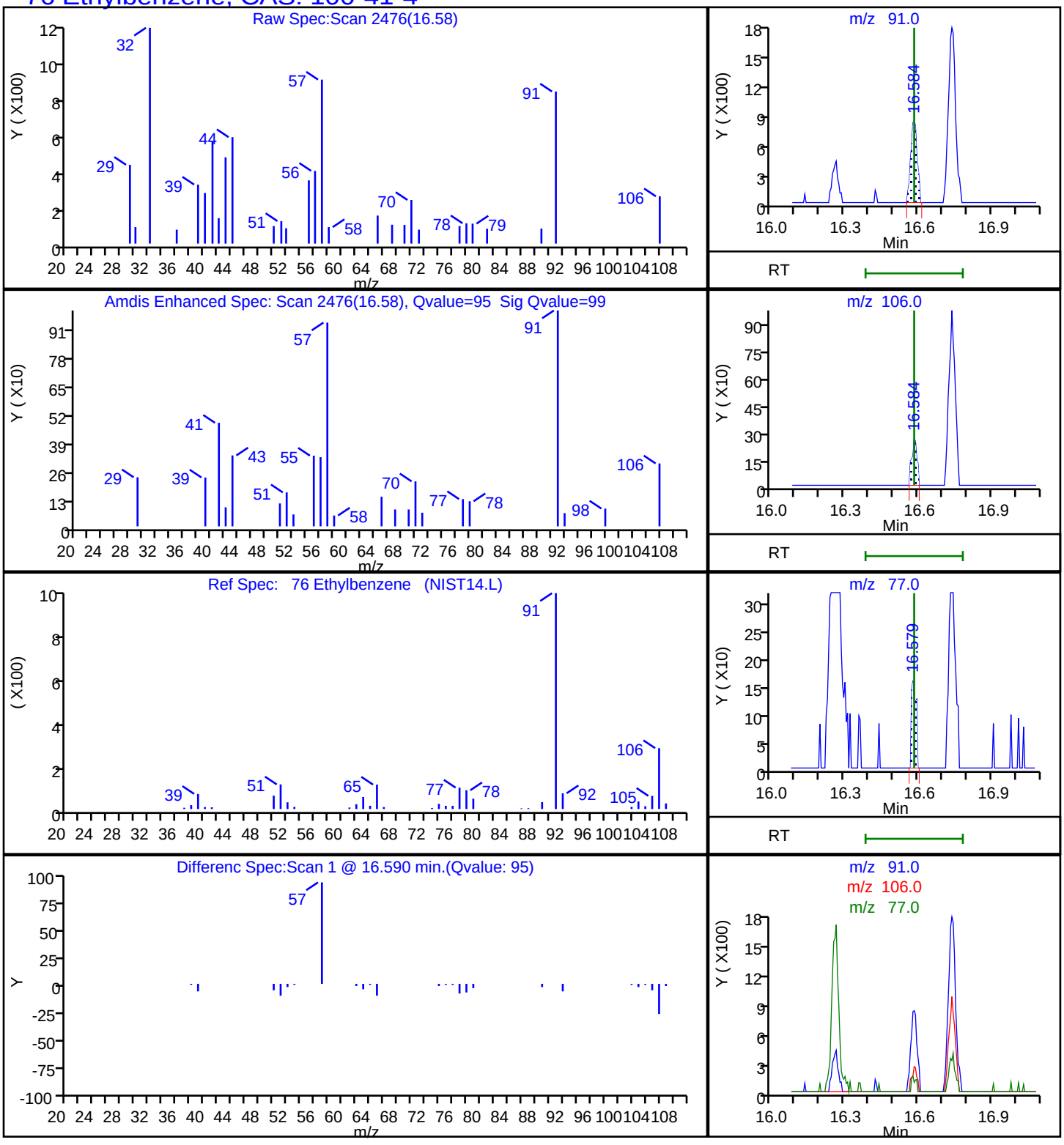
Lims ID:	140-20175-A-22	Lab Sample ID:	140-20175-22
Client ID:	IA-088-C-29		
Operator ID:	HMT	ALS Bottle#:	5 Worklist Smp#: 10
Purge Vol:	500.000 mL	Dil. Factor:	1.3500
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

76 Ethylbenzene, CAS: 100-41-4



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P105.D		
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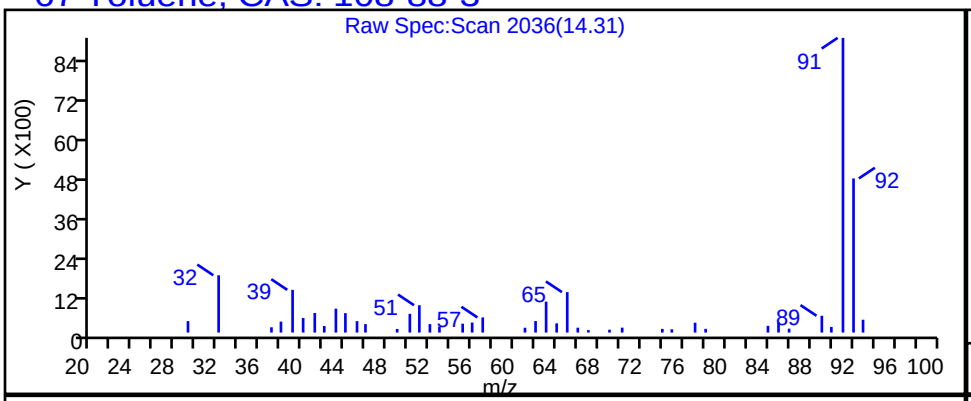
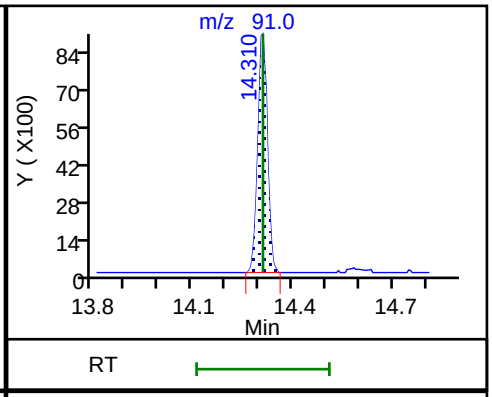
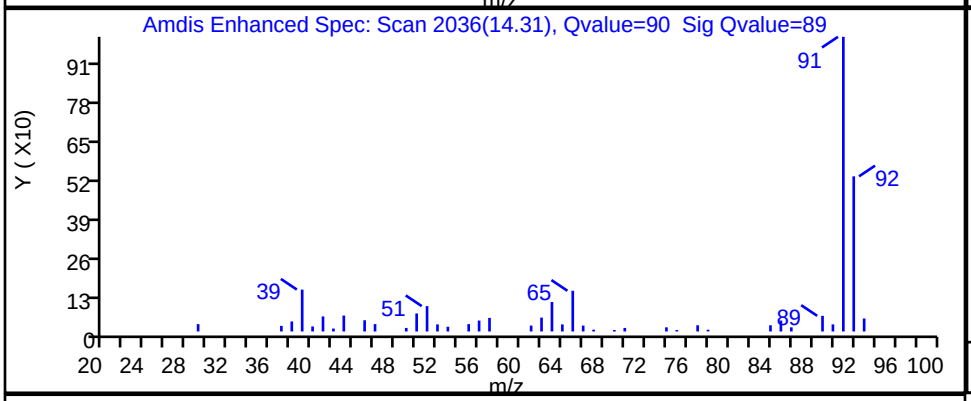
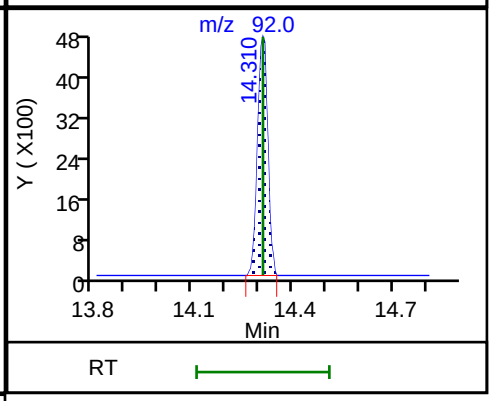
Lims ID:	140-20175-A-22	Lab Sample ID:	140-20175-22
Client ID:	IA-088-C-29		
Operator ID:	HMT	ALS Bottle#:	5 Worklist Smp#: 10
Purge Vol:	500.000 mL	Dil. Factor:	1.3500
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

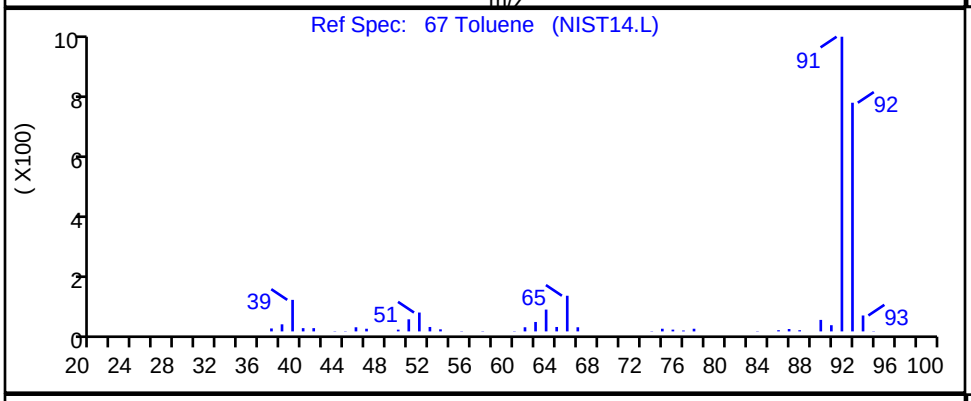
67 Toluene, CAS: 108-88-3

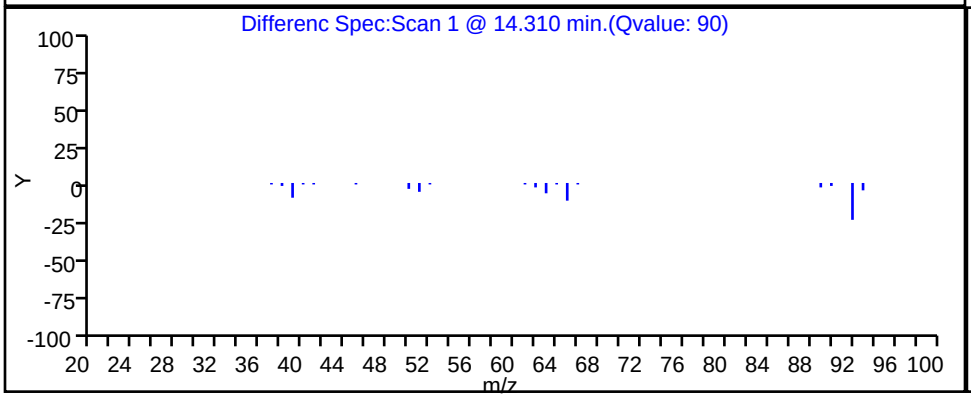


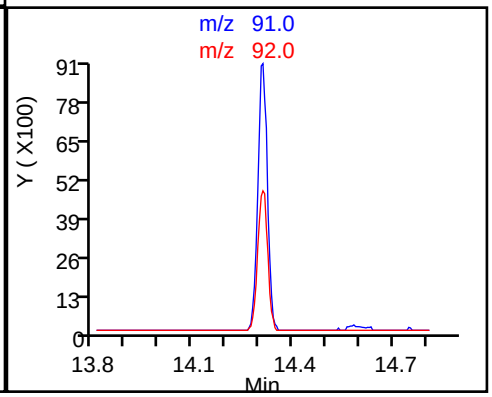












Report Date: 07-Sep-2020 07:43:56 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

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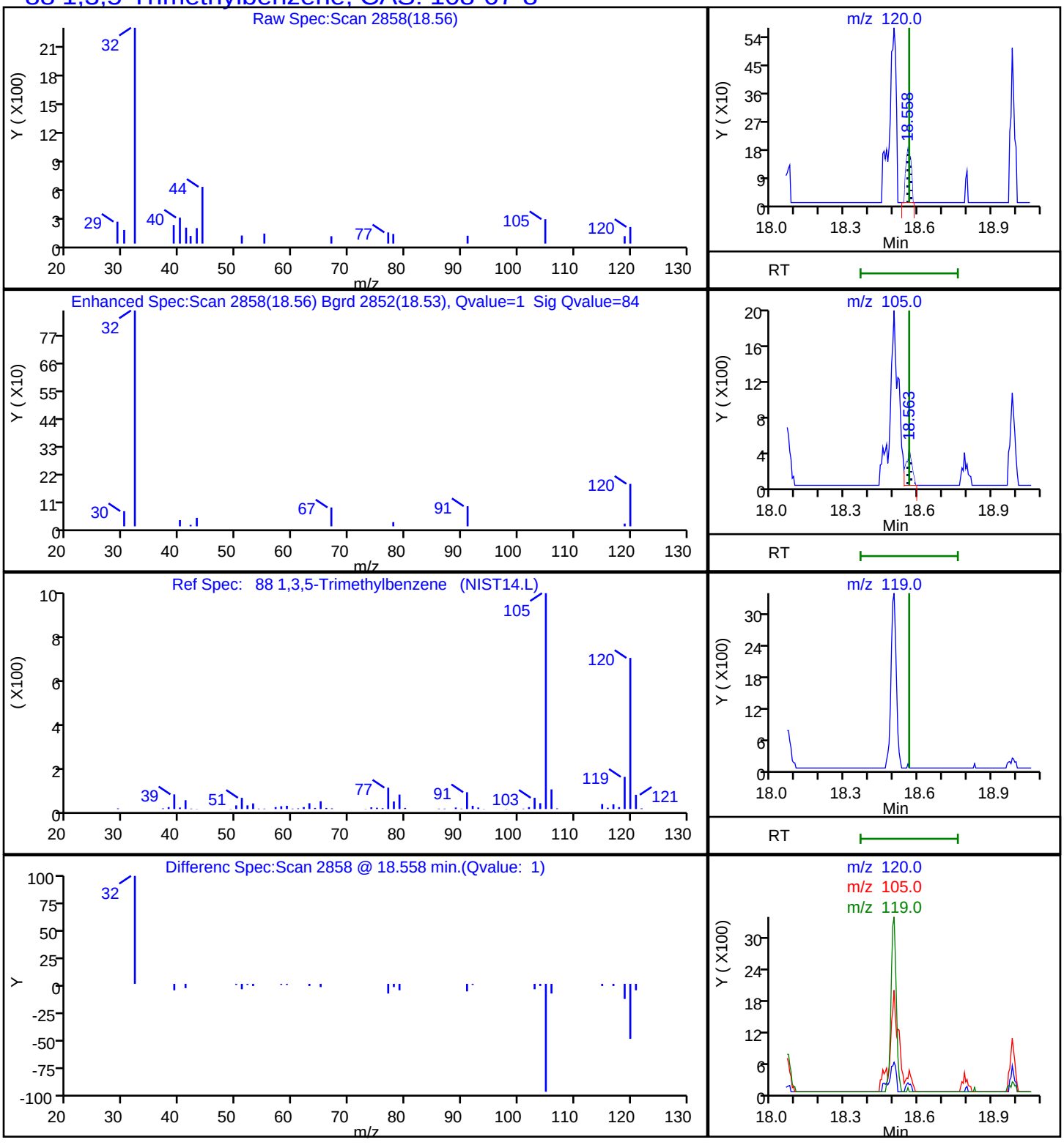
Lims ID:	140-20175-A-22	Lab Sample ID:	140-20175-22		
Client ID:	IA-088-C-29				
Operator ID:	HMT	ALS Bottle#:	5	Worklist Smp#:	10
Purge Vol:	500.000 mL	Dil. Factor:	1.3500		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

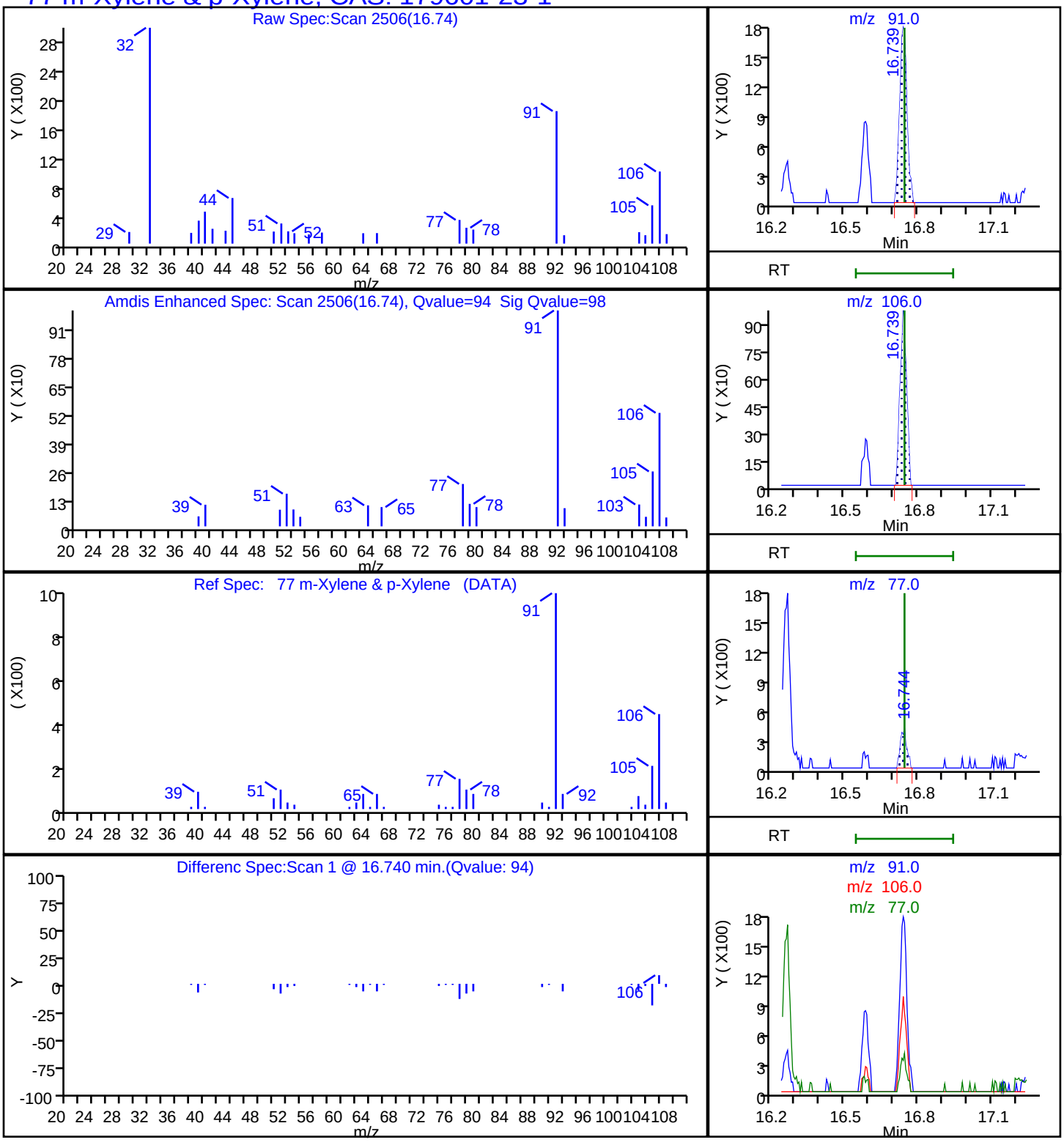
88 1,3,5-Trimethylbenzene, CAS: 108-67-8



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P105.D				
Injection Date:	06-Sep-2020 20:26:30	Instrument ID:	MH		
Lims ID:	140-20175-A-22	Lab Sample ID:	140-20175-22		
Client ID:	IA-088-C-29				
Operator ID:	HMT	ALS Bottle#:	5	Worklist Smp#:	10
Purge Vol:	500.000 mL	Dil. Factor:	1.3500		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

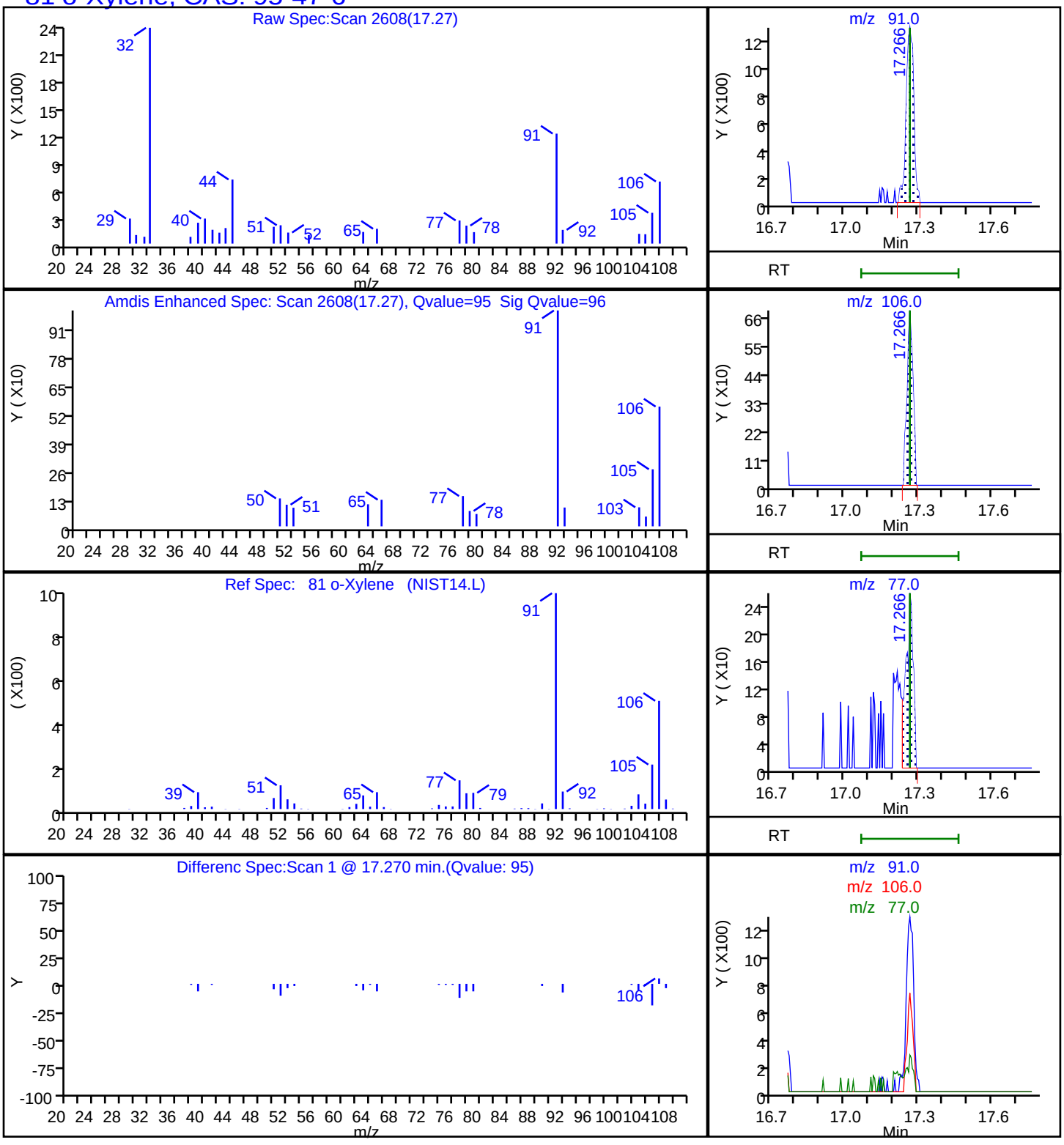
77 m-Xylene & p-Xylene, CAS: 179601-23-1



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P105.D		
Injection Date:	06-Sep-2020 20:26:30	Instrument ID:	MH
Lims ID:	140-20175-A-22	Lab Sample ID:	140-20175-22
Client ID:	IA-088-C-29		
Operator ID:	HMT	ALS Bottle#:	5 Worklist Smp#: 10
Purge Vol:	500.000 mL	Dil. Factor:	1.3500
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

81 o-Xylene, CAS: 95-47-6



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: IA-142-C-29 Lab Sample ID: 140-20175-23

Matrix: Air Lab File ID: HI07P106.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 16:25

Sample wt/vol: 100(mL) Date Analyzed: 09/06/2020 21:23

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42498 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.15	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.12	J *	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	2.2		0.40	0.11
67-66-3	Chloroform	119.38	0.20	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.57		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	0.11	J	0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.035
108-88-3	Toluene	92.14	1.1		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	ND		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND	*	0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	0.28	J	0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.62	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	84		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: IA-142-C-29 Lab Sample ID: 140-20175-23

Matrix: Air Lab File ID: HI07P106.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 16:25

Sample wt/vol: 100(mL) Date Analyzed: 09/06/2020 21:23

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42498 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.47	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.77	J *	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	7.8		1.4	0.39
67-66-3	Chloroform	119.38	0.96	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.8		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	0.49	J	1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.24
108-88-3	Toluene	92.14	4.2		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	ND		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	ND	*	2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	1.4	J	2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	2.7	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	84		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P106.D				
Lims ID:	140-20175-A-23				
Client ID:	IA-142-C-29				
Sample Type:	Client				
Inject. Date:	06-Sep-2020 21:23:30	ALS Bottle#:	6	Worklist Smp#:	11
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016514-011				
Misc. Info.:	140-20175-a-23				
Operator ID:	HMT	Instrument ID:	MH		
Method:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\MH_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	07-Sep-2020 07:43:45	Calib Date:	29-Aug-2020 23:57:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1015				
First Level Reviewer: tajh		Date:	07-Sep-2020 07:41:05		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.431	9.431	0.000	98	96074	4.80	
* 2 1,4-Difluorobenzene	114	11.591	11.591	0.000	96	382955	4.80	
* 3 Chlorobenzene-d5 (IS)	117	16.258	16.258	0.000	88	292544	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.876	17.876	0.000	90	132033	3.88	
6 Chlorodifluoromethane	51	3.921	3.916	0.005	97	23605	0.4403	
8 Dichlorodifluoromethane	85	3.988	3.983	0.005	99	8227	0.1133	
44 Chloroform	83	9.436	9.436	0.000	28	2298	0.0394	
51 Benzene	78	11.069	11.074	-0.005	93	2056	0.0292	
52 Carbon tetrachloride	117	11.095	11.095	0.000	87	1068	0.0245	
67 Toluene	91	14.310	14.310	0.000	90	16679	0.2213	
76 Ethylbenzene	91	16.584	16.584	0.000	93	2054	0.0225	
77 m-Xylene & p-Xylene	91	16.739	16.744	-0.005	95	5661	0.0785	
81 o-Xylene	91	17.266	17.266	0.000	96	3483	0.0461	
88 1,3,5-Trimethylbenzene	120	18.563	18.563	0.000	85	347	0.0550	
S 116 Xylenes, Total	100				0		0.1246	

Reagents:

40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

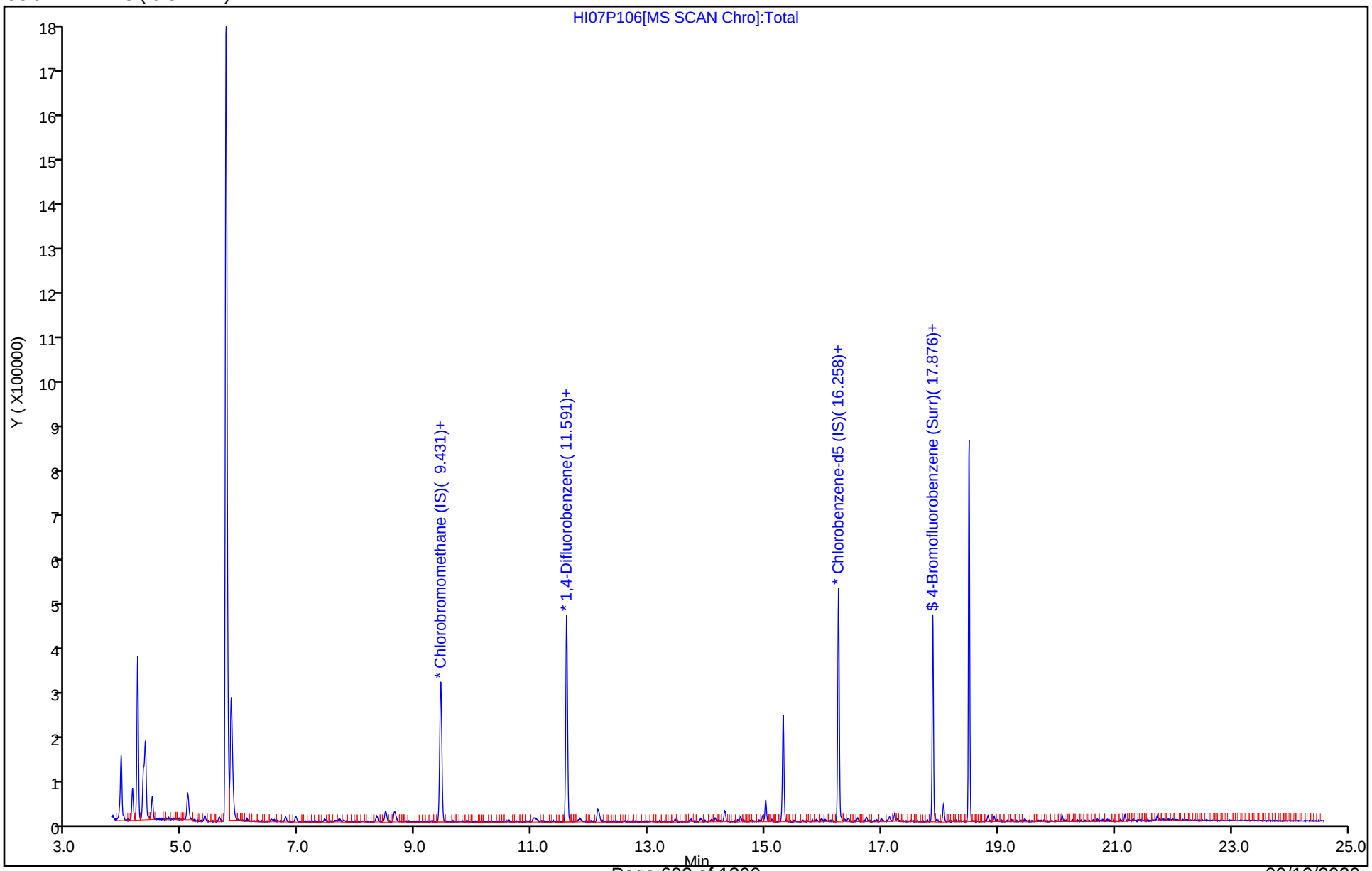
Report Date: 07-Sep-2020 07:43:58 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P106.D

Injection Date:	06-Sep-2020 21:23:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	140-20175-A-23	Lab Sample ID:	140-20175-23	Worklist Smp#:	11
Client ID:	IA-142-C-29				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

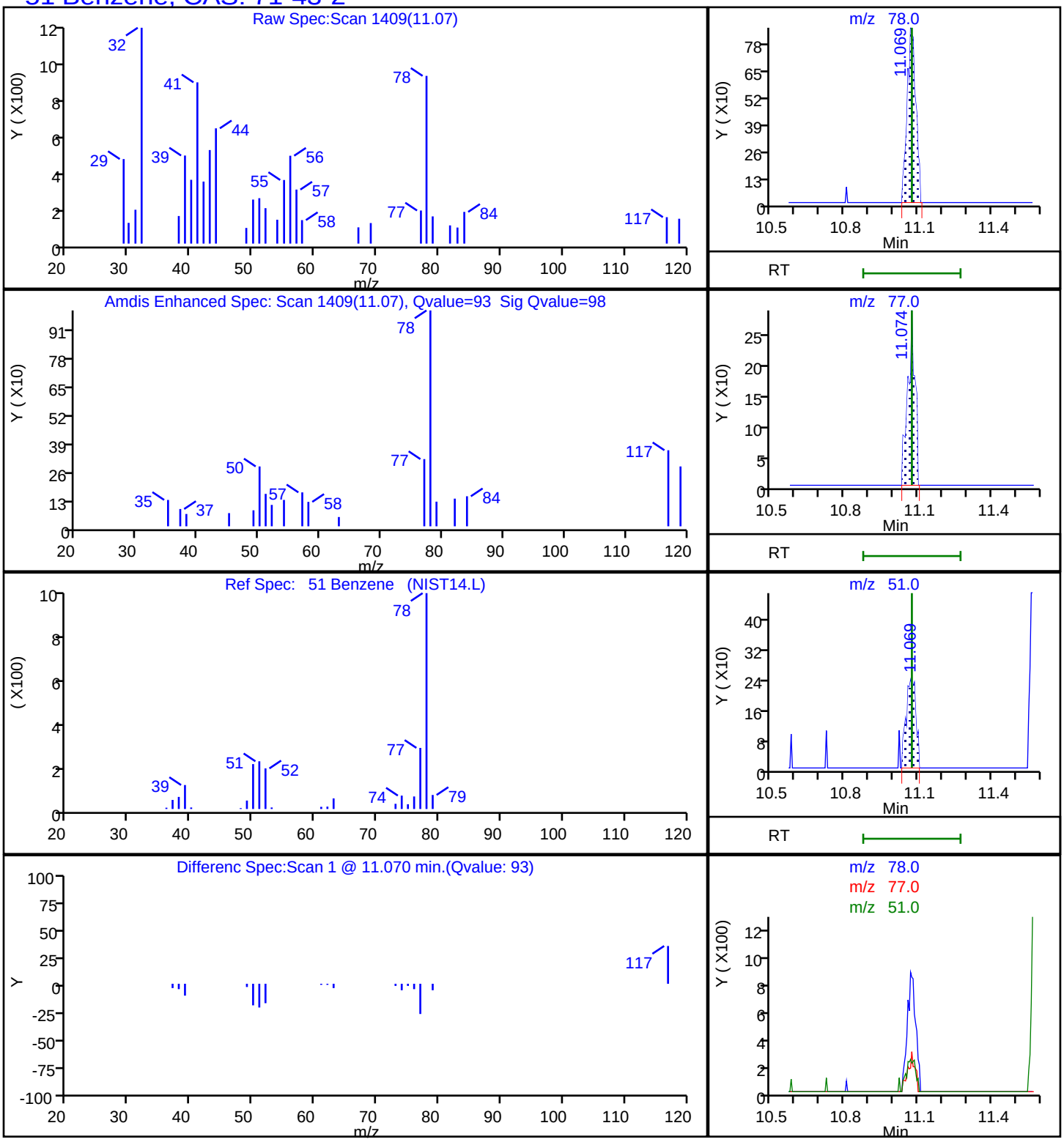
Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P106.D				
Lims ID:	140-20175-A-23				
Client ID:	IA-142-C-29				
Sample Type:	Client				
Inject. Date:	06-Sep-2020 21:23:30	ALS Bottle#:	6	Worklist Smp#:	11
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016514-011				
Misc. Info.:	140-20175-a-23				
Operator ID:	HMT	Instrument ID:	MH		
Method:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\MH_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	07-Sep-2020 07:43:45	Calib Date:	29-Aug-2020 23:57:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1015				
First Level Reviewer: tajh		Date:	07-Sep-2020 07:41:05		

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	3.88	83.72

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P106.D		
Injection Date:	06-Sep-2020 21:23:30	Instrument ID:	MH
Lims ID:	140-20175-A-23	Lab Sample ID:	140-20175-23
Client ID:	IA-142-C-29		
Operator ID:	HMT	ALS Bottle#:	6 Worklist Smp#: 11
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

51 Benzene, CAS: 71-43-2



Eurofins TestAmerica, Knoxville

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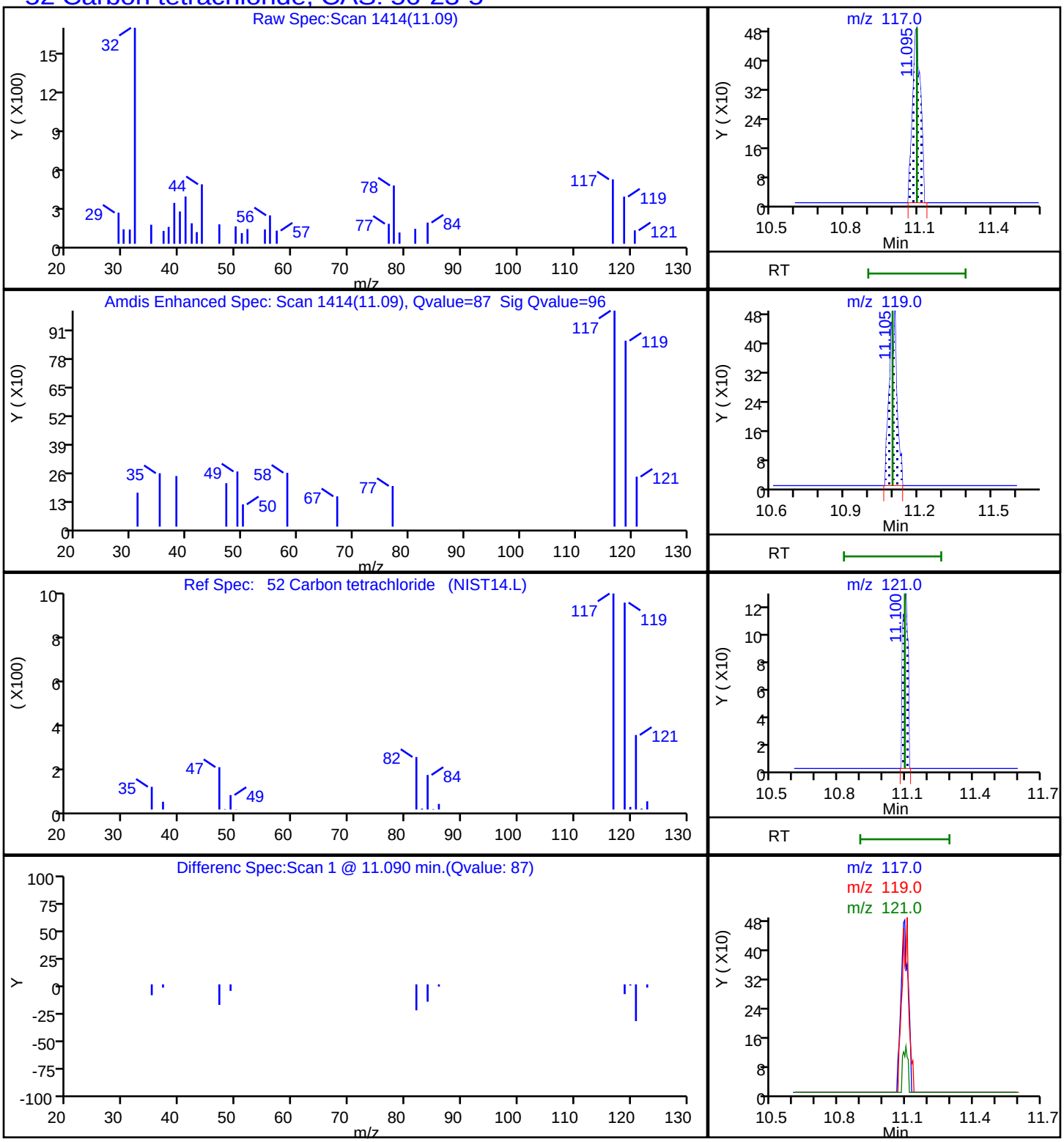
Lims ID:	140-20175-A-23	Lab Sample ID:	140-20175-23
Client ID:	IA-142-C-29		
Operator ID:	HMT	ALS Bottle#:	6 Worklist Smp#: 11
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

52 Carbon tetrachloride, CAS: 56-23-5



Eurofins TestAmerica, Knoxville

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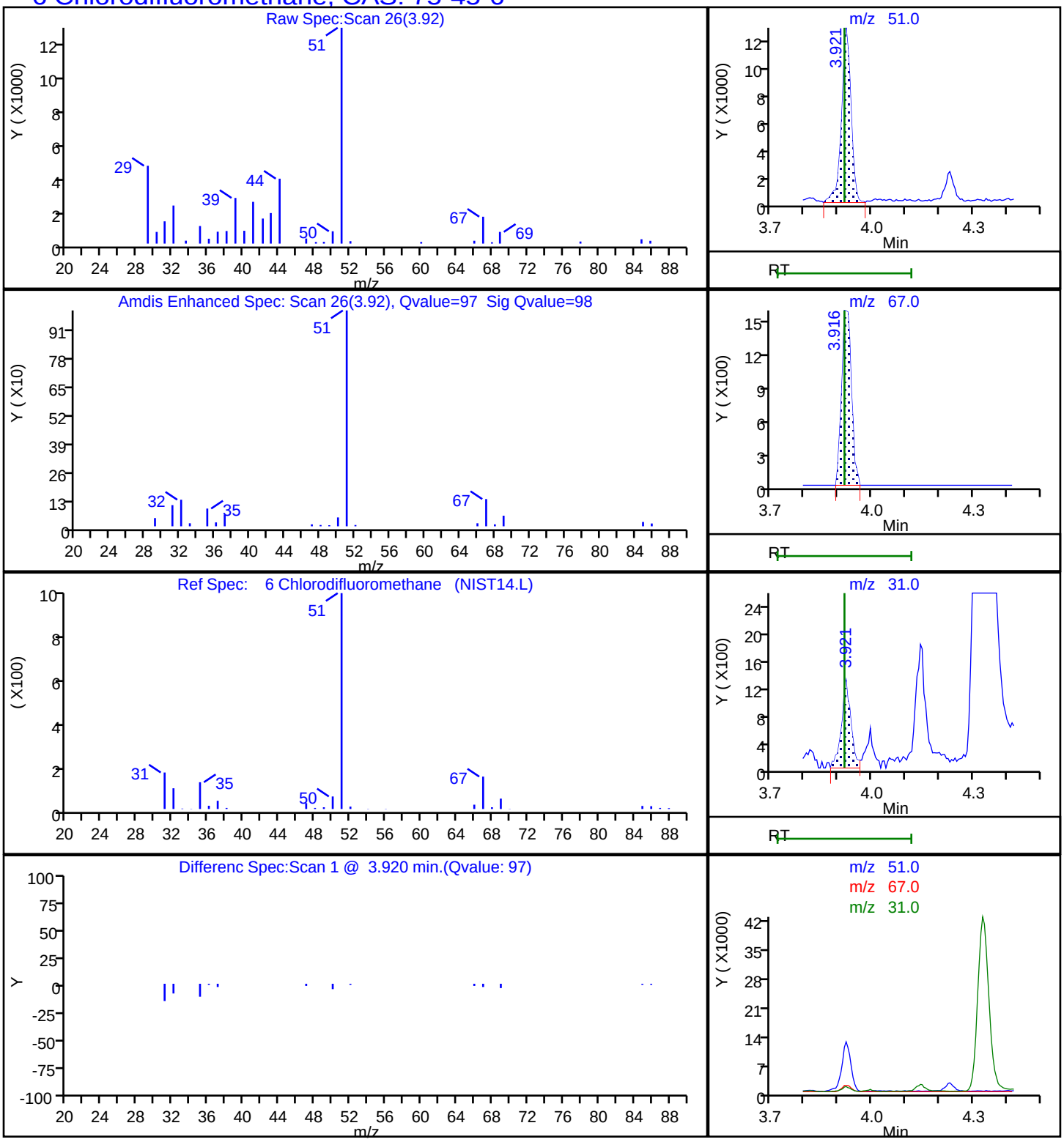
Lims ID:	140-20175-A-23	Lab Sample ID:	140-20175-23
Client ID:	IA-142-C-29		
Operator ID:	HMT	ALS Bottle#:	6 Worklist Smp#: 11
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

6 Chlorodifluoromethane, CAS: 75-45-6



Eurofins TestAmerica, Knoxville

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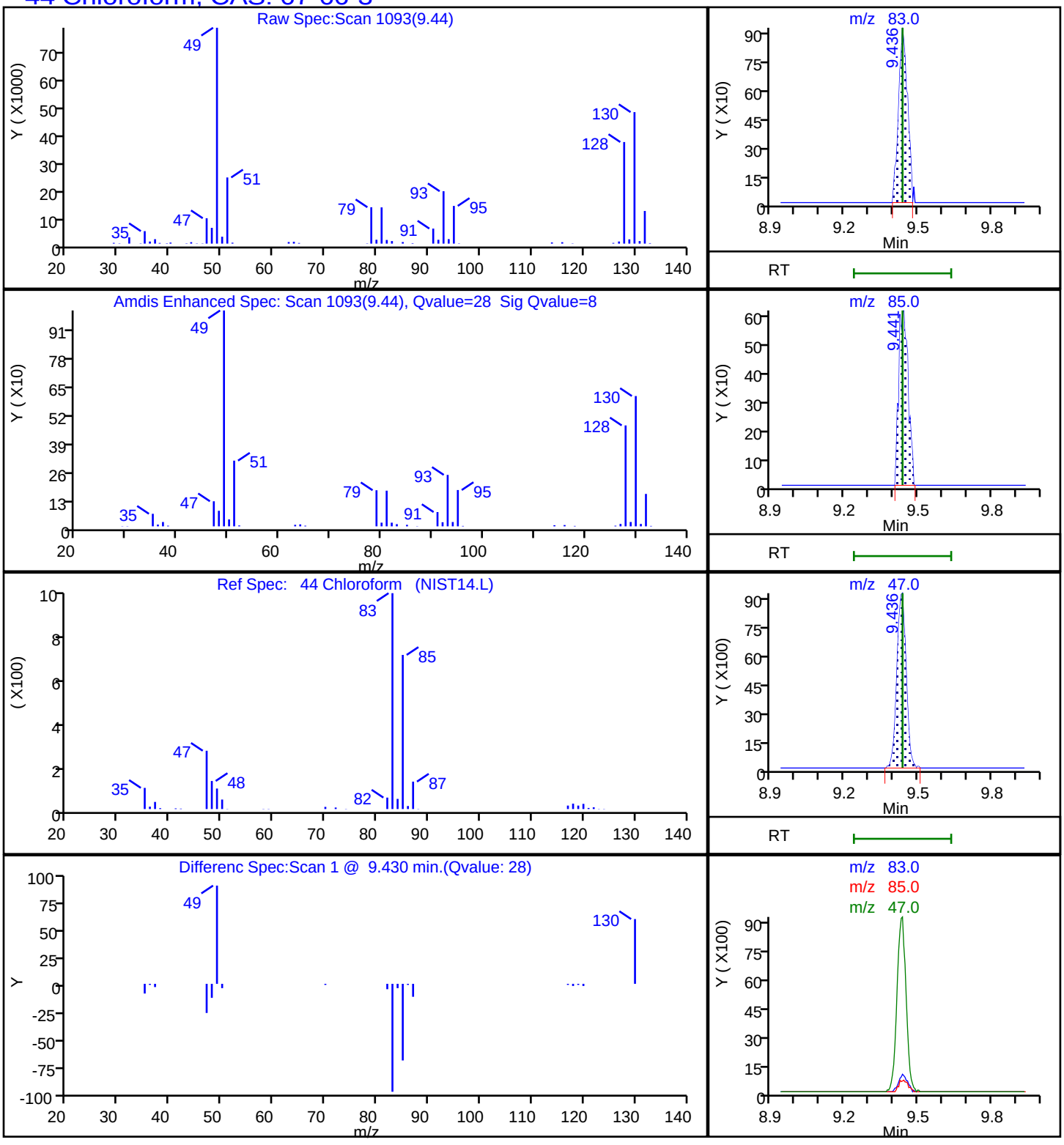
Injection Date:	06-Sep-2020 21:23:30	Instrument ID:	MH
Lims ID:	140-20175-A-23	Lab Sample ID:	140-20175-23
Client ID:	IA-142-C-29		
Operator ID:	HMT	ALS Bottle#:	6 Worklist Smp#: 11
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

44 Chloroform, CAS: 67-66-3



Eurofins TestAmerica, Knoxville

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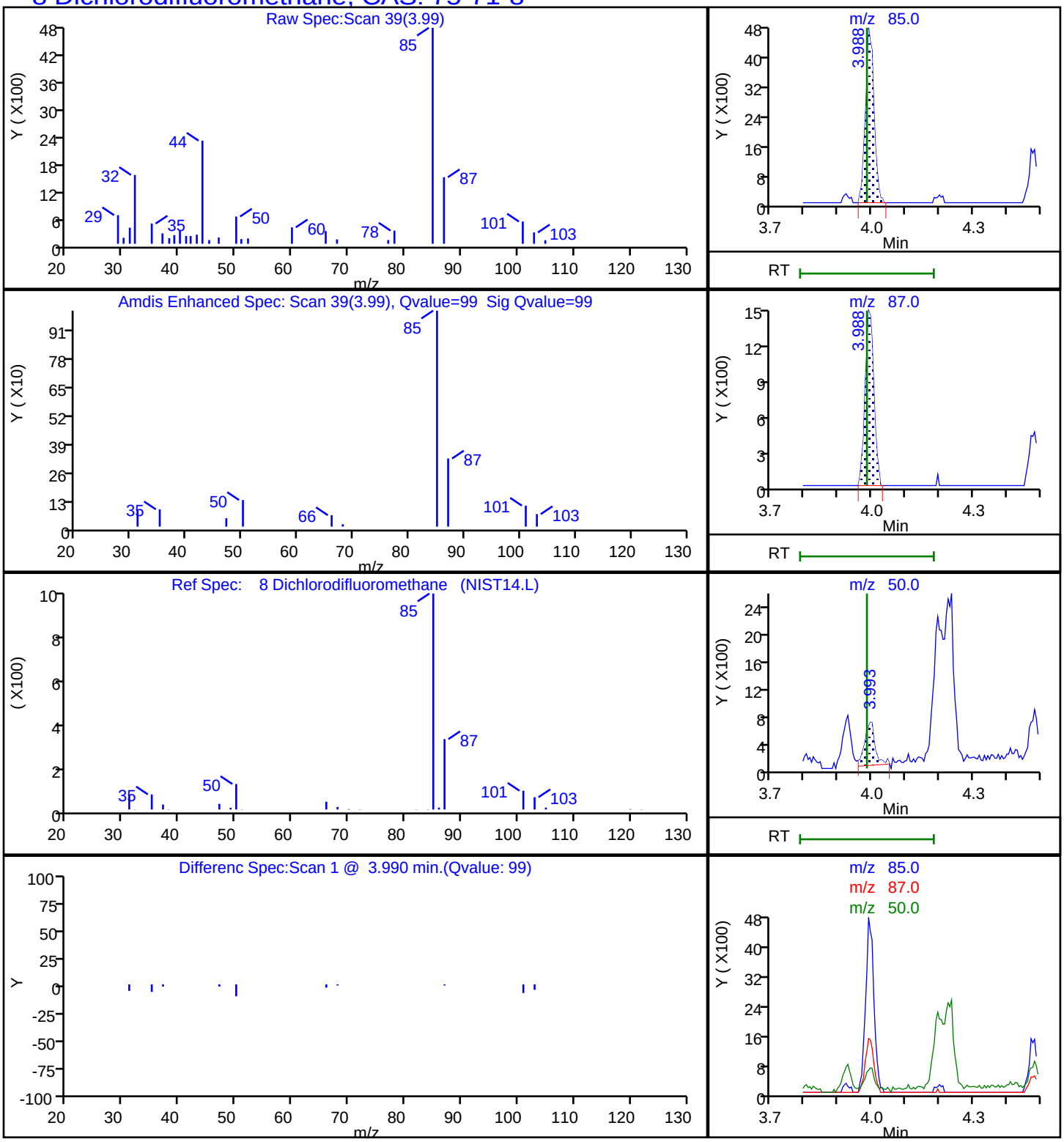
Lims ID:	140-20175-A-23	Lab Sample ID:	140-20175-23
Client ID:	IA-142-C-29		
Operator ID:	HMT	ALS Bottle#:	6 Worklist Smp#: 11
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

8 Dichlorodifluoromethane, CAS: 75-71-8



Eurofins TestAmerica, Knoxville

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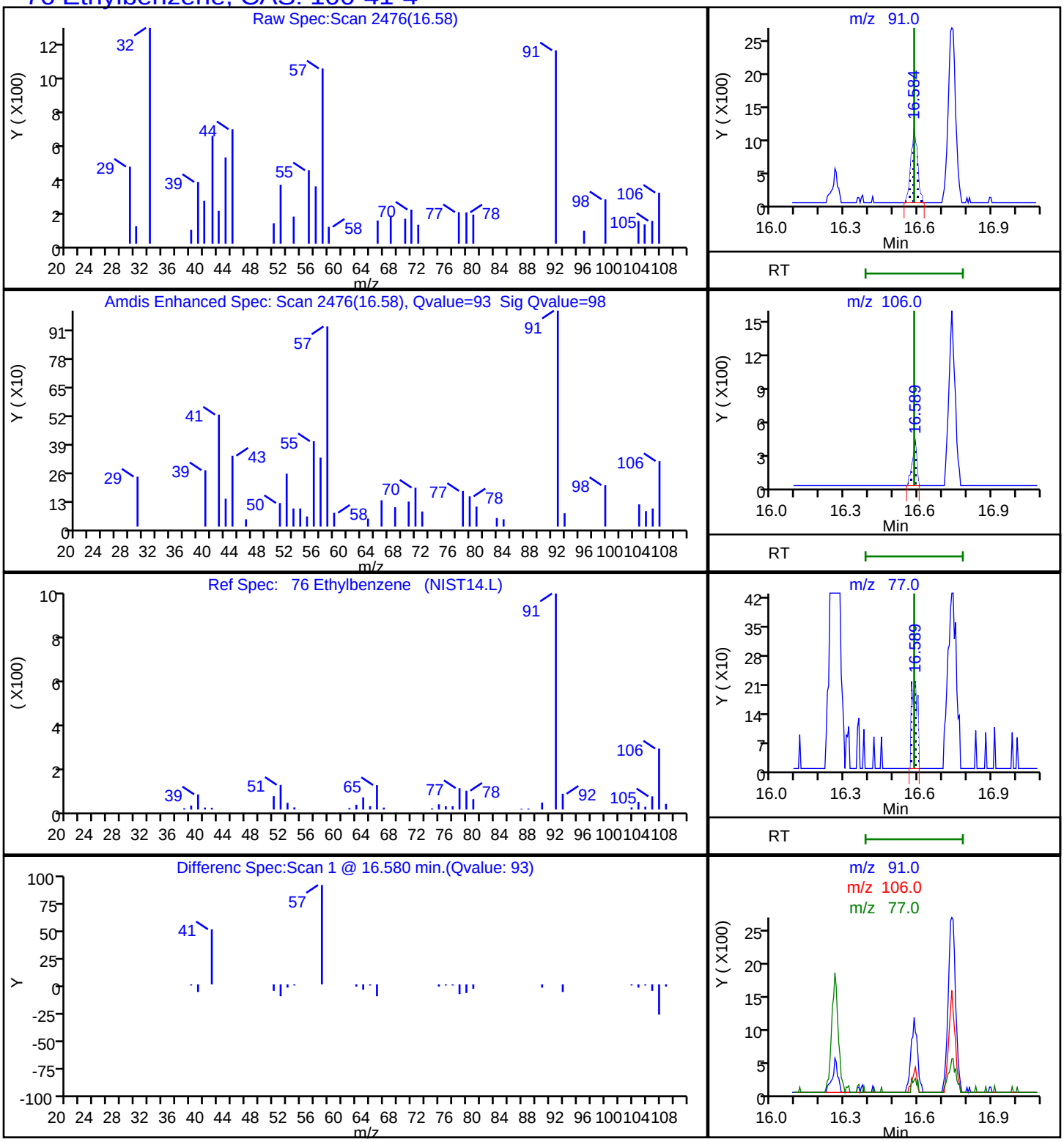
Lims ID:	140-20175-A-23	Lab Sample ID:	140-20175-23
Client ID:	IA-142-C-29		
Operator ID:	HMT	ALS Bottle#:	6 Worklist Smp#: 11
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

76 Ethylbenzene, CAS: 100-41-4



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P106.D		
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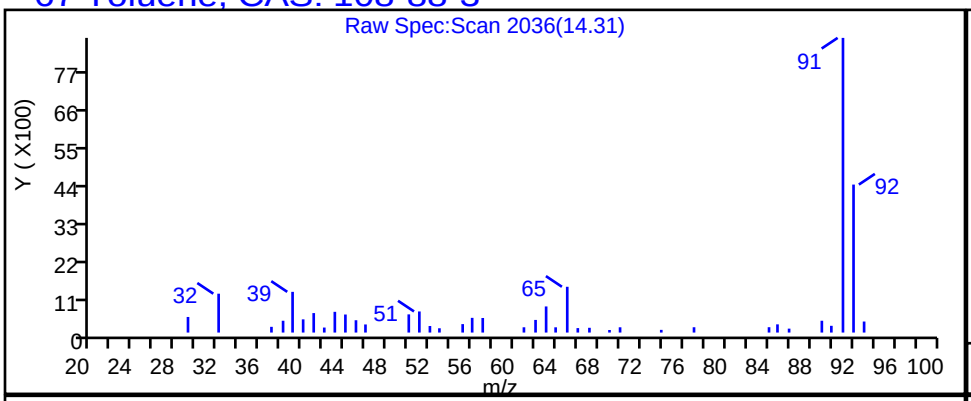
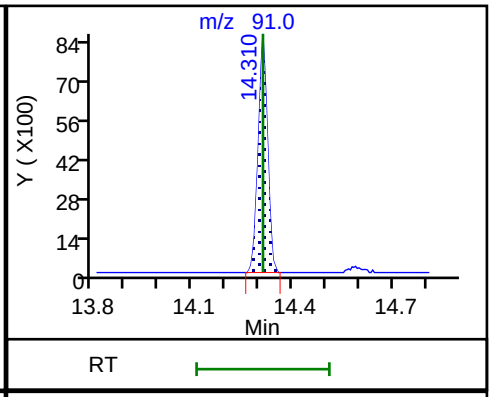
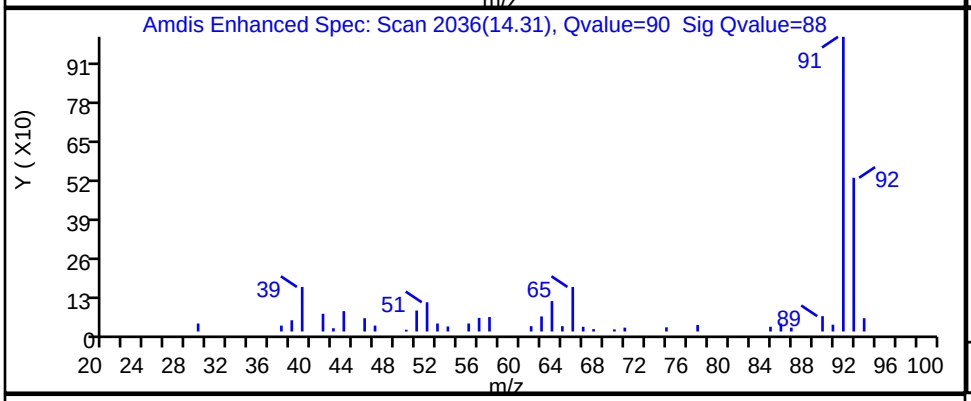
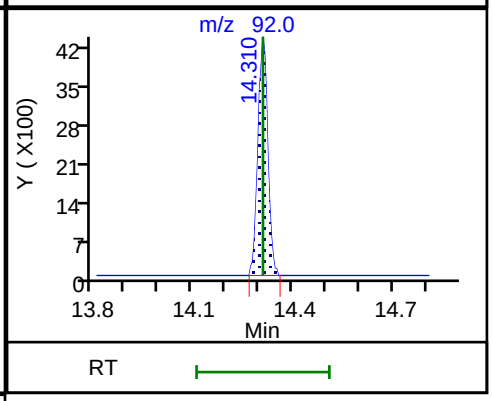
Lims ID:	140-20175-A-23	Lab Sample ID:	140-20175-23
Client ID:	IA-142-C-29		
Operator ID:	HMT	ALS Bottle#:	6 Worklist Smp#: 11
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

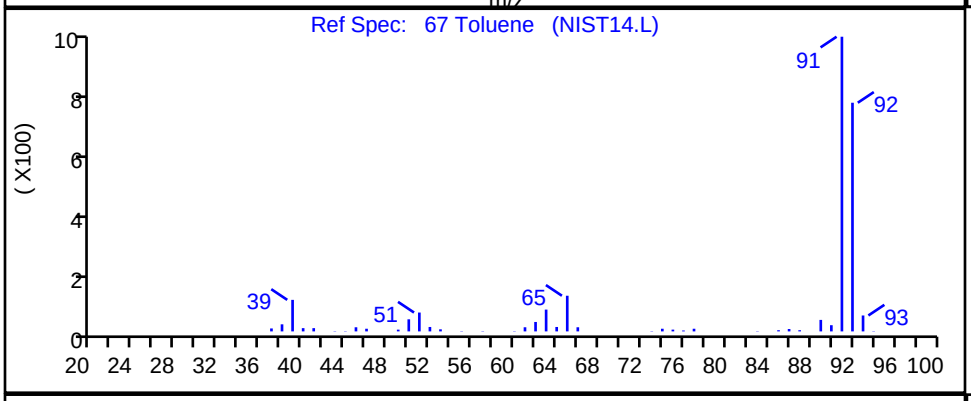
67 Toluene, CAS: 108-88-3

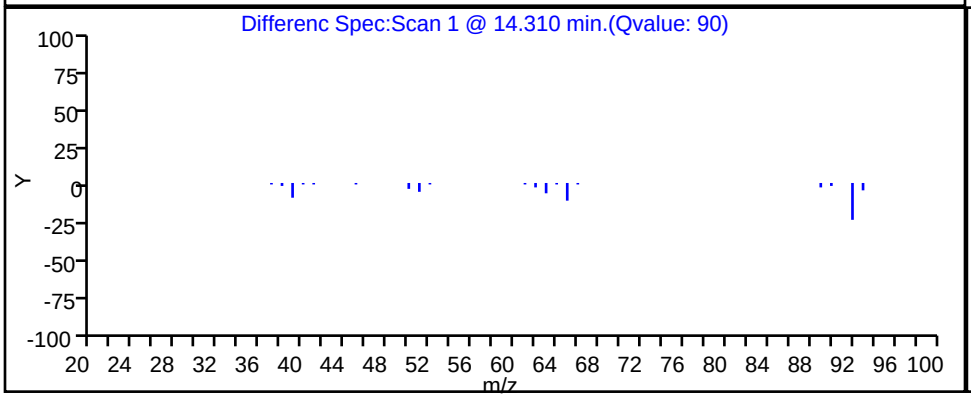


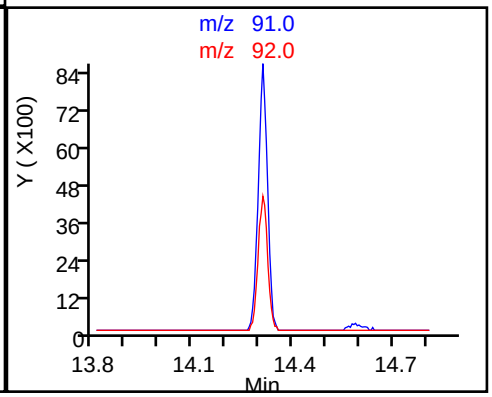












Eurofins TestAmerica, Knoxville

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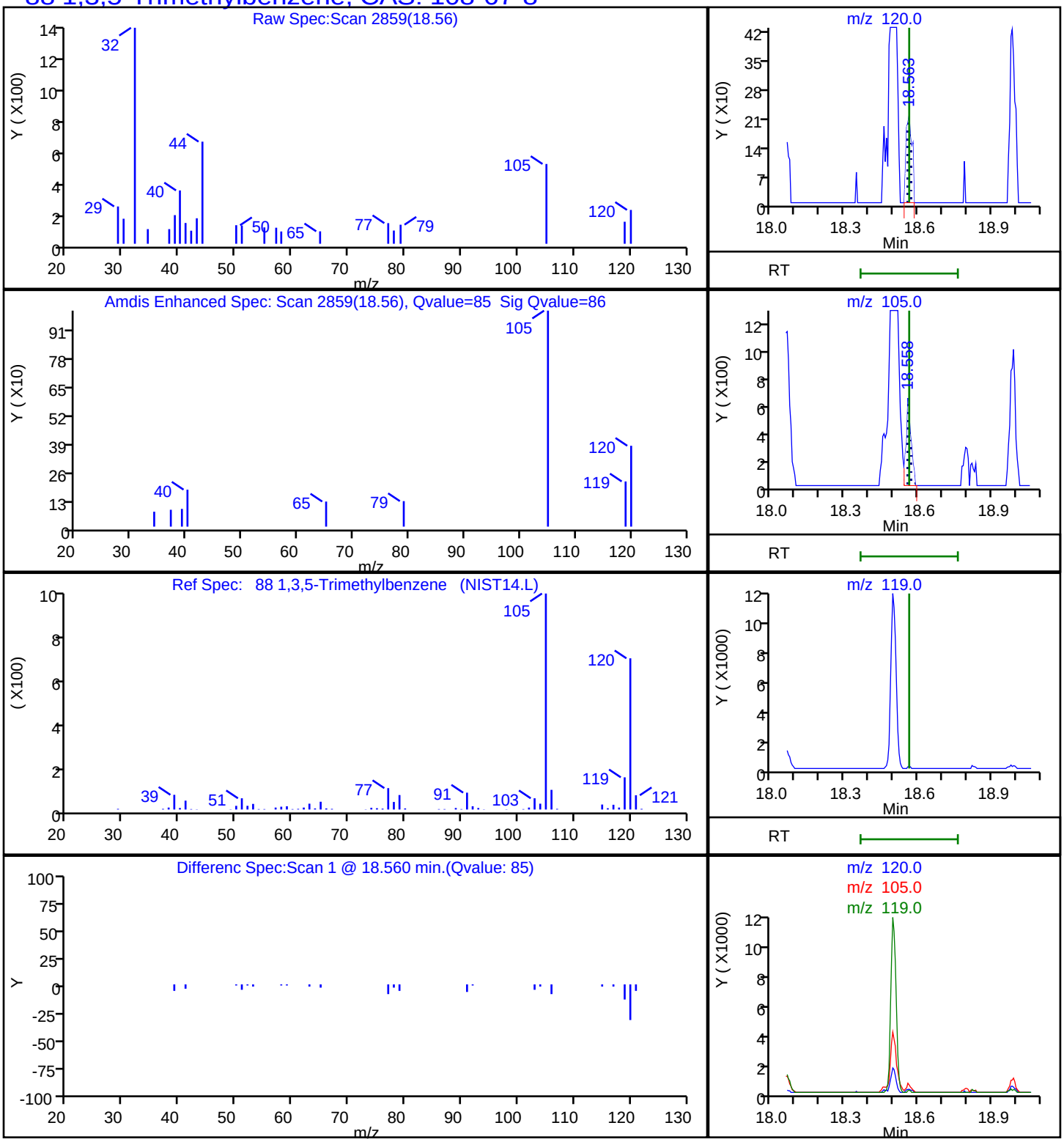
Lims ID:	140-20175-A-23	Lab Sample ID:	140-20175-23		
Client ID:	IA-142-C-29				
Operator ID:	HMT	ALS Bottle#:	6	Worklist Smp#:	11
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

88 1,3,5-Trimethylbenzene, CAS: 108-67-8

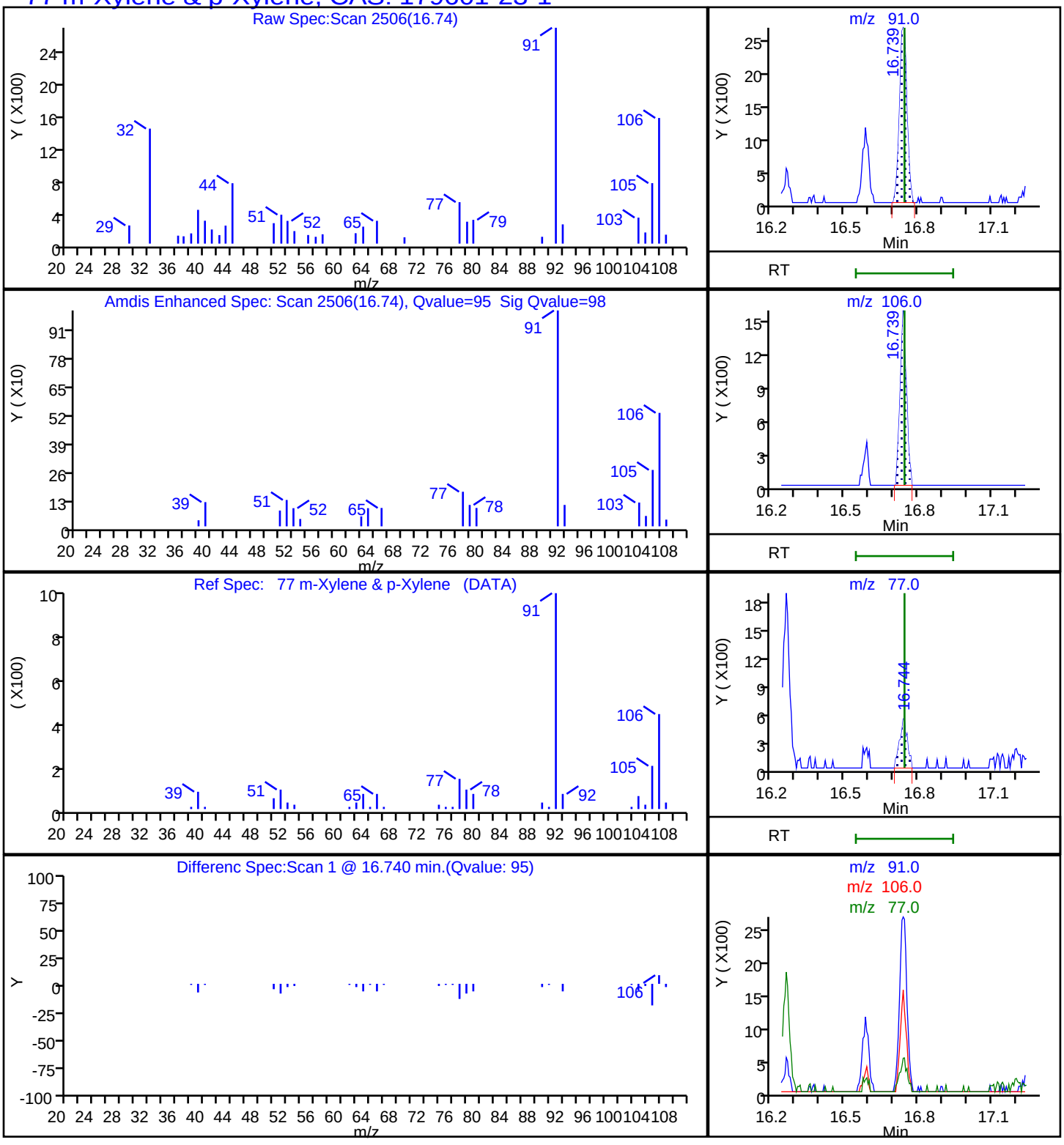


Report Date: 07-Sep-2020 07:43:58 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P106.D				
Injection Date:	06-Sep-2020 21:23:30	Instrument ID:	MH		
Lims ID:	140-20175-A-23	Lab Sample ID:	140-20175-23		
Client ID:	IA-142-C-29				
Operator ID:	HMT	ALS Bottle#:	6	Worklist Smp#:	11
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

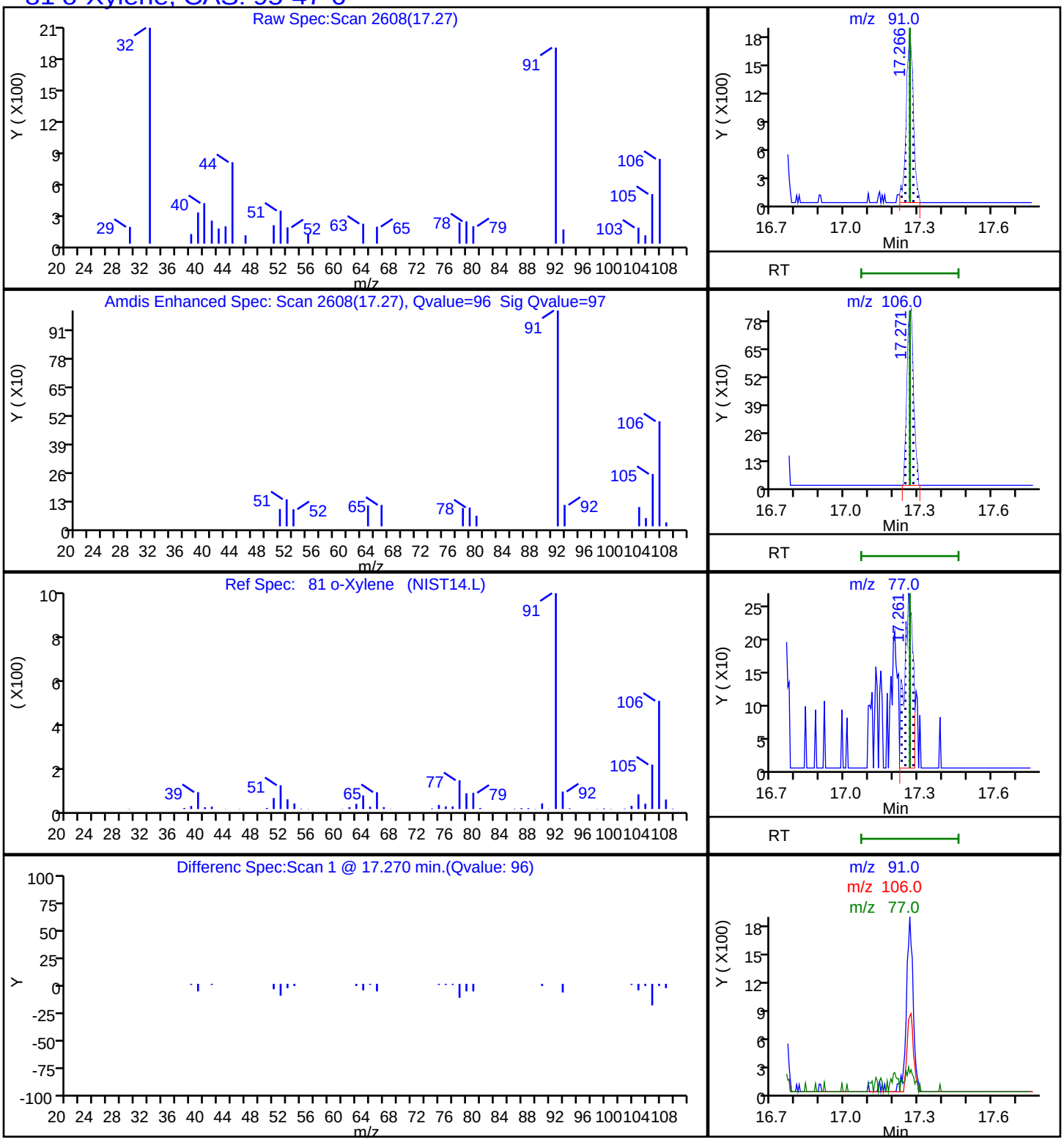
77 m-Xylene & p-Xylene, CAS: 179601-23-1



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P106.D				
Injection Date:	06-Sep-2020 21:23:30	Instrument ID:	MH		
Lims ID:	140-20175-A-23	Lab Sample ID:	140-20175-23		
Client ID:	IA-142-C-29				
Operator ID:	HMT	ALS Bottle#:	6	Worklist Smp#:	11
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

81 o-Xylene, CAS: 95-47-6



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: IA-155-C-29 Lab Sample ID: 140-20175-24

Matrix: Air Lab File ID: HI07P107.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 16:28

Sample wt/vol: 143(mL) Date Analyzed: 09/06/2020 22:17

Soil Aliquot Vol: Dilution Factor: 1.43

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42498 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.18	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.060	J *	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	2.6		0.40	0.11
67-66-3	Chloroform	119.38	0.094	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.50		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	0.097	J	0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.035
108-88-3	Toluene	92.14	0.87		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	ND		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND	*	0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	0.26	J	0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.49	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	96		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: IA-155-C-29 Lab Sample ID: 140-20175-24

Matrix: Air Lab File ID: HI07P107.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 16:28

Sample wt/vol: 143(mL) Date Analyzed: 09/06/2020 22:17

Soil Aliquot Vol: Dilution Factor: 1.43

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42498 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.58	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.38	J *	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	9.2		1.4	0.39
67-66-3	Chloroform	119.38	0.46	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.5		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	0.42	J	1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.24
108-88-3	Toluene	92.14	3.3		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	ND		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	ND	*	2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	1.3	J	2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	2.1	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	96		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P107.D				
Lims ID:	140-20175-A-24				
Client ID:	IA-155-C-29				
Sample Type:	Client				
Inject. Date:	06-Sep-2020 22:17:30	ALS Bottle#:	7	Worklist Smp#:	12
Purge Vol:	500.000 mL	Dil. Factor:	1.4300		
Sample Info:	140-0016514-012				
Misc. Info.:	140-20175-a-24@1.43				
Operator ID:	HMT	Instrument ID:	MH		
Method:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\MH_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	07-Sep-2020 07:43:45	Calib Date:	29-Aug-2020 23:57:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1015				
First Level Reviewer: tajh		Date:	07-Sep-2020 07:41:17		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.431	9.431	0.000	97	105613	4.80	
* 2 1,4-Difluorobenzene	114	11.591	11.591	0.000	95	386630	4.80	
* 3 Chlorobenzene-d5 (IS)	117	16.258	16.258	0.000	88	313320	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.876	17.876	0.000	92	161396	4.43	
6 Chlorodifluoromethane	51	3.916	3.916	0.000	98	30622	0.5196	
8 Dichlorodifluoromethane	85	3.988	3.983	0.005	99	8003	0.1002	
44 Chloroform	83	9.441	9.436	0.005	32	1200	0.0187	
51 Benzene	78	11.074	11.074	0.000	95	2580	0.0363	
52 Carbon tetrachloride	117	11.095	11.095	0.000	39	524	0.0119	
67 Toluene	91	14.310	14.310	0.000	91	13985	0.1732	
76 Ethylbenzene	91	16.584	16.584	0.000	83	1900	0.0194	
77 m-Xylene & p-Xylene	91	16.739	16.744	-0.005	95	4544	0.0588	
81 o-Xylene	91	17.261	17.266	-0.005	97	3284	0.0406	
88 1,3,5-Trimethylbenzene	120	18.563	18.563	0.000	1	182	0.0511	
S 116 Xylenes, Total	100				0		0.0994	

Reagents:

40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

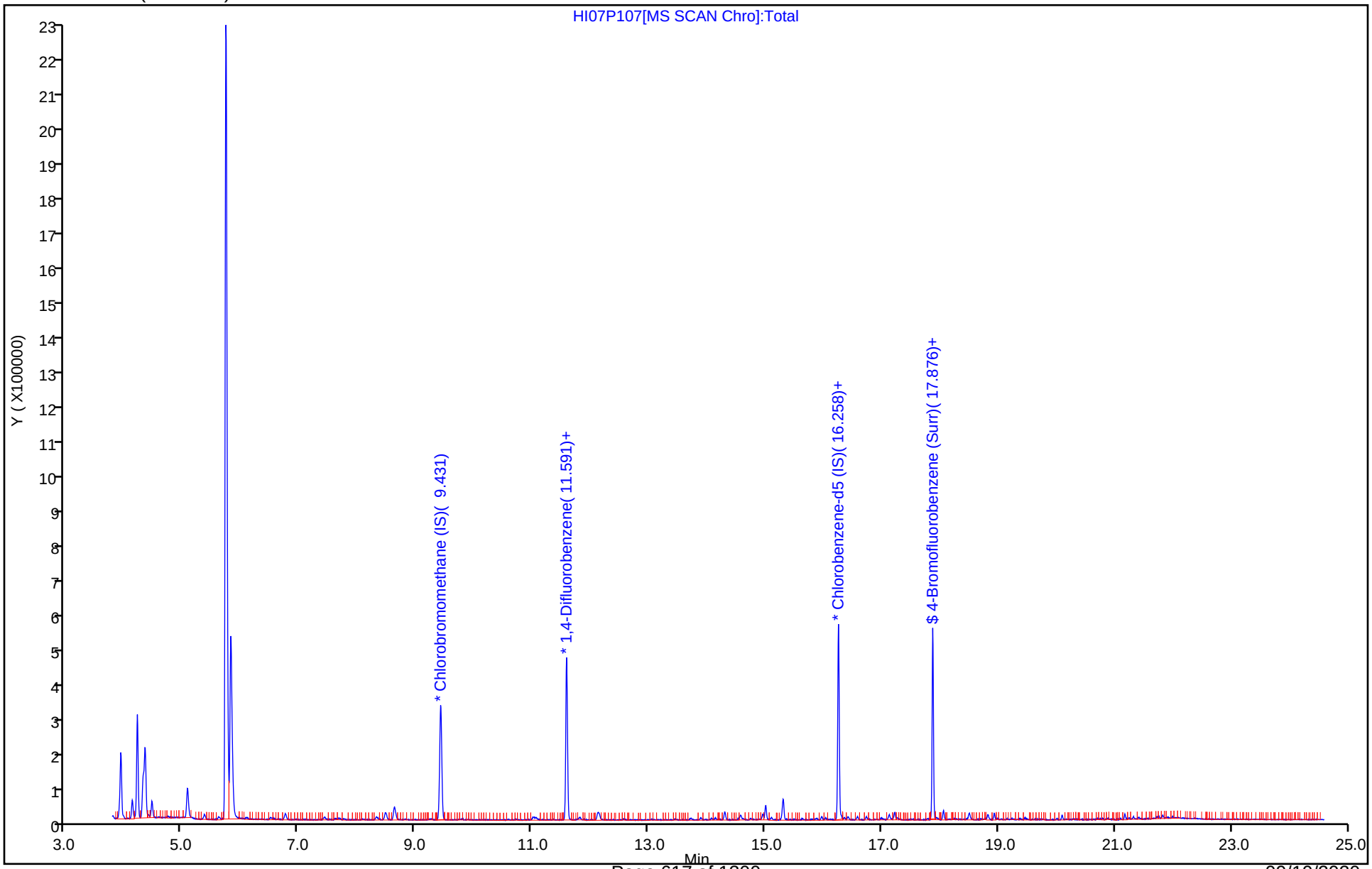
Report Date: 07-Sep-2020 07:43:59 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P107.D

Injection Date:	06-Sep-2020 22:17:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	140-20175-A-24	Lab Sample ID:	140-20175-24	Worklist Smp#:	12
Client ID:	IA-155-C-29				
Purge Vol:	500.000 mL	Dil. Factor:	1.4300	ALS Bottle#:	7
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

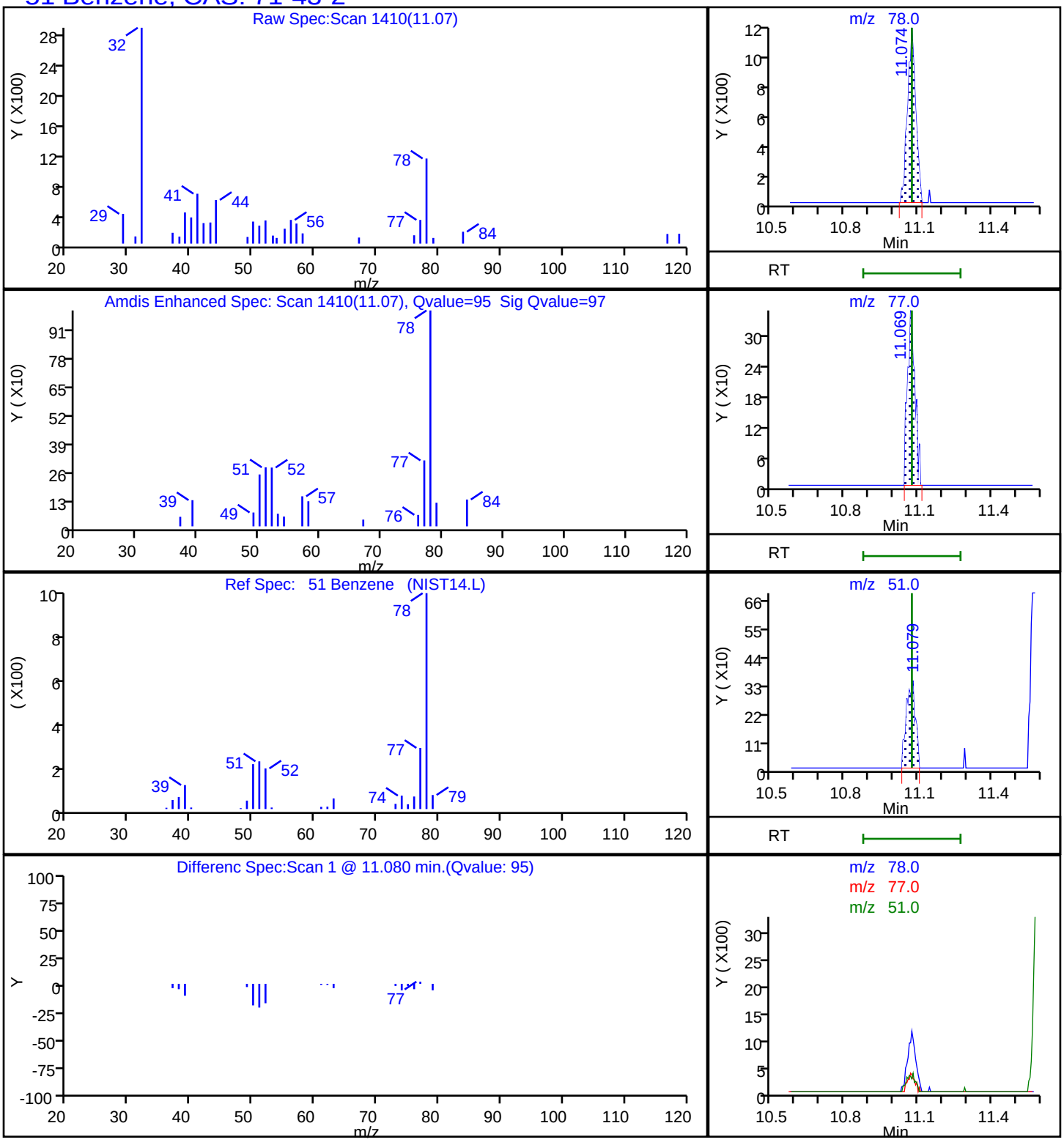
Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P107.D				
Lims ID:	140-20175-A-24				
Client ID:	IA-155-C-29				
Sample Type:	Client				
Inject. Date:	06-Sep-2020 22:17:30	ALS Bottle#:	7	Worklist Smp#:	12
Purge Vol:	500.000 mL	Dil. Factor:	1.4300		
Sample Info:	140-0016514-012				
Misc. Info.:	140-20175-a-24@1.43				
Operator ID:	HMT	Instrument ID:	MH		
Method:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\MH_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	07-Sep-2020 07:43:45	Calib Date:	29-Aug-2020 23:57:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1015				
First Level Reviewer: tajh		Date:	07-Sep-2020 07:41:17		

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	4.43	95.55

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P107.D		
Injection Date:	06-Sep-2020 22:17:30	Instrument ID:	MH
Lims ID:	140-20175-A-24	Lab Sample ID:	140-20175-24
Client ID:	IA-155-C-29		
Operator ID:	HMT	ALS Bottle#:	7 Worklist Smp#: 12
Purge Vol:	500.000 mL	Dil. Factor:	1.4300
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

51 Benzene, CAS: 71-43-2



Eurofins TestAmerica, Knoxville

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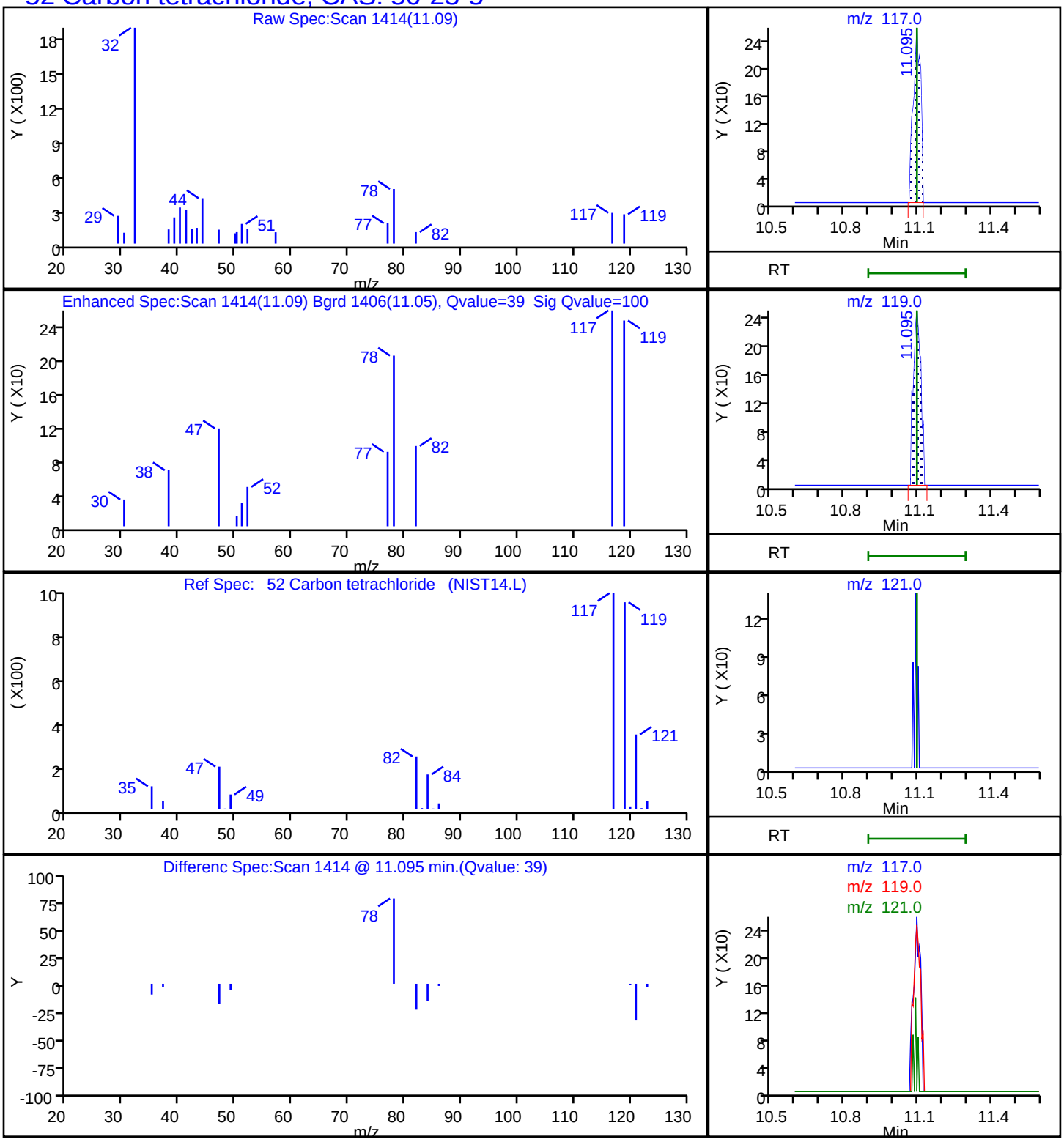
Lims ID:	140-20175-A-24	Lab Sample ID:	140-20175-24		
Client ID:	IA-155-C-29				
Operator ID:	HMT	ALS Bottle#:	7	Worklist Smp#:	12
Purge Vol:	500.000 mL	Dil. Factor:	1.4300		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

52 Carbon tetrachloride, CAS: 56-23-5



Eurofins TestAmerica, Knoxville

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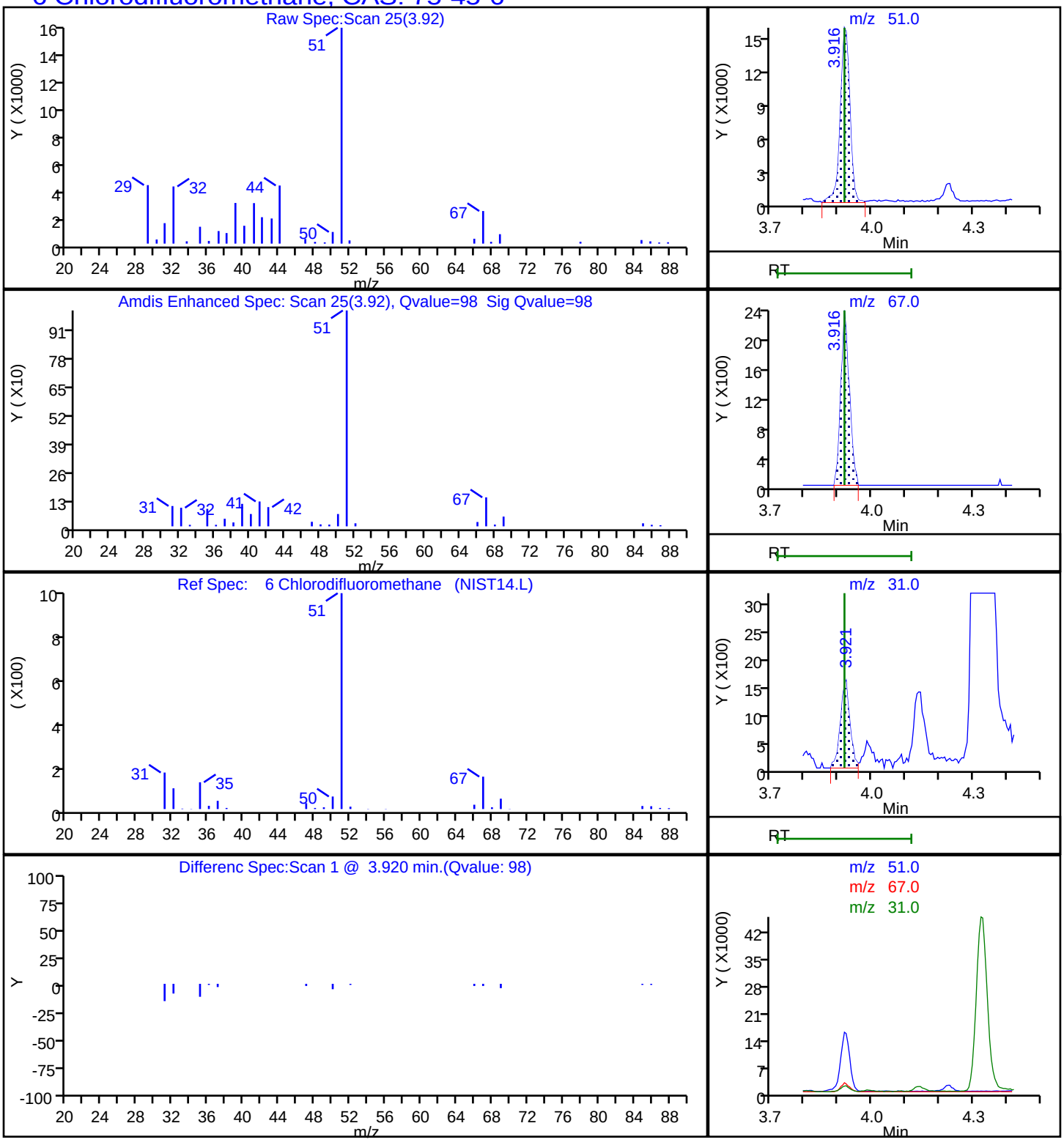
Lims ID:	140-20175-A-24	Lab Sample ID:	140-20175-24
Client ID:	IA-155-C-29		
Operator ID:	HMT	ALS Bottle#:	7 Worklist Smp#: 12
Purge Vol:	500.000 mL	Dil. Factor:	1.4300
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

6 Chlorodifluoromethane, CAS: 75-45-6



Eurofins TestAmerica, Knoxville

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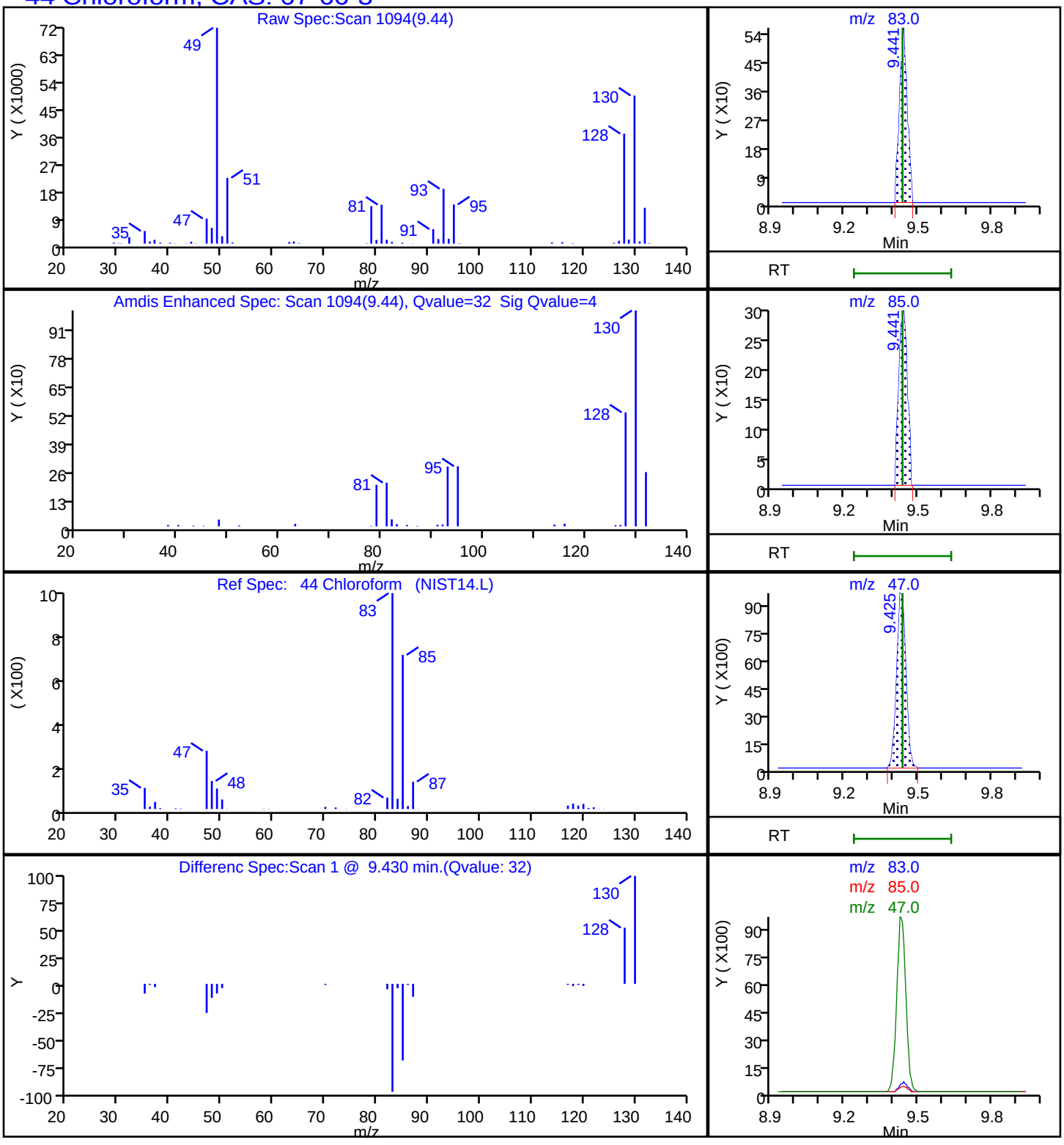
Injection Date:	06-Sep-2020 22:17:30	Instrument ID:	MH
Lims ID:	140-20175-A-24	Lab Sample ID:	140-20175-24
Client ID:	IA-155-C-29		
Operator ID:	HMT	ALS Bottle#:	7 Worklist Smp#: 12
Purge Vol:	500.000 mL	Dil. Factor:	1.4300
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

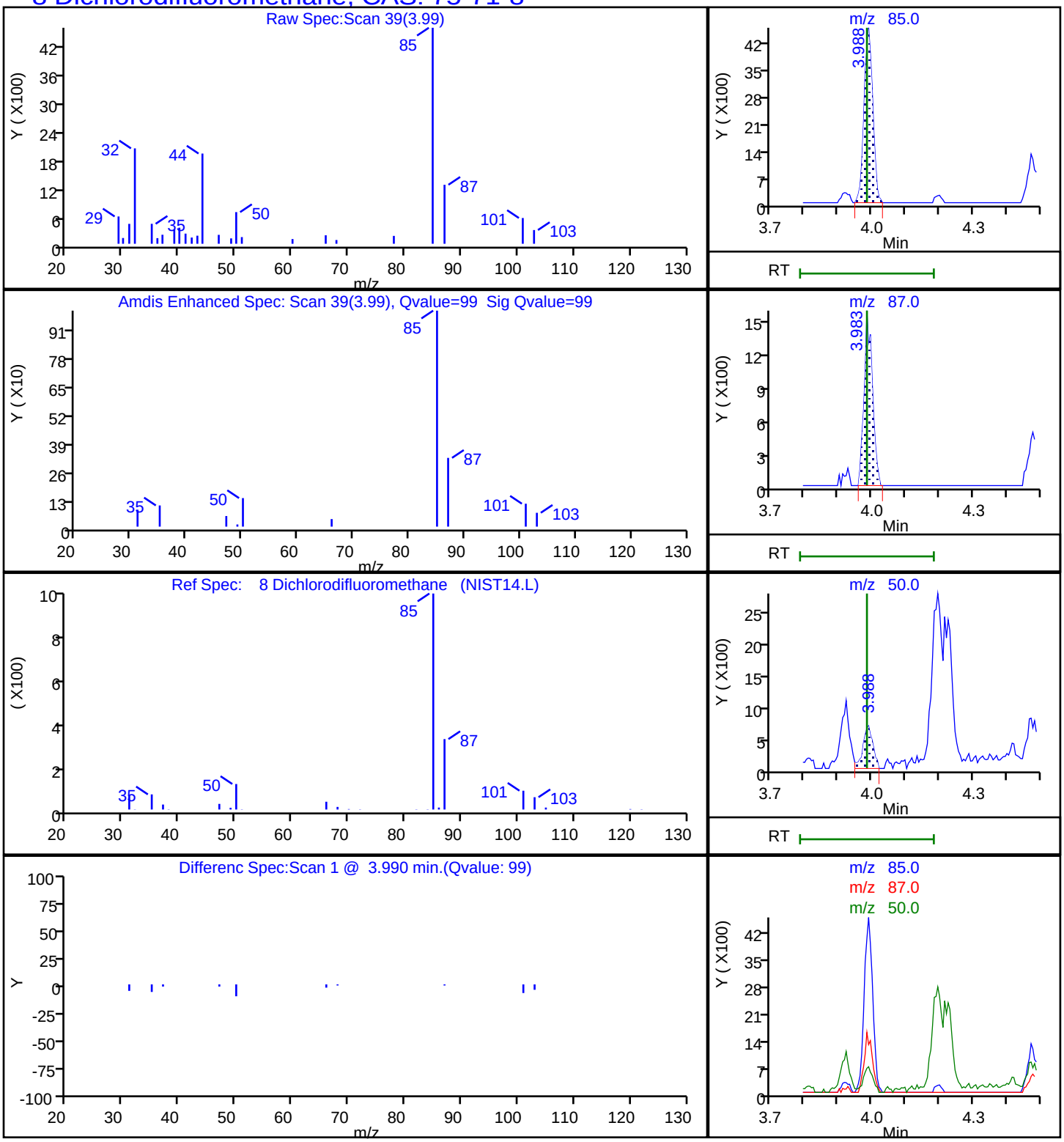
44 Chloroform, CAS: 67-66-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P107.D		
Injection Date:	06-Sep-2020 22:17:30	Instrument ID:	MH
Lims ID:	140-20175-A-24	Lab Sample ID:	140-20175-24
Client ID:	IA-155-C-29		
Operator ID:	HMT	ALS Bottle#:	7 Worklist Smp#: 12
Purge Vol:	500.000 mL	Dil. Factor:	1.4300
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

8 Dichlorodifluoromethane, CAS: 75-71-8

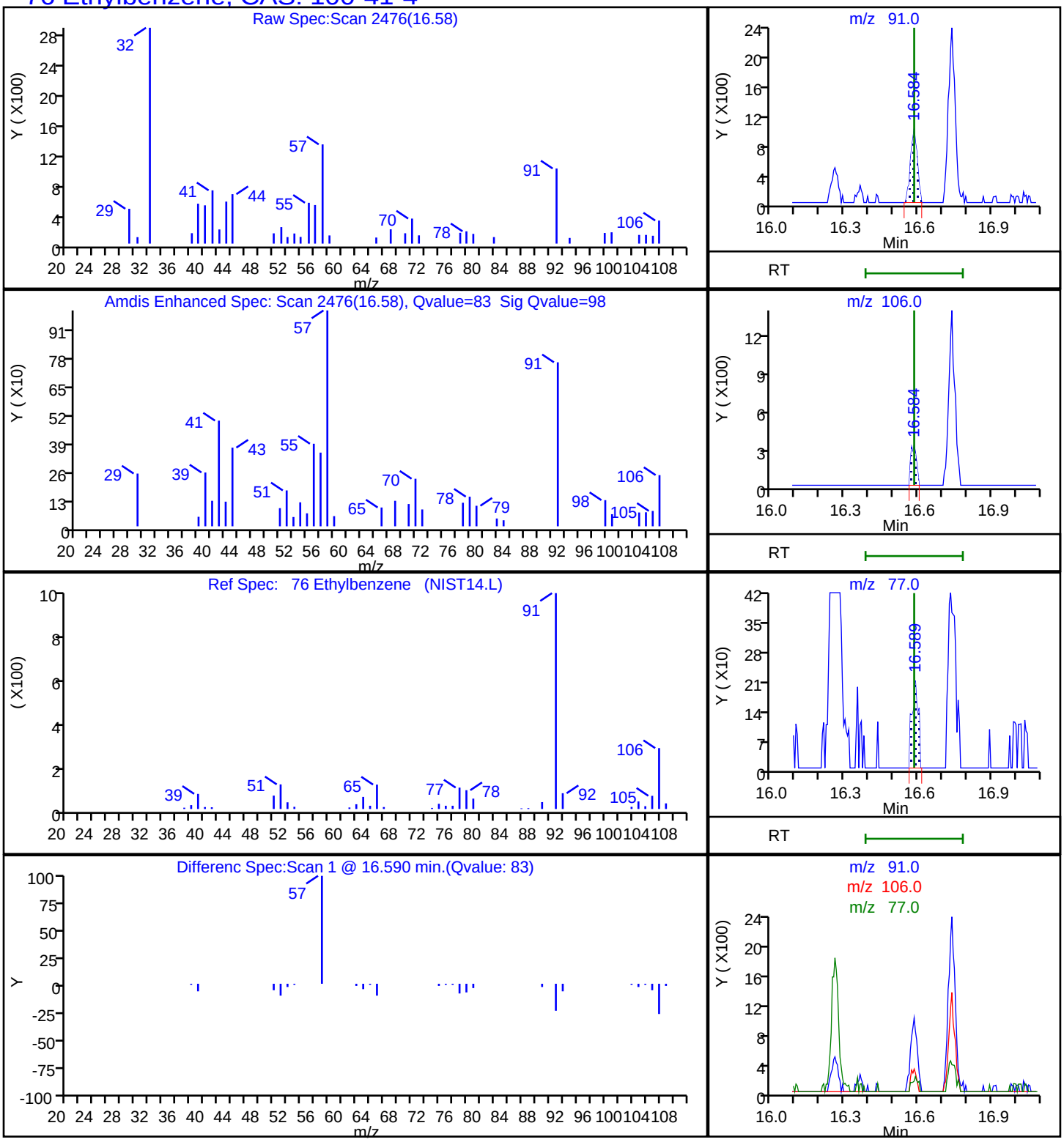


Report Date: 07-Sep-2020 07:43:59 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P107.D		
Injection Date:	06-Sep-2020 22:17:30	Instrument ID:	MH
Lims ID:	140-20175-A-24	Lab Sample ID:	140-20175-24
Client ID:	IA-155-C-29		
Operator ID:	HMT	ALS Bottle#:	7 Worklist Smp#: 12
Purge Vol:	500.000 mL	Dil. Factor:	1.4300
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

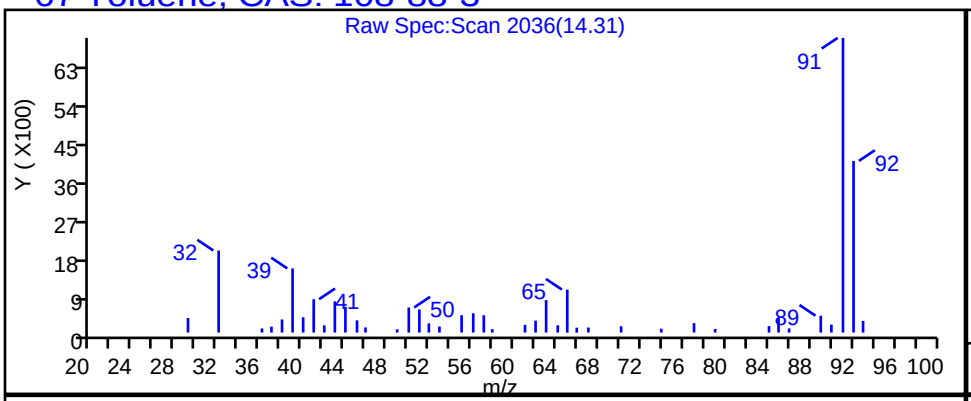
76 Ethylbenzene, CAS: 100-41-4

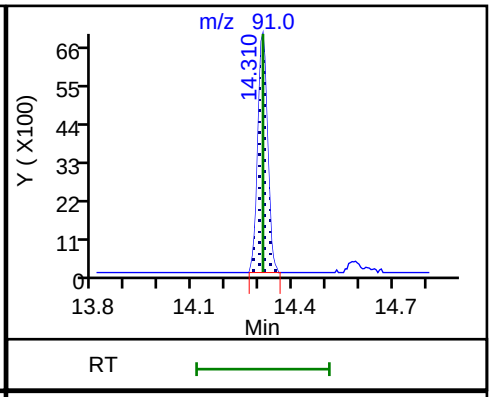


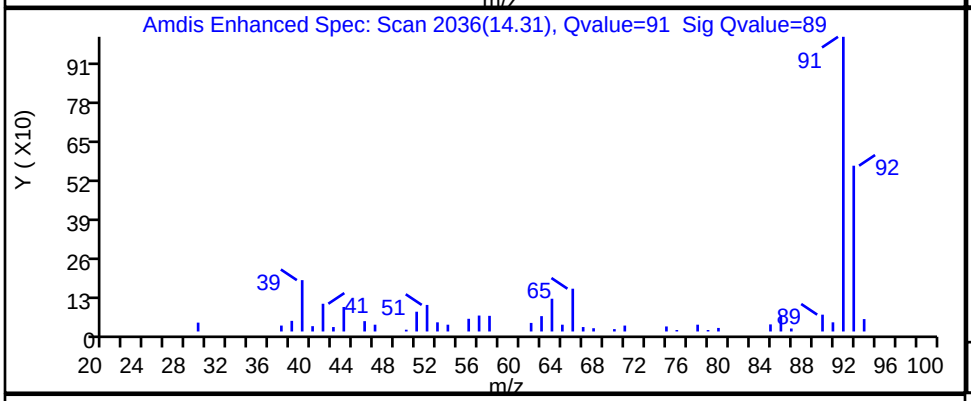
Eurofins TestAmerica, Knoxville

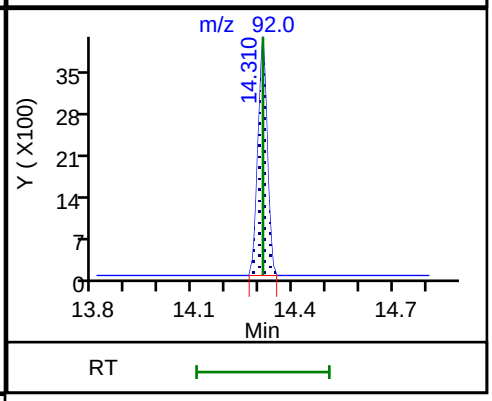
Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P107.D		
Injection Date:	06-Sep-2020 22:17:30	Instrument ID:	MH
Lims ID:	140-20175-A-24	Lab Sample ID:	140-20175-24
Client ID:	IA-155-C-29		
Operator ID:	HMT	ALS Bottle#:	7 Worklist Smp#: 12
Purge Vol:	500.000 mL	Dil. Factor:	1.4300
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

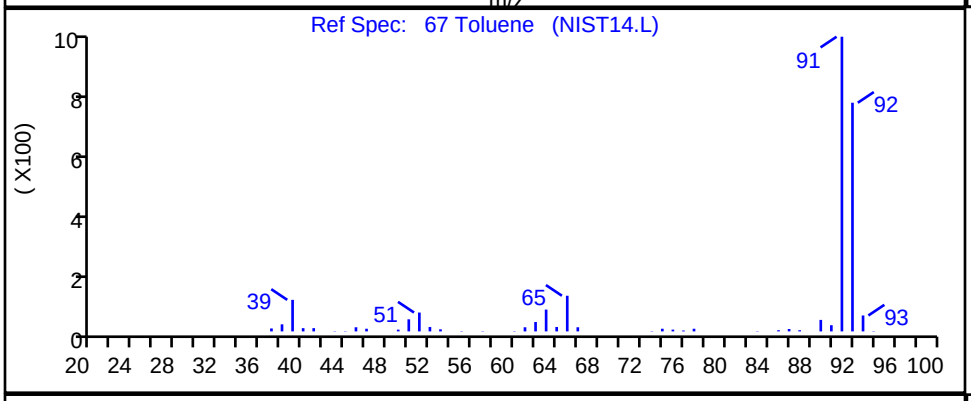
67 Toluene, CAS: 108-88-3

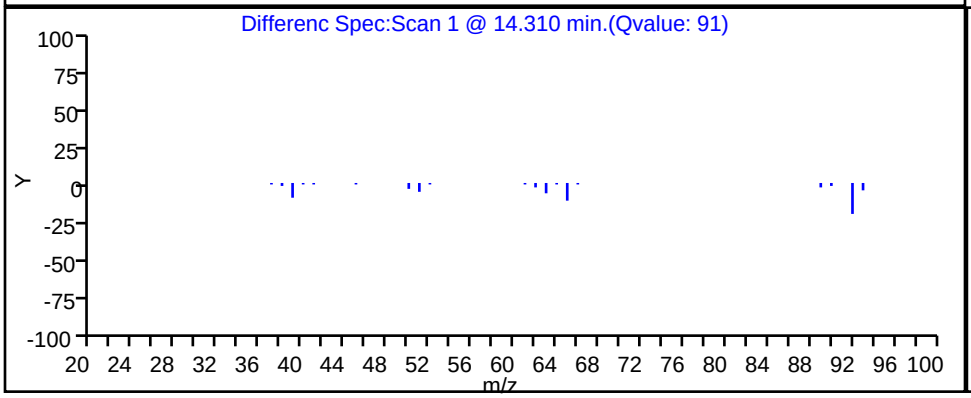


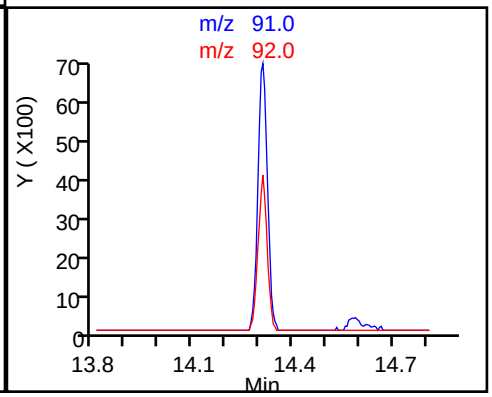








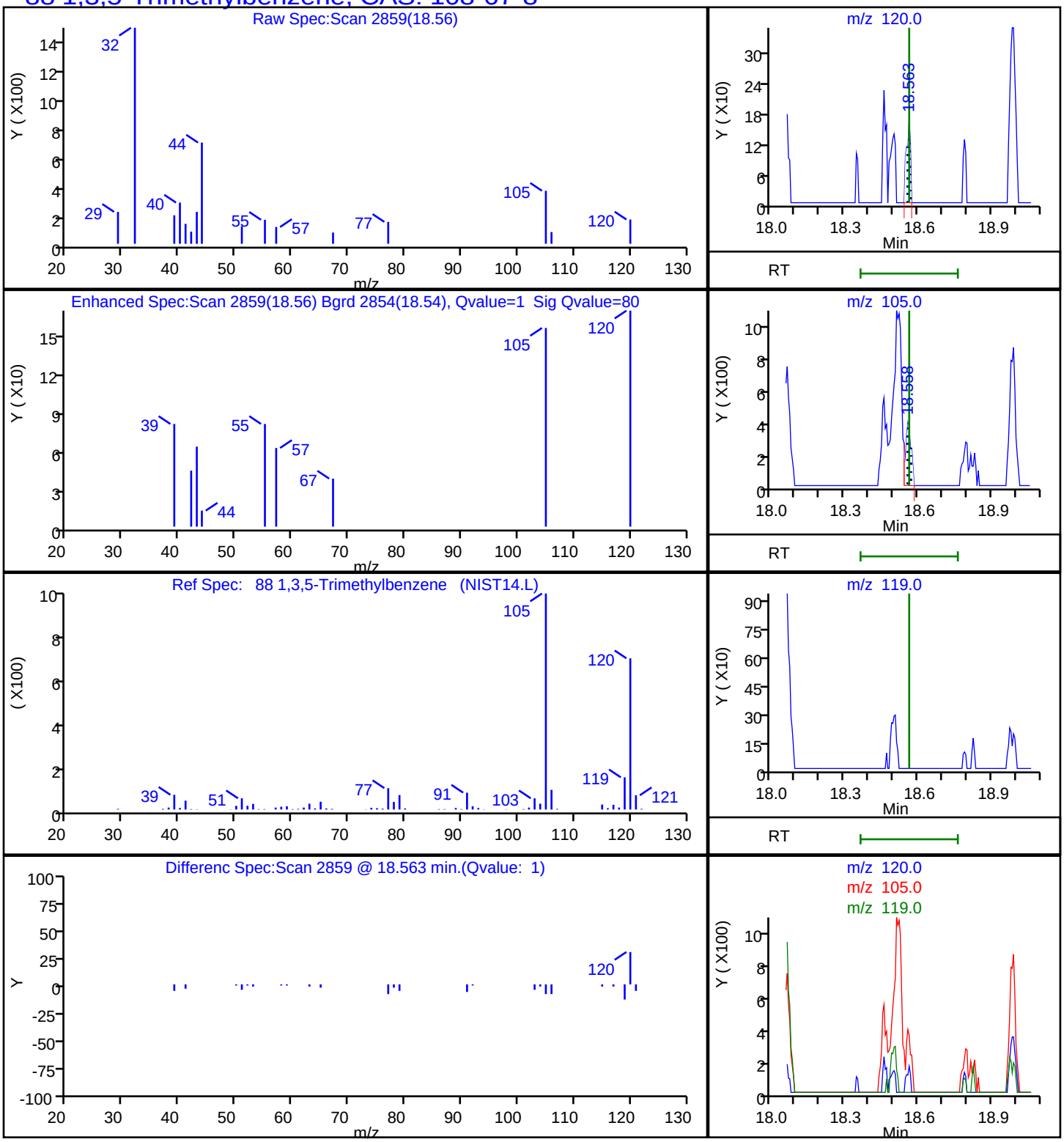




Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P107.D		
Injection Date:	06-Sep-2020 22:17:30	Instrument ID:	MH
Lims ID:	140-20175-A-24	Lab Sample ID:	140-20175-24
Client ID:	IA-155-C-29		
Operator ID:	HMT	ALS Bottle#:	7 Worklist Smp#: 12
Purge Vol:	500.000 mL	Dil. Factor:	1.4300
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

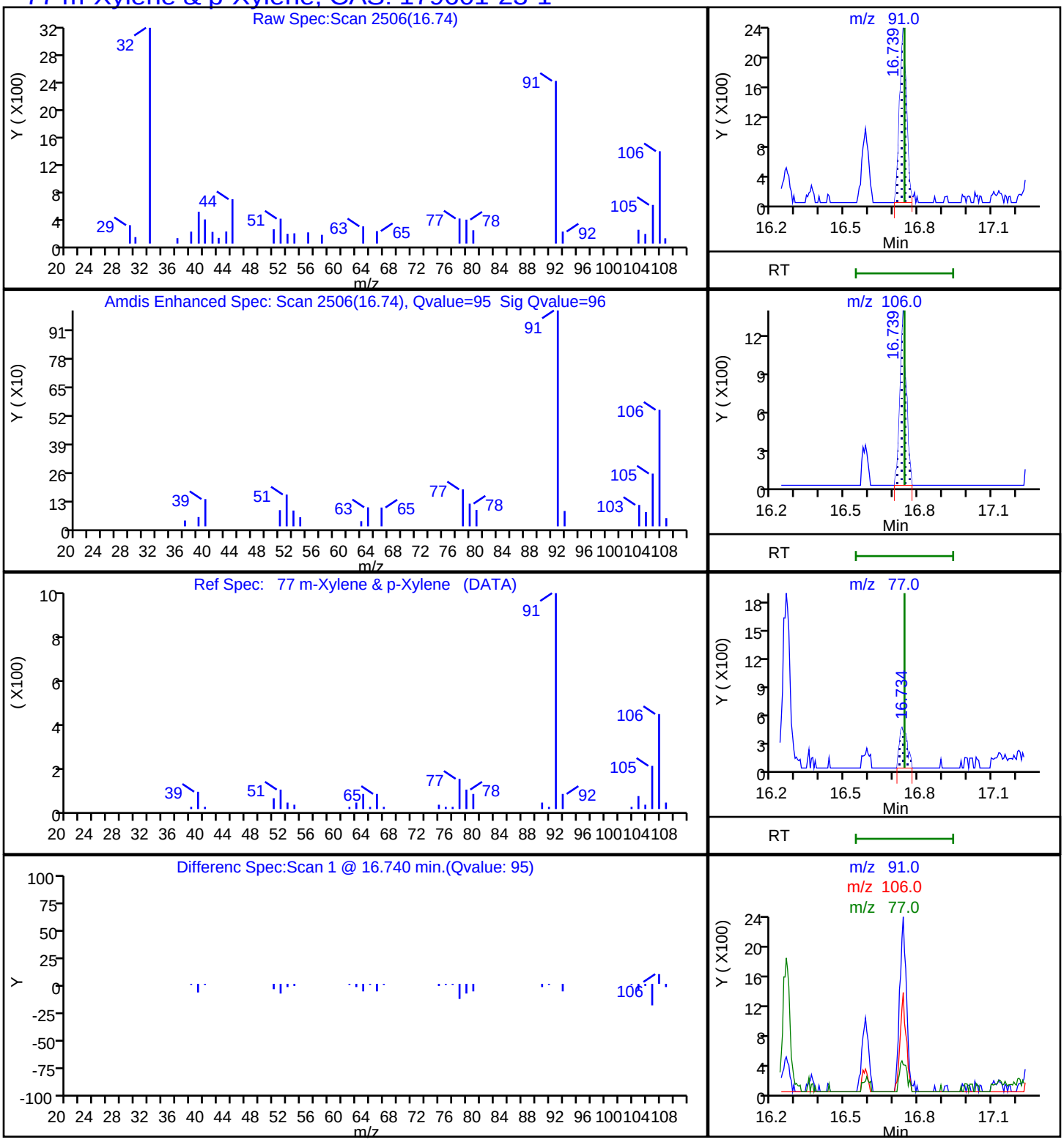
88 1,3,5-Trimethylbenzene, CAS: 108-67-8



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P107.D				
Injection Date:	06-Sep-2020 22:17:30	Instrument ID:	MH		
Lims ID:	140-20175-A-24	Lab Sample ID:	140-20175-24		
Client ID:	IA-155-C-29				
Operator ID:	HMT	ALS Bottle#:	7	Worklist Smp#:	12
Purge Vol:	500.000 mL	Dil. Factor:	1.4300		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

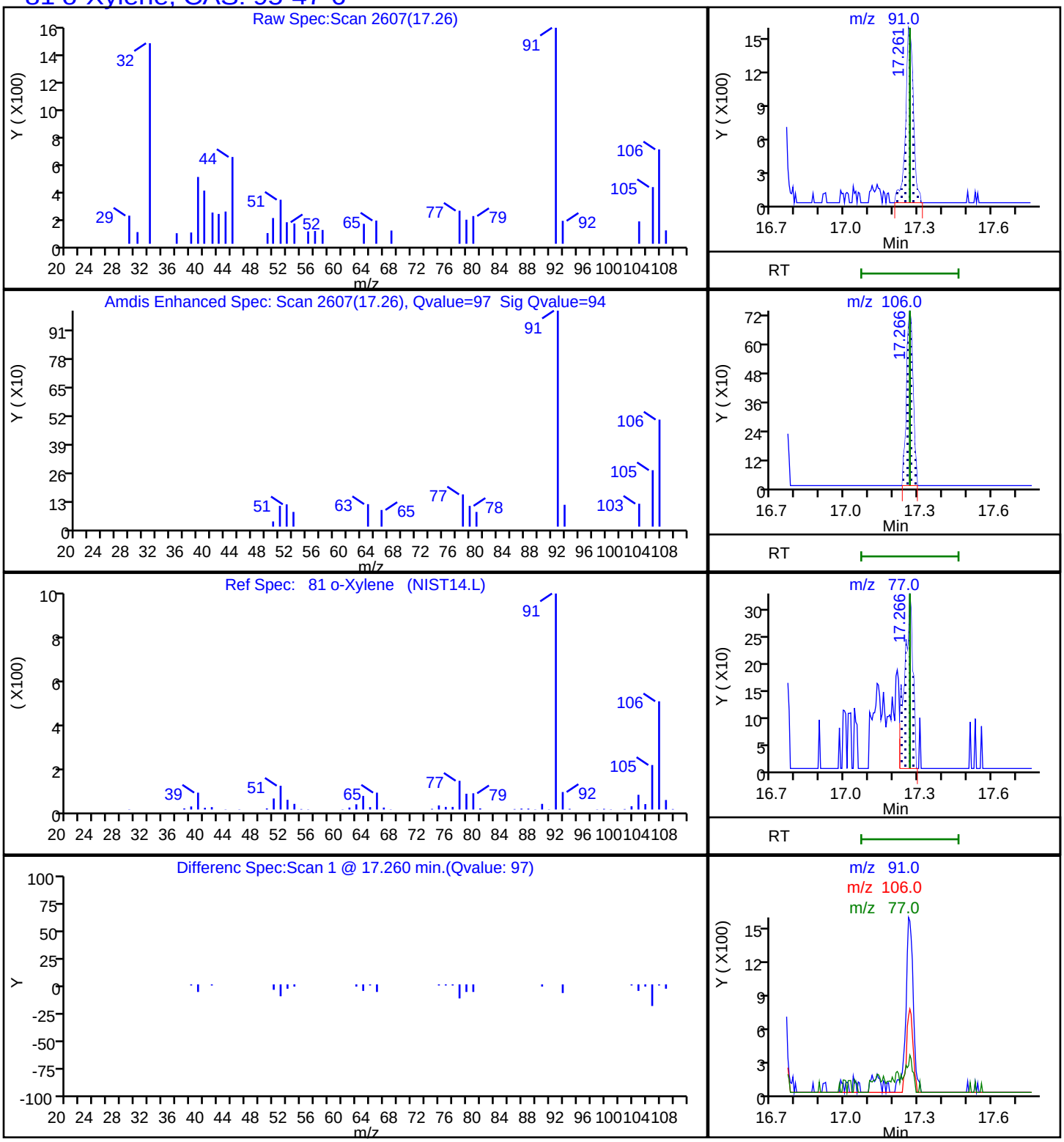
77 m-Xylene & p-Xylene, CAS: 179601-23-1



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P107.D		
Injection Date:	06-Sep-2020 22:17:30	Instrument ID:	MH
Lims ID:	140-20175-A-24	Lab Sample ID:	140-20175-24
Client ID:	IA-155-C-29		
Operator ID:	HMT	ALS Bottle#:	7 Worklist Smp#: 12
Purge Vol:	500.000 mL	Dil. Factor:	1.4300
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

81 o-Xylene, CAS: 95-47-6



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: IA-133-C-29 Lab Sample ID: 140-20175-25

Matrix: Air Lab File ID: HI07P108.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 16:31

Sample wt/vol: 156(mL) Date Analyzed: 09/06/2020 23:11

Soil Aliquot Vol: Dilution Factor: 1.56

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42498 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.17	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.076	J *	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	2.7		0.40	0.11
67-66-3	Chloroform	119.38	0.069	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.47		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	0.087	J	0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.035
108-88-3	Toluene	92.14	0.82		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	ND		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND	*	0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	0.27	J	0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.49	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	90		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: IA-133-C-29 Lab Sample ID: 140-20175-25

Matrix: Air Lab File ID: HI07P108.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 16:31

Sample wt/vol: 156(mL) Date Analyzed: 09/06/2020 23:11

Soil Aliquot Vol: Dilution Factor: 1.56

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42498 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.54	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.48	J *	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	9.4		1.4	0.39
67-66-3	Chloroform	119.38	0.34	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.3		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	0.38	J	1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.24
108-88-3	Toluene	92.14	3.1		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	ND		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	ND	*	2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	1.3	J	2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	2.1	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	90		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P108.D				
Lims ID:	140-20175-A-25				
Client ID:	IA-133-C-29				
Sample Type:	Client				
Inject. Date:	06-Sep-2020 23:11:30	ALS Bottle#:	8	Worklist Smp#:	13
Purge Vol:	500.000 mL	Dil. Factor:	1.5600		
Sample Info:	140-0016514-013				
Misc. Info.:	140-20175-a-25@1.56				
Operator ID:	HMT	Instrument ID:	MH		
Method:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\MH_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	07-Sep-2020 07:43:45	Calib Date:	29-Aug-2020 23:57:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1015				
First Level Reviewer: tajh		Date:	07-Sep-2020 07:41:29		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.431	9.431	0.000	97	105562	4.80	
* 2 1,4-Difluorobenzene	114	11.591	11.591	0.000	95	383858	4.80	
* 3 Chlorobenzene-d5 (IS)	117	16.258	16.258	0.000	88	284256	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.876	17.876	0.000	91	137404	4.16	
6 Chlorodifluoromethane	51	3.916	3.916	0.000	97	31297	0.5313	
8 Dichlorodifluoromethane	85	3.988	3.983	0.005	99	7539	0.0945	
44 Chloroform	83	9.441	9.436	0.005	28	887	0.0138	
51 Benzene	78	11.069	11.074	-0.005	94	2388	0.0339	
52 Carbon tetrachloride	117	11.100	11.095	0.005	72	663	0.0152	
67 Toluene	91	14.310	14.310	0.000	90	11963	0.1633	
76 Ethylbenzene	91	16.584	16.584	0.000	83	1540	0.0174	
77 m-Xylene & p-Xylene	91	16.734	16.744	-0.010	95	4163	0.0594	
81 o-Xylene	91	17.266	17.266	0.000	96	2802	0.0382	
88 1,3,5-Trimethylbenzene	120	18.558	18.563	-0.005	1	259	0.0533	
S 116 Xylenes, Total	100				0		0.0976	

Reagents:

40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

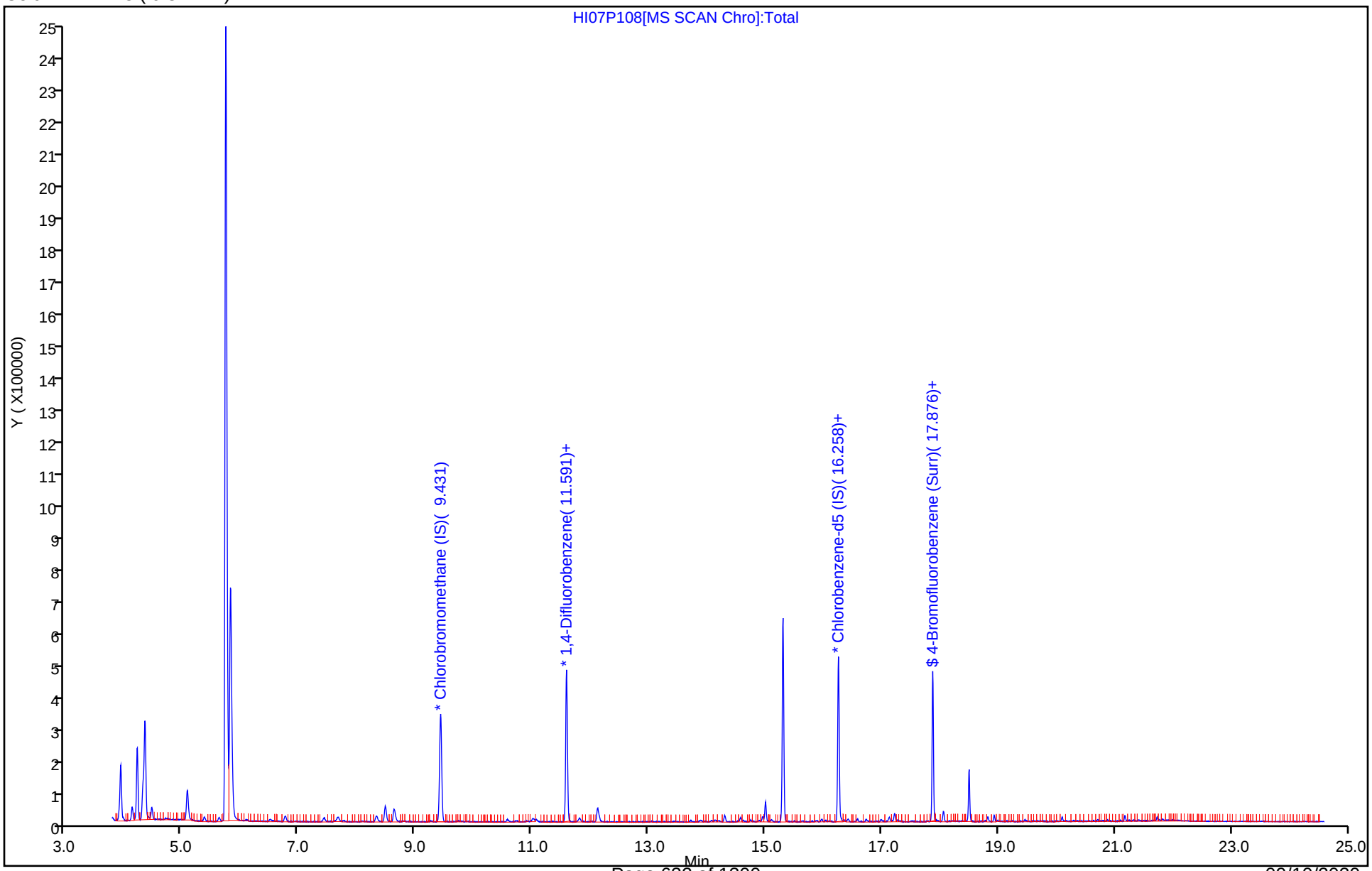
Report Date: 07-Sep-2020 07:44:00 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P108.D

Injection Date:	06-Sep-2020 23:11:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	140-20175-A-25	Lab Sample ID:	140-20175-25	Worklist Smp#:	13
Client ID:	IA-133-C-29				
Purge Vol:	500.000 mL	Dil. Factor:	1.5600	ALS Bottle#:	8
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P108.D				
Lims ID:	140-20175-A-25				
Client ID:	IA-133-C-29				
Sample Type:	Client				
Inject. Date:	06-Sep-2020 23:11:30	ALS Bottle#:	8	Worklist Smp#:	13
Purge Vol:	500.000 mL	Dil. Factor:	1.5600		
Sample Info:	140-0016514-013				
Misc. Info.:	140-20175-a-25@1.56				
Operator ID:	HMT	Instrument ID:	MH		
Method:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\MH_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	07-Sep-2020 07:43:45	Calib Date:	29-Aug-2020 23:57:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1015				
First Level Reviewer: tajh		Date:	07-Sep-2020 07:41:29		

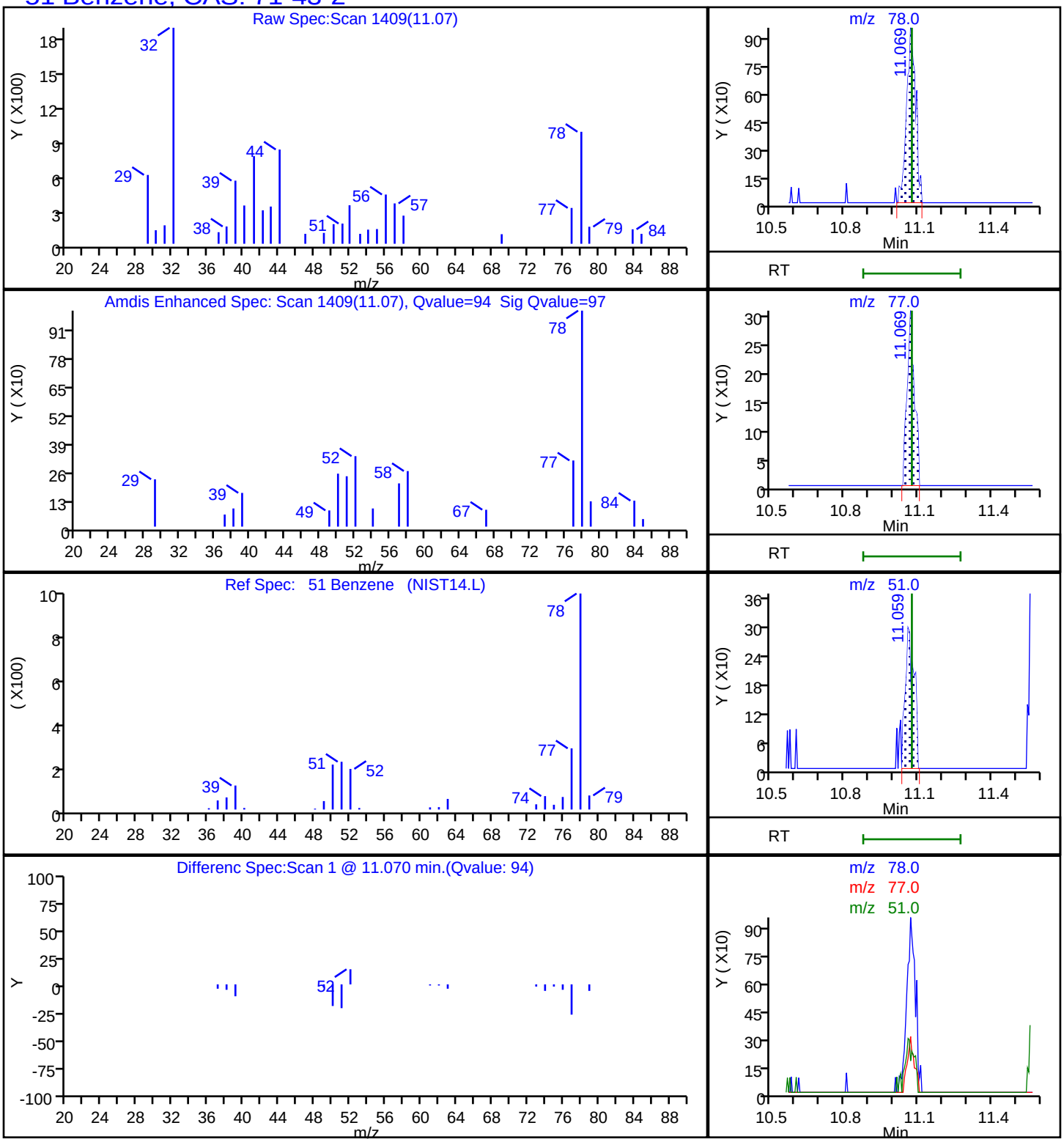
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	4.16	89.66

Report Date: 07-Sep-2020 07:44:00 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P108.D		
Injection Date:	06-Sep-2020 23:11:30	Instrument ID:	MH
Lims ID:	140-20175-A-25	Lab Sample ID:	140-20175-25
Client ID:	IA-133-C-29		
Operator ID:	HMT	ALS Bottle#:	8 Worklist Smp#: 13
Purge Vol:	500.000 mL	Dil. Factor:	1.5600
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

51 Benzene, CAS: 71-43-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P108.D				
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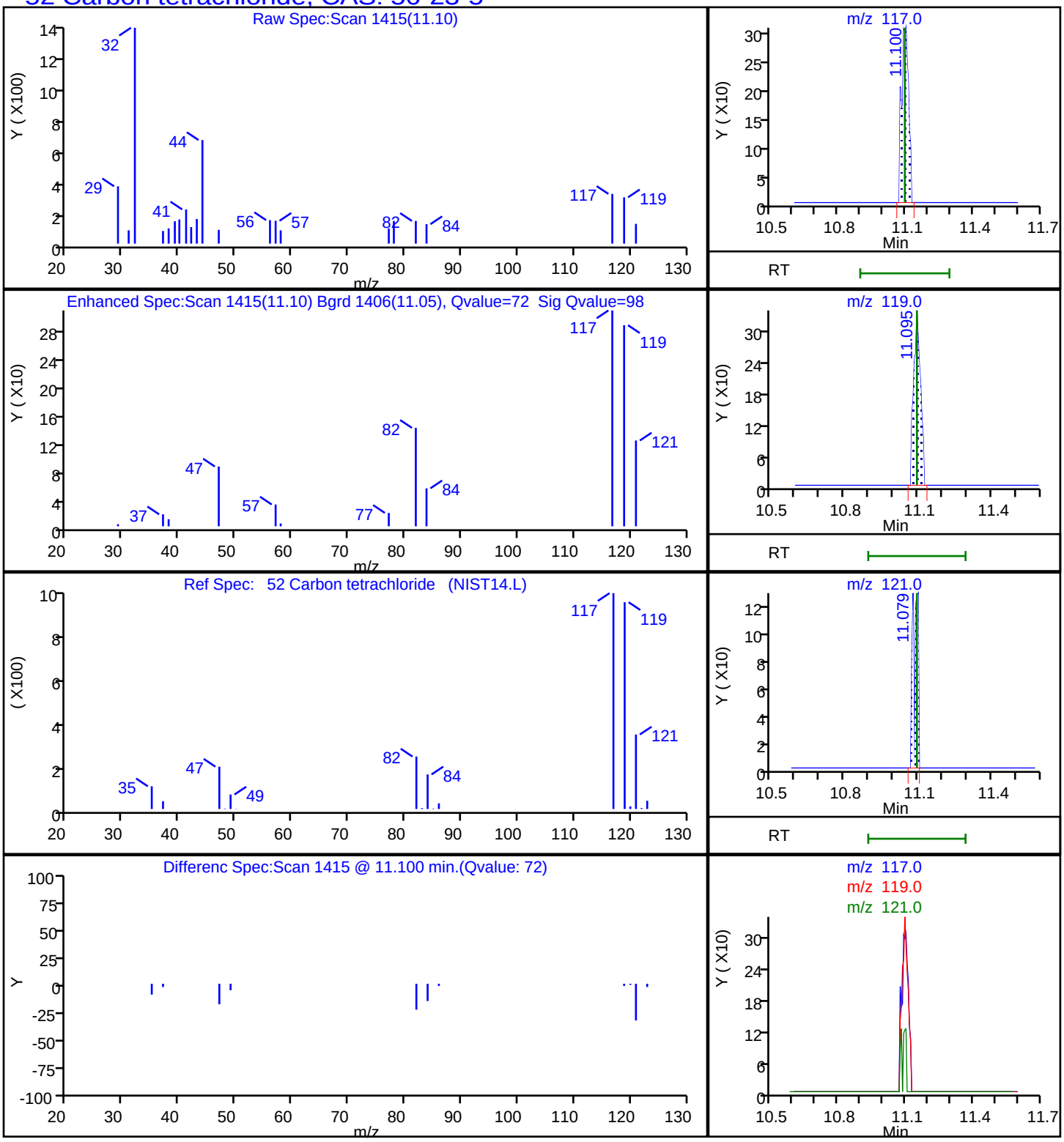
Lims ID:	140-20175-A-25	Lab Sample ID:	140-20175-25		
Client ID:	IA-133-C-29				
Operator ID:	HMT	ALS Bottle#:	8	Worklist Smp#:	13
Purge Vol:	500.000 mL	Dil. Factor:	1.5600		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

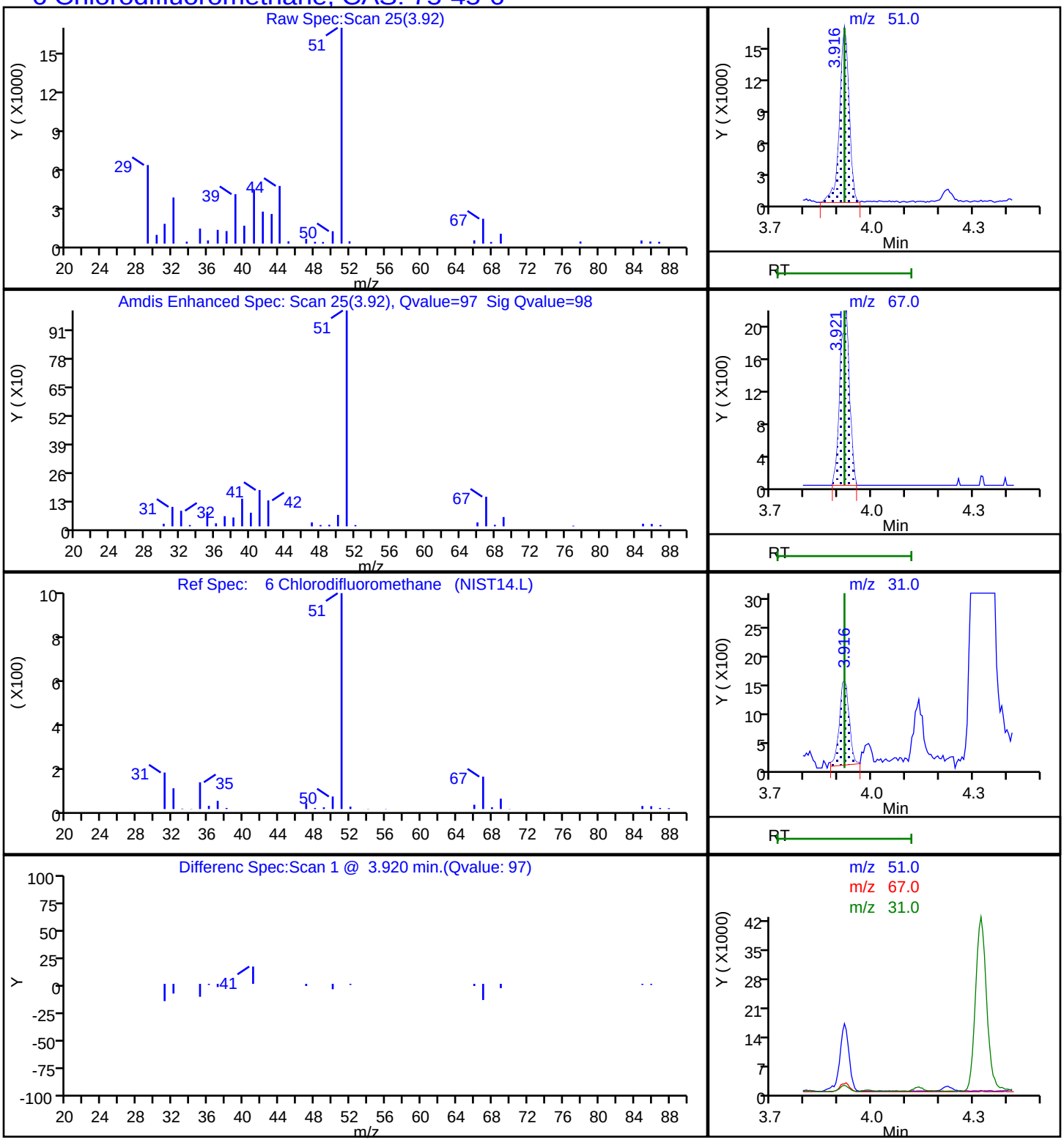
52 Carbon tetrachloride, CAS: 56-23-5



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P108.D				
Injection Date:	06-Sep-2020 23:11:30	Instrument ID:	MH		
Lims ID:	140-20175-A-25	Lab Sample ID:	140-20175-25		
Client ID:	IA-133-C-29				
Operator ID:	HMT	ALS Bottle#:	8	Worklist Smp#:	13
Purge Vol:	500.000 mL	Dil. Factor:	1.5600		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

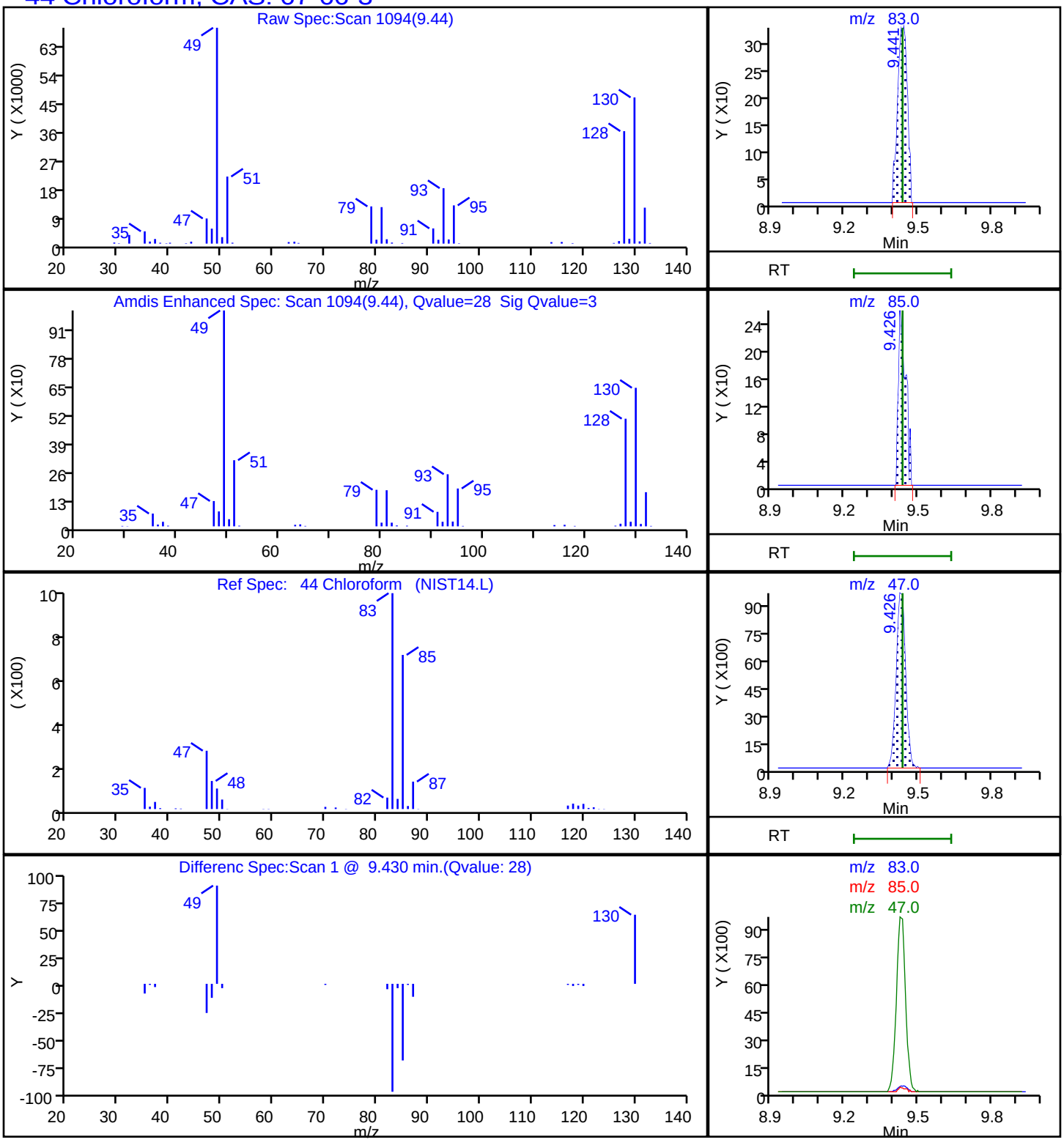
6 Chlorodifluoromethane, CAS: 75-45-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P108.D				
Injection Date:	06-Sep-2020 23:11:30	Instrument ID:	MH		
Lims ID:	140-20175-A-25	Lab Sample ID:	140-20175-25		
Client ID:	IA-133-C-29				
Operator ID:	HMT	ALS Bottle#:	8	Worklist Smp#:	13
Purge Vol:	500.000 mL	Dil. Factor:	1.5600		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

44 Chloroform, CAS: 67-66-3

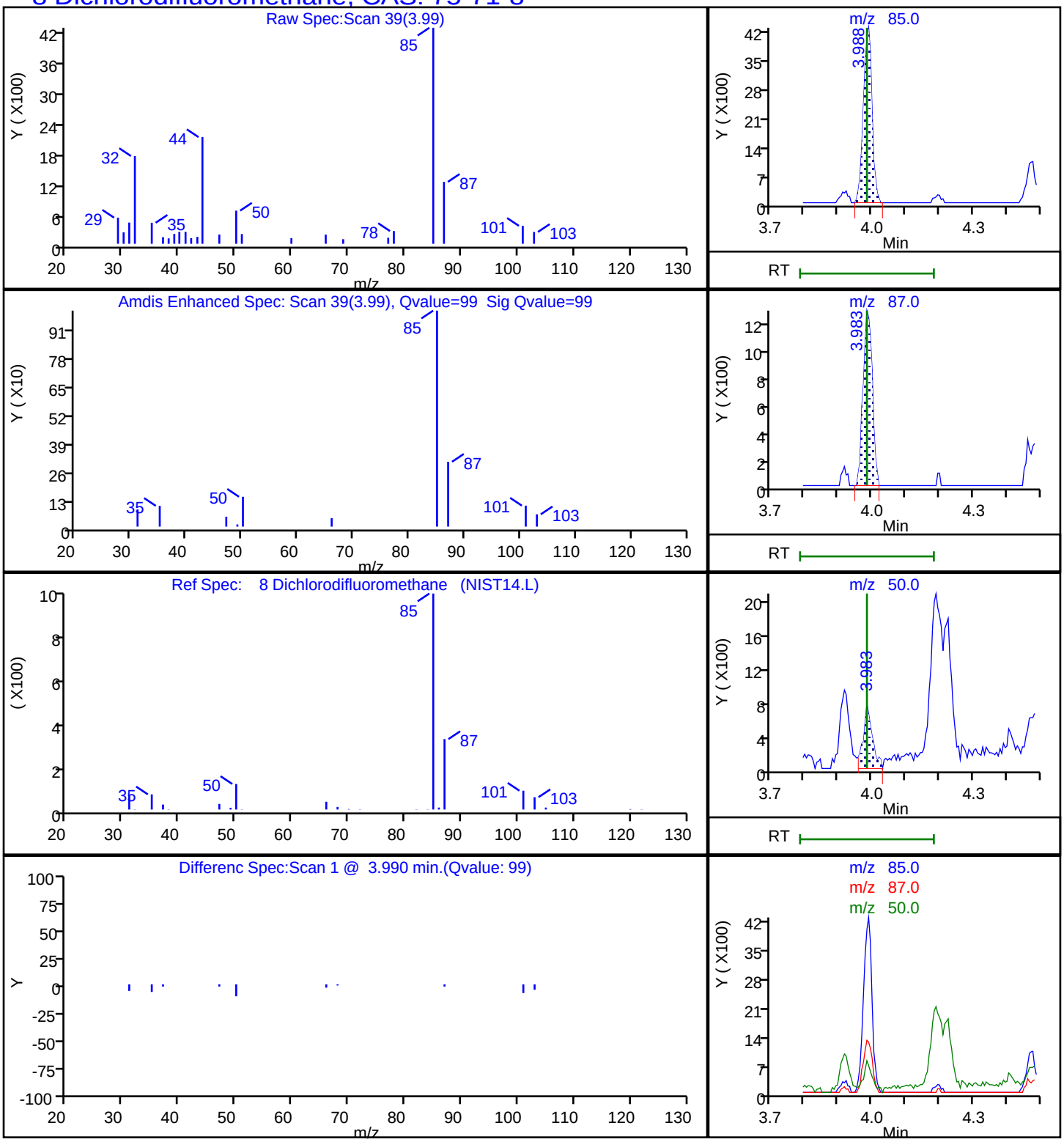


Report Date: 07-Sep-2020 07:44:00 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P108.D				
Injection Date:	06-Sep-2020 23:11:30	Instrument ID:	MH		
Lims ID:	140-20175-A-25	Lab Sample ID:	140-20175-25		
Client ID:	IA-133-C-29				
Operator ID:	HMT	ALS Bottle#:	8	Worklist Smp#:	13
Purge Vol:	500.000 mL	Dil. Factor:	1.5600		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

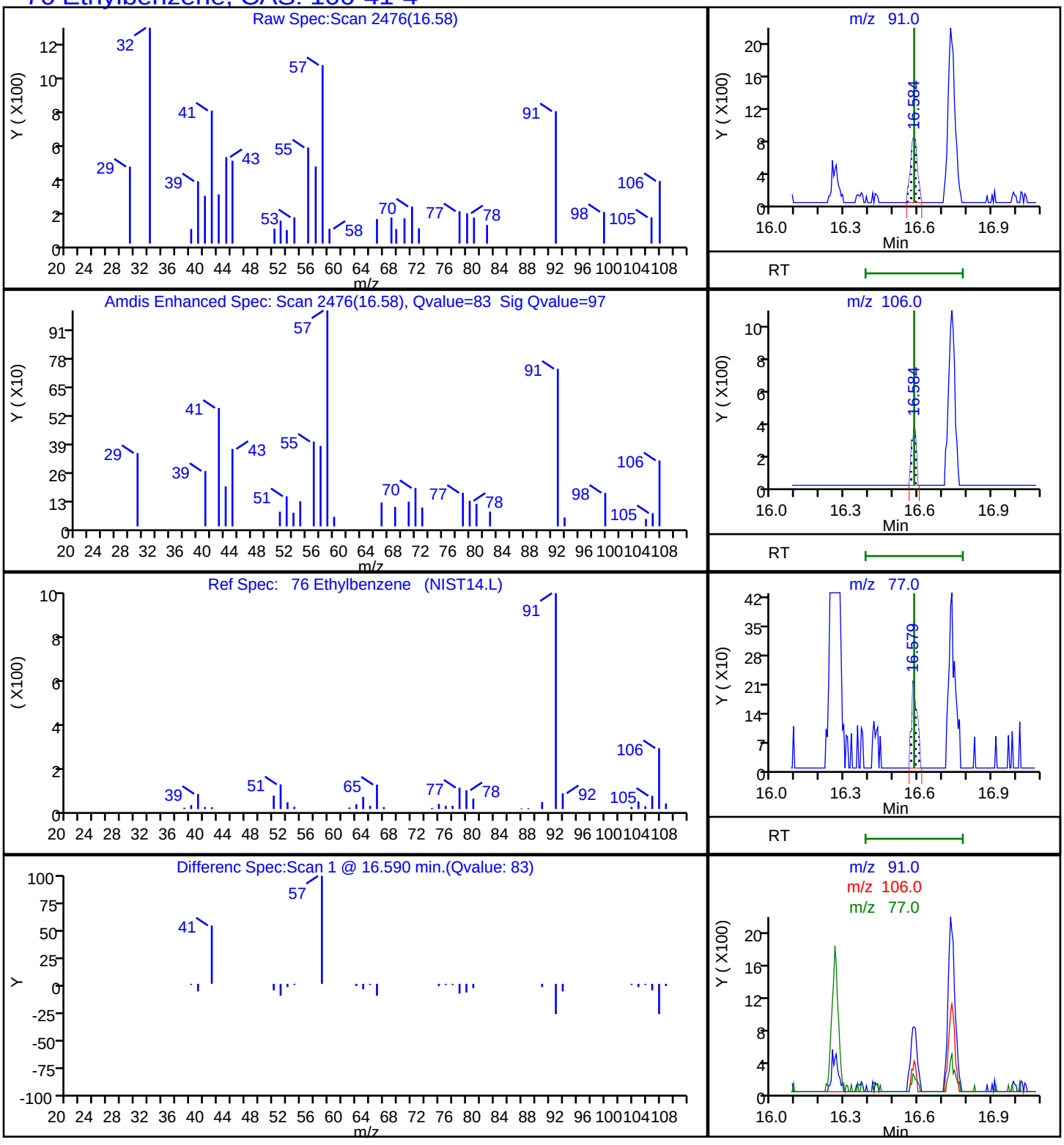
8 Dichlorodifluoromethane, CAS: 75-71-8



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P108.D				
Injection Date:	06-Sep-2020 23:11:30	Instrument ID:	MH		
Lims ID:	140-20175-A-25	Lab Sample ID:	140-20175-25		
Client ID:	IA-133-C-29				
Operator ID:	HMT	ALS Bottle#:	8	Worklist Smp#:	13
Purge Vol:	500.000 mL	Dil. Factor:	1.5600		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

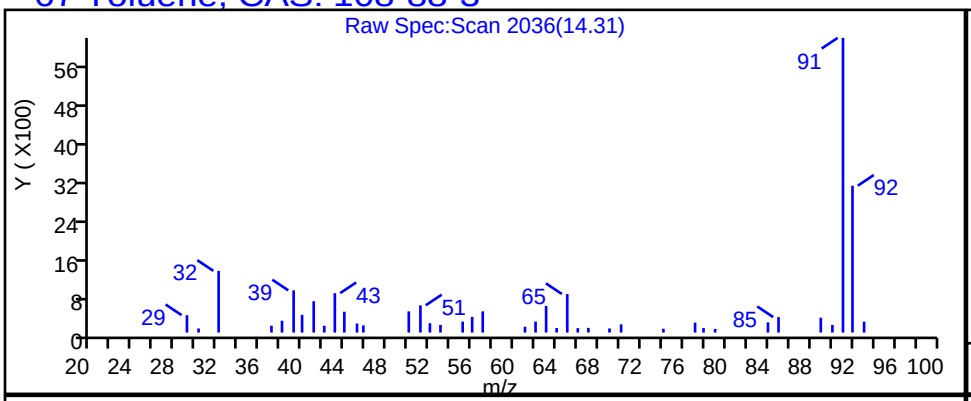
76 Ethylbenzene, CAS: 100-41-4

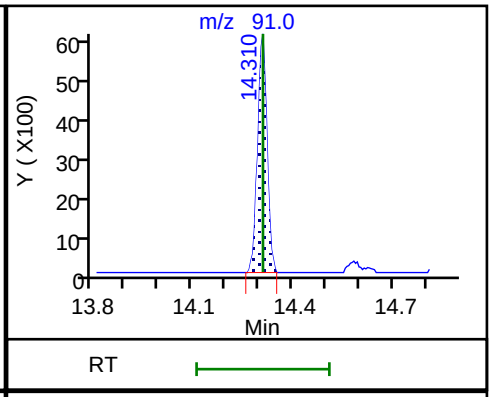


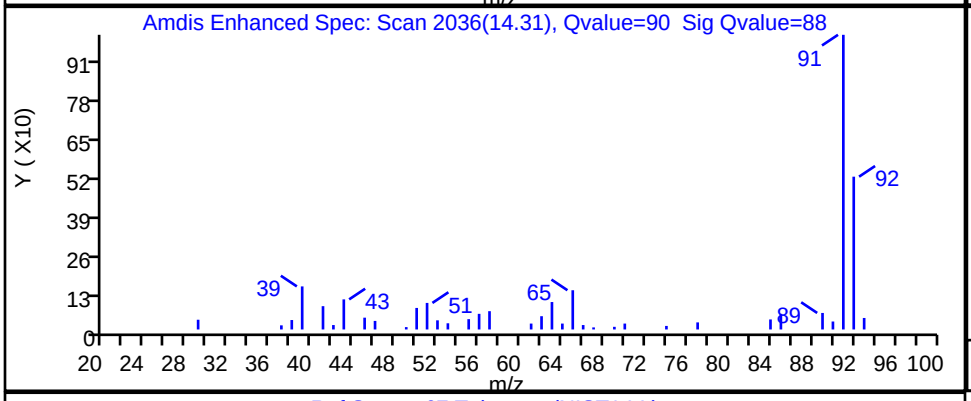
Eurofins TestAmerica, Knoxville

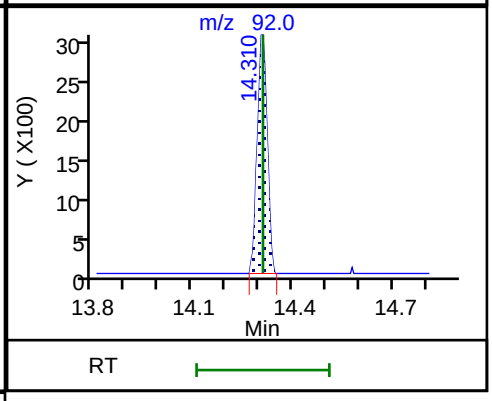
Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P108.D				
Injection Date:	06-Sep-2020 23:11:30	Instrument ID:	MH		
Lims ID:	140-20175-A-25	Lab Sample ID:	140-20175-25		
Client ID:	IA-133-C-29				
Operator ID:	HMT	ALS Bottle#:	8	Worklist Smp#:	13
Purge Vol:	500.000 mL	Dil. Factor:	1.5600		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

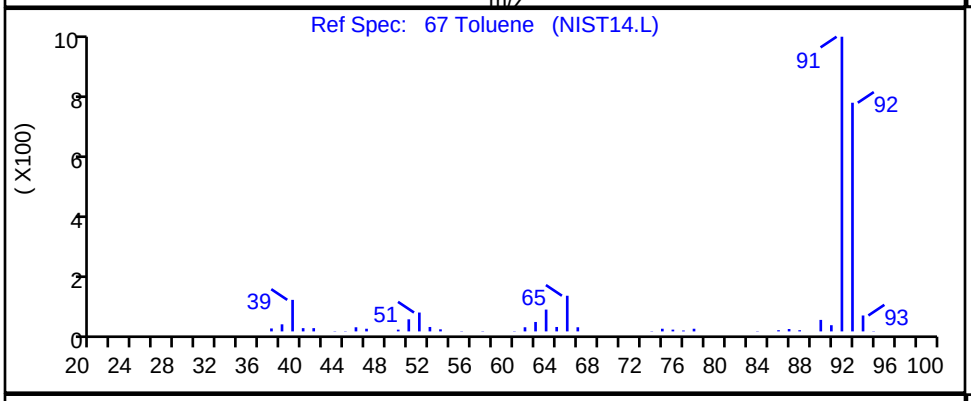
67 Toluene, CAS: 108-88-3

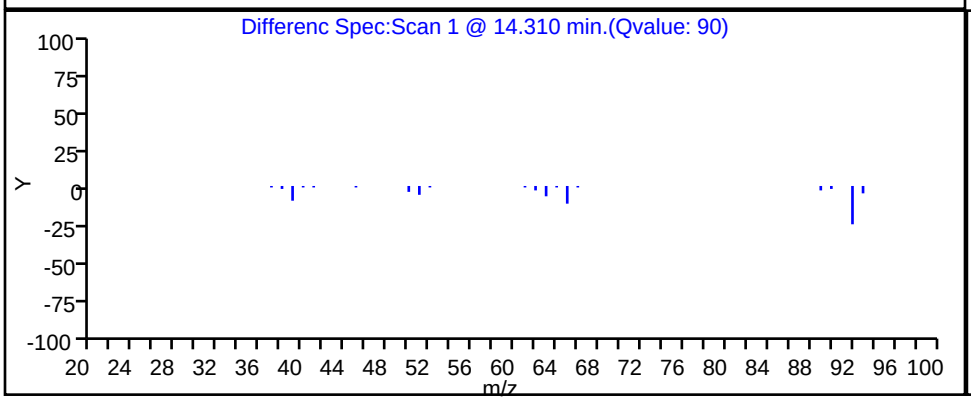


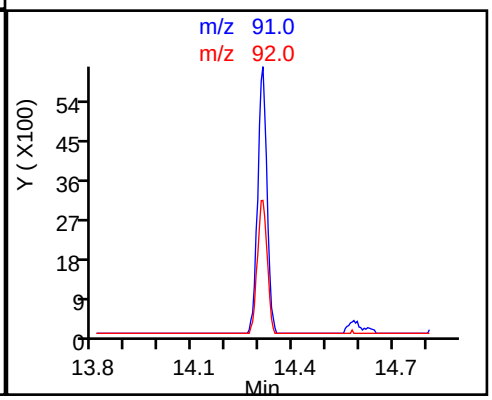










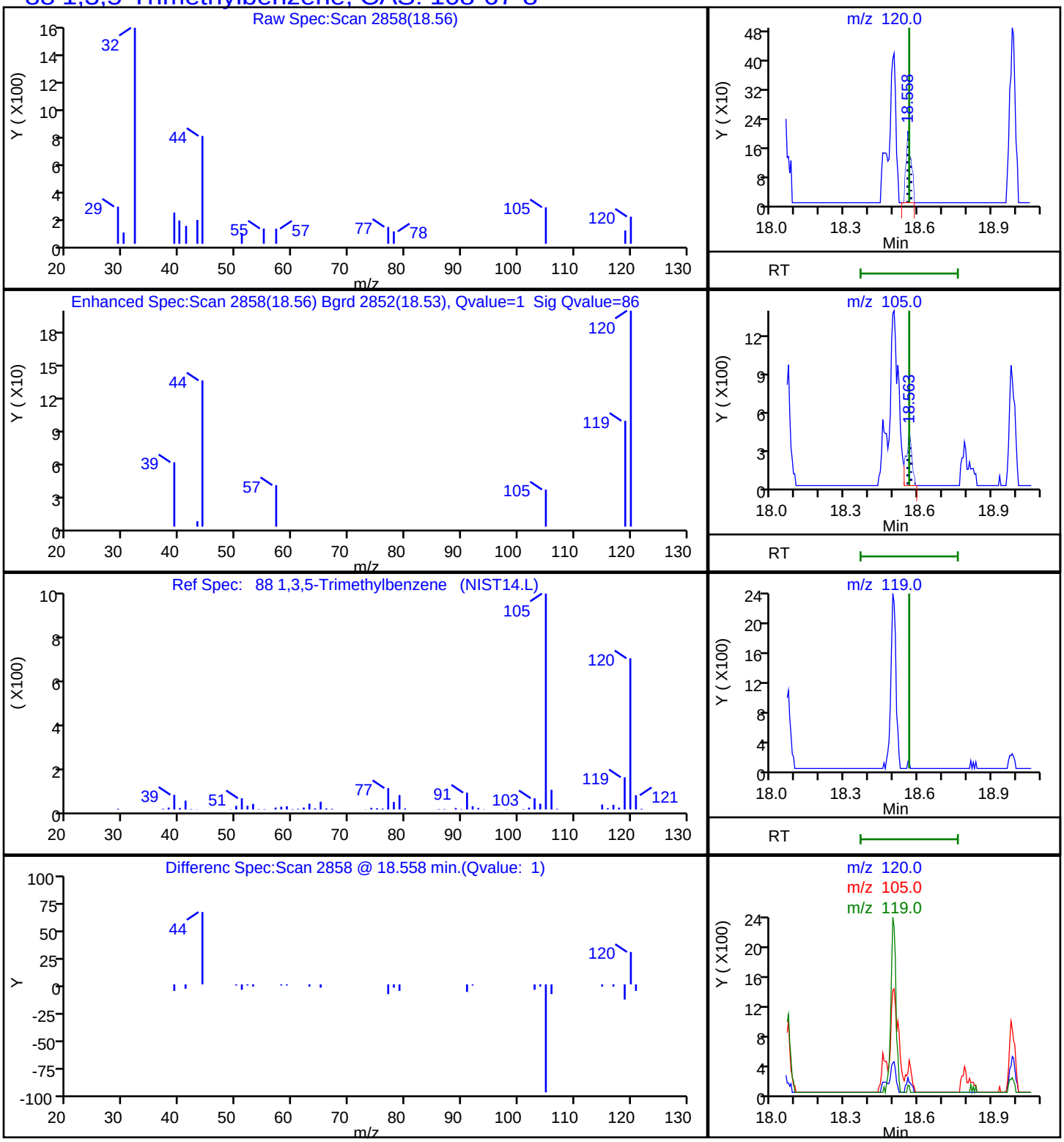


Report Date: 07-Sep-2020 07:44:01 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P108.D				
Injection Date:	06-Sep-2020 23:11:30	Instrument ID:	MH		
Lims ID:	140-20175-A-25	Lab Sample ID:	140-20175-25		
Client ID:	IA-133-C-29				
Operator ID:	HMT	ALS Bottle#:	8	Worklist Smp#:	13
Purge Vol:	500.000 mL	Dil. Factor:	1.5600		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

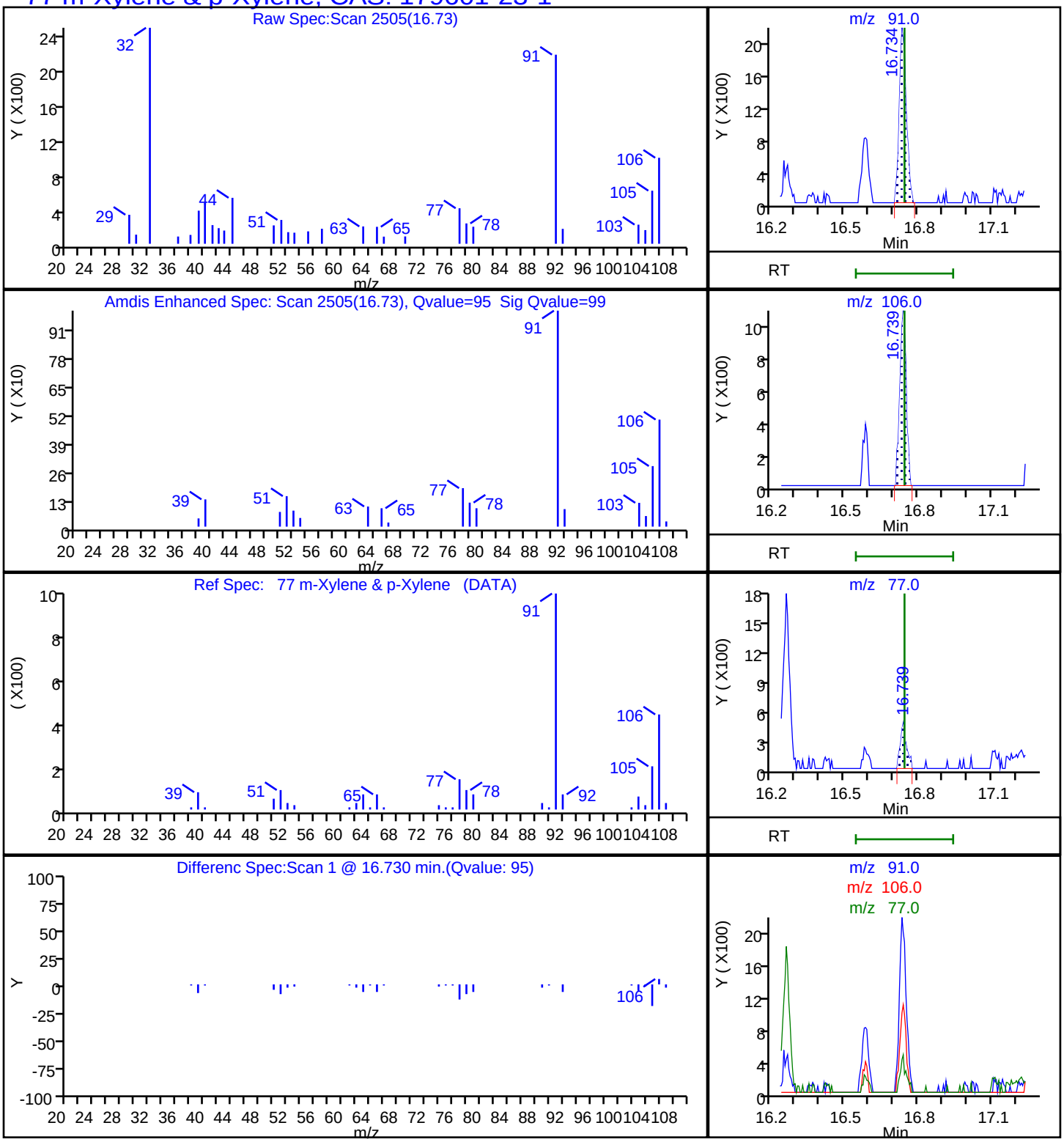
88 1,3,5-Trimethylbenzene, CAS: 108-67-8



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P108.D				
Injection Date:	06-Sep-2020 23:11:30	Instrument ID:	MH		
Lims ID:	140-20175-A-25	Lab Sample ID:	140-20175-25		
Client ID:	IA-133-C-29				
Operator ID:	HMT	ALS Bottle#:	8	Worklist Smp#:	13
Purge Vol:	500.000 mL	Dil. Factor:	1.5600		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

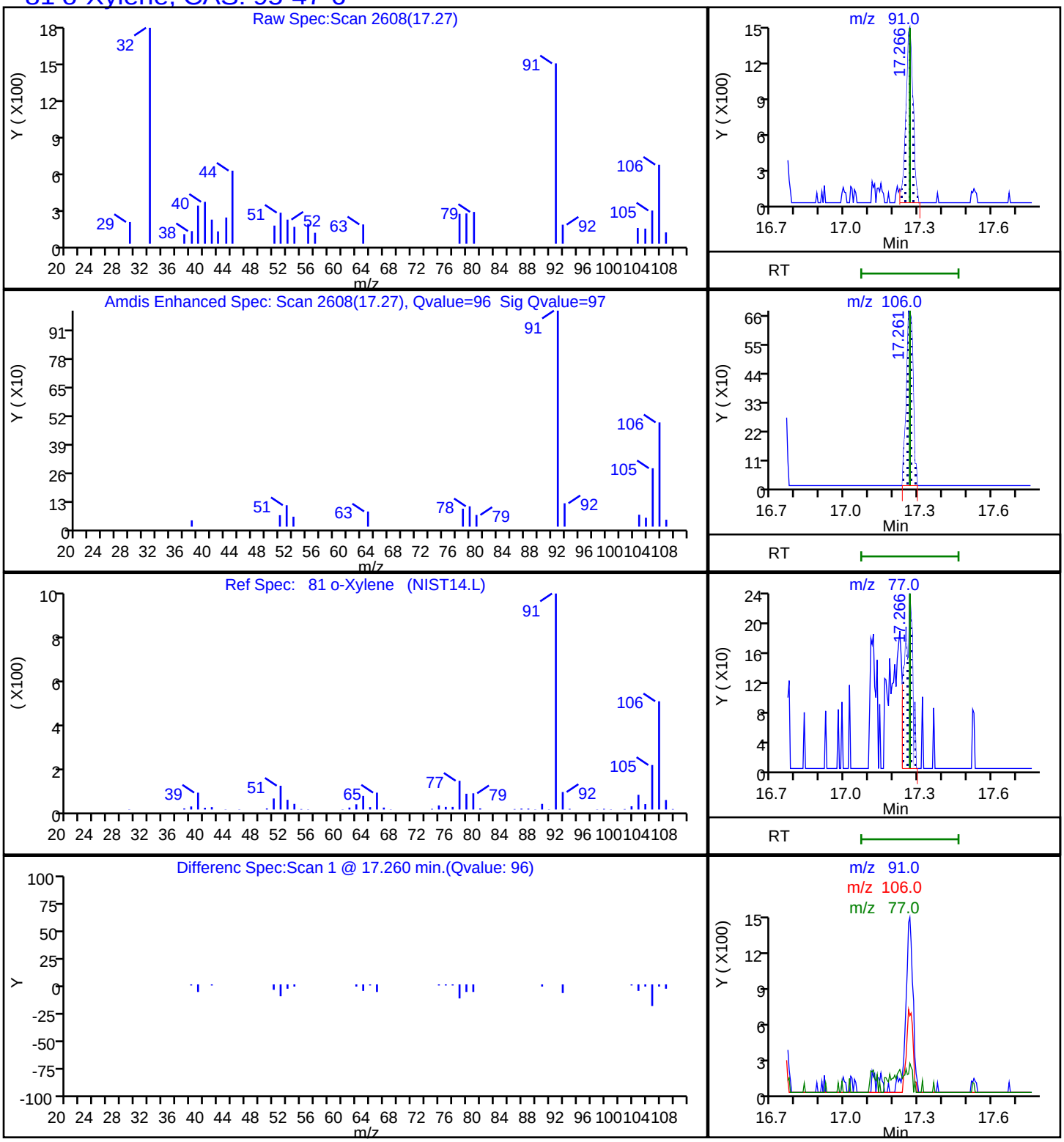
77 m-Xylene & p-Xylene, CAS: 179601-23-1



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P108.D		
Injection Date:	06-Sep-2020 23:11:30	Instrument ID:	MH
Lims ID:	140-20175-A-25	Lab Sample ID:	140-20175-25
Client ID:	IA-133-C-29		
Operator ID:	HMT	ALS Bottle#:	8 Worklist Smp#: 13
Purge Vol:	500.000 mL	Dil. Factor:	1.5600
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

81 o-Xylene, CAS: 95-47-6



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: IA-153-C-29 Lab Sample ID: 140-20175-26

Matrix: Air Lab File ID: HI07P109.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 16:32

Sample wt/vol: 100(mL) Date Analyzed: 09/07/2020 00:04

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42498 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.14	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.086	J *	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	2.4		0.40	0.11
67-66-3	Chloroform	119.38	0.060	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.47		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	0.10	J	0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	0.086	J	0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.035
108-88-3	Toluene	92.14	0.77		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	ND		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND	*	0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.42	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	89		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: IA-153-C-29 Lab Sample ID: 140-20175-26

Matrix: Air Lab File ID: HI07P109.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 16:32

Sample wt/vol: 100(mL) Date Analyzed: 09/07/2020 00:04

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42498 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.45	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.54	J *	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	8.4		1.4	0.39
67-66-3	Chloroform	119.38	0.29	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.3		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	0.41	J	1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	0.38	J	1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.24
108-88-3	Toluene	92.14	2.9		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	ND		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	ND	*	2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	1.8	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	89		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P109.D
Lims ID: 140-20175-A-26
Client ID: IA-153-C-29
Sample Type: Client
Inject. Date: 07-Sep-2020 00:04:30 ALS Bottle#: 9 Worklist Smp#: 14
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016514-014
Misc. Info.: 140-20175-a-26
Operator ID: HMT Instrument ID: MH

Method: \\chromfs\Knoxville\ChromData\MH\20200904-16514.b\MH_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 08-Sep-2020 17:33:11 Calib Date: 29-Aug-2020 23:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1050

First Level Reviewer: liul Date: 08-Sep-2020 17:33:11

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.431	9.431	0.000	96	99987	4.80	
* 2 1,4-Difluorobenzene	114	11.591	11.591	0.000	95	388940	4.80	
* 3 Chlorobenzene-d5 (IS)	117	16.258	16.258	0.000	88	262723	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.876	17.876	0.000	90	125507	4.11	
6 Chlorodifluoromethane	51	3.916	3.914	0.000	96	26622	0.4771	
8 Dichlorodifluoromethane	85	3.988	3.981	0.005	99	7121	0.0942	
44 Chloroform	83	9.436	9.431	0.000	28	730	0.0120	
48 1,2-Dichloroethane	62	10.599	10.599	0.000	84	709	0.0200	
51 Benzene	78	11.069	11.074	-0.005	91	2019	0.0283	
52 Carbon tetrachloride	117	11.090	11.095	-0.005	48	764	0.0173	
67 Toluene	91	14.305	14.310	-0.005	90	10454	0.1544	
76 Ethylbenzene	91	16.589	16.584	0.005	90	1416	0.0173	
77 m-Xylene & p-Xylene	91	16.739	16.744	-0.005	97	3616	0.0558	
81 o-Xylene	91	17.266	17.266	0.000	95	1948	0.0287	
S 116 Xylenes, Total	100				0		0.0846	

Reagents:

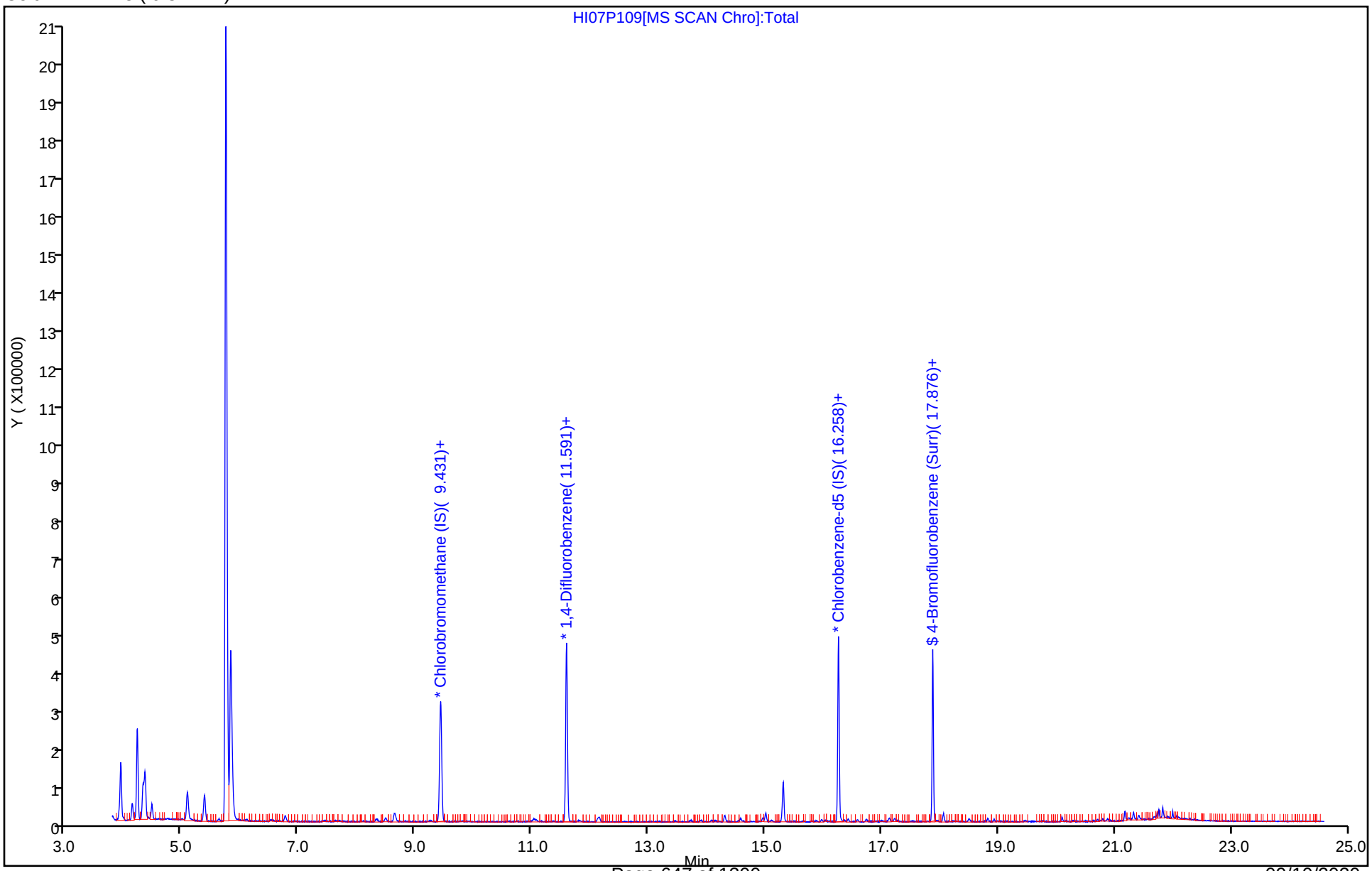
40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

Report Date: 08-Sep-2020 17:33:11 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P109.D				
Injection Date:	07-Sep-2020 00:04:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	140-20175-A-26	Lab Sample ID:	140-20175-26	Worklist Smp#:	14
Client ID:	IA-153-C-29				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

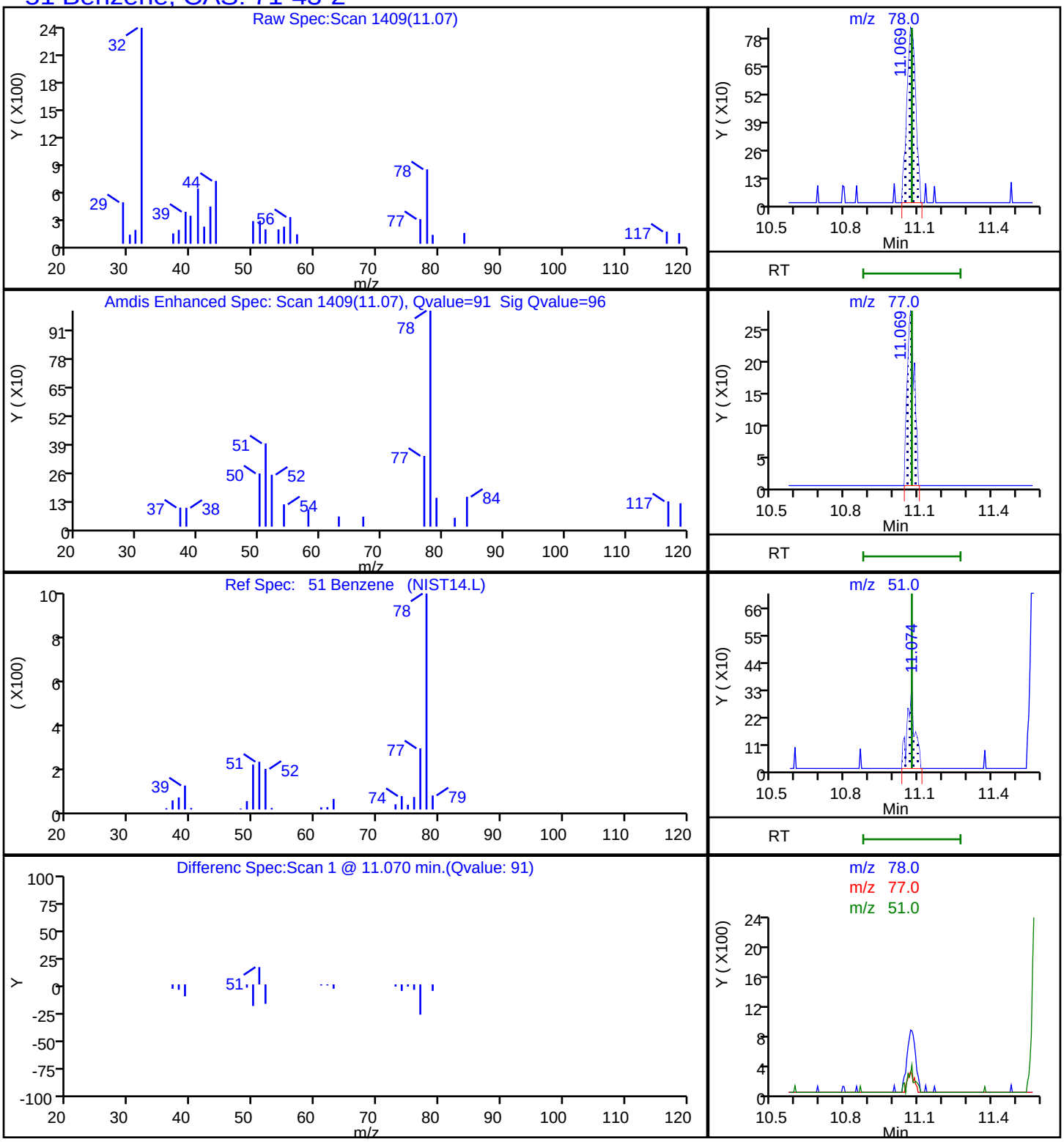
Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P109.D				
Lims ID:	140-20175-A-26				
Client ID:	IA-153-C-29				
Sample Type:	Client				
Inject. Date:	07-Sep-2020 00:04:30	ALS Bottle#:	9	Worklist Smp#:	14
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016514-014				
Misc. Info.:	140-20175-a-26				
Operator ID:	HMT	Instrument ID:	MH		
Method:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\MH_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	08-Sep-2020 17:33:11	Calib Date:	29-Aug-2020 23:57:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1050				
First Level Reviewer: liul		Date:	08-Sep-2020 17:33:11		

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	4.11	88.61

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P109.D		
Injection Date:	07-Sep-2020 00:04:30	Instrument ID:	MH
Lims ID:	140-20175-A-26	Lab Sample ID:	140-20175-26
Client ID:	IA-153-C-29		
Operator ID:	HMT	ALS Bottle#:	9 Worklist Smp#: 14
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

51 Benzene, CAS: 71-43-2



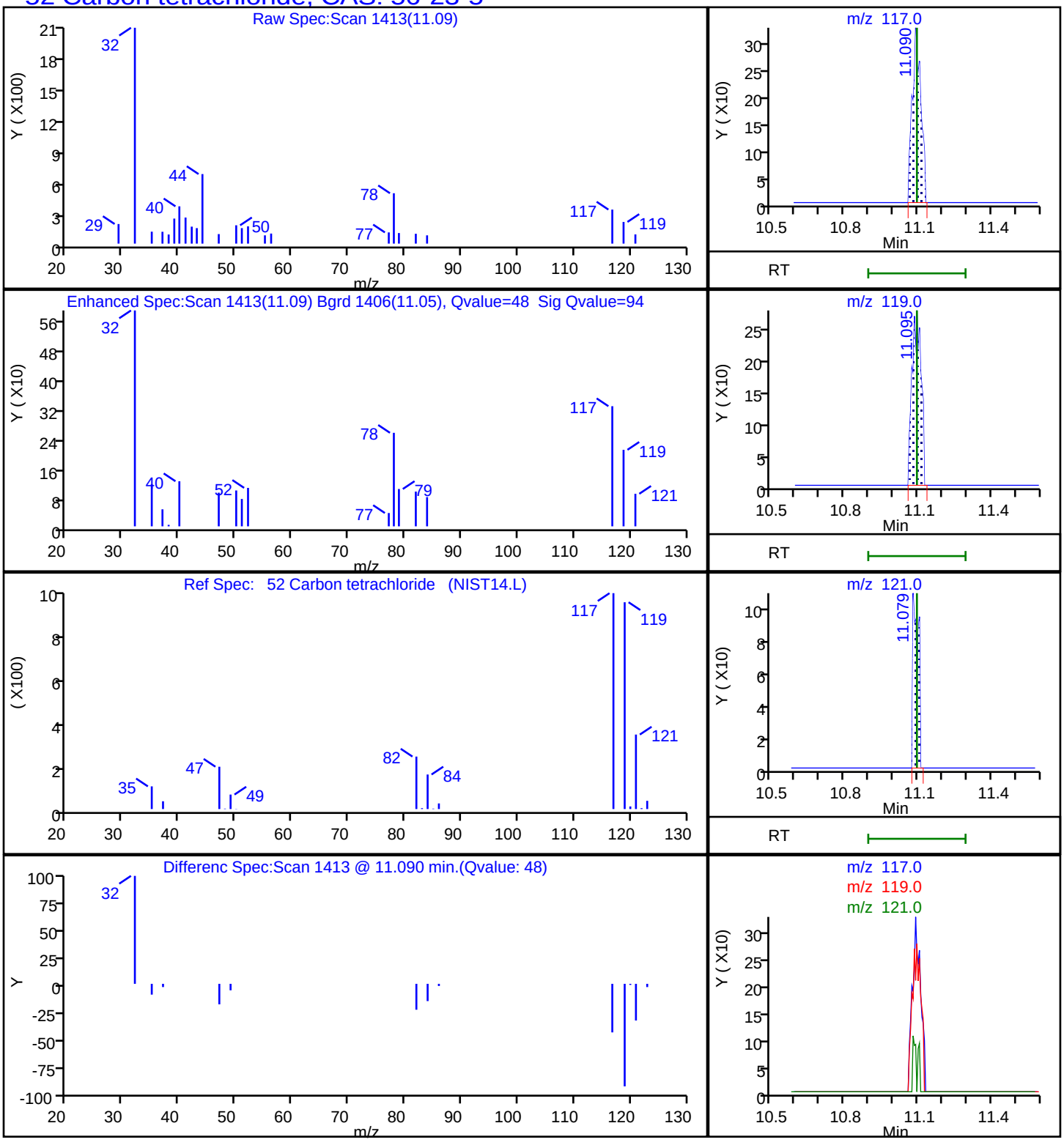
Report Date: 08-Sep-2020 17:33:11 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P109.D

Injection Date:	07-Sep-2020 00:04:30	Instrument ID:	MH		
Lims ID:	140-20175-A-26	Lab Sample ID:	140-20175-26		
Client ID:	IA-153-C-29				
Operator ID:	HMT	ALS Bottle#:	9	Worklist Smp#:	14
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

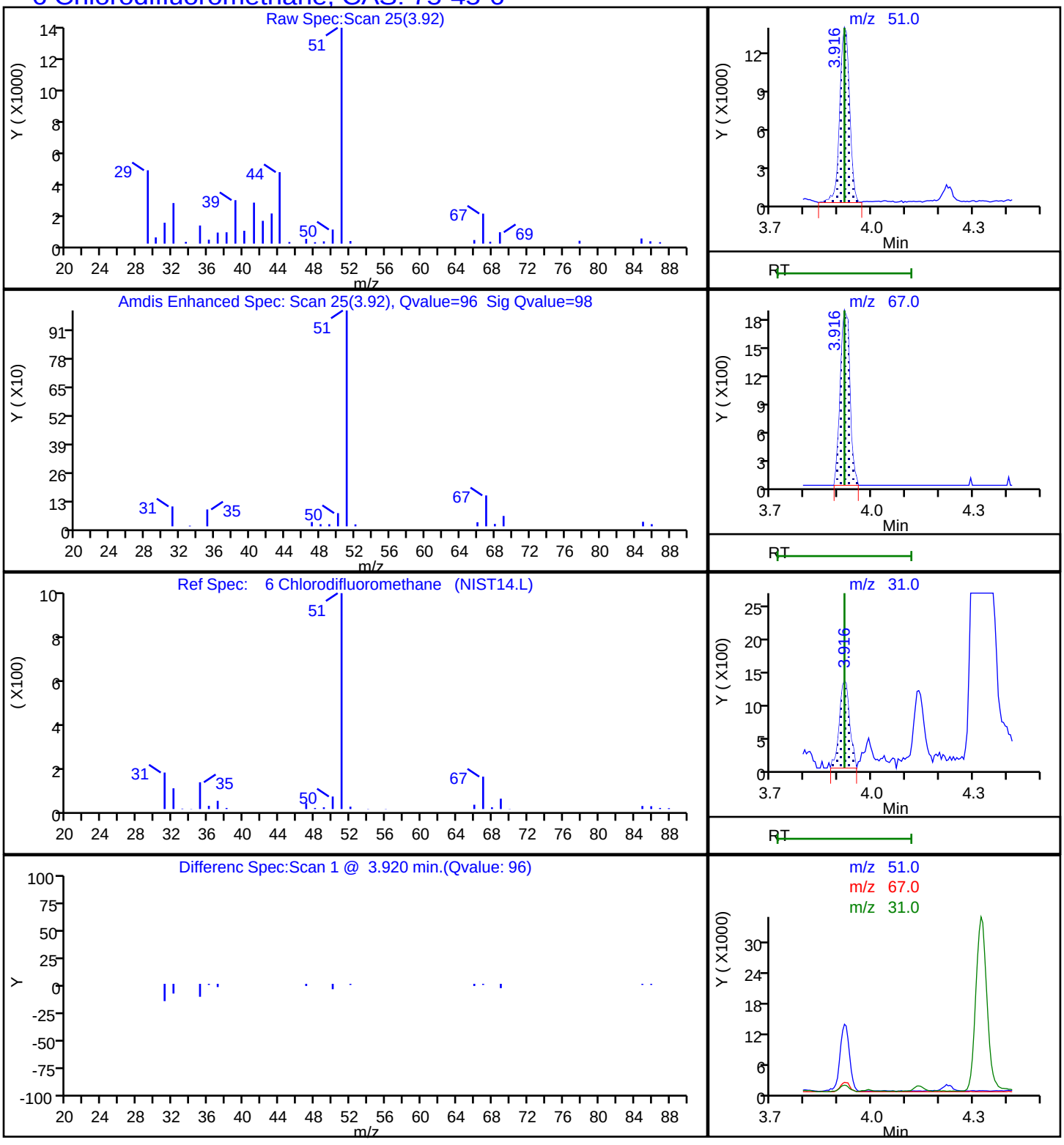
52 Carbon tetrachloride, CAS: 56-23-5



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P109.D		
Injection Date:	07-Sep-2020 00:04:30	Instrument ID:	MH
Lims ID:	140-20175-A-26	Lab Sample ID:	140-20175-26
Client ID:	IA-153-C-29		
Operator ID:	HMT	ALS Bottle#:	9 Worklist Smp#: 14
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

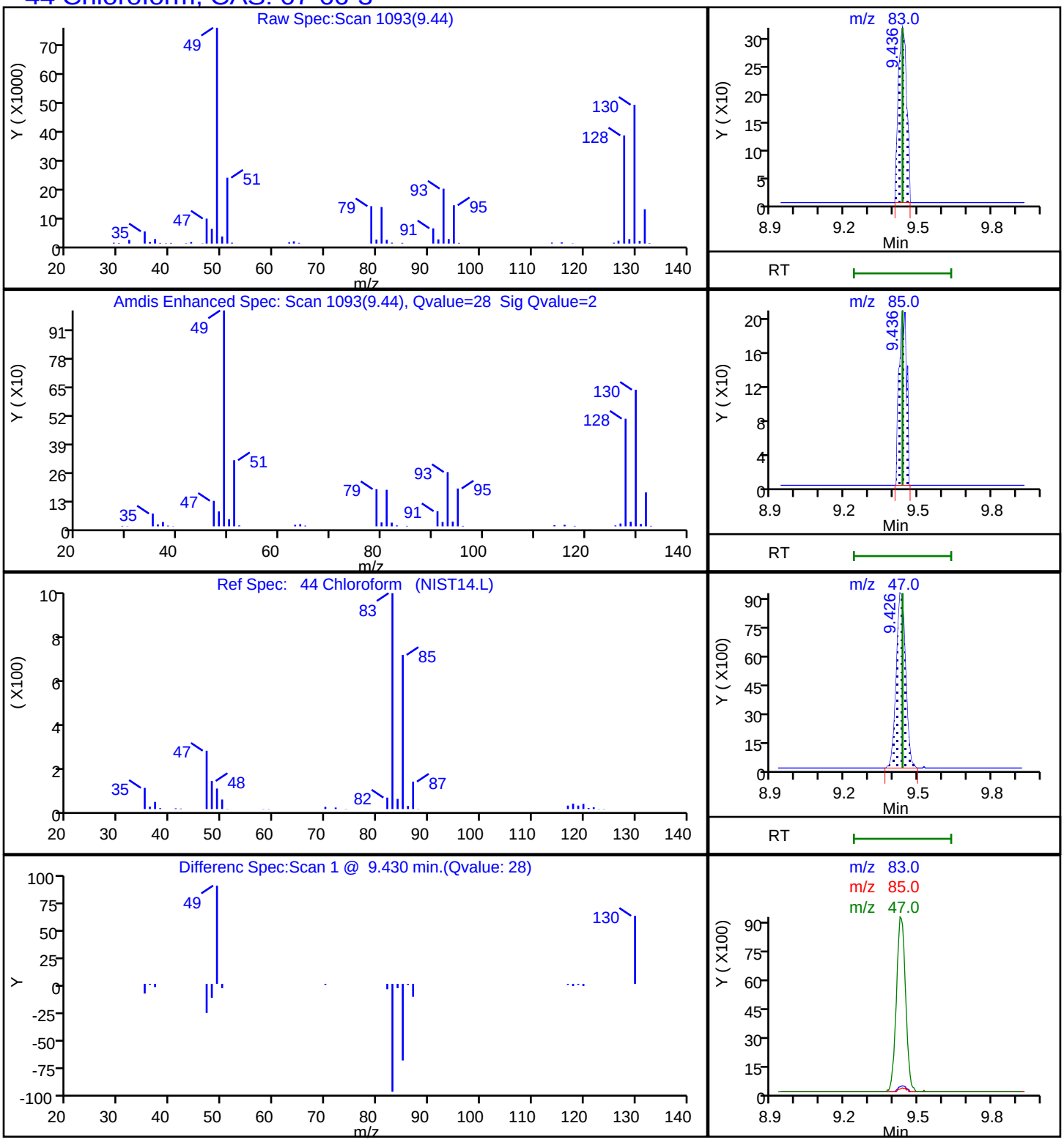
6 Chlorodifluoromethane, CAS: 75-45-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P109.D		
Injection Date:	07-Sep-2020 00:04:30	Instrument ID:	MH
Lims ID:	140-20175-A-26	Lab Sample ID:	140-20175-26
Client ID:	IA-153-C-29		
Operator ID:	HMT	ALS Bottle#:	9 Worklist Smp#: 14
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

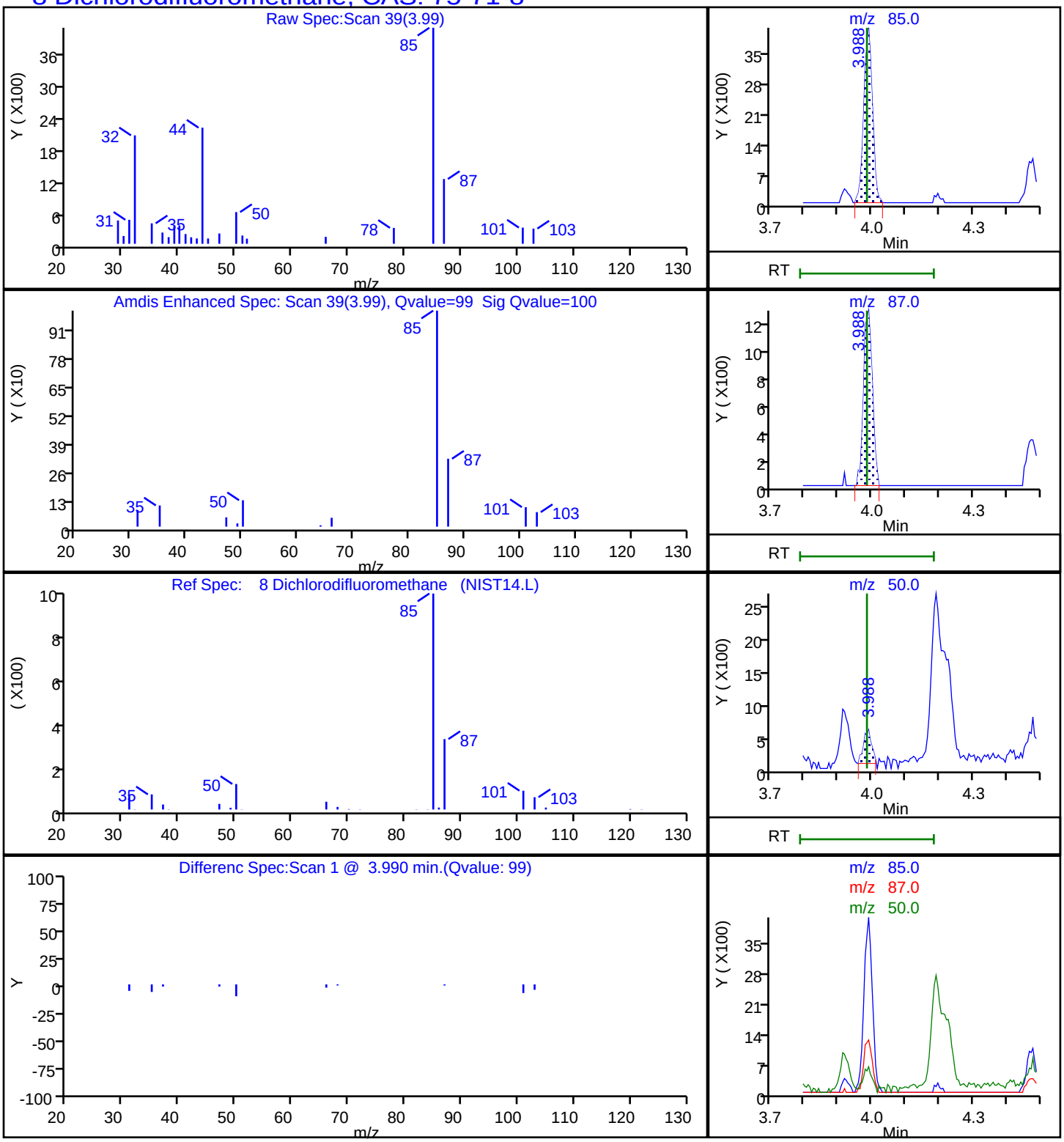
44 Chloroform, CAS: 67-66-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P109.D		
Injection Date:	07-Sep-2020 00:04:30	Instrument ID:	MH
Lims ID:	140-20175-A-26	Lab Sample ID:	140-20175-26
Client ID:	IA-153-C-29		
Operator ID:	HMT	ALS Bottle#:	9 Worklist Smp#: 14
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

8 Dichlorodifluoromethane, CAS: 75-71-8



Report Date: 08-Sep-2020 17:33:11 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P109.D

Injection Date: 07-Sep-2020 00:04:30 Instrument ID: MH

Lims ID: 140-20175-A-26 Lab Sample ID: 140-20175-26

Client ID: IA-153-C-29

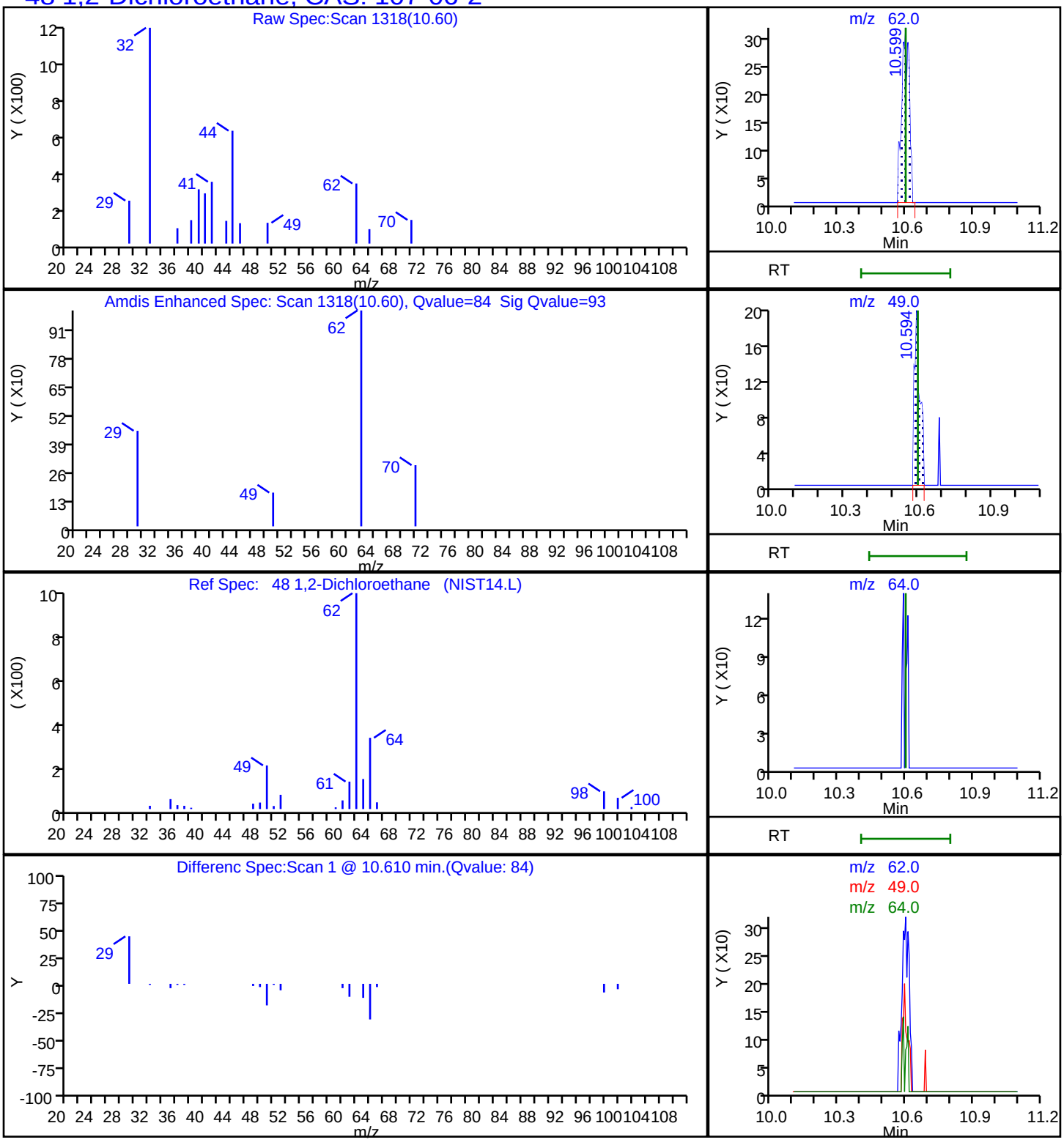
Operator ID: HMT ALS Bottle#: 9 Worklist Smp#: 14

Purge Vol: 500.000 mL Dil. Factor: 1.0000

Method: MH_TO15 Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm) Detector MS SCAN

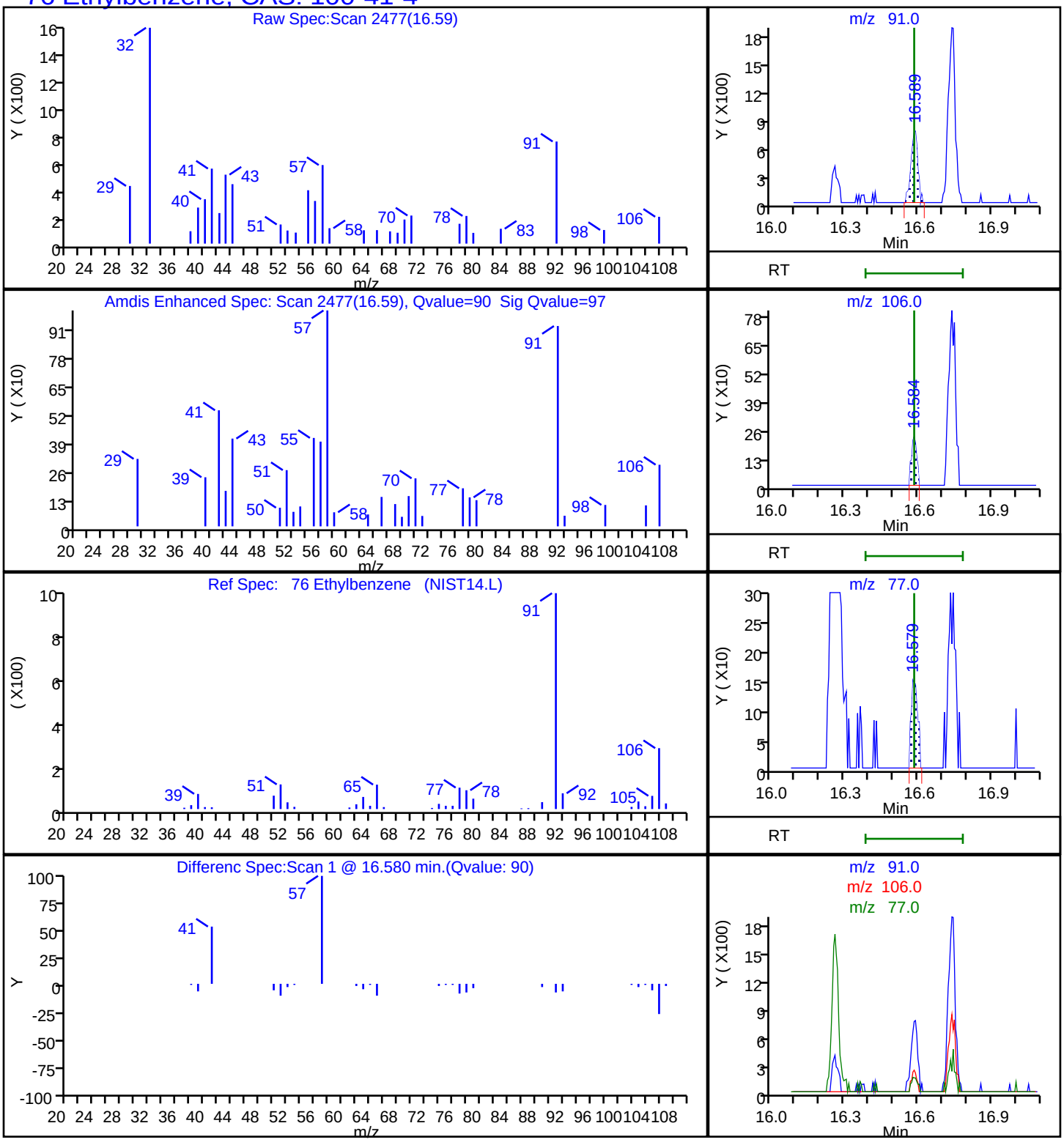
48 1,2-Dichloroethane, CAS: 107-06-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P109.D				
Injection Date:	07-Sep-2020 00:04:30	Instrument ID:	MH		
Lims ID:	140-20175-A-26	Lab Sample ID:	140-20175-26		
Client ID:	IA-153-C-29				
Operator ID:	HMT	ALS Bottle#:	9	Worklist Smp#:	14
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

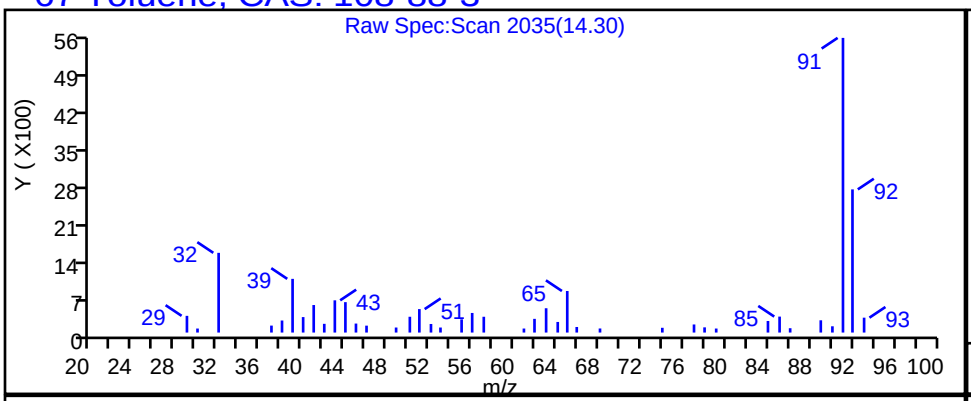
76 Ethylbenzene, CAS: 100-41-4

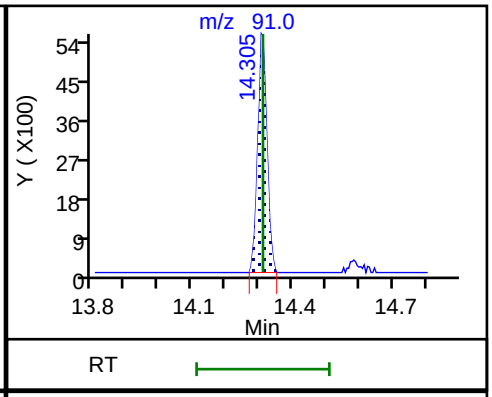


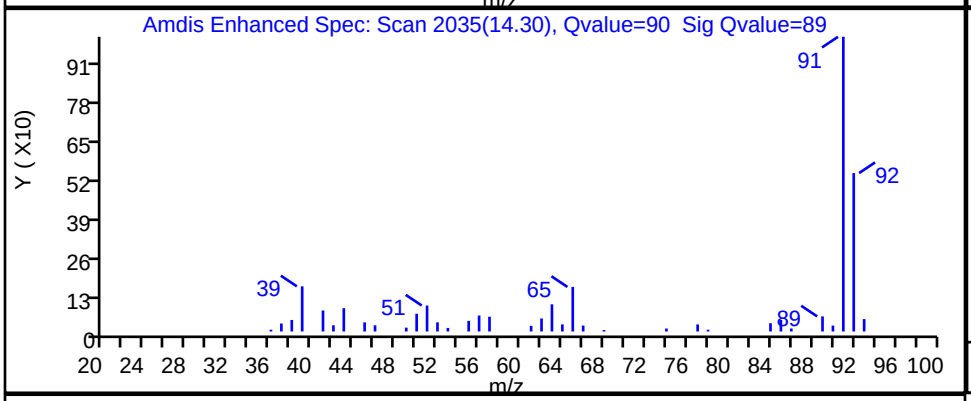
Eurofins TestAmerica, Knoxville

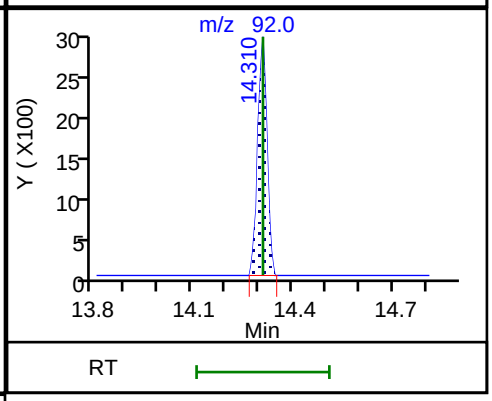
Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P109.D		
Injection Date:	07-Sep-2020 00:04:30	Instrument ID:	MH
Lims ID:	140-20175-A-26	Lab Sample ID:	140-20175-26
Client ID:	IA-153-C-29		
Operator ID:	HMT	ALS Bottle#:	9 Worklist Smp#: 14
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

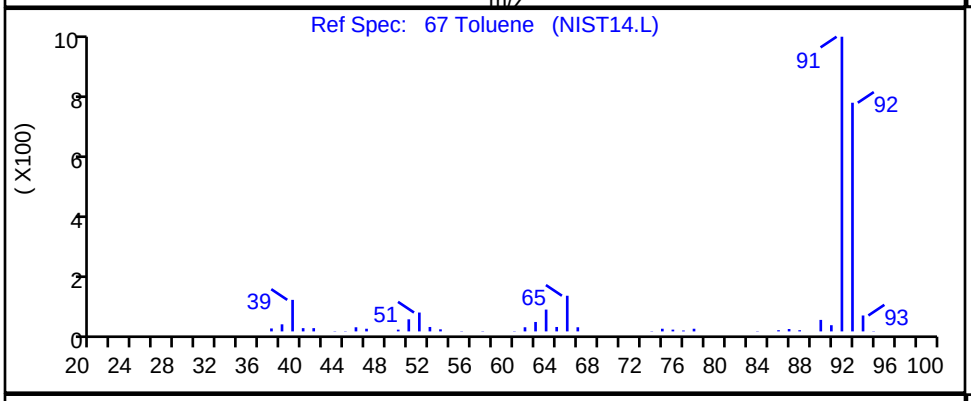
67 Toluene, CAS: 108-88-3

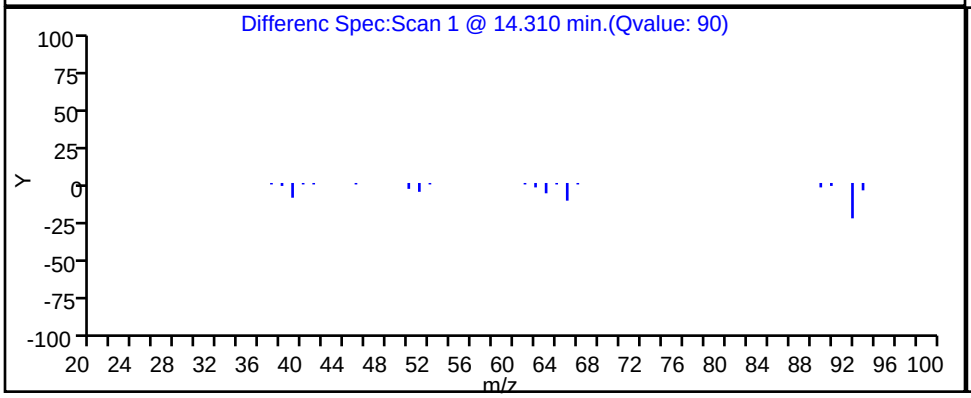


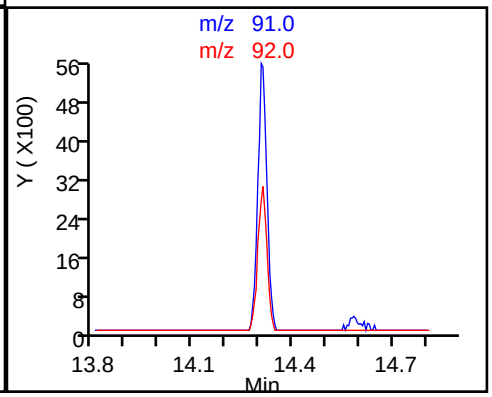








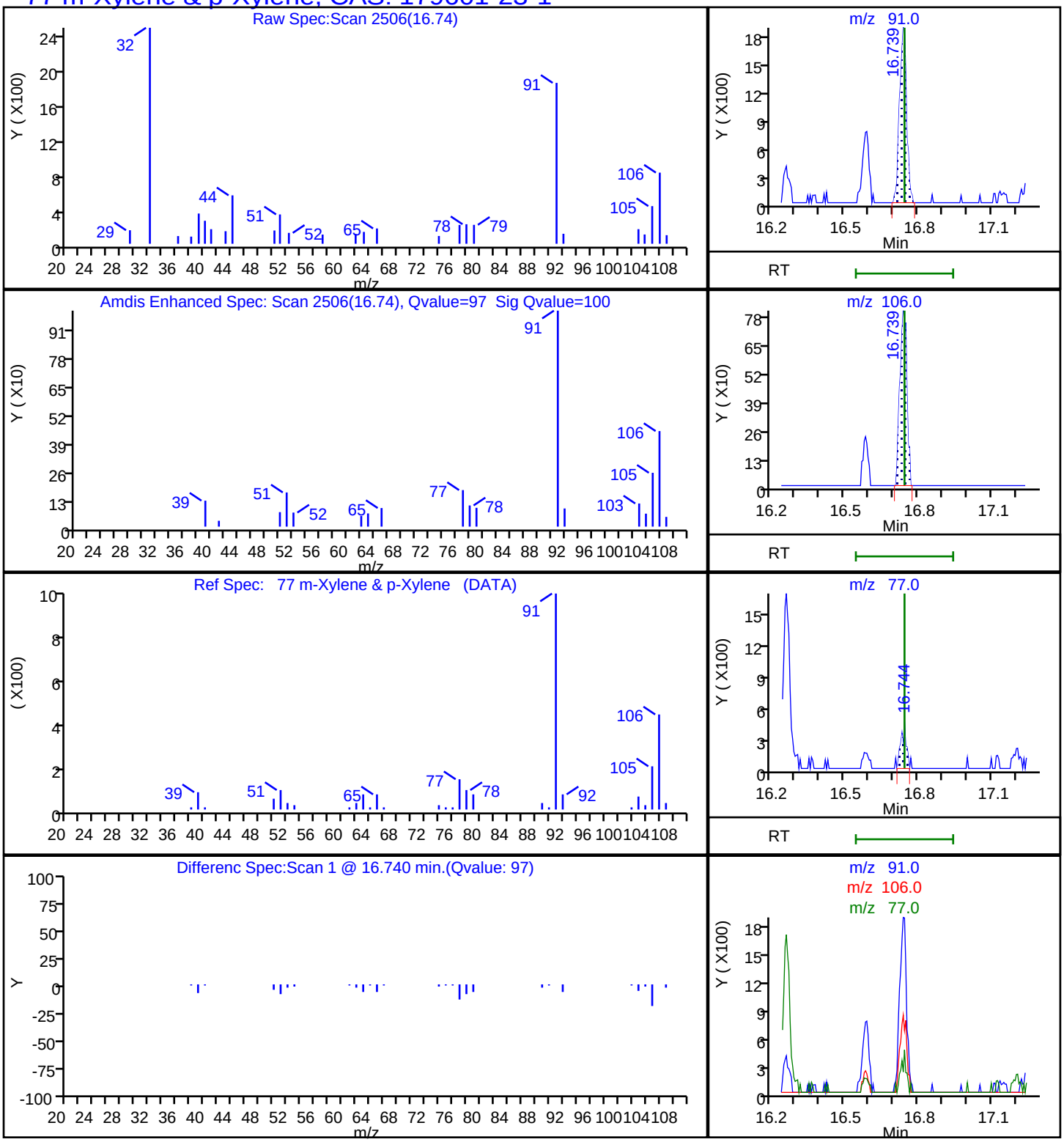




Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P109.D		
Injection Date:	07-Sep-2020 00:04:30	Instrument ID:	MH
Lims ID:	140-20175-A-26	Lab Sample ID:	140-20175-26
Client ID:	IA-153-C-29		
Operator ID:	HMT	ALS Bottle#:	9 Worklist Smp#: 14
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

77 m-Xylene & p-Xylene, CAS: 179601-23-1

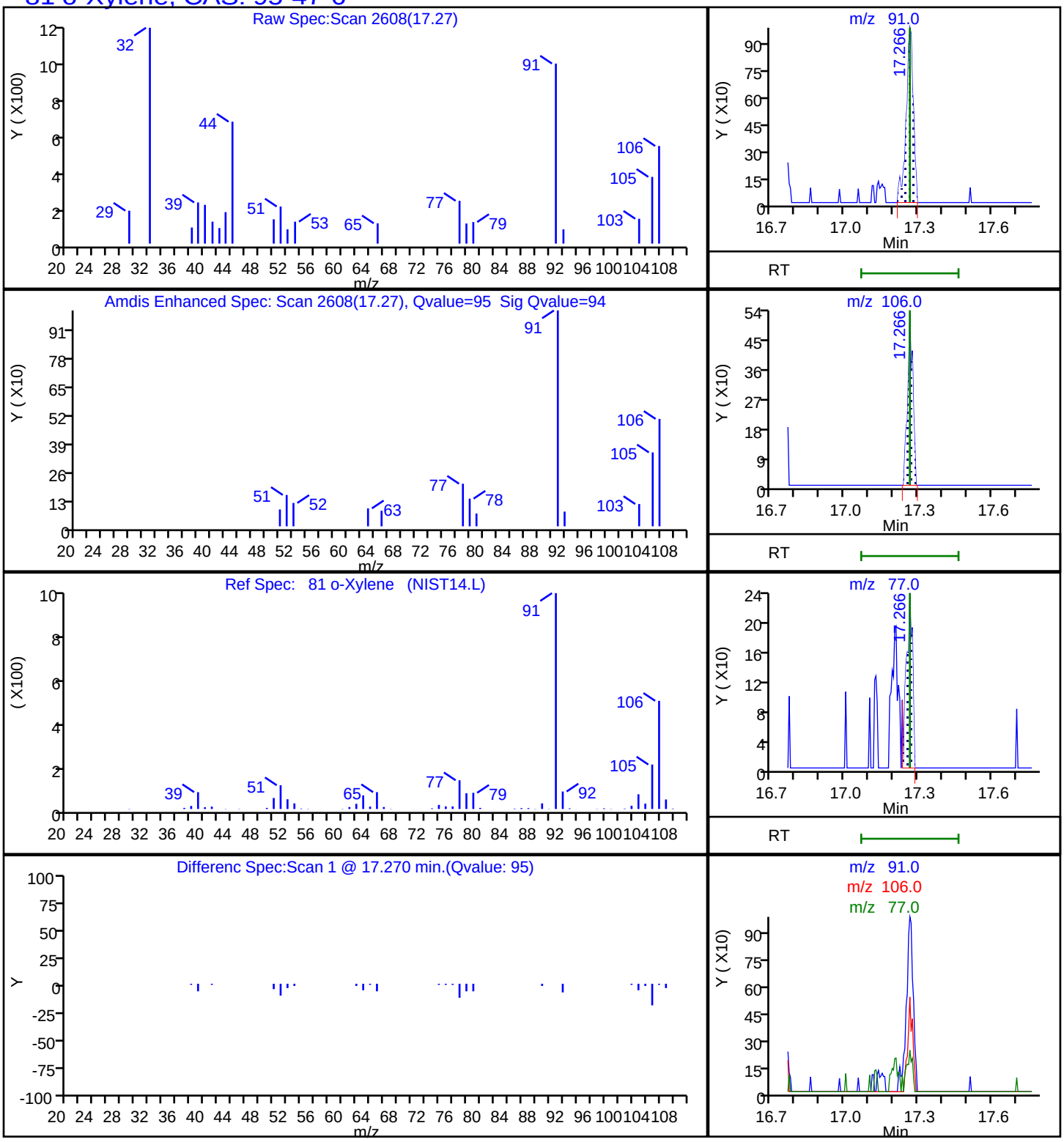


Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P109.D

Injection Date:	07-Sep-2020 00:04:30	Instrument ID:	MH		
Lims ID:	140-20175-A-26	Lab Sample ID:	140-20175-26		
Client ID:	IA-153-C-29				
Operator ID:	HMT	ALS Bottle#:	9	Worklist Smp#:	14
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

81 o-Xylene, CAS: 95-47-6



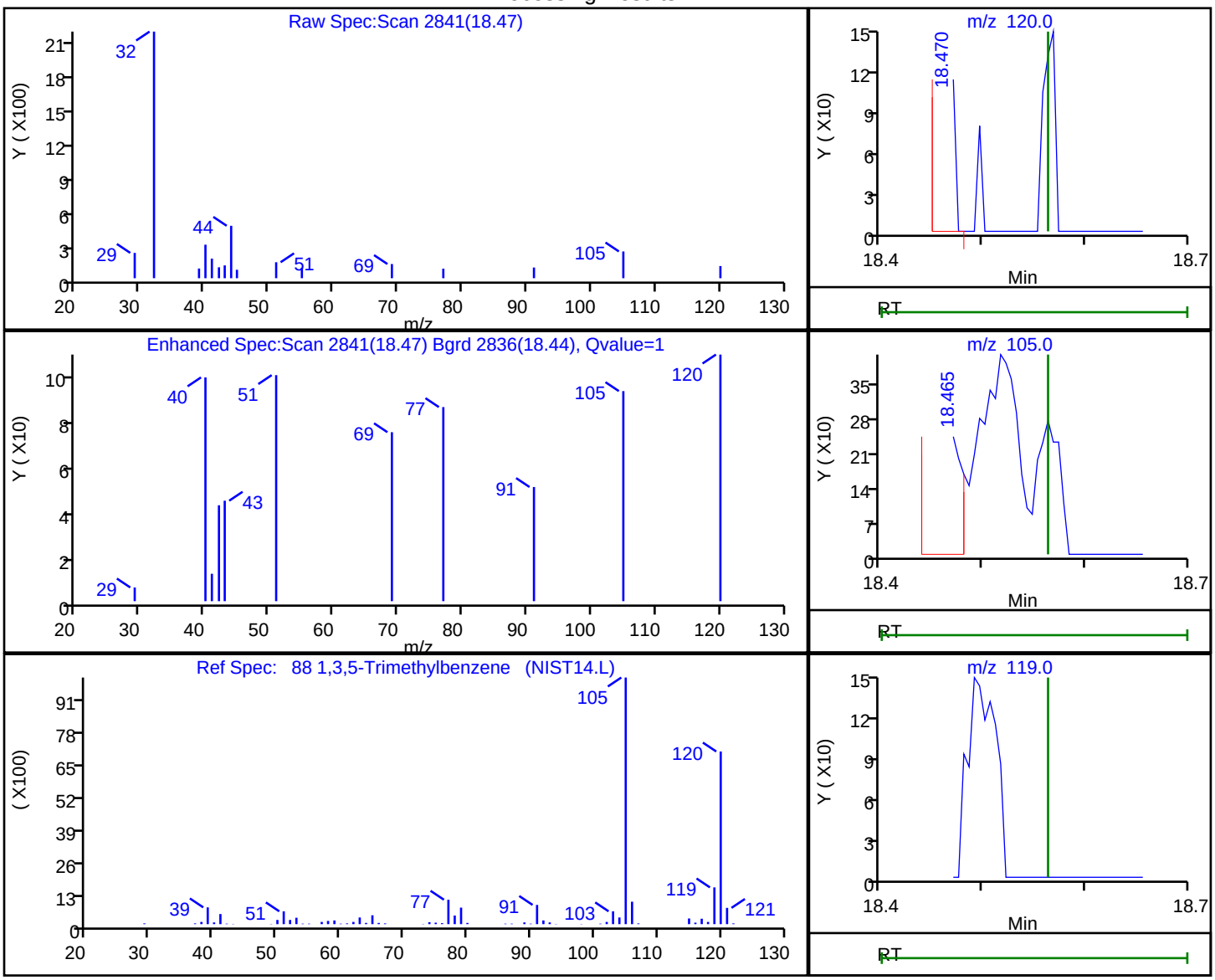
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P109.D				
Injection Date:	07-Sep-2020 00:04:30	Instrument ID:	MH		
Lims ID:	140-20175-A-26	Lab Sample ID:	140-20175-26		
Client ID:	IA-153-C-29				
Operator ID:	HMT	ALS Bottle#:	9	Worklist Smp#:	14
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

88 1,3,5-Trimethylbenzene, CAS: 108-67-8

Processing Results



RT	Mass	Response	Amount
18.47	120.00	119	0.050334
18.47	105.00	585	
18.56	119.00	0	

Reviewer: liul, 08-Sep-2020 17:33:06

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: IA-DUP1-C-29 Lab Sample ID: 140-20175-27

Matrix: Air Lab File ID: HI07P110.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 00:00

Sample wt/vol: 100(mL) Date Analyzed: 09/07/2020 00:57

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42498 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.19	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.12	J *	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	2.9		0.40	0.11
67-66-3	Chloroform	119.38	0.11	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.57		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	0.13	J	0.40	0.065
75-09-2	Methylene Chloride	84.93	3.2		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.035
108-88-3	Toluene	92.14	1.1		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	0.89		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	0.11	J *	0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	0.28	J	0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.58	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	95		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: IA-DUP1-C-29 Lab Sample ID: 140-20175-27

Matrix: Air Lab File ID: HI07P110.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 00:00

Sample wt/vol: 100(mL) Date Analyzed: 09/07/2020 00:57

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42498 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.60	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.76	J *	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	10		1.4	0.39
67-66-3	Chloroform	119.38	0.55	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.8		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	0.56	J	1.7	0.28
75-09-2	Methylene Chloride	84.93	11		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.24
108-88-3	Toluene	92.14	4.2		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	4.8		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	0.52	J *	2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	1.4	J	2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	2.5	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	95		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P110.D
Lims ID: 140-20175-A-27
Client ID: IA-DUP1-C-29
Sample Type: Client
Inject. Date: 07-Sep-2020 00:57:30 ALS Bottle#: 10 Worklist Smp#: 15
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016514-015
Misc. Info.: 140-20175-a-27
Operator ID: HMT Instrument ID: MH

Method: \\chromfs\Knoxville\ChromData\MH\20200904-16514.b\MH_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 07-Sep-2020 07:43:45 Calib Date: 29-Aug-2020 23:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1015

First Level Reviewer: tajh Date: 07-Sep-2020 07:42:22

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.431	9.431	0.000	96	99189	4.80	
* 2 1,4-Difluorobenzene	114	11.591	11.591	0.000	95	347780	4.80	
* 3 Chlorobenzene-d5 (IS)	117	16.258	16.258	0.000	88	267383	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.876	17.876	0.000	91	137553	4.43	
6 Chlorodifluoromethane	51	3.916	3.916	0.000	96	31579	0.5705	
8 Dichlorodifluoromethane	85	3.983	3.983	0.000	99	8559	0.1141	
31 Methylene Chloride	84	6.764	6.764	0.000	96	15605	0.6418	
44 Chloroform	83	9.436	9.436	0.000	28	1349	0.0224	
51 Benzene	78	11.064	11.074	-0.010	74	2408	0.0377	
52 Carbon tetrachloride	117	11.090	11.095	-0.005	89	950	0.0240	
58 Trichloroethene	130	12.294	12.294	0.000	93	5131	0.1787	
67 Toluene	91	14.310	14.310	0.000	90	15224	0.2210	
73 Tetrachloroethene	129	15.426	15.436	-0.010	1	198	0.006857	
76 Ethylbenzene	91	16.584	16.584	0.000	92	2143	0.0257	
77 m-Xylene & p-Xylene	91	16.739	16.744	-0.005	94	5003	0.0759	
81 o-Xylene	91	17.266	17.266	0.000	96	2827	0.0410	
88 1,3,5-Trimethylbenzene	120	18.563	18.563	0.000	87	388	0.0567	
92 1,2,4-Trimethylbenzene	105	18.987	18.987	0.000	91	1688	0.0212	
S 116 Xylenes, Total	100				0		0.1169	

Reagents:

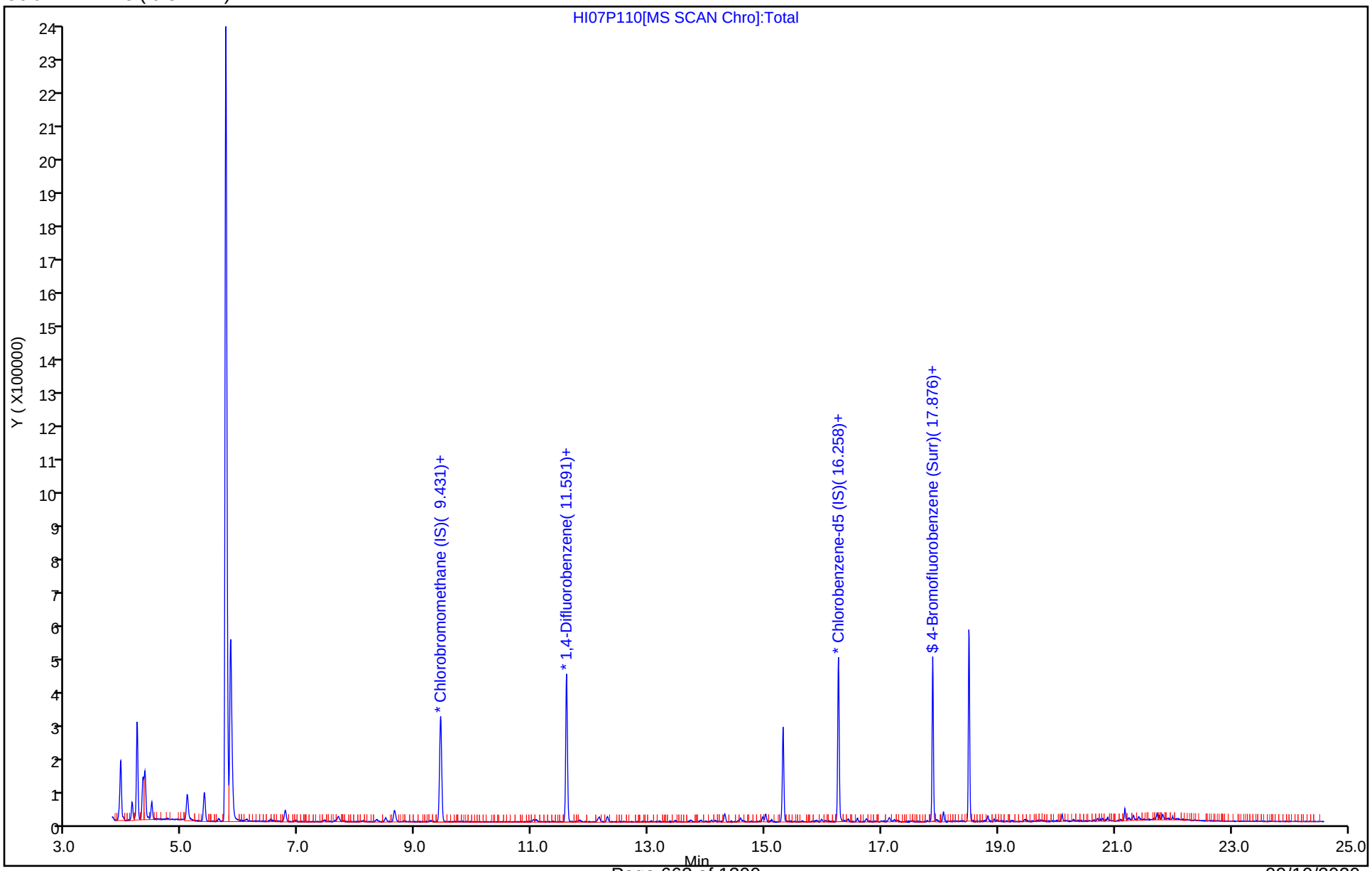
40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

Report Date: 07-Sep-2020 07:44:03 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P110.D				
Injection Date:	07-Sep-2020 00:57:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	140-20175-A-27	Lab Sample ID:	140-20175-27	Worklist Smp#:	15
Client ID:	IA-DUP1-C-29				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

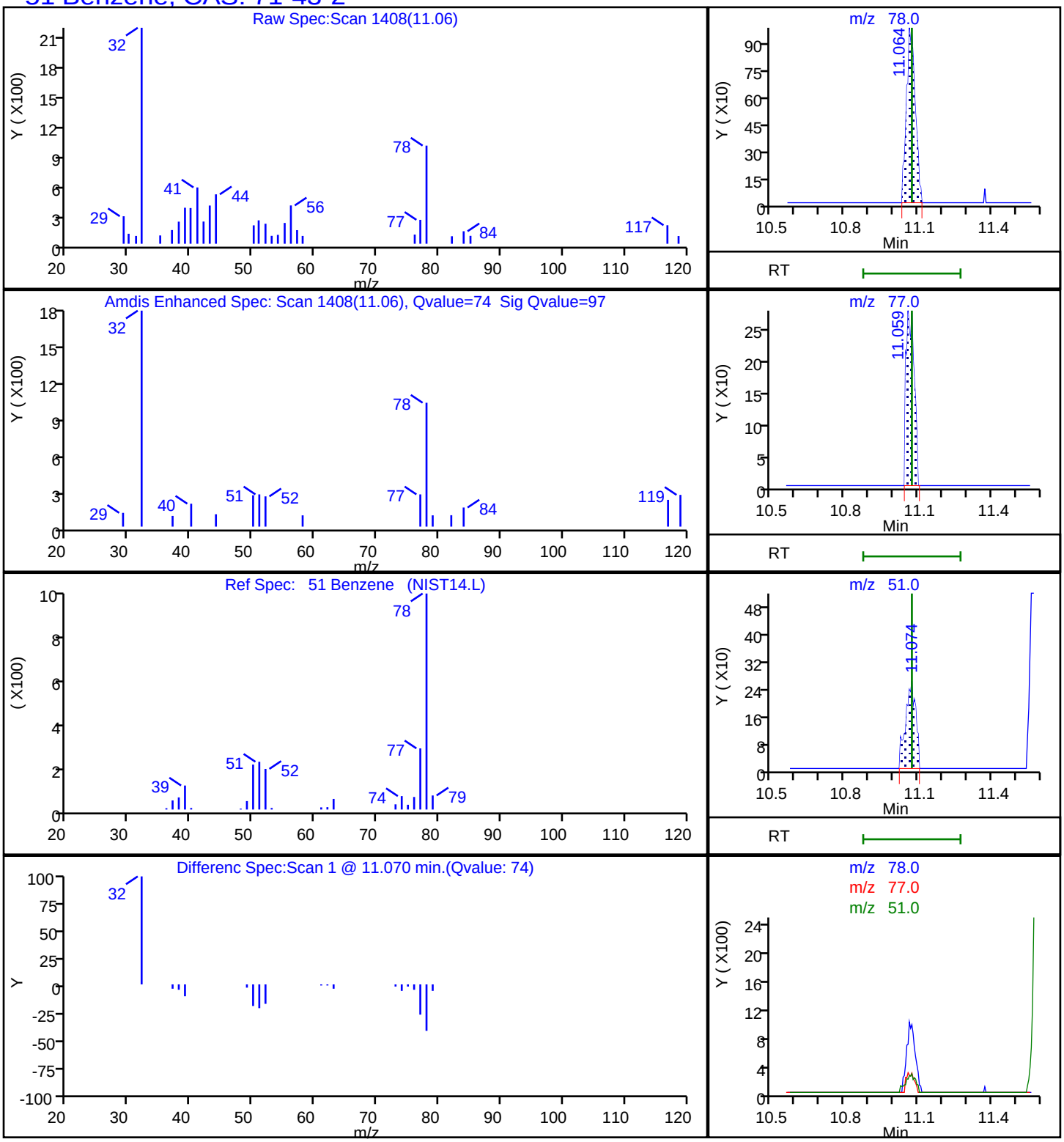
Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P110.D				
Lims ID:	140-20175-A-27				
Client ID:	IA-DUP1-C-29				
Sample Type:	Client				
Inject. Date:	07-Sep-2020 00:57:30	ALS Bottle#:	10	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016514-015				
Misc. Info.:	140-20175-a-27				
Operator ID:	HMT	Instrument ID:	MH		
Method:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\MH_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	07-Sep-2020 07:43:45	Calib Date:	29-Aug-2020 23:57:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1015				
First Level Reviewer: tajh		Date:	07-Sep-2020 07:42:22		

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	4.43	95.42

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P110.D		
Injection Date:	07-Sep-2020 00:57:30	Instrument ID:	MH
Lims ID:	140-20175-A-27	Lab Sample ID:	140-20175-27
Client ID:	IA-DUP1-C-29		
Operator ID:	HMT	ALS Bottle#:	10 Worklist Smp#: 15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

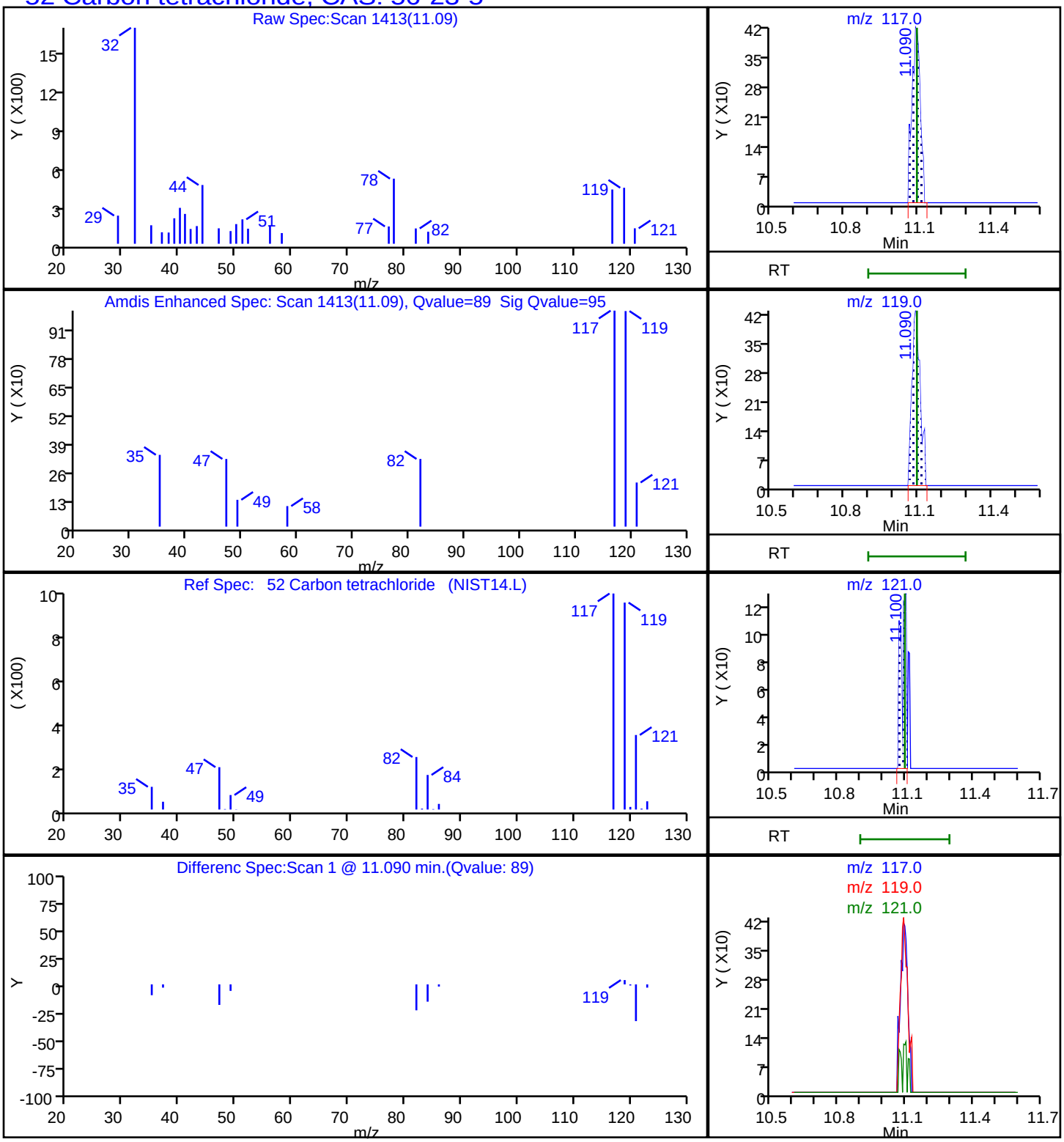
51 Benzene, CAS: 71-43-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P110.D				
Injection Date:	07-Sep-2020 00:57:30	Instrument ID:	MH		
Lims ID:	140-20175-A-27	Lab Sample ID:	140-20175-27		
Client ID:	IA-DUP1-C-29				
Operator ID:	HMT	ALS Bottle#:	10	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

52 Carbon tetrachloride, CAS: 56-23-5

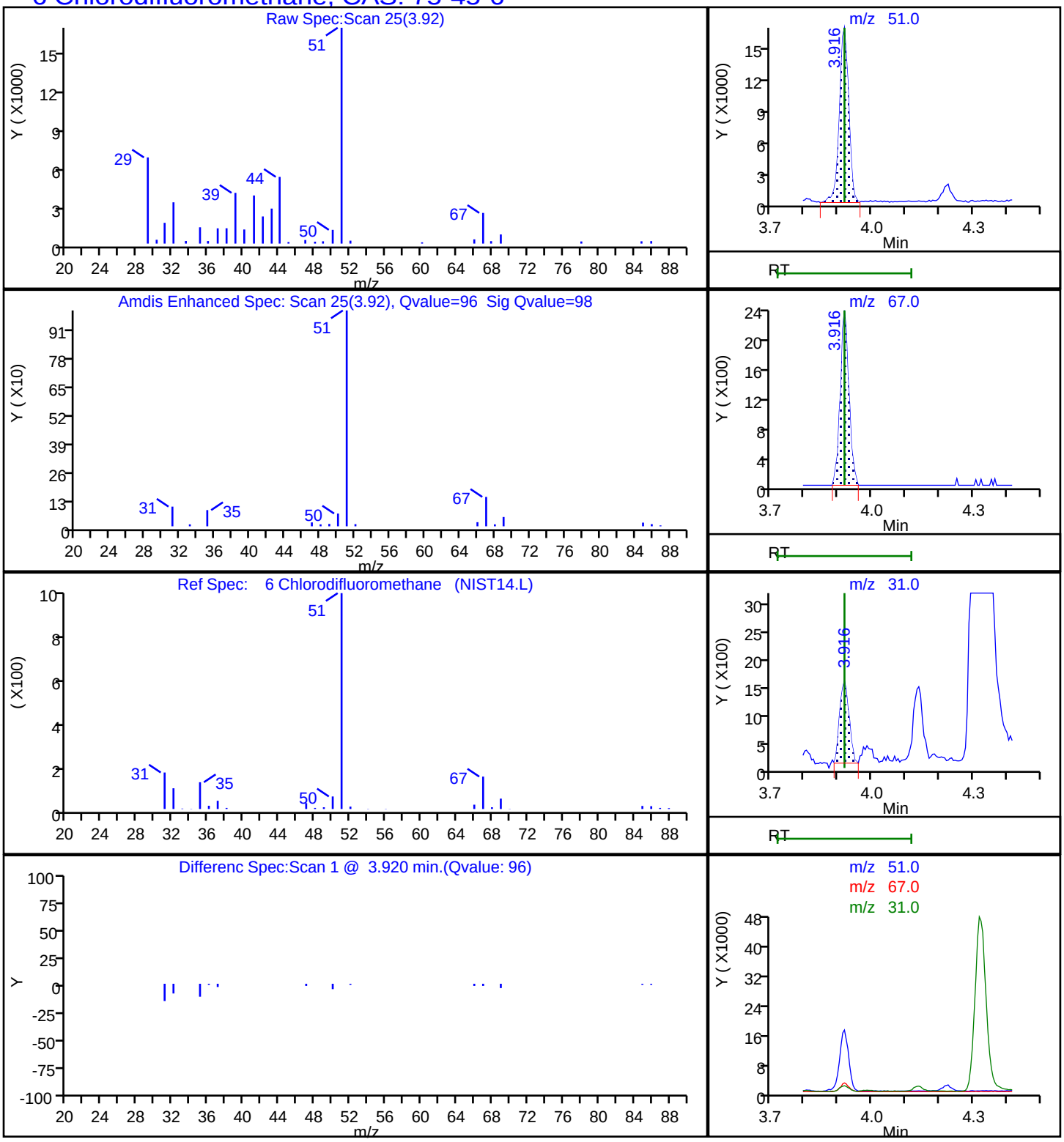


Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P110.D

Injection Date:	07-Sep-2020 00:57:30	Instrument ID:	MH		
Lims ID:	140-20175-A-27	Lab Sample ID:	140-20175-27		
Client ID:	IA-DUP1-C-29				
Operator ID:	HMT	ALS Bottle#:	10	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

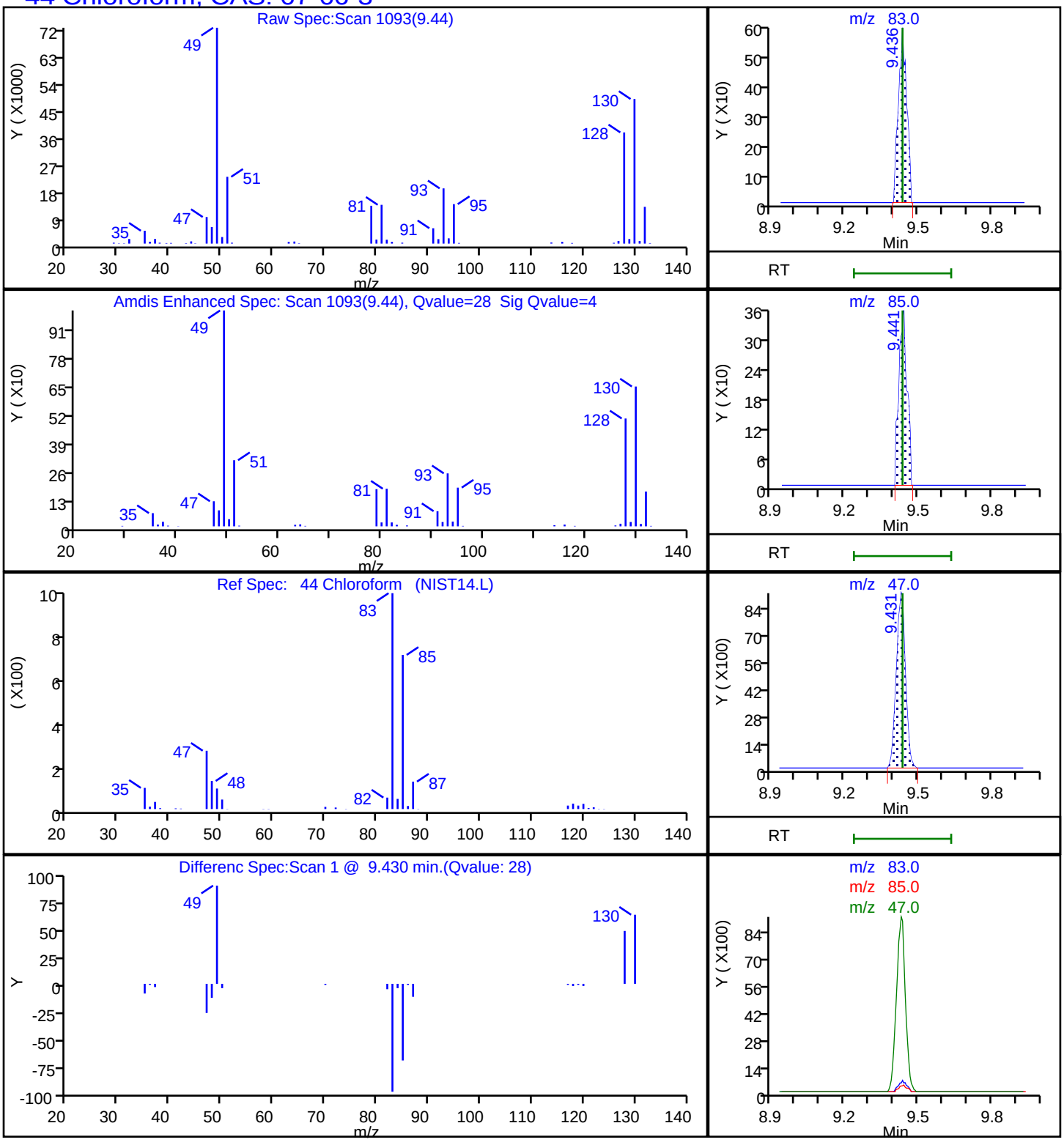
6 Chlorodifluoromethane, CAS: 75-45-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P110.D				
Injection Date:	07-Sep-2020 00:57:30	Instrument ID:	MH		
Lims ID:	140-20175-A-27	Lab Sample ID:	140-20175-27		
Client ID:	IA-DUP1-C-29				
Operator ID:	HMT	ALS Bottle#:	10	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

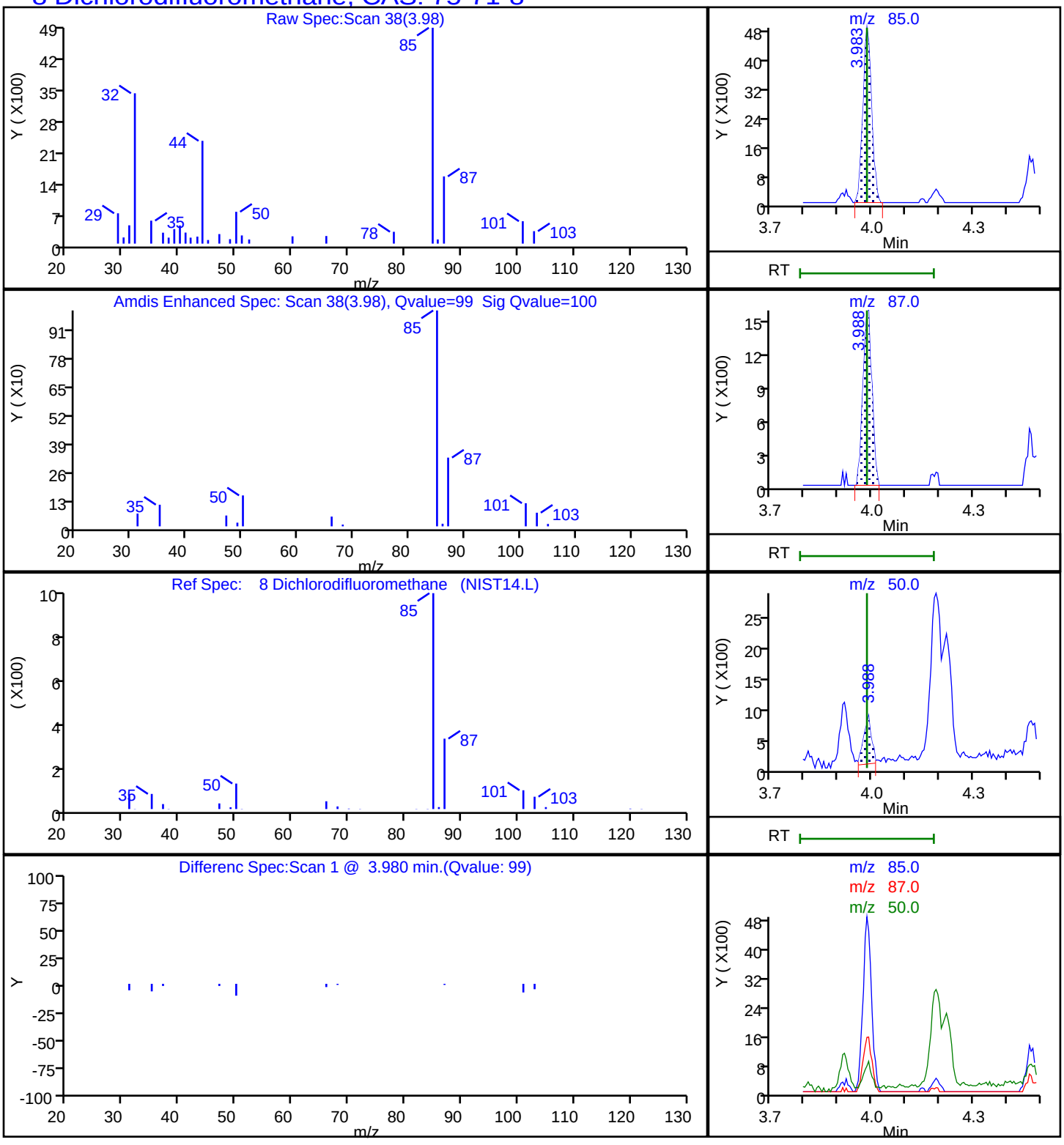
44 Chloroform, CAS: 67-66-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P110.D				
Injection Date:	07-Sep-2020 00:57:30	Instrument ID:	MH		
Lims ID:	140-20175-A-27	Lab Sample ID:	140-20175-27		
Client ID:	IA-DUP1-C-29				
Operator ID:	HMT	ALS Bottle#:	10	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

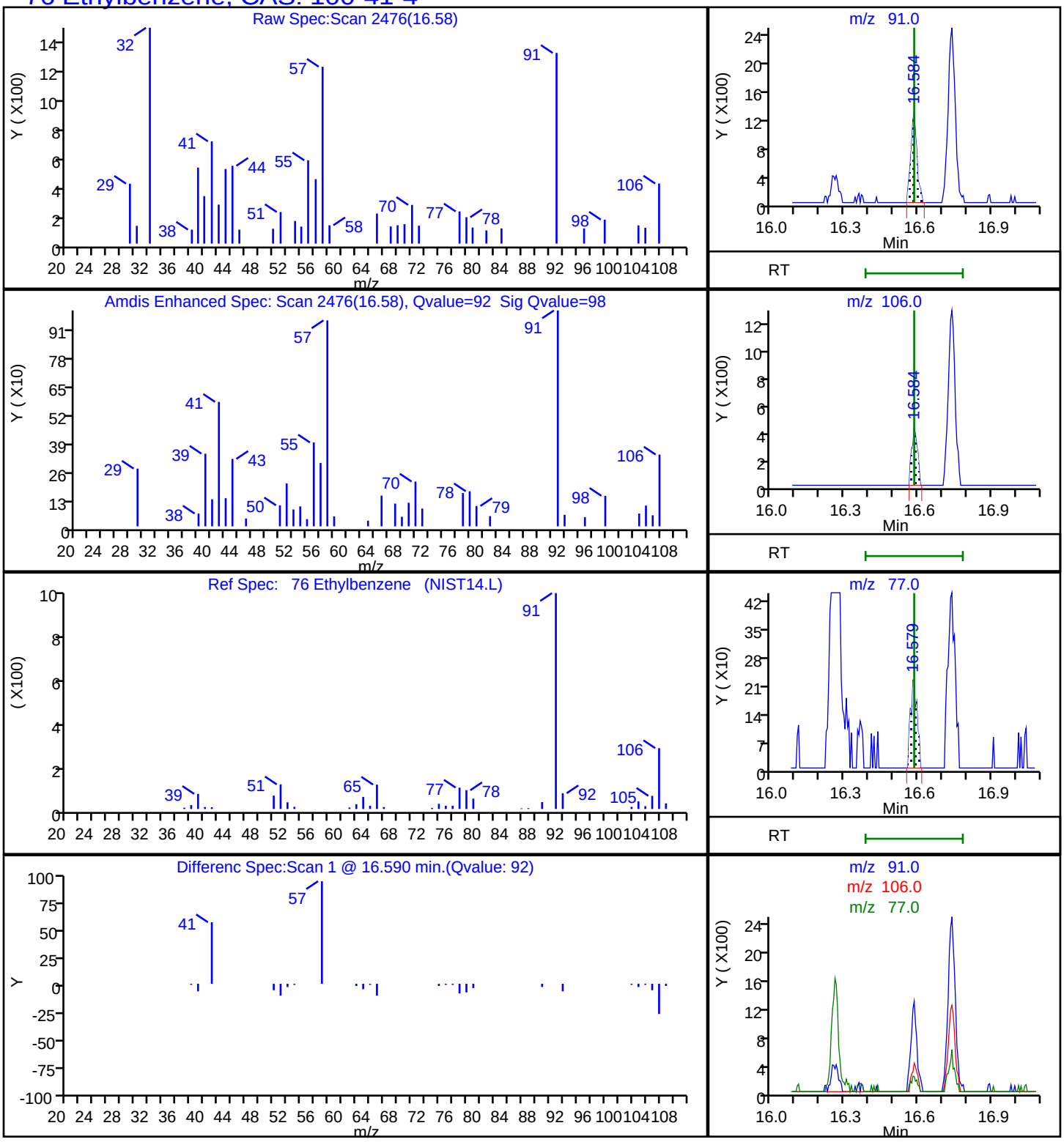
8 Dichlorodifluoromethane, CAS: 75-71-8



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P110.D				
Injection Date:	07-Sep-2020 00:57:30	Instrument ID:	MH		
Lims ID:	140-20175-A-27	Lab Sample ID:	140-20175-27		
Client ID:	IA-DUP1-C-29				
Operator ID:	HMT	ALS Bottle#:	10	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

76 Ethylbenzene, CAS: 100-41-4

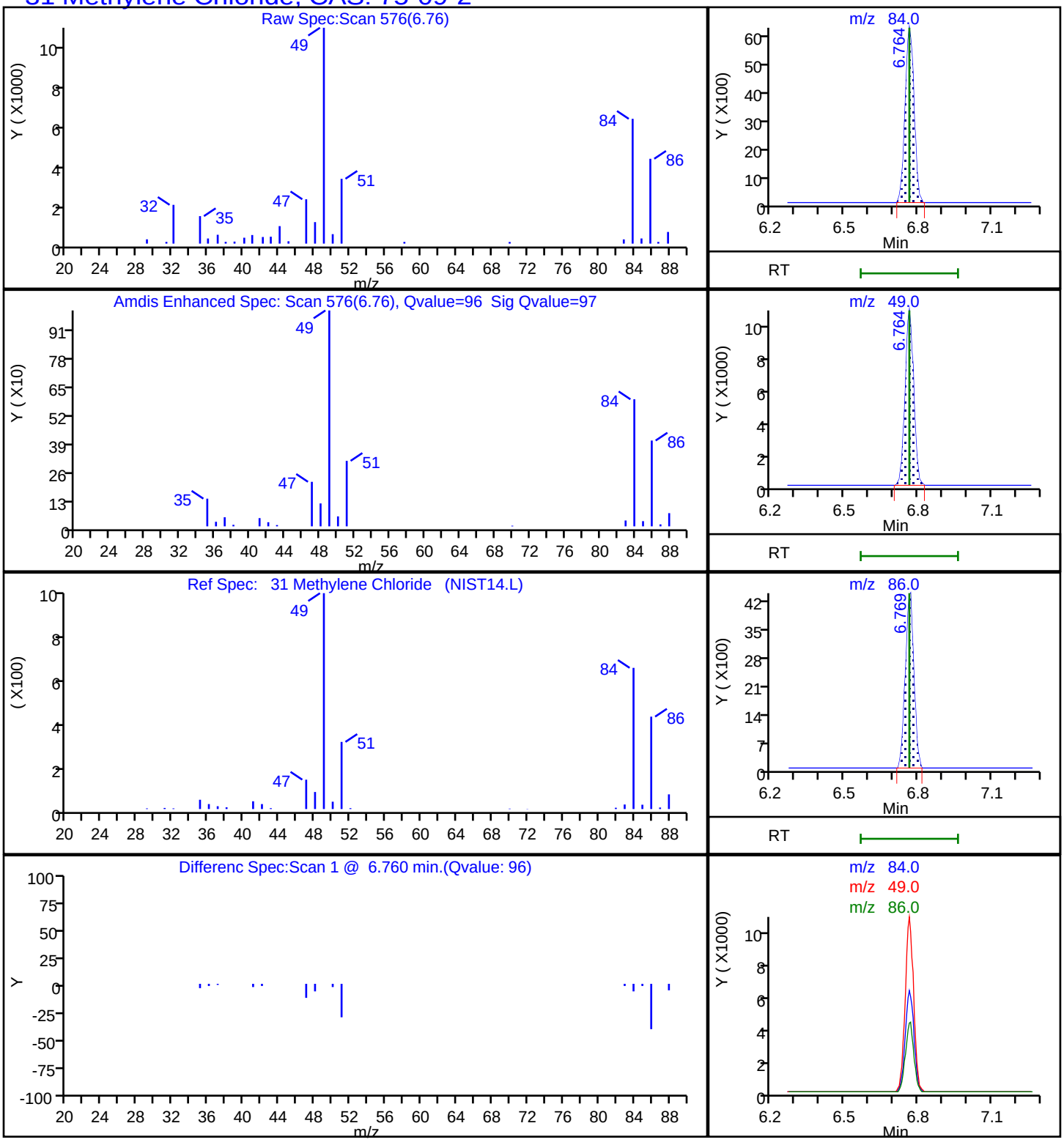


Report Date: 07-Sep-2020 07:44:03 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P110.D				
Injection Date:	07-Sep-2020 00:57:30	Instrument ID:	MH		
Lims ID:	140-20175-A-27	Lab Sample ID:	140-20175-27		
Client ID:	IA-DUP1-C-29				
Operator ID:	HMT	ALS Bottle#:	10	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

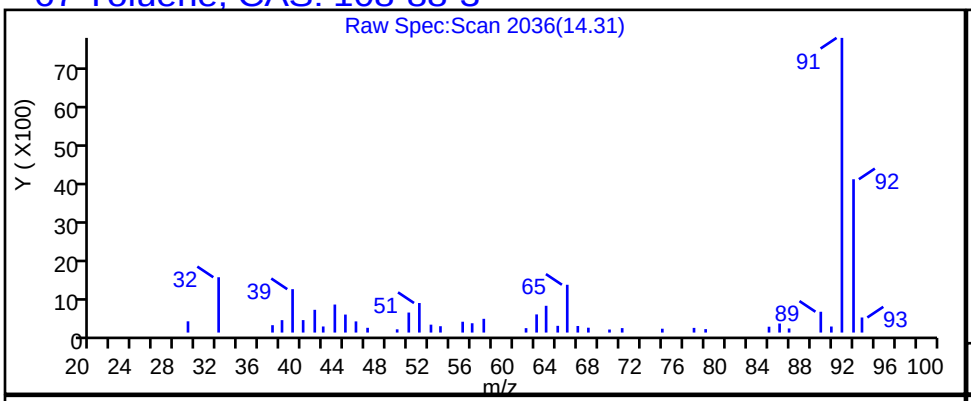
31 Methylene Chloride, CAS: 75-09-2

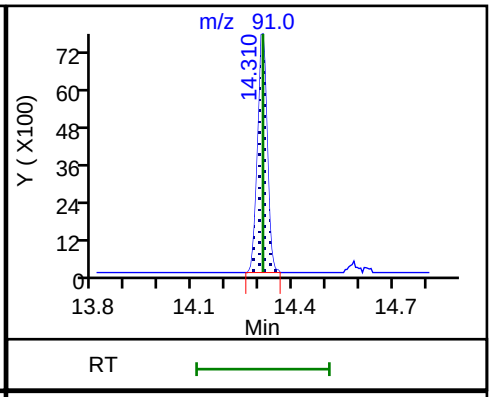


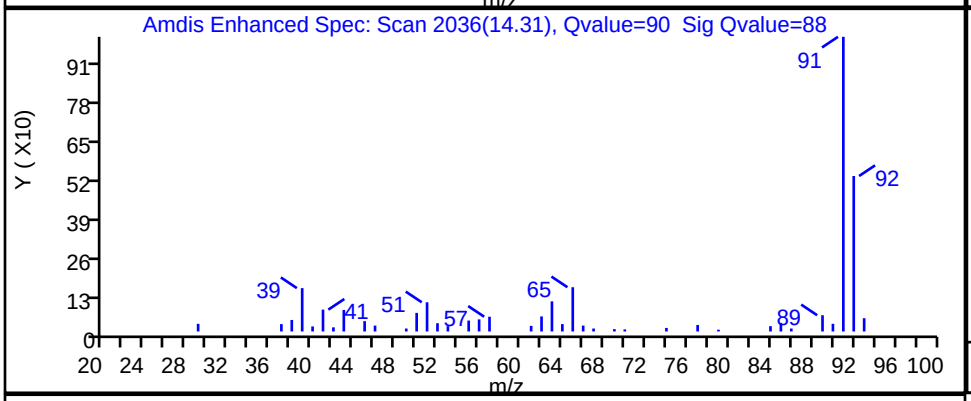
Eurofins TestAmerica, Knoxville

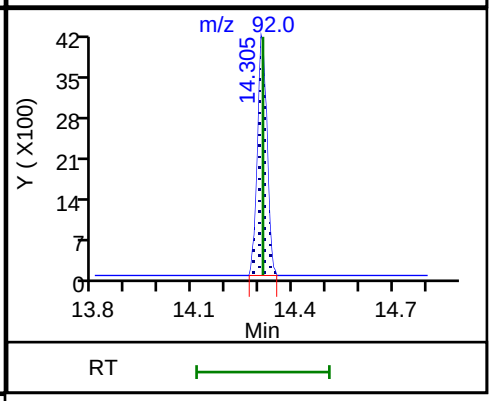
Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P110.D				
Injection Date:	07-Sep-2020 00:57:30	Instrument ID:	MH		
Lims ID:	140-20175-A-27	Lab Sample ID:	140-20175-27		
Client ID:	IA-DUP1-C-29				
Operator ID:	HMT	ALS Bottle#:	10	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

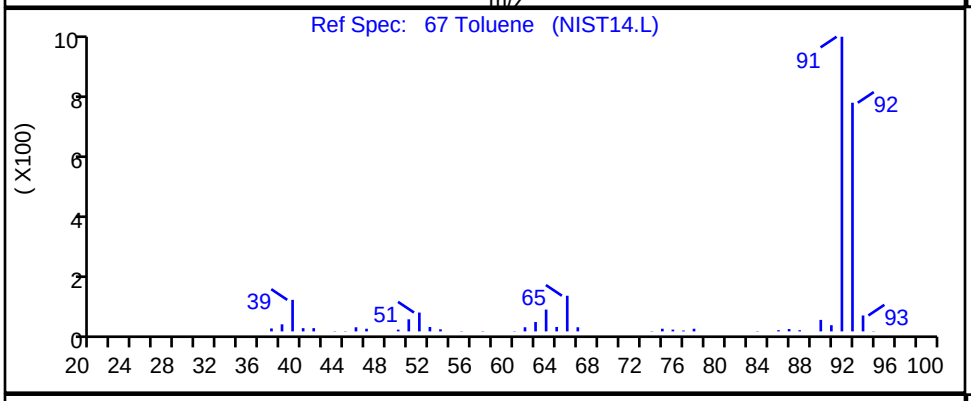
67 Toluene, CAS: 108-88-3

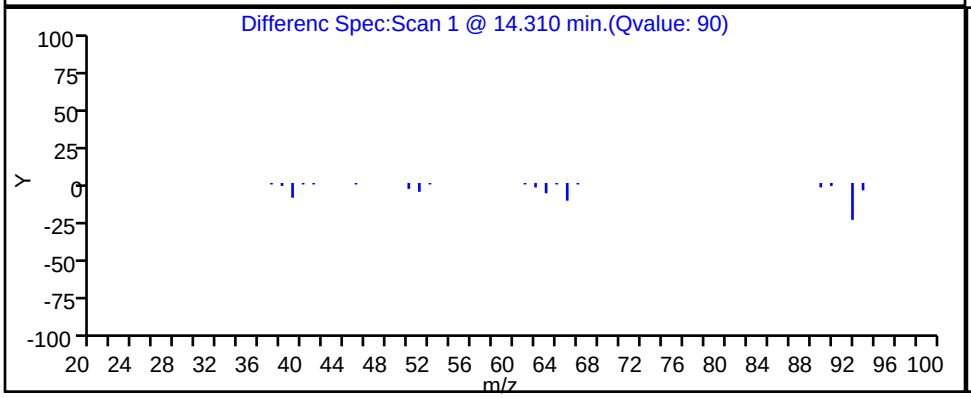


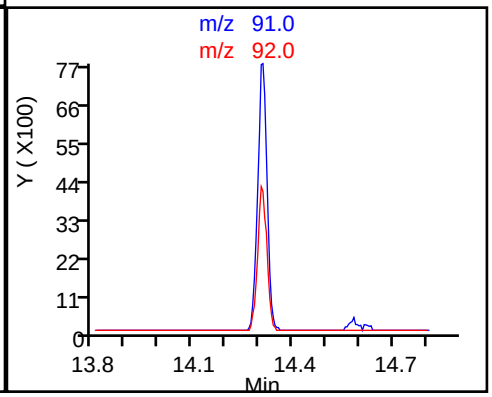










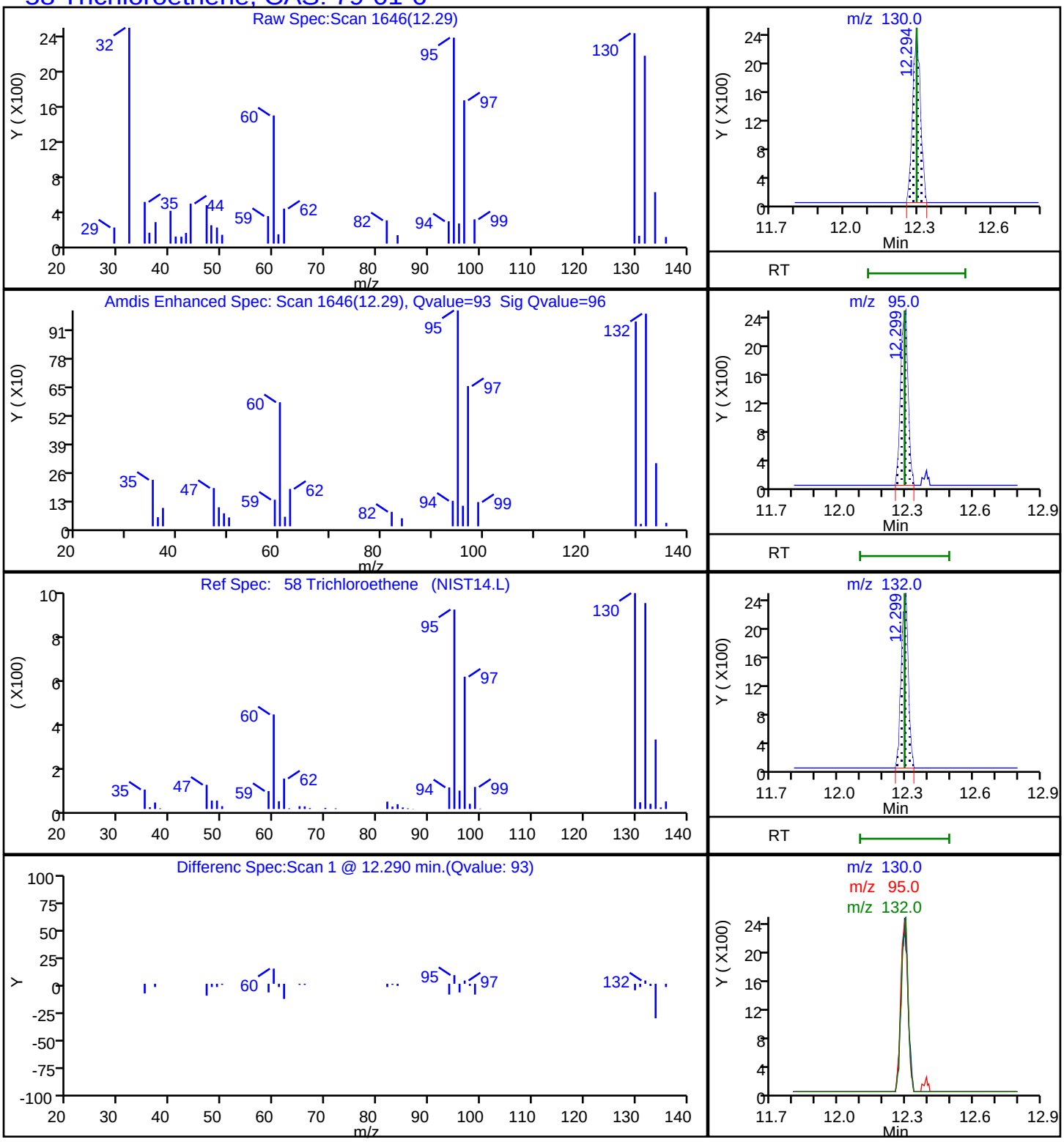


Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P110.D

Injection Date:	07-Sep-2020 00:57:30	Instrument ID:	MH		
Lims ID:	140-20175-A-27	Lab Sample ID:	140-20175-27		
Client ID:	IA-DUP1-C-29				
Operator ID:	HMT	ALS Bottle#:	10	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

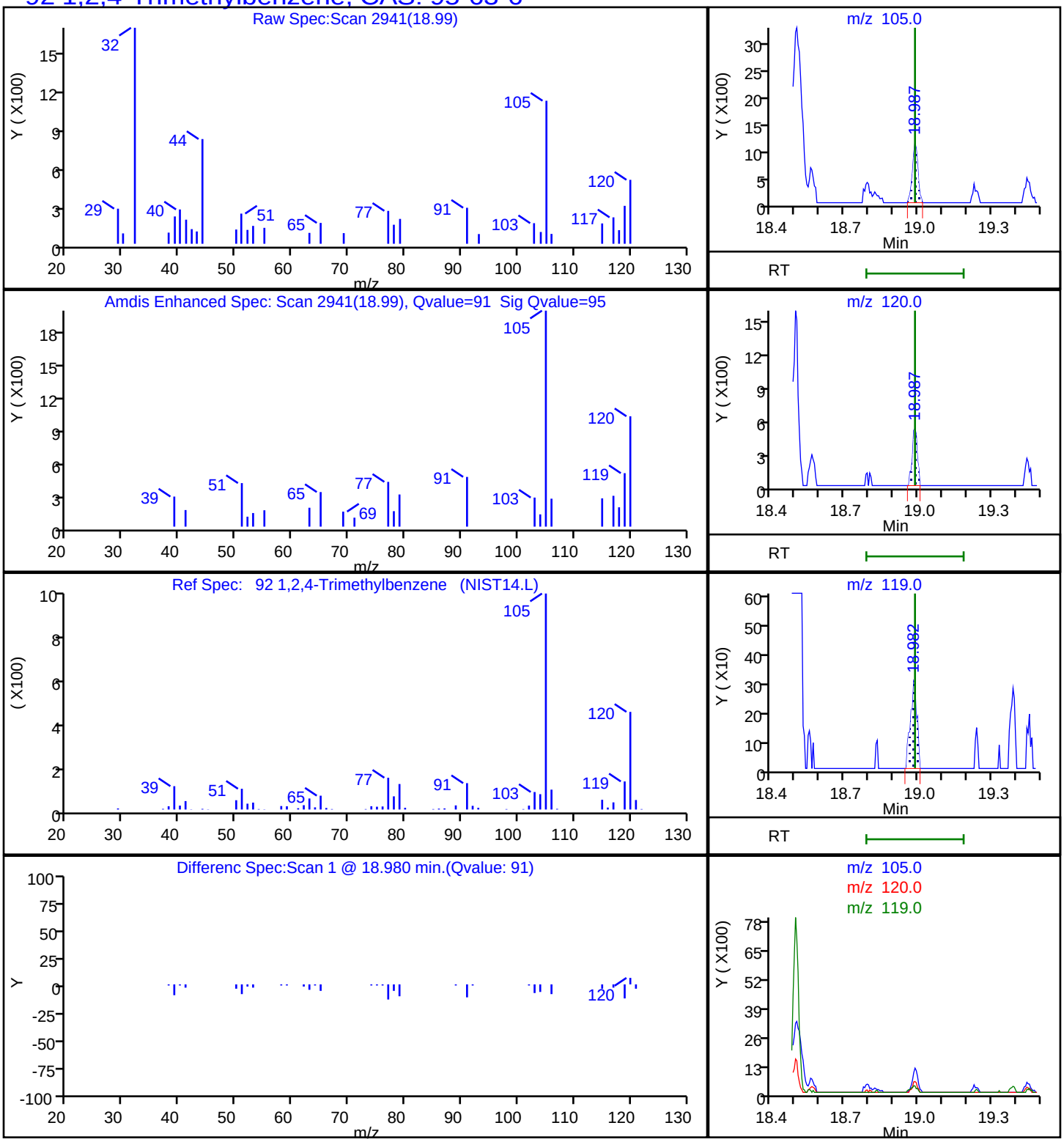
58 Trichloroethene, CAS: 79-01-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P110.D				
Injection Date:	07-Sep-2020 00:57:30	Instrument ID:	MH		
Lims ID:	140-20175-A-27	Lab Sample ID:	140-20175-27		
Client ID:	IA-DUP1-C-29				
Operator ID:	HMT	ALS Bottle#:	10	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

92 1,2,4-Trimethylbenzene, CAS: 95-63-6

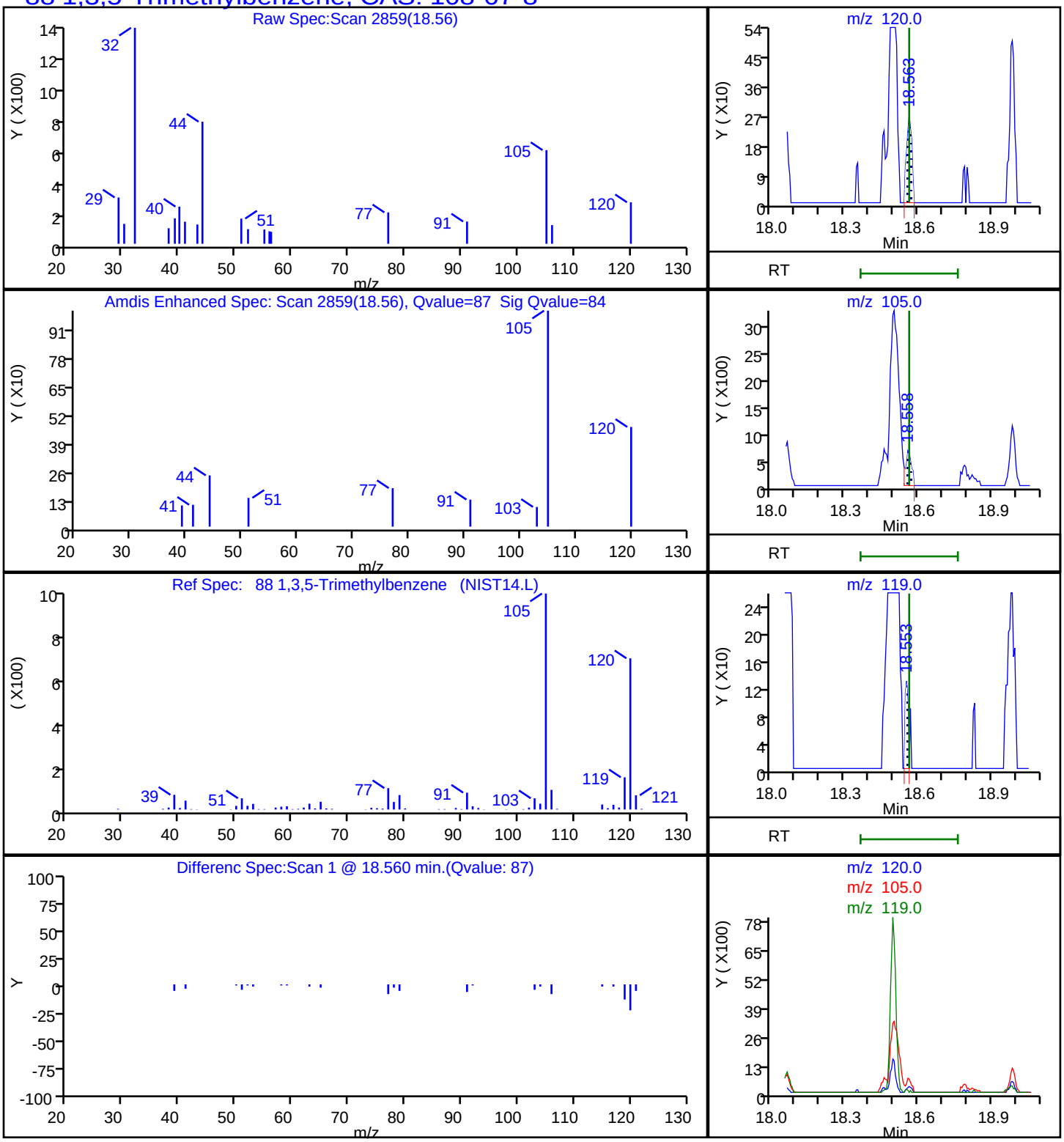


Report Date: 07-Sep-2020 07:44:03 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P110.D				
Injection Date:	07-Sep-2020 00:57:30	Instrument ID:	MH		
Lims ID:	140-20175-A-27	Lab Sample ID:	140-20175-27		
Client ID:	IA-DUP1-C-29				
Operator ID:	HMT	ALS Bottle#:	10	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

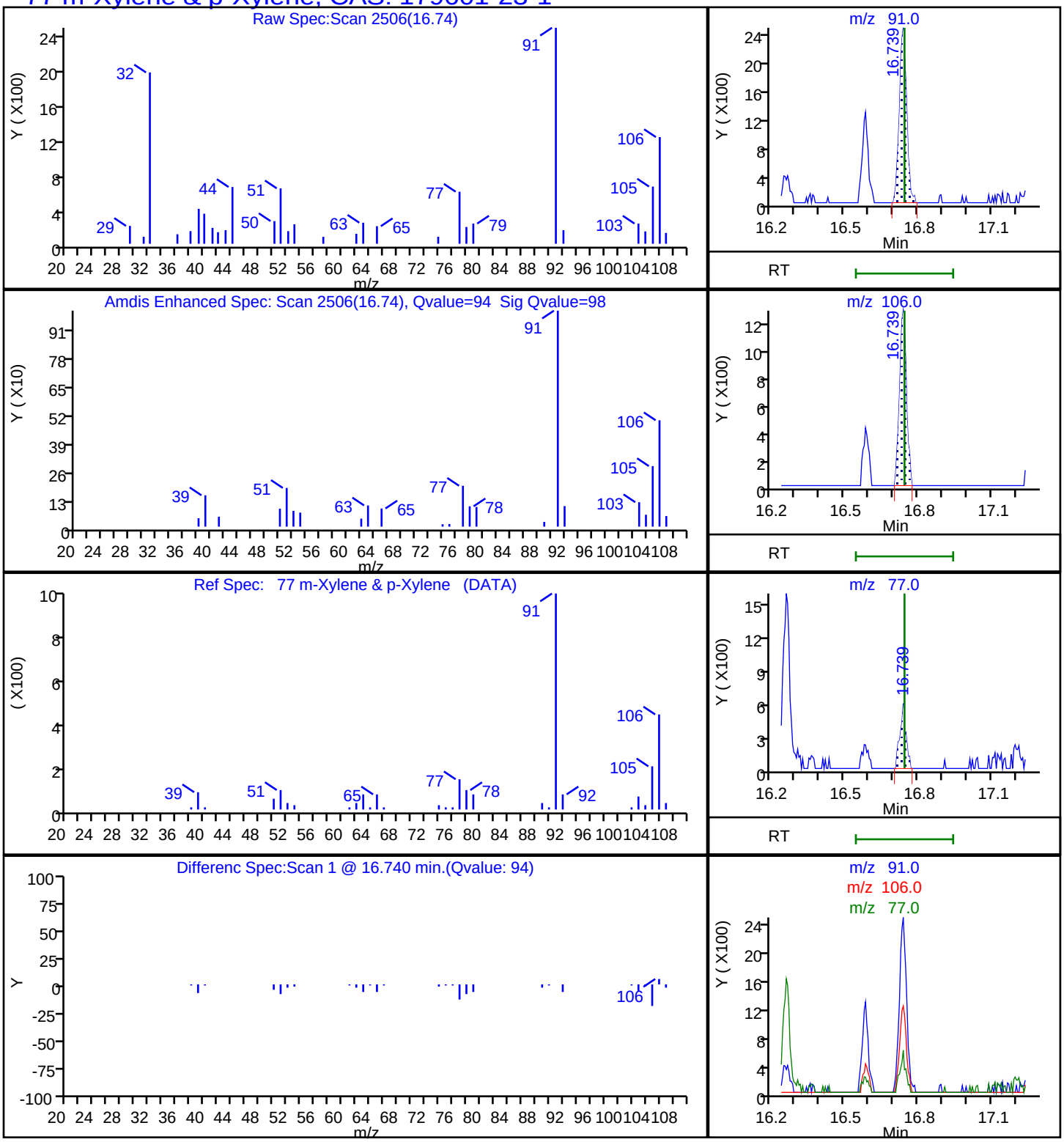
88 1,3,5-Trimethylbenzene, CAS: 108-67-8



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P110.D				
Injection Date:	07-Sep-2020 00:57:30	Instrument ID:	MH		
Lims ID:	140-20175-A-27	Lab Sample ID:	140-20175-27		
Client ID:	IA-DUP1-C-29				
Operator ID:	HMT	ALS Bottle#:	10	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

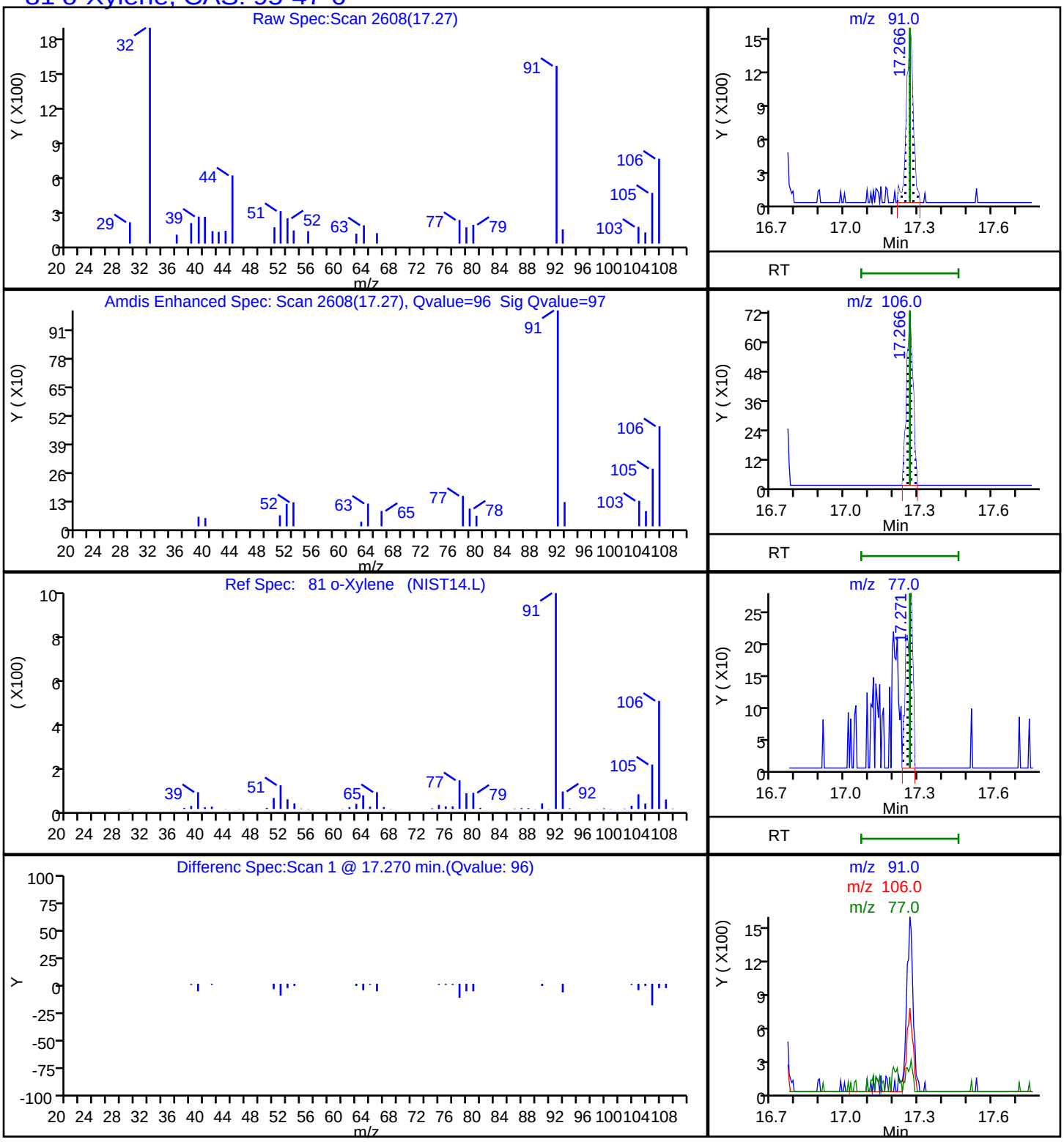
77 m-Xylene & p-Xylene, CAS: 179601-23-1



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P110.D				
Injection Date:	07-Sep-2020 00:57:30	Instrument ID:	MH		
Lims ID:	140-20175-A-27	Lab Sample ID:	140-20175-27		
Client ID:	IA-DUP1-C-29				
Operator ID:	HMT	ALS Bottle#:	10	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

81 o-Xylene, CAS: 95-47-6



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: IA-060-C-29 Lab Sample ID: 140-20175-28

Matrix: Air Lab File ID: HI07P111.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 16:35

Sample wt/vol: 100(mL) Date Analyzed: 09/07/2020 01:52

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42498 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.21	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.11	J *	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	5.5		0.40	0.11
67-66-3	Chloroform	119.38	0.11	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.56		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	0.13	J	0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.035
108-88-3	Toluene	92.14	1.4		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	ND		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	0.14	J *	0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	0.28	J	0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.77	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	99		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: IA-060-C-29 Lab Sample ID: 140-20175-28

Matrix: Air Lab File ID: HI07P111.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 16:35

Sample wt/vol: 100(mL) Date Analyzed: 09/07/2020 01:52

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42498 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.68	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.69	J *	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	19		1.4	0.39
67-66-3	Chloroform	119.38	0.56	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.8		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	0.58	J	1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.24
108-88-3	Toluene	92.14	5.2		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	ND		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	0.67	J *	2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	1.4	J	2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	3.3	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	99		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P111.D				
Lims ID:	140-20175-A-28				
Client ID:	IA-060-C-29				
Sample Type:	Client				
Inject. Date:	07-Sep-2020 01:52:30	ALS Bottle#:	11	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016514-016				
Misc. Info.:	140-20175-a-28				
Operator ID:	HMT	Instrument ID:	MH		
Method:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\MH_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	07-Sep-2020 07:43:45	Calib Date:	29-Aug-2020 23:57:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1015				
First Level Reviewer: tajh		Date:	07-Sep-2020 07:42:34		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.436	9.431	0.005	97	92287	4.80	
* 2 1,4-Difluorobenzene	114	11.591	11.591	0.000	95	364744	4.80	
* 3 Chlorobenzene-d5 (IS)	117	16.258	16.258	0.000	88	265631	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.876	17.876	0.000	91	141270	4.58	
6 Chlorodifluoromethane	51	3.916	3.916	0.000	97	56502	1.10	
8 Dichlorodifluoromethane	85	3.988	3.983	0.005	99	7819	0.1121	
44 Chloroform	83	9.431	9.436	-0.005	28	1283	0.0229	
51 Benzene	78	11.074	11.074	0.000	72	2831	0.0423	
52 Carbon tetrachloride	117	11.100	11.095	0.005	47	910	0.0220	
67 Toluene	91	14.310	14.310	0.000	91	19043	0.2783	
76 Ethylbenzene	91	16.584	16.584	0.000	86	2202	0.0266	
77 m-Xylene & p-Xylene	91	16.744	16.744	0.000	93	5833	0.0891	
81 o-Xylene	91	17.261	17.266	-0.005	96	4369	0.0637	
88 1,3,5-Trimethylbenzene	120	18.563	18.563	0.000	16	391	0.0568	
92 1,2,4-Trimethylbenzene	105	18.987	18.987	0.000	93	2157	0.0272	
S 116 Xylenes, Total	100				0		0.1528	

Reagents:

40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

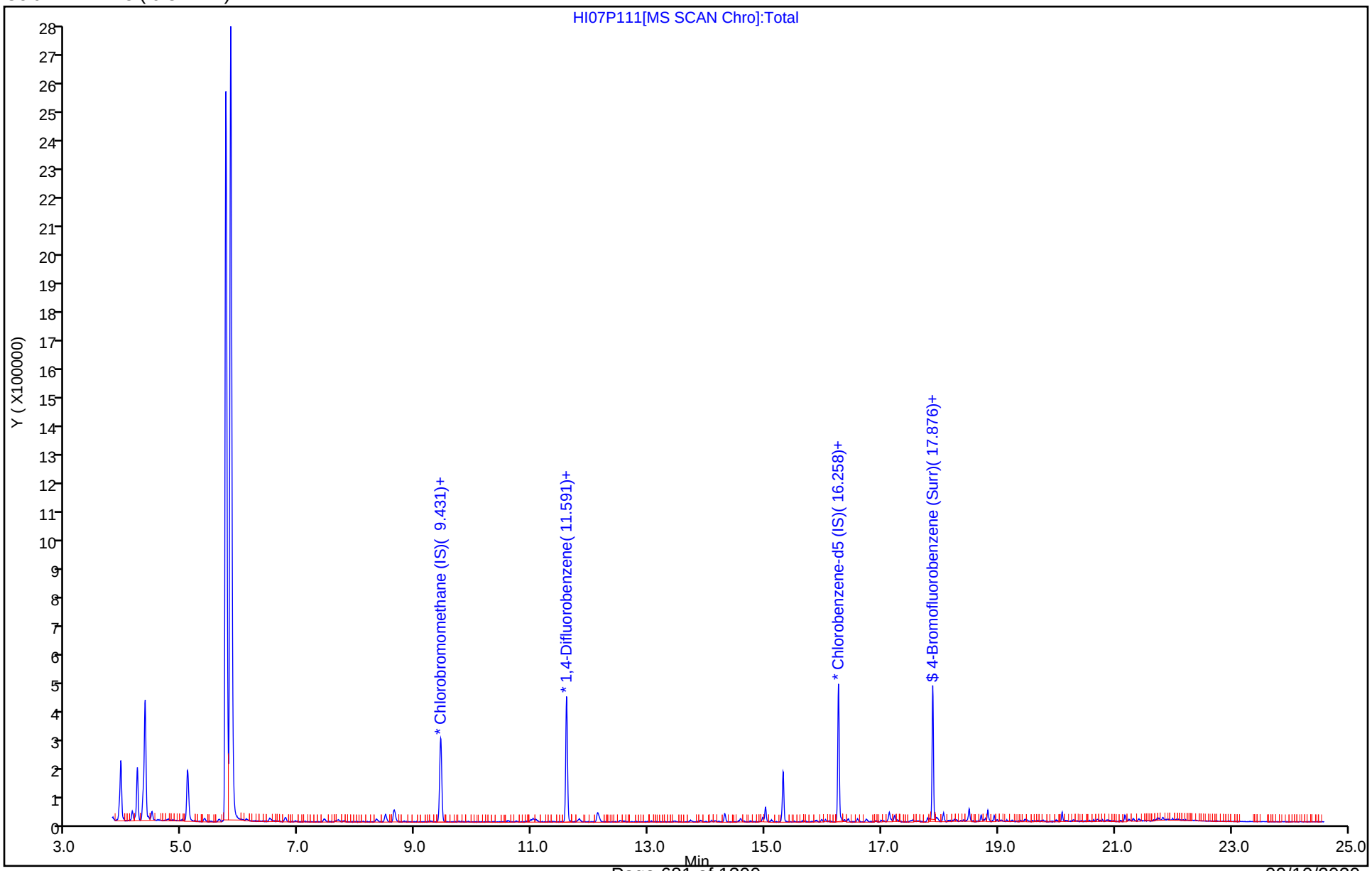
Report Date: 07-Sep-2020 07:44:05 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P111.D

Injection Date:	07-Sep-2020 01:52:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	140-20175-A-28	Lab Sample ID:	140-20175-28	Worklist Smp#:	16
Client ID:	IA-060-C-29				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

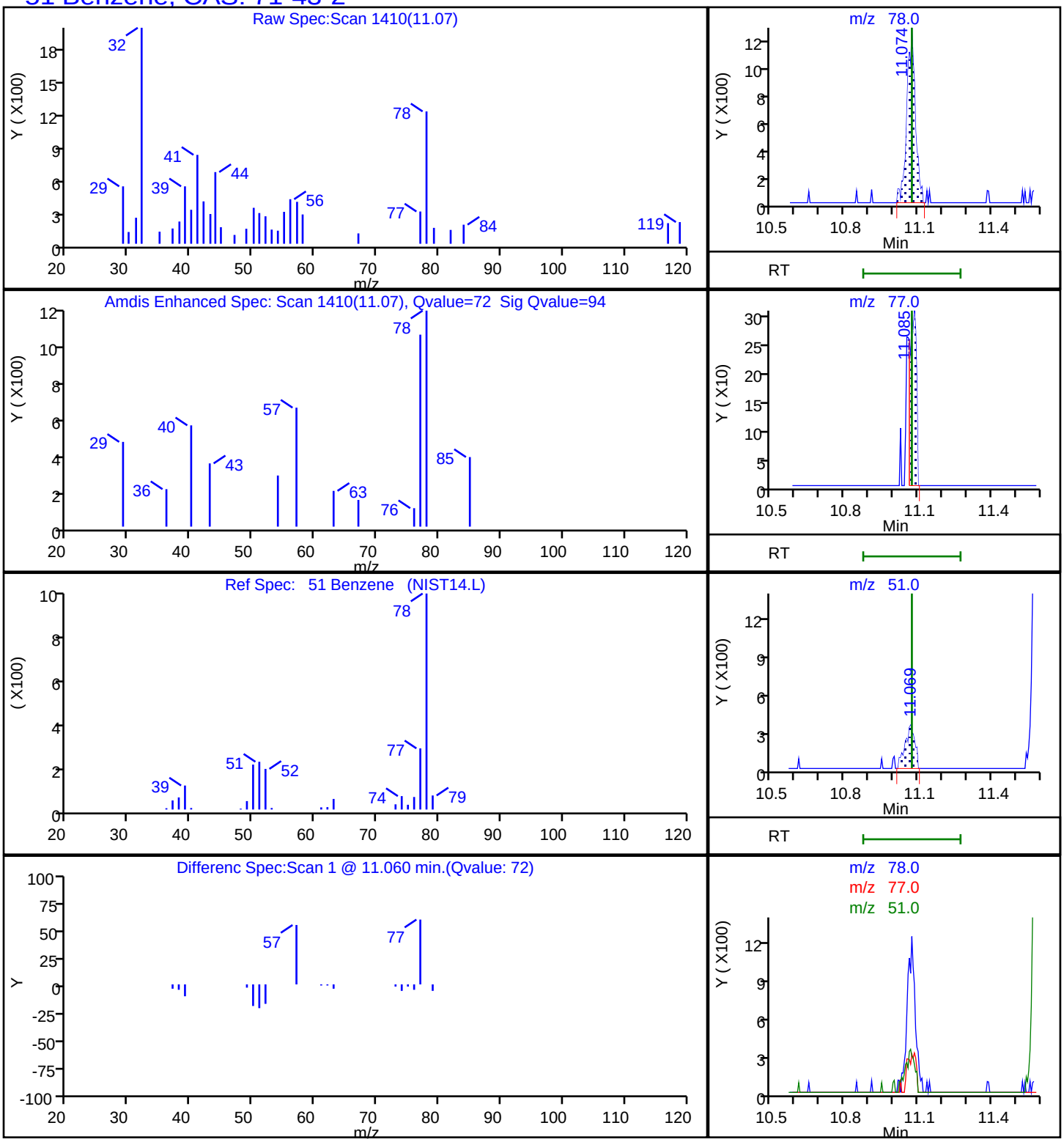
Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P111.D				
Lims ID:	140-20175-A-28				
Client ID:	IA-060-C-29				
Sample Type:	Client				
Inject. Date:	07-Sep-2020 01:52:30	ALS Bottle#:	11	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016514-016				
Misc. Info.:	140-20175-a-28				
Operator ID:	HMT	Instrument ID:	MH		
Method:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\MH_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	07-Sep-2020 07:43:45	Calib Date:	29-Aug-2020 23:57:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1015				
First Level Reviewer: tajh		Date:	07-Sep-2020 07:42:34		

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	4.58	98.65

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P111.D		
Injection Date:	07-Sep-2020 01:52:30	Instrument ID:	MH
Lims ID:	140-20175-A-28	Lab Sample ID:	140-20175-28
Client ID:	IA-060-C-29		
Operator ID:	HMT	ALS Bottle#:	11 Worklist Smp#: 16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

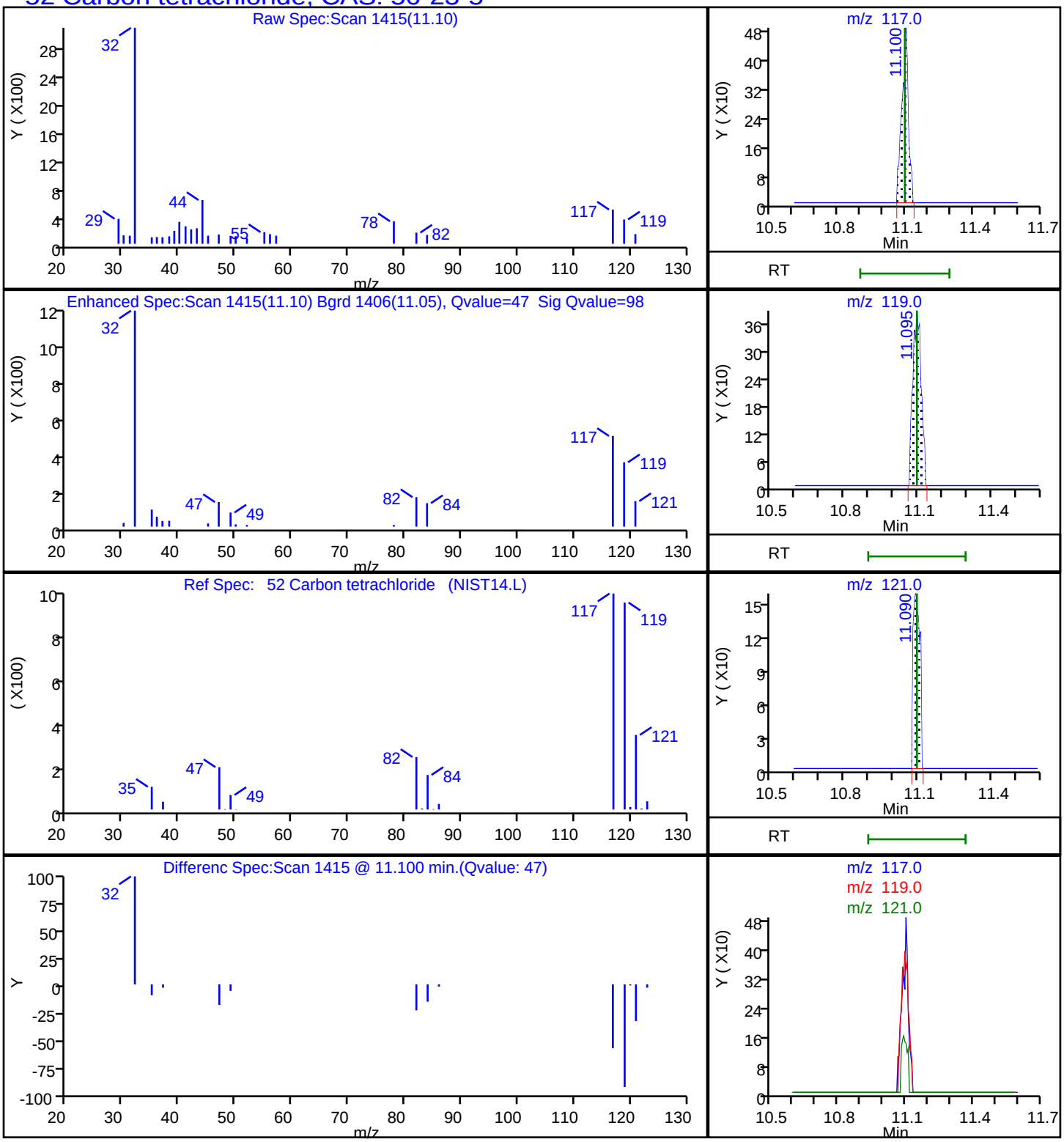
51 Benzene, CAS: 71-43-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P111.D				
Injection Date:	07-Sep-2020 01:52:30	Instrument ID:	MH		
Lims ID:	140-20175-A-28	Lab Sample ID:	140-20175-28		
Client ID:	IA-060-C-29				
Operator ID:	HMT	ALS Bottle#:	11	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

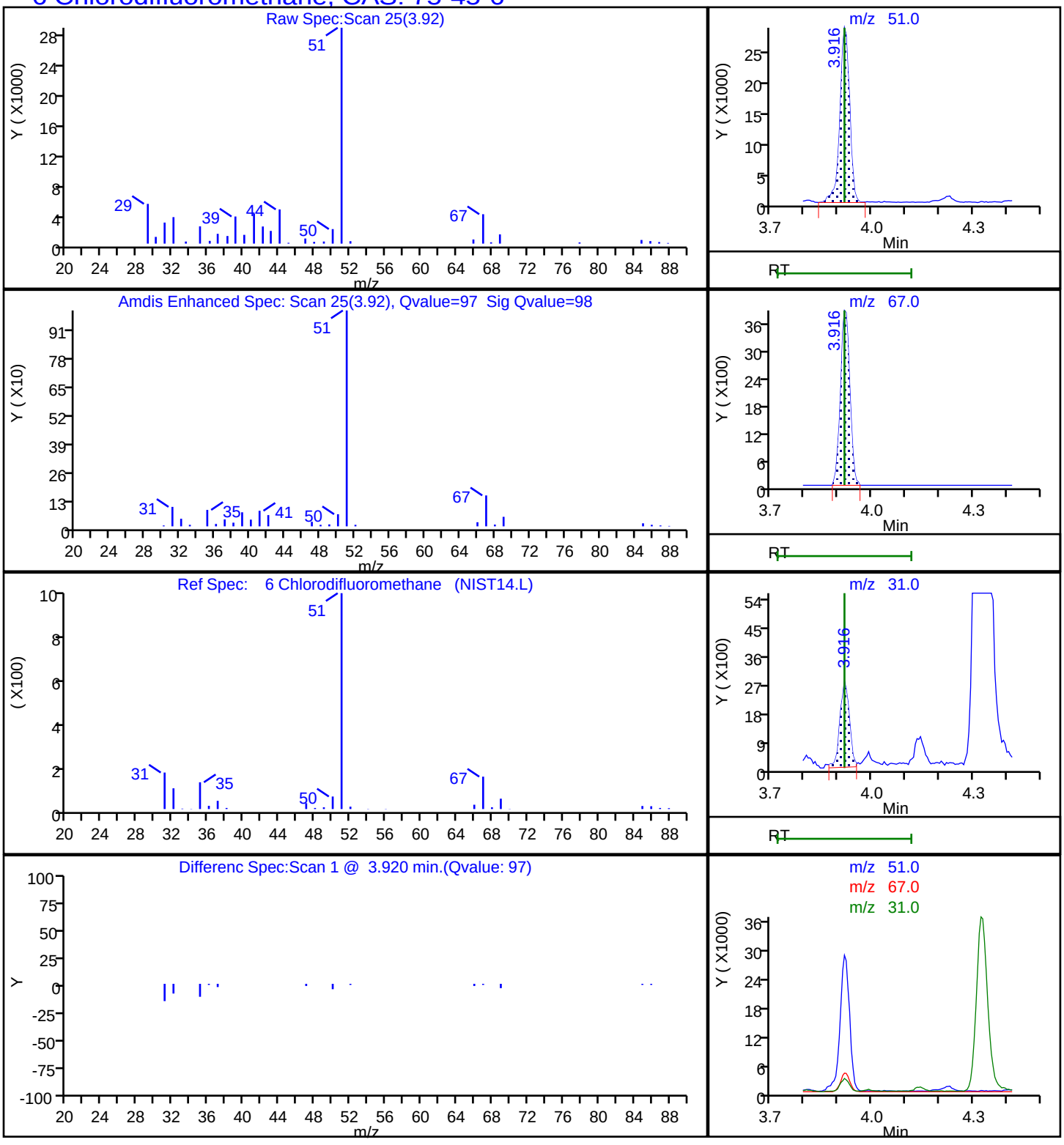
52 Carbon tetrachloride, CAS: 56-23-5



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P111.D				
Injection Date:	07-Sep-2020 01:52:30	Instrument ID:	MH		
Lims ID:	140-20175-A-28	Lab Sample ID:	140-20175-28		
Client ID:	IA-060-C-29				
Operator ID:	HMT	ALS Bottle#:	11	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

6 Chlorodifluoromethane, CAS: 75-45-6

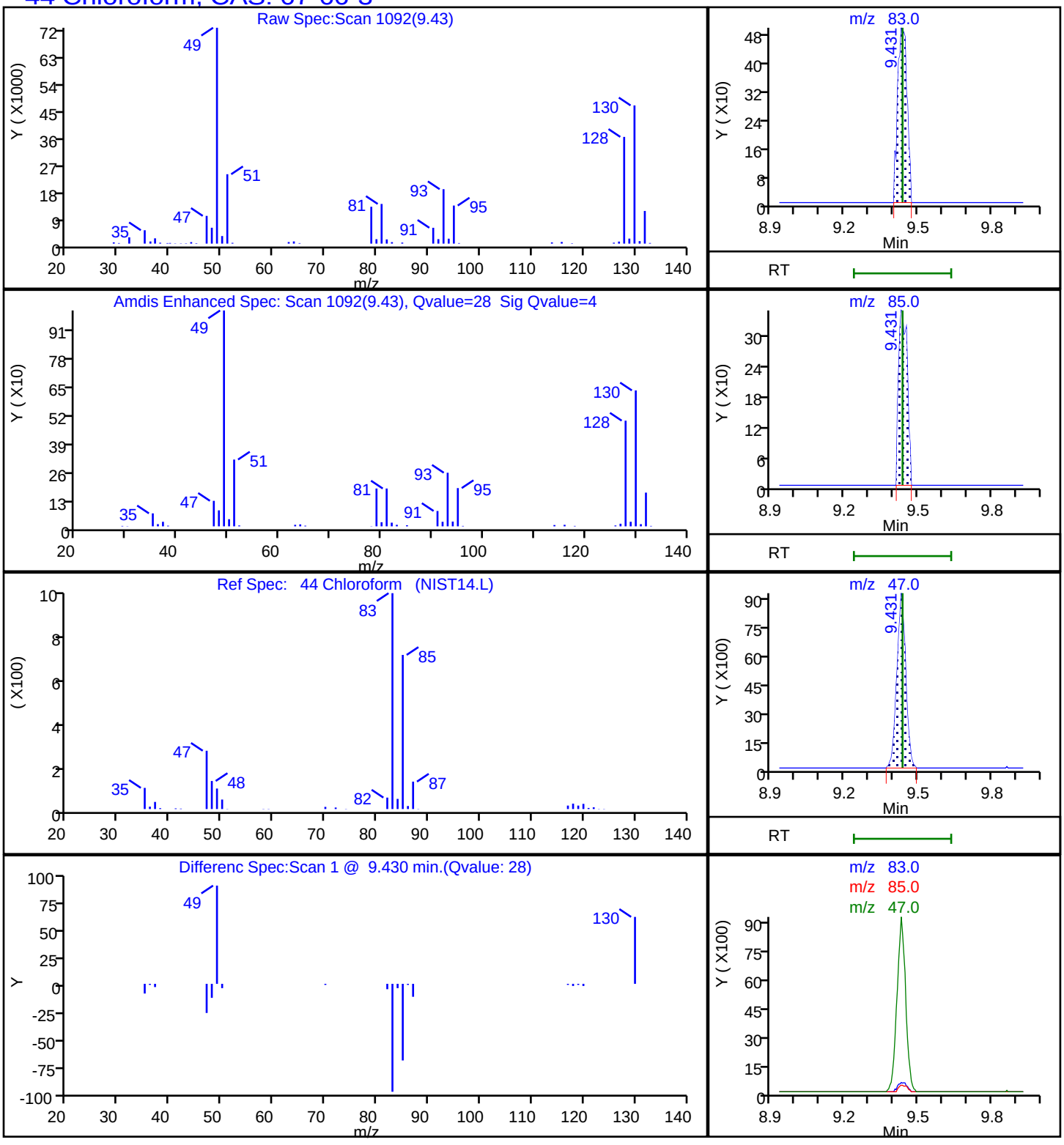


Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P111.D

Injection Date:	07-Sep-2020 01:52:30	Instrument ID:	MH
Lims ID:	140-20175-A-28	Lab Sample ID:	140-20175-28
Client ID:	IA-060-C-29		
Operator ID:	HMT	ALS Bottle#:	11 Worklist Smp#: 16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

44 Chloroform, CAS: 67-66-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P111.D				
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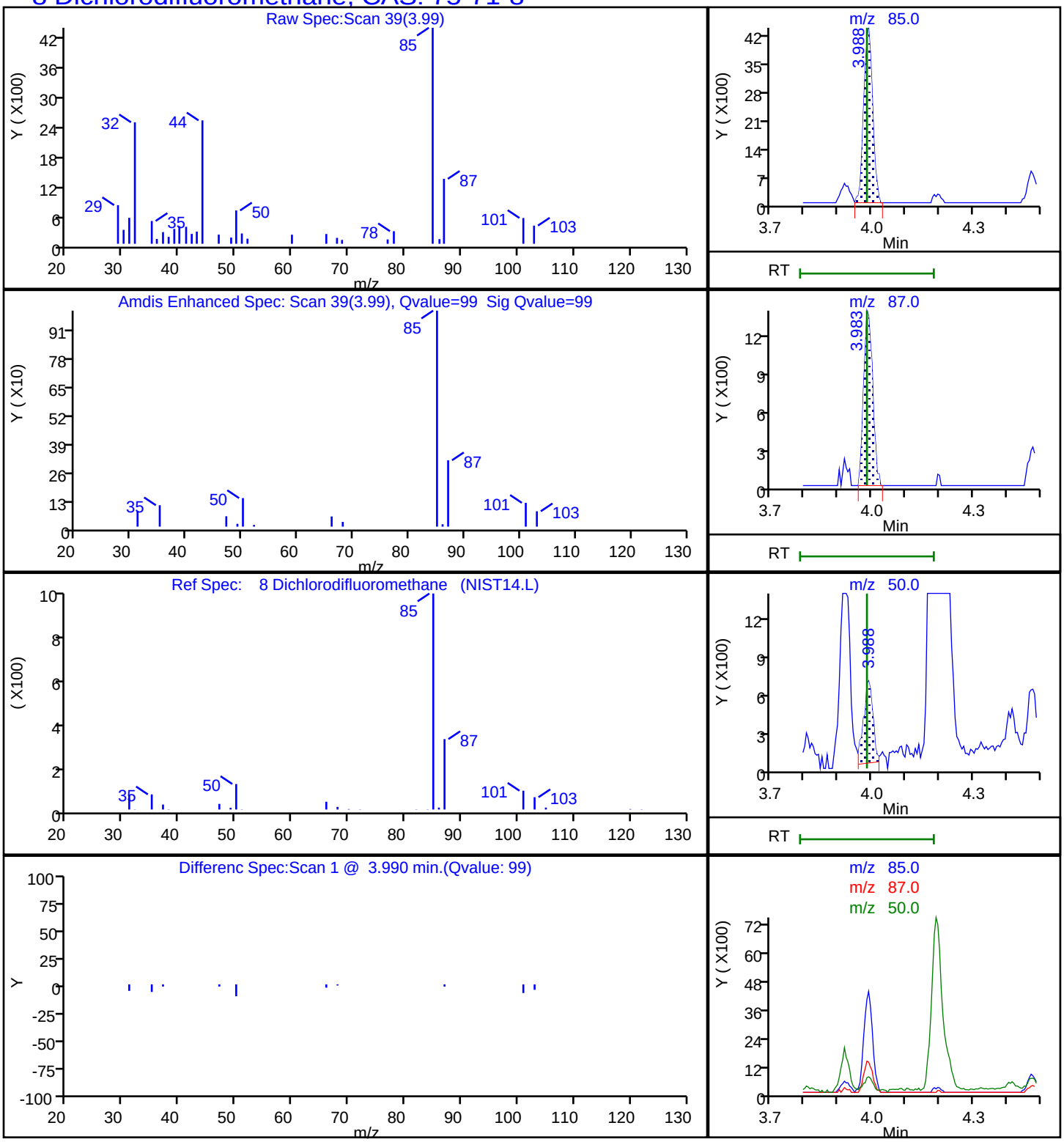
Lims ID:	140-20175-A-28	Lab Sample ID:	140-20175-28		
Client ID:	IA-060-C-29				
Operator ID:	HMT	ALS Bottle#:	11	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

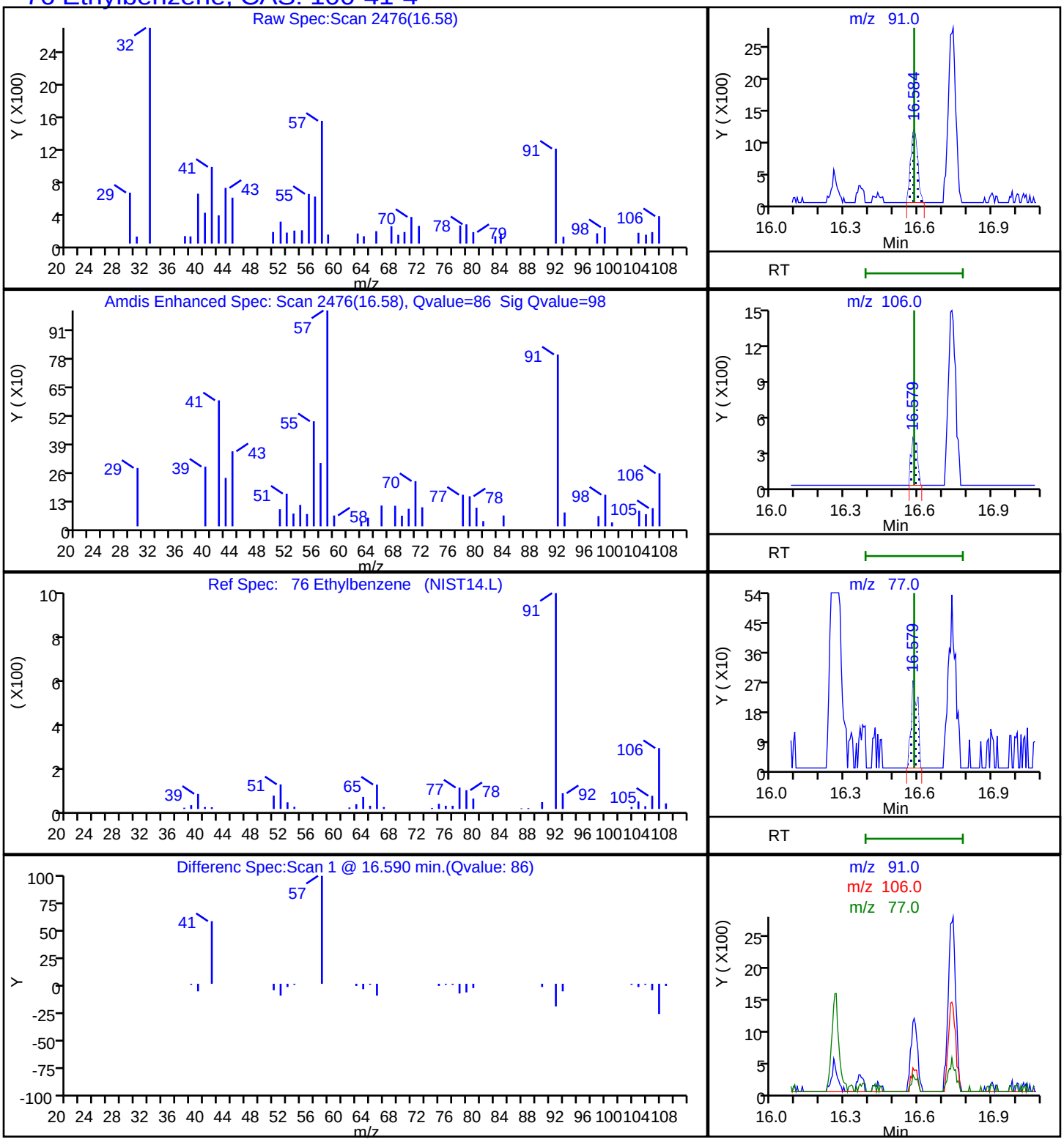
8 Dichlorodifluoromethane, CAS: 75-71-8



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P111.D				
Injection Date:	07-Sep-2020 01:52:30	Instrument ID:	MH		
Lims ID:	140-20175-A-28	Lab Sample ID:	140-20175-28		
Client ID:	IA-060-C-29				
Operator ID:	HMT	ALS Bottle#:	11	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

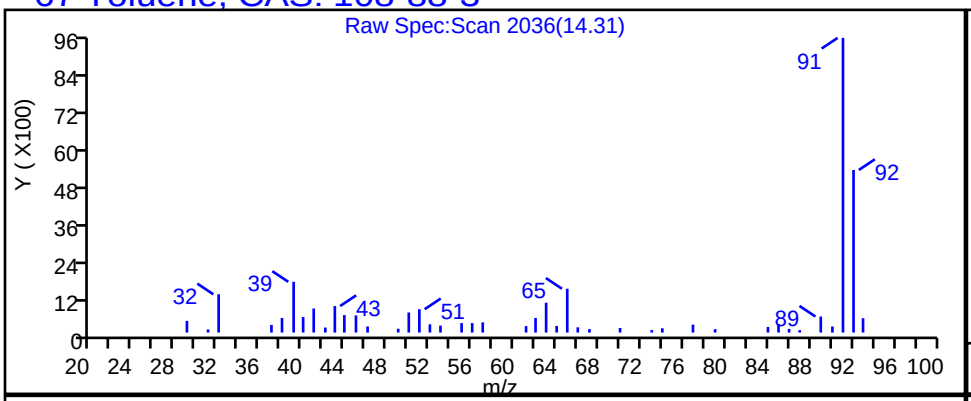
76 Ethylbenzene, CAS: 100-41-4

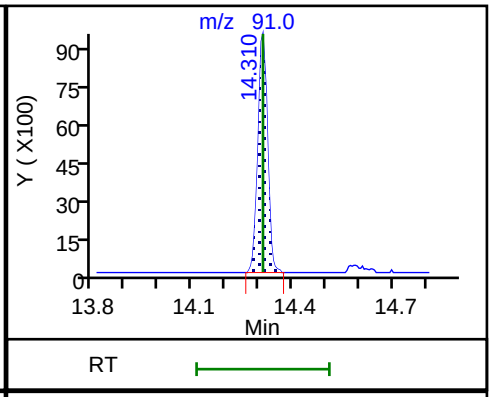


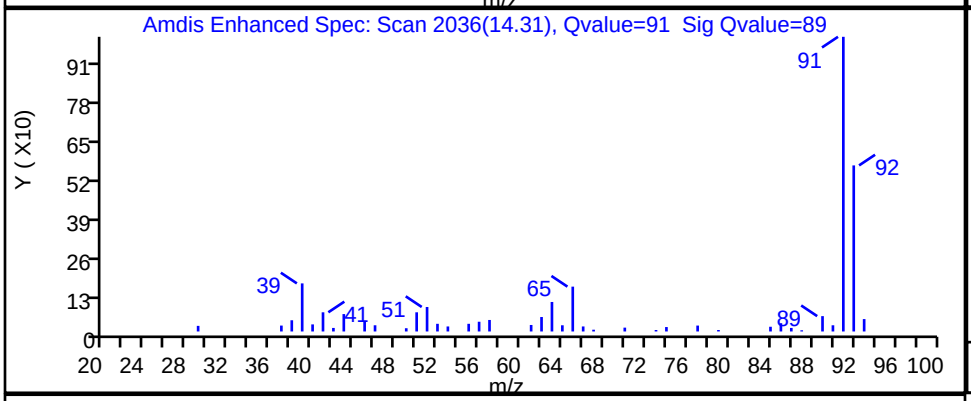
Eurofins TestAmerica, Knoxville

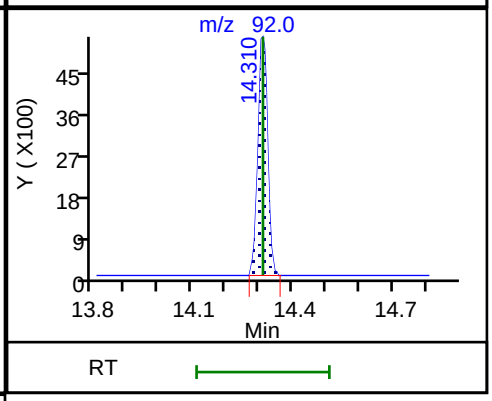
Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P111.D		
Injection Date:	07-Sep-2020 01:52:30	Instrument ID:	MH
Lims ID:	140-20175-A-28	Lab Sample ID:	140-20175-28
Client ID:	IA-060-C-29		
Operator ID:	HMT	ALS Bottle#:	11 Worklist Smp#: 16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

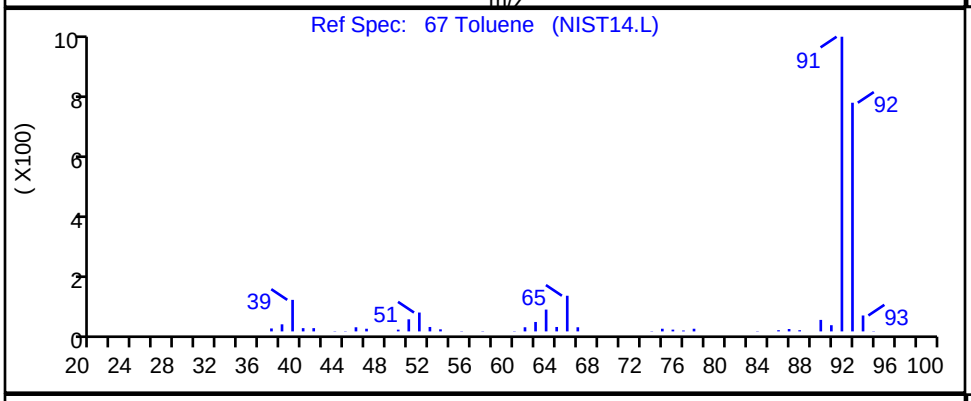
67 Toluene, CAS: 108-88-3

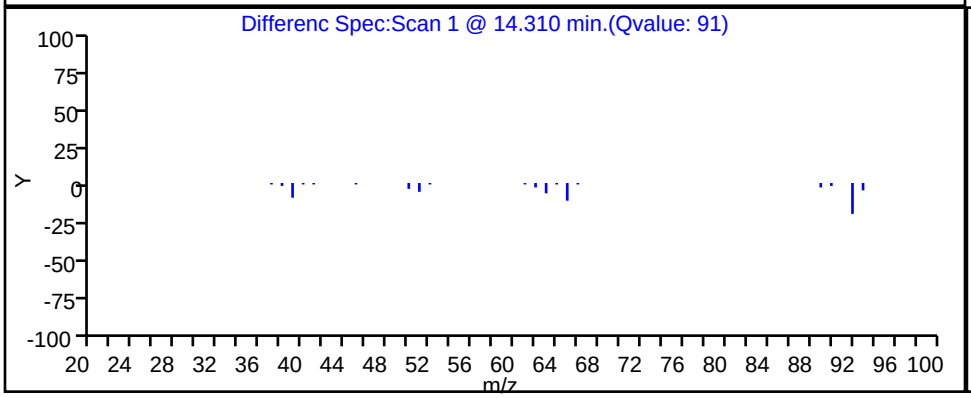


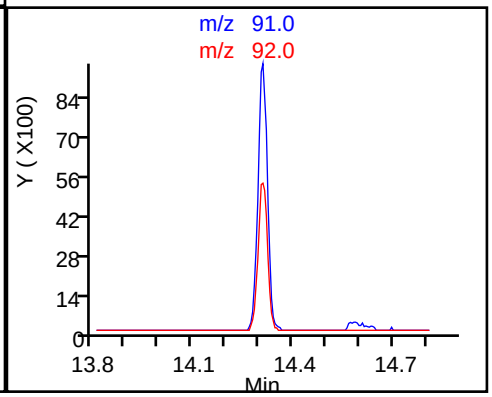








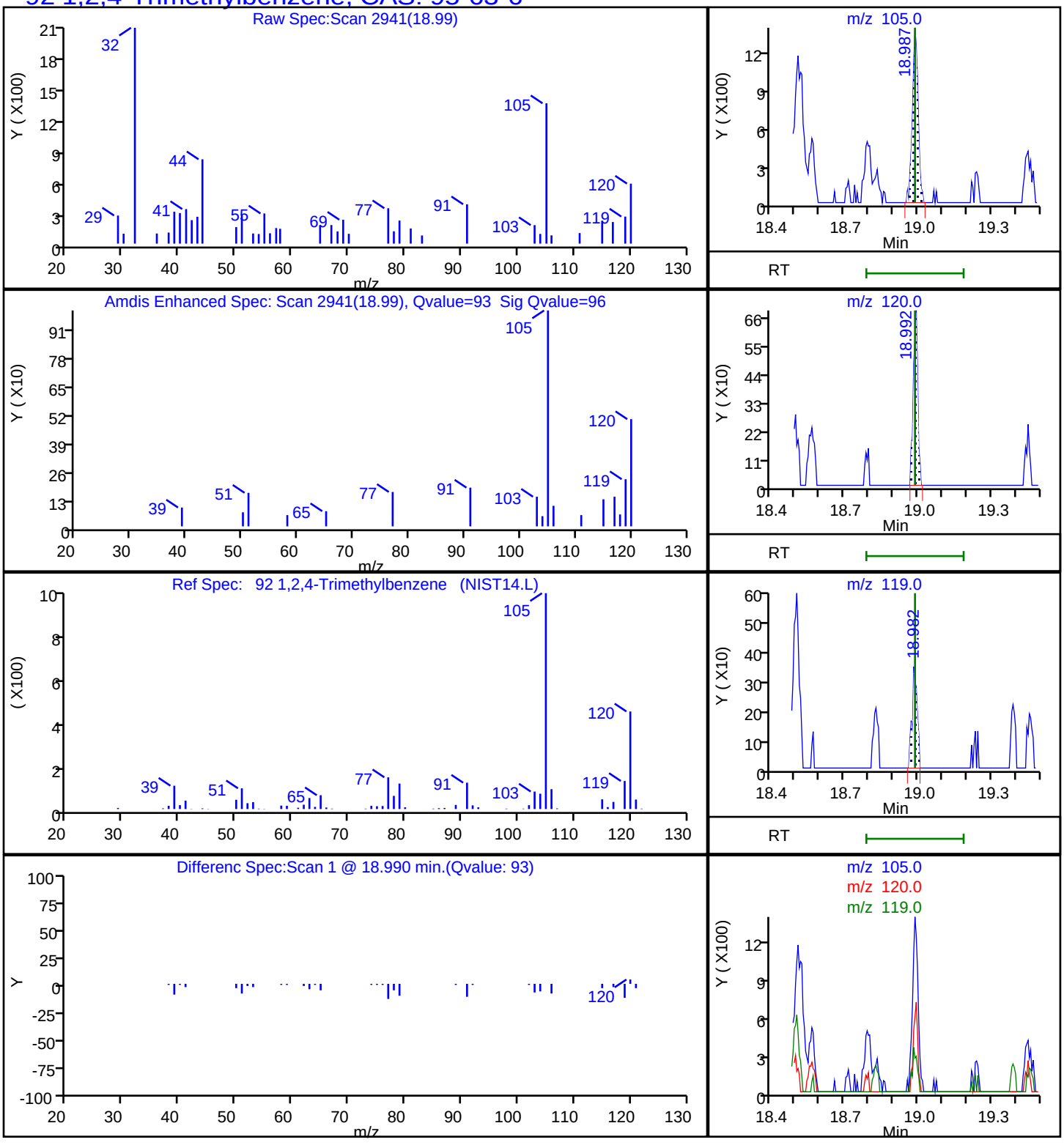




Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P111.D				
Injection Date:	07-Sep-2020 01:52:30	Instrument ID:	MH		
Lims ID:	140-20175-A-28	Lab Sample ID:	140-20175-28		
Client ID:	IA-060-C-29				
Operator ID:	HMT	ALS Bottle#:	11	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

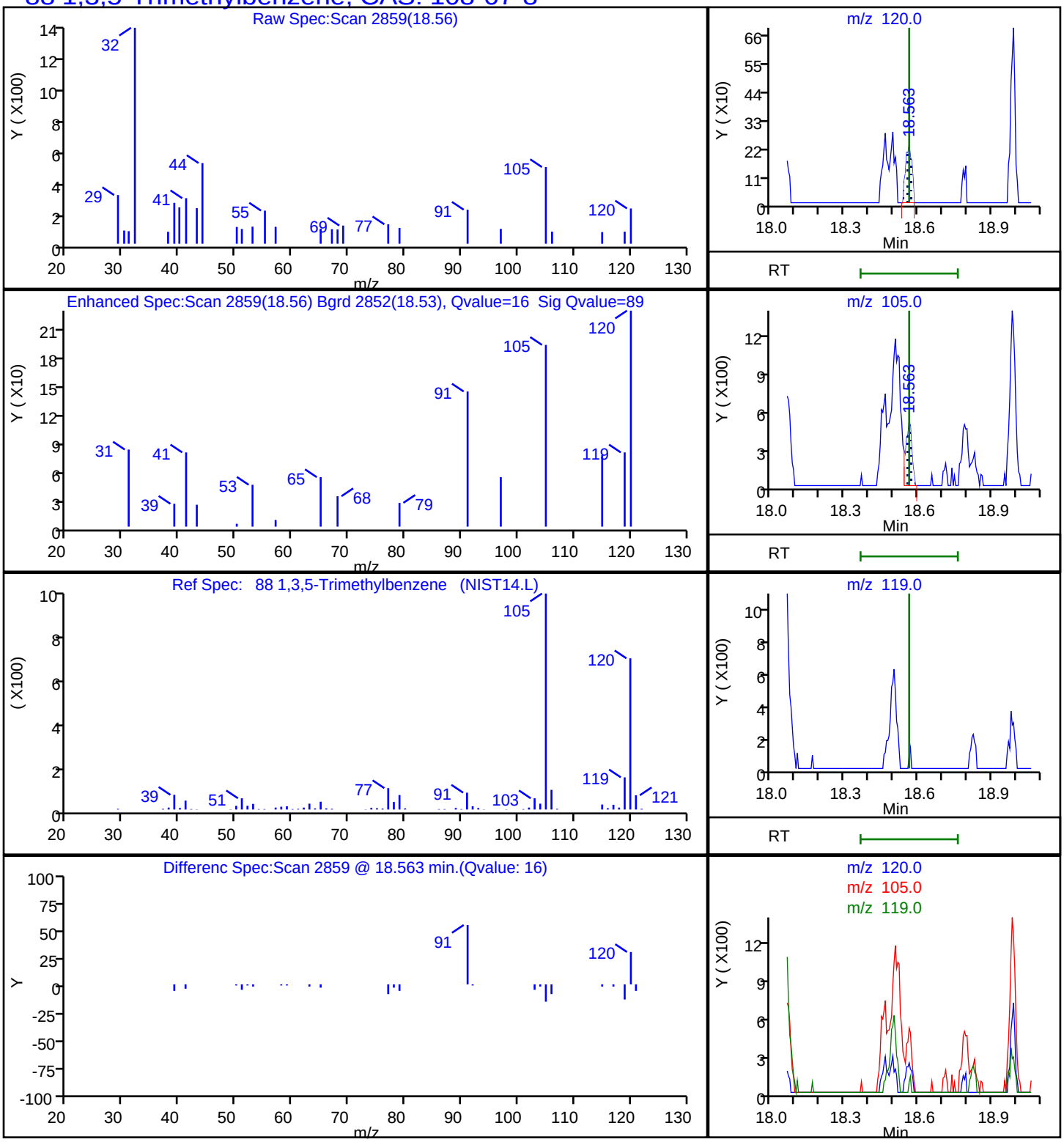
92 1,2,4-Trimethylbenzene, CAS: 95-63-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P111.D				
Injection Date:	07-Sep-2020 01:52:30	Instrument ID:	MH		
Lims ID:	140-20175-A-28	Lab Sample ID:	140-20175-28		
Client ID:	IA-060-C-29				
Operator ID:	HMT	ALS Bottle#:	11	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

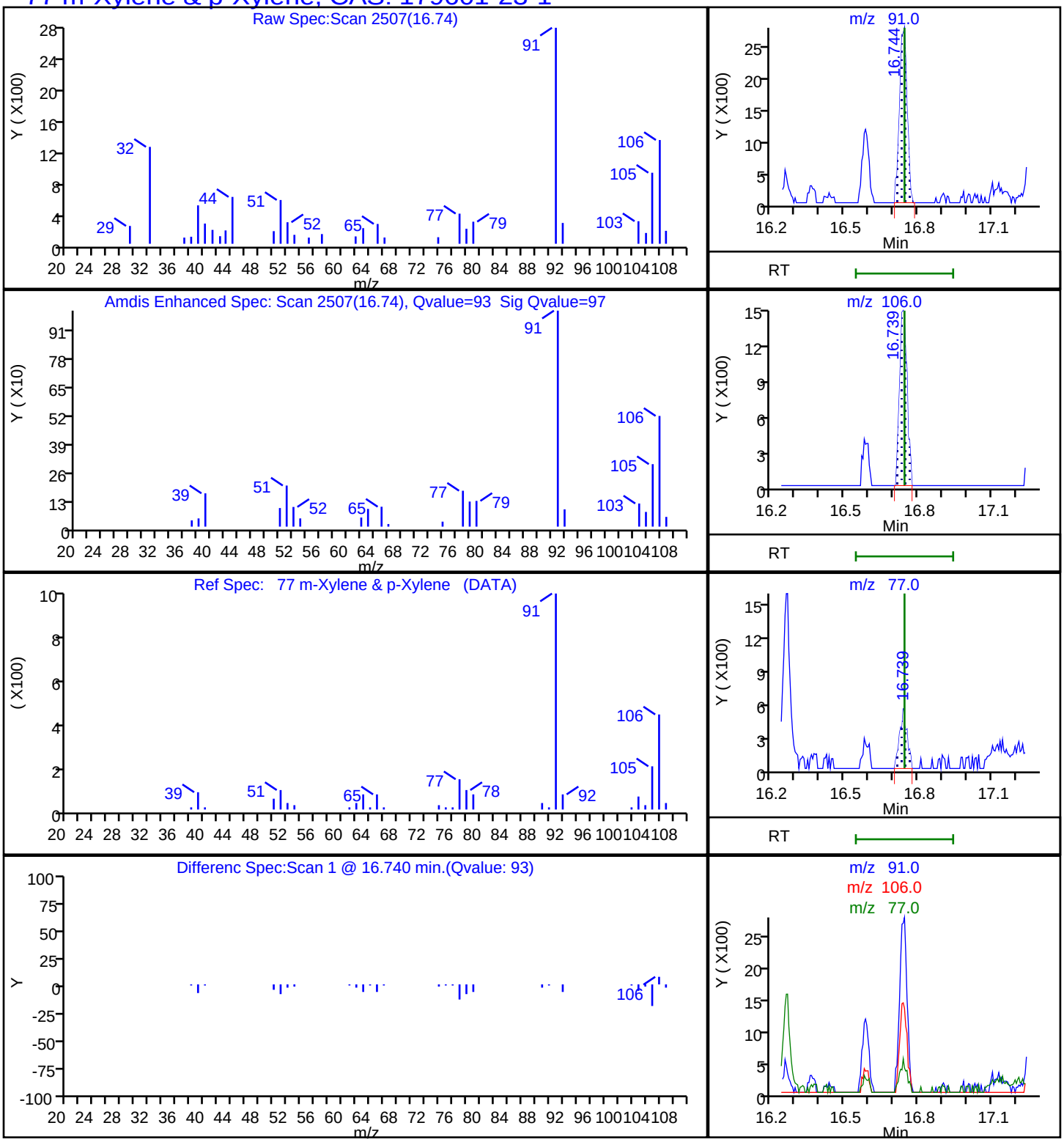
88 1,3,5-Trimethylbenzene, CAS: 108-67-8



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P111.D				
Injection Date:	07-Sep-2020 01:52:30	Instrument ID:	MH		
Lims ID:	140-20175-A-28	Lab Sample ID:	140-20175-28		
Client ID:	IA-060-C-29				
Operator ID:	HMT	ALS Bottle#:	11	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

77 m-Xylene & p-Xylene, CAS: 179601-23-1

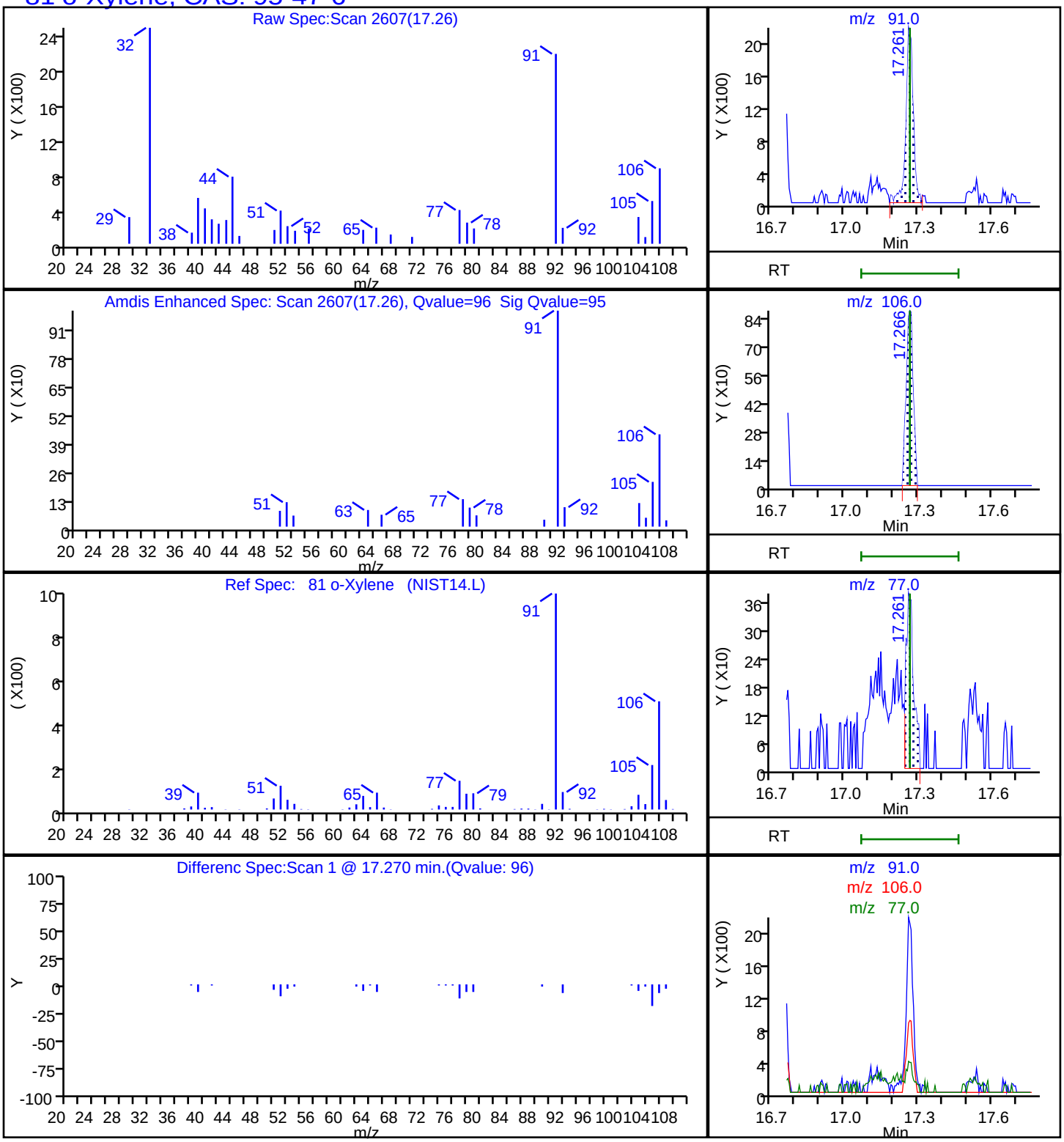


Report Date: 07-Sep-2020 07:44:05 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P111.D				
Injection Date:	07-Sep-2020 01:52:30	Instrument ID:	MH		
Lims ID:	140-20175-A-28	Lab Sample ID:	140-20175-28		
Client ID:	IA-060-C-29				
Operator ID:	HMT	ALS Bottle#:	11	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

81 o-Xylene, CAS: 95-47-6



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: IA-152-C-29 Lab Sample ID: 140-20175-29

Matrix: Air Lab File ID: HI07P112.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 16:38

Sample wt/vol: 100(mL) Date Analyzed: 09/07/2020 02:48

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42498 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.21	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.093	J *	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	11		0.40	0.11
67-66-3	Chloroform	119.38	0.14	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.55		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	0.15	J	0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.035
108-88-3	Toluene	92.14	1.3		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	ND		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	0.21	J *	0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	0.30	J	0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.81		0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	106		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: IA-152-C-29 Lab Sample ID: 140-20175-29

Matrix: Air Lab File ID: HI07P112.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 16:38

Sample wt/vol: 100(mL) Date Analyzed: 09/07/2020 02:48

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42498 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.66	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.59	J *	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	38		1.4	0.39
67-66-3	Chloroform	119.38	0.67	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.7		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	0.67	J	1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.24
108-88-3	Toluene	92.14	4.8		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	ND		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	1.0	J *	2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	1.5	J	2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	3.5		3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	106		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P112.D
Lims ID: 140-20175-A-29
Client ID: IA-152-C-29
Sample Type: Client
Inject. Date: 07-Sep-2020 02:48:30 ALS Bottle#: 12 Worklist Smp#: 17
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016514-017
Misc. Info.: 140-20175-a-29
Operator ID: HMT Instrument ID: MH

Method: \\chromfs\Knoxville\ChromData\MH\20200904-16514.b\MH_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 07-Sep-2020 07:43:45 Calib Date: 29-Aug-2020 23:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1015

First Level Reviewer: tajh Date: 07-Sep-2020 07:42:45

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.436	9.431	0.005	97	99489	4.80	
* 2 1,4-Difluorobenzene	114	11.591	11.591	0.000	96	402246	4.80	
* 3 Chlorobenzene-d5 (IS)	117	16.258	16.258	0.000	88	302959	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.876	17.876	0.000	91	173898	4.94	
6 Chlorodifluoromethane	51	3.921	3.916	0.005	97	120667	2.17	
8 Dichlorodifluoromethane	85	3.983	3.983	0.000	99	8303	0.1104	
44 Chloroform	83	9.431	9.436	-0.005	28	1648	0.0273	
51 Benzene	78	11.069	11.074	-0.005	96	3072	0.0416	
52 Carbon tetrachloride	117	11.090	11.095	-0.005	82	851	0.0186	
67 Toluene	91	14.310	14.310	0.000	91	20082	0.2573	
76 Ethylbenzene	91	16.584	16.584	0.000	83	2919	0.0309	
77 m-Xylene & p-Xylene	91	16.739	16.744	-0.005	96	7541	0.1010	
81 o-Xylene	91	17.261	17.266	-0.005	97	4884	0.0625	
88 1,3,5-Trimethylbenzene	120	18.563	18.563	0.000	91	627	0.0606	
92 1,2,4-Trimethylbenzene	105	18.992	18.987	0.005	96	3776	0.0418	
S 116 Xylenes, Total	100				0		0.1634	

Reagents:

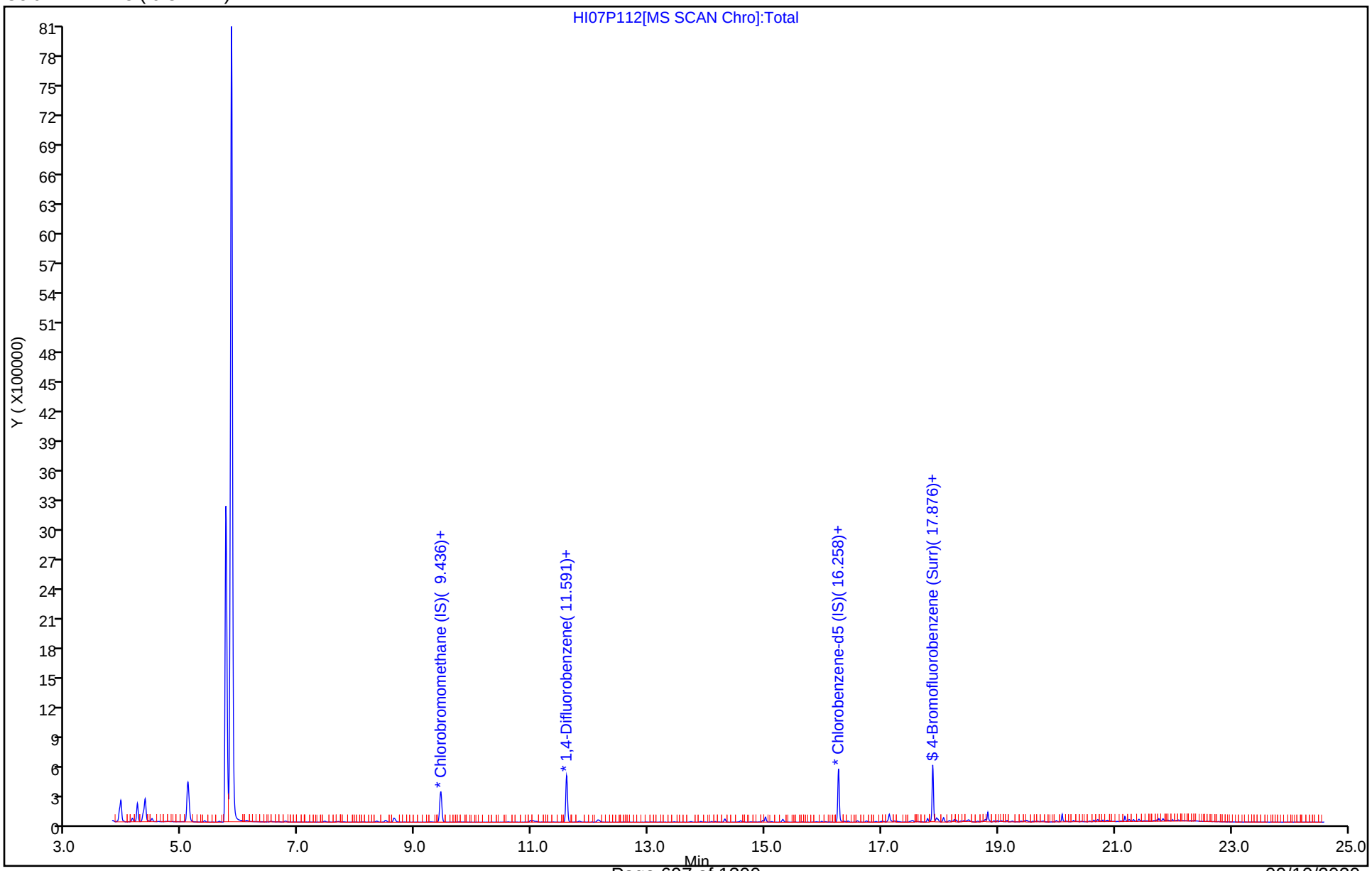
40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

Report Date: 07-Sep-2020 07:44:06 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P112.D				
Injection Date:	07-Sep-2020 02:48:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	140-20175-A-29	Lab Sample ID:	140-20175-29	Worklist Smp#:	17
Client ID:	IA-152-C-29				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

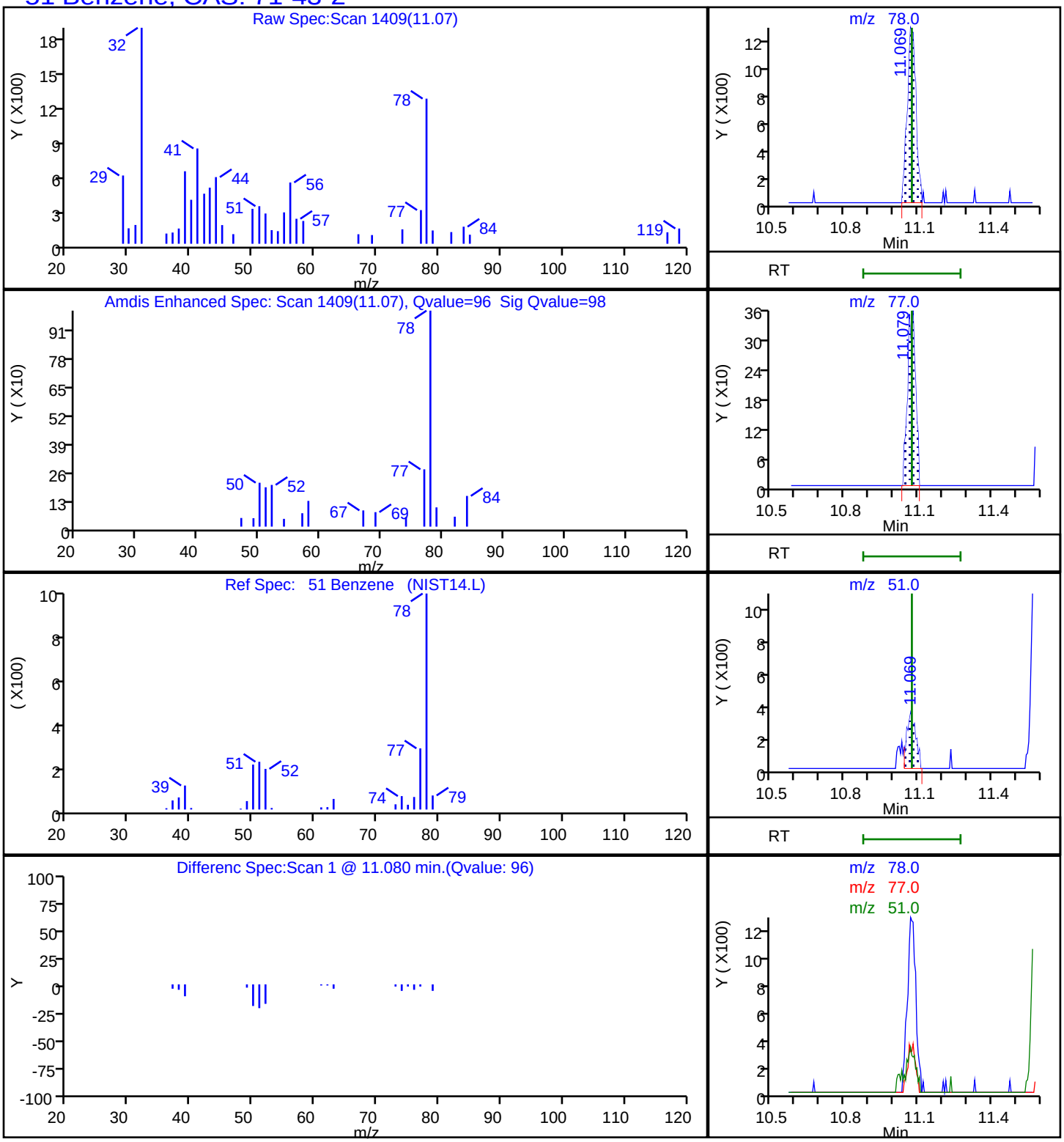
Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P112.D				
Lims ID:	140-20175-A-29				
Client ID:	IA-152-C-29				
Sample Type:	Client				
Inject. Date:	07-Sep-2020 02:48:30	ALS Bottle#:	12	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016514-017				
Misc. Info.:	140-20175-a-29				
Operator ID:	HMT	Instrument ID:	MH		
Method:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\MH_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	07-Sep-2020 07:43:45	Calib Date:	29-Aug-2020 23:57:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1015				
First Level Reviewer: tajh		Date:	07-Sep-2020 07:42:45		

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	4.94	106.47

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P112.D		
Injection Date:	07-Sep-2020 02:48:30	Instrument ID:	MH
Lims ID:	140-20175-A-29	Lab Sample ID:	140-20175-29
Client ID:	IA-152-C-29		
Operator ID:	HMT	ALS Bottle#:	12 Worklist Smp#: 17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

51 Benzene, CAS: 71-43-2

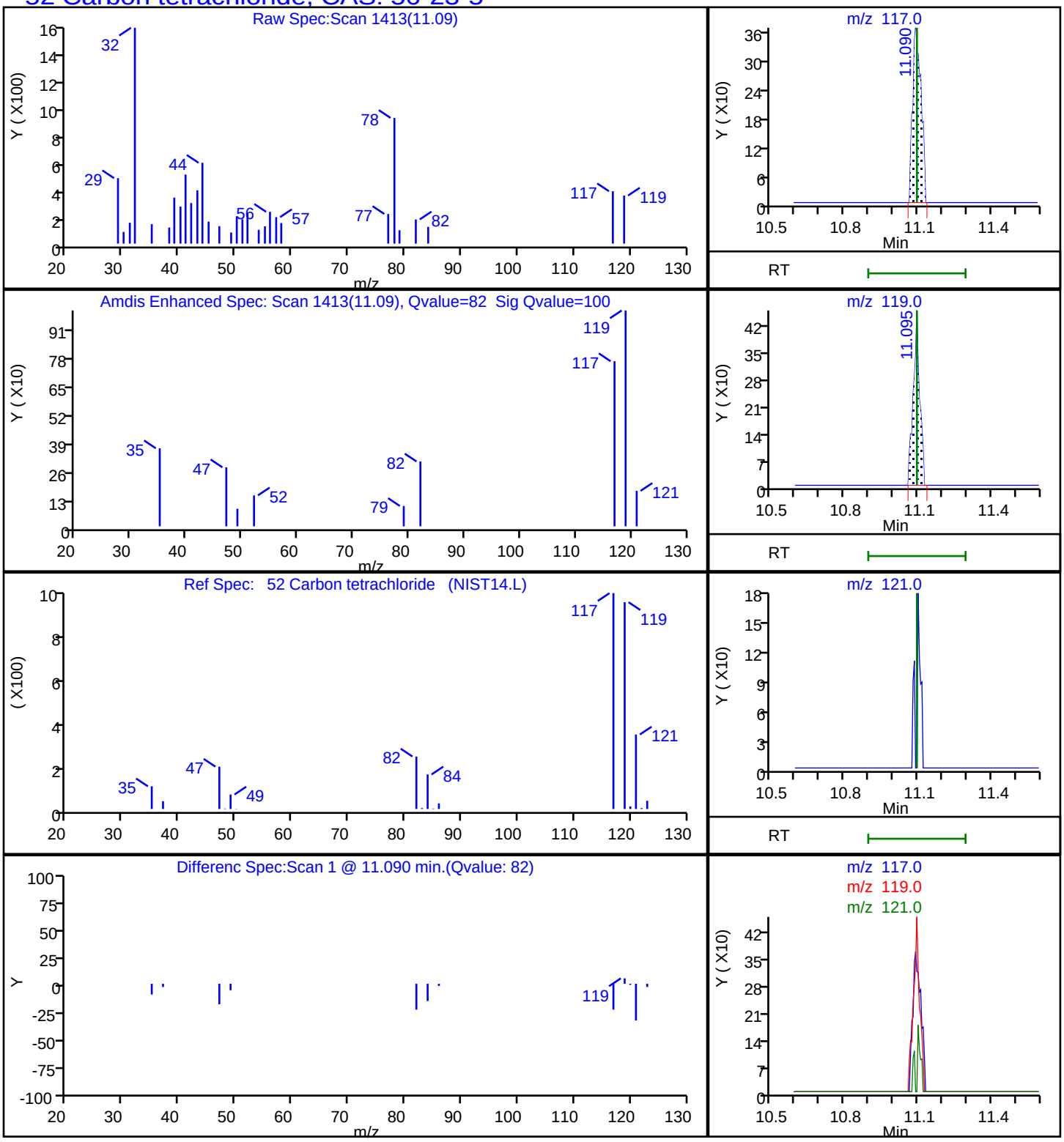


Report Date: 07-Sep-2020 07:44:06 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P112.D				
Injection Date:	07-Sep-2020 02:48:30	Instrument ID:	MH		
Lims ID:	140-20175-A-29	Lab Sample ID:	140-20175-29		
Client ID:	IA-152-C-29				
Operator ID:	HMT	ALS Bottle#:	12	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

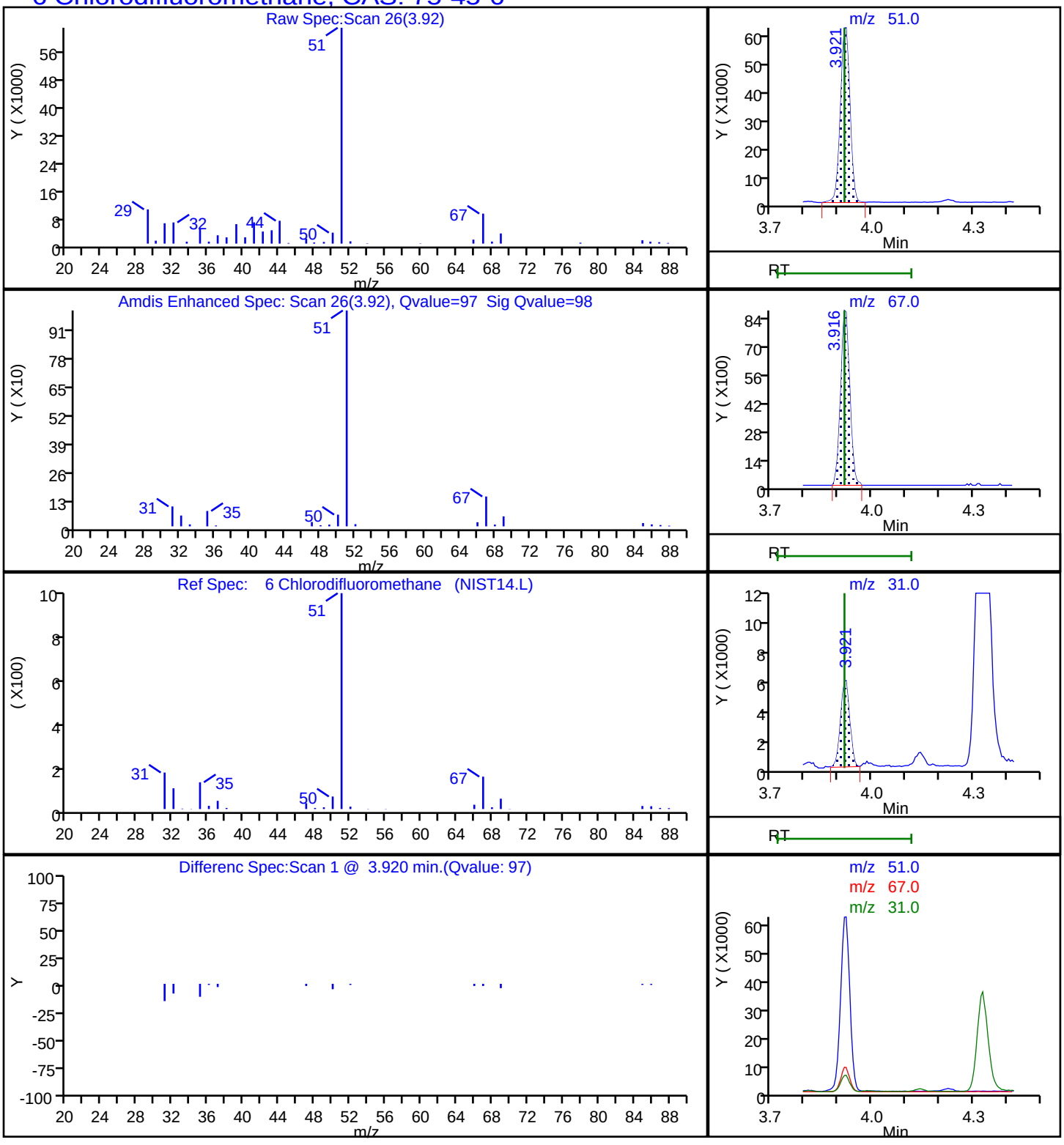
52 Carbon tetrachloride, CAS: 56-23-5



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P112.D				
Injection Date:	07-Sep-2020 02:48:30	Instrument ID:	MH		
Lims ID:	140-20175-A-29	Lab Sample ID:	140-20175-29		
Client ID:	IA-152-C-29				
Operator ID:	HMT	ALS Bottle#:	12	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

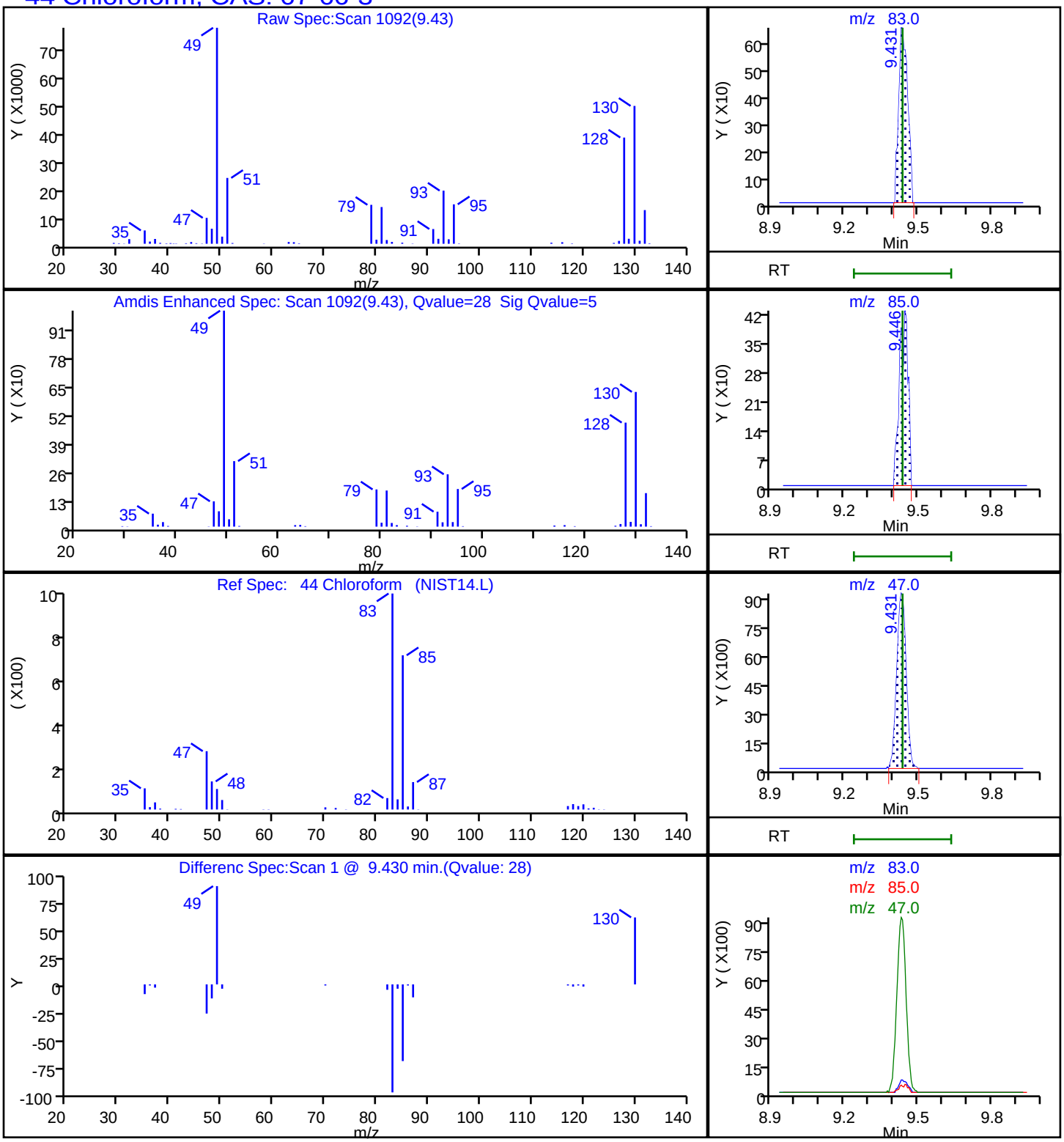
6 Chlorodifluoromethane, CAS: 75-45-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P112.D				
Injection Date:	07-Sep-2020 02:48:30	Instrument ID:	MH		
Lims ID:	140-20175-A-29	Lab Sample ID:	140-20175-29		
Client ID:	IA-152-C-29				
Operator ID:	HMT	ALS Bottle#:	12	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

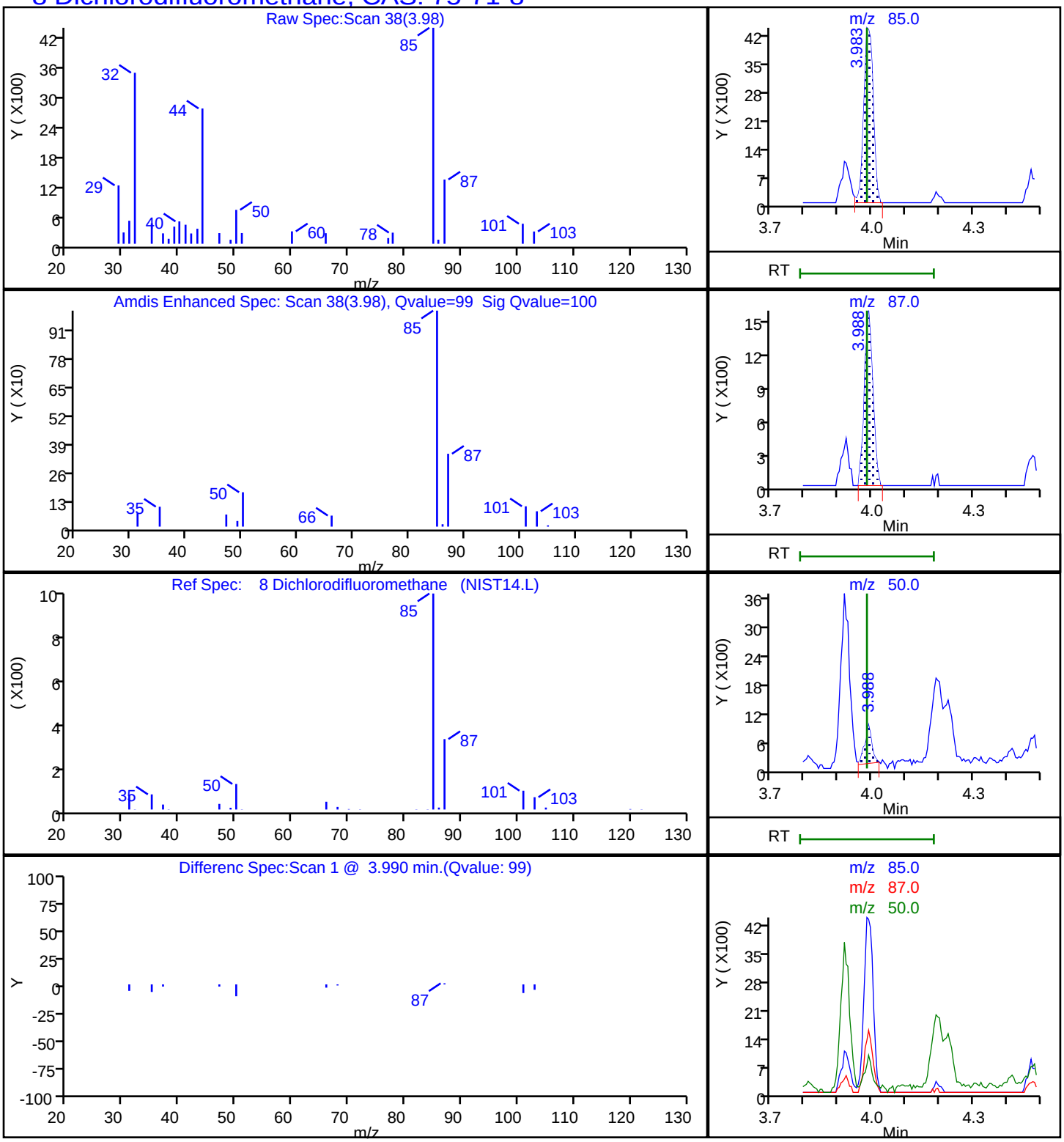
44 Chloroform, CAS: 67-66-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P112.D				
Injection Date:	07-Sep-2020 02:48:30	Instrument ID:	MH		
Lims ID:	140-20175-A-29	Lab Sample ID:	140-20175-29		
Client ID:	IA-152-C-29				
Operator ID:	HMT	ALS Bottle#:	12	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

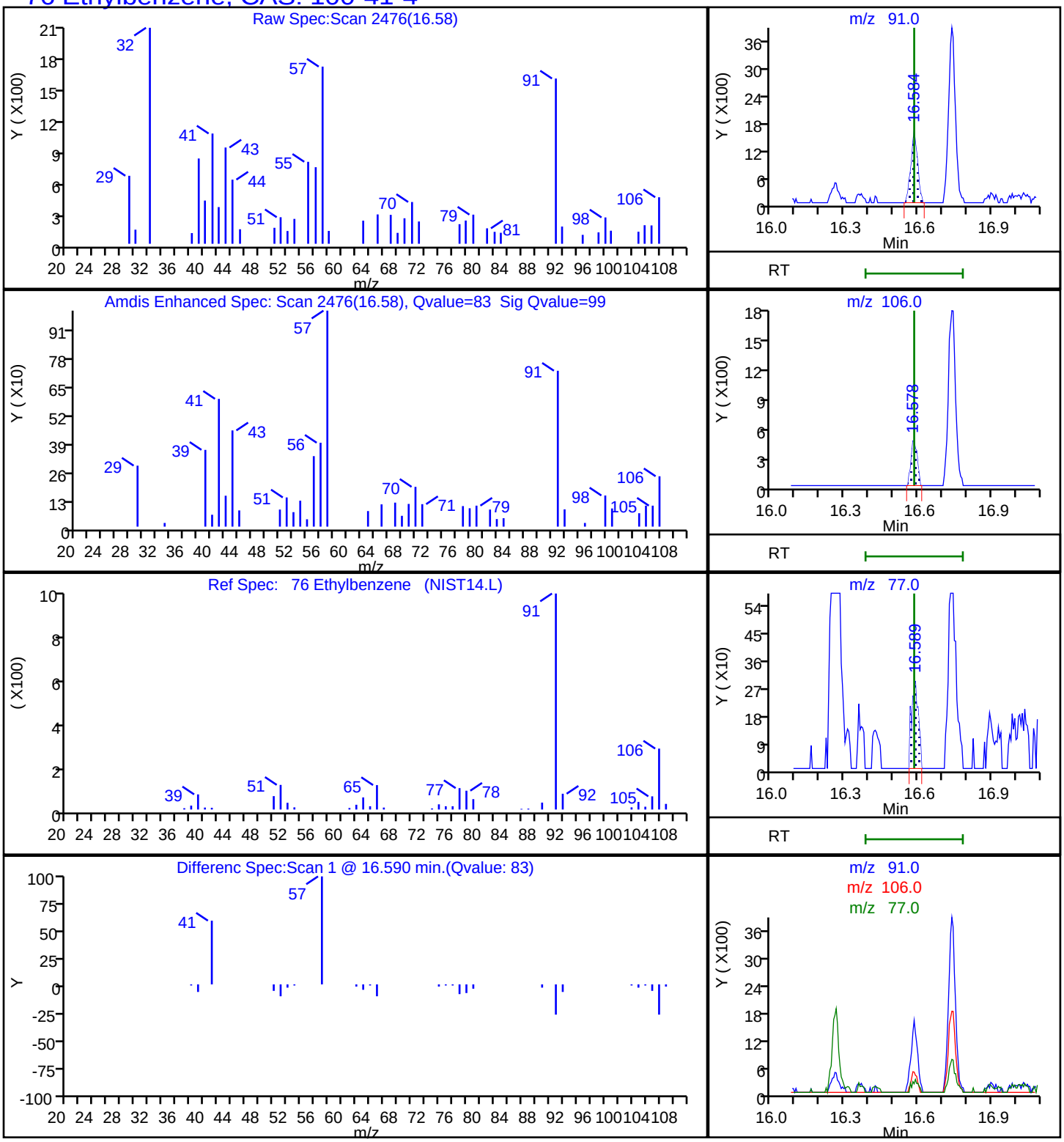
8 Dichlorodifluoromethane, CAS: 75-71-8



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P112.D				
Injection Date:	07-Sep-2020 02:48:30	Instrument ID:	MH		
Lims ID:	140-20175-A-29	Lab Sample ID:	140-20175-29		
Client ID:	IA-152-C-29				
Operator ID:	HMT	ALS Bottle#:	12	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

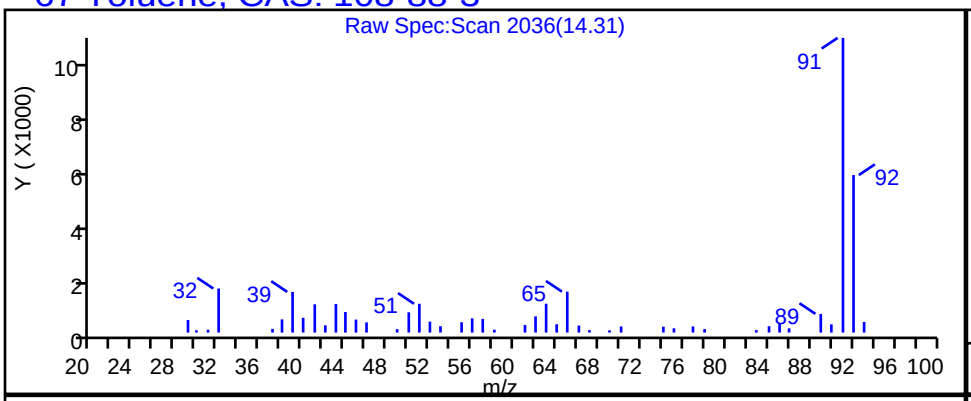
76 Ethylbenzene, CAS: 100-41-4

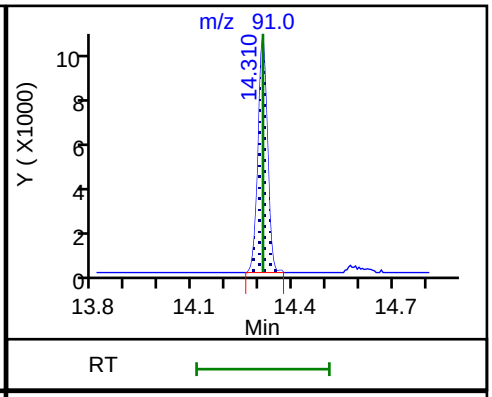


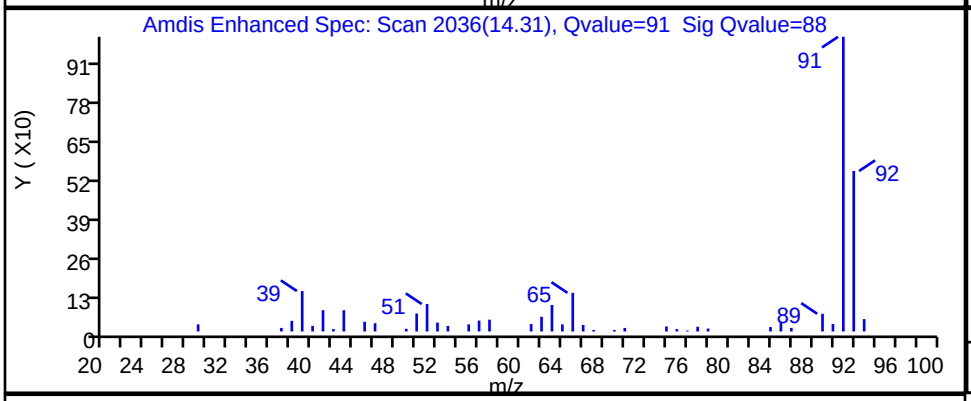
Eurofins TestAmerica, Knoxville

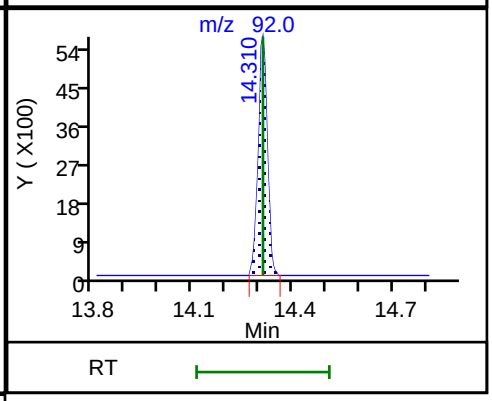
Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P112.D				
Injection Date:	07-Sep-2020 02:48:30	Instrument ID:	MH		
Lims ID:	140-20175-A-29	Lab Sample ID:	140-20175-29		
Client ID:	IA-152-C-29				
Operator ID:	HMT	ALS Bottle#:	12	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

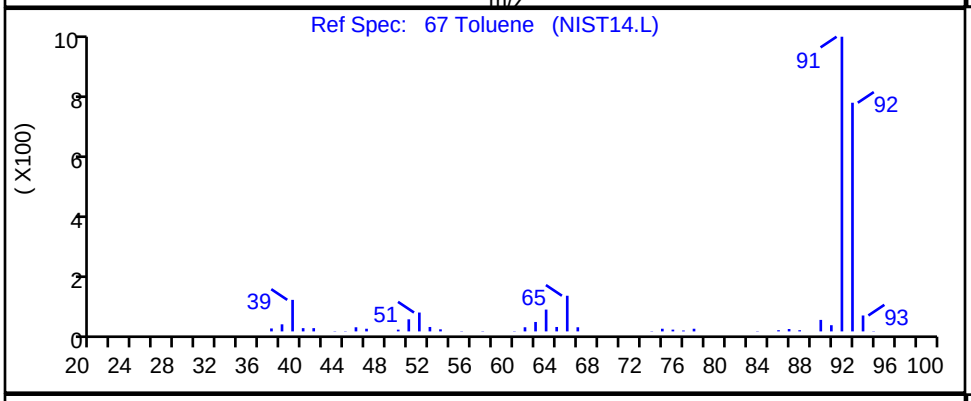
67 Toluene, CAS: 108-88-3

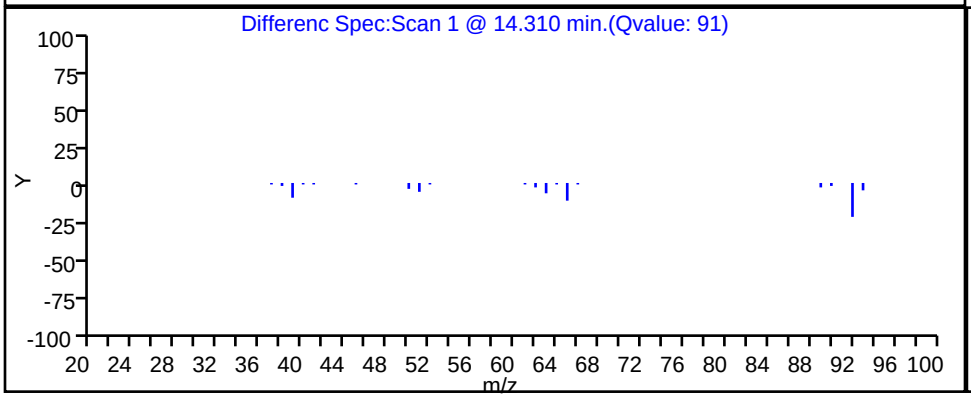


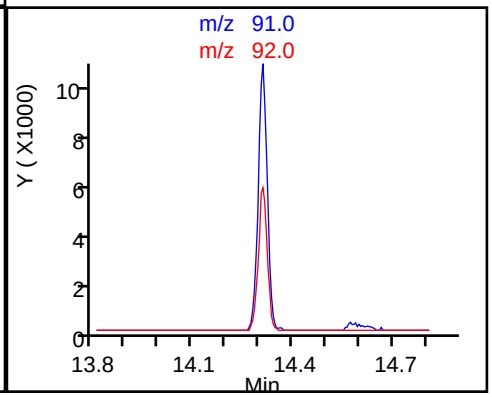








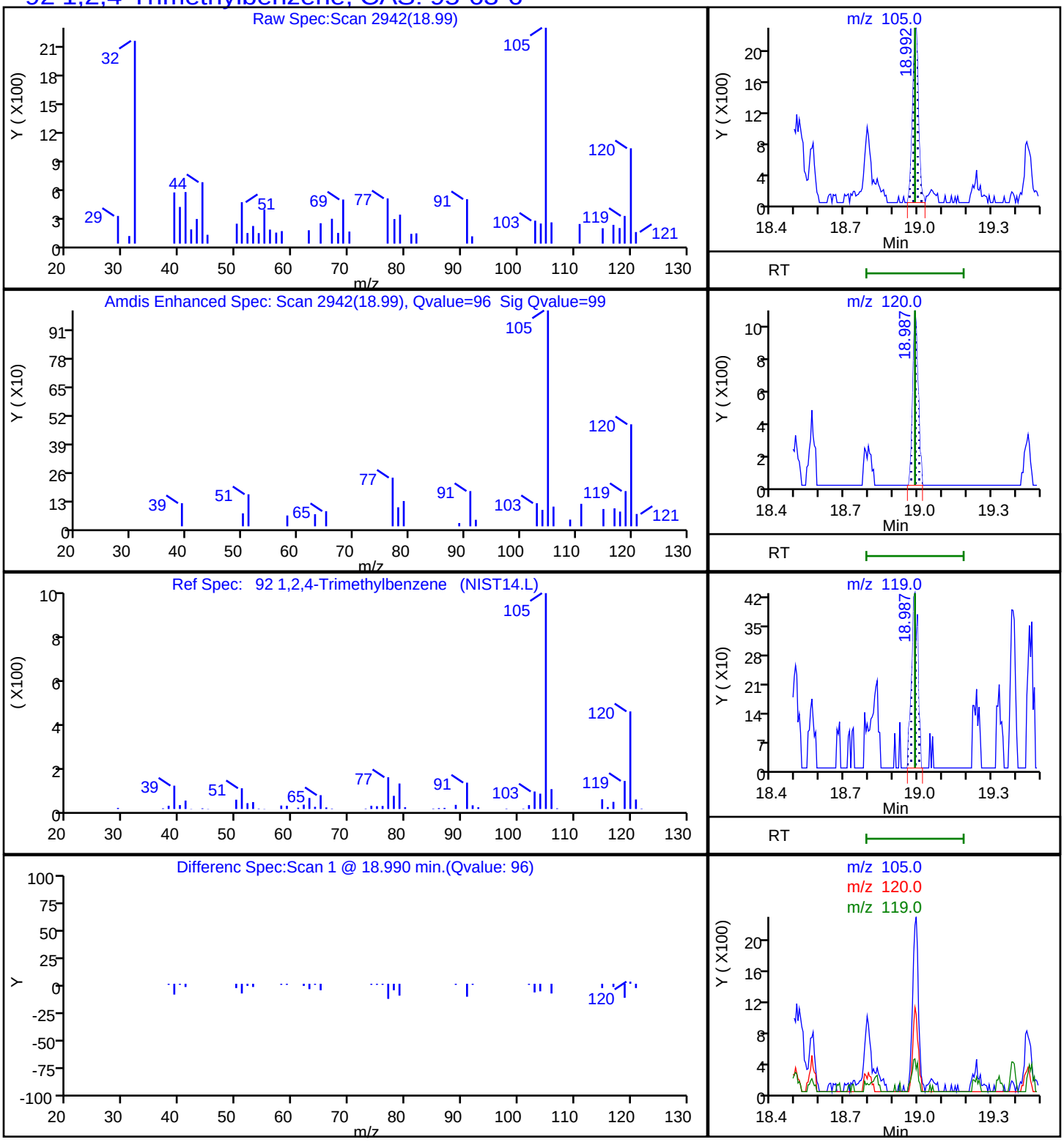




Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P112.D				
Injection Date:	07-Sep-2020 02:48:30	Instrument ID:	MH		
Lims ID:	140-20175-A-29	Lab Sample ID:	140-20175-29		
Client ID:	IA-152-C-29				
Operator ID:	HMT	ALS Bottle#:	12	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

92 1,2,4-Trimethylbenzene, CAS: 95-63-6

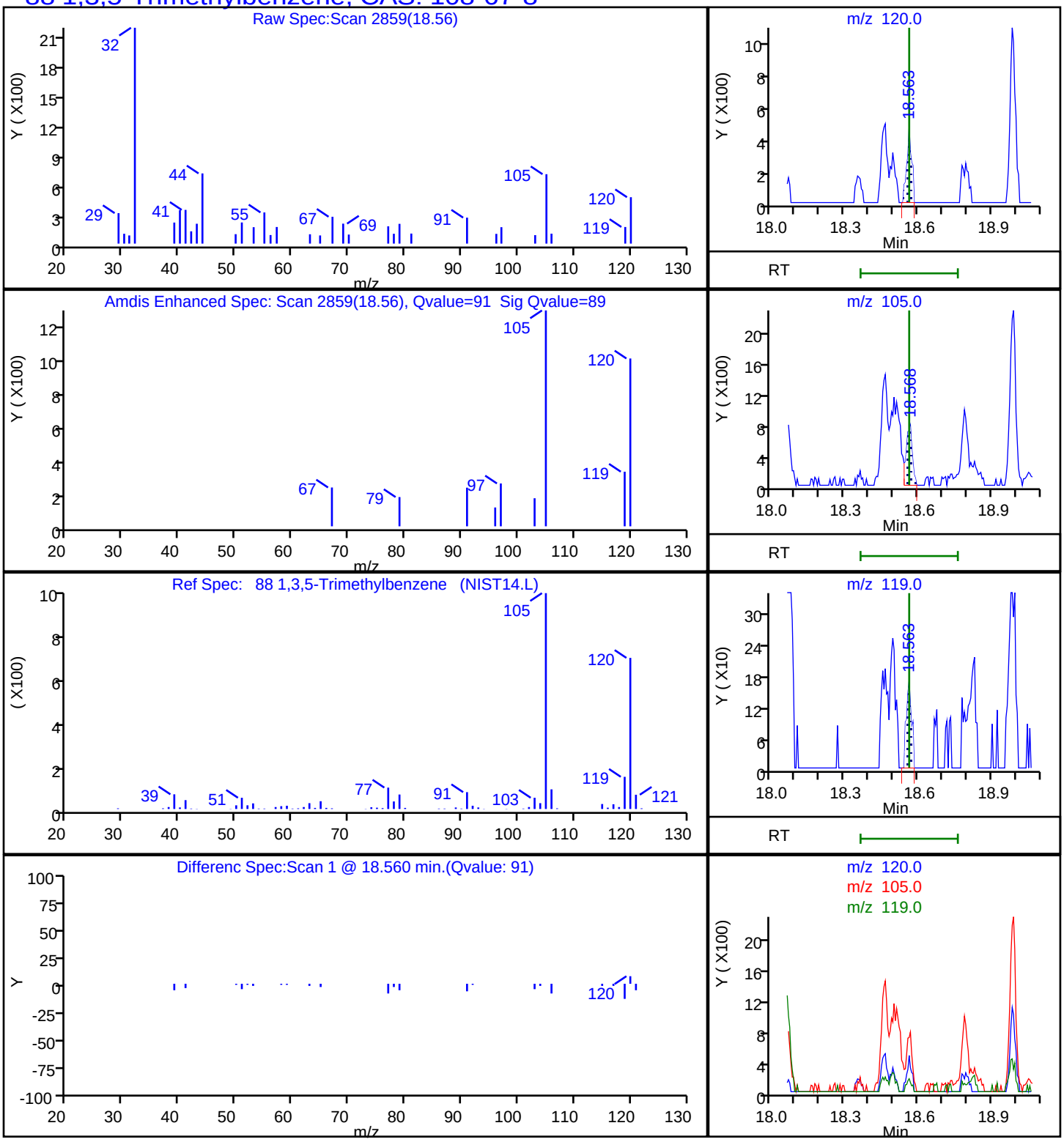


Report Date: 07-Sep-2020 07:44:06 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P112.D				
Injection Date:	07-Sep-2020 02:48:30	Instrument ID:	MH		
Lims ID:	140-20175-A-29	Lab Sample ID:	140-20175-29		
Client ID:	IA-152-C-29				
Operator ID:	HMT	ALS Bottle#:	12	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

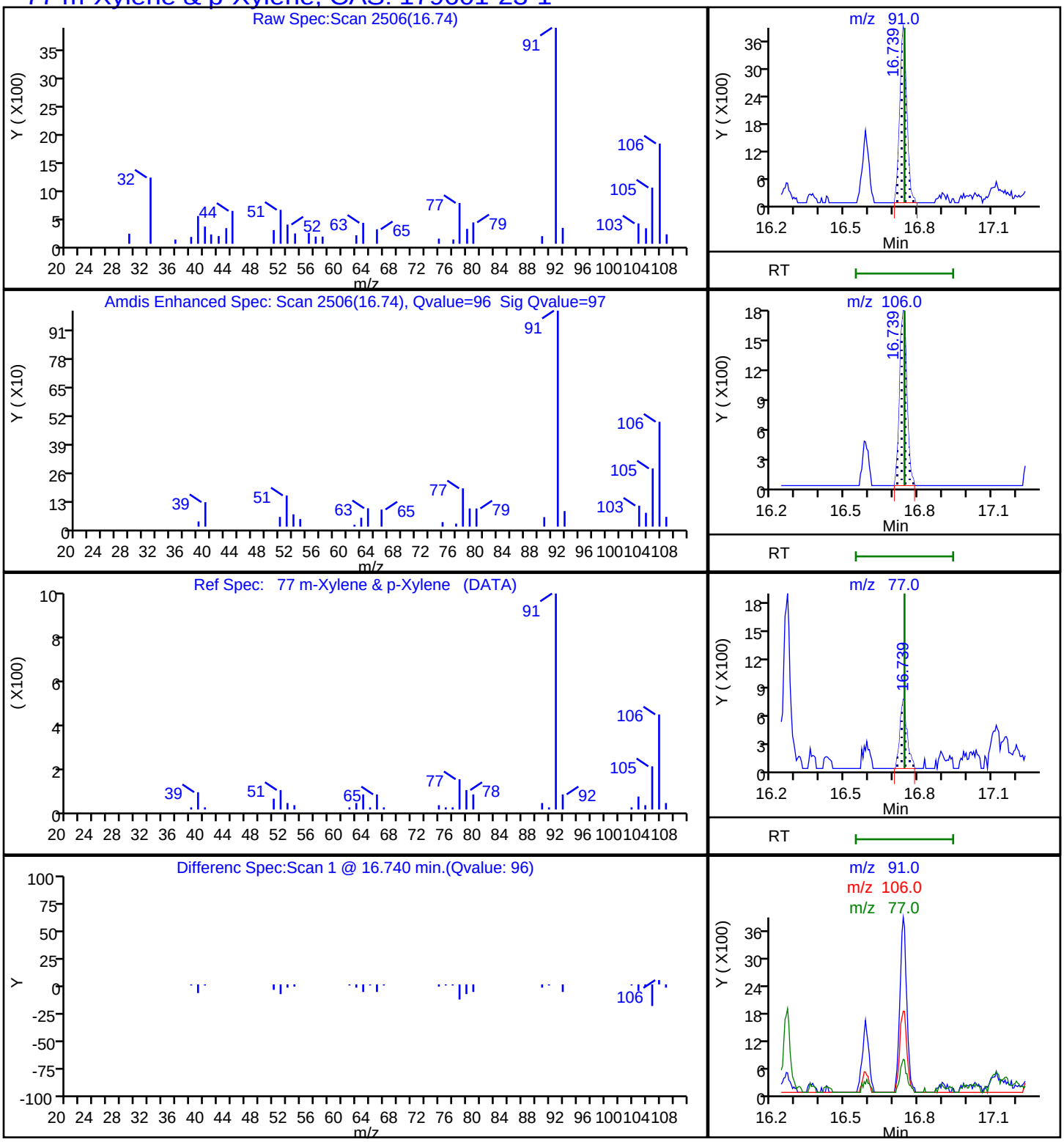
88 1,3,5-Trimethylbenzene, CAS: 108-67-8



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P112.D				
Injection Date:	07-Sep-2020 02:48:30	Instrument ID:	MH		
Lims ID:	140-20175-A-29	Lab Sample ID:	140-20175-29		
Client ID:	IA-152-C-29				
Operator ID:	HMT	ALS Bottle#:	12	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

77 m-Xylene & p-Xylene, CAS: 179601-23-1

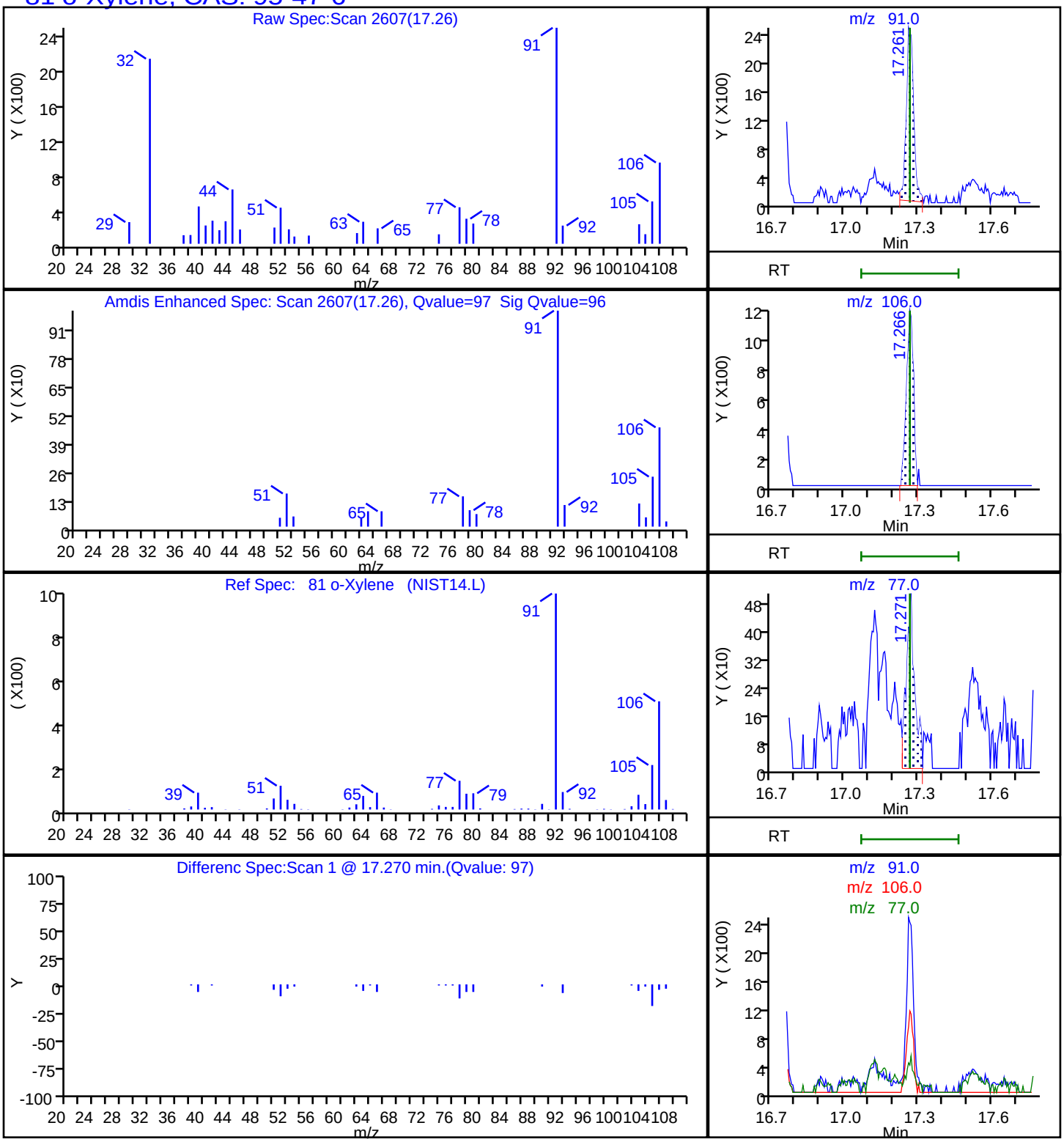


Report Date: 07-Sep-2020 07:44:06 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P112.D				
Injection Date:	07-Sep-2020 02:48:30	Instrument ID:	MH		
Lims ID:	140-20175-A-29	Lab Sample ID:	140-20175-29		
Client ID:	IA-152-C-29				
Operator ID:	HMT	ALS Bottle#:	12	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

81 o-Xylene, CAS: 95-47-6



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: IA-150-C-29 Lab Sample ID: 140-20175-30

Matrix: Air Lab File ID: HI07P113.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 16:40

Sample wt/vol: 100(mL) Date Analyzed: 09/07/2020 03:43

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42498 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.20	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.094	J *	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	18		0.40	0.11
67-66-3	Chloroform	119.38	0.082	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.56		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	0.14	J	0.40	0.065
75-09-2	Methylene Chloride	84.93	5.2		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.035
108-88-3	Toluene	92.14	1.1		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	ND		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	0.10	J *	0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	0.28	J	0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.73	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	87		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: IA-150-C-29 Lab Sample ID: 140-20175-30

Matrix: Air Lab File ID: HI07P113.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 16:40

Sample wt/vol: 100(mL) Date Analyzed: 09/07/2020 03:43

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42498 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.62	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.59	J *	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	65		1.4	0.39
67-66-3	Chloroform	119.38	0.40	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.8		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	0.61	J	1.7	0.28
75-09-2	Methylene Chloride	84.93	18		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.24
108-88-3	Toluene	92.14	4.2		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	ND		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	0.51	J *	2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	1.4	J	2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	3.2	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	87		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P113.D
Lims ID: 140-20175-A-30
Client ID: IA-150-C-29
Sample Type: Client
Inject. Date: 07-Sep-2020 03:43:30 ALS Bottle#: 13 Worklist Smp#: 18
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016514-018
Misc. Info.: 140-20175-a-30
Operator ID: HMT Instrument ID: MH

Method: \\chromfs\Knoxville\ChromData\MH\20200904-16514.b\MH_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 07-Sep-2020 07:43:45 Calib Date: 29-Aug-2020 23:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1015

First Level Reviewer: tajh Date: 07-Sep-2020 07:42:56

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.436	9.431	0.005	98	100616	4.80	
* 2 1,4-Difluorobenzene	114	11.591	11.591	0.000	96	398071	4.80	
* 3 Chlorobenzene-d5 (IS)	117	16.258	16.258	0.000	88	282692	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.876	17.876	0.000	91	133115	4.05	
6 Chlorodifluoromethane	51	3.921	3.916	0.005	97	206371	3.68	
8 Dichlorodifluoromethane	85	3.988	3.983	0.005	100	8543	0.1123	
31 Methylene Chloride	84	6.774	6.764	0.010	97	25622	1.04	
44 Chloroform	83	9.446	9.436	0.010	35	996	0.0163	
51 Benzene	78	11.074	11.074	0.000	93	2851	0.0390	
52 Carbon tetrachloride	117	11.095	11.095	0.000	74	855	0.0189	
67 Toluene	91	14.310	14.310	0.000	92	16258	0.2232	
76 Ethylbenzene	91	16.584	16.584	0.000	90	2480	0.0281	
77 m-Xylene & p-Xylene	91	16.739	16.744	-0.005	96	6228	0.0894	
81 o-Xylene	91	17.266	17.266	0.000	98	4141	0.0567	
88 1,3,5-Trimethylbenzene	120	18.558	18.563	-0.005	2	367	0.0557	
92 1,2,4-Trimethylbenzene	105	18.987	18.987	0.000	95	1749	0.0207	
S 116 Xylenes, Total	100				0		0.1461	

Reagents:

40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

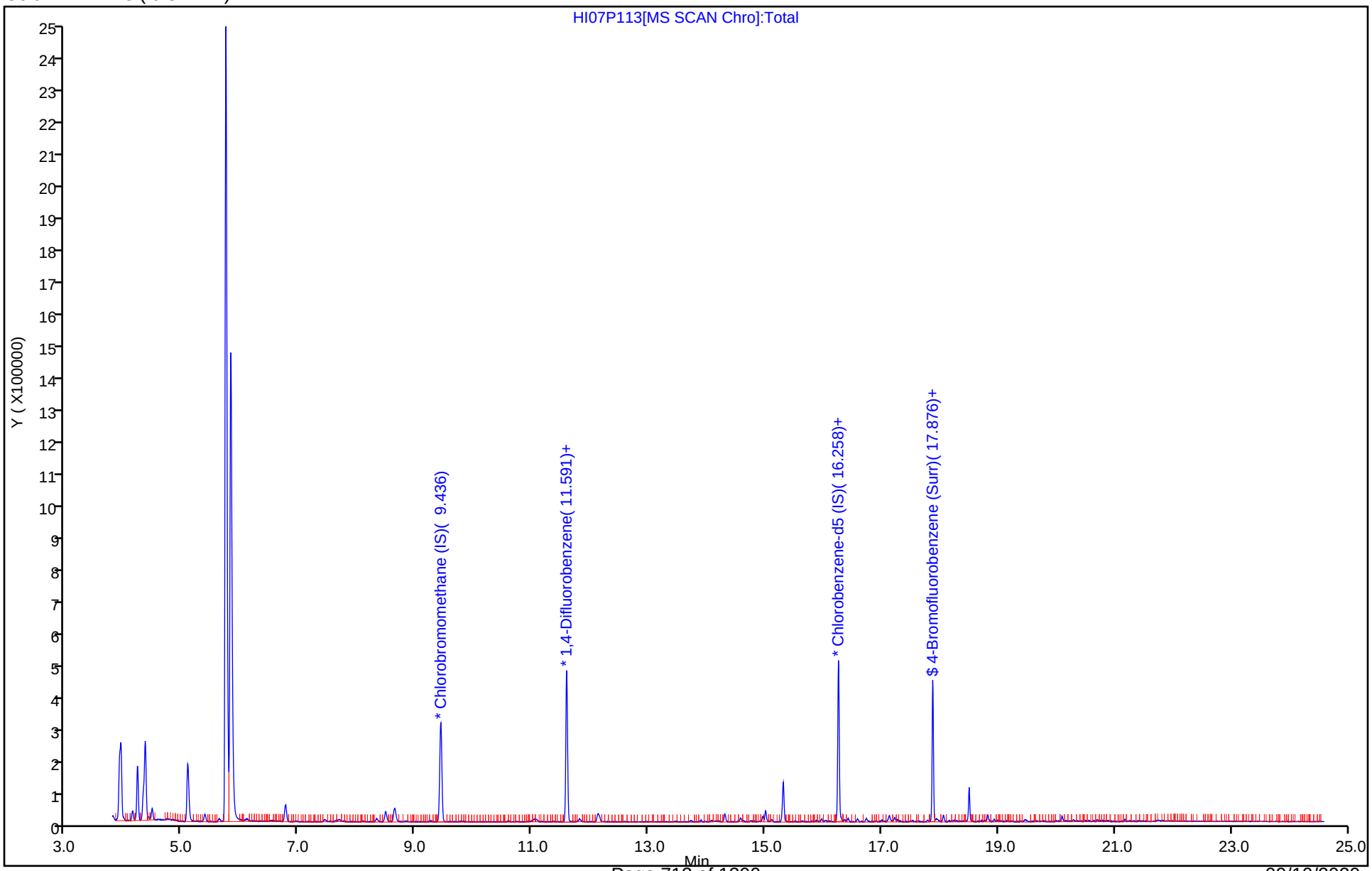
Report Date: 07-Sep-2020 07:44:07 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P113.D

Injection Date:	07-Sep-2020 03:43:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	140-20175-A-30	Lab Sample ID:	140-20175-30	Worklist Smp#:	18
Client ID:	IA-150-C-29				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P113.D				
Lims ID:	140-20175-A-30				
Client ID:	IA-150-C-29				
Sample Type:	Client				
Inject. Date:	07-Sep-2020 03:43:30	ALS Bottle#:	13	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016514-018				
Misc. Info.:	140-20175-a-30				
Operator ID:	HMT	Instrument ID:	MH		
Method:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\MH_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	07-Sep-2020 07:43:45	Calib Date:	29-Aug-2020 23:57:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1015				
First Level Reviewer: tajh		Date:	07-Sep-2020 07:42:56		

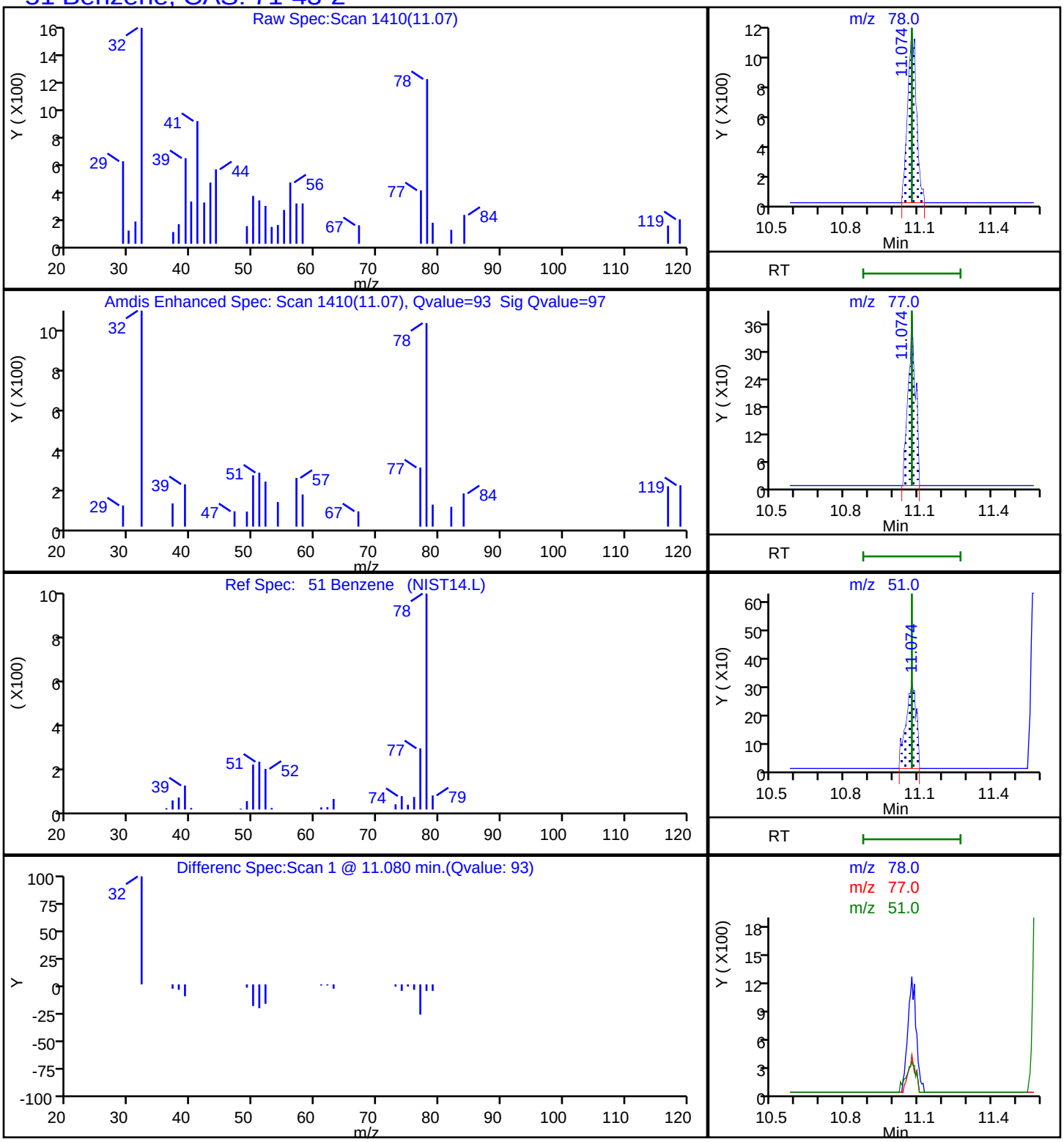
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	4.05	87.34

Report Date: 07-Sep-2020 07:44:07 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P113.D				
Injection Date:	07-Sep-2020 03:43:30	Instrument ID:	MH		
Lims ID:	140-20175-A-30	Lab Sample ID:	140-20175-30		
Client ID:	IA-150-C-29				
Operator ID:	HMT	ALS Bottle#:	13	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

51 Benzene, CAS: 71-43-2

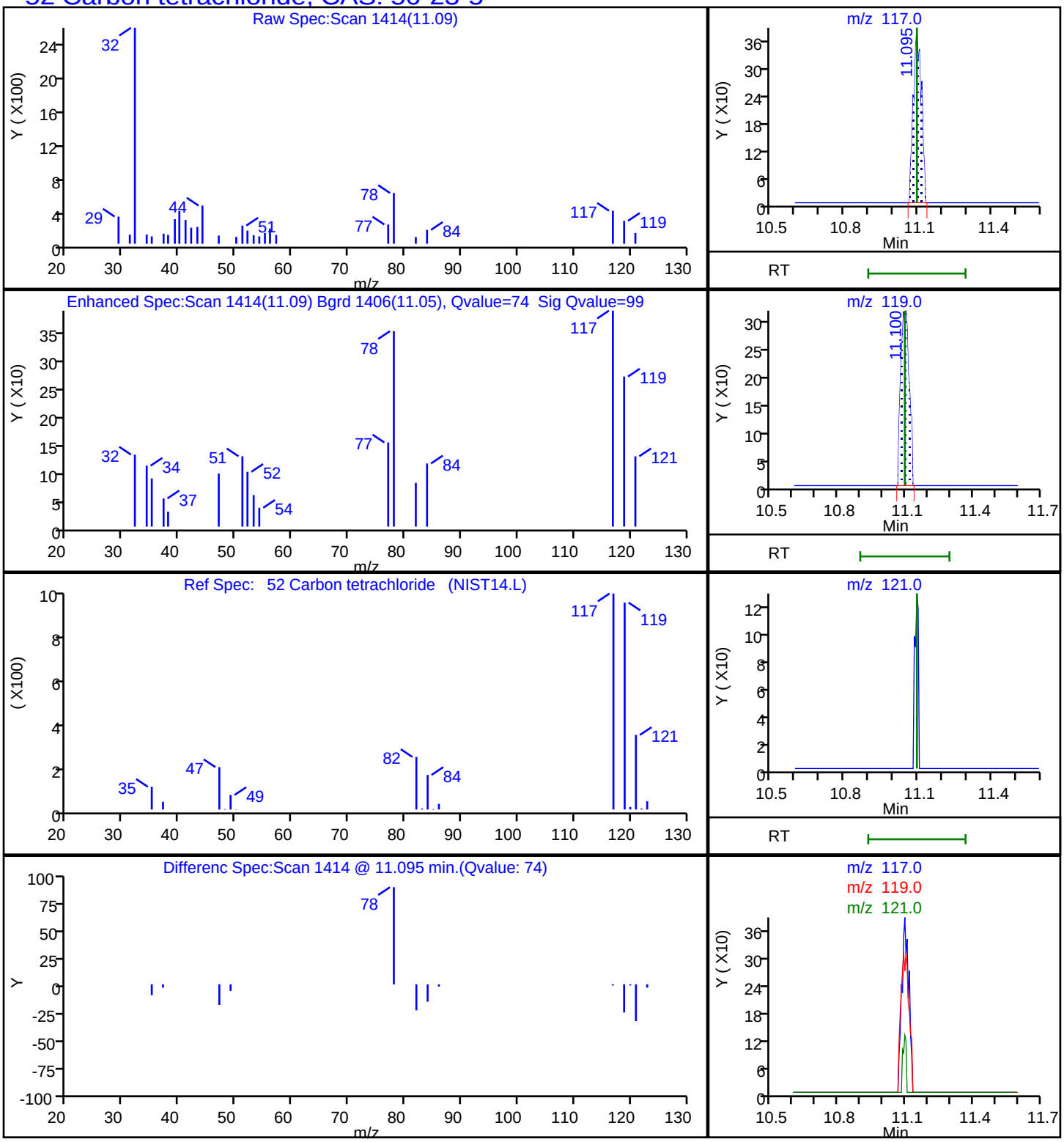


Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P113.D

Injection Date:	07-Sep-2020 03:43:30	Instrument ID:	MH		
Lims ID:	140-20175-A-30	Lab Sample ID:	140-20175-30		
Client ID:	IA-150-C-29				
Operator ID:	HMT	ALS Bottle#:	13	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

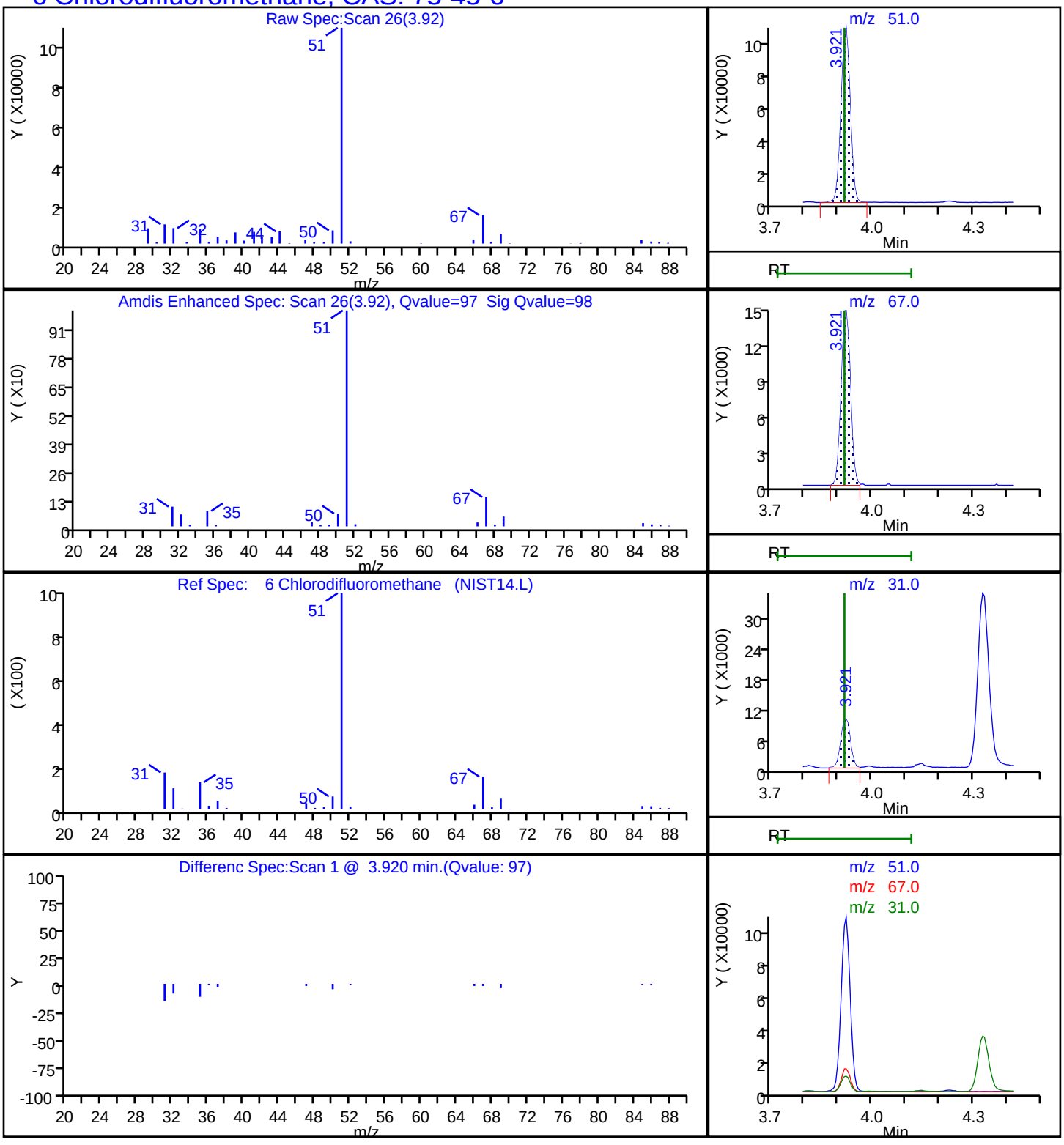
52 Carbon tetrachloride, CAS: 56-23-5



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P113.D				
Injection Date:	07-Sep-2020 03:43:30	Instrument ID:	MH		
Lims ID:	140-20175-A-30	Lab Sample ID:	140-20175-30		
Client ID:	IA-150-C-29				
Operator ID:	HMT	ALS Bottle#:	13	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

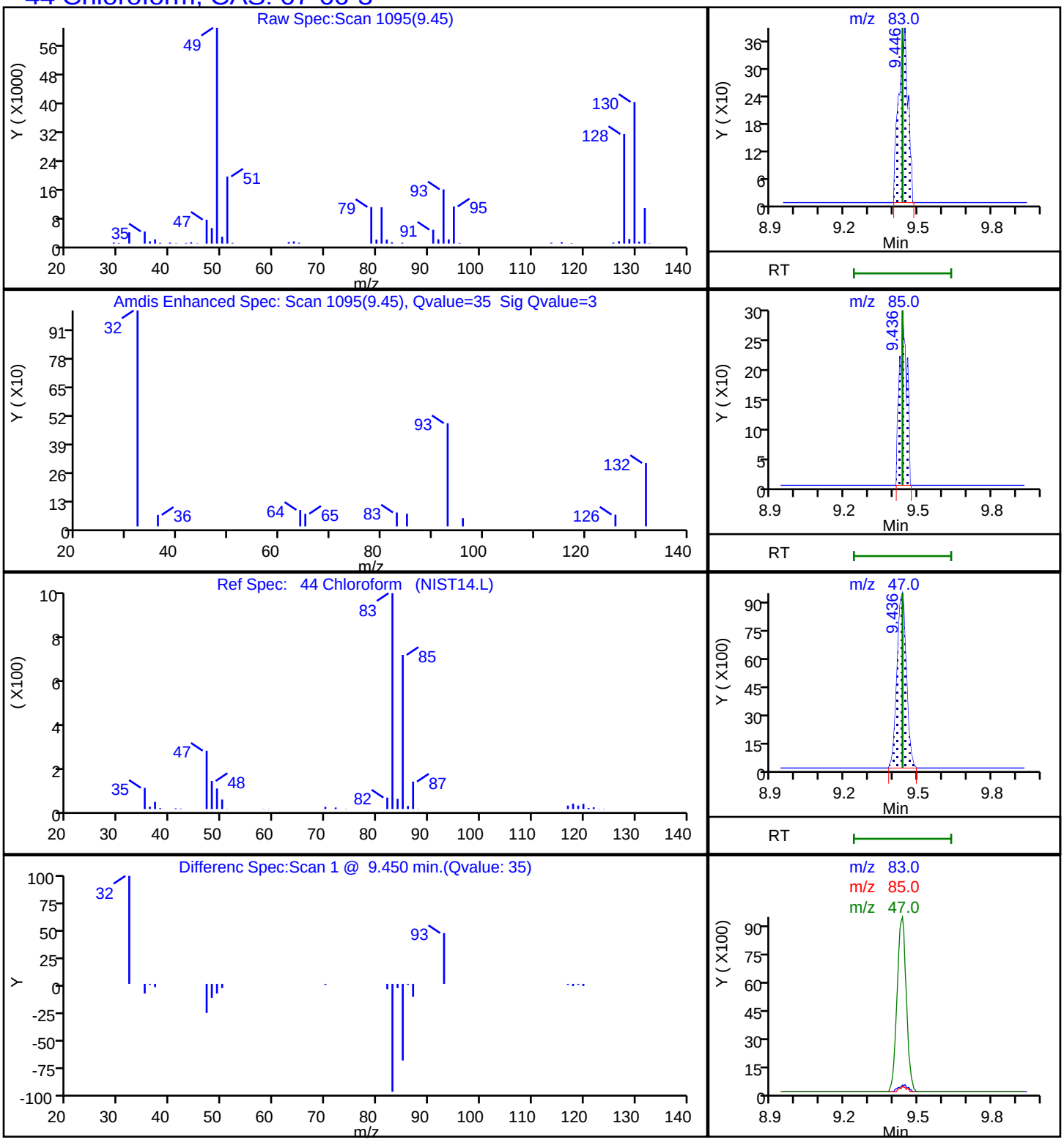
6 Chlorodifluoromethane, CAS: 75-45-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P113.D				
Injection Date:	07-Sep-2020 03:43:30	Instrument ID:	MH		
Lims ID:	140-20175-A-30	Lab Sample ID:	140-20175-30		
Client ID:	IA-150-C-29				
Operator ID:	HMT	ALS Bottle#:	13	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

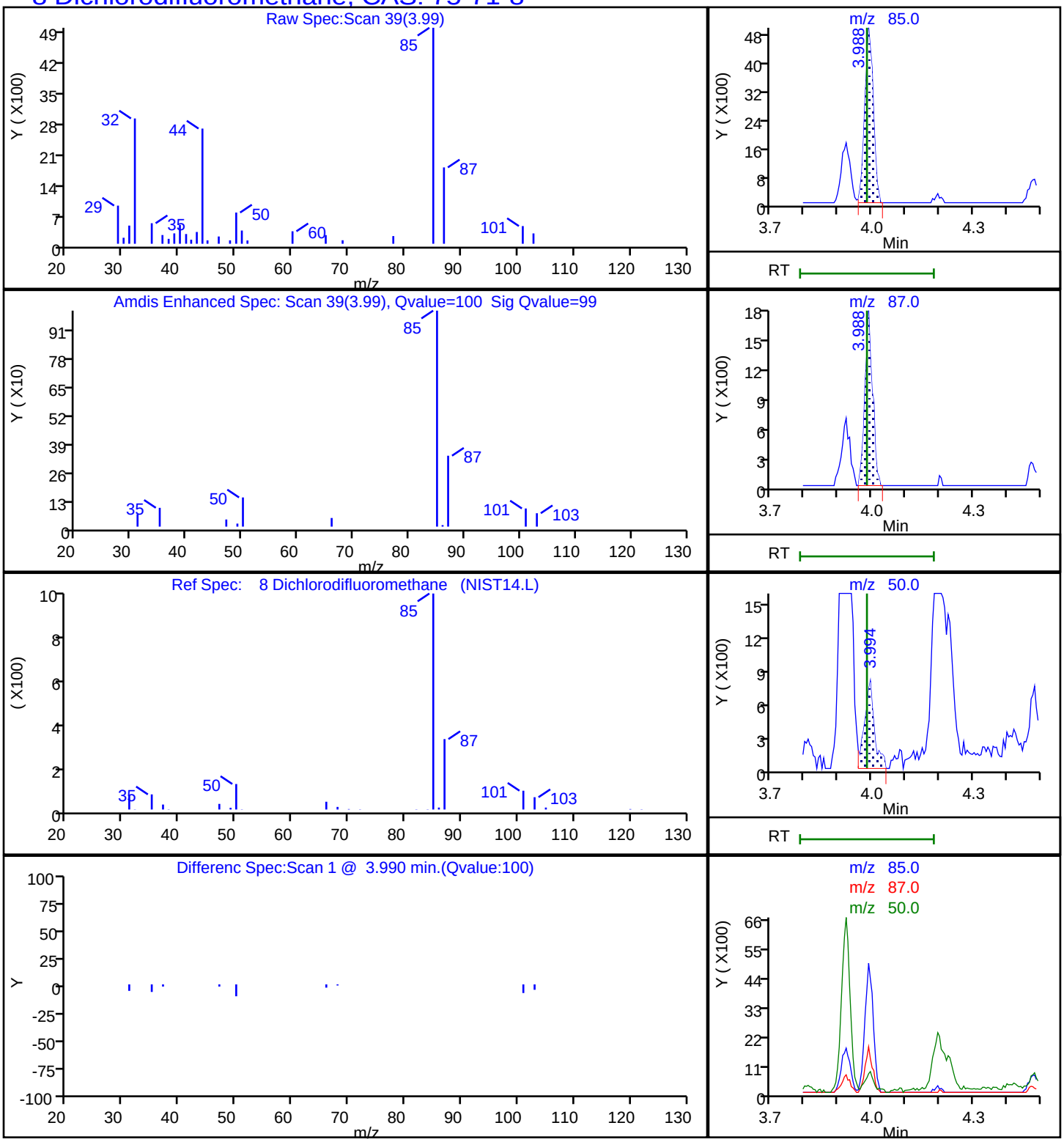
44 Chloroform, CAS: 67-66-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P113.D				
Injection Date:	07-Sep-2020 03:43:30	Instrument ID:	MH		
Lims ID:	140-20175-A-30	Lab Sample ID:	140-20175-30		
Client ID:	IA-150-C-29				
Operator ID:	HMT	ALS Bottle#:	13	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

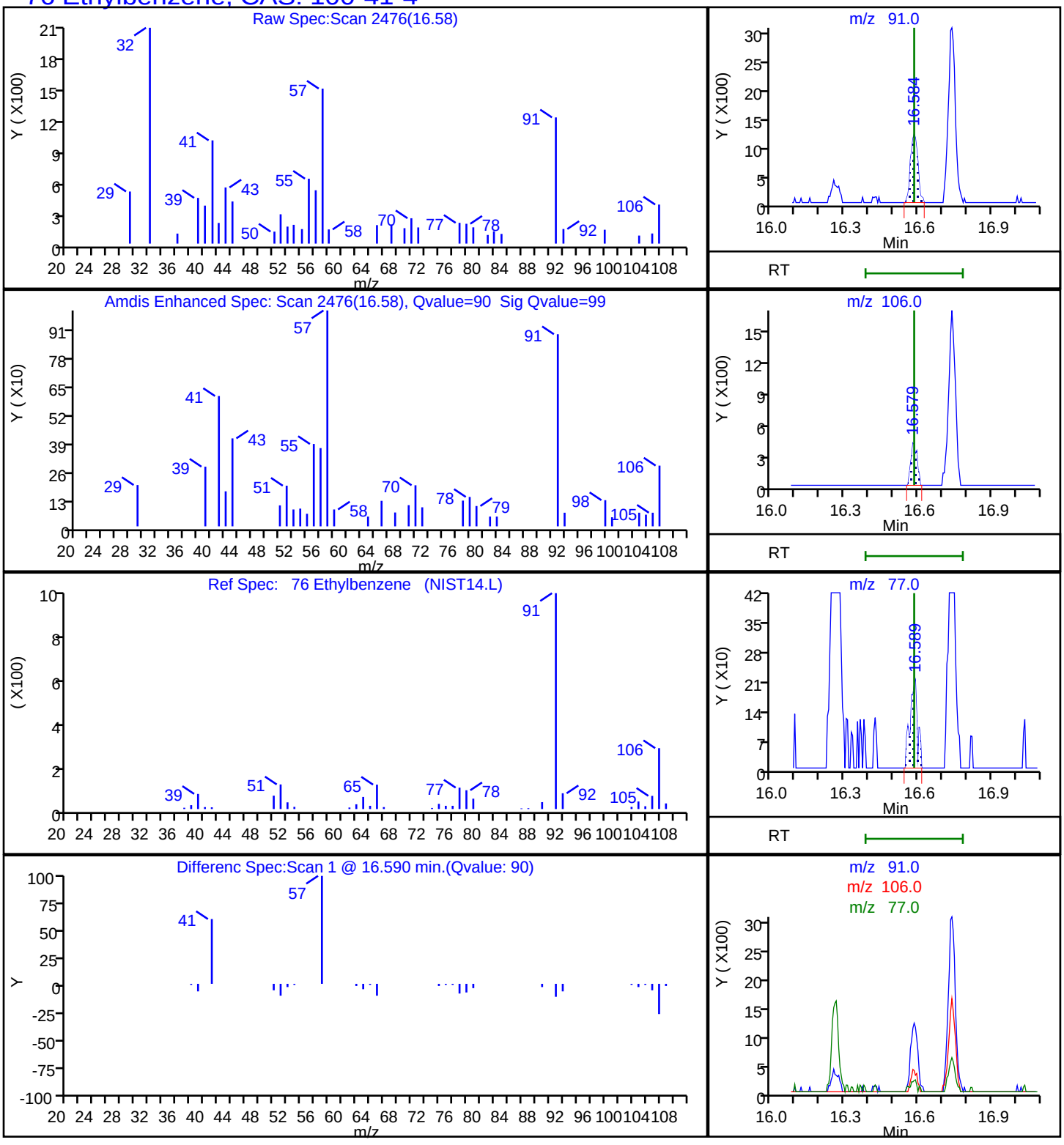
8 Dichlorodifluoromethane, CAS: 75-71-8



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P113.D				
Injection Date:	07-Sep-2020 03:43:30	Instrument ID:	MH		
Lims ID:	140-20175-A-30	Lab Sample ID:	140-20175-30		
Client ID:	IA-150-C-29				
Operator ID:	HMT	ALS Bottle#:	13	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

76 Ethylbenzene, CAS: 100-41-4

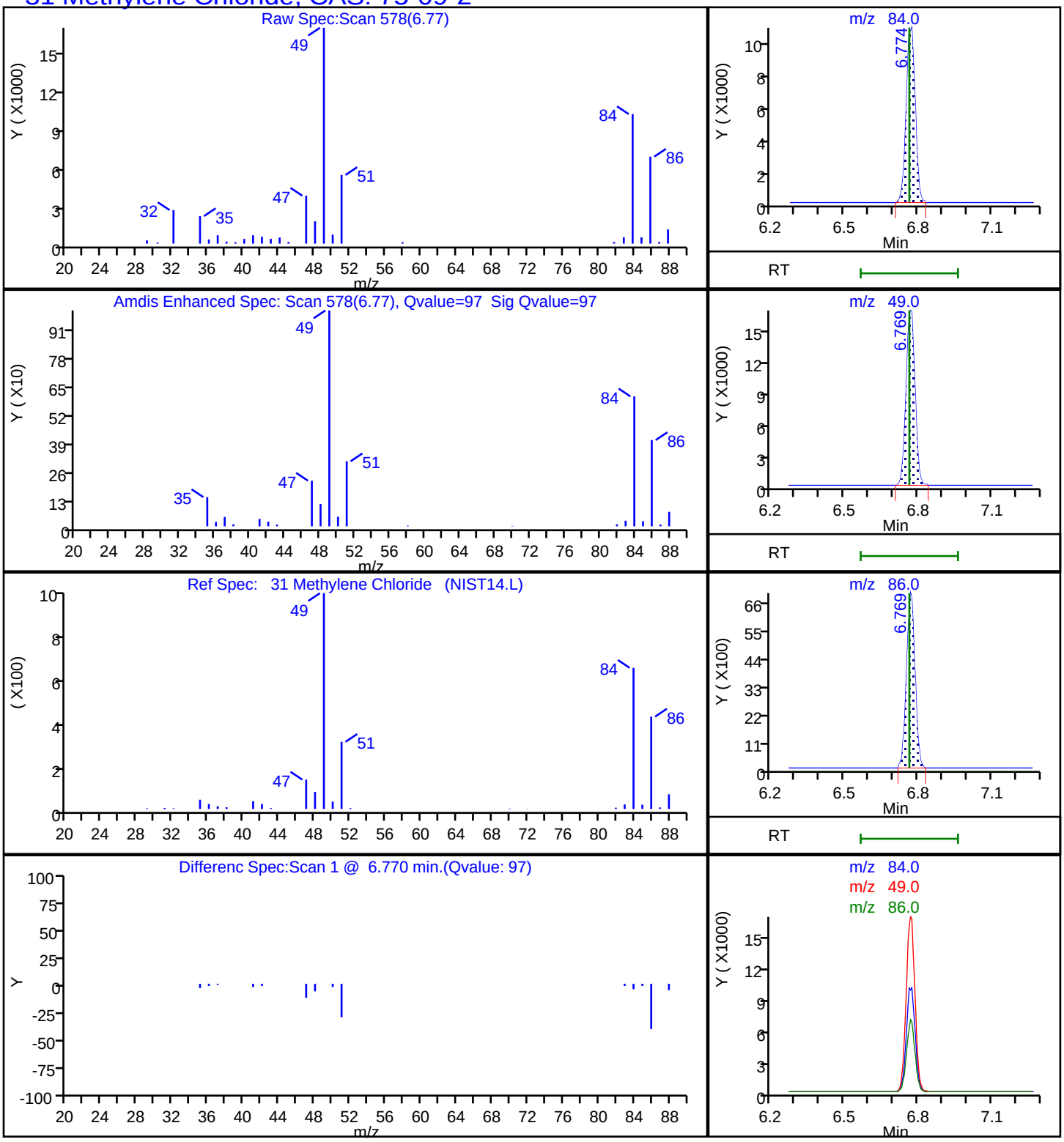


Report Date: 07-Sep-2020 07:44:07 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P113.D				
Injection Date:	07-Sep-2020 03:43:30	Instrument ID:	MH		
Lims ID:	140-20175-A-30	Lab Sample ID:	140-20175-30		
Client ID:	IA-150-C-29				
Operator ID:	HMT	ALS Bottle#:	13	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

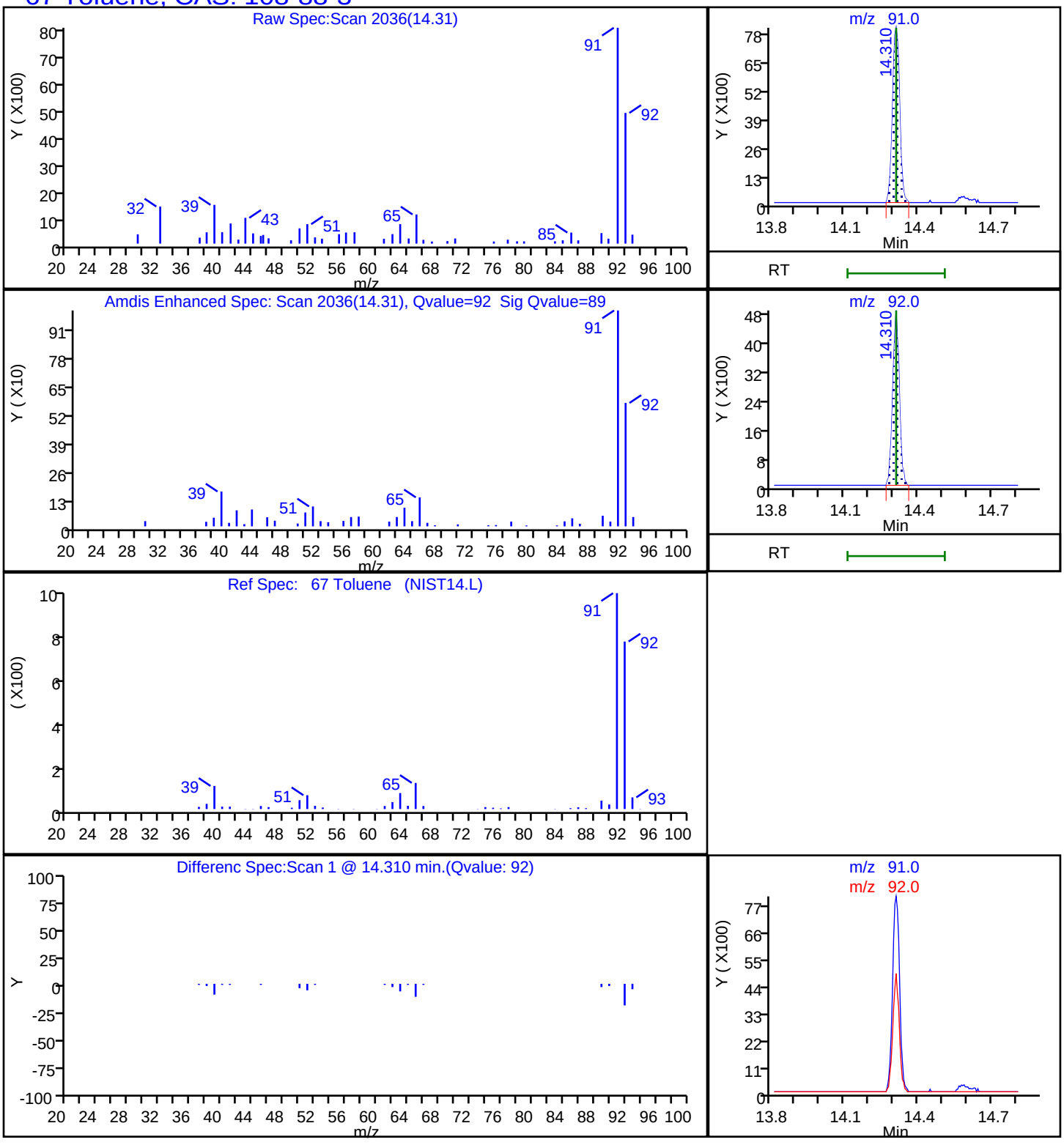
31 Methylene Chloride, CAS: 75-09-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P113.D				
Injection Date:	07-Sep-2020 03:43:30	Instrument ID:	MH		
Lims ID:	140-20175-A-30	Lab Sample ID:	140-20175-30		
Client ID:	IA-150-C-29				
Operator ID:	HMT	ALS Bottle#:	13	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

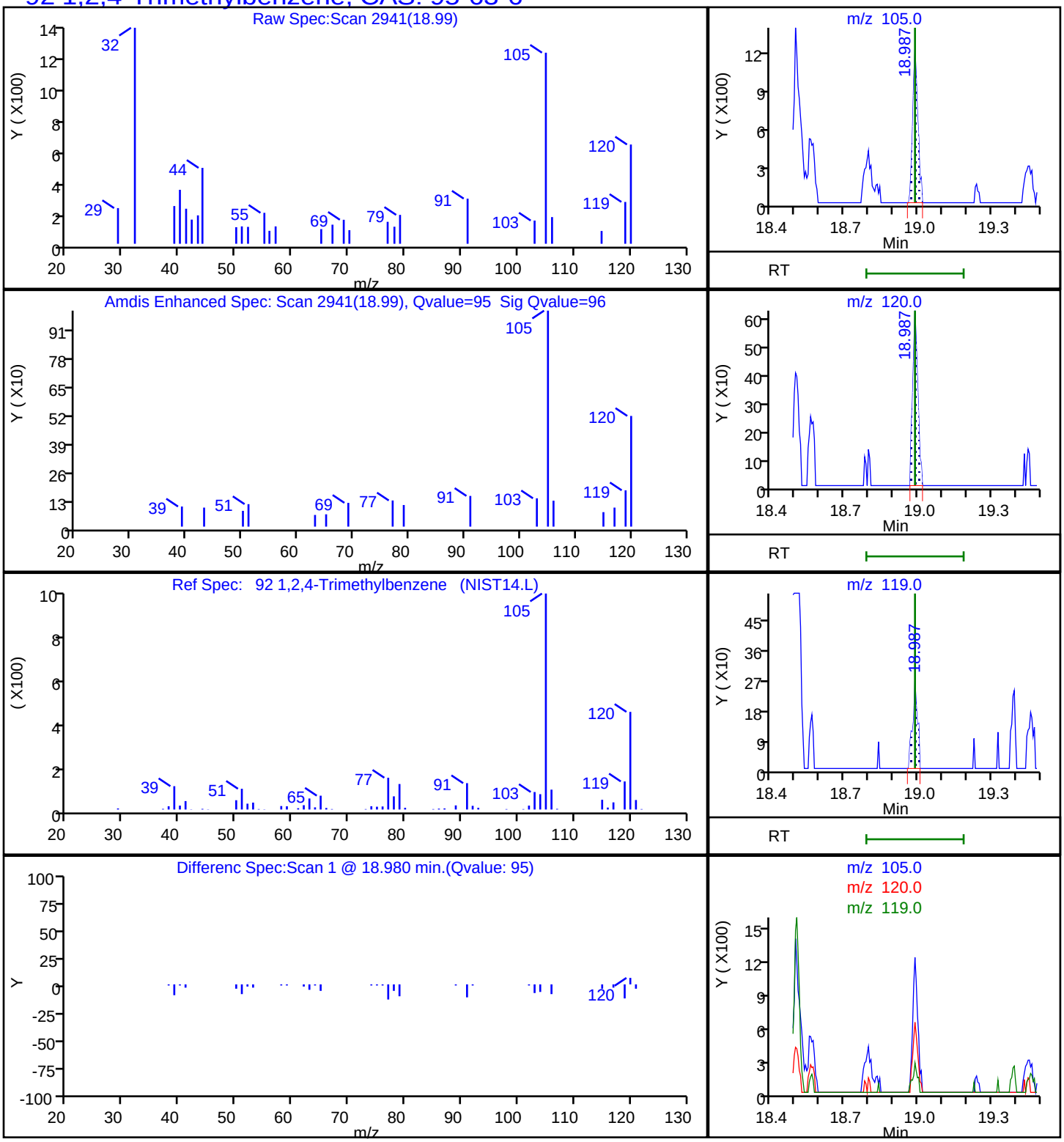
67 Toluene, CAS: 108-88-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P113.D				
Injection Date:	07-Sep-2020 03:43:30	Instrument ID:	MH		
Lims ID:	140-20175-A-30	Lab Sample ID:	140-20175-30		
Client ID:	IA-150-C-29				
Operator ID:	HMT	ALS Bottle#:	13	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

92 1,2,4-Trimethylbenzene, CAS: 95-63-6

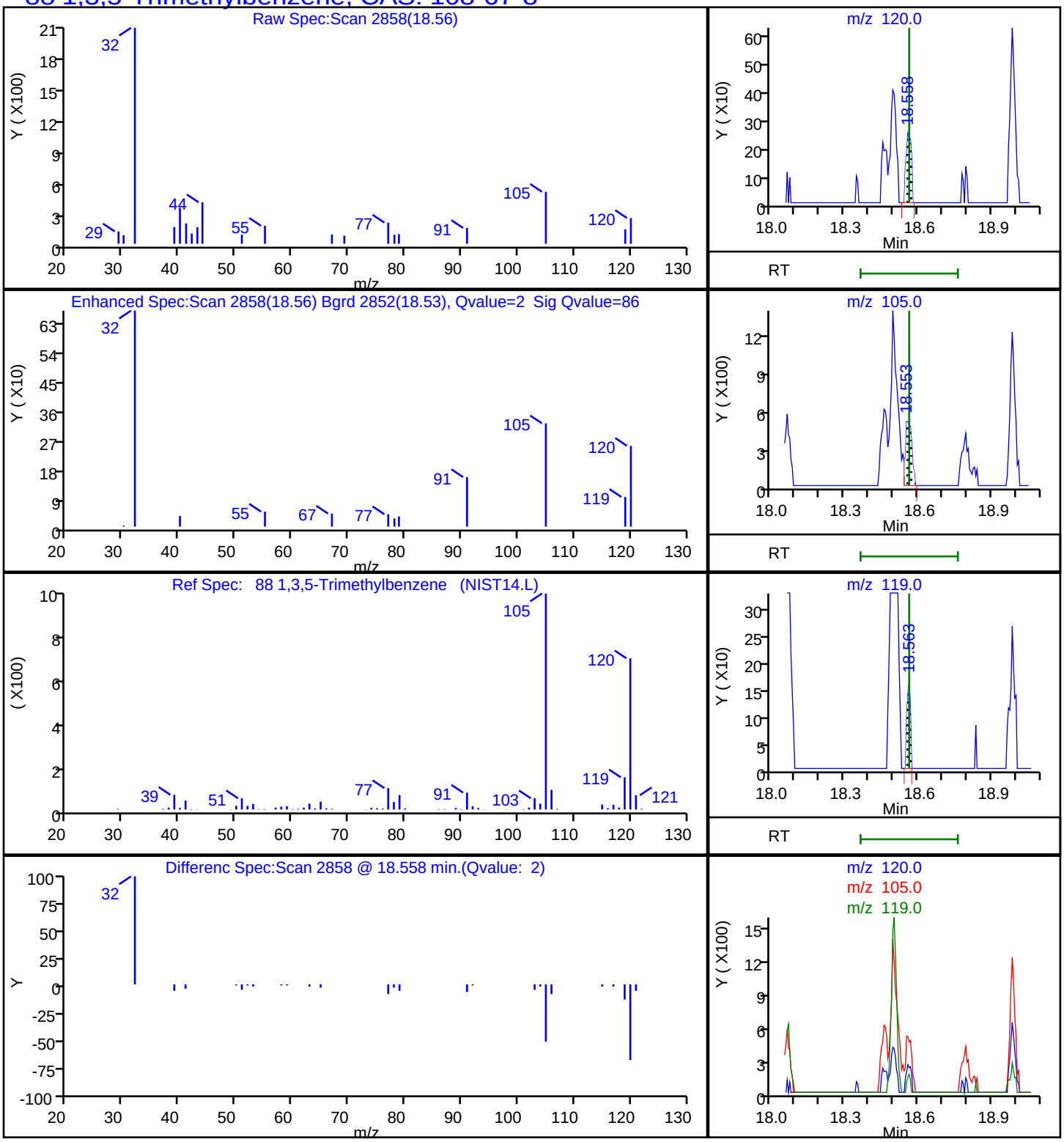


Report Date: 07-Sep-2020 07:44:08 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P113.D				
Injection Date:	07-Sep-2020 03:43:30	Instrument ID:	MH		
Lims ID:	140-20175-A-30	Lab Sample ID:	140-20175-30		
Client ID:	IA-150-C-29				
Operator ID:	HMT	ALS Bottle#:	13	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

88 1,3,5-Trimethylbenzene, CAS: 108-67-8



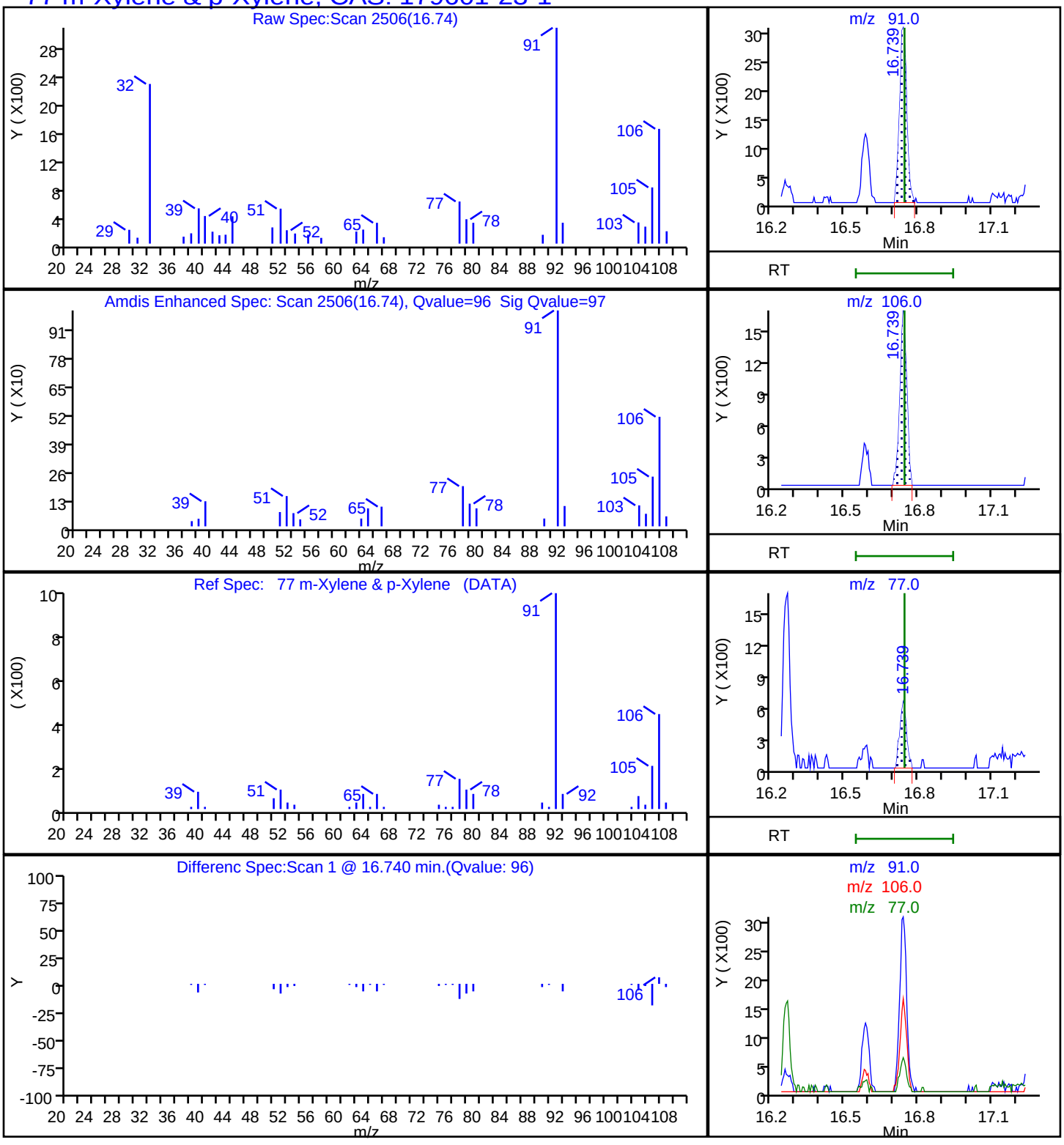
Report Date: 07-Sep-2020 07:44:08 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P113.D

Injection Date:	07-Sep-2020 03:43:30	Instrument ID:	MH		
Lims ID:	140-20175-A-30	Lab Sample ID:	140-20175-30		
Client ID:	IA-150-C-29				
Operator ID:	HMT	ALS Bottle#:	13	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

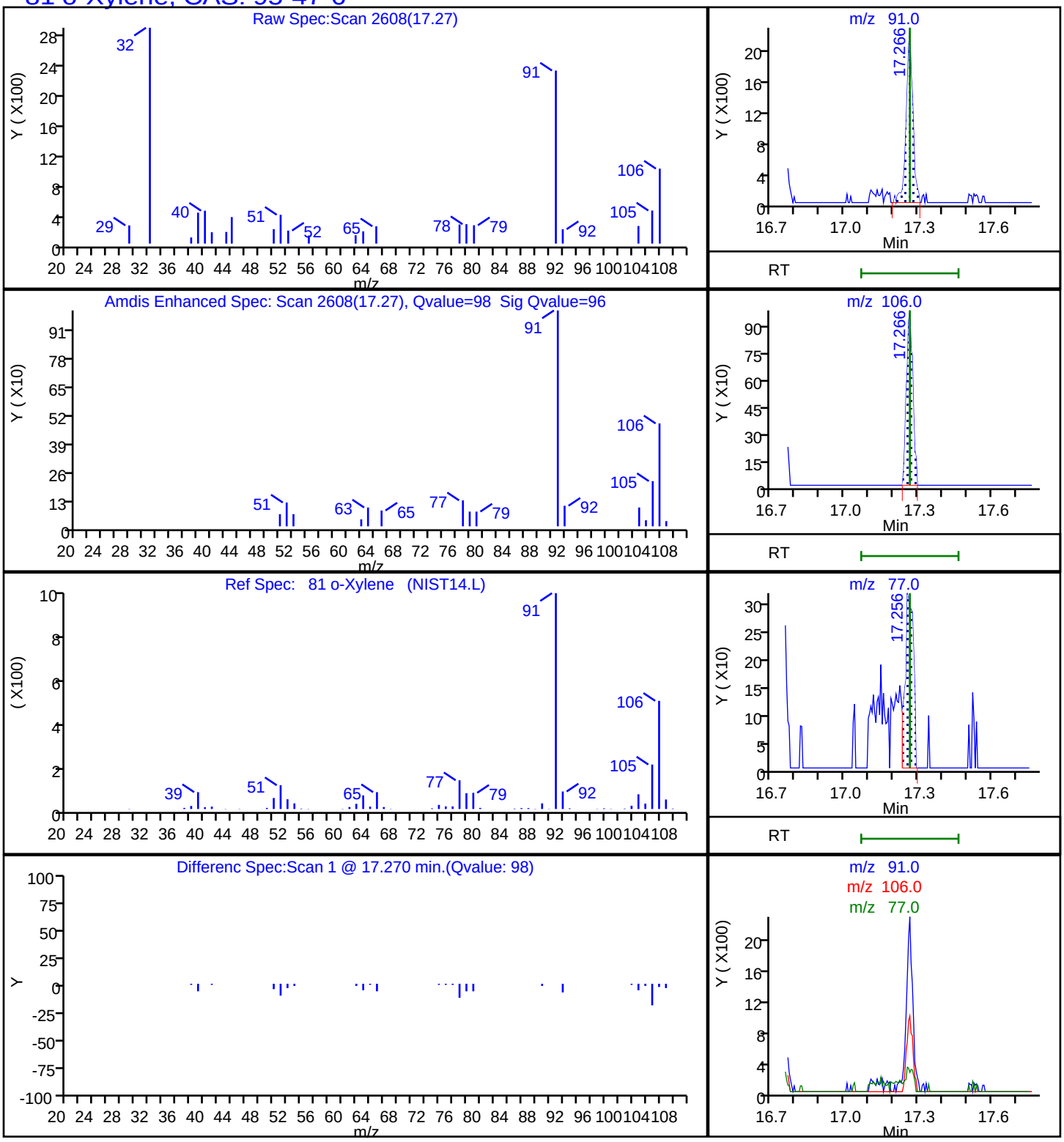
77 m-Xylene & p-Xylene, CAS: 179601-23-1



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P113.D				
Injection Date:	07-Sep-2020 03:43:30	Instrument ID:	MH		
Lims ID:	140-20175-A-30	Lab Sample ID:	140-20175-30		
Client ID:	IA-150-C-29				
Operator ID:	HMT	ALS Bottle#:	13	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

81 o-Xylene, CAS: 95-47-6



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: IA-145-C-29 Lab Sample ID: 140-20175-31

Matrix: Air Lab File ID: HI07P114.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 16:42

Sample wt/vol: 100(mL) Date Analyzed: 09/07/2020 04:36

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42498 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.19	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.091	J *	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	18		0.40	0.11
67-66-3	Chloroform	119.38	0.082	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.51		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	0.13	J	0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.035
108-88-3	Toluene	92.14	0.85		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	ND		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND	*	0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	0.26	J	0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.63	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	91		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: IA-145-C-29 Lab Sample ID: 140-20175-31

Matrix: Air Lab File ID: HI07P114.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 16:42

Sample wt/vol: 100(mL) Date Analyzed: 09/07/2020 04:36

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42498 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.61	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.57	J *	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	63		1.4	0.39
67-66-3	Chloroform	119.38	0.40	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.5		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	0.55	J	1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.24
108-88-3	Toluene	92.14	3.2		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	ND		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	ND	*	2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	1.3	J	2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	2.7	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	91		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P114.D
Lims ID: 140-20175-A-31
Client ID: IA-145-C-29
Sample Type: Client
Inject. Date: 07-Sep-2020 04:36:30 ALS Bottle#: 14 Worklist Smp#: 19
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016514-019
Misc. Info.: 140-20175-a-31
Operator ID: HMT Instrument ID: MH

Method: \\chromfs\Knoxville\ChromData\MH\20200904-16514.b\MH_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 07-Sep-2020 07:43:45 Calib Date: 29-Aug-2020 23:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1015

First Level Reviewer: tajh Date: 07-Sep-2020 07:43:08

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.431	9.431	0.000	97	106815	4.80	
* 2 1,4-Difluorobenzene	114	11.591	11.591	0.000	95	429409	4.80	
* 3 Chlorobenzene-d5 (IS)	117	16.258	16.258	0.000	88	299473	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.876	17.876	0.000	91	146862	4.22	
6 Chlorodifluoromethane	51	3.916	3.916	0.000	96	213387	3.58	
8 Dichlorodifluoromethane	85	3.988	3.983	0.005	99	8213	0.1017	
44 Chloroform	83	9.436	9.436	0.000	32	1069	0.0165	
51 Benzene	78	11.074	11.074	0.000	80	3003	0.0381	
52 Carbon tetrachloride	117	11.100	11.095	0.005	91	890	0.0182	
67 Toluene	91	14.305	14.310	-0.005	90	13107	0.1699	
76 Ethylbenzene	91	16.579	16.584	-0.005	87	2357	0.0252	
77 m-Xylene & p-Xylene	91	16.739	16.744	-0.005	95	6127	0.0830	
81 o-Xylene	91	17.266	17.266	0.000	96	3292	0.0426	
88 1,3,5-Trimethylbenzene	120	18.563	18.563	0.000	26	243	0.0526	
S 116 Xylenes, Total	100				0		0.1256	

Reagents:

40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

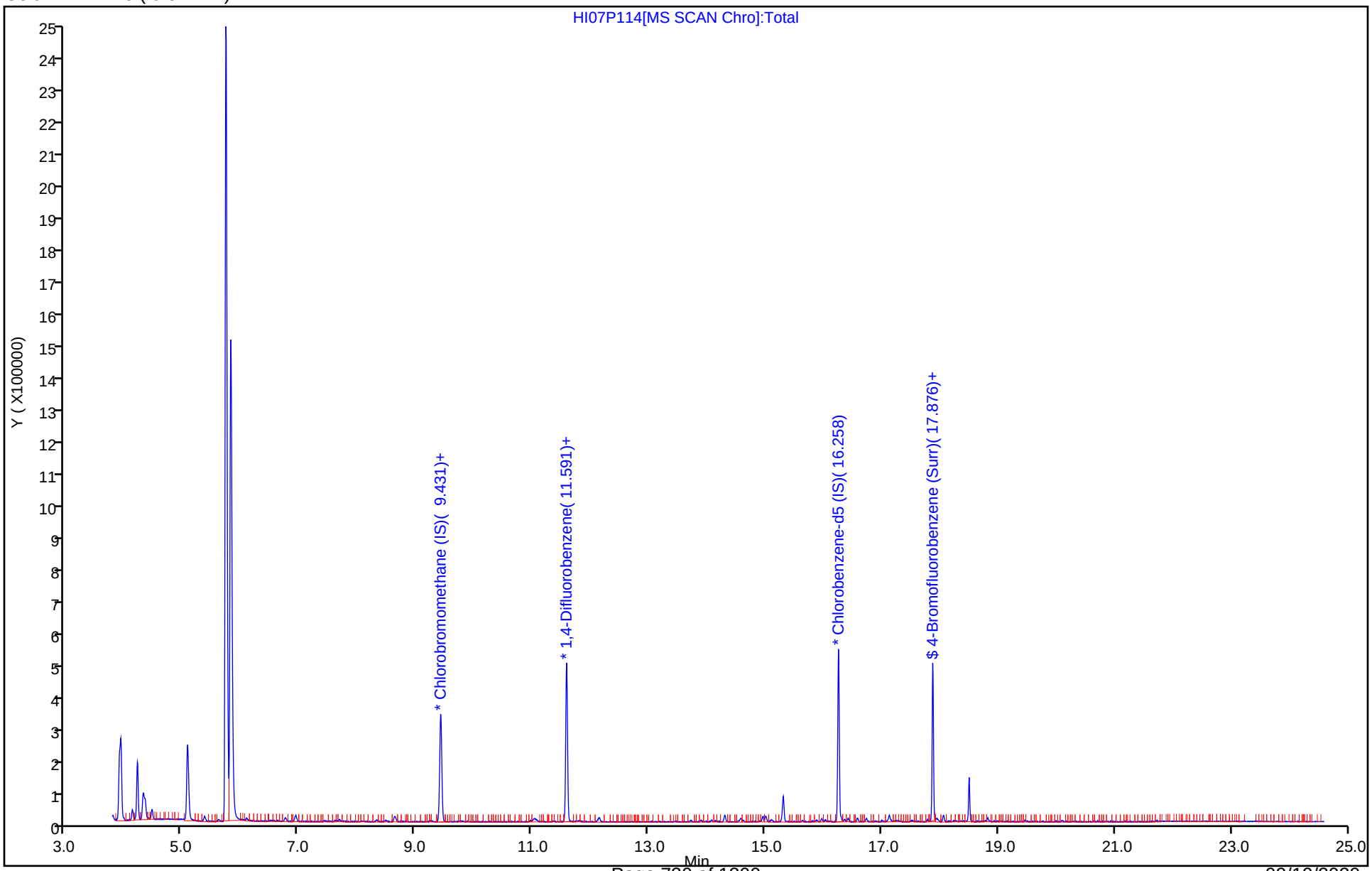
Report Date: 07-Sep-2020 07:44:09 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P114.D

Injection Date:	07-Sep-2020 04:36:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	140-20175-A-31	Lab Sample ID:	140-20175-31	Worklist Smp#:	19
Client ID:	IA-145-C-29				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

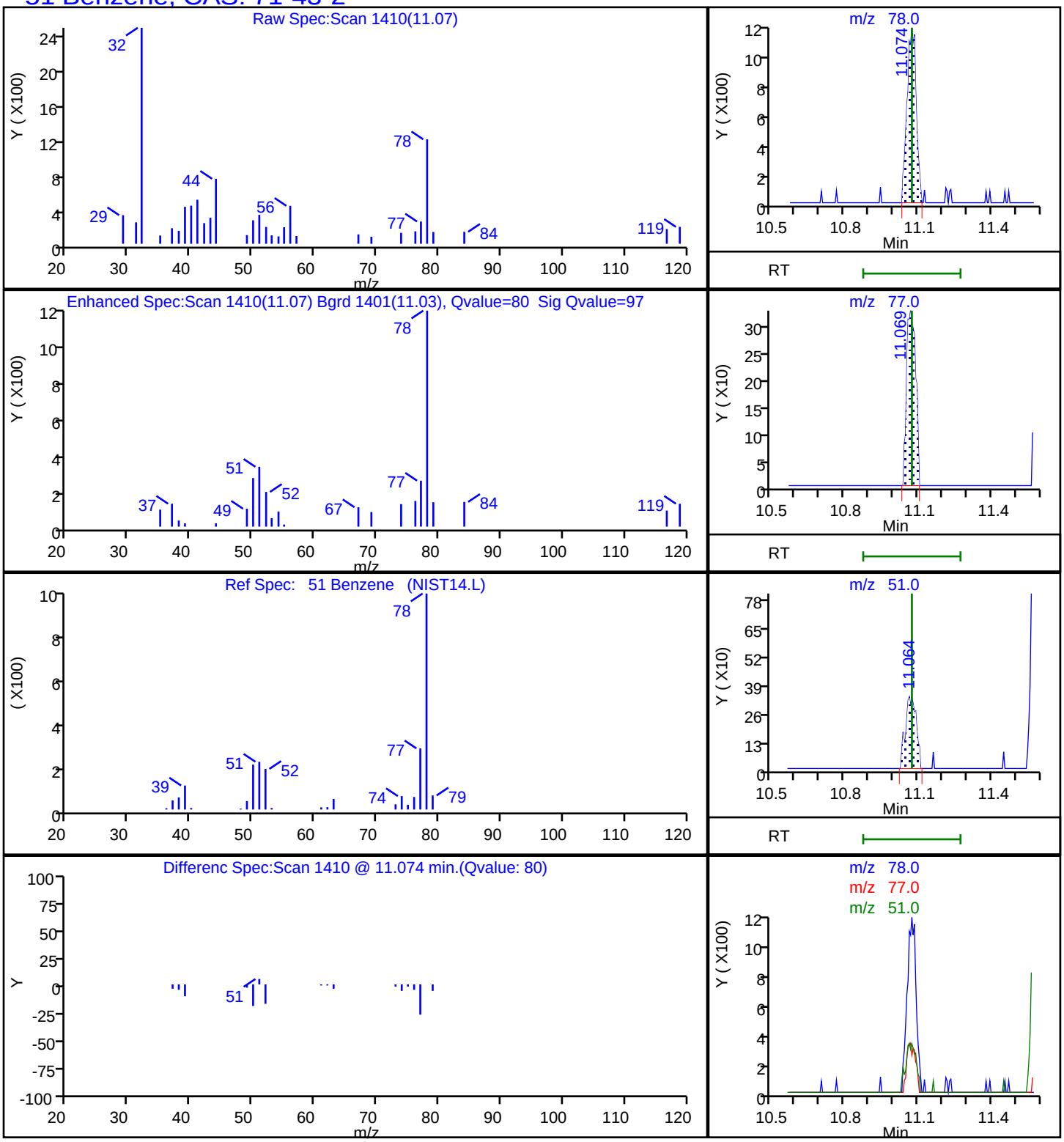
Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P114.D				
Lims ID:	140-20175-A-31				
Client ID:	IA-145-C-29				
Sample Type:	Client				
Inject. Date:	07-Sep-2020 04:36:30	ALS Bottle#:	14	Worklist Smp#:	19
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016514-019				
Misc. Info.:	140-20175-a-31				
Operator ID:	HMT	Instrument ID:	MH		
Method:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\MH_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	07-Sep-2020 07:43:45	Calib Date:	29-Aug-2020 23:57:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1015				
First Level Reviewer: tajh		Date:	07-Sep-2020 07:43:08		

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	4.22	90.96

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P114.D				
Injection Date:	07-Sep-2020 04:36:30	Instrument ID:	MH		
Lims ID:	140-20175-A-31	Lab Sample ID:	140-20175-31		
Client ID:	IA-145-C-29				
Operator ID:	HMT	ALS Bottle#:	14	Worklist Smp#:	19
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

51 Benzene, CAS: 71-43-2

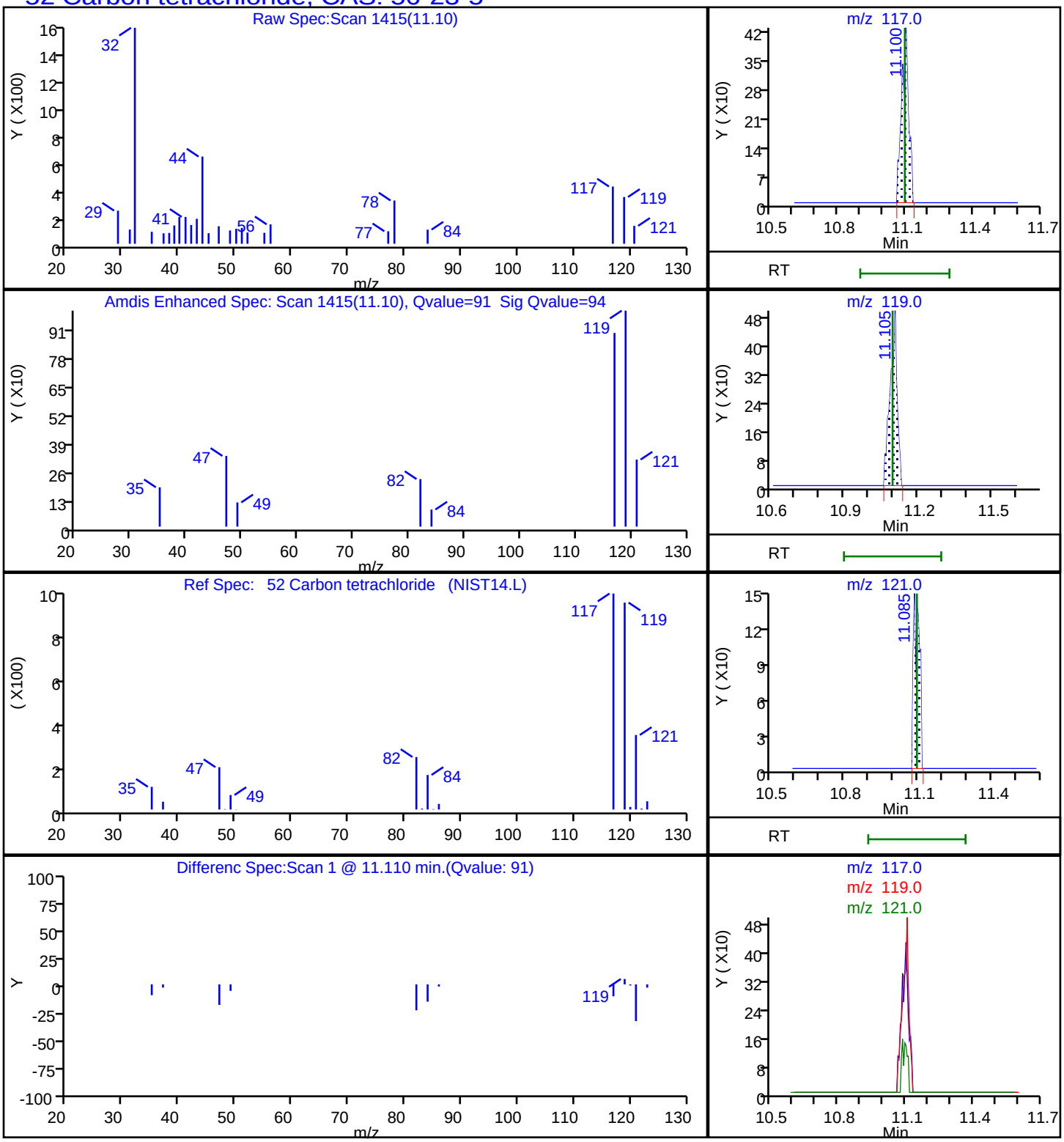


Report Date: 07-Sep-2020 07:44:09 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P114.D				
Injection Date:	07-Sep-2020 04:36:30	Instrument ID:	MH		
Lims ID:	140-20175-A-31	Lab Sample ID:	140-20175-31		
Client ID:	IA-145-C-29				
Operator ID:	HMT	ALS Bottle#:	14	Worklist Smp#:	19
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

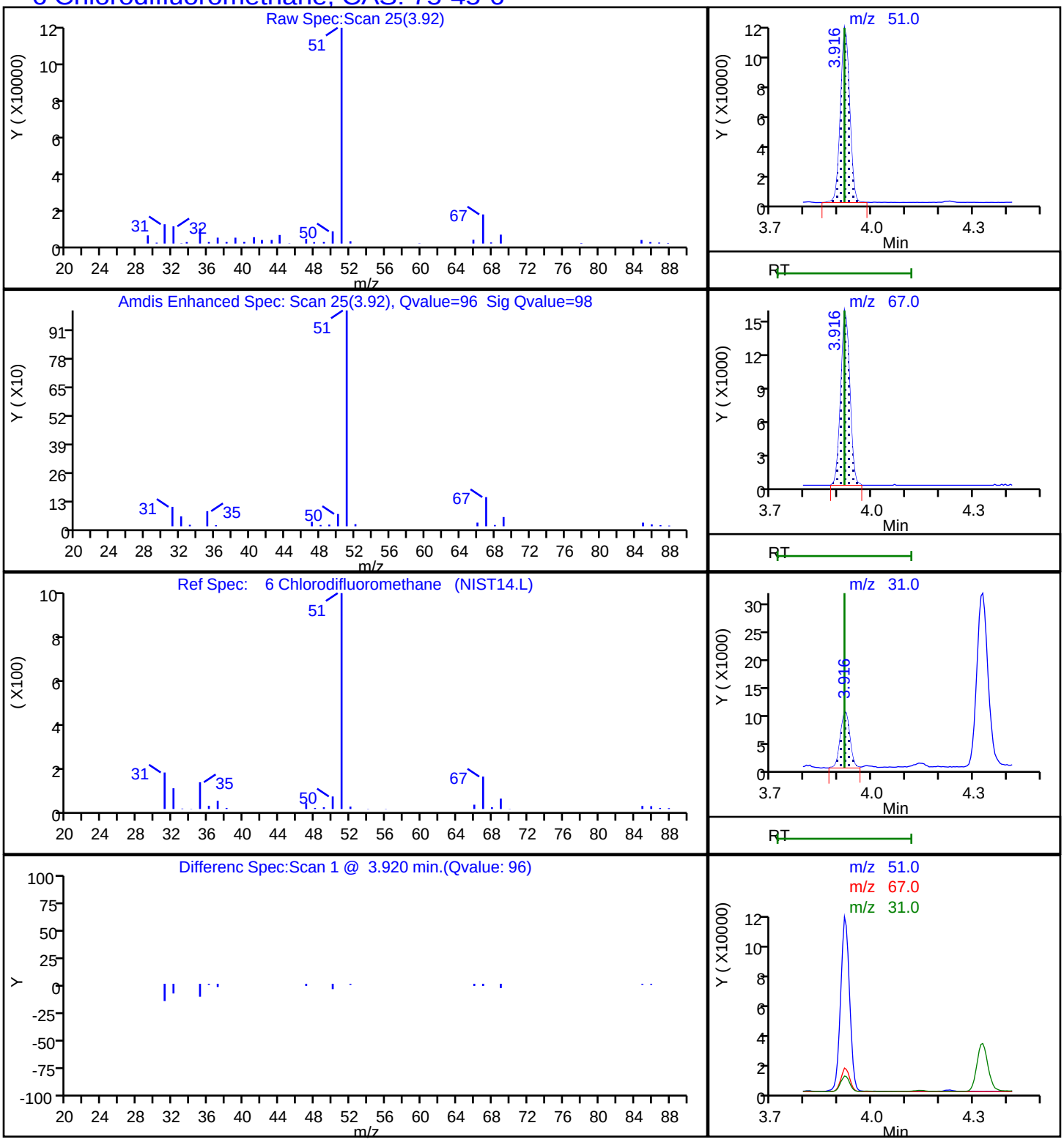
52 Carbon tetrachloride, CAS: 56-23-5



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P114.D				
Injection Date:	07-Sep-2020 04:36:30	Instrument ID:	MH		
Lims ID:	140-20175-A-31	Lab Sample ID:	140-20175-31		
Client ID:	IA-145-C-29				
Operator ID:	HMT	ALS Bottle#:	14	Worklist Smp#:	19
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

6 Chlorodifluoromethane, CAS: 75-45-6

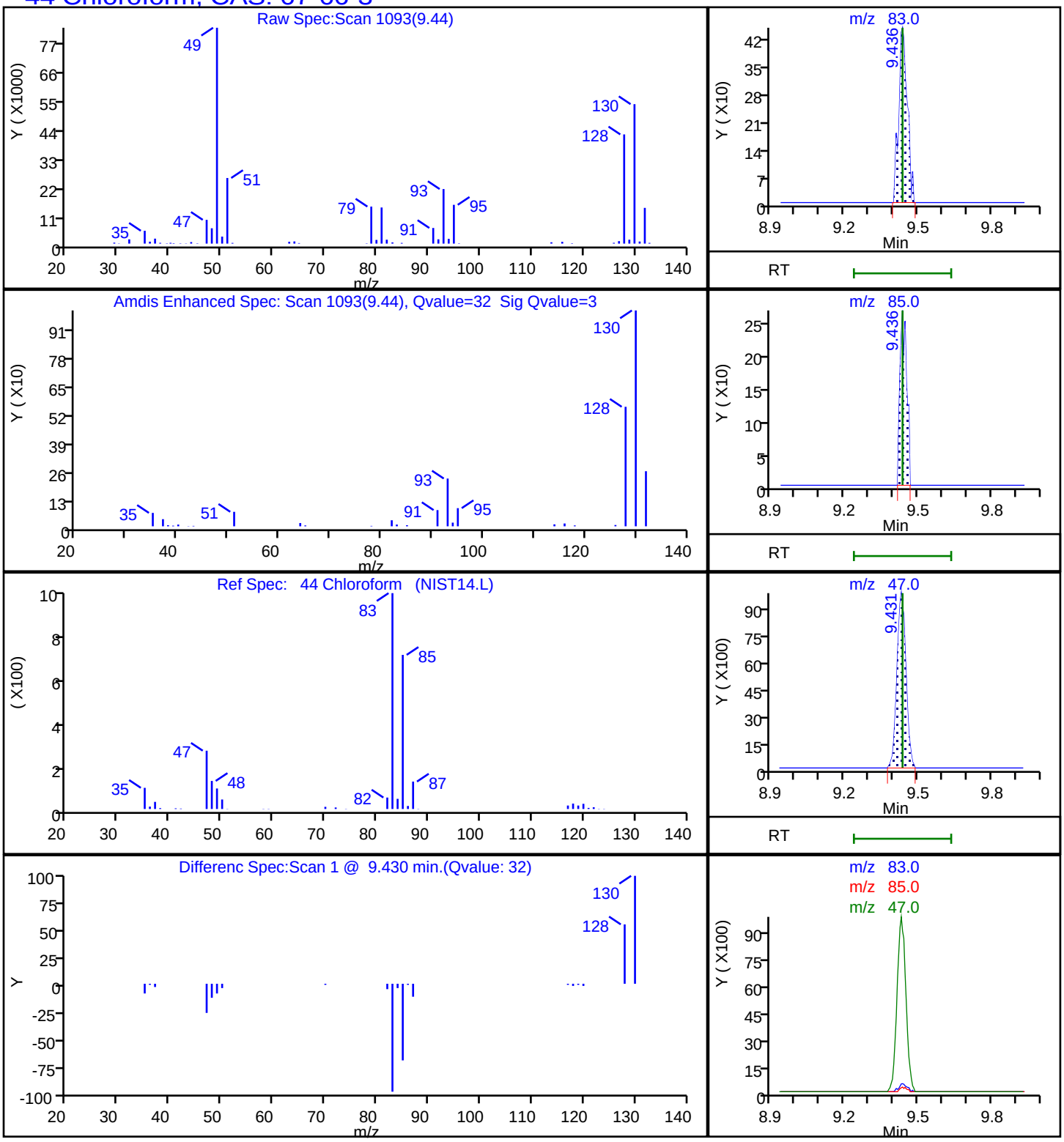


Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P114.D

Injection Date:	07-Sep-2020 04:36:30	Instrument ID:	MH		
Lims ID:	140-20175-A-31	Lab Sample ID:	140-20175-31		
Client ID:	IA-145-C-29				
Operator ID:	HMT	ALS Bottle#:	14	Worklist Smp#:	19
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

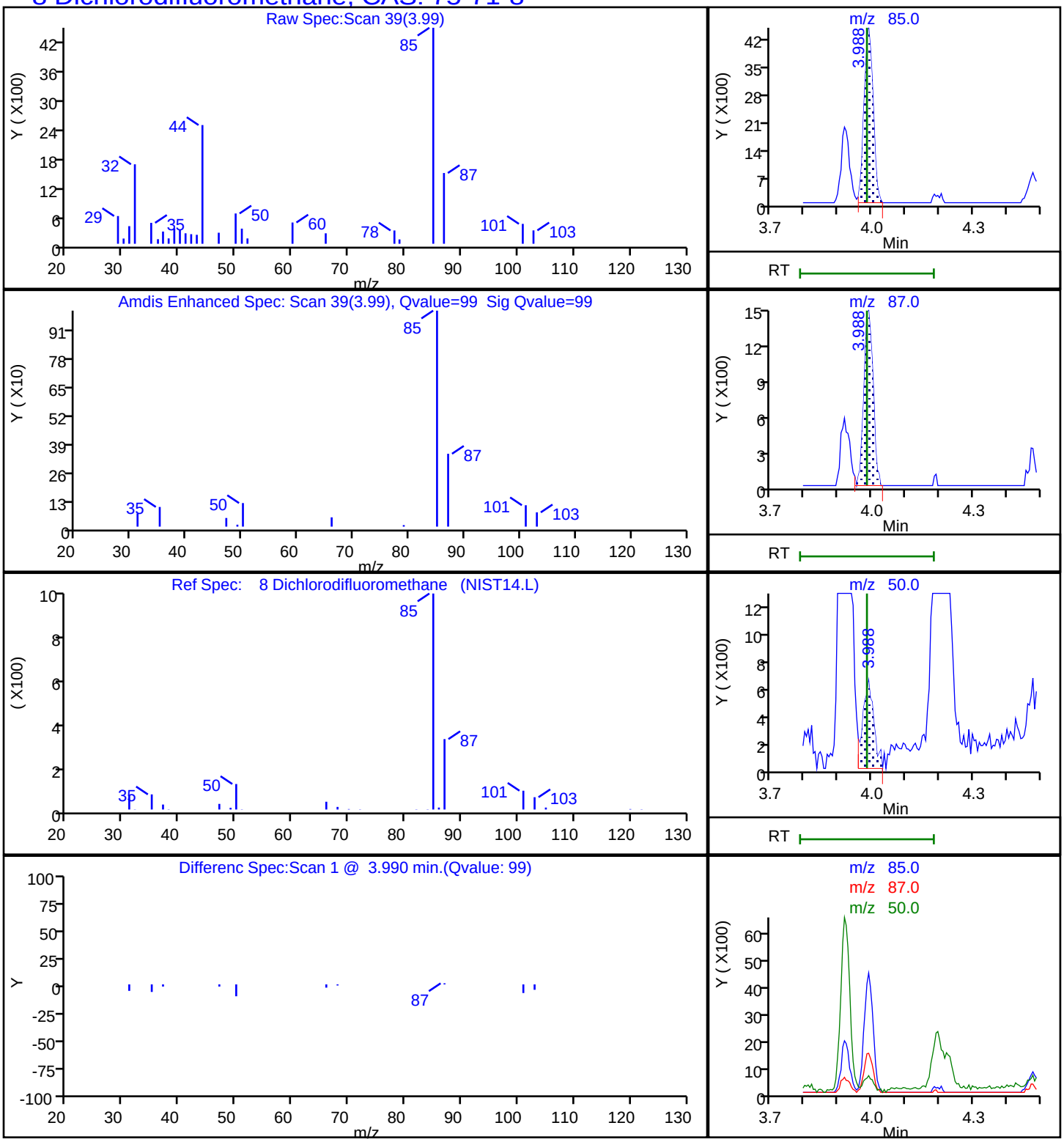
44 Chloroform, CAS: 67-66-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P114.D				
Injection Date:	07-Sep-2020 04:36:30	Instrument ID:	MH		
Lims ID:	140-20175-A-31	Lab Sample ID:	140-20175-31		
Client ID:	IA-145-C-29				
Operator ID:	HMT	ALS Bottle#:	14	Worklist Smp#:	19
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

8 Dichlorodifluoromethane, CAS: 75-71-8

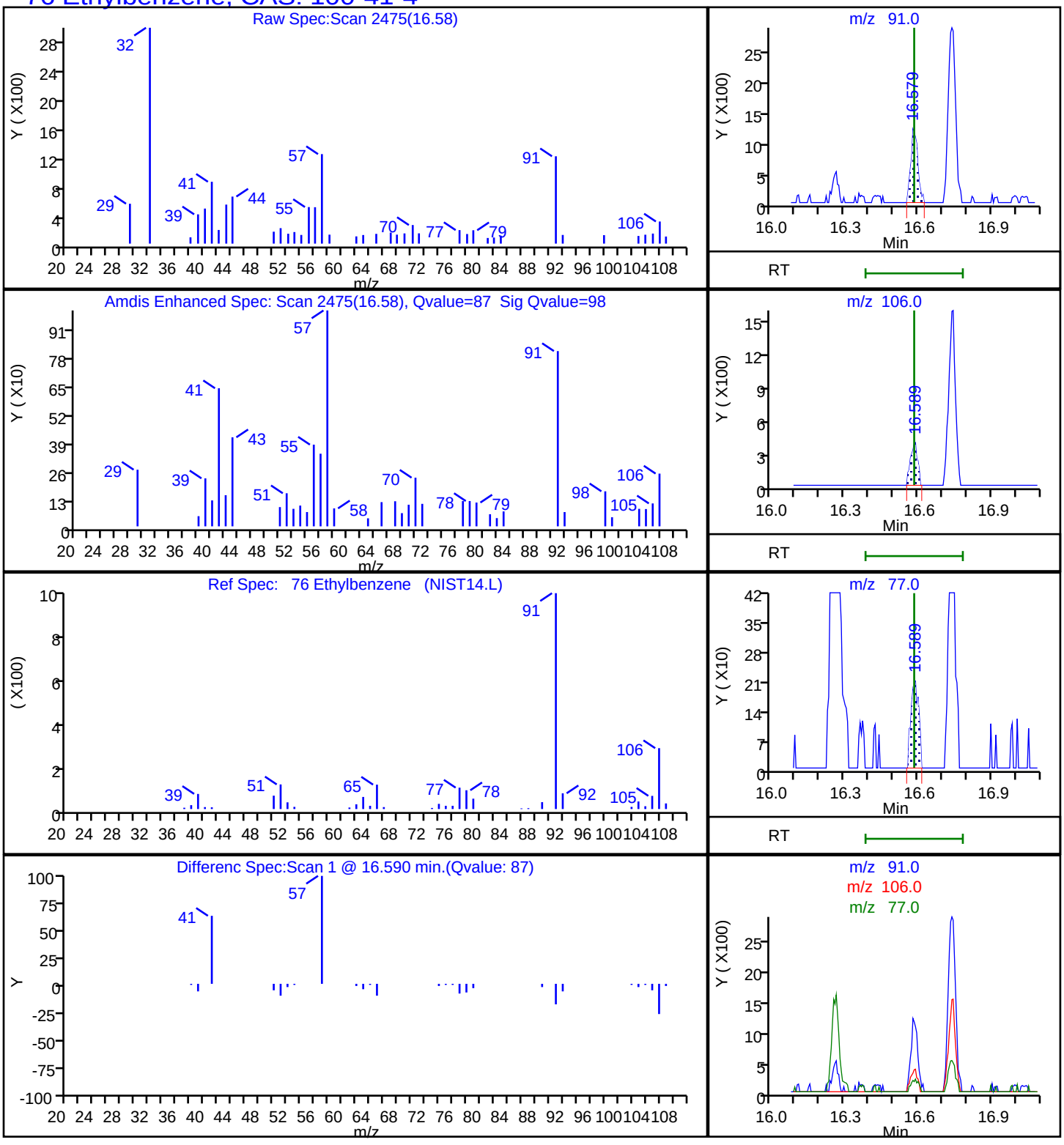


Report Date: 07-Sep-2020 07:44:09 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P114.D				
Injection Date:	07-Sep-2020 04:36:30	Instrument ID:	MH		
Lims ID:	140-20175-A-31	Lab Sample ID:	140-20175-31		
Client ID:	IA-145-C-29				
Operator ID:	HMT	ALS Bottle#:	14	Worklist Smp#:	19
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

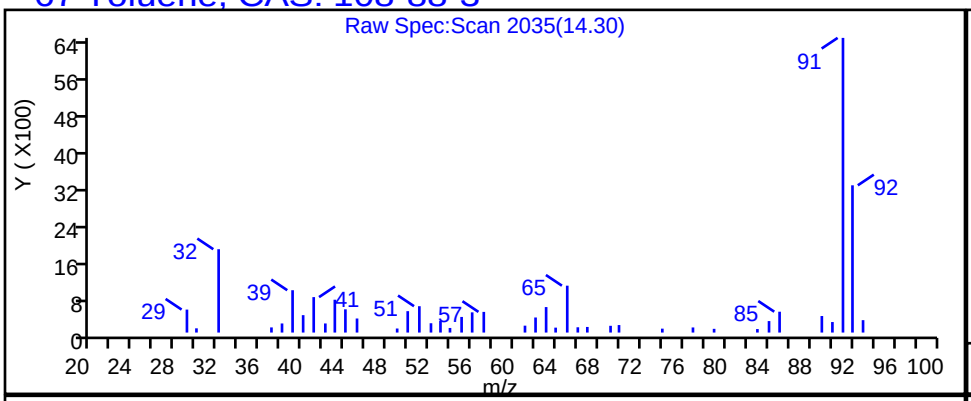
76 Ethylbenzene, CAS: 100-41-4

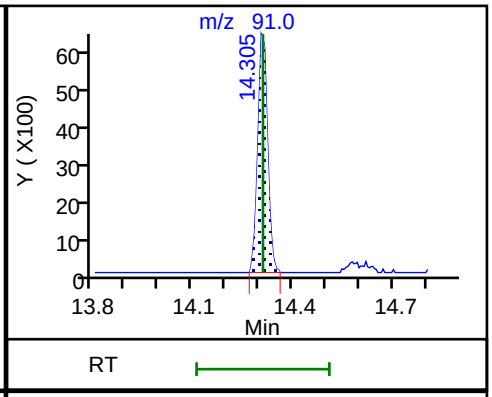


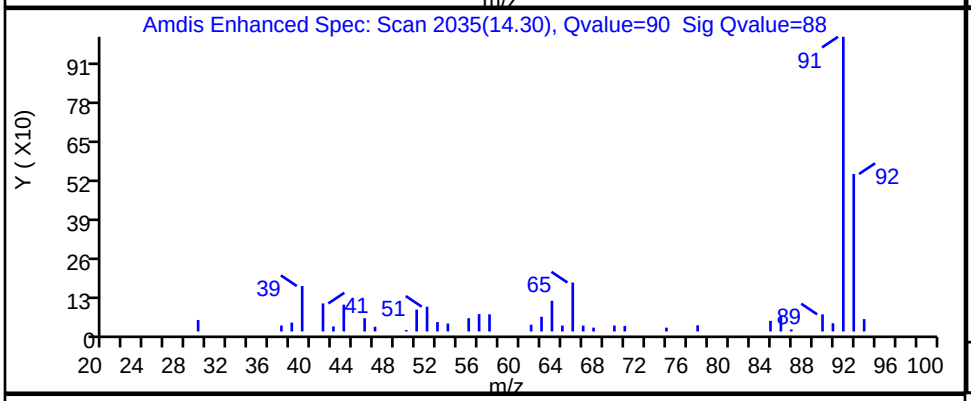
Eurofins TestAmerica, Knoxville

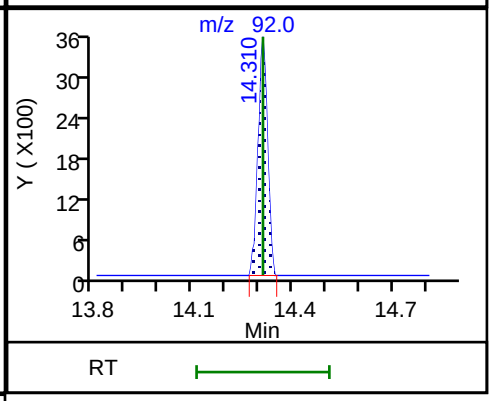
Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P114.D				
Injection Date:	07-Sep-2020 04:36:30	Instrument ID:	MH		
Lims ID:	140-20175-A-31	Lab Sample ID:	140-20175-31		
Client ID:	IA-145-C-29				
Operator ID:	HMT	ALS Bottle#:	14	Worklist Smp#:	19
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

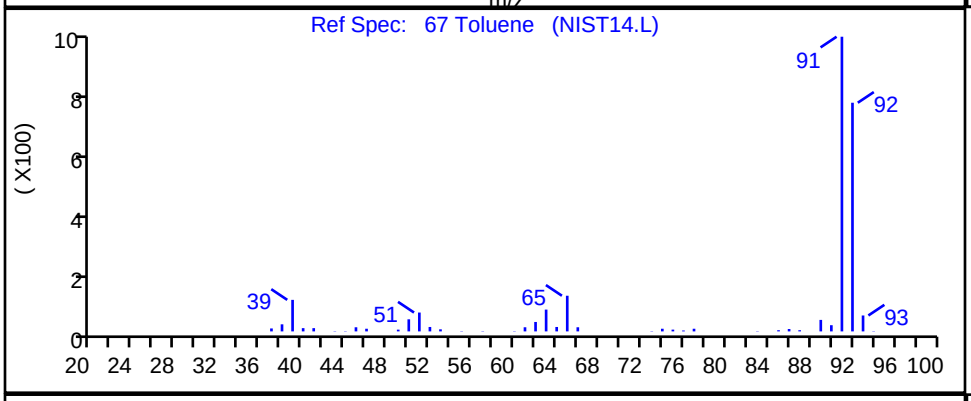
67 Toluene, CAS: 108-88-3

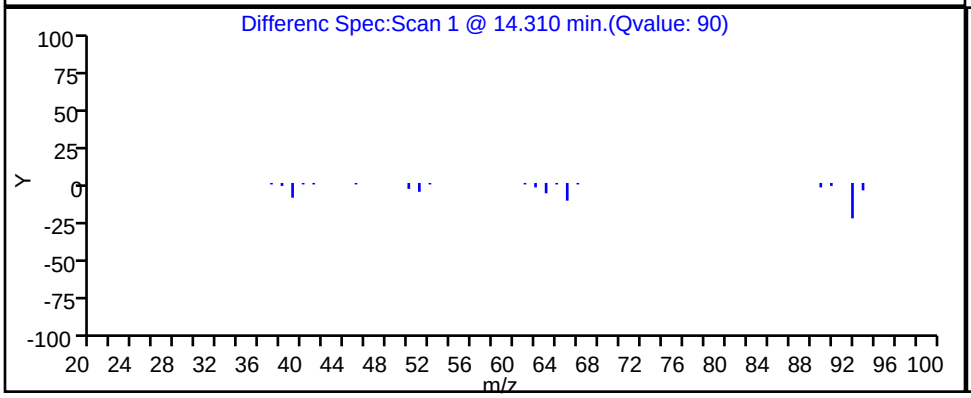


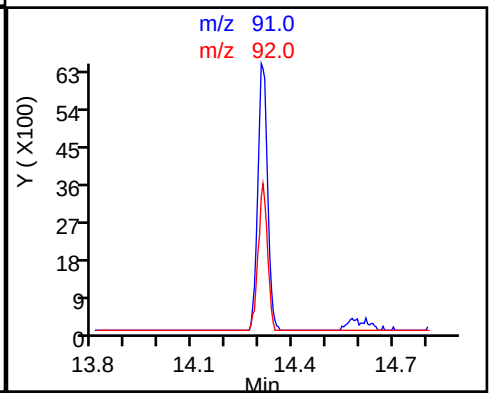








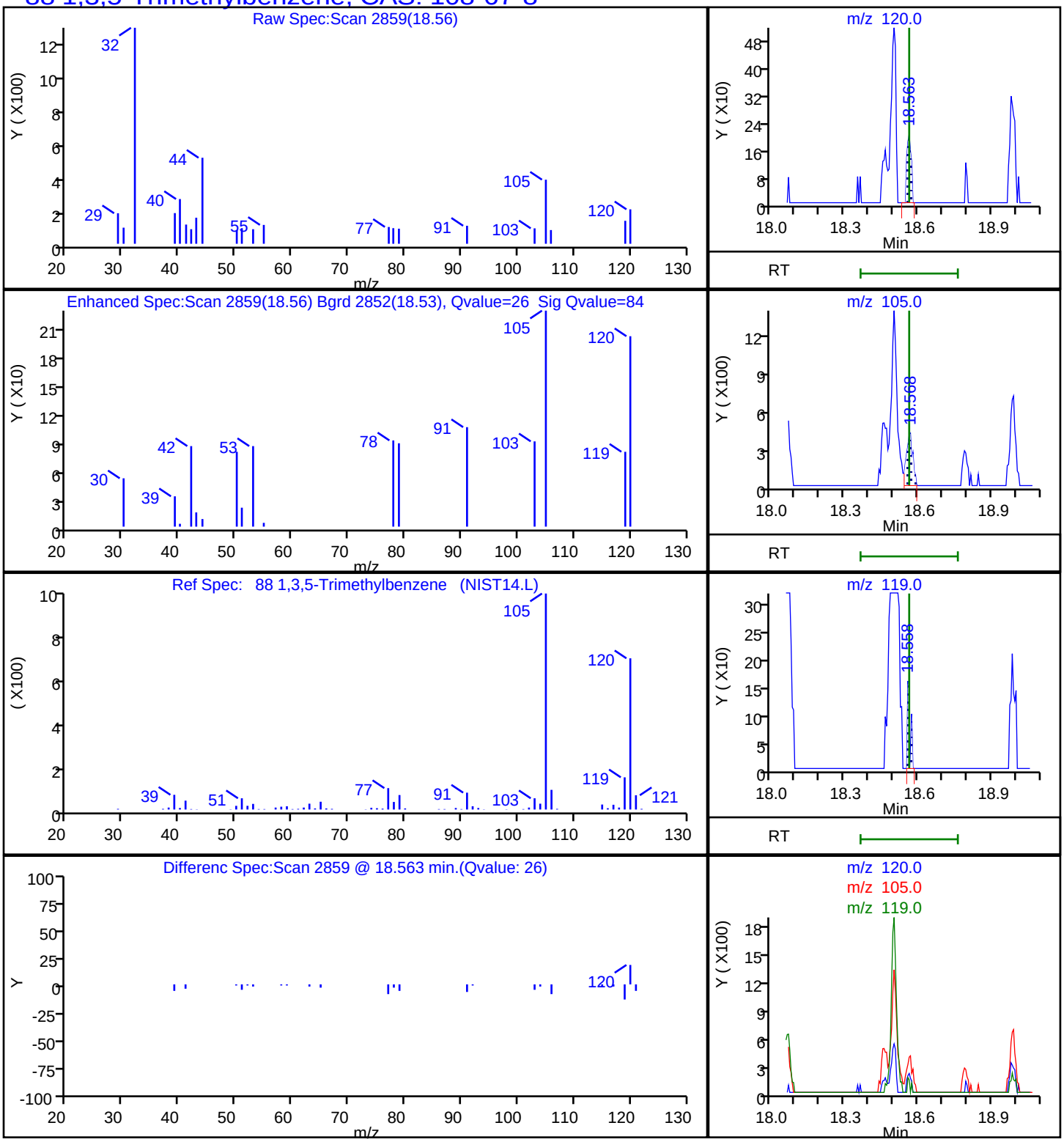




Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P114.D				
Injection Date:	07-Sep-2020 04:36:30	Instrument ID:	MH		
Lims ID:	140-20175-A-31	Lab Sample ID:	140-20175-31		
Client ID:	IA-145-C-29				
Operator ID:	HMT	ALS Bottle#:	14	Worklist Smp#:	19
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

88 1,3,5-Trimethylbenzene, CAS: 108-67-8

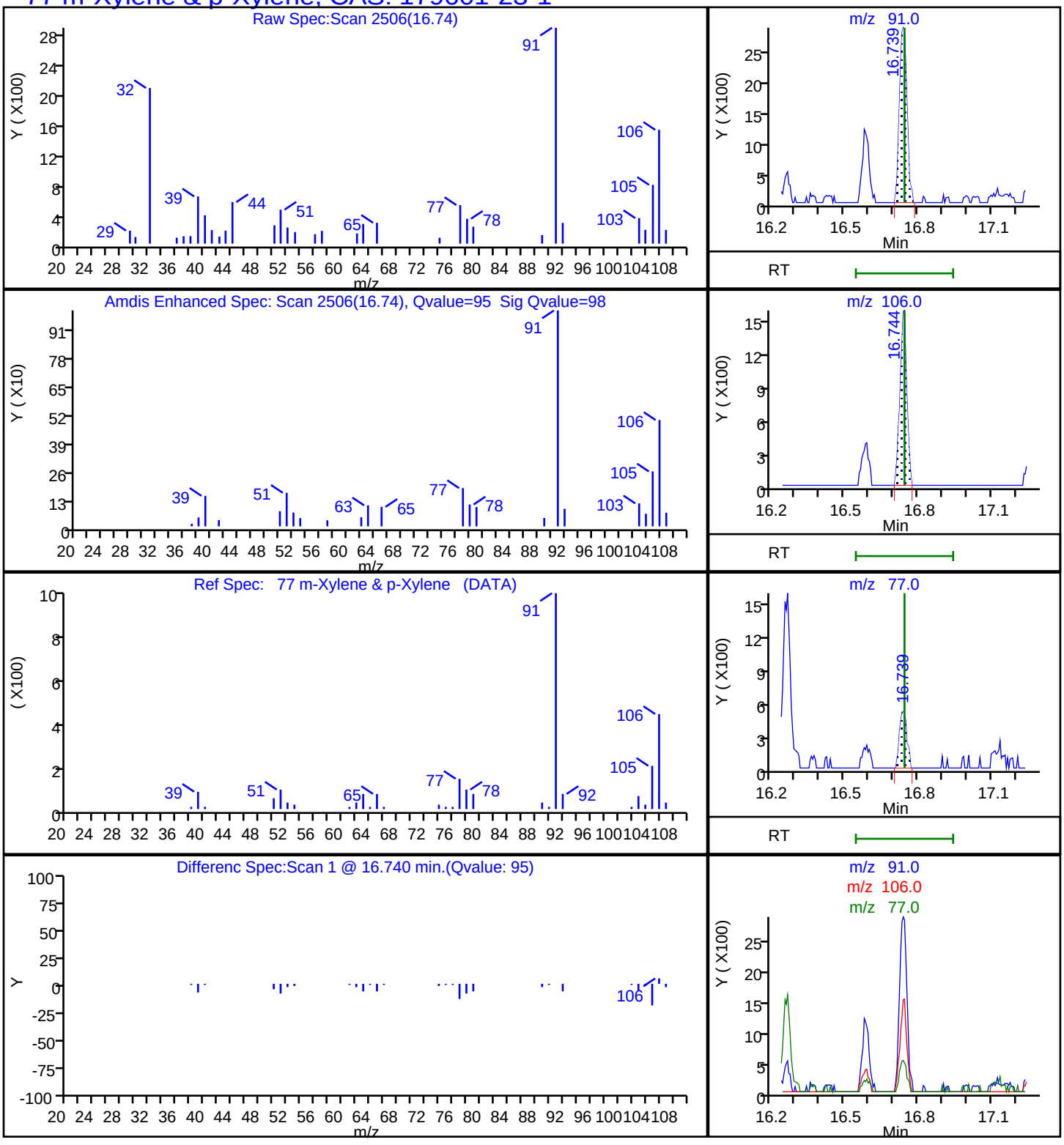


Report Date: 07-Sep-2020 07:44:09 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P114.D				
Injection Date:	07-Sep-2020 04:36:30	Instrument ID:	MH		
Lims ID:	140-20175-A-31	Lab Sample ID:	140-20175-31		
Client ID:	IA-145-C-29				
Operator ID:	HMT	ALS Bottle#:	14	Worklist Smp#:	19
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

77 m-Xylene & p-Xylene, CAS: 179601-23-1

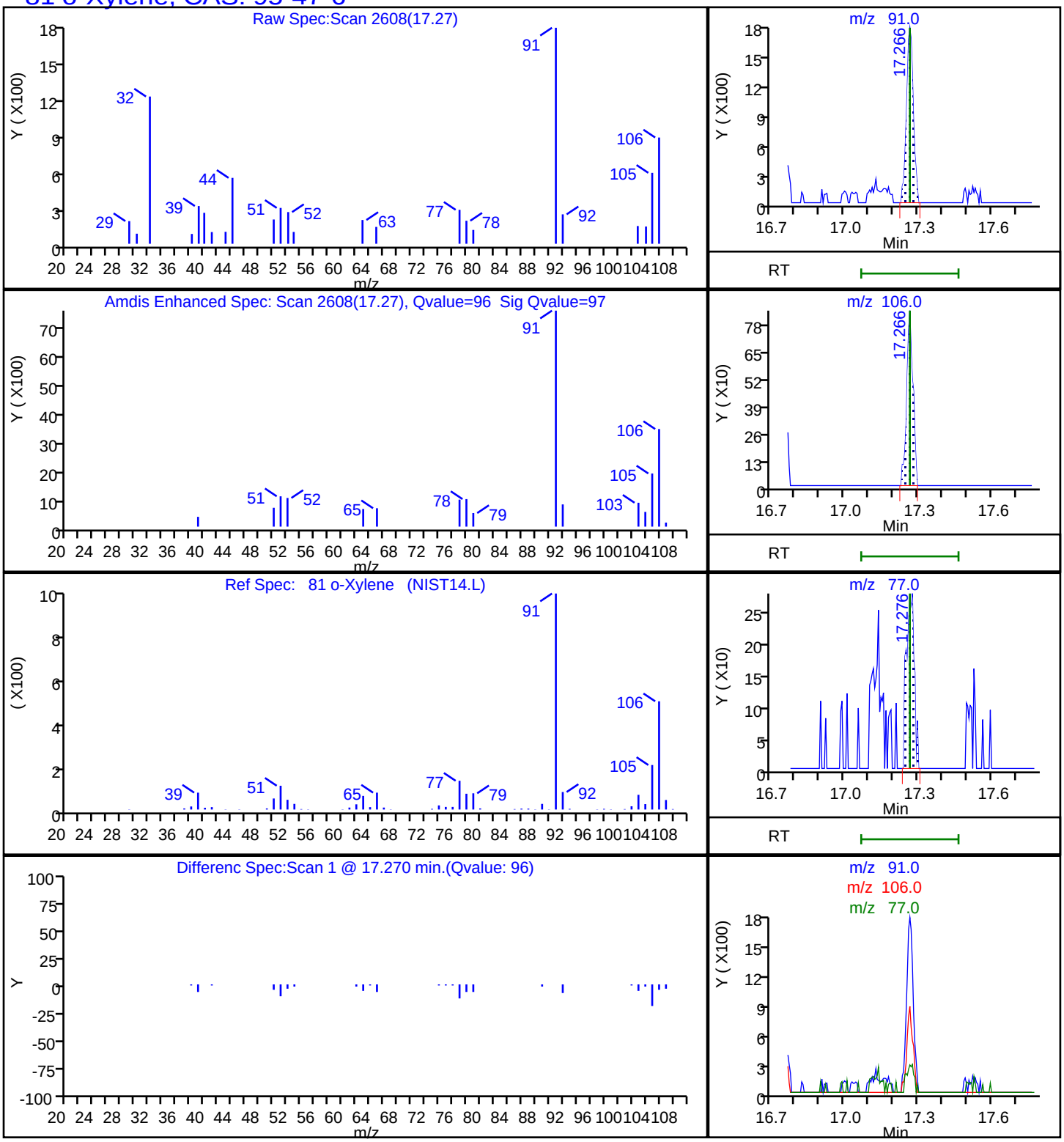


Report Date: 07-Sep-2020 07:44:09 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P114.D				
Injection Date:	07-Sep-2020 04:36:30	Instrument ID:	MH		
Lims ID:	140-20175-A-31	Lab Sample ID:	140-20175-31		
Client ID:	IA-145-C-29				
Operator ID:	HMT	ALS Bottle#:	14	Worklist Smp#:	19
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

81 o-Xylene, CAS: 95-47-6



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: IA-146-C-29 Lab Sample ID: 140-20175-32

Matrix: Air Lab File ID: HI07P115.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 16:43

Sample wt/vol: 148(mL) Date Analyzed: 09/07/2020 05:30

Soil Aliquot Vol: Dilution Factor: 1.48

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42498 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.19	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.088	J *	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	18		0.40	0.11
67-66-3	Chloroform	119.38	0.090	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.53		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	0.13	J	0.40	0.065
75-09-2	Methylene Chloride	84.93	2.5		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.035
108-88-3	Toluene	92.14	0.79		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	ND		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	0.11	J *	0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	0.28	J	0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.67	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	93		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: IA-146-C-29 Lab Sample ID: 140-20175-32

Matrix: Air Lab File ID: HI07P115.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 16:43

Sample wt/vol: 148(mL) Date Analyzed: 09/07/2020 05:30

Soil Aliquot Vol: Dilution Factor: 1.48

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42498 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.59	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.55	J *	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	65		1.4	0.39
67-66-3	Chloroform	119.38	0.44	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.6		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	0.56	J	1.7	0.28
75-09-2	Methylene Chloride	84.93	8.8		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.24
108-88-3	Toluene	92.14	3.0		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	ND		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	0.53	J *	2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	1.4	J	2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	2.9	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	93		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P115.D				
Lims ID:	140-20175-A-32				
Client ID:	IA-146-C-29				
Sample Type:	Client				
Inject. Date:	07-Sep-2020 05:30:30	ALS Bottle#:	15	Worklist Smp#:	20
Purge Vol:	500.000 mL	Dil. Factor:	1.4800		
Sample Info:	140-0016514-020				
Misc. Info.:	140-20175-a-32@1.48				
Operator ID:	HMT	Instrument ID:	MH		
Method:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\MH_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	07-Sep-2020 07:43:45	Calib Date:	29-Aug-2020 23:57:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1015				
First Level Reviewer: tajh		Date:	07-Sep-2020 07:43:18		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.436	9.431	0.005	98	98293	4.80	
* 2 1,4-Difluorobenzene	114	11.591	11.591	0.000	96	374024	4.80	
* 3 Chlorobenzene-d5 (IS)	117	16.258	16.258	0.000	88	293987	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.876	17.876	0.000	91	148052	4.33	
6 Chlorodifluoromethane	51	3.916	3.916	0.000	97	201206	3.67	
8 Dichlorodifluoromethane	85	3.988	3.983	0.005	99	7841	0.1055	
31 Methylene Chloride	84	6.769	6.764	0.005	96	12140	0.5038	
44 Chloroform	83	9.436	9.436	0.000	32	1070	0.0179	
51 Benzene	78	11.069	11.074	-0.005	83	2552	0.0372	
52 Carbon tetrachloride	117	11.090	11.095	-0.005	70	746	0.0175	
67 Toluene	91	14.310	14.310	0.000	90	12014	0.1586	
76 Ethylbenzene	91	16.584	16.584	0.000	89	2351	0.0256	
77 m-Xylene & p-Xylene	91	16.739	16.744	-0.005	96	5833	0.0805	
81 o-Xylene	91	17.271	17.266	0.005	97	4109	0.0541	
88 1,3,5-Trimethylbenzene	120	18.563	18.563	0.000	88	420	0.0565	
92 1,2,4-Trimethylbenzene	105	18.992	18.987	0.005	94	1892	0.0216	
S 116 Xylenes, Total	100				0		0.1346	

Reagents:

40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

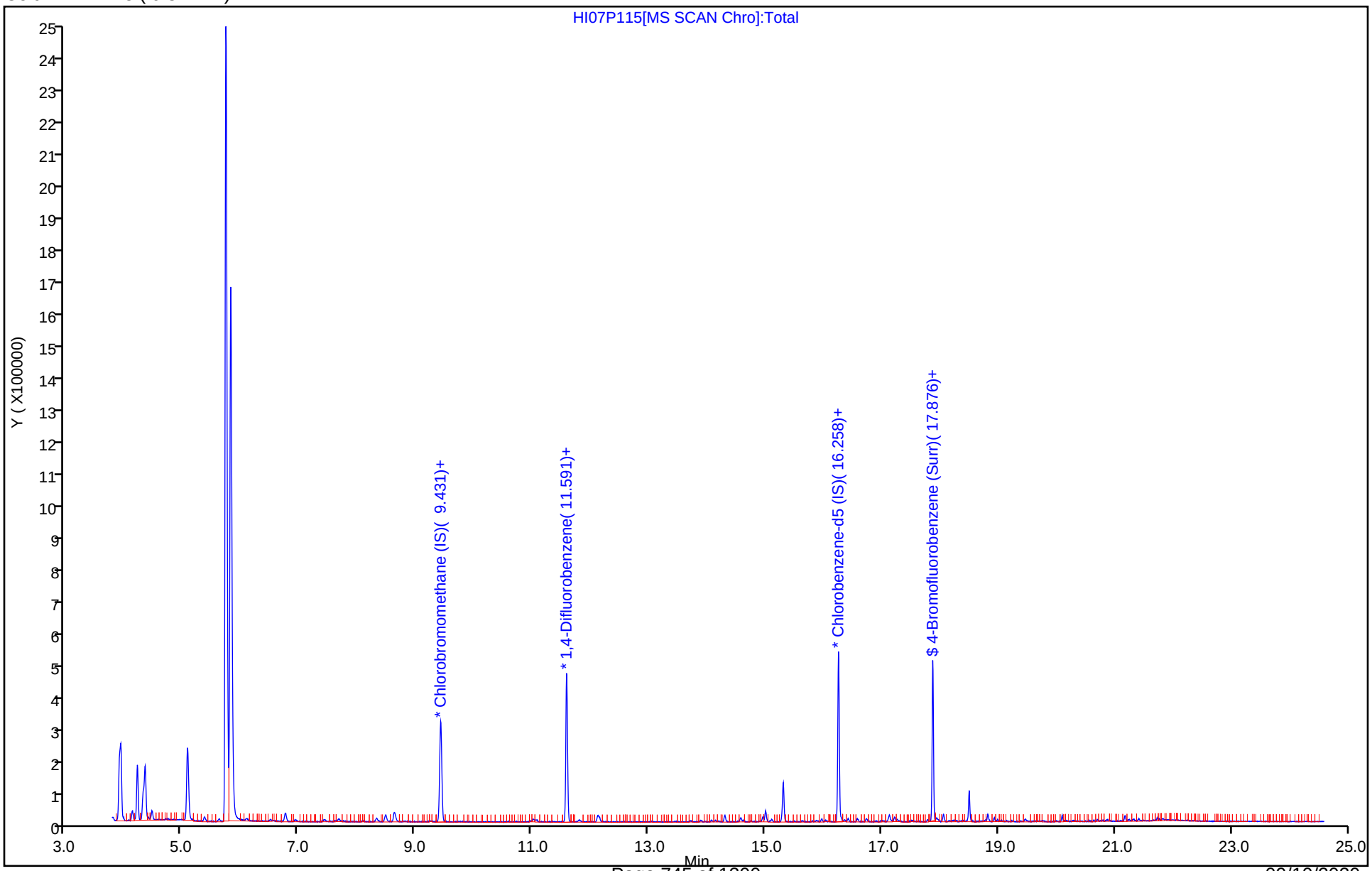
Report Date: 07-Sep-2020 07:44:10 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P115.D

Injection Date:	07-Sep-2020 05:30:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	140-20175-A-32	Lab Sample ID:	140-20175-32	Worklist Smp#:	20
Client ID:	IA-146-C-29				
Purge Vol:	500.000 mL	Dil. Factor:	1.4800	ALS Bottle#:	15
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P115.D				
Lims ID:	140-20175-A-32				
Client ID:	IA-146-C-29				
Sample Type:	Client				
Inject. Date:	07-Sep-2020 05:30:30	ALS Bottle#:	15	Worklist Smp#:	20
Purge Vol:	500.000 mL	Dil. Factor:	1.4800		
Sample Info:	140-0016514-020				
Misc. Info.:	140-20175-a-32@1.48				
Operator ID:	HMT	Instrument ID:	MH		
Method:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\MH_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	07-Sep-2020 07:43:45	Calib Date:	29-Aug-2020 23:57:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1015				
First Level Reviewer: tajh		Date:	07-Sep-2020 07:43:18		

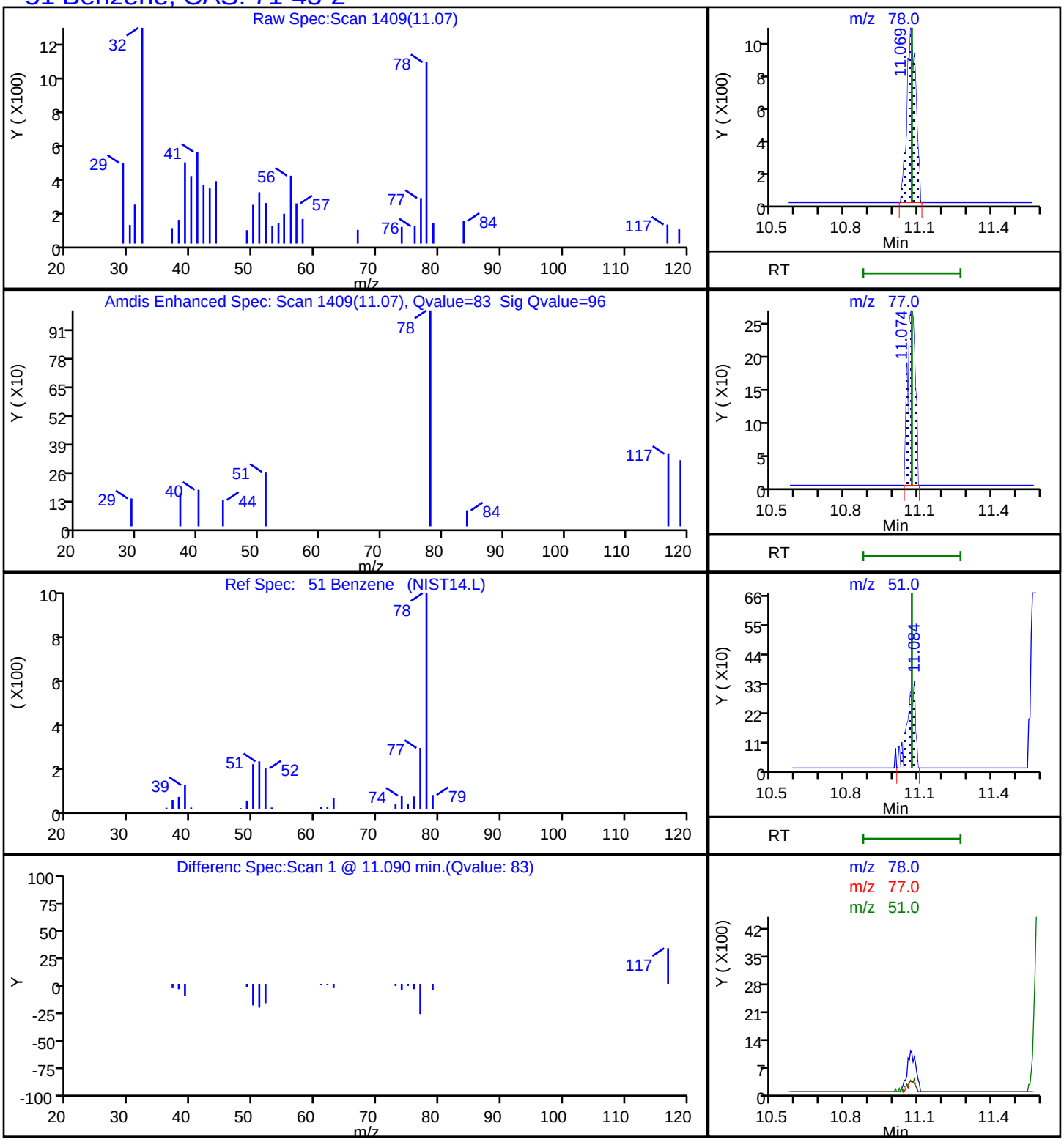
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	4.33	93.41

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P115.D

Injection Date:	07-Sep-2020 05:30:30	Instrument ID:	MH
Lims ID:	140-20175-A-32	Lab Sample ID:	140-20175-32
Client ID:	IA-146-C-29		
Operator ID:	HMT	ALS Bottle#:	15 Worklist Smp#: 20
Purge Vol:	500.000 mL	Dil. Factor:	1.4800
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

51 Benzene, CAS: 71-43-2

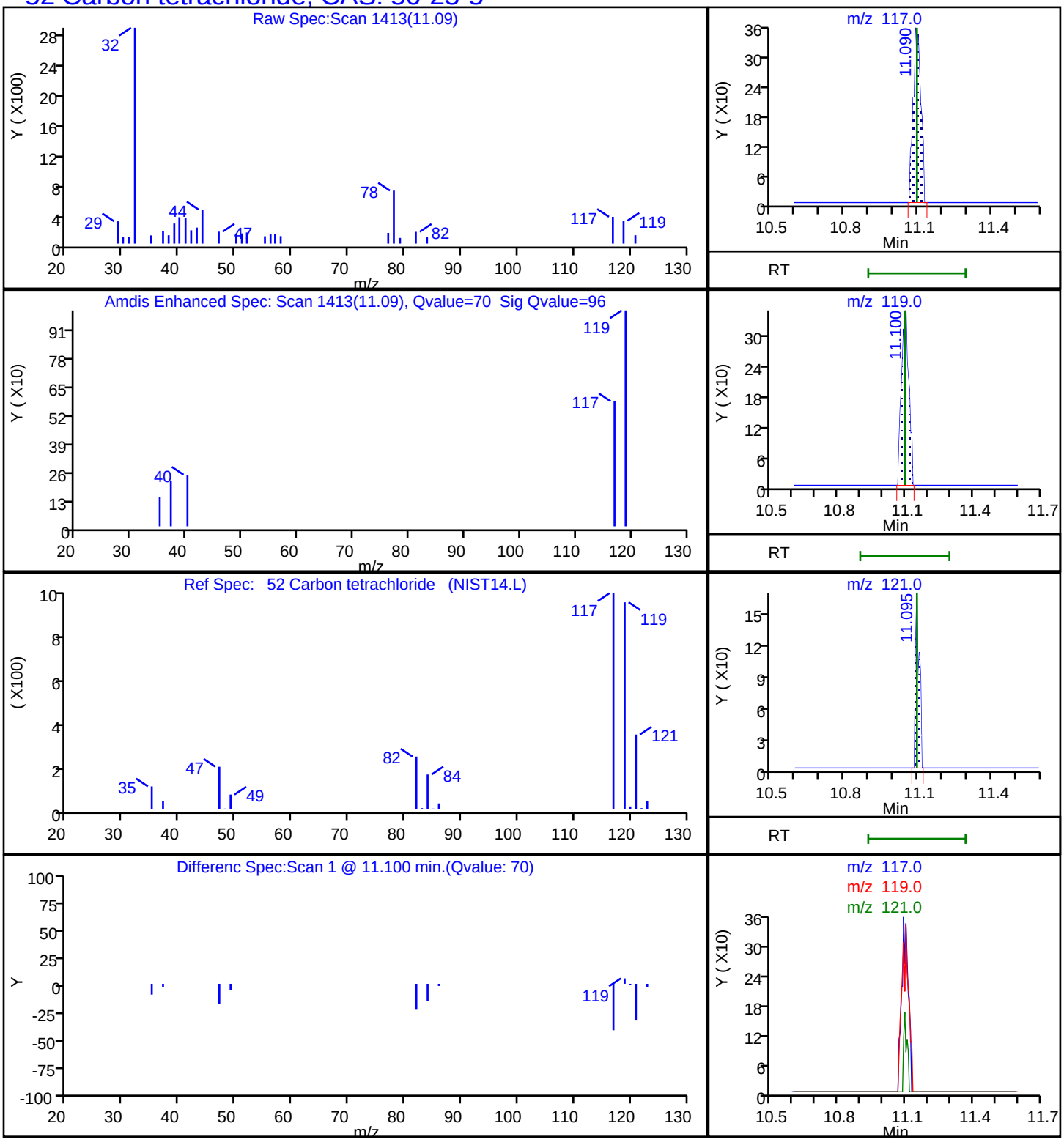


Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P115.D

Injection Date:	07-Sep-2020 05:30:30	Instrument ID:	MH		
Lims ID:	140-20175-A-32	Lab Sample ID:	140-20175-32		
Client ID:	IA-146-C-29				
Operator ID:	HMT	ALS Bottle#:	15	Worklist Smp#:	20
Purge Vol:	500.000 mL	Dil. Factor:	1.4800		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

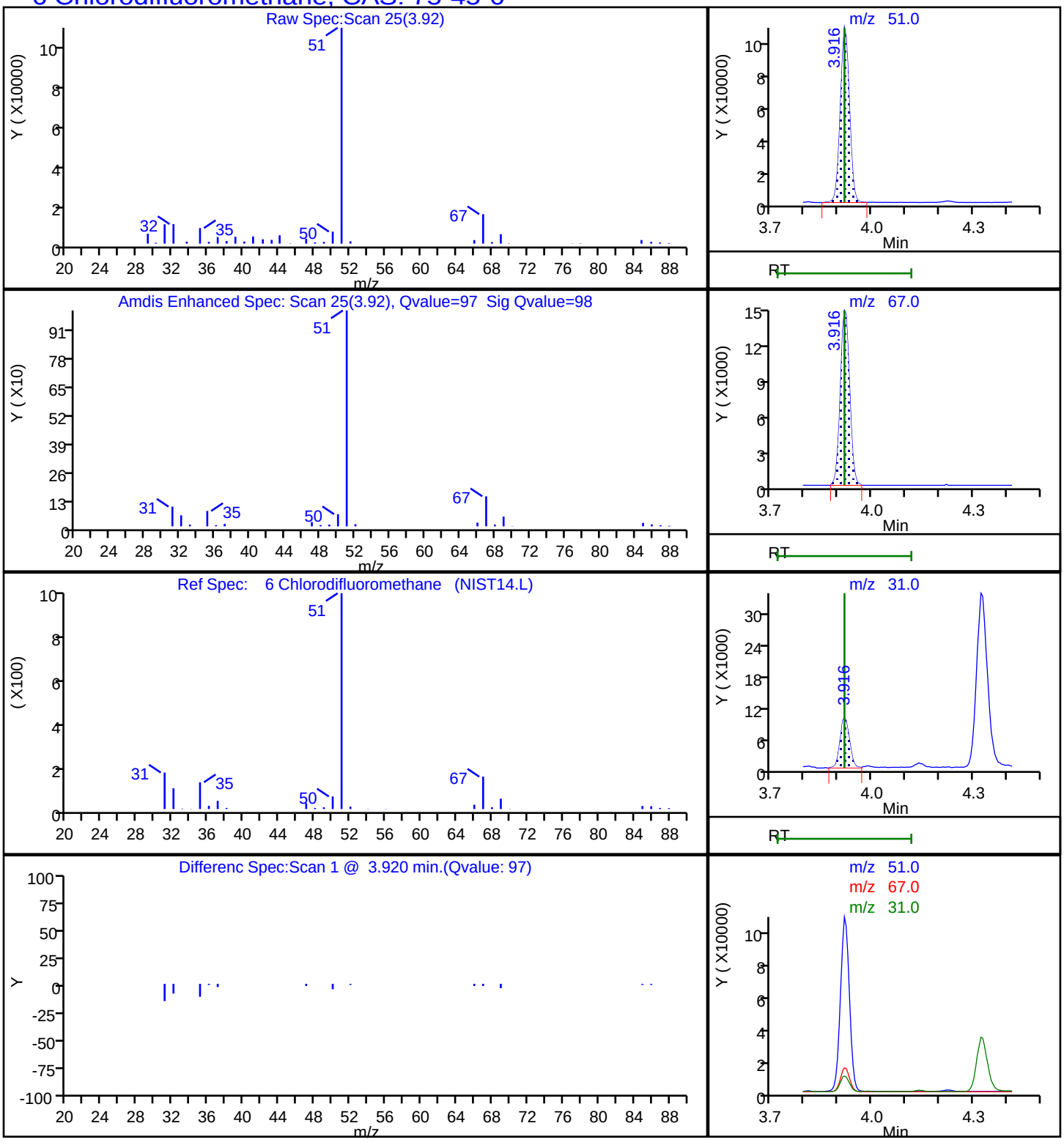
52 Carbon tetrachloride, CAS: 56-23-5



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P115.D				
Injection Date:	07-Sep-2020 05:30:30	Instrument ID:	MH		
Lims ID:	140-20175-A-32	Lab Sample ID:	140-20175-32		
Client ID:	IA-146-C-29				
Operator ID:	HMT	ALS Bottle#:	15	Worklist Smp#:	20
Purge Vol:	500.000 mL	Dil. Factor:	1.4800		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

6 Chlorodifluoromethane, CAS: 75-45-6

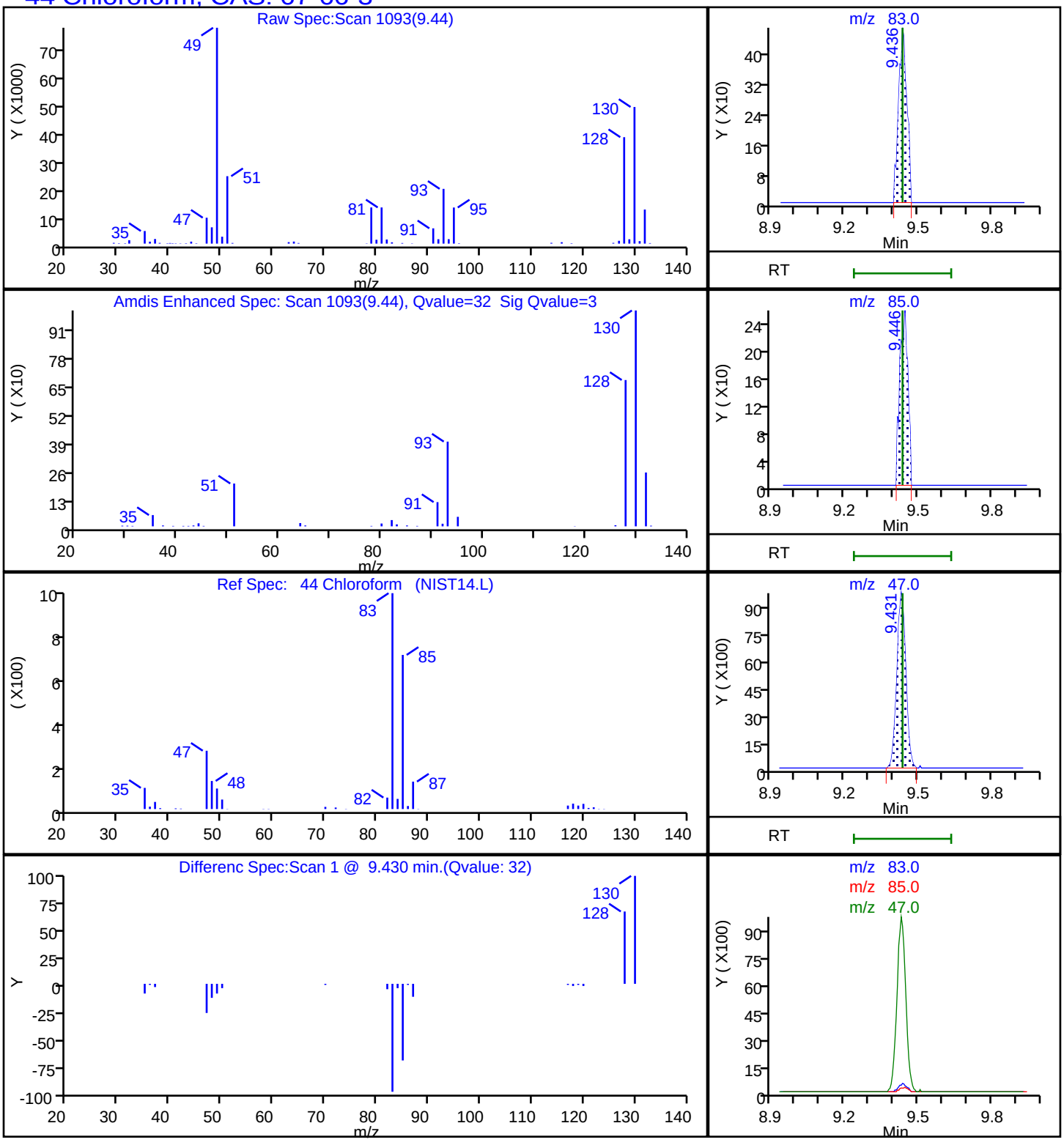


Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P115.D

Injection Date:	07-Sep-2020 05:30:30	Instrument ID:	MH
Lims ID:	140-20175-A-32	Lab Sample ID:	140-20175-32
Client ID:	IA-146-C-29		
Operator ID:	HMT	ALS Bottle#:	15 Worklist Smp#: 20
Purge Vol:	500.000 mL	Dil. Factor:	1.4800
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

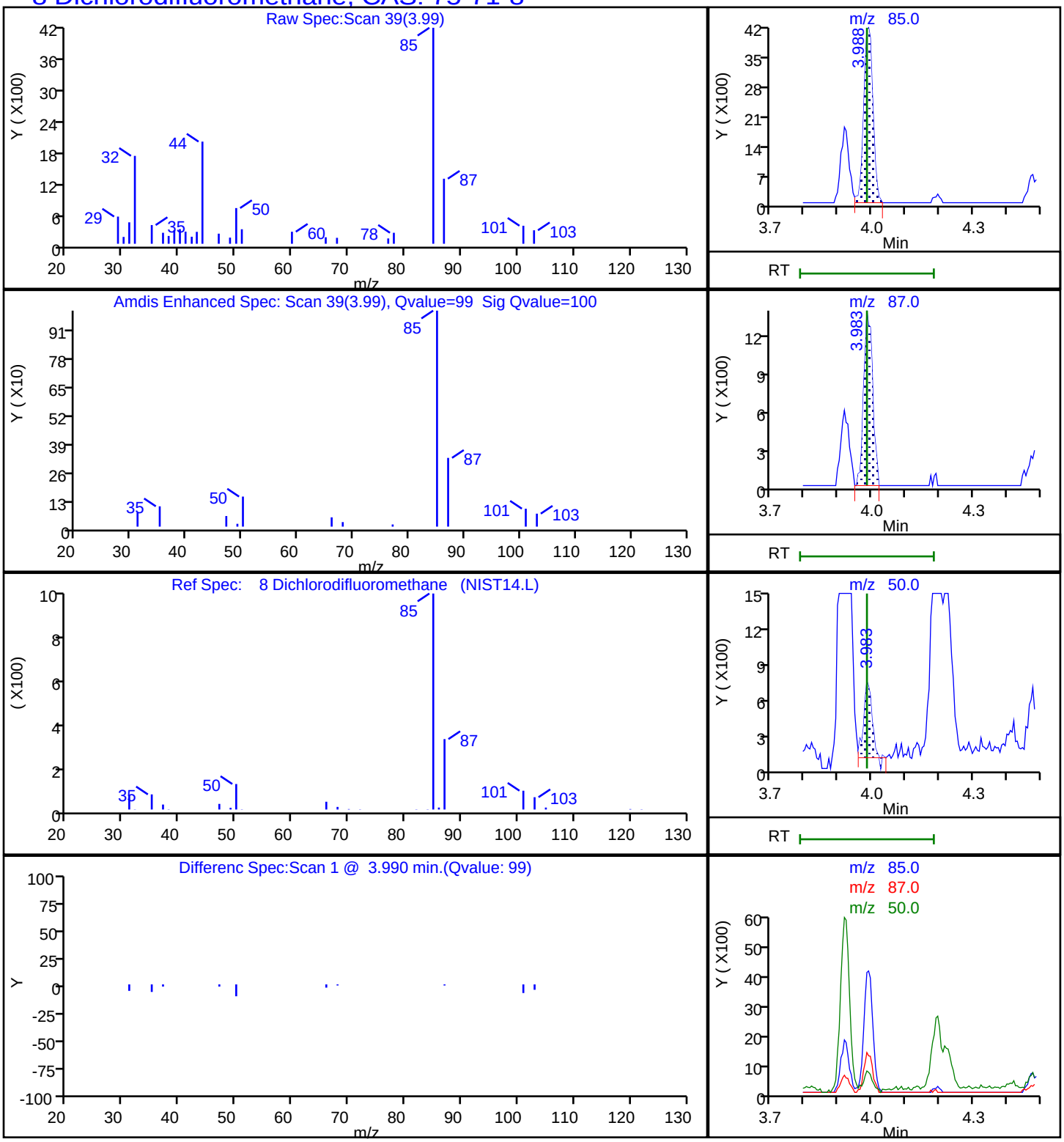
44 Chloroform, CAS: 67-66-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P115.D		
Injection Date:	07-Sep-2020 05:30:30	Instrument ID:	MH
Lims ID:	140-20175-A-32	Lab Sample ID:	140-20175-32
Client ID:	IA-146-C-29		
Operator ID:	HMT	ALS Bottle#:	15 Worklist Smp#: 20
Purge Vol:	500.000 mL	Dil. Factor:	1.4800
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

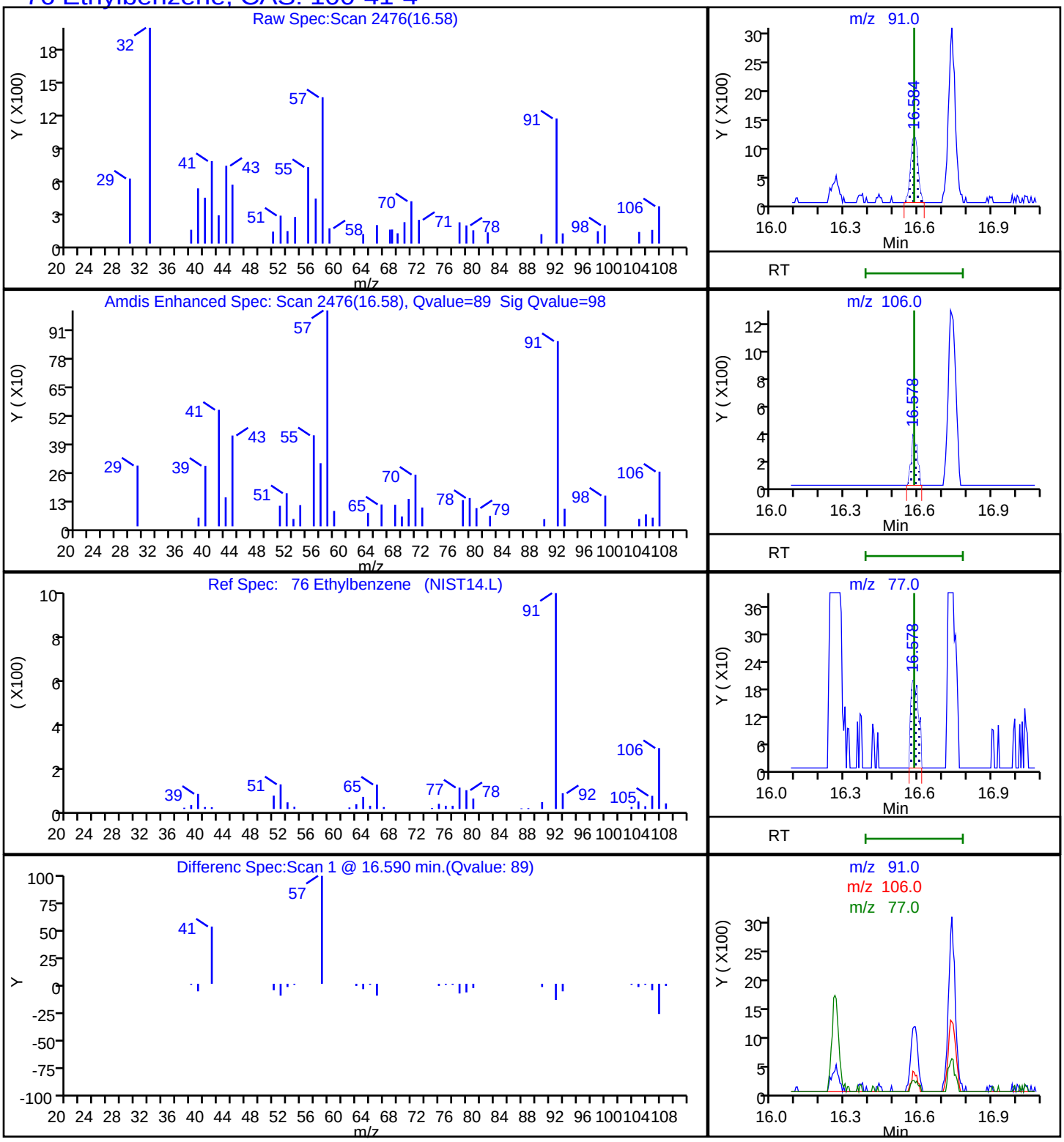
8 Dichlorodifluoromethane, CAS: 75-71-8



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P115.D		
Injection Date:	07-Sep-2020 05:30:30	Instrument ID:	MH
Lims ID:	140-20175-A-32	Lab Sample ID:	140-20175-32
Client ID:	IA-146-C-29		
Operator ID:	HMT	ALS Bottle#:	15 Worklist Smp#: 20
Purge Vol:	500.000 mL	Dil. Factor:	1.4800
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

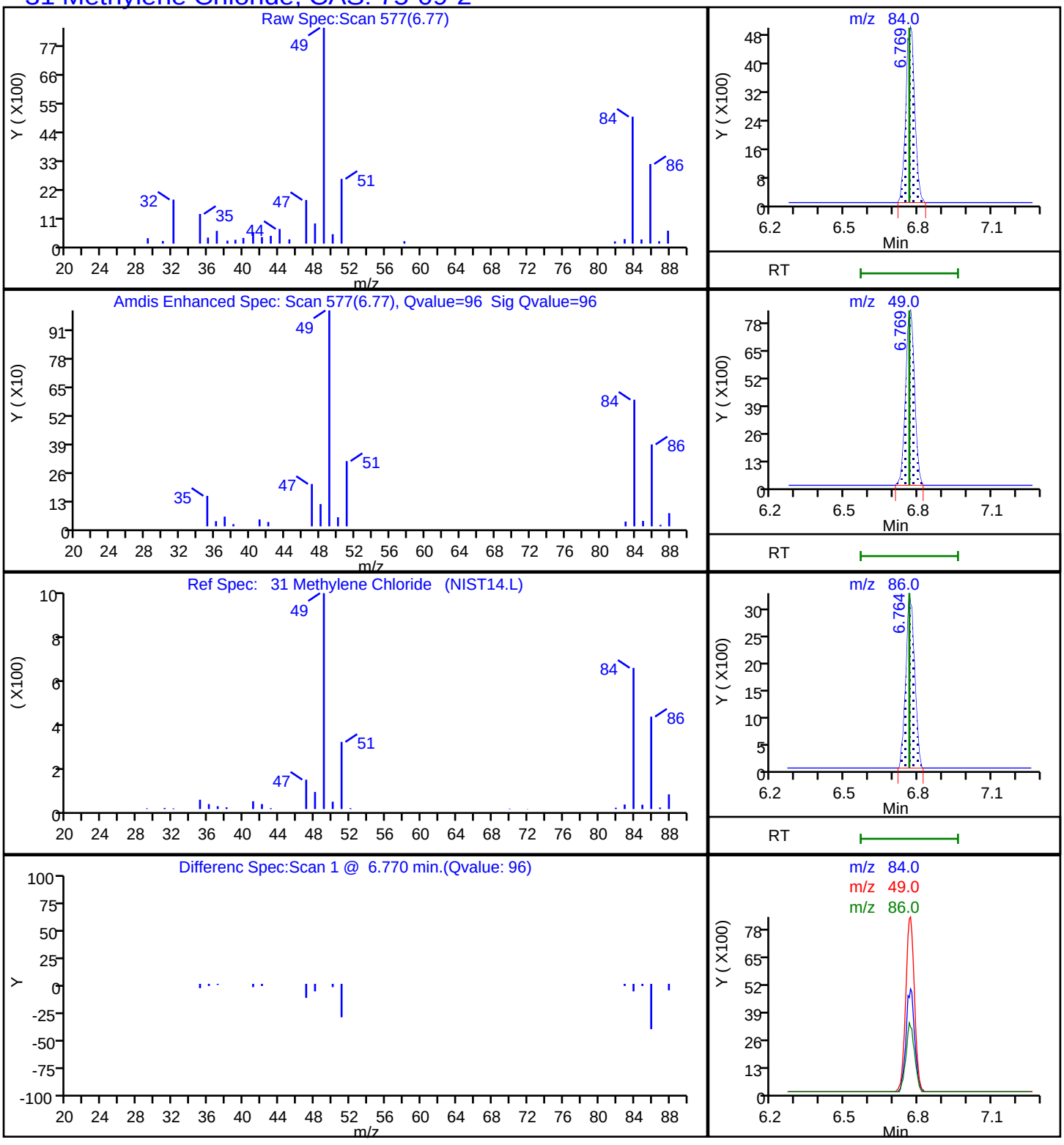
76 Ethylbenzene, CAS: 100-41-4



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P115.D				
Injection Date:	07-Sep-2020 05:30:30	Instrument ID:	MH		
Lims ID:	140-20175-A-32	Lab Sample ID:	140-20175-32		
Client ID:	IA-146-C-29				
Operator ID:	HMT	ALS Bottle#:	15	Worklist Smp#:	20
Purge Vol:	500.000 mL	Dil. Factor:	1.4800		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

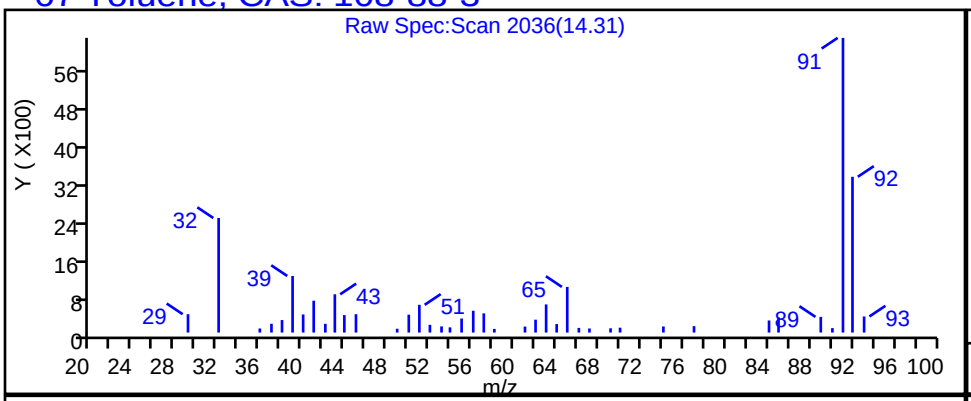
31 Methylene Chloride, CAS: 75-09-2

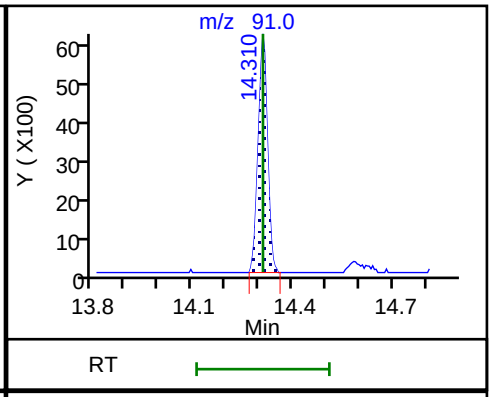


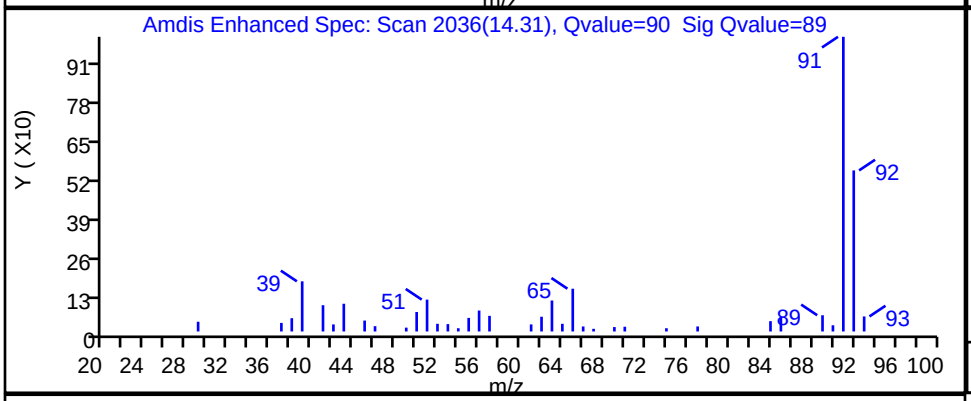
Eurofins TestAmerica, Knoxville

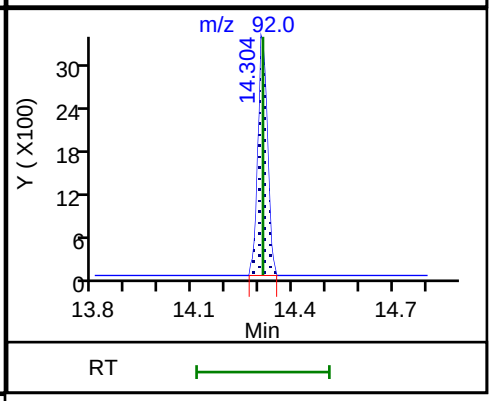
Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P115.D		
Injection Date:	07-Sep-2020 05:30:30	Instrument ID:	MH
Lims ID:	140-20175-A-32	Lab Sample ID:	140-20175-32
Client ID:	IA-146-C-29		
Operator ID:	HMT	ALS Bottle#:	15 Worklist Smp#: 20
Purge Vol:	500.000 mL	Dil. Factor:	1.4800
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

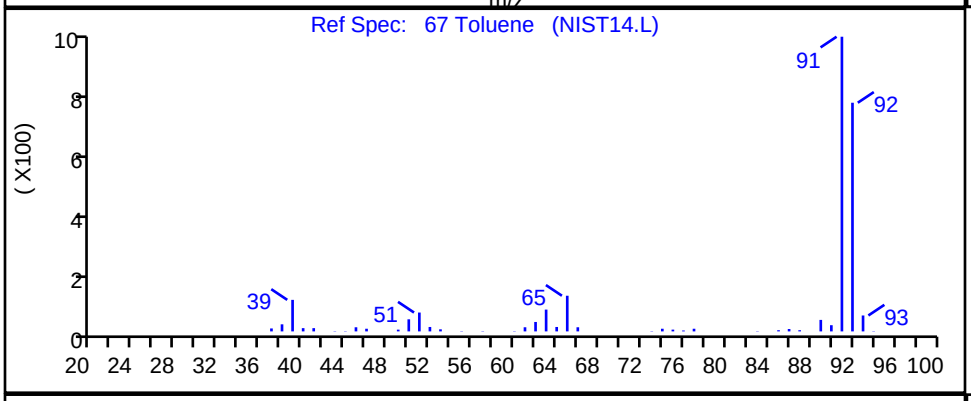
67 Toluene, CAS: 108-88-3

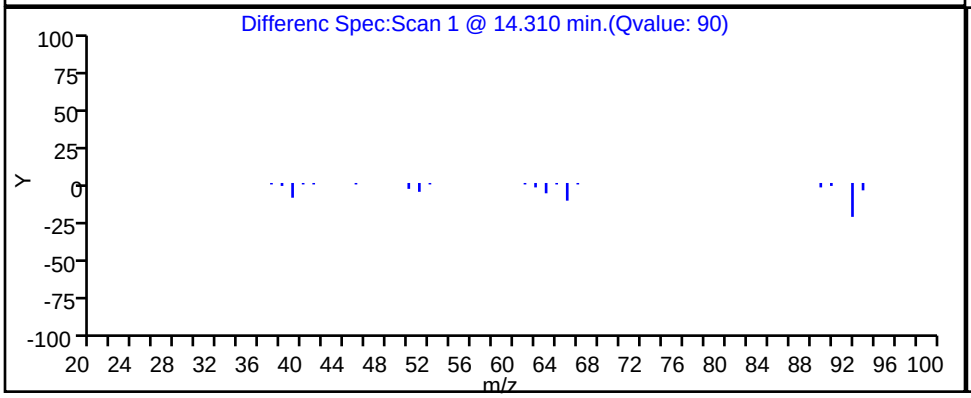


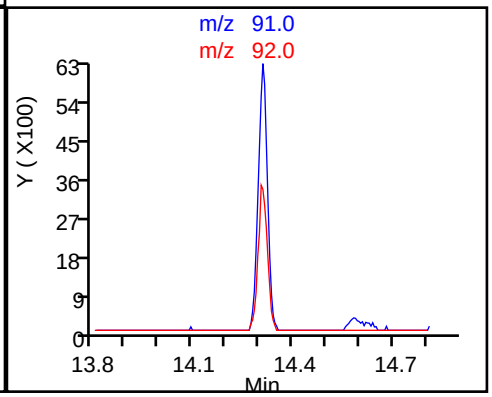










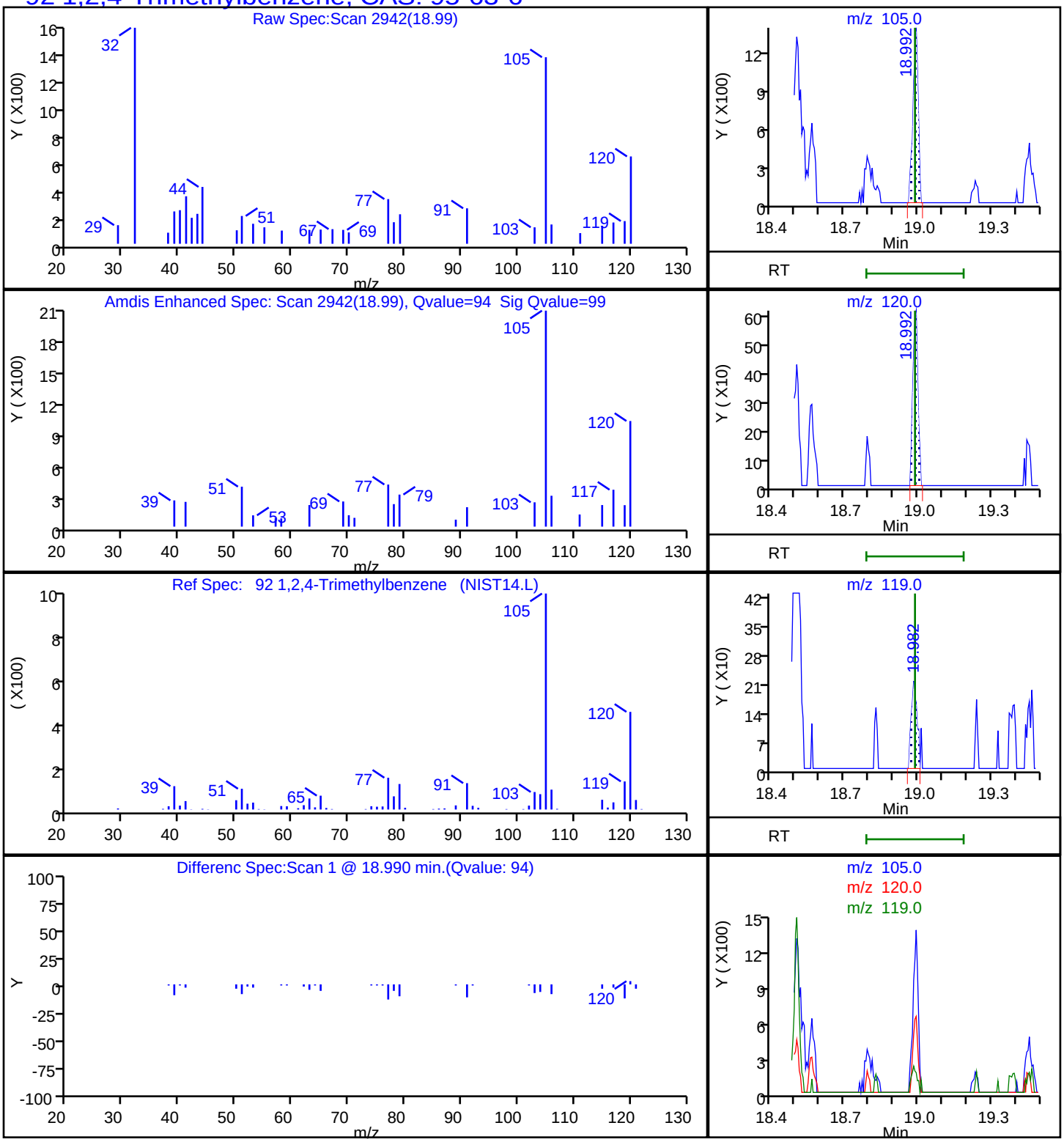


Report Date: 07-Sep-2020 07:44:10 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P115.D				
Injection Date:	07-Sep-2020 05:30:30	Instrument ID:	MH		
Lims ID:	140-20175-A-32	Lab Sample ID:	140-20175-32		
Client ID:	IA-146-C-29				
Operator ID:	HMT	ALS Bottle#:	15	Worklist Smp#:	20
Purge Vol:	500.000 mL	Dil. Factor:	1.4800		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

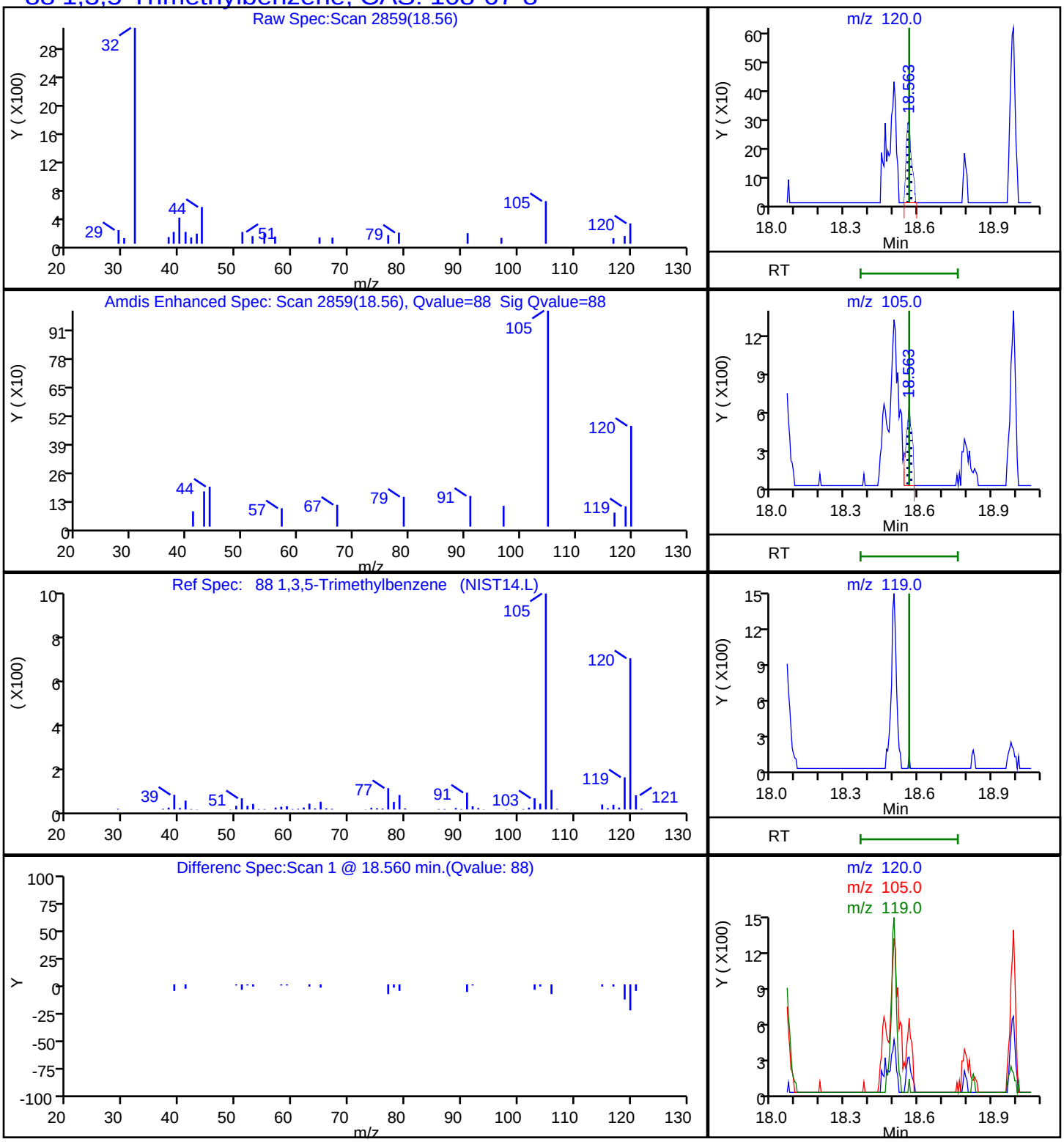
92 1,2,4-Trimethylbenzene, CAS: 95-63-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P115.D		
Injection Date:	07-Sep-2020 05:30:30	Instrument ID:	MH
Lims ID:	140-20175-A-32	Lab Sample ID:	140-20175-32
Client ID:	IA-146-C-29		
Operator ID:	HMT	ALS Bottle#:	15 Worklist Smp#: 20
Purge Vol:	500.000 mL	Dil. Factor:	1.4800
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

88 1,3,5-Trimethylbenzene, CAS: 108-67-8

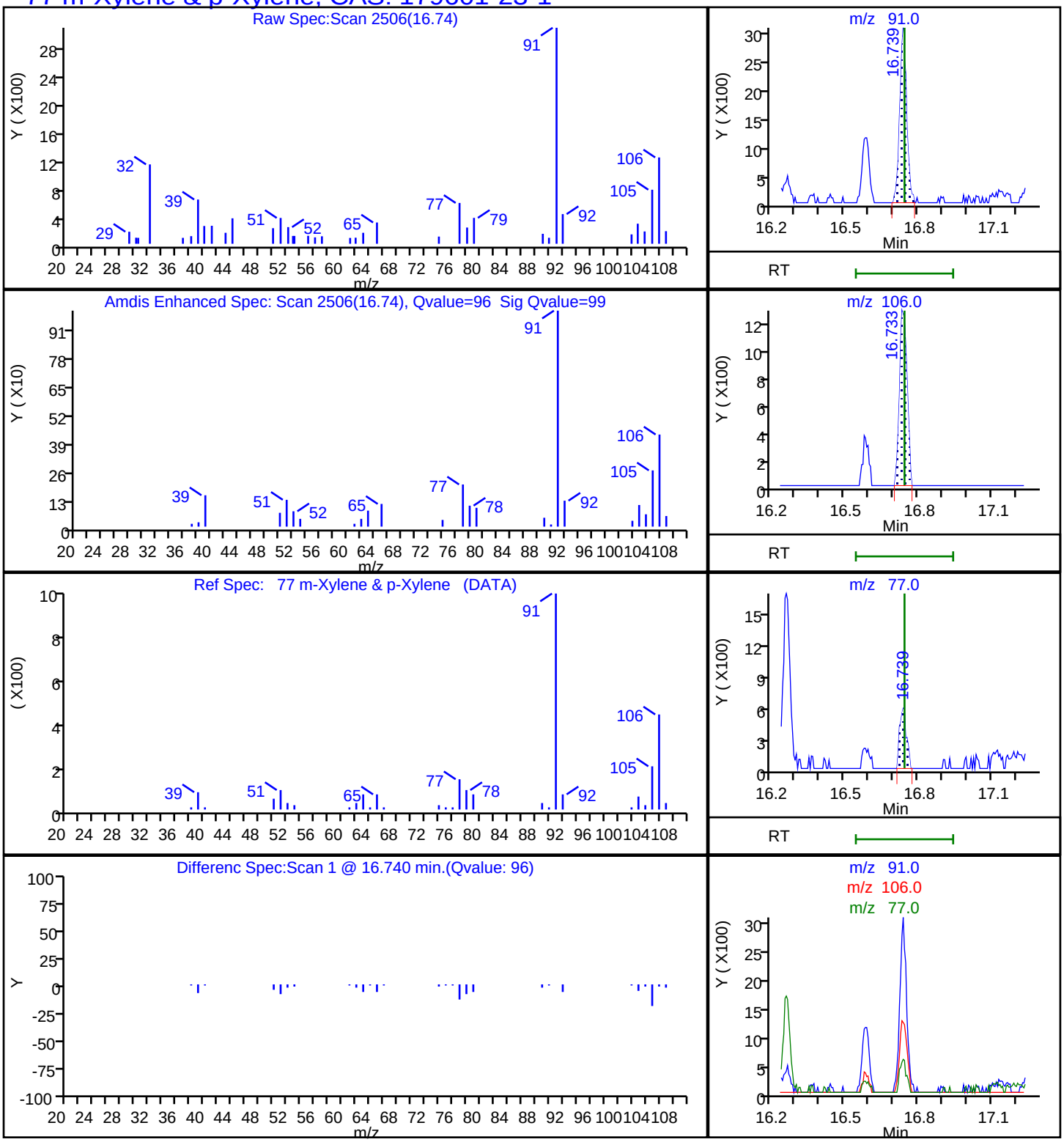


Report Date: 07-Sep-2020 07:44:10 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P115.D				
Injection Date:	07-Sep-2020 05:30:30	Instrument ID:	MH		
Lims ID:	140-20175-A-32	Lab Sample ID:	140-20175-32		
Client ID:	IA-146-C-29				
Operator ID:	HMT	ALS Bottle#:	15	Worklist Smp#:	20
Purge Vol:	500.000 mL	Dil. Factor:	1.4800		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

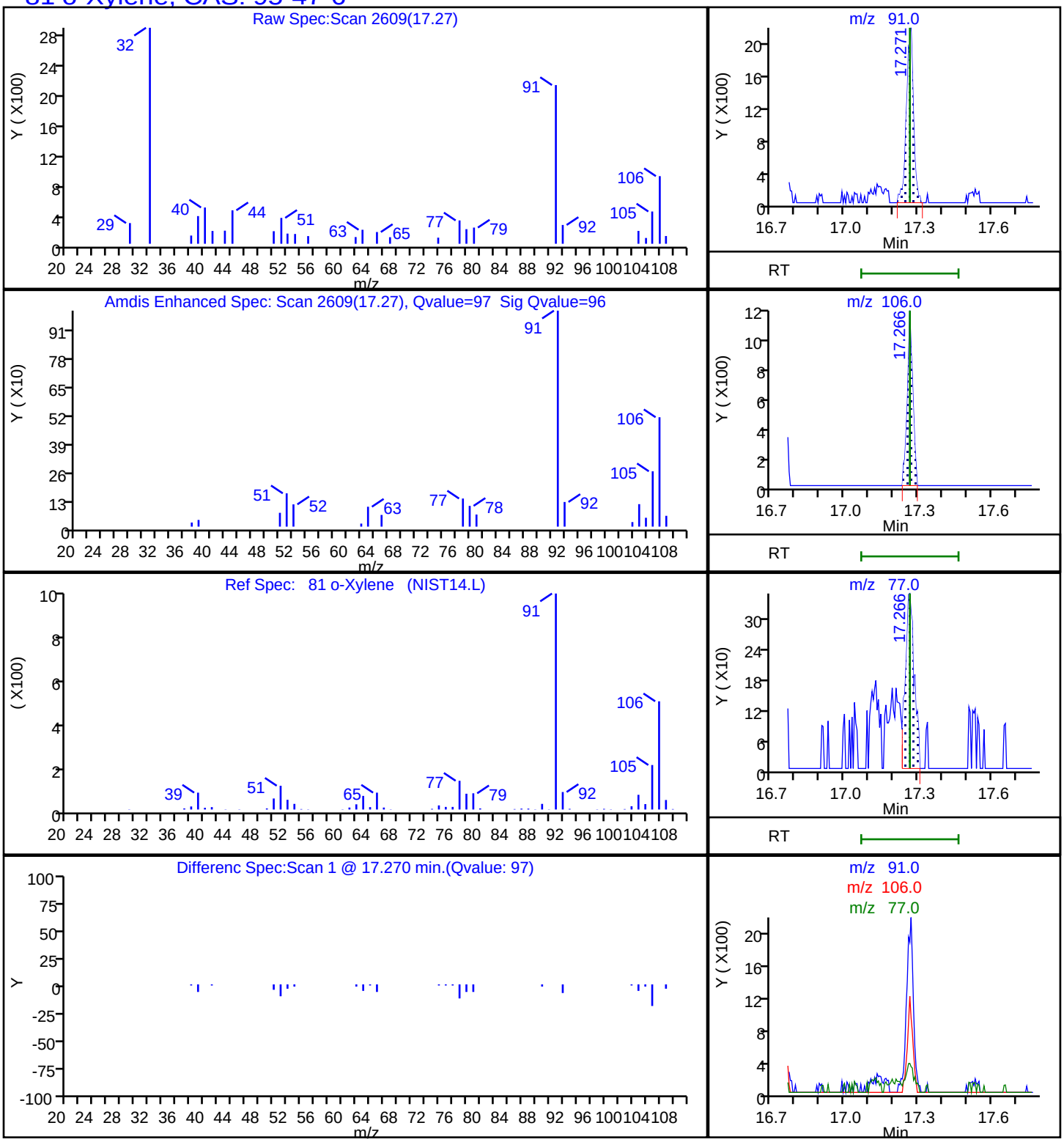
77 m-Xylene & p-Xylene, CAS: 179601-23-1



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P115.D		
Injection Date:	07-Sep-2020 05:30:30	Instrument ID:	MH
Lims ID:	140-20175-A-32	Lab Sample ID:	140-20175-32
Client ID:	IA-146-C-29		
Operator ID:	HMT	ALS Bottle#:	15 Worklist Smp#: 20
Purge Vol:	500.000 mL	Dil. Factor:	1.4800
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

81 o-Xylene, CAS: 95-47-6



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: IA-144-C-29 Lab Sample ID: 140-20175-33

Matrix: Air Lab File ID: GBI07P107.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 16:45

Sample wt/vol: 100(mL) Date Analyzed: 09/07/2020 18:39

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42500 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	ND		0.40	0.040
56-23-5	Carbon tetrachloride	153.81	ND		0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	7.4		0.40	0.11
67-66-3	Chloroform	119.38	ND		0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.38	J	0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	ND		0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.035
108-88-3	Toluene	92.14	ND		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	ND		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	ND		0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	96		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: IA-144-C-29 Lab Sample ID: 140-20175-33

Matrix: Air Lab File ID: GBI07P107.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 16:45

Sample wt/vol: 100(mL) Date Analyzed: 09/07/2020 18:39

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42500 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	ND		1.3	0.13
56-23-5	Carbon tetrachloride	153.81	ND		2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	26		1.4	0.39
67-66-3	Chloroform	119.38	ND		2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	1.9	J	2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	ND		1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.24
108-88-3	Toluene	92.14	ND		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	ND		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	ND		3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	96		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P107.D				
Lims ID:	140-20175-A-33				
Client ID:	IA-144-C-29				
Sample Type:	Client				
Inject. Date:	07-Sep-2020 18:39:30	ALS Bottle#:	7	Worklist Smp#:	13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016516-013				
Misc. Info.:	140-20175-a-33				
Operator ID:	AFB	Instrument ID:	MG		
Method:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\MG_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	08-Sep-2020 13:15:22	Calib Date:	02-Sep-2020 03:27:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1021				
First Level Reviewer: barlozhetskayaa		Date:	08-Sep-2020 13:17:47		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.806	8.806	0.000	86	106151	4.80	
* 2 1,4-Difluorobenzene	114	10.990	10.995	-0.005	98	586385	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.730	15.730	0.000	94	570501	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.369	17.369	0.000	90	398024	4.45	
6 Chlorodifluoromethane	51	3.705	3.699	0.006	96	141318	1.49	
8 Dichlorodifluoromethane	85	3.769	3.759	0.010	97	8141	0.0766	

Reagents:

40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

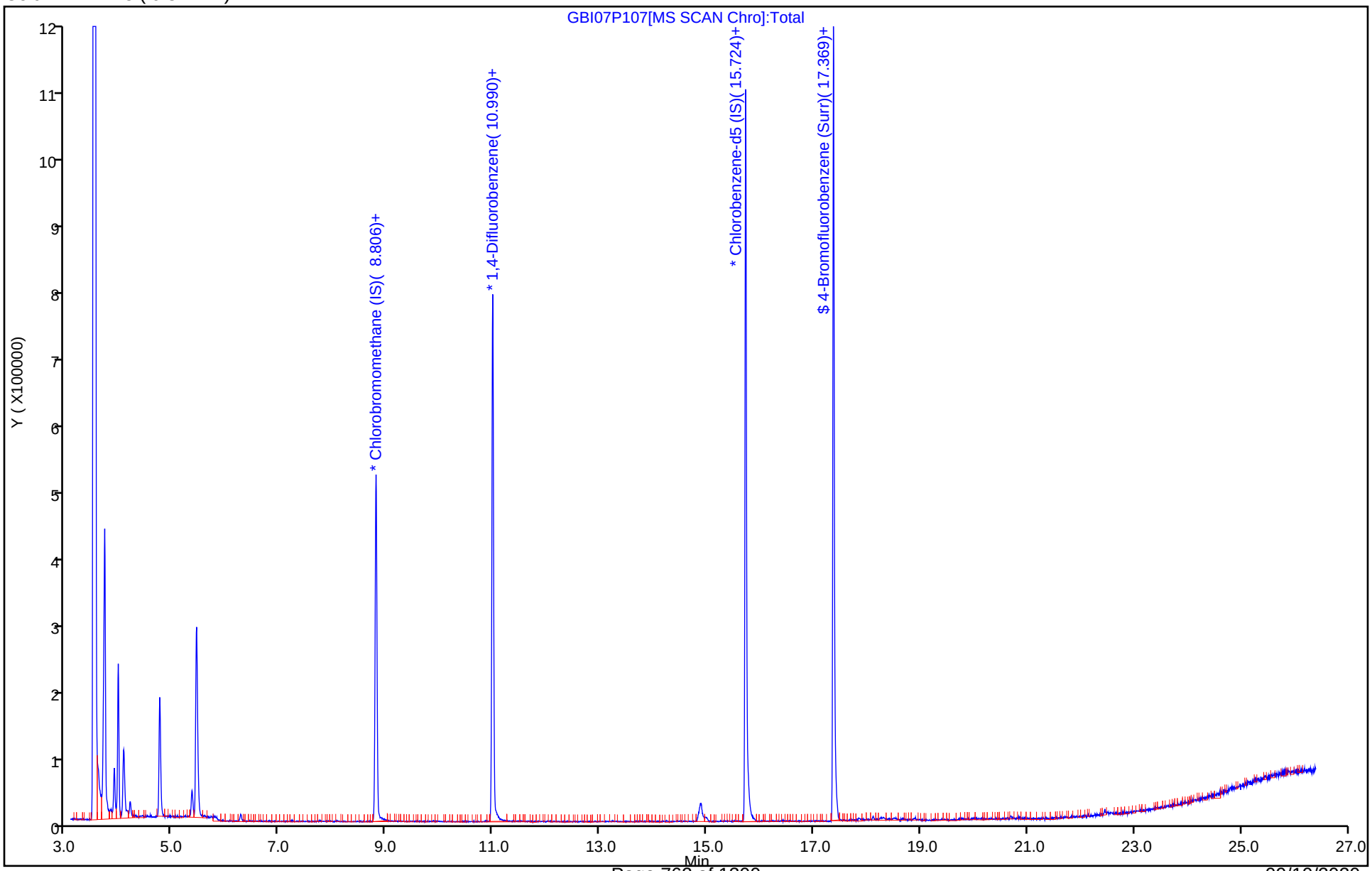
Report Date: 08-Sep-2020 13:17:48 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P107.D

Injection Date:	07-Sep-2020 18:39:30	Instrument ID:	MG	Operator ID:	AFB
Lims ID:	140-20175-A-33	Lab Sample ID:	140-20175-33	Worklist Smp#:	13
Client ID:	IA-144-C-29				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P107.D				
Lims ID:	140-20175-A-33				
Client ID:	IA-144-C-29				
Sample Type:	Client				
Inject. Date:	07-Sep-2020 18:39:30	ALS Bottle#:	7	Worklist Smp#:	13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016516-013				
Misc. Info.:	140-20175-a-33				
Operator ID:	AFB	Instrument ID:	MG		
Method:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\MG_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	08-Sep-2020 13:15:22	Calib Date:	02-Sep-2020 03:27:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1021				

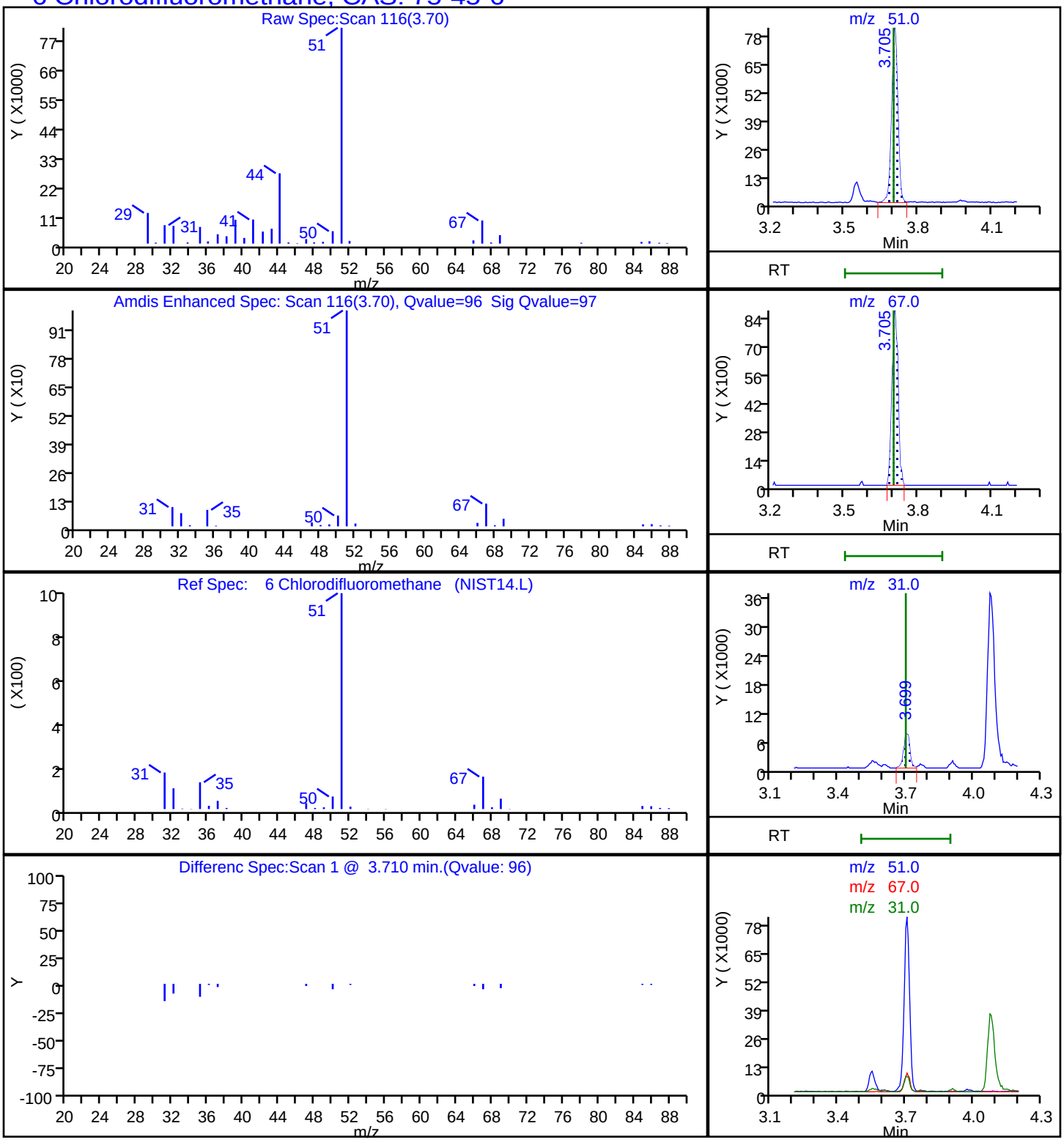
First Level Reviewer: barlozhetskayaa Date: 08-Sep-2020 13:17:47

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	4.45	95.82

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P107.D		
Injection Date:	07-Sep-2020 18:39:30	Instrument ID:	MG
Lims ID:	140-20175-A-33	Lab Sample ID:	140-20175-33
Client ID:	IA-144-C-29		
Operator ID:	AFB	ALS Bottle#:	7 Worklist Smp#: 13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

6 Chlorodifluoromethane, CAS: 75-45-6

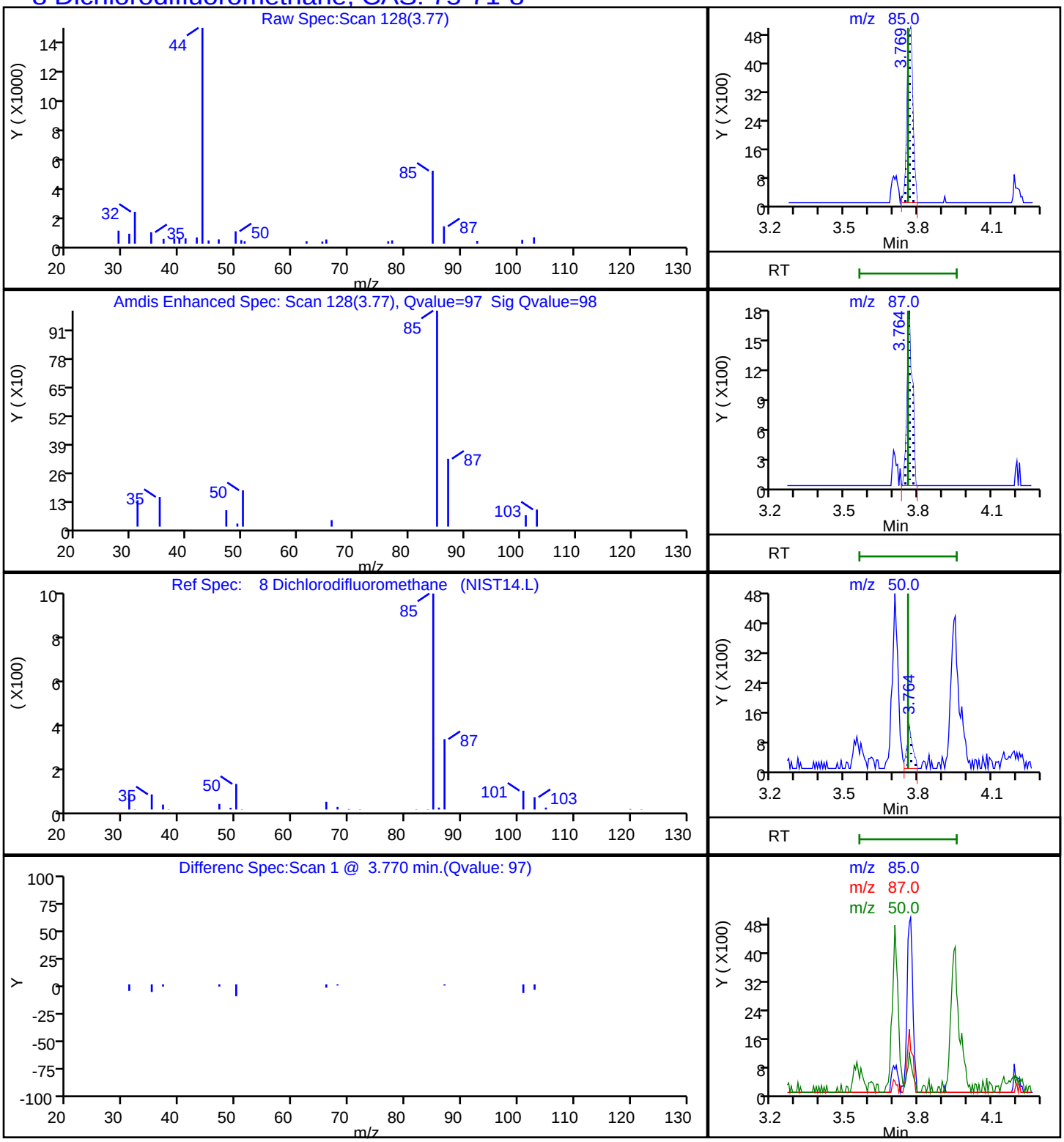


Report Date: 08-Sep-2020 13:17:48 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P107.D		
Injection Date:	07-Sep-2020 18:39:30	Instrument ID:	MG
Lims ID:	140-20175-A-33	Lab Sample ID:	140-20175-33
Client ID:	IA-144-C-29		
Operator ID:	AFB	ALS Bottle#:	7 Worklist Smp#: 13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

8 Dichlorodifluoromethane, CAS: 75-71-8



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: IA-141-C-29 Lab Sample ID: 140-20175-34

Matrix: Air Lab File ID: GBI07P108.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 16:48

Sample wt/vol: 100(mL) Date Analyzed: 09/07/2020 19:25

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42500 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.16	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.052	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	3.2		0.40	0.11
67-66-3	Chloroform	119.38	ND		0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.38	J	0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	0.18	J	0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.035
108-88-3	Toluene	92.14	1.6		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	ND		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	0.15	J	0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.98		0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	103		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: IA-141-C-29 Lab Sample ID: 140-20175-34

Matrix: Air Lab File ID: GBI07P108.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 16:48

Sample wt/vol: 100(mL) Date Analyzed: 09/07/2020 19:25

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42500 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.51	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.33	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	11		1.4	0.39
67-66-3	Chloroform	119.38	ND		2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	1.9	J	2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	0.77	J	1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.24
108-88-3	Toluene	92.14	5.9		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	ND		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	0.73	J	2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	4.3		3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	103		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P108.D
Lims ID: 140-20175-A-34
Client ID: IA-141-C-29
Sample Type: Client
Inject. Date: 07-Sep-2020 19:25:30 ALS Bottle#: 8 Worklist Smp#: 14
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016516-014
Misc. Info.: 140-20175-a-34
Operator ID: AFB Instrument ID: MG

Method: \\chromfs\Knoxville\ChromData\MG\20200904-16516.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 08-Sep-2020 13:18:20 Calib Date: 02-Sep-2020 03:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1021

First Level Reviewer: barlozhetskayaa Date: 08-Sep-2020 13:18:20

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.811	8.806	0.005	86	105842	4.80	
* 2 1,4-Difluorobenzene	114	10.990	10.995	-0.005	98	582821	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.724	15.730	-0.006	96	560836	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.369	17.369	0.000	80	419427	4.77	
6 Chlorodifluoromethane	51	3.705	3.699	0.006	97	60901	0.6421	
8 Dichlorodifluoromethane	85	3.769	3.759	0.010	94	8004	0.0755	
50 Benzene	78	10.440	10.440	-0.005	69	3843	0.0321	
52 Carbon tetrachloride	117	10.472	10.467	0.000	29	772	0.0104	
67 Toluene	91	13.756	13.756	0.000	92	38516	0.3114	
78 Ethylbenzene	91	16.064	16.064	0.000	98	5666	0.0356	
79 m-Xylene & p-Xylene	91	16.226	16.231	-0.005	97	16756	0.1332	
83 o-Xylene	91	16.754	16.754	0.000	96	7791	0.0612	
95 1,2,4-Trimethylbenzene	105	18.545	18.545	0.001	93	4359	0.0299	
S 124 Xylenes, Total	100				0		0.1944	

Reagents:

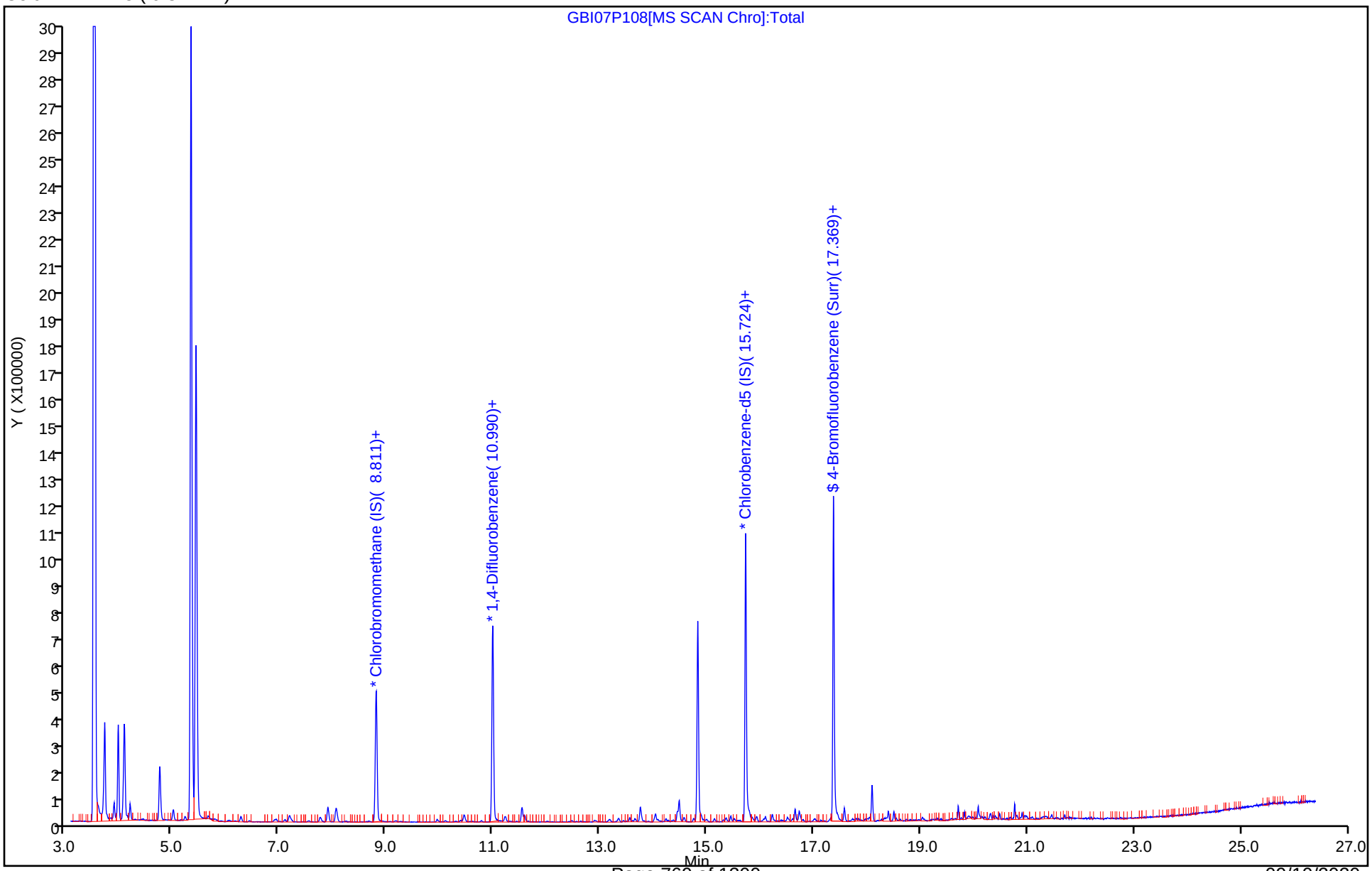
40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

Report Date: 08-Sep-2020 13:18:21 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P108.D				
Injection Date:	07-Sep-2020 19:25:30	Instrument ID:	MG	Operator ID:	AFB
Lims ID:	140-20175-A-34	Lab Sample ID:	140-20175-34	Worklist Smp#:	14
Client ID:	IA-141-C-29				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P108.D				
Lims ID:	140-20175-A-34				
Client ID:	IA-141-C-29				
Sample Type:	Client				
Inject. Date:	07-Sep-2020 19:25:30	ALS Bottle#:	8	Worklist Smp#:	14
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016516-014				
Misc. Info.:	140-20175-a-34				
Operator ID:	AFB	Instrument ID:	MG		
Method:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\MG_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	08-Sep-2020 13:18:20	Calib Date:	02-Sep-2020 03:27:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1021				

First Level Reviewer: barlozhetskayaa Date: 08-Sep-2020 13:18:20

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	4.77	102.71

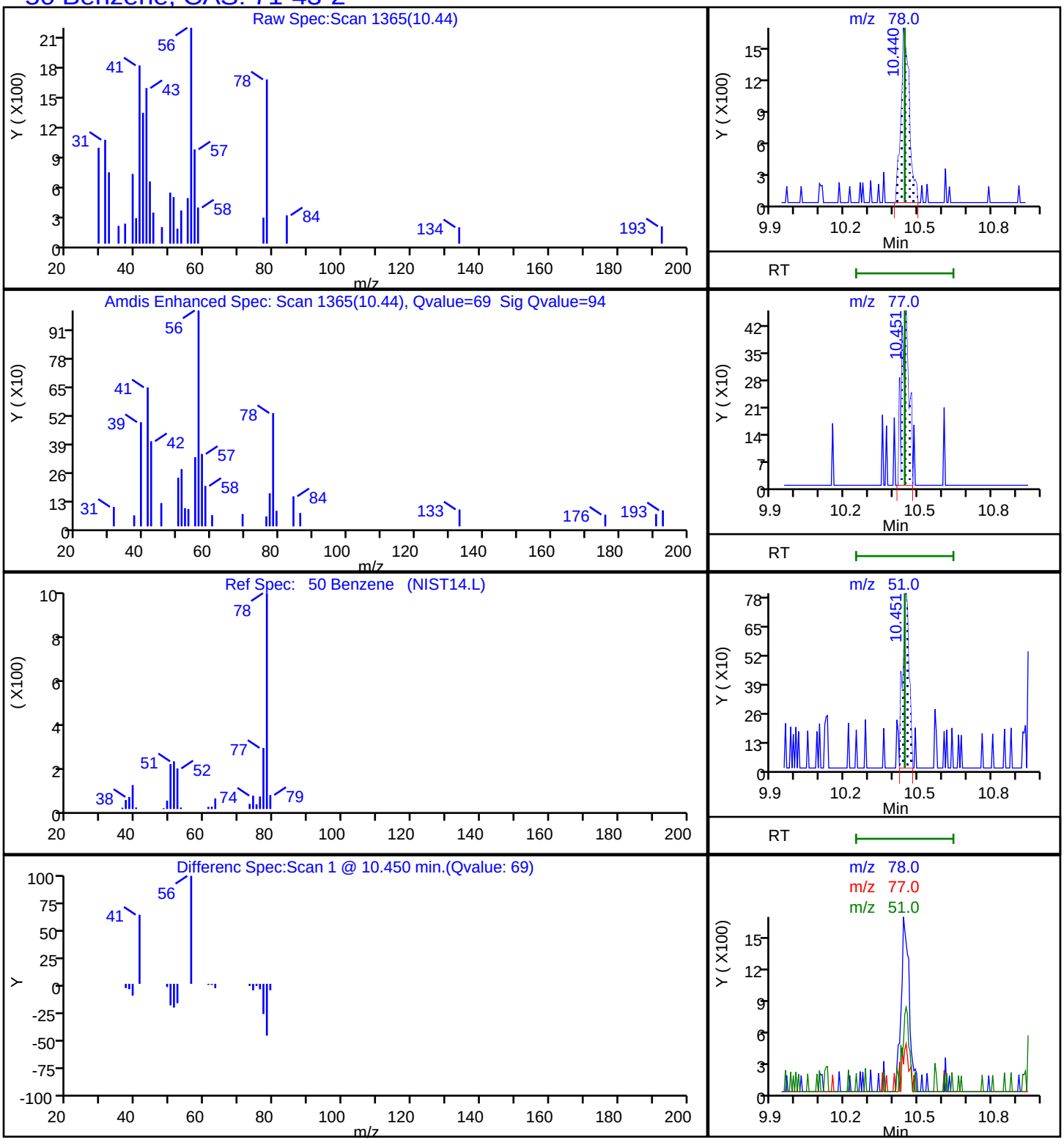
Report Date: 08-Sep-2020 13:18:21 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P108.D

Injection Date:	07-Sep-2020 19:25:30	Instrument ID:	MG		
Lims ID:	140-20175-A-34	Lab Sample ID:	140-20175-34		
Client ID:	IA-141-C-29				
Operator ID:	AFB	ALS Bottle#:	8	Worklist Smp#:	14
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

50 Benzene, CAS: 71-43-2

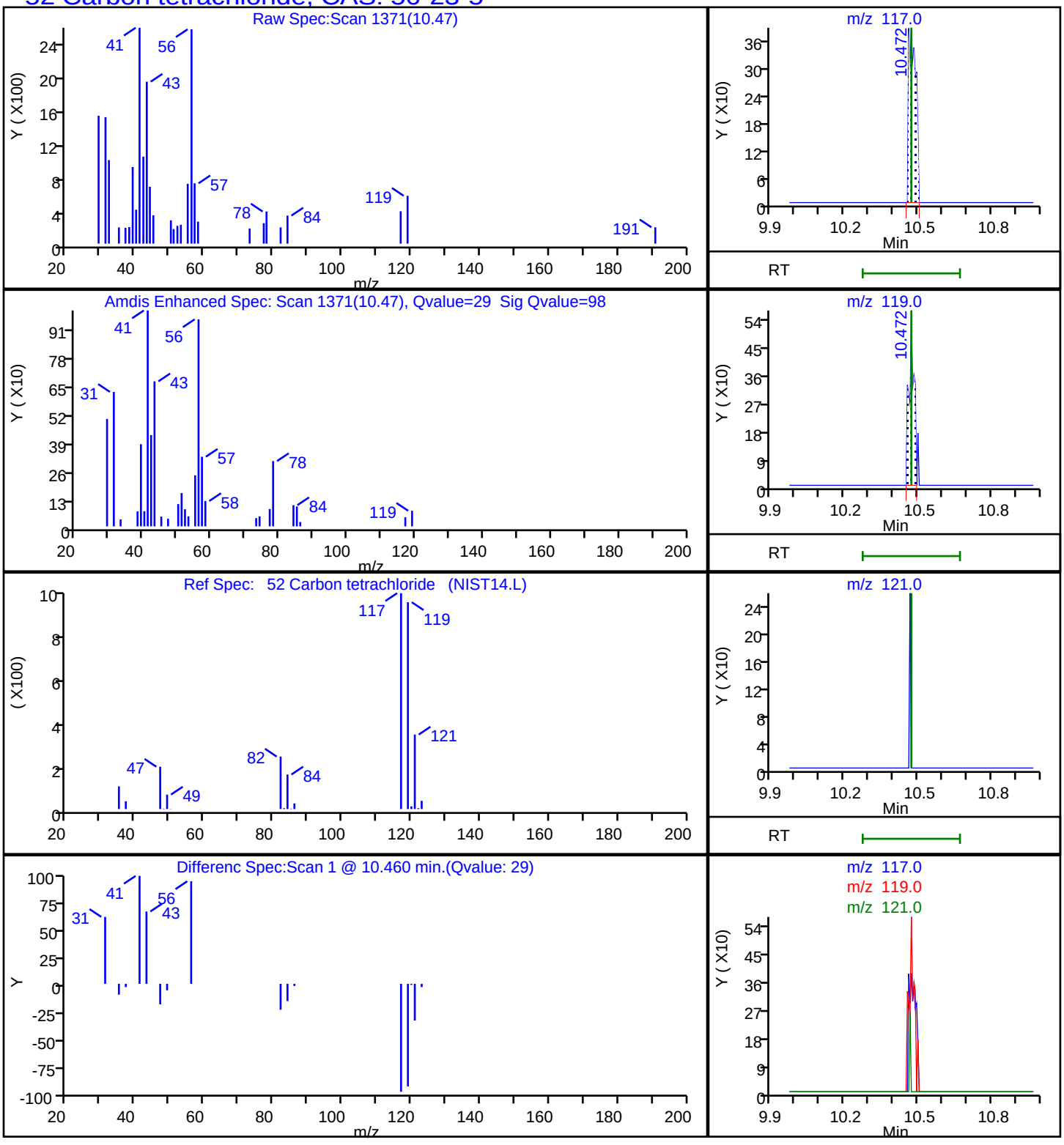


Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P108.D

Injection Date:	07-Sep-2020 19:25:30	Instrument ID:	MG		
Lims ID:	140-20175-A-34	Lab Sample ID:	140-20175-34		
Client ID:	IA-141-C-29				
Operator ID:	AFB	ALS Bottle#:	8	Worklist Smp#:	14
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

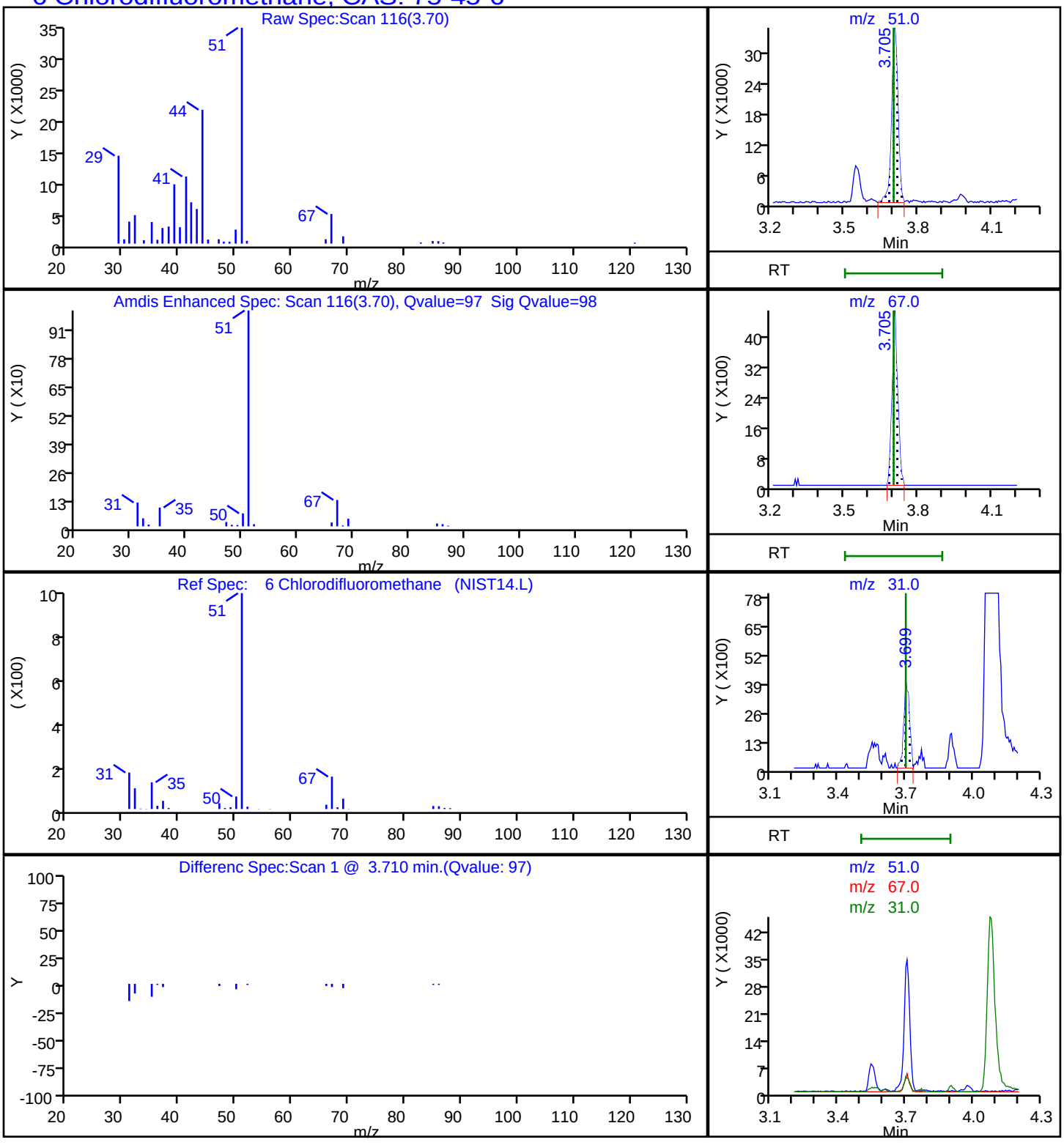
52 Carbon tetrachloride, CAS: 56-23-5



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P108.D				
Injection Date:	07-Sep-2020 19:25:30	Instrument ID:	MG		
Lims ID:	140-20175-A-34	Lab Sample ID:	140-20175-34		
Client ID:	IA-141-C-29				
Operator ID:	AFB	ALS Bottle#:	8	Worklist Smp#:	14
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

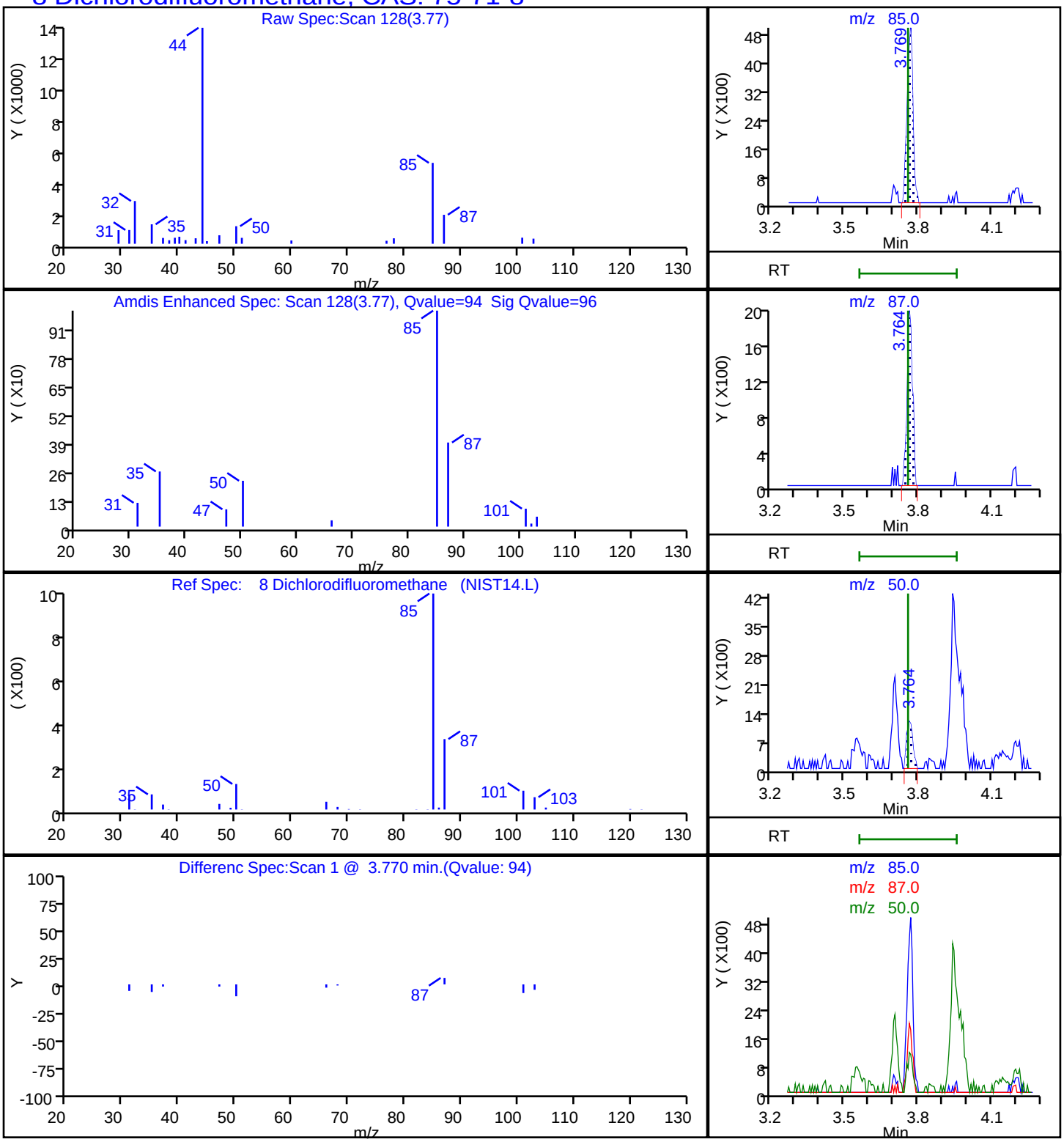
6 Chlorodifluoromethane, CAS: 75-45-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P108.D				
Injection Date:	07-Sep-2020 19:25:30	Instrument ID:	MG		
Lims ID:	140-20175-A-34	Lab Sample ID:	140-20175-34		
Client ID:	IA-141-C-29				
Operator ID:	AFB	ALS Bottle#:	8	Worklist Smp#:	14
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

8 Dichlorodifluoromethane, CAS: 75-71-8



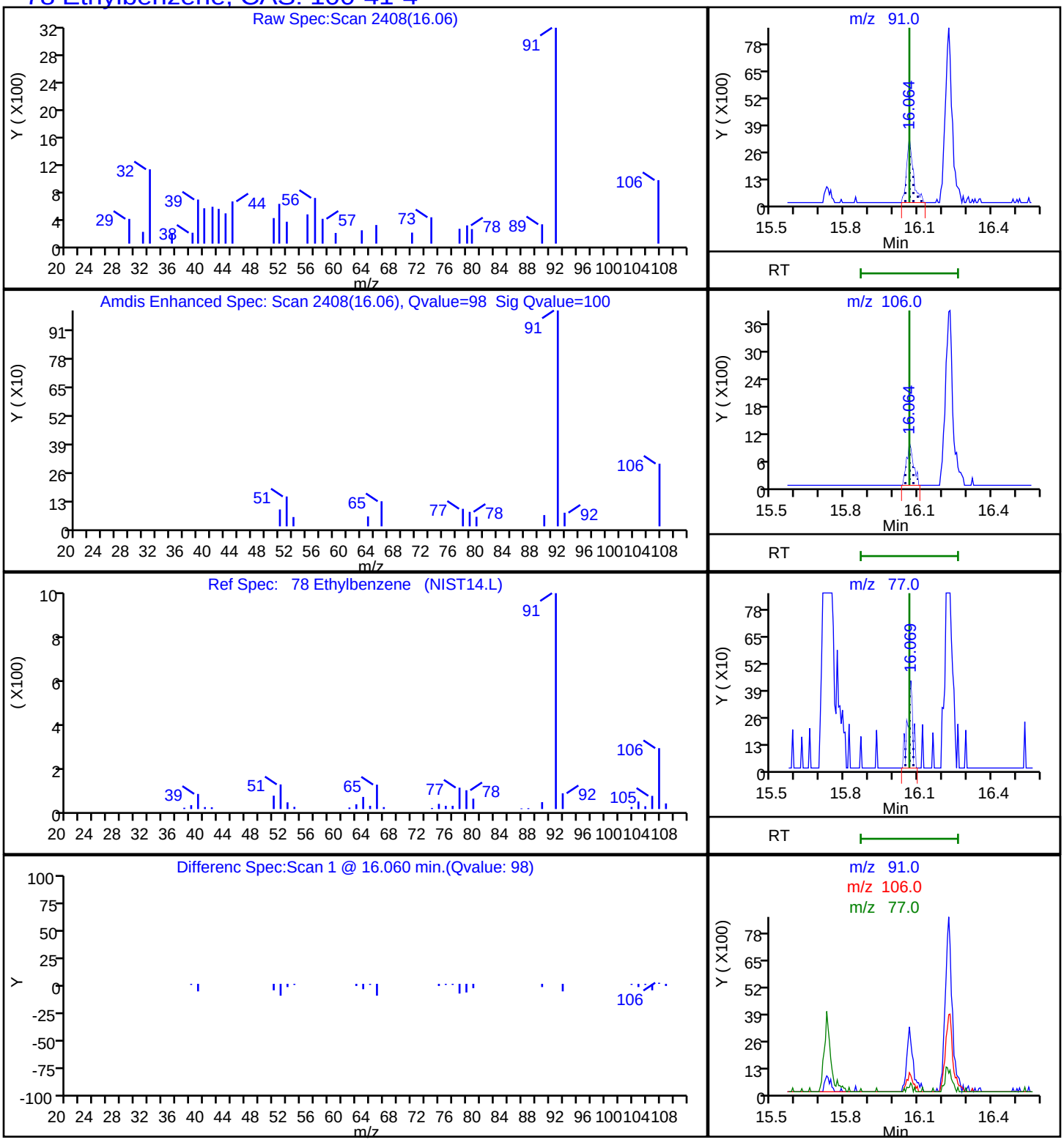
Report Date: 08-Sep-2020 13:18:21 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P108.D

Injection Date:	07-Sep-2020 19:25:30	Instrument ID:	MG		
Lims ID:	140-20175-A-34	Lab Sample ID:	140-20175-34		
Client ID:	IA-141-C-29				
Operator ID:	AFB	ALS Bottle#:	8	Worklist Smp#:	14
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

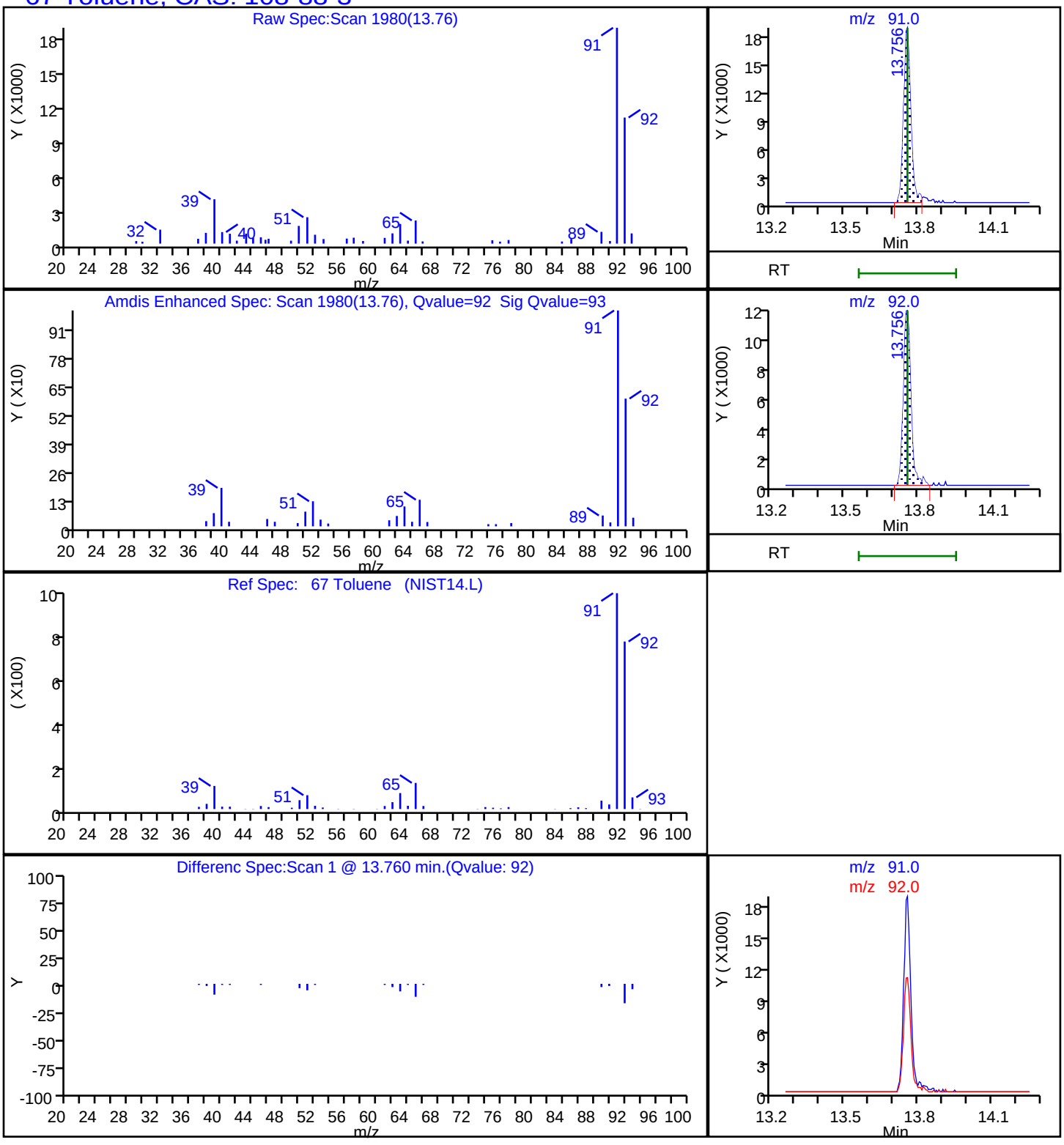
78 Ethylbenzene, CAS: 100-41-4



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P108.D		
Injection Date:	07-Sep-2020 19:25:30	Instrument ID:	MG
Lims ID:	140-20175-A-34	Lab Sample ID:	140-20175-34
Client ID:	IA-141-C-29		
Operator ID:	AFB	ALS Bottle#:	8 Worklist Smp#: 14
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

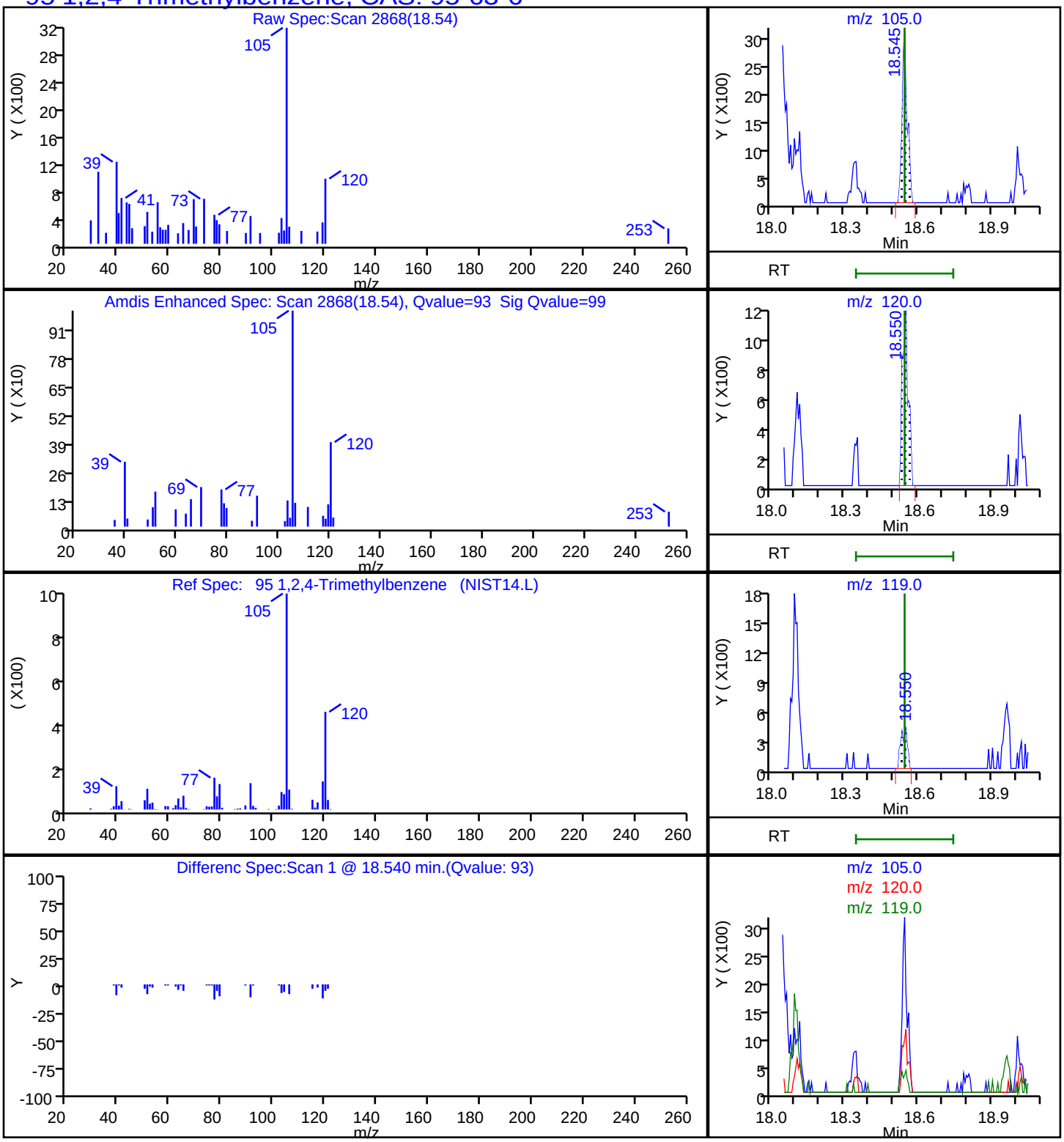
67 Toluene, CAS: 108-88-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P108.D		
Injection Date:	07-Sep-2020 19:25:30	Instrument ID:	MG
Lims ID:	140-20175-A-34	Lab Sample ID:	140-20175-34
Client ID:	IA-141-C-29		
Operator ID:	AFB	ALS Bottle#:	8 Worklist Smp#: 14
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

95 1,2,4-Trimethylbenzene, CAS: 95-63-6

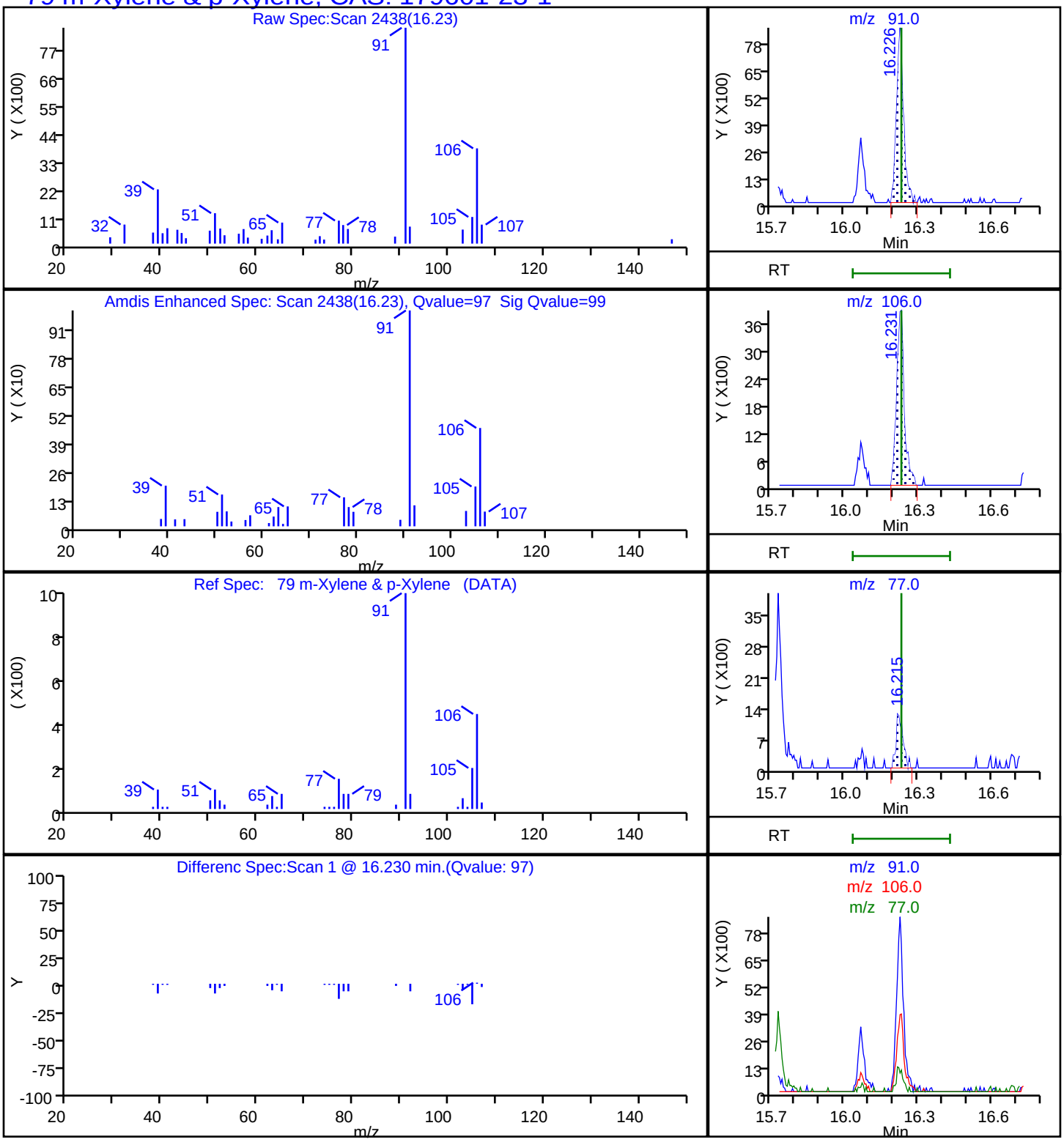


Report Date: 08-Sep-2020 13:18:21 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P108.D				
Injection Date:	07-Sep-2020 19:25:30	Instrument ID:	MG		
Lims ID:	140-20175-A-34	Lab Sample ID:	140-20175-34		
Client ID:	IA-141-C-29				
Operator ID:	AFB	ALS Bottle#:	8	Worklist Smp#:	14
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

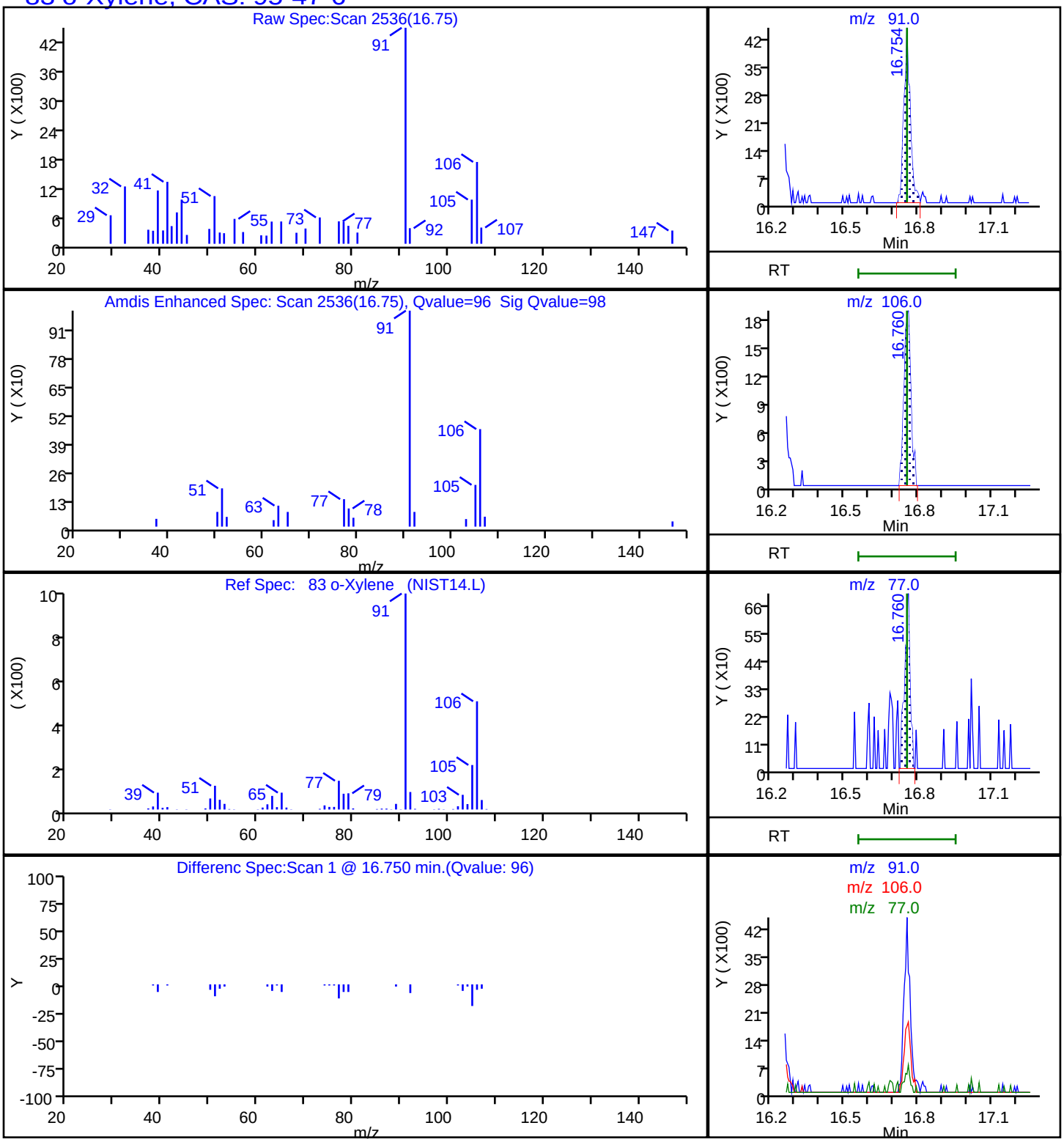
79 m-Xylene & p-Xylene, CAS: 179601-23-1



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P108.D		
Injection Date:	07-Sep-2020 19:25:30	Instrument ID:	MG
Lims ID:	140-20175-A-34	Lab Sample ID:	140-20175-34
Client ID:	IA-141-C-29		
Operator ID:	AFB	ALS Bottle#:	8 Worklist Smp#: 14
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

83 o-Xylene, CAS: 95-47-6



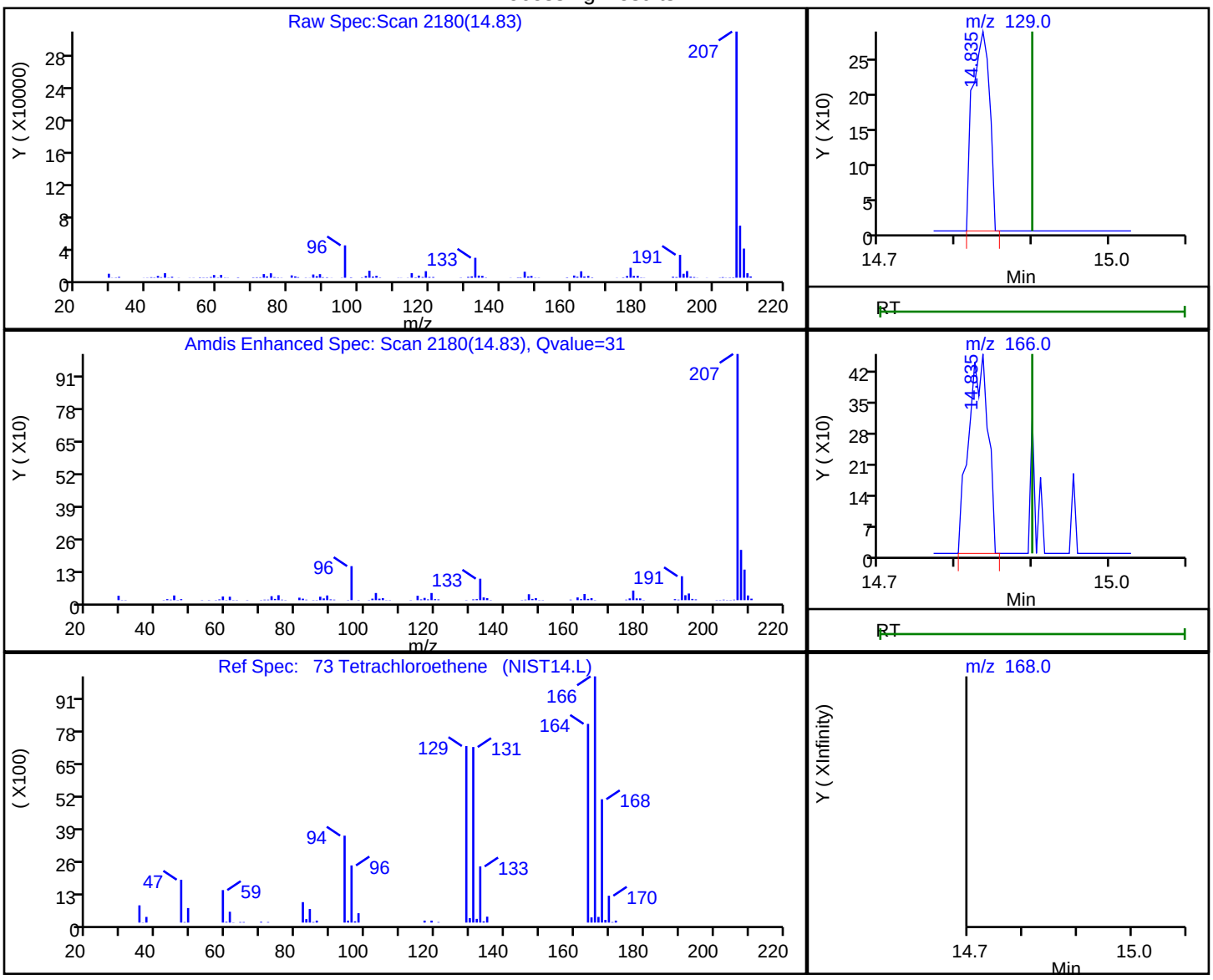
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P108.D				
Injection Date:	07-Sep-2020 19:25:30	Instrument ID:	MG		
Lims ID:	140-20175-A-34	Lab Sample ID:	140-20175-34		
Client ID:	IA-141-C-29				
Operator ID:	AFB	ALS Bottle#:	8	Worklist Smp#:	14
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

73 Tetrachloroethene, CAS: 127-18-4

Processing Results



RT	Mass	Response	Amount
14.83	129.00	432	0.009264
14.83	166.00	795	
14.90	168.00	0	

Reviewer: barlozhetskayaa, 08-Sep-2020 13:18:02

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: IA-149-C-29 Lab Sample ID: 140-20175-35

Matrix: Air Lab File ID: GBI07P109.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 16:50

Sample wt/vol: 100(mL) Date Analyzed: 09/07/2020 20:13

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42500 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.18	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.045	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	1.7		0.40	0.11
67-66-3	Chloroform	119.38	0.11	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.38	J	0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	0.31	J	0.40	0.065
75-09-2	Methylene Chloride	84.93	9.6		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	0.15	J	0.40	0.035
108-88-3	Toluene	92.14	13		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	0.41		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	0.29	J	0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	1.6		0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	101		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: IA-149-C-29 Lab Sample ID: 140-20175-35

Matrix: Air Lab File ID: GBI07P109.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 16:50

Sample wt/vol: 100(mL) Date Analyzed: 09/07/2020 20:13

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42500 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.58	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.28	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	6.2		1.4	0.39
67-66-3	Chloroform	119.38	0.52	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	1.9	J	2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	1.3	J	1.7	0.28
75-09-2	Methylene Chloride	84.93	33		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	1.0	J	2.7	0.24
108-88-3	Toluene	92.14	47		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	2.2		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	1.4	J	2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	6.8		3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	101		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P109.D
Lims ID: 140-20175-A-35
Client ID: IA-149-C-29
Sample Type: Client
Inject. Date: 07-Sep-2020 20:13:30 ALS Bottle#: 9 Worklist Smp#: 15
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016516-015
Misc. Info.: 140-20175-a-35
Operator ID: AFB Instrument ID: MG

Method: \\chromfs\Knoxville\ChromData\MG\20200904-16516.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 08-Sep-2020 13:18:20 Calib Date: 02-Sep-2020 03:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1021

First Level Reviewer: barlozhetskayaa Date: 08-Sep-2020 13:18:55

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.806	8.806	0.000	86	107478	4.80	
* 2 1,4-Difluorobenzene	114	10.990	10.995	-0.005	98	567029	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.730	15.730	0.000	95	554939	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.369	17.369	0.000	81	409650	4.70	
6 Chlorodifluoromethane	51	3.705	3.699	0.006	97	33627	0.3492	
8 Dichlorodifluoromethane	85	3.764	3.759	0.005	95	8085	0.0751	
31 Methylene Chloride	84	6.271	6.271	0.000	87	50982	1.92	
44 Chloroform	83	8.822	8.822	0.000	27	1620	0.0215	
50 Benzene	78	10.445	10.440	0.000	52	4229	0.0363	
52 Carbon tetrachloride	117	10.477	10.467	0.005	19	648	0.008994	
58 Trichloroethene	130	11.707	11.701	0.000	86	4143	0.0815	
67 Toluene	91	13.756	13.756	0.000	93	306355	2.50	
73 Tetrachloroethene	129	14.894	14.899	-0.005	52	1384	0.0300	
78 Ethylbenzene	91	16.064	16.064	0.000	96	9740	0.0619	
79 m-Xylene & p-Xylene	91	16.226	16.231	-0.005	95	26556	0.2134	
83 o-Xylene	91	16.754	16.754	0.000	94	11483	0.0912	
95 1,2,4-Trimethylbenzene	105	18.550	18.545	0.006	96	8381	0.0580	
112 Naphthalene	128	21.095	21.095	0.000	96	7806	0.0373	
S 124 Xylenes, Total	100				0		0.3046	

Reagents:

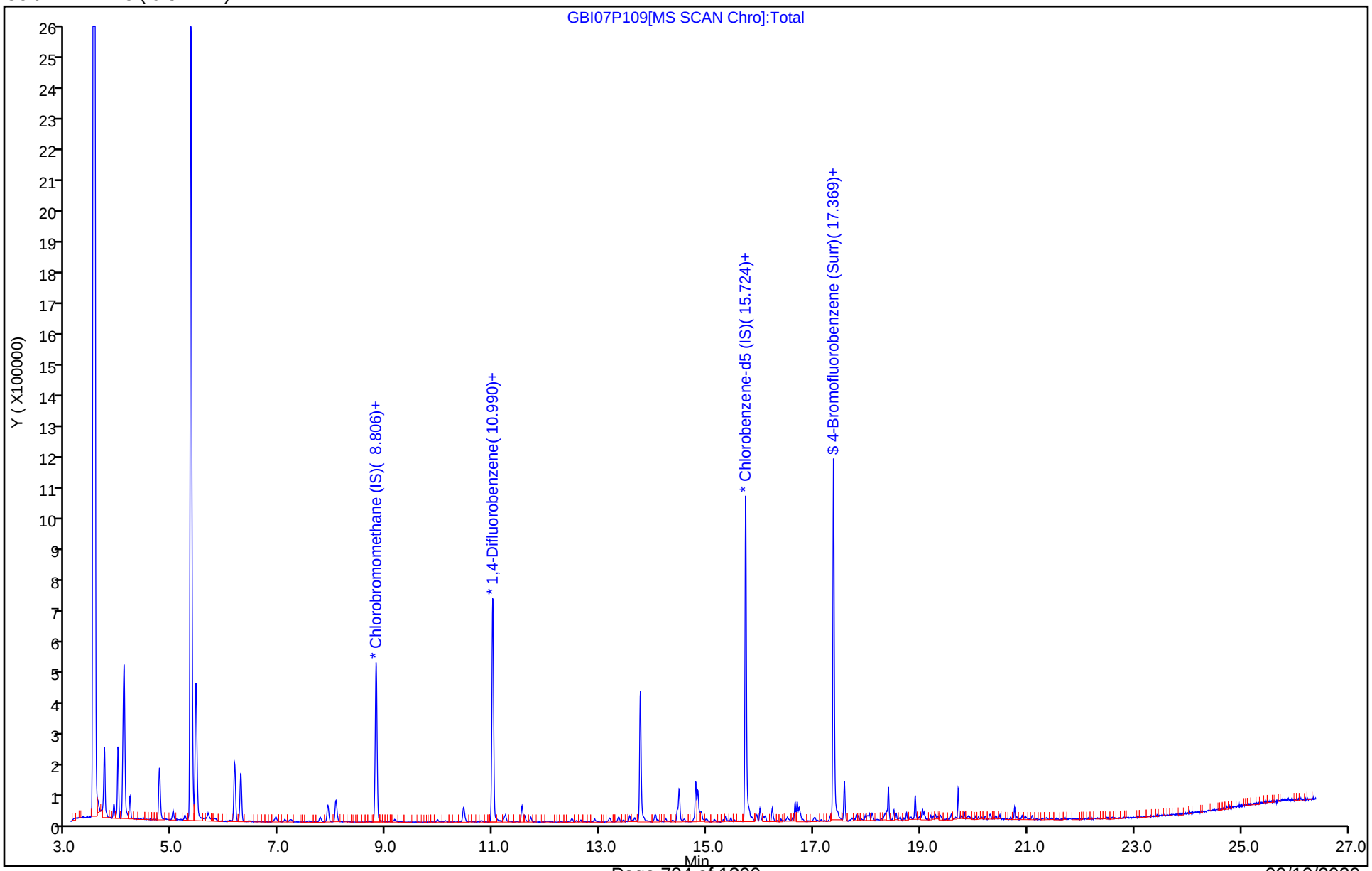
40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

Report Date: 08-Sep-2020 13:18:56 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P109.D				
Injection Date:	07-Sep-2020 20:13:30	Instrument ID:	MG	Operator ID:	AFB
Lims ID:	140-20175-A-35	Lab Sample ID:	140-20175-35	Worklist Smp#:	15
Client ID:	IA-149-C-29				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P109.D				
Lims ID:	140-20175-A-35				
Client ID:	IA-149-C-29				
Sample Type:	Client				
Inject. Date:	07-Sep-2020 20:13:30	ALS Bottle#:	9	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016516-015				
Misc. Info.:	140-20175-a-35				
Operator ID:	AFB	Instrument ID:	MG		
Method:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\MG_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	08-Sep-2020 13:18:20	Calib Date:	02-Sep-2020 03:27:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1021				
First Level Reviewer: barlozhetskayaa		Date:	08-Sep-2020 13:18:55		

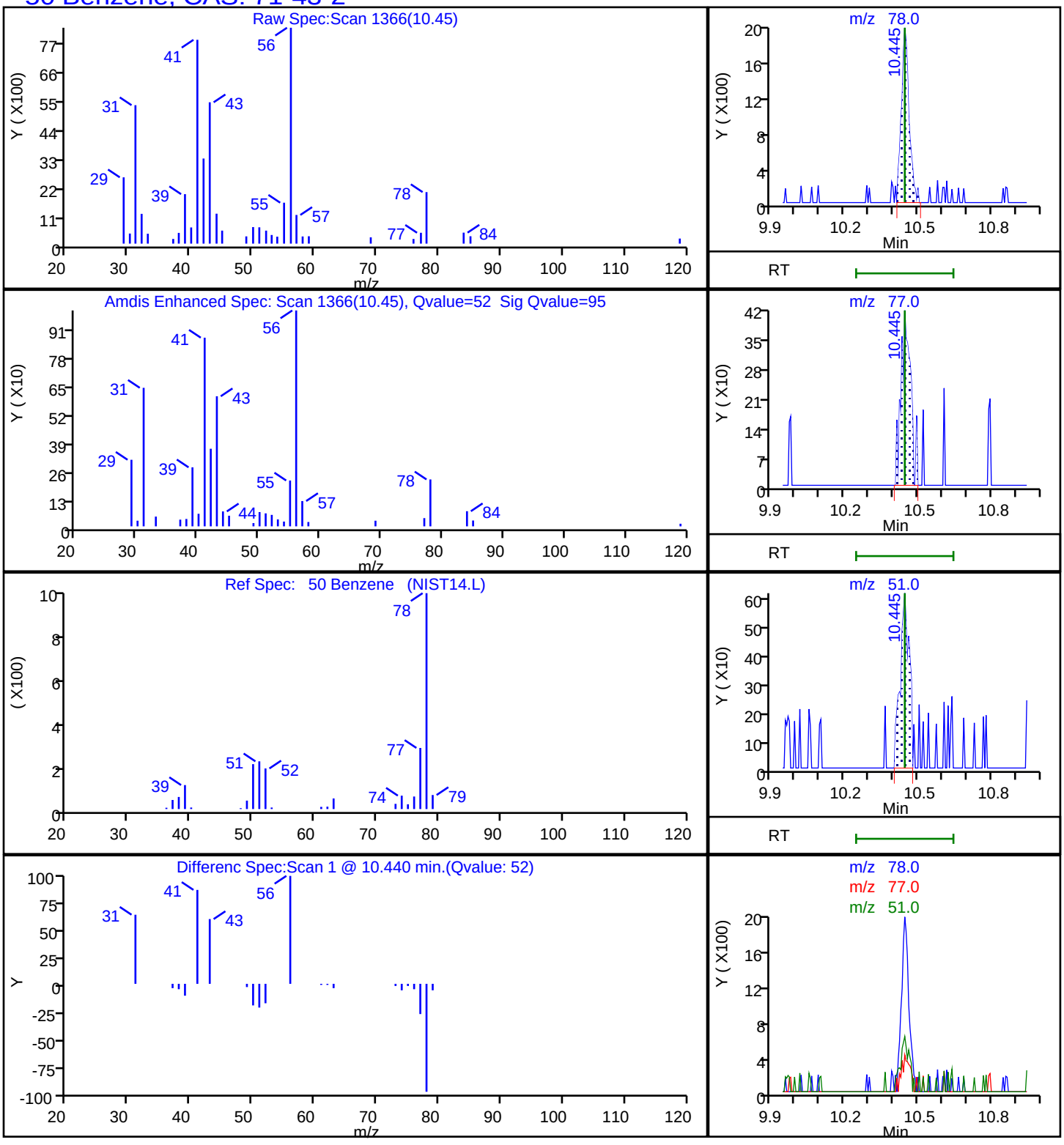
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	4.70	101.38

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P109.D

Injection Date:	07-Sep-2020 20:13:30	Instrument ID:	MG
Lims ID:	140-20175-A-35	Lab Sample ID:	140-20175-35
Client ID:	IA-149-C-29		
Operator ID:	AFB	ALS Bottle#:	9 Worklist Smp#: 15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

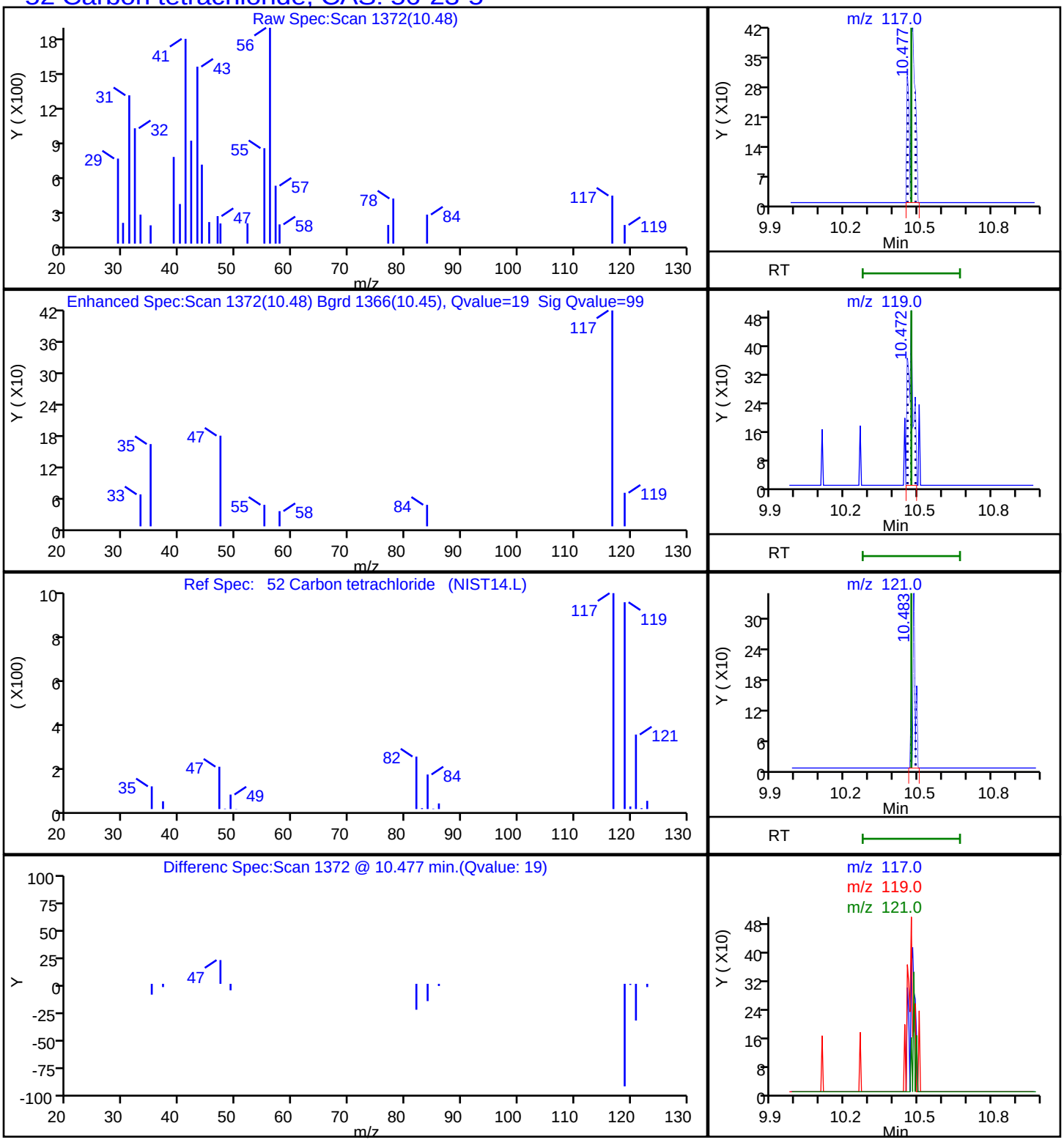
50 Benzene, CAS: 71-43-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P109.D		
Injection Date:	07-Sep-2020 20:13:30	Instrument ID:	MG
Lims ID:	140-20175-A-35	Lab Sample ID:	140-20175-35
Client ID:	IA-149-C-29		
Operator ID:	AFB	ALS Bottle#:	9 Worklist Smp#: 15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

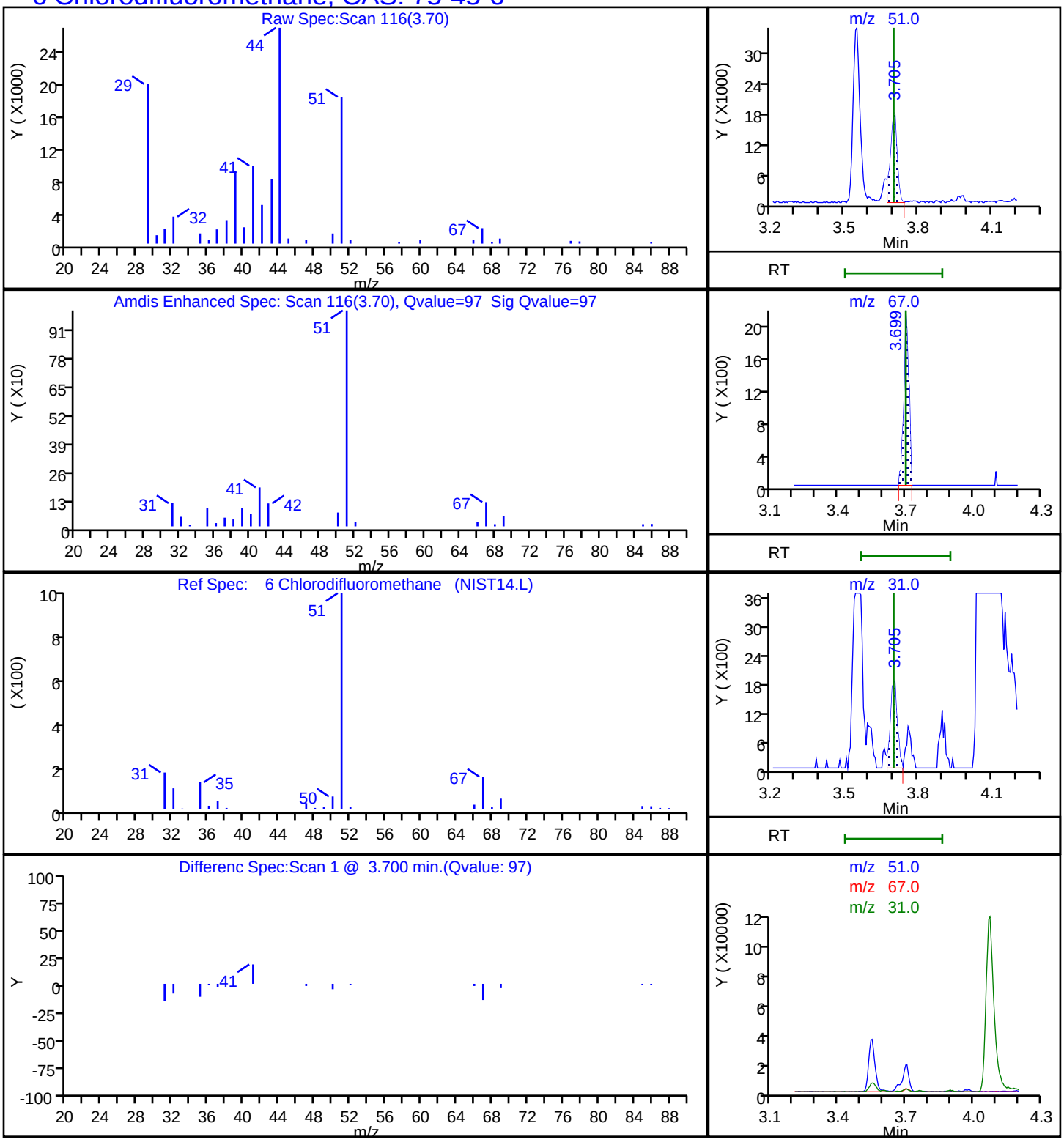
52 Carbon tetrachloride, CAS: 56-23-5



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P109.D				
Injection Date:	07-Sep-2020 20:13:30	Instrument ID:	MG		
Lims ID:	140-20175-A-35	Lab Sample ID:	140-20175-35		
Client ID:	IA-149-C-29				
Operator ID:	AFB	ALS Bottle#:	9	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

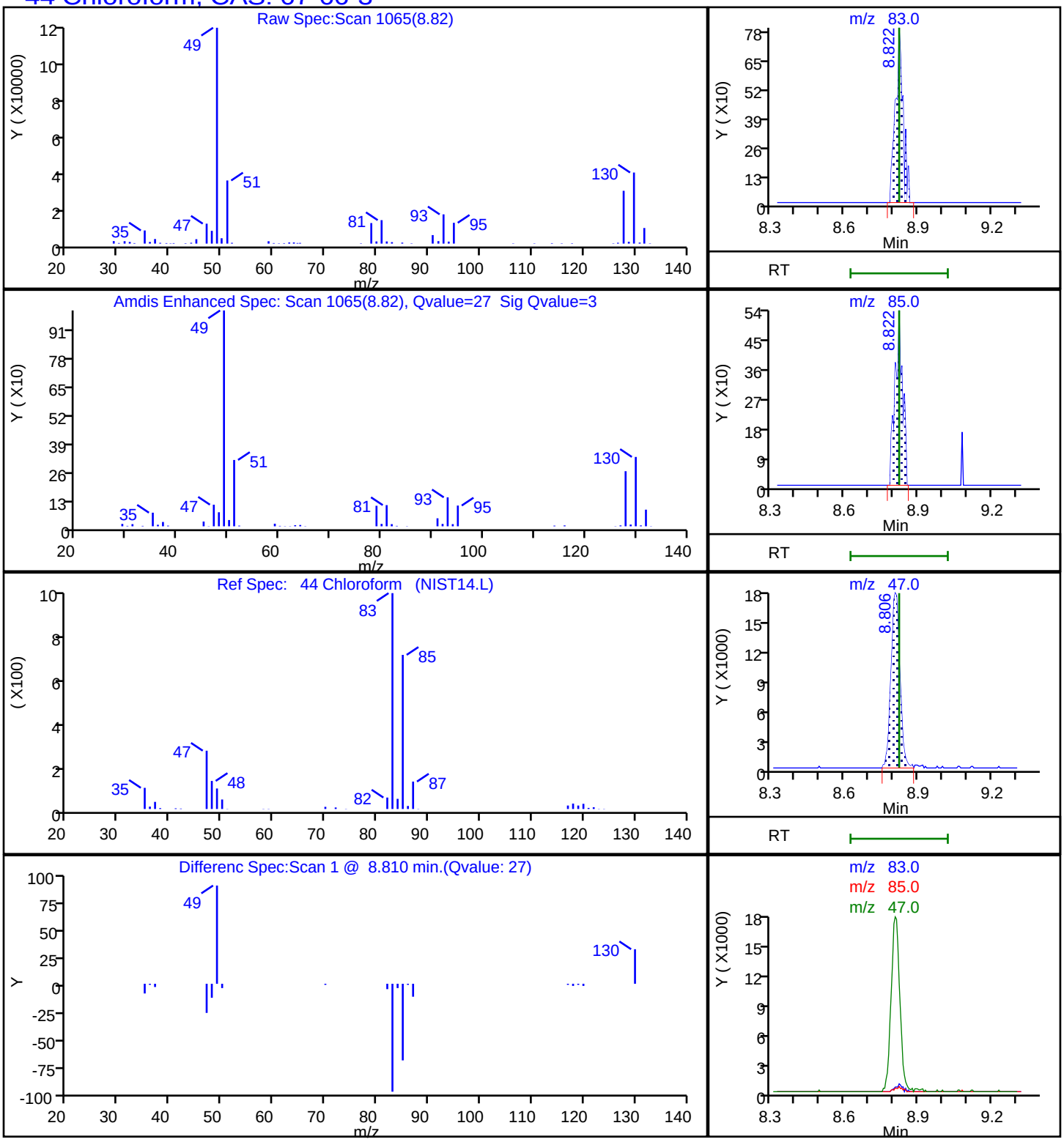
6 Chlorodifluoromethane, CAS: 75-45-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P109.D		
Injection Date:	07-Sep-2020 20:13:30	Instrument ID:	MG
Lims ID:	140-20175-A-35	Lab Sample ID:	140-20175-35
Client ID:	IA-149-C-29		
Operator ID:	AFB	ALS Bottle#:	9 Worklist Smp#: 15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

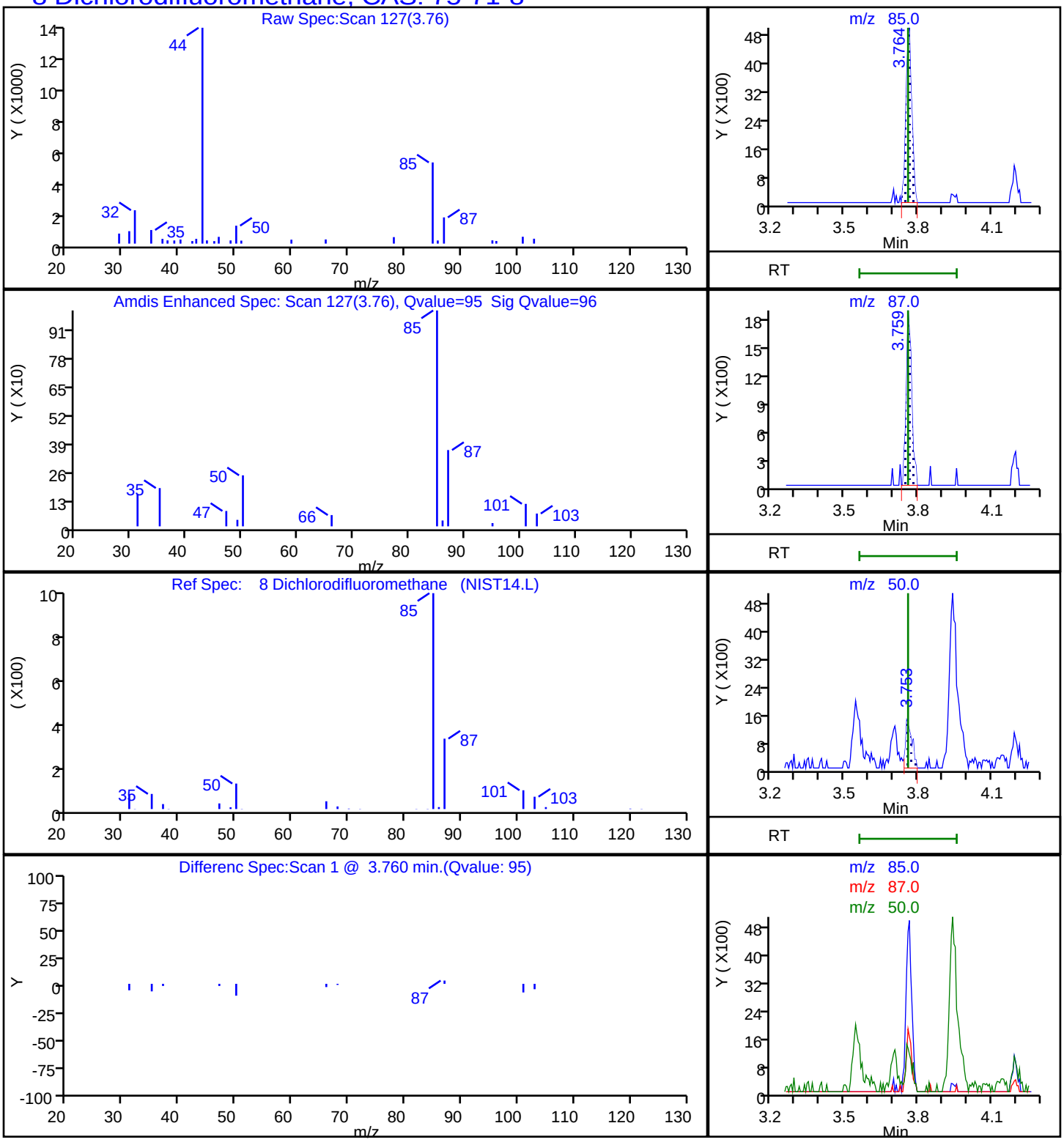
44 Chloroform, CAS: 67-66-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P109.D		
Injection Date:	07-Sep-2020 20:13:30	Instrument ID:	MG
Lims ID:	140-20175-A-35	Lab Sample ID:	140-20175-35
Client ID:	IA-149-C-29		
Operator ID:	AFB	ALS Bottle#:	9 Worklist Smp#: 15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

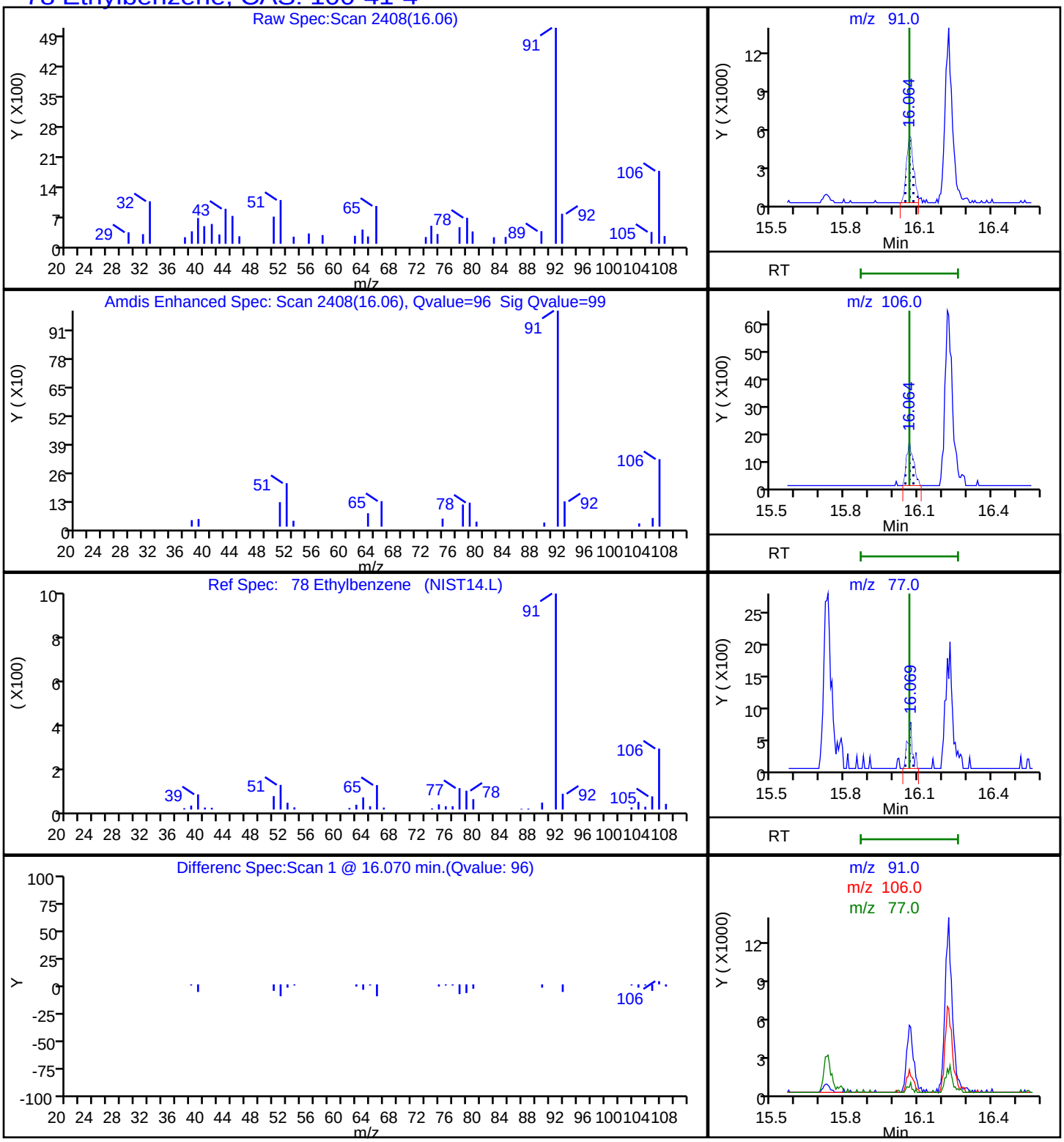
8 Dichlorodifluoromethane, CAS: 75-71-8



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P109.D		
Injection Date:	07-Sep-2020 20:13:30	Instrument ID:	MG
Lims ID:	140-20175-A-35	Lab Sample ID:	140-20175-35
Client ID:	IA-149-C-29		
Operator ID:	AFB	ALS Bottle#:	9 Worklist Smp#: 15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

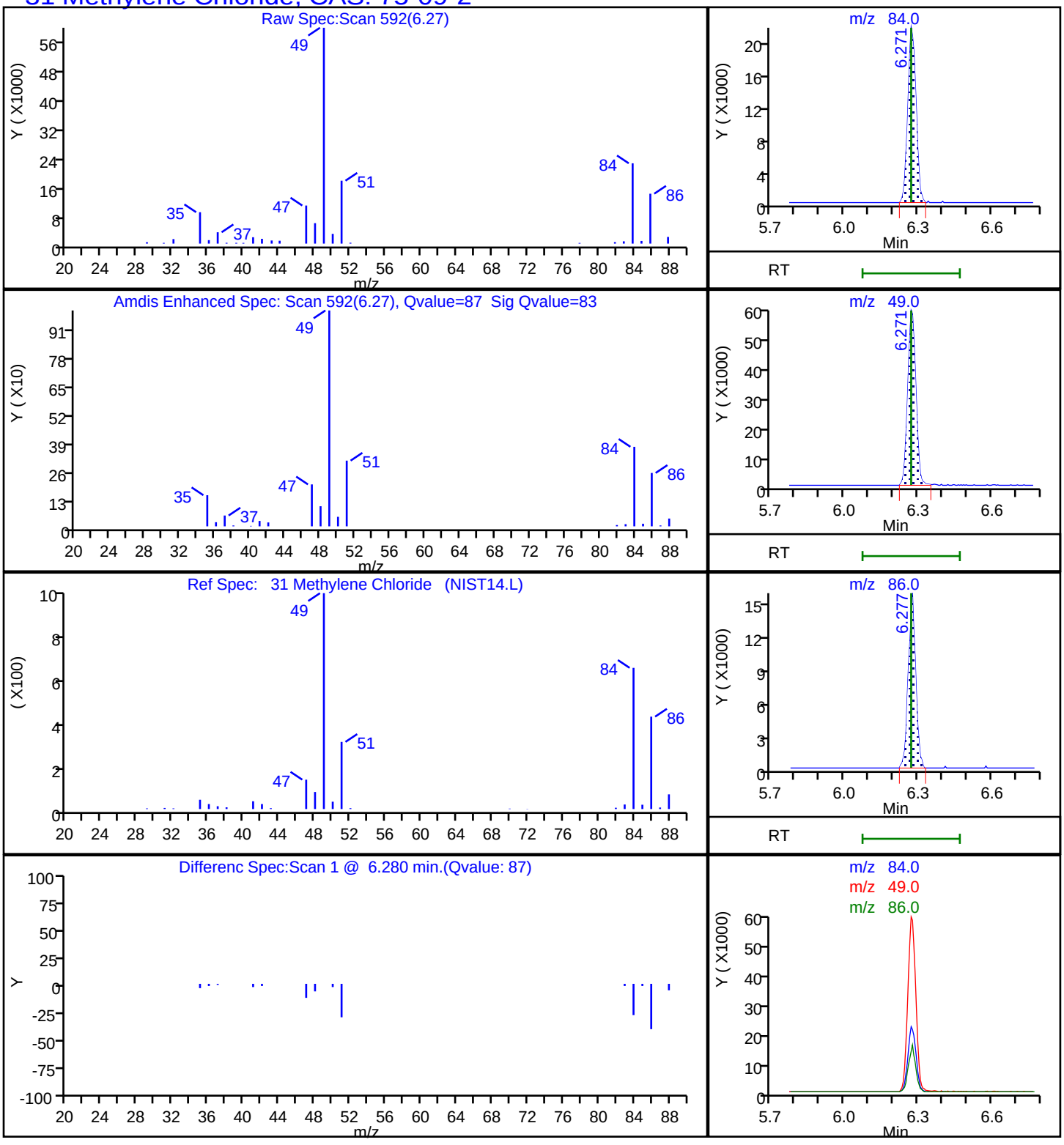
78 Ethylbenzene, CAS: 100-41-4



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P109.D		
Injection Date:	07-Sep-2020 20:13:30	Instrument ID:	MG
Lims ID:	140-20175-A-35	Lab Sample ID:	140-20175-35
Client ID:	IA-149-C-29		
Operator ID:	AFB	ALS Bottle#:	9 Worklist Smp#: 15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

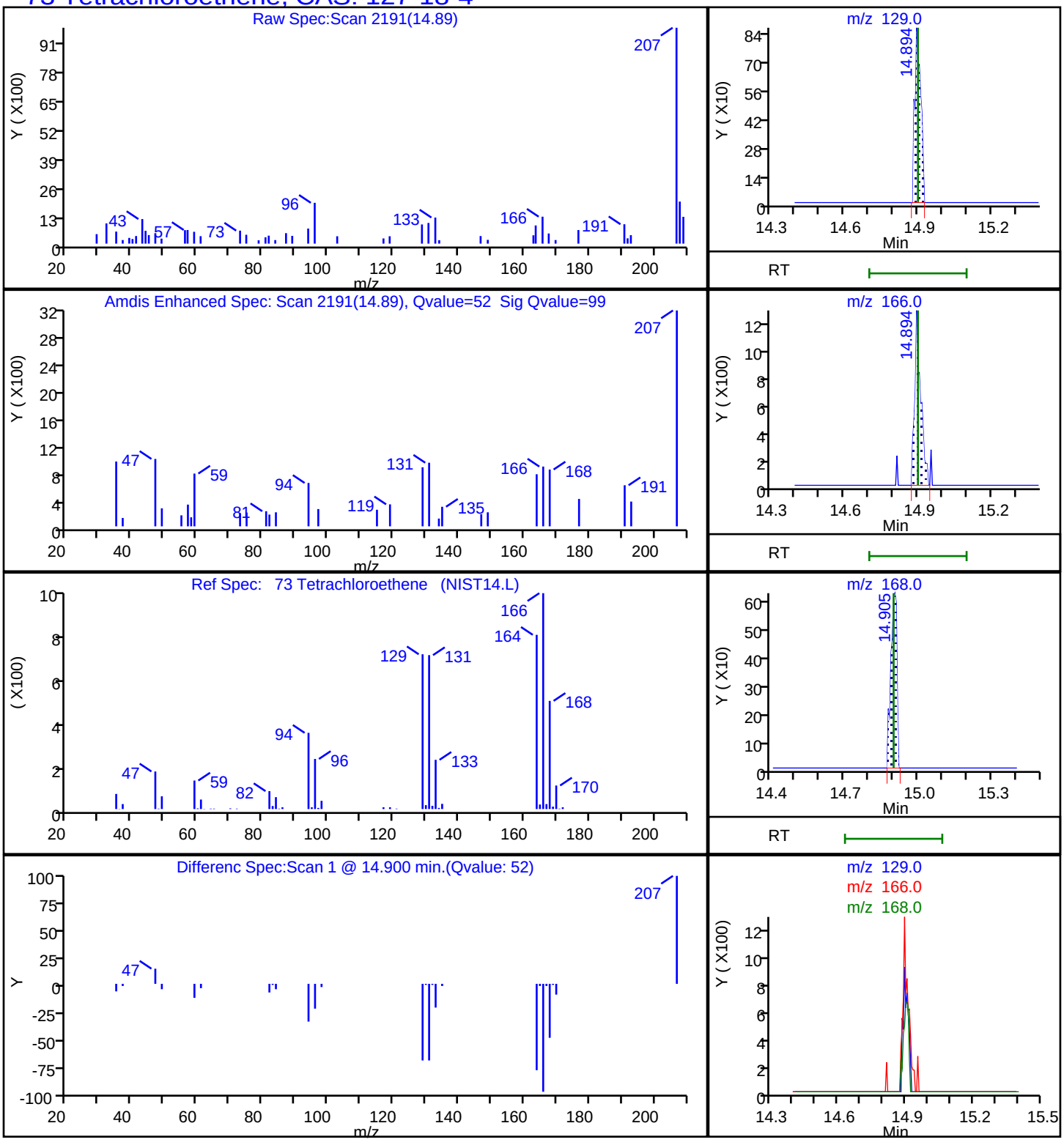
31 Methylene Chloride, CAS: 75-09-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P109.D		
Injection Date:	07-Sep-2020 20:13:30	Instrument ID:	MG
Lims ID:	140-20175-A-35	Lab Sample ID:	140-20175-35
Client ID:	IA-149-C-29		
Operator ID:	AFB	ALS Bottle#:	9 Worklist Smp#: 15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

73 Tetrachloroethene, CAS: 127-18-4

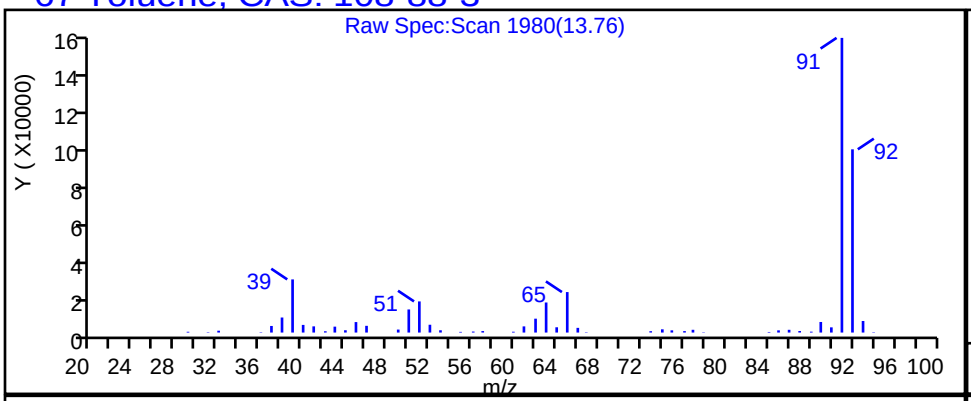


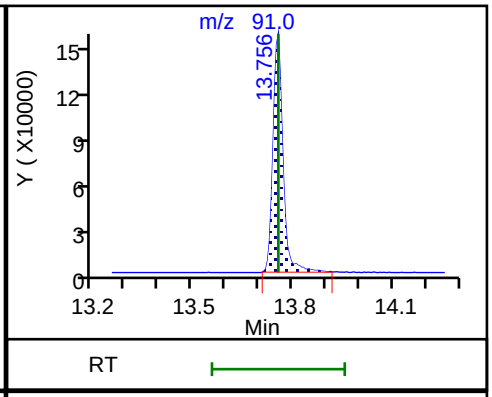
Report Date: 08-Sep-2020 13:18:56 Chrom Revision: 2.3 20-Aug-2020 13:57:12

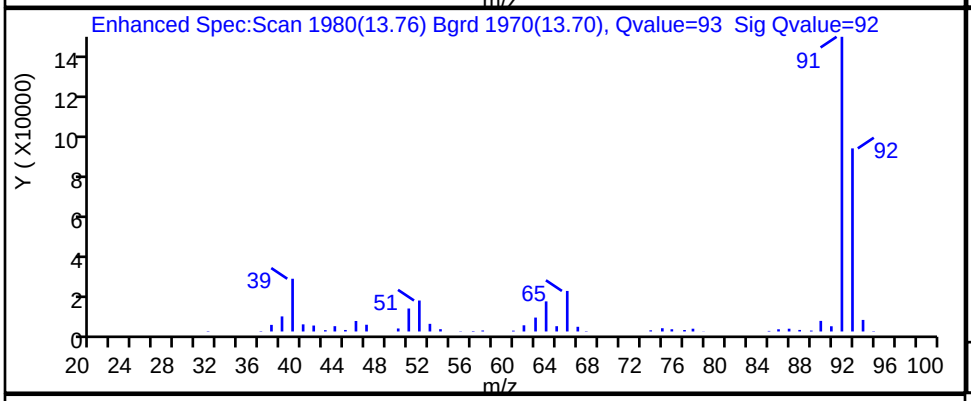
Eurofins TestAmerica, Knoxville

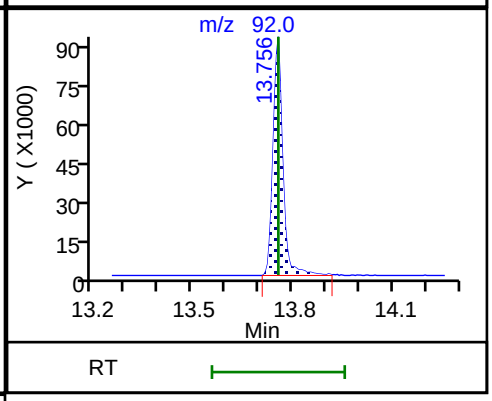
Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P109.D		
Injection Date:	07-Sep-2020 20:13:30	Instrument ID:	MG
Lims ID:	140-20175-A-35	Lab Sample ID:	140-20175-35
Client ID:	IA-149-C-29		
Operator ID:	AFB	ALS Bottle#:	9 Worklist Smp#: 15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

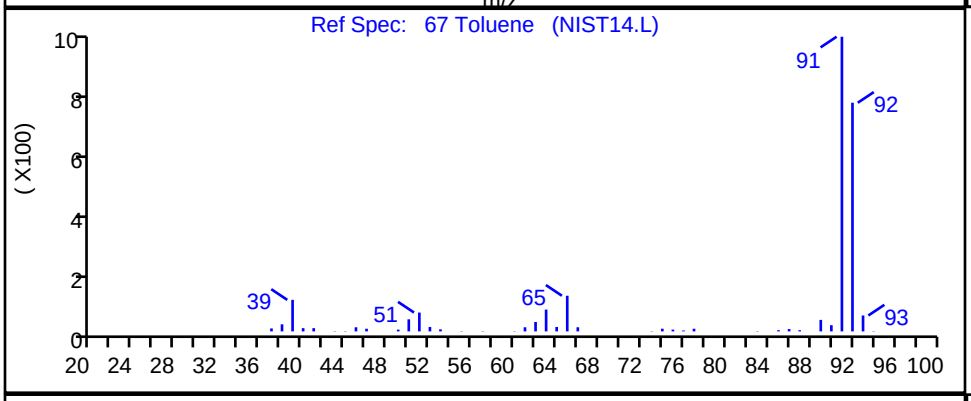
67 Toluene, CAS: 108-88-3

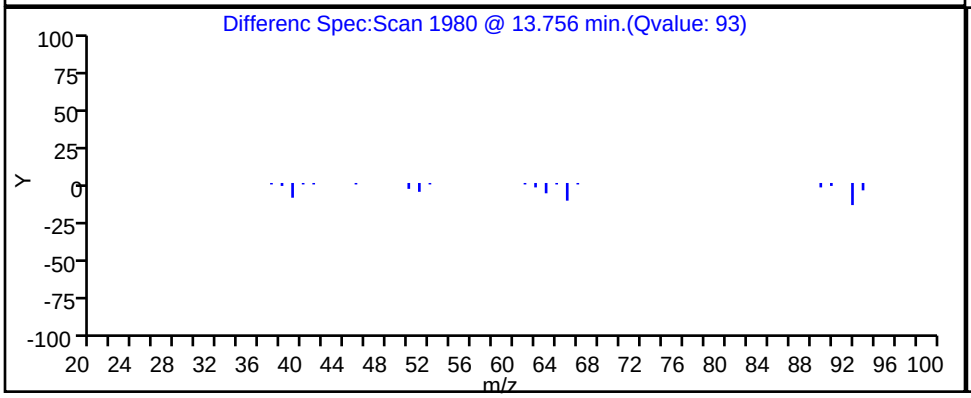


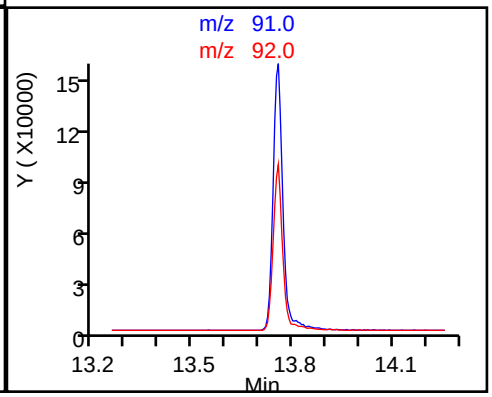










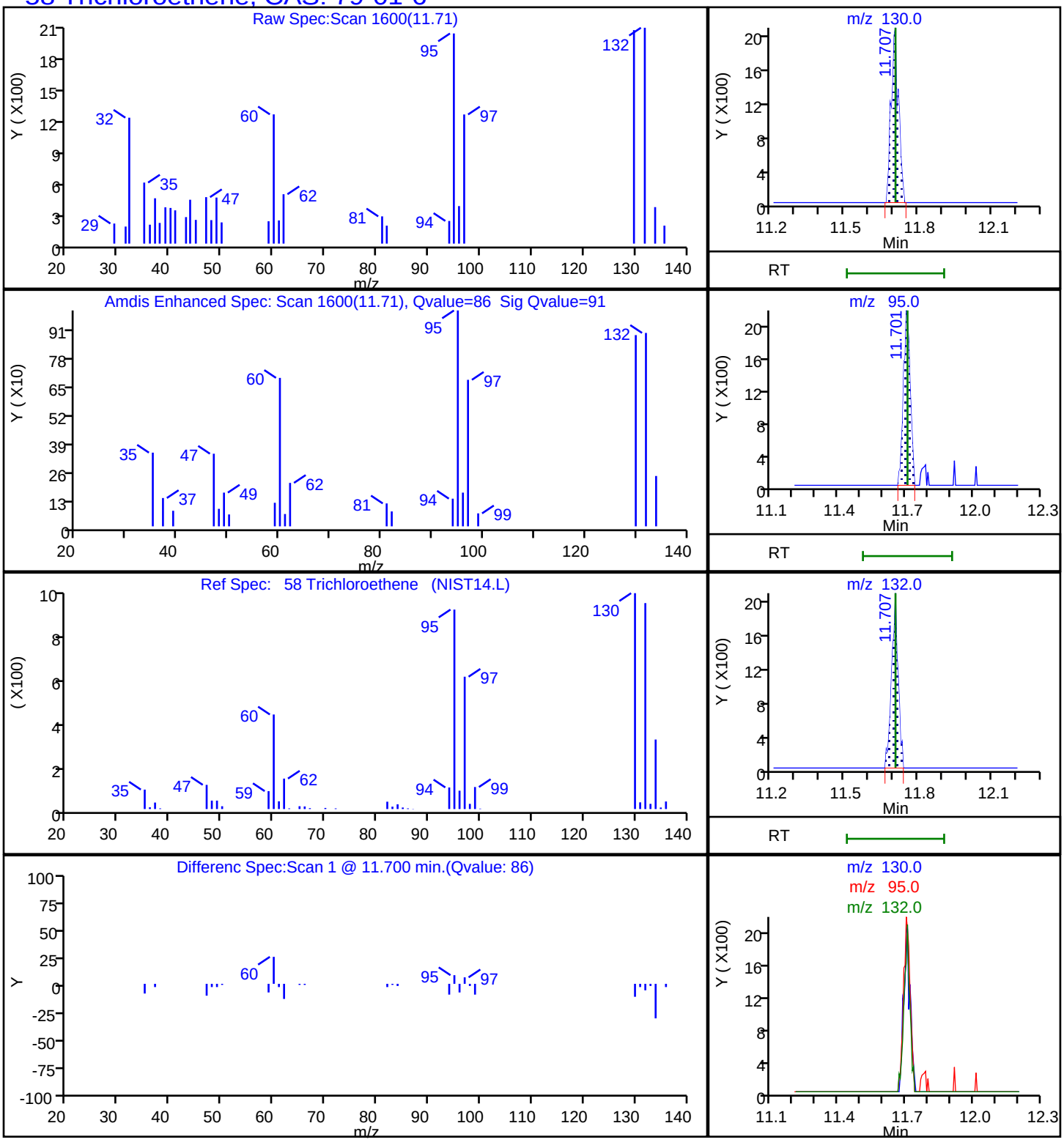


Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P109.D

Injection Date:	07-Sep-2020 20:13:30	Instrument ID:	MG
Lims ID:	140-20175-A-35	Lab Sample ID:	140-20175-35
Client ID:	IA-149-C-29		
Operator ID:	AFB	ALS Bottle#:	9 Worklist Smp#: 15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

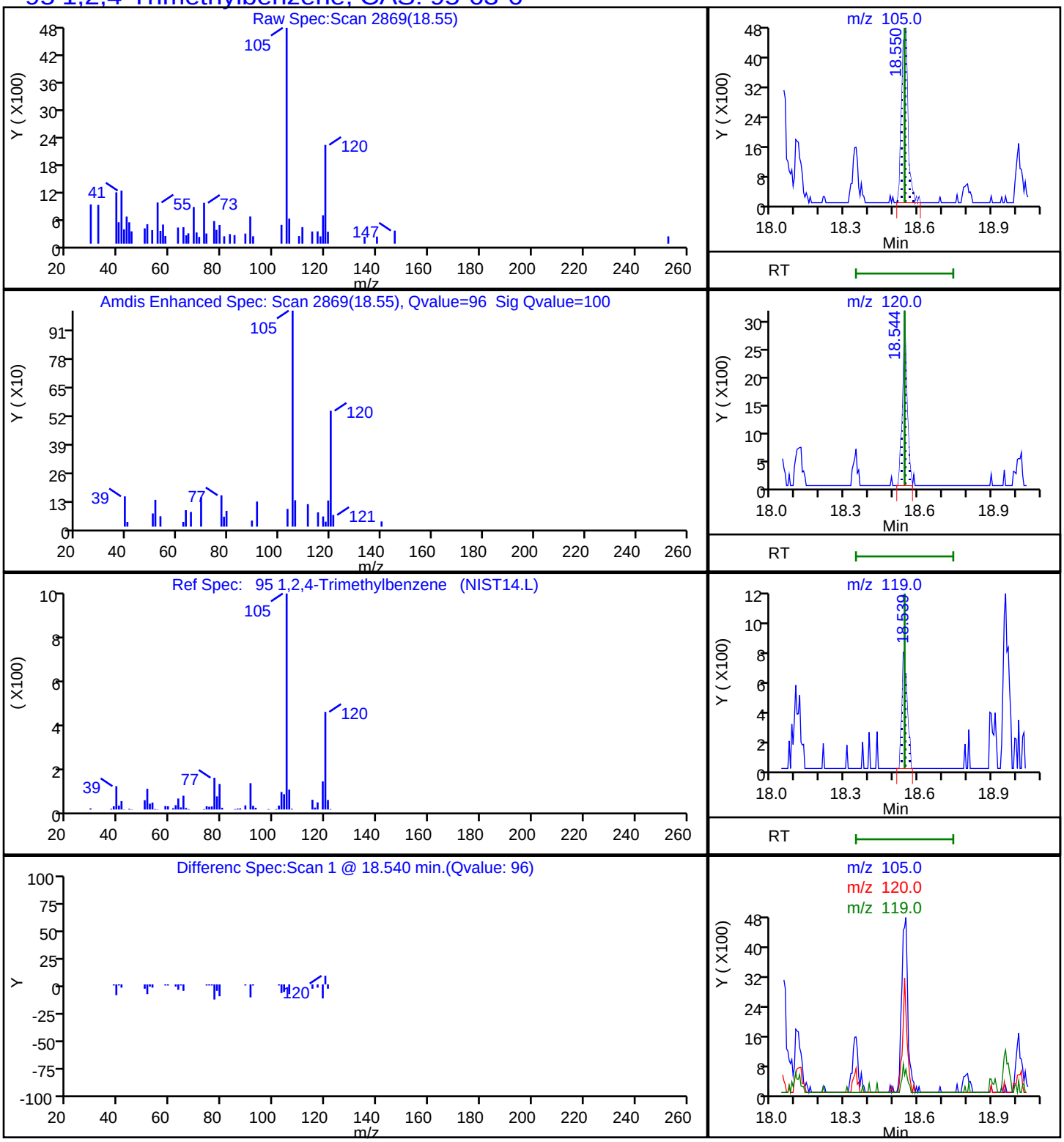
58 Trichloroethene, CAS: 79-01-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P109.D				
Injection Date:	07-Sep-2020 20:13:30	Instrument ID:	MG		
Lims ID:	140-20175-A-35	Lab Sample ID:	140-20175-35		
Client ID:	IA-149-C-29				
Operator ID:	AFB	ALS Bottle#:	9	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

95 1,2,4-Trimethylbenzene, CAS: 95-63-6

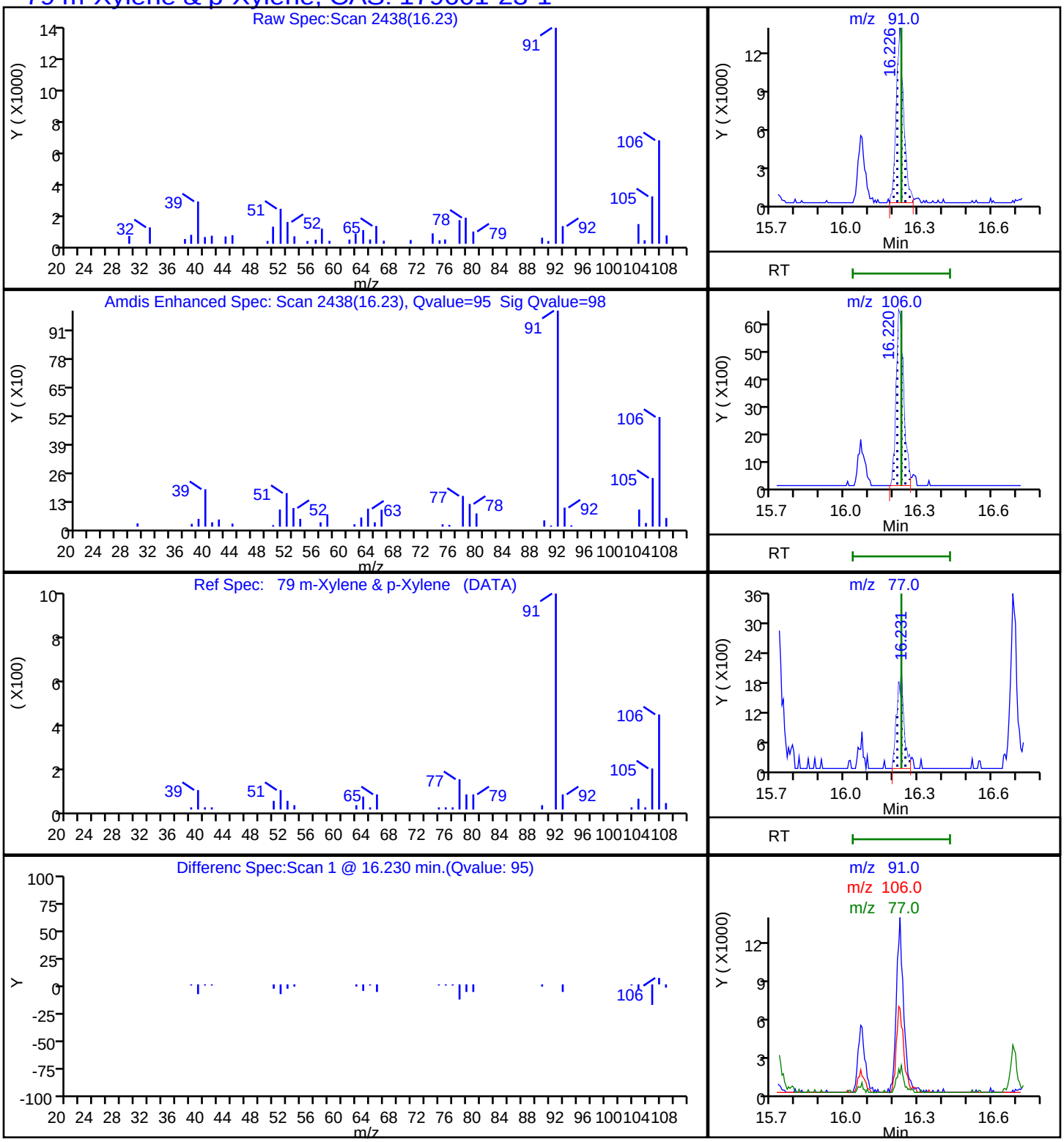


Report Date: 08-Sep-2020 13:18:56 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P109.D				
Injection Date:	07-Sep-2020 20:13:30	Instrument ID:	MG		
Lims ID:	140-20175-A-35	Lab Sample ID:	140-20175-35		
Client ID:	IA-149-C-29				
Operator ID:	AFB	ALS Bottle#:	9	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

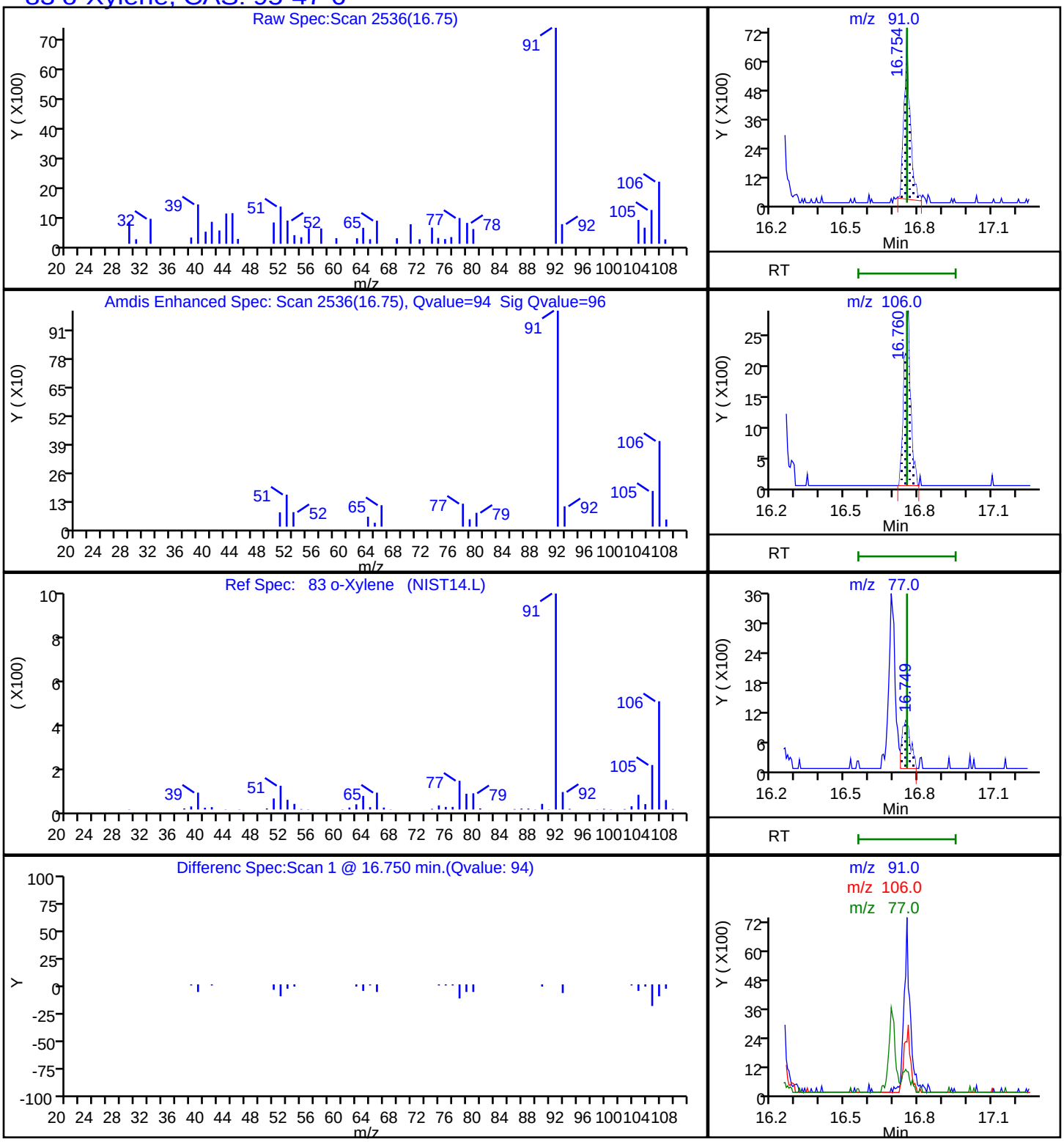
79 m-Xylene & p-Xylene, CAS: 179601-23-1



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P109.D		
Injection Date:	07-Sep-2020 20:13:30	Instrument ID:	MG
Lims ID:	140-20175-A-35	Lab Sample ID:	140-20175-35
Client ID:	IA-149-C-29		
Operator ID:	AFB	ALS Bottle#:	9 Worklist Smp#: 15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

83 o-Xylene, CAS: 95-47-6



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: IA-DUP2-C-29 Lab Sample ID: 140-20175-36

Matrix: Air Lab File ID: GBI07P110.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 00:00

Sample wt/vol: 140(mL) Date Analyzed: 09/07/2020 20:56

Soil Aliquot Vol: Dilution Factor: 1.4

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42500 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.17	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	ND		0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	1.6		0.40	0.11
67-66-3	Chloroform	119.38	0.12	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.36	J	0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	0.35	J	0.40	0.065
75-09-2	Methylene Chloride	84.93	11		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	0.24		0.20	0.20
127-18-4	Tetrachloroethene	165.83	0.14	J	0.40	0.035
108-88-3	Toluene	92.14	13		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	0.36		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	0.38	J	0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	0.11	J	0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	1.8		0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	99		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: IA-DUP2-C-29 Lab Sample ID: 140-20175-36

Matrix: Air Lab File ID: GBI07P110.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 00:00

Sample wt/vol: 140(mL) Date Analyzed: 09/07/2020 20:56

Soil Aliquot Vol: Dilution Factor: 1.4

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42500 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.55	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	ND		2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	5.7		1.4	0.39
67-66-3	Chloroform	119.38	0.57	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	1.8	J	2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	1.5	J	1.7	0.28
75-09-2	Methylene Chloride	84.93	40		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	1.3		1.0	1.0
127-18-4	Tetrachloroethene	165.83	0.94	J	2.7	0.24
108-88-3	Toluene	92.14	50		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	1.9		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	1.9	J	2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	0.55	J	2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	7.6		3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	99		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P110.D
Lims ID: 140-20175-A-36
Client ID: IA-DUP2-C-29
Sample Type: Client
Inject. Date: 07-Sep-2020 20:56:30 ALS Bottle#: 10 Worklist Smp#: 16
Purge Vol: 500.000 mL Dil. Factor: 1.4000
Sample Info: 140-0016516-016
Misc. Info.: 140-20175-a-36@1.40
Operator ID: AFB Instrument ID: MG

Method: \\chromfs\Knoxville\ChromData\MG\20200904-16516.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 08-Sep-2020 13:18:20 Calib Date: 02-Sep-2020 03:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1021

First Level Reviewer: barlozhetskayaa Date: 08-Sep-2020 13:19:47

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.817	8.806	0.011	86	108291	4.80	
* 2 1,4-Difluorobenzene	114	10.995	10.995	0.000	98	591254	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.724	15.730	-0.006	95	579156	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.369	17.369	0.000	80	418970	4.61	
6 Chlorodifluoromethane	51	3.705	3.699	0.006	54	31293	0.3225	
8 Dichlorodifluoromethane	85	3.759	3.759	0.000	97	7771	0.0716	
31 Methylene Chloride	84	6.277	6.271	0.006	87	61026	2.29	
44 Chloroform	83	8.827	8.822	0.005	27	1763	0.0232	
50 Benzene	78	10.450	10.440	0.005	49	4209	0.0346	
58 Trichloroethene	130	11.712	11.701	0.005	87	3766	0.0711	
67 Toluene	91	13.756	13.756	0.000	92	340273	2.66	
73 Tetrachloroethene	129	14.894	14.899	-0.005	64	1335	0.0277	
78 Ethylbenzene	91	16.069	16.064	0.005	97	11394	0.0694	
79 m-Xylene & p-Xylene	91	16.226	16.231	-0.005	97	31782	0.2447	
83 o-Xylene	91	16.754	16.754	0.000	95	14332	0.1090	
90 1,3,5-Trimethylbenzene	120	18.108	18.113	-0.005	86	1532	0.0222	
95 1,2,4-Trimethylbenzene	105	18.544	18.545	0.000	98	11413	0.0757	
112 Naphthalene	128	21.095	21.095	0.000	97	10697	0.0489	
S 124 Xylenes, Total	100				0		0.3537	

Reagents:

40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

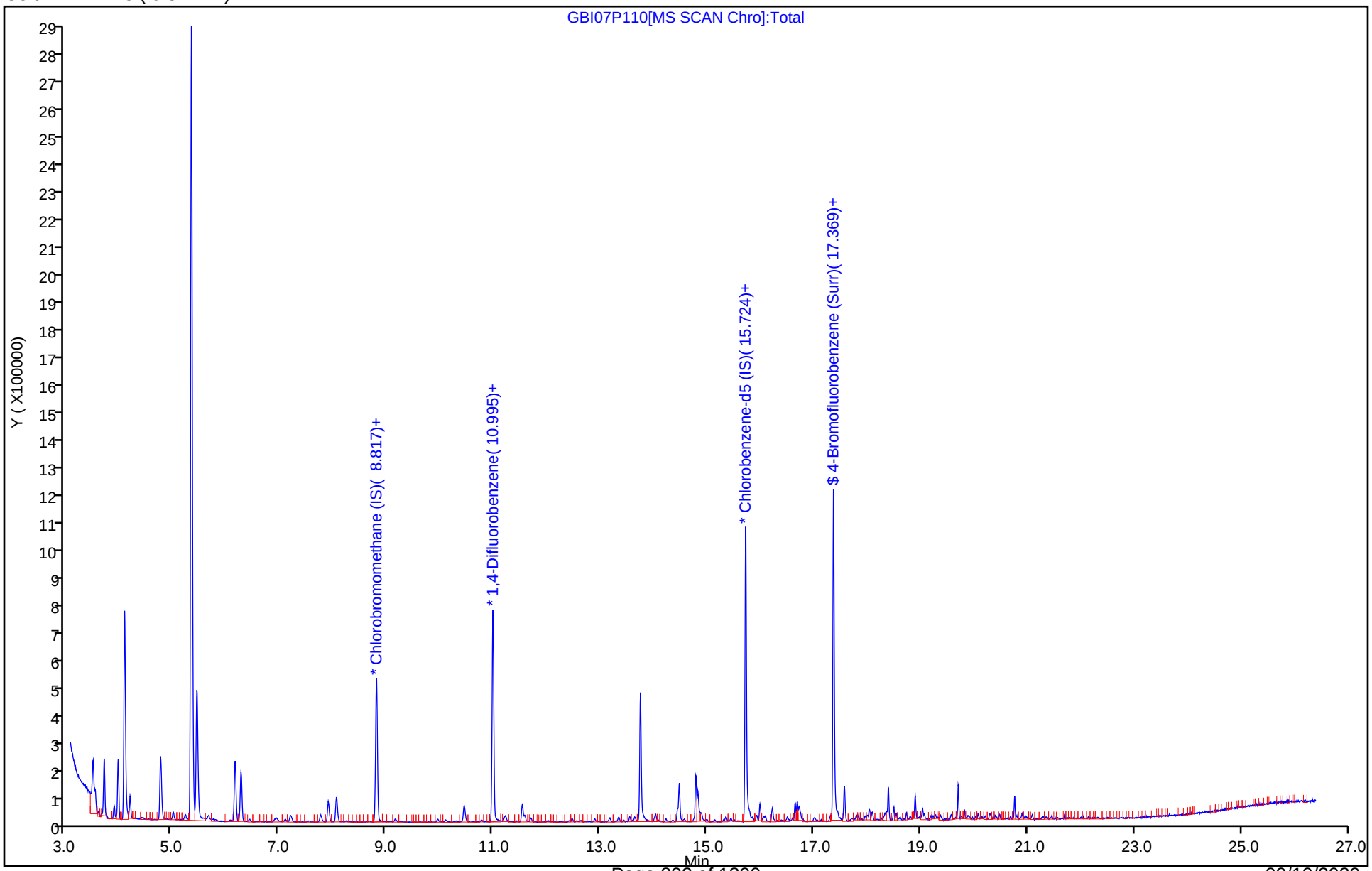
Report Date: 08-Sep-2020 13:19:47 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P110.D

Injection Date:	07-Sep-2020 20:56:30	Instrument ID:	MG	Operator ID:	AFB
Lims ID:	140-20175-A-36	Lab Sample ID:	140-20175-36	Worklist Smp#:	16
Client ID:	IA-DUP2-C-29				
Purge Vol:	500.000 mL	Dil. Factor:	1.4000	ALS Bottle#:	10
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

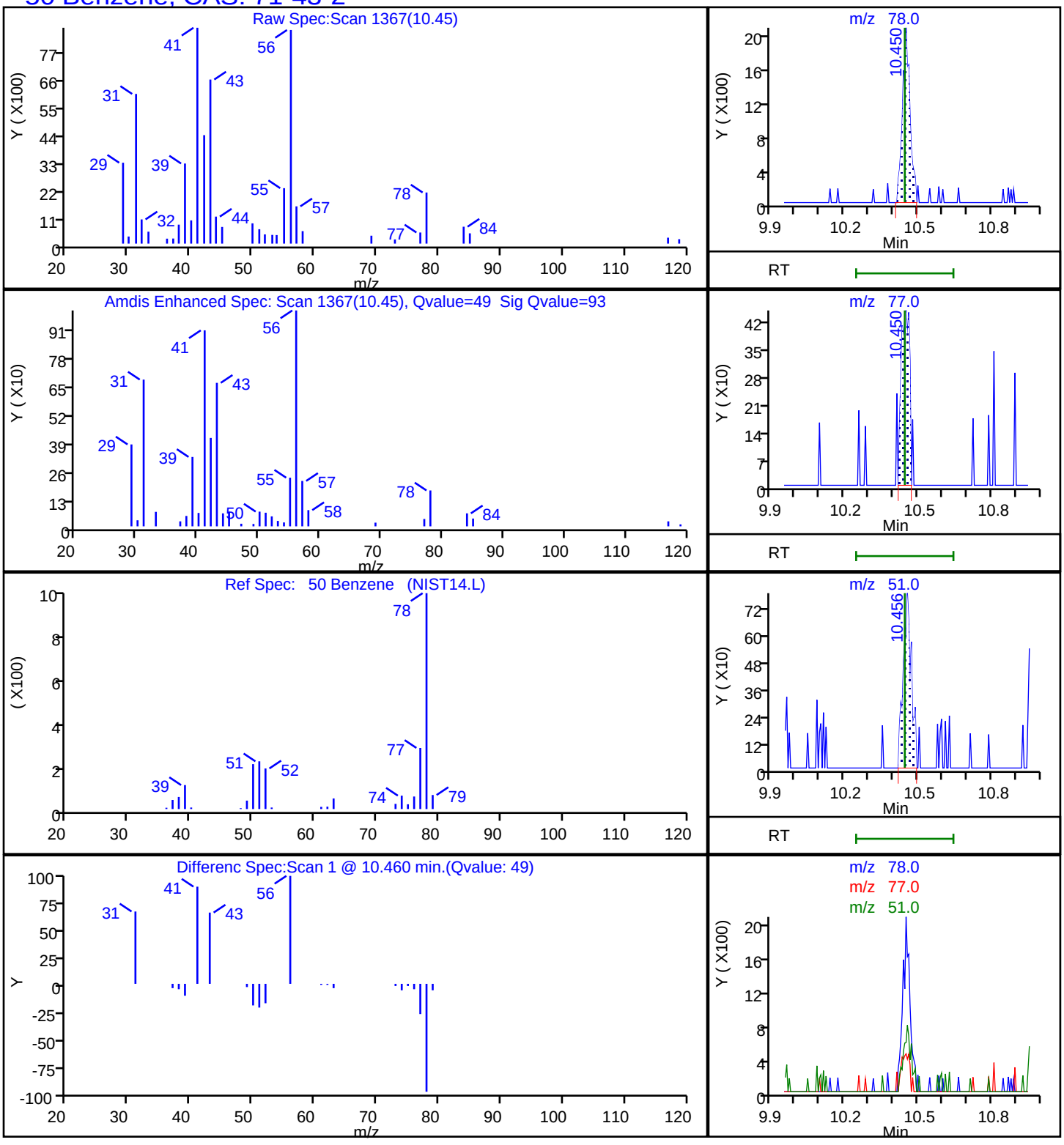
Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P110.D				
Lims ID:	140-20175-A-36				
Client ID:	IA-DUP2-C-29				
Sample Type:	Client				
Inject. Date:	07-Sep-2020 20:56:30	ALS Bottle#:	10	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	1.4000		
Sample Info:	140-0016516-016				
Misc. Info.:	140-20175-a-36@1.40				
Operator ID:	AFB	Instrument ID:	MG		
Method:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\MG_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	08-Sep-2020 13:18:20	Calib Date:	02-Sep-2020 03:27:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1021				
First Level Reviewer: barlozhetskayaa		Date:	08-Sep-2020 13:19:47		

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	4.61	99.36

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P110.D		
Injection Date:	07-Sep-2020 20:56:30	Instrument ID:	MG
Lims ID:	140-20175-A-36	Lab Sample ID:	140-20175-36
Client ID:	IA-DUP2-C-29		
Operator ID:	AFB	ALS Bottle#:	10 Worklist Smp#: 16
Purge Vol:	500.000 mL	Dil. Factor:	1.4000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

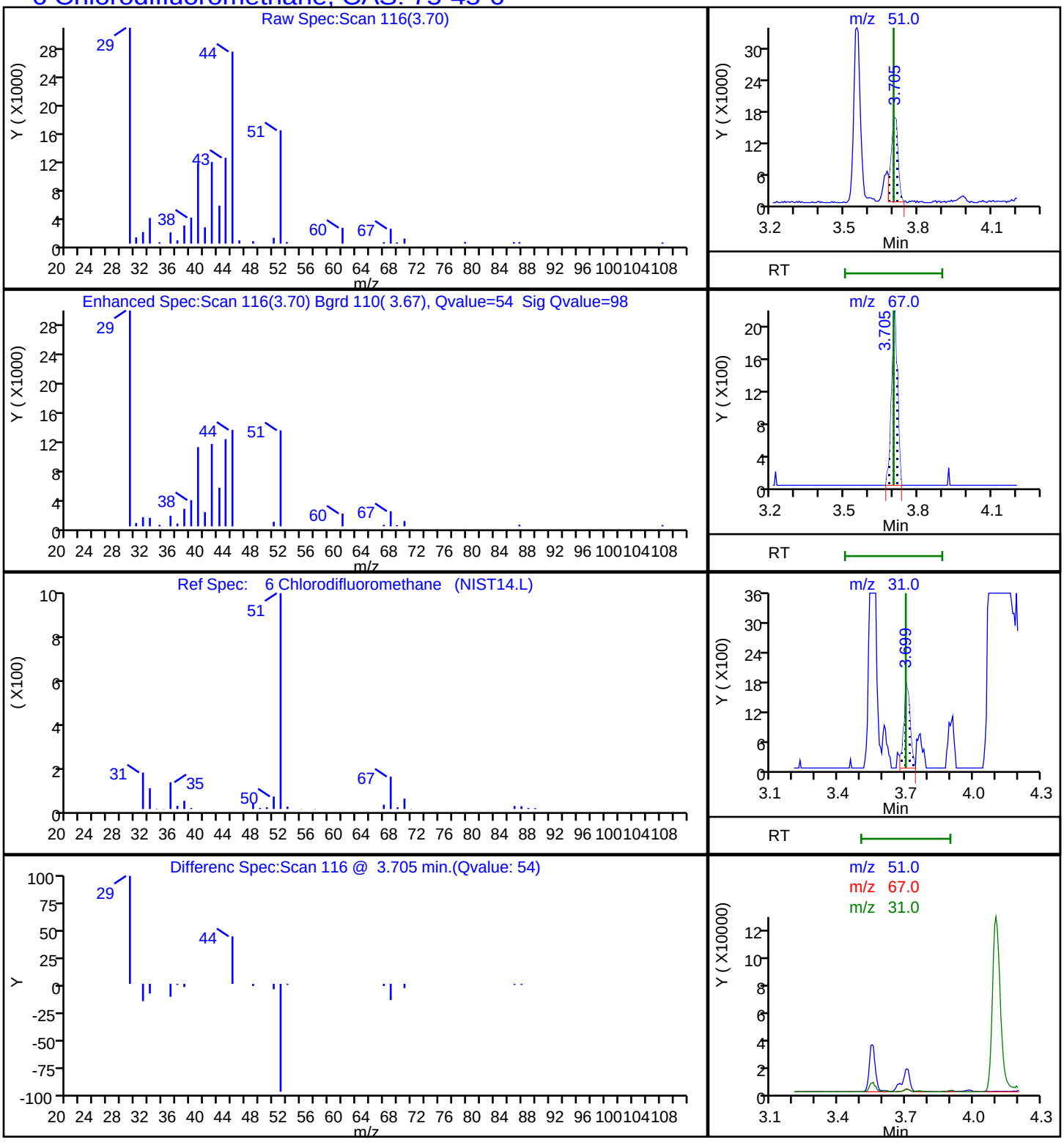
50 Benzene, CAS: 71-43-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P110.D				
Injection Date:	07-Sep-2020 20:56:30	Instrument ID:	MG		
Lims ID:	140-20175-A-36	Lab Sample ID:	140-20175-36		
Client ID:	IA-DUP2-C-29				
Operator ID:	AFB	ALS Bottle#:	10	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	1.4000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

6 Chlorodifluoromethane, CAS: 75-45-6

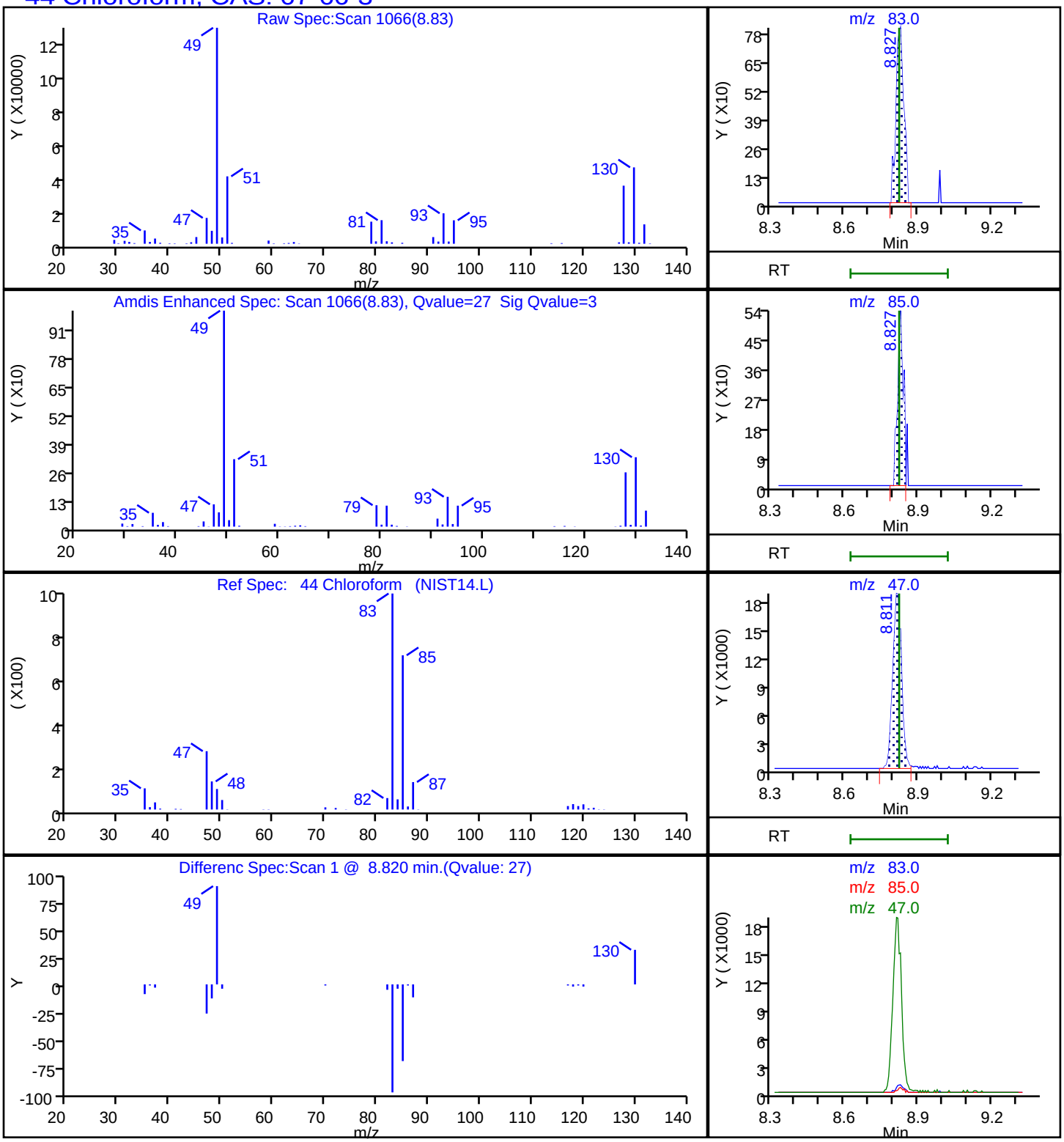


Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P110.D

Injection Date:	07-Sep-2020 20:56:30	Instrument ID:	MG
Lims ID:	140-20175-A-36	Lab Sample ID:	140-20175-36
Client ID:	IA-DUP2-C-29		
Operator ID:	AFB	ALS Bottle#:	10 Worklist Smp#: 16
Purge Vol:	500.000 mL	Dil. Factor:	1.4000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

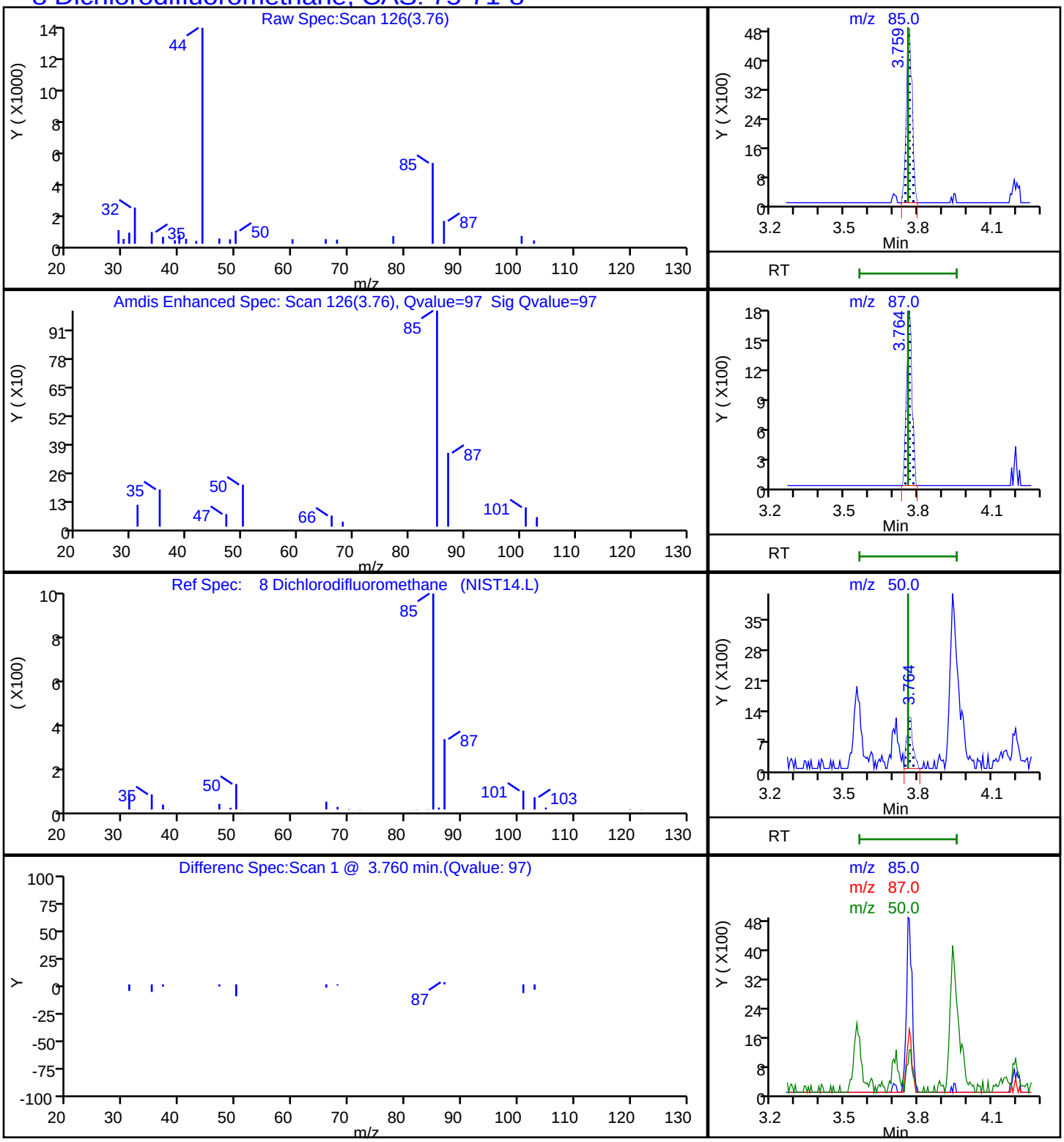
44 Chloroform, CAS: 67-66-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P110.D				
Injection Date:	07-Sep-2020 20:56:30	Instrument ID:	MG		
Lims ID:	140-20175-A-36	Lab Sample ID:	140-20175-36		
Client ID:	IA-DUP2-C-29				
Operator ID:	AFB	ALS Bottle#:	10	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	1.4000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

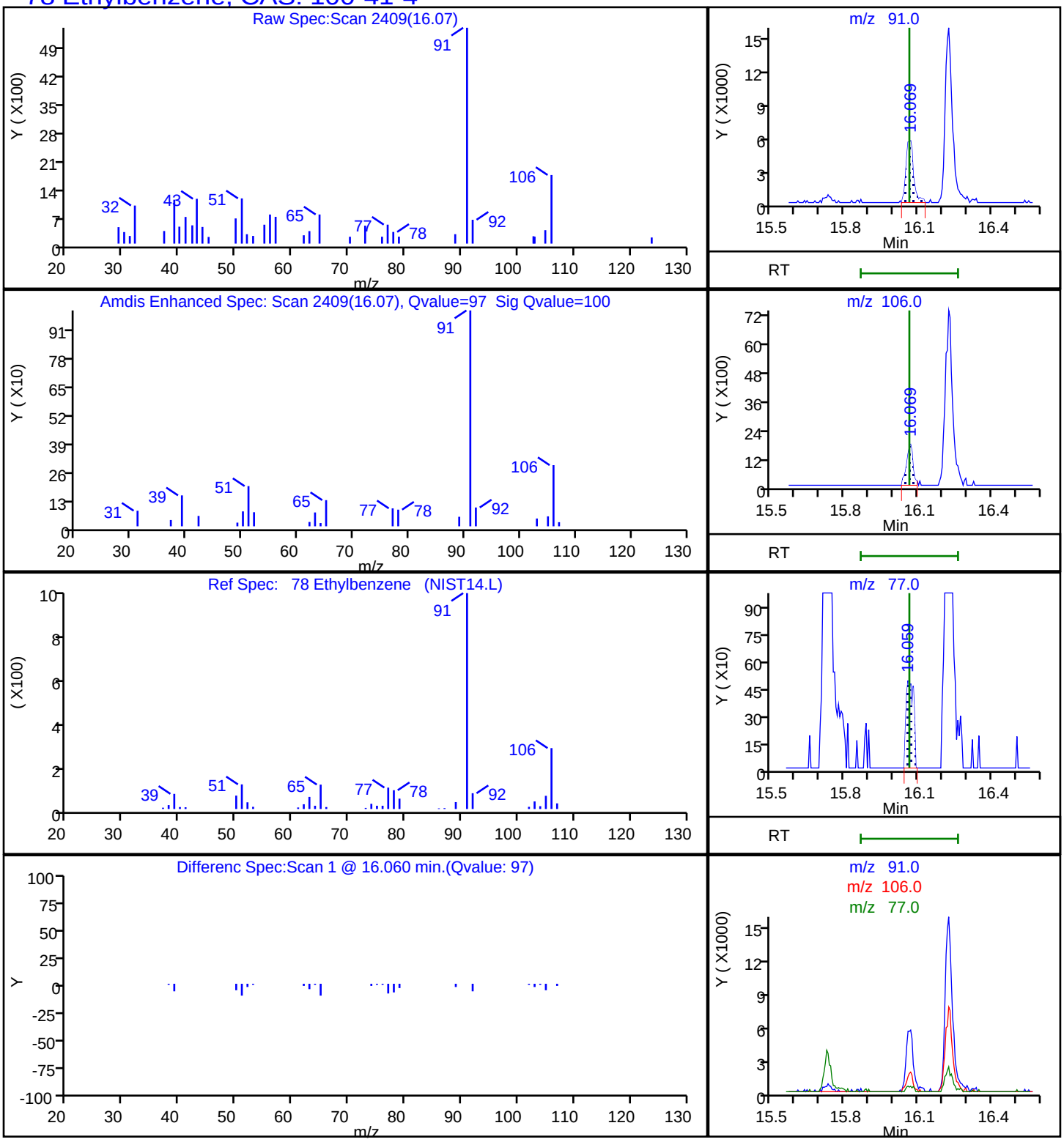
8 Dichlorodifluoromethane, CAS: 75-71-8



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P110.D		
Injection Date:	07-Sep-2020 20:56:30	Instrument ID:	MG
Lims ID:	140-20175-A-36	Lab Sample ID:	140-20175-36
Client ID:	IA-DUP2-C-29		
Operator ID:	AFB	ALS Bottle#:	10 Worklist Smp#: 16
Purge Vol:	500.000 mL	Dil. Factor:	1.4000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

78 Ethylbenzene, CAS: 100-41-4

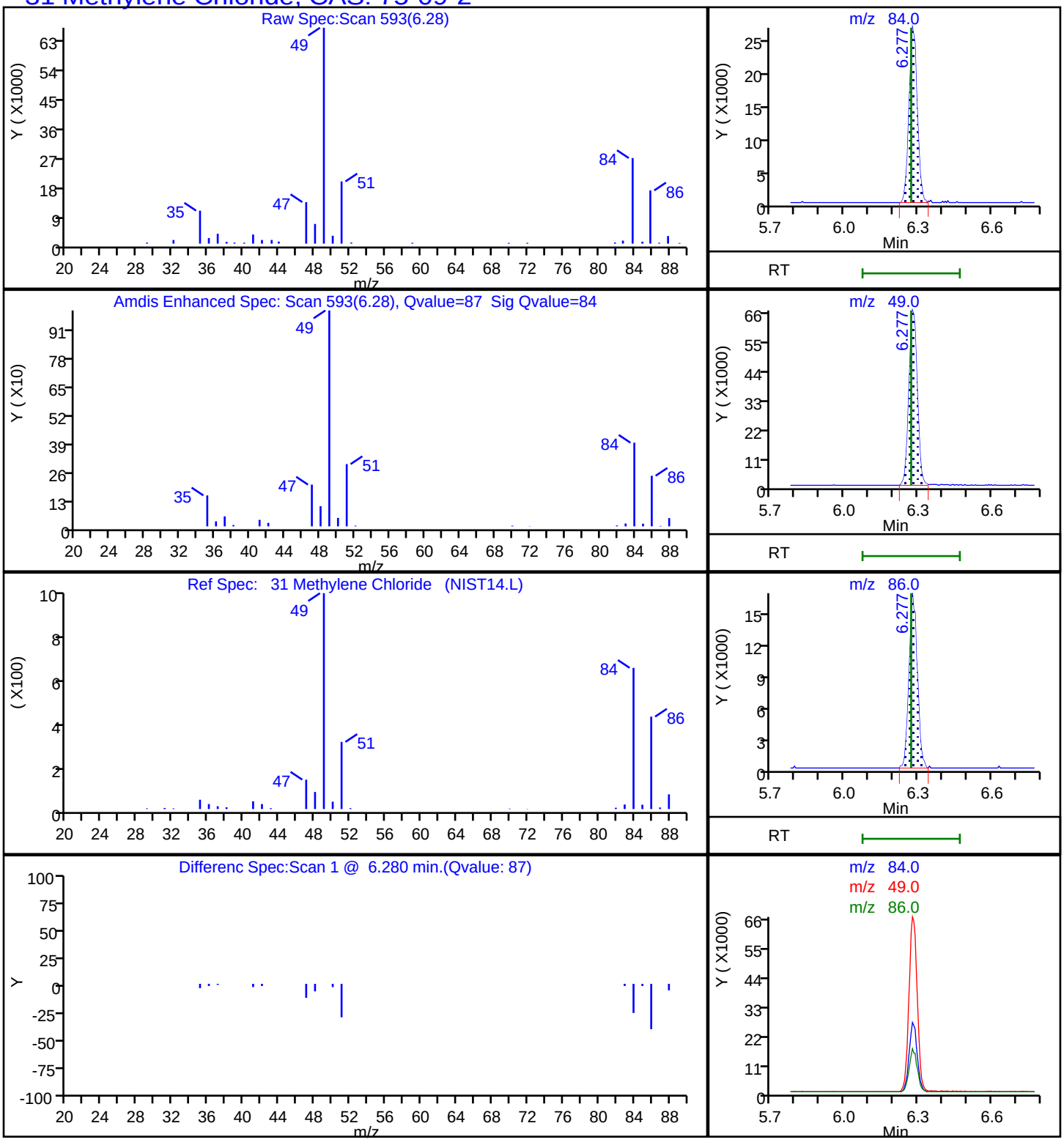


Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P110.D

Injection Date:	07-Sep-2020 20:56:30	Instrument ID:	MG		
Lims ID:	140-20175-A-36	Lab Sample ID:	140-20175-36		
Client ID:	IA-DUP2-C-29				
Operator ID:	AFB	ALS Bottle#:	10	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	1.4000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

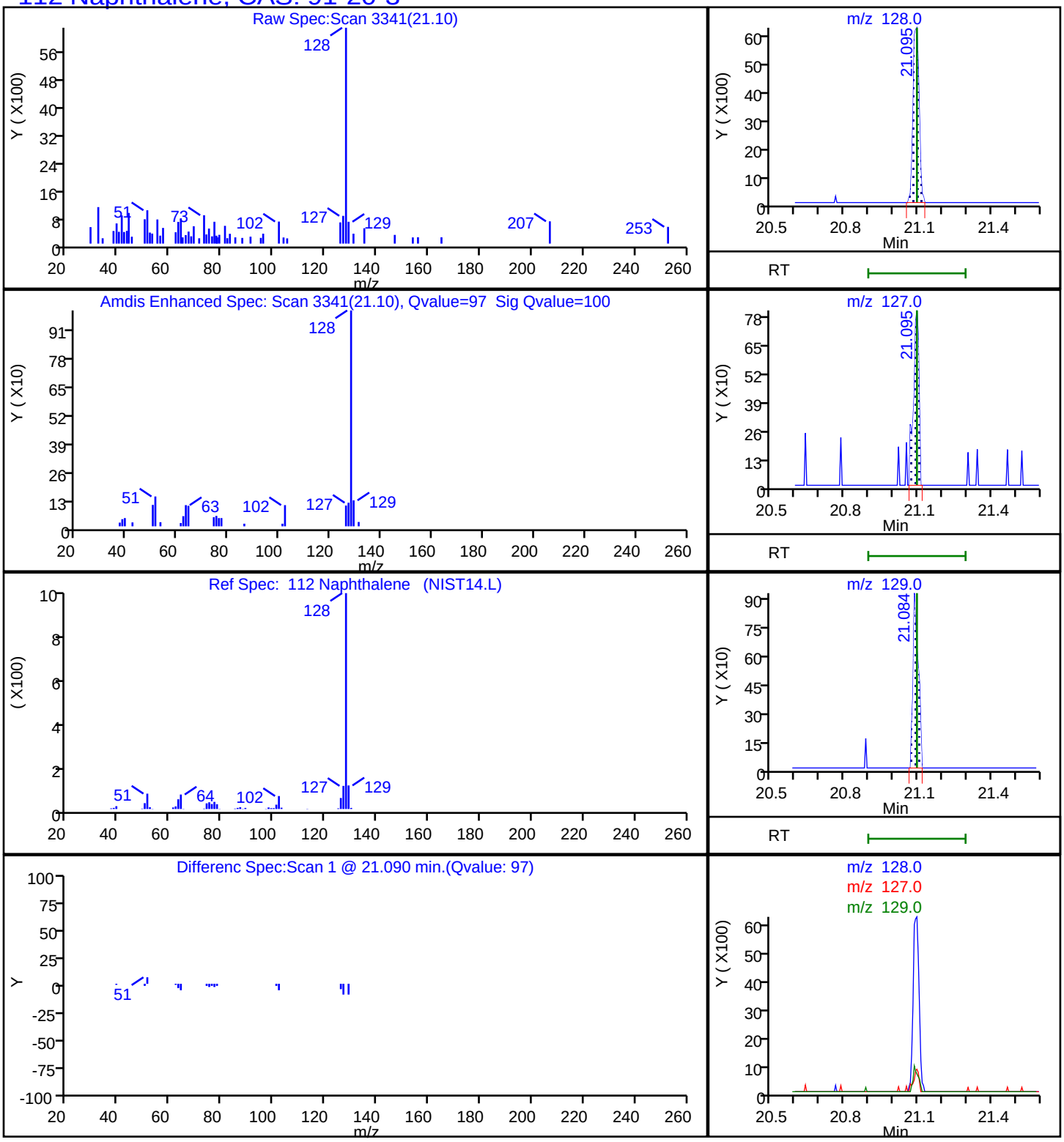
31 Methylene Chloride, CAS: 75-09-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P110.D		
Injection Date:	07-Sep-2020 20:56:30	Instrument ID:	MG
Lims ID:	140-20175-A-36	Lab Sample ID:	140-20175-36
Client ID:	IA-DUP2-C-29		
Operator ID:	AFB	ALS Bottle#:	10 Worklist Smp#: 16
Purge Vol:	500.000 mL	Dil. Factor:	1.4000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

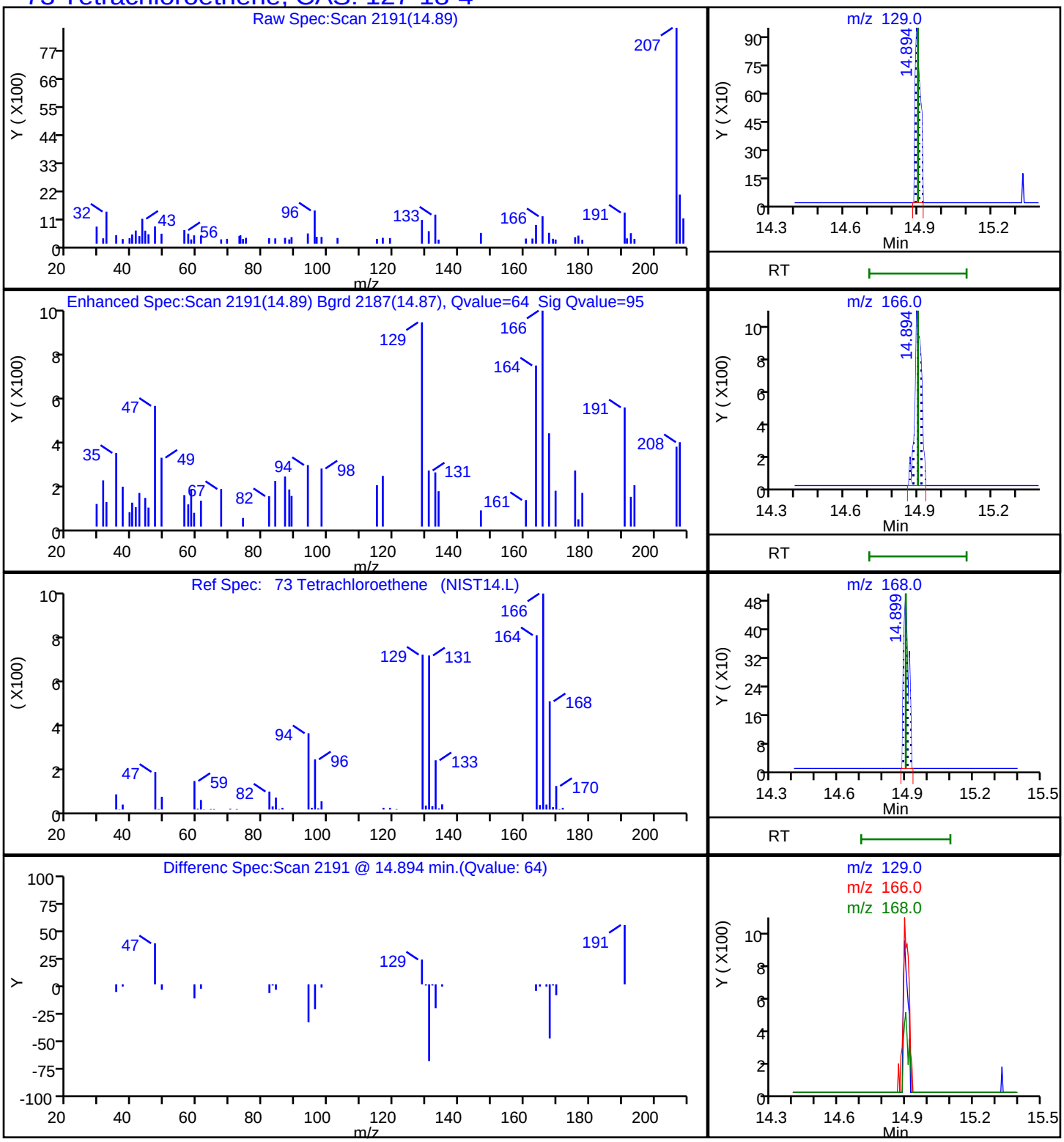
112 Naphthalene, CAS: 91-20-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P110.D		
Injection Date:	07-Sep-2020 20:56:30	Instrument ID:	MG
Lims ID:	140-20175-A-36	Lab Sample ID:	140-20175-36
Client ID:	IA-DUP2-C-29		
Operator ID:	AFB	ALS Bottle#:	10 Worklist Smp#: 16
Purge Vol:	500.000 mL	Dil. Factor:	1.4000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

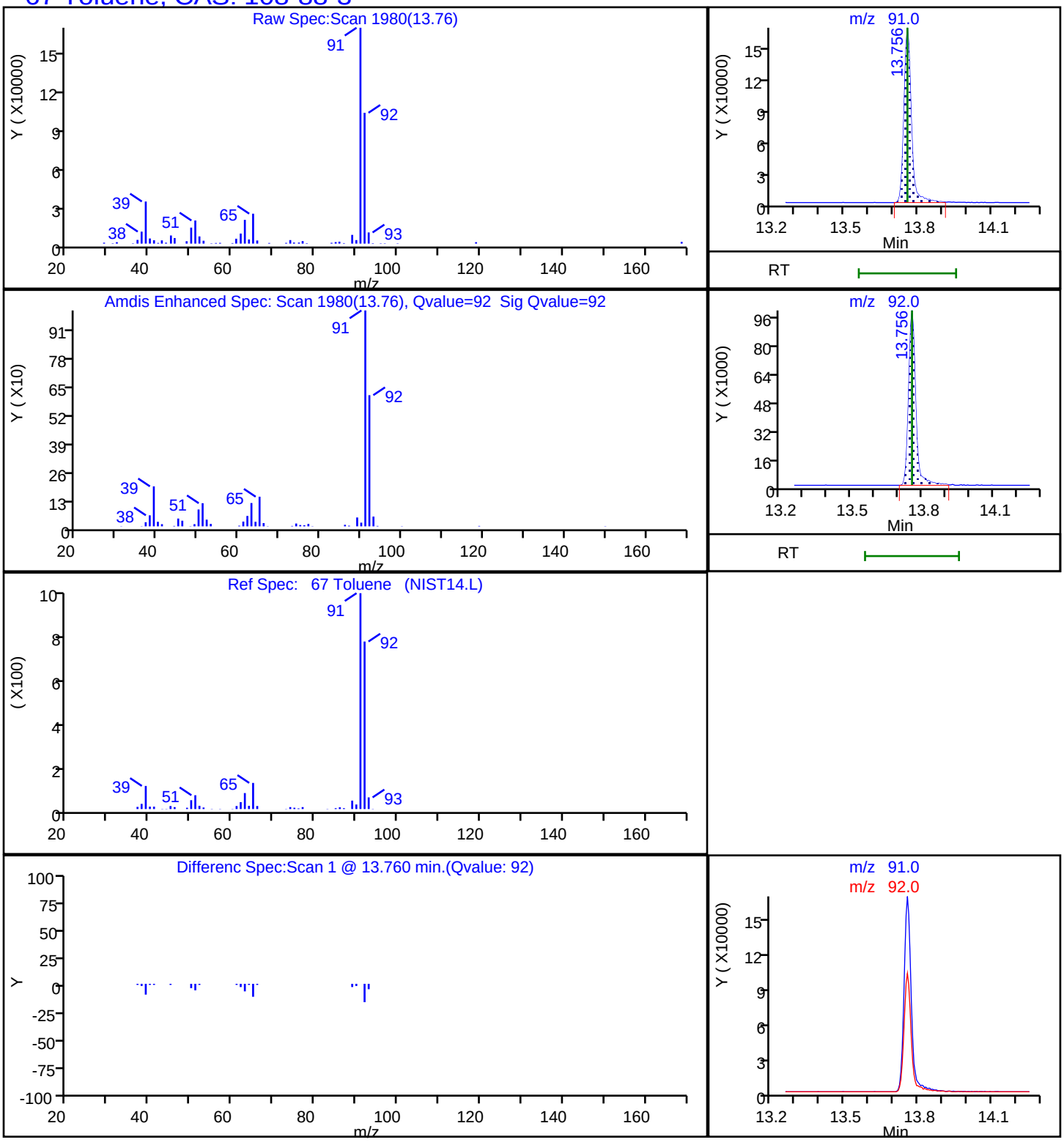
73 Tetrachloroethene, CAS: 127-18-4



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P110.D		
Injection Date:	07-Sep-2020 20:56:30	Instrument ID:	MG
Lims ID:	140-20175-A-36	Lab Sample ID:	140-20175-36
Client ID:	IA-DUP2-C-29		
Operator ID:	AFB	ALS Bottle#:	10 Worklist Smp#: 16
Purge Vol:	500.000 mL	Dil. Factor:	1.4000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

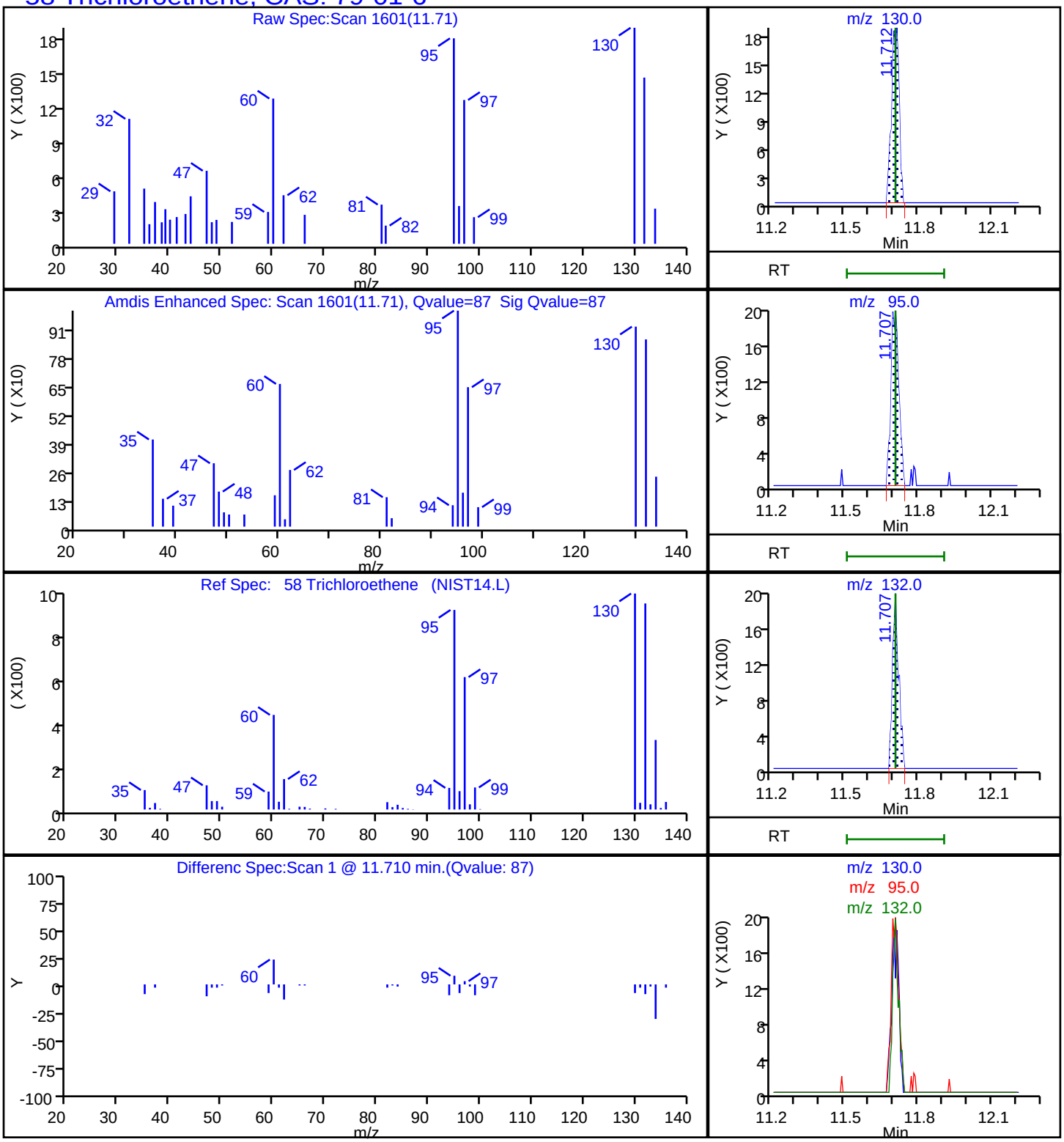
67 Toluene, CAS: 108-88-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P110.D		
Injection Date:	07-Sep-2020 20:56:30	Instrument ID:	MG
Lims ID:	140-20175-A-36	Lab Sample ID:	140-20175-36
Client ID:	IA-DUP2-C-29		
Operator ID:	AFB	ALS Bottle#:	10 Worklist Smp#: 16
Purge Vol:	500.000 mL	Dil. Factor:	1.4000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

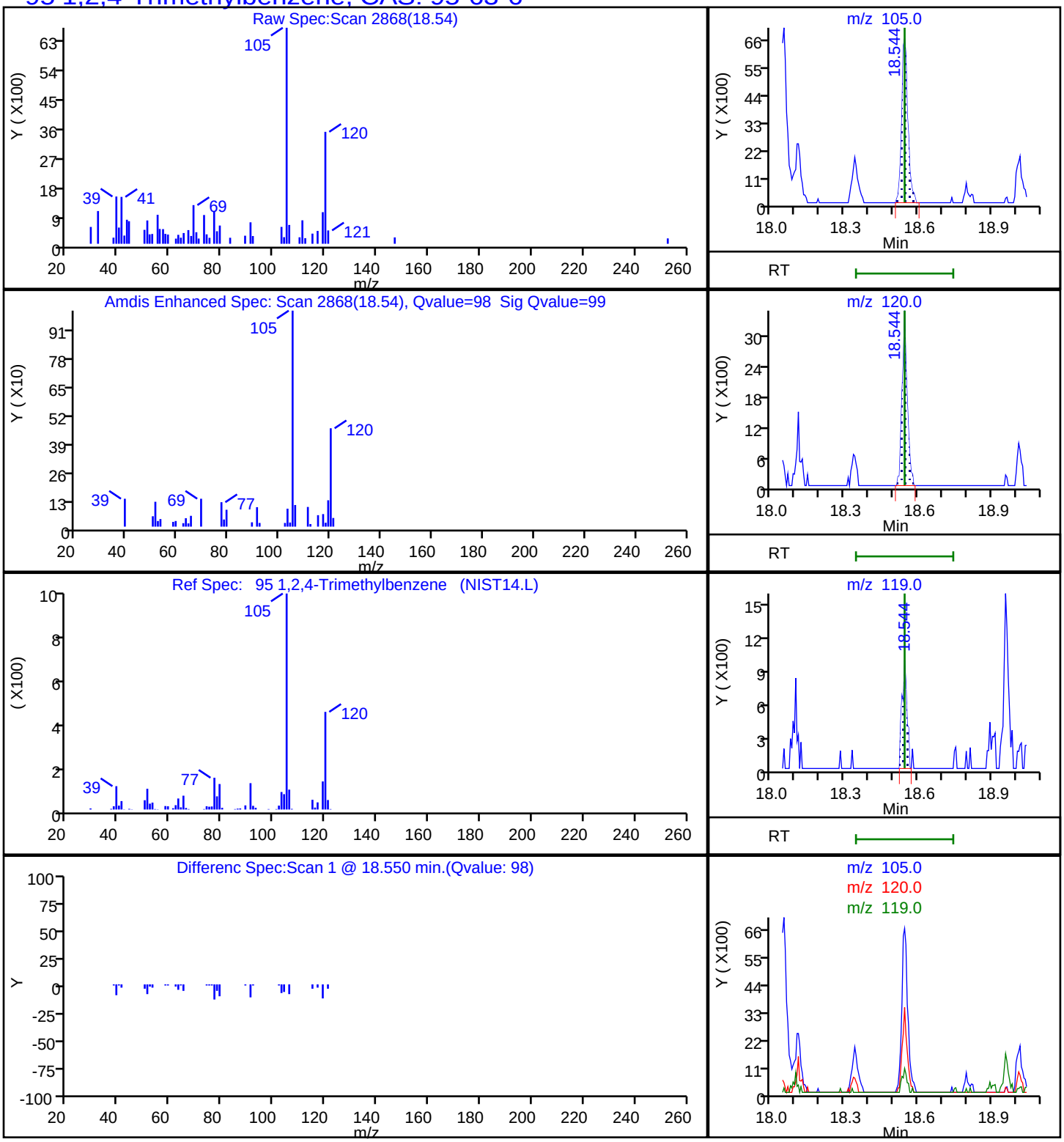
58 Trichloroethene, CAS: 79-01-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P110.D		
Injection Date:	07-Sep-2020 20:56:30	Instrument ID:	MG
Lims ID:	140-20175-A-36	Lab Sample ID:	140-20175-36
Client ID:	IA-DUP2-C-29		
Operator ID:	AFB	ALS Bottle#:	10 Worklist Smp#: 16
Purge Vol:	500.000 mL	Dil. Factor:	1.4000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

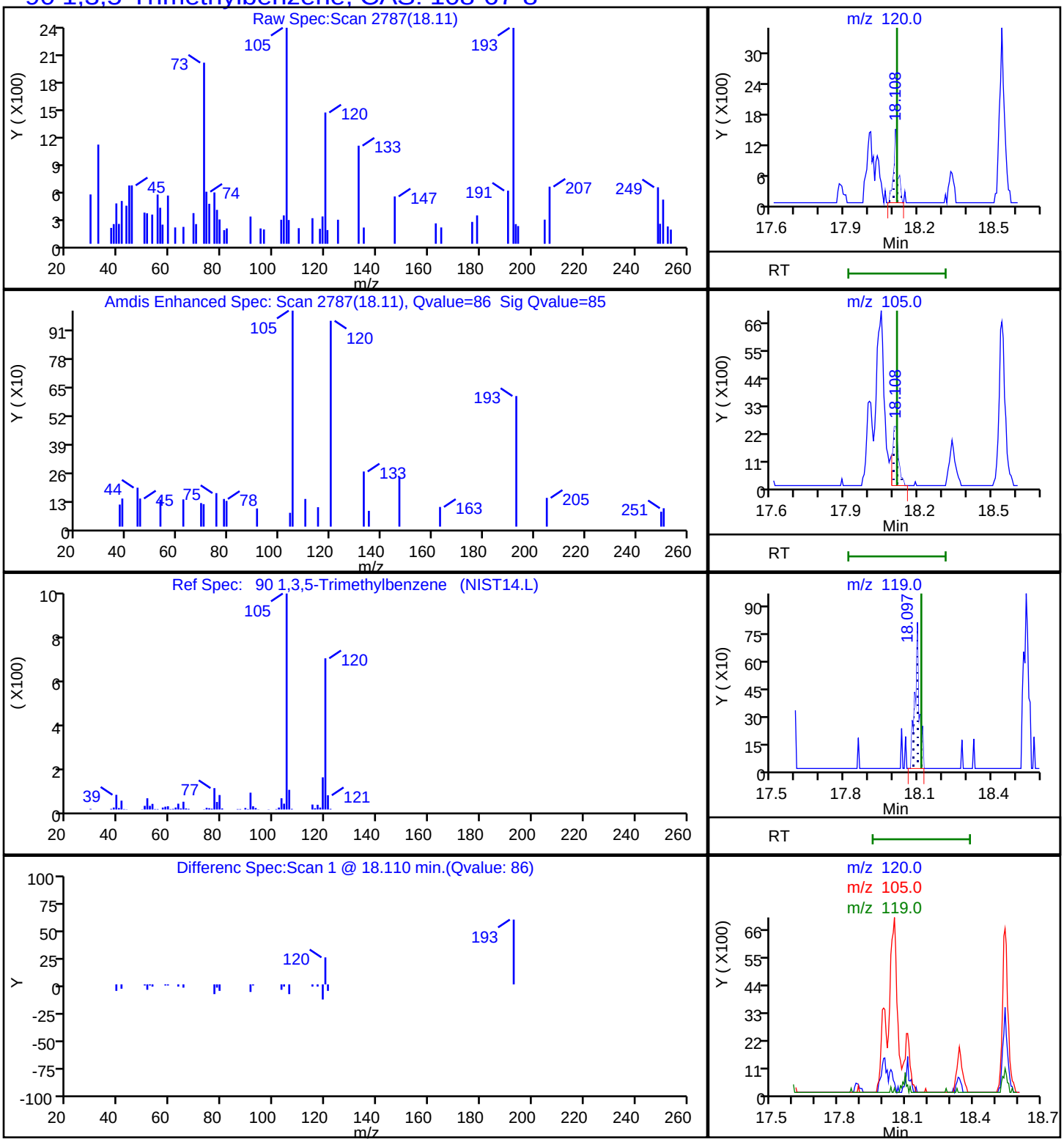
95 1,2,4-Trimethylbenzene, CAS: 95-63-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P110.D				
Injection Date:	07-Sep-2020 20:56:30	Instrument ID:	MG		
Lims ID:	140-20175-A-36	Lab Sample ID:	140-20175-36		
Client ID:	IA-DUP2-C-29				
Operator ID:	AFB	ALS Bottle#:	10	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	1.4000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

90 1,3,5-Trimethylbenzene, CAS: 108-67-8

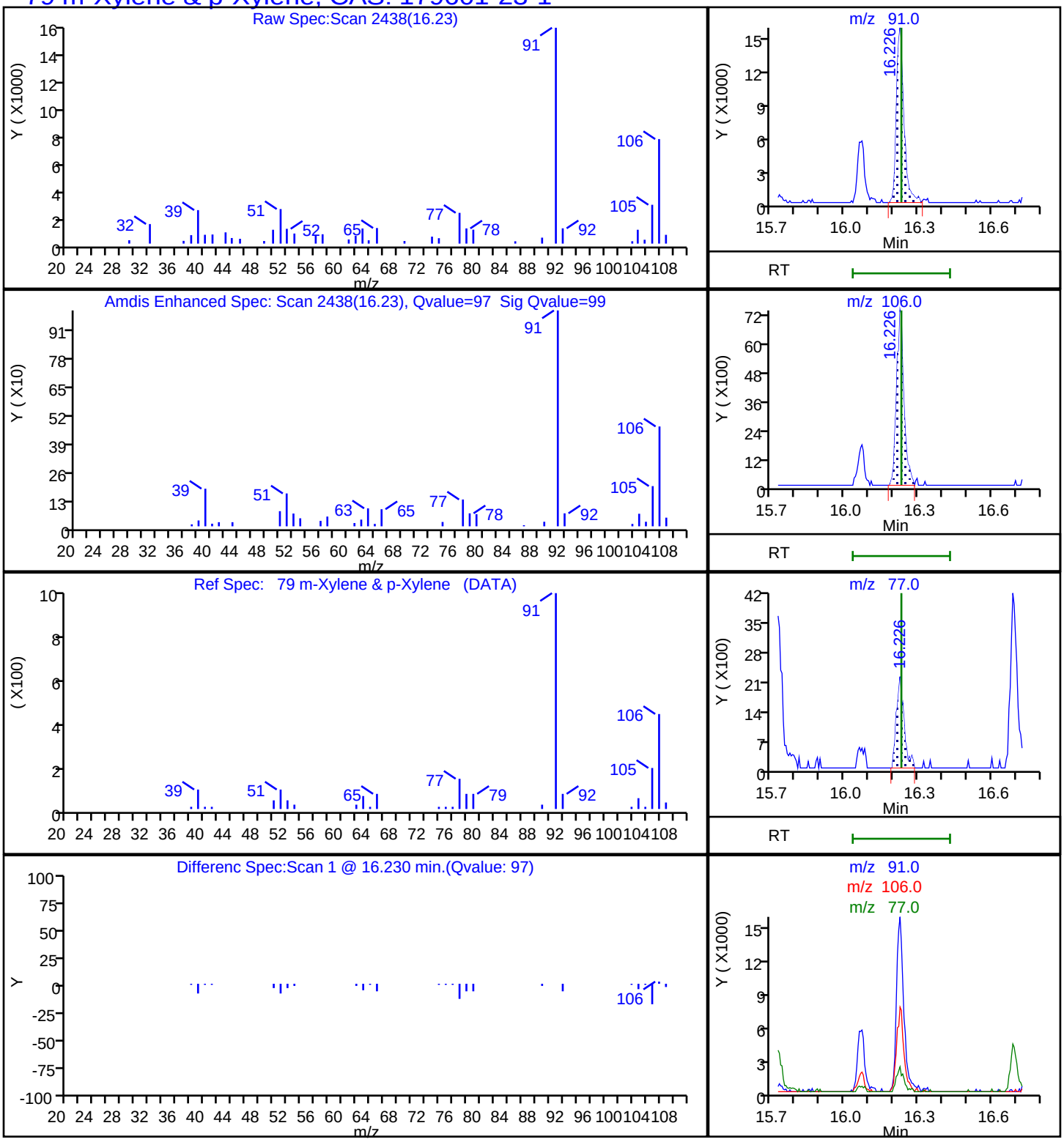


Report Date: 08-Sep-2020 13:19:47 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P110.D				
Injection Date:	07-Sep-2020 20:56:30	Instrument ID:	MG		
Lims ID:	140-20175-A-36	Lab Sample ID:	140-20175-36		
Client ID:	IA-DUP2-C-29				
Operator ID:	AFB	ALS Bottle#:	10	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	1.4000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

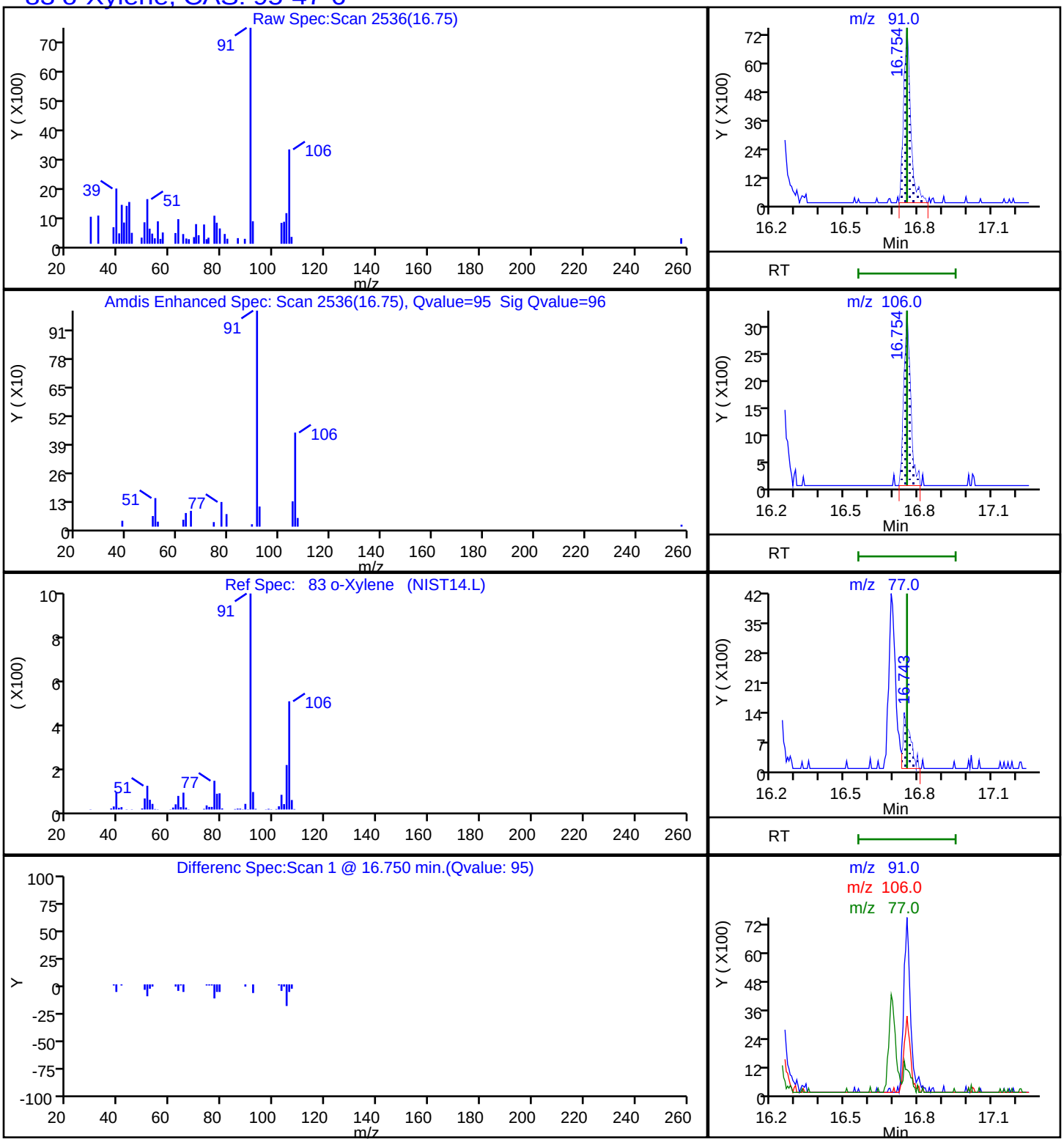
79 m-Xylene & p-Xylene, CAS: 179601-23-1



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P110.D		
Injection Date:	07-Sep-2020 20:56:30	Instrument ID:	MG
Lims ID:	140-20175-A-36	Lab Sample ID:	140-20175-36
Client ID:	IA-DUP2-C-29		
Operator ID:	AFB	ALS Bottle#:	10 Worklist Smp#: 16
Purge Vol:	500.000 mL	Dil. Factor:	1.4000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

83 o-Xylene, CAS: 95-47-6



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: IA-126-C-29 Lab Sample ID: 140-20175-37

Matrix: Air Lab File ID: GBI07P111.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 16:52

Sample wt/vol: 100(mL) Date Analyzed: 09/07/2020 21:40

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42500 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.18	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.062	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	1.7		0.40	0.11
67-66-3	Chloroform	119.38	0.13	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.40		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	0.32	J	0.40	0.065
75-09-2	Methylene Chloride	84.93	11		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	0.18	J	0.40	0.035
108-88-3	Toluene	92.14	14		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	0.39		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	0.35	J	0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	1.7		0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	98		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: IA-126-C-29 Lab Sample ID: 140-20175-37

Matrix: Air Lab File ID: GBI07P111.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 16:52

Sample wt/vol: 100(mL) Date Analyzed: 09/07/2020 21:40

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42500 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.58	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.39	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	5.9		1.4	0.39
67-66-3	Chloroform	119.38	0.63	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.0		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	1.4	J	1.7	0.28
75-09-2	Methylene Chloride	84.93	39		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	1.3	J	2.7	0.24
108-88-3	Toluene	92.14	52		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	2.1		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	1.7	J	2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	7.3		3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	98		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P111.D
Lims ID: 140-20175-A-37
Client ID: IA-126-C-29
Sample Type: Client
Inject. Date: 07-Sep-2020 21:40:30 ALS Bottle#: 11 Worklist Smp#: 17
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016516-017
Misc. Info.: 140-20175-a-37
Operator ID: AFB Instrument ID: MG

Method: \\chromfs\Knoxville\ChromData\MG\20200904-16516.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 08-Sep-2020 13:20:40 Calib Date: 02-Sep-2020 03:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1021

First Level Reviewer: barlozhetskayaa Date: 08-Sep-2020 13:20:40

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.806	8.806	0.000	86	105788	4.80	
* 2 1,4-Difluorobenzene	114	10.990	10.995	-0.005	98	596448	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.724	15.730	-0.006	94	584242	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.369	17.369	0.000	92	416010	4.54	
6 Chlorodifluoromethane	51	3.699	3.699	0.000	96	31405	0.3313	
8 Dichlorodifluoromethane	85	3.759	3.759	0.000	95	8382	0.0791	
31 Methylene Chloride	84	6.277	6.271	0.006	87	59156	2.27	
44 Chloroform	83	8.833	8.822	0.011	38	1905	0.0257	
50 Benzene	78	10.440	10.440	-0.005	51	4437	0.0362	
52 Carbon tetrachloride	117	10.461	10.467	-0.011	25	933	0.0123	
58 Trichloroethene	130	11.712	11.701	0.005	88	4143	0.0775	
67 Toluene	91	13.756	13.756	0.000	94	353088	2.74	
73 Tetrachloroethene	129	14.899	14.899	0.000	57	1797	0.0370	
78 Ethylbenzene	91	16.064	16.064	0.000	96	10585	0.0639	
79 m-Xylene & p-Xylene	91	16.220	16.231	-0.011	97	32655	0.2492	
83 o-Xylene	91	16.754	16.754	0.000	97	12928	0.0975	
95 1,2,4-Trimethylbenzene	105	18.544	18.545	0.000	97	10663	0.0701	
112 Naphthalene	128	21.095	21.095	0.000	98	8483	0.0385	
S 124 Xylenes, Total	100				0		0.3467	

Reagents:

40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

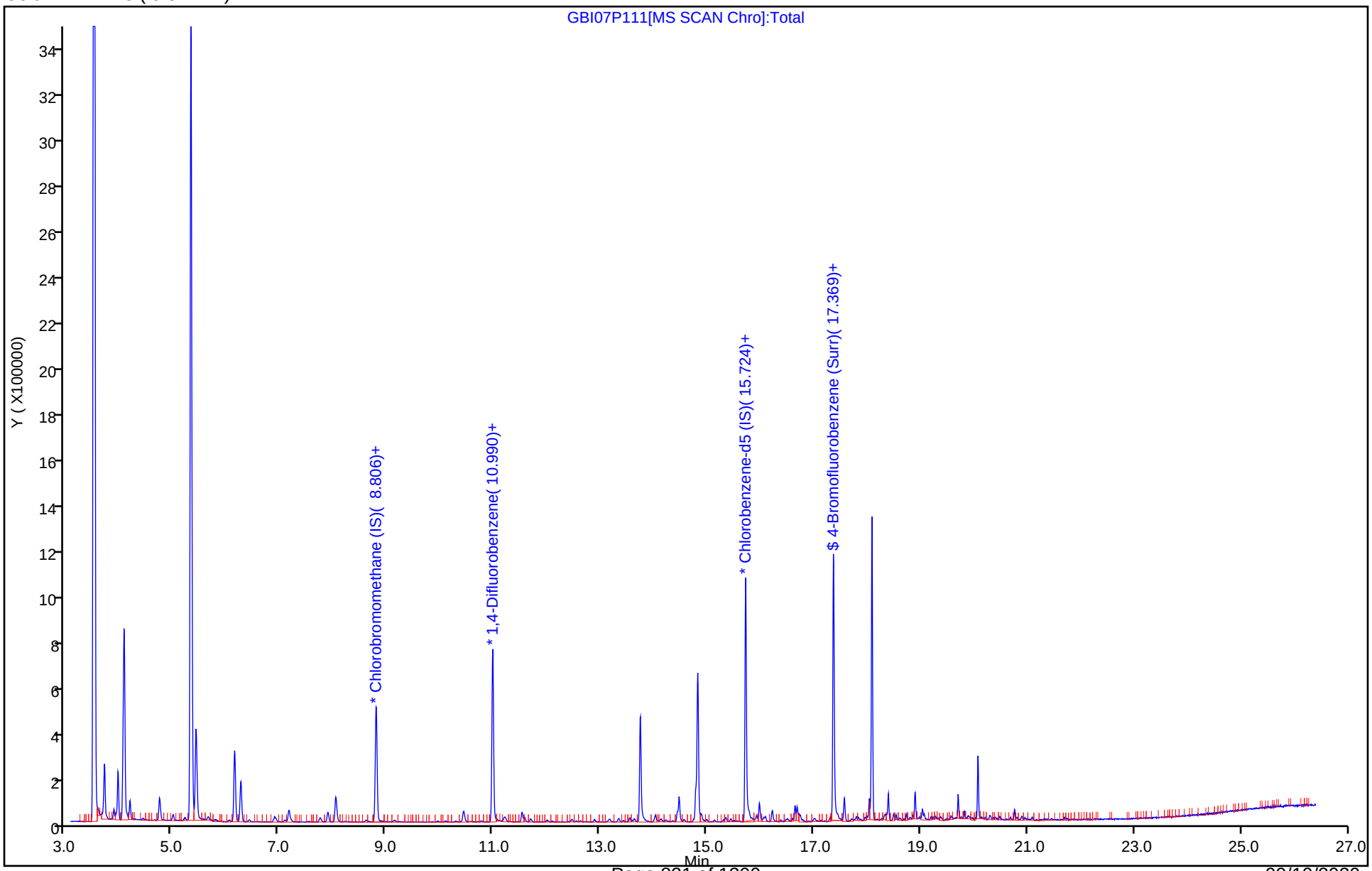
Report Date: 08-Sep-2020 13:20:41 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P111.D

Injection Date:	07-Sep-2020 21:40:30	Instrument ID:	MG	Operator ID:	AFB
Lims ID:	140-20175-A-37	Lab Sample ID:	140-20175-37	Worklist Smp#:	17
Client ID:	IA-126-C-29				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P111.D				
Lims ID:	140-20175-A-37				
Client ID:	IA-126-C-29				
Sample Type:	Client				
Inject. Date:	07-Sep-2020 21:40:30	ALS Bottle#:	11	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016516-017				
Misc. Info.:	140-20175-a-37				
Operator ID:	AFB	Instrument ID:	MG		
Method:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\MG_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	08-Sep-2020 13:20:40	Calib Date:	02-Sep-2020 03:27:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1021				

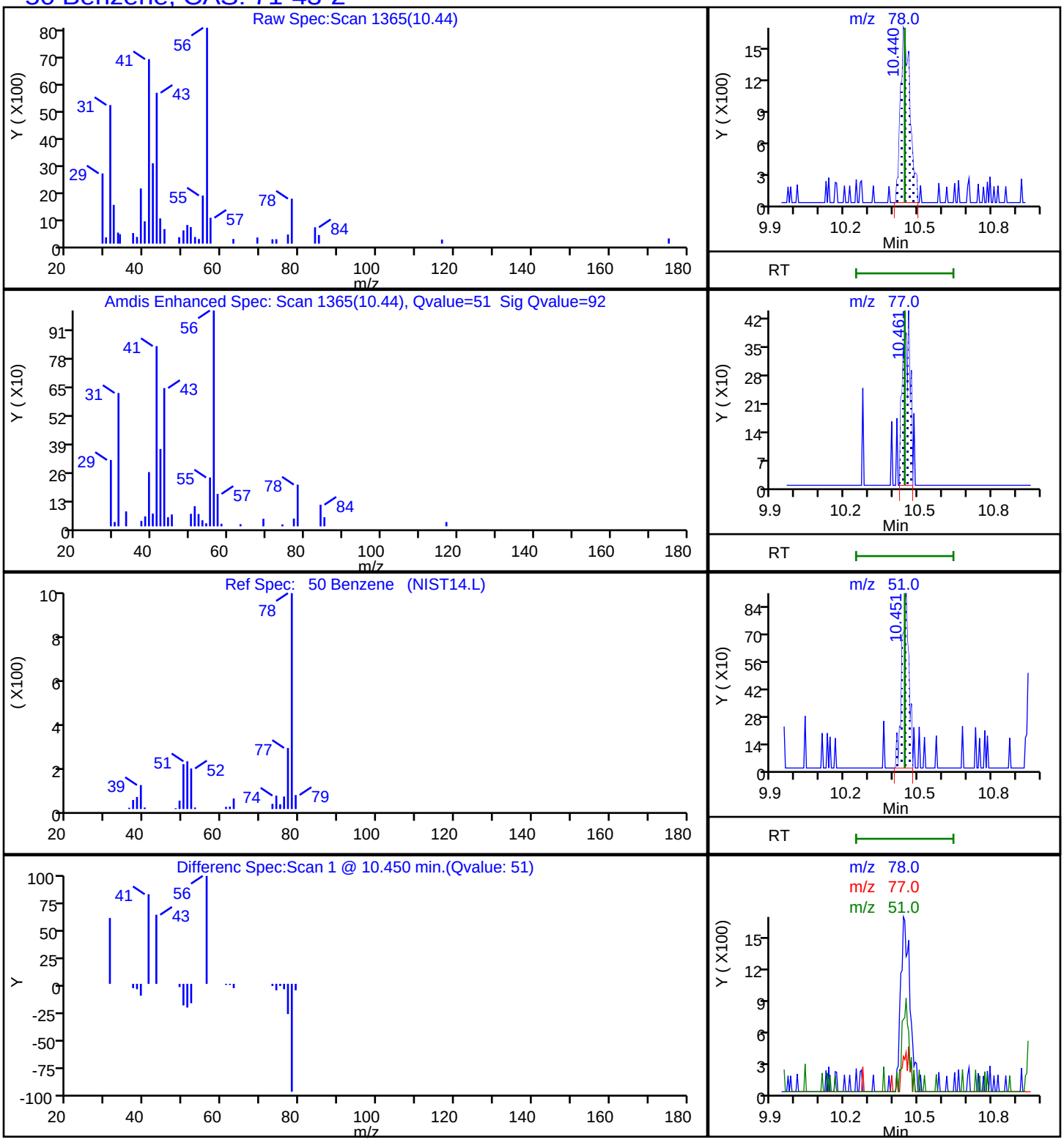
First Level Reviewer: barlozhetskayaa Date: 08-Sep-2020 13:20:40

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	4.54	97.79

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P111.D		
Injection Date:	07-Sep-2020 21:40:30	Instrument ID:	MG
Lims ID:	140-20175-A-37	Lab Sample ID:	140-20175-37
Client ID:	IA-126-C-29		
Operator ID:	AFB	ALS Bottle#:	11 Worklist Smp#: 17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

50 Benzene, CAS: 71-43-2

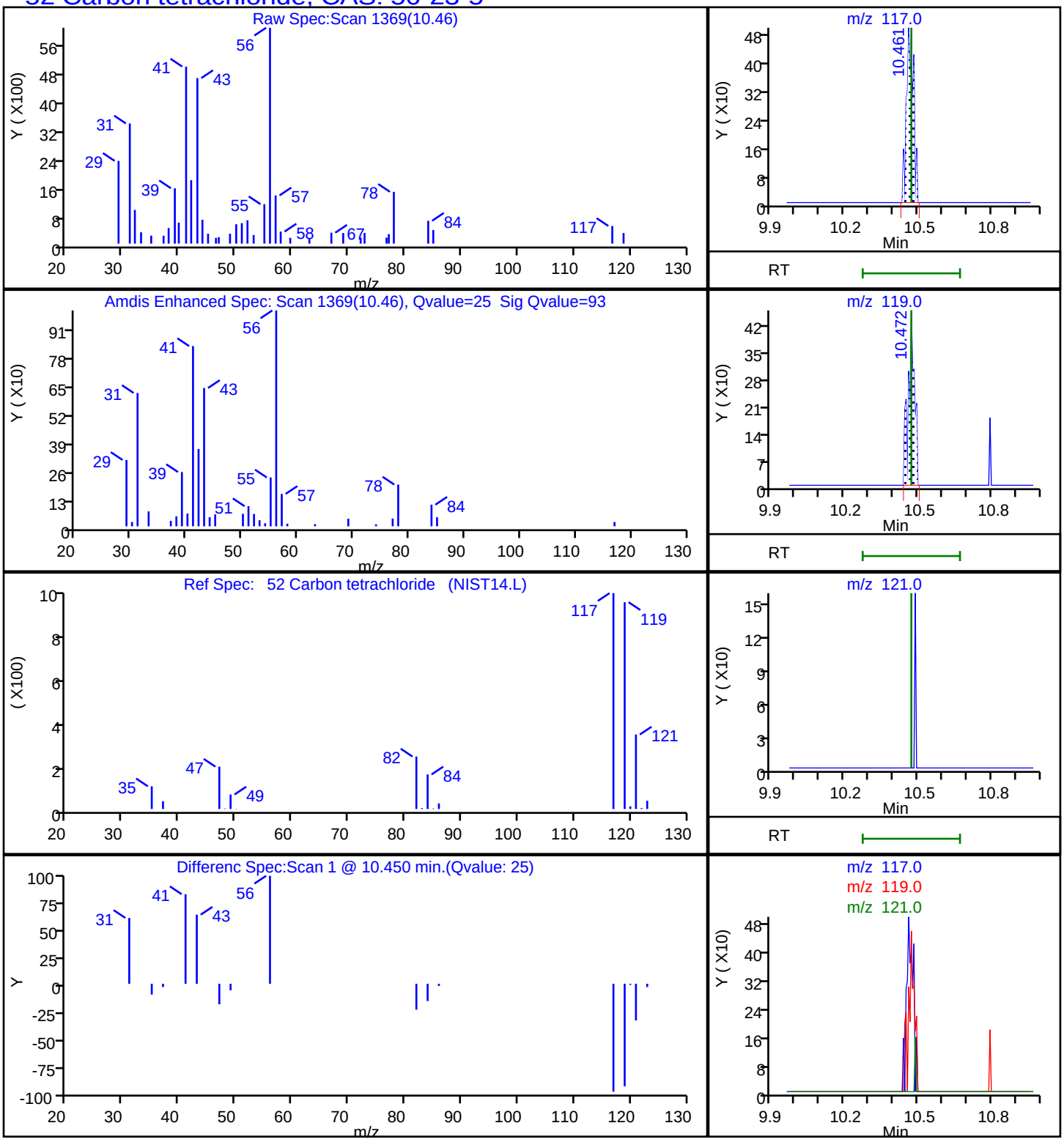


Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P111.D

Injection Date:	07-Sep-2020 21:40:30	Instrument ID:	MG		
Lims ID:	140-20175-A-37	Lab Sample ID:	140-20175-37		
Client ID:	IA-126-C-29				
Operator ID:	AFB	ALS Bottle#:	11	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

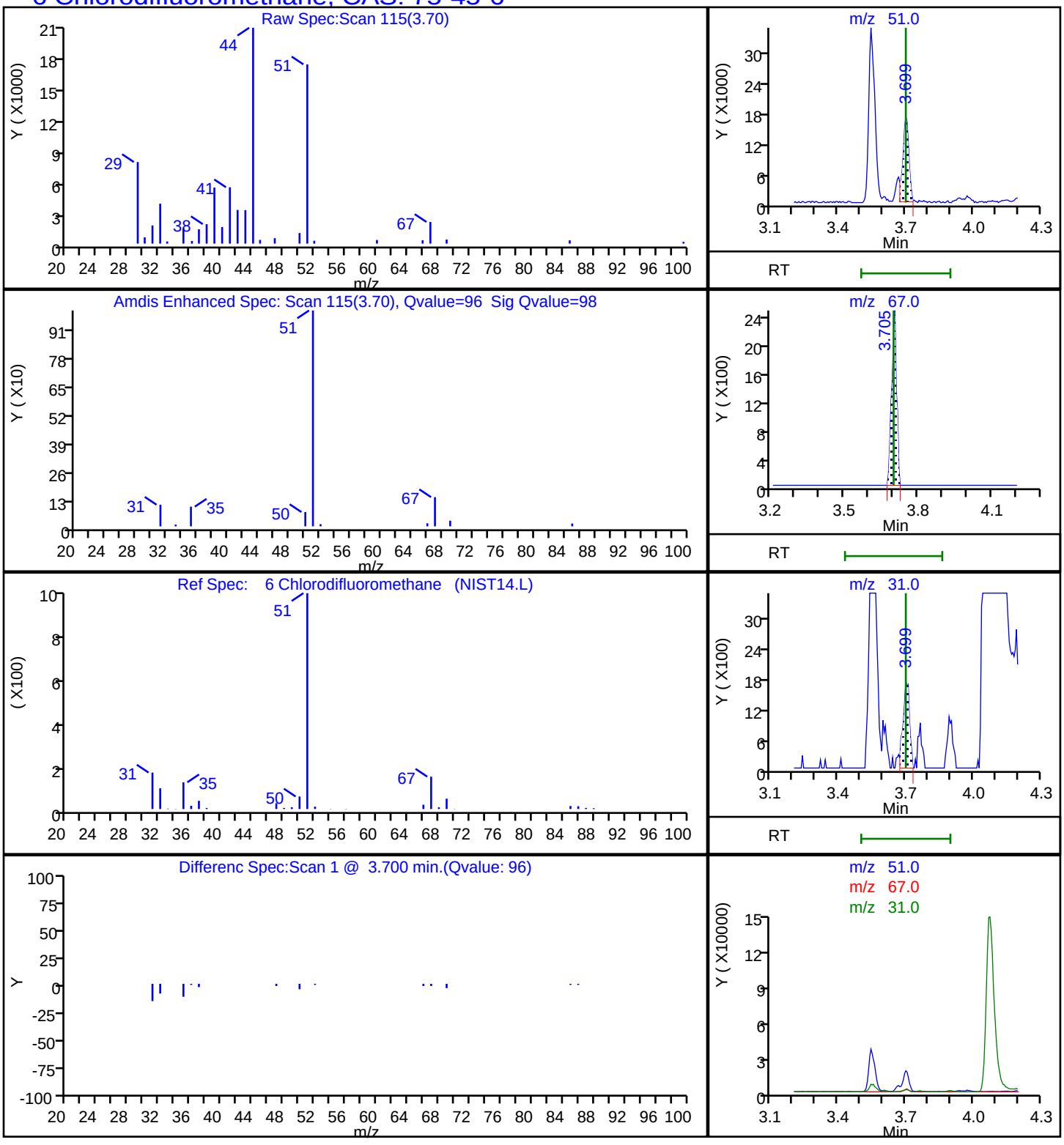
52 Carbon tetrachloride, CAS: 56-23-5



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P111.D				
Injection Date:	07-Sep-2020 21:40:30	Instrument ID:	MG		
Lims ID:	140-20175-A-37	Lab Sample ID:	140-20175-37		
Client ID:	IA-126-C-29				
Operator ID:	AFB	ALS Bottle#:	11	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

6 Chlorodifluoromethane, CAS: 75-45-6

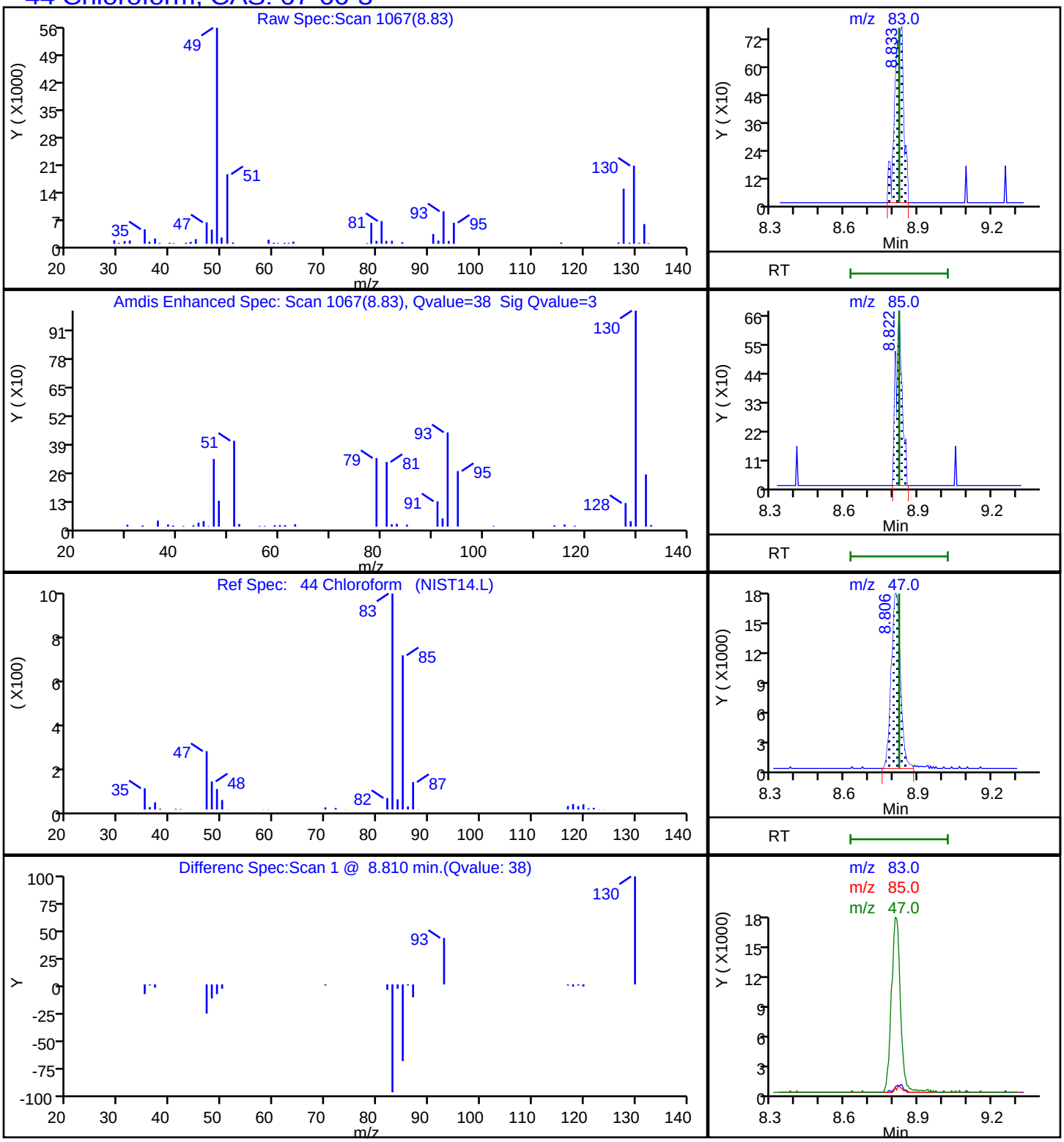


Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P111.D

Injection Date:	07-Sep-2020 21:40:30	Instrument ID:	MG		
Lims ID:	140-20175-A-37	Lab Sample ID:	140-20175-37		
Client ID:	IA-126-C-29				
Operator ID:	AFB	ALS Bottle#:	11	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

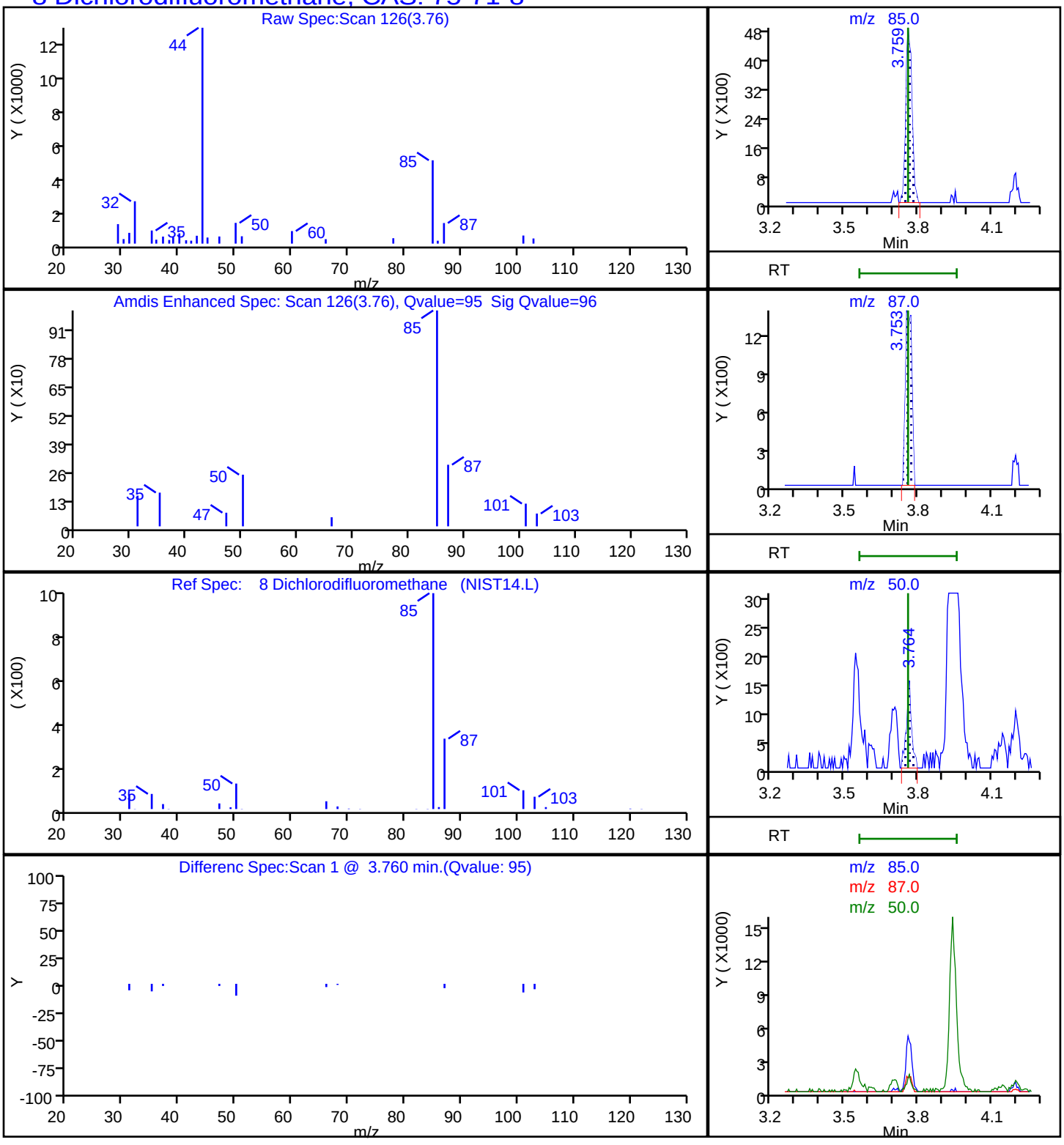
44 Chloroform, CAS: 67-66-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P111.D				
Injection Date:	07-Sep-2020 21:40:30	Instrument ID:	MG		
Lims ID:	140-20175-A-37	Lab Sample ID:	140-20175-37		
Client ID:	IA-126-C-29				
Operator ID:	AFB	ALS Bottle#:	11	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

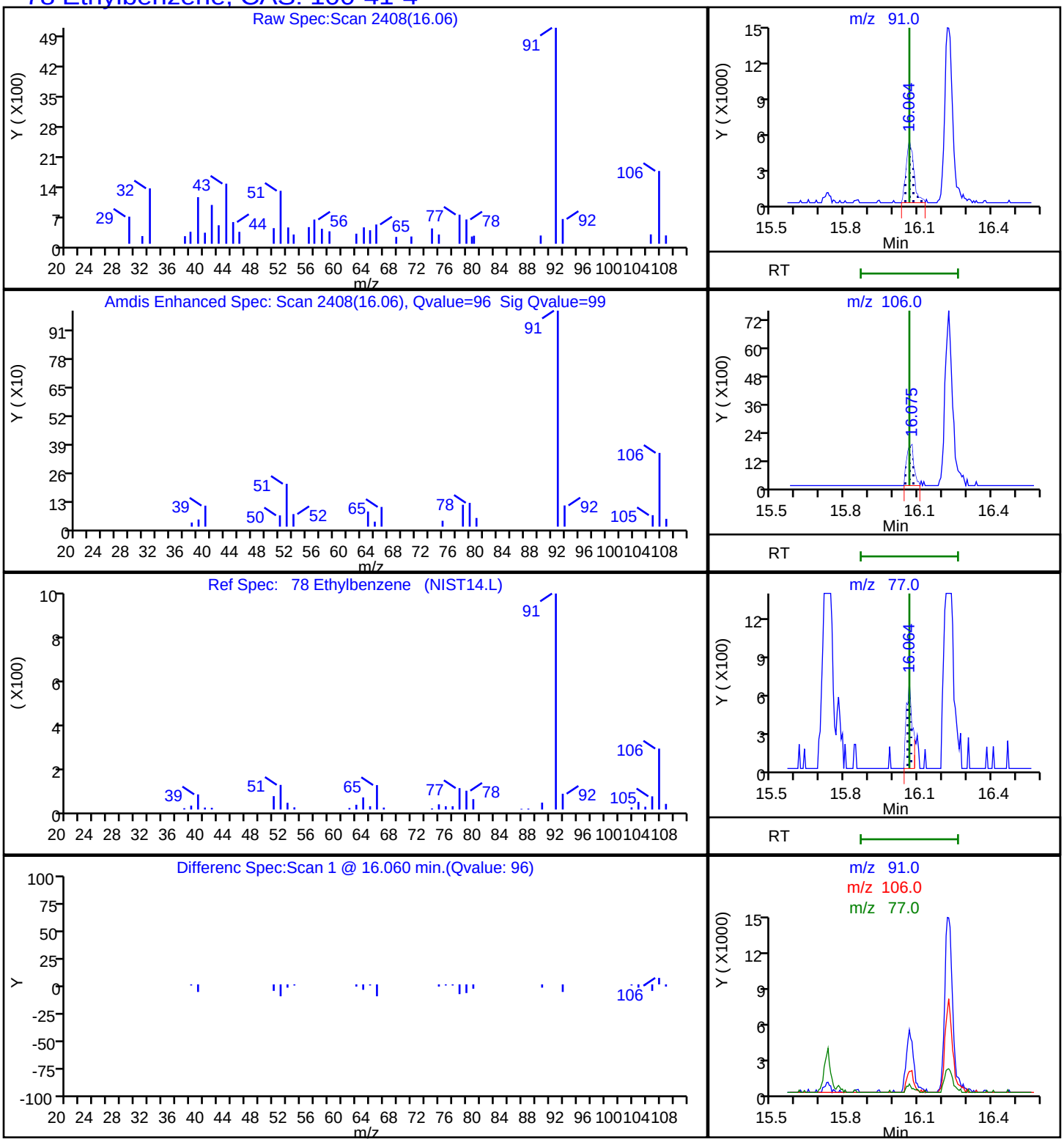
8 Dichlorodifluoromethane, CAS: 75-71-8



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P111.D				
Injection Date:	07-Sep-2020 21:40:30	Instrument ID:	MG		
Lims ID:	140-20175-A-37	Lab Sample ID:	140-20175-37		
Client ID:	IA-126-C-29				
Operator ID:	AFB	ALS Bottle#:	11	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

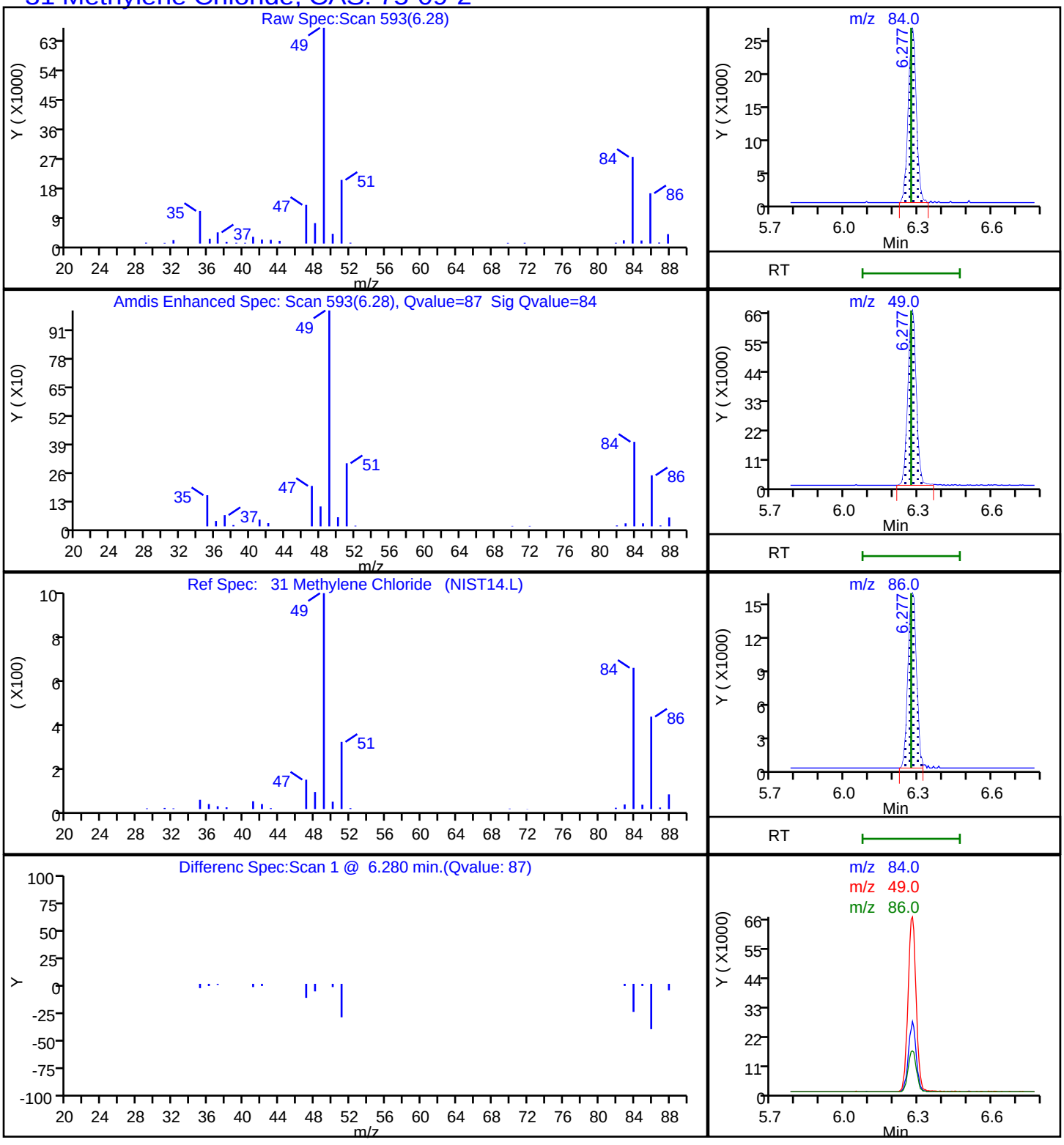
78 Ethylbenzene, CAS: 100-41-4



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P111.D				
Injection Date:	07-Sep-2020 21:40:30	Instrument ID:	MG		
Lims ID:	140-20175-A-37	Lab Sample ID:	140-20175-37		
Client ID:	IA-126-C-29				
Operator ID:	AFB	ALS Bottle#:	11	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

31 Methylene Chloride, CAS: 75-09-2

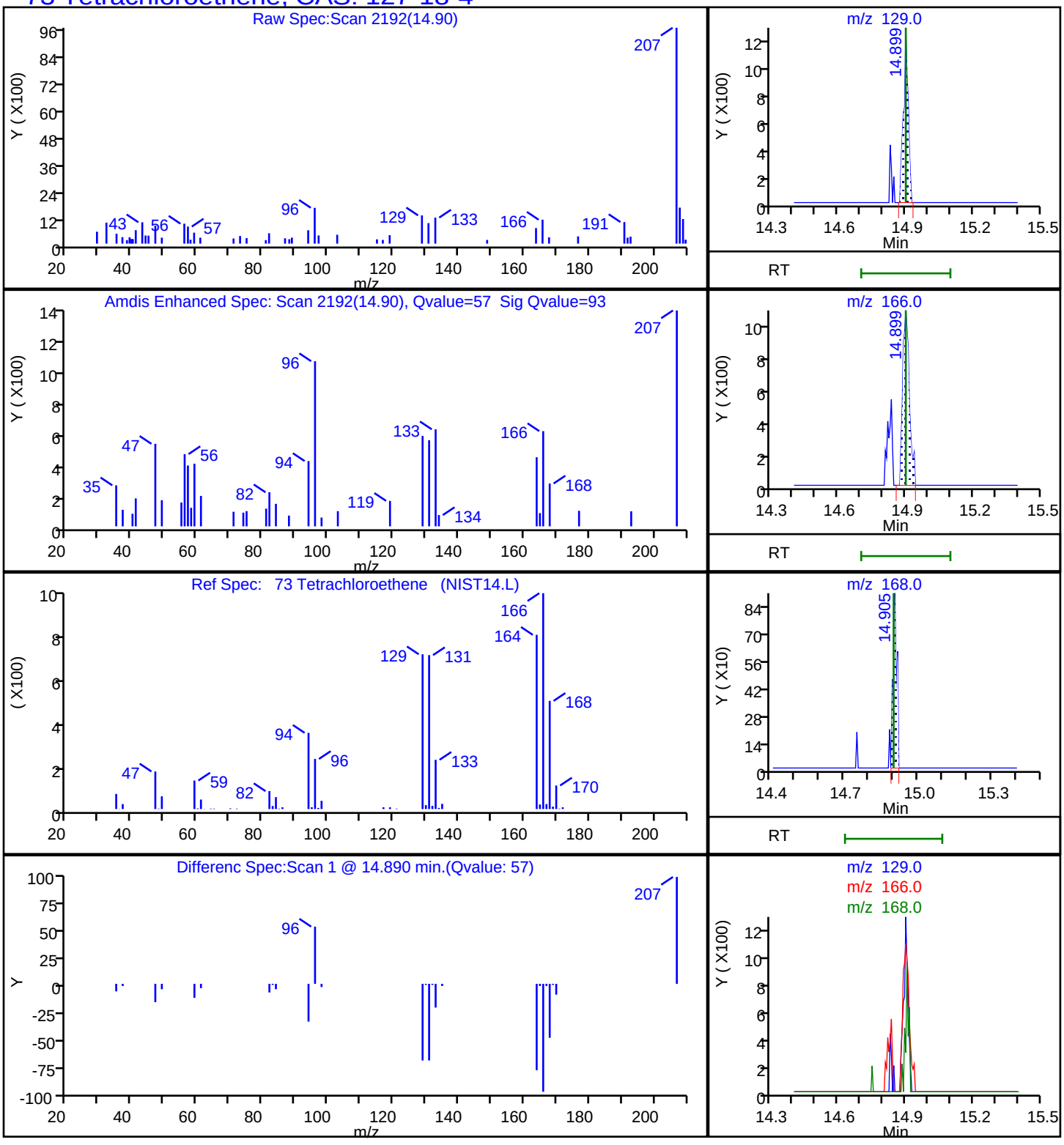


Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P111.D

Injection Date:	07-Sep-2020 21:40:30	Instrument ID:	MG		
Lims ID:	140-20175-A-37	Lab Sample ID:	140-20175-37		
Client ID:	IA-126-C-29				
Operator ID:	AFB	ALS Bottle#:	11	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

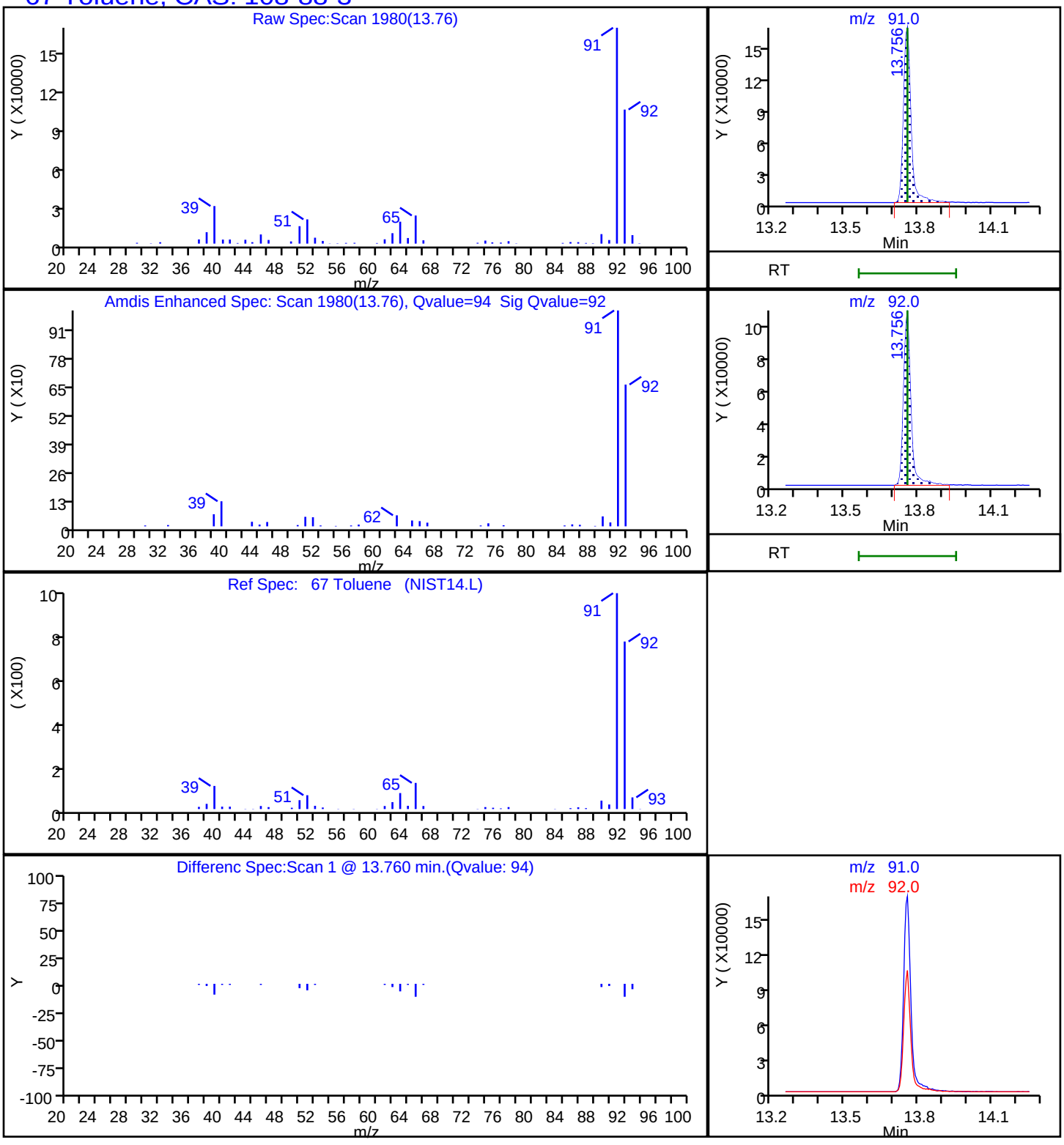
73 Tetrachloroethene, CAS: 127-18-4



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P111.D				
Injection Date:	07-Sep-2020 21:40:30	Instrument ID:	MG		
Lims ID:	140-20175-A-37	Lab Sample ID:	140-20175-37		
Client ID:	IA-126-C-29				
Operator ID:	AFB	ALS Bottle#:	11	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

67 Toluene, CAS: 108-88-3

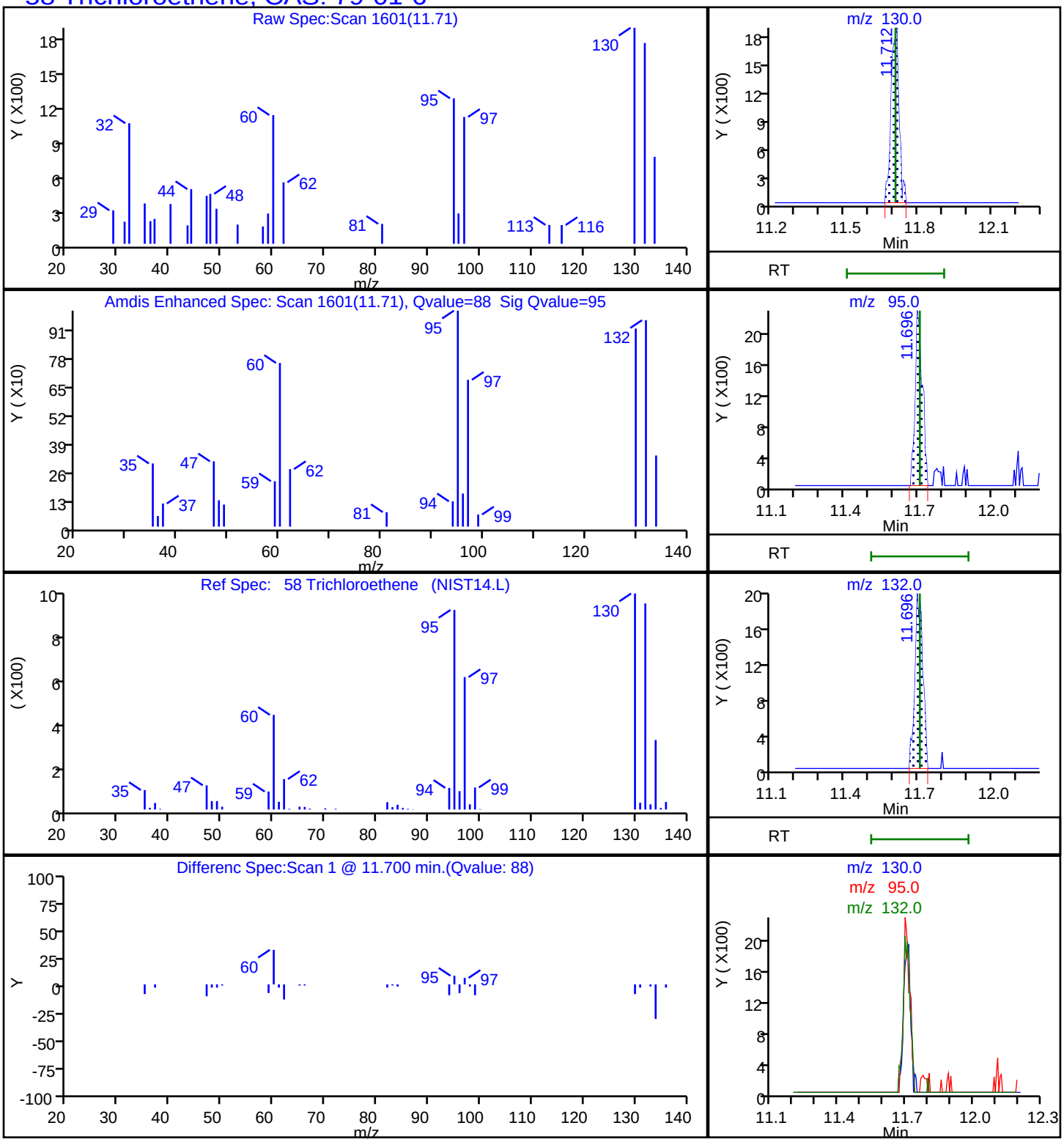


Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P111.D

Injection Date:	07-Sep-2020 21:40:30	Instrument ID:	MG
Lims ID:	140-20175-A-37	Lab Sample ID:	140-20175-37
Client ID:	IA-126-C-29		
Operator ID:	AFB	ALS Bottle#:	11 Worklist Smp#: 17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

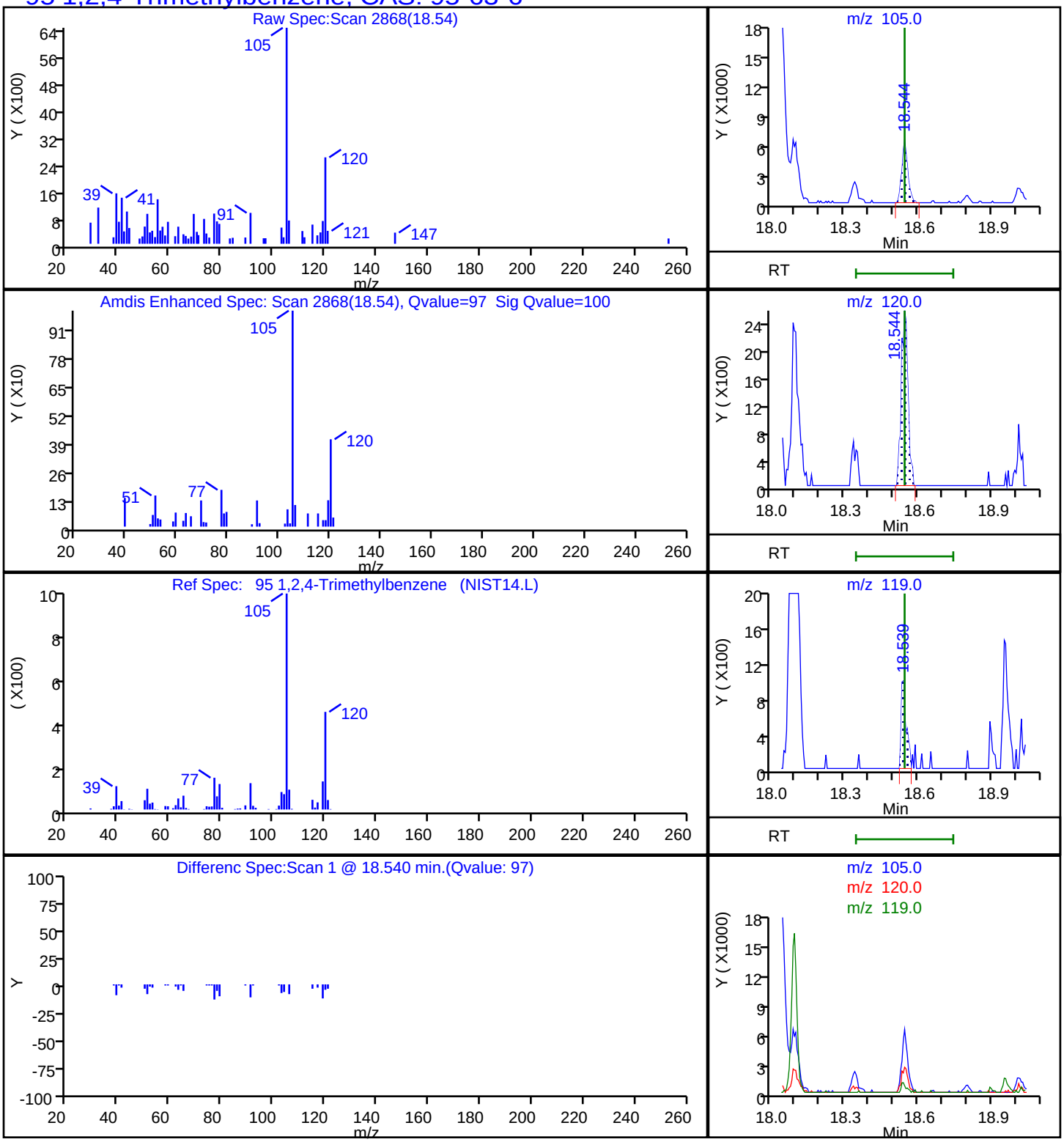
58 Trichloroethene, CAS: 79-01-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P111.D				
Injection Date:	07-Sep-2020 21:40:30	Instrument ID:	MG		
Lims ID:	140-20175-A-37	Lab Sample ID:	140-20175-37		
Client ID:	IA-126-C-29				
Operator ID:	AFB	ALS Bottle#:	11	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

95 1,2,4-Trimethylbenzene, CAS: 95-63-6

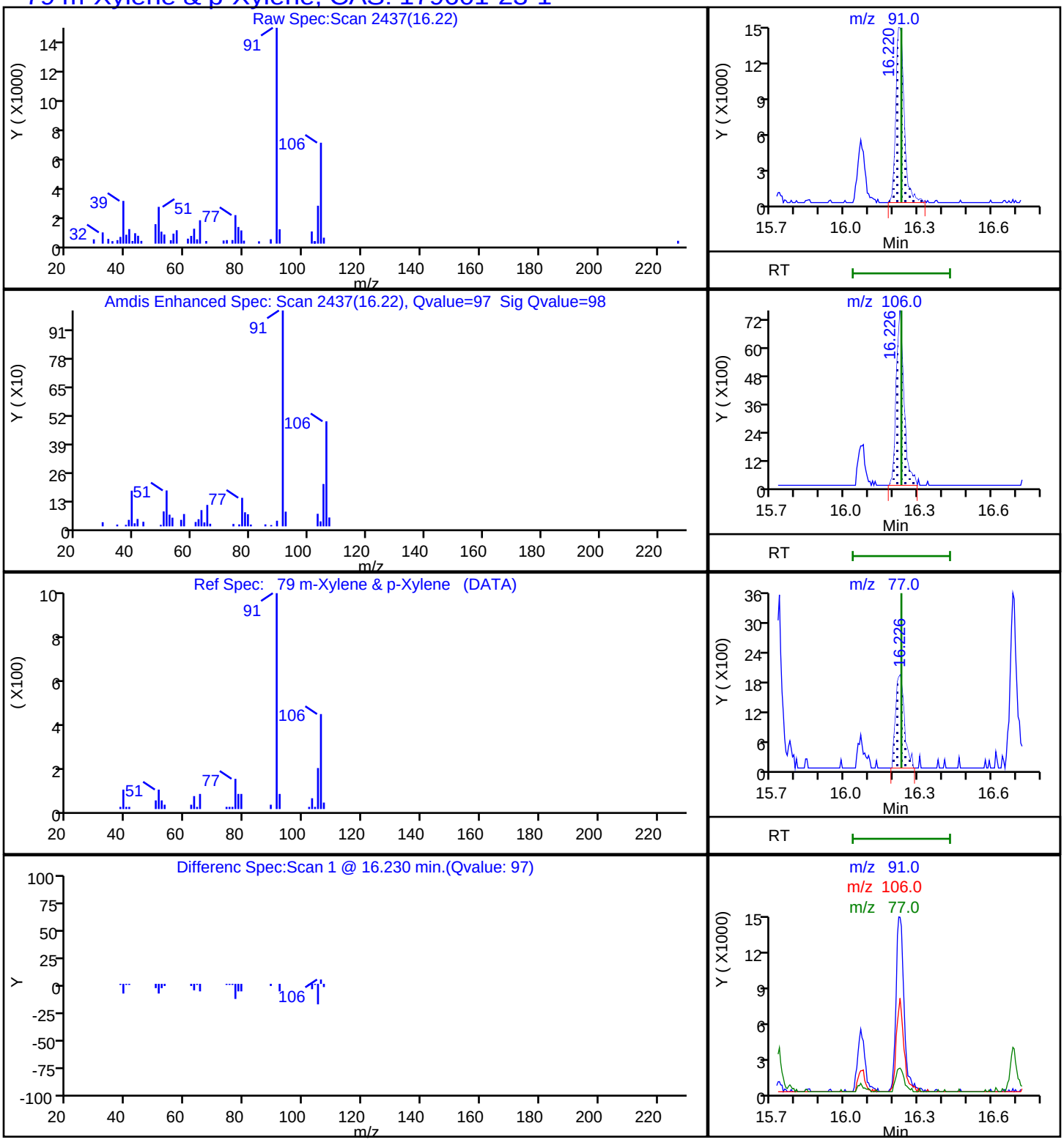


Report Date: 08-Sep-2020 13:20:41 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P111.D				
Injection Date:	07-Sep-2020 21:40:30	Instrument ID:	MG		
Lims ID:	140-20175-A-37	Lab Sample ID:	140-20175-37		
Client ID:	IA-126-C-29				
Operator ID:	AFB	ALS Bottle#:	11	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

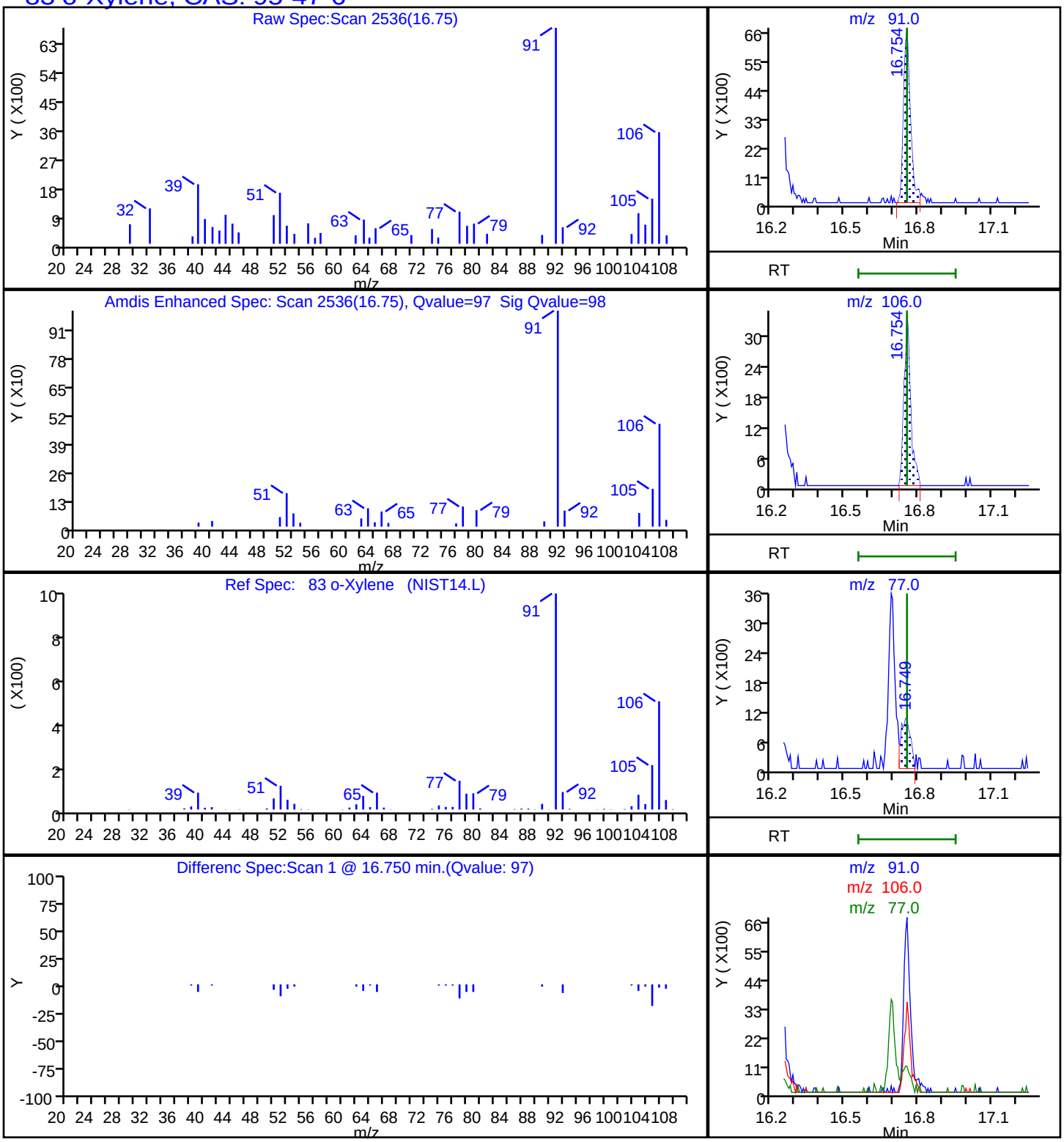
79 m-Xylene & p-Xylene, CAS: 179601-23-1



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P111.D				
Injection Date:	07-Sep-2020 21:40:30	Instrument ID:	MG		
Lims ID:	140-20175-A-37	Lab Sample ID:	140-20175-37		
Client ID:	IA-126-C-29				
Operator ID:	AFB	ALS Bottle#:	11	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

83 o-Xylene, CAS: 95-47-6



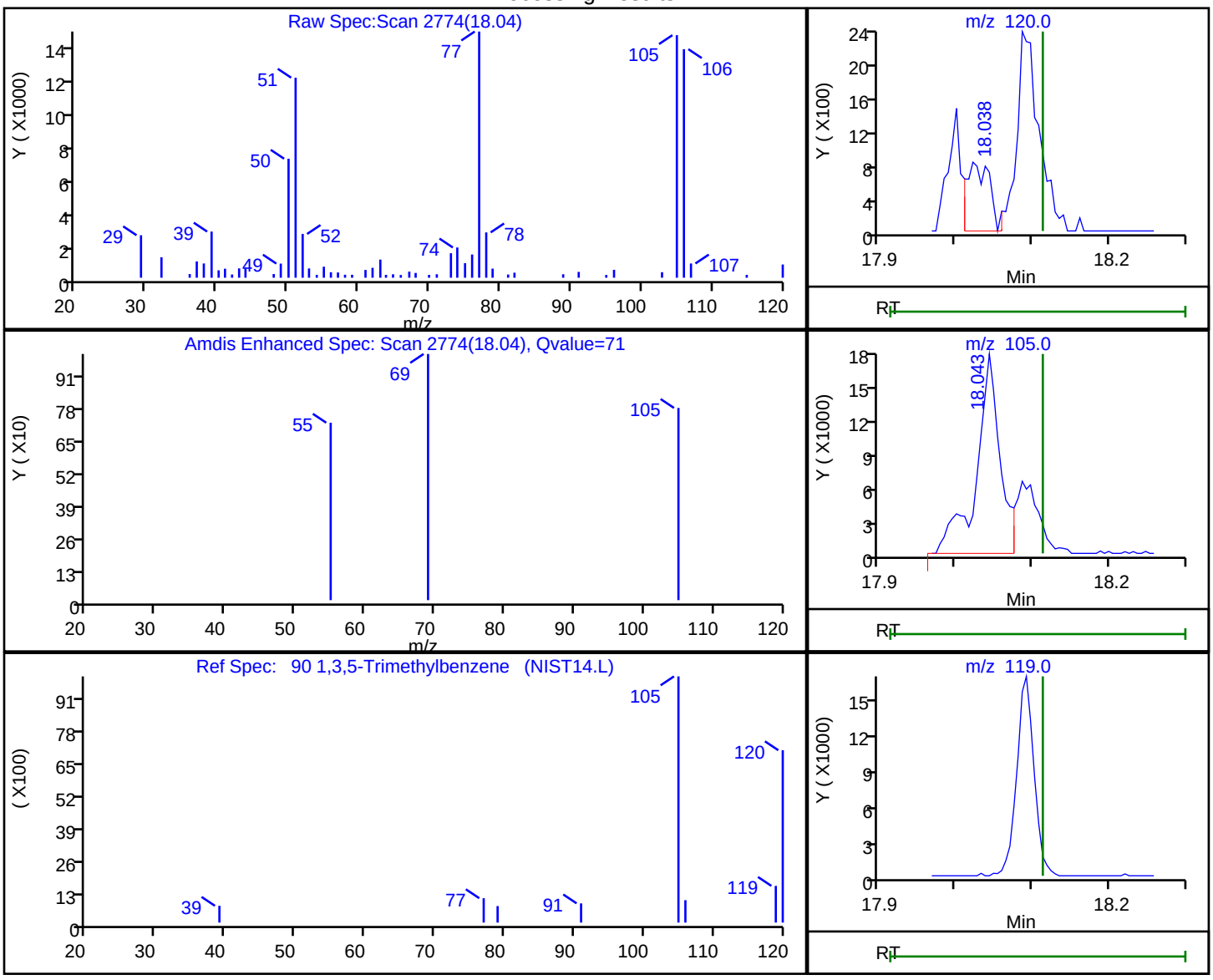
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P111.D				
Injection Date:	07-Sep-2020 21:40:30	Instrument ID:	MG		
Lims ID:	140-20175-A-37	Lab Sample ID:	140-20175-37		
Client ID:	IA-126-C-29				
Operator ID:	AFB	ALS Bottle#:	11	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

90 1,3,5-Trimethylbenzene, CAS: 108-67-8

Processing Results



RT	Mass	Response	Amount
18.04	120.00	1768	0.025432
18.04	105.00	38566	
18.11	119.00	0	

Reviewer: barlozhetskayaa, 08-Sep-2020 13:20:36

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: IA-BCK-1-29 Lab Sample ID: 140-20175-38

Matrix: Air Lab File ID: GBI07P112.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 16:03

Sample wt/vol: 100(mL) Date Analyzed: 09/07/2020 22:24

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42500 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.073	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	ND		0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	0.35	J	0.40	0.11
67-66-3	Chloroform	119.38	ND		0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.35	J	0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	ND		0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.035
108-88-3	Toluene	92.14	ND		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	ND		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.23	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	101		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: IA-BCK-1-29 Lab Sample ID: 140-20175-38

Matrix: Air Lab File ID: GBI07P112.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 16:03

Sample wt/vol: 100(mL) Date Analyzed: 09/07/2020 22:24

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42500 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.23	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	ND		2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	1.3	J	1.4	0.39
67-66-3	Chloroform	119.38	ND		2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	1.7	J	2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	ND		1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.24
108-88-3	Toluene	92.14	ND		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	ND		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	0.99	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	101		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P112.D				
Lims ID:	140-20175-A-38				
Client ID:	IA-BCK-1-29				
Sample Type:	Client				
Inject. Date:	07-Sep-2020 22:24:30	ALS Bottle#:	12	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016516-018				
Misc. Info.:	140-20175-a-38				
Operator ID:	AFB	Instrument ID:	MG		
Method:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\MG_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	08-Sep-2020 13:21:40	Calib Date:	02-Sep-2020 03:27:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1021				
First Level Reviewer: barlozhetskayaa		Date:	08-Sep-2020 13:21:40		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.800	8.806	-0.006	86	105198	4.80	
* 2 1,4-Difluorobenzene	114	10.984	10.995	-0.011	98	596948	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.724	15.730	-0.006	95	571257	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.369	17.369	0.000	81	419719	4.68	
6 Chlorodifluoromethane	51	3.699	3.699	0.000	97	6671	0.0708	M
8 Dichlorodifluoromethane	85	3.764	3.759	0.005	95	7448	0.0707	
50 Benzene	78	10.445	10.440	0.000	62	1796	0.0146	
67 Toluene	91	13.751	13.756	-0.005	90	7665	0.0608	
79 m-Xylene & p-Xylene	91	16.220	16.231	-0.011	92	3818	0.0298	
83 o-Xylene	91	16.754	16.754	0.000	87	2018	0.0156	
S 124 Xylenes, Total	100				0		0.0454	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

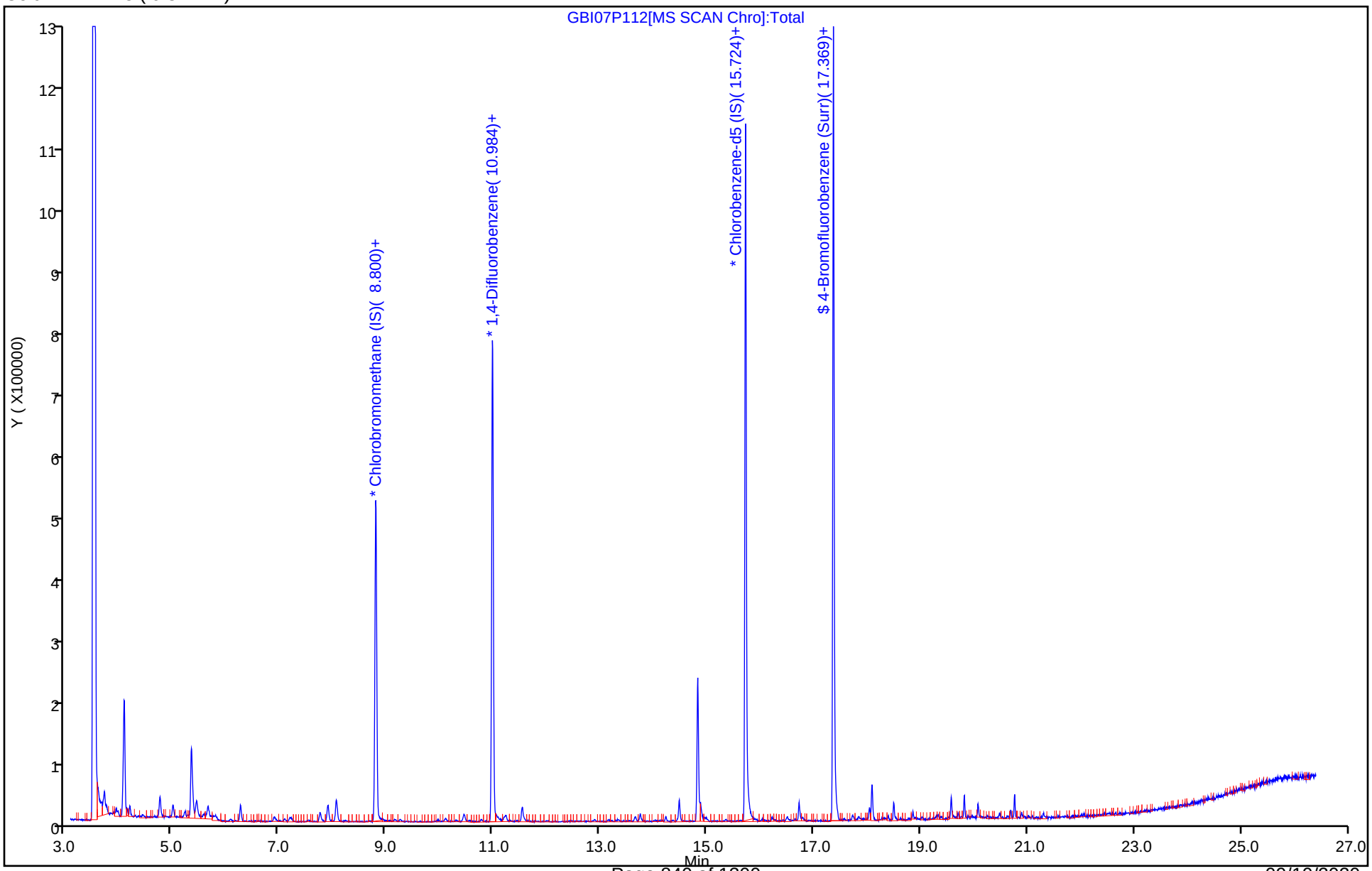
Report Date: 08-Sep-2020 13:21:41 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P112.D

Injection Date:	07-Sep-2020 22:24:30	Instrument ID:	MG	Operator ID:	AFB
Lims ID:	140-20175-A-38	Lab Sample ID:	140-20175-38	Worklist Smp#:	18
Client ID:	IA-BCK-1-29				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P112.D				
Lims ID:	140-20175-A-38				
Client ID:	IA-BCK-1-29				
Sample Type:	Client				
Inject. Date:	07-Sep-2020 22:24:30	ALS Bottle#:	12	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016516-018				
Misc. Info.:	140-20175-a-38				
Operator ID:	AFB	Instrument ID:	MG		
Method:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\MG_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	08-Sep-2020 13:21:40	Calib Date:	02-Sep-2020 03:27:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1021				

First Level Reviewer: barlozhetskayaa Date: 08-Sep-2020 13:21:40

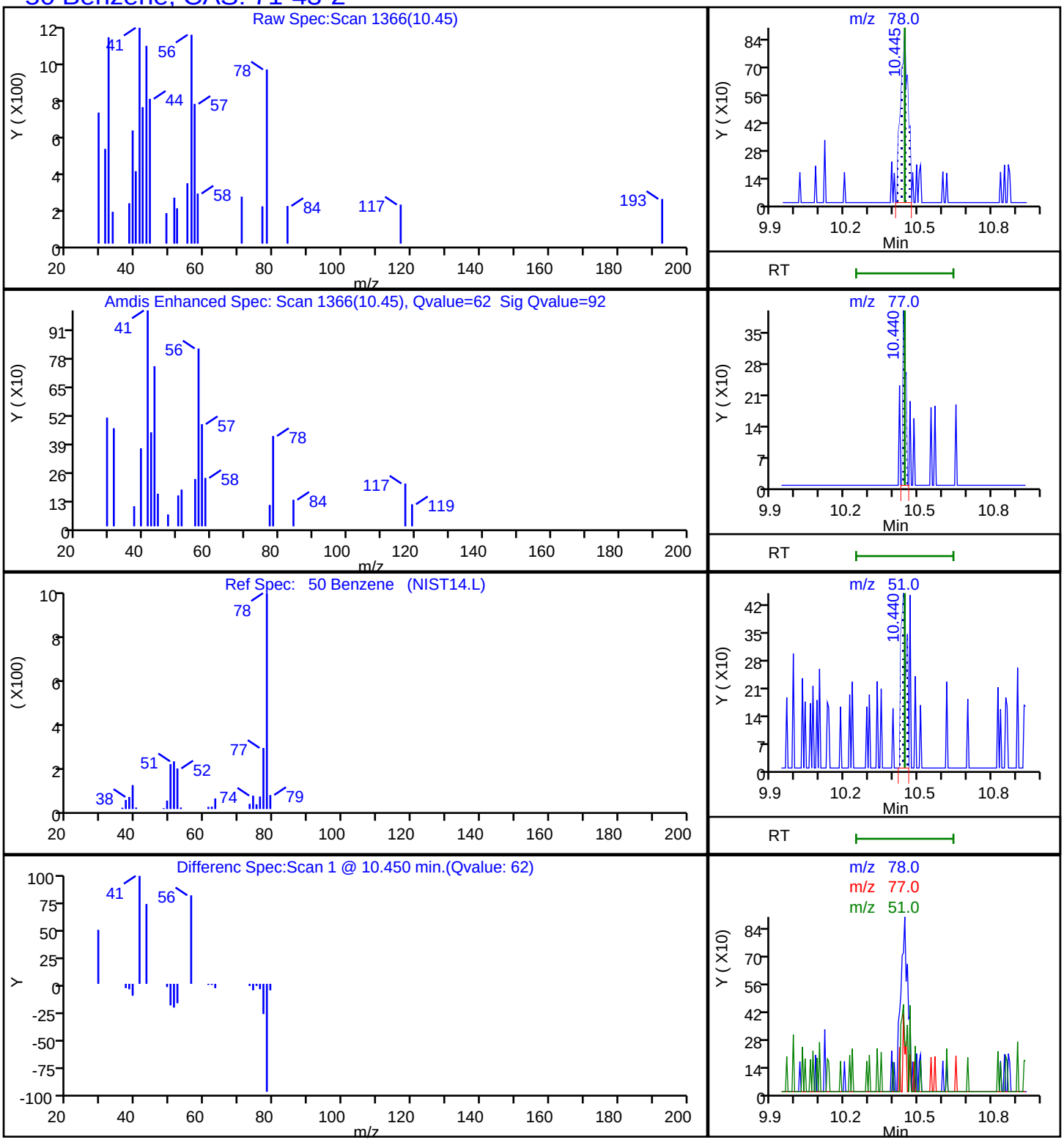
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	4.68	100.91

Report Date: 08-Sep-2020 13:21:41 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P112.D				
Injection Date:	07-Sep-2020 22:24:30	Instrument ID:	MG		
Lims ID:	140-20175-A-38	Lab Sample ID:	140-20175-38		
Client ID:	IA-BCK-1-29				
Operator ID:	AFB	ALS Bottle#:	12	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

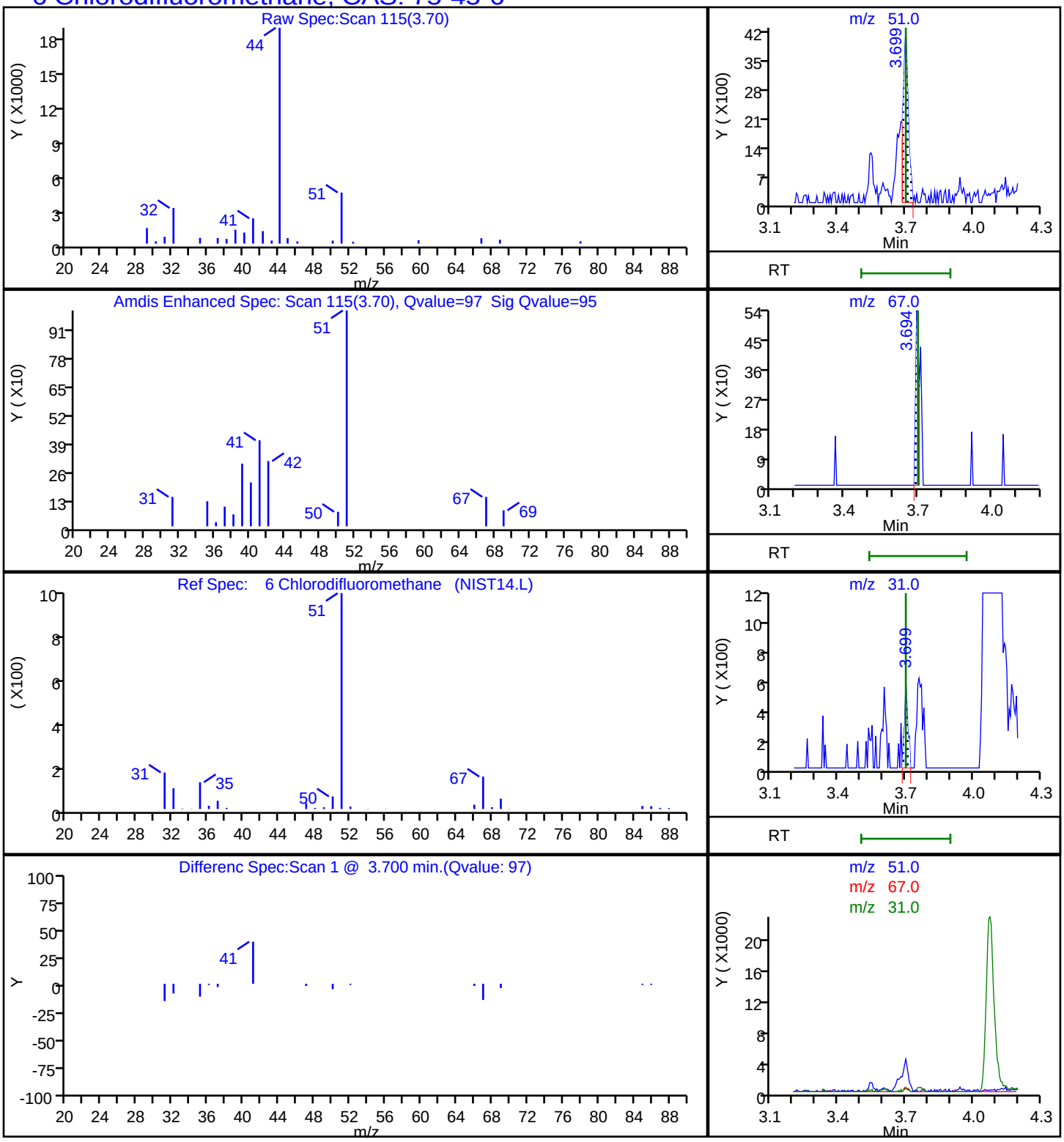
50 Benzene, CAS: 71-43-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P112.D				
Injection Date:	07-Sep-2020 22:24:30	Instrument ID:	MG		
Lims ID:	140-20175-A-38	Lab Sample ID:	140-20175-38		
Client ID:	IA-BCK-1-29				
Operator ID:	AFB	ALS Bottle#:	12	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

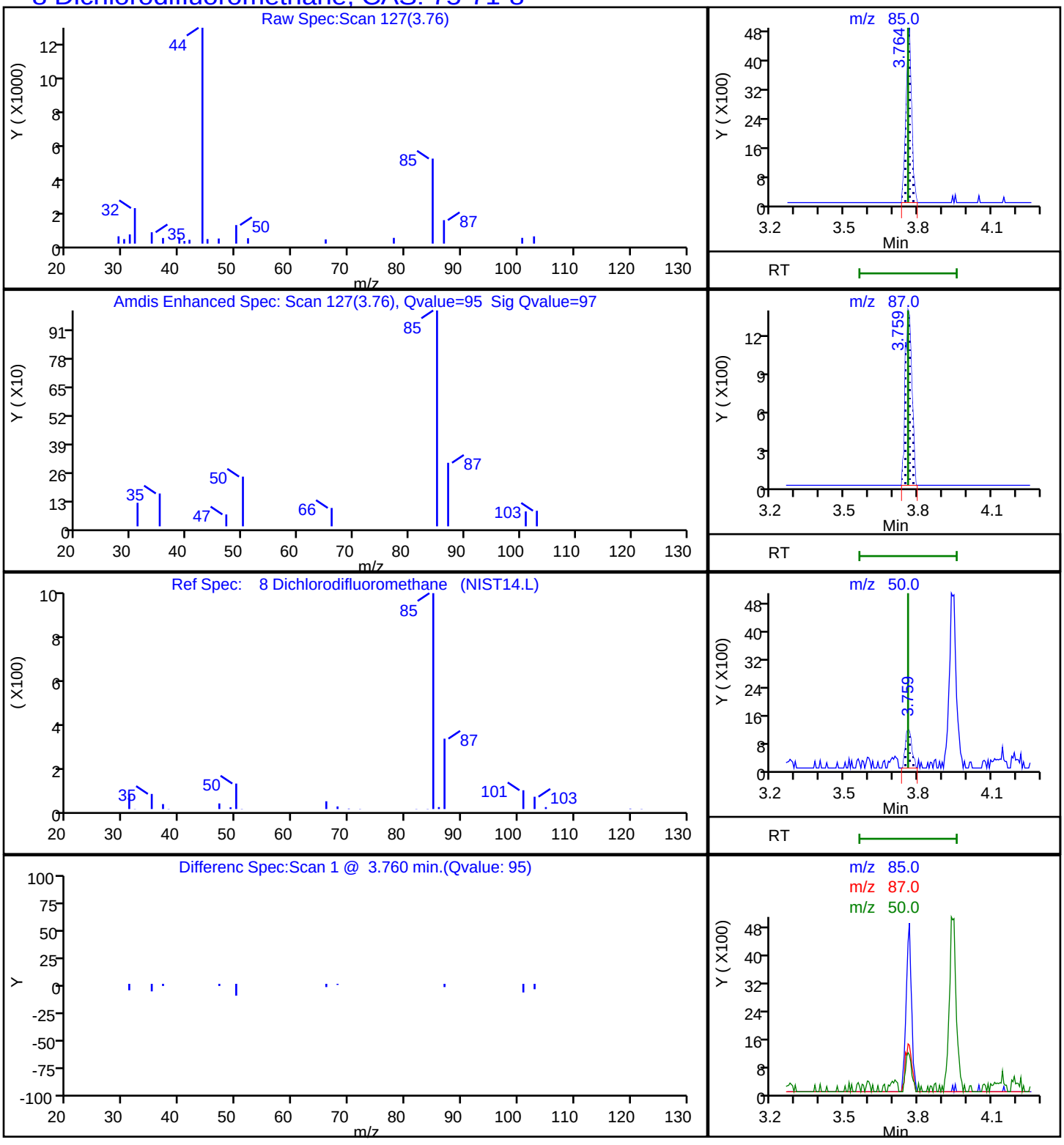
6 Chlorodifluoromethane, CAS: 75-45-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P112.D		
Injection Date:	07-Sep-2020 22:24:30	Instrument ID:	MG
Lims ID:	140-20175-A-38	Lab Sample ID:	140-20175-38
Client ID:	IA-BCK-1-29		
Operator ID:	AFB	ALS Bottle#:	12 Worklist Smp#: 18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

8 Dichlorodifluoromethane, CAS: 75-71-8

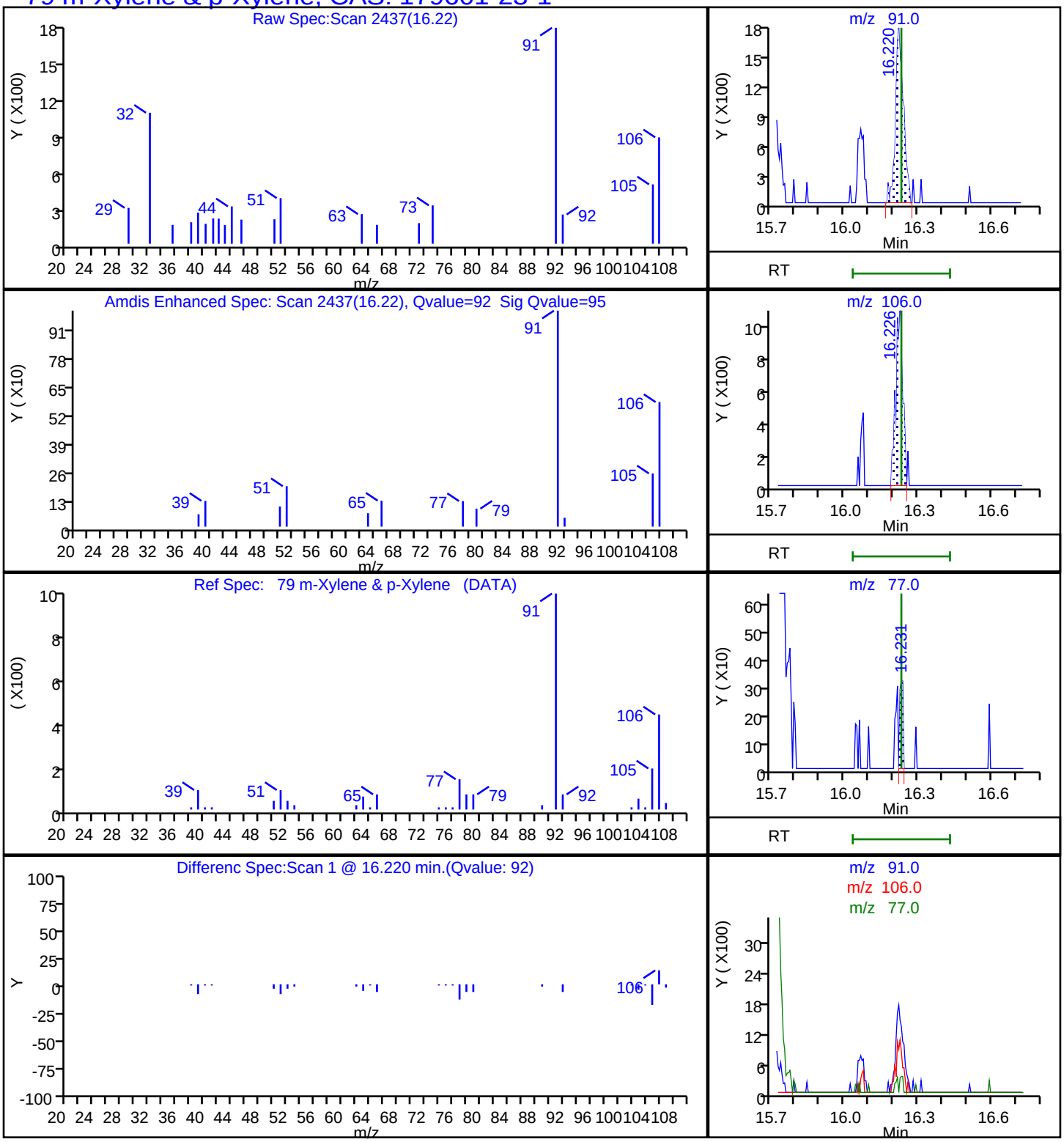


Report Date: 08-Sep-2020 13:21:41 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P112.D				
Injection Date:	07-Sep-2020 22:24:30	Instrument ID:	MG		
Lims ID:	140-20175-A-38	Lab Sample ID:	140-20175-38		
Client ID:	IA-BCK-1-29				
Operator ID:	AFB	ALS Bottle#:	12	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

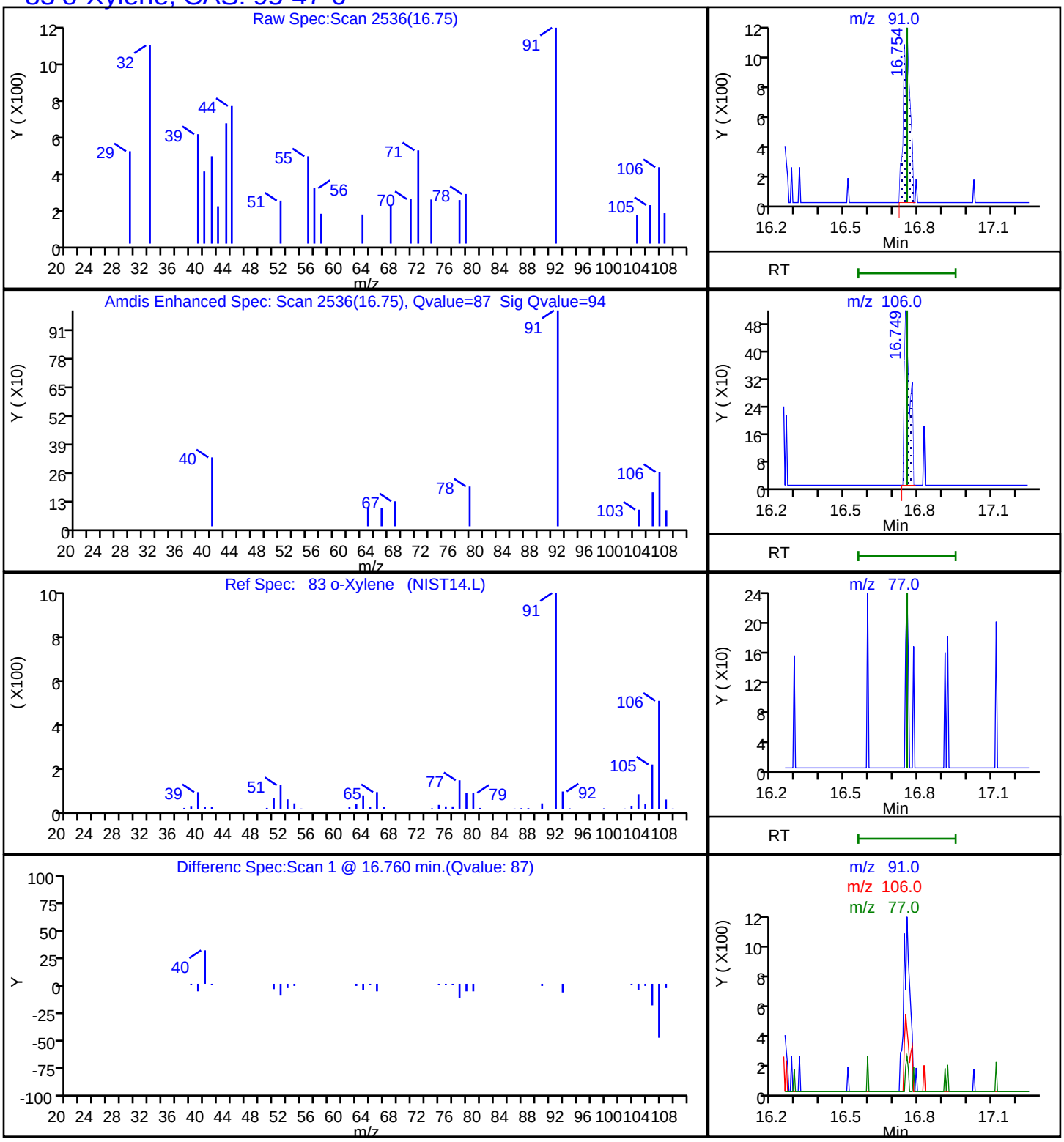
79 m-Xylene & p-Xylene, CAS: 179601-23-1



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P112.D		
Injection Date:	07-Sep-2020 22:24:30	Instrument ID:	MG
Lims ID:	140-20175-A-38	Lab Sample ID:	140-20175-38
Client ID:	IA-BCK-1-29		
Operator ID:	AFB	ALS Bottle#:	12 Worklist Smp#: 18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

83 o-Xylene, CAS: 95-47-6



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Knoxville

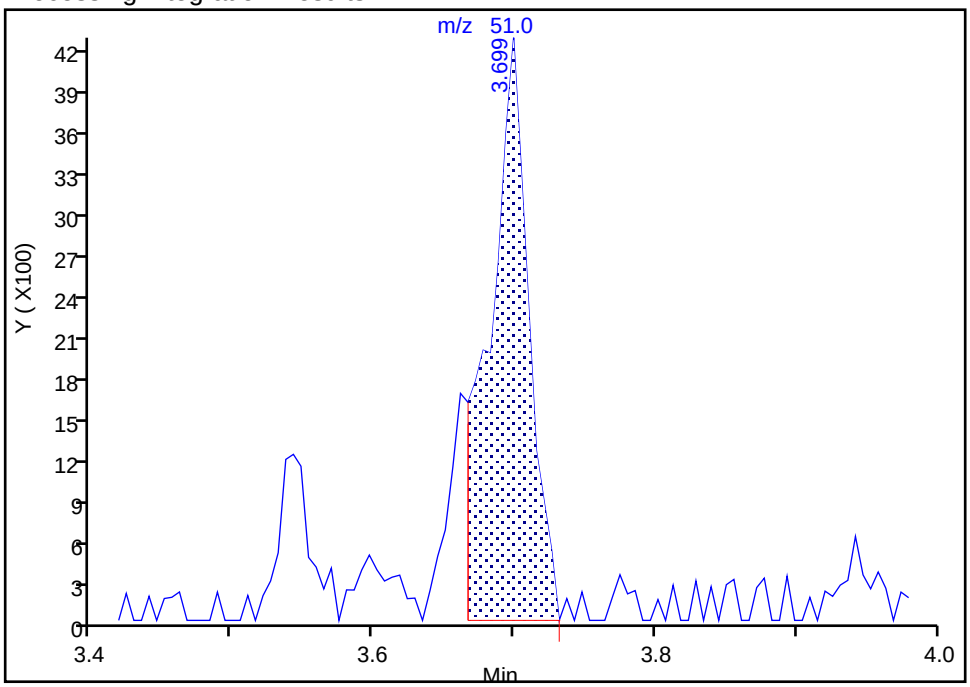
Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P112.D				
Injection Date:	07-Sep-2020 22:24:30	Instrument ID:	MG		
Lims ID:	140-20175-A-38	Lab Sample ID:	140-20175-38		
Client ID:	IA-BCK-1-29				
Operator ID:	AFB	ALS Bottle#:	12	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

6 Chlorodifluoromethane, CAS: 75-45-6

Signal: 1

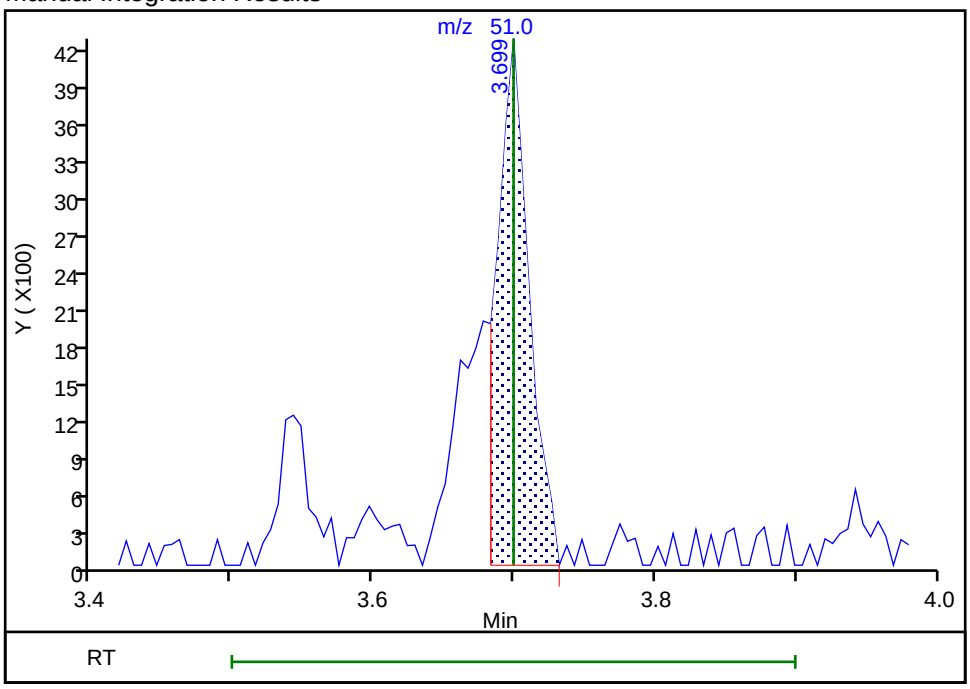
Processing Integration Results

RT: 3.70
Area: 8394
Amount: 0.089049
Amount Units: ppb v/v



Manual Integration Results

RT: 3.70
Area: 6671
Amount: 0.070770
Amount Units: ppb v/v



Reviewer: barlozhetskayaa, 08-Sep-2020 13:21:26

Audit Action: Split an Integrated Peak Audit Reason: Split Peak

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: IA-BCK-2-29 Lab Sample ID: 140-20175-39

Matrix: Air Lab File ID: GBI07P113.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 16:07

Sample wt/vol: 229(mL) Date Analyzed: 09/07/2020 23:09

Soil Aliquot Vol: Dilution Factor: 2.29

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42500 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.084	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	ND		0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	0.31	J	0.40	0.11
67-66-3	Chloroform	119.38	ND		0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.38	J	0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	0.068	J	0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	ND		0.40	0.065
75-09-2	Methylene Chloride	84.93	6.1		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.035
108-88-3	Toluene	92.14	0.42	J	0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	ND		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.24	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	101		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: IA-BCK-2-29 Lab Sample ID: 140-20175-39

Matrix: Air Lab File ID: GBI07P113.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 16:07

Sample wt/vol: 229(mL) Date Analyzed: 09/07/2020 23:09

Soil Aliquot Vol: Dilution Factor: 2.29

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42500 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.27	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	ND		2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	1.1	J	1.4	0.39
67-66-3	Chloroform	119.38	ND		2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	1.9	J	2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	0.28	J	1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	ND		1.7	0.28
75-09-2	Methylene Chloride	84.93	21		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.24
108-88-3	Toluene	92.14	1.6	J	2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	ND		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	1.1	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	101		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P113.D
Lims ID: 140-20175-A-39
Client ID: IA-BCK-2-29
Sample Type: Client
Inject. Date: 07-Sep-2020 23:09:30 ALS Bottle#: 13 Worklist Smp#: 19
Purge Vol: 500.000 mL Dil. Factor: 2.2900
Sample Info: 140-0016516-019
Misc. Info.: 140-20175-a-39@2.29
Operator ID: AFB Instrument ID: MG

Method: \\chromfs\Knoxville\ChromData\MG\20200904-16516.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 08-Sep-2020 13:22:12 Calib Date: 02-Sep-2020 03:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1021

First Level Reviewer: barlozhetskayaa Date: 08-Sep-2020 13:22:11

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.806	8.806	0.000	86	108441	4.80	
* 2 1,4-Difluorobenzene	114	10.990	10.995	-0.005	98	606996	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.724	15.730	-0.006	95	576944	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.369	17.369	0.000	80	425101	4.70	
6 Chlorodifluoromethane	51	3.705	3.699	0.006	97	6102	0.0628	
8 Dichlorodifluoromethane	85	3.769	3.759	0.010	96	8163	0.0751	
31 Methylene Chloride	84	6.277	6.271	0.006	87	32408	1.21	
48 1,2-Dichloroethane	62	9.954	9.945	0.000	44	936	0.0137	
50 Benzene	78	10.434	10.440	-0.011	56	2108	0.0169	
67 Toluene	91	13.756	13.756	0.000	91	10570	0.0831	
79 m-Xylene & p-Xylene	91	16.215	16.231	-0.016	93	4083	0.0316	
83 o-Xylene	91	16.760	16.754	0.006	94	2169	0.0166	
S 124 Xylenes, Total	100				0		0.0481	

Reagents:

40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

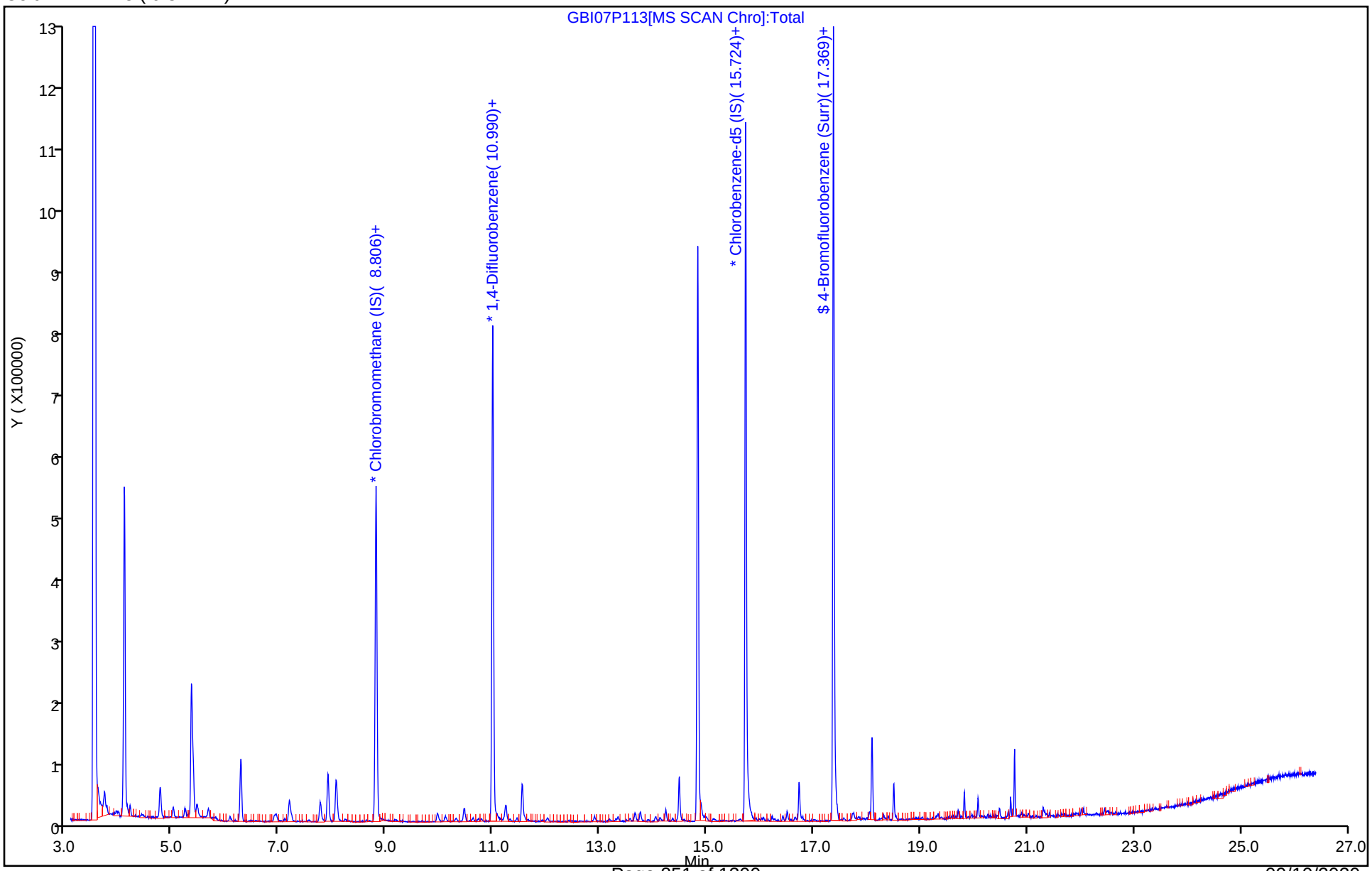
Report Date: 08-Sep-2020 13:22:12 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P113.D

Injection Date:	07-Sep-2020 23:09:30	Instrument ID:	MG	Operator ID:	AFB
Lims ID:	140-20175-A-39	Lab Sample ID:	140-20175-39	Worklist Smp#:	19
Client ID:	IA-BCK-2-29				
Purge Vol:	500.000 mL	Dil. Factor:	2.2900	ALS Bottle#:	13
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P113.D				
Lims ID:	140-20175-A-39				
Client ID:	IA-BCK-2-29				
Sample Type:	Client				
Inject. Date:	07-Sep-2020 23:09:30	ALS Bottle#:	13	Worklist Smp#:	19
Purge Vol:	500.000 mL	Dil. Factor:	2.2900		
Sample Info:	140-0016516-019				
Misc. Info.:	140-20175-a-39@2.29				
Operator ID:	AFB	Instrument ID:	MG		
Method:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\MG_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	08-Sep-2020 13:22:12	Calib Date:	02-Sep-2020 03:27:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1021				

First Level Reviewer: barlozhetskayaa Date: 08-Sep-2020 13:22:11

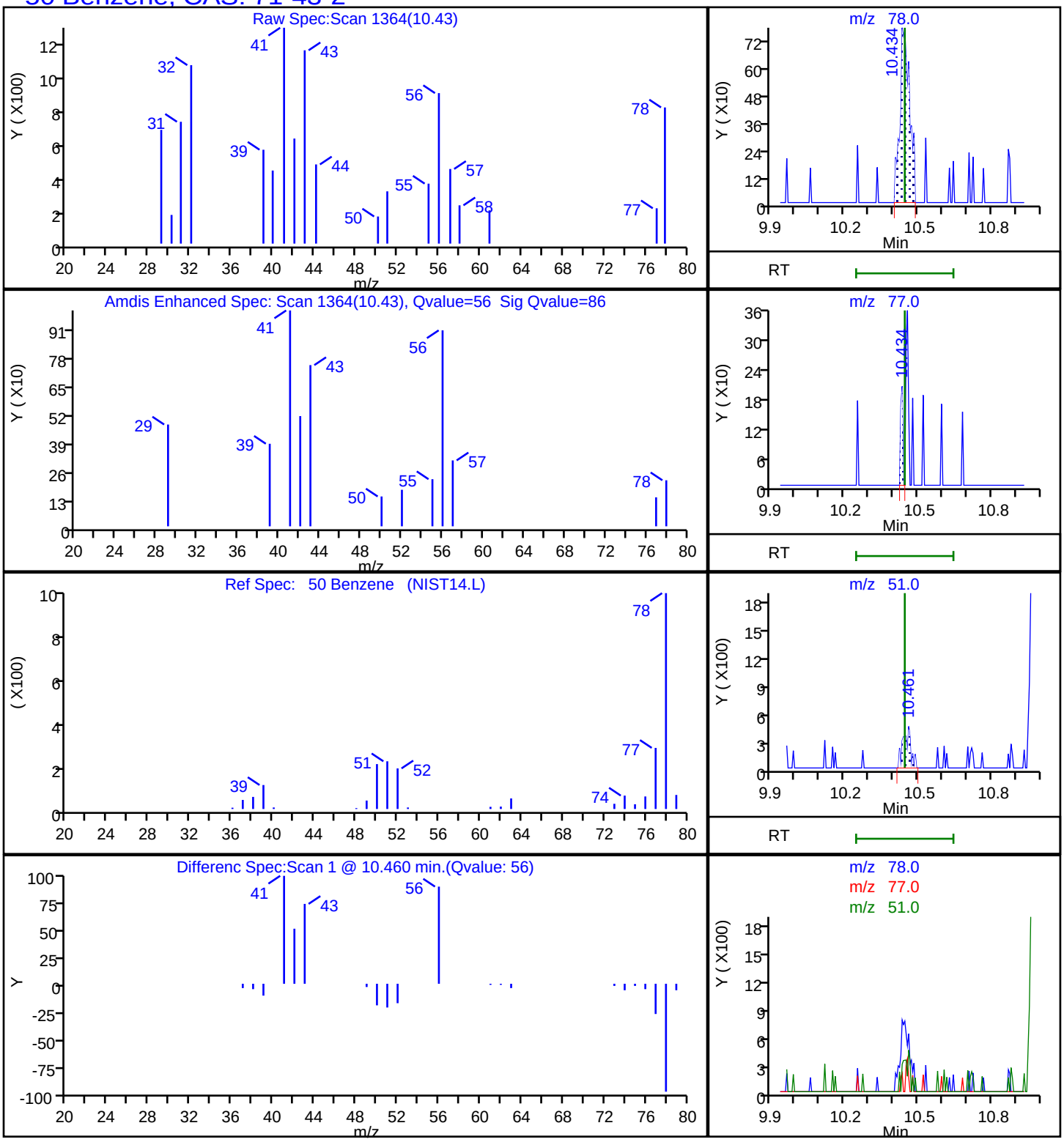
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	4.70	101.20

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P113.D

Injection Date:	07-Sep-2020 23:09:30	Instrument ID:	MG		
Lims ID:	140-20175-A-39	Lab Sample ID:	140-20175-39		
Client ID:	IA-BCK-2-29				
Operator ID:	AFB	ALS Bottle#:	13	Worklist Smp#:	19
Purge Vol:	500.000 mL	Dil. Factor:	2.2900		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

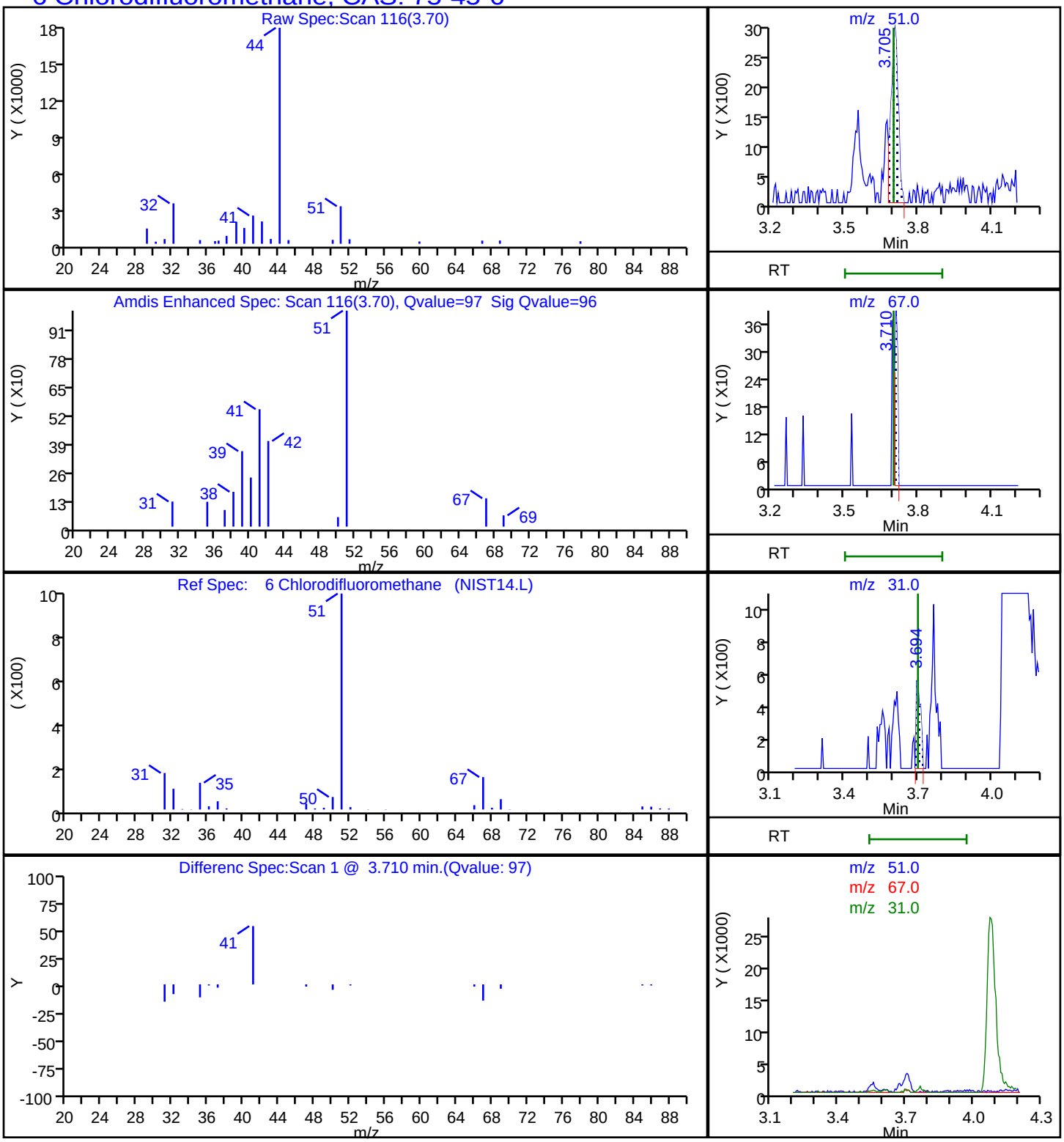
50 Benzene, CAS: 71-43-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P113.D				
Injection Date:	07-Sep-2020 23:09:30	Instrument ID:	MG		
Lims ID:	140-20175-A-39	Lab Sample ID:	140-20175-39		
Client ID:	IA-BCK-2-29				
Operator ID:	AFB	ALS Bottle#:	13	Worklist Smp#:	19
Purge Vol:	500.000 mL	Dil. Factor:	2.2900		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

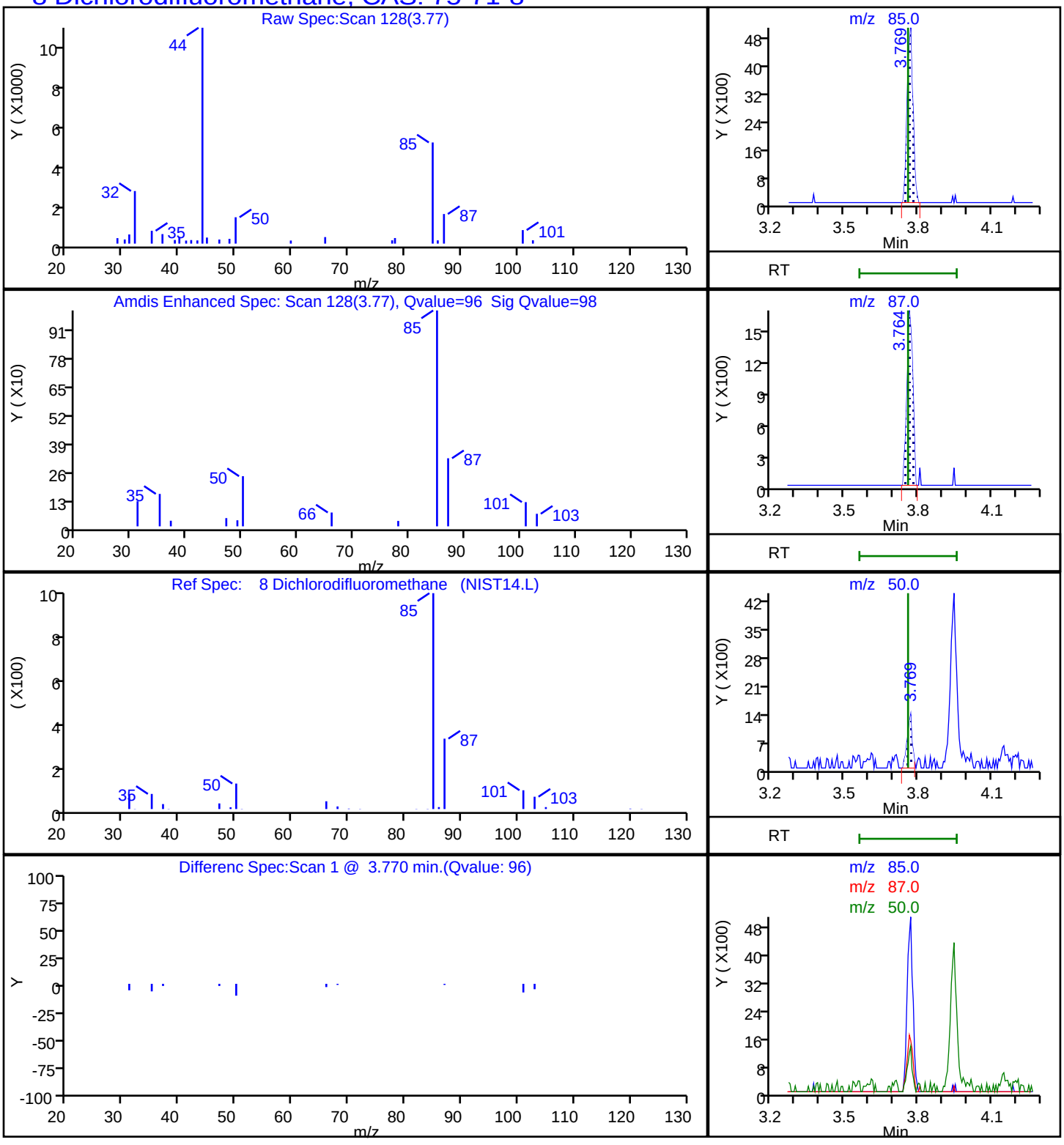
6 Chlorodifluoromethane, CAS: 75-45-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P113.D		
Injection Date:	07-Sep-2020 23:09:30	Instrument ID:	MG
Lims ID:	140-20175-A-39	Lab Sample ID:	140-20175-39
Client ID:	IA-BCK-2-29		
Operator ID:	AFB	ALS Bottle#:	13 Worklist Smp#: 19
Purge Vol:	500.000 mL	Dil. Factor:	2.2900
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

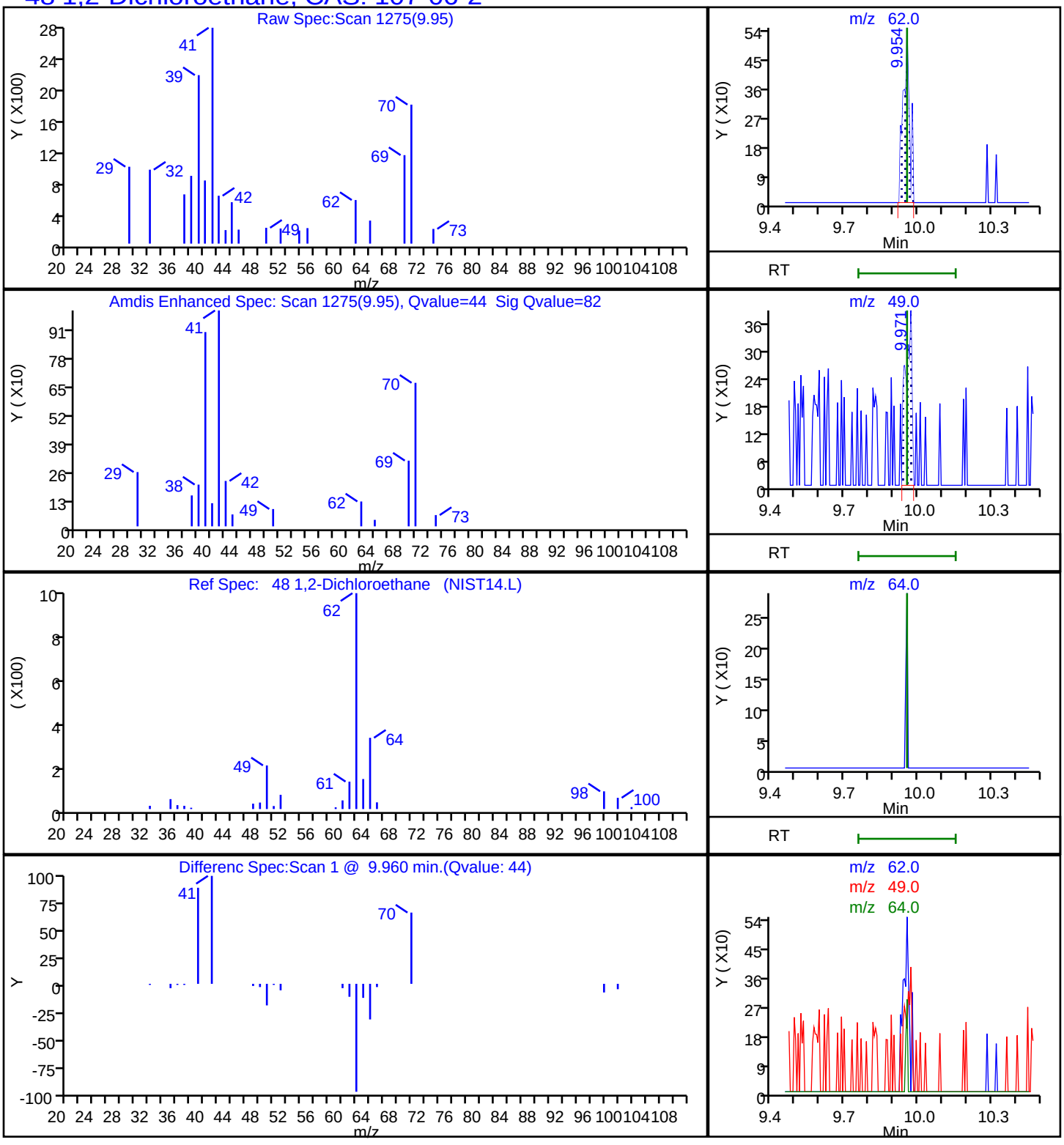
8 Dichlorodifluoromethane, CAS: 75-71-8



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P113.D		
Injection Date:	07-Sep-2020 23:09:30	Instrument ID:	MG
Lims ID:	140-20175-A-39	Lab Sample ID:	140-20175-39
Client ID:	IA-BCK-2-29		
Operator ID:	AFB	ALS Bottle#:	13 Worklist Smp#: 19
Purge Vol:	500.000 mL	Dil. Factor:	2.2900
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

48 1,2-Dichloroethane, CAS: 107-06-2

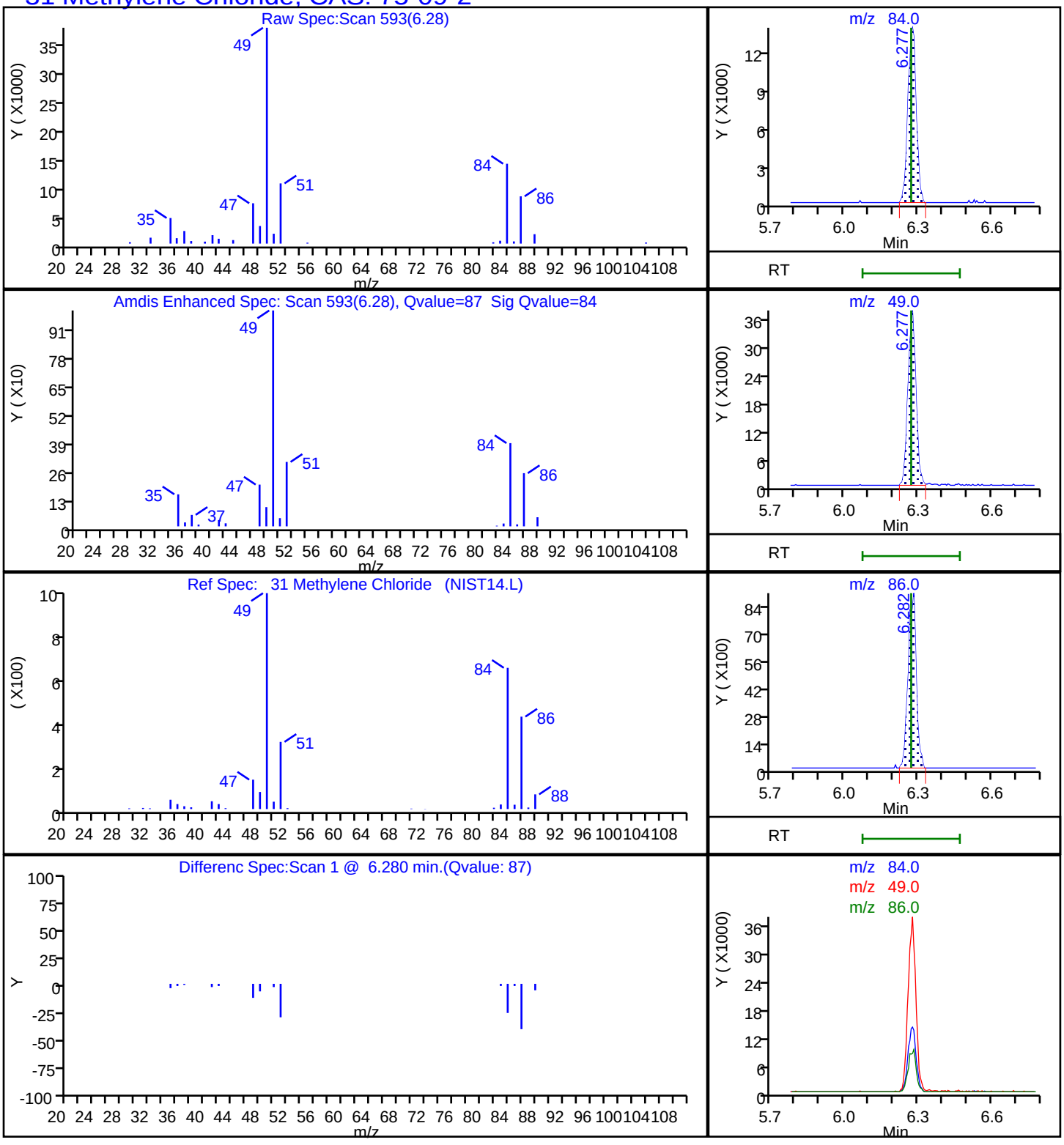


Report Date: 08-Sep-2020 13:22:12 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P113.D				
Injection Date:	07-Sep-2020 23:09:30	Instrument ID:	MG		
Lims ID:	140-20175-A-39	Lab Sample ID:	140-20175-39		
Client ID:	IA-BCK-2-29				
Operator ID:	AFB	ALS Bottle#:	13	Worklist Smp#:	19
Purge Vol:	500.000 mL	Dil. Factor:	2.2900		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

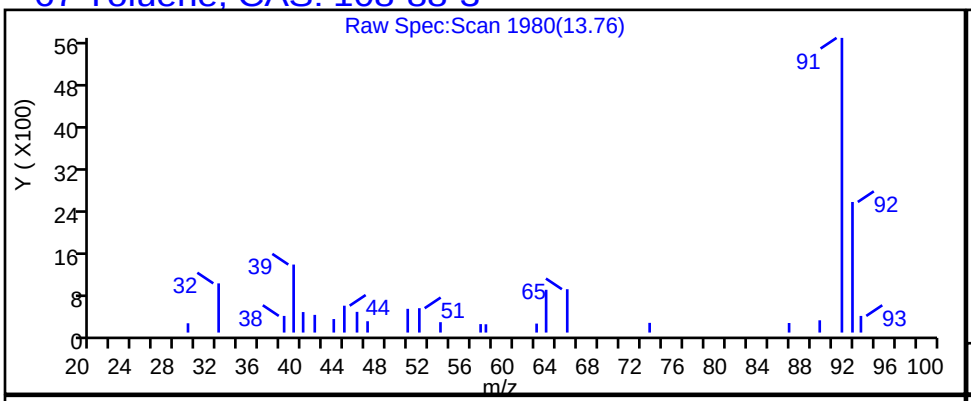
31 Methylene Chloride, CAS: 75-09-2

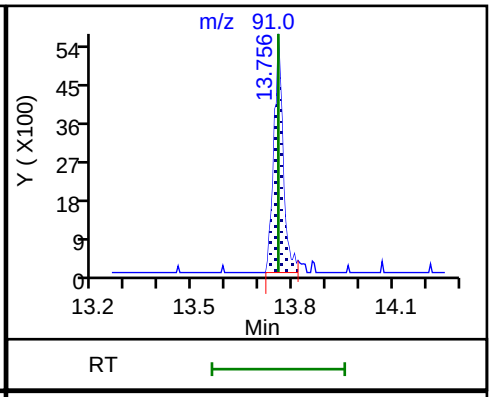


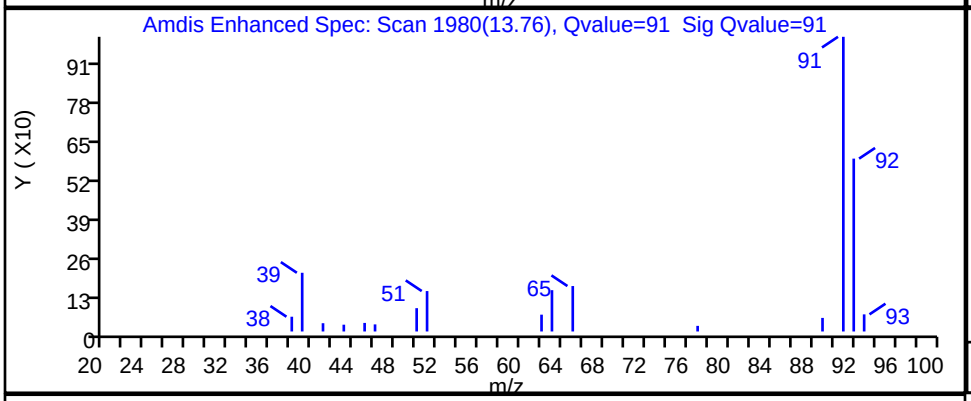
Eurofins TestAmerica, Knoxville

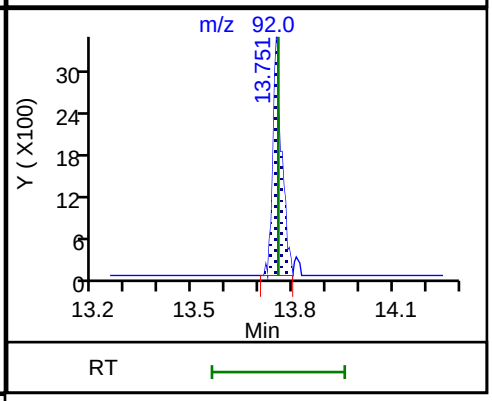
Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P113.D		
Injection Date:	07-Sep-2020 23:09:30	Instrument ID:	MG
Lims ID:	140-20175-A-39	Lab Sample ID:	140-20175-39
Client ID:	IA-BCK-2-29		
Operator ID:	AFB	ALS Bottle#:	13 Worklist Smp#: 19
Purge Vol:	500.000 mL	Dil. Factor:	2.2900
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

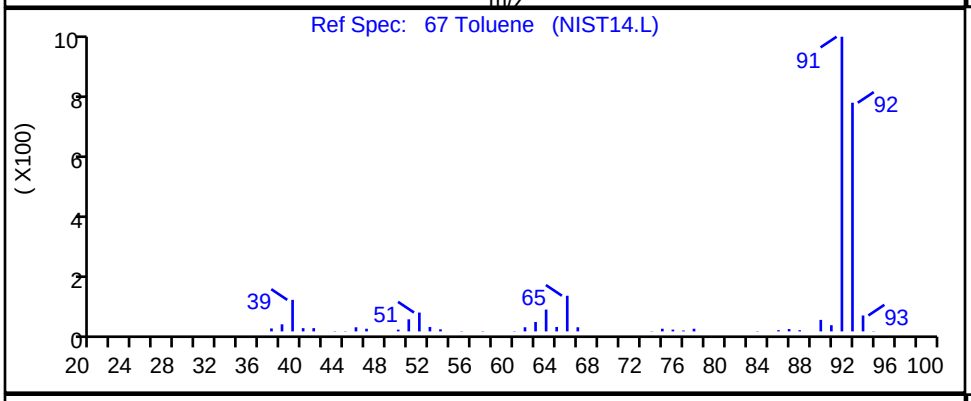
67 Toluene, CAS: 108-88-3

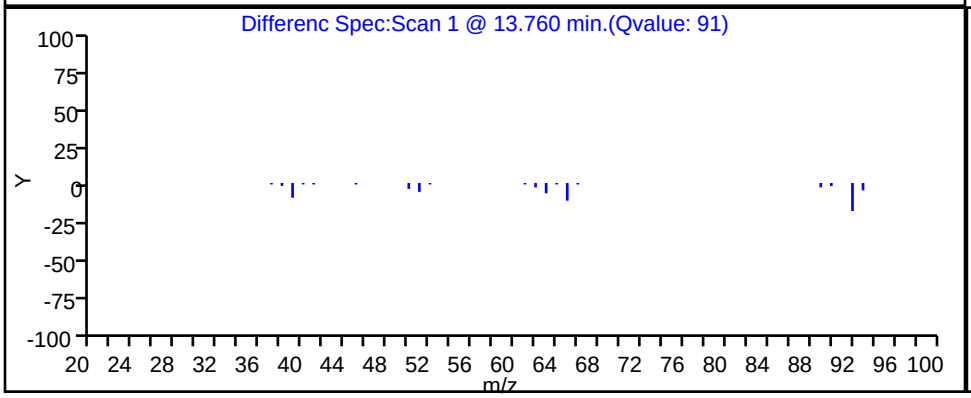


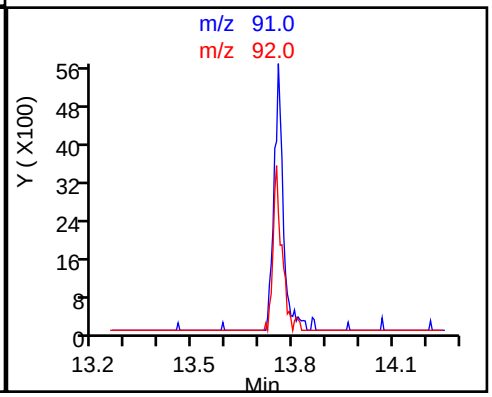








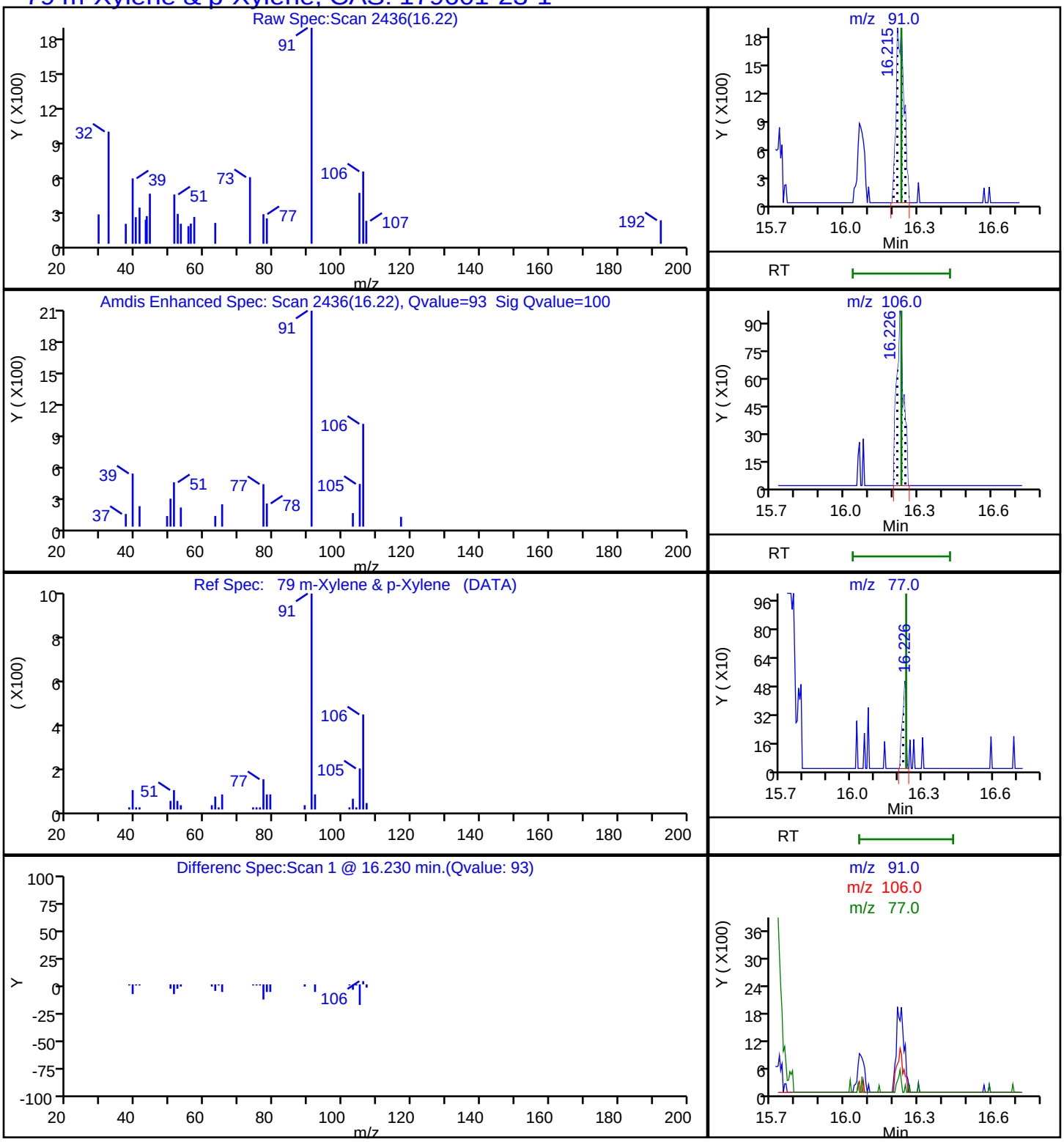




Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P113.D				
Injection Date:	07-Sep-2020 23:09:30	Instrument ID:	MG		
Lims ID:	140-20175-A-39	Lab Sample ID:	140-20175-39		
Client ID:	IA-BCK-2-29				
Operator ID:	AFB	ALS Bottle#:	13	Worklist Smp#:	19
Purge Vol:	500.000 mL	Dil. Factor:	2.2900		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

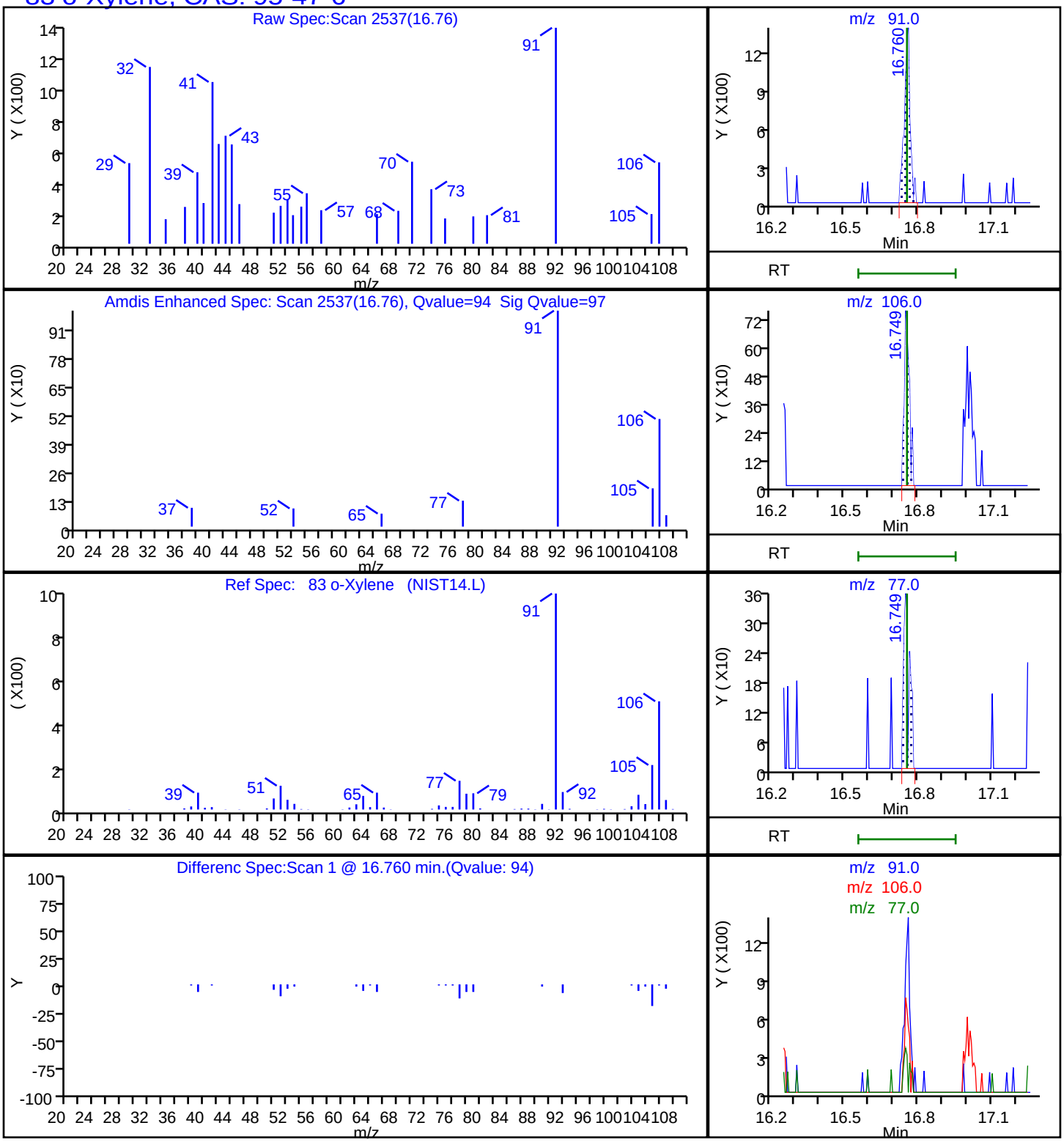
79 m-Xylene & p-Xylene, CAS: 179601-23-1



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P113.D		
Injection Date:	07-Sep-2020 23:09:30	Instrument ID:	MG
Lims ID:	140-20175-A-39	Lab Sample ID:	140-20175-39
Client ID:	IA-BCK-2-29		
Operator ID:	AFB	ALS Bottle#:	13 Worklist Smp#: 19
Purge Vol:	500.000 mL	Dil. Factor:	2.2900
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

83 o-Xylene, CAS: 95-47-6



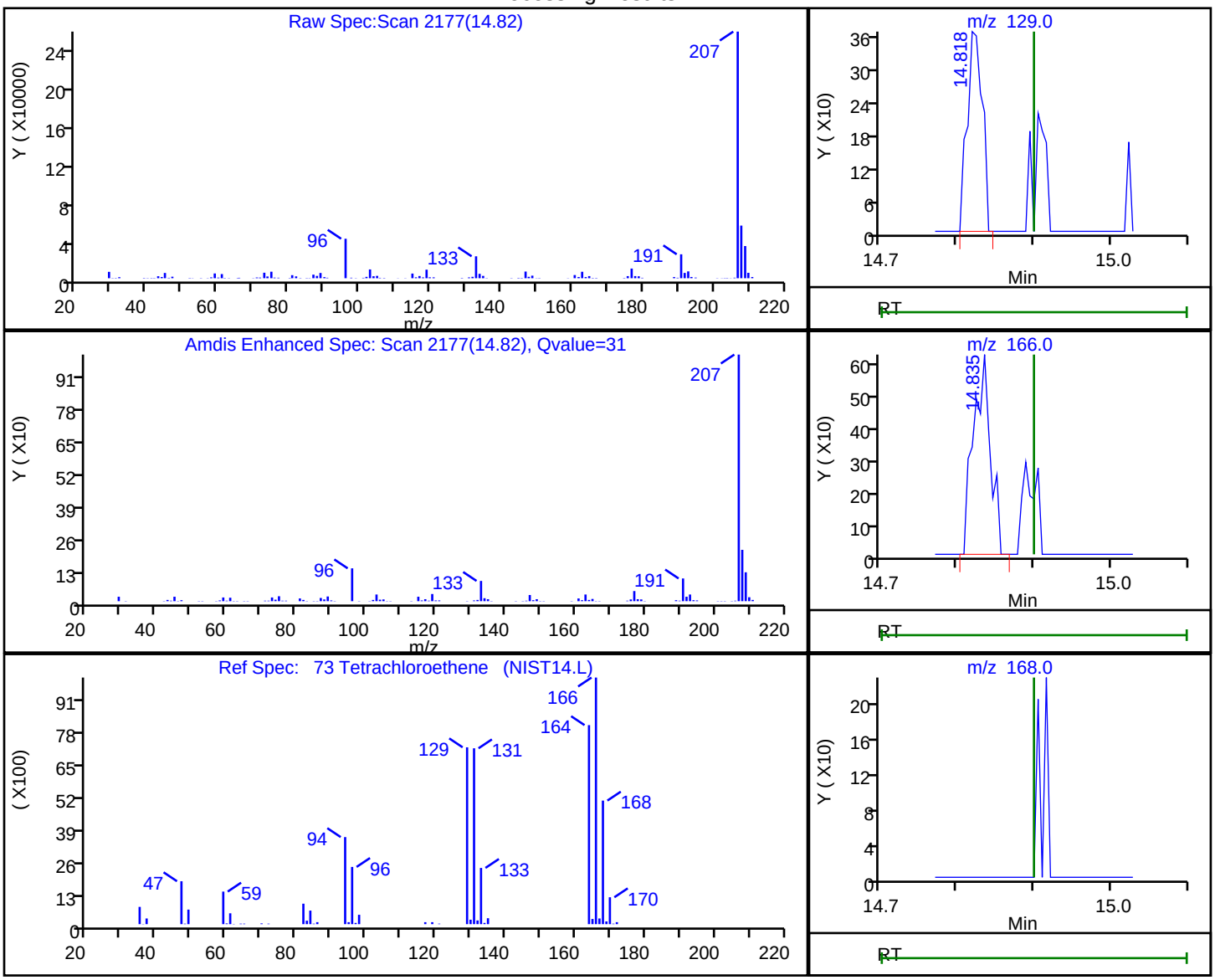
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P113.D				
Injection Date:	07-Sep-2020 23:09:30	Instrument ID:	MG		
Lims ID:	140-20175-A-39	Lab Sample ID:	140-20175-39		
Client ID:	IA-BCK-2-29				
Operator ID:	AFB	ALS Bottle#:	13	Worklist Smp#:	19
Purge Vol:	500.000 mL	Dil. Factor:	2.2900		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

73 Tetrachloroethene, CAS: 127-18-4

Processing Results



RT	Mass	Response	Amount
14.82	129.00	508	0.010590
14.83	166.00	965	
14.90	168.00	0	

Reviewer: barlozhetskayaa, 08-Sep-2020 13:22:04

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: IA-BCK-3-29 Lab Sample ID: 140-20175-40

Matrix: Air Lab File ID: GBI07P114.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 15:52

Sample wt/vol: 159(mL) Date Analyzed: 09/07/2020 23:56

Soil Aliquot Vol: Dilution Factor: 1.59

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42500 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.071	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.072	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	0.34	J	0.40	0.11
67-66-3	Chloroform	119.38	ND		0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	0.31	J	0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.39	J	0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	ND		0.40	0.065
75-09-2	Methylene Chloride	84.93	2.2		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.035
108-88-3	Toluene	92.14	0.41	J	0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	ND		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	0.11	J	0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.27	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	100		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: IA-BCK-3-29 Lab Sample ID: 140-20175-40

Matrix: Air Lab File ID: GBI07P114.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 15:52

Sample wt/vol: 159(mL) Date Analyzed: 09/07/2020 23:56

Soil Aliquot Vol: Dilution Factor: 1.59

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42500 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.23	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.45	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	1.2	J	1.4	0.39
67-66-3	Chloroform	119.38	ND		2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	1.2	J	1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	1.9	J	2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	ND		1.7	0.28
75-09-2	Methylene Chloride	84.93	7.8		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.24
108-88-3	Toluene	92.14	1.5	J	2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	ND		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	0.53	J	2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	1.2	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	100		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P114.D
Lims ID: 140-20175-A-40
Client ID: IA-BCK-3-29
Sample Type: Client
Inject. Date: 07-Sep-2020 23:56:30 ALS Bottle#: 14 Worklist Smp#: 20
Purge Vol: 500.000 mL Dil. Factor: 1.5900
Sample Info: 140-0016516-020
Misc. Info.: 140-20175-a-40@1.59
Operator ID: AFB Instrument ID: MG

Method: \\chromfs\Knoxville\ChromData\MG\20200904-16516.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 08-Sep-2020 13:22:12 Calib Date: 02-Sep-2020 03:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1021

First Level Reviewer: barlozhetskayaa Date: 08-Sep-2020 13:22:42

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.806	8.806	0.000	86	104188	4.80	
* 2 1,4-Difluorobenzene	114	10.990	10.995	-0.005	98	561438	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.730	15.730	0.000	95	569586	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.374	17.369	0.005	82	413801	4.63	
6 Chlorodifluoromethane	51	3.705	3.699	0.006	97	6392	0.0685	
8 Dichlorodifluoromethane	85	3.769	3.759	0.010	97	8057	0.0772	
31 Methylene Chloride	84	6.271	6.271	0.000	87	11511	0.4480	
42 cis-1,2-Dichloroethene	96	8.482	8.477	0.005	95	1961	0.0610	
50 Benzene	78	10.456	10.440	0.011	47	1632	0.0141	
52 Carbon tetrachloride	117	10.477	10.467	0.005	31	1025	0.0144	
67 Toluene	91	13.756	13.756	0.000	92	10181	0.0810	
79 m-Xylene & p-Xylene	91	16.215	16.231	-0.016	89	3716	0.0291	
83 o-Xylene	91	16.754	16.754	0.000	45	2977	0.0230	
95 1,2,4-Trimethylbenzene	105	18.550	18.545	0.006	93	3210	0.0217	
S 124 Xylenes, Total	100				0		0.0521	

Reagents:

40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

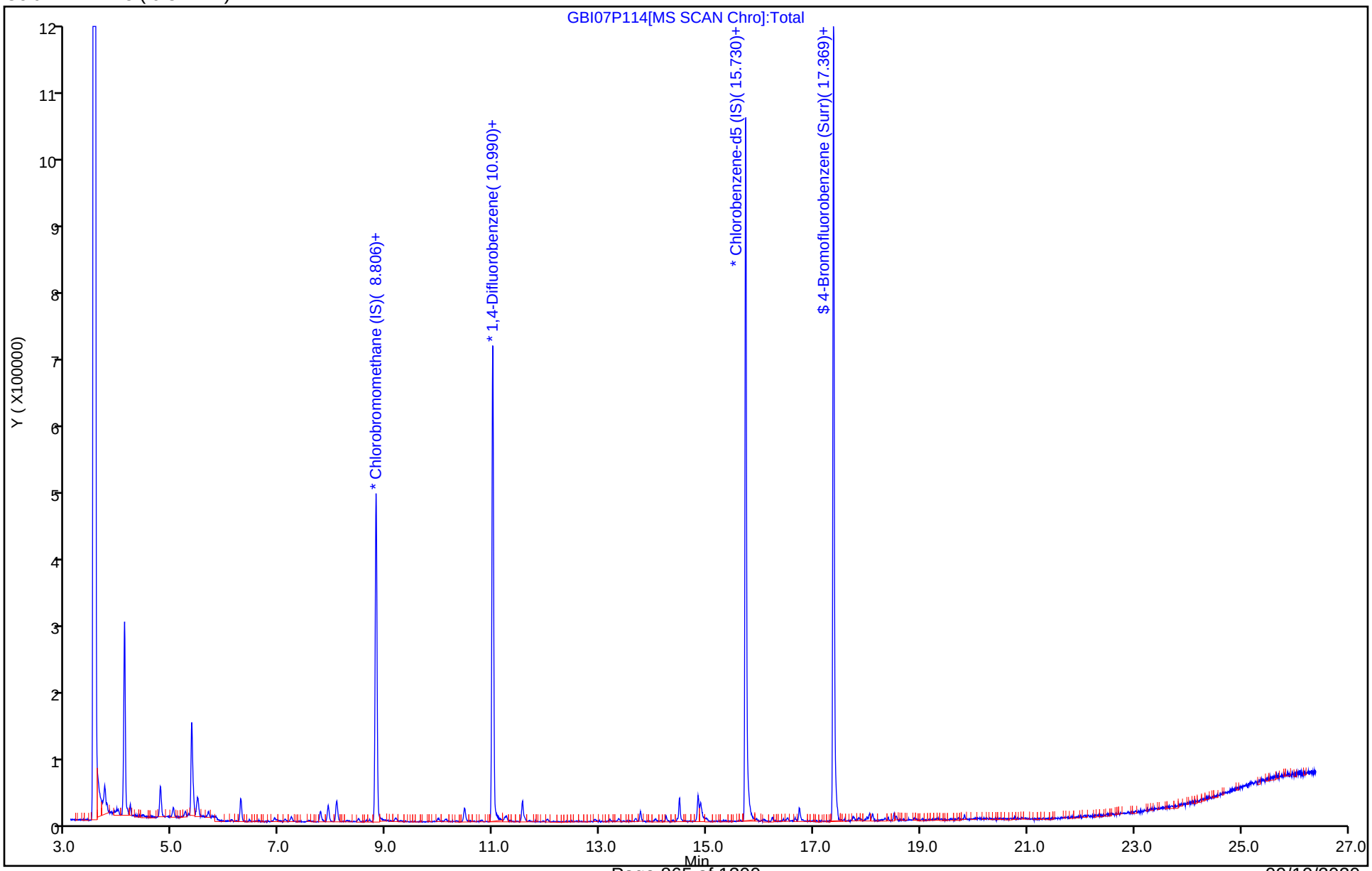
Report Date: 08-Sep-2020 13:22:42 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P114.D

Injection Date:	07-Sep-2020 23:56:30	Instrument ID:	MG	Operator ID:	AFB
Lims ID:	140-20175-A-40	Lab Sample ID:	140-20175-40	Worklist Smp#:	20
Client ID:	IA-BCK-3-29				
Purge Vol:	500.000 mL	Dil. Factor:	1.5900	ALS Bottle#:	14
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P114.D				
Lims ID:	140-20175-A-40				
Client ID:	IA-BCK-3-29				
Sample Type:	Client				
Inject. Date:	07-Sep-2020 23:56:30	ALS Bottle#:	14	Worklist Smp#:	20
Purge Vol:	500.000 mL	Dil. Factor:	1.5900		
Sample Info:	140-0016516-020				
Misc. Info.:	140-20175-a-40@1.59				
Operator ID:	AFB	Instrument ID:	MG		
Method:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\MG_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	08-Sep-2020 13:22:12	Calib Date:	02-Sep-2020 03:27:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1021				

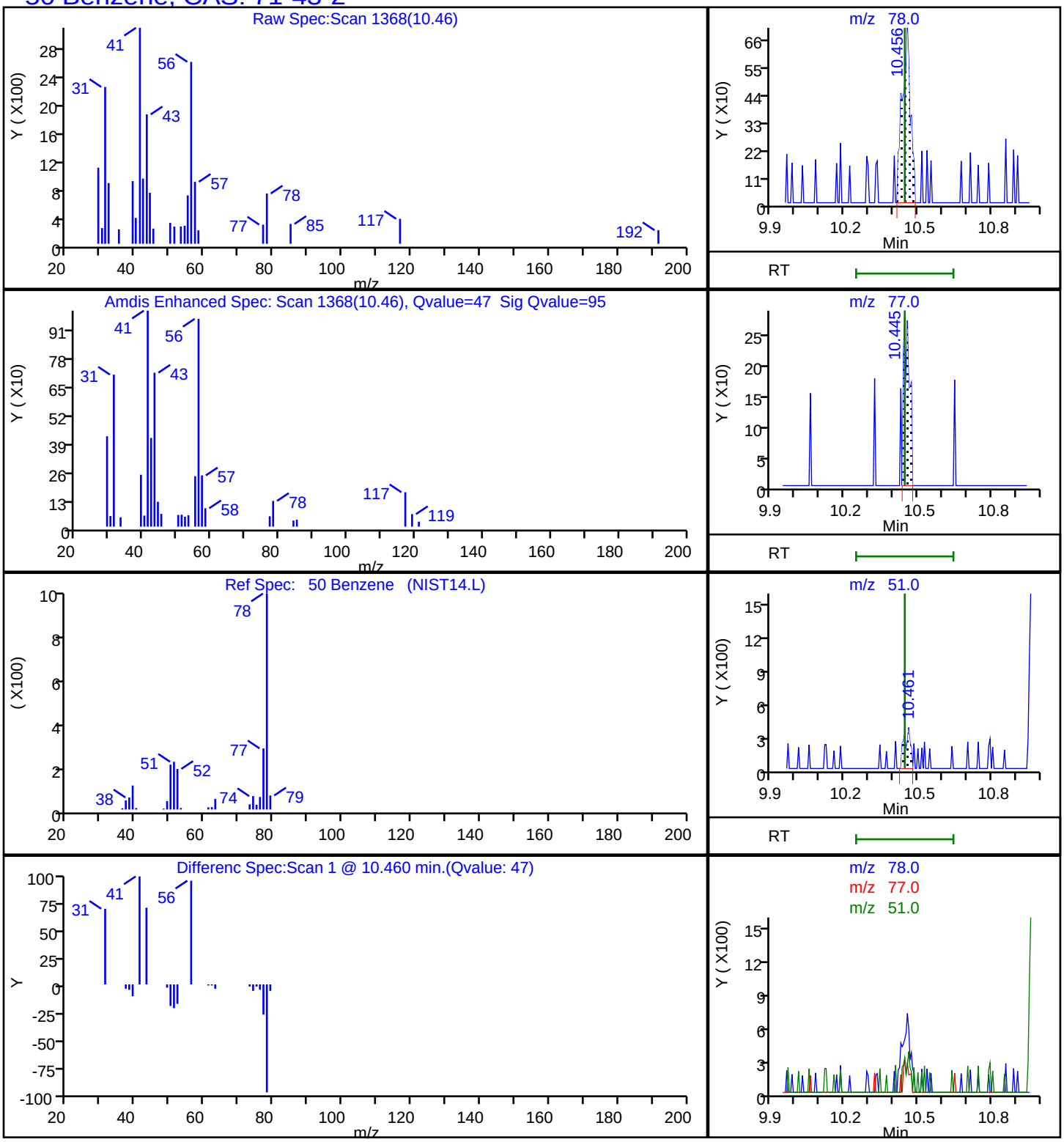
First Level Reviewer: barlozhetskayaa Date: 08-Sep-2020 13:22:42

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	4.63	99.78

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P114.D		
Injection Date:	07-Sep-2020 23:56:30	Instrument ID:	MG
Lims ID:	140-20175-A-40	Lab Sample ID:	140-20175-40
Client ID:	IA-BCK-3-29		
Operator ID:	AFB	ALS Bottle#:	14 Worklist Smp#: 20
Purge Vol:	500.000 mL	Dil. Factor:	1.5900
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

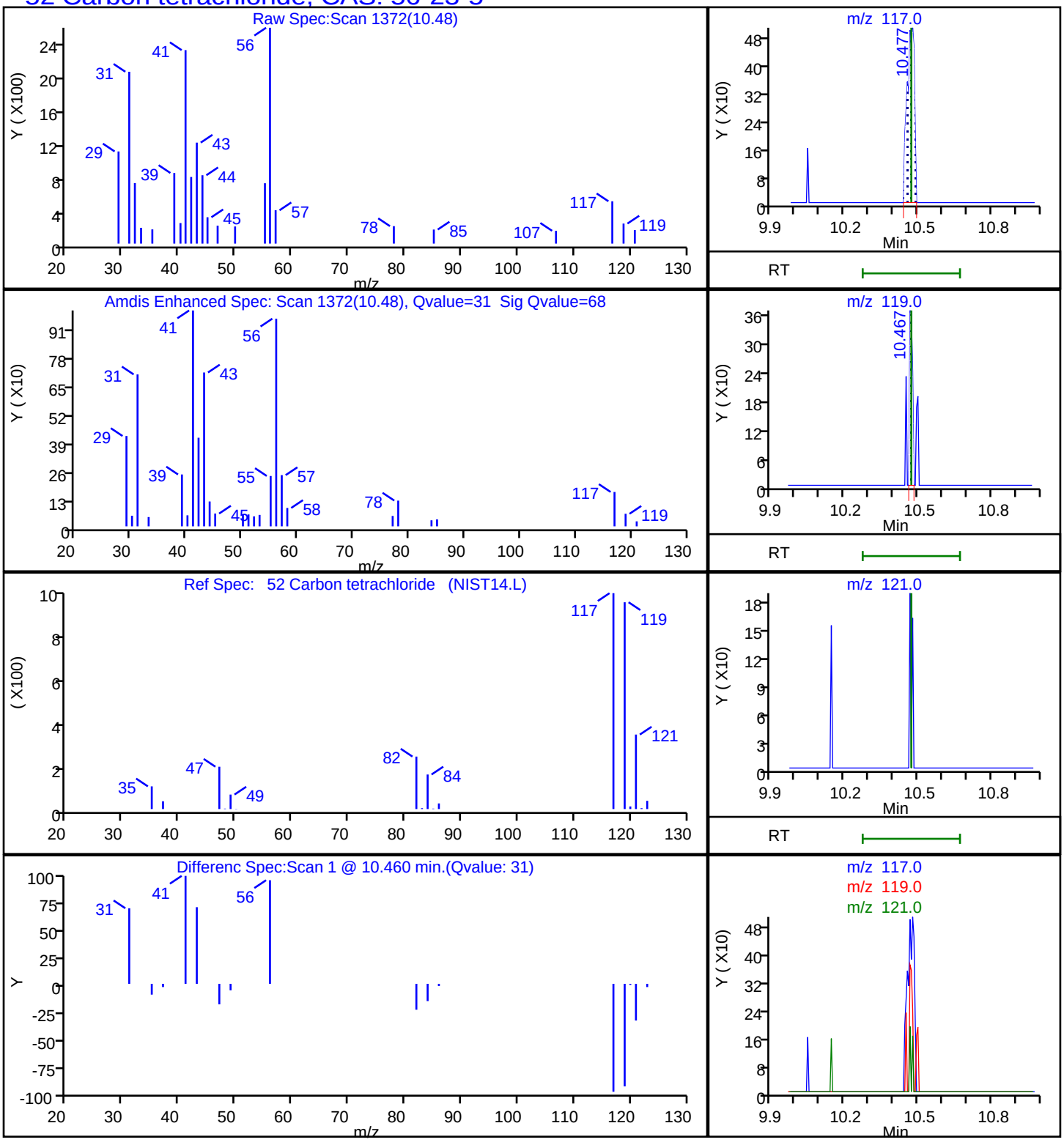
50 Benzene, CAS: 71-43-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P114.D		
Injection Date:	07-Sep-2020 23:56:30	Instrument ID:	MG
Lims ID:	140-20175-A-40	Lab Sample ID:	140-20175-40
Client ID:	IA-BCK-3-29		
Operator ID:	AFB	ALS Bottle#:	14 Worklist Smp#: 20
Purge Vol:	500.000 mL	Dil. Factor:	1.5900
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

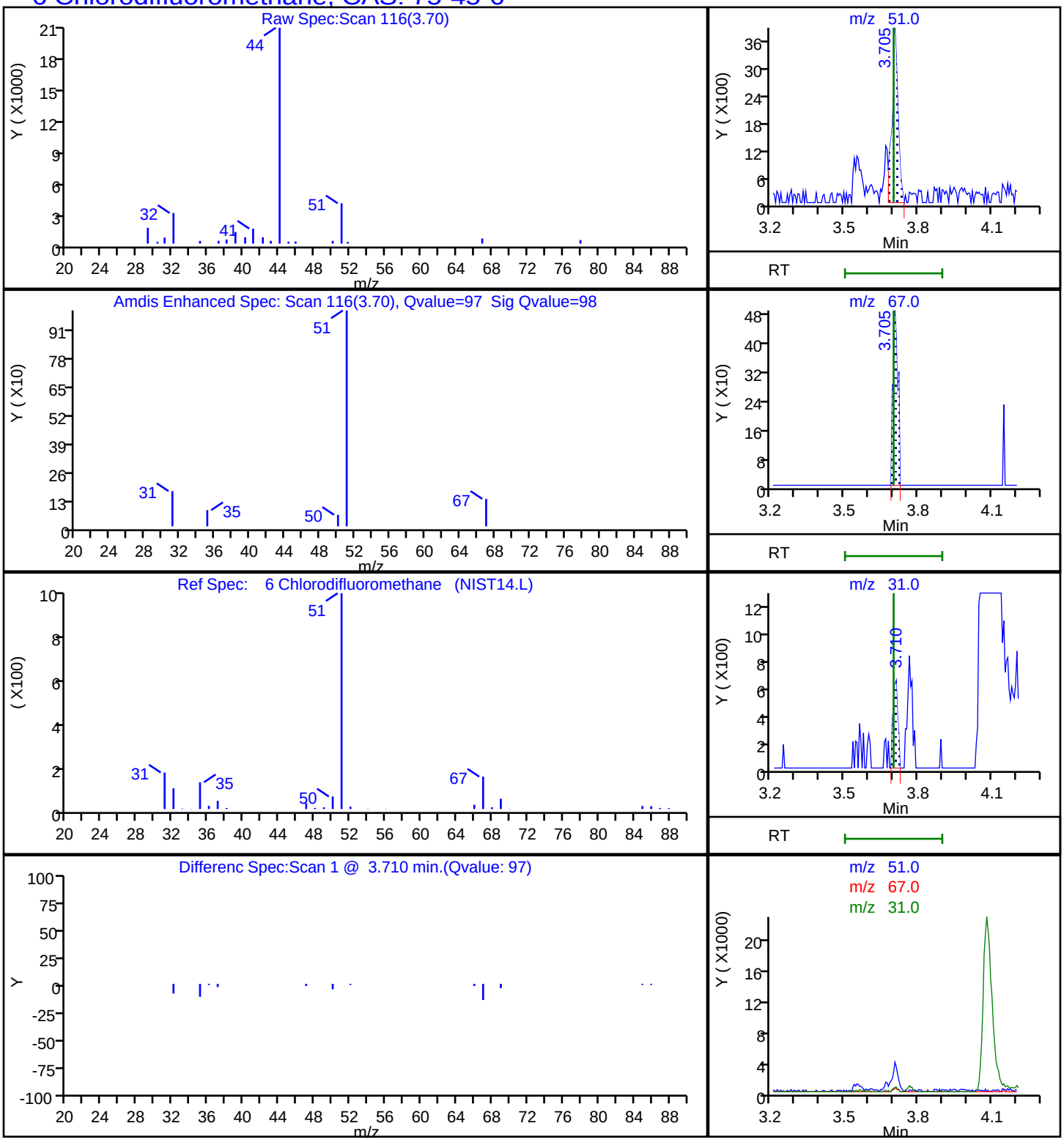
52 Carbon tetrachloride, CAS: 56-23-5



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P114.D				
Injection Date:	07-Sep-2020 23:56:30	Instrument ID:	MG		
Lims ID:	140-20175-A-40	Lab Sample ID:	140-20175-40		
Client ID:	IA-BCK-3-29				
Operator ID:	AFB	ALS Bottle#:	14	Worklist Smp#:	20
Purge Vol:	500.000 mL	Dil. Factor:	1.5900		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

6 Chlorodifluoromethane, CAS: 75-45-6

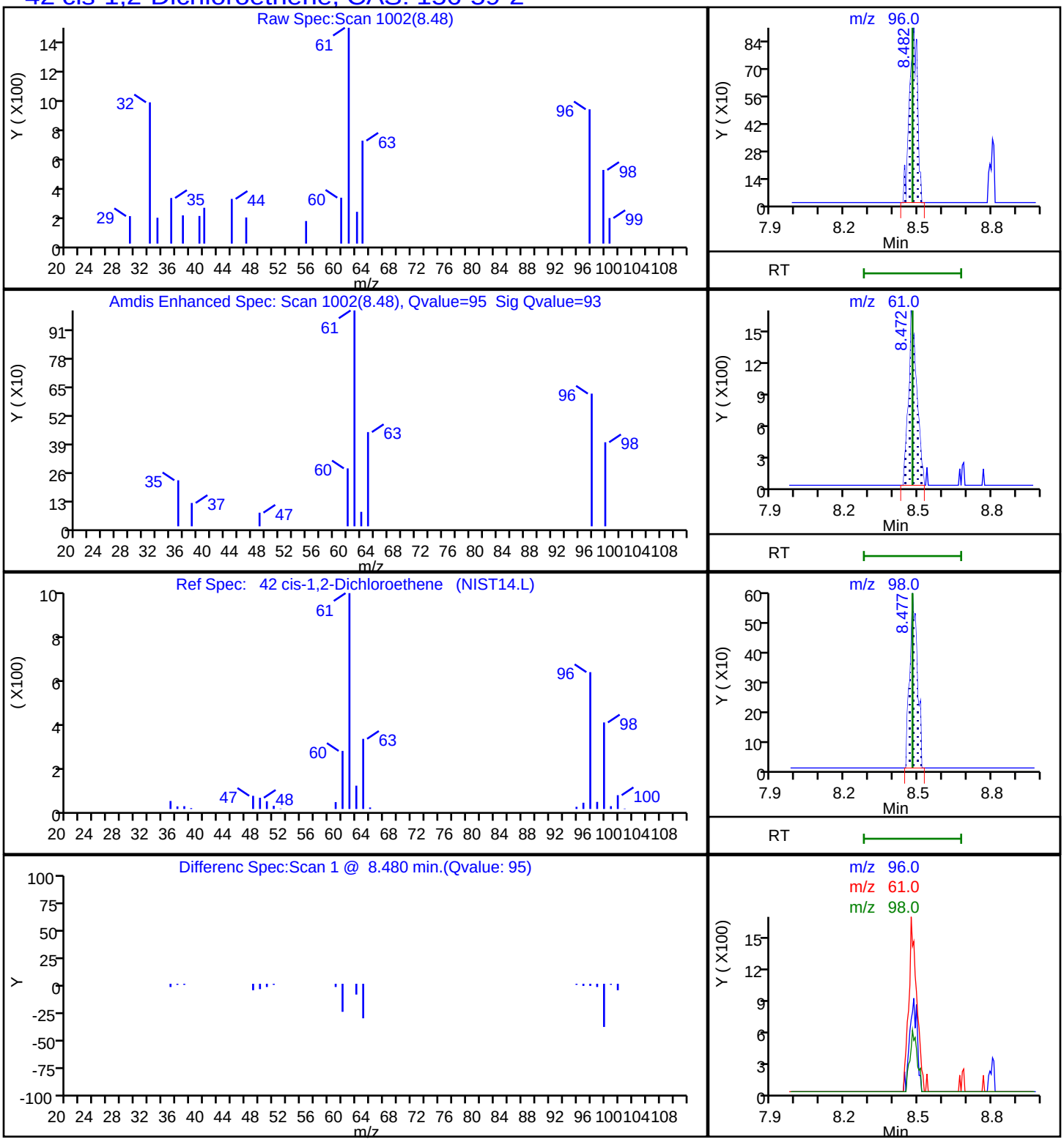


Report Date: 08-Sep-2020 13:22:42 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P114.D				
Injection Date:	07-Sep-2020 23:56:30	Instrument ID:	MG		
Lims ID:	140-20175-A-40	Lab Sample ID:	140-20175-40		
Client ID:	IA-BCK-3-29				
Operator ID:	AFB	ALS Bottle#:	14	Worklist Smp#:	20
Purge Vol:	500.000 mL	Dil. Factor:	1.5900		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

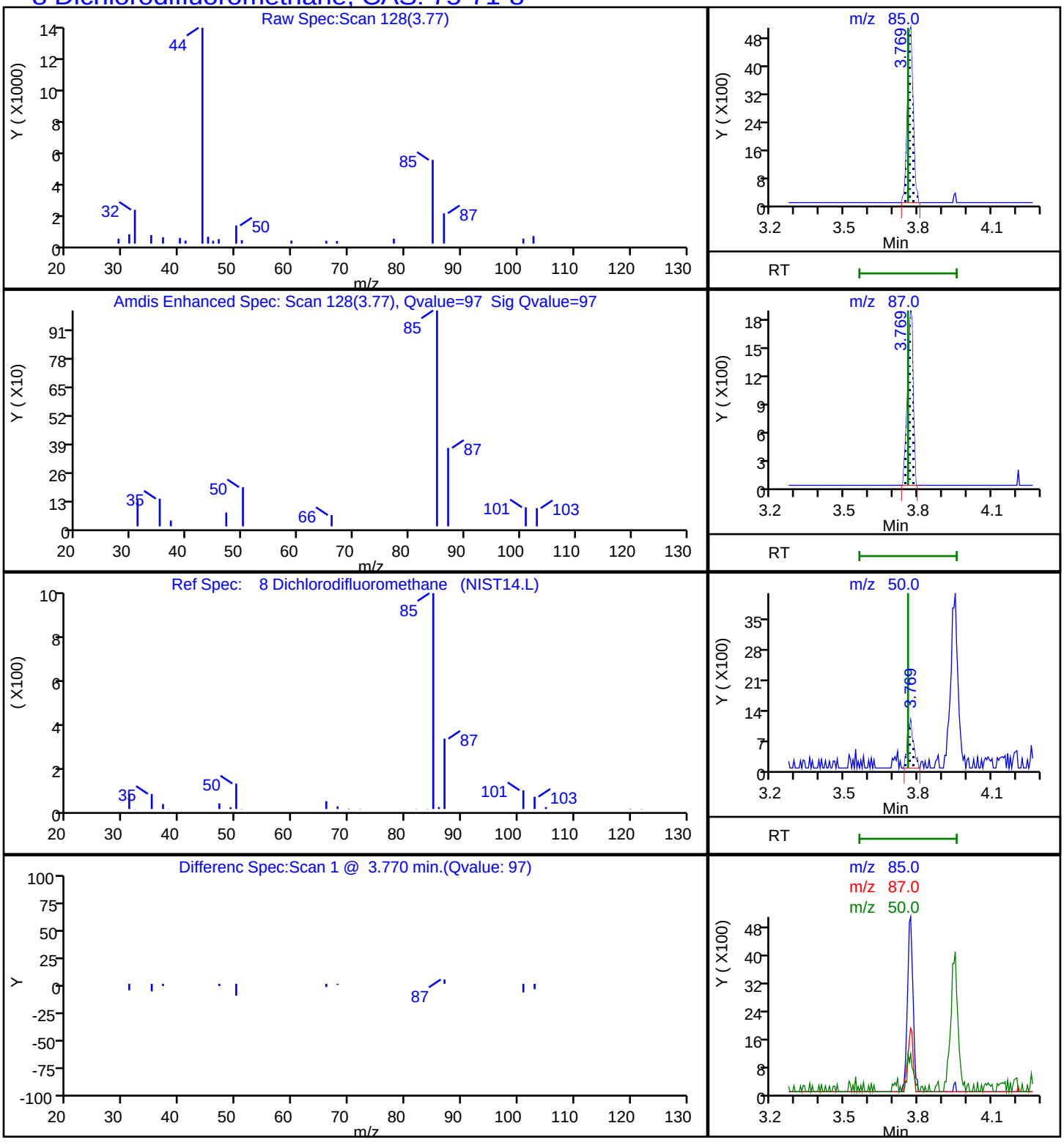
42 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P114.D		
Injection Date:	07-Sep-2020 23:56:30	Instrument ID:	MG
Lims ID:	140-20175-A-40	Lab Sample ID:	140-20175-40
Client ID:	IA-BCK-3-29		
Operator ID:	AFB	ALS Bottle#:	14 Worklist Smp#: 20
Purge Vol:	500.000 mL	Dil. Factor:	1.5900
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

8 Dichlorodifluoromethane, CAS: 75-71-8



Report Date: 08-Sep-2020 13:22:42 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P114.D

Injection Date: 07-Sep-2020 23:56:30 Instrument ID: MG

Lims ID: 140-20175-A-40 Lab Sample ID: 140-20175-40

Client ID: IA-BCK-3-29

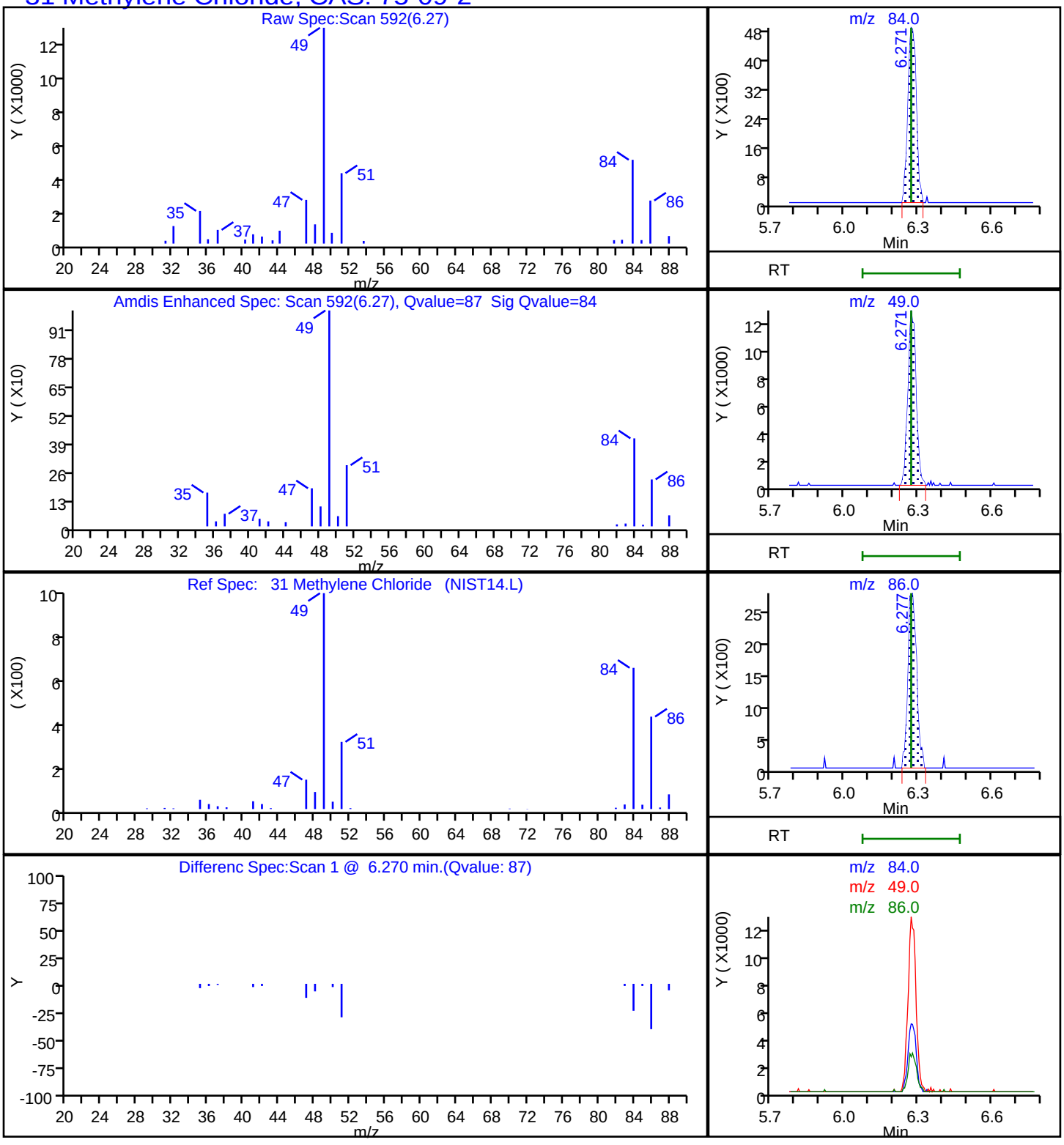
Operator ID: AFB ALS Bottle#: 14 Worklist Smp#: 20

Purge Vol: 500.000 mL Dil. Factor: 1.5900

Method: MG_TO15 Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm) Detector MS SCAN

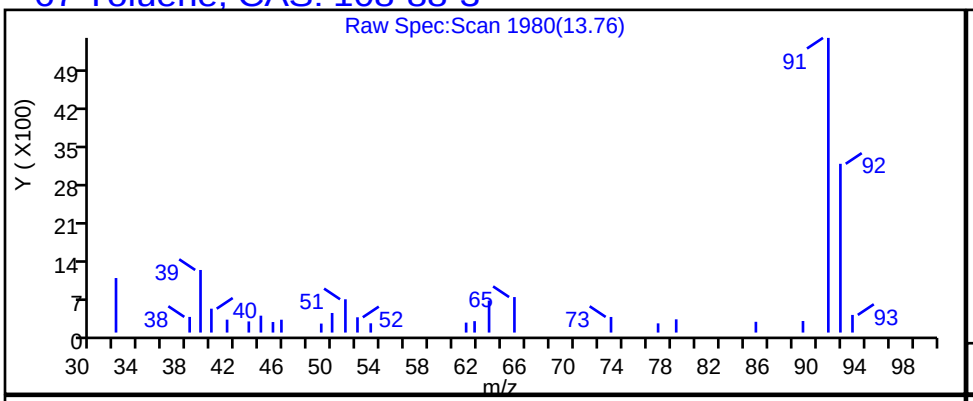
31 Methylene Chloride, CAS: 75-09-2

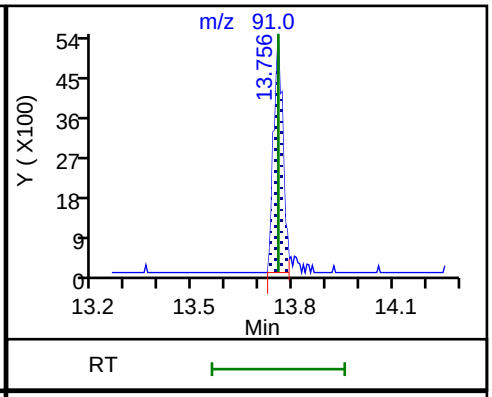


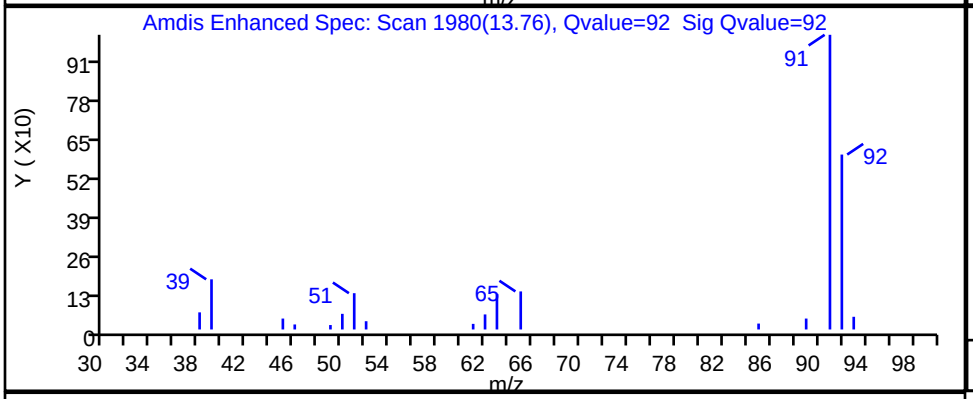
Eurofins TestAmerica, Knoxville

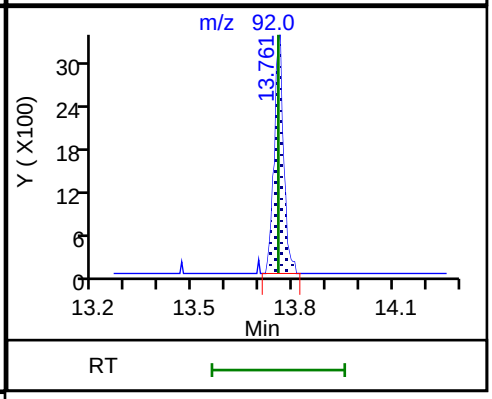
Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P114.D		
Injection Date:	07-Sep-2020 23:56:30	Instrument ID:	MG
Lims ID:	140-20175-A-40	Lab Sample ID:	140-20175-40
Client ID:	IA-BCK-3-29		
Operator ID:	AFB	ALS Bottle#:	14 Worklist Smp#: 20
Purge Vol:	500.000 mL	Dil. Factor:	1.5900
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

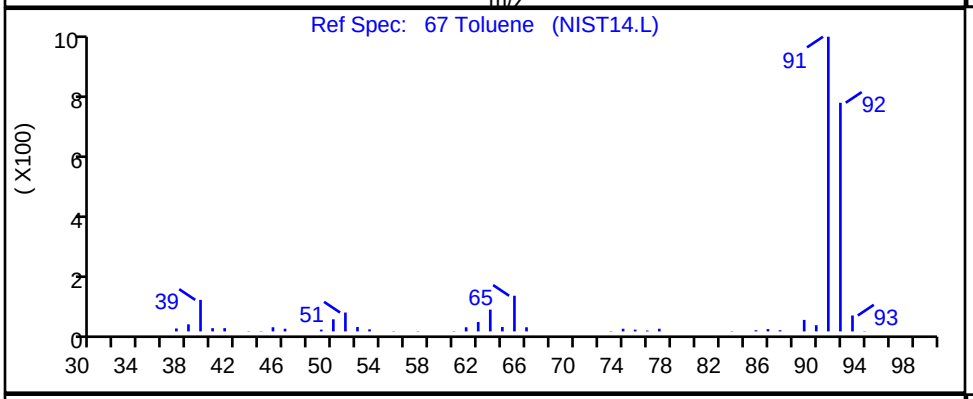
67 Toluene, CAS: 108-88-3

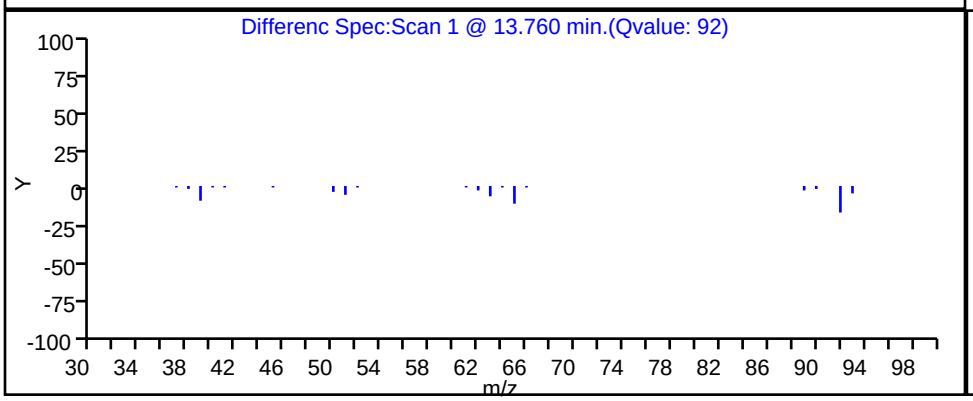


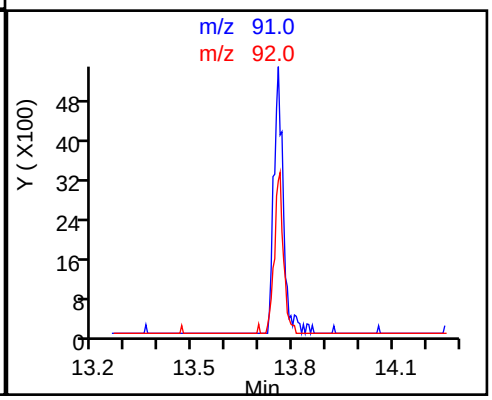








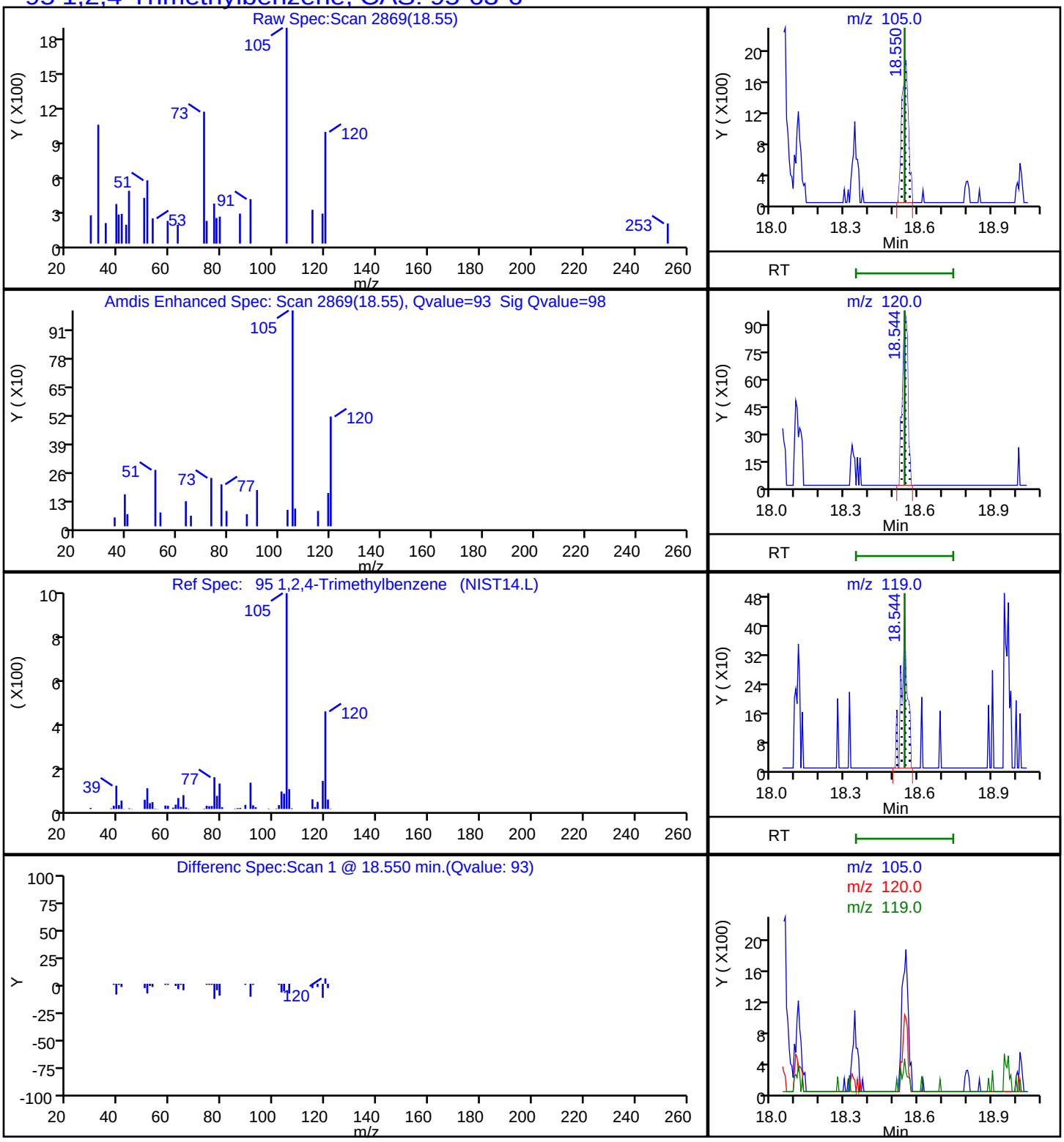




Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P114.D				
Injection Date:	07-Sep-2020 23:56:30	Instrument ID:	MG		
Lims ID:	140-20175-A-40	Lab Sample ID:	140-20175-40		
Client ID:	IA-BCK-3-29				
Operator ID:	AFB	ALS Bottle#:	14	Worklist Smp#:	20
Purge Vol:	500.000 mL	Dil. Factor:	1.5900		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

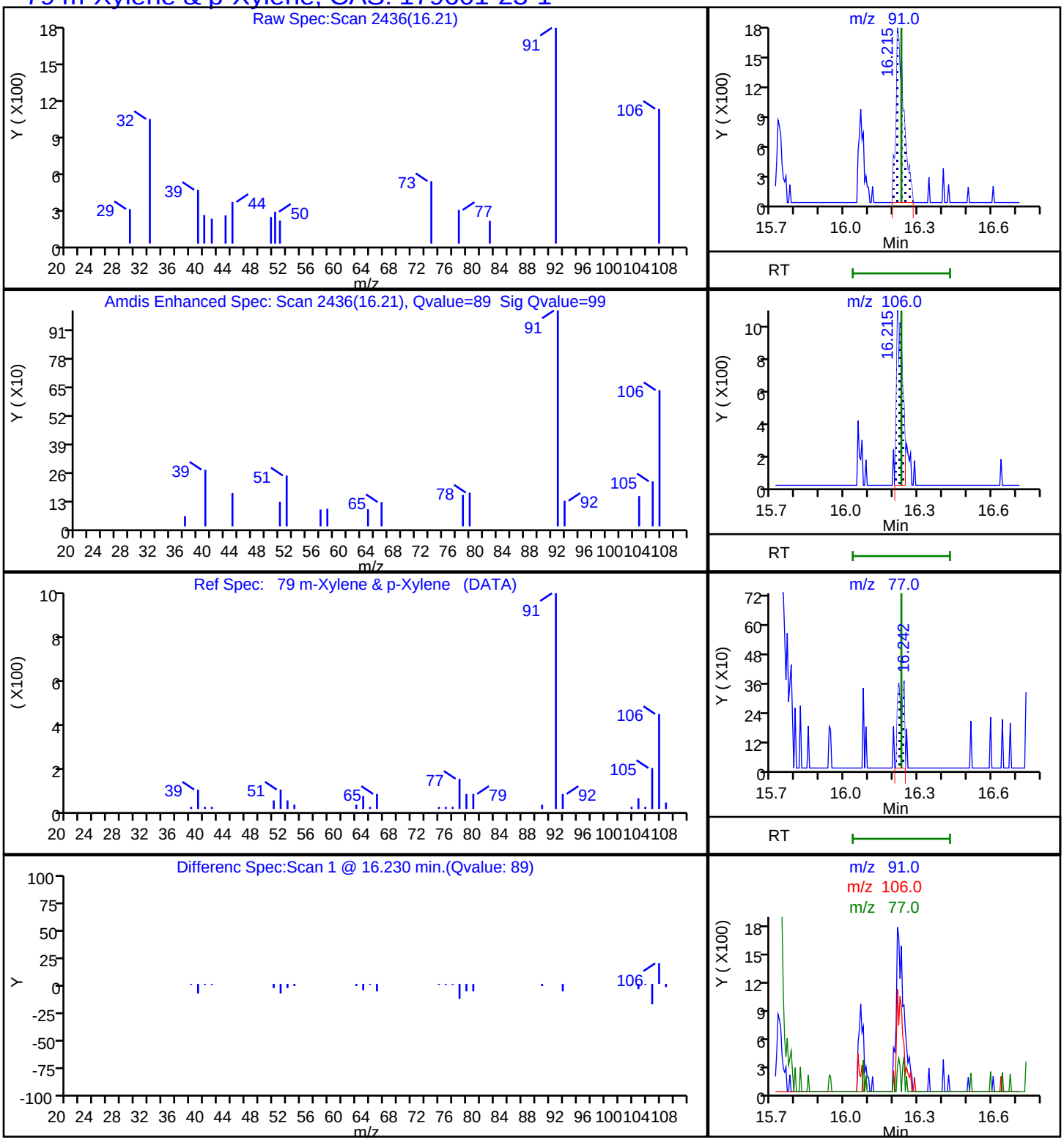
95 1,2,4-Trimethylbenzene, CAS: 95-63-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P114.D				
Injection Date:	07-Sep-2020 23:56:30	Instrument ID:	MG		
Lims ID:	140-20175-A-40	Lab Sample ID:	140-20175-40		
Client ID:	IA-BCK-3-29				
Operator ID:	AFB	ALS Bottle#:	14	Worklist Smp#:	20
Purge Vol:	500.000 mL	Dil. Factor:	1.5900		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

79 m-Xylene & p-Xylene, CAS: 179601-23-1

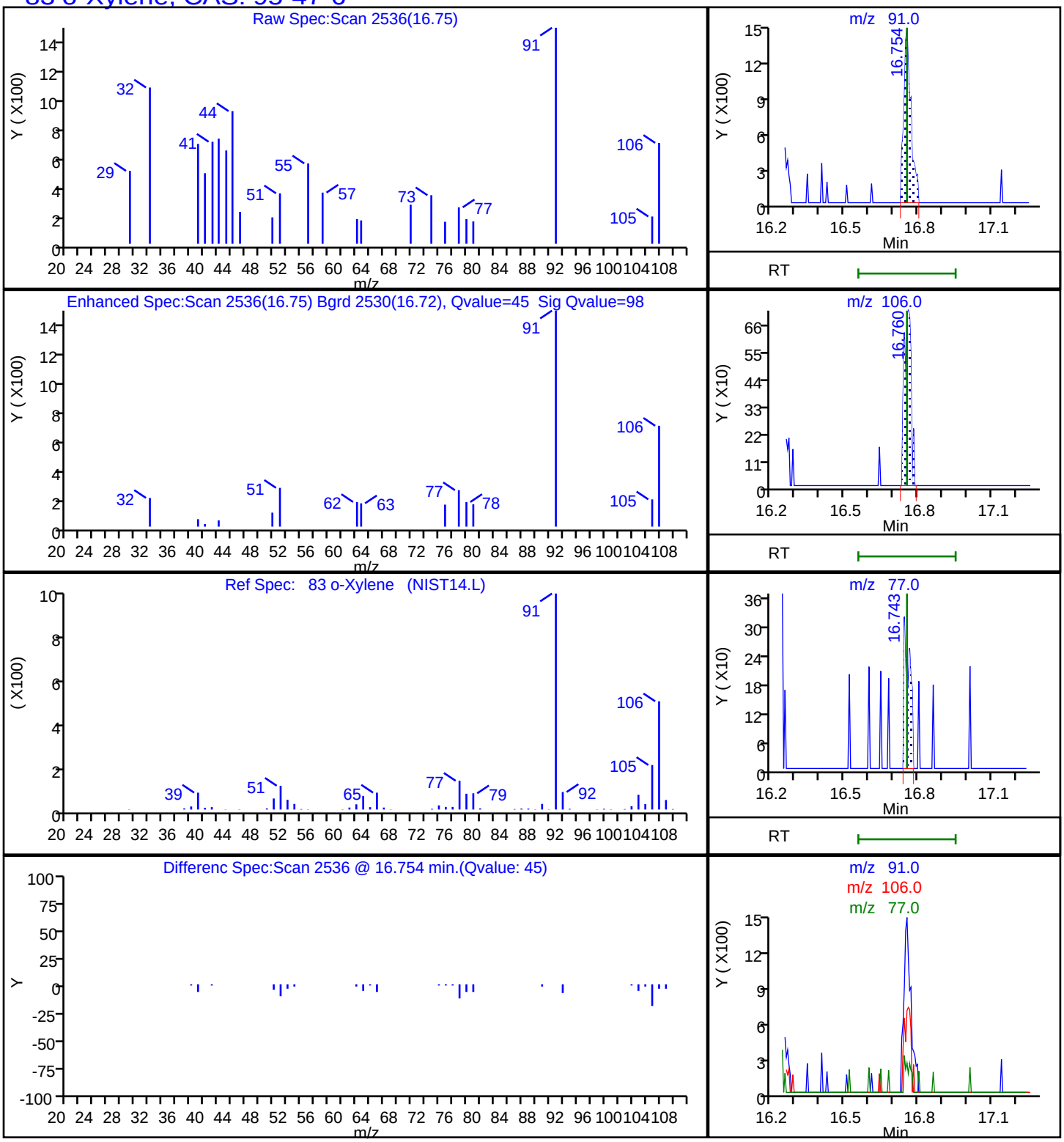


Report Date: 08-Sep-2020 13:22:43 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P114.D				
Injection Date:	07-Sep-2020 23:56:30	Instrument ID:	MG		
Lims ID:	140-20175-A-40	Lab Sample ID:	140-20175-40		
Client ID:	IA-BCK-3-29				
Operator ID:	AFB	ALS Bottle#:	14	Worklist Smp#:	20
Purge Vol:	500.000 mL	Dil. Factor:	1.5900		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

83 o-Xylene, CAS: 95-47-6



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: IA-BCK-4-29 Lab Sample ID: 140-20175-41

Matrix: Air Lab File ID: GBI07P115.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 15:57

Sample wt/vol: 152(mL) Date Analyzed: 09/08/2020 00:42

Soil Aliquot Vol: Dilution Factor: 1.52

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42500 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.14	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.048	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	0.35	J	0.40	0.11
67-66-3	Chloroform	119.38	ND		0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.42		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	ND		0.40	0.065
75-09-2	Methylene Chloride	84.93	3.6		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.035
108-88-3	Toluene	92.14	0.49	J	0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	ND		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.15	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	101		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: IA-BCK-4-29 Lab Sample ID: 140-20175-41

Matrix: Air Lab File ID: GBI07P115.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 15:57

Sample wt/vol: 152(mL) Date Analyzed: 09/08/2020 00:42

Soil Aliquot Vol: Dilution Factor: 1.52

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42500 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.43	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.30	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	1.2	J	1.4	0.39
67-66-3	Chloroform	119.38	ND		2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.1		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	ND		1.7	0.28
75-09-2	Methylene Chloride	84.93	12		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.24
108-88-3	Toluene	92.14	1.8	J	2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	ND		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	0.65	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	101		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P115.D
Lims ID: 140-20175-A-41
Client ID: IA-BCK-4-29
Sample Type: Client
Inject. Date: 08-Sep-2020 00:42:30 ALS Bottle#: 15 Worklist Smp#: 21
Purge Vol: 500.000 mL Dil. Factor: 1.5200
Sample Info: 140-0016516-021
Misc. Info.: 140-20175-a-41@1.52
Operator ID: AFB Instrument ID: MG

Method: \\chromfs\Knoxville\ChromData\MG\20200904-16516.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 08-Sep-2020 13:22:12 Calib Date: 02-Sep-2020 03:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1021

First Level Reviewer: barlozhetskayaa Date: 08-Sep-2020 13:23:10

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.806	8.806	0.000	85	100244	4.80	
* 2 1,4-Difluorobenzene	114	10.990	10.995	-0.005	98	551622	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.724	15.730	-0.006	95	520267	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.369	17.369	0.000	81	383925	4.70	
6 Chlorodifluoromethane	51	3.705	3.699	0.006	96	6256	0.0696	
8 Dichlorodifluoromethane	85	3.764	3.759	0.005	97	8391	0.0836	
31 Methylene Chloride	84	6.271	6.271	0.000	88	17781	0.7193	
50 Benzene	78	10.451	10.440	0.006	53	3076	0.0271	
52 Carbon tetrachloride	117	10.488	10.467	0.016	34	674	0.009616	
67 Toluene	91	13.751	13.756	-0.005	89	11259	0.0981	
79 m-Xylene & p-Xylene	91	16.220	16.231	-0.011	95	3498	0.0300	
S 124 Xylenes, Total	100				0		0.0300	

Reagents:

40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

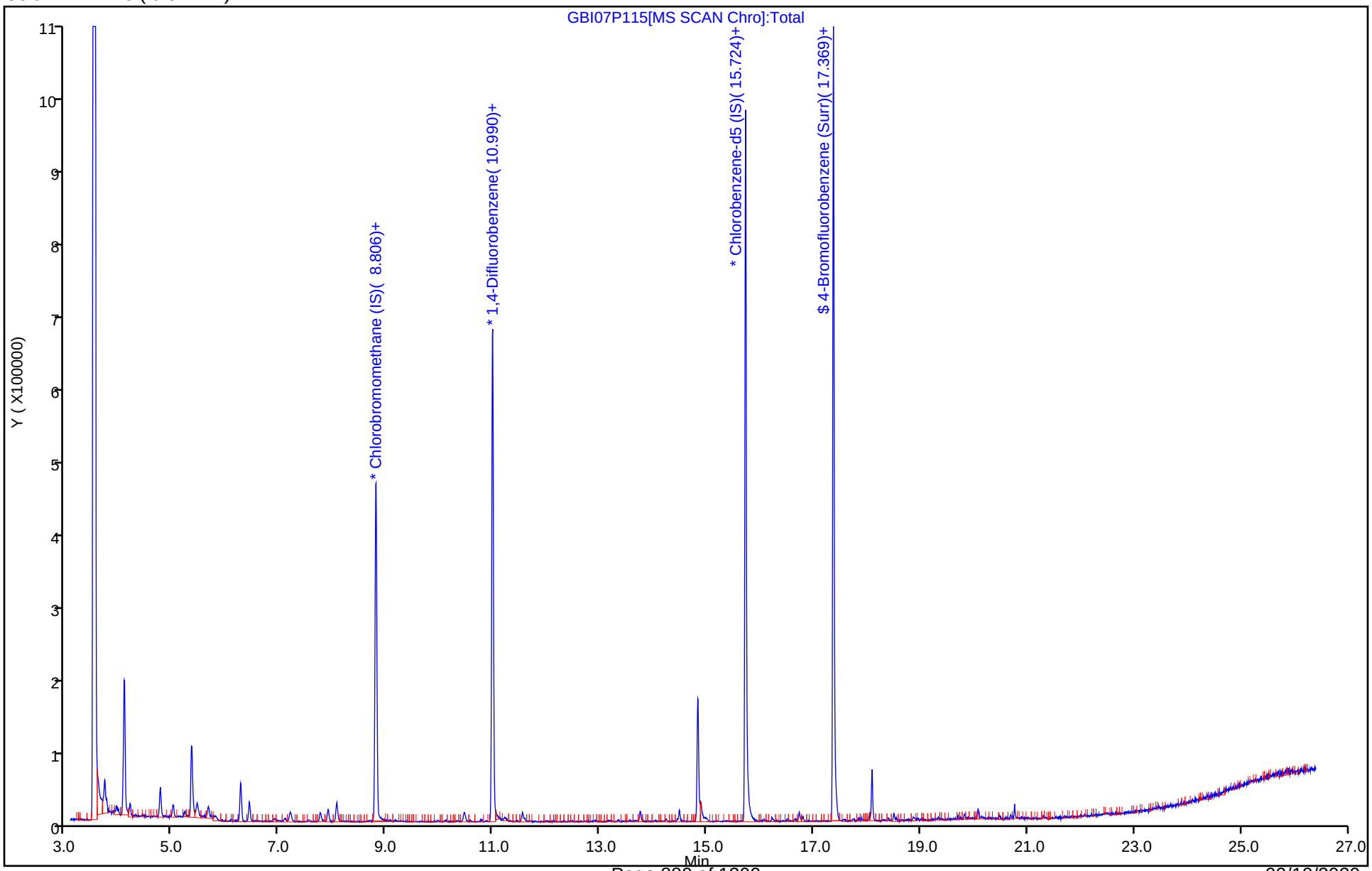
Report Date: 08-Sep-2020 13:23:10 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P115.D

Injection Date:	08-Sep-2020 00:42:30	Instrument ID:	MG	Operator ID:	AFB
Lims ID:	140-20175-A-41	Lab Sample ID:	140-20175-41	Worklist Smp#:	21
Client ID:	IA-BCK-4-29				
Purge Vol:	500.000 mL	Dil. Factor:	1.5200	ALS Bottle#:	15
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

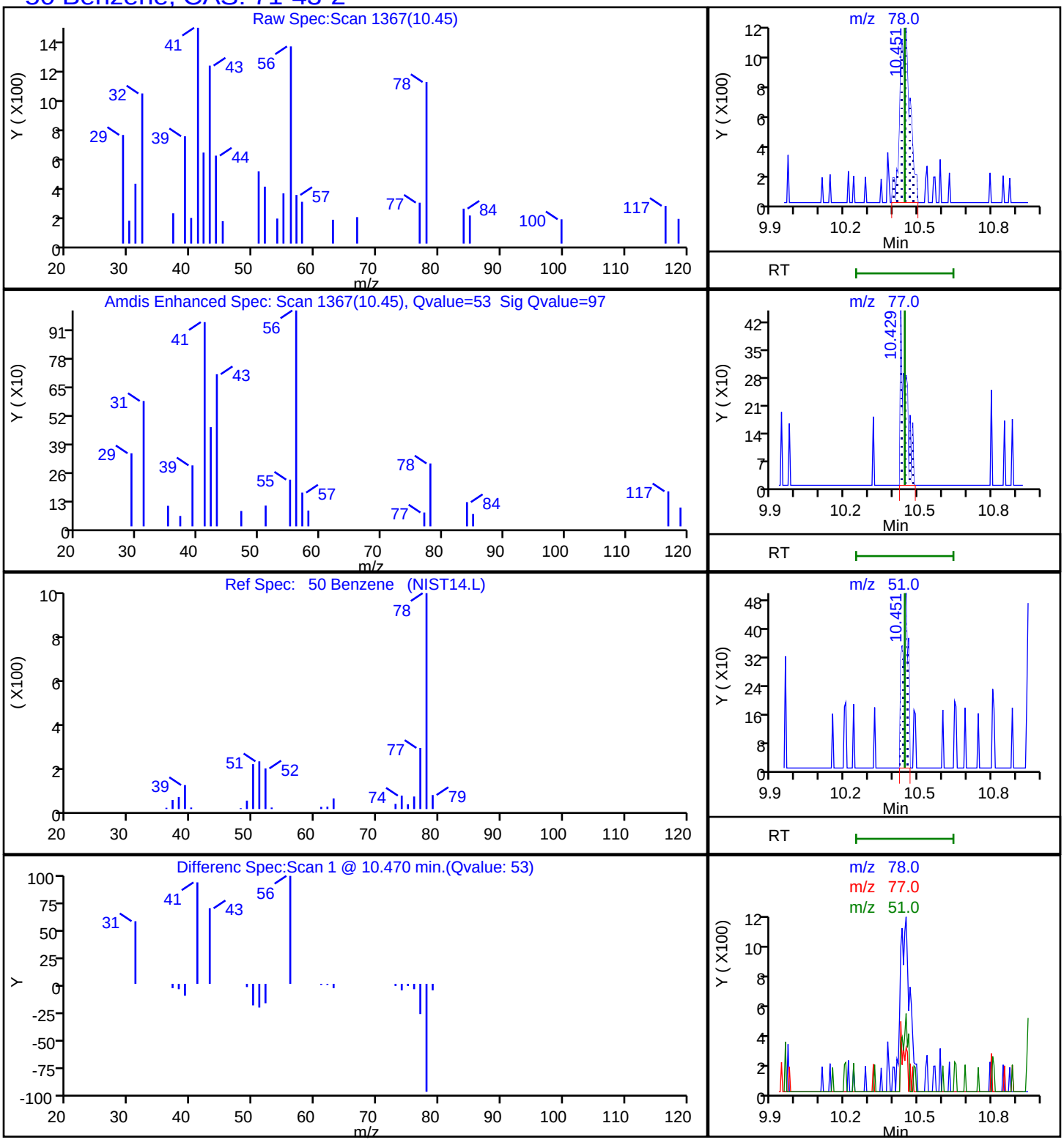
Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P115.D				
Lims ID:	140-20175-A-41				
Client ID:	IA-BCK-4-29				
Sample Type:	Client				
Inject. Date:	08-Sep-2020 00:42:30	ALS Bottle#:	15	Worklist Smp#:	21
Purge Vol:	500.000 mL	Dil. Factor:	1.5200		
Sample Info:	140-0016516-021				
Misc. Info.:	140-20175-a-41@1.52				
Operator ID:	AFB	Instrument ID:	MG		
Method:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\MG_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	08-Sep-2020 13:22:12	Calib Date:	02-Sep-2020 03:27:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1021				
First Level Reviewer: barlozhetskayaa		Date:	08-Sep-2020 13:23:10		

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	4.70	101.35

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P115.D		
Injection Date:	08-Sep-2020 00:42:30	Instrument ID:	MG
Lims ID:	140-20175-A-41	Lab Sample ID:	140-20175-41
Client ID:	IA-BCK-4-29		
Operator ID:	AFB	ALS Bottle#:	15 Worklist Smp#: 21
Purge Vol:	500.000 mL	Dil. Factor:	1.5200
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

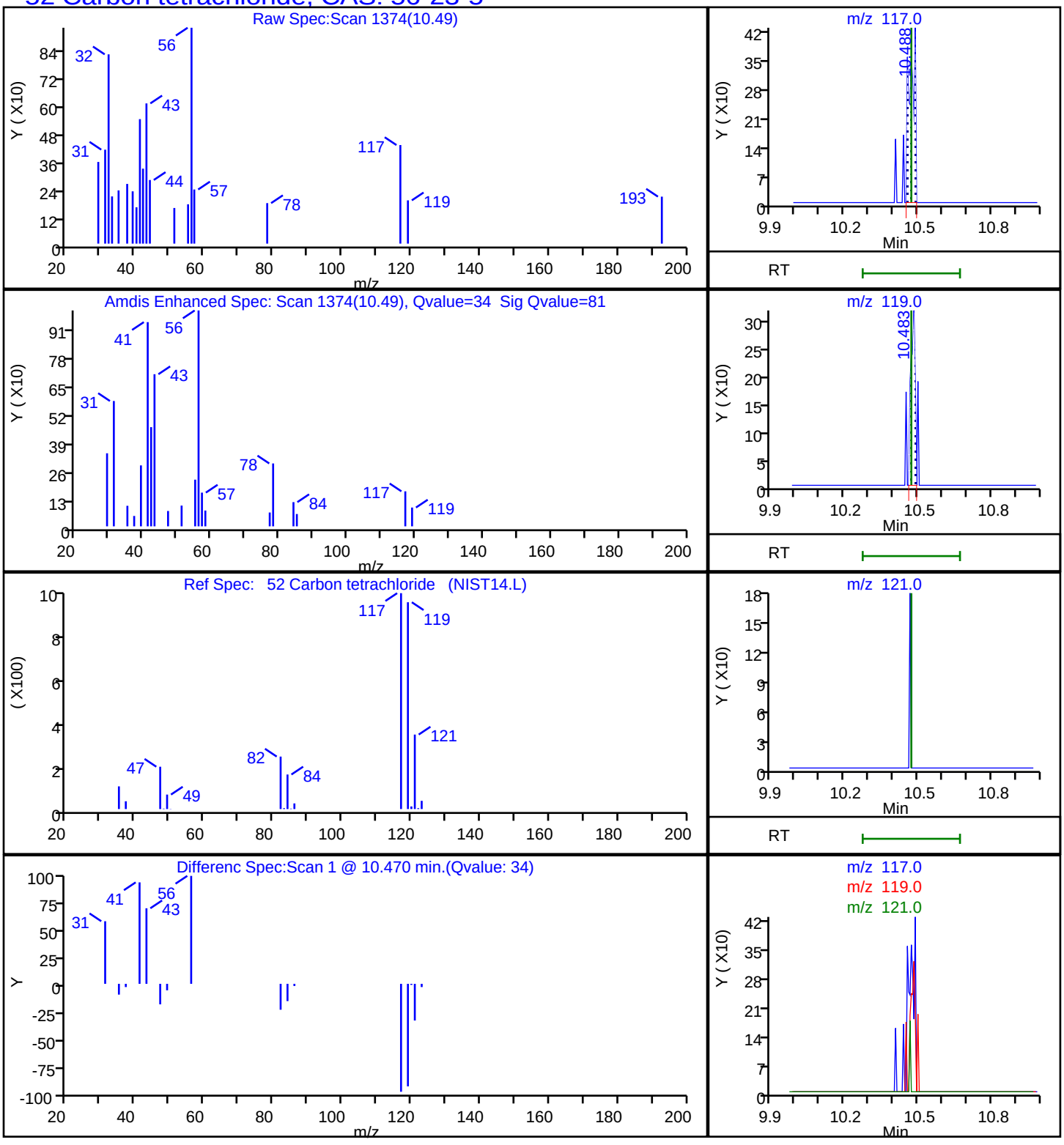
50 Benzene, CAS: 71-43-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P115.D		
Injection Date:	08-Sep-2020 00:42:30	Instrument ID:	MG
Lims ID:	140-20175-A-41	Lab Sample ID:	140-20175-41
Client ID:	IA-BCK-4-29		
Operator ID:	AFB	ALS Bottle#:	15 Worklist Smp#: 21
Purge Vol:	500.000 mL	Dil. Factor:	1.5200
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

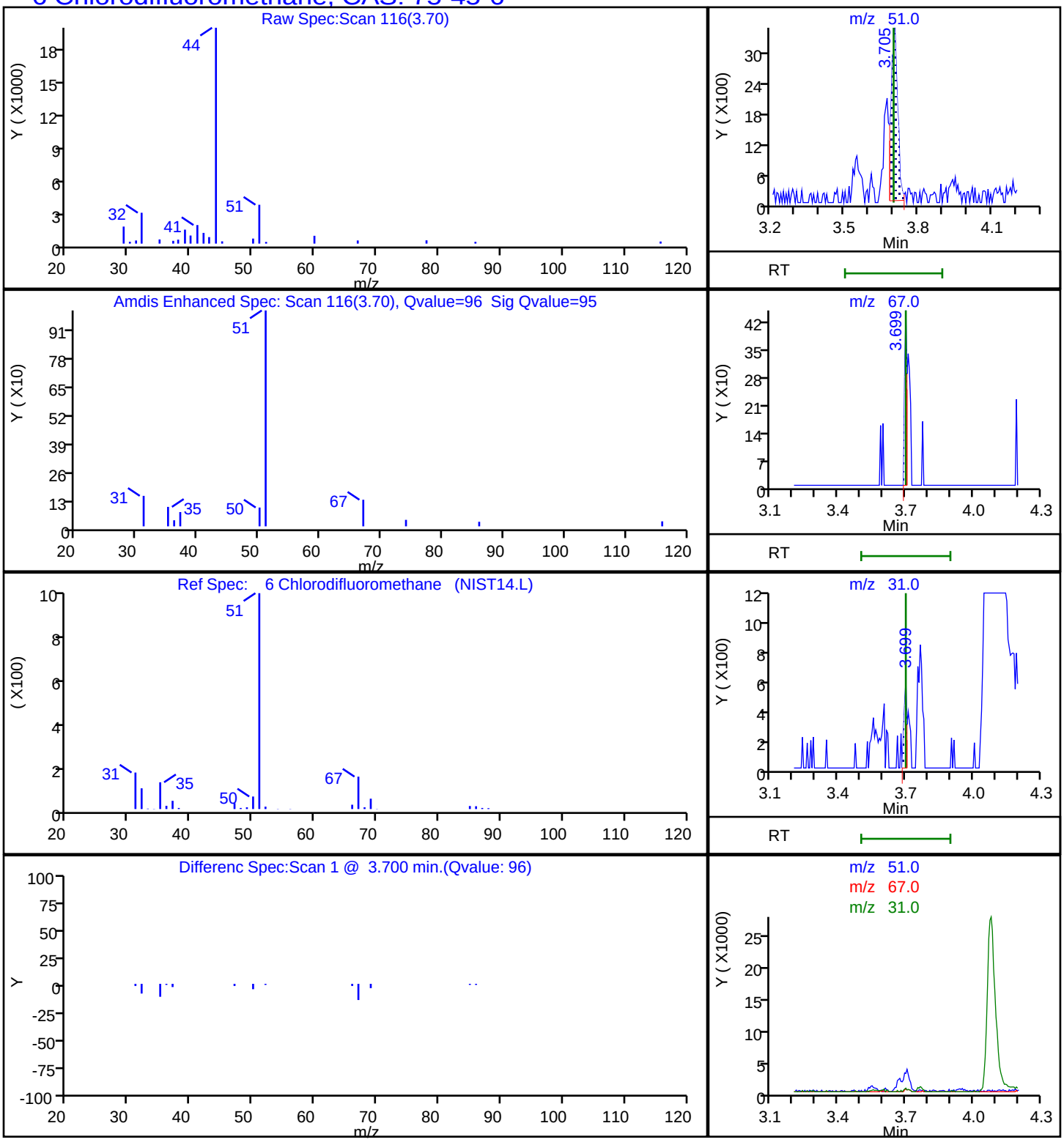
52 Carbon tetrachloride, CAS: 56-23-5



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P115.D				
Injection Date:	08-Sep-2020 00:42:30	Instrument ID:	MG		
Lims ID:	140-20175-A-41	Lab Sample ID:	140-20175-41		
Client ID:	IA-BCK-4-29				
Operator ID:	AFB	ALS Bottle#:	15	Worklist Smp#:	21
Purge Vol:	500.000 mL	Dil. Factor:	1.5200		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

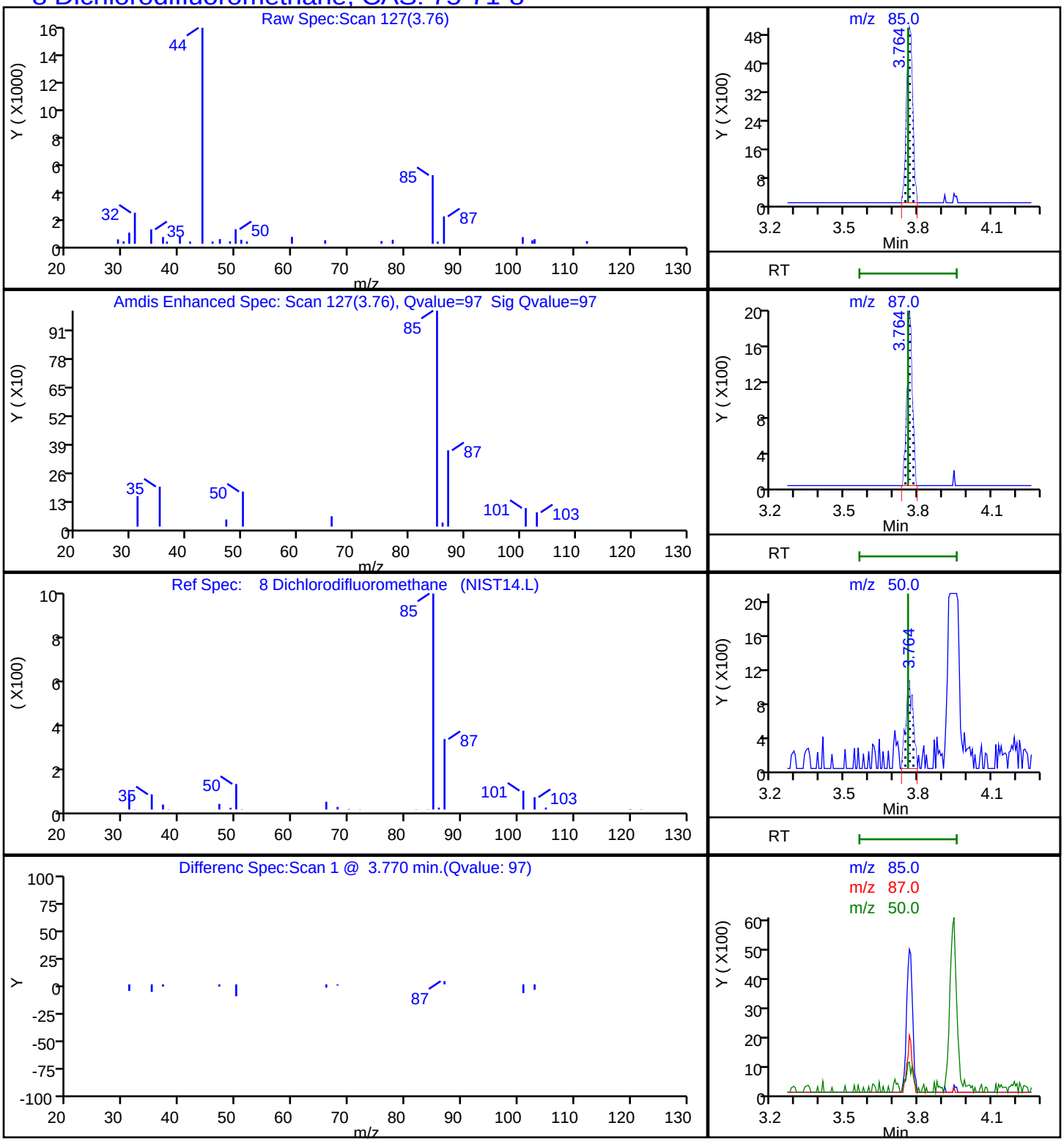
6 Chlorodifluoromethane, CAS: 75-45-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P115.D		
Injection Date:	08-Sep-2020 00:42:30	Instrument ID:	MG
Lims ID:	140-20175-A-41	Lab Sample ID:	140-20175-41
Client ID:	IA-BCK-4-29		
Operator ID:	AFB	ALS Bottle#:	15 Worklist Smp#: 21
Purge Vol:	500.000 mL	Dil. Factor:	1.5200
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

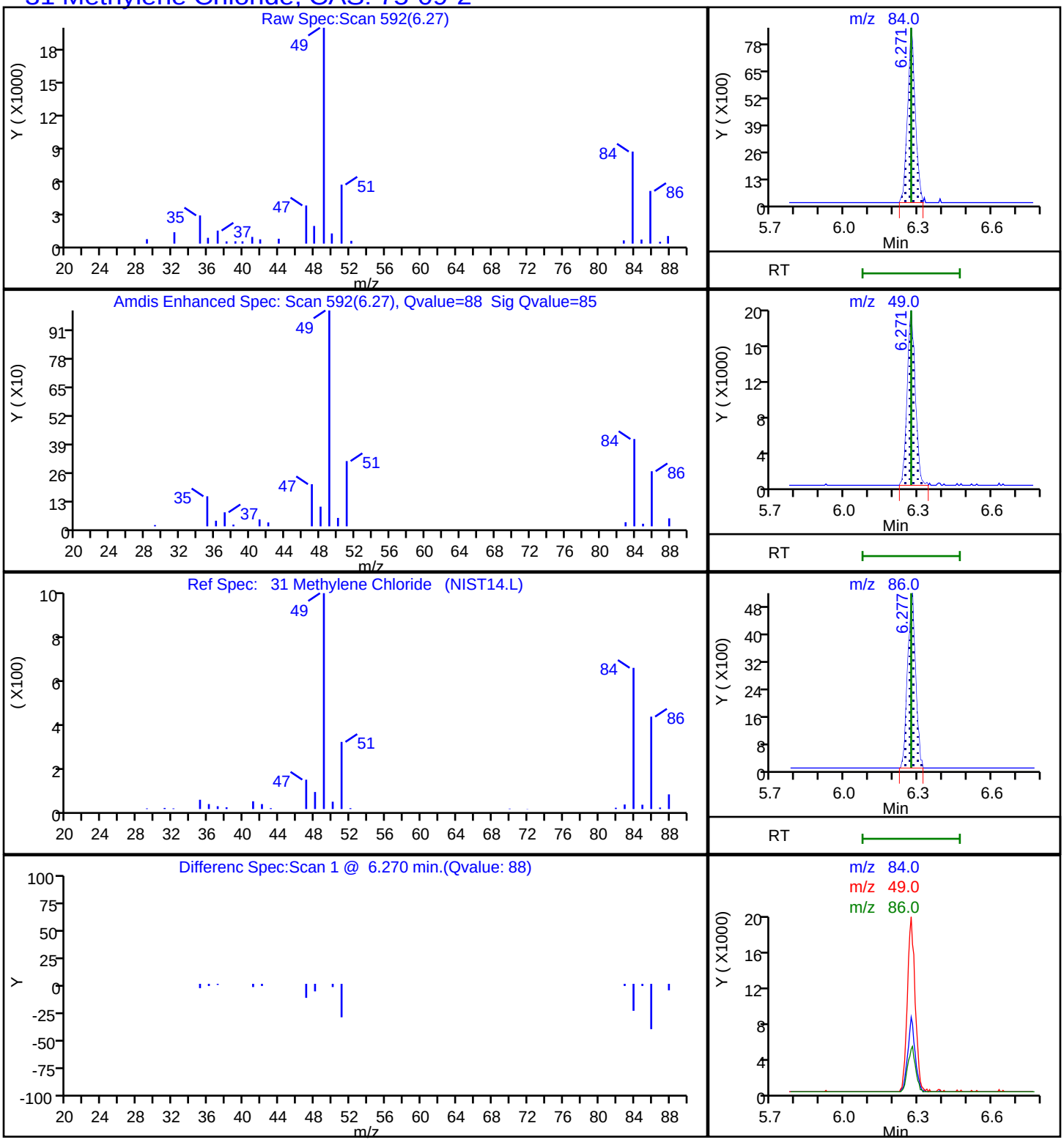
8 Dichlorodifluoromethane, CAS: 75-71-8



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P115.D		
Injection Date:	08-Sep-2020 00:42:30	Instrument ID:	MG
Lims ID:	140-20175-A-41	Lab Sample ID:	140-20175-41
Client ID:	IA-BCK-4-29		
Operator ID:	AFB	ALS Bottle#:	15 Worklist Smp#: 21
Purge Vol:	500.000 mL	Dil. Factor:	1.5200
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

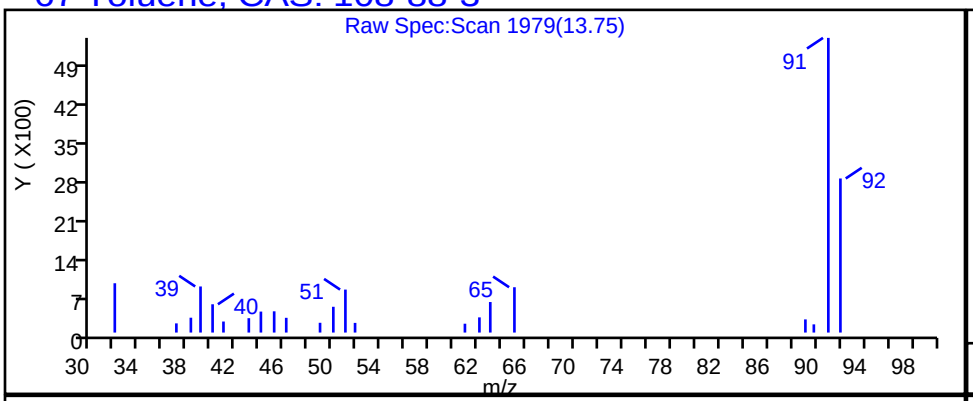
31 Methylene Chloride, CAS: 75-09-2

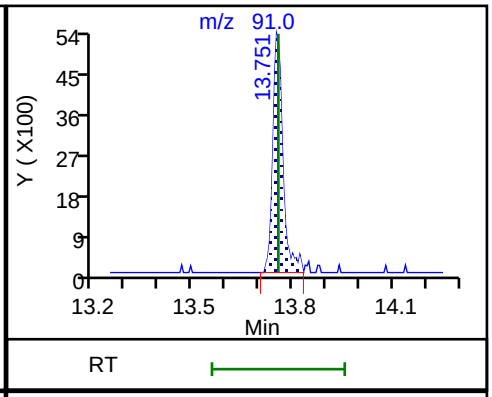


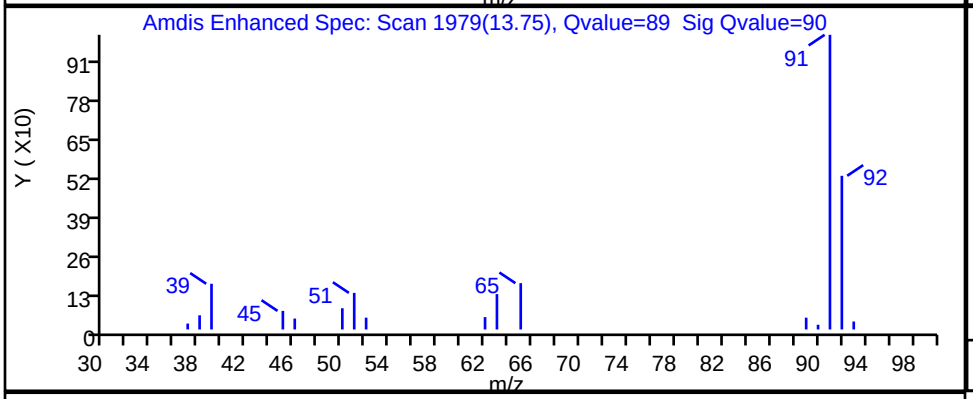
Eurofins TestAmerica, Knoxville

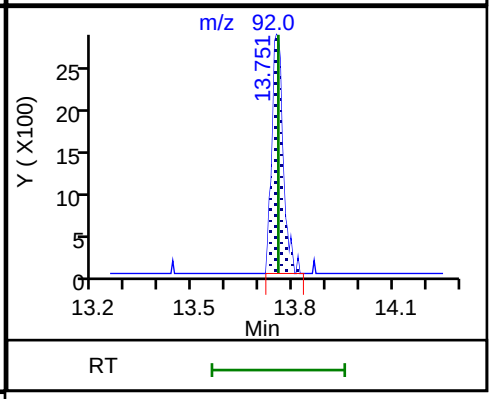
Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P115.D		
Injection Date:	08-Sep-2020 00:42:30	Instrument ID:	MG
Lims ID:	140-20175-A-41	Lab Sample ID:	140-20175-41
Client ID:	IA-BCK-4-29		
Operator ID:	AFB	ALS Bottle#:	15 Worklist Smp#: 21
Purge Vol:	500.000 mL	Dil. Factor:	1.5200
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

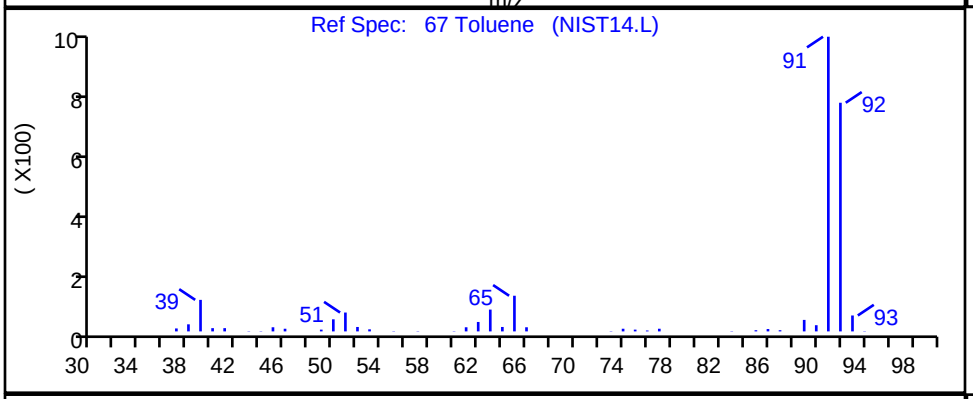
67 Toluene, CAS: 108-88-3

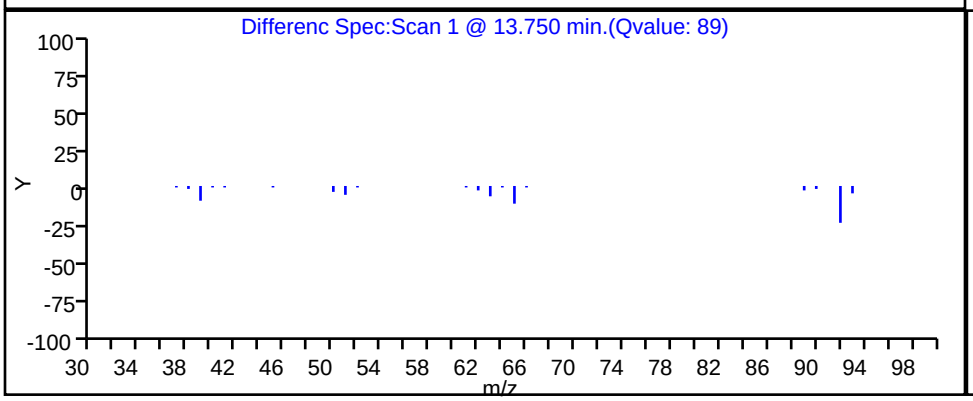


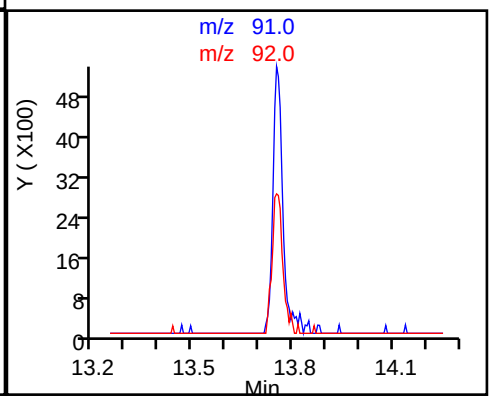










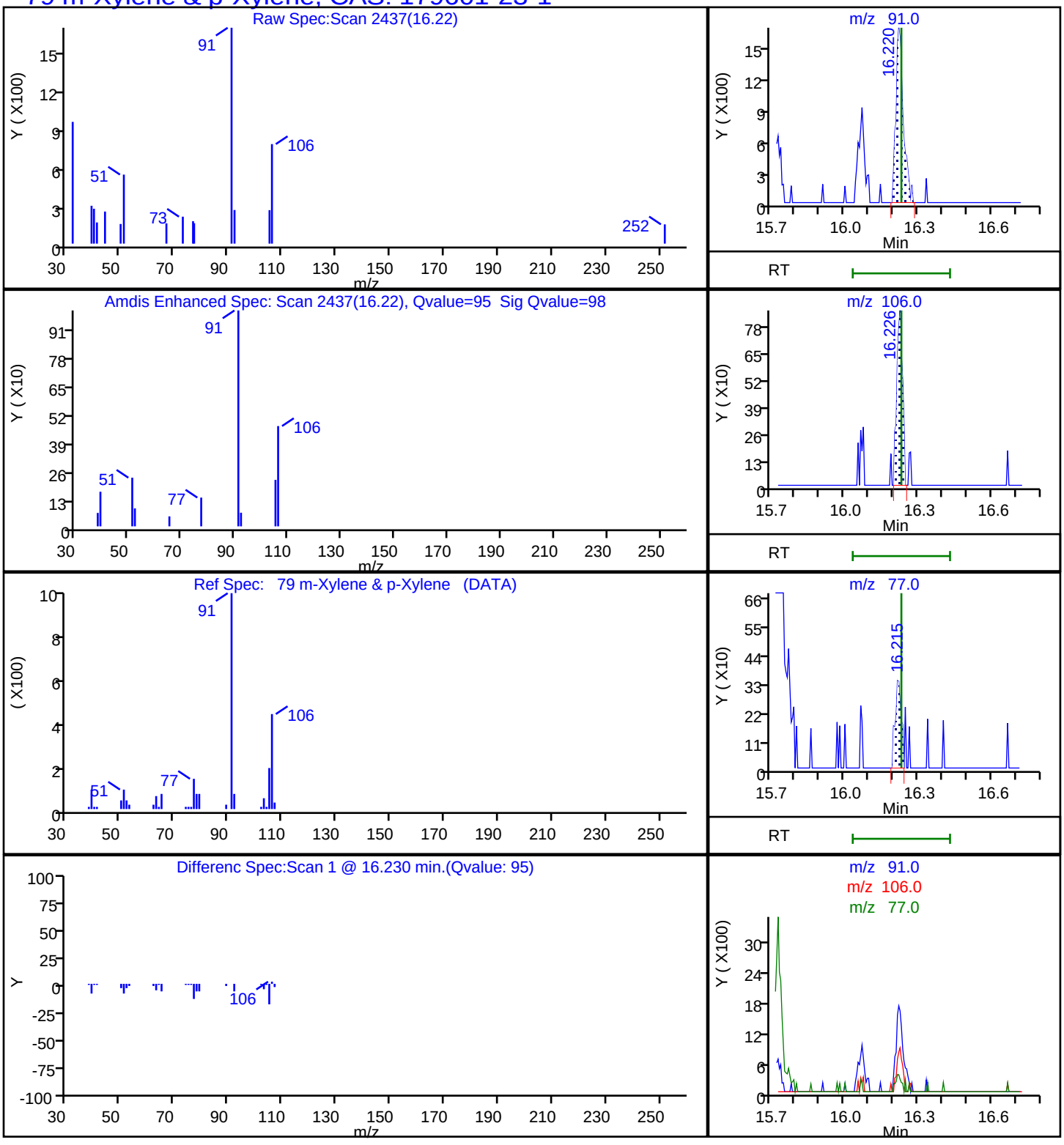


Report Date: 08-Sep-2020 13:23:11 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBI07P115.D				
Injection Date:	08-Sep-2020 00:42:30	Instrument ID:	MG		
Lims ID:	140-20175-A-41	Lab Sample ID:	140-20175-41		
Client ID:	IA-BCK-4-29				
Operator ID:	AFB	ALS Bottle#:	15	Worklist Smp#:	21
Purge Vol:	500.000 mL	Dil. Factor:	1.5200		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

79 m-Xylene & p-Xylene, CAS: 179601-23-1



FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 140-42295/9	GI01IC01.D
Level 2	IC 140-42295/10	GI01IC02.D
Level 3	IC 140-42295/11	GI01IC03.D
Level 4	IC 140-42295/12	GI01IC04.D
Level 5	IC 140-42295/13	GI01IC05.D
Level 6	IC 140-42295/14	GI01IC06.D
Level 7	ICIS 140-42295/15	GI01IC07.D
Level 8	IC 140-42295/7	GI01IC08.D
Level 9	IC 140-42295/5	GI01IC09.D
Level 10	IC 140-42295/3	GI01IC10.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Chlorodifluoromethane	+++++ 4.2174	+++++ 3.9338	5.0807 4.6204	4.1800 4.4013	4.2893 3.6854	Ave		4.3010				9.8		30.0			
Propene	+++++ 2.1016	+++++ 1.9924	+++++ 2.2188	2.4122 2.0989	2.1914 1.7884	Ave		2.1148				9.2		30.0			
Dichlorodifluoromethane	+++++ 4.6221	+++++ 4.5171	5.1025 5.2936	5.0254 5.0487	4.6333 4.2256	Ave		4.8085				7.5		30.0			
Chloromethane	+++++ 0.8378	+++++ 0.7711	+++++ 0.9046	1.0496 0.8511	0.9048 0.7078	Ave		0.8610				12.7		30.0			
1,2-Dichloro-1,1,2,2-tetrafluoroethane	2.7419 2.4849	3.0305 2.6157	2.6182 3.1606	2.5493 3.1468	2.5986 2.4827	Ave		2.7429				9.8		30.0			
Vinyl chloride	2.2108 2.3591	3.0033 2.2051	2.6105 2.5785	2.2040 2.4712	2.3833 2.0097	Ave		2.4035				11.7		30.0			
1,3-Butadiene	+++++ 2.1302	+++++ 1.9721	+++++ 2.3036	2.1726 2.2136	2.2042 1.8343	Ave		2.1187				7.6		30.0			
Butane	+++++ 4.3488	+++++ 4.0253	4.6585 4.5089	4.6118 4.2262	4.5015 3.5538	Ave		4.3044				8.6		30.0			
Bromomethane	+++++ 1.3715	+++++ 1.3578	1.5650 1.6350	1.4697 1.5631	1.4210 1.2343	Ave		1.4522				9.1		30.0			
Chloroethane	+++++ 0.9275	+++++ 0.9381	1.2120 1.0916	0.9857 1.0523	0.9542 0.8144	Ave		0.9970				12.1		30.0			
Ethanol	+++++ 0.8956	+++++ 0.9494	+++++ 1.0644	0.8703 0.7979	1.0301 0.7479	Ave		0.9079				12.8		30.0			
Vinyl bromide	+++++ 1.1432	1.2751 1.1648	1.2369 1.4478	1.2077 1.3491	1.2537 1.0693	Ave		1.2386				9.1		30.0			
2-Methylbutane	+++++ 2.9599	+++++ 2.7561	+++++ 3.3238	2.9753 3.0693	2.9458 2.4296	Ave		2.9228				9.5		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Trichlorofluoromethane	3.9167 3.5393	4.1610 3.2865	4.1430 4.0916	3.5786 3.8541	3.5904 3.2131	Ave		3.7374				9.3		30.0			
Acrolein	+++++ 0.4569	+++++ 0.4173	+++++ 0.3780	+++++ 0.4417	0.5137 0.4710	Ave		0.4464				10.4		30.0			
Acetonitrile	+++++ 0.7945	+++++ 0.8380	+++++ 0.7024	+++++ 0.6506	1.0870 0.7195	Ave		0.7987				19.6		30.0			
Acetone	+++++ 0.9473	+++++ 0.8615	+++++ 0.6959	0.7948 0.6300	0.9823 0.6878	Ave		0.7999				17.0		30.0			
Isopropyl alcohol	+++++ 2.3768	+++++ 2.2904	+++++ 3.0620	2.2332 2.0902	2.6720 1.9961	Ave		2.3887				15.4		30.0			
Pentane	+++++ 0.2407	+++++ 0.2227	+++++ 0.2836	0.2386 0.2584	0.2444 0.2123	Ave		0.2430				9.6		30.0			
Ethyl ether	+++++ 1.8676	+++++ 1.8292	+++++ 1.5681	1.5565 1.5554	1.9511 1.6408	Ave		1.7098				9.8		30.0			
1,1-Dichloroethene	+++++ 1.1460	1.2138 1.1071	1.3220 1.2854	1.0888 1.2140	1.2249 1.0475	Ave		1.1833				7.8		30.0			
Acrylonitrile	+++++ 1.1577	+++++ 1.1526	+++++ 0.9121	1.0056 1.0241	1.2114 1.1792	Ave		1.0918				10.2		30.0			
tert-Butyl alcohol	+++++ 2.4598	+++++ 2.1786	+++++ 3.1532	2.3200 2.0921	2.6745 2.0080	Ave		2.4123				16.5		30.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	2.9739 2.5990	2.9936 2.5089	2.9993 2.8289	2.7308 2.7120	2.6787 2.3381	Ave		2.7363				8.0		30.0			
Methylene Chloride	+++++ 1.1888	+++++ 1.1040	+++++ 1.2681	+++++ 1.2031	1.2912 1.0471	Ave		1.1837				7.9		30.0			
3-Chloropropene	+++++ 2.0584	+++++ 1.8527	3.4211 2.1137	2.3717 2.1326	2.2916 +++++	Ave		2.3203				22.1		30.0			
Carbon disulfide	+++++ 3.9864	+++++ 3.6463	4.6626 4.2662	3.9658 3.9565	3.9101 3.4240	Ave		3.9773				9.4		30.0			
trans-1,2-Dichloroethene	+++++ 1.3276	1.4977 1.2596	1.6040 1.4777	1.2760 1.4233	1.4268 1.2441	Ave		1.3930				8.9		30.0			
2-Methylpentane	+++++ 5.3070	+++++ 4.9992	6.5041 5.4750	5.2908 5.3755	5.6347 4.8807	Ave		5.4334				9.1		30.0			
Methyl tert-butyl ether	+++++ 3.1393	+++++ 3.0946	+++++ 2.7875	2.3858 2.6178	3.2114 2.9473	Ave		2.8834				10.5		30.0			
1,1-Dichloroethane	+++++ 3.4115	3.7876 3.2158	3.9181 3.5051	3.4555 3.4303	3.4976 3.0350	Ave		3.4730				7.6		30.0			
Vinyl acetate	+++++ 4.8276	+++++ 5.0004	+++++ 3.9048	3.8303 4.2643	4.9123 5.0941	Ave		4.5477				11.8		30.0			
2-Butanone (MEK)	+++++ 0.6548	+++++ 0.6135	+++++ 0.5527	0.4972 0.4919	0.6747 0.5569	Ave		0.5774				12.6		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Hexane	+++++ 1.7503	+++++ 1.6732	2.0176 1.8319	1.8921 1.7798	1.8022 1.5922	Ave		1.7924				7.3		30.0			
cis-1,2-Dichloroethene	+++++ 1.4665	1.5582 1.3982	1.5881 1.5642	1.4357 1.4968	1.4885 1.3297	Ave		1.4807				5.7		30.0			
Ethyl acetate	+++++ 4.2053	+++++ 4.2696	+++++ 3.7315	+++++ 3.3697	4.2713 4.0410	Ave		3.9814				9.1		30.0			
Chloroform	3.6326 3.2428	3.8455 3.0621	4.0330 3.2724	3.2505 3.1262	3.3547 2.8423	Ave		3.3662				10.9		30.0			
Tetrahydrofuran	+++++ 2.1055	+++++ 2.1356	+++++ 1.9106	1.7359 1.7485	2.2340 2.1111	Ave		1.9973				10.0		30.0			
1,1,1-Trichloroethane	+++++ 3.1201	3.6579 2.9347	3.6746 3.3019	3.1348 3.2238	3.1883 2.9270	Ave		3.2403				8.4		30.0			
1,2-Dichloroethane	+++++ 0.5726	+++++ 0.4842	0.6275 0.6150	0.5495 0.5076	0.5324 0.4483	Ave		0.5421				11.5		30.0			
1-Butanol	+++++ 0.1665	+++++ 0.1260	+++++ 0.2219	+++++ 0.1221	0.1708 0.1138	Ave		0.1535				26.8		30.0			
Benzene	+++++ 1.0472	+++++ 0.8775	1.1251 1.1183	1.0176 0.9183	0.9768 0.8127	Ave		0.9867				11.4		30.0			
Cyclohexane	+++++ 0.1851	+++++ 0.1422	+++++ 0.1911	0.1843 0.1565	0.1713 0.1325	Ave		0.1661				13.8		30.0			
Carbon tetrachloride	0.6115 0.6342	0.7855 0.3732	0.6372 0.7687	0.6496 0.5332	0.6314 0.4745	Ave		0.6099				20.4		30.0			
2,3-Dimethylpentane	+++++ 0.2742	+++++ 0.2228	0.3087 0.2832	0.2513 0.2297	0.2718 0.1969	Ave		0.2548				14.4		30.0			
Thiophene	+++++ 0.6226	+++++ 0.5084	0.6481 0.6440	0.5323 0.5147	0.5936 0.4600	Ave		0.5655				12.5		30.0			
2,2,4-Trimethylpentane	+++++ 2.6529	+++++ 2.1576	2.5968 2.7357	2.5821 2.2056	2.4393 1.9434	Ave		2.4142				11.6		30.0			
Heptane	+++++ 0.4225	+++++ 0.3493	0.4467 0.4306	0.4137 0.3481	0.3833 0.3098	Ave		0.3880				12.5		30.0			
1,2-Dichloropropane	+++++ 0.4903	+++++ 0.4198	0.5242 0.4544	0.4420 0.4070	0.4670 0.3907	Ave		0.4494				9.9		30.0			
Trichloroethene	0.4268 0.4287	0.6851 0.3531	0.4447 0.4566	0.3977 0.3715	0.3907 0.3471	Ave		0.4302				22.6		30.0			
Dibromomethane	+++++ 0.4913	+++++ 0.3719	0.4798 0.4731	0.4427 0.3774	0.4069 0.3477	Ave		0.4239				13.0		30.0			
Bromodichloromethane	+++++ 0.7898	+++++ 0.6710	0.7786 0.8678	0.7548 0.6917	0.7246 0.6155	Ave		0.7367				10.7		30.0			
1,4-Dioxane	+++++ 0.0995	+++++ 0.1146	0.1383 0.1433	0.0983 0.0995	0.1218 0.1060	Ave		0.1151				15.5		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Methyl methacrylate	+++++ 0.6126	+++++ 0.5158	+++++ 0.5430	0.4167 0.4267	0.5480 0.4984	Ave		0.5088				13.6		30.0			
Methylcyclohexane	+++++ 0.7141	+++++ 0.5799	0.7102 0.7331	0.6975 0.6005	0.6391 0.5295	Ave		0.6505				11.5		30.0			
4-Methyl-2-pentanone (MIBK)	+++++ 0.9278	+++++ 0.8261	+++++ 1.0804	0.7409 0.6478	0.9390 0.8352	Ave		0.8567				16.5		30.0			
cis-1,3-Dichloropropene	+++++ 0.6560	+++++ 0.5378	0.6234 0.6358	0.6180 0.5649	0.5766 0.5208	Ave		0.5917				8.2		30.0			
trans-1,3-Dichloropropene	+++++ 0.5080	+++++ 0.4807	0.5744 0.5058	0.4699 0.4430	0.4959 0.4618	Ave		0.4924				8.1		30.0			
Toluene	+++++ 1.1362	+++++ 1.0313	1.2507 1.0326	0.9784 0.9458	1.1137 0.9804	Ave		1.0587				9.6		30.0			
1,1,2-Trichloroethane	+++++ 0.3651	+++++ 0.3332	0.3544 0.3478	0.3135 0.3004	0.3359 0.3042	Ave		0.3318				7.2		30.0			
2-Hexanone	+++++ 0.4283	+++++ 0.3609	+++++ 0.5255	0.3215 0.2913	0.4231 0.3950	Ave		0.3922				19.8		30.0			
Octane	+++++ 0.4065	+++++ 0.3682	0.4218 0.4332	0.3669 0.3485	0.4038 0.3377	Ave		0.3858				9.1		30.0			
C8 Range	+++++ 5.1496	+++++ 4.5413	+++++ 5.0824	4.9366 4.1728	4.8692 4.0260	Ave		4.6826				9.5		30.0			
Dibromochloromethane	+++++ 0.6038	+++++ 0.6015	0.6071 0.7470	0.5882 0.6071	0.6039 0.6314	Ave		0.6238				8.2		30.0			
1,2-Dibromoethane (EDB)	+++++ 0.6113	+++++ 0.5807	0.6903 0.6152	0.5414 0.5554	0.5986 0.5707	Ave		0.5955				7.8		30.0			
Tetrachloroethene	0.3922 0.3899	0.5714 0.3494	0.4232 0.4129	0.3811 0.3486	0.3633 0.3589	Ave		0.3991				16.5		30.0			
Chlorobenzene	+++++ 0.8917	+++++ 0.8359	0.9456 0.8804	0.8214 0.7793	0.8728 0.8230	Ave		0.8562				6.0		30.0			
Ethylbenzene	+++++ 1.4845	+++++ 1.3986	1.5812 1.3093	1.1895 1.1688	1.4349 1.3181	Ave		1.3606				10.4		30.0			
m-Xylene & p-Xylene	+++++ 1.1395	1.3560 1.0689	1.1696 1.0189	0.9045 0.9029	1.0775 1.0501	Ave		1.0764				12.9		30.0			
Nonane	+++++ 1.1178	+++++ 1.0412	1.1918 1.1156	0.9832 0.9695	1.0531 1.0220	Ave		1.0618				7.1		30.0			
Bromoform	+++++ 0.3530	0.4932 0.5262	0.4773 0.6766	0.4669 0.5829	0.4831 0.6638	Ave		0.5248				19.5		30.0			
Styrene	+++++ 0.8496	0.8564 0.8197	0.7693 0.8021	0.6128 0.7235	0.7599 0.8482	Ave		0.7824				10.0		30.0			
o-Xylene	+++++ 1.1834	+++++ 1.1099	1.2724 1.0625	0.9632 0.9188	1.1394 1.0648	Ave		1.0893				10.5		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
1,1,2,2-Tetrachloroethane	+++++ 0.9568	+++++ 0.8965	0.9614 0.9003	0.7850 0.7111	0.9017 0.8402	Ave		0.8691				9.9		30.0			
1,2,3-Trichloropropane	+++++ 0.2303	+++++ 0.2224	0.2139 0.2285	0.1808 0.1846	0.2198 0.2199	Ave		0.2125				9.0		30.0			
Isopropylbenzene	+++++ 1.5477	+++++ 1.4846	1.6346 1.4298	1.1749 1.2363	1.4395 1.5017	Ave		1.4311				10.8		30.0			
Propylbenzene	+++++ 0.4096	+++++ 0.3881	0.4490 0.3889	0.2983 0.3382	0.3607 0.4238	Ave		0.3821				12.7		30.0			
2-Chlorotoluene	+++++ 0.3740	+++++ 0.3672	0.3653 0.3802	0.3033 0.3491	0.3890 0.3999	Ave		0.3660				8.1		30.0			
4-Ethyltoluene	+++++ 1.5444	+++++ 1.4874	1.6377 1.4488	1.1082 1.2285	1.4027 1.5756	Ave		1.4292				12.6		30.0			
1,3,5-Trimethylbenzene	+++++ 0.6287	+++++ 0.5816	0.6485 0.5885	0.4212 0.4949	0.5763 0.6295	Ave		0.5712				13.5		30.0			
Alpha Methyl Styrene	+++++ 0.6091	+++++ 0.5921	+++++ 0.6036	0.4018 0.5445	0.5103 0.6897	Ave		0.5644				16.1		30.0			
Decane	+++++ 1.3958	+++++ 1.3245	1.4453 1.2935	1.1663 1.0979	1.3010 1.2736	Ave		1.2872				8.8		30.0			
tert-Butylbenzene	+++++ 1.3443	+++++ 1.3045	1.3391 1.3134	0.9248 1.1315	1.1828 1.5072	Ave		1.2560				13.9		30.0			
1,2,4-Trimethylbenzene	+++++ 1.3349	+++++ 1.2958	1.3725 1.3030	0.9005 1.0916	1.2317 1.4632	Ave		1.2492				14.2		30.0			
sec-Butylbenzene	+++++ 2.0106	+++++ 1.9451	2.0566 1.9618	1.4032 1.6599	1.7616 2.2768	Ave		1.8845				14.3		30.0			
1,3-Dichlorobenzene	0.7914 0.8744	1.0379 0.8623	0.9071 0.9390	0.7225 0.8650	0.7989 1.1012	Ave		0.8900				12.8		30.0			
Benzyl chloride	+++++ 1.1627	+++++ 1.2981	1.2725 1.2526	0.8444 1.0752	1.0888 1.4189	Ave		1.1766				15.0		30.0			
1,4-Dichlorobenzene	0.8212 0.8662	1.1563 0.8485	0.9244 0.9286	0.7311 0.8537	0.8219 1.0629	Ave		0.9015				13.9		30.0			
4-Isopropyltoluene	+++++ 1.5739	+++++ 1.5520	1.5326 1.5665	1.0593 1.3129	1.3776 1.6980	Ave		1.4591				13.8		30.0			
1,2,3-Trimethylbenzene	+++++ 1.3535	+++++ 1.3304	1.3699 1.3206	0.9147 1.0928	1.2244 1.3703	QuaF		1.0451	0.0196912						0.9950		0.9900
1,2-Dichlorobenzene	+++++ 0.8393	+++++ 0.8396	0.9032 0.9175	0.6871 0.8170	0.7522 1.0674	Ave		0.8529				13.4		30.0			
Indane	+++++ 1.2941	1.3808 1.2787	1.3052 1.2997	0.8717 1.1236	1.1373 1.5429	Ave		1.2482				15.1		30.0			
Indene	+++++ 1.1144	+++++ 1.1166	1.0943 1.1458	0.7537 0.9883	0.9911 1.3506	Ave		1.0694				15.9		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Butylbenzene	+++++ 1.7840	+++++ 1.7332	1.8906 1.7260	1.2003 1.4015	1.6122 1.8819	Ave		1.6537				14.6		30.0			
Undecane	+++++ 1.5657	+++++ 1.4831	1.6754 1.4503	1.1926 1.1849	1.4250 1.5159	Ave		1.4366				11.9		30.0			
1,2-Dibromo-3-Chloropropane	+++++ 0.3524	+++++ 0.4563	0.3665 0.5320	0.2980 0.4064	0.3669 0.5757	QuaF		0.3520	0.0136829						0.9930		0.9900
1,2,4,5-Tetramethylbenzene	+++++ 1.3759	+++++ 1.4754	1.5696 1.5953	0.8949 1.2219	1.2986 1.7205	QuaF		1.0880	0.0385563						0.9930		0.9900
Dodecane	+++++ 1.4953	+++++ 1.1035	+++++ 1.4579	1.0479 1.0511	1.3963 1.2270	Ave		1.2542				15.5		30.0			
1,2,4-Trichlorobenzene	+++++ 0.6689	+++++ 0.7087	0.8181 0.8251	0.5088 0.7325	0.6450 1.1015	Ave		0.7511				23.1		30.0			
Naphthalene	+++++ 1.5967	2.4276 1.7346	2.1874 1.9122	1.1790 1.4929	1.6126 2.1629	Ave		1.8118				21.8		30.0			
Hexachlorobutadiene	+++++ 0.6043	+++++ 0.6330	0.7229 0.7599	0.4569 0.7265	0.5378 +++++	Ave		0.6345				17.5		30.0			
1,2,3-Trichlorobenzene	+++++ 0.6619	+++++ 0.6779	0.8148 0.8166	0.4626 0.7112	0.6095 1.0297	Ave		0.7230				23.3		30.0			
2-Methylnaphthalene	+++++ 0.6920	+++++ 0.4527	+++++ 1.2986	+++++ 0.8133	0.7500 0.6688	Ave		0.7792				36.2		50.0			
1-Methylnaphthalene	+++++ 0.7883	+++++ 0.4816	+++++ 1.3389	0.6525 0.8306	0.8523 0.6090	Ave		0.7933				34.7		50.0			
4-Bromofluorobenzene (Surr)	0.7279 0.7634	0.7355 0.7715	0.7208 0.7607	0.7393 0.7936	0.7384 0.7811	Ave		0.7532				3.2		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 140-42295/9	GI01IC01.D
Level 2	IC 140-42295/10	GI01IC02.D
Level 3	IC 140-42295/11	GI01IC03.D
Level 4	IC 140-42295/12	GI01IC04.D
Level 5	IC 140-42295/13	GI01IC05.D
Level 6	IC 140-42295/14	GI01IC06.D
Level 7	ICIS 140-42295/15	GI01IC07.D
Level 8	IC 140-42295/7	GI01IC08.D
Level 9	IC 140-42295/5	GI01IC09.D
Level 10	IC 140-42295/3	GI01IC10.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
Chlorodifluoromethane	CBM	Ave	+++++ 126387	+++++ 254491	11226 595533	19940 1219560	48665 2051104	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Propene	CBM	Ave	+++++ 62980	+++++ 128895	+++++ 285979	11507 581585	24863 995335	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Dichlorodifluoromethane	CBM	Ave	+++++ 138515	+++++ 292225	11274 682291	23973 1398945	52568 2351785	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Chloromethane	CBM	Ave	+++++ 25107	+++++ 49882	+++++ 116599	5007 235833	10266 393942	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,2-Dichloro-1,1,2,2-tetrafluoroethane	CBM	Ave	1998 74466	3458 169218	5785 407375	12161 871962	29483 1381764	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Vinyl chloride	CBM	Ave	1611 70697	3427 142653	5768 332339	10514 684743	27040 1118505	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,3-Butadiene	CBM	Ave	+++++ 63838	+++++ 127581	+++++ 296910	10364 613368	25008 1020894	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Butane	CBM	Ave	+++++ 130324	+++++ 260407	10293 581152	22000 1171057	51072 1977905	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Bromomethane	CBM	Ave	+++++ 41102	+++++ 87843	3458 210733	7011 433116	16122 686953	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Chloroethane	CBM	Ave	+++++ 27795	+++++ 60690	2678 140702	4702 291588	10826 453281	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Ethanol	CBM	Ave	+++++ 134201	+++++ 307085	+++++ 685930	20757 1105422	58436 2081107	+++++ 5.00	+++++ 10.0	+++++ 20.0	0.800 40.0	2.00 80.0
Vinyl bromide	CBM	Ave	+++++ 34260	1455 75357	2733 186602	5761 373832	14224 595103	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Methylbutane	CBM	Ave	+++++ 88701	+++++ 178302	+++++ 428407	14193 850465	33422 1352213	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Trichlorofluoromethane	CBM	Ave	2854 106066	4748 212612	9154 527367	17071 1067934	40736 1788276	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
Acrolein	CBM	Ave	+++++ 13692	+++++ 26996	+++++ 48727	+++++ 122401	5828 262114	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
Acetonitrile	CBM	Ave	+++++ 23808	+++++ 54213	+++++ 90528	+++++ 180279	12333 400450	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
Acetone	CBM	Ave	+++++ 85167	+++++ 167195	+++++ 269068	11375 523707	33434 1148398	+++++ 3.00	+++++ 6.00	+++++ 12.0	0.480 24.0	1.20 48.0
Isopropyl alcohol	CBM	Ave	+++++ 213678	+++++ 444518	+++++ 1184009	31959 1737523	90947 3332728	+++++ 3.00	+++++ 6.00	+++++ 12.0	0.480 24.0	1.20 48.0
Pentane	CBM	Ave	+++++ 7214	+++++ 14405	+++++ 36548	1138 71611	2773 118178	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Ethyl ether	CBM	Ave	+++++ 55969	+++++ 118337	+++++ 202112	7425 431001	22137 913197	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,1-Dichloroethene	CBM	Ave	+++++ 34343	1385 71623	2921 165673	5194 336401	13897 583003	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Acrylonitrile	CBM	Ave	+++++ 34693	+++++ 74563	+++++ 117560	4797 283762	13744 656282	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
tert-Butyl alcohol	CBM	Ave	+++++ 73714	+++++ 140940	+++++ 406423	11067 579708	30344 1117573	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,1,2-Trichloro-1,2,2-trifluoroetha ne	CBM	Ave	2167 77887	3416 162311	6627 364620	13027 751469	30392 1301292	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Methylene Chloride	CBM	Ave	+++++ 35627	+++++ 71422	+++++ 163443	+++++ 333362	14649 582763	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
3-Chloropropene	CBM	Ave	+++++ 61687	+++++ 119860	7559 272432	11314 590936	26000 +++++	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
Carbon disulfide	CBM	Ave	+++++ 119464	+++++ 235894	10302 549880	18918 1096319	44363 1905658	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
trans-1,2-Dichloroethene	CBM	Ave	+++++ 39785	1709 81489	3544 190465	6087 394374	16188 692384	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Methylpentane	CBM	Ave	+++++ 159038	+++++ 323413	14371 705673	25239 1489517	63929 2716361	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Methyl tert-butyl ether	CBM	Ave	+++++ 94079	+++++ 200198	+++++ 359280	11381 725384	36435 1640351	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,1-Dichloroethane	CBM	Ave	+++++ 102235	4322 208044	8657 451772	16484 950498	39683 1689157	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Vinyl acetate	CBM	Ave	+++++ 144673	+++++ 323495	+++++ 503287	18272 1181597	55733 2835157	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
2-Butanone (MEK)	CBM	Ave	+++++ 19622	+++++ 39691	+++++ 71237	2372 136308	7655 309968	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Hexane	CBM	Ave	+++++ 52452	+++++ 108248	4458 236115	9026 493163	20447 886142	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
cis-1,2-Dichloroethene	CBM	Ave	+++++ 43948	1778 90453	3509 201607	6849 414738	16888 740051	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
Ethyl acetate	CBM	Ave	+++++ 126022	+++++ 276215	+++++ 480959	+++++ 933715	48461 2249047	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
Chloroform	CBM	Ave	2647 97178	4388 198099	8911 421785	15506 866236	38061 1581905	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Tetrahydrofuran	CBM	Ave	+++++ 63096	+++++ 138158	+++++ 246265	8281 484501	25346 1174961	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,1,1-Trichloroethane	CBM	Ave	+++++ 93502	4174 189856	8119 425590	14954 893295	36173 1629049	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2-Dichloroethane	DFBZ	Ave	+++++ 74570	+++++ 156222	6831 340796	11727 712592	29376 1309457	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1-Butanol	DFBZ	Ave	+++++ 21677	+++++ 40646	+++++ 122991	+++++ 171394	9421 332356	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
Benzene	DFBZ	Ave	+++++ 136368	+++++ 283155	12247 619691	21718 1289194	53895 2374147	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Cyclohexane	DFBZ	Ave	+++++ 24100	+++++ 45891	+++++ 105905	3934 219701	9450 386947	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Carbon tetrachloride	DFBZ	Ave	2115 82585	3137 120424	6936 425976	13863 748515	34839 1386144	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2,3-Dimethylpentane	DFBZ	Ave	+++++ 35713	+++++ 71885	3360 156938	5364 322420	14994 575076	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Thiophene	DFBZ	Ave	+++++ 81080	+++++ 164043	7055 356857	11360 722547	32749 1343789	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2,2,4-Trimethylpentane	DFBZ	Ave	+++++ 345476	+++++ 696193	28267 1515982	55108 3096308	134587 5676918	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Heptane	DFBZ	Ave	+++++ 55017	+++++ 112703	4863 238604	8829 488721	21146 905044	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2-Dichloropropane	DFBZ	Ave	+++++ 63849	+++++ 135449	5706 251789	9433 571342	25767 1141437	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Trichloroethene	DFBZ	Ave	1476 55829	2736 113938	4841 253014	8487 521549	21557 1014059	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Dibromomethane	DFBZ	Ave	+++++ 63978	+++++ 119998	5223 262180	9449 529820	22450 1015819	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Bromodichloromethane	DFBZ	Ave	+++++ 102850	+++++ 216520	8475 480892	16110 971037	39980 1797881	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,4-Dioxane	DFBZ	Ave	+++++ 12962	+++++ 36968	1505 79403	2097 139641	6721 309615	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Methyl methacrylate	DFBZ	Ave	+++++ 79777	+++++ 166422	+++++ 300901	8893 599074	30238 1456048	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Methylcyclohexane	DFBZ	Ave	+++++ 92997	+++++ 187114	7731 406216	14886 842977	35264 1546743	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
4-Methyl-2-pentanone (MIBK)	DFBZ	Ave	+++++ 120828	+++++ 266548	+++++ 598699	15812 909376	51809 2439624	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
cis-1,3-Dichloropropene	DFBZ	Ave	+++++	+++++	6786	13190	31812	+++++	+++++	0.0800	0.160	0.400
			85421	173523	352319	793045	1521326	1.00	2.00	4.00	8.00	16.0
trans-1,3-Dichloropropene	CBZd 5	Ave	+++++	+++++	6177	10340	27117	+++++	+++++	0.0800	0.160	0.400
			68823	152113	296890	658647	1383502	1.00	2.00	4.00	8.00	16.0
Toluene	CBZd 5	Ave	+++++	+++++	13451	21528	60905	+++++	+++++	0.0800	0.160	0.400
			153919	326329	606087	1406174	2937051	1.00	2.00	4.00	8.00	16.0
1,1,2-Trichloroethane	CBZd 5	Ave	+++++	+++++	3811	6897	18372	+++++	+++++	0.0800	0.160	0.400
			49466	105417	204172	446561	911205	1.00	2.00	4.00	8.00	16.0
2-Hexanone	CBZd 5	Ave	+++++	+++++	+++++	7073	23138	+++++	+++++	+++++	0.160	0.400
			58020	114195	308468	433145	1183432	1.00	2.00	4.00	8.00	16.0
Octane	CBZd 5	Ave	+++++	+++++	4536	8073	22082	+++++	+++++	0.0800	0.160	0.400
			55073	116497	254271	518088	1011643	1.00	2.00	4.00	8.00	16.0
C8 Range	CBZd 5	Ave	+++++	+++++	+++++	108617	266284	+++++	+++++	+++++	0.160	0.400
			697619	1436960	2983142	6203684	12060880	1.00	2.00	4.00	8.00	16.0
Dibromochloromethane	CBZd 5	Ave	+++++	+++++	6529	12942	33024	+++++	+++++	0.0800	0.160	0.400
			81803	190331	438464	902612	1891483	1.00	2.00	4.00	8.00	16.0
1,2-Dibromoethane (EDB)	CBZd 5	Ave	+++++	+++++	7424	11912	32736	+++++	+++++	0.0800	0.160	0.400
			82810	183756	361106	825710	1709784	1.00	2.00	4.00	8.00	16.0
Tetrachloroethene	CBZd 5	Ave	1279	2500	4551	8385	19868	0.0200	0.0400	0.0800	0.160	0.400
			52818	110572	242360	518316	1075236	1.00	2.00	4.00	8.00	16.0
Chlorobenzene	CBZd 5	Ave	+++++	+++++	10169	18072	47729	+++++	+++++	0.0800	0.160	0.400
			120798	264485	516782	1158553	2465447	1.00	2.00	4.00	8.00	16.0
Ethylbenzene	CBZd 5	Ave	+++++	+++++	17005	26172	78472	+++++	+++++	0.0800	0.160	0.400
			201106	442535	768480	1737569	3948553	1.00	2.00	4.00	8.00	16.0
m-Xylene & p-Xylene	CBZd 5	Ave	+++++	11865	25157	39802	117852	+++++	0.0800	0.160	0.320	0.800
			308731	676428	1196112	2684790	6291833	2.00	4.00	8.00	16.0	32.0
Nonane	CBZd 5	Ave	+++++	+++++	12817	21633	57593	+++++	+++++	0.0800	0.160	0.400
			151433	329467	654836	1441294	3061549	1.00	2.00	4.00	8.00	16.0
Bromoform	CBZd 5	Ave	+++++	2158	5133	10274	26419	+++++	0.0400	0.0800	0.160	0.400
			47825	166485	397152	866530	1988611	1.00	2.00	4.00	8.00	16.0
Styrene	CBZd 5	Ave	+++++	3747	8273	13483	41558	+++++	0.0400	0.0800	0.160	0.400
			115089	259361	470774	1075638	2541086	1.00	2.00	4.00	8.00	16.0
o-Xylene	CBZd 5	Ave	+++++	+++++	13684	21193	62312	+++++	+++++	0.0800	0.160	0.400
			160310	351197	623631	1365939	3189901	1.00	2.00	4.00	8.00	16.0
1,1,2,2-Tetrachloroethane	CBZd 5	Ave	+++++	+++++	10339	17273	49310	+++++	+++++	0.0800	0.160	0.400
			129612	283671	528435	1057194	2516976	1.00	2.00	4.00	8.00	16.0
1,2,3-Trichloropropane	CBZd 5	Ave	+++++	+++++	2300	3979	12020	+++++	+++++	0.0800	0.160	0.400
			31198	70357	134141	274369	658777	1.00	2.00	4.00	8.00	16.0
Isopropylbenzene	CBZd 5	Ave	+++++	+++++	17579	25851	78721	+++++	+++++	0.0800	0.160	0.400
			209664	469762	839245	1838036	4498773	1.00	2.00	4.00	8.00	16.0
Propylbenzene	CBZd 5	Ave	+++++	+++++	4829	6564	19728	+++++	+++++	0.0800	0.160	0.400
			55490	122801	228287	502759	1269531	1.00	2.00	4.00	8.00	16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
2-Chlorotoluene	CBZd 5	Ave	+++++ 50660	+++++ 116178	3929 223185	6674 519001	21271 1197945	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
4-Ethyltoluene	CBZd 5	Ave	+++++ 209216	+++++ 470643	17613 850389	24383 1826353	76712 4720069	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,3,5-Trimethylbenzene	CBZd 5	Ave	+++++ 85164	+++++ 184043	6974 345419	9268 735810	31514 1885947	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Alpha Methyl Styrene	CBZd 5	Ave	+++++ 82510	+++++ 187336	+++++ 354303	8841 809517	27908 2066076	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Decane	CBZd 5	Ave	+++++ 189083	+++++ 419090	15543 759257	25661 1632200	71149 3815257	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
tert-Butylbenzene	CBZd 5	Ave	+++++ 182107	+++++ 412773	14401 770891	20349 1682234	64684 4515312	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2,4-Trimethylbenzene	CBZd 5	Ave	+++++ 180832	+++++ 410005	14761 764817	19813 1622836	67360 4383450	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
sec-Butylbenzene	CBZd 5	Ave	+++++ 272380	+++++ 615450	22118 1151509	30874 2467800	96336 6820666	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,3-Dichlorobenzene	CBZd 5	Ave	2581 118460	4541 272851	9755 551149	15896 1286011	43692 3298828	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Benzyl chloride	CBZd 5	Ave	+++++ 157512	+++++ 410741	13685 735219	18578 1598462	59541 4250505	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,4-Dichlorobenzene	CBZd 5	Ave	2678 117341	5059 268488	9941 545052	16086 1269190	44948 3184224	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
4-Isopropyltoluene	CBZd 5	Ave	+++++ 213219	+++++ 491082	16482 919460	23308 1951840	75338 5086898	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2,3-Trimethylbenzene	CBZd 5	QuaF	+++++ 183353	+++++ 420978	14733 775110	20125 1624627	66959 4105097	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2-Dichlorobenzene	CBZd 5	Ave	+++++ 113702	+++++ 265655	9714 538536	15119 1214657	41138 3197685	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Indane	CBZd 5	Ave	+++++ 175316	6041 404591	14037 762843	19180 1670413	62198 4622214	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Indene	CBZd 5	Ave	+++++ 150965	+++++ 353313	11769 672537	16584 1469257	54200 4046053	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Butylbenzene	CBZd 5	Ave	+++++ 241684	+++++ 548406	20333 1013104	26410 2083566	88169 5637666	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Undecane	CBZd 5	Ave	+++++ 212100	+++++ 469276	18018 851240	26240 1761528	77930 4541178	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2-Dibromo-3-Chloropropane	CBZd 5	QuaF	+++++ 47740	+++++ 144381	3942 312261	6556 604213	20067 1724558	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2,4,5-Tetramethylbenzene	CBZd 5	QuaF	+++++ 186389	+++++ 466848	16880 936361	19690 1816600	71014 5154231	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Dodecane	CBZd 5	Ave	+++++ 202565	+++++ 349178	+++++ 855739	23057 1562672	76360 3675886	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
1,2,4-Trichlorobenzene	CBZd5	Ave	+++++ 90620	+++++ 224232	8798 484290	11196 1089060	35272 3299699	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Naphthalene	CBZd5	Ave	+++++ 216311	10621 548866	23525 1122391	25941 2219533	88191 6479441	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Hexachlorobutadiene	CBZd5	Ave	+++++ 81866	+++++ 200284	7774 446054	10052 1080114	29410 +++++	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
1,2,3-Trichlorobenzene	CBZd5	Ave	+++++ 89666	+++++ 214504	8763 479297	10179 1057388	33331 3084852	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Methylnaphthalene	CBZd5	Ave	+++++ 93743	+++++ 143251	+++++ 762263	+++++ 1209161	41015 2003736	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
1-Methylnaphthalene	CBZd5	Ave	+++++ 106800	+++++ 152396	+++++ 785887	14358 1234833	46614 1824509	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
4-Bromofluorobenzene (Surr)	CBZd5	Ave	550738 479859	373260 566331	449593 517937	471736 684275	468432 678598	4.64 4.64	4.64 4.64	4.64 4.64	4.64 4.64	4.64 4.64

Curve Type Legend:

Ave = Average ISTD
QuaF = Quadratic ISTD forced zero

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 140-42295/9	GI01IC01.D
Level 2	IC 140-42295/10	GI01IC02.D
Level 3	IC 140-42295/11	GI01IC03.D
Level 4	IC 140-42295/12	GI01IC04.D
Level 5	IC 140-42295/13	GI01IC05.D
Level 6	IC 140-42295/14	GI01IC06.D
Level 7	ICIS 140-42295/15	GI01IC07.D
Level 8	IC 140-42295/7	GI01IC08.D
Level 9	IC 140-42295/5	GI01IC09.D
Level 10	IC 140-42295/3	GI01IC10.D

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
Chlorodifluoromethane	+++++	+++++	18.1						50			
Propene	+++++	+++++	+++++	14.1						50		
Dichlorodifluoromethane	+++++	+++++	6.1						50			
Chloromethane	+++++	+++++	+++++	21.9						50		
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.0						50					
Vinyl chloride	-8.0						50					
1,3-Butadiene	+++++	+++++	+++++	2.5						50		
Butane	+++++	+++++	8.2						50			
Bromomethane	+++++	+++++	7.8						50			
Chloroethane	+++++	+++++	21.6						50			
Ethanol	+++++	+++++	+++++	-4.1						50		
Vinyl bromide	+++++	2.9						50				
2-Methylbutane	+++++	+++++	+++++	1.8						50		
Trichlorofluoromethane	4.8						50					

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
Acrolein	+++++	+++++	+++++	+++++	15.1						50	
Acetonitrile	+++++	+++++	+++++	+++++	36.1						50	
Acetone	+++++	+++++	+++++	-0.6						80		
Isopropyl alcohol	+++++	+++++	+++++	-6.5						50		
Pentane	+++++	+++++	+++++	-1.8						50		
Ethyl ether	+++++	+++++	+++++	-9.0						50		
1,1-Dichloroethene	+++++	2.6						50				
Acrylonitrile	+++++	+++++	+++++	-7.9						50		
tert-Butyl alcohol	+++++	+++++	+++++	-3.8						50		
1,1,2-Trichloro-1,2,2-trifluoroethane	8.7						50					
Methylene Chloride	+++++	+++++	+++++	+++++	9.1						80	
3-Chloropropene	+++++	+++++	47.4	+++++					50			
Carbon disulfide	+++++	+++++	17.2						50			
trans-1,2-Dichloroethene	+++++	7.5						50				
2-Methylpentane	+++++	+++++	19.7						50			
Methyl tert-butyl ether	+++++	+++++	+++++	-17.3						50		
1,1-Dichloroethane	+++++	9.1						50				
Vinyl acetate	+++++	+++++	+++++	-15.8						50		
2-Butanone (MEK)	+++++	+++++	+++++	-13.9						50		
Hexane	+++++	+++++	12.6						50			
cis-1,2-Dichloroethene	+++++	5.2						50				

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
Ethyl acetate	+++++	+++++	+++++	+++++	7.3						50	
Chloroform	7.9						50					
Tetrahydrofuran	+++++	+++++	+++++	-13.1						50		
1,1,1-Trichloroethane	+++++	12.9						50				
1,2-Dichloroethane	+++++	+++++	15.8						50			
1-Butanol	+++++	+++++	+++++	+++++	11.2						50	
Benzene	+++++	+++++	14.0						50			
Cyclohexane	+++++	+++++	+++++	10.9						50		
Carbon tetrachloride	0.3						50					
2,3-Dimethylpentane	+++++	+++++	21.1						50			
Thiophene	+++++	+++++	14.6						50			
2,2,4-Trimethylpentane	+++++	+++++	7.6						50			
Heptane	+++++	+++++	15.1						50			
1,2-Dichloropropane	+++++	+++++	16.6						50			
Trichloroethene	-0.8						50					
Dibromomethane	+++++	+++++	13.2						50			
Bromodichloromethane	+++++	+++++	5.7						50			
1,4-Dioxane	+++++	+++++	20.1						50			
Methyl methacrylate	+++++	+++++	+++++	-18.1						50		
Methylcyclohexane	+++++	+++++	9.2						50			
4-Methyl-2-pentanone (MIBK)	+++++	+++++	+++++	-13.5						50		

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
cis-1,3-Dichloropropene	+++++	+++++	5.4						50			
trans-1,3-Dichloropropene	+++++	+++++	16.6						50			
Toluene	+++++	+++++	18.1						50			
1,1,2-Trichloroethane	+++++	+++++	6.8						50			
2-Hexanone	+++++	+++++	+++++	-18.0						50		
Octane	+++++	+++++	9.3						50			
Dibromochloromethane	+++++	+++++	-2.7						50			
1,2-Dibromoethane (EDB)	+++++	+++++	15.9						50			
Tetrachloroethene	-1.7						50					
Chlorobenzene	+++++	+++++	10.4						50			
Ethylbenzene	+++++	+++++	16.2						50			
m-Xylene & p-Xylene	+++++	26.0						50				
Nonane	+++++	+++++	12.2						50			
Bromoform	+++++	-6.0						50				
Styrene	+++++	9.5						50				
o-Xylene	+++++	+++++	16.8						50			
1,1,2,2-Tetrachloroethane	+++++	+++++	10.6						50			
1,2,3-Trichloropropane	+++++	+++++	0.6						50			
Isopropylbenzene	+++++	+++++	14.2						50			
Propylbenzene	+++++	+++++	17.5						50			
2-Chlorotoluene	+++++	+++++	-0.2						50			

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
4-Ethyltoluene	+++++	+++++	14.6						50			
1,3,5-Trimethylbenzene	+++++	+++++	13.5						50			
Alpha Methyl Styrene	+++++	+++++	+++++	-28.8						50		
Decane	+++++	+++++	12.3						50			
tert-Butylbenzene	+++++	+++++	6.6						50			
1,2,4-Trimethylbenzene	+++++	+++++	9.9						50			
sec-Butylbenzene	+++++	+++++	9.1						50			
1,3-Dichlorobenzene	-11.1						50					
Benzyl chloride	+++++	+++++	8.1						50			
1,4-Dichlorobenzene	-8.9						50					
4-Isopropyltoluene	+++++	+++++	5.0						50			
1,2,3-Trimethylbenzene	+++++	+++++	30.8						50			
1,2-Dichlorobenzene	+++++	+++++	5.9						50			
Indane	+++++	10.6						50				
Indene	+++++	+++++	2.3						50			
Butylbenzene	+++++	+++++	14.3						50			
Undecane	+++++	+++++	16.6						50			
1,2-Dibromo-3-Chloropropane	+++++	+++++	3.8						50			
1,2,4,5-Tetramethylbenzene	+++++	+++++	43.7						50			
Dodecane	+++++	+++++	+++++	-16.4						50		
1,2,4-Trichlorobenzene	+++++	+++++	8.9						50			

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
Naphthalene	+++++	34.0						80				
Hexachlorobutadiene	+++++	+++++	13.9	+++++					50			
1,2,3-Trichlorobenzene	+++++	+++++	12.7						50			
2-Methylnaphthalene	+++++	+++++	+++++	+++++	-3.8						80	
1-Methylnaphthalene	+++++	+++++	+++++	-17.7						80		

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC10.D
Lims ID: IC L10
Client ID:
Sample Type: IC Calib Level: 10
Inject. Date: 01-Sep-2020 18:07:30 ALS Bottle#: 1 Worklist Smp#: 3
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016453-003
Misc. Info.: 314600
Operator ID: AFB Instrument ID: MG
Sublist: chrom-MG_TO15*sub17

Method: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 02-Sep-2020 12:23:04 Calib Date: 02-Sep-2020 03:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1035

First Level Reviewer: tajh Date: 02-Sep-2020 07:24:43

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.817	8.812	0.005	86	166966	4.80	4.80	
* 2 1,4-Difluorobenzene	114	11.001	10.996	0.005	97	876347	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.735	15.730	0.005	91	898721	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.374	17.374	0.000	95	678598	4.64	4.81	
6 Chlorodifluoromethane	51	3.699	3.703	-0.004	97	2051104	16.0	13.7	
7 Propene	41	3.716	3.716	0.000	99	995335	16.0	13.5	
8 Dichlorodifluoromethane	85	3.764	3.765	-0.001	99	2351785	16.0	14.1	
9 Chloromethane	52	3.947	3.945	0.002	98	393942	16.0	13.2	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.953	3.951	0.002	93	1381764	16.0	14.5	
11 Acetaldehyde	44	4.093	4.096	-0.003	98	2392045	80.0	67.9	
12 Vinyl chloride	62	4.115	4.114	0.001	99	1118505	16.0	13.4	
14 Butadiene	54	4.201	4.201	0.000	67	1020894	16.0	13.9	
13 Butane	43	4.201	4.202	-0.001	86	1977905	16.0	13.2	
15 Bromomethane	94	4.519	4.521	-0.002	98	686953	16.0	13.6	
16 Chloroethane	64	4.659	4.658	0.001	91	453281	16.0	13.1	
17 Ethanol	31	4.756	4.759	-0.003	95	2081107	80.0	65.9	
18 Vinyl bromide	106	4.961	4.960	0.001	98	595103	16.0	13.8	
19 2-Methylbutane	43	5.010	5.010	0.000	93	1352213	16.0	13.3	
20 Trichlorofluoromethane	101	5.231	5.229	0.002	98	1788276	16.0	13.8	
21 Acrolein	56	5.236	5.235	0.001	92	262114	16.0	16.9	
22 Acetonitrile	40	5.301	5.301	0.000	99	400450	16.0	14.4	
23 Acetone	58	5.344	5.355	-0.011	99	1148398	48.0	41.3	
24 Pentane	72	5.447	5.448	-0.001	95	118178	16.0	14.0	
25 Isopropyl alcohol	45	5.441	5.451	-0.010	93	3332728	48.0	40.1	
26 Ethyl ether	31	5.608	5.619	-0.011	90	913197	16.0	15.4	
27 1,1-Dichloroethene	96	5.932	5.928	0.004	90	583003	16.0	14.2	
28 Acrylonitrile	53	6.034	6.032	0.002	77	656282	16.0	17.3	
30 2-Methyl-2-propanol	59	6.034	6.059	-0.025	96	1117573	16.0	13.3	
29 1,1,2-Trichloro-1,2,2-trifluoroe	101	6.110	6.107	0.003	92	1301292	16.0	13.7	
31 Methylene Chloride	84	6.277	6.273	0.004	88	582763	16.0	14.2	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.293	6.289	0.004	93	1056256	16.0	13.1	
33 Carbon disulfide	76	6.439	6.438	0.001	97	1905658	16.0	13.8	
34 trans-1,2-Dichloroethene	96	7.086	7.082	0.004	91	692384	16.0	14.3	
35 2-Methylpentane	43	7.102	7.101	0.001	97	2716361	16.0	14.4	
36 Methyl tert-butyl ether	73	7.210	7.230	-0.020	94	1640351	16.0	16.4	
37 1,1-Dichloroethane	63	7.506	7.499	0.007	98	1689157	16.0	14.0	
38 Vinyl acetate	43	7.609	7.607	0.002	100	2835157	16.0	17.9	
39 2-Butanone (MEK)	72	8.056	8.063	-0.007	96	309968	16.0	15.4	
40 Hexane	56	8.083	8.082	0.001	92	886142	16.0	14.2	
41 Isopropyl ether	45	8.240	8.246	-0.006	96	3357122	16.0	16.1	
42 cis-1,2-Dichloroethene	96	8.488	8.483	0.005	96	740051	16.0	14.4	
43 Ethyl acetate	43	8.671	8.676	-0.005	97	2249047	16.0	16.2	
44 Chloroform	83	8.833	8.825	0.008	93	1581905	16.0	13.5	
45 Tert-butyl ethyl ether	59	8.914	8.928	-0.014	96	2787393	16.0	16.0	
46 Tetrahydrofuran	42	9.227	9.244	-0.017	91	1174961	16.0	16.9	
47 1,1,1-Trichloroethane	97	9.857	9.851	0.006	94	1629049	16.0	14.5	
48 1,2-Dichloroethane	62	9.965	9.958	0.007	95	1309457	16.0	13.2	
51 n-Butanol	31	10.418	10.442	-0.024	82	332356	16.0	11.9	
50 Benzene	78	10.456	10.451	0.005	93	2374147	16.0	13.2	
49 Cyclohexane	69	10.461	10.455	0.006	79	386947	16.0	12.8	
52 Carbon tetrachloride	117	10.483	10.476	0.007	92	1386144	16.0	12.4	
53 2,3-Dimethylpentane	71	10.580	10.577	0.003	90	575076	16.0	12.4	
54 Thiophene	84	10.731	10.725	0.006	93	1343789	16.0	13.0	
55 Isooctane	57	11.222	11.219	0.003	98	5676918	16.0	12.9	
56 n-Heptane	71	11.599	11.594	0.005	94	905044	16.0	12.8	
57 1,2-Dichloropropane	63	11.675	11.669	0.006	88	1141437	16.0	13.9	
58 Trichloroethene	130	11.712	11.706	0.006	93	1014059	16.0	12.9	
59 Dibromomethane	93	11.793	11.791	0.002	94	1015819	16.0	13.1	
60 Dichlorobromomethane	83	11.939	11.936	0.003	95	1797881	16.0	13.4	
61 1,4-Dioxane	88	11.955	11.974	-0.019	91	309615	16.0	14.7	
62 Methyl methacrylate	41	12.036	12.038	-0.002	86	1456048	16.0	15.7	
63 Methylcyclohexane	83	12.484	12.480	0.004	86	1546743	16.0	13.0	
64 4-Methyl-2-pentanone (MIBK)	43	12.888	12.898	-0.010	98	2439624	16.0	15.6	
65 cis-1,3-Dichloropropene	75	12.942	12.938	0.004	97	1521326	16.0	14.1	
66 trans-1,3-Dichloropropene	75	13.638	13.632	0.006	92	1383502	16.0	15.0	
67 Toluene	91	13.762	13.759	0.003	92	2937051	16.0	14.8	
68 1,1,2-Trichloroethane	83	13.837	13.831	0.006	95	911205	16.0	14.7	
69 2-Hexanone	58	14.225	14.231	-0.006	91	1183432	16.0	16.1	
70 n-Octane	85	14.457	14.454	0.003	97	1011643	16.0	14.0	
71 Chlorodibromomethane	129	14.538	14.536	0.002	96	1891483	16.0	16.2	
72 Ethylene Dibromide	107	14.829	14.826	0.003	97	1709784	16.0	15.3	
73 Tetrachloroethene	129	14.910	14.904	0.006	93	1075236	16.0	14.4	
75 Chlorobenzene	112	15.784	15.779	0.005	91	2465447	16.0	15.4	
74 2,3-Dimethylheptane	43	15.805	15.801	0.004	93	4656713	16.0	13.6	
78 Ethylbenzene	91	16.069	16.068	0.001	98	3948553	16.0	15.5	
79 m-Xylene & p-Xylene	91	16.237	16.232	0.005	97	6291833	32.0	31.2	
80 n-Nonane	57	16.657	16.654	0.003	93	3061549	16.0	15.4	
81 Bromoform	173	16.679	16.676	0.003	95	1988611	16.0	20.2	
82 Styrene	104	16.700	16.695	0.005	96	2541086	16.0	17.3	
83 o-Xylene	91	16.760	16.757	0.003	98	3189901	16.0	15.6	
84 1,1,2,2-Tetrachloroethane	83	17.083	17.078	0.005	98	2516976	16.0	15.5	
85 1,2,3-Trichloropropane	110	17.240	17.237	0.003	93	658777	16.0	16.6	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
86 Isopropylbenzene	105	17.347	17.344	0.003	97	4498773	16.0	16.8	
87 N-Propylbenzene	120	17.887	17.887	0.000	99	1269531	16.0	17.7	
88 2-Chlorotoluene	126	17.935	17.930	0.005	97	1197945	16.0	17.5	
89 4-Ethyltoluene	105	18.038	18.038	0.000	98	4720069	16.0	17.6	
90 1,3,5-Trimethylbenzene	120	18.113	18.109	0.004	92	1885947	16.0	17.6	
92 Alpha Methyl Styrene	118	18.345	18.340	0.005	88	2066076	16.0	19.5	
93 n-Decane	57	18.404	18.401	0.003	88	3815257	16.0	15.8	
94 tert-Butylbenzene	119	18.539	18.533	0.006	93	4515312	16.0	19.2	
95 1,2,4-Trimethylbenzene	105	18.550	18.547	0.003	96	4383450	16.0	18.7	
96 sec-Butylbenzene	105	18.809	18.804	0.005	98	6820666	16.0	19.3	
97 1,3-Dichlorobenzene	146	18.820	18.815	0.005	97	3298828	16.0	19.8	
98 Benzyl chloride	91	18.895	18.891	0.004	98	4250505	16.0	19.3	
99 1,4-Dichlorobenzene	146	18.906	18.905	0.001	94	3184224	16.0	18.9	
100 4-Isopropyltoluene	119	18.971	18.965	0.006	96	5086898	16.0	18.6	
101 1,2,3-Trimethylbenzene	105	19.019	19.019	0.000	99	4105097	16.0	16.1	
102 Butylcyclohexane	83	19.078	19.074	0.004	88	3628135	16.0	15.9	
103 2,3-Dihydroindene	117	19.267	19.262	0.005	93	4622214	16.0	19.8	
104 1,2-Dichlorobenzene	146	19.267	19.262	0.005	81	3197685	16.0	20.0	
106 Indene	116	19.397	19.392	0.005	90	4046053	16.0	20.2	
105 n-Butylbenzene	91	19.397	19.398	-0.001	98	5637666	16.0	18.2	
107 Undecane	57	19.709	19.708	0.001	93	4541178	16.0	16.9	
108 1,2-Dibromo-3-Chloropropane	157	19.860	19.858	0.002	95	1724558	16.0	16.1	
109 1,2,4,5-Tetramethylbenzene	119	20.152	20.150	0.002	98	5154231	16.0	16.1	
110 Dodecane	57	20.766	20.765	0.001	94	3675886	16.0	15.7	
111 1,2,4-Trichlorobenzene	180	20.960	20.957	0.003	94	3299699	16.0	23.5	
112 Naphthalene	128	21.095	21.095	0.000	99	6479441	16.0	19.1	
113 Hexachlorobutadiene	225	21.305	21.304	0.001	96	3184218	16.0	26.8	
114 1,2,3-Trichlorobenzene	180	21.376	21.372	0.004	96	3084852	16.0	22.8	
115 2-Methylnaphthalene	142	22.147	22.144	0.003	99	2003736	16.0	13.7	
116 1-Methylnaphthalene	142	22.319	22.319	0.000	99	1824509	16.0	12.3	
A 122 C8 Range	1	14.508	(14.393-14.597)		0	12060880	16.0	13.8	
S 123 1,2-Dichloroethene, Total	1				0		32.0	28.7	
S 124 Xylenes, Total	100				0		48.0	46.9	

Reagents:

40L10DQP_00019	Amount Added: 200.00	Units: mL	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

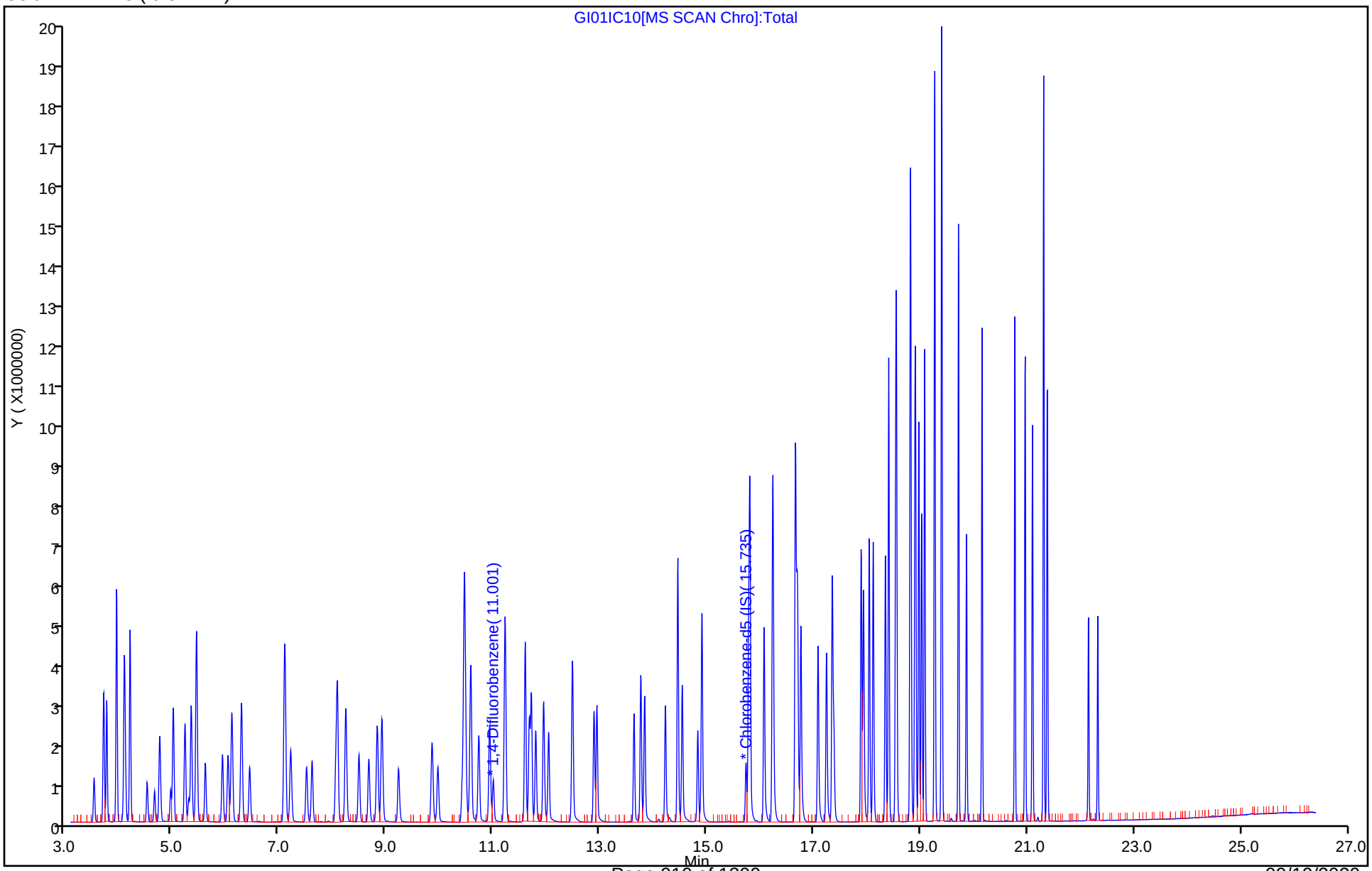
Report Date: 02-Sep-2020 12:23:05 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC10.D

Injection Date:	01-Sep-2020 18:07:30	Instrument ID:	MG	Operator ID:	AFB
Lims ID:	IC L10			Worklist Smp#:	3
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

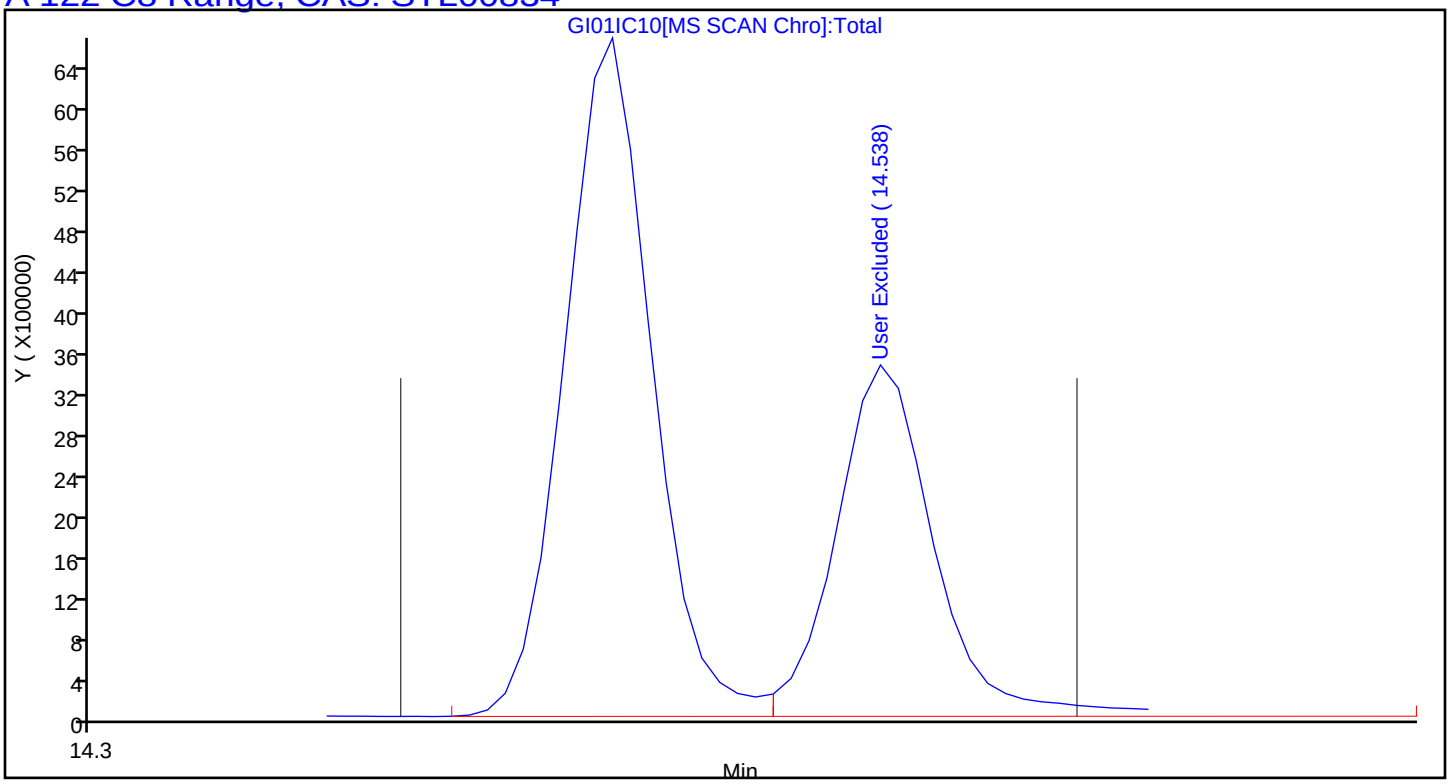


Report Date: 02-Sep-2020 12:23:05 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC10.D				
Injection Date:	01-Sep-2020 18:07:30	Instrument ID:	MG		
Lims ID:	IC L10				
Client ID:					
Operator ID:	AFB	ALS Bottle#:	1	Worklist Smp#:	3
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 122 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC09.D
Lims ID: IC L9
Client ID:
Sample Type: IC Calib Level: 9
Inject. Date: 01-Sep-2020 19:43:30 ALS Bottle#: 1 Worklist Smp#: 5
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016453-005
Misc. Info.: 314600
Operator ID: AFB Instrument ID: MG
Sublist: chrom-MG_TO15*sub17

Method: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 02-Sep-2020 12:23:12 Calib Date: 02-Sep-2020 03:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1035

First Level Reviewer: tajh Date: 02-Sep-2020 07:23:47

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.817	8.812	0.005	89	166255	4.80	4.80	
* 2 1,4-Difluorobenzene	114	11.001	10.996	0.005	98	842312	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.730	15.730	0.000	92	892014	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.374	17.374	0.000	94	684275	4.64	4.89	
6 Chlorodifluoromethane	51	3.705	3.703	0.002	97	1219560	8.00	8.19	
7 Propene	41	3.716	3.716	0.000	99	581585	8.00	7.94	
8 Dichlorodifluoromethane	85	3.764	3.765	-0.001	99	1398945	8.00	8.40	
9 Chloromethane	52	3.947	3.945	0.002	98	235833	8.00	7.91	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.953	3.951	0.002	92	871962	8.00	9.18	
11 Acetaldehyde	44	4.093	4.096	-0.003	95	1150692	40.0	32.8	
12 Vinyl chloride	62	4.115	4.114	0.001	98	684743	8.00	8.23	
14 Butadiene	54	4.201	4.201	0.000	67	613368	8.00	8.36	
13 Butane	43	4.201	4.202	-0.001	85	1171057	8.00	7.85	
15 Bromomethane	94	4.519	4.521	-0.002	99	433116	8.00	8.61	
16 Chloroethane	64	4.659	4.658	0.001	92	291588	8.00	8.44	
17 Ethanol	31	4.751	4.759	-0.008	94	1105422	40.0	35.2	
18 Vinyl bromide	106	4.961	4.960	0.001	98	373832	8.00	8.71	
19 2-Methylbutane	43	5.010	5.010	0.000	93	850465	8.00	8.40	
20 Trichlorofluoromethane	101	5.231	5.229	0.002	99	1067934	8.00	8.25	
21 Acrolein	56	5.231	5.235	-0.004	92	122401	8.00	7.92	
22 Acetonitrile	40	5.296	5.301	-0.005	100	180279	8.00	6.52	
23 Acetone	58	5.349	5.355	-0.006	99	523707	24.0	18.9	
25 Isopropyl alcohol	45	5.441	5.451	-0.010	99	1737523	24.0	21.0	
24 Pentane	72	5.447	5.448	-0.001	94	71611	8.00	8.51	
26 Ethyl ether	31	5.614	5.619	-0.005	90	431001	8.00	7.28	
27 1,1-Dichloroethene	96	5.932	5.928	0.004	90	336401	8.00	8.21	
30 2-Methyl-2-propanol	59	6.040	6.059	-0.019	96	579708	8.00	6.94	
28 Acrylonitrile	53	6.034	6.032	0.002	94	283762	8.00	7.50	
29 1,1,2-Trichloro-1,2,2-trifluoroe	101	6.104	6.107	-0.003	91	751469	8.00	7.93	
31 Methylene Chloride	84	6.277	6.273	0.004	89	333362	8.00	8.13	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.293	6.289	0.004	94	590936	8.00	7.35	
33 Carbon disulfide	76	6.439	6.438	0.001	97	1096319	8.00	7.96	
34 trans-1,2-Dichloroethene	96	7.086	7.082	0.004	91	394374	8.00	8.17	
35 2-Methylpentane	43	7.102	7.101	0.001	97	1489517	8.00	7.91	
36 Methyl tert-butyl ether	73	7.215	7.230	-0.015	92	725384	8.00	7.26	
37 1,1-Dichloroethane	63	7.501	7.499	0.002	98	950498	8.00	7.90	
38 Vinyl acetate	43	7.609	7.607	0.002	100	1181597	8.00	7.50	
39 2-Butanone (MEK)	72	8.051	8.063	-0.012	95	136308	8.00	6.82	
40 Hexane	56	8.083	8.082	0.001	93	493163	8.00	7.94	
41 Isopropyl ether	45	8.240	8.246	-0.006	95	1425530	8.00	6.89	
42 cis-1,2-Dichloroethene	96	8.482	8.483	-0.001	96	414738	8.00	8.09	
43 Ethyl acetate	43	8.671	8.676	-0.005	97	933715	8.00	6.77	
44 Chloroform	83	8.828	8.825	0.003	93	866236	8.00	7.43	
45 Tert-butyl ethyl ether	59	8.914	8.928	-0.014	96	1222689	8.00	7.04	
46 Tetrahydrofuran	42	9.232	9.244	-0.012	91	484501	8.00	7.00	
47 1,1,1-Trichloroethane	97	9.852	9.851	0.001	94	893295	8.00	7.96	
48 1,2-Dichloroethane	62	9.960	9.958	0.002	95	712592	8.00	7.49	
51 n-Butanol	31	10.418	10.442	-0.024	87	171394	8.00	6.36	
50 Benzene	78	10.456	10.451	0.005	93	1289194	8.00	7.45	
49 Cyclohexane	69	10.461	10.455	0.006	86	219701	8.00	7.54	
52 Carbon tetrachloride	117	10.478	10.476	0.002	94	748515	8.00	6.99	
53 2,3-Dimethylpentane	71	10.580	10.577	0.003	89	322420	8.00	7.21	
54 Thiophene	84	10.731	10.725	0.006	93	722547	8.00	7.28	
55 Isooctane	57	11.222	11.219	0.003	98	3096308	8.00	7.31	
56 n-Heptane	71	11.599	11.594	0.005	94	488721	8.00	7.18	
57 1,2-Dichloropropane	63	11.675	11.669	0.006	89	571342	8.00	7.24	
58 Trichloroethene	130	11.712	11.706	0.006	91	521549	8.00	6.91	
59 Dibromomethane	93	11.793	11.791	0.002	91	529820	8.00	7.12	
60 Dichlorobromomethane	83	11.939	11.936	0.003	95	971037	8.00	7.51	
61 1,4-Dioxane	88	11.955	11.974	-0.019	89	139641	8.00	6.91	
62 Methyl methacrylate	41	12.036	12.038	-0.002	86	599074	8.00	6.71	
63 Methylcyclohexane	83	12.484	12.480	0.004	86	842977	8.00	7.38	
64 4-Methyl-2-pentanone (MIBK)	43	12.888	12.898	-0.010	98	909376	8.00	6.05	
65 cis-1,3-Dichloropropene	75	12.942	12.938	0.004	96	793045	8.00	7.64	
66 trans-1,3-Dichloropropene	75	13.632	13.632	0.000	92	658647	8.00	7.20	
67 Toluene	91	13.762	13.759	0.003	92	1406174	8.00	7.15	
68 1,1,2-Trichloroethane	83	13.837	13.831	0.006	95	446561	8.00	7.24	
69 2-Hexanone	58	14.225	14.231	-0.006	92	433145	8.00	5.94	
70 n-Octane	85	14.457	14.454	0.003	97	518088	8.00	7.23	
71 Chlorodibromomethane	129	14.538	14.536	0.002	95	902612	8.00	7.79	
72 Ethylene Dibromide	107	14.829	14.826	0.003	98	825710	8.00	7.46	
73 Tetrachloroethene	129	14.905	14.904	0.001	92	518316	8.00	6.99	
75 Chlorobenzene	112	15.778	15.779	-0.001	91	1158553	8.00	7.28	
74 2,3-Dimethylheptane	43	15.805	15.801	0.004	93	2350533	8.00	6.90	
78 Ethylbenzene	91	16.070	16.068	0.002	99	1737569	8.00	6.87	
79 m-Xylene & p-Xylene	91	16.231	16.232	-0.001	98	2684790	16.0	13.4	
80 n-Nonane	57	16.657	16.654	0.003	93	1441294	8.00	7.30	
81 Bromoform	173	16.679	16.676	0.003	94	866530	8.00	8.89	
82 Styrene	104	16.695	16.695	0.000	97	1075638	8.00	7.40	
83 o-Xylene	91	16.760	16.757	0.003	98	1365939	8.00	6.75	
84 1,1,2,2-Tetrachloroethane	83	17.078	17.078	0.000	98	1057194	8.00	6.55	
85 1,2,3-Trichloropropane	110	17.240	17.237	0.003	93	274369	8.00	6.95	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
86 Isopropylbenzene	105	17.348	17.344	0.004	97	1838036	8.00	6.91	
87 N-Propylbenzene	120	17.887	17.887	0.000	98	502759	8.00	7.08	
88 2-Chlorotoluene	126	17.930	17.930	0.000	98	519001	8.00	7.63	
89 4-Ethyltoluene	105	18.038	18.038	0.000	98	1826353	8.00	6.88	
90 1,3,5-Trimethylbenzene	120	18.113	18.109	0.004	92	735810	8.00	6.93	
92 Alpha Methyl Styrene	118	18.340	18.340	0.000	86	809517	8.00	7.72	
93 n-Decane	57	18.404	18.401	0.003	88	1632200	8.00	6.82	
94 tert-Butylbenzene	119	18.534	18.533	0.001	97	1682234	8.00	7.21	
95 1,2,4-Trimethylbenzene	105	18.550	18.547	0.003	96	1622836	8.00	6.99	
96 sec-Butylbenzene	105	18.803	18.804	-0.001	99	2467800	8.00	7.05	
97 1,3-Dichlorobenzene	146	18.814	18.815	-0.001	97	1286011	8.00	7.78	
98 Benzyl chloride	91	18.890	18.891	-0.001	97	1598462	8.00	7.31	
99 1,4-Dichlorobenzene	146	18.906	18.905	0.001	96	1269190	8.00	7.58	
100 4-Isopropyltoluene	119	18.965	18.965	0.000	96	1951840	8.00	7.20	
101 1,2,3-Trimethylbenzene	105	19.019	19.019	0.000	99	1624627	8.00	7.35	
102 Butylcyclohexane	83	19.073	19.074	-0.001	86	1574993	8.00	6.94	
103 2,3-Dihydroindene	117	19.262	19.262	0.000	93	1670413	8.00	7.20	
104 1,2-Dichlorobenzene	146	19.262	19.262	0.000	83	1214657	8.00	7.66	
105 n-Butylbenzene	91	19.397	19.398	-0.001	98	2083566	8.00	6.78	
106 Indene	116	19.391	19.392	-0.001	90	1469257	8.00	7.39	
107 Undecane	57	19.709	19.708	0.001	94	1761528	8.00	6.60	
108 1,2-Dibromo-3-Chloropropane	157	19.860	19.858	0.002	94	604213	8.00	7.21	
109 1,2,4,5-Tetramethylbenzene	119	20.152	20.150	0.002	97	1816600	8.00	7.17	
110 Dodecane	57	20.766	20.765	0.001	93	1562672	8.00	6.70	
111 1,2,4-Trichlorobenzene	180	20.955	20.957	-0.002	94	1089060	8.00	7.80	
112 Naphthalene	128	21.095	21.095	0.000	99	2219533	8.00	6.59	
113 Hexachlorobutadiene	225	21.306	21.304	0.002	96	1080114	8.00	9.16	
114 1,2,3-Trichlorobenzene	180	21.370	21.372	-0.002	96	1057388	8.00	7.87	
115 2-Methylnaphthalene	142	22.147	22.144	0.003	99	1209161	8.00	8.35	
116 1-Methylnaphthalene	142	22.319	22.319	0.000	99	1234833	8.00	8.38	
A 122 C8 Range	1	14.505	(14.399-14.592)		0	6203684	8.00	7.13	
S 123 1,2-Dichloroethene, Total	1				0		16.0	16.3	
S 124 Xylenes, Total	100				0		24.0	20.2	

Reagents:

40L10DQP_00019	Amount Added: 100.00	Units: mL	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

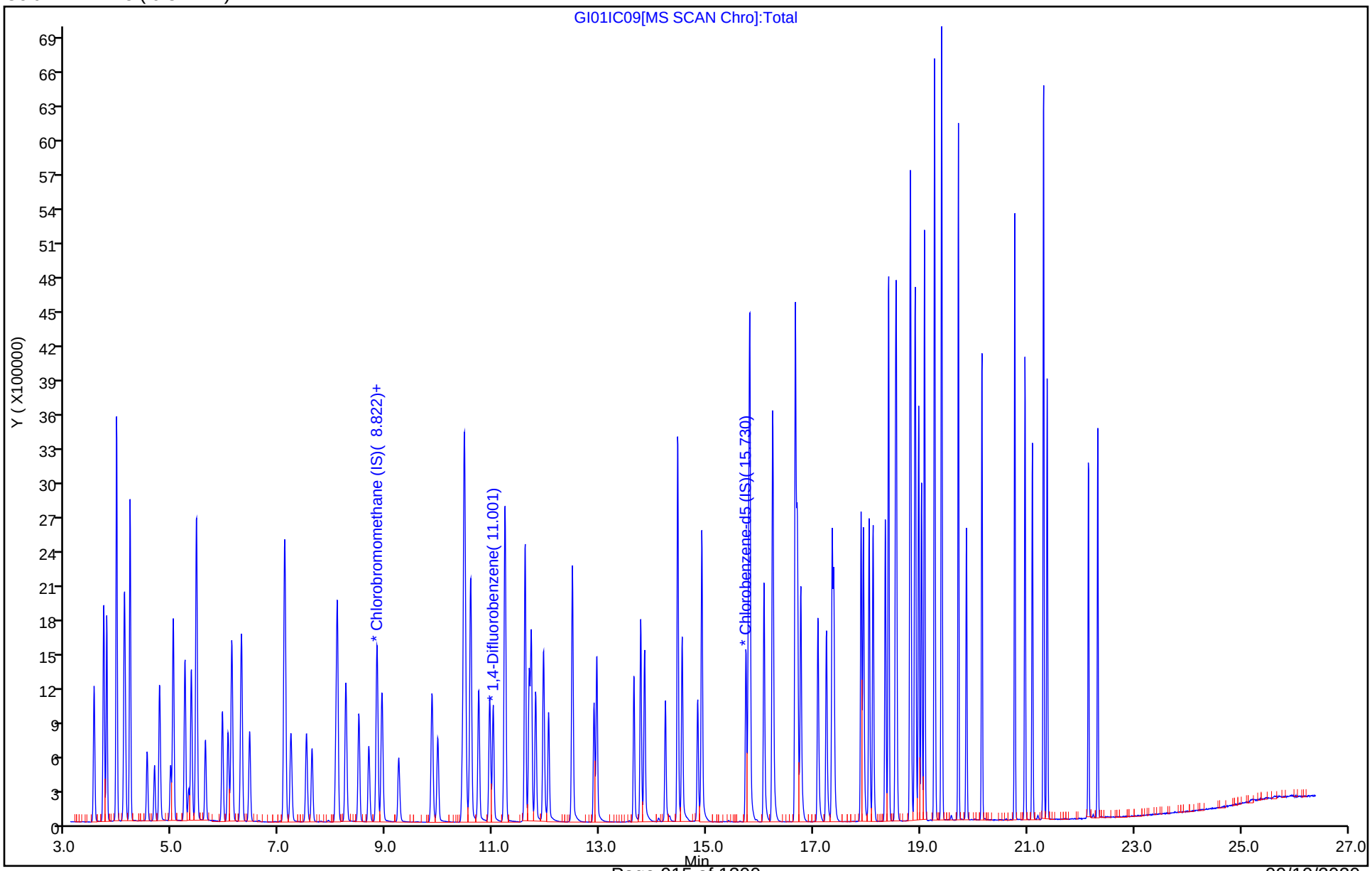
Report Date: 02-Sep-2020 12:23:13 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC09.D

Injection Date:	01-Sep-2020 19:43:30	Instrument ID:	MG	Operator ID:	AFB
Lims ID:	IC L9			Worklist Smp#:	5
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

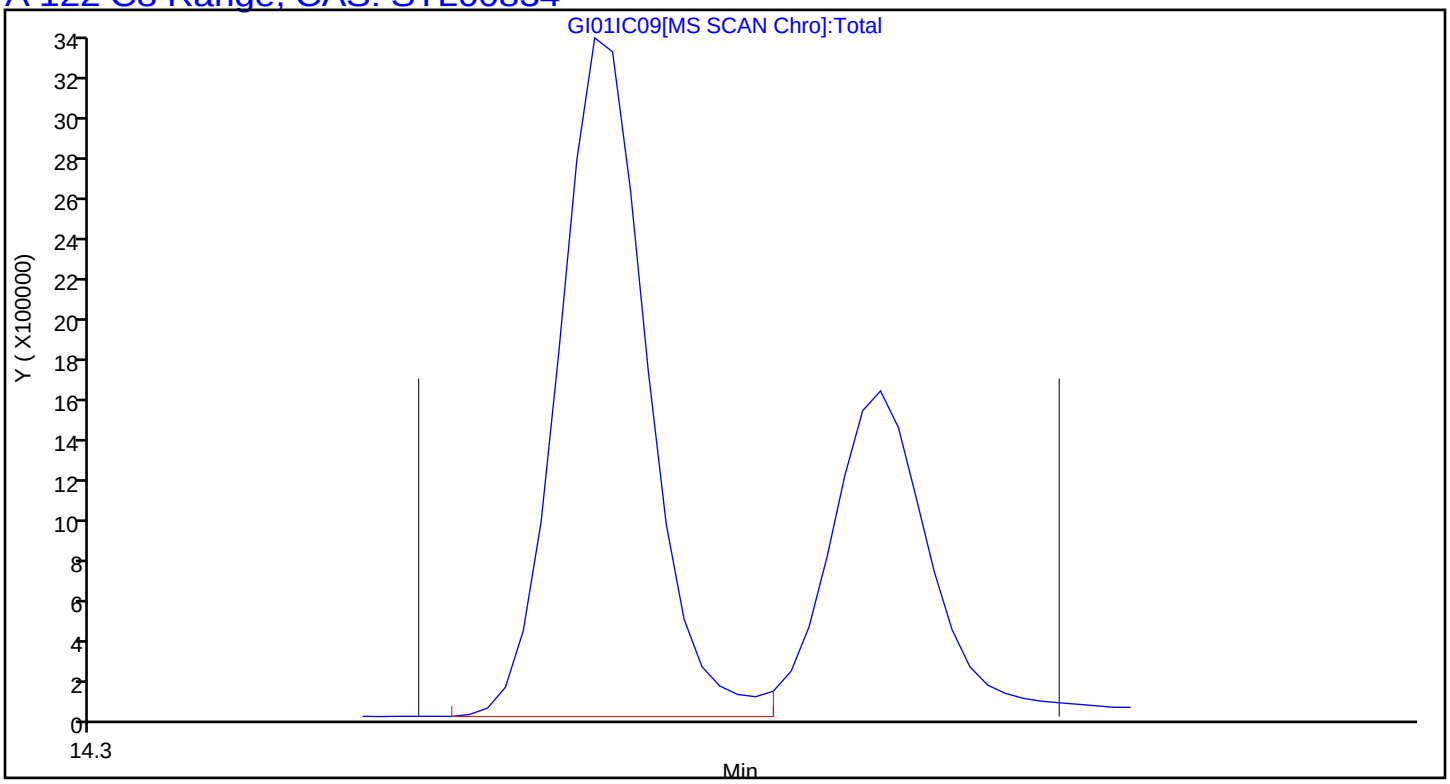


Report Date: 02-Sep-2020 12:23:13 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC09.D				
Injection Date:	01-Sep-2020 19:43:30	Instrument ID:	MG		
Lims ID:	IC L9				
Client ID:					
Operator ID:	AFB	ALS Bottle#:	1	Worklist Smp#:	5
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 122 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC08.D
Lims ID: IC L8
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 01-Sep-2020 21:19:30 ALS Bottle#: 2 Worklist Smp#: 7
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016453-007
Misc. Info.: 314607
Operator ID: AFB Instrument ID: MG
Sublist: chrom-MG_TO15*sub17

Method: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 02-Sep-2020 12:23:20 Calib Date: 02-Sep-2020 03:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1035

First Level Reviewer: barlozhetskayaa Date: 02-Sep-2020 10:52:47

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.811	8.812	-0.001	88	154669	4.80	4.80	
* 2 1,4-Difluorobenzene	114	10.995	10.996	-0.001	98	664974	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.730	15.730	0.000	92	704348	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.374	17.374	0.000	86	517937	4.64	4.69	
6 Chlorodifluoromethane	51	3.705	3.703	0.002	97	595533	4.00	4.30	
7 Propene	41	3.716	3.716	0.000	99	285979	4.00	4.20	
8 Dichlorodifluoromethane	85	3.764	3.765	-0.001	99	682291	4.00	4.40	
9 Chloromethane	52	3.942	3.945	-0.003	98	116599	4.00	4.20	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.953	3.951	0.002	93	407375	4.00	4.61	
11 Acetaldehyde	44	4.093	4.096	-0.003	98	461347	20.0	14.1	
12 Vinyl chloride	62	4.115	4.114	0.001	98	332339	4.00	4.29	
14 Butadiene	54	4.201	4.201	0.000	66	296910	4.00	4.35	
13 Butane	43	4.201	4.202	-0.001	86	581152	4.00	4.19	
15 Bromomethane	94	4.519	4.521	-0.002	99	210733	4.00	4.50	
16 Chloroethane	64	4.659	4.658	0.001	92	140702	4.00	4.38	
17 Ethanol	31	4.751	4.759	-0.008	94	685930	20.0	23.4	
18 Vinyl bromide	106	4.956	4.960	-0.004	98	186602	4.00	4.68	
19 2-Methylbutane	43	5.010	5.010	0.000	93	428407	4.00	4.55	
20 Trichlorofluoromethane	101	5.225	5.229	-0.004	98	527367	4.00	4.38	
21 Acrolein	56	5.231	5.235	-0.004	32	48727	4.00	3.39	
22 Acetonitrile	40	5.296	5.301	-0.005	100	90528	4.00	3.52	
23 Acetone	58	5.344	5.355	-0.011	99	269068	12.0	10.4	
25 Isopropyl alcohol	45	5.430	5.451	-0.021	95	1184009	12.0	15.4	
24 Pentane	72	5.447	5.448	-0.001	96	36548	4.00	4.67	
26 Ethyl ether	31	5.608	5.619	-0.011	89	202112	4.00	3.67	
27 1,1-Dichloroethene	96	5.926	5.928	-0.002	90	165673	4.00	4.35	
28 Acrylonitrile	53	6.029	6.032	-0.003	91	117560	4.00	3.34	
30 2-Methyl-2-propanol	59	6.034	6.059	-0.025	96	406423	4.00	5.23	
29 1,1,2-Trichloro-1,2,2-trifluoroe	101	6.104	6.107	-0.003	90	364620	4.00	4.14	
31 Methylene Chloride	84	6.272	6.273	-0.001	89	163443	4.00	4.29	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.288	6.289	-0.001	94	272432	4.00	3.64	
33 Carbon disulfide	76	6.439	6.438	0.001	97	549880	4.00	4.29	
34 trans-1,2-Dichloroethene	96	7.080	7.082	-0.002	91	190465	4.00	4.24	
35 2-Methylpentane	43	7.102	7.101	0.001	96	705673	4.00	4.03	
36 Methyl tert-butyl ether	73	7.215	7.230	-0.015	93	359280	4.00	3.87	
37 1,1-Dichloroethane	63	7.501	7.499	0.002	98	451772	4.00	4.04	
38 Vinyl acetate	43	7.603	7.607	-0.004	100	503287	4.00	3.43	
39 2-Butanone (MEK)	72	8.051	8.063	-0.012	95	71237	4.00	3.83	
40 Hexane	56	8.078	8.082	-0.004	91	236115	4.00	4.09	
41 Isopropyl ether	45	8.240	8.246	-0.006	96	731542	4.00	3.80	
42 cis-1,2-Dichloroethene	96	8.477	8.483	-0.006	96	201607	4.00	4.23	
43 Ethyl acetate	43	8.666	8.676	-0.010	97	480959	4.00	3.75	
44 Chloroform	83	8.828	8.825	0.003	93	421785	4.00	3.89	
45 Tert-butyl ethyl ether	59	8.914	8.928	-0.014	96	634982	4.00	3.93	
46 Tetrahydrofuran	42	9.232	9.244	-0.012	91	246265	4.00	3.83	
47 1,1,1-Trichloroethane	97	9.852	9.851	0.001	94	425590	4.00	4.08	
48 1,2-Dichloroethane	62	9.960	9.958	0.002	95	340796	4.00	4.54	
51 n-Butanol	31	10.424	10.442	-0.018	90	122991	4.00	5.78	
50 Benzene	78	10.451	10.451	0.000	95	619691	4.00	4.53	
49 Cyclohexane	69	10.451	10.455	-0.004	84	105905	4.00	4.60	
52 Carbon tetrachloride	117	10.478	10.476	0.002	93	425976	4.00	5.04	
53 2,3-Dimethylpentane	71	10.575	10.577	-0.002	90	156938	4.00	4.45	
54 Thiophene	84	10.726	10.725	0.001	95	356857	4.00	4.56	
55 Isooctane	57	11.216	11.219	-0.003	98	1515982	4.00	4.53	
56 n-Heptane	71	11.594	11.594	0.000	94	238604	4.00	4.44	
57 1,2-Dichloropropane	63	11.669	11.669	0.000	90	251789	4.00	4.04	
58 Trichloroethene	130	11.707	11.706	0.001	90	253014	4.00	4.25	
59 Dibromomethane	93	11.793	11.791	0.002	89	262180	4.00	4.46	
60 Dichlorobromomethane	83	11.939	11.936	0.003	95	480892	4.00	4.71	
61 1,4-Dioxane	88	11.961	11.974	-0.014	93	79403	4.00	4.98	
62 Methyl methacrylate	41	12.036	12.038	-0.002	86	300901	4.00	4.27	
63 Methylcyclohexane	83	12.478	12.480	-0.002	86	406216	4.00	4.51	
64 4-Methyl-2-pentanone (MIBK)	43	12.888	12.898	-0.010	98	598699	4.00	5.04	
65 cis-1,3-Dichloropropene	75	12.937	12.938	-0.001	97	352319	4.00	4.30	
66 trans-1,3-Dichloropropene	75	13.632	13.632	0.000	92	296890	4.00	4.11	
67 Toluene	91	13.762	13.759	0.003	92	606087	4.00	3.90	
68 1,1,2-Trichloroethane	83	13.832	13.831	0.001	95	204172	4.00	4.19	
69 2-Hexanone	58	14.220	14.231	-0.011	92	308468	4.00	5.36	
70 n-Octane	85	14.452	14.454	-0.002	97	254271	4.00	4.49	
71 Chlorodibromomethane	129	14.533	14.536	-0.003	95	438464	4.00	4.79	
72 Ethylene Dibromide	107	14.824	14.826	-0.002	97	361106	4.00	4.13	
73 Tetrachloroethene	129	14.905	14.904	0.001	91	242360	4.00	4.14	
75 Chlorobenzene	112	15.778	15.779	-0.001	90	516782	4.00	4.11	
74 2,3-Dimethylheptane	43	15.800	15.801	-0.001	92	1131139	4.00	4.21	
78 Ethylbenzene	91	16.069	16.068	0.001	99	768480	4.00	3.85	
79 m-Xylene & p-Xylene	91	16.231	16.232	-0.001	97	1196112	8.00	7.57	
80 n-Nonane	57	16.652	16.654	-0.002	93	654836	4.00	4.20	
81 Bromoform	173	16.679	16.676	0.003	93	397152	4.00	5.16	
82 Styrene	104	16.695	16.695	0.000	96	470774	4.00	4.10	
83 o-Xylene	91	16.754	16.757	-0.003	97	623631	4.00	3.90	
84 1,1,2,2-Tetrachloroethane	83	17.078	17.078	0.000	98	528435	4.00	4.14	
85 1,2,3-Trichloropropane	110	17.234	17.237	-0.003	93	134141	4.00	4.30	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
86 Isopropylbenzene	105	17.347	17.344	0.003	97	839245	4.00	4.00	
87 N-Propylbenzene	120	17.887	17.887	0.000	98	228287	4.00	4.07	
88 2-Chlorotoluene	126	17.930	17.930	0.000	98	223185	4.00	4.16	
89 4-Ethyltoluene	105	18.038	18.038	0.000	98	850389	4.00	4.05	
90 1,3,5-Trimethylbenzene	120	18.113	18.109	0.004	92	345419	4.00	4.12	
92 Alpha Methyl Styrene	118	18.340	18.340	0.000	86	354303	4.00	4.28	
93 n-Decane	57	18.399	18.401	-0.002	88	759257	4.00	4.02	
94 tert-Butylbenzene	119	18.534	18.533	0.001	92	770891	4.00	4.18	
95 1,2,4-Trimethylbenzene	105	18.550	18.547	0.003	96	764817	4.00	4.17	
96 sec-Butylbenzene	105	18.803	18.804	-0.001	98	1151509	4.00	4.16	
97 1,3-Dichlorobenzene	146	18.814	18.815	-0.001	97	551149	4.00	4.22	
98 Benzyl chloride	91	18.890	18.891	-0.001	97	735219	4.00	4.26	
99 1,4-Dichlorobenzene	146	18.906	18.905	0.001	94	545052	4.00	4.12	
100 4-Isopropyltoluene	119	18.965	18.965	0.000	96	919460	4.00	4.29	
101 1,2,3-Trimethylbenzene	105	19.019	19.019	0.000	99	775110	4.00	4.65	
102 Butylcyclohexane	83	19.073	19.074	-0.001	86	734092	4.00	4.10	
103 2,3-Dihydroindene	117	19.262	19.262	0.000	92	762843	4.00	4.16	
104 1,2-Dichlorobenzene	146	19.262	19.262	0.000	81	538536	4.00	4.30	
106 Indene	116	19.391	19.392	-0.001	89	672537	4.00	4.29	
105 n-Butylbenzene	91	19.397	19.398	-0.001	98	1013104	4.00	4.17	
107 Undecane	57	19.709	19.708	0.001	94	851240	4.00	4.04	
108 1,2-Dibromo-3-Chloropropane	157	19.860	19.858	0.002	93	312261	4.00	5.05	
109 1,2,4,5-Tetramethylbenzene	119	20.152	20.150	0.002	97	936361	4.00	4.98	
110 Dodecane	57	20.766	20.765	0.001	92	855739	4.00	4.65	
111 1,2,4-Trichlorobenzene	180	20.955	20.957	-0.002	94	484290	4.00	4.39	
112 Naphthalene	128	21.095	21.095	0.000	99	1122391	4.00	4.22	
113 Hexachlorobutadiene	225	21.305	21.304	0.001	94	446054	4.00	4.79	
114 1,2,3-Trichlorobenzene	180	21.370	21.372	-0.002	94	479297	4.00	4.52	
115 2-Methylnaphthalene	142	22.147	22.144	0.003	99	762263	4.00	6.67	
116 1-Methylnaphthalene	142	22.319	22.319	0.000	99	785887	4.00	6.75	
A 122 C8 Range	1	14.474	(14.388-14.560)		0	2983142	4.00	4.34	
S 123 1,2-Dichloroethene, Total	1				0		8.00	8.47	
S 124 Xylenes, Total	100				0		12.0	11.5	

Reagents:

40L8DQP_00018	Amount Added: 200.00	Units: mL	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

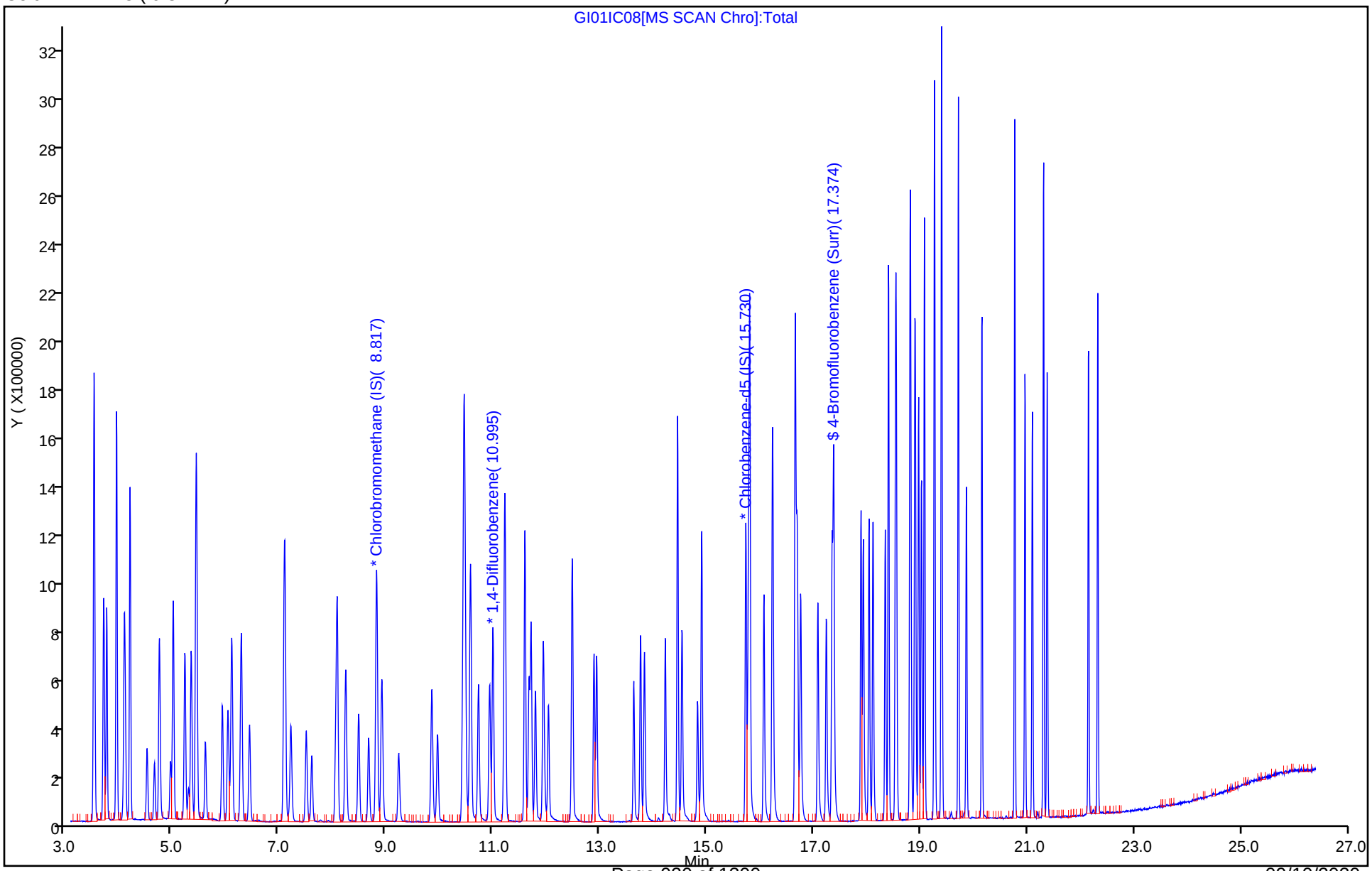
Report Date: 02-Sep-2020 12:23:21 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC08.D

Injection Date:	01-Sep-2020 21:19:30	Instrument ID:	MG	Operator ID:	AFB
Lims ID:	IC L8			Worklist Smp#:	7
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

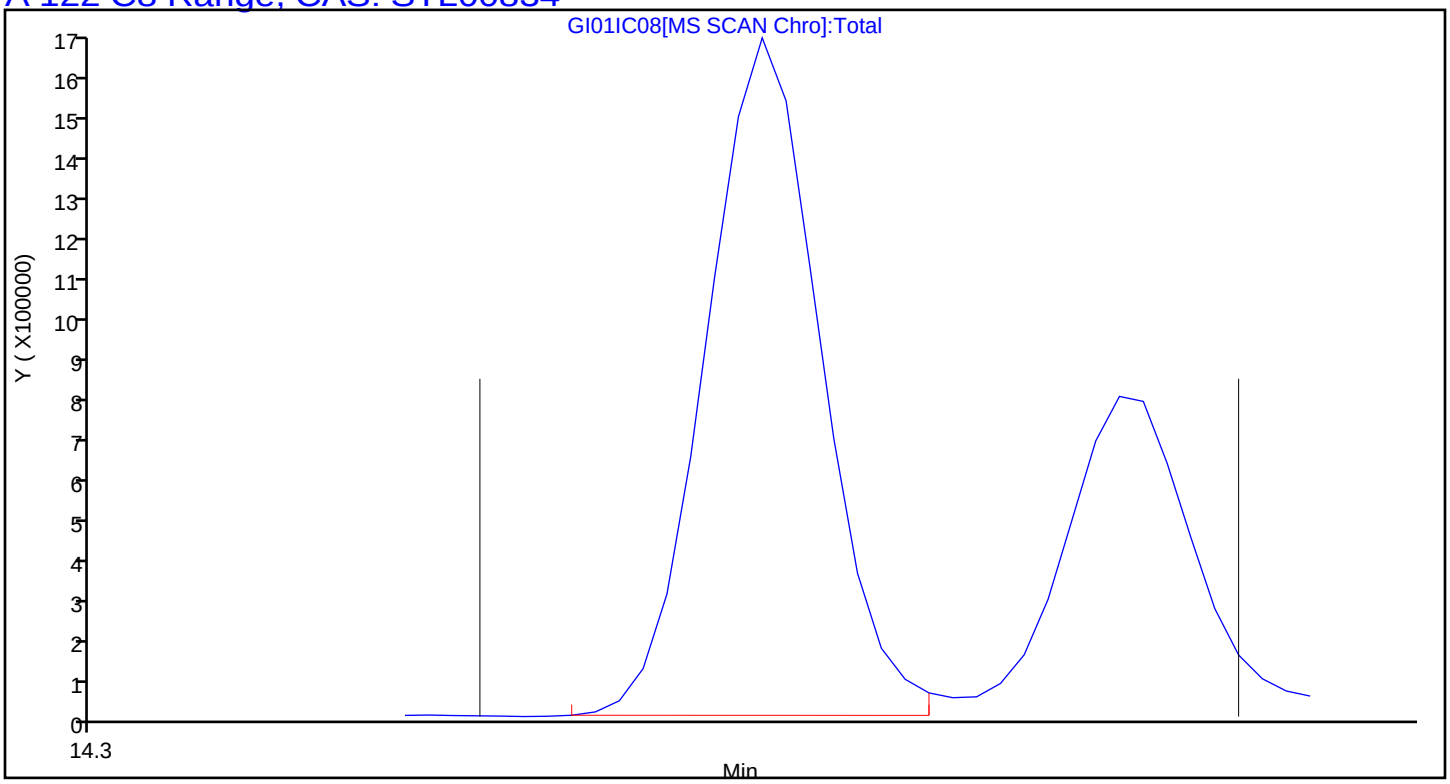


Report Date: 02-Sep-2020 12:23:21 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC08.D				
Injection Date:	01-Sep-2020 21:19:30	Instrument ID:	MG		
Lims ID:	IC L8				
Client ID:					
Operator ID:	AFB	ALS Bottle#:	2	Worklist Smp#:	7
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 122 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC01.D
Lims ID: IC L1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 01-Sep-2020 22:55:30 ALS Bottle#: 3 Worklist Smp#: 9
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016453-009
Misc. Info.: 314720
Operator ID: AFB Instrument ID: MG
Sublist: chrom-MG_TO15*sub17

Method: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 02-Sep-2020 12:23:28 Calib Date: 02-Sep-2020 03:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1035

First Level Reviewer: barlozhetskayaa Date: 02-Sep-2020 10:36:43

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.811	8.812	-0.001	90	174884	4.80	4.80	
* 2 1,4-Difluorobenzene	114	10.995	10.996	-0.001	98	830080	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.730	15.730	0.000	94	782665	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.374	17.374	0.000	82	550738	4.64	4.48	
6 Chlorodifluoromethane	51	3.705	3.703	0.002	78	3340	0.0200	0.0213	
7 Propene	41	3.715	3.716	-0.001	89	2496	0.0200	0.0324	
8 Dichlorodifluoromethane	85	3.764	3.765	-0.001	93	3603	0.0200	0.0206	
9 Chloromethane	52	3.942	3.945	-0.003	62	1142	0.0200	0.0364	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.947	3.951	-0.004	94	1998	0.0200	0.0200	
11 Acetaldehyde	44	4.093	4.096	-0.003	96	11229	0.1000	0.3043	
12 Vinyl chloride	62	4.109	4.114	-0.005	36	1611	0.0200	0.0184	
14 Butadiene	54	4.201	4.201	0.000	61	1667	0.0200	0.0216	
13 Butane	43	4.201	4.202	-0.001	88	4506	0.0200	0.0287	
15 Bromomethane	94	4.524	4.521	0.003	44	1045	0.0200	0.0198	
16 Chloroethane	64	4.648	4.658	-0.010	44	913	0.0200	0.0251	
17 Ethanol	31	4.767	4.759	0.008	94	4007	0.1000	0.1211	
18 Vinyl bromide	106	4.956	4.960	-0.004	44	1153	0.0200	0.0255	
19 2-Methylbutane	43	5.015	5.010	0.005	68	3421	0.0200	0.0321	
20 Trichlorofluoromethane	101	5.225	5.229	-0.004	70	2854	0.0200	0.0210	
23 Acetone	58	5.365	5.355	0.010	98	3541	0.0600	0.1215	
25 Isopropyl alcohol	45	5.473	5.451	0.022	90	6635	0.0600	0.0762	
29 1,1,2-Trichloro-1,2,2-trifluoroe	101	6.115	6.107	0.008	83	2167	0.0200	0.0217	
31 Methylene Chloride	84	6.271	6.273	-0.002	95	2122	0.0200	0.0492	
32 3-Chloro-1-propene	39	6.282	6.289	-0.007	49	2625	0.0200	0.0311	
33 Carbon disulfide	76	6.439	6.438	0.001	92	2949	0.0200	0.0204	
34 trans-1,2-Dichloroethene	96	7.075	7.082	-0.007	88	698	0.0200	0.0138	
35 2-Methylpentane	43	7.096	7.101	-0.005	90	4691	0.0200	0.0237	
36 Methyl tert-butyl ether	73	7.247	7.230	0.017	22	1484	0.0200	0.0141	
37 1,1-Dichloroethane	63	7.495	7.499	-0.004	95	3087	0.0200	0.0244	
38 Vinyl acetate	43	7.614	7.607	0.007	70	2709	0.0200	0.0163	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
39 2-Butanone (MEK)	72	8.072	8.063	0.009	86	677	0.0200	0.0322	
40 Hexane	56	8.089	8.082	0.007	78	1669	0.0200	0.0256	
42 cis-1,2-Dichloroethene	96	8.471	8.483	-0.012	57	1103	0.0200	0.0204	
43 Ethyl acetate	43	8.682	8.676	0.006	24	2501	0.0200	0.0172	
44 Chloroform	83	8.817	8.825	-0.008	27	2647	0.0200	0.0216	
45 Tert-butyl ethyl ether	59	8.957	8.928	0.029	78	2000	0.0200	0.0109	
47 1,1,1-Trichloroethane	97	9.847	9.851	-0.004	10	1560	0.0200	0.0132	
48 1,2-Dichloroethane	62	9.954	9.958	-0.004	47	1462	0.0200	0.0156	
49 Cyclohexane	69	10.456	10.455	0.001	84	762	0.0200	0.0265	
50 Benzene	78	10.445	10.451	-0.006	82	3804	0.0200	0.0223	
52 Carbon tetrachloride	117	10.477	10.476	0.001	80	2115	0.0200	0.0201	
53 2,3-Dimethylpentane	71	10.580	10.577	0.003	85	909	0.0200	0.0206	
54 Thiophene	84	10.726	10.725	0.001	35	2028	0.0200	0.0207	
55 Isooctane	57	11.222	11.219	0.003	94	9413	0.0200	0.0225	
56 n-Heptane	71	11.594	11.594	0.000	91	1488	0.0200	0.0222	
57 1,2-Dichloropropane	63	11.669	11.669	0.000	28	1596	0.0200	0.0205	
58 Trichloroethene	130	11.707	11.706	0.001	50	1476	0.0200	0.0198	
59 Dibromomethane	93	11.788	11.791	-0.003	59	1732	0.0200	0.0236	
60 Dichlorobromomethane	83	11.933	11.936	-0.003	92	2327	0.0200	0.0183	
62 Methyl methacrylate	41	12.030	12.038	-0.008	1	2118	0.0200	0.0241	
63 Methylcyclohexane	83	12.478	12.480	-0.002	85	2436	0.0200	0.0217	
64 4-Methyl-2-pentanone (MIBK)	43	12.920	12.898	0.022	45	2393	0.0200	0.0162	
65 cis-1,3-Dichloropropene	75	12.931	12.938	-0.007	37	1341	0.0200	0.0131	
66 trans-1,3-Dichloropropene	75	13.627	13.632	-0.005	1	1104	0.0200	0.0137	
67 Toluene	91	13.761	13.759	0.002	93	3107	0.0200	0.0180	
68 1,1,2-Trichloroethane	83	13.826	13.831	-0.005	1	869	0.0200	0.0161	
69 2-Hexanone	58	14.247	14.231	0.016	90	1070	0.0200	0.0167	
70 n-Octane	85	14.452	14.454	-0.002	96	1117	0.0200	0.0178	
71 Chlorodibromomethane	129	14.533	14.536	-0.004	91	1445	0.0200	0.0142	
72 Ethylene Dibromide	107	14.829	14.826	0.003	95	1375	0.0200	0.0142	
73 Tetrachloroethene	129	14.899	14.904	-0.005	70	1279	0.0200	0.0197	
75 Chlorobenzene	112	15.778	15.779	-0.001	88	2304	0.0200	0.0165	
74 2,3-Dimethylheptane	43	15.800	15.801	-0.001	95	5600	0.0200	0.0187	
78 Ethylbenzene	91	16.069	16.068	0.001	94	3031	0.0200	0.0137	
79 m-Xylene & p-Xylene	91	16.231	16.232	-0.001	96	5086	0.0400	0.0290	
80 n-Nonane	57	16.652	16.654	-0.002	90	3685	0.0200	0.0213	
81 Bromoform	173	16.679	16.676	0.003	40	1041	0.0200	0.0122	
82 Styrene	104	16.700	16.695	0.005	36	1656	0.0200	0.0130	
83 o-Xylene	91	16.754	16.757	-0.003	90	2884	0.0200	0.0162	
84 1,1,2,2-Tetrachloroethane	83	17.078	17.078	0.000	90	1786	0.0200	0.0126	
86 Isopropylbenzene	105	17.342	17.344	-0.002	1	1654	0.0200	0.007088	
87 N-Propylbenzene	120	17.887	17.887	0.000	96	405	0.0200	0.006501	
89 4-Ethyltoluene	105	18.043	18.038	0.005	91	2826	0.0200	0.0121	
90 1,3,5-Trimethylbenzene	120	18.108	18.109	-0.001	90	1238	0.0200	0.0133	
92 Alpha Methyl Styrene	118	18.340	18.340	0.000	35	793	0.0200	0.008616	
93 n-Decane	57	18.399	18.401	-0.002	92	3174	0.0200	0.0151	
94 tert-Butylbenzene	119	18.528	18.533	-0.005	69	2202	0.0200	0.0108	
95 1,2,4-Trimethylbenzene	105	18.544	18.547	-0.003	90	2764	0.0200	0.0136	
96 sec-Butylbenzene	105	18.803	18.804	-0.001	97	2858	0.0200	0.009301	
97 1,3-Dichlorobenzene	146	18.814	18.815	-0.001	81	2581	0.0200	0.0178	
98 Benzyl chloride	91	18.900	18.891	0.009	90	2494	0.0200	0.0130	
99 1,4-Dichlorobenzene	146	18.900	18.905	-0.005	85	2678	0.0200	0.0182	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
100 4-Isopropyltoluene	119	18.960	18.965	-0.005	26	1413	0.0200	0.005939	
101 1,2,3-Trimethylbenzene	105	19.019	19.019	0.000	55	1654	0.0200	0.009704	
102 Butylcyclohexane	83	19.073	19.074	-0.001	90	3132	0.0200	0.0157	
103 2,3-Dihydroindene	117	19.262	19.262	0.000	86	2515	0.0200	0.0124	
104 1,2-Dichlorobenzene	146	19.262	19.262	0.000	78	2148	0.0200	0.0154	
106 Indene	116	19.396	19.392	0.004	63	1715	0.0200	0.009836	
105 n-Butylbenzene	91	19.402	19.398	0.004	92	3050	0.0200	0.0113	
107 Undecane	57	19.704	19.708	-0.004	88	2975	0.0200	0.0127	
108 1,2-Dibromo-3-Chloropropane	157	19.855	19.858	-0.003	30	701	0.0200	0.0122	
109 1,2,4,5-Tetramethylbenzene	119	20.151	20.150	0.001	91	2896	0.0200	0.0163	
110 Dodecane	57	20.766	20.765	0.001	86	3368	0.0200	0.0165	
111 1,2,4-Trichlorobenzene	180	20.955	20.957	-0.002	85	2095	0.0200	0.0171	
112 Naphthalene	128	21.090	21.095	-0.005	97	4347	0.0200	0.0147	
113 Hexachlorobutadiene	225	21.305	21.304	0.001	85	1528	0.0200	0.0148	
114 1,2,3-Trichlorobenzene	180	21.375	21.372	0.003	89	1945	0.0200	0.0165	
115 2-Methylnaphthalene	142	22.147	22.144	0.003	92	2532	0.0200	0.0199	
116 1-Methylnaphthalene	142	22.319	22.319	0.000	96	3046	0.0200	0.0235	
A 122 C8 Range	1	14.454	(14.420-14.473)		0	21162	0.0200	0.0277	
S 123 1,2-Dichloroethene, Total	1				0		0.0400	0.0342	
S 124 Xylenes, Total	100				0		0.0600	0.0452	

Reagents:

40L1-3DQP_00031	Amount Added: 50.00	Units: mL	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

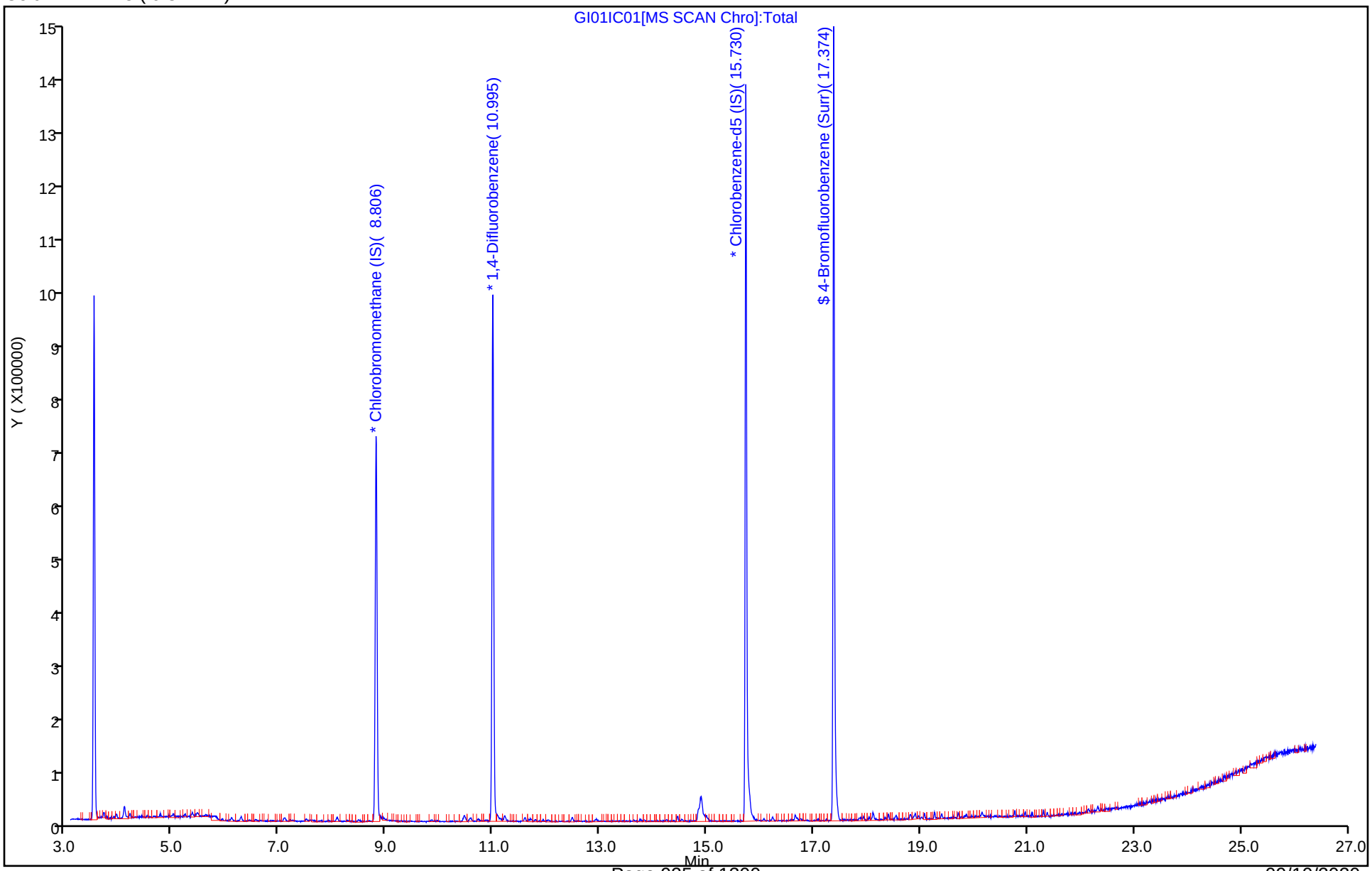
Report Date: 02-Sep-2020 12:23:28 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC01.D

Injection Date:	01-Sep-2020 22:55:30	Instrument ID:	MG	Operator ID:	AFB
Lims ID:	IC L1			Worklist Smp#:	9
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

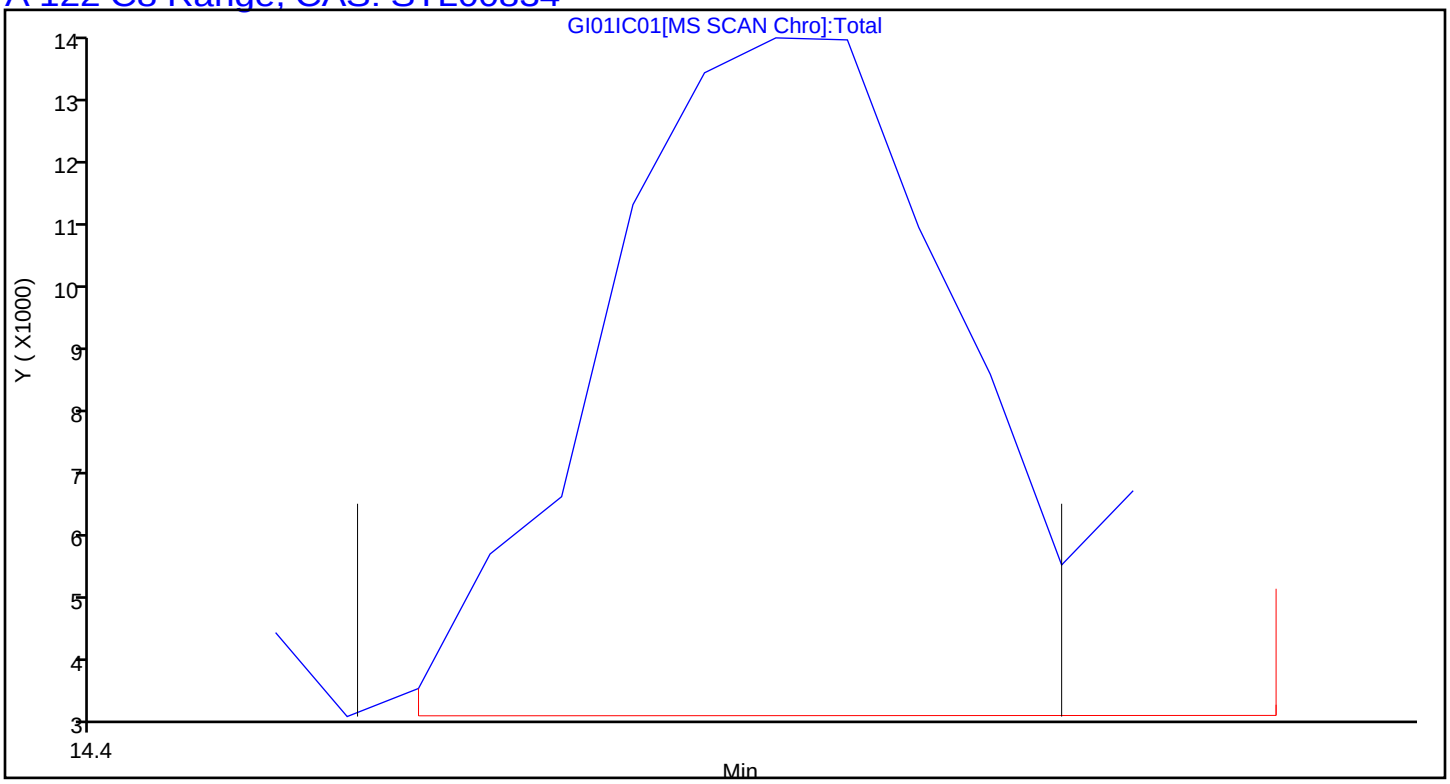


Report Date: 02-Sep-2020 12:23:29 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC01.D				
Injection Date:	01-Sep-2020 22:55:30	Instrument ID:	MG		
Lims ID:	IC L1				
Client ID:					
Operator ID:	AFB	ALS Bottle#:	3	Worklist Smp#:	9
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 122 C8 Range, CAS: STL00834



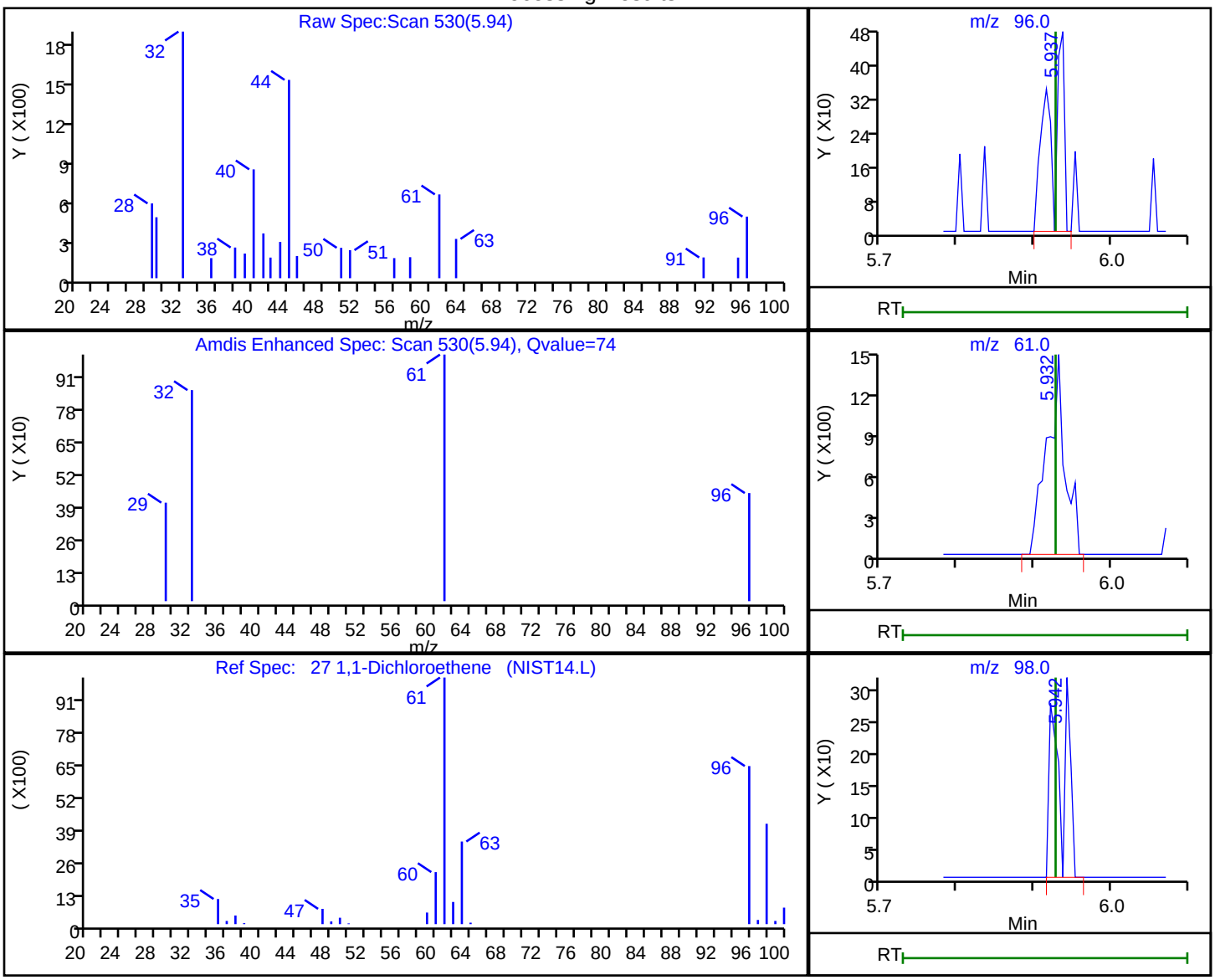
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC01.D				
Injection Date:	01-Sep-2020 22:55:30	Instrument ID:	MG		
Lims ID:	IC L1				
Client ID:					
Operator ID:	AFB	ALS Bottle#:	3	Worklist Smp#:	9
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

27 1,1-Dichloroethene, CAS: 75-35-4

Processing Results



RT	Mass	Response	Amount
5.94	96.00	615	0.014265
5.93	61.00	2311	
5.94	98.00	381	

Reviewer: barlozhetskayaa, 02-Sep-2020 10:49:58

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

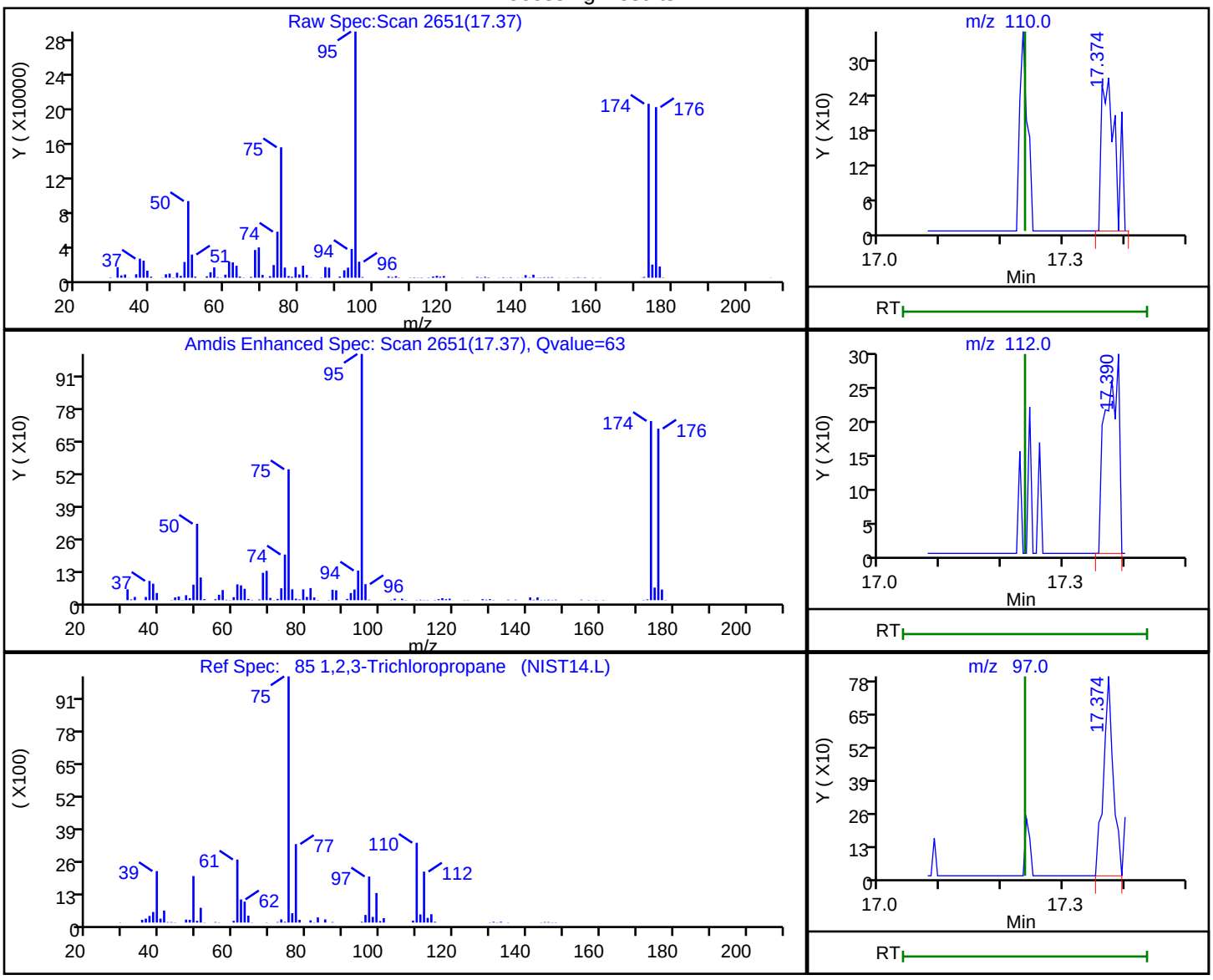
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC01.D				
Injection Date:	01-Sep-2020 22:55:30	Instrument ID:	MG		
Lims ID:	IC L1				
Client ID:					
Operator ID:	AFB	ALS Bottle#:	3	Worklist Smp#:	9
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

85 1,2,3-Trichloropropane, CAS: 96-18-4

Processing Results



RT	Mass	Response	Amount
17.37	110.00	424	0.012236
17.39	112.00	444	
17.37	97.00	876	

Reviewer: barlozhetskayaa, 02-Sep-2020 10:51:13

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

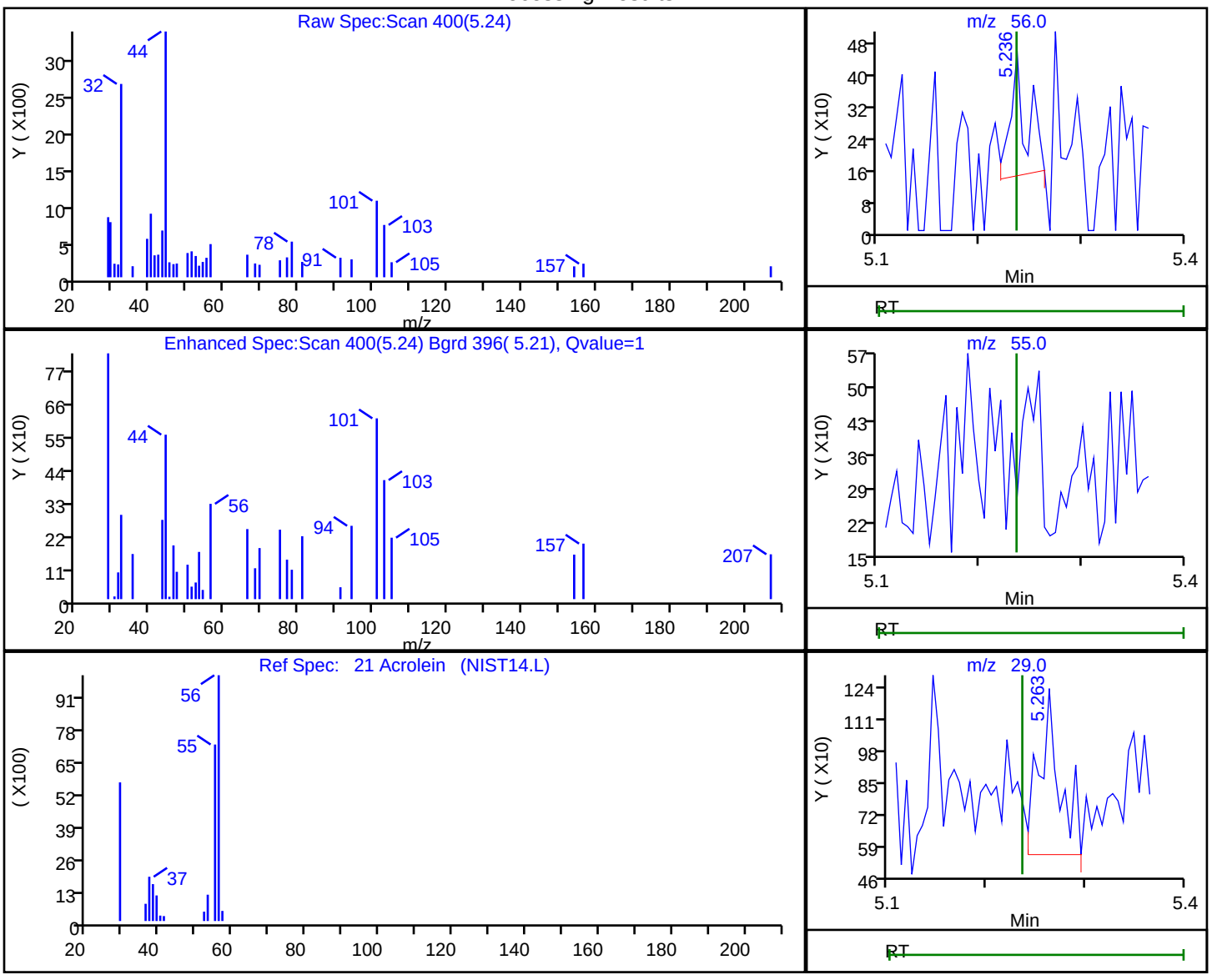
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC01.D				
Injection Date:	01-Sep-2020 22:55:30	Instrument ID:	MG		
Lims ID:	IC L1				
Client ID:					
Operator ID:	AFB	ALS Bottle#:	3	Worklist Smp#:	9
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

21 Acrolein, CAS: 107-02-8

Processing Results



RT	Mass	Response	Amount
5.24	56.00	344	0.021149
5.24	55.00	0	
5.26	29.00	991	

Reviewer: barlozhetskayaa, 02-Sep-2020 10:49:48

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

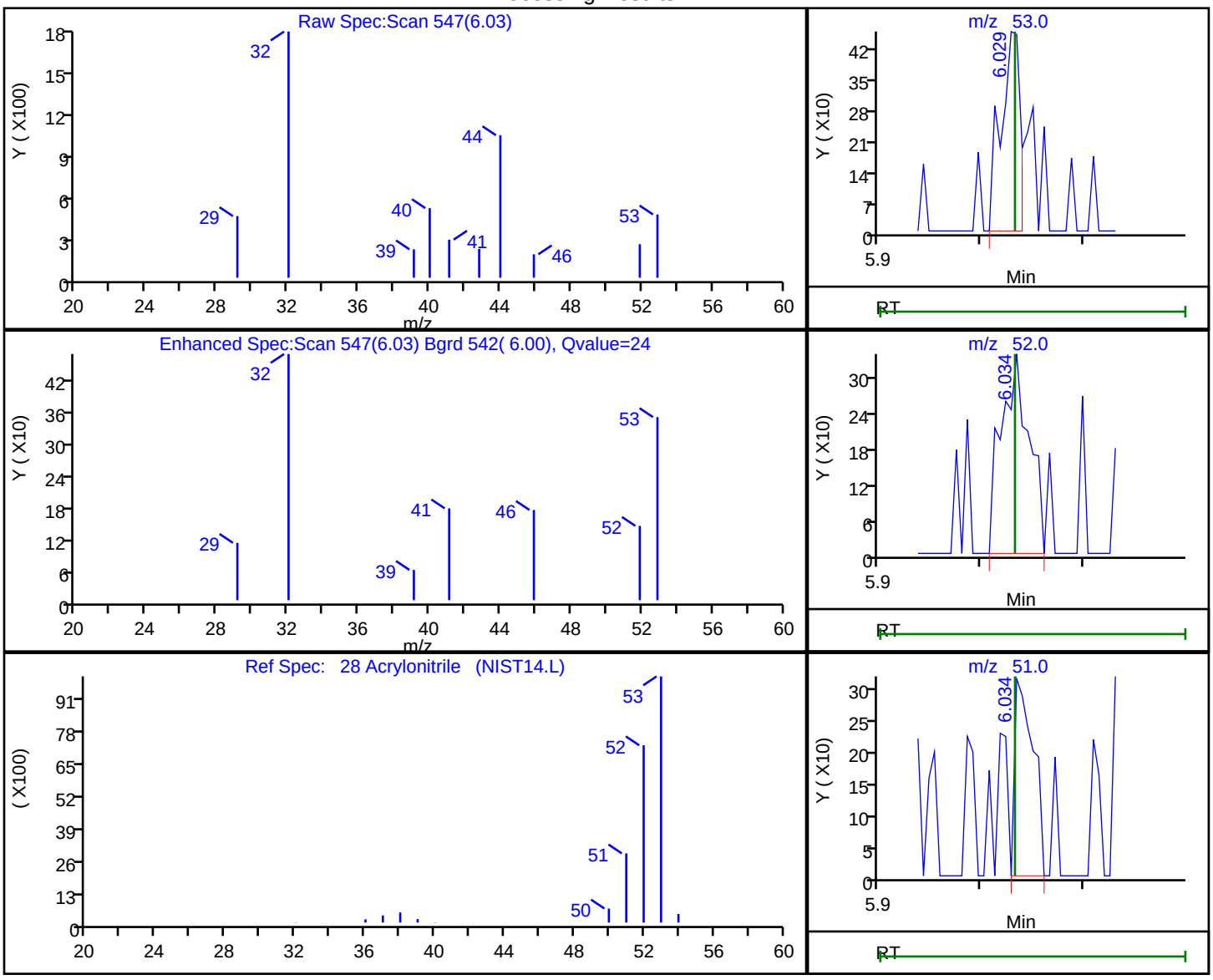
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC01.D				
Injection Date:	01-Sep-2020 22:55:30	Instrument ID:	MG		
Lims ID:	IC L1				
Client ID:					
Operator ID:	AFB	ALS Bottle#:	3	Worklist Smp#:	9
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

28 Acrylonitrile, CAS: 107-13-1

Processing Results



RT	Mass	Response	Amount
6.03	53.00	607	0.015259
6.03	52.00	646	
6.03	51.00	390	

Reviewer: barlozhetskayaa, 02-Sep-2020 10:50:01

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

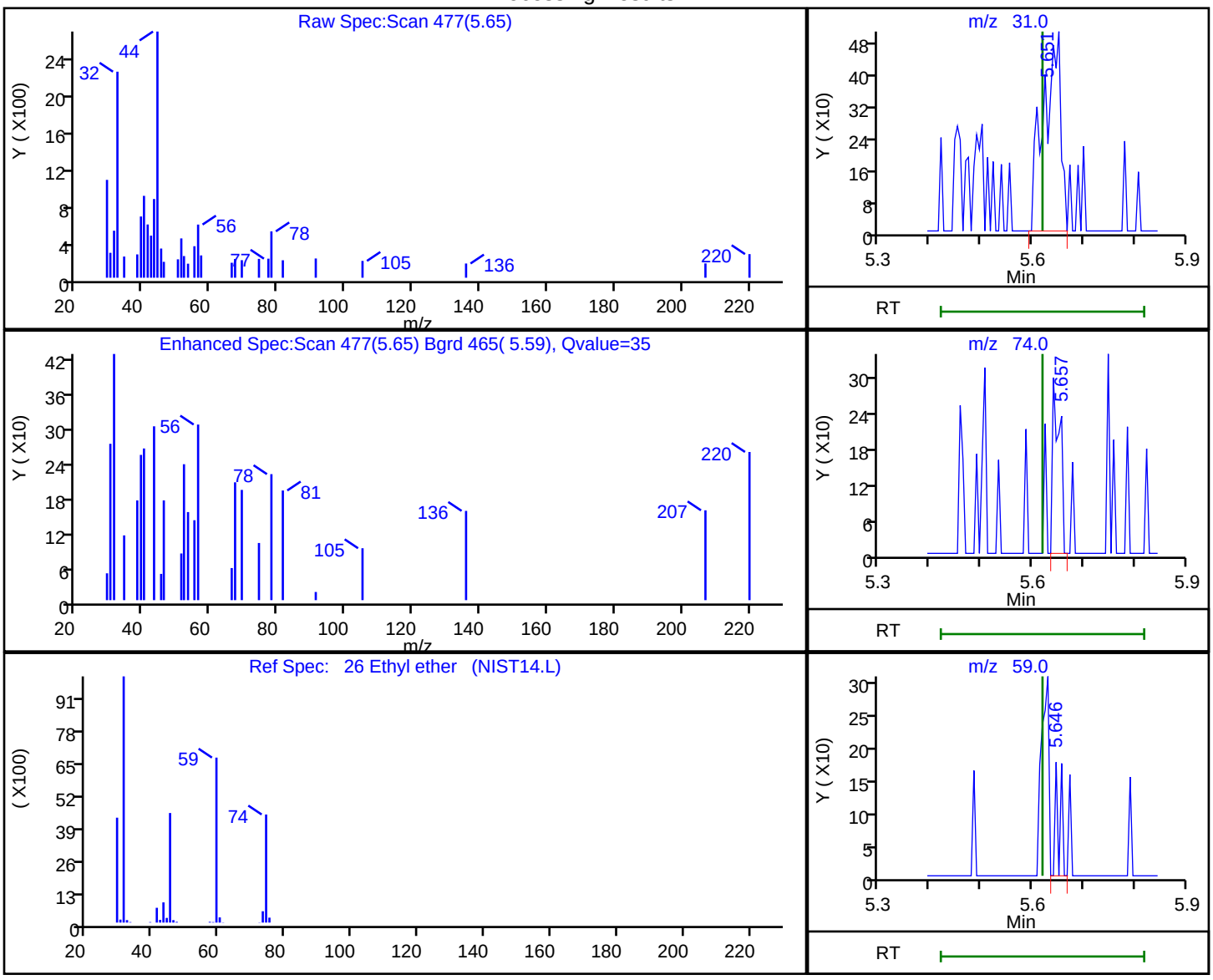
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC01.D				
Injection Date:	01-Sep-2020 22:55:30	Instrument ID:	MG		
Lims ID:	IC L1				
Client ID:					
Operator ID:	AFB	ALS Bottle#:	3	Worklist Smp#:	9
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

26 Ethyl ether, CAS: 60-29-7

Processing Results



RT	Mass	Response	Amount
5.65	31.00	1187	0.019054
5.66	74.00	298	
5.65	59.00	113	

Reviewer: barlozhetskayaa, 02-Sep-2020 10:49:54

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

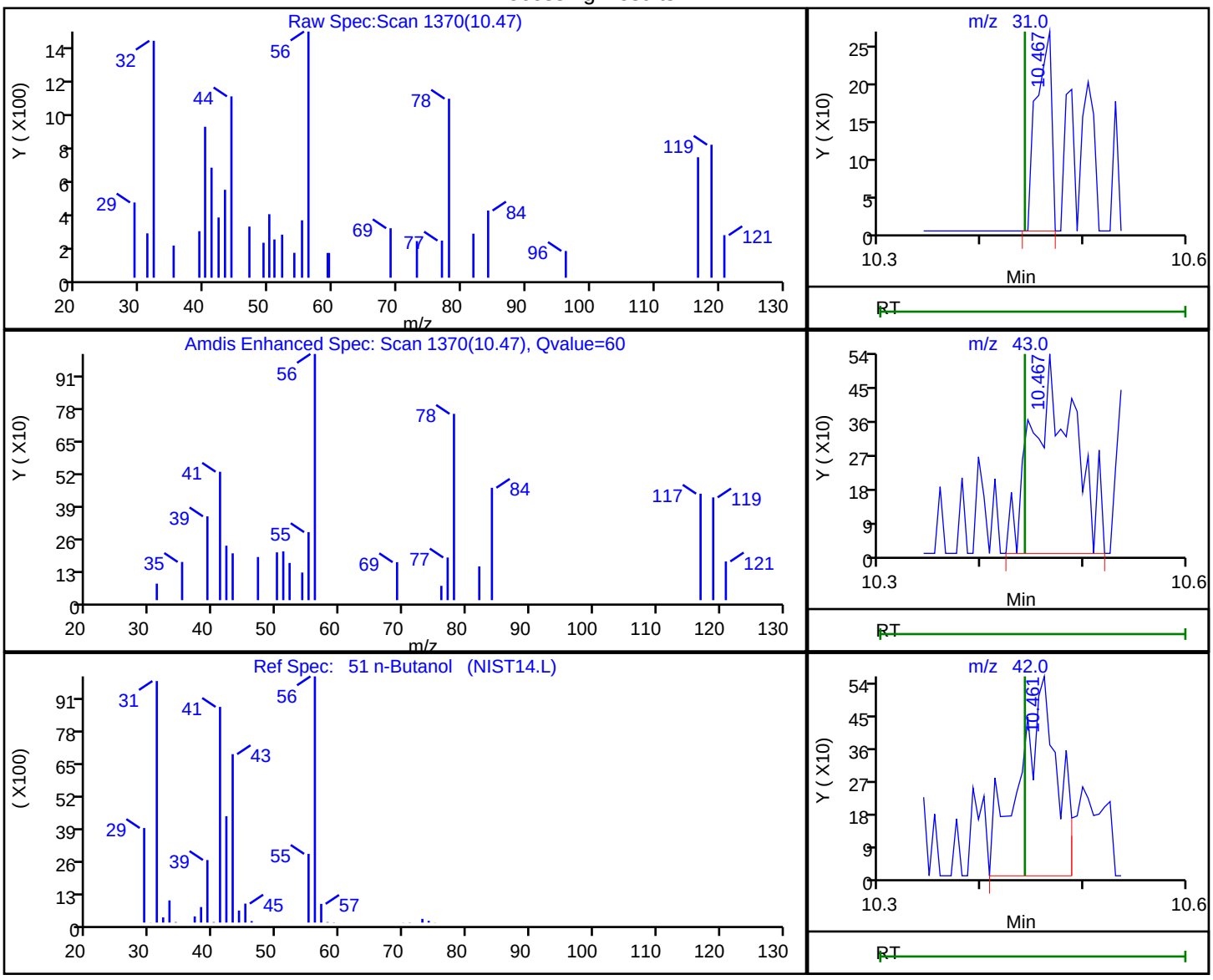
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC01.D				
Injection Date:	01-Sep-2020 22:55:30	Instrument ID:	MG		
Lims ID:	IC L1				
Client ID:					
Operator ID:	AFB	ALS Bottle#:	3	Worklist Smp#:	9
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

51 n-Butanol, CAS: 71-36-3

Processing Results



RT	Mass	Response	Amount
10.47	31.00	276	0.010397
10.47	43.00	1509	
10.46	42.00	1436	

Reviewer: barlozhetskayaa, 02-Sep-2020 10:51:01

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

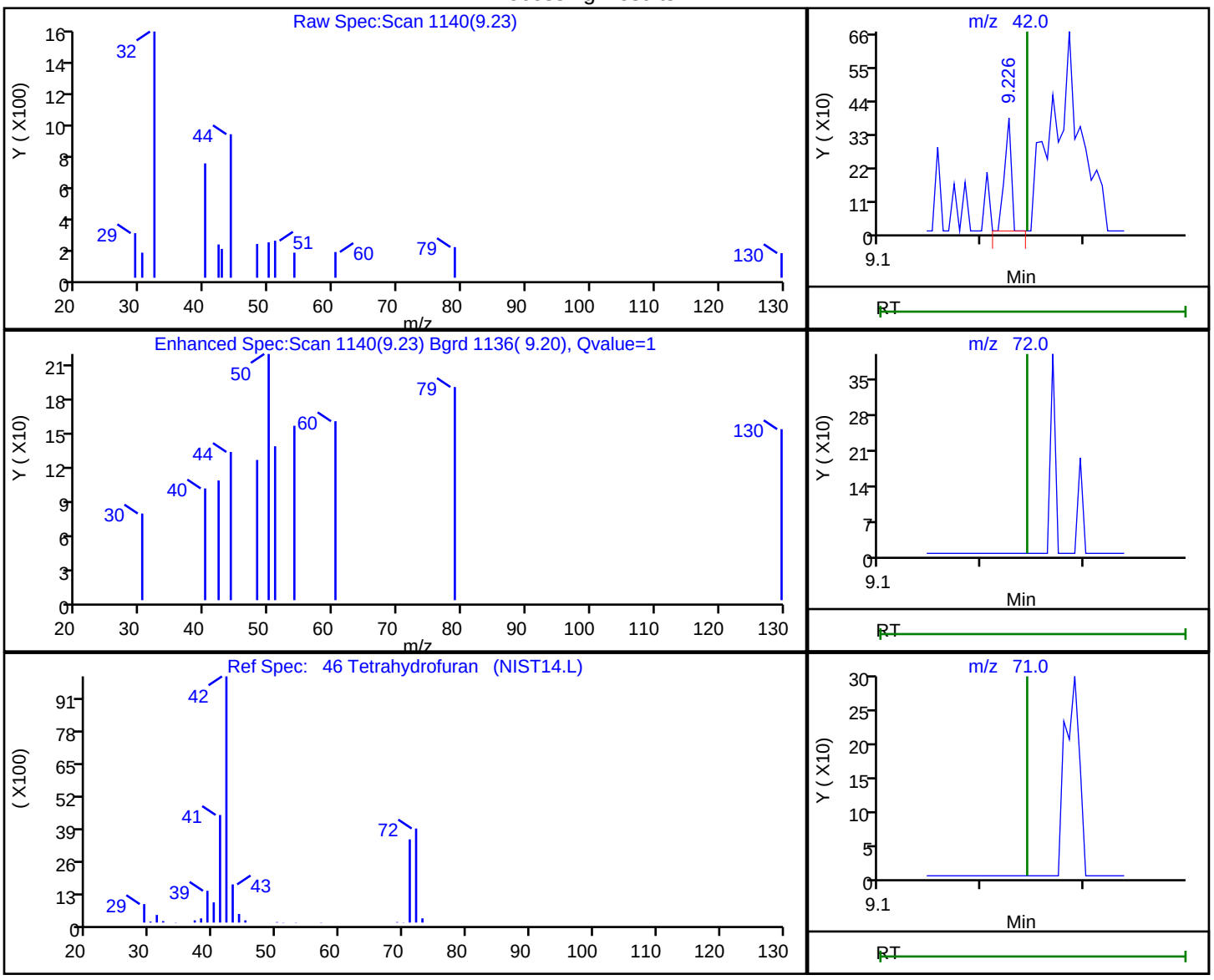
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC01.D				
Injection Date:	01-Sep-2020 22:55:30	Instrument ID:	MG		
Lims ID:	IC L1				
Client ID:					
Operator ID:	AFB	ALS Bottle#:	3	Worklist Smp#:	9
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

46 Tetrahydrofuran, CAS: 109-99-9

Processing Results



RT	Mass	Response	Amount
9.23	42.00	174	0.002391
9.24	72.00	0	
9.24	71.00	0	

Reviewer: barlozhetskayaa, 02-Sep-2020 10:50:56

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC02.D
Lims ID: IC L2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 01-Sep-2020 23:39:30 ALS Bottle#: 3 Worklist Smp#: 10
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016453-010
Misc. Info.: 314720
Operator ID: AFB Instrument ID: MG
Sublist: chrom-MG_TO15*sub17

Method: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 02-Sep-2020 12:23:36 Calib Date: 02-Sep-2020 03:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1035

First Level Reviewer: tajh Date: 02-Sep-2020 08:46:24

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.806	8.812	-0.006	89	136930	4.80	4.80	
* 2 1,4-Difluorobenzene	114	10.990	10.996	-0.006	98	479256	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.730	15.730	0.000	94	525013	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.374	17.374	0.000	89	373260	4.64	4.53	
6 Chlorodifluoromethane	51	3.694	3.703	-0.009	83	6128	0.0400	0.0499	
7 Propene	41	3.716	3.716	0.000	96	3806	0.0400	0.0631	
8 Dichlorodifluoromethane	85	3.759	3.765	-0.006	96	6618	0.0400	0.0482	
9 Chloromethane	52	3.942	3.945	-0.003	72	1377	0.0400	0.0561	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.942	3.951	-0.009	94	3458	0.0400	0.0442	
11 Acetaldehyde	44	4.098	4.096	0.002	99	18891	0.2000	0.6539	
12 Vinyl chloride	62	4.109	4.114	-0.005	31	3427	0.0400	0.0500	
14 Butadiene	54	4.201	4.201	0.000	65	3482	0.0400	0.0576	
13 Butane	43	4.201	4.202	-0.001	82	6880	0.0400	0.0560	
15 Bromomethane	94	4.519	4.521	-0.002	96	2081	0.0400	0.0502	
16 Chloroethane	64	4.648	4.658	-0.010	60	1311	0.0400	0.0461	
17 Ethanol	31	4.762	4.759	0.003	93	8488	0.2000	0.3277	
18 Vinyl bromide	106	4.961	4.960	0.001	68	1455	0.0400	0.0412	
19 2-Methylbutane	43	5.004	5.010	-0.006	84	5791	0.0400	0.0695	
20 Trichlorofluoromethane	101	5.225	5.229	-0.004	96	4748	0.0400	0.0445	
23 Acetone	58	5.371	5.355	0.016	99	8166	0.1200	0.3578	
24 Pentane	72	5.452	5.448	0.004	93	254	0.0400	0.0366	
25 Isopropyl alcohol	45	5.457	5.451	0.006	96	8322	0.1200	0.1221	
26 Ethyl ether	31	5.624	5.619	0.005	72	2911	0.0400	0.0597	
27 1,1-Dichloroethene	96	5.921	5.928	-0.007	72	1385	0.0400	0.0410	
28 Acrylonitrile	53	6.040	6.032	0.008	75	1630	0.0400	0.0523	
30 2-Methyl-2-propanol	59	6.083	6.059	0.024	88	4072	0.0400	0.0592	
29 1,1,2-Trichloro-1,2,2-trifluoroe	101	6.099	6.107	-0.008	83	3416	0.0400	0.0438	
31 Methylene Chloride	84	6.266	6.273	-0.007	85	2287	0.0400	0.0677	
32 3-Chloro-1-propene	39	6.293	6.289	0.004	75	4120	0.0400	0.0622	
33 Carbon disulfide	76	6.433	6.438	-0.005	95	5385	0.0400	0.0475	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
34 trans-1,2-Dichloroethene	96	7.070	7.082	-0.012	85	1709	0.0400	0.0430	
35 2-Methylpentane	43	7.097	7.101	-0.004	97	7961	0.0400	0.0514	
36 Methyl tert-butyl ether	73	7.253	7.230	0.023	79	4414	0.0400	0.0537	
37 1,1-Dichloroethane	63	7.485	7.499	-0.014	54	4322	0.0400	0.0436	
38 Vinyl acetate	43	7.603	7.607	-0.004	98	6339	0.0400	0.0489	
39 2-Butanone (MEK)	72	8.089	8.063	0.026	88	1172	0.0400	0.0712	
40 Hexane	56	8.078	8.082	-0.004	70	2714	0.0400	0.0531	
41 Isopropyl ether	45	8.272	8.246	0.026	92	8253	0.0400	0.0484	
42 cis-1,2-Dichloroethene	96	8.488	8.483	0.005	92	1778	0.0400	0.0421	
43 Ethyl acetate	43	8.682	8.676	0.006	95	6176	0.0400	0.0544	
44 Chloroform	83	8.822	8.825	-0.003	27	4388	0.0400	0.0457	
45 Tert-butyl ethyl ether	59	8.946	8.928	0.018	94	6153	0.0400	0.0430	
46 Tetrahydrofuran	42	9.275	9.244	0.031	60	3187	0.0400	0.0559	
47 1,1,1-Trichloroethane	97	9.847	9.851	-0.004	88	4174	0.0400	0.0452	
48 1,2-Dichloroethane	62	9.949	9.958	-0.009	91	2849	0.0400	0.0526	
51 n-Butanol	31	10.445	10.442	0.003	71	1601	0.0400	0.1045	
50 Benzene	78	10.445	10.451	-0.006	87	5876	0.0400	0.0596	
49 Cyclohexane	69	10.456	10.455	0.001	79	1000	0.0400	0.0603	
52 Carbon tetrachloride	117	10.472	10.476	-0.004	88	3137	0.0400	0.0515	
53 2,3-Dimethylpentane	71	10.580	10.577	0.003	90	1520	0.0400	0.0597	
54 Thiophene	84	10.720	10.725	-0.005	91	3236	0.0400	0.0573	
55 Isooctane	57	11.222	11.219	0.003	92	15246	0.0400	0.0633	
56 n-Heptane	71	11.588	11.594	-0.006	93	2377	0.0400	0.0614	
57 1,2-Dichloropropane	63	11.669	11.669	0.000	89	2570	0.0400	0.0573	
58 Trichloroethene	130	11.696	11.706	-0.010	85	2736	0.0400	0.0637	
59 Dibromomethane	93	11.788	11.791	-0.003	88	2434	0.0400	0.0575	
60 Dichlorobromomethane	83	11.939	11.936	0.003	91	4579	0.0400	0.0622	
61 1,4-Dioxane	88	11.993	11.974	0.019	58	941	0.0400	0.0818	
62 Methyl methacrylate	41	12.041	12.038	0.003	81	4500	0.0400	0.0886	
63 Methylcyclohexane	83	12.478	12.480	-0.002	89	3723	0.0400	0.0573	
64 4-Methyl-2-pentanone (MIBK)	43	12.899	12.898	0.001	68	5712	0.0400	0.0668	
65 cis-1,3-Dichloropropene	75	12.942	12.938	0.004	92	3325	0.0400	0.0563	
66 trans-1,3-Dichloropropene	75	13.627	13.632	-0.005	88	3357	0.0400	0.0623	
67 Toluene	91	13.751	13.759	-0.008	94	6411	0.0400	0.0554	
68 1,1,2-Trichloroethane	83	13.832	13.831	0.001	88	1724	0.0400	0.0475	
69 2-Hexanone	58	14.236	14.231	0.005	88	3160	0.0400	0.0737	
70 n-Octane	85	14.457	14.454	0.003	98	1972	0.0400	0.0467	
71 Chlorodibromomethane	129	14.538	14.536	0.002	93	3335	0.0400	0.0489	
72 Ethylene Dibromide	107	14.829	14.826	0.003	96	3248	0.0400	0.0499	
73 Tetrachloroethene	129	14.905	14.904	0.001	83	2500	0.0400	0.0573	
75 Chlorobenzene	112	15.784	15.779	0.005	93	5000	0.0400	0.0534	
74 2,3-Dimethylheptane	43	15.800	15.801	-0.001	90	9338	0.0400	0.0466	
78 Ethylbenzene	91	16.064	16.068	-0.004	97	7158	0.0400	0.0481	
79 m-Xylene & p-Xylene	91	16.231	16.232	-0.001	97	11865	0.0800	0.1008	
80 n-Nonane	57	16.657	16.654	0.003	94	6097	0.0400	0.0525	
81 Bromoform	173	16.668	16.676	-0.008	78	2158	0.0400	0.0376	
82 Styrene	104	16.690	16.695	-0.005	88	3747	0.0400	0.0438	
83 o-Xylene	91	16.765	16.757	0.008	96	6008	0.0400	0.0504	
84 1,1,2,2-Tetrachloroethane	83	17.078	17.078	0.000	95	5272	0.0400	0.0555	
85 1,2,3-Trichloropropane	110	17.240	17.237	0.003	92	1349	0.0400	0.0580	
86 Isopropylbenzene	105	17.342	17.344	-0.002	86	8674	0.0400	0.0554	
87 N-Propylbenzene	120	17.892	17.887	0.005	99	2286	0.0400	0.0547	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
88 2-Chlorotoluene	126	17.924	17.930	-0.006	95	2016	0.0400	0.0504	
89 4-Ethyltoluene	105	18.032	18.038	-0.006	98	8740	0.0400	0.0559	
90 1,3,5-Trimethylbenzene	120	18.108	18.109	-0.001	90	3362	0.0400	0.0538	
92 Alpha Methyl Styrene	118	18.345	18.340	0.005	75	3084	0.0400	0.0500	
93 n-Decane	57	18.404	18.401	0.003	84	7315	0.0400	0.0520	
94 tert-Butylbenzene	119	18.534	18.533	0.001	87	7547	0.0400	0.0549	
95 1,2,4-Trimethylbenzene	105	18.550	18.547	0.003	94	6713	0.0400	0.0491	
96 sec-Butylbenzene	105	18.803	18.804	-0.001	98	10835	0.0400	0.0526	
97 1,3-Dichlorobenzene	146	18.814	18.815	-0.001	90	4541	0.0400	0.0466	
99 1,4-Dichlorobenzene	146	18.906	18.905	0.001	89	5059	0.0400	0.0513	
98 Benzyl chloride	91	18.890	18.891	-0.001	97	7655	0.0400	0.0595	
100 4-Isopropyltoluene	119	18.965	18.965	0.000	95	8175	0.0400	0.0512	
101 1,2,3-Trimethylbenzene	105	19.019	19.019	0.000	94	6880	0.0400	0.0601	
102 Butylcyclohexane	83	19.073	19.074	-0.001	82	7078	0.0400	0.0530	
103 2,3-Dihydroindene	117	19.262	19.262	0.000	92	6041	0.0400	0.0442	
104 1,2-Dichlorobenzene	146	19.267	19.262	0.005	83	4702	0.0400	0.0504	
106 Indene	116	19.386	19.392	-0.006	76	5153	0.0400	0.0441	
105 n-Butylbenzene	91	19.402	19.398	0.004	95	9273	0.0400	0.0513	
107 Undecane	57	19.709	19.708	0.001	87	9041	0.0400	0.0575	
108 1,2-Dibromo-3-Chloropropane	157	19.849	19.858	-0.009	34	830	0.0400	0.0215	
109 1,2,4,5-Tetramethylbenzene	119	20.151	20.150	0.001	96	8612	0.0400	0.0722	
110 Dodecane	57	20.761	20.765	-0.004	88	10113	0.0400	0.0737	
111 1,2,4-Trichlorobenzene	180	20.960	20.957	0.003	89	4559	0.0400	0.0555	
112 Naphthalene	128	21.101	21.095	0.006	96	10621	0.0400	0.0536	
113 Hexachlorobutadiene	225	21.300	21.304	-0.004	88	3572	0.0400	0.0515	
114 1,2,3-Trichlorobenzene	180	21.370	21.372	-0.002	94	4616	0.0400	0.0584	
115 2-Methylnaphthalene	142	22.141	22.144	-0.003	95	6137	0.0400	0.0720	
116 1-Methylnaphthalene	142	22.319	22.319	0.000	96	6836	0.0400	0.0788	
A 122 C8 Range	1	14.447	(14.409-14.484)		0	34657	0.0400	0.0677	
S 123 1,2-Dichloroethene, Total	1				0		0.0800	0.0851	
S 124 Xylenes, Total	100				0		0.1200	0.1512	

Reagents:

40L1-3DQP_00031	Amount Added: 100.00	Units: mL	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

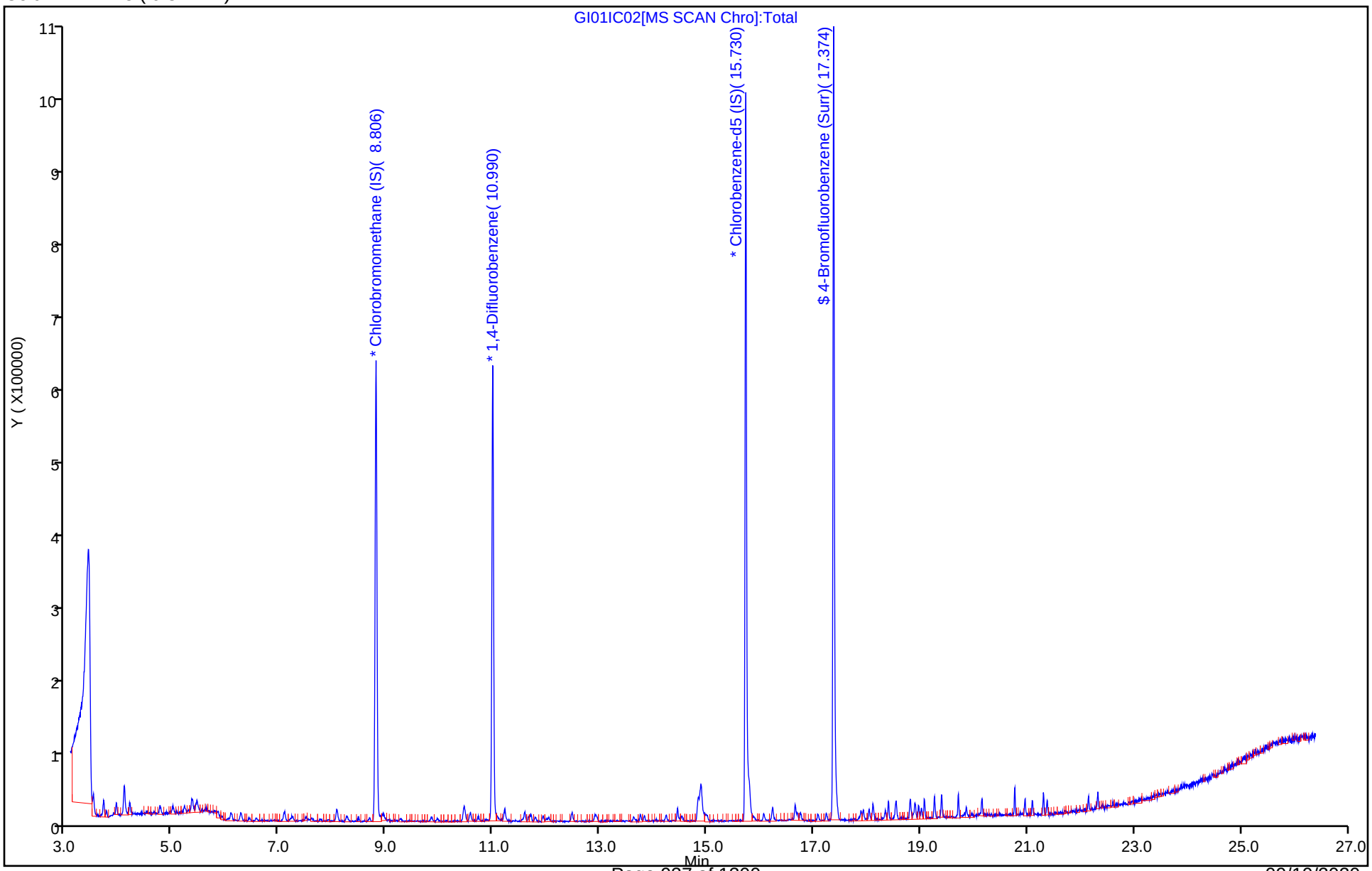
Report Date: 02-Sep-2020 12:23:37 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC02.D

Injection Date:	01-Sep-2020 23:39:30	Instrument ID:	MG	Operator ID:	AFB
Lims ID:	IC L2			Worklist Smp#:	10
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

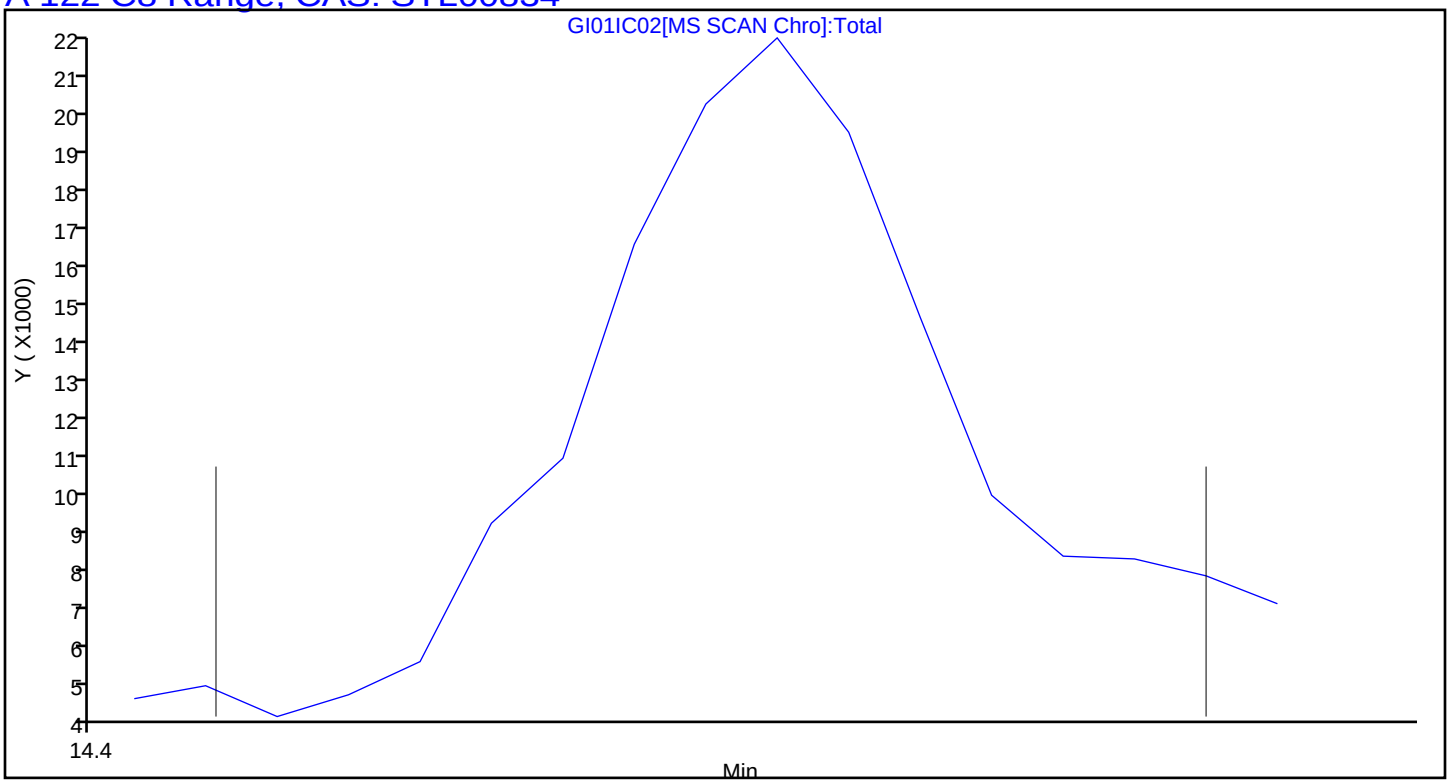


Report Date: 02-Sep-2020 12:23:37 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC02.D				
Injection Date:	01-Sep-2020 23:39:30	Instrument ID:	MG		
Lims ID:	IC L2				
Client ID:					
Operator ID:	AFB	ALS Bottle#:	3	Worklist Smp#:	10
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 122 C8 Range, CAS: STL00834



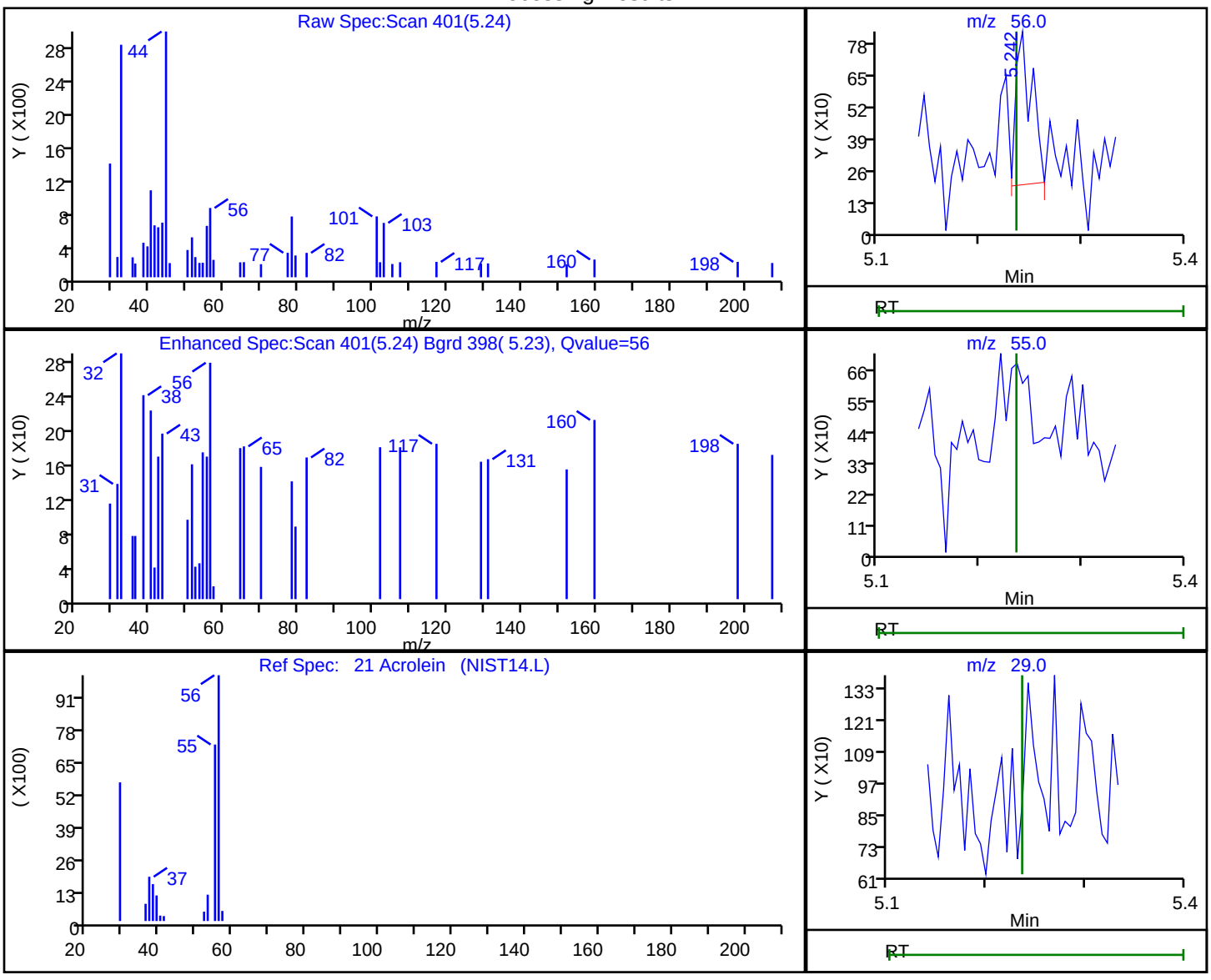
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC02.D				
Injection Date:	01-Sep-2020 23:39:30	Instrument ID:	MG		
Lims ID:	IC L2				
Client ID:					
Operator ID:	AFB	ALS Bottle#:	3	Worklist Smp#:	10
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

21 Acrolein, CAS: 107-02-8

Processing Results



RT	Mass	Response	Amount
5.24	56.00	680	0.053394
5.24	55.00	0	
5.24	29.00	0	

Reviewer: barlozhetskayaa, 02-Sep-2020 10:43:59

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC03.D
Lims ID: IC L3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 02-Sep-2020 00:24:30 ALS Bottle#: 3 Worklist Smp#: 11
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016453-011
Misc. Info.: 314720
Operator ID: AFB Instrument ID: MG
Sublist: chrom-MG_TO15*sub17

Method: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 02-Sep-2020 12:23:42 Calib Date: 02-Sep-2020 03:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1035

First Level Reviewer: barlozhetskayaa Date: 02-Sep-2020 10:38:00

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.811	8.812	-0.001	89	132571	4.80	4.80	
* 2 1,4-Difluorobenzene	114	10.995	10.996	-0.001	98	653131	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.730	15.730	0.000	93	645272	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.374	17.374	0.000	83	449593	4.64	4.44	
6 Chlorodifluoromethane	51	3.705	3.703	0.002	88	11226	0.0800	0.0945	
7 Propene	41	3.721	3.716	0.005	96	5751	0.0800	0.0985	
8 Dichlorodifluoromethane	85	3.764	3.765	-0.001	97	11274	0.0800	0.0849	
9 Chloromethane	52	3.942	3.945	-0.003	75	2873	0.0800	0.1208	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.953	3.951	0.002	92	5785	0.0800	0.0764	
11 Acetaldehyde	44	4.098	4.096	0.002	99	39777	0.4000	1.42	
12 Vinyl chloride	62	4.114	4.114	0.000	96	5768	0.0800	0.0869	
14 Butadiene	54	4.201	4.201	0.000	74	5655	0.0800	0.0966	
13 Butane	43	4.206	4.202	0.004	83	10293	0.0800	0.0866	
15 Bromomethane	94	4.524	4.521	0.003	94	3458	0.0800	0.0862	
16 Chloroethane	64	4.659	4.658	0.001	89	2678	0.0800	0.0973	
17 Ethanol	31	4.772	4.759	0.013	95	16047	0.4000	0.6399	
18 Vinyl bromide	106	4.961	4.960	0.001	97	2733	0.0800	0.0799	
19 2-Methylbutane	43	5.010	5.010	0.000	88	8464	0.0800	0.1048	
20 Trichlorofluoromethane	101	5.236	5.229	0.007	96	9154	0.0800	0.0887	
21 Acrolein	56	5.241	5.235	0.006	29	1960	0.0800	0.1590	
22 Acetonitrile	40	5.312	5.301	0.011	71	2884	0.0800	0.1307	
23 Acetone	58	5.355	5.355	0.000	100	16115	0.2400	0.7294	
24 Pentane	72	5.452	5.448	0.004	94	506	0.0800	0.0754	
25 Isopropyl alcohol	45	5.473	5.451	0.022	95	23180	0.2400	0.3514	
26 Ethyl ether	31	5.635	5.619	0.016	85	5547	0.0800	0.1175	
27 1,1-Dichloroethene	96	5.926	5.928	-0.002	88	2921	0.0800	0.0894	
28 Acrylonitrile	53	6.034	6.032	0.002	78	3178	0.0800	0.1054	
30 2-Methyl-2-propanol	59	6.083	6.059	0.024	96	7941	0.0800	0.1192	
29 1,1,2-Trichloro-1,2,2-trifluoroe	101	6.115	6.107	0.008	87	6627	0.0800	0.0877	
31 Methylene Chloride	84	6.266	6.273	-0.007	87	3527	0.0800	0.1079	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.288	6.289	-0.001	94	7559	0.0800	0.1180	
33 Carbon disulfide	76	6.439	6.438	0.001	94	10302	0.0800	0.0938	
34 trans-1,2-Dichloroethene	96	7.086	7.082	0.004	91	3544	0.0800	0.0921	
35 2-Methylpentane	43	7.107	7.101	0.006	96	14371	0.0800	0.0958	
36 Methyl tert-butyl ether	73	7.247	7.230	0.017	88	8506	0.0800	0.1068	
37 1,1-Dichloroethane	63	7.501	7.499	0.002	98	8657	0.0800	0.0903	
38 Vinyl acetate	43	7.609	7.607	0.002	99	12385	0.0800	0.0986	
40 Hexane	56	8.078	8.082	-0.004	66	4458	0.0800	0.0901	
39 2-Butanone (MEK)	72	8.078	8.063	0.015	86	2587	0.0800	0.1622	
41 Isopropyl ether	45	8.256	8.246	0.010	96	15835	0.0800	0.0959	
42 cis-1,2-Dichloroethene	96	8.482	8.483	-0.001	94	3509	0.0800	0.0858	
43 Ethyl acetate	43	8.682	8.676	0.006	95	12098	0.0800	0.1100	
44 Chloroform	83	8.827	8.825	0.002	92	8911	0.0800	0.0958	
45 Tert-butyl ethyl ether	59	8.935	8.928	0.007	96	13167	0.0800	0.0950	
46 Tetrahydrofuran	42	9.264	9.244	0.020	90	6568	0.0800	0.1191	
47 1,1,1-Trichloroethane	97	9.852	9.851	0.001	93	8119	0.0800	0.0907	
48 1,2-Dichloroethane	62	9.960	9.958	0.002	93	6831	0.0800	0.0926	
50 Benzene	78	10.450	10.451	-0.001	89	12247	0.0800	0.0912	
51 n-Butanol	31	10.477	10.442	0.035	65	2601	0.0800	0.1245	
49 Cyclohexane	69	10.450	10.455	-0.005	84	2208	0.0800	0.0977	
52 Carbon tetrachloride	117	10.477	10.476	0.001	92	6936	0.0800	0.0836	
53 2,3-Dimethylpentane	71	10.580	10.577	0.003	88	3360	0.0800	0.0969	
54 Thiophene	84	10.731	10.725	0.006	91	7055	0.0800	0.0917	
55 Isooctane	57	11.216	11.219	-0.003	98	28267	0.0800	0.0861	
56 n-Heptane	71	11.588	11.594	-0.006	93	4863	0.0800	0.0921	
57 1,2-Dichloropropane	63	11.658	11.669	-0.011	86	5706	0.0800	0.0933	
58 Trichloroethene	130	11.702	11.706	-0.004	86	4841	0.0800	0.0827	
59 Dibromomethane	93	11.793	11.791	0.002	86	5223	0.0800	0.0906	
60 Dichlorobromomethane	83	11.933	11.936	-0.003	92	8475	0.0800	0.0845	
61 1,4-Dioxane	88	11.987	11.974	0.013	79	1505	0.0800	0.0961	
62 Methyl methacrylate	41	12.047	12.038	0.009	84	7935	0.0800	0.1146	
63 Methylcyclohexane	83	12.483	12.480	0.003	87	7731	0.0800	0.0873	
64 4-Methyl-2-pentanone (MIBK)	43	12.909	12.898	0.011	97	12922	0.0800	0.1108	
65 cis-1,3-Dichloropropene	75	12.942	12.938	0.004	97	6786	0.0800	0.0843	
66 trans-1,3-Dichloropropene	75	13.632	13.632	0.000	94	6177	0.0800	0.0933	
67 Toluene	91	13.761	13.759	0.002	90	13451	0.0800	0.0945	
68 1,1,2-Trichloroethane	83	13.831	13.831	0.000	91	3811	0.0800	0.0854	
69 2-Hexanone	58	14.231	14.231	0.000	89	5186	0.0800	0.0984	
70 n-Octane	85	14.452	14.454	-0.002	97	4536	0.0800	0.0875	
71 Chlorodibromomethane	129	14.538	14.536	0.002	94	6529	0.0800	0.0779	
72 Ethylene Dibromide	107	14.824	14.826	-0.002	66	7424	0.0800	0.0927	
73 Tetrachloroethene	129	14.899	14.904	-0.005	86	4551	0.0800	0.0848	
75 Chlorobenzene	112	15.778	15.779	-0.001	92	10169	0.0800	0.0883	
74 2,3-Dimethylheptane	43	15.800	15.801	-0.001	91	22325	0.0800	0.0906	
78 Ethylbenzene	91	16.064	16.068	-0.004	98	17005	0.0800	0.0930	
79 m-Xylene & p-Xylene	91	16.236	16.232	0.004	96	25157	0.1600	0.1738	
80 n-Nonane	57	16.652	16.654	-0.002	92	12817	0.0800	0.0898	
81 Bromoform	173	16.673	16.676	-0.003	87	5133	0.0800	0.0728	
82 Styrene	104	16.695	16.695	0.000	96	8273	0.0800	0.0787	
83 o-Xylene	91	16.760	16.757	0.003	97	13684	0.0800	0.0934	
84 1,1,2,2-Tetrachloroethane	83	17.072	17.078	-0.006	96	10339	0.0800	0.0885	
85 1,2,3-Trichloropropane	110	17.234	17.237	-0.003	91	2300	0.0800	0.0805	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
86 Isopropylbenzene	105	17.342	17.344	-0.002	95	17579	0.0800	0.0914	
87 N-Propylbenzene	120	17.887	17.887	0.000	98	4829	0.0800	0.0940	
88 2-Chlorotoluene	126	17.935	17.930	0.005	96	3929	0.0800	0.0799	
89 4-Ethyltoluene	105	18.038	18.038	0.000	98	17613	0.0800	0.0917	
90 1,3,5-Trimethylbenzene	120	18.108	18.109	-0.001	92	6974	0.0800	0.0908	
92 Alpha Methyl Styrene	118	18.334	18.340	-0.006	83	6104	0.0800	0.0804	
93 n-Decane	57	18.399	18.401	-0.002	86	15543	0.0800	0.0898	
94 tert-Butylbenzene	119	18.528	18.533	-0.005	88	14401	0.0800	0.0853	
95 1,2,4-Trimethylbenzene	105	18.544	18.547	-0.003	93	14761	0.0800	0.0879	
96 sec-Butylbenzene	105	18.803	18.804	-0.001	98	22118	0.0800	0.0873	
97 1,3-Dichlorobenzene	146	18.814	18.815	-0.001	93	9755	0.0800	0.0815	
98 Benzyl chloride	91	18.890	18.891	-0.001	96	13685	0.0800	0.0865	
99 1,4-Dichlorobenzene	146	18.906	18.905	0.001	84	9941	0.0800	0.0820	
100 4-Isopropyltoluene	119	18.965	18.965	0.000	96	16482	0.0800	0.0840	
101 1,2,3-Trimethylbenzene	105	19.019	19.019	0.000	98	14733	0.0800	0.1047	
102 Butylcyclohexane	83	19.073	19.074	-0.001	86	14842	0.0800	0.0904	
103 2,3-Dihydroindene	117	19.262	19.262	0.000	91	14037	0.0800	0.0837	
104 1,2-Dichlorobenzene	146	19.262	19.262	0.000	79	9714	0.0800	0.0847	
106 Indene	116	19.391	19.392	-0.001	74	11769	0.0800	0.0819	
105 n-Butylbenzene	91	19.396	19.398	-0.002	96	20333	0.0800	0.0915	
107 Undecane	57	19.709	19.708	0.001	91	18018	0.0800	0.0933	
108 1,2-Dibromo-3-Chloropropane	157	19.860	19.858	0.002	78	3942	0.0800	0.0830	
109 1,2,4,5-Tetramethylbenzene	119	20.146	20.150	-0.004	95	16880	0.0800	0.1149	
110 Dodecane	57	20.766	20.765	0.001	90	22403	0.0800	0.1329	
111 1,2,4-Trichlorobenzene	180	20.955	20.957	-0.002	89	8798	0.0800	0.0871	
112 Naphthalene	128	21.095	21.095	0.000	98	23525	0.0800	0.0966	
113 Hexachlorobutadiene	225	21.305	21.304	0.001	88	7774	0.0800	0.0911	
114 1,2,3-Trichlorobenzene	180	21.370	21.372	-0.002	92	8763	0.0800	0.0902	
115 2-Methylnaphthalene	142	22.141	22.144	-0.003	98	12763	0.0800	0.1218	
116 1-Methylnaphthalene	142	22.319	22.319	0.000	99	14747	0.0800	0.1383	
A 122 C8 Range	1	14.452	(14.409-14.495)		0	66296	0.0800	0.1053	
S 123 1,2-Dichloroethene, Total	1				0		0.1600	0.1779	
S 124 Xylenes, Total	100				0		0.2400	0.2673	

Reagents:

40L1-3DQP_00031	Amount Added: 200.00	Units: mL	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

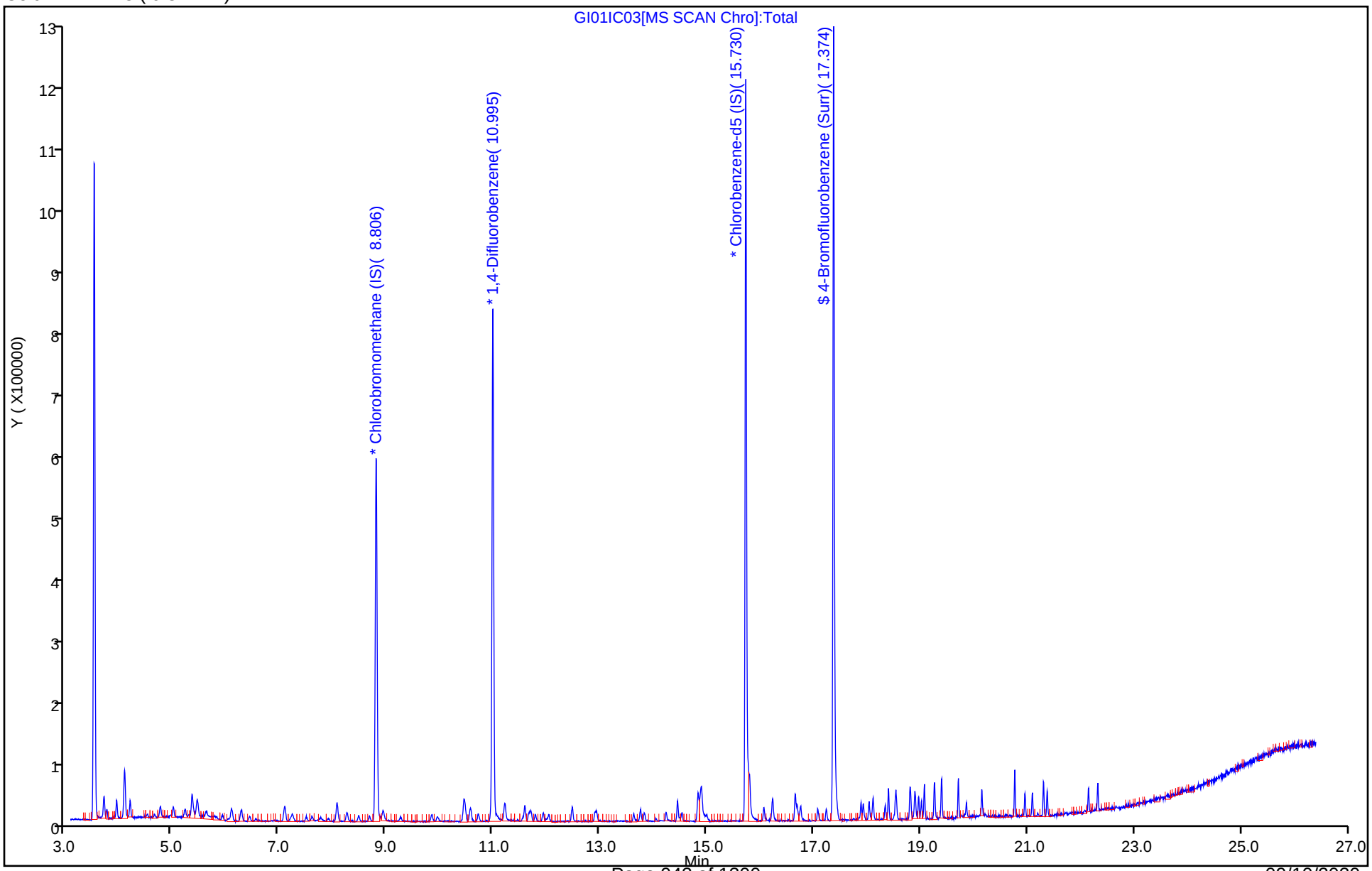
Report Date: 02-Sep-2020 12:23:43 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC03.D

Injection Date:	02-Sep-2020 00:24:30	Instrument ID:	MG	Operator ID:	AFB
Lims ID:	IC L3			Worklist Smp#:	11
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

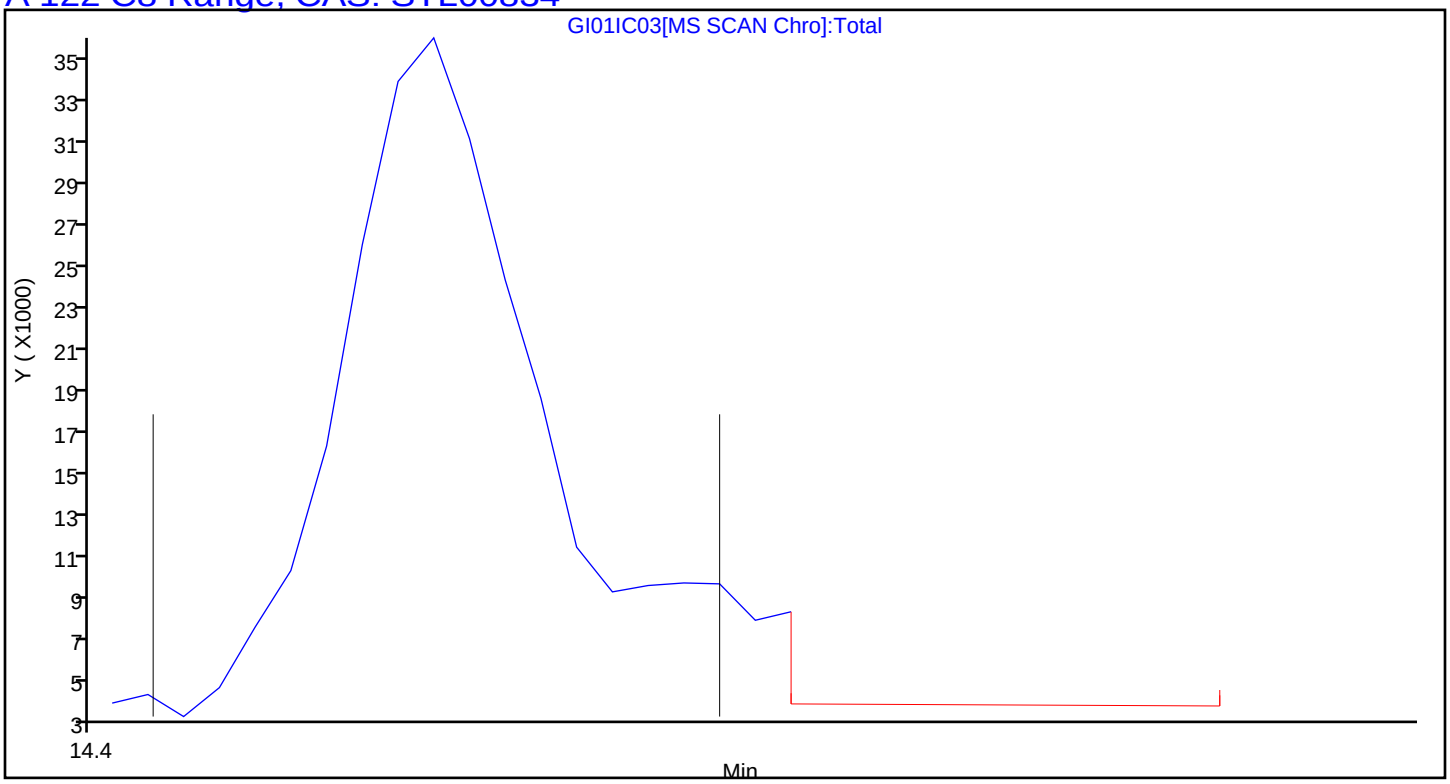


Report Date: 02-Sep-2020 12:23:43 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC03.D				
Injection Date:	02-Sep-2020 00:24:30	Instrument ID:	MG		
Lims ID:	IC L3				
Client ID:					
Operator ID:	AFB	ALS Bottle#:	3	Worklist Smp#:	11
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 122 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC04.D
Lims ID: IC L4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 02-Sep-2020 01:08:30 ALS Bottle#: 4 Worklist Smp#: 12
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016453-012
Misc. Info.: 314717
Operator ID: AFB Instrument ID: MG
Sublist: chrom-MG_TO15*sub17

Method: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 02-Sep-2020 12:23:49 Calib Date: 02-Sep-2020 03:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1035

First Level Reviewer: barlozhetskayaa Date: 02-Sep-2020 10:39:39

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.811	8.812	-0.001	89	143110	4.80	4.80	
* 2 1,4-Difluorobenzene	114	10.995	10.996	-0.001	98	640266	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.730	15.730	0.000	93	660078	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.374	17.374	0.000	82	471736	4.64	4.55	
6 Chlorodifluoromethane	51	3.699	3.703	-0.004	98	19940	0.1600	0.1555	
7 Propene	41	3.716	3.716	0.000	97	11507	0.1600	0.1825	
8 Dichlorodifluoromethane	85	3.764	3.765	-0.001	97	23973	0.1600	0.1672	
9 Chloromethane	52	3.947	3.945	0.002	70	5007	0.1600	0.1951	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.953	3.951	0.002	94	12161	0.1600	0.1487	
11 Acetaldehyde	44	4.104	4.096	0.008	98	28254	0.8000	0.9358	
12 Vinyl chloride	62	4.115	4.114	0.001	55	10514	0.1600	0.1467	
14 Butadiene	54	4.201	4.201	0.000	66	10364	0.1600	0.1641	
13 Butane	43	4.201	4.202	-0.001	85	22000	0.1600	0.1714	
15 Bromomethane	94	4.524	4.521	0.003	97	7011	0.1600	0.1619	
16 Chloroethane	64	4.659	4.658	0.001	81	4702	0.1600	0.1582	
17 Ethanol	31	4.778	4.759	0.019	95	20757	0.8000	0.7668	
18 Vinyl bromide	106	4.967	4.960	0.007	95	5761	0.1600	0.1560	
19 2-Methylbutane	43	5.015	5.010	0.005	93	14193	0.1600	0.1629	
20 Trichlorofluoromethane	101	5.231	5.229	0.002	97	17071	0.1600	0.1532	
21 Acrolein	56	5.236	5.235	0.001	27	2402	0.1600	0.1805	
22 Acetonitrile	40	5.312	5.301	0.011	92	3339	0.1600	0.1402	
23 Acetone	58	5.371	5.355	0.016	98	11375	0.4800	0.4769	
24 Pentane	72	5.452	5.448	0.004	95	1138	0.1600	0.1571	
25 Isopropyl alcohol	45	5.479	5.451	0.028	97	31959	0.4800	0.4488	
26 Ethyl ether	31	5.635	5.619	0.016	88	7425	0.1600	0.1457	
27 1,1-Dichloroethene	96	5.921	5.928	-0.007	89	5194	0.1600	0.1472	
28 Acrylonitrile	53	6.045	6.032	0.013	97	4797	0.1600	0.1474	
30 2-Methyl-2-propanol	59	6.099	6.059	0.040	86	11067	0.1600	0.1539	
29 1,1,2-Trichloro-1,2,2-trifluoroe	101	6.110	6.107	0.003	86	13027	0.1600	0.1597	
31 Methylene Chloride	84	6.277	6.273	0.004	89	6840	0.1600	0.1938	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.293	6.289	0.004	85	11314	0.1600	0.1635	
33 Carbon disulfide	76	6.439	6.438	0.001	96	18918	0.1600	0.1595	
34 trans-1,2-Dichloroethene	96	7.091	7.082	0.009	92	6087	0.1600	0.1466	
35 2-Methylpentane	43	7.102	7.101	0.001	95	25239	0.1600	0.1558	
36 Methyl tert-butyl ether	73	7.253	7.230	0.023	92	11381	0.1600	0.1324	
37 1,1-Dichloroethane	63	7.501	7.499	0.002	98	16484	0.1600	0.1592	
38 Vinyl acetate	43	7.609	7.607	0.002	100	18272	0.1600	0.1348	
39 2-Butanone (MEK)	72	8.067	8.063	0.004	84	2372	0.1600	0.1378	
40 Hexane	56	8.089	8.082	0.007	88	9026	0.1600	0.1689	
41 Isopropyl ether	45	8.261	8.249	0.012	95	22166	0.1600	0.1244	
42 cis-1,2-Dichloroethene	96	8.493	8.483	0.010	95	6849	0.1600	0.1551	
43 Ethyl acetate	43	8.698	8.676	0.022	97	14255	0.1600	0.1201	
44 Chloroform	83	8.833	8.825	0.008	28	15506	0.1600	0.1545	
45 Tert-butyl ethyl ether	59	8.941	8.928	0.013	96	18642	0.1600	0.1246	
46 Tetrahydrofuran	42	9.270	9.244	0.026	91	8281	0.1600	0.1391	
47 1,1,1-Trichloroethane	97	9.857	9.851	0.006	93	14954	0.1600	0.1548	
48 1,2-Dichloroethane	62	9.960	9.958	0.002	95	11727	0.1600	0.1622	
49 Cyclohexane	69	10.456	10.455	0.001	83	3934	0.1600	0.1775	
50 Benzene	78	10.456	10.451	0.005	92	21718	0.1600	0.1650	
52 Carbon tetrachloride	117	10.478	10.476	0.002	91	13863	0.1600	0.1704	
51 n-Butanol	31	10.478	10.442	0.036	66	3605	0.1600	0.1761	
53 2,3-Dimethylpentane	71	10.569	10.577	-0.008	91	5364	0.1600	0.1578	
54 Thiophene	84	10.720	10.725	-0.005	87	11360	0.1600	0.1506	
55 Isooctane	57	11.222	11.219	0.003	97	55108	0.1600	0.1711	
56 n-Heptane	71	11.599	11.594	0.005	94	8829	0.1600	0.1706	
57 1,2-Dichloropropane	63	11.669	11.669	0.000	88	9433	0.1600	0.1574	
58 Trichloroethene	130	11.707	11.706	0.001	88	8487	0.1600	0.1479	
59 Dibromomethane	93	11.793	11.791	0.002	89	9449	0.1600	0.1671	
60 Dichlorobromomethane	83	11.939	11.936	0.003	95	16110	0.1600	0.1639	
61 1,4-Dioxane	88	12.009	11.974	0.035	80	2097	0.1600	0.1365	
62 Methyl methacrylate	41	12.047	12.038	0.009	83	8893	0.1600	0.1310	
63 Methylcyclohexane	83	12.478	12.480	-0.002	85	14886	0.1600	0.1716	
64 4-Methyl-2-pentanone (MIBK)	43	12.904	12.898	0.006	96	15812	0.1600	0.1384	
65 cis-1,3-Dichloropropene	75	12.936	12.938	-0.002	97	13190	0.1600	0.1671	
66 trans-1,3-Dichloropropene	75	13.632	13.632	0.000	89	10340	0.1600	0.1527	
67 Toluene	91	13.762	13.759	0.003	90	21528	0.1600	0.1479	
68 1,1,2-Trichloroethane	83	13.832	13.831	0.001	96	6897	0.1600	0.1512	
69 2-Hexanone	58	14.241	14.231	0.010	91	7073	0.1600	0.1311	
70 n-Octane	85	14.457	14.454	0.003	97	8073	0.1600	0.1522	
71 Chlorodibromomethane	129	14.538	14.536	0.002	91	12942	0.1600	0.1509	
72 Ethylene Dibromide	107	14.824	14.826	-0.002	96	11912	0.1600	0.1455	
73 Tetrachloroethene	129	14.905	14.904	0.001	90	8385	0.1600	0.1528	
75 Chlorobenzene	112	15.778	15.779	-0.001	93	18072	0.1600	0.1535	
74 2,3-Dimethylheptane	43	15.800	15.801	-0.001	92	41603	0.1600	0.1651	
78 Ethylbenzene	91	16.069	16.068	0.001	98	26172	0.1600	0.1399	
79 m-Xylene & p-Xylene	91	16.231	16.232	-0.001	98	39802	0.3200	0.2689	
80 n-Nonane	57	16.657	16.654	0.003	94	21633	0.1600	0.1482	
81 Bromoform	173	16.673	16.676	-0.003	88	10274	0.1600	0.1424	
82 Styrene	104	16.690	16.695	-0.005	95	13483	0.1600	0.1253	
83 o-Xylene	91	16.754	16.757	-0.003	96	21193	0.1600	0.1415	
84 1,1,2,2-Tetrachloroethane	83	17.078	17.078	0.000	97	17273	0.1600	0.1445	
85 1,2,3-Trichloropropane	110	17.240	17.237	0.003	92	3979	0.1600	0.1362	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
86 Isopropylbenzene	105	17.342	17.344	-0.002	90	25851	0.1600	0.1314	
87 N-Propylbenzene	120	17.881	17.887	-0.006	98	6564	0.1600	0.1249	
88 2-Chlorotoluene	126	17.930	17.930	0.000	98	6674	0.1600	0.1326	
89 4-Ethyltoluene	105	18.038	18.038	0.000	98	24383	0.1600	0.1241	
90 1,3,5-Trimethylbenzene	120	18.108	18.109	-0.001	90	9268	0.1600	0.1180	
92 Alpha Methyl Styrene	118	18.340	18.340	0.000	87	8841	0.1600	0.1139	
93 n-Decane	57	18.399	18.401	-0.002	89	25661	0.1600	0.1450	
94 tert-Butylbenzene	119	18.534	18.533	0.001	90	20349	0.1600	0.1178	
95 1,2,4-Trimethylbenzene	105	18.545	18.547	-0.002	96	19813	0.1600	0.1153	
96 sec-Butylbenzene	105	18.803	18.804	-0.001	97	30874	0.1600	0.1191	
97 1,3-Dichlorobenzene	146	18.820	18.815	0.005	95	15896	0.1600	0.1299	
98 Benzyl chloride	91	18.890	18.891	-0.001	93	18578	0.1600	0.1148	
99 1,4-Dichlorobenzene	146	18.906	18.905	0.001	91	16086	0.1600	0.1298	
100 4-Isopropyltoluene	119	18.965	18.965	0.000	96	23308	0.1600	0.1162	
101 1,2,3-Trimethylbenzene	105	19.019	19.019	0.000	97	20125	0.1600	0.1397	
102 Butylcyclohexane	83	19.073	19.074	-0.001	86	24085	0.1600	0.1434	
103 2,3-Dihydroindene	117	19.262	19.262	0.000	90	19180	0.1600	0.1117	
104 1,2-Dichlorobenzene	146	19.256	19.262	-0.006	83	15119	0.1600	0.1289	
106 Indene	116	19.391	19.392	-0.001	89	16584	0.1600	0.1128	
105 n-Butylbenzene	91	19.397	19.398	-0.001	98	26410	0.1600	0.1161	
107 Undecane	57	19.704	19.708	-0.004	91	26240	0.1600	0.1328	
108 1,2-Dibromo-3-Chloropropane	157	19.860	19.858	0.002	82	6556	0.1600	0.1347	
109 1,2,4,5-Tetramethylbenzene	119	20.146	20.150	-0.004	96	19690	0.1600	0.1310	
110 Dodecane	57	20.766	20.765	0.001	89	23057	0.1600	0.1337	
111 1,2,4-Trichlorobenzene	180	20.960	20.957	0.003	92	11196	0.1600	0.1084	
112 Naphthalene	128	21.095	21.095	0.000	98	25941	0.1600	0.1041	
113 Hexachlorobutadiene	225	21.300	21.304	-0.004	88	10052	0.1600	0.1152	
114 1,2,3-Trichlorobenzene	180	21.376	21.372	0.004	92	10179	0.1600	0.1024	
115 2-Methylnaphthalene	142	22.141	22.144	-0.003	98	11539	0.1600	0.1077	
116 1-Methylnaphthalene	142	22.314	22.319	-0.005	98	14358	0.1600	0.1316	
A 122 C8 Range	1	14.452	(14.409-14.495)		0	108617	0.1600	0.1687	
S 123 1,2-Dichloroethene, Total	1				0		0.3200	0.3017	
S 124 Xylenes, Total	100				0		0.4800	0.4104	

Reagents:

40L5DQP_00020	Amount Added: 80.00	Units: mL	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

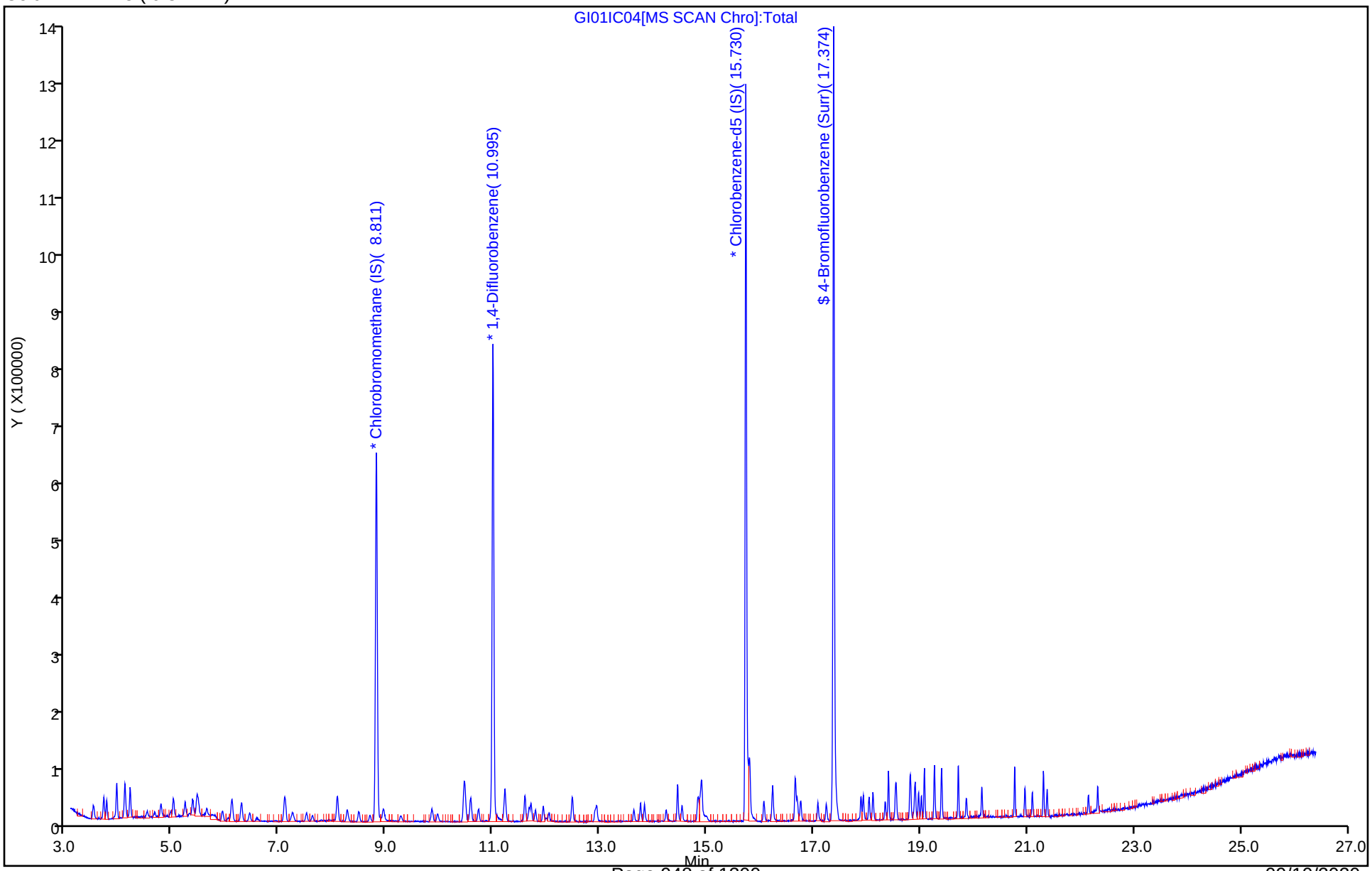
Report Date: 02-Sep-2020 12:23:50 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC04.D

Injection Date:	02-Sep-2020 01:08:30	Instrument ID:	MG	Operator ID:	AFB
Lims ID:	IC L4			Worklist Smp#:	12
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

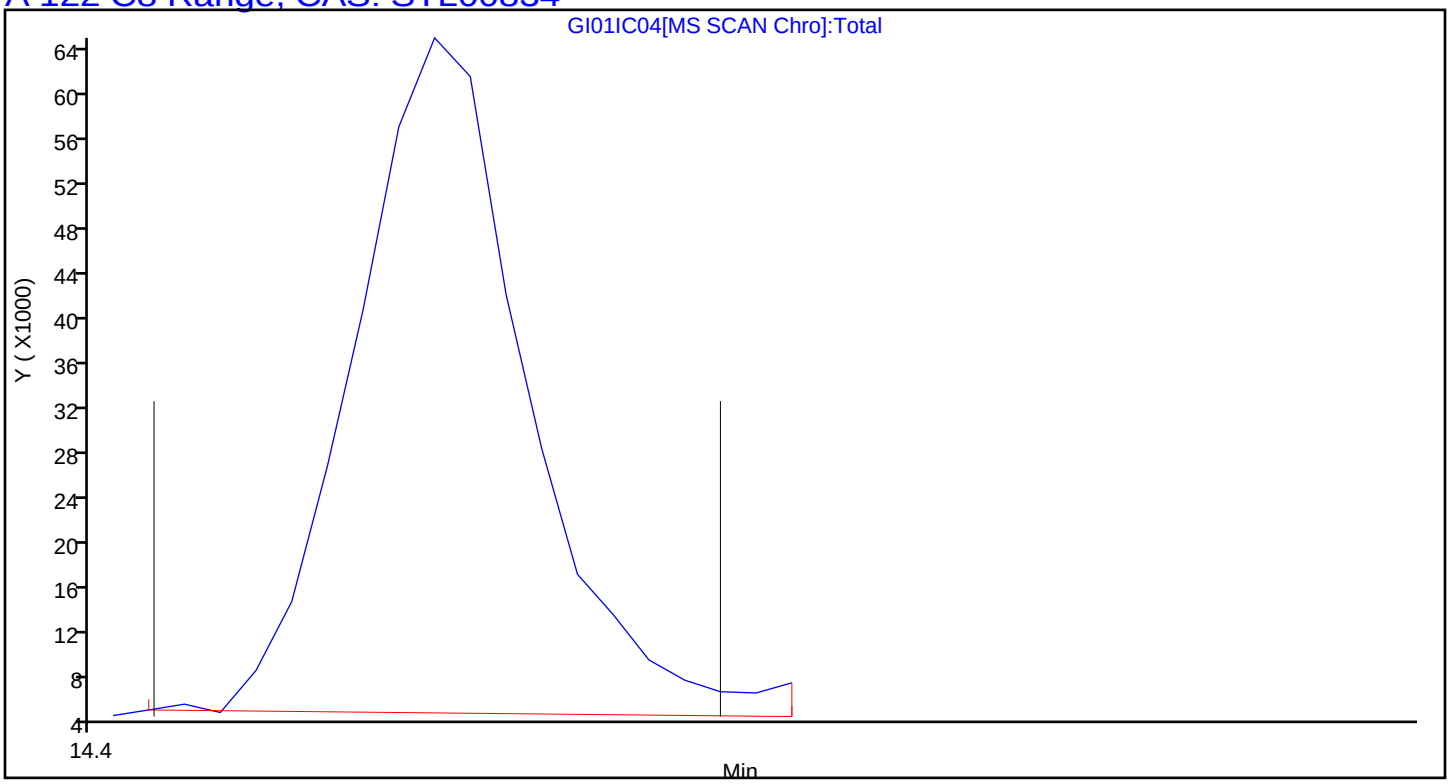


Report Date: 02-Sep-2020 12:23:50 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC04.D				
Injection Date:	02-Sep-2020 01:08:30	Instrument ID:	MG		
Lims ID:	IC L4				
Client ID:					
Operator ID:	AFB	ALS Bottle#:	4	Worklist Smp#:	12
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 122 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC05.D
Lims ID: IC L5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 02-Sep-2020 01:52:30 ALS Bottle#: 4 Worklist Smp#: 13
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016453-013
Misc. Info.: 314717
Operator ID: AFB Instrument ID: MG
Sublist: chrom-MG_TO15*sub17

Method: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 02-Sep-2020 12:23:56 Calib Date: 02-Sep-2020 03:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1035

First Level Reviewer: barlozhetskayaa Date: 02-Sep-2020 10:40:34

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.811	8.812	-0.001	89	136148	4.80	4.80	
* 2 1,4-Difluorobenzene	114	10.995	10.996	-0.001	98	662086	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.730	15.730	0.000	93	656245	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.374	17.374	0.000	83	468432	4.64	4.55	
6 Chlorodifluoromethane	51	3.705	3.703	0.002	98	48665	0.4000	0.3989	
7 Propene	41	3.716	3.716	0.000	97	24863	0.4000	0.4145	
8 Dichlorodifluoromethane	85	3.770	3.765	0.005	98	52568	0.4000	0.3854	
9 Chloromethane	52	3.953	3.945	0.008	67	10266	0.4000	0.4204	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.947	3.951	-0.004	94	29483	0.4000	0.3790	
11 Acetaldehyde	44	4.098	4.096	0.002	99	73859	2.00	2.57	
12 Vinyl chloride	62	4.120	4.114	0.006	99	27040	0.4000	0.3966	
14 Butadiene	54	4.206	4.201	0.005	66	25008	0.4000	0.4161	
13 Butane	43	4.206	4.202	0.004	85	51072	0.4000	0.4183	
15 Bromomethane	94	4.524	4.521	0.003	98	16122	0.4000	0.3914	
16 Chloroethane	64	4.665	4.658	0.007	88	10826	0.4000	0.3828	
17 Ethanol	31	4.756	4.759	-0.003	96	58436	2.00	2.27	
18 Vinyl bromide	106	4.961	4.960	0.001	97	14224	0.4000	0.4049	
19 2-Methylbutane	43	5.010	5.010	0.000	92	33422	0.4000	0.4031	
20 Trichlorofluoromethane	101	5.225	5.229	-0.004	97	40736	0.4000	0.3843	
21 Acrolein	56	5.242	5.235	0.007	32	5828	0.4000	0.4602	
22 Acetonitrile	40	5.301	5.301	0.000	99	12333	0.4000	0.5444	
23 Acetone	58	5.355	5.355	0.000	99	33434	1.20	1.47	
24 Pentane	72	5.452	5.448	0.004	80	2773	0.4000	0.4024	
25 Isopropyl alcohol	45	5.447	5.451	-0.004	77	90947	1.20	1.34	
26 Ethyl ether	31	5.619	5.619	0.000	91	22137	0.4000	0.4565	
27 1,1-Dichloroethene	96	5.932	5.928	0.004	88	13897	0.4000	0.4141	
28 Acrylonitrile	53	6.024	6.032	-0.008	94	13744	0.4000	0.4438	
30 2-Methyl-2-propanol	59	6.067	6.059	0.008	97	30344	0.4000	0.4435	
29 1,1,2-Trichloro-1,2,2-trifluoroe	101	6.104	6.107	-0.003	89	30392	0.4000	0.3916	
31 Methylene Chloride	84	6.272	6.273	-0.001	88	14649	0.4000	0.4363	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.288	6.289	-0.001	94	26000	0.4000	0.3951	
33 Carbon disulfide	76	6.439	6.438	0.001	96	44363	0.4000	0.3932	
34 trans-1,2-Dichloroethene	96	7.086	7.082	0.004	92	16188	0.4000	0.4097	
35 2-Methylpentane	43	7.102	7.101	0.001	96	63929	0.4000	0.4148	
36 Methyl tert-butyl ether	73	7.226	7.230	-0.004	90	36435	0.4000	0.4455	
37 1,1-Dichloroethane	63	7.501	7.499	0.002	98	39683	0.4000	0.4028	
38 Vinyl acetate	43	7.603	7.607	-0.004	100	55733	0.4000	0.4321	
39 2-Butanone (MEK)	72	8.056	8.063	-0.007	95	7655	0.4000	0.4674	
40 Hexane	56	8.078	8.082	-0.004	87	20447	0.4000	0.4022	
41 Isopropyl ether	45	8.245	8.248	-0.003	96	72295	0.4000	0.4264	
42 cis-1,2-Dichloroethene	96	8.482	8.483	-0.001	96	16888	0.4000	0.4021	
43 Ethyl acetate	43	8.677	8.676	0.001	97	48461	0.4000	0.4291	
44 Chloroform	83	8.822	8.825	-0.003	91	38061	0.4000	0.3986	
45 Tert-butyl ethyl ether	59	8.925	8.928	-0.003	97	60350	0.4000	0.4241	
46 Tetrahydrofuran	42	9.248	9.244	0.004	90	25346	0.4000	0.4474	
47 1,1,1-Trichloroethane	97	9.852	9.851	0.001	94	36173	0.4000	0.3936	
48 1,2-Dichloroethane	62	9.960	9.958	0.002	95	29376	0.4000	0.3928	
49 Cyclohexane	69	10.451	10.455	-0.004	82	9450	0.4000	0.4124	
50 Benzene	78	10.451	10.451	0.000	92	53895	0.4000	0.3960	
52 Carbon tetrachloride	117	10.472	10.476	-0.004	92	34839	0.4000	0.4141	
51 n-Butanol	31	10.451	10.442	0.009	66	9421	0.4000	0.4450	
53 2,3-Dimethylpentane	71	10.575	10.577	-0.002	91	14994	0.4000	0.4266	
54 Thiophene	84	10.720	10.725	-0.005	94	32749	0.4000	0.4199	
55 Isooctane	57	11.216	11.219	-0.003	98	134587	0.4000	0.4042	
56 n-Heptane	71	11.594	11.594	0.000	95	21146	0.4000	0.3951	
57 1,2-Dichloropropane	63	11.669	11.669	0.000	90	25767	0.4000	0.4157	
58 Trichloroethene	130	11.707	11.706	0.001	90	21557	0.4000	0.3633	
59 Dibromomethane	93	11.793	11.791	0.002	88	22450	0.4000	0.3840	
60 Dichlorobromomethane	83	11.934	11.936	-0.002	94	39980	0.4000	0.3934	
61 1,4-Dioxane	88	11.982	11.974	0.008	98	6721	0.4000	0.4232	
62 Methyl methacrylate	41	12.036	12.038	-0.002	84	30238	0.4000	0.4309	
63 Methylcyclohexane	83	12.484	12.480	0.004	86	35264	0.4000	0.3930	
64 4-Methyl-2-pentanone (MIBK)	43	12.899	12.898	0.001	96	51809	0.4000	0.4384	
65 cis-1,3-Dichloropropene	75	12.937	12.938	-0.001	95	31812	0.4000	0.3898	
66 trans-1,3-Dichloropropene	75	13.632	13.632	0.000	90	27117	0.4000	0.4028	
67 Toluene	91	13.756	13.759	-0.003	91	60905	0.4000	0.4208	
68 1,1,2-Trichloroethane	83	13.826	13.831	-0.005	95	18372	0.4000	0.4050	
69 2-Hexanone	58	14.231	14.231	0.000	91	23138	0.4000	0.4315	
70 n-Octane	85	14.452	14.454	-0.002	97	22082	0.4000	0.4186	
71 Chlorodibromomethane	129	14.538	14.536	0.002	93	33024	0.4000	0.3872	
72 Ethylene Dibromide	107	14.824	14.826	-0.002	98	32736	0.4000	0.4021	
73 Tetrachloroethene	129	14.899	14.904	-0.005	88	19868	0.4000	0.3641	
75 Chlorobenzene	112	15.778	15.779	-0.001	89	47729	0.4000	0.4077	
74 2,3-Dimethylheptane	43	15.800	15.801	-0.001	92	98500	0.4000	0.3932	
78 Ethylbenzene	91	16.069	16.068	0.001	99	78472	0.4000	0.4219	
79 m-Xylene & p-Xylene	91	16.231	16.232	-0.001	98	117852	0.8000	0.8008	
80 n-Nonane	57	16.657	16.654	0.003	92	57593	0.4000	0.3967	
81 Bromoform	173	16.673	16.676	-0.003	89	26419	0.4000	0.3682	
82 Styrene	104	16.695	16.695	0.000	96	41558	0.4000	0.3885	
83 o-Xylene	91	16.754	16.757	-0.003	97	62312	0.4000	0.4184	
84 1,1,2,2-Tetrachloroethane	83	17.078	17.078	0.000	97	49310	0.4000	0.4150	
85 1,2,3-Trichloropropane	110	17.234	17.237	-0.003	93	12020	0.4000	0.4137	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
86 Isopropylbenzene	105	17.342	17.344	-0.002	97	78721	0.4000	0.4023	
87 N-Propylbenzene	120	17.887	17.887	0.000	97	19728	0.4000	0.3777	
88 2-Chlorotoluene	126	17.924	17.930	-0.006	98	21271	0.4000	0.4251	
89 4-Ethyltoluene	105	18.038	18.038	0.000	98	76712	0.4000	0.3926	
90 1,3,5-Trimethylbenzene	120	18.108	18.109	-0.001	91	31514	0.4000	0.4036	
92 Alpha Methyl Styrene	118	18.340	18.340	0.000	83	27908	0.4000	0.3616	
93 n-Decane	57	18.399	18.401	-0.002	88	71149	0.4000	0.4043	
94 tert-Butylbenzene	119	18.534	18.533	0.001	89	64684	0.4000	0.3767	
95 1,2,4-Trimethylbenzene	105	18.545	18.547	-0.002	95	67360	0.4000	0.3944	
96 sec-Butylbenzene	105	18.803	18.804	-0.001	98	96336	0.4000	0.3739	
97 1,3-Dichlorobenzene	146	18.814	18.815	-0.001	95	43692	0.4000	0.3591	
98 Benzyl chloride	91	18.890	18.891	-0.001	95	59541	0.4000	0.3701	
99 1,4-Dichlorobenzene	146	18.906	18.905	0.001	91	44948	0.4000	0.3647	
100 4-Isopropyltoluene	119	18.965	18.965	0.000	96	75338	0.4000	0.3777	
101 1,2,3-Trimethylbenzene	105	19.019	19.019	0.000	98	66959	0.4000	0.4645	
102 Butylcyclohexane	83	19.073	19.074	-0.001	85	66421	0.4000	0.3978	
104 1,2-Dichlorobenzene	146	19.262	19.262	0.000	78	41138	0.4000	0.3528	
103 2,3-Dihydroindene	117	19.262	19.262	0.000	91	62198	0.4000	0.3645	
106 Indene	116	19.391	19.392	-0.001	93	54200	0.4000	0.3707	
105 n-Butylbenzene	91	19.397	19.398	-0.001	96	88169	0.4000	0.3900	
107 Undecane	57	19.709	19.708	0.001	92	77930	0.4000	0.3968	
108 1,2-Dibromo-3-Chloropropane	157	19.860	19.858	0.002	81	20067	0.4000	0.4105	
109 1,2,4,5-Tetramethylbenzene	119	20.152	20.150	0.002	95	71014	0.4000	0.4696	
110 Dodecane	57	20.766	20.765	0.001	89	76360	0.4000	0.4453	
111 1,2,4-Trichlorobenzene	180	20.955	20.957	-0.002	91	35272	0.4000	0.3435	
112 Naphthalene	128	21.095	21.095	0.000	98	88191	0.4000	0.3560	
113 Hexachlorobutadiene	225	21.305	21.304	0.001	88	29410	0.4000	0.3390	
114 1,2,3-Trichlorobenzene	180	21.376	21.372	0.004	93	33331	0.4000	0.3372	
115 2-Methylnaphthalene	142	22.147	22.144	0.003	98	41015	0.4000	0.3850	
116 1-Methylnaphthalene	142	22.319	22.319	0.000	99	46614	0.4000	0.4298	
A 122 C8 Range	1	14.449	(14.399-14.516)		0	266284	0.4000	0.4159	
S 123 1,2-Dichloroethene, Total	1				0		0.8000	0.8118	
S 124 Xylenes, Total	100				0		1.20	1.22	

Reagents:

40L5DQP_00020	Amount Added: 200.00	Units: mL	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

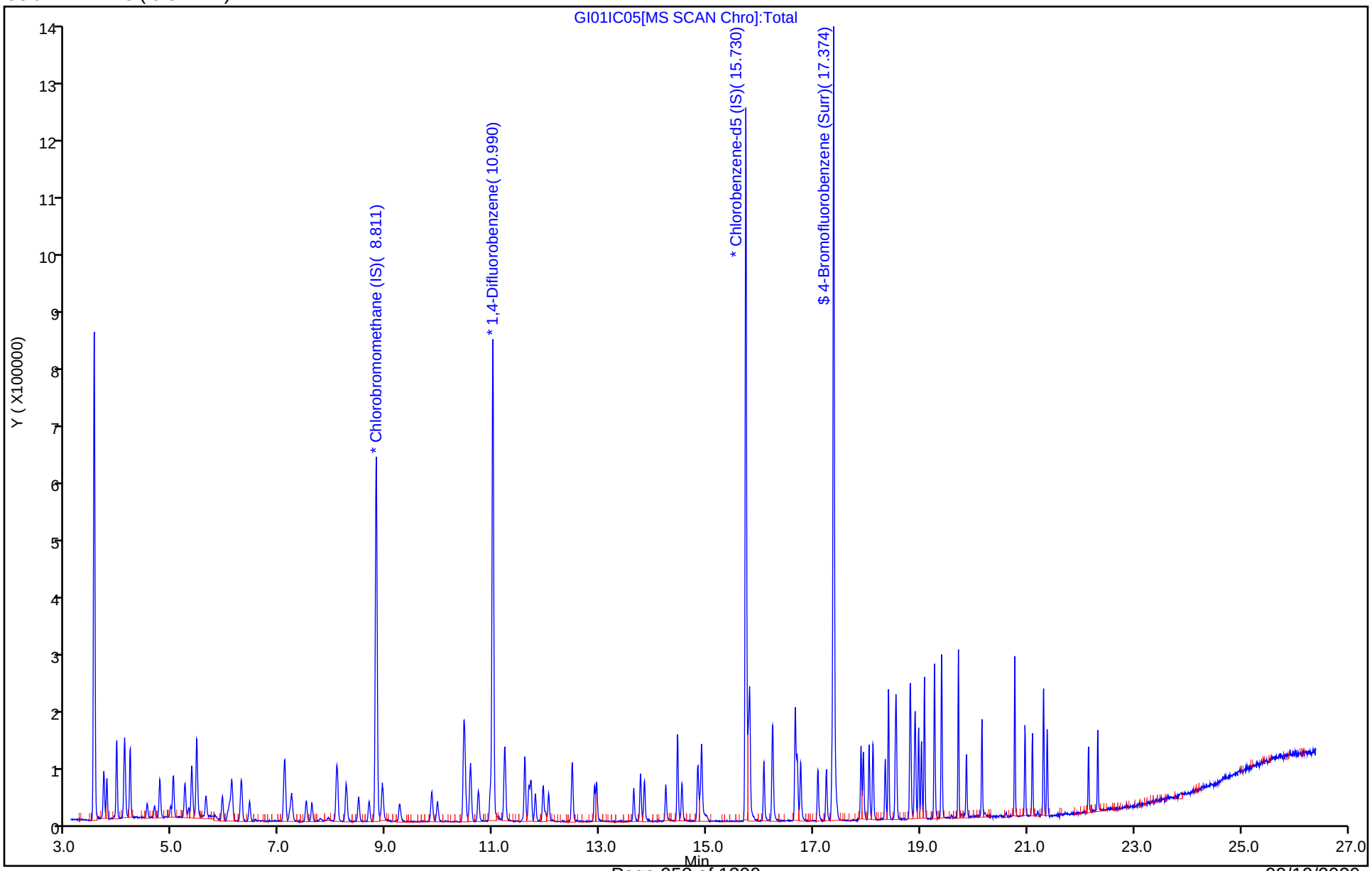
Report Date: 02-Sep-2020 12:23:57 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC05.D

Injection Date:	02-Sep-2020 01:52:30	Instrument ID:	MG	Operator ID:	AFB
Lims ID:	IC L5			Worklist Smp#:	13
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

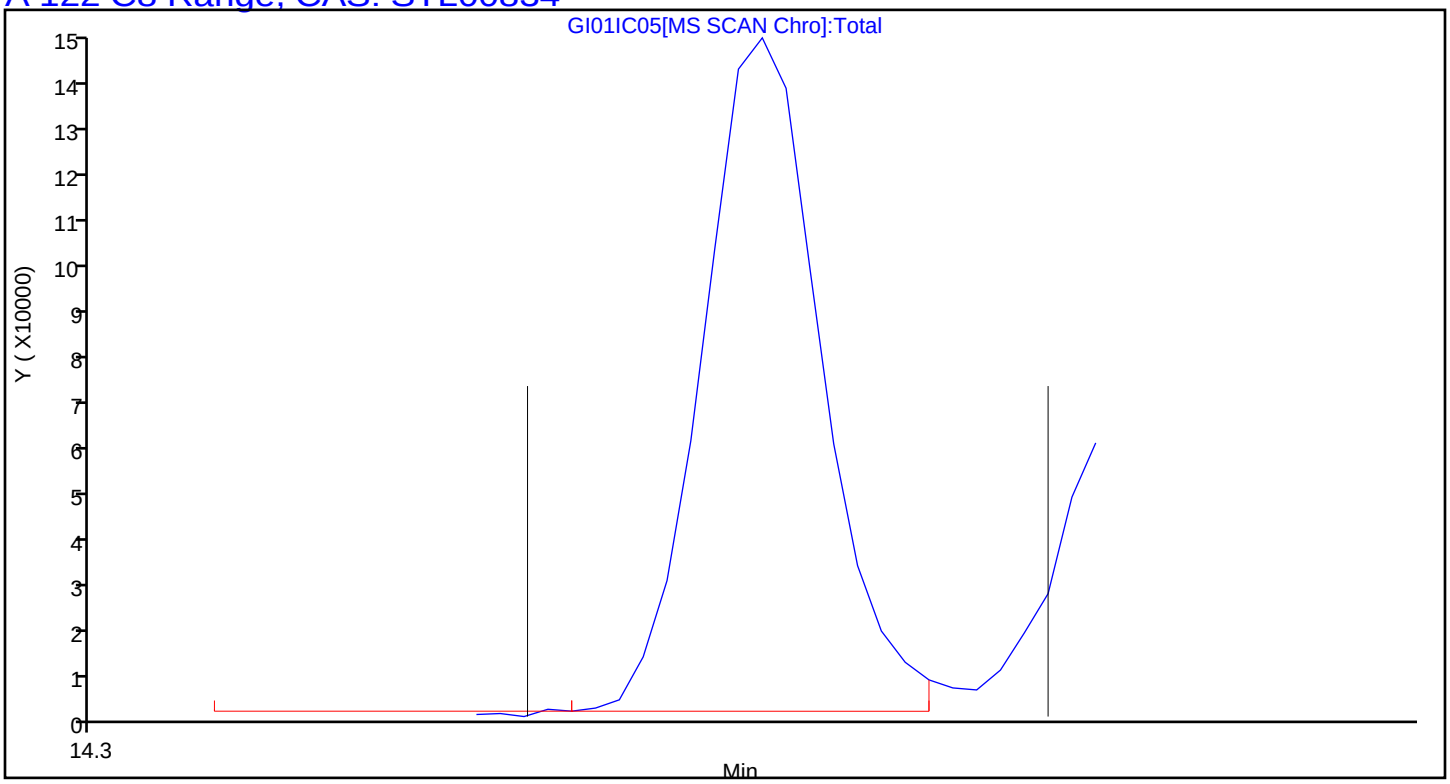


Report Date: 02-Sep-2020 12:23:57 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC05.D				
Injection Date:	02-Sep-2020 01:52:30	Instrument ID:	MG		
Lims ID:	IC L5				
Client ID:					
Operator ID:	AFB	ALS Bottle#:	4	Worklist Smp#:	13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 122 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC06.D
Lims ID: IC L6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 02-Sep-2020 02:38:30 ALS Bottle#: 5 Worklist Smp#: 14
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016453-014
Misc. Info.: 314716
Operator ID: AFB Instrument ID: MG
Sublist: chrom-MG_TO15*sub17

Method: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 02-Sep-2020 12:24:03 Calib Date: 02-Sep-2020 03:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1035

First Level Reviewer: barlozhetskayaa Date: 02-Sep-2020 10:41:18

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.811	8.812	-0.001	88	143845	4.80	4.80	
* 2 1,4-Difluorobenzene	114	10.995	10.996	-0.001	98	625077	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.730	15.730	0.000	93	650254	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.374	17.374	0.000	84	479859	4.64	4.70	
6 Chlorodifluoromethane	51	3.705	3.703	0.002	97	126387	1.00	0.9806	
7 Propene	41	3.710	3.716	-0.006	98	62980	1.00	0.99	
8 Dichlorodifluoromethane	85	3.764	3.765	-0.001	98	138515	1.00	0.9612	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.953	3.951	0.002	94	74466	1.00	0.9059	
9 Chloromethane	52	3.942	3.945	-0.003	79	25107	1.00	0.9731	
11 Acetaldehyde	44	4.093	4.096	-0.003	100	173325	5.00	5.71	
12 Vinyl chloride	62	4.114	4.114	0.000	98	70697	1.00	0.9815	
14 Butadiene	54	4.201	4.201	0.000	81	63838	1.00	1.01	
13 Butane	43	4.201	4.202	-0.001	87	130324	1.00	1.01	
15 Bromomethane	94	4.519	4.521	-0.002	97	41102	1.00	0.9445	
16 Chloroethane	64	4.659	4.658	0.001	86	27795	1.00	0.9303	
17 Ethanol	31	4.751	4.759	-0.008	96	134201	5.00	4.93	
18 Vinyl bromide	106	4.956	4.960	-0.004	97	34260	1.00	0.9230	
19 2-Methylbutane	43	5.004	5.010	-0.006	95	88701	1.00	1.01	
20 Trichlorofluoromethane	101	5.231	5.229	0.002	98	106066	1.00	0.9470	
21 Acrolein	56	5.236	5.235	0.001	33	13692	1.00	1.02	
22 Acetonitrile	40	5.295	5.301	-0.006	98	23808	1.00	0.99	
23 Acetone	58	5.349	5.355	-0.006	99	85167	3.00	3.55	
25 Isopropyl alcohol	45	5.435	5.451	-0.016	82	213678	3.00	2.99	
24 Pentane	72	5.441	5.448	-0.007	86	7214	1.00	0.99	
26 Ethyl ether	31	5.613	5.619	-0.006	90	55969	1.00	1.09	
27 1,1-Dichloroethene	96	5.926	5.928	-0.002	89	34343	1.00	0.9685	
28 Acrylonitrile	53	6.023	6.032	-0.009	95	34693	1.00	1.06	
30 2-Methyl-2-propanol	59	6.045	6.059	-0.014	94	73714	1.00	1.02	
29 1,1,2-Trichloro-1,2,2-trifluoroe	101	6.104	6.107	-0.003	89	77887	1.00	0.9498	
31 Methylene Chloride	84	6.271	6.273	-0.002	89	35627	1.00	1.00	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.287	6.289	-0.002	93	61687	1.00	0.8872	
33 Carbon disulfide	76	6.433	6.438	-0.005	97	119464	1.00	1.00	
34 trans-1,2-Dichloroethene	96	7.080	7.082	-0.002	90	39785	1.00	0.9531	
35 2-Methylpentane	43	7.102	7.101	0.001	96	159038	1.00	0.9767	
36 Methyl tert-butyl ether	73	7.220	7.230	-0.010	90	94079	1.00	1.09	
37 1,1-Dichloroethane	63	7.495	7.499	-0.004	99	102235	1.00	0.9823	
38 Vinyl acetate	43	7.603	7.607	-0.004	100	144673	1.00	1.06	
39 2-Butanone (MEK)	72	8.056	8.063	-0.007	95	19622	1.00	1.13	
40 Hexane	56	8.078	8.082	-0.004	93	52452	1.00	0.9765	
41 Isopropyl ether	45	8.240	8.248	-0.008	96	193913	1.00	1.08	
42 cis-1,2-Dichloroethene	96	8.482	8.483	-0.001	95	43948	1.00	0.99	
43 Ethyl acetate	43	8.666	8.676	-0.010	97	126022	1.00	1.06	
44 Chloroform	83	8.822	8.825	-0.003	93	97178	1.00	0.9633	
45 Tert-butyl ethyl ether	59	8.919	8.928	-0.009	96	158268	1.00	1.05	
46 Tetrahydrofuran	42	9.237	9.244	-0.007	90	63096	1.00	1.05	
47 1,1,1-Trichloroethane	97	9.852	9.851	0.001	94	93502	1.00	0.9629	
48 1,2-Dichloroethane	62	9.954	9.958	-0.004	94	74570	1.00	1.06	
49 Cyclohexane	69	10.450	10.455	-0.005	88	24100	1.00	1.11	
50 Benzene	78	10.450	10.451	-0.001	93	136368	1.00	1.06	
51 n-Butanol	31	10.440	10.442	-0.002	63	21677	1.00	1.08	
52 Carbon tetrachloride	117	10.472	10.476	-0.004	92	82585	1.00	1.04	
53 2,3-Dimethylpentane	71	10.574	10.577	-0.003	90	35713	1.00	1.08	
54 Thiophene	84	10.720	10.725	-0.005	93	81080	1.00	1.10	
55 Isooctane	57	11.216	11.219	-0.003	98	345476	1.00	1.10	
56 n-Heptane	71	11.594	11.594	0.000	94	55017	1.00	1.09	
57 1,2-Dichloropropane	63	11.669	11.669	0.000	89	63849	1.00	1.09	
58 Trichloroethene	130	11.701	11.706	-0.005	90	55829	1.00	1.00	
59 Dibromomethane	93	11.788	11.791	-0.003	86	63978	1.00	1.16	
60 Dichlorobromomethane	83	11.933	11.936	-0.003	95	102850	1.00	1.07	
61 1,4-Dioxane	88	11.966	11.974	-0.008	91	12962	1.00	0.8644	
62 Methyl methacrylate	41	12.030	12.038	-0.008	86	79777	1.00	1.20	
63 Methylcyclohexane	83	12.478	12.480	-0.002	86	92997	1.00	1.10	
64 4-Methyl-2-pentanone (MIBK)	43	12.893	12.898	-0.005	96	120828	1.00	1.08	
65 cis-1,3-Dichloropropene	75	12.936	12.938	-0.002	97	85421	1.00	1.11	
66 trans-1,3-Dichloropropene	75	13.632	13.632	0.000	91	68823	1.00	1.03	
67 Toluene	91	13.756	13.759	-0.003	92	153919	1.00	1.07	
68 1,1,2-Trichloroethane	83	13.826	13.831	-0.005	95	49466	1.00	1.10	
69 2-Hexanone	58	14.225	14.231	-0.006	91	58020	1.00	1.09	
70 n-Octane	85	14.452	14.454	-0.002	98	55073	1.00	1.05	
71 Chlorodibromomethane	129	14.532	14.536	-0.004	95	81803	1.00	0.9681	
72 Ethylene Dibromide	107	14.824	14.826	-0.002	99	82810	1.00	1.03	
73 Tetrachloroethene	129	14.904	14.904	0.000	90	52818	1.00	0.9769	
75 Chlorobenzene	112	15.778	15.779	-0.001	90	120798	1.00	1.04	
74 2,3-Dimethylheptane	43	15.800	15.801	-0.001	92	258919	1.00	1.04	
78 Ethylbenzene	91	16.064	16.068	-0.004	99	201106	1.00	1.09	
79 m-Xylene & p-Xylene	91	16.231	16.232	-0.001	97	308731	2.00	2.12	
80 n-Nonane	57	16.652	16.654	-0.002	94	151433	1.00	1.05	
81 Bromoform	173	16.679	16.676	0.003	89	47825	1.00	0.6727	
82 Styrene	104	16.695	16.695	0.000	96	115089	1.00	1.09	
83 o-Xylene	91	16.754	16.757	-0.003	97	160310	1.00	1.09	
84 1,1,2,2-Tetrachloroethane	83	17.078	17.078	0.000	97	129612	1.00	1.10	
85 1,2,3-Trichloropropane	110	17.234	17.237	-0.003	94	31198	1.00	1.08	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
86 Isopropylbenzene	105	17.342	17.344	-0.002	97	209664	1.00	1.08	
87 N-Propylbenzene	120	17.886	17.887	-0.001	98	55490	1.00	1.07	
88 2-Chlorotoluene	126	17.930	17.930	0.000	97	50660	1.00	1.02	
89 4-Ethyltoluene	105	18.037	18.038	-0.001	98	209216	1.00	1.08	
90 1,3,5-Trimethylbenzene	120	18.108	18.109	-0.001	92	85164	1.00	1.10	
92 Alpha Methyl Styrene	118	18.339	18.340	-0.001	85	82510	1.00	1.08	
93 n-Decane	57	18.399	18.401	-0.002	87	189083	1.00	1.08	
94 tert-Butylbenzene	119	18.534	18.533	0.001	90	182107	1.00	1.07	
95 1,2,4-Trimethylbenzene	105	18.544	18.547	-0.003	96	180832	1.00	1.07	
96 sec-Butylbenzene	105	18.803	18.804	-0.001	98	272380	1.00	1.07	
97 1,3-Dichlorobenzene	146	18.814	18.815	-0.001	96	118460	1.00	0.9825	
98 Benzyl chloride	91	18.889	18.891	-0.002	96	157512	1.00	0.9882	
99 1,4-Dichlorobenzene	146	18.900	18.905	-0.005	94	117341	1.00	0.9608	
100 4-Isopropyltoluene	119	18.965	18.965	0.000	96	213219	1.00	1.08	
101 1,2,3-Trimethylbenzene	105	19.013	19.019	-0.006	99	183353	1.00	1.26	
102 Butylcyclohexane	83	19.073	19.074	-0.001	86	179536	1.00	1.09	
103 2,3-Dihydroindene	117	19.262	19.262	0.000	92	175316	1.00	1.04	
104 1,2-Dichlorobenzene	146	19.262	19.262	0.000	77	113702	1.00	0.9840	
106 Indene	116	19.391	19.392	-0.001	88	150965	1.00	1.04	
105 n-Butylbenzene	91	19.396	19.398	-0.002	97	241684	1.00	1.08	
107 Undecane	57	19.709	19.708	0.001	91	212100	1.00	1.09	
108 1,2-Dibromo-3-Chloropropane	157	19.860	19.858	0.002	84	47740	1.00	0.9650	
109 1,2,4,5-Tetramethylbenzene	119	20.151	20.150	0.001	96	186389	1.00	1.21	
110 Dodecane	57	20.761	20.765	-0.004	90	202565	1.00	1.19	
111 1,2,4-Trichlorobenzene	180	20.955	20.957	-0.002	92	90620	1.00	0.8906	
112 Naphthalene	128	21.095	21.095	0.000	98	216311	1.00	0.8813	
113 Hexachlorobutadiene	225	21.305	21.304	0.001	90	81866	1.00	0.9525	
114 1,2,3-Trichlorobenzene	180	21.370	21.372	-0.002	93	89666	1.00	0.9154	
115 2-Methylnaphthalene	142	22.146	22.144	0.002	99	93743	1.00	0.8880	
116 1-Methylnaphthalene	142	22.319	22.319	0.000	99	106800	1.00	0.99	
A 122 C8 Range	1	14.439	(14.398-14.527)		0	697619	1.00	1.10	
S 123 1,2-Dichloroethene, Total	1				0		2.00	1.94	
S 124 Xylenes, Total	100				0		3.00	3.20	

Reagents:

40L6DQP_00019	Amount Added: 200.00	Units: mL	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

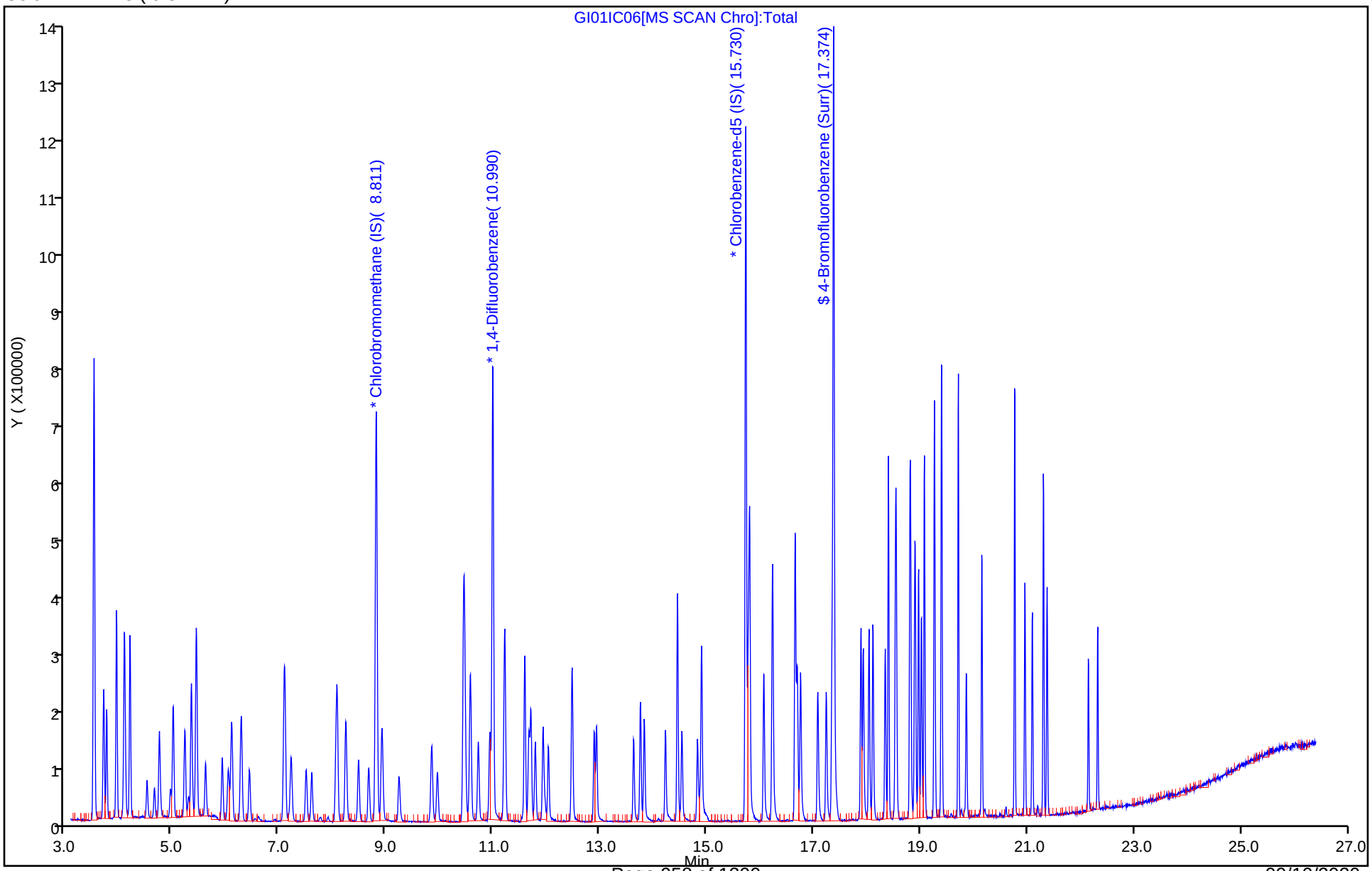
Report Date: 02-Sep-2020 12:24:04 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC06.D

Injection Date:	02-Sep-2020 02:38:30	Instrument ID:	MG	Operator ID:	AFB
Lims ID:	IC L6			Worklist Smp#:	14
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

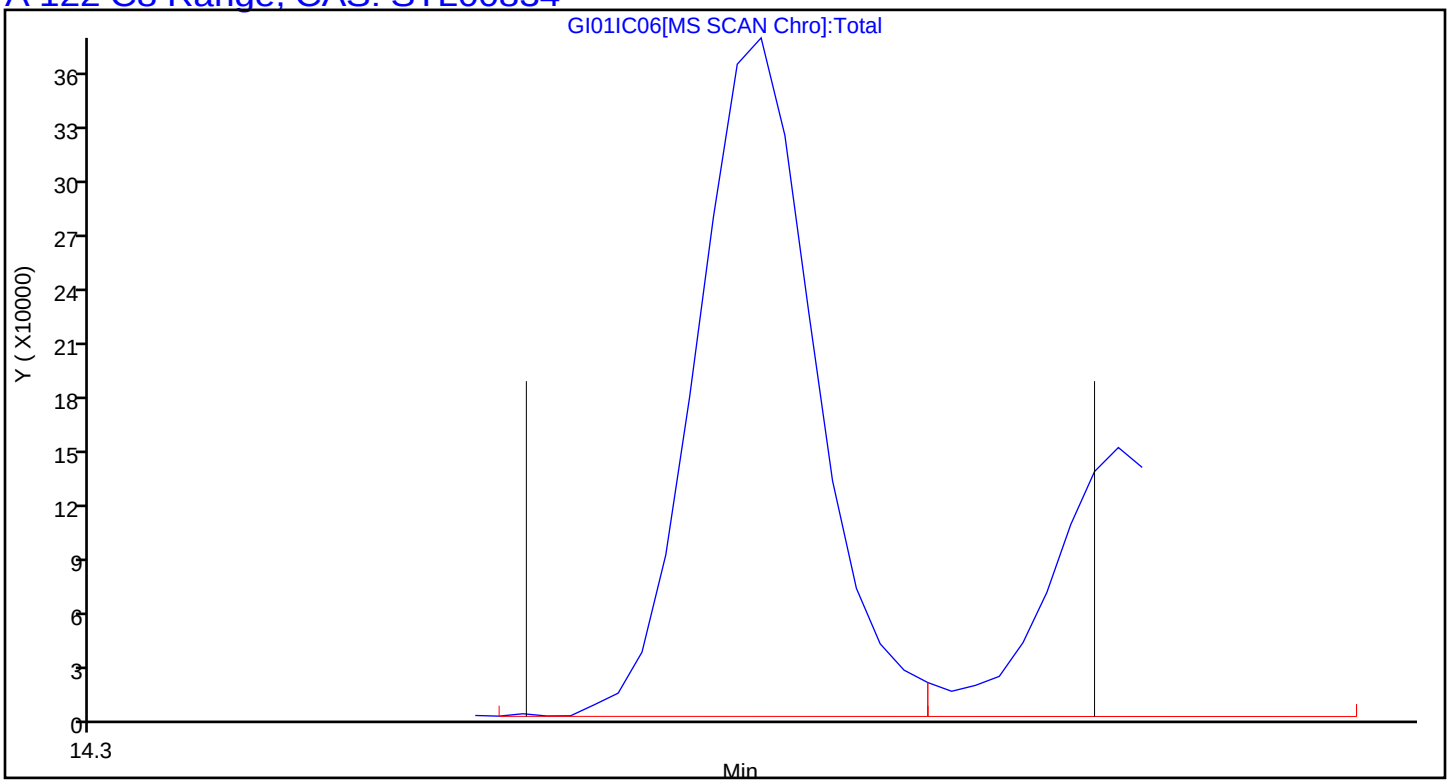


Report Date: 02-Sep-2020 12:24:04 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC06.D				
Injection Date:	02-Sep-2020 02:38:30	Instrument ID:	MG		
Lims ID:	IC L6				
Client ID:					
Operator ID:	AFB	ALS Bottle#:	5	Worklist Smp#:	14
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 122 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D
Lims ID: ICIS L7
Client ID:
Sample Type: ICIS Calib Level: 7
Inject. Date: 02-Sep-2020 03:27:30 ALS Bottle#: 6 Worklist Smp#: 15
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016453-015
Misc. Info.: 314608
Operator ID: AFB Instrument ID: MG
Sublist: chrom-MG_TO15*sub17

Method: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 02-Sep-2020 12:24:11 Calib Date: 02-Sep-2020 03:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1035

First Level Reviewer: tajh Date: 02-Sep-2020 07:22:50

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.811	8.812	-0.001	88	155264	4.80	4.80	
* 2 1,4-Difluorobenzene	114	10.995	10.996	-0.001	98	774405	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.730	15.730	0.000	93	759403	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.374	17.374	0.000	85	566331	4.64	4.75	
6 Chlorodifluoromethane	51	3.705	3.703	0.002	97	254491	2.00	1.83	
7 Propene	41	3.716	3.716	0.000	98	128895	2.00	1.88	
8 Dichlorodifluoromethane	85	3.770	3.765	0.005	99	292225	2.00	1.88	
9 Chloromethane	52	3.947	3.945	0.002	98	49882	2.00	1.79	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.953	3.951	0.002	93	169218	2.00	1.91	
11 Acetaldehyde	44	4.093	4.096	-0.003	98	336190	10.0	10.3	
12 Vinyl chloride	62	4.115	4.114	0.001	98	142653	2.00	1.83	
14 Butadiene	54	4.201	4.201	0.000	67	127581	2.00	1.86	
13 Butane	43	4.206	4.202	0.004	86	260407	2.00	1.87	
15 Bromomethane	94	4.519	4.521	-0.002	98	87843	2.00	1.87	
16 Chloroethane	64	4.659	4.658	0.001	88	60690	2.00	1.88	
17 Ethanol	31	4.751	4.759	-0.008	94	307085	10.0	10.5	
18 Vinyl bromide	106	4.961	4.960	0.001	98	75357	2.00	1.88	
19 2-Methylbutane	43	5.010	5.010	0.000	94	178302	2.00	1.89	
20 Trichlorofluoromethane	101	5.231	5.229	0.002	97	212612	2.00	1.76	
21 Acrolein	56	5.231	5.235	-0.004	34	26996	2.00	1.87	
22 Acetonitrile	40	5.296	5.301	-0.005	99	54213	2.00	2.10	
23 Acetone	58	5.349	5.355	-0.006	99	167195	6.00	6.46	
25 Isopropyl alcohol	45	5.436	5.451	-0.015	93	444518	6.00	5.75	
24 Pentane	72	5.447	5.448	-0.001	96	14405	2.00	1.83	
26 Ethyl ether	31	5.614	5.619	-0.005	90	118337	2.00	2.14	
27 1,1-Dichloroethene	96	5.932	5.928	0.004	90	71623	2.00	1.87	
28 Acrylonitrile	53	6.029	6.032	-0.003	96	74563	2.00	2.11	
30 2-Methyl-2-propanol	59	6.045	6.059	-0.014	96	140940	2.00	1.81	
29 1,1,2-Trichloro-1,2,2-trifluoroe	101	6.104	6.107	-0.003	89	162311	2.00	1.83	
31 Methylene Chloride	84	6.277	6.273	0.004	88	71422	2.00	1.87	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.288	6.289	-0.001	94	119860	2.00	1.60	
33 Carbon disulfide	76	6.439	6.438	0.001	97	235894	2.00	1.83	
34 trans-1,2-Dichloroethene	96	7.080	7.082	-0.002	89	81489	2.00	1.81	
35 2-Methylpentane	43	7.102	7.101	0.001	97	323413	2.00	1.84	
36 Methyl tert-butyl ether	73	7.215	7.230	-0.015	91	200198	2.00	2.15	
37 1,1-Dichloroethane	63	7.501	7.499	0.002	98	208044	2.00	1.85	
38 Vinyl acetate	43	7.603	7.607	-0.004	100	323495	2.00	2.20	
39 2-Butanone (MEK)	72	8.056	8.063	-0.007	95	39691	2.00	2.13	
40 Hexane	56	8.083	8.082	0.001	89	108248	2.00	1.87	
41 Isopropyl ether	45	8.240	8.248	-0.008	95	408213	2.00	2.11	
42 cis-1,2-Dichloroethene	96	8.488	8.483	0.005	96	90453	2.00	1.89	
43 Ethyl acetate	43	8.671	8.676	-0.005	97	276215	2.00	2.14	
44 Chloroform	83	8.822	8.825	-0.003	85	198099	2.00	1.82	
45 Tert-butyl ethyl ether	59	8.919	8.928	-0.009	96	344105	2.00	2.12	
46 Tetrahydrofuran	42	9.232	9.244	-0.012	91	138158	2.00	2.14	
47 1,1,1-Trichloroethane	97	9.847	9.851	-0.004	93	189856	2.00	1.81	
48 1,2-Dichloroethane	62	9.960	9.958	0.002	94	156222	2.00	1.79	
51 n-Butanol	31	10.429	10.442	-0.013	81	40646	2.00	1.64	
49 Cyclohexane	69	10.456	10.455	0.001	89	45891	2.00	1.71	
50 Benzene	78	10.451	10.451	0.000	96	283155	2.00	1.78	
52 Carbon tetrachloride	117	10.478	10.476	0.002	91	120424	2.00	1.22	
53 2,3-Dimethylpentane	71	10.575	10.577	-0.002	89	71885	2.00	1.75	
54 Thiophene	84	10.720	10.725	-0.005	93	164043	2.00	1.80	
55 Isooctane	57	11.216	11.219	-0.003	97	696193	2.00	1.79	
56 n-Heptane	71	11.594	11.594	0.000	95	112703	2.00	1.80	
57 1,2-Dichloropropane	63	11.669	11.669	0.000	89	135449	2.00	1.87	
58 Trichloroethene	130	11.712	11.706	0.006	90	113938	2.00	1.64	
59 Dibromomethane	93	11.788	11.791	-0.003	88	119998	2.00	1.75	
60 Dichlorobromomethane	83	11.934	11.936	-0.002	95	216520	2.00	1.82	
61 1,4-Dioxane	88	11.961	11.974	-0.013	87	36968	2.00	1.99	
62 Methyl methacrylate	41	12.036	12.038	-0.002	86	166422	2.00	2.03	
63 Methylcyclohexane	83	12.478	12.480	-0.002	86	187114	2.00	1.78	
64 4-Methyl-2-pentanone (MIBK)	43	12.888	12.898	-0.010	97	266548	2.00	1.93	
65 cis-1,3-Dichloropropene	75	12.937	12.938	-0.001	98	173523	2.00	1.82	
66 trans-1,3-Dichloropropene	75	13.632	13.632	0.000	91	152113	2.00	1.95	
67 Toluene	91	13.756	13.759	-0.003	92	326329	2.00	1.95	
68 1,1,2-Trichloroethane	83	13.832	13.831	0.001	94	105417	2.00	2.01	
69 2-Hexanone	58	14.225	14.231	-0.006	92	114195	2.00	1.84	
70 n-Octane	85	14.452	14.454	-0.002	98	116497	2.00	1.91	
71 Chlorodibromomethane	129	14.533	14.536	-0.003	95	190331	2.00	1.93	
72 Ethylene Dibromide	107	14.824	14.826	-0.002	96	183756	2.00	1.95	
73 Tetrachloroethene	129	14.905	14.904	0.001	91	110572	2.00	1.75	
75 Chlorobenzene	112	15.778	15.779	-0.001	90	264485	2.00	1.95	
74 2,3-Dimethylheptane	43	15.800	15.801	-0.001	92	547136	2.00	1.89	
78 Ethylbenzene	91	16.070	16.068	0.002	99	442535	2.00	2.06	
79 m-Xylene & p-Xylene	91	16.231	16.232	-0.001	97	676428	4.00	3.97	
80 n-Nonane	57	16.652	16.654	-0.002	94	329467	2.00	1.96	
81 Bromoform	173	16.679	16.676	0.003	92	166485	2.00	2.01	
82 Styrene	104	16.695	16.695	0.000	96	259361	2.00	2.10	
83 o-Xylene	91	16.754	16.757	-0.003	97	351197	2.00	2.04	
84 1,1,2,2-Tetrachloroethane	83	17.078	17.078	0.000	97	283671	2.00	2.06	
85 1,2,3-Trichloropropane	110	17.240	17.237	0.003	93	70357	2.00	2.09	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
86 Isopropylbenzene	105	17.347	17.344	0.003	97	469762	2.00	2.07	
87 N-Propylbenzene	120	17.887	17.887	0.000	98	122801	2.00	2.03	
88 2-Chlorotoluene	126	17.930	17.930	0.000	98	116178	2.00	2.01	
89 4-Ethyltoluene	105	18.038	18.038	0.000	99	470643	2.00	2.08	
90 1,3,5-Trimethylbenzene	120	18.108	18.109	-0.001	91	184043	2.00	2.04	
92 Alpha Methyl Styrene	118	18.340	18.340	0.000	84	187336	2.00	2.10	
93 n-Decane	57	18.399	18.401	-0.002	87	419090	2.00	2.06	
94 tert-Butylbenzene	119	18.534	18.533	0.001	91	412773	2.00	2.08	
95 1,2,4-Trimethylbenzene	105	18.550	18.547	0.003	96	410005	2.00	2.07	
96 sec-Butylbenzene	105	18.803	18.804	-0.001	98	615450	2.00	2.06	
97 1,3-Dichlorobenzene	146	18.814	18.815	-0.001	96	272851	2.00	1.94	
98 Benzyl chloride	91	18.890	18.891	-0.001	97	410741	2.00	2.21	
99 1,4-Dichlorobenzene	146	18.906	18.905	0.001	93	268488	2.00	1.88	
100 4-Isopropyltoluene	119	18.965	18.965	0.000	97	491082	2.00	2.13	
101 1,2,3-Trimethylbenzene	105	19.019	19.019	0.000	99	420978	2.00	2.43	
102 Butylcyclohexane	83	19.073	19.074	-0.001	86	390777	2.00	2.02	
103 2,3-Dihydroindene	117	19.262	19.262	0.000	92	404591	2.00	2.05	
104 1,2-Dichlorobenzene	146	19.262	19.262	0.000	78	265655	2.00	1.97	
106 Indene	116	19.391	19.392	-0.001	89	353313	2.00	2.09	
105 n-Butylbenzene	91	19.397	19.398	-0.001	98	548406	2.00	2.10	
107 Undecane	57	19.709	19.708	0.001	93	469276	2.00	2.06	
108 1,2-Dibromo-3-Chloropropane	157	19.860	19.859	0.001	96	144381	2.00	2.37	
109 1,2,4,5-Tetramethylbenzene	119	20.152	20.150	0.002	97	466848	2.00	2.49	
110 Dodecane	57	20.761	20.765	-0.004	90	349178	2.00	1.76	
111 1,2,4-Trichlorobenzene	180	20.955	20.957	-0.002	93	224232	2.00	1.89	
112 Naphthalene	128	21.095	21.095	0.000	98	548866	2.00	1.91	
113 Hexachlorobutadiene	225	21.305	21.304	0.001	92	200284	2.00	2.00	
114 1,2,3-Trichlorobenzene	180	21.370	21.372	-0.002	94	214504	2.00	1.88	
115 2-Methylnaphthalene	142	22.141	22.144	-0.003	98	143251	2.00	1.16	
116 1-Methylnaphthalene	142	22.319	22.319	0.000	99	152396	2.00	1.21	
A 122 C8 Range	1	14.449	(14.399-14.517)		0	1436960	2.00	1.94	
S 123 1,2-Dichloroethene, Total	1				0		4.00	3.70	
S 124 Xylenes, Total	100				0		6.00	6.01	

Reagents:

40L7DQP_00019	Amount Added: 200.00	Units: mL	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

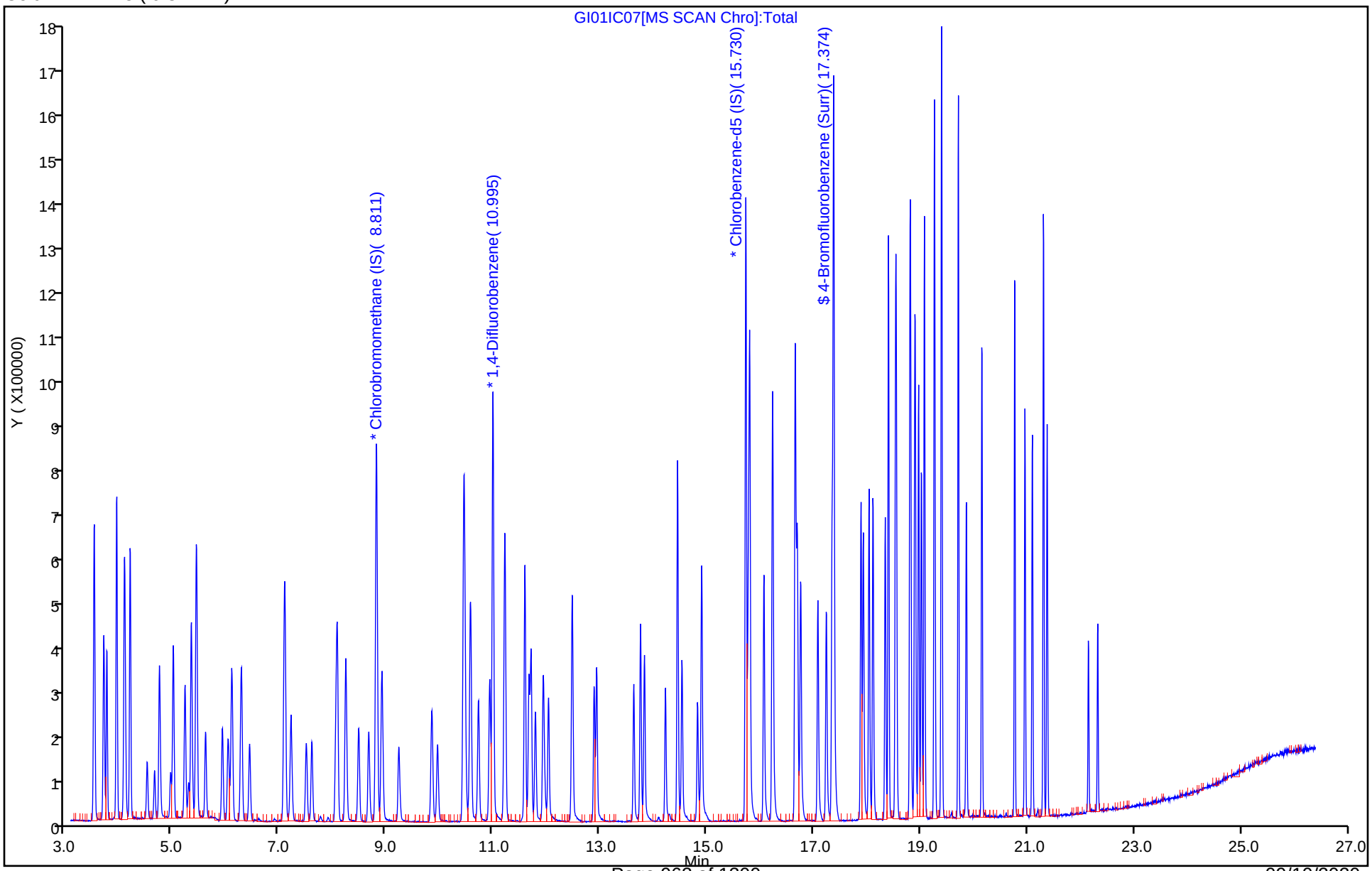
Report Date: 02-Sep-2020 12:24:12 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D

Injection Date:	02-Sep-2020 03:27:30	Instrument ID:	MG	Operator ID:	AFB
Lims ID:	ICIS L7			Worklist Smp#:	15
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

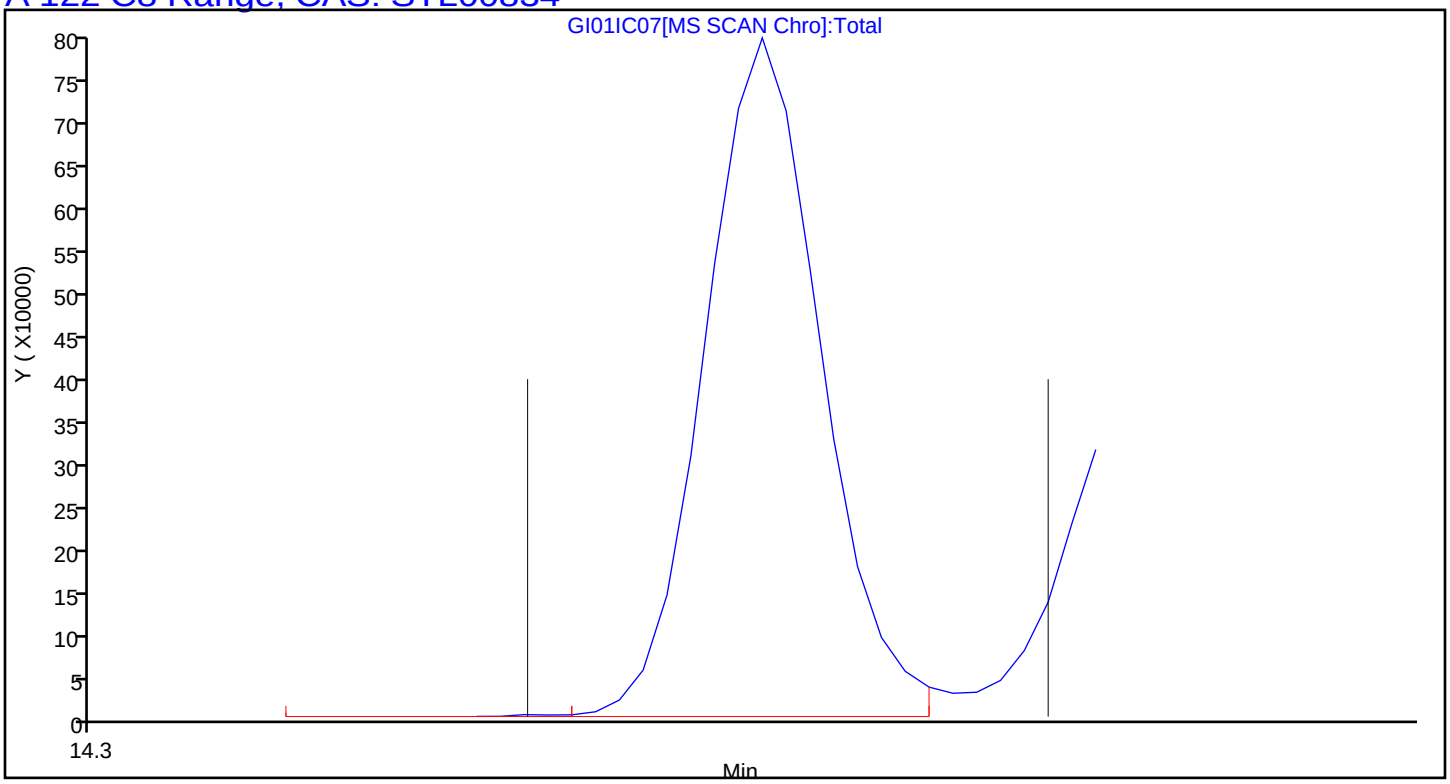


Report Date: 02-Sep-2020 12:24:12 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D				
Injection Date:	02-Sep-2020 03:27:30	Instrument ID:	MG		
Lims ID:	ICIS L7				
Client ID:					
Operator ID:	AFB	ALS Bottle#:	6	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 122 C8 Range, CAS: STL00834



FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1 Analy Batch No.: 42290

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/29/2020 12:34 Calibration End Date: 08/29/2020 23:57 Calibration ID: 2592

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 140-42290/9	HH29IC01.D
Level 2	IC 140-42290/10	HH29IC02.D
Level 3	IC 140-42290/11	HH29IC03.D
Level 4	IC 140-42290/12	HH29IC04.D
Level 5	IC 140-42290/13	HH29IC05.D
Level 6	IC 140-42290/14	HH29IC06.D
Level 7	ICIS 140-42290/15	HH29IC07.D
Level 8	IC 140-42290/7	HH29IC08.D
Level 9	IC 140-42290/5	HH29IC09.D
Level 10	IC 140-42290/3	HH29IC10.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Chlorodifluoromethane	+++++ 2.7055	+++++ 2.6133	3.4173 2.4773	2.8362 2.3638	2.7135 2.3014	Ave		2.6785				13.1		30.0			
Propene	+++++ 1.2455	+++++ 1.1794	+++++ 1.1222	+++++ 1.0487	1.2046 1.0659	Ave		1.1444				6.9		30.0			
Dichlorodifluoromethane	+++++ 3.7367	+++++ 3.7564	4.2037 3.5581	3.9703 2.7867	3.7783 3.2382	Ave		3.6285				12.2		30.0			
Chloromethane	+++++ 0.5127	+++++ 0.5118	+++++ 0.4596	0.5380 0.4000	0.5470 0.3674	Ave		0.4766				14.7		30.0			
1,2-Dichloro-1,1,2,2-tetrafluoroethane	+++++ 2.9877	+++++ 2.7959	3.2885 2.7391	3.2420 2.4960	3.0064 2.6296	Ave		2.8982				9.8		30.0			
Vinyl chloride	1.7873 1.6144	1.8695 1.5602	1.9103 1.4490	1.6595 1.2848	1.6154 1.2032	Ave		1.5954				14.6		30.0			
Butane	+++++ 2.3867	+++++ 2.4155	+++++ 2.1618	2.3074 1.9057	2.4206 1.6706	Ave		2.1812				13.3		30.0			
1,3-Butadiene	+++++ 1.1774	+++++ 1.1465	+++++ 1.0761	1.2028 0.9453	1.1764 0.8821	Ave		1.0867				11.6		30.0			
Bromomethane	+++++ 1.5739	+++++ 1.5439	2.0317 1.4379	1.5846 1.2654	1.6586 1.2286	Ave		1.5406				16.3		30.0			
Chloroethane	+++++ 0.6907	+++++ 0.6738	0.9193 0.6224	0.7437 0.5388	0.7005 0.5001	Ave		0.6737				19.2		30.0			
Ethanol	+++++ 0.7845	+++++ 0.9095	+++++ 0.7809	0.7532 0.8165	0.8148 0.5491	Ave		0.7726				14.3		30.0			
Vinyl bromide	+++++ 1.2798	1.3352 1.2694	1.4263 1.2825	1.2693 1.1540	1.3043 1.2354	Ave		1.2840				5.7		30.0			
2-Methylbutane	+++++ 1.6662	1.8377 1.6690	1.9496 1.6417	1.7086 1.4854	1.6132 1.5623	Ave		1.6815				8.3		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1 Analy Batch No.: 42290

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/29/2020 12:34 Calibration End Date: 08/29/2020 23:57 Calibration ID: 2592

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Trichlorofluoromethane	+++++ 3.4997	+++++ 3.4683	4.1168 3.3912	3.6804 3.1171	3.6481 3.3569	Ave		3.5348				8.3		30.0			
Acrolein	+++++ 0.3293	+++++ 0.3359	0.4055 0.4067	0.4056 0.3724	0.3317 0.3998	Lin1	-0.005	0.3879							0.9970		0.9900
Acetonitrile	+++++ 0.6616	+++++ 0.7202	+++++ 0.6820	0.6370 0.6220	0.7799 0.6271	Ave		0.6757				8.5		30.0			
Acetone	+++++ 0.8548	+++++ 0.7750	+++++ 0.6482	+++++ 0.7691	0.8359 0.5956	Ave		0.7464				13.9		30.0			
Pentane	+++++ 0.1775	+++++ 0.1759	0.1172 0.1687	0.1468 0.1515	0.1590 0.1568	Ave		0.1567				12.4		30.0			
Isopropyl alcohol	2.0200 1.7223	1.7659 1.9942	1.7685 1.9544	1.7938 1.8109	1.7172 1.8953	Ave		1.8442				6.1		30.0			
Ethyl ether	+++++ 1.5445	1.6582 1.6027	1.4358 1.6309	1.5079 1.4897	1.4064 1.5818	Ave		1.5398				5.6		30.0			
1,1-Dichloroethene	+++++ 1.1304	1.2419 1.1553	1.1621 1.2092	1.1867 1.1118	1.0808 1.1941	Ave		1.1636				4.3		30.0			
Acrylonitrile	+++++ 1.0013	1.0778 1.0766	0.9669 1.0679	1.0503 0.9586	0.9959 1.0166	Ave		1.0235				4.5		30.0			
tert-Butyl alcohol	+++++ 1.7110	1.8603 1.9553	1.9674 2.0796	1.8294 1.9515	1.6805 2.0862	Ave		1.9024				7.6		30.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	+++++ 2.9548	3.2652 2.9270	3.4016 2.8617	3.0642 2.5989	3.1091 2.8034	Ave		2.9984				8.1		30.0			
Methylene Chloride	+++++ 1.1853	+++++ 1.1753	+++++ 1.1585	1.2554 1.0871	1.2838 1.0915	Ave		1.1767				6.3		30.0			
3-Chloropropene	+++++ 1.0940	+++++ 1.1188	1.3944 1.1878	1.2931 1.1146	1.1655 1.2774	Ave		1.2057				8.8		30.0			
Carbon disulfide	+++++ 3.7487	4.1379 3.8002	4.0389 3.7839	3.7726 3.3931	3.7879 3.5723	Ave		3.7817				5.8		30.0			
trans-1,2-Dichloroethene	+++++ 1.2025	1.2337 1.2302	1.2296 1.2714	1.2008 1.1522	1.1882 1.2283	Ave		1.2152				2.8		30.0			
2-Methylpentane	+++++ 2.9073	+++++ 3.0918	2.5445 3.1447	2.8000 2.8906	2.7099 3.0978	Ave		2.8983				7.2		30.0			
Methyl tert-butyl ether	+++++ 2.4539	+++++ 2.6104	+++++ 2.8096	2.3468 2.6114	2.2261 2.8991	Ave		2.5653				9.4		30.0			
1,1-Dichloroethane	+++++ 2.3589	+++++ 2.4022	2.6392 2.3824	2.5463 2.1792	2.4463 2.3517	Ave		2.4133				5.7		30.0			
Vinyl acetate	+++++ 2.8453	+++++ 3.1704	+++++ 3.5025	2.6214 3.2862	2.5279 3.7316	Ave		3.0979				14.6		30.0			
2-Butanone (MEK)	+++++ 0.6082	+++++ 0.5881	+++++ 0.5856	0.5879 0.5694	0.5982 0.5777	Ave		0.5879				2.2		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1 Analy Batch No.: 42290

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/29/2020 12:34 Calibration End Date: 08/29/2020 23:57 Calibration ID: 2592

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Hexane	+++++ 1.0080	0.9773 1.0550	1.0130 1.0448	0.9838 0.9870	0.9509 1.0318	Ave		1.0057				3.4		30.0			
cis-1,2-Dichloroethene	+++++ 1.2006	1.3116 1.2181	1.2071 1.2852	1.1877 1.1989	1.1672 1.2990	Ave		1.2306				4.3		30.0			
Ethyl acetate	+++++ 2.9537	3.2426 3.0946	3.0860 3.2045	3.0580 2.9864	2.8380 3.2849	Ave		3.0832				4.7		30.0			
Chloroform	+++++ 2.8096	3.2252 2.8206	3.2462 2.8108	2.9724 2.5718	2.9615 2.8168	Ave		2.9150				7.4		30.0			
Tetrahydrofuran	+++++ 1.4066	1.3660 1.5320	1.3295 1.5894	1.3844 1.4788	1.3361 1.6073	Ave		1.4478				7.4		30.0			
1,1,1-Trichloroethane	+++++ 2.5370	2.7730 2.5666	2.8490 2.6074	2.6261 2.4100	2.6714 2.7422	Ave		2.6425				5.1		30.0			
1,2-Dichloroethane	+++++ 0.4161	0.5015 0.4090	0.4638 0.4108	0.4474 0.3989	0.4303 0.4502	Ave		0.4365				7.5		30.0			
1-Butanol	+++++ 0.1165	+++++ 0.1336	+++++ 0.1377	+++++ 0.1423	0.1277 0.1580	Ave		0.1360				10.3		30.0			
Cyclohexane	+++++ 0.1198	+++++ 0.1249	+++++ 0.1277	0.1004 0.1227	0.1139 0.1347	Ave		0.1206				9.1		30.0			
Benzene	+++++ 0.8717	+++++ 0.8688	0.9571 0.8628	0.8914 0.8210	0.8833 0.8951	Ave		0.8814				4.3		30.0			
Carbon tetrachloride	0.5108 0.5438	0.5330 0.4095	0.5691 0.6501	0.5793 0.4135	0.6039 0.6426	Ave		0.5456				15.3		30.0			
2,3-Dimethylpentane	+++++ 0.1708	+++++ 0.1774	0.1466 0.1831	0.1419 0.1757	0.1521 0.1876	Ave		0.1669				10.5		30.0			
Thiophene	+++++ 0.4580	+++++ 0.4695	0.4528 0.4902	0.4129 0.4728	0.4335 0.5188	Ave		0.4636				7.1		30.0			
2,2,4-Trimethylpentane	+++++ 1.3767	1.2986 1.4447	1.2613 1.4999	1.1363 1.4507	1.2859 1.5790	Ave		1.3703				10.0		30.0			
Heptane	+++++ 0.2507	+++++ 0.2627	+++++ 0.2778	0.1771 0.2716	0.2236 0.2949	Ave		0.2512				15.8		30.0			
1,2-Dichloropropane	+++++ 0.3611	0.3921 0.3664	0.4016 0.3701	0.3866 0.3598	0.3648 0.3925	Ave		0.3772				4.2		30.0			
Trichloroethene	0.4333 0.3724	0.4130 0.3723	0.3957 0.3910	0.3650 0.4321	0.3607 0.4274	Ave		0.3963				7.2		30.0			
Dibromomethane	+++++ 0.4361	+++++ 0.3943	+++++ 0.4009	0.4554 0.3985	0.4038 0.4475	Ave		0.4195				6.2		30.0			
Bromodichloromethane	0.6294 0.5862	0.5994 0.6091	0.6386 0.6497	0.5894 0.6277	0.5998 0.7176	Ave		0.6247				6.3		30.0			
1,4-Dioxane	+++++ 0.1088	+++++ 0.1402	+++++ 0.1440	0.0949 0.1381	0.1070 0.1457	Ave		0.1255				16.9		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1 Analy Batch No.: 42290

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/29/2020 12:34 Calibration End Date: 08/29/2020 23:57 Calibration ID: 2592

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Methyl methacrylate	+++++ 0.4015	+++++ 0.4210	0.4173 0.4469	0.3162 0.4328	0.3641 0.4756	Ave		0.4094				12.2		30.0			
Methylcyclohexane	+++++ 0.4388	+++++ 0.4675	0.3567 0.5019	0.3227 0.4863	0.3660 0.5253	Lin1	-0.026	0.5093							0.9980		0.9900
4-Methyl-2-pentanone (MIBK)	+++++ 0.7878	0.8746 0.8200	0.7030 0.8472	0.6829 0.8431	0.6160 0.9050	Ave		0.7866				12.4		30.0			
cis-1,3-Dichloropropene	0.4198 0.4295	0.3993 0.4424	0.3681 0.4700	0.3727 0.4805	0.3526 0.5444	Ave		0.4279				13.8		30.0			
trans-1,3-Dichloropropene	+++++ 0.4260	0.4080 0.4418	0.3705 0.4908	0.3941 0.5133	0.3133 0.5954	Ave		0.4392				19.1		30.0			
Toluene	+++++ 1.2601	1.2066 1.3006	1.2235 1.3441	1.0657 1.3045	1.0583 1.3667	Ave		1.2367				9.0		30.0			
1,1,2-Trichloroethane	+++++ 0.4421	+++++ 0.4441	0.4803 0.4351	0.4483 0.4076	0.4571 0.4404	Ave		0.4444				4.6		30.0			
2-Hexanone	+++++ 0.3858	+++++ 0.4326	+++++ 0.4558	0.2776 0.4485	0.2517 0.5036	Ave		0.3937				24.1		30.0			
Octane	+++++ 0.3553	+++++ 0.3811	+++++ 0.3933	0.2316 0.3675	0.2819 0.4047	Ave		0.3450				18.6		30.0			
C8 Range	+++++ 3.1573	+++++ 3.2462	+++++ 3.2801	+++++ 3.2149	2.7086 3.5763	Ave		3.1972				8.8		30.0			
Dibromochloromethane	0.6546 0.6509	0.6558 0.7687	0.6791 0.8540	0.6591 0.7744	0.6935 0.9490	Ave		0.7339				13.9		30.0			
1,2-Dibromoethane (EDB)	0.7544 0.6217	0.6964 0.6241	0.5894 0.6594	0.6677 0.6710	0.5662 0.8020	Ave		0.6652				10.8		30.0			
Tetrachloroethene	0.5714 0.4879	0.5262 0.4977	0.5628 0.5126	0.4947 0.4884	0.4911 0.5510	Ave		0.5184				6.3		30.0			
Chlorobenzene	+++++ 0.9716	+++++ 0.9844	1.0329 0.9914	1.0019 0.9321	1.0223 1.0762	Ave		1.0016				4.3		30.0			
Ethylbenzene	1.5785 1.4962	1.4684 1.5829	1.3909 1.6686	1.1901 1.5737	1.2383 1.7796	Ave		1.4967				12.2		30.0			
m-Xylene & p-Xylene	1.1967 1.1962	1.0298 1.2777	1.0159 1.3281	0.9436 1.2680	1.0880 1.4862	Ave		1.1830				14.0		30.0			
Nonane	+++++ 0.8542	+++++ 0.9145	+++++ 0.9462	0.5962 0.9084	0.7075 1.0313	Ave		0.8512				17.6		30.0			
Bromoform	0.4185 0.3621	0.3850 0.6034	0.3917 0.7563	0.4488 +++++	0.4598 +++++	QuaF		0.3745	0.0961863						0.9980		0.9900
Styrene	+++++ 0.7392	+++++ 0.8288	0.5299 0.9084	0.5286 0.8821	0.6138 +++++	Ave		0.7187				22.6		30.0			
o-Xylene	+++++ 1.2464	1.1840 1.3067	1.1076 1.3521	1.0587 1.2666	1.1918 1.4374	Ave		1.2390				9.6		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1 Analy Batch No.: 42290

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/29/2020 12:34 Calibration End Date: 08/29/2020 23:57 Calibration ID: 2592

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
1,1,2,2-Tetrachloroethane	+++++ 1.0743	+++++ 1.0946	1.1993 1.0639	1.2054 0.8526	1.1482 1.1332	Ave		1.0964				10.2		30.0			
1,2,3-Trichloropropane	+++++ 0.2413	0.2644 0.2435	0.2540 0.2439	0.2567 0.2233	0.2427 0.2640	Ave		0.2482				5.2		30.0			
Isopropylbenzene	+++++ 1.5898	1.6136 1.7042	1.1288 1.7866	1.2884 1.6697	1.3313 1.9874	Ave		1.5667				17.2		30.0			
Propylbenzene	+++++ 0.4042	+++++ 0.4452	+++++ 0.4665	0.3276 0.4339	0.3240 0.5387	Ave		0.4200				18.2		30.0			
2-Chlorotoluene	+++++ 0.3810	+++++ 0.4108	+++++ 0.4223	0.3547 0.3849	0.3872 0.4701	Ave		0.4016				9.3		30.0			
4-Ethyltoluene	+++++ 1.4865	+++++ 1.6384	+++++ 1.7505	1.1820 1.5660	1.4387 1.9506	Ave		1.5732				15.5		30.0			
1,3,5-Trimethylbenzene	+++++ 0.6401	+++++ 0.7166	0.4384 0.7256	0.5526 0.6505	0.6648 0.8121	Lin1	-0.036	0.7537							0.9910		0.9900
Alpha Methyl Styrene	+++++ 0.5198	+++++ 0.6458	+++++ 0.6857	0.4073 0.6079	0.3977 +++++	Ave		0.5440				22.5		30.0			
Decane	+++++ 1.1794	+++++ 1.2671	+++++ 1.2589	+++++ 1.1749	1.2088 1.3795	Ave		1.2448				6.1		30.0			
tert-Butylbenzene	+++++ 1.5059	+++++ 1.6813	+++++ 1.6720	1.2811 1.5401	1.5547 1.9269	Ave		1.5946				12.4		30.0			
1,2,4-Trimethylbenzene	+++++ 1.4308	+++++ 1.5594	0.9977 1.5184	1.2515 1.3957	1.5472 1.7572	Ave		1.4322				15.9		30.0			
sec-Butylbenzene	+++++ 2.0544	+++++ 2.2913	+++++ 2.2519	1.7213 2.0088	1.9453 2.5087	Ave		2.1117				12.3		30.0			
1,3-Dichlorobenzene	+++++ 0.6744	+++++ 0.7630	0.5723 0.7869	0.6757 0.7537	0.6956 1.0262	Ave		0.7435				17.8		30.0			
Benzyl chloride	+++++ 0.5965	+++++ 0.8377	+++++ 0.8757	0.5101 0.8718	0.5402 +++++	Lin1	-0.096	0.8755							0.9950		0.9900
1,4-Dichlorobenzene	+++++ 0.5451	0.4496 0.6379	0.3789 0.6959	0.4954 0.6868	0.4983 +++++	Ave		0.5485				21.0		30.0			
4-Isopropyltoluene	+++++ 1.8294	+++++ 2.0580	0.9462 1.9698	1.3130 1.6893	1.7718 2.0975	Ave		1.7094				23.2		30.0			
1,2,3-Trimethylbenzene	+++++ 1.4294	+++++ 1.5408	0.9821 1.4515	1.2191 1.2701	1.5076 1.6067	Ave		1.3759				15.0		30.0			
Indane	+++++ 1.1354	+++++ 1.2527	0.7558 1.2305	1.0301 1.1346	1.1008 1.4807	Ave		1.1401				18.1		30.0			
1,2-Dichlorobenzene	0.9523 0.7714	0.7900 0.8237	0.6887 0.7936	0.8221 0.7418	0.8326 0.9898	Ave		0.8206				11.0		30.0			
Butylbenzene	+++++ 1.9322	+++++ 2.1536	+++++ 1.9888	1.4314 1.7204	1.9128 2.0980	Ave		1.8910				13.0		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1 Analy Batch No.: 42290

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/29/2020 12:34 Calibration End Date: 08/29/2020 23:57 Calibration ID: 2592

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Indene	+++++ 0.9711	+++++ 1.0654	+++++ 0.9911	0.8038 0.8419	0.9727 1.1970	Ave		0.9776				13.5		30.0			
Undecane	+++++ 1.3782	+++++ 1.5245	+++++ 1.4385	+++++ 1.3412	1.2044 1.6345	Ave		1.4202				10.5		30.0			
1,2-Dibromo-3-Chloropropane	+++++ 0.3687	+++++ 0.5347	0.2516 0.5090	0.3511 0.4216	0.3755 0.5438	Ave		0.4195				24.5		30.0			
1,2,4,5-Tetramethylbenzene	+++++ 1.5935	+++++ 1.8239	0.5811 1.8233	1.0074 1.6457	1.1795 +++++	Lin1	-0.108	1.7348							0.9960		0.9900
Dodecane	+++++ 1.0696	+++++ 1.0645	+++++ 1.0349	+++++ 1.2145	0.6204 +++++	Ave		1.0008				22.4		30.0			
1,2,4-Trichlorobenzene	+++++ 0.3142	+++++ 0.3577	0.1451 0.4022	0.2191 0.4125	0.2199 +++++	Lin1	-0.032	0.4028							0.9940		0.9900
Naphthalene	0.9418 0.9413	0.5365 1.0963	0.3423 1.1573	0.6009 1.0956	0.5838 +++++	QuaF		1.1293	-0.003652						0.9980		0.9900
Hexachlorobutadiene	+++++ 0.8071	+++++ 0.7669	0.8537 0.6872	0.9582 0.6153	0.8167 0.7764	Ave		0.7852				13.2		30.0			
1,2,3-Trichlorobenzene	+++++ 0.4407	+++++ 0.4530	+++++ 0.4697	0.3501 0.4927	0.3083 0.7127	Ave		0.4610				28.1		30.0			
2-Methylnaphthalene	+++++ 0.0479	+++++ 0.0574	+++++ 0.0895	+++++ 0.2206	+++++ 0.4797	Ave		0.1790				101.5	*	50.0			
1-Methylnaphthalene	+++++ 0.0870	+++++ 0.0863	+++++ 0.1078	+++++ 0.2461	+++++ 0.5059	Ave		0.2066				87.1	*	50.0			
4-Bromofluorobenzene (Surr)	0.4842 0.5620	0.4989 0.5844	0.4590 0.6018	0.5397 0.6213	0.5523 0.6736	Ave		0.5577				11.8		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1 Analy Batch No.: 42290

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/29/2020 12:34 Calibration End Date: 08/29/2020 23:57 Calibration ID: 2592

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 140-42290/9	HH29IC01.D
Level 2	IC 140-42290/10	HH29IC02.D
Level 3	IC 140-42290/11	HH29IC03.D
Level 4	IC 140-42290/12	HH29IC04.D
Level 5	IC 140-42290/13	HH29IC05.D
Level 6	IC 140-42290/14	HH29IC06.D
Level 7	ICIS 140-42290/15	HH29IC07.D
Level 8	IC 140-42290/7	HH29IC08.D
Level 9	IC 140-42290/5	HH29IC09.D
Level 10	IC 140-42290/3	HH29IC10.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
Chlorodifluoromethane	CBM	Ave	+++++ 71178	+++++ 135250	6531 291670	11434 564270	26384 1170804	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Propene	CBM	Ave	+++++ 32766	+++++ 61039	+++++ 132120	+++++ 250332	11713 542250	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
Dichlorodifluoromethane	CBM	Ave	+++++ 98306	+++++ 194412	8034 418915	16006 665212	36737 1647380	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Chloromethane	CBM	Ave	+++++ 13487	+++++ 26488	+++++ 54109	2169 95475	5319 186886	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,2-Dichloro-1,1,2,2-tetrafluoroethane	CBM	Ave	+++++ 78601	+++++ 144701	6285 322487	13070 595826	29232 1337769	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Vinyl chloride	CBM	Ave	932 42471	1823 80749	3651 170593	6690 306691	15707 612100	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Butane	CBM	Ave	+++++ 62791	+++++ 125013	+++++ 254521	9302 454922	23536 849872	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,3-Butadiene	CBM	Ave	+++++ 30976	+++++ 59336	+++++ 126693	4849 225651	11438 448776	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Bromomethane	CBM	Ave	+++++ 41408	+++++ 79903	3883 169287	6388 302073	16127 625059	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Chloroethane	CBM	Ave	+++++ 18172	+++++ 34873	1757 73280	2998 128615	6811 254400	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Ethanol	CBM	Ave	+++++ 103194	+++++ 235349	+++++ 459695	15182 974505	39613 1396709	+++++ 5.00	+++++ 10.0	+++++ 20.0	0.800 40.0	2.00 80.0
Vinyl bromide	CBM	Ave	+++++ 33670	1302 65698	2726 150998	5117 275481	12682 628508	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Methylbutane	CBM	Ave	+++++ 43836	1792 86376	3726 193291	6888 354580	15686 794816	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Trichlorofluoromethane	CBM	Ave	+++++ 92071	+++++ 179500	7868 399259	14837 744095	35471 1707786	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1 Analy Batch No.: 42290

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/29/2020 12:34 Calibration End Date: 08/29/2020 23:57 Calibration ID: 2592

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
Acrolein	CBM	Lin1	+++++ 8663	+++++ 17382	775 47885	1635 88893	3225 203402	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Acetonitrile	CBM	Ave	+++++ 17405	+++++ 37274	+++++ 80296	2568 148489	7583 319051	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Acetone	CBM	Ave	+++++ 67466	+++++ 120332	+++++ 228958	+++++ 550794	24383 908970	+++++ 3.00	+++++ 6.00	+++++ 12.0	+++++ 24.0	1.20 48.0
Pentane	CBM	Ave	+++++ 4670	+++++ 9103	224 19860	592 36172	1546 79750	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Isopropyl alcohol	CBM	Ave	3160 135930	5166 309623	10140 690311	21694 1296845	50090 2892621	0.0600 3.00	0.120 6.00	0.240 12.0	0.480 24.0	1.20 48.0
Ethyl ether	CBM	Ave	+++++ 40634	1617 82949	2744 192018	6079 355621	13675 804708	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,1-Dichloroethene	CBM	Ave	+++++ 29740	1211 59790	2221 142360	4784 265390	10509 607494	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Acrylonitrile	CBM	Ave	+++++ 26342	1051 55721	1848 125727	4234 228821	9683 517174	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
tert-Butyl alcohol	CBM	Ave	+++++ 45014	1814 101194	3760 244846	7375 465853	16340 1061322	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,1,2-Trichloro-1,2,2-trifluoroetha ne	CBM	Ave	+++++ 77735	3184 151488	6501 336927	12353 620382	30231 1426183	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Methylene Chloride	CBM	Ave	+++++ 31182	+++++ 60826	+++++ 136401	5061 259505	12483 555280	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
3-Chloropropene	CBM	Ave	+++++ 28782	+++++ 57903	2665 139845	5213 266061	11332 649836	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Carbon disulfide	CBM	Ave	+++++ 98622	4035 196676	7719 445503	15209 809975	36831 1817383	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
trans-1,2-Dichloroethene	CBM	Ave	+++++ 31637	1203 63666	2350 149694	4841 275057	11553 624883	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Methylpentane	CBM	Ave	+++++ 76485	+++++ 160016	4863 370246	11288 690025	26349 1575951	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Methyl tert-butyl ether	CBM	Ave	+++++ 64559	+++++ 135102	+++++ 330791	9461 623376	21645 1474857	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,1-Dichloroethane	CBM	Ave	+++++ 62058	+++++ 124325	5044 280496	10265 520203	23786 1196411	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Vinyl acetate	CBM	Ave	+++++ 74856	+++++ 164085	+++++ 412364	10568 784451	24579 1898417	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
2-Butanone (MEK)	CBM	Ave	+++++ 16000	+++++ 30439	+++++ 68948	2370 135925	5816 293914	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Hexane	CBM	Ave	+++++ 26520	953 54603	1936 123014	3966 235600	9246 524911	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
cis-1,2-Dichloroethene	CBM	Ave	+++++ 31585	1279 63040	2307 151318	4788 286195	11349 660849	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1 Analy Batch No.: 42290

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/29/2020 12:34 Calibration End Date: 08/29/2020 23:57 Calibration ID: 2592

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
Ethyl acetate	CBM	Ave	+++++ 77708	3162 160162	5898 377279	12328 712888	27595 1671126	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Chloroform	CBM	Ave	+++++ 73917	3145 145980	6204 330924	11983 613922	28795 1433018	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Tetrahydrofuran	CBM	Ave	+++++ 37004	1332 79287	2541 187127	5581 352999	12991 817677	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,1,1-Trichloroethane	CBM	Ave	+++++ 66743	2704 132832	5445 306983	10587 575307	25975 1395034	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2-Dichloroethane	DFBZ	Ave	+++++ 47284	2085 93346	3781 213048	7312 401489	17988 963858	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1-Butanol	DFBZ	Ave	+++++ 13235	+++++ 30500	+++++ 71434	+++++ 143170	5338 338272	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
Cyclohexane	DFBZ	Ave	+++++ 13610	+++++ 28513	+++++ 66211	1641 123486	4760 288406	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Benzene	DFBZ	Ave	+++++ 99057	+++++ 198272	7802 447438	14569 826207	36921 1916459	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Carbon tetrachloride	DFBZ	Ave	1133 61795	2216 93449	4639 337106	9468 416169	25244 1375702	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2,3-Dimethylpentane	DFBZ	Ave	+++++ 19407	+++++ 40490	1195 94974	2320 176820	6357 401567	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Thiophene	DFBZ	Ave	+++++ 52043	+++++ 107154	3691 254231	6749 475836	18120 1110676	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2,2,4-Trimethylpentane	DFBZ	Ave	+++++ 156443	5399 329728	10282 777814	18572 1459914	53753 3380543	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Heptane	DFBZ	Ave	+++++ 28489	+++++ 59951	+++++ 144047	2894 273309	9346 631336	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,2-Dichloropropane	DFBZ	Ave	+++++ 41034	1630 83631	3274 191949	6318 362074	15250 840266	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Trichloroethene	DFBZ	Ave	961 42319	1717 84978	3226 202744	5965 434833	15077 915128	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Dibromomethane	DFBZ	Ave	+++++ 49560	+++++ 89996	+++++ 207883	7443 401008	16878 958099	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Bromodichloromethane	DFBZ	Ave	1396 66609	2492 139005	5206 336939	9634 631688	25071 1536417	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,4-Dioxane	DFBZ	Ave	+++++ 12361	+++++ 32004	+++++ 74690	1551 138998	4471 311891	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Methyl methacrylate	DFBZ	Ave	+++++ 45630	+++++ 96083	3402 231736	5168 435605	15220 1018216	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Methylcyclohexane	DFBZ	Lin1	+++++ 49859	+++++ 106694	2908 260282	5275 489358	15301 1124722	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
4-Methyl-2-pentanone (MIBK)	DFBZ	Ave	+++++ 89525	3636 187155	5731 439352	11162 848466	25748 1937646	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1 Analy Batch No.: 42290

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/29/2020 12:34 Calibration End Date: 08/29/2020 23:57 Calibration ID: 2592

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
cis-1,3-Dichloropropene	DFBZ	Ave	931 48811	1660 100971	3001 243759	6091 483570	14738 1165499	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
trans-1,3-Dichloropropene	CBZd 5	Ave	+++++ 35446	1225 73899	2144 194299	4654 409325	8657 1033921	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Toluene	CBZd 5	Ave	+++++ 104851	3623 217553	7081 532092	12584 1040202	29243 2373066	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,1,2-Trichloroethane	CBZd 5	Ave	+++++ 36787	+++++ 74295	2780 172251	5294 324985	12630 764760	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Hexanone	CBZd 5	Ave	+++++ 32100	+++++ 72367	+++++ 180452	3278 357602	6955 874521	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Octane	CBZd 5	Ave	+++++ 29562	+++++ 63752	+++++ 155695	2735 293032	7788 702692	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
C8 Range	DFBZ	Ave	+++++ 358784	+++++ 740857	+++++ 1701005	+++++ 3235392	113223 7656734	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
Dibromochloromethane	CBZd 5	Ave	1062 54160	1969 128589	3930 338056	7783 617460	19161 1647856	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2-Dibromoethane (EDB)	CBZd 5	Ave	1224 51730	2091 104398	3411 261015	7884 535038	15646 1392569	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Tetrachloroethene	CBZd 5	Ave	927 40597	1580 83258	3257 202921	5841 389413	13570 956734	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Chlorobenzene	CBZd 5	Ave	+++++ 80847	+++++ 164669	5978 392452	11831 743269	28248 1868757	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Ethylbenzene	CBZd 5	Ave	2561 124500	4409 264773	8050 660533	14053 1254862	34216 3089994	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
m-Xylene & p-Xylene	CBZd 5	Ave	3883 199075	6184 427470	11759 1051498	22284 2022188	60126 5161120	0.0400 2.00	0.0800 4.00	0.160 8.00	0.320 16.0	0.800 32.0
Nonane	CBZd 5	Ave	+++++ 71082	+++++ 152966	+++++ 374564	7040 724315	19548 1790733	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Bromoform	CBZd 5	QuaF	679 30128	1156 100938	2267 299387	5299 +++++	12706 +++++	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 +++++	0.400 +++++
Styrene	CBZd 5	Ave	+++++ 61513	+++++ 138635	3067 359605	6242 703366	16959 +++++	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
o-Xylene	CBZd 5	Ave	+++++ 103713	3555 218585	6410 535239	12502 1010000	32930 2495830	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,1,2,2-Tetrachloroethane	CBZd 5	Ave	+++++ 89392	+++++ 183101	6941 421162	14234 679869	31726 1967574	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2,3-Trichloropropane	CBZd 5	Ave	+++++ 20078	794 40738	1470 96559	3031 178026	6706 458317	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Isopropylbenzene	CBZd 5	Ave	+++++ 132293	4845 285073	6533 707258	15214 1331394	36786 3450814	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Propylbenzene	CBZd 5	Ave	+++++ 33634	+++++ 74473	+++++ 184674	3868 345970	8952 935298	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1 Analy Batch No.: 42290

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/29/2020 12:34 Calibration End Date: 08/29/2020 23:57 Calibration ID: 2592

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
2-Chlorotoluene	CBZd 5	Ave	+++++ 31701	+++++ 68725	+++++ 167167	4189 306918	10698 816298	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
4-Ethyltoluene	CBZd 5	Ave	+++++ 123694	+++++ 274063	+++++ 692968	13957 1248739	39753 3386928	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,3,5-Trimethylbenzene	CBZd 5	Lin1	+++++ 53265	+++++ 119868	2537 287240	6525 518722	18369 1410023	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Alpha Methyl Styrene	CBZd 5	Ave	+++++ 43249	+++++ 108031	+++++ 271429	4809 484735	10989 +++++	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 +++++
Decane	CBZd 5	Ave	+++++ 98138	+++++ 211962	+++++ 498369	+++++ 936873	33400 2395266	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
tert-Butylbenzene	CBZd 5	Ave	+++++ 125306	+++++ 281235	+++++ 661899	15128 1228047	42959 3345761	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,2,4-Trimethylbenzene	CBZd 5	Ave	+++++ 119057	+++++ 260842	5774 601094	14778 1112935	42752 3051181	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
sec-Butylbenzene	CBZd 5	Ave	+++++ 170946	+++++ 383279	+++++ 891452	20326 1601820	53752 4356098	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,3-Dichlorobenzene	CBZd 5	Ave	+++++ 56119	+++++ 127639	3312 311522	7979 600990	19220 1781787	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Benzyl chloride	CBZd 5	Lin1	+++++ 49639	+++++ 140127	+++++ 346656	6023 695153	14926 +++++	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 +++++
1,4-Dichlorobenzene	CBZd 5	Ave	+++++ 45361	1350 106707	2193 275478	5850 547614	13769 +++++	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
4-Isopropyltoluene	CBZd 5	Ave	+++++ 152230	+++++ 344253	5476 779777	15504 1347034	48957 3642103	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2,3-Trimethylbenzene	CBZd 5	Ave	+++++ 118943	+++++ 257743	5684 574609	14395 1012757	41656 2789911	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Indane	CBZd 5	Ave	+++++ 94480	+++++ 209539	4374 487092	12164 904716	30416 2571055	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2-Dichlorobenzene	CBZd 5	Ave	1545 64192	2372 137779	3986 314163	9708 591518	23005 1718635	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Butylbenzene	CBZd 5	Ave	+++++ 160783	+++++ 360249	+++++ 787301	16902 1371797	52853 3642930	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Indene	CBZd 5	Ave	+++++ 80808	+++++ 178212	+++++ 392352	9491 671298	26876 2078384	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Undecane	CBZd 5	Ave	+++++ 114678	+++++ 255017	+++++ 569435	+++++ 1069442	33280 2838035	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
1,2-Dibromo-3-Chloropropane	CBZd 5	Ave	+++++ 30683	+++++ 89447	1456 201489	4146 336214	10376 944276	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2,4,5-Tetramethylbenzene	CBZd 5	Lin1	+++++ 132594	+++++ 305087	3363 721787	11896 1312226	32591 +++++	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
Dodecane	CBZd 5	Ave	+++++ 88999	+++++ 178065	+++++ 409669	+++++ 968430	17141 +++++	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 +++++

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1 Analy Batch No.: 42290

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/29/2020 12:34 Calibration End Date: 08/29/2020 23:57 Calibration ID: 2592

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
1,2,4-Trichlorobenzene	CBZd 5	Lin1	+++++ 26147	+++++ 59828	840 159208	2587 328959	6075 +++++	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
Naphthalene	CBZd 5	QuaF	1528 78327	1611 183378	1981 458116	7096 873625	16130 +++++	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
Hexachlorobutadiene	CBZd 5	Ave	+++++ 67162	+++++ 128278	4941 272041	11315 490625	22566 1348081	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2,3-Trichlorobenzene	CBZd 5	Ave	+++++ 36670	+++++ 75774	+++++ 185934	4134 392883	8519 1237502	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
2-Methylnaphthalene	CBZd 5	Ave	+++++ 3986	+++++ 9604	+++++ 35445	+++++ 175877	+++++ 832938	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	+++++ 16.0
1-Methylnaphthalene	CBZd 5	Ave	+++++ 7239	+++++ 14439	+++++ 42682	+++++ 196232	+++++ 878408	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	+++++ 16.0
4-Bromofluorobenzene (Surr)	CBZd 5	Ave	182238 216986	173759 226803	154059 276345	184823 287349	177016 339176	4.64 4.64	4.64 4.64	4.64 4.64	4.64 4.64	4.64 4.64

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD
QuaF = Quadratic ISTD forced zero

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1 Analy Batch No.: 42290

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/29/2020 12:34 Calibration End Date: 08/29/2020 23:57 Calibration ID: 2592

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 140-42290/9	HH29IC01.D
Level 2	IC 140-42290/10	HH29IC02.D
Level 3	IC 140-42290/11	HH29IC03.D
Level 4	IC 140-42290/12	HH29IC04.D
Level 5	IC 140-42290/13	HH29IC05.D
Level 6	IC 140-42290/14	HH29IC06.D
Level 7	ICIS 140-42290/15	HH29IC07.D
Level 8	IC 140-42290/7	HH29IC08.D
Level 9	IC 140-42290/5	HH29IC09.D
Level 10	IC 140-42290/3	HH29IC10.D

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
Chlorodifluoromethane	+++++	+++++	27.6						50			
Propene	+++++	+++++	+++++	+++++	5.3						50	
Dichlorodifluoromethane	+++++	+++++	15.9						50			
Chloromethane	+++++	+++++	+++++	12.9						50		
1,2-Dichloro-1,1,2,2-tetrafluoroethane	+++++	+++++	13.5						50			
Vinyl chloride	12.0						50					
Butane	+++++	+++++	+++++	5.8						50		
1,3-Butadiene	+++++	+++++	+++++	10.7						50		
Bromomethane	+++++	+++++	31.9						50			
Chloroethane	+++++	+++++	36.5						50			
Ethanol	+++++	+++++	+++++	-2.5						50		
Vinyl bromide	+++++	4.0						50				
2-Methylbutane	+++++	9.3						50				
Trichlorofluoromethane	+++++	+++++	16.5						50			

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1 Analy Batch No.: 42290

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/29/2020 12:34 Calibration End Date: 08/29/2020 23:57 Calibration ID: 2592

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
Acrolein	+++++	+++++	20.7						50			
Acetonitrile	+++++	+++++	+++++	-5.7						50		
Acetone	+++++	+++++	+++++	+++++	12.0						80	
Pentane	+++++	+++++	-25.2						50			
Isopropyl alcohol	9.5						50					
Ethyl ether	+++++	7.7						50				
1,1-Dichloroethene	+++++	6.7						50				
Acrylonitrile	+++++	5.3						50				
tert-Butyl alcohol	+++++	-2.2						50				
1,1,2-Trichloro-1,2,2-trifluoroethane	+++++	8.9						50				
Methylene Chloride	+++++	+++++	+++++	6.7						80		
3-Chloropropene	+++++	+++++	15.7						50			
Carbon disulfide	+++++	9.4						50				
trans-1,2-Dichloroethene	+++++	1.5						50				
2-Methylpentane	+++++	+++++	-12.2						50			
Methyl tert-butyl ether	+++++	+++++	+++++	-8.5						50		
1,1-Dichloroethane	+++++	+++++	9.4						50			
Vinyl acetate	+++++	+++++	+++++	-15.4						50		
2-Butanone (MEK)	+++++	+++++	+++++	0.0						50		
Hexane	+++++	-2.8						50				
cis-1,2-Dichloroethene	+++++	6.6						50				

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1 Analy Batch No.: 42290

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/29/2020 12:34 Calibration End Date: 08/29/2020 23:57 Calibration ID: 2592

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
Ethyl acetate	+++++	5.2						50				
Chloroform	+++++	10.6						50				
Tetrahydrofuran	+++++	-5.7						50				
1,1,1-Trichloroethane	+++++	4.9						50				
1,2-Dichloroethane	+++++	14.9						50				
1-Butanol	+++++	+++++	+++++	+++++	-6.1						50	
Cyclohexane	+++++	+++++	+++++	-16.7						50		
Benzene	+++++	+++++	8.6						50			
Carbon tetrachloride	-6.4						50					
2,3-Dimethylpentane	+++++	+++++	-12.2						50			
Thiophene	+++++	+++++	-2.3						50			
2,2,4-Trimethylpentane	+++++	-5.2						50				
Heptane	+++++	+++++	+++++	-29.5						50		
1,2-Dichloropropane	+++++	3.9						50				
Trichloroethene	9.3						50					
Dibromomethane	+++++	+++++	+++++	8.6						50		
Bromodichloromethane	0.8						50					
1,4-Dioxane	+++++	+++++	+++++	-24.4						50		
Methyl methacrylate	+++++	+++++	1.9						50			
Methylcyclohexane	+++++	+++++	34.5						50			
4-Methyl-2-pentanone (MIBK)	+++++	11.2						50				

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1 Analy Batch No.: 42290

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/29/2020 12:34 Calibration End Date: 08/29/2020 23:57 Calibration ID: 2592

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
cis-1,3-Dichloropropene	-1.9						50					
trans-1,3-Dichloropropene	+++++	-7.1						50				
Toluene	+++++	-2.4						50				
1,1,2-Trichloroethane	+++++	+++++	8.1						50			
2-Hexanone	+++++	+++++	+++++	-29.5						50		
Octane	+++++	+++++	+++++	-32.9						50		
Dibromochloromethane	-10.8						50					
1,2-Dibromoethane (EDB)	13.4						50					
Tetrachloroethene	10.2						50					
Chlorobenzene	+++++	+++++	3.1						50			
Ethylbenzene	5.5						50					
m-Xylene & p-Xylene	1.2						50					
Nonane	+++++	+++++	+++++	-30.0						50		
Bromoform	11.1		+++++	+++++			50					
Styrene	+++++	+++++	-26.3	+++++					50			
o-Xylene	+++++	-4.4						50				
1,1,2,2-Tetrachloroethane	+++++	+++++	9.4						50			
1,2,3-Trichloropropane	+++++	6.5						50				
Isopropylbenzene	+++++	3.0						50				
Propylbenzene	+++++	+++++	+++++	-22.0						50		
2-Chlorotoluene	+++++	+++++	+++++	-11.7						50		

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1 Analy Batch No.: 42290

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/29/2020 12:34 Calibration End Date: 08/29/2020 23:57 Calibration ID: 2592

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
4-Ethyltoluene	+++++	+++++	+++++	-24.9						50		
1,3,5-Trimethylbenzene	+++++	+++++	17.5						50			
Alpha Methyl Styrene	+++++	+++++	+++++	-25.1 +++++						50		
Decane	+++++	+++++	+++++	+++++	-2.9						50	
tert-Butylbenzene	+++++	+++++	+++++	-19.7						50		
1,2,4-Trimethylbenzene	+++++	+++++	-30.3						50			
sec-Butylbenzene	+++++	+++++	+++++	-18.5						50		
1,3-Dichlorobenzene	+++++	+++++	-23.0						50			
Benzyl chloride	+++++	+++++	+++++	26.9 +++++						50		
1,4-Dichlorobenzene	+++++	-18.0		+++++				50				
4-Isopropyltoluene	+++++	+++++	-44.6						50			
1,2,3-Trimethylbenzene	+++++	+++++	-28.6						50			
Indane	+++++	+++++	-33.7						50			
1,2-Dichlorobenzene	16.0						50					
Butylbenzene	+++++	+++++	+++++	-24.3						50		
Indene	+++++	+++++	+++++	-17.8						50		
Undecane	+++++	+++++	+++++	+++++	-15.2						50	
1,2-Dibromo-3-Chloropropane	+++++	+++++	-40.0						50			
1,2,4,5-Tetramethylbenzene	+++++	+++++	11.1	+++++					50			
Dodecane	+++++	+++++	+++++	+++++ +++++	-38.0						50	
1,2,4-Trichlorobenzene	+++++	+++++	36.5	+++++					50			

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1 Analy Batch No.: 42290

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

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ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
Naphthalene	-16.6			+++++			80					
Hexachlorobutadiene	+++++	+++++	8.7						50			
1,2,3-Trichlorobenzene	+++++	+++++	+++++	-24.1						50		
2-Methylnaphthalene	+++++	+++++	+++++	+++++	+++++	-73.2						80
1-Methylnaphthalene	+++++	+++++	+++++	+++++	+++++	-57.9						80

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC10.D
Lims ID: IC L10
Client ID:
Sample Type: IC Calib Level: 10
Inject. Date: 29-Aug-2020 12:34:30 ALS Bottle#: 15 Worklist Smp#: 3
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016451-003
Misc. Info.: 314600
Operator ID: HMT Instrument ID: MH
Sublist: chrom-MH_TO15*sub7

Method: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\MH_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 31-Aug-2020 12:24:07 Calib Date: 29-Aug-2020 23:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1064

First Level Reviewer: tajh Date: 30-Aug-2020 07:35:41

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.436	9.432	0.004	97	152621	4.80	4.80	
* 2 1,4-Difluorobenzene	114	11.596	11.594	0.002	95	642283	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	16.263	16.260	0.003	88	520911	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.881	17.877	0.004	93	339176	4.64	5.60	
6 Chlorodifluoromethane	51	3.911	3.920	-0.009	97	1170804	16.0	13.7	
7 Propene	41	3.926	3.935	-0.009	98	542250	16.0	14.9	
8 Dichlorodifluoromethane	85	3.983	3.989	-0.006	100	1647380	16.0	14.3	
9 Chloromethane	52	4.185	4.191	-0.006	55	186886	16.0	12.3	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	4.190	4.197	-0.007	90	1337769	16.0	14.5	
11 Acetaldehyde	44	4.355	4.365	-0.010	97	1146821	80.0	51.0	
12 Vinyl chloride	62	4.376	4.383	-0.007	99	612100	16.0	12.1	
14 Butadiene	54	4.474	4.479	-0.005	72	448776	16.0	13.0	
13 Butane	43	4.474	4.479	-0.005	82	849872	16.0	12.3	
15 Bromomethane	94	4.836	4.842	-0.006	98	625059	16.0	12.8	
16 Chloroethane	64	4.991	4.997	-0.006	87	254400	16.0	11.9	
17 Ethanol	31	5.089	5.099	-0.010	97	1396709	80.0	56.9	
18 Vinyl bromide	106	5.327	5.334	-0.007	98	628508	16.0	15.4	
19 2-Methylbutane	43	5.374	5.382	-0.008	93	794816	16.0	14.9	
20 Trichlorofluoromethane	101	5.622	5.626	-0.004	100	1707786	16.0	15.2	
21 Acrolein	56	5.632	5.646	-0.014	96	203402	16.0	16.5	
22 Acetonitrile	40	5.710	5.715	-0.005	99	319051	16.0	14.9	
23 Acetone	58	5.751	5.775	-0.024	99	908970	48.0	38.3	
24 Pentane	72	5.854	5.865	-0.011	94	79750	16.0	16.0	
25 Isopropyl alcohol	45	5.839	5.868	-0.029	97	2892621	48.0	49.3	
26 Ethyl ether	31	6.030	6.065	-0.035	91	804708	16.0	16.4	
27 1,1-Dichloroethene	96	6.387	6.393	-0.006	96	607494	16.0	16.4	
28 Acrylonitrile	53	6.500	6.508	-0.008	93	517174	16.0	15.9	
29 2-Methyl-2-propanol	59	6.475	6.535	-0.061	97	1061322	16.0	17.5	
30 112TCTFE	101	6.568	6.575	-0.007	96	1426183	16.0	15.0	
31 Methylene Chloride	84	6.764	6.766	-0.002	95	555280	16.0	14.8	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.779	6.781	-0.002	95	649836	16.0	17.0	
33 Carbon disulfide	76	6.940	6.946	-0.006	100	1817383	16.0	15.1	
34 trans-1,2-Dichloroethene	96	7.617	7.620	-0.003	93	624883	16.0	16.2	
35 2-Methylpentane	43	7.622	7.626	-0.004	96	1575951	16.0	17.1	
36 Methyl tert-butyl ether	73	7.725	7.785	-0.060	96	1474857	16.0	18.1	
37 1,1-Dichloroethane	63	8.066	8.066	0.000	100	1196411	16.0	15.6	
38 Vinyl acetate	43	8.159	8.165	-0.006	100	1898417	16.0	19.3	
40 Hexane	56	8.645	8.650	-0.005	88	524911	16.0	16.4	
39 2-Butanone (MEK)	72	8.619	8.660	-0.041	96	293914	16.0	15.7	
41 Isopropyl ether	45	8.800	8.836	-0.036	97	2478210	16.0	18.2	
42 cis-1,2-Dichloroethene	96	9.090	9.086	0.004	97	660849	16.0	16.9	
43 Ethyl acetate	43	9.250	9.277	-0.027	98	1671126	16.0	17.0	
44 Chloroform	83	9.441	9.438	0.003	96	1433018	16.0	15.5	
45 Tert-butyl ethyl ether	59	9.498	9.539	-0.041	98	1987944	16.0	19.1	
46 Tetrahydrofuran	42	9.834	9.897	-0.063	94	817677	16.0	17.8	
47 1,1,1-Trichloroethane	97	10.490	10.492	-0.002	97	1395034	16.0	16.6	
48 1,2-Dichloroethane	62	10.604	10.600	0.004	96	963858	16.0	16.5	
49 n-Butanol	31	10.986	11.038	-0.052	92	338272	16.0	18.6	
50 Cyclohexane	69	11.069	11.072	-0.003	92	288406	16.0	17.9	
51 Benzene	78	11.074	11.076	-0.002	98	1916459	16.0	16.2	
52 Carbon tetrachloride	117	11.095	11.095	0.000	96	1375702	16.0	18.8	
53 2,3-Dimethylpentane	71	11.173	11.172	0.001	91	401567	16.0	18.0	
54 Thiophene	84	11.348	11.344	0.004	97	1110676	16.0	17.9	
55 Isooctane	57	11.798	11.796	0.002	98	3380543	16.0	18.4	
56 n-Heptane	71	12.160	12.159	0.001	95	631336	16.0	18.8	
57 1,2-Dichloropropane	63	12.268	12.269	-0.001	90	840266	16.0	16.6	
58 Trichloroethene	130	12.299	12.298	0.001	95	915128	16.0	17.3	
59 Dibromomethane	93	12.392	12.390	0.002	97	958099	16.0	17.1	
60 Dichlorobromomethane	83	12.527	12.526	0.001	99	1536417	16.0	18.4	
61 1,4-Dioxane	88	12.522	12.571	-0.049	98	311891	16.0	18.6	
62 Methyl methacrylate	41	12.594	12.600	-0.006	89	1018216	16.0	18.6	
63 Methylcyclohexane	83	13.049	13.049	0.000	91	1124722	16.0	16.6	
64 4-Methyl-2-pentanone (MIBK)	43	13.426	13.452	-0.026	98	1937646	16.0	18.4	
65 cis-1,3-Dichloropropene	75	13.503	13.503	0.000	98	1165499	16.0	20.4	
66 trans-1,3-Dichloropropene	75	14.186	14.185	0.001	98	1033921	16.0	21.7	
67 Toluene	91	14.315	14.310	0.005	93	2373066	16.0	17.7	
68 1,1,2-Trichloroethane	83	14.387	14.386	0.001	97	764760	16.0	15.9	
69 2-Hexanone	58	14.739	14.759	-0.020	90	874521	16.0	20.5	
70 n-Octane	85	14.961	14.962	-0.001	96	702692	16.0	18.8	
71 Chlorodibromomethane	129	15.090	15.086	0.004	98	1647856	16.0	20.7	
72 Ethylene Dibromide	107	15.380	15.378	0.002	98	1392569	16.0	19.3	
73 Tetrachloroethene	129	15.442	15.439	0.003	96	956734	16.0	17.0	
75 2,3-Dimethylheptane	43	16.300	16.295	0.005	94	2763894	16.0	16.0	
74 Chlorobenzene	112	16.310	16.309	0.001	92	1868757	16.0	17.2	
76 Ethylbenzene	91	16.589	16.585	0.004	99	3089994	16.0	19.0	
77 m-Xylene & p-Xylene	91	16.749	16.745	0.004	98	5161120	32.0	40.2	
78 n-Nonane	57	17.137	17.134	0.003	94	1790733	16.0	19.4	
79 Bromoform	173	17.209	17.208	0.001	88	1643245	16.0	10.8	
80 Styrene	104	17.209	17.209	0.000	99	1897882	16.0	24.3	
81 o-Xylene	91	17.271	17.270	0.001	99	2495830	16.0	18.6	
82 1,1,2,2-Tetrachloroethane	83	17.592	17.591	0.001	98	1967574	16.0	16.5	
83 1,2,3-Trichloropropane	110	17.752	17.747	0.005	97	458317	16.0	17.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	17.845	17.842	0.003	97	3450814	16.0	20.3	
85 N-Propylbenzene	120	18.357	18.356	0.001	99	935298	16.0	20.5	
86 2-Chlorotoluene	126	18.408	18.408	0.000	98	816298	16.0	18.7	
87 4-Ethyltoluene	105	18.501	18.496	0.005	98	3386928	16.0	19.8	
88 1,3,5-Trimethylbenzene	120	18.568	18.567	0.001	92	1410023	16.0	17.3	
89 Alpha Methyl Styrene	118	18.791	18.791	0.000	88	1428730	16.0	24.2	
90 n-Decane	57	18.827	18.822	0.005	90	2395266	16.0	17.7	
91 tert-Butylbenzene	119	18.982	18.979	0.003	91	3345761	16.0	19.3	
92 1,2,4-Trimethylbenzene	105	18.992	18.991	0.001	96	3051181	16.0	19.6	
93 sec-Butylbenzene	105	19.240	19.239	0.001	98	4356098	16.0	19.0	
94 1,3-Dichlorobenzene	146	19.266	19.263	0.003	98	1781787	16.0	22.1	
95 Benzyl chloride	91	19.333	19.333	0.000	98	2129244	16.0	22.5	
96 1,4-Dichlorobenzene	146	19.349	19.345	0.004	98	1662191	16.0	27.9	
97 4-Isopropyltoluene	119	19.395	19.393	0.002	97	3642103	16.0	19.6	
98 1,2,3-Trimethylbenzene	105	19.452	19.452	0.000	99	2789911	16.0	18.7	
99 Butylcyclohexane	83	19.499	19.494	0.005	91	2440443	16.0	19.0	
101 2,3-Dihydroindene	117	19.700	19.695	0.005	95	2571055	16.0	20.8	
100 1,2-Dichlorobenzene	146	19.700	19.699	0.001	97	1718635	16.0	19.3	
103 n-Butylbenzene	91	19.814	19.814	0.000	98	3642930	16.0	17.8	
102 Indene	116	19.824	19.824	0.000	92	2078384	16.0	19.6	
104 Undecane	57	20.098	20.098	0.000	95	2838035	16.0	18.4	
105 1,2-Dibromo-3-Chloropropane	157	20.290	20.288	0.002	98	944276	16.0	20.7	
106 1,2,4,5-Tetramethylbenzene	119	20.563	20.563	0.000	97	3620004	16.0	19.3	
107 Dodecane	57	21.179	21.175	0.004	95	2958200	16.0	27.2	
108 1,2,4-Trichlorobenzene	180	21.421	21.418	0.003	94	1180416	16.0	27.1	
109 Naphthalene	128	21.561	21.559	0.002	99	2794001	16.0	24.8	
110 Hexachlorobutadiene	225	21.732	21.727	0.005	93	1348081	16.0	15.8	
111 1,2,3-Trichlorobenzene	180	21.794	21.793	0.001	96	1237502	16.0	24.7	
112 2-Methylnaphthalene	142	22.341	22.340	0.001	100	832938	16.0	42.9	
113 1-Methylnaphthalene	142	22.471	22.468	0.003	100	878408	16.0	39.2	
A 115 C8 Range	1	14.966	(14.914-15.007)		0	7656734	16.0	17.9	
S 116 Xylenes, Total	100				0		48.0	58.8	
S 117 1,2-Dichloroethene, Total	1				0		32.0	33.1	

Reagents:

40L10DQP_00019	Amount Added: 200.00	Units: mL	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

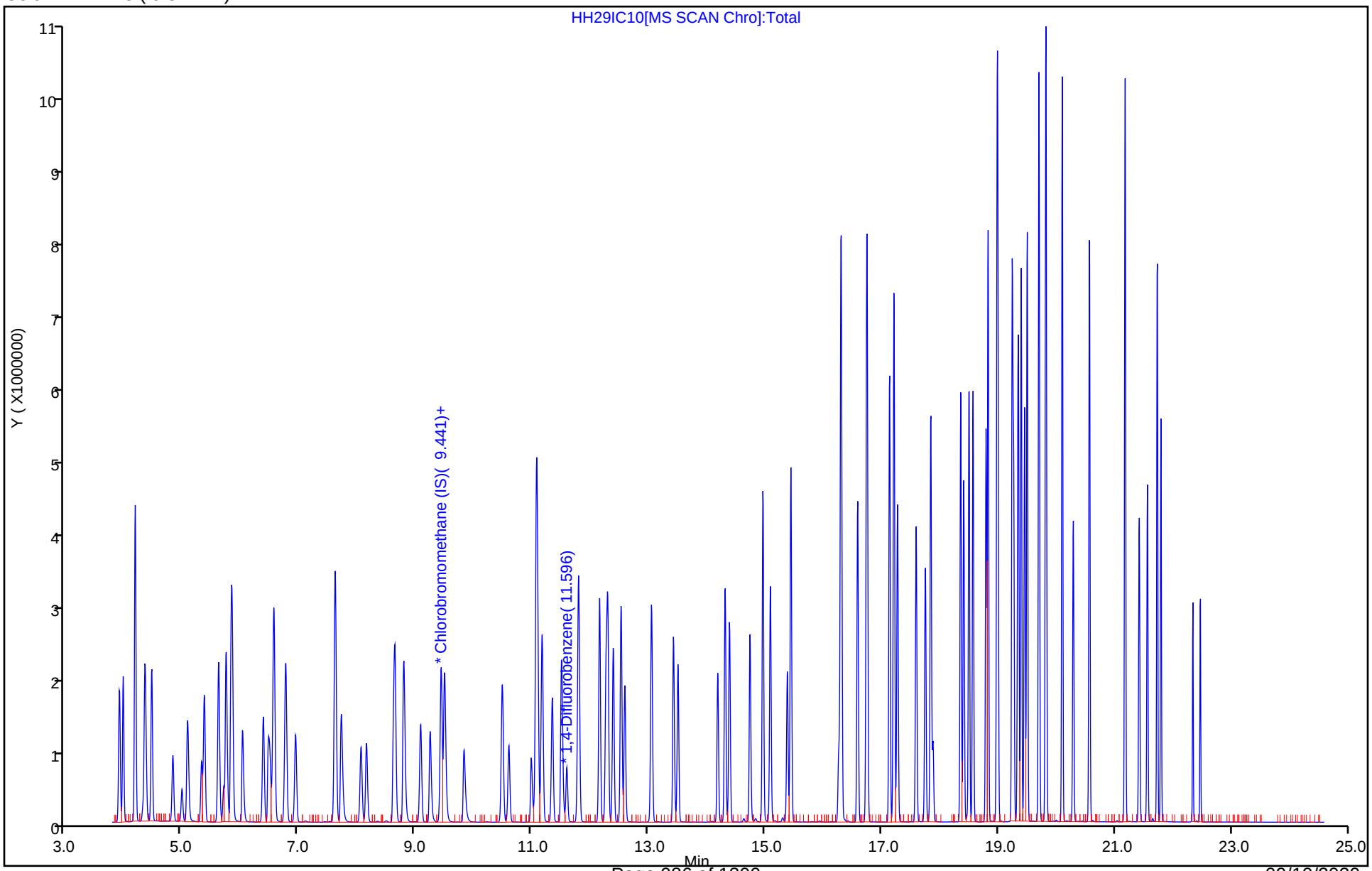
Report Date: 31-Aug-2020 12:24:08 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC10.D

Injection Date:	29-Aug-2020 12:34:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	IC L10			Worklist Smp#:	3
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

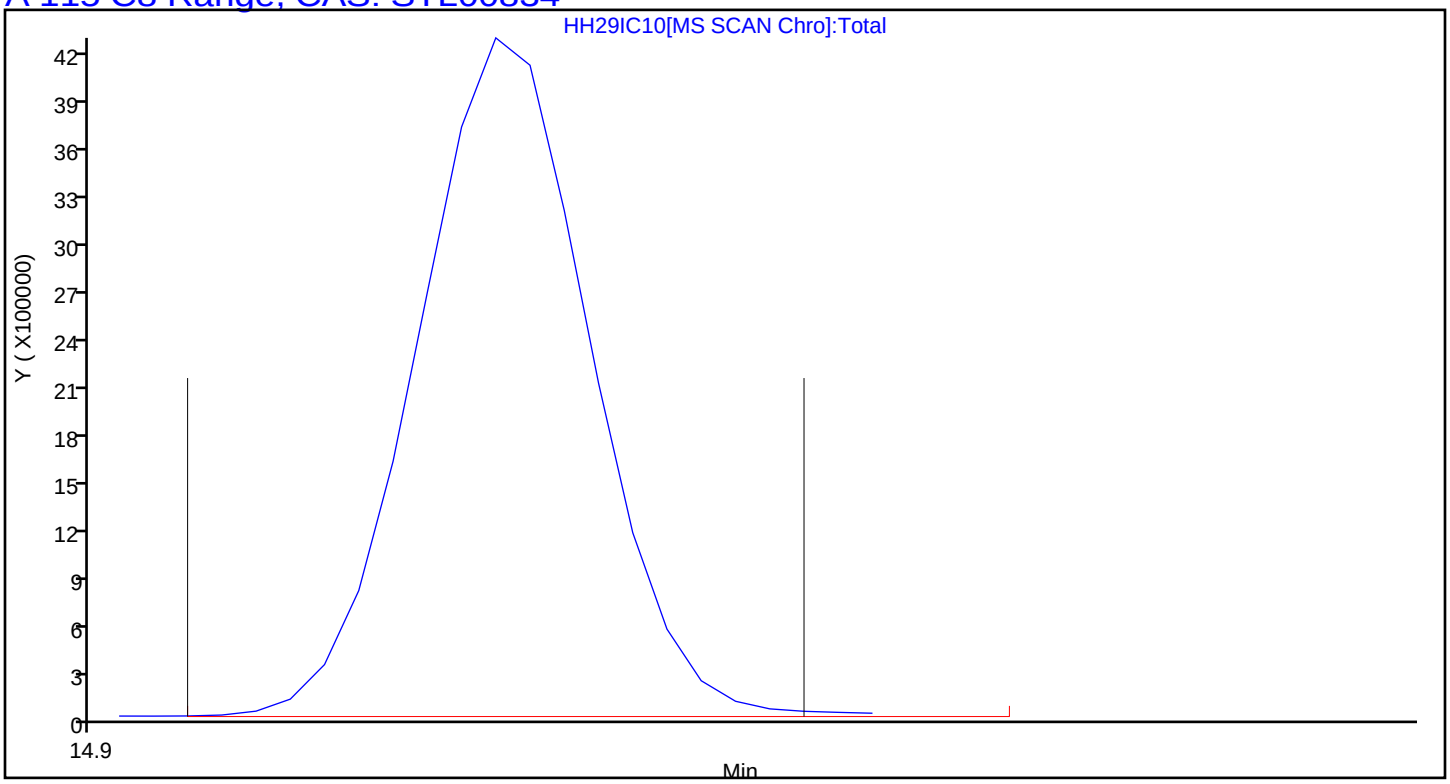


Report Date: 31-Aug-2020 12:24:08 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC10.D				
Injection Date:	29-Aug-2020 12:34:30	Instrument ID:	MH		
Lims ID:	IC L10				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	15	Worklist Smp#:	3
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 115 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC09.D
Lims ID: IC L9
Client ID:
Sample Type: IC Calib Level: 9
Inject. Date: 29-Aug-2020 14:25:30 ALS Bottle#: 14 Worklist Smp#: 5
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016451-005
Misc. Info.: 314601
Operator ID: HMT Instrument ID: MH
Sublist: chrom-MH_TO15*sub7

Method: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\MH_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 31-Aug-2020 12:24:15 Calib Date: 29-Aug-2020 23:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1064

First Level Reviewer: tajh Date: 30-Aug-2020 07:38:57

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.436	9.432	0.004	98	143228	4.80	4.80	
* 2 1,4-Difluorobenzene	114	11.596	11.594	0.002	95	603830	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	16.263	16.260	0.003	88	478433	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.881	17.877	0.004	94	287349	4.64	5.17	
6 Chlorodifluoromethane	51	3.921	3.920	0.001	97	564270	8.00	7.06	M
7 Propene	41	3.937	3.935	0.002	99	250332	8.00	7.33	
8 Dichlorodifluoromethane	85	3.994	3.989	0.005	100	665212	8.00	6.14	
9 Chloromethane	52	4.195	4.191	0.004	57	95475	8.00	6.71	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	4.200	4.197	0.003	91	595826	8.00	6.89	
11 Acetaldehyde	44	4.366	4.365	0.001	97	755942	40.0	35.8	
12 Vinyl chloride	62	4.386	4.383	0.003	99	306691	8.00	6.44	
14 Butadiene	54	4.485	4.479	0.005	69	225651	8.00	6.96	
13 Butane	43	4.479	4.479	0.000	84	454922	8.00	6.99	
15 Bromomethane	94	4.846	4.842	0.004	98	302073	8.00	6.57	
16 Chloroethane	64	5.001	4.997	0.004	93	128615	8.00	6.40	
17 Ethanol	31	5.094	5.099	-0.005	97	974505	40.0	42.3	
18 Vinyl bromide	106	5.337	5.334	0.003	98	275481	8.00	7.19	
19 2-Methylbutane	43	5.384	5.382	0.002	94	354580	8.00	7.07	
20 Trichlorofluoromethane	101	5.627	5.626	0.001	100	744095	8.00	7.05	
21 Acrolein	56	5.642	5.646	-0.004	95	88893	8.00	7.69	
22 Acetonitrile	40	5.715	5.715	0.000	99	148489	8.00	7.36	
23 Acetone	58	5.756	5.775	-0.019	99	550794	24.0	24.7	
25 Isopropyl alcohol	45	5.839	5.868	-0.029	97	1296845	24.0	23.6	
24 Pentane	72	5.864	5.865	-0.001	97	36172	8.00	7.74	
26 Ethyl ether	31	6.040	6.065	-0.025	91	355621	8.00	7.74	
27 1,1-Dichloroethene	96	6.397	6.393	0.004	96	265390	8.00	7.64	
29 2-Methyl-2-propanol	59	6.479	6.535	-0.056	96	465853	8.00	8.21	
28 Acrylonitrile	53	6.505	6.508	-0.003	93	228821	8.00	7.49	
30 112TCTFE	101	6.573	6.575	-0.002	97	620382	8.00	6.93	
31 Methylene Chloride	84	6.769	6.766	0.003	96	259505	8.00	7.39	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.784	6.781	0.003	95	266061	8.00	7.40	
33 Carbon disulfide	76	6.950	6.946	0.004	100	809975	8.00	7.18	
34 trans-1,2-Dichloroethene	96	7.622	7.620	0.002	95	275057	8.00	7.59	
35 2-Methylpentane	43	7.632	7.626	0.006	96	690025	8.00	7.98	
36 Methyl tert-butyl ether	73	7.735	7.785	-0.050	96	623376	8.00	8.14	
37 1,1-Dichloroethane	63	8.066	8.066	0.000	100	520203	8.00	7.22	
38 Vinyl acetate	43	8.159	8.165	-0.006	100	784451	8.00	8.49	
39 2-Butanone (MEK)	72	8.624	8.660	-0.036	96	135925	8.00	7.75	
40 Hexane	56	8.650	8.650	0.000	91	235600	8.00	7.85	
41 Isopropyl ether	45	8.805	8.836	-0.031	97	1066420	8.00	8.35	
42 cis-1,2-Dichloroethene	96	9.090	9.086	0.004	96	286195	8.00	7.79	
43 Ethyl acetate	43	9.255	9.277	-0.022	98	712888	8.00	7.75	
44 Chloroform	83	9.441	9.438	0.003	97	613922	8.00	7.06	
45 Tert-butyl ethyl ether	59	9.503	9.539	-0.036	98	832498	8.00	8.50	
46 Tetrahydrofuran	42	9.839	9.897	-0.058	94	352999	8.00	8.17	
47 1,1,1-Trichloroethane	97	10.490	10.492	-0.002	97	575307	8.00	7.30	
48 1,2-Dichloroethane	62	10.604	10.600	0.004	96	401489	8.00	7.31	
49 n-Butanol	31	10.991	11.038	-0.047	93	143170	8.00	8.37	
50 Cyclohexane	69	11.074	11.072	0.002	91	123486	8.00	8.14	
51 Benzene	78	11.079	11.076	0.003	98	826207	8.00	7.45	
52 Carbon tetrachloride	117	11.095	11.095	0.000	97	416169	8.00	6.06	
53 2,3-Dimethylpentane	71	11.178	11.172	0.006	92	176820	8.00	8.42	
54 Thiophene	84	11.348	11.344	0.004	97	475836	8.00	8.16	
55 Isooctane	57	11.798	11.796	0.002	98	1459914	8.00	8.47	
56 n-Heptane	71	12.160	12.159	0.001	95	273309	8.00	8.65	
57 1,2-Dichloropropane	63	12.268	12.269	-0.001	91	362074	8.00	7.63	
58 Trichloroethene	130	12.299	12.298	0.001	96	434833	8.00	8.72	
59 Dibromomethane	93	12.392	12.390	0.002	96	401008	8.00	7.60	
61 1,4-Dioxane	88	12.526	12.571	-0.045	41	138998	8.00	8.80	
60 Dichlorobromomethane	83	12.526	12.526	0.000	98	631688	8.00	8.04	
62 Methyl methacrylate	41	12.594	12.600	-0.006	90	435605	8.00	8.46	
63 Methylcyclohexane	83	13.048	13.049	-0.001	92	489358	8.00	7.69	
64 4-Methyl-2-pentanone (MIBK)	43	13.426	13.452	-0.026	98	848466	8.00	8.57	
65 cis-1,3-Dichloropropene	75	13.503	13.503	0.000	97	483570	8.00	8.98	
66 trans-1,3-Dichloropropene	75	14.186	14.185	0.001	98	409325	8.00	9.35	
67 Toluene	91	14.310	14.310	0.000	93	1040202	8.00	8.44	
68 1,1,2-Trichloroethane	83	14.387	14.386	0.001	97	324985	8.00	7.34	
69 2-Hexanone	58	14.739	14.759	-0.020	90	357602	8.00	9.11	
70 n-Octane	85	14.961	14.962	-0.001	97	293032	8.00	8.52	
71 Chlorodibromomethane	129	15.090	15.086	0.004	98	617460	8.00	8.44	
72 Ethylene Dibromide	107	15.379	15.378	0.001	98	535038	8.00	8.07	
73 Tetrachloroethene	129	15.441	15.439	0.002	96	389413	8.00	7.54	
75 2,3-Dimethylheptane	43	16.299	16.295	0.004	94	1190642	8.00	7.50	
74 Chlorobenzene	112	16.310	16.309	0.001	93	743269	8.00	7.44	
76 Ethylbenzene	91	16.589	16.585	0.004	99	1254862	8.00	8.41	
77 m-Xylene & p-Xylene	91	16.744	16.745	-0.001	98	2022188	16.0	17.1	
78 n-Nonane	57	17.132	17.134	-0.002	95	724315	8.00	8.54	
79 Bromoform	173	17.209	17.208	0.001	85	518648	8.00	5.66	
80 Styrene	104	17.209	17.209	0.000	99	703366	8.00	9.82	
81 o-Xylene	91	17.271	17.270	0.001	99	1010000	8.00	8.18	
82 1,1,2,2-Tetrachloroethane	83	17.591	17.591	0.000	98	679869	8.00	6.22	
83 1,2,3-Trichloropropane	110	17.747	17.747	0.000	97	178026	8.00	7.20	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	17.845	17.842	0.003	97	1331394	8.00	8.53	
85 N-Propylbenzene	120	18.356	18.356	0.000	99	345970	8.00	8.26	
86 2-Chlorotoluene	126	18.408	18.408	0.000	98	306918	8.00	7.67	
87 4-Ethyltoluene	105	18.496	18.496	0.000	98	1248739	8.00	7.96	
88 1,3,5-Trimethylbenzene	120	18.568	18.567	0.001	92	518722	8.00	6.95	
89 Alpha Methyl Styrene	118	18.791	18.791	0.000	88	484735	8.00	8.94	
90 n-Decane	57	18.822	18.822	0.000	87	936873	8.00	7.55	
91 tert-Butylbenzene	119	18.982	18.979	0.003	90	1228047	8.00	7.73	
92 1,2,4-Trimethylbenzene	105	18.992	18.991	0.001	96	1112935	8.00	7.80	
93 sec-Butylbenzene	105	19.240	19.239	0.001	99	1601820	8.00	7.61	
94 1,3-Dichlorobenzene	146	19.266	19.263	0.003	98	600990	8.00	8.11	
95 Benzyl chloride	91	19.333	19.333	0.000	98	695153	8.00	8.08	
96 1,4-Dichlorobenzene	146	19.349	19.345	0.004	95	547614	8.00	10.0	
97 4-Isopropyltoluene	119	19.395	19.393	0.002	97	1347034	8.00	7.91	
98 1,2,3-Trimethylbenzene	105	19.452	19.452	0.000	99	1012757	8.00	7.38	
99 Butylcyclohexane	83	19.493	19.494	-0.001	90	922051	8.00	7.82	
101 2,3-Dihydroindene	117	19.695	19.695	0.000	94	904716	8.00	7.96	
100 1,2-Dichlorobenzene	146	19.700	19.699	0.001	96	591518	8.00	7.23	
103 n-Butylbenzene	91	19.814	19.814	0.000	97	1371797	8.00	7.28	
102 Indene	116	19.824	19.824	0.000	94	671298	8.00	6.89	
104 Undecane	57	20.098	20.098	0.000	95	1069442	8.00	7.55	
105 1,2-Dibromo-3-Chloropropane	157	20.289	20.288	0.001	97	336214	8.00	8.04	
106 1,2,4,5-Tetramethylbenzene	119	20.563	20.563	0.000	97	1312226	8.00	7.65	
107 Dodecane	57	21.173	21.175	-0.002	93	968430	8.00	9.71	
108 1,2,4-Trichlorobenzene	180	21.421	21.418	0.003	94	328959	8.00	8.27	
109 Naphthalene	128	21.561	21.559	0.002	99	873625	8.00	7.97	
110 Hexachlorobutadiene	225	21.731	21.727	0.004	93	490625	8.00	6.27	
111 1,2,3-Trichlorobenzene	180	21.793	21.793	0.000	95	392883	8.00	8.55	
112 2-Methylnaphthalene	142	22.341	22.340	0.001	100	175877	8.00	9.86	
113 1-Methylnaphthalene	142	22.465	22.468	-0.003	100	196232	8.00	9.53	
A 115 C8 Range	1	14.966	(14.919-15.012)		0	3235392	8.00	8.04	
S 116 Xylenes, Total	100				0		24.0	25.3	
S 117 1,2-Dichloroethene, Total	1				0		16.0	15.4	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

40L9DQP_00019	Amount Added: 200.00	Units: mL	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

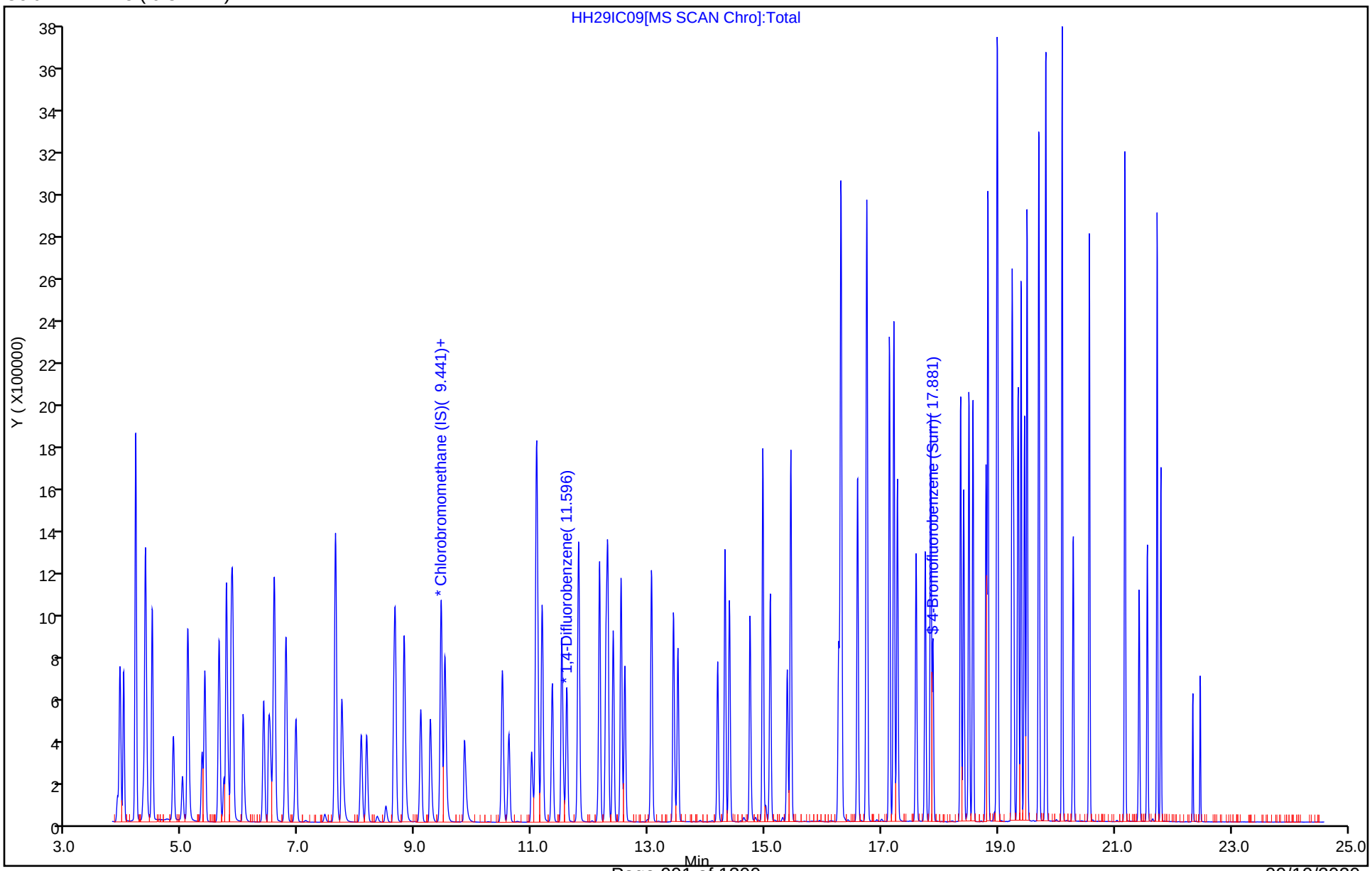
Report Date: 31-Aug-2020 12:24:16 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC09.D

Injection Date:	29-Aug-2020 14:25:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	IC L9			Worklist Smp#:	5
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

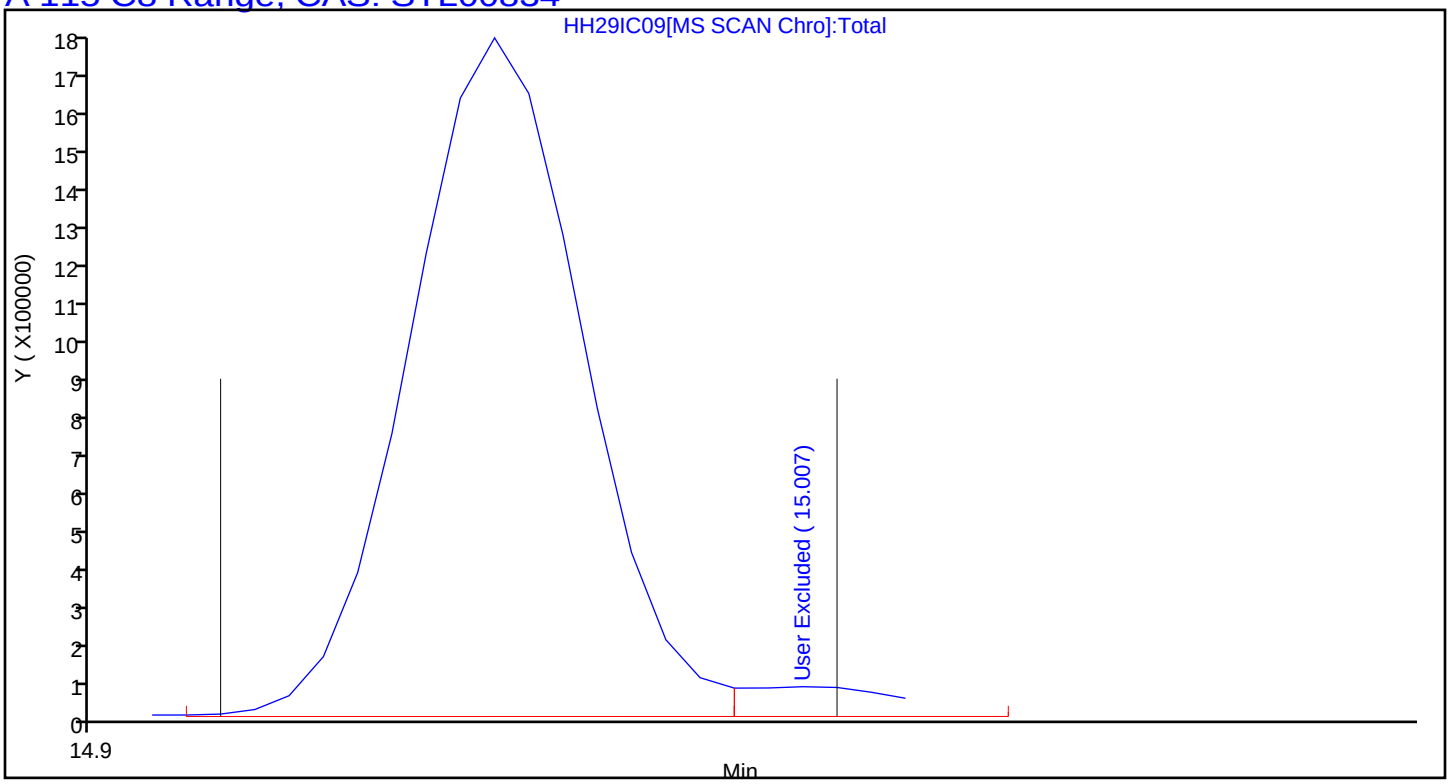


Report Date: 31-Aug-2020 12:24:16 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC09.D				
Injection Date:	29-Aug-2020 14:25:30	Instrument ID:	MH		
Lims ID:	IC L9				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	14	Worklist Smp#:	5
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 115 C8 Range, CAS: STL00834



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Knoxville

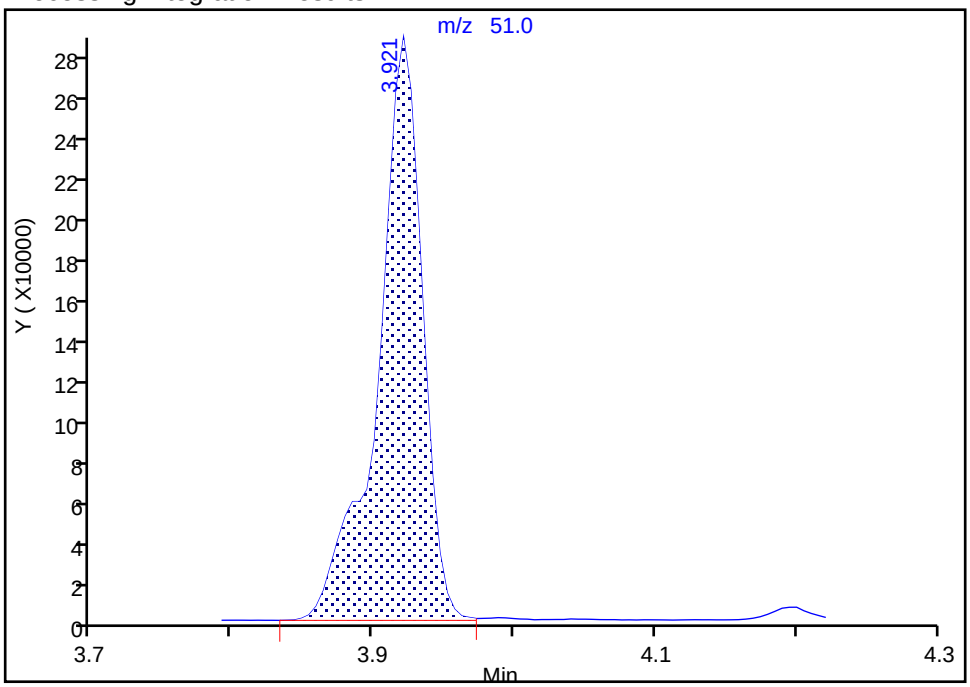
Data File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC09.D
Injection Date: 29-Aug-2020 14:25:30 Instrument ID: MH
Lims ID: IC L9
Client ID:
Operator ID: HMT ALS Bottle#: 14 Worklist Smp#: 5
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Method: MH_TO15 Limit Group: MSA TO14A_15 Routine ICAL
Column: RTX-5 (0.32 mm) Detector MS SCAN

6 Chlorodifluoromethane, CAS: 75-45-6

Signal: 1

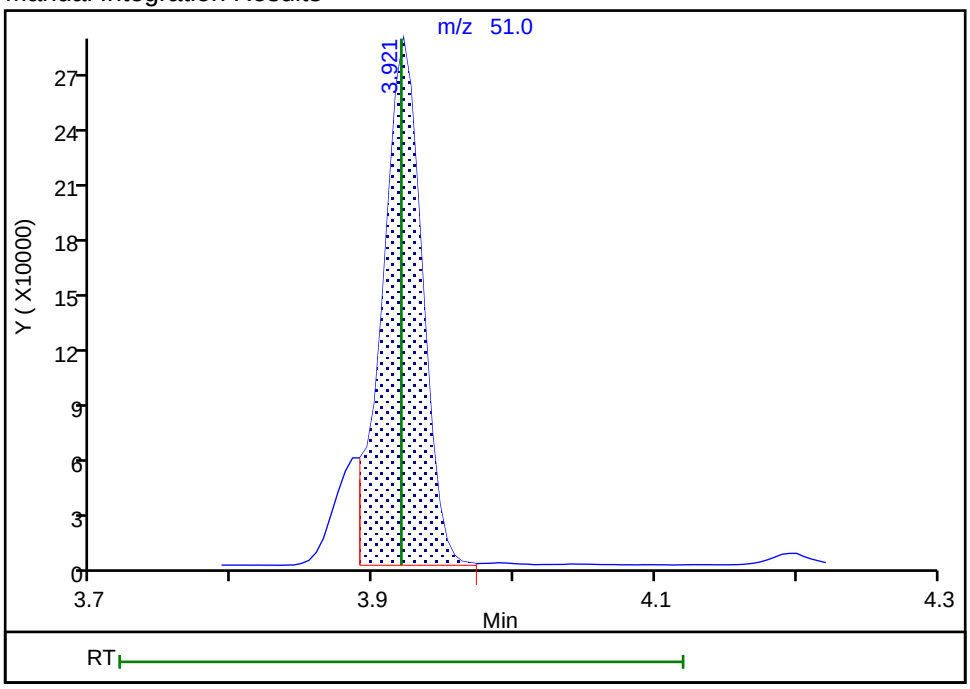
Processing Integration Results

RT: 3.92
Area: 626764
Amount: 7.747203
Amount Units: ppb v/v



Manual Integration Results

RT: 3.92
Area: 564270
Amount: 7.059949
Amount Units: ppb v/v



Reviewer: barlozhetskayaa, 31-Aug-2020 10:49:49
Audit Action: Split an Integrated Peak Audit Reason: Split Peak

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC08.D
Lims ID: IC L8
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 29-Aug-2020 16:25:30 ALS Bottle#: 13 Worklist Smp#: 7
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016451-007
Misc. Info.: 314607
Operator ID: HMT Instrument ID: MH
Sublist: chrom-MH_TO15*sub7

Method: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\MH_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 31-Aug-2020 12:24:23 Calib Date: 29-Aug-2020 23:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1064

First Level Reviewer: barlozhetskayaa Date: 31-Aug-2020 09:54:21

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.431	9.432	-0.001	97	141282	4.80	4.80	
* 2 1,4-Difluorobenzene	114	11.596	11.594	0.002	91	622298	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	16.263	16.260	0.003	87	475034	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.881	17.877	0.004	94	276345	4.64	5.01	
6 Chlorodifluoromethane	51	3.916	3.920	-0.004	97	291670	4.00	3.70	
7 Propene	41	3.932	3.935	-0.003	99	132120	4.00	3.92	
8 Dichlorodifluoromethane	85	3.988	3.989	-0.001	100	418915	4.00	3.92	
9 Chloromethane	52	4.190	4.191	-0.001	59	54109	4.00	3.86	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	4.195	4.197	-0.002	91	322487	4.00	3.78	
11 Acetaldehyde	44	4.361	4.365	-0.005	97	361009	20.0	17.3	
12 Vinyl chloride	62	4.381	4.383	-0.002	99	170593	4.00	3.63	
13 Butane	43	4.479	4.479	0.000	84	254521	4.00	3.96	
14 Butadiene	54	4.479	4.479	0.000	69	126693	4.00	3.96	
15 Bromomethane	94	4.841	4.842	-0.001	98	169287	4.00	3.73	
16 Chloroethane	64	4.996	4.997	-0.001	88	73280	4.00	3.70	
17 Ethanol	31	5.089	5.099	-0.010	97	459695	20.0	20.2	
18 Vinyl bromide	106	5.337	5.334	0.003	98	150998	4.00	4.00	
19 2-Methylbutane	43	5.384	5.382	0.002	93	193291	4.00	3.91	
20 Trichlorofluoromethane	101	5.627	5.626	0.001	99	399259	4.00	3.84	
21 Acrolein	56	5.642	5.646	-0.004	95	47885	4.00	4.21	
22 Acetonitrile	40	5.709	5.715	-0.006	98	80296	4.00	4.04	
23 Acetone	58	5.756	5.775	-0.019	98	228958	12.0	10.4	
25 Isopropyl alcohol	45	5.839	5.868	-0.029	96	690311	12.0	12.7	
24 Pentane	72	5.865	5.865	-0.001	96	19860	4.00	4.31	
26 Ethyl ether	31	6.045	6.065	-0.020	91	192018	4.00	4.24	
27 1,1-Dichloroethene	96	6.392	6.393	-0.001	96	142360	4.00	4.16	
29 2-Methyl-2-propanol	59	6.485	6.535	-0.050	95	244846	4.00	4.37	
28 Acrylonitrile	53	6.505	6.508	-0.003	94	125727	4.00	4.17	
30 112TCTFE	101	6.573	6.575	-0.002	96	336927	4.00	3.82	
31 Methylene Chloride	84	6.769	6.766	0.003	96	136401	4.00	3.94	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.784	6.781	0.003	95	139845	4.00	3.94	
33 Carbon disulfide	76	6.945	6.946	-0.001	100	445503	4.00	4.00	
34 trans-1,2-Dichloroethene	96	7.622	7.620	0.002	95	149694	4.00	4.19	
35 2-Methylpentane	43	7.627	7.626	0.001	96	370246	4.00	4.34	
36 Methyl tert-butyl ether	73	7.741	7.785	-0.044	95	330791	4.00	4.38	
37 1,1-Dichloroethane	63	8.066	8.066	0.000	100	280496	4.00	3.95	
38 Vinyl acetate	43	8.159	8.165	-0.006	100	412364	4.00	4.52	
39 2-Butanone (MEK)	72	8.630	8.660	-0.030	96	68948	4.00	3.98	
40 Hexane	56	8.650	8.650	0.000	85	123014	4.00	4.16	
41 Isopropyl ether	45	8.805	8.836	-0.031	97	563683	4.00	4.47	
42 cis-1,2-Dichloroethene	96	9.090	9.086	0.004	97	151318	4.00	4.18	
43 Ethyl acetate	43	9.255	9.277	-0.022	98	377279	4.00	4.16	
44 Chloroform	83	9.441	9.438	0.003	97	330924	4.00	3.86	
45 Tert-butyl ethyl ether	59	9.508	9.539	-0.031	98	440890	4.00	4.56	
46 Tetrahydrofuran	42	9.849	9.897	-0.048	94	187127	4.00	4.39	
47 1,1,1-Trichloroethane	97	10.490	10.492	-0.002	97	306983	4.00	3.95	
48 1,2-Dichloroethane	62	10.599	10.600	-0.001	96	213048	4.00	3.77	
49 n-Butanol	31	10.997	11.038	-0.041	93	71434	4.00	4.05	
50 Cyclohexane	69	11.069	11.072	-0.003	82	66211	4.00	4.24	
51 Benzene	78	11.074	11.076	-0.002	98	447438	4.00	3.92	
52 Carbon tetrachloride	117	11.095	11.095	0.000	97	337106	4.00	4.77	
53 2,3-Dimethylpentane	71	11.172	11.172	0.000	93	94974	4.00	4.39	
54 Thiophene	84	11.348	11.344	0.004	96	254231	4.00	4.23	
55 Isooctane	57	11.798	11.796	0.002	98	777814	4.00	4.38	
56 n-Heptane	71	12.160	12.159	0.001	95	144047	4.00	4.42	
57 1,2-Dichloropropane	63	12.268	12.269	-0.001	91	191949	4.00	3.92	
58 Trichloroethene	130	12.299	12.298	0.001	96	202744	4.00	3.95	
59 Dibromomethane	93	12.392	12.390	0.002	96	207883	4.00	3.82	
60 Dichlorobromomethane	83	12.527	12.526	0.001	99	336939	4.00	4.16	
61 1,4-Dioxane	88	12.532	12.571	-0.039	93	74690	4.00	4.59	
62 Methyl methacrylate	41	12.594	12.600	-0.006	90	231736	4.00	4.37	
63 Methylcyclohexane	83	13.049	13.049	0.000	92	260282	4.00	3.99	
64 4-Methyl-2-pentanone (MIBK)	43	13.431	13.452	-0.021	98	439352	4.00	4.31	
65 cis-1,3-Dichloropropene	75	13.503	13.503	0.000	97	243759	4.00	4.39	
66 trans-1,3-Dichloropropene	75	14.186	14.185	0.001	98	194299	4.00	4.47	
67 Toluene	91	14.310	14.310	0.000	92	532092	4.00	4.35	
68 1,1,2-Trichloroethane	83	14.387	14.386	0.001	97	172251	4.00	3.92	
69 2-Hexanone	58	14.744	14.759	-0.015	90	180452	4.00	4.63	
70 n-Octane	85	14.961	14.962	-0.001	97	155695	4.00	4.56	
71 Chlorodibromomethane	129	15.085	15.086	-0.001	98	338056	4.00	4.65	
72 Ethylene Dibromide	107	15.379	15.378	0.001	98	261015	4.00	3.96	
73 Tetrachloroethene	129	15.442	15.439	0.003	96	202921	4.00	3.96	
75 2,3-Dimethylheptane	43	16.294	16.295	-0.001	94	630662	4.00	4.00	
74 Chlorobenzene	112	16.310	16.309	0.001	94	392452	4.00	3.96	
76 Ethylbenzene	91	16.584	16.585	-0.001	99	660533	4.00	4.46	
77 m-Xylene & p-Xylene	91	16.744	16.745	-0.001	98	1051498	8.00	8.98	
78 n-Nonane	57	17.132	17.134	-0.002	95	374564	4.00	4.45	
79 Bromoform	173	17.209	17.208	0.001	83	299387	4.00	3.99	
80 Styrene	104	17.209	17.209	0.000	98	359605	4.00	5.06	
81 o-Xylene	91	17.271	17.270	0.001	99	535239	4.00	4.36	
82 1,1,2,2-Tetrachloroethane	83	17.592	17.591	0.001	98	421162	4.00	3.88	
83 1,2,3-Trichloropropane	110	17.747	17.747	0.000	97	96559	4.00	3.93	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	17.840	17.842	-0.002	96	707258	4.00	4.56	
85 N-Propylbenzene	120	18.356	18.356	0.000	99	184674	4.00	4.44	
86 2-Chlorotoluene	126	18.408	18.408	0.000	98	167167	4.00	4.21	
87 4-Ethyltoluene	105	18.496	18.496	0.000	98	692968	4.00	4.45	
88 1,3,5-Trimethylbenzene	120	18.568	18.567	0.001	93	287240	4.00	3.90	
89 Alpha Methyl Styrene	118	18.791	18.791	0.000	88	271429	4.00	5.04	
90 n-Decane	57	18.822	18.822	0.000	87	498369	4.00	4.05	
91 tert-Butylbenzene	119	18.977	18.979	-0.002	90	661899	4.00	4.19	
92 1,2,4-Trimethylbenzene	105	18.992	18.991	0.001	96	601094	4.00	4.24	
93 sec-Butylbenzene	105	19.235	19.239	-0.004	99	891452	4.00	4.27	
94 1,3-Dichlorobenzene	146	19.261	19.263	-0.002	98	311522	4.00	4.23	
95 Benzyl chloride	91	19.333	19.333	0.000	98	346656	4.00	4.11	
96 1,4-Dichlorobenzene	146	19.344	19.345	-0.001	96	275478	4.00	5.07	
97 4-Isopropyltoluene	119	19.390	19.393	-0.003	97	779777	4.00	4.61	
98 1,2,3-Trimethylbenzene	105	19.452	19.452	0.000	99	574609	4.00	4.22	
99 Butylcyclohexane	83	19.494	19.494	0.000	90	493736	4.00	4.22	
101 2,3-Dihydroindene	117	19.695	19.695	0.000	94	487092	4.00	4.32	
100 1,2-Dichlorobenzene	146	19.700	19.699	0.001	98	314163	4.00	3.87	
103 n-Butylbenzene	91	19.814	19.814	0.000	97	787301	4.00	4.21	
102 Indene	116	19.824	19.824	0.000	90	392352	4.00	4.06	
104 Undecane	57	20.098	20.098	0.000	94	569435	4.00	4.05	
105 1,2-Dibromo-3-Chloropropane	157	20.289	20.288	0.001	97	201489	4.00	4.85	
106 1,2,4,5-Tetramethylbenzene	119	20.563	20.563	0.000	97	721787	4.00	4.27	
107 Dodecane	57	21.173	21.175	-0.002	92	409669	4.00	4.14	
108 1,2,4-Trichlorobenzene	180	21.421	21.418	0.003	94	159208	4.00	4.07	
109 Naphthalene	128	21.561	21.559	0.002	99	458116	4.00	4.15	
110 Hexachlorobutadiene	225	21.726	21.727	-0.001	92	272041	4.00	3.50	
111 1,2,3-Trichlorobenzene	180	21.793	21.793	0.000	95	185934	4.00	4.08	
112 2-Methylnaphthalene	142	22.341	22.340	0.001	100	35445	4.00	2.00	
113 1-Methylnaphthalene	142	22.465	22.468	-0.003	99	42682	4.00	2.09	
A 115 C8 Range	1	14.961	(14.909-15.013)		0	1701005	4.00	4.10	
S 116 Xylenes, Total	100				0		12.0	13.3	
S 117 1,2-Dichloroethene, Total	1				0		8.00	8.36	

Reagents:

40L8DQP_00018	Amount Added: 200.00	Units: mL	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

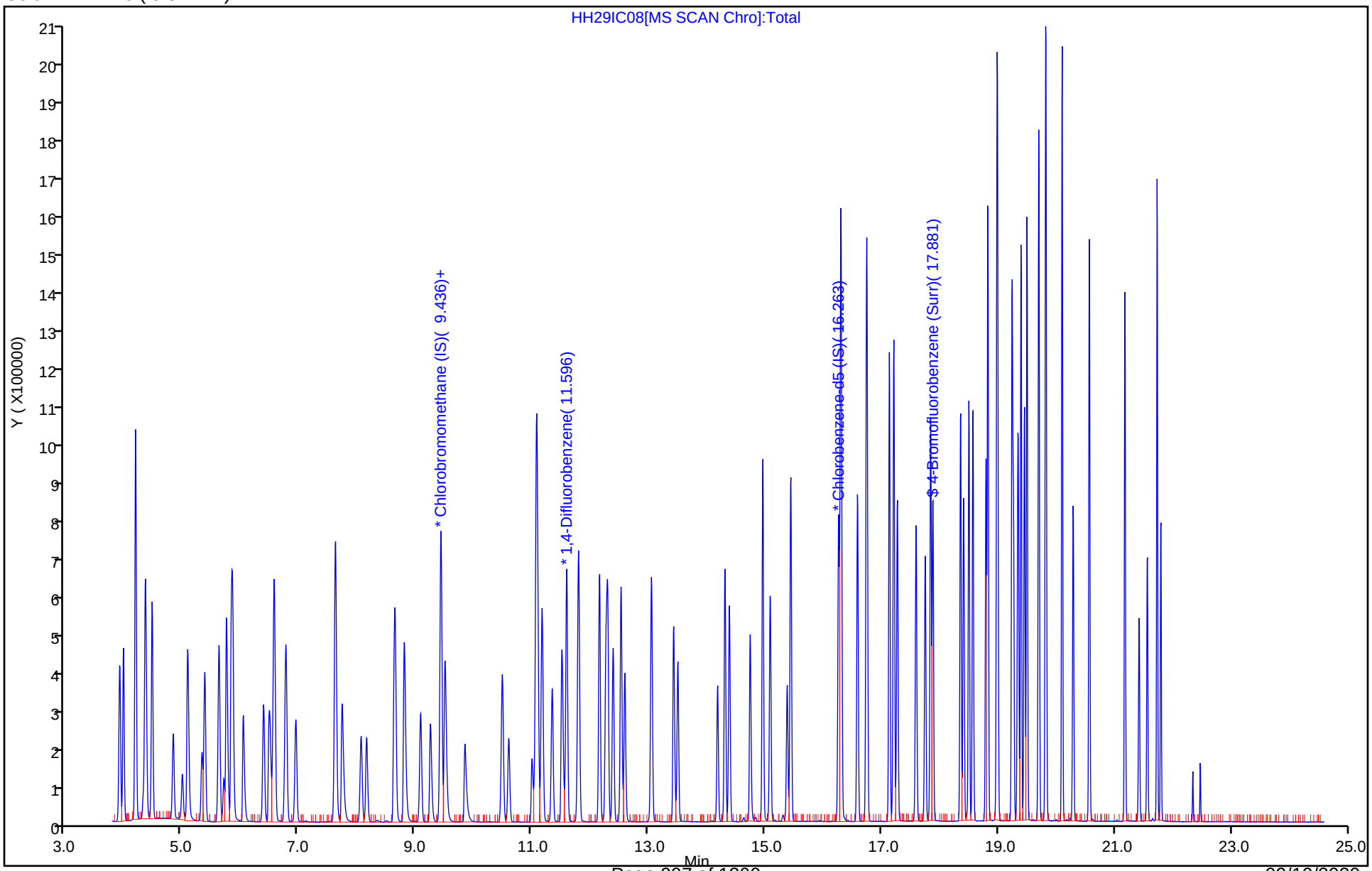
Report Date: 31-Aug-2020 12:24:24 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC08.D

Injection Date:	29-Aug-2020 16:25:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	IC L8			Worklist Smp#:	7
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

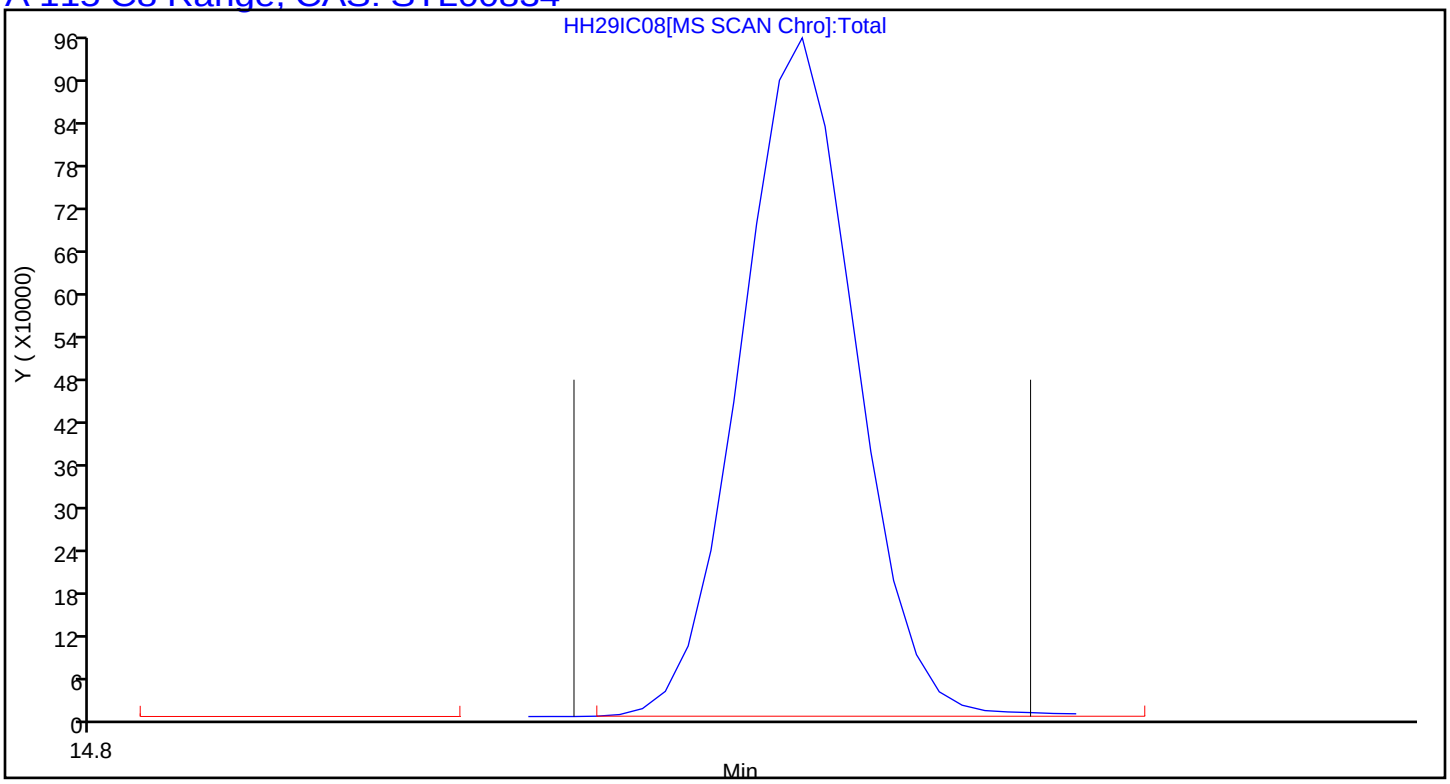


Report Date: 31-Aug-2020 12:24:24 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC08.D				
Injection Date:	29-Aug-2020 16:25:30	Instrument ID:	MH		
Lims ID:	IC L8				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	13	Worklist Smp#:	7
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 115 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC01.D
Lims ID: IC L1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 29-Aug-2020 18:16:30 ALS Bottle#: 9 Worklist Smp#: 9
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016451-009
Misc. Info.: 314720
Operator ID: HMT Instrument ID: MH
Sublist: chrom-MH_TO15*sub7

Method: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\MH_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 31-Aug-2020 12:24:30 Calib Date: 29-Aug-2020 23:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1064

First Level Reviewer: barlozhetskayaa Date: 31-Aug-2020 09:54:05

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.431	9.432	-0.001	98	125148	4.80	4.80	
* 2 1,4-Difluorobenzene	114	11.591	11.594	-0.003	95	532294	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	16.258	16.260	-0.002	88	389380	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.876	17.877	-0.001	91	182238	4.64	4.03	
6 Chlorodifluoromethane	51	3.926	3.920	0.006	87	1619	0.0200	0.0232	
7 Propene	41	3.942	3.935	0.007	89	1361	0.0200	0.0456	
8 Dichlorodifluoromethane	85	3.988	3.989	-0.001	97	2066	0.0200	0.0218	
9 Chloromethane	52	4.180	4.191	-0.011	64	639	0.0200	0.0514	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	4.200	4.197	0.003	90	1929	0.0200	0.0255	
11 Acetaldehyde	44	4.366	4.365	0.001	95	8034	0.1000	0.4357	
12 Vinyl chloride	62	4.381	4.383	-0.002	96	932	0.0200	0.0224	
14 Butadiene	54	4.474	4.479	-0.005	76	1074	0.0200	0.0379	
15 Bromomethane	94	4.841	4.842	-0.001	95	1532	0.0200	0.0381	
16 Chloroethane	64	4.996	4.997	-0.001	63	500	0.0200	0.0285	
17 Ethanol	31	5.115	5.099	0.016	97	3028	0.1000	0.1503	
18 Vinyl bromide	106	5.337	5.334	0.003	95	712	0.0200	0.0213	
19 2-Methylbutane	43	5.379	5.382	-0.003	86	1607	0.0200	0.0367	
20 Trichlorofluoromethane	101	5.632	5.626	0.006	96	1938	0.0200	0.0210	
21 Acrolein	56	5.653	5.646	0.007	45	258	0.0200	0.0385	
23 Acetone	58	5.802	5.775	0.027	96	3530	0.0600	0.1814	
25 Isopropyl alcohol	45	5.916	5.868	0.048	96	3160	0.0600	0.0657	
26 Ethyl ether	31	6.097	6.065	0.032	83	1045	0.0200	0.0260	
27 1,1-Dichloroethene	96	6.402	6.393	0.009	91	651	0.0200	0.0215	
29 2-Methyl-2-propanol	59	6.624	6.535	0.089	32	1039	0.0200	0.0209	
28 Acrylonitrile	53	6.521	6.508	0.013	76	684	0.0200	0.0256	
30 112TCTFE	101	6.578	6.575	0.003	91	1631	0.0200	0.0209	
31 Methylene Chloride	84	6.764	6.766	-0.002	95	1124	0.0200	0.0366	
32 3-Chloro-1-propene	39	6.784	6.781	0.003	63	1034	0.0200	0.0329	
33 Carbon disulfide	76	6.950	6.946	0.004	92	2085	0.0200	0.0211	
34 trans-1,2-Dichloroethene	96	7.622	7.620	0.002	93	602	0.0200	0.0190	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
35 2-Methylpentane	43	7.617	7.626	-0.010	89	1533	0.0200	0.0203	
36 Methyl tert-butyl ether	73	7.859	7.785	0.074	92	1127	0.0200	0.0168	
37 1,1-Dichloroethane	63	8.066	8.066	0.000	51	1432	0.0200	0.0228	
38 Vinyl acetate	43	8.170	8.165	0.005	98	1516	0.0200	0.0188	
39 2-Butanone (MEK)	72	8.717	8.660	0.057	98	433	0.0200	0.0283	
40 Hexane	56	8.661	8.650	0.011	87	524	0.0200	0.0200	
42 cis-1,2-Dichloroethene	96	9.089	9.086	0.003	91	749	0.0200	0.0233	
43 Ethyl acetate	43	9.312	9.277	0.035	95	1939	0.0200	0.0241	
44 Chloroform	83	9.441	9.438	0.003	32	1718	0.0200	0.0226	
46 Tetrahydrofuran	42	9.989	9.897	0.092	73	992	0.0200	0.0263	
47 1,1,1-Trichloroethane	97	10.500	10.492	0.008	93	1436	0.0200	0.0208	
48 1,2-Dichloroethane	62	10.604	10.600	0.004	83	1102	0.0200	0.0228	
49 n-Butanol	31	11.090	11.038	0.052	52	717	0.0200	0.0476	
51 Benzene	78	11.074	11.076	-0.002	90	2307	0.0200	0.0236	
52 Carbon tetrachloride	117	11.095	11.095	0.000	87	1133	0.0200	0.0187	
53 2,3-Dimethylpentane	71	11.167	11.172	-0.005	86	301	0.0200	0.0163	
54 Thiophene	84	11.338	11.344	-0.006	91	976	0.0200	0.0190	
55 Isooctane	57	11.793	11.796	-0.003	92	2699	0.0200	0.0178	
56 n-Heptane	71	12.165	12.159	0.006	84	425	0.0200	0.0153	
57 1,2-Dichloropropane	63	12.273	12.269	0.004	76	946	0.0200	0.0226	
58 Trichloroethene	130	12.299	12.298	0.001	89	961	0.0200	0.0219	
59 Dibromomethane	93	12.387	12.390	-0.003	94	1351	0.0200	0.0290	
60 Dichlorobromomethane	83	12.526	12.526	0.000	92	1396	0.0200	0.0202	
61 1,4-Dioxane	88	12.651	12.571	0.079	1	240	0.0200	0.0172	
62 Methyl methacrylate	41	12.604	12.600	0.004	79	1367	0.0200	0.0301	
63 Methylcyclohexane	83	13.054	13.049	0.005	90	826	0.0200	0.0662	
64 4-Methyl-2-pentanone (MIBK)	43	13.483	13.452	0.031	95	2579	0.0200	0.0296	
65 cis-1,3-Dichloropropene	75	13.508	13.503	0.005	83	931	0.0200	0.0196	
66 trans-1,3-Dichloropropene	75	14.186	14.185	0.001	89	717	0.0200	0.0201	
67 Toluene	91	14.310	14.310	0.000	92	2175	0.0200	0.0217	
68 1,1,2-Trichloroethane	83	14.387	14.386	0.001	92	769	0.0200	0.0213	
69 2-Hexanone	58	14.780	14.759	0.021	86	615	0.0200	0.0193	
70 n-Octane	85	14.966	14.962	0.004	89	426	0.0200	0.0152	
71 Chlorodibromomethane	129	15.090	15.086	0.004	95	1062	0.0200	0.0178	
72 Ethylene Dibromide	107	15.379	15.378	0.001	91	1224	0.0200	0.0227	
73 Tetrachloroethene	129	15.436	15.439	-0.003	92	927	0.0200	0.0220	
75 2,3-Dimethylheptane	43	16.294	16.295	-0.001	89	3234	0.0200	0.0250	
74 Chlorobenzene	112	16.310	16.309	0.001	91	1989	0.0200	0.0245	
76 Ethylbenzene	91	16.584	16.585	-0.001	96	2561	0.0200	0.0211	
77 m-Xylene & p-Xylene	91	16.749	16.745	0.004	96	3883	0.0400	0.0405	
78 n-Nonane	57	17.137	17.134	0.003	89	1057	0.0200	0.0153	
79 Bromoform	173	17.209	17.208	0.001	82	679	0.0200	0.0222	
80 Styrene	104	17.199	17.209	-0.010	90	878	0.0200	0.0151	
81 o-Xylene	91	17.266	17.270	-0.004	94	1635	0.0200	0.0163	
82 1,1,2,2-Tetrachloroethane	83	17.591	17.591	0.000	94	2106	0.0200	0.0237	
83 1,2,3-Trichloropropane	110	17.741	17.747	-0.006	93	402	0.0200	0.0200	
84 Isopropylbenzene	105	17.840	17.842	-0.002	89	2235	0.0200	0.0176	
85 N-Propylbenzene	120	18.356	18.356	0.000	97	406	0.0200	0.0119	
86 2-Chlorotoluene	126	18.408	18.408	0.000	95	577	0.0200	0.0177	
87 4-Ethyltoluene	105	18.496	18.496	0.000	96	1869	0.0200	0.0146	
88 1,3,5-Trimethylbenzene	120	18.568	18.567	0.001	93	802	0.0200	0.0606	
89 Alpha Methyl Styrene	118	18.796	18.791	0.005	88	697	0.0200	0.0158	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
90 n-Decane	57	18.822	18.822	0.000	91	1046	0.0200	0.0104	
91 tert-Butylbenzene	119	18.977	18.979	-0.002	83	1774	0.0200	0.0137	
92 1,2,4-Trimethylbenzene	105	18.987	18.991	-0.004	91	1634	0.0200	0.0141	
93 sec-Butylbenzene	105	19.240	19.239	0.001	97	2269	0.0200	0.0132	
94 1,3-Dichlorobenzene	146	19.266	19.263	0.003	94	1257	0.0200	0.0208	
95 Benzyl chloride	91	19.333	19.333	0.000	94	997	0.0200	0.1238	
96 1,4-Dichlorobenzene	146	19.349	19.345	0.004	84	970	0.0200	0.0218	
97 4-Isopropyltoluene	119	19.390	19.393	-0.003	92	1671	0.0200	0.0121	
98 1,2,3-Trimethylbenzene	105	19.452	19.452	0.000	95	1615	0.0200	0.0145	
99 Butylcyclohexane	83	19.493	19.494	-0.001	78	1194	0.0200	0.0124	
101 2,3-Dihydroindene	117	19.695	19.695	0.000	87	1644	0.0200	0.0178	
100 1,2-Dichlorobenzene	146	19.695	19.699	-0.004	89	1545	0.0200	0.0232	
103 n-Butylbenzene	91	19.814	19.814	0.000	93	1988	0.0200	0.0130	
102 Indene	116	19.824	19.824	0.000	71	1172	0.0200	0.0148	
104 Undecane	57	20.098	20.098	0.000	85	1105	0.0200	0.009591	
105 1,2-Dibromo-3-Chloropropane	157	20.289	20.288	0.001	87	631	0.0200	0.0185	
106 1,2,4,5-Tetramethylbenzene	119	20.563	20.563	0.000	94	1513	0.0200	0.0728	
107 Dodecane	57	21.178	21.175	0.003	74	713	0.0200	0.008783	
108 1,2,4-Trichlorobenzene	180	21.411	21.418	-0.007	87	562	0.0200	0.0976	
109 Naphthalene	128	21.561	21.559	0.002	97	1528	0.0200	0.0167	
110 Hexachlorobutadiene	225	21.726	21.727	-0.001	88	1697	0.0200	0.0266	
111 1,2,3-Trichlorobenzene	180	21.793	21.793	0.000	92	950	0.0200	0.0254	
112 2-Methylnaphthalene	142	22.336	22.340	-0.004	79	193	0.0200	0.0133	
113 1-Methylnaphthalene	142	22.465	22.468	-0.003	77	295	0.0200	0.0176	
A 115 C8 Range	1	14.966	(14.940-14.992)		0	7815	0.0200	0.0220	
S 116 Xylenes, Total	100				0		0.0600	0.0567	
S 117 1,2-Dichloroethene, Total	1				0		0.0400	0.0423	

Reagents:

40L1-3DQP_00031	Amount Added: 50.00	Units: mL	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

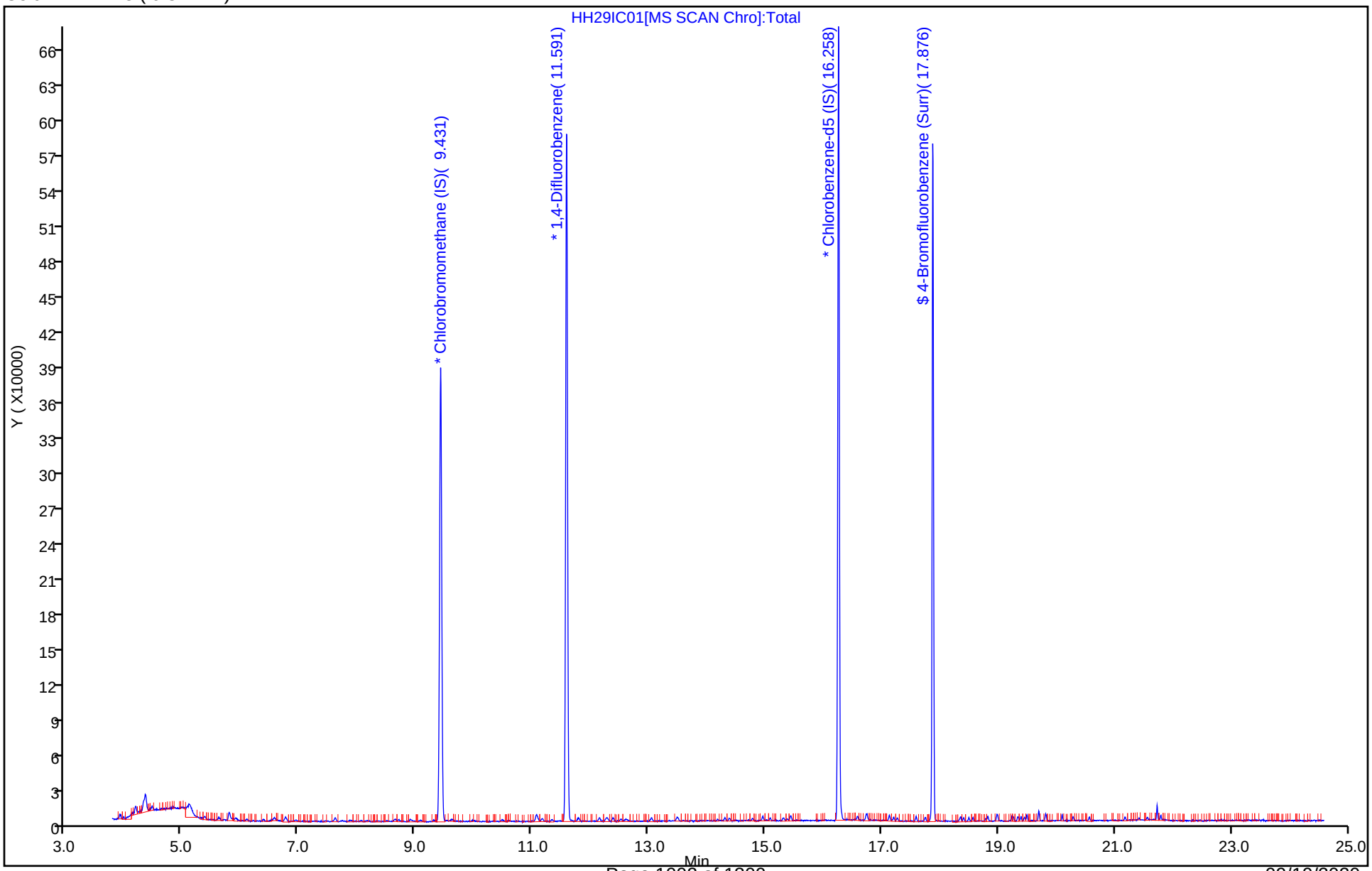
Report Date: 31-Aug-2020 12:24:31 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC01.D

Injection Date:	29-Aug-2020 18:16:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	IC L1			Worklist Smp#:	9
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

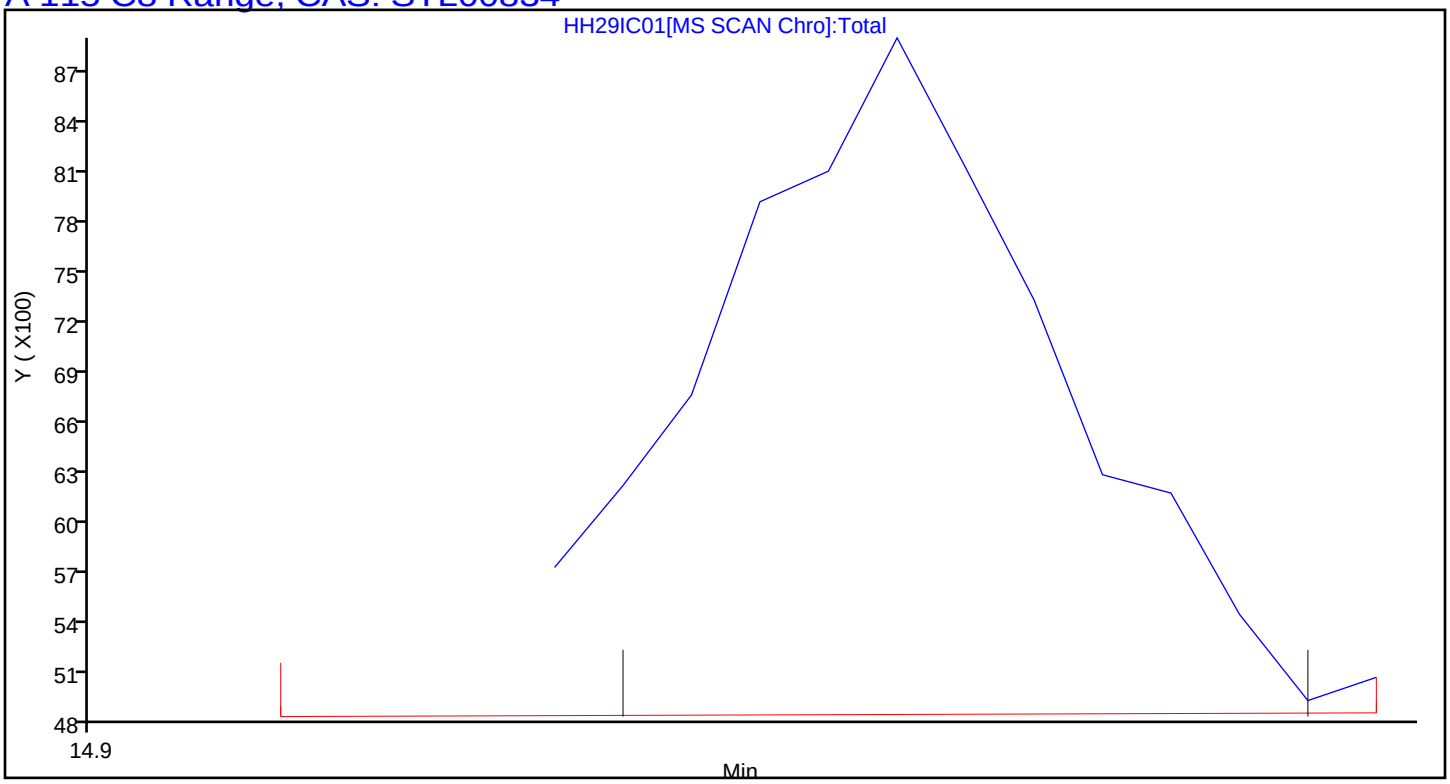


Report Date: 31-Aug-2020 12:24:31 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC01.D				
Injection Date:	29-Aug-2020 18:16:30	Instrument ID:	MH		
Lims ID:	IC L1				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	9	Worklist Smp#:	9
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 115 C8 Range, CAS: STL00834



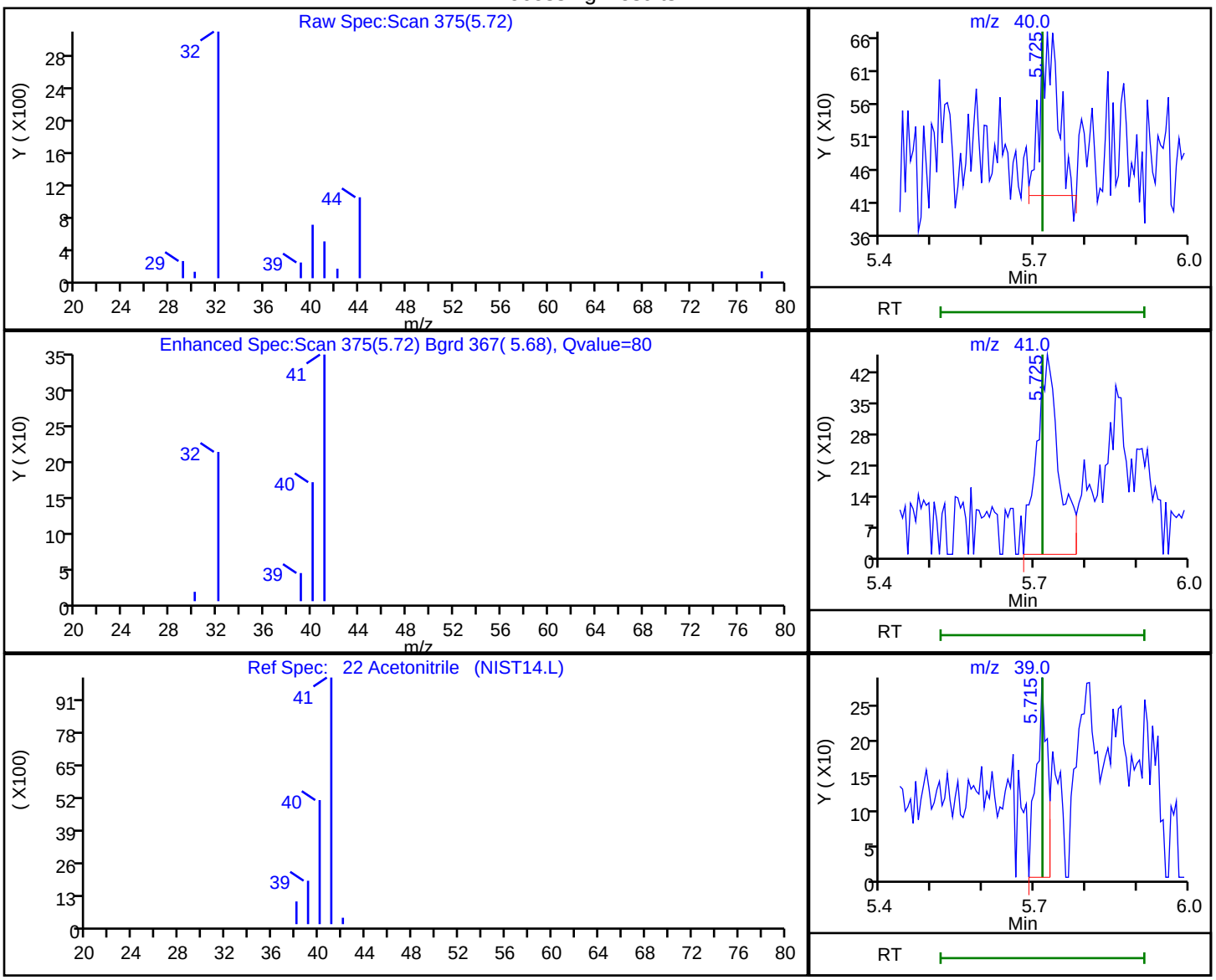
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC01.D				
Injection Date:	29-Aug-2020 18:16:30	Instrument ID:	MH		
Lims ID:	IC L1				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	9	Worklist Smp#:	9
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

22 Acetonitrile, CAS: 75-05-8

Processing Results



RT	Mass	Response	Amount
5.72	40.00	598	0.033944
5.72	41.00	1372	
5.71	39.00	410	

Reviewer: barlozhetskayaa, 31-Aug-2020 10:46:58

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC02.D
Lims ID: IC L2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 29-Aug-2020 19:13:30 ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016451-010
Misc. Info.: 314720
Operator ID: HMT Instrument ID: MH
Sublist: chrom-MH_TO15*sub7

Method: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\MH_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 31-Aug-2020 12:24:37 Calib Date: 29-Aug-2020 23:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1064

First Level Reviewer: tajh Date: 30-Aug-2020 08:11:36

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.430	9.432	-0.002	98	117016	4.80	4.80	
* 2 1,4-Difluorobenzene	114	11.591	11.594	-0.003	95	498897	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	16.258	16.260	-0.002	88	360304	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.876	17.877	-0.001	92	173759	4.64	4.15	
6 Chlorodifluoromethane	51	3.921	3.920	0.001	95	3392	0.0400	0.0519	
7 Propene	41	3.942	3.935	0.007	92	1755	0.0400	0.0629	
8 Dichlorodifluoromethane	85	3.988	3.989	-0.001	98	4202	0.0400	0.0475	
9 Chloromethane	52	4.190	4.191	-0.001	61	884	0.0400	0.0761	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	4.200	4.197	0.003	90	3554	0.0400	0.0503	
11 Acetaldehyde	44	4.371	4.365	0.006	98	13990	0.2000	0.8115	
12 Vinyl chloride	62	4.381	4.383	-0.002	97	1823	0.0400	0.0469	
14 Butadiene	54	4.479	4.479	0.000	74	1425	0.0400	0.0538	
13 Butane	43	4.479	4.479	0.000	85	2687	0.0400	0.0505	
15 Bromomethane	94	4.841	4.842	-0.001	94	2275	0.0400	0.0606	
16 Chloroethane	64	4.996	4.997	-0.001	63	915	0.0400	0.0557	
17 Ethanol	31	5.110	5.099	0.011	98	5788	0.2000	0.3073	
18 Vinyl bromide	106	5.342	5.334	0.008	96	1302	0.0400	0.0416	
19 2-Methylbutane	43	5.384	5.382	0.002	92	1792	0.0400	0.0437	
20 Trichlorofluoromethane	101	5.626	5.626	0.000	99	3885	0.0400	0.0451	
21 Acrolein	56	5.658	5.646	0.012	27	401	0.0400	0.0554	
23 Acetone	58	5.807	5.775	0.032	98	5745	0.1200	0.3157	
25 Isopropyl alcohol	45	5.911	5.868	0.043	96	5166	0.1200	0.1149	
26 Ethyl ether	31	6.102	6.065	0.037	90	1617	0.0400	0.0431	
27 1,1-Dichloroethene	96	6.386	6.393	-0.007	97	1211	0.0400	0.0427	
28 Acrylonitrile	53	6.510	6.508	0.002	73	1051	0.0400	0.0421	
30 112TCTFE	101	6.577	6.575	0.002	94	3184	0.0400	0.0436	
29 2-Methyl-2-propanol	59	6.603	6.535	0.068	87	1814	0.0400	0.0391	
31 Methylene Chloride	84	6.769	6.766	0.003	96	1808	0.0400	0.0630	
32 3-Chloro-1-propene	39	6.769	6.781	-0.012	52	1514	0.0400	0.0515	
33 Carbon disulfide	76	6.950	6.946	0.004	95	4035	0.0400	0.0438	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
35 2-Methylpentane	43	7.627	7.626	0.001	90	2532	0.0400	0.0358	
34 trans-1,2-Dichloroethene	96	7.621	7.620	0.001	93	1203	0.0400	0.0406	
36 Methyl tert-butyl ether	73	7.859	7.785	0.074	87	1991	0.0400	0.0318	
37 1,1-Dichloroethane	63	8.066	8.066	0.000	98	2684	0.0400	0.0456	
38 Vinyl acetate	43	8.174	8.165	0.009	96	2476	0.0400	0.0328	
40 Hexane	56	8.655	8.650	0.005	73	953	0.0400	0.0389	
39 2-Butanone (MEK)	72	8.707	8.660	0.047	98	845	0.0400	0.0590	
41 Isopropyl ether	45	8.903	8.836	0.067	88	3331	0.0400	0.0319	
42 cis-1,2-Dichloroethene	96	9.084	9.086	-0.002	93	1279	0.0400	0.0426	
43 Ethyl acetate	43	9.312	9.277	0.035	96	3162	0.0400	0.0421	
44 Chloroform	83	9.436	9.438	-0.002	28	3145	0.0400	0.0443	
45 Tert-butyl ethyl ether	59	9.601	9.539	0.062	90	2441	0.0400	0.0305	
46 Tetrahydrofuran	42	9.958	9.897	0.061	86	1332	0.0400	0.0377	
47 1,1,1-Trichloroethane	97	10.490	10.492	-0.002	95	2704	0.0400	0.0420	
48 1,2-Dichloroethane	62	10.598	10.600	-0.002	93	2085	0.0400	0.0460	
50 Cyclohexane	69	11.079	11.072	0.007	63	352	0.0400	0.0281	
51 Benzene	78	11.079	11.076	0.003	96	4309	0.0400	0.0470	
49 n-Butanol	31	11.079	11.038	0.041	47	806	0.0400	0.0570	
52 Carbon tetrachloride	117	11.089	11.095	-0.006	81	2216	0.0400	0.0391	
53 2,3-Dimethylpentane	71	11.172	11.172	0.000	88	530	0.0400	0.0306	
54 Thiophene	84	11.343	11.344	-0.001	94	1672	0.0400	0.0347	
55 Isooctane	57	11.792	11.796	-0.004	92	5399	0.0400	0.0379	
56 n-Heptane	71	12.154	12.159	-0.005	85	802	0.0400	0.0307	
57 1,2-Dichloropropane	63	12.268	12.269	-0.001	77	1630	0.0400	0.0416	
58 Trichloroethene	130	12.299	12.298	0.001	93	1717	0.0400	0.0417	
59 Dibromomethane	93	12.392	12.390	0.002	96	2255	0.0400	0.0517	
60 Dichlorobromomethane	83	12.531	12.526	0.005	94	2492	0.0400	0.0384	
62 Methyl methacrylate	41	12.614	12.600	0.014	87	1868	0.0400	0.0439	
61 1,4-Dioxane	88	12.630	12.571	0.059	45	380	0.0400	0.0291	
63 Methylcyclohexane	83	13.053	13.049	0.004	83	1397	0.0400	0.0780	
64 4-Methyl-2-pentanone (MIBK)	43	13.482	13.452	0.030	97	3636	0.0400	0.0445	
65 cis-1,3-Dichloropropene	75	13.508	13.503	0.005	78	1660	0.0400	0.0373	
66 trans-1,3-Dichloropropene	75	14.180	14.185	-0.005	93	1225	0.0400	0.0372	
67 Toluene	91	14.309	14.310	-0.001	93	3623	0.0400	0.0390	
68 1,1,2-Trichloroethane	83	14.387	14.386	0.001	94	1566	0.0400	0.0469	
69 2-Hexanone	58	14.775	14.759	0.015	88	998	0.0400	0.0338	
70 n-Octane	85	14.966	14.962	0.004	89	688	0.0400	0.0266	
71 Chlorodibromomethane	129	15.085	15.086	-0.001	95	1969	0.0400	0.0357	
72 Ethylene Dibromide	107	15.374	15.378	-0.004	97	2091	0.0400	0.0419	
73 Tetrachloroethene	129	15.436	15.439	-0.003	89	1580	0.0400	0.0406	
75 2,3-Dimethylheptane	43	16.294	16.295	-0.001	89	5454	0.0400	0.0456	
74 Chlorobenzene	112	16.310	16.309	0.001	96	3431	0.0400	0.0456	
76 Ethylbenzene	91	16.583	16.585	-0.002	98	4409	0.0400	0.0392	
77 m-Xylene & p-Xylene	91	16.744	16.745	-0.001	96	6184	0.0800	0.0696	
78 n-Nonane	57	17.136	17.134	0.002	87	1867	0.0400	0.0292	
80 Styrene	104	17.214	17.209	0.005	92	1594	0.0400	0.0295	
79 Bromoform	173	17.204	17.208	-0.004	78	1156	0.0400	0.0407	
81 o-Xylene	91	17.266	17.270	-0.004	97	3555	0.0400	0.0382	
82 1,1,2,2-Tetrachloroethane	83	17.586	17.591	-0.005	97	3883	0.0400	0.0472	
83 1,2,3-Trichloropropane	110	17.741	17.747	-0.006	95	794	0.0400	0.0426	
84 Isopropylbenzene	105	17.845	17.842	0.003	96	4845	0.0400	0.0412	
85 N-Propylbenzene	120	18.356	18.356	0.000	98	1079	0.0400	0.0342	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
86 2-Chlorotoluene	126	18.408	18.408	0.000	96	1163	0.0400	0.0386	
87 4-Ethyltoluene	105	18.496	18.496	0.000	96	3800	0.0400	0.0322	
88 1,3,5-Trimethylbenzene	120	18.563	18.567	-0.004	92	1641	0.0400	0.0765	
89 Alpha Methyl Styrene	118	18.796	18.791	0.005	91	1088	0.0400	0.0266	
90 n-Decane	57	18.821	18.822	-0.001	87	1926	0.0400	0.0206	
91 tert-Butylbenzene	119	18.976	18.979	-0.003	86	3095	0.0400	0.0259	
92 1,2,4-Trimethylbenzene	105	18.992	18.991	0.001	95	2955	0.0400	0.0275	
93 sec-Butylbenzene	105	19.235	19.239	-0.004	96	4176	0.0400	0.0263	
94 1,3-Dichlorobenzene	146	19.266	19.263	0.003	96	1822	0.0400	0.0326	
95 Benzyl chloride	91	19.333	19.333	0.000	95	1365	0.0400	0.1306	
96 1,4-Dichlorobenzene	146	19.343	19.345	-0.002	89	1350	0.0400	0.0328	
97 4-Isopropyltoluene	119	19.395	19.393	0.002	93	2975	0.0400	0.0232	
98 1,2,3-Trimethylbenzene	105	19.452	19.452	0.000	98	3050	0.0400	0.0295	
99 Butylcyclohexane	83	19.493	19.494	-0.001	79	2315	0.0400	0.0261	
101 2,3-Dihydroindene	117	19.690	19.695	-0.005	85	2766	0.0400	0.0323	
100 1,2-Dichlorobenzene	146	19.700	19.699	0.001	87	2372	0.0400	0.0385	
103 n-Butylbenzene	91	19.814	19.814	0.000	95	3363	0.0400	0.0237	
102 Indene	116	19.824	19.824	0.000	63	1871	0.0400	0.0255	
104 Undecane	57	20.098	20.098	0.000	84	1853	0.0400	0.0174	
105 1,2-Dibromo-3-Chloropropane	157	20.284	20.288	-0.004	83	854	0.0400	0.0271	
106 1,2,4,5-Tetramethylbenzene	119	20.563	20.563	0.000	95	2353	0.0400	0.0801	
107 Dodecane	57	21.173	21.175	-0.002	82	1221	0.0400	0.0163	
108 1,2,4-Trichlorobenzene	180	21.421	21.418	0.003	88	542	0.0400	0.0983	
109 Naphthalene	128	21.555	21.559	-0.004	98	1611	0.0400	0.0190	
110 Hexachlorobutadiene	225	21.726	21.727	-0.001	87	2923	0.0400	0.0496	
111 1,2,3-Trichlorobenzene	180	21.788	21.793	-0.005	91	900	0.0400	0.0260	
113 1-Methylnaphthalene	142	22.470	22.468	0.002	18	194	0.0400	0.0125	
A 115 C8 Range	1	14.955	(14.930-14.981)		0	11821	0.0400	0.0356	
S 116 Xylenes, Total	100				0		0.1200	0.1079	
S 117 1,2-Dichloroethene, Total	1				0		0.0800	0.0832	

Reagents:

40L1-3DQP_00031	Amount Added: 100.00	Units: mL	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

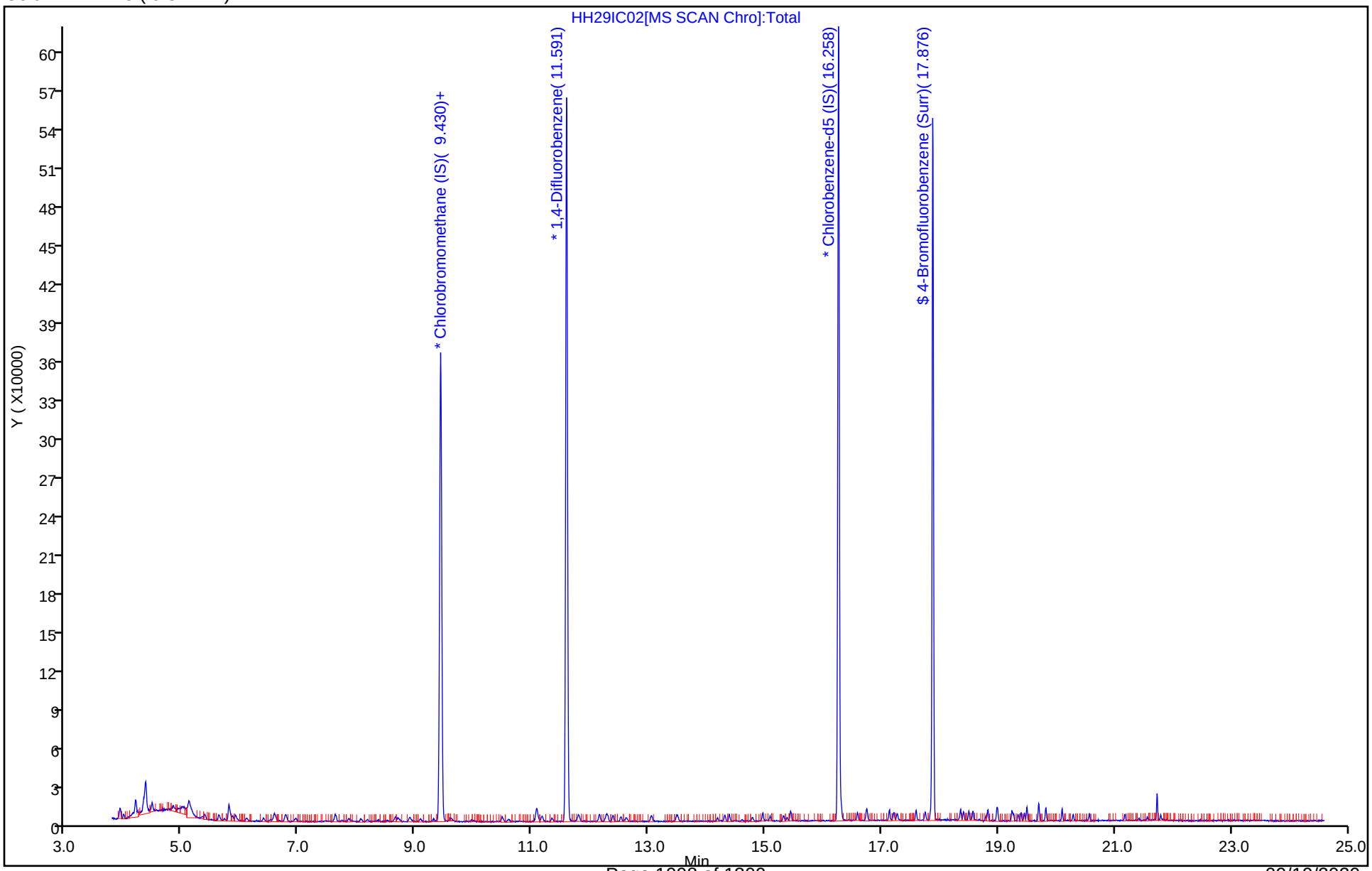
Report Date: 31-Aug-2020 12:24:37 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC02.D

Injection Date:	29-Aug-2020 19:13:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	IC L2			Worklist Smp#:	10
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

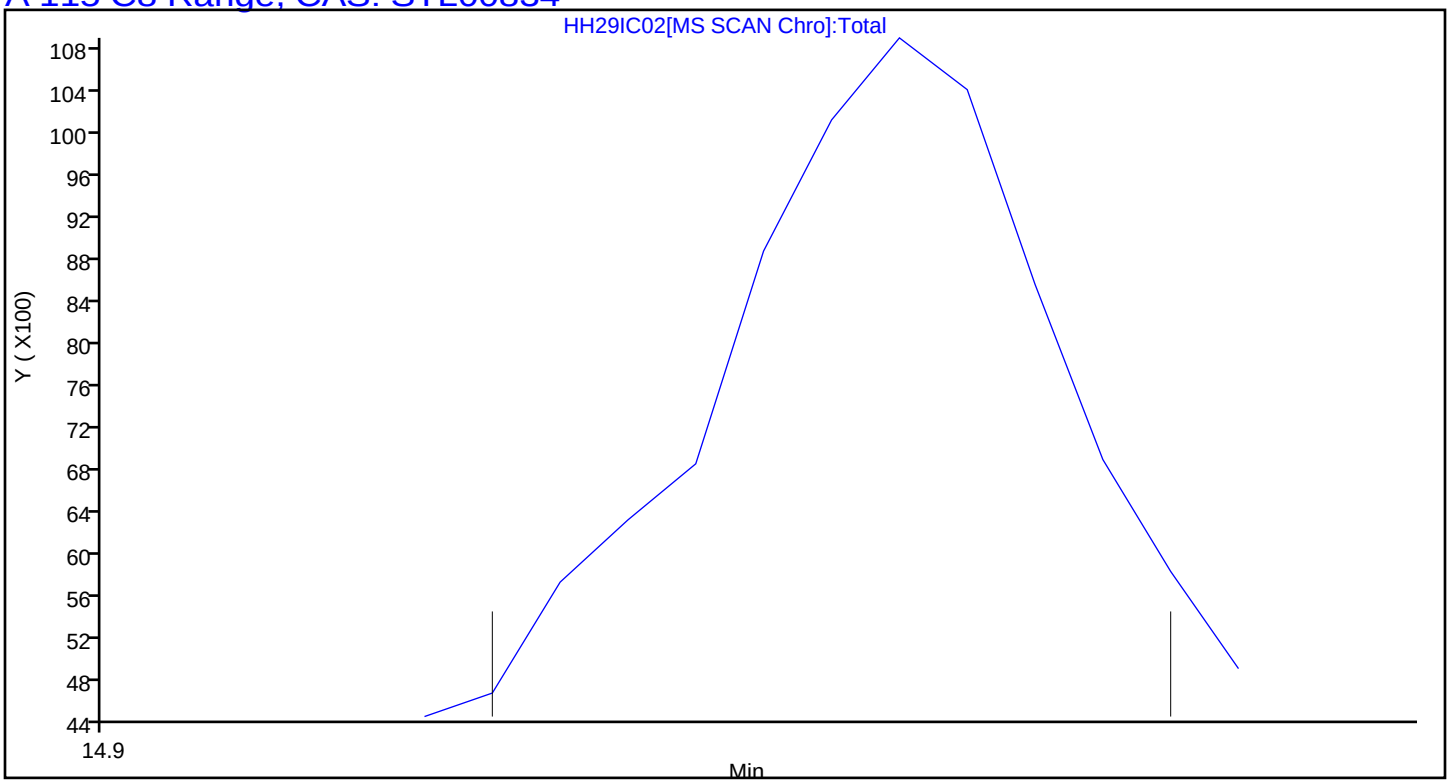


Report Date: 31-Aug-2020 12:24:37 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC02.D				
Injection Date:	29-Aug-2020 19:13:30	Instrument ID:	MH		
Lims ID:	IC L2				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	9	Worklist Smp#:	10
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 115 C8 Range, CAS: STL00834



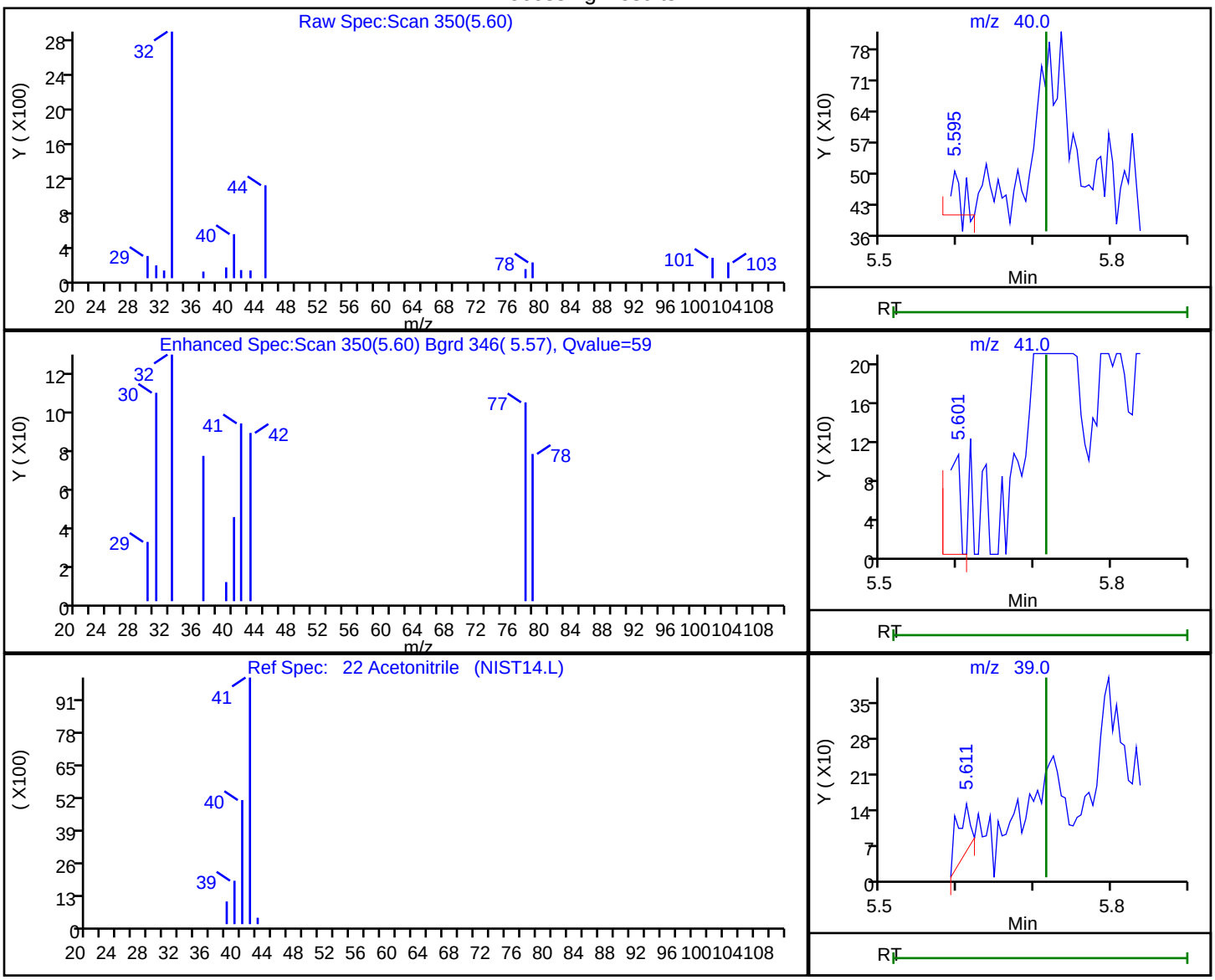
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC02.D				
Injection Date:	29-Aug-2020 19:13:30	Instrument ID:	MH		
Lims ID:	IC L2				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	9	Worklist Smp#:	10
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

22 Acetonitrile, CAS: 75-05-8

Processing Results



RT	Mass	Response	Amount
5.60	40.00	68	0.004128
5.60	41.00	87	
5.61	39.00	116	

Reviewer: barlozhetskayaa, 31-Aug-2020 10:45:28

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC03.D
Lims ID: IC L3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 29-Aug-2020 20:11:30 ALS Bottle#: 9 Worklist Smp#: 11
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016451-011
Misc. Info.: 314720
Operator ID: HMT Instrument ID: MH
Sublist: chrom-MH_TO15*sub7

Method: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\MH_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 31-Aug-2020 12:24:43 Calib Date: 29-Aug-2020 23:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1064

First Level Reviewer: tajh Date: 30-Aug-2020 07:57:10

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.431	9.432	-0.001	98	114671	4.80	4.80	
* 2 1,4-Difluorobenzene	114	11.596	11.594	0.002	95	489127	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	16.258	16.260	-0.002	88	347248	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.876	17.877	-0.001	90	154059	4.64	3.82	
6 Chlorodifluoromethane	51	3.926	3.920	0.006	90	6531	0.0800	0.1021	
7 Propene	41	3.937	3.935	0.002	76	2747	0.0800	0.1005	
8 Dichlorodifluoromethane	85	3.994	3.989	0.005	99	8034	0.0800	0.0927	
9 Chloromethane	52	4.200	4.191	0.009	58	1608	0.0800	0.1412	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	4.200	4.197	0.003	91	6285	0.0800	0.0908	
11 Acetaldehyde	44	4.371	4.365	0.006	98	26182	0.4000	1.55	
12 Vinyl chloride	62	4.392	4.383	0.009	99	3651	0.0800	0.0958	
14 Butadiene	54	4.485	4.479	0.006	71	2713	0.0800	0.1045	
13 Butane	43	4.485	4.479	0.006	82	4904	0.0800	0.0941	
15 Bromomethane	94	4.846	4.842	0.004	96	3883	0.0800	0.1055	
16 Chloroethane	64	5.007	4.997	0.010	89	1757	0.0800	0.1092	
17 Ethanol	31	5.115	5.099	0.016	96	10913	0.4000	0.5912	
18 Vinyl bromide	106	5.332	5.334	-0.002	95	2726	0.0800	0.0889	
19 2-Methylbutane	43	5.384	5.382	0.002	89	3726	0.0800	0.0928	
20 Trichlorofluoromethane	101	5.627	5.626	0.001	99	7868	0.0800	0.0932	
21 Acrolein	56	5.653	5.646	0.007	83	775	0.0800	0.0966	
22 Acetonitrile	40	5.730	5.715	0.015	99	1691	0.0800	0.1048	
23 Acetone	58	5.792	5.775	0.017	98	10681	0.2400	0.5990	
24 Pentane	72	5.875	5.865	0.010	72	224	0.0800	0.0598	
25 Isopropyl alcohol	45	5.906	5.868	0.038	97	10140	0.2400	0.2301	
26 Ethyl ether	31	6.092	6.065	0.027	85	2744	0.0800	0.0746	
27 1,1-Dichloroethene	96	6.397	6.393	0.004	96	2221	0.0800	0.0799	
28 Acrylonitrile	53	6.516	6.508	0.008	92	1848	0.0800	0.0756	
30 112TCTFE	101	6.578	6.575	0.003	93	6501	0.0800	0.0908	
29 2-Methyl-2-propanol	59	6.588	6.535	0.053	81	3760	0.0800	0.0827	
31 Methylene Chloride	84	6.769	6.766	0.003	96	3116	0.0800	0.1108	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.779	6.781	-0.002	96	2665	0.0800	0.0925	
33 Carbon disulfide	76	6.945	6.946	-0.001	100	7719	0.0800	0.0854	
34 trans-1,2-Dichloroethene	96	7.622	7.620	0.002	95	2350	0.0800	0.0809	
35 2-Methylpentane	43	7.632	7.626	0.006	91	4863	0.0800	0.0702	
36 Methyl tert-butyl ether	73	7.834	7.785	0.049	88	4086	0.0800	0.0667	
37 1,1-Dichloroethane	63	8.071	8.066	0.005	98	5044	0.0800	0.0875	
38 Vinyl acetate	43	8.170	8.165	0.005	97	4502	0.0800	0.0608	
40 Hexane	56	8.645	8.650	-0.005	70	1936	0.0800	0.0806	
39 2-Butanone (MEK)	72	8.686	8.660	0.026	97	1540	0.0800	0.1097	
41 Isopropyl ether	45	8.878	8.836	0.042	88	6586	0.0800	0.0644	
42 cis-1,2-Dichloroethene	96	9.079	9.086	-0.007	97	2307	0.0800	0.0785	
43 Ethyl acetate	43	9.301	9.277	0.024	97	5898	0.0800	0.0801	
44 Chloroform	83	9.436	9.438	-0.002	28	6204	0.0800	0.0891	
45 Tert-butyl ethyl ether	59	9.591	9.539	0.052	92	5068	0.0800	0.0646	
46 Tetrahydrofuran	42	9.948	9.897	0.051	91	2541	0.0800	0.0735	
47 1,1,1-Trichloroethane	97	10.495	10.492	0.003	97	5445	0.0800	0.0863	
48 1,2-Dichloroethane	62	10.604	10.600	0.004	96	3781	0.0800	0.0850	
51 Benzene	78	11.079	11.076	0.003	96	7802	0.0800	0.0869	
49 n-Butanol	31	11.090	11.038	0.052	57	1194	0.0800	0.0862	
50 Cyclohexane	69	11.074	11.072	0.002	66	726	0.0800	0.0591	
52 Carbon tetrachloride	117	11.095	11.095	0.000	93	4639	0.0800	0.0834	
53 2,3-Dimethylpentane	71	11.167	11.172	-0.005	84	1195	0.0800	0.0703	
54 Thiophene	84	11.338	11.344	-0.006	96	3691	0.0800	0.0781	
55 Isooctane	57	11.798	11.796	0.002	95	10282	0.0800	0.0736	
56 n-Heptane	71	12.160	12.159	0.001	84	1717	0.0800	0.0671	
57 1,2-Dichloropropane	63	12.273	12.269	0.004	86	3274	0.0800	0.0852	
58 Trichloroethene	130	12.299	12.298	0.001	92	3226	0.0800	0.0799	
59 Dibromomethane	93	12.387	12.390	-0.003	93	3899	0.0800	0.0912	
60 Dichlorobromomethane	83	12.521	12.526	-0.005	97	5206	0.0800	0.0818	
62 Methyl methacrylate	41	12.609	12.600	0.009	90	3402	0.0800	0.0815	
61 1,4-Dioxane	88	12.609	12.571	0.038	46	690	0.0800	0.0539	
63 Methylcyclohexane	83	13.049	13.049	0.000	85	2908	0.0800	0.1076	
64 4-Methyl-2-pentanone (MIBK)	43	13.478	13.452	0.026	97	5731	0.0800	0.0715	
65 cis-1,3-Dichloropropene	75	13.498	13.503	-0.005	97	3001	0.0800	0.0688	
66 trans-1,3-Dichloropropene	75	14.186	14.185	0.001	94	2144	0.0800	0.0675	
67 Toluene	91	14.310	14.310	0.000	92	7081	0.0800	0.0791	
68 1,1,2-Trichloroethane	83	14.387	14.386	0.001	95	2780	0.0800	0.0865	
69 2-Hexanone	58	14.780	14.759	0.021	87	1837	0.0800	0.0645	
70 n-Octane	85	14.961	14.962	-0.001	89	1592	0.0800	0.0638	
71 Chlorodibromomethane	129	15.085	15.086	-0.001	96	3930	0.0800	0.0740	
72 Ethylene Dibromide	107	15.379	15.378	0.001	96	3411	0.0800	0.0709	
73 Tetrachloroethene	129	15.441	15.439	0.002	90	3257	0.0800	0.0869	
75 2,3-Dimethylheptane	43	16.294	16.295	-0.001	88	9495	0.0800	0.0824	
74 Chlorobenzene	112	16.310	16.309	0.001	94	5978	0.0800	0.0825	
76 Ethylbenzene	91	16.584	16.585	-0.001	97	8050	0.0800	0.0743	
77 m-Xylene & p-Xylene	91	16.744	16.745	-0.001	96	11759	0.1600	0.1374	
78 n-Nonane	57	17.132	17.134	-0.002	90	3820	0.0800	0.0620	
79 Bromoform	173	17.209	17.208	0.001	82	2267	0.0800	0.0820	
80 Styrene	104	17.209	17.209	0.000	95	3067	0.0800	0.0590	
81 o-Xylene	91	17.271	17.270	0.001	99	6410	0.0800	0.0715	
82 1,1,2,2-Tetrachloroethane	83	17.592	17.591	0.001	97	6941	0.0800	0.0875	
83 1,2,3-Trichloropropane	110	17.752	17.747	0.005	97	1470	0.0800	0.0819	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	17.845	17.842	0.003	95	6533	0.0800	0.0576	
85 N-Propylbenzene	120	18.356	18.356	0.000	98	1506	0.0800	0.0496	
86 2-Chlorotoluene	126	18.403	18.408	-0.005	98	1701	0.0800	0.0586	
87 4-Ethyltoluene	105	18.496	18.496	0.000	97	5485	0.0800	0.0482	
88 1,3,5-Trimethylbenzene	120	18.568	18.567	0.001	92	2537	0.0800	0.0940	
89 Alpha Methyl Styrene	118	18.791	18.791	0.000	84	1746	0.0800	0.0444	
90 n-Decane	57	18.822	18.822	0.000	89	4222	0.0800	0.0469	
91 tert-Butylbenzene	119	18.982	18.979	0.003	82	5964	0.0800	0.0517	
92 1,2,4-Trimethylbenzene	105	18.992	18.991	0.001	94	5774	0.0800	0.0557	
93 sec-Butylbenzene	105	19.240	19.239	0.001	96	7473	0.0800	0.0489	
94 1,3-Dichlorobenzene	146	19.261	19.263	-0.002	95	3312	0.0800	0.0616	
95 Benzyl chloride	91	19.328	19.333	-0.005	94	2343	0.0800	0.1468	
96 1,4-Dichlorobenzene	146	19.344	19.345	-0.001	90	2193	0.0800	0.0553	
97 4-Isopropyltoluene	119	19.395	19.393	0.002	94	5476	0.0800	0.0443	
98 1,2,3-Trimethylbenzene	105	19.452	19.452	0.000	98	5684	0.0800	0.0571	
99 Butylcyclohexane	83	19.493	19.494	-0.001	82	4566	0.0800	0.0534	
101 2,3-Dihydroindene	117	19.695	19.695	0.000	86	4374	0.0800	0.0530	
100 1,2-Dichlorobenzene	146	19.700	19.699	0.001	90	3986	0.0800	0.0671	
103 n-Butylbenzene	91	19.814	19.814	0.000	98	6346	0.0800	0.0464	
102 Indene	116	19.824	19.824	0.000	86	3301	0.0800	0.0467	
104 Undecane	57	20.098	20.098	0.000	84	3439	0.0800	0.0335	
105 1,2-Dibromo-3-Chloropropane	157	20.284	20.288	-0.004	85	1456	0.0800	0.0480	
106 1,2,4,5-Tetramethylbenzene	119	20.563	20.563	0.000	95	3363	0.0800	0.0889	
107 Dodecane	57	21.173	21.175	-0.002	80	1713	0.0800	0.0237	
108 1,2,4-Trichlorobenzene	180	21.416	21.418	-0.002	88	840	0.0800	0.1092	
109 Naphthalene	128	21.556	21.559	-0.003	97	1981	0.0800	0.0242	
110 Hexachlorobutadiene	225	21.726	21.727	-0.001	89	4941	0.0800	0.0870	
111 1,2,3-Trichlorobenzene	180	21.793	21.793	0.000	92	1210	0.0800	0.0363	
A 115 C8 Range	1	14.961	(14.930-14.992)		0	24409	0.0800	0.0749	
S 116 Xylenes, Total	100				0		0.2400	0.2089	
S 117 1,2-Dichloroethene, Total	1				0		0.1600	0.1594	

Reagents:

40L1-3DQP_00031	Amount Added: 200.00	Units: mL	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

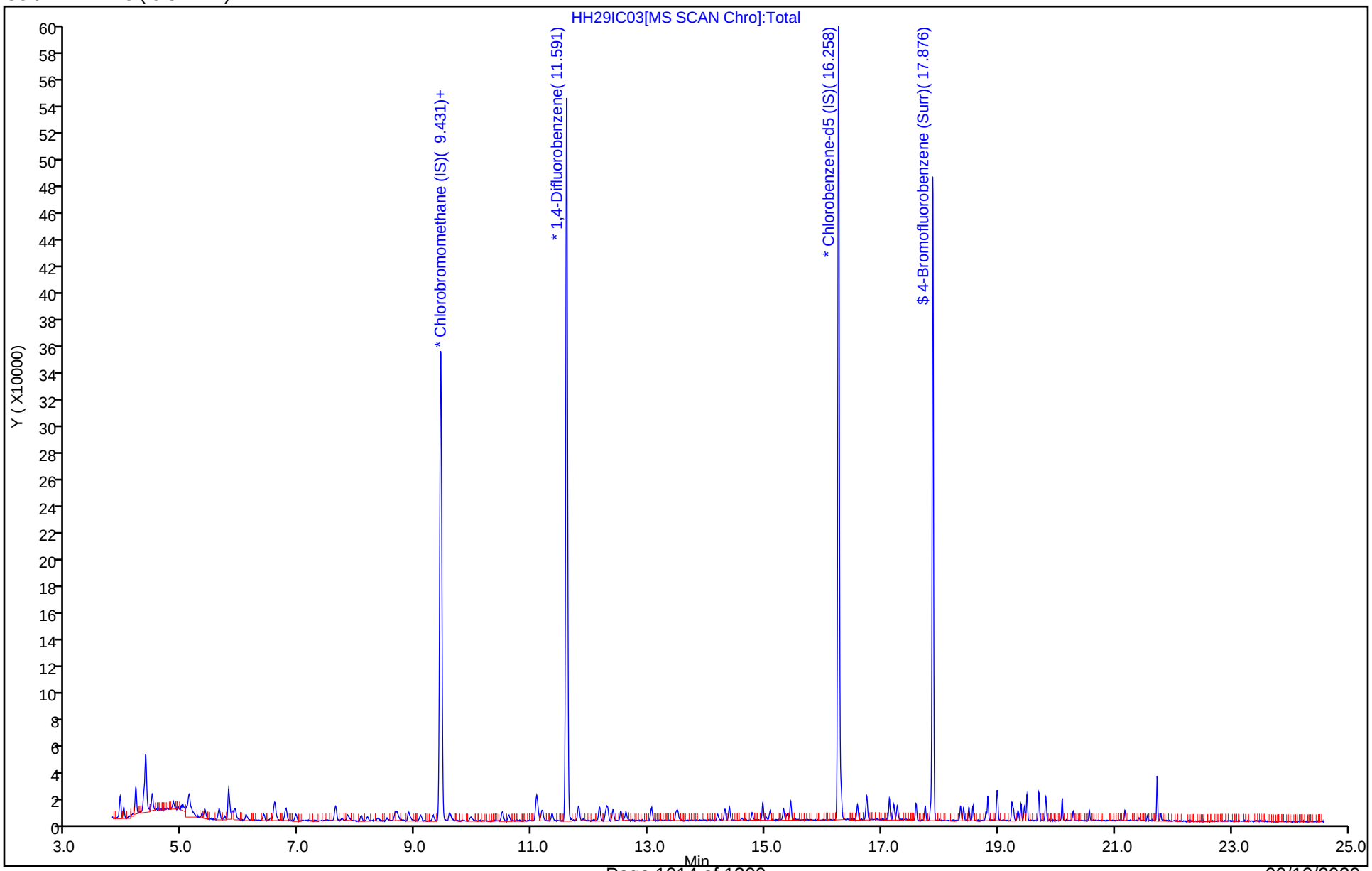
Report Date: 31-Aug-2020 12:24:44 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC03.D

Injection Date:	29-Aug-2020 20:11:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	IC L3			Worklist Smp#:	11
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

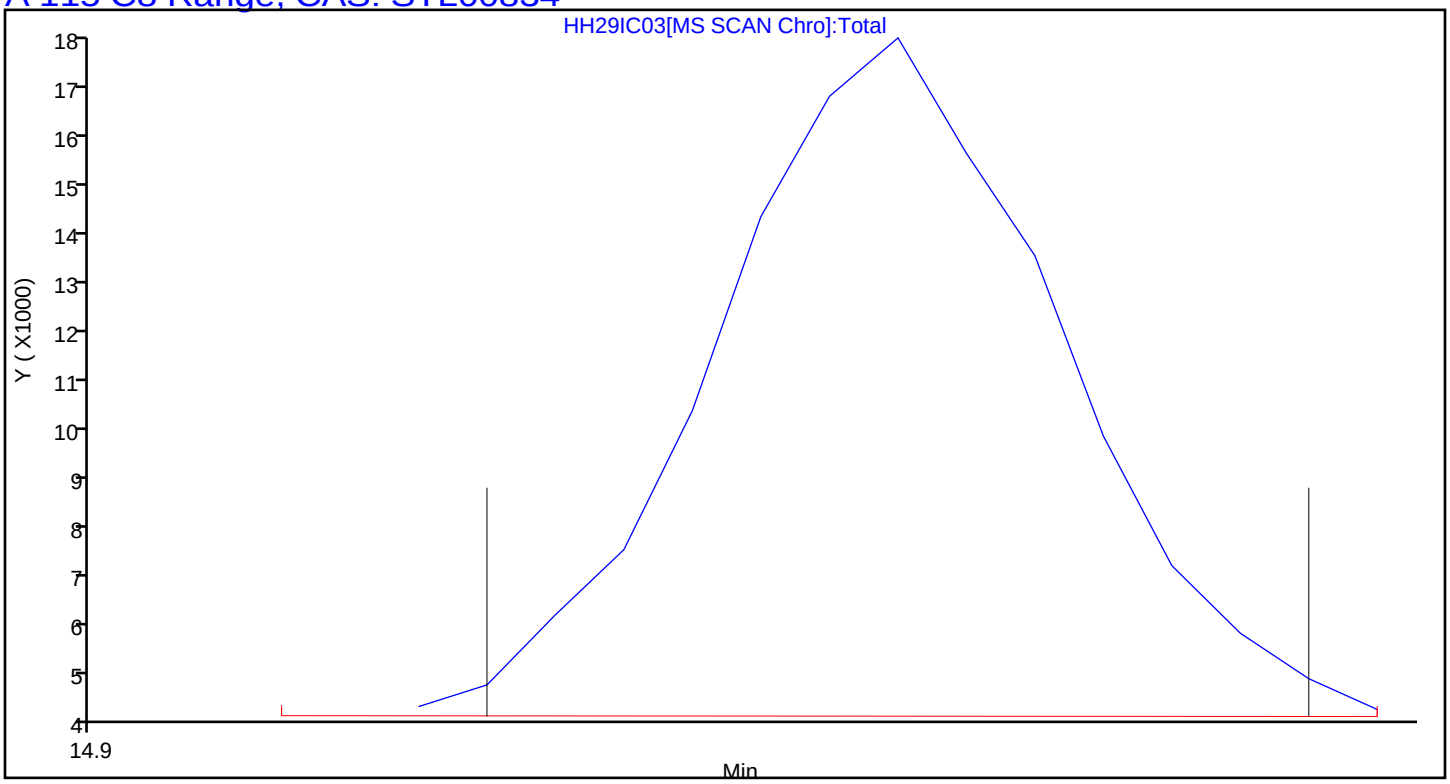


Report Date: 31-Aug-2020 12:24:44 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC03.D				
Injection Date:	29-Aug-2020 20:11:30	Instrument ID:	MH		
Lims ID:	IC L3				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	9	Worklist Smp#:	11
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 115 C8 Range, CAS: STL00834



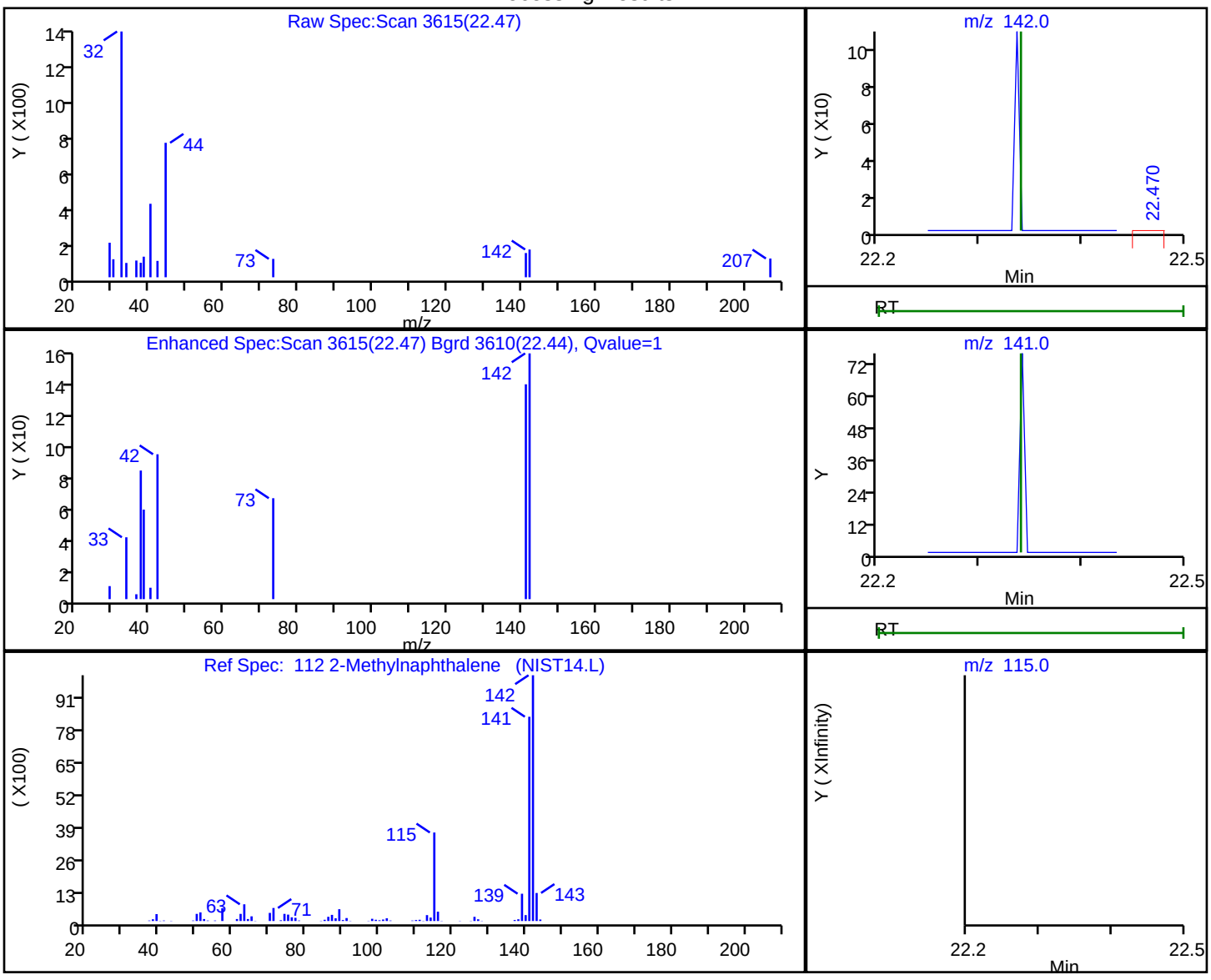
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC03.D				
Injection Date:	29-Aug-2020 20:11:30	Instrument ID:	MH		
Lims ID:	IC L3				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	9	Worklist Smp#:	11
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

112 2-Methylnaphthalene, CAS: 91-57-6

Processing Results



RT	Mass	Response	Amount
22.47	142.00	117	0.009034
22.34	141.00	0	
22.34	115.00	0	

Reviewer: barlozhetskayaa, 31-Aug-2020 10:45:03

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC04.D
Lims ID: IC L4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 29-Aug-2020 21:03:30 ALS Bottle#: 10 Worklist Smp#: 12
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016451-012
Misc. Info.: 314717
Operator ID: HMT Instrument ID: MH
Sublist: chrom-MH_TO15*sub7

Method: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\MH_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 31-Aug-2020 12:24:51 Calib Date: 29-Aug-2020 23:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1064

First Level Reviewer: barlozhetskayaa Date: 31-Aug-2020 09:53:23

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.431	9.432	-0.001	98	120942	4.80	4.80	
* 2 1,4-Difluorobenzene	114	11.591	11.594	-0.003	95	490325	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	16.258	16.260	-0.002	88	354250	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.876	17.877	-0.001	91	184823	4.64	4.49	
6 Chlorodifluoromethane	51	3.916	3.920	-0.004	97	11434	0.1600	0.1694	
7 Propene	41	3.931	3.935	-0.004	97	5401	0.1600	0.1873	
8 Dichlorodifluoromethane	85	3.983	3.989	-0.006	100	16006	0.1600	0.1751	
9 Chloromethane	52	4.190	4.191	-0.001	58	2169	0.1600	0.1806	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	4.190	4.197	-0.007	90	13070	0.1600	0.1790	
11 Acetaldehyde	44	4.360	4.365	-0.005	98	19567	0.8000	1.10	
12 Vinyl chloride	62	4.381	4.383	-0.002	99	6690	0.1600	0.1664	
14 Butadiene	54	4.469	4.479	-0.010	70	4849	0.1600	0.1771	
13 Butane	43	4.474	4.479	-0.005	84	9302	0.1600	0.1693	
15 Bromomethane	94	4.836	4.842	-0.006	97	6388	0.1600	0.1646	
16 Chloroethane	64	4.986	4.997	-0.011	88	2998	0.1600	0.1766	
17 Ethanol	31	5.094	5.099	-0.005	97	15182	0.8000	0.7799	
18 Vinyl bromide	106	5.327	5.334	-0.007	94	5117	0.1600	0.1582	
19 2-Methylbutane	43	5.373	5.382	-0.009	94	6888	0.1600	0.1626	
20 Trichlorofluoromethane	101	5.616	5.626	-0.010	99	14837	0.1600	0.1666	
21 Acrolein	56	5.647	5.646	0.001	89	1635	0.1600	0.1802	
22 Acetonitrile	40	5.720	5.715	0.005	98	2568	0.1600	0.1508	
23 Acetone	58	5.782	5.775	0.007	99	10813	0.4800	0.5749	
24 Pentane	72	5.864	5.865	-0.001	77	592	0.1600	0.1500	
25 Isopropyl alcohol	45	5.870	5.868	0.002	95	21694	0.4800	0.4669	
26 Ethyl ether	31	6.071	6.065	0.006	87	6079	0.1600	0.1567	
27 1,1-Dichloroethene	96	6.386	6.393	-0.007	95	4784	0.1600	0.1632	
28 Acrylonitrile	53	6.510	6.508	0.002	97	4234	0.1600	0.1642	
30 112TCTFE	101	6.572	6.575	-0.003	95	12353	0.1600	0.1635	
29 2-Methyl-2-propanol	59	6.552	6.535	0.017	93	7375	0.1600	0.1539	
31 Methylene Chloride	84	6.753	6.766	-0.013	93	5061	0.1600	0.1707	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.779	6.781	-0.002	96	5213	0.1600	0.1716	
33 Carbon disulfide	76	6.945	6.946	-0.001	99	15209	0.1600	0.1596	
34 trans-1,2-Dichloroethene	96	7.611	7.620	-0.009	95	4841	0.1600	0.1581	
35 2-Methylpentane	43	7.622	7.626	-0.004	91	11288	0.1600	0.1546	
36 Methyl tert-butyl ether	73	7.797	7.785	0.012	92	9461	0.1600	0.1464	
37 1,1-Dichloroethane	63	8.061	8.066	-0.005	99	10265	0.1600	0.1688	
38 Vinyl acetate	43	8.164	8.165	-0.001	99	10568	0.1600	0.1354	
40 Hexane	56	8.645	8.650	-0.005	78	3966	0.1600	0.1565	
39 2-Butanone (MEK)	72	8.666	8.660	0.006	97	2370	0.1600	0.1600	
41 Isopropyl ether	45	8.857	8.836	0.021	92	15829	0.1600	0.1468	
42 cis-1,2-Dichloroethene	96	9.084	9.086	-0.002	97	4788	0.1600	0.1544	
43 Ethyl acetate	43	9.281	9.277	0.004	98	12328	0.1600	0.1587	
44 Chloroform	83	9.431	9.438	-0.007	31	11983	0.1600	0.1632	
45 Tert-butyl ethyl ether	59	9.565	9.539	0.026	96	11715	0.1600	0.1417	
46 Tetrahydrofuran	42	9.916	9.897	0.019	89	5581	0.1600	0.1530	
47 1,1,1-Trichloroethane	97	10.490	10.492	-0.002	96	10587	0.1600	0.1590	
48 1,2-Dichloroethane	62	10.593	10.600	-0.007	96	7312	0.1600	0.1640	
50 Cyclohexane	69	11.064	11.072	-0.008	65	1641	0.1600	0.1332	
51 Benzene	78	11.074	11.076	-0.002	98	14569	0.1600	0.1618	
49 n-Butanol	31	11.059	11.038	0.021	43	1925	0.1600	0.1386	
52 Carbon tetrachloride	117	11.100	11.095	0.005	95	9468	0.1600	0.1699	
53 2,3-Dimethylpentane	71	11.172	11.172	0.000	87	2320	0.1600	0.1361	
54 Thiophene	84	11.343	11.344	-0.001	96	6749	0.1600	0.1425	
55 Isooctane	57	11.793	11.796	-0.003	93	18572	0.1600	0.1327	
56 n-Heptane	71	12.159	12.159	0.000	86	2894	0.1600	0.1128	
57 1,2-Dichloropropane	63	12.273	12.269	0.004	89	6318	0.1600	0.1640	
58 Trichloroethene	130	12.299	12.298	0.001	93	5965	0.1600	0.1474	
59 Dibromomethane	93	12.387	12.390	-0.003	92	7443	0.1600	0.1737	
60 Dichlorobromomethane	83	12.526	12.526	0.000	97	9634	0.1600	0.1510	
62 Methyl methacrylate	41	12.604	12.600	0.004	90	5168	0.1600	0.1236	
61 1,4-Dioxane	88	12.583	12.571	0.012	75	1551	0.1600	0.1210	
63 Methylcyclohexane	83	13.043	13.049	-0.006	84	5275	0.1600	0.1530	
64 4-Methyl-2-pentanone (MIBK)	43	13.462	13.452	0.010	95	11162	0.1600	0.1389	
65 cis-1,3-Dichloropropene	75	13.503	13.503	0.000	97	6091	0.1600	0.1393	
66 trans-1,3-Dichloropropene	75	14.180	14.185	-0.005	96	4654	0.1600	0.1436	
67 Toluene	91	14.310	14.310	0.000	91	12584	0.1600	0.1379	
68 1,1,2-Trichloroethane	83	14.382	14.386	-0.004	96	5294	0.1600	0.1614	
69 2-Hexanone	58	14.764	14.759	0.005	88	3278	0.1600	0.1128	
70 n-Octane	85	14.961	14.962	-0.001	91	2735	0.1600	0.1074	
71 Chlorodibromomethane	129	15.085	15.086	-0.001	96	7783	0.1600	0.1437	
72 Ethylene Dibromide	107	15.374	15.378	-0.004	97	7884	0.1600	0.1606	
73 Tetrachloroethene	129	15.436	15.439	-0.003	91	5841	0.1600	0.1527	
75 2,3-Dimethylheptane	43	16.294	16.295	-0.001	91	18466	0.1600	0.1571	
74 Chlorobenzene	112	16.305	16.309	-0.005	96	11831	0.1600	0.1600	
76 Ethylbenzene	91	16.584	16.585	-0.001	99	14053	0.1600	0.1272	
77 m-Xylene & p-Xylene	91	16.744	16.745	-0.001	97	22284	0.3200	0.2552	
78 n-Nonane	57	17.131	17.134	-0.003	88	7040	0.1600	0.1121	
80 Styrene	104	17.209	17.209	0.000	97	6242	0.1600	0.1177	
79 Bromoform	173	17.204	17.208	-0.004	83	5299	0.1600	0.1831	
81 o-Xylene	91	17.271	17.270	0.001	98	12502	0.1600	0.1367	
82 1,1,2,2-Tetrachloroethane	83	17.591	17.591	0.000	99	14234	0.1600	0.1759	
83 1,2,3-Trichloropropane	110	17.746	17.747	-0.001	97	3031	0.1600	0.1655	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	17.840	17.842	-0.002	91	15214	0.1600	0.1316	
85 N-Propylbenzene	120	18.356	18.356	0.000	98	3868	0.1600	0.1248	
86 2-Chlorotoluene	126	18.408	18.408	0.000	98	4189	0.1600	0.1413	
87 4-Ethyltoluene	105	18.496	18.496	0.000	97	13957	0.1600	0.1202	
88 1,3,5-Trimethylbenzene	120	18.563	18.567	-0.004	91	6525	0.1600	0.1647	
89 Alpha Methyl Styrene	118	18.785	18.791	-0.006	84	4809	0.1600	0.1198	
90 n-Decane	57	18.822	18.822	0.000	89	10860	0.1600	0.1182	
91 tert-Butylbenzene	119	18.982	18.979	0.003	88	15128	0.1600	0.1285	
92 1,2,4-Trimethylbenzene	105	18.992	18.991	0.001	96	14778	0.1600	0.1398	
93 sec-Butylbenzene	105	19.240	19.239	0.001	98	20326	0.1600	0.1304	
94 1,3-Dichlorobenzene	146	19.266	19.263	0.003	98	7979	0.1600	0.1454	
95 Benzyl chloride	91	19.333	19.333	0.000	97	6023	0.1600	0.2030	
96 1,4-Dichlorobenzene	146	19.344	19.345	-0.001	92	5850	0.1600	0.1445	
97 4-Isopropyltoluene	119	19.395	19.393	0.002	96	15504	0.1600	0.1229	
98 1,2,3-Trimethylbenzene	105	19.452	19.452	0.000	98	14395	0.1600	0.1418	
99 Butylcyclohexane	83	19.493	19.494	-0.001	85	12911	0.1600	0.1479	
101 2,3-Dihydroindene	117	19.695	19.695	0.000	89	12164	0.1600	0.1446	
100 1,2-Dichlorobenzene	146	19.700	19.699	0.001	97	9708	0.1600	0.1603	
103 n-Butylbenzene	91	19.814	19.814	0.000	95	16902	0.1600	0.1211	
102 Indene	116	19.819	19.824	-0.005	89	9491	0.1600	0.1316	
104 Undecane	57	20.098	20.098	0.000	87	10740	0.1600	0.1025	
105 1,2-Dibromo-3-Chloropropane	157	20.284	20.288	-0.004	88	4146	0.1600	0.1339	
106 1,2,4,5-Tetramethylbenzene	119	20.563	20.563	0.000	96	11896	0.1600	0.1550	
107 Dodecane	57	21.178	21.175	0.003	84	6708	0.1600	0.0908	
108 1,2,4-Trichlorobenzene	180	21.421	21.418	0.003	94	2587	0.1600	0.1674	
109 Naphthalene	128	21.556	21.559	-0.003	98	7096	0.1600	0.0852	
110 Hexachlorobutadiene	225	21.726	21.727	-0.001	91	11315	0.1600	0.1953	
111 1,2,3-Trichlorobenzene	180	21.793	21.793	0.000	95	4134	0.1600	0.1215	
112 2-Methylnaphthalene	142	22.341	22.340	0.001	94	465	0.1600	0.0352	
113 1-Methylnaphthalene	142	22.465	22.468	-0.003	96	1044	0.1600	0.0685	
A 115 C8 Range	1	14.961	(14.930-14.992)		0	44189	0.1600	0.1353	
S 116 Xylenes, Total	100				0		0.4800	0.3919	
S 117 1,2-Dichloroethene, Total	1				0		0.3200	0.3125	

Reagents:

40L5DQP_00020	Amount Added: 80.00	Units: mL	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

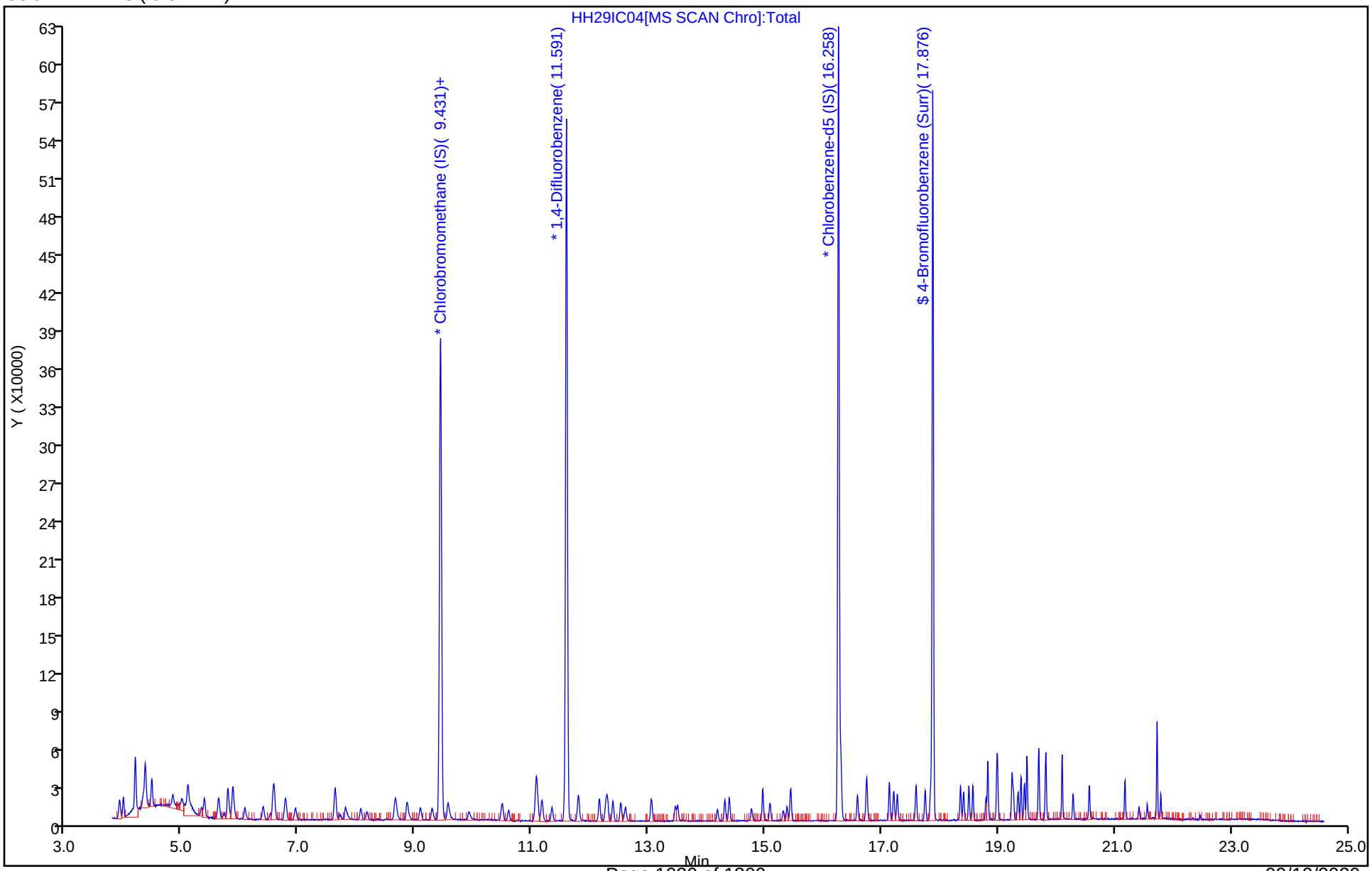
Report Date: 31-Aug-2020 12:24:52 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC04.D

Injection Date:	29-Aug-2020 21:03:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	IC L4			Worklist Smp#:	12
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

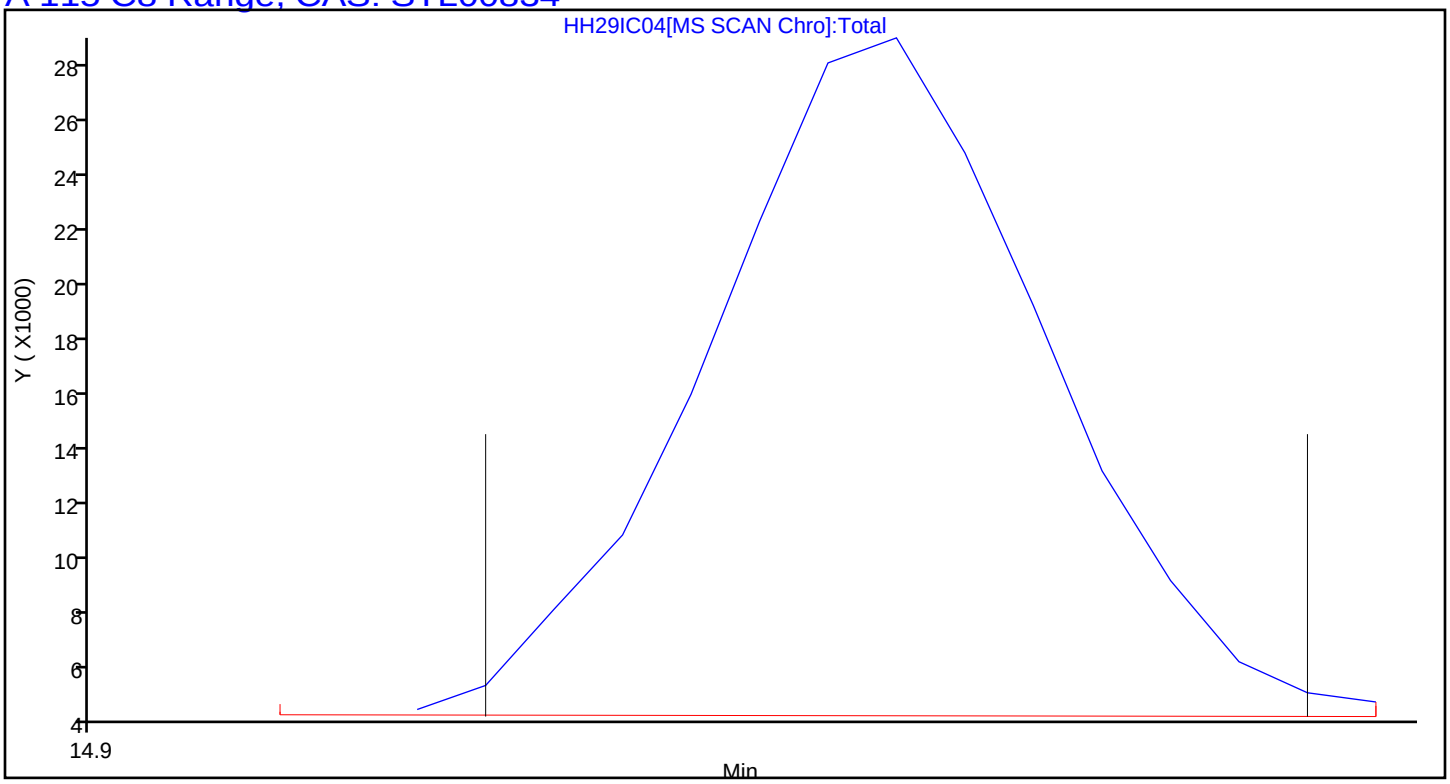


Report Date: 31-Aug-2020 12:24:52 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC04.D				
Injection Date:	29-Aug-2020 21:03:30	Instrument ID:	MH		
Lims ID:	IC L4				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	10	Worklist Smp#:	12
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 115 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC05.D
Lims ID: IC L5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 29-Aug-2020 21:58:30 ALS Bottle#: 10 Worklist Smp#: 13
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016451-013
Misc. Info.: 314717
Operator ID: HMT Instrument ID: MH
Sublist: chrom-MH_TO15*sub7

Method: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\MH_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 31-Aug-2020 12:24:59 Calib Date: 29-Aug-2020 23:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1064

First Level Reviewer: tajh Date: 30-Aug-2020 07:58:19

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.431	9.432	-0.001	98	116679	4.80	4.80	
* 2 1,4-Difluorobenzene	114	11.591	11.594	-0.003	95	501609	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	16.258	16.260	-0.002	88	331574	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.876	17.877	-0.001	91	177016	4.64	4.59	
6 Chlorodifluoromethane	51	3.921	3.920	0.001	97	26384	0.4000	0.4052	
7 Propene	41	3.937	3.935	0.002	98	11713	0.4000	0.4211	
8 Dichlorodifluoromethane	85	3.994	3.989	0.005	100	36737	0.4000	0.4165	
9 Chloromethane	52	4.190	4.191	-0.001	61	5319	0.4000	0.4591	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	4.200	4.197	0.003	92	29232	0.4000	0.4149	
11 Acetaldehyde	44	4.366	4.365	0.001	97	45941	2.00	2.67	
12 Vinyl chloride	62	4.386	4.383	0.003	99	15707	0.4000	0.4050	
14 Butadiene	54	4.479	4.479	0.000	70	11438	0.4000	0.4330	
13 Butane	43	4.479	4.479	0.000	83	23536	0.4000	0.4439	
15 Bromomethane	94	4.841	4.842	-0.001	97	16127	0.4000	0.4306	
16 Chloroethane	64	4.996	4.997	-0.001	85	6811	0.4000	0.4159	
17 Ethanol	31	5.100	5.099	0.001	97	39613	2.00	2.11	
18 Vinyl bromide	106	5.332	5.334	-0.002	98	12682	0.4000	0.4063	
19 2-Methylbutane	43	5.384	5.382	0.002	91	15686	0.4000	0.3838	
20 Trichlorofluoromethane	101	5.627	5.626	0.001	99	35471	0.4000	0.4128	
21 Acrolein	56	5.642	5.646	-0.004	92	3225	0.4000	0.3550	
22 Acetonitrile	40	5.715	5.715	0.000	99	7583	0.4000	0.4617	
23 Acetone	58	5.777	5.775	0.002	99	24383	1.20	1.34	
24 Pentane	72	5.864	5.865	-0.001	77	1546	0.4000	0.4059	
25 Isopropyl alcohol	45	5.864	5.868	-0.004	79	50090	1.20	1.12	
26 Ethyl ether	31	6.066	6.065	0.001	87	13675	0.4000	0.3654	
27 1,1-Dichloroethene	96	6.392	6.393	-0.001	96	10509	0.4000	0.3715	
28 Acrylonitrile	53	6.505	6.508	-0.003	93	9683	0.4000	0.3892	
29 2-Methyl-2-propanol	59	6.536	6.535	0.001	93	16340	0.4000	0.3534	
30 112TCTFE	101	6.578	6.575	0.003	94	30231	0.4000	0.4148	
31 Methylene Chloride	84	6.769	6.766	0.003	95	12483	0.4000	0.4364	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.779	6.781	-0.002	96	11332	0.4000	0.3867	
33 Carbon disulfide	76	6.945	6.946	-0.001	100	36831	0.4000	0.4007	
34 trans-1,2-Dichloroethene	96	7.622	7.620	0.002	95	11553	0.4000	0.3911	
35 2-Methylpentane	43	7.627	7.626	0.001	95	26349	0.4000	0.3740	
36 Methyl tert-butyl ether	73	7.782	7.785	-0.003	93	21645	0.4000	0.3471	
37 1,1-Dichloroethane	63	8.061	8.066	-0.005	99	23786	0.4000	0.4055	
38 Vinyl acetate	43	8.170	8.165	0.005	98	24579	0.4000	0.3264	
40 Hexane	56	8.650	8.650	0.000	71	9246	0.4000	0.3782	
39 2-Butanone (MEK)	72	8.661	8.660	0.001	96	5816	0.4000	0.4070	
41 Isopropyl ether	45	8.841	8.836	0.005	92	37008	0.4000	0.3557	
42 cis-1,2-Dichloroethene	96	9.084	9.086	-0.002	96	11349	0.4000	0.3794	
43 Ethyl acetate	43	9.276	9.277	-0.001	98	27595	0.4000	0.3682	
44 Chloroform	83	9.436	9.438	-0.002	95	28795	0.4000	0.4064	
45 Tert-butyl ethyl ether	59	9.539	9.539	0.000	96	27765	0.4000	0.3480	
46 Tetrahydrofuran	42	9.896	9.897	-0.001	89	12991	0.4000	0.3691	
47 1,1,1-Trichloroethane	97	10.490	10.492	-0.002	96	25975	0.4000	0.4044	
48 1,2-Dichloroethane	62	10.599	10.600	-0.001	96	17988	0.4000	0.3944	
49 n-Butanol	31	11.048	11.038	0.010	89	5338	0.4000	0.3757	
50 Cyclohexane	69	11.074	11.072	0.002	71	4760	0.4000	0.3777	
51 Benzene	78	11.079	11.076	0.003	97	36921	0.4000	0.4009	
52 Carbon tetrachloride	117	11.100	11.095	0.005	96	25244	0.4000	0.4428	
53 2,3-Dimethylpentane	71	11.172	11.172	0.000	88	6357	0.4000	0.3645	
54 Thiophene	84	11.343	11.344	-0.001	96	18120	0.4000	0.3740	
55 Isooctane	57	11.798	11.796	0.002	96	53753	0.4000	0.3754	
56 n-Heptane	71	12.154	12.159	-0.005	92	9346	0.4000	0.3561	
57 1,2-Dichloropropane	63	12.263	12.269	-0.006	87	15250	0.4000	0.3869	
58 Trichloroethene	130	12.294	12.298	-0.004	95	15077	0.4000	0.3641	
59 Dibromomethane	93	12.392	12.390	0.002	95	16878	0.4000	0.3850	
60 Dichlorobromomethane	83	12.521	12.526	-0.005	98	25071	0.4000	0.3840	
61 1,4-Dioxane	88	12.568	12.571	-0.003	92	4471	0.4000	0.3408	
62 Methyl methacrylate	41	12.599	12.600	-0.001	89	15220	0.4000	0.3557	
63 Methylcyclohexane	83	13.049	13.049	-0.001	87	15301	0.4000	0.3391	
64 4-Methyl-2-pentanone (MIBK)	43	13.452	13.452	0.000	95	25748	0.4000	0.3132	
65 cis-1,3-Dichloropropene	75	13.503	13.503	0.000	96	14738	0.4000	0.3296	
66 trans-1,3-Dichloropropene	75	14.186	14.185	0.001	96	8657	0.4000	0.2853	
67 Toluene	91	14.310	14.310	0.000	92	29243	0.4000	0.3423	
68 1,1,2-Trichloroethane	83	14.387	14.386	0.001	97	12630	0.4000	0.4114	
69 2-Hexanone	58	14.764	14.759	0.005	88	6955	0.4000	0.2558	
70 n-Octane	85	14.961	14.962	-0.001	94	7788	0.4000	0.3267	
71 Chlorodibromomethane	129	15.085	15.086	-0.001	96	19161	0.4000	0.3780	
72 Ethylene Dibromide	107	15.374	15.378	-0.004	98	15646	0.4000	0.3405	
73 Tetrachloroethene	129	15.441	15.439	0.002	93	13570	0.4000	0.3790	
75 2,3-Dimethylheptane	43	16.294	16.295	-0.001	92	45111	0.4000	0.4100	
74 Chlorobenzene	112	16.305	16.309	-0.004	94	28248	0.4000	0.4083	
76 Ethylbenzene	91	16.589	16.585	0.004	99	34216	0.4000	0.3309	
77 m-Xylene & p-Xylene	91	16.744	16.745	-0.001	98	60126	0.8000	0.7358	
78 n-Nonane	57	17.137	17.134	0.003	91	19548	0.4000	0.3325	
79 Bromoform	173	17.209	17.208	0.001	88	12706	0.4000	0.4412	
80 Styrene	104	17.209	17.209	0.000	98	16959	0.4000	0.3416	
81 o-Xylene	91	17.271	17.270	0.001	99	32930	0.4000	0.3847	
82 1,1,2,2-Tetrachloroethane	83	17.592	17.591	0.001	98	31726	0.4000	0.4189	
83 1,2,3-Trichloropropane	110	17.747	17.747	0.000	97	6706	0.4000	0.3911	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	17.840	17.842	-0.002	97	36786	0.4000	0.3399	
85 N-Propylbenzene	120	18.356	18.356	0.000	98	8952	0.4000	0.3086	
86 2-Chlorotoluene	126	18.408	18.408	0.000	98	10698	0.4000	0.3856	
87 4-Ethyltoluene	105	18.496	18.496	0.000	98	39753	0.4000	0.3658	
88 1,3,5-Trimethylbenzene	120	18.563	18.567	-0.004	92	18369	0.4000	0.4002	
89 Alpha Methyl Styrene	118	18.791	18.791	0.000	85	10989	0.4000	0.2924	
90 n-Decane	57	18.822	18.822	0.000	89	33400	0.4000	0.3884	
91 tert-Butylbenzene	119	18.982	18.979	0.003	89	42959	0.4000	0.3900	
92 1,2,4-Trimethylbenzene	105	18.987	18.991	-0.004	95	42752	0.4000	0.4321	
93 sec-Butylbenzene	105	19.240	19.239	0.001	98	53752	0.4000	0.3685	
94 1,3-Dichlorobenzene	146	19.261	19.263	-0.002	97	19220	0.4000	0.3742	
95 Benzyl chloride	91	19.333	19.333	0.000	97	14926	0.4000	0.3566	
96 1,4-Dichlorobenzene	146	19.344	19.345	-0.001	91	13769	0.4000	0.3634	
97 4-Isopropyltoluene	119	19.390	19.393	-0.003	96	48957	0.4000	0.4146	
98 1,2,3-Trimethylbenzene	105	19.452	19.452	0.000	99	41656	0.4000	0.4383	
99 Butylcyclohexane	83	19.493	19.494	-0.001	89	35771	0.4000	0.4377	
101 2,3-Dihydroindene	117	19.695	19.695	0.000	90	30416	0.4000	0.3862	
100 1,2-Dichlorobenzene	146	19.695	19.699	-0.004	97	23005	0.4000	0.4058	
103 n-Butylbenzene	91	19.814	19.814	0.000	97	52853	0.4000	0.4046	
102 Indene	116	19.824	19.824	0.000	90	26876	0.4000	0.3980	
104 Undecane	57	20.098	20.098	0.000	93	33280	0.4000	0.3392	
105 1,2-Dibromo-3-Chloropropane	157	20.289	20.288	0.001	89	10376	0.4000	0.3580	
106 1,2,4,5-Tetramethylbenzene	119	20.563	20.563	0.000	96	32591	0.4000	0.3340	
107 Dodecane	57	21.178	21.175	0.003	87	17141	0.4000	0.2480	
108 1,2,4-Trichlorobenzene	180	21.416	21.418	-0.002	94	6075	0.4000	0.2987	
109 Naphthalene	128	21.561	21.559	0.002	98	16130	0.4000	0.2069	
110 Hexachlorobutadiene	225	21.726	21.727	-0.001	90	22566	0.4000	0.4160	
111 1,2,3-Trichlorobenzene	180	21.793	21.793	0.000	94	8519	0.4000	0.2675	
112 2-Methylnaphthalene	142	22.336	22.340	-0.004	95	481	0.4000	0.0389	
113 1-Methylnaphthalene	142	22.465	22.468	-0.003	95	831	0.4000	0.0582	
A 115 C8 Range	1	14.961	(14.919-15.002)		0	113223	0.4000	0.3389	
S 116 Xylenes, Total	100				0		1.20	1.12	
S 117 1,2-Dichloroethene, Total	1				0		0.8000	0.7705	

Reagents:

40L5DQP_00020	Amount Added: 200.00	Units: mL	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

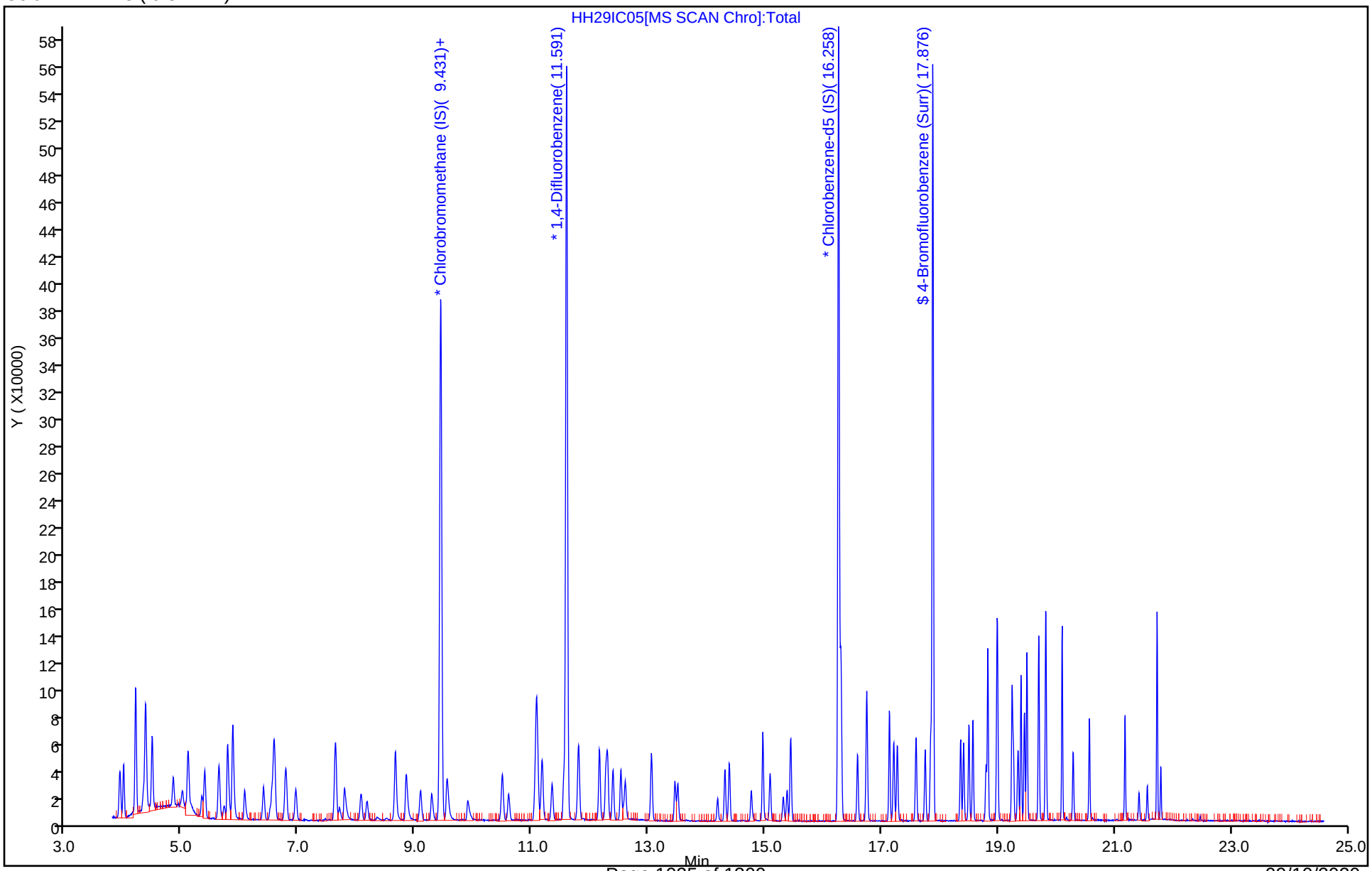
Report Date: 31-Aug-2020 12:25:00 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC05.D

Injection Date:	29-Aug-2020 21:58:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	IC L5			Worklist Smp#:	13
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

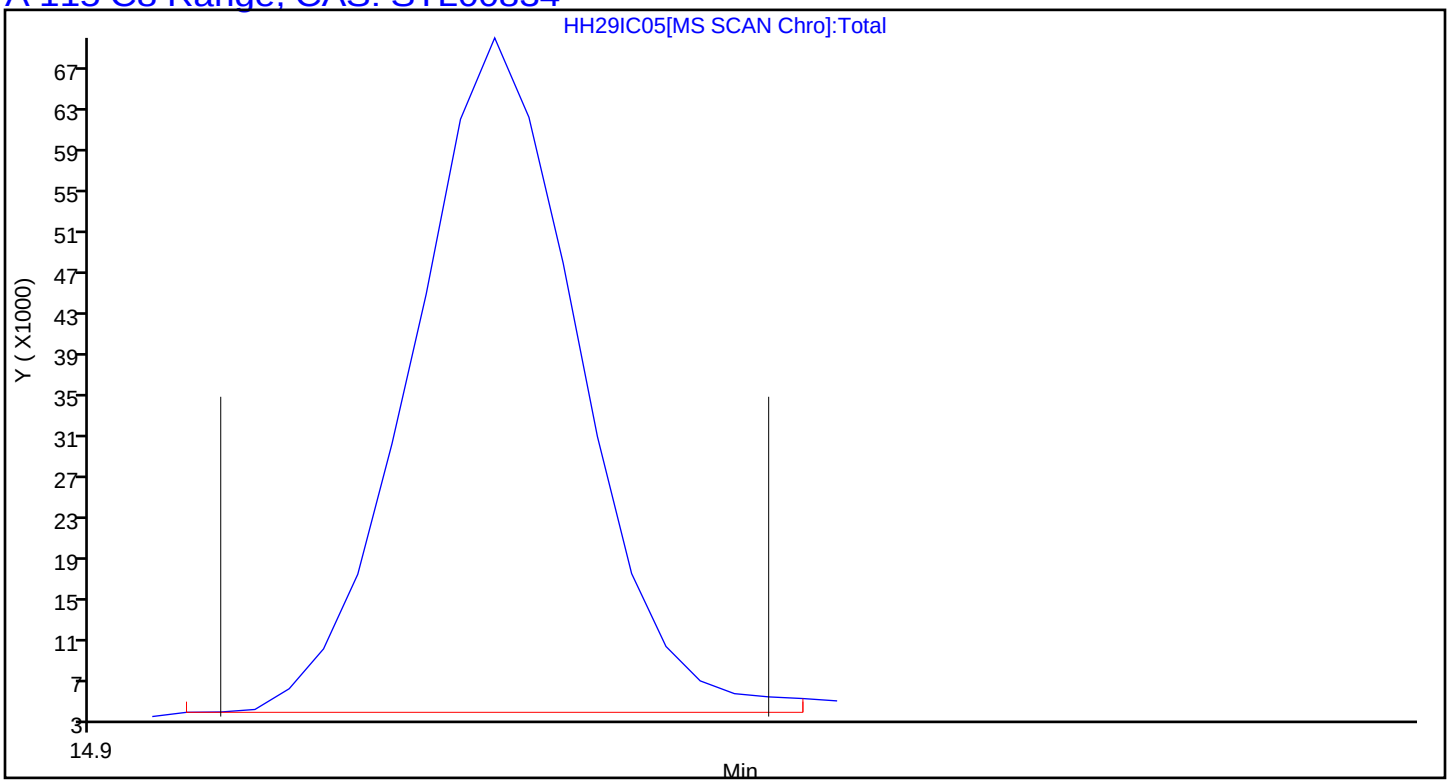
Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC05.D				
Injection Date:	29-Aug-2020 21:58:30	Instrument ID:	MH		
Lims ID:	IC L5				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	10	Worklist Smp#:	13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 115 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC06.D
Lims ID: IC L6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 29-Aug-2020 22:57:30 ALS Bottle#: 11 Worklist Smp#: 14
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016451-014
Misc. Info.: 314716
Operator ID: HMT Instrument ID: MH
Sublist: chrom-MH_TO15*sub7

Method: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\MH_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 31-Aug-2020 12:25:10 Calib Date: 29-Aug-2020 23:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1064

First Level Reviewer: barlozhetskayaa Date: 31-Aug-2020 09:52:50

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.431	9.432	-0.001	97	126280	4.80	4.80	
* 2 1,4-Difluorobenzene	114	11.591	11.594	-0.003	95	545458	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	16.258	16.260	-0.002	88	399413	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.876	17.877	-0.001	92	216986	4.64	4.68	
6 Chlorodifluoromethane	51	3.916	3.920	-0.004	97	71178	1.00	1.01	
7 Propene	41	3.932	3.935	-0.003	97	32766	1.00	1.09	
8 Dichlorodifluoromethane	85	3.988	3.989	-0.001	100	98306	1.00	1.03	
9 Chloromethane	52	4.190	4.191	-0.001	59	13487	1.00	1.08	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	4.195	4.197	-0.002	91	78601	1.00	1.03	
11 Acetaldehyde	44	4.366	4.365	0.001	97	112582	5.00	6.05	
12 Vinyl chloride	62	4.381	4.383	-0.002	99	42471	1.00	1.01	
14 Butadiene	54	4.479	4.479	0.000	68	30976	1.00	1.08	
13 Butane	43	4.479	4.479	0.000	84	62791	1.00	1.09	
15 Bromomethane	94	4.841	4.842	-0.001	98	41408	1.00	1.02	
16 Chloroethane	64	4.996	4.997	-0.001	88	18172	1.00	1.03	
17 Ethanol	31	5.089	5.099	-0.010	98	103194	5.00	5.08	
18 Vinyl bromide	106	5.332	5.334	-0.002	98	33670	1.00	1.00	
19 2-Methylbutane	43	5.384	5.382	0.002	93	43836	1.00	0.99	
20 Trichlorofluoromethane	101	5.627	5.626	0.001	99	92071	1.00	0.99	
21 Acrolein	56	5.642	5.646	-0.004	95	8663	1.00	0.8618	
22 Acetonitrile	40	5.710	5.715	-0.005	99	17405	1.00	0.9791	
23 Acetone	58	5.766	5.775	-0.009	99	67466	3.00	3.44	
24 Pentane	72	5.865	5.865	0.000	95	4670	1.00	1.13	
25 Isopropyl alcohol	45	5.849	5.868	-0.019	92	135930	3.00	2.80	
26 Ethyl ether	31	6.056	6.065	-0.009	89	40634	1.00	1.00	
27 1,1-Dichloroethene	96	6.392	6.393	-0.001	96	29740	1.00	0.9715	
28 Acrylonitrile	53	6.505	6.508	-0.003	92	26342	1.00	0.9783	
29 2-Methyl-2-propanol	59	6.516	6.535	-0.019	93	45014	1.00	0.8994	
30 112TCTFE	101	6.573	6.575	-0.002	95	77735	1.00	0.9854	
31 Methylene Chloride	84	6.769	6.766	0.003	96	31182	1.00	1.01	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.785	6.781	0.004	95	28782	1.00	0.9074	
33 Carbon disulfide	76	6.945	6.946	-0.001	100	98622	1.00	0.99	
34 trans-1,2-Dichloroethene	96	7.622	7.620	0.002	95	31637	1.00	0.9896	
35 2-Methylpentane	43	7.627	7.626	0.001	96	76485	1.00	1.00	
36 Methyl tert-butyl ether	73	7.767	7.785	-0.018	93	64559	1.00	0.9566	
37 1,1-Dichloroethane	63	8.061	8.066	-0.005	100	62058	1.00	0.9775	
38 Vinyl acetate	43	8.165	8.165	-0.001	99	74856	1.00	0.9185	
40 Hexane	56	8.650	8.650	0.000	77	26520	1.00	1.00	
39 2-Butanone (MEK)	72	8.645	8.660	-0.015	95	16000	1.00	1.03	
41 Isopropyl ether	45	8.821	8.836	-0.015	95	113438	1.00	1.01	
42 cis-1,2-Dichloroethene	96	9.084	9.086	-0.002	97	31585	1.00	0.9756	
43 Ethyl acetate	43	9.265	9.277	-0.012	98	77708	1.00	0.9580	
44 Chloroform	83	9.436	9.438	-0.002	98	73917	1.00	0.9639	
45 Tert-butyl ethyl ether	59	9.524	9.539	-0.015	98	84652	1.00	0.9804	
46 Tetrahydrofuran	42	9.875	9.897	-0.022	92	37004	1.00	0.9715	
47 1,1,1-Trichloroethane	97	10.490	10.492	-0.002	97	66743	1.00	0.9601	
48 1,2-Dichloroethane	62	10.599	10.600	-0.001	96	47284	1.00	0.9534	
49 n-Butanol	31	11.023	11.038	-0.015	59	13235	1.00	0.8566	
50 Cyclohexane	69	11.074	11.072	0.002	90	13610	1.00	0.99	
51 Benzene	78	11.074	11.076	-0.002	97	99057	1.00	0.9890	
52 Carbon tetrachloride	117	11.095	11.095	0.000	95	61795	1.00	1.00	
53 2,3-Dimethylpentane	71	11.172	11.172	0.000	93	19407	1.00	1.02	
54 Thiophene	84	11.343	11.344	-0.001	97	52043	1.00	0.9879	
55 Isooctane	57	11.798	11.796	0.002	97	156443	1.00	1.00	
56 n-Heptane	71	12.154	12.159	-0.005	94	28489	1.00	1.00	
57 1,2-Dichloropropane	63	12.268	12.269	-0.001	88	41034	1.00	0.9573	
58 Trichloroethene	130	12.294	12.298	-0.004	95	42319	1.00	0.9397	
59 Dibromomethane	93	12.387	12.390	-0.003	94	49560	1.00	1.04	
60 Dichlorobromomethane	83	12.527	12.526	0.001	98	66609	1.00	0.9383	
61 1,4-Dioxane	88	12.558	12.571	-0.013	96	12361	1.00	0.8666	
62 Methyl methacrylate	41	12.594	12.600	-0.006	90	45630	1.00	0.9807	
63 Methylcyclohexane	83	13.049	13.049	0.000	93	49859	1.00	0.9131	
64 4-Methyl-2-pentanone (MIBK)	43	13.441	13.452	-0.011	98	89525	1.00	1.00	
65 cis-1,3-Dichloropropene	75	13.498	13.503	-0.005	98	48811	1.00	1.00	
66 trans-1,3-Dichloropropene	75	14.186	14.185	0.001	98	35446	1.00	0.9698	
67 Toluene	91	14.310	14.310	0.000	92	104851	1.00	1.02	
68 1,1,2-Trichloroethane	83	14.382	14.386	-0.004	96	36787	1.00	0.99	
69 2-Hexanone	58	14.754	14.759	-0.005	89	32100	1.00	0.9799	
70 n-Octane	85	14.961	14.962	-0.001	96	29562	1.00	1.03	
71 Chlorodibromomethane	129	15.085	15.086	-0.001	97	54160	1.00	0.8869	
72 Ethylene Dibromide	107	15.380	15.378	0.002	97	51730	1.00	0.9345	
73 Tetrachloroethene	129	15.436	15.439	-0.003	94	40597	1.00	0.9412	
75 2,3-Dimethylheptane	43	16.294	16.295	-0.001	93	133014	1.00	1.00	
74 Chlorobenzene	112	16.310	16.309	0.001	94	80847	1.00	0.9700	
76 Ethylbenzene	91	16.584	16.585	-0.001	99	124500	1.00	1.00	
77 m-Xylene & p-Xylene	91	16.744	16.745	-0.001	98	199075	2.00	2.02	
78 n-Nonane	57	17.132	17.134	-0.002	94	71082	1.00	1.00	
80 Styrene	104	17.209	17.209	0.000	98	61513	1.00	1.03	
79 Bromoform	173	17.209	17.208	0.001	69	30128	1.00	0.8018	
81 o-Xylene	91	17.266	17.270	-0.004	98	103713	1.00	1.01	
82 1,1,2,2-Tetrachloroethane	83	17.592	17.591	0.001	98	89392	1.00	0.9798	
83 1,2,3-Trichloropropane	110	17.747	17.747	0.000	97	20078	1.00	0.9722	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	17.840	17.842	-0.002	97	132293	1.00	1.01	
85 N-Propylbenzene	120	18.357	18.356	0.001	99	33634	1.00	0.9624	
86 2-Chlorotoluene	126	18.408	18.408	0.000	98	31701	1.00	0.9487	
87 4-Ethyltoluene	105	18.496	18.496	0.000	98	123694	1.00	0.9449	
88 1,3,5-Trimethylbenzene	120	18.568	18.567	0.001	92	53265	1.00	0.8967	
89 Alpha Methyl Styrene	118	18.791	18.791	0.000	87	43249	1.00	0.9554	
90 n-Decane	57	18.822	18.822	0.000	87	98138	1.00	0.9475	
91 tert-Butylbenzene	119	18.977	18.979	-0.002	92	125306	1.00	0.9444	
92 1,2,4-Trimethylbenzene	105	18.987	18.991	-0.004	95	119057	1.00	1.00	
93 sec-Butylbenzene	105	19.235	19.239	-0.004	99	170946	1.00	0.9729	
94 1,3-Dichlorobenzene	146	19.261	19.263	-0.002	98	56119	1.00	0.9071	
95 Benzyl chloride	91	19.333	19.333	0.000	97	49639	1.00	0.7911	
96 1,4-Dichlorobenzene	146	19.344	19.345	-0.001	93	45361	1.00	0.99	
97 4-Isopropyltoluene	119	19.390	19.393	-0.003	97	152230	1.00	1.07	
98 1,2,3-Trimethylbenzene	105	19.452	19.452	0.000	99	118943	1.00	1.04	
99 Butylcyclohexane	83	19.494	19.494	0.000	89	99985	1.00	1.02	
101 2,3-Dihydroindene	117	19.695	19.695	0.000	92	94480	1.00	1.00	
100 1,2-Dichlorobenzene	146	19.700	19.699	0.001	97	64192	1.00	0.9401	
103 n-Butylbenzene	91	19.814	19.814	0.000	97	160783	1.00	1.02	
102 Indene	116	19.824	19.824	0.000	93	80808	1.00	0.99	
104 Undecane	57	20.098	20.098	0.000	93	114678	1.00	0.9704	
105 1,2-Dibromo-3-Chloropropane	157	20.290	20.288	0.002	94	30683	1.00	0.8790	
106 1,2,4,5-Tetramethylbenzene	119	20.563	20.563	0.000	97	132594	1.00	0.9806	
107 Dodecane	57	21.173	21.175	-0.002	90	88999	1.00	1.07	
108 1,2,4-Trichlorobenzene	180	21.416	21.418	-0.002	94	26147	1.00	0.8605	
109 Naphthalene	128	21.561	21.559	0.002	99	78327	1.00	0.8358	
110 Hexachlorobutadiene	225	21.726	21.727	-0.001	91	67162	1.00	1.03	
111 1,2,3-Trichlorobenzene	180	21.794	21.793	0.001	94	36670	1.00	0.9559	
112 2-Methylnaphthalene	142	22.341	22.340	0.001	99	3986	1.00	0.2676	
113 1-Methylnaphthalene	142	22.471	22.468	0.003	97	7239	1.00	0.4211	
A 115 C8 Range	1	14.953	(14.920-15.002)		0	358784	1.00	0.9875	
S 116 Xylenes, Total	100				0		3.00	3.03	
S 117 1,2-Dichloroethene, Total	1				0		2.00	1.97	

Reagents:

40L6DQP_00019	Amount Added: 200.00	Units: mL	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

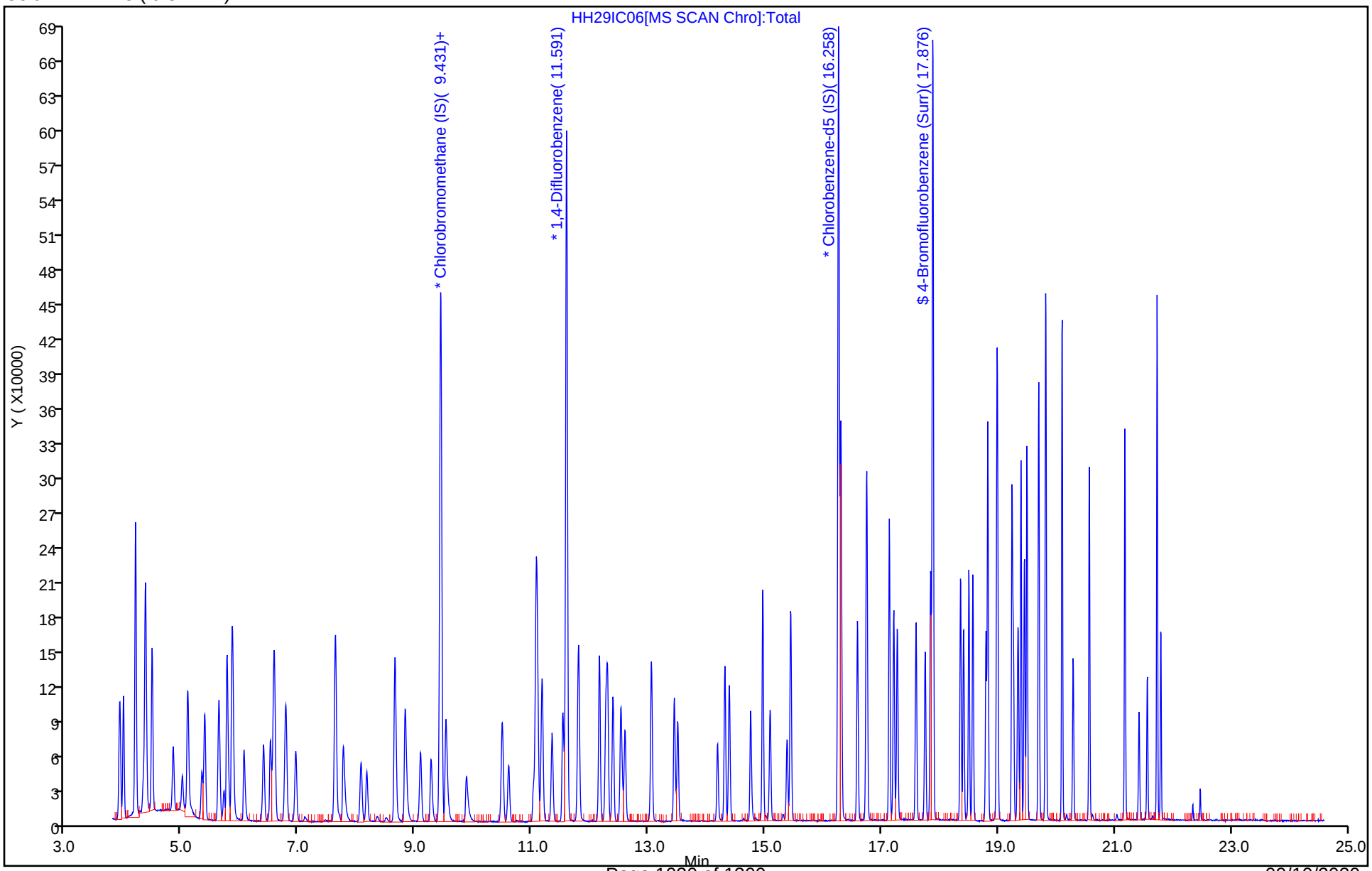
Report Date: 31-Aug-2020 12:25:12 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC06.D

Injection Date:	29-Aug-2020 22:57:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	IC L6			Worklist Smp#:	14
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

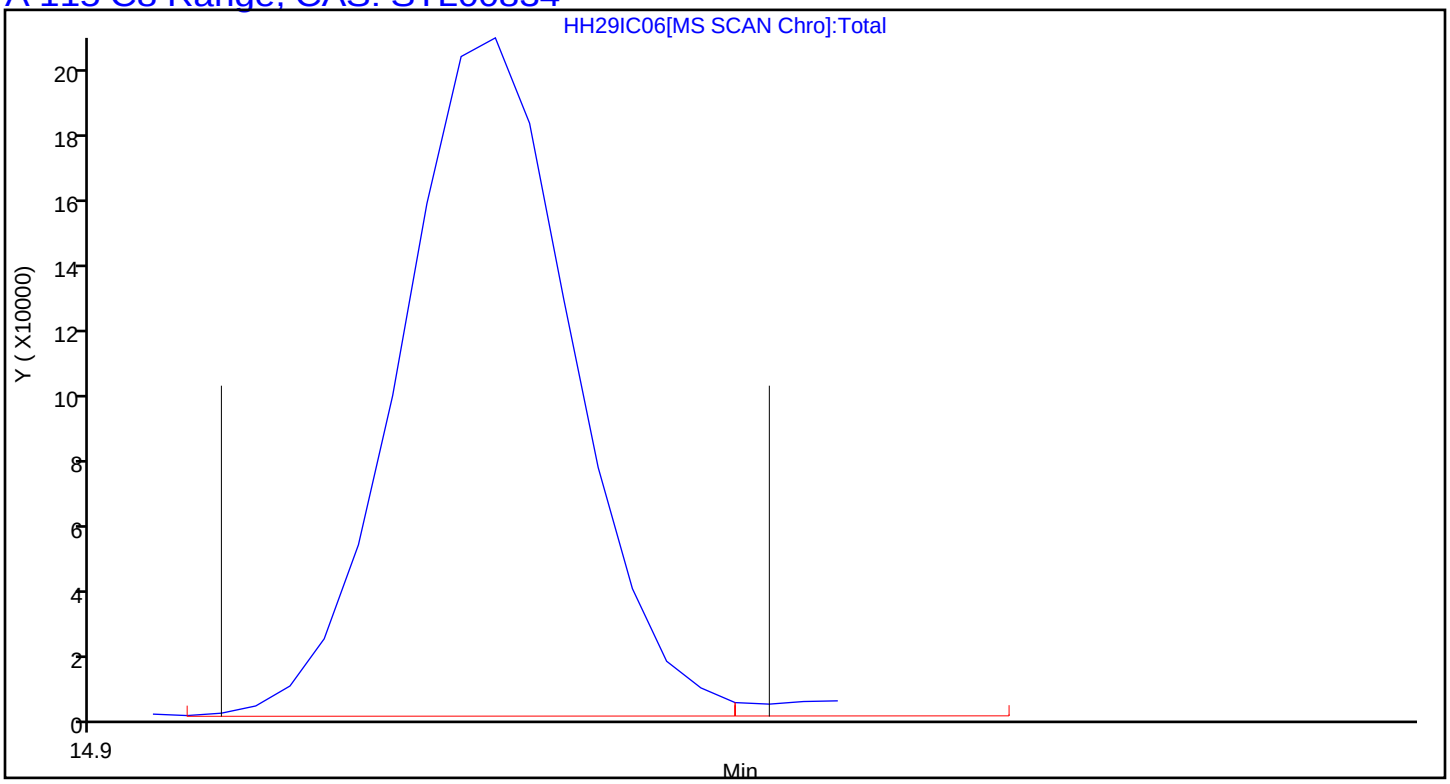


Report Date: 31-Aug-2020 12:25:12 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC06.D				
Injection Date:	29-Aug-2020 22:57:30	Instrument ID:	MH		
Lims ID:	IC L6				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	11	Worklist Smp#:	14
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 115 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D
Lims ID: ICIS L7
Client ID:
Sample Type: ICIS Calib Level: 7
Inject. Date: 29-Aug-2020 23:57:30 ALS Bottle#: 12 Worklist Smp#: 15
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016451-015
Misc. Info.: 314608
Operator ID: HMT Instrument ID: MH
Sublist: chrom-MH_TO15*sub7

Method: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\MH_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 31-Aug-2020 12:25:20 Calib Date: 29-Aug-2020 23:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1064

First Level Reviewer: tajh Date: 30-Aug-2020 07:56:08

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.436	9.432	0.004	96	124211	4.80	4.80	
* 2 1,4-Difluorobenzene	114	11.596	11.594	0.002	95	547740	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	16.263	16.260	0.003	87	401461	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.876	17.877	-0.001	93	226803	4.64	4.86	
6 Chlorodifluoromethane	51	3.921	3.920	0.001	97	135250	2.00	1.95	
7 Propene	41	3.937	3.935	0.002	99	61039	2.00	2.06	
8 Dichlorodifluoromethane	85	3.994	3.989	0.005	100	194412	2.00	2.07	
9 Chloromethane	52	4.200	4.191	0.009	71	26488	2.00	2.15	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	4.200	4.197	0.003	94	144701	2.00	1.93	
11 Acetaldehyde	44	4.366	4.365	0.001	97	192758	10.0	10.5	
12 Vinyl chloride	62	4.386	4.383	0.003	99	80749	2.00	1.96	
14 Butadiene	54	4.485	4.479	0.005	68	59336	2.00	2.11	
13 Butane	43	4.485	4.479	0.005	84	125013	2.00	2.21	
15 Bromomethane	94	4.846	4.842	0.004	98	79903	2.00	2.00	
16 Chloroethane	64	5.007	4.997	0.009	87	34873	2.00	2.00	
17 Ethanol	31	5.094	5.099	-0.005	98	235349	10.0	11.8	
18 Vinyl bromide	106	5.337	5.334	0.003	98	65698	2.00	1.98	
19 2-Methylbutane	43	5.389	5.382	0.007	93	86376	2.00	1.99	
20 Trichlorofluoromethane	101	5.627	5.626	0.001	99	179500	2.00	1.96	
21 Acrolein	56	5.647	5.646	0.001	94	17382	2.00	1.74	
22 Acetonitrile	40	5.715	5.715	0.000	100	37274	2.00	2.13	
23 Acetone	58	5.761	5.775	-0.014	99	120332	6.00	6.23	
25 Isopropyl alcohol	45	5.844	5.868	-0.024	97	309623	6.00	6.49	
24 Pentane	72	5.870	5.865	0.005	96	9103	2.00	2.25	
26 Ethyl ether	31	6.051	6.065	-0.014	91	82949	2.00	2.08	
27 1,1-Dichloroethene	96	6.397	6.393	0.004	96	59790	2.00	1.99	
28 Acrylonitrile	53	6.505	6.508	-0.003	96	55721	2.00	2.10	
29 2-Methyl-2-propanol	59	6.495	6.535	-0.040	94	101194	2.00	2.06	
30 112TCTFE	101	6.578	6.575	0.003	96	151488	2.00	1.95	
31 Methylene Chloride	84	6.769	6.766	0.003	96	60826	2.00	2.00	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.784	6.781	0.003	94	57903	2.00	1.86	
33 Carbon disulfide	76	6.950	6.946	0.004	100	196676	2.00	2.01	
34 trans-1,2-Dichloroethene	96	7.622	7.620	0.002	95	63666	2.00	2.02	
35 2-Methylpentane	43	7.632	7.626	0.006	96	160016	2.00	2.13	
36 Methyl tert-butyl ether	73	7.751	7.785	-0.034	94	135102	2.00	2.04	
37 1,1-Dichloroethane	63	8.071	8.066	0.005	100	124325	2.00	1.99	
38 Vinyl acetate	43	8.164	8.165	-0.001	100	164085	2.00	2.05	
39 2-Butanone (MEK)	72	8.640	8.660	-0.020	96	30439	2.00	2.00	
40 Hexane	56	8.650	8.650	0.000	77	54603	2.00	2.10	
41 Isopropyl ether	45	8.816	8.836	-0.020	96	239411	2.00	2.16	
42 cis-1,2-Dichloroethene	96	9.090	9.086	0.004	97	63040	2.00	1.98	
43 Ethyl acetate	43	9.265	9.277	-0.012	98	160162	2.00	2.01	
44 Chloroform	83	9.441	9.438	0.003	97	145980	2.00	1.94	
45 Tert-butyl ethyl ether	59	9.518	9.539	-0.021	98	180364	2.00	2.12	
46 Tetrahydrofuran	42	9.865	9.897	-0.032	93	79287	2.00	2.12	
47 1,1,1-Trichloroethane	97	10.490	10.492	-0.002	96	132832	2.00	1.94	
48 1,2-Dichloroethane	62	10.599	10.600	-0.001	96	93346	2.00	1.87	
49 n-Butanol	31	11.017	11.038	-0.021	95	30500	2.00	1.97	
51 Benzene	78	11.074	11.076	-0.002	98	198272	2.00	1.97	
50 Cyclohexane	69	11.074	11.072	0.002	82	28513	2.00	2.07	
52 Carbon tetrachloride	117	11.095	11.095	0.000	96	93449	2.00	1.50	
53 2,3-Dimethylpentane	71	11.172	11.172	0.000	93	40490	2.00	2.13	
54 Thiophene	84	11.348	11.344	0.004	96	107154	2.00	2.03	
55 Isooctane	57	11.798	11.796	0.002	98	329728	2.00	2.11	
56 n-Heptane	71	12.160	12.159	0.001	95	59951	2.00	2.09	
57 1,2-Dichloropropane	63	12.268	12.269	-0.001	90	83631	2.00	1.94	
58 Trichloroethene	130	12.299	12.298	0.001	95	84978	2.00	1.88	
59 Dibromomethane	93	12.392	12.390	0.002	94	89996	2.00	1.88	
60 Dichlorobromomethane	83	12.526	12.526	0.000	98	139005	2.00	1.95	
61 1,4-Dioxane	88	12.537	12.571	-0.034	94	32004	2.00	2.23	
62 Methyl methacrylate	41	12.594	12.600	-0.006	90	96083	2.00	2.06	
63 Methylcyclohexane	83	13.048	13.049	-0.001	91	106694	2.00	1.89	
64 4-Methyl-2-pentanone (MIBK)	43	13.436	13.452	-0.016	98	187155	2.00	2.08	
65 cis-1,3-Dichloropropene	75	13.503	13.503	0.000	97	100971	2.00	2.07	
66 trans-1,3-Dichloropropene	75	14.186	14.185	0.001	97	73899	2.00	2.01	
67 Toluene	91	14.310	14.310	0.000	92	217553	2.00	2.10	
68 1,1,2-Trichloroethane	83	14.387	14.386	0.001	97	74295	2.00	2.00	
69 2-Hexanone	58	14.749	14.759	-0.010	90	72367	2.00	2.20	
70 n-Octane	85	14.961	14.962	-0.001	97	63752	2.00	2.21	
71 Chlorodibromomethane	129	15.085	15.086	-0.001	97	128589	2.00	2.09	
72 Ethylene Dibromide	107	15.379	15.378	0.001	98	104398	2.00	1.88	
73 Tetrachloroethene	129	15.441	15.439	0.002	94	83258	2.00	1.92	
75 2,3-Dimethylheptane	43	16.294	16.295	-0.001	94	272648	2.00	2.05	
74 Chlorobenzene	112	16.310	16.309	0.001	94	164669	2.00	1.97	
76 Ethylbenzene	91	16.584	16.585	-0.001	99	264773	2.00	2.12	
77 m-Xylene & p-Xylene	91	16.744	16.745	-0.001	98	427470	4.00	4.32	
78 n-Nonane	57	17.132	17.134	-0.002	95	152966	2.00	2.15	
80 Styrene	104	17.209	17.209	0.000	98	138635	2.00	2.31	
79 Bromoform	173	17.209	17.208	0.001	77	100938	2.00	2.10	
81 o-Xylene	91	17.271	17.270	0.001	99	218585	2.00	2.11	
82 1,1,2,2-Tetrachloroethane	83	17.591	17.591	0.000	98	183101	2.00	2.00	
83 1,2,3-Trichloropropane	110	17.747	17.747	0.000	97	40738	2.00	1.96	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	17.840	17.842	-0.002	96	285073	2.00	2.18	
85 N-Propylbenzene	120	18.356	18.356	0.000	99	74473	2.00	2.12	
86 2-Chlorotoluene	126	18.408	18.408	0.000	98	68725	2.00	2.05	
87 4-Ethyltoluene	105	18.496	18.496	0.000	98	274063	2.00	2.08	
88 1,3,5-Trimethylbenzene	120	18.568	18.567	0.001	92	119868	2.00	1.95	
89 Alpha Methyl Styrene	118	18.791	18.791	0.000	87	108031	2.00	2.37	
90 n-Decane	57	18.822	18.822	0.000	87	211962	2.00	2.04	
91 tert-Butylbenzene	119	18.977	18.979	-0.002	92	281235	2.00	2.11	
92 1,2,4-Trimethylbenzene	105	18.992	18.991	0.001	96	260842	2.00	2.18	
93 sec-Butylbenzene	105	19.240	19.239	0.001	99	383279	2.00	2.17	
94 1,3-Dichlorobenzene	146	19.261	19.263	-0.002	98	127639	2.00	2.05	
95 Benzyl chloride	91	19.333	19.333	0.000	98	140127	2.00	2.02	
96 1,4-Dichlorobenzene	146	19.344	19.345	-0.001	95	106707	2.00	2.33	
97 4-Isopropyltoluene	119	19.390	19.393	-0.003	97	344253	2.00	2.41	
98 1,2,3-Trimethylbenzene	105	19.452	19.452	0.000	99	257743	2.00	2.24	
99 Butylcyclohexane	83	19.493	19.494	-0.001	90	213538	2.00	2.16	
101 2,3-Dihydroindene	117	19.695	19.695	0.000	93	209539	2.00	2.20	
100 1,2-Dichlorobenzene	146	19.700	19.699	0.001	99	137779	2.00	2.01	
103 n-Butylbenzene	91	19.814	19.814	0.000	97	360249	2.00	2.28	
102 Indene	116	19.824	19.824	0.000	97	178212	2.00	2.18	
104 Undecane	57	20.098	20.098	0.000	93	255017	2.00	2.15	
105 1,2-Dibromo-3-Chloropropane	157	20.289	20.288	0.001	96	89447	2.00	2.55	
106 1,2,4,5-Tetramethylbenzene	119	20.563	20.563	0.000	97	305087	2.00	2.16	
107 Dodecane	57	21.173	21.175	-0.002	91	178065	2.00	2.13	
108 1,2,4-Trichlorobenzene	180	21.416	21.418	-0.002	94	59828	2.00	1.86	
109 Naphthalene	128	21.561	21.559	0.002	99	183378	2.00	1.95	
110 Hexachlorobutadiene	225	21.726	21.727	-0.001	91	128278	2.00	1.95	
111 1,2,3-Trichlorobenzene	180	21.793	21.793	0.000	95	75774	2.00	1.97	
112 2-Methylnaphthalene	142	22.341	22.340	0.001	99	9604	2.00	0.6414	
113 1-Methylnaphthalene	142	22.470	22.468	0.002	99	14439	2.00	0.8356	
A 115 C8 Range	1	14.966	(14.914-15.007)		0	740857	2.00	2.03	
S 116 Xylenes, Total	100				0		6.00	6.43	
S 117 1,2-Dichloroethene, Total	1				0		4.00	4.00	

Reagents:

40L7DQP_00019	Amount Added: 200.00	Units: mL	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

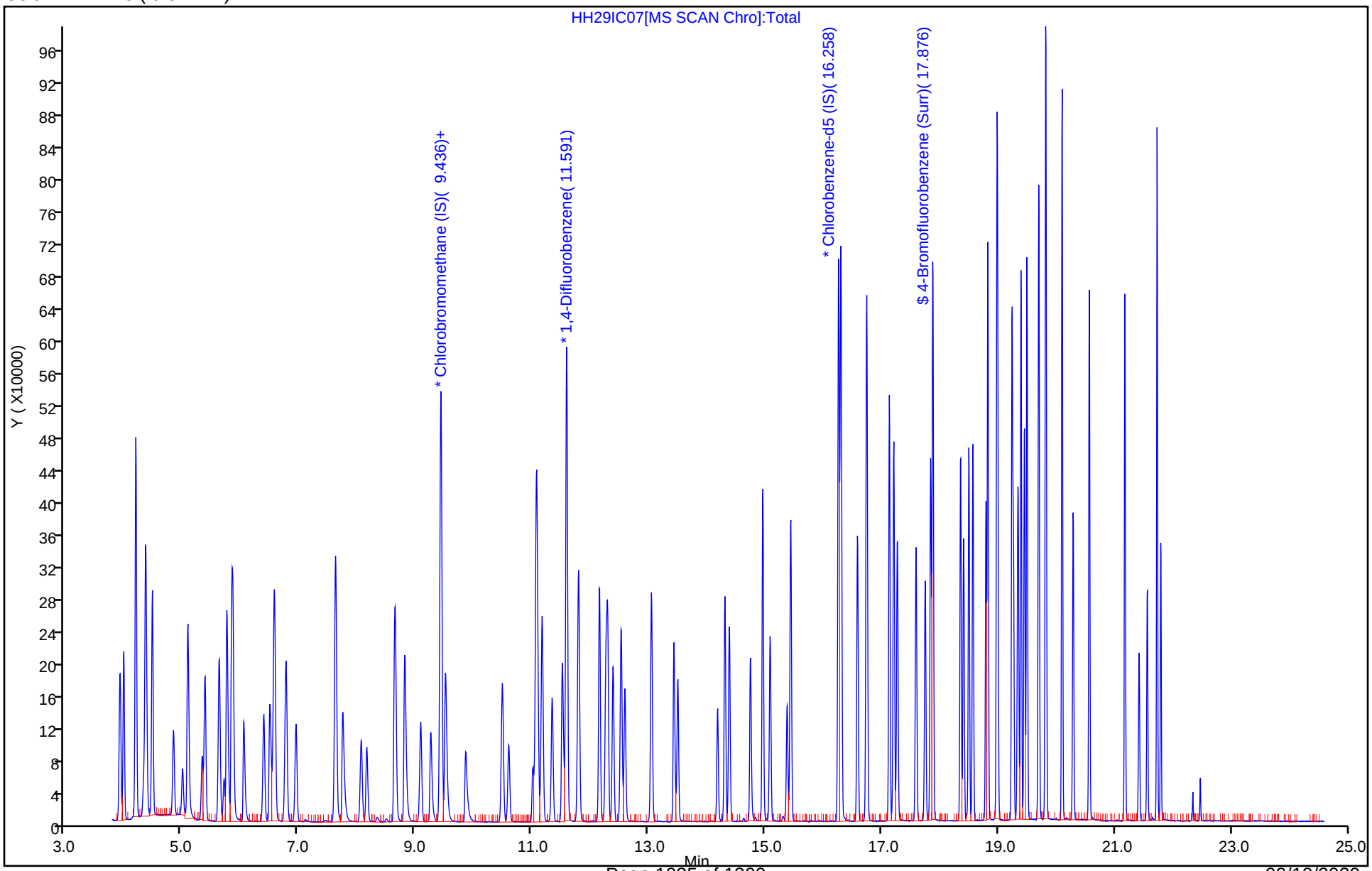
Report Date: 31-Aug-2020 12:25:21 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D

Injection Date:	29-Aug-2020 23:57:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	ICIS L7			Worklist Smp#:	15
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

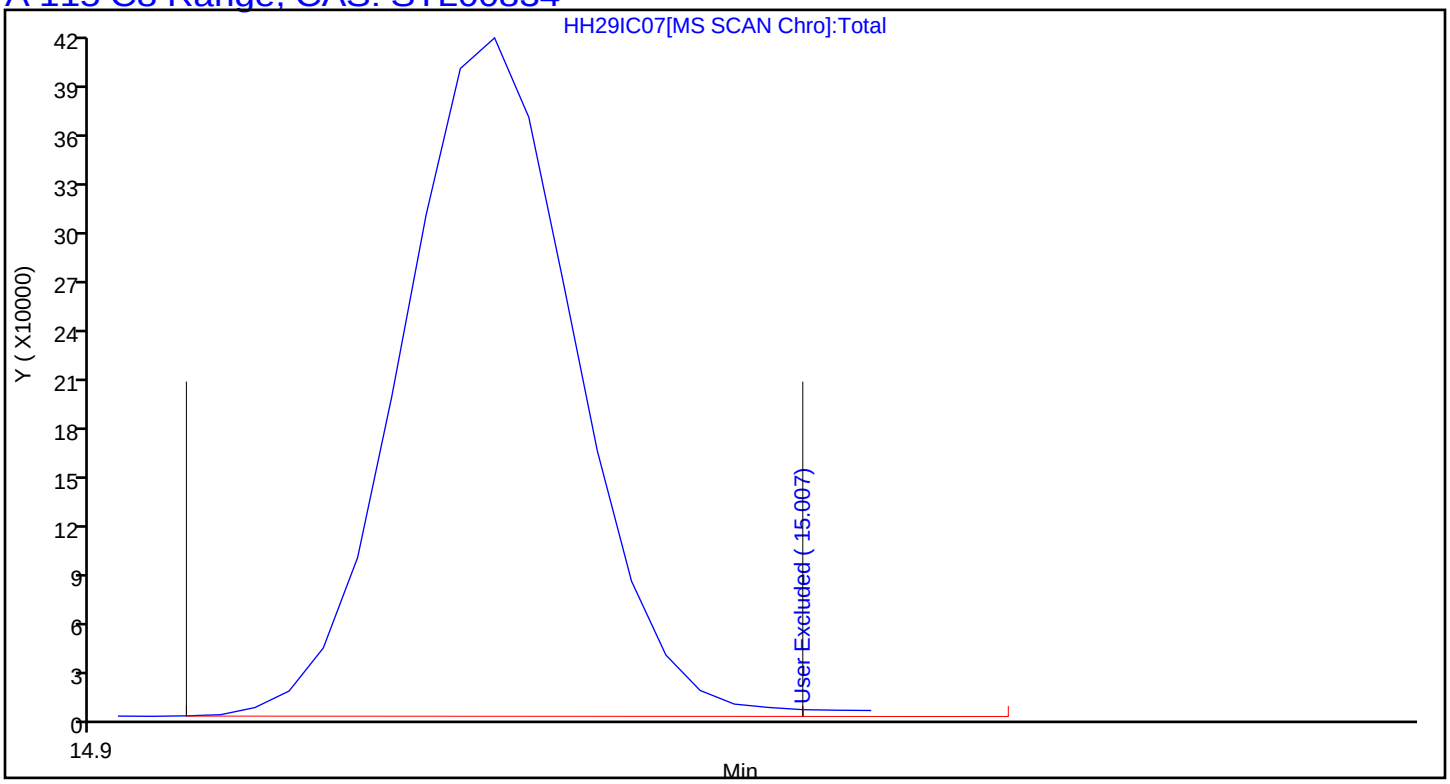


Report Date: 31-Aug-2020 12:25:21 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D				
Injection Date:	29-Aug-2020 23:57:30	Instrument ID:	MH		
Lims ID:	ICIS L7				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	12	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 115 C8 Range, CAS: STL00834



FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Lab Sample ID: ICV 140-42295/22 Calibration Date: 09/02/2020 08:56

Instrument ID: MG Calib Start Date: 09/01/2020 18:07

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 09/02/2020 03:27

Lab File ID: GI01ICVR.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorodifluoromethane	Ave	4.301	3.929		4.57	5.00	-8.6	35.0
Propene	Ave	2.115	1.931		4.57	5.00	-8.7	35.0
Dichlorodifluoromethane	Ave	4.809	4.292		4.46	5.00	-10.7	35.0
Chloromethane	Ave	0.8610	0.7442		4.32	5.00	-13.6	35.0
1,2-Dichloro-1,1,2,2-tetrafluoroethane	Ave	2.743	2.277		4.15	5.00	-17.0	35.0
Acetaldehyde	Ave	1.013	0.8426		20.8	25.0	-16.8	35.0
Vinyl chloride	Ave	2.404	2.220		4.62	5.00	-7.6	35.0
1,3-Butadiene	Ave	2.119	1.970		4.65	5.00	-7.0	35.0
Butane	Ave	4.304	4.065		4.72	5.00	-5.6	35.0
Bromomethane	Ave	1.452	1.260		4.34	5.00	-13.2	35.0
Chloroethane	Ave	0.997	0.8957		4.49	5.00	-10.2	35.0
Ethanol	Ave	0.9079	0.6562		18.1	25.0	-27.7	35.0
Vinyl bromide	Ave	1.239	1.117		4.51	5.00	-9.8	35.0
2-Methylbutane	Ave	2.923	2.831		4.84	5.00	-3.1	35.0
Trichlorofluoromethane	Ave	3.737	3.130		4.19	5.00	-16.3	35.0
Acrolein	Ave	0.4464	0.4931		5.52	5.00	10.5	35.0
Acetonitrile	Ave	0.7987	0.6668		4.17	5.00	-16.5	35.0
Acetone	Ave	0.7999	0.8016		5.01	5.00	0.2	35.0
Isopropyl alcohol	Ave	2.389	2.423		5.07	5.00	1.5	35.0
Pentane	Ave	0.2430	0.2227		4.58	5.00	-8.4	35.0
Ethyl ether	Ave	1.710	1.790		5.23	5.00	4.7	35.0
1,1-Dichloroethene	Ave	1.183	1.025		4.33	5.00	-13.4	35.0
Acrylonitrile	Ave	1.092	1.075		4.92	5.00	-1.6	35.0
tert-Butyl alcohol	Ave	2.412	1.818		3.77	5.00	-24.6	35.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	2.736	2.359		4.31	5.00	-13.8	35.0
Methylene Chloride	Ave	1.184	1.067		4.51	5.00	-9.9	35.0
3-Chloropropene	Ave	2.320	1.903		4.10	5.00	-18.0	35.0
Carbon disulfide	Ave	3.977	3.544		4.46	5.00	-10.9	35.0
trans-1,2-Dichloroethene	Ave	1.393	1.226		4.40	5.00	-12.0	35.0
2-Methylpentane	Ave	5.433	4.474		4.12	5.00	-17.6	35.0
Methyl tert-butyl ether	Ave	2.883	2.736		4.74	5.00	-5.1	35.0
1,1-Dichloroethane	Ave	3.473	3.181		4.58	5.00	-8.4	35.0
Vinyl acetate	Ave	4.548	4.694		5.16	5.00	3.2	35.0
2-Butanone (MEK)	Ave	0.5774	0.5305		4.59	5.00	-8.1	35.0
Hexane	Ave	1.792	1.607		4.48	5.00	-10.3	35.0
Isopropyl ether	Ave	5.977	5.799		4.85	5.00	-3.0	35.0
cis-1,2-Dichloroethene	Ave	1.481	1.325		4.47	5.00	-10.5	35.0
Ethyl acetate	Ave	3.981	3.588		4.51	5.00	-9.9	35.0
Chloroform	Ave	3.366	2.934		4.36	5.00	-12.8	35.0
Tert-butyl ethyl ether	Ave	5.017	4.408		4.39	5.00	-12.1	35.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Lab Sample ID: ICV 140-42295/22 Calibration Date: 09/02/2020 08:56

Instrument ID: MG Calib Start Date: 09/01/2020 18:07

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 09/02/2020 03:27

Lab File ID: GI01ICVR.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Tetrahydrofuran	Ave	1.997	1.896		4.75	5.00	-5.1	35.0
1,1,1-Trichloroethane	Ave	3.240	2.865		4.42	5.00	-11.6	35.0
1,2-Dichloroethane	Ave	0.5421	0.4409		4.07	5.00	-18.7	35.0
1-Butanol	Ave	0.1535	0.1036		3.38	5.00	-32.5	35.0
Benzene	Ave	0.9867	0.8211		4.16	5.00	-16.8	35.0
Cyclohexane	Ave	0.1661	0.1347		4.05	5.00	-18.9	35.0
Carbon tetrachloride	Ave	0.6099	0.5409		4.43	5.00	-11.3	35.0
2,3-Dimethylpentane	Ave	0.2548	0.1966		3.86	5.00	-22.8	35.0
Thiophene	Ave	0.5655	0.4452		3.94	5.00	-21.3	35.0
2,2,4-Trimethylpentane	Ave	2.414	1.987		4.12	5.00	-17.7	35.0
Heptane	Ave	0.3880	0.3065		3.95	5.00	-21.0	35.0
1,2-Dichloropropane	Ave	0.4494	0.3788		4.21	5.00	-15.7	35.0
Trichloroethene	Ave	0.4302	0.3138		3.65	5.00	-27.0	35.0
Dibromomethane	Ave	0.4239	0.3454		4.07	5.00	-18.5	35.0
Bromodichloromethane	Ave	0.7367	0.6419		4.36	5.00	-12.9	35.0
1,4-Dioxane	Ave	0.1151	0.0858		3.73	5.00	-25.5	35.0
Methyl methacrylate	Ave	0.5088	0.4152		4.08	5.00	-18.4	35.0
Methylcyclohexane	Ave	0.6505	0.6281		4.83	5.00	-3.4	35.0
4-Methyl-2-pentanone (MIBK)	Ave	0.8567	0.6695		3.91	5.00	-21.9	35.0
cis-1,3-Dichloropropene	Ave	0.5917	0.5245		4.43	5.00	-11.3	35.0
trans-1,3-Dichloropropene	Ave	0.4924	0.4541		4.61	5.00	-7.8	35.0
Toluene	Ave	1.059	0.9715		4.59	5.00	-8.2	35.0
1,1,2-Trichloroethane	Ave	0.3318	0.2919		4.40	5.00	-12.0	35.0
2-Hexanone	Ave	0.3922	0.2950		3.76	5.00	-24.8	35.0
Octane	Ave	0.3858	0.3458		4.48	5.00	-10.4	35.0
Dibromochloromethane	Ave	0.6238	0.5958		4.78	5.00	-4.5	35.0
1,2-Dibromoethane (EDB)	Ave	0.5955	0.5271		4.43	5.00	-11.5	35.0
Tetrachloroethene	Ave	0.3991	0.3272		4.10	5.00	-18.0	35.0
Chlorobenzene	Ave	0.8562	0.7813		4.56	5.00	-8.8	35.0
2,3-Dimethylheptane	Ave	1.832	1.469		4.01	5.00	-19.8	35.0
Ethylbenzene	Ave	1.361	1.213		4.46	5.00	-10.8	35.0
m-Xylene & p-Xylene	Ave	1.076	0.9236		8.58	10.0	-14.2	35.0
Nonane	Ave	1.062	0.9751		4.59	5.00	-8.2	35.0
Bromoform	Ave	0.5248	0.5270		5.02	5.00	0.4	35.0
Styrene	Ave	0.7824	0.6733		4.30	5.00	-13.9	35.0
o-Xylene	Ave	1.089	0.9679		4.44	5.00	-11.1	35.0
1,1,2,2-Tetrachloroethane	Ave	0.8691	0.7611		4.38	5.00	-12.4	35.0
1,2,3-Trichloropropane	Ave	0.2125	0.1885		4.43	5.00	-11.3	35.0
Isopropylbenzene	Ave	1.431	1.289		4.50	5.00	-9.9	35.0
Propylbenzene	Ave	0.3821	0.3364		4.40	5.00	-12.0	35.0
2-Chlorotoluene	Ave	0.3660	0.3422		4.67	5.00	-6.5	35.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Lab Sample ID: ICV 140-42295/22 Calibration Date: 09/02/2020 08:56

Instrument ID: MG Calib Start Date: 09/01/2020 18:07

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 09/02/2020 03:27

Lab File ID: GI01ICVR.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Ethyltoluene	Ave	1.429	1.215		4.25	5.00	-15.0	35.0
1,3,5-Trimethylbenzene	Ave	0.5712	0.5698		4.99	5.00	-0.2	35.0
Alpha Methyl Styrene	Ave	0.5644	0.4904		4.34	5.00	-13.1	35.0
Decane	Ave	1.287	1.157		4.49	5.00	-10.1	35.0
tert-Butylbenzene	Ave	1.256	1.107		4.41	5.00	-11.8	35.0
1,2,4-Trimethylbenzene	Ave	1.249	1.123		4.49	5.00	-10.1	35.0
sec-Butylbenzene	Ave	1.884	1.651		4.38	5.00	-12.4	35.0
1,3-Dichlorobenzene	Ave	0.8900	0.7770		4.37	5.00	-12.7	35.0
Benzyl chloride	Ave	1.177	1.122		4.77	5.00	-4.6	35.0
1,4-Dichlorobenzene	Ave	0.9015	0.7590		4.21	5.00	-15.8	35.0
4-Isopropyltoluene	Ave	1.459	1.292		4.43	5.00	-11.4	35.0
1,2,3-Trimethylbenzene	QuaF		0.8283		3.85	5.00	-23.0	35.0
Butylcyclohexane	Ave	1.221	1.032		4.22	5.00	-15.5	35.0
1,2-Dichlorobenzene	Ave	0.8529	0.7455		4.37	5.00	-12.6	35.0
Indane	Ave	1.248	1.052		4.22	5.00	-15.7	35.0
Indene	Ave	1.069	0.7883		3.69	5.00	-26.3	35.0
Butylbenzene	Ave	1.654	1.495		4.52	5.00	-9.6	35.0
Undecane	Ave	1.437	1.263		4.40	5.00	-12.1	35.0
1,2-Dibromo-3-Chloropropane	QuaF		0.2886		3.87	5.00	-22.7	35.0
1,2,4,5-Tetramethylbenzene	QuaF		1.092		4.70	5.00	-5.9	35.0
Dodecane	Ave	1.254	1.200		4.79	5.00	-4.3	35.0
1,2,4-Trichlorobenzene	Ave	0.7511	0.6306		4.20	5.00	-16.0	35.0
Naphthalene	Ave	1.812	1.517		4.19	5.00	-16.3	35.0
Hexachlorobutadiene	Ave	0.6345	0.5377		4.24	5.00	-15.3	35.0
1,2,3-Trichlorobenzene	Ave	0.7230	0.6231		4.31	5.00	-13.8	35.0
2-Methylnaphthalene	Ave	0.7792	0.6437		4.13	5.00	-17.4	50.0
1-Methylnaphthalene	Ave	0.7933	0.6885		4.34	5.00	-13.2	50.0
4-Bromofluorobenzene (Surr)	Ave	0.7532	0.7643		11.8	11.6	1.5	35.0

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01ICVR.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 02-Sep-2020 08:56:30 ALS Bottle#: 7 Worklist Smp#: 22
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016453-022
Misc. Info.: S123 100ML 314619
Operator ID: AFB Instrument ID: MG
Sublist:

Method: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 02-Sep-2020 12:24:11 Calib Date: 02-Sep-2020 03:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1035

First Level Reviewer: barlozhetskayaa Date: 02-Sep-2020 10:29:43

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.811	8.811	0.000	87	147601	4.80	4.80	
* 2 1,4-Difluorobenzene	114	10.995	10.995	0.000	98	795164	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.730	15.730	0.000	94	773847	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.374	17.374	0.000	83	571756	4.64	4.71	
6 Chlorodifluoromethane	51	3.705	3.705	0.000	97	241643	2.00	1.83	
7 Propene	41	3.716	3.716	0.000	98	118767	2.00	1.83	
8 Dichlorodifluoromethane	85	3.764	3.770	-0.006	98	263975	2.00	1.79	
9 Chloromethane	52	3.947	3.947	0.000	72	45771	2.00	1.73	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.953	3.953	0.000	94	140044	2.00	1.66	
11 Acetaldehyde	44	4.098	4.093	0.005	100	259096	10.0	8.32	
12 Vinyl chloride	62	4.115	4.115	0.000	99	136539	2.00	1.85	
14 Butadiene	54	4.201	4.201	0.000	68	121148	2.00	1.86	
13 Butane	43	4.206	4.206	0.000	87	249996	2.00	1.89	
15 Bromomethane	94	4.519	4.519	0.000	98	77519	2.00	1.74	
16 Chloroethane	64	4.659	4.659	0.000	84	55088	2.00	1.80	
17 Ethanol	31	4.751	4.751	0.000	96	201798	10.0	7.23	
18 Vinyl bromide	106	4.961	4.961	0.000	96	68705	2.00	1.80	
19 2-Methylbutane	43	5.010	5.010	0.000	94	174113	2.00	1.94	
20 Trichlorofluoromethane	101	5.225	5.231	-0.006	98	192500	2.00	1.67	
21 Acrolein	56	5.231	5.231	0.000	36	30327	2.00	2.21	
22 Acetonitrile	40	5.295	5.296	-0.001	100	41007	2.00	1.67	
23 Acetone	58	5.355	5.349	0.006	99	49297	2.00	2.00	
25 Isopropyl alcohol	45	5.441	5.436	0.005	94	149039	2.00	2.03	
24 Pentane	72	5.446	5.447	-0.001	95	13694	2.00	1.83	
26 Ethyl ether	31	5.614	5.614	0.000	88	110080	2.00	2.09	
27 1,1-Dichloroethene	96	5.926	5.932	-0.006	89	63012	2.00	1.73	
28 Acrylonitrile	53	6.034	6.029	0.005	94	66087	2.00	1.97	
30 2-Methyl-2-propanol	59	6.040	6.045	-0.005	96	111815	2.00	1.51	
29 1,1,2-Trichloro-1,2,2-trifluoroe	101	6.104	6.104	0.000	89	145077	2.00	1.72	
31 Methylene Chloride	84	6.277	6.277	0.000	88	65615	2.00	1.80	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.288	6.288	0.000	94	117015	2.00	1.64	
33 Carbon disulfide	76	6.439	6.439	0.000	97	217959	2.00	1.78	
34 trans-1,2-Dichloroethene	96	7.086	7.080	0.006	90	75393	2.00	1.76	
35 2-Methylpentane	43	7.102	7.102	0.000	96	275179	2.00	1.65	
36 Methyl tert-butyl ether	73	7.221	7.215	0.006	92	168285	2.00	1.90	
37 1,1-Dichloroethane	63	7.501	7.501	0.000	98	195631	2.00	1.83	
38 Vinyl acetate	43	7.603	7.603	0.000	100	288713	2.00	2.06	
39 2-Butanone (MEK)	72	8.051	8.056	-0.005	95	32629	2.00	1.84	
40 Hexane	56	8.083	8.083	0.000	91	98855	2.00	1.79	
41 Isopropyl ether	45	8.240	8.240	0.000	95	356651	2.00	1.94	
42 cis-1,2-Dichloroethene	96	8.482	8.488	-0.006	94	81476	2.00	1.79	
43 Ethyl acetate	43	8.671	8.671	0.000	97	220650	2.00	1.80	
44 Chloroform	83	8.827	8.822	0.005	95	180444	2.00	1.74	
45 Tert-butyl ethyl ether	59	8.914	8.919	-0.005	96	271100	2.00	1.76	
46 Tetrahydrofuran	42	9.232	9.232	0.000	90	116632	2.00	1.90	
47 1,1,1-Trichloroethane	97	9.852	9.847	0.005	93	176228	2.00	1.77	
48 1,2-Dichloroethane	62	9.960	9.960	0.000	95	146090	2.00	1.63	
51 n-Butanol	31	10.434	10.429	0.005	71	34331	2.00	1.35	
50 Benzene	78	10.451	10.451	0.000	93	272043	2.00	1.66	
49 Cyclohexane	69	10.456	10.456	0.000	88	44638	2.00	1.62	
52 Carbon tetrachloride	117	10.478	10.478	0.000	92	179216	2.00	1.77	
53 2,3-Dimethylpentane	71	10.580	10.575	0.005	90	65148	2.00	1.54	
54 Thiophene	84	10.720	10.720	0.000	93	147498	2.00	1.57	
55 Isooctane	57	11.216	11.216	0.000	98	658344	2.00	1.65	
56 n-Heptane	71	11.594	11.594	0.000	94	101560	2.00	1.58	
57 1,2-Dichloropropane	63	11.675	11.669	0.006	88	125503	2.00	1.69	
58 Trichloroethene	130	11.712	11.712	0.000	89	103984	2.00	1.46	
59 Dibromomethane	93	11.788	11.788	0.000	87	114445	2.00	1.63	
60 Dichlorobromomethane	83	11.939	11.934	0.005	95	212678	2.00	1.74	
61 1,4-Dioxane	88	11.966	11.961	0.005	91	28433	2.00	1.49	
62 Methyl methacrylate	41	12.036	12.036	0.000	85	137568	2.00	1.63	
63 Methylcyclohexane	83	12.478	12.478	0.000	86	208092	2.00	1.93	
64 4-Methyl-2-pentanone (MIBK)	43	12.888	12.888	0.000	97	221805	2.00	1.56	
65 cis-1,3-Dichloropropene	75	12.936	12.937	-0.001	97	173786	2.00	1.77	
66 trans-1,3-Dichloropropene	75	13.632	13.632	0.000	91	146415	2.00	1.84	
67 Toluene	91	13.756	13.756	0.000	92	313239	2.00	1.84	
68 1,1,2-Trichloroethane	83	13.832	13.832	0.000	94	94123	2.00	1.76	
69 2-Hexanone	58	14.225	14.225	0.000	91	95107	2.00	1.50	
70 n-Octane	85	14.452	14.452	0.000	98	111511	2.00	1.79	
71 Chlorodibromomethane	129	14.538	14.533	0.005	94	192113	2.00	1.91	
72 Ethylene Dibromide	107	14.824	14.824	0.000	97	169944	2.00	1.77	
73 Tetrachloroethene	129	14.905	14.905	0.000	90	105515	2.00	1.64	
75 Chlorobenzene	112	15.778	15.778	0.000	90	251919	2.00	1.82	
74 2,3-Dimethylheptane	43	15.800	15.800	0.000	92	473562	2.00	1.60	
78 Ethylbenzene	91	16.069	16.070	-0.001	98	391211	2.00	1.78	
79 m-Xylene & p-Xylene	91	16.231	16.231	0.000	98	595631	4.00	3.43	
80 n-Nonane	57	16.652	16.652	0.000	93	314394	2.00	1.84	
81 Bromoform	173	16.679	16.679	0.000	90	169932	2.00	2.01	
82 Styrene	104	16.695	16.695	0.000	96	217105	2.00	1.72	
83 o-Xylene	91	16.754	16.754	0.000	97	312087	2.00	1.78	
84 1,1,2,2-Tetrachloroethane	83	17.078	17.078	0.000	97	245410	2.00	1.75	
85 1,2,3-Trichloropropane	110	17.234	17.240	-0.006	92	60775	2.00	1.77	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
86 Isopropylbenzene	105	17.342	17.347	-0.005	97	415722	2.00	1.80	
87 N-Propylbenzene	120	17.887	17.887	0.000	98	108476	2.00	1.76	
88 2-Chlorotoluene	126	17.930	17.930	0.000	98	110334	2.00	1.87	
89 4-Ethyltoluene	105	18.038	18.038	0.000	99	391682	2.00	1.70	
90 1,3,5-Trimethylbenzene	120	18.108	18.108	0.000	91	183721	2.00	2.00	
92 Alpha Methyl Styrene	118	18.340	18.340	0.000	84	158132	2.00	1.74	
93 n-Decane	57	18.399	18.399	0.000	87	372994	2.00	1.80	
94 tert-Butylbenzene	119	18.534	18.534	0.000	89	357090	2.00	1.76	
95 1,2,4-Trimethylbenzene	105	18.545	18.550	-0.005	96	361981	2.00	1.80	
96 sec-Butylbenzene	105	18.803	18.803	0.000	98	532479	2.00	1.75	
97 1,3-Dichlorobenzene	146	18.814	18.814	0.000	97	250519	2.00	1.75	
98 Benzyl chloride	91	18.890	18.890	0.000	96	361904	2.00	1.91	
99 1,4-Dichlorobenzene	146	18.900	18.906	-0.006	94	244726	2.00	1.68	
100 4-Isopropyltoluene	119	18.965	18.965	0.000	96	416724	2.00	1.77	
101 1,2,3-Trimethylbenzene	105	19.014	19.019	-0.005	99	267065	2.00	1.54	
102 Butylcyclohexane	83	19.073	19.073	0.000	85	332763	2.00	1.69	
103 2,3-Dihydroindene	117	19.262	19.262	0.000	92	339297	2.00	1.69	
104 1,2-Dichlorobenzene	146	19.262	19.262	0.000	80	240366	2.00	1.75	
106 Indene	116	19.391	19.391	0.000	92	254181	2.00	1.47	
105 n-Butylbenzene	91	19.397	19.397	0.000	98	482020	2.00	1.81	
107 Undecane	57	19.709	19.709	0.000	92	407210	2.00	1.76	
108 1,2-Dibromo-3-Chloropropane	157	19.860	19.860	0.000	86	93039	2.00	1.55	
109 1,2,4,5-Tetramethylbenzene	119	20.146	20.152	-0.006	97	352073	2.00	1.88	
110 Dodecane	57	20.766	20.761	0.005	91	387080	2.00	1.91	
111 1,2,4-Trichlorobenzene	180	20.955	20.955	0.000	93	203324	2.00	1.68	
112 Naphthalene	128	21.095	21.095	0.000	98	489225	2.00	1.67	
113 Hexachlorobutadiene	225	21.305	21.305	0.000	91	173369	2.00	1.69	
114 1,2,3-Trichlorobenzene	180	21.370	21.370	0.000	94	200917	2.00	1.72	
115 2-Methylnaphthalene	142	22.141	22.141	0.000	97	207554	2.00	1.65	
116 1-Methylnaphthalene	142	22.319	22.319	0.000	99	222006	2.00	1.74	
A 122 C8 Range	1	14.449	(14.399-14.517)		0	1388561	2.00	1.84	
S 123 1,2-Dichloroethene, Total	1				0		4.00	3.55	
S 124 Xylenes, Total	100				0		6.00	5.21	
T 136 2-Methylthiophene TIC	97	13.912	13.917	-0.006	97	242304	2.00	1.50	
T 137 3-Methylthiophene TIC	97	14.112	14.974	-0.863	95	245771	2.00	1.52	
T 154 2-Ethylthiophene TIC	97	16.172	17.374	-1.202	97	286980	2.00	1.78	
T 161 1,2,3,5-Tetramethylbenzene TIC	119	20.200	18.970	1.230	96	208289	2.00	1.29	
T 162 1,2,3,4-Tetramethylbenzene TIC	119	20.604	18.970	1.634	96	275647	2.00	1.71	
T 160 1,2-Dimethyl-4-Ethylbenzene TIC	119	19.763	19.865	-0.103	96	295157	2.00	1.83	
T 163 Benzo(b)thiophene TIC	134	21.198	23.310	-2.113	97	257697	2.00	1.60	

Reagents:

40CV101S_00123	Amount Added: 100.00	Units: mL	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

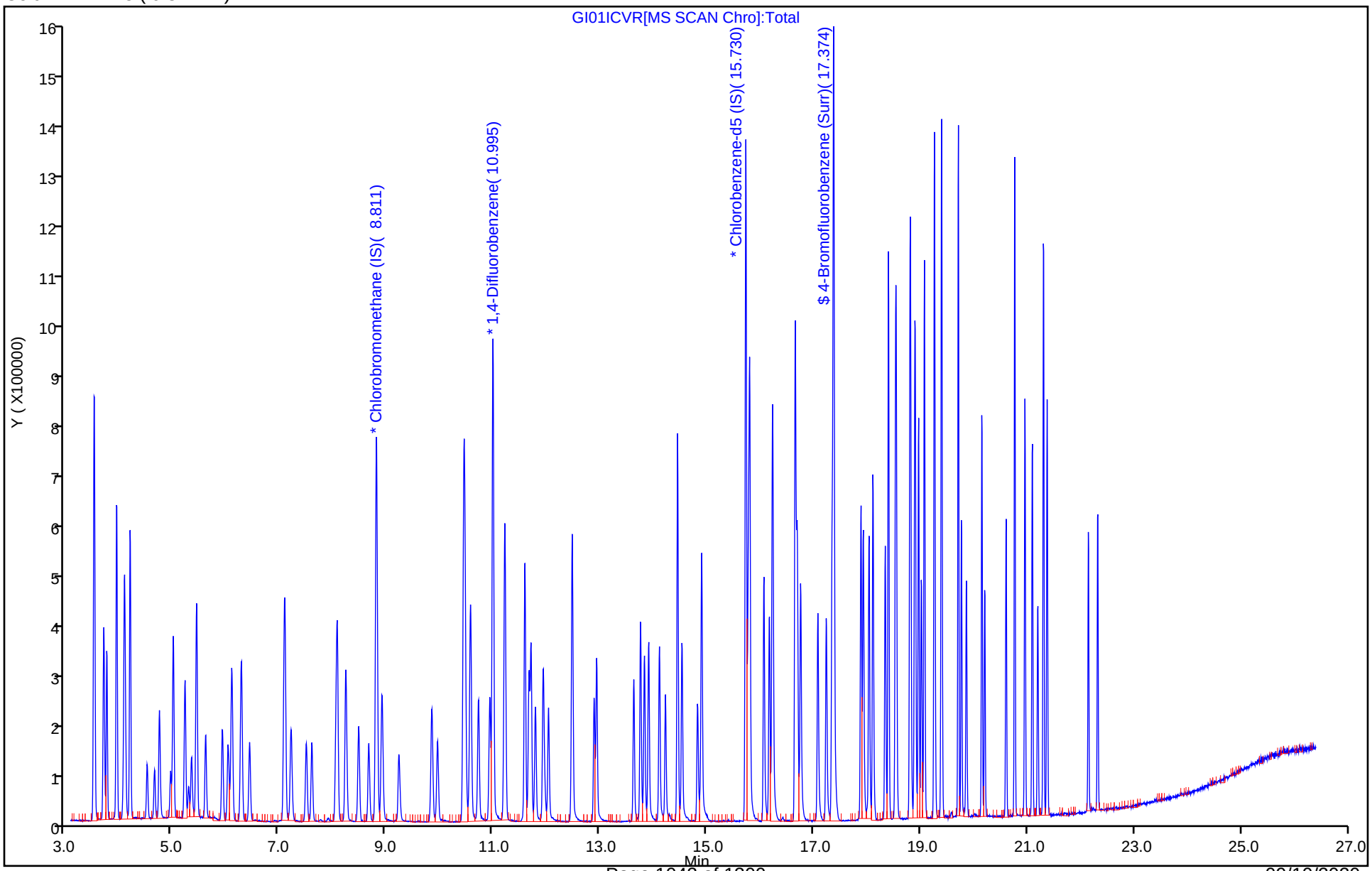
Report Date: 02-Sep-2020 12:35:07 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01ICVR.D

Injection Date:	02-Sep-2020 08:56:30	Instrument ID:	MG	Operator ID:	AFB
Lims ID:	ICV			Worklist Smp#:	22
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Lab Sample ID: CCVIS 140-42409/2 Calibration Date: 09/03/2020 07:55

Instrument ID: MG Calib Start Date: 09/01/2020 18:07

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 09/02/2020 03:27

Lab File ID: GCCVI03.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorodifluoromethane	Ave	4.301	3.971		1.48	1.60	-7.7	30.0
Propene	Ave	2.115	1.990		1.51	1.60	-5.9	30.0
Dichlorodifluoromethane	Ave	4.809	3.993		1.33	1.60	-17.0	30.0
1,2-Dichloro-1,1,2,2-tetrafluoroethane	Ave	2.743	2.134		1.24	1.60	-22.2	30.0
Chloromethane	Ave	0.8610	0.8146		1.51	1.60	-5.4	30.0
Acetaldehyde	Ave	1.013	0.8753		6.92	8.00	-13.6	30.0
Vinyl chloride	Ave	2.404	2.268		1.51	1.60	-5.7	30.0
1,3-Butadiene	Ave	2.119	2.014		1.52	1.60	-4.9	30.0
Butane	Ave	4.304	4.427		1.65	1.60	2.8	30.0
Bromomethane	Ave	1.452	1.268		1.40	1.60	-12.7	30.0
Chloroethane	Ave	0.997	0.9565		1.54	1.60	-4.1	30.0
Ethanol	Ave	0.9079	0.8085		7.12	8.00	-11.0	30.0
Vinyl bromide	Ave	1.239	1.163		1.50	1.60	-6.1	30.0
2-Methylbutane	Ave	2.923	3.339		1.83	1.60	14.2	30.0
Trichlorofluoromethane	Ave	3.737	3.291		1.41	1.60	-11.9	30.0
Acrolein	Ave	0.4464	0.5495		1.97	1.60	23.1	30.0
Acetonitrile	Ave	0.7987	0.7958		1.59	1.60	-0.4	30.0
Acetone	Ave	0.7999	0.9070		1.81	1.60	13.4	30.0
Isopropyl alcohol	Ave	2.389	2.891		1.94	1.60	21.0	30.0
Pentane	Ave	0.2430	0.2474		1.63	1.60	1.8	30.0
Ethyl ether	Ave	1.710	2.203		2.06	1.60	28.9	30.0
1,1-Dichloroethene	Ave	1.183	0.9719		1.31	1.60	-17.9	30.0
Acrylonitrile	Ave	1.092	1.150		1.69	1.60	5.4	30.0
tert-Butyl alcohol	Ave	2.412	2.045		1.36	1.60	-15.2	30.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	2.736	2.315		1.35	1.60	-15.4	30.0
Methylene Chloride	Ave	1.184	1.074		1.45	1.60	-9.3	30.0
3-Chloropropene	Ave	2.320	2.021		1.39	1.60	-12.9	30.0
Carbon disulfide	Ave	3.977	3.624		1.46	1.60	-8.9	30.0
trans-1,2-Dichloroethene	Ave	1.393	1.202		1.38	1.60	-13.7	30.0
2-Methylpentane	Ave	5.433	4.819		1.42	1.60	-11.3	30.0
Methyl tert-butyl ether	Ave	2.883	2.714		1.51	1.60	-5.9	30.0
1,1-Dichloroethane	Ave	3.473	3.299		1.52	1.60	-5.0	30.0
Vinyl acetate	Ave	4.548	5.060		1.78	1.60	11.3	30.0
2-Butanone (MEK)	Ave	0.5774	0.5468		1.52	1.60	-5.3	30.0
Hexane	Ave	1.792	1.656		1.48	1.60	-7.6	30.0
Isopropyl ether	Ave	5.977	6.097		1.63	1.60	2.0	30.0
cis-1,2-Dichloroethene	Ave	1.481	1.394		1.51	1.60	-5.9	30.0
Ethyl acetate	Ave	3.981	3.807		1.53	1.60	-4.4	30.0
Chloroform	Ave	3.366	3.012		1.43	1.60	-10.5	30.0
Tert-butyl ethyl ether	Ave	5.017	4.451		1.42	1.60	-11.3	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Lab Sample ID: CCVIS 140-42409/2 Calibration Date: 09/03/2020 07:55

Instrument ID: MG Calib Start Date: 09/01/2020 18:07

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 09/02/2020 03:27

Lab File ID: GCCVI03.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Tetrahydrofuran	Ave	1.997	2.083		1.67	1.60	4.3	30.0
1,1,1-Trichloroethane	Ave	3.240	2.858		1.41	1.60	-11.8	30.0
1,2-Dichloroethane	Ave	0.5421	0.5300		1.56	1.60	-2.2	30.0
1-Butanol	Ave	0.1535	0.1433		1.49	1.60	-6.7	30.0
Benzene	Ave	0.9867	0.9609		1.56	1.60	-2.6	30.0
Cyclohexane	Ave	0.1661	0.1564		1.51	1.60	-5.9	30.0
Carbon tetrachloride	Ave	0.6099	0.6262		1.64	1.60	2.7	30.0
2,3-Dimethylpentane	Ave	0.2548	0.2251		1.41	1.60	-11.7	30.0
Thiophene	Ave	0.5655	0.5261		1.49	1.60	-7.0	30.0
2,2,4-Trimethylpentane	Ave	2.414	2.381		1.58	1.60	-1.4	30.0
Heptane	Ave	0.3880	0.3564		1.47	1.60	-8.2	30.0
1,2-Dichloropropane	Ave	0.4494	0.4240		1.51	1.60	-5.6	30.0
Trichloroethene	Ave	0.4302	0.3568		1.33	1.60	-17.1	30.0
Dibromomethane	Ave	0.4239	0.3887		1.47	1.60	-8.3	30.0
Bromodichloromethane	Ave	0.7367	0.7053		1.53	1.60	-4.3	30.0
1,4-Dioxane	Ave	0.1151	0.1005		1.40	1.60	-12.7	30.0
Methyl methacrylate	Ave	0.5088	0.5359		1.69	1.60	5.3	30.0
Methylcyclohexane	Ave	0.6505	0.7350		1.81	1.60	13.0	30.0
4-Methyl-2-pentanone (MIBK)	Ave	0.8567	0.8220		1.54	1.60	-4.0	30.0
cis-1,3-Dichloropropene	Ave	0.5917	0.5572		1.51	1.60	-5.8	30.0
trans-1,3-Dichloropropene	Ave	0.4924	0.4511		1.47	1.60	-8.4	30.0
Toluene	Ave	1.059	0.9580		1.45	1.60	-9.5	30.0
1,1,2-Trichloroethane	Ave	0.3318	0.2944		1.42	1.60	-11.3	30.0
2-Hexanone	Ave	0.3922	0.3276		1.34	1.60	-16.5	30.0
Octane	Ave	0.3858	0.3461		1.44	1.60	-10.3	30.0
Dibromochloromethane	Ave	0.6238	0.5763		1.48	1.60	-7.6	30.0
1,2-Dibromoethane (EDB)	Ave	0.5955	0.5263		1.41	1.60	-11.6	30.0
Tetrachloroethene	Ave	0.3991	0.3180		1.27	1.60	-20.3	30.0
Chlorobenzene	Ave	0.8562	0.7479		1.40	1.60	-12.7	30.0
2,3-Dimethylheptane	Ave	1.832	1.534		1.34	1.60	-16.3	30.0
Ethylbenzene	Ave	1.361	1.258		1.48	1.60	-7.5	30.0
m-Xylene & p-Xylene	Ave	1.076	0.9716		2.89	3.20	-9.7	30.0
Nonane	Ave	1.062	0.9763		1.47	1.60	-8.0	30.0
Bromoform	Ave	0.5248	0.4673		1.42	1.60	-11.0	30.0
Styrene	Ave	0.7824	0.7204		1.47	1.60	-7.9	30.0
o-Xylene	Ave	1.089	1.010		1.48	1.60	-7.3	30.0
1,1,2,2-Tetrachloroethane	Ave	0.8691	0.7989		1.47	1.60	-8.1	30.0
1,2,3-Trichloropropane	Ave	0.2125	0.1902		1.43	1.60	-10.5	30.0
Isopropylbenzene	Ave	1.431	1.288		1.44	1.60	-10.0	30.0
Propylbenzene	Ave	0.3821	0.3351		1.40	1.60	-12.3	30.0
2-Chlorotoluene	Ave	0.3660	0.3292		1.44	1.60	-10.0	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Lab Sample ID: CCVIS 140-42409/2 Calibration Date: 09/03/2020 07:55

Instrument ID: MG Calib Start Date: 09/01/2020 18:07

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 09/02/2020 03:27

Lab File ID: GCCVI03.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Ethyltoluene	Ave	1.429	1.211		1.36	1.60	-15.3	30.0
1,3,5-Trimethylbenzene	Ave	0.5712	0.5688		1.59	1.60	-0.4	30.0
Alpha Methyl Styrene	Ave	0.5644	0.5017		1.42	1.60	-11.1	30.0
Decane	Ave	1.287	1.197		1.49	1.60	-7.0	30.0
tert-Butylbenzene	Ave	1.256	1.103		1.41	1.60	-12.2	30.0
1,2,4-Trimethylbenzene	Ave	1.249	1.133		1.45	1.60	-9.3	30.0
sec-Butylbenzene	Ave	1.884	1.688		1.43	1.60	-10.4	30.0
1,3-Dichlorobenzene	Ave	0.8900	0.7526		1.35	1.60	-15.4	30.0
Benzyl chloride	Ave	1.177	1.190		1.62	1.60	1.1	30.0
1,4-Dichlorobenzene	Ave	0.9015	0.7554		1.34	1.60	-16.2	30.0
4-Isopropyltoluene	Ave	1.459	1.332		1.46	1.60	-8.7	30.0
1,2,3-Trimethylbenzene	QuaF		0.8479		1.27	1.60	-20.8	30.0
Butylcyclohexane	Ave	1.221	1.078		1.41	1.60	-11.7	30.0
1,2-Dichlorobenzene	Ave	0.8529	0.7363		1.38	1.60	-13.7	30.0
Indane	Ave	1.248	1.058		1.36	1.60	-15.3	30.0
Indene	Ave	1.069	0.7968		1.19	1.60	-25.5	30.0
Butylbenzene	Ave	1.654	1.587		1.54	1.60	-4.0	30.0
Undecane	Ave	1.437	1.359		1.51	1.60	-5.4	30.0
1,2-Dibromo-3-Chloropropane	QuaF		0.2948		1.28	1.60	-20.2	30.0
1,2,4,5-Tetramethylbenzene	QuaF		1.099		1.53	1.60	-4.2	30.0
Dodecane	Ave	1.254	1.304		1.66	1.60	4.0	30.0
1,2,4-Trichlorobenzene	Ave	0.7511	0.6032		1.28	1.60	-19.7	30.0
Naphthalene	Ave	1.812	1.522		1.34	1.60	-16.0	30.0
Hexachlorobutadiene	Ave	0.6345	0.5023		1.27	1.60	-20.8	30.0
1,2,3-Trichlorobenzene	Ave	0.7230	0.6046		1.34	1.60	-16.4	30.0
2-Methylnaphthalene	Ave	0.7792	0.6517		1.34	1.60	-16.4	50.0
1-Methylnaphthalene	Ave	0.7933	0.7360		1.48	1.60	-7.2	50.0
4-Bromofluorobenzene (Surr)	Ave	0.7532	0.8115		5.00	4.64	7.7	30.0

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200902-16486.b\GCCVI03.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 03-Sep-2020 07:55:30 ALS Bottle#: 7 Worklist Smp#: 2
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016486-002
Misc. Info.: S123 80ML
Operator ID: HMT Instrument ID: MG
Sublist: chrom-MG_TO15*sub19

Method: \\chromfs\Knoxville\ChromData\MG\20200902-16486.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 03-Sep-2020 12:34:18 Calib Date: 02-Sep-2020 03:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1067

First Level Reviewer: tajh Date: 03-Sep-2020 12:31:42

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.811	8.811	0.000	85	123190	4.80	4.80	
* 2 1,4-Difluorobenzene	114	10.995	10.995	0.000	98	577691	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.730	15.730	0.000	94	619386	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.374	17.374	0.000	81	485867	4.64	5.00	
6 Chlorodifluoromethane	51	3.699	3.699	0.000	97	163063	1.60	1.48	
7 Propene	41	3.715	3.715	0.000	99	81716	1.60	1.51	
8 Dichlorodifluoromethane	85	3.764	3.764	0.000	98	163965	1.60	1.33	
9 Chloromethane	52	3.947	3.947	0.000	97	33449	1.60	1.51	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.947	3.947	0.000	95	87630	1.60	1.24	
11 Acetaldehyde	44	4.093	4.093	0.000	99	179720	8.00	6.92	
12 Vinyl chloride	62	4.114	4.114	0.000	98	93112	1.60	1.51	
14 Butadiene	54	4.201	4.201	0.000	64	82711	1.60	1.52	
13 Butane	43	4.201	4.201	0.000	86	181772	1.60	1.65	
15 Bromomethane	94	4.519	4.519	0.000	97	52059	1.60	1.40	
16 Chloroethane	64	4.659	4.659	0.000	86	39279	1.60	1.54	
17 Ethanol	31	4.751	4.751	0.000	98	165996	8.00	7.12	
18 Vinyl bromide	106	4.961	4.961	0.000	96	47742	1.60	1.50	
19 2-Methylbutane	43	5.010	5.010	0.000	93	137105	1.60	1.83	
20 Trichlorofluoromethane	101	5.225	5.225	0.000	96	135139	1.60	1.41	
21 Acrolein	56	5.236	5.236	0.000	37	22565	1.60	1.97	
22 Acetonitrile	40	5.295	5.295	0.000	99	32678	1.60	1.59	
23 Acetone	58	5.355	5.355	0.000	99	37245	1.60	1.81	
25 Isopropyl alcohol	45	5.441	5.441	0.000	43	118725	1.60	1.94	
24 Pentane	72	5.452	5.452	0.000	95	10161	1.60	1.63	
26 Ethyl ether	31	5.614	5.614	0.000	87	90476	1.60	2.06	
27 1,1-Dichloroethene	96	5.926	5.926	0.000	89	39908	1.60	1.31	
28 Acrylonitrile	53	6.029	6.029	0.000	97	47240	1.60	1.69	
30 2-Methyl-2-propanol	59	6.045	6.045	0.000	95	83969	1.60	1.36	
29 1,1,2-Trichloro-1,2,2-trifluoroe	101	6.104	6.104	0.000	88	95053	1.60	1.35	
31 Methylene Chloride	84	6.277	6.277	0.000	87	44090	1.60	1.45	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.288	6.288	0.000	95	82980	1.60	1.39	
33 Carbon disulfide	76	6.439	6.439	0.000	95	148813	1.60	1.46	
34 trans-1,2-Dichloroethene	96	7.080	7.080	0.000	89	49377	1.60	1.38	
35 2-Methylpentane	43	7.102	7.102	0.000	96	197897	1.60	1.42	
36 Methyl tert-butyl ether	73	7.215	7.215	0.000	90	111458	1.60	1.51	
37 1,1-Dichloroethane	63	7.501	7.501	0.000	98	135464	1.60	1.52	
38 Vinyl acetate	43	7.603	7.603	0.000	100	207791	1.60	1.78	
39 2-Butanone (MEK)	72	8.056	8.056	0.000	95	22455	1.60	1.52	
40 Hexane	56	8.083	8.083	0.000	91	67987	1.60	1.48	
41 Isopropyl ether	45	8.240	8.240	0.000	95	250381	1.60	1.63	
42 cis-1,2-Dichloroethene	96	8.477	8.477	0.000	95	57243	1.60	1.51	
43 Ethyl acetate	43	8.671	8.671	0.000	97	156337	1.60	1.53	
44 Chloroform	83	8.822	8.822	0.000	92	123703	1.60	1.43	
45 Tert-butyl ethyl ether	59	8.919	8.919	0.000	96	182754	1.60	1.42	
46 Tetrahydrofuran	42	9.232	9.232	0.000	90	85529	1.60	1.67	
47 1,1,1-Trichloroethane	97	9.852	9.852	0.000	93	117365	1.60	1.41	
48 1,2-Dichloroethane	62	9.960	9.960	0.000	94	102060	1.60	1.56	
51 n-Butanol	31	10.440	10.440	0.000	63	27592	1.60	1.49	
49 Cyclohexane	69	10.450	10.450	0.000	82	30113	1.60	1.51	
50 Benzene	78	10.450	10.450	0.000	93	185036	1.60	1.56	
52 Carbon tetrachloride	117	10.472	10.472	0.000	91	120587	1.60	1.64	
53 2,3-Dimethylpentane	71	10.574	10.574	0.000	90	43346	1.60	1.41	
54 Thiophene	84	10.720	10.720	0.000	92	101309	1.60	1.49	
55 Isooctane	57	11.216	11.216	0.000	97	458556	1.60	1.58	
56 n-Heptane	71	11.594	11.594	0.000	94	68623	1.60	1.47	
57 1,2-Dichloropropane	63	11.669	11.669	0.000	89	81656	1.60	1.51	
58 Trichloroethene	130	11.707	11.707	0.000	88	68699	1.60	1.33	
59 Dibromomethane	93	11.788	11.788	0.000	84	74856	1.60	1.47	
60 Dichlorobromomethane	83	11.933	11.933	0.000	94	135818	1.60	1.53	
61 1,4-Dioxane	88	11.966	11.966	0.000	88	19354	1.60	1.40	
62 Methyl methacrylate	41	12.036	12.036	0.000	84	103186	1.60	1.69	
63 Methylcyclohexane	83	12.483	12.483	0.000	85	141525	1.60	1.81	
64 4-Methyl-2-pentanone (MIBK)	43	12.888	12.888	0.000	97	158295	1.60	1.54	
65 cis-1,3-Dichloropropene	75	12.936	12.936	0.000	94	107289	1.60	1.51	
66 trans-1,3-Dichloropropene	75	13.632	13.632	0.000	89	93140	1.60	1.47	
67 Toluene	91	13.761	13.761	0.000	91	197783	1.60	1.45	
68 1,1,2-Trichloroethane	83	13.831	13.831	0.000	92	60792	1.60	1.42	
69 2-Hexanone	58	14.225	14.225	0.000	89	67643	1.60	1.34	
70 n-Octane	85	14.452	14.452	0.000	98	71452	1.60	1.44	
71 Chlorodibromomethane	129	14.538	14.538	0.000	94	118986	1.60	1.48	
72 Ethylene Dibromide	107	14.824	14.824	0.000	96	108658	1.60	1.41	
73 Tetrachloroethene	129	14.899	14.899	0.000	84	65653	1.60	1.27	
75 Chlorobenzene	112	15.778	15.778	0.000	88	154410	1.60	1.40	
74 2,3-Dimethylheptane	43	15.805	15.805	0.000	91	316725	1.60	1.34	
78 Ethylbenzene	91	16.069	16.069	0.000	98	259756	1.60	1.48	
79 m-Xylene & p-Xylene	91	16.231	16.231	0.000	98	401183	3.20	2.89	
80 n-Nonane	57	16.652	16.652	0.000	94	201576	1.60	1.47	
81 Bromoform	173	16.679	16.679	0.000	87	96470	1.60	1.42	
82 Styrene	104	16.695	16.695	0.000	96	148735	1.60	1.47	
83 o-Xylene	91	16.760	16.760	0.000	96	208508	1.60	1.48	
84 1,1,2,2-Tetrachloroethane	83	17.078	17.078	0.000	97	164945	1.60	1.47	
85 1,2,3-Trichloropropane	110	17.234	17.234	0.000	92	39267	1.60	1.43	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
86 Isopropylbenzene	105	17.347	17.347	0.000	97	265840	1.60	1.44	
87 N-Propylbenzene	120	17.887	17.887	0.000	98	69182	1.60	1.40	
88 2-Chlorotoluene	126	17.930	17.930	0.000	98	67976	1.60	1.44	
89 4-Ethyltoluene	105	18.038	18.038	0.000	98	249972	1.60	1.36	
90 1,3,5-Trimethylbenzene	120	18.113	18.113	0.000	91	117434	1.60	1.59	
92 Alpha Methyl Styrene	118	18.339	18.339	0.000	84	103587	1.60	1.42	
93 n-Decane	57	18.399	18.399	0.000	85	247162	1.60	1.49	
94 tert-Butylbenzene	119	18.534	18.534	0.000	90	227762	1.60	1.41	
95 1,2,4-Trimethylbenzene	105	18.550	18.550	0.000	96	234005	1.60	1.45	
96 sec-Butylbenzene	105	18.803	18.803	0.000	98	348438	1.60	1.43	
97 1,3-Dichlorobenzene	146	18.814	18.814	0.000	95	155374	1.60	1.35	
98 Benzyl chloride	91	18.890	18.890	0.000	96	245596	1.60	1.62	
99 1,4-Dichlorobenzene	146	18.900	18.900	0.000	90	155961	1.60	1.34	
100 4-Isopropyltoluene	119	18.965	18.965	0.000	96	274944	1.60	1.46	
101 1,2,3-Trimethylbenzene	105	19.019	19.019	0.000	98	175058	1.60	1.27	
102 Butylcyclohexane	83	19.073	19.073	0.000	84	222603	1.60	1.41	
104 1,2-Dichlorobenzene	146	19.262	19.262	0.000	88	152008	1.60	1.38	
103 2,3-Dihydroindene	117	19.262	19.262	0.000	92	218358	1.60	1.36	
106 Indene	116	19.391	19.391	0.000	89	164507	1.60	1.19	
105 n-Butylbenzene	91	19.396	19.396	0.000	97	327697	1.60	1.54	
107 Undecane	57	19.709	19.709	0.000	91	280488	1.60	1.51	
108 1,2-Dibromo-3-Chloropropane	157	19.860	19.860	0.000	84	60855	1.60	1.28	
109 1,2,4,5-Tetramethylbenzene	119	20.151	20.151	0.000	96	226955	1.60	1.53	
110 Dodecane	57	20.766	20.766	0.000	89	269238	1.60	1.66	
111 1,2,4-Trichlorobenzene	180	20.955	20.955	0.000	92	124538	1.60	1.28	
112 Naphthalene	128	21.095	21.095	0.000	98	314138	1.60	1.34	
113 Hexachlorobutadiene	225	21.305	21.305	0.000	89	103708	1.60	1.27	
114 1,2,3-Trichlorobenzene	180	21.370	21.370	0.000	93	124836	1.60	1.34	
115 2-Methylnaphthalene	142	22.141	22.141	0.000	98	134553	1.60	1.34	
116 1-Methylnaphthalene	142	22.319	22.319	0.000	99	151954	1.60	1.48	
A 122 C8 Range	1	14.481	(14.393-14.543)		0	1442529	1.60	2.39	
S 123 1,2-Dichloroethene, Total	1				0		3.20	2.89	
S 124 Xylenes, Total	100				0		4.80	4.37	
T 136 2-Methylthiophene TIC	97	13.912	13.912	0.000	97	144947	1.60	1.12	
T 137 3-Methylthiophene TIC	97	14.112	14.112	0.000	96	150606	1.60	1.17	
T 154 2-Ethylthiophene TIC	97	16.172	16.172	0.000	97	185814	1.60	1.44	
T 162 1,2,3,4-Tetramethylbenzene TIC	119	20.205	20.205	0.000	96	136187	1.60	1.06	
T 161 1,2,3,5-Tetramethylbenzene TIC	119	20.604	20.604	0.000	96	178009	1.60	1.38	
T 163 Benzo(b)thiophene TIC	134	21.197	21.197	0.000	97	164592	1.60	1.28	

Reagents:

40CV101S_00123	Amount Added: 80.00	Units: ml	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

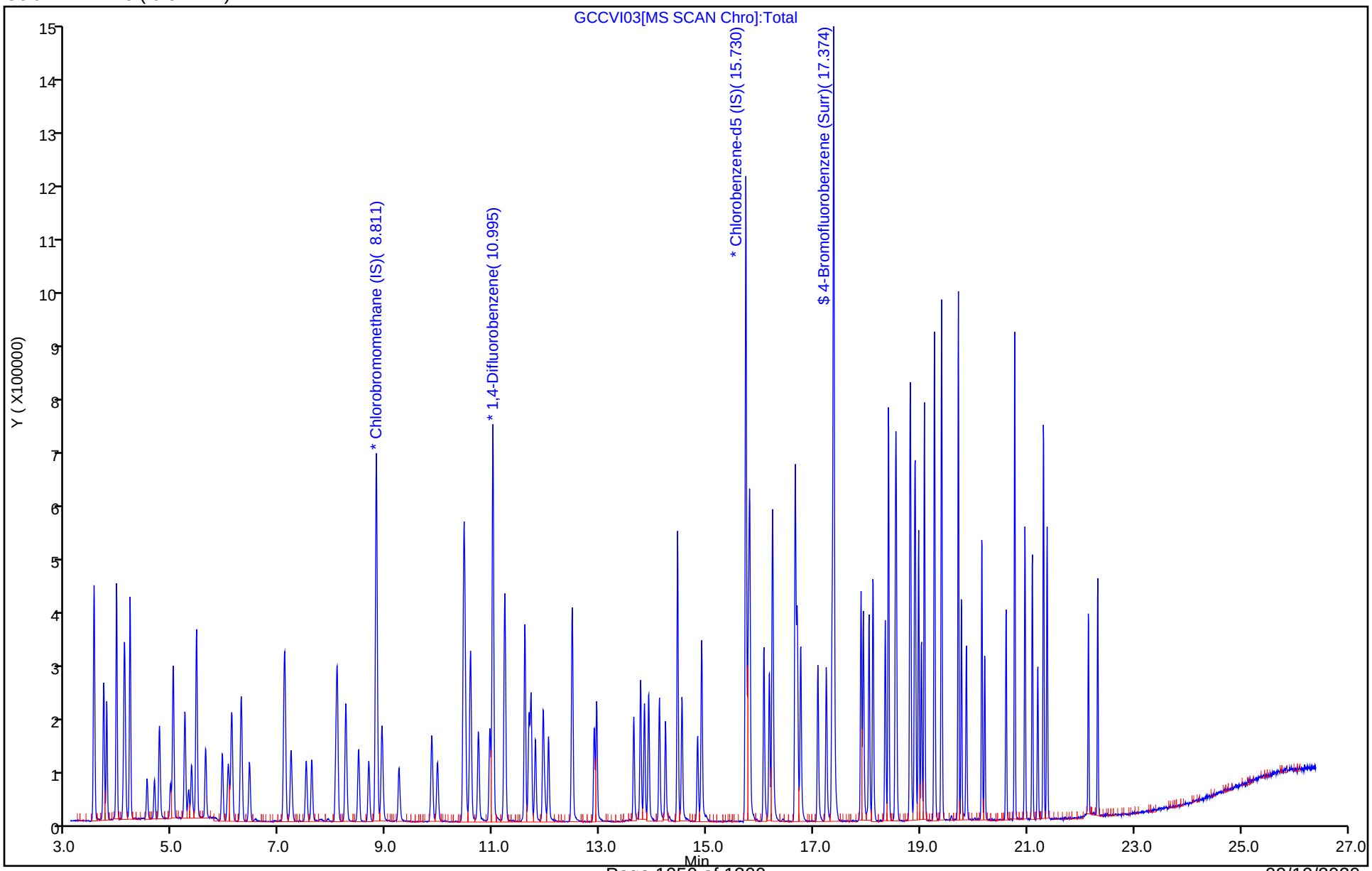
Report Date: 03-Sep-2020 12:34:20 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200902-16486.b\GCCVI03.D

Injection Date:	03-Sep-2020 07:55:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	CCVIS			Worklist Smp#:	2
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Lab Sample ID: CCVIS 140-42500/2 Calibration Date: 09/07/2020 08:06

Instrument ID: MG Calib Start Date: 09/01/2020 18:07

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 09/02/2020 03:27

Lab File ID: GCCVI07.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorodifluoromethane	Ave	4.301	4.160		1.55	1.60	-3.3	30.0
Propene	Ave	2.115	2.152		1.63	1.60	1.7	30.0
Dichlorodifluoromethane	Ave	4.809	4.309		1.43	1.60	-10.4	30.0
Chloromethane	Ave	0.8610	0.8590		1.60	1.60	-0.2	30.0
1,2-Dichloro-1,1,2,2-tetrafluoroethane	Ave	2.743	2.288		1.33	1.60	-16.6	30.0
Acetaldehyde	Ave	1.013	1.142		9.02	8.00	12.8	30.0
Vinyl chloride	Ave	2.404	2.325		1.55	1.60	-3.2	30.0
1,3-Butadiene	Ave	2.119	2.281		1.72	1.60	7.6	30.0
Butane	Ave	4.304	4.705		1.75	1.60	9.3	30.0
Bromomethane	Ave	1.452	1.255		1.38	1.60	-13.5	30.0
Chloroethane	Ave	0.997	0.9242		1.48	1.60	-7.3	30.0
Ethanol	Ave	0.9079	1.163		10.3	8.00	28.1	30.0
Vinyl bromide	Ave	1.239	1.098		1.42	1.60	-11.4	30.0
2-Methylbutane	Ave	2.923	3.463		1.90	1.60	18.5	30.0
Trichlorofluoromethane	Ave	3.737	3.365		1.44	1.60	-10.0	30.0
Acrolein	Ave	0.4464	0.6917		2.48	1.60	54.9*	30.0
Acetonitrile	Ave	0.7987	1.002		2.01	1.60	25.5	30.0
Acetone	Ave	0.7999	0.8544		5.13	4.80	6.8	30.0
Isopropyl alcohol	Ave	2.389	2.892		5.81	4.80	21.1	30.0
Pentane	Ave	0.2430	0.2258		1.49	1.60	-7.1	30.0
Ethyl ether	Ave	1.710	2.501		2.34	1.60	46.3*	30.0
1,1-Dichloroethene	Ave	1.183	1.054		1.43	1.60	-10.9	30.0
Acrylonitrile	Ave	1.092	1.369		2.01	1.60	25.4	30.0
tert-Butyl alcohol	Ave	2.412	2.339		1.55	1.60	-3.0	30.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	2.736	2.318		1.36	1.60	-15.3	30.0
Methylene Chloride	Ave	1.184	1.092		1.48	1.60	-7.8	30.0
3-Chloropropene	Ave	2.320	2.211		1.52	1.60	-4.7	30.0
Carbon disulfide	Ave	3.977	3.535		1.42	1.60	-11.1	30.0
trans-1,2-Dichloroethene	Ave	1.393	1.234		1.42	1.60	-11.4	30.0
2-Methylpentane	Ave	5.433	5.627		1.66	1.60	3.6	30.0
Methyl tert-butyl ether	Ave	2.883	3.189		1.77	1.60	10.6	30.0
1,1-Dichloroethane	Ave	3.473	3.385		1.56	1.60	-2.5	30.0
Vinyl acetate	Ave	4.548	5.912		2.08	1.60	30.0	30.0
2-Butanone (MEK)	Ave	0.5774	0.6199		1.72	1.60	7.4	30.0
Hexane	Ave	1.792	1.753		1.56	1.60	-2.2	30.0
Isopropyl ether	Ave	5.977	7.498		2.01	1.60	25.4	30.0
cis-1,2-Dichloroethene	Ave	1.481	1.362		1.47	1.60	-8.0	30.0
Ethyl acetate	Ave	3.981	5.152		2.07	1.60	29.4	30.0
Chloroform	Ave	3.366	3.069		1.46	1.60	-8.8	30.0
Tert-butyl ethyl ether	Ave	5.017	5.797		1.85	1.60	15.5	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Lab Sample ID: CCVIS 140-42500/2 Calibration Date: 09/07/2020 08:06

Instrument ID: MG Calib Start Date: 09/01/2020 18:07

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 09/02/2020 03:27

Lab File ID: GCCVI07.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Tetrahydrofuran	Ave	1.997	2.535		2.03	1.60	26.9	30.0
1,1,1-Trichloroethane	Ave	3.240	2.998		1.48	1.60	-7.5	30.0
1,2-Dichloroethane	Ave	0.5421	0.4761		1.41	1.60	-12.2	30.0
1-Butanol	Ave	0.1535	0.1383		1.44	1.60	-9.9	30.0
Benzene	Ave	0.9867	0.8368		1.36	1.60	-15.2	30.0
Cyclohexane	Ave	0.1661	0.1410		1.36	1.60	-15.1	30.0
Carbon tetrachloride	Ave	0.6099	0.5222		1.37	1.60	-14.4	30.0
2,3-Dimethylpentane	Ave	0.2548	0.2134		1.34	1.60	-16.3	30.0
Thiophene	Ave	0.5655	0.4769		1.35	1.60	-15.7	30.0
2,2,4-Trimethylpentane	Ave	2.414	2.171		1.44	1.60	-10.1	30.0
Heptane	Ave	0.3880	0.3314		1.37	1.60	-14.6	30.0
1,2-Dichloropropane	Ave	0.4494	0.4093		1.46	1.60	-8.9	30.0
Trichloroethene	Ave	0.4302	0.3231		1.20	1.60	-24.9	30.0
Dibromomethane	Ave	0.4239	0.3410		1.29	1.60	-19.6	30.0
Bromodichloromethane	Ave	0.7367	0.6628		1.44	1.60	-10.0	30.0
1,4-Dioxane	Ave	0.1151	0.0897		1.25	1.60	-22.1	30.0
Methyl methacrylate	Ave	0.5088	0.5746		1.81	1.60	12.9	30.0
Methylcyclohexane	Ave	0.6505	0.5325		1.31	1.60	-18.1	30.0
4-Methyl-2-pentanone (MIBK)	Ave	0.8567	0.9722		1.82	1.60	13.5	30.0
cis-1,3-Dichloropropene	Ave	0.5917	0.4975		1.35	1.60	-15.9	30.0
trans-1,3-Dichloropropene	Ave	0.4924	0.4506		1.46	1.60	-8.5	30.0
Toluene	Ave	1.059	0.9713		1.47	1.60	-8.3	30.0
1,1,2-Trichloroethane	Ave	0.3318	0.3068		1.48	1.60	-7.5	30.0
2-Hexanone	Ave	0.3922	0.3969		1.62	1.60	1.2	30.0
Octane	Ave	0.3858	0.3299		1.37	1.60	-14.5	30.0
Dibromochloromethane	Ave	0.6238	0.5630		1.44	1.60	-9.7	30.0
1,2-Dibromoethane (EDB)	Ave	0.5955	0.5252		1.41	1.60	-11.8	30.0
Tetrachloroethene	Ave	0.3991	0.3085		1.24	1.60	-22.7	30.0
Chlorobenzene	Ave	0.8562	0.7391		1.38	1.60	-13.7	30.0
2,3-Dimethylheptane	Ave	1.832	1.806		1.58	1.60	-1.5	30.0
Ethylbenzene	Ave	1.361	1.266		1.49	1.60	-6.9	30.0
m-Xylene & p-Xylene	Ave	1.076	0.9725		2.89	3.20	-9.7	30.0
Nonane	Ave	1.062	1.019		1.54	1.60	-4.0	30.0
Bromoform	Ave	0.5248	0.4985		1.52	1.60	-5.0	30.0
Styrene	Ave	0.7824	0.7565		1.55	1.60	-3.3	30.0
o-Xylene	Ave	1.089	0.999		1.47	1.60	-8.3	30.0
1,1,2,2-Tetrachloroethane	Ave	0.8691	0.8431		1.55	1.60	-3.0	30.0
1,2,3-Trichloropropane	Ave	0.2125	0.2023		1.52	1.60	-4.8	30.0
Isopropylbenzene	Ave	1.431	1.324		1.48	1.60	-7.5	30.0
Propylbenzene	Ave	0.3821	0.3596		1.51	1.60	-5.9	30.0
2-Chlorotoluene	Ave	0.3660	0.3341		1.46	1.60	-8.7	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Lab Sample ID: CCVIS 140-42500/2 Calibration Date: 09/07/2020 08:06

Instrument ID: MG Calib Start Date: 09/01/2020 18:07

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 09/02/2020 03:27

Lab File ID: GCCVI07.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Ethyltoluene	Ave	1.429	1.356		1.52	1.60	-5.1	30.0
1,3,5-Trimethylbenzene	Ave	0.5712	0.5469		1.53	1.60	-4.3	30.0
Alpha Methyl Styrene	Ave	0.5644	0.5654		1.60	1.60	0.2	30.0
Decane	Ave	1.287	1.305		1.62	1.60	1.4	30.0
tert-Butylbenzene	Ave	1.256	1.200		1.53	1.60	-4.4	30.0
1,2,4-Trimethylbenzene	Ave	1.249	1.185		1.52	1.60	-5.2	30.0
sec-Butylbenzene	Ave	1.884	1.816		1.54	1.60	-3.6	30.0
1,3-Dichlorobenzene	Ave	0.8900	0.7967		1.43	1.60	-10.5	30.0
Benzyl chloride	Ave	1.177	1.225		1.67	1.60	4.1	30.0
1,4-Dichlorobenzene	Ave	0.9015	0.8023		1.42	1.60	-11.0	30.0
4-Isopropyltoluene	Ave	1.459	1.470		1.61	1.60	0.7	30.0
1,2,3-Trimethylbenzene	QuaF		1.227		1.82	1.60	13.5	30.0
Butylcyclohexane	Ave	1.221	1.152		1.51	1.60	-5.7	30.0
1,2-Dichlorobenzene	Ave	0.8529	0.8002		1.50	1.60	-6.2	30.0
Indane	Ave	1.248	1.188		1.52	1.60	-4.8	30.0
Indene	Ave	1.069	1.075		1.61	1.60	0.5	30.0
Butylbenzene	Ave	1.654	1.652		1.60	1.60	-0.1	30.0
Undecane	Ave	1.437	1.487		1.66	1.60	3.5	30.0
1,2-Dibromo-3-Chloropropane	QuaF		0.4674		1.97	1.60	23.3	30.0
1,2,4,5-Tetramethylbenzene	QuaF		1.406		1.93	1.60	20.9	30.0
Dodecane	Ave	1.254	1.560		1.99	1.60	24.4	30.0
1,2,4-Trichlorobenzene	Ave	0.7511	0.7358		1.57	1.60	-2.0	30.0
Naphthalene	Ave	1.812	1.718		1.52	1.60	-5.2	30.0
Hexachlorobutadiene	Ave	0.6345	0.7020		1.77	1.60	10.7	30.0
1,2,3-Trichlorobenzene	Ave	0.7230	0.7245		1.60	1.60	0.2	30.0
2-Methylnaphthalene	Ave	0.7792	0.8096		1.66	1.60	3.9	50.0
1-Methylnaphthalene	Ave	0.7933	0.9068		1.83	1.60	14.3	50.0
4-Bromofluorobenzene (Surr)	Ave	0.7532	0.7673		4.73	4.64	1.9	30.0

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GCCVI07.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 07-Sep-2020 08:06:30 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016513-010
Misc. Info.: S121 80ML
Operator ID: HMT Instrument ID: MG
Sublist: chrom-MG_TO15*sub17

Method: \\chromfs\Knoxville\ChromData\MG\20200904-16516.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 08-Sep-2020 13:12:30 Calib Date: 02-Sep-2020 03:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1021

First Level Reviewer: barlozhetskayaa Date: 08-Sep-2020 13:12:30

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.806	8.806	0.000	85	111190	4.80	4.80	
* 2 1,4-Difluorobenzene	114	10.995	10.995	0.000	96	599538	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.730	15.730	0.000	94	593917	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.369	17.369	0.000	83	440513	4.64	4.73	
6 Chlorodifluoromethane	51	3.699	3.699	0.000	80	154183	1.60	1.55	
7 Propene	41	3.710	3.710	0.000	90	79749	1.60	1.63	
8 Dichlorodifluoromethane	85	3.759	3.759	0.000	97	159694	1.60	1.43	
9 Chloromethane	52	3.942	3.942	0.000	78	31839	1.60	1.60	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.947	3.947	0.000	93	84808	1.60	1.33	
11 Acetaldehyde	44	4.093	4.093	0.000	100	211596	8.00	9.02	
12 Vinyl chloride	62	4.109	4.109	0.000	93	86190	1.60	1.55	
13 Butane	43	4.195	4.195	0.000	86	174370	1.60	1.75	
14 Butadiene	54	4.195	4.195	0.000	65	84525	1.60	1.72	
15 Bromomethane	94	4.514	4.514	0.000	94	46532	1.60	1.38	
16 Chloroethane	64	4.654	4.654	0.000	82	34255	1.60	1.48	
17 Ethanol	31	4.751	4.751	0.000	95	215579	8.00	10.3	
18 Vinyl bromide	106	4.956	4.956	0.000	94	40686	1.60	1.42	
19 2-Methylbutane	43	5.004	5.004	0.000	94	128354	1.60	1.90	
20 Trichlorofluoromethane	101	5.225	5.225	0.000	95	124716	1.60	1.44	
21 Acrolein	56	5.231	5.231	0.000	20	25635	1.60	2.48	
22 Acetonitrile	40	5.295	5.295	0.000	98	37141	1.60	2.01	
23 Acetone	58	5.344	5.344	0.000	57	95003	4.80	5.13	
25 Isopropyl alcohol	45	5.436	5.436	0.000	83	321606	4.80	5.81	
24 Pentane	72	5.441	5.441	0.000	82	8369	1.60	1.49	
26 Ethyl ether	31	5.614	5.614	0.000	87	92692	1.60	2.34	
27 1,1-Dichloroethene	96	5.921	5.921	0.000	89	39073	1.60	1.43	
28 Acrylonitrile	53	6.029	6.029	0.000	96	50726	1.60	2.01	
30 2-Methyl-2-propanol	59	6.045	6.045	0.000	95	86700	1.60	1.55	
29 1,1,2-Trichloro-1,2,2-trifluoroe	101	6.099	6.099	0.000	89	85915	1.60	1.36	
31 Methylene Chloride	84	6.271	6.271	0.000	83	40466	1.60	1.48	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.288	6.288	0.000	87	81964	1.60	1.52	
33 Carbon disulfide	76	6.433	6.433	0.000	94	131032	1.60	1.42	
34 trans-1,2-Dichloroethene	96	7.080	7.080	0.000	83	45753	1.60	1.42	
35 2-Methylpentane	43	7.096	7.096	0.000	96	208568	1.60	1.66	
36 Methyl tert-butyl ether	73	7.215	7.215	0.000	89	118213	1.60	1.77	
37 1,1-Dichloroethane	63	7.496	7.496	0.000	97	125441	1.60	1.56	
38 Vinyl acetate	43	7.603	7.603	0.000	100	219119	1.60	2.08	
39 2-Butanone (MEK)	72	8.046	8.046	0.000	94	22977	1.60	1.72	
40 Hexane	56	8.072	8.072	0.000	84	64959	1.60	1.56	
41 Isopropyl ether	45	8.240	8.240	0.000	95	277890	1.60	2.01	
42 cis-1,2-Dichloroethene	96	8.477	8.477	0.000	94	50489	1.60	1.47	
43 Ethyl acetate	43	8.666	8.666	0.000	96	190937	1.60	2.07	
44 Chloroform	83	8.822	8.822	0.000	53	113738	1.60	1.46	
45 Tert-butyl ethyl ether	59	8.914	8.914	0.000	96	214842	1.60	1.85	
46 Tetrahydrofuran	42	9.237	9.237	0.000	90	93966	1.60	2.03	
47 1,1,1-Trichloroethane	97	9.847	9.847	0.000	84	111099	1.60	1.48	
48 1,2-Dichloroethane	62	9.954	9.954	0.000	91	95149	1.60	1.41	
51 n-Butanol	31	10.445	10.445	0.000	63	27645	1.60	1.44	
50 Benzene	78	10.445	10.445	0.000	92	167239	1.60	1.36	
49 Cyclohexane	69	10.451	10.451	0.000	80	28186	1.60	1.36	
52 Carbon tetrachloride	117	10.472	10.472	0.000	87	104353	1.60	1.37	
53 2,3-Dimethylpentane	71	10.569	10.569	0.000	91	42648	1.60	1.34	
54 Thiophene	84	10.720	10.720	0.000	89	95315	1.60	1.35	
55 Isooctane	57	11.211	11.211	0.000	98	433861	1.60	1.44	
56 n-Heptane	71	11.588	11.588	0.000	94	66222	1.60	1.37	
57 1,2-Dichloropropane	63	11.664	11.664	0.000	86	81791	1.60	1.46	
58 Trichloroethene	130	11.707	11.707	0.000	85	64576	1.60	1.20	
59 Dibromomethane	93	11.788	11.788	0.000	77	68145	1.60	1.29	
60 Dichlorobromomethane	83	11.933	11.933	0.000	93	132455	1.60	1.44	
61 1,4-Dioxane	88	11.971	11.971	0.000	76	17928	1.60	1.25	
62 Methyl methacrylate	41	12.030	12.030	0.000	78	114828	1.60	1.81	
63 Methylcyclohexane	83	12.478	12.478	0.000	83	106411	1.60	1.31	
64 4-Methyl-2-pentanone (MIBK)	43	12.888	12.888	0.000	98	194283	1.60	1.82	
65 cis-1,3-Dichloropropene	75	12.931	12.931	0.000	92	99427	1.60	1.35	
66 trans-1,3-Dichloropropene	75	13.632	13.632	0.000	90	89212	1.60	1.46	
67 Toluene	91	13.756	13.756	0.000	93	192283	1.60	1.47	
68 1,1,2-Trichloroethane	83	13.826	13.826	0.000	91	60742	1.60	1.48	
69 2-Hexanone	58	14.225	14.225	0.000	90	78572	1.60	1.62	
70 n-Octane	85	14.452	14.452	0.000	98	65309	1.60	1.37	
71 Chlorodibromomethane	129	14.533	14.533	0.000	92	111457	1.60	1.44	
72 Ethylene Dibromide	107	14.824	14.824	0.000	97	103971	1.60	1.41	
73 Tetrachloroethene	129	14.899	14.899	0.000	87	61073	1.60	1.24	
75 Chlorobenzene	112	15.778	15.778	0.000	81	146326	1.60	1.38	
74 2,3-Dimethylheptane	43	15.800	15.800	0.000	88	357469	1.60	1.58	
78 Ethylbenzene	91	16.064	16.064	0.000	98	250711	1.60	1.49	
79 m-Xylene & p-Xylene	91	16.231	16.231	0.000	96	385067	3.20	2.89	
80 n-Nonane	57	16.652	16.652	0.000	93	201820	1.60	1.54	
81 Bromoform	173	16.679	16.679	0.000	78	98689	1.60	1.52	
82 Styrene	104	16.695	16.695	0.000	92	149764	1.60	1.55	
83 o-Xylene	91	16.754	16.754	0.000	94	197735	1.60	1.47	
84 1,1,2,2-Tetrachloroethane	83	17.078	17.078	0.000	97	166915	1.60	1.55	
85 1,2,3-Trichloropropane	110	17.234	17.234	0.000	83	40049	1.60	1.52	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
86 Isopropylbenzene	105	17.342	17.342	0.000	97	262141	1.60	1.48	
87 N-Propylbenzene	120	17.881	17.881	0.000	98	71185	1.60	1.51	
88 2-Chlorotoluene	126	17.930	17.930	0.000	47	66150	1.60	1.46	
89 4-Ethyltoluene	105	18.032	18.032	0.000	98	268462	1.60	1.52	
90 1,3,5-Trimethylbenzene	120	18.113	18.113	0.000	91	108262	1.60	1.53	
92 Alpha Methyl Styrene	118	18.340	18.340	0.000	84	111942	1.60	1.60	
93 n-Decane	57	18.399	18.399	0.000	83	258376	1.60	1.62	
94 tert-Butylbenzene	119	18.534	18.534	0.000	84	237581	1.60	1.53	
95 1,2,4-Trimethylbenzene	105	18.544	18.544	0.000	89	234537	1.60	1.52	
96 sec-Butylbenzene	105	18.798	18.798	0.000	98	359587	1.60	1.54	
97 1,3-Dichlorobenzene	146	18.814	18.814	0.000	93	157722	1.60	1.43	
98 Benzyl chloride	91	18.890	18.890	0.000	95	242578	1.60	1.67	
99 1,4-Dichlorobenzene	146	18.900	18.900	0.000	89	158829	1.60	1.42	
100 4-Isopropyltoluene	119	18.965	18.965	0.000	80	290956	1.60	1.61	
101 1,2,3-Trimethylbenzene	105	19.014	19.014	0.000	79	242888	1.60	1.82	
102 Butylcyclohexane	83	19.073	19.073	0.000	83	228113	1.60	1.51	
104 1,2-Dichlorobenzene	146	19.262	19.262	0.000	80	158408	1.60	1.50	
103 2,3-Dihydroindene	117	19.262	19.262	0.000	89	235281	1.60	1.52	
106 Indene	116	19.391	19.391	0.000	79	212742	1.60	1.61	
105 n-Butylbenzene	91	19.396	19.396	0.000	96	327003	1.60	1.60	
107 Undecane	57	19.704	19.704	0.000	89	294442	1.60	1.66	
108 1,2-Dibromo-3-Chloropropane	157	19.860	19.860	0.000	89	92526	1.60	1.97	
109 1,2,4,5-Tetramethylbenzene	119	20.146	20.146	0.000	97	278318	1.60	1.93	
110 Dodecane	57	20.761	20.761	0.000	88	308875	1.60	1.99	
111 1,2,4-Trichlorobenzene	180	20.955	20.955	0.000	93	145675	1.60	1.57	
112 Naphthalene	128	21.095	21.095	0.000	98	340091	1.60	1.52	
113 Hexachlorobutadiene	225	21.305	21.305	0.000	84	138984	1.60	1.77	
114 1,2,3-Trichlorobenzene	180	21.370	21.370	0.000	93	143428	1.60	1.60	
115 2-Methylnaphthalene	142	22.141	22.141	0.000	95	160296	1.60	1.66	
116 1-Methylnaphthalene	142	22.314	22.314	0.000	98	179524	1.60	1.83	
A 122 C8 Range	1	14.436	(14.393-14.522)		0	886202	1.60	1.53	
S 123 1,2-Dichloroethene, Total	1				0		3.20	2.89	
S 124 Xylenes, Total	100				0		4.80	4.36	

Reagents:

40CV101P_00121	Amount Added: 80.00	Units: ml	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

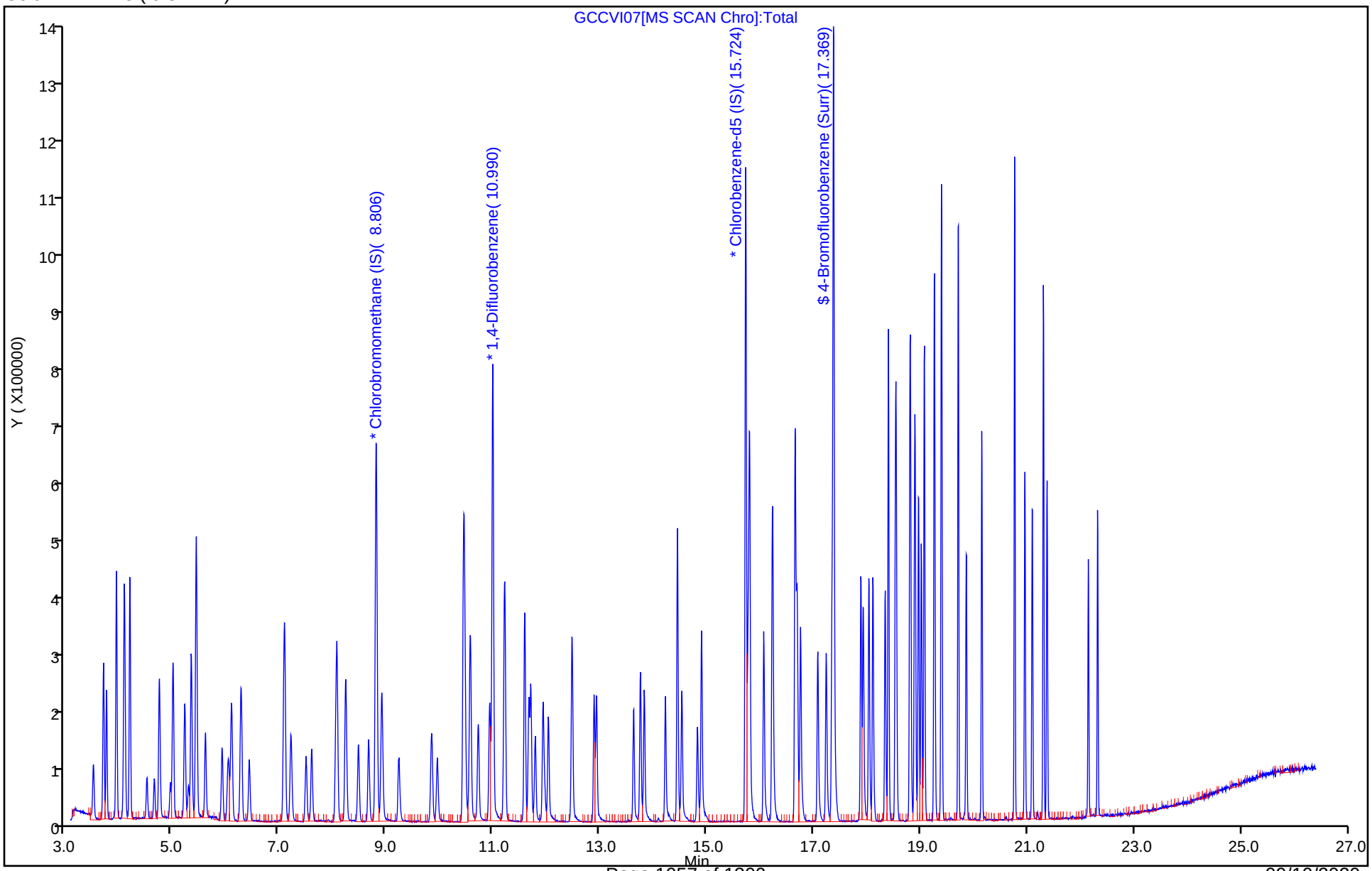
Report Date: 08-Sep-2020 13:12:31 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GCCVI07.D

Injection Date:	07-Sep-2020 08:06:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	CCVIS			Worklist Smp#:	2
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Lab Sample ID: CCVIS 140-42503/2 Calibration Date: 09/08/2020 15:52

Instrument ID: MG Calib Start Date: 09/01/2020 18:07

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 09/02/2020 03:27

Lab File ID: GCCVI08Z.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorodifluoromethane	Ave	4.301	4.660		1.73	1.60	8.4	30.0
Propene	Ave	2.115	2.251		1.70	1.60	6.4	30.0
Dichlorodifluoromethane	Ave	4.809	4.437		1.48	1.60	-7.7	30.0
Chloromethane	Ave	0.8610	0.9690		1.80	1.60	12.5	30.0
1,2-Dichloro-1,1,2,2-tetrafluoroethane	Ave	2.743	2.370		1.38	1.60	-13.6	30.0
Acetaldehyde	Ave	1.013	0.9793		7.74	8.00	-3.3	30.0
Vinyl chloride	Ave	2.404	2.601		1.73	1.60	8.2	30.0
1,3-Butadiene	Ave	2.119	2.538		1.92	1.60	19.8	30.0
Butane	Ave	4.304	5.403		2.01	1.60	25.5	30.0
Bromomethane	Ave	1.452	1.393		1.54	1.60	-4.0	30.0
Chloroethane	Ave	0.997	1.078		1.73	1.60	8.1	30.0
Ethanol	Ave	0.9079	0.9203		8.11	8.00	1.4	30.0
Vinyl bromide	Ave	1.239	1.240		1.60	1.60	0.1	30.0
2-Methylbutane	Ave	2.923	4.127		2.26	1.60	41.2*	30.0
Trichlorofluoromethane	Ave	3.737	3.635		1.56	1.60	-2.7	30.0
Acrolein	Ave	0.4464	0.7566		2.71	1.60	69.5*	30.0
Acetonitrile	Ave	0.7987	0.9470		1.90	1.60	18.6	30.0
Acetone	Ave	0.7999	0.8371		1.67	1.60	4.6	30.0
Isopropyl alcohol	Ave	2.389	4.008		2.68	1.60	67.8*	30.0
Pentane	Ave	0.2430	0.2564		1.69	1.60	5.5	30.0
Ethyl ether	Ave	1.710	2.538		2.37	1.60	48.4*	30.0
1,1-Dichloroethene	Ave	1.183	1.139		1.54	1.60	-3.8	30.0
Acrylonitrile	Ave	1.092	1.355		1.99	1.60	24.1	30.0
tert-Butyl alcohol	Ave	2.412	2.757		1.83	1.60	14.3	30.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	2.736	2.480		1.45	1.60	-9.4	30.0
Methylene Chloride	Ave	1.184	1.141		1.54	1.60	-3.6	30.0
3-Chloropropene	Ave	2.320	2.286		1.58	1.60	-1.5	30.0
Carbon disulfide	Ave	3.977	3.826		1.54	1.60	-3.8	30.0
trans-1,2-Dichloroethene	Ave	1.393	1.255		1.44	1.60	-9.9	30.0
2-Methylpentane	Ave	5.433	5.558		1.64	1.60	2.3	30.0
Methyl tert-butyl ether	Ave	2.883	2.746		1.52	1.60	-4.8	30.0
1,1-Dichloroethane	Ave	3.473	3.571		1.65	1.60	2.8	30.0
Vinyl acetate	Ave	4.548	5.485		1.93	1.60	20.6	30.0
2-Butanone (MEK)	Ave	0.5774	0.5047		1.40	1.60	-12.6	30.0
Hexane	Ave	1.792	1.837		1.64	1.60	2.5	30.0
Isopropyl ether	Ave	5.977	6.502		1.74	1.60	8.8	30.0
cis-1,2-Dichloroethene	Ave	1.481	1.376		1.49	1.60	-7.1	30.0
Ethyl acetate	Ave	3.981	3.754		1.51	1.60	-5.7	30.0
Chloroform	Ave	3.366	3.143		1.49	1.60	-6.6	30.0
Tert-butyl ethyl ether	Ave	5.017	4.491		1.43	1.60	-10.5	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Lab Sample ID: CCVIS 140-42503/2 Calibration Date: 09/08/2020 15:52

Instrument ID: MG Calib Start Date: 09/01/2020 18:07

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 09/02/2020 03:27

Lab File ID: GCCVI08Z.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Tetrahydrofuran	Ave	1.997	2.257		1.81	1.60	13.0	30.0
1,1,1-Trichloroethane	Ave	3.240	2.933		1.45	1.60	-9.5	30.0
1,2-Dichloroethane	Ave	0.5421	0.4958		1.46	1.60	-8.5	30.0
1-Butanol	Ave	0.1535	0.1925		2.01	1.60	25.4	30.0
Benzene	Ave	0.9867	0.8682		1.41	1.60	-12.0	30.0
Cyclohexane	Ave	0.1661	0.1517		1.46	1.60	-8.7	30.0
Carbon tetrachloride	Ave	0.6099	0.5775		1.51	1.60	-5.3	30.0
2,3-Dimethylpentane	Ave	0.2548	0.2258		1.42	1.60	-11.4	30.0
Thiophene	Ave	0.5655	0.4913		1.39	1.60	-13.1	30.0
2,2,4-Trimethylpentane	Ave	2.414	2.458		1.63	1.60	1.8	30.0
Heptane	Ave	0.3880	0.3683		1.52	1.60	-5.1	30.0
1,2-Dichloropropane	Ave	0.4494	0.4276		1.52	1.60	-4.9	30.0
Trichloroethene	Ave	0.4302	0.3391		1.26	1.60	-21.2	30.0
Dibromomethane	Ave	0.4239	0.3702		1.40	1.60	-12.7	30.0
Bromodichloromethane	Ave	0.7367	0.6819		1.48	1.60	-7.4	30.0
1,4-Dioxane	Ave	0.1151	0.0850		1.18	1.60	-26.2	30.0
Methyl methacrylate	Ave	0.5088	0.4786		1.51	1.60	-5.9	30.0
Methylcyclohexane	Ave	0.6505	0.7027		1.73	1.60	8.0	30.0
4-Methyl-2-pentanone (MIBK)	Ave	0.8567	0.9404		1.76	1.60	9.8	30.0
cis-1,3-Dichloropropene	Ave	0.5917	0.5272		1.43	1.60	-10.9	30.0
trans-1,3-Dichloropropene	Ave	0.4924	0.4286		1.39	1.60	-13.0	30.0
Toluene	Ave	1.059	0.9047		1.37	1.60	-14.5	30.0
1,1,2-Trichloroethane	Ave	0.3318	0.2815		1.36	1.60	-15.2	30.0
2-Hexanone	Ave	0.3922	0.4111		1.68	1.60	4.8	30.0
Octane	Ave	0.3858	0.3366		1.40	1.60	-12.8	30.0
Dibromochloromethane	Ave	0.6238	0.5356		1.37	1.60	-14.1	30.0
1,2-Dibromoethane (EDB)	Ave	0.5955	0.4728		1.27	1.60	-20.6	30.0
Tetrachloroethene	Ave	0.3991	0.3090		1.24	1.60	-22.6	30.0
Chlorobenzene	Ave	0.8562	0.7283		1.36	1.60	-14.9	30.0
2,3-Dimethylheptane	Ave	1.832	1.647		1.44	1.60	-10.1	30.0
Ethylbenzene	Ave	1.361	1.182		1.39	1.60	-13.1	30.0
m-Xylene & p-Xylene	Ave	1.076	0.9181		2.73	3.20	-14.7	30.0
Nonane	Ave	1.062	1.001		1.51	1.60	-5.7	30.0
Bromoform	Ave	0.5248	0.4385		1.34	1.60	-16.4	30.0
Styrene	Ave	0.7824	0.7032		1.44	1.60	-10.1	30.0
o-Xylene	Ave	1.089	0.9336		1.37	1.60	-14.3	30.0
1,1,2,2-Tetrachloroethane	Ave	0.8691	0.7703		1.42	1.60	-11.4	30.0
1,2,3-Trichloropropane	Ave	0.2125	0.1785		1.34	1.60	-16.0	30.0
Isopropylbenzene	Ave	1.431	1.233		1.38	1.60	-13.9	30.0
Propylbenzene	Ave	0.3821	0.3183		1.33	1.60	-16.7	30.0
2-Chlorotoluene	Ave	0.3660	0.3254		1.42	1.60	-11.1	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Lab Sample ID: CCVIS 140-42503/2 Calibration Date: 09/08/2020 15:52

Instrument ID: MG Calib Start Date: 09/01/2020 18:07

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 09/02/2020 03:27

Lab File ID: GCCVI08Z.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Ethyltoluene	Ave	1.429	1.131		1.27	1.60	-20.8	30.0
1,3,5-Trimethylbenzene	Ave	0.5712	0.5197		1.46	1.60	-9.0	30.0
Alpha Methyl Styrene	Ave	0.5644	0.4834		1.37	1.60	-14.4	30.0
Decane	Ave	1.287	1.216		1.51	1.60	-5.5	30.0
tert-Butylbenzene	Ave	1.256	0.9771		1.24	1.60	-22.2	30.0
1,2,4-Trimethylbenzene	Ave	1.249	0.9803		1.26	1.60	-21.5	30.0
sec-Butylbenzene	Ave	1.884	1.500		1.27	1.60	-20.4	30.0
1,3-Dichlorobenzene	Ave	0.8900	0.6658		1.20	1.60	-25.2	30.0
Benzyl chloride	Ave	1.177	1.006		1.37	1.60	-14.5	30.0
1,4-Dichlorobenzene	Ave	0.9015	0.6719		1.19	1.60	-25.5	30.0
4-Isopropyltoluene	Ave	1.459	1.108		1.22	1.60	-24.1	30.0
1,2,3-Trimethylbenzene	QuaF		0.7290		1.09	1.60	-31.7*	30.0
Butylcyclohexane	Ave	1.221	1.016		1.33	1.60	-16.8	30.0
Indane	Ave	1.248	0.9549		1.22	1.60	-23.5	30.0
1,2-Dichlorobenzene	Ave	0.8529	0.6594		1.24	1.60	-22.7	30.0
Indene	Ave	1.069	0.7312		1.09	1.60	-31.6*	30.0
Butylbenzene	Ave	1.654	1.329		1.29	1.60	-19.7	30.0
Undecane	Ave	1.437	1.257		1.40	1.60	-12.5	30.0
1,2-Dibromo-3-Chloropropane	QuaF		0.2527		1.10	1.60	-31.2*	30.0
1,2,4,5-Tetramethylbenzene	QuaF		0.9358		1.31	1.60	-17.8	30.0
Dodecane	Ave	1.254	1.153		1.47	1.60	-8.1	30.0
1,2,4-Trichlorobenzene	Ave	0.7511	0.5314		1.13	1.60	-29.2	30.0
Naphthalene	Ave	1.812	1.327		1.17	1.60	-26.8	30.0
Hexachlorobutadiene	Ave	0.6345	0.4730		1.19	1.60	-25.4	30.0
1,2,3-Trichlorobenzene	Ave	0.7230	0.5211		1.15	1.60	-27.9	30.0
2-Methylnaphthalene	Ave	0.7792	0.7539		1.55	1.60	-3.3	50.0
1-Methylnaphthalene	Ave	0.7933	0.7903		1.59	1.60	-0.4	50.0
4-Bromofluorobenzene (Surr)	Ave	0.7532	0.7870		4.85	4.64	4.5	30.0

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GCCVI08Z.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 08-Sep-2020 15:52:30 ALS Bottle#: 16 Worklist Smp#: 2
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016519-002
Misc. Info.: s127 80ML
Operator ID: HMT Instrument ID: MG
Sublist: chrom-MG_TO15*sub19

Method: \\chromfs\Knoxville\ChromData\MG\20200904-16519.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 09-Sep-2020 14:14:33 Calib Date: 02-Sep-2020 03:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1034

First Level Reviewer: barlozhetskayaa Date: 09-Sep-2020 13:53:41

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.806	8.806	0.000	85	85639	4.80	4.80	s
* 2 1,4-Difluorobenzene	114	10.990	10.990	0.000	98	429335	4.80	4.80	s
* 3 Chlorobenzene-d5 (IS)	117	15.724	15.724	0.000	96	458464	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.369	17.369	0.000	81	348774	4.64	4.85	
6 Chlorodifluoromethane	51	3.699	3.699	0.000	97	133039	1.60	1.73	
7 Propene	41	3.710	3.710	0.000	99	64247	1.60	1.70	
8 Dichlorodifluoromethane	85	3.764	3.764	0.000	97	126670	1.60	1.48	
9 Chloromethane	52	3.942	3.942	0.000	82	27660	1.60	1.80	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.947	3.947	0.000	92	67647	1.60	1.38	
11 Acetaldehyde	44	4.093	4.093	0.000	99	139783	8.00	7.74	
12 Vinyl chloride	62	4.109	4.109	0.000	99	74241	1.60	1.73	
14 Butadiene	54	4.201	4.201	0.000	64	72459	1.60	1.92	
13 Butane	43	4.201	4.201	0.000	87	154234	1.60	2.01	
15 Bromomethane	94	4.519	4.519	0.000	98	39779	1.60	1.54	
16 Chloroethane	64	4.659	4.659	0.000	81	30770	1.60	1.73	
17 Ethanol	31	4.751	4.751	0.000	97	131351	8.00	8.11	
18 Vinyl bromide	106	4.961	4.961	0.000	96	35403	1.60	1.60	
19 2-Methylbutane	43	5.010	5.010	0.000	94	117808	1.60	2.26	
20 Trichlorofluoromethane	101	5.225	5.225	0.000	96	103761	1.60	1.56	
21 Acrolein	56	5.236	5.236	0.000	38	21599	1.60	2.71	
22 Acetonitrile	40	5.295	5.295	0.000	100	27032	1.60	1.90	
23 Acetone	58	5.349	5.349	0.000	99	23895	1.60	1.67	
25 Isopropyl alcohol	45	5.441	5.441	0.000	43	114409	1.60	2.68	
24 Pentane	72	5.452	5.452	0.000	93	7319	1.60	1.69	
26 Ethyl ether	31	5.614	5.614	0.000	86	72439	1.60	2.37	
27 1,1-Dichloroethene	96	5.921	5.921	0.000	88	32508	1.60	1.54	
28 Acrylonitrile	53	6.029	6.029	0.000	95	38676	1.60	1.99	
30 2-Methyl-2-propanol	59	6.045	6.045	0.000	95	78702	1.60	1.83	
29 1,1,2-Trichloro-1,2,2-trifluoroe	101	6.099	6.099	0.000	86	70792	1.60	1.45	
31 Methylene Chloride	84	6.271	6.271	0.000	85	32562	1.60	1.54	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.288	6.288	0.000	92	65271	1.60	1.58	
33 Carbon disulfide	76	6.433	6.433	0.000	94	109229	1.60	1.54	
34 trans-1,2-Dichloroethene	96	7.086	7.086	0.000	89	35814	1.60	1.44	
35 2-Methylpentane	43	7.096	7.096	0.000	96	158659	1.60	1.64	
36 Methyl tert-butyl ether	73	7.215	7.215	0.000	89	78397	1.60	1.52	
37 1,1-Dichloroethane	63	7.495	7.495	0.000	98	101940	1.60	1.65	
38 Vinyl acetate	43	7.603	7.603	0.000	100	156579	1.60	1.93	
39 2-Butanone (MEK)	72	8.045	8.045	0.000	93	14408	1.60	1.40	
40 Hexane	56	8.078	8.078	0.000	91	52442	1.60	1.64	
41 Isopropyl ether	45	8.234	8.234	0.000	96	185601	1.60	1.74	
42 cis-1,2-Dichloroethene	96	8.482	8.482	0.000	93	39279	1.60	1.49	
43 Ethyl acetate	43	8.666	8.666	0.000	96	107166	1.60	1.51	
44 Chloroform	83	8.817	8.817	0.000	92	89711	1.60	1.49	
45 Tert-butyl ethyl ether	59	8.919	8.919	0.000	96	128214	1.60	1.43	
46 Tetrahydrofuran	42	9.232	9.232	0.000	89	64442	1.60	1.81	
47 1,1,1-Trichloroethane	97	9.852	9.852	0.000	93	83716	1.60	1.45	
48 1,2-Dichloroethane	62	9.954	9.954	0.000	93	70957	1.60	1.46	
51 n-Butanol	31	10.434	10.434	0.000	70	27548	1.60	2.01	
50 Benzene	78	10.445	10.445	0.000	91	124248	1.60	1.41	
49 Cyclohexane	69	10.450	10.450	0.000	83	21712	1.60	1.46	
52 Carbon tetrachloride	117	10.467	10.467	0.000	89	82641	1.60	1.51	
53 2,3-Dimethylpentane	71	10.575	10.575	0.000	89	32317	1.60	1.42	
54 Thiophene	84	10.720	10.720	0.000	90	70311	1.60	1.39	
55 Isooctane	57	11.216	11.216	0.000	97	351776	1.60	1.63	
56 n-Heptane	71	11.588	11.588	0.000	95	52709	1.60	1.52	
57 1,2-Dichloropropane	63	11.664	11.664	0.000	88	61193	1.60	1.52	
58 Trichloroethene	130	11.702	11.702	0.000	86	48534	1.60	1.26	
59 Dibromomethane	93	11.788	11.788	0.000	84	52979	1.60	1.40	
60 Dichlorobromomethane	83	11.933	11.933	0.000	92	97586	1.60	1.48	
61 1,4-Dioxane	88	11.966	11.966	0.000	85	12169	1.60	1.18	
62 Methyl methacrylate	41	12.030	12.030	0.000	85	68494	1.60	1.51	
63 Methylcyclohexane	83	12.478	12.478	0.000	83	100568	1.60	1.73	
64 4-Methyl-2-pentanone (MIBK)	43	12.888	12.888	0.000	96	134588	1.60	1.76	
65 cis-1,3-Dichloropropene	75	12.936	12.936	0.000	96	75451	1.60	1.43	
66 trans-1,3-Dichloropropene	75	13.627	13.627	0.000	88	65495	1.60	1.39	
67 Toluene	91	13.756	13.756	0.000	92	138264	1.60	1.37	
68 1,1,2-Trichloroethane	83	13.826	13.826	0.000	91	43025	1.60	1.36	
69 2-Hexanone	58	14.225	14.225	0.000	89	62823	1.60	1.68	
70 n-Octane	85	14.452	14.452	0.000	98	51442	1.60	1.40	
71 Chlorodibromomethane	129	14.533	14.533	0.000	92	81847	1.60	1.37	
72 Ethylene Dibromide	107	14.824	14.824	0.000	97	72258	1.60	1.27	
73 Tetrachloroethene	129	14.899	14.899	0.000	85	47229	1.60	1.24	
75 Chlorobenzene	112	15.773	15.773	0.000	88	111296	1.60	1.36	
74 2,3-Dimethylheptane	43	15.800	15.800	0.000	90	251682	1.60	1.44	
78 Ethylbenzene	91	16.064	16.064	0.000	98	180695	1.60	1.39	
79 m-Xylene & p-Xylene	91	16.231	16.231	0.000	96	280616	3.20	2.73	
80 n-Nonane	57	16.652	16.652	0.000	94	152984	1.60	1.51	
81 Bromoform	173	16.673	16.673	0.000	88	67010	1.60	1.34	
82 Styrene	104	16.695	16.695	0.000	95	107471	1.60	1.44	
83 o-Xylene	91	16.754	16.754	0.000	97	142681	1.60	1.37	
84 1,1,2,2-Tetrachloroethane	83	17.078	17.078	0.000	96	117711	1.60	1.42	
85 1,2,3-Trichloropropane	110	17.234	17.234	0.000	91	27285	1.60	1.34	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
86 Isopropylbenzene	105	17.342	17.342	0.000	97	188407	1.60	1.38	
87 N-Propylbenzene	120	17.881	17.881	0.000	97	48641	1.60	1.33	
88 2-Chlorotoluene	126	17.930	17.930	0.000	97	49726	1.60	1.42	
89 4-Ethyltoluene	105	18.032	18.032	0.000	98	172903	1.60	1.27	
90 1,3,5-Trimethylbenzene	120	18.108	18.108	0.000	91	79423	1.60	1.46	
92 Alpha Methyl Styrene	118	18.340	18.340	0.000	86	73871	1.60	1.37	
93 n-Decane	57	18.399	18.399	0.000	84	185869	1.60	1.51	
94 tert-Butylbenzene	119	18.528	18.528	0.000	90	149316	1.60	1.24	
95 1,2,4-Trimethylbenzene	105	18.544	18.544	0.000	96	149812	1.60	1.26	
96 sec-Butylbenzene	105	18.803	18.803	0.000	98	229281	1.60	1.27	
97 1,3-Dichlorobenzene	146	18.814	18.814	0.000	95	101742	1.60	1.20	
98 Benzyl chloride	91	18.890	18.890	0.000	96	153721	1.60	1.37	
99 1,4-Dichlorobenzene	146	18.900	18.900	0.000	87	102686	1.60	1.19	
100 4-Isopropyltoluene	119	18.965	18.965	0.000	96	169334	1.60	1.22	
101 1,2,3-Trimethylbenzene	105	19.014	19.014	0.000	98	111405	1.60	1.09	
102 Butylcyclohexane	83	19.073	19.073	0.000	84	155244	1.60	1.33	
103 2,3-Dihydroindene	117	19.256	19.256	0.000	91	145924	1.60	1.22	
104 1,2-Dichlorobenzene	146	19.262	19.262	0.000	81	100767	1.60	1.24	
106 Indene	116	19.391	19.391	0.000	95	111736	1.60	1.09	
105 n-Butylbenzene	91	19.396	19.396	0.000	98	203063	1.60	1.29	
107 Undecane	57	19.704	19.704	0.000	89	192086	1.60	1.40	
108 1,2-Dibromo-3-Chloropropane	157	19.855	19.855	0.000	78	38612	1.60	1.10	
109 1,2,4,5-Tetramethylbenzene	119	20.146	20.146	0.000	96	143011	1.60	1.31	
110 Dodecane	57	20.761	20.761	0.000	87	176205	1.60	1.47	
111 1,2,4-Trichlorobenzene	180	20.955	20.955	0.000	92	81213	1.60	1.13	
112 Naphthalene	128	21.090	21.090	0.000	98	202730	1.60	1.17	
113 Hexachlorobutadiene	225	21.300	21.300	0.000	90	72287	1.60	1.19	
114 1,2,3-Trichlorobenzene	180	21.370	21.370	0.000	94	79631	1.60	1.15	
115 2-Methylnaphthalene	142	22.141	22.141	0.000	99	115215	1.60	1.55	
116 1-Methylnaphthalene	142	22.314	22.314	0.000	99	120778	1.60	1.59	
A 122 C8 Range	1	14.474	(14.393-14.554)		0	727964	1.60	1.63	
S 123 1,2-Dichloroethene, Total	1				0		3.20	2.93	
S 124 Xylenes, Total	100				0		4.80	4.10	
T 136 2-Methylthiophene TIC	97	13.907	13.907	0.000	97	102291	1.60	1.07	
T 137 3-Methylthiophene TIC	97	14.107	14.107	0.000	97	104672	1.60	1.10	
T 154 2-Ethylthiophene TIC	97	16.166	16.166	0.000	95	129343	1.60	1.35	
T 160 1,2-Dimethyl-4-Ethylbenzene TIC	119	19.763	19.763	0.000	96	114988	1.60	1.20	
T 161 1,2,3,5-Tetramethylbenzene TIC	119	20.200	20.200	0.000	94	86137	1.60	0.9018	
T 162 1,2,3,4-Tetramethylbenzene TIC	119	20.599	20.599	0.000	97	115894	1.60	1.21	a
T 163 Benzo(b)thiophene TIC	134	21.192	21.192	0.000	97	108671	1.60	1.14	

QC Flag Legend

Processing Flags

s - Failed ISTD Recovery Test

Review Flags

a - User Assigned ID

Reagents:

40CV101S_00127	Amount Added: 80.00	Units: mL	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

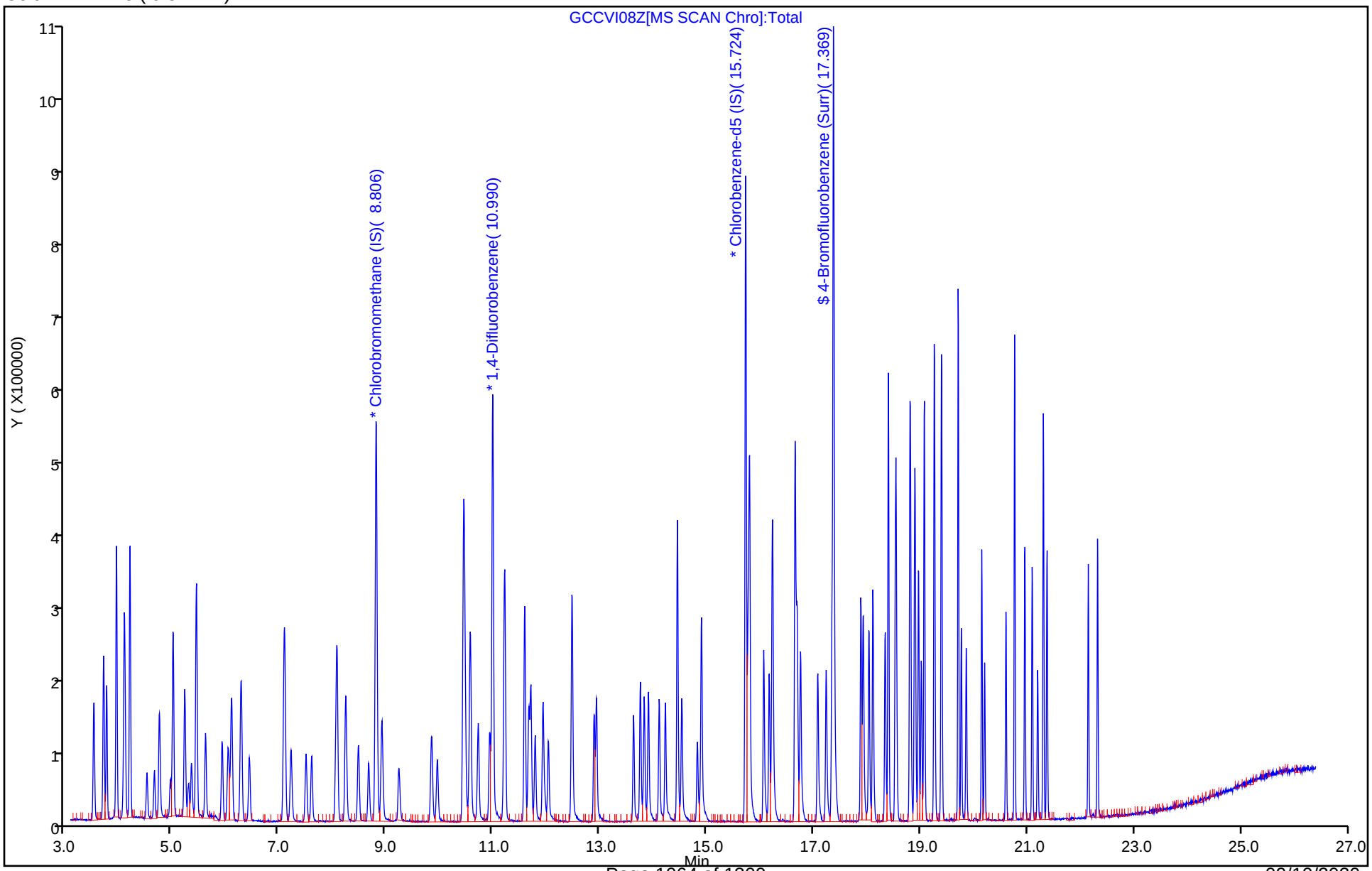
Report Date: 09-Sep-2020 14:14:34 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GCCVI08Z.D

Injection Date:	08-Sep-2020 15:52:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	CCVIS			Worklist Smp#:	2
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Lab Sample ID: ICV 140-42290/18 Calibration Date: 08/30/2020 02:47

Instrument ID: MH Calib Start Date: 08/29/2020 12:34

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 08/29/2020 23:57

Lab File ID: HH29LCS.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorodifluoromethane	Ave	2.679	2.781		1.66	1.60	3.8	35.0
Propene	Ave	1.144	1.209		1.69	1.60	5.7	35.0
Dichlorodifluoromethane	Ave	3.629	3.949		1.74	1.60	8.8	35.0
1,2-Dichloro-1,1,2,2-tetrafluoroethane	Ave	2.898	3.181		1.76	1.60	9.8	35.0
Chloromethane	Ave	0.4766	0.5581		1.87	1.60	17.1	35.0
Acetaldehyde	Ave	0.7072	0.6771		7.66	8.00	-4.3	35.0
Vinyl chloride	Ave	1.595	1.723		1.73	1.60	8.0	35.0
1,3-Butadiene	Ave	1.087	1.239		1.82	1.60	14.0	35.0
Butane	Ave	2.181	2.591		1.90	1.60	18.8	35.0
Bromomethane	Ave	1.541	1.577		1.64	1.60	2.3	35.0
Chloroethane	Ave	0.6737	0.7027		1.67	1.60	4.3	35.0
Ethanol	Ave	0.7726	0.6660		6.90	8.00	-13.8	35.0
Vinyl bromide	Ave	1.284	1.389		1.73	1.60	8.2	35.0
2-Methylbutane	Ave	1.682	1.767		1.68	1.60	5.1	35.0
Trichlorofluoromethane	Ave	3.535	3.518		1.59	1.60	-0.5	35.0
Acrolein	Lin1		0.5141		2.13	1.60	33.3	35.0
Acetonitrile	Ave	0.6757	0.6832		1.62	1.60	1.1	35.0
Acetone	Ave	0.7464	0.7233		1.55	1.60	-3.1	35.0
Isopropyl alcohol	Ave	1.844	2.328		2.02	1.60	26.2	35.0
Pentane	Ave	0.1567	0.1785		1.82	1.60	13.9	35.0
Ethyl ether	Ave	1.540	1.709		1.78	1.60	11.0	35.0
1,1-Dichloroethene	Ave	1.164	1.183		1.63	1.60	1.7	35.0
tert-Butyl alcohol	Ave	1.902	1.992		1.68	1.60	4.7	35.0
Acrylonitrile	Ave	1.024	1.111		1.74	1.60	8.5	35.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	2.998	2.997		1.60	1.60	-0.0	35.0
Methylene Chloride	Ave	1.177	1.198		1.63	1.60	1.8	35.0
3-Chloropropene	Ave	1.206	1.136		1.51	1.60	-5.7	35.0
Carbon disulfide	Ave	3.782	3.778		1.60	1.60	-0.1	35.0
trans-1,2-Dichloroethene	Ave	1.215	1.218		1.60	1.60	0.2	35.0
2-Methylpentane	Ave	2.898	2.851		1.57	1.60	-1.6	35.0
Methyl tert-butyl ether	Ave	2.565	2.642		1.65	1.60	3.0	35.0
1,1-Dichloroethane	Ave	2.413	2.475		1.64	1.60	2.6	35.0
Vinyl acetate	Ave	3.098	3.333		1.72	1.60	7.6	35.0
2-Butanone (MEK)	Ave	0.5879	0.5954		1.62	1.60	1.3	35.0
Hexane	Ave	1.006	1.052		1.67	1.60	4.6	35.0
Isopropyl ether	Ave	4.280	4.770		1.78	1.60	11.4	35.0
cis-1,2-Dichloroethene	Ave	1.231	1.265		1.64	1.60	2.8	35.0
Ethyl acetate	Ave	3.083	3.081		1.60	1.60	-0.0	35.0
Chloroform	Ave	2.915	2.895		1.59	1.60	-0.7	35.0
Tert-butyl ethyl ether	Ave	3.282	3.254		1.59	1.60	-0.8	35.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Lab Sample ID: ICV 140-42290/18 Calibration Date: 08/30/2020 02:47

Instrument ID: MH Calib Start Date: 08/29/2020 12:34

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 08/29/2020 23:57

Lab File ID: HH29LCS.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Tetrahydrofuran	Ave	1.448	1.528		1.69	1.60	5.6	35.0
1,1,1-Trichloroethane	Ave	2.643	2.587		1.57	1.60	-2.1	35.0
1,2-Dichloroethane	Ave	0.4365	0.4354		1.60	1.60	-0.2	35.0
1-Butanol	Ave	0.1360	0.1382		1.63	1.60	1.6	35.0
Benzene	Ave	0.8814	0.9188		1.67	1.60	4.2	35.0
Cyclohexane	Ave	0.1206	0.1297		1.72	1.60	7.5	35.0
Carbon tetrachloride	Ave	0.5456	0.6384		1.87	1.60	17.0	35.0
2,3-Dimethylpentane	Ave	0.1669	0.1743		1.67	1.60	4.4	35.0
Thiophene	Ave	0.4636	0.4730		1.63	1.60	2.0	35.0
2,2,4-Trimethylpentane	Ave	1.370	1.504		1.76	1.60	9.8	35.0
Heptane	Ave	0.2512	0.2656		1.69	1.60	5.7	35.0
1,2-Dichloropropane	Ave	0.3772	0.3845		1.63	1.60	1.9	35.0
Trichloroethene	Ave	0.3963	0.3943		1.59	1.60	-0.5	35.0
Dibromomethane	Ave	0.4195	0.4223		1.61	1.60	0.7	35.0
Bromodichloromethane	Ave	0.6247	0.6504		1.67	1.60	4.1	35.0
1,4-Dioxane	Ave	0.1255	0.1251		1.59	1.60	-0.3	35.0
Methyl methacrylate	Ave	0.4094	0.4316		1.69	1.60	5.4	35.0
Methylcyclohexane	Lin1		0.5858		1.89	1.60	18.2	35.0
4-Methyl-2-pentanone (MIBK)	Ave	0.7866	0.8536		1.74	1.60	8.5	35.0
cis-1,3-Dichloropropene	Ave	0.4279	0.4697		1.76	1.60	9.8	35.0
trans-1,3-Dichloropropene	Ave	0.4392	0.4863		1.77	1.60	10.7	35.0
Toluene	Ave	1.237	1.342		1.74	1.60	8.5	35.0
1,1,2-Trichloroethane	Ave	0.4444	0.4511		1.62	1.60	1.5	35.0
2-Hexanone	Ave	0.3937	0.4569		1.86	1.60	16.1	35.0
Octane	Ave	0.3450	0.3910		1.81	1.60	13.3	35.0
Dibromochloromethane	Ave	0.7339	0.8331		1.82	1.60	13.5	35.0
1,2-Dibromoethane (EDB)	Ave	0.6652	0.6699		1.61	1.60	0.7	35.0
Tetrachloroethene	Ave	0.5184	0.5192		1.60	1.60	0.2	35.0
2,3-Dimethylheptane	Ave	1.593	1.483		1.49	1.60	-6.9	35.0
Chlorobenzene	Ave	1.002	1.035		1.65	1.60	3.4	35.0
Ethylbenzene	Ave	1.497	1.654		1.77	1.60	10.5	35.0
m-Xylene & p-Xylene	Ave	1.183	1.376		3.72	3.20	16.3	35.0
Nonane	Ave	0.8512	0.9355		1.76	1.60	9.9	35.0
Bromoform	QuaF		0.6859		1.95	1.60	22.0	35.0
Styrene	Ave	0.7187	0.8674		1.93	1.60	20.7	35.0
o-Xylene	Ave	1.239	1.336		1.73	1.60	7.8	35.0
1,1,2,2-Tetrachloroethane	Ave	1.096	1.119		1.63	1.60	2.0	35.0
1,2,3-Trichloropropane	Ave	0.2482	0.2462		1.59	1.60	-0.8	35.0
Isopropylbenzene	Ave	1.567	1.722		1.76	1.60	9.9	35.0
Propylbenzene	Ave	0.4200	0.4545		1.73	1.60	8.2	35.0
2-Chlorotoluene	Ave	0.4016	0.4289		1.71	1.60	6.8	35.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Lab Sample ID: ICV 140-42290/18 Calibration Date: 08/30/2020 02:47

Instrument ID: MH Calib Start Date: 08/29/2020 12:34

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 08/29/2020 23:57

Lab File ID: HH29LCS.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Ethyltoluene	Ave	1.573	1.665		1.69	1.60	5.9	35.0
1,3,5-Trimethylbenzene	Lin1		0.8605		1.87	1.60	17.1	35.0
Alpha Methyl Styrene	Ave	0.5440	0.6760		1.99	1.60	24.3	35.0
Decane	Ave	1.245	1.320		1.70	1.60	6.1	35.0
tert-Butylbenzene	Ave	1.595	1.750		1.76	1.60	9.7	35.0
1,2,4-Trimethylbenzene	Ave	1.432	1.673		1.87	1.60	16.8	35.0
sec-Butylbenzene	Ave	2.112	2.401		1.82	1.60	13.7	35.0
1,3-Dichlorobenzene	Ave	0.7435	0.8347		1.80	1.60	12.3	35.0
Benzyl chloride	Lin1		0.9537		1.85	1.60	15.8	35.0
1,4-Dichlorobenzene	Ave	0.5485	0.7042		2.05	1.60	28.4	35.0
4-Isopropyltoluene	Ave	1.709	2.102		1.97	1.60	23.0	35.0
1,2,3-Trimethylbenzene	Ave	1.376	1.210		1.41	1.60	-12.1	35.0
Butylcyclohexane	Ave	1.183	1.247		1.69	1.60	5.4	35.0
Indane	Ave	1.140	1.323		1.86	1.60	16.0	35.0
1,2-Dichlorobenzene	Ave	0.8206	0.9347		1.82	1.60	13.9	35.0
Butylbenzene	Ave	1.891	2.293		1.94	1.60	21.3	35.0
Indene	Ave	0.9776	1.023		1.67	1.60	4.7	35.0
Undecane	Ave	1.420	1.561		1.76	1.60	9.9	35.0
1,2-Dibromo-3-Chloropropane	Ave	0.4195	0.4561		1.74	1.60	8.7	35.0
1,2,4,5-Tetramethylbenzene	Lin1		1.729		1.66	1.60	3.5	35.0
Dodecane	Ave	1.001	1.263		2.02	1.60	26.2	35.0
1,2,4-Trichlorobenzene	Lin1		0.4891		2.02	1.60	26.5	35.0
Naphthalene	QuaF		1.439		2.05	1.60	28.3	35.0
Hexachlorobutadiene	Ave	0.7852	0.9322		1.90	1.60	18.7	35.0
1,2,3-Trichlorobenzene	Ave	0.4610	0.6220		2.16	1.60	34.9	35.0
2-Methylnaphthalene	Ave	0.1790	0.0996		0.890	1.60	-44.4	50.0
1-Methylnaphthalene	Ave	0.2066	0.1558		1.21	1.60	-24.6	50.0
4-Bromofluorobenzene (Surr)	Ave	0.5577	0.5614		4.67	4.64	0.7	35.0

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29LCS.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 30-Aug-2020 02:47:30 ALS Bottle#: 2 Worklist Smp#: 18
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016451-018
Misc. Info.: 80 ML S124
Operator ID: HMT Instrument ID: MH
Sublist:

Method: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\MH_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 31-Aug-2020 12:57:08 Calib Date: 29-Aug-2020 23:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1064

First Level Reviewer: barlozhetskayaa Date: 31-Aug-2020 12:29:23

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.430	9.430	0.000	96	125635	4.80	4.80	
* 2 1,4-Difluorobenzene	114	11.591	11.591	0.000	95	541139	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	16.258	16.258	0.000	87	407551	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.876	17.875	0.000	92	221161	4.64	4.67	
6 Chlorodifluoromethane	51	3.921	3.921	0.000	97	116446	1.60	1.66	
7 Propene	41	3.931	3.931	0.000	99	50646	1.60	1.69	
8 Dichlorodifluoromethane	85	3.988	3.988	0.000	100	165379	1.60	1.74	
9 Chloromethane	52	4.195	4.195	0.000	59	23373	1.60	1.87	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	4.195	4.195	0.000	91	133222	1.60	1.76	
11 Acetaldehyde	44	4.360	4.360	0.000	99	141771	8.00	7.66	
12 Vinyl chloride	62	4.381	4.381	0.000	99	72138	1.60	1.73	
14 Butadiene	54	4.479	4.479	0.000	68	51867	1.60	1.82	
13 Butane	43	4.479	4.479	0.000	84	108502	1.60	1.90	
15 Bromomethane	94	4.841	4.841	0.000	98	66027	1.60	1.64	
16 Chloroethane	64	5.001	5.001	0.000	95	29429	1.60	1.67	
17 Ethanol	31	5.089	5.089	0.000	97	139448	8.00	6.90	
18 Vinyl bromide	106	5.332	5.332	0.000	98	58185	1.60	1.73	
19 2-Methylbutane	43	5.384	5.384	0.000	94	73999	1.60	1.68	
20 Trichlorofluoromethane	101	5.621	5.621	0.000	100	147330	1.60	1.59	
21 Acrolein	56	5.642	5.642	0.000	96	21530	1.60	2.13	
22 Acetonitrile	40	5.714	5.714	0.000	99	28613	1.60	1.62	
23 Acetone	58	5.771	5.771	0.000	98	30292	1.60	1.55	
25 Isopropyl alcohol	45	5.849	5.849	0.000	92	97482	1.60	2.02	
24 Pentane	72	5.859	5.859	0.000	97	7475	1.60	1.82	
26 Ethyl ether	31	6.050	6.050	0.000	90	71553	1.60	1.78	
27 1,1-Dichloroethene	96	6.397	6.397	0.000	97	49538	1.60	1.63	
29 2-Methyl-2-propanol	59	6.495	6.495	0.000	94	83402	1.60	1.68	
28 Acrylonitrile	53	6.505	6.505	0.000	93	46528	1.60	1.74	
30 112TCTFE	101	6.572	6.572	0.000	95	125502	1.60	1.60	
31 Methylene Chloride	84	6.769	6.769	0.000	95	50150	1.60	1.63	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.784	6.784	0.000	95	47590	1.60	1.51	
33 Carbon disulfide	76	6.944	6.944	0.000	100	158202	1.60	1.60	
34 trans-1,2-Dichloroethene	96	7.621	7.621	0.000	95	51007	1.60	1.60	
35 2-Methylpentane	43	7.627	7.627	0.000	96	119412	1.60	1.57	
36 Methyl tert-butyl ether	73	7.751	7.751	0.000	94	110623	1.60	1.65	
37 1,1-Dichloroethane	63	8.066	8.066	0.000	100	103663	1.60	1.64	
38 Vinyl acetate	43	8.159	8.159	0.000	100	139594	1.60	1.72	
39 2-Butanone (MEK)	72	8.640	8.640	0.000	95	24936	1.60	1.62	
40 Hexane	56	8.645	8.645	0.000	75	44071	1.60	1.67	
41 Isopropyl ether	45	8.815	8.815	0.000	96	199762	1.60	1.78	
42 cis-1,2-Dichloroethene	96	9.089	9.089	0.000	96	52966	1.60	1.64	
43 Ethyl acetate	43	9.260	9.260	0.000	98	129014	1.60	1.60	
44 Chloroform	83	9.436	9.436	0.000	97	121240	1.60	1.59	
45 Tert-butyl ethyl ether	59	9.513	9.513	0.000	98	136290	1.60	1.59	
46 Tetrahydrofuran	42	9.865	9.865	0.000	93	64005	1.60	1.69	
47 1,1,1-Trichloroethane	97	10.485	10.485	0.000	96	108337	1.60	1.57	
48 1,2-Dichloroethane	62	10.598	10.598	0.000	96	78534	1.60	1.60	
49 n-Butanol	31	11.012	11.012	0.000	96	24926	1.60	1.63	
50 Cyclohexane	69	11.074	11.074	0.000	81	23387	1.60	1.72	
51 Benzene	78	11.074	11.074	0.000	97	165734	1.60	1.67	
52 Carbon tetrachloride	117	11.095	11.095	0.000	95	115150	1.60	1.87	
53 2,3-Dimethylpentane	71	11.172	11.172	0.000	92	31436	1.60	1.67	
54 Thiophene	84	11.343	11.343	0.000	96	85321	1.60	1.63	
55 Isooctane	57	11.798	11.798	0.000	98	271343	1.60	1.76	
56 n-Heptane	71	12.159	12.159	0.000	95	47912	1.60	1.69	
57 1,2-Dichloropropane	63	12.268	12.268	0.000	92	69353	1.60	1.63	
58 Trichloroethene	130	12.294	12.294	0.000	95	71125	1.60	1.59	
59 Dibromomethane	93	12.387	12.387	0.000	94	76182	1.60	1.61	
60 Dichlorobromomethane	83	12.526	12.526	0.000	97	117326	1.60	1.67	
61 1,4-Dioxane	88	12.542	12.542	0.000	96	22571	1.60	1.59	
62 Methyl methacrylate	41	12.593	12.593	0.000	89	77845	1.60	1.69	
63 Methylcyclohexane	83	13.048	13.048	0.000	91	105661	1.60	1.89	
64 4-Methyl-2-pentanone (MIBK)	43	13.436	13.436	0.000	97	153981	1.60	1.74	
65 cis-1,3-Dichloropropene	75	13.503	13.503	0.000	98	84722	1.60	1.76	
66 trans-1,3-Dichloropropene	75	14.180	14.180	0.000	97	66065	1.60	1.77	
67 Toluene	91	14.309	14.309	0.000	92	182291	1.60	1.74	
68 1,1,2-Trichloroethane	83	14.382	14.382	0.000	96	61282	1.60	1.62	
69 2-Hexanone	58	14.749	14.749	0.000	90	62076	1.60	1.86	
70 n-Octane	85	14.961	14.961	0.000	97	53112	1.60	1.81	
71 Chlorodibromomethane	129	15.085	15.085	0.000	98	113172	1.60	1.82	
72 Ethylene Dibromide	107	15.379	15.379	0.000	99	91000	1.60	1.61	
73 Tetrachloroethene	129	15.436	15.436	0.000	95	70528	1.60	1.60	
75 2,3-Dimethylheptane	43	16.294	16.294	0.000	94	201433	1.60	1.49	
74 Chlorobenzene	112	16.310	16.310	0.000	94	140657	1.60	1.65	
76 Ethylbenzene	91	16.583	16.583	0.000	99	224760	1.60	1.77	
77 m-Xylene & p-Xylene	91	16.744	16.744	0.000	98	373796	3.20	3.72	
78 n-Nonane	57	17.131	17.131	0.000	95	127094	1.60	1.76	
80 Styrene	104	17.209	17.209	0.000	96	117833	1.60	1.93	
79 Bromoform	173	17.209	17.209	0.000	71	93185	1.60	1.95	
81 o-Xylene	91	17.266	17.266	0.000	99	181484	1.60	1.73	
82 1,1,2,2-Tetrachloroethane	83	17.591	17.591	0.000	98	151965	1.60	1.63	
83 1,2,3-Trichloropropane	110	17.746	17.746	0.000	97	33451	1.60	1.59	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	17.839	17.839	0.000	97	233874	1.60	1.76	
85 N-Propylbenzene	120	18.351	18.351	0.000	98	61742	1.60	1.73	
86 2-Chlorotoluene	126	18.408	18.408	0.000	98	58269	1.60	1.71	
87 4-Ethyltoluene	105	18.496	18.496	0.000	98	226255	1.60	1.69	
88 1,3,5-Trimethylbenzene	120	18.568	18.568	0.000	92	116903	1.60	1.87	
89 Alpha Methyl Styrene	118	18.790	18.790	0.000	88	91830	1.60	1.99	
90 n-Decane	57	18.821	18.821	0.000	87	179360	1.60	1.70	
91 tert-Butylbenzene	119	18.976	18.976	0.000	90	237737	1.60	1.76	
92 1,2,4-Trimethylbenzene	105	18.992	18.992	0.000	96	227299	1.60	1.87	
93 sec-Butylbenzene	105	19.235	19.235	0.000	99	326153	1.60	1.82	
94 1,3-Dichlorobenzene	146	19.261	19.261	0.000	98	113393	1.60	1.80	
95 Benzyl chloride	91	19.333	19.333	0.000	98	129554	1.60	1.85	
96 1,4-Dichlorobenzene	146	19.343	19.343	0.000	95	95666	1.60	2.05	
97 4-Isopropyltoluene	119	19.390	19.390	0.000	97	285564	1.60	1.97	
98 1,2,3-Trimethylbenzene	105	19.452	19.452	0.000	99	164358	1.60	1.41	
99 Butylcyclohexane	83	19.493	19.493	0.000	90	169445	1.60	1.69	
101 2,3-Dihydroindene	117	19.695	19.695	0.000	94	179696	1.60	1.86	
100 1,2-Dichlorobenzene	146	19.700	19.700	0.000	97	126982	1.60	1.82	
103 n-Butylbenzene	91	19.814	19.814	0.000	97	311516	1.60	1.94	
102 Indene	116	19.819	19.819	0.000	91	138981	1.60	1.67	
104 Undecane	57	20.098	20.098	0.000	93	212039	1.60	1.76	
105 1,2-Dibromo-3-Chloropropane	157	20.289	20.289	0.000	96	61956	1.60	1.74	
106 1,2,4,5-Tetramethylbenzene	119	20.563	20.563	0.000	97	234894	1.60	1.66	
107 Dodecane	57	21.173	21.173	0.000	92	171614	1.60	2.02	
108 1,2,4-Trichlorobenzene	180	21.416	21.416	0.000	94	66448	1.60	2.02	
109 Naphthalene	128	21.561	21.561	0.000	99	195533	1.60	2.05	
110 Hexachlorobutadiene	225	21.726	21.726	0.000	92	126638	1.60	1.90	
111 1,2,3-Trichlorobenzene	180	21.793	21.793	0.000	94	84497	1.60	2.16	
112 2-Methylnaphthalene	142	22.341	22.341	0.000	98	13534	1.60	0.8904	
113 1-Methylnaphthalene	142	22.465	22.465	0.000	100	21166	1.60	1.21	
A 115 C8 Range	1	14.968	(14.924-15.012)		0	632639	1.60	1.76	
S 116 Xylenes, Total	100				0		4.80	5.45	
S 117 1,2-Dichloroethene, Total	1				0		3.20	3.25	
T 139 2-Methylthiophene TIC	97	14.464	14.464	0.000	98	138595	1.60	1.63	
T 142 3-Methylthiophene TIC	97	14.661	14.661	0.000	99	135290	1.60	1.59	
T 141 2-Ethylthiophene TIC	97	16.687	16.687	0.000	98	158529	1.60	1.87	
T 152 1,2-Dimethyl-4-Ethylbenzene TIC	119	20.175	20.175	0.000	98	205249	1.60	2.42	
T 149 1,2,3,5-Tetramethylbenzene TIC	119	20.620	20.615	0.005	94	143636	1.60	1.69	a
T 150 1,2,3,4-Tetramethylbenzene TIC	119	21.039	21.039	0.000	97	176663	1.60	2.08	a
T 151 Benzo(b)thiophene TIC	134	21.654	21.654	0.000	99	62601	1.60	0.7373	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

40CV101S_00124	Amount Added: 80.00	Units: mL	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

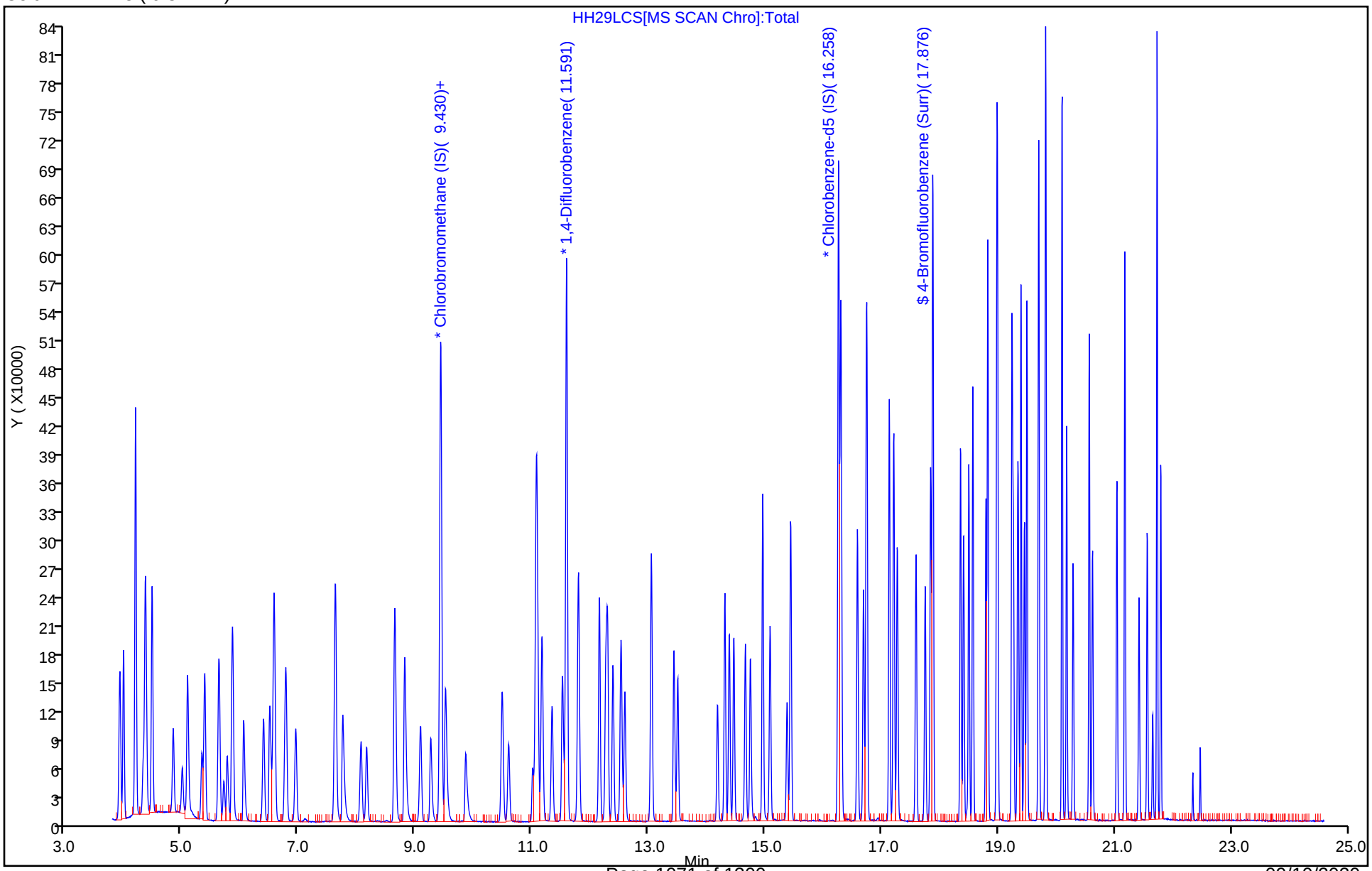
Report Date: 31-Aug-2020 12:57:09 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29LCS.D

Injection Date:	30-Aug-2020 02:47:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	ICV			Worklist Smp#:	18
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Lab Sample ID: CCVIS 140-42399/2 Calibration Date: 09/03/2020 10:16

Instrument ID: MH Calib Start Date: 08/29/2020 12:34

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 08/29/2020 23:57

Lab File ID: HCCVI03.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorodifluoromethane	Ave	2.679	2.635		1.57	1.60	-1.6	30.0
Propene	Ave	1.144	1.039		1.45	1.60	-9.2	30.0
Dichlorodifluoromethane	Ave	3.629	3.771		1.66	1.60	3.9	30.0
Chloromethane	Ave	0.4766	0.4602		1.54	1.60	-3.5	30.0
1,2-Dichloro-1,1,2,2-tetrafluoroethane	Ave	2.898	2.654		1.47	1.60	-8.4	30.0
Acetaldehyde	Ave	0.7072	0.6447		7.29	8.00	-8.8	30.0
Vinyl chloride	Ave	1.595	1.358		1.36	1.60	-14.9	30.0
Butane	Ave	2.181	2.165		1.59	1.60	-0.8	30.0
1,3-Butadiene	Ave	1.087	0.9843		1.45	1.60	-9.4	30.0
Bromomethane	Ave	1.541	1.431		1.49	1.60	-7.1	30.0
Chloroethane	Ave	0.6737	0.6108		1.45	1.60	-9.3	30.0
Ethanol	Ave	0.7726	0.7610		7.88	8.00	-1.5	30.0
Vinyl bromide	Ave	1.284	1.179		1.47	1.60	-8.2	30.0
2-Methylbutane	Ave	1.682	1.531		1.46	1.60	-8.9	30.0
Trichlorofluoromethane	Ave	3.535	3.511		1.59	1.60	-0.7	30.0
Acrolein	Lin1		0.3302		1.37	1.60	-14.1	30.0
Acetonitrile	Ave	0.6757	0.6875		1.63	1.60	1.7	30.0
Acetone	Ave	0.7464	0.6123		3.94	4.80	-18.0	30.0
Isopropyl alcohol	Ave	1.844	1.492		3.88	4.80	-19.1	30.0
Pentane	Ave	0.1567	0.1601		1.63	1.60	2.2	30.0
Ethyl ether	Ave	1.540	1.307		1.36	1.60	-15.1	30.0
1,1-Dichloroethene	Ave	1.164	0.9724		1.34	1.60	-16.4	30.0
tert-Butyl alcohol	Ave	1.902	1.418		1.19	1.60	-25.5	30.0
Acrylonitrile	Ave	1.024	0.999		1.56	1.60	-2.4	30.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	2.998	2.937		1.57	1.60	-2.0	30.0
Methylene Chloride	Ave	1.177	1.192		1.62	1.60	1.3	30.0
3-Chloropropene	Ave	1.206	0.9817		1.30	1.60	-18.6	30.0
Carbon disulfide	Ave	3.782	3.630		1.54	1.60	-4.0	30.0
trans-1,2-Dichloroethene	Ave	1.215	1.133		1.49	1.60	-6.7	30.0
2-Methylpentane	Ave	2.898	2.669		1.47	1.60	-7.9	30.0
Methyl tert-butyl ether	Ave	2.565	2.118		1.32	1.60	-17.4	30.0
1,1-Dichloroethane	Ave	2.413	2.250		1.49	1.60	-6.8	30.0
Vinyl acetate	Ave	3.098	2.030		1.05	1.60	-34.5*	30.0
2-Butanone (MEK)	Ave	0.5879	0.4952		1.35	1.60	-15.8	30.0
Hexane	Ave	1.006	0.9910		1.58	1.60	-1.5	30.0
Isopropyl ether	Ave	4.280	3.776		1.41	1.60	-11.8	30.0
cis-1,2-Dichloroethene	Ave	1.231	1.039		1.35	1.60	-15.6	30.0
Ethyl acetate	Ave	3.083	2.714		1.41	1.60	-12.0	30.0
Chloroform	Ave	2.915	2.842		1.56	1.60	-2.5	30.0
Tert-butyl ethyl ether	Ave	3.282	2.801		1.37	1.60	-14.7	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Lab Sample ID: CCVIS 140-42399/2 Calibration Date: 09/03/2020 10:16

Instrument ID: MH Calib Start Date: 08/29/2020 12:34

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 08/29/2020 23:57

Lab File ID: HCCVI03.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Tetrahydrofuran	Ave	1.448	1.235		1.37	1.60	-14.7	30.0
1,1,1-Trichloroethane	Ave	2.643	2.534		1.53	1.60	-4.1	30.0
1,2-Dichloroethane	Ave	0.4365	0.4185		1.53	1.60	-4.1	30.0
1-Butanol	Ave	0.1360	0.0892		1.05	1.60	-34.4*	30.0
Cyclohexane	Ave	0.1206	0.1152		1.53	1.60	-4.4	30.0
Benzene	Ave	0.8814	0.8566		1.56	1.60	-2.8	30.0
Carbon tetrachloride	Ave	0.5456	0.6556		1.92	1.60	20.2	30.0
2,3-Dimethylpentane	Ave	0.1669	0.1600		1.53	1.60	-4.1	30.0
Thiophene	Ave	0.4636	0.4435		1.53	1.60	-4.3	30.0
2,2,4-Trimethylpentane	Ave	1.370	1.333		1.56	1.60	-2.7	30.0
Heptane	Ave	0.2512	0.2405		1.53	1.60	-4.3	30.0
1,2-Dichloropropane	Ave	0.3772	0.3593		1.52	1.60	-4.7	30.0
Trichloroethene	Ave	0.3963	0.3674		1.48	1.60	-7.3	30.0
Dibromomethane	Ave	0.4195	0.4164		1.59	1.60	-0.7	30.0
Bromodichloromethane	Ave	0.6247	0.6455		1.65	1.60	3.3	30.0
1,4-Dioxane	Ave	0.1255	0.0971		1.24	1.60	-22.6	30.0
Methyl methacrylate	Ave	0.4094	0.3789		1.48	1.60	-7.5	30.0
Methylcyclohexane	Lin1		0.4116		1.34	1.60	-16.0	30.0
4-Methyl-2-pentanone (MIBK)	Ave	0.7866	0.7635		1.55	1.60	-2.9	30.0
cis-1,3-Dichloropropene	Ave	0.4279	0.4218		1.58	1.60	-1.4	30.0
trans-1,3-Dichloropropene	Ave	0.4392	0.4085		1.49	1.60	-7.0	30.0
Toluene	Ave	1.237	1.163		1.50	1.60	-6.0	30.0
1,1,2-Trichloroethane	Ave	0.4444	0.4321		1.56	1.60	-2.8	30.0
2-Hexanone	Ave	0.3937	0.3577		1.45	1.60	-9.1	30.0
Octane	Ave	0.3450	0.3364		1.56	1.60	-2.5	30.0
Dibromochloromethane	Ave	0.7339	0.7941		1.73	1.60	8.2	30.0
1,2-Dibromoethane (EDB)	Ave	0.6652	0.6198		1.49	1.60	-6.8	30.0
Tetrachloroethene	Ave	0.5184	0.4744		1.46	1.60	-8.5	30.0
2,3-Dimethylheptane	Ave	1.593	1.485		1.49	1.60	-6.8	30.0
Chlorobenzene	Ave	1.002	0.9408		1.50	1.60	-6.1	30.0
Ethylbenzene	Ave	1.497	1.350		1.44	1.60	-9.8	30.0
m-Xylene & p-Xylene	Ave	1.183	1.129		3.05	3.20	-4.5	30.0
Nonane	Ave	0.8512	0.8038		1.51	1.60	-5.6	30.0
Bromoform	QuaF		0.6710		1.92	1.60	20.0	30.0
Styrene	Ave	0.7187	0.6756		1.50	1.60	-6.0	30.0
o-Xylene	Ave	1.239	1.175		1.52	1.60	-5.1	30.0
1,1,2,2-Tetrachloroethane	Ave	1.096	1.107		1.62	1.60	0.9	30.0
1,2,3-Trichloropropane	Ave	0.2482	0.2437		1.57	1.60	-1.8	30.0
Isopropylbenzene	Ave	1.567	1.512		1.54	1.60	-3.5	30.0
Propylbenzene	Ave	0.4200	0.4048		1.54	1.60	-3.6	30.0
2-Chlorotoluene	Ave	0.4016	0.3663		1.46	1.60	-8.8	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Lab Sample ID: CCVIS 140-42399/2 Calibration Date: 09/03/2020 10:16

Instrument ID: MH Calib Start Date: 08/29/2020 12:34

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 08/29/2020 23:57

Lab File ID: HCCVI03.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Ethyltoluene	Ave	1.573	1.542		1.57	1.60	-2.0	30.0
1,3,5-Trimethylbenzene	Lin1		0.6557		1.44	1.60	-10.0	30.0
Alpha Methyl Styrene	Ave	0.5440	0.4797		1.41	1.60	-11.8	30.0
Decane	Ave	1.245	1.213		1.56	1.60	-2.5	30.0
tert-Butylbenzene	Ave	1.595	1.622		1.63	1.60	1.7	30.0
1,2,4-Trimethylbenzene	Ave	1.432	1.563		1.75	1.60	9.1	30.0
sec-Butylbenzene	Ave	2.112	2.200		1.67	1.60	4.2	30.0
1,3-Dichlorobenzene	Ave	0.7435	0.7441		1.60	1.60	0.0	30.0
Benzyl chloride	Lin1		0.6967		1.38	1.60	-13.6	30.0
1,4-Dichlorobenzene	Ave	0.5485	0.6036		1.76	1.60	10.0	30.0
4-Isopropyltoluene	Ave	1.709	1.937		1.81	1.60	13.3	30.0
1,2,3-Trimethylbenzene	Ave	1.376	1.575		1.83	1.60	14.5	30.0
Butylcyclohexane	Ave	1.183	1.278		1.73	1.60	8.0	30.0
1,2-Dichlorobenzene	Ave	0.8206	0.8713		1.70	1.60	6.2	30.0
Indane	Ave	1.140	1.261		1.77	1.60	10.6	30.0
Butylbenzene	Ave	1.891	2.122		1.80	1.60	12.2	30.0
Indene	Ave	0.9776	1.046		1.71	1.60	7.0	30.0
Undecane	Ave	1.420	1.439		1.62	1.60	1.3	30.0
1,2-Dibromo-3-Chloropropane	Ave	0.4195	0.5081		1.94	1.60	21.1	30.0
1,2,4,5-Tetramethylbenzene	Lin1		1.607		1.54	1.60	-3.5	30.0
Dodecane	Ave	1.001	1.048		1.68	1.60	4.8	30.0
1,2,4-Trichlorobenzene	Lin1		0.3352		1.41	1.60	-11.8	30.0
Naphthalene	QuaF		0.9384		1.34	1.60	-16.5	30.0
Hexachlorobutadiene	Ave	0.7852	0.9300		1.90	1.60	18.4	30.0
1,2,3-Trichlorobenzene	Ave	0.4610	0.4308		1.50	1.60	-6.6	30.0
2-Methylnaphthalene	Ave	0.1790	0.0399		0.357	1.60	-77.7*	50.0
1-Methylnaphthalene	Ave	0.2066	0.0780		0.604	1.60	-62.3*	50.0
4-Bromofluorobenzene (Surr)	Ave	0.5577	0.6170		5.13	4.64	10.6	30.0

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HCCVI03.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 03-Sep-2020 10:16:30 ALS Bottle#: 5 Worklist Smp#: 2
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016480-002
Misc. Info.: P118 80ML
Operator ID: HMT Instrument ID: MH
Sublist: chrom-MH_TO15*sub7

Method: \\chromfs\Knoxville\ChromData\MH\20200902-16480.b\MH_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 04-Sep-2020 10:17:09 Calib Date: 29-Aug-2020 23:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1061

First Level Reviewer: khachitpongpanits Date: 04-Sep-2020 10:17:09

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.436	9.436	0.000	97	102360	4.80	4.80	
* 2 1,4-Difluorobenzene	114	11.591	11.591	0.000	95	437376	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	16.258	16.258	0.000	87	328807	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.876	17.876	0.000	93	196113	4.64	5.13	
6 Chlorodifluoromethane	51	3.921	3.921	0.000	97	89910	1.60	1.57	
7 Propene	41	3.937	3.937	0.000	97	35460	1.60	1.45	
8 Dichlorodifluoromethane	85	3.988	3.988	0.000	100	128663	1.60	1.66	
9 Chloromethane	52	4.195	4.195	0.000	59	15701	1.60	1.54	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	4.200	4.200	0.000	90	90554	1.60	1.47	
11 Acetaldehyde	44	4.366	4.366	0.000	97	109984	8.00	7.29	
12 Vinyl chloride	62	4.381	4.381	0.000	100	46324	1.60	1.36	
13 Butane	43	4.479	4.479	0.000	83	73863	1.60	1.59	
14 Butadiene	54	4.485	4.485	0.000	79	33586	1.60	1.45	
15 Bromomethane	94	4.846	4.846	0.000	98	48839	1.60	1.49	
16 Chloroethane	64	4.996	4.996	0.000	93	20839	1.60	1.45	
17 Ethanol	31	5.084	5.084	0.000	98	129825	8.00	7.88	
18 Vinyl bromide	106	5.337	5.337	0.000	98	40215	1.60	1.47	
19 2-Methylbutane	43	5.384	5.384	0.000	93	52250	1.60	1.46	
20 Trichlorofluoromethane	101	5.627	5.627	0.000	99	119805	1.60	1.59	
21 Acrolein	56	5.637	5.637	0.000	94	11265	1.60	1.37	
22 Acetonitrile	40	5.710	5.710	0.000	99	23458	1.60	1.63	
23 Acetone	58	5.761	5.761	0.000	99	62673	4.80	3.94	
25 Isopropyl alcohol	45	5.839	5.839	0.000	94	152693	4.80	3.88	
24 Pentane	72	5.859	5.859	0.000	97	5462	1.60	1.63	
26 Ethyl ether	31	6.046	6.046	0.000	89	44598	1.60	1.36	
27 1,1-Dichloroethene	96	6.397	6.397	0.000	95	33177	1.60	1.34	
29 2-Methyl-2-propanol	59	6.495	6.495	0.000	91	48376	1.60	1.19	
28 Acrylonitrile	53	6.500	6.500	0.000	94	34075	1.60	1.56	
30 112TCTFE	101	6.573	6.573	0.000	94	100211	1.60	1.57	
31 Methylene Chloride	84	6.764	6.764	0.000	95	40659	1.60	1.62	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.785	6.785	0.000	96	33497	1.60	1.30	
33 Carbon disulfide	76	6.945	6.945	0.000	99	123854	1.60	1.54	
34 trans-1,2-Dichloroethene	96	7.622	7.622	0.000	95	38665	1.60	1.49	
35 2-Methylpentane	43	7.627	7.627	0.000	96	91052	1.60	1.47	
36 Methyl tert-butyl ether	73	7.746	7.746	0.000	90	72260	1.60	1.32	
37 1,1-Dichloroethane	63	8.061	8.061	0.000	99	76779	1.60	1.49	
38 Vinyl acetate	43	8.159	8.159	0.000	99	69259	1.60	1.05	
39 2-Butanone (MEK)	72	8.635	8.635	0.000	95	16897	1.60	1.35	
40 Hexane	56	8.650	8.650	0.000	82	33812	1.60	1.58	
41 Isopropyl ether	45	8.811	8.811	0.000	94	128832	1.60	1.41	
42 cis-1,2-Dichloroethene	96	9.085	9.085	0.000	97	35442	1.60	1.35	
43 Ethyl acetate	43	9.255	9.255	0.000	98	92608	1.60	1.41	
44 Chloroform	83	9.436	9.436	0.000	98	96982	1.60	1.56	
45 Tert-butyl ethyl ether	59	9.508	9.508	0.000	98	95571	1.60	1.37	
46 Tetrahydrofuran	42	9.855	9.855	0.000	91	42146	1.60	1.37	
47 1,1,1-Trichloroethane	97	10.485	10.485	0.000	96	86445	1.60	1.53	
48 1,2-Dichloroethane	62	10.599	10.599	0.000	96	61008	1.60	1.53	
49 n-Butanol	31	11.007	11.007	0.000	89	12998	1.60	1.05	
50 Cyclohexane	69	11.069	11.069	0.000	90	16801	1.60	1.53	
51 Benzene	78	11.074	11.074	0.000	97	124890	1.60	1.56	
52 Carbon tetrachloride	117	11.095	11.095	0.000	95	95581	1.60	1.92	
53 2,3-Dimethylpentane	71	11.173	11.173	0.000	92	23329	1.60	1.53	
54 Thiophene	84	11.343	11.343	0.000	96	64663	1.60	1.53	
55 Isooctane	57	11.798	11.798	0.000	96	194406	1.60	1.56	
56 n-Heptane	71	12.155	12.155	0.000	94	35059	1.60	1.53	
57 1,2-Dichloropropane	63	12.263	12.263	0.000	89	52386	1.60	1.52	
58 Trichloroethene	130	12.294	12.294	0.000	94	53557	1.60	1.48	
59 Dibromomethane	93	12.387	12.387	0.000	93	60707	1.60	1.59	
60 Dichlorobromomethane	83	12.521	12.521	0.000	98	94109	1.60	1.65	
61 1,4-Dioxane	88	12.537	12.537	0.000	96	14161	1.60	1.24	
62 Methyl methacrylate	41	12.589	12.589	0.000	89	55242	1.60	1.48	
63 Methylcyclohexane	83	13.049	13.049	0.000	88	60006	1.60	1.34	
64 4-Methyl-2-pentanone (MIBK)	43	13.431	13.431	0.000	97	111305	1.60	1.55	
65 cis-1,3-Dichloropropene	75	13.498	13.498	0.000	98	61495	1.60	1.58	
66 trans-1,3-Dichloropropene	75	14.181	14.181	0.000	97	44777	1.60	1.49	
67 Toluene	91	14.310	14.310	0.000	92	127450	1.60	1.50	
68 1,1,2-Trichloroethane	83	14.382	14.382	0.000	96	47356	1.60	1.56	
69 2-Hexanone	58	14.744	14.744	0.000	89	39204	1.60	1.45	
70 n-Octane	85	14.956	14.956	0.000	96	36869	1.60	1.56	
71 Chlorodibromomethane	129	15.085	15.085	0.000	97	87033	1.60	1.73	
72 Ethylene Dibromide	107	15.374	15.374	0.000	97	67931	1.60	1.49	
73 Tetrachloroethene	129	15.436	15.436	0.000	93	51998	1.60	1.46	
75 2,3-Dimethylheptane	43	16.294	16.294	0.000	93	162735	1.60	1.49	
74 Chlorobenzene	112	16.305	16.305	0.000	93	103119	1.60	1.50	
76 Ethylbenzene	91	16.584	16.584	0.000	99	147943	1.60	1.44	
77 m-Xylene & p-Xylene	91	16.739	16.739	0.000	98	247525	3.20	3.05	
78 n-Nonane	57	17.132	17.132	0.000	94	88093	1.60	1.51	
79 Bromoform	173	17.204	17.204	0.000	88	73545	1.60	1.92	
80 Styrene	104	17.209	17.209	0.000	98	74051	1.60	1.50	
81 o-Xylene	91	17.266	17.266	0.000	98	128827	1.60	1.52	
82 1,1,2,2-Tetrachloroethane	83	17.586	17.586	0.000	98	121307	1.60	1.62	
83 1,2,3-Trichloropropane	110	17.747	17.747	0.000	97	26707	1.60	1.57	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	17.840	17.840	0.000	96	165739	1.60	1.54	
85 N-Propylbenzene	120	18.351	18.351	0.000	98	44371	1.60	1.54	
86 2-Chlorotoluene	126	18.403	18.403	0.000	98	40151	1.60	1.46	
87 4-Ethyltoluene	105	18.496	18.496	0.000	98	168991	1.60	1.57	
88 1,3,5-Trimethylbenzene	120	18.563	18.563	0.000	92	71870	1.60	1.44	
89 Alpha Methyl Styrene	118	18.791	18.791	0.000	87	52581	1.60	1.41	
90 n-Decane	57	18.822	18.822	0.000	88	132959	1.60	1.56	
91 tert-Butylbenzene	119	18.977	18.977	0.000	91	177801	1.60	1.63	
92 1,2,4-Trimethylbenzene	105	18.987	18.987	0.000	96	171274	1.60	1.75	
93 sec-Butylbenzene	105	19.235	19.235	0.000	99	241076	1.60	1.67	
94 1,3-Dichlorobenzene	146	19.261	19.261	0.000	98	81558	1.60	1.60	
95 Benzyl chloride	91	19.333	19.333	0.000	97	76355	1.60	1.38	
96 1,4-Dichlorobenzene	146	19.344	19.344	0.000	94	66152	1.60	1.76	
97 4-Isopropyltoluene	119	19.390	19.390	0.000	97	212267	1.60	1.81	
98 1,2,3-Trimethylbenzene	105	19.447	19.447	0.000	99	172599	1.60	1.83	
99 Butylcyclohexane	83	19.494	19.494	0.000	90	140024	1.60	1.73	
101 2,3-Dihydroindene	117	19.695	19.695	0.000	92	138176	1.60	1.77	
100 1,2-Dichlorobenzene	146	19.695	19.695	0.000	96	95499	1.60	1.70	
103 n-Butylbenzene	91	19.809	19.809	0.000	97	232523	1.60	1.80	
102 Indene	116	19.819	19.819	0.000	91	114669	1.60	1.71	
104 Undecane	57	20.093	20.093	0.000	93	157745	1.60	1.62	
105 1,2-Dibromo-3-Chloropropane	157	20.284	20.284	0.000	94	55686	1.60	1.94	
106 1,2,4,5-Tetramethylbenzene	119	20.563	20.563	0.000	96	176178	1.60	1.54	
107 Dodecane	57	21.173	21.173	0.000	91	114899	1.60	1.68	
108 1,2,4-Trichlorobenzene	180	21.416	21.416	0.000	94	36741	1.60	1.41	
109 Naphthalene	128	21.556	21.556	0.000	99	102853	1.60	1.34	
110 Hexachlorobutadiene	225	21.726	21.726	0.000	91	101929	1.60	1.90	
111 1,2,3-Trichlorobenzene	180	21.788	21.788	0.000	94	47218	1.60	1.50	
112 2-Methylnaphthalene	142	22.336	22.336	0.000	98	4378	1.60	0.3570	
113 1-Methylnaphthalene	142	22.465	22.465	0.000	97	8544	1.60	0.6037	
A 115 C8 Range	1	14.961	(14.914-15.007)		0	477149	1.60	1.64	
S 116 Xylenes, Total	100				0		4.80	4.57	
S 117 1,2-Dichloroethene, Total	1				0		3.20	2.84	

Reagents:

40CV101P_00118	Amount Added: 80.00	Units: ml	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

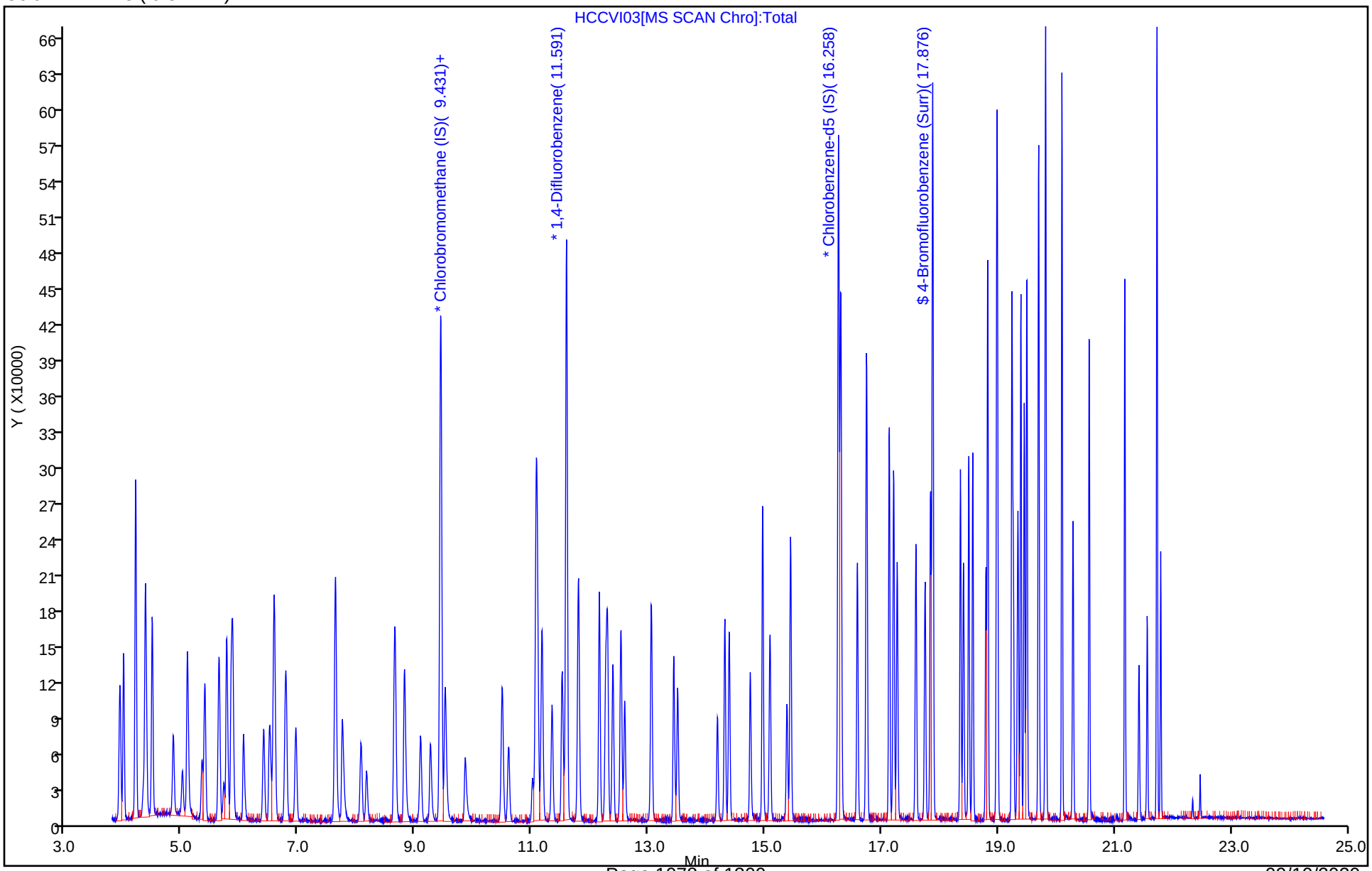
Report Date: 04-Sep-2020 10:17:10 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HCCVI03.D

Injection Date:	03-Sep-2020 10:16:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	CCVIS			Worklist Smp#:	2
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Lab Sample ID: CCVIS 140-42482/3 Calibration Date: 09/05/2020 12:41

Instrument ID: MH Calib Start Date: 08/29/2020 12:34

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 08/29/2020 23:57

Lab File ID: HCCVI05A.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorodifluoromethane	Ave	2.679	2.604		1.56	1.60	-2.8	30.0
Propene	Ave	1.144	0.9392		1.31	1.60	-17.9	30.0
Dichlorodifluoromethane	Ave	3.629	3.715		1.64	1.60	2.4	30.0
Chloromethane	Ave	0.4766	0.4426		1.49	1.60	-7.1	30.0
1,2-Dichloro-1,1,2,2-tetrafluoroethane	Ave	2.898	2.622		1.45	1.60	-9.5	30.0
Acetaldehyde	Ave	0.7072	0.5915		6.69	8.00	-16.4	30.0
Vinyl chloride	Ave	1.595	1.277		1.28	1.60	-19.9	30.0
1,3-Butadiene	Ave	1.087	0.8863		1.31	1.60	-18.4	30.0
Butane	Ave	2.181	2.017		1.48	1.60	-7.5	30.0
Bromomethane	Ave	1.541	1.325		1.38	1.60	-14.0	30.0
Chloroethane	Ave	0.6737	0.5393		1.28	1.60	-19.9	30.0
Ethanol	Ave	0.7726	0.7009		7.26	8.00	-9.3	30.0
Vinyl bromide	Ave	1.284	1.052		1.31	1.60	-18.1	30.0
2-Methylbutane	Ave	1.682	1.385		1.32	1.60	-17.7	30.0
Trichlorofluoromethane	Ave	3.535	3.602		1.63	1.60	1.9	30.0
Acrolein	Lin1		0.2741		1.14	1.60	-28.5	30.0
Acetonitrile	Ave	0.6757	0.6354		1.50	1.60	-6.0	30.0
Acetone	Ave	0.7464	0.5887		3.79	4.80	-21.1	30.0
Isopropyl alcohol	Ave	1.844	1.405		3.66	4.80	-23.8	30.0
Pentane	Ave	0.1567	0.1515		1.55	1.60	-3.3	30.0
Ethyl ether	Ave	1.540	1.148		1.19	1.60	-25.4	30.0
1,1-Dichloroethene	Ave	1.164	0.8450		1.16	1.60	-27.4	30.0
tert-Butyl alcohol	Ave	1.902	1.301		1.09	1.60	-31.6*	30.0
Acrylonitrile	Ave	1.024	0.9294		1.45	1.60	-9.2	30.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	2.998	2.951		1.57	1.60	-1.6	30.0
Methylene Chloride	Ave	1.177	1.157		1.57	1.60	-1.7	30.0
3-Chloropropene	Ave	1.206	0.8759		1.16	1.60	-27.4	30.0
Carbon disulfide	Ave	3.782	3.509		1.48	1.60	-7.2	30.0
trans-1,2-Dichloroethene	Ave	1.215	1.052		1.39	1.60	-13.4	30.0
2-Methylpentane	Ave	2.898	2.440		1.35	1.60	-15.8	30.0
Methyl tert-butyl ether	Ave	2.565	1.924		1.20	1.60	-25.0	30.0
1,1-Dichloroethane	Ave	2.413	2.133		1.41	1.60	-11.6	30.0
Vinyl acetate	Ave	3.098	1.887		0.975	1.60	-39.1*	30.0
2-Butanone (MEK)	Ave	0.5879	0.4629		1.26	1.60	-21.3	30.0
Hexane	Ave	1.006	0.9560		1.52	1.60	-4.9	30.0
Isopropyl ether	Ave	4.280	3.422		1.28	1.60	-20.1	30.0
cis-1,2-Dichloroethene	Ave	1.231	0.9294		1.21	1.60	-24.5	30.0
Ethyl acetate	Ave	3.083	2.529		1.31	1.60	-18.0	30.0
Chloroform	Ave	2.915	2.767		1.52	1.60	-5.1	30.0
Tert-butyl ethyl ether	Ave	3.282	2.537		1.24	1.60	-22.7	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Lab Sample ID: CCVIS 140-42482/3 Calibration Date: 09/05/2020 12:41

Instrument ID: MH Calib Start Date: 08/29/2020 12:34

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 08/29/2020 23:57

Lab File ID: HCCVI05A.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Tetrahydrofuran	Ave	1.448	1.105		1.22	1.60	-23.7	30.0
1,1,1-Trichloroethane	Ave	2.643	2.481		1.50	1.60	-6.1	30.0
1,2-Dichloroethane	Ave	0.4365	0.3870		1.42	1.60	-11.3	30.0
1-Butanol	Ave	0.1360	0.0784		0.923	1.60	-42.3*	30.0
Benzene	Ave	0.8814	0.7916		1.44	1.60	-10.2	30.0
Cyclohexane	Ave	0.1206	0.1010		1.34	1.60	-16.2	30.0
Carbon tetrachloride	Ave	0.5456	0.6475		1.90	1.60	18.7	30.0
2,3-Dimethylpentane	Ave	0.1669	0.1407		1.35	1.60	-15.7	30.0
Thiophene	Ave	0.4636	0.3940		1.36	1.60	-15.0	30.0
2,2,4-Trimethylpentane	Ave	1.370	1.177		1.37	1.60	-14.1	30.0
Heptane	Ave	0.2512	0.2046		1.30	1.60	-18.6	30.0
1,2-Dichloropropane	Ave	0.3772	0.3238		1.37	1.60	-14.2	30.0
Trichloroethene	Ave	0.3963	0.3449		1.39	1.60	-13.0	30.0
Dibromomethane	Ave	0.4195	0.3866		1.47	1.60	-7.8	30.0
Bromodichloromethane	Ave	0.6247	0.6099		1.56	1.60	-2.4	30.0
1,4-Dioxane	Ave	0.1255	0.0830		1.06	1.60	-33.9*	30.0
Methyl methacrylate	Ave	0.4094	0.3478		1.36	1.60	-15.0	30.0
Methylcyclohexane	Lin1		0.3632		1.19	1.60	-25.5	30.0
4-Methyl-2-pentanone (MIBK)	Ave	0.7866	0.7001		1.42	1.60	-11.0	30.0
cis-1,3-Dichloropropene	Ave	0.4279	0.3735		1.40	1.60	-12.7	30.0
trans-1,3-Dichloropropene	Ave	0.4392	0.3634		1.32	1.60	-17.3	30.0
Toluene	Ave	1.237	1.049		1.36	1.60	-15.2	30.0
1,1,2-Trichloroethane	Ave	0.4444	0.4188		1.51	1.60	-5.8	30.0
2-Hexanone	Ave	0.3937	0.3384		1.38	1.60	-14.0	30.0
Octane	Ave	0.3450	0.3156		1.46	1.60	-8.5	30.0
Dibromochloromethane	Ave	0.7339	0.7748		1.69	1.60	5.6	30.0
1,2-Dibromoethane (EDB)	Ave	0.6652	0.5807		1.40	1.60	-12.7	30.0
Tetrachloroethene	Ave	0.5184	0.4639		1.43	1.60	-10.5	30.0
2,3-Dimethylheptane	Ave	1.593	1.413		1.42	1.60	-11.3	30.0
Chlorobenzene	Ave	1.002	0.9059		1.45	1.60	-9.6	30.0
Ethylbenzene	Ave	1.497	1.196		1.28	1.60	-20.1	30.0
m-Xylene & p-Xylene	Ave	1.183	1.039		2.81	3.20	-12.2	30.0
Nonane	Ave	0.8512	0.7387		1.39	1.60	-13.2	30.0
Bromoform	QuaF		0.6251		1.82	1.60	13.8	30.0
Styrene	Ave	0.7187	0.5742		1.28	1.60	-20.1	30.0
o-Xylene	Ave	1.239	0.995		1.29	1.60	-19.7	30.0
1,1,2,2-Tetrachloroethane	Ave	1.096	1.003		1.46	1.60	-8.5	30.0
1,2,3-Trichloropropane	Ave	0.2482	0.2205		1.42	1.60	-11.2	30.0
Isopropylbenzene	Ave	1.567	1.250		1.28	1.60	-20.2	30.0
Propylbenzene	Ave	0.4200	0.3247		1.24	1.60	-22.7	30.0
2-Chlorotoluene	Ave	0.4016	0.3261		1.30	1.60	-18.8	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Lab Sample ID: CCVIS 140-42482/3 Calibration Date: 09/05/2020 12:41

Instrument ID: MH Calib Start Date: 08/29/2020 12:34

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 08/29/2020 23:57

Lab File ID: HCCVI05A.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Ethyltoluene	Ave	1.573	1.449		1.47	1.60	-7.9	30.0
1,3,5-Trimethylbenzene	Lin1		0.6561		1.44	1.60	-10.0	30.0
Alpha Methyl Styrene	Ave	0.5440	0.4520		1.33	1.60	-16.9	30.0
Decane	Ave	1.245	1.211		1.56	1.60	-2.7	30.0
tert-Butylbenzene	Ave	1.595	1.655		1.66	1.60	3.8	30.0
1,2,4-Trimethylbenzene	Ave	1.432	1.581		1.77	1.60	10.4	30.0
sec-Butylbenzene	Ave	2.112	2.186		1.66	1.60	3.5	30.0
1,3-Dichlorobenzene	Ave	0.7435	0.7729		1.66	1.60	4.0	30.0
Benzyl chloride	Lin1		0.7012		1.39	1.60	-13.1	30.0
1,4-Dichlorobenzene	Ave	0.5485	0.6244		1.82	1.60	13.8	30.0
4-Isopropyltoluene	Ave	1.709	2.023		1.89	1.60	18.3	30.0
1,2,3-Trimethylbenzene	Ave	1.376	1.593		1.85	1.60	15.8	30.0
Butylcyclohexane	Ave	1.183	1.215		1.64	1.60	2.7	30.0
1,2-Dichlorobenzene	Ave	0.8206	0.8834		1.72	1.60	7.7	30.0
Indane	Ave	1.140	1.231		1.73	1.60	7.9	30.0
Butylbenzene	Ave	1.891	2.193		1.86	1.60	16.0	30.0
Indene	Ave	0.9776	1.042		1.71	1.60	6.6	30.0
Undecane	Ave	1.420	1.463		1.65	1.60	3.0	30.0
1,2-Dibromo-3-Chloropropane	Ave	0.4195	0.5475		2.09	1.60	30.5*	30.0
1,2,4,5-Tetramethylbenzene	Lin1		1.679		1.61	1.60	0.7	30.0
Dodecane	Ave	1.001	1.122		1.79	1.60	12.1	30.0
1,2,4-Trichlorobenzene	Lin1		0.3553		1.49	1.60	-6.8	30.0
Naphthalene	QuaF		0.9662		1.37	1.60	-14.1	30.0
Hexachlorobutadiene	Ave	0.7852	0.9617		1.96	1.60	22.5	30.0
1,2,3-Trichlorobenzene	Ave	0.4610	0.4437		1.54	1.60	-3.8	30.0
2-Methylnaphthalene	Ave	0.1790	0.0392		0.351	1.60	-78.1*	50.0
1-Methylnaphthalene	Ave	0.2066	0.0745		0.577	1.60	-63.9*	50.0
4-Bromofluorobenzene (Surr)	Ave	0.5577	0.6172		5.14	4.64	10.7	30.0

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MH\20200904-16507.b\HCCVI05A.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 05-Sep-2020 12:41:30 ALS Bottle#: 8 Worklist Smp#: 3
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016507-002
Misc. Info.: P118 80
Operator ID: HMT Instrument ID: MH
Sublist: chrom-MH_TO15*sub7

Method: \\chromfs\Knoxville\ChromData\MH\20200904-16507.b\MH_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 06-Sep-2020 10:10:44 Calib Date: 29-Aug-2020 23:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1044

First Level Reviewer: tajh Date: 05-Sep-2020 15:21:33

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.436	9.436	0.000	97	96483	4.80	4.80	
* 2 1,4-Difluorobenzene	114	11.591	11.591	0.000	95	419421	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	16.258	16.258	0.000	88	298882	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.876	17.876	0.000	92	178327	4.64	5.14	
6 Chlorodifluoromethane	51	3.921	3.921	0.000	97	83732	1.60	1.56	
7 Propene	41	3.937	3.937	0.000	97	30206	1.60	1.31	
8 Dichlorodifluoromethane	85	3.993	3.993	0.000	100	119486	1.60	1.64	
9 Chloromethane	52	4.195	4.195	0.000	97	14236	1.60	1.49	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	4.200	4.200	0.000	90	84330	1.60	1.45	
11 Acetaldehyde	44	4.366	4.366	0.000	95	95111	8.00	6.69	
12 Vinyl chloride	62	4.386	4.386	0.000	99	41075	1.60	1.28	
13 Butane	43	4.479	4.479	0.000	83	64876	1.60	1.48	
14 Butadiene	54	4.479	4.479	0.000	67	28505	1.60	1.31	
15 Bromomethane	94	4.841	4.841	0.000	97	42629	1.60	1.38	
16 Chloroethane	64	4.996	4.996	0.000	93	17346	1.60	1.28	
17 Ethanol	31	5.089	5.089	0.000	98	112701	8.00	7.26	
18 Vinyl bromide	106	5.332	5.332	0.000	97	33838	1.60	1.31	
19 2-Methylbutane	43	5.384	5.384	0.000	91	44529	1.60	1.32	
20 Trichlorofluoromethane	101	5.627	5.627	0.000	99	115828	1.60	1.63	
21 Acrolein	56	5.642	5.642	0.000	95	8815	1.60	1.14	
22 Acetonitrile	40	5.709	5.709	0.000	99	20435	1.60	1.50	
23 Acetone	58	5.761	5.761	0.000	99	56804	4.80	3.79	
25 Isopropyl alcohol	45	5.839	5.839	0.000	96	135528	4.80	3.66	
24 Pentane	72	5.864	5.864	0.000	96	4873	1.60	1.55	
26 Ethyl ether	31	6.051	6.051	0.000	87	36920	1.60	1.19	
27 1,1-Dichloroethene	96	6.397	6.397	0.000	95	27175	1.60	1.16	
29 2-Methyl-2-propanol	59	6.490	6.490	0.000	89	41837	1.60	1.09	
28 Acrylonitrile	53	6.505	6.505	0.000	92	29892	1.60	1.45	
30 112TCTFE	101	6.573	6.573	0.000	95	94895	1.60	1.57	
31 Methylene Chloride	84	6.769	6.769	0.000	95	37214	1.60	1.57	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.784	6.784	0.000	96	28169	1.60	1.16	
33 Carbon disulfide	76	6.945	6.945	0.000	99	112866	1.60	1.48	
34 trans-1,2-Dichloroethene	96	7.622	7.622	0.000	94	33845	1.60	1.39	
35 2-Methylpentane	43	7.632	7.632	0.000	96	78479	1.60	1.35	
36 Methyl tert-butyl ether	73	7.746	7.746	0.000	89	61874	1.60	1.20	
37 1,1-Dichloroethane	63	8.061	8.061	0.000	99	68609	1.60	1.41	
38 Vinyl acetate	43	8.159	8.159	0.000	98	60701	1.60	0.9748	
39 2-Butanone (MEK)	72	8.630	8.630	0.000	96	14888	1.60	1.26	
40 Hexane	56	8.645	8.645	0.000	83	30745	1.60	1.52	
41 Isopropyl ether	45	8.810	8.810	0.000	92	110048	1.60	1.28	
42 cis-1,2-Dichloroethene	96	9.090	9.090	0.000	96	29889	1.60	1.21	
43 Ethyl acetate	43	9.255	9.255	0.000	97	81335	1.60	1.31	
44 Chloroform	83	9.436	9.436	0.000	97	88978	1.60	1.52	
45 Tert-butyl ethyl ether	59	9.513	9.513	0.000	96	81592	1.60	1.24	
46 Tetrahydrofuran	42	9.854	9.854	0.000	88	35524	1.60	1.22	
47 1,1,1-Trichloroethane	97	10.490	10.490	0.000	96	79790	1.60	1.50	
48 1,2-Dichloroethane	62	10.599	10.599	0.000	96	54108	1.60	1.42	
49 n-Butanol	31	11.007	11.007	0.000	84	10964	1.60	0.9228	
51 Benzene	78	11.069	11.069	0.000	97	110669	1.60	1.44	
50 Cyclohexane	69	11.074	11.074	0.000	77	14121	1.60	1.34	
52 Carbon tetrachloride	117	11.095	11.095	0.000	97	90521	1.60	1.90	
53 2,3-Dimethylpentane	71	11.167	11.167	0.000	87	19667	1.60	1.35	
54 Thiophene	84	11.343	11.343	0.000	96	55080	1.60	1.36	
55 Isooctane	57	11.798	11.798	0.000	96	164526	1.60	1.37	
56 n-Heptane	71	12.154	12.154	0.000	93	28602	1.60	1.30	
57 1,2-Dichloropropane	63	12.263	12.263	0.000	85	45264	1.60	1.37	
58 Trichloroethene	130	12.294	12.294	0.000	94	48222	1.60	1.39	
59 Dibromomethane	93	12.387	12.387	0.000	93	54049	1.60	1.47	
60 Dichlorobromomethane	83	12.526	12.526	0.000	98	85274	1.60	1.56	
61 1,4-Dioxane	88	12.537	12.537	0.000	91	11604	1.60	1.06	
62 Methyl methacrylate	41	12.594	12.594	0.000	89	48628	1.60	1.36	
63 Methylcyclohexane	83	13.048	13.048	0.000	88	50774	1.60	1.19	
64 4-Methyl-2-pentanone (MIBK)	43	13.431	13.431	0.000	97	97874	1.60	1.42	
65 cis-1,3-Dichloropropene	75	13.498	13.498	0.000	98	52212	1.60	1.40	
66 trans-1,3-Dichloropropene	75	14.186	14.186	0.000	96	36209	1.60	1.32	
67 Toluene	91	14.310	14.310	0.000	92	104494	1.60	1.36	
68 1,1,2-Trichloroethane	83	14.387	14.387	0.000	97	41727	1.60	1.51	
69 2-Hexanone	58	14.744	14.744	0.000	89	33710	1.60	1.38	
70 n-Octane	85	14.961	14.961	0.000	94	31438	1.60	1.46	
71 Chlorodibromomethane	129	15.085	15.085	0.000	98	77194	1.60	1.69	
72 Ethylene Dibromide	107	15.374	15.374	0.000	97	57852	1.60	1.40	
73 Tetrachloroethene	129	15.436	15.436	0.000	93	46219	1.60	1.43	
75 2,3-Dimethylheptane	43	16.294	16.294	0.000	92	140774	1.60	1.42	
74 Chlorobenzene	112	16.305	16.305	0.000	96	90256	1.60	1.45	
76 Ethylbenzene	91	16.584	16.584	0.000	99	119135	1.60	1.28	
77 m-Xylene & p-Xylene	91	16.744	16.744	0.000	98	206929	3.20	2.81	
78 n-Nonane	57	17.131	17.131	0.000	93	73596	1.60	1.39	
80 Styrene	104	17.209	17.209	0.000	98	57209	1.60	1.28	
79 Bromoform	173	17.209	17.209	0.000	89	62278	1.60	1.82	
81 o-Xylene	91	17.266	17.266	0.000	98	99151	1.60	1.29	
82 1,1,2,2-Tetrachloroethane	83	17.586	17.586	0.000	98	99918	1.60	1.46	
83 1,2,3-Trichloropropane	110	17.747	17.747	0.000	96	21969	1.60	1.42	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	17.840	17.840	0.000	96	124494	1.60	1.28	
85 N-Propylbenzene	120	18.356	18.356	0.000	98	32352	1.60	1.24	
86 2-Chlorotoluene	126	18.403	18.403	0.000	98	32491	1.60	1.30	
87 4-Ethyltoluene	105	18.496	18.496	0.000	98	144343	1.60	1.47	
88 1,3,5-Trimethylbenzene	120	18.563	18.563	0.000	92	65362	1.60	1.44	
89 Alpha Methyl Styrene	118	18.791	18.791	0.000	87	45031	1.60	1.33	
90 n-Decane	57	18.822	18.822	0.000	88	120606	1.60	1.56	
91 tert-Butylbenzene	119	18.977	18.977	0.000	90	164850	1.60	1.66	
92 1,2,4-Trimethylbenzene	105	18.987	18.987	0.000	96	157559	1.60	1.77	
93 sec-Butylbenzene	105	19.235	19.235	0.000	99	217778	1.60	1.66	
94 1,3-Dichlorobenzene	146	19.261	19.261	0.000	98	77004	1.60	1.66	
95 Benzyl chloride	91	19.333	19.333	0.000	98	69858	1.60	1.39	
96 1,4-Dichlorobenzene	146	19.344	19.344	0.000	96	62212	1.60	1.82	
97 4-Isopropyltoluene	119	19.390	19.390	0.000	97	201535	1.60	1.89	
98 1,2,3-Trimethylbenzene	105	19.447	19.447	0.000	99	158720	1.60	1.85	
99 Butylcyclohexane	83	19.493	19.493	0.000	89	121029	1.60	1.64	
101 2,3-Dihydroindene	117	19.695	19.695	0.000	92	122605	1.60	1.73	
100 1,2-Dichlorobenzene	146	19.695	19.695	0.000	96	88014	1.60	1.72	
103 n-Butylbenzene	91	19.809	19.809	0.000	97	218504	1.60	1.86	
102 Indene	116	19.819	19.819	0.000	90	103850	1.60	1.71	
104 Undecane	57	20.093	20.093	0.000	92	145705	1.60	1.65	
105 1,2-Dibromo-3-Chloropropane	157	20.284	20.284	0.000	94	54549	1.60	2.09	
106 1,2,4,5-Tetramethylbenzene	119	20.563	20.563	0.000	96	167310	1.60	1.61	
107 Dodecane	57	21.173	21.173	0.000	90	111777	1.60	1.79	
108 1,2,4-Trichlorobenzene	180	21.416	21.416	0.000	93	35396	1.60	1.49	
109 Naphthalene	128	21.561	21.561	0.000	99	96257	1.60	1.37	
110 Hexachlorobutadiene	225	21.726	21.726	0.000	91	95813	1.60	1.96	
111 1,2,3-Trichlorobenzene	180	21.788	21.788	0.000	95	44208	1.60	1.54	
112 2-Methylnaphthalene	142	22.336	22.336	0.000	94	3907	1.60	0.3505	
113 1-Methylnaphthalene	142	22.465	22.465	0.000	98	7423	1.60	0.5770	
A 115 C8 Range	1	14.961	(14.919-15.002)		0	426485	1.60	1.53	
S 116 Xylenes, Total	100				0		4.80	4.09	
S 117 1,2-Dichloroethene, Total	1				0		3.20	2.59	

Reagents:

40CV101P_00118	Amount Added: 80.00	Units: mL	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

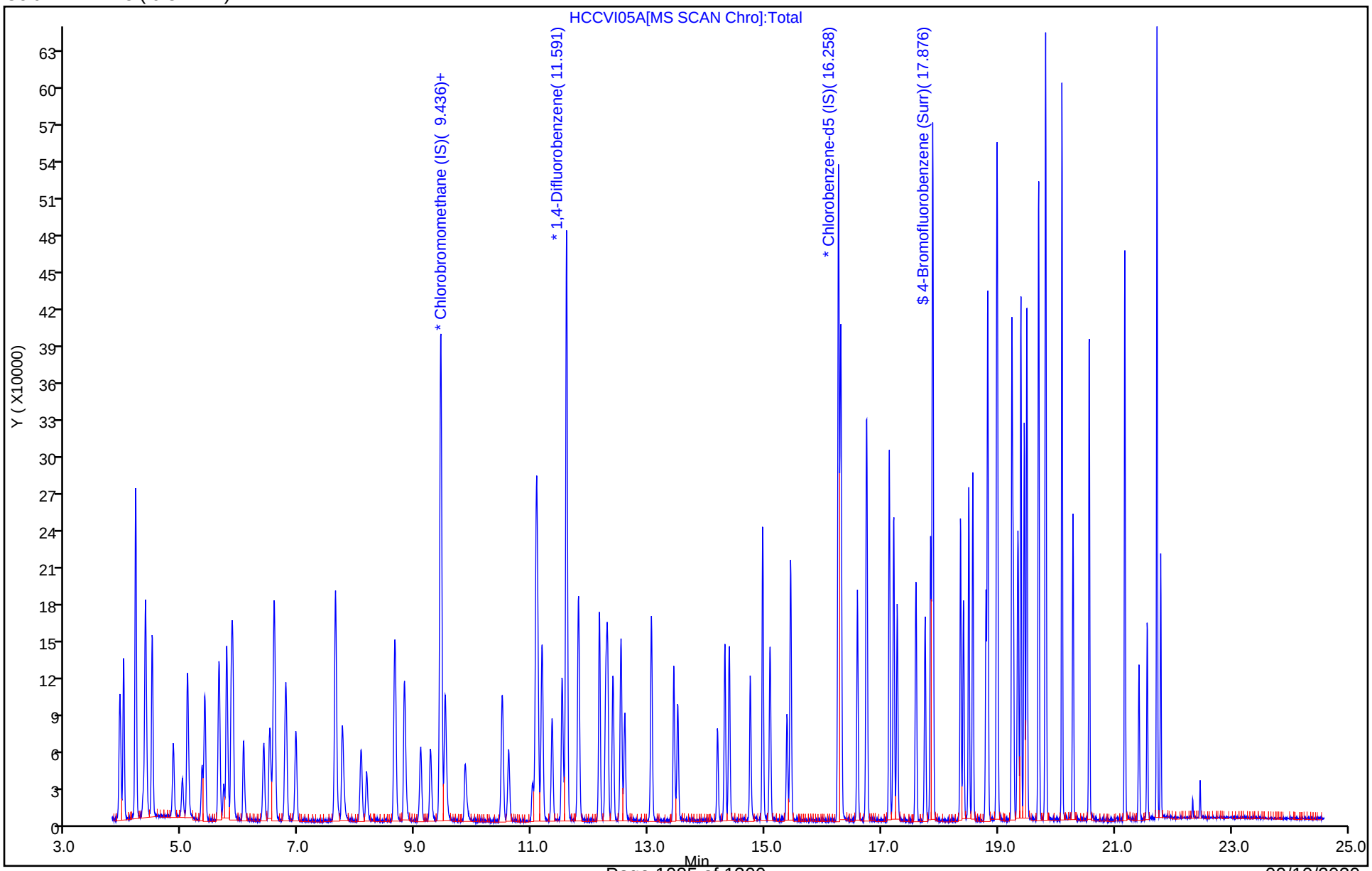
Report Date: 06-Sep-2020 10:10:45 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200904-16507.b\HCCVI05A.D

Injection Date:	05-Sep-2020 12:41:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	CCVIS			Worklist Smp#:	3
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Lab Sample ID: CCVIS 140-42498/9 Calibration Date: 09/06/2020 17:12

Instrument ID: MH Calib Start Date: 08/29/2020 12:34

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 08/29/2020 23:57

Lab File ID: HCCVH06b.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorodifluoromethane	Ave	2.679	2.887		1.72	1.60	7.8	30.0
Propene	Ave	1.144	1.215		1.70	1.60	6.2	30.0
Dichlorodifluoromethane	Ave	3.629	4.198		1.85	1.60	15.7	30.0
Chloromethane	Ave	0.4766	0.5114		1.72	1.60	7.3	30.0
1,2-Dichloro-1,1,2,2-tetrafluoroethane	Ave	2.898	3.114		1.72	1.60	7.5	30.0
Acetaldehyde	Ave	0.7072	0.6190		7.00	8.00	-12.5	30.0
Vinyl chloride	Ave	1.595	1.653		1.66	1.60	3.6	30.0
1,3-Butadiene	Ave	1.087	1.215		1.79	1.60	11.8	30.0
Butane	Ave	2.181	2.522		1.85	1.60	15.6	30.0
Bromomethane	Ave	1.541	1.593		1.65	1.60	3.4	30.0
Chloroethane	Ave	0.6737	0.6653		1.58	1.60	-1.2	30.0
Ethanol	Ave	0.7726	0.6114		6.33	8.00	-20.9	30.0
Vinyl bromide	Ave	1.284	1.476		1.84	1.60	15.0	30.0
2-Methylbutane	Ave	1.682	1.777		1.69	1.60	5.7	30.0
Trichlorofluoromethane	Ave	3.535	4.161		1.88	1.60	17.7	30.0
Acrolein	Lin1		0.5108		2.12	1.60	32.5*	30.0
Acetonitrile	Ave	0.6757	0.6573		1.56	1.60	-2.7	30.0
Acetone	Ave	0.7464	0.6410		1.37	1.60	-14.1	30.0
Isopropyl alcohol	Ave	1.844	2.125		1.84	1.60	15.2	30.0
Pentane	Ave	0.1567	0.1711		1.75	1.60	9.2	30.0
Ethyl ether	Ave	1.540	1.615		1.68	1.60	4.9	30.0
1,1-Dichloroethene	Ave	1.164	1.196		1.64	1.60	2.8	30.0
tert-Butyl alcohol	Ave	1.902	1.837		1.55	1.60	-3.4	30.0
Acrylonitrile	Ave	1.024	1.100		1.72	1.60	7.5	30.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	2.998	3.241		1.73	1.60	8.1	30.0
Methylene Chloride	Ave	1.177	1.207		1.64	1.60	2.5	30.0
3-Chloropropene	Ave	1.206	1.219		1.62	1.60	1.1	30.0
Carbon disulfide	Ave	3.782	3.817		1.61	1.60	0.9	30.0
trans-1,2-Dichloroethene	Ave	1.215	1.271		1.67	1.60	4.6	30.0
2-Methylpentane	Ave	2.898	2.755		1.52	1.60	-4.9	30.0
Methyl tert-butyl ether	Ave	2.565	2.555		1.59	1.60	-0.4	30.0
1,1-Dichloroethane	Ave	2.413	2.561		1.70	1.60	6.1	30.0
Vinyl acetate	Ave	3.098	2.940		1.52	1.60	-5.1	30.0
2-Butanone (MEK)	Ave	0.5879	0.5502		1.50	1.60	-6.4	30.0
Hexane	Ave	1.006	1.051		1.67	1.60	4.5	30.0
Isopropyl ether	Ave	4.280	4.464		1.67	1.60	4.3	30.0
cis-1,2-Dichloroethene	Ave	1.231	1.253		1.63	1.60	1.8	30.0
Ethyl acetate	Ave	3.083	3.030		1.57	1.60	-1.7	30.0
Chloroform	Ave	2.915	3.125		1.72	1.60	7.2	30.0
Tert-butyl ethyl ether	Ave	3.282	3.059		1.49	1.60	-6.8	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Lab Sample ID: CCVIS 140-42498/9 Calibration Date: 09/06/2020 17:12

Instrument ID: MH Calib Start Date: 08/29/2020 12:34

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 08/29/2020 23:57

Lab File ID: HCCVH06b.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Tetrahydrofuran	Ave	1.448	1.410		1.56	1.60	-2.6	30.0
1,1,1-Trichloroethane	Ave	2.643	2.771		1.68	1.60	4.9	30.0
1,2-Dichloroethane	Ave	0.4365	0.4875		1.79	1.60	11.7	30.0
1-Butanol	Ave	0.1360	0.1096		1.29	1.60	-19.4	30.0
Cyclohexane	Ave	0.1206	0.1284		1.70	1.60	6.5	30.0
Benzene	Ave	0.8814	0.9453		1.72	1.60	7.3	30.0
Carbon tetrachloride	Ave	0.5456	0.7811		2.29	1.60	43.2*	30.0
2,3-Dimethylpentane	Ave	0.1669	0.1724		1.65	1.60	3.3	30.0
Thiophene	Ave	0.4636	0.4709		1.63	1.60	1.6	30.0
2,2,4-Trimethylpentane	Ave	1.370	1.489		1.74	1.60	8.7	30.0
Heptane	Ave	0.2512	0.2591		1.65	1.60	3.2	30.0
1,2-Dichloropropane	Ave	0.3772	0.3934		1.67	1.60	4.3	30.0
Trichloroethene	Ave	0.3963	0.4246		1.71	1.60	7.1	30.0
Dibromomethane	Ave	0.4195	0.4619		1.76	1.60	10.1	30.0
Bromodichloromethane	Ave	0.6247	0.7216		1.85	1.60	15.5	30.0
1,4-Dioxane	Ave	0.1255	0.1137		1.45	1.60	-9.4	30.0
Methyl methacrylate	Ave	0.4094	0.4276		1.67	1.60	4.4	30.0
Methylcyclohexane	Lin1		0.5711		1.85	1.60	15.4	30.0
4-Methyl-2-pentanone (MIBK)	Ave	0.7866	0.8582		1.75	1.60	9.1	30.0
cis-1,3-Dichloropropene	Ave	0.4279	0.4884		1.83	1.60	14.1	30.0
trans-1,3-Dichloropropene	Ave	0.4392	0.4936		1.80	1.60	12.4	30.0
Toluene	Ave	1.237	1.348		1.74	1.60	9.0	30.0
1,1,2-Trichloroethane	Ave	0.4444	0.4874		1.75	1.60	9.7	30.0
2-Hexanone	Ave	0.3937	0.4828		1.96	1.60	22.6	30.0
Octane	Ave	0.3450	0.3975		1.84	1.60	15.2	30.0
Dibromochloromethane	Ave	0.7339	0.9665		2.11	1.60	31.7*	30.0
1,2-Dibromoethane (EDB)	Ave	0.6652	0.7293		1.75	1.60	9.6	30.0
Tetrachloroethene	Ave	0.5184	0.5591		1.73	1.60	7.9	30.0
2,3-Dimethylheptane	Ave	1.593	1.485		1.49	1.60	-6.8	30.0
Chlorobenzene	Ave	1.002	1.096		1.75	1.60	9.5	30.0
Ethylbenzene	Ave	1.497	1.579		1.69	1.60	5.5	30.0
m-Xylene & p-Xylene	Ave	1.183	1.404		3.80	3.20	18.7	30.0
Nonane	Ave	0.8512	0.9212		1.73	1.60	8.2	30.0
Styrene	Ave	0.7187	0.8615		1.92	1.60	19.9	30.0
Bromoform	QuaF		0.8250		2.24	1.60	39.9*	30.0
o-Xylene	Ave	1.239	1.324		1.71	1.60	6.9	30.0
1,1,2,2-Tetrachloroethane	Ave	1.096	1.221		1.78	1.60	11.4	30.0
1,2,3-Trichloropropane	Ave	0.2482	0.2817		1.82	1.60	13.5	30.0
Isopropylbenzene	Ave	1.567	1.777		1.81	1.60	13.4	30.0
Propylbenzene	Ave	0.4200	0.4719		1.80	1.60	12.3	30.0
2-Chlorotoluene	Ave	0.4016	0.4495		1.79	1.60	11.9	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Lab Sample ID: CCVIS 140-42498/9 Calibration Date: 09/06/2020 17:12

Instrument ID: MH Calib Start Date: 08/29/2020 12:34

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 08/29/2020 23:57

Lab File ID: HCCVH06b.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Ethyltoluene	Ave	1.573	1.759		1.79	1.60	11.8	30.0
1,3,5-Trimethylbenzene	Lin1		0.9296		2.02	1.60	26.3	30.0
Alpha Methyl Styrene	Ave	0.5440	0.7128		2.10	1.60	31.0*	30.0
Decane	Ave	1.245	1.374		1.77	1.60	10.4	30.0
tert-Butylbenzene	Ave	1.595	1.991		2.00	1.60	24.9	30.0
1,2,4-Trimethylbenzene	Ave	1.432	1.894		2.12	1.60	32.2*	30.0
sec-Butylbenzene	Ave	2.112	2.660		2.02	1.60	25.9	30.0
1,3-Dichlorobenzene	Ave	0.7435	0.9720		2.09	1.60	30.7*	30.0
Benzyl chloride	Lin1		1.104		2.13	1.60	32.9*	30.0
1,4-Dichlorobenzene	Ave	0.5485	0.8276		2.41	1.60	50.9*	30.0
4-Isopropyltoluene	Ave	1.709	2.380		2.23	1.60	39.2*	30.0
1,2,3-Trimethylbenzene	Ave	1.376	1.356		1.58	1.60	-1.5	30.0
Butylcyclohexane	Ave	1.183	1.286		1.74	1.60	8.7	30.0
1,2-Dichlorobenzene	Ave	0.8206	1.055		2.06	1.60	28.6	30.0
Indane	Ave	1.140	1.448		2.03	1.60	27.0	30.0
Butylbenzene	Ave	1.891	2.586		2.19	1.60	36.7*	30.0
Indene	Ave	0.9776	1.197		1.96	1.60	22.4	30.0
Undecane	Ave	1.420	1.690		1.90	1.60	19.0	30.0
1,2-Dibromo-3-Chloropropane	Ave	0.4195	0.5702		2.17	1.60	35.9*	30.0
1,2,4,5-Tetramethylbenzene	Lin1		1.973		1.88	1.60	17.6	30.0
Dodecane	Ave	1.001	1.468		2.35	1.60	46.7*	30.0
1,2,4-Trichlorobenzene	Lin1		0.5283		2.18	1.60	36.2*	30.0
Naphthalene	QuaF		1.529		2.18	1.60	36.3*	30.0
Hexachlorobutadiene	Ave	0.7852	1.056		2.15	1.60	34.5*	30.0
1,2,3-Trichlorobenzene	Ave	0.4610	0.6350		2.20	1.60	37.7*	30.0
2-Methylnaphthalene	Ave	0.1790	0.0785		0.701	1.60	-56.2*	50.0
1-Methylnaphthalene	Ave	0.2066	0.1681		1.30	1.60	-18.7	50.0
4-Bromofluorobenzene (Surr)	Ave	0.5577	0.6256		5.21	4.64	12.2	30.0

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HCCVH06b.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 06-Sep-2020 17:12:30 ALS Bottle#: 3 Worklist Smp#: 9
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016507-005
Misc. Info.: P118 80ML
Operator ID: HMT Instrument ID: MH
Sublist: chrom-MH_TO15*sub6

Method: \\chromfs\Knoxville\ChromData\MH\20200904-16514.b\MH_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 07-Sep-2020 07:46:39 Calib Date: 29-Aug-2020 23:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1015

First Level Reviewer: tajh Date: 07-Sep-2020 07:46:39

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.431	9.431	0.000	96	122536	4.80	4.80	
* 2 1,4-Difluorobenzene	114	11.591	11.591	0.000	95	491945	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	16.258	16.258	0.000	87	362338	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.876	17.876	0.000	93	219137	4.64	5.21	
6 Chlorodifluoromethane	51	3.916	3.916	0.000	97	117910	1.60	1.72	
7 Propene	41	3.932	3.932	0.000	99	49619	1.60	1.70	
8 Dichlorodifluoromethane	85	3.983	3.983	0.000	100	171486	1.60	1.85	
9 Chloromethane	52	4.190	4.190	0.000	59	20890	1.60	1.72	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	4.195	4.195	0.000	90	127201	1.60	1.72	
11 Acetaldehyde	44	4.361	4.361	0.000	95	126417	8.00	7.00	
12 Vinyl chloride	62	4.381	4.381	0.000	99	67502	1.60	1.66	
14 Butadiene	54	4.474	4.474	0.000	68	49635	1.60	1.79	
13 Butane	43	4.474	4.474	0.000	83	103025	1.60	1.85	
15 Bromomethane	94	4.836	4.836	0.000	98	65060	1.60	1.65	
16 Chloroethane	64	4.991	4.991	0.000	95	27176	1.60	1.58	
17 Ethanol	31	5.079	5.079	0.000	98	124874	8.00	6.33	
18 Vinyl bromide	106	5.327	5.327	0.000	98	60290	1.60	1.84	
19 2-Methylbutane	43	5.379	5.379	0.000	93	72571	1.60	1.69	
20 Trichlorofluoromethane	101	5.617	5.617	0.000	99	169960	1.60	1.88	
21 Acrolein	56	5.637	5.637	0.000	97	20862	1.60	2.12	
22 Acetonitrile	40	5.704	5.704	0.000	99	26847	1.60	1.56	
23 Acetone	58	5.761	5.761	0.000	99	26180	1.60	1.37	
25 Isopropyl alcohol	45	5.839	5.839	0.000	94	86786	1.60	1.84	
24 Pentane	72	5.854	5.854	0.000	97	6990	1.60	1.75	
26 Ethyl ether	31	6.040	6.040	0.000	90	65962	1.60	1.68	
27 1,1-Dichloroethene	96	6.387	6.387	0.000	96	48845	1.60	1.64	
29 2-Methyl-2-propanol	59	6.485	6.485	0.000	93	75034	1.60	1.55	
28 Acrylonitrile	53	6.500	6.500	0.000	93	44950	1.60	1.72	
30 112TCTFE	101	6.567	6.567	0.000	96	132396	1.60	1.73	
31 Methylene Chloride	84	6.764	6.764	0.000	95	49287	1.60	1.64	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.779	6.779	0.000	95	49806	1.60	1.62	
33 Carbon disulfide	76	6.940	6.940	0.000	100	155893	1.60	1.61	
34 trans-1,2-Dichloroethene	96	7.617	7.617	0.000	95	51926	1.60	1.67	
35 2-Methylpentane	43	7.627	7.627	0.000	96	112538	1.60	1.52	
36 Methyl tert-butyl ether	73	7.741	7.741	0.000	92	104379	1.60	1.59	
37 1,1-Dichloroethane	63	8.061	8.061	0.000	100	104590	1.60	1.70	
38 Vinyl acetate	43	8.154	8.154	0.000	99	120068	1.60	1.52	
39 2-Butanone (MEK)	72	8.625	8.625	0.000	96	22475	1.60	1.50	
40 Hexane	56	8.645	8.645	0.000	85	42928	1.60	1.67	
41 Isopropyl ether	45	8.805	8.805	0.000	94	182340	1.60	1.67	
42 cis-1,2-Dichloroethene	96	9.084	9.084	0.000	97	51168	1.60	1.63	
43 Ethyl acetate	43	9.250	9.250	0.000	98	123757	1.60	1.57	
44 Chloroform	83	9.436	9.436	0.000	97	127650	1.60	1.72	
45 Tert-butyl ethyl ether	59	9.508	9.508	0.000	98	124949	1.60	1.49	
46 Tetrahydrofuran	42	9.844	9.844	0.000	91	57605	1.60	1.56	
47 1,1,1-Trichloroethane	97	10.485	10.485	0.000	97	113188	1.60	1.68	
48 1,2-Dichloroethane	62	10.599	10.599	0.000	96	79941	1.60	1.79	
49 n-Butanol	31	10.997	10.997	0.000	92	17968	1.60	1.29	
50 Cyclohexane	69	11.069	11.069	0.000	75	21062	1.60	1.70	
51 Benzene	78	11.074	11.074	0.000	97	155010	1.60	1.72	
52 Carbon tetrachloride	117	11.095	11.095	0.000	96	128083	1.60	2.29	
53 2,3-Dimethylpentane	71	11.167	11.167	0.000	92	28277	1.60	1.65	
54 Thiophene	84	11.343	11.343	0.000	96	77219	1.60	1.63	
55 Isooctane	57	11.793	11.793	0.000	97	244157	1.60	1.74	
56 n-Heptane	71	12.154	12.154	0.000	94	42494	1.60	1.65	
57 1,2-Dichloropropane	63	12.263	12.263	0.000	87	64508	1.60	1.67	
58 Trichloroethene	130	12.294	12.294	0.000	95	69630	1.60	1.71	
59 Dibromomethane	93	12.387	12.387	0.000	94	75744	1.60	1.76	
60 Dichlorobromomethane	83	12.521	12.521	0.000	98	118337	1.60	1.85	
61 1,4-Dioxane	88	12.532	12.532	0.000	96	18649	1.60	1.45	
62 Methyl methacrylate	41	12.589	12.589	0.000	89	70111	1.60	1.67	
63 Methylcyclohexane	83	13.049	13.049	0.000	89	93649	1.60	1.85	
64 4-Methyl-2-pentanone (MIBK)	43	13.426	13.426	0.000	98	140736	1.60	1.75	
65 cis-1,3-Dichloropropene	75	13.498	13.498	0.000	98	80085	1.60	1.83	
66 trans-1,3-Dichloropropene	75	14.181	14.181	0.000	97	59615	1.60	1.80	
67 Toluene	91	14.310	14.310	0.000	92	162763	1.60	1.74	
68 1,1,2-Trichloroethane	83	14.382	14.382	0.000	97	58870	1.60	1.75	
69 2-Hexanone	58	14.739	14.739	0.000	90	58310	1.60	1.96	
70 n-Octane	85	14.961	14.961	0.000	96	48015	1.60	1.84	
71 Chlorodibromomethane	129	15.085	15.085	0.000	98	116739	1.60	2.11	
72 Ethylene Dibromide	107	15.374	15.374	0.000	97	88083	1.60	1.75	
73 Tetrachloroethene	129	15.436	15.436	0.000	94	67533	1.60	1.73	
75 2,3-Dimethylheptane	43	16.294	16.294	0.000	93	179386	1.60	1.49	
74 Chlorobenzene	112	16.305	16.305	0.000	94	132428	1.60	1.75	
76 Ethylbenzene	91	16.584	16.584	0.000	99	190740	1.60	1.69	
77 m-Xylene & p-Xylene	91	16.744	16.744	0.000	98	339184	3.20	3.80	
78 n-Nonane	57	17.132	17.132	0.000	94	111262	1.60	1.73	
80 Styrene	104	17.204	17.204	0.000	98	104049	1.60	1.92	
79 Bromoform	173	17.209	17.209	0.000	87	99643	1.60	2.24	
81 o-Xylene	91	17.266	17.266	0.000	99	159911	1.60	1.71	
82 1,1,2,2-Tetrachloroethane	83	17.586	17.586	0.000	99	147511	1.60	1.78	
83 1,2,3-Trichloropropane	110	17.747	17.747	0.000	97	34027	1.60	1.82	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	17.840	17.840	0.000	96	214634	1.60	1.81	
85 N-Propylbenzene	120	18.351	18.351	0.000	98	56991	1.60	1.80	
86 2-Chlorotoluene	126	18.403	18.403	0.000	98	54293	1.60	1.79	
87 4-Ethyltoluene	105	18.496	18.496	0.000	98	212456	1.60	1.79	
88 1,3,5-Trimethylbenzene	120	18.563	18.563	0.000	92	112281	1.60	2.02	
89 Alpha Methyl Styrene	118	18.791	18.791	0.000	87	86093	1.60	2.10	
90 n-Decane	57	18.822	18.822	0.000	88	165969	1.60	1.77	
91 tert-Butylbenzene	119	18.977	18.977	0.000	91	240458	1.60	2.00	
92 1,2,4-Trimethylbenzene	105	18.987	18.987	0.000	96	228753	1.60	2.12	
93 sec-Butylbenzene	105	19.235	19.235	0.000	99	321215	1.60	2.02	
94 1,3-Dichlorobenzene	146	19.261	19.261	0.000	98	117403	1.60	2.09	
95 Benzyl chloride	91	19.333	19.333	0.000	97	133302	1.60	2.13	
96 1,4-Dichlorobenzene	146	19.344	19.344	0.000	96	99958	1.60	2.41	
97 4-Isopropyltoluene	119	19.390	19.390	0.000	97	287468	1.60	2.23	
98 1,2,3-Trimethylbenzene	105	19.447	19.447	0.000	99	163768	1.60	1.58	
99 Butylcyclohexane	83	19.494	19.494	0.000	90	155359	1.60	1.74	
101 2,3-Dihydroindene	117	19.695	19.695	0.000	93	174928	1.60	2.03	
100 1,2-Dichlorobenzene	146	19.695	19.695	0.000	96	127461	1.60	2.06	
103 n-Butylbenzene	91	19.809	19.809	0.000	97	312328	1.60	2.19	
102 Indene	116	19.819	19.819	0.000	94	144513	1.60	1.96	
104 Undecane	57	20.093	20.093	0.000	93	204071	1.60	1.90	
105 1,2-Dibromo-3-Chloropropane	157	20.284	20.284	0.000	96	68865	1.60	2.17	
106 1,2,4,5-Tetramethylbenzene	119	20.563	20.563	0.000	97	238353	1.60	1.88	
107 Dodecane	57	21.173	21.173	0.000	91	177302	1.60	2.35	
108 1,2,4-Trichlorobenzene	180	21.416	21.416	0.000	94	63812	1.60	2.18	
109 Naphthalene	128	21.556	21.556	0.000	99	184660	1.60	2.18	
110 Hexachlorobutadiene	225	21.726	21.726	0.000	91	127548	1.60	2.15	
111 1,2,3-Trichlorobenzene	180	21.788	21.788	0.000	94	76696	1.60	2.20	
112 2-Methylnaphthalene	142	22.336	22.336	0.000	97	9476	1.60	0.7012	
113 1-Methylnaphthalene	142	22.465	22.465	0.000	97	20299	1.60	1.30	
A 115 C8 Range	1	14.961	(14.920-15.002)		0	594457	1.60	1.81	
S 116 Xylenes, Total	100				0		4.80	5.51	
S 117 1,2-Dichloroethene, Total	1				0		3.20	3.30	
T 139 2-Methylthiophene TIC	97	14.465	14.465	0.000	96	124105	1.60	1.64	
T 142 3-Methylthiophene TIC	97	14.661	14.661	0.000	97	121164	1.60	1.61	
T 141 2-Ethylthiophene TIC	97	16.687	16.687	0.000	95	140835	1.60	1.87	
T 152 1,2-Dimethyl-4-Ethylbenzene TIC	119	20.176	20.176	0.000	95	204969	1.60	2.72	
T 151 Benzo(b)thiophene TIC	134	21.654	21.654	0.000	97	53876	1.60	0.7137	

Reagents:

40CV101S_00126	Amount Added: 80.00	Units: mL	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

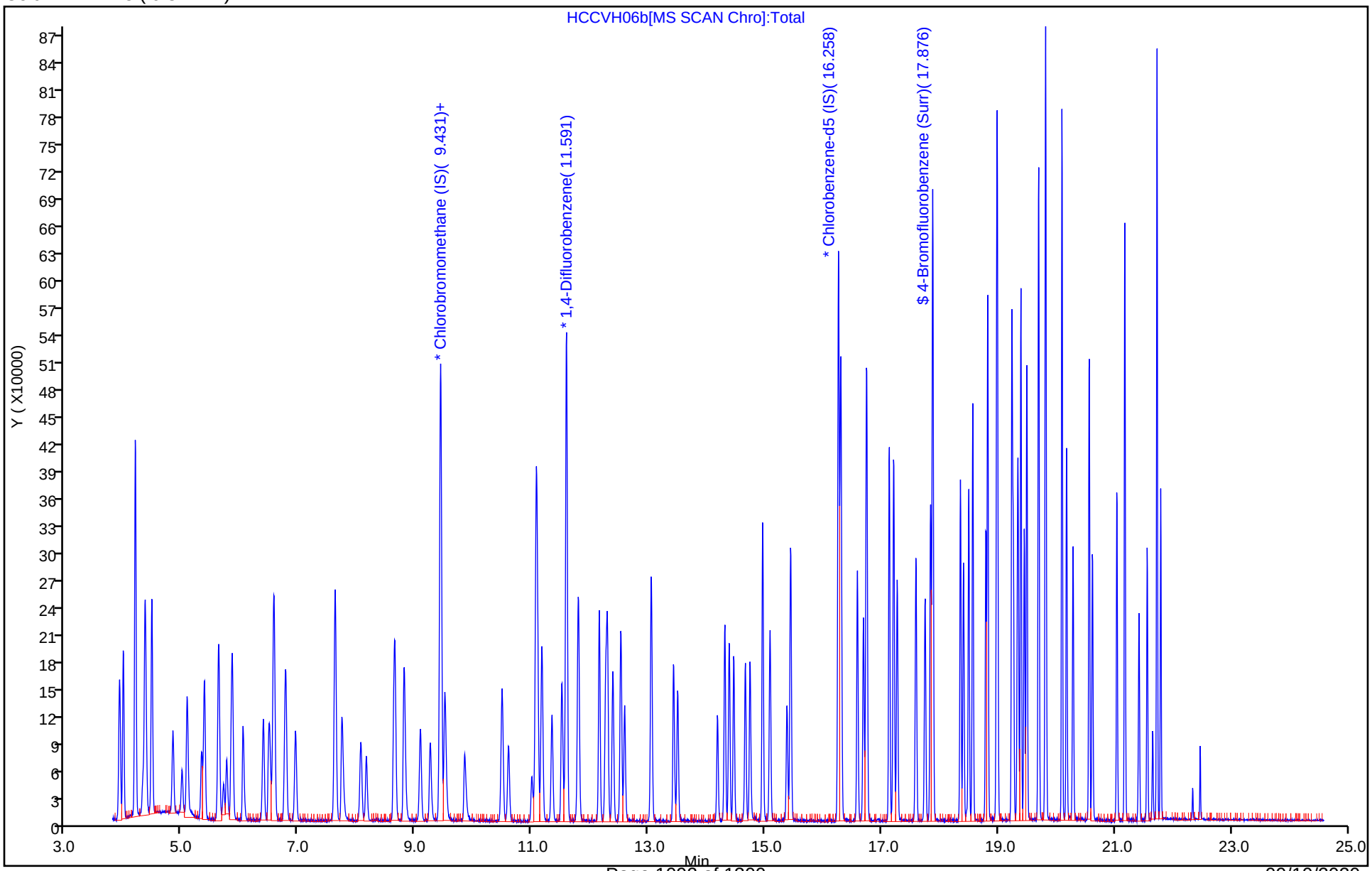
Report Date: 07-Sep-2020 07:46:40 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HCCVH06b.D

Injection Date:	06-Sep-2020 17:12:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	CCVIS			Worklist Smp#:	9
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01BFB.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 01-Sep-2020 16:42:30 ALS Bottle#: 16 Worklist Smp#: 1
Injection Vol: 500.0 mL Dil. Factor: 1.0000
Sample Info: 140-0016453-001
Misc. Info.: BFB
Operator ID: AFB Instrument ID: MG

Method: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 02-Sep-2020 13:24:52 Calib Date: 02-Sep-2020 03:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1046

First Level Reviewer: barlozhetskayaa Date: 02-Sep-2020 13:24:52

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
$ 5 BFB	95	5.025	5.025	0.000	0	331196	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

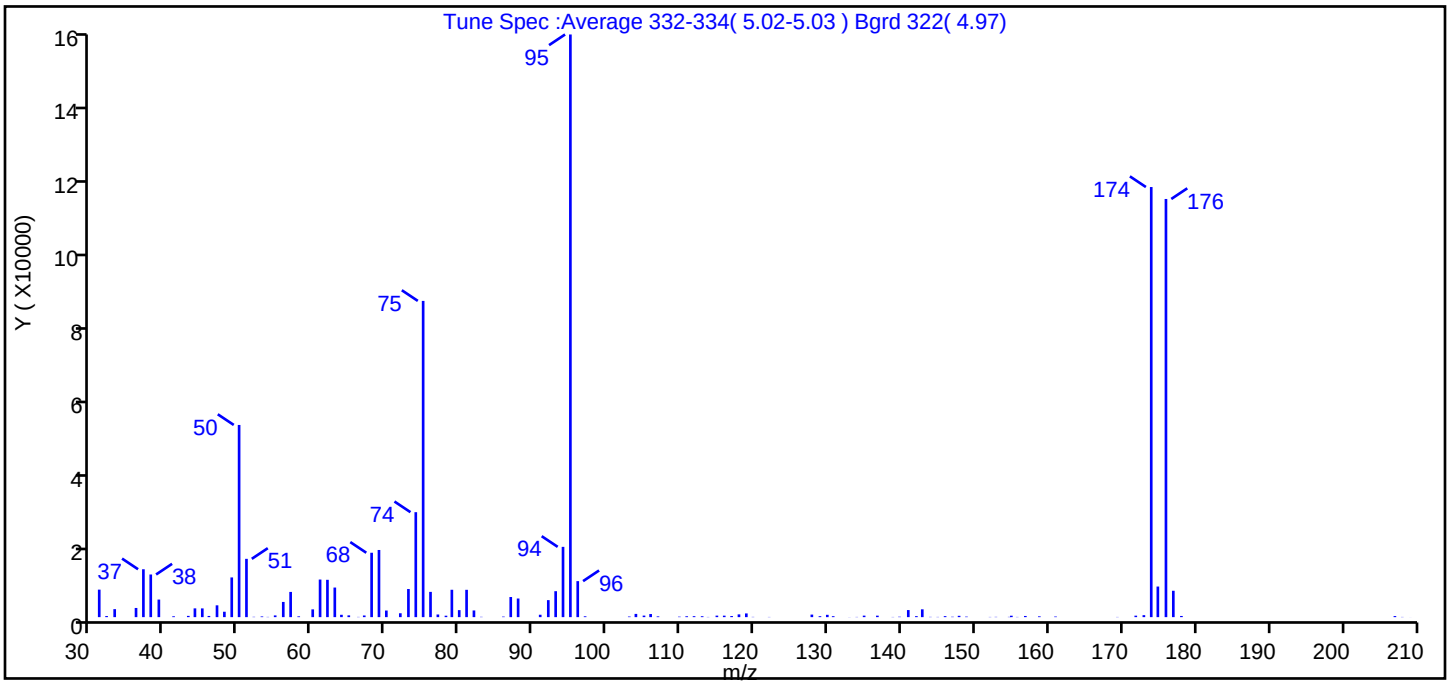
40MXBFB_00001 Amount Added: 40.00 Units: mL

MS Tune Report

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01BFB.D
Injection Date: 01-Sep-2020 16:42:30 Instrument ID: MG
Lims ID: BFB
Client ID:
Operator ID: AFB ALS Bottle#: 16 Worklist Smp#: 1
Injection Vol: 500.0 mL Dil. Factor: 1.0000
Method: MG_TO15 Limit Group: MSA TO14A_15 Routine ICAL
Tune Method: BFB Method 8260

$ 5 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	33.0
75	30 to 60% of m/z 95	54.3
96	5 to 9% of m/z 95	6.2
173	Less than 2% of m/z 174	0.3 (0.5)
174	50 to 120% of m/z 95	73.8
175	5 to 9% of m/z 174	5.3 (7.1)
176	Greater than 95% but less than 101% of m/z 174	71.8 (97.2)
177	5 to 9% of m/z 176	4.5 (6.3)

Data File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01BFB.D\MG_TO15.rslt\spectra.d
Injection Date: 01-Sep-2020 16:42:30
Spectrum: Tune Spec :Average 332-334(5.02-5.03) Bgrd 322(4.97)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 112

m/z	Y	m/z	Y	m/z	Y	m/z	Y
31.00	7094	64.00	607	97.00	217	141.00	1824
32.00	288	65.00	459	103.00	159	142.00	261
33.00	2064	66.00	60	104.00	836	143.00	2018
36.00	2368	67.00	427	105.00	400	144.00	69
37.00	12353	68.00	16608	106.00	799	145.00	58
38.00	10999	69.00	17320	107.00	192	146.00	259
39.00	4535	70.00	1704	110.00	124	147.00	103
41.00	221	72.00	1003	111.00	228	148.00	344
43.00	327	73.00	7253	112.00	247	149.00	136
44.00	2263	74.00	27072	113.00	233	152.00	54
45.00	2256	75.00	81560	114.00	51	153.00	72
46.00	307	76.00	6516	115.00	391	155.00	71
47.00	3048	77.00	684	116.00	382	155.00	369
48.00	1395	78.00	371	117.00	283	156.00	54
49.00	10242	79.00	7062	118.00	712	157.00	303
50.00	49568	80.00	1809	119.00	958	159.00	205
51.00	15036	81.00	7049	120.00	66	161.00	156
52.00	82	82.00	1725	122.00	51	169.00	51
53.00	180	83.00	79	128.00	659	172.00	381
54.00	61	86.00	140	129.00	240	173.00	510
55.00	444	87.00	5191	130.00	600	174.00	110928
56.00	3922	88.00	4807	131.00	243	175.00	7893
57.00	6505	91.00	619	133.00	25	176.00	107848
58.00	203	92.00	4387	134.00	56	177.00	6803
60.00	2003	93.00	6692	135.00	391	178.00	305
61.00	9698	94.00	18128	137.00	382	207.00	278
62.00	9630	95.00	150272	139.00	50	208.00	54
63.00	7632	96.00	9288	140.00	108	209.00	9

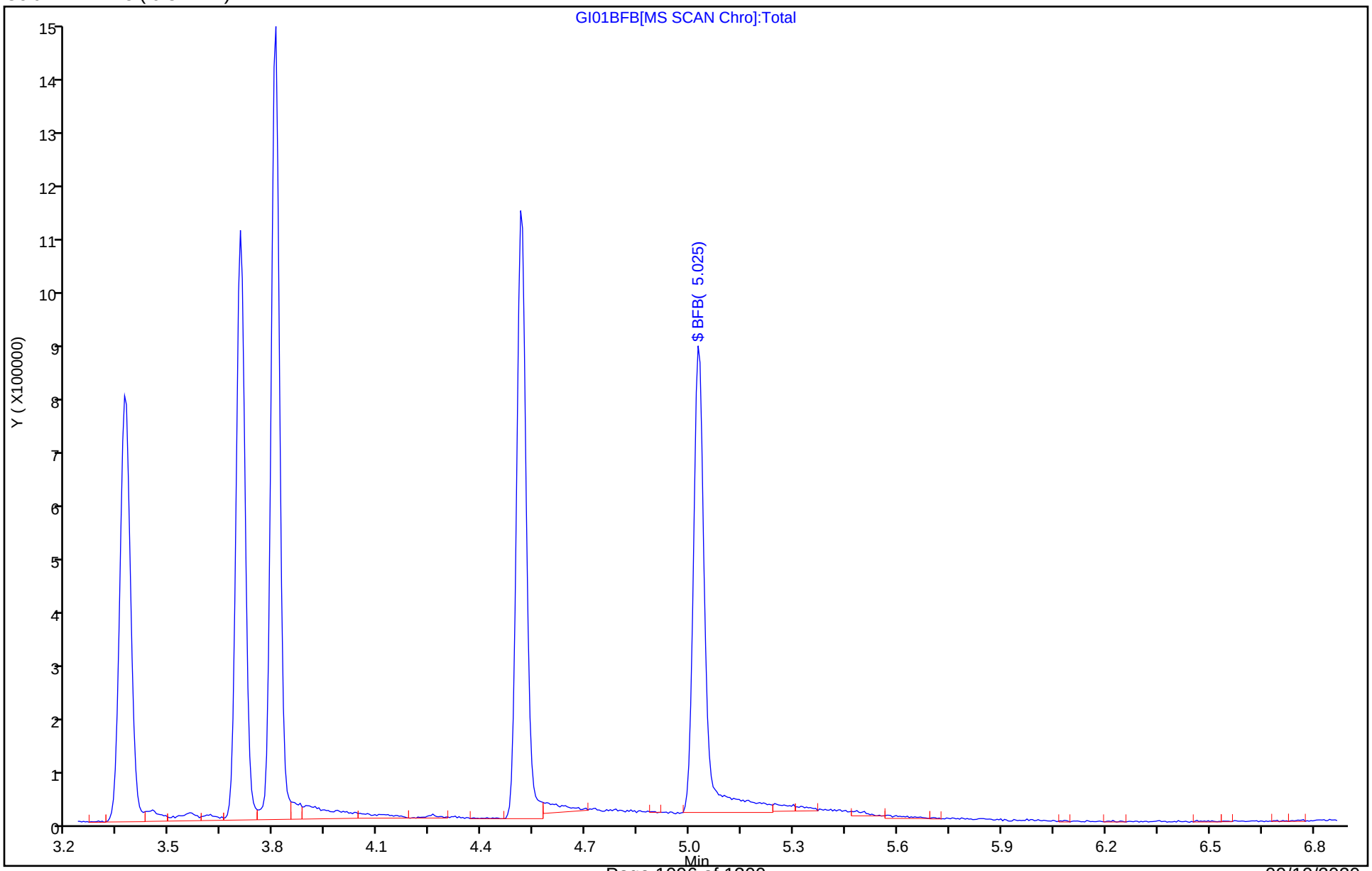
Report Date: 02-Sep-2020 13:24:52 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01BFB.D

Injection Date:	01-Sep-2020 16:42:30	Instrument ID:	MG	Operator ID:	AFB
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	500.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MG\20200902-16486.b\GBFBI03.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	03-Sep-2020 07:22:30	ALS Bottle#:	16	Worklist Smp#:	1
Injection Vol:	500.0 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016486-001				
Misc. Info.:	TUNE				
Operator ID:	HMT	Instrument ID:	MG		
Method:	\\chromfs\Knoxville\ChromData\MG\20200902-16486.b\MG_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	03-Sep-2020 12:34:17	Calib Date:	02-Sep-2020 03:27:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1067				

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
$ 5 BFB	95	5.030	5.030	0.000	0	282105	NR	NR	8

QC Flag Legend

Processing Flags
NR - Missing Quant Standard
8 - Failed MS Tune Ratio Test

Reagents:

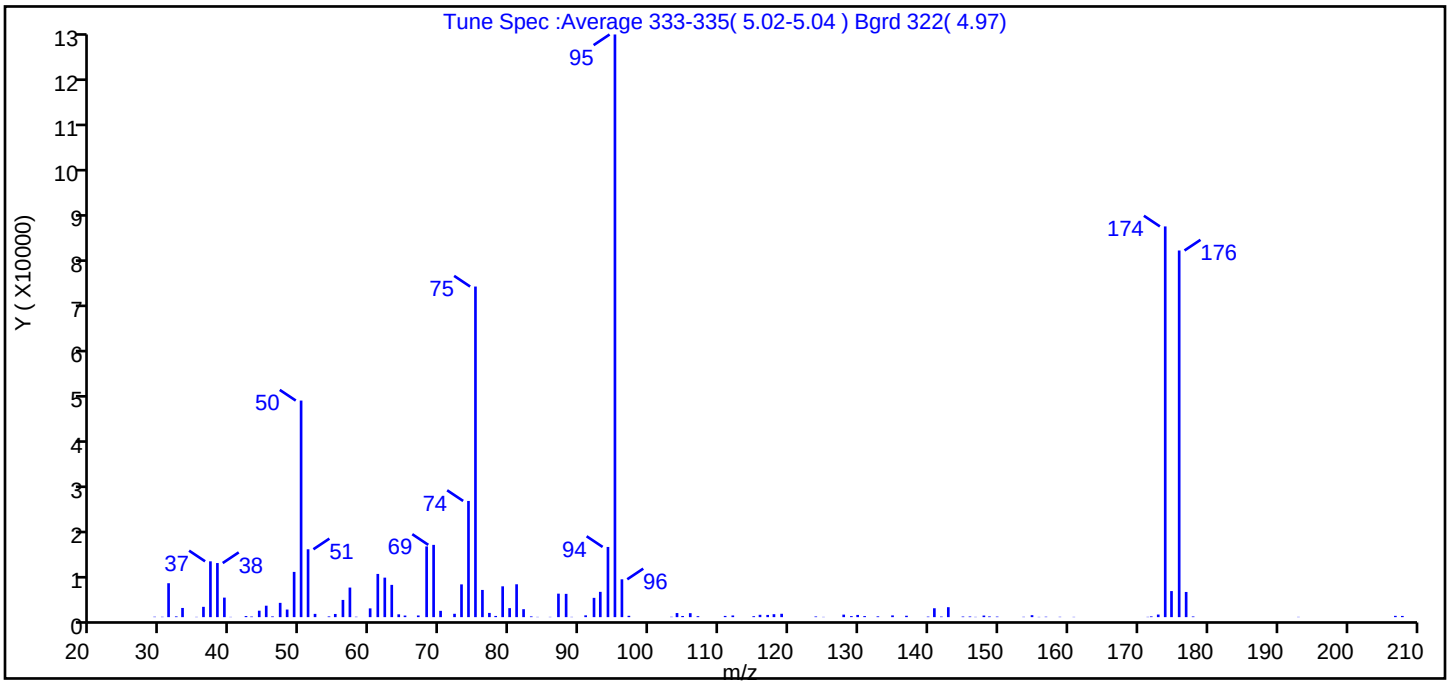
40MXBFB_00001 Amount Added: 40.00 Units: ml

MS Tune Report

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200902-16486.b\GBFBI03.D
Injection Date: 03-Sep-2020 07:22:30 Instrument ID: MG
Lims ID: BFB
Client ID:
Operator ID: HMT ALS Bottle#: 16 Worklist Smp#: 1
Injection Vol: 500.0 mL Dil. Factor: 1.0000
Method: MG_TO15 Limit Group: MSA TO14A_15 Routine ICAL
Tune Method: BFB Method 8260

$ 5 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	37.2
75	30 to 60% of m/z 95	56.7
96	5 to 9% of m/z 95	6.5
173	Less than 2% of m/z 174	0.4 (0.7)
174	50 to 120% of m/z 95	67.1
175	5 to 9% of m/z 174	4.5 (6.7)
176	Greater than 95% but less than 101% of m/z 174	62.9 (93.8)*
177	5 to 9% of m/z 176	4.3 (6.9)

Data File: \\chromfs\Knoxville\ChromData\MG\20200902-16486.b\GBFBI03.D\MG_TO15.rslt\spectra.d
Injection Date: 03-Sep-2020 07:22:30
Spectrum: Tune Spec :Average 333-335(5.02-5.04) Bgrd 322(4.97)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 109

m/z	Y	m/z	Y	m/z	Y	m/z	Y
29.00	88	61.00	9237	93.00	5407	142.00	124
30.00	77	62.00	8441	94.00	15003	143.00	2126
31.00	7250	63.00	6895	95.00	124528	145.00	130
32.00	160	64.00	601	96.00	8088	146.00	140
33.00	1964	65.00	338	97.00	288	147.00	59
35.00	59	67.00	355	103.00	80	148.00	339
36.00	2204	68.00	15115	104.00	877	149.00	153
37.00	11929	69.00	15447	105.00	249	150.00	121
38.00	11563	70.00	1347	106.00	852	154.00	73
39.00	4174	72.00	718	107.00	208	155.00	421
40.00	55	73.00	7002	111.00	263	156.00	54
42.00	234	74.00	24832	112.00	356	157.00	92
43.00	126	75.00	70656	115.00	204	159.00	73
44.00	1378	76.00	5815	116.00	500	161.00	57
45.00	2446	77.00	904	117.00	473	171.00	64
46.00	154	78.00	258	118.00	632	172.00	161
47.00	3053	79.00	6588	119.00	721	173.00	556
48.00	1625	80.00	1925	124.00	146	174.00	83504
49.00	9669	81.00	7025	125.00	55	175.00	5571
50.00	46288	82.00	1700	128.00	540	176.00	78360
51.00	14506	83.00	160	129.00	218	177.00	5382
52.00	700	84.00	54	130.00	472	178.00	143
54.00	155	86.00	57	131.00	226	193.00	57
55.00	680	87.00	5021	133.00	173	207.00	275
56.00	3681	88.00	4976	135.00	370	208.00	257
57.00	6322	89.00	58	137.00	298		
58.00	86	91.00	383	140.00	116		
60.00	1872	92.00	4122	141.00	1900		

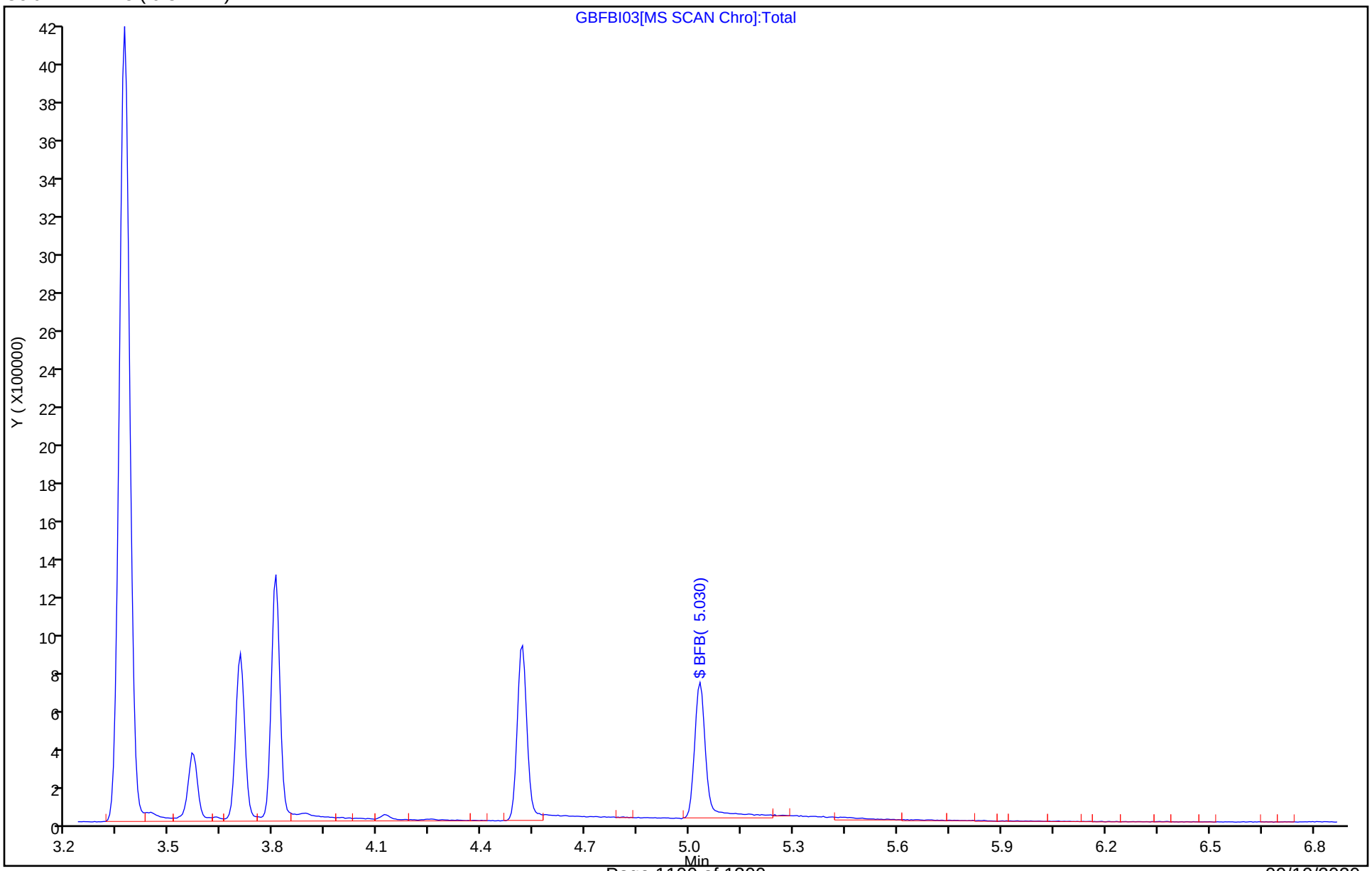
Report Date: 03-Sep-2020 12:34:17 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200902-16486.b\GBFBI03.D

Injection Date:	03-Sep-2020 07:22:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	500.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBFBI07.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	07-Sep-2020 07:32:30	ALS Bottle#:	16	Worklist Smp#:	1
Injection Vol:	500.0 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016506-026				
Misc. Info.:	34002332				
Operator ID:	HMT	Instrument ID:	MG		
Method:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\MG_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	08-Sep-2020 13:12:50	Calib Date:	02-Sep-2020 03:27:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1021				
First Level Reviewer: barlozhetskayaa		Date:	08-Sep-2020 13:10:12		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
$ 5 BFB	95	5.025	5.025	0.000	0	294231	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

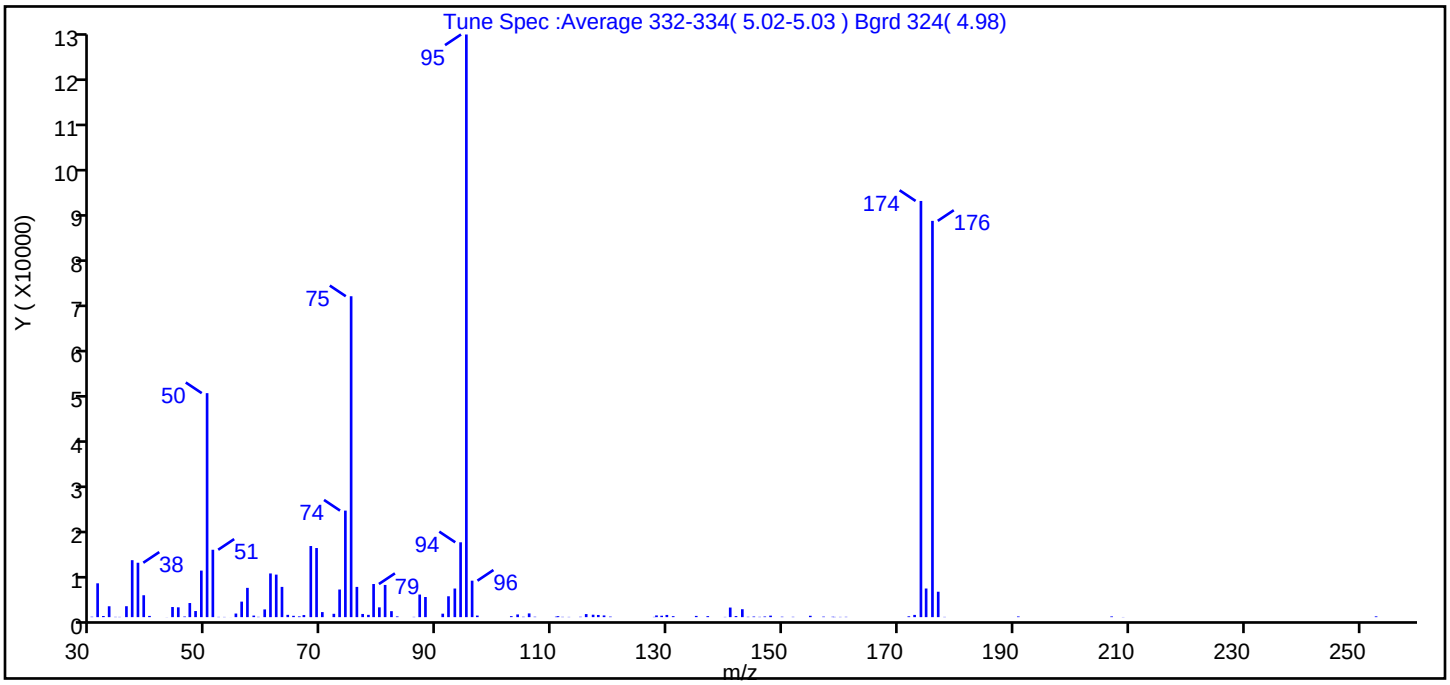
40MXBFB_00001 Amount Added: 40.00 Units: ml

MS Tune Report

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBFBI07.D
Injection Date: 07-Sep-2020 07:32:30 Instrument ID: MG
Lims ID: BFB
Client ID:
Operator ID: HMT ALS Bottle#: 16 Worklist Smp#: 1
Injection Vol: 500.0 mL Dil. Factor: 1.0000
Method: MG_TO15 Limit Group: MSA TO14A_15 Routine ICAL
Tune Method: BFB Method 8260

$ 5 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	38.4
75	30 to 60% of m/z 95	55.1
96	5 to 9% of m/z 95	6.3
173	Less than 2% of m/z 174	0.4 (0.5)
174	50 to 120% of m/z 95	71.4
175	5 to 9% of m/z 174	4.9 (6.9)
176	Greater than 95% but less than 101% of m/z 174	68.0 (95.2)
177	5 to 9% of m/z 176	4.4 (6.4)

Data File: \\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBFBI07.D\MG_TO15.rslt\spectra.d
Injection Date: 07-Sep-2020 07:32:30
Spectrum: Tune Spec :Average 332-334(5.02-5.03) Bgrd 324(4.98)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 112

m/z	Y	m/z	Y	m/z	Y	m/z	Y
30.00	90	59.00	68	92.00	4543	140.00	52
31.00	7365	60.00	1683	93.00	6227	141.00	2090
32.00	245	61.00	9512	94.00	16293	142.00	239
33.00	2369	62.00	9258	95.00	126840	143.00	1725
34.00	63	63.00	6584	96.00	7939	144.00	80
35.00	54	64.00	498	97.00	342	145.00	136
36.00	2380	65.00	289	103.00	215	146.00	70
37.00	12402	66.00	165	104.00	589	147.00	142
38.00	11843	67.00	453	105.00	84	148.00	329
39.00	4768	68.00	15480	106.00	811	150.00	95
40.00	269	69.00	15046	107.00	89	152.00	73
41.00	1	70.00	1099	111.00	105	155.00	298
43.00	19	72.00	729	111.00	211	157.00	114
44.00	2203	73.00	6016	112.00	66	159.00	86
45.00	2138	74.00	23192	113.00	53	159.00	53
46.00	136	75.00	69856	115.00	82	160.00	56
47.00	3071	76.00	6582	116.00	668	161.00	71
48.00	1328	77.00	694	117.00	531	172.00	185
49.00	10133	78.00	500	118.00	474	173.00	484
50.00	48760	79.00	7212	119.00	371	174.00	90600
51.00	14670	80.00	2134	120.00	115	175.00	6233
52.00	57	81.00	7011	128.00	55	176.00	86264
53.00	47	82.00	1302	128.00	372	177.00	5533
54.00	9	83.00	158	129.00	308	178.00	54
55.00	785	86.00	58	130.00	479	191.00	148
56.00	3377	87.00	4920	131.00	212	207.00	156
57.00	6373	88.00	4383	135.00	270	209.00	33
58.00	339	91.00	754	137.00	220	253.00	172

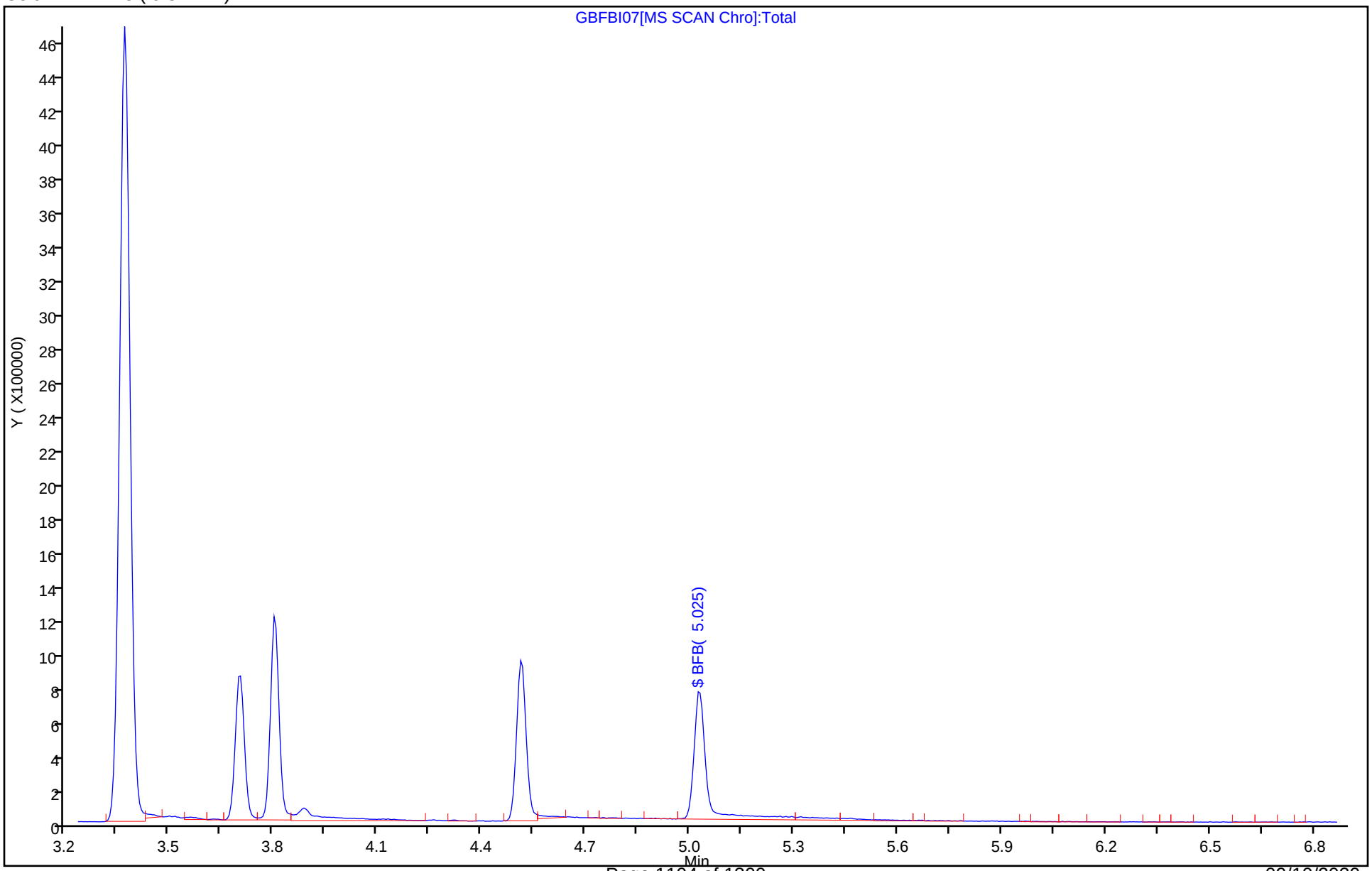
Report Date: 08-Sep-2020 13:12:50 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GBFBI07.D

Injection Date:	07-Sep-2020 07:32:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	500.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GBFBI08Z.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 08-Sep-2020 14:50:30 ALS Bottle#: 16 Worklist Smp#: 1
Injection Vol: 500.0 mL Dil. Factor: 1.0000
Sample Info: 140-0016519-001
Misc. Info.: BFB
Operator ID: HMT Instrument ID: MG

Method: \\chromfs\Knoxville\ChromData\MG\20200904-16519.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 09-Sep-2020 14:14:21 Calib Date: 02-Sep-2020 03:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1034

First Level Reviewer: barlozhetskayaa Date: 09-Sep-2020 11:48:11

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
$ 5 BFB	95	5.009	5.009	0.000	0	239811	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

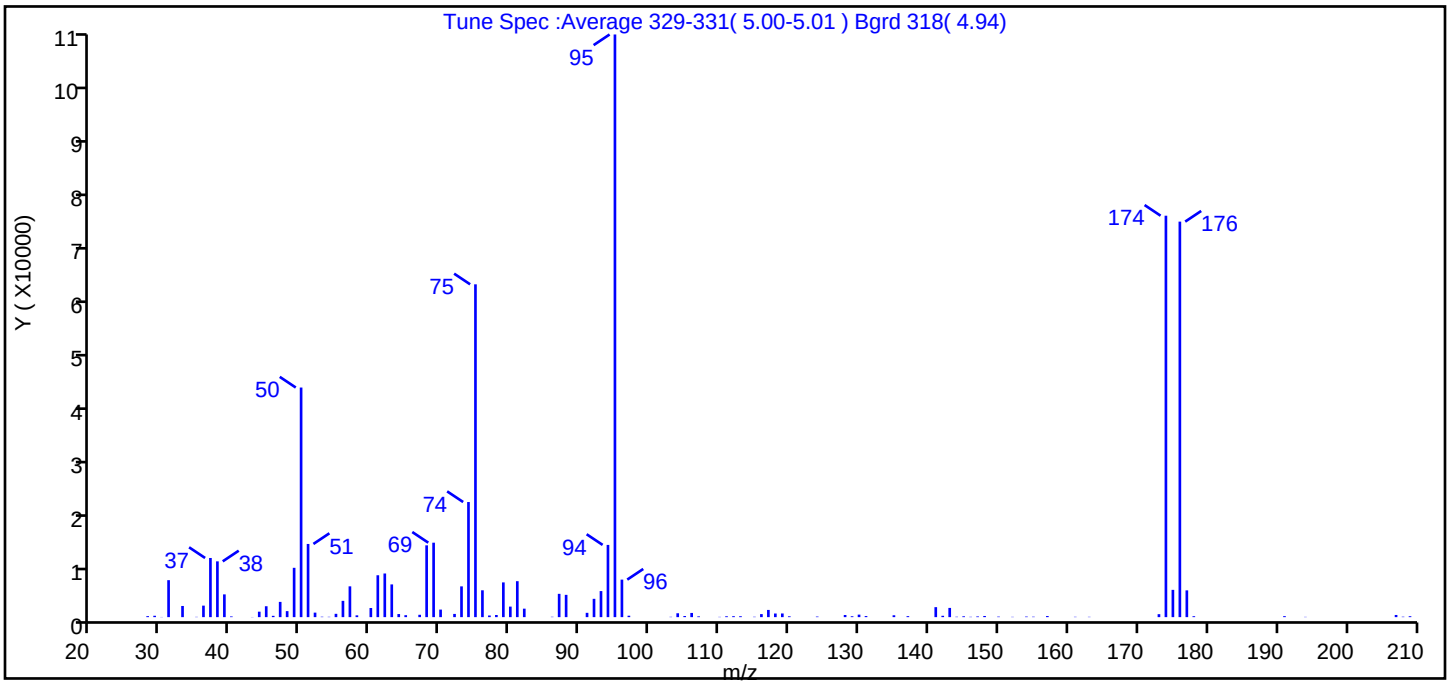
40MXBFB_00001 Amount Added: 40.00 Units: ml

MS Tune Report

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GBFBI08Z.D
Injection Date: 08-Sep-2020 14:50:30 Instrument ID: MG
Lims ID: BFB
Client ID:
Operator ID: HMT ALS Bottle#: 16 Worklist Smp#: 1
Injection Vol: 500.0 mL Dil. Factor: 1.0000
Method: MG_TO15 Limit Group: MSA TO14A_15 Routine ICAL
Tune Method: BFB Method 8260

$ 5 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	39.4
75	30 to 60% of m/z 95	57.1
96	5 to 9% of m/z 95	6.4
173	Less than 2% of m/z 174	0.5 (0.7)
174	50 to 120% of m/z 95	68.9
175	5 to 9% of m/z 174	4.7 (6.8)
176	Greater than 95% but less than 101% of m/z 174	67.9 (98.5)
177	5 to 9% of m/z 176	4.6 (6.8)

Data File: \\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GBFBI08Z.D\MG_TO15.rslt\spectra.d
Injection Date: 08-Sep-2020 14:50:30
Spectrum: Tune Spec :Average 329-331(5.00-5.01) Bgrd 318(4.94)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 106

m/z	Y	m/z	Y	m/z	Y	m/z	Y
28.00	183	60.00	1670	94.00	13197	142.00	246
29.00	252	61.00	7654	95.00	106456	143.00	1686
30.00	32	62.00	7975	96.00	6855	144.00	74
31.00	6755	63.00	5981	97.00	262	145.00	153
33.00	2040	64.00	565	103.00	59	146.00	61
35.00	52	65.00	357	104.00	710	147.00	129
36.00	2103	67.00	432	105.00	204	148.00	211
37.00	10810	68.00	13121	106.00	767	150.00	96
38.00	10193	69.00	13603	107.00	139	152.00	54
39.00	4160	70.00	1381	110.00	50	154.00	105
40.00	128	72.00	589	111.00	158	155.00	80
43.00	28	73.00	5623	112.00	173	157.00	200
44.00	998	74.00	21032	113.00	164	161.00	62
45.00	1993	75.00	60808	115.00	69	163.00	58
46.00	238	76.00	4906	116.00	556	173.00	542
47.00	2787	77.00	302	117.00	1318	174.00	73344
48.00	1100	78.00	392	118.00	663	175.00	4986
49.00	9013	79.00	6348	119.00	671	176.00	72264
50.00	41952	80.00	1925	120.00	151	177.00	4893
51.00	13372	81.00	6570	124.00	106	178.00	168
52.00	825	82.00	1549	128.00	391	191.00	180
53.00	78	86.00	66	129.00	160	194.00	50
54.00	62	87.00	4258	130.00	460	207.00	395
55.00	607	88.00	4072	131.00	201	208.00	81
56.00	2977	91.00	788	135.00	342	209.00	166
57.00	5628	92.00	3347	137.00	180		
58.00	329	93.00	4762	141.00	1825		

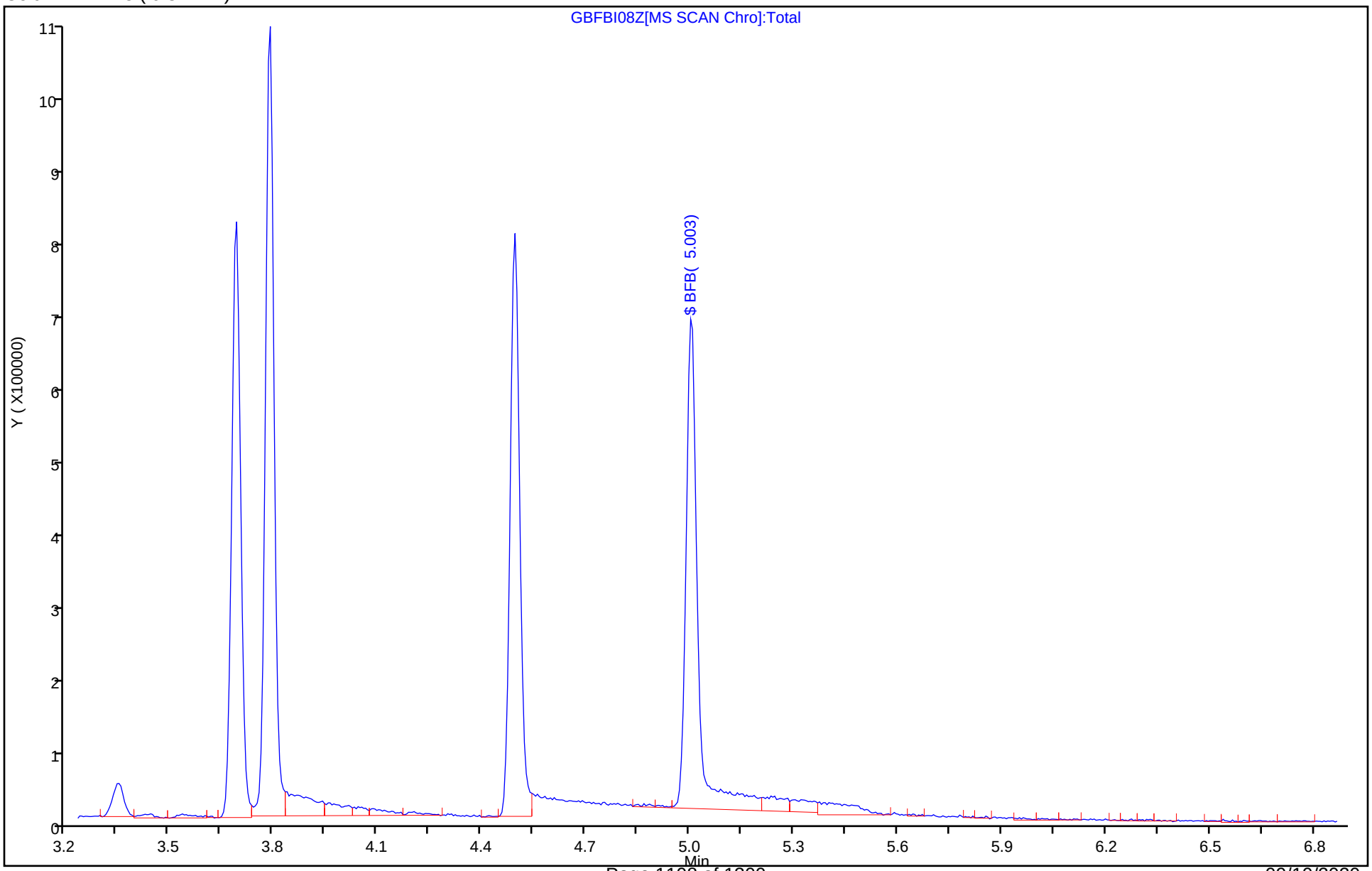
Report Date: 09-Sep-2020 14:14:22 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GBFBI08Z.D

Injection Date:	08-Sep-2020 14:50:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	500.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HBFBH29.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 29-Aug-2020 10:00:30 ALS Bottle#: 26 Worklist Smp#: 1
Injection Vol: 500.0 mL Dil. Factor: 1.0000
Sample Info:
Misc. Info.: bfb
Operator ID: HMT Instrument ID: MH

Method: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\MH_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 31-Aug-2020 12:29:54 Calib Date: 29-Aug-2020 23:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1064

First Level Reviewer: barlozhetskayaa Date: 31-Aug-2020 12:29:54

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
$ 5 BFB	95	5.363	5.363	0.000	0	77298	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

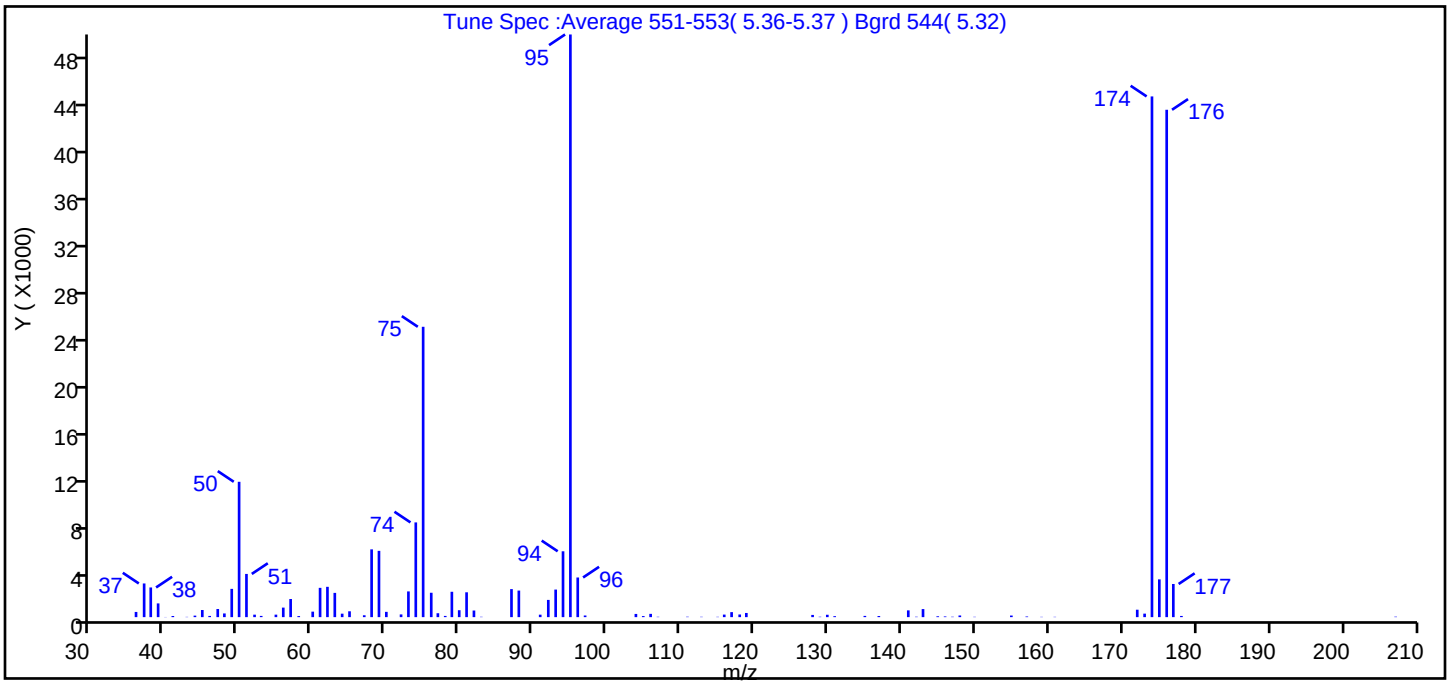
40MXBFB_00001 Amount Added: 40.00 Units: mL

MS Tune Report

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HBFBH29.D
Injection Date: 29-Aug-2020 10:00:30 Instrument ID: MH
Lims ID: BFB
Client ID:
Operator ID: HMT ALS Bottle#: 26 Worklist Smp#: 1
Injection Vol: 500.0 mL Dil. Factor: 1.0000
Method: MH_TO15 Limit Group: MSA TO14A_15 Routine ICAL
Tune Method: BFB Method 8260

$ 5 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	23.2
75	30 to 60% of m/z 95	49.8
96	5 to 9% of m/z 95	6.8
173	Less than 2% of m/z 174	0.6 (0.7)
174	50 to 120% of m/z 95	89.4
175	5 to 9% of m/z 174	6.5 (7.3)
176	Greater than 95% but less than 101% of m/z 174	87.1 (97.4)
177	5 to 9% of m/z 176	5.7 (6.5)

Data File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HBFBH29.D\MH_TO15.rslt\spectra.d
Injection Date: 29-Aug-2020 10:00:30
Spectrum: Tune Spec :Average 551-553(5.36-5.37) Bgrd 544(5.32)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 89

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	446	62.00	2600	92.00	1478	141.00	581
37.00	2888	63.00	2080	93.00	2364	142.00	36
38.00	2545	64.00	298	94.00	5647	143.00	692
39.00	1178	65.00	502	95.00	49960	145.00	74
40.00	14	67.00	161	96.00	3400	146.00	60
41.00	97	68.00	5812	97.00	141	147.00	35
43.00	23	69.00	5684	104.00	275	148.00	142
44.00	130	70.00	454	105.00	91	150.00	28
45.00	611	72.00	234	106.00	281	155.00	137
46.00	104	73.00	2206	107.00	31	157.00	56
47.00	697	74.00	8123	111.00	36	159.00	25
48.00	317	75.00	24896	113.00	30	161.00	26
49.00	2424	76.00	2091	115.00	28	172.00	637
50.00	11606	77.00	335	116.00	219	173.00	301
51.00	3705	78.00	105	117.00	430	174.00	44648
52.00	213	79.00	2175	118.00	228	175.00	3239
53.00	106	80.00	594	119.00	358	176.00	43504
55.00	214	81.00	2131	128.00	190	177.00	2843
56.00	818	82.00	568	129.00	34	178.00	103
57.00	1556	83.00	30	130.00	204	207.00	40
58.00	90	87.00	2404	131.00	83		
60.00	472	88.00	2278	135.00	107		
61.00	2512	91.00	212	137.00	95		

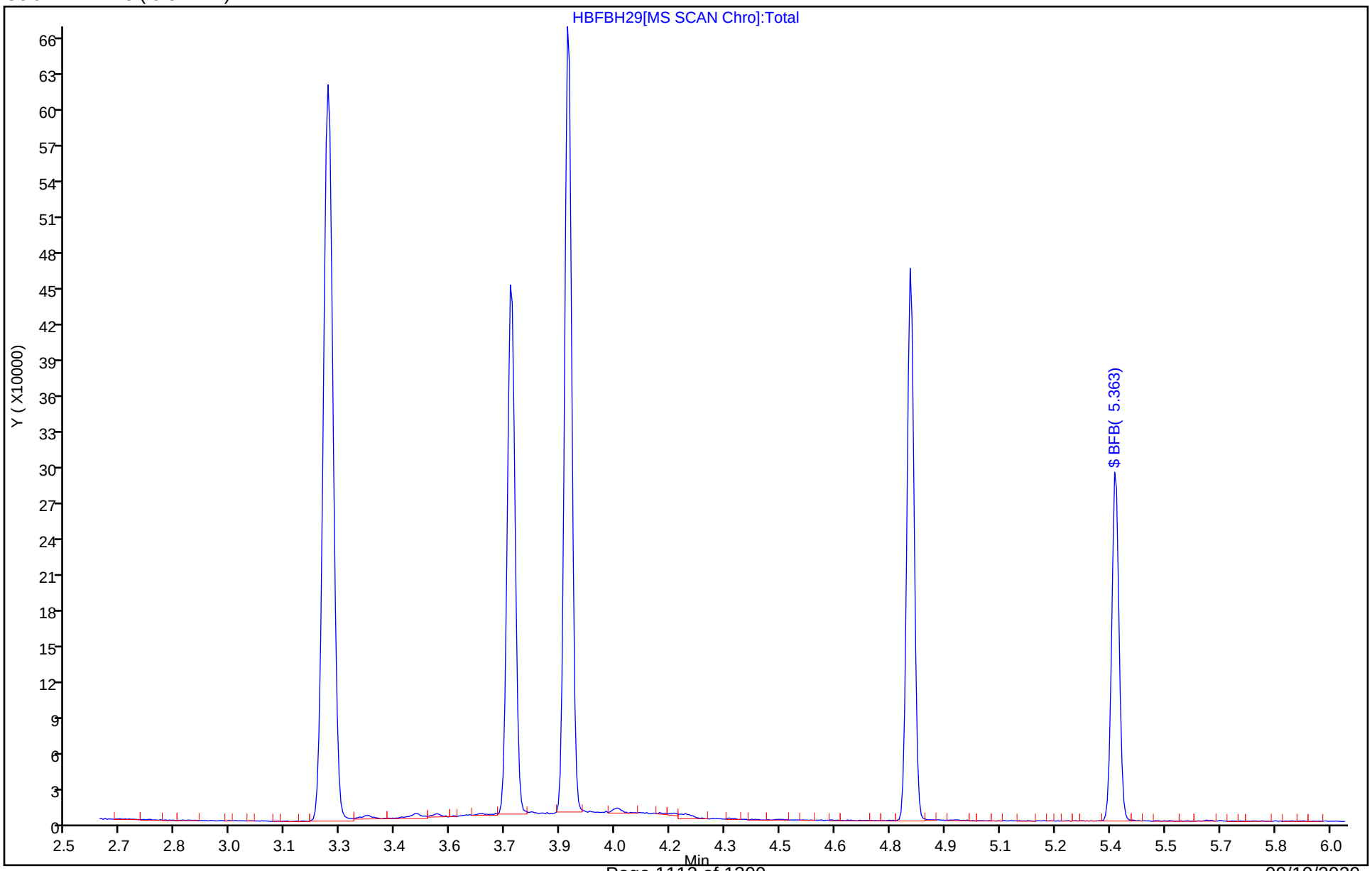
Report Date: 31-Aug-2020 12:29:54 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HBFBH29.D

Injection Date:	29-Aug-2020 10:00:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	500.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	26
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HBFBI03.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	03-Sep-2020 09:43:30	ALS Bottle#:	4	Worklist Smp#:	1
Injection Vol:	500.0 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016480-001				
Misc. Info.:	TUNE				
Operator ID:	HMT	Instrument ID:	MH		
Method:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\MH_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	04-Sep-2020 10:15:26	Calib Date:	29-Aug-2020 23:57:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1061				
First Level Reviewer: khachitpongpanits		Date:	04-Sep-2020 10:15:26		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
$ 5 BFB	95	4.931	4.931	0.000	0	66232	NR	NR	8

QC Flag Legend

Processing Flags
NR - Missing Quant Standard
8 - Failed MS Tune Ratio Test

Reagents:

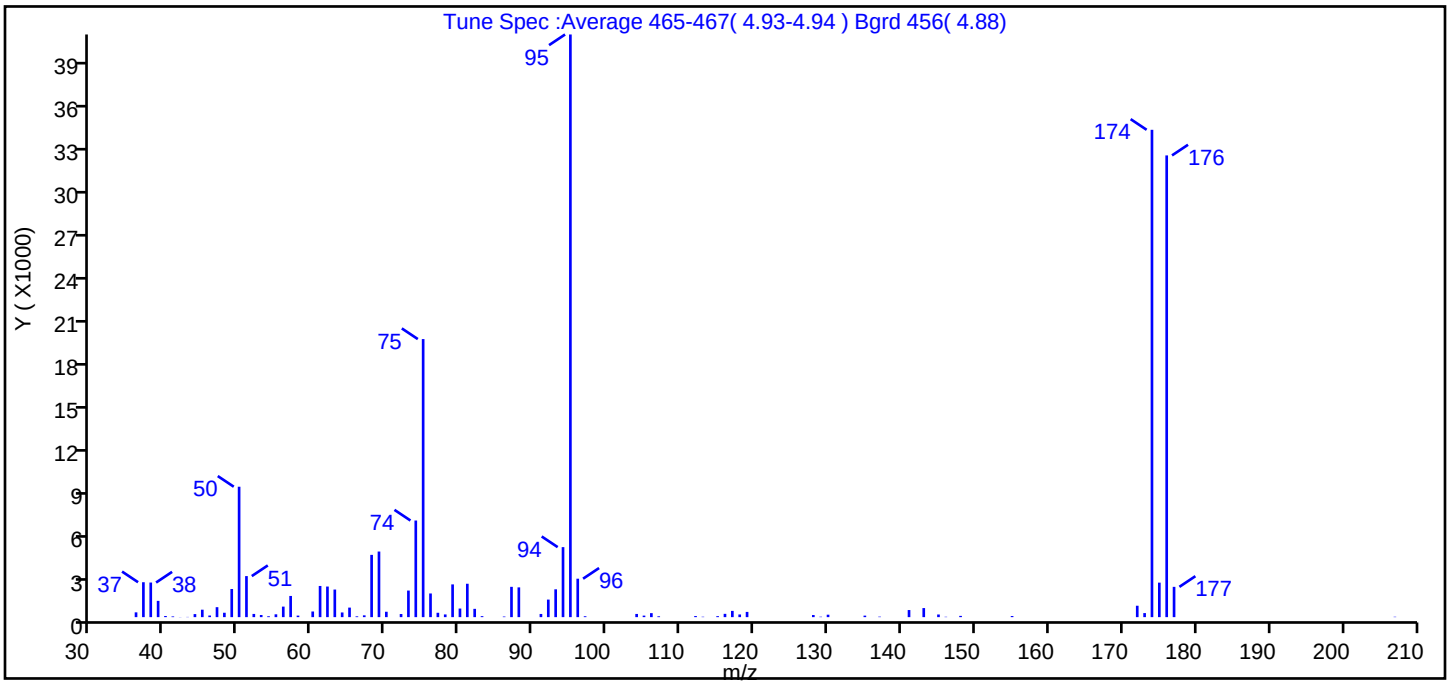
40MXBFB_00001 Amount Added: 40.00 Units: mL

MS Tune Report

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HBFBI03.D
Injection Date: 03-Sep-2020 09:43:30 Instrument ID: MH
Lims ID: BFB
Client ID:
Operator ID: HMT ALS Bottle#: 4 Worklist Smp#: 1
Injection Vol: 500.0 mL Dil. Factor: 1.0000
Method: MH_TO15 Limit Group: MSA TO14A_15 Routine ICAL
Tune Method: BFB Method 8260

$ 5 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	22.4
75	30 to 60% of m/z 95	47.7
96	5 to 9% of m/z 95	6.6
173	Less than 2% of m/z 174	0.7 (0.8)
174	50 to 120% of m/z 95	83.6
175	5 to 9% of m/z 174	5.9 (7.1)
176	Greater than 95% but less than 101% of m/z 174	79.2 (94.7)*
177	5 to 9% of m/z 176	5.2 (6.6)

Data File: \\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HBFBI03.D\MH_TO15.rslt\spectra.d
Injection Date: 03-Sep-2020 09:43:30
Spectrum: Tune Spec :Average 465-467(4.93-4.94) Bgrd 456(4.88)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 85

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	330	58.00	106	82.00	570	119.00	360
37.00	2400	60.00	389	83.00	68	128.00	145
38.00	2379	61.00	2143	86.00	41	129.00	29
39.00	1119	62.00	2103	87.00	2083	130.00	168
40.00	79	63.00	1897	88.00	2046	135.00	104
41.00	49	64.00	322	91.00	219	137.00	34
42.00	9	65.00	656	92.00	1207	141.00	488
43.00	15	66.00	55	93.00	1913	143.00	623
44.00	210	67.00	124	94.00	4812	145.00	182
45.00	512	68.00	4280	95.00	40048	146.00	25
46.00	111	69.00	4509	96.00	2642	148.00	87
47.00	685	70.00	371	97.00	61	155.00	76
48.00	302	72.00	215	104.00	220	172.00	784
49.00	1933	73.00	1827	105.00	105	173.00	279
50.00	8964	74.00	6641	106.00	275	174.00	33496
51.00	2822	75.00	19112	107.00	57	175.00	2372
52.00	221	76.00	1627	112.00	76	176.00	31736
53.00	146	77.00	300	113.00	28	177.00	2082
54.00	60	78.00	186	115.00	68	207.00	26
55.00	195	79.00	2251	116.00	227		
56.00	724	80.00	591	117.00	430		
57.00	1457	81.00	2295	118.00	184		

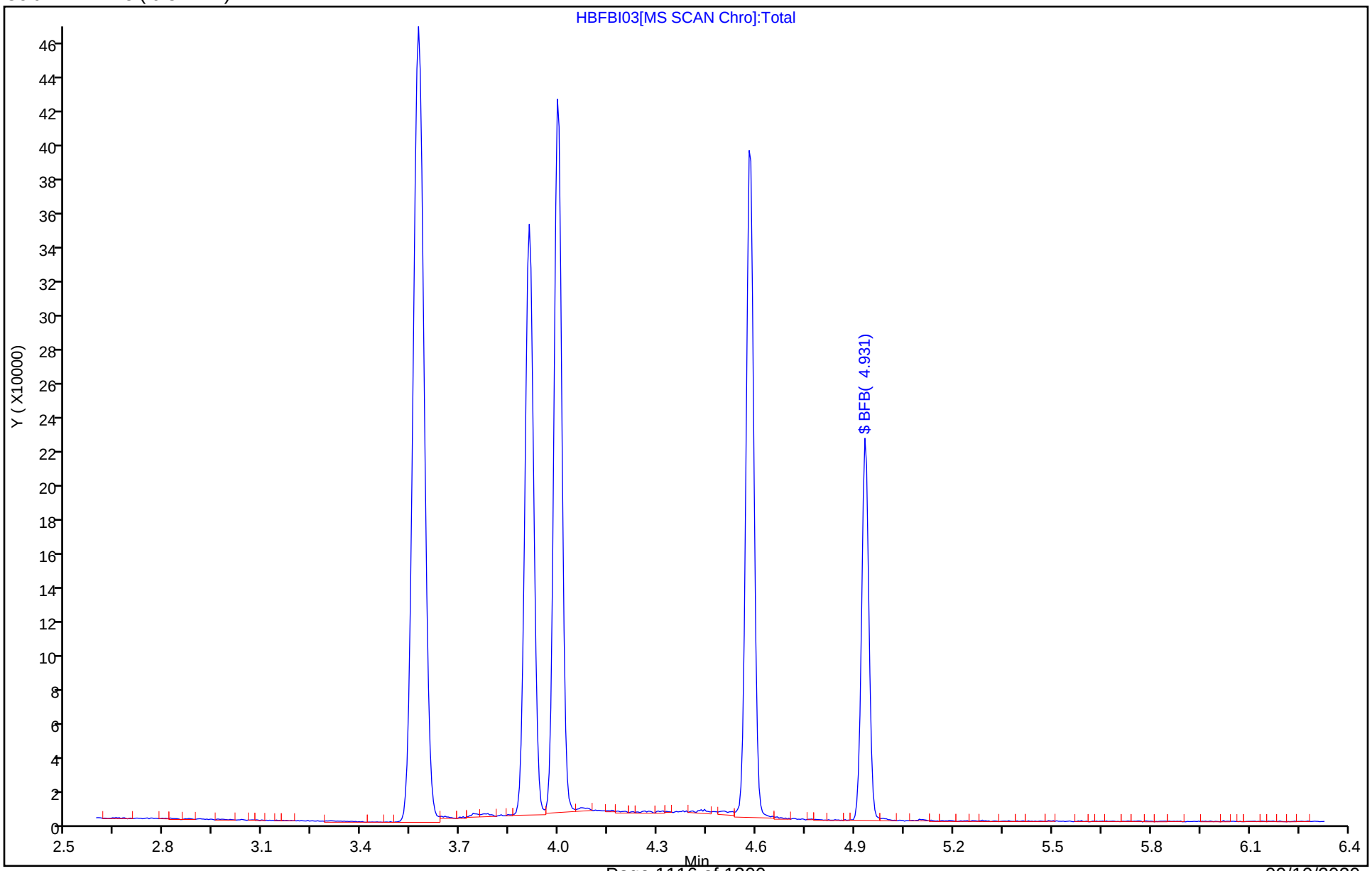
Report Date: 04-Sep-2020 10:15:26 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HBFBI03.D

Injection Date:	03-Sep-2020 09:43:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	500.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16507.b\HDNUI05X.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	05-Sep-2020 11:09:30	ALS Bottle#:	6	Worklist Smp#:	1
Injection Vol:	500.0 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016507-001				
Misc. Info.:	BFB				
Operator ID:	HMT	Instrument ID:	MH		
Method:	\\chromfs\Knoxville\ChromData\MH\20200904-16507.b\MH_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	06-Sep-2020 10:10:43	Calib Date:	29-Aug-2020 23:57:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1044				

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
$ 5 BFB	95	4.941	4.941	0.000	0	75044	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

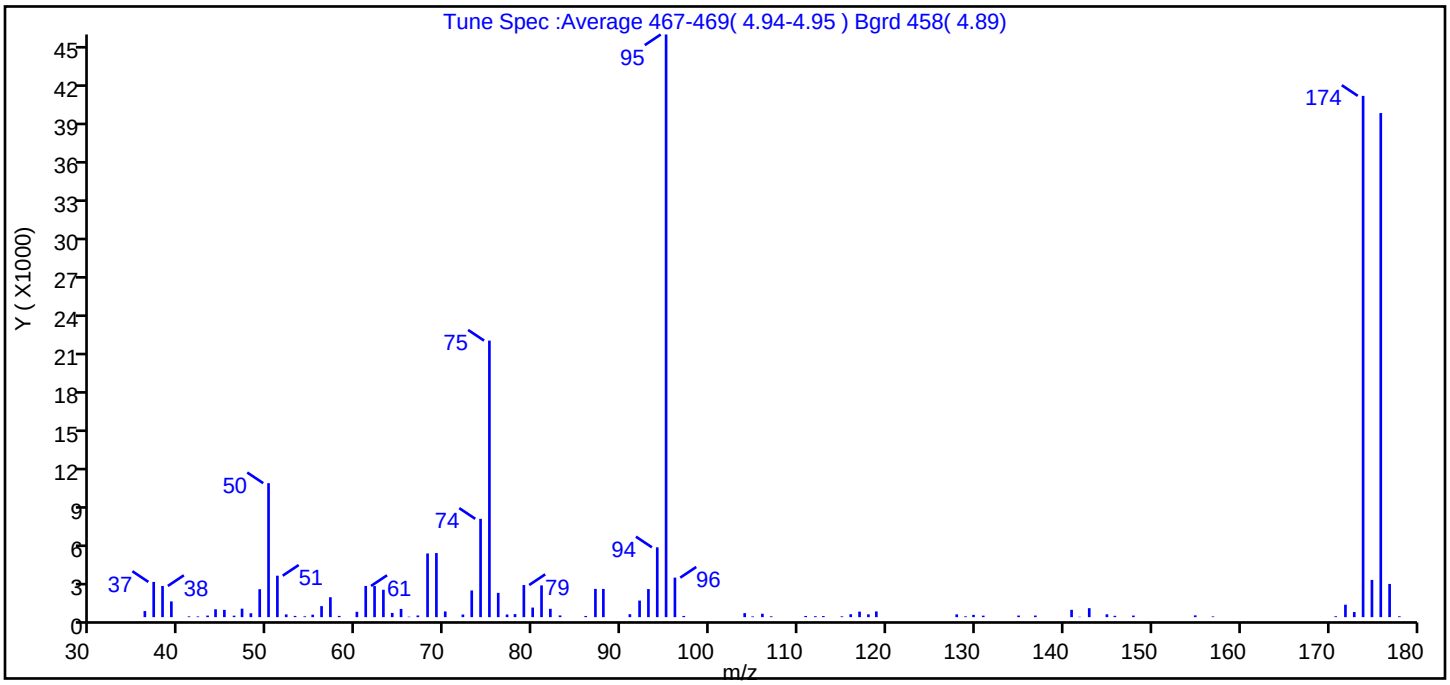
40MXBFB_00001 Amount Added: 40.00 Units: mL

MS Tune Report

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200904-16507.b\HDNUI05X.D
Injection Date: 05-Sep-2020 11:09:30 Instrument ID: MH
Lims ID: BFB
Client ID:
Operator ID: HMT ALS Bottle#: 6 Worklist Smp#: 1
Injection Vol: 500.0 mL Dil. Factor: 1.0000
Method: MH_TO15 Limit Group: MSA TO14A_15 Routine ICAL
Tune Method: BFB Method 8260

$ 5 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	23.0
75	30 to 60% of m/z 95	47.5
96	5 to 9% of m/z 95	6.8
173	Less than 2% of m/z 174	0.9 (1.0)
174	50 to 120% of m/z 95	89.5
175	5 to 9% of m/z 174	6.4 (7.1)
176	Greater than 95% but less than 101% of m/z 174	86.5 (96.7)
177	5 to 9% of m/z 176	5.7 (6.6)

Data File: \\chromfs\Knoxville\ChromData\MH\20200904-16507.b\HDNUI05X.D\MH_TO15.rslt\spectra.d
Injection Date: 05-Sep-2020 11:09:30
Spectrum: Tune Spec :Average 467-469(4.94-4.95) Bgrd 458(4.89)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 89

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	480	61.00	2455	87.00	2224	130.00	179
37.00	2773	62.00	2450	88.00	2221	131.00	118
38.00	2454	63.00	2156	91.00	232	135.00	125
39.00	1240	64.00	332	92.00	1305	137.00	125
41.00	60	65.00	647	93.00	2211	141.00	576
42.00	55	66.00	36	94.00	5496	142.00	30
43.00	123	67.00	131	95.00	45864	143.00	705
44.00	620	68.00	5012	96.00	3109	145.00	224
45.00	572	69.00	5046	97.00	95	146.00	104
46.00	117	70.00	449	104.00	318	148.00	125
47.00	666	72.00	208	105.00	56	155.00	140
48.00	307	73.00	2100	106.00	268	157.00	56
49.00	2200	74.00	7740	107.00	63	171.00	70
50.00	10545	75.00	21768	111.00	93	172.00	980
51.00	3263	76.00	1911	112.00	74	173.00	402
52.00	215	77.00	207	113.00	84	174.00	41032
53.00	98	78.00	239	115.00	63	175.00	2930
54.00	66	79.00	2528	116.00	228	176.00	39680
55.00	193	80.00	754	117.00	435	177.00	2614
56.00	868	81.00	2497	118.00	222	178.00	66
57.00	1568	82.00	657	119.00	451		
58.00	97	83.00	135	128.00	217		
60.00	420	86.00	93	129.00	65		

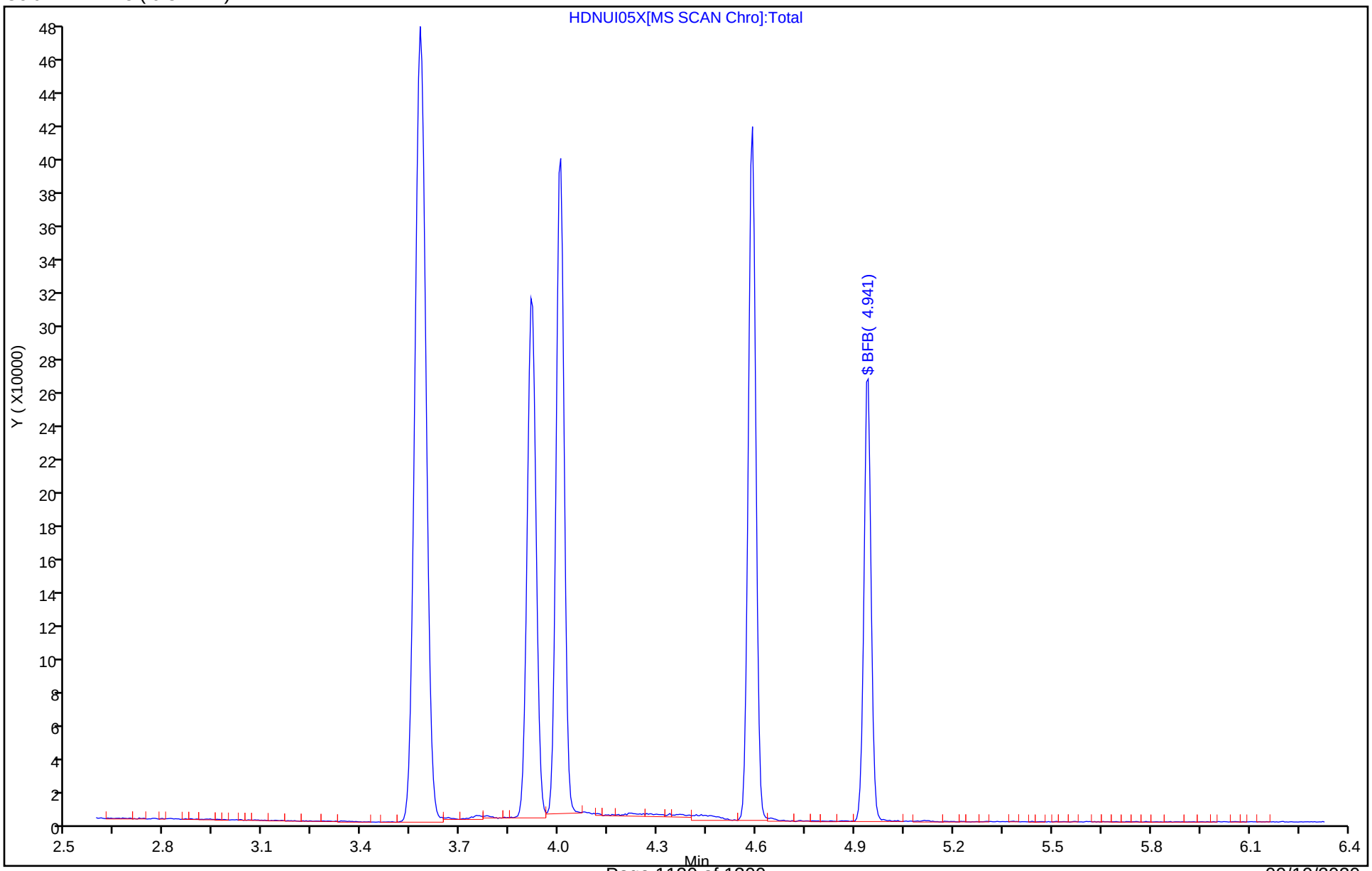
Report Date: 06-Sep-2020 10:10:43 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200904-16507.b\HDNUI05X.D

Injection Date:	05-Sep-2020 11:09:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	500.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HBFBH06a.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	06-Sep-2020 15:49:30	ALS Bottle#:	16	Worklist Smp#:	7
Injection Vol:	500.0 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016507-003				
Misc. Info.:	DNU				
Operator ID:	HMT	Instrument ID:	MH		
Method:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\MH_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	07-Sep-2020 07:43:44	Calib Date:	29-Aug-2020 23:57:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1015				

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
$ 5 BFB	95	4.951	4.951	0.000	0	28114	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

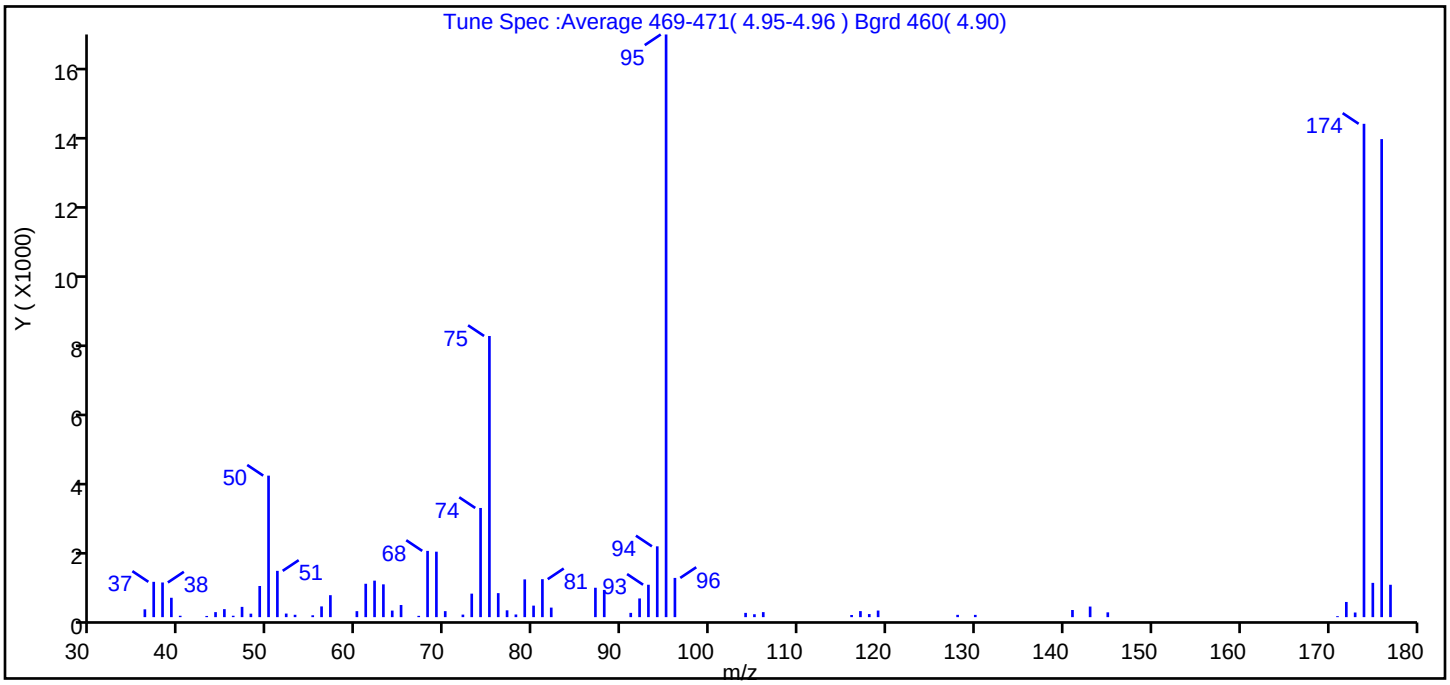
40MXBFB_00001 Amount Added: 40.00 Units: mL

MS Tune Report

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HBFBH06a.D
Injection Date: 06-Sep-2020 15:49:30 Instrument ID: MH
Lims ID: BFB
Client ID:
Operator ID: HMT ALS Bottle#: 16 Worklist Smp#: 7
Injection Vol: 500.0 mL Dil. Factor: 1.0000
Method: MH_TO15 Limit Group: MSA TO14A_15 Routine ICAL
Tune Method: BFB Method 8260

$ 5 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	24.3
75	30 to 60% of m/z 95	48.3
96	5 to 9% of m/z 95	6.7
173	Less than 2% of m/z 174	0.8 (0.9)
174	50 to 120% of m/z 95	84.7
175	5 to 9% of m/z 174	5.9 (6.9)
176	Greater than 95% but less than 101% of m/z 174	82.0 (96.9)
177	5 to 9% of m/z 176	5.6 (6.8)

Data File: \\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HBFBH06a.D\MH_TO15.rslt\spectra.d
Injection Date: 06-Sep-2020 15:49:30
Spectrum: Tune Spec :Average 469-471(4.95-4.96) Bgrd 460(4.90)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 67

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	218	56.00	299	77.00	190	116.00	60
37.00	984	57.00	612	78.00	74	117.00	168
38.00	966	60.00	167	79.00	1052	118.00	86
39.00	540	61.00	930	80.00	321	119.00	184
40.00	39	62.00	1017	81.00	1058	128.00	64
43.00	33	63.00	914	82.00	266	130.00	63
44.00	140	64.00	183	87.00	819	141.00	199
45.00	223	65.00	338	88.00	759	143.00	295
46.00	39	67.00	36	91.00	119	145.00	134
47.00	286	68.00	1846	92.00	521	171.00	27
48.00	97	69.00	1824	93.00	903	172.00	423
49.00	868	70.00	167	94.00	1973	173.00	129
50.00	3943	72.00	71	95.00	16235	174.00	13746
51.00	1290	73.00	655	96.00	1093	175.00	955
52.00	100	74.00	3042	104.00	119	176.00	13320
53.00	66	75.00	7834	105.00	81	177.00	902
55.00	52	76.00	669	106.00	140		

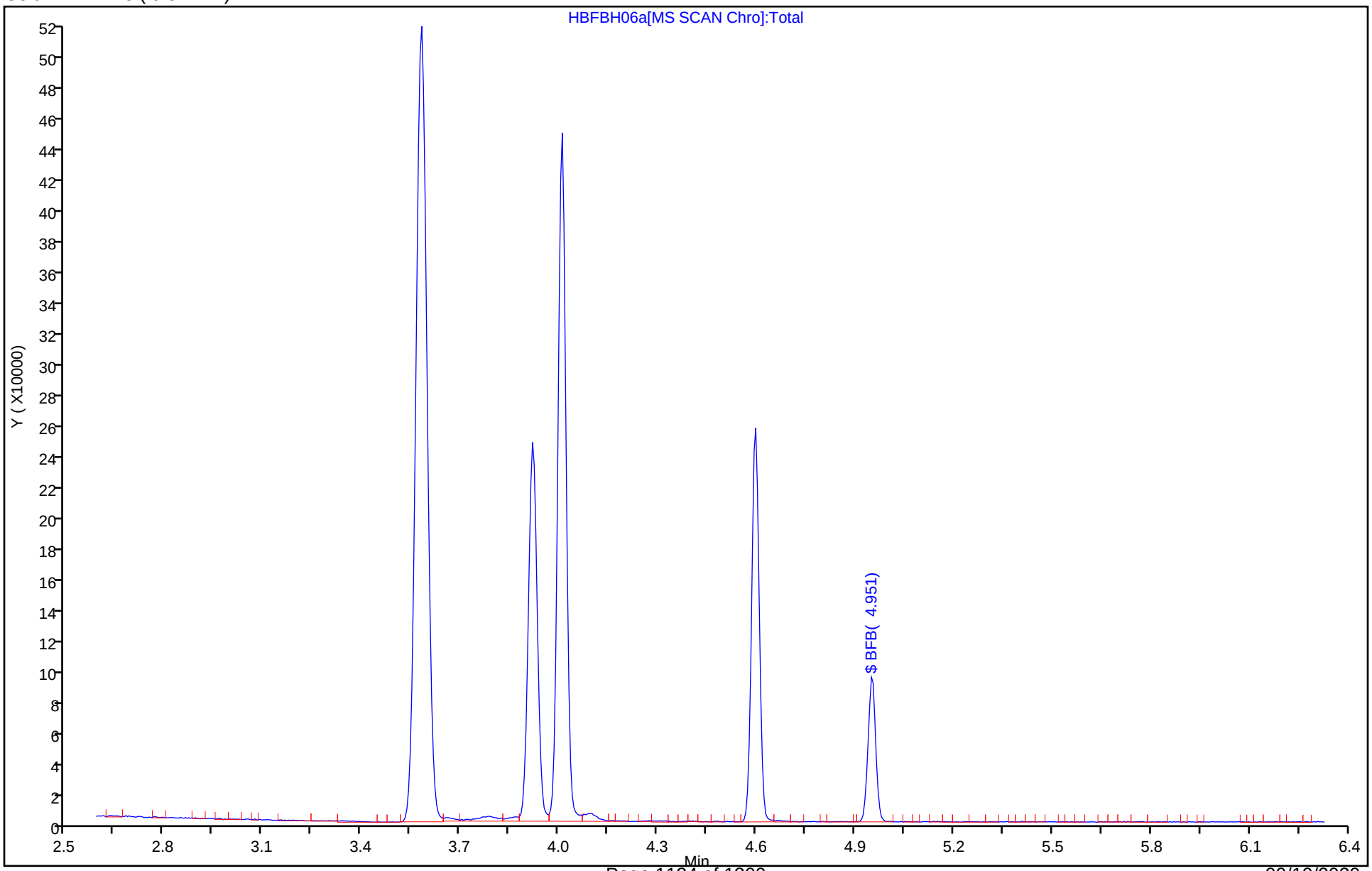
Report Date: 07-Sep-2020 07:43:44 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HBFBH06a.D

Injection Date:	06-Sep-2020 15:49:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	BFB			Worklist Smp#:	7
Client ID:					
Injection Vol:	500.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 140-42399/4

Matrix: Air Lab File ID: H500BI03.D

Analysis Method: TO 15 LL Date Collected:

Sample wt/vol: 500(mL) Date Analyzed: 09/03/2020 12:59

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42399 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	ND		0.080	0.0080
56-23-5	Carbon tetrachloride	153.81	ND		0.080	0.0070
75-45-6	Chlorodifluoromethane	86.47	ND		0.080	0.022
67-66-3	Chloroform	119.38	ND		0.080	0.0070
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.080	0.010
75-71-8	Dichlorodifluoromethane	120.91	ND		0.080	0.014
75-34-3	1,1-Dichloroethane	98.96	ND		0.080	0.0070
107-06-2	1,2-Dichloroethane	98.96	ND		0.080	0.010
75-35-4	1,1-Dichloroethene	96.94	ND		0.080	0.0080
100-41-4	Ethylbenzene	106.17	ND		0.080	0.013
75-09-2	Methylene Chloride	84.93	ND		0.40	0.39
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.40	0.052
91-20-3	Naphthalene	128.17	ND		0.040	0.040
127-18-4	Tetrachloroethene	165.83	ND		0.080	0.0070
108-88-3	Toluene	92.14	ND		0.12	0.078
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.080	0.0070
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.080	0.064
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.080	0.037
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.080	0.0070
79-01-6	Trichloroethene	131.39	ND		0.040	0.0060
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.080	0.036
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.080	0.020
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.080	0.022
75-01-4	Vinyl chloride	62.50	ND		0.040	0.026
1330-20-7	Xylenes, Total	106.17	ND		0.16	0.024

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	78		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 140-42399/4

Matrix: Air Lab File ID: H500BI03.D

Analysis Method: TO 15 LL Date Collected:

Sample wt/vol: 500(mL) Date Analyzed: 09/03/2020 12:59

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42399 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	ND		0.26	0.026
56-23-5	Carbon tetrachloride	153.81	ND		0.50	0.044
75-45-6	Chlorodifluoromethane	86.47	ND		0.28	0.078
67-66-3	Chloroform	119.38	ND		0.39	0.034
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.32	0.040
75-71-8	Dichlorodifluoromethane	120.91	ND		0.40	0.069
75-34-3	1,1-Dichloroethane	98.96	ND		0.32	0.028
107-06-2	1,2-Dichloroethane	98.96	ND		0.32	0.040
75-35-4	1,1-Dichloroethene	96.94	ND		0.32	0.032
100-41-4	Ethylbenzene	106.17	ND		0.35	0.056
75-09-2	Methylene Chloride	84.93	ND		1.4	1.4
1634-04-4	Methyl tert-butyl ether	88.15	ND		1.4	0.19
91-20-3	Naphthalene	128.17	ND		0.21	0.21
127-18-4	Tetrachloroethene	165.83	ND		0.54	0.047
108-88-3	Toluene	92.14	ND		0.45	0.29
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.32	0.028
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.59	0.47
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.44	0.20
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.44	0.038
79-01-6	Trichloroethene	131.39	ND		0.21	0.032
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.39	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.39	0.098
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.39	0.11
75-01-4	Vinyl chloride	62.50	ND		0.10	0.066
1330-20-7	Xylenes, Total	106.17	ND		0.69	0.10

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	78		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MH\20200902-16480.b\H500BI03.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 03-Sep-2020 12:59:30 ALS Bottle#: 16 Worklist Smp#: 4
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016480-004
Misc. Info.: 500ML BLK
Operator ID: HMT Instrument ID: MH

Method: \\chromfs\Knoxville\ChromData\MH\20200902-16480.b\MH_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 04-Sep-2020 10:17:52 Calib Date: 29-Aug-2020 23:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1061

First Level Reviewer: khachitpongpanits Date: 04-Sep-2020 10:17:52

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.431	9.436	-0.005	98	109088	4.80	4.80	
* 2 1,4-Difluorobenzene	114	11.591	11.591	0.000	95	445803	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	16.258	16.258	0.000	88	307157	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.876	17.876	0.000	90	129110	4.64	3.62	

Reagents:

40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

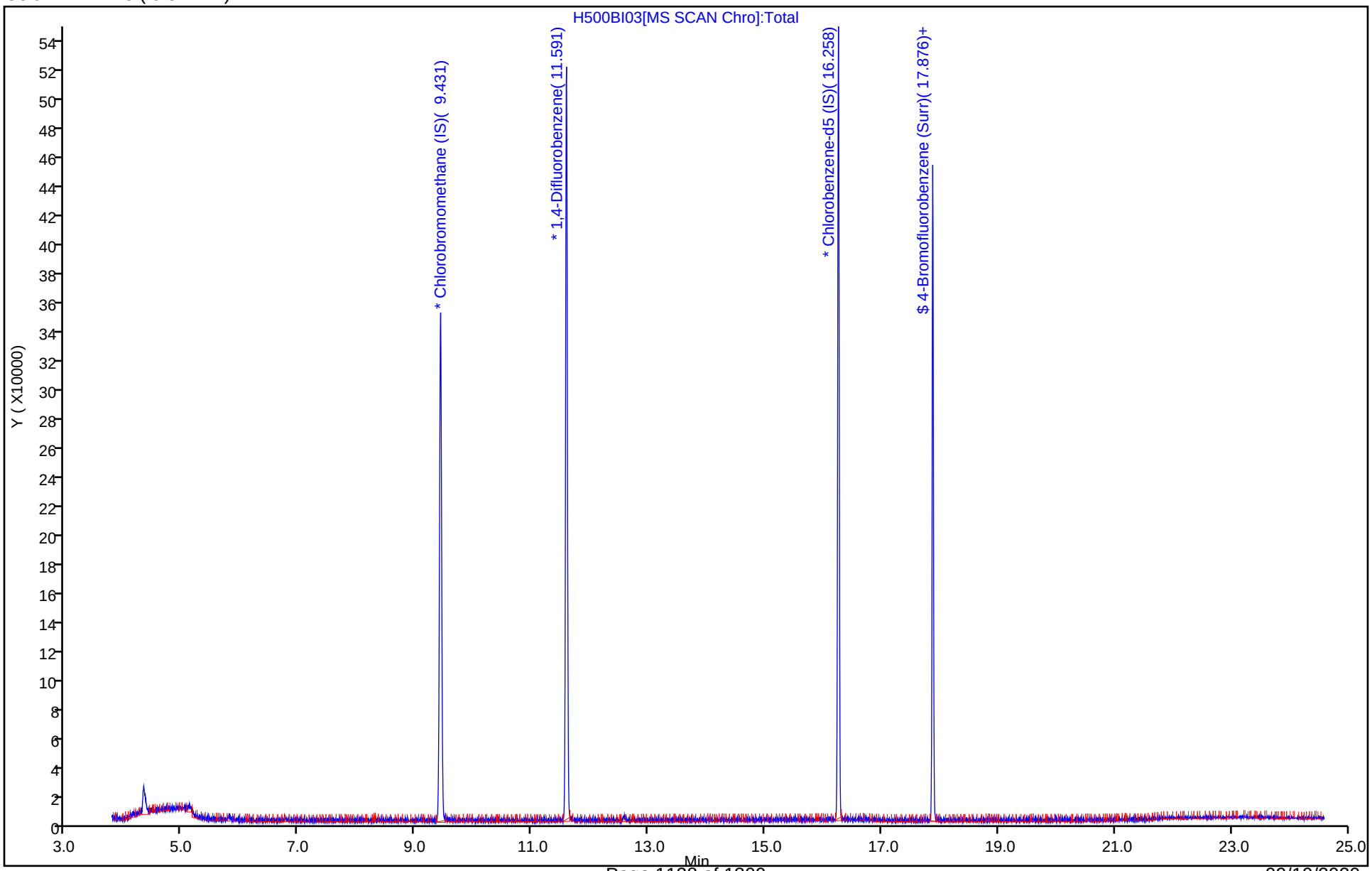
Report Date: 04-Sep-2020 10:17:52 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200902-16480.b\H500BI03.D

Injection Date:	03-Sep-2020 12:59:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	MB			Worklist Smp#:	4
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\H500BI03.D				
Lims ID:	MB				
Client ID:					
Sample Type:	MB				
Inject. Date:	03-Sep-2020 12:59:30	ALS Bottle#:	16	Worklist Smp#:	4
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016480-004				
Misc. Info.:	500ML BLK				
Operator ID:	HMT	Instrument ID:	MH		
Method:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\MH_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	04-Sep-2020 10:17:52	Calib Date:	29-Aug-2020 23:57:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1061				

First Level Reviewer: khachitpongpanits Date: 04-Sep-2020 10:17:52

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	3.62	77.97

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 140-42409/8

Matrix: Air Lab File ID: I03L20237X.D

Analysis Method: TO 15 LL Date Collected:

Sample wt/vol: 500(mL) Date Analyzed: 09/03/2020 11:52

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42409 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	ND		0.080	0.0080
56-23-5	Carbon tetrachloride	153.81	ND		0.080	0.0070
75-45-6	Chlorodifluoromethane	86.47	ND		0.080	0.022
67-66-3	Chloroform	119.38	ND		0.080	0.0070
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.080	0.010
75-71-8	Dichlorodifluoromethane	120.91	ND		0.080	0.014
75-34-3	1,1-Dichloroethane	98.96	ND		0.080	0.0070
107-06-2	1,2-Dichloroethane	98.96	ND		0.080	0.010
75-35-4	1,1-Dichloroethene	96.94	ND		0.080	0.0080
100-41-4	Ethylbenzene	106.17	ND		0.080	0.013
75-09-2	Methylene Chloride	84.93	ND		0.40	0.39
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.40	0.052
91-20-3	Naphthalene	128.17	ND		0.040	0.040
127-18-4	Tetrachloroethene	165.83	ND		0.080	0.0070
108-88-3	Toluene	92.14	ND		0.12	0.078
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.080	0.0070
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.080	0.064
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.080	0.037
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.080	0.0070
79-01-6	Trichloroethene	131.39	ND		0.040	0.0060
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.080	0.036
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.080	0.020
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.080	0.022
75-01-4	Vinyl chloride	62.50	ND		0.040	0.026
1330-20-7	Xylenes, Total	106.17	ND		0.16	0.024

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	99		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 140-42409/8

Matrix: Air Lab File ID: I03L20237X.D

Analysis Method: TO 15 LL Date Collected:

Sample wt/vol: 500(mL) Date Analyzed: 09/03/2020 11:52

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42409 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	ND		0.26	0.026
56-23-5	Carbon tetrachloride	153.81	ND		0.50	0.044
75-45-6	Chlorodifluoromethane	86.47	ND		0.28	0.078
67-66-3	Chloroform	119.38	ND		0.39	0.034
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.32	0.040
75-71-8	Dichlorodifluoromethane	120.91	ND		0.40	0.069
75-34-3	1,1-Dichloroethane	98.96	ND		0.32	0.028
107-06-2	1,2-Dichloroethane	98.96	ND		0.32	0.040
75-35-4	1,1-Dichloroethene	96.94	ND		0.32	0.032
100-41-4	Ethylbenzene	106.17	ND		0.35	0.056
75-09-2	Methylene Chloride	84.93	ND		1.4	1.4
1634-04-4	Methyl tert-butyl ether	88.15	ND		1.4	0.19
91-20-3	Naphthalene	128.17	ND		0.21	0.21
127-18-4	Tetrachloroethene	165.83	ND		0.54	0.047
108-88-3	Toluene	92.14	ND		0.45	0.29
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.32	0.028
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.59	0.47
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.44	0.20
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.44	0.038
79-01-6	Trichloroethene	131.39	ND		0.21	0.032
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.39	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.39	0.098
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.39	0.11
75-01-4	Vinyl chloride	62.50	ND		0.10	0.066
1330-20-7	Xylenes, Total	106.17	ND		0.69	0.10

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	99		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200902-16486.b\I03L20237X.D
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 03-Sep-2020 11:52:30 ALS Bottle#: 5 Worklist Smp#: 8
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016486-007
Misc. Info.: 9005
Operator ID: HMT Instrument ID: MG

Method: \\chromfs\Knoxville\ChromData\MG\20200902-16486.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 03-Sep-2020 12:34:18 Calib Date: 02-Sep-2020 03:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1067

First Level Reviewer: tajh Date: 03-Sep-2020 12:32:54

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.811	8.811	0.000	86	126458	4.80	4.80	
* 2 1,4-Difluorobenzene	114	10.995	10.995	0.000	98	674635	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.730	15.730	0.000	94	648613	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.374	17.374	0.000	81	466113	4.64	4.58	
9 Chloromethane	52	3.942	3.947	-0.005	99	2126		0.0937	

Reagents:

40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

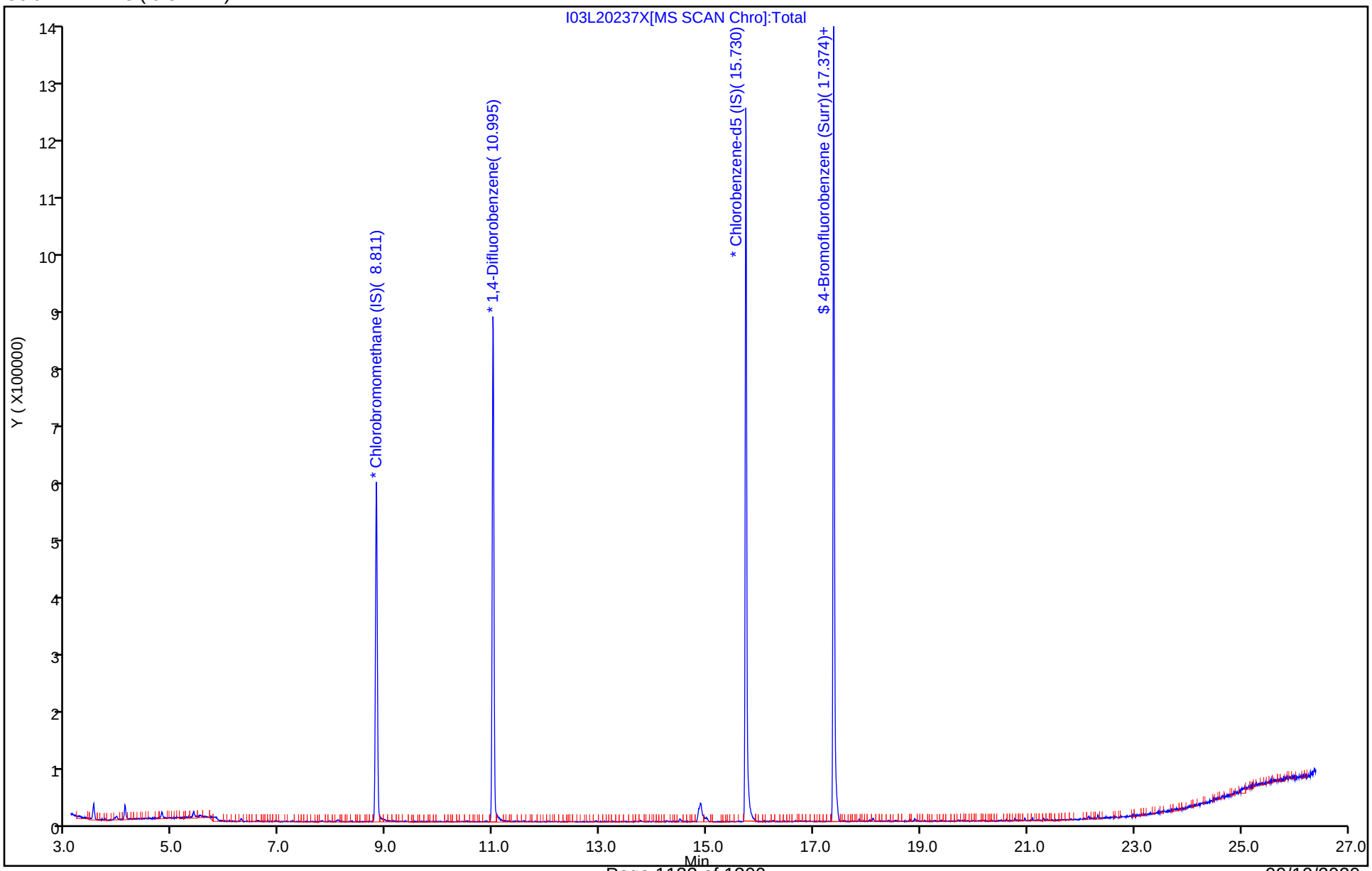
Report Date: 03-Sep-2020 12:34:33 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200902-16486.b\I03L20237X.D

Injection Date:	03-Sep-2020 11:52:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	mb			Worklist Smp#:	8
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MG\20200902-16486.b\I03L20237X.D				
Lims ID:	mb				
Client ID:					
Sample Type:	MB				
Inject. Date:	03-Sep-2020 11:52:30	ALS Bottle#:	5	Worklist Smp#:	8
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016486-007				
Misc. Info.:	9005				
Operator ID:	HMT	Instrument ID:	MG		
Method:	\\chromfs\Knoxville\ChromData\MG\20200902-16486.b\MG_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	03-Sep-2020 12:34:18	Calib Date:	02-Sep-2020 03:27:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1067				
First Level Reviewer: tajh		Date:	03-Sep-2020 12:32:54		

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	4.58	98.70

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 140-42482/5

Matrix: Air Lab File ID: H500BI05RN.D

Analysis Method: TO 15 LL Date Collected:

Sample wt/vol: 500(mL) Date Analyzed: 09/05/2020 15:25

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42482 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	ND		0.080	0.0080
56-23-5	Carbon tetrachloride	153.81	ND		0.080	0.0070
75-45-6	Chlorodifluoromethane	86.47	ND		0.080	0.022
67-66-3	Chloroform	119.38	ND		0.080	0.0070
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.080	0.010
75-71-8	Dichlorodifluoromethane	120.91	ND		0.080	0.014
75-34-3	1,1-Dichloroethane	98.96	ND		0.080	0.0070
107-06-2	1,2-Dichloroethane	98.96	ND		0.080	0.010
75-35-4	1,1-Dichloroethene	96.94	ND		0.080	0.0080
100-41-4	Ethylbenzene	106.17	ND		0.080	0.013
75-09-2	Methylene Chloride	84.93	ND		0.40	0.39
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.40	0.052
91-20-3	Naphthalene	128.17	ND		0.040	0.040
127-18-4	Tetrachloroethene	165.83	ND		0.080	0.0070
108-88-3	Toluene	92.14	ND		0.12	0.078
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.080	0.0070
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.080	0.064
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.080	0.037
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.080	0.0070
79-01-6	Trichloroethene	131.39	ND		0.040	0.0060
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.080	0.036
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.080	0.020
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.080	0.022
75-01-4	Vinyl chloride	62.50	ND		0.040	0.026
1330-20-7	Xylenes, Total	106.17	ND		0.16	0.024

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	90		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 140-42482/5

Matrix: Air Lab File ID: H500BI05RN.D

Analysis Method: TO 15 LL Date Collected:

Sample wt/vol: 500(mL) Date Analyzed: 09/05/2020 15:25

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42482 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	ND		0.26	0.026
56-23-5	Carbon tetrachloride	153.81	ND		0.50	0.044
75-45-6	Chlorodifluoromethane	86.47	ND		0.28	0.078
67-66-3	Chloroform	119.38	ND		0.39	0.034
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.32	0.040
75-71-8	Dichlorodifluoromethane	120.91	ND		0.40	0.069
75-34-3	1,1-Dichloroethane	98.96	ND		0.32	0.028
107-06-2	1,2-Dichloroethane	98.96	ND		0.32	0.040
75-35-4	1,1-Dichloroethene	96.94	ND		0.32	0.032
100-41-4	Ethylbenzene	106.17	ND		0.35	0.056
75-09-2	Methylene Chloride	84.93	ND		1.4	1.4
1634-04-4	Methyl tert-butyl ether	88.15	ND		1.4	0.19
91-20-3	Naphthalene	128.17	ND		0.21	0.21
127-18-4	Tetrachloroethene	165.83	ND		0.54	0.047
108-88-3	Toluene	92.14	ND		0.45	0.29
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.32	0.028
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.59	0.47
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.44	0.20
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.44	0.038
79-01-6	Trichloroethene	131.39	ND		0.21	0.032
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.39	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.39	0.098
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.39	0.11
75-01-4	Vinyl chloride	62.50	ND		0.10	0.066
1330-20-7	Xylenes, Total	106.17	ND		0.69	0.10

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	90		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16507.b\H500BI05RN.D				
Lims ID:	mb				
Client ID:					
Sample Type:	MB				
Inject. Date:	05-Sep-2020 15:25:30	ALS Bottle#:	16	Worklist Smp#:	5
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016507-005				
Misc. Info.:	P118 80ML				
Operator ID:	HMT	Instrument ID:	MH		
Method:	\\chromfs\Knoxville\ChromData\MH\20200904-16507.b\MH_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	06-Sep-2020 10:10:44	Calib Date:	29-Aug-2020 23:57:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1044				
First Level Reviewer: tajh		Date:	06-Sep-2020 10:09:07		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.431	9.436	-0.005	97	106353	4.80	4.80	
* 2 1,4-Difluorobenzene	114	11.591	11.591	0.000	95	381351	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	16.258	16.258	0.000	88	254972	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.876	17.876	0.000	91	123425	4.64	4.17	

Reagents:

40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

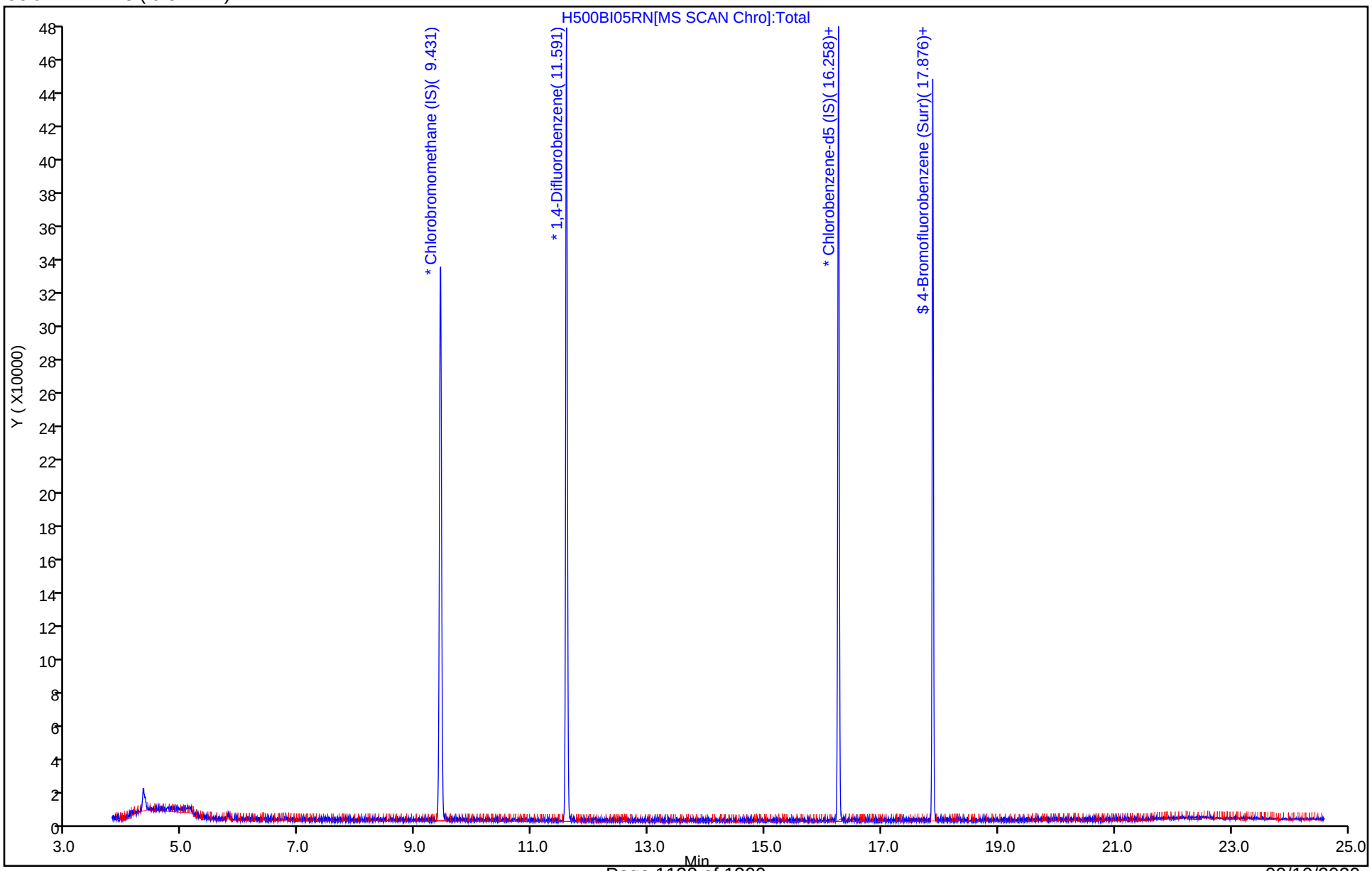
Report Date: 06-Sep-2020 10:10:49 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200904-16507.b\H500BI05RN.D

Injection Date:	05-Sep-2020 15:25:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	mb			Worklist Smp#:	5
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16507.b\H500BI05RN.D				
Lims ID:	mb				
Client ID:					
Sample Type:	MB				
Inject. Date:	05-Sep-2020 15:25:30	ALS Bottle#:	16	Worklist Smp#:	5
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016507-005				
Misc. Info.:	P118 80ML				
Operator ID:	HMT	Instrument ID:	MH		
Method:	\\chromfs\Knoxville\ChromData\MH\20200904-16507.b\MH_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	06-Sep-2020 10:10:44	Calib Date:	29-Aug-2020 23:57:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1044				
First Level Reviewer: tajh		Date:	06-Sep-2020 10:09:07		

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	4.17	89.79

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 140-42498/4

Matrix: Air Lab File ID: HB500I06.D

Analysis Method: TO 15 LL Date Collected:

Sample wt/vol: 500(mL) Date Analyzed: 09/06/2020 18:36

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42498 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	ND		0.080	0.0080
56-23-5	Carbon tetrachloride	153.81	ND		0.080	0.0070
75-45-6	Chlorodifluoromethane	86.47	ND		0.080	0.022
67-66-3	Chloroform	119.38	ND		0.080	0.0070
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.080	0.010
75-71-8	Dichlorodifluoromethane	120.91	ND		0.080	0.014
75-34-3	1,1-Dichloroethane	98.96	ND		0.080	0.0070
107-06-2	1,2-Dichloroethane	98.96	ND		0.080	0.010
75-35-4	1,1-Dichloroethene	96.94	ND		0.080	0.0080
100-41-4	Ethylbenzene	106.17	ND		0.080	0.013
75-09-2	Methylene Chloride	84.93	ND		0.40	0.39
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.40	0.052
91-20-3	Naphthalene	128.17	ND		0.040	0.040
127-18-4	Tetrachloroethene	165.83	ND		0.080	0.0070
108-88-3	Toluene	92.14	ND		0.12	0.078
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.080	0.0070
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.080	0.064
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.080	0.037
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.080	0.0070
79-01-6	Trichloroethene	131.39	ND		0.040	0.0060
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.080	0.036
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.080	0.020
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.080	0.022
75-01-4	Vinyl chloride	62.50	ND		0.040	0.026
1330-20-7	Xylenes, Total	106.17	ND		0.16	0.024

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	75		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 140-42498/4

Matrix: Air Lab File ID: HB500I06.D

Analysis Method: TO 15 LL Date Collected:

Sample wt/vol: 500(mL) Date Analyzed: 09/06/2020 18:36

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42498 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	ND		0.26	0.026
56-23-5	Carbon tetrachloride	153.81	ND		0.50	0.044
75-45-6	Chlorodifluoromethane	86.47	ND		0.28	0.078
67-66-3	Chloroform	119.38	ND		0.39	0.034
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.32	0.040
75-71-8	Dichlorodifluoromethane	120.91	ND		0.40	0.069
75-34-3	1,1-Dichloroethane	98.96	ND		0.32	0.028
107-06-2	1,2-Dichloroethane	98.96	ND		0.32	0.040
75-35-4	1,1-Dichloroethene	96.94	ND		0.32	0.032
100-41-4	Ethylbenzene	106.17	ND		0.35	0.056
75-09-2	Methylene Chloride	84.93	ND		1.4	1.4
1634-04-4	Methyl tert-butyl ether	88.15	ND		1.4	0.19
91-20-3	Naphthalene	128.17	ND		0.21	0.21
127-18-4	Tetrachloroethene	165.83	ND		0.54	0.047
108-88-3	Toluene	92.14	ND		0.45	0.29
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.32	0.028
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.59	0.47
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.44	0.20
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.44	0.038
79-01-6	Trichloroethene	131.39	ND		0.21	0.032
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.39	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.39	0.098
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.39	0.11
75-01-4	Vinyl chloride	62.50	ND		0.10	0.066
1330-20-7	Xylenes, Total	106.17	ND		0.69	0.10

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	75		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HB500I06.D				
Lims ID:	MB				
Client ID:					
Sample Type:	MB				
Inject. Date:	06-Sep-2020 18:36:30	ALS Bottle#:	16	Worklist Smp#:	4
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016514-004				
Misc. Info.:	500MB				
Operator ID:	HMT	Instrument ID:	MH		
Method:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\MH_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	07-Sep-2020 07:43:45	Calib Date:	29-Aug-2020 23:57:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1015				
First Level Reviewer: tajh		Date:	07-Sep-2020 07:39:14		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.431	9.431	0.000	98	100504	4.80	4.80	
* 2 1,4-Difluorobenzene	114	11.591	11.591	0.000	95	421238	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	16.258	16.258	0.000	88	248813	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.876	17.876	0.000	90	100833	4.64	3.49	

Reagents:

40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

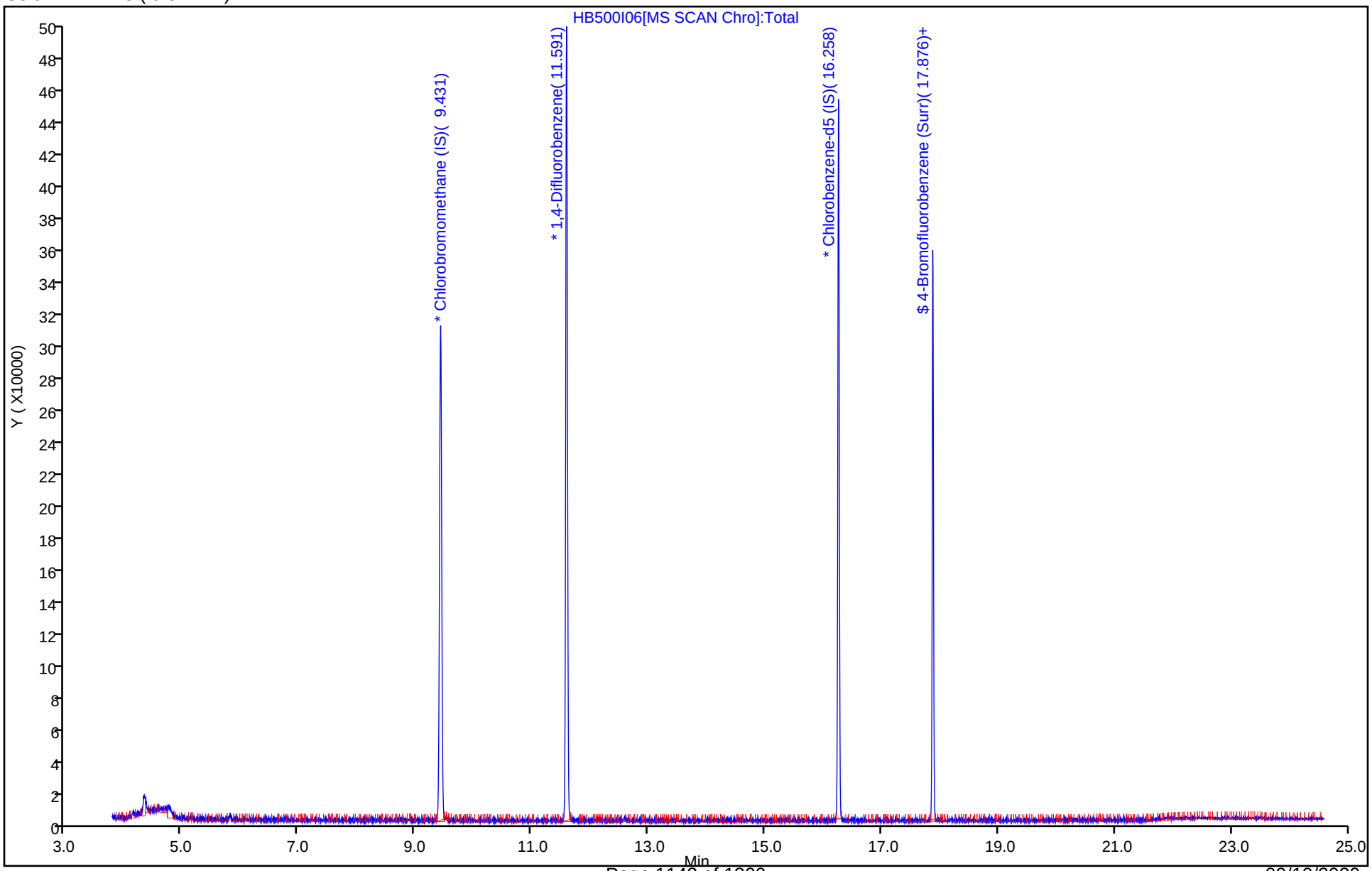
Report Date: 07-Sep-2020 07:43:54 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HB500I06.D

Injection Date:	06-Sep-2020 18:36:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	MB			Worklist Smp#:	4
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HB500I06.D				
Lims ID:	MB				
Client ID:					
Sample Type:	MB				
Inject. Date:	06-Sep-2020 18:36:30	ALS Bottle#:	16	Worklist Smp#:	4
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016514-004				
Misc. Info.:	500MB				
Operator ID:	HMT	Instrument ID:	MH		
Method:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\MH_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	07-Sep-2020 07:43:45	Calib Date:	29-Aug-2020 23:57:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1015				

First Level Reviewer: tajh Date: 07-Sep-2020 07:39:14

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	3.49	75.17

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 140-42500/4

Matrix: Air Lab File ID: G500BI07.D

Analysis Method: TO 15 LL Date Collected:

Sample wt/vol: 500(mL) Date Analyzed: 09/07/2020 10:21

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42500 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	ND		0.080	0.0080
56-23-5	Carbon tetrachloride	153.81	ND		0.080	0.0070
75-45-6	Chlorodifluoromethane	86.47	ND		0.080	0.022
67-66-3	Chloroform	119.38	ND		0.080	0.0070
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.080	0.010
75-71-8	Dichlorodifluoromethane	120.91	ND		0.080	0.014
75-34-3	1,1-Dichloroethane	98.96	ND		0.080	0.0070
107-06-2	1,2-Dichloroethane	98.96	ND		0.080	0.010
75-35-4	1,1-Dichloroethene	96.94	ND		0.080	0.0080
100-41-4	Ethylbenzene	106.17	ND		0.080	0.013
75-09-2	Methylene Chloride	84.93	ND		0.40	0.39
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.40	0.052
91-20-3	Naphthalene	128.17	ND		0.040	0.040
127-18-4	Tetrachloroethene	165.83	ND		0.080	0.0070
108-88-3	Toluene	92.14	ND		0.12	0.078
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.080	0.0070
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.080	0.064
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.080	0.037
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.080	0.0070
79-01-6	Trichloroethene	131.39	ND		0.040	0.0060
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.080	0.036
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.080	0.020
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.080	0.022
75-01-4	Vinyl chloride	62.50	ND		0.040	0.026
1330-20-7	Xylenes, Total	106.17	ND		0.16	0.024

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	97		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 140-42500/4

Matrix: Air Lab File ID: G500BI07.D

Analysis Method: TO 15 LL Date Collected:

Sample wt/vol: 500(mL) Date Analyzed: 09/07/2020 10:21

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42500 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	ND		0.26	0.026
56-23-5	Carbon tetrachloride	153.81	ND		0.50	0.044
75-45-6	Chlorodifluoromethane	86.47	ND		0.28	0.078
67-66-3	Chloroform	119.38	ND		0.39	0.034
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.32	0.040
75-71-8	Dichlorodifluoromethane	120.91	ND		0.40	0.069
75-34-3	1,1-Dichloroethane	98.96	ND		0.32	0.028
107-06-2	1,2-Dichloroethane	98.96	ND		0.32	0.040
75-35-4	1,1-Dichloroethene	96.94	ND		0.32	0.032
100-41-4	Ethylbenzene	106.17	ND		0.35	0.056
75-09-2	Methylene Chloride	84.93	ND		1.4	1.4
1634-04-4	Methyl tert-butyl ether	88.15	ND		1.4	0.19
91-20-3	Naphthalene	128.17	ND		0.21	0.21
127-18-4	Tetrachloroethene	165.83	ND		0.54	0.047
108-88-3	Toluene	92.14	ND		0.45	0.29
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.32	0.028
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.59	0.47
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.44	0.20
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.44	0.038
79-01-6	Trichloroethene	131.39	ND		0.21	0.032
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.39	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.39	0.098
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.39	0.11
75-01-4	Vinyl chloride	62.50	ND		0.10	0.066
1330-20-7	Xylenes, Total	106.17	ND		0.69	0.10

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	97		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200904-16516.b\G500BI07.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 07-Sep-2020 10:21:30 ALS Bottle#: 16 Worklist Smp#: 4
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016516-004
Misc. Info.: 500ML BLK
Operator ID: HMT Instrument ID: MG

Method: \\chromfs\Knoxville\ChromData\MG\20200904-16516.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 08-Sep-2020 13:13:38 Calib Date: 02-Sep-2020 03:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1021

First Level Reviewer: barlozhetskayaa Date: 08-Sep-2020 13:13:38

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.806	8.806	0.000	86	111064	4.80	4.80	
* 2 1,4-Difluorobenzene	114	10.990	10.995	-0.005	98	569575	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.730	15.730	0.000	94	557368	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.369	17.369	0.000	83	393630	4.64	4.50	
46 Tetrahydrofuran	42	9.275	9.237	0.038	90	2366		0.0512	

Reagents:

40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

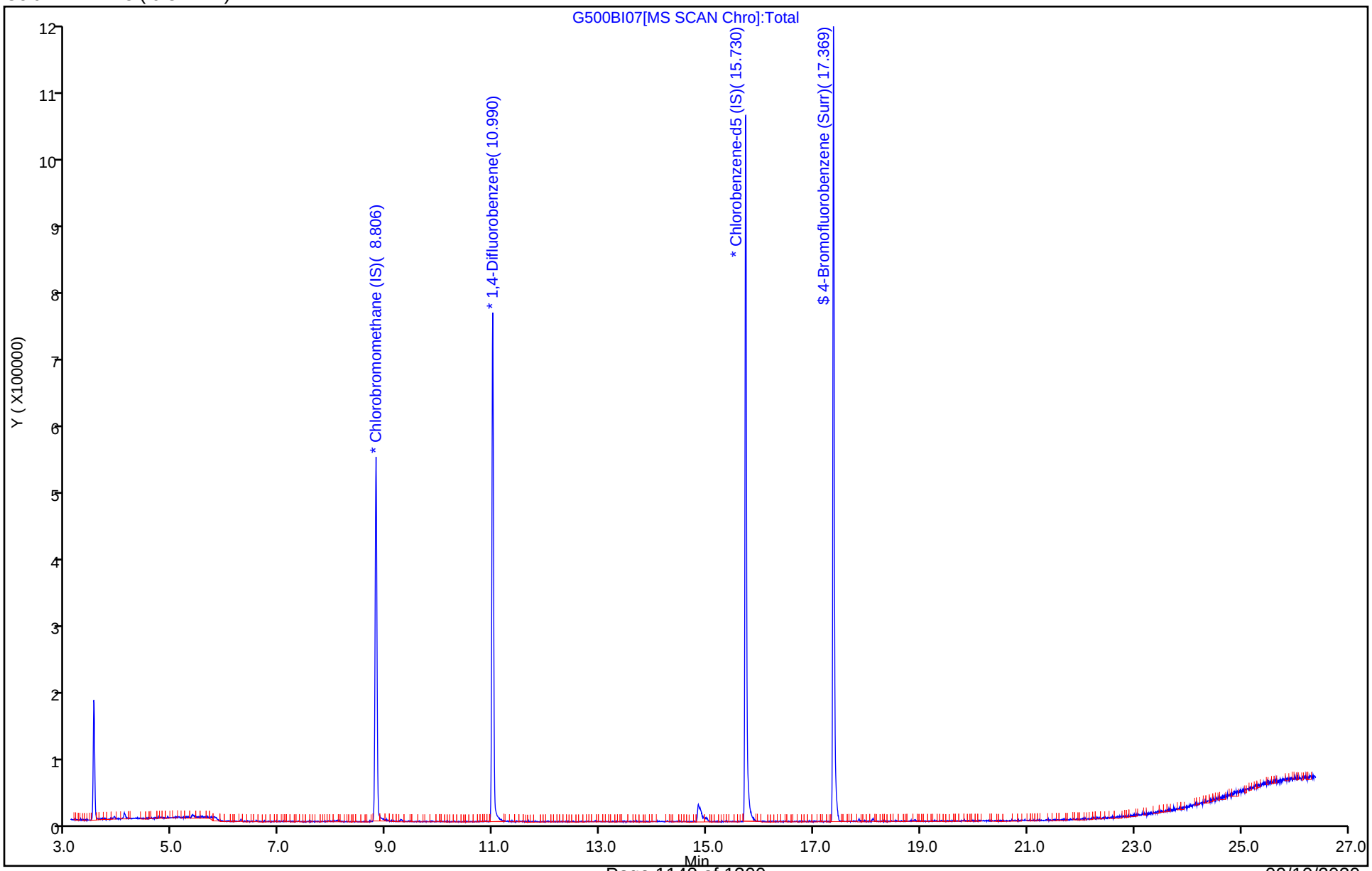
Report Date: 08-Sep-2020 13:13:38 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200904-16516.b\G500BI07.D

Injection Date:	07-Sep-2020 10:21:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	MB			Worklist Smp#:	4
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\G500BI07.D				
Lims ID:	MB				
Client ID:					
Sample Type:	MB				
Inject. Date:	07-Sep-2020 10:21:30	ALS Bottle#:	16	Worklist Smp#:	4
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016516-004				
Misc. Info.:	500ML BLK				
Operator ID:	HMT	Instrument ID:	MG		
Method:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\MG_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	08-Sep-2020 13:13:38	Calib Date:	02-Sep-2020 03:27:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1021				

First Level Reviewer: barlozhetskayaa Date: 08-Sep-2020 13:13:38

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	4.50	97.00

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 140-42503/5

Matrix: Air Lab File ID: G500BI08.D

Analysis Method: TO 15 LL Date Collected:

Sample wt/vol: 500(mL) Date Analyzed: 09/08/2020 17:16

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42503 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	ND		0.080	0.0080
56-23-5	Carbon tetrachloride	153.81	ND		0.080	0.0070
75-45-6	Chlorodifluoromethane	86.47	ND		0.080	0.022
67-66-3	Chloroform	119.38	ND		0.080	0.0070
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.080	0.010
75-71-8	Dichlorodifluoromethane	120.91	ND		0.080	0.014
75-34-3	1,1-Dichloroethane	98.96	ND		0.080	0.0070
107-06-2	1,2-Dichloroethane	98.96	ND		0.080	0.010
75-35-4	1,1-Dichloroethene	96.94	ND		0.080	0.0080
100-41-4	Ethylbenzene	106.17	ND		0.080	0.013
75-09-2	Methylene Chloride	84.93	ND		0.40	0.39
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.40	0.052
91-20-3	Naphthalene	128.17	ND		0.040	0.040
127-18-4	Tetrachloroethene	165.83	ND		0.080	0.0070
108-88-3	Toluene	92.14	ND		0.12	0.078
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.080	0.0070
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.080	0.064
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.080	0.037
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.080	0.0070
79-01-6	Trichloroethene	131.39	ND		0.040	0.0060
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.080	0.036
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.080	0.020
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.080	0.022
75-01-4	Vinyl chloride	62.50	ND		0.040	0.026
1330-20-7	Xylenes, Total	106.17	ND		0.16	0.024

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	98		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 140-42503/5

Matrix: Air Lab File ID: G500BI08.D

Analysis Method: TO 15 LL Date Collected:

Sample wt/vol: 500(mL) Date Analyzed: 09/08/2020 17:16

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42503 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	ND		0.26	0.026
56-23-5	Carbon tetrachloride	153.81	ND		0.50	0.044
75-45-6	Chlorodifluoromethane	86.47	ND		0.28	0.078
67-66-3	Chloroform	119.38	ND		0.39	0.034
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.32	0.040
75-71-8	Dichlorodifluoromethane	120.91	ND		0.40	0.069
75-34-3	1,1-Dichloroethane	98.96	ND		0.32	0.028
107-06-2	1,2-Dichloroethane	98.96	ND		0.32	0.040
75-35-4	1,1-Dichloroethene	96.94	ND		0.32	0.032
100-41-4	Ethylbenzene	106.17	ND		0.35	0.056
75-09-2	Methylene Chloride	84.93	ND		1.4	1.4
1634-04-4	Methyl tert-butyl ether	88.15	ND		1.4	0.19
91-20-3	Naphthalene	128.17	ND		0.21	0.21
127-18-4	Tetrachloroethene	165.83	ND		0.54	0.047
108-88-3	Toluene	92.14	ND		0.45	0.29
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.32	0.028
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.59	0.47
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.44	0.20
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.44	0.038
79-01-6	Trichloroethene	131.39	ND		0.21	0.032
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.39	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.39	0.098
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.39	0.11
75-01-4	Vinyl chloride	62.50	ND		0.10	0.066
1330-20-7	Xylenes, Total	106.17	ND		0.69	0.10

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	98		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200904-16519.b\G500BI08.D
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 08-Sep-2020 17:16:30 ALS Bottle#: 16 Worklist Smp#: 5
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016519-005
Misc. Info.: 500ML BLK
Operator ID: HMT Instrument ID: MG

Method: \\chromfs\Knoxville\ChromData\MG\20200904-16519.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 09-Sep-2020 14:13:04 Calib Date: 02-Sep-2020 03:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1034

First Level Reviewer: barlozhetskayaa Date: 09-Sep-2020 13:28:09

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.806	8.806	0.000	85	92424	4.80	4.80	
* 2 1,4-Difluorobenzene	114	10.990	10.990	0.000	98	511454	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.730	15.724	0.006	95	492844	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.369	17.369	0.000	81	352653	4.64	4.56	
46 Tetrahydrofuran	42	9.264	9.232	0.032	87	1759		0.0457	

Reagents:

40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

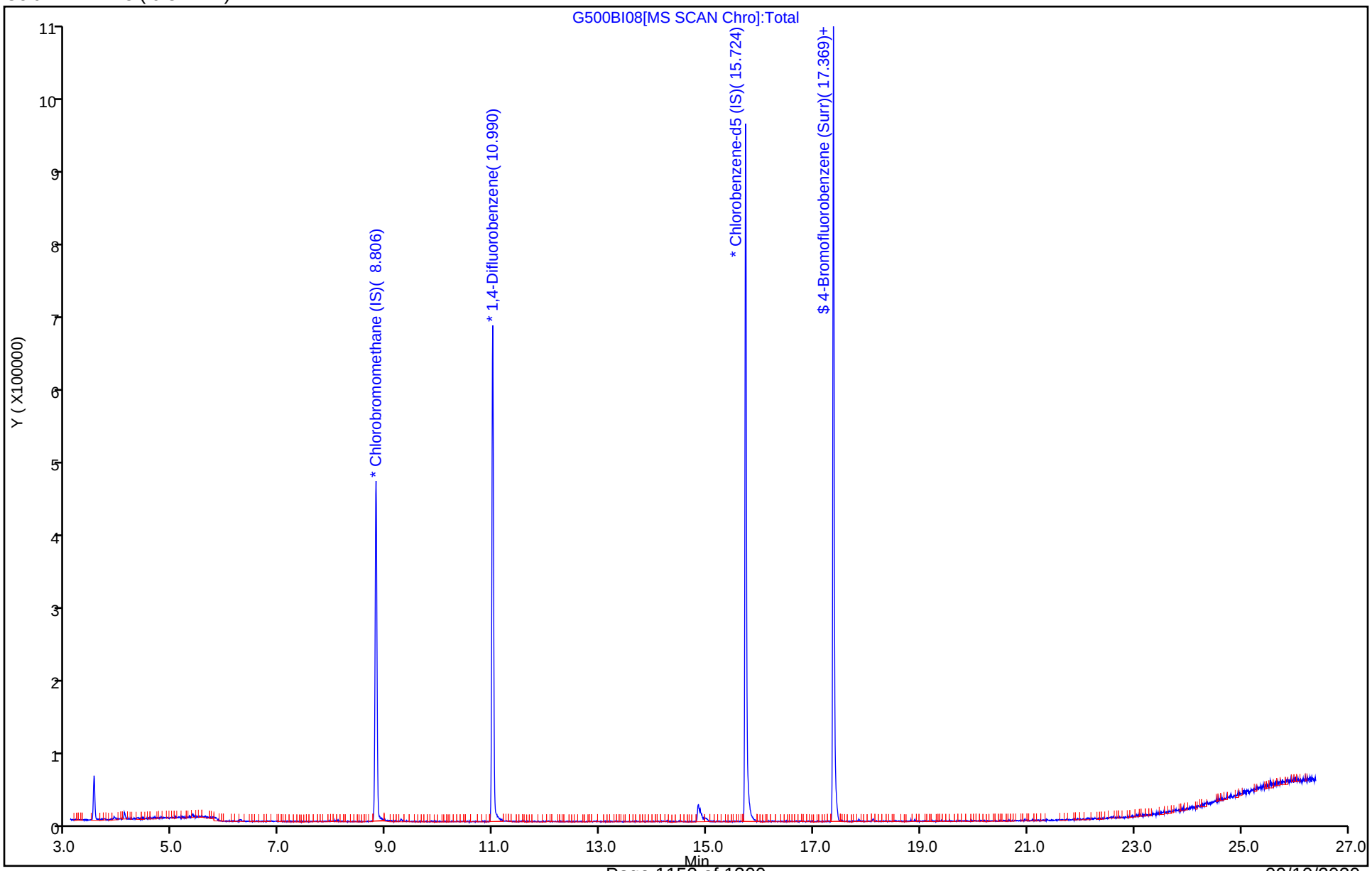
Report Date: 09-Sep-2020 14:14:19 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200904-16519.b\G500BI08.D

Injection Date:	08-Sep-2020 17:16:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	mb			Worklist Smp#:	5
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\G500BI08.D				
Lims ID:	mb				
Client ID:					
Sample Type:	MB				
Inject. Date:	08-Sep-2020 17:16:30	ALS Bottle#:	16	Worklist Smp#:	5
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016519-005				
Misc. Info.:	500ML BLK				
Operator ID:	HMT	Instrument ID:	MG		
Method:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\MG_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	09-Sep-2020 14:13:04	Calib Date:	02-Sep-2020 03:27:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1034				

First Level Reviewer: barlozhetskayaa Date: 09-Sep-2020 13:28:09

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	4.56	98.27

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 140-42399/1002

Matrix: Air Lab File ID: HCCVI03-LCS.d

Analysis Method: TO 15 LL Date Collected:

Sample wt/vol: 500(mL) Date Analyzed: 09/03/2020 10:16

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42399 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	1.56		0.080	0.0080
56-23-5	Carbon tetrachloride	153.81	1.92		0.080	0.0070
75-45-6	Chlorodifluoromethane	86.47	1.57		0.080	0.022
67-66-3	Chloroform	119.38	1.56		0.080	0.0070
156-59-2	cis-1,2-Dichloroethene	96.94	1.35		0.080	0.010
75-71-8	Dichlorodifluoromethane	120.91	1.66		0.080	0.014
75-34-3	1,1-Dichloroethane	98.96	1.49		0.080	0.0070
107-06-2	1,2-Dichloroethane	98.96	1.53		0.080	0.010
75-35-4	1,1-Dichloroethene	96.94	1.34		0.080	0.0080
100-41-4	Ethylbenzene	106.17	1.44		0.080	0.013
75-09-2	Methylene Chloride	84.93	1.62		0.40	0.39
1634-04-4	Methyl tert-butyl ether	88.15	1.32		0.40	0.052
91-20-3	Naphthalene	128.17	1.34		0.040	0.040
127-18-4	Tetrachloroethene	165.83	1.46		0.080	0.0070
108-88-3	Toluene	92.14	1.50		0.12	0.078
156-60-5	trans-1,2-Dichloroethene	96.94	1.49		0.080	0.0070
120-82-1	1,2,4-Trichlorobenzene	181.45	1.41		0.080	0.064
71-55-6	1,1,1-Trichloroethane	133.41	1.53		0.080	0.037
79-00-5	1,1,2-Trichloroethane	133.41	1.56		0.080	0.0070
79-01-6	Trichloroethene	131.39	1.48		0.040	0.0060
526-73-8	1,2,3-Trimethylbenzene	120.19	1.83		0.080	0.036
95-63-6	1,2,4-Trimethylbenzene	120.20	1.75		0.080	0.020
108-67-8	1,3,5-Trimethylbenzene	120.20	1.44		0.080	0.022
75-01-4	Vinyl chloride	62.50	1.36		0.040	0.026
1330-20-7	Xylenes, Total	106.17	4.57		0.16	0.024

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	111		60-140

Eurofins Environment Testing America
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HCCVI03-LCS.d
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 03-Sep-2020 10:16:30 ALS Bottle#: 5 Worklist Smp#: 1002
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016480-002
Misc. Info.: P118 80ML
Operator ID: HMT Instrument ID: MH

Method: \\chromfs\Knoxville\ChromData\MH\20200902-16480.b\MH_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 04-Sep-2020 10:17:09 Calib Date: 29-Aug-2020 23:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1061

First Level Reviewer: khachitpongpanits Date: 04-Sep-2020 10:17:09

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.436	9.436	0.000	97	102360	4.80	4.80	
* 2 1,4-Difluorobenzene	114	11.591	11.591	0.000	95	437376	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	16.258	16.258	0.000	87	328807	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.876	17.876	0.000	93	196113	4.64	5.13	
6 Chlorodifluoromethane	51	3.921	3.921	0.000	97	89910	1.60	1.57	
7 Propene	41	3.937	3.937	0.000	97	35460	1.60	1.45	
8 Dichlorodifluoromethane	85	3.988	3.988	0.000	100	128663	1.60	1.66	
9 Chloromethane	52	4.195	4.195	0.000	59	15701	1.60	1.54	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	4.200	4.200	0.000	90	90554	1.60	1.47	
11 Acetaldehyde	44	4.366	4.366	0.000	97	109984	8.00	7.29	
12 Vinyl chloride	62	4.381	4.381	0.000	100	46324	1.60	1.36	
13 Butane	43	4.479	4.479	0.000	83	73863	1.60	1.59	
14 Butadiene	54	4.485	4.485	0.000	79	33586	1.60	1.45	
15 Bromomethane	94	4.846	4.846	0.000	98	48839	1.60	1.49	
16 Chloroethane	64	4.996	4.996	0.000	93	20839	1.60	1.45	
17 Ethanol	31	5.084	5.084	0.000	98	129825	8.00	7.88	
18 Vinyl bromide	106	5.337	5.337	0.000	98	40215	1.60	1.47	
19 2-Methylbutane	43	5.384	5.384	0.000	93	52250	1.60	1.46	
20 Trichlorofluoromethane	101	5.627	5.627	0.000	99	119805	1.60	1.59	
21 Acrolein	56	5.637	5.637	0.000	94	11265	1.60	1.37	
22 Acetonitrile	40	5.710	5.710	0.000	99	23458	1.60	1.63	
23 Acetone	58	5.761	5.761	0.000	99	62673	4.80	3.94	
25 Isopropyl alcohol	45	5.839	5.839	0.000	94	152693	4.80	3.88	
24 Pentane	72	5.859	5.859	0.000	97	5462	1.60	1.63	
26 Ethyl ether	31	6.046	6.046	0.000	89	44598	1.60	1.36	
27 1,1-Dichloroethene	96	6.397	6.397	0.000	95	33177	1.60	1.34	
29 2-Methyl-2-propanol	59	6.495	6.495	0.000	91	48376	1.60	1.19	
28 Acrylonitrile	53	6.500	6.500	0.000	94	34075	1.60	1.56	
30 112TCTFE	101	6.573	6.573	0.000	94	100211	1.60	1.57	
31 Methylene Chloride	84	6.764	6.764	0.000	95	40659	1.60	1.62	
32 3-Chloro-1-propene	39	6.785	6.785	0.000	96	33497	1.60	1.30	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
33 Carbon disulfide	76	6.945	6.945	0.000	99	123854	1.60	1.54	
34 trans-1,2-Dichloroethene	96	7.622	7.622	0.000	95	38665	1.60	1.49	
35 2-Methylpentane	43	7.627	7.627	0.000	96	91052	1.60	1.47	
36 Methyl tert-butyl ether	73	7.746	7.746	0.000	90	72260	1.60	1.32	
37 1,1-Dichloroethane	63	8.061	8.061	0.000	99	76779	1.60	1.49	
38 Vinyl acetate	43	8.159	8.159	0.000	99	69259	1.60	1.05	
39 2-Butanone (MEK)	72	8.635	8.635	0.000	95	16897	1.60	1.35	
40 Hexane	56	8.650	8.650	0.000	82	33812	1.60	1.58	
41 Isopropyl ether	45	8.811	8.811	0.000	94	128832	1.60	1.41	
42 cis-1,2-Dichloroethene	96	9.085	9.085	0.000	97	35442	1.60	1.35	
43 Ethyl acetate	43	9.255	9.255	0.000	98	92608	1.60	1.41	
44 Chloroform	83	9.436	9.436	0.000	98	96982	1.60	1.56	
45 Tert-butyl ethyl ether	59	9.508	9.508	0.000	98	95571	1.60	1.37	
46 Tetrahydrofuran	42	9.855	9.855	0.000	91	42146	1.60	1.37	
47 1,1,1-Trichloroethane	97	10.485	10.485	0.000	96	86445	1.60	1.53	
48 1,2-Dichloroethane	62	10.599	10.599	0.000	96	61008	1.60	1.53	
49 n-Butanol	31	11.007	11.007	0.000	89	12998	1.60	1.05	
50 Cyclohexane	69	11.069	11.069	0.000	90	16801	1.60	1.53	
51 Benzene	78	11.074	11.074	0.000	97	124890	1.60	1.56	
52 Carbon tetrachloride	117	11.095	11.095	0.000	95	95581	1.60	1.92	
53 2,3-Dimethylpentane	71	11.173	11.173	0.000	92	23329	1.60	1.53	
54 Thiophene	84	11.343	11.343	0.000	96	64663	1.60	1.53	
55 Isooctane	57	11.798	11.798	0.000	96	194406	1.60	1.56	
56 n-Heptane	71	12.155	12.155	0.000	94	35059	1.60	1.53	
57 1,2-Dichloropropane	63	12.263	12.263	0.000	89	52386	1.60	1.52	
58 Trichloroethene	130	12.294	12.294	0.000	94	53557	1.60	1.48	
59 Dibromomethane	93	12.387	12.387	0.000	93	60707	1.60	1.59	
60 Dichlorobromomethane	83	12.521	12.521	0.000	98	94109	1.60	1.65	
61 1,4-Dioxane	88	12.537	12.537	0.000	96	14161	1.60	1.24	
62 Methyl methacrylate	41	12.589	12.589	0.000	89	55242	1.60	1.48	
63 Methylcyclohexane	83	13.049	13.049	0.000	88	60006	1.60	1.34	
64 4-Methyl-2-pentanone (MIBK)	43	13.431	13.431	0.000	97	111305	1.60	1.55	
65 cis-1,3-Dichloropropene	75	13.498	13.498	0.000	98	61495	1.60	1.58	
66 trans-1,3-Dichloropropene	75	14.181	14.181	0.000	97	44777	1.60	1.49	
67 Toluene	91	14.310	14.310	0.000	92	127450	1.60	1.50	
68 1,1,2-Trichloroethane	83	14.382	14.382	0.000	96	47356	1.60	1.56	
69 2-Hexanone	58	14.744	14.744	0.000	89	39204	1.60	1.45	
70 n-Octane	85	14.956	14.956	0.000	96	36869	1.60	1.56	
71 Chlorodibromomethane	129	15.085	15.085	0.000	97	87033	1.60	1.73	
72 Ethylene Dibromide	107	15.374	15.374	0.000	97	67931	1.60	1.49	
73 Tetrachloroethene	129	15.436	15.436	0.000	93	51998	1.60	1.46	
75 2,3-Dimethylheptane	43	16.294	16.294	0.000	93	162735	1.60	1.49	
74 Chlorobenzene	112	16.305	16.305	0.000	93	103119	1.60	1.50	
76 Ethylbenzene	91	16.584	16.584	0.000	99	147943	1.60	1.44	
77 m-Xylene & p-Xylene	91	16.739	16.739	0.000	98	247525	3.20	3.05	
78 n-Nonane	57	17.132	17.132	0.000	94	88093	1.60	1.51	
79 Bromoform	173	17.204	17.204	0.000	88	73545	1.60	1.92	
80 Styrene	104	17.209	17.209	0.000	98	74051	1.60	1.50	
81 o-Xylene	91	17.266	17.266	0.000	98	128827	1.60	1.52	
82 1,1,2,2-Tetrachloroethane	83	17.586	17.586	0.000	98	121307	1.60	1.62	
83 1,2,3-Trichloropropane	110	17.747	17.747	0.000	97	26707	1.60	1.57	
84 Isopropylbenzene	105	17.840	17.840	0.000	96	165739	1.60	1.54	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
85 N-Propylbenzene	120	18.351	18.351	0.000	98	44371	1.60	1.54	
86 2-Chlorotoluene	126	18.403	18.403	0.000	98	40151	1.60	1.46	
87 4-Ethyltoluene	105	18.496	18.496	0.000	98	168991	1.60	1.57	
88 1,3,5-Trimethylbenzene	120	18.563	18.563	0.000	92	71870	1.60	1.44	
89 Alpha Methyl Styrene	118	18.791	18.791	0.000	87	52581	1.60	1.41	
90 n-Decane	57	18.822	18.822	0.000	88	132959	1.60	1.56	
91 tert-Butylbenzene	119	18.977	18.977	0.000	91	177801	1.60	1.63	
92 1,2,4-Trimethylbenzene	105	18.987	18.987	0.000	96	171274	1.60	1.75	
93 sec-Butylbenzene	105	19.235	19.235	0.000	99	241076	1.60	1.67	
94 1,3-Dichlorobenzene	146	19.261	19.261	0.000	98	81558	1.60	1.60	
95 Benzyl chloride	91	19.333	19.333	0.000	97	76355	1.60	1.38	
96 1,4-Dichlorobenzene	146	19.344	19.344	0.000	94	66152	1.60	1.76	
97 4-Isopropyltoluene	119	19.390	19.390	0.000	97	212267	1.60	1.81	
98 1,2,3-Trimethylbenzene	105	19.447	19.447	0.000	99	172599	1.60	1.83	
99 Butylcyclohexane	83	19.494	19.494	0.000	90	140024	1.60	1.73	
101 2,3-Dihydroindene	117	19.695	19.695	0.000	92	138176	1.60	1.77	
100 1,2-Dichlorobenzene	146	19.695	19.695	0.000	96	95499	1.60	1.70	
103 n-Butylbenzene	91	19.809	19.809	0.000	97	232523	1.60	1.80	
102 Indene	116	19.819	19.819	0.000	91	114669	1.60	1.71	
104 Undecane	57	20.093	20.093	0.000	93	157745	1.60	1.62	
105 1,2-Dibromo-3-Chloropropane	157	20.284	20.284	0.000	94	55686	1.60	1.94	
106 1,2,4,5-Tetramethylbenzene	119	20.563	20.563	0.000	96	176178	1.60	1.54	
107 Dodecane	57	21.173	21.173	0.000	91	114899	1.60	1.68	
108 1,2,4-Trichlorobenzene	180	21.416	21.416	0.000	94	36741	1.60	1.41	
109 Naphthalene	128	21.556	21.556	0.000	99	102853	1.60	1.34	
110 Hexachlorobutadiene	225	21.726	21.726	0.000	91	101929	1.60	1.90	
111 1,2,3-Trichlorobenzene	180	21.788	21.788	0.000	94	47218	1.60	1.50	
112 2-Methylnaphthalene	142	22.336	22.336	0.000	98	4378	1.60	0.3570	
113 1-Methylnaphthalene	142	22.465	22.465	0.000	97	8544	1.60	0.6037	
A 115 C8 Range	1	14.961	(14.914-15.007)		0	477149	1.60	1.64	
S 116 Xylenes, Total	100				0		4.80	4.57	
S 117 1,2-Dichloroethene, Total	1				0		3.20	2.84	

Reagents:

40CV101P_00118	Amount Added: 80.00	Units: ml	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

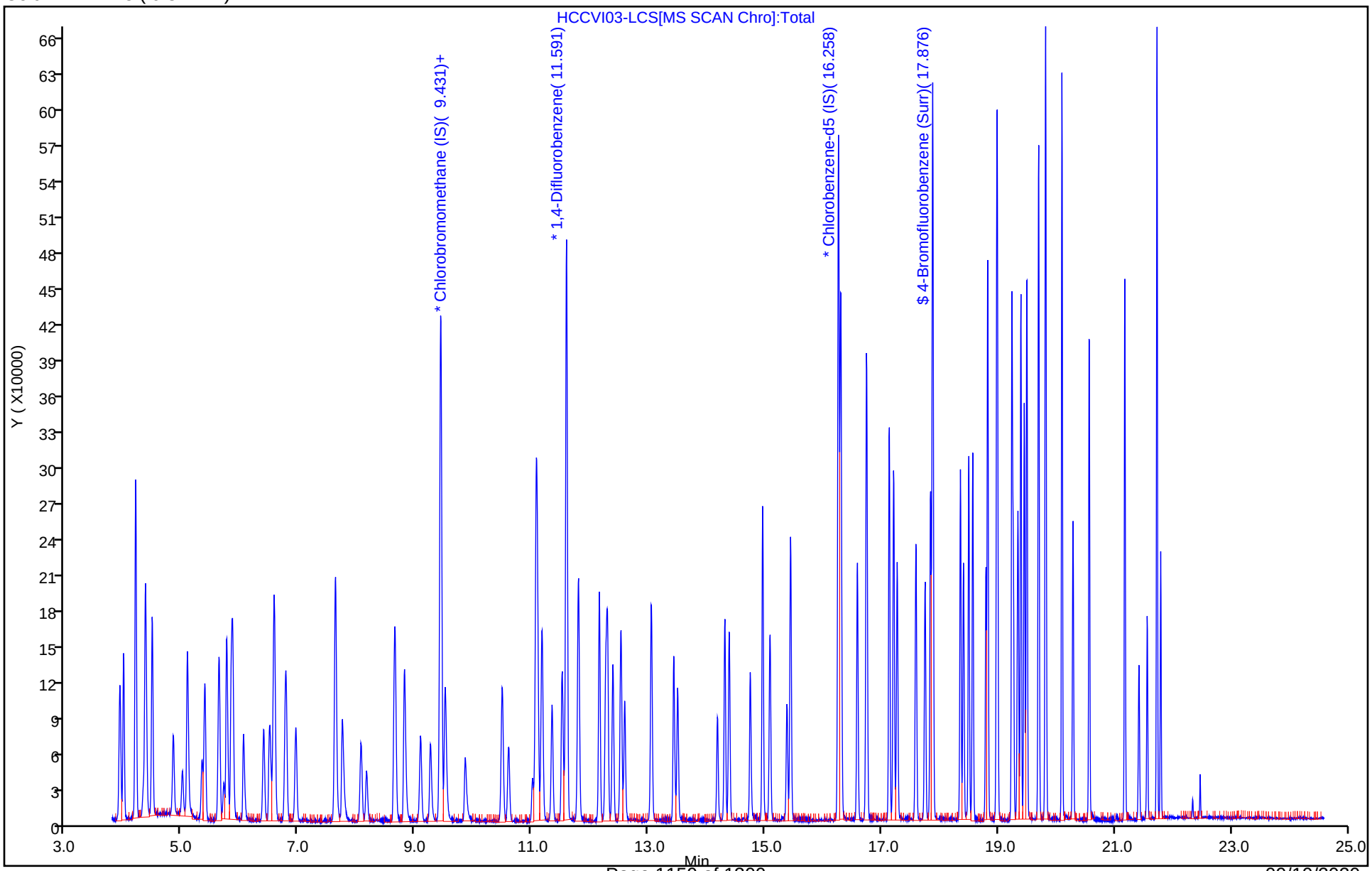
Report Date: 04-Sep-2020 10:17:11 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins Environment Testing America

Data File: \\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HCCVI03-LCS.d

Injection Date:	03-Sep-2020 10:16:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	LCS			Worklist Smp#:	1002
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins Environment Testing America
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\HCCVI03-LCS.d				
Lims ID:	LCS				
Client ID:					
Sample Type:	LCS				
Inject. Date:	03-Sep-2020 10:16:30	ALS Bottle#:	5	Worklist Smp#:	1002
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016480-002				
Misc. Info.:	P118 80ML				
Operator ID:	HMT	Instrument ID:	MH		
Method:	\\chromfs\Knoxville\ChromData\MH\20200902-16480.b\MH_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	04-Sep-2020 10:17:09	Calib Date:	29-Aug-2020 23:57:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1061				

First Level Reviewer: khachitpongpanits Date: 04-Sep-2020 10:17:09

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	5.13	110.63

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 140-42409/1002

Matrix: Air Lab File ID: GCCVI03-LCS.d

Analysis Method: TO 15 LL Date Collected:

Sample wt/vol: 500(mL) Date Analyzed: 09/03/2020 07:55

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42409 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	1.56		0.080	0.0080
56-23-5	Carbon tetrachloride	153.81	1.64		0.080	0.0070
75-45-6	Chlorodifluoromethane	86.47	1.48		0.080	0.022
67-66-3	Chloroform	119.38	1.43		0.080	0.0070
156-59-2	cis-1,2-Dichloroethene	96.94	1.51		0.080	0.010
75-71-8	Dichlorodifluoromethane	120.91	1.33		0.080	0.014
75-34-3	1,1-Dichloroethane	98.96	1.52		0.080	0.0070
107-06-2	1,2-Dichloroethane	98.96	1.56		0.080	0.010
75-35-4	1,1-Dichloroethene	96.94	1.31		0.080	0.0080
100-41-4	Ethylbenzene	106.17	1.48		0.080	0.013
75-09-2	Methylene Chloride	84.93	1.45		0.40	0.39
1634-04-4	Methyl tert-butyl ether	88.15	1.51		0.40	0.052
91-20-3	Naphthalene	128.17	1.34		0.040	0.040
127-18-4	Tetrachloroethene	165.83	1.27		0.080	0.0070
108-88-3	Toluene	92.14	1.45		0.12	0.078
156-60-5	trans-1,2-Dichloroethene	96.94	1.38		0.080	0.0070
120-82-1	1,2,4-Trichlorobenzene	181.45	1.28		0.080	0.064
71-55-6	1,1,1-Trichloroethane	133.41	1.41		0.080	0.037
79-00-5	1,1,2-Trichloroethane	133.41	1.42		0.080	0.0070
79-01-6	Trichloroethene	131.39	1.33		0.040	0.0060
526-73-8	1,2,3-Trimethylbenzene	120.19	1.27		0.080	0.036
95-63-6	1,2,4-Trimethylbenzene	120.20	1.45		0.080	0.020
108-67-8	1,3,5-Trimethylbenzene	120.20	1.59		0.080	0.022
75-01-4	Vinyl chloride	62.50	1.51		0.040	0.026
1330-20-7	Xylenes, Total	106.17	4.37		0.16	0.024

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	108		60-140

Eurofins Environment Testing America
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200902-16486.b\GCCVI03-LCS.d
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 03-Sep-2020 07:55:30 ALS Bottle#: 7 Worklist Smp#: 1002
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016486-002
Misc. Info.: S123 80ML
Operator ID: HMT Instrument ID: MG

Method: \\chromfs\Knoxville\ChromData\MG\20200902-16486.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 03-Sep-2020 12:34:18 Calib Date: 02-Sep-2020 03:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1067

First Level Reviewer: tajh Date: 03-Sep-2020 12:31:42

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.811	8.811	0.000	85	123190	4.80	4.80	
* 2 1,4-Difluorobenzene	114	10.995	10.995	0.000	98	577691	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.730	15.730	0.000	94	619386	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.374	17.374	0.000	81	485867	4.64	5.00	
6 Chlorodifluoromethane	51	3.699	3.699	0.000	97	163063	1.60	1.48	
7 Propene	41	3.715	3.715	0.000	99	81716	1.60	1.51	
8 Dichlorodifluoromethane	85	3.764	3.764	0.000	98	163965	1.60	1.33	
9 Chloromethane	52	3.947	3.947	0.000	97	33449	1.60	1.51	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.947	3.947	0.000	95	87630	1.60	1.24	
11 Acetaldehyde	44	4.093	4.093	0.000	99	179720	8.00	6.92	
12 Vinyl chloride	62	4.114	4.114	0.000	98	93112	1.60	1.51	
14 Butadiene	54	4.201	4.201	0.000	64	82711	1.60	1.52	
13 Butane	43	4.201	4.201	0.000	86	181772	1.60	1.65	
15 Bromomethane	94	4.519	4.519	0.000	97	52059	1.60	1.40	
16 Chloroethane	64	4.659	4.659	0.000	86	39279	1.60	1.54	
17 Ethanol	31	4.751	4.751	0.000	98	165996	8.00	7.12	
18 Vinyl bromide	106	4.961	4.961	0.000	96	47742	1.60	1.50	
19 2-Methylbutane	43	5.010	5.010	0.000	93	137105	1.60	1.83	
20 Trichlorofluoromethane	101	5.225	5.225	0.000	96	135139	1.60	1.41	
21 Acrolein	56	5.236	5.236	0.000	37	22565	1.60	1.97	
22 Acetonitrile	40	5.295	5.295	0.000	99	32678	1.60	1.59	
23 Acetone	58	5.355	5.355	0.000	99	37245	1.60	1.81	
25 Isopropyl alcohol	45	5.441	5.441	0.000	43	118725	1.60	1.94	
24 Pentane	72	5.452	5.452	0.000	95	10161	1.60	1.63	
26 Ethyl ether	31	5.614	5.614	0.000	87	90476	1.60	2.06	
27 1,1-Dichloroethene	96	5.926	5.926	0.000	89	39908	1.60	1.31	
28 Acrylonitrile	53	6.029	6.029	0.000	97	47240	1.60	1.69	
30 2-Methyl-2-propanol	59	6.045	6.045	0.000	95	83969	1.60	1.36	
29 1,1,2-Trichloro-1,2,2-trifluoroe	101	6.104	6.104	0.000	88	95053	1.60	1.35	
31 Methylene Chloride	84	6.277	6.277	0.000	87	44090	1.60	1.45	
32 3-Chloro-1-propene	39	6.288	6.288	0.000	95	82980	1.60	1.39	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
33 Carbon disulfide	76	6.439	6.439	0.000	95	148813	1.60	1.46	
34 trans-1,2-Dichloroethene	96	7.080	7.080	0.000	89	49377	1.60	1.38	
35 2-Methylpentane	43	7.102	7.102	0.000	96	197897	1.60	1.42	
36 Methyl tert-butyl ether	73	7.215	7.215	0.000	90	111458	1.60	1.51	
37 1,1-Dichloroethane	63	7.501	7.501	0.000	98	135464	1.60	1.52	
38 Vinyl acetate	43	7.603	7.603	0.000	100	207791	1.60	1.78	
39 2-Butanone (MEK)	72	8.056	8.056	0.000	95	22455	1.60	1.52	
40 Hexane	56	8.083	8.083	0.000	91	67987	1.60	1.48	
41 Isopropyl ether	45	8.240	8.240	0.000	95	250381	1.60	1.63	
42 cis-1,2-Dichloroethene	96	8.477	8.477	0.000	95	57243	1.60	1.51	
43 Ethyl acetate	43	8.671	8.671	0.000	97	156337	1.60	1.53	
44 Chloroform	83	8.822	8.822	0.000	92	123703	1.60	1.43	
45 Tert-butyl ethyl ether	59	8.919	8.919	0.000	96	182754	1.60	1.42	
46 Tetrahydrofuran	42	9.232	9.232	0.000	90	85529	1.60	1.67	
47 1,1,1-Trichloroethane	97	9.852	9.852	0.000	93	117365	1.60	1.41	
48 1,2-Dichloroethane	62	9.960	9.960	0.000	94	102060	1.60	1.56	
51 n-Butanol	31	10.440	10.440	0.000	63	27592	1.60	1.49	
49 Cyclohexane	69	10.450	10.450	0.000	82	30113	1.60	1.51	
50 Benzene	78	10.450	10.450	0.000	93	185036	1.60	1.56	
52 Carbon tetrachloride	117	10.472	10.472	0.000	91	120587	1.60	1.64	
53 2,3-Dimethylpentane	71	10.574	10.574	0.000	90	43346	1.60	1.41	
54 Thiophene	84	10.720	10.720	0.000	92	101309	1.60	1.49	
55 Isooctane	57	11.216	11.216	0.000	97	458556	1.60	1.58	
56 n-Heptane	71	11.594	11.594	0.000	94	68623	1.60	1.47	
57 1,2-Dichloropropane	63	11.669	11.669	0.000	89	81656	1.60	1.51	
58 Trichloroethene	130	11.707	11.707	0.000	88	68699	1.60	1.33	
59 Dibromomethane	93	11.788	11.788	0.000	84	74856	1.60	1.47	
60 Dichlorobromomethane	83	11.933	11.933	0.000	94	135818	1.60	1.53	
61 1,4-Dioxane	88	11.966	11.966	0.000	88	19354	1.60	1.40	
62 Methyl methacrylate	41	12.036	12.036	0.000	84	103186	1.60	1.69	
63 Methylcyclohexane	83	12.483	12.483	0.000	85	141525	1.60	1.81	
64 4-Methyl-2-pentanone (MIBK)	43	12.888	12.888	0.000	97	158295	1.60	1.54	
65 cis-1,3-Dichloropropene	75	12.936	12.936	0.000	94	107289	1.60	1.51	
66 trans-1,3-Dichloropropene	75	13.632	13.632	0.000	89	93140	1.60	1.47	
67 Toluene	91	13.761	13.761	0.000	91	197783	1.60	1.45	
68 1,1,2-Trichloroethane	83	13.831	13.831	0.000	92	60792	1.60	1.42	
69 2-Hexanone	58	14.225	14.225	0.000	89	67643	1.60	1.34	
70 n-Octane	85	14.452	14.452	0.000	98	71452	1.60	1.44	
71 Chlorodibromomethane	129	14.538	14.538	0.000	94	118986	1.60	1.48	
72 Ethylene Dibromide	107	14.824	14.824	0.000	96	108658	1.60	1.41	
73 Tetrachloroethene	129	14.899	14.899	0.000	84	65653	1.60	1.27	
75 Chlorobenzene	112	15.778	15.778	0.000	88	154410	1.60	1.40	
74 2,3-Dimethylheptane	43	15.805	15.805	0.000	91	316725	1.60	1.34	
78 Ethylbenzene	91	16.069	16.069	0.000	98	259756	1.60	1.48	
79 m-Xylene & p-Xylene	91	16.231	16.231	0.000	98	401183	3.20	2.89	
80 n-Nonane	57	16.652	16.652	0.000	94	201576	1.60	1.47	
81 Bromoform	173	16.679	16.679	0.000	87	96470	1.60	1.42	
82 Styrene	104	16.695	16.695	0.000	96	148735	1.60	1.47	
83 o-Xylene	91	16.760	16.760	0.000	96	208508	1.60	1.48	
84 1,1,2,2-Tetrachloroethane	83	17.078	17.078	0.000	97	164945	1.60	1.47	
85 1,2,3-Trichloropropane	110	17.234	17.234	0.000	92	39267	1.60	1.43	
86 Isopropylbenzene	105	17.347	17.347	0.000	97	265840	1.60	1.44	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
87 N-Propylbenzene	120	17.887	17.887	0.000	98	69182	1.60	1.40	
88 2-Chlorotoluene	126	17.930	17.930	0.000	98	67976	1.60	1.44	
89 4-Ethyltoluene	105	18.038	18.038	0.000	98	249972	1.60	1.36	
90 1,3,5-Trimethylbenzene	120	18.113	18.113	0.000	91	117434	1.60	1.59	
92 Alpha Methyl Styrene	118	18.339	18.339	0.000	84	103587	1.60	1.42	
93 n-Decane	57	18.399	18.399	0.000	85	247162	1.60	1.49	
94 tert-Butylbenzene	119	18.534	18.534	0.000	90	227762	1.60	1.41	
95 1,2,4-Trimethylbenzene	105	18.550	18.550	0.000	96	234005	1.60	1.45	
96 sec-Butylbenzene	105	18.803	18.803	0.000	98	348438	1.60	1.43	
97 1,3-Dichlorobenzene	146	18.814	18.814	0.000	95	155374	1.60	1.35	
98 Benzyl chloride	91	18.890	18.890	0.000	96	245596	1.60	1.62	
99 1,4-Dichlorobenzene	146	18.900	18.900	0.000	90	155961	1.60	1.34	
100 4-Isopropyltoluene	119	18.965	18.965	0.000	96	274944	1.60	1.46	
101 1,2,3-Trimethylbenzene	105	19.019	19.019	0.000	98	175058	1.60	1.27	
102 Butylcyclohexane	83	19.073	19.073	0.000	84	222603	1.60	1.41	
104 1,2-Dichlorobenzene	146	19.262	19.262	0.000	88	152008	1.60	1.38	
103 2,3-Dihydroindene	117	19.262	19.262	0.000	92	218358	1.60	1.36	
106 Indene	116	19.391	19.391	0.000	89	164507	1.60	1.19	
105 n-Butylbenzene	91	19.396	19.396	0.000	97	327697	1.60	1.54	
107 Undecane	57	19.709	19.709	0.000	91	280488	1.60	1.51	
108 1,2-Dibromo-3-Chloropropane	157	19.860	19.860	0.000	84	60855	1.60	1.28	
109 1,2,4,5-Tetramethylbenzene	119	20.151	20.151	0.000	96	226955	1.60	1.53	
110 Dodecane	57	20.766	20.766	0.000	89	269238	1.60	1.66	
111 1,2,4-Trichlorobenzene	180	20.955	20.955	0.000	92	124538	1.60	1.28	
112 Naphthalene	128	21.095	21.095	0.000	98	314138	1.60	1.34	
113 Hexachlorobutadiene	225	21.305	21.305	0.000	89	103708	1.60	1.27	
114 1,2,3-Trichlorobenzene	180	21.370	21.370	0.000	93	124836	1.60	1.34	
115 2-Methylnaphthalene	142	22.141	22.141	0.000	98	134553	1.60	1.34	
116 1-Methylnaphthalene	142	22.319	22.319	0.000	99	151954	1.60	1.48	
A 122 C8 Range	1	14.481	(14.393-14.543)		0	1442529	1.60	2.39	
S 123 1,2-Dichloroethene, Total	1				0		3.20	2.89	
S 124 Xylenes, Total	100				0		4.80	4.37	
T 136 2-Methylthiophene TIC	97	13.912	13.912	0.000	97	144947	1.60	1.12	
T 137 3-Methylthiophene TIC	97	14.112	14.112	0.000	96	150606	1.60	1.17	
T 154 2-Ethylthiophene TIC	97	16.172	16.172	0.000	97	185814	1.60	1.44	
T 162 1,2,3,4-Tetramethylbenzene TIC	119	20.205	20.205	0.000	96	136187	1.60	1.06	
T 161 1,2,3,5-Tetramethylbenzene TIC	119	20.604	20.604	0.000	96	178009	1.60	1.38	
T 163 Benzo(b)thiophene TIC	134	21.197	21.197	0.000	97	164592	1.60	1.28	

Reagents:

40CV101S_00123	Amount Added: 80.00	Units: ml	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

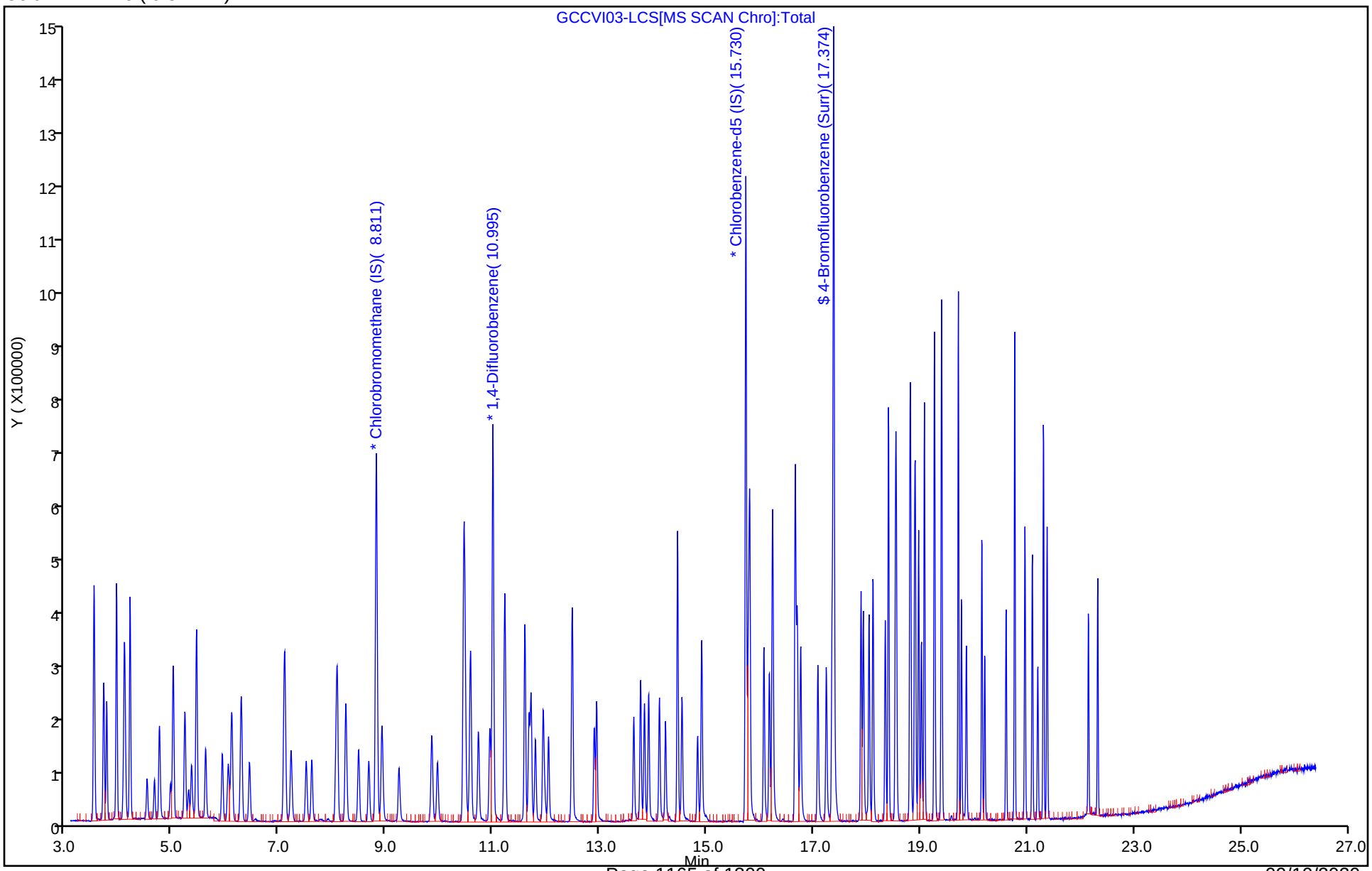
Report Date: 03-Sep-2020 12:34:23 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins Environment Testing America

Data File: \\chromfs\Knoxville\ChromData\MG\20200902-16486.b\GCCVI03-LCS.d

Injection Date:	03-Sep-2020 07:55:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	LCS			Worklist Smp#:	1002
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins Environment Testing America
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MG\20200902-16486.b\GCCVI03-LCS.d				
Lims ID:	LCS				
Client ID:					
Sample Type:	LCS				
Inject. Date:	03-Sep-2020 07:55:30	ALS Bottle#:	7	Worklist Smp#:	1002
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016486-002				
Misc. Info.:	S123 80ML				
Operator ID:	HMT	Instrument ID:	MG		
Method:	\\chromfs\Knoxville\ChromData\MG\20200902-16486.b\MG_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	03-Sep-2020 12:34:18	Calib Date:	02-Sep-2020 03:27:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1067				

First Level Reviewer: tajh Date: 03-Sep-2020 12:31:42

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	5.00	107.74

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 140-42482/1003

Matrix: Air Lab File ID: HCCVI05A-LCS.d

Analysis Method: TO 15 LL Date Collected:

Sample wt/vol: 500(mL) Date Analyzed: 09/05/2020 12:41

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42482 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	1.44		0.080	0.0080
56-23-5	Carbon tetrachloride	153.81	1.90		0.080	0.0070
75-45-6	Chlorodifluoromethane	86.47	1.56		0.080	0.022
67-66-3	Chloroform	119.38	1.52		0.080	0.0070
156-59-2	cis-1,2-Dichloroethene	96.94	1.21		0.080	0.010
75-71-8	Dichlorodifluoromethane	120.91	1.64		0.080	0.014
75-34-3	1,1-Dichloroethane	98.96	1.41		0.080	0.0070
107-06-2	1,2-Dichloroethane	98.96	1.42		0.080	0.010
75-35-4	1,1-Dichloroethene	96.94	1.16		0.080	0.0080
100-41-4	Ethylbenzene	106.17	1.28		0.080	0.013
75-09-2	Methylene Chloride	84.93	1.57		0.40	0.39
1634-04-4	Methyl tert-butyl ether	88.15	1.20		0.40	0.052
91-20-3	Naphthalene	128.17	1.37		0.040	0.040
127-18-4	Tetrachloroethene	165.83	1.43		0.080	0.0070
108-88-3	Toluene	92.14	1.36		0.12	0.078
156-60-5	trans-1,2-Dichloroethene	96.94	1.39		0.080	0.0070
120-82-1	1,2,4-Trichlorobenzene	181.45	1.49		0.080	0.064
71-55-6	1,1,1-Trichloroethane	133.41	1.50		0.080	0.037
79-00-5	1,1,2-Trichloroethane	133.41	1.51		0.080	0.0070
79-01-6	Trichloroethene	131.39	1.39		0.040	0.0060
526-73-8	1,2,3-Trimethylbenzene	120.19	1.85		0.080	0.036
95-63-6	1,2,4-Trimethylbenzene	120.20	1.77		0.080	0.020
108-67-8	1,3,5-Trimethylbenzene	120.20	1.44		0.080	0.022
75-01-4	Vinyl chloride	62.50	1.28		0.040	0.026
1330-20-7	Xylenes, Total	106.17	4.10		0.16	0.024

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	111		60-140

Eurofins Environment Testing America
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MH\20200904-16507.b\HCCVI05A-LCS.d
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 05-Sep-2020 12:41:30 ALS Bottle#: 8 Worklist Smp#: 1003
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016507-002
Misc. Info.: P118 80
Operator ID: HMT Instrument ID: MH

Method: \\chromfs\Knoxville\ChromData\MH\20200904-16507.b\MH_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 06-Sep-2020 10:10:44 Calib Date: 29-Aug-2020 23:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1044

First Level Reviewer: tajh Date: 05-Sep-2020 15:21:33

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.436	9.436	0.000	97	96483	4.80	4.80	
* 2 1,4-Difluorobenzene	114	11.591	11.591	0.000	95	419421	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	16.258	16.258	0.000	88	298882	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.876	17.876	0.000	92	178327	4.64	5.14	
6 Chlorodifluoromethane	51	3.921	3.921	0.000	97	83732	1.60	1.56	
7 Propene	41	3.937	3.937	0.000	97	30206	1.60	1.31	
8 Dichlorodifluoromethane	85	3.993	3.993	0.000	100	119486	1.60	1.64	
9 Chloromethane	52	4.195	4.195	0.000	97	14236	1.60	1.49	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	4.200	4.200	0.000	90	84330	1.60	1.45	
11 Acetaldehyde	44	4.366	4.366	0.000	95	95111	8.00	6.69	
12 Vinyl chloride	62	4.386	4.386	0.000	99	41075	1.60	1.28	
13 Butane	43	4.479	4.479	0.000	83	64876	1.60	1.48	
14 Butadiene	54	4.479	4.479	0.000	67	28505	1.60	1.31	
15 Bromomethane	94	4.841	4.841	0.000	97	42629	1.60	1.38	
16 Chloroethane	64	4.996	4.996	0.000	93	17346	1.60	1.28	
17 Ethanol	31	5.089	5.089	0.000	98	112701	8.00	7.26	
18 Vinyl bromide	106	5.332	5.332	0.000	97	33838	1.60	1.31	
19 2-Methylbutane	43	5.384	5.384	0.000	91	44529	1.60	1.32	
20 Trichlorofluoromethane	101	5.627	5.627	0.000	99	115828	1.60	1.63	
21 Acrolein	56	5.642	5.642	0.000	95	8815	1.60	1.14	
22 Acetonitrile	40	5.709	5.709	0.000	99	20435	1.60	1.50	
23 Acetone	58	5.761	5.761	0.000	99	56804	4.80	3.79	
25 Isopropyl alcohol	45	5.839	5.839	0.000	96	135528	4.80	3.66	
24 Pentane	72	5.864	5.864	0.000	96	4873	1.60	1.55	
26 Ethyl ether	31	6.051	6.051	0.000	87	36920	1.60	1.19	
27 1,1-Dichloroethene	96	6.397	6.397	0.000	95	27175	1.60	1.16	
29 2-Methyl-2-propanol	59	6.490	6.490	0.000	89	41837	1.60	1.09	
28 Acrylonitrile	53	6.505	6.505	0.000	92	29892	1.60	1.45	
30 112TCTFE	101	6.573	6.573	0.000	95	94895	1.60	1.57	
31 Methylene Chloride	84	6.769	6.769	0.000	95	37214	1.60	1.57	
32 3-Chloro-1-propene	39	6.784	6.784	0.000	96	28169	1.60	1.16	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
33 Carbon disulfide	76	6.945	6.945	0.000	99	112866	1.60	1.48	
34 trans-1,2-Dichloroethene	96	7.622	7.622	0.000	94	33845	1.60	1.39	
35 2-Methylpentane	43	7.632	7.632	0.000	96	78479	1.60	1.35	
36 Methyl tert-butyl ether	73	7.746	7.746	0.000	89	61874	1.60	1.20	
37 1,1-Dichloroethane	63	8.061	8.061	0.000	99	68609	1.60	1.41	
38 Vinyl acetate	43	8.159	8.159	0.000	98	60701	1.60	0.9748	
39 2-Butanone (MEK)	72	8.630	8.630	0.000	96	14888	1.60	1.26	
40 Hexane	56	8.645	8.645	0.000	83	30745	1.60	1.52	
41 Isopropyl ether	45	8.810	8.810	0.000	92	110048	1.60	1.28	
42 cis-1,2-Dichloroethene	96	9.090	9.090	0.000	96	29889	1.60	1.21	
43 Ethyl acetate	43	9.255	9.255	0.000	97	81335	1.60	1.31	
44 Chloroform	83	9.436	9.436	0.000	97	88978	1.60	1.52	
45 Tert-butyl ethyl ether	59	9.513	9.513	0.000	96	81592	1.60	1.24	
46 Tetrahydrofuran	42	9.854	9.854	0.000	88	35524	1.60	1.22	
47 1,1,1-Trichloroethane	97	10.490	10.490	0.000	96	79790	1.60	1.50	
48 1,2-Dichloroethane	62	10.599	10.599	0.000	96	54108	1.60	1.42	
49 n-Butanol	31	11.007	11.007	0.000	84	10964	1.60	0.9228	
51 Benzene	78	11.069	11.069	0.000	97	110669	1.60	1.44	
50 Cyclohexane	69	11.074	11.074	0.000	77	14121	1.60	1.34	
52 Carbon tetrachloride	117	11.095	11.095	0.000	97	90521	1.60	1.90	
53 2,3-Dimethylpentane	71	11.167	11.167	0.000	87	19667	1.60	1.35	
54 Thiophene	84	11.343	11.343	0.000	96	55080	1.60	1.36	
55 Isooctane	57	11.798	11.798	0.000	96	164526	1.60	1.37	
56 n-Heptane	71	12.154	12.154	0.000	93	28602	1.60	1.30	
57 1,2-Dichloropropane	63	12.263	12.263	0.000	85	45264	1.60	1.37	
58 Trichloroethene	130	12.294	12.294	0.000	94	48222	1.60	1.39	
59 Dibromomethane	93	12.387	12.387	0.000	93	54049	1.60	1.47	
60 Dichlorobromomethane	83	12.526	12.526	0.000	98	85274	1.60	1.56	
61 1,4-Dioxane	88	12.537	12.537	0.000	91	11604	1.60	1.06	
62 Methyl methacrylate	41	12.594	12.594	0.000	89	48628	1.60	1.36	
63 Methylcyclohexane	83	13.048	13.048	0.000	88	50774	1.60	1.19	
64 4-Methyl-2-pentanone (MIBK)	43	13.431	13.431	0.000	97	97874	1.60	1.42	
65 cis-1,3-Dichloropropene	75	13.498	13.498	0.000	98	52212	1.60	1.40	
66 trans-1,3-Dichloropropene	75	14.186	14.186	0.000	96	36209	1.60	1.32	
67 Toluene	91	14.310	14.310	0.000	92	104494	1.60	1.36	
68 1,1,2-Trichloroethane	83	14.387	14.387	0.000	97	41727	1.60	1.51	
69 2-Hexanone	58	14.744	14.744	0.000	89	33710	1.60	1.38	
70 n-Octane	85	14.961	14.961	0.000	94	31438	1.60	1.46	
71 Chlorodibromomethane	129	15.085	15.085	0.000	98	77194	1.60	1.69	
72 Ethylene Dibromide	107	15.374	15.374	0.000	97	57852	1.60	1.40	
73 Tetrachloroethene	129	15.436	15.436	0.000	93	46219	1.60	1.43	
75 2,3-Dimethylheptane	43	16.294	16.294	0.000	92	140774	1.60	1.42	
74 Chlorobenzene	112	16.305	16.305	0.000	96	90256	1.60	1.45	
76 Ethylbenzene	91	16.584	16.584	0.000	99	119135	1.60	1.28	
77 m-Xylene & p-Xylene	91	16.744	16.744	0.000	98	206929	3.20	2.81	
78 n-Nonane	57	17.131	17.131	0.000	93	73596	1.60	1.39	
80 Styrene	104	17.209	17.209	0.000	98	57209	1.60	1.28	
79 Bromoform	173	17.209	17.209	0.000	89	62278	1.60	1.82	
81 o-Xylene	91	17.266	17.266	0.000	98	99151	1.60	1.29	
82 1,1,2,2-Tetrachloroethane	83	17.586	17.586	0.000	98	99918	1.60	1.46	
83 1,2,3-Trichloropropane	110	17.747	17.747	0.000	96	21969	1.60	1.42	
84 Isopropylbenzene	105	17.840	17.840	0.000	96	124494	1.60	1.28	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
85 N-Propylbenzene	120	18.356	18.356	0.000	98	32352	1.60	1.24	
86 2-Chlorotoluene	126	18.403	18.403	0.000	98	32491	1.60	1.30	
87 4-Ethyltoluene	105	18.496	18.496	0.000	98	144343	1.60	1.47	
88 1,3,5-Trimethylbenzene	120	18.563	18.563	0.000	92	65362	1.60	1.44	
89 Alpha Methyl Styrene	118	18.791	18.791	0.000	87	45031	1.60	1.33	
90 n-Decane	57	18.822	18.822	0.000	88	120606	1.60	1.56	
91 tert-Butylbenzene	119	18.977	18.977	0.000	90	164850	1.60	1.66	
92 1,2,4-Trimethylbenzene	105	18.987	18.987	0.000	96	157559	1.60	1.77	
93 sec-Butylbenzene	105	19.235	19.235	0.000	99	217778	1.60	1.66	
94 1,3-Dichlorobenzene	146	19.261	19.261	0.000	98	77004	1.60	1.66	
95 Benzyl chloride	91	19.333	19.333	0.000	98	69858	1.60	1.39	
96 1,4-Dichlorobenzene	146	19.344	19.344	0.000	96	62212	1.60	1.82	
97 4-Isopropyltoluene	119	19.390	19.390	0.000	97	201535	1.60	1.89	
98 1,2,3-Trimethylbenzene	105	19.447	19.447	0.000	99	158720	1.60	1.85	
99 Butylcyclohexane	83	19.493	19.493	0.000	89	121029	1.60	1.64	
101 2,3-Dihydroindene	117	19.695	19.695	0.000	92	122605	1.60	1.73	
100 1,2-Dichlorobenzene	146	19.695	19.695	0.000	96	88014	1.60	1.72	
103 n-Butylbenzene	91	19.809	19.809	0.000	97	218504	1.60	1.86	
102 Indene	116	19.819	19.819	0.000	90	103850	1.60	1.71	
104 Undecane	57	20.093	20.093	0.000	92	145705	1.60	1.65	
105 1,2-Dibromo-3-Chloropropane	157	20.284	20.284	0.000	94	54549	1.60	2.09	
106 1,2,4,5-Tetramethylbenzene	119	20.563	20.563	0.000	96	167310	1.60	1.61	
107 Dodecane	57	21.173	21.173	0.000	90	111777	1.60	1.79	
108 1,2,4-Trichlorobenzene	180	21.416	21.416	0.000	93	35396	1.60	1.49	
109 Naphthalene	128	21.561	21.561	0.000	99	96257	1.60	1.37	
110 Hexachlorobutadiene	225	21.726	21.726	0.000	91	95813	1.60	1.96	
111 1,2,3-Trichlorobenzene	180	21.788	21.788	0.000	95	44208	1.60	1.54	
112 2-Methylnaphthalene	142	22.336	22.336	0.000	94	3907	1.60	0.3505	
113 1-Methylnaphthalene	142	22.465	22.465	0.000	98	7423	1.60	0.5770	
A 115 C8 Range	1	14.961	(14.919-15.002)		0	426485	1.60	1.53	
S 116 Xylenes, Total	100				0		4.80	4.09	
S 117 1,2-Dichloroethene, Total	1				0		3.20	2.59	

Reagents:

40CV101P_00118	Amount Added: 80.00	Units: mL	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

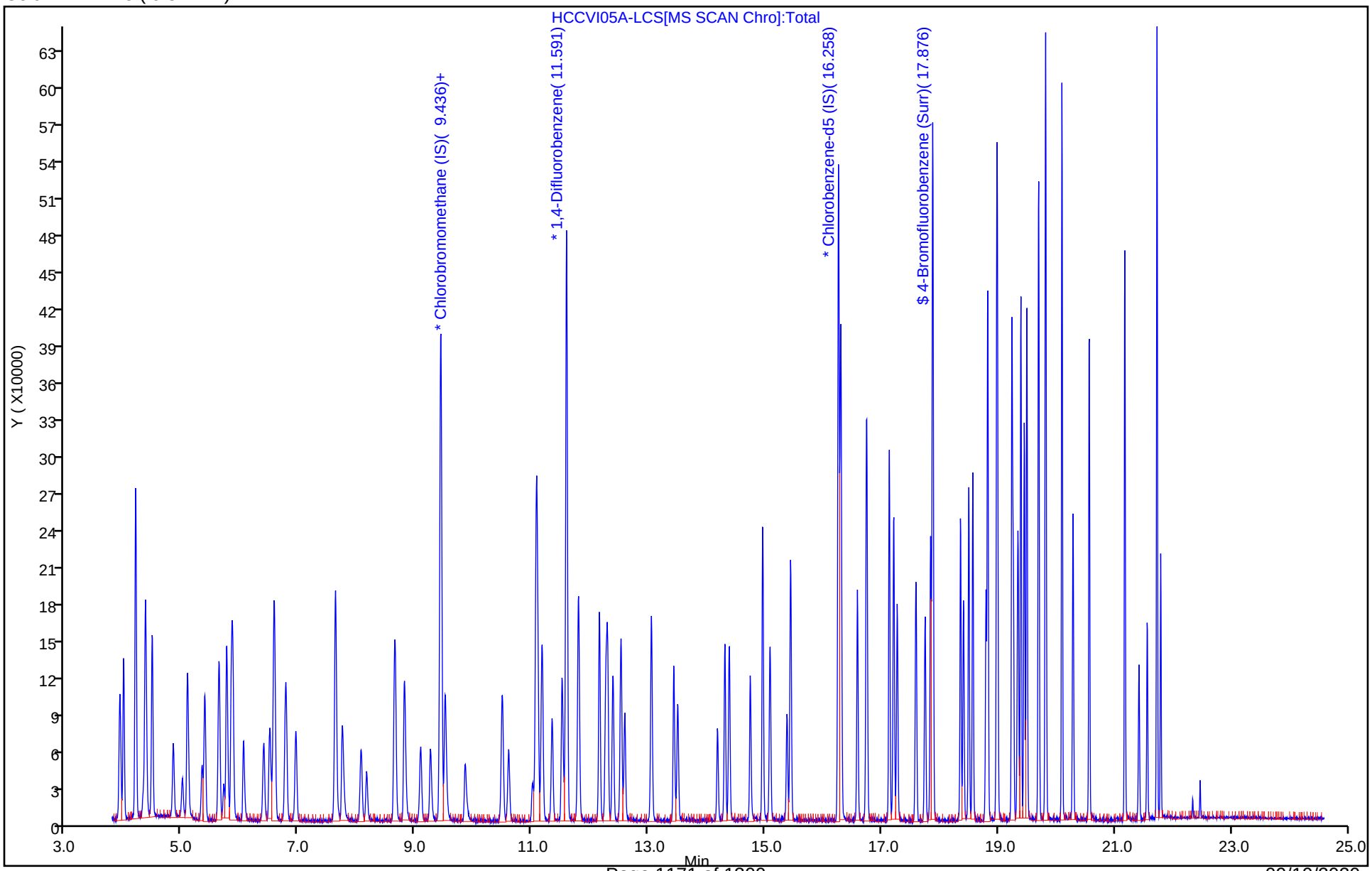
Report Date: 06-Sep-2020 10:10:47 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins Environment Testing America

Data File: \\chromfs\Knoxville\ChromData\MH\20200904-16507.b\HCCVI05A-LCS.d

Injection Date:	05-Sep-2020 12:41:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	LCS			Worklist Smp#:	1003
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins Environment Testing America
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16507.b\HCCVI05A-LCS.d				
Lims ID:	LCS				
Client ID:					
Sample Type:	LCS				
Inject. Date:	05-Sep-2020 12:41:30	ALS Bottle#:	8	Worklist Smp#:	1003
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016507-002				
Misc. Info.:	P118 80				
Operator ID:	HMT	Instrument ID:	MH		
Method:	\\chromfs\Knoxville\ChromData\MH\20200904-16507.b\MH_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	06-Sep-2020 10:10:44	Calib Date:	29-Aug-2020 23:57:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1044				
First Level Reviewer: tajh		Date:	05-Sep-2020 15:21:33		

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	5.14	110.67

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 140-42498/1009

Matrix: Air Lab File ID: HCCVH06b-LCS.d

Analysis Method: TO 15 LL Date Collected:

Sample wt/vol: 500(mL) Date Analyzed: 09/06/2020 17:12

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42498 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	1.72		0.080	0.0080
56-23-5	Carbon tetrachloride	153.81	2.29		0.080	0.0070
75-45-6	Chlorodifluoromethane	86.47	1.72		0.080	0.022
67-66-3	Chloroform	119.38	1.72		0.080	0.0070
156-59-2	cis-1,2-Dichloroethene	96.94	1.63		0.080	0.010
75-71-8	Dichlorodifluoromethane	120.91	1.85		0.080	0.014
75-34-3	1,1-Dichloroethane	98.96	1.70		0.080	0.0070
107-06-2	1,2-Dichloroethane	98.96	1.79		0.080	0.010
75-35-4	1,1-Dichloroethene	96.94	1.64		0.080	0.0080
100-41-4	Ethylbenzene	106.17	1.69		0.080	0.013
75-09-2	Methylene Chloride	84.93	1.64		0.40	0.39
1634-04-4	Methyl tert-butyl ether	88.15	1.59		0.40	0.052
91-20-3	Naphthalene	128.17	2.18		0.040	0.040
127-18-4	Tetrachloroethene	165.83	1.73		0.080	0.0070
108-88-3	Toluene	92.14	1.74		0.12	0.078
156-60-5	trans-1,2-Dichloroethene	96.94	1.67		0.080	0.0070
120-82-1	1,2,4-Trichlorobenzene	181.45	2.18		0.080	0.064
71-55-6	1,1,1-Trichloroethane	133.41	1.68		0.080	0.037
79-00-5	1,1,2-Trichloroethane	133.41	1.75		0.080	0.0070
79-01-6	Trichloroethene	131.39	1.71		0.040	0.0060
526-73-8	1,2,3-Trimethylbenzene	120.19	1.58		0.080	0.036
95-63-6	1,2,4-Trimethylbenzene	120.20	2.12		0.080	0.020
108-67-8	1,3,5-Trimethylbenzene	120.20	2.02		0.080	0.022
75-01-4	Vinyl chloride	62.50	1.66		0.040	0.026
1330-20-7	Xylenes, Total	106.17	5.51		0.16	0.024

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	112		60-140

Eurofins Environment Testing America
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HCCVH06b-LCS.d
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 06-Sep-2020 17:12:30 ALS Bottle#: 3 Worklist Smp#: 1009
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016507-005
Misc. Info.: P118 80ML
Operator ID: HMT Instrument ID: MH

Method: \\chromfs\Knoxville\ChromData\MH\20200904-16514.b\MH_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 07-Sep-2020 07:46:39 Calib Date: 29-Aug-2020 23:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1015

First Level Reviewer: tajh Date: 07-Sep-2020 07:46:39

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.431	9.431	0.000	96	122536	4.80	4.80	
* 2 1,4-Difluorobenzene	114	11.591	11.591	0.000	95	491945	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	16.258	16.258	0.000	87	362338	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.876	17.876	0.000	93	219137	4.64	5.21	
6 Chlorodifluoromethane	51	3.916	3.916	0.000	97	117910	1.60	1.72	
7 Propene	41	3.932	3.932	0.000	99	49619	1.60	1.70	
8 Dichlorodifluoromethane	85	3.983	3.983	0.000	100	171486	1.60	1.85	
9 Chloromethane	52	4.190	4.190	0.000	59	20890	1.60	1.72	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	4.195	4.195	0.000	90	127201	1.60	1.72	
11 Acetaldehyde	44	4.361	4.361	0.000	95	126417	8.00	7.00	
12 Vinyl chloride	62	4.381	4.381	0.000	99	67502	1.60	1.66	
14 Butadiene	54	4.474	4.474	0.000	68	49635	1.60	1.79	
13 Butane	43	4.474	4.474	0.000	83	103025	1.60	1.85	
15 Bromomethane	94	4.836	4.836	0.000	98	65060	1.60	1.65	
16 Chloroethane	64	4.991	4.991	0.000	95	27176	1.60	1.58	
17 Ethanol	31	5.079	5.079	0.000	98	124874	8.00	6.33	
18 Vinyl bromide	106	5.327	5.327	0.000	98	60290	1.60	1.84	
19 2-Methylbutane	43	5.379	5.379	0.000	93	72571	1.60	1.69	
20 Trichlorofluoromethane	101	5.617	5.617	0.000	99	169960	1.60	1.88	
21 Acrolein	56	5.637	5.637	0.000	97	20862	1.60	2.12	
22 Acetonitrile	40	5.704	5.704	0.000	99	26847	1.60	1.56	
23 Acetone	58	5.761	5.761	0.000	99	26180	1.60	1.37	
25 Isopropyl alcohol	45	5.839	5.839	0.000	94	86786	1.60	1.84	
24 Pentane	72	5.854	5.854	0.000	97	6990	1.60	1.75	
26 Ethyl ether	31	6.040	6.040	0.000	90	65962	1.60	1.68	
27 1,1-Dichloroethene	96	6.387	6.387	0.000	96	48845	1.60	1.64	
29 2-Methyl-2-propanol	59	6.485	6.485	0.000	93	75034	1.60	1.55	
28 Acrylonitrile	53	6.500	6.500	0.000	93	44950	1.60	1.72	
30 112TCTFE	101	6.567	6.567	0.000	96	132396	1.60	1.73	
31 Methylene Chloride	84	6.764	6.764	0.000	95	49287	1.60	1.64	
32 3-Chloro-1-propene	39	6.779	6.779	0.000	95	49806	1.60	1.62	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
33 Carbon disulfide	76	6.940	6.940	0.000	100	155893	1.60	1.61	
34 trans-1,2-Dichloroethene	96	7.617	7.617	0.000	95	51926	1.60	1.67	
35 2-Methylpentane	43	7.627	7.627	0.000	96	112538	1.60	1.52	
36 Methyl tert-butyl ether	73	7.741	7.741	0.000	92	104379	1.60	1.59	
37 1,1-Dichloroethane	63	8.061	8.061	0.000	100	104590	1.60	1.70	
38 Vinyl acetate	43	8.154	8.154	0.000	99	120068	1.60	1.52	
39 2-Butanone (MEK)	72	8.625	8.625	0.000	96	22475	1.60	1.50	
40 Hexane	56	8.645	8.645	0.000	85	42928	1.60	1.67	
41 Isopropyl ether	45	8.805	8.805	0.000	94	182340	1.60	1.67	
42 cis-1,2-Dichloroethene	96	9.084	9.084	0.000	97	51168	1.60	1.63	
43 Ethyl acetate	43	9.250	9.250	0.000	98	123757	1.60	1.57	
44 Chloroform	83	9.436	9.436	0.000	97	127650	1.60	1.72	
45 Tert-butyl ethyl ether	59	9.508	9.508	0.000	98	124949	1.60	1.49	
46 Tetrahydrofuran	42	9.844	9.844	0.000	91	57605	1.60	1.56	
47 1,1,1-Trichloroethane	97	10.485	10.485	0.000	97	113188	1.60	1.68	
48 1,2-Dichloroethane	62	10.599	10.599	0.000	96	79941	1.60	1.79	
49 n-Butanol	31	10.997	10.997	0.000	92	17968	1.60	1.29	
50 Cyclohexane	69	11.069	11.069	0.000	75	21062	1.60	1.70	
51 Benzene	78	11.074	11.074	0.000	97	155010	1.60	1.72	
52 Carbon tetrachloride	117	11.095	11.095	0.000	96	128083	1.60	2.29	
53 2,3-Dimethylpentane	71	11.167	11.167	0.000	92	28277	1.60	1.65	
54 Thiophene	84	11.343	11.343	0.000	96	77219	1.60	1.63	
55 Isooctane	57	11.793	11.793	0.000	97	244157	1.60	1.74	
56 n-Heptane	71	12.154	12.154	0.000	94	42494	1.60	1.65	
57 1,2-Dichloropropane	63	12.263	12.263	0.000	87	64508	1.60	1.67	
58 Trichloroethene	130	12.294	12.294	0.000	95	69630	1.60	1.71	
59 Dibromomethane	93	12.387	12.387	0.000	94	75744	1.60	1.76	
60 Dichlorobromomethane	83	12.521	12.521	0.000	98	118337	1.60	1.85	
61 1,4-Dioxane	88	12.532	12.532	0.000	96	18649	1.60	1.45	
62 Methyl methacrylate	41	12.589	12.589	0.000	89	70111	1.60	1.67	
63 Methylcyclohexane	83	13.049	13.049	0.000	89	93649	1.60	1.85	
64 4-Methyl-2-pentanone (MIBK)	43	13.426	13.426	0.000	98	140736	1.60	1.75	
65 cis-1,3-Dichloropropene	75	13.498	13.498	0.000	98	80085	1.60	1.83	
66 trans-1,3-Dichloropropene	75	14.181	14.181	0.000	97	59615	1.60	1.80	
67 Toluene	91	14.310	14.310	0.000	92	162763	1.60	1.74	
68 1,1,2-Trichloroethane	83	14.382	14.382	0.000	97	58870	1.60	1.75	
69 2-Hexanone	58	14.739	14.739	0.000	90	58310	1.60	1.96	
70 n-Octane	85	14.961	14.961	0.000	96	48015	1.60	1.84	
71 Chlorodibromomethane	129	15.085	15.085	0.000	98	116739	1.60	2.11	
72 Ethylene Dibromide	107	15.374	15.374	0.000	97	88083	1.60	1.75	
73 Tetrachloroethene	129	15.436	15.436	0.000	94	67533	1.60	1.73	
75 2,3-Dimethylheptane	43	16.294	16.294	0.000	93	179386	1.60	1.49	
74 Chlorobenzene	112	16.305	16.305	0.000	94	132428	1.60	1.75	
76 Ethylbenzene	91	16.584	16.584	0.000	99	190740	1.60	1.69	
77 m-Xylene & p-Xylene	91	16.744	16.744	0.000	98	339184	3.20	3.80	
78 n-Nonane	57	17.132	17.132	0.000	94	111262	1.60	1.73	
80 Styrene	104	17.204	17.204	0.000	98	104049	1.60	1.92	
79 Bromoform	173	17.209	17.209	0.000	87	99643	1.60	2.24	
81 o-Xylene	91	17.266	17.266	0.000	99	159911	1.60	1.71	
82 1,1,2,2-Tetrachloroethane	83	17.586	17.586	0.000	99	147511	1.60	1.78	
83 1,2,3-Trichloropropane	110	17.747	17.747	0.000	97	34027	1.60	1.82	
84 Isopropylbenzene	105	17.840	17.840	0.000	96	214634	1.60	1.81	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
85 N-Propylbenzene	120	18.351	18.351	0.000	98	56991	1.60	1.80	
86 2-Chlorotoluene	126	18.403	18.403	0.000	98	54293	1.60	1.79	
87 4-Ethyltoluene	105	18.496	18.496	0.000	98	212456	1.60	1.79	
88 1,3,5-Trimethylbenzene	120	18.563	18.563	0.000	92	112281	1.60	2.02	
89 Alpha Methyl Styrene	118	18.791	18.791	0.000	87	86093	1.60	2.10	
90 n-Decane	57	18.822	18.822	0.000	88	165969	1.60	1.77	
91 tert-Butylbenzene	119	18.977	18.977	0.000	91	240458	1.60	2.00	
92 1,2,4-Trimethylbenzene	105	18.987	18.987	0.000	96	228753	1.60	2.12	
93 sec-Butylbenzene	105	19.235	19.235	0.000	99	321215	1.60	2.02	
94 1,3-Dichlorobenzene	146	19.261	19.261	0.000	98	117403	1.60	2.09	
95 Benzyl chloride	91	19.333	19.333	0.000	97	133302	1.60	2.13	
96 1,4-Dichlorobenzene	146	19.344	19.344	0.000	96	99958	1.60	2.41	
97 4-Isopropyltoluene	119	19.390	19.390	0.000	97	287468	1.60	2.23	
98 1,2,3-Trimethylbenzene	105	19.447	19.447	0.000	99	163768	1.60	1.58	
99 Butylcyclohexane	83	19.494	19.494	0.000	90	155359	1.60	1.74	
101 2,3-Dihydroindene	117	19.695	19.695	0.000	93	174928	1.60	2.03	
100 1,2-Dichlorobenzene	146	19.695	19.695	0.000	96	127461	1.60	2.06	
103 n-Butylbenzene	91	19.809	19.809	0.000	97	312328	1.60	2.19	
102 Indene	116	19.819	19.819	0.000	94	144513	1.60	1.96	
104 Undecane	57	20.093	20.093	0.000	93	204071	1.60	1.90	
105 1,2-Dibromo-3-Chloropropane	157	20.284	20.284	0.000	96	68865	1.60	2.17	
106 1,2,4,5-Tetramethylbenzene	119	20.563	20.563	0.000	97	238353	1.60	1.88	
107 Dodecane	57	21.173	21.173	0.000	91	177302	1.60	2.35	
108 1,2,4-Trichlorobenzene	180	21.416	21.416	0.000	94	63812	1.60	2.18	
109 Naphthalene	128	21.556	21.556	0.000	99	184660	1.60	2.18	
110 Hexachlorobutadiene	225	21.726	21.726	0.000	91	127548	1.60	2.15	
111 1,2,3-Trichlorobenzene	180	21.788	21.788	0.000	94	76696	1.60	2.20	
112 2-Methylnaphthalene	142	22.336	22.336	0.000	97	9476	1.60	0.7012	
113 1-Methylnaphthalene	142	22.465	22.465	0.000	97	20299	1.60	1.30	
A 115 C8 Range	1	14.961	(14.920-15.002)		0	594457	1.60	1.81	
S 116 Xylenes, Total	100				0		4.80	5.51	
S 117 1,2-Dichloroethene, Total	1				0		3.20	3.30	
T 139 2-Methylthiophene TIC	97	14.465	14.465	0.000	96	124105	1.60	1.64	
T 142 3-Methylthiophene TIC	97	14.661	14.661	0.000	97	121164	1.60	1.61	
T 141 2-Ethylthiophene TIC	97	16.687	16.687	0.000	95	140835	1.60	1.87	
T 152 1,2-Dimethyl-4-Ethylbenzene TIC	119	20.176	20.176	0.000	95	204969	1.60	2.72	
T 151 Benzo(b)thiophene TIC	134	21.654	21.654	0.000	97	53876	1.60	0.7137	

Reagents:

40CV101S_00126	Amount Added: 80.00	Units: mL	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

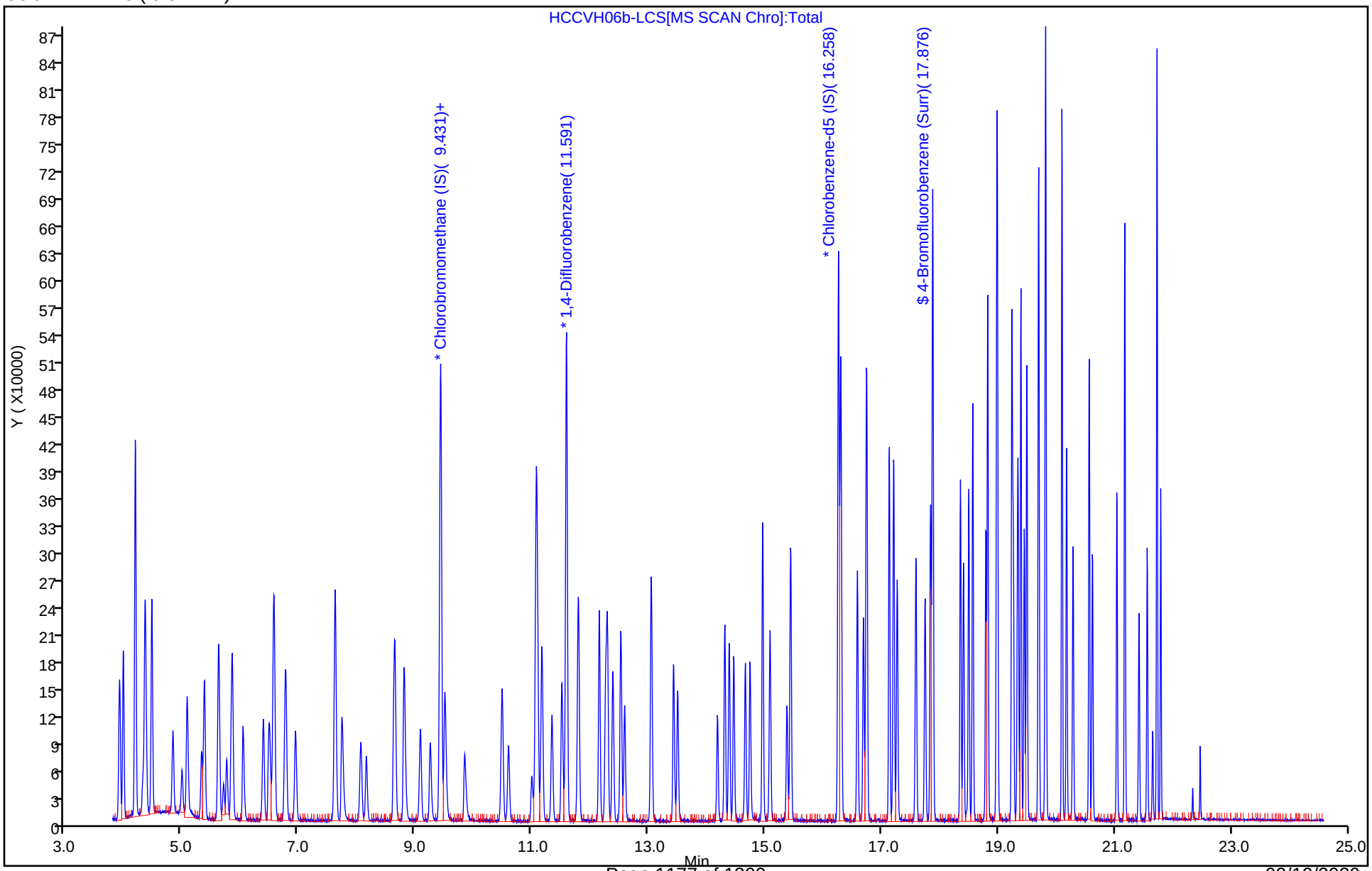
Report Date: 07-Sep-2020 07:46:42 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins Environment Testing America

Data File: \\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HCCVH06b-LCS.d

Injection Date:	06-Sep-2020 17:12:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	LCS			Worklist Smp#:	1009
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins Environment Testing America
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HCCVH06b-LCS.d				
Lims ID:	LCS				
Client ID:					
Sample Type:	LCS				
Inject. Date:	06-Sep-2020 17:12:30	ALS Bottle#:	3	Worklist Smp#:	1009
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016507-005				
Misc. Info.:	P118 80ML				
Operator ID:	HMT	Instrument ID:	MH		
Method:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\MH_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	07-Sep-2020 07:46:39	Calib Date:	29-Aug-2020 23:57:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1015				

First Level Reviewer: tajh Date: 07-Sep-2020 07:46:39

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	5.21	112.18

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 140-42500/1002

Matrix: Air Lab File ID: GCCVI07-LCS.d

Analysis Method: TO 15 LL Date Collected:

Sample wt/vol: 500(mL) Date Analyzed: 09/07/2020 08:06

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42500 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	1.36		0.080	0.0080
56-23-5	Carbon tetrachloride	153.81	1.37		0.080	0.0070
75-45-6	Chlorodifluoromethane	86.47	1.55		0.080	0.022
67-66-3	Chloroform	119.38	1.46		0.080	0.0070
156-59-2	cis-1,2-Dichloroethene	96.94	1.47		0.080	0.010
75-71-8	Dichlorodifluoromethane	120.91	1.43		0.080	0.014
75-34-3	1,1-Dichloroethane	98.96	1.56		0.080	0.0070
107-06-2	1,2-Dichloroethane	98.96	1.41		0.080	0.010
75-35-4	1,1-Dichloroethene	96.94	1.43		0.080	0.0080
100-41-4	Ethylbenzene	106.17	1.49		0.080	0.013
75-09-2	Methylene Chloride	84.93	1.48		0.40	0.39
1634-04-4	Methyl tert-butyl ether	88.15	1.77		0.40	0.052
91-20-3	Naphthalene	128.17	1.52		0.040	0.040
127-18-4	Tetrachloroethene	165.83	1.24		0.080	0.0070
108-88-3	Toluene	92.14	1.47		0.12	0.078
156-60-5	trans-1,2-Dichloroethene	96.94	1.42		0.080	0.0070
120-82-1	1,2,4-Trichlorobenzene	181.45	1.57		0.080	0.064
71-55-6	1,1,1-Trichloroethane	133.41	1.48		0.080	0.037
79-00-5	1,1,2-Trichloroethane	133.41	1.48		0.080	0.0070
79-01-6	Trichloroethene	131.39	1.20		0.040	0.0060
526-73-8	1,2,3-Trimethylbenzene	120.19	1.82		0.080	0.036
95-63-6	1,2,4-Trimethylbenzene	120.20	1.52		0.080	0.020
108-67-8	1,3,5-Trimethylbenzene	120.20	1.53		0.080	0.022
75-01-4	Vinyl chloride	62.50	1.55		0.040	0.026
1330-20-7	Xylenes, Total	106.17	4.36		0.16	0.024

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	102		60-140

Eurofins Environment Testing America
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GCCVI07-LCS.d
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 07-Sep-2020 08:06:30 ALS Bottle#: 2 Worklist Smp#: 1002
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016513-010
Misc. Info.: S121 80ML
Operator ID: HMT Instrument ID: MG

Method: \\chromfs\Knoxville\ChromData\MG\20200904-16516.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 08-Sep-2020 13:12:30 Calib Date: 02-Sep-2020 03:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1021

First Level Reviewer: barlozhetskayaa Date: 08-Sep-2020 13:12:30

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.806	8.806	0.000	85	111190	4.80	4.80	
* 2 1,4-Difluorobenzene	114	10.995	10.995	0.000	96	599538	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.730	15.730	0.000	94	593917	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.369	17.369	0.000	83	440513	4.64	4.73	
6 Chlorodifluoromethane	51	3.699	3.699	0.000	80	154183	1.60	1.55	
7 Propene	41	3.710	3.710	0.000	90	79749	1.60	1.63	
8 Dichlorodifluoromethane	85	3.759	3.759	0.000	97	159694	1.60	1.43	
9 Chloromethane	52	3.942	3.942	0.000	78	31839	1.60	1.60	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.947	3.947	0.000	93	84808	1.60	1.33	
11 Acetaldehyde	44	4.093	4.093	0.000	100	211596	8.00	9.02	
12 Vinyl chloride	62	4.109	4.109	0.000	93	86190	1.60	1.55	
13 Butane	43	4.195	4.195	0.000	86	174370	1.60	1.75	
14 Butadiene	54	4.195	4.195	0.000	65	84525	1.60	1.72	
15 Bromomethane	94	4.514	4.514	0.000	94	46532	1.60	1.38	
16 Chloroethane	64	4.654	4.654	0.000	82	34255	1.60	1.48	
17 Ethanol	31	4.751	4.751	0.000	95	215579	8.00	10.3	
18 Vinyl bromide	106	4.956	4.956	0.000	94	40686	1.60	1.42	
19 2-Methylbutane	43	5.004	5.004	0.000	94	128354	1.60	1.90	
20 Trichlorofluoromethane	101	5.225	5.225	0.000	95	124716	1.60	1.44	
21 Acrolein	56	5.231	5.231	0.000	20	25635	1.60	2.48	
22 Acetonitrile	40	5.295	5.295	0.000	98	37141	1.60	2.01	
23 Acetone	58	5.344	5.344	0.000	57	95003	4.80	5.13	
25 Isopropyl alcohol	45	5.436	5.436	0.000	83	321606	4.80	5.81	
24 Pentane	72	5.441	5.441	0.000	82	8369	1.60	1.49	
26 Ethyl ether	31	5.614	5.614	0.000	87	92692	1.60	2.34	
27 1,1-Dichloroethene	96	5.921	5.921	0.000	89	39073	1.60	1.43	
28 Acrylonitrile	53	6.029	6.029	0.000	96	50726	1.60	2.01	
30 2-Methyl-2-propanol	59	6.045	6.045	0.000	95	86700	1.60	1.55	
29 1,1,2-Trichloro-1,2,2-trifluoroe	101	6.099	6.099	0.000	89	85915	1.60	1.36	
31 Methylene Chloride	84	6.271	6.271	0.000	83	40466	1.60	1.48	
32 3-Chloro-1-propene	39	6.288	6.288	0.000	87	81964	1.60	1.52	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
33 Carbon disulfide	76	6.433	6.433	0.000	94	131032	1.60	1.42	
34 trans-1,2-Dichloroethene	96	7.080	7.080	0.000	83	45753	1.60	1.42	
35 2-Methylpentane	43	7.096	7.096	0.000	96	208568	1.60	1.66	
36 Methyl tert-butyl ether	73	7.215	7.215	0.000	89	118213	1.60	1.77	
37 1,1-Dichloroethane	63	7.496	7.496	0.000	97	125441	1.60	1.56	
38 Vinyl acetate	43	7.603	7.603	0.000	100	219119	1.60	2.08	
39 2-Butanone (MEK)	72	8.046	8.046	0.000	94	22977	1.60	1.72	
40 Hexane	56	8.072	8.072	0.000	84	64959	1.60	1.56	
41 Isopropyl ether	45	8.240	8.240	0.000	95	277890	1.60	2.01	
42 cis-1,2-Dichloroethene	96	8.477	8.477	0.000	94	50489	1.60	1.47	
43 Ethyl acetate	43	8.666	8.666	0.000	96	190937	1.60	2.07	
44 Chloroform	83	8.822	8.822	0.000	53	113738	1.60	1.46	
45 Tert-butyl ethyl ether	59	8.914	8.914	0.000	96	214842	1.60	1.85	
46 Tetrahydrofuran	42	9.237	9.237	0.000	90	93966	1.60	2.03	
47 1,1,1-Trichloroethane	97	9.847	9.847	0.000	84	111099	1.60	1.48	
48 1,2-Dichloroethane	62	9.954	9.954	0.000	91	95149	1.60	1.41	
51 n-Butanol	31	10.445	10.445	0.000	63	27645	1.60	1.44	
50 Benzene	78	10.445	10.445	0.000	92	167239	1.60	1.36	
49 Cyclohexane	69	10.451	10.451	0.000	80	28186	1.60	1.36	
52 Carbon tetrachloride	117	10.472	10.472	0.000	87	104353	1.60	1.37	
53 2,3-Dimethylpentane	71	10.569	10.569	0.000	91	42648	1.60	1.34	
54 Thiophene	84	10.720	10.720	0.000	89	95315	1.60	1.35	
55 Isooctane	57	11.211	11.211	0.000	98	433861	1.60	1.44	
56 n-Heptane	71	11.588	11.588	0.000	94	66222	1.60	1.37	
57 1,2-Dichloropropane	63	11.664	11.664	0.000	86	81791	1.60	1.46	
58 Trichloroethene	130	11.707	11.707	0.000	85	64576	1.60	1.20	
59 Dibromomethane	93	11.788	11.788	0.000	77	68145	1.60	1.29	
60 Dichlorobromomethane	83	11.933	11.933	0.000	93	132455	1.60	1.44	
61 1,4-Dioxane	88	11.971	11.971	0.000	76	17928	1.60	1.25	
62 Methyl methacrylate	41	12.030	12.030	0.000	78	114828	1.60	1.81	
63 Methylcyclohexane	83	12.478	12.478	0.000	83	106411	1.60	1.31	
64 4-Methyl-2-pentanone (MIBK)	43	12.888	12.888	0.000	98	194283	1.60	1.82	
65 cis-1,3-Dichloropropene	75	12.931	12.931	0.000	92	99427	1.60	1.35	
66 trans-1,3-Dichloropropene	75	13.632	13.632	0.000	90	89212	1.60	1.46	
67 Toluene	91	13.756	13.756	0.000	93	192283	1.60	1.47	
68 1,1,2-Trichloroethane	83	13.826	13.826	0.000	91	60742	1.60	1.48	
69 2-Hexanone	58	14.225	14.225	0.000	90	78572	1.60	1.62	
70 n-Octane	85	14.452	14.452	0.000	98	65309	1.60	1.37	
71 Chlorodibromomethane	129	14.533	14.533	0.000	92	111457	1.60	1.44	
72 Ethylene Dibromide	107	14.824	14.824	0.000	97	103971	1.60	1.41	
73 Tetrachloroethene	129	14.899	14.899	0.000	87	61073	1.60	1.24	
75 Chlorobenzene	112	15.778	15.778	0.000	81	146326	1.60	1.38	
74 2,3-Dimethylheptane	43	15.800	15.800	0.000	88	357469	1.60	1.58	
78 Ethylbenzene	91	16.064	16.064	0.000	98	250711	1.60	1.49	
79 m-Xylene & p-Xylene	91	16.231	16.231	0.000	96	385067	3.20	2.89	
80 n-Nonane	57	16.652	16.652	0.000	93	201820	1.60	1.54	
81 Bromoform	173	16.679	16.679	0.000	78	98689	1.60	1.52	
82 Styrene	104	16.695	16.695	0.000	92	149764	1.60	1.55	
83 o-Xylene	91	16.754	16.754	0.000	94	197735	1.60	1.47	
84 1,1,2,2-Tetrachloroethane	83	17.078	17.078	0.000	97	166915	1.60	1.55	
85 1,2,3-Trichloropropane	110	17.234	17.234	0.000	83	40049	1.60	1.52	
86 Isopropylbenzene	105	17.342	17.342	0.000	97	262141	1.60	1.48	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
87 N-Propylbenzene	120	17.881	17.881	0.000	98	71185	1.60	1.51	
88 2-Chlorotoluene	126	17.930	17.930	0.000	47	66150	1.60	1.46	
89 4-Ethyltoluene	105	18.032	18.032	0.000	98	268462	1.60	1.52	
90 1,3,5-Trimethylbenzene	120	18.113	18.113	0.000	91	108262	1.60	1.53	
92 Alpha Methyl Styrene	118	18.340	18.340	0.000	84	111942	1.60	1.60	
93 n-Decane	57	18.399	18.399	0.000	83	258376	1.60	1.62	
94 tert-Butylbenzene	119	18.534	18.534	0.000	84	237581	1.60	1.53	
95 1,2,4-Trimethylbenzene	105	18.544	18.544	0.000	89	234537	1.60	1.52	
96 sec-Butylbenzene	105	18.798	18.798	0.000	98	359587	1.60	1.54	
97 1,3-Dichlorobenzene	146	18.814	18.814	0.000	93	157722	1.60	1.43	
98 Benzyl chloride	91	18.890	18.890	0.000	95	242578	1.60	1.67	
99 1,4-Dichlorobenzene	146	18.900	18.900	0.000	89	158829	1.60	1.42	
100 4-Isopropyltoluene	119	18.965	18.965	0.000	80	290956	1.60	1.61	
101 1,2,3-Trimethylbenzene	105	19.014	19.014	0.000	79	242888	1.60	1.82	
102 Butylcyclohexane	83	19.073	19.073	0.000	83	228113	1.60	1.51	
104 1,2-Dichlorobenzene	146	19.262	19.262	0.000	80	158408	1.60	1.50	
103 2,3-Dihydroindene	117	19.262	19.262	0.000	89	235281	1.60	1.52	
106 Indene	116	19.391	19.391	0.000	79	212742	1.60	1.61	
105 n-Butylbenzene	91	19.396	19.396	0.000	96	327003	1.60	1.60	
107 Undecane	57	19.704	19.704	0.000	89	294442	1.60	1.66	
108 1,2-Dibromo-3-Chloropropane	157	19.860	19.860	0.000	89	92526	1.60	1.97	
109 1,2,4,5-Tetramethylbenzene	119	20.146	20.146	0.000	97	278318	1.60	1.93	
110 Dodecane	57	20.761	20.761	0.000	88	308875	1.60	1.99	
111 1,2,4-Trichlorobenzene	180	20.955	20.955	0.000	93	145675	1.60	1.57	
112 Naphthalene	128	21.095	21.095	0.000	98	340091	1.60	1.52	
113 Hexachlorobutadiene	225	21.305	21.305	0.000	84	138984	1.60	1.77	
114 1,2,3-Trichlorobenzene	180	21.370	21.370	0.000	93	143428	1.60	1.60	
115 2-Methylnaphthalene	142	22.141	22.141	0.000	95	160296	1.60	1.66	
116 1-Methylnaphthalene	142	22.314	22.314	0.000	98	179524	1.60	1.83	
A 122 C8 Range	1	14.436	(14.393-14.522)		0	886202	1.60	1.53	
S 123 1,2-Dichloroethene, Total	1				0		3.20	2.89	
S 124 Xylenes, Total	100				0		4.80	4.36	

Reagents:

40CV101P_00121	Amount Added: 80.00	Units: ml	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

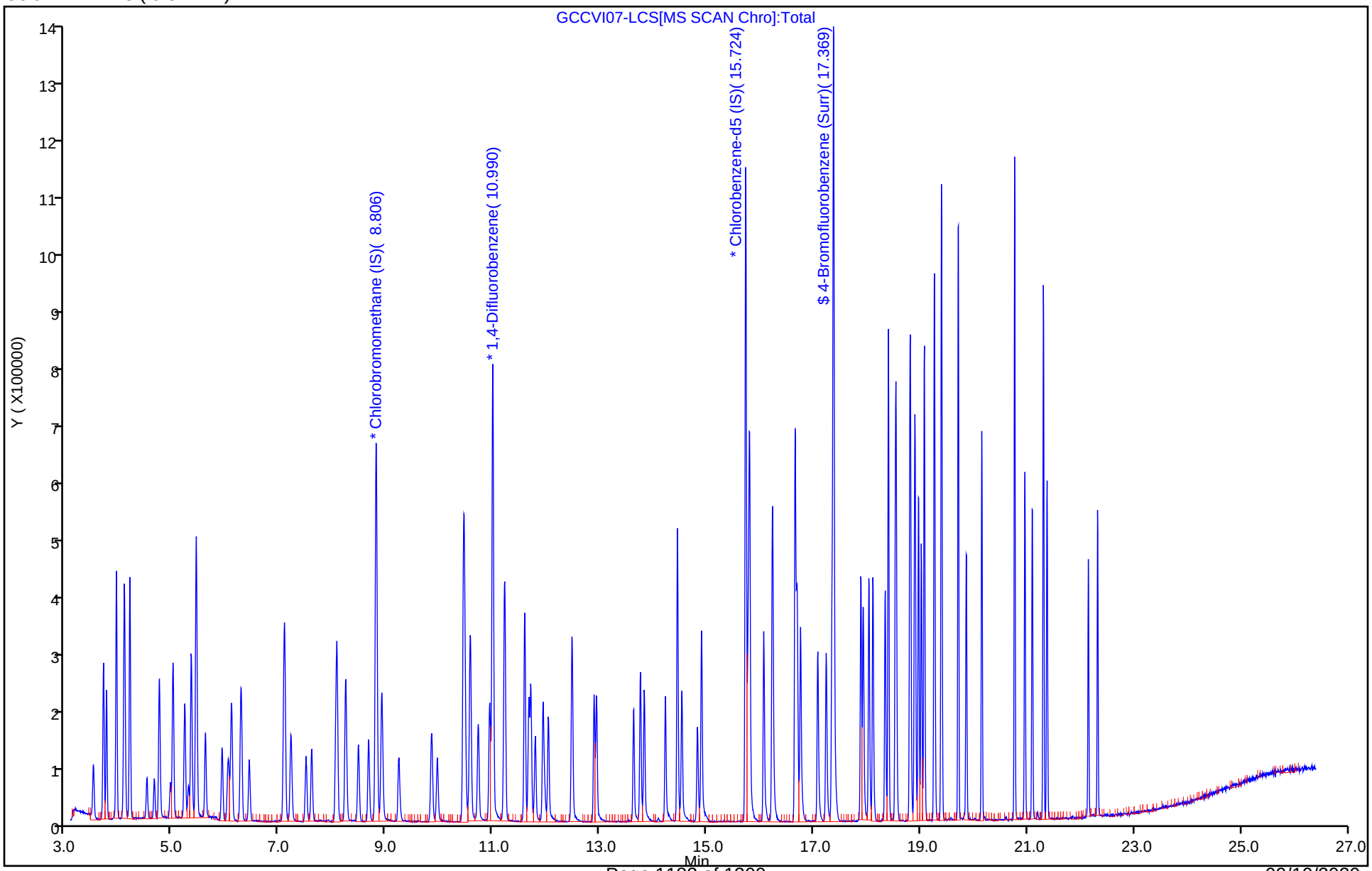
Report Date: 08-Sep-2020 13:12:34 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins Environment Testing America

Data File: \\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GCCVI07-LCS.d

Injection Date:	07-Sep-2020 08:06:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	LCS			Worklist Smp#:	1002
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins Environment Testing America
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\GCCVI07-LCS.d				
Lims ID:	LCS				
Client ID:					
Sample Type:	LCS				
Inject. Date:	07-Sep-2020 08:06:30	ALS Bottle#:	2	Worklist Smp#:	1002
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016513-010				
Misc. Info.:	S121 80ML				
Operator ID:	HMT	Instrument ID:	MG		
Method:	\\chromfs\Knoxville\ChromData\MG\20200904-16516.b\MG_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	08-Sep-2020 13:12:30	Calib Date:	02-Sep-2020 03:27:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1021				

First Level Reviewer: barlozhetskayaa Date: 08-Sep-2020 13:12:30

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	4.73	101.87

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 140-42503/1002

Matrix: Air Lab File ID: GCCVI08Z-LCS.d

Analysis Method: TO 15 LL Date Collected:

Sample wt/vol: 500(mL) Date Analyzed: 09/08/2020 15:52

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42503 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	1.41		0.080	0.0080
56-23-5	Carbon tetrachloride	153.81	1.51		0.080	0.0070
75-45-6	Chlorodifluoromethane	86.47	1.73		0.080	0.022
67-66-3	Chloroform	119.38	1.49		0.080	0.0070
156-59-2	cis-1,2-Dichloroethene	96.94	1.49		0.080	0.010
75-71-8	Dichlorodifluoromethane	120.91	1.48		0.080	0.014
75-34-3	1,1-Dichloroethane	98.96	1.65		0.080	0.0070
107-06-2	1,2-Dichloroethane	98.96	1.46		0.080	0.010
75-35-4	1,1-Dichloroethene	96.94	1.54		0.080	0.0080
100-41-4	Ethylbenzene	106.17	1.39		0.080	0.013
75-09-2	Methylene Chloride	84.93	1.54		0.40	0.39
1634-04-4	Methyl tert-butyl ether	88.15	1.52		0.40	0.052
91-20-3	Naphthalene	128.17	1.17		0.040	0.040
127-18-4	Tetrachloroethene	165.83	1.24		0.080	0.0070
108-88-3	Toluene	92.14	1.37		0.12	0.078
156-60-5	trans-1,2-Dichloroethene	96.94	1.44		0.080	0.0070
120-82-1	1,2,4-Trichlorobenzene	181.45	1.13		0.080	0.064
71-55-6	1,1,1-Trichloroethane	133.41	1.45		0.080	0.037
79-00-5	1,1,2-Trichloroethane	133.41	1.36		0.080	0.0070
79-01-6	Trichloroethene	131.39	1.26		0.040	0.0060
526-73-8	1,2,3-Trimethylbenzene	120.19	1.09		0.080	0.036
95-63-6	1,2,4-Trimethylbenzene	120.20	1.26		0.080	0.020
108-67-8	1,3,5-Trimethylbenzene	120.20	1.46		0.080	0.022
75-01-4	Vinyl chloride	62.50	1.73		0.040	0.026
1330-20-7	Xylenes, Total	106.17	4.10		0.16	0.024

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	104		60-140

Eurofins Environment Testing America
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GCCVI08Z-LCS.d
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 08-Sep-2020 15:52:30 ALS Bottle#: 16 Worklist Smp#: 1002
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016519-002
Misc. Info.: s127 80ML
Operator ID: HMT Instrument ID: MG

Method: \\chromfs\Knoxville\ChromData\MG\20200904-16519.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 09-Sep-2020 14:14:33 Calib Date: 02-Sep-2020 03:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1034

First Level Reviewer: barlozhetskayaa Date: 09-Sep-2020 13:53:41

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.806	8.806	0.000	85	85639	4.80	4.80	
* 2 1,4-Difluorobenzene	114	10.990	10.990	0.000	98	429335	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.724	15.724	0.000	96	458464	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.369	17.369	0.000	81	348774	4.64	4.85	
6 Chlorodifluoromethane	51	3.699	3.699	0.000	97	133039	1.60	1.73	
7 Propene	41	3.710	3.710	0.000	99	64247	1.60	1.70	
8 Dichlorodifluoromethane	85	3.764	3.764	0.000	97	126670	1.60	1.48	
9 Chloromethane	52	3.942	3.942	0.000	82	27660	1.60	1.80	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.947	3.947	0.000	92	67647	1.60	1.38	
11 Acetaldehyde	44	4.093	4.093	0.000	99	139783	8.00	7.74	
12 Vinyl chloride	62	4.109	4.109	0.000	99	74241	1.60	1.73	
14 Butadiene	54	4.201	4.201	0.000	64	72459	1.60	1.92	
13 Butane	43	4.201	4.201	0.000	87	154234	1.60	2.01	
15 Bromomethane	94	4.519	4.519	0.000	98	39779	1.60	1.54	
16 Chloroethane	64	4.659	4.659	0.000	81	30770	1.60	1.73	
17 Ethanol	31	4.751	4.751	0.000	97	131351	8.00	8.11	
18 Vinyl bromide	106	4.961	4.961	0.000	96	35403	1.60	1.60	
19 2-Methylbutane	43	5.010	5.010	0.000	94	117808	1.60	2.26	
20 Trichlorofluoromethane	101	5.225	5.225	0.000	96	103761	1.60	1.56	
21 Acrolein	56	5.236	5.236	0.000	38	21599	1.60	2.71	
22 Acetonitrile	40	5.295	5.295	0.000	100	27032	1.60	1.90	
23 Acetone	58	5.349	5.349	0.000	99	23895	1.60	1.67	
25 Isopropyl alcohol	45	5.441	5.441	0.000	43	114409	1.60	2.68	
24 Pentane	72	5.452	5.452	0.000	93	7319	1.60	1.69	
26 Ethyl ether	31	5.614	5.614	0.000	86	72439	1.60	2.37	
27 1,1-Dichloroethene	96	5.921	5.921	0.000	88	32508	1.60	1.54	
28 Acrylonitrile	53	6.029	6.029	0.000	95	38676	1.60	1.99	
30 2-Methyl-2-propanol	59	6.045	6.045	0.000	95	78702	1.60	1.83	
29 1,1,2-Trichloro-1,2,2-trifluoroe	101	6.099	6.099	0.000	86	70792	1.60	1.45	
31 Methylene Chloride	84	6.271	6.271	0.000	85	32562	1.60	1.54	
32 3-Chloro-1-propene	39	6.288	6.288	0.000	92	65271	1.60	1.58	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
33 Carbon disulfide	76	6.433	6.433	0.000	94	109229	1.60	1.54	
34 trans-1,2-Dichloroethene	96	7.086	7.086	0.000	89	35814	1.60	1.44	
35 2-Methylpentane	43	7.096	7.096	0.000	96	158659	1.60	1.64	
36 Methyl tert-butyl ether	73	7.215	7.215	0.000	89	78397	1.60	1.52	
37 1,1-Dichloroethane	63	7.495	7.495	0.000	98	101940	1.60	1.65	
38 Vinyl acetate	43	7.603	7.603	0.000	100	156579	1.60	1.93	
39 2-Butanone (MEK)	72	8.045	8.045	0.000	93	14408	1.60	1.40	
40 Hexane	56	8.078	8.078	0.000	91	52442	1.60	1.64	
41 Isopropyl ether	45	8.234	8.234	0.000	96	185601	1.60	1.74	
42 cis-1,2-Dichloroethene	96	8.482	8.482	0.000	93	39279	1.60	1.49	
43 Ethyl acetate	43	8.666	8.666	0.000	96	107166	1.60	1.51	
44 Chloroform	83	8.817	8.817	0.000	92	89711	1.60	1.49	
45 Tert-butyl ethyl ether	59	8.919	8.919	0.000	96	128214	1.60	1.43	
46 Tetrahydrofuran	42	9.232	9.232	0.000	89	64442	1.60	1.81	
47 1,1,1-Trichloroethane	97	9.852	9.852	0.000	93	83716	1.60	1.45	
48 1,2-Dichloroethane	62	9.954	9.954	0.000	93	70957	1.60	1.46	
51 n-Butanol	31	10.434	10.434	0.000	70	27548	1.60	2.01	
50 Benzene	78	10.445	10.445	0.000	91	124248	1.60	1.41	
49 Cyclohexane	69	10.450	10.450	0.000	83	21712	1.60	1.46	
52 Carbon tetrachloride	117	10.467	10.467	0.000	89	82641	1.60	1.51	
53 2,3-Dimethylpentane	71	10.575	10.575	0.000	89	32317	1.60	1.42	
54 Thiophene	84	10.720	10.720	0.000	90	70311	1.60	1.39	
55 Isooctane	57	11.216	11.216	0.000	97	351776	1.60	1.63	
56 n-Heptane	71	11.588	11.588	0.000	95	52709	1.60	1.52	
57 1,2-Dichloropropane	63	11.664	11.664	0.000	88	61193	1.60	1.52	
58 Trichloroethene	130	11.702	11.702	0.000	86	48534	1.60	1.26	
59 Dibromomethane	93	11.788	11.788	0.000	84	52979	1.60	1.40	
60 Dichlorobromomethane	83	11.933	11.933	0.000	92	97586	1.60	1.48	
61 1,4-Dioxane	88	11.966	11.966	0.000	85	12169	1.60	1.18	
62 Methyl methacrylate	41	12.030	12.030	0.000	85	68494	1.60	1.51	
63 Methylcyclohexane	83	12.478	12.478	0.000	83	100568	1.60	1.73	
64 4-Methyl-2-pentanone (MIBK)	43	12.888	12.888	0.000	96	134588	1.60	1.76	
65 cis-1,3-Dichloropropene	75	12.936	12.936	0.000	96	75451	1.60	1.43	
66 trans-1,3-Dichloropropene	75	13.627	13.627	0.000	88	65495	1.60	1.39	
67 Toluene	91	13.756	13.756	0.000	92	138264	1.60	1.37	
68 1,1,2-Trichloroethane	83	13.826	13.826	0.000	91	43025	1.60	1.36	
69 2-Hexanone	58	14.225	14.225	0.000	89	62823	1.60	1.68	
70 n-Octane	85	14.452	14.452	0.000	98	51442	1.60	1.40	
71 Chlorodibromomethane	129	14.533	14.533	0.000	92	81847	1.60	1.37	
72 Ethylene Dibromide	107	14.824	14.824	0.000	97	72258	1.60	1.27	
73 Tetrachloroethene	129	14.899	14.899	0.000	85	47229	1.60	1.24	
75 Chlorobenzene	112	15.773	15.773	0.000	88	111296	1.60	1.36	
74 2,3-Dimethylheptane	43	15.800	15.800	0.000	90	251682	1.60	1.44	
78 Ethylbenzene	91	16.064	16.064	0.000	98	180695	1.60	1.39	
79 m-Xylene & p-Xylene	91	16.231	16.231	0.000	96	280616	3.20	2.73	
80 n-Nonane	57	16.652	16.652	0.000	94	152984	1.60	1.51	
81 Bromoform	173	16.673	16.673	0.000	88	67010	1.60	1.34	
82 Styrene	104	16.695	16.695	0.000	95	107471	1.60	1.44	
83 o-Xylene	91	16.754	16.754	0.000	97	142681	1.60	1.37	
84 1,1,2,2-Tetrachloroethane	83	17.078	17.078	0.000	96	117711	1.60	1.42	
85 1,2,3-Trichloropropane	110	17.234	17.234	0.000	91	27285	1.60	1.34	
86 Isopropylbenzene	105	17.342	17.342	0.000	97	188407	1.60	1.38	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
87 N-Propylbenzene	120	17.881	17.881	0.000	97	48641	1.60	1.33	
88 2-Chlorotoluene	126	17.930	17.930	0.000	97	49726	1.60	1.42	
89 4-Ethyltoluene	105	18.032	18.032	0.000	98	172903	1.60	1.27	
90 1,3,5-Trimethylbenzene	120	18.108	18.108	0.000	91	79423	1.60	1.46	
92 Alpha Methyl Styrene	118	18.340	18.340	0.000	86	73871	1.60	1.37	
93 n-Decane	57	18.399	18.399	0.000	84	185869	1.60	1.51	
94 tert-Butylbenzene	119	18.528	18.528	0.000	90	149316	1.60	1.24	
95 1,2,4-Trimethylbenzene	105	18.544	18.544	0.000	96	149812	1.60	1.26	
96 sec-Butylbenzene	105	18.803	18.803	0.000	98	229281	1.60	1.27	
97 1,3-Dichlorobenzene	146	18.814	18.814	0.000	95	101742	1.60	1.20	
98 Benzyl chloride	91	18.890	18.890	0.000	96	153721	1.60	1.37	
99 1,4-Dichlorobenzene	146	18.900	18.900	0.000	87	102686	1.60	1.19	
100 4-Isopropyltoluene	119	18.965	18.965	0.000	96	169334	1.60	1.22	
101 1,2,3-Trimethylbenzene	105	19.014	19.014	0.000	98	111405	1.60	1.09	
102 Butylcyclohexane	83	19.073	19.073	0.000	84	155244	1.60	1.33	
103 2,3-Dihydroindene	117	19.256	19.256	0.000	91	145924	1.60	1.22	
104 1,2-Dichlorobenzene	146	19.262	19.262	0.000	81	100767	1.60	1.24	
106 Indene	116	19.391	19.391	0.000	95	111736	1.60	1.09	
105 n-Butylbenzene	91	19.396	19.396	0.000	98	203063	1.60	1.29	
107 Undecane	57	19.704	19.704	0.000	89	192086	1.60	1.40	
108 1,2-Dibromo-3-Chloropropane	157	19.855	19.855	0.000	78	38612	1.60	1.10	
109 1,2,4,5-Tetramethylbenzene	119	20.146	20.146	0.000	96	143011	1.60	1.31	
110 Dodecane	57	20.761	20.761	0.000	87	176205	1.60	1.47	
111 1,2,4-Trichlorobenzene	180	20.955	20.955	0.000	92	81213	1.60	1.13	
112 Naphthalene	128	21.090	21.090	0.000	98	202730	1.60	1.17	
113 Hexachlorobutadiene	225	21.300	21.300	0.000	90	72287	1.60	1.19	
114 1,2,3-Trichlorobenzene	180	21.370	21.370	0.000	94	79631	1.60	1.15	
115 2-Methylnaphthalene	142	22.141	22.141	0.000	99	115215	1.60	1.55	
116 1-Methylnaphthalene	142	22.314	22.314	0.000	99	120778	1.60	1.59	
A 122 C8 Range	1	14.474	(14.393-14.554)		0	727964	1.60	1.63	
S 123 1,2-Dichloroethene, Total	1				0		3.20	2.93	
S 124 Xylenes, Total	100				0		4.80	4.10	
T 136 2-Methylthiophene TIC	97	13.907	13.907	0.000	97	102291	1.60	1.07	
T 137 3-Methylthiophene TIC	97	14.107	14.107	0.000	97	104672	1.60	1.10	
T 154 2-Ethylthiophene TIC	97	16.166	16.166	0.000	95	129343	1.60	1.35	
T 160 1,2-Dimethyl-4-Ethylbenzene TIC	119	19.763	19.763	0.000	96	114988	1.60	1.20	
T 161 1,2,3,5-Tetramethylbenzene TIC	119	20.200	20.200	0.000	94	86137	1.60	0.9018	
T 162 1,2,3,4-Tetramethylbenzene TIC	119	20.599	20.599	0.000	97	115894	1.60	1.21	a
T 163 Benzo(b)thiophene TIC	134	21.192	21.192	0.000	97	108671	1.60	1.14	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

40CV101S_00127	Amount Added: 80.00	Units: mL	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

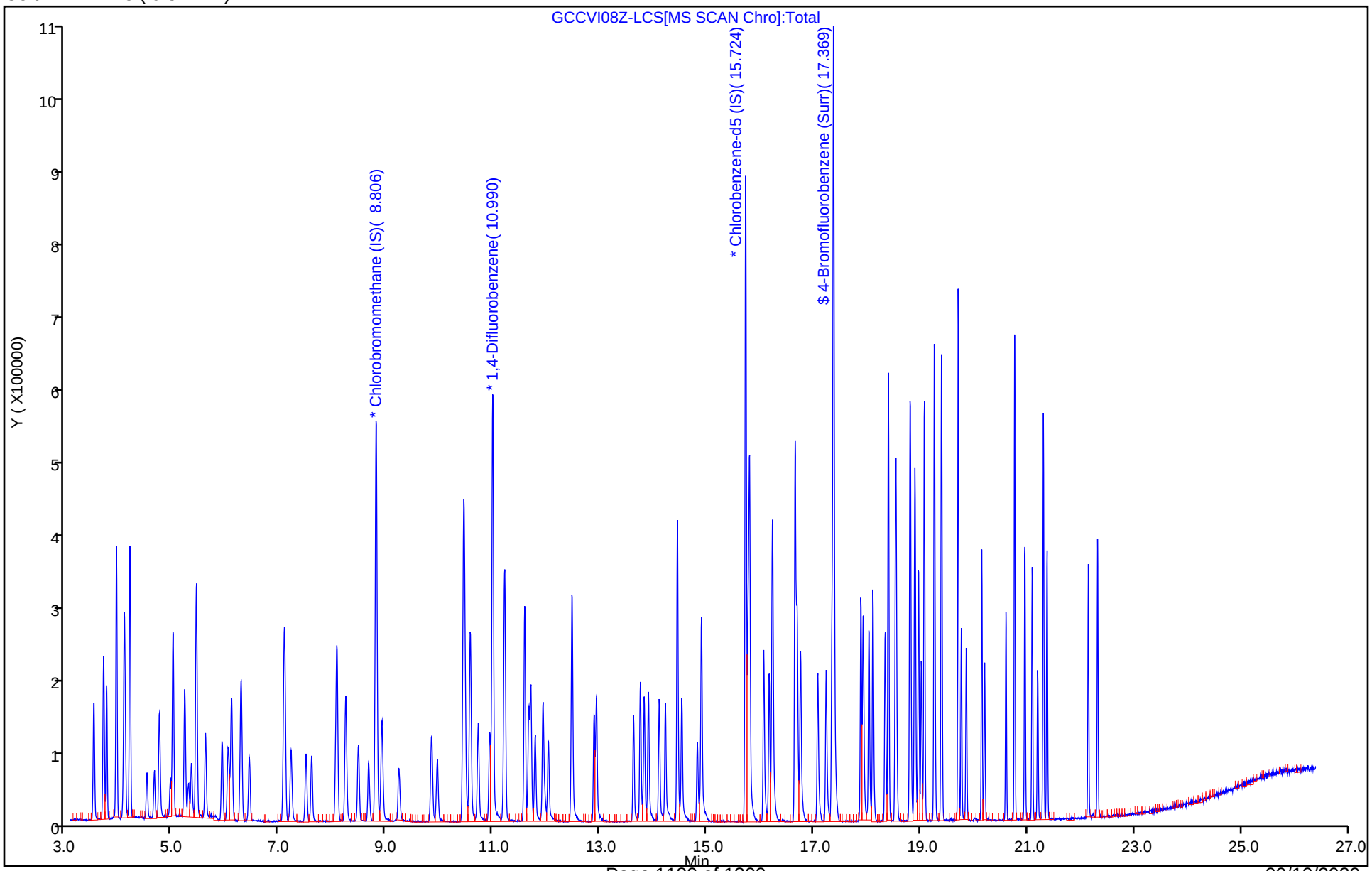
Report Date: 09-Sep-2020 14:14:38 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins Environment Testing America

Data File: \\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GCCVI08Z-LCS.d

Injection Date:	08-Sep-2020 15:52:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	LCS			Worklist Smp#:	1002
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins Environment Testing America
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GCCVI08Z-LCS.d				
Lims ID:	LCS				
Client ID:					
Sample Type:	LCS				
Inject. Date:	08-Sep-2020 15:52:30	ALS Bottle#:	16	Worklist Smp#:	1002
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016519-002				
Misc. Info.:	s127 80ML				
Operator ID:	HMT	Instrument ID:	MG		
Method:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\MG_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	09-Sep-2020 14:14:33	Calib Date:	02-Sep-2020 03:27:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1034				

First Level Reviewer: barlozhetskayaa Date: 09-Sep-2020 13:53:41

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	4.85	104.48

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Instrument ID: MH Start Date: 08/29/2020 10:00

Analysis Batch Number: 42290 End Date: 08/30/2020 09:10

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 140-42290/1		08/29/2020 10:00	1	HBFBH29.D	RTX-5 0.32(mm)
IC 140-42290/3		08/29/2020 12:34	1	HH29IC10.D	RTX-5 0.32(mm)
IC 140-42290/5		08/29/2020 14:25	1	HH29IC09.D	RTX-5 0.32(mm)
IC 140-42290/7		08/29/2020 16:25	1	HH29IC08.D	RTX-5 0.32(mm)
IC 140-42290/9		08/29/2020 18:16	1	HH29IC01.D	RTX-5 0.32(mm)
IC 140-42290/10		08/29/2020 19:13	1	HH29IC02.D	RTX-5 0.32(mm)
IC 140-42290/11		08/29/2020 20:11	1	HH29IC03.D	RTX-5 0.32(mm)
IC 140-42290/12		08/29/2020 21:03	1	HH29IC04.D	RTX-5 0.32(mm)
IC 140-42290/13		08/29/2020 21:58	1	HH29IC05.D	RTX-5 0.32(mm)
IC 140-42290/14		08/29/2020 22:57	1	HH29IC06.D	RTX-5 0.32(mm)
ICIS 140-42290/15		08/29/2020 23:57	1	HH29IC07.D	RTX-5 0.32(mm)
ICV 140-42290/18		08/30/2020 02:47	1	HH29LCS.D	RTX-5 0.32(mm)
CCVIS 140-42290/28		08/30/2020 02:47	1		RTX-5 0.32(mm)
ZZZZZ		08/30/2020 05:54	1		RTX-5 0.32(mm)
ZZZZZ		08/30/2020 06:59	1		RTX-5 0.32(mm)
ZZZZZ		08/30/2020 08:04	1		RTX-5 0.32(mm)
ZZZZZ		08/30/2020 09:10	1		RTX-5 0.32(mm)

Eurofins/TestAmerica Knoxville GC/MS Air - Initial Calibration Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 21 & KNOX-MS-0023, Rev 4

Analysis Date:	8/29/20	Instrument:	MH	Chrom WL #:	16451	TALS Batch & Event #	TO14/15: 42290 / 2592	DOD5: 42291 / 2593
							DOD: 42293 / 2595	OHIO: 42292 / 2594

Chrom/Worklist Review	1st	Comments	2nd
1. Re-read each Limit Group [method editor-limit groups]	✓		na
2. Verify LODV in Chrom [method editor -> edit -> MDL]	✓		na
3. Are the reagents and init/final volumes correct and first level "unlock/clear"? (Verify reagents & amt. injected at each level) [WL Sample Reagents Tab vs. Entech]	✓		✓
4. Files linked properly to calibration levels? [Sample List- Lab ID vs. Info]	✓		✓
5. Did BFB meet tune criteria? [F8]	✓		✓
6. Were all standards injected within 24 hr of BFB? [F7]	✓		✓
7. High point checked for saturation and point removed if so? [Chrom]	✓		✓
8. If manual integrations performed, are they properly performed, correct, baseline clearly identified, and correct reason given? [Chrom]	✓	(M) CDFM lvl 9	
9. RT for each IS ±20 sec avg. RT? [F6 IstdRec]	✓		✓
10. Area for each IS ± 40% avg. area? [F6 IstdRec]	✓		✓
11. Each analyte ± 0.06 RRT of avg. RRT? [F6 - RRT]	✓		✓
12. Elution order checked on isomeric pairs? [Chrom]			
• dichlorodifluoromethane / 1,2-dichlorotetrafluoroethane	✓		✓
• 2-methyl butane / acrolein	✓		✓
• trichlorofluoromethane / 1,1,2-trichlorotrifluoroethane	✓		✓
• vinyl acetate / hexane	✓		✓
• cis- and trans- isomers	✓		✓
• ethyl benzene / m/p-xylene / o-xylene	✓		✓
• n-propylbenzene/4-ethyl toluene/1,3,5-trimethylbenzene/1,2,4-trimethylbenzene/ sec-butylbenzene/1,2,3-trimethylbenzene	✓		✓
• tert-butylbenzene/4-isopropyltoluene	✓		✓
• 1,3- , 1,4- , and 1,2-dichlorobenzene	✓		✓
• 1,2-dimethyl-4-ethylbenzene/1,2,4,5-, 1,2,3,5-, and 1,2,3,4-tetramethylbenzenes	✓		lnicc
• 1,2,4- and 1,2,3-trichlorobenzenes	✓		✓
• 2-, and 1-methylnaphthalene	✓		✓
13. "Range" analytes & internal standard RIC ID'd correctly, inspected for interferences & proper integration?	✓		✓

MLG Review	TO	DOD	OH	Comments	TO-	DOD	OH
14. Is %RSD for all target analytes ≤ 30%? (with up to 2 compounds with RSD ≤ 40%) 1& 2 methylnaphthalene ≤ 50% naph 1,2,4-tc/bz [F6 Σ]	✓	✓	✓		✓	✓	✓
15. Were at least 5 levels of each compound analyzed? [F6]	✓	✓	✓		✓	✓	✓
16. Is low level std at or <RL and are the remaining points consec.? [F6]	✓	✓	✓		✓	✓	✓
17. At least 6 consec. points used for quad curves; at least 5 consec. points for linear curves? (Note: Ohio does not allow quad) [F6]	✓	✓	✓		✓	✓	✓
18. If curves were used, is correlation coefficient ≥0.990? [F6]	✓	✓	✓		✓	✓	✓
19. Is the intercept less than the RL for each curve? [F6]	✓	✓	✓		✓	✓	✓
20. For quadratic: is a tangent's slope to the curve entirely positive or negative and continuous. [Cntrl-C, details]	✓	✓	na		✓	✓	na
21. Is low point RSE ≤ 50 %? [F6]	✓	✓	✓		✓	✓	✓
22. Is the second source analysis within limits? [F8 - icv]	✓	✓	✓		✓	✓	✓

Analyst/Date: JS 8/31/20 — **2nd Level Reviewer/Date:** 8/31/20

TALS Review	TO	DOD	OH	Comments	TO	DOD	OH
23. Upload ICAL		✓			na	na	na
24. Graphics uploaded? [paperclip]	✓	✓	✓		✓	✓	✓
25. All points are in the most recent active calibration event? [Calibration Events –'Fix ICAL linkage' if needed]	✓	✓	✓		✓	✓	✓
26. Runs linked to BFB? [QC Links]	✓	✓	✓		✓	✓	✓
27. Run Checklist and acknowledge findings [F8]	✓	✓	✓		✓	✓	✓
28. If criteria not met, was a NCM generated?	NA →				✓	✓	✓
29. After review in TALS, approve the method in TALS.	na	na	na		✓	✓	✓
30. After verifying TALS is correct, lock method in Chrom <resolve any error issues>	na	na	na		✓	✓	✓
31. Checklist & Entech report scanned, attached & assigned properly?	na	na	na		✓	✓	✓

Analyst/date: JS 8/31/20	2nd Level Reviewer/date: 8/31/20
Comments: DNA 1 or 2-methylnapth.	Comments:

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Instrument ID: MG Start Date: 09/01/2020 16:42

Analysis Batch Number: 42295 End Date: 09/02/2020 08:56

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 140-42295/1		09/01/2020 16:42	1	GI01BFB.D	RTX-5 0.32(mm)
IC 140-42295/3		09/01/2020 18:07	1	GI01IC10.D	RTX-5 0.32(mm)
IC 140-42295/5		09/01/2020 19:43	1	GI01IC09.D	RTX-5 0.32(mm)
IC 140-42295/7		09/01/2020 21:19	1	GI01IC08.D	RTX-5 0.32(mm)
IC 140-42295/9		09/01/2020 22:55	1	GI01IC01.D	RTX-5 0.32(mm)
IC 140-42295/10		09/01/2020 23:39	1	GI01IC02.D	RTX-5 0.32(mm)
140-19589-A-5 MDLV		09/01/2020 23:39	1		RTX-5 0.32(mm)
IC 140-42295/11		09/02/2020 00:24	1	GI01IC03.D	RTX-5 0.32(mm)
140-19589-A-6 MDLV		09/02/2020 00:24	1		RTX-5 0.32(mm)
IC 140-42295/12		09/02/2020 01:08	1	GI01IC04.D	RTX-5 0.32(mm)
140-19589-A-7 MDLV		09/02/2020 01:08	1		RTX-5 0.32(mm)
IC 140-42295/13		09/02/2020 01:52	1	GI01IC05.D	RTX-5 0.32(mm)
140-19589-A-8 MDLV		09/02/2020 01:52	1		RTX-5 0.32(mm)
IC 140-42295/14		09/02/2020 02:38	1	GI01IC06.D	RTX-5 0.32(mm)
ICIS 140-42295/15		09/02/2020 03:27	1	GI01IC07.D	RTX-5 0.32(mm)
ZZZZZ		09/02/2020 07:23	1		RTX-5 0.32(mm)
ZZZZZ		09/02/2020 08:08	1		RTX-5 0.32(mm)
ICV 140-42295/22		09/02/2020 08:56	1	GI01ICVR.D	RTX-5 0.32(mm)

Eurofins/TestAmerica Knoxville GC/MS Air - Initial Calibration Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 21 & KNOX-MS-0023, Rev 4

Analysis Date:	9/1/20	Instrument:	MG	Chrom WL #:	16453	TALS Batch & Event #	TO14/15: 2602 / 42295	DOD: 2603 42296
							DOD: 2605 / 42298	OHIO: 2604 / 42297

Chrom/Worklist Review	1st	Comments	2nd
1. Re-read each Limit Group [method editor-limit groups]	✓		na
2. Verify LODV in Chrom [method editor -> edit -> MDL]	✓		na
3. Are the reagents and init/final volumes correct and first level "unlock/clear"? (Verify reagents & amt. injected at each level) [WL Sample Reagents Tab vs. Entech]	✓		✓
4. Files linked properly to calibration levels? [Sample List- Lab ID vs. Info]	✓		✓
5. Did BFB meet tune criteria? [F8]	✓		✓
6. Were all standards injected within 24 hr of BFB? [F7]	✓		✓
7. High point checked for saturation and point removed if so? [Chrom]	✓		✓
8. If manual integrations performed, are they properly performed, correct, baseline clearly identified, and correct reason given? [Chrom]	✓		NA
9. RT for each IS ±20 sec avg. RT? [F6 IstdRec]	✓		✓
10. Area for each IS ± 40% avg. area? [F6 IstdRec]	✓		✓
11. Each analyte ± 0.06 RRT of avg. RRT? [F6 - RRT]	✓		✓
12. Elution order checked on isomeric pairs? [Chrom]			
• dichlorodifluoromethane / 1,2-dichlorotetrafluoroethane	✓		✓
• 2-methyl butane / acrolein	✓		✓
• trichlorofluoromethane / 1,1,2-trichlorotrifluoroethane	✓		✓
• vinyl acetate / hexane	✓		✓
• cis- and trans- isomers	✓		✓
• ethyl benzene / m/p-xylene / o-xylene	✓		✓
• n-propylbenzene/4-ethyl toluene/1,3,5-trimethylbenzene/1,2,4-trimethylbenzene/ sec-butylbenzene/1,2,3-trimethylbenzene	✓		✓
• tert-butylbenzene/4-isopropyltoluene	✓		✓
• 1,3- , 1,4- , and 1,2-dichlorobenzene	✓		✓
• 1,2-dimethyl-4-ethylbenzene/1,2,4,5-, 1,2,3,5-, and 1,2,3,4-tetramethylbenzenes	N	In ICV	✓
• 1,2,4- and 1,2,3-trichlorobenzenes	✓		✓
• 2-, and 1-methylnaphthalene	✓		✓
13. "Range" analytes & internal standard RIC ID'd correctly, inspected for interferences & proper integration?	✓		✓

MLG Review	TO	DOD	OH	Comments	TO-	DOD	OH
14. Is %RSD for all target analytes ≤ 30%? (with up to 2 compounds with RSD ≤ 40%) 1& 2 methylnaphthalene ≤ 50% [F6 Σ]	✓	✓	✓		✓	✓	✓
15. Were at least 5 levels of each compound analyzed? [F6]	✓	✓	✓		✓	✓	✓
16. Is low level std at or <RL and are the remaining points consec.? [F6]	✓	✓			✓	✓	✓
17. At least 6 consec. points used for quad curves; at least 5 consec. points for linear curves? (Note: Ohio does not allow quad) [F6]	✓	✓	✓		✓	✓	✓
18. If curves were used, is correlation coefficient ≥0.990? [F6]	✓	✓	✓		✓	✓	✓
19. Is the intercept less than the RL for each curve? [F6]	✓	✓	✓		✓	✓	✓
20. For quadratic: is a tangent's slope to the curve entirely positive or negative and continuous. [Cntrl-C, details]	✓	✓	na		✓	✓	na
21. Is low point RSE ≤ 50 %? [F6]	✓	✓	✓		✓	✓	✓
22. Is the second source analysis within limits? [F8 - icv]	✓	✓	✓		✓	✓	✓

Analyst/Date: ✓ 9/2/20 **2nd Level Reviewer/Date:** JB 9/2/20

TALS Review	TO	DOD	OH	Comments	TO	DOD	OH
23. Upload ICAL	✓				na	na	na
24. Graphics uploaded? [paperclip]	✓	✓	✓		✓	✓	✓
25. All points are in the most recent active calibration event? [Calibration Events – 'Fix ICAL linkage' if needed]	✓	✓	✓		✓	✓	✓
26. Runs linked to BFB? [QC Links]	✓	✓	✓		✓	✓	✓
27. Run Checklist and acknowledge findings [F8]	✓	✓	✓		✓	✓	✓
28. If criteria not met, was a NCM generated?	✓	✓	✓		NA →		
29. After review in TALS, approve the method in TALS.	na	na	na		✓	✓	✓
30. After verifying TALS is correct, lock method in Chrom <resolve any error issues>	na	na	na		✓	✓	✓
31. Checklist & Entech report scanned, attached & assigned properly?	na	na	na		✓	✓	✓

Analyst/date: ✓ 9/2/20 **2nd Level Reviewer/date:** JB 9/2/20

Comments: **Comments:**

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Instrument ID: MH Start Date: 09/03/2020 09:43

Analysis Batch Number: 42399 End Date: 09/04/2020 08:25

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 140-42399/1		09/03/2020 09:43	1	HBFBI03.D	RTX-5 0.32(mm)
CCVIS 140-42399/2		09/03/2020 10:16	1	HCCVI03.D	RTX-5 0.32(mm)
LCS 140-42399/1002		09/03/2020 10:16	1	HCCVI03-LCS.d	RTX-5 0.32(mm)
MB 140-42399/4		09/03/2020 12:59	1	H500BI03.D	RTX-5 0.32(mm)
ZZZZZ		09/03/2020 13:56	126.78		RTX-5 0.32(mm)
ZZZZZ		09/03/2020 14:49	3.04		RTX-5 0.32(mm)
ZZZZZ		09/03/2020 15:41	1		RTX-5 0.32(mm)
ZZZZZ		09/03/2020 16:38	1		RTX-5 0.32(mm)
ZZZZZ		09/03/2020 17:34	1.45		RTX-5 0.32(mm)
ZZZZZ		09/03/2020 18:27	1		RTX-5 0.32(mm)
ZZZZZ		09/03/2020 20:25	3.83		RTX-5 0.32(mm)
ZZZZZ		09/03/2020 21:26	1		RTX-5 0.32(mm)
140-20175-1	SV-001-C-29	09/03/2020 22:20	1	HI03P110.D	RTX-5 0.32(mm)
140-20175-2	SV-004-C-29	09/03/2020 23:13	1	HI03P111.D	RTX-5 0.32(mm)
140-20175-3	SV-102-C-29	09/04/2020 00:08	3.43	HI03P112.D	RTX-5 0.32(mm)
140-20175-4	SV-113-C-29	09/04/2020 01:04	1	HI03P113.D	RTX-5 0.32(mm)
140-20175-5	SV-088-C-29	09/04/2020 01:58	1	HI03P114.D	RTX-5 0.32(mm)
140-20175-6	SV-DUP1-C-29	09/04/2020 02:50	3.6	HI03P115.D	RTX-5 0.32(mm)
ZZZZZ		09/04/2020 03:44	1		RTX-5 0.32(mm)
140-20175-7	SV-142-C-29	09/04/2020 04:41	1	HI03P116D.D	RTX-5 0.32(mm)
140-20175-8	SV-155-C-29	09/04/2020 05:38	1	HI03P201.D	RTX-5 0.32(mm)
140-20175-9	SV-133-C-29	09/04/2020 06:35	1	HI03P202.D	RTX-5 0.32(mm)
140-20175-10	SV-153-C-29	09/04/2020 07:30	1	HI03P203.D	RTX-5 0.32(mm)
ZZZZZ		09/04/2020 08:25	1.47		RTX-5 0.32(mm)

Eurofins/TestAmerica Knoxville GC/MS Air - Batch Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 21 & KNOX-MS-0023, Rev 4

Instrument/Date	MH 9/3/2020		Routine	DOD	OHIO VAP
CCAL Chrom WL #	16480	CCAL Batch #	42399		
ICAL Chrom WL #	16451	ICAL Batch # / Event #	42290 / 2592	/	/

Chrom Review	1st	If No, why is data reportable?	2nd
1. Are the reagents & init/final volumes correct? (Verify reagents & amt. injected) [WL Sample Reagent Tab]	✓		na
2. Did BFB meet tune criteria? [F8]	✓	☑ [Failed TO-14A, but passes TO-15]	
3. Was the CCAL compared to the most recent & correct ICAL (correct last ICal File batch #/start/end Cal date/time)? [F8]	✓	List Target analytes outside CCV limits:	
4. Elution order checked on isomeric pairs? [Chrom]			
• dichlorodifluoromethane / 1,2-dichlorotetrafluoroethane	✓		
• 2-methyl butane / acrolein	✓		
• trichlorofluoromethane / 1,1,2-trichlorotrifluoroethane	✓		
• vinyl acetate / hexane	✓		
• cis- and trans- isomers	✓		
• ethyl benzene / m/p-xylene / o-xylene	✓		
• n-propylbenzene/4-ethyl toluene/1,3,5-trimethylbenzene/1,2,4-trimethylbenzene/sec-butylbenzene/1,2,3-trimethylbenzene	✓		
• tert-butylbenzene/4-isopropyltoluene	✓		
• 1,3- , 1,4- , and 1,2-dichlorobenzene	✓		
• 1,2-dimethyl-4-ethylbenzene/1,2,4,5-, 1,2,3,5-, and 1,2,3,4-tetramethylbenzenes	NA		
• 1,2,4-trichlorobenzene/1,2,3-trichlorobenzene	✓		
• 2-, and 1-methylnaphthalene	✓		
5. "Range" analytes & internal standard RIC ID'd correctly, inspected for interferences & proper integration?	NA		
6. Has the RT been updated to the method?	✓		
Analyst/date		**2nd Level Reviewer/date**	

7. Has the vol injected been verified vs Entech & corrected if actual amount differs >5%? [WL Sample Info: init amt = sample amt; final amt = 500 mL]	✓		
8. Do the lab ID, Info 1 and Dilution Factor columns correlate in Chrom? [Sample List - Lab ID vs. Info 1 vs. Dilution]	✓		
9. Can dilution history verified? [Mgmt Report]	✓		
10. Are all analytes present in the system blank < RL? (<1/2 RL for DoD). *If no, list blank ID:*	✓	☐ Method Blank – Report, ND (NCM#_____) ☐ Method Blank – Report, 10X (NCM#_____)	
11. All runs - peaks ID'd correctly and false positives removed?	✓		
12. If manual integrations performed, are they properly performed, baseline clearly identified, and correct reason given?	✓		
13. IS/Surr within limits? *List samples and reason (e.g.,* 1 thru 5*):* [Batch Results IS & SUR Tab] Sample / Reason / Sample / Reason	✓	☐ (1) Surrogate – Matrix (NCM#_____) ☐ (2) Surrogate – High, ND (NCM#_____) ☐ (3) ISTD – RA/RA Concurs (NCM#_____) ☐ (4) Surrogate –RX concur, Report both (NCM#_____) ☐ (5) ISTD – Matrix, DL required (NCM#_____)	
14. Samples outside calibration range scheduled for dilution?	✓	☐ ICAL – Range Exceeded; Minimum Dilution	

Chrom Review	1st	If No, why is data reportable?	2nd
15. For first analysis that is at a dilution, is highest target analyte >20% cal range? *List samples and reason:* Sample: 140-20170-2 / Reason: limited vol / Sample / Reason	✓	☐ (1) Reporting Limit – Dilution, Matrix (NCM#_____) ☐ (2) Reporting Limit – Dilution, Non-Target (NCM#_____) ☐ (3) Issues with initial collection volume; see DRC. NCM 24957	
16. RIC inspected for proper integration for TPH?	NA		
17. Obvious non-TPH peaks excluded?	↓		
18. Individual TPH peak area < octane high point area?	↓		

TALS Review	1st	If No, why is data reportable?	2nd

Eurofins/TestAmerica Knoxville GC/MS Air - Batch Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 21 & KNOX-MS-0023, Rev 4

19. Graphics uploaded? [open one paperclip]	/		
20. NCM generated if BFB failed TO-14A criteria, but passes TO-15?	/	☐ [Failed TO-14A, but passes TO-15] (NCM# 24950)	
21. Is the %D ≤ 30% for all target analytes? [≤ 50% for 1&2 methylnaphthalene] [Chrom-F8] [TALS-Sample Results Tab]	/	☐ CCV - %D - LCS criteria met (NCM#_____) ☐ CCV - %D high - outside criteria, samples ND, Sample IDs Included (NCM#_____)	
22. Undiluted volume analyzed meets the method requirement (200 mL vs. 500 mL)?	/		na
23. Project & sample special instructions verified?	/		
24. If samples were Tedlar bags, was the 72 hr HT met? ** Narrate transfer to can.	NA	☐ Air Analysis - Air Sample Transfer to Canister (NCM#____)	
25. Sample analyses done within analytical holding time?	/	☐ Holding Time – Received w/Insufficient Time (NCM#_____) ☐ Holding Time – Receipt (NCM#_____)	
26. Did the LCS meet criteria (70-130% with a limited # allowed 60-140% (see table) provisional analyte limit 60-140% with a limited # allowed 50-150%, and no two consecutive MEs). [Sample Results Tab] Note: No LCS required for OH VAP.	/	☐ Marginal Exceedances - Within ME Limits and Random; Report (NCM# ___) ☐ LCS/LCSD - %R High (NCM#_____)	
27. Suffixes assigned properly (DL/RE)? [Sample List Tab]	/		
28. Each job has QC created (BFB, CCV, LCS, MB)? [Sample List Tab]	/		
29. Analytes over calibration range set to secondary [Conditions Review Tab]	/		
30. Samples not reported set to 'Acceptable' or 'Rejected'? [Sample Results Tab]	/		
31. DUP done per 20 samples and are all RPDs within limits? (for target analytes >5x RL, <25% RPD; no criteria for n-butanol) *(If DUP not reported - set to 'Acceptable' for each job)*	/		
32. Samples linked to proper blank (200 mL or 500 mL)? [QC links]	/	**500 mL blank ID:** #4 **200 mL blank ID:** NA	
33. Samples linked to job's BFB/CCV/LCS/MB? [QC Links]	/		
34. Correct ICV linked to each MB? [QC Links]	/		
35. Were all samples/QC analyzed within 24 hr of BFB? [F7]	/		
36. If criteria were not met, was a NCM generated, and assigned to proper QC & samples? [Also see Conditions Review Tab]	/		
37. Run Checklist and acknowledge findings [F8]	/		
38. Runs set to 1st level review?	/	Runs set to 2nd level review?	
39. QC checker run and items addressed?	-na-		
40. Checklist & Entech report scanned, attached & assigned properly?	-na-		

Number of target analytes in LCS / # marginal exceedances of LCS control limits allowed

Number of target analytes in LCS	# marginal exceedances of LCS control limits allowed
>90	5
71 - 90	4
51 - 70	3
31 - 50	2
11 - 30	1
< 11	0

Analyst: Sydnee Ku	**Date:** 9/4/2020	**2nd Level Reviewer :**	**Date:**
Comments:		**Comments:**	
C1 Chlorodifluoromethane line 17, 21			
Example Calculation: 140-20118-1 CCl4			
On-column ppbv x Final Vol (mL)/Entech Initial Vol (mL) x Canister Dilution Log DF			
$5.048121 \times \frac{500}{10} \times 126.78 = 32{,}000$			

MS017r48, 4/08/2020

Eurofins/TestAmerica Knoxville GC/MS Air - Batch Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 20 & KNOX-MS-0023, Rev 4

Instrument/Date	MH 9/3/20		Routine	DOD	OHIO VAP
CCAL Chrom WL #	16480	CCAL Batch #	42399		
ICAL Chrom WL #	16451	ICAL Batch # / Event #	42290 /2592		

Chrom Review	1st	If No, why is data reportable?	2nd
1. Are the reagents & init/final volumes correct? (Verify reagents & amt. injected) [WL Sample Reagent Tab]			na
2. Did BFB meet tune criteria? [F8]		□ [Failed TO-14A, but passes TO-15]	N
3. Was the CCAL compared to the most recent & correct ICAL (correct last ICal File batch #/start/end Cal date/time)? [F8]		List Target analytes outside CCV limits: _____ _____ _____	Y
4. Elution order checked on isomeric pairs? [Chrom]			
• dichlorodifluoromethane / 1,2-dichlorotetrafluoroethane			Y
• 2-methyl butane / acrolein			Y
• trichlorofluoromethane / 1,1,2-trichlorotrifluoroethane			Y
• vinyl acetate / hexane			Y
• cis- and trans- isomers			Y
• ethyl benzene / m/p-xylene / o-xylene			Y
• n-propylbenzene/4-ethyl toluene/1,3,5-trimethylbenzene/1,2,4-trimethylbenzene/sec-butylbenzene/1,2,3-trimethylbenzene			Y
• tert-butylbenzene/4-isopropyltoluene			Y
• 1,3- , 1,4- , and 1,2-dichlorobenzene			Y
• 1,2-dimethyl-4-ethylbenzene/1,2,4,5-, 1,2,3,5-, and 1,2,3,4-tetramethylbenzenes			NA
• 1,2,4-trichlorobenzene/1,2,3-trichlorobenzene			Y
• 2-, and 1-methylnaphthalene			Y
5. "Range" analytes & internal standard RIC ID'd correctly, inspected for interferences & proper integration?			NA
6. Has the RT been updated to the method?			Y
Analyst/date		**2nd Level Reviewer/date LL 9/4/20**	

7. Has the vol injected been verified vs Entech & corrected if actual amount differs >5%? [WL Sample Info: init amt = sample amt; final amt = 500 mL]			Y
8. Do the lab ID, Info 1 and Dilution Factor columns correlate in Chrom? [Sample List - Lab ID vs. Info 1 vs. Dilution]			Y
9. Can dilution history verified? [Mgmt Report]			Y
10. Are all analytes present in the system blank < RL**?** (<1/2 RL for DoD). *If no, list blank ID:*		□ Method Blank – Report, ND (NCM#_____) □ Method Blank – Report, 10X (NCM#_____)	Y
11. All runs - peaks ID'd correctly and false positives removed?			Y
12. If manual integrations performed, are they properly performed, baseline clearly identified, and correct reason given?			Y
13. IS/Surr within limits? *List samples and reason (e.g.,* 1 thru 5*):* [Batch Results IS & SUR Tab] Sample Reason Sample Reason _____ _____ _____ _____ _____ _____ _____ _____		□ (1) Surrogate – Matrix (NCM#_____) □ (2) Surrogate – High, ND (NCM#_____) □ (3) ISTD – RA/RA Concurs (NCM#_____) □ (4) Surrogate –RX concur, Report both (NCM#_____) □ (5) ISTD – Matrix, DL required (NCM#_____)	Y
14. Samples outside calibration range scheduled for dilution?		□ ICAL – Range Exceeded; Minimum Dilution	Y

Chrom Review	1st	If No, why is data reportable?	2nd
15. For first analysis that is at a dilution, is highest target analyte >20% cal range? *List samples and reason:* Sample Reason Sample Reason _____ _____ _____ _____ _____ _____ _____ _____		□ (1) Reporting Limit – Dilution, Matrix (NCM#_____) □ (2) Reporting Limit – Dilution, Non-Target (NCM#_____) □ (3) Issues with initial collection volume; see DRC.	Y
16. RIC inspected for proper integration for TPH?			NA
17. Obvious non-TPH peaks excluded?			NA
18. Individual TPH peak area < octane high point area?			NA

Eurofins/TestAmerica Knoxville GC/MS Air - Batch Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 20 & KNOX-MS-0023, Rev 4

TALS Review	**1st**	**If No, why is data reportable?**	**2nd**
19. Graphics uploaded? [open one paperclip]			**Y**
20. NCM generated if BFB failed TO-14A criteria, but passes TO-15?		□ [Failed TO-14A, but passes TO-15] (NCM#_____)	**Y**
21. Is the %D ≤ 30% for all target analytes? [≤ 50% for 1&2 methylnaphthalene] [Chrom-F8] [TALS-Sample Results Tab]		□ CCV - %D - LCS criteria met (NCM#_____) □ CCV - %D high - outside criteria, samples ND, Sample IDs Included (NCM#_____)	**Y**
22. Undiluted volume analyzed meets the method requirement (200 mL vs. 500 mL)?			**na**
23. Project & sample special instructions verified?			**Y**
24. If samples were Tedlar bags, was the 72 hr HT met? ** Narrate transfer to can.		□ Air Analysis - Air Sample Transfer to Canister (NCM#____)	**Y**
25. Sample analyses done within analytical holding time?		□ Holding Time – Received w/Insufficient Time (NCM#_____) □ Holding Time – Receipt (NCM#_____)	**Y**
26. Did the LCS meet criteria (70-130% with a limited # allowed 60-140% (see table) provisional analyte limit 60-140% with a limited # allowed 50-150%, and no two consecutive MEs). [Sample Results Tab] Note: No LCS required for OH VAP.		□ Marginal Exceedances - Within ME Limits and Random; Report (NCM# ___) □ LCS/LCSD - %R High (NCM#_____)	**Y**
27. Suffixes assigned properly (DL/RE)? [Sample List Tab]			**Y**
28. Each job has QC created (BFB, CCV, LCS, MB)? [Sample List Tab]			**Y**
29. Analytes over calibration range set to secondary [Conditions Review Tab]			**Y**
30. Samples not reported set to 'Acceptable' or 'Rejected'? [Sample Results Tab]			**Y**
31. DUP done per 20 samples and are all RPDs within limits? (for target analytes >5x RL, <25% RPD; no criteria for n-butanol) *(If DUP not reported - set to 'Acceptable' for each job)*			**Y**
32. Samples linked to proper blank (200 mL or 500 mL)? [QC links]		**500 mL blank ID: 4** **200 mL blank ID: NA**	**Y**
33. Samples linked to job's BFB/CCV/LCS/MB? [QC Links]			**Y**
34. Correct ICV linked to each MB? [QC Links]			**Y**
35. Were all samples/QC analyzed within 24 hr of BFB? [F7]			**Y**
36. If criteria were not met, was a NCM generated, and assigned to proper QC & samples? [Also see Conditions Review Tab]			**Y**
37. Run Checklist and acknowledge findings [F8]			**Y**
38. Runs set to 1st level review?		Runs set to 2nd level review?	**Y**
39. QC checker run and items addressed?	**-na-**		**Y**
40. Checklist & Entech report scanned, attached & assigned properly?	**-na-**		**Y**

Analyst:	**Date:**	**2nd Level Reviewer : LL**	**Date: 9/4/20**
Comments:		**Comments:**	
Example Calculation:			
On-column ppbv x Final Vol (mL)/Entech Initial Vol (mL) x Canister Dilution Log DF			

Number of target analytes in LCS	# marginal exceedances of LCS control limits allowed
>90	5
71 - 90	4
51 - 70	3
31 - 50	2
11 - 30	1
< 11	0

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Instrument ID: MG Start Date: 09/03/2020 07:22

Analysis Batch Number: 42409 End Date: 09/04/2020 02:51

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 140-42409/1		09/03/2020 07:22	1	GBFBI03.D	RTX-5 0.32(mm)
CCVIS 140-42409/2		09/03/2020 07:55	1	GCCVI03.D	RTX-5 0.32(mm)
LCS 140-42409/1002		09/03/2020 07:55	1	GCCVI03-LCS.d	RTX-5 0.32(mm)
ZZZZZ		09/03/2020 09:19	1		RTX-5 0.32(mm)
ZZZZZ		09/03/2020 11:52	1		RTX-5 0.32(mm)
MB 140-42409/8		09/03/2020 11:52	1	I03L20237X.D	RTX-5 0.32(mm)
ZZZZZ		09/03/2020 12:38	1.49		RTX-5 0.32(mm)
140-20175-12	SV-060-C-29	09/03/2020 22:15	1	GI03P111.D	RTX-5 0.32(mm)
140-20175-14	SV-152-C-29	09/03/2020 23:05	1	GI03P112.D	RTX-5 0.32(mm)
140-20175-15	SV-141-C-29	09/03/2020 23:53	1	GI03P113.D	RTX-5 0.32(mm)
140-20175-16	SV-149-C-29	09/04/2020 00:41	1	GI03P114.D	RTX-5 0.32(mm)
ZZZZZ		09/04/2020 01:24	1		RTX-5 0.32(mm)
ZZZZZ		09/04/2020 02:07	1		RTX-5 0.32(mm)
140-20175-13	SV-150-C-29	09/04/2020 02:51	1	GI03P116D.D	RTX-5 0.32(mm)

Eurofins/TestAmerica Knoxville GC/MS Air - Batch Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 21 & KNOX-MS-0023, Rev 4

Instrument/Date	MG 9/3/20		Routine	DOD	OHIO VAP
CCAL Chrom WL #	16486	CCAL Batch #	42409		
ICAL Chrom WL #	16453	ICAL Batch # / Event #	42295 / 2602	/	/

Chrom Review	1st	If No, why is data reportable?	2nd
1. Are the reagents & init/final volumes correct? (Verify reagents & amt. injected) [WL Sample Reagent Tab]	✓		na
2. Did BFB meet tune criteria? [F8]	✓	☐ [Failed TO-14A, but passes TO-15] TO15 only	
3. Was the CCAL compared to the most recent & correct ICAL (correct last ICal File batch #/start/end Cal date/time)? [F8]	✓	List Target analytes outside CCV limits:	
4. Elution order checked on isomeric pairs? [Chrom]			
• dichlorodifluoromethane / 1,2-dichlorotetrafluoroethane	✓		
• 2-methyl butane / acrolein	✓		
• trichlorofluoromethane / 1,1,2-trichlorotrifluoroethane	✓		
• vinyl acetate / hexane	✓		
• cis- and trans- isomers	✓		
• ethyl benzene / m/p-xylene / o-xylene	✓		
• n-propylbenzene/4-ethyl toluene/1,3,5-trimethylbenzene/1,2,4-trimethylbenzene/sec-butylbenzene/1,2,3-trimethylbenzene	✓		
• tert-butylbenzene/4-isopropyltoluene	✓		
• 1,3- , 1,4- , and 1,2-dichlorobenzene	✓		
• 1,2-dimethyl-4-ethylbenzene/1,2,4,5-, 1,2,3,5-, and 1,2,3,4-tetramethylbenzenes	NA		
• 1,2,4-trichlorobenzene/1,2,3-trichlorobenzene	✓		
• 2-, and 1-methylnaphthalene	✓		
5. "Range" analytes & internal standard RIC ID'd correctly, inspected for interferences & proper integration?	NA		
6. Has the RT been updated to the method?			
Analyst/date MG 9/3/20		**2nd Level Reviewer/date**	

7. Has the vol injected been verified vs Entech & corrected if actual amount differs >5%? [WL Sample Info: init amt = sample amt; final amt = 500 mL]	✓		
8. Do the lab ID, Info 1 and Dilution Factor columns correlate in Chrom? [Sample List - Lab ID vs. Info 1 vs. Dilution]	✓		
9. Can dilution history verified? [Mgmt Report]	✓		
10. Are all analytes present in the system blank < RL? (<1/2 RL for DoD). *If no, list blank ID:*	✓	☐ Method Blank – Report, ND (NCM#_____) ☐ Method Blank – Report, 10X (NCM#_____)	
11. All runs - peaks ID'd correctly and false positives removed?	✓		
12. If manual integrations performed, are they properly performed, baseline clearly identified, and correct reason given?	✓		
13. IS/Surr within limits? *List samples and reason (e.g.,* 1 thru 5*):* [Batch Results IS & SUR Tab] Sample Reason Sample Reason	✓	☐ (1) Surrogate – Matrix (NCM#_____) ☐ (2) Surrogate – High, ND (NCM#_____) ☐ (3) ISTD – RA/RA Concurs (NCM#_____) ☐ (4) Surrogate –RX concur, Report both (NCM#_____) ☐ (5) ISTD – Matrix, DL required (NCM#_____)	
14. Samples outside calibration range scheduled for dilution?	✓	☐ ICAL – Range Exceeded; Minimum Dilution	

Chrom Review	1st	If No, why is data reportable?	2nd
15. For first analysis that is at a dilution, is highest target analyte >20% cal range? *List samples and reason:* Sample Reason Sample Reason	✓	☐ (1) Reporting Limit – Dilution, Matrix (NCM#_____) ☐ (2) Reporting Limit – Dilution, Non-Target (NCM#_____) ☐ (3) Issues with initial collection volume; see DRC.	
16. RIC inspected for proper integration for TPH?	NA		
17. Obvious non-TPH peaks excluded?	✓		
18. Individual TPH peak area < octane high point area?	✓		

TALS Review	1st	If No, why is data reportable?	2nd

Eurofins/TestAmerica Knoxville GC/MS Air - Batch Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 21 & KNOX-MS-0023, Rev 4

19. Graphics uploaded? [open one paperclip]	✓		
20. NCM generated if BFB failed TO-14A criteria, but passes TO-15?	✓	□ Failed TO-14A, but passes TO-15] (NCM# M950)	
21. Is the %D ≤ 30% for all target analytes? [≤ 50% for 1&2 methylnaphthalene] [Chrom-F8] [TALS-Sample Results Tab]	✓	□ CCV - %D - LCS criteria met (NCM#_____) □ CCV - %D high - outside criteria, samples ND, Sample IDs Included (NCM#_____)	
22. Undiluted volume analyzed meets the method requirement (200 mL vs. 500 mL)?	✓		na
23. Project & sample special instructions verified?	✓		
24. If samples were Tedlar bags, was the 72 hr HT met? ** Narrate transfer to can.	✓	□ Air Analysis - Air Sample Transfer to Canister (NCM#___)	
25. Sample analyses done within analytical holding time?	✓	□ Holding Time – Received w/Insufficient Time (NCM#____) □ Holding Time – Receipt (NCM#_____)	
26. Did the LCS meet criteria (70-130% with a limited # allowed 60-140% (see table) provisional analyte limit 60-140% with a limited # allowed 50-150%, and no two consecutive MEs). [Sample Results Tab] Note: No LCS required for OH VAP.	✓	□ Marginal Exceedances - Within ME Limits and Random; Report (NCM# ___) □ LCS/LCSD - %R High (NCM#_____) LCSD V/C only DL DF 9/3/20	
27. Suffixes assigned properly (DL/RE)? [Sample List Tab]	✓		
28. Each job has QC created (BFB, CCV, LCS, MB)? [Sample List Tab]	✓		
29. Analytes over calibration range set to secondary [Conditions Review Tab]	✓		
30. Samples not reported set to 'Acceptable' or 'Rejected'? [Sample Results Tab]	✓		
31. DUP done per 20 samples and are all RPDs within limits? (for target analytes >5x RL, <25% RPD; no criteria for n-butanol) *(If DUP not reported - set to 'Acceptable' for each job)*	✓		
32. Samples linked to proper blank (200 mL or 500 mL)? [QC links]	✓	**500 mL blank ID:** 8 **200 mL blank ID:** _____	
33. Samples linked to job's BFB/CCV/LCS/MB? [QC Links]	✓		
34. Correct ICV linked to each MB? [QC Links]	✓		
35. Were all samples/QC analyzed within 24 hr of BFB? [F7]	✓		
36. If criteria were not met, was a NCM generated, and assigned to proper QC & samples? [Also see Conditions Review Tab]	✓		
37. Run Checklist and acknowledge findings [F8]	✓		
38. Runs set to 1st level review?	✓	Runs set to 2nd level review?	
39. QC checker run and items addressed?	-na-		
40. Checklist & Entech report scanned, attached & assigned properly?	-na-		

Analyst:	Date: 9/3/20	2nd Level Reviewer :	Date:
Comments:		**Comments:**	

Example Calculation: #5 V/C

On-column ppbv x Final Vol (mL)/Entech Initial Vol (mL) x Canister Dilution Log DF

6.3792 x 50 x 1.49 = 95.05 x (62.5/M95) = M2

Eurofins/TestAmerica Knoxville GC/MS Air - Batch Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 20 & KNOX-MS-0023, Rev 4

Instrument/Date	MG 9/3/20		Routine	DOD	OHIO VAP
CCAL Chrom WL #	16486	CCAL Batch #	42409		
ICAL Chrom WL #	16453	ICAL Batch # / Event #	42295/2602		

Chrom Review	1st	If No, why is data reportable?	2nd
1. Are the reagents & init/final volumes correct? (Verify reagents & amt. injected) [WL Sample Reagent Tab]			na
2. Did BFB meet tune criteria? [F8]		□ [Failed TO-14A, but passes TO-15]	N
3. Was the CCAL compared to the most recent & correct ICAL (correct last ICal File batch #/start/end Cal date/time)? [F8]		List Target analytes outside CCV limits: _____ _____ _____	Y
4. Elution order checked on isomeric pairs? [Chrom]			
• dichlorodifluoromethane / 1,2-dichlorotetrafluoroethane			Y
• 2-methyl butane / acrolein			Y
• trichlorofluoromethane / 1,1,2-trichlorotrifluoroethane			Y
• vinyl acetate / hexane			Y
• cis- and trans- isomers			Y
• ethyl benzene / m/p-xylene / o-xylene			Y
• n-propylbenzene/4-ethyl toluene/1,3,5-trimethylbenzene/1,2,4-trimethylbenzene/sec-butylbenzene/1,2,3-trimethylbenzene			Y
• tert-butylbenzene/4-isopropyltoluene			Y
• 1,3- , 1,4- , and 1,2-dichlorobenzene			Y
• 1,2-dimethyl-4-ethylbenzene/1,2,4,5-, 1,2,3,5-, and 1,2,3,4-tetramethylbenzenes			NA
• 1,2,4-trichlorobenzene/1,2,3-trichlorobenzene			Y
• 2-, and 1-methylnaphthalene			Y
5. "Range" analytes & internal standard RIC ID'd correctly, inspected for interferences & proper integration?			NA
6. Has the RT been updated to the method?			Y
Analyst/date		**2nd Level Reviewer/date LL 9/3/20**	

7. Has the vol injected been verified vs Entech & corrected if actual amount differs >5%? [WL Sample Info: init amt = sample amt; final amt = 500 mL]			Y
8. Do the lab ID, Info 1 and Dilution Factor columns correlate in Chrom? [Sample List - Lab ID vs. Info 1 vs. Dilution]			Y
9. Can dilution history verified? [Mgmt Report]			Y
10. Are all analytes present in the system blank < RL**?** (<1/2 RL for DoD). *If no, list blank ID:*		□ Method Blank – Report, ND (NCM#_____) □ Method Blank – Report, 10X (NCM#_____)	Y
11. All runs - peaks ID'd correctly and false positives removed?			Y
12. If manual integrations performed, are they properly performed, baseline clearly identified, and correct reason given?			Y
13. IS/Surr within limits? *List samples and reason (e.g.,* 1 thru 5*):* [Batch Results IS & SUR Tab] Sample Reason Sample Reason _____ _____ _____ _____ _____ _____ _____ _____		□ (1) Surrogate – Matrix (NCM#_____) □ (2) Surrogate – High, ND (NCM#_____) □ (3) ISTD – RA/RA Concurs (NCM#_____) □ (4) Surrogate –RX concur, Report both (NCM#_____) □ (5) ISTD – Matrix, DL required (NCM#_____)	Y
14. Samples outside calibration range scheduled for dilution?		□ ICAL – Range Exceeded; Minimum Dilution	NA
Chrom Review	**1st**	**If No, why is data reportable?**	**2nd**
15. For first analysis that is at a dilution, is highest target analyte >20% cal range? *List samples and reason:* Sample Reason Sample Reason _____ _____ _____ _____ _____ _____ _____ _____		□ (1) Reporting Limit – Dilution, Matrix (NCM#_____) □ (2) Reporting Limit – Dilution, Non-Target (NCM#_____) □ (3) Issues with initial collection volume; see DRC.	Y
16. RIC inspected for proper integration for TPH?			NA
17. Obvious non-TPH peaks excluded?			NA
18. Individual TPH peak area < octane high point area?			NA

Eurofins/TestAmerica Knoxville GC/MS Air - Batch Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 20 & KNOX-MS-0023, Rev 4

TALS Review	**1st**	**If No, why is data reportable?**	**2nd**
19. Graphics uploaded? [open one paperclip]			**Y**
20. NCM generated if BFB failed TO-14A criteria, but passes TO-15?		□ [Failed TO-14A, but passes TO-15] (NCM#_____)	**Y**
21. Is the %D ≤ 30% for all target analytes? [≤ 50% for 1&2 methylnaphthalene] [Chrom-F8] [TALS-Sample Results Tab]		□ CCV - %D - LCS criteria met (NCM#_____) □ CCV - %D high - outside criteria, samples ND, Sample IDs Included (NCM#_____)	**Y**
22. Undiluted volume analyzed meets the method requirement (200 mL vs. 500 mL)?			**na**
23. Project & sample special instructions verified?			**Y**
24. If samples were Tedlar bags, was the 72 hr HT met? ** Narrate transfer to can.		□ Air Analysis - Air Sample Transfer to Canister (NCM#____)	**NA**
25. Sample analyses done within analytical holding time?		□ Holding Time – Received w/Insufficient Time (NCM#_____) □ Holding Time – Receipt (NCM#_____)	**Y**
26. Did the LCS meet criteria (70-130% with a limited # allowed 60-140% (see table) provisional analyte limit 60-140% with a limited # allowed 50-150%, and no two consecutive MEs). [Sample Results Tab] Note: No LCS required for OH VAP.		□ Marginal Exceedances - Within ME Limits and Random; Report (NCM# ___) □ LCS/LCSD - %R High (NCM#_____)	**Y**
27. Suffixes assigned properly (DL/RE)? [Sample List Tab]			**NA**
28. Each job has QC created (BFB, CCV, LCS, MB)? [Sample List Tab]			**Y**
29. Analytes over calibration range set to secondary [Conditions Review Tab]			**NA**
30. Samples not reported set to 'Acceptable' or 'Rejected'? [Sample Results Tab]			**Y**
31. DUP done per 20 samples and are all RPDs within limits? (for target analytes >5x RL, <25% RPD; no criteria for n-butanol) *(If DUP not reported - set to 'Acceptable' for each job)*		**LCSD**	**Y**
32. Samples linked to proper blank (200 mL or 500 mL)? [QC links]		**500 mL blank ID: 8** **200 mL blank ID: NA**	**Y**
33. Samples linked to job's BFB/CCV/LCS/MB? [QC Links]			**Y**
34. Correct ICV linked to each MB? [QC Links]			**Y**
35. Were all samples/QC analyzed within 24 hr of BFB? [F7]			**Y**
36. If criteria were not met, was a NCM generated, and assigned to proper QC & samples? [Also see Conditions Review Tab]			**Y**
37. Run Checklist and acknowledge findings [F8]			**Y**
38. Runs set to 1st level review?		Runs set to 2nd level review?	**Y**
39. QC checker run and items addressed?	**-na-**		**Y**
40. Checklist & Entech report scanned, attached & assigned properly?	**-na-**		**Y**

Analyst:	**Date:**	**2nd Level Reviewer : LL**	**Date: 9/3/20**
Comments:		**Comments:**	

Example Calculation:
On-column ppbv x Final Vol (mL)/Entech Initial Vol (mL) x Canister Dilution Log DF

Number of target analytes in LCS	# marginal exceedances of LCS control limits allowed
>90	5
71 - 90	4
51 - 70	3
31 - 50	2
11 - 30	1
< 11	0

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Instrument ID: MH Start Date: 09/05/2020 11:09

Analysis Batch Number: 42482 End Date: 09/05/2020 18:14

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 140-42482/1		09/05/2020 11:09	1	HDNUI05X.D	RTX-5 0.32(mm)
CCVIS 140-42482/3		09/05/2020 12:41	1	HCCVI05A.D	RTX-5 0.32(mm)
LCS 140-42482/1003		09/05/2020 12:41	1	HCCVI05A-LCS.d	RTX-5 0.32(mm)
MB 140-42482/5		09/05/2020 15:25	1	H500BI05RN.D	RTX-5 0.32(mm)
140-20175-18	IA-001-C-29	09/05/2020 16:20	1	HI05P101.D	RTX-5 0.32(mm)
140-20175-19	IA-004-C-29	09/05/2020 17:18	1.77	HI05P102.D	RTX-5 0.32(mm)
140-20175-20	IA-102-C-29	09/05/2020 18:14	1	HI05P103.D	RTX-5 0.32(mm)

Eurofins/TestAmerica Knoxville GC/MS Air - Batch Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 21 & KNOX-MS-0023, Rev 4

Instrument/Date	MH 9/5/20		Routine	DOD	OHIO VAP
CCAL Chrom WL #	16507	CCAL Batch #	42482		
ICAL Chrom WL #	16451	ICAL Batch # / Event #	42290 / 2592	/	/

Chrom Review	1st	If No, why is data reportable?	2nd
1. Are the reagents & init/final volumes correct? (Verify reagents & amt. injected) [WL Sample Reagent Tab]	✓		na
2. Did BFB meet tune criteria? [F8]	✓	□ [Failed TO-14A, but passes TO-15]	
3. Was the CCAL compared to the most recent & correct ICAL (correct last ICal File batch #/start/end Cal date/time)? [F8]	✓	List Target analytes outside CCV limits: 2M2P. V/A N-but -42 14DXN	
4. Elution order checked on isomeric pairs? [Chrom]	✓		
• dichlorodifluoromethane / 1,2-dichlorotetrafluoroethane	✓		
• 2-methyl butane / acrolein	✓		
• trichlorofluoromethane / 1,1,2-trichlorotrifluoroethane	✓		
• vinyl acetate / hexane	✓		
• cis- and trans- isomers	✓		
• ethyl benzene / m/p-xylene / o-xylene	✓		
• n-propylbenzene/4-ethyl toluene/1,3,5-trimethylbenzene/1,2,4-trimethylbenzene/sec-butylbenzene/1,2,3-trimethylbenzene	✓		
• tert-butylbenzene/4-isopropyltoluene	✓		
• 1,3- , 1,4- , and 1,2-dichlorobenzene	✓		
• 1,2-dimethyl-4-ethylbenzene/1,2,4,5-, 1,2,3,5-, and 1,2,3,4-tetramethylbenzenes	NL		
• 1,2,4-trichlorobenzene/1,2,3-trichlorobenzene	✓		
• 2-, and 1-methylnaphthalene	✓	DNL	
5. "Range" analytes & internal standard RIC ID'd correctly, inspected for interferences & proper integration?	NL		
6. Has the RT been updated to the method?	✓		
Analyst/date MH 9/5/20		**2nd Level Reviewer/date**	
7. Has the vol injected been verified vs Entech & corrected if actual amount differs >5%? [WL Sample Info: init amt = sample amt; final amt = 500 mL]	✓		
8. Do the lab ID, Info 1 and Dilution Factor columns correlate in Chrom? [Sample List - Lab ID vs. Info 1 vs. Dilution]	✓		
9. Can dilution history verified? [Mgmt Report]	✓		
10. Are all analytes present in the system blank < RL? (<1/2 RL for DoD). *If no, list blank ID:*	✓	□ Method Blank – Report, ND (NCM#_____) □ Method Blank – Report, 10X (NCM#_____)	
11. All runs - peaks ID'd correctly and false positives removed?	✓		
12. If manual integrations performed, are they properly performed, baseline clearly identified, and correct reason given?	✓		
13. IS/Surr within limits? *List samples and reason (e.g.,* 1 thru 5*):* [Batch Results IS & SUR Tab] Sample ____ Reason ____ Sample ____ Reason ____	✓	□ (1) Surrogate – Matrix (NCM#_____) □ (2) Surrogate – High, ND (NCM#_____) □ (3) ISTD – RA/RA Concurs (NCM#_____) □ (4) Surrogate –RX concur, Report both (NCM#_____) □ (5) ISTD – Matrix, DL required (NCM#_____)	
14. Samples outside calibration range scheduled for dilution?	✓	□ ICAL – Range Exceeded; Minimum Dilution	
Chrom Review	**1st**	**If No, why is data reportable?**	**2nd**
15. For first analysis that is at a dilution, is highest target analyte >20% cal range? *List samples and reason:* Sample ____ Reason ____ Sample ____ Reason ____	✓	□ (1) Reporting Limit – Dilution, Matrix (NCM#_____) □ (2) Reporting Limit – Dilution, Non-Target (NCM#_____) □ (3) Issues with initial collection volume; see DRC.	
16. RIC inspected for proper integration for TPH?	NL		
17. Obvious non-TPH peaks excluded?	✓		
18. Individual TPH peak area < octane high point area?			
TALS Review	**1st**	**If No, why is data reportable?**	**2nd**

Eurofins/TestAmerica Knoxville GC/MS Air - Batch Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 21 & KNOX-MS-0023, Rev 4

19. Graphics uploaded? [open one paperclip]	✓		
20. NCM generated if BFB failed TO-14A criteria, but passes TO-15?	✓	□ [Failed TO-14A, but passes TO-15] (NCM#)	
21. Is the %D ≤ 30% for all target analytes? [≤ 50% for 1&2 methylnaphthalene] [Chrom-F8] [TALS-Sample Results Tab]	✓	□ CCV - %D - LCS criteria met (NCM#) □ CCV - %D high - outside criteria, samples ND, Sample IDs Included (NCM#)	
22. Undiluted volume analyzed meets the method requirement (200 mL vs. 500 mL)?	✓		na
23. Project & sample special instructions verified?	✓		
24. If samples were Tedlar bags, was the 72 hr HT met? ** Narrate transfer to can.	✓	□ Air Analysis - Air Sample Transfer to Canister (NCM#___)	
25. Sample analyses done within analytical holding time?	✓	□ Holding Time – Received w/Insufficient Time (NCM#___) □ Holding Time – Receipt (NCM#)	
26. Did the LCS meet criteria (70-130% with a limited # allowed 60-140% (see table) provisional analyte limit 60-140% with a limited # allowed 50-150%, and no two consecutive MEs). [Sample Results Tab] Note: No LCS required for OH VAP.	✓	□ Marginal Exceedances - Within ME Limits and Random; Report (NCM# ___) □ LCS/LCSD - %R High (NCM#_____)	
27. Suffixes assigned properly (DL/RE)? [Sample List Tab]	✓		
28. Each job has QC created (BFB, CCV, LCS, MB)? [Sample List Tab]	✓		
29. Analytes over calibration range set to secondary [Conditions Review Tab]	✓		
30. Samples not reported set to 'Acceptable' or 'Rejected'? [Sample Results Tab]	✓		
31. DUP done per 20 samples and are all RPDs within limits? (for target analytes >5x RL, <25% RPD; no criteria for n-butanol) *(If DUP not reported - set to 'Acceptable' for each job)*	✓		
32. Samples linked to proper blank (200 mL or 500 mL)? [QC links]	✓	**500 mL blank ID:** 5 **200 mL blank ID:**	
33. Samples linked to job's BFB/CCV/LCS/MB? [QC Links]	✓		
34. Correct ICV linked to each MB? [QC Links]	✓		
35. Were all samples/QC analyzed within 24 hr of BFB? [F7]	✓		
36. If criteria were not met, was a NCM generated, and assigned to proper QC & samples? [Also see Conditions Review Tab]	✓		
37. Run Checklist and acknowledge findings [F8]	✓		
38. Runs set to 1st level review?	✓	Runs set to 2nd level review?	
39. QC checker run and items addressed?	-na-		
40. Checklist & Entech report scanned, attached & assigned properly?	-na-		

Analyst:	Date: 9/6/20	2nd Level Reviewer :	Date:
Comments:		Comments:	

Example Calculation: 20175-20 #1

On-column ppbv x Final Vol (mL)/Entech Initial Vol (mL) x Canister Dilution Log DF

0.16 X 100 X 1 = 0.8

Eurofins/TestAmerica Knoxville GC/MS Air - Batch Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 20 & KNOX-MS-0023, Rev 4

Instrument/Date	MH 9/5/20		Routine	DOD	OHIO VAP
CCAL Chrom WL #	16507	CCAL Batch #	42482		
ICAL Chrom WL #	16451	ICAL Batch # / Event #	42290 /2592		

Chrom Review	1st	If No, why is data reportable?	2nd
1. Are the reagents & init/final volumes correct? (Verify reagents & amt. injected) [WL Sample Reagent Tab]			na
2. Did BFB meet tune criteria? [F8]		□ [Failed TO-14A, but passes TO-15]	Y
3. Was the CCAL compared to the most recent & correct ICAL (correct last ICal File batch #/start/end Cal date/time)? [F8]		List Target analytes outside CCV limits: _____ _____ _____	Y
4. Elution order checked on isomeric pairs? [Chrom]			
• dichlorodifluoromethane / 1,2-dichlorotetrafluoroethane			Y
• 2-methyl butane / acrolein			Y
• trichlorofluoromethane / 1,1,2-trichlorotrifluoroethane			Y
• vinyl acetate / hexane			Y
• cis- and trans- isomers			Y
• ethyl benzene / m/p-xylene / o-xylene			Y
• n-propylbenzene/4-ethyl toluene/1,3,5-trimethylbenzene/1,2,4-trimethylbenzene/sec-butylbenzene/1,2,3-trimethylbenzene			Y
• tert-butylbenzene/4-isopropyltoluene			Y
• 1,3- , 1,4- , and 1,2-dichlorobenzene			Y
• 1,2-dimethyl-4-ethylbenzene/1,2,4,5-, 1,2,3,5-, and 1,2,3,4-tetramethylbenzenes			NA
• 1,2,4-trichlorobenzene/1,2,3-trichlorobenzene			Y
• 2-, and 1-methylnaphthalene			Y
5. "Range" analytes & internal standard RIC ID'd correctly, inspected for interferences & proper integration?			NA
6. Has the RT been updated to the method?			Y
Analyst/date		**2nd Level Reviewer/date LL 9/7/20**	

7. Has the vol injected been verified vs Entech & corrected if actual amount differs >5%? [WL Sample Info: init amt = sample amt; final amt = 500 mL]			Y
8. Do the lab ID, Info 1 and Dilution Factor columns correlate in Chrom? [Sample List - Lab ID vs. Info 1 vs. Dilution]			Y
9. Can dilution history verified? [Mgmt Report]			Y
10. Are all analytes present in the system blank < RL? (<1/2 RL for DoD). *If no, list blank ID:*		□ Method Blank – Report, ND (NCM#_____) □ Method Blank – Report, 10X (NCM#_____)	Y
11. All runs - peaks ID'd correctly and false positives removed?			Y
12. If manual integrations performed, are they properly performed, baseline clearly identified, and correct reason given?			Y
13. IS/Surr within limits? *List samples and reason (e.g.,* 1 thru 5*):* [Batch Results IS & SUR Tab] Sample Reason Sample Reason _____ _____ _____ _____ _____ _____ _____ _____		□ (1) Surrogate – Matrix (NCM#_____) □ (2) Surrogate – High, ND (NCM#_____) □ (3) ISTD – RA/RA Concurs (NCM#_____) □ (4) Surrogate –RX concur, Report both (NCM#_____) □ (5) ISTD – Matrix, DL required (NCM#_____)	Y
14. Samples outside calibration range scheduled for dilution?		□ ICAL – Range Exceeded; Minimum Dilution	Y

Chrom Review	1st	If No, why is data reportable?	2nd
15. For first analysis that is at a dilution, is highest target analyte >20% cal range? *List samples and reason:* Sample Reason Sample Reason _____ _____ _____ _____ _____ _____ _____ _____		□ (1) Reporting Limit – Dilution, Matrix (NCM#_____) □ (2) Reporting Limit – Dilution, Non-Target (NCM#_____) □ (3) Issues with initial collection volume; see DRC.	Y
16. RIC inspected for proper integration for TPH?			NA
17. Obvious non-TPH peaks excluded?			NA
18. Individual TPH peak area < octane high point area?			NA

Eurofins/TestAmerica Knoxville GC/MS Air - Batch Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 20 & KNOX-MS-0023, Rev 4

TALS Review	**1st**	**If No, why is data reportable?**	**2nd**
19. Graphics uploaded? [open one paperclip]			**Y**
20. NCM generated if BFB failed TO-14A criteria, but passes TO-15?		□ [Failed TO-14A, but passes TO-15] (NCM#_____)	**NA**
21. Is the %D ≤ 30% for all target analytes? [≤ 50% for 1&2 methylnaphthalene] [Chrom-F8] [TALS-Sample Results Tab]		□ CCV - %D - LCS criteria met (NCM#_____) □ CCV - %D high - outside criteria, samples ND, Sample IDs Included (NCM#_____)	**Y**
22. Undiluted volume analyzed meets the method requirement (200 mL vs. 500 mL)?			**na**
23. Project & sample special instructions verified?			**Y**
24. If samples were Tedlar bags, was the 72 hr HT met? ** Narrate transfer to can.		□ Air Analysis - Air Sample Transfer to Canister (NCM#____)	**Y**
25. Sample analyses done within analytical holding time?		□ Holding Time – Received w/Insufficient Time (NCM#_____) □ Holding Time – Receipt (NCM#_____)	**Y**
26. Did the LCS meet criteria (70-130% with a limited # allowed 60-140% (see table) provisional analyte limit 60-140% with a limited # allowed 50-150%, and no two consecutive MEs). [Sample Results Tab] Note: No LCS required for OH VAP.		□ Marginal Exceedances - Within ME Limits and Random; Report (NCM# ___) □ LCS/LCSD - %R High (NCM#_____)	**Y**
27. Suffixes assigned properly (DL/RE)? [Sample List Tab]			**Y**
28. Each job has QC created (BFB, CCV, LCS, MB)? [Sample List Tab]			**Y**
29. Analytes over calibration range set to secondary [Conditions Review Tab]			**Y**
30. Samples not reported set to 'Acceptable' or 'Rejected'? [Sample Results Tab]			**Y**
31. DUP done per 20 samples and are all RPDs within limits? (for target analytes >5x RL, <25% RPD; no criteria for n-butanol) *(If DUP not reported - set to 'Acceptable' for each job)*			**Y**
32. Samples linked to proper blank (200 mL or 500 mL)? [QC links]		**500 mL blank ID: 5** **200 mL blank ID: NA**	**Y**
33. Samples linked to job's BFB/CCV/LCS/MB? [QC Links]			**Y**
34. Correct ICV linked to each MB? [QC Links]			**Y**
35. Were all samples/QC analyzed within 24 hr of BFB? [F7]			**Y**
36. If criteria were not met, was a NCM generated, and assigned to proper QC & samples? [Also see Conditions Review Tab]			**Y**
37. Run Checklist and acknowledge findings [F8]			**Y**
38. Runs set to 1st level review?		Runs set to 2nd level review?	**Y**
39. QC checker run and items addressed?	**-na-**		**Y**
40. Checklist & Entech report scanned, attached & assigned properly?	**-na-**		**Y**

Analyst:	**Date:**	**2nd Level Reviewer : LL**	**Date: 9/7/20**
Comments:		**Comments:**	
Example Calculation:			
On-column ppbv x Final Vol (mL)/Entech Initial Vol (mL) x Canister Dilution Log DF			

Number of target analytes in LCS	# marginal exceedances of LCS control limits allowed
>90	5
71 - 90	4
51 - 70	3
31 - 50	2
11 - 30	1
< 11	0

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Instrument ID: MH Start Date: 09/06/2020 15:49

Analysis Batch Number: 42498 End Date: 09/07/2020 08:16

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 140-42498/7		09/06/2020 15:49	1	HBFBH06a.D	RTX-5 0.32(mm)
CCVIS 140-42498/9		09/06/2020 17:12	1	HCCVH06b.D	RTX-5 0.32(mm)
LCS 140-42498/1009		09/06/2020 17:12	1	HCCVH06b-LCS.d	RTX-5 0.32(mm)
MB 140-42498/4		09/06/2020 18:36	1	HB500I06.D	RTX-5 0.32(mm)
140-20175-21	IA-113-C-29	09/06/2020 19:30	1.33	HI07P104.D	RTX-5 0.32(mm)
140-20175-22	IA-088-C-29	09/06/2020 20:26	1.35	HI07P105.D	RTX-5 0.32(mm)
140-20175-23	IA-142-C-29	09/06/2020 21:23	1	HI07P106.D	RTX-5 0.32(mm)
140-20175-24	IA-155-C-29	09/06/2020 22:17	1.43	HI07P107.D	RTX-5 0.32(mm)
140-20175-25	IA-133-C-29	09/06/2020 23:11	1.56	HI07P108.D	RTX-5 0.32(mm)
140-20175-26	IA-153-C-29	09/07/2020 00:04	1	HI07P109.D	RTX-5 0.32(mm)
140-20175-27	IA-DUP1-C-29	09/07/2020 00:57	1	HI07P110.D	RTX-5 0.32(mm)
140-20175-28	IA-060-C-29	09/07/2020 01:52	1	HI07P111.D	RTX-5 0.32(mm)
140-20175-29	IA-152-C-29	09/07/2020 02:48	1	HI07P112.D	RTX-5 0.32(mm)
140-20175-30	IA-150-C-29	09/07/2020 03:43	1	HI07P113.D	RTX-5 0.32(mm)
140-20175-31	IA-145-C-29	09/07/2020 04:36	1	HI07P114.D	RTX-5 0.32(mm)
140-20175-32	IA-146-C-29	09/07/2020 05:30	1.48	HI07P115.D	RTX-5 0.32(mm)
ZZZZZ		09/07/2020 06:24	1		RTX-5 0.32(mm)
ZZZZZ		09/07/2020 07:19	1		RTX-5 0.32(mm)
ZZZZZ		09/07/2020 08:16	1		RTX-5 0.32(mm)

Eurofins/TestAmerica Knoxville GC/MS Air - Batch Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 21 & KNOX-MS-0023, Rev 4

Instrument/Date	MH 9/6/20		Routine	DOD	OHIO VAP
CCAL Chrom WL #	16514	CCAL Batch #	42498		
ICAL Chrom WL #	16457	ICAL Batch # / Event #	42290 / 2592	/	/

Chrom Review	1st	If No, why is data reportable?	2nd
1. Are the reagents & init/final volumes correct? (Verify reagents & amt. injected) [WL Sample Reagent Tab]	✓ ✓		na
2. Did BFB meet tune criteria? [F8]		☐ [Failed TO-14A, but passes TO-15]	
3. Was the CCAL compared to the most recent & correct ICAL (correct last ICal File batch #/start/end Cal date/time)? [F8]	✓	List Target analytes outside CCV limits: Several high	
4. Elution order checked on isomeric pairs? [Chrom]			
• dichlorodifluoromethane / 1,2-dichlorotetrafluoroethane	✓		
• 2-methyl butane / acrolein	✓		
• trichlorofluoromethane / 1,1,2-trichlorotrifluoroethane	✓		
• vinyl acetate / hexane	✓		
• cis- and trans- isomers	✓		
• ethyl benzene / m/p-xylene / o-xylene	✓		
• n-propylbenzene/4-ethyl toluene/1,3,5-trimethylbenzene/1,2,4-trimethylbenzene/sec-butylbenzene/1,2,3-trimethylbenzene	✓		
• tert-butylbenzene/4-isopropyltoluene	✓		
• 1,3- , 1,4- , and 1,2-dichlorobenzene	✓		
• 1,2-dimethyl-4-ethylbenzene/1,2,4,5-, 1,2,3,5-, and 1,2,3,4-tetramethylbenzenes	✓		
• 1,2,4-trichlorobenzene/1,2,3-trichlorobenzene	✓		
• 2-, and 1-methylnaphthalene	✓		
5. "Range" analytes & internal standard RIC ID'd correctly, inspected for interferences & proper integration?	M		
6. Has the RT been updated to the method?	✓		
Analyst/date MH 9/8/20		**2nd Level Reviewer/date**	

7. Has the vol injected been verified vs Entech & corrected if actual amount differs >5%? [WL Sample Info: init amt = sample amt; final amt = 500 mL]	✓		
8. Do the lab ID, Info 1 and Dilution Factor columns correlate in Chrom? [Sample List - Lab ID vs. Info 1 vs. Dilution]	✓		
9. Can dilution history verified? [Mgmt Report]	✓		
10. Are all analytes present in the system blank < RL? (<1/2 RL for DoD). *If no, list blank ID:*	✓	☐ Method Blank – Report, ND (NCM#_____) ☐ Method Blank – Report, 10X (NCM#_____)	
11. All runs - peaks ID'd correctly and false positives removed?	✓		
12. If manual integrations performed, are they properly performed, baseline clearly identified, and correct reason given?	✓		
13. IS/Surr within limits? *List samples and reason (e.g., 1 thru 5):* [Batch Results IS & SUR Tab] Sample Reason Sample Reason _____ _____ _____ _____ _____ _____ _____ _____	✓	☐ (1) Surrogate – Matrix (NCM#_____) ☐ (2) Surrogate – High, ND (NCM#_____) ☐ (3) ISTD – RA/RA Concurs (NCM#_____) ☐ (4) Surrogate –RX concur, Report both (NCM#_____) ☐ (5) ISTD – Matrix, DL required (NCM#_____)	
14. Samples outside calibration range scheduled for dilution?	✓	☐ ICAL – Range Exceeded; Minimum Dilution	

Chrom Review	1st	If No, why is data reportable?	2nd
15. For first analysis that is at a dilution, is highest target analyte >20% cal range? *List samples and reason:* Sample Reason Sample Reason _____ _____ _____ _____	✓	☐ (1) Reporting Limit – Dilution, Matrix (NCM#_____) ☐ (2) Reporting Limit – Dilution, Non-Target (NCM#_____) ☐ (3) Issues with initial collection volume; see DRC.	
16. RIC inspected for proper integration for TPH?	M		
17. Obvious non-TPH peaks excluded?	✓		
18. Individual TPH peak area < octane high point area?	✓		
TALS Review	1st	If No, why is data reportable?	2nd

Eurofins/TestAmerica Knoxville GC/MS Air - Batch Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 21 & KNOX-MS-0023, Rev 4

19. Graphics uploaded? [open one paperclip]	✓		
20. NCM generated if BFB failed TO-14A criteria, but passes TO-15?		□ [Failed TO-14A, but passes TO-15] (NCM#)	
21. Is the %D ≤ 30% for all target analytes? [≤ 50% for 1&2 methylnaphthalene] [Chrom-F8] [TALS-Sample Results Tab]	✓	□ CCV - %D - LCS criteria met (NCM#_____) ☑ CCV - %D high - outside criteria, samples ND, Sample IDs Included (NCM# 24983)	
22. Undiluted volume analyzed meets the method requirement (200 mL vs. 500 mL)?	✓		na
23. Project & sample special instructions verified?	✓		
24. If samples were Tedlar bags, was the 72 hr HT met? ** Narrate transfer to can.	✓	□ Air Analysis - Air Sample Transfer to Canister (NCM#____)	
25. Sample analyses done within analytical holding time?	✓	□ Holding Time – Received w/Insufficient Time (NCM#____) □ Holding Time – Receipt (NCM#_____)	
26. Did the LCS meet criteria (70-130% with a limited # allowed 60-140% (see table) provisional analyte limit 60-140% with a limited # allowed 50-150%, and no two consecutive MEs). [Sample Results Tab] Note: No LCS required for OH VAP.	✓	□ Marginal Exceedances - Within ME Limits and Random; Report (NCM# ___) ☑ LCS/LCSD - %R High (NCM#_____) 24984	
27. Suffixes assigned properly (DL/RE)? [Sample List Tab]	✓		
28. Each job has QC created (BFB, CCV, LCS, MB)? [Sample List Tab]	✓		
29. Analytes over calibration range set to secondary [Conditions Review Tab]	✓		
30. Samples not reported set to 'Acceptable' or 'Rejected'? [Sample Results Tab]	✓		
31. DUP done per 20 samples and are all RPDs within limits? (for target analytes >5x RL, <25% RPD; no criteria for n-butanol) *(If DUP not reported - set to 'Acceptable' for each job)*	✓		
32. Samples linked to proper blank (200 mL or 500 mL)? [QC links]	✓	**500 mL blank ID:** 4 **200 mL blank ID:**	
33. Samples linked to job's BFB/CCV/LCS/MB? [QC Links]	✓		
34. Correct ICV linked to each MB? [QC Links]	✓		
35. Were all samples/QC analyzed within 24 hr of BFB? [F7]	✓		
36. If criteria were not met, was a NCM generated, and assigned to proper QC & samples? [Also see Conditions Review Tab]	✓		
37. Run Checklist and acknowledge findings [F8]	✓		
38. Runs set to 1st level review?	✓	Runs set to 2nd level review?	
39. QC checker run and items addressed?	-na-		
40. Checklist & Entech report scanned, attached & assigned properly?	-na-		

Analyst: **Date:** 9/18/20	**2nd Level Reviewer :** **Date:**
Comments:	**Comments:**
Example Calculation: #21 CCV	
On-column ppbv x Final Vol (mL)/Entech Initial Vol (mL) x Canister Dilution Log DF	
0.26419 x 133 x 1.33 = 1.32	

Number of target analytes in LCS	# marginal exceedances of LCS control limits allowed
>90	5
71 - 90	4
51 - 70	3
31 - 50	2
11 - 30	1
< 11	0

Eurofins/TestAmerica Knoxville GC/MS Air - Batch Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 20 & KNOX-MS-0023, Rev 4

Instrument/Date	MH 9/6/20		Routine	DOD	OHIO VAP
CCAL Chrom WL #	16514	CCAL Batch #	42498		
ICAL Chrom WL #	16451	ICAL Batch # / Event #	42290 /2592		

Chrom Review	1st	If No, why is data reportable?	2nd
1. Are the reagents & init/final volumes correct? (Verify reagents & amt. injected) [WL Sample Reagent Tab]			na
2. Did BFB meet tune criteria? [F8]		□ [Failed TO-14A, but passes TO-15]	Y
3. Was the CCAL compared to the most recent & correct ICAL (correct last ICal File batch #/start/end Cal date/time)? [F8]		List Target analytes outside CCV limits: _____ _____ _____	Y
4. Elution order checked on isomeric pairs? [Chrom]			
• dichlorodifluoromethane / 1,2-dichlorotetrafluoroethane			Y
• 2-methyl butane / acrolein			Y
• trichlorofluoromethane / 1,1,2-trichlorotrifluoroethane			Y
• vinyl acetate / hexane			Y
• cis- and trans- isomers			Y
• ethyl benzene / m/p-xylene / o-xylene			Y
• n-propylbenzene/4-ethyl toluene/1,3,5-trimethylbenzene/1,2,4-trimethylbenzene/sec-butylbenzene/1,2,3-trimethylbenzene			Y
• tert-butylbenzene/4-isopropyltoluene			Y
• 1,3- , 1,4- , and 1,2-dichlorobenzene			Y
• 1,2-dimethyl-4-ethylbenzene/1,2,4,5-, 1,2,3,5-, and 1,2,3,4-tetramethylbenzenes			NA
• 1,2,4-trichlorobenzene/1,2,3-trichlorobenzene			Y
• 2-, and 1-methylnaphthalene			Y
5. "Range" analytes & internal standard RIC ID'd correctly, inspected for interferences & proper integration?			NA
6. Has the RT been updated to the method?			Y
Analyst/date		**2nd Level Reviewer/date LL 9/8/20**	

7. Has the vol injected been verified vs Entech & corrected if actual amount differs >5%? [WL Sample Info: init amt = sample amt; final amt = 500 mL]			Y
8. Do the lab ID, Info 1 and Dilution Factor columns correlate in Chrom? [Sample List - Lab ID vs. Info 1 vs. Dilution]			Y
9. Can dilution history verified? [Mgmt Report]			Y
10. Are all analytes present in the system blank < RL**?** (<1/2 RL for DoD). *If no, list blank ID:*		□ Method Blank – Report, ND (NCM#_____) □ Method Blank – Report, 10X (NCM#_____)	Y
11. All runs - peaks ID'd correctly and false positives removed?			Y
12. If manual integrations performed, are they properly performed, baseline clearly identified, and correct reason given?			Y
13. IS/Surr within limits? *List samples and reason (e.g.,* 1 thru 5*):* [Batch Results IS & SUR Tab] Sample Reason Sample Reason _____ _____ _____ _____ _____ _____ _____ _____		□ (1) Surrogate – Matrix (NCM#_____) □ (2) Surrogate – High, ND (NCM#_____) □ (3) ISTD – RA/RA Concurs (NCM#_____) □ (4) Surrogate –RX concur, Report both (NCM#_____) □ (5) ISTD – Matrix, DL required (NCM#_____)	Y
14. Samples outside calibration range scheduled for dilution?		□ ICAL – Range Exceeded; Minimum Dilution	Y

Chrom Review	1st	If No, why is data reportable?	2nd
15. For first analysis that is at a dilution, is highest target analyte >20% cal range? *List samples and reason:* Sample Reason Sample Reason _____ _____ _____ _____ _____ _____ _____ _____		□ (1) Reporting Limit – Dilution, Matrix (NCM#_____) □ (2) Reporting Limit – Dilution, Non-Target (NCM#_____) □ (3) Issues with initial collection volume; see DRC.	Y
16. RIC inspected for proper integration for TPH?			NA
17. Obvious non-TPH peaks excluded?			NA
18. Individual TPH peak area < octane high point area?			NA

Eurofins/TestAmerica Knoxville GC/MS Air - Batch Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 20 & KNOX-MS-0023, Rev 4

TALS Review	**1st**	**If No, why is data reportable?**	**2nd**
19. Graphics uploaded? [open one paperclip]			**Y**
20. NCM generated if BFB failed TO-14A criteria, but passes TO-15?		□ [Failed TO-14A, but passes TO-15] (NCM#_____)	**NA**
21. Is the %D ≤ 30% for all target analytes? [≤ 50% for 1&2 methylnaphthalene] [Chrom-F8] [TALS-Sample Results Tab]		□ CCV - %D - LCS criteria met (NCM#_____) □ CCV - %D high - outside criteria, samples ND, Sample IDs Included (NCM#_____)	**Y**
22. Undiluted volume analyzed meets the method requirement (200 mL vs. 500 mL)?			**na**
23. Project & sample special instructions verified?			**Y**
24. If samples were Tedlar bags, was the 72 hr HT met? ** Narrate transfer to can.		□ Air Analysis - Air Sample Transfer to Canister (NCM#____)	**Y**
25. Sample analyses done within analytical holding time?		□ Holding Time – Received w/Insufficient Time (NCM#_____) □ Holding Time – Receipt (NCM#_____)	**Y**
26. Did the LCS meet criteria (70-130% with a limited # allowed 60-140% (see table) provisional analyte limit 60-140% with a limited # allowed 50-150%, and no two consecutive MEs). [Sample Results Tab] Note: No LCS required for OH VAP.		□ Marginal Exceedances - Within ME Limits and Random; Report (NCM# ___) □ LCS/LCSD - %R High (NCM#_____)	**Y**
27. Suffixes assigned properly (DL/RE)? [Sample List Tab]			**Y**
28. Each job has QC created (BFB, CCV, LCS, MB)? [Sample List Tab]			**Y**
29. Analytes over calibration range set to secondary [Conditions Review Tab]			**Y**
30. Samples not reported set to 'Acceptable' or 'Rejected'? [Sample Results Tab]			**Y**
31. DUP done per 20 samples and are all RPDs within limits? (for target analytes >5x RL, <25% RPD; no criteria for n-butanol) *(If DUP not reported - set to 'Acceptable' for each job)*			**Y**
32. Samples linked to proper blank (200 mL or 500 mL)? [QC links]		**500 mL blank ID: 4** **200 mL blank ID: NA**	**Y**
33. Samples linked to job's BFB/CCV/LCS/MB? [QC Links]			**Y**
34. Correct ICV linked to each MB? [QC Links]			**Y**
35. Were all samples/QC analyzed within 24 hr of BFB? [F7]			**Y**
36. If criteria were not met, was a NCM generated, and assigned to proper QC & samples? [Also see Conditions Review Tab]			**Y**
37. Run Checklist and acknowledge findings [F8]			**Y**
38. Runs set to 1st level review?		Runs set to 2nd level review?	**Y**
39. QC checker run and items addressed?	**-na-**		**Y**
40. Checklist & Entech report scanned, attached & assigned properly?	**-na-**		**Y**

Analyst:	**Date:**	**2nd Level Reviewer : LL**	**Date: 9/8/20**
Comments:		**Comments:**	
Example Calculation:			
On-column ppbv x Final Vol (mL)/Entech Initial Vol (mL) x Canister Dilution Log DF			

Number of target analytes in LCS	# marginal exceedances of LCS control limits allowed
>90	5
71 - 90	4
51 - 70	3
31 - 50	2
11 - 30	1
< 11	0

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Instrument ID: MG Start Date: 09/07/2020 07:32

Analysis Batch Number: 42500 End Date: 09/08/2020 06:32

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 140-42500/1		09/07/2020 07:32	1	GBFBI07.D	RTX-5 0.32(mm)
CCVIS 140-42500/2		09/07/2020 08:06	1	GCCVI07.D	RTX-5 0.32(mm)
LCS 140-42500/1002		09/07/2020 08:06	1	GCCVI07-LCS.d	RTX-5 0.32(mm)
MB 140-42500/4		09/07/2020 10:21	1	G500BI07.D	RTX-5 0.32(mm)
ZZZZZ		09/07/2020 13:21	1.44		RTX-5 0.32(mm)
ZZZZZ		09/07/2020 14:04	10.77		RTX-5 0.32(mm)
ZZZZZ		09/07/2020 14:49	32.57		RTX-5 0.32(mm)
ZZZZZ		09/07/2020 15:37	8.16		RTX-5 0.32(mm)
ZZZZZ		09/07/2020 17:52	1		RTX-5 0.32(mm)
140-20175-33	IA-144-C-29	09/07/2020 18:39	1	GBI07P107.D	RTX-5 0.32(mm)
140-20175-34	IA-141-C-29	09/07/2020 19:25	1	GBI07P108.D	RTX-5 0.32(mm)
140-20175-35	IA-149-C-29	09/07/2020 20:13	1	GBI07P109.D	RTX-5 0.32(mm)
140-20175-36	IA-DUP2-C-29	09/07/2020 20:56	1.4	GBI07P110.D	RTX-5 0.32(mm)
140-20175-37	IA-126-C-29	09/07/2020 21:40	1	GBI07P111.D	RTX-5 0.32(mm)
140-20175-38	IA-BCK-1-29	09/07/2020 22:24	1	GBI07P112.D	RTX-5 0.32(mm)
140-20175-39	IA-BCK-2-29	09/07/2020 23:09	2.29	GBI07P113.D	RTX-5 0.32(mm)
140-20175-40	IA-BCK-3-29	09/07/2020 23:56	1.59	GBI07P114.D	RTX-5 0.32(mm)
140-20175-41	IA-BCK-4-29	09/08/2020 00:42	1.52	GBI07P115.D	RTX-5 0.32(mm)
140-20175-11	SV-DUP2-C-29	09/08/2020 01:28	1	GBI07P116.D	RTX-5 0.32(mm)
ZZZZZ		09/08/2020 02:13	1		RTX-5 0.32(mm)
ZZZZZ		09/08/2020 02:56	1		RTX-5 0.32(mm)
ZZZZZ		09/08/2020 05:07	1		RTX-5 0.32(mm)
ZZZZZ		09/08/2020 06:32	1		RTX-5 0.32(mm)

Eurofins/TestAmerica Knoxville GC/MS Air - Batch Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 21 & KNOX-MS-0023, Rev 4

Instrument/Date	MG 9/7/20		Routine	DOD	OHIO VAP
CCAL Chrom WL #	16516	CCAL Batch #	42500		42512
ICAL Chrom WL #	16453	ICAL Batch # / Event #	42295 / 2602	/	42297 2604

Chrom Review	1st	If No, why is data reportable?	2nd
1. Are the reagents & init/final volumes correct? (Verify reagents & amt. injected) [WL Sample Reagent Tab]	✓		na
2. Did BFB meet tune criteria? [F8]	✓	□ [Failed TO-14A, but passes TO-15]	
3. Was the CCAL compared to the most recent & correct ICAL (correct last ICal File batch #/start/end Cal date/time)? [F8]	✓	List Target analytes outside CCV limits: _____ _____	
4. Elution order checked on isomeric pairs? [Chrom]			
• dichlorodifluoromethane / 1,2-dichlorotetrafluoroethane	✓		
• 2-methyl butane / acrolein	✓		
• trichlorofluoromethane / 1,1,2-trichlorotrifluoroethane	✓		
• vinyl acetate / hexane	✓		
• cis- and trans- isomers	✓		
• ethyl benzene / m/p-xylene / o-xylene	✓		
• n-propylbenzene/4-ethyl toluene/1,3,5-trimethylbenzene/1,2,4-trimethylbenzene/sec-butylbenzene/1,2,3-trimethylbenzene	✓		
• tert-butylbenzene/4-isopropyltoluene	✓		
• 1,3- , 1,4- , and 1,2-dichlorobenzene	✓		
• 1,2-dimethyl-4-ethylbenzene/1,2,4,5-, 1,2,3,5-, and 1,2,3,4-tetramethylbenzenes	NA		
• 1,2,4-trichlorobenzene/1,2,3-trichlorobenzene	✓		
• 2-, and 1-methylnaphthalene	✓		
5. "Range" analytes & internal standard RIC ID'd correctly, inspected for interferences & proper integration?	✓		
6. Has the RT been updated to the method?	✓		
Analyst/date	TS 9/8/20	**2nd Level Reviewer/date**	

7. Has the vol injected been verified vs Entech & corrected if actual amount differs >5%? [WL Sample Info: init amt = sample amt; final amt = 500 mL]	✓		
8. Do the lab ID, Info 1 and Dilution Factor columns correlate in Chrom? [Sample List - Lab ID vs. Info 1 vs. Dilution]	✓		
9. Can dilution history verified? [Mgmt Report]	✓		
10. Are all analytes present in the system blank < RL? (<1/2 RL for DoD). *If no, list blank ID:*	✓	□ Method Blank – Report, ND (NCM#_____) ☑ Method Blank – Report, 10X (NCM#_____)	
11. All runs - peaks ID'd correctly and false positives removed?	✓		
12. If manual integrations performed, are they properly performed, baseline clearly identified, and correct reason given?	✓		
13. IS/Surr within limits? *List samples and reason (e.g., 1 thru 5):* [Batch Results IS & SUR Tab] Sample Reason Sample Reason _____ _____ _____ _____ _____ _____ _____ _____	✓	□ (1) Surrogate – Matrix (NCM#_____) □ (2) Surrogate – High, ND (NCM#_____) □ (3) ISTD – RA/RA Concurs (NCM#_____) □ (4) Surrogate –RX concur, Report both (NCM#_____) □ (5) ISTD – Matrix, DL required (NCM#_____)	
14. Samples outside calibration range scheduled for dilution?	✓	□ ICAL – Range Exceeded; Minimum Dilution	

Chrom Review	1st	If No, why is data reportable?	2nd
15. For first analysis that is at a dilution, is highest target analyte >20% cal range? *List samples and reason:* Sample Reason Sample Reason _____ _____ _____ _____	✓	□ (1) Reporting Limit – Dilution, Matrix (NCM#_____) □ (2) Reporting Limit – Dilution, Non-Target (NCM#_____) □ (3) Issues with initial collection volume; see DRC.	
16. RIC inspected for proper integration for TPH?	NA		
17. Obvious non-TPH peaks excluded?			
18. Individual TPH peak area < octane high point area?			

TALS Review	1st	If No, why is data reportable?	2nd

Eurofins/TestAmerica Knoxville GC/MS Air - Batch Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 21 & KNOX-MS-0023, Rev 4
Page 2 of 2

19. Graphics uploaded? [open one paperclip]	✓		
20. NCM generated if BFB failed TO-14A criteria, but passes TO-15?	✓	□ [Failed TO-14A, but passes TO-15] (NCM#_____)	
21. Is the %D ≤ 30% for all target analytes? [≤ 50% for 1&2 methylnaphthalene] [Chrom-F8] [TALS-Sample Results Tab]	✓	□ CCV - %D - LCS criteria met (NCM#_____) □ CCV - %D high - outside criteria, samples ND, Sample IDs Included (NCM#_____)	
22. Undiluted volume analyzed meets the method requirement (200 mL vs. 500 mL)?	✓		na
23. Project & sample special instructions verified?	✓		
24. If samples were Tedlar bags, was the 72 hr HT met? ** Narrate transfer to can.	NA	□ Air Analysis - Air Sample Transfer to Canister (NCM#____)	
25. Sample analyses done within analytical holding time?	✓	□ Holding Time – Received w/Insufficient Time (NCM#_____) □ Holding Time – Receipt (NCM#_____)	
26. Did the LCS meet criteria (70-130% with a limited # allowed 60-140% (see table) provisional analyte limit 60-140% with a limited # allowed 50-150%, and no two consecutive MEs). [Sample Results Tab] Note: No LCS required for OH VAP.	✓	□ Marginal Exceedances - Within ME Limits and Random; Report (NCM# ___) □ LCS/LCSD - %R High (NCM#_____)	
27. Suffixes assigned properly (DL/RE)? [Sample List Tab]	✓		
28. Each job has QC created (BFB, CCV, LCS, MB)? [Sample List Tab]	✓		
29. Analytes over calibration range set to secondary [Conditions Review Tab]	NA		
30. Samples not reported set to 'Acceptable' or 'Rejected'? [Sample Results Tab]	✓		
31. DUP done per 20 samples and are all RPDs within limits? (for target analytes >5x RL, <25% RPD; no criteria for n-butanol) *(If DUP not reported - set to 'Acceptable' for each job)*	✓		
32. Samples linked to proper blank (200 mL or 500 mL)? [QC links]	✓	**500 mL blank ID:** 4 **200 mL blank ID:**	
33. Samples linked to job's BFB/CCV/LCS/MB? [QC Links]	✓		
34. Correct ICV linked to each MB? [QC Links]	✓		
35. Were all samples/QC analyzed within 24 hr of BFB? [F7]	✓		
36. If criteria were not met, was a NCM generated, and assigned to proper QC & samples? [Also see Conditions Review Tab]	NA		
37. Run Checklist and acknowledge findings [F8]	✓		
38. Runs set to 1st level review?	✓	Runs set to 2nd level review?	
39. QC checker run and items addressed?	-na-		
40. Checklist & Entech report scanned, attached & assigned properly?	-na-		

Analyst: AB	Date: 9/8/20	2nd Level Reviewer :	Date:
Comments:		**Comments:**	
Example Calculation:			
On-column ppbv x Final Vol (mL)/Entech Initial Vol (mL) x Canister Dilution Log DF			
20197 #2			
8.075 → 367 370 ✓			

MS017r48, 4/08/2020

Eurofins/TestAmerica Knoxville GC/MS Air - Batch Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 20 & KNOX-MS-0023, Rev 4

Instrument/Date	MG 9/7/20		Routine	DOD	OHIO VAP
CCAL Chrom WL #	16516	CCAL Batch #	42500		42512
ICAL Chrom WL #	16453	ICAL Batch # / Event #	42295/2602		42297/2604

Chrom Review	1st	If No, why is data reportable?	2nd
1. Are the reagents & init/final volumes correct? (Verify reagents & amt. injected) [WL Sample Reagent Tab]			na
2. Did BFB meet tune criteria? [F8]		□ [Failed TO-14A, but passes TO-15]	Y
3. Was the CCAL compared to the most recent & correct ICAL (correct last ICal File batch #/start/end Cal date/time)? [F8]		List Target analytes outside CCV limits: _____ _____ _____	Y
4. Elution order checked on isomeric pairs? [Chrom]			
• dichlorodifluoromethane / 1,2-dichlorotetrafluoroethane			Y
• 2-methyl butane / acrolein			Y
• trichlorofluoromethane / 1,1,2-trichlorotrifluoroethane			Y
• vinyl acetate / hexane			Y
• cis- and trans- isomers			Y
• ethyl benzene / m/p-xylene / o-xylene			Y
• n-propylbenzene/4-ethyl toluene/1,3,5-trimethylbenzene/1,2,4-trimethylbenzene/sec-butylbenzene/1,2,3-trimethylbenzene			Y
• tert-butylbenzene/4-isopropyltoluene			Y
• 1,3- , 1,4- , and 1,2-dichlorobenzene			Y
• 1,2-dimethyl-4-ethylbenzene/1,2,4,5-, 1,2,3,5-, and 1,2,3,4-tetramethylbenzenes			NA
• 1,2,4-trichlorobenzene/1,2,3-trichlorobenzene			Y
• 2-, and 1-methylnaphthalene			Y
5. "Range" analytes & internal standard RIC ID'd correctly, inspected for interferences & proper integration?			**NA**
6. Has the RT been updated to the method?			**Y**
Analyst/date		**2nd Level Reviewer/date LL 9/8/20**	

7. Has the vol injected been verified vs Entech & corrected if actual amount differs >5%? [WL Sample Info: init amt = sample amt; final amt = 500 mL]			**Y**
8. Do the lab ID, Info 1 and Dilution Factor columns correlate in Chrom? [Sample List - Lab ID vs. Info 1 vs. Dilution]			**Y**
9. Can dilution history verified? [Mgmt Report]			**Y**
10. Are all analytes present in the system blank < RL**?** (<1/2 RL for DoD). *If no, list blank ID:*		□ Method Blank – Report, ND (NCM#_____) □ Method Blank – Report, 10X (NCM#_____)	**Y**
11. All runs - peaks ID'd correctly and false positives removed?			**Y**
12. If manual integrations performed, are they properly performed, baseline clearly identified, and correct reason given?			**Y**
13. IS/Surr within limits? *List samples and reason (e.g.,* 1 thru 5*):* [Batch Results IS & SUR Tab] Sample Reason Sample Reason _____ _____ _____ _____ _____ _____ _____ _____		□ (1) Surrogate – Matrix (NCM#_____) □ (2) Surrogate – High, ND (NCM#_____) □ (3) ISTD – RA/RA Concurs (NCM#_____) □ (4) Surrogate –RX concur, Report both (NCM#_____) □ (5) ISTD – Matrix, DL required (NCM#_____)	**Y**
14. Samples outside calibration range scheduled for dilution?		□ ICAL – Range Exceeded; Minimum Dilution	**Y**
Chrom Review	**1st**	**If No, why is data reportable?**	**2nd**
15. For first analysis that is at a dilution, is highest target analyte >20% cal range? *List samples and reason:* Sample Reason Sample Reason _____ _____ _____ _____ _____ _____ _____ _____		□ (1) Reporting Limit – Dilution, Matrix (NCM#_____) □ (2) Reporting Limit – Dilution, Non-Target (NCM#_____) □ (3) Issues with initial collection volume; see DRC.	**Y**
16. RIC inspected for proper integration for TPH?			**NA**
17. Obvious non-TPH peaks excluded?			**NA**
18. Individual TPH peak area < octane high point area?			**NA**

Eurofins/TestAmerica Knoxville GC/MS Air - Batch Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 20 & KNOX-MS-0023, Rev 4

TALS Review	**1st**	**If No, why is data reportable?**	**2nd**
19. Graphics uploaded? [open one paperclip]			**Y**
20. NCM generated if BFB failed TO-14A criteria, but passes TO-15?		□ [Failed TO-14A, but passes TO-15] (NCM#_____)	**Y**
21. Is the %D ≤ 30% for all target analytes? [≤ 50% for 1&2 methylnaphthalene] [Chrom-F8] [TALS-Sample Results Tab]		□ CCV - %D - LCS criteria met (NCM#_____) □ CCV - %D high - outside criteria, samples ND, Sample IDs Included (NCM#_____)	**Y**
22. Undiluted volume analyzed meets the method requirement (200 mL vs. 500 mL)?			**na**
23. Project & sample special instructions verified?			**Y**
24. If samples were Tedlar bags, was the 72 hr HT met? ** Narrate transfer to can.		□ Air Analysis - Air Sample Transfer to Canister (NCM#____)	**NA**
25. Sample analyses done within analytical holding time?		□ Holding Time – Received w/Insufficient Time (NCM#_____) □ Holding Time – Receipt (NCM#_____)	**Y**
26. Did the LCS meet criteria (70-130% with a limited # allowed 60-140% (see table) provisional analyte limit 60-140% with a limited # allowed 50-150%, and no two consecutive MEs). [Sample Results Tab] Note: No LCS required for OH VAP.		□ Marginal Exceedances - Within ME Limits and Random; Report (NCM# ___) □ LCS/LCSD - %R High (NCM#_____)	**Y**
27. Suffixes assigned properly (DL/RE)? [Sample List Tab]			**Y**
28. Each job has QC created (BFB, CCV, LCS, MB)? [Sample List Tab]			**Y**
29. Analytes over calibration range set to secondary [Conditions Review Tab]			**Y**
30. Samples not reported set to 'Acceptable' or 'Rejected'? [Sample Results Tab]			**Y**
31. DUP done per 20 samples and are all RPDs within limits? (for target analytes >5x RL, <25% RPD; no criteria for n-butanol) *(If DUP not reported - set to 'Acceptable' for each job)*			**Y**
32. Samples linked to proper blank (200 mL or 500 mL)? [QC links]		**500 mL blank ID: 4** **200 mL blank ID: NA**	**Y**
33. Samples linked to job's BFB/CCV/LCS/MB? [QC Links]			**Y**
34. Correct ICV linked to each MB? [QC Links]			**Y**
35. Were all samples/QC analyzed within 24 hr of BFB? [F7]			**Y**
36. If criteria were not met, was a NCM generated, and assigned to proper QC & samples? [Also see Conditions Review Tab]			**Y**
37. Run Checklist and acknowledge findings [F8]			**Y**
38. Runs set to 1st level review?		Runs set to 2nd level review?	**Y**
39. QC checker run and items addressed?	**-na-**		**Y**
40. Checklist & Entech report scanned, attached & assigned properly?	**-na-**		**Y**

Analyst:	**Date:**	**2nd Level Reviewer : LL**	**Date: 9/8/20**
Comments:		**Comments:**	

Example Calculation:
On-column ppbv x Final Vol (mL)/Entech Initial Vol (mL) x Canister Dilution Log DF

Number of target analytes in LCS	# marginal exceedances of LCS control limits allowed
>90	5
71 - 90	4
51 - 70	3
31 - 50	2
11 - 30	1
< 11	0

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Instrument ID: MG Start Date: 09/08/2020 14:50

Analysis Batch Number: 42503 End Date: 09/09/2020 10:14

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 140-42503/1		09/08/2020 14:50	1	GBFBI08Z.D	RTX-5 0.32(mm)
CCVIS 140-42503/2		09/08/2020 15:52	1	GCCVI08Z.D	RTX-5 0.32(mm)
LCS 140-42503/1002		09/08/2020 15:52	1	GCCVI08Z-LCS.d	RTX-5 0.32(mm)
MB 140-42503/5		09/08/2020 17:16	1	G500BI08.D	RTX-5 0.32(mm)
140-20175-3 DL	SV-102-C-29 DL	09/08/2020 18:03	3.43	GI08P102.D	RTX-5 0.32(mm)
140-20175-6 DL	SV-DUP1-C-29 DL	09/08/2020 18:49	3.6	GI08P103.D	RTX-5 0.32(mm)
ZZZZZ		09/08/2020 20:19	1.55		RTX-5 0.32(mm)
ZZZZZ		09/08/2020 22:39	1		RTX-5 0.32(mm)
ZZZZZ		09/08/2020 23:24	1		RTX-5 0.32(mm)
ZZZZZ		09/09/2020 00:58	1		RTX-5 0.32(mm)
ZZZZZ		09/09/2020 01:43	1		RTX-5 0.32(mm)
ZZZZZ		09/09/2020 02:29	1		RTX-5 0.32(mm)
ZZZZZ		09/09/2020 03:15	1		RTX-5 0.32(mm)
ZZZZZ		09/09/2020 04:00	9.23		RTX-5 0.32(mm)
ZZZZZ		09/09/2020 04:44	3.03		RTX-5 0.32(mm)
140-20175-17	SV-126-C-29	09/09/2020 07:56	12.39	GI08P104R.D	RTX-5 0.32(mm)
ZZZZZ		09/09/2020 08:42	1.55		RTX-5 0.32(mm)
ZZZZZ		09/09/2020 09:26	1		RTX-5 0.32(mm)
ZZZZZ		09/09/2020 10:14	1		RTX-5 0.32(mm)

TO 15 LL

Eurofins/TestAmerica Knoxville GC/MS Air - Batch Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 21 & KNOX-MS-0023, Rev 4

Instrument/Date	MG 9/9/20		Routine	DOD	OHIO VAP
CCAL Chrom WL #	16579	CCAL Batch #	42503		42542
ICAL Chrom WL #	16453	ICAL Batch # / Event #	42295 / 2602	/	42297 / 2604

Chrom Review	1st	If No, why is data reportable?	2nd
1. Are the reagents & init/final volumes correct? (Verify reagents & amt. injected) [WL Sample Reagent Tab]	✓	tce confirmation only	na
2. Did BFB meet tune criteria? [F8]	✓	□ [Failed TO-14A, but passes TO-15]	
3. Was the CCAL compared to the most recent & correct ICAL (correct last ICal File batch #/start/end Cal date/time)? [F8]	✓	List Target analytes outside CCV limits: 123 tmbz	
4. Elution order checked on isomeric pairs? [Chrom]			
• dichlorodifluoromethane / 1,2-dichlorotetrafluoroethane	✓		
• 2-methyl butane / acrolein	✓		
• trichlorofluoromethane / 1,1,2-trichlorotrifluoroethane	✓		
• vinyl acetate / hexane	✓		
• cis- and trans- isomers	✓		
• ethyl benzene / m/p-xylene / o-xylene	✓		
• n-propylbenzene/4-ethyl toluene/1,3,5-trimethylbenzene/1,2,4-trimethylbenzene/sec-butylbenzene/1,2,3-trimethylbenzene	✓		
• tert-butylbenzene/4-isopropyltoluene	✓		
• 1,3- , 1,4- , and 1,2-dichlorobenzene	✓		
• 1,2-dimethyl-4-ethylbenzene/1,2,4,5-, 1,2,3,5-, and 1,2,3,4-tetramethylbenzenes	✓		
• 1,2,4-trichlorobenzene/1,2,3-trichlorobenzene	✓		
• 2-, and 1-methylnaphthalene	✓		
5. "Range" analytes & internal standard RIC ID'd correctly, inspected for interferences & proper integration?	✓		
6. Has the RT been updated to the method?	✓		
Analyst/date JB 9/9/20		**2nd Level Reviewer/date**	

7. Has the vol injected been verified vs Entech & corrected if actual amount differs >5%? [WL Sample Info: init amt = sample amt; final amt = 500 mL]	✓		
8. Do the lab ID, Info 1 and Dilution Factor columns correlate in Chrom? [Sample List - Lab ID vs. Info 1 vs. Dilution]	✓		
9. Can dilution history verified? [Mgmt Report]	✓		
10. Are all analytes present in the system blank < RL? (<1/2 RL for DoD). *If no, list blank ID:*	✓	□ Method Blank – Report, ND (NCM#_____) □ Method Blank – Report, 10X (NCM#_____)	
11. All runs - peaks ID'd correctly and false positives removed?	✓		
12. If manual integrations performed, are they properly performed, baseline clearly identified, and correct reason given?	✓		
13. IS/Surr within limits? *List samples and reason (e.g., 1 thru 5):* [Batch Results IS & SUR Tab] Sample Reason Sample Reason	✓	□ (1) Surrogate – Matrix (NCM#_____) □ (2) Surrogate – High, ND (NCM#_____) □ (3) ISTD – RA/RA Concurs (NCM#_____) □ (4) Surrogate –RX concur, Report both (NCM#_____) □ (5) ISTD – Matrix, DL required (NCM#_____)	
14. Samples outside calibration range scheduled for dilution?	✓	□ ICAL – Range Exceeded; Minimum Dilution	

Chrom Review	1st	If No, why is data reportable?	2nd
15. For first analysis that is at a dilution, is highest target analyte >20% cal range? *List samples and reason:* Sample Reason Sample Reason	NA	□ (1) Reporting Limit – Dilution, Matrix (NCM#_____) □ (2) Reporting Limit – Dilution, Non-Target (NCM#_____) □ (3) Issues with initial collection volume; see DRC.	
16. RIC inspected for proper integration for TPH?			
17. Obvious non-TPH peaks excluded?			
18. Individual TPH peak area < octane high point area?			

TALS Review	1st	If No, why is data reportable?	2nd

Eurofins/TestAmerica Knoxville GC/MS Air - Batch Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 21 & KNOX-MS-0023, Rev 4

19. Graphics uploaded? [open one paperclip]	✓		
20. NCM generated if BFB failed TO-14A criteria, but passes TO-15?	✓	□ [Failed TO-14A, but passes TO-15] (NCM#)	
21. Is the %D ≤ 30% for all target analytes? [≤ 50% for 1&2 methylnaphthalene] [Chrom-F8] [TALS-Sample Results Tab]	✓	☒ CCV - %D - LCS criteria met (NCM# ~~25067~~ 9/9/20) □ CCV - %D high - outside criteria, samples ND, Sample TDs Included (NCM# 25007)	
22. Undiluted volume analyzed meets the method requirement (200 mL vs. 500 mL)?	✓		na
23. Project & sample special instructions verified?	✓		
24. If samples were Tedlar bags, was the 72 hr HT met? ** Narrate transfer to can.	NA	□ Air Analysis - Air Sample Transfer to Canister (NCM#____)	
25. Sample analyses done within analytical holding time?	✓	□ Holding Time – Received w/Insufficient Time (NCM#_____) □ Holding Time – Receipt (NCM#_____)	
26. Did the LCS meet criteria (70-130% with a limited # allowed 60-140% (see table) provisional analyte limit 60-140% with a limited # allowed 50-150%, and no two consecutive MEs). [Sample Results Tab] Note: No LCS required for OH VAP.	✓	☒ Marginal Exceedances - Within ME Limits and Random; Report (NCM# ___) □ LCS/LCSD - %R High (NCM#_____) 25008	
27. Suffixes assigned properly (DL/RE)? [Sample List Tab]	✓		
28. Each job has QC created (BFB, CCV, LCS, MB)? [Sample List Tab]	✓		
29. Analytes over calibration range set to secondary [Conditions Review Tab]	✓		
30. Samples not reported set to 'Acceptable' or 'Rejected'? [Sample Results Tab]	✓		
31. DUP done per 20 samples and are all RPDs within limits? (for target analytes >5x RL, <25% RPD; no criteria for n-butanol) *(If DUP not reported - set to 'Acceptable' for each job)*	✓		
32. Samples linked to proper blank (200 mL or 500 mL)? [QC links]	✓	**500 mL blank ID:** 5 **200 mL blank ID:**	
33. Samples linked to job's BFB/CCV/LCS/MB? [QC Links]	✓		
34. Correct ICV linked to each MB? [QC Links]	✓		
35. Were all samples/QC analyzed within 24 hr of BFB? [F7]	✓		
36. If criteria were not met, was a NCM generated, and assigned to proper QC & samples? [Also see Conditions Review Tab]	✓		
37. Run Checklist and acknowledge findings [F8]	✓		
38. Runs set to 1st level review?	✓	Runs set to 2nd level review?	
39. QC checker run and items addressed?	-na-		
40. Checklist & Entech report scanned, attached & assigned properly?	-na-		

Analyst:	**Date:** 9/9/20	**2nd Level Reviewer :**	**Date:**
Comments:		**Comments:**	

Example Calculation:

On-column ppbv x Final Vol (mL)/Entech Initial Vol (mL) x Canister Dilution Log DF

20210 DL 5.289 → 8/1.98 ✓

Eurofins/TestAmerica Knoxville GC/MS Air - Batch Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 20 & KNOX-MS-0023, Rev 4

Instrument/Date	MG 9/8/20		Routine	DOD	OHIO VAP
CCAL Chrom WL #	16519	CCAL Batch #	42503		42542
ICAL Chrom WL #	16453	ICAL Batch # / Event #	42295/2602		42297/2604

Chrom Review	1st	If No, why is data reportable?	2nd
1. Are the reagents & init/final volumes correct? (Verify reagents & amt. injected) [WL Sample Reagent Tab]			na
2. Did BFB meet tune criteria? [F8]		□ [Failed TO-14A, but passes TO-15]	Y
3. Was the CCAL compared to the most recent & correct ICAL (correct last ICal File batch #/start/end Cal date/time)? [F8]		List Target analytes outside CCV limits: _____ _____ _____	Y
4. Elution order checked on isomeric pairs? [Chrom]			
• dichlorodifluoromethane / 1,2-dichlorotetrafluoroethane			Y
• 2-methyl butane / acrolein			Y
• trichlorofluoromethane / 1,1,2-trichlorotrifluoroethane			Y
• vinyl acetate / hexane			Y
• cis- and trans- isomers			Y
• ethyl benzene / m/p-xylene / o-xylene			Y
• n-propylbenzene/4-ethyl toluene/1,3,5-trimethylbenzene/1,2,4-trimethylbenzene/sec-butylbenzene/1,2,3-trimethylbenzene			Y
• tert-butylbenzene/4-isopropyltoluene			Y
• 1,3- , 1,4- , and 1,2-dichlorobenzene			Y
• 1,2-dimethyl-4-ethylbenzene/1,2,4,5-, 1,2,3,5-, and 1,2,3,4-tetramethylbenzenes			NA
• 1,2,4-trichlorobenzene/1,2,3-trichlorobenzene			Y
• 2-, and 1-methylnaphthalene			Y
5. "Range" analytes & internal standard RIC ID'd correctly, inspected for interferences & proper integration?			**NA**
6. Has the RT been updated to the method?			**Y**
Analyst/date		**2nd Level Reviewer/date LL 9/9/20**	

7. Has the vol injected been verified vs Entech & corrected if actual amount differs >5%? [WL Sample Info: init amt = sample amt; final amt = 500 mL]			**Y**
8. Do the lab ID, Info 1 and Dilution Factor columns correlate in Chrom? [Sample List - Lab ID vs. Info 1 vs. Dilution]			**Y**
9. Can dilution history verified? [Mgmt Report]			**Y**
10. Are all analytes present in the system blank < RL**?** (<1/2 RL for DoD). *If no, list blank ID:*		□ Method Blank – Report, ND (NCM#_____) □ Method Blank – Report, 10X (NCM#_____)	**Y**
11. All runs - peaks ID'd correctly and false positives removed?			**Y**
12. If manual integrations performed, are they properly performed, baseline clearly identified, and correct reason given?			**Y**
13. IS/Surr within limits? *List samples and reason (e.g.,* 1 thru 5*):* [Batch Results IS & SUR Tab] Sample Reason Sample Reason _____ _____ _____ _____ _____ _____ _____ _____		□ (1) Surrogate – Matrix (NCM#_____) □ (2) Surrogate – High, ND (NCM#_____) □ (3) ISTD – RA/RA Concurs (NCM#_____) □ (4) Surrogate –RX concur, Report both (NCM#_____) □ (5) ISTD – Matrix, DL required (NCM#_____)	**Y**
14. Samples outside calibration range scheduled for dilution?		□ ICAL – Range Exceeded; Minimum Dilution	**Y**
Chrom Review	**1st**	**If No, why is data reportable?**	**2nd**
15. For first analysis that is at a dilution, is highest target analyte >20% cal range? *List samples and reason:* Sample Reason Sample Reason _____ _____ _____ _____ _____ _____ _____ _____		□ (1) Reporting Limit – Dilution, Matrix (NCM#_____) □ (2) Reporting Limit – Dilution, Non-Target (NCM#_____) □ (3) Issues with initial collection volume; see DRC.	**Y**
16. RIC inspected for proper integration for TPH?			**NA**
17. Obvious non-TPH peaks excluded?			**NA**
18. Individual TPH peak area < octane high point area?			**NA**

Eurofins/TestAmerica Knoxville GC/MS Air - Batch Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 20 & KNOX-MS-0023, Rev 4

TALS Review	**1st**	**If No, why is data reportable?**	**2nd**
19. Graphics uploaded? [open one paperclip]			**Y**
20. NCM generated if BFB failed TO-14A criteria, but passes TO-15?		□ [Failed TO-14A, but passes TO-15] (NCM#_____)	**NA**
21. Is the %D ≤ 30% for all target analytes? [≤ 50% for 1&2 methylnaphthalene] [Chrom-F8] [TALS-Sample Results Tab]		□ CCV - %D - LCS criteria met (NCM#_____) □ CCV - %D high - outside criteria, samples ND, Sample IDs Included (NCM#_____)	**Y**
22. Undiluted volume analyzed meets the method requirement (200 mL vs. 500 mL)?			**na**
23. Project & sample special instructions verified?			**Y**
24. If samples were Tedlar bags, was the 72 hr HT met? ** Narrate transfer to can.		□ Air Analysis - Air Sample Transfer to Canister (NCM#____)	**NA**
25. Sample analyses done within analytical holding time?		□ Holding Time – Received w/Insufficient Time (NCM#_____) □ Holding Time – Receipt (NCM#_____)	**Y**
26. Did the LCS meet criteria (70-130% with a limited # allowed 60-140% (see table) provisional analyte limit 60-140% with a limited # allowed 50-150%, and no two consecutive MEs). [Sample Results Tab] Note: No LCS required for OH VAP.		□ Marginal Exceedances - Within ME Limits and Random; Report (NCM# ___) □ LCS/LCSD - %R High (NCM#_____)	**Y**
27. Suffixes assigned properly (DL/RE)? [Sample List Tab]			**Y**
28. Each job has QC created (BFB, CCV, LCS, MB)? [Sample List Tab]			**Y**
29. Analytes over calibration range set to secondary [Conditions Review Tab]			**Y**
30. Samples not reported set to 'Acceptable' or 'Rejected'? [Sample Results Tab]			**Y**
31. DUP done per 20 samples and are all RPDs within limits? (for target analytes >5x RL, <25% RPD; no criteria for n-butanol) *(If DUP not reported - set to 'Acceptable' for each job)*			**Y**
32. Samples linked to proper blank (200 mL or 500 mL)? [QC links]		**500 mL blank ID: 5** **200 mL blank ID: NA**	**Y**
33. Samples linked to job's BFB/CCV/LCS/MB? [QC Links]			**Y**
34. Correct ICV linked to each MB? [QC Links]			**Y**
35. Were all samples/QC analyzed within 24 hr of BFB? [F7]			**Y**
36. If criteria were not met, was a NCM generated, and assigned to proper QC & samples? [Also see Conditions Review Tab]			**Y**
37. Run Checklist and acknowledge findings [F8]			**Y**
38. Runs set to 1st level review?		Runs set to 2nd level review?	**Y**
39. QC checker run and items addressed?	**-na-**		**Y**
40. Checklist & Entech report scanned, attached & assigned properly?	**-na-**		**Y**

Analyst:	**Date:**	**2nd Level Reviewer : LL**	**Date: 9/9/20**
Comments:		**Comments:**	
Example Calculation:			
On-column ppbv x Final Vol (mL)/Entech Initial Vol (mL) x Canister Dilution Log DF			

AIR - GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Knoxvill Job No.: 140-20175-1

SDG No.:

Batch Number: 42399 Batch Start Date: 09/03/20 09:43 Batch Analyst: Khachitpongpanit, Suphawa

Batch Method: TO 15 LL Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	InitialPressure	FinalPressure	40CV101P 00118	40MXBFB 00001
BFB 140-42399/1		TO 15 LL		500 mL	500 mL	1	1		40 mL
CCVIS 140-42399/2		TO 15 LL		500 mL	500 mL	1	1	80 mL	
MB 140-42399/4		TO 15 LL		500 mL	500 mL	1	1		
140-20175-A-1	SV-001-C-29	TO 15 LL	T	100 mL	500 mL	1	1		
140-20175-A-2	SV-004-C-29	TO 15 LL	T	40 mL	500 mL	1	1		
140-20175-A-3	SV-102-C-29	TO 15 LL	T	20 mL	500 mL	1	1		
140-20175-A-4	SV-113-C-29	TO 15 LL	T	100 mL	500 mL	1	1		
140-20175-A-5	SV-088-C-29	TO 15 LL	T	100 mL	500 mL	1	1		
140-20175-A-6	SV-DUP1-C-29	TO 15 LL	T	20 mL	500 mL	1	1		
140-20175-A-7	SV-142-C-29	TO 15 LL	T	100 mL	500 mL	1	1		
140-20175-A-8	SV-155-C-29	TO 15 LL	T	100 mL	500 mL	1	1		
140-20175-A-9	SV-133-C-29	TO 15 LL	T	100 mL	500 mL	1	1		
140-20175-A-10	SV-153-C-29	TO 15 LL	T	100 mL	500 mL	1	1		
LCS 140-42399/1002		TO 15 LL		500 mL	500 mL	1	1	80 mL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	40MXISSUR 00001					
BFB 140-42399/1		TO 15 LL							
CCVIS 140-42399/2		TO 15 LL		40 mL					
MB 140-42399/4		TO 15 LL		40 mL					
140-20175-A-1	SV-001-C-29	TO 15 LL	T	40 mL					
140-20175-A-2	SV-004-C-29	TO 15 LL	T	40 mL					
140-20175-A-3	SV-102-C-29	TO 15 LL	T	40 mL					
140-20175-A-4	SV-113-C-29	TO 15 LL	T	40 mL					
140-20175-A-5	SV-088-C-29	TO 15 LL	T	40 mL					
140-20175-A-6	SV-DUP1-C-29	TO 15 LL	T	40 mL					
140-20175-A-7	SV-142-C-29	TO 15 LL	T	40 mL					
140-20175-A-8	SV-155-C-29	TO 15 LL	T	40 mL					
140-20175-A-9	SV-133-C-29	TO 15 LL	T	40 mL					
140-20175-A-10	SV-153-C-29	TO 15 LL	T	40 mL					

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

AIR - GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Knoxvill Job No.: 140-20175-1

SDG No.:

Batch Number: 42399 Batch Start Date: 09/03/20 09:43 Batch Analyst: Khachitpongpanit, Suphawa

Batch Method: TO 15 LL Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	40MXISSUR 00001					
LCS 140-42399/1002		TO 15 LL		40 mL					

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

AIR - GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Knoxvill Job No.: 140-20175-1

SDG No.:

Batch Number: 42409 Batch Start Date: 09/03/20 07:22 Batch Analyst: Taj, Holly M

Batch Method: TO 15 LL Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	InitialPressure	FinalPressure	40CV101S 00123	40MXBFB 00001
BFB 140-42409/1		TO 15 LL		500 mL	500 mL	1	1		40 mL
CCVIS 140-42409/2		TO 15 LL		500 mL	500 mL	1	1	80 mL	
MB 140-42409/8		TO 15 LL		500 mL	500 mL	1	1		
140-20175-A-12	SV-060-C-29	TO 15 LL	T	20 mL	500 mL	1	1		
140-20175-A-14	SV-152-C-29	TO 15 LL	T	50 mL	500 mL	1	1		
140-20175-A-15	SV-141-C-29	TO 15 LL	T	100 mL	500 mL	1	1		
140-20175-A-16	SV-149-C-29	TO 15 LL	T	100 mL	500 mL	1	1		
140-20175-A-13	SV-150-C-29	TO 15 LL	T	100 mL	500 mL	1	1		
LCS 140-42409/1002		TO 15 LL		500 mL	500 mL	1	1	80 mL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	40MXISSUR 00001					
BFB 140-42409/1		TO 15 LL							
CCVIS 140-42409/2		TO 15 LL		40 mL					
MB 140-42409/8		TO 15 LL		40 mL					
140-20175-A-12	SV-060-C-29	TO 15 LL	T	40 mL					
140-20175-A-14	SV-152-C-29	TO 15 LL	T	40 mL					
140-20175-A-15	SV-141-C-29	TO 15 LL	T	40 mL					
140-20175-A-16	SV-149-C-29	TO 15 LL	T	40 mL					
140-20175-A-13	SV-150-C-29	TO 15 LL	T	40 mL					
LCS 140-42409/1002		TO 15 LL		40 mL					

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

AIR - GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Knoxvill Job No.: 140-20175-1

SDG No.:

Batch Number: 42482 Batch Start Date: 09/05/20 11:09 Batch Analyst: Taj, Holly M

Batch Method: TO 15 LL Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	InitialPressure	FinalPressure	40CV101P 00118	40MXBFB 00001
BFB 140-42482/1		TO 15 LL		500 mL	500 mL	1	1		40 mL
CCVIS 140-42482/3		TO 15 LL		500 mL	500 mL	1	1	80 mL	
MB 140-42482/5		TO 15 LL		500 mL	500 mL	1	1		
140-20175-A-18	IA-001-C-29	TO 15 LL	T	100 mL	500 mL	1	1		
140-20175-A-19	IA-004-C-29	TO 15 LL	T	177 mL	500 mL	1	1		
140-20175-A-20	IA-102-C-29	TO 15 LL	T	100 mL	500 mL	1	1		
LCS 140-42482/1003		TO 15 LL		500 mL	500 mL	1	1	80 mL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	40MXISSUR 00001					
BFB 140-42482/1		TO 15 LL							
CCVIS 140-42482/3		TO 15 LL		40 mL					
MB 140-42482/5		TO 15 LL		40 mL					
140-20175-A-18	IA-001-C-29	TO 15 LL	T	40 mL					
140-20175-A-19	IA-004-C-29	TO 15 LL	T	40 mL					
140-20175-A-20	IA-102-C-29	TO 15 LL	T	40 mL					
LCS 140-42482/1003		TO 15 LL		40 mL					

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

AIR - GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Knoxvill Job No.: 140-20175-1

SDG No.:

Batch Number: 42498 Batch Start Date: 09/06/20 15:49 Batch Analyst: Taj, Holly M

Batch Method: TO 15 LL Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	InitialPressure	FinalPressure	40CV101S 00126	40MXBFB 00001
MB 140-42498/4		TO 15 LL		500 mL	500 mL	1	1		
140-20175-A-21	IA-113-C-29	TO 15 LL	T	133 mL	500 mL	1	1		
BFB 140-42498/7		TO 15 LL		500 mL	500 mL	1	1		40 mL
CCVIS 140-42498/9		TO 15 LL		500 mL	500 mL	1	1	80 mL	
140-20175-A-22	IA-088-C-29	TO 15 LL	T	135 mL	500 mL	1	1		
140-20175-A-23	IA-142-C-29	TO 15 LL	T	100 mL	500 mL	1	1		
140-20175-A-24	IA-155-C-29	TO 15 LL	T	143 mL	500 mL	1	1		
140-20175-A-25	IA-133-C-29	TO 15 LL	T	156 mL	500 mL	1	1		
140-20175-A-26	IA-153-C-29	TO 15 LL	T	100 mL	500 mL	1	1		
140-20175-A-27	IA-DUP1-C-29	TO 15 LL	T	100 mL	500 mL	1	1		
140-20175-A-28	IA-060-C-29	TO 15 LL	T	100 mL	500 mL	1	1		
140-20175-A-29	IA-152-C-29	TO 15 LL	T	100 mL	500 mL	1	1		
140-20175-A-30	IA-150-C-29	TO 15 LL	T	100 mL	500 mL	1	1		
140-20175-A-31	IA-145-C-29	TO 15 LL	T	100 mL	500 mL	1	1		
140-20175-A-32	IA-146-C-29	TO 15 LL	T	148 mL	500 mL	1	1		
LCS 140-42498/1009		TO 15 LL		500 mL	500 mL	1	1	80 mL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	40MXISSUR 00001					
MB 140-42498/4		TO 15 LL		40 mL					
140-20175-A-21	IA-113-C-29	TO 15 LL	T	40 mL					
BFB 140-42498/7		TO 15 LL							
CCVIS 140-42498/9		TO 15 LL		40 mL					
140-20175-A-22	IA-088-C-29	TO 15 LL	T	40 mL					
140-20175-A-23	IA-142-C-29	TO 15 LL	T	40 mL					
140-20175-A-24	IA-155-C-29	TO 15 LL	T	40 mL					
140-20175-A-25	IA-133-C-29	TO 15 LL	T	40 mL					
140-20175-A-26	IA-153-C-29	TO 15 LL	T	40 mL					
140-20175-A-27	IA-DUP1-C-29	TO 15 LL	T	40 mL					
140-20175-A-28	IA-060-C-29	TO 15 LL	T	40 mL					

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

AIR - GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Knoxvill Job No.: 140-20175-1

SDG No.:

Batch Number: 42498 Batch Start Date: 09/06/20 15:49 Batch Analyst: Taj, Holly M

Batch Method: TO 15 LL Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	40MXISSUR 00001					
140-20175-A-29	IA-152-C-29	TO 15 LL	T	40 mL					
140-20175-A-30	IA-150-C-29	TO 15 LL	T	40 mL					
140-20175-A-31	IA-145-C-29	TO 15 LL	T	40 mL					
140-20175-A-32	IA-146-C-29	TO 15 LL	T	40 mL					
LCS 140-42498/1009		TO 15 LL		40 mL					

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

AIR - GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Knoxvill Job No.: 140-20175-1

SDG No.:

Batch Number: 42500 Batch Start Date: 09/07/20 07:32 Batch Analyst: Barlozhetskaya, Anna F

Batch Method: TO 15 LL Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	InitialPressure	FinalPressure	40CV101P 00121	40MXBFB 00001
BFB 140-42500/1		TO 15 LL		500 mL	500 mL	1	1		40 mL
CCVIS 140-42500/2		TO 15 LL		500 mL	500 mL	1	1	80 mL	
MB 140-42500/4		TO 15 LL		500 mL	500 mL	1	1		
140-20175-A-33	IA-144-C-29	TO 15 LL	T	100 mL	500 mL	1	1		
140-20175-A-34	IA-141-C-29	TO 15 LL	T	100 mL	500 mL	1	1		
140-20175-A-35	IA-149-C-29	TO 15 LL	T	100 mL	500 mL	1	1		
140-20175-A-36	IA-DUP2-C-29	TO 15 LL	T	140 mL	500 mL	1	1		
140-20175-A-37	IA-126-C-29	TO 15 LL	T	100 mL	500 mL	1	1		
140-20175-A-38	IA-BCK-1-29	TO 15 LL	T	100 mL	500 mL	1	1		
140-20175-A-39	IA-BCK-2-29	TO 15 LL	T	229 mL	500 mL	1	1		
140-20175-A-40	IA-BCK-3-29	TO 15 LL	T	159 mL	500 mL	1	1		
140-20175-A-41	IA-BCK-4-29	TO 15 LL	T	152 mL	500 mL	1	1		
140-20175-A-11	SV-DUP2-C-29	TO 15 LL	T	100 mL	500 mL	1	1		
LCS 140-42500/1002		TO 15 LL		500 mL	500 mL	1	1	80 mL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	40MXISSUR 00001					
BFB 140-42500/1		TO 15 LL							
CCVIS 140-42500/2		TO 15 LL		40 mL					
MB 140-42500/4		TO 15 LL		40 mL					
140-20175-A-33	IA-144-C-29	TO 15 LL	T	40 mL					
140-20175-A-34	IA-141-C-29	TO 15 LL	T	40 mL					
140-20175-A-35	IA-149-C-29	TO 15 LL	T	40 mL					
140-20175-A-36	IA-DUP2-C-29	TO 15 LL	T	40 mL					
140-20175-A-37	IA-126-C-29	TO 15 LL	T	40 mL					
140-20175-A-38	IA-BCK-1-29	TO 15 LL	T	40 mL					
140-20175-A-39	IA-BCK-2-29	TO 15 LL	T	40 mL					
140-20175-A-40	IA-BCK-3-29	TO 15 LL	T	40 mL					
140-20175-A-41	IA-BCK-4-29	TO 15 LL	T	40 mL					
140-20175-A-11	SV-DUP2-C-29	TO 15 LL	T	40 mL					

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

AIR - GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Knoxvill Job No.: 140-20175-1

SDG No.:

Batch Number: 42500 Batch Start Date: 09/07/20 07:32 Batch Analyst: Barlozhetskaya, Anna F

Batch Method: TO 15 LL Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	40MXISSUR 00001					
LCS 140-42500/1002		TO 15 LL		40 mL					

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

AIR - GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Knoxvill Job No.: 140-20175-1

SDG No.:

Batch Number: 42503 Batch Start Date: 09/08/20 14:50 Batch Analyst: Barlozhetskaya, Anna F

Batch Method: TO 15 LL Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	InitialPressure	FinalPressure	40CV101S 00127	40MXBFB 00001
BFB 140-42503/1		TO 15 LL		500 mL	500 mL	1	1		40 mL
CCVIS 140-42503/2		TO 15 LL		500 mL	500 mL	1	1	80 mL	
MB 140-42503/5		TO 15 LL		500 mL	500 mL	1	1		
140-20175-A-3	SV-102-C-29	TO 15 LL	T	11 mL	500 mL	1	1		
140-20175-A-6	SV-DUP1-C-29	TO 15 LL	T	11 mL	500 mL	1	1		
140-20175-A-17	SV-126-C-29	TO 15 LL	T	100 mL	500 mL	1	1		
LCS 140-42503/1002		TO 15 LL		500 mL	500 mL	1	1	80 mL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	40MXISSUR 00001					
BFB 140-42503/1		TO 15 LL							
CCVIS 140-42503/2		TO 15 LL		40 mL					
MB 140-42503/5		TO 15 LL		40 mL					
140-20175-A-3	SV-102-C-29	TO 15 LL	T	40 mL					
140-20175-A-6	SV-DUP1-C-29	TO 15 LL	T	40 mL					
140-20175-A-17	SV-126-C-29	TO 15 LL	T	40 mL					
LCS 140-42503/1002		TO 15 LL		40 mL					

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Summa Canister Dilution Worksheet

Client: Tetra Tech, Inc.
Project/Site: Middle River - MRC

Job No.: 140-20175-1

Lab Sample ID	Canister Volume (L)	Preadjusted Pressure ("Hg)	Preadjusted Pressure (atm)	Preadjusted Volume (L)	Adjusted Pressure (psig)	Adjusted Pressure (atm)	Adjusted Volume (L)	Initial Volume (mL)	Dilution Factor	Final Dilution Factor	Pressure Gauge ID	Date	Analyst Initals
140-20175-3	1	-3.4	0.89	0.89	30.0	3.04	3.04		3.43	3.43	G5	09/01/20 8:18	BRS
140-20175-6	1	-4.5	0.85	0.85	30.3	3.06	3.06		3.60	3.60	G5	09/01/20 8:19	BRS
140-20175-17	1	-7.4	0.75	0.75	30.0	3.04	3.04		4.04	4.04	G5	09/04/20 8:53	BRS
140-20175-17	1	0.0	1.00	1.00	30.4	3.07	3.07		3.07	12.39	G5	09/04/20 9:31	BRS
140-20175-19	1	-13.0	0.57	0.57	0.0	1.00	1.00		1.77	1.77	G5	08/31/20 11:24	BRS
140-20175-21	1	-7.4	0.75	0.75	0.0	1.00	1.00		1.33	1.33	G5	08/31/20 11:26	BRS
140-20175-22	1	-7.8	0.74	0.74	0.0	1.00	1.00		1.35	1.35	G5	08/31/20 14:27	BRS
140-20175-24	1	-9.0	0.70	0.70	0.0	1.00	1.00		1.43	1.43	G5	08/31/20 14:28	BRS
140-20175-25	1	-10.8	0.64	0.64	0.0	1.00	1.00		1.56	1.56	G5	08/31/20 14:29	BRS
140-20175-32	1	-8.2	0.73	0.73	1.1	1.07	1.07		1.48	1.48	G5	09/01/20 8:10	BRS
140-20175-36	0	-7.1	0.76	0.00	1.0	1.07	0.00		1.40	1.40	G5	09/01/20 8:10	BRS
140-20175-39	1	-15.5	0.48	0.48	1.5	1.10	1.10		2.29	2.29	G5	09/01/20 8:11	BRS
140-20175-40	1	-9.5	0.68	0.68	1.3	1.09	1.09		1.59	1.59	G5	09/01/20 8:11	BRS
140-20175-41	1	-8.7	0.71	0.71	1.1	1.07	1.07		1.52	1.52	G5	09/01/20 8:11	BRS

Summa Canister Dilution Worksheet

Client: Tetra Tech, Inc.
Project/Site: Middle River - MRC

Job No.: 140-20175-1

Formulae:

Preadjusted Volume (L) = (Preadjusted Pressure ("Hg) + 29.92 "Hg * Vol L) / 29.92 "Hg
Adjusted Volume (L) = (Adjusted Pressure (psig) + 14.7 psig * Vol L) / 14.7 psig
Dilution Factor = Adjusted Volume (L) / Preadjusted Volume (L)

Where:

29.92 "Hg = Standard atmospheric pressure in inches of Mercury (“Hg)
14.7 psig = Standard atmospheric pressure in pounds per square inch gauge (psig)

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19745-1

SDG No.:

Client Sample ID: 11712 Lab Sample ID: 140-19745-1

Matrix: Air Lab File ID: RG20LOT01.D

Analysis Method: TO-15 Date Collected: 07/17/2020 16:00

Sample wt/vol: 200(mL) Date Analyzed: 07/20/2020 16:36

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 41174 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	ND		0.20	
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.20	
79-00-5	1,1,2-Trichloroethane	ND		0.20	
76-13-1	1,1,2-Trichlorotrifluoroethane	ND		0.20	
75-34-3	1,1-Dichloroethane	ND		0.20	
75-35-4	1,1-Dichloroethene	ND		0.20	
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	
96-18-4	1,2,3-Trichloropropane	ND		0.50	
526-73-8	1,2,3-Trimethylbenzene	ND		0.20	
95-93-2	1,2,4,5-Tetramethylbenzene	ND		0.20	
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	
95-63-6	1,2,4-Trimethylbenzene	ND		0.20	
96-12-8	1,2-Dibromo-3-Chloropropane	ND		0.40	
106-93-4	1,2-Dibromoethane	ND		0.20	
95-50-1	1,2-Dichlorobenzene	ND		0.40	
107-06-2	1,2-Dichloroethane	ND		0.20	
78-87-5	1,2-Dichloropropane	ND		0.20	
76-14-2	1,2-Dichlorotetrafluoroethane	ND		0.20	
108-67-8	1,3,5-Trimethylbenzene	ND		0.20	
106-99-0	1,3-Butadiene	ND		0.40	
541-73-1	1,3-Dichlorobenzene	ND		0.20	
106-46-7	1,4-Dichlorobenzene	ND		0.20	
123-91-1	1,4-Dioxane	ND		0.40	
71-36-3	1-Butanol	ND		2.0	
90-12-0	1-Methylnaphthalene	ND		2.5	
540-84-1	2,2,4-Trimethylpentane	ND		0.40	
565-59-3	2,3-Dimethylpentane	ND		0.20	
78-93-3	2-Butanone	ND		1.0	
95-49-8	2-Chlorotoluene	ND		0.40	
591-78-6	2-Hexanone	ND		0.40	
78-78-4	2-Methylbutane	ND		0.50	
91-57-6	2-Methylnaphthalene	ND		2.5	
107-83-5	2-Methylpentane	ND		0.20	
107-05-1	3-Chloropropene	ND		0.20	
622-96-8	4-Ethyltoluene	ND		0.40	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		1.0	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19745-1

SDG No.:

Client Sample ID: 11712 Lab Sample ID: 140-19745-1

Matrix: Air Lab File ID: RG20LOT01.D

Analysis Method: TO-15 Date Collected: 07/17/2020 16:00

Sample wt/vol: 200(mL) Date Analyzed: 07/20/2020 16:36

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 41174 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
67-64-1	Acetone	ND		7.5	
75-05-8	Acetonitrile	ND		1.0	
107-02-8	Acrolein	ND		1.0	
107-13-1	Acrylonitrile	ND		2.0	
98-83-9	Alpha Methyl Styrene	ND		0.40	
71-43-2	Benzene	ND		0.20	
100-44-7	Benzyl chloride	ND		0.40	
75-27-4	Bromodichloromethane	ND		0.20	
75-25-2	Bromoform	ND		0.20	
74-83-9	Bromomethane	ND		0.20	
106-97-8	Butane	ND		1.0	
75-15-0	Carbon disulfide	ND		0.40	
56-23-5	Carbon tetrachloride	ND		0.20	
108-90-7	Chlorobenzene	ND		0.20	
75-45-6	Chlorodifluoromethane	ND		0.20	
75-00-3	Chloroethane	ND		0.20	
67-66-3	Chloroform	ND		0.20	
74-87-3	Chloromethane	ND		1.0	
156-59-2	cis-1,2-Dichloroethene	ND		0.20	
10061-01-5	cis-1,3-Dichloropropene	ND		0.40	
98-82-8	Cumene	ND		0.40	
110-82-7	Cyclohexane	ND		0.40	
124-48-1	Dibromochloromethane	ND		0.20	
74-95-3	Dibromomethane	ND		0.40	
75-71-8	Dichlorodifluoromethane	ND		0.20	
64-17-5	Ethanol	ND		5.0	
141-78-6	Ethyl acetate	ND		2.0	
60-29-7	Ethyl ether	ND		2.0	
100-41-4	Ethylbenzene	ND		0.20	
87-68-3	Hexachlorobutadiene	ND		1.0	
110-54-3	Hexane	ND		0.40	
496-11-7	Indane	ND		0.20	
95-13-6	Indene	ND		0.40	
67-63-0	Isopropyl alcohol	ND		1.2	
179601-23-1	m&p-Xylene	ND		0.20	
80-62-6	Methyl methacrylate	ND		0.40	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19745-1

SDG No.:

Client Sample ID: 11712 Lab Sample ID: 140-19745-1

Matrix: Air Lab File ID: RG20LOT01.D

Analysis Method: TO-15 Date Collected: 07/17/2020 16:00

Sample wt/vol: 200(mL) Date Analyzed: 07/20/2020 16:36

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 41174 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
1634-04-4	Methyl tert-butyl ether	ND		1.0	
108-87-2	Methylcyclohexane	ND		0.20	
75-09-2	Methylene Chloride	ND		1.0	
91-20-3	Naphthalene	ND		0.40	
104-51-8	n-Butylbenzene	ND		0.40	
124-18-5	n-Decane	ND		1.0	
112-40-3	n-Dodecane	ND		1.0	
142-82-5	n-Heptane	ND		0.40	
111-84-2	n-Nonane	ND		0.40	
111-65-9	n-Octane	ND		0.40	
103-65-1	N-Propylbenzene	ND		0.40	
1120-21-4	n-Undecane	ND		1.0	
95-47-6	o-Xylene	ND		0.20	
99-87-6	p-Cymene	ND		0.20	
109-66-0	Pentane	ND		2.5	
115-07-1	Propene	ND		2.5	
135-98-8	sec-Butylbenzene	ND		0.40	
100-42-5	Styrene	ND		0.20	
75-65-0	tert-Butanol	ND		1.0	
98-06-6	tert-Butylbenzene	ND		0.40	
127-18-4	Tetrachloroethene	ND		0.20	
109-99-9	Tetrahydrofuran	ND		1.0	
110-02-1	Thiophene	ND		0.20	
108-88-3	Toluene	ND		1.0	
156-60-5	trans-1,2-Dichloroethene	ND		0.20	
10061-02-6	trans-1,3-Dichloropropene	ND		0.20	
79-01-6	Trichloroethene	ND		0.20	
75-69-4	Trichlorofluoromethane	ND		0.20	
108-05-4	Vinyl acetate	ND		1.0	
593-60-2	Vinyl bromide	ND		0.20	
75-01-4	Vinyl chloride	ND		0.40	

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MR\20200717-16051.b\RG20LOT01.D				
Lims ID:	140-19745-A-1				
Client ID:	11712				
Sample Type:	Client				
Inject. Date:	20-Jul-2020 16:36:30	ALS Bottle#:	1	Worklist Smp#:	4
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016012-004				
Misc. Info.:	11712				
Operator ID:	HMT	Instrument ID:	MR		
Method:	\\chromfs\Knoxville\ChromData\MR\20200717-16051.b\MR_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	21-Jul-2020 12:25:51	Calib Date:	14-May-2020 00:39:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MR\20200513-15465.b\RE13TEST.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1020				
First Level Reviewer: khachitpongpanits		Date:	21-Jul-2020 12:27:42		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.317	8.307	0.011	79	518332	4.00	
* 2 1,4-Difluorobenzene	114	10.555	10.544	0.011	92	3882357	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.381	15.381	0.000	83	3179125	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.031	17.031	0.000	94	1549435	3.61	
7 Propene	41	3.351	3.335	0.016	96	121022	-0.1587	7
20 Trichlorofluoromethane	101	4.769	4.748	0.021	35	8031	0.0121	
31 Methylene Chloride	84	5.804	5.767	0.037	89	159215	0.2607	
47 1,1,1-Trichloroethane	97	9.358	9.342	0.016	57	10081	0.0226	
67 Toluene	91	13.386	13.386	0.000	88	39570	0.0555	
112 2-Methylnaphthalene	142	21.847	21.836	0.011	7	8946	0.6506	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

40MXISSURP_00004 Amount Added: 40.00 Units: mL Run Reagent

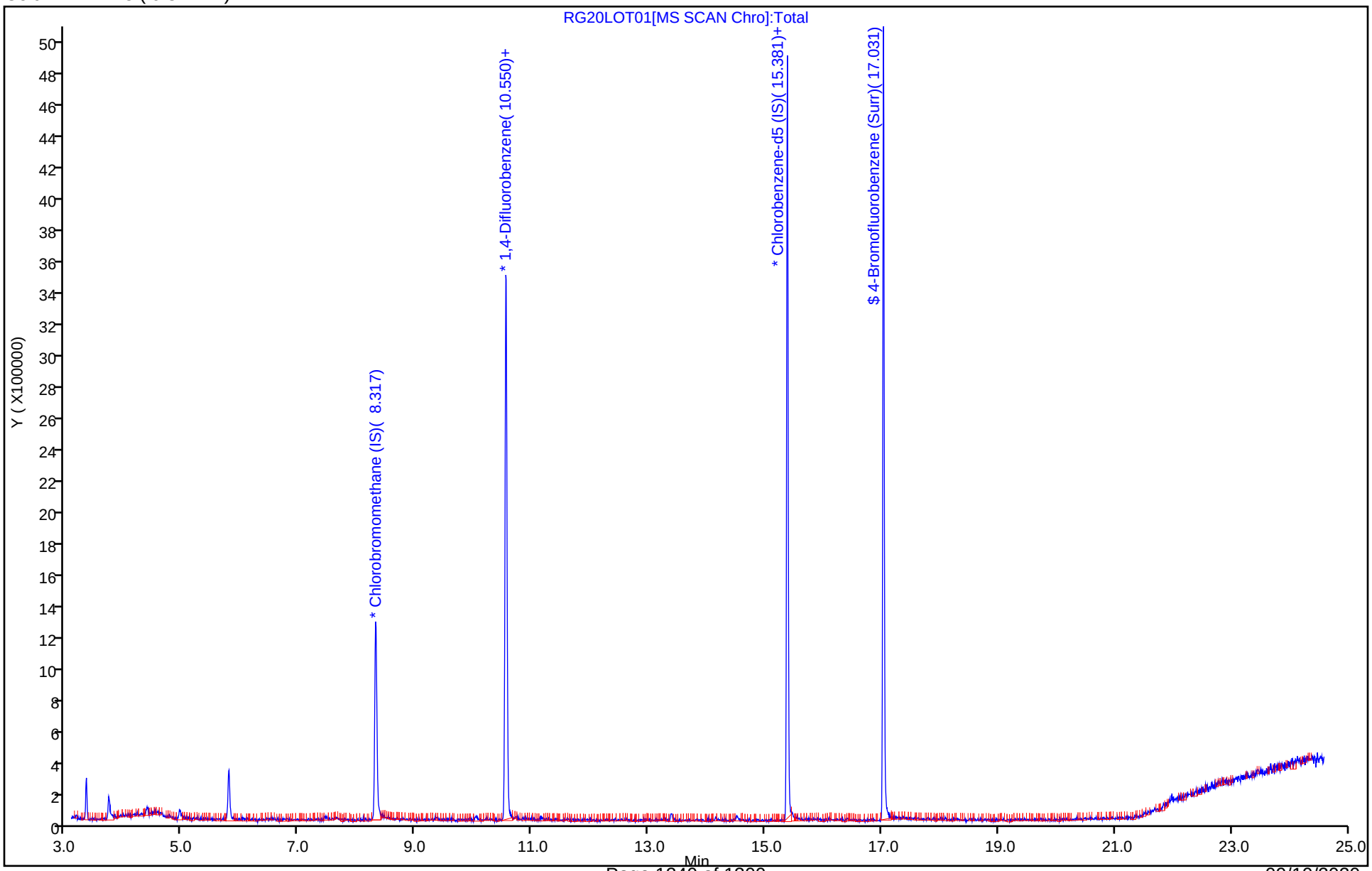
Report Date: 21-Jul-2020 12:27:42 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200717-16051.b\RG20LOT01.D

Injection Date:	20-Jul-2020 16:36:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	140-19745-A-1	Lab Sample ID:	140-19745-1	Worklist Smp#:	4
Client ID:	11712				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19747-1

SDG No.:

Client Sample ID: 11875 Lab Sample ID: 140-19747-4

Matrix: Air Lab File ID: R22LOT01.D

Analysis Method: TO-15 Date Collected: 07/17/2020 16:15

Sample wt/vol: 200(mL) Date Analyzed: 07/22/2020 14:17

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 41185 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	ND		0.20	
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.20	
79-00-5	1,1,2-Trichloroethane	ND		0.20	
76-13-1	1,1,2-Trichlorotrifluoroethane	ND		0.20	
75-34-3	1,1-Dichloroethane	ND		0.20	
75-35-4	1,1-Dichloroethene	ND		0.20	
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	
96-18-4	1,2,3-Trichloropropane	ND		0.50	
526-73-8	1,2,3-Trimethylbenzene	ND		0.20	
95-93-2	1,2,4,5-Tetramethylbenzene	ND		0.20	
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	
95-63-6	1,2,4-Trimethylbenzene	ND		0.20	
96-12-8	1,2-Dibromo-3-Chloropropane	ND		0.40	
106-93-4	1,2-Dibromoethane	ND		0.20	
95-50-1	1,2-Dichlorobenzene	ND		0.40	
107-06-2	1,2-Dichloroethane	ND		0.20	
78-87-5	1,2-Dichloropropane	ND		0.20	
76-14-2	1,2-Dichlorotetrafluoroethane	ND		0.20	
108-67-8	1,3,5-Trimethylbenzene	ND		0.20	
106-99-0	1,3-Butadiene	ND		0.40	
541-73-1	1,3-Dichlorobenzene	ND		0.20	
106-46-7	1,4-Dichlorobenzene	ND		0.20	
123-91-1	1,4-Dioxane	ND		0.40	
71-36-3	1-Butanol	ND		2.0	
90-12-0	1-Methylnaphthalene	ND		2.5	
540-84-1	2,2,4-Trimethylpentane	ND		0.40	
565-59-3	2,3-Dimethylpentane	ND		0.20	
78-93-3	2-Butanone	ND		1.0	
95-49-8	2-Chlorotoluene	ND		0.40	
591-78-6	2-Hexanone	ND		0.40	
78-78-4	2-Methylbutane	ND		0.50	
91-57-6	2-Methylnaphthalene	ND		2.5	
107-83-5	2-Methylpentane	ND		0.20	
107-05-1	3-Chloropropene	ND		0.20	
622-96-8	4-Ethyltoluene	ND		0.40	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		1.0	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19747-1

SDG No.:

Client Sample ID: 11875 Lab Sample ID: 140-19747-4

Matrix: Air Lab File ID: R22LOT01.D

Analysis Method: TO-15 Date Collected: 07/17/2020 16:15

Sample wt/vol: 200(mL) Date Analyzed: 07/22/2020 14:17

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 41185 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
67-64-1	Acetone	ND		7.5	
75-05-8	Acetonitrile	ND		1.0	
107-02-8	Acrolein	ND		1.0	
107-13-1	Acrylonitrile	ND		2.0	
98-83-9	Alpha Methyl Styrene	ND		0.40	
71-43-2	Benzene	ND		0.20	
100-44-7	Benzyl chloride	ND		0.40	
75-27-4	Bromodichloromethane	ND		0.20	
75-25-2	Bromoform	ND		0.20	
74-83-9	Bromomethane	ND		0.20	
106-97-8	Butane	ND		1.0	
75-15-0	Carbon disulfide	ND		0.40	
56-23-5	Carbon tetrachloride	ND		0.20	
108-90-7	Chlorobenzene	ND		0.20	
75-45-6	Chlorodifluoromethane	ND		0.20	
75-00-3	Chloroethane	ND		0.20	
67-66-3	Chloroform	ND		0.20	
74-87-3	Chloromethane	ND		1.0	
156-59-2	cis-1,2-Dichloroethene	ND		0.20	
10061-01-5	cis-1,3-Dichloropropene	ND		0.40	
98-82-8	Cumene	ND		0.40	
110-82-7	Cyclohexane	ND		0.40	
124-48-1	Dibromochloromethane	ND		0.20	
74-95-3	Dibromomethane	ND		0.40	
75-71-8	Dichlorodifluoromethane	ND		0.20	
64-17-5	Ethanol	ND		5.0	
141-78-6	Ethyl acetate	ND		2.0	
60-29-7	Ethyl ether	ND		2.0	
100-41-4	Ethylbenzene	ND		0.20	
87-68-3	Hexachlorobutadiene	ND		1.0	
110-54-3	Hexane	ND		0.40	
496-11-7	Indane	ND		0.20	
95-13-6	Indene	ND		0.40	
67-63-0	Isopropyl alcohol	ND		1.2	
179601-23-1	m&p-Xylene	ND		0.20	
80-62-6	Methyl methacrylate	ND		0.40	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19747-1

SDG No.:

Client Sample ID: 11875 Lab Sample ID: 140-19747-4

Matrix: Air Lab File ID: R22LOT01.D

Analysis Method: TO-15 Date Collected: 07/17/2020 16:15

Sample wt/vol: 200(mL) Date Analyzed: 07/22/2020 14:17

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 41185 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
1634-04-4	Methyl tert-butyl ether	ND		1.0	
108-87-2	Methylcyclohexane	ND		0.20	
75-09-2	Methylene Chloride	ND		1.0	
91-20-3	Naphthalene	ND		0.40	
104-51-8	n-Butylbenzene	ND		0.40	
124-18-5	n-Decane	ND		1.0	
112-40-3	n-Dodecane	ND		1.0	
142-82-5	n-Heptane	ND		0.40	
111-84-2	n-Nonane	ND		0.40	
111-65-9	n-Octane	ND		0.40	
103-65-1	N-Propylbenzene	ND		0.40	
1120-21-4	n-Undecane	ND		1.0	
95-47-6	o-Xylene	ND		0.20	
99-87-6	p-Cymene	ND		0.20	
109-66-0	Pentane	ND		2.5	
115-07-1	Propene	ND		2.5	
135-98-8	sec-Butylbenzene	ND		0.40	
100-42-5	Styrene	ND		0.20	
75-65-0	tert-Butanol	ND		1.0	
98-06-6	tert-Butylbenzene	ND		0.40	
127-18-4	Tetrachloroethene	ND		0.20	
109-99-9	Tetrahydrofuran	ND		1.0	
110-02-1	Thiophene	ND		0.20	
108-88-3	Toluene	ND		1.0	
156-60-5	trans-1,2-Dichloroethene	ND		0.20	
10061-02-6	trans-1,3-Dichloropropene	ND		0.20	
79-01-6	Trichloroethene	ND		0.20	
75-69-4	Trichlorofluoromethane	ND		0.20	
108-05-4	Vinyl acetate	ND		1.0	
593-60-2	Vinyl bromide	ND		0.20	
75-01-4	Vinyl chloride	ND		0.40	

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MR\20200721-16069.b\R22LOT01.D				
Lims ID:	140-19747-A-4				
Client ID:	11875				
Sample Type:	Client				
Inject. Date:	22-Jul-2020 14:17:30	ALS Bottle#:	1	Worklist Smp#:	4
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016069-004				
Misc. Info.:	11875				
Operator ID:	HMT	Instrument ID:	MR		
Method:	\\chromfs\Knoxville\ChromData\MR\20200721-16069.b\MR_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	23-Jul-2020 09:09:25	Calib Date:	14-May-2020 00:39:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MR\20200513-15465.b\RE13TEST.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1039				
First Level Reviewer: khachitpongpanits		Date:	23-Jul-2020 09:09:25		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.317	8.296	0.021	82	414444	4.00	
* 2 1,4-Difluorobenzene	114	10.550	10.539	0.011	93	3127290	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.381	15.381	0.000	84	2479454	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.026	17.026	0.000	95	1160077	3.47	
7 Propene	41	3.367	3.319	0.048	97	90494	-0.2189	7
31 Methylene Chloride	84	5.805	5.767	0.038	96	116999	0.1766	
40 Hexane	56	7.584	7.563	0.021	53	3384	0.0369	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

40MXISSURP_00004 Amount Added: 40.00 Units: mL Run Reagent

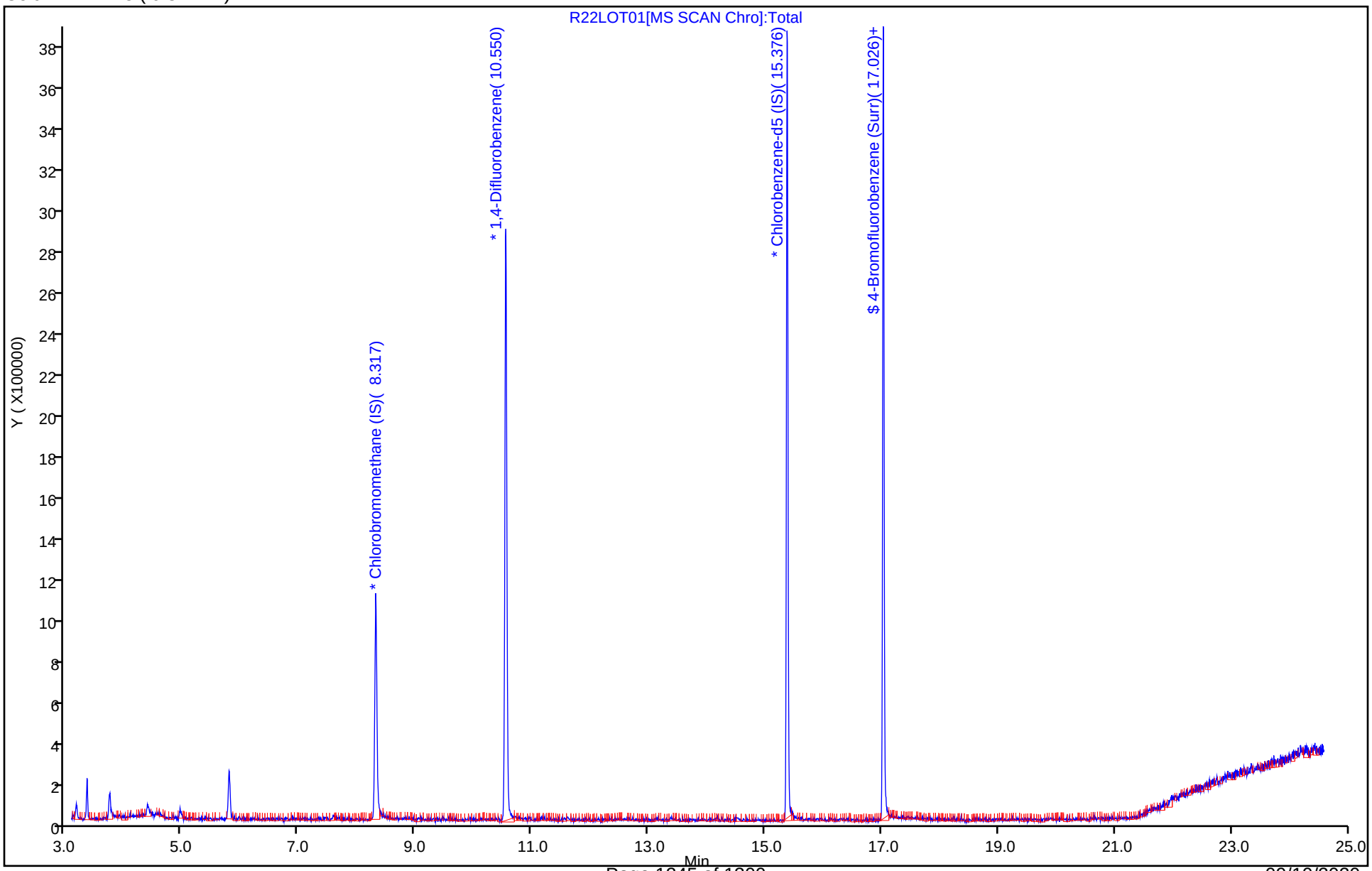
Report Date: 23-Jul-2020 09:09:26 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200721-16069.b\R22LOT01.D

Injection Date:	22-Jul-2020 14:17:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	140-19747-A-4	Lab Sample ID:	140-19747-4	Worklist Smp#:	4
Client ID:	11875				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



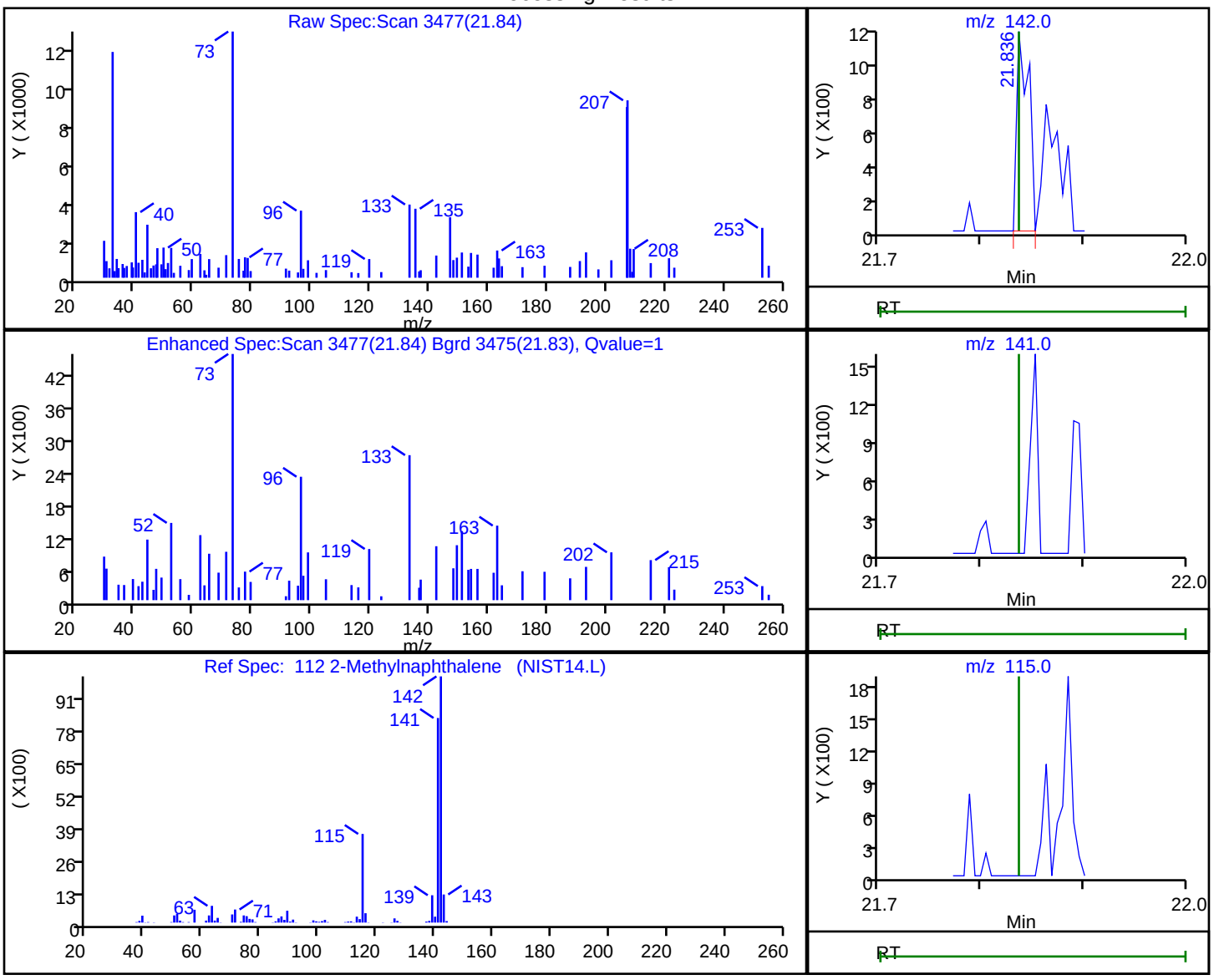
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200721-16069.b\R22LOT01.D				
Injection Date:	22-Jul-2020 14:17:30	Instrument ID:	MR		
Lims ID:	140-19747-A-4	Lab Sample ID:	140-19747-4		
Client ID:	11875				
Operator ID:	HMT	ALS Bottle#:	1	Worklist Smp#:	4
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

112 2-Methylnaphthalene, CAS: 91-57-6

Processing Results



RT	Mass	Response	Amount
21.84	142.00	925	0.646439
21.84	141.00	0	
21.84	115.00	0	

Reviewer: khachitpongpanits, 23-Jul-2020 09:09:22

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

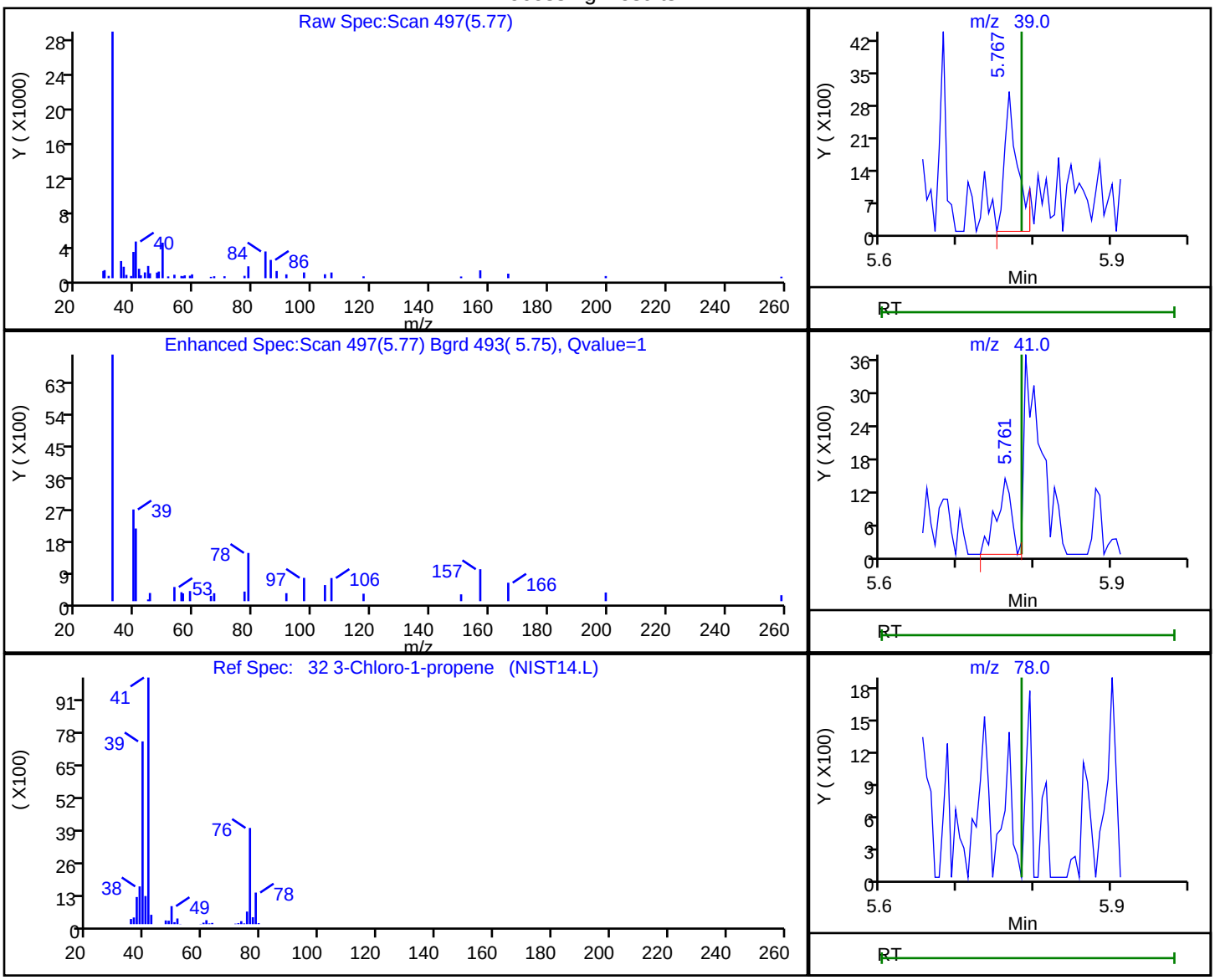
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200721-16069.b\R22LOT01.D				
Injection Date:	22-Jul-2020 14:17:30	Instrument ID:	MR		
Lims ID:	140-19747-A-4	Lab Sample ID:	140-19747-4		
Client ID:	11875				
Operator ID:	HMT	ALS Bottle#:	1	Worklist Smp#:	4
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

32 3-Chloro-1-propene, CAS: 107-05-1

Processing Results



RT	Mass	Response	Amount
5.77	39.00	3635	0.022876
5.76	41.00	1902	
5.78	78.00	0	

Reviewer: khachitpongpanits, 23-Jul-2020 09:08:58

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19776-1

SDG No.:

Client Sample ID: 10833 Lab Sample ID: 140-19776-13

Matrix: Air Lab File ID: RG22L19776.D

Analysis Method: TO-15 Date Collected: 07/21/2020 14:20

Sample wt/vol: 200(mL) Date Analyzed: 07/23/2020 05:56

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 41185 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	ND		0.20	
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.20	
79-00-5	1,1,2-Trichloroethane	ND		0.20	
76-13-1	1,1,2-Trichlorotrifluoroethane	ND		0.20	
75-34-3	1,1-Dichloroethane	ND		0.20	
75-35-4	1,1-Dichloroethene	ND		0.20	
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	
96-18-4	1,2,3-Trichloropropane	ND		0.50	
526-73-8	1,2,3-Trimethylbenzene	ND		0.20	
95-93-2	1,2,4,5-Tetramethylbenzene	ND		0.20	
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	
95-63-6	1,2,4-Trimethylbenzene	ND		0.20	
96-12-8	1,2-Dibromo-3-Chloropropane	ND		0.40	
106-93-4	1,2-Dibromoethane	ND		0.20	
95-50-1	1,2-Dichlorobenzene	ND		0.40	
107-06-2	1,2-Dichloroethane	ND		0.20	
78-87-5	1,2-Dichloropropane	ND		0.20	
76-14-2	1,2-Dichlorotetrafluoroethane	ND		0.20	
108-67-8	1,3,5-Trimethylbenzene	ND		0.20	
106-99-0	1,3-Butadiene	ND		0.40	
541-73-1	1,3-Dichlorobenzene	ND		0.20	
106-46-7	1,4-Dichlorobenzene	ND		0.20	
123-91-1	1,4-Dioxane	ND		0.40	
71-36-3	1-Butanol	ND		2.0	
90-12-0	1-Methylnaphthalene	ND		2.5	
540-84-1	2,2,4-Trimethylpentane	ND		0.40	
565-59-3	2,3-Dimethylpentane	ND		0.20	
78-93-3	2-Butanone	ND		1.0	
95-49-8	2-Chlorotoluene	ND		0.40	
591-78-6	2-Hexanone	ND		0.40	
78-78-4	2-Methylbutane	ND		0.50	
91-57-6	2-Methylnaphthalene	ND		2.5	
107-83-5	2-Methylpentane	ND		0.20	
107-05-1	3-Chloropropene	ND		0.20	
622-96-8	4-Ethyltoluene	ND		0.40	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		1.0	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19776-1

SDG No.:

Client Sample ID: 10833 Lab Sample ID: 140-19776-13

Matrix: Air Lab File ID: RG22L19776.D

Analysis Method: TO-15 Date Collected: 07/21/2020 14:20

Sample wt/vol: 200(mL) Date Analyzed: 07/23/2020 05:56

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 41185 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
67-64-1	Acetone	ND		7.5	
75-05-8	Acetonitrile	ND		1.0	
107-02-8	Acrolein	ND		1.0	
107-13-1	Acrylonitrile	ND		2.0	
98-83-9	Alpha Methyl Styrene	ND		0.40	
71-43-2	Benzene	ND		0.20	
100-44-7	Benzyl chloride	ND		0.40	
75-27-4	Bromodichloromethane	ND		0.20	
75-25-2	Bromoform	ND		0.20	
74-83-9	Bromomethane	ND		0.20	
106-97-8	Butane	ND		1.0	
75-15-0	Carbon disulfide	ND		0.40	
56-23-5	Carbon tetrachloride	ND		0.20	
108-90-7	Chlorobenzene	ND		0.20	
75-45-6	Chlorodifluoromethane	ND		0.20	
75-00-3	Chloroethane	ND		0.20	
67-66-3	Chloroform	ND		0.20	
74-87-3	Chloromethane	ND		1.0	
156-59-2	cis-1,2-Dichloroethene	ND		0.20	
10061-01-5	cis-1,3-Dichloropropene	ND		0.40	
98-82-8	Cumene	ND		0.40	
110-82-7	Cyclohexane	ND		0.40	
124-48-1	Dibromochloromethane	ND		0.20	
74-95-3	Dibromomethane	ND		0.40	
75-71-8	Dichlorodifluoromethane	ND		0.20	
64-17-5	Ethanol	ND		5.0	
141-78-6	Ethyl acetate	ND		2.0	
60-29-7	Ethyl ether	ND		2.0	
100-41-4	Ethylbenzene	ND		0.20	
87-68-3	Hexachlorobutadiene	ND		1.0	
110-54-3	Hexane	ND		0.40	
496-11-7	Indane	ND		0.20	
95-13-6	Indene	ND		0.40	
67-63-0	Isopropyl alcohol	ND		1.2	
179601-23-1	m&p-Xylene	ND		0.20	
80-62-6	Methyl methacrylate	ND		0.40	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19776-1

SDG No.:

Client Sample ID: 10833 Lab Sample ID: 140-19776-13

Matrix: Air Lab File ID: RG22L19776.D

Analysis Method: TO-15 Date Collected: 07/21/2020 14:20

Sample wt/vol: 200(mL) Date Analyzed: 07/23/2020 05:56

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 41185 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
1634-04-4	Methyl tert-butyl ether	ND		1.0	
108-87-2	Methylcyclohexane	ND		0.20	
75-09-2	Methylene Chloride	ND		1.0	
91-20-3	Naphthalene	ND		0.40	
104-51-8	n-Butylbenzene	ND		0.40	
124-18-5	n-Decane	ND		1.0	
112-40-3	n-Dodecane	ND		1.0	
142-82-5	n-Heptane	ND		0.40	
111-84-2	n-Nonane	ND		0.40	
111-65-9	n-Octane	ND		0.40	
103-65-1	N-Propylbenzene	ND		0.40	
1120-21-4	n-Undecane	ND		1.0	
95-47-6	o-Xylene	ND		0.20	
99-87-6	p-Cymene	ND		0.20	
109-66-0	Pentane	ND		2.5	
115-07-1	Propene	ND		2.5	
135-98-8	sec-Butylbenzene	ND		0.40	
100-42-5	Styrene	ND		0.20	
75-65-0	tert-Butanol	ND		1.0	
98-06-6	tert-Butylbenzene	ND		0.40	
127-18-4	Tetrachloroethene	ND		0.20	
109-99-9	Tetrahydrofuran	ND		1.0	
110-02-1	Thiophene	ND		0.20	
108-88-3	Toluene	ND		1.0	
156-60-5	trans-1,2-Dichloroethene	ND		0.20	
10061-02-6	trans-1,3-Dichloropropene	ND		0.20	
79-01-6	Trichloroethene	ND		0.20	
75-69-4	Trichlorofluoromethane	ND		0.20	
108-05-4	Vinyl acetate	ND		1.0	
593-60-2	Vinyl bromide	ND		0.20	
75-01-4	Vinyl chloride	ND		0.40	

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MR\20200721-16069.b\RG22L19776.D
Lims ID: 140-19776-A-13
Client ID: 10833
Sample Type: Client
Inject. Date: 23-Jul-2020 05:56:30 ALS Bottle#: 3 Worklist Smp#: 25
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016069-025
Misc. Info.: 10833
Operator ID: HMT Instrument ID: MR

Method: \\chromfs\Knoxville\ChromData\MR\20200721-16069.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 23-Jul-2020 09:46:14 Calib Date: 14-May-2020 00:39:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MR\20200513-15465.b\RE13TEST.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1007

First Level Reviewer: smelcerb Date: 23-Jul-2020 09:46:14

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.290	8.296	-0.006	92	238584	4.00	
* 2 1,4-Difluorobenzene	114	10.534	10.539	-0.005	93	1877087	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.376	15.381	-0.005	84	1568506	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.026	17.020	0.000	93	756125	3.57	
7 Propene	41	3.335	3.317	0.016	94	67398	0.0362	7
17 Ethanol	31	4.338	4.313	0.022	88	55281	0.8471	
25 Isopropyl alcohol	45	4.904	4.960	-0.059	19	5102	0.0445	
31 Methylene Chloride	84	5.767	5.763	0.000	96	71221	0.2314	
67 Toluene	91	13.375	13.376	-0.006	97	27737	0.0789	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

40MXISSURP_00004 Amount Added: 40.00 Units: mL Run Reagent

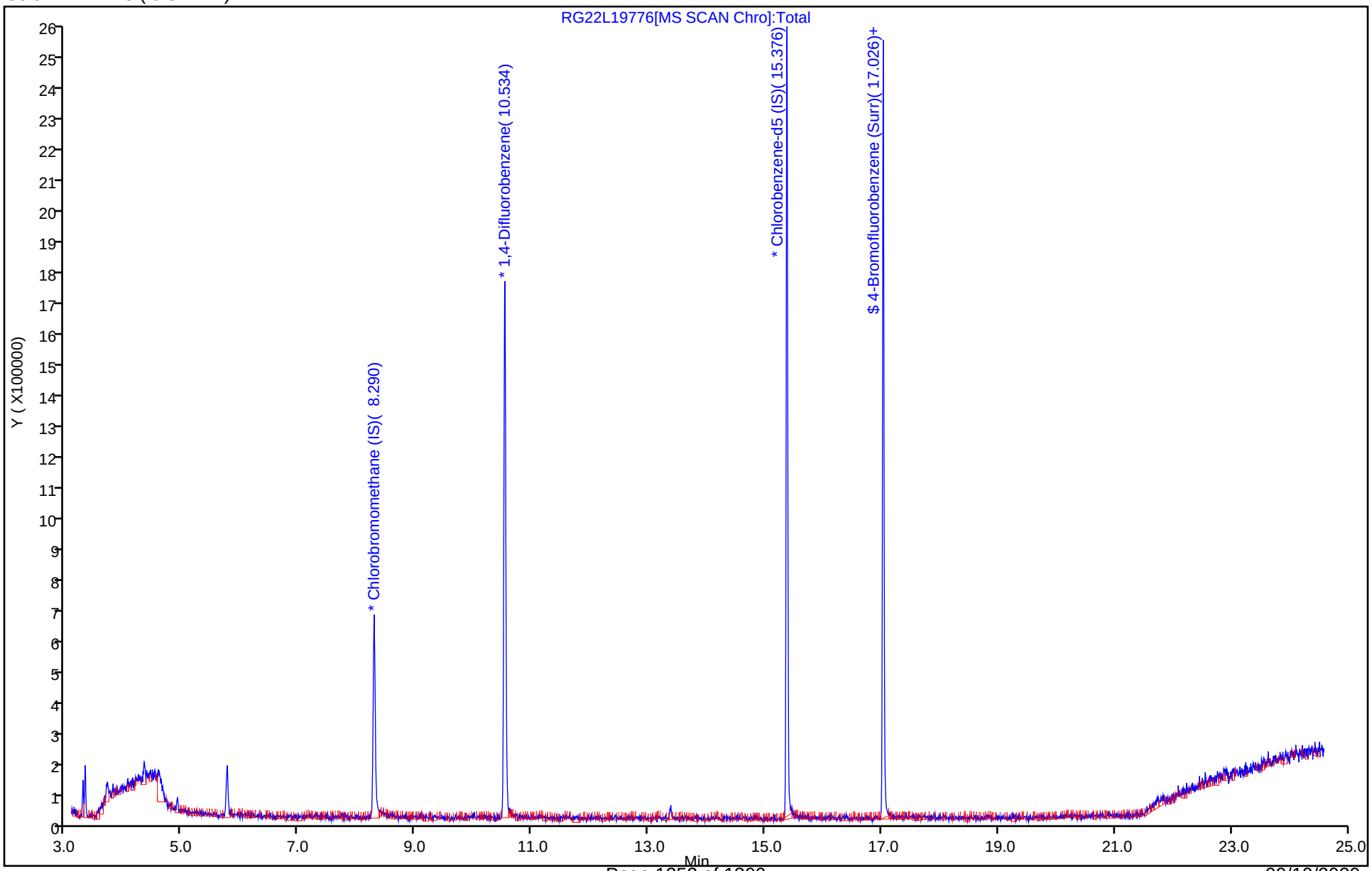
Report Date: 23-Jul-2020 09:46:53 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200721-16069.b\RG22L19776.D

Injection Date:	23-Jul-2020 05:56:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	140-19776-A-13	Lab Sample ID:	140-19776-13	Worklist Smp#:	25
Client ID:	10833				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



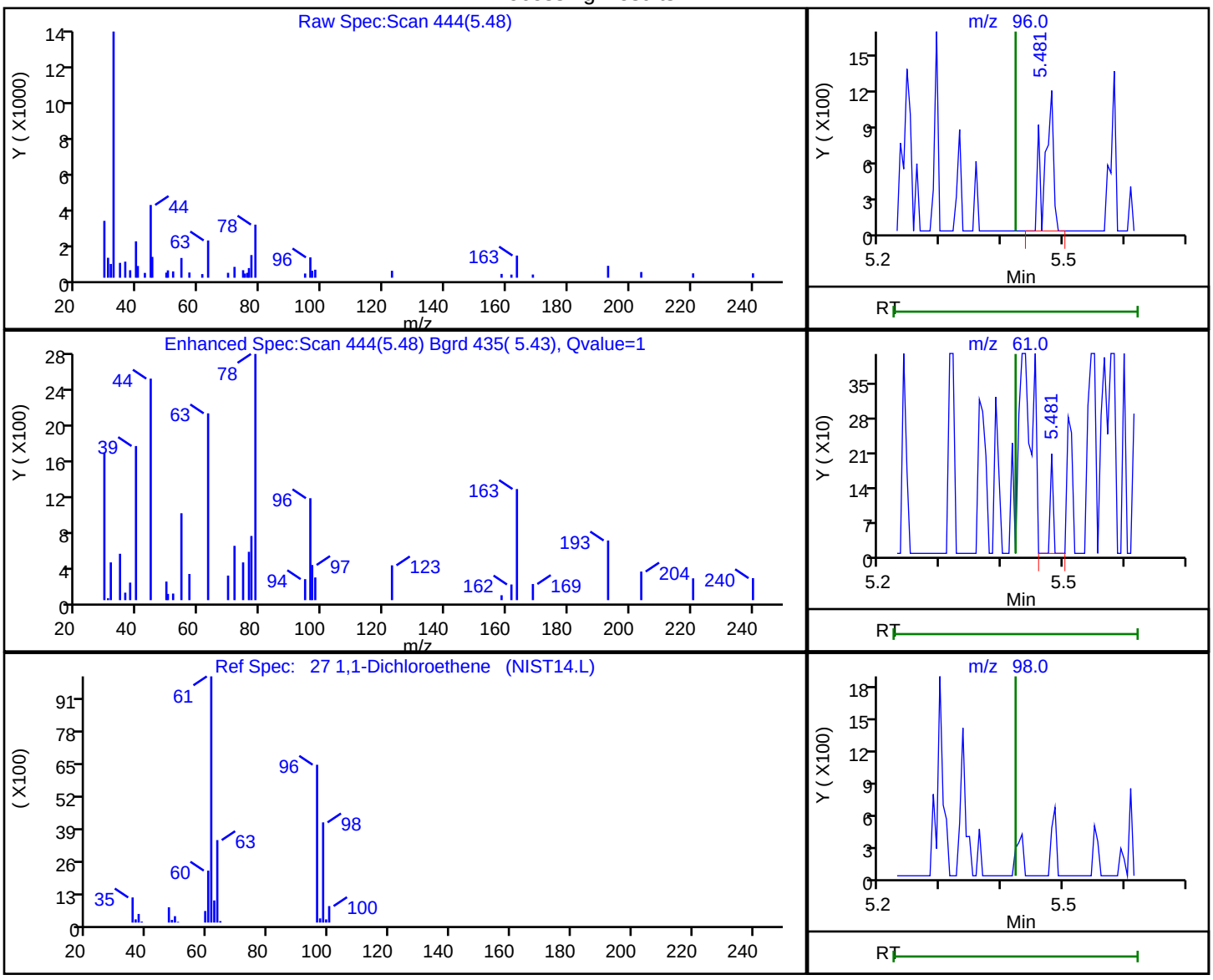
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200721-16069.b\RG22L19776.D				
Injection Date:	23-Jul-2020 05:56:30	Instrument ID:	MR		
Lims ID:	140-19776-A-13	Lab Sample ID:	140-19776-13		
Client ID:	10833				
Operator ID:	HMT	ALS Bottle#:	3	Worklist Smp#:	25
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

27 1,1-Dichloroethene, CAS: 75-35-4

Processing Results



RT	Mass	Response	Amount
5.48	96.00	1152	0.011902
5.48	61.00	66	
5.42	98.00	0	

Reviewer: smelcerb, 23-Jul-2020 09:41:12

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

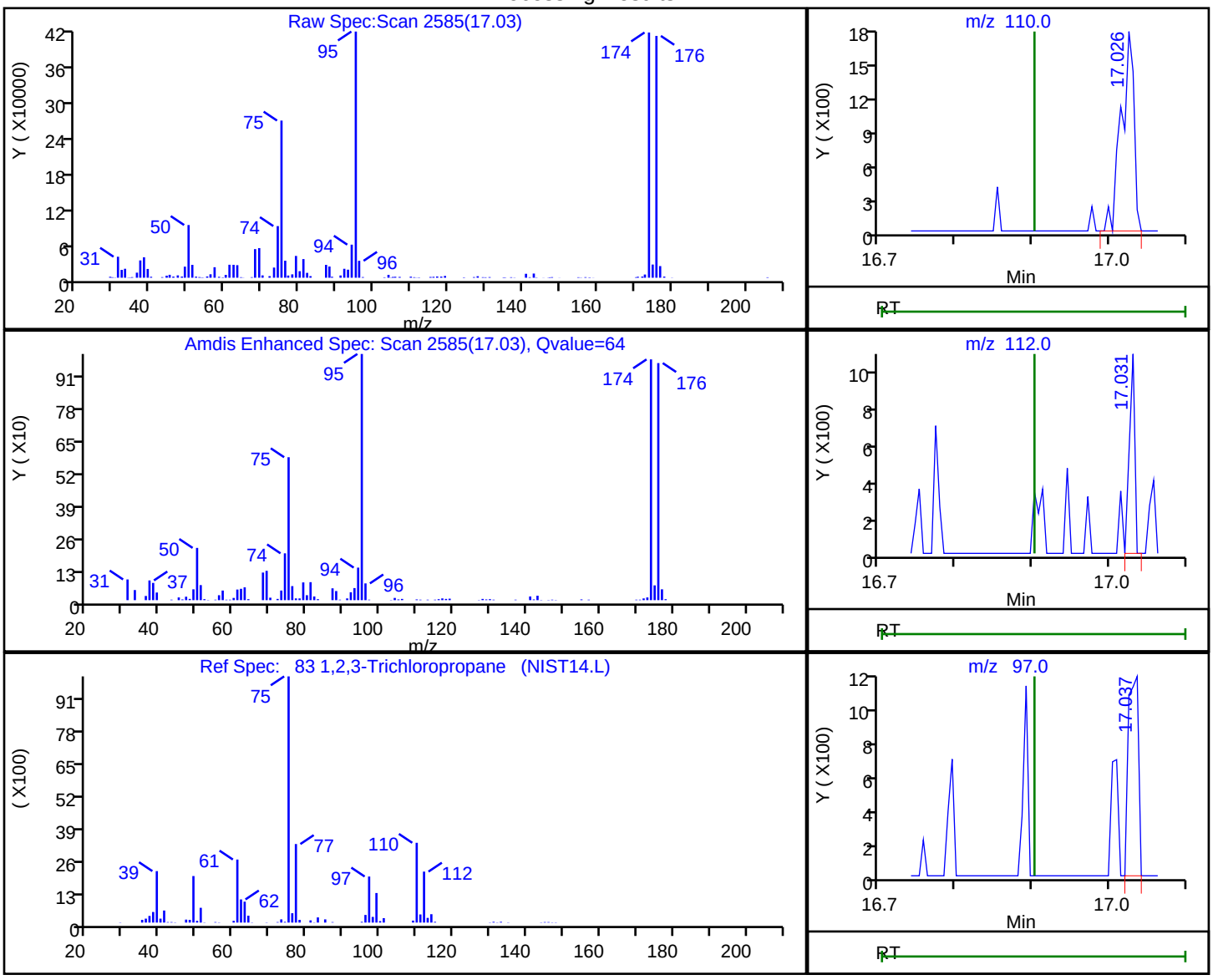
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200721-16069.b\RG22L19776.D				
Injection Date:	23-Jul-2020 05:56:30	Instrument ID:	MR		
Lims ID:	140-19776-A-13	Lab Sample ID:	140-19776-13		
Client ID:	10833				
Operator ID:	HMT	ALS Bottle#:	3	Worklist Smp#:	25
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

83 1,2,3-Trichloropropane, CAS: 96-18-4

Processing Results



RT	Mass	Response	Amount
17.03	110.00	2042	0.023144
17.03	112.00	523	
17.04	97.00	1108	

Reviewer: smelcerb, 23-Jul-2020 09:44:04

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

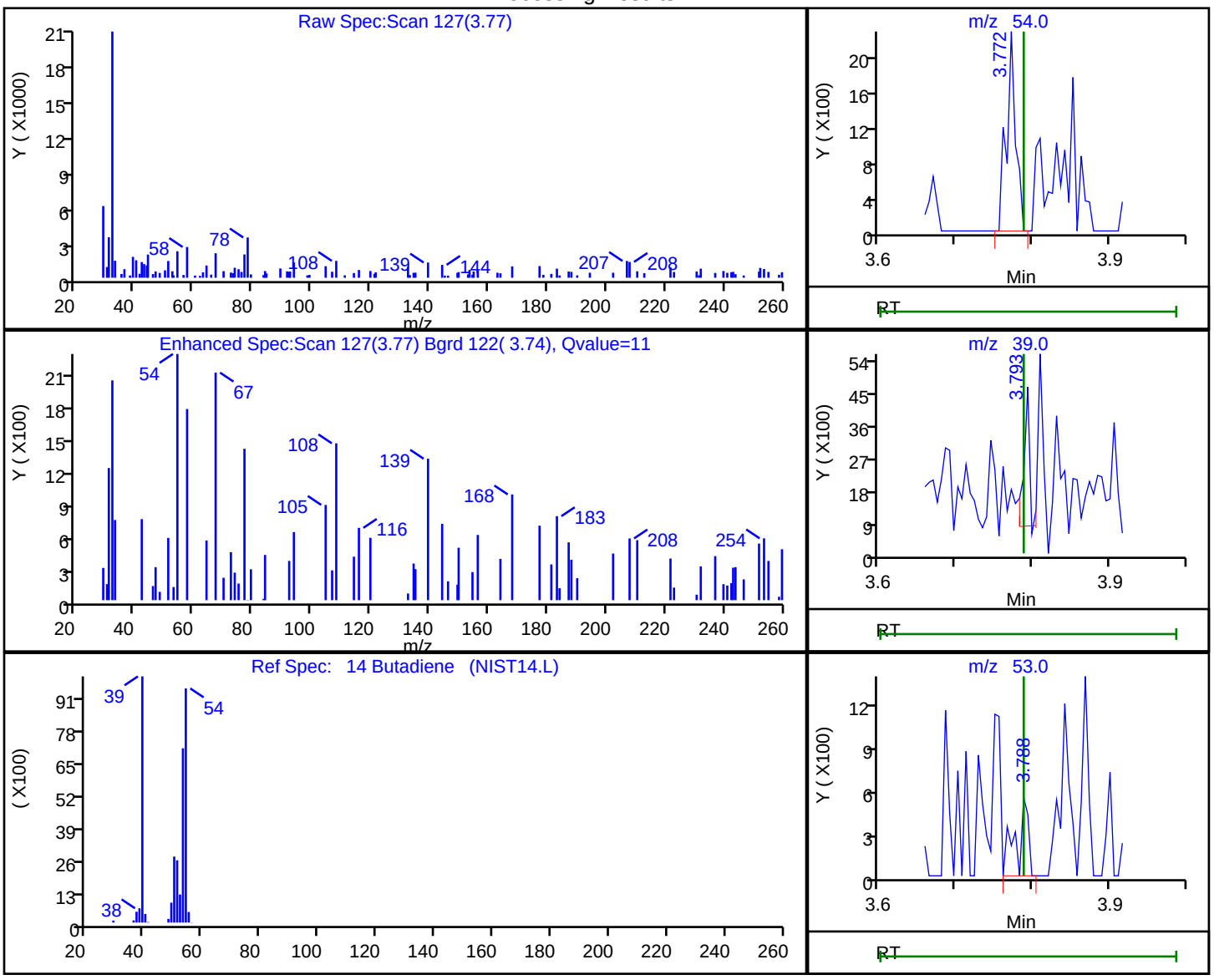
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200721-16069.b\RG22L19776.D				
Injection Date:	23-Jul-2020 05:56:30	Instrument ID:	MR		
Lims ID:	140-19776-A-13	Lab Sample ID:	140-19776-13		
Client ID:	10833				
Operator ID:	HMT	ALS Bottle#:	3	Worklist Smp#:	25
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

14 Butadiene, CAS: 106-99-0

Processing Results



RT	Mass	Response	Amount
3.77	54.00	1893	0.026634
3.79	39.00	2024	
3.79	53.00	565	

Reviewer: smelcerb, 23-Jul-2020 09:40:32

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

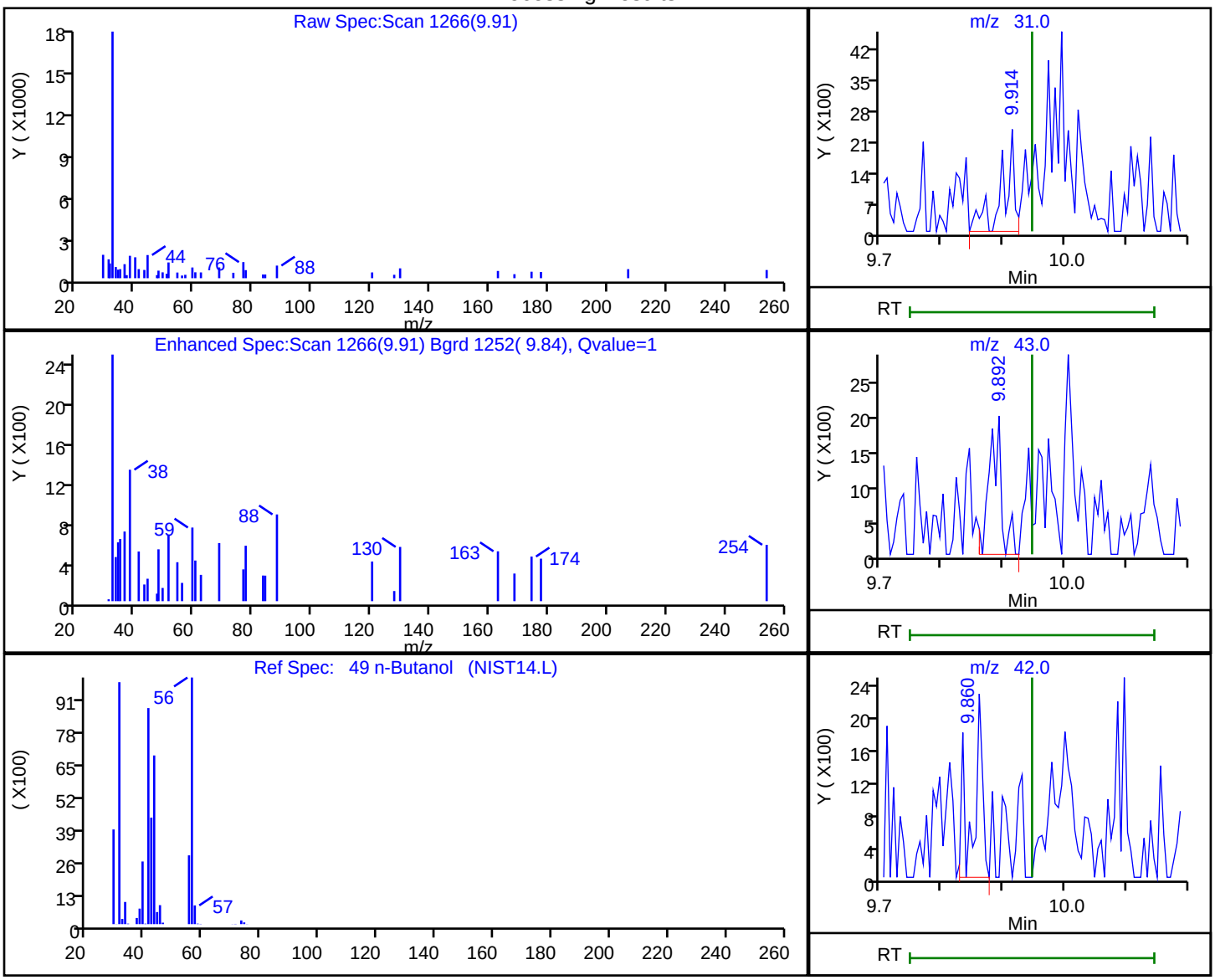
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200721-16069.b\RG22L19776.D				
Injection Date:	23-Jul-2020 05:56:30	Instrument ID:	MR		
Lims ID:	140-19776-A-13	Lab Sample ID:	140-19776-13		
Client ID:	10833				
Operator ID:	HMT	ALS Bottle#:	3	Worklist Smp#:	25
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

49 n-Butanol, CAS: 71-36-3

Processing Results



RT	Mass	Response	Amount
9.91	31.00	3051	0.046980
9.89	43.00	2650	
9.86	42.00	2290	

Reviewer: smelcerb, 23-Jul-2020 09:42:23

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

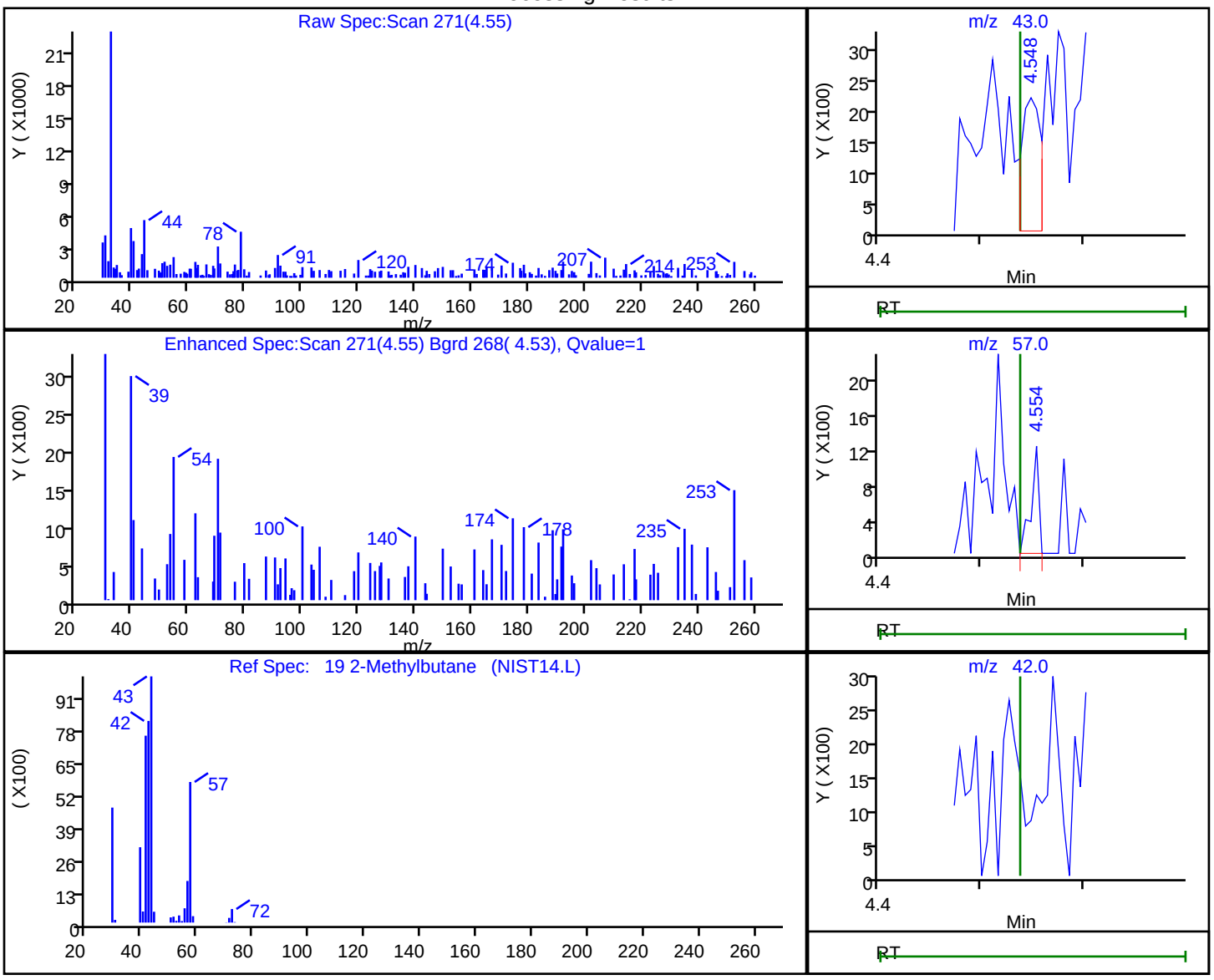
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200721-16069.b\RG22L19776.D				
Injection Date:	23-Jul-2020 05:56:30	Instrument ID:	MR		
Lims ID:	140-19776-A-13	Lab Sample ID:	140-19776-13		
Client ID:	10833				
Operator ID:	HMT	ALS Bottle#:	3	Worklist Smp#:	25
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

19 2-Methylbutane, CAS: 78-78-4

Processing Results



RT	Mass	Response	Amount
4.55	43.00	2812	0.022937
4.55	57.00	640	
4.54	42.00	0	

Reviewer: smelcerb, 23-Jul-2020 09:40:45

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

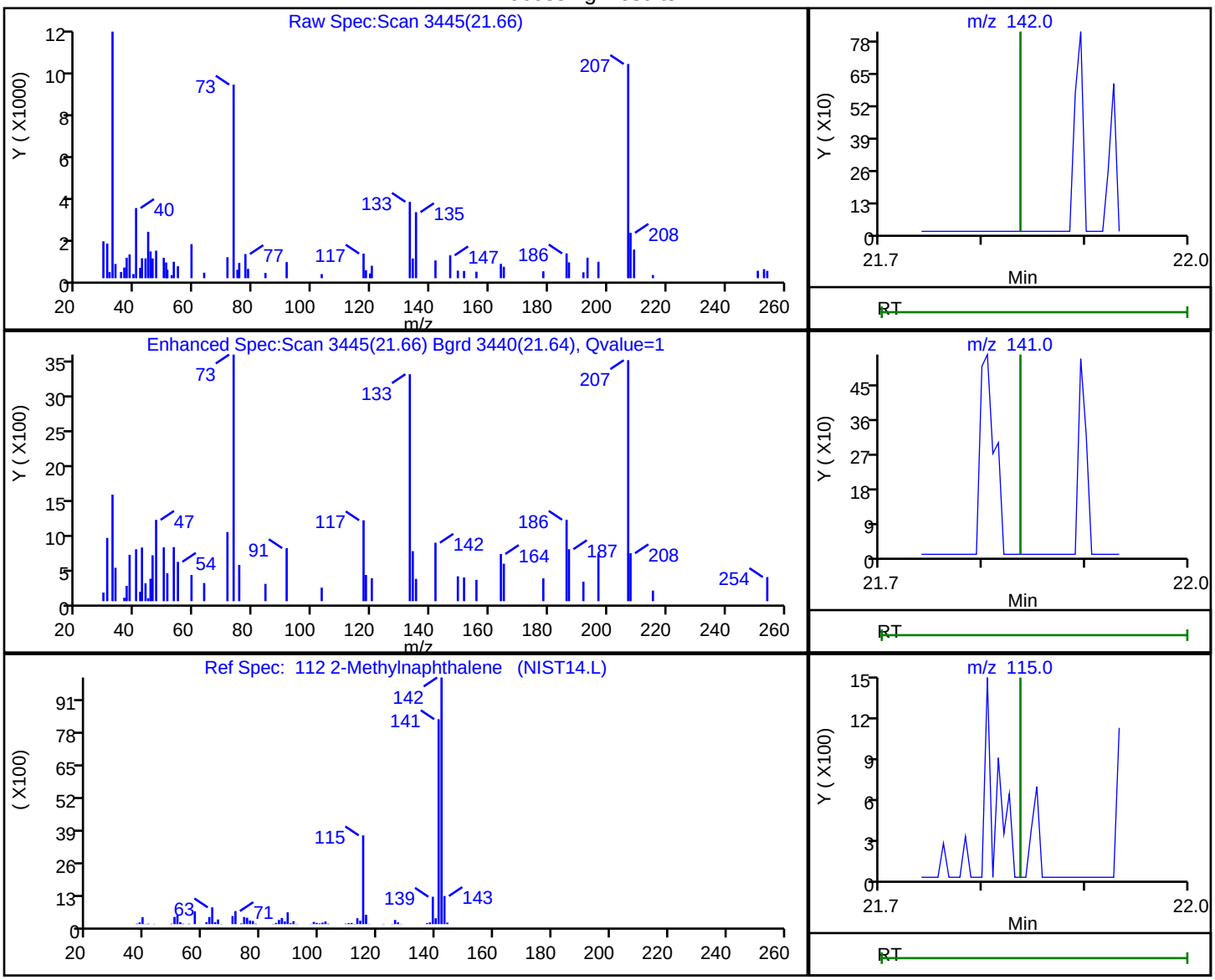
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200721-16069.b\RG22L19776.D				
Injection Date:	23-Jul-2020 05:56:30	Instrument ID:	MR		
Lims ID:	140-19776-A-13	Lab Sample ID:	140-19776-13		
Client ID:	10833				
Operator ID:	HMT	ALS Bottle#:	3	Worklist Smp#:	25
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

112 2-Methylnaphthalene, CAS: 91-57-6

Processing Results



RT	Mass	Response	Amount
21.66	142.00	325	0.646158
21.84	141.00	0	
21.84	115.00	0	

Reviewer: smelcerb, 23-Jul-2020 09:44:12

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

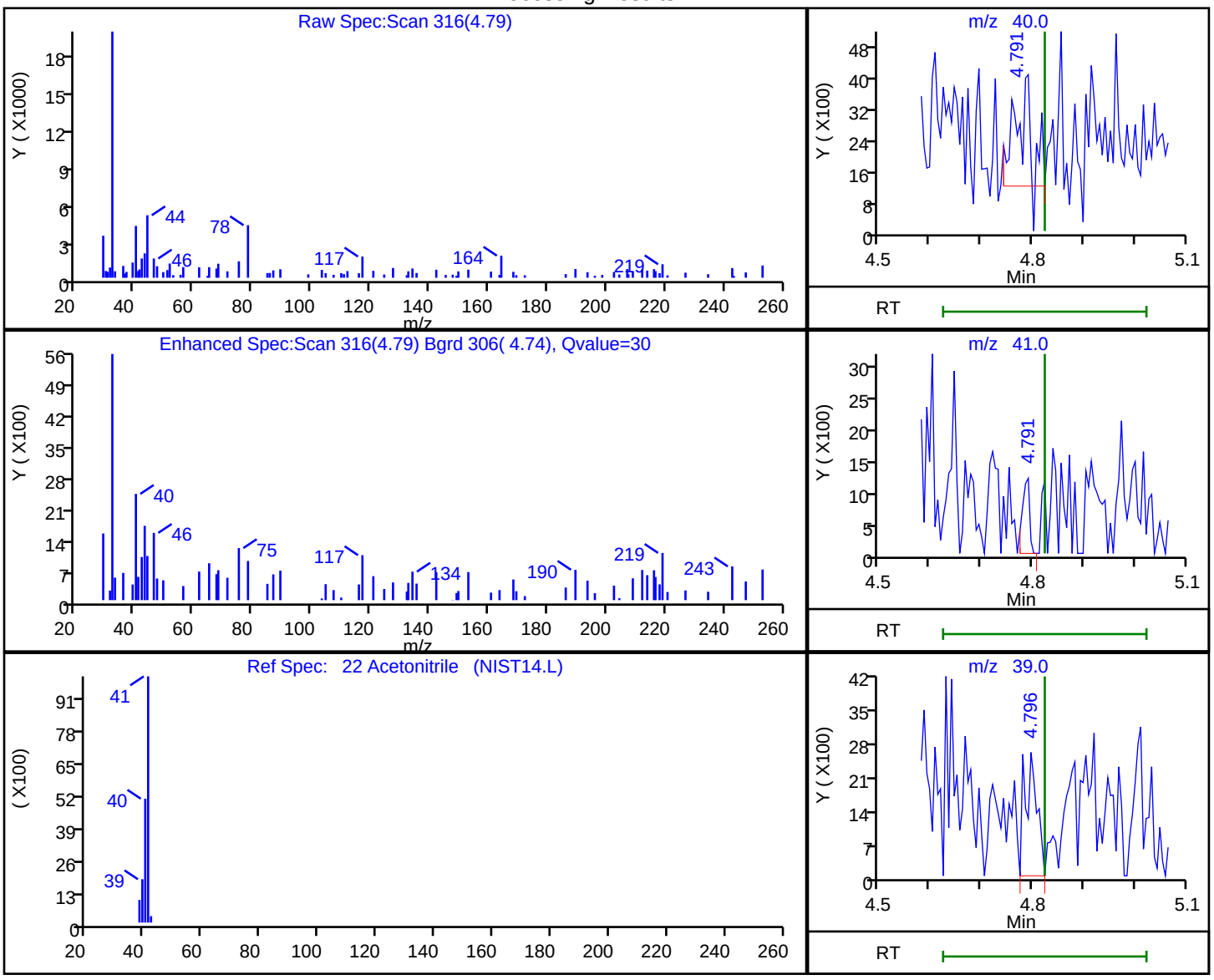
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200721-16069.b\RG22L19776.D				
Injection Date:	23-Jul-2020 05:56:30	Instrument ID:	MR		
Lims ID:	140-19776-A-13	Lab Sample ID:	140-19776-13		
Client ID:	10833				
Operator ID:	HMT	ALS Bottle#:	3	Worklist Smp#:	25
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

22 Acetonitrile, CAS: 75-05-8

Processing Results



RT	Mass	Response	Amount
4.79	40.00	6108	0.178363
4.79	41.00	1153	
4.80	39.00	4211	

Reviewer: smelcerb, 23-Jul-2020 09:40:53

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

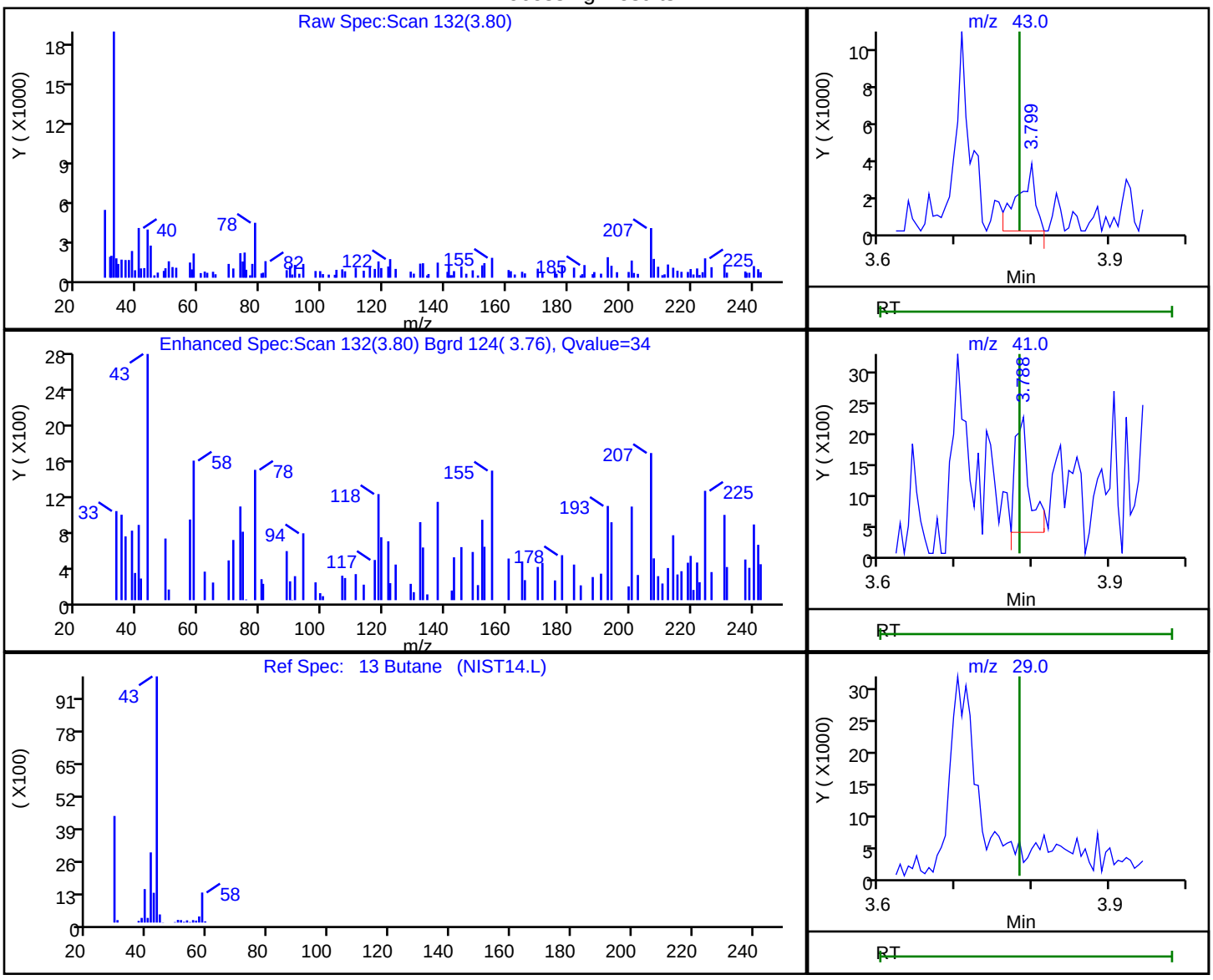
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200721-16069.b\RG22L19776.D		
Injection Date:	23-Jul-2020 05:56:30	Instrument ID:	MR
Lims ID:	140-19776-A-13	Lab Sample ID:	140-19776-13
Client ID:	10833		
Operator ID:	HMT	ALS Bottle#:	3 Worklist Smp#: 25
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

13 Butane, CAS: 106-97-8

Processing Results



RT	Mass	Response	Amount
3.80	43.00	5535	0.035544
3.79	41.00	2364	
3.78	29.00	0	

Reviewer: smelcerb, 23-Jul-2020 09:40:24

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

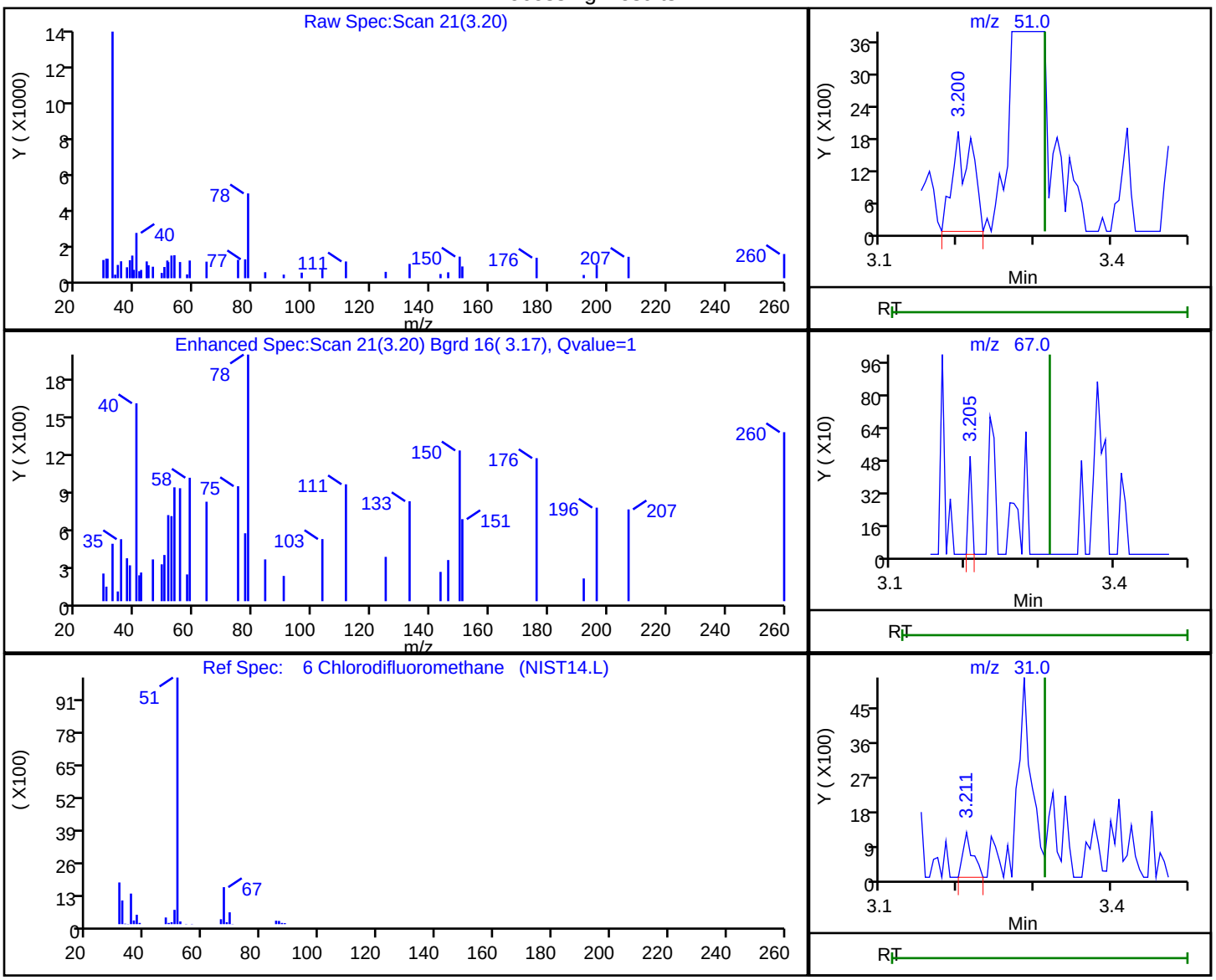
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200721-16069.b\RG22L19776.D				
Injection Date:	23-Jul-2020 05:56:30	Instrument ID:	MR		
Lims ID:	140-19776-A-13	Lab Sample ID:	140-19776-13		
Client ID:	10833				
Operator ID:	HMT	ALS Bottle#:	3	Worklist Smp#:	25
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

6 Chlorodifluoromethane, CAS: 75-45-6

Processing Results



RT	Mass	Response	Amount
3.20	51.00	3306	0.027372
3.21	67.00	158	
3.21	31.00	1039	

Reviewer: smelcerb, 23-Jul-2020 09:39:58

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

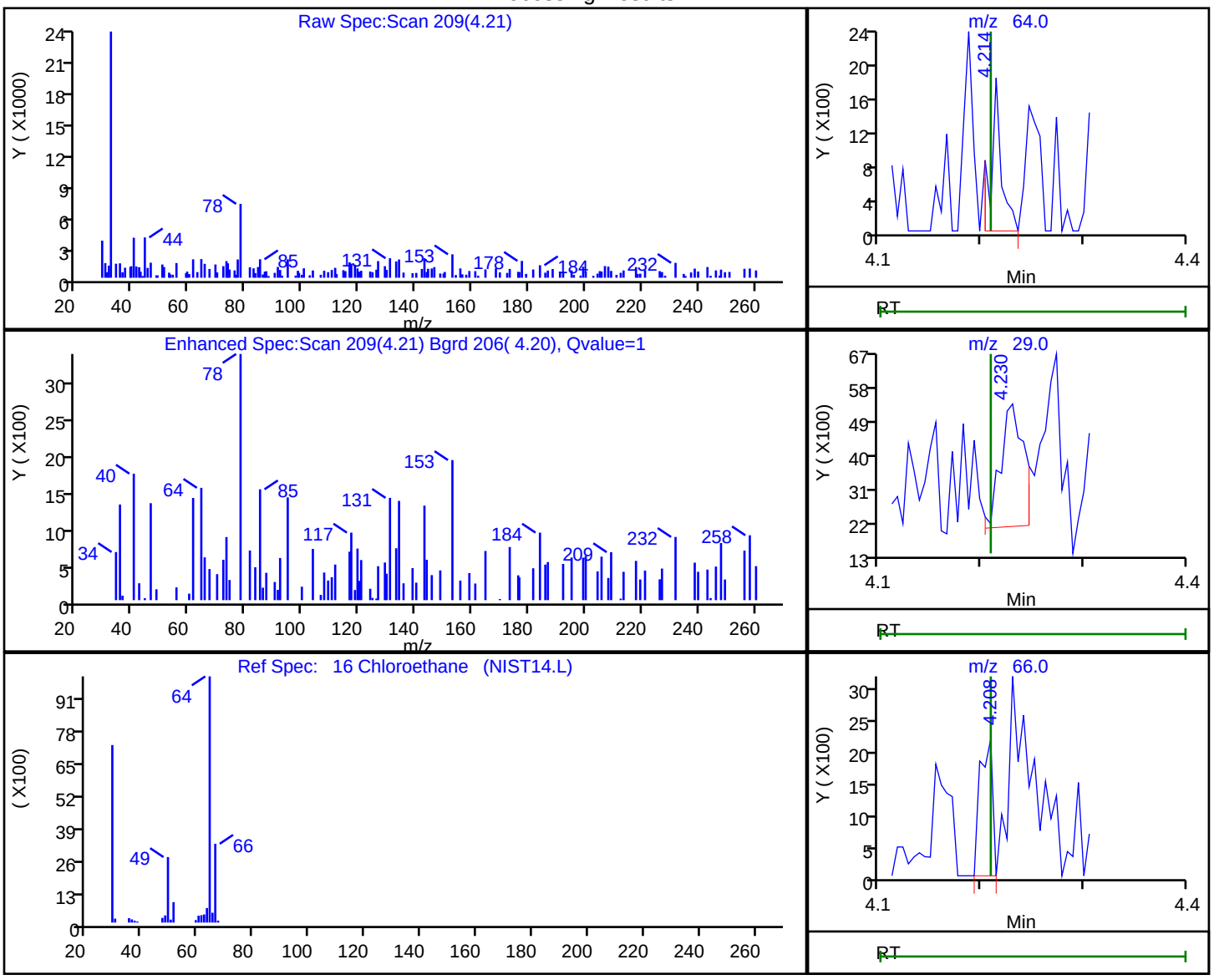
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200721-16069.b\RG22L19776.D				
Injection Date:	23-Jul-2020 05:56:30	Instrument ID:	MR		
Lims ID:	140-19776-A-13	Lab Sample ID:	140-19776-13		
Client ID:	10833				
Operator ID:	HMT	ALS Bottle#:	3	Worklist Smp#:	25
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

16 Chloroethane, CAS: 75-00-3

Processing Results



RT	Mass	Response	Amount
4.21	64.00	1276	0.023288
4.23	29.00	5090	
4.21	66.00	1819	

Reviewer: smelcerb, 23-Jul-2020 09:40:37

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

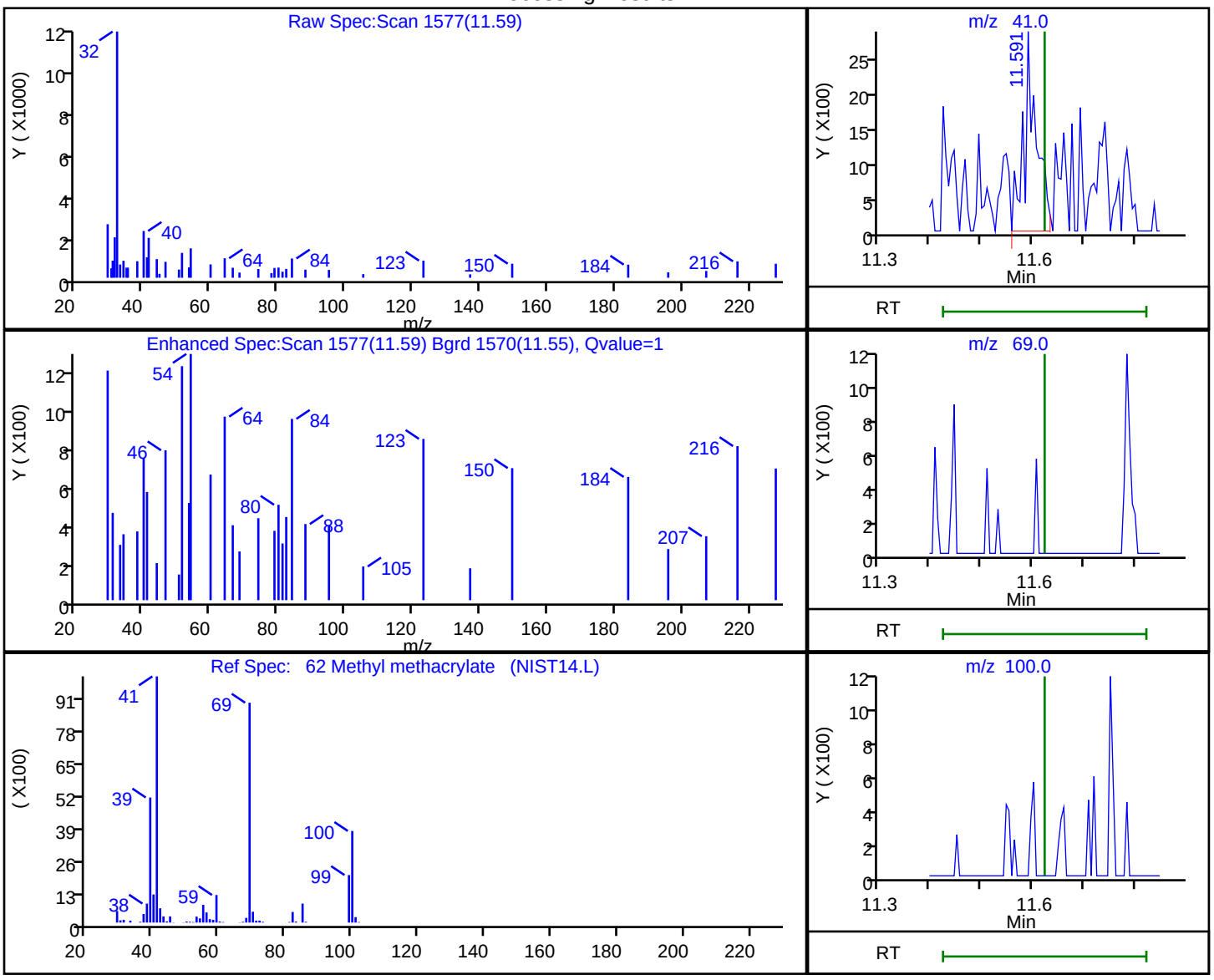
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200721-16069.b\RG22L19776.D				
Injection Date:	23-Jul-2020 05:56:30	Instrument ID:	MR		
Lims ID:	140-19776-A-13	Lab Sample ID:	140-19776-13		
Client ID:	10833				
Operator ID:	HMT	ALS Bottle#:	3	Worklist Smp#:	25
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

62 Methyl methacrylate, CAS: 80-62-6

Processing Results



RT	Mass	Response	Amount
11.59	41.00	4828	0.037852
11.62	69.00	0	
11.62	100.00	0	

Reviewer: smelcerb, 23-Jul-2020 09:43:49

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

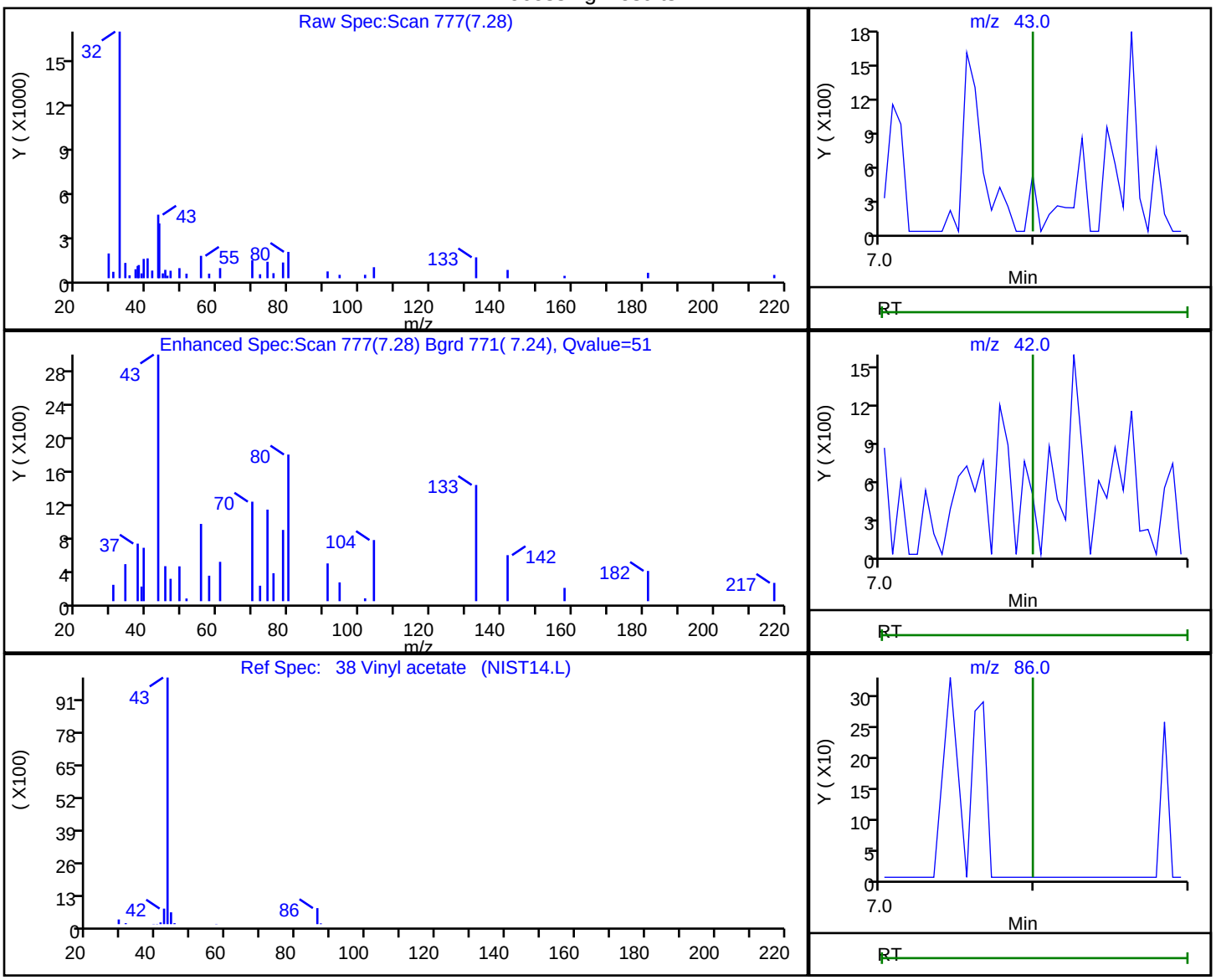
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200721-16069.b\RG22L19776.D				
Injection Date:	23-Jul-2020 05:56:30	Instrument ID:	MR		
Lims ID:	140-19776-A-13	Lab Sample ID:	140-19776-13		
Client ID:	10833				
Operator ID:	HMT	ALS Bottle#:	3	Worklist Smp#:	25
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

38 Vinyl acetate, CAS: 108-05-4

Processing Results



RT	Mass	Response	Amount
7.28	43.00	7320	0.034693
7.26	42.00	1882	
7.10	86.00	0	

Reviewer: smelcerb, 23-Jul-2020 09:41:20

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19793-1

SDG No.:

Client Sample ID: 11743 Lab Sample ID: 140-19793-1

Matrix: Air Lab File ID: GG23L19793.D

Analysis Method: TO-15 Date Collected: 07/22/2020 15:00

Sample wt/vol: 200(mL) Date Analyzed: 07/24/2020 05:43

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 41220 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	ND		0.20	
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.20	
79-00-5	1,1,2-Trichloroethane	ND		0.20	
76-13-1	1,1,2-Trichlorotrifluoroethane	ND		0.20	
75-34-3	1,1-Dichloroethane	ND		0.20	
75-35-4	1,1-Dichloroethene	ND		0.20	
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	
96-18-4	1,2,3-Trichloropropane	ND		0.50	
526-73-8	1,2,3-Trimethylbenzene	ND		0.20	
95-93-2	1,2,4,5-Tetramethylbenzene	ND		0.20	
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	
95-63-6	1,2,4-Trimethylbenzene	ND		0.20	
96-12-8	1,2-Dibromo-3-Chloropropane	ND		0.40	
106-93-4	1,2-Dibromoethane	ND		0.20	
95-50-1	1,2-Dichlorobenzene	ND		0.40	
107-06-2	1,2-Dichloroethane	ND		0.20	
78-87-5	1,2-Dichloropropane	ND		0.20	
76-14-2	1,2-Dichlorotetrafluoroethane	ND		0.20	
108-67-8	1,3,5-Trimethylbenzene	ND		0.20	
106-99-0	1,3-Butadiene	ND		0.40	
541-73-1	1,3-Dichlorobenzene	ND		0.20	
106-46-7	1,4-Dichlorobenzene	ND		0.20	
123-91-1	1,4-Dioxane	ND		0.40	
71-36-3	1-Butanol	ND		2.0	
90-12-0	1-Methylnaphthalene	ND		2.5	
540-84-1	2,2,4-Trimethylpentane	ND		0.40	
565-59-3	2,3-Dimethylpentane	ND		0.20	
78-93-3	2-Butanone	ND		1.0	
95-49-8	2-Chlorotoluene	ND		0.40	
591-78-6	2-Hexanone	ND		0.40	
78-78-4	2-Methylbutane	ND		0.50	
91-57-6	2-Methylnaphthalene	ND		2.5	
107-83-5	2-Methylpentane	ND		0.20	
107-05-1	3-Chloropropene	ND		0.20	
622-96-8	4-Ethyltoluene	ND		0.40	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		1.0	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19793-1

SDG No.:

Client Sample ID: 11743 Lab Sample ID: 140-19793-1

Matrix: Air Lab File ID: GG23L19793.D

Analysis Method: TO-15 Date Collected: 07/22/2020 15:00

Sample wt/vol: 200(mL) Date Analyzed: 07/24/2020 05:43

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 41220 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
67-64-1	Acetone	ND		7.5	
75-05-8	Acetonitrile	ND		1.0	
107-02-8	Acrolein	ND		1.0	
107-13-1	Acrylonitrile	ND		2.0	
98-83-9	Alpha Methyl Styrene	ND		0.40	
71-43-2	Benzene	ND		0.20	
100-44-7	Benzyl chloride	ND		0.40	
75-27-4	Bromodichloromethane	ND		0.20	
75-25-2	Bromoform	ND		0.20	
74-83-9	Bromomethane	ND		0.20	
106-97-8	Butane	ND		1.0	
75-15-0	Carbon disulfide	ND		0.40	
56-23-5	Carbon tetrachloride	ND		0.20	
108-90-7	Chlorobenzene	ND		0.20	
75-45-6	Chlorodifluoromethane	ND		0.20	
75-00-3	Chloroethane	ND		0.20	
67-66-3	Chloroform	ND		0.20	
74-87-3	Chloromethane	ND		1.0	
156-59-2	cis-1,2-Dichloroethene	ND		0.20	
10061-01-5	cis-1,3-Dichloropropene	ND		0.40	
98-82-8	Cumene	ND		0.40	
110-82-7	Cyclohexane	ND		0.40	
124-48-1	Dibromochloromethane	ND		0.20	
74-95-3	Dibromomethane	ND		0.40	
75-71-8	Dichlorodifluoromethane	ND		0.20	
64-17-5	Ethanol	ND	*	5.0	
141-78-6	Ethyl acetate	ND		2.0	
60-29-7	Ethyl ether	ND		2.0	
100-41-4	Ethylbenzene	ND		0.20	
87-68-3	Hexachlorobutadiene	ND		1.0	
110-54-3	Hexane	ND		0.40	
496-11-7	Indane	ND		0.20	
95-13-6	Indene	ND		0.40	
67-63-0	Isopropyl alcohol	ND		1.2	
179601-23-1	m&p-Xylene	ND		0.20	
80-62-6	Methyl methacrylate	ND		0.40	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19793-1

SDG No.:

Client Sample ID: 11743 Lab Sample ID: 140-19793-1

Matrix: Air Lab File ID: GG23L19793.D

Analysis Method: TO-15 Date Collected: 07/22/2020 15:00

Sample wt/vol: 200(mL) Date Analyzed: 07/24/2020 05:43

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 41220 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
1634-04-4	Methyl tert-butyl ether	ND		1.0	
108-87-2	Methylcyclohexane	ND		0.20	
75-09-2	Methylene Chloride	ND		1.0	
91-20-3	Naphthalene	ND		0.40	
104-51-8	n-Butylbenzene	ND		0.40	
124-18-5	n-Decane	ND		1.0	
112-40-3	n-Dodecane	ND		1.0	
142-82-5	n-Heptane	ND		0.40	
111-84-2	n-Nonane	ND		0.40	
111-65-9	n-Octane	ND		0.40	
103-65-1	N-Propylbenzene	ND		0.40	
1120-21-4	n-Undecane	ND		1.0	
95-47-6	o-Xylene	ND		0.20	
99-87-6	p-Cymene	ND		0.20	
109-66-0	Pentane	ND		2.5	
115-07-1	Propene	ND		2.5	
135-98-8	sec-Butylbenzene	ND		0.40	
100-42-5	Styrene	ND		0.20	
75-65-0	tert-Butanol	ND		1.0	
98-06-6	tert-Butylbenzene	ND		0.40	
127-18-4	Tetrachloroethene	ND		0.20	
109-99-9	Tetrahydrofuran	ND		1.0	
110-02-1	Thiophene	ND		0.20	
108-88-3	Toluene	ND		1.0	
156-60-5	trans-1,2-Dichloroethene	ND		0.20	
10061-02-6	trans-1,3-Dichloropropene	ND		0.20	
79-01-6	Trichloroethene	ND		0.20	
75-69-4	Trichlorofluoromethane	ND		0.20	
108-05-4	Vinyl acetate	ND		1.0	
593-60-2	Vinyl bromide	ND		0.20	
75-01-4	Vinyl chloride	ND		0.40	

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200722-16085.b\GG23L19793.D
Lims ID: 140-19793-A-1
Client ID: 11743
Sample Type: Client
Inject. Date: 24-Jul-2020 05:43:30 ALS Bottle#: 16 Worklist Smp#: 28
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016085-028
Misc. Info.: 11743
Operator ID: AFB Instrument ID: MG

Method: \\chromfs\Knoxville\ChromData\MG\20200722-16085.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 24-Jul-2020 17:22:24 Calib Date: 15-Jul-2020 22:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1003

First Level Reviewer: khachitpongpanits Date: 24-Jul-2020 17:22:24

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.833	8.838	-0.005	93	139983	4.00	
* 2 1,4-Difluorobenzene	114	11.017	11.022	-0.005	97	1313377	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.746	15.751	-0.005	94	1133543	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.391	17.385	0.000	75	889525	3.86	
7 Propene	41	3.715	3.713	0.000	98	73632	-0.2392	7
17 Ethanol	31	4.805	4.775	0.027	98	47789	1.95	
23 Acetone	58	5.403	5.362	0.038	96	19569	0.6563	
25 Isopropyl alcohol	45	5.538	5.465	0.070	90	4724	0.0643	
31 Methylene Chloride	84	6.293	6.289	0.000	98	64589	0.1666	
47 1,1,1-Trichloroethane	97	9.863	9.873	-0.016	89	2479	0.0124	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

40MXISSURP_00004 Amount Added: 40.00 Units: mL Run Reagent

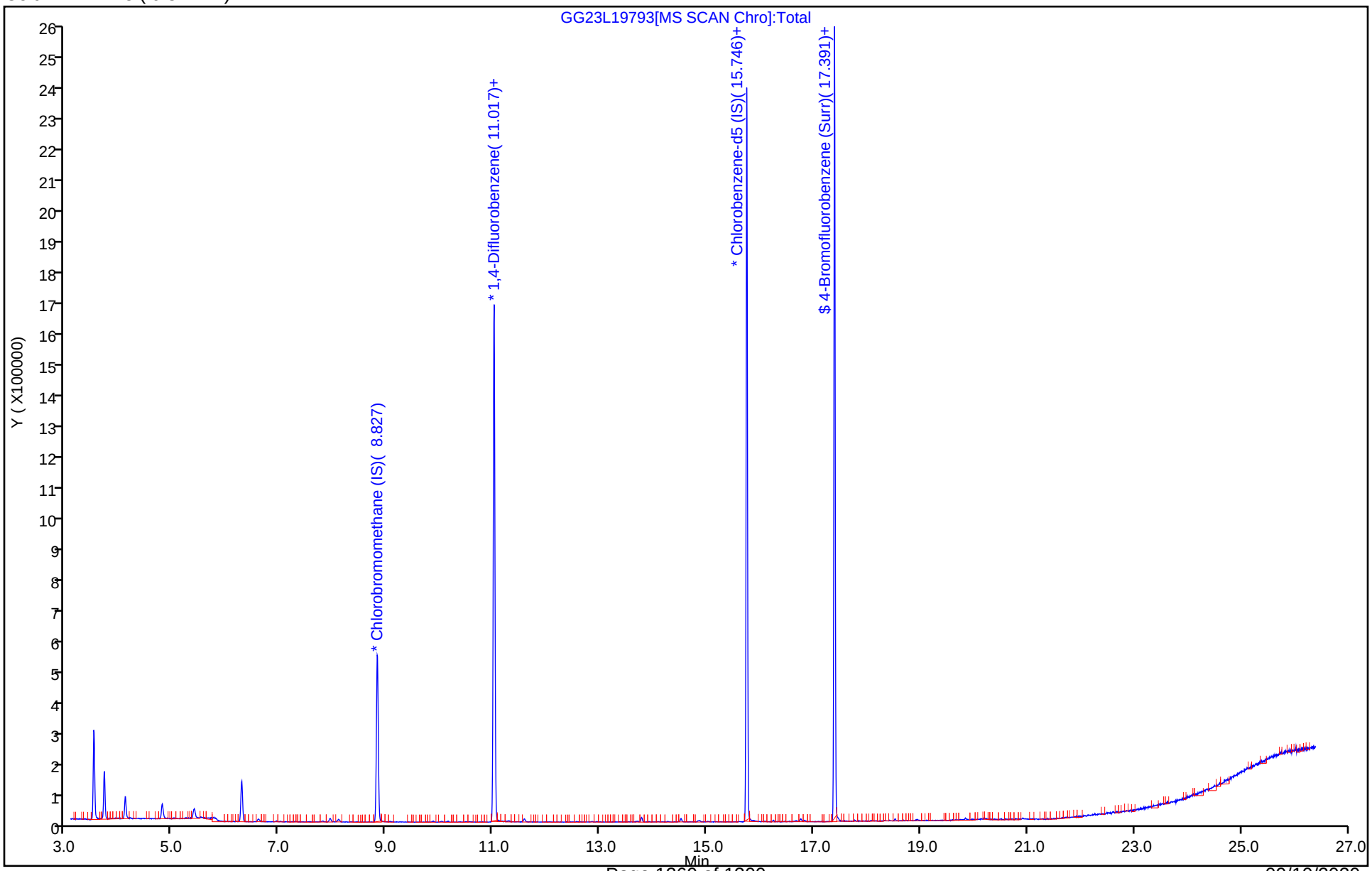
Report Date: 24-Jul-2020 17:22:24 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200722-16085.b\GG23L19793.D

Injection Date:	24-Jul-2020 05:43:30	Instrument ID:	MG	Operator ID:	AFB
Lims ID:	140-19793-A-1	Lab Sample ID:	140-19793-1	Worklist Smp#:	28
Client ID:	11743				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



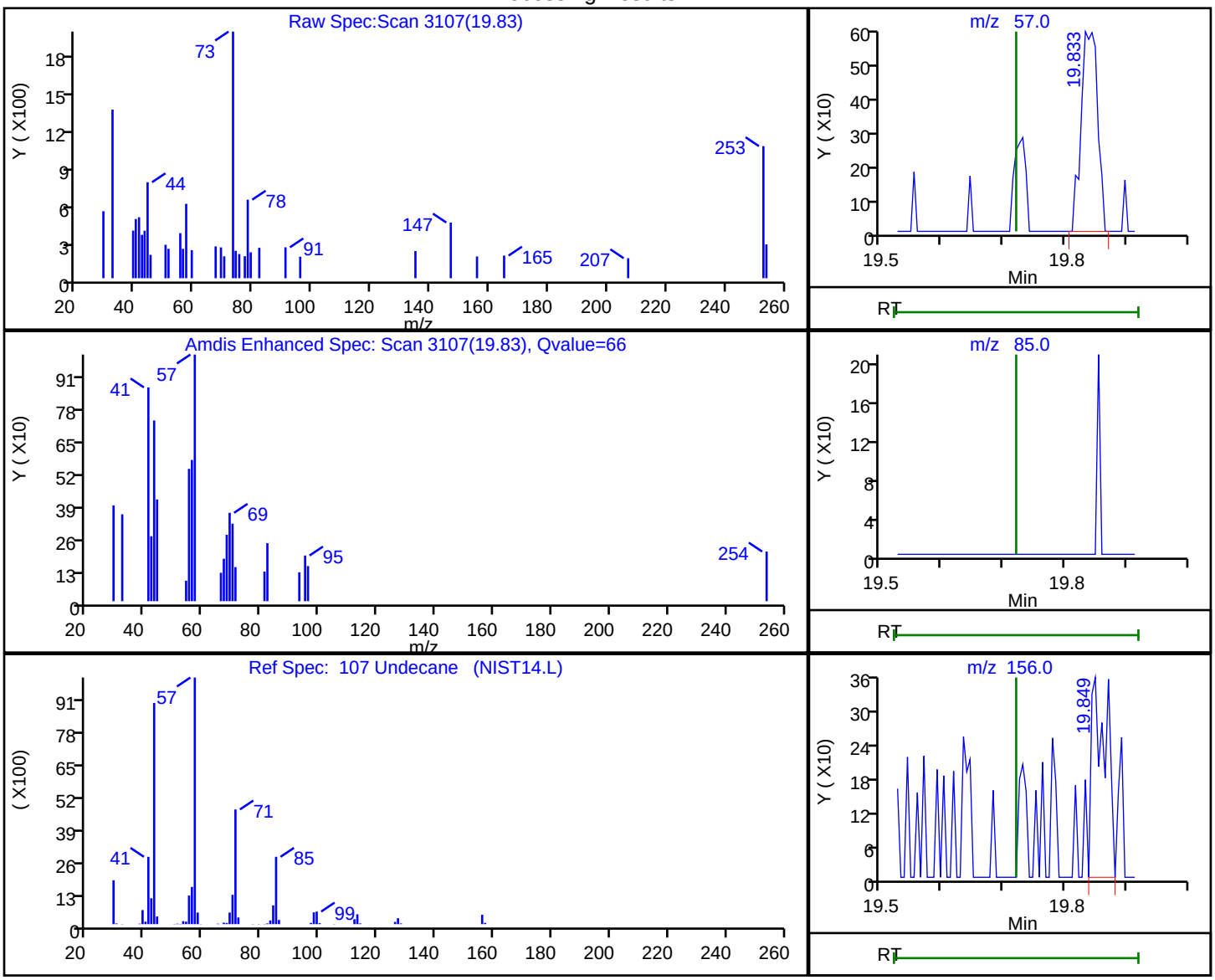
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200722-16085.b\GG23L19793.D				
Injection Date:	24-Jul-2020 05:43:30	Instrument ID:	MG		
Lims ID:	140-19793-A-1	Lab Sample ID:	140-19793-1		
Client ID:	11743				
Operator ID:	AFB	ALS Bottle#:	16	Worklist Smp#:	28
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

107 Undecane, CAS: 1120-21-4

Processing Results



RT	Mass	Response	Amount
19.83	57.00	1118	0.005004
19.72	85.00	0	
19.85	156.00	595	

Reviewer: khachitpongpanits, 24-Jul-2020 17:22:17

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19809-1

SDG No.:

Client Sample ID: 10335 Lab Sample ID: 140-19809-7

Matrix: Air Lab File ID: GG27L19809.D

Analysis Method: TO-15 Date Collected: 07/23/2020 16:30

Sample wt/vol: 200(mL) Date Analyzed: 07/27/2020 11:12

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 41299 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	ND		0.20	
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.20	
79-00-5	1,1,2-Trichloroethane	ND		0.20	
76-13-1	1,1,2-Trichlorotrifluoroethane	ND		0.20	
75-34-3	1,1-Dichloroethane	ND		0.20	
75-35-4	1,1-Dichloroethene	ND		0.20	
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	
96-18-4	1,2,3-Trichloropropane	ND		0.50	
526-73-8	1,2,3-Trimethylbenzene	ND		0.20	
95-93-2	1,2,4,5-Tetramethylbenzene	ND		0.20	
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	
95-63-6	1,2,4-Trimethylbenzene	ND		0.20	
96-12-8	1,2-Dibromo-3-Chloropropane	ND		0.40	
106-93-4	1,2-Dibromoethane	ND		0.20	
95-50-1	1,2-Dichlorobenzene	ND		0.40	
107-06-2	1,2-Dichloroethane	ND		0.20	
78-87-5	1,2-Dichloropropane	ND		0.20	
76-14-2	1,2-Dichlorotetrafluoroethane	ND		0.20	
108-67-8	1,3,5-Trimethylbenzene	ND		0.20	
106-99-0	1,3-Butadiene	ND		0.40	
541-73-1	1,3-Dichlorobenzene	ND		0.20	
106-46-7	1,4-Dichlorobenzene	ND		0.20	
123-91-1	1,4-Dioxane	ND		0.40	
71-36-3	1-Butanol	ND		2.0	
90-12-0	1-Methylnaphthalene	ND		2.5	
540-84-1	2,2,4-Trimethylpentane	ND		0.40	
565-59-3	2,3-Dimethylpentane	ND		0.20	
78-93-3	2-Butanone	ND		1.0	
95-49-8	2-Chlorotoluene	ND		0.40	
591-78-6	2-Hexanone	ND		0.40	
78-78-4	2-Methylbutane	ND		0.50	
91-57-6	2-Methylnaphthalene	ND		2.5	
107-83-5	2-Methylpentane	ND		0.20	
107-05-1	3-Chloropropene	ND		0.20	
622-96-8	4-Ethyltoluene	ND		0.40	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		1.0	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19809-1

SDG No.:

Client Sample ID: 10335 Lab Sample ID: 140-19809-7

Matrix: Air Lab File ID: GG27L19809.D

Analysis Method: TO-15 Date Collected: 07/23/2020 16:30

Sample wt/vol: 200(mL) Date Analyzed: 07/27/2020 11:12

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 41299 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
67-64-1	Acetone	ND		7.5	
75-05-8	Acetonitrile	ND		1.0	
107-02-8	Acrolein	ND		1.0	
107-13-1	Acrylonitrile	ND		2.0	
98-83-9	Alpha Methyl Styrene	ND		0.40	
71-43-2	Benzene	ND		0.20	
100-44-7	Benzyl chloride	ND		0.40	
75-27-4	Bromodichloromethane	ND		0.20	
75-25-2	Bromoform	ND		0.20	
74-83-9	Bromomethane	ND		0.20	
106-97-8	Butane	ND		1.0	
75-15-0	Carbon disulfide	ND		0.40	
56-23-5	Carbon tetrachloride	ND		0.20	
108-90-7	Chlorobenzene	ND		0.20	
75-45-6	Chlorodifluoromethane	ND		0.20	
75-00-3	Chloroethane	ND		0.20	
67-66-3	Chloroform	ND		0.20	
74-87-3	Chloromethane	ND		1.0	
156-59-2	cis-1,2-Dichloroethene	ND		0.20	
10061-01-5	cis-1,3-Dichloropropene	ND		0.40	
98-82-8	Cumene	ND		0.40	
110-82-7	Cyclohexane	ND		0.40	
124-48-1	Dibromochloromethane	ND		0.20	
74-95-3	Dibromomethane	ND		0.40	
75-71-8	Dichlorodifluoromethane	ND		0.20	
64-17-5	Ethanol	ND		5.0	
141-78-6	Ethyl acetate	ND		2.0	
60-29-7	Ethyl ether	ND		2.0	
100-41-4	Ethylbenzene	ND		0.20	
87-68-3	Hexachlorobutadiene	ND		1.0	
110-54-3	Hexane	ND		0.40	
496-11-7	Indane	ND		0.20	
95-13-6	Indene	ND		0.40	
67-63-0	Isopropyl alcohol	ND		1.2	
179601-23-1	m&p-Xylene	ND		0.20	
80-62-6	Methyl methacrylate	ND		0.40	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19809-1

SDG No.:

Client Sample ID: 10335 Lab Sample ID: 140-19809-7

Matrix: Air Lab File ID: GG27L19809.D

Analysis Method: TO-15 Date Collected: 07/23/2020 16:30

Sample wt/vol: 200(mL) Date Analyzed: 07/27/2020 11:12

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 41299 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
1634-04-4	Methyl tert-butyl ether	ND		1.0	
108-87-2	Methylcyclohexane	ND		0.20	
75-09-2	Methylene Chloride	ND		1.0	
91-20-3	Naphthalene	ND		0.40	
104-51-8	n-Butylbenzene	ND		0.40	
124-18-5	n-Decane	ND		1.0	
112-40-3	n-Dodecane	ND		1.0	
142-82-5	n-Heptane	ND		0.40	
111-84-2	n-Nonane	ND		0.40	
111-65-9	n-Octane	ND		0.40	
103-65-1	N-Propylbenzene	ND		0.40	
1120-21-4	n-Undecane	ND		1.0	
95-47-6	o-Xylene	ND		0.20	
99-87-6	p-Cymene	ND		0.20	
109-66-0	Pentane	ND		2.5	
115-07-1	Propene	ND		2.5	
135-98-8	sec-Butylbenzene	ND		0.40	
100-42-5	Styrene	ND		0.20	
75-65-0	tert-Butanol	ND		1.0	
98-06-6	tert-Butylbenzene	ND		0.40	
127-18-4	Tetrachloroethene	ND		0.20	
109-99-9	Tetrahydrofuran	ND		1.0	
110-02-1	Thiophene	ND		0.20	
108-88-3	Toluene	ND		1.0	
156-60-5	trans-1,2-Dichloroethene	ND		0.20	
10061-02-6	trans-1,3-Dichloropropene	ND		0.20	
79-01-6	Trichloroethene	ND		0.20	
75-69-4	Trichlorofluoromethane	ND		0.20	
108-05-4	Vinyl acetate	ND		1.0	
593-60-2	Vinyl bromide	ND		0.20	
75-01-4	Vinyl chloride	ND		0.40	

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200724-16113.b\GG27L19809.D
Lims ID: 140-19809-A-7
Client ID: 10335
Sample Type: Client
Inject. Date: 27-Jul-2020 11:12:30 ALS Bottle#: 16 Worklist Smp#: 6
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016113-006
Misc. Info.: 200ML10335
Operator ID: HMT Instrument ID: MG

Method: \\chromfs\Knoxville\ChromData\MG\20200724-16113.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 28-Jul-2020 10:38:18 Calib Date: 15-Jul-2020 22:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1057

First Level Reviewer: khachitpongpanits Date: 28-Jul-2020 10:38:59

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.833	8.838	-0.005	94	205468	4.00	
* 2 1,4-Difluorobenzene	114	11.017	11.022	-0.005	97	1872932	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.746	15.751	-0.005	94	1596319	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.391	17.385	0.000	76	1198813	3.69	
7 Propene	41	3.721	3.719	0.000	98	102178	-0.3058	7
47 1,1,1-Trichloroethane	97	9.874	9.868	0.000	96	14859	0.0504	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

40MXISSURP_00004 Amount Added: 40.00 Units: mL Run Reagent

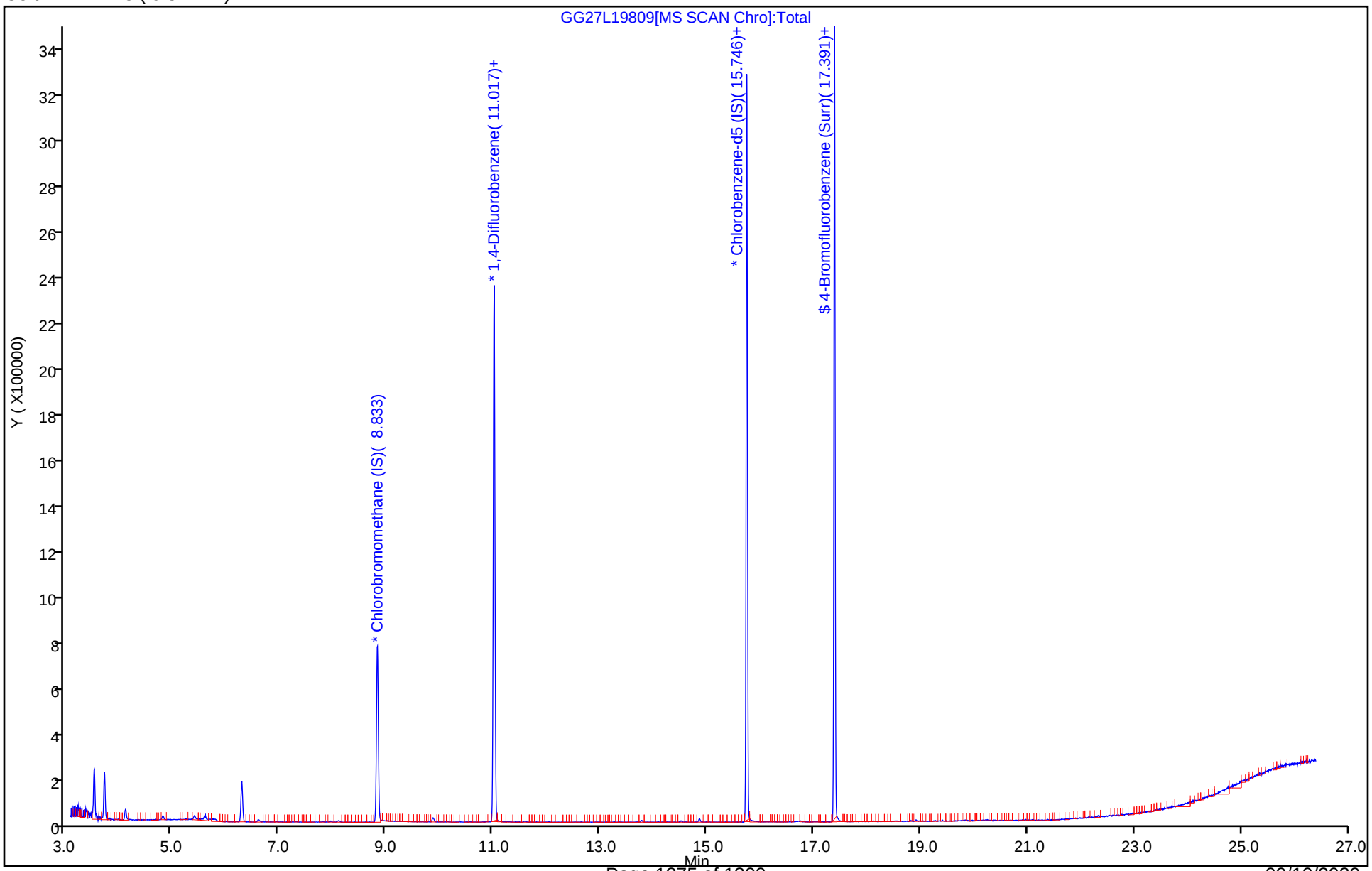
Report Date: 28-Jul-2020 10:39:00 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200724-16113.b\GG27L19809.D

Injection Date:	27-Jul-2020 11:12:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	140-19809-A-7	Lab Sample ID:	140-19809-7	Worklist Smp#:	6
Client ID:	10335				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19822-1

SDG No.:

Client Sample ID: 11830 Lab Sample ID: 140-19822-14

Matrix: Air Lab File ID: G29L19822.D

Analysis Method: TO-15 Date Collected: 07/24/2020 16:45

Sample wt/vol: 200(mL) Date Analyzed: 07/29/2020 13:04

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 41354 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	ND		0.20	
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.20	
79-00-5	1,1,2-Trichloroethane	ND		0.20	
76-13-1	1,1,2-Trichlorotrifluoroethane	ND		0.20	
75-34-3	1,1-Dichloroethane	ND		0.20	
75-35-4	1,1-Dichloroethene	ND		0.20	
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	
96-18-4	1,2,3-Trichloropropane	ND		0.50	
526-73-8	1,2,3-Trimethylbenzene	ND		0.20	
95-93-2	1,2,4,5-Tetramethylbenzene	ND		0.20	
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	
95-63-6	1,2,4-Trimethylbenzene	ND		0.20	
96-12-8	1,2-Dibromo-3-Chloropropane	ND		0.40	
106-93-4	1,2-Dibromoethane	ND		0.20	
95-50-1	1,2-Dichlorobenzene	ND		0.40	
107-06-2	1,2-Dichloroethane	ND		0.20	
78-87-5	1,2-Dichloropropane	ND		0.20	
76-14-2	1,2-Dichlorotetrafluoroethane	ND		0.20	
108-67-8	1,3,5-Trimethylbenzene	ND		0.20	
106-99-0	1,3-Butadiene	ND		0.40	
541-73-1	1,3-Dichlorobenzene	ND		0.20	
106-46-7	1,4-Dichlorobenzene	ND		0.20	
123-91-1	1,4-Dioxane	ND		0.40	
71-36-3	1-Butanol	ND		2.0	
90-12-0	1-Methylnaphthalene	ND		2.5	
540-84-1	2,2,4-Trimethylpentane	ND		0.40	
565-59-3	2,3-Dimethylpentane	ND		0.20	
78-93-3	2-Butanone	ND		1.0	
95-49-8	2-Chlorotoluene	ND		0.40	
591-78-6	2-Hexanone	ND		0.40	
78-78-4	2-Methylbutane	ND		0.50	
91-57-6	2-Methylnaphthalene	ND		2.5	
107-83-5	2-Methylpentane	ND		0.20	
107-05-1	3-Chloropropene	ND		0.20	
622-96-8	4-Ethyltoluene	ND		0.40	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		1.0	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19822-1

SDG No.:

Client Sample ID: 11830 Lab Sample ID: 140-19822-14

Matrix: Air Lab File ID: G29L19822.D

Analysis Method: TO-15 Date Collected: 07/24/2020 16:45

Sample wt/vol: 200(mL) Date Analyzed: 07/29/2020 13:04

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 41354 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
67-64-1	Acetone	ND		7.5	
75-05-8	Acetonitrile	ND		1.0	
107-02-8	Acrolein	ND		1.0	
107-13-1	Acrylonitrile	ND		2.0	
98-83-9	Alpha Methyl Styrene	ND		0.40	
71-43-2	Benzene	ND		0.20	
100-44-7	Benzyl chloride	ND		0.40	
75-27-4	Bromodichloromethane	ND		0.20	
75-25-2	Bromoform	ND		0.20	
74-83-9	Bromomethane	ND		0.20	
106-97-8	Butane	ND		1.0	
75-15-0	Carbon disulfide	ND		0.40	
56-23-5	Carbon tetrachloride	ND		0.20	
108-90-7	Chlorobenzene	ND		0.20	
75-45-6	Chlorodifluoromethane	ND		0.20	
75-00-3	Chloroethane	ND		0.20	
67-66-3	Chloroform	ND		0.20	
74-87-3	Chloromethane	ND		1.0	
156-59-2	cis-1,2-Dichloroethene	ND		0.20	
10061-01-5	cis-1,3-Dichloropropene	ND		0.40	
98-82-8	Cumene	ND		0.40	
110-82-7	Cyclohexane	ND		0.40	
124-48-1	Dibromochloromethane	ND		0.20	
74-95-3	Dibromomethane	ND		0.40	
75-71-8	Dichlorodifluoromethane	ND		0.20	
64-17-5	Ethanol	ND		5.0	
141-78-6	Ethyl acetate	ND		2.0	
60-29-7	Ethyl ether	ND		2.0	
100-41-4	Ethylbenzene	ND		0.20	
87-68-3	Hexachlorobutadiene	ND		1.0	
110-54-3	Hexane	ND		0.40	
496-11-7	Indane	ND		0.20	
95-13-6	Indene	ND		0.40	
67-63-0	Isopropyl alcohol	ND		1.2	
179601-23-1	m&p-Xylene	ND		0.20	
80-62-6	Methyl methacrylate	ND		0.40	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19822-1

SDG No.:

Client Sample ID: 11830 Lab Sample ID: 140-19822-14

Matrix: Air Lab File ID: G29L19822.D

Analysis Method: TO-15 Date Collected: 07/24/2020 16:45

Sample wt/vol: 200(mL) Date Analyzed: 07/29/2020 13:04

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 41354 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
1634-04-4	Methyl tert-butyl ether	ND		1.0	
108-87-2	Methylcyclohexane	ND		0.20	
75-09-2	Methylene Chloride	ND		1.0	
91-20-3	Naphthalene	ND		0.40	
104-51-8	n-Butylbenzene	ND		0.40	
124-18-5	n-Decane	ND		1.0	
112-40-3	n-Dodecane	ND		1.0	
142-82-5	n-Heptane	ND		0.40	
111-84-2	n-Nonane	ND		0.40	
111-65-9	n-Octane	ND		0.40	
103-65-1	N-Propylbenzene	ND		0.40	
1120-21-4	n-Undecane	ND		1.0	
95-47-6	o-Xylene	ND		0.20	
99-87-6	p-Cymene	ND		0.20	
109-66-0	Pentane	ND		2.5	
115-07-1	Propene	ND		2.5	
135-98-8	sec-Butylbenzene	ND		0.40	
100-42-5	Styrene	ND		0.20	
75-65-0	tert-Butanol	ND		1.0	
98-06-6	tert-Butylbenzene	ND		0.40	
127-18-4	Tetrachloroethene	ND		0.20	
109-99-9	Tetrahydrofuran	ND		1.0	
110-02-1	Thiophene	ND		0.20	
108-88-3	Toluene	ND		1.0	
156-60-5	trans-1,2-Dichloroethene	ND		0.20	
10061-02-6	trans-1,3-Dichloropropene	ND		0.20	
79-01-6	Trichloroethene	ND		0.20	
75-69-4	Trichlorofluoromethane	ND		0.20	
108-05-4	Vinyl acetate	ND		1.0	
593-60-2	Vinyl bromide	ND		0.20	
75-01-4	Vinyl chloride	ND		0.40	

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MR\20200728-16133.b\G29L19822.D
Lims ID: 140-19822-A-14
Client ID: 11830
Sample Type: Client
Inject. Date: 29-Jul-2020 13:04:30 ALS Bottle#: 6 Worklist Smp#: 9
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016133-009
Misc. Info.: 11830
Operator ID: HMT Instrument ID: MR

Method: \\chromfs\Knoxville\ChromData\MR\20200728-16133.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 30-Jul-2020 10:01:05 Calib Date: 28-Jul-2020 09:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC09R.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1069

First Level Reviewer: barlozhetskayaa Date: 30-Jul-2020 10:02:07

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.301	8.312	-0.011	92	143475	4.00	
* 2 1,4-Difluorobenzene	114	10.544	10.539	0.005	96	1257432	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.376	15.371	0.006	90	1016983	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.026	17.021	0.005	94	556392	3.62	
7 Propene	41	3.351	3.356	-0.005	98	71609	0.3957	7
40 Hexane	56	7.584	7.573	0.011	21	1231	0.0159	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

40MXISSURP_00004 Amount Added: 40.00 Units: mL Run Reagent

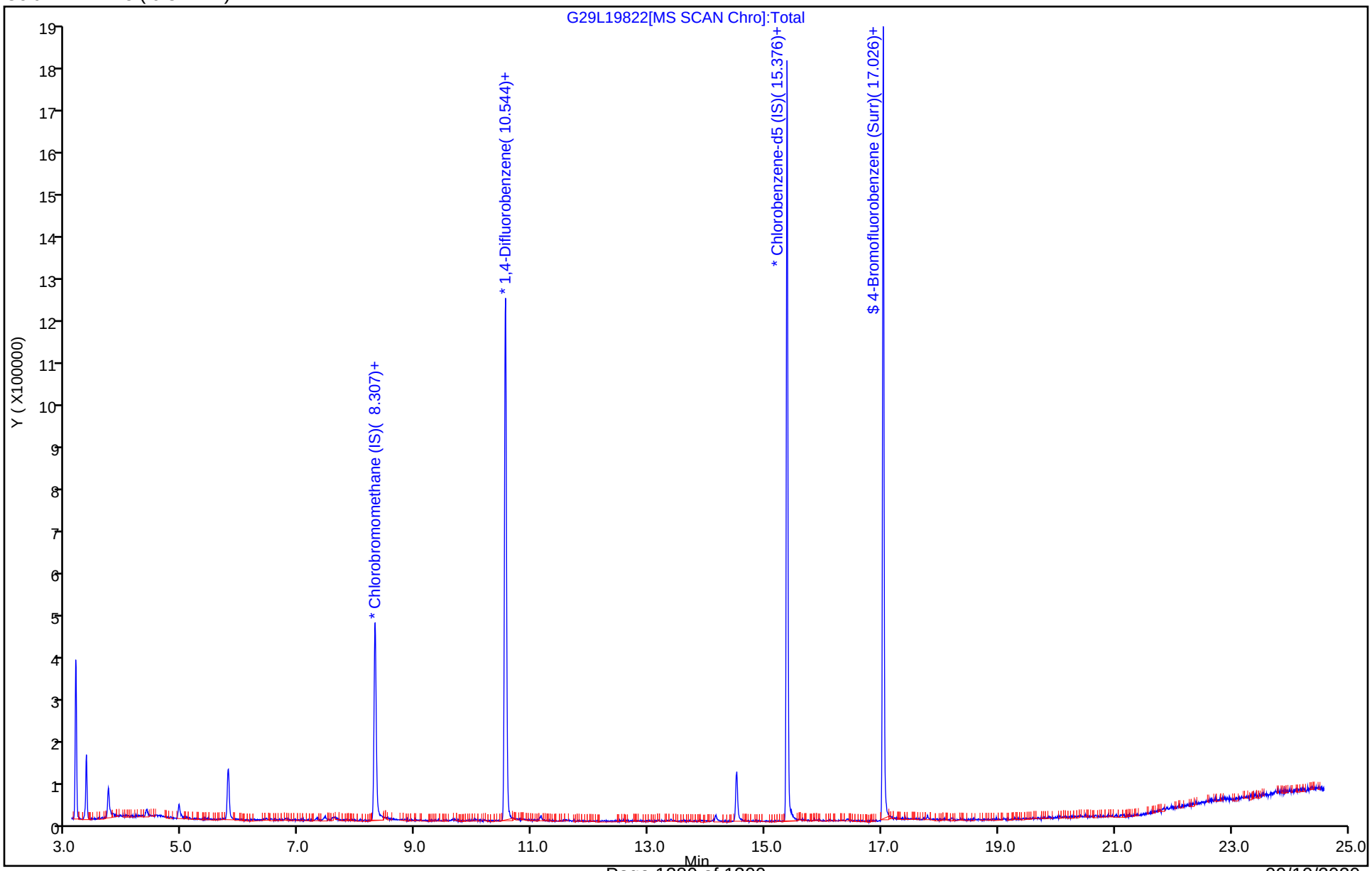
Report Date: 30-Jul-2020 10:02:07 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200728-16133.b\G29L19822.D

Injection Date:	29-Jul-2020 13:04:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	140-19822-A-14	Lab Sample ID:	140-19822-14	Worklist Smp#:	9
Client ID:	11830				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19827-1

SDG No.:

Client Sample ID: 34002461 Lab Sample ID: 140-19827-9

Matrix: Air Lab File ID: G30L19827.D

Analysis Method: TO-15 Date Collected: 07/25/2020 11:45

Sample wt/vol: 200(mL) Date Analyzed: 07/31/2020 05:57

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 41393 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	ND		0.20	
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.20	
79-00-5	1,1,2-Trichloroethane	ND		0.20	
76-13-1	1,1,2-Trichlorotrifluoroethane	ND		0.20	
75-34-3	1,1-Dichloroethane	ND		0.20	
75-35-4	1,1-Dichloroethene	ND		0.20	
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	
96-18-4	1,2,3-Trichloropropane	ND		0.50	
526-73-8	1,2,3-Trimethylbenzene	ND		0.20	
95-93-2	1,2,4,5-Tetramethylbenzene	ND		0.20	
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	
95-63-6	1,2,4-Trimethylbenzene	ND		0.20	
96-12-8	1,2-Dibromo-3-Chloropropane	ND		0.40	
106-93-4	1,2-Dibromoethane	ND		0.20	
95-50-1	1,2-Dichlorobenzene	ND		0.40	
107-06-2	1,2-Dichloroethane	ND		0.20	
78-87-5	1,2-Dichloropropane	ND		0.20	
76-14-2	1,2-Dichlorotetrafluoroethane	ND		0.20	
108-67-8	1,3,5-Trimethylbenzene	ND		0.20	
106-99-0	1,3-Butadiene	ND		0.40	
541-73-1	1,3-Dichlorobenzene	ND		0.20	
106-46-7	1,4-Dichlorobenzene	ND		0.20	
123-91-1	1,4-Dioxane	ND		0.40	
71-36-3	1-Butanol	ND	*	2.0	
90-12-0	1-Methylnaphthalene	ND		2.5	
540-84-1	2,2,4-Trimethylpentane	ND		0.40	
565-59-3	2,3-Dimethylpentane	ND		0.20	
78-93-3	2-Butanone	ND		1.0	
95-49-8	2-Chlorotoluene	ND		0.40	
591-78-6	2-Hexanone	ND		0.40	
78-78-4	2-Methylbutane	ND		0.50	
91-57-6	2-Methylnaphthalene	ND		2.5	
107-83-5	2-Methylpentane	ND		0.20	
107-05-1	3-Chloropropene	ND		0.20	
622-96-8	4-Ethyltoluene	ND		0.40	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		1.0	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19827-1

SDG No.:

Client Sample ID: 34002461 Lab Sample ID: 140-19827-9

Matrix: Air Lab File ID: G30L19827.D

Analysis Method: TO-15 Date Collected: 07/25/2020 11:45

Sample wt/vol: 200(mL) Date Analyzed: 07/31/2020 05:57

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 41393 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
67-64-1	Acetone	ND	*	7.5	
75-05-8	Acetonitrile	ND		1.0	
107-02-8	Acrolein	ND		1.0	
107-13-1	Acrylonitrile	ND		2.0	
98-83-9	Alpha Methyl Styrene	ND		0.40	
71-43-2	Benzene	ND		0.20	
100-44-7	Benzyl chloride	ND		0.40	
75-27-4	Bromodichloromethane	ND		0.20	
75-25-2	Bromoform	ND		0.20	
74-83-9	Bromomethane	ND		0.20	
106-97-8	Butane	ND		1.0	
75-15-0	Carbon disulfide	ND		0.40	
56-23-5	Carbon tetrachloride	ND		0.20	
108-90-7	Chlorobenzene	ND		0.20	
75-45-6	Chlorodifluoromethane	ND		0.20	
75-00-3	Chloroethane	ND		0.20	
67-66-3	Chloroform	ND		0.20	
74-87-3	Chloromethane	ND		1.0	
156-59-2	cis-1,2-Dichloroethene	ND		0.20	
10061-01-5	cis-1,3-Dichloropropene	ND		0.40	
98-82-8	Cumene	ND		0.40	
110-82-7	Cyclohexane	ND		0.40	
124-48-1	Dibromochloromethane	ND		0.20	
74-95-3	Dibromomethane	ND		0.40	
75-71-8	Dichlorodifluoromethane	ND		0.20	
64-17-5	Ethanol	ND		5.0	
141-78-6	Ethyl acetate	ND		2.0	
60-29-7	Ethyl ether	ND		2.0	
100-41-4	Ethylbenzene	ND		0.20	
87-68-3	Hexachlorobutadiene	ND		1.0	
110-54-3	Hexane	ND		0.40	
496-11-7	Indane	ND		0.20	
95-13-6	Indene	ND		0.40	
67-63-0	Isopropyl alcohol	ND		1.2	
179601-23-1	m&p-Xylene	ND		0.20	
80-62-6	Methyl methacrylate	ND		0.40	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19827-1

SDG No.:

Client Sample ID: 34002461 Lab Sample ID: 140-19827-9

Matrix: Air Lab File ID: G30L19827.D

Analysis Method: TO-15 Date Collected: 07/25/2020 11:45

Sample wt/vol: 200(mL) Date Analyzed: 07/31/2020 05:57

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 41393 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
1634-04-4	Methyl tert-butyl ether	ND		1.0	
108-87-2	Methylcyclohexane	ND	*	0.20	
75-09-2	Methylene Chloride	ND		1.0	
91-20-3	Naphthalene	ND		0.40	
104-51-8	n-Butylbenzene	ND		0.40	
124-18-5	n-Decane	ND		1.0	
112-40-3	n-Dodecane	ND		1.0	
142-82-5	n-Heptane	ND		0.40	
111-84-2	n-Nonane	ND		0.40	
111-65-9	n-Octane	ND		0.40	
103-65-1	N-Propylbenzene	ND		0.40	
1120-21-4	n-Undecane	ND		1.0	
95-47-6	o-Xylene	ND		0.20	
99-87-6	p-Cymene	ND		0.20	
109-66-0	Pentane	ND		2.5	
115-07-1	Propene	ND		2.5	
135-98-8	sec-Butylbenzene	ND		0.40	
100-42-5	Styrene	ND		0.20	
75-65-0	tert-Butanol	ND		1.0	
98-06-6	tert-Butylbenzene	ND		0.40	
127-18-4	Tetrachloroethene	ND		0.20	
109-99-9	Tetrahydrofuran	ND		1.0	
110-02-1	Thiophene	ND		0.20	
108-88-3	Toluene	ND		1.0	
156-60-5	trans-1,2-Dichloroethene	ND		0.20	
10061-02-6	trans-1,3-Dichloropropene	ND		0.20	
79-01-6	Trichloroethene	ND		0.20	
75-69-4	Trichlorofluoromethane	ND		0.20	
108-05-4	Vinyl acetate	ND		1.0	
593-60-2	Vinyl bromide	ND		0.20	
75-01-4	Vinyl chloride	ND		0.40	

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MR\20200729-16151.b\G30L19827.D				
Lims ID:	140-19827-A-9				
Client ID:	34002461				
Sample Type:	Client				
Inject. Date:	31-Jul-2020 05:57:30	ALS Bottle#:	17	Worklist Smp#:	25
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016151-025				
Misc. Info.:	34002461				
Operator ID:	HMT	Instrument ID:	MR		
Method:	\\chromfs\Knoxville\ChromData\MR\20200729-16151.b\MR_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	31-Jul-2020 17:38:18	Calib Date:	28-Jul-2020 09:59:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC09R.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1020				
First Level Reviewer: khachitpongpanits		Date:	31-Jul-2020 17:38:18		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.307	8.307	0.000	89	82993	4.00	
* 2 1,4-Difluorobenzene	114	10.539	10.539	0.000	96	764973	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.376	15.371	0.005	91	631383	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.026	17.032	0.000	94	327483	3.43	
7 Propene	41	3.351	3.356	-0.005	99	49379	0.4952	7
17 Ethanol	31	4.376	4.343	0.033	97	23544	0.7139	
25 Isopropyl alcohol	45	5.066	4.990	0.076	59	7585	0.0717	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

40MXISSURP_00004 Amount Added: 40.00 Units: mL Run Reagent

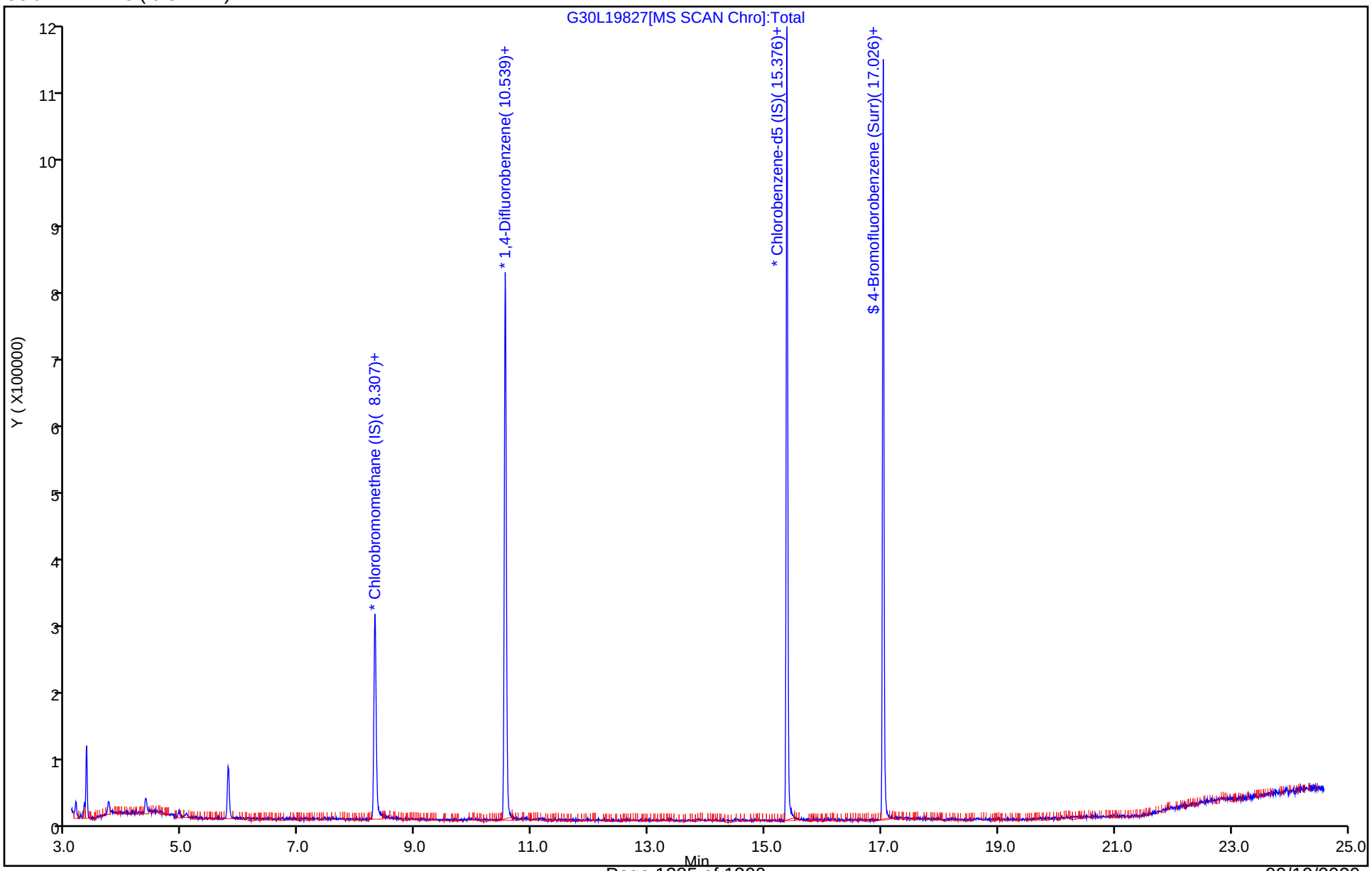
Report Date: 31-Jul-2020 17:38:19 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200729-16151.b\G30L19827.D

Injection Date:	31-Jul-2020 05:57:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	140-19827-A-9	Lab Sample ID:	140-19827-9	Worklist Smp#:	25
Client ID:	34002461				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



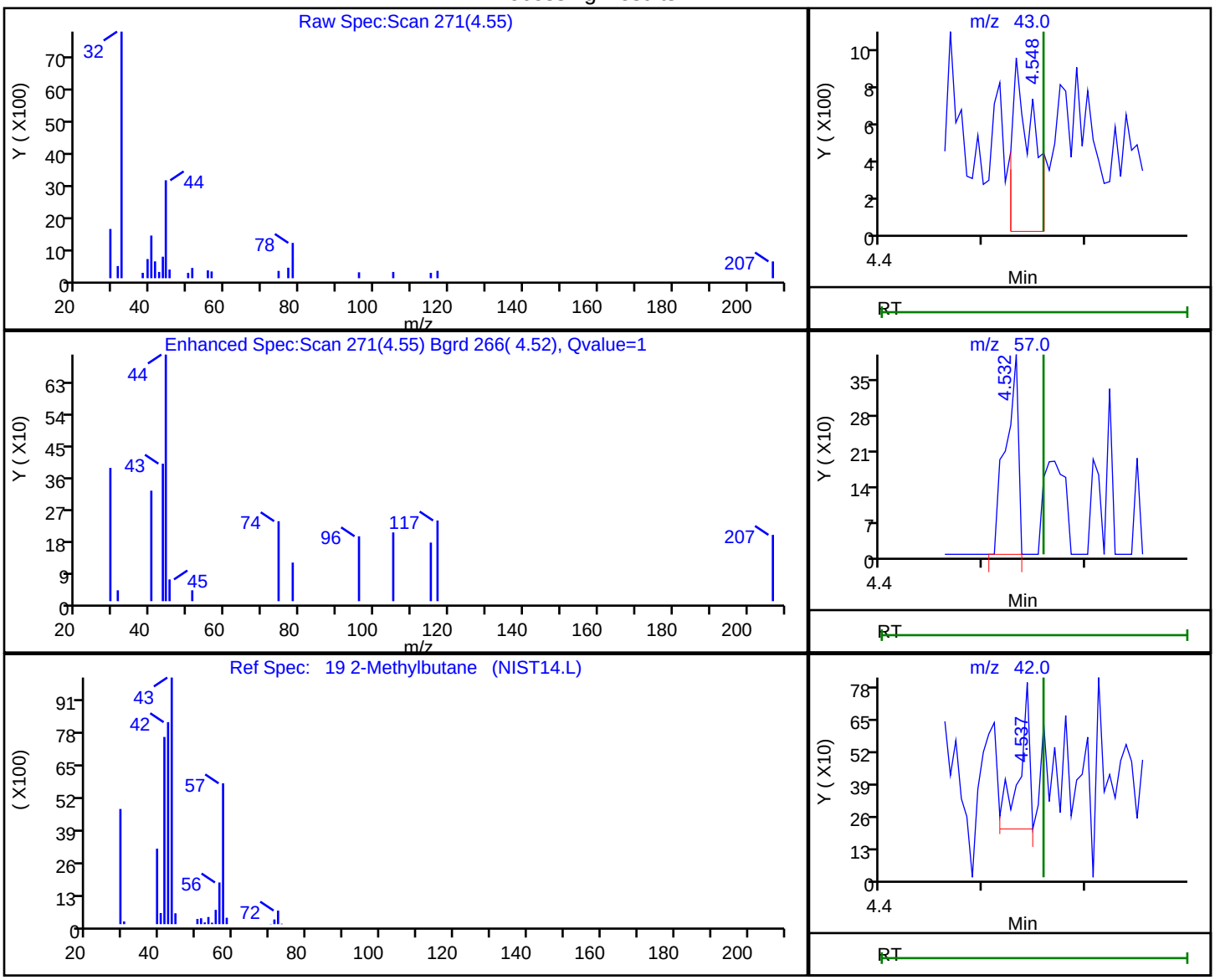
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200729-16151.b\G30L19827.D				
Injection Date:	31-Jul-2020 05:57:30	Instrument ID:	MR		
Lims ID:	140-19827-A-9	Lab Sample ID:	140-19827-9		
Client ID:	34002461				
Operator ID:	HMT	ALS Bottle#:	17	Worklist Smp#:	25
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

19 2-Methylbutane, CAS: 78-78-4

Processing Results



RT	Mass	Response	Amount
4.55	43.00	1201	0.014992
4.53	57.00	339	
4.54	42.00	427	

Reviewer: khachitpongpanits, 31-Jul-2020 17:37:54

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19838-1

SDG No.:

Client Sample ID: 10336 Lab Sample ID: 140-19838-7

Matrix: Air Lab File ID: G29L19838.D

Analysis Method: TO-15 Date Collected: 07/27/2020 14:55

Sample wt/vol: 200(mL) Date Analyzed: 07/30/2020 05:16

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 41351 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	ND		0.20	
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.20	
79-00-5	1,1,2-Trichloroethane	ND		0.20	
76-13-1	1,1,2-Trichlorotrifluoroethane	ND		0.20	
75-34-3	1,1-Dichloroethane	ND		0.20	
75-35-4	1,1-Dichloroethene	ND		0.20	
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	
96-18-4	1,2,3-Trichloropropane	ND		0.50	
526-73-8	1,2,3-Trimethylbenzene	ND		0.20	
95-93-2	1,2,4,5-Tetramethylbenzene	ND		0.20	
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	
95-63-6	1,2,4-Trimethylbenzene	ND		0.20	
96-12-8	1,2-Dibromo-3-Chloropropane	ND		0.40	
106-93-4	1,2-Dibromoethane	ND		0.20	
95-50-1	1,2-Dichlorobenzene	ND		0.40	
107-06-2	1,2-Dichloroethane	ND		0.20	
78-87-5	1,2-Dichloropropane	ND		0.20	
76-14-2	1,2-Dichlorotetrafluoroethane	ND		0.20	
108-67-8	1,3,5-Trimethylbenzene	ND		0.20	
106-99-0	1,3-Butadiene	ND		0.40	
541-73-1	1,3-Dichlorobenzene	ND		0.20	
106-46-7	1,4-Dichlorobenzene	ND		0.20	
123-91-1	1,4-Dioxane	ND		0.40	
71-36-3	1-Butanol	ND		2.0	
90-12-0	1-Methylnaphthalene	ND		2.5	
540-84-1	2,2,4-Trimethylpentane	ND		0.40	
565-59-3	2,3-Dimethylpentane	ND		0.20	
78-93-3	2-Butanone	ND		1.0	
95-49-8	2-Chlorotoluene	ND		0.40	
591-78-6	2-Hexanone	ND		0.40	
78-78-4	2-Methylbutane	ND		0.50	
91-57-6	2-Methylnaphthalene	ND		2.5	
107-83-5	2-Methylpentane	ND		0.20	
107-05-1	3-Chloropropene	ND		0.20	
622-96-8	4-Ethyltoluene	ND		0.40	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		1.0	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19838-1

SDG No.:

Client Sample ID: 10336 Lab Sample ID: 140-19838-7

Matrix: Air Lab File ID: G29L19838.D

Analysis Method: TO-15 Date Collected: 07/27/2020 14:55

Sample wt/vol: 200(mL) Date Analyzed: 07/30/2020 05:16

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 41351 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
67-64-1	Acetone	ND		7.5	
75-05-8	Acetonitrile	ND		1.0	
107-02-8	Acrolein	ND		1.0	
107-13-1	Acrylonitrile	ND		2.0	
98-83-9	Alpha Methyl Styrene	ND		0.40	
71-43-2	Benzene	ND		0.20	
100-44-7	Benzyl chloride	ND		0.40	
75-27-4	Bromodichloromethane	ND		0.20	
75-25-2	Bromoform	ND		0.20	
74-83-9	Bromomethane	ND		0.20	
106-97-8	Butane	ND		1.0	
75-15-0	Carbon disulfide	ND		0.40	
56-23-5	Carbon tetrachloride	ND		0.20	
108-90-7	Chlorobenzene	ND		0.20	
75-45-6	Chlorodifluoromethane	ND		0.20	
75-00-3	Chloroethane	ND		0.20	
67-66-3	Chloroform	ND		0.20	
74-87-3	Chloromethane	ND		1.0	
156-59-2	cis-1,2-Dichloroethene	ND		0.20	
10061-01-5	cis-1,3-Dichloropropene	ND		0.40	
98-82-8	Cumene	ND		0.40	
110-82-7	Cyclohexane	ND		0.40	
124-48-1	Dibromochloromethane	ND		0.20	
74-95-3	Dibromomethane	ND		0.40	
75-71-8	Dichlorodifluoromethane	ND		0.20	
64-17-5	Ethanol	ND		5.0	
141-78-6	Ethyl acetate	ND		2.0	
60-29-7	Ethyl ether	ND		2.0	
100-41-4	Ethylbenzene	ND		0.20	
87-68-3	Hexachlorobutadiene	ND		1.0	
110-54-3	Hexane	ND		0.40	
496-11-7	Indane	ND		0.20	
95-13-6	Indene	ND		0.40	
67-63-0	Isopropyl alcohol	ND		1.2	
179601-23-1	m&p-Xylene	ND		0.20	
80-62-6	Methyl methacrylate	ND		0.40	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19838-1

SDG No.:

Client Sample ID: 10336 Lab Sample ID: 140-19838-7

Matrix: Air Lab File ID: G29L19838.D

Analysis Method: TO-15 Date Collected: 07/27/2020 14:55

Sample wt/vol: 200(mL) Date Analyzed: 07/30/2020 05:16

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 41351 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
1634-04-4	Methyl tert-butyl ether	ND		1.0	
108-87-2	Methylcyclohexane	ND		0.20	
75-09-2	Methylene Chloride	ND		1.0	
91-20-3	Naphthalene	ND		0.40	
104-51-8	n-Butylbenzene	ND		0.40	
124-18-5	n-Decane	ND		1.0	
112-40-3	n-Dodecane	ND		1.0	
142-82-5	n-Heptane	ND		0.40	
111-84-2	n-Nonane	ND		0.40	
111-65-9	n-Octane	ND		0.40	
103-65-1	N-Propylbenzene	ND		0.40	
1120-21-4	n-Undecane	ND		1.0	
95-47-6	o-Xylene	ND		0.20	
99-87-6	p-Cymene	ND		0.20	
109-66-0	Pentane	ND		2.5	
115-07-1	Propene	ND		2.5	
135-98-8	sec-Butylbenzene	ND		0.40	
100-42-5	Styrene	ND		0.20	
75-65-0	tert-Butanol	ND		1.0	
98-06-6	tert-Butylbenzene	ND		0.40	
127-18-4	Tetrachloroethene	ND		0.20	
109-99-9	Tetrahydrofuran	ND		1.0	
110-02-1	Thiophene	ND		0.20	
108-88-3	Toluene	ND		1.0	
156-60-5	trans-1,2-Dichloroethene	ND		0.20	
10061-02-6	trans-1,3-Dichloropropene	ND		0.20	
79-01-6	Trichloroethene	ND		0.20	
75-69-4	Trichlorofluoromethane	ND		0.20	
108-05-4	Vinyl acetate	ND		1.0	
593-60-2	Vinyl bromide	ND		0.20	
75-01-4	Vinyl chloride	ND		0.40	

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200728-16131.b\G29L19838.D
Lims ID: 140-19838-A-7
Client ID: 10336
Sample Type: Client
Inject. Date: 30-Jul-2020 05:16:30 ALS Bottle#: 1 Worklist Smp#: 26
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016131-026
Operator ID: HMT Instrument ID: MG

Method: \\chromfs\Knoxville\ChromData\MG\20200728-16131.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 30-Jul-2020 11:18:55 Calib Date: 15-Jul-2020 22:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1069

First Level Reviewer: barlozhetskayaa Date: 30-Jul-2020 11:23:36

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.833	8.838	-0.005	92	136689	4.00	
* 2 1,4-Difluorobenzene	114	11.017	11.022	-0.005	97	1175803	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.746	15.751	-0.005	94	1036433	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.390	17.385	0.000	74	799632	3.80	
7 Propene	41	3.721	3.719	0.000	99	77310	-0.1473	7
17 Ethanol	31	4.815	4.775	0.037	99	20026	0.8411	
25 Isopropyl alcohol	45	5.560	5.465	0.092	94	3898	0.0544	
31 Methylene Chloride	84	6.293	6.289	0.000	98	61039	0.1341	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

40MXISSURP_00004 Amount Added: 40.00 Units: mL Run Reagent

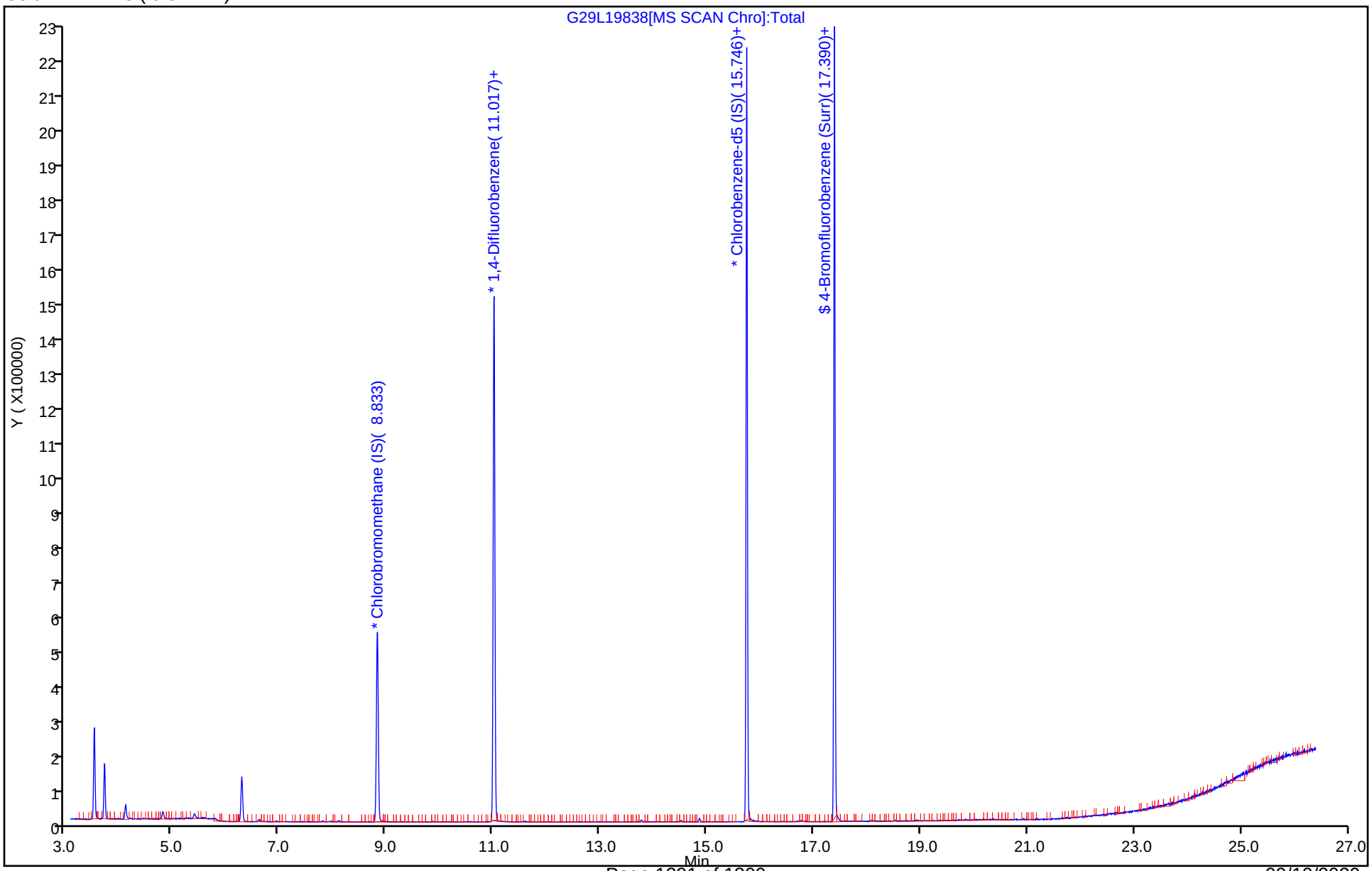
Report Date: 30-Jul-2020 11:23:36 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200728-16131.b\G29L19838.D

Injection Date:	30-Jul-2020 05:16:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	140-19838-A-7	Lab Sample ID:	140-19838-7	Worklist Smp#:	26
Client ID:	10336				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Shipping and Receiving Documents

Baltimore #201

Eurofins TestAmerica, Knoxville
5815 Middlebrook Pike

Knoxville, TN 37921-5947
phone 865.291.3000 fax 865.584.4315

Canister Samples Chain of Custody Record

TestAmerica Laboratories, Inc. assumes no liability with respect to the collection and shipment of these samples.

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TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact Information	**Client Project Manager:** Josh Mullis	**Samples Collected By:** Josh Mullis / Walt Pryor	COC No: 1 of 6 COCs
Company Name: TETRA TECH INC	**Phone:** 410-279-2700		TALS Project #:
Address: 20251 Century Blvd Ste. 200	**Email:** josh.mullis@tetratech.com		**For Lab Use Only:**
City/State/Zip: Germantown, MD, 20878			Walk-in Client:
Phone: 410-279-2700	**Site Contact:** Josh Mullis		
FAX: —	**Tel/Fax** 410-279-2700		
Project Name: MRC Indoor Air / Soil Vapor	**Analysis Turnaround Time**		
Site/Location: Middle River Complex	Standard (Specific): —		
PO# 112EC08388	Rush (Specifiy):		

140-20175 Chain of Custody

Sample Identification	Sample Start Date	Time Start	Sample End Date	Time Stop	Canister Vacuum in Field, "Hg (Start)	Canister Vacuum in Field, "Hg (Stop)	Flow Controller ID	Canister ID	TO-14/15 (Standard / Low Level)	TO-15 SIM	EPA 3C	EPA 25C	ASTM D-1946	EPA 15/16	Other (Please specify in notes section)	Sa	Ind	Sul	Sol	Sol	Lar	Oth	Sample Specific Notes:
SV-001-C-29	8/25/2020	0908	8/25/2020	1008	-30	-3	09659	34000238	X									X					
SV-004-C-29	↓	0912	↓	1012	-30	-4	10448	09798	X									X					
SV-102-C-29	↓	0917	↓	1017	-30	-4	10436	09642	X									X					
SV-113-C-29	↓	0920	↓	1020	-30	-3	10145	10337	X									X					
SV-088-C-29	↓	0922	↓	1022	-30	-2	11936	11753	X									X					
SV-DUP1-C-29	↓	0000	↓	0000	-30	-3	7255	09669	X									X					
SV-142-C-29	↓	0927	↓	1027	-30	-4	10662	11615	X									X					
SV-155-C-29	↓	0932	↓	1032	-30	-4	7625	34000625	X									X					
SV-133-C-29	↓	0935	↓	1035	-30	-3	10140	10780	X									X					
SV-153-C-29	↓	0937	↓	1037	-30	-3	~~11272~~ JAM	~~34002153~~ JAM	X									X					FLOW 10665 / CAN 10760

Temperature (Fahrenheit)			
Start	Interior	Ambient	
Stop			

Pressure (inches of Hg)			
Start	Interior	Ambient	
Stop			

CUSTODY SEALS INTACT
RECEIVED AMBIENT RT 21.0 / CT 21.0°C
DKD 8-27-20
4 BOXES FED X # 771365697978 m PD
42 CANS / 42 FLOWS

Special Instructions/QC Requirements & Comments: MRC Indoor Air / Soil Vapor Bi-Annual Sampling

Samples Shipped by: [signature]	**Date / Time:** 8/26/2020 1200	**Samples Received by:** [signature]
Samples Relinquished by: [signature]	**Date / Time:** 8/26/20 1200	**Received by:** [signature] Damon ETA KNX 8-27-20 10:00
Relinquished by:	**Date / Time:**	**Received by:**
Lab Use Only: **Shipper Name:**	**Opened by:**	**Condition:**

Form No. CA-C-WI-003, Rev. 2.23, dated 5/4/2020

Baltimore #201

Eurofins TestAmerica, Knoxville
5815 Middlebrook Pike

Knoxville, TN 37921-5947
phone 865.291.3000 fax 865.584.4315

Canister Samples Chain of Custody Record

TestAmerica Laboratories, Inc. assumes no liability with respect to the collection and shipment of these samples.

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TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact Information	**Client Project Manager:** Josh Mullis	**Samples Collected By:** Josh Mullis / Walt Pryor	COC No: 2 of 6 COCs
Company Name: TETRA TECH INC	**Phone:** 410-279-2700		TALS Project #:
Address: 20251 Century Blvd Ste. 200	**Email:** josh.mullis@tetratech.com		**For Lab Use Only:**
City/State/Zip: Germantown, MD, 20878			Walk-in Client:
Phone: 410-279-2700	**Site Contact:** Josh Mullis		Lab Sampling:
FAX: —	**Tel/Fax** 410-279-2700		
Project Name: MRC Indoor Air / Soil Vapor	**Analysis Turnaround Time**		Job / SDG No.:
Site/Location: Middle River Complex	Standard (Specific): —		(See below for Add'l Items)
PO# 112EC08388	Rush (Specifiy):		

Sample Identification	Sample Start Date	Time Start	Sample End Date	Time Stop	Canister Vacuum in Field, "Hg (Start)	Canister Vacuum in Field, "Hg (Stop)	Flow Controller ID	Canister ID	TO-14/15 (Standard / Low Level)	TO-15 SIM	EPA 3C	EPA 25C	ASTM D-1946	EPA 15/16	Other (Please specify in notes section)	Sample Type	Indoor Air/Ambient Air	Sub-Slab	Soil Gas	Soil Vapor Extraction (SVE)	Landfill Gas	Other (Please specify in notes section)	Sample Specific Notes:
SV-DUP2-C-29	8/25/2020	0000	8/25/2020	0000	-30	-4	11272	34002453	X									X					
SV-060-C-29	↓	0941	↓	1041	-27	-2	11477	09644	X									X					
SV-150-C-29	↓	0944	↓	1044	-30	-4	7654	11284	X									X					
SV-152-C-29	↓	0947	↓	1047	-30	-4	11977	34001075	X									X					
SV-141-C-29	↓	0950	↓	1050	-30	-3	11511	11126	X									X					
SV-149-C-29	↓	0953	↓	1053	-30	-5	10158	34000628	X									X					
SV-126-C-29	↓	0956	↓	1056	-30	-4	11976	11693	X									X					

8/25/2020

Temperature (Fahrenheit)			
Start	Interior	Ambient	
Stop			

Pressure (inches of Hg)			
Start	Interior	Ambient	
Stop			

Special Instructions/QC Requirements & Comments: MRC Indoor Air / Soil Vapor Bi-Annual Sampling

Samples Shipped by:	**Date / Time:** 8/26/2020 1200	**Samples Received by:**	
Samples Relinquished by:	**Date / Time:** 8/26/20 1200	**Received by:**	
Relinquished by:	**Date / Time:**	**Received by:**	
Lab Use Only: **Shipper Name:**	**Opened by:**	**Condition:**	

Form No. CA-C-WI-003, Rev. 2.23, dated 5/4/2020

Baltimore #201

Eurofins TestAmerica, Knoxville
5815 Middlebrook Pike
Knoxville, TN 37921-5947
phone 865.291.3000 fax 865.584.4315

Canister Samples Chain of Custody Record

TestAmerica Laboratories, Inc. assumes no liability with respect to the collection and shipment of these samples.

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TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact Information	**Client Project Manager:** Josh Mullis	**Samples Collected By:** Josh Mullis/ Walt Pryor	COC No: 3 of 6 COCs
Company Name: TETRA TECH INC	Phone: 410-279-2700		TALS Project #:
Address: 10251 Century Blvd Ste. 200	Email: josh.mullis@tetratech.com		For Lab Use Only:
City/State/Zip: Germantown, MD, 20874			Walk-in Client:
Phone: 410-279-2700	Site Contact: Josh Mullis		Lab Sampling:
FAX: —	Tel/Fax 410-279-2700		Job / SDG No.:
Project Name: MRC Indoor Air / Soil Vapor	Analysis Turnaround Time		(See below for Add'l Items)
Site/Location: Middle River Complex	Standard (Specific): —		
PO # 112EC08388	Rush (Specifiy):		

Sample Identification	Sample Start Date	Time Start	Sample End Date	Time Stop	Canister Vacuum in Field, "Hg (Start)	Canister Vacuum in Field, "Hg (Stop)	Flow Controller ID	Canister ID	TO-14/15 (Standard / Low Level)	TO-15 SIM	EPA 3C	EPA 25C	ASTM D-1946	EPA 16/16	Other (Please specify in notes section)	Sample Type	Indoor Air/Ambient Air	Sub-Slab	Soil Gas	Soil Vapor Extraction (SVE)	Landfill Gas	Other (Please specify in notes section)	Sample Specific Notes:
IA-001-C-29	8/25/2020	0811	8/25/2020	1611	-30	-3	7635	340-02391	K								K						
IA-004-E-29		0814		1614	-30	-14	8563	10833	K								K						
IA-102-C-29		0822		1622	-30	-4	7588	3100642	K								K						
IA-113-C-29		0823		1623	-30	-7	8749	3100684	K								K						
IA-088-C-29		0824		1624	-30	-8	8607	11710	K								K						
IA-042-C-29		0825		1625	-28	-10	10450	3400 2421	K								K						
IA-155-C-29		0828		1628	-27	-8	8634	10492	K								K						
IA-133-C-29		0831		1631	-30	-11	8464	11665	K								K						
IA-153-C-29		0832		1632	-30	-4	0825	10335	K								K						
IA-Dup1-C-29	↓	0000	↓	0000	-30	-4	09846	10333	K								K						

Temperature (Fahrenheit)			
Start	Interior	Ambient	
Stop			

Pressure (inches of Hg)			
Start	Interior	Ambient	
Stop			

Special Instructions/QC Requirements & Comments: MRC Indoor Air / Soil Vapor Bi-Annual Sampling

Samples Shipped by:	**Date / Time:** 8/26/2020 1200	**Samples Received by:**	
Samples Relinquished by:	**Date / Time:** 8/26/20 1700	**Received by:**	FEDEX 8.27.20 10:00
Relinquished by:	**Date / Time:**	**Received by:**	
Lab Use Only: **Shipper Name:**	**Opened by:**	**Condition:**	

Form No. CA-C-WI-003, Rev. 2.23, dated 5/4/2020

09/01/2020

Baltimore #201

Eurofins TestAmerica, Knoxville
5815 Middlebrook Pike
Knoxville, TN 37921-5947
phone 865.291.3000 fax 865.584.4315

Canister Samples Chain of Custody Record

eurofins | Environment Testing TestAmerica

TestAmerica Laboratories, Inc. assumes no liability with respect to the collection and shipment of these samples.

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact Information	**Client Project Manager:** Josh Mullis	**Samples Collected By:** Josh Mullis / Walt Piper	COC No: 1 of 6 COCs
Company Name: FETNA TECH INC	Phone: 410-279-2700		TALS Project #:
Address: 10251 Century Blvd Ste. 300	Email: josh.mullis@fetnatech.com		For Lab Use Only:
City/State/Zip: Lacmonton, MD, 20878			Walk-in Client:
Phone: 410-279-2700	**Site Contact:** Josh Mullis		Lab Sampling:
FAX: —	Tel/Fax 410-279-2700		Job / SDG No.:
Project Name: MPC Indoor Air / Soil Vapor	**Analysis Turnaround Time**		(See below for Add'l Items)
Site/Location: Middle River Complex	Standard (Specific): ✓		
PO # 1122C09388	Rush (Specifiy):		

Sample Identification	Sample Start Date	Time Start	Sample End Date	Time Stop	Canister Vacuum in Field, "Hg (Start)	Canister Vacuum in Field, "Hg (Stop)	Flow Controller ID	Canister ID	TO-14/15 (Standard / Low Level)	TO-15 SIM	EPA 3C	EPA 25C	ASTM D-1946	EPA 18/16	Other (Please specify in notes section)	Sample Type	Indoor Air/Ambient Air	Sub-Slab	Soil Gas	Soil Vapor Extraction (SVE)	Landfill Gas	Other (Please specify in notes section)	Sample Specific Notes:
IA-060-C-29	8/25/2020	0835	8/26/2020	1635	-29	-5	11937	11875	X								X						
IA-152-C-29		0838		1638	-30	-4	8653	11804	X								X						
IA-150-C-29		0840		1640	-30	-3	7184	11842	X								X						
IA-145-C-29		0842		1642	-29	-1	11528	34001137	X								X						
IA-146-2-29		0843		1643	-29	-8	09655	11573	X								X						
IA-144-C-29		0845		1645	-30	-8	10870	11721	X								X						
IA-141-C-29		0848		1648	-30	-7	7617	11713	X								X						
IA-149-C-29		0850		1650	-30	-6	7187	11572	X								X						
IA-DUP2-C-29		0000		0000	-30	-8	09657	34002455	X								X						
IA-126-C-29	↓	0852	↓	1652	-30	-7	7590	09661	X								X						

Temperature (Fahrenheit)	Interior	Ambient
Start		
Stop		

Pressure (inches of Hg)	Interior	Ambient
Start		
Stop		

Special Instructions/QC Requirements & Comments: MPC Indoor Air / Soil Vapor Bi-Annual Sampling

Samples Shipped by:	**Date / Time:** 8/26/2020 1200	**Samples Received by:**
Samples Relinquished by:	**Date / Time:** 8/26/20 1700	**Received by:** ETA KW 8-27-20 10:00
Relinquished by:	**Date / Time:**	**Received by:**
Lab Use Only: **Shipper Name:**	**Opened by:**	**Condition:**

09/10/2020

Baltimore #201

Eurofins TestAmerica, Knoxville
5815 Middlebrook Pike
Knoxville, TN 37921-5947
phone 865.291.3000 fax 865.584.4315

Canister Samples Chain of Custody Record

TestAmerica Laboratories, Inc. assumes no liability with respect to the collection and shipment of these samples.

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TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact Information	**Client Project Manager:** Josh Mullis	**Samples Collected By:** Josh Mullis/ Walt Pyar
Company Name: TETRA TECH INC	Phone: 410-279-2700	
Address: 2021 Century Blvd Ste. 200	Email: josh.mullis@tetratech.com	
City/State/Zip: Lexington Park, MD, 20653		
Phone: 410-279-2700	**Site Contact:** Josh Mullis	
FAX: —	**Tel/Fax** 410-279-2700	
Project Name: MDE Indoor Air / Soil Vapor	**Analysis Turnaround Time**	
Site/Location: Middle River Complex	Standard (Specific): —	
P O # 1128208388	Rush (Specifiy):	

COC No: 5 of 6 COCs
TALS Project #:
For Lab Use Only:
Walk-in Client:
Lab Sampling:
Job / SDG No.:
(See below for Add'l Items)

Sample Identification	Sample Start Date	Time Start	Sample End Date	Time Stop	Canister Vacuum in Field, "Hg (Start)	Canister Vacuum in Field, "Hg (Stop)	Flow Controller ID	Canister ID	TO-14/15 (Standard / Low Level)	TO-15 SIM	EPA 3C	EPA 25C	ASTM D-1946	EPA 15/16	Other (Please specify in notes section)	Sample Type	Indoor Air/Ambient Air	Sub-Slab	Soil Gas	Soil Vapor Extraction (SVE)	Landfill Gas	Other (Please specify in notes section)	Sample Specific Notes:
IA-BCK-1-29	8/25/2020	0803	8/25/2020	1603	-30	-5	8780	11141	X								X						Outdoor Background Samples
IA-BCK-2-29		0807		1607	-30	-16	8727	11671	X								X						
IA-BCK-3-29		0752		1552	-23	-2	11308	10980	X								X						
IA-BCK-4-29		0757		1557	-30	-7	8689	3400650	X								X						

8/26/2020

Temperature (Fahrenheit)		
Start	Interior	Ambient
Stop		

Pressure (inches of Hg)		
Start	Interior	Ambient
Stop		

Special Instructions/QC Requirements & Comments: MDE Indoor Air / Soil Vapor Bi-Annual Sampling

Samples Shipped by:	**Date / Time:** 8/26/2020 1200	**Samples Received by:**
Samples Relinquished by:	**Date / Time:** 8/28/20 1700	**Received by:** FETA KWX 8-27-20 10:00
Relinquished by:	**Date / Time:**	**Received by:**
Lab Use Only: **Shipper Name:**	**Opened by:**	**Condition:**

Form No. CA-C-WI-003, Rev. 2.23, dated 5/4/2020

3H00077 1

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09/10/2020

Loc: 140
20175

EUROFINS/TESTAMERICA KNOXVILLE SAMPLE RECEIPT/CONDITION UPON RECEIPT ANOMALY CHECKLIST **Log In Number:**

Review Items	Yes	No	NA	If No, what was the problem?	Comments/Actions Taken
1. Are the shipping containers intact?	✓			☐ **Containers, Broken**	
2. Were ambient air containers received intact?			✓	☑ Checked in lab	
3. The coolers/containers custody seal if present, is it intact?	✓			☐ Yes ☐ NA	
4. Is the cooler temperature within limits? (> freezing temp. of water to 6 °C, VOST: 10°C) Thermometer ID :_____ Correction factor: _____			✓	☐ **Cooler Out of Temp, Client Contacted, Proceed/Cancel** ☐ **Cooler Out of Temp, Same Day Receipt**	
5. Were all of the sample containers received intact?	✓			☐ **Containers, Broken**	
6. Were samples received in appropriate containers?	✓			☐ **Containers, Improper; Client Contacted; Proceed/Cancel**	
7. Do sample container labels match COC? (IDs, Dates, Times)	✓			☐ **COC & Samples Do Not Match** ☐ **COC Incorrect/Incomplete** ☐ **COC Not Received**	
8. Were all of the samples listed on the COC received?	✓			☐ **Sample Received, Not on COC** ☐ **Sample on COC, Not Received**	
9. Is the date/time of sample collection noted?	✓			☐ **COC; No Date/Time; Client Contacted**	
10. Was the sampler identified on the COC?	✓			☐ **Sampler Not Listed on COC**	**Labeling Verified by:** **Date:**
11. Is the client and project name/# identified?	✓			☐ **COC Incorrect/Incomplete**	
12. Are tests/parameters listed for each sample?	✓			☐ **COC No tests on COC**	**pH test strip lot number:**
13. Is the matrix of the samples noted?	✓			☐ **COC Incorrect/Incomplete**	
14. Was COC relinquished? (Signed/Dated/Timed)	✓			☐ **COC Incorrect/Incomplete**	
15. Were samples received within holding time?	✓			☐ **Holding Time - Receipt**	
16. Were samples received with correct chemical preservative (excluding Encore)?			✓	☐ **pH Adjusted, pH Included (See box 16A)** ☐ **Incorrect Preservative**	
17. Were VOA samples received without headspace?			✓	☐ **Headspace (VOA only)**	
18. Did you check for residual chlorine, if necessary? (e.g. 1613B, 1668) Chlorine test strip lot number:_____			✓	☐ **Residual Chlorine**	
19. For 1613B water samples is pH<9?			✓	☐ If no, notify lab to adjust	
20. For rad samples was sample activity info. Provided?			✓	☐ Project missing info	

	Box 16A: pH Preservation	Box 18A: Residual Chlorine
Preservative:		
Lot Number:		
Exp Date:		
Analyst:		
Date:		
Time:		

Project #: 14002945 PM Instructions: _____

Sample Receiving Associate: _____ Date: 8-27-20

QA026R32.doc, 062719

TestAmerica Knoxville - Air Canister Initial Pressure Check

Gauge ID: G5

Date: 8/31/2020

Analyst	Sample ID	Asset #	Cleaning Job	Cert	Size (L)	Pressure @ Receipt (-in Hg or +psig)	Time	Comments
BRS	140-20175-a-1	34000238	19827	B	1	-3.1	11:06	
BRS	140-20175-a-2	09798	19822	B	1	-3.4	11:07	
BRS	140-20175-a-3	09642	19838	B	1	-3.4	11:08	
BRS	140-20175-a-4	10337	19837	B	1	-3.4	11:09	
BRS	140-20175-a-5	11753	19809	B	1	-3.5	11:10	
BRS	140-20175-a-6	09669	19809	B	1	-4.5	11:11	
BRS	140-20175-a-7	11615	19838	B	1	-3.8	11:12	
BRS	140-20175-a-8	34000625	19827	B	1	-3.4	11:13	
BRS	140-20175-a-9	10780	19838	B	1	-3.2	11:14	
BRS	140-20175-a-10	10760	19809	B	1	-3.3	11:15	
BRS	140-20175-a-11	34002453	19809	B	1	-3.9	11:16	
BRS	140-20175-a-12	09644	19838	B	1	-3.7	11:17	
BRS	140-20175-a-13	11284	19827	B	1	-3.9	11:18	
BRS	140-20175-a-14	34001075	19838	B	1	-4.7	11:19	
BRS	140-20175-a-15	11126	19809	B	1	-4.7	11:20	
BRS	140-20175-a-16	34000628	19838	B	1	-4.4	11:21	
BRS	140-20175-a-17	11693	19827	B	1	-4.9	11:22	
BRS	140-20175-a-18	34002391	19793	B	1	-4.7	11:23	
BRS	140-20175-a-19	10833	19776	B	1	-13.0	11:24	0.0
BRS	140-20175-a-20	34000642	19793	B	1	-4.9	11:25	
BRS	140-20175-a-21	34000684	19776	B	1	-7.4	11:26	0.0
BRS	140-20175-a-22	11710	19793	B	1	-7.8	14:13	0.0
BRS	140-20175-a-23	34002471	19793	B	1	-3.4	14:14	
BRS	140-20175-a-24	10492	19793	B	1	-9.0	14:15	0.0
BRS	140-20175-a-25	11665	19776	B	1	-10.8	14:16	0.0
BRS	140-20175-a-26	10335	19809	B	1	-3.5	14:17	
BRS	140-20175-a-27	10333	19747	B	1	-4.1	14:18	
BRS	140-20175-a-28	11875	19747	B	1	-4.8	14:19	
BRS	140-20175-a-29	11804	19776	B	1	-2.5	14:20	
BRS	140-20175-a-30	11842	19793	B	1	-2.3	14:21	
BRS	140-20175-a-31	34001137	19747	B	1	-1.6	14:22	

□ Receiving –Air Can –Calve Open (NCM #_____)

□ Air - Can P -24 to -25 " - Flow Contr. Works (NCM#_____)

□ Air - Can P -24 to -25 " - Flow Contr. Faulty (NCM#_____)

□ Air - Can P Out -26" - Flow Contr. Works (NCM#_____)

□ Air - Can P Out -26" - Flow Contr. Faulty (NCM#_____)

□ Air - Can P Low -24 to -25 " - Grab Sample (NCM#_____)

□ Air - Can P Low -26 "- Grab Sample (NCM#_____)

TestAmerica Knoxville - Air Canister Initial Pressure Check

Gauge ID: G5
Date: 9/1/2020

Analyst	Sample ID	Asset #	Cleaning Job	Cert	Size (L)	Pressure @ Receipt (-in Hg or +psig)	Time	Comments
BRS	140-20175-a-32	11573	19776	B	1	-8.2	7:44	1.1
BRS	140-20175-a-33	11721	19745	B	1	-6.6	7:45	
BRS	140-20175-a-34	11743	19793	B	1	-5.9	7:46	
BRS	140-20175-a-35	11572	19776	B	1	-6.4	7:47	
BRS	140-20175-a-36	34002485	19776	B	1	-7.1	7:48	1.0
BRS	140-20175-a-37	09561	19793	B	1	-5.7	7:49	
BRS	140-20175-a-38	11141	19809	B	1	-6.0	7:50	
BRS	140-20175-a-39	11671	19809	B	1	-15.5	7:51	1.5
BRS	140-20175-a-40	10980	19745	B	1	-9.5	7:52	1.3
BRS	140-20175-a-41	34001650	19747	B	1	-8.7	7:53	1.1

□ Receiving –Air Can –Calve Open (NCM #_____)
□ Air - Can P -24 to -25 " - Flow Contr. Works (NCM#_____)
□ Air - Can P -24 to -25 " - Flow Contr. Faulty (NCM#_____)
□ Air - Can P Out -26" - Flow Contr. Works (NCM#_____)
□ Air - Can P Out -26" - Flow Contr. Faulty (NCM#_____)
□ Air - Can P Low -24 to -25 " - Grab Sample (NCM#_____)
□ Air - Can P Low -26 "- Grab Sample (NCM#_____)

ANALYTICAL REPORT

Job Number: 140-20194-1

Job Description: Middle River - MRC

For:
Tetra Tech, Inc.
20251 Century Blvd
Suite 200
Germantown, MD 20874

Attention: Samantha Brenner



Approved for release.
Diana L Lange
Project Management Assistant II
9/11/2020 1:08 PM

Designee for
Jamie A McKinney, Senior Project Manager
5815 Middlebrook Pike, Knoxville, TN, 37921
(865)291-3000
Jamie.McKinney@Eurofinset.com
09/11/2020

cc: Amy Thomson

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins TestAmerica Project Manager.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

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Qualifiers

Air - GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
E	Result exceeded calibration range.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job Narrative
140-20194-1

Comments
No additional comments.

Receipt
The samples were received on 8/28/2020 10:00 AM; the samples arrived in good condition, and where required, properly preserved and on ice.

Air - GC/MS VOA
Methods 3005A, TO 15 LL, TO-14A, TO-15: EPA methods TO-14A and TO-15 specify the use of humidified "zero air" as the blank reagent for canister cleaning, instrument calibration and sample analysis. Ultra-high purity humidified nitrogen from a cryogenic reservoir is used in place of "zero air" by TestAmerica Knoxville.

Method TO 15 LL: The continuing calibration verification (CCV) associated with batch 140-42503 exhibited % difference of > 30% for the following analyte(s) :1,2,3-Trimethylbenzene;however, the results were within the LCS acceptance limits. The EPA method requires that all target analytes in the continuing calibration verification standard be within 30% difference from the initial calibration. According to the laboratory standard operating procedure, the continuing calibration is acceptable if it meets the laboratory control sample acceptance criteria and is within marginal exceedance criteria.

Method TO 15 LL: The continuing calibration verification (CCV) associated with batch 140-42504 exhibited % difference of > 30% for the following analyte(s) Naphthalene; however, the results were within the LCS acceptance limits. The EPA method requires that all target analytes in the continuing calibration verification standard be within 30% difference from the initial calibration. According to the laboratory standard operating procedure, the continuing calibration is acceptable if it meets the laboratory control sample acceptance criteria.

Method TO 15 LL: The continuing calibration verification (CCV) associated with batch 140-42504 recovered above the upper control limit for 1,2,4-Trichlorobenzene, 1,4-Dichlorobenzene and Hexachlorobutadiene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method TO 15 LL: The laboratory control sample (LCS) for analytical batch 140-42504 recovered outside control limits for the following analytes: 1,2,4-Trichlorobenzene, 1,4-Dichlorobenzene and Hexachlorobutadiene. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Methods TO 15 LL, TO-15: Although the BFB is flagged as outside control limits for TO-14 on batch 140-42515, the results are within limits for TO-15, which is required for this project.

Method TO 15 LL: The continuing calibration verification (CCV) associated with batch 140-42515 exhibited % difference of > 30% for the following analyte(s) Dichlorodifluoromethane; however, the results were within the LCS acceptance limits. The EPA method requires that all target analytes in the continuing calibration verification standard be within 30% difference from the initial calibration. According to the laboratory standard operating procedure, the continuing calibration is acceptable if it meets the laboratory control sample acceptance criteria.

Method TO 15 LL: The following analyte(s) recovered outside control limits for the LCS associated with analytical batch 140-42503: 1,2,3-Trimethylbenzene. This is not indicative of a systematic control problem because these were random marginal exceedances. Qualified results have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: Tetra Tech, Inc.
Project/Site: Middle River - MRC

Job ID: 140-20194-1

Client Sample ID: SV-172-A-29 — Lab Sample ID: 140-20194-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.11	J	0.40	0.040	ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.057	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Chlorodifluoromethane	0.57		0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Chloroform	0.27	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	0.16	J	0.40	0.050	ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.53		0.40	0.070	ppb v/v	1		TO 15 LL	Total/NA
1,1-Dichloroethane	0.097	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Ethylbenzene	0.15	J	0.40	0.065	ppb v/v	1		TO 15 LL	Total/NA
Tetrachloroethene	0.38	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Toluene	0.96		0.60	0.39	ppb v/v	1		TO 15 LL	Total/NA
1,1,1-Trichloroethane	0.73		0.40	0.19	ppb v/v	1		TO 15 LL	Total/NA
Trichloroethene	11		0.20	0.030	ppb v/v	1		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	0.23	J	0.40	0.10	ppb v/v	1		TO 15 LL	Total/NA
Xylenes, Total	0.77	J	0.80	0.12	ppb v/v	1		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.35	J	1.3	0.13	ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.36	J	2.5	0.22	ug/m3	1		TO 15 LL	Total/NA
Chlorodifluoromethane	2.0		1.4	0.39	ug/m3	1		TO 15 LL	Total/NA
Chloroform	1.3	J	2.0	0.17	ug/m3	1		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	0.62	J	1.6	0.20	ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.6		2.0	0.35	ug/m3	1		TO 15 LL	Total/NA
1,1-Dichloroethane	0.39	J	1.6	0.14	ug/m3	1		TO 15 LL	Total/NA
Ethylbenzene	0.66	J	1.7	0.28	ug/m3	1		TO 15 LL	Total/NA
Tetrachloroethene	2.6	J	2.7	0.24	ug/m3	1		TO 15 LL	Total/NA
Toluene	3.6		2.3	1.5	ug/m3	1		TO 15 LL	Total/NA
1,1,1-Trichloroethane	4.0		2.2	1.0	ug/m3	1		TO 15 LL	Total/NA
Trichloroethene	59		1.1	0.16	ug/m3	1		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	1.1	J	2.0	0.49	ug/m3	1		TO 15 LL	Total/NA
Xylenes, Total	3.3	J	3.5	0.52	ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: SV-116-A-29 — Lab Sample ID: 140-20194-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.11	J	0.40	0.040	ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.059	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Chlorodifluoromethane	0.39	J	0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Chloroform	0.79		0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.47		0.40	0.070	ppb v/v	1		TO 15 LL	Total/NA
1,1-Dichloroethene	0.20	J	0.40	0.040	ppb v/v	1		TO 15 LL	Total/NA
Methylene Chloride	2.3		2.0	2.0	ppb v/v	1		TO 15 LL	Total/NA
Trichloroethene	1.4		0.20	0.030	ppb v/v	1		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.36	J	1.3	0.13	ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.37	J	2.5	0.22	ug/m3	1		TO 15 LL	Total/NA
Chlorodifluoromethane	1.4	J	1.4	0.39	ug/m3	1		TO 15 LL	Total/NA
Chloroform	3.9		2.0	0.17	ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.3		2.0	0.35	ug/m3	1		TO 15 LL	Total/NA
1,1-Dichloroethene	0.80	J	1.6	0.16	ug/m3	1		TO 15 LL	Total/NA
Methylene Chloride	8.0		6.9	6.8	ug/m3	1		TO 15 LL	Total/NA
Trichloroethene	7.6		1.1	0.16	ug/m3	1		TO 15 LL	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Tetra Tech, Inc.
Project/Site: Middle River - MRC

Job ID: 140-20194-1

Client Sample ID: SV-DUP 3-A-29 — Lab Sample ID: 140-20194-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.11	J	0.40	0.040	ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.056	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Chlorodifluoromethane	0.34	J	0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Chloroform	0.72		0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.42		0.40	0.070	ppb v/v	1		TO 15 LL	Total/NA
1,1-Dichloroethene	0.16	J	0.40	0.040	ppb v/v	1		TO 15 LL	Total/NA
Tetrachloroethene	0.049	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Trichloroethene	1.2		0.20	0.030	ppb v/v	1		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.35	J	1.3	0.13	ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.35	J	2.5	0.22	ug/m3	1		TO 15 LL	Total/NA
Chlorodifluoromethane	1.2	J	1.4	0.39	ug/m3	1		TO 15 LL	Total/NA
Chloroform	3.5		2.0	0.17	ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.1		2.0	0.35	ug/m3	1		TO 15 LL	Total/NA
1,1-Dichloroethene	0.65	J	1.6	0.16	ug/m3	1		TO 15 LL	Total/NA
Tetrachloroethene	0.33	J	2.7	0.24	ug/m3	1		TO 15 LL	Total/NA
Trichloroethene	6.5		1.1	0.16	ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: SV-138-A-29 — Lab Sample ID: 140-20194-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.12	J	0.40	0.040	ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.054	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Chlorodifluoromethane	0.40		0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Chloroform	0.19	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	2.9		0.40	0.050	ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.42		0.40	0.070	ppb v/v	1		TO 15 LL	Total/NA
1,1-Dichloroethane	0.90		0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
1,2-Dichloroethane	0.051	J	0.40	0.050	ppb v/v	1		TO 15 LL	Total/NA
1,1-Dichloroethene	4.2		0.40	0.040	ppb v/v	1		TO 15 LL	Total/NA
Tetrachloroethene	0.19	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
trans-1,2-Dichloroethene	0.10	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Trichloroethene	26		0.20	0.030	ppb v/v	1		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.38	J	1.3	0.13	ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.34	J	2.5	0.22	ug/m3	1		TO 15 LL	Total/NA
Chlorodifluoromethane	1.4		1.4	0.39	ug/m3	1		TO 15 LL	Total/NA
Chloroform	0.94	J	2.0	0.17	ug/m3	1		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	11		1.6	0.20	ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.1		2.0	0.35	ug/m3	1		TO 15 LL	Total/NA
1,1-Dichloroethane	3.7		1.6	0.14	ug/m3	1		TO 15 LL	Total/NA
1,2-Dichloroethane	0.21	J	1.6	0.20	ug/m3	1		TO 15 LL	Total/NA
1,1-Dichloroethene	16		1.6	0.16	ug/m3	1		TO 15 LL	Total/NA
Tetrachloroethene	1.3	J	2.7	0.24	ug/m3	1		TO 15 LL	Total/NA
trans-1,2-Dichloroethene	0.39	J	1.6	0.14	ug/m3	1		TO 15 LL	Total/NA
Trichloroethene	140		1.1	0.16	ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: SV-173-A-29 — Lab Sample ID: 140-20194-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	66		26	3.3	ppb v/v	9.23		TO 15 LL	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SV-173-A-29 (Continued) — Lab Sample ID: 140-20194-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	14	J	26	2.3	ppb v/v	9.23		TO 15 LL	Total/NA
1,1-Dichloroethene	260		26	2.6	ppb v/v	9.23		TO 15 LL	Total/NA
Trichloroethene	1400		13	2.0	ppb v/v	9.23		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	260		100	13	ug/m3	9.23		TO 15 LL	Total/NA
1,1-Dichloroethane	58	J	110	9.3	ug/m3	9.23		TO 15 LL	Total/NA
1,1-Dichloroethene	1000		100	10	ug/m3	9.23		TO 15 LL	Total/NA
Trichloroethene	7600		71	11	ug/m3	9.23		TO 15 LL	Total/NA

Client Sample ID: SV-171-A-29 — Lab Sample ID: 140-20194-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	12		9.3	1.2	ppb v/v	3.03		TO 15 LL	Total/NA
1,1-Dichloroethane	2.6	J	9.3	0.82	ppb v/v	3.03		TO 15 LL	Total/NA
1,1-Dichloroethene	79		9.3	0.93	ppb v/v	3.03		TO 15 LL	Total/NA
Trichloroethene	510		4.7	0.70	ppb v/v	3.03		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	49		37	4.6	ug/m3	3.03		TO 15 LL	Total/NA
1,1-Dichloroethane	10	J	38	3.3	ug/m3	3.03		TO 15 LL	Total/NA
1,1-Dichloroethene	320		37	3.7	ug/m3	3.03		TO 15 LL	Total/NA
Trichloroethene	2800		25	3.8	ug/m3	3.03		TO 15 LL	Total/NA

Client Sample ID: SV-174-A-29 — Lab Sample ID: 140-20194-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	21	J	240	21	ppb v/v	120		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	460		240	30	ppb v/v	120		TO 15 LL	Total/NA
1,1-Dichloroethane	150	J	240	21	ppb v/v	120		TO 15 LL	Total/NA
1,1-Dichloroethene	5800		240	24	ppb v/v	120		TO 15 LL	Total/NA
trans-1,2-Dichloroethene	50	J	240	21	ppb v/v	120		TO 15 LL	Total/NA
Trichloroethene	25000		120	18	ppb v/v	120		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	100	J	1200	100	ug/m3	120		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	1800		950	120	ug/m3	120		TO 15 LL	Total/NA
1,1-Dichloroethane	630	J	970	85	ug/m3	120		TO 15 LL	Total/NA
1,1-Dichloroethene	23000		950	95	ug/m3	120		TO 15 LL	Total/NA
trans-1,2-Dichloroethene	200	J	950	83	ug/m3	120		TO 15 LL	Total/NA
Trichloroethene	140000		640	97	ug/m3	120		TO 15 LL	Total/NA

Client Sample ID: SV-177-A-29 — Lab Sample ID: 140-20194-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.19	J	0.27	0.027	ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.041	J	0.27	0.023	ppb v/v	1		TO 15 LL	Total/NA
Chlorodifluoromethane	0.42		0.27	0.073	ppb v/v	1		TO 15 LL	Total/NA
Chloroform	0.76		0.27	0.023	ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.41		0.27	0.047	ppb v/v	1		TO 15 LL	Total/NA
1,1-Dichloroethane	0.13	J	0.27	0.023	ppb v/v	1		TO 15 LL	Total/NA
Ethylbenzene	0.15	J	0.27	0.043	ppb v/v	1		TO 15 LL	Total/NA
Tetrachloroethene	0.21	J	0.27	0.023	ppb v/v	1		TO 15 LL	Total/NA
Toluene	0.89		0.40	0.26	ppb v/v	1		TO 15 LL	Total/NA
1,1,1-Trichloroethane	0.28		0.27	0.12	ppb v/v	1		TO 15 LL	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SV-177-A-29 (Continued)

Lab Sample ID: 140-20194-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	21		0.13	0.020	ppb v/v	1		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	0.27		0.27	0.067	ppb v/v	1		TO 15 LL	Total/NA
Xylenes, Total	0.79		0.53	0.080	ppb v/v	1		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.62	J	0.85	0.085	ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.26	J	1.7	0.15	ug/m3	1		TO 15 LL	Total/NA
Chlorodifluoromethane	1.5		0.94	0.26	ug/m3	1		TO 15 LL	Total/NA
Chloroform	3.7		1.3	0.11	ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.0		1.3	0.23	ug/m3	1		TO 15 LL	Total/NA
1,1-Dichloroethane	0.53	J	1.1	0.094	ug/m3	1		TO 15 LL	Total/NA
Ethylbenzene	0.65	J	1.2	0.19	ug/m3	1		TO 15 LL	Total/NA
Tetrachloroethene	1.4	J	1.8	0.16	ug/m3	1		TO 15 LL	Total/NA
Toluene	3.3		1.5	0.98	ug/m3	1		TO 15 LL	Total/NA
1,1,1-Trichloroethane	1.5		1.5	0.67	ug/m3	1		TO 15 LL	Total/NA
Trichloroethene	110		0.72	0.11	ug/m3	1		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	1.4		1.3	0.33	ug/m3	1		TO 15 LL	Total/NA
Xylenes, Total	3.4		2.3	0.35	ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: SV-015-A-29

Lab Sample ID: 140-20194-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.86		0.40	0.040	ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.090	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Chlorodifluoromethane	0.31	J	0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Chloroform	0.19	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	0.91		0.40	0.050	ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.49		0.40	0.070	ppb v/v	1		TO 15 LL	Total/NA
1,1-Dichloroethane	2.2		0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
1,1-Dichloroethene	7.1		0.40	0.040	ppb v/v	1		TO 15 LL	Total/NA
Ethylbenzene	1.3		0.40	0.065	ppb v/v	1		TO 15 LL	Total/NA
Tetrachloroethene	0.077	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Toluene	0.54	J	0.60	0.39	ppb v/v	1		TO 15 LL	Total/NA
trans-1,2-Dichloroethene	0.59		0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
1,1,1-Trichloroethane	1.8		0.40	0.19	ppb v/v	1		TO 15 LL	Total/NA
Trichloroethene	5.1		0.20	0.030	ppb v/v	1		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	0.14	J	0.40	0.10	ppb v/v	1		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	0.30	J	0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Xylenes, Total	2.8		0.80	0.12	ppb v/v	1		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	2.7		1.3	0.13	ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.56	J	2.5	0.22	ug/m3	1		TO 15 LL	Total/NA
Chlorodifluoromethane	1.1	J	1.4	0.39	ug/m3	1		TO 15 LL	Total/NA
Chloroform	0.93	J	2.0	0.17	ug/m3	1		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	3.6		1.6	0.20	ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.4		2.0	0.35	ug/m3	1		TO 15 LL	Total/NA
1,1-Dichloroethane	9.0		1.6	0.14	ug/m3	1		TO 15 LL	Total/NA
1,1-Dichloroethene	28		1.6	0.16	ug/m3	1		TO 15 LL	Total/NA
Ethylbenzene	5.8		1.7	0.28	ug/m3	1		TO 15 LL	Total/NA
Tetrachloroethene	0.52	J	2.7	0.24	ug/m3	1		TO 15 LL	Total/NA
Toluene	2.0	J	2.3	1.5	ug/m3	1		TO 15 LL	Total/NA
trans-1,2-Dichloroethene	2.4		1.6	0.14	ug/m3	1		TO 15 LL	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SV-015-A-29 (Continued) — Lab Sample ID: 140-20194-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	9.9		2.2	1.0	ug/m3	1		TO 15 LL	Total/NA
Trichloroethene	28		1.1	0.16	ug/m3	1		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	0.67	J	2.0	0.49	ug/m3	1		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	1.5	J	2.0	0.54	ug/m3	1		TO 15 LL	Total/NA
Xylenes, Total	12		3.5	0.52	ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: SV-078-A-29 — Lab Sample ID: 140-20194-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.097	J	0.40	0.040	ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.075	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Chlorodifluoromethane	0.36	J	0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Chloroform	0.20	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	1.0		0.40	0.070	ppb v/v	1		TO 15 LL	Total/NA
Tetrachloroethene	0.42		0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
1,1,1-Trichloroethane	0.54		0.40	0.19	ppb v/v	1		TO 15 LL	Total/NA
Trichloroethene	5.0		0.20	0.030	ppb v/v	1		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	0.15	J	0.40	0.10	ppb v/v	1		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	0.29	J	0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Xylenes, Total	0.32	J	0.80	0.12	ppb v/v	1		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.31	J	1.3	0.13	ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.47	J	2.5	0.22	ug/m3	1		TO 15 LL	Total/NA
Chlorodifluoromethane	1.3	J	1.4	0.39	ug/m3	1		TO 15 LL	Total/NA
Chloroform	0.98	J	2.0	0.17	ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	5.0		2.0	0.35	ug/m3	1		TO 15 LL	Total/NA
Tetrachloroethene	2.9		2.7	0.24	ug/m3	1		TO 15 LL	Total/NA
1,1,1-Trichloroethane	2.9		2.2	1.0	ug/m3	1		TO 15 LL	Total/NA
Trichloroethene	27		1.1	0.16	ug/m3	1		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	0.72	J	2.0	0.49	ug/m3	1		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	1.4	J	2.0	0.54	ug/m3	1		TO 15 LL	Total/NA
Xylenes, Total	1.4	J	3.5	0.52	ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: SV-076-A-29 — Lab Sample ID: 140-20194-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.12	J	0.40	0.040	ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.085	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Chlorodifluoromethane	0.28	J	0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Chloroform	0.051	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.52		0.40	0.070	ppb v/v	1		TO 15 LL	Total/NA
Tetrachloroethene	0.19	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
1,1,1-Trichloroethane	0.39	J	0.40	0.19	ppb v/v	1		TO 15 LL	Total/NA
Trichloroethene	0.89		0.20	0.030	ppb v/v	1		TO 15 LL	Total/NA
1,2,3-Trimethylbenzene	1.4		0.40	0.18	ppb v/v	1		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	1.1		0.40	0.10	ppb v/v	1		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	1.7		0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Xylenes, Total	0.37	J	0.80	0.12	ppb v/v	1		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.37	J	1.3	0.13	ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.53	J	2.5	0.22	ug/m3	1		TO 15 LL	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SV-076-A-29 (Continued)

Lab Sample ID: 140-20194-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chlorodifluoromethane	1.0	J	1.4	0.39	ug/m3	1		TO 15 LL	Total/NA
Chloroform	0.25	J	2.0	0.17	ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.6		2.0	0.35	ug/m3	1		TO 15 LL	Total/NA
Tetrachloroethene	1.3	J	2.7	0.24	ug/m3	1		TO 15 LL	Total/NA
1,1,1-Trichloroethane	2.1	J	2.2	1.0	ug/m3	1		TO 15 LL	Total/NA
Trichloroethene	4.8		1.1	0.16	ug/m3	1		TO 15 LL	Total/NA
1,2,3-Trimethylbenzene	7.0		2.0	0.88	ug/m3	1		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	5.4		2.0	0.49	ug/m3	1		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	8.3		2.0	0.54	ug/m3	1		TO 15 LL	Total/NA
Xylenes, Total	1.6	J	3.5	0.52	ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: SV-168-A-29

Lab Sample ID: 140-20194-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.055	J	0.40	0.040	ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.098	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Chlorodifluoromethane	0.48		0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Chloroform	0.58		0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	0.072	J	0.40	0.050	ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.51		0.40	0.070	ppb v/v	1		TO 15 LL	Total/NA
1,1-Dichloroethane	0.18	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
1,1-Dichloroethene	7.2		0.40	0.040	ppb v/v	1		TO 15 LL	Total/NA
Methylene Chloride	5.7		2.0	2.0	ppb v/v	1		TO 15 LL	Total/NA
Tetrachloroethene	0.047	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
1,1,1-Trichloroethane	1.8		0.40	0.19	ppb v/v	1		TO 15 LL	Total/NA
Trichloroethene	6.4		0.20	0.030	ppb v/v	1		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.18	J	1.3	0.13	ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.62	J	2.5	0.22	ug/m3	1		TO 15 LL	Total/NA
Chlorodifluoromethane	1.7		1.4	0.39	ug/m3	1		TO 15 LL	Total/NA
Chloroform	2.8		2.0	0.17	ug/m3	1		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	0.29	J	1.6	0.20	ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.5		2.0	0.35	ug/m3	1		TO 15 LL	Total/NA
1,1-Dichloroethane	0.73	J	1.6	0.14	ug/m3	1		TO 15 LL	Total/NA
1,1-Dichloroethene	28		1.6	0.16	ug/m3	1		TO 15 LL	Total/NA
Methylene Chloride	20		6.9	6.8	ug/m3	1		TO 15 LL	Total/NA
Tetrachloroethene	0.32	J	2.7	0.24	ug/m3	1		TO 15 LL	Total/NA
1,1,1-Trichloroethane	9.7		2.2	1.0	ug/m3	1		TO 15 LL	Total/NA
Trichloroethene	34		1.1	0.16	ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: SV-DUP 4-A-29

Lab Sample ID: 140-20194-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.17	J	0.40	0.040	ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.12	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Chlorodifluoromethane	0.50		0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Chloroform	0.66		0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	0.11	J	0.40	0.050	ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.50		0.40	0.070	ppb v/v	1		TO 15 LL	Total/NA
1,1-Dichloroethane	0.19	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
1,1-Dichloroethene	8.7		0.40	0.040	ppb v/v	1		TO 15 LL	Total/NA
Methylene Chloride	5.3		2.0	2.0	ppb v/v	1		TO 15 LL	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SV-DUP 4-A-29 (Continued)

Lab Sample ID: 140-20194-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	0.072	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Toluene	0.48	J	0.60	0.39	ppb v/v	1		TO 15 LL	Total/NA
trans-1,2-Dichloroethene	0.053	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
1,1,1-Trichloroethane	1.9		0.40	0.19	ppb v/v	1		TO 15 LL	Total/NA
Trichloroethene	34		0.20	0.030	ppb v/v	1		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	0.15	J	0.40	0.10	ppb v/v	1		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	0.28	J	0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Xylenes, Total	0.28	J	0.80	0.12	ppb v/v	1		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.55	J	1.3	0.13	ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.74	J	2.5	0.22	ug/m3	1		TO 15 LL	Total/NA
Chlorodifluoromethane	1.8		1.4	0.39	ug/m3	1		TO 15 LL	Total/NA
Chloroform	3.2		2.0	0.17	ug/m3	1		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	0.42	J	1.6	0.20	ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.5		2.0	0.35	ug/m3	1		TO 15 LL	Total/NA
1,1-Dichloroethane	0.77	J	1.6	0.14	ug/m3	1		TO 15 LL	Total/NA
1,1-Dichloroethene	35		1.6	0.16	ug/m3	1		TO 15 LL	Total/NA
Methylene Chloride	19		6.9	6.8	ug/m3	1		TO 15 LL	Total/NA
Tetrachloroethene	0.49	J	2.7	0.24	ug/m3	1		TO 15 LL	Total/NA
Toluene	1.8	J	2.3	1.5	ug/m3	1		TO 15 LL	Total/NA
trans-1,2-Dichloroethene	0.21	J	1.6	0.14	ug/m3	1		TO 15 LL	Total/NA
1,1,1-Trichloroethane	11		2.2	1.0	ug/m3	1		TO 15 LL	Total/NA
Trichloroethene	180		1.1	0.16	ug/m3	1		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	0.71	J	2.0	0.49	ug/m3	1		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	1.4	J	2.0	0.54	ug/m3	1		TO 15 LL	Total/NA
Xylenes, Total	1.2	J	3.5	0.52	ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: SV-075-A-29

Lab Sample ID: 140-20194-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.056	J	0.40	0.040	ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.085	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Chlorodifluoromethane	2.3		0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Chloroform	0.079	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.53		0.40	0.070	ppb v/v	1		TO 15 LL	Total/NA
Ethylbenzene	0.11	J	0.40	0.065	ppb v/v	1		TO 15 LL	Total/NA
Naphthalene	2.0		0.20	0.20	ppb v/v	1		TO 15 LL	Total/NA
Tetrachloroethene	0.13	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Toluene	2.0		0.60	0.39	ppb v/v	1		TO 15 LL	Total/NA
Trichloroethene	0.52		0.20	0.030	ppb v/v	1		TO 15 LL	Total/NA
1,2,3-Trimethylbenzene	0.72		0.40	0.18	ppb v/v	1		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	2.0		0.40	0.10	ppb v/v	1		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	1.1		0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Xylenes, Total	0.73	J	0.80	0.12	ppb v/v	1		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.18	J	1.3	0.13	ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.54	J	2.5	0.22	ug/m3	1		TO 15 LL	Total/NA
Chlorodifluoromethane	8.2		1.4	0.39	ug/m3	1		TO 15 LL	Total/NA
Chloroform	0.38	J	2.0	0.17	ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.6		2.0	0.35	ug/m3	1		TO 15 LL	Total/NA
Ethylbenzene	0.49	J	1.7	0.28	ug/m3	1		TO 15 LL	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SV-075-A-29 (Continued)

Lab Sample ID: 140-20194-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	10		1.0	1.0	ug/m3	1		TO 15 LL	Total/NA
Tetrachloroethene	0.89	J	2.7	0.24	ug/m3	1		TO 15 LL	Total/NA
Toluene	7.4		2.3	1.5	ug/m3	1		TO 15 LL	Total/NA
Trichloroethene	2.8		1.1	0.16	ug/m3	1		TO 15 LL	Total/NA
1,2,3-Trimethylbenzene	3.6		2.0	0.88	ug/m3	1		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	10		2.0	0.49	ug/m3	1		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	5.7		2.0	0.54	ug/m3	1		TO 15 LL	Total/NA
Xylenes, Total	3.2	J	3.5	0.52	ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: SV-136-A-29

Lab Sample ID: 140-20194-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.81	J	2.0	0.20	ppb v/v	1		TO 15 LL	Total/NA
Chloroform	0.37	J	2.0	0.18	ppb v/v	1		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	0.45	J	2.0	0.25	ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.45	J	2.0	0.35	ppb v/v	1		TO 15 LL	Total/NA
Trichloroethene	89		1.0	0.15	ppb v/v	1		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	2.6	J	6.4	0.64	ug/m3	1		TO 15 LL	Total/NA
Chloroform	1.8	J	9.8	0.85	ug/m3	1		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	1.8	J	7.9	0.99	ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.2	J	9.9	1.7	ug/m3	1		TO 15 LL	Total/NA
Trichloroethene	480		5.4	0.81	ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: SV-101-B-29

Lab Sample ID: 140-20194-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.060	J	0.40	0.040	ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	1.1		0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Chlorodifluoromethane	0.86		0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Chloroform	0.18	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	1.2		0.40	0.070	ppb v/v	1		TO 15 LL	Total/NA
Naphthalene	0.55		0.20	0.20	ppb v/v	1		TO 15 LL	Total/NA
Tetrachloroethene	11		0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Toluene	0.44	J	0.60	0.39	ppb v/v	1		TO 15 LL	Total/NA
1,1,1-Trichloroethane	41		0.40	0.19	ppb v/v	1		TO 15 LL	Total/NA
Trichloroethene	29		0.20	0.030	ppb v/v	1		TO 15 LL	Total/NA
1,2,3-Trimethylbenzene	1.1		0.40	0.18	ppb v/v	1		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	3.0		0.40	0.10	ppb v/v	1		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	1.2		0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Xylenes, Total	0.39	J	0.80	0.12	ppb v/v	1		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.19	J	1.3	0.13	ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	6.8		2.5	0.22	ug/m3	1		TO 15 LL	Total/NA
Chlorodifluoromethane	3.0		1.4	0.39	ug/m3	1		TO 15 LL	Total/NA
Chloroform	0.87	J	2.0	0.17	ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	6.0		2.0	0.35	ug/m3	1		TO 15 LL	Total/NA
Naphthalene	2.9		1.0	1.0	ug/m3	1		TO 15 LL	Total/NA
Tetrachloroethene	73		2.7	0.24	ug/m3	1		TO 15 LL	Total/NA
Toluene	1.7	J	2.3	1.5	ug/m3	1		TO 15 LL	Total/NA
1,1,1-Trichloroethane	220		2.2	1.0	ug/m3	1		TO 15 LL	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SV-101-B-29 (Continued)

Lab Sample ID: 140-20194-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	160		1.1	0.16	ug/m3	1		TO 15 LL	Total/NA
1,2,3-Trimethylbenzene	5.3		2.0	0.88	ug/m3	1		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	15		2.0	0.49	ug/m3	1		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	5.7		2.0	0.54	ug/m3	1		TO 15 LL	Total/NA
Xylenes, Total	1.7	J	3.5	0.52	ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: SV-100-B-29

Lab Sample ID: 140-20194-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon tetrachloride	6.6		0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Chlorodifluoromethane	0.43		0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Chloroform	1.4		0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	1.0		0.40	0.070	ppb v/v	1		TO 15 LL	Total/NA
Tetrachloroethene	0.80		0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
1,1,1-Trichloroethane	0.58		0.40	0.19	ppb v/v	1		TO 15 LL	Total/NA
Trichloroethene	5.8		0.20	0.030	ppb v/v	1		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	0.25	J	0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon tetrachloride	42		2.5	0.22	ug/m3	1		TO 15 LL	Total/NA
Chlorodifluoromethane	1.5		1.4	0.39	ug/m3	1		TO 15 LL	Total/NA
Chloroform	6.8		2.0	0.17	ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	5.1		2.0	0.35	ug/m3	1		TO 15 LL	Total/NA
Tetrachloroethene	5.4		2.7	0.24	ug/m3	1		TO 15 LL	Total/NA
1,1,1-Trichloroethane	3.2		2.2	1.0	ug/m3	1		TO 15 LL	Total/NA
Trichloroethene	31		1.1	0.16	ug/m3	1		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	1.2	J	2.0	0.54	ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: SV-079-A-29

Lab Sample ID: 140-20194-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.13	J	0.40	0.040	ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.076	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Chlorodifluoromethane	0.62		0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Chloroform	0.15	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.56		0.40	0.070	ppb v/v	1		TO 15 LL	Total/NA
Ethylbenzene	0.39	J	0.40	0.065	ppb v/v	1		TO 15 LL	Total/NA
Methylene Chloride	8.5		2.0	2.0	ppb v/v	1		TO 15 LL	Total/NA
Tetrachloroethene	2.0		0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Toluene	0.72		0.60	0.39	ppb v/v	1		TO 15 LL	Total/NA
trans-1,2-Dichloroethene	0.080	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
1,1,1-Trichloroethane	0.41		0.40	0.19	ppb v/v	1		TO 15 LL	Total/NA
Trichloroethene	25		0.20	0.030	ppb v/v	1		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	0.28	J	0.40	0.10	ppb v/v	1		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	0.39	J	0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Xylenes, Total	1.7		0.80	0.12	ppb v/v	1		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.42	J	1.3	0.13	ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.48	J	2.5	0.22	ug/m3	1		TO 15 LL	Total/NA
Chlorodifluoromethane	2.2		1.4	0.39	ug/m3	1		TO 15 LL	Total/NA
Chloroform	0.74	J	2.0	0.17	ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.8		2.0	0.35	ug/m3	1		TO 15 LL	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SV-079-A-29 (Continued)

Lab Sample ID: 140-20194-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Ethylbenzene	1.7	J	1.7	0.28	ug/m3	1		TO 15 LL	Total/NA
Methylene Chloride	30		6.9	6.8	ug/m3	1		TO 15 LL	Total/NA
Tetrachloroethene	13		2.7	0.24	ug/m3	1		TO 15 LL	Total/NA
Toluene	2.7		2.3	1.5	ug/m3	1		TO 15 LL	Total/NA
trans-1,2-Dichloroethene	0.32	J	1.6	0.14	ug/m3	1		TO 15 LL	Total/NA
1,1,1-Trichloroethane	2.3		2.2	1.0	ug/m3	1		TO 15 LL	Total/NA
Trichloroethene	130		1.1	0.16	ug/m3	1		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	1.4	J	2.0	0.49	ug/m3	1		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	1.9	J	2.0	0.54	ug/m3	1		TO 15 LL	Total/NA
Xylenes, Total	7.2		3.5	0.52	ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: SV-139-A-29

Lab Sample ID: 140-20194-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.085	J	0.40	0.040	ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.090	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Chlorodifluoromethane	0.51		0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.47		0.40	0.070	ppb v/v	1		TO 15 LL	Total/NA
Ethylbenzene	0.95		0.40	0.065	ppb v/v	1		TO 15 LL	Total/NA
Methylene Chloride	7.4		2.0	2.0	ppb v/v	1		TO 15 LL	Total/NA
Naphthalene	0.78		0.20	0.20	ppb v/v	1		TO 15 LL	Total/NA
Tetrachloroethene	0.68		0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Toluene	0.96		0.60	0.39	ppb v/v	1		TO 15 LL	Total/NA
Trichloroethene	0.29		0.20	0.030	ppb v/v	1		TO 15 LL	Total/NA
1,2,3-Trimethylbenzene	1.3	*	0.40	0.18	ppb v/v	1		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	1.5		0.40	0.10	ppb v/v	1		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	1.3		0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Xylenes, Total	9.7		0.80	0.12	ppb v/v	1		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.27	J	1.3	0.13	ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.57	J	2.5	0.22	ug/m3	1		TO 15 LL	Total/NA
Chlorodifluoromethane	1.8		1.4	0.39	ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.3		2.0	0.35	ug/m3	1		TO 15 LL	Total/NA
Ethylbenzene	4.1		1.7	0.28	ug/m3	1		TO 15 LL	Total/NA
Methylene Chloride	26		6.9	6.8	ug/m3	1		TO 15 LL	Total/NA
Naphthalene	4.1		1.0	1.0	ug/m3	1		TO 15 LL	Total/NA
Tetrachloroethene	4.6		2.7	0.24	ug/m3	1		TO 15 LL	Total/NA
Toluene	3.6		2.3	1.5	ug/m3	1		TO 15 LL	Total/NA
Trichloroethene	1.6		1.1	0.16	ug/m3	1		TO 15 LL	Total/NA
1,2,3-Trimethylbenzene	6.5	*	2.0	0.88	ug/m3	1		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	7.5		2.0	0.49	ug/m3	1		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	6.5		2.0	0.54	ug/m3	1		TO 15 LL	Total/NA
Xylenes, Total	42		3.5	0.52	ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: SV-118-A-29

Lab Sample ID: 140-20194-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.071	J	0.40	0.040	ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.061	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Chloroform	0.35	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	10		0.40	0.050	ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.43		0.40	0.070	ppb v/v	1		TO 15 LL	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SV-118-A-29 (Continued)

Lab Sample ID: 140-20194-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	2.4		0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
1,1-Dichloroethene	18		0.40	0.040	ppb v/v	1		TO 15 LL	Total/NA
Ethylbenzene	1.5		0.40	0.065	ppb v/v	1		TO 15 LL	Total/NA
Toluene	0.39	J	0.60	0.39	ppb v/v	1		TO 15 LL	Total/NA
trans-1,2-Dichloroethene	0.81		0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
1,1,1-Trichloroethane	0.72		0.40	0.19	ppb v/v	1		TO 15 LL	Total/NA
Trichloroethene	97	E	0.20	0.030	ppb v/v	1		TO 15 LL	Total/NA
1,2,3-Trimethylbenzene	0.69	*	0.40	0.18	ppb v/v	1		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	1.4		0.40	0.10	ppb v/v	1		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	1.0		0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Vinyl chloride	0.27		0.20	0.13	ppb v/v	1		TO 15 LL	Total/NA
Xylenes, Total	14		0.80	0.12	ppb v/v	1		TO 15 LL	Total/NA
Trichloroethene - DL	120		0.40	0.060	ppb v/v	1		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.23	J	1.3	0.13	ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.38	J	2.5	0.22	ug/m3	1		TO 15 LL	Total/NA
Chloroform	1.7	J	2.0	0.17	ug/m3	1		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	40		1.6	0.20	ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.1		2.0	0.35	ug/m3	1		TO 15 LL	Total/NA
1,1-Dichloroethane	9.7		1.6	0.14	ug/m3	1		TO 15 LL	Total/NA
1,1-Dichloroethene	72		1.6	0.16	ug/m3	1		TO 15 LL	Total/NA
Ethylbenzene	6.6		1.7	0.28	ug/m3	1		TO 15 LL	Total/NA
Toluene	1.5	J	2.3	1.5	ug/m3	1		TO 15 LL	Total/NA
trans-1,2-Dichloroethene	3.2		1.6	0.14	ug/m3	1		TO 15 LL	Total/NA
1,1,1-Trichloroethane	3.9		2.2	1.0	ug/m3	1		TO 15 LL	Total/NA
Trichloroethene	520	E	1.1	0.16	ug/m3	1		TO 15 LL	Total/NA
1,2,3-Trimethylbenzene	3.4	*	2.0	0.88	ug/m3	1		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	6.7		2.0	0.49	ug/m3	1		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	5.0		2.0	0.54	ug/m3	1		TO 15 LL	Total/NA
Vinyl chloride	0.69		0.51	0.33	ug/m3	1		TO 15 LL	Total/NA
Xylenes, Total	61		3.5	0.52	ug/m3	1		TO 15 LL	Total/NA
Trichloroethene - DL	650		2.1	0.32	ug/m3	1		TO 15 LL	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SV-172-A-29

Lab Sample ID: 140-20194-1

Date Collected: 08/26/20 10:02
Matrix: Air
Date Received: 08/28/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.11**	**J**	0.40	0.040	ppb v/v			09/09/20 00:58	1
Carbon tetrachloride	**0.057**	**J**	0.40	0.035	ppb v/v			09/09/20 00:58	1
Chlorodifluoromethane	**0.57**		0.40	0.11	ppb v/v			09/09/20 00:58	1
Chloroform	**0.27**	**J**	0.40	0.035	ppb v/v			09/09/20 00:58	1
cis-1,2-Dichloroethene	**0.16**	**J**	0.40	0.050	ppb v/v			09/09/20 00:58	1
Dichlorodifluoromethane	**0.53**		0.40	0.070	ppb v/v			09/09/20 00:58	1
1,1-Dichloroethane	**0.097**	**J**	0.40	0.035	ppb v/v			09/09/20 00:58	1
1,2-Dichloroethane	ND		0.40	0.050	ppb v/v			09/09/20 00:58	1
1,1-Dichloroethene	ND		0.40	0.040	ppb v/v			09/09/20 00:58	1
Ethylbenzene	**0.15**	**J**	0.40	0.065	ppb v/v			09/09/20 00:58	1
Methylene Chloride	ND		2.0	2.0	ppb v/v			09/09/20 00:58	1
Methyl tert-butyl ether	ND		2.0	0.26	ppb v/v			09/09/20 00:58	1
Naphthalene	ND		0.20	0.20	ppb v/v			09/09/20 00:58	1
Tetrachloroethene	**0.38**	**J**	0.40	0.035	ppb v/v			09/09/20 00:58	1
Toluene	**0.96**		0.60	0.39	ppb v/v			09/09/20 00:58	1
trans-1,2-Dichloroethene	ND		0.40	0.035	ppb v/v			09/09/20 00:58	1
1,2,4-Trichlorobenzene	ND		0.40	0.32	ppb v/v			09/09/20 00:58	1
1,1,1-Trichloroethane	**0.73**		0.40	0.19	ppb v/v			09/09/20 00:58	1
1,1,2-Trichloroethane	ND		0.40	0.035	ppb v/v			09/09/20 00:58	1
Trichloroethene	**11**		0.20	0.030	ppb v/v			09/09/20 00:58	1
1,2,3-Trimethylbenzene	ND	*	0.40	0.18	ppb v/v			09/09/20 00:58	1
1,2,4-Trimethylbenzene	**0.23**	**J**	0.40	0.10	ppb v/v			09/09/20 00:58	1
1,3,5-Trimethylbenzene	ND		0.40	0.11	ppb v/v			09/09/20 00:58	1
Vinyl chloride	ND		0.20	0.13	ppb v/v			09/09/20 00:58	1
Xylenes, Total	**0.77**	**J**	0.80	0.12	ppb v/v			09/09/20 00:58	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.35**	**J**	1.3	0.13	ug/m3			09/09/20 00:58	1
Carbon tetrachloride	**0.36**	**J**	2.5	0.22	ug/m3			09/09/20 00:58	1
Chlorodifluoromethane	**2.0**		1.4	0.39	ug/m3			09/09/20 00:58	1
Chloroform	**1.3**	**J**	2.0	0.17	ug/m3			09/09/20 00:58	1
cis-1,2-Dichloroethene	**0.62**	**J**	1.6	0.20	ug/m3			09/09/20 00:58	1
Dichlorodifluoromethane	**2.6**		2.0	0.35	ug/m3			09/09/20 00:58	1
1,1-Dichloroethane	**0.39**	**J**	1.6	0.14	ug/m3			09/09/20 00:58	1
1,2-Dichloroethane	ND		1.6	0.20	ug/m3			09/09/20 00:58	1
1,1-Dichloroethene	ND		1.6	0.16	ug/m3			09/09/20 00:58	1
Ethylbenzene	**0.66**	**J**	1.7	0.28	ug/m3			09/09/20 00:58	1
Methylene Chloride	ND		6.9	6.8	ug/m3			09/09/20 00:58	1
Methyl tert-butyl ether	ND		7.2	0.94	ug/m3			09/09/20 00:58	1
Naphthalene	ND		1.0	1.0	ug/m3			09/09/20 00:58	1
Tetrachloroethene	**2.6**	**J**	2.7	0.24	ug/m3			09/09/20 00:58	1
Toluene	**3.6**		2.3	1.5	ug/m3			09/09/20 00:58	1
trans-1,2-Dichloroethene	ND		1.6	0.14	ug/m3			09/09/20 00:58	1
1,2,4-Trichlorobenzene	ND		3.0	2.4	ug/m3			09/09/20 00:58	1
1,1,1-Trichloroethane	**4.0**		2.2	1.0	ug/m3			09/09/20 00:58	1
1,1,2-Trichloroethane	ND		2.2	0.19	ug/m3			09/09/20 00:58	1
Trichloroethene	**59**		1.1	0.16	ug/m3			09/09/20 00:58	1
1,2,3-Trimethylbenzene	ND	*	2.0	0.88	ug/m3			09/09/20 00:58	1
1,2,4-Trimethylbenzene	**1.1**	**J**	2.0	0.49	ug/m3			09/09/20 00:58	1

Client Sample ID: SV-172-A-29
Lab Sample ID: 140-20194-1
Date Collected: 08/26/20 10:02
Matrix: Air
Date Received: 08/28/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		2.0	0.54	ug/m3			09/09/20 00:58	1
Vinyl chloride	ND		0.51	0.33	ug/m3			09/09/20 00:58	1
Xylenes, Total	**3.3**	**J**	3.5	0.52	ug/m3			09/09/20 00:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*60 - 140*		*09/09/20 00:58*	*1*

Client Sample ID: SV-116-A-29

Date Collected: 08/26/20 09:58
Date Received: 08/28/20 10:00
Sample Container: Summa Canister 1L

Lab Sample ID: 140-20194-2

Matrix: Air

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.11**	**J**	0.40	0.040	ppb v/v			09/09/20 01:43	1
Carbon tetrachloride	**0.059**	**J**	0.40	0.035	ppb v/v			09/09/20 01:43	1
Chlorodifluoromethane	**0.39**	**J**	0.40	0.11	ppb v/v			09/09/20 01:43	1
Chloroform	**0.79**		0.40	0.035	ppb v/v			09/09/20 01:43	1
cis-1,2-Dichloroethene	ND		0.40	0.050	ppb v/v			09/09/20 01:43	1
Dichlorodifluoromethane	**0.47**		0.40	0.070	ppb v/v			09/09/20 01:43	1
1,1-Dichloroethane	ND		0.40	0.035	ppb v/v			09/09/20 01:43	1
1,2-Dichloroethane	ND		0.40	0.050	ppb v/v			09/09/20 01:43	1
1,1-Dichloroethene	**0.20**	**J**	0.40	0.040	ppb v/v			09/09/20 01:43	1
Ethylbenzene	ND		0.40	0.065	ppb v/v			09/09/20 01:43	1
Methylene Chloride	**2.3**		2.0	2.0	ppb v/v			09/09/20 01:43	1
Methyl tert-butyl ether	ND		2.0	0.26	ppb v/v			09/09/20 01:43	1
Naphthalene	ND		0.20	0.20	ppb v/v			09/09/20 01:43	1
Tetrachloroethene	ND		0.40	0.035	ppb v/v			09/09/20 01:43	1
Toluene	ND		0.60	0.39	ppb v/v			09/09/20 01:43	1
trans-1,2-Dichloroethene	ND		0.40	0.035	ppb v/v			09/09/20 01:43	1
1,2,4-Trichlorobenzene	ND		0.40	0.32	ppb v/v			09/09/20 01:43	1
1,1,1-Trichloroethane	ND		0.40	0.19	ppb v/v			09/09/20 01:43	1
1,1,2-Trichloroethane	ND		0.40	0.035	ppb v/v			09/09/20 01:43	1
Trichloroethene	**1.4**		0.20	0.030	ppb v/v			09/09/20 01:43	1
1,2,3-Trimethylbenzene	ND	*	0.40	0.18	ppb v/v			09/09/20 01:43	1
1,2,4-Trimethylbenzene	ND		0.40	0.10	ppb v/v			09/09/20 01:43	1
1,3,5-Trimethylbenzene	ND		0.40	0.11	ppb v/v			09/09/20 01:43	1
Vinyl chloride	ND		0.20	0.13	ppb v/v			09/09/20 01:43	1
Xylenes, Total	ND		0.80	0.12	ppb v/v			09/09/20 01:43	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.36**	**J**	1.3	0.13	ug/m3			09/09/20 01:43	1
Carbon tetrachloride	**0.37**	**J**	2.5	0.22	ug/m3			09/09/20 01:43	1
Chlorodifluoromethane	**1.4**	**J**	1.4	0.39	ug/m3			09/09/20 01:43	1
Chloroform	**3.9**		2.0	0.17	ug/m3			09/09/20 01:43	1
cis-1,2-Dichloroethene	ND		1.6	0.20	ug/m3			09/09/20 01:43	1
Dichlorodifluoromethane	**2.3**		2.0	0.35	ug/m3			09/09/20 01:43	1
1,1-Dichloroethane	ND		1.6	0.14	ug/m3			09/09/20 01:43	1
1,2-Dichloroethane	ND		1.6	0.20	ug/m3			09/09/20 01:43	1
1,1-Dichloroethene	**0.80**	**J**	1.6	0.16	ug/m3			09/09/20 01:43	1
Ethylbenzene	ND		1.7	0.28	ug/m3			09/09/20 01:43	1
Methylene Chloride	**8.0**		6.9	6.8	ug/m3			09/09/20 01:43	1
Methyl tert-butyl ether	ND		7.2	0.94	ug/m3			09/09/20 01:43	1
Naphthalene	ND		1.0	1.0	ug/m3			09/09/20 01:43	1
Tetrachloroethene	ND		2.7	0.24	ug/m3			09/09/20 01:43	1
Toluene	ND		2.3	1.5	ug/m3			09/09/20 01:43	1
trans-1,2-Dichloroethene	ND		1.6	0.14	ug/m3			09/09/20 01:43	1
1,2,4-Trichlorobenzene	ND		3.0	2.4	ug/m3			09/09/20 01:43	1
1,1,1-Trichloroethane	ND		2.2	1.0	ug/m3			09/09/20 01:43	1
1,1,2-Trichloroethane	ND		2.2	0.19	ug/m3			09/09/20 01:43	1
Trichloroethene	**7.6**		1.1	0.16	ug/m3			09/09/20 01:43	1
1,2,3-Trimethylbenzene	ND	*	2.0	0.88	ug/m3			09/09/20 01:43	1
1,2,4-Trimethylbenzene	ND		2.0	0.49	ug/m3			09/09/20 01:43	1

Client Sample ID: SV-116-A-29
Lab Sample ID: 140-20194-2
Date Collected: 08/26/20 09:58
Matrix: Air
Date Received: 08/28/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		2.0	0.54	ug/m3			09/09/20 01:43	1
Vinyl chloride	ND		0.51	0.33	ug/m3			09/09/20 01:43	1
Xylenes, Total	ND		3.5	0.52	ug/m3			09/09/20 01:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*60 - 140*		*09/09/20 01:43*	*1*

Client Sample ID: SV-DUP 3-A-29

Date Collected: 08/26/20 00:00
Date Received: 08/28/20 10:00
Sample Container: Summa Canister 1L

Lab Sample ID: 140-20194-3

Matrix: Air

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.11**	**J**	0.40	0.040	ppb v/v			09/09/20 02:29	1
Carbon tetrachloride	**0.056**	**J**	0.40	0.035	ppb v/v			09/09/20 02:29	1
Chlorodifluoromethane	**0.34**	**J**	0.40	0.11	ppb v/v			09/09/20 02:29	1
Chloroform	**0.72**		0.40	0.035	ppb v/v			09/09/20 02:29	1
cis-1,2-Dichloroethene	ND		0.40	0.050	ppb v/v			09/09/20 02:29	1
Dichlorodifluoromethane	**0.42**		0.40	0.070	ppb v/v			09/09/20 02:29	1
1,1-Dichloroethane	ND		0.40	0.035	ppb v/v			09/09/20 02:29	1
1,2-Dichloroethane	ND		0.40	0.050	ppb v/v			09/09/20 02:29	1
1,1-Dichloroethene	**0.16**	**J**	0.40	0.040	ppb v/v			09/09/20 02:29	1
Ethylbenzene	ND		0.40	0.065	ppb v/v			09/09/20 02:29	1
Methylene Chloride	ND		2.0	2.0	ppb v/v			09/09/20 02:29	1
Methyl tert-butyl ether	ND		2.0	0.26	ppb v/v			09/09/20 02:29	1
Naphthalene	ND		0.20	0.20	ppb v/v			09/09/20 02:29	1
Tetrachloroethene	**0.049**	**J**	0.40	0.035	ppb v/v			09/09/20 02:29	1
Toluene	ND		0.60	0.39	ppb v/v			09/09/20 02:29	1
trans-1,2-Dichloroethene	ND		0.40	0.035	ppb v/v			09/09/20 02:29	1
1,2,4-Trichlorobenzene	ND		0.40	0.32	ppb v/v			09/09/20 02:29	1
1,1,1-Trichloroethane	ND		0.40	0.19	ppb v/v			09/09/20 02:29	1
1,1,2-Trichloroethane	ND		0.40	0.035	ppb v/v			09/09/20 02:29	1
Trichloroethene	**1.2**		0.20	0.030	ppb v/v			09/09/20 02:29	1
1,2,3-Trimethylbenzene	ND	*	0.40	0.18	ppb v/v			09/09/20 02:29	1
1,2,4-Trimethylbenzene	ND		0.40	0.10	ppb v/v			09/09/20 02:29	1
1,3,5-Trimethylbenzene	ND		0.40	0.11	ppb v/v			09/09/20 02:29	1
Vinyl chloride	ND		0.20	0.13	ppb v/v			09/09/20 02:29	1
Xylenes, Total	ND		0.80	0.12	ppb v/v			09/09/20 02:29	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.35**	**J**	1.3	0.13	ug/m3			09/09/20 02:29	1
Carbon tetrachloride	**0.35**	**J**	2.5	0.22	ug/m3			09/09/20 02:29	1
Chlorodifluoromethane	**1.2**	**J**	1.4	0.39	ug/m3			09/09/20 02:29	1
Chloroform	**3.5**		2.0	0.17	ug/m3			09/09/20 02:29	1
cis-1,2-Dichloroethene	ND		1.6	0.20	ug/m3			09/09/20 02:29	1
Dichlorodifluoromethane	**2.1**		2.0	0.35	ug/m3			09/09/20 02:29	1
1,1-Dichloroethane	ND		1.6	0.14	ug/m3			09/09/20 02:29	1
1,2-Dichloroethane	ND		1.6	0.20	ug/m3			09/09/20 02:29	1
1,1-Dichloroethene	**0.65**	**J**	1.6	0.16	ug/m3			09/09/20 02:29	1
Ethylbenzene	ND		1.7	0.28	ug/m3			09/09/20 02:29	1
Methylene Chloride	ND		6.9	6.8	ug/m3			09/09/20 02:29	1
Methyl tert-butyl ether	ND		7.2	0.94	ug/m3			09/09/20 02:29	1
Naphthalene	ND		1.0	1.0	ug/m3			09/09/20 02:29	1
Tetrachloroethene	**0.33**	**J**	2.7	0.24	ug/m3			09/09/20 02:29	1
Toluene	ND		2.3	1.5	ug/m3			09/09/20 02:29	1
trans-1,2-Dichloroethene	ND		1.6	0.14	ug/m3			09/09/20 02:29	1
1,2,4-Trichlorobenzene	ND		3.0	2.4	ug/m3			09/09/20 02:29	1
1,1,1-Trichloroethane	ND		2.2	1.0	ug/m3			09/09/20 02:29	1
1,1,2-Trichloroethane	ND		2.2	0.19	ug/m3			09/09/20 02:29	1
Trichloroethene	**6.5**		1.1	0.16	ug/m3			09/09/20 02:29	1
1,2,3-Trimethylbenzene	ND	*	2.0	0.88	ug/m3			09/09/20 02:29	1
1,2,4-Trimethylbenzene	ND		2.0	0.49	ug/m3			09/09/20 02:29	1

Client Sample ID: SV-DUP 3-A-29
Lab Sample ID: 140-20194-3

Date Collected: 08/26/20 00:00
Matrix: Air
Date Received: 08/28/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		2.0	0.54	ug/m3			09/09/20 02:29	1
Vinyl chloride	ND		0.51	0.33	ug/m3			09/09/20 02:29	1
Xylenes, Total	ND		3.5	0.52	ug/m3			09/09/20 02:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*60 - 140*		*09/09/20 02:29*	*1*

Client Sample ID: SV-138-A-29

Lab Sample ID: 140-20194-4

Date Collected: 08/26/20 10:03
Matrix: Air
Date Received: 08/28/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.12**	**J**	0.40	0.040	ppb v/v			09/09/20 03:15	1
Carbon tetrachloride	**0.054**	**J**	0.40	0.035	ppb v/v			09/09/20 03:15	1
Chlorodifluoromethane	**0.40**		0.40	0.11	ppb v/v			09/09/20 03:15	1
Chloroform	**0.19**	**J**	0.40	0.035	ppb v/v			09/09/20 03:15	1
cis-1,2-Dichloroethene	**2.9**		0.40	0.050	ppb v/v			09/09/20 03:15	1
Dichlorodifluoromethane	**0.42**		0.40	0.070	ppb v/v			09/09/20 03:15	1
1,1-Dichloroethane	**0.90**		0.40	0.035	ppb v/v			09/09/20 03:15	1
1,2-Dichloroethane	**0.051**	**J**	0.40	0.050	ppb v/v			09/09/20 03:15	1
1,1-Dichloroethene	**4.2**		0.40	0.040	ppb v/v			09/09/20 03:15	1
Ethylbenzene	ND		0.40	0.065	ppb v/v			09/09/20 03:15	1
Methylene Chloride	ND		2.0	2.0	ppb v/v			09/09/20 03:15	1
Methyl tert-butyl ether	ND		2.0	0.26	ppb v/v			09/09/20 03:15	1
Naphthalene	ND		0.20	0.20	ppb v/v			09/09/20 03:15	1
Tetrachloroethene	**0.19**	**J**	0.40	0.035	ppb v/v			09/09/20 03:15	1
Toluene	ND		0.60	0.39	ppb v/v			09/09/20 03:15	1
trans-1,2-Dichloroethene	**0.10**	**J**	0.40	0.035	ppb v/v			09/09/20 03:15	1
1,2,4-Trichlorobenzene	ND		0.40	0.32	ppb v/v			09/09/20 03:15	1
1,1,1-Trichloroethane	ND		0.40	0.19	ppb v/v			09/09/20 03:15	1
1,1,2-Trichloroethane	ND		0.40	0.035	ppb v/v			09/09/20 03:15	1
Trichloroethene	**26**		0.20	0.030	ppb v/v			09/09/20 03:15	1
1,2,3-Trimethylbenzene	ND	*	0.40	0.18	ppb v/v			09/09/20 03:15	1
1,2,4-Trimethylbenzene	ND		0.40	0.10	ppb v/v			09/09/20 03:15	1
1,3,5-Trimethylbenzene	ND		0.40	0.11	ppb v/v			09/09/20 03:15	1
Vinyl chloride	ND		0.20	0.13	ppb v/v			09/09/20 03:15	1
Xylenes, Total	ND		0.80	0.12	ppb v/v			09/09/20 03:15	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.38**	**J**	1.3	0.13	ug/m3			09/09/20 03:15	1
Carbon tetrachloride	**0.34**	**J**	2.5	0.22	ug/m3			09/09/20 03:15	1
Chlorodifluoromethane	**1.4**		1.4	0.39	ug/m3			09/09/20 03:15	1
Chloroform	**0.94**	**J**	2.0	0.17	ug/m3			09/09/20 03:15	1
cis-1,2-Dichloroethene	**11**		1.6	0.20	ug/m3			09/09/20 03:15	1
Dichlorodifluoromethane	**2.1**		2.0	0.35	ug/m3			09/09/20 03:15	1
1,1-Dichloroethane	**3.7**		1.6	0.14	ug/m3			09/09/20 03:15	1
1,2-Dichloroethane	**0.21**	**J**	1.6	0.20	ug/m3			09/09/20 03:15	1
1,1-Dichloroethene	**16**		1.6	0.16	ug/m3			09/09/20 03:15	1
Ethylbenzene	ND		1.7	0.28	ug/m3			09/09/20 03:15	1
Methylene Chloride	ND		6.9	6.8	ug/m3			09/09/20 03:15	1
Methyl tert-butyl ether	ND		7.2	0.94	ug/m3			09/09/20 03:15	1
Naphthalene	ND		1.0	1.0	ug/m3			09/09/20 03:15	1
Tetrachloroethene	**1.3**	**J**	2.7	0.24	ug/m3			09/09/20 03:15	1
Toluene	ND		2.3	1.5	ug/m3			09/09/20 03:15	1
trans-1,2-Dichloroethene	**0.39**	**J**	1.6	0.14	ug/m3			09/09/20 03:15	1
1,2,4-Trichlorobenzene	ND		3.0	2.4	ug/m3			09/09/20 03:15	1
1,1,1-Trichloroethane	ND		2.2	1.0	ug/m3			09/09/20 03:15	1
1,1,2-Trichloroethane	ND		2.2	0.19	ug/m3			09/09/20 03:15	1
Trichloroethene	**140**		1.1	0.16	ug/m3			09/09/20 03:15	1
1,2,3-Trimethylbenzene	ND	*	2.0	0.88	ug/m3			09/09/20 03:15	1
1,2,4-Trimethylbenzene	ND		2.0	0.49	ug/m3			09/09/20 03:15	1

Client Sample ID: SV-138-A-29
Lab Sample ID: 140-20194-4
Date Collected: 08/26/20 10:03
Matrix: Air
Date Received: 08/28/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		2.0	0.54	ug/m3			09/09/20 03:15	1
Vinyl chloride	ND		0.51	0.33	ug/m3			09/09/20 03:15	1
Xylenes, Total	ND		3.5	0.52	ug/m3			09/09/20 03:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*60 - 140*		*09/09/20 03:15*	*1*

Client Sample ID: SV-173-A-29

Date Collected: 08/26/20 10:04
Date Received: 08/28/20 10:00
Sample Container: Summa Canister 1L

Lab Sample ID: 140-20194-5

Matrix: Air

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		26	2.6	ppb v/v			09/09/20 04:00	9.23
Carbon tetrachloride	ND		26	2.3	ppb v/v			09/09/20 04:00	9.23
Chlorodifluoromethane	ND		26	7.3	ppb v/v			09/09/20 04:00	9.23
Chloroform	ND		26	2.3	ppb v/v			09/09/20 04:00	9.23
cis-1,2-Dichloroethene	**66**		26	3.3	ppb v/v			09/09/20 04:00	9.23
Dichlorodifluoromethane	ND		26	4.6	ppb v/v			09/09/20 04:00	9.23
1,1-Dichloroethane	**14**	**J**	26	2.3	ppb v/v			09/09/20 04:00	9.23
1,2-Dichloroethane	ND		26	3.3	ppb v/v			09/09/20 04:00	9.23
1,1-Dichloroethene	**260**		26	2.6	ppb v/v			09/09/20 04:00	9.23
Ethylbenzene	ND		26	4.3	ppb v/v			09/09/20 04:00	9.23
Methylene Chloride	ND		130	130	ppb v/v			09/09/20 04:00	9.23
Methyl tert-butyl ether	ND		130	17	ppb v/v			09/09/20 04:00	9.23
Naphthalene	ND		13	13	ppb v/v			09/09/20 04:00	9.23
Tetrachloroethene	ND		26	2.3	ppb v/v			09/09/20 04:00	9.23
Toluene	ND		40	26	ppb v/v			09/09/20 04:00	9.23
trans-1,2-Dichloroethene	ND		26	2.3	ppb v/v			09/09/20 04:00	9.23
1,2,4-Trichlorobenzene	ND		26	21	ppb v/v			09/09/20 04:00	9.23
1,1,1-Trichloroethane	ND		26	12	ppb v/v			09/09/20 04:00	9.23
1,1,2-Trichloroethane	ND		26	2.3	ppb v/v			09/09/20 04:00	9.23
Trichloroethene	**1400**		13	2.0	ppb v/v			09/09/20 04:00	9.23
1,2,3-Trimethylbenzene	ND	*	26	12	ppb v/v			09/09/20 04:00	9.23
1,2,4-Trimethylbenzene	ND		26	6.6	ppb v/v			09/09/20 04:00	9.23
1,3,5-Trimethylbenzene	ND		26	7.3	ppb v/v			09/09/20 04:00	9.23
Vinyl chloride	ND		13	8.6	ppb v/v			09/09/20 04:00	9.23
Xylenes, Total	ND		53	7.9	ppb v/v			09/09/20 04:00	9.23

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		84	8.4	ug/m3			09/09/20 04:00	9.23
Carbon tetrachloride	ND		170	15	ug/m3			09/09/20 04:00	9.23
Chlorodifluoromethane	ND		93	26	ug/m3			09/09/20 04:00	9.23
Chloroform	ND		130	11	ug/m3			09/09/20 04:00	9.23
cis-1,2-Dichloroethene	**260**		100	13	ug/m3			09/09/20 04:00	9.23
Dichlorodifluoromethane	ND		130	23	ug/m3			09/09/20 04:00	9.23
1,1-Dichloroethane	**58**	**J**	110	9.3	ug/m3			09/09/20 04:00	9.23
1,2-Dichloroethane	ND		110	13	ug/m3			09/09/20 04:00	9.23
1,1-Dichloroethene	**1000**		100	10	ug/m3			09/09/20 04:00	9.23
Ethylbenzene	ND		110	19	ug/m3			09/09/20 04:00	9.23
Methylene Chloride	ND		460	450	ug/m3			09/09/20 04:00	9.23
Methyl tert-butyl ether	ND		480	62	ug/m3			09/09/20 04:00	9.23
Naphthalene	ND		69	69	ug/m3			09/09/20 04:00	9.23
Tetrachloroethene	ND		180	16	ug/m3			09/09/20 04:00	9.23
Toluene	ND		150	97	ug/m3			09/09/20 04:00	9.23
trans-1,2-Dichloroethene	ND		100	9.1	ug/m3			09/09/20 04:00	9.23
1,2,4-Trichlorobenzene	ND		200	160	ug/m3			09/09/20 04:00	9.23
1,1,1-Trichloroethane	ND		140	67	ug/m3			09/09/20 04:00	9.23
1,1,2-Trichloroethane	ND		140	13	ug/m3			09/09/20 04:00	9.23
Trichloroethene	**7600**		71	11	ug/m3			09/09/20 04:00	9.23
1,2,3-Trimethylbenzene	ND	*	130	58	ug/m3			09/09/20 04:00	9.23
1,2,4-Trimethylbenzene	ND		130	32	ug/m3			09/09/20 04:00	9.23

Client Sample ID: SV-173-A-29
Lab Sample ID: 140-20194-5
Date Collected: 08/26/20 10:04
Matrix: Air
Date Received: 08/28/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		130	36	ug/m3			09/09/20 04:00	9.23
Vinyl chloride	ND		34	22	ug/m3			09/09/20 04:00	9.23
Xylenes, Total	ND		230	34	ug/m3			09/09/20 04:00	9.23

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*60 - 140*		*09/09/20 04:00*	*9.23*

Client Sample ID: SV-171-A-29

Date Collected: 08/26/20 10:06
Date Received: 08/28/20 10:00
Sample Container: Summa Canister 1L

Lab Sample ID: 140-20194-6

Matrix: Air

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		9.3	0.93	ppb v/v			09/09/20 04:44	3.03
Carbon tetrachloride	ND		9.3	0.82	ppb v/v			09/09/20 04:44	3.03
Chlorodifluoromethane	ND		9.3	2.6	ppb v/v			09/09/20 04:44	3.03
Chloroform	ND		9.3	0.82	ppb v/v			09/09/20 04:44	3.03
cis-1,2-Dichloroethene	**12**		9.3	1.2	ppb v/v			09/09/20 04:44	3.03
Dichlorodifluoromethane	ND		9.3	1.6	ppb v/v			09/09/20 04:44	3.03
1,1-Dichloroethane	**2.6**	**J**	9.3	0.82	ppb v/v			09/09/20 04:44	3.03
1,2-Dichloroethane	ND		9.3	1.2	ppb v/v			09/09/20 04:44	3.03
1,1-Dichloroethene	**79**		9.3	0.93	ppb v/v			09/09/20 04:44	3.03
Ethylbenzene	ND		9.3	1.5	ppb v/v			09/09/20 04:44	3.03
Methylene Chloride	ND		47	45	ppb v/v			09/09/20 04:44	3.03
Methyl tert-butyl ether	ND		47	6.1	ppb v/v			09/09/20 04:44	3.03
Naphthalene	ND		4.7	4.7	ppb v/v			09/09/20 04:44	3.03
Tetrachloroethene	ND		9.3	0.82	ppb v/v			09/09/20 04:44	3.03
Toluene	ND		14	9.1	ppb v/v			09/09/20 04:44	3.03
trans-1,2-Dichloroethene	ND		9.3	0.82	ppb v/v			09/09/20 04:44	3.03
1,2,4-Trichlorobenzene	ND		9.3	7.5	ppb v/v			09/09/20 04:44	3.03
1,1,1-Trichloroethane	ND		9.3	4.3	ppb v/v			09/09/20 04:44	3.03
1,1,2-Trichloroethane	ND		9.3	0.82	ppb v/v			09/09/20 04:44	3.03
Trichloroethene	**510**		4.7	0.70	ppb v/v			09/09/20 04:44	3.03
1,2,3-Trimethylbenzene	ND	*	9.3	4.2	ppb v/v			09/09/20 04:44	3.03
1,2,4-Trimethylbenzene	ND		9.3	2.3	ppb v/v			09/09/20 04:44	3.03
1,3,5-Trimethylbenzene	ND		9.3	2.6	ppb v/v			09/09/20 04:44	3.03
Vinyl chloride	ND		4.7	3.0	ppb v/v			09/09/20 04:44	3.03
Xylenes, Total	ND		19	2.8	ppb v/v			09/09/20 04:44	3.03

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		30	3.0	ug/m3			09/09/20 04:44	3.03
Carbon tetrachloride	ND		59	5.1	ug/m3			09/09/20 04:44	3.03
Chlorodifluoromethane	ND		33	9.1	ug/m3			09/09/20 04:44	3.03
Chloroform	ND		46	4.0	ug/m3			09/09/20 04:44	3.03
cis-1,2-Dichloroethene	**49**		37	4.6	ug/m3			09/09/20 04:44	3.03
Dichlorodifluoromethane	ND		46	8.1	ug/m3			09/09/20 04:44	3.03
1,1-Dichloroethane	**10**	**J**	38	3.3	ug/m3			09/09/20 04:44	3.03
1,2-Dichloroethane	ND		38	4.7	ug/m3			09/09/20 04:44	3.03
1,1-Dichloroethene	**320**		37	3.7	ug/m3			09/09/20 04:44	3.03
Ethylbenzene	ND		40	6.6	ug/m3			09/09/20 04:44	3.03
Methylene Chloride	ND		160	160	ug/m3			09/09/20 04:44	3.03
Methyl tert-butyl ether	ND		170	22	ug/m3			09/09/20 04:44	3.03
Naphthalene	ND		24	24	ug/m3			09/09/20 04:44	3.03
Tetrachloroethene	ND		63	5.5	ug/m3			09/09/20 04:44	3.03
Toluene	ND		53	34	ug/m3			09/09/20 04:44	3.03
trans-1,2-Dichloroethene	ND		37	3.2	ug/m3			09/09/20 04:44	3.03
1,2,4-Trichlorobenzene	ND		69	55	ug/m3			09/09/20 04:44	3.03
1,1,1-Trichloroethane	ND		51	24	ug/m3			09/09/20 04:44	3.03
1,1,2-Trichloroethane	ND		51	4.5	ug/m3			09/09/20 04:44	3.03
Trichloroethene	**2800**		25	3.8	ug/m3			09/09/20 04:44	3.03
1,2,3-Trimethylbenzene	ND	*	46	21	ug/m3			09/09/20 04:44	3.03
1,2,4-Trimethylbenzene	ND		46	11	ug/m3			09/09/20 04:44	3.03

Client Sample ID: SV-171-A-29

Lab Sample ID: 140-20194-6

Date Collected: 08/26/20 10:06
Matrix: Air
Date Received: 08/28/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		46	13	ug/m3			09/09/20 04:44	3.03
Vinyl chloride	ND		12	7.7	ug/m3			09/09/20 04:44	3.03
Xylenes, Total	ND		81	12	ug/m3			09/09/20 04:44	3.03

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*60 - 140*		*09/09/20 04:44*	*3.03*

Client Sample ID: SV-174-A-29

Date Collected: 08/26/20 10:07
Date Received: 08/28/20 10:00
Sample Container: Summa Canister 1L

Lab Sample ID: 140-20194-7

Matrix: Air

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		240	24	ppb v/v			09/10/20 08:00	120
Carbon tetrachloride	ND		240	21	ppb v/v			09/10/20 08:00	120
Chlorodifluoromethane	ND		240	66	ppb v/v			09/10/20 08:00	120
Chloroform	**21**	**J**	240	21	ppb v/v			09/10/20 08:00	120
cis-1,2-Dichloroethene	**460**		240	30	ppb v/v			09/10/20 08:00	120
Dichlorodifluoromethane	ND		240	42	ppb v/v			09/10/20 08:00	120
1,1-Dichloroethane	**150**	**J**	240	21	ppb v/v			09/10/20 08:00	120
1,2-Dichloroethane	ND		240	30	ppb v/v			09/10/20 08:00	120
1,1-Dichloroethene	**5800**		240	24	ppb v/v			09/10/20 08:00	120
Ethylbenzene	ND		240	39	ppb v/v			09/10/20 08:00	120
Methylene Chloride	ND		1200	1200	ppb v/v			09/10/20 08:00	120
Methyl tert-butyl ether	ND		1200	160	ppb v/v			09/10/20 08:00	120
Naphthalene	ND		120	120	ppb v/v			09/10/20 08:00	120
Tetrachloroethene	ND		240	21	ppb v/v			09/10/20 08:00	120
Toluene	ND		360	230	ppb v/v			09/10/20 08:00	120
trans-1,2-Dichloroethene	**50**	**J**	240	21	ppb v/v			09/10/20 08:00	120
1,2,4-Trichlorobenzene	ND		240	190	ppb v/v			09/10/20 08:00	120
1,1,1-Trichloroethane	ND		240	110	ppb v/v			09/10/20 08:00	120
1,1,2-Trichloroethane	ND		240	21	ppb v/v			09/10/20 08:00	120
Trichloroethene	**25000**		120	18	ppb v/v			09/10/20 08:00	120
1,2,3-Trimethylbenzene	ND		240	110	ppb v/v			09/10/20 08:00	120
1,2,4-Trimethylbenzene	ND		240	60	ppb v/v			09/10/20 08:00	120
1,3,5-Trimethylbenzene	ND		240	66	ppb v/v			09/10/20 08:00	120
Vinyl chloride	ND		120	78	ppb v/v			09/10/20 08:00	120
Xylenes, Total	ND		480	72	ppb v/v			09/10/20 08:00	120

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		770	77	ug/m3			09/10/20 08:00	120
Carbon tetrachloride	ND		1500	130	ug/m3			09/10/20 08:00	120
Chlorodifluoromethane	ND		850	230	ug/m3			09/10/20 08:00	120
Chloroform	**100**	**J**	1200	100	ug/m3			09/10/20 08:00	120
cis-1,2-Dichloroethene	**1800**		950	120	ug/m3			09/10/20 08:00	120
Dichlorodifluoromethane	ND		1200	210	ug/m3			09/10/20 08:00	120
1,1-Dichloroethane	**630**	**J**	970	85	ug/m3			09/10/20 08:00	120
1,2-Dichloroethane	ND		970	120	ug/m3			09/10/20 08:00	120
1,1-Dichloroethene	**23000**		950	95	ug/m3			09/10/20 08:00	120
Ethylbenzene	ND		1000	170	ug/m3			09/10/20 08:00	120
Methylene Chloride	ND		4200	4100	ug/m3			09/10/20 08:00	120
Methyl tert-butyl ether	ND		4300	560	ug/m3			09/10/20 08:00	120
Naphthalene	ND		630	630	ug/m3			09/10/20 08:00	120
Tetrachloroethene	ND		1600	140	ug/m3			09/10/20 08:00	120
Toluene	ND		1400	880	ug/m3			09/10/20 08:00	120
trans-1,2-Dichloroethene	**200**	**J**	950	83	ug/m3			09/10/20 08:00	120
1,2,4-Trichlorobenzene	ND		1800	1400	ug/m3			09/10/20 08:00	120
1,1,1-Trichloroethane	ND		1300	610	ug/m3			09/10/20 08:00	120
1,1,2-Trichloroethane	ND		1300	110	ug/m3			09/10/20 08:00	120
Trichloroethene	**140000**		640	97	ug/m3			09/10/20 08:00	120
1,2,3-Trimethylbenzene	ND		1200	530	ug/m3			09/10/20 08:00	120
1,2,4-Trimethylbenzene	ND		1200	290	ug/m3			09/10/20 08:00	120

Client Sample ID: SV-174-A-29
Lab Sample ID: 140-20194-7
Date Collected: 08/26/20 10:07
Matrix: Air
Date Received: 08/28/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		1200	320	ug/m3			09/10/20 08:00	120
Vinyl chloride	ND		310	200	ug/m3			09/10/20 08:00	120
Xylenes, Total	ND		2100	310	ug/m3			09/10/20 08:00	120

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*60 - 140*		*09/10/20 08:00*	*120*

Client Sample ID: SV-177-A-29

Lab Sample ID: 140-20194-8

Date Collected: 08/26/20 10:08
Matrix: Air
Date Received: 08/28/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.19**	**J**	0.27	0.027	ppb v/v			09/09/20 09:26	1
Carbon tetrachloride	**0.041**	**J**	0.27	0.023	ppb v/v			09/09/20 09:26	1
Chlorodifluoromethane	**0.42**		0.27	0.073	ppb v/v			09/09/20 09:26	1
Chloroform	**0.76**		0.27	0.023	ppb v/v			09/09/20 09:26	1
cis-1,2-Dichloroethene	ND		0.27	0.033	ppb v/v			09/09/20 09:26	1
Dichlorodifluoromethane	**0.41**		0.27	0.047	ppb v/v			09/09/20 09:26	1
1,1-Dichloroethane	**0.13**	**J**	0.27	0.023	ppb v/v			09/09/20 09:26	1
1,2-Dichloroethane	ND		0.27	0.033	ppb v/v			09/09/20 09:26	1
1,1-Dichloroethene	ND		0.27	0.027	ppb v/v			09/09/20 09:26	1
Ethylbenzene	**0.15**	**J**	0.27	0.043	ppb v/v			09/09/20 09:26	1
Methylene Chloride	ND		1.3	1.3	ppb v/v			09/09/20 09:26	1
Methyl tert-butyl ether	ND		1.3	0.17	ppb v/v			09/09/20 09:26	1
Naphthalene	ND		0.13	0.13	ppb v/v			09/09/20 09:26	1
Tetrachloroethene	**0.21**	**J**	0.27	0.023	ppb v/v			09/09/20 09:26	1
Toluene	**0.89**		0.40	0.26	ppb v/v			09/09/20 09:26	1
trans-1,2-Dichloroethene	ND		0.27	0.023	ppb v/v			09/09/20 09:26	1
1,2,4-Trichlorobenzene	ND		0.27	0.21	ppb v/v			09/09/20 09:26	1
1,1,1-Trichloroethane	**0.28**		0.27	0.12	ppb v/v			09/09/20 09:26	1
1,1,2-Trichloroethane	ND		0.27	0.023	ppb v/v			09/09/20 09:26	1
Trichloroethene	**21**		0.13	0.020	ppb v/v			09/09/20 09:26	1
1,2,3-Trimethylbenzene	ND	*	0.27	0.12	ppb v/v			09/09/20 09:26	1
1,2,4-Trimethylbenzene	**0.27**		0.27	0.067	ppb v/v			09/09/20 09:26	1
1,3,5-Trimethylbenzene	ND		0.27	0.073	ppb v/v			09/09/20 09:26	1
Vinyl chloride	ND		0.13	0.087	ppb v/v			09/09/20 09:26	1
Xylenes, Total	**0.79**		0.53	0.080	ppb v/v			09/09/20 09:26	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.62**	**J**	0.85	0.085	ug/m3			09/09/20 09:26	1
Carbon tetrachloride	**0.26**	**J**	1.7	0.15	ug/m3			09/09/20 09:26	1
Chlorodifluoromethane	**1.5**		0.94	0.26	ug/m3			09/09/20 09:26	1
Chloroform	**3.7**		1.3	0.11	ug/m3			09/09/20 09:26	1
cis-1,2-Dichloroethene	ND		1.1	0.13	ug/m3			09/09/20 09:26	1
Dichlorodifluoromethane	**2.0**		1.3	0.23	ug/m3			09/09/20 09:26	1
1,1-Dichloroethane	**0.53**	**J**	1.1	0.094	ug/m3			09/09/20 09:26	1
1,2-Dichloroethane	ND		1.1	0.13	ug/m3			09/09/20 09:26	1
1,1-Dichloroethene	ND		1.1	0.11	ug/m3			09/09/20 09:26	1
Ethylbenzene	**0.65**	**J**	1.2	0.19	ug/m3			09/09/20 09:26	1
Methylene Chloride	ND		4.6	4.5	ug/m3			09/09/20 09:26	1
Methyl tert-butyl ether	ND		4.8	0.62	ug/m3			09/09/20 09:26	1
Naphthalene	ND		0.70	0.70	ug/m3			09/09/20 09:26	1
Tetrachloroethene	**1.4**	**J**	1.8	0.16	ug/m3			09/09/20 09:26	1
Toluene	**3.3**		1.5	0.98	ug/m3			09/09/20 09:26	1
trans-1,2-Dichloroethene	ND		1.1	0.093	ug/m3			09/09/20 09:26	1
1,2,4-Trichlorobenzene	ND		2.0	1.6	ug/m3			09/09/20 09:26	1
1,1,1-Trichloroethane	**1.5**		1.5	0.67	ug/m3			09/09/20 09:26	1
1,1,2-Trichloroethane	ND		1.5	0.13	ug/m3			09/09/20 09:26	1
Trichloroethene	**110**		0.72	0.11	ug/m3			09/09/20 09:26	1
1,2,3-Trimethylbenzene	ND	*	1.3	0.59	ug/m3			09/09/20 09:26	1
1,2,4-Trimethylbenzene	**1.4**		1.3	0.33	ug/m3			09/09/20 09:26	1

Client Sample ID: SV-177-A-29
Lab Sample ID: 140-20194-8
Date Collected: 08/26/20 10:08
Matrix: Air
Date Received: 08/28/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		1.3	0.36	ug/m3			09/09/20 09:26	1
Vinyl chloride	ND		0.34	0.22	ug/m3			09/09/20 09:26	1
Xylenes, Total	**3.4**		2.3	0.35	ug/m3			09/09/20 09:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*60 - 140*		*09/09/20 09:26*	*1*

Client Sample ID: SV-015-A-29

Lab Sample ID: 140-20194-9

Date Collected: 08/26/20 10:12
Matrix: Air
Date Received: 08/28/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.86**		0.40	0.040	ppb v/v			09/08/20 22:04	1
Carbon tetrachloride	**0.090**	**J**	0.40	0.035	ppb v/v			09/08/20 22:04	1
Chlorodifluoromethane	**0.31**	**J**	0.40	0.11	ppb v/v			09/08/20 22:04	1
Chloroform	**0.19**	**J**	0.40	0.035	ppb v/v			09/08/20 22:04	1
cis-1,2-Dichloroethene	**0.91**		0.40	0.050	ppb v/v			09/08/20 22:04	1
Dichlorodifluoromethane	**0.49**		0.40	0.070	ppb v/v			09/08/20 22:04	1
1,1-Dichloroethane	**2.2**		0.40	0.035	ppb v/v			09/08/20 22:04	1
1,2-Dichloroethane	ND		0.40	0.050	ppb v/v			09/08/20 22:04	1
1,1-Dichloroethene	**7.1**		0.40	0.040	ppb v/v			09/08/20 22:04	1
Ethylbenzene	**1.3**		0.40	0.065	ppb v/v			09/08/20 22:04	1
Methylene Chloride	ND		2.0	2.0	ppb v/v			09/08/20 22:04	1
Methyl tert-butyl ether	ND		2.0	0.26	ppb v/v			09/08/20 22:04	1
Naphthalene	ND		0.20	0.20	ppb v/v			09/08/20 22:04	1
Tetrachloroethene	**0.077**	**J**	0.40	0.035	ppb v/v			09/08/20 22:04	1
Toluene	**0.54**	**J**	0.60	0.39	ppb v/v			09/08/20 22:04	1
trans-1,2-Dichloroethene	**0.59**		0.40	0.035	ppb v/v			09/08/20 22:04	1
1,2,4-Trichlorobenzene	ND	*	0.40	0.32	ppb v/v			09/08/20 22:04	1
1,1,1-Trichloroethane	**1.8**		0.40	0.19	ppb v/v			09/08/20 22:04	1
1,1,2-Trichloroethane	ND		0.40	0.035	ppb v/v			09/08/20 22:04	1
Trichloroethene	**5.1**		0.20	0.030	ppb v/v			09/08/20 22:04	1
1,2,3-Trimethylbenzene	ND		0.40	0.18	ppb v/v			09/08/20 22:04	1
1,2,4-Trimethylbenzene	**0.14**	**J**	0.40	0.10	ppb v/v			09/08/20 22:04	1
1,3,5-Trimethylbenzene	**0.30**	**J**	0.40	0.11	ppb v/v			09/08/20 22:04	1
Vinyl chloride	ND		0.20	0.13	ppb v/v			09/08/20 22:04	1
Xylenes, Total	**2.8**		0.80	0.12	ppb v/v			09/08/20 22:04	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**2.7**		1.3	0.13	ug/m3			09/08/20 22:04	1
Carbon tetrachloride	**0.56**	**J**	2.5	0.22	ug/m3			09/08/20 22:04	1
Chlorodifluoromethane	**1.1**	**J**	1.4	0.39	ug/m3			09/08/20 22:04	1
Chloroform	**0.93**	**J**	2.0	0.17	ug/m3			09/08/20 22:04	1
cis-1,2-Dichloroethene	**3.6**		1.6	0.20	ug/m3			09/08/20 22:04	1
Dichlorodifluoromethane	**2.4**		2.0	0.35	ug/m3			09/08/20 22:04	1
1,1-Dichloroethane	**9.0**		1.6	0.14	ug/m3			09/08/20 22:04	1
1,2-Dichloroethane	ND		1.6	0.20	ug/m3			09/08/20 22:04	1
1,1-Dichloroethene	**28**		1.6	0.16	ug/m3			09/08/20 22:04	1
Ethylbenzene	**5.8**		1.7	0.28	ug/m3			09/08/20 22:04	1
Methylene Chloride	ND		6.9	6.8	ug/m3			09/08/20 22:04	1
Methyl tert-butyl ether	ND		7.2	0.94	ug/m3			09/08/20 22:04	1
Naphthalene	ND		1.0	1.0	ug/m3			09/08/20 22:04	1
Tetrachloroethene	**0.52**	**J**	2.7	0.24	ug/m3			09/08/20 22:04	1
Toluene	**2.0**	**J**	2.3	1.5	ug/m3			09/08/20 22:04	1
trans-1,2-Dichloroethene	**2.4**		1.6	0.14	ug/m3			09/08/20 22:04	1
1,2,4-Trichlorobenzene	ND	*	3.0	2.4	ug/m3			09/08/20 22:04	1
1,1,1-Trichloroethane	**9.9**		2.2	1.0	ug/m3			09/08/20 22:04	1
1,1,2-Trichloroethane	ND		2.2	0.19	ug/m3			09/08/20 22:04	1
Trichloroethene	**28**		1.1	0.16	ug/m3			09/08/20 22:04	1
1,2,3-Trimethylbenzene	ND		2.0	0.88	ug/m3			09/08/20 22:04	1
1,2,4-Trimethylbenzene	**0.67**	**J**	2.0	0.49	ug/m3			09/08/20 22:04	1

Client Sample ID: SV-015-A-29
Lab Sample ID: 140-20194-9
Date Collected: 08/26/20 10:12
Matrix: Air
Date Received: 08/28/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	**1.5**	**J**	2.0	0.54	ug/m3			09/08/20 22:04	1
Vinyl chloride	ND		0.51	0.33	ug/m3			09/08/20 22:04	1
Xylenes, Total	**12**		3.5	0.52	ug/m3			09/08/20 22:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*60 - 140*		*09/08/20 22:04*	*1*

Client Sample ID: SV-078-A-29

Date Collected: 08/26/20 10:16
Date Received: 08/28/20 10:00
Sample Container: Summa Canister 1L

Lab Sample ID: 140-20194-10

Matrix: Air

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.097**	**J**	0.40	0.040	ppb v/v			09/08/20 23:00	1
Carbon tetrachloride	**0.075**	**J**	0.40	0.035	ppb v/v			09/08/20 23:00	1
Chlorodifluoromethane	**0.36**	**J**	0.40	0.11	ppb v/v			09/08/20 23:00	1
Chloroform	**0.20**	**J**	0.40	0.035	ppb v/v			09/08/20 23:00	1
cis-1,2-Dichloroethene	ND		0.40	0.050	ppb v/v			09/08/20 23:00	1
Dichlorodifluoromethane	**1.0**		0.40	0.070	ppb v/v			09/08/20 23:00	1
1,1-Dichloroethane	ND		0.40	0.035	ppb v/v			09/08/20 23:00	1
1,2-Dichloroethane	ND		0.40	0.050	ppb v/v			09/08/20 23:00	1
1,1-Dichloroethene	ND		0.40	0.040	ppb v/v			09/08/20 23:00	1
Ethylbenzene	ND		0.40	0.065	ppb v/v			09/08/20 23:00	1
Methylene Chloride	ND		2.0	2.0	ppb v/v			09/08/20 23:00	1
Methyl tert-butyl ether	ND		2.0	0.26	ppb v/v			09/08/20 23:00	1
Naphthalene	ND		0.20	0.20	ppb v/v			09/08/20 23:00	1
Tetrachloroethene	**0.42**		0.40	0.035	ppb v/v			09/08/20 23:00	1
Toluene	ND		0.60	0.39	ppb v/v			09/08/20 23:00	1
trans-1,2-Dichloroethene	ND		0.40	0.035	ppb v/v			09/08/20 23:00	1
1,2,4-Trichlorobenzene	ND	*	0.40	0.32	ppb v/v			09/08/20 23:00	1
1,1,1-Trichloroethane	**0.54**		0.40	0.19	ppb v/v			09/08/20 23:00	1
1,1,2-Trichloroethane	ND		0.40	0.035	ppb v/v			09/08/20 23:00	1
Trichloroethene	**5.0**		0.20	0.030	ppb v/v			09/08/20 23:00	1
1,2,3-Trimethylbenzene	ND		0.40	0.18	ppb v/v			09/08/20 23:00	1
1,2,4-Trimethylbenzene	**0.15**	**J**	0.40	0.10	ppb v/v			09/08/20 23:00	1
1,3,5-Trimethylbenzene	**0.29**	**J**	0.40	0.11	ppb v/v			09/08/20 23:00	1
Vinyl chloride	ND		0.20	0.13	ppb v/v			09/08/20 23:00	1
Xylenes, Total	**0.32**	**J**	0.80	0.12	ppb v/v			09/08/20 23:00	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.31**	**J**	1.3	0.13	ug/m3			09/08/20 23:00	1
Carbon tetrachloride	**0.47**	**J**	2.5	0.22	ug/m3			09/08/20 23:00	1
Chlorodifluoromethane	**1.3**	**J**	1.4	0.39	ug/m3			09/08/20 23:00	1
Chloroform	**0.98**	**J**	2.0	0.17	ug/m3			09/08/20 23:00	1
cis-1,2-Dichloroethene	ND		1.6	0.20	ug/m3			09/08/20 23:00	1
Dichlorodifluoromethane	**5.0**		2.0	0.35	ug/m3			09/08/20 23:00	1
1,1-Dichloroethane	ND		1.6	0.14	ug/m3			09/08/20 23:00	1
1,2-Dichloroethane	ND		1.6	0.20	ug/m3			09/08/20 23:00	1
1,1-Dichloroethene	ND		1.6	0.16	ug/m3			09/08/20 23:00	1
Ethylbenzene	ND		1.7	0.28	ug/m3			09/08/20 23:00	1
Methylene Chloride	ND		6.9	6.8	ug/m3			09/08/20 23:00	1
Methyl tert-butyl ether	ND		7.2	0.94	ug/m3			09/08/20 23:00	1
Naphthalene	ND		1.0	1.0	ug/m3			09/08/20 23:00	1
Tetrachloroethene	**2.9**		2.7	0.24	ug/m3			09/08/20 23:00	1
Toluene	ND		2.3	1.5	ug/m3			09/08/20 23:00	1
trans-1,2-Dichloroethene	ND		1.6	0.14	ug/m3			09/08/20 23:00	1
1,2,4-Trichlorobenzene	ND	*	3.0	2.4	ug/m3			09/08/20 23:00	1
1,1,1-Trichloroethane	**2.9**		2.2	1.0	ug/m3			09/08/20 23:00	1
1,1,2-Trichloroethane	ND		2.2	0.19	ug/m3			09/08/20 23:00	1
Trichloroethene	**27**		1.1	0.16	ug/m3			09/08/20 23:00	1
1,2,3-Trimethylbenzene	ND		2.0	0.88	ug/m3			09/08/20 23:00	1
1,2,4-Trimethylbenzene	**0.72**	**J**	2.0	0.49	ug/m3			09/08/20 23:00	1

Client Sample ID: SV-078-A-29
Lab Sample ID: 140-20194-10
Date Collected: 08/26/20 10:16
Matrix: Air
Date Received: 08/28/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	**1.4**	**J**	2.0	0.54	ug/m3			09/08/20 23:00	1
Vinyl chloride	ND		0.51	0.33	ug/m3			09/08/20 23:00	1
Xylenes, Total	**1.4**	**J**	3.5	0.52	ug/m3			09/08/20 23:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*60 - 140*		*09/08/20 23:00*	*1*

Client Sample ID: SV-076-A-29

Lab Sample ID: 140-20194-11

Date Collected: 08/26/20 10:18

Matrix: Air

Date Received: 08/28/20 10:00

Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.12**	**J**	0.40	0.040	ppb v/v			09/08/20 23:55	1
Carbon tetrachloride	**0.085**	**J**	0.40	0.035	ppb v/v			09/08/20 23:55	1
Chlorodifluoromethane	**0.28**	**J**	0.40	0.11	ppb v/v			09/08/20 23:55	1
Chloroform	**0.051**	**J**	0.40	0.035	ppb v/v			09/08/20 23:55	1
cis-1,2-Dichloroethene	ND		0.40	0.050	ppb v/v			09/08/20 23:55	1
Dichlorodifluoromethane	**0.52**		0.40	0.070	ppb v/v			09/08/20 23:55	1
1,1-Dichloroethane	ND		0.40	0.035	ppb v/v			09/08/20 23:55	1
1,2-Dichloroethane	ND		0.40	0.050	ppb v/v			09/08/20 23:55	1
1,1-Dichloroethene	ND		0.40	0.040	ppb v/v			09/08/20 23:55	1
Ethylbenzene	ND		0.40	0.065	ppb v/v			09/08/20 23:55	1
Methylene Chloride	ND		2.0	2.0	ppb v/v			09/08/20 23:55	1
Methyl tert-butyl ether	ND		2.0	0.26	ppb v/v			09/08/20 23:55	1
Naphthalene	ND		0.20	0.20	ppb v/v			09/08/20 23:55	1
Tetrachloroethene	**0.19**	**J**	0.40	0.035	ppb v/v			09/08/20 23:55	1
Toluene	ND		0.60	0.39	ppb v/v			09/08/20 23:55	1
trans-1,2-Dichloroethene	ND		0.40	0.035	ppb v/v			09/08/20 23:55	1
1,2,4-Trichlorobenzene	ND	*	0.40	0.32	ppb v/v			09/08/20 23:55	1
1,1,1-Trichloroethane	**0.39**	**J**	0.40	0.19	ppb v/v			09/08/20 23:55	1
1,1,2-Trichloroethane	ND		0.40	0.035	ppb v/v			09/08/20 23:55	1
Trichloroethene	**0.89**		0.20	0.030	ppb v/v			09/08/20 23:55	1
1,2,3-Trimethylbenzene	**1.4**		0.40	0.18	ppb v/v			09/08/20 23:55	1
1,2,4-Trimethylbenzene	**1.1**		0.40	0.10	ppb v/v			09/08/20 23:55	1
1,3,5-Trimethylbenzene	**1.7**		0.40	0.11	ppb v/v			09/08/20 23:55	1
Vinyl chloride	ND		0.20	0.13	ppb v/v			09/08/20 23:55	1
Xylenes, Total	**0.37**	**J**	0.80	0.12	ppb v/v			09/08/20 23:55	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.37**	**J**	1.3	0.13	ug/m3			09/08/20 23:55	1
Carbon tetrachloride	**0.53**	**J**	2.5	0.22	ug/m3			09/08/20 23:55	1
Chlorodifluoromethane	**1.0**	**J**	1.4	0.39	ug/m3			09/08/20 23:55	1
Chloroform	**0.25**	**J**	2.0	0.17	ug/m3			09/08/20 23:55	1
cis-1,2-Dichloroethene	ND		1.6	0.20	ug/m3			09/08/20 23:55	1
Dichlorodifluoromethane	**2.6**		2.0	0.35	ug/m3			09/08/20 23:55	1
1,1-Dichloroethane	ND		1.6	0.14	ug/m3			09/08/20 23:55	1
1,2-Dichloroethane	ND		1.6	0.20	ug/m3			09/08/20 23:55	1
1,1-Dichloroethene	ND		1.6	0.16	ug/m3			09/08/20 23:55	1
Ethylbenzene	ND		1.7	0.28	ug/m3			09/08/20 23:55	1
Methylene Chloride	ND		6.9	6.8	ug/m3			09/08/20 23:55	1
Methyl tert-butyl ether	ND		7.2	0.94	ug/m3			09/08/20 23:55	1
Naphthalene	ND		1.0	1.0	ug/m3			09/08/20 23:55	1
Tetrachloroethene	**1.3**	**J**	2.7	0.24	ug/m3			09/08/20 23:55	1
Toluene	ND		2.3	1.5	ug/m3			09/08/20 23:55	1
trans-1,2-Dichloroethene	ND		1.6	0.14	ug/m3			09/08/20 23:55	1
1,2,4-Trichlorobenzene	ND	*	3.0	2.4	ug/m3			09/08/20 23:55	1
1,1,1-Trichloroethane	**2.1**	**J**	2.2	1.0	ug/m3			09/08/20 23:55	1
1,1,2-Trichloroethane	ND		2.2	0.19	ug/m3			09/08/20 23:55	1
Trichloroethene	**4.8**		1.1	0.16	ug/m3			09/08/20 23:55	1
1,2,3-Trimethylbenzene	**7.0**		2.0	0.88	ug/m3			09/08/20 23:55	1
1,2,4-Trimethylbenzene	**5.4**		2.0	0.49	ug/m3			09/08/20 23:55	1

Client Sample ID: SV-076-A-29
Lab Sample ID: 140-20194-11
Date Collected: 08/26/20 10:18
Matrix: Air
Date Received: 08/28/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	**8.3**		2.0	0.54	ug/m3			09/08/20 23:55	1
Vinyl chloride	ND		0.51	0.33	ug/m3			09/08/20 23:55	1
Xylenes, Total	**1.6**	**J**	3.5	0.52	ug/m3			09/08/20 23:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*60 - 140*		*09/08/20 23:55*	*1*

Client Sample ID: SV-168-A-29

Lab Sample ID: 140-20194-12

Date Collected: 08/26/20 10:20
Matrix: Air
Date Received: 08/28/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.055**	**J**	0.40	0.040	ppb v/v			09/09/20 08:03	1
Carbon tetrachloride	**0.098**	**J**	0.40	0.035	ppb v/v			09/09/20 08:03	1
Chlorodifluoromethane	**0.48**		0.40	0.11	ppb v/v			09/09/20 08:03	1
Chloroform	**0.58**		0.40	0.035	ppb v/v			09/09/20 08:03	1
cis-1,2-Dichloroethene	**0.072**	**J**	0.40	0.050	ppb v/v			09/09/20 08:03	1
Dichlorodifluoromethane	**0.51**		0.40	0.070	ppb v/v			09/09/20 08:03	1
1,1-Dichloroethane	**0.18**	**J**	0.40	0.035	ppb v/v			09/09/20 08:03	1
1,2-Dichloroethane	ND		0.40	0.050	ppb v/v			09/09/20 08:03	1
1,1-Dichloroethene	**7.2**		0.40	0.040	ppb v/v			09/09/20 08:03	1
Ethylbenzene	ND		0.40	0.065	ppb v/v			09/09/20 08:03	1
Methylene Chloride	**5.7**		2.0	2.0	ppb v/v			09/09/20 08:03	1
Methyl tert-butyl ether	ND		2.0	0.26	ppb v/v			09/09/20 08:03	1
Naphthalene	ND		0.20	0.20	ppb v/v			09/09/20 08:03	1
Tetrachloroethene	**0.047**	**J**	0.40	0.035	ppb v/v			09/09/20 08:03	1
Toluene	ND		0.60	0.39	ppb v/v			09/09/20 08:03	1
trans-1,2-Dichloroethene	ND		0.40	0.035	ppb v/v			09/09/20 08:03	1
1,2,4-Trichlorobenzene	ND	*	0.40	0.32	ppb v/v			09/09/20 08:03	1
1,1,1-Trichloroethane	**1.8**		0.40	0.19	ppb v/v			09/09/20 08:03	1
1,1,2-Trichloroethane	ND		0.40	0.035	ppb v/v			09/09/20 08:03	1
Trichloroethene	**6.4**		0.20	0.030	ppb v/v			09/09/20 08:03	1
1,2,3-Trimethylbenzene	ND		0.40	0.18	ppb v/v			09/09/20 08:03	1
1,2,4-Trimethylbenzene	ND		0.40	0.10	ppb v/v			09/09/20 08:03	1
1,3,5-Trimethylbenzene	ND		0.40	0.11	ppb v/v			09/09/20 08:03	1
Vinyl chloride	ND		0.20	0.13	ppb v/v			09/09/20 08:03	1
Xylenes, Total	ND		0.80	0.12	ppb v/v			09/09/20 08:03	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.18**	**J**	1.3	0.13	ug/m3			09/09/20 08:03	1
Carbon tetrachloride	**0.62**	**J**	2.5	0.22	ug/m3			09/09/20 08:03	1
Chlorodifluoromethane	**1.7**		1.4	0.39	ug/m3			09/09/20 08:03	1
Chloroform	**2.8**		2.0	0.17	ug/m3			09/09/20 08:03	1
cis-1,2-Dichloroethene	**0.29**	**J**	1.6	0.20	ug/m3			09/09/20 08:03	1
Dichlorodifluoromethane	**2.5**		2.0	0.35	ug/m3			09/09/20 08:03	1
1,1-Dichloroethane	**0.73**	**J**	1.6	0.14	ug/m3			09/09/20 08:03	1
1,2-Dichloroethane	ND		1.6	0.20	ug/m3			09/09/20 08:03	1
1,1-Dichloroethene	**28**		1.6	0.16	ug/m3			09/09/20 08:03	1
Ethylbenzene	ND		1.7	0.28	ug/m3			09/09/20 08:03	1
Methylene Chloride	**20**		6.9	6.8	ug/m3			09/09/20 08:03	1
Methyl tert-butyl ether	ND		7.2	0.94	ug/m3			09/09/20 08:03	1
Naphthalene	ND		1.0	1.0	ug/m3			09/09/20 08:03	1
Tetrachloroethene	**0.32**	**J**	2.7	0.24	ug/m3			09/09/20 08:03	1
Toluene	ND		2.3	1.5	ug/m3			09/09/20 08:03	1
trans-1,2-Dichloroethene	ND		1.6	0.14	ug/m3			09/09/20 08:03	1
1,2,4-Trichlorobenzene	ND	*	3.0	2.4	ug/m3			09/09/20 08:03	1
1,1,1-Trichloroethane	**9.7**		2.2	1.0	ug/m3			09/09/20 08:03	1
1,1,2-Trichloroethane	ND		2.2	0.19	ug/m3			09/09/20 08:03	1
Trichloroethene	**34**		1.1	0.16	ug/m3			09/09/20 08:03	1
1,2,3-Trimethylbenzene	ND		2.0	0.88	ug/m3			09/09/20 08:03	1
1,2,4-Trimethylbenzene	ND		2.0	0.49	ug/m3			09/09/20 08:03	1

Client: Tetra Tech, Inc.
Project/Site: Middle River - MRC

Job ID: 140-20194-1

Client Sample ID: SV-168-A-29
Date Collected: 08/26/20 10:20
Date Received: 08/28/20 10:00
Sample Container: Summa Canister 1L

Lab Sample ID: 140-20194-12
Matrix: Air

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		2.0	0.54	ug/m3			09/09/20 08:03	1
Vinyl chloride	ND		0.51	0.33	ug/m3			09/09/20 08:03	1
Xylenes, Total	ND		3.5	0.52	ug/m3			09/09/20 08:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*60 - 140*		*09/09/20 08:03*	*1*

Client Sample ID: SV-DUP 4-A-29

Date Collected: 08/26/20 00:00
Date Received: 08/28/20 10:00
Sample Container: Summa Canister 1L

Lab Sample ID: 140-20194-13

Matrix: Air

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.17**	**J**	0.40	0.040	ppb v/v			09/09/20 01:42	1
Carbon tetrachloride	**0.12**	**J**	0.40	0.035	ppb v/v			09/09/20 01:42	1
Chlorodifluoromethane	**0.50**		0.40	0.11	ppb v/v			09/09/20 01:42	1
Chloroform	**0.66**		0.40	0.035	ppb v/v			09/09/20 01:42	1
cis-1,2-Dichloroethene	**0.11**	**J**	0.40	0.050	ppb v/v			09/09/20 01:42	1
Dichlorodifluoromethane	**0.50**		0.40	0.070	ppb v/v			09/09/20 01:42	1
1,1-Dichloroethane	**0.19**	**J**	0.40	0.035	ppb v/v			09/09/20 01:42	1
1,2-Dichloroethane	ND		0.40	0.050	ppb v/v			09/09/20 01:42	1
1,1-Dichloroethene	**8.7**		0.40	0.040	ppb v/v			09/09/20 01:42	1
Ethylbenzene	ND		0.40	0.065	ppb v/v			09/09/20 01:42	1
Methylene Chloride	**5.3**		2.0	2.0	ppb v/v			09/09/20 01:42	1
Methyl tert-butyl ether	ND		2.0	0.26	ppb v/v			09/09/20 01:42	1
Naphthalene	ND		0.20	0.20	ppb v/v			09/09/20 01:42	1
Tetrachloroethene	**0.072**	**J**	0.40	0.035	ppb v/v			09/09/20 01:42	1
Toluene	**0.48**	**J**	0.60	0.39	ppb v/v			09/09/20 01:42	1
trans-1,2-Dichloroethene	**0.053**	**J**	0.40	0.035	ppb v/v			09/09/20 01:42	1
1,2,4-Trichlorobenzene	ND	*	0.40	0.32	ppb v/v			09/09/20 01:42	1
1,1,1-Trichloroethane	**1.9**		0.40	0.19	ppb v/v			09/09/20 01:42	1
1,1,2-Trichloroethane	ND		0.40	0.035	ppb v/v			09/09/20 01:42	1
Trichloroethene	**34**		0.20	0.030	ppb v/v			09/09/20 01:42	1
1,2,3-Trimethylbenzene	ND		0.40	0.18	ppb v/v			09/09/20 01:42	1
1,2,4-Trimethylbenzene	**0.15**	**J**	0.40	0.10	ppb v/v			09/09/20 01:42	1
1,3,5-Trimethylbenzene	**0.28**	**J**	0.40	0.11	ppb v/v			09/09/20 01:42	1
Vinyl chloride	ND		0.20	0.13	ppb v/v			09/09/20 01:42	1
Xylenes, Total	**0.28**	**J**	0.80	0.12	ppb v/v			09/09/20 01:42	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.55**	**J**	1.3	0.13	ug/m3			09/09/20 01:42	1
Carbon tetrachloride	**0.74**	**J**	2.5	0.22	ug/m3			09/09/20 01:42	1
Chlorodifluoromethane	**1.8**		1.4	0.39	ug/m3			09/09/20 01:42	1
Chloroform	**3.2**		2.0	0.17	ug/m3			09/09/20 01:42	1
cis-1,2-Dichloroethene	**0.42**	**J**	1.6	0.20	ug/m3			09/09/20 01:42	1
Dichlorodifluoromethane	**2.5**		2.0	0.35	ug/m3			09/09/20 01:42	1
1,1-Dichloroethane	**0.77**	**J**	1.6	0.14	ug/m3			09/09/20 01:42	1
1,2-Dichloroethane	ND		1.6	0.20	ug/m3			09/09/20 01:42	1
1,1-Dichloroethene	**35**		1.6	0.16	ug/m3			09/09/20 01:42	1
Ethylbenzene	ND		1.7	0.28	ug/m3			09/09/20 01:42	1
Methylene Chloride	**19**		6.9	6.8	ug/m3			09/09/20 01:42	1
Methyl tert-butyl ether	ND		7.2	0.94	ug/m3			09/09/20 01:42	1
Naphthalene	ND		1.0	1.0	ug/m3			09/09/20 01:42	1
Tetrachloroethene	**0.49**	**J**	2.7	0.24	ug/m3			09/09/20 01:42	1
Toluene	**1.8**	**J**	2.3	1.5	ug/m3			09/09/20 01:42	1
trans-1,2-Dichloroethene	**0.21**	**J**	1.6	0.14	ug/m3			09/09/20 01:42	1
1,2,4-Trichlorobenzene	ND	*	3.0	2.4	ug/m3			09/09/20 01:42	1
1,1,1-Trichloroethane	**11**		2.2	1.0	ug/m3			09/09/20 01:42	1
1,1,2-Trichloroethane	ND		2.2	0.19	ug/m3			09/09/20 01:42	1
Trichloroethene	**180**		1.1	0.16	ug/m3			09/09/20 01:42	1
1,2,3-Trimethylbenzene	ND		2.0	0.88	ug/m3			09/09/20 01:42	1
1,2,4-Trimethylbenzene	**0.71**	**J**	2.0	0.49	ug/m3			09/09/20 01:42	1

Client Sample ID: SV-DUP 4-A-29

Date Collected: 08/26/20 00:00
Date Received: 08/28/20 10:00
Sample Container: Summa Canister 1L

Lab Sample ID: 140-20194-13

Matrix: Air

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	**1.4**	**J**	2.0	0.54	ug/m3			09/09/20 01:42	1
Vinyl chloride	ND		0.51	0.33	ug/m3			09/09/20 01:42	1
Xylenes, Total	**1.2**	**J**	3.5	0.52	ug/m3			09/09/20 01:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*60 - 140*		*09/09/20 01:42*	*1*

Client Sample ID: SV-075-A-29

Lab Sample ID: 140-20194-14

Date Collected: 08/26/20 10:24
Matrix: Air
Date Received: 08/28/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.056**	**J**	0.40	0.040	ppb v/v			09/09/20 02:36	1
Carbon tetrachloride	**0.085**	**J**	0.40	0.035	ppb v/v			09/09/20 02:36	1
Chlorodifluoromethane	**2.3**		0.40	0.11	ppb v/v			09/09/20 02:36	1
Chloroform	**0.079**	**J**	0.40	0.035	ppb v/v			09/09/20 02:36	1
cis-1,2-Dichloroethene	ND		0.40	0.050	ppb v/v			09/09/20 02:36	1
Dichlorodifluoromethane	**0.53**		0.40	0.070	ppb v/v			09/09/20 02:36	1
1,1-Dichloroethane	ND		0.40	0.035	ppb v/v			09/09/20 02:36	1
1,2-Dichloroethane	ND		0.40	0.050	ppb v/v			09/09/20 02:36	1
1,1-Dichloroethene	ND		0.40	0.040	ppb v/v			09/09/20 02:36	1
Ethylbenzene	**0.11**	**J**	0.40	0.065	ppb v/v			09/09/20 02:36	1
Methylene Chloride	ND		2.0	2.0	ppb v/v			09/09/20 02:36	1
Methyl tert-butyl ether	ND		2.0	0.26	ppb v/v			09/09/20 02:36	1
Naphthalene	**2.0**		0.20	0.20	ppb v/v			09/09/20 02:36	1
Tetrachloroethene	**0.13**	**J**	0.40	0.035	ppb v/v			09/09/20 02:36	1
Toluene	**2.0**		0.60	0.39	ppb v/v			09/09/20 02:36	1
trans-1,2-Dichloroethene	ND		0.40	0.035	ppb v/v			09/09/20 02:36	1
1,2,4-Trichlorobenzene	ND	*	0.40	0.32	ppb v/v			09/09/20 02:36	1
1,1,1-Trichloroethane	ND		0.40	0.19	ppb v/v			09/09/20 02:36	1
1,1,2-Trichloroethane	ND		0.40	0.035	ppb v/v			09/09/20 02:36	1
Trichloroethene	**0.52**		0.20	0.030	ppb v/v			09/09/20 02:36	1
1,2,3-Trimethylbenzene	**0.72**		0.40	0.18	ppb v/v			09/09/20 02:36	1
1,2,4-Trimethylbenzene	**2.0**		0.40	0.10	ppb v/v			09/09/20 02:36	1
1,3,5-Trimethylbenzene	**1.1**		0.40	0.11	ppb v/v			09/09/20 02:36	1
Vinyl chloride	ND		0.20	0.13	ppb v/v			09/09/20 02:36	1
Xylenes, Total	**0.73**	**J**	0.80	0.12	ppb v/v			09/09/20 02:36	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.18**	**J**	1.3	0.13	ug/m3			09/09/20 02:36	1
Carbon tetrachloride	**0.54**	**J**	2.5	0.22	ug/m3			09/09/20 02:36	1
Chlorodifluoromethane	**8.2**		1.4	0.39	ug/m3			09/09/20 02:36	1
Chloroform	**0.38**	**J**	2.0	0.17	ug/m3			09/09/20 02:36	1
cis-1,2-Dichloroethene	ND		1.6	0.20	ug/m3			09/09/20 02:36	1
Dichlorodifluoromethane	**2.6**		2.0	0.35	ug/m3			09/09/20 02:36	1
1,1-Dichloroethane	ND		1.6	0.14	ug/m3			09/09/20 02:36	1
1,2-Dichloroethane	ND		1.6	0.20	ug/m3			09/09/20 02:36	1
1,1-Dichloroethene	ND		1.6	0.16	ug/m3			09/09/20 02:36	1
Ethylbenzene	**0.49**	**J**	1.7	0.28	ug/m3			09/09/20 02:36	1
Methylene Chloride	ND		6.9	6.8	ug/m3			09/09/20 02:36	1
Methyl tert-butyl ether	ND		7.2	0.94	ug/m3			09/09/20 02:36	1
Naphthalene	**10**		1.0	1.0	ug/m3			09/09/20 02:36	1
Tetrachloroethene	**0.89**	**J**	2.7	0.24	ug/m3			09/09/20 02:36	1
Toluene	**7.4**		2.3	1.5	ug/m3			09/09/20 02:36	1
trans-1,2-Dichloroethene	ND		1.6	0.14	ug/m3			09/09/20 02:36	1
1,2,4-Trichlorobenzene	ND	*	3.0	2.4	ug/m3			09/09/20 02:36	1
1,1,1-Trichloroethane	ND		2.2	1.0	ug/m3			09/09/20 02:36	1
1,1,2-Trichloroethane	ND		2.2	0.19	ug/m3			09/09/20 02:36	1
Trichloroethene	**2.8**		1.1	0.16	ug/m3			09/09/20 02:36	1
1,2,3-Trimethylbenzene	**3.6**		2.0	0.88	ug/m3			09/09/20 02:36	1
1,2,4-Trimethylbenzene	**10**		2.0	0.49	ug/m3			09/09/20 02:36	1

Client Sample ID: SV-075-A-29 **Lab Sample ID: 140-20194-14**
Date Collected: 08/26/20 10:24 **Matrix: Air**
Date Received: 08/28/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	**5.7**		2.0	0.54	ug/m3			09/09/20 02:36	1
Vinyl chloride	ND		0.51	0.33	ug/m3			09/09/20 02:36	1
Xylenes, Total	**3.2**	**J**	3.5	0.52	ug/m3			09/09/20 02:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*60 - 140*		*09/09/20 02:36*	*1*

Client Sample ID: SV-136-A-29

Lab Sample ID: 140-20194-15

Date Collected: 08/26/20 10:26
Matrix: Air
Date Received: 08/28/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.81**	**J**	2.0	0.20	ppb v/v			09/09/20 03:32	1
Carbon tetrachloride	ND		2.0	0.18	ppb v/v			09/09/20 03:32	1
Chlorodifluoromethane	ND		2.0	0.55	ppb v/v			09/09/20 03:32	1
Chloroform	**0.37**	**J**	2.0	0.18	ppb v/v			09/09/20 03:32	1
cis-1,2-Dichloroethene	**0.45**	**J**	2.0	0.25	ppb v/v			09/09/20 03:32	1
Dichlorodifluoromethane	**0.45**	**J**	2.0	0.35	ppb v/v			09/09/20 03:32	1
1,1-Dichloroethane	ND		2.0	0.18	ppb v/v			09/09/20 03:32	1
1,2-Dichloroethane	ND		2.0	0.25	ppb v/v			09/09/20 03:32	1
1,1-Dichloroethene	ND		2.0	0.20	ppb v/v			09/09/20 03:32	1
Ethylbenzene	ND		2.0	0.33	ppb v/v			09/09/20 03:32	1
Methylene Chloride	ND		10	9.8	ppb v/v			09/09/20 03:32	1
Methyl tert-butyl ether	ND		10	1.3	ppb v/v			09/09/20 03:32	1
Naphthalene	ND		1.0	1.0	ppb v/v			09/09/20 03:32	1
Tetrachloroethene	ND		2.0	0.18	ppb v/v			09/09/20 03:32	1
Toluene	ND		3.0	2.0	ppb v/v			09/09/20 03:32	1
trans-1,2-Dichloroethene	ND		2.0	0.18	ppb v/v			09/09/20 03:32	1
1,2,4-Trichlorobenzene	ND	*	2.0	1.6	ppb v/v			09/09/20 03:32	1
1,1,1-Trichloroethane	ND		2.0	0.93	ppb v/v			09/09/20 03:32	1
1,1,2-Trichloroethane	ND		2.0	0.18	ppb v/v			09/09/20 03:32	1
Trichloroethene	**89**		1.0	0.15	ppb v/v			09/09/20 03:32	1
1,2,3-Trimethylbenzene	ND		2.0	0.90	ppb v/v			09/09/20 03:32	1
1,2,4-Trimethylbenzene	ND		2.0	0.50	ppb v/v			09/09/20 03:32	1
1,3,5-Trimethylbenzene	ND		2.0	0.55	ppb v/v			09/09/20 03:32	1
Vinyl chloride	ND		1.0	0.65	ppb v/v			09/09/20 03:32	1
Xylenes, Total	ND		4.0	0.60	ppb v/v			09/09/20 03:32	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**2.6**	**J**	6.4	0.64	ug/m3			09/09/20 03:32	1
Carbon tetrachloride	ND		13	1.1	ug/m3			09/09/20 03:32	1
Chlorodifluoromethane	ND		7.1	1.9	ug/m3			09/09/20 03:32	1
Chloroform	**1.8**	**J**	9.8	0.85	ug/m3			09/09/20 03:32	1
cis-1,2-Dichloroethene	**1.8**	**J**	7.9	0.99	ug/m3			09/09/20 03:32	1
Dichlorodifluoromethane	**2.2**	**J**	9.9	1.7	ug/m3			09/09/20 03:32	1
1,1-Dichloroethane	ND		8.1	0.71	ug/m3			09/09/20 03:32	1
1,2-Dichloroethane	ND		8.1	1.0	ug/m3			09/09/20 03:32	1
1,1-Dichloroethene	ND		7.9	0.79	ug/m3			09/09/20 03:32	1
Ethylbenzene	ND		8.7	1.4	ug/m3			09/09/20 03:32	1
Methylene Chloride	ND		35	34	ug/m3			09/09/20 03:32	1
Methyl tert-butyl ether	ND		36	4.7	ug/m3			09/09/20 03:32	1
Naphthalene	ND		5.2	5.2	ug/m3			09/09/20 03:32	1
Tetrachloroethene	ND		14	1.2	ug/m3			09/09/20 03:32	1
Toluene	ND		11	7.3	ug/m3			09/09/20 03:32	1
trans-1,2-Dichloroethene	ND		7.9	0.69	ug/m3			09/09/20 03:32	1
1,2,4-Trichlorobenzene	ND	*	15	12	ug/m3			09/09/20 03:32	1
1,1,1-Trichloroethane	ND		11	5.0	ug/m3			09/09/20 03:32	1
1,1,2-Trichloroethane	ND		11	0.95	ug/m3			09/09/20 03:32	1
Trichloroethene	**480**		5.4	0.81	ug/m3			09/09/20 03:32	1
1,2,3-Trimethylbenzene	ND		9.8	4.4	ug/m3			09/09/20 03:32	1
1,2,4-Trimethylbenzene	ND		9.8	2.5	ug/m3			09/09/20 03:32	1

Client Sample ID: SV-136-A-29
Lab Sample ID: 140-20194-15

Date Collected: 08/26/20 10:26
Matrix: Air
Date Received: 08/28/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		9.8	2.7	ug/m3			09/09/20 03:32	1
Vinyl chloride	ND		2.6	1.7	ug/m3			09/09/20 03:32	1
Xylenes, Total	ND		17	2.6	ug/m3			09/09/20 03:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*60 - 140*		*09/09/20 03:32*	*1*

Client Sample ID: SV-101-B-29

Date Collected: 08/26/20 10:27
Date Received: 08/28/20 10:00
Sample Container: Summa Canister 1L

Lab Sample ID: 140-20194-16

Matrix: Air

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.060**	**J**	0.40	0.040	ppb v/v			09/09/20 04:29	1
Carbon tetrachloride	**1.1**		0.40	0.035	ppb v/v			09/09/20 04:29	1
Chlorodifluoromethane	**0.86**		0.40	0.11	ppb v/v			09/09/20 04:29	1
Chloroform	**0.18**	**J**	0.40	0.035	ppb v/v			09/09/20 04:29	1
cis-1,2-Dichloroethene	ND		0.40	0.050	ppb v/v			09/09/20 04:29	1
Dichlorodifluoromethane	**1.2**		0.40	0.070	ppb v/v			09/09/20 04:29	1
1,1-Dichloroethane	ND		0.40	0.035	ppb v/v			09/09/20 04:29	1
1,2-Dichloroethane	ND		0.40	0.050	ppb v/v			09/09/20 04:29	1
1,1-Dichloroethene	ND		0.40	0.040	ppb v/v			09/09/20 04:29	1
Ethylbenzene	ND		0.40	0.065	ppb v/v			09/09/20 04:29	1
Methylene Chloride	ND		2.0	2.0	ppb v/v			09/09/20 04:29	1
Methyl tert-butyl ether	ND		2.0	0.26	ppb v/v			09/09/20 04:29	1
Naphthalene	**0.55**		0.20	0.20	ppb v/v			09/09/20 04:29	1
Tetrachloroethene	**11**		0.40	0.035	ppb v/v			09/09/20 04:29	1
Toluene	**0.44**	**J**	0.60	0.39	ppb v/v			09/09/20 04:29	1
trans-1,2-Dichloroethene	ND		0.40	0.035	ppb v/v			09/09/20 04:29	1
1,2,4-Trichlorobenzene	ND	*	0.40	0.32	ppb v/v			09/09/20 04:29	1
1,1,1-Trichloroethane	**41**		0.40	0.19	ppb v/v			09/09/20 04:29	1
1,1,2-Trichloroethane	ND		0.40	0.035	ppb v/v			09/09/20 04:29	1
Trichloroethene	**29**		0.20	0.030	ppb v/v			09/09/20 04:29	1
1,2,3-Trimethylbenzene	**1.1**		0.40	0.18	ppb v/v			09/09/20 04:29	1
1,2,4-Trimethylbenzene	**3.0**		0.40	0.10	ppb v/v			09/09/20 04:29	1
1,3,5-Trimethylbenzene	**1.2**		0.40	0.11	ppb v/v			09/09/20 04:29	1
Vinyl chloride	ND		0.20	0.13	ppb v/v			09/09/20 04:29	1
Xylenes, Total	**0.39**	**J**	0.80	0.12	ppb v/v			09/09/20 04:29	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.19**	**J**	1.3	0.13	ug/m3			09/09/20 04:29	1
Carbon tetrachloride	**6.8**		2.5	0.22	ug/m3			09/09/20 04:29	1
Chlorodifluoromethane	**3.0**		1.4	0.39	ug/m3			09/09/20 04:29	1
Chloroform	**0.87**	**J**	2.0	0.17	ug/m3			09/09/20 04:29	1
cis-1,2-Dichloroethene	ND		1.6	0.20	ug/m3			09/09/20 04:29	1
Dichlorodifluoromethane	**6.0**		2.0	0.35	ug/m3			09/09/20 04:29	1
1,1-Dichloroethane	ND		1.6	0.14	ug/m3			09/09/20 04:29	1
1,2-Dichloroethane	ND		1.6	0.20	ug/m3			09/09/20 04:29	1
1,1-Dichloroethene	ND		1.6	0.16	ug/m3			09/09/20 04:29	1
Ethylbenzene	ND		1.7	0.28	ug/m3			09/09/20 04:29	1
Methylene Chloride	ND		6.9	6.8	ug/m3			09/09/20 04:29	1
Methyl tert-butyl ether	ND		7.2	0.94	ug/m3			09/09/20 04:29	1
Naphthalene	**2.9**		1.0	1.0	ug/m3			09/09/20 04:29	1
Tetrachloroethene	**73**		2.7	0.24	ug/m3			09/09/20 04:29	1
Toluene	**1.7**	**J**	2.3	1.5	ug/m3			09/09/20 04:29	1
trans-1,2-Dichloroethene	ND		1.6	0.14	ug/m3			09/09/20 04:29	1
1,2,4-Trichlorobenzene	ND	*	3.0	2.4	ug/m3			09/09/20 04:29	1
1,1,1-Trichloroethane	**220**		2.2	1.0	ug/m3			09/09/20 04:29	1
1,1,2-Trichloroethane	ND		2.2	0.19	ug/m3			09/09/20 04:29	1
Trichloroethene	**160**		1.1	0.16	ug/m3			09/09/20 04:29	1
1,2,3-Trimethylbenzene	**5.3**		2.0	0.88	ug/m3			09/09/20 04:29	1
1,2,4-Trimethylbenzene	**15**		2.0	0.49	ug/m3			09/09/20 04:29	1

Client Sample ID: SV-101-B-29
Lab Sample ID: 140-20194-16
Date Collected: 08/26/20 10:27
Matrix: Air
Date Received: 08/28/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	**5.7**		2.0	0.54	ug/m3			09/09/20 04:29	1
Vinyl chloride	ND		0.51	0.33	ug/m3			09/09/20 04:29	1
Xylenes, Total	**1.7**	**J**	3.5	0.52	ug/m3			09/09/20 04:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*60 - 140*		*09/09/20 04:29*	*1*

Client Sample ID: SV-100-B-29

Lab Sample ID: 140-20194-17

Date Collected: 08/26/20 10:30
Matrix: Air
Date Received: 08/28/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.40	0.040	ppb v/v			09/09/20 05:22	1
Carbon tetrachloride	**6.6**		0.40	0.035	ppb v/v			09/09/20 05:22	1
Chlorodifluoromethane	**0.43**		0.40	0.11	ppb v/v			09/09/20 05:22	1
Chloroform	**1.4**		0.40	0.035	ppb v/v			09/09/20 05:22	1
cis-1,2-Dichloroethene	ND		0.40	0.050	ppb v/v			09/09/20 05:22	1
Dichlorodifluoromethane	**1.0**		0.40	0.070	ppb v/v			09/09/20 05:22	1
1,1-Dichloroethane	ND		0.40	0.035	ppb v/v			09/09/20 05:22	1
1,2-Dichloroethane	ND		0.40	0.050	ppb v/v			09/09/20 05:22	1
1,1-Dichloroethene	ND		0.40	0.040	ppb v/v			09/09/20 05:22	1
Ethylbenzene	ND		0.40	0.065	ppb v/v			09/09/20 05:22	1
Methylene Chloride	ND		2.0	2.0	ppb v/v			09/09/20 05:22	1
Methyl tert-butyl ether	ND		2.0	0.26	ppb v/v			09/09/20 05:22	1
Naphthalene	ND		0.20	0.20	ppb v/v			09/09/20 05:22	1
Tetrachloroethene	**0.80**		0.40	0.035	ppb v/v			09/09/20 05:22	1
Toluene	ND		0.60	0.39	ppb v/v			09/09/20 05:22	1
trans-1,2-Dichloroethene	ND		0.40	0.035	ppb v/v			09/09/20 05:22	1
1,2,4-Trichlorobenzene	ND	*	0.40	0.32	ppb v/v			09/09/20 05:22	1
1,1,1-Trichloroethane	**0.58**		0.40	0.19	ppb v/v			09/09/20 05:22	1
1,1,2-Trichloroethane	ND		0.40	0.035	ppb v/v			09/09/20 05:22	1
Trichloroethene	**5.8**		0.20	0.030	ppb v/v			09/09/20 05:22	1
1,2,3-Trimethylbenzene	ND		0.40	0.18	ppb v/v			09/09/20 05:22	1
1,2,4-Trimethylbenzene	ND		0.40	0.10	ppb v/v			09/09/20 05:22	1
1,3,5-Trimethylbenzene	**0.25**	**J**	0.40	0.11	ppb v/v			09/09/20 05:22	1
Vinyl chloride	ND		0.20	0.13	ppb v/v			09/09/20 05:22	1
Xylenes, Total	ND		0.80	0.12	ppb v/v			09/09/20 05:22	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.3	0.13	ug/m3			09/09/20 05:22	1
Carbon tetrachloride	**42**		2.5	0.22	ug/m3			09/09/20 05:22	1
Chlorodifluoromethane	**1.5**		1.4	0.39	ug/m3			09/09/20 05:22	1
Chloroform	**6.8**		2.0	0.17	ug/m3			09/09/20 05:22	1
cis-1,2-Dichloroethene	ND		1.6	0.20	ug/m3			09/09/20 05:22	1
Dichlorodifluoromethane	**5.1**		2.0	0.35	ug/m3			09/09/20 05:22	1
1,1-Dichloroethane	ND		1.6	0.14	ug/m3			09/09/20 05:22	1
1,2-Dichloroethane	ND		1.6	0.20	ug/m3			09/09/20 05:22	1
1,1-Dichloroethene	ND		1.6	0.16	ug/m3			09/09/20 05:22	1
Ethylbenzene	ND		1.7	0.28	ug/m3			09/09/20 05:22	1
Methylene Chloride	ND		6.9	6.8	ug/m3			09/09/20 05:22	1
Methyl tert-butyl ether	ND		7.2	0.94	ug/m3			09/09/20 05:22	1
Naphthalene	ND		1.0	1.0	ug/m3			09/09/20 05:22	1
Tetrachloroethene	**5.4**		2.7	0.24	ug/m3			09/09/20 05:22	1
Toluene	ND		2.3	1.5	ug/m3			09/09/20 05:22	1
trans-1,2-Dichloroethene	ND		1.6	0.14	ug/m3			09/09/20 05:22	1
1,2,4-Trichlorobenzene	ND	*	3.0	2.4	ug/m3			09/09/20 05:22	1
1,1,1-Trichloroethane	**3.2**		2.2	1.0	ug/m3			09/09/20 05:22	1
1,1,2-Trichloroethane	ND		2.2	0.19	ug/m3			09/09/20 05:22	1
Trichloroethene	**31**		1.1	0.16	ug/m3			09/09/20 05:22	1
1,2,3-Trimethylbenzene	ND		2.0	0.88	ug/m3			09/09/20 05:22	1
1,2,4-Trimethylbenzene	ND		2.0	0.49	ug/m3			09/09/20 05:22	1

Client Sample ID: SV-100-B-29
Lab Sample ID: 140-20194-17
Date Collected: 08/26/20 10:30
Matrix: Air
Date Received: 08/28/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	**1.2**	**J**	2.0	0.54	ug/m3			09/09/20 05:22	1
Vinyl chloride	ND		0.51	0.33	ug/m3			09/09/20 05:22	1
Xylenes, Total	ND		3.5	0.52	ug/m3			09/09/20 05:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*82*		*60 - 140*		*09/09/20 05:22*	*1*

Client Sample ID: SV-079-A-29

Lab Sample ID: 140-20194-18

Date Collected: 08/26/20 10:35
Matrix: Air
Date Received: 08/28/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.13**	**J**	0.40	0.040	ppb v/v			09/09/20 07:09	1
Carbon tetrachloride	**0.076**	**J**	0.40	0.035	ppb v/v			09/09/20 07:09	1
Chlorodifluoromethane	**0.62**		0.40	0.11	ppb v/v			09/09/20 07:09	1
Chloroform	**0.15**	**J**	0.40	0.035	ppb v/v			09/09/20 07:09	1
cis-1,2-Dichloroethene	ND		0.40	0.050	ppb v/v			09/09/20 07:09	1
Dichlorodifluoromethane	**0.56**		0.40	0.070	ppb v/v			09/09/20 07:09	1
1,1-Dichloroethane	ND		0.40	0.035	ppb v/v			09/09/20 07:09	1
1,2-Dichloroethane	ND		0.40	0.050	ppb v/v			09/09/20 07:09	1
1,1-Dichloroethene	ND		0.40	0.040	ppb v/v			09/09/20 07:09	1
Ethylbenzene	**0.39**	**J**	0.40	0.065	ppb v/v			09/09/20 07:09	1
Methylene Chloride	**8.5**		2.0	2.0	ppb v/v			09/09/20 07:09	1
Methyl tert-butyl ether	ND		2.0	0.26	ppb v/v			09/09/20 07:09	1
Naphthalene	ND		0.20	0.20	ppb v/v			09/09/20 07:09	1
Tetrachloroethene	**2.0**		0.40	0.035	ppb v/v			09/09/20 07:09	1
Toluene	**0.72**		0.60	0.39	ppb v/v			09/09/20 07:09	1
trans-1,2-Dichloroethene	**0.080**	**J**	0.40	0.035	ppb v/v			09/09/20 07:09	1
1,2,4-Trichlorobenzene	ND	*	0.40	0.32	ppb v/v			09/09/20 07:09	1
1,1,1-Trichloroethane	**0.41**		0.40	0.19	ppb v/v			09/09/20 07:09	1
1,1,2-Trichloroethane	ND		0.40	0.035	ppb v/v			09/09/20 07:09	1
Trichloroethene	**25**		0.20	0.030	ppb v/v			09/09/20 07:09	1
1,2,3-Trimethylbenzene	ND		0.40	0.18	ppb v/v			09/09/20 07:09	1
1,2,4-Trimethylbenzene	**0.28**	**J**	0.40	0.10	ppb v/v			09/09/20 07:09	1
1,3,5-Trimethylbenzene	**0.39**	**J**	0.40	0.11	ppb v/v			09/09/20 07:09	1
Vinyl chloride	ND		0.20	0.13	ppb v/v			09/09/20 07:09	1
Xylenes, Total	**1.7**		0.80	0.12	ppb v/v			09/09/20 07:09	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.42**	**J**	1.3	0.13	ug/m3			09/09/20 07:09	1
Carbon tetrachloride	**0.48**	**J**	2.5	0.22	ug/m3			09/09/20 07:09	1
Chlorodifluoromethane	**2.2**		1.4	0.39	ug/m3			09/09/20 07:09	1
Chloroform	**0.74**	**J**	2.0	0.17	ug/m3			09/09/20 07:09	1
cis-1,2-Dichloroethene	ND		1.6	0.20	ug/m3			09/09/20 07:09	1
Dichlorodifluoromethane	**2.8**		2.0	0.35	ug/m3			09/09/20 07:09	1
1,1-Dichloroethane	ND		1.6	0.14	ug/m3			09/09/20 07:09	1
1,2-Dichloroethane	ND		1.6	0.20	ug/m3			09/09/20 07:09	1
1,1-Dichloroethene	ND		1.6	0.16	ug/m3			09/09/20 07:09	1
Ethylbenzene	**1.7**	**J**	1.7	0.28	ug/m3			09/09/20 07:09	1
Methylene Chloride	**30**		6.9	6.8	ug/m3			09/09/20 07:09	1
Methyl tert-butyl ether	ND		7.2	0.94	ug/m3			09/09/20 07:09	1
Naphthalene	ND		1.0	1.0	ug/m3			09/09/20 07:09	1
Tetrachloroethene	**13**		2.7	0.24	ug/m3			09/09/20 07:09	1
Toluene	**2.7**		2.3	1.5	ug/m3			09/09/20 07:09	1
trans-1,2-Dichloroethene	**0.32**	**J**	1.6	0.14	ug/m3			09/09/20 07:09	1
1,2,4-Trichlorobenzene	ND	*	3.0	2.4	ug/m3			09/09/20 07:09	1
1,1,1-Trichloroethane	**2.3**		2.2	1.0	ug/m3			09/09/20 07:09	1
1,1,2-Trichloroethane	ND		2.2	0.19	ug/m3			09/09/20 07:09	1
Trichloroethene	**130**		1.1	0.16	ug/m3			09/09/20 07:09	1
1,2,3-Trimethylbenzene	ND		2.0	0.88	ug/m3			09/09/20 07:09	1
1,2,4-Trimethylbenzene	**1.4**	**J**	2.0	0.49	ug/m3			09/09/20 07:09	1

Client Sample ID: SV-079-A-29
Lab Sample ID: 140-20194-18
Date Collected: 08/26/20 10:35
Matrix: Air
Date Received: 08/28/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	**1.9**	**J**	2.0	0.54	ug/m3			09/09/20 07:09	1
Vinyl chloride	ND		0.51	0.33	ug/m3			09/09/20 07:09	1
Xylenes, Total	**7.2**		3.5	0.52	ug/m3			09/09/20 07:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*60 - 140*		*09/09/20 07:09*	*1*

Client Sample ID: SV-139-A-29

Lab Sample ID: 140-20194-19

Date Collected: 08/26/20 10:38
Matrix: Air
Date Received: 08/28/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.085**	**J**	0.40	0.040	ppb v/v			09/08/20 23:24	1
Carbon tetrachloride	**0.090**	**J**	0.40	0.035	ppb v/v			09/08/20 23:24	1
Chlorodifluoromethane	**0.51**		0.40	0.11	ppb v/v			09/08/20 23:24	1
Chloroform	ND		0.40	0.035	ppb v/v			09/08/20 23:24	1
cis-1,2-Dichloroethene	ND		0.40	0.050	ppb v/v			09/08/20 23:24	1
Dichlorodifluoromethane	**0.47**		0.40	0.070	ppb v/v			09/08/20 23:24	1
1,1-Dichloroethane	ND		0.40	0.035	ppb v/v			09/08/20 23:24	1
1,2-Dichloroethane	ND		0.40	0.050	ppb v/v			09/08/20 23:24	1
1,1-Dichloroethene	ND		0.40	0.040	ppb v/v			09/08/20 23:24	1
Ethylbenzene	**0.95**		0.40	0.065	ppb v/v			09/08/20 23:24	1
Methylene Chloride	**7.4**		2.0	2.0	ppb v/v			09/08/20 23:24	1
Methyl tert-butyl ether	ND		2.0	0.26	ppb v/v			09/08/20 23:24	1
Naphthalene	**0.78**		0.20	0.20	ppb v/v			09/08/20 23:24	1
Tetrachloroethene	**0.68**		0.40	0.035	ppb v/v			09/08/20 23:24	1
Toluene	**0.96**		0.60	0.39	ppb v/v			09/08/20 23:24	1
trans-1,2-Dichloroethene	ND		0.40	0.035	ppb v/v			09/08/20 23:24	1
1,2,4-Trichlorobenzene	ND		0.40	0.32	ppb v/v			09/08/20 23:24	1
1,1,1-Trichloroethane	ND		0.40	0.19	ppb v/v			09/08/20 23:24	1
1,1,2-Trichloroethane	ND		0.40	0.035	ppb v/v			09/08/20 23:24	1
Trichloroethene	**0.29**		0.20	0.030	ppb v/v			09/08/20 23:24	1
1,2,3-Trimethylbenzene	**1.3**	*	0.40	0.18	ppb v/v			09/08/20 23:24	1
1,2,4-Trimethylbenzene	**1.5**		0.40	0.10	ppb v/v			09/08/20 23:24	1
1,3,5-Trimethylbenzene	**1.3**		0.40	0.11	ppb v/v			09/08/20 23:24	1
Vinyl chloride	ND		0.20	0.13	ppb v/v			09/08/20 23:24	1
Xylenes, Total	**9.7**		0.80	0.12	ppb v/v			09/08/20 23:24	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.27**	**J**	1.3	0.13	ug/m3			09/08/20 23:24	1
Carbon tetrachloride	**0.57**	**J**	2.5	0.22	ug/m3			09/08/20 23:24	1
Chlorodifluoromethane	**1.8**		1.4	0.39	ug/m3			09/08/20 23:24	1
Chloroform	ND		2.0	0.17	ug/m3			09/08/20 23:24	1
cis-1,2-Dichloroethene	ND		1.6	0.20	ug/m3			09/08/20 23:24	1
Dichlorodifluoromethane	**2.3**		2.0	0.35	ug/m3			09/08/20 23:24	1
1,1-Dichloroethane	ND		1.6	0.14	ug/m3			09/08/20 23:24	1
1,2-Dichloroethane	ND		1.6	0.20	ug/m3			09/08/20 23:24	1
1,1-Dichloroethene	ND		1.6	0.16	ug/m3			09/08/20 23:24	1
Ethylbenzene	**4.1**		1.7	0.28	ug/m3			09/08/20 23:24	1
Methylene Chloride	**26**		6.9	6.8	ug/m3			09/08/20 23:24	1
Methyl tert-butyl ether	ND		7.2	0.94	ug/m3			09/08/20 23:24	1
Naphthalene	**4.1**		1.0	1.0	ug/m3			09/08/20 23:24	1
Tetrachloroethene	**4.6**		2.7	0.24	ug/m3			09/08/20 23:24	1
Toluene	**3.6**		2.3	1.5	ug/m3			09/08/20 23:24	1
trans-1,2-Dichloroethene	ND		1.6	0.14	ug/m3			09/08/20 23:24	1
1,2,4-Trichlorobenzene	ND		3.0	2.4	ug/m3			09/08/20 23:24	1
1,1,1-Trichloroethane	ND		2.2	1.0	ug/m3			09/08/20 23:24	1
1,1,2-Trichloroethane	ND		2.2	0.19	ug/m3			09/08/20 23:24	1
Trichloroethene	**1.6**		1.1	0.16	ug/m3			09/08/20 23:24	1
1,2,3-Trimethylbenzene	**6.5**	*	2.0	0.88	ug/m3			09/08/20 23:24	1
1,2,4-Trimethylbenzene	**7.5**		2.0	0.49	ug/m3			09/08/20 23:24	1

Client Sample ID: SV-139-A-29
Lab Sample ID: 140-20194-19
Date Collected: 08/26/20 10:38
Matrix: Air
Date Received: 08/28/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	**6.5**		2.0	0.54	ug/m3			09/08/20 23:24	1
Vinyl chloride	ND		0.51	0.33	ug/m3			09/08/20 23:24	1
Xylenes, Total	**42**		3.5	0.52	ug/m3			09/08/20 23:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*60 - 140*		*09/08/20 23:24*	*1*

Client Sample ID: SV-118-A-29

Lab Sample ID: 140-20194-20

Date Collected: 08/26/20 10:41
Matrix: Air
Date Received: 08/28/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.071**	**J**	0.40	0.040	ppb v/v			09/09/20 10:14	1
Carbon tetrachloride	**0.061**	**J**	0.40	0.035	ppb v/v			09/09/20 10:14	1
Chlorodifluoromethane	ND		0.40	0.11	ppb v/v			09/09/20 10:14	1
Chloroform	**0.35**	**J**	0.40	0.035	ppb v/v			09/09/20 10:14	1
cis-1,2-Dichloroethene	**10**		0.40	0.050	ppb v/v			09/09/20 10:14	1
Dichlorodifluoromethane	**0.43**		0.40	0.070	ppb v/v			09/09/20 10:14	1
1,1-Dichloroethane	**2.4**		0.40	0.035	ppb v/v			09/09/20 10:14	1
1,2-Dichloroethane	ND		0.40	0.050	ppb v/v			09/09/20 10:14	1
1,1-Dichloroethene	**18**		0.40	0.040	ppb v/v			09/09/20 10:14	1
Ethylbenzene	**1.5**		0.40	0.065	ppb v/v			09/09/20 10:14	1
Methylene Chloride	ND		2.0	2.0	ppb v/v			09/09/20 10:14	1
Methyl tert-butyl ether	ND		2.0	0.26	ppb v/v			09/09/20 10:14	1
Naphthalene	ND		0.20	0.20	ppb v/v			09/09/20 10:14	1
Tetrachloroethene	ND		0.40	0.035	ppb v/v			09/09/20 10:14	1
Toluene	**0.39**	**J**	0.60	0.39	ppb v/v			09/09/20 10:14	1
trans-1,2-Dichloroethene	**0.81**		0.40	0.035	ppb v/v			09/09/20 10:14	1
1,2,4-Trichlorobenzene	ND		0.40	0.32	ppb v/v			09/09/20 10:14	1
1,1,1-Trichloroethane	**0.72**		0.40	0.19	ppb v/v			09/09/20 10:14	1
1,1,2-Trichloroethane	ND		0.40	0.035	ppb v/v			09/09/20 10:14	1
Trichloroethene	**97**	**E**	0.20	0.030	ppb v/v			09/09/20 10:14	1
1,2,3-Trimethylbenzene	**0.69**	*****	0.40	0.18	ppb v/v			09/09/20 10:14	1
1,2,4-Trimethylbenzene	**1.4**		0.40	0.10	ppb v/v			09/09/20 10:14	1
1,3,5-Trimethylbenzene	**1.0**		0.40	0.11	ppb v/v			09/09/20 10:14	1
Vinyl chloride	**0.27**		0.20	0.13	ppb v/v			09/09/20 10:14	1
Xylenes, Total	**14**		0.80	0.12	ppb v/v			09/09/20 10:14	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.23**	**J**	1.3	0.13	ug/m3			09/09/20 10:14	1
Carbon tetrachloride	**0.38**	**J**	2.5	0.22	ug/m3			09/09/20 10:14	1
Chlorodifluoromethane	ND		1.4	0.39	ug/m3			09/09/20 10:14	1
Chloroform	**1.7**	**J**	2.0	0.17	ug/m3			09/09/20 10:14	1
cis-1,2-Dichloroethene	**40**		1.6	0.20	ug/m3			09/09/20 10:14	1
Dichlorodifluoromethane	**2.1**		2.0	0.35	ug/m3			09/09/20 10:14	1
1,1-Dichloroethane	**9.7**		1.6	0.14	ug/m3			09/09/20 10:14	1
1,2-Dichloroethane	ND		1.6	0.20	ug/m3			09/09/20 10:14	1
1,1-Dichloroethene	**72**		1.6	0.16	ug/m3			09/09/20 10:14	1
Ethylbenzene	**6.6**		1.7	0.28	ug/m3			09/09/20 10:14	1
Methylene Chloride	ND		6.9	6.8	ug/m3			09/09/20 10:14	1
Methyl tert-butyl ether	ND		7.2	0.94	ug/m3			09/09/20 10:14	1
Naphthalene	ND		1.0	1.0	ug/m3			09/09/20 10:14	1
Tetrachloroethene	ND		2.7	0.24	ug/m3			09/09/20 10:14	1
Toluene	**1.5**	**J**	2.3	1.5	ug/m3			09/09/20 10:14	1
trans-1,2-Dichloroethene	**3.2**		1.6	0.14	ug/m3			09/09/20 10:14	1
1,2,4-Trichlorobenzene	ND		3.0	2.4	ug/m3			09/09/20 10:14	1
1,1,1-Trichloroethane	**3.9**		2.2	1.0	ug/m3			09/09/20 10:14	1
1,1,2-Trichloroethane	ND		2.2	0.19	ug/m3			09/09/20 10:14	1
Trichloroethene	**520**	**E**	1.1	0.16	ug/m3			09/09/20 10:14	1
1,2,3-Trimethylbenzene	**3.4**	*****	2.0	0.88	ug/m3			09/09/20 10:14	1
1,2,4-Trimethylbenzene	**6.7**		2.0	0.49	ug/m3			09/09/20 10:14	1

Client Sample ID: SV-118-A-29 Lab Sample ID: 140-20194-20

Date Collected: 08/26/20 10:41 **Matrix: Air**
Date Received: 08/28/20 10:00
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	5.0		2.0	0.54	ug/m3			09/09/20 10:14	1
Vinyl chloride	0.69		0.51	0.33	ug/m3			09/09/20 10:14	1
Xylenes, Total	61		3.5	0.52	ug/m3			09/09/20 10:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*60 - 140*		*09/09/20 10:14*	*1*

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	120		0.40	0.060	ppb v/v			09/09/20 14:44	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	650		2.1	0.32	ug/m3			09/09/20 14:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*60 - 140*		*09/09/20 14:44*	*1*

Default Detection Limits

Client: Tetra Tech, Inc.
Project/Site: Middle River - MRC

Job ID: 140-20194-1

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	RL	MDL	Units
1,1,1-Trichloroethane	0.080	0.037	ppb v/v
1,1,1-Trichloroethane	0.44	0.20	ug/m3
1,1,2-Trichloroethane	0.080	0.0070	ppb v/v
1,1,2-Trichloroethane	0.44	0.038	ug/m3
1,1-Dichloroethane	0.080	0.0070	ppb v/v
1,1-Dichloroethane	0.32	0.028	ug/m3
1,1-Dichloroethene	0.080	0.0080	ppb v/v
1,1-Dichloroethene	0.32	0.032	ug/m3
1,2,3-Trimethylbenzene	0.080	0.036	ppb v/v
1,2,3-Trimethylbenzene	0.39	0.18	ug/m3
1,2,4-Trichlorobenzene	0.080	0.064	ppb v/v
1,2,4-Trichlorobenzene	0.59	0.47	ug/m3
1,2,4-Trimethylbenzene	0.080	0.020	ppb v/v
1,2,4-Trimethylbenzene	0.39	0.098	ug/m3
1,2-Dichloroethane	0.080	0.010	ppb v/v
1,2-Dichloroethane	0.32	0.040	ug/m3
1,3,5-Trimethylbenzene	0.080	0.022	ppb v/v
1,3,5-Trimethylbenzene	0.39	0.11	ug/m3
Benzene	0.080	0.0080	ppb v/v
Benzene	0.26	0.026	ug/m3
Carbon tetrachloride	0.080	0.0070	ppb v/v
Carbon tetrachloride	0.50	0.044	ug/m3
Chlorodifluoromethane	0.080	0.022	ppb v/v
Chlorodifluoromethane	0.28	0.078	ug/m3
Chloroform	0.080	0.0070	ppb v/v
Chloroform	0.39	0.034	ug/m3
cis-1,2-Dichloroethene	0.080	0.010	ppb v/v
cis-1,2-Dichloroethene	0.32	0.040	ug/m3
Dichlorodifluoromethane	0.080	0.014	ppb v/v
Dichlorodifluoromethane	0.40	0.069	ug/m3
Ethylbenzene	0.080	0.013	ppb v/v
Ethylbenzene	0.35	0.056	ug/m3
Methyl tert-butyl ether	0.40	0.052	ppb v/v
Methyl tert-butyl ether	1.4	0.19	ug/m3
Methylene Chloride	0.40	0.39	ppb v/v
Methylene Chloride	1.4	1.4	ug/m3
Naphthalene	0.040	0.040	ppb v/v
Naphthalene	0.21	0.21	ug/m3
Tetrachloroethene	0.080	0.0070	ppb v/v
Tetrachloroethene	0.54	0.047	ug/m3
Toluene	0.12	0.078	ppb v/v
Toluene	0.45	0.29	ug/m3
trans-1,2-Dichloroethene	0.080	0.0070	ppb v/v
trans-1,2-Dichloroethene	0.32	0.028	ug/m3
Trichloroethene	0.040	0.0060	ppb v/v
Trichloroethene	0.21	0.032	ug/m3
Vinyl chloride	0.040	0.026	ppb v/v
Vinyl chloride	0.10	0.066	ug/m3
Xylenes, Total	0.16	0.024	ppb v/v
Xylenes, Total	0.69	0.10	ug/m3

Surrogate Summary

Client: Tetra Tech, Inc.
Project/Site: Middle River - MRC

Job ID: 140-20194-1

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Matrix: Air **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)								
Lab Sample ID	Client Sample ID	BFB (60-140)								
140-20194-1	SV-172-A-29	100								
140-20194-2	SV-116-A-29	102								
140-20194-3	SV-DUP 3-A-29	98								
140-20194-4	SV-138-A-29	98								
140-20194-5	SV-173-A-29	95								
140-20194-6	SV-171-A-29	98								
140-20194-7	SV-174-A-29	92								
140-20194-8	SV-177-A-29	102								
140-20194-9	SV-015-A-29	91								
140-20194-10	SV-078-A-29	92								
140-20194-11	SV-076-A-29	91								
140-20194-12	SV-168-A-29	88								
140-20194-13	SV-DUP 4-A-29	91								
140-20194-14	SV-075-A-29	94								
140-20194-15	SV-136-A-29	94								
140-20194-16	SV-101-B-29	89								
140-20194-17	SV-100-B-29	82								
140-20194-18	SV-079-A-29	91								
140-20194-19	SV-139-A-29	101								
140-20194-20	SV-118-A-29	99								
140-20194-20 - DL	SV-118-A-29	97								
LCS 140-42503/1002	Lab Control Sample	104								
LCS 140-42504/1002	Lab Control Sample	107								
LCS 140-42515/1002	Lab Control Sample	105								
MB 140-42503/5	Method Blank	98								
MB 140-42504/4	Method Blank	70								
MB 140-42515/4	Method Blank	100								

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Lab Sample ID: MB 140-42503/5
Matrix: Air
Analysis Batch: 42503

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.080	0.0080	ppb v/v			09/08/20 17:16	1
Carbon tetrachloride	ND		0.080	0.0070	ppb v/v			09/08/20 17:16	1
Chlorodifluoromethane	ND		0.080	0.022	ppb v/v			09/08/20 17:16	1
Chloroform	ND		0.080	0.0070	ppb v/v			09/08/20 17:16	1
cis-1,2-Dichloroethene	ND		0.080	0.010	ppb v/v			09/08/20 17:16	1
Dichlorodifluoromethane	ND		0.080	0.014	ppb v/v			09/08/20 17:16	1
1,1-Dichloroethane	ND		0.080	0.0070	ppb v/v			09/08/20 17:16	1
1,2-Dichloroethane	ND		0.080	0.010	ppb v/v			09/08/20 17:16	1
1,1-Dichloroethene	ND		0.080	0.0080	ppb v/v			09/08/20 17:16	1
Ethylbenzene	ND		0.080	0.013	ppb v/v			09/08/20 17:16	1
Methylene Chloride	ND		0.40	0.39	ppb v/v			09/08/20 17:16	1
Methyl tert-butyl ether	ND		0.40	0.052	ppb v/v			09/08/20 17:16	1
Naphthalene	ND		0.040	0.040	ppb v/v			09/08/20 17:16	1
Tetrachloroethene	ND		0.080	0.0070	ppb v/v			09/08/20 17:16	1
Toluene	ND		0.12	0.078	ppb v/v			09/08/20 17:16	1
trans-1,2-Dichloroethene	ND		0.080	0.0070	ppb v/v			09/08/20 17:16	1
1,2,4-Trichlorobenzene	ND		0.080	0.064	ppb v/v			09/08/20 17:16	1
1,1,1-Trichloroethane	ND		0.080	0.037	ppb v/v			09/08/20 17:16	1
1,1,2-Trichloroethane	ND		0.080	0.0070	ppb v/v			09/08/20 17:16	1
Trichloroethene	ND		0.040	0.0060	ppb v/v			09/08/20 17:16	1
1,2,3-Trimethylbenzene	ND		0.080	0.036	ppb v/v			09/08/20 17:16	1
1,2,4-Trimethylbenzene	ND		0.080	0.020	ppb v/v			09/08/20 17:16	1
1,3,5-Trimethylbenzene	ND		0.080	0.022	ppb v/v			09/08/20 17:16	1
Vinyl chloride	ND		0.040	0.026	ppb v/v			09/08/20 17:16	1
Xylenes, Total	ND		0.16	0.024	ppb v/v			09/08/20 17:16	1

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.26	0.026	ug/m3			09/08/20 17:16	1
Carbon tetrachloride	ND		0.50	0.044	ug/m3			09/08/20 17:16	1
Chlorodifluoromethane	ND		0.28	0.078	ug/m3			09/08/20 17:16	1
Chloroform	ND		0.39	0.034	ug/m3			09/08/20 17:16	1
cis-1,2-Dichloroethene	ND		0.32	0.040	ug/m3			09/08/20 17:16	1
Dichlorodifluoromethane	ND		0.40	0.069	ug/m3			09/08/20 17:16	1
1,1-Dichloroethane	ND		0.32	0.028	ug/m3			09/08/20 17:16	1
1,2-Dichloroethane	ND		0.32	0.040	ug/m3			09/08/20 17:16	1
1,1-Dichloroethene	ND		0.32	0.032	ug/m3			09/08/20 17:16	1
Ethylbenzene	ND		0.35	0.056	ug/m3			09/08/20 17:16	1
Methylene Chloride	ND		1.4	1.4	ug/m3			09/08/20 17:16	1
Methyl tert-butyl ether	ND		1.4	0.19	ug/m3			09/08/20 17:16	1
Naphthalene	ND		0.21	0.21	ug/m3			09/08/20 17:16	1
Tetrachloroethene	ND		0.54	0.047	ug/m3			09/08/20 17:16	1
Toluene	ND		0.45	0.29	ug/m3			09/08/20 17:16	1
trans-1,2-Dichloroethene	ND		0.32	0.028	ug/m3			09/08/20 17:16	1
1,2,4-Trichlorobenzene	ND		0.59	0.47	ug/m3			09/08/20 17:16	1
1,1,1-Trichloroethane	ND		0.44	0.20	ug/m3			09/08/20 17:16	1
1,1,2-Trichloroethane	ND		0.44	0.038	ug/m3			09/08/20 17:16	1
Trichloroethene	ND		0.21	0.032	ug/m3			09/08/20 17:16	1
1,2,3-Trimethylbenzene	ND		0.39	0.18	ug/m3			09/08/20 17:16	1

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Lab Sample ID: MB 140-42503/5
Matrix: Air
Analysis Batch: 42503

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.39	0.098	ug/m3			09/08/20 17:16	1
1,3,5-Trimethylbenzene	ND		0.39	0.11	ug/m3			09/08/20 17:16	1
Vinyl chloride	ND		0.10	0.066	ug/m3			09/08/20 17:16	1
Xylenes, Total	ND		0.69	0.10	ug/m3			09/08/20 17:16	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*60 - 140*		*09/08/20 17:16*	*1*

Lab Sample ID: LCS 140-42503/1002
Matrix: Air
Analysis Batch: 42503

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	1.60	1.41		ppb v/v		88	70 - 130
Carbon tetrachloride	1.60	1.51		ppb v/v		95	70 - 130
Chlorodifluoromethane	1.60	1.73		ppb v/v		108	60 - 140
Chloroform	1.60	1.49		ppb v/v		93	70 - 130
cis-1,2-Dichloroethene	1.60	1.49		ppb v/v		93	70 - 130
Dichlorodifluoromethane	1.60	1.48		ppb v/v		92	60 - 140
1,1-Dichloroethane	1.60	1.65		ppb v/v		103	70 - 130
1,2-Dichloroethane	1.60	1.46		ppb v/v		91	70 - 130
1,1-Dichloroethene	1.60	1.54		ppb v/v		96	70 - 130
Ethylbenzene	1.60	1.39		ppb v/v		87	70 - 130
Methylene Chloride	1.60	1.54		ppb v/v		96	70 - 130
Methyl tert-butyl ether	1.60	1.52		ppb v/v		95	60 - 140
Naphthalene	1.60	1.17		ppb v/v		73	60 - 140
Tetrachloroethene	1.60	1.24		ppb v/v		77	70 - 130
Toluene	1.60	1.37		ppb v/v		85	70 - 130
trans-1,2-Dichloroethene	1.60	1.44		ppb v/v		90	70 - 130
1,2,4-Trichlorobenzene	1.60	1.13		ppb v/v		71	60 - 140
1,1,1-Trichloroethane	1.60	1.45		ppb v/v		91	70 - 130
1,1,2-Trichloroethane	1.60	1.36		ppb v/v		85	70 - 130
Trichloroethene	1.60	1.26		ppb v/v		79	70 - 130
1,2,3-Trimethylbenzene	1.60	1.09	*	ppb v/v		68	70 - 130
1,2,4-Trimethylbenzene	1.60	1.26		ppb v/v		78	70 - 130
1,3,5-Trimethylbenzene	1.60	1.46		ppb v/v		91	70 - 130
Vinyl chloride	1.60	1.73		ppb v/v		108	70 - 130
Xylenes, Total	4.80	4.10		ppb v/v		85	70 - 130

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	5.1	4.50		ug/m3		88	70 - 130
Carbon tetrachloride	10	9.53		ug/m3		95	70 - 130
Chlorodifluoromethane	5.7	6.13		ug/m3		108	60 - 140
Chloroform	7.8	7.29		ug/m3		93	70 - 130
cis-1,2-Dichloroethene	6.3	5.90		ug/m3		93	70 - 130
Dichlorodifluoromethane	7.9	7.30		ug/m3		92	60 - 140
1,1-Dichloroethane	6.5	6.66		ug/m3		103	70 - 130

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Lab Sample ID: LCS 140-42503/1002
Matrix: Air
Analysis Batch: 42503

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloroethane	6.5	5.92		ug/m3		91	70 - 130
1,1-Dichloroethene	6.3	6.11		ug/m3		96	70 - 130
Ethylbenzene	6.9	6.04		ug/m3		87	70 - 130
Methylene Chloride	5.6	5.36		ug/m3		96	70 - 130
Methyl tert-butyl ether	5.8	5.49		ug/m3		95	60 - 140
Naphthalene	8.4	6.14		ug/m3		73	60 - 140
Tetrachloroethene	11	8.40		ug/m3		77	70 - 130
Toluene	6.0	5.15		ug/m3		85	70 - 130
trans-1,2-Dichloroethene	6.3	5.71		ug/m3		90	70 - 130
1,2,4-Trichlorobenzene	12	8.40		ug/m3		71	60 - 140
1,1,1-Trichloroethane	8.7	7.90		ug/m3		91	70 - 130
1,1,2-Trichloroethane	8.7	7.41		ug/m3		85	70 - 130
Trichloroethene	8.6	6.78		ug/m3		79	70 - 130
1,2,3-Trimethylbenzene	7.9	5.38	*	ug/m3		68	70 - 130
1,2,4-Trimethylbenzene	7.9	6.17		ug/m3		78	70 - 130
1,3,5-Trimethylbenzene	7.9	7.16		ug/m3		91	70 - 130
Vinyl chloride	4.1	4.43		ug/m3		108	70 - 130
Xylenes, Total	21	17.8		ug/m3		85	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*104*		*60 - 140*

Lab Sample ID: MB 140-42504/4
Matrix: Air
Analysis Batch: 42504

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.080	0.0080	ppb v/v			09/08/20 15:46	1
Carbon tetrachloride	ND		0.080	0.0070	ppb v/v			09/08/20 15:46	1
Chlorodifluoromethane	ND		0.080	0.022	ppb v/v			09/08/20 15:46	1
Chloroform	ND		0.080	0.0070	ppb v/v			09/08/20 15:46	1
cis-1,2-Dichloroethene	ND		0.080	0.010	ppb v/v			09/08/20 15:46	1
Dichlorodifluoromethane	ND		0.080	0.014	ppb v/v			09/08/20 15:46	1
1,1-Dichloroethane	ND		0.080	0.0070	ppb v/v			09/08/20 15:46	1
1,2-Dichloroethane	ND		0.080	0.010	ppb v/v			09/08/20 15:46	1
1,1-Dichloroethene	ND		0.080	0.0080	ppb v/v			09/08/20 15:46	1
Ethylbenzene	ND		0.080	0.013	ppb v/v			09/08/20 15:46	1
Methylene Chloride	ND		0.40	0.39	ppb v/v			09/08/20 15:46	1
Methyl tert-butyl ether	ND		0.40	0.052	ppb v/v			09/08/20 15:46	1
Naphthalene	ND		0.040	0.040	ppb v/v			09/08/20 15:46	1
Tetrachloroethene	ND		0.080	0.0070	ppb v/v			09/08/20 15:46	1
Toluene	ND		0.12	0.078	ppb v/v			09/08/20 15:46	1
trans-1,2-Dichloroethene	ND		0.080	0.0070	ppb v/v			09/08/20 15:46	1
1,2,4-Trichlorobenzene	ND		0.080	0.064	ppb v/v			09/08/20 15:46	1
1,1,1-Trichloroethane	ND		0.080	0.037	ppb v/v			09/08/20 15:46	1
1,1,2-Trichloroethane	ND		0.080	0.0070	ppb v/v			09/08/20 15:46	1
Trichloroethene	ND		0.040	0.0060	ppb v/v			09/08/20 15:46	1

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Lab Sample ID: MB 140-42504/4
Matrix: Air
Analysis Batch: 42504

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trimethylbenzene	ND		0.080	0.036	ppb v/v			09/08/20 15:46	1
1,2,4-Trimethylbenzene	ND		0.080	0.020	ppb v/v			09/08/20 15:46	1
1,3,5-Trimethylbenzene	ND		0.080	0.022	ppb v/v			09/08/20 15:46	1
Vinyl chloride	ND		0.040	0.026	ppb v/v			09/08/20 15:46	1
Xylenes, Total	ND		0.16	0.024	ppb v/v			09/08/20 15:46	1

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.26	0.026	ug/m3			09/08/20 15:46	1
Carbon tetrachloride	ND		0.50	0.044	ug/m3			09/08/20 15:46	1
Chlorodifluoromethane	ND		0.28	0.078	ug/m3			09/08/20 15:46	1
Chloroform	ND		0.39	0.034	ug/m3			09/08/20 15:46	1
cis-1,2-Dichloroethene	ND		0.32	0.040	ug/m3			09/08/20 15:46	1
Dichlorodifluoromethane	ND		0.40	0.069	ug/m3			09/08/20 15:46	1
1,1-Dichloroethane	ND		0.32	0.028	ug/m3			09/08/20 15:46	1
1,2-Dichloroethane	ND		0.32	0.040	ug/m3			09/08/20 15:46	1
1,1-Dichloroethene	ND		0.32	0.032	ug/m3			09/08/20 15:46	1
Ethylbenzene	ND		0.35	0.056	ug/m3			09/08/20 15:46	1
Methylene Chloride	ND		1.4	1.4	ug/m3			09/08/20 15:46	1
Methyl tert-butyl ether	ND		1.4	0.19	ug/m3			09/08/20 15:46	1
Naphthalene	ND		0.21	0.21	ug/m3			09/08/20 15:46	1
Tetrachloroethene	ND		0.54	0.047	ug/m3			09/08/20 15:46	1
Toluene	ND		0.45	0.29	ug/m3			09/08/20 15:46	1
trans-1,2-Dichloroethene	ND		0.32	0.028	ug/m3			09/08/20 15:46	1
1,2,4-Trichlorobenzene	ND		0.59	0.47	ug/m3			09/08/20 15:46	1
1,1,1-Trichloroethane	ND		0.44	0.20	ug/m3			09/08/20 15:46	1
1,1,2-Trichloroethane	ND		0.44	0.038	ug/m3			09/08/20 15:46	1
Trichloroethene	ND		0.21	0.032	ug/m3			09/08/20 15:46	1
1,2,3-Trimethylbenzene	ND		0.39	0.18	ug/m3			09/08/20 15:46	1
1,2,4-Trimethylbenzene	ND		0.39	0.098	ug/m3			09/08/20 15:46	1
1,3,5-Trimethylbenzene	ND		0.39	0.11	ug/m3			09/08/20 15:46	1
Vinyl chloride	ND		0.10	0.066	ug/m3			09/08/20 15:46	1
Xylenes, Total	ND		0.69	0.10	ug/m3			09/08/20 15:46	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*70*		*60 - 140*		*09/08/20 15:46*	*1*

Lab Sample ID: LCS 140-42504/1002
Matrix: Air
Analysis Batch: 42504

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	1.60	1.55		ppb v/v		97	70 - 130
Carbon tetrachloride	1.60	2.06		ppb v/v		129	70 - 130
Chlorodifluoromethane	1.60	1.49		ppb v/v		93	60 - 140
Chloroform	1.60	1.54		ppb v/v		96	70 - 130
cis-1,2-Dichloroethene	1.60	1.58		ppb v/v		99	70 - 130
Dichlorodifluoromethane	1.60	1.64		ppb v/v		102	60 - 140

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Lab Sample ID: LCS 140-42504/1002
Matrix: Air
Analysis Batch: 42504

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	1.60	1.53		ppb v/v		96	70 - 130
1,2-Dichloroethane	1.60	1.58		ppb v/v		99	70 - 130
1,1-Dichloroethene	1.60	1.55		ppb v/v		97	70 - 130
Ethylbenzene	1.60	1.53		ppb v/v		96	70 - 130
Methylene Chloride	1.60	1.52		ppb v/v		95	70 - 130
Methyl tert-butyl ether	1.60	1.44		ppb v/v		90	60 - 140
Naphthalene	1.60	2.13		ppb v/v		133	60 - 140
Tetrachloroethene	1.60	1.63		ppb v/v		102	70 - 130
Toluene	1.60	1.59		ppb v/v		100	70 - 130
trans-1,2-Dichloroethene	1.60	1.60		ppb v/v		100	70 - 130
1,2,4-Trichlorobenzene	1.60	2.46	*	ppb v/v		154	60 - 140
1,1,1-Trichloroethane	1.60	1.57		ppb v/v		98	70 - 130
1,1,2-Trichloroethane	1.60	1.56		ppb v/v		98	70 - 130
Trichloroethene	1.60	1.65		ppb v/v		103	70 - 130
1,2,3-Trimethylbenzene	1.60	1.41		ppb v/v		88	70 - 130
1,2,4-Trimethylbenzene	1.60	1.92		ppb v/v		120	70 - 130
1,3,5-Trimethylbenzene	1.60	1.91		ppb v/v		119	70 - 130
Vinyl chloride	1.60	1.51		ppb v/v		94	70 - 130
Xylenes, Total	4.80	4.96		ppb v/v		103	70 - 130

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	5.1	4.96		ug/m3		97	70 - 130
Carbon tetrachloride	10	13.0		ug/m3		129	70 - 130
Chlorodifluoromethane	5.7	5.27		ug/m3		93	60 - 140
Chloroform	7.8	7.51		ug/m3		96	70 - 130
cis-1,2-Dichloroethene	6.3	6.28		ug/m3		99	70 - 130
Dichlorodifluoromethane	7.9	8.09		ug/m3		102	60 - 140
1,1-Dichloroethane	6.5	6.20		ug/m3		96	70 - 130
1,2-Dichloroethane	6.5	6.39		ug/m3		99	70 - 130
1,1-Dichloroethene	6.3	6.15		ug/m3		97	70 - 130
Ethylbenzene	6.9	6.64		ug/m3		96	70 - 130
Methylene Chloride	5.6	5.30		ug/m3		95	70 - 130
Methyl tert-butyl ether	5.8	5.20		ug/m3		90	60 - 140
Naphthalene	8.4	11.2		ug/m3		133	60 - 140
Tetrachloroethene	11	11.0		ug/m3		102	70 - 130
Toluene	6.0	6.00		ug/m3		100	70 - 130
trans-1,2-Dichloroethene	6.3	6.33		ug/m3		100	70 - 130
1,2,4-Trichlorobenzene	12	18.2	*	ug/m3		154	60 - 140
1,1,1-Trichloroethane	8.7	8.55		ug/m3		98	70 - 130
1,1,2-Trichloroethane	8.7	8.51		ug/m3		98	70 - 130
Trichloroethene	8.6	8.89		ug/m3		103	70 - 130
1,2,3-Trimethylbenzene	7.9	6.94		ug/m3		88	70 - 130
1,2,4-Trimethylbenzene	7.9	9.46		ug/m3		120	70 - 130
1,3,5-Trimethylbenzene	7.9	9.37		ug/m3		119	70 - 130
Vinyl chloride	4.1	3.86		ug/m3		94	70 - 130
Xylenes, Total	21	21.5		ug/m3		103	70 - 130

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Lab Sample ID: LCS 140-42504/1002
Matrix: Air
Analysis Batch: 42504

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	*107*		*60 - 140*

Lab Sample ID: MB 140-42515/4
Matrix: Air
Analysis Batch: 42515

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.080	0.0080	ppb v/v			09/09/20 13:56	1
Carbon tetrachloride	ND		0.080	0.0070	ppb v/v			09/09/20 13:56	1
Chlorodifluoromethane	ND		0.080	0.022	ppb v/v			09/09/20 13:56	1
Chloroform	ND		0.080	0.0070	ppb v/v			09/09/20 13:56	1
cis-1,2-Dichloroethene	ND		0.080	0.010	ppb v/v			09/09/20 13:56	1
Dichlorodifluoromethane	ND		0.080	0.014	ppb v/v			09/09/20 13:56	1
1,1-Dichloroethane	ND		0.080	0.0070	ppb v/v			09/09/20 13:56	1
1,2-Dichloroethane	ND		0.080	0.010	ppb v/v			09/09/20 13:56	1
1,1-Dichloroethene	ND		0.080	0.0080	ppb v/v			09/09/20 13:56	1
Ethylbenzene	ND		0.080	0.013	ppb v/v			09/09/20 13:56	1
Methylene Chloride	ND		0.40	0.39	ppb v/v			09/09/20 13:56	1
Methyl tert-butyl ether	ND		0.40	0.052	ppb v/v			09/09/20 13:56	1
Naphthalene	ND		0.040	0.040	ppb v/v			09/09/20 13:56	1
Tetrachloroethene	ND		0.080	0.0070	ppb v/v			09/09/20 13:56	1
Toluene	ND		0.12	0.078	ppb v/v			09/09/20 13:56	1
trans-1,2-Dichloroethene	ND		0.080	0.0070	ppb v/v			09/09/20 13:56	1
1,2,4-Trichlorobenzene	ND		0.080	0.064	ppb v/v			09/09/20 13:56	1
1,1,1-Trichloroethane	ND		0.080	0.037	ppb v/v			09/09/20 13:56	1
1,1,2-Trichloroethane	ND		0.080	0.0070	ppb v/v			09/09/20 13:56	1
Trichloroethene	ND		0.040	0.0060	ppb v/v			09/09/20 13:56	1
1,2,3-Trimethylbenzene	ND		0.080	0.036	ppb v/v			09/09/20 13:56	1
1,2,4-Trimethylbenzene	ND		0.080	0.020	ppb v/v			09/09/20 13:56	1
1,3,5-Trimethylbenzene	ND		0.080	0.022	ppb v/v			09/09/20 13:56	1
Vinyl chloride	ND		0.040	0.026	ppb v/v			09/09/20 13:56	1
Xylenes, Total	ND		0.16	0.024	ppb v/v			09/09/20 13:56	1

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.26	0.026	ug/m3			09/09/20 13:56	1
Carbon tetrachloride	ND		0.50	0.044	ug/m3			09/09/20 13:56	1
Chlorodifluoromethane	ND		0.28	0.078	ug/m3			09/09/20 13:56	1
Chloroform	ND		0.39	0.034	ug/m3			09/09/20 13:56	1
cis-1,2-Dichloroethene	ND		0.32	0.040	ug/m3			09/09/20 13:56	1
Dichlorodifluoromethane	ND		0.40	0.069	ug/m3			09/09/20 13:56	1
1,1-Dichloroethane	ND		0.32	0.028	ug/m3			09/09/20 13:56	1
1,2-Dichloroethane	ND		0.32	0.040	ug/m3			09/09/20 13:56	1
1,1-Dichloroethene	ND		0.32	0.032	ug/m3			09/09/20 13:56	1
Ethylbenzene	ND		0.35	0.056	ug/m3			09/09/20 13:56	1
Methylene Chloride	ND		1.4	1.4	ug/m3			09/09/20 13:56	1
Methyl tert-butyl ether	ND		1.4	0.19	ug/m3			09/09/20 13:56	1
Naphthalene	ND		0.21	0.21	ug/m3			09/09/20 13:56	1

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Lab Sample ID: MB 140-42515/4
Matrix: Air
Analysis Batch: 42515

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		0.54	0.047	ug/m3			09/09/20 13:56	1
Toluene	ND		0.45	0.29	ug/m3			09/09/20 13:56	1
trans-1,2-Dichloroethene	ND		0.32	0.028	ug/m3			09/09/20 13:56	1
1,2,4-Trichlorobenzene	ND		0.59	0.47	ug/m3			09/09/20 13:56	1
1,1,1-Trichloroethane	ND		0.44	0.20	ug/m3			09/09/20 13:56	1
1,1,2-Trichloroethane	ND		0.44	0.038	ug/m3			09/09/20 13:56	1
Trichloroethene	ND		0.21	0.032	ug/m3			09/09/20 13:56	1
1,2,3-Trimethylbenzene	ND		0.39	0.18	ug/m3			09/09/20 13:56	1
1,2,4-Trimethylbenzene	ND		0.39	0.098	ug/m3			09/09/20 13:56	1
1,3,5-Trimethylbenzene	ND		0.39	0.11	ug/m3			09/09/20 13:56	1
Vinyl chloride	ND		0.10	0.066	ug/m3			09/09/20 13:56	1
Xylenes, Total	ND		0.69	0.10	ug/m3			09/09/20 13:56	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*60 - 140*		*09/09/20 13:56*	*1*

Lab Sample ID: LCS 140-42515/1002
Matrix: Air
Analysis Batch: 42515

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	1.60	1.64		ppb v/v		103	70 - 130
Carbon tetrachloride	1.60	1.80		ppb v/v		112	70 - 130
Chlorodifluoromethane	1.60	1.77		ppb v/v		110	60 - 140
Chloroform	1.60	1.68		ppb v/v		105	70 - 130
cis-1,2-Dichloroethene	1.60	1.36		ppb v/v		85	70 - 130
Dichlorodifluoromethane	1.60	2.09		ppb v/v		131	60 - 140
1,1-Dichloroethane	1.60	1.82		ppb v/v		114	70 - 130
1,2-Dichloroethane	1.60	1.93		ppb v/v		121	70 - 130
1,1-Dichloroethene	1.60	1.45		ppb v/v		90	70 - 130
Ethylbenzene	1.60	1.48		ppb v/v		93	70 - 130
Methylene Chloride	1.60	1.68		ppb v/v		105	70 - 130
Methyl tert-butyl ether	1.60	1.79		ppb v/v		112	60 - 140
Naphthalene	1.60	1.51		ppb v/v		95	60 - 140
Tetrachloroethene	1.60	1.34		ppb v/v		84	70 - 130
Toluene	1.60	1.41		ppb v/v		88	70 - 130
trans-1,2-Dichloroethene	1.60	1.55		ppb v/v		97	70 - 130
1,2,4-Trichlorobenzene	1.60	1.44		ppb v/v		90	60 - 140
1,1,1-Trichloroethane	1.60	1.67		ppb v/v		105	70 - 130
1,1,2-Trichloroethane	1.60	1.46		ppb v/v		91	70 - 130
Trichloroethene	1.60	1.43		ppb v/v		89	70 - 130
1,2,3-Trimethylbenzene	1.60	1.66		ppb v/v		104	70 - 130
1,2,4-Trimethylbenzene	1.60	1.54		ppb v/v		96	70 - 130
1,3,5-Trimethylbenzene	1.60	1.44		ppb v/v		90	70 - 130
Vinyl chloride	1.60	1.96		ppb v/v		123	70 - 130
Xylenes, Total	4.80	4.47		ppb v/v		93	70 - 130

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	5.1	5.25		ug/m3		103	70 - 130
Carbon tetrachloride	10	11.3		ug/m3		112	70 - 130
Chlorodifluoromethane	5.7	6.24		ug/m3		110	60 - 140
Chloroform	7.8	8.18		ug/m3		105	70 - 130
cis-1,2-Dichloroethene	6.3	5.41		ug/m3		85	70 - 130
Dichlorodifluoromethane	7.9	10.3		ug/m3		131	60 - 140
1,1-Dichloroethane	6.5	7.35		ug/m3		114	70 - 130
1,2-Dichloroethane	6.5	7.82		ug/m3		121	70 - 130
1,1-Dichloroethene	6.3	5.74		ug/m3		90	70 - 130
Ethylbenzene	6.9	6.43		ug/m3		93	70 - 130
Methylene Chloride	5.6	5.84		ug/m3		105	70 - 130
Methyl tert-butyl ether	5.8	6.45		ug/m3		112	60 - 140
Naphthalene	8.4	7.93		ug/m3		95	60 - 140
Tetrachloroethene	11	9.07		ug/m3		84	70 - 130
Toluene	6.0	5.32		ug/m3		88	70 - 130
trans-1,2-Dichloroethene	6.3	6.14		ug/m3		97	70 - 130
1,2,4-Trichlorobenzene	12	10.7		ug/m3		90	60 - 140
1,1,1-Trichloroethane	8.7	9.13		ug/m3		105	70 - 130
1,1,2-Trichloroethane	8.7	7.97		ug/m3		91	70 - 130
Trichloroethene	8.6	7.69		ug/m3		89	70 - 130
1,2,3-Trimethylbenzene	7.9	8.17		ug/m3		104	70 - 130
1,2,4-Trimethylbenzene	7.9	7.58		ug/m3		96	70 - 130
1,3,5-Trimethylbenzene	7.9	7.10		ug/m3		90	70 - 130
Vinyl chloride	4.1	5.02		ug/m3		123	70 - 130
Xylenes, Total	21	19.4		ug/m3		93	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*60 - 140*

Air - GC/MS VOA

Analysis Batch: 42503

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-20194-1	SV-172-A-29	Total/NA	Air	TO 15 LL	
140-20194-2	SV-116-A-29	Total/NA	Air	TO 15 LL	
140-20194-3	SV-DUP 3-A-29	Total/NA	Air	TO 15 LL	
140-20194-4	SV-138-A-29	Total/NA	Air	TO 15 LL	
140-20194-5	SV-173-A-29	Total/NA	Air	TO 15 LL	
140-20194-6	SV-171-A-29	Total/NA	Air	TO 15 LL	
140-20194-8	SV-177-A-29	Total/NA	Air	TO 15 LL	
140-20194-19	SV-139-A-29	Total/NA	Air	TO 15 LL	
140-20194-20	SV-118-A-29	Total/NA	Air	TO 15 LL	
MB 140-42503/5	Method Blank	Total/NA	Air	TO 15 LL	
LCS 140-42503/1002	Lab Control Sample	Total/NA	Air	TO 15 LL	

Analysis Batch: 42504

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-20194-9	SV-015-A-29	Total/NA	Air	TO 15 LL	
140-20194-10	SV-078-A-29	Total/NA	Air	TO 15 LL	
140-20194-11	SV-076-A-29	Total/NA	Air	TO 15 LL	
140-20194-12	SV-168-A-29	Total/NA	Air	TO 15 LL	
140-20194-13	SV-DUP 4-A-29	Total/NA	Air	TO 15 LL	
140-20194-14	SV-075-A-29	Total/NA	Air	TO 15 LL	
140-20194-15	SV-136-A-29	Total/NA	Air	TO 15 LL	
140-20194-16	SV-101-B-29	Total/NA	Air	TO 15 LL	
140-20194-17	SV-100-B-29	Total/NA	Air	TO 15 LL	
140-20194-18	SV-079-A-29	Total/NA	Air	TO 15 LL	
MB 140-42504/4	Method Blank	Total/NA	Air	TO 15 LL	
LCS 140-42504/1002	Lab Control Sample	Total/NA	Air	TO 15 LL	

Analysis Batch: 42515

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-20194-7	SV-174-A-29	Total/NA	Air	TO 15 LL	
140-20194-20 - DL	SV-118-A-29	Total/NA	Air	TO 15 LL	
MB 140-42515/4	Method Blank	Total/NA	Air	TO 15 LL	
LCS 140-42515/1002	Lab Control Sample	Total/NA	Air	TO 15 LL	

Client Sample ID: SV-172-A-29 — Lab Sample ID: 140-20194-1

Date Collected: 08/26/20 10:02 — **Matrix: Air**
Date Received: 08/28/20 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	100 mL	500 mL	42503	09/09/20 00:58	AFB	TAL KNX
	Instrument ID: MG									

Client Sample ID: SV-116-A-29 — Lab Sample ID: 140-20194-2

Date Collected: 08/26/20 09:58 — **Matrix: Air**
Date Received: 08/28/20 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	100 mL	500 mL	42503	09/09/20 01:43	AFB	TAL KNX
	Instrument ID: MG									

Client Sample ID: SV-DUP 3-A-29 — Lab Sample ID: 140-20194-3

Date Collected: 08/26/20 00:00 — **Matrix: Air**
Date Received: 08/28/20 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	100 mL	500 mL	42503	09/09/20 02:29	AFB	TAL KNX
	Instrument ID: MG									

Client Sample ID: SV-138-A-29 — Lab Sample ID: 140-20194-4

Date Collected: 08/26/20 10:03 — **Matrix: Air**
Date Received: 08/28/20 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	100 mL	500 mL	42503	09/09/20 03:15	AFB	TAL KNX
	Instrument ID: MG									

Client Sample ID: SV-173-A-29 — Lab Sample ID: 140-20194-5

Date Collected: 08/26/20 10:04 — **Matrix: Air**
Date Received: 08/28/20 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		9.23	14 mL	500 mL	42503	09/09/20 04:00	AFB	TAL KNX
	Instrument ID: MG									

Client Sample ID: SV-171-A-29 — Lab Sample ID: 140-20194-6

Date Collected: 08/26/20 10:06 — **Matrix: Air**
Date Received: 08/28/20 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		3.03	13 mL	500 mL	42503	09/09/20 04:44	AFB	TAL KNX
	Instrument ID: MG									

Client Sample ID: SV-174-A-29
Lab Sample ID: 140-20194-7
Date Collected: 08/26/20 10:07
Matrix: Air
Date Received: 08/28/20 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		120	20 mL	500 mL	42515	09/10/20 08:00	S1K	TAL KNX
	Instrument ID: MR									

Client Sample ID: SV-177-A-29
Lab Sample ID: 140-20194-8
Date Collected: 08/26/20 10:08
Matrix: Air
Date Received: 08/28/20 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	150 mL	500 mL	42503	09/09/20 09:26	AFB	TAL KNX
	Instrument ID: MG									

Client Sample ID: SV-015-A-29
Lab Sample ID: 140-20194-9
Date Collected: 08/26/20 10:12
Matrix: Air
Date Received: 08/28/20 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	100 mL	500 mL	42504	09/08/20 22:04	S1K	TAL KNX
	Instrument ID: MH									

Client Sample ID: SV-078-A-29
Lab Sample ID: 140-20194-10
Date Collected: 08/26/20 10:16
Matrix: Air
Date Received: 08/28/20 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	100 mL	500 mL	42504	09/08/20 23:00	S1K	TAL KNX
	Instrument ID: MH									

Client Sample ID: SV-076-A-29
Lab Sample ID: 140-20194-11
Date Collected: 08/26/20 10:18
Matrix: Air
Date Received: 08/28/20 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	100 mL	500 mL	42504	09/08/20 23:55	S1K	TAL KNX
	Instrument ID: MH									

Client Sample ID: SV-168-A-29
Lab Sample ID: 140-20194-12
Date Collected: 08/26/20 10:20
Matrix: Air
Date Received: 08/28/20 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	100 mL	500 mL	42504	09/09/20 08:03	S1K	TAL KNX
	Instrument ID: MH									

Client Sample ID: SV-DUP 4-A-29
Lab Sample ID: 140-20194-13
Date Collected: 08/26/20 00:00
Matrix: Air
Date Received: 08/28/20 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	100 mL	500 mL	42504	09/09/20 01:42	S1K	TAL KNX
	Instrument ID: MH									

Client Sample ID: SV-075-A-29
Lab Sample ID: 140-20194-14
Date Collected: 08/26/20 10:24
Matrix: Air
Date Received: 08/28/20 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	100 mL	500 mL	42504	09/09/20 02:36	S1K	TAL KNX
	Instrument ID: MH									

Client Sample ID: SV-136-A-29
Lab Sample ID: 140-20194-15
Date Collected: 08/26/20 10:26
Matrix: Air
Date Received: 08/28/20 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	20 mL	500 mL	42504	09/09/20 03:32	S1K	TAL KNX
	Instrument ID: MH									

Client Sample ID: SV-101-B-29
Lab Sample ID: 140-20194-16
Date Collected: 08/26/20 10:27
Matrix: Air
Date Received: 08/28/20 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	100 mL	500 mL	42504	09/09/20 04:29	S1K	TAL KNX
	Instrument ID: MH									

Client Sample ID: SV-100-B-29
Lab Sample ID: 140-20194-17
Date Collected: 08/26/20 10:30
Matrix: Air
Date Received: 08/28/20 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	100 mL	500 mL	42504	09/09/20 05:22	S1K	TAL KNX
	Instrument ID: MH									

Client Sample ID: SV-079-A-29
Lab Sample ID: 140-20194-18
Date Collected: 08/26/20 10:35
Matrix: Air
Date Received: 08/28/20 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	100 mL	500 mL	42504	09/09/20 07:09	S1K	TAL KNX
	Instrument ID: MH									

Client Sample ID: SV-139-A-29

Lab Sample ID: 140-20194-19

Date Collected: 08/26/20 10:38

Matrix: Air

Date Received: 08/28/20 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	100 mL	500 mL	42503	09/08/20 23:24	AFB	TAL KNX
	Instrument ID: MG									

Client Sample ID: SV-118-A-29

Lab Sample ID: 140-20194-20

Date Collected: 08/26/20 10:41

Matrix: Air

Date Received: 08/28/20 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	100 mL	500 mL	42503	09/09/20 10:14	AFB	TAL KNX
	Instrument ID: MG									
Total/NA	Analysis	TO 15 LL	DL	1	50 mL	500 mL	42515	09/09/20 14:44	S1K	TAL KNX
	Instrument ID: MR									

Client Sample ID: Method Blank

Lab Sample ID: MB 140-42503/5

Date Collected: N/A

Matrix: Air

Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	500 mL	500 mL	42503	09/08/20 17:16	AFB	TAL KNX
	Instrument ID: MG									

Client Sample ID: Method Blank

Lab Sample ID: MB 140-42504/4

Date Collected: N/A

Matrix: Air

Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	500 mL	500 mL	42504	09/08/20 15:46	S1K	TAL KNX
	Instrument ID: MH									

Client Sample ID: Method Blank

Lab Sample ID: MB 140-42515/4

Date Collected: N/A

Matrix: Air

Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	500 mL	500 mL	42515	09/09/20 13:56	S1K	TAL KNX
	Instrument ID: MR									

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 140-42503/1002

Date Collected: N/A

Matrix: Air

Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	500 mL	500 mL	42503	09/08/20 15:52	AFB	TAL KNX
	Instrument ID: MG									

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 140-42504/1002

Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	500 mL	500 mL	42504	09/08/20 13:10	S1K	TAL KNX
	Instrument ID: MH									

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 140-42515/1002

Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	500 mL	500 mL	42515	09/09/20 11:27	S1K	TAL KNX
	Instrument ID: MR									

Laboratory References:

TAL KNX = Eurofins TestAmerica, Knoxville, 5815 Middlebrook Pike, Knoxville, TN 37921, TEL (865)291-3000

Method Summary

Client: Tetra Tech, Inc.
Project/Site: Middle River - MRC

Job ID: 140-20194-1

Method	Method Description	Protocol	Laboratory
TO 15 LL	Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)	EPA	TAL KNX

Protocol References:

EPA = US Environmental Protection Agency

Laboratory References:

TAL KNX = Eurofins TestAmerica, Knoxville, 5815 Middlebrook Pike, Knoxville, TN 37921, TEL (865)291-3000

Sample Summary

Client: Tetra Tech, Inc.
Project/Site: Middle River - MRC

Job ID: 140-20194-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
140-20194-1	SV-172-A-29	Air	08/26/20 10:02	08/28/20 10:00	Air Canister (1-Liter) #11720
140-20194-2	SV-116-A-29	Air	08/26/20 09:58	08/28/20 10:00	Air Canister (1-Liter) #34002449
140-20194-3	SV-DUP 3-A-29	Air	08/26/20 00:00	08/28/20 10:00	Air Canister (1-Liter) #34002455
140-20194-4	SV-138-A-29	Air	08/26/20 10:03	08/28/20 10:00	Air Canister (1-Liter) #10753
140-20194-5	SV-173-A-29	Air	08/26/20 10:04	08/28/20 10:00	Air Canister (1-Liter) #34002475
140-20194-6	SV-171-A-29	Air	08/26/20 10:06	08/28/20 10:00	Air Canister (1-Liter) #11848
140-20194-7	SV-174-A-29	Air	08/26/20 10:07	08/28/20 10:00	Air Canister (1-Liter) #11751, Air Canister (6-Liter) #9003
140-20194-8	SV-177-A-29	Air	08/26/20 10:08	08/28/20 10:00	Air Canister (1-Liter) #11111
140-20194-9	SV-015-A-29	Air	08/26/20 10:12	08/28/20 10:00	Air Canister (1-Liter) #34002488
140-20194-10	SV-078-A-29	Air	08/26/20 10:16	08/28/20 10:00	Air Canister (1-Liter) #10960
140-20194-11	SV-076-A-29	Air	08/26/20 10:18	08/28/20 10:00	Air Canister (1-Liter) #11830
140-20194-12	SV-168-A-29	Air	08/26/20 10:20	08/28/20 10:00	Air Canister (1-Liter) #34000763
140-20194-13	SV-DUP 4-A-29	Air	08/26/20 00:00	08/28/20 10:00	Air Canister (1-Liter) #34002412
140-20194-14	SV-075-A-29	Air	08/26/20 10:24	08/28/20 10:00	Air Canister (1-Liter) #34000730
140-20194-15	SV-136-A-29	Air	08/26/20 10:26	08/28/20 10:00	Air Canister (1-Liter) #09789
140-20194-16	SV-101-B-29	Air	08/26/20 10:27	08/28/20 10:00	Air Canister (1-Liter) #34002478
140-20194-17	SV-100-B-29	Air	08/26/20 10:30	08/28/20 10:00	Air Canister (1-Liter) #11672
140-20194-18	SV-079-A-29	Air	08/26/20 10:35	08/28/20 10:00	Air Canister (1-Liter) #34002185
140-20194-19	SV-139-A-29	Air	08/26/20 10:38	08/28/20 10:00	Air Canister (1-Liter) #34000662
140-20194-20	SV-118-A-29	Air	08/26/20 10:41	08/28/20 10:00	Air Canister (1-Liter) #34002461

Method TO15 Low Level

Volatile Organic Compounds - Low level (GC/MS) by Method TO 15

FORM II
AIR - GC/MS VOA SURROGATE RECOVERY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Matrix: Air Level: Low

GC Column (1): RTX-5 ID: 0.32(mm)

Client Sample ID	Lab Sample ID	BFB #
SV-172-A-29	140-20194-1	100
SV-116-A-29	140-20194-2	102
SV-DUP 3-A-29	140-20194-3	98
SV-138-A-29	140-20194-4	98
SV-173-A-29	140-20194-5	95
SV-171-A-29	140-20194-6	98
SV-174-A-29	140-20194-7	92
SV-177-A-29	140-20194-8	102
SV-015-A-29	140-20194-9	91
SV-078-A-29	140-20194-10	92
SV-076-A-29	140-20194-11	91
SV-168-A-29	140-20194-12	88
SV-DUP 4-A-29	140-20194-13	91
SV-075-A-29	140-20194-14	94
SV-136-A-29	140-20194-15	94
SV-101-B-29	140-20194-16	89
SV-100-B-29	140-20194-17	82
SV-079-A-29	140-20194-18	91
SV-139-A-29	140-20194-19	101
SV-118-A-29	140-20194-20	99
SV-118-A-29 DL	140-20194-20 DL	97
	MB 140-42503/5	98
	MB 140-42504/4	70
	MB 140-42515/4	100
	LCS 140-42503/1002	104
	LCS 140-42504/1002	107
	LCS 140-42515/1002	105

	QC LIMITS
BFB = 4-Bromofluorobenzene (Surr)	60-140

Column to be used to flag recovery values

FORM II TO 15 LL

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Matrix: Air Level: Low Lab File ID: GCCVI08Z-LCS.d

Lab ID: LCS 140-42503/1002 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Benzene	1.60	1.41	88	70-130	
Carbon tetrachloride	1.60	1.51	95	70-130	
Chlorodifluoromethane	1.60	1.73	108	60-140	
Chloroform	1.60	1.49	93	70-130	
cis-1,2-Dichloroethene	1.60	1.49	93	70-130	
Dichlorodifluoromethane	1.60	1.48	92	60-140	
1,1-Dichloroethane	1.60	1.65	103	70-130	
1,2-Dichloroethane	1.60	1.46	91	70-130	
1,1-Dichloroethene	1.60	1.54	96	70-130	
Ethylbenzene	1.60	1.39	87	70-130	
Methylene Chloride	1.60	1.54	96	70-130	
Methyl tert-butyl ether	1.60	1.52	95	60-140	
Naphthalene	1.60	1.17	73	60-140	
Tetrachloroethene	1.60	1.24	77	70-130	
Toluene	1.60	1.37	85	70-130	
trans-1,2-Dichloroethene	1.60	1.44	90	70-130	
1,2,4-Trichlorobenzene	1.60	1.13	71	60-140	
1,1,1-Trichloroethane	1.60	1.45	91	70-130	
1,1,2-Trichloroethane	1.60	1.36	85	70-130	
Trichloroethene	1.60	1.26	79	70-130	
1,2,3-Trimethylbenzene	1.60	1.09	68	70-130	*
1,2,4-Trimethylbenzene	1.60	1.26	78	70-130	
1,3,5-Trimethylbenzene	1.60	1.46	91	70-130	
Vinyl chloride	1.60	1.73	108	70-130	
Xylenes, Total	4.80	4.10	85	70-130	

Column to be used to flag recovery and RPD values

FORM III TO 15 LL

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Matrix: Air Level: Low Lab File ID: HCCV08B-LCS.d

Lab ID: LCS 140-42504/1002 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Benzene	1.60	1.55	97	70-130	
Carbon tetrachloride	1.60	2.06	129	70-130	
Chlorodifluoromethane	1.60	1.49	93	60-140	
Chloroform	1.60	1.54	96	70-130	
cis-1,2-Dichloroethene	1.60	1.58	99	70-130	
Dichlorodifluoromethane	1.60	1.64	102	60-140	
1,1-Dichloroethane	1.60	1.53	96	70-130	
1,2-Dichloroethane	1.60	1.58	99	70-130	
1,1-Dichloroethene	1.60	1.55	97	70-130	
Ethylbenzene	1.60	1.53	96	70-130	
Methylene Chloride	1.60	1.52	95	70-130	
Methyl tert-butyl ether	1.60	1.44	90	60-140	
Naphthalene	1.60	2.13	133	60-140	
Tetrachloroethene	1.60	1.63	102	70-130	
Toluene	1.60	1.59	100	70-130	
trans-1,2-Dichloroethene	1.60	1.60	100	70-130	
1,2,4-Trichlorobenzene	1.60	2.46	154	60-140	*
1,1,1-Trichloroethane	1.60	1.57	98	70-130	
1,1,2-Trichloroethane	1.60	1.56	98	70-130	
Trichloroethene	1.60	1.65	103	70-130	
1,2,3-Trimethylbenzene	1.60	1.41	88	70-130	
1,2,4-Trimethylbenzene	1.60	1.92	120	70-130	
1,3,5-Trimethylbenzene	1.60	1.91	119	70-130	
Vinyl chloride	1.60	1.51	94	70-130	
Xylenes, Total	4.80	4.96	103	70-130	

Column to be used to flag recovery and RPD values

FORM III TO 15 LL

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Matrix: Air Level: Low Lab File ID: RCCVI09-LCS.d

Lab ID: LCS 140-42515/1002 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Benzene	1.60	1.64	103	70-130	
Carbon tetrachloride	1.60	1.80	112	70-130	
Chlorodifluoromethane	1.60	1.77	110	60-140	
Chloroform	1.60	1.68	105	70-130	
cis-1,2-Dichloroethene	1.60	1.36	85	70-130	
Dichlorodifluoromethane	1.60	2.09	131	60-140	
1,1-Dichloroethane	1.60	1.82	114	70-130	
1,2-Dichloroethane	1.60	1.93	121	70-130	
1,1-Dichloroethene	1.60	1.45	90	70-130	
Ethylbenzene	1.60	1.48	93	70-130	
Methylene Chloride	1.60	1.68	105	70-130	
Methyl tert-butyl ether	1.60	1.79	112	60-140	
Naphthalene	1.60	1.51	95	60-140	
Tetrachloroethene	1.60	1.34	84	70-130	
Toluene	1.60	1.41	88	70-130	
trans-1,2-Dichloroethene	1.60	1.55	97	70-130	
1,2,4-Trichlorobenzene	1.60	1.44	90	60-140	
1,1,1-Trichloroethane	1.60	1.67	105	70-130	
1,1,2-Trichloroethane	1.60	1.46	91	70-130	
Trichloroethene	1.60	1.43	89	70-130	
1,2,3-Trimethylbenzene	1.60	1.66	104	70-130	
1,2,4-Trimethylbenzene	1.60	1.54	96	70-130	
1,3,5-Trimethylbenzene	1.60	1.44	90	70-130	
Vinyl chloride	1.60	1.96	123	70-130	
Xylenes, Total	4.80	4.47	93	70-130	

Column to be used to flag recovery and RPD values

FORM III TO 15 LL

FORM IV
AIR - GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Lab File ID: G500BI08.D Lab Sample ID: MB 140-42503/5

Matrix: Air Heated Purge:(Y/N) N

Instrument ID: MG Date Analyzed: 09/08/2020 17:16

GC Column: RTX-5 ID: 0.32(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 140-42503/1002	GCCVI08Z-LCS.d	09/08/2020 15:52
SV-139-A-29	140-20194-19	GI08P108.D	09/08/2020 23:24
SV-172-A-29	140-20194-1	GI08P110.D	09/09/2020 00:58
SV-116-A-29	140-20194-2	GI08P111.D	09/09/2020 01:43
SV-DUP 3-A-29	140-20194-3	GI08P112.D	09/09/2020 02:29
SV-138-A-29	140-20194-4	GI08P113.D	09/09/2020 03:15
SV-173-A-29	140-20194-5	GI08P114.D	09/09/2020 04:00
SV-171-A-29	140-20194-6	GI08P115.D	09/09/2020 04:44
SV-177-A-29	140-20194-8	GI08P107R.D	09/09/2020 09:26
SV-118-A-29	140-20194-20	GI08P109R.D	09/09/2020 10:14

FORM IV
AIR - GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Lab File ID: H500BI08.D Lab Sample ID: MB 140-42504/4

Matrix: Air Heated Purge:(Y/N) N

Instrument ID: MH Date Analyzed: 09/08/2020 15:46

GC Column: RTX-5 ID: 0.32(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 140-42504/1002	HCCV08B-LCS.d	09/08/2020 13:10
SV-015-A-29	140-20194-9	HI08P107.D	09/08/2020 22:04
SV-078-A-29	140-20194-10	HI08P108.D	09/08/2020 23:00
SV-076-A-29	140-20194-11	HI08P109.D	09/08/2020 23:55
SV-DUP 4-A-29	140-20194-13	HI08P111.D	09/09/2020 01:42
SV-075-A-29	140-20194-14	HI08P112.D	09/09/2020 02:36
SV-136-A-29	140-20194-15	HI08P113.D	09/09/2020 03:32
SV-101-B-29	140-20194-16	HI08P114.D	09/09/2020 04:29
SV-100-B-29	140-20194-17	HI08P115.D	09/09/2020 05:22
SV-079-A-29	140-20194-18	HI08P116.D	09/09/2020 07:09
SV-168-A-29	140-20194-12	HI08P110R.D	09/09/2020 08:03

FORM IV
AIR - GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Lab File ID: R500BI09.D Lab Sample ID: MB 140-42515/4

Matrix: Air Heated Purge:(Y/N) N

Instrument ID: MR Date Analyzed: 09/09/2020 13:56

GC Column: RTX-5 ID: 0.32(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 140-42515/1002	RCCVI09-LCS.d	09/09/2020 11:27
SV-118-A-29 DL	140-20194-20 DL	RI09P101.D	09/09/2020 14:44
SV-174-A-29	140-20194-7	RI09P202R.D	09/10/2020 08:00

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Lab File ID: GI01BFB.D BFB Injection Date: 09/01/2020

Instrument ID: MG BFB Injection Time: 16:42

Analysis Batch No.: 42295

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	33.0	
75	30.0 - 60.0 % of mass 95	54.3	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.2	
173	Less than 2.0 % of mass 174	0.3	(0.5) 1
174	Greater than 50% of mass 95	73.8	
175	5.0 - 9.0 % of mass 174	5.3	(7.1) 1
176	95.0 - 101.0 % of mass 174	71.8	(97.2) 1
177	5.0 - 9.0 % of mass 176	4.5	(6.3) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 140-42295/3	GI01IC10.D	09/01/2020	18:07
	IC 140-42295/5	GI01IC09.D	09/01/2020	19:43
	IC 140-42295/7	GI01IC08.D	09/01/2020	21:19
	IC 140-42295/9	GI01IC01.D	09/01/2020	22:55
	IC 140-42295/10	GI01IC02.D	09/01/2020	23:39
	IC 140-42295/11	GI01IC03.D	09/02/2020	0:24
	IC 140-42295/12	GI01IC04.D	09/02/2020	1:08
	IC 140-42295/13	GI01IC05.D	09/02/2020	1:52
	IC 140-42295/14	GI01IC06.D	09/02/2020	2:38
	ICIS 140-42295/15	GI01IC07.D	09/02/2020	3:27
	ICV 140-42295/22	GI01ICVR.D	09/02/2020	8:56

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Lab File ID: GBFBI08Z.D BFB Injection Date: 09/08/2020

Instrument ID: MG BFB Injection Time: 14:50

Analysis Batch No.: 42503

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	39.4	
75	30.0 - 60.0 % of mass 95	57.1	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.4	
173	Less than 2.0 % of mass 174	0.5	(0.7) 1
174	Greater than 50% of mass 95	68.9	
175	5.0 - 9.0 % of mass 174	4.7	(6.8) 1
176	95.0 - 101.0 % of mass 174	67.9	(98.5) 1
177	5.0 - 9.0 % of mass 176	4.6	(6.8) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 140-42503/2	GCCVI08Z.D	09/08/2020	15:52
	LCS 140-42503/1002	GCCVI08Z-LCS.	09/08/2020	15:52
	MB 140-42503/5	G500BI08.D	09/08/2020	17:16
SV-139-A-29	140-20194-19	GI08P108.D	09/08/2020	23:24
SV-172-A-29	140-20194-1	GI08P110.D	09/09/2020	0:58
SV-116-A-29	140-20194-2	GI08P111.D	09/09/2020	1:43
SV-DUP 3-A-29	140-20194-3	GI08P112.D	09/09/2020	2:29
SV-138-A-29	140-20194-4	GI08P113.D	09/09/2020	3:15
SV-173-A-29	140-20194-5	GI08P114.D	09/09/2020	4:00
SV-171-A-29	140-20194-6	GI08P115.D	09/09/2020	4:44
SV-177-A-29	140-20194-8	GI08P107R.D	09/09/2020	9:26
SV-118-A-29	140-20194-20	GI08P109R.D	09/09/2020	10:14

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Lab File ID: HBFBH29.D BFB Injection Date: 08/29/2020

Instrument ID: MH BFB Injection Time: 10:00

Analysis Batch No.: 42290

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	23.2	
75	30.0 - 60.0 % of mass 95	49.8	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.8	
173	Less than 2.0 % of mass 174	0.6	(0.7) 1
174	Greater than 50% of mass 95	89.4	
175	5.0 - 9.0 % of mass 174	6.5	(7.3) 1
176	95.0 - 101.0 % of mass 174	87.1	(97.4) 1
177	5.0 - 9.0 % of mass 176	5.7	(6.5) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 140-42290/3	HH29IC10.D	08/29/2020	12:34
	IC 140-42290/5	HH29IC09.D	08/29/2020	14:25
	IC 140-42290/7	HH29IC08.D	08/29/2020	16:25
	IC 140-42290/9	HH29IC01.D	08/29/2020	18:16
	IC 140-42290/10	HH29IC02.D	08/29/2020	19:13
	IC 140-42290/11	HH29IC03.D	08/29/2020	20:11
	IC 140-42290/12	HH29IC04.D	08/29/2020	21:03
	IC 140-42290/13	HH29IC05.D	08/29/2020	21:58
	IC 140-42290/14	HH29IC06.D	08/29/2020	22:57
	ICIS 140-42290/15	HH29IC07.D	08/29/2020	23:57
	ICV 140-42290/18	HH29LCS.D	08/30/2020	2:47

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Lab File ID: HBFBI08B.D BFB Injection Date: 09/08/2020

Instrument ID: MH BFB Injection Time: 12:40

Analysis Batch No.: 42504

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	21.2	
75	30.0 - 60.0 % of mass 95	46.7	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.9	
173	Less than 2.0 % of mass 174	0.7	(0.8) 1
174	Greater than 50% of mass 95	94.3	
175	5.0 - 9.0 % of mass 174	6.6	(7.0) 1
176	95.0 - 101.0 % of mass 174	90.8	(96.3) 1
177	5.0 - 9.0 % of mass 176	5.9	(6.5) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 140-42504/2	HCCV08B.D	09/08/2020	13:10
	LCS 140-42504/1002	HCCV08B-LCS.d	09/08/2020	13:10
	MB 140-42504/4	H500BI08.D	09/08/2020	15:46
SV-015-A-29	140-20194-9	HI08P107.D	09/08/2020	22:04
SV-078-A-29	140-20194-10	HI08P108.D	09/08/2020	23:00
SV-076-A-29	140-20194-11	HI08P109.D	09/08/2020	23:55
SV-DUP 4-A-29	140-20194-13	HI08P111.D	09/09/2020	1:42
SV-075-A-29	140-20194-14	HI08P112.D	09/09/2020	2:36
SV-136-A-29	140-20194-15	HI08P113.D	09/09/2020	3:32
SV-101-B-29	140-20194-16	HI08P114.D	09/09/2020	4:29
SV-100-B-29	140-20194-17	HI08P115.D	09/09/2020	5:22
SV-079-A-29	140-20194-18	HI08P116.D	09/09/2020	7:09
SV-168-A-29	140-20194-12	HI08P110R.D	09/09/2020	8:03

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Lab File ID: RH287BLK2.D BFB Injection Date: 08/28/2020

Instrument ID: MR BFB Injection Time: 12:43

Analysis Batch No.: 42222

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	22.7	
75	30.0 - 60.0 % of mass 95	48.7	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.9	
173	Less than 2.0 % of mass 174	0.7	(0.6) 1
174	Greater than 50% of mass 95	103.7	
175	5.0 - 9.0 % of mass 174	7.5	(7.2) 1
176	95.0 - 101.0 % of mass 174	102.5	(98.8) 1
177	5.0 - 9.0 % of mass 176	6.5	(6.4) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 140-42222/3	RH28IC10X.D	08/28/2020	14:01
	IC 140-42222/5	RH28IC09.D	08/28/2020	15:43
	IC 140-42222/7	RH28IC08.D	08/28/2020	17:27
	IC 140-42222/9	RH28IC01.D	08/28/2020	19:11
	IC 140-42222/10	RH28IC02.D	08/28/2020	20:00
	IC 140-42222/11	RH28IC03.D	08/28/2020	20:50
	IC 140-42222/12	RH28IC04.D	08/28/2020	21:38
	IC 140-42222/13	RH28IC05.D	08/28/2020	22:26
	IC 140-42222/14	RH28IC06.D	08/28/2020	23:14
	ICIS 140-42222/15	RH28IC07.D	08/29/2020	0:02
	ICV 140-42222/17	RH28ICV.D	08/29/2020	1:37

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Lab File ID: RBFBI09.D BFB Injection Date: 09/09/2020

Instrument ID: MR BFB Injection Time: 10:50

Analysis Batch No.: 42515

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	35.2	
75	30.0 - 60.0 % of mass 95	61.9	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	5.9	
173	Less than 2.0 % of mass 174	0.8	(0.7) 1
174	Greater than 50% of mass 95	104.1	
175	5.0 - 9.0 % of mass 174	7.5	(7.2) 1
176	95.0 - 101.0 % of mass 174	100.0	(96.1) 1
177	5.0 - 9.0 % of mass 176	7.1	(7.1) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 140-42515/2	RCCVI09.D	09/09/2020	11:27
	LCS 140-42515/1002	RCCVI09-LCS.d	09/09/2020	11:27
	MB 140-42515/4	R500BI09.D	09/09/2020	13:56
SV-118-A-29 DL	140-20194-20 DL	RI09P101.D	09/09/2020	14:44
SV-174-A-29	140-20194-7	RI09P202R.D	09/10/2020	8:00

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Sample No.: ICIS 140-42295/15 Date Analyzed: 09/02/2020 03:27

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm)

Lab File ID (Standard): GI01IC07.D Heated Purge: (Y/N) N

Calibration ID: 2602

		CBM		DFBZ		CBZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		155264	8.81	774405	11.00	759403	15.73
UPPER LIMIT		217370	9.14	1084167	11.33	1063164	16.06
LOWER LIMIT		93158	8.48	464643	10.67	455642	15.40
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 140-42295/22		147601	8.81	795164	11.00	773847	15.73

CBM = Chlorobromomethane (IS)
DFBZ = 1,4-Difluorobenzene
CBZd5 = Chlorobenzene-d5 (IS)

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO 15 LL

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Sample No.: CCVIS 140-42503/2 Date Analyzed: 09/08/2020 15:52

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm)

Lab File ID (Standard): GCCVI08Z.D Heated Purge: (Y/N) N

Calibration ID: 2602

		CBM		DFBZ		CBZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		85639	8.81	429335	10.99	458464	15.72
UPPER LIMIT		119895	9.14	601069	11.32	641850	16.05
LOWER LIMIT		51383	8.48	257601	10.66	275078	15.39
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 140-42503/1002		85639	8.81	429335	10.99	458464	15.72
MB 140-42503/5		92424	8.81	511454	10.99	492844	15.73
140-20194-19	SV-139-A-29	86582	8.81	410202	11.00	454862	15.72
140-20194-1	SV-172-A-29	103554	8.81	587760	10.99	579950	15.72
140-20194-2	SV-116-A-29	90743	8.81	464093	10.99	507405	15.72
140-20194-3	SV-DUP 3-A-29	97654	8.81	530751	10.99	523970	15.72
140-20194-4	SV-138-A-29	92444	8.81	515832	10.99	518977	15.72
140-20194-5	SV-173-A-29	90182	8.80	484422	10.98	489767	15.72
140-20194-6	SV-171-A-29	82512	8.80	463975	10.99	458155	15.72
140-20194-8	SV-177-A-29	83742	8.80	463696	10.99	454893	15.72
140-20194-20	SV-118-A-29	86015	8.81	482523	10.99	462676	15.72

CBM = Chlorobromomethane (IS)
DFBZ = 1,4-Difluorobenzene
CBZd5 = Chlorobenzene-d5 (IS)

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO 15 LL

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Sample No.: ICIS 140-42290/15 Date Analyzed: 08/29/2020 23:57

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm)

Lab File ID (Standard): HH29IC07.D Heated Purge: (Y/N) N

Calibration ID: 2592

		CBM		DFBZ		CBZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		124211	9.44	547740	11.60	401461	16.26
UPPER LIMIT		173895	9.77	766836	11.93	562045	16.59
LOWER LIMIT		74527	9.11	328644	11.27	240877	15.93
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 140-42290/18		125635	9.43	541139	11.59	407551	16.26

CBM = Chlorobromomethane (IS)
DFBZ = 1,4-Difluorobenzene
CBZd5 = Chlorobenzene-d5 (IS)

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO 15 LL

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Sample No.: CCVIS 140-42504/2 Date Analyzed: 09/08/2020 13:10

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm)

Lab File ID (Standard): HCCV08B.D Heated Purge: (Y/N) N

Calibration ID: 2592

		CBM		DFBZ		CBZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		277460	9.43	1172334	11.59	835308	16.26
UPPER LIMIT		388444	9.76	1641268	11.92	1169431	16.59
LOWER LIMIT		166476	9.10	703400	11.26	501185	15.93
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 140-42504/1002		277460	9.43	1172334	11.59	835308	16.26
MB 140-42504/4		225364	9.43	984804	11.59	583162	16.26
140-20194-9	SV-015-A-29	233829	9.45	929539	11.60	611367	16.26
140-20194-10	SV-078-A-29	224248	9.43	895355	11.59	594581	16.26
140-20194-11	SV-076-A-29	215583	9.43	858322	11.59	604862	16.26
140-20194-13	SV-DUP 4-A-29	228740	9.43	837467	11.59	632871	16.26
140-20194-14	SV-075-A-29	210055	9.43	837649	11.59	587721	16.26
140-20194-15	SV-136-A-29	237690	9.43	933516	11.59	673440	16.26
140-20194-16	SV-101-B-29	218037	9.44	867833	11.59	634435	16.26
140-20194-17	SV-100-B-29	202296	9.44	787120	11.60	520637	16.26
140-20194-18	SV-079-A-29	204275	9.43	796569	11.59	582729	16.26
140-20194-12	SV-168-A-29	233954	9.43	936484	11.59	573740	16.26

CBM = Chlorobromomethane (IS)
DFBZ = 1,4-Difluorobenzene
CBZd5 = Chlorobenzene-d5 (IS)

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO 15 LL

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Sample No.: ICIS 140-42222/15 Date Analyzed: 08/29/2020 00:02

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm)

Lab File ID (Standard): RH28IC07.D Heated Purge: (Y/N) N

Calibration ID: 2588

		CBM		DFBZ		CBZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		235543	8.28	1153917	10.52	934834	15.36
UPPER LIMIT		329760	8.61	1615484	10.85	1308768	15.69
LOWER LIMIT		141326	7.95	692350	10.19	560900	15.03
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 140-42222/17		241131	8.29	1181864	10.52	954759	15.35

CBM = Chlorobromomethane (IS)
DFBZ = 1,4-Difluorobenzene
CBZd5 = Chlorobenzene-d5 (IS)

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO 15 LL

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Sample No.: CCVIS 140-42515/2 Date Analyzed: 09/09/2020 11:27

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm)

Lab File ID (Standard): RCCVI09.D Heated Purge: (Y/N) N

Calibration ID: 2588

		CBM		DFBZ		CBZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		123371	8.27	593621	10.51	504150	15.35
UPPER LIMIT		172719	8.60	831069	10.84	705810	15.68
LOWER LIMIT		74023	7.94	356173	10.18	302490	15.02
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 140-42515/1002		123371	8.27	593621	10.51	504150	15.35
MB 140-42515/4		135548	8.27	676979	10.50	529837	15.35
140-20194-20 DL	SV-118-A-29 DL	116898	8.27	601573	10.51	477691	15.34
140-20194-7	SV-174-A-29	151241	8.26	770861	10.50	588539	15.34

CBM = Chlorobromomethane (IS)
DFBZ = 1,4-Difluorobenzene
CBZd5 = Chlorobenzene-d5 (IS)

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO 15 LL

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: SV-172-A-29 Lab Sample ID: 140-20194-1

Matrix: Air Lab File ID: GI08P110.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 10:02

Sample wt/vol: 100(mL) Date Analyzed: 09/09/2020 00:58

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42503 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.11	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.057	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	0.57		0.40	0.11
67-66-3	Chloroform	119.38	0.27	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	0.16	J	0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.53		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	0.097	J	0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	0.15	J	0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	0.38	J	0.40	0.035
108-88-3	Toluene	92.14	0.96		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	0.73		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	11		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND	*	0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	0.23	J	0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.77	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	100		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: SV-172-A-29 Lab Sample ID: 140-20194-1

Matrix: Air Lab File ID: GI08P110.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 10:02

Sample wt/vol: 100(mL) Date Analyzed: 09/09/2020 00:58

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42503 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.35	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.36	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	2.0		1.4	0.39
67-66-3	Chloroform	119.38	1.3	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	0.62	J	1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.6		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	0.39	J	1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	0.66	J	1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	2.6	J	2.7	0.24
108-88-3	Toluene	92.14	3.6		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	4.0		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	59		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND	*	2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	1.1	J	2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	3.3	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	100		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P110.D
Lims ID: 140-20194-A-1
Client ID: SV-172-A-29
Sample Type: Client
Inject. Date: 09-Sep-2020 00:58:30 ALS Bottle#: 10 Worklist Smp#: 15
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016519-015
Misc. Info.: 140-20194-a-1
Operator ID: HMT Instrument ID: MG

Method: \\chromfs\Knoxville\ChromData\MG\20200904-16519.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 09-Sep-2020 14:08:46 Calib Date: 02-Sep-2020 03:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1034

First Level Reviewer: barlozhetskayaa Date: 09-Sep-2020 14:08:46

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
*	1 Chlorobromomethane (IS)	128	8.806	8.806	0.000	85	103554	4.80	
*	2 1,4-Difluorobenzene	114	10.990	10.990	0.000	99	587760	4.80	
*	3 Chlorobenzene-d5 (IS)	117	15.724	15.724	0.000	96	579950	4.80	
$	4 4-Bromofluorobenzene (Surr)	95	17.369	17.369	0.000	80	421930	4.64	
	6 Chlorodifluoromethane	51	3.699	3.699	0.000	95	10604	0.1143	
	8 Dichlorodifluoromethane	85	3.764	3.766	0.000	97	10965	0.1057	
	37 1,1-Dichloroethane	63	7.490	7.495	-0.005	11	1450	0.0194	
	42 cis-1,2-Dichloroethene	96	8.482	8.482	0.000	31	1002	0.0314	
	44 Chloroform	83	8.827	8.817	0.010	85	3857	0.0531	
	47 1,1,1-Trichloroethane	97	9.852	9.852	0.000	92	10213	0.1461	
	50 Benzene	78	10.450	10.445	0.005	48	2620	0.0217	
	52 Carbon tetrachloride	117	10.488	10.467	0.021	27	852	0.0114	
	58 Trichloroethene	130	11.701	11.702	-0.001	87	116344	2.21	
	67 Toluene	91	13.756	13.756	0.000	91	24660	0.1928	
	73 Tetrachloroethene	129	14.899	14.899	0.000	77	3703	0.0768	
	78 Ethylbenzene	91	16.064	16.064	0.000	96	5017	0.0305	
	79 m-Xylene & p-Xylene	91	16.226	16.231	-0.005	96	13362	0.1027	
	83 o-Xylene	91	16.749	16.754	-0.005	96	6817	0.0518	
	95 1,2,4-Trimethylbenzene	105	18.539	18.545	-0.005	94	7030	0.0466	
S	124 Xylenes, Total	100				0		0.1545	

Reagents:

40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

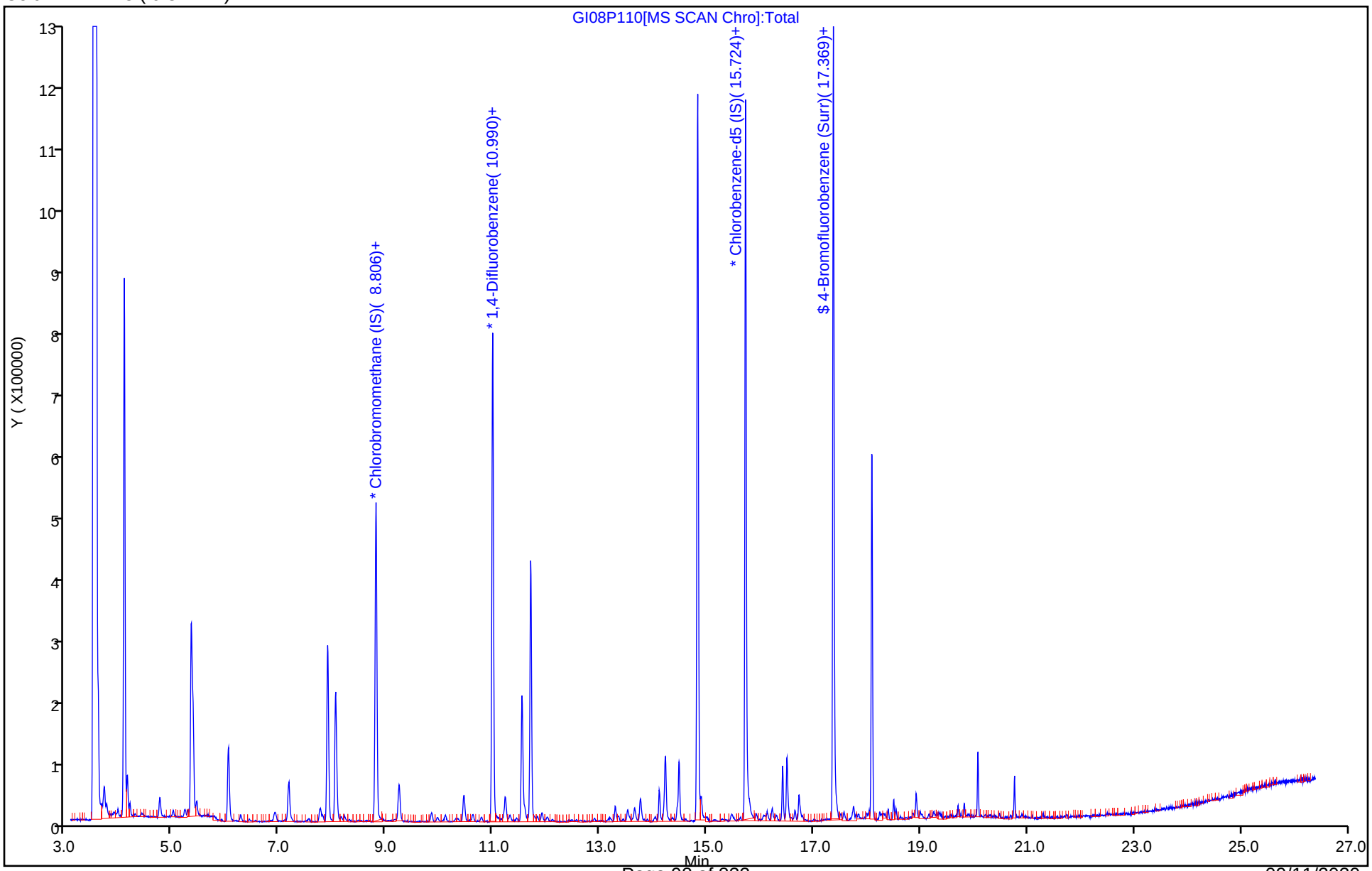
Report Date: 09-Sep-2020 14:08:47 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P110.D

Injection Date:	09-Sep-2020 00:58:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	140-20194-A-1	Lab Sample ID:	140-20194-1	Worklist Smp#:	15
Client ID:	SV-172-A-29				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P110.D				
Lims ID:	140-20194-A-1				
Client ID:	SV-172-A-29				
Sample Type:	Client				
Inject. Date:	09-Sep-2020 00:58:30	ALS Bottle#:	10	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016519-015				
Misc. Info.:	140-20194-a-1				
Operator ID:	HMT	Instrument ID:	MG		
Method:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\MG_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	09-Sep-2020 14:08:46	Calib Date:	02-Sep-2020 03:27:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1034				

First Level Reviewer: barlozhetskayaa Date: 09-Sep-2020 14:08:46

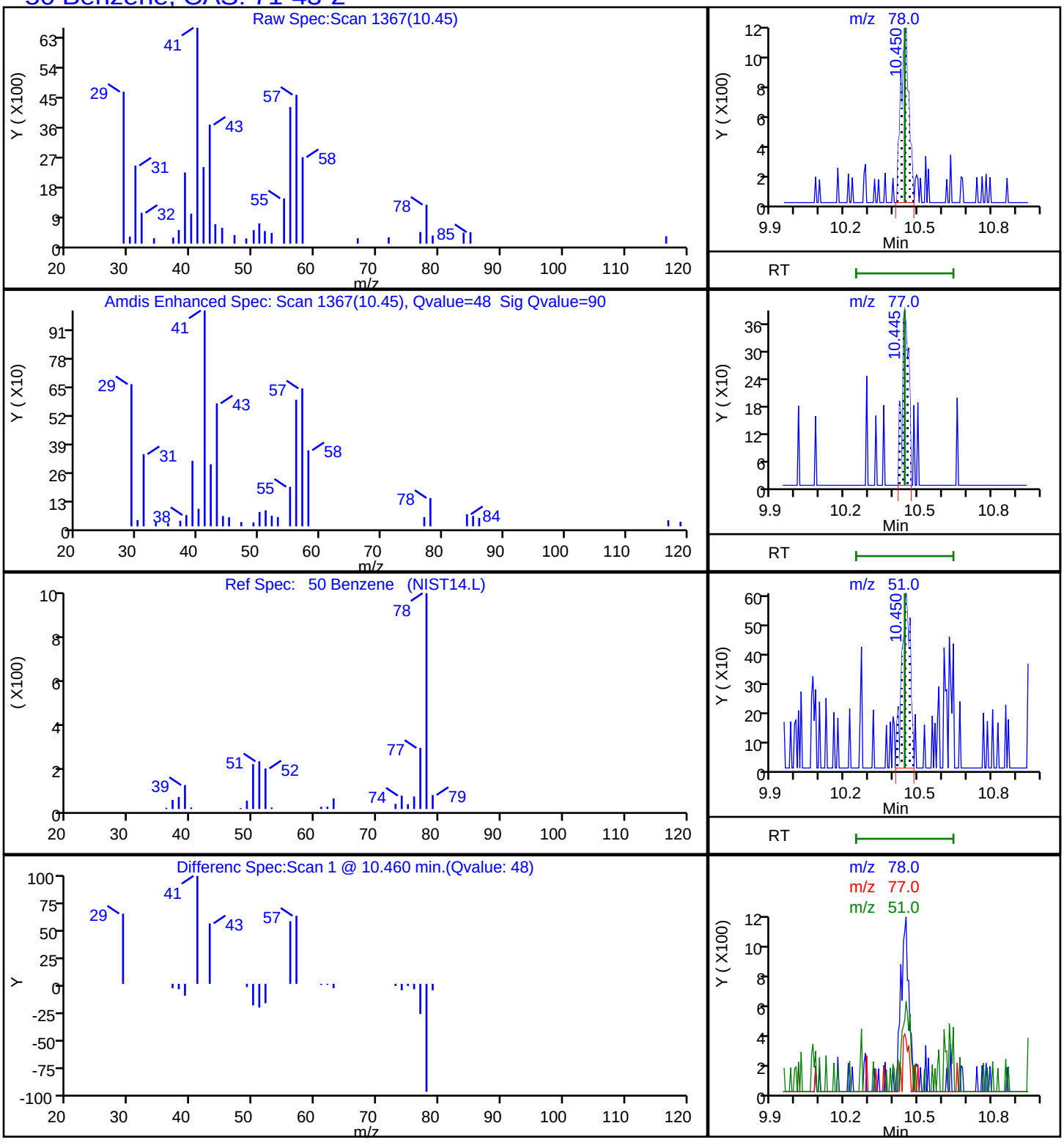
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	4.64	99.92

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P110.D

Injection Date:	09-Sep-2020 00:58:30	Instrument ID:	MG
Lims ID:	140-20194-A-1	Lab Sample ID:	140-20194-1
Client ID:	SV-172-A-29		
Operator ID:	HMT	ALS Bottle#:	10 Worklist Smp#: 15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

50 Benzene, CAS: 71-43-2



Eurofins TestAmerica, Knoxville

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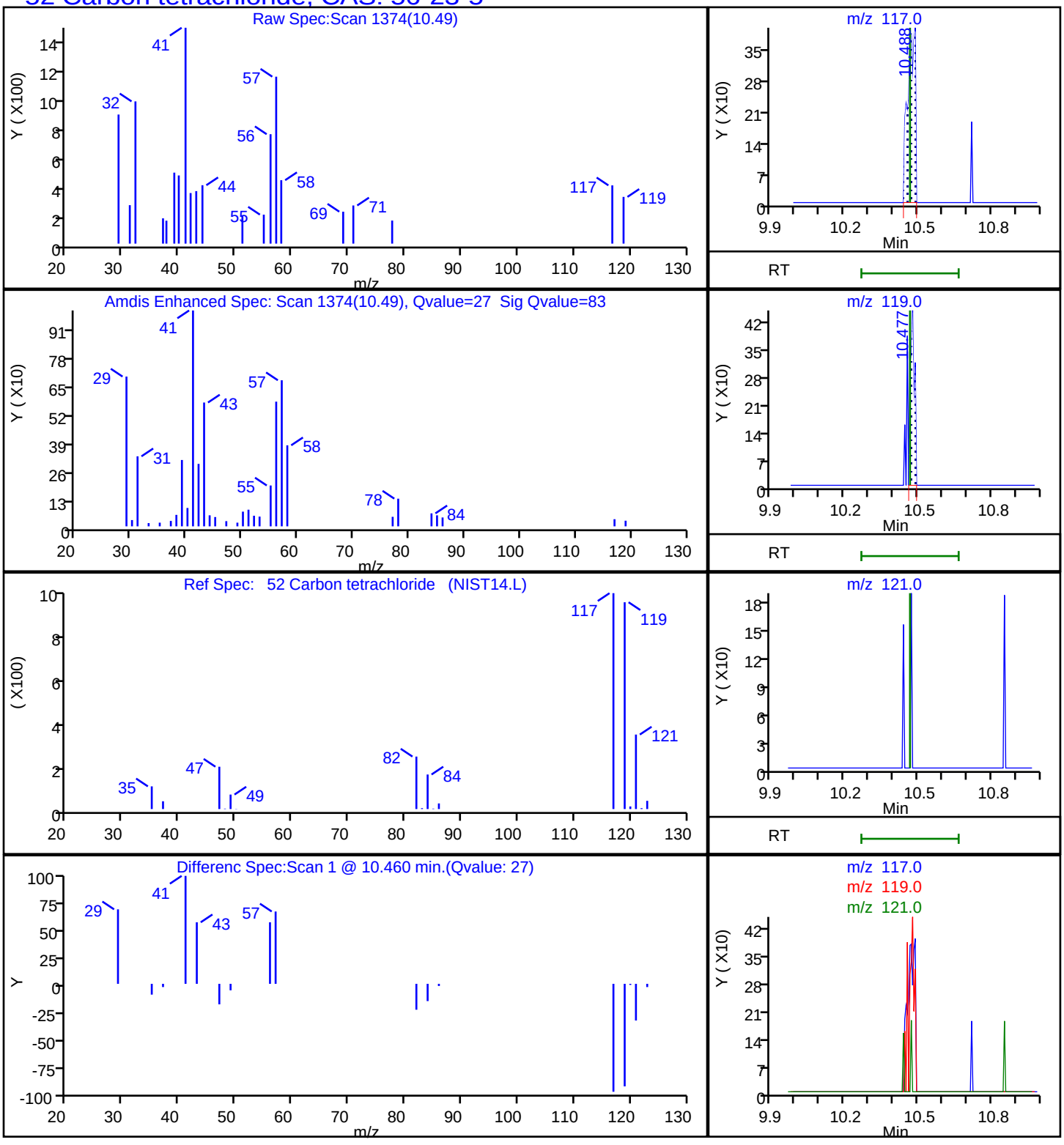
Lims ID:	140-20194-A-1	Lab Sample ID:	140-20194-1		
Client ID:	SV-172-A-29				
Operator ID:	HMT	ALS Bottle#:	10	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

52 Carbon tetrachloride, CAS: 56-23-5



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P110.D				
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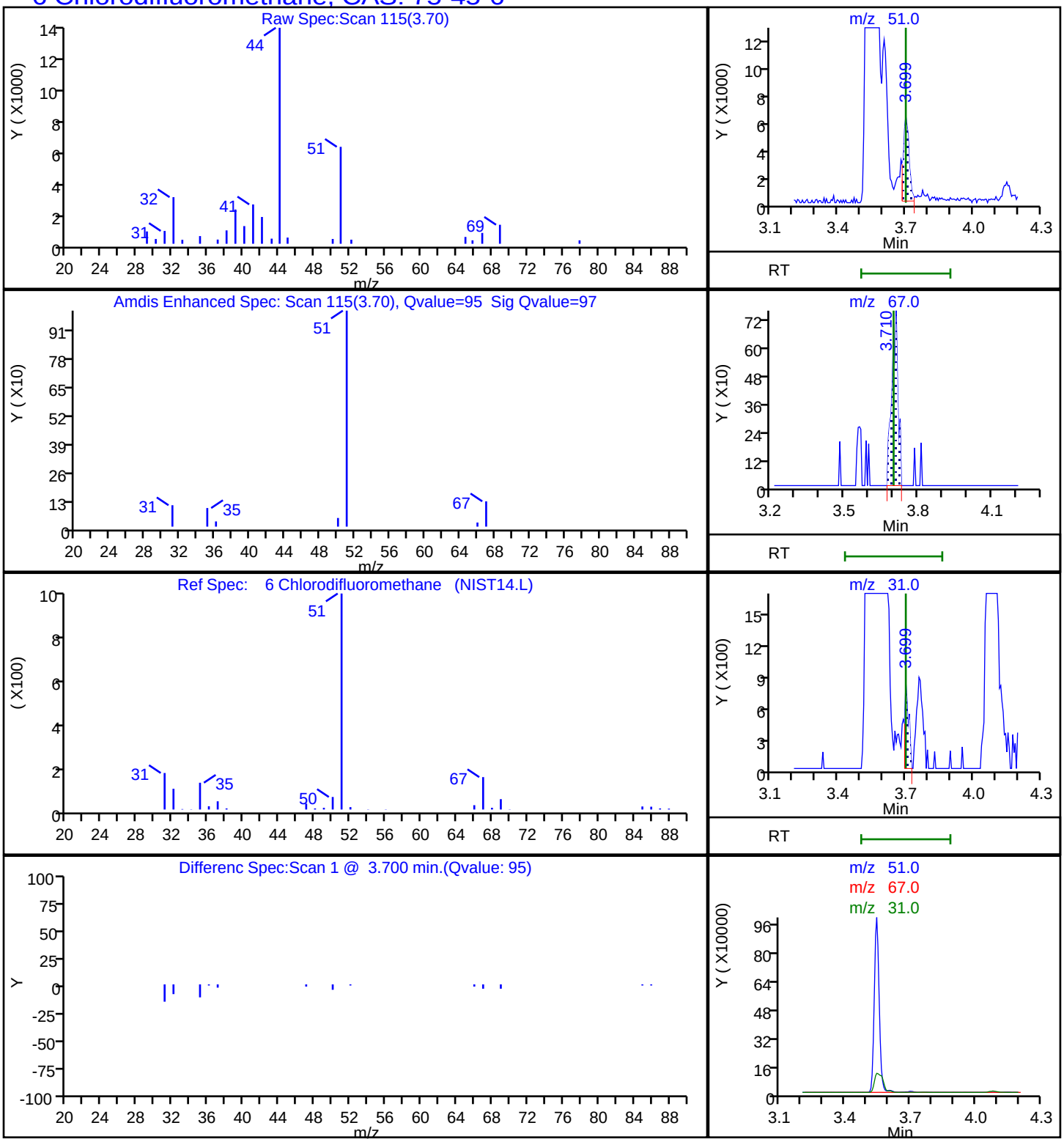
Lims ID:	140-20194-A-1	Lab Sample ID:	140-20194-1		
Client ID:	SV-172-A-29				
Operator ID:	HMT	ALS Bottle#:	10	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

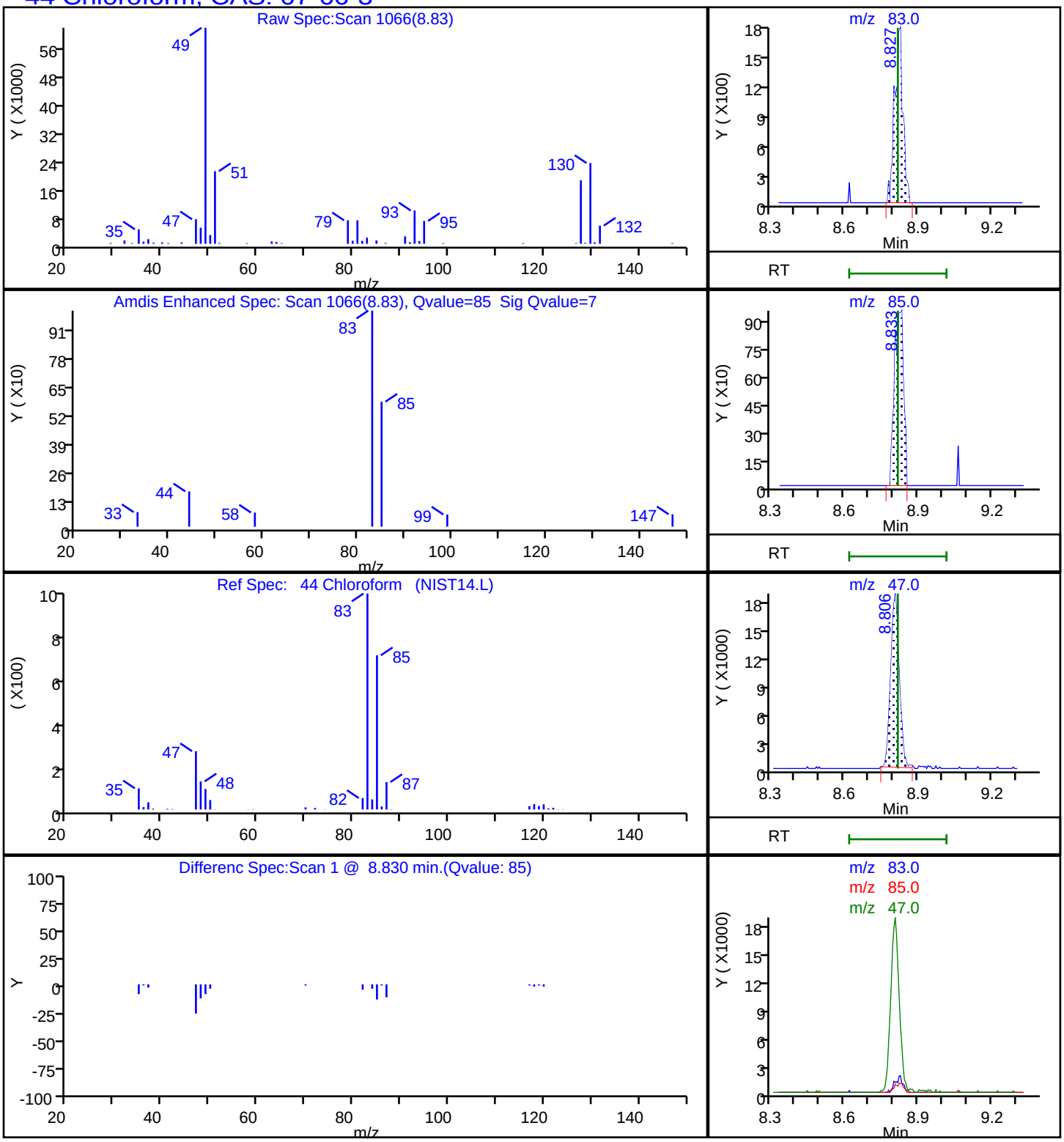
6 Chlorodifluoromethane, CAS: 75-45-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P110.D				
Injection Date:	09-Sep-2020 00:58:30	Instrument ID:	MG		
Lims ID:	140-20194-A-1	Lab Sample ID:	140-20194-1		
Client ID:	SV-172-A-29				
Operator ID:	HMT	ALS Bottle#:	10	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

44 Chloroform, CAS: 67-66-3

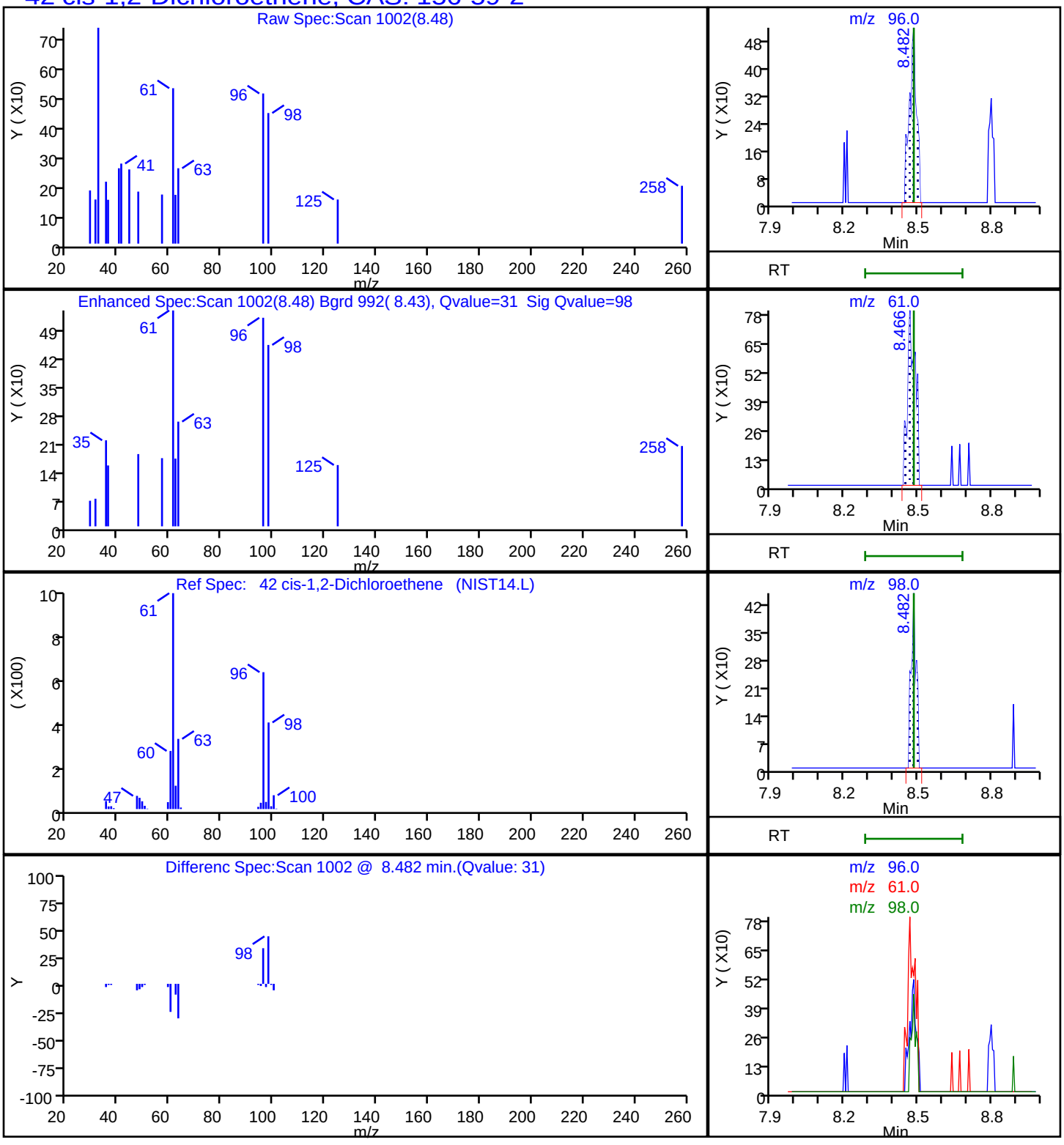


Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P110.D

Injection Date:	09-Sep-2020 00:58:30	Instrument ID:	MG		
Lims ID:	140-20194-A-1	Lab Sample ID:	140-20194-1		
Client ID:	SV-172-A-29				
Operator ID:	HMT	ALS Bottle#:	10	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

42 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P110.D				
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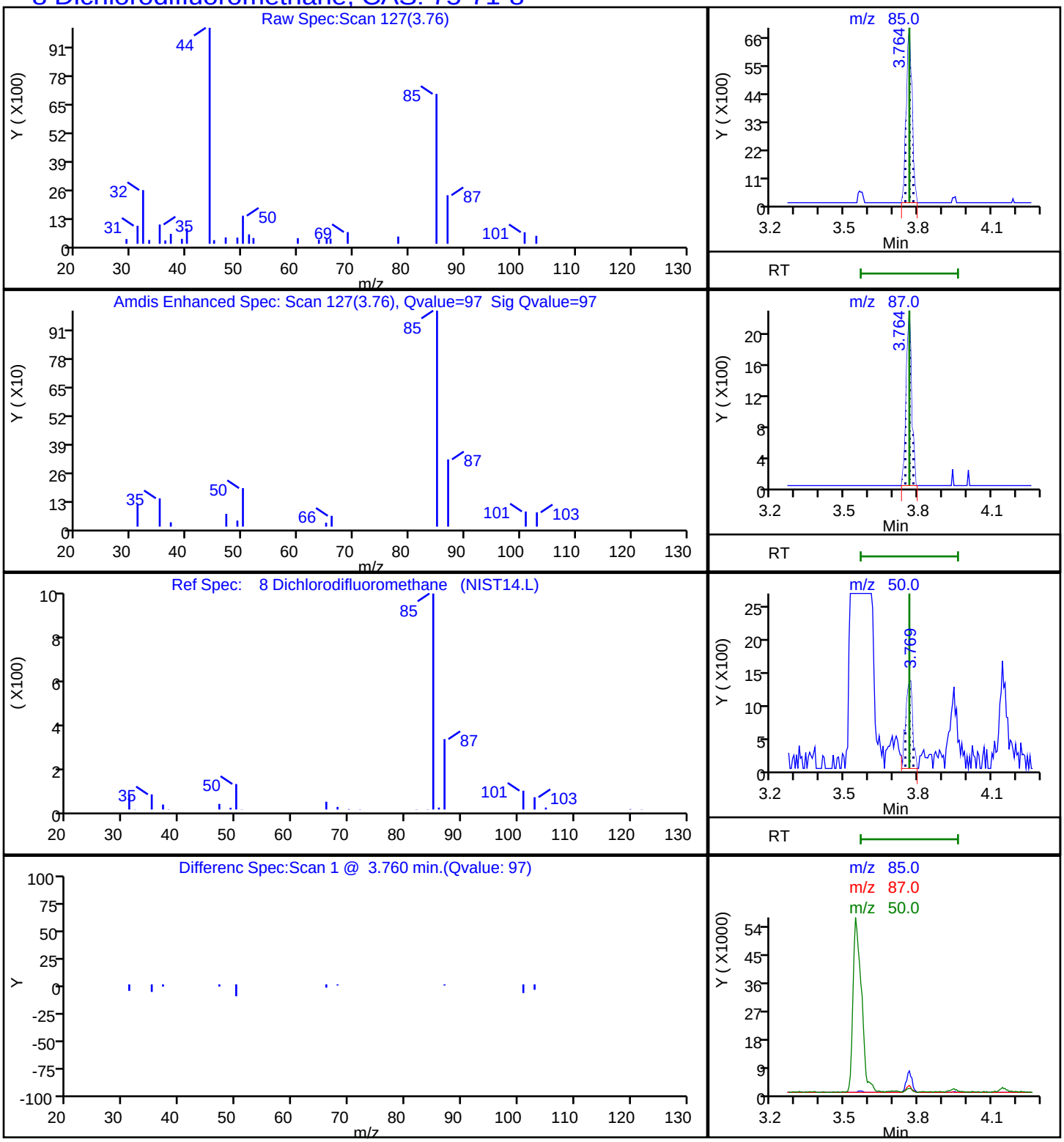
Lims ID:	140-20194-A-1	Lab Sample ID:	140-20194-1		
Client ID:	SV-172-A-29				
Operator ID:	HMT	ALS Bottle#:	10	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

8 Dichlorodifluoromethane, CAS: 75-71-8



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P110.D				
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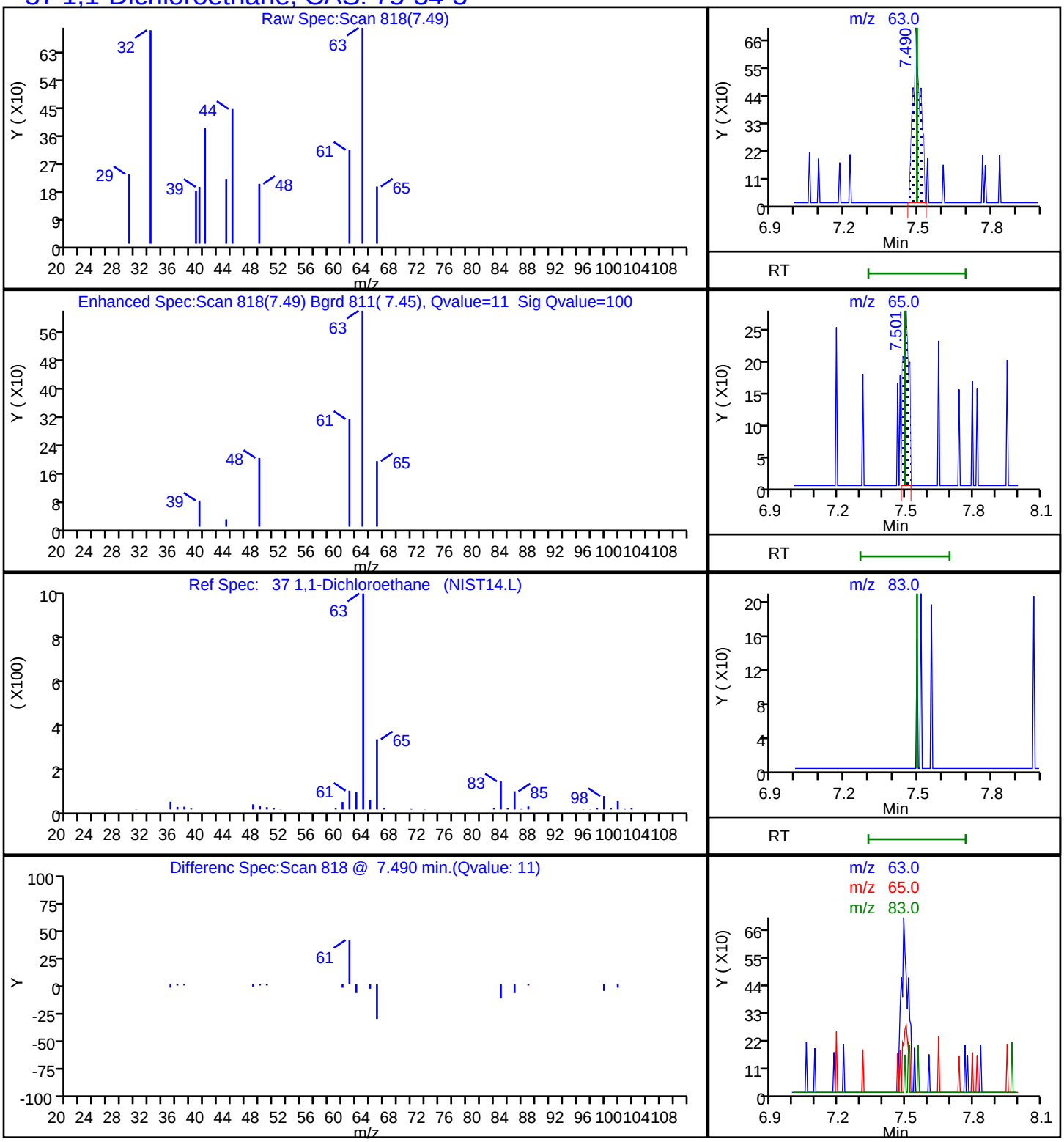
Lims ID:	140-20194-A-1	Lab Sample ID:	140-20194-1		
Client ID:	SV-172-A-29				
Operator ID:	HMT	ALS Bottle#:	10	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

37 1,1-Dichloroethane, CAS: 75-34-3

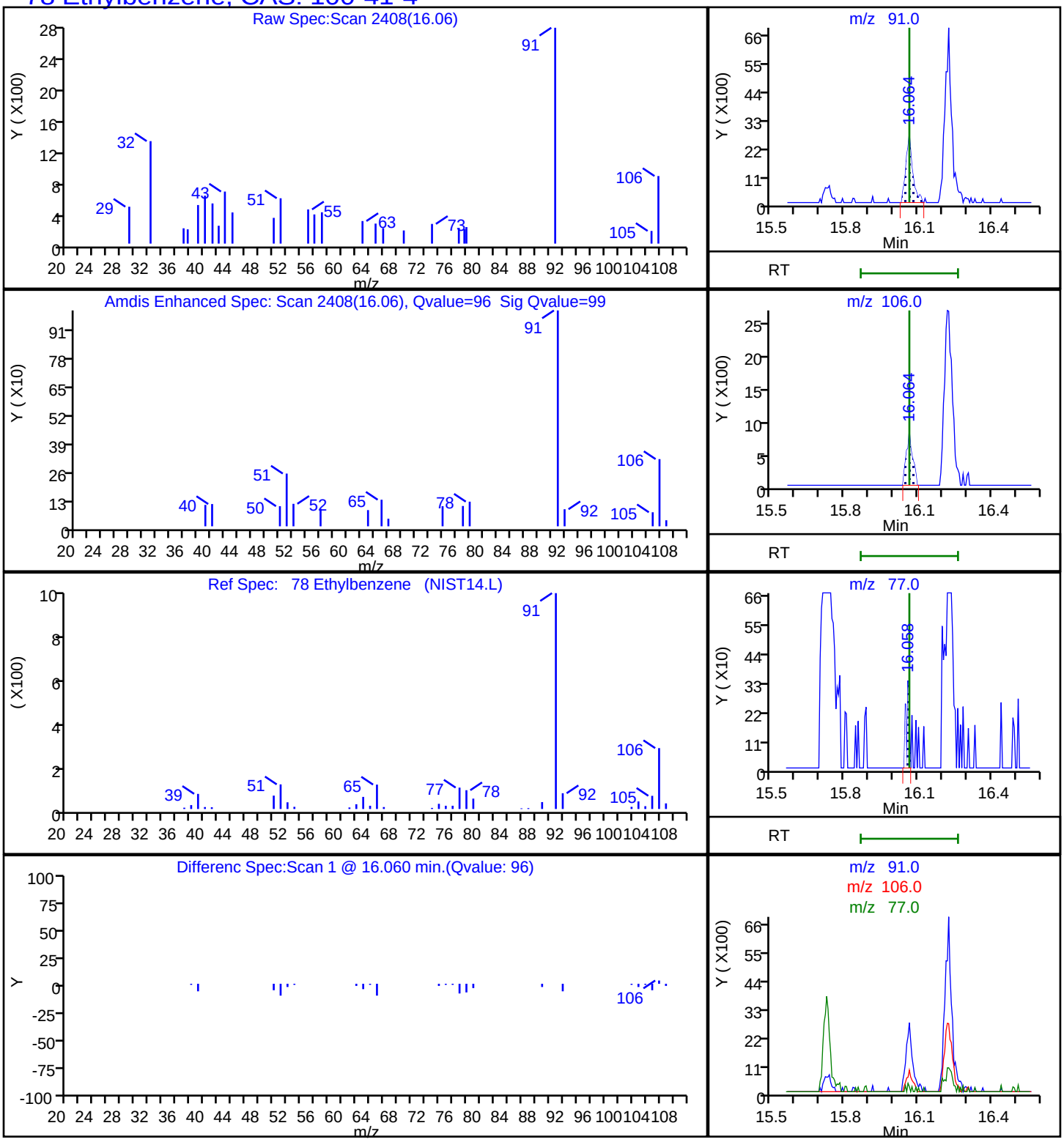


Report Date: 09-Sep-2020 14:08:47 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P110.D				
Injection Date:	09-Sep-2020 00:58:30	Instrument ID:	MG		
Lims ID:	140-20194-A-1	Lab Sample ID:	140-20194-1		
Client ID:	SV-172-A-29				
Operator ID:	HMT	ALS Bottle#:	10	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

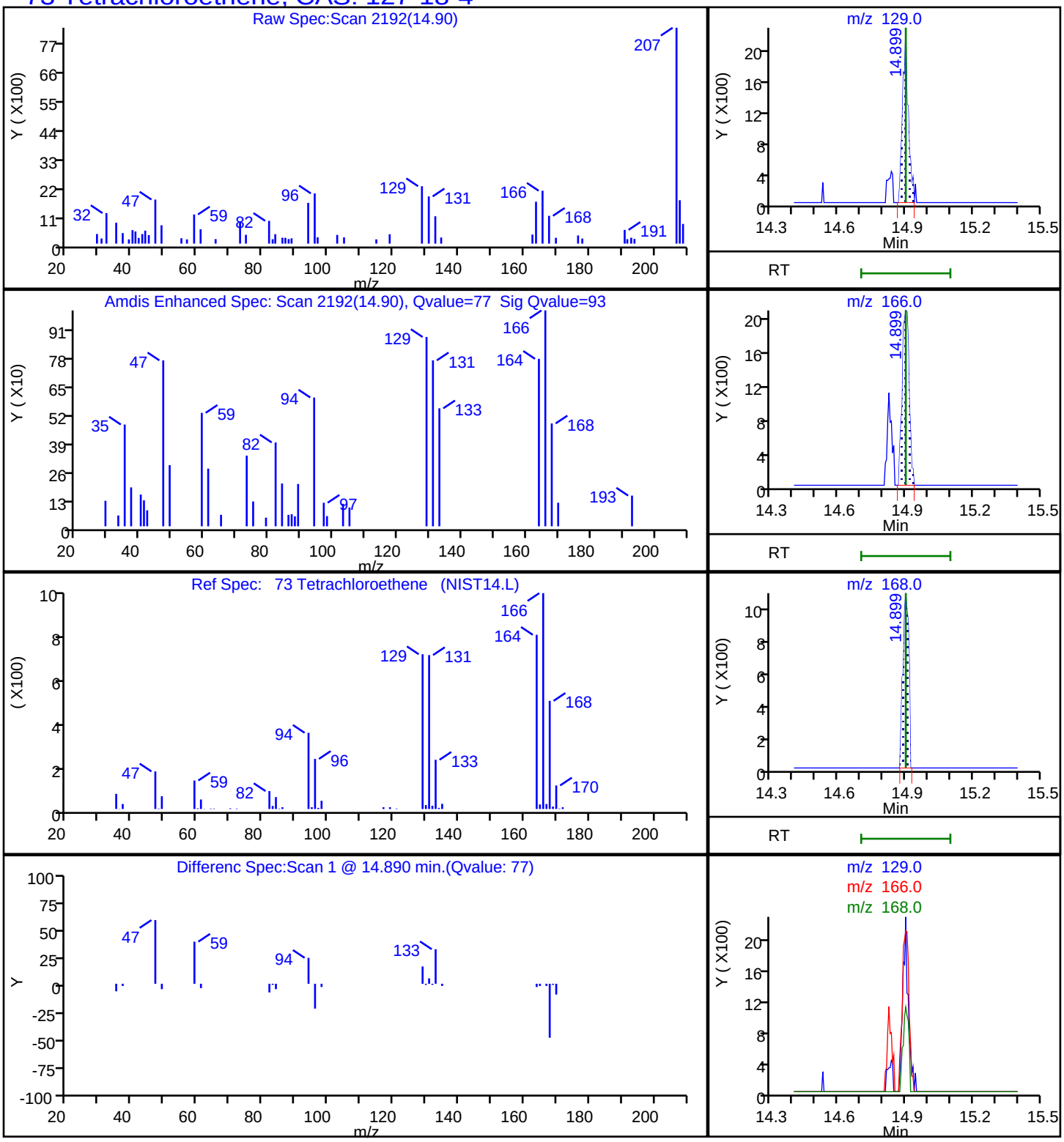
78 Ethylbenzene, CAS: 100-41-4



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P110.D				
Injection Date:	09-Sep-2020 00:58:30	Instrument ID:	MG		
Lims ID:	140-20194-A-1	Lab Sample ID:	140-20194-1		
Client ID:	SV-172-A-29				
Operator ID:	HMT	ALS Bottle#:	10	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

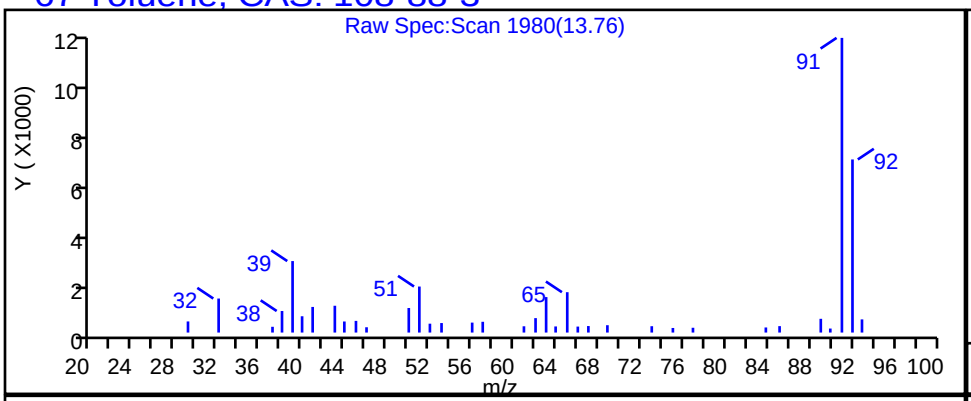
73 Tetrachloroethene, CAS: 127-18-4

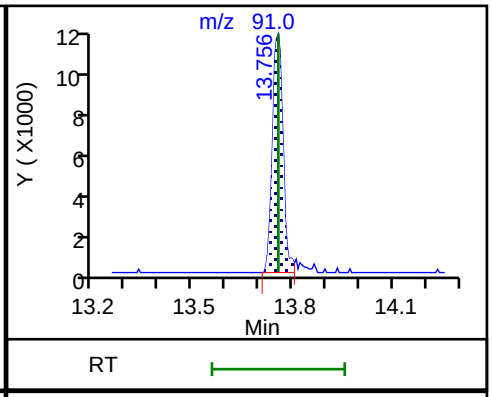


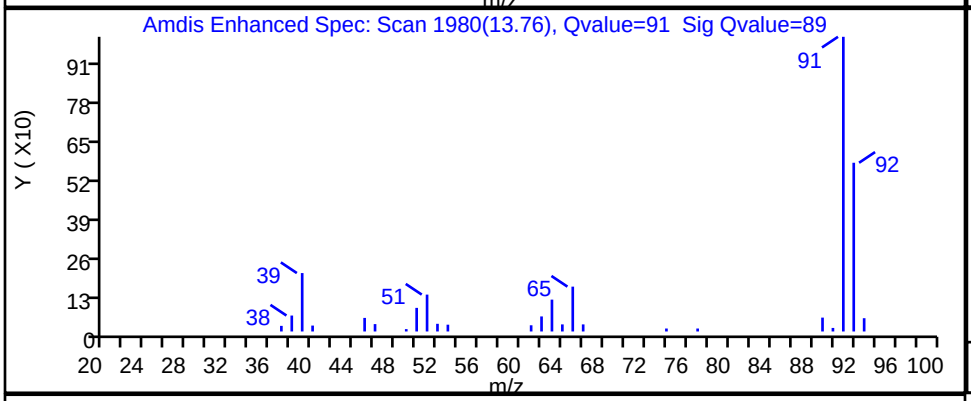
Eurofins TestAmerica, Knoxville

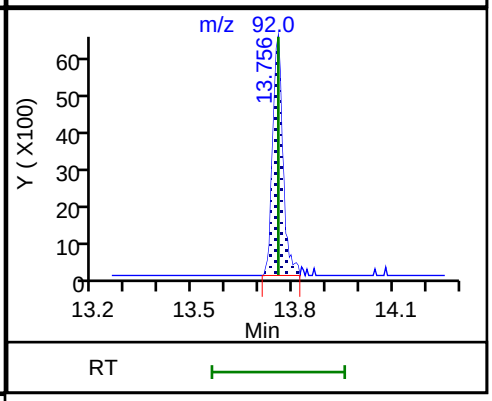
Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P110.D		
Injection Date:	09-Sep-2020 00:58:30	Instrument ID:	MG
Lims ID:	140-20194-A-1	Lab Sample ID:	140-20194-1
Client ID:	SV-172-A-29		
Operator ID:	HMT	ALS Bottle#:	10 Worklist Smp#: 15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

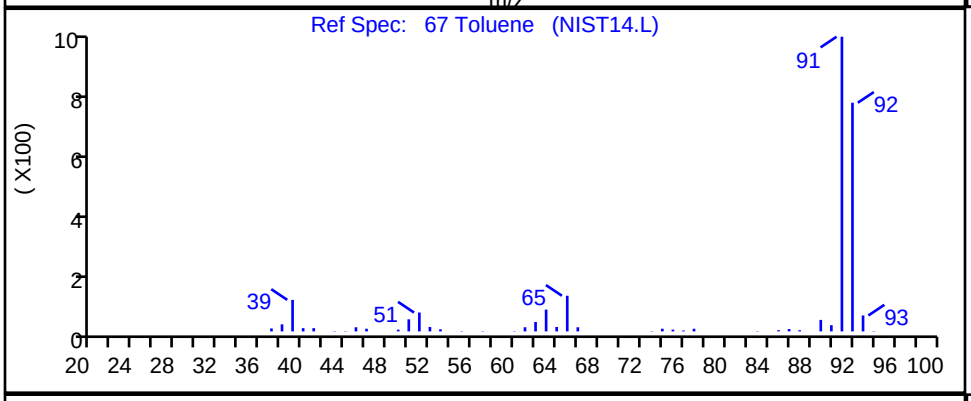
67 Toluene, CAS: 108-88-3

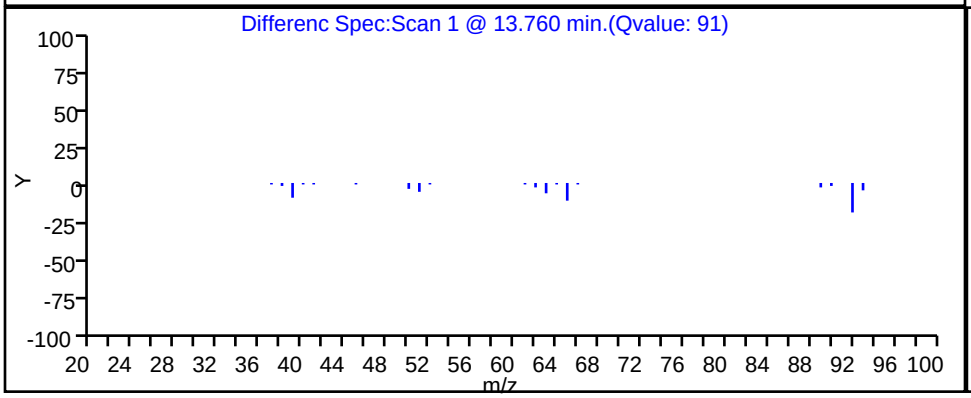


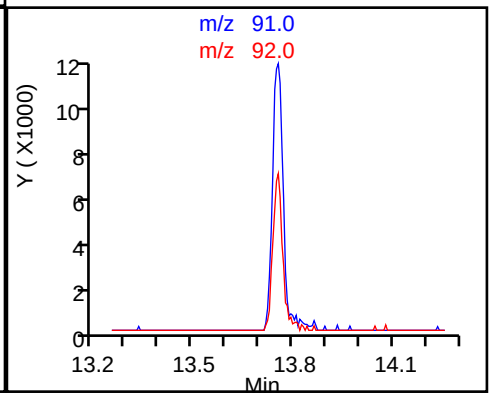








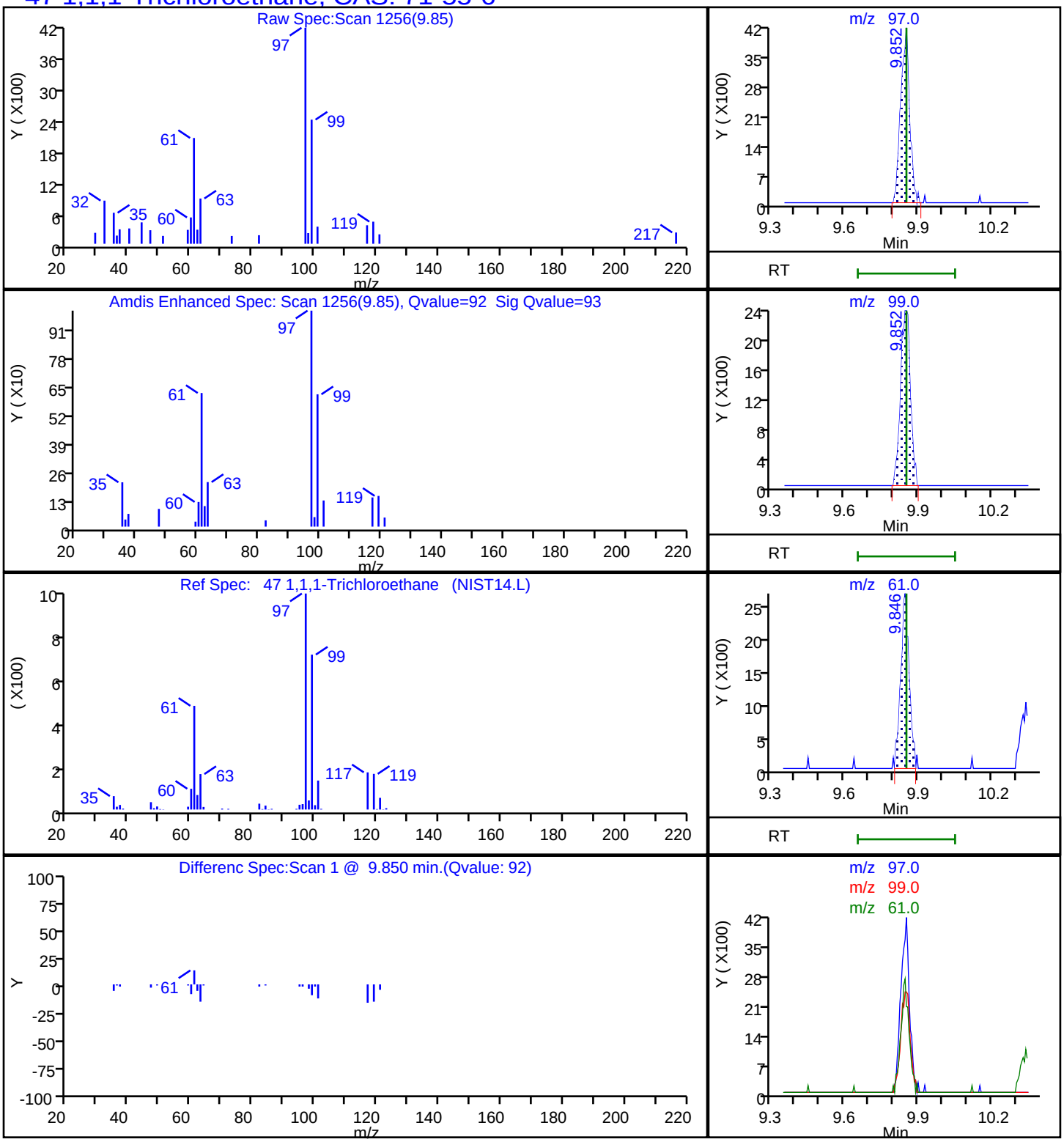




Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P110.D				
Injection Date:	09-Sep-2020 00:58:30	Instrument ID:	MG		
Lims ID:	140-20194-A-1	Lab Sample ID:	140-20194-1		
Client ID:	SV-172-A-29				
Operator ID:	HMT	ALS Bottle#:	10	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

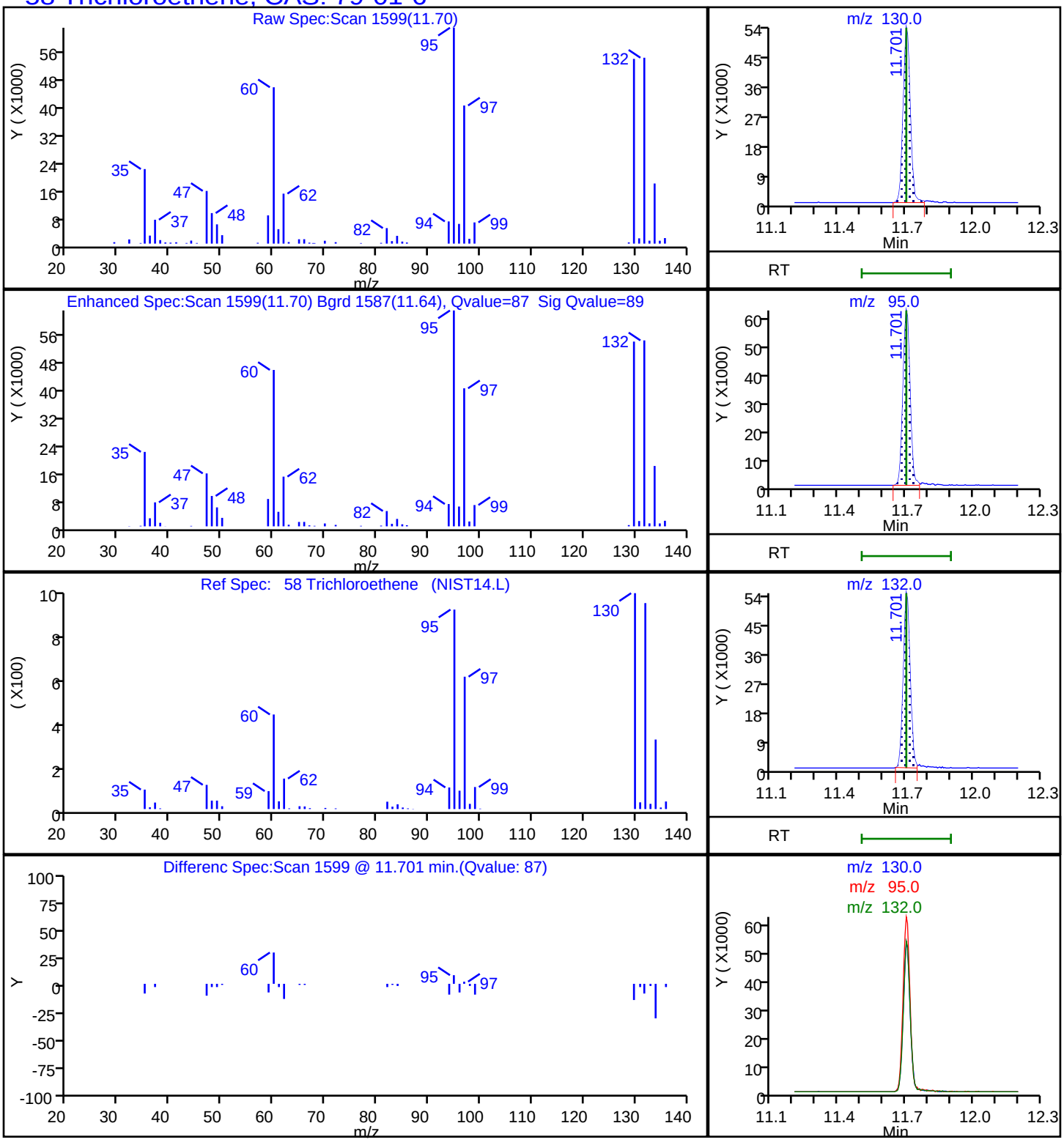
47 1,1,1-Trichloroethane, CAS: 71-55-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P110.D		
Injection Date:	09-Sep-2020 00:58:30	Instrument ID:	MG
Lims ID:	140-20194-A-1	Lab Sample ID:	140-20194-1
Client ID:	SV-172-A-29		
Operator ID:	HMT	ALS Bottle#:	10 Worklist Smp#: 15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

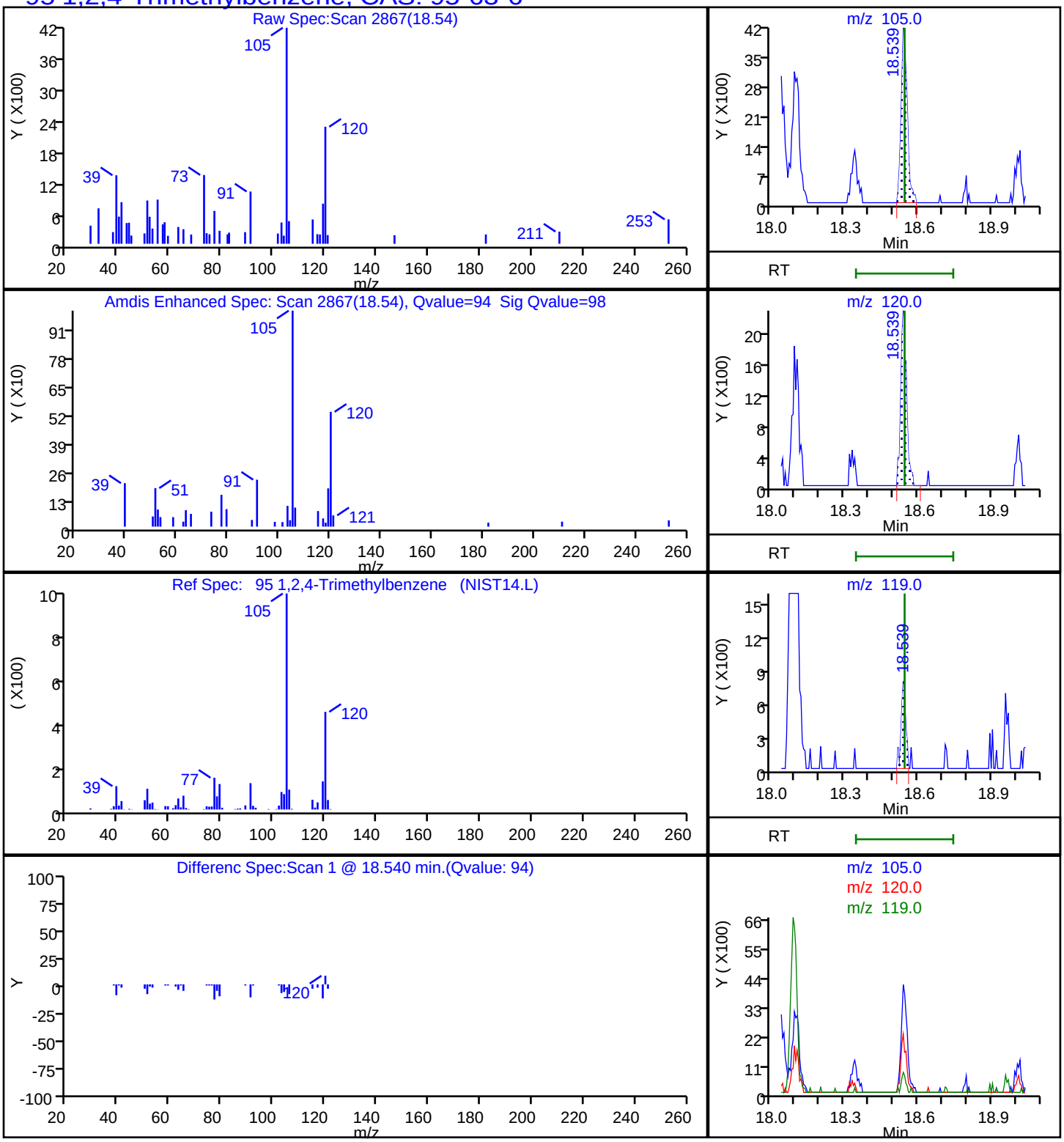
58 Trichloroethene, CAS: 79-01-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P110.D				
Injection Date:	09-Sep-2020 00:58:30	Instrument ID:	MG		
Lims ID:	140-20194-A-1	Lab Sample ID:	140-20194-1		
Client ID:	SV-172-A-29				
Operator ID:	HMT	ALS Bottle#:	10	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

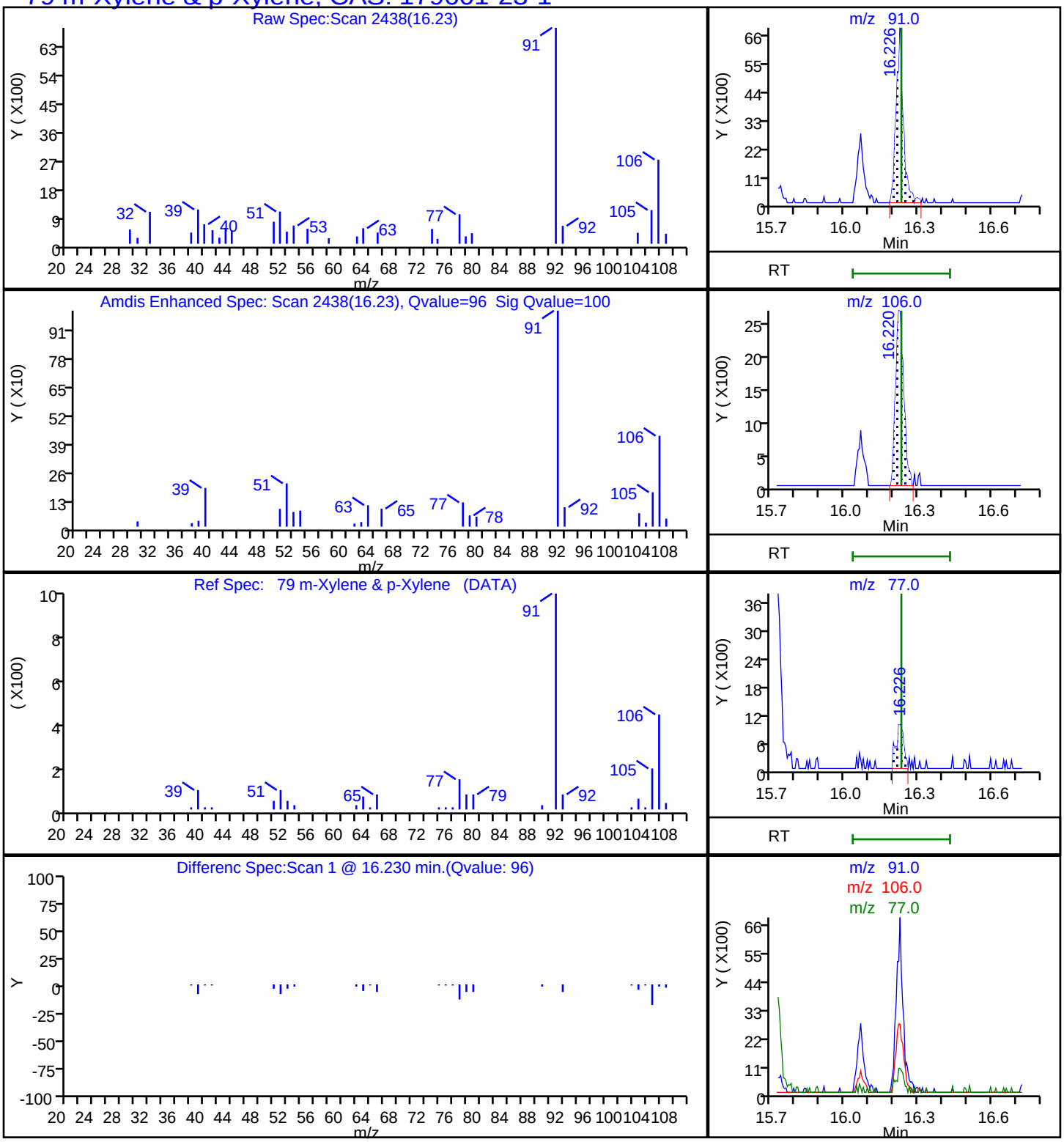
95 1,2,4-Trimethylbenzene, CAS: 95-63-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P110.D				
Injection Date:	09-Sep-2020 00:58:30	Instrument ID:	MG		
Lims ID:	140-20194-A-1	Lab Sample ID:	140-20194-1		
Client ID:	SV-172-A-29				
Operator ID:	HMT	ALS Bottle#:	10	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

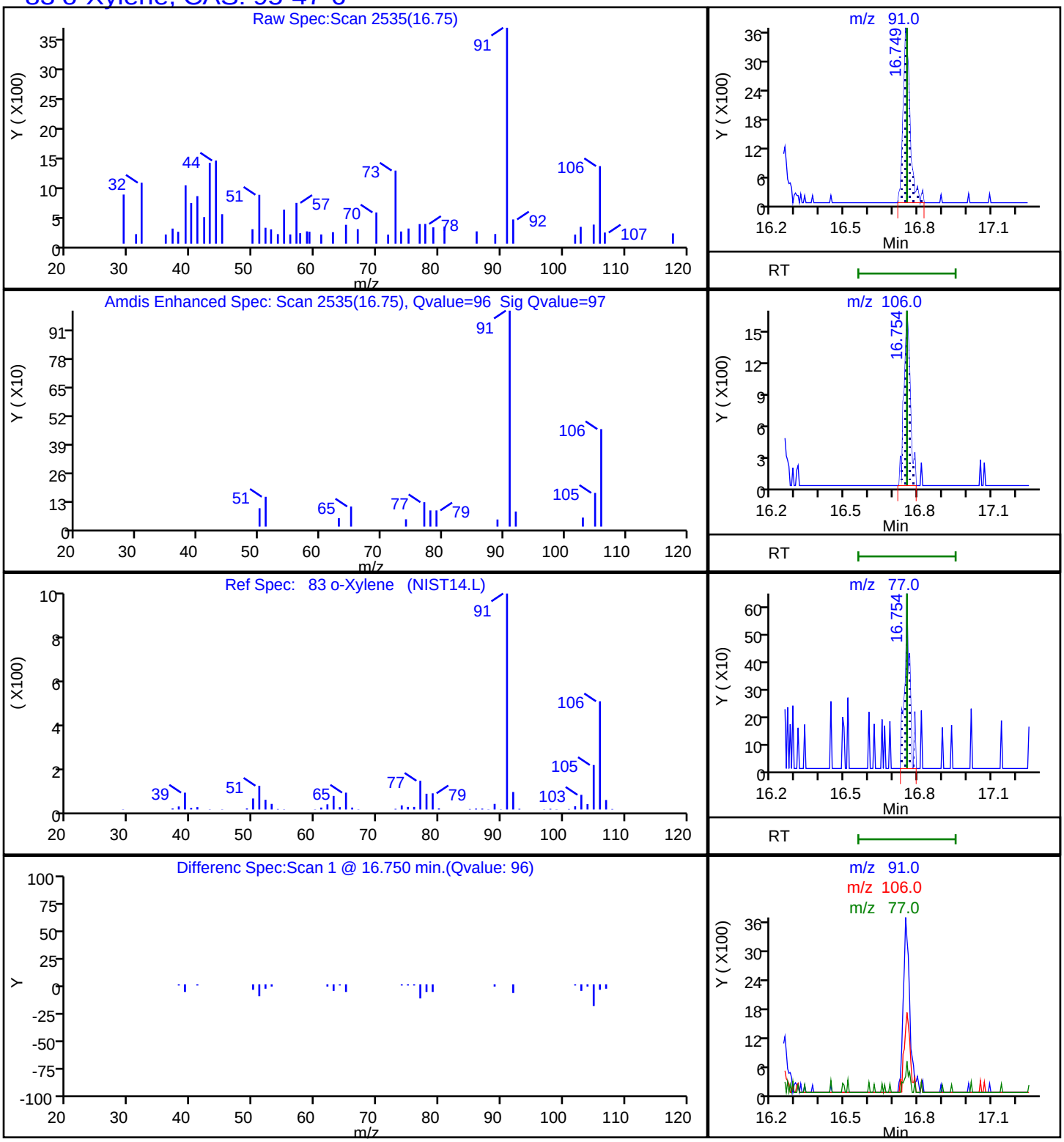
79 m-Xylene & p-Xylene, CAS: 179601-23-1



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P110.D				
Injection Date:	09-Sep-2020 00:58:30	Instrument ID:	MG		
Lims ID:	140-20194-A-1	Lab Sample ID:	140-20194-1		
Client ID:	SV-172-A-29				
Operator ID:	HMT	ALS Bottle#:	10	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

83 o-Xylene, CAS: 95-47-6



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: SV-116-A-29 Lab Sample ID: 140-20194-2

Matrix: Air Lab File ID: GI08P111.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 09:58

Sample wt/vol: 100(mL) Date Analyzed: 09/09/2020 01:43

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42503 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.11	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.059	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	0.39	J	0.40	0.11
67-66-3	Chloroform	119.38	0.79		0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.47		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	0.20	J	0.40	0.040
100-41-4	Ethylbenzene	106.17	ND		0.40	0.065
75-09-2	Methylene Chloride	84.93	2.3		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.035
108-88-3	Toluene	92.14	ND		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	1.4		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND	*	0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	ND		0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	102		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: SV-116-A-29 Lab Sample ID: 140-20194-2

Matrix: Air Lab File ID: GI08P111.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 09:58

Sample wt/vol: 100(mL) Date Analyzed: 09/09/2020 01:43

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42503 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.36	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.37	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	1.4	J	1.4	0.39
67-66-3	Chloroform	119.38	3.9		2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.3		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	0.80	J	1.6	0.16
100-41-4	Ethylbenzene	106.17	ND		1.7	0.28
75-09-2	Methylene Chloride	84.93	8.0		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.24
108-88-3	Toluene	92.14	ND		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	7.6		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND	*	2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	ND		3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	102		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P111.D				
Lims ID:	140-20194-A-2				
Client ID:	SV-116-A-29				
Sample Type:	Client				
Inject. Date:	09-Sep-2020 01:43:30	ALS Bottle#:	11	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016519-016				
Misc. Info.:	140-20194-a-2				
Operator ID:	HMT	Instrument ID:	MG		
Method:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\MG_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	09-Sep-2020 14:08:46	Calib Date:	02-Sep-2020 03:27:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1034				
First Level Reviewer: barlozhetskayaa		Date:	09-Sep-2020 14:09:17		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.806	8.806	0.000	85	90743	4.80	
* 2 1,4-Difluorobenzene	114	10.990	10.990	0.000	98	464093	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.724	15.724	0.000	95	507405	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.369	17.369	0.000	90	378200	4.75	
6 Chlorodifluoromethane	51	3.705	3.699	0.006	94	6269	0.0771	
8 Dichlorodifluoromethane	85	3.764	3.766	0.000	94	8487	0.0934	
27 1,1-Dichloroethene	96	5.932	5.921	0.011	90	899	0.0402	
31 Methylene Chloride	84	6.277	6.271	0.006	85	10311	0.4608	
44 Chloroform	83	8.817	8.817	0.000	78	10070	0.1582	
47 1,1,1-Trichloroethane	97	9.841	9.852	-0.011	4	1102	0.0180	
50 Benzene	78	10.456	10.445	0.011	86	2178	0.0228	
52 Carbon tetrachloride	117	10.467	10.467	0.000	29	696	0.0118	
58 Trichloroethene	130	11.702	11.702	0.000	89	11712	0.2816	
67 Toluene	91	13.762	13.756	0.006	92	5917	0.0529	

Reagents:

40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

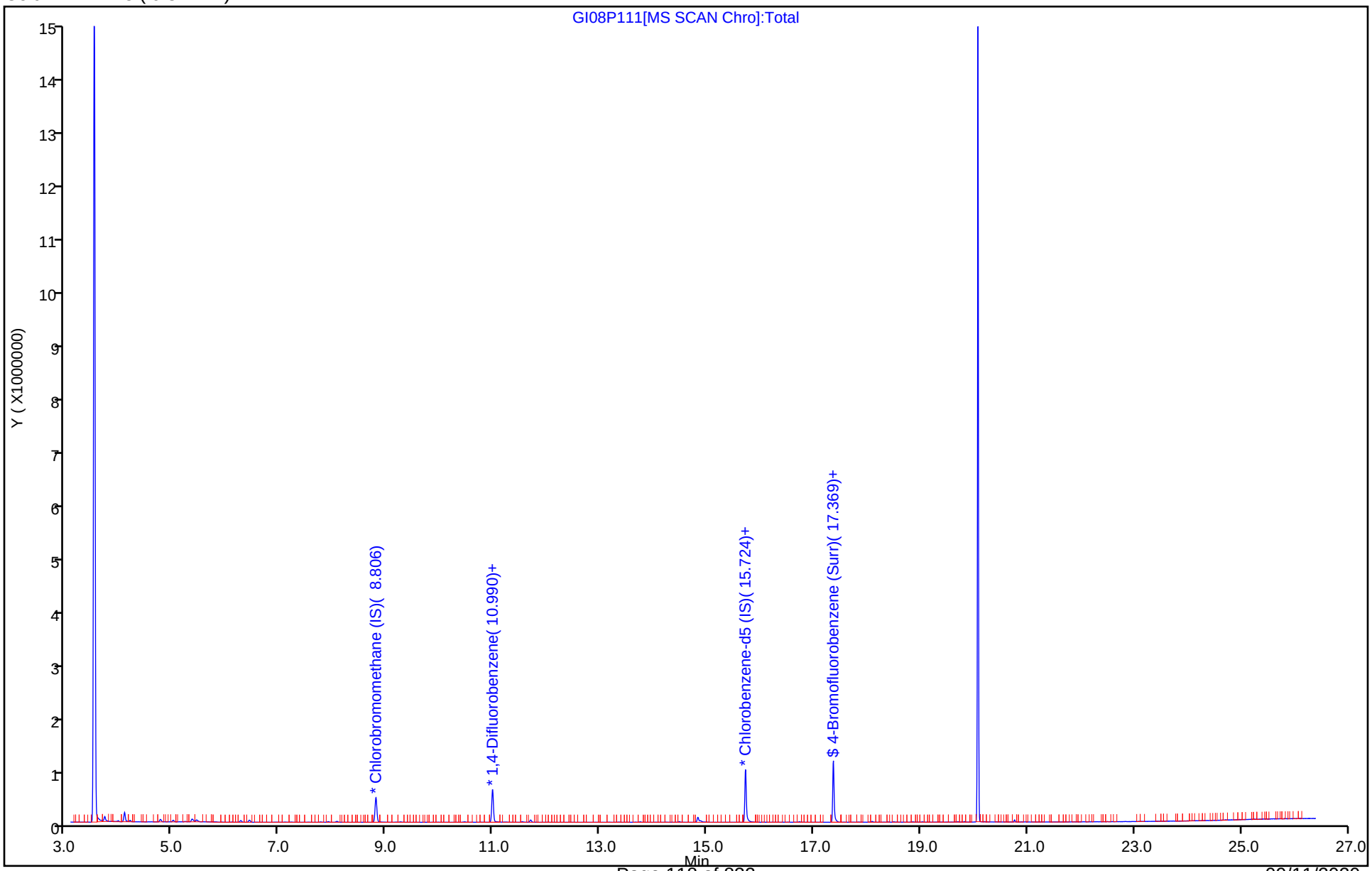
Report Date: 09-Sep-2020 14:09:18 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P111.D

Injection Date:	09-Sep-2020 01:43:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	140-20194-A-2	Lab Sample ID:	140-20194-2	Worklist Smp#:	16
Client ID:	SV-116-A-29				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P111.D				
Lims ID:	140-20194-A-2				
Client ID:	SV-116-A-29				
Sample Type:	Client				
Inject. Date:	09-Sep-2020 01:43:30	ALS Bottle#:	11	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016519-016				
Misc. Info.:	140-20194-a-2				
Operator ID:	HMT	Instrument ID:	MG		
Method:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\MG_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	09-Sep-2020 14:08:46	Calib Date:	02-Sep-2020 03:27:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1034				

First Level Reviewer: barlozhetskayaa Date: 09-Sep-2020 14:09:17

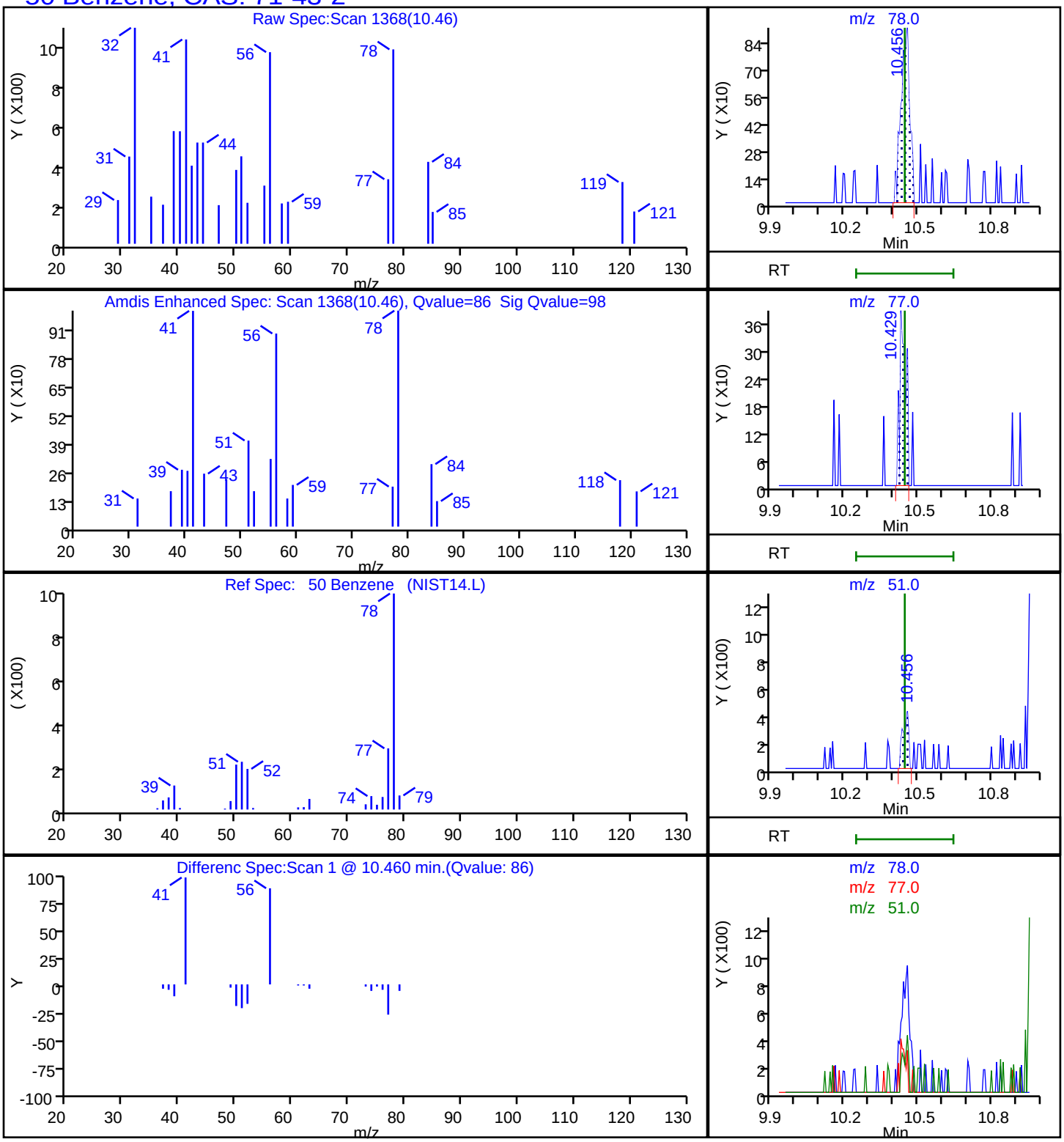
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	4.75	102.37

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P111.D

Injection Date:	09-Sep-2020 01:43:30	Instrument ID:	MG
Lims ID:	140-20194-A-2	Lab Sample ID:	140-20194-2
Client ID:	SV-116-A-29		
Operator ID:	HMT	ALS Bottle#:	11 Worklist Smp#: 16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

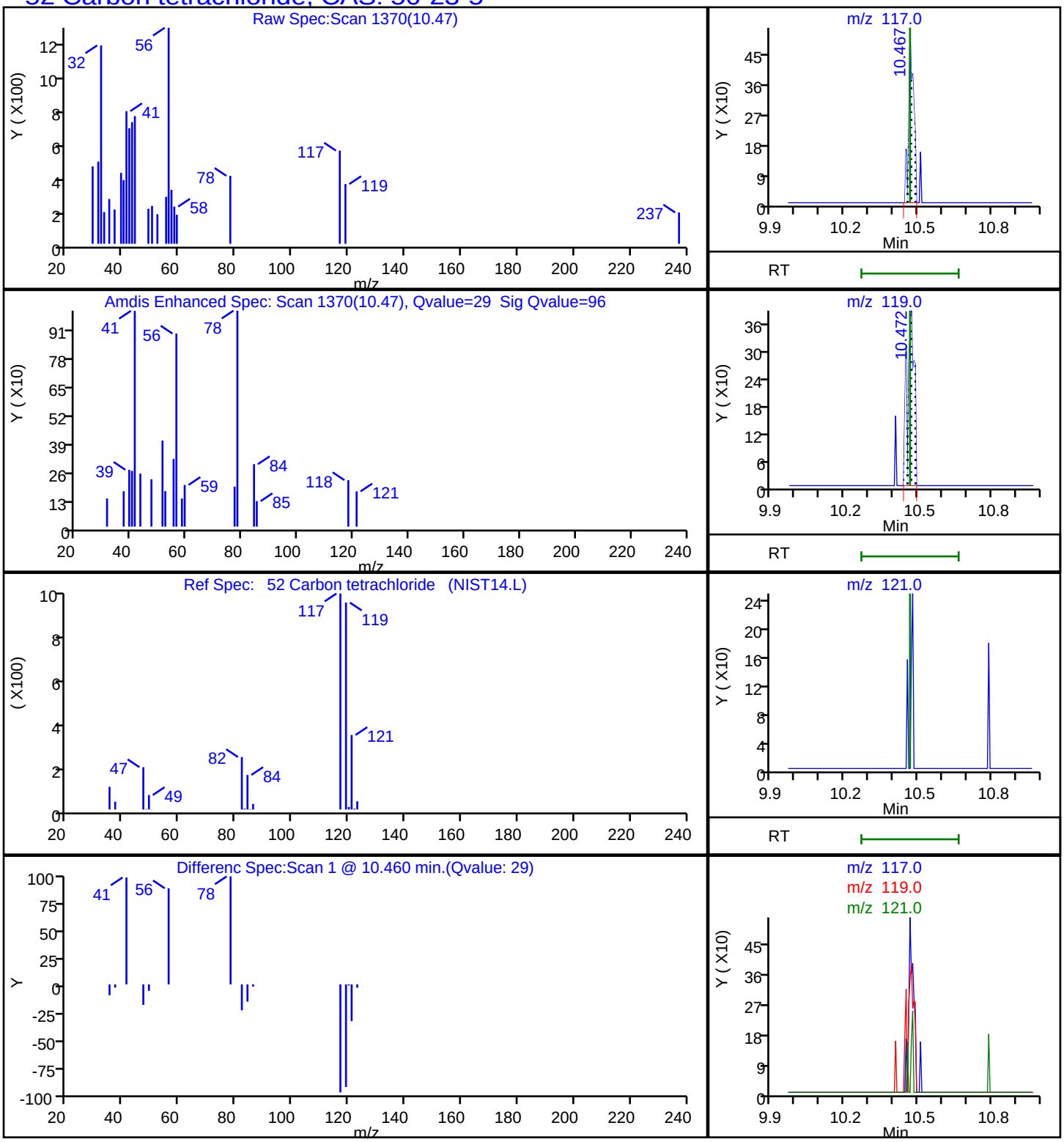
50 Benzene, CAS: 71-43-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P111.D		
Injection Date:	09-Sep-2020 01:43:30	Instrument ID:	MG
Lims ID:	140-20194-A-2	Lab Sample ID:	140-20194-2
Client ID:	SV-116-A-29		
Operator ID:	HMT	ALS Bottle#:	11 Worklist Smp#: 16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

52 Carbon tetrachloride, CAS: 56-23-5

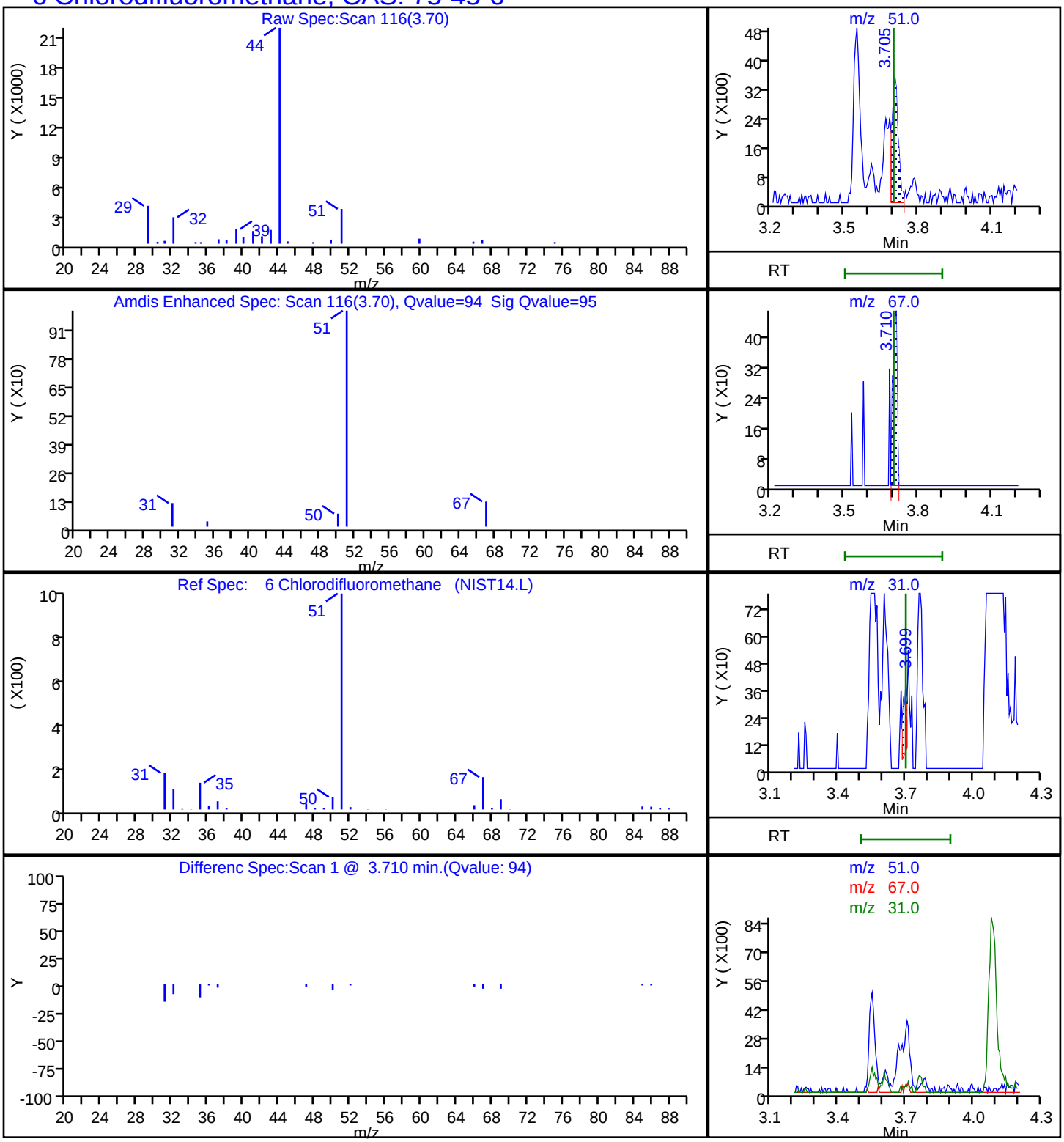


Report Date: 09-Sep-2020 14:09:18 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P111.D				
Injection Date:	09-Sep-2020 01:43:30	Instrument ID:	MG		
Lims ID:	140-20194-A-2	Lab Sample ID:	140-20194-2		
Client ID:	SV-116-A-29				
Operator ID:	HMT	ALS Bottle#:	11	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

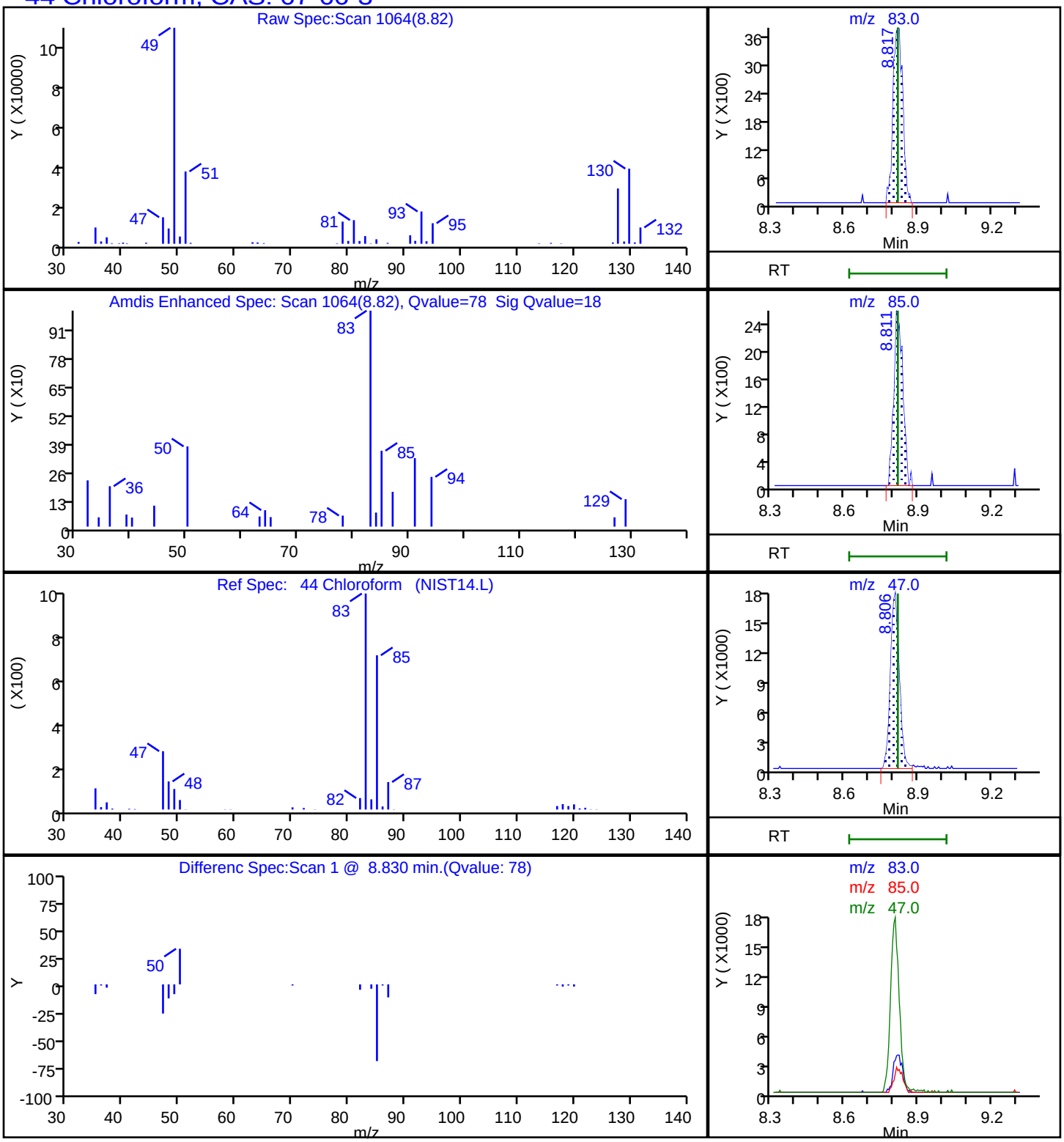
6 Chlorodifluoromethane, CAS: 75-45-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P111.D				
Injection Date:	09-Sep-2020 01:43:30	Instrument ID:	MG		
Lims ID:	140-20194-A-2	Lab Sample ID:	140-20194-2		
Client ID:	SV-116-A-29				
Operator ID:	HMT	ALS Bottle#:	11	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

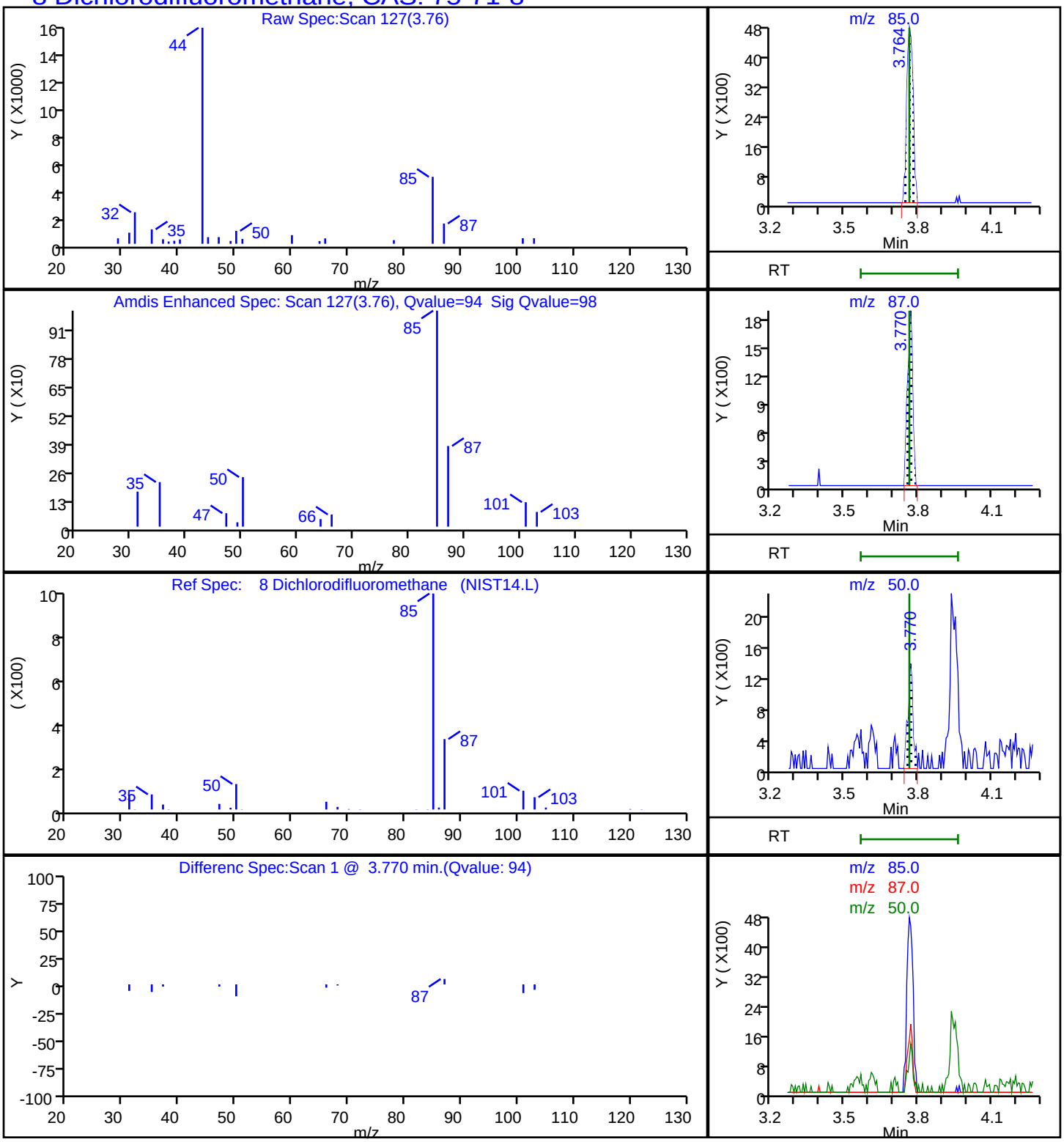
44 Chloroform, CAS: 67-66-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P111.D				
Injection Date:	09-Sep-2020 01:43:30	Instrument ID:	MG		
Lims ID:	140-20194-A-2	Lab Sample ID:	140-20194-2		
Client ID:	SV-116-A-29				
Operator ID:	HMT	ALS Bottle#:	11	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

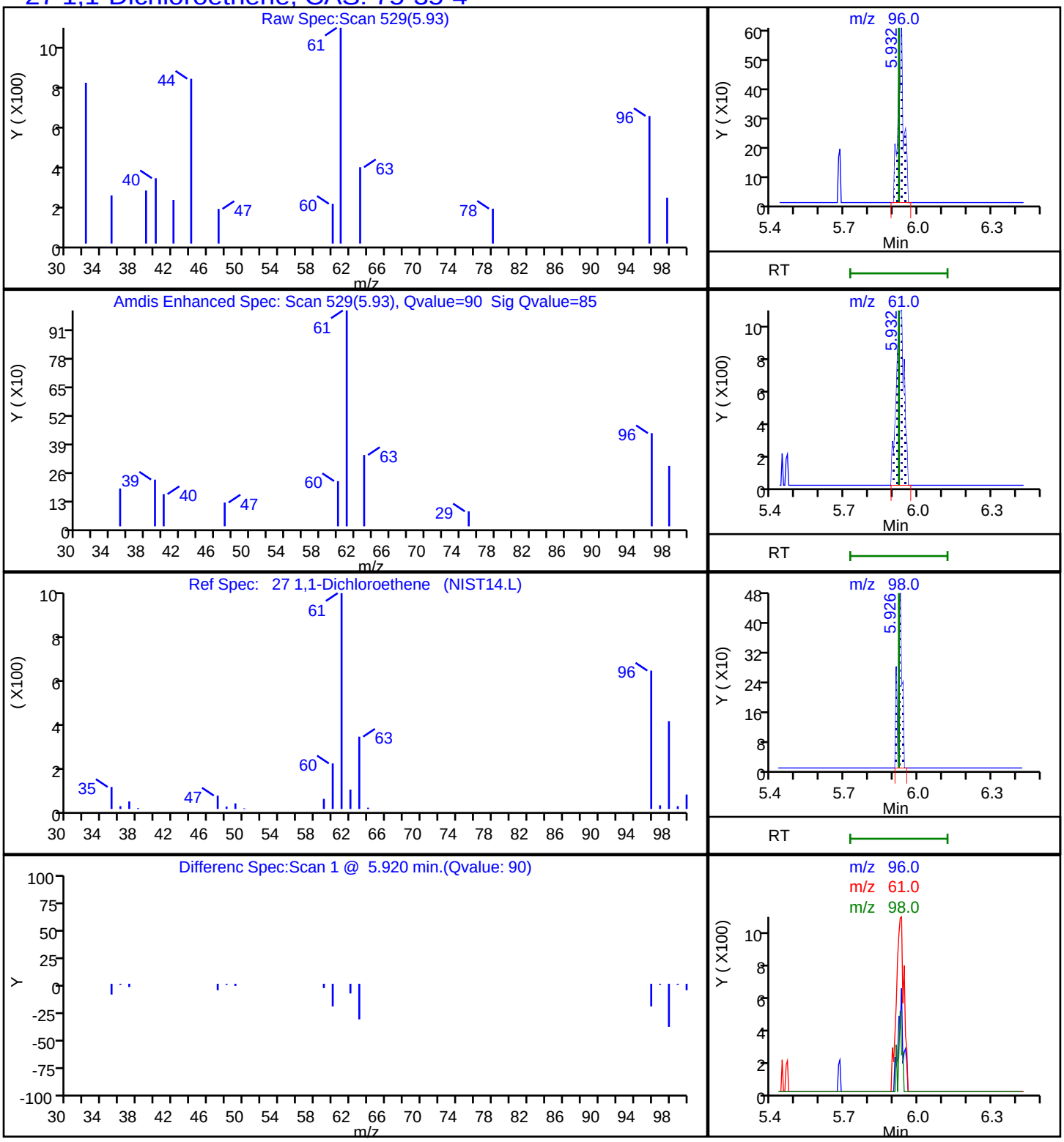
8 Dichlorodifluoromethane, CAS: 75-71-8



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P111.D		
Injection Date:	09-Sep-2020 01:43:30	Instrument ID:	MG
Lims ID:	140-20194-A-2	Lab Sample ID:	140-20194-2
Client ID:	SV-116-A-29		
Operator ID:	HMT	ALS Bottle#:	11 Worklist Smp#: 16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

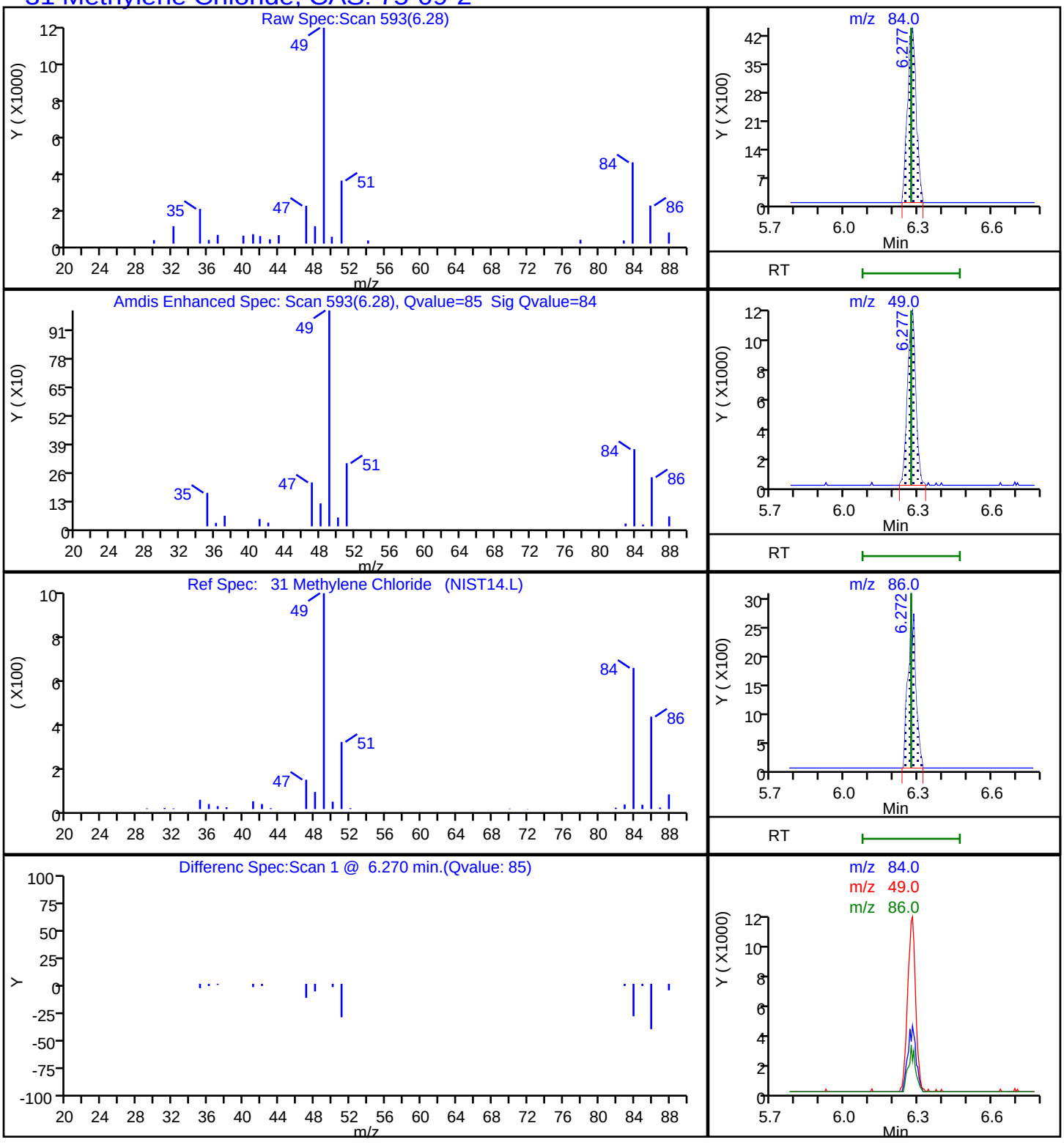
27 1,1-Dichloroethene, CAS: 75-35-4



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P111.D				
Injection Date:	09-Sep-2020 01:43:30	Instrument ID:	MG		
Lims ID:	140-20194-A-2	Lab Sample ID:	140-20194-2		
Client ID:	SV-116-A-29				
Operator ID:	HMT	ALS Bottle#:	11	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

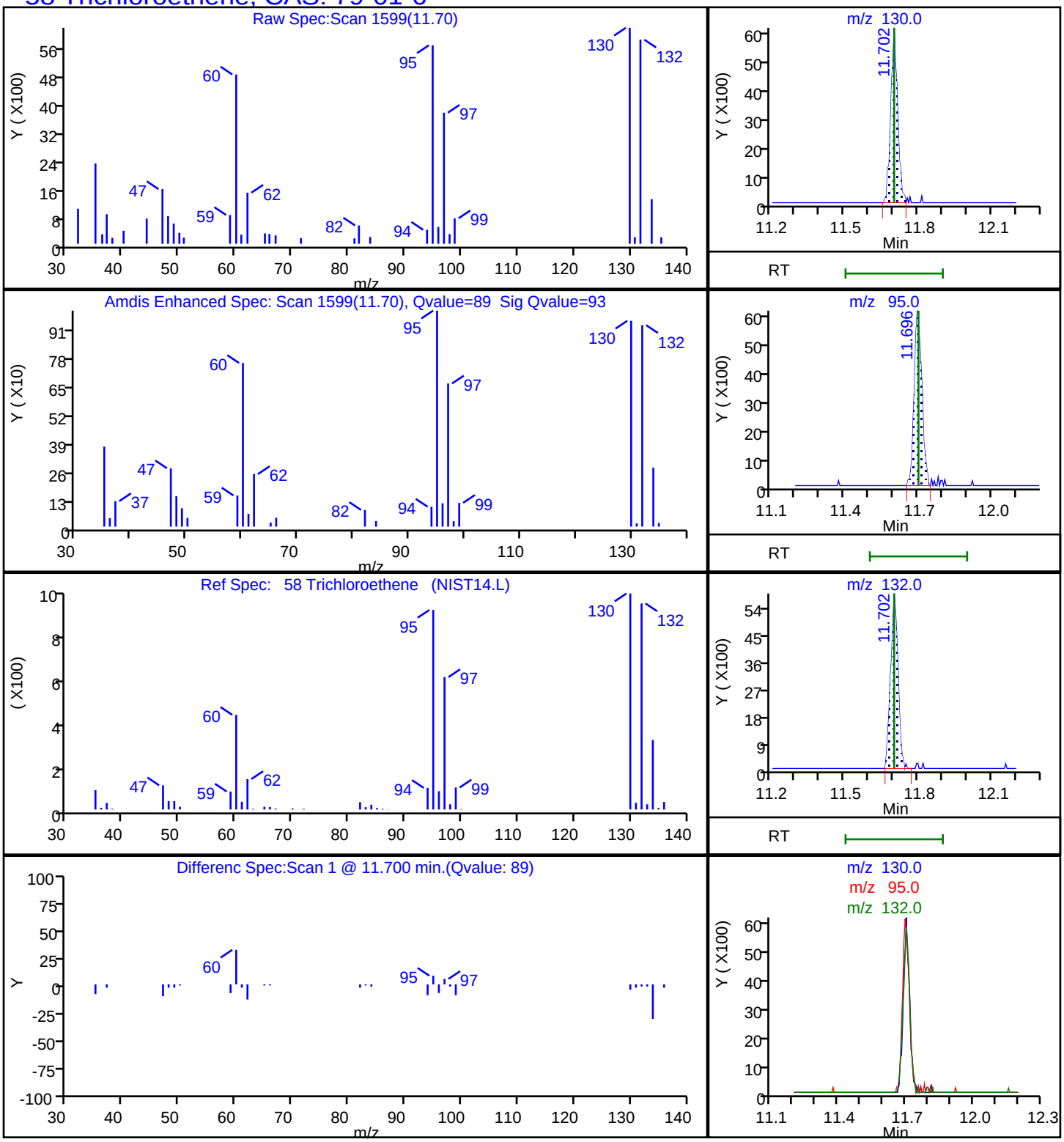
31 Methylene Chloride, CAS: 75-09-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P111.D		
Injection Date:	09-Sep-2020 01:43:30	Instrument ID:	MG
Lims ID:	140-20194-A-2	Lab Sample ID:	140-20194-2
Client ID:	SV-116-A-29		
Operator ID:	HMT	ALS Bottle#:	11 Worklist Smp#: 16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

58 Trichloroethene, CAS: 79-01-6



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: SV-DUP 3-A-29 Lab Sample ID: 140-20194-3

Matrix: Air Lab File ID: GI08P112.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 00:00

Sample wt/vol: 100(mL) Date Analyzed: 09/09/2020 02:29

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42503 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.11	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.056	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	0.34	J	0.40	0.11
67-66-3	Chloroform	119.38	0.72		0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.42		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	0.16	J	0.40	0.040
100-41-4	Ethylbenzene	106.17	ND		0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	0.049	J	0.40	0.035
108-88-3	Toluene	92.14	ND		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	1.2		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND	*	0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	ND		0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	98		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: SV-DUP 3-A-29 Lab Sample ID: 140-20194-3

Matrix: Air Lab File ID: GI08P112.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 00:00

Sample wt/vol: 100(mL) Date Analyzed: 09/09/2020 02:29

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42503 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.35	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.35	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	1.2	J	1.4	0.39
67-66-3	Chloroform	119.38	3.5		2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.1		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	0.65	J	1.6	0.16
100-41-4	Ethylbenzene	106.17	ND		1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	0.33	J	2.7	0.24
108-88-3	Toluene	92.14	ND		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	6.5		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND	*	2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	ND		3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	98		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P112.D				
Lims ID:	140-20194-A-3				
Client ID:	SV-DUP 3-A-29				
Sample Type:	Client				
Inject. Date:	09-Sep-2020 02:29:30	ALS Bottle#:	12	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016519-017				
Misc. Info.:	140-20194-a-3				
Operator ID:	HMT	Instrument ID:	MG		
Method:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\MG_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	09-Sep-2020 14:09:43	Calib Date:	02-Sep-2020 03:27:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1034				
First Level Reviewer: barlozhetskayaa		Date:	09-Sep-2020 14:09:43		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.806	8.806	0.000	85	97654	4.80	
* 2 1,4-Difluorobenzene	114	10.990	10.990	0.000	98	530751	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.724	15.724	0.000	97	523970	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.369	17.369	0.000	87	375006	4.56	
6 Chlorodifluoromethane	51	3.705	3.699	0.006	97	5925	0.0677	
8 Dichlorodifluoromethane	85	3.769	3.766	0.005	95	8272	0.0846	
27 1,1-Dichloroethene	96	5.926	5.921	0.005	88	784	0.0326	
44 Chloroform	83	8.817	8.817	0.000	48	9816	0.1433	
47 1,1,1-Trichloroethane	97	9.847	9.852	-0.005	11	1001	0.0152	
50 Benzene	78	10.445	10.445	0.000	78	2411	0.0221	
52 Carbon tetrachloride	117	10.461	10.467	-0.006	48	761	0.0113	
58 Trichloroethene	130	11.702	11.702	0.000	87	11593	0.2437	
73 Tetrachloroethene	129	14.888	14.899	-0.011	33	430	0.009870	

Reagents:

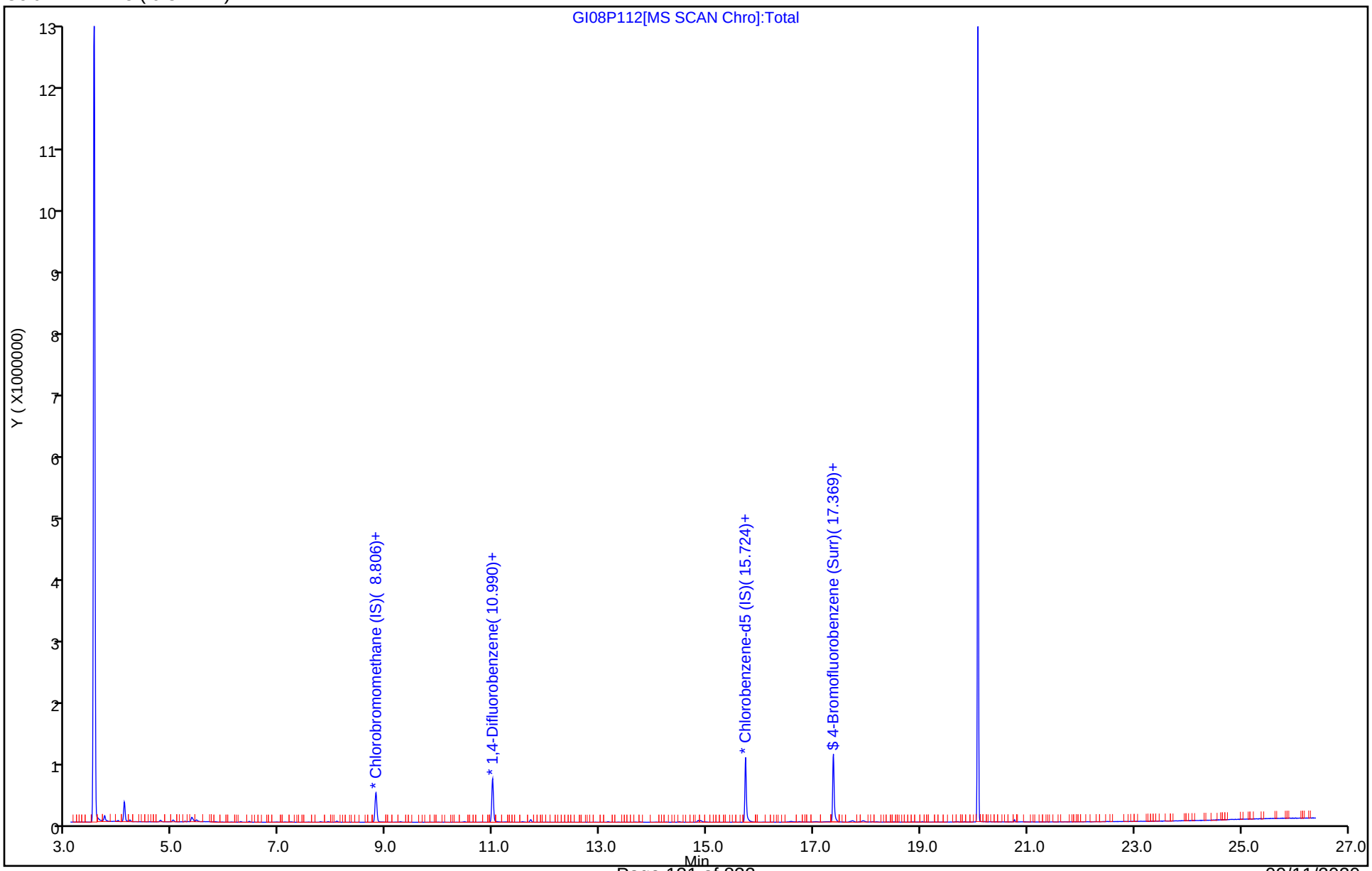
40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

Report Date: 09-Sep-2020 14:09:44 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P112.D				
Injection Date:	09-Sep-2020 02:29:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	140-20194-A-3	Lab Sample ID:	140-20194-3	Worklist Smp#:	17
Client ID:	SV-DUP 3-A-29				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P112.D				
Lims ID:	140-20194-A-3				
Client ID:	SV-DUP 3-A-29				
Sample Type:	Client				
Inject. Date:	09-Sep-2020 02:29:30	ALS Bottle#:	12	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016519-017				
Misc. Info.:	140-20194-a-3				
Operator ID:	HMT	Instrument ID:	MG		
Method:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\MG_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	09-Sep-2020 14:09:43	Calib Date:	02-Sep-2020 03:27:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1034				

First Level Reviewer: barlozhetskayaa Date: 09-Sep-2020 14:09:43

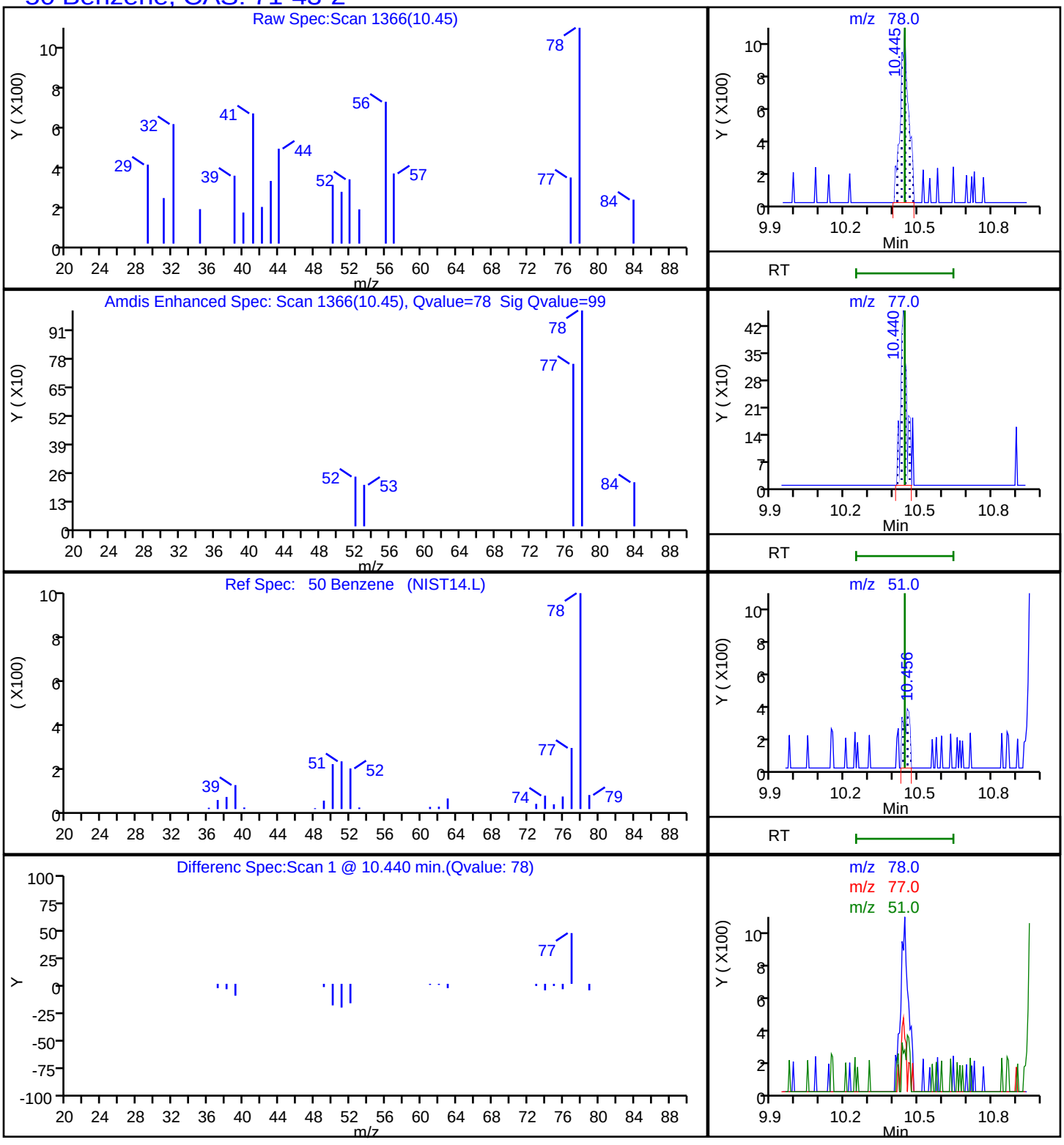
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	4.56	98.30

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P112.D

Injection Date:	09-Sep-2020 02:29:30	Instrument ID:	MG
Lims ID:	140-20194-A-3	Lab Sample ID:	140-20194-3
Client ID:	SV-DUP 3-A-29		
Operator ID:	HMT	ALS Bottle#:	12 Worklist Smp#: 17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

50 Benzene, CAS: 71-43-2



Report Date: 09-Sep-2020 14:09:44 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P112.D

Injection Date: 09-Sep-2020 02:29:30 Instrument ID: MG

Lims ID: 140-20194-A-3 Lab Sample ID: 140-20194-3

Client ID: SV-DUP 3-A-29

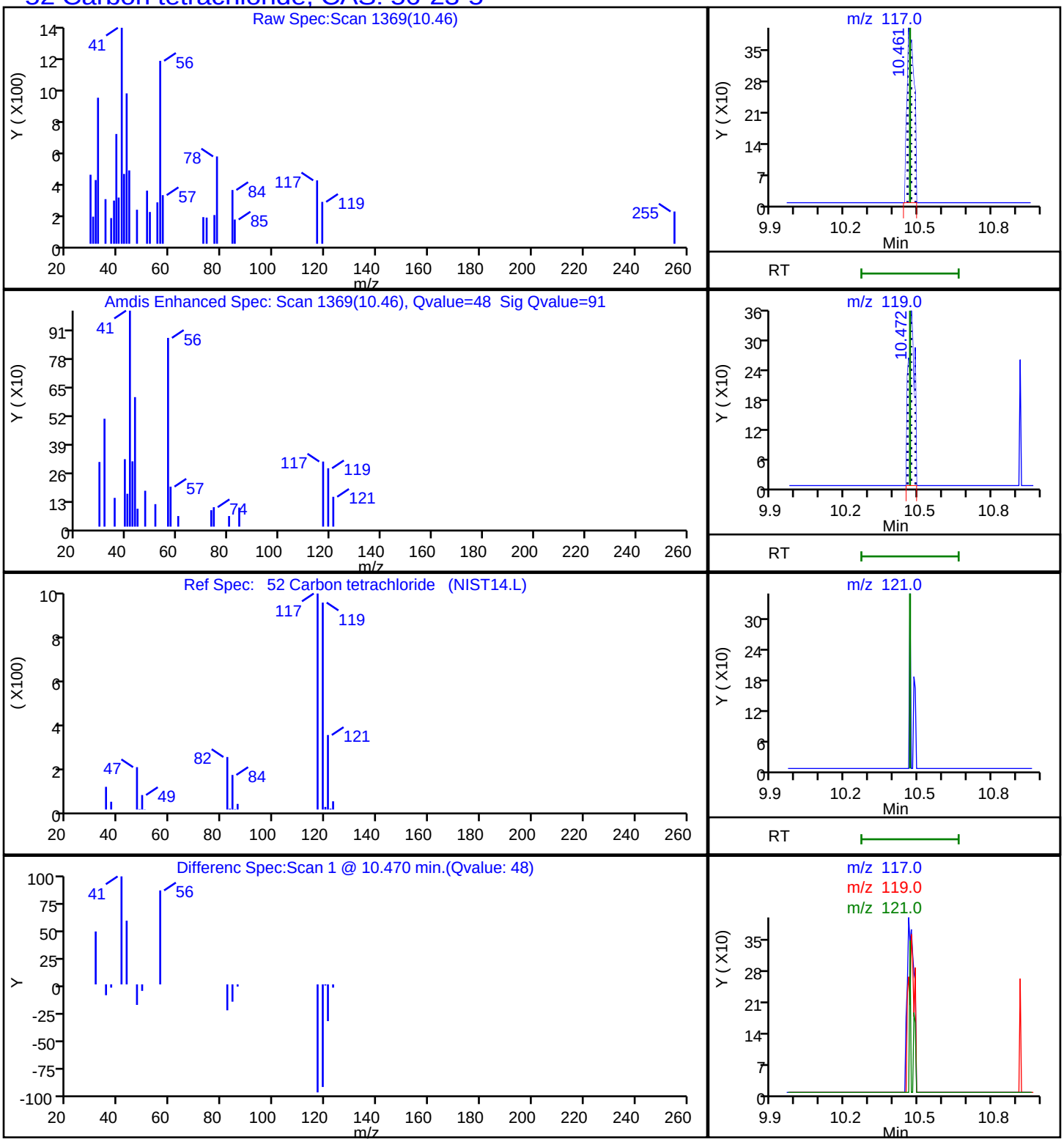
Operator ID: HMT ALS Bottle#: 12 Worklist Smp#: 17

Purge Vol: 500.000 mL Dil. Factor: 1.0000

Method: MG_TO15 Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm) Detector MS SCAN

52 Carbon tetrachloride, CAS: 56-23-5

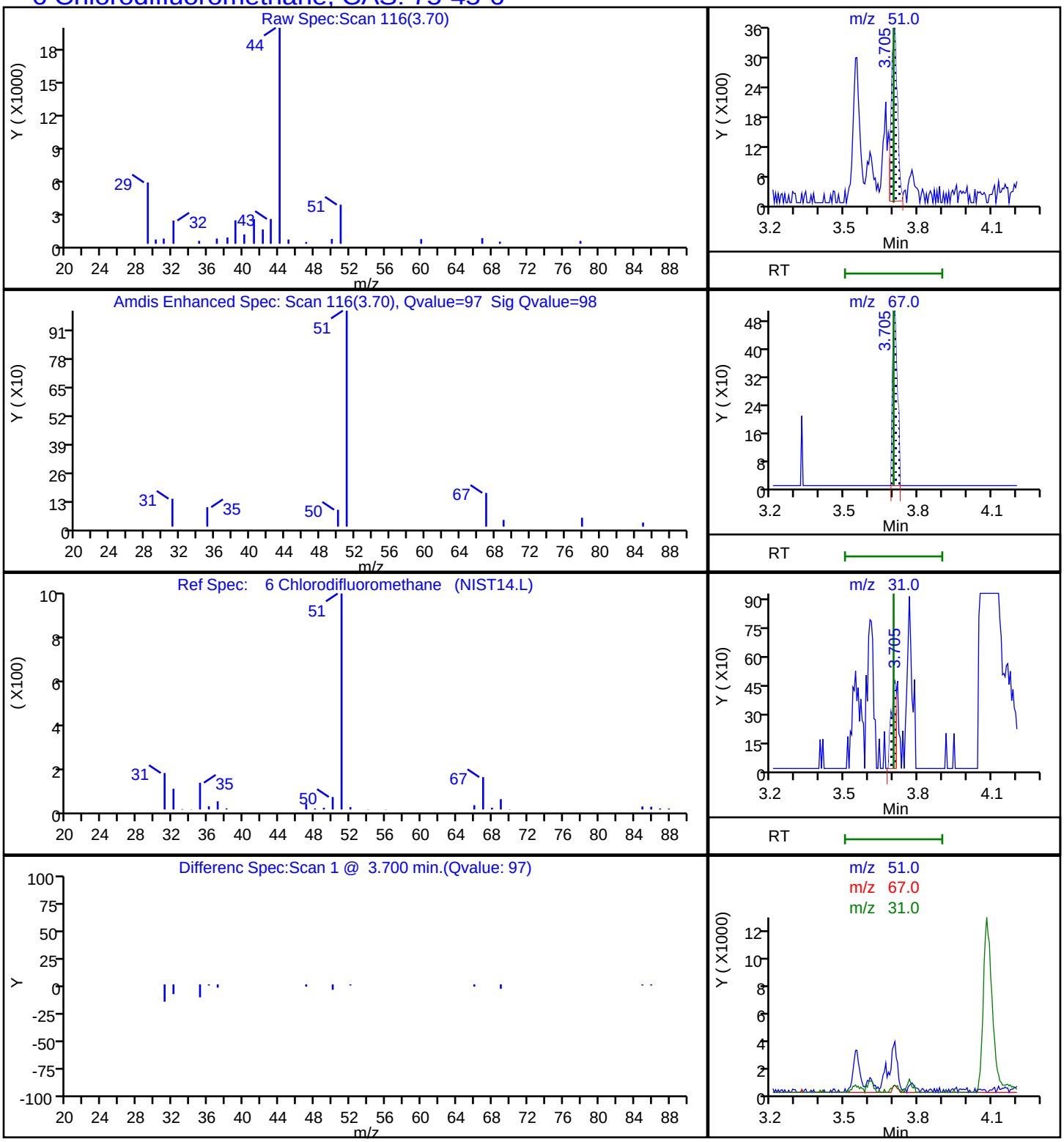


Report Date: 09-Sep-2020 14:09:44 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P112.D				
Injection Date:	09-Sep-2020 02:29:30	Instrument ID:	MG		
Lims ID:	140-20194-A-3	Lab Sample ID:	140-20194-3		
Client ID:	SV-DUP 3-A-29				
Operator ID:	HMT	ALS Bottle#:	12	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

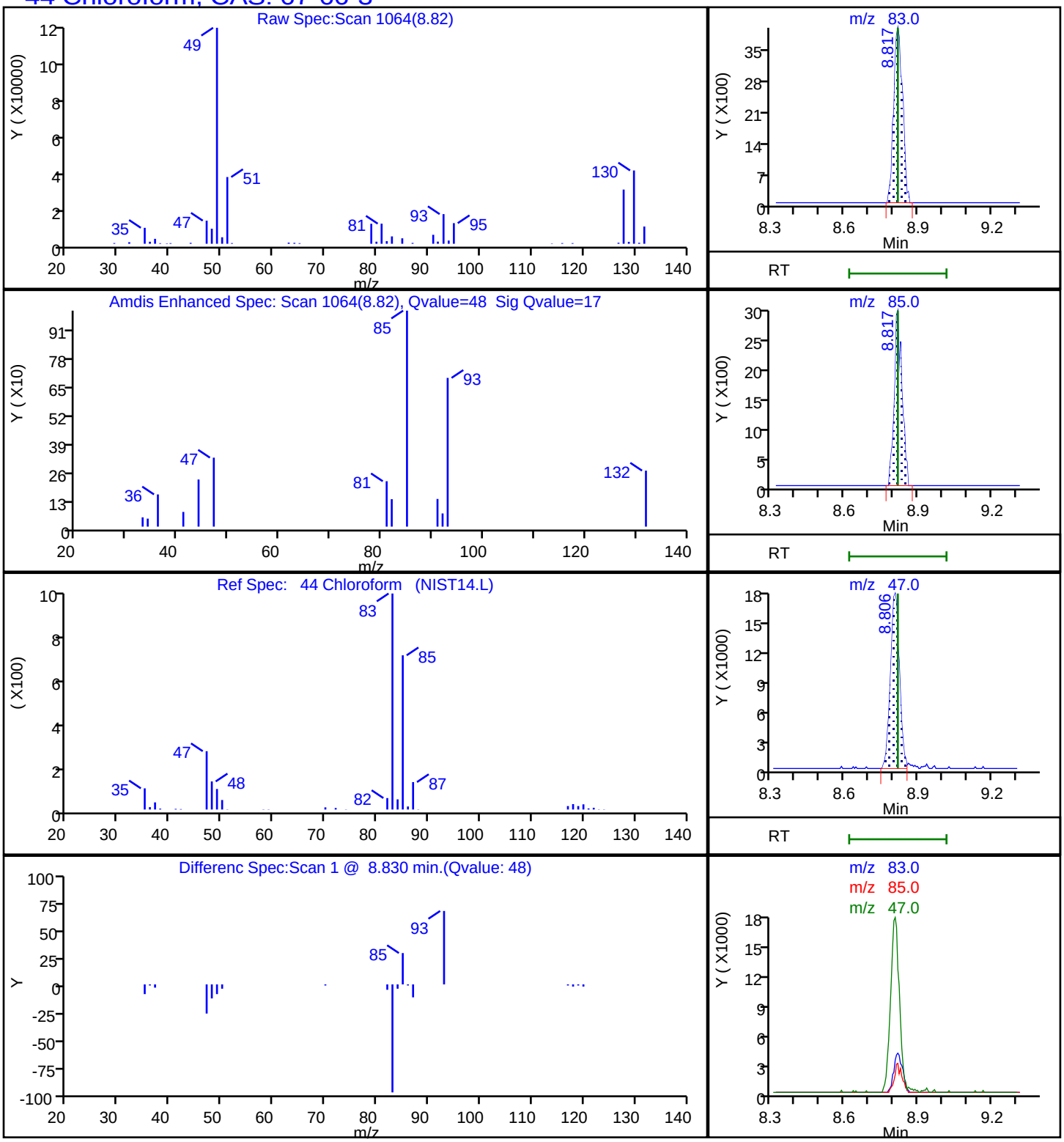
6 Chlorodifluoromethane, CAS: 75-45-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P112.D		
Injection Date:	09-Sep-2020 02:29:30	Instrument ID:	MG
Lims ID:	140-20194-A-3	Lab Sample ID:	140-20194-3
Client ID:	SV-DUP 3-A-29		
Operator ID:	HMT	ALS Bottle#:	12 Worklist Smp#: 17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

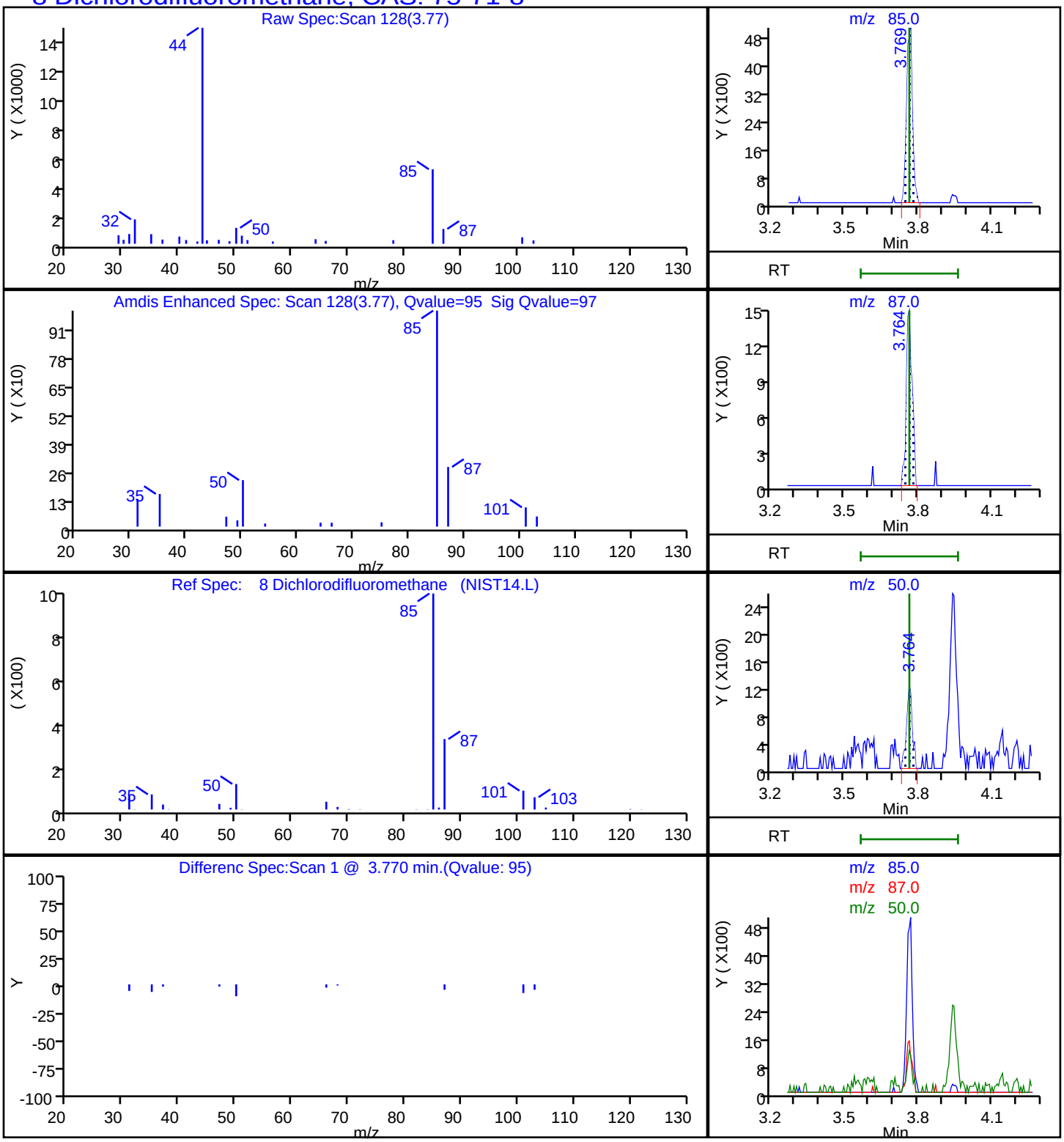
44 Chloroform, CAS: 67-66-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P112.D				
Injection Date:	09-Sep-2020 02:29:30	Instrument ID:	MG		
Lims ID:	140-20194-A-3	Lab Sample ID:	140-20194-3		
Client ID:	SV-DUP 3-A-29				
Operator ID:	HMT	ALS Bottle#:	12	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

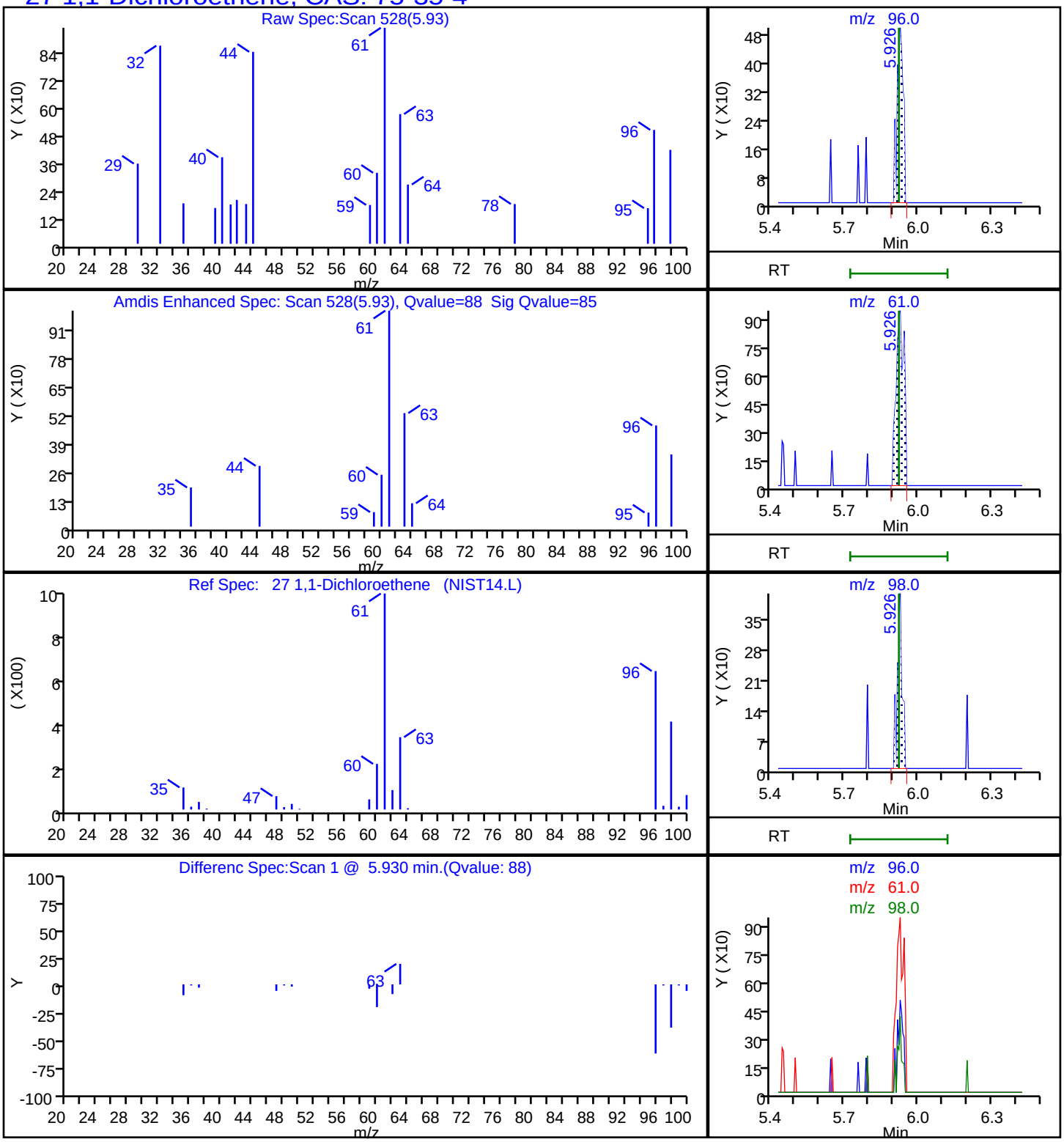
8 Dichlorodifluoromethane, CAS: 75-71-8



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P112.D				
Injection Date:	09-Sep-2020 02:29:30	Instrument ID:	MG		
Lims ID:	140-20194-A-3	Lab Sample ID:	140-20194-3		
Client ID:	SV-DUP 3-A-29				
Operator ID:	HMT	ALS Bottle#:	12	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

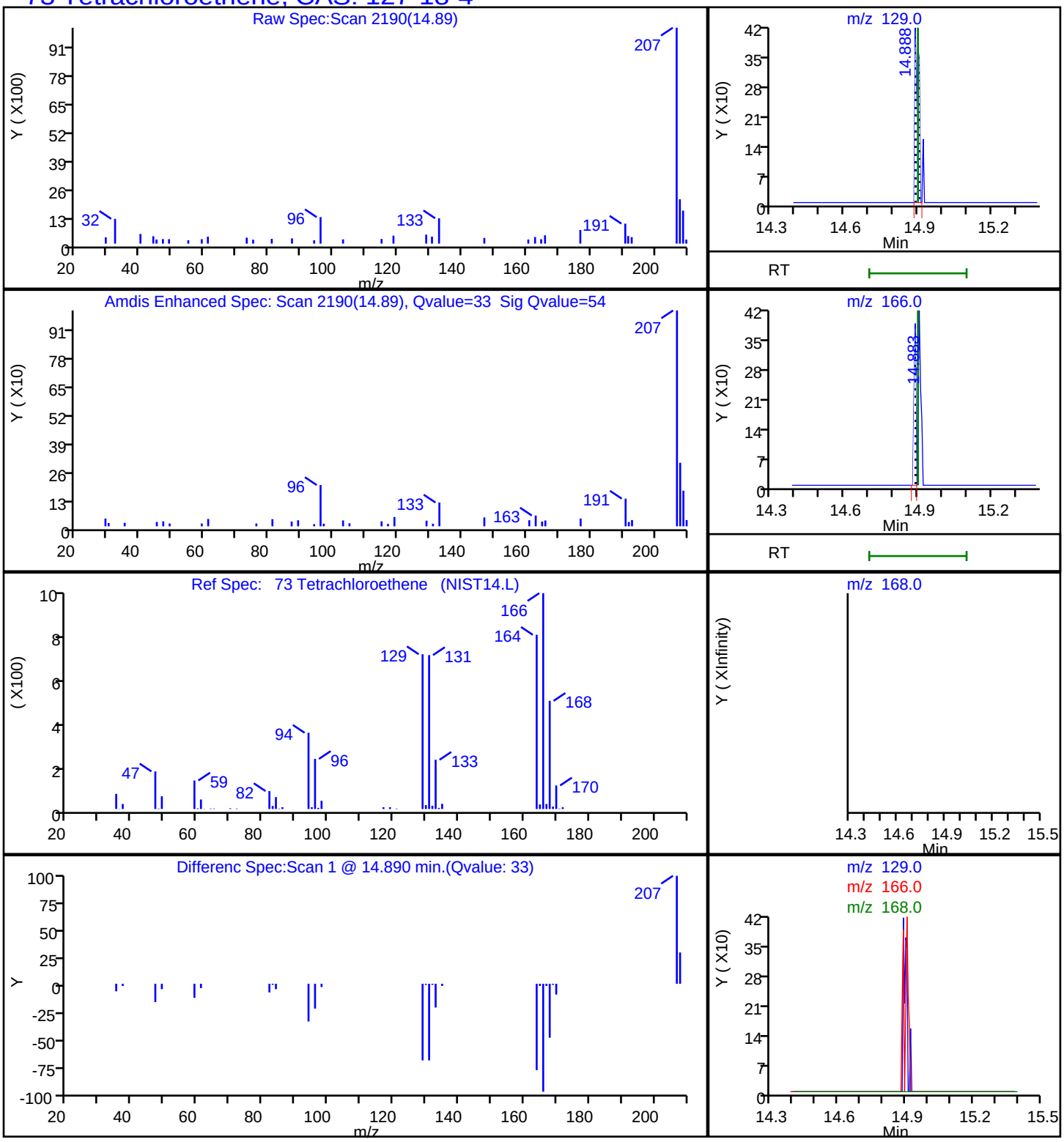
27 1,1-Dichloroethene, CAS: 75-35-4



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P112.D				
Injection Date:	09-Sep-2020 02:29:30	Instrument ID:	MG		
Lims ID:	140-20194-A-3	Lab Sample ID:	140-20194-3		
Client ID:	SV-DUP 3-A-29				
Operator ID:	HMT	ALS Bottle#:	12	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

73 Tetrachloroethene, CAS: 127-18-4

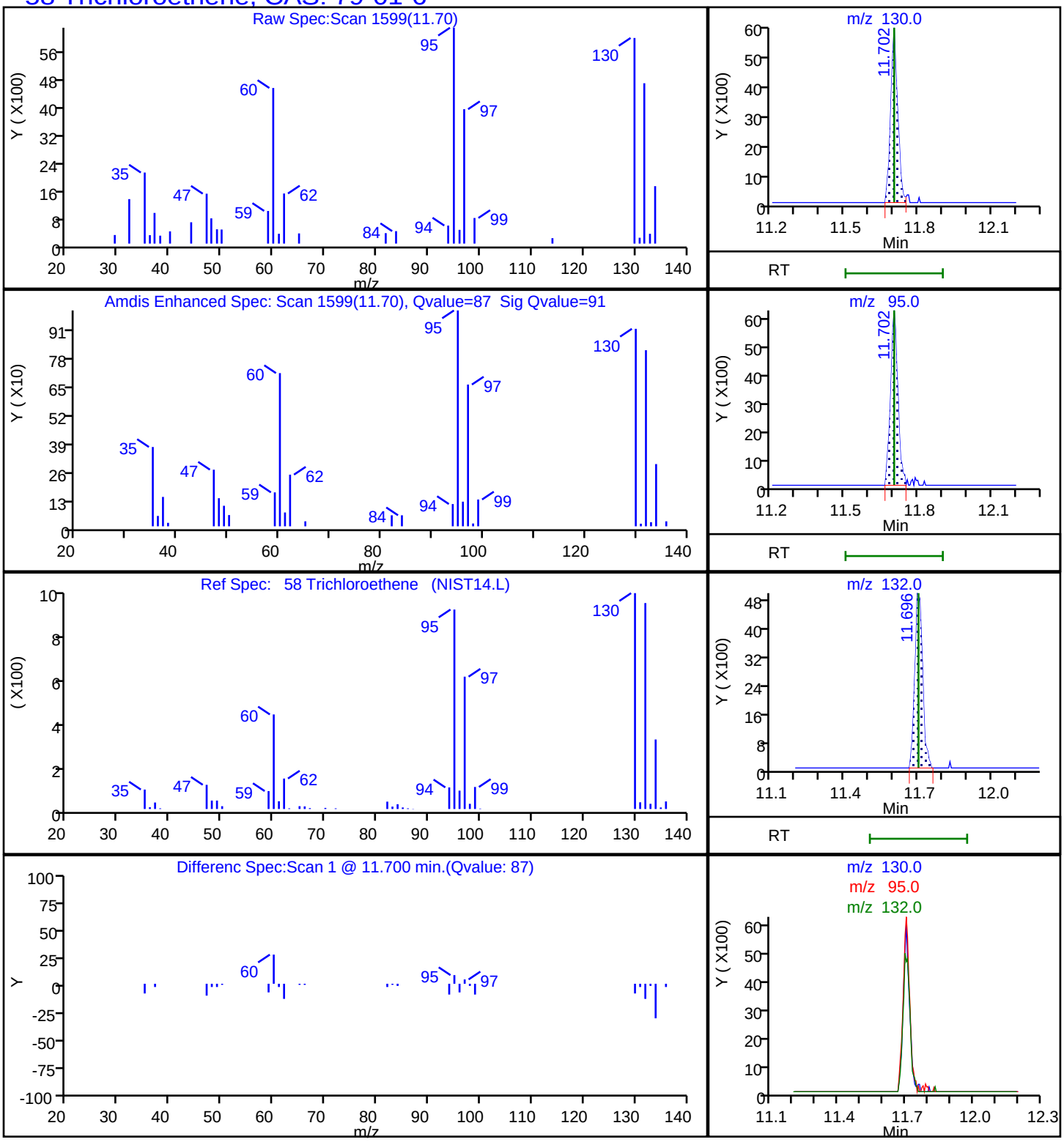


Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P112.D

Injection Date:	09-Sep-2020 02:29:30	Instrument ID:	MG
Lims ID:	140-20194-A-3	Lab Sample ID:	140-20194-3
Client ID:	SV-DUP 3-A-29		
Operator ID:	HMT	ALS Bottle#:	12 Worklist Smp#: 17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

58 Trichloroethene, CAS: 79-01-6



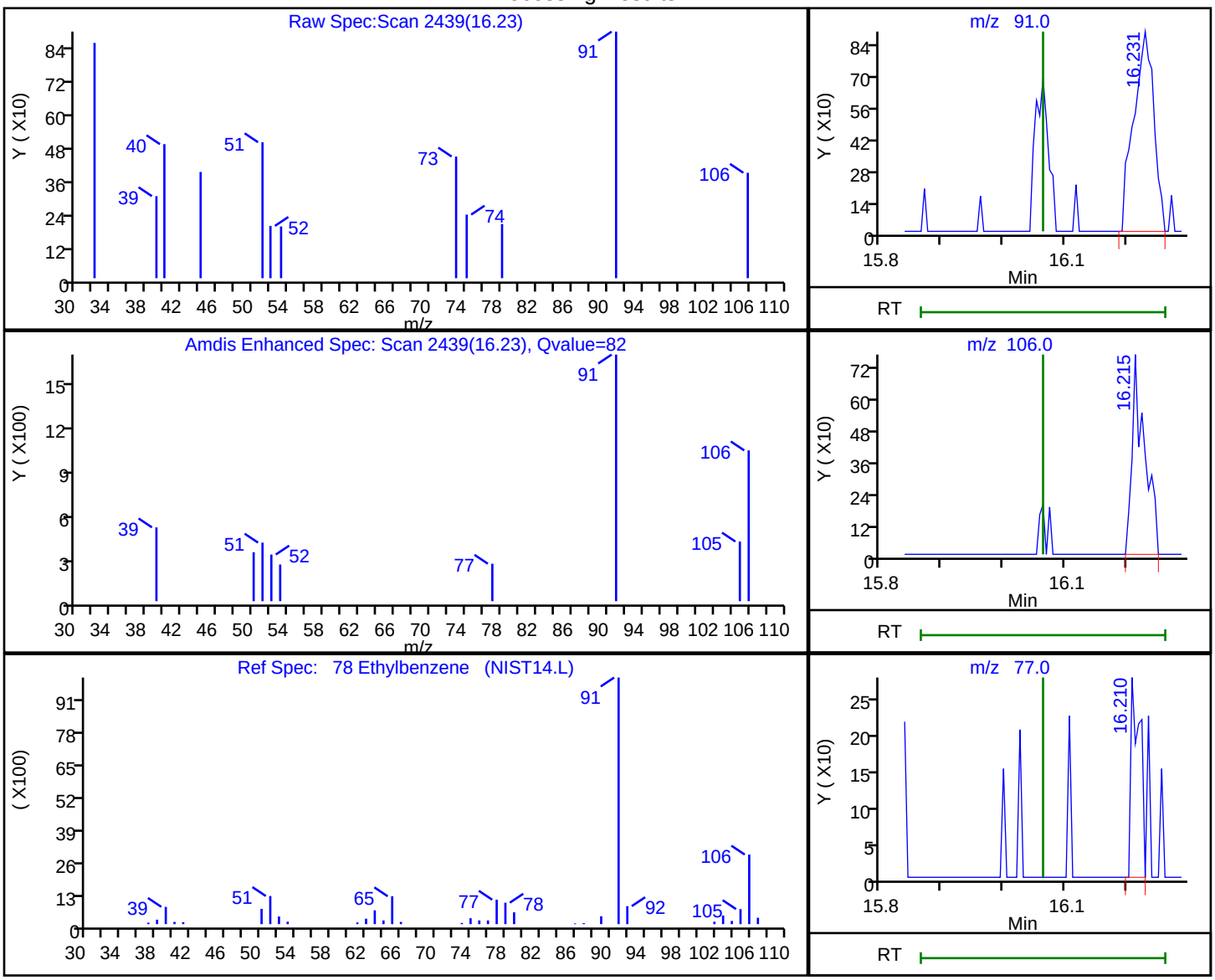
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P112.D				
Injection Date:	09-Sep-2020 02:29:30	Instrument ID:	MG		
Lims ID:	140-20194-A-3	Lab Sample ID:	140-20194-3		
Client ID:	SV-DUP 3-A-29				
Operator ID:	HMT	ALS Bottle#:	12	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

78 Ethylbenzene, CAS: 100-41-4

Processing Results



RT	Mass	Response	Amount
16.23	91.00	2049	0.013796
16.21	106.00	1103	
16.21	77.00	288	

Reviewer: barlozhetskayaa, 09-Sep-2020 14:09:25

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: SV-138-A-29 Lab Sample ID: 140-20194-4

Matrix: Air Lab File ID: GI08P113.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 10:03

Sample wt/vol: 100(mL) Date Analyzed: 09/09/2020 03:15

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42503 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.12	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.054	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	0.40		0.40	0.11
67-66-3	Chloroform	119.38	0.19	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	2.9		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.42		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	0.90		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	0.051	J	0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	4.2		0.40	0.040
100-41-4	Ethylbenzene	106.17	ND		0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	0.19	J	0.40	0.035
108-88-3	Toluene	92.14	ND		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	0.10	J	0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	26		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND	*	0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	ND		0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	98		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: SV-138-A-29 Lab Sample ID: 140-20194-4

Matrix: Air Lab File ID: GI08P113.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 10:03

Sample wt/vol: 100(mL) Date Analyzed: 09/09/2020 03:15

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42503 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.38	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.34	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	1.4		1.4	0.39
67-66-3	Chloroform	119.38	0.94	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	11		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.1		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	3.7		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	0.21	J	1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	16		1.6	0.16
100-41-4	Ethylbenzene	106.17	ND		1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	1.3	J	2.7	0.24
108-88-3	Toluene	92.14	ND		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	0.39	J	1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	140		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND	*	2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	ND		3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	98		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P113.D
Lims ID: 140-20194-A-4
Client ID: SV-138-A-29
Sample Type: Client
Inject. Date: 09-Sep-2020 03:15:30 ALS Bottle#: 13 Worklist Smp#: 18
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016519-018
Misc. Info.: 140-20194-a-4
Operator ID: HMT Instrument ID: MG

Method: \\chromfs\Knoxville\ChromData\MG\20200904-16519.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 09-Sep-2020 14:10:09 Calib Date: 02-Sep-2020 03:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1034

First Level Reviewer: barlozhetskayaa Date: 09-Sep-2020 14:10:09

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.806	8.806	0.000	86	92444	4.80	
* 2 1,4-Difluorobenzene	114	10.990	10.990	0.000	98	515832	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.724	15.724	0.000	96	518977	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.369	17.369	0.000	80	368588	4.53	
6 Chlorodifluoromethane	51	3.705	3.699	0.006	94	6661	0.0804	
8 Dichlorodifluoromethane	85	3.764	3.766	0.000	97	7806	0.0843	
27 1,1-Dichloroethene	96	5.926	5.921	0.005	89	18945	0.8313	
34 trans-1,2-Dichloroethene	96	7.080	7.086	-0.006	78	534	0.0199	
37 1,1-Dichloroethane	63	7.501	7.495	0.006	96	12101	0.1809	
42 cis-1,2-Dichloroethene	96	8.482	8.482	0.000	93	16467	0.5775	
44 Chloroform	83	8.817	8.817	0.000	27	2490	0.0384	
48 1,2-Dichloroethane	62	9.960	9.954	0.006	51	593	0.0102	
50 Benzene	78	10.445	10.445	0.000	62	2527	0.0238	
52 Carbon tetrachloride	117	10.472	10.467	0.005	37	707	0.0108	
58 Trichloroethene	130	11.702	11.702	0.000	89	243831	5.27	
67 Toluene	91	13.762	13.756	0.006	90	5754	0.0503	
73 Tetrachloroethene	129	14.894	14.899	-0.005	43	1630	0.0378	

Reagents:

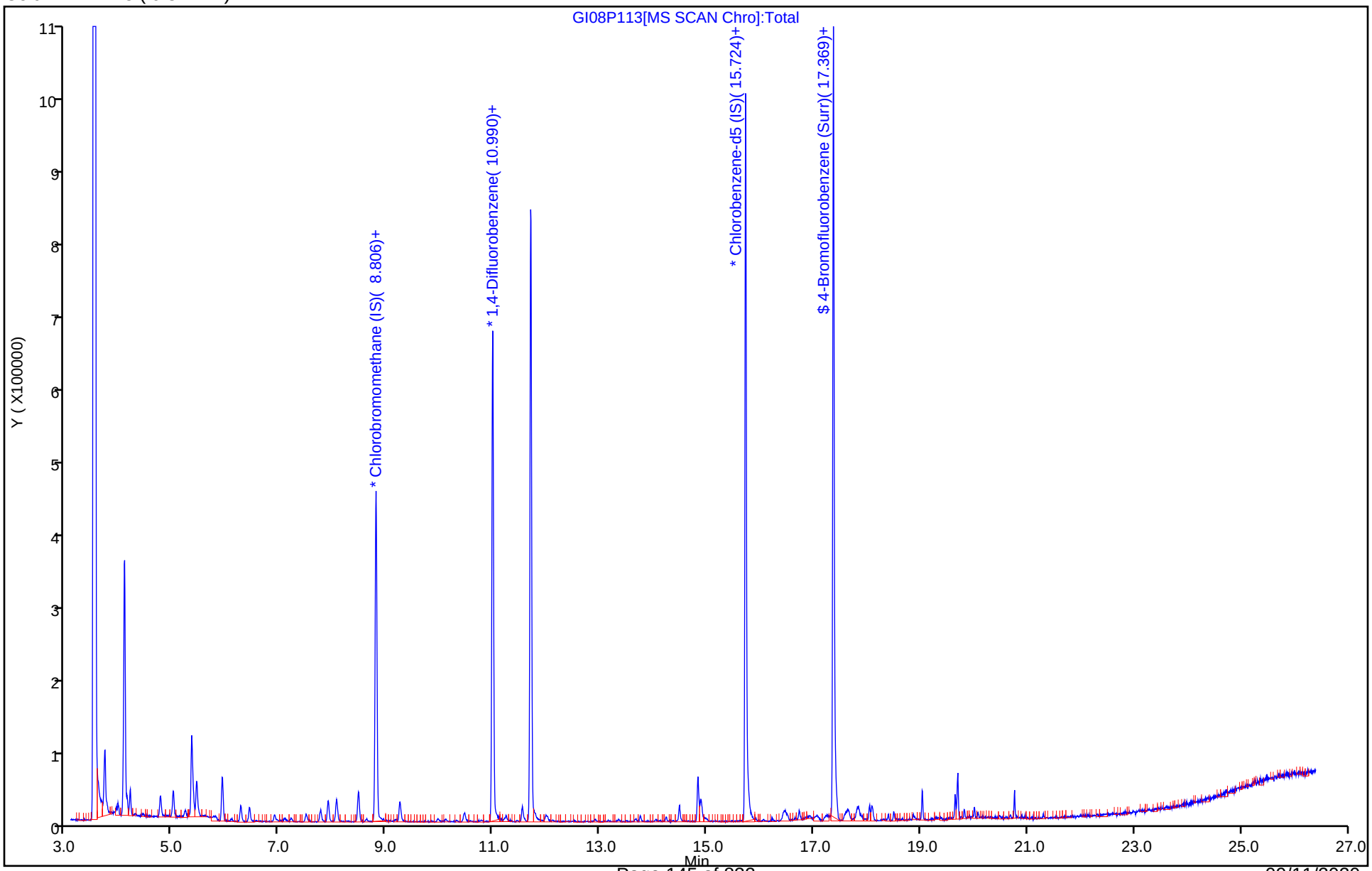
40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

Report Date: 09-Sep-2020 14:10:09 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P113.D				
Injection Date:	09-Sep-2020 03:15:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	140-20194-A-4	Lab Sample ID:	140-20194-4	Worklist Smp#:	18
Client ID:	SV-138-A-29				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P113.D				
Lims ID:	140-20194-A-4				
Client ID:	SV-138-A-29				
Sample Type:	Client				
Inject. Date:	09-Sep-2020 03:15:30	ALS Bottle#:	13	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016519-018				
Misc. Info.:	140-20194-a-4				
Operator ID:	HMT	Instrument ID:	MG		
Method:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\MG_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	09-Sep-2020 14:10:09	Calib Date:	02-Sep-2020 03:27:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1034				

First Level Reviewer: barlozhetskayaa Date: 09-Sep-2020 14:10:09

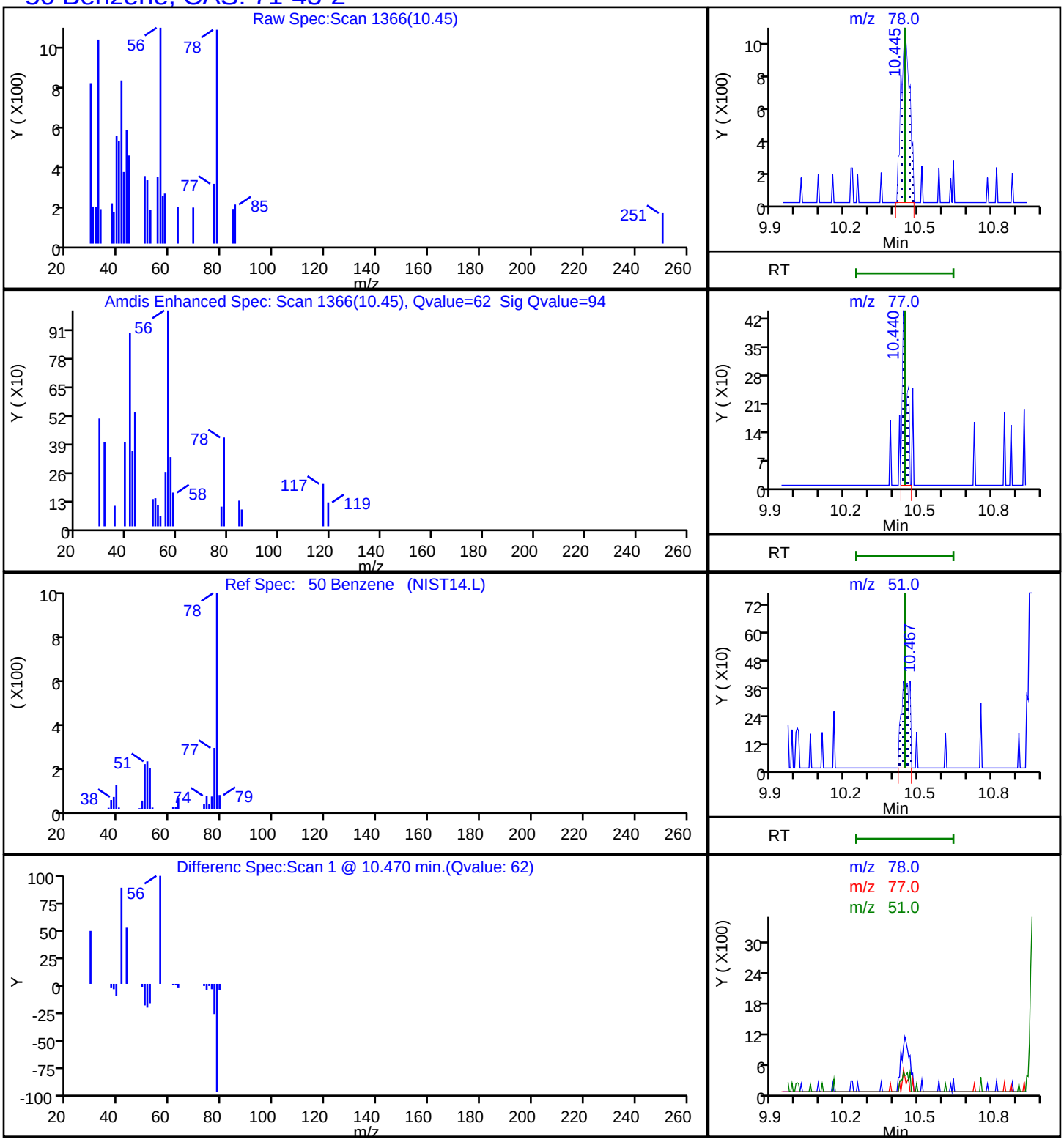
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	4.53	97.54

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P113.D

Injection Date:	09-Sep-2020 03:15:30	Instrument ID:	MG		
Lims ID:	140-20194-A-4	Lab Sample ID:	140-20194-4		
Client ID:	SV-138-A-29				
Operator ID:	HMT	ALS Bottle#:	13	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

50 Benzene, CAS: 71-43-2



Report Date: 09-Sep-2020 14:10:10 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

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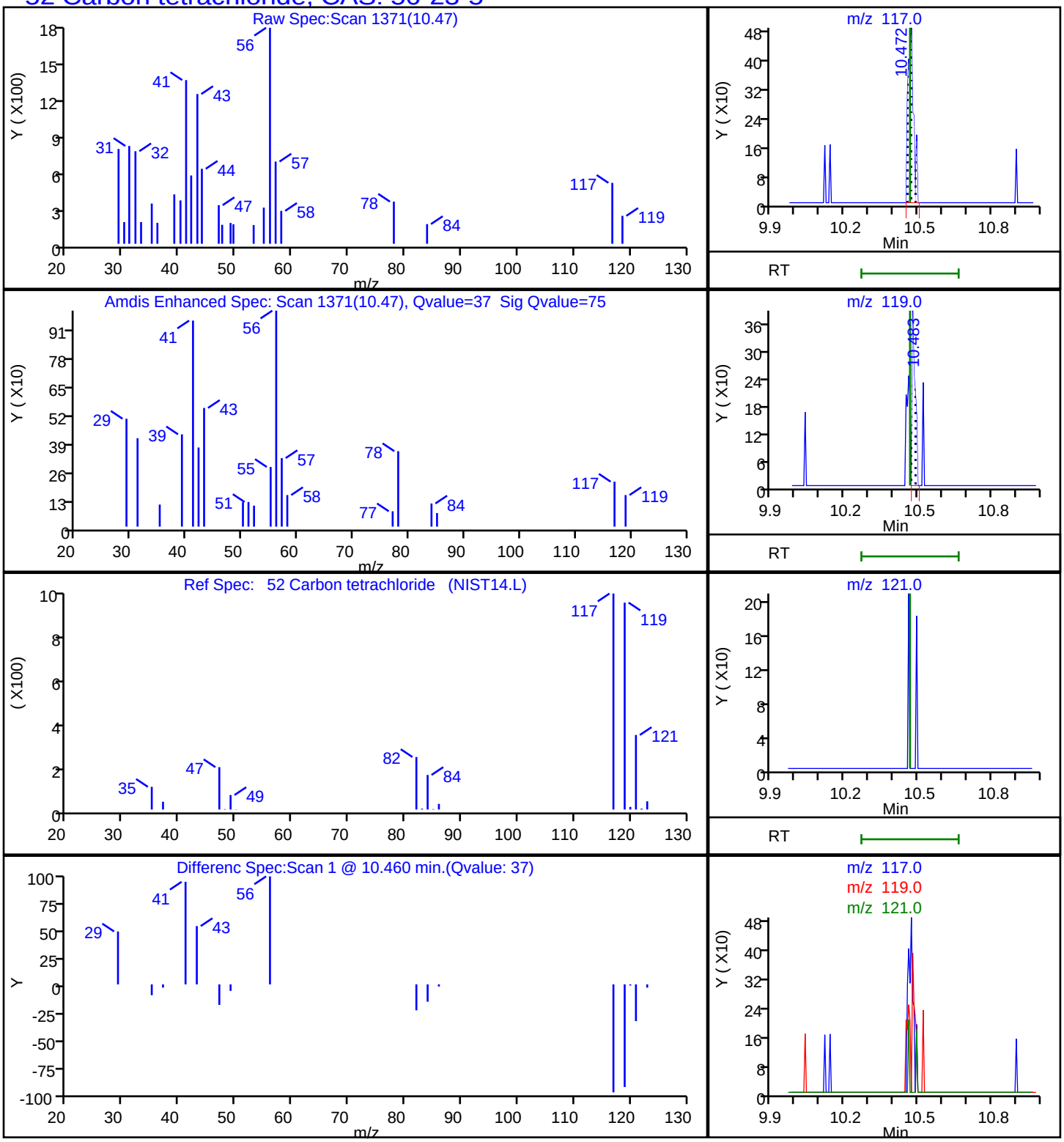
Lims ID:	140-20194-A-4	Lab Sample ID:	140-20194-4		
Client ID:	SV-138-A-29				
Operator ID:	HMT	ALS Bottle#:	13	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

52 Carbon tetrachloride, CAS: 56-23-5

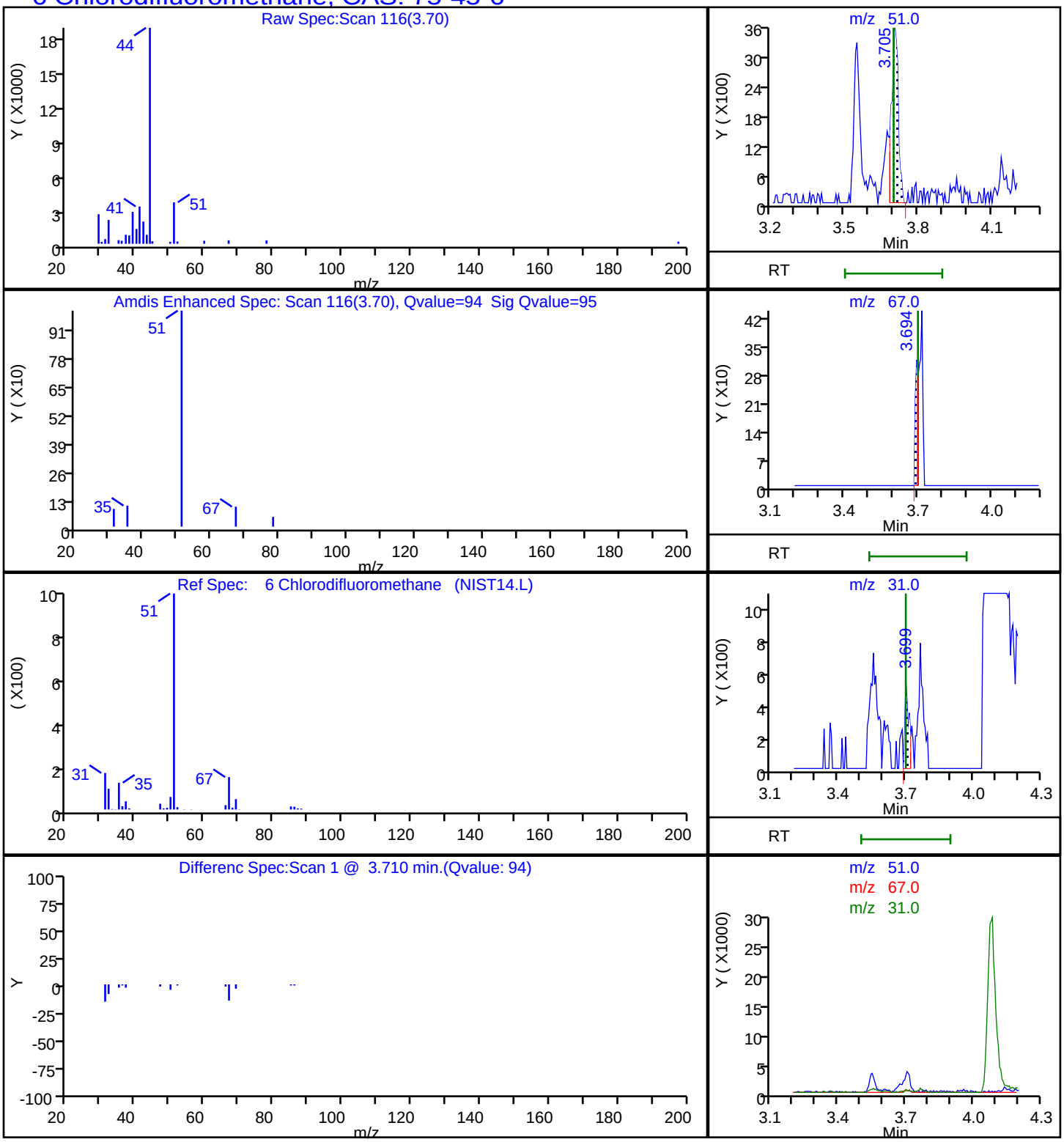


Report Date: 09-Sep-2020 14:10:09 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P113.D				
Injection Date:	09-Sep-2020 03:15:30	Instrument ID:	MG		
Lims ID:	140-20194-A-4	Lab Sample ID:	140-20194-4		
Client ID:	SV-138-A-29				
Operator ID:	HMT	ALS Bottle#:	13	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

6 Chlorodifluoromethane, CAS: 75-45-6

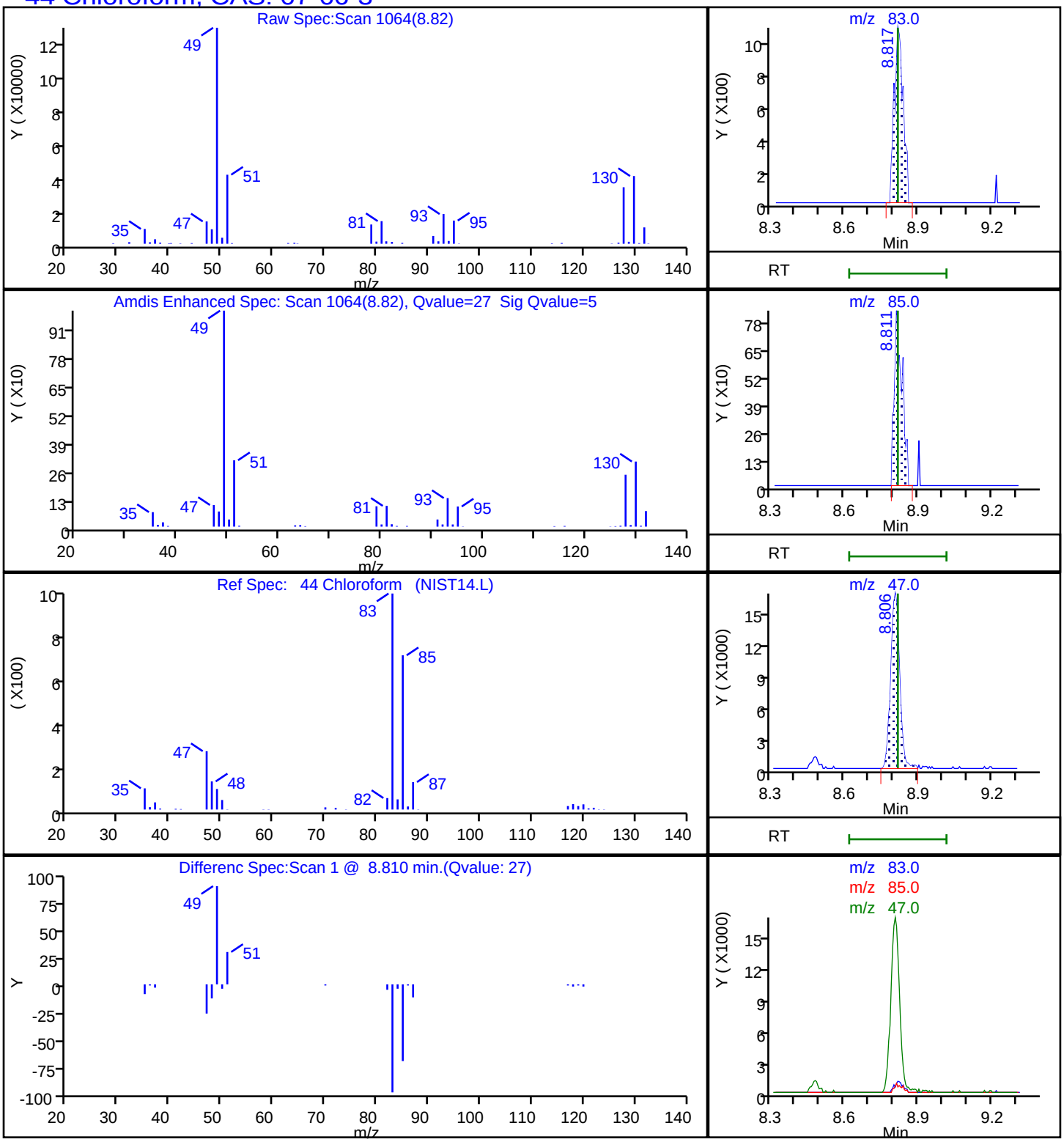


Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P113.D

Injection Date:	09-Sep-2020 03:15:30	Instrument ID:	MG		
Lims ID:	140-20194-A-4	Lab Sample ID:	140-20194-4		
Client ID:	SV-138-A-29				
Operator ID:	HMT	ALS Bottle#:	13	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

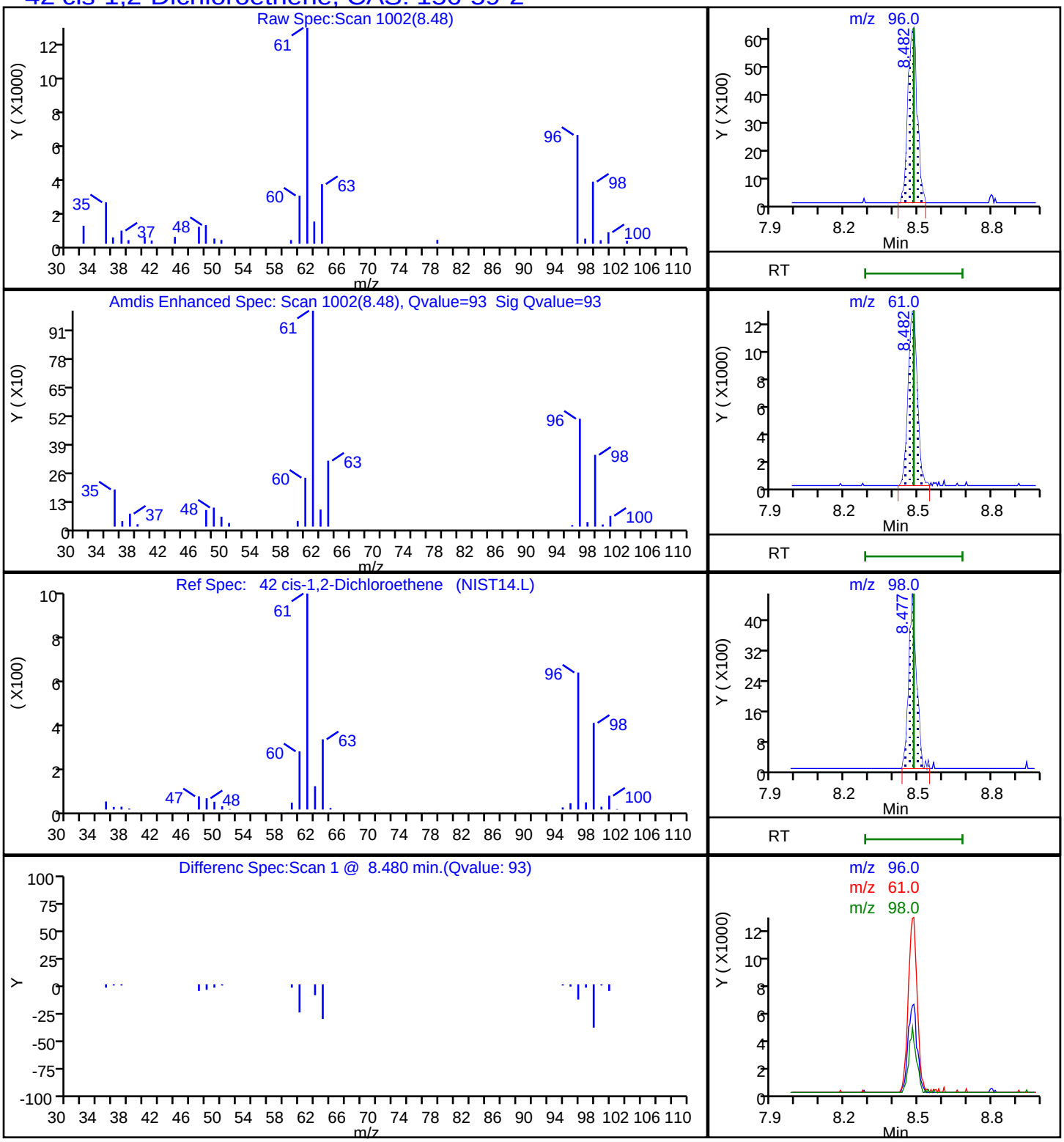
44 Chloroform, CAS: 67-66-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P113.D				
Injection Date:	09-Sep-2020 03:15:30	Instrument ID:	MG		
Lims ID:	140-20194-A-4	Lab Sample ID:	140-20194-4		
Client ID:	SV-138-A-29				
Operator ID:	HMT	ALS Bottle#:	13	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

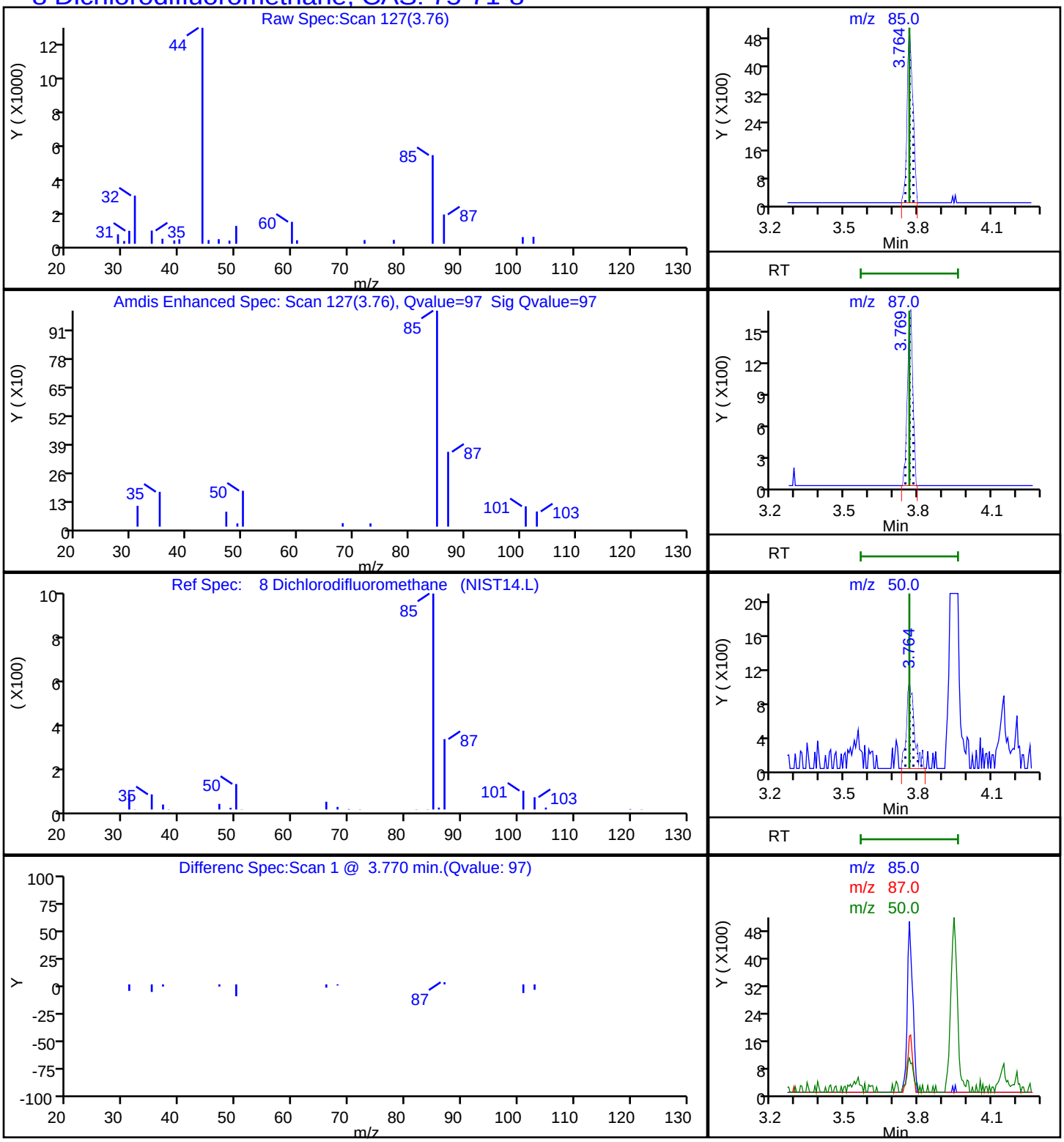
42 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P113.D				
Injection Date:	09-Sep-2020 03:15:30	Instrument ID:	MG		
Lims ID:	140-20194-A-4	Lab Sample ID:	140-20194-4		
Client ID:	SV-138-A-29				
Operator ID:	HMT	ALS Bottle#:	13	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

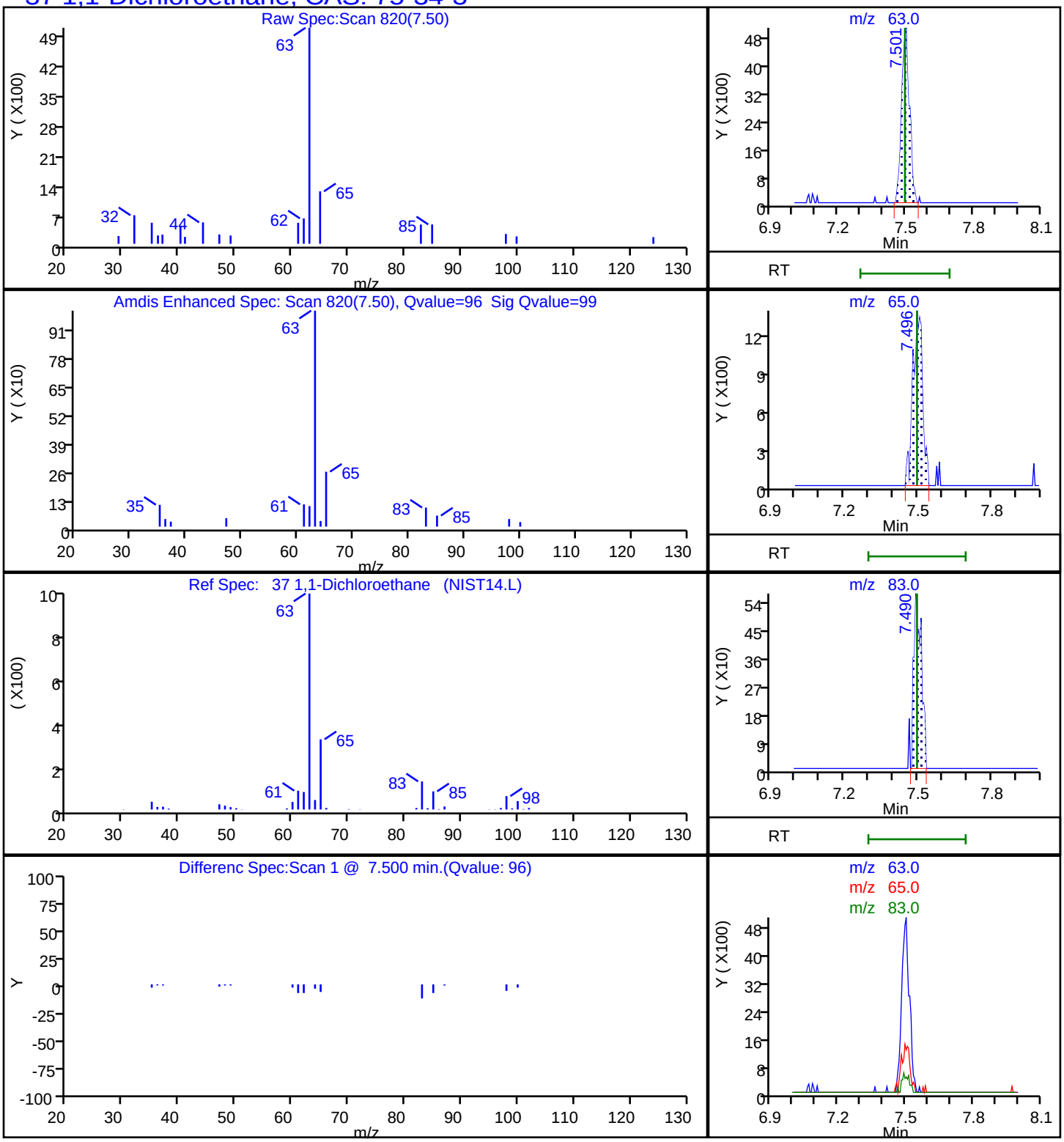
8 Dichlorodifluoromethane, CAS: 75-71-8



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P113.D		
Injection Date:	09-Sep-2020 03:15:30	Instrument ID:	MG
Lims ID:	140-20194-A-4	Lab Sample ID:	140-20194-4
Client ID:	SV-138-A-29		
Operator ID:	HMT	ALS Bottle#:	13 Worklist Smp#: 18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

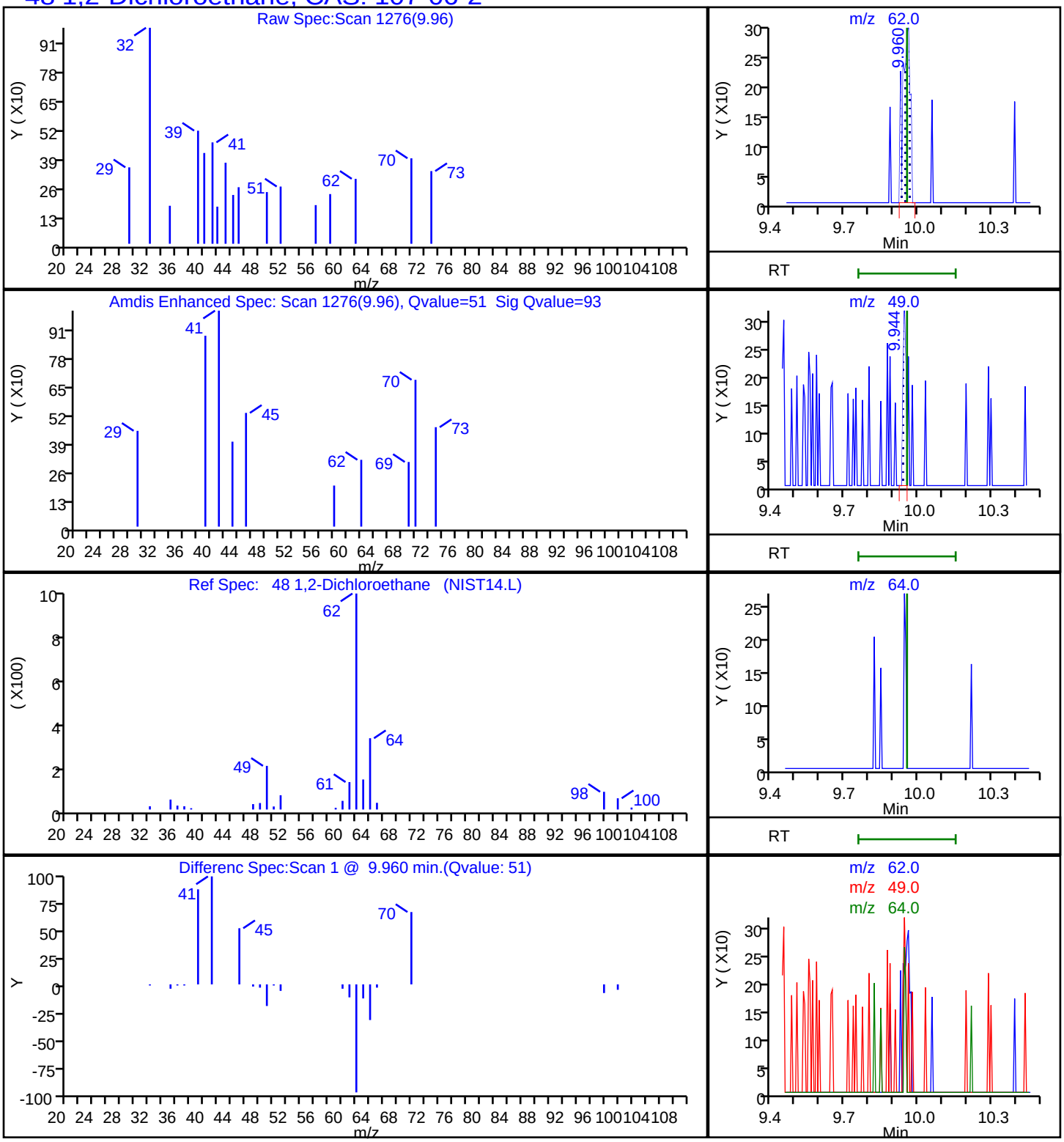
37 1,1-Dichloroethane, CAS: 75-34-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P113.D				
Injection Date:	09-Sep-2020 03:15:30	Instrument ID:	MG		
Lims ID:	140-20194-A-4	Lab Sample ID:	140-20194-4		
Client ID:	SV-138-A-29				
Operator ID:	HMT	ALS Bottle#:	13	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

48 1,2-Dichloroethane, CAS: 107-06-2

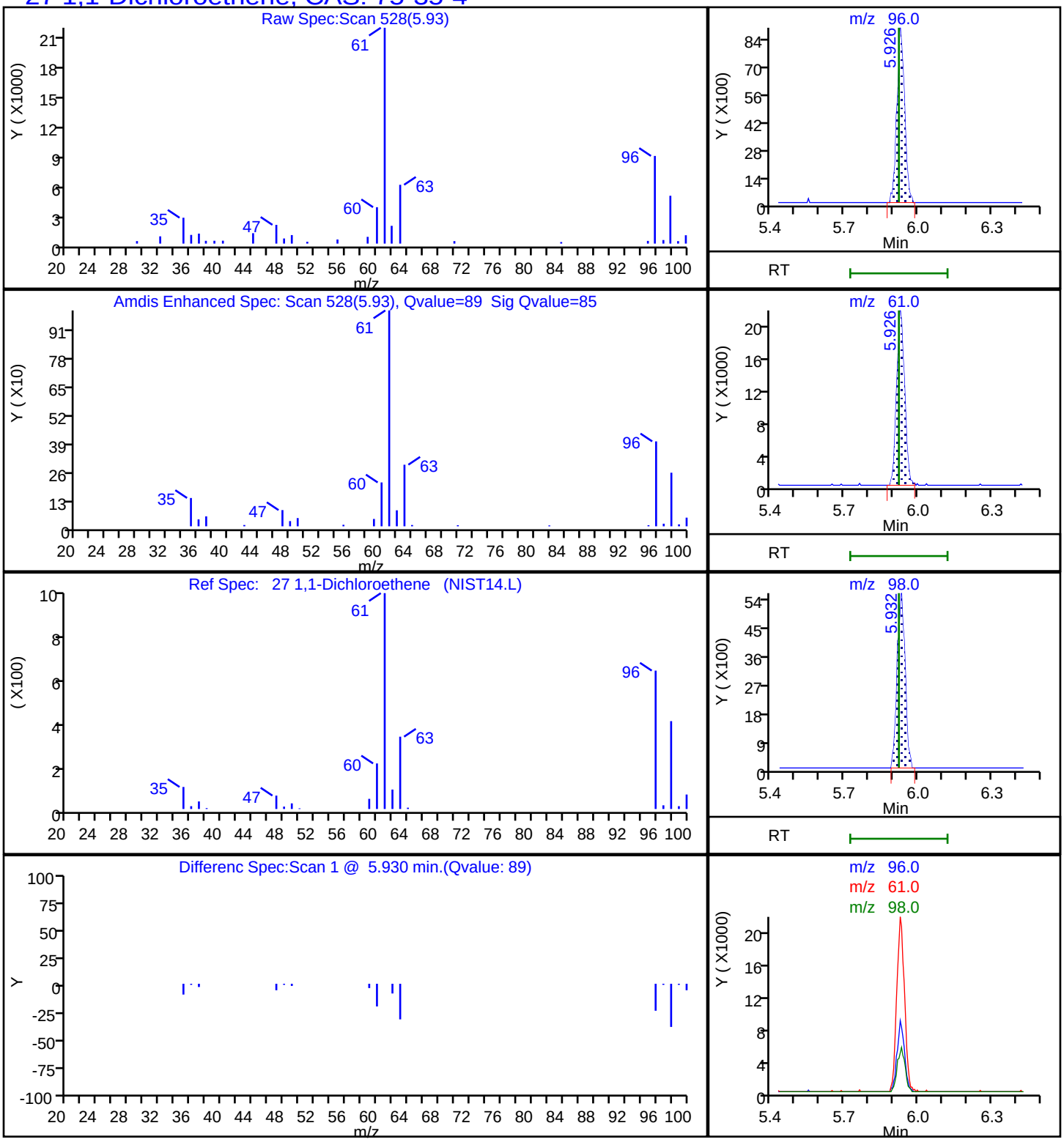


Report Date: 09-Sep-2020 14:10:09 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P113.D				
Injection Date:	09-Sep-2020 03:15:30	Instrument ID:	MG		
Lims ID:	140-20194-A-4	Lab Sample ID:	140-20194-4		
Client ID:	SV-138-A-29				
Operator ID:	HMT	ALS Bottle#:	13	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

27 1,1-Dichloroethene, CAS: 75-35-4

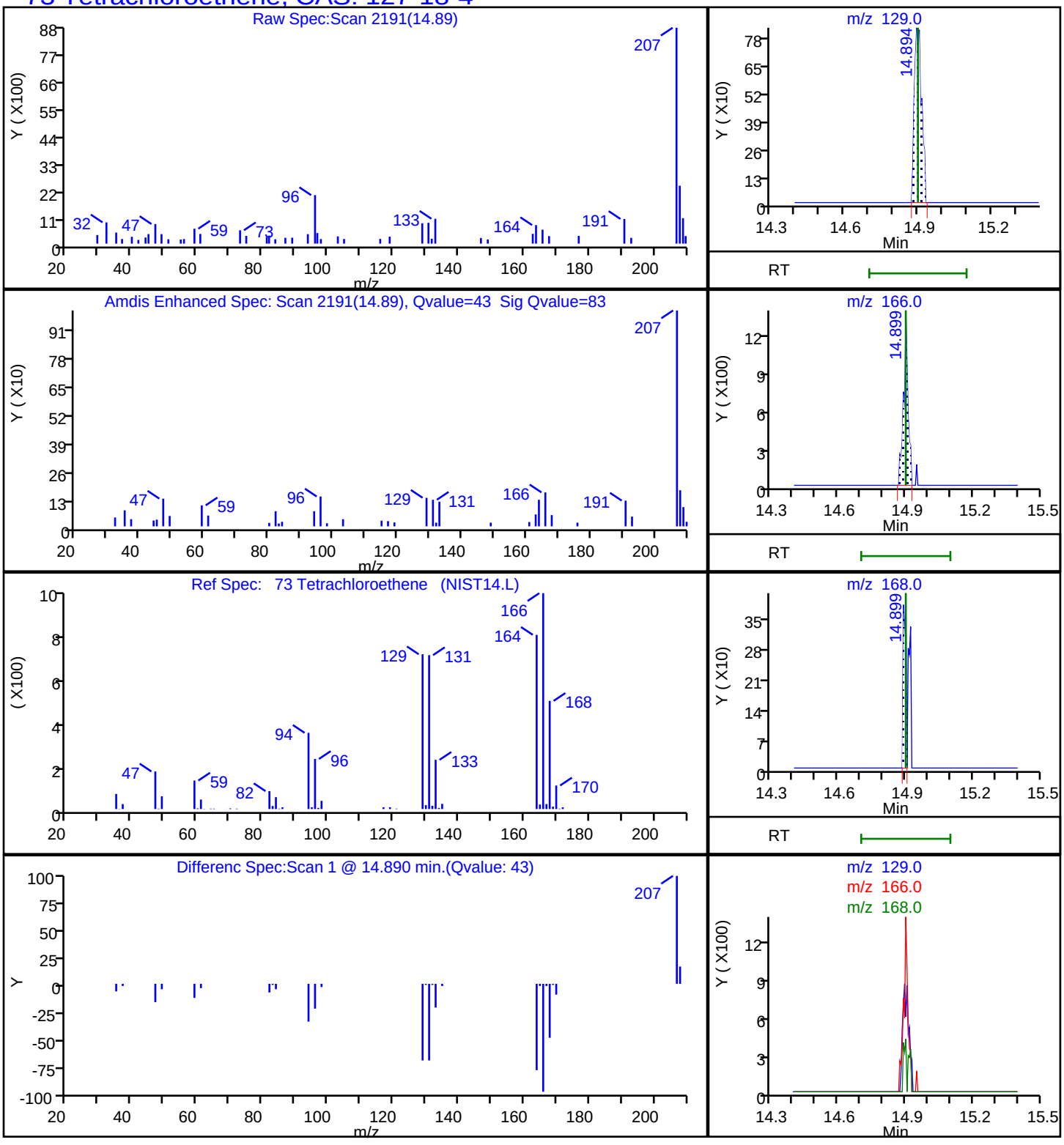


Report Date: 09-Sep-2020 14:10:10 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P113.D				
Injection Date:	09-Sep-2020 03:15:30	Instrument ID:	MG		
Lims ID:	140-20194-A-4	Lab Sample ID:	140-20194-4		
Client ID:	SV-138-A-29				
Operator ID:	HMT	ALS Bottle#:	13	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

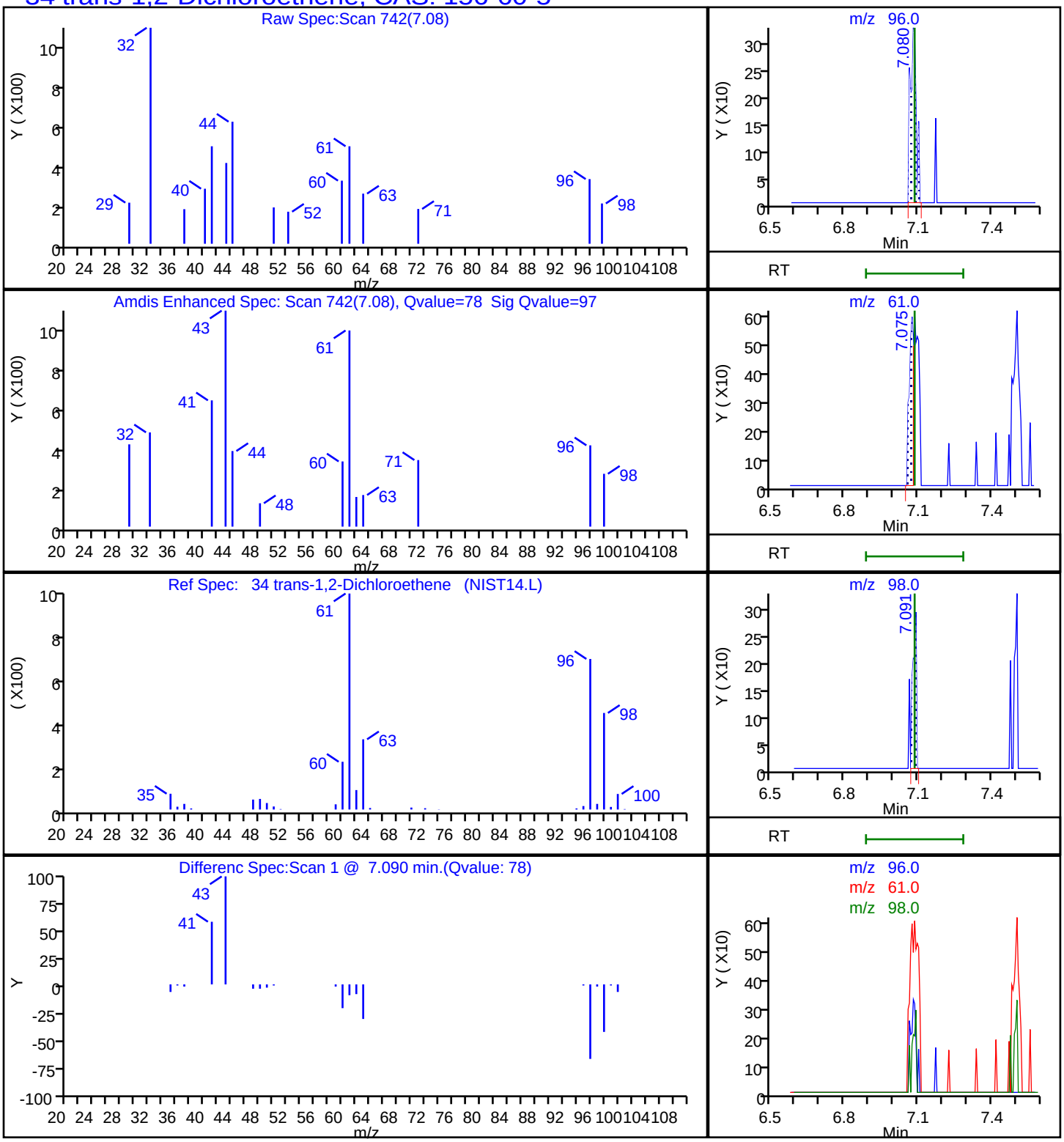
73 Tetrachloroethene, CAS: 127-18-4



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P113.D				
Injection Date:	09-Sep-2020 03:15:30	Instrument ID:	MG		
Lims ID:	140-20194-A-4	Lab Sample ID:	140-20194-4		
Client ID:	SV-138-A-29				
Operator ID:	HMT	ALS Bottle#:	13	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

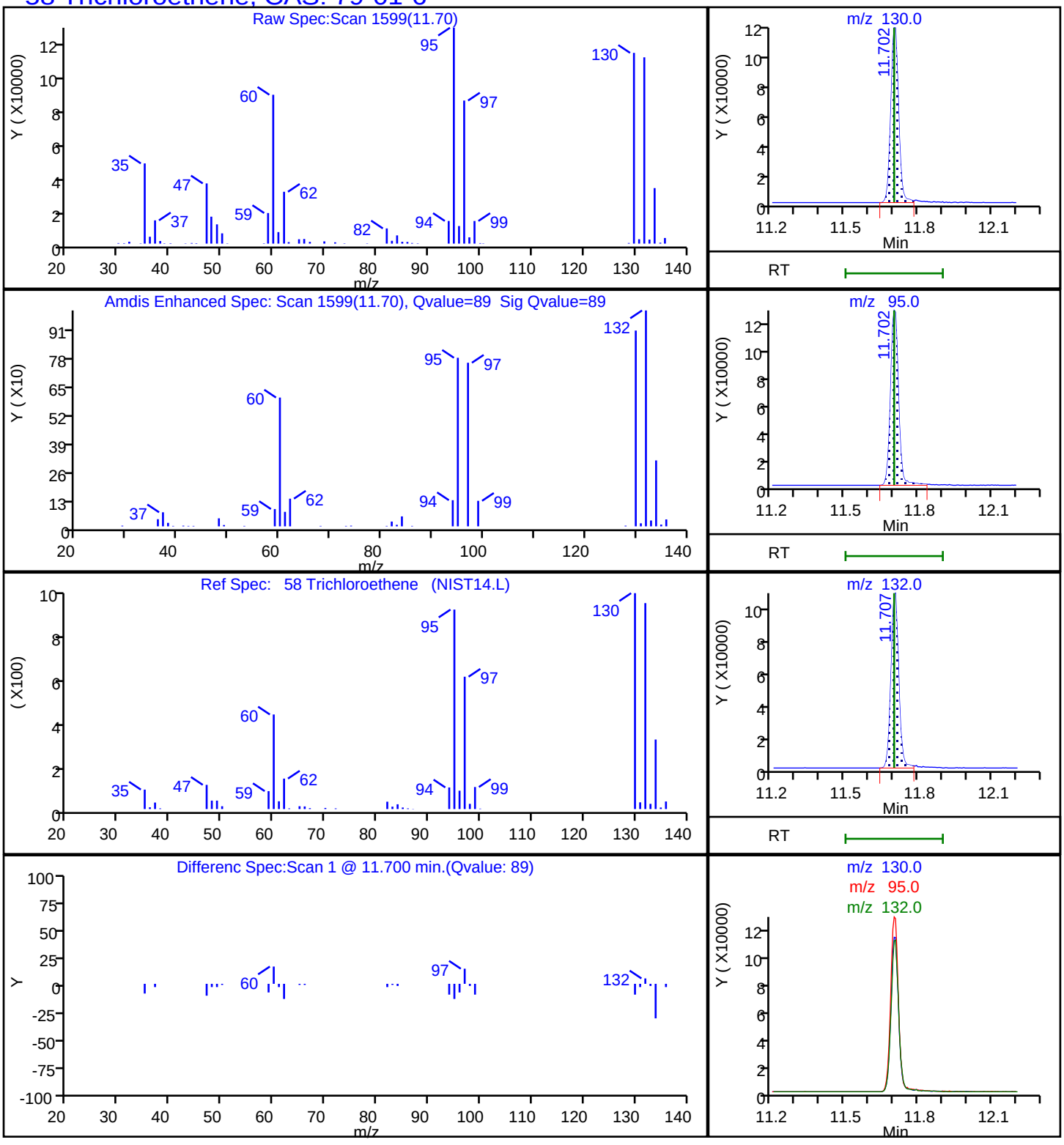
34 trans-1,2-Dichloroethene, CAS: 156-60-5



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P113.D		
Injection Date:	09-Sep-2020 03:15:30	Instrument ID:	MG
Lims ID:	140-20194-A-4	Lab Sample ID:	140-20194-4
Client ID:	SV-138-A-29		
Operator ID:	HMT	ALS Bottle#:	13 Worklist Smp#: 18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

58 Trichloroethene, CAS: 79-01-6



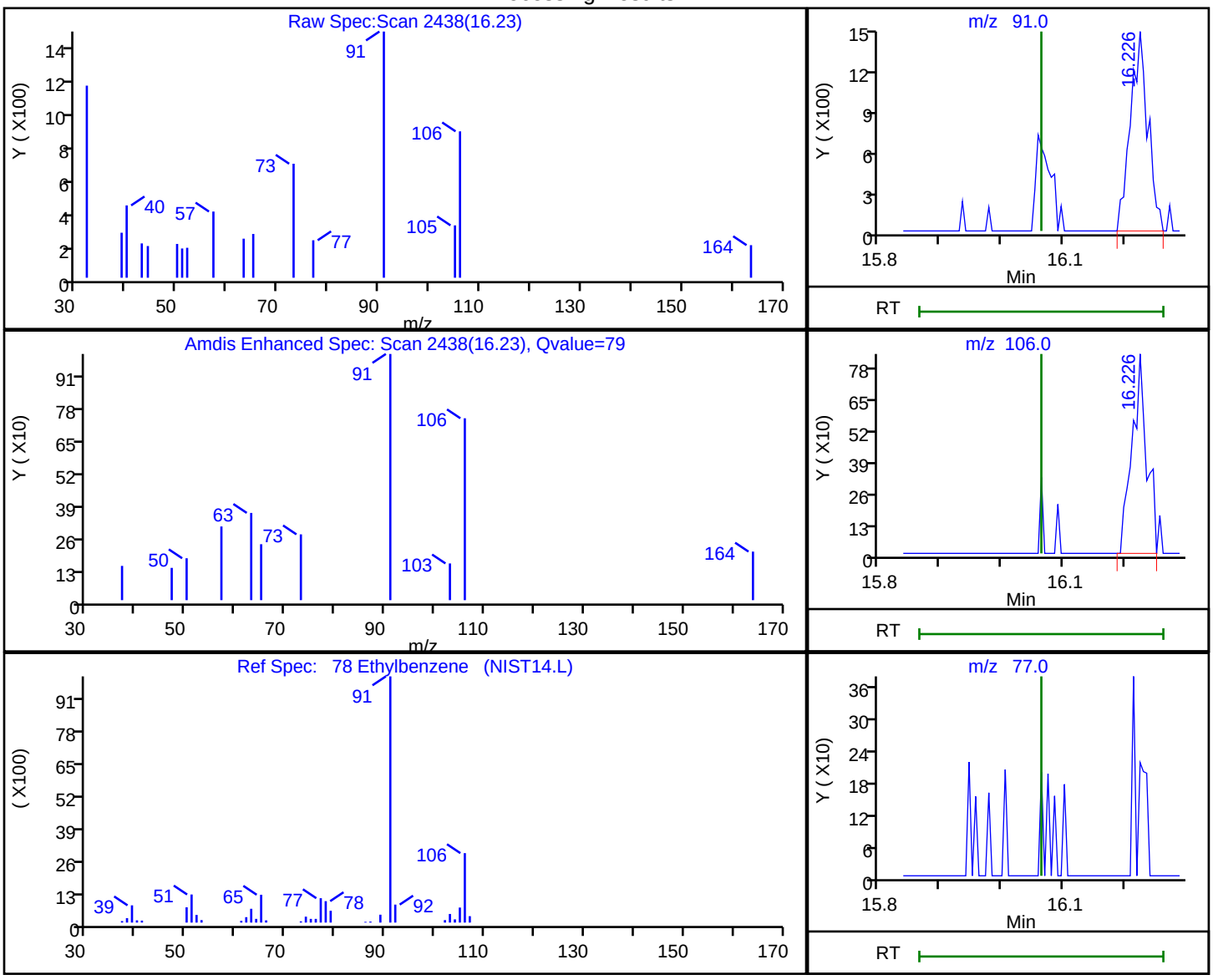
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P113.D				
Injection Date:	09-Sep-2020 03:15:30	Instrument ID:	MG		
Lims ID:	140-20194-A-4	Lab Sample ID:	140-20194-4		
Client ID:	SV-138-A-29				
Operator ID:	HMT	ALS Bottle#:	13	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

78 Ethylbenzene, CAS: 100-41-4

Processing Results



RT	Mass	Response	Amount
16.23	91.00	2785	0.018932
16.23	106.00	1397	
16.06	77.00	0	

Reviewer: barlozhetskayaa, 09-Sep-2020 14:10:00

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: SV-173-A-29 Lab Sample ID: 140-20194-5

Matrix: Air Lab File ID: GI08P114.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 10:04

Sample wt/vol: 14(mL) Date Analyzed: 09/09/2020 04:00

Soil Aliquot Vol: Dilution Factor: 9.23

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42503 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	ND		26	2.6
56-23-5	Carbon tetrachloride	153.81	ND		26	2.3
75-45-6	Chlorodifluoromethane	86.47	ND		26	7.3
67-66-3	Chloroform	119.38	ND		26	2.3
156-59-2	cis-1,2-Dichloroethene	96.94	66		26	3.3
75-71-8	Dichlorodifluoromethane	120.91	ND		26	4.6
75-34-3	1,1-Dichloroethane	98.96	14	J	26	2.3
107-06-2	1,2-Dichloroethane	98.96	ND		26	3.3
75-35-4	1,1-Dichloroethene	96.94	260		26	2.6
100-41-4	Ethylbenzene	106.17	ND		26	4.3
75-09-2	Methylene Chloride	84.93	ND		130	130
1634-04-4	Methyl tert-butyl ether	88.15	ND		130	17
91-20-3	Naphthalene	128.17	ND		13	13
127-18-4	Tetrachloroethene	165.83	ND		26	2.3
108-88-3	Toluene	92.14	ND		40	26
156-60-5	trans-1,2-Dichloroethene	96.94	ND		26	2.3
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		26	21
71-55-6	1,1,1-Trichloroethane	133.41	ND		26	12
79-00-5	1,1,2-Trichloroethane	133.41	ND		26	2.3
79-01-6	Trichloroethene	131.39	1400		13	2.0
526-73-8	1,2,3-Trimethylbenzene	120.19	ND	*	26	12
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		26	6.6
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		26	7.3
75-01-4	Vinyl chloride	62.50	ND		13	8.6
1330-20-7	Xylenes, Total	106.17	ND		53	7.9

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	95		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: SV-173-A-29 Lab Sample ID: 140-20194-5

Matrix: Air Lab File ID: GI08P114.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 10:04

Sample wt/vol: 14(mL) Date Analyzed: 09/09/2020 04:00

Soil Aliquot Vol: Dilution Factor: 9.23

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42503 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	ND		84	8.4
56-23-5	Carbon tetrachloride	153.81	ND		170	15
75-45-6	Chlorodifluoromethane	86.47	ND		93	26
67-66-3	Chloroform	119.38	ND		130	11
156-59-2	cis-1,2-Dichloroethene	96.94	260		100	13
75-71-8	Dichlorodifluoromethane	120.91	ND		130	23
75-34-3	1,1-Dichloroethane	98.96	58	J	110	9.3
107-06-2	1,2-Dichloroethane	98.96	ND		110	13
75-35-4	1,1-Dichloroethene	96.94	1000		100	10
100-41-4	Ethylbenzene	106.17	ND		110	19
75-09-2	Methylene Chloride	84.93	ND		460	450
1634-04-4	Methyl tert-butyl ether	88.15	ND		480	62
91-20-3	Naphthalene	128.17	ND		69	69
127-18-4	Tetrachloroethene	165.83	ND		180	16
108-88-3	Toluene	92.14	ND		150	97
156-60-5	trans-1,2-Dichloroethene	96.94	ND		100	9.1
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		200	160
71-55-6	1,1,1-Trichloroethane	133.41	ND		140	67
79-00-5	1,1,2-Trichloroethane	133.41	ND		140	13
79-01-6	Trichloroethene	131.39	7600		71	11
526-73-8	1,2,3-Trimethylbenzene	120.19	ND	*	130	58
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		130	32
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		130	36
75-01-4	Vinyl chloride	62.50	ND		34	22
1330-20-7	Xylenes, Total	106.17	ND		230	34

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	95		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P114.D				
Lims ID:	140-20194-A-5				
Client ID:	SV-173-A-29				
Sample Type:	Client				
Inject. Date:	09-Sep-2020 04:00:30	ALS Bottle#:	14	Worklist Smp#:	19
Purge Vol:	500.000 mL	Dil. Factor:	9.2300		
Sample Info:	140-0016519-019				
Misc. Info.:	140-20194-a-5@9.23				
Operator ID:	HMT	Instrument ID:	MG		
Method:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\MG_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	09-Sep-2020 14:10:09	Calib Date:	02-Sep-2020 03:27:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1034				
First Level Reviewer: barlozhetskayaa		Date:	09-Sep-2020 14:10:55		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.801	8.806	-0.005	85	90182	4.80	
* 2 1,4-Difluorobenzene	114	10.984	10.990	-0.006	98	484422	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.724	15.724	0.000	97	489767	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.369	17.369	0.000	79	339264	4.41	
27 1,1-Dichloroethene	96	5.926	5.921	0.005	89	17557	0.7897	
37 1,1-Dichloroethane	63	7.496	7.495	0.001	91	2851	0.0437	
42 cis-1,2-Dichloroethene	96	8.477	8.482	-0.005	94	5564	0.2000	
58 Trichloroethene	130	11.702	11.702	0.000	86	185057	4.26	

Reagents:

40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

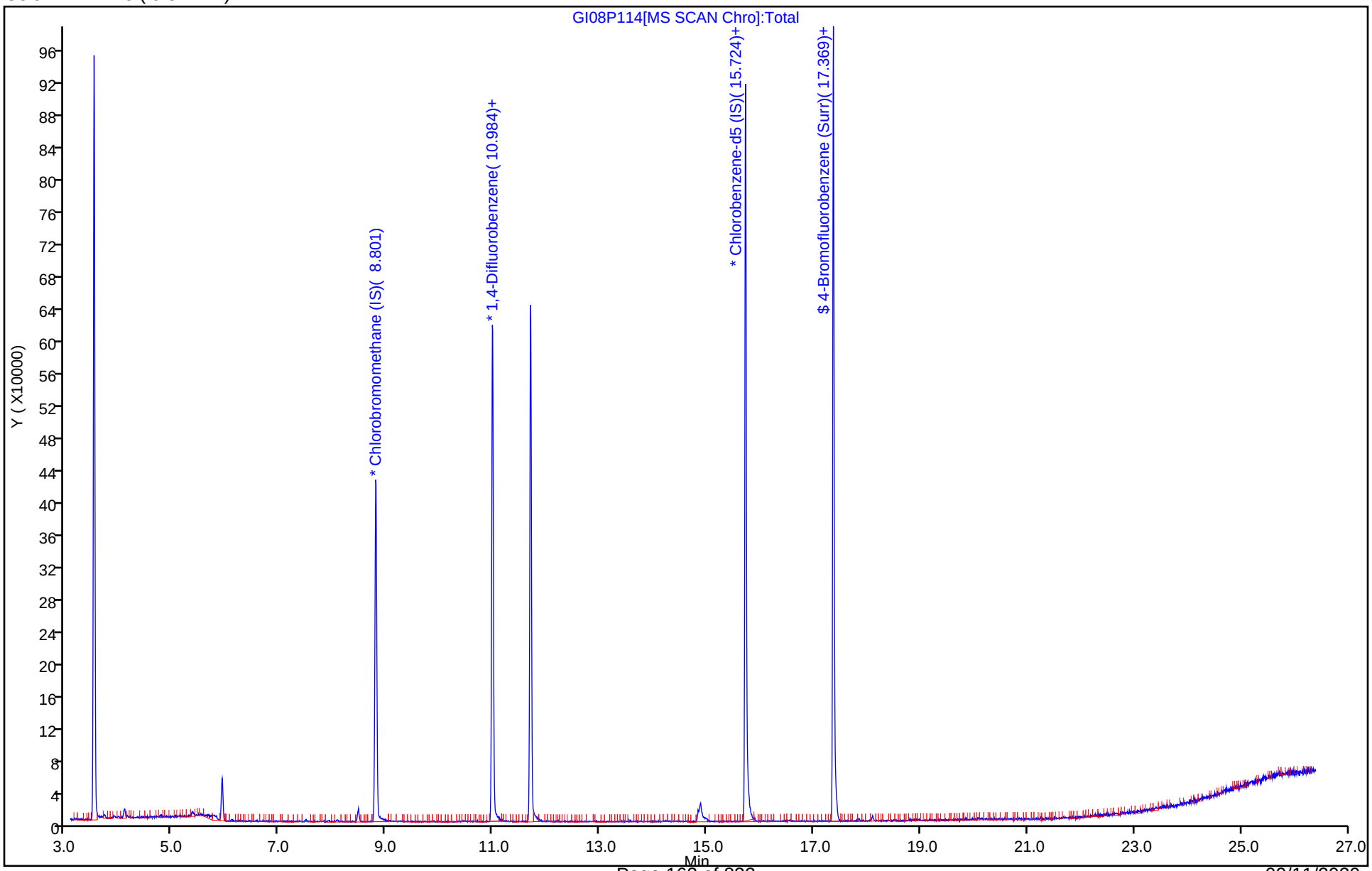
Report Date: 09-Sep-2020 14:10:55 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P114.D

Injection Date:	09-Sep-2020 04:00:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	140-20194-A-5	Lab Sample ID:	140-20194-5	Worklist Smp#:	19
Client ID:	SV-173-A-29				
Purge Vol:	500.000 mL	Dil. Factor:	9.2300	ALS Bottle#:	14
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P114.D				
Lims ID:	140-20194-A-5				
Client ID:	SV-173-A-29				
Sample Type:	Client				
Inject. Date:	09-Sep-2020 04:00:30	ALS Bottle#:	14	Worklist Smp#:	19
Purge Vol:	500.000 mL	Dil. Factor:	9.2300		
Sample Info:	140-0016519-019				
Misc. Info.:	140-20194-a-5@9.23				
Operator ID:	HMT	Instrument ID:	MG		
Method:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\MG_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	09-Sep-2020 14:10:09	Calib Date:	02-Sep-2020 03:27:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1034				

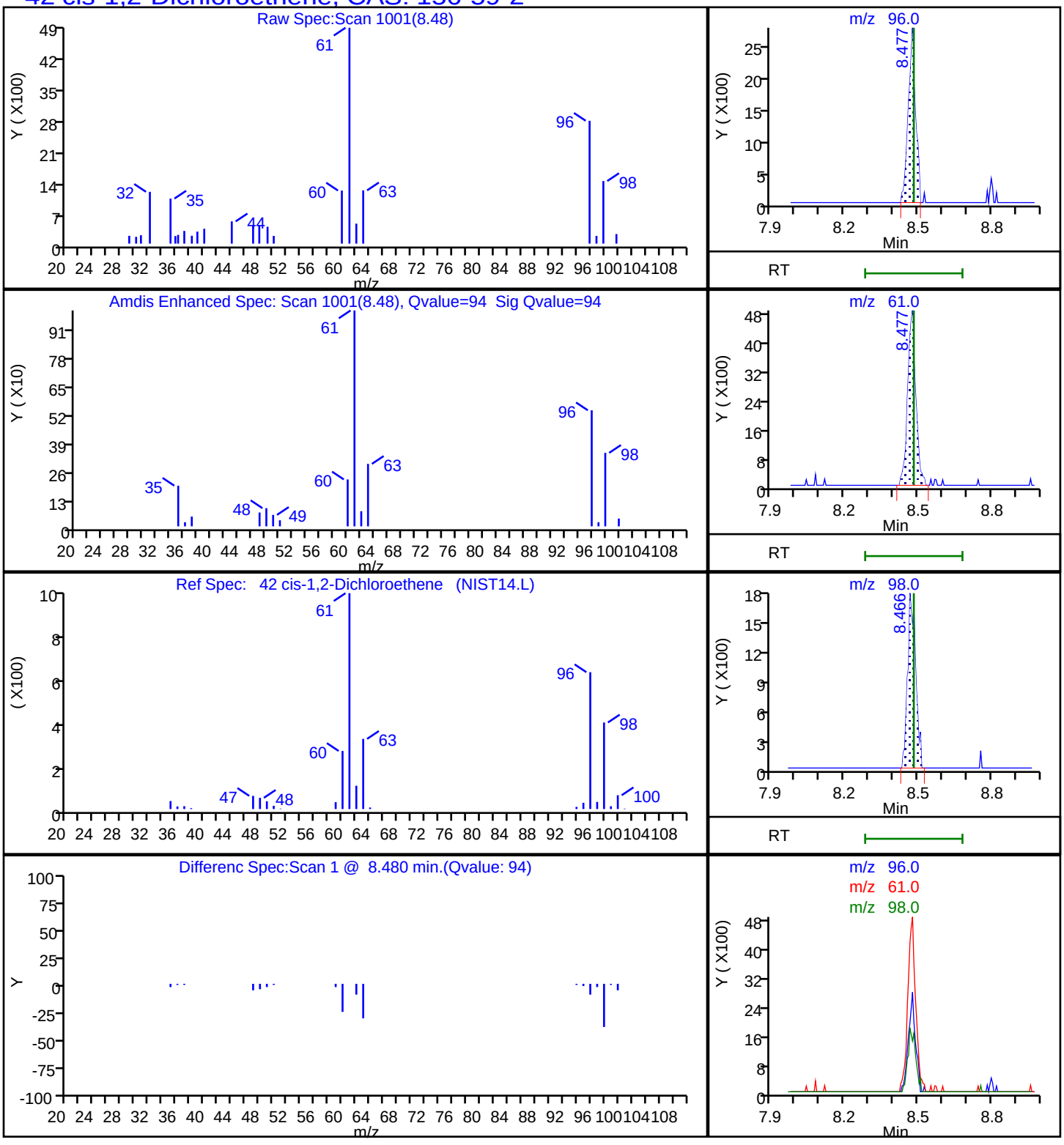
First Level Reviewer: barlozhetskayaa Date: 09-Sep-2020 14:10:55

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	4.41	95.14

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P114.D				
Injection Date:	09-Sep-2020 04:00:30	Instrument ID:	MG		
Lims ID:	140-20194-A-5	Lab Sample ID:	140-20194-5		
Client ID:	SV-173-A-29				
Operator ID:	HMT	ALS Bottle#:	14	Worklist Smp#:	19
Purge Vol:	500.000 mL	Dil. Factor:	9.2300		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

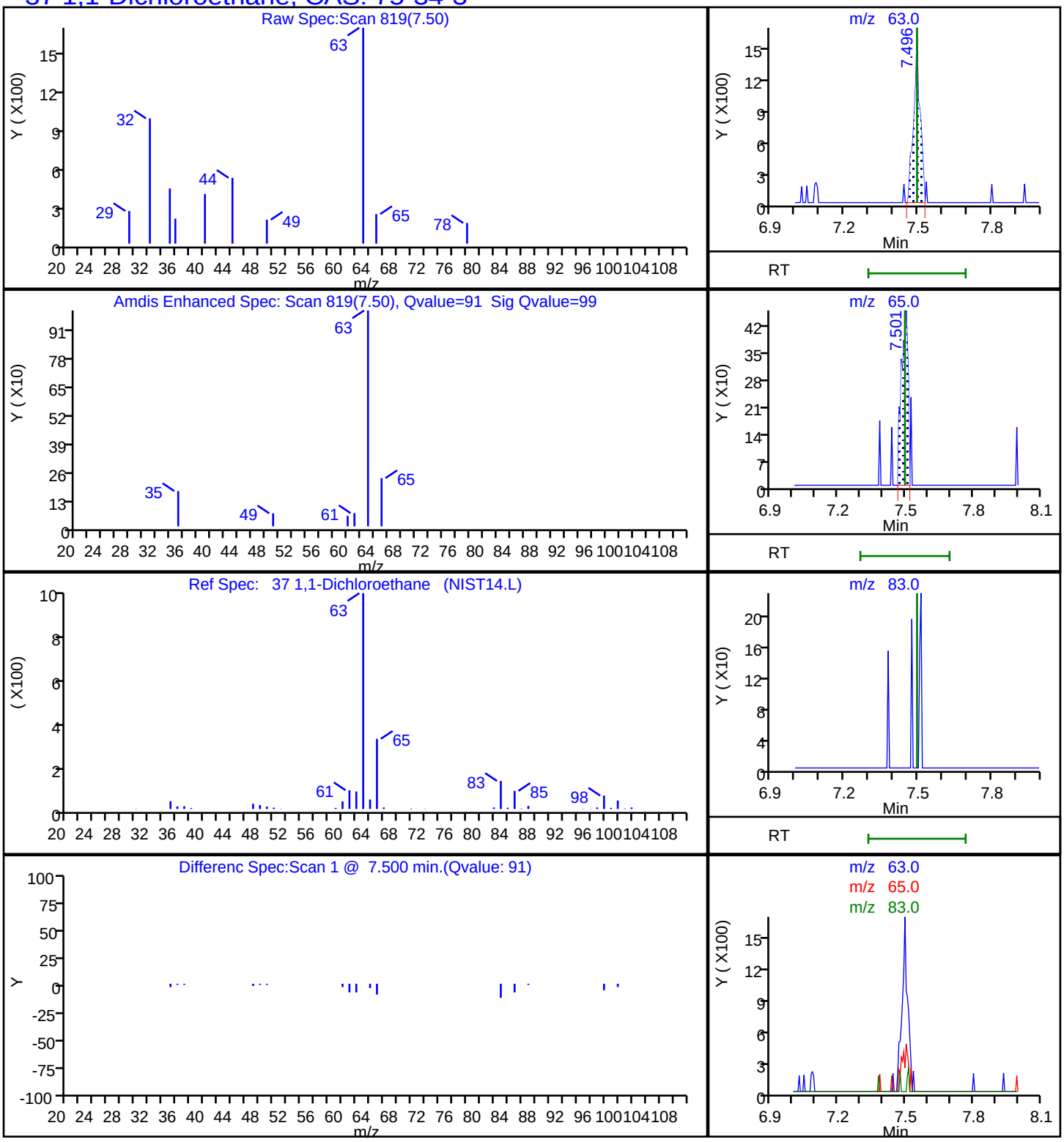
42 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P114.D		
Injection Date:	09-Sep-2020 04:00:30	Instrument ID:	MG
Lims ID:	140-20194-A-5	Lab Sample ID:	140-20194-5
Client ID:	SV-173-A-29		
Operator ID:	HMT	ALS Bottle#:	14 Worklist Smp#: 19
Purge Vol:	500.000 mL	Dil. Factor:	9.2300
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

37 1,1-Dichloroethane, CAS: 75-34-3

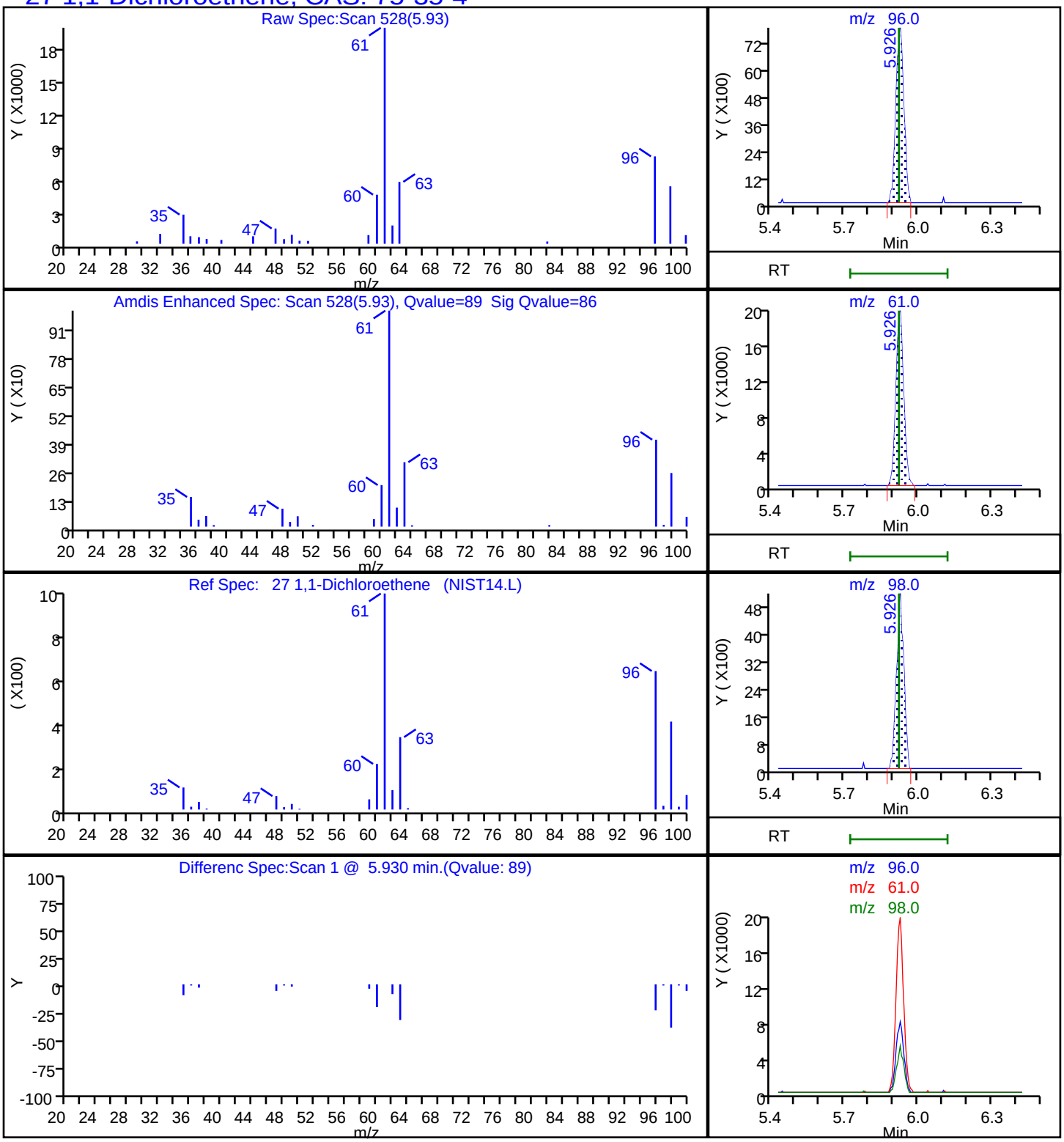


Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P114.D

Injection Date:	09-Sep-2020 04:00:30	Instrument ID:	MG		
Lims ID:	140-20194-A-5	Lab Sample ID:	140-20194-5		
Client ID:	SV-173-A-29				
Operator ID:	HMT	ALS Bottle#:	14	Worklist Smp#:	19
Purge Vol:	500.000 mL	Dil. Factor:	9.2300		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

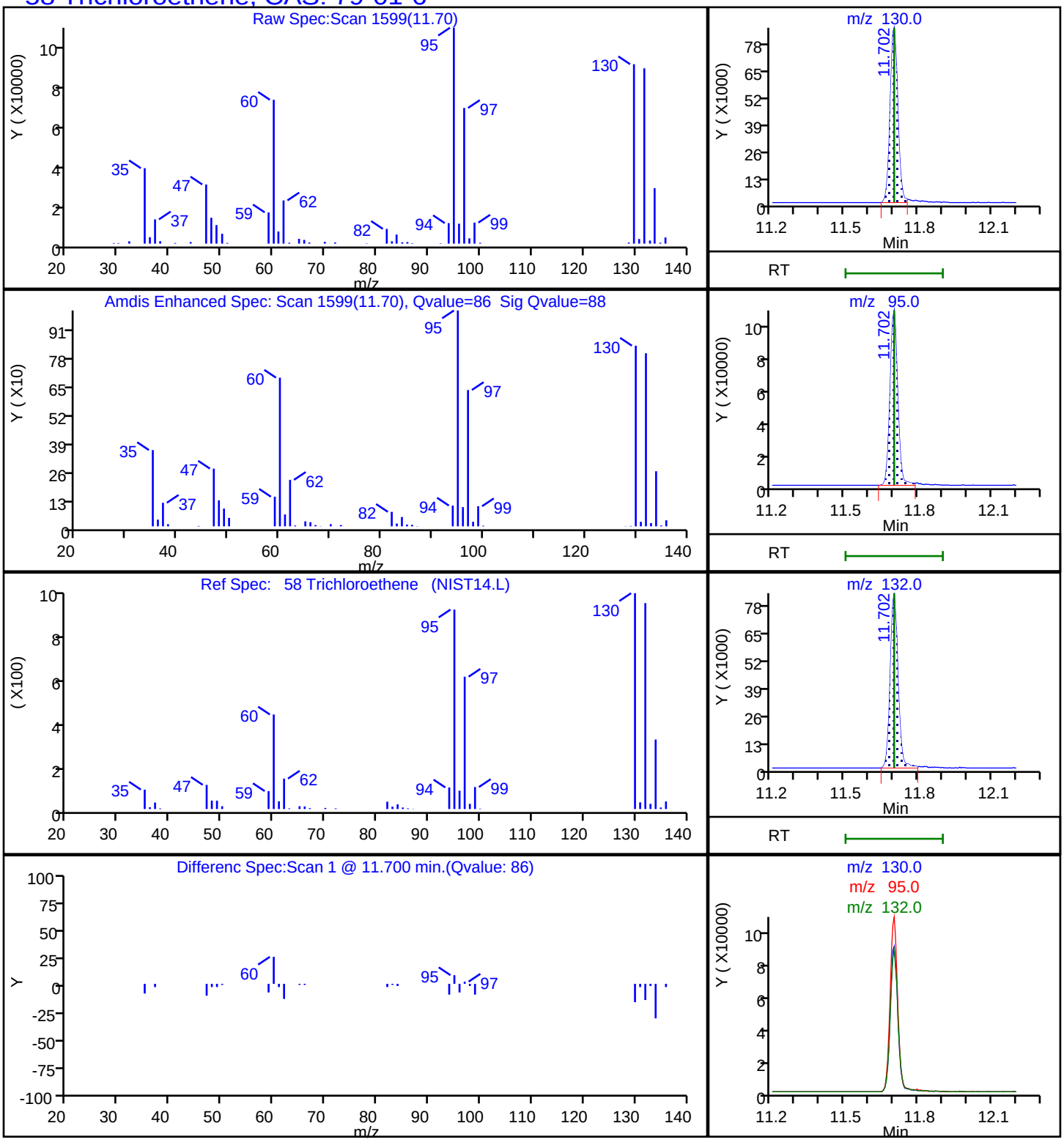
27 1,1-Dichloroethene, CAS: 75-35-4



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P114.D		
Injection Date:	09-Sep-2020 04:00:30	Instrument ID:	MG
Lims ID:	140-20194-A-5	Lab Sample ID:	140-20194-5
Client ID:	SV-173-A-29		
Operator ID:	HMT	ALS Bottle#:	14 Worklist Smp#: 19
Purge Vol:	500.000 mL	Dil. Factor:	9.2300
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

58 Trichloroethene, CAS: 79-01-6



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: SV-171-A-29 Lab Sample ID: 140-20194-6

Matrix: Air Lab File ID: GI08P115.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 10:06

Sample wt/vol: 13(mL) Date Analyzed: 09/09/2020 04:44

Soil Aliquot Vol: Dilution Factor: 3.03

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42503 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	ND		9.3	0.93
56-23-5	Carbon tetrachloride	153.81	ND		9.3	0.82
75-45-6	Chlorodifluoromethane	86.47	ND		9.3	2.6
67-66-3	Chloroform	119.38	ND		9.3	0.82
156-59-2	cis-1,2-Dichloroethene	96.94	12		9.3	1.2
75-71-8	Dichlorodifluoromethane	120.91	ND		9.3	1.6
75-34-3	1,1-Dichloroethane	98.96	2.6	J	9.3	0.82
107-06-2	1,2-Dichloroethane	98.96	ND		9.3	1.2
75-35-4	1,1-Dichloroethene	96.94	79		9.3	0.93
100-41-4	Ethylbenzene	106.17	ND		9.3	1.5
75-09-2	Methylene Chloride	84.93	ND		47	45
1634-04-4	Methyl tert-butyl ether	88.15	ND		47	6.1
91-20-3	Naphthalene	128.17	ND		4.7	4.7
127-18-4	Tetrachloroethene	165.83	ND		9.3	0.82
108-88-3	Toluene	92.14	ND		14	9.1
156-60-5	trans-1,2-Dichloroethene	96.94	ND		9.3	0.82
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		9.3	7.5
71-55-6	1,1,1-Trichloroethane	133.41	ND		9.3	4.3
79-00-5	1,1,2-Trichloroethane	133.41	ND		9.3	0.82
79-01-6	Trichloroethene	131.39	510		4.7	0.70
526-73-8	1,2,3-Trimethylbenzene	120.19	ND	*	9.3	4.2
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		9.3	2.3
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		9.3	2.6
75-01-4	Vinyl chloride	62.50	ND		4.7	3.0
1330-20-7	Xylenes, Total	106.17	ND		19	2.8

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	98		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: SV-171-A-29 Lab Sample ID: 140-20194-6

Matrix: Air Lab File ID: GI08P115.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 10:06

Sample wt/vol: 13(mL) Date Analyzed: 09/09/2020 04:44

Soil Aliquot Vol: Dilution Factor: 3.03

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42503 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	ND		30	3.0
56-23-5	Carbon tetrachloride	153.81	ND		59	5.1
75-45-6	Chlorodifluoromethane	86.47	ND		33	9.1
67-66-3	Chloroform	119.38	ND		46	4.0
156-59-2	cis-1,2-Dichloroethene	96.94	49		37	4.6
75-71-8	Dichlorodifluoromethane	120.91	ND		46	8.1
75-34-3	1,1-Dichloroethane	98.96	10	J	38	3.3
107-06-2	1,2-Dichloroethane	98.96	ND		38	4.7
75-35-4	1,1-Dichloroethene	96.94	320		37	3.7
100-41-4	Ethylbenzene	106.17	ND		40	6.6
75-09-2	Methylene Chloride	84.93	ND		160	160
1634-04-4	Methyl tert-butyl ether	88.15	ND		170	22
91-20-3	Naphthalene	128.17	ND		24	24
127-18-4	Tetrachloroethene	165.83	ND		63	5.5
108-88-3	Toluene	92.14	ND		53	34
156-60-5	trans-1,2-Dichloroethene	96.94	ND		37	3.2
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		69	55
71-55-6	1,1,1-Trichloroethane	133.41	ND		51	24
79-00-5	1,1,2-Trichloroethane	133.41	ND		51	4.5
79-01-6	Trichloroethene	131.39	2800		25	3.8
526-73-8	1,2,3-Trimethylbenzene	120.19	ND	*	46	21
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		46	11
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		46	13
75-01-4	Vinyl chloride	62.50	ND		12	7.7
1330-20-7	Xylenes, Total	106.17	ND		81	12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	98		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P115.D				
Lims ID:	140-20194-A-6				
Client ID:	SV-171-A-29				
Sample Type:	Client				
Inject. Date:	09-Sep-2020 04:44:30	ALS Bottle#:	15	Worklist Smp#:	20
Purge Vol:	500.000 mL	Dil. Factor:	3.0300		
Sample Info:	140-0016519-020				
Misc. Info.:	140-20194-a-6@3.03				
Operator ID:	HMT	Instrument ID:	MG		
Method:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\MG_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	09-Sep-2020 14:10:09	Calib Date:	02-Sep-2020 03:27:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1034				
First Level Reviewer: barlozhetskayaa		Date:	09-Sep-2020 14:11:42		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.801	8.806	-0.005	85	82512	4.80	
* 2 1,4-Difluorobenzene	114	10.990	10.990	0.000	98	463975	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.724	15.724	0.000	96	458155	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.369	17.369	0.000	83	327758	4.56	
27 1,1-Dichloroethene	96	5.921	5.921	0.000	89	13873	0.6820	
37 1,1-Dichloroethane	63	7.496	7.495	0.001	1	1309	0.0219	
42 cis-1,2-Dichloroethene	96	8.477	8.482	-0.005	96	2708	0.1064	
58 Trichloroethene	130	11.702	11.702	0.000	87	183604	4.42	

Reagents:

40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

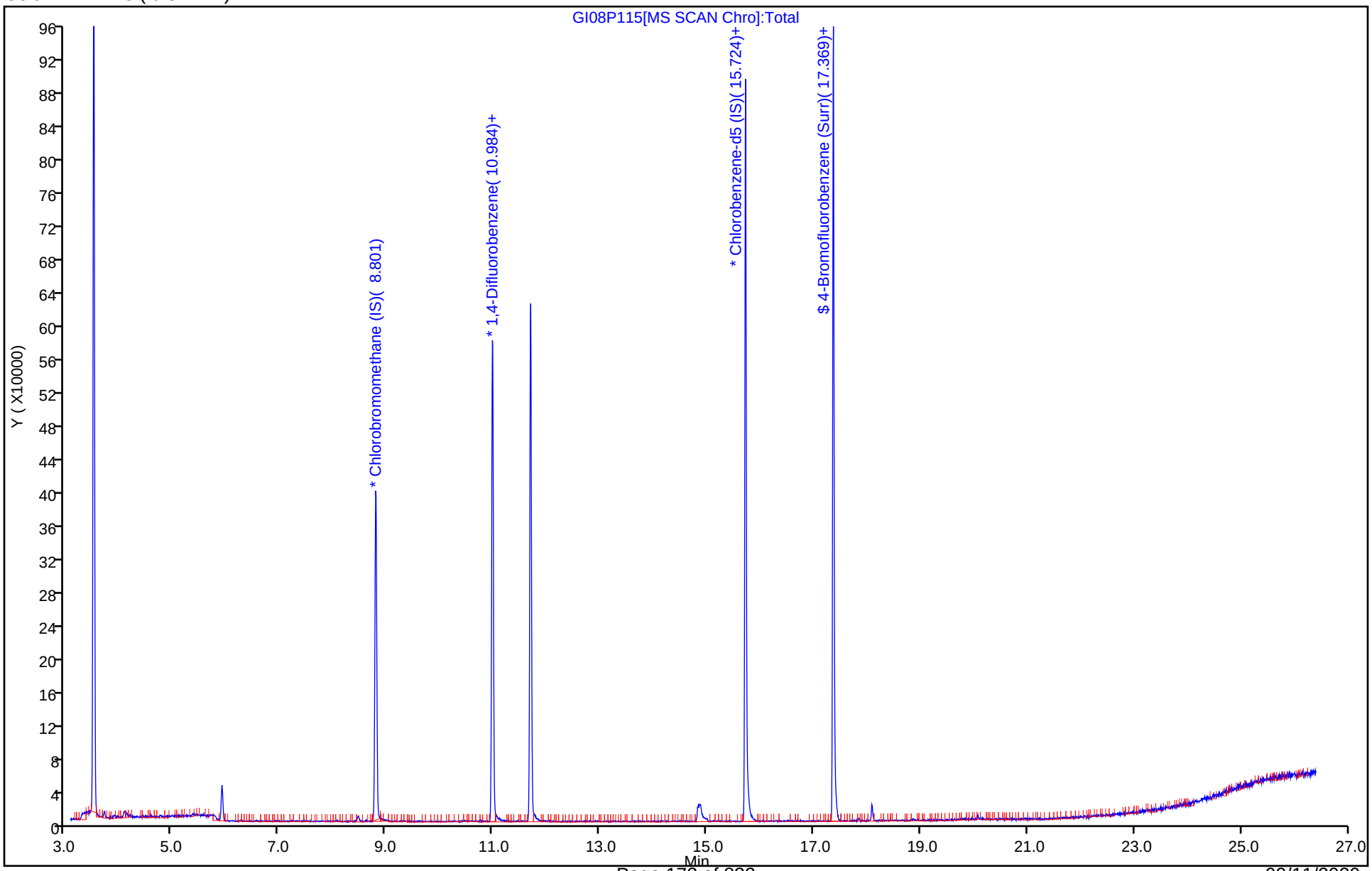
Report Date: 09-Sep-2020 14:11:42 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P115.D

Injection Date:	09-Sep-2020 04:44:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	140-20194-A-6	Lab Sample ID:	140-20194-6	Worklist Smp#:	20
Client ID:	SV-171-A-29				
Purge Vol:	500.000 mL	Dil. Factor:	3.0300	ALS Bottle#:	15
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P115.D				
Lims ID:	140-20194-A-6				
Client ID:	SV-171-A-29				
Sample Type:	Client				
Inject. Date:	09-Sep-2020 04:44:30	ALS Bottle#:	15	Worklist Smp#:	20
Purge Vol:	500.000 mL	Dil. Factor:	3.0300		
Sample Info:	140-0016519-020				
Misc. Info.:	140-20194-a-6@3.03				
Operator ID:	HMT	Instrument ID:	MG		
Method:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\MG_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	09-Sep-2020 14:10:09	Calib Date:	02-Sep-2020 03:27:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1034				

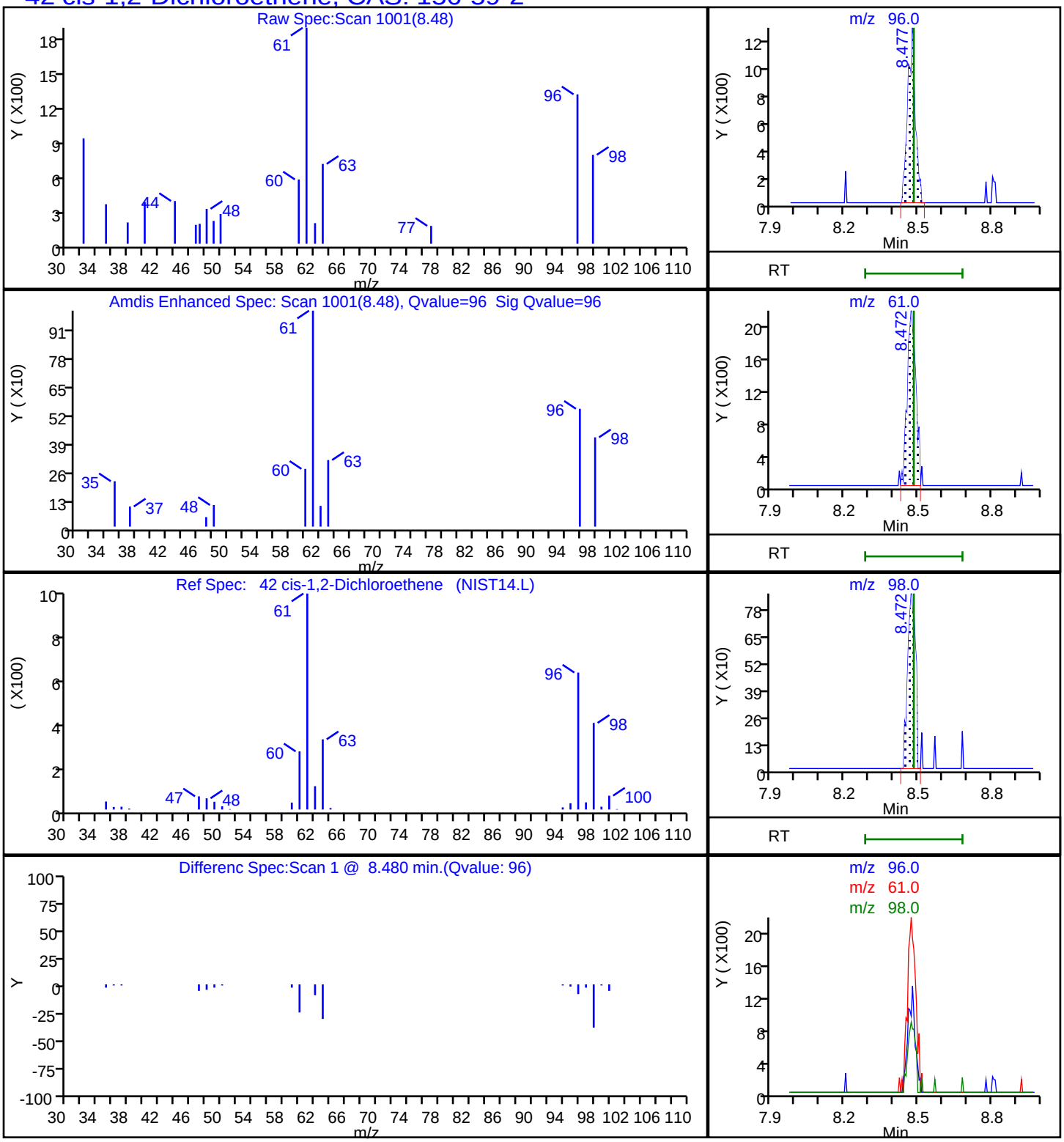
First Level Reviewer: barlozhetskayaa Date: 09-Sep-2020 14:11:42

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	4.56	98.25

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P115.D				
Injection Date:	09-Sep-2020 04:44:30	Instrument ID:	MG		
Lims ID:	140-20194-A-6	Lab Sample ID:	140-20194-6		
Client ID:	SV-171-A-29				
Operator ID:	HMT	ALS Bottle#:	15	Worklist Smp#:	20
Purge Vol:	500.000 mL	Dil. Factor:	3.0300		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

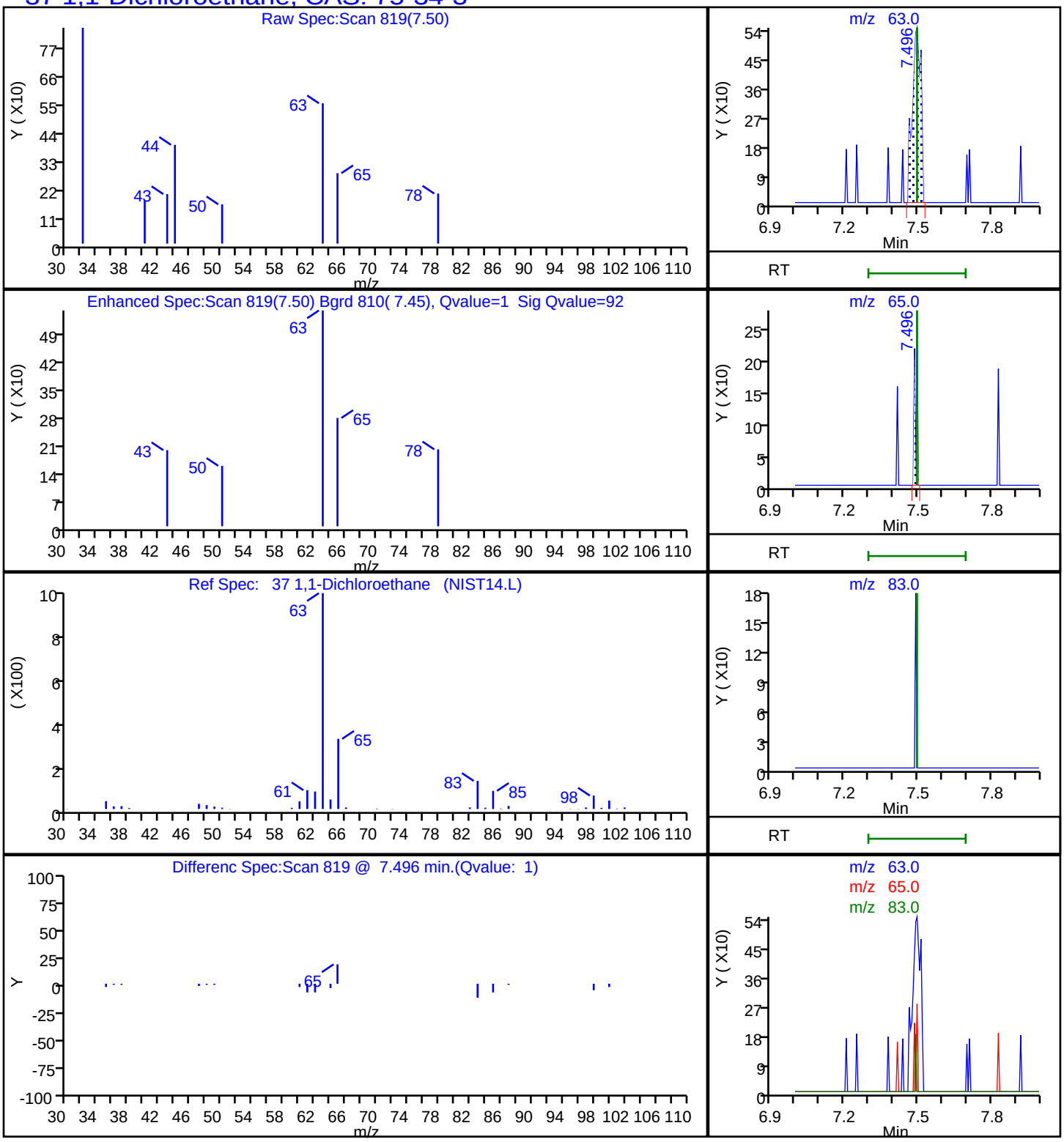
42 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P115.D				
Injection Date:	09-Sep-2020 04:44:30	Instrument ID:	MG		
Lims ID:	140-20194-A-6	Lab Sample ID:	140-20194-6		
Client ID:	SV-171-A-29				
Operator ID:	HMT	ALS Bottle#:	15	Worklist Smp#:	20
Purge Vol:	500.000 mL	Dil. Factor:	3.0300		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

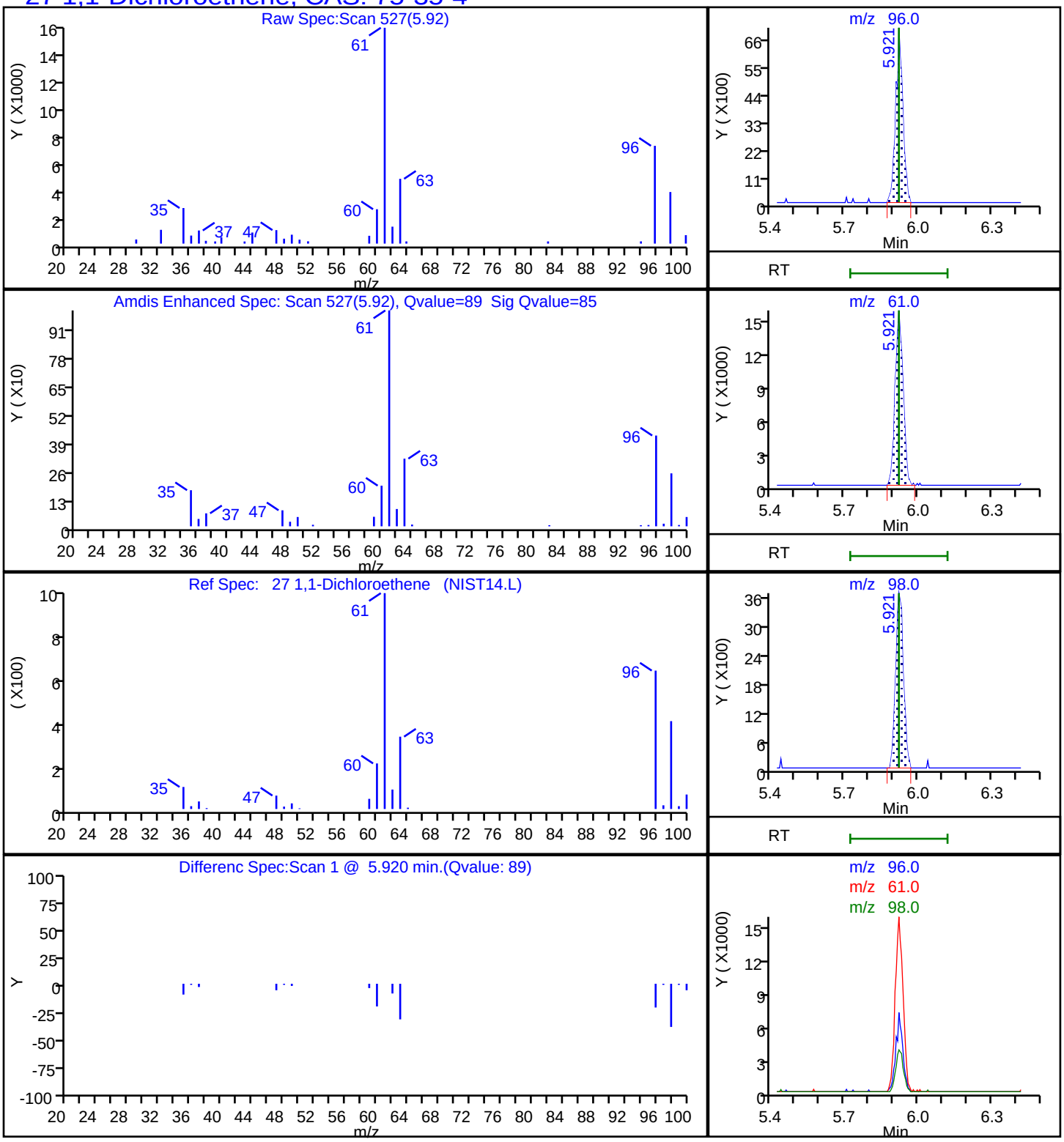
37 1,1-Dichloroethane, CAS: 75-34-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P115.D		
Injection Date:	09-Sep-2020 04:44:30	Instrument ID:	MG
Lims ID:	140-20194-A-6	Lab Sample ID:	140-20194-6
Client ID:	SV-171-A-29		
Operator ID:	HMT	ALS Bottle#:	15 Worklist Smp#: 20
Purge Vol:	500.000 mL	Dil. Factor:	3.0300
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

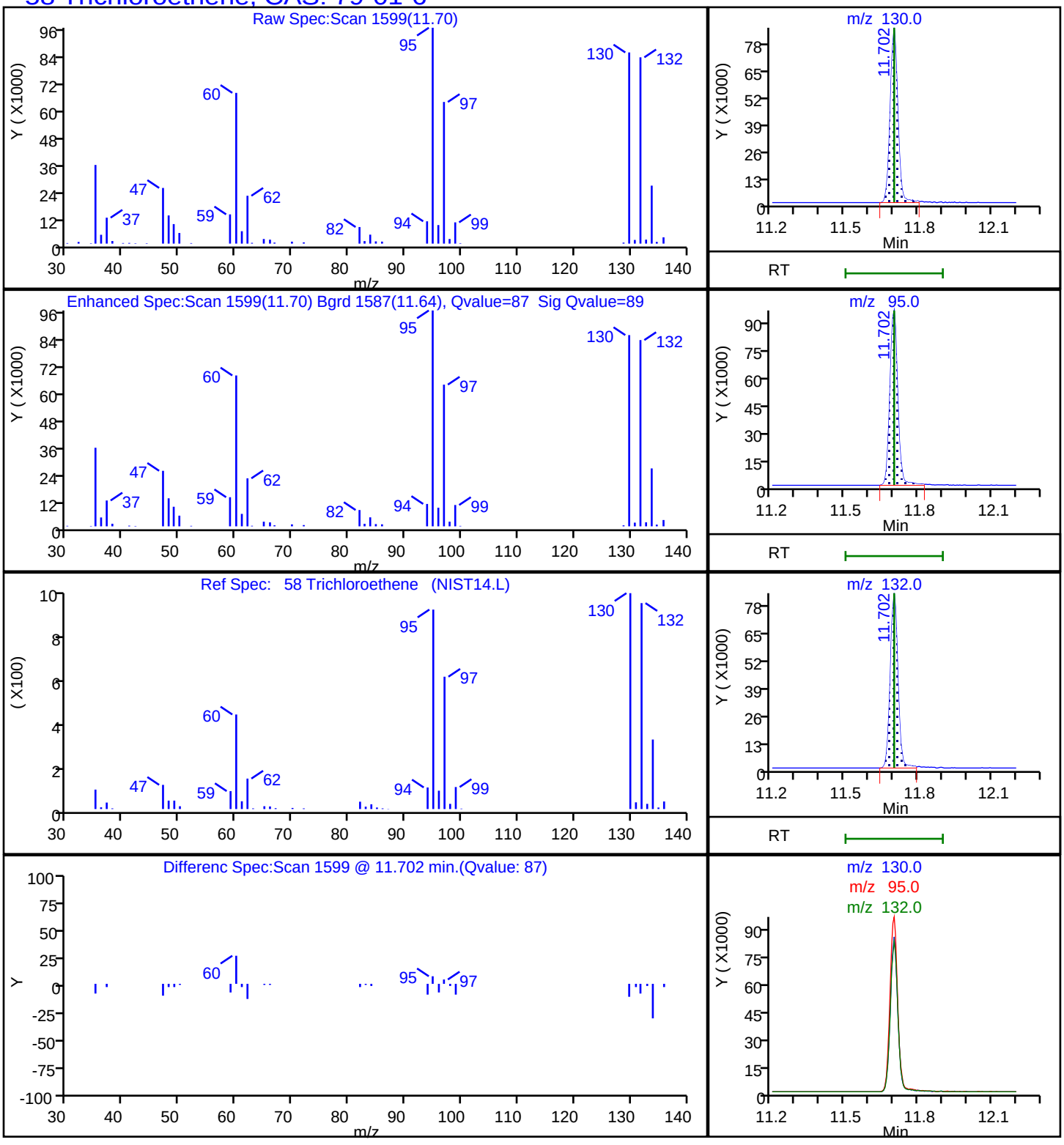
27 1,1-Dichloroethene, CAS: 75-35-4



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P115.D		
Injection Date:	09-Sep-2020 04:44:30	Instrument ID:	MG
Lims ID:	140-20194-A-6	Lab Sample ID:	140-20194-6
Client ID:	SV-171-A-29		
Operator ID:	HMT	ALS Bottle#:	15 Worklist Smp#: 20
Purge Vol:	500.000 mL	Dil. Factor:	3.0300
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

58 Trichloroethene, CAS: 79-01-6



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: SV-174-A-29 Lab Sample ID: 140-20194-7

Matrix: Air Lab File ID: RI09P202R.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 10:07

Sample wt/vol: 20(mL) Date Analyzed: 09/10/2020 08:00

Soil Aliquot Vol: Dilution Factor: 120

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42515 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	ND		240	24
56-23-5	Carbon tetrachloride	153.81	ND		240	21
75-45-6	Chlorodifluoromethane	86.47	ND		240	66
67-66-3	Chloroform	119.38	21	J	240	21
156-59-2	cis-1,2-Dichloroethene	96.94	460		240	30
75-71-8	Dichlorodifluoromethane	120.91	ND		240	42
75-34-3	1,1-Dichloroethane	98.96	150	J	240	21
107-06-2	1,2-Dichloroethane	98.96	ND		240	30
75-35-4	1,1-Dichloroethene	96.94	5800		240	24
100-41-4	Ethylbenzene	106.17	ND		240	39
75-09-2	Methylene Chloride	84.93	ND		1200	1200
1634-04-4	Methyl tert-butyl ether	88.15	ND		1200	160
91-20-3	Naphthalene	128.17	ND		120	120
127-18-4	Tetrachloroethene	165.83	ND		240	21
108-88-3	Toluene	92.14	ND		360	230
156-60-5	trans-1,2-Dichloroethene	96.94	50	J	240	21
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		240	190
71-55-6	1,1,1-Trichloroethane	133.41	ND		240	110
79-00-5	1,1,2-Trichloroethane	133.41	ND		240	21
79-01-6	Trichloroethene	131.39	25000		120	18
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		240	110
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		240	60
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		240	66
75-01-4	Vinyl chloride	62.50	ND		120	78
1330-20-7	Xylenes, Total	106.17	ND		480	72

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	92		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: SV-174-A-29 Lab Sample ID: 140-20194-7

Matrix: Air Lab File ID: RI09P202R.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 10:07

Sample wt/vol: 20(mL) Date Analyzed: 09/10/2020 08:00

Soil Aliquot Vol: Dilution Factor: 120

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42515 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	ND		770	77
56-23-5	Carbon tetrachloride	153.81	ND		1500	130
75-45-6	Chlorodifluoromethane	86.47	ND		850	230
67-66-3	Chloroform	119.38	100	J	1200	100
156-59-2	cis-1,2-Dichloroethene	96.94	1800		950	120
75-71-8	Dichlorodifluoromethane	120.91	ND		1200	210
75-34-3	1,1-Dichloroethane	98.96	630	J	970	85
107-06-2	1,2-Dichloroethane	98.96	ND		970	120
75-35-4	1,1-Dichloroethene	96.94	23000		950	95
100-41-4	Ethylbenzene	106.17	ND		1000	170
75-09-2	Methylene Chloride	84.93	ND		4200	4100
1634-04-4	Methyl tert-butyl ether	88.15	ND		4300	560
91-20-3	Naphthalene	128.17	ND		630	630
127-18-4	Tetrachloroethene	165.83	ND		1600	140
108-88-3	Toluene	92.14	ND		1400	880
156-60-5	trans-1,2-Dichloroethene	96.94	200	J	950	83
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		1800	1400
71-55-6	1,1,1-Trichloroethane	133.41	ND		1300	610
79-00-5	1,1,2-Trichloroethane	133.41	ND		1300	110
79-01-6	Trichloroethene	131.39	140000		640	97
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		1200	530
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		1200	290
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		1200	320
75-01-4	Vinyl chloride	62.50	ND		310	200
1330-20-7	Xylenes, Total	106.17	ND		2100	310

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	92		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MR\20200908-16524.b\RI09P202R.D				
Lims ID:	140-20194-B-7				
Client ID:	SV-174-A-29				
Sample Type:	Client				
Inject. Date:	10-Sep-2020 08:00:30	ALS Bottle#:	17	Worklist Smp#:	30
Purge Vol:	500.000 mL	Dil. Factor:	120.0000		
Sample Info:	140-0016524-030				
Misc. Info.:	140-20194-b-7@120.00				
Operator ID:	HMT	Instrument ID:	MR		
Method:	\\chromfs\Knoxville\ChromData\MR\20200908-16524.b\MR_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	10-Sep-2020 08:45:48	Calib Date:	29-Aug-2020 00:02:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1028				
First Level Reviewer: tajh		Date:	10-Sep-2020 08:46:03		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.263	8.274	-0.011	96	151241	4.80	
* 2 1,4-Difluorobenzene	114	10.496	10.507	-0.011	95	770861	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.344	15.349	-0.005	90	588539	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	16.999	16.993	0.000	92	336791	4.28	
27 1,1-Dichloroethene	96	5.416	5.418	-0.006	97	86330	1.93	
34 trans-1,2-Dichloroethene	96	6.554	6.550	0.000	1	691	0.0167	
37 1,1-Dichloroethane	63	6.958	6.959	-0.006	36	3703	0.0515	
42 cis-1,2-Dichloroethene	96	7.934	7.940	-0.011	88	7299	0.1524	
44 Chloroform	83	8.269	8.285	-0.022	34	622	0.006834	
58 Trichloroethene	130	11.235	11.240	-0.011	94	568098	8.48	

Reagents:

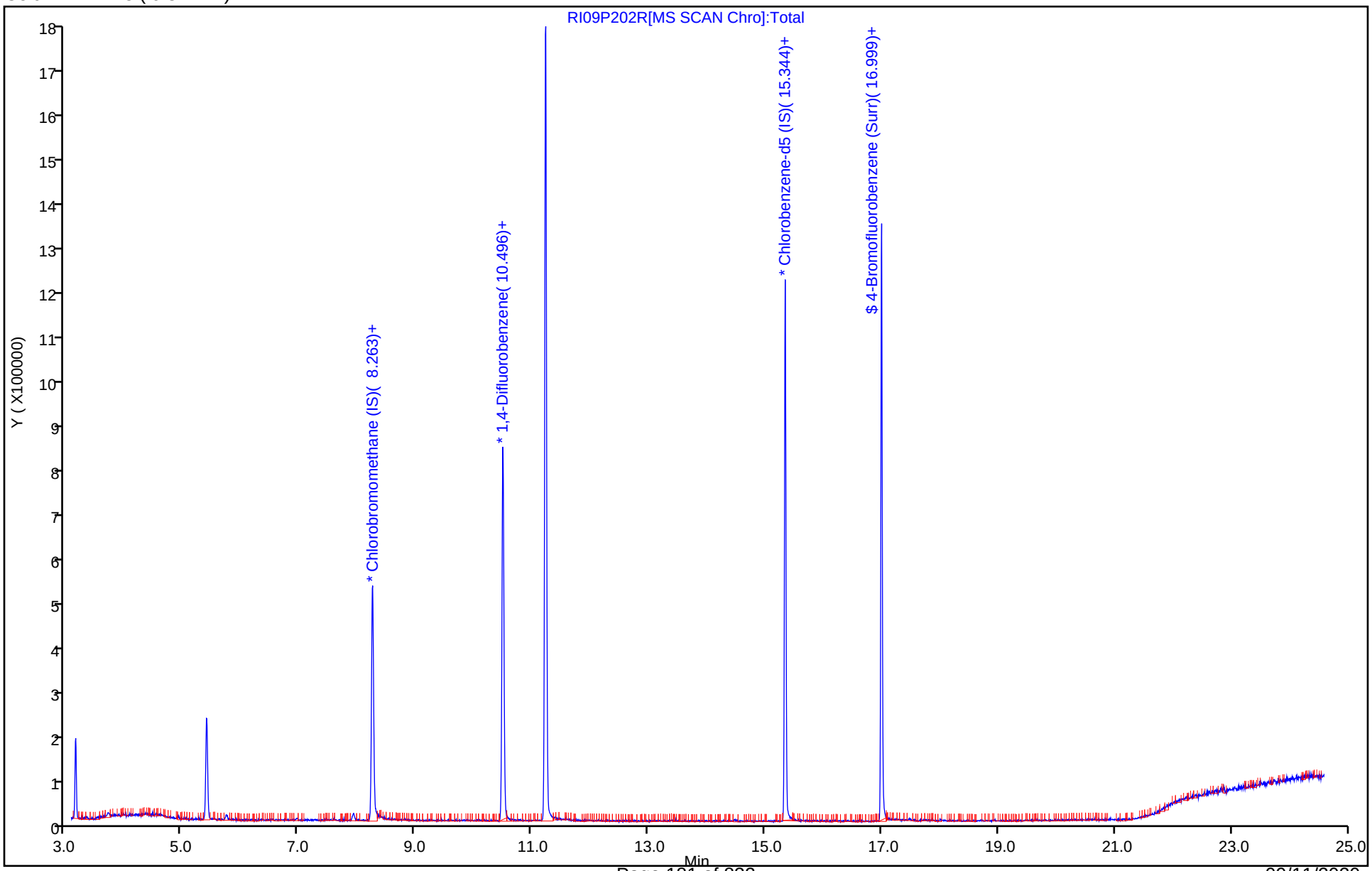
40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

Report Date: 10-Sep-2020 08:46:04 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200908-16524.b\RI09P202R.D				
Injection Date:	10-Sep-2020 08:00:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	140-20194-B-7	Lab Sample ID:	140-20194-7	Worklist Smp#:	30
Client ID:	SV-174-A-29				
Purge Vol:	500.000 mL	Dil. Factor:	120.0000	ALS Bottle#:	17
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MR\20200908-16524.b\RI09P202R.D				
Lims ID:	140-20194-B-7				
Client ID:	SV-174-A-29				
Sample Type:	Client				
Inject. Date:	10-Sep-2020 08:00:30	ALS Bottle#:	17	Worklist Smp#:	30
Purge Vol:	500.000 mL	Dil. Factor:	120.0000		
Sample Info:	140-0016524-030				
Misc. Info.:	140-20194-b-7@120.00				
Operator ID:	HMT	Instrument ID:	MR		
Method:	\\chromfs\Knoxville\ChromData\MR\20200908-16524.b\MR_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	10-Sep-2020 08:45:48	Calib Date:	29-Aug-2020 00:02:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1028				

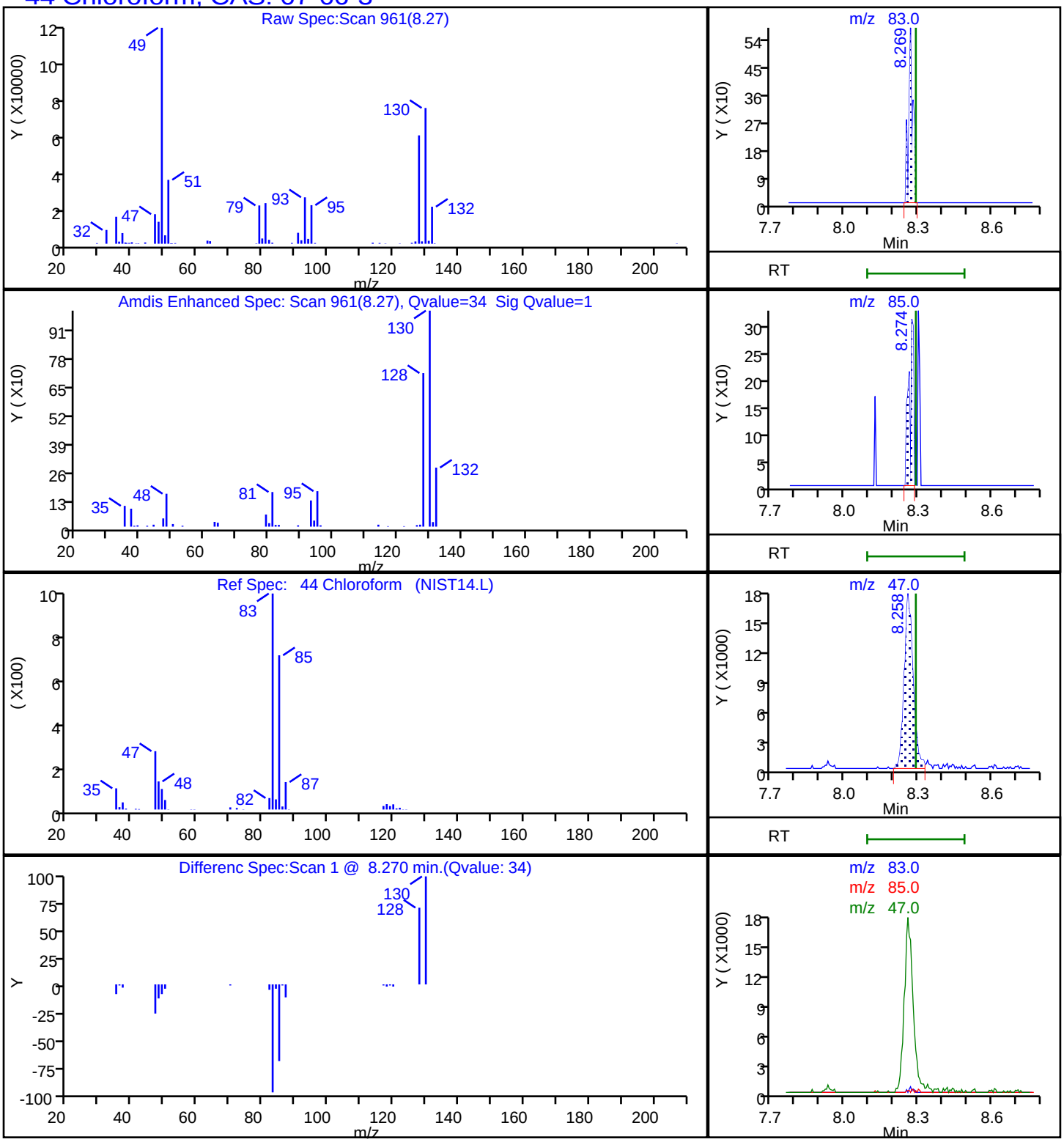
First Level Reviewer: tajh Date: 10-Sep-2020 08:46:03

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	4.28	92.24

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200908-16524.b\RI09P202R.D				
Injection Date:	10-Sep-2020 08:00:30	Instrument ID:	MR		
Lims ID:	140-20194-B-7	Lab Sample ID:	140-20194-7		
Client ID:	SV-174-A-29				
Operator ID:	HMT	ALS Bottle#:	17	Worklist Smp#:	30
Purge Vol:	500.000 mL	Dil. Factor:	120.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

44 Chloroform, CAS: 67-66-3



Report Date: 10-Sep-2020 08:46:04 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200908-16524.b\RI09P202R.D

Injection Date: 10-Sep-2020 08:00:30 Instrument ID: MR

Lims ID: 140-20194-B-7 Lab Sample ID: 140-20194-7

Client ID: SV-174-A-29

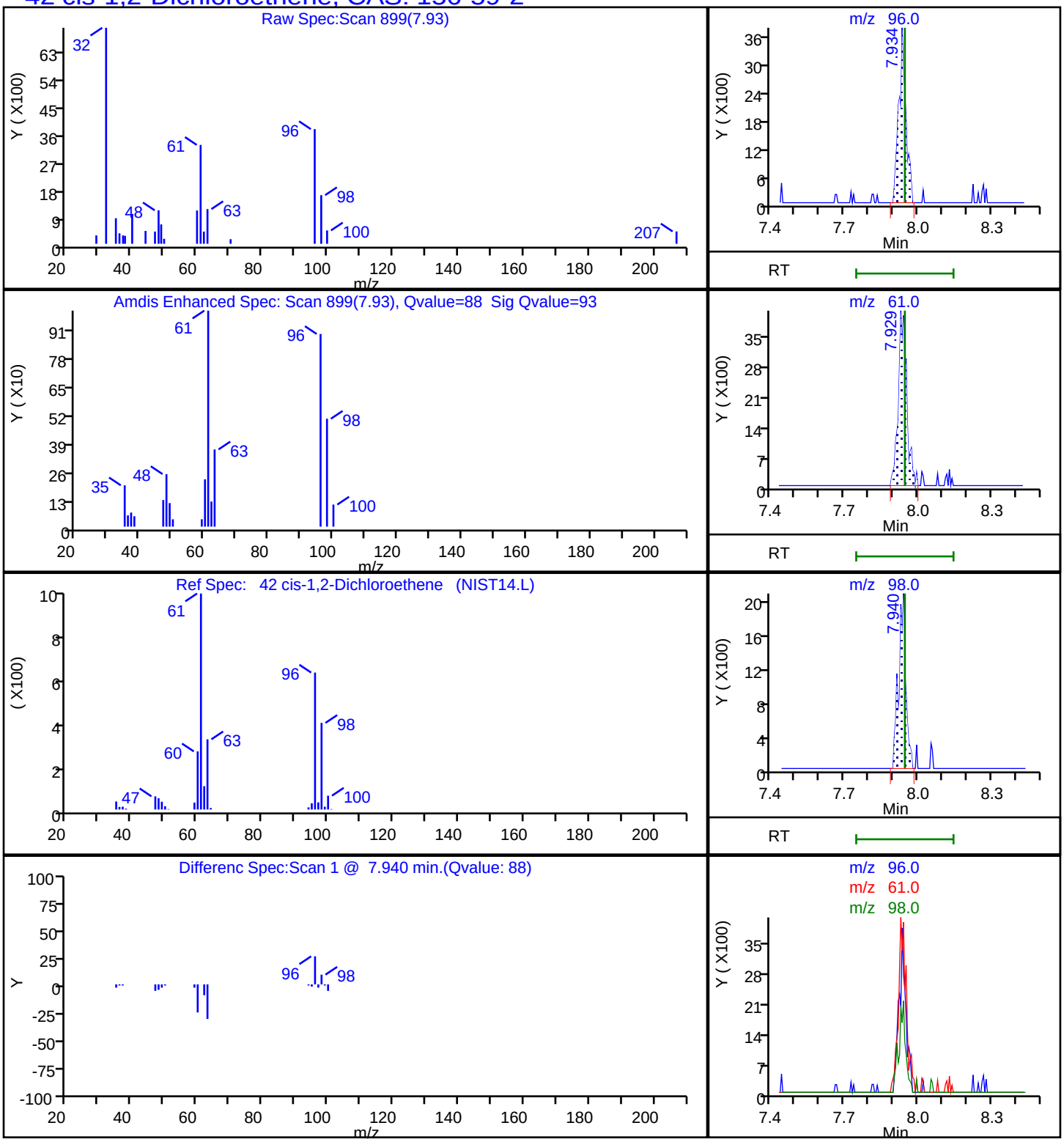
Operator ID: HMT ALS Bottle#: 17 Worklist Smp#: 30

Purge Vol: 500.000 mL Dil. Factor: 120.0000

Method: MR_TO15 Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm) Detector MS SCAN

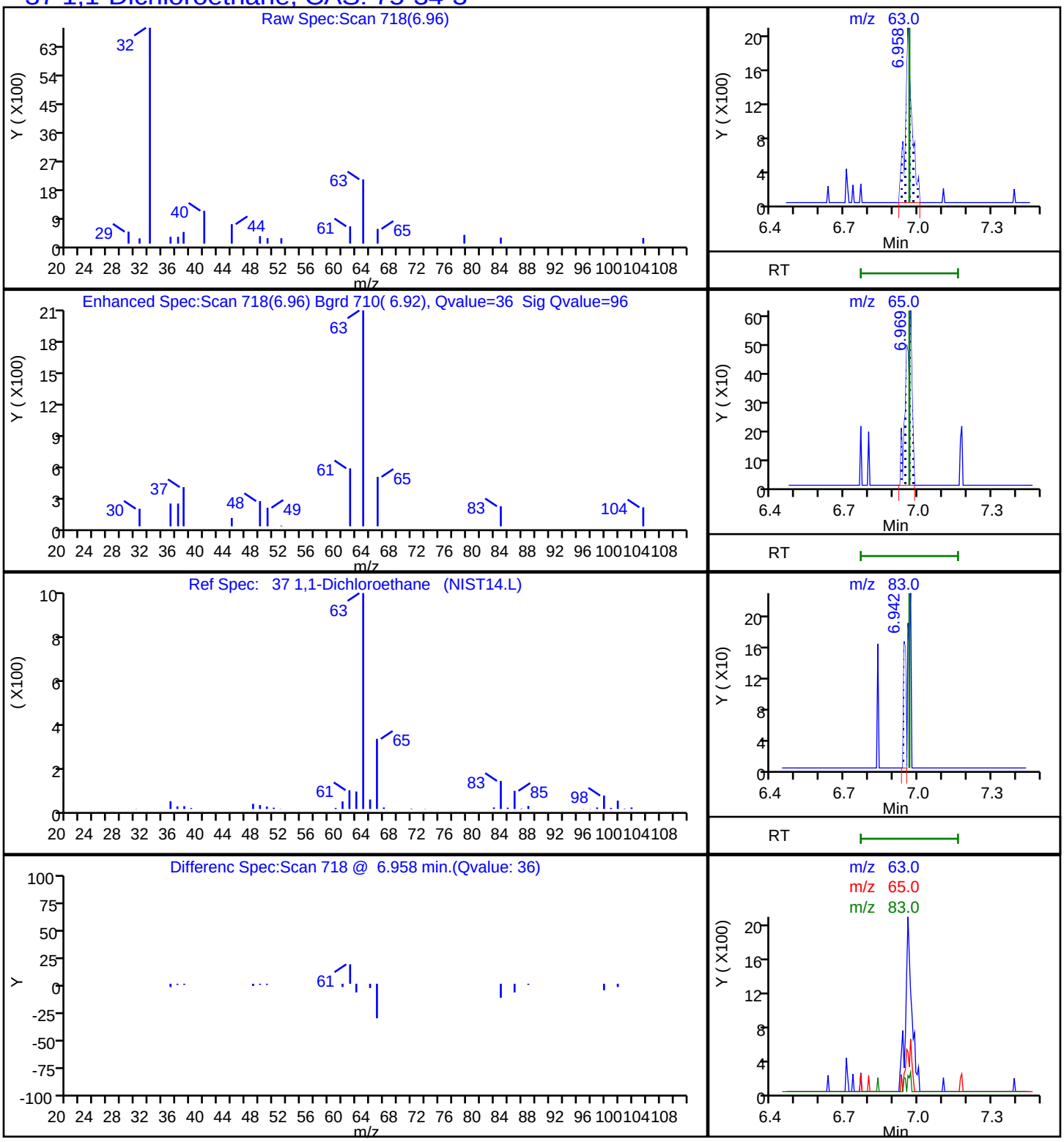
42 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200908-16524.b\RI09P202R.D				
Injection Date:	10-Sep-2020 08:00:30	Instrument ID:	MR		
Lims ID:	140-20194-B-7	Lab Sample ID:	140-20194-7		
Client ID:	SV-174-A-29				
Operator ID:	HMT	ALS Bottle#:	17	Worklist Smp#:	30
Purge Vol:	500.000 mL	Dil. Factor:	120.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

37 1,1-Dichloroethane, CAS: 75-34-3



Eurofins TestAmerica, Knoxville

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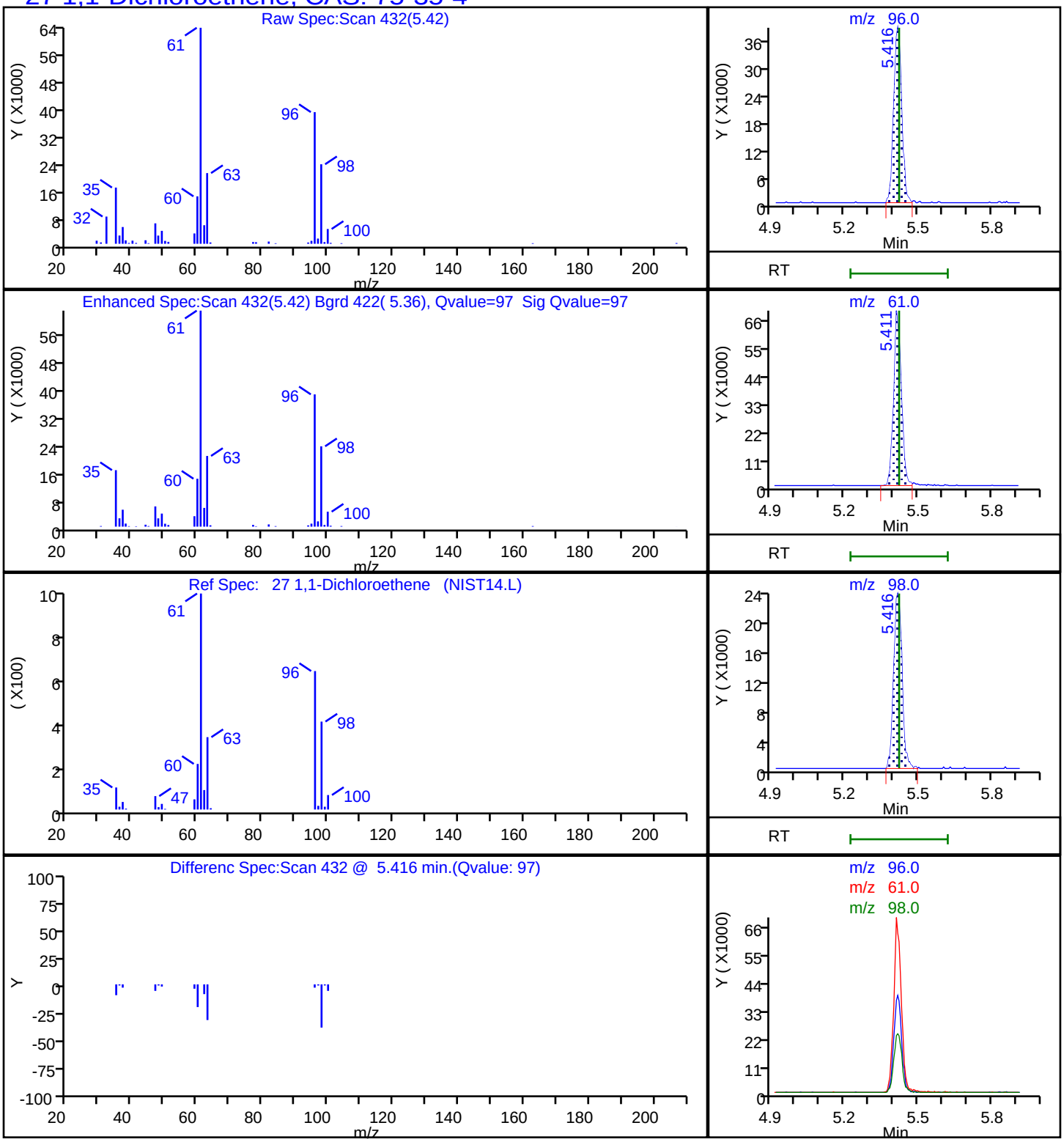
Lims ID:	140-20194-B-7	Lab Sample ID:	140-20194-7		
Client ID:	SV-174-A-29				
Operator ID:	HMT	ALS Bottle#:	17	Worklist Smp#:	30
Purge Vol:	500.000 mL	Dil. Factor:	120.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

27 1,1-Dichloroethene, CAS: 75-35-4

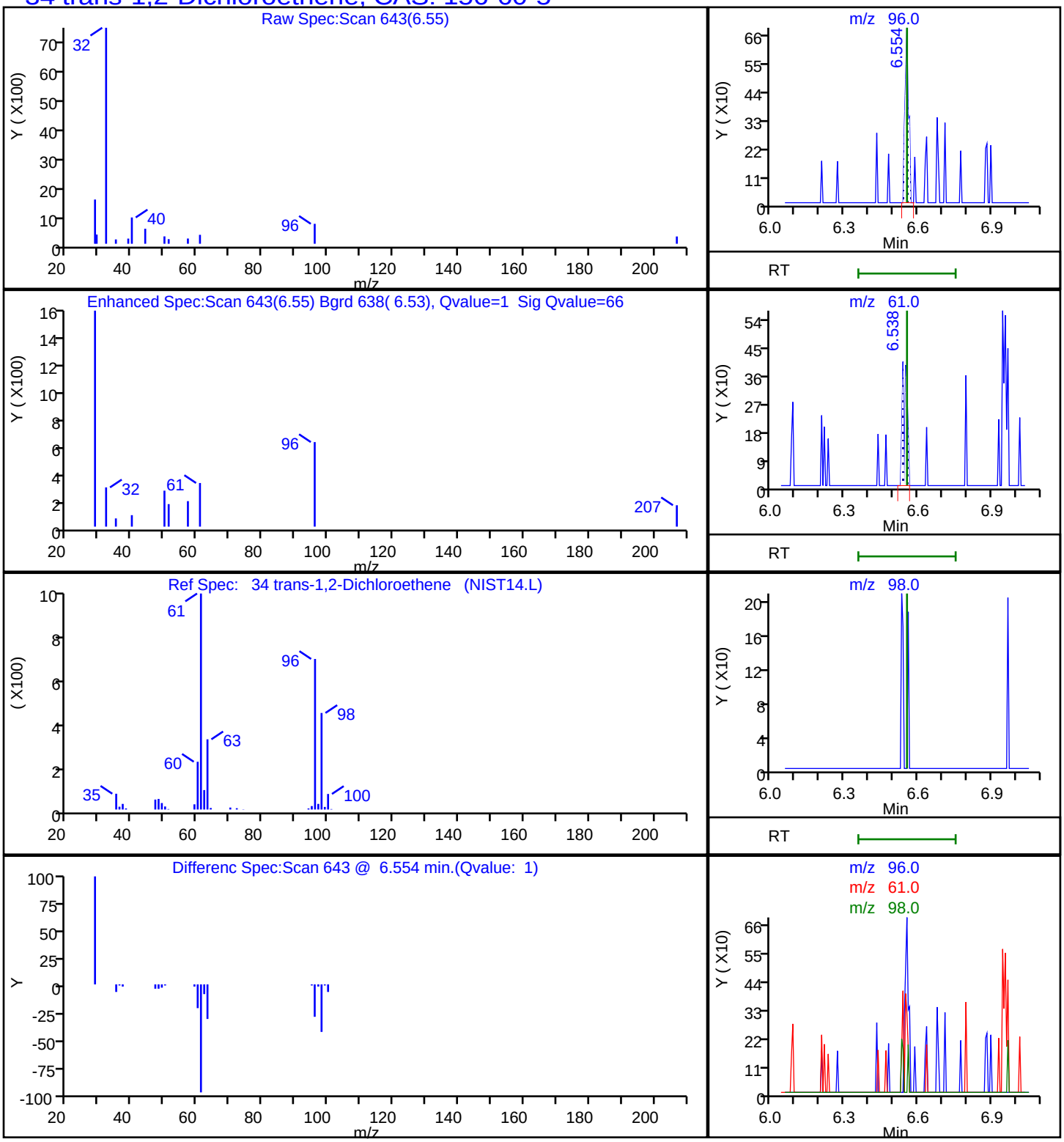


Report Date: 10-Sep-2020 08:46:04 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200908-16524.b\RI09P202R.D				
Injection Date:	10-Sep-2020 08:00:30	Instrument ID:	MR		
Lims ID:	140-20194-B-7	Lab Sample ID:	140-20194-7		
Client ID:	SV-174-A-29				
Operator ID:	HMT	ALS Bottle#:	17	Worklist Smp#:	30
Purge Vol:	500.000 mL	Dil. Factor:	120.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

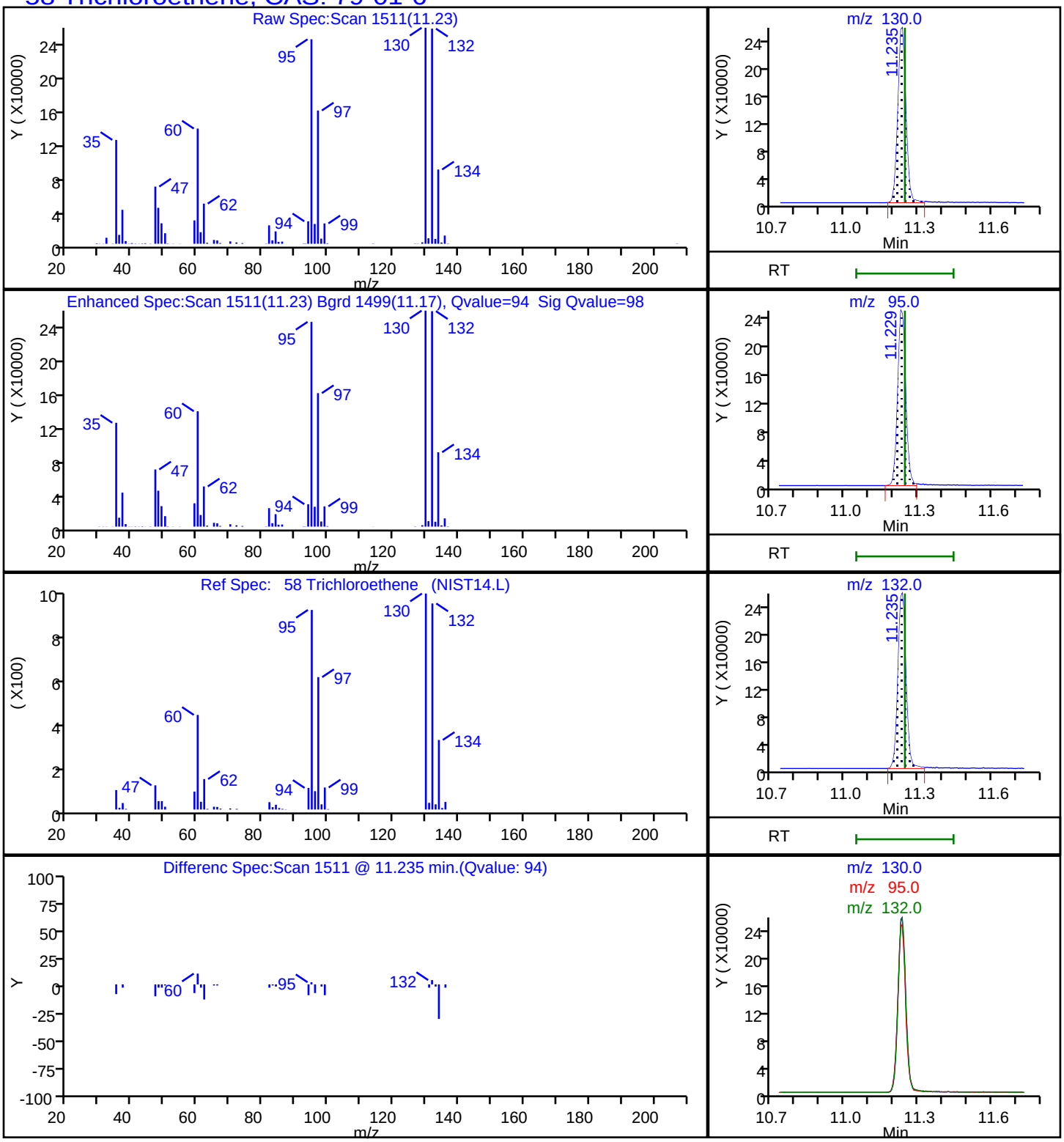
34 trans-1,2-Dichloroethene, CAS: 156-60-5



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200908-16524.b\RI09P202R.D		
Injection Date:	10-Sep-2020 08:00:30	Instrument ID:	MR
Lims ID:	140-20194-B-7	Lab Sample ID:	140-20194-7
Client ID:	SV-174-A-29		
Operator ID:	HMT	ALS Bottle#:	17 Worklist Smp#: 30
Purge Vol:	500.000 mL	Dil. Factor:	120.0000
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

58 Trichloroethene, CAS: 79-01-6



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: SV-177-A-29 Lab Sample ID: 140-20194-8

Matrix: Air Lab File ID: GI08P107R.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 10:08

Sample wt/vol: 150(mL) Date Analyzed: 09/09/2020 09:26

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42503 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.19	J	0.27	0.027
56-23-5	Carbon tetrachloride	153.81	0.041	J	0.27	0.023
75-45-6	Chlorodifluoromethane	86.47	0.42		0.27	0.073
67-66-3	Chloroform	119.38	0.76		0.27	0.023
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.27	0.033
75-71-8	Dichlorodifluoromethane	120.91	0.41		0.27	0.047
75-34-3	1,1-Dichloroethane	98.96	0.13	J	0.27	0.023
107-06-2	1,2-Dichloroethane	98.96	ND		0.27	0.033
75-35-4	1,1-Dichloroethene	96.94	ND		0.27	0.027
100-41-4	Ethylbenzene	106.17	0.15	J	0.27	0.043
75-09-2	Methylene Chloride	84.93	ND		1.3	1.3
1634-04-4	Methyl tert-butyl ether	88.15	ND		1.3	0.17
91-20-3	Naphthalene	128.17	ND		0.13	0.13
127-18-4	Tetrachloroethene	165.83	0.21	J	0.27	0.023
108-88-3	Toluene	92.14	0.89		0.40	0.26
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.27	0.023
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.27	0.21
71-55-6	1,1,1-Trichloroethane	133.41	0.28		0.27	0.12
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.27	0.023
79-01-6	Trichloroethene	131.39	21		0.13	0.020
526-73-8	1,2,3-Trimethylbenzene	120.19	ND	*	0.27	0.12
95-63-6	1,2,4-Trimethylbenzene	120.20	0.27		0.27	0.067
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.27	0.073
75-01-4	Vinyl chloride	62.50	ND		0.13	0.087
1330-20-7	Xylenes, Total	106.17	0.79		0.53	0.080

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	102		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: SV-177-A-29 Lab Sample ID: 140-20194-8

Matrix: Air Lab File ID: GI08P107R.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 10:08

Sample wt/vol: 150(mL) Date Analyzed: 09/09/2020 09:26

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42503 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.62	J	0.85	0.085
56-23-5	Carbon tetrachloride	153.81	0.26	J	1.7	0.15
75-45-6	Chlorodifluoromethane	86.47	1.5		0.94	0.26
67-66-3	Chloroform	119.38	3.7		1.3	0.11
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.1	0.13
75-71-8	Dichlorodifluoromethane	120.91	2.0		1.3	0.23
75-34-3	1,1-Dichloroethane	98.96	0.53	J	1.1	0.094
107-06-2	1,2-Dichloroethane	98.96	ND		1.1	0.13
75-35-4	1,1-Dichloroethene	96.94	ND		1.1	0.11
100-41-4	Ethylbenzene	106.17	0.65	J	1.2	0.19
75-09-2	Methylene Chloride	84.93	ND		4.6	4.5
1634-04-4	Methyl tert-butyl ether	88.15	ND		4.8	0.62
91-20-3	Naphthalene	128.17	ND		0.70	0.70
127-18-4	Tetrachloroethene	165.83	1.4	J	1.8	0.16
108-88-3	Toluene	92.14	3.3		1.5	0.98
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.1	0.093
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		2.0	1.6
71-55-6	1,1,1-Trichloroethane	133.41	1.5		1.5	0.67
79-00-5	1,1,2-Trichloroethane	133.41	ND		1.5	0.13
79-01-6	Trichloroethene	131.39	110		0.72	0.11
526-73-8	1,2,3-Trimethylbenzene	120.19	ND	*	1.3	0.59
95-63-6	1,2,4-Trimethylbenzene	120.20	1.4		1.3	0.33
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		1.3	0.36
75-01-4	Vinyl chloride	62.50	ND		0.34	0.22
1330-20-7	Xylenes, Total	106.17	3.4		2.3	0.35

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	102		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P107R.D
Lims ID: 140-20194-A-8
Client ID: SV-177-A-29
Sample Type: Client
Inject. Date: 09-Sep-2020 09:26:30 ALS Bottle#: 7 Worklist Smp#: 29
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016519-029
Misc. Info.: 140-20194-a-8
Operator ID: HMT Instrument ID: MG

Method: \\chromfs\Knoxville\ChromData\MG\20200904-16519.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 09-Sep-2020 14:21:02 Calib Date: 02-Sep-2020 03:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1034

First Level Reviewer: barlozhetskayaa Date: 09-Sep-2020 14:21:02

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.800	8.806	-0.006	85	83742	4.80	
* 2 1,4-Difluorobenzene	114	10.990	10.990	0.000	98	463696	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.724	15.724	0.000	96	454893	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.369	17.369	0.000	79	338425	4.74	
6 Chlorodifluoromethane	51	3.705	3.699	0.006	96	9391	0.1252	
8 Dichlorodifluoromethane	85	3.764	3.764	0.000	95	10388	0.1238	
37 1,1-Dichloroethane	63	7.485	7.495	-0.010	12	2387	0.0394	
44 Chloroform	83	8.822	8.817	0.005	96	13357	0.2274	
47 1,1,1-Trichloroethane	97	9.852	9.852	0.000	90	4727	0.0836	
50 Benzene	78	10.445	10.445	0.000	57	5560	0.0583	
52 Carbon tetrachloride	117	10.461	10.467	-0.006	19	722	0.0123	
58 Trichloroethene	130	11.702	11.702	0.000	86	263616	6.34	
67 Toluene	91	13.756	13.756	0.000	92	26687	0.2660	
73 Tetrachloroethene	129	14.894	14.899	-0.005	77	2381	0.0630	
78 Ethylbenzene	91	16.064	16.064	0.000	96	5765	0.0447	
79 m-Xylene & p-Xylene	91	16.220	16.231	-0.011	97	15877	0.1556	
83 o-Xylene	91	16.749	16.754	-0.005	95	8471	0.0821	
95 1,2,4-Trimethylbenzene	105	18.539	18.544	-0.005	96	9754	0.0824	
S 124 Xylenes, Total	100				0		0.2377	

Reagents:

40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

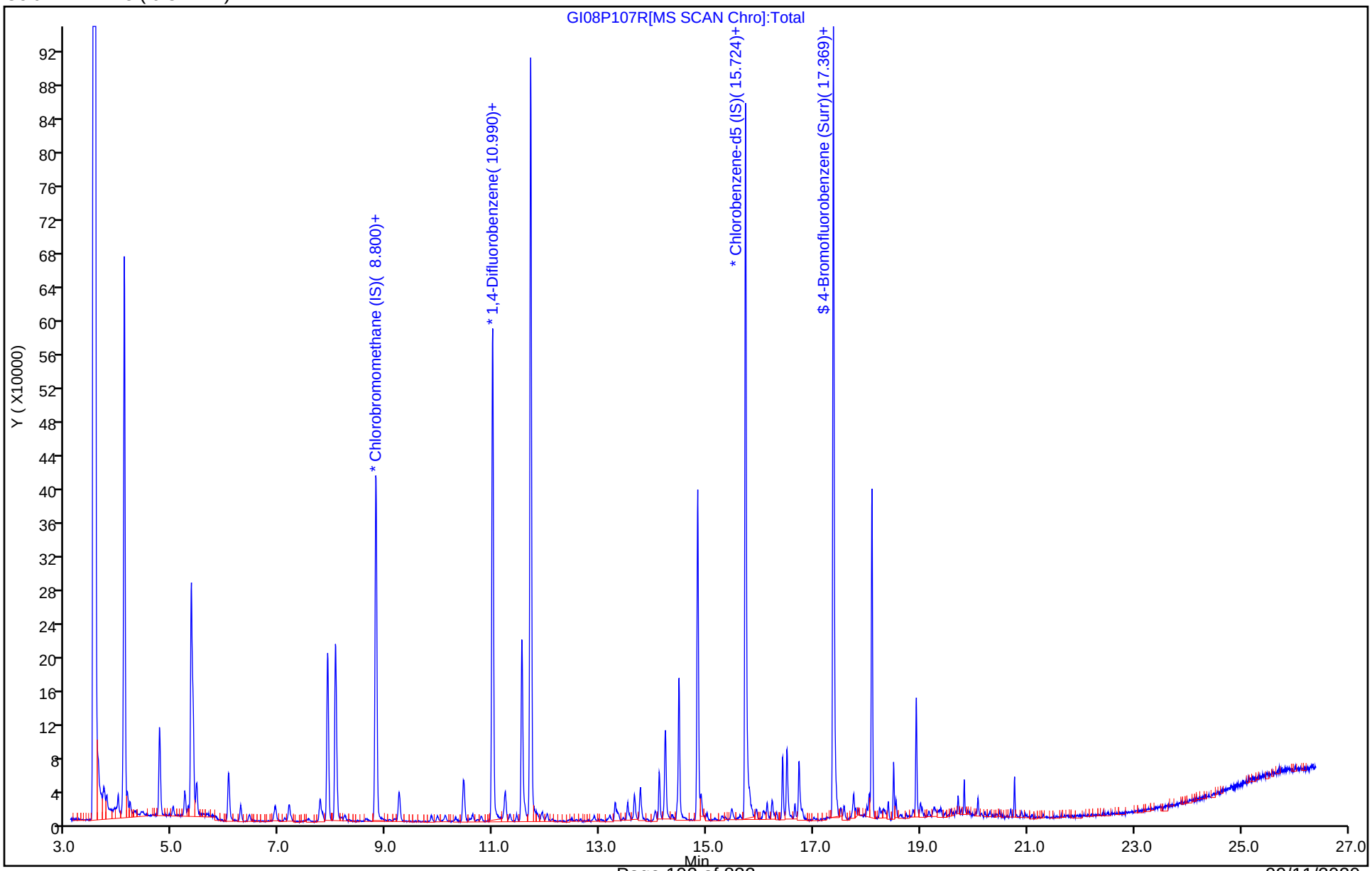
Report Date: 09-Sep-2020 14:21:02 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P107R.D

Injection Date:	09-Sep-2020 09:26:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	140-20194-A-8	Lab Sample ID:	140-20194-8	Worklist Smp#:	29
Client ID:	SV-177-A-29				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P107R.D				
Lims ID:	140-20194-A-8				
Client ID:	SV-177-A-29				
Sample Type:	Client				
Inject. Date:	09-Sep-2020 09:26:30	ALS Bottle#:	7	Worklist Smp#:	29
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016519-029				
Misc. Info.:	140-20194-a-8				
Operator ID:	HMT	Instrument ID:	MG		
Method:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\MG_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	09-Sep-2020 14:21:02	Calib Date:	02-Sep-2020 03:27:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1034				

First Level Reviewer: barlozhetskayaa Date: 09-Sep-2020 14:21:02

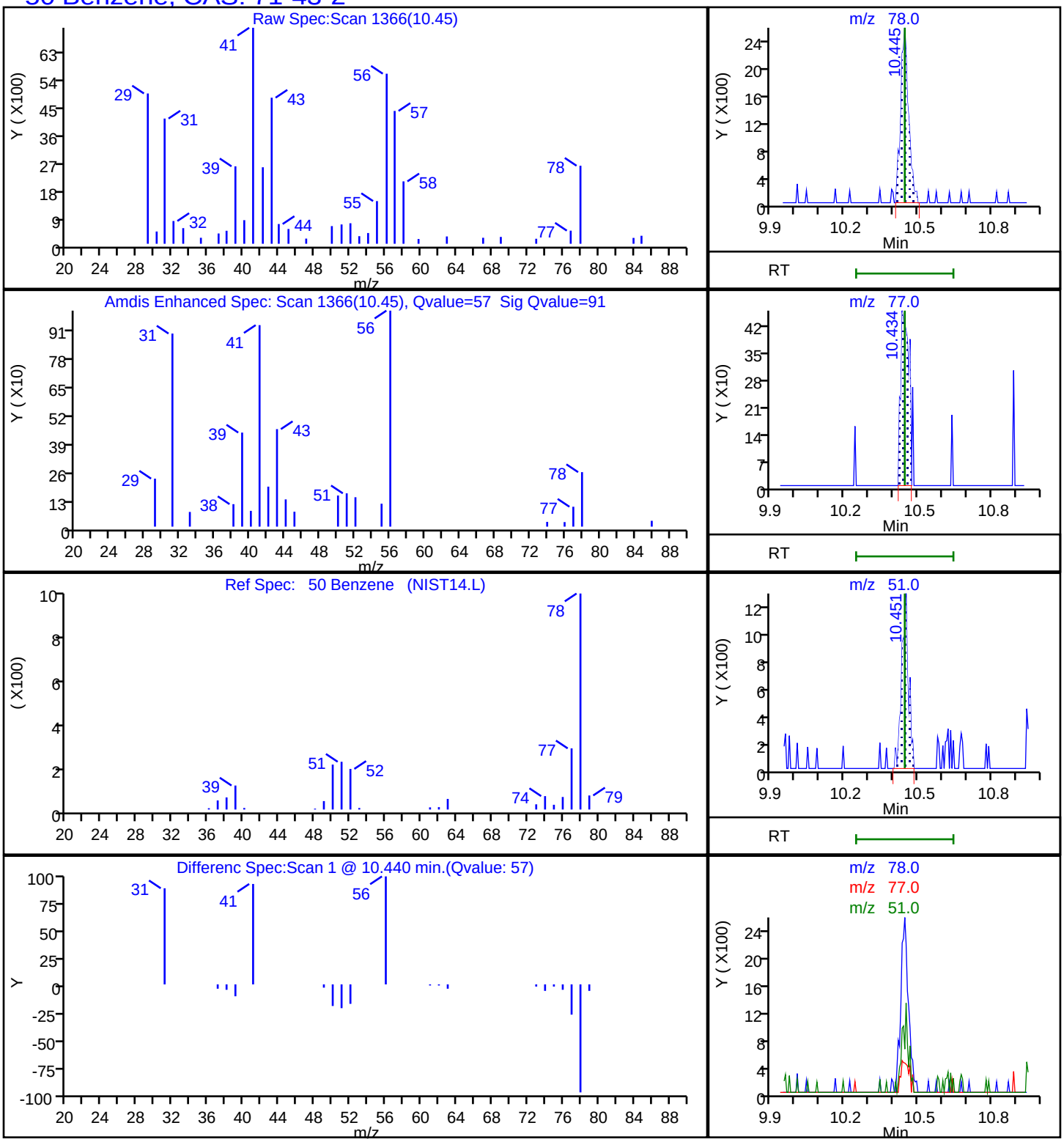
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	4.74	102.18

Report Date: 09-Sep-2020 14:21:02 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P107R.D		
Injection Date:	09-Sep-2020 09:26:30	Instrument ID:	MG
Lims ID:	140-20194-A-8	Lab Sample ID:	140-20194-8
Client ID:	SV-177-A-29		
Operator ID:	HMT	ALS Bottle#:	7 Worklist Smp#: 29
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

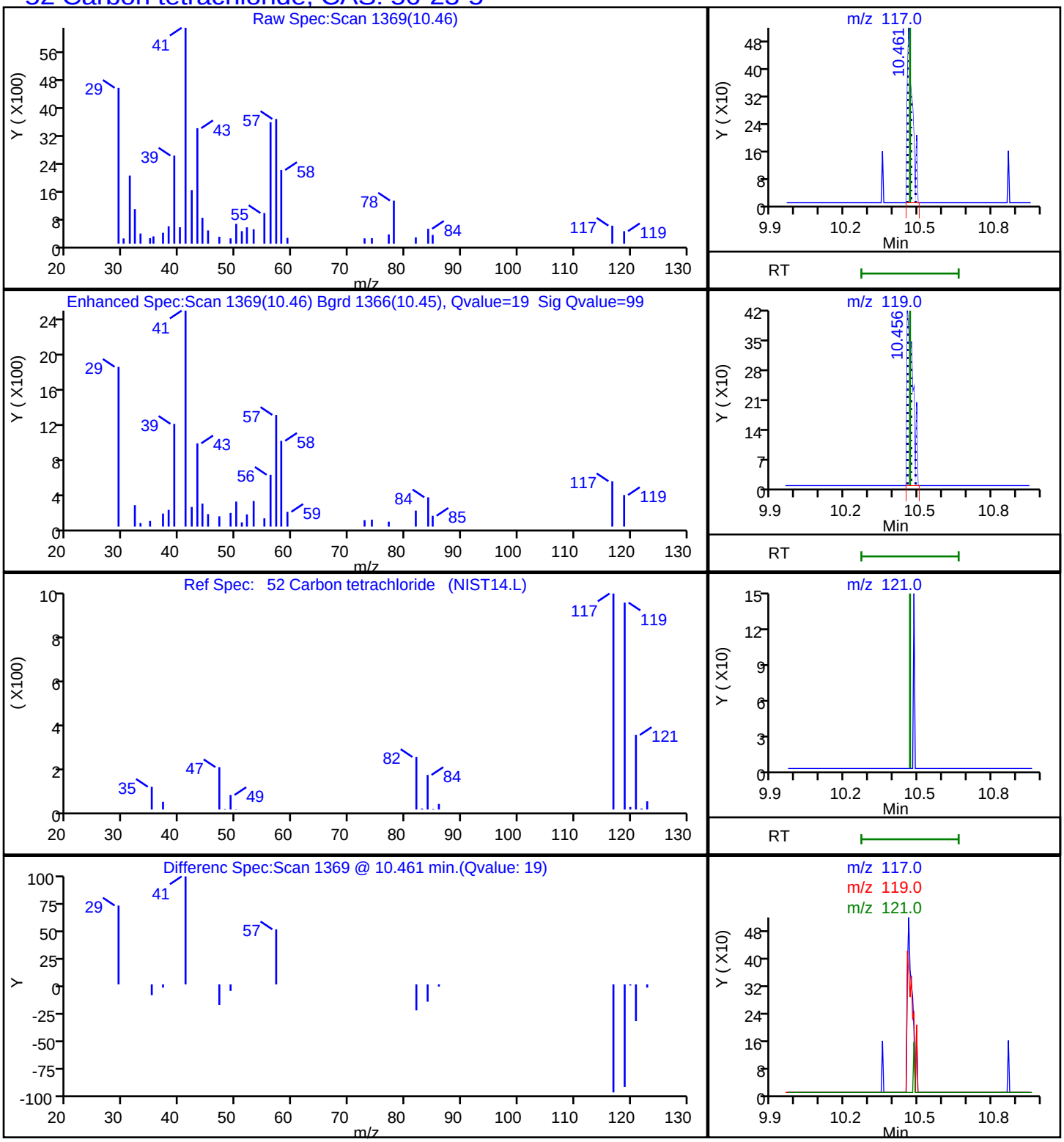
50 Benzene, CAS: 71-43-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P107R.D		
Injection Date:	09-Sep-2020 09:26:30	Instrument ID:	MG
Lims ID:	140-20194-A-8	Lab Sample ID:	140-20194-8
Client ID:	SV-177-A-29		
Operator ID:	HMT	ALS Bottle#:	7 Worklist Smp#: 29
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

52 Carbon tetrachloride, CAS: 56-23-5

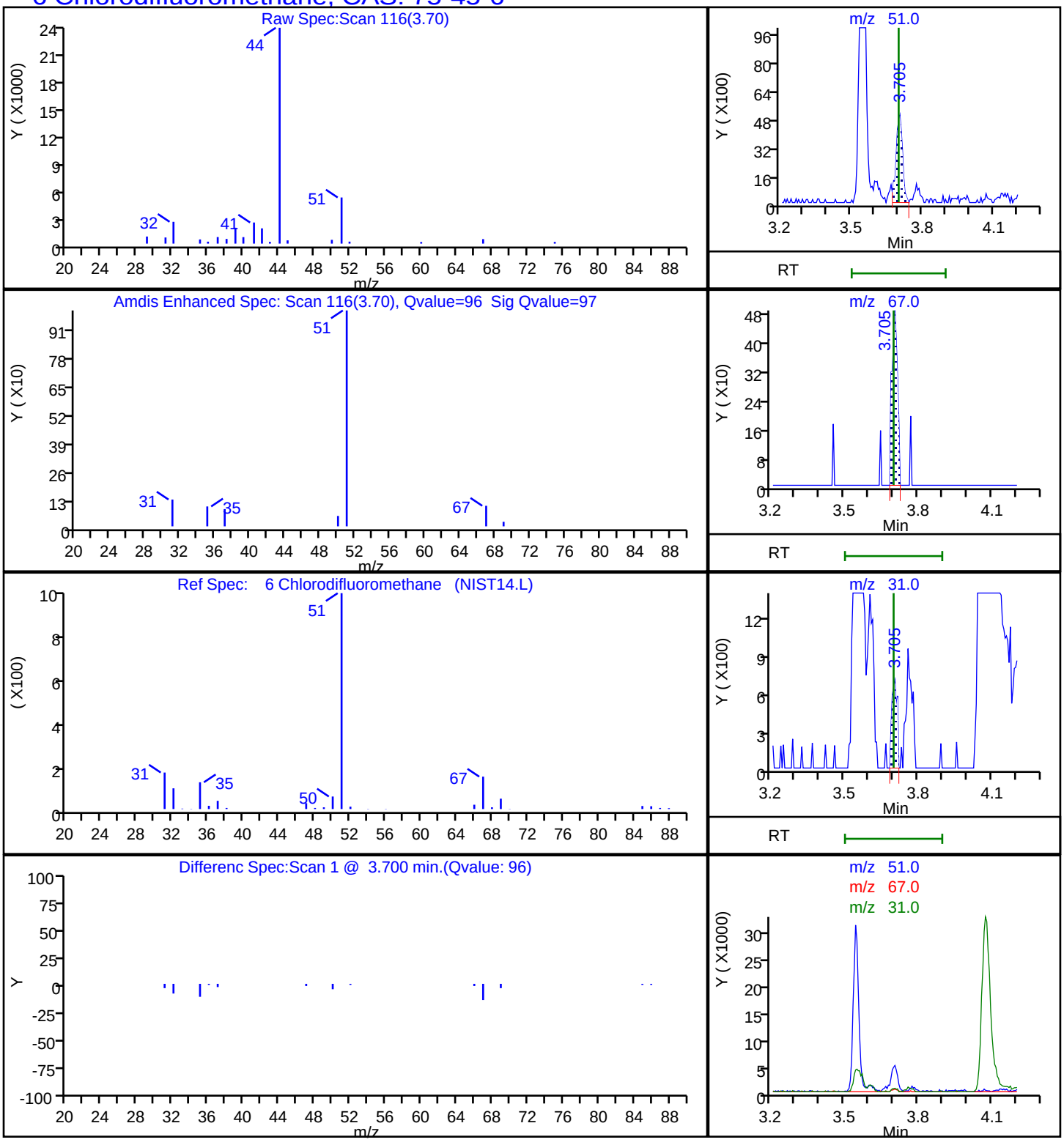


Report Date: 09-Sep-2020 14:21:02 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P107R.D				
Injection Date:	09-Sep-2020 09:26:30	Instrument ID:	MG		
Lims ID:	140-20194-A-8	Lab Sample ID:	140-20194-8		
Client ID:	SV-177-A-29				
Operator ID:	HMT	ALS Bottle#:	7	Worklist Smp#:	29
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

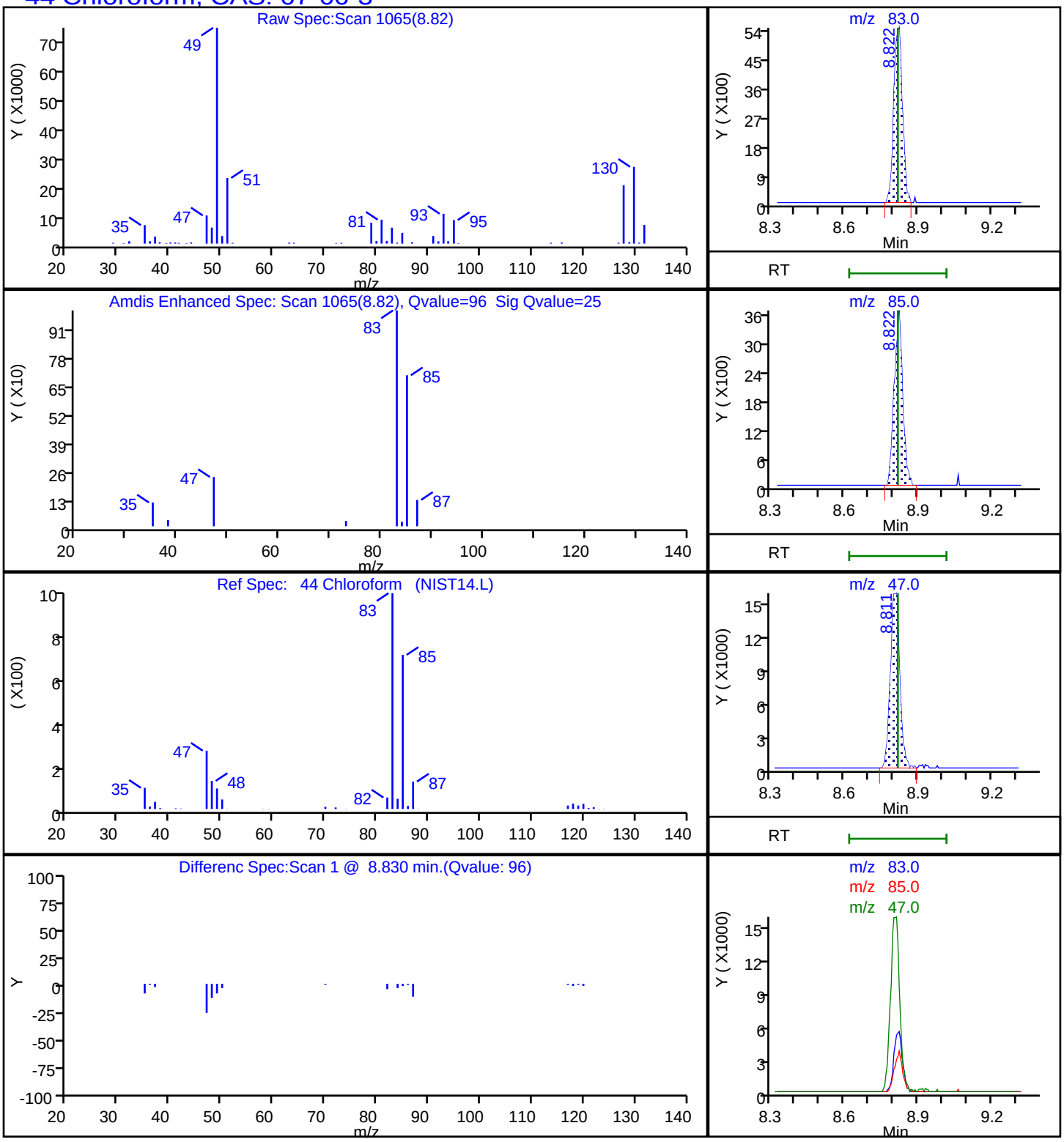
6 Chlorodifluoromethane, CAS: 75-45-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P107R.D		
Injection Date:	09-Sep-2020 09:26:30	Instrument ID:	MG
Lims ID:	140-20194-A-8	Lab Sample ID:	140-20194-8
Client ID:	SV-177-A-29		
Operator ID:	HMT	ALS Bottle#:	7 Worklist Smp#: 29
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

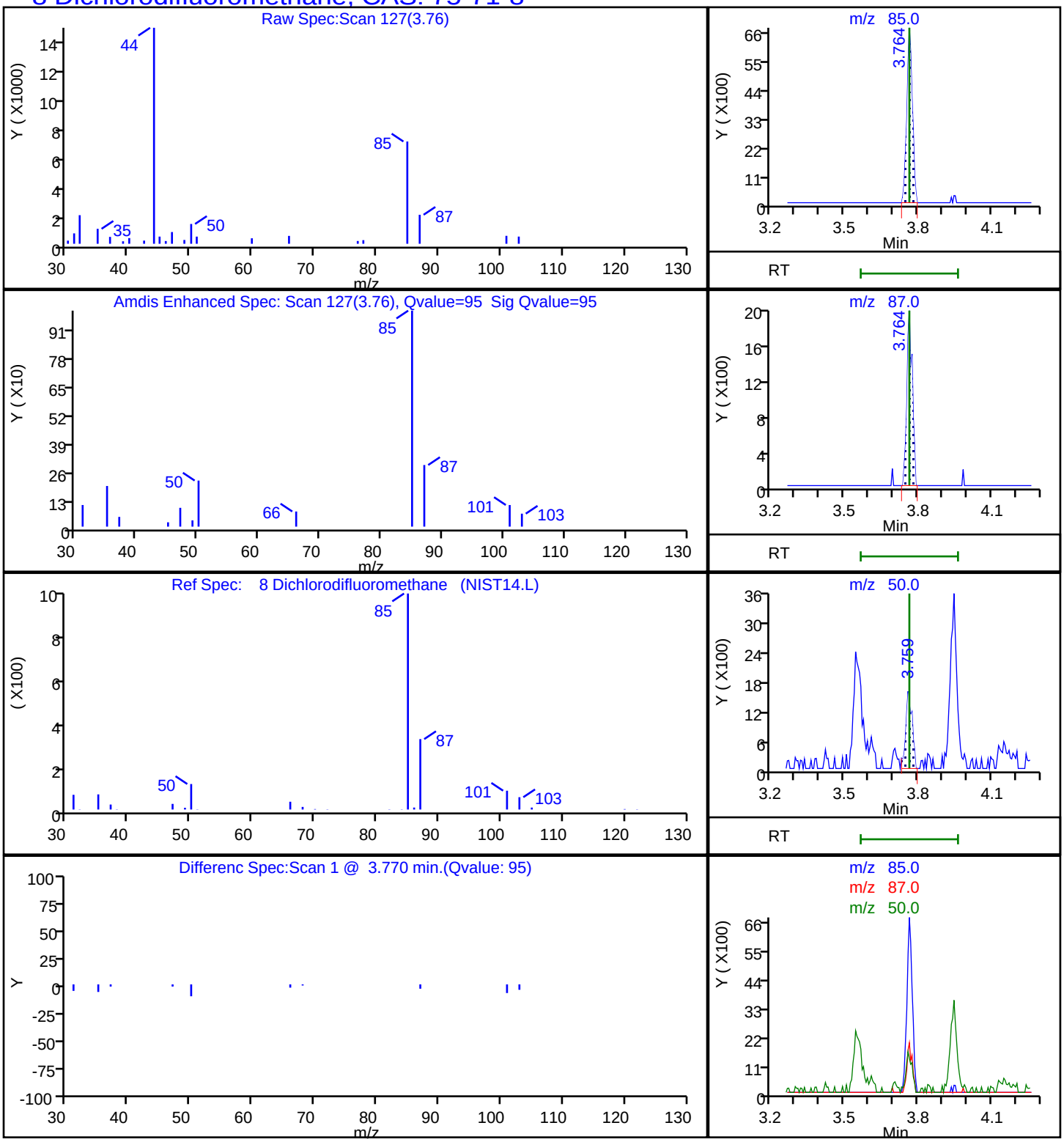
44 Chloroform, CAS: 67-66-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P107R.D				
Injection Date:	09-Sep-2020 09:26:30	Instrument ID:	MG		
Lims ID:	140-20194-A-8	Lab Sample ID:	140-20194-8		
Client ID:	SV-177-A-29				
Operator ID:	HMT	ALS Bottle#:	7	Worklist Smp#:	29
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

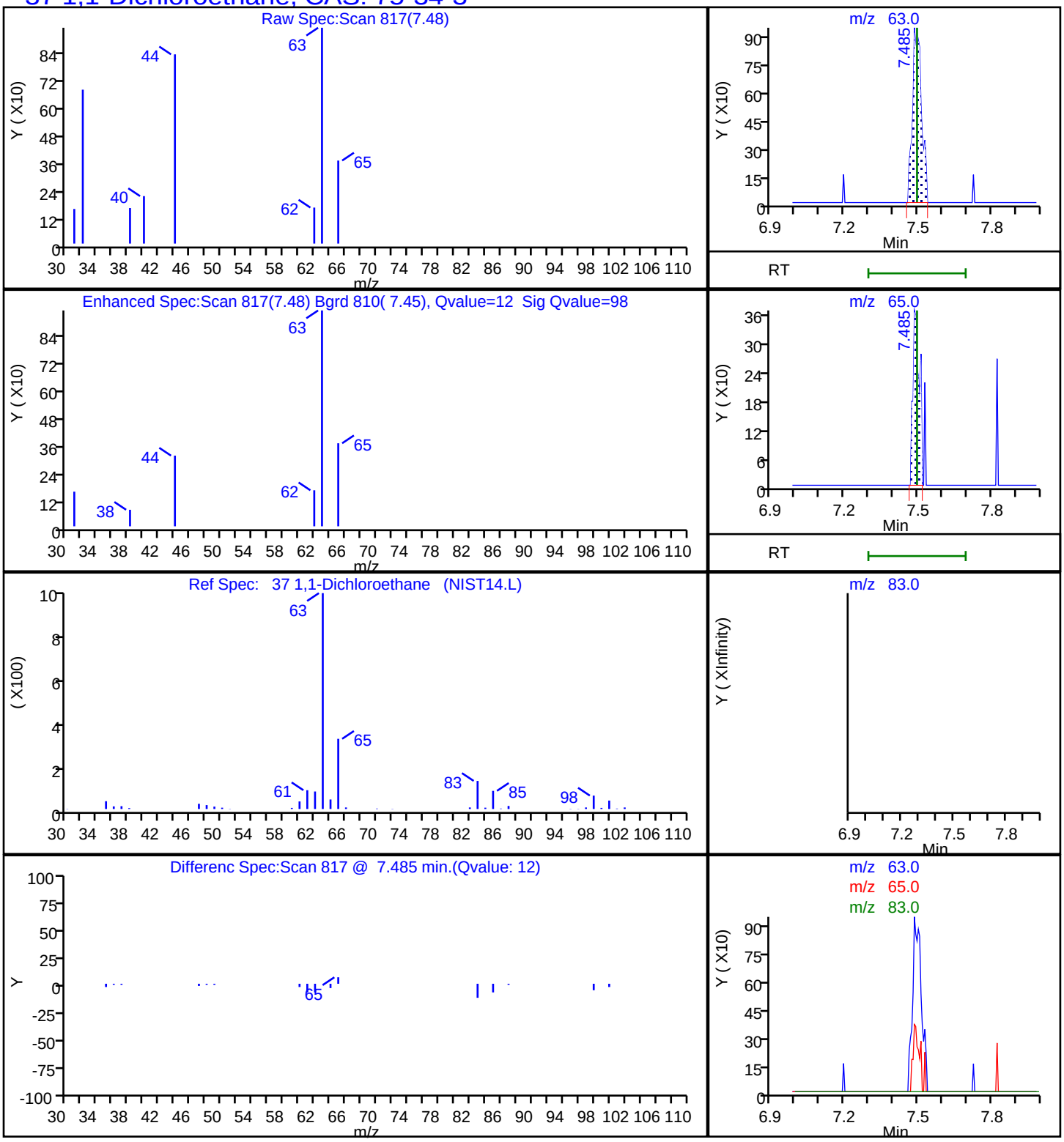
8 Dichlorodifluoromethane, CAS: 75-71-8



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P107R.D		
Injection Date:	09-Sep-2020 09:26:30	Instrument ID:	MG
Lims ID:	140-20194-A-8	Lab Sample ID:	140-20194-8
Client ID:	SV-177-A-29		
Operator ID:	HMT	ALS Bottle#:	7 Worklist Smp#: 29
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

37 1,1-Dichloroethane, CAS: 75-34-3

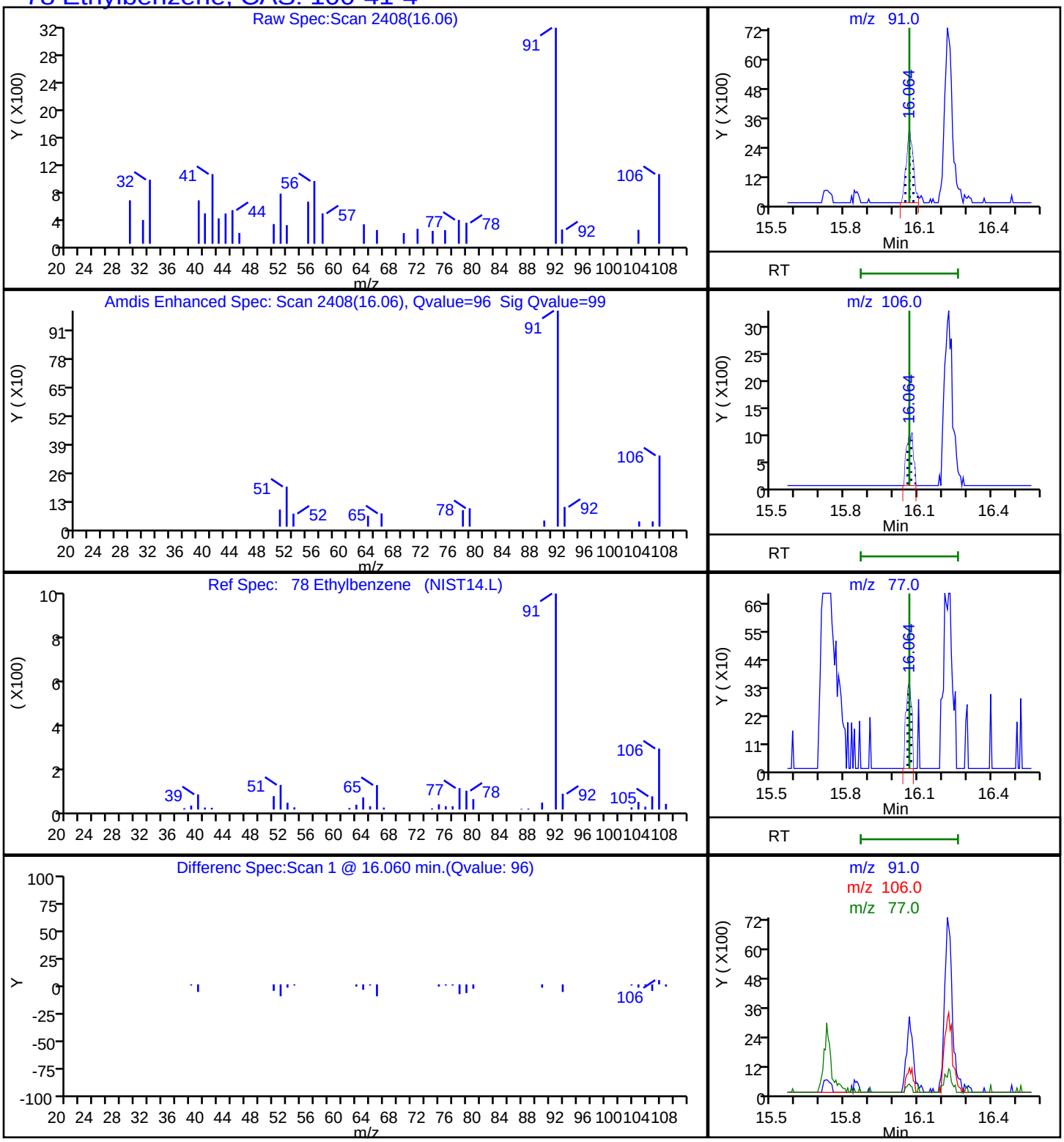


Report Date: 09-Sep-2020 14:21:03 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P107R.D				
Injection Date:	09-Sep-2020 09:26:30	Instrument ID:	MG		
Lims ID:	140-20194-A-8	Lab Sample ID:	140-20194-8		
Client ID:	SV-177-A-29				
Operator ID:	HMT	ALS Bottle#:	7	Worklist Smp#:	29
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

78 Ethylbenzene, CAS: 100-41-4

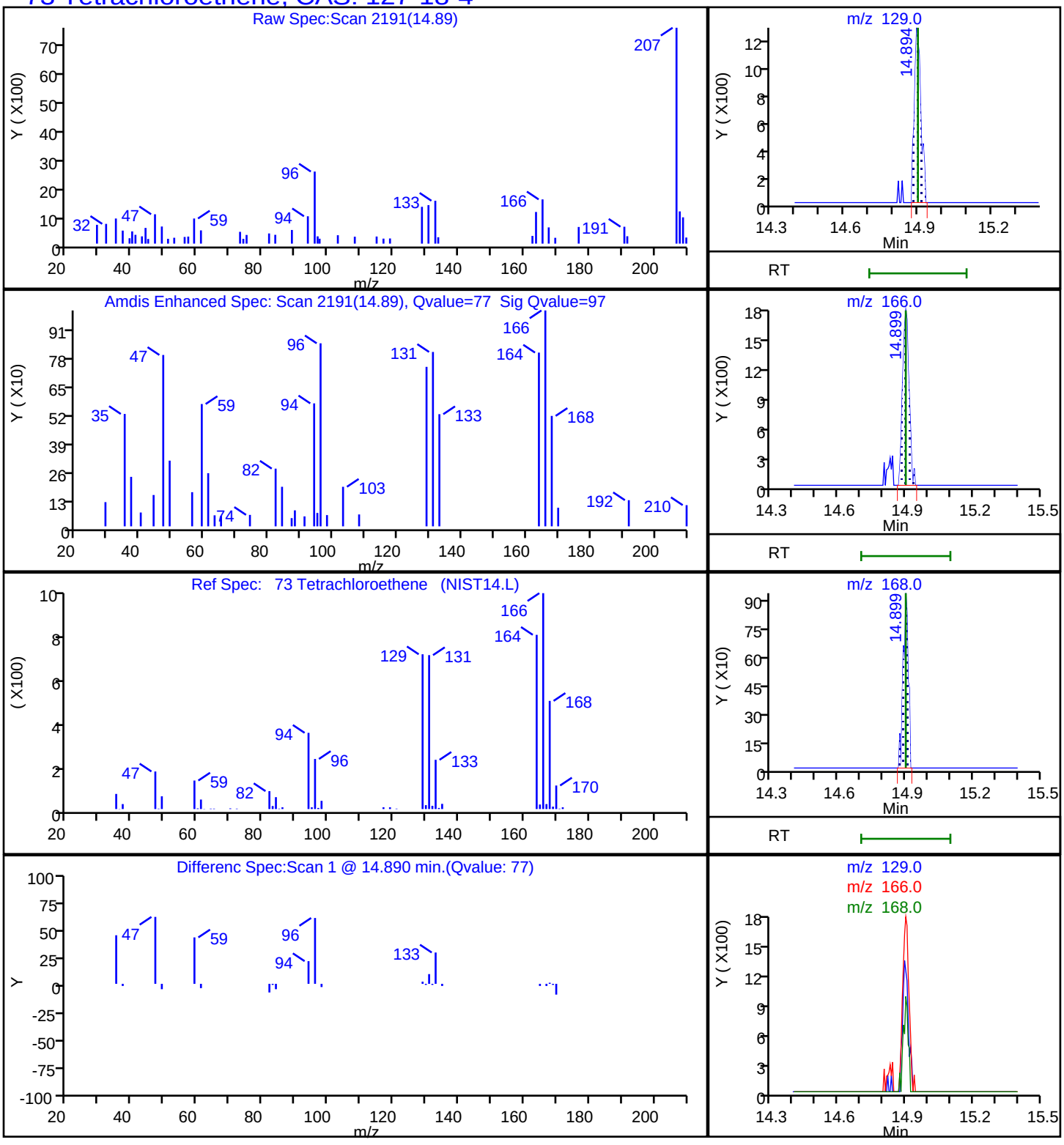


Report Date: 09-Sep-2020 14:21:03 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P107R.D		
Injection Date:	09-Sep-2020 09:26:30	Instrument ID:	MG
Lims ID:	140-20194-A-8	Lab Sample ID:	140-20194-8
Client ID:	SV-177-A-29		
Operator ID:	HMT	ALS Bottle#:	7 Worklist Smp#: 29
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

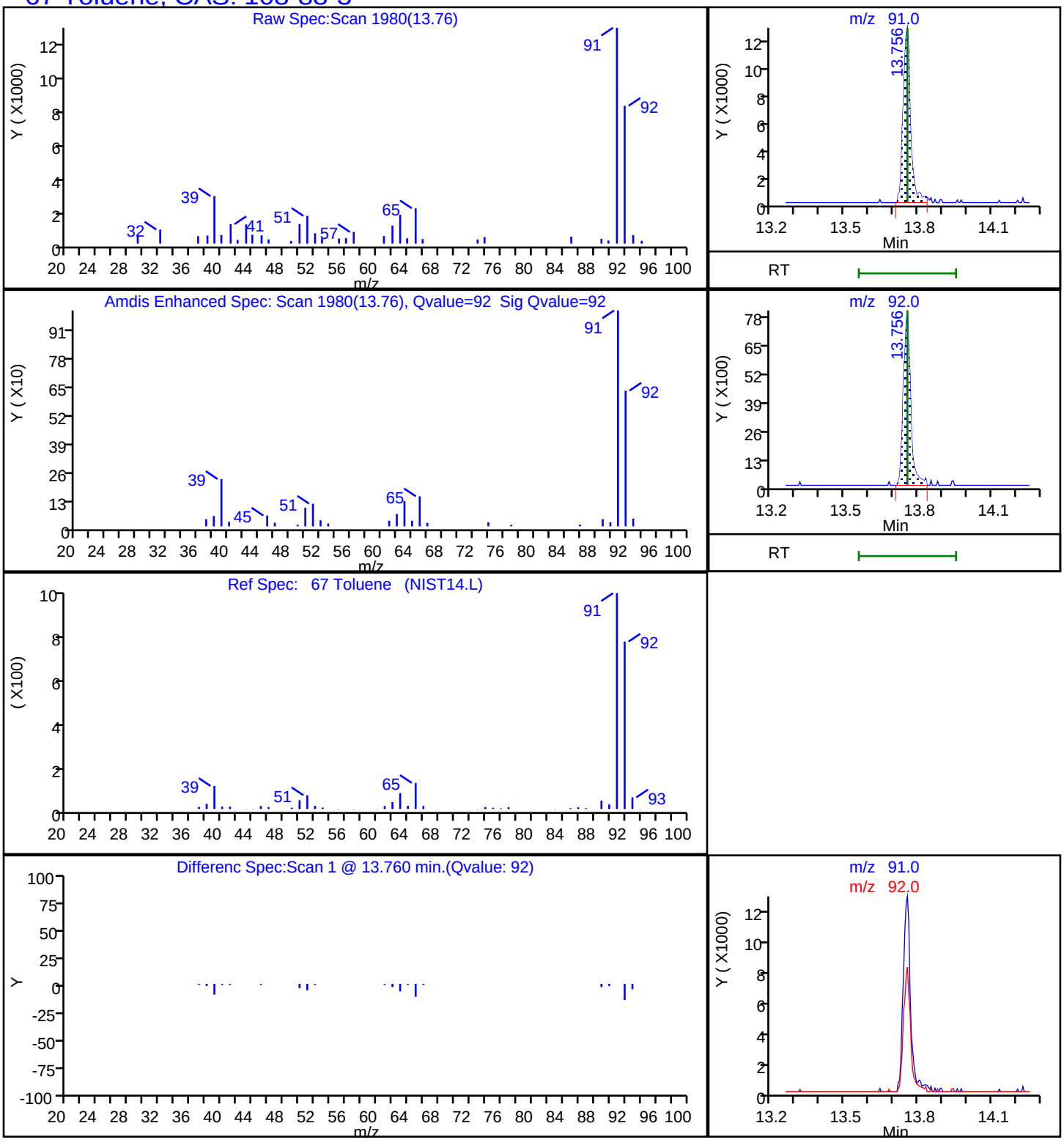
73 Tetrachloroethene, CAS: 127-18-4



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P107R.D		
Injection Date:	09-Sep-2020 09:26:30	Instrument ID:	MG
Lims ID:	140-20194-A-8	Lab Sample ID:	140-20194-8
Client ID:	SV-177-A-29		
Operator ID:	HMT	ALS Bottle#:	7 Worklist Smp#: 29
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

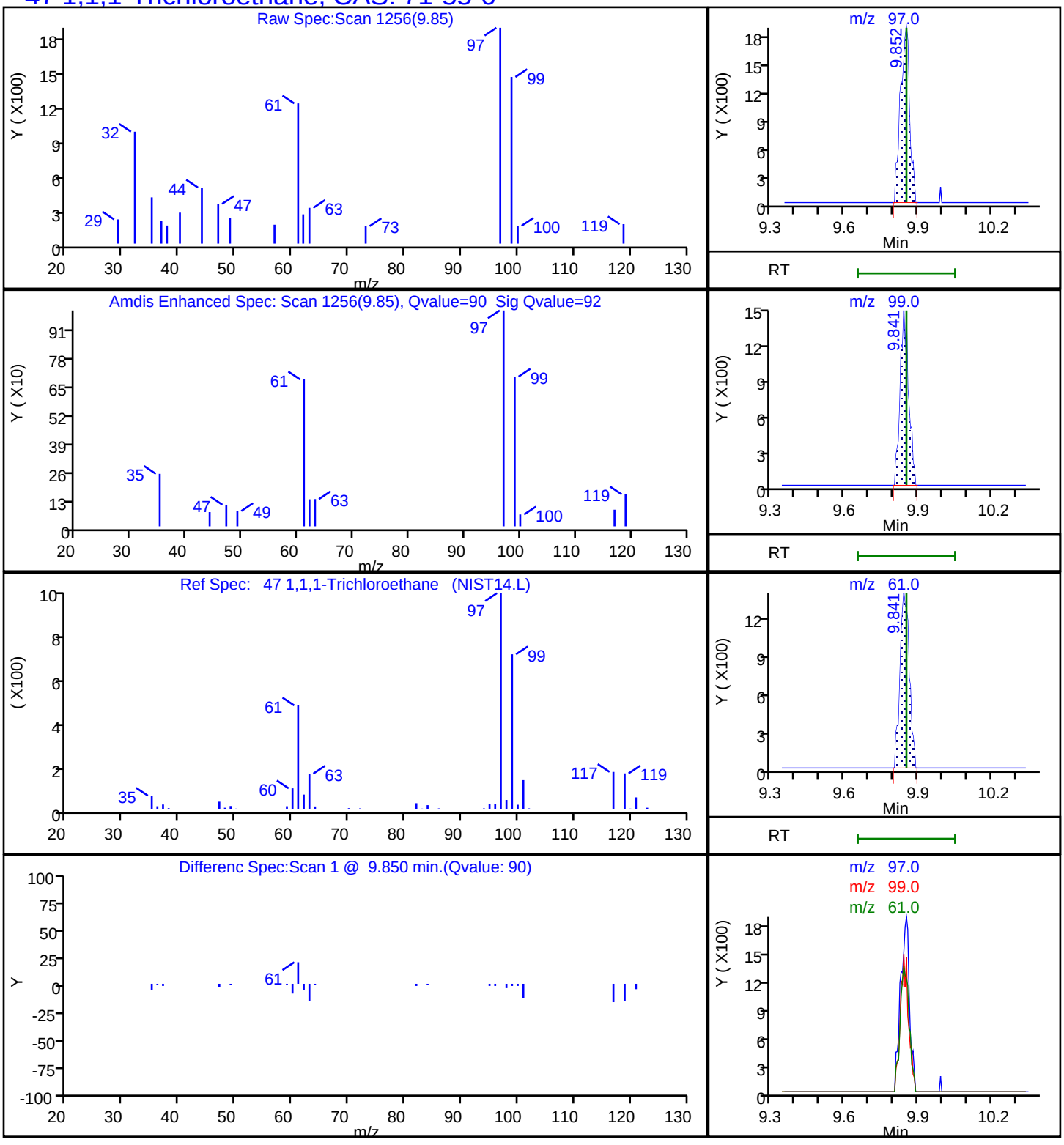
67 Toluene, CAS: 108-88-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P107R.D		
Injection Date:	09-Sep-2020 09:26:30	Instrument ID:	MG
Lims ID:	140-20194-A-8	Lab Sample ID:	140-20194-8
Client ID:	SV-177-A-29		
Operator ID:	HMT	ALS Bottle#:	7 Worklist Smp#: 29
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

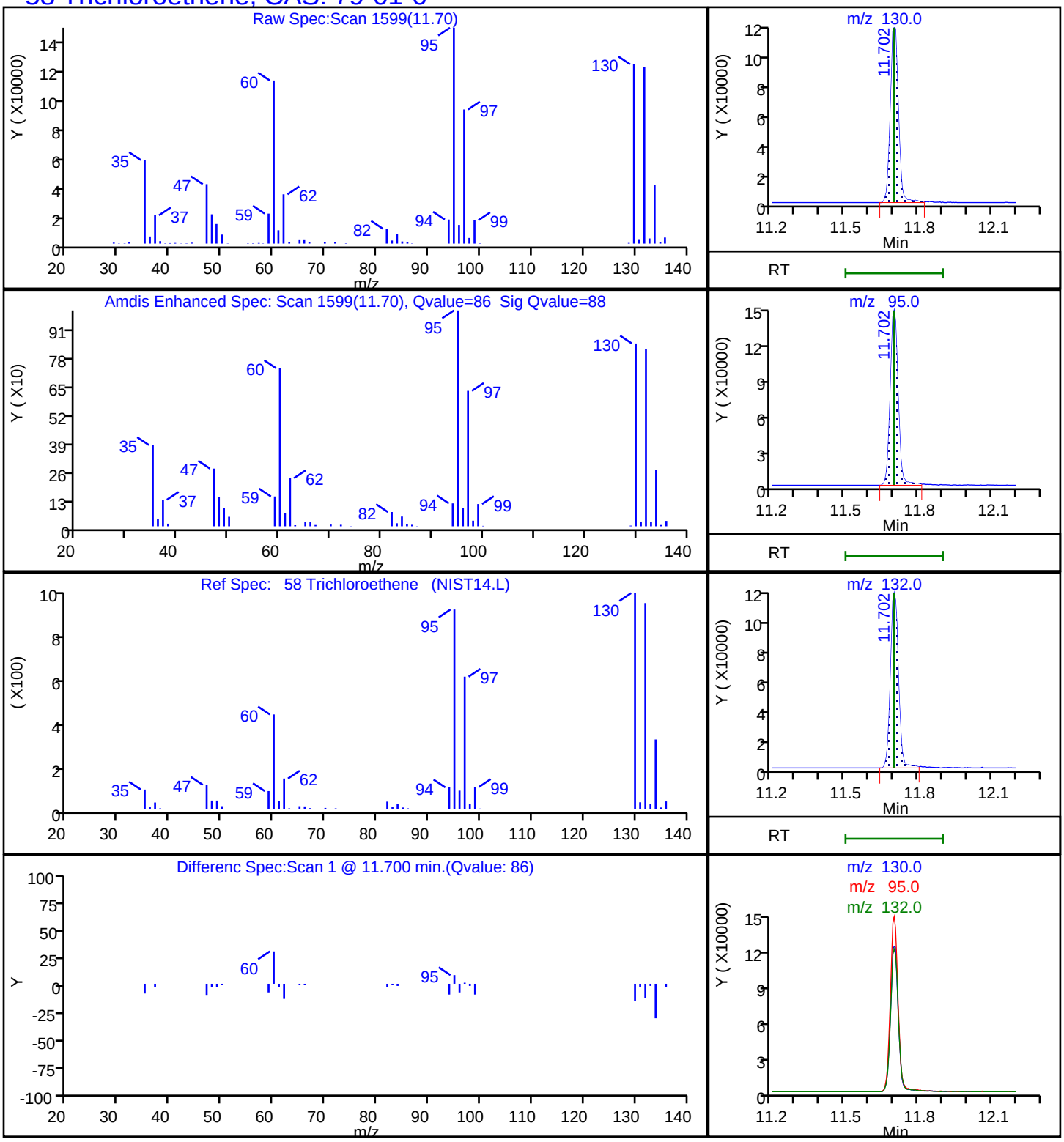
47 1,1,1-Trichloroethane, CAS: 71-55-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P107R.D		
Injection Date:	09-Sep-2020 09:26:30	Instrument ID:	MG
Lims ID:	140-20194-A-8	Lab Sample ID:	140-20194-8
Client ID:	SV-177-A-29		
Operator ID:	HMT	ALS Bottle#:	7 Worklist Smp#: 29
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

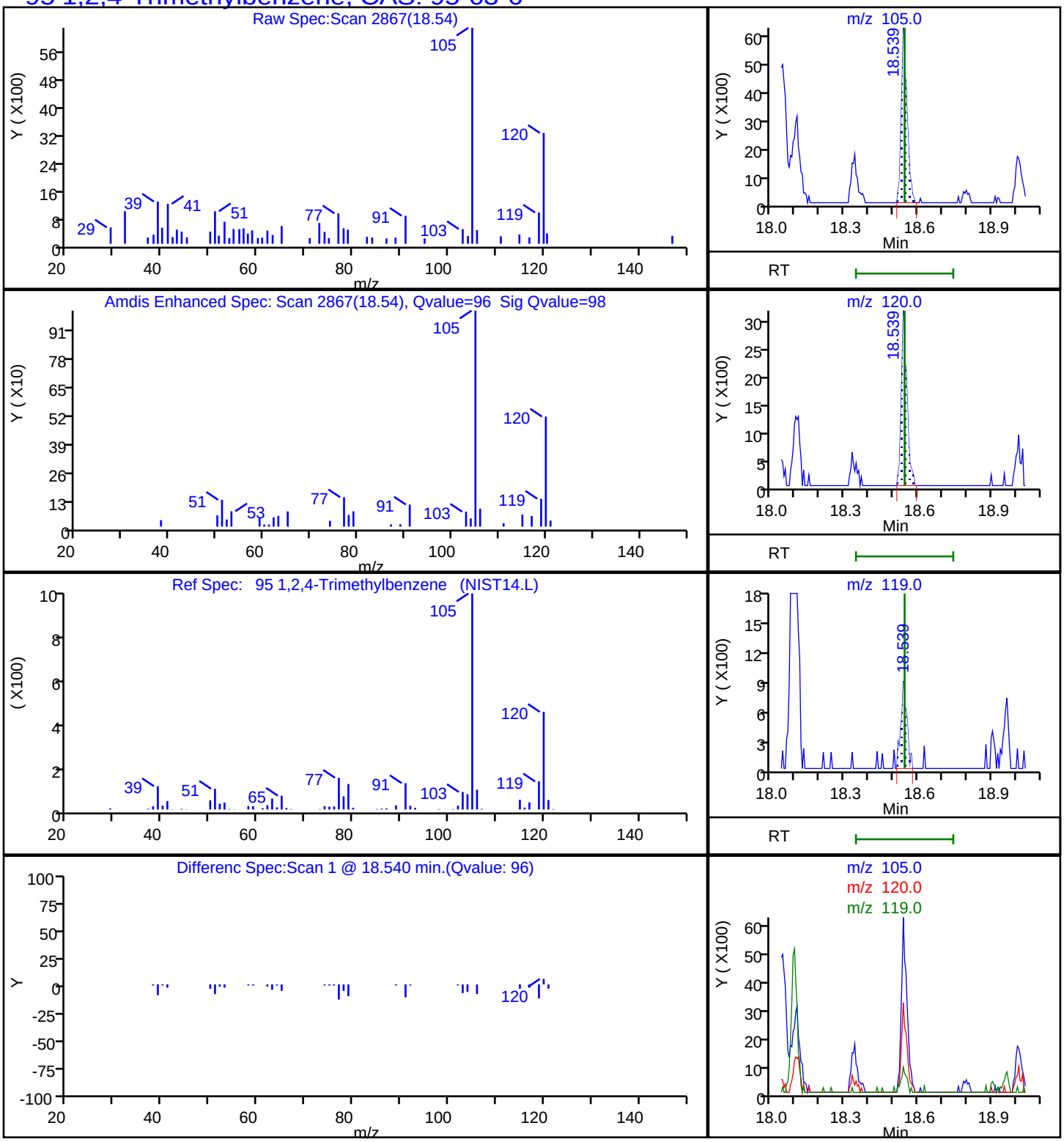
58 Trichloroethene, CAS: 79-01-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P107R.D				
Injection Date:	09-Sep-2020 09:26:30	Instrument ID:	MG		
Lims ID:	140-20194-A-8	Lab Sample ID:	140-20194-8		
Client ID:	SV-177-A-29				
Operator ID:	HMT	ALS Bottle#:	7	Worklist Smp#:	29
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

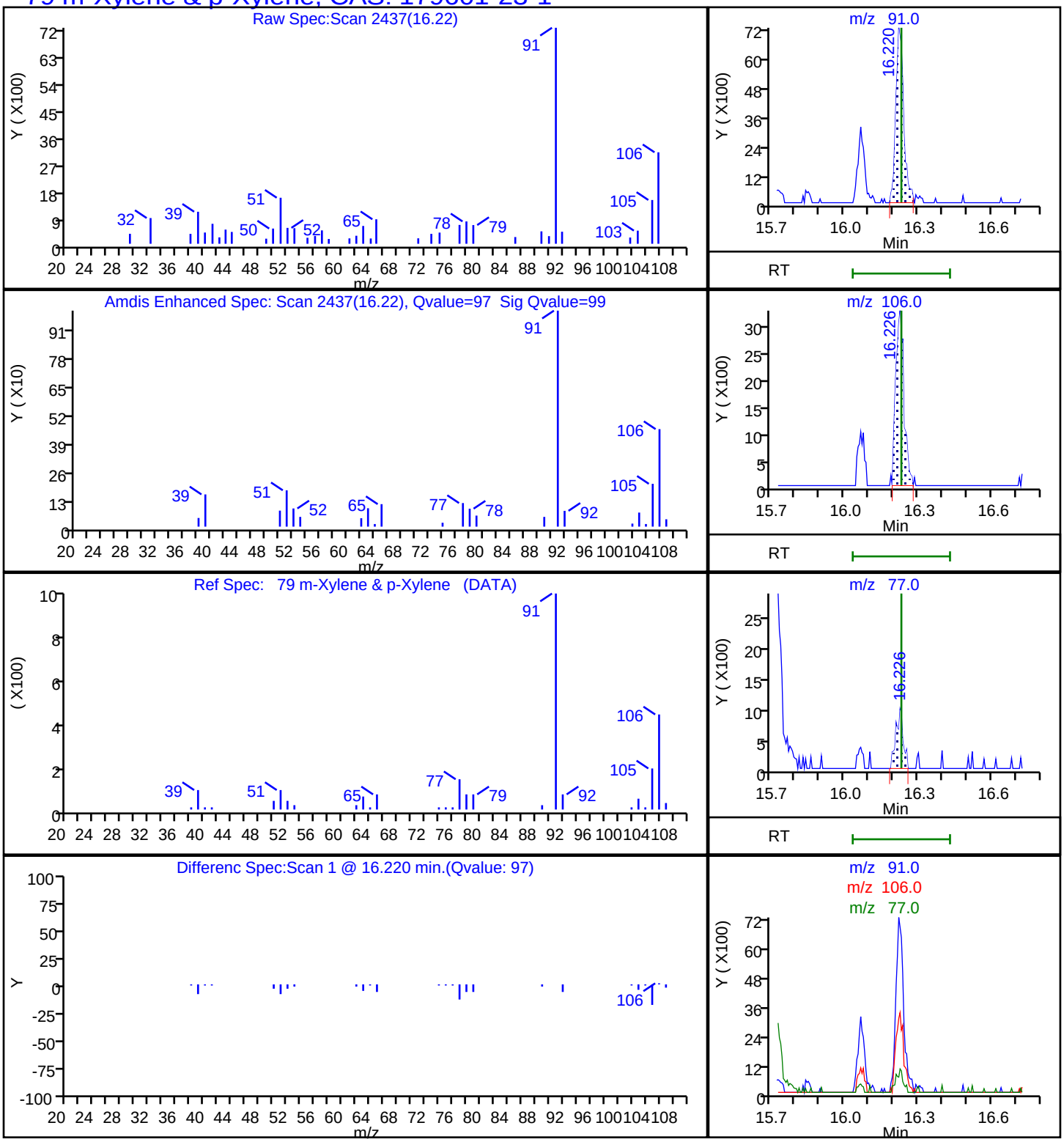
95 1,2,4-Trimethylbenzene, CAS: 95-63-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P107R.D				
Injection Date:	09-Sep-2020 09:26:30	Instrument ID:	MG		
Lims ID:	140-20194-A-8	Lab Sample ID:	140-20194-8		
Client ID:	SV-177-A-29				
Operator ID:	HMT	ALS Bottle#:	7	Worklist Smp#:	29
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

79 m-Xylene & p-Xylene, CAS: 179601-23-1

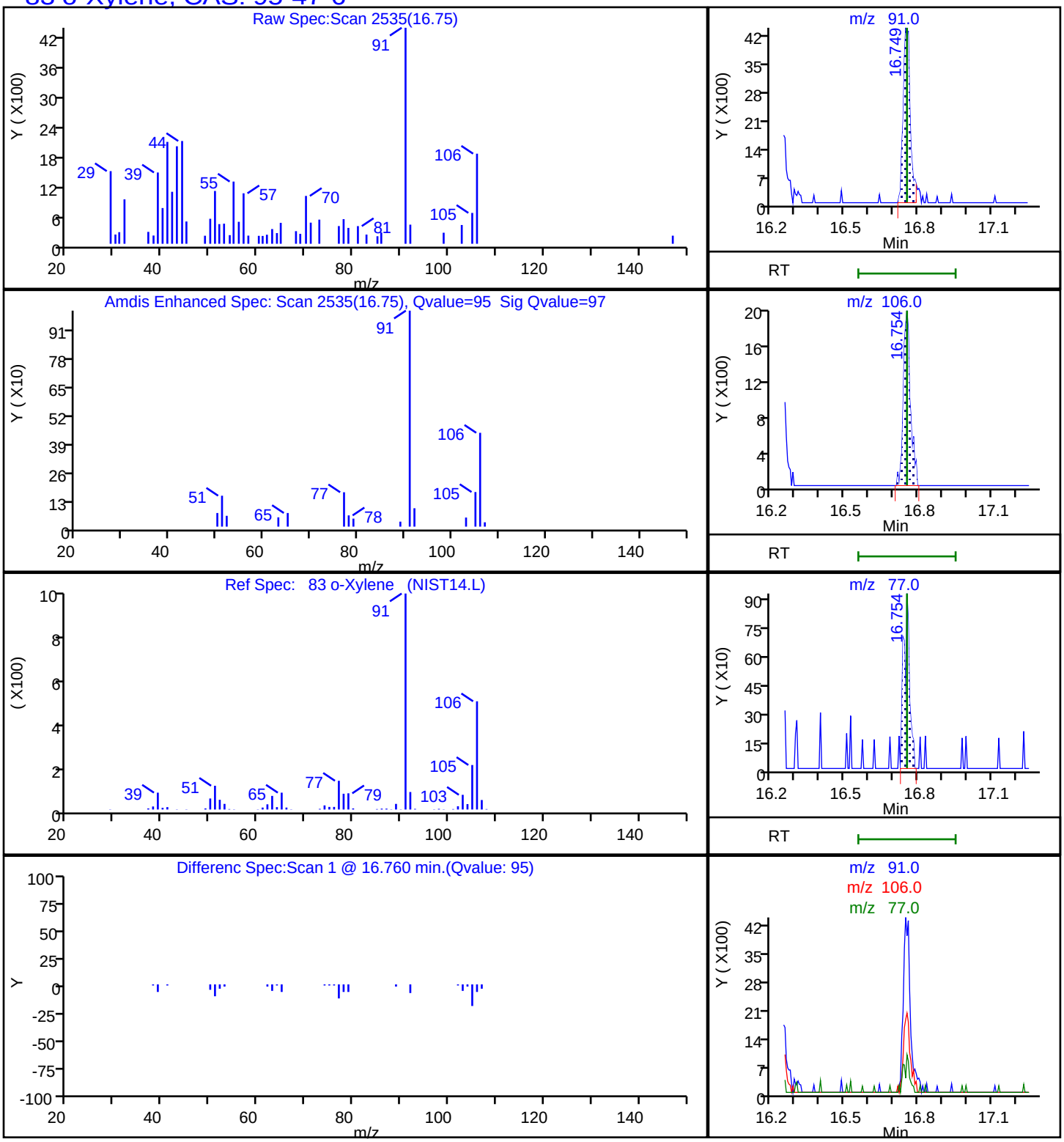


Report Date: 09-Sep-2020 14:21:03 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P107R.D		
Injection Date:	09-Sep-2020 09:26:30	Instrument ID:	MG
Lims ID:	140-20194-A-8	Lab Sample ID:	140-20194-8
Client ID:	SV-177-A-29		
Operator ID:	HMT	ALS Bottle#:	7 Worklist Smp#: 29
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

83 o-Xylene, CAS: 95-47-6



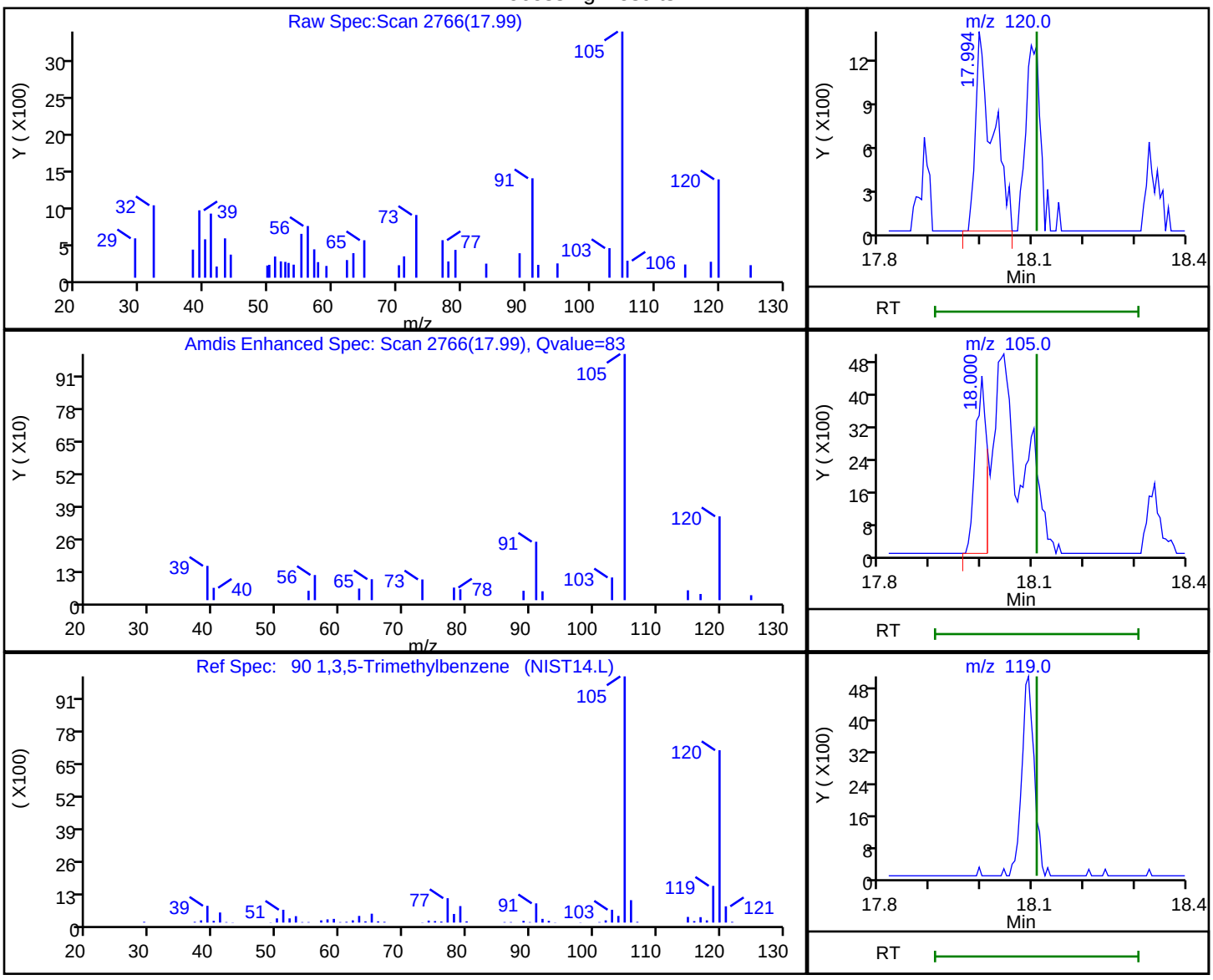
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P107R.D				
Injection Date:	09-Sep-2020 09:26:30	Instrument ID:	MG		
Lims ID:	140-20194-A-8	Lab Sample ID:	140-20194-8		
Client ID:	SV-177-A-29				
Operator ID:	HMT	ALS Bottle#:	7	Worklist Smp#:	29
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

90 1,3,5-Trimethylbenzene, CAS: 108-67-8

Processing Results



RT	Mass	Response	Amount
17.99	120.00	3142	0.058048
18.00	105.00	6414	
18.11	119.00	0	

Reviewer: barlozhetskayaa, 09-Sep-2020 14:20:56

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: SV-015-A-29 Lab Sample ID: 140-20194-9

Matrix: Air Lab File ID: HI08P107.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 10:12

Sample wt/vol: 100(mL) Date Analyzed: 09/08/2020 22:04

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42504 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.86		0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.090	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	0.31	J	0.40	0.11
67-66-3	Chloroform	119.38	0.19	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	0.91		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.49		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	2.2		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	7.1		0.40	0.040
100-41-4	Ethylbenzene	106.17	1.3		0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	0.077	J	0.40	0.035
108-88-3	Toluene	92.14	0.54	J	0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	0.59		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND	*	0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	1.8		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	5.1		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	0.14	J	0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	0.30	J	0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	2.8		0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	91		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: SV-015-A-29 Lab Sample ID: 140-20194-9

Matrix: Air Lab File ID: HI08P107.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 10:12

Sample wt/vol: 100(mL) Date Analyzed: 09/08/2020 22:04

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42504 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	2.7		1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.56	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	1.1	J	1.4	0.39
67-66-3	Chloroform	119.38	0.93	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	3.6		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.4		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	9.0		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	28		1.6	0.16
100-41-4	Ethylbenzene	106.17	5.8		1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	0.52	J	2.7	0.24
108-88-3	Toluene	92.14	2.0	J	2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	2.4		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND	*	3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	9.9		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	28		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	0.67	J	2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	1.5	J	2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	12		3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	91		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P107.D
Lims ID: 140-20194-A-9
Client ID: SV-015-A-29
Sample Type: Client
Inject. Date: 08-Sep-2020 22:04:30 ALS Bottle#: 7 Worklist Smp#: 11
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016520-011
Misc. Info.: 140-20194-a-9
Operator ID: HMT Instrument ID: MH

Method: \\chromfs\Knoxville\ChromData\MH\20200904-16520.b\MH_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 10-Sep-2020 10:25:53 Calib Date: 29-Aug-2020 23:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1028

First Level Reviewer: khachitpongpanits Date: 10-Sep-2020 10:26:44

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.446	9.431	0.015	95	233829	4.80	
* 2 1,4-Difluorobenzene	114	11.601	11.591	0.010	95	929539	4.80	
* 3 Chlorobenzene-d5 (IS)	117	16.258	16.258	0.000	87	611367	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.876	17.876	0.000	95	301357	4.24	
6 Chlorodifluoromethane	51	3.916	3.916	0.000	95	8095	0.0620	
8 Dichlorodifluoromethane	85	3.988	3.988	0.000	100	17193	0.0973	
27 1,1-Dichloroethene	96	6.392	6.392	0.000	96	80755	1.42	
34 trans-1,2-Dichloroethene	96	7.622	7.617	0.006	90	7041	0.1189	
37 1,1-Dichloroethane	63	8.071	8.061	0.010	99	52341	0.4452	
42 cis-1,2-Dichloroethene	96	9.095	9.090	0.006	95	10945	0.1826	
44 Chloroform	83	9.441	9.436	0.005	33	5425	0.0382	
47 1,1,1-Trichloroethane	97	10.490	10.490	0.000	97	46785	0.3634	
51 Benzene	78	11.085	11.069	0.015	98	29234	0.1713	
52 Carbon tetrachloride	117	11.095	11.095	0.000	27	1897	0.0180	
58 Trichloroethene	130	12.299	12.294	0.005	95	78775	1.03	
67 Toluene	91	14.310	14.310	0.000	89	17120	0.1087	
73 Tetrachloroethene	129	15.436	15.441	0.000	92	1022	0.0155	
76 Ethylbenzene	91	16.584	16.584	0.000	97	50888	0.2669	
77 m-Xylene & p-Xylene	91	16.739	16.739	0.000	98	65631	0.4356	
81 o-Xylene	91	17.266	17.266	0.000	98	18048	0.1144	
88 1,3,5-Trimethylbenzene	120	18.563	18.568	0.000	90	1215	0.0601	
92 1,2,4-Trimethylbenzene	105	18.987	18.993	0.000	96	5004	0.0274	
S 116 Xylenes, Total	100				0		0.5499	

Reagents:

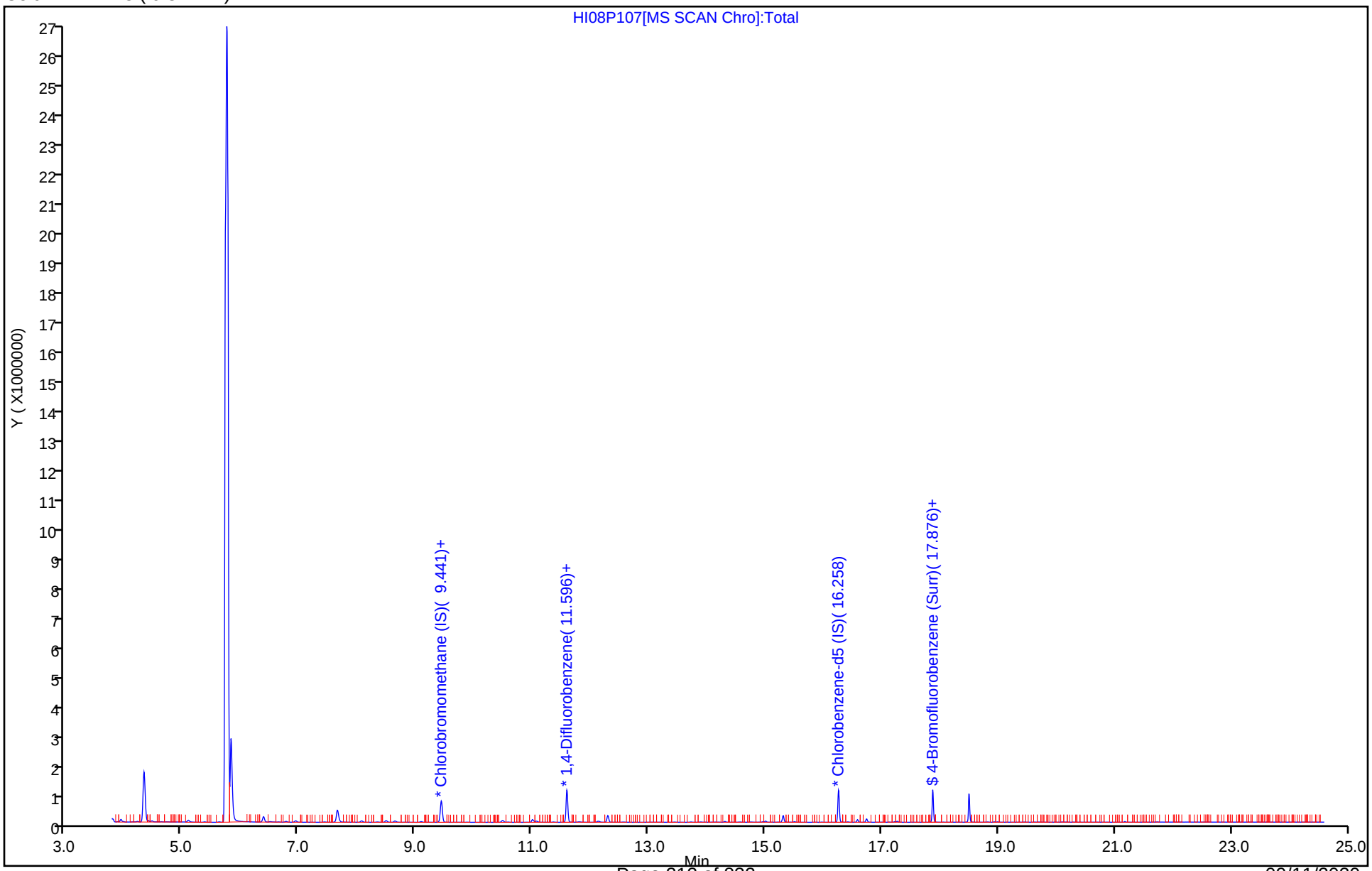
40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

Report Date: 10-Sep-2020 10:26:44 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P107.D				
Injection Date:	08-Sep-2020 22:04:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	140-20194-A-9	Lab Sample ID:	140-20194-9	Worklist Smp#:	11
Client ID:	SV-015-A-29				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P107.D				
Lims ID:	140-20194-A-9				
Client ID:	SV-015-A-29				
Sample Type:	Client				
Inject. Date:	08-Sep-2020 22:04:30	ALS Bottle#:	7	Worklist Smp#:	11
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016520-011				
Misc. Info.:	140-20194-a-9				
Operator ID:	HMT	Instrument ID:	MH		
Method:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\MH_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	10-Sep-2020 10:25:53	Calib Date:	29-Aug-2020 23:57:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1028				

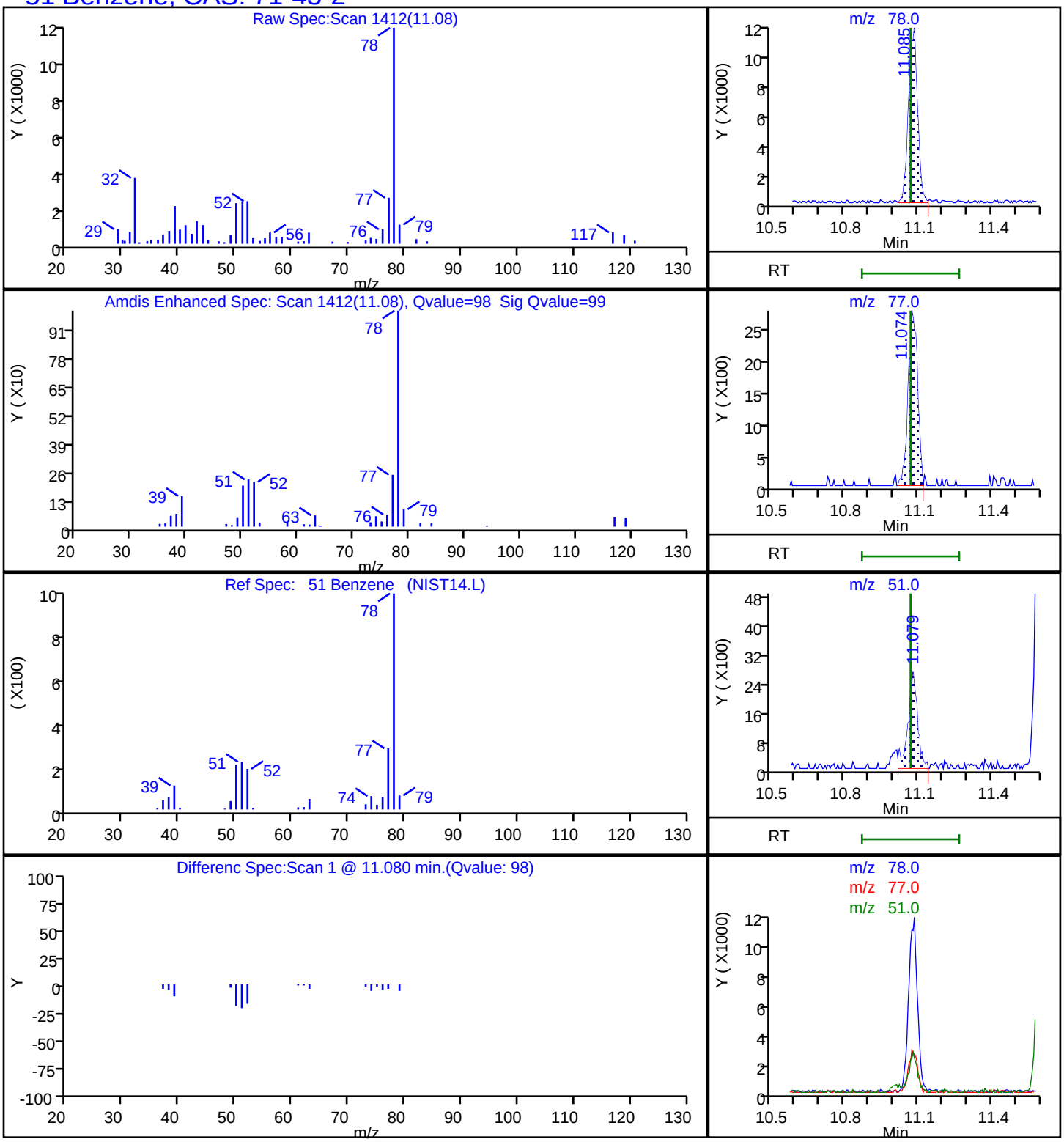
First Level Reviewer: khachitpongpanits Date: 10-Sep-2020 10:26:44

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	4.24	91.43

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P107.D		
Injection Date:	08-Sep-2020 22:04:30	Instrument ID:	MH
Lims ID:	140-20194-A-9	Lab Sample ID:	140-20194-9
Client ID:	SV-015-A-29		
Operator ID:	HMT	ALS Bottle#:	7 Worklist Smp#: 11
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

51 Benzene, CAS: 71-43-2

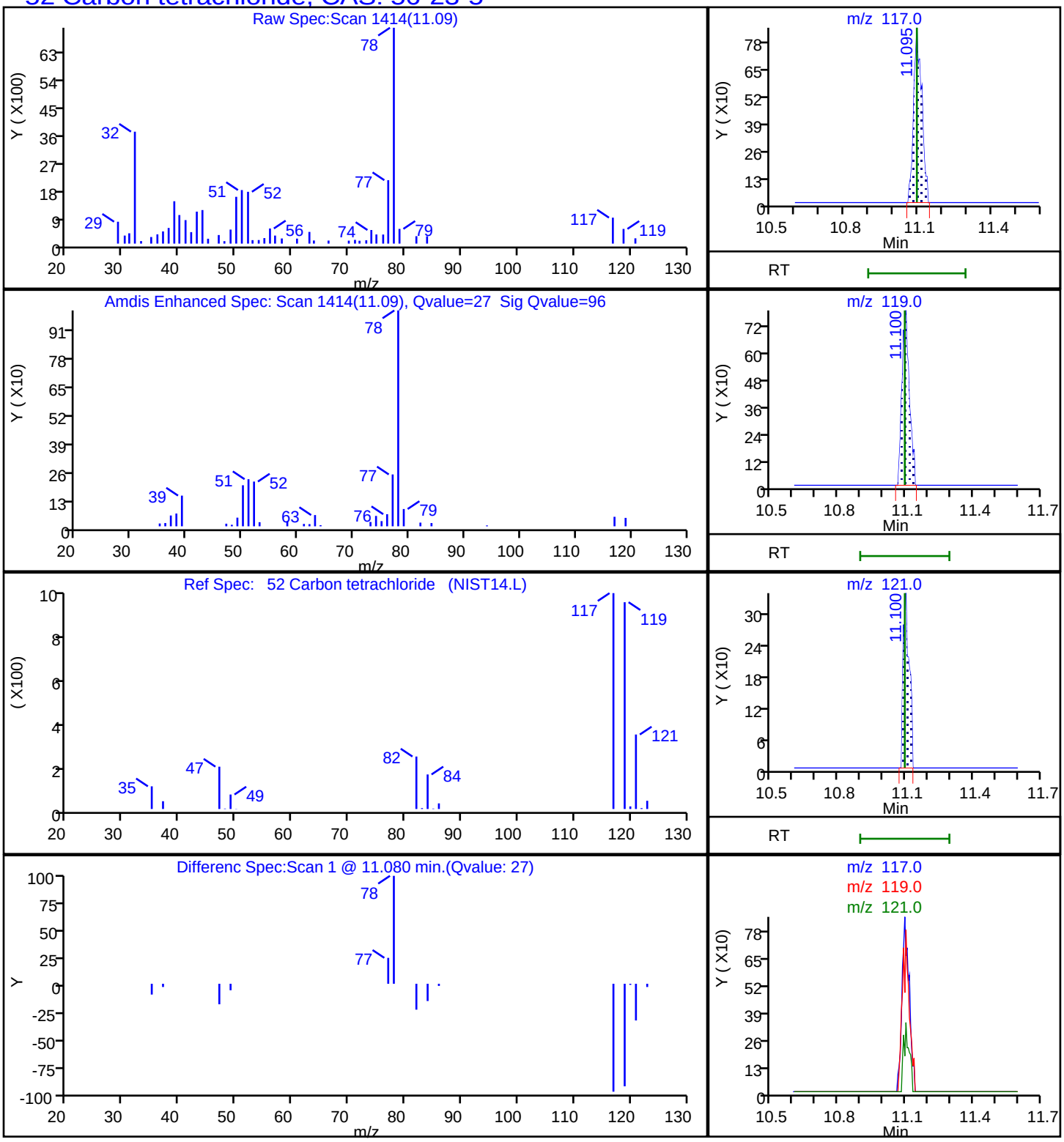


Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P107.D

Injection Date:	08-Sep-2020 22:04:30	Instrument ID:	MH		
Lims ID:	140-20194-A-9	Lab Sample ID:	140-20194-9		
Client ID:	SV-015-A-29				
Operator ID:	HMT	ALS Bottle#:	7	Worklist Smp#:	11
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

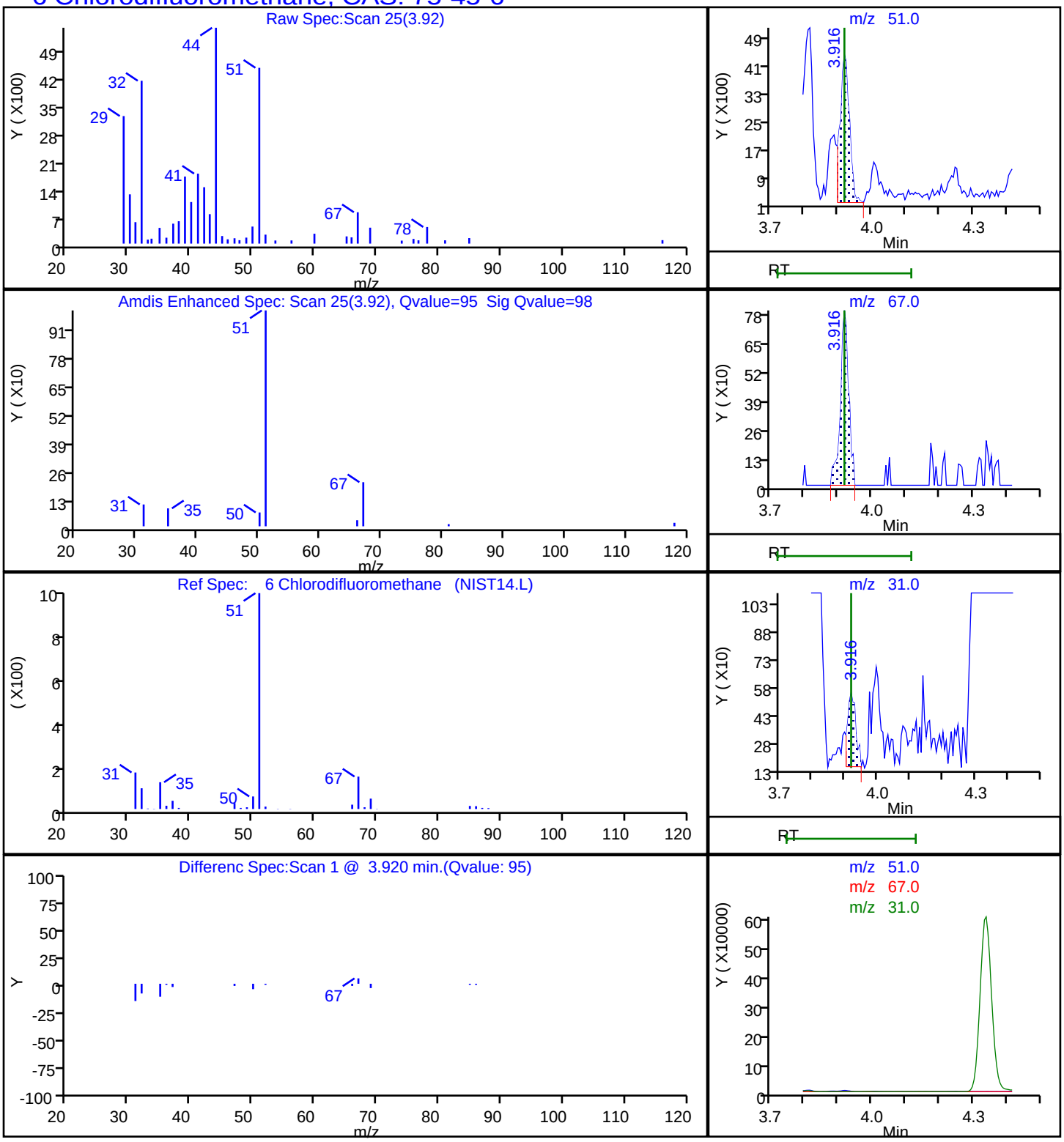
52 Carbon tetrachloride, CAS: 56-23-5



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P107.D		
Injection Date:	08-Sep-2020 22:04:30	Instrument ID:	MH
Lims ID:	140-20194-A-9	Lab Sample ID:	140-20194-9
Client ID:	SV-015-A-29		
Operator ID:	HMT	ALS Bottle#:	7 Worklist Smp#: 11
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

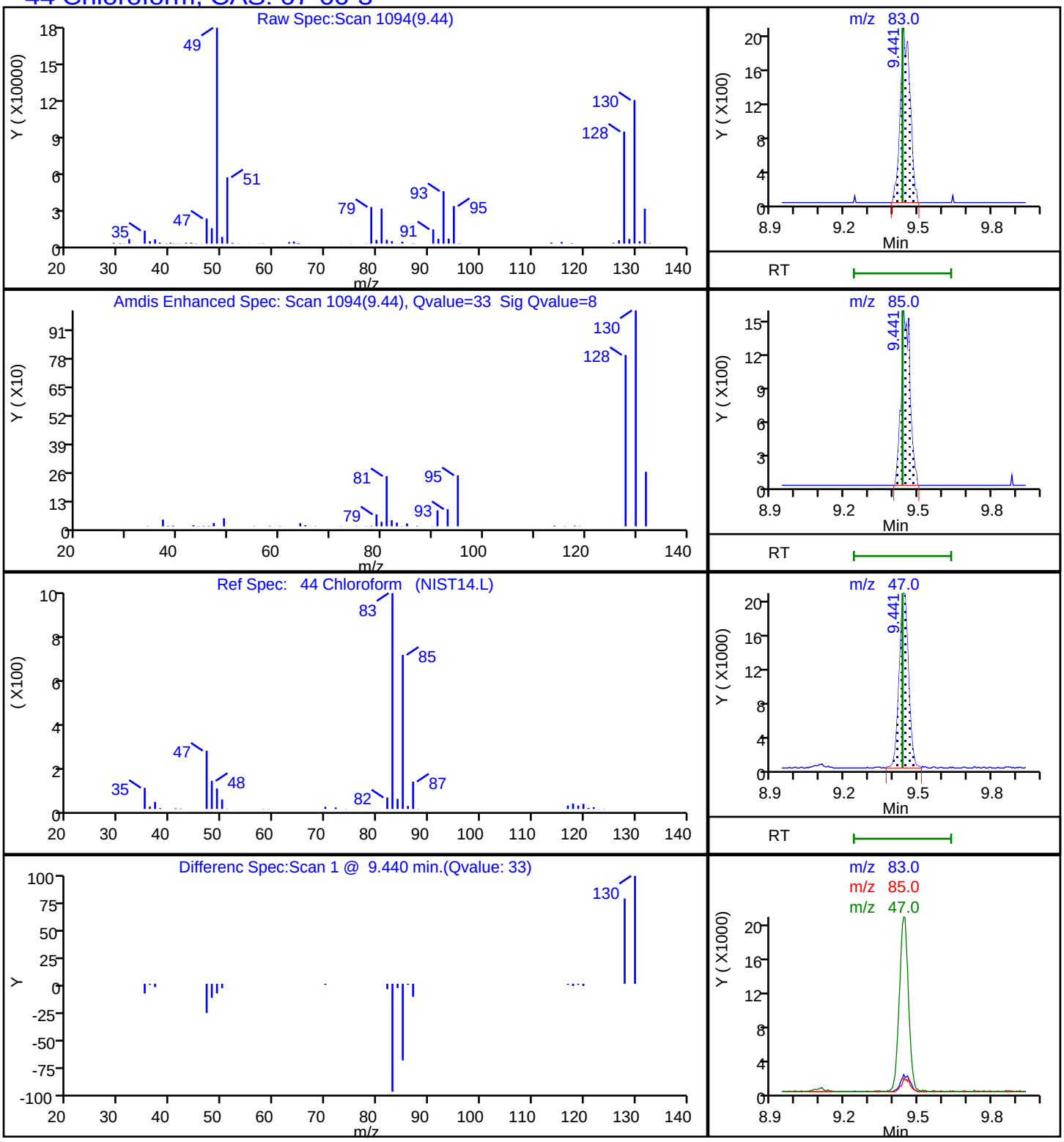
6 Chlorodifluoromethane, CAS: 75-45-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P107.D		
Injection Date:	08-Sep-2020 22:04:30	Instrument ID:	MH
Lims ID:	140-20194-A-9	Lab Sample ID:	140-20194-9
Client ID:	SV-015-A-29		
Operator ID:	HMT	ALS Bottle#:	7 Worklist Smp#: 11
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

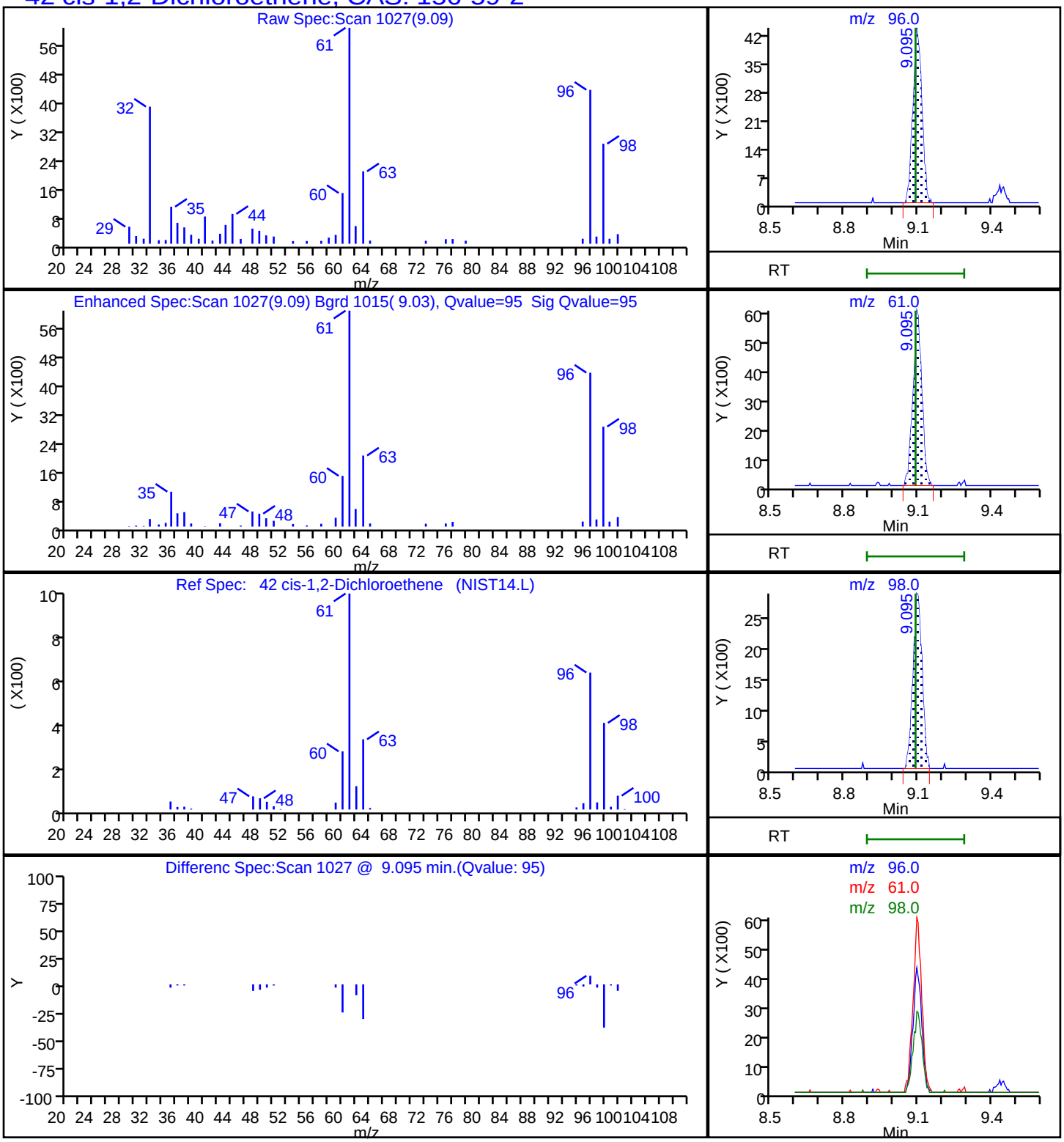
44 Chloroform, CAS: 67-66-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P107.D		
Injection Date:	08-Sep-2020 22:04:30	Instrument ID:	MH
Lims ID:	140-20194-A-9	Lab Sample ID:	140-20194-9
Client ID:	SV-015-A-29		
Operator ID:	HMT	ALS Bottle#:	7 Worklist Smp#: 11
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

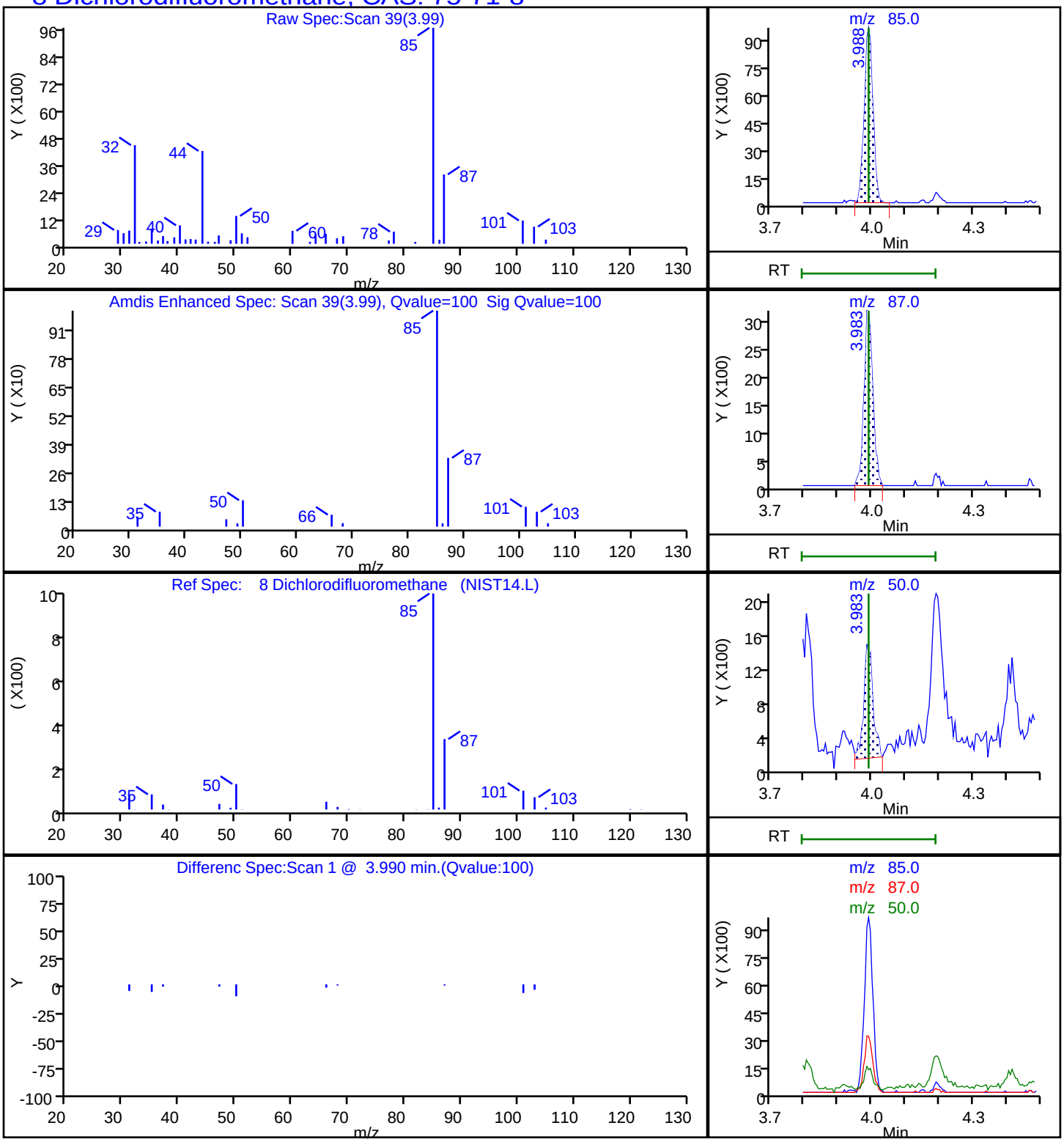
42 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P107.D		
Injection Date:	08-Sep-2020 22:04:30	Instrument ID:	MH
Lims ID:	140-20194-A-9	Lab Sample ID:	140-20194-9
Client ID:	SV-015-A-29		
Operator ID:	HMT	ALS Bottle#:	7 Worklist Smp#: 11
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

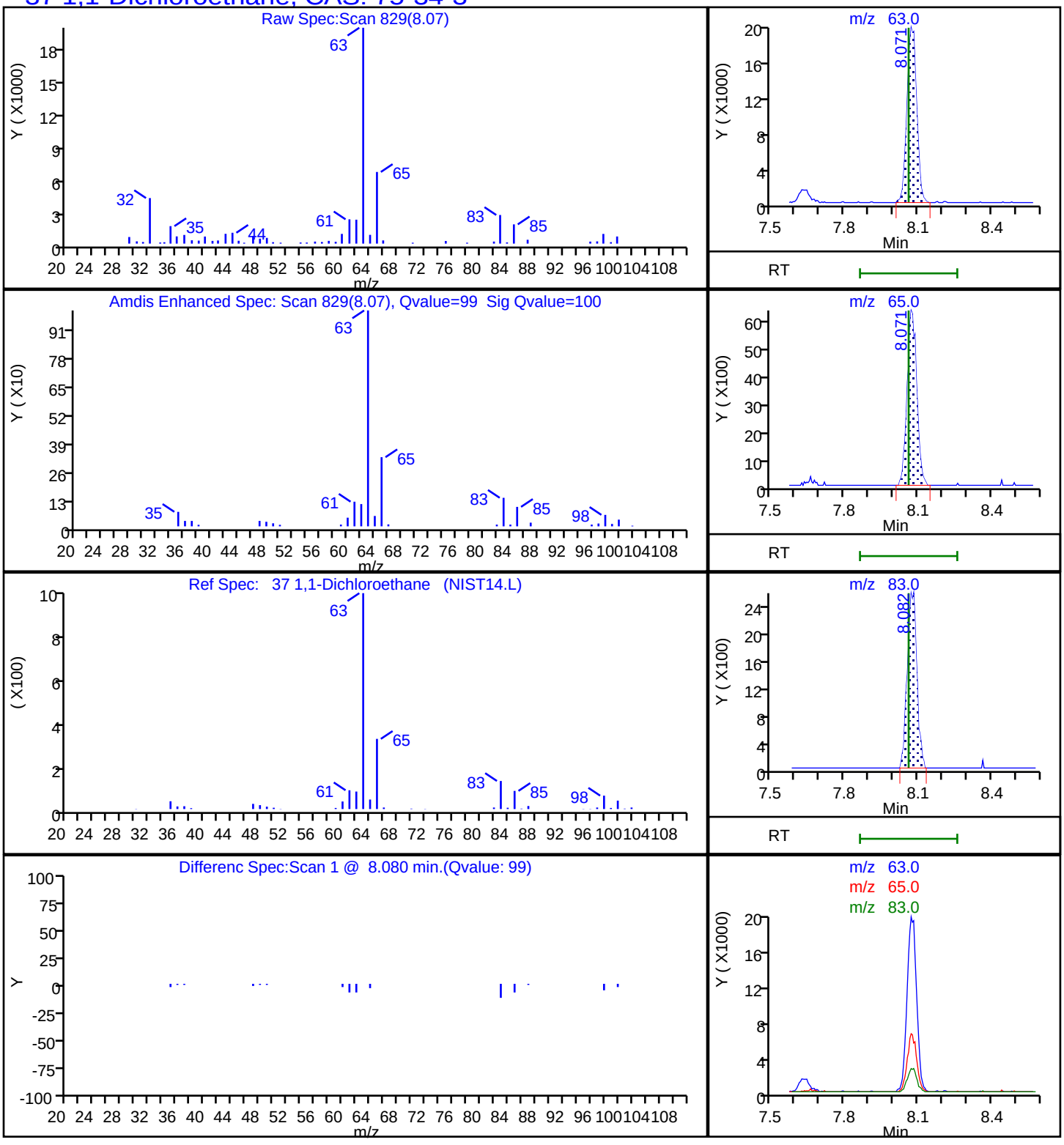
8 Dichlorodifluoromethane, CAS: 75-71-8



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P107.D		
Injection Date:	08-Sep-2020 22:04:30	Instrument ID:	MH
Lims ID:	140-20194-A-9	Lab Sample ID:	140-20194-9
Client ID:	SV-015-A-29		
Operator ID:	HMT	ALS Bottle#:	7 Worklist Smp#: 11
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

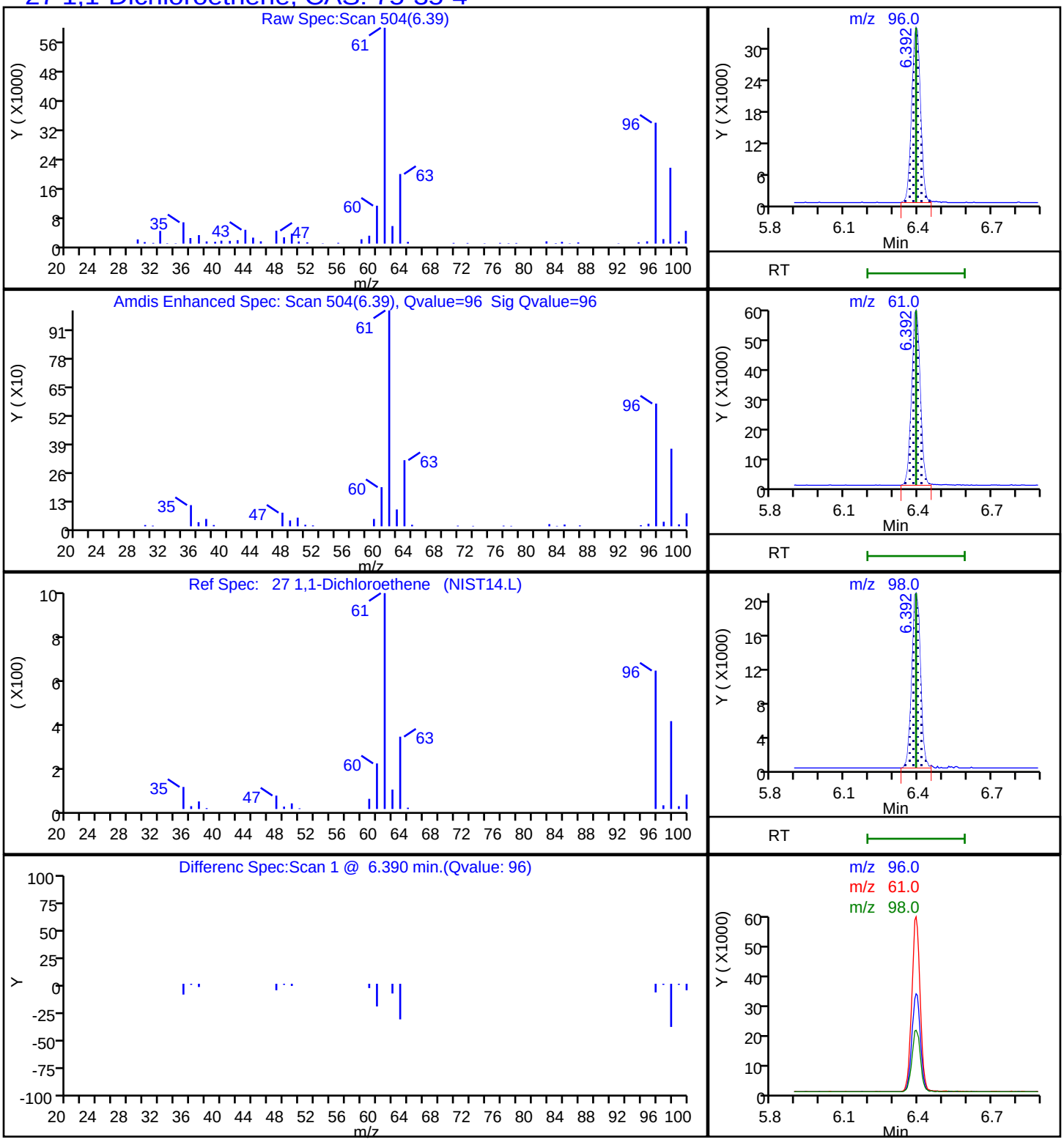
37 1,1-Dichloroethane, CAS: 75-34-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P107.D		
Injection Date:	08-Sep-2020 22:04:30	Instrument ID:	MH
Lims ID:	140-20194-A-9	Lab Sample ID:	140-20194-9
Client ID:	SV-015-A-29		
Operator ID:	HMT	ALS Bottle#:	7 Worklist Smp#: 11
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

27 1,1-Dichloroethene, CAS: 75-35-4

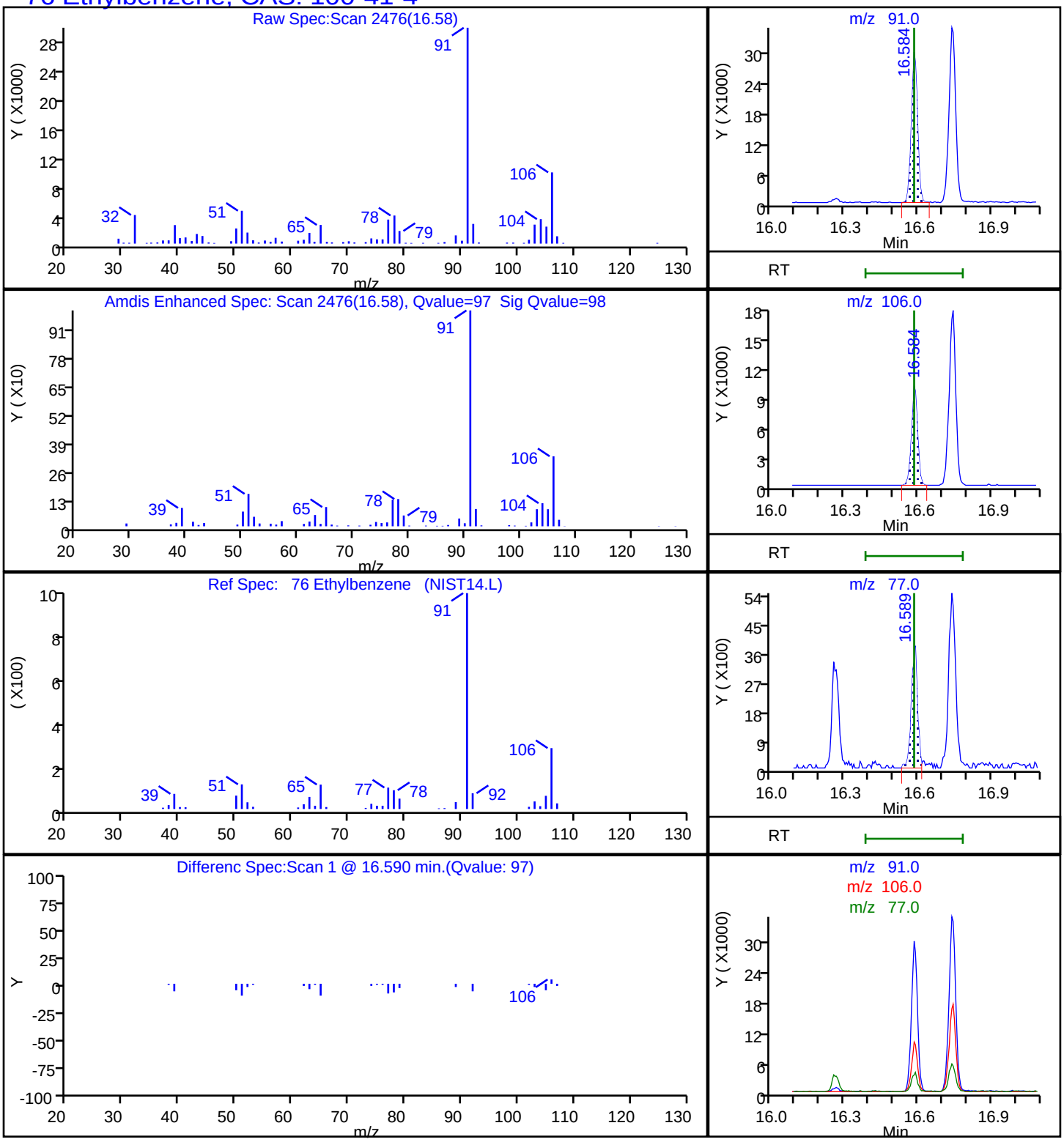


Report Date: 10-Sep-2020 10:26:44 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P107.D		
Injection Date:	08-Sep-2020 22:04:30	Instrument ID:	MH
Lims ID:	140-20194-A-9	Lab Sample ID:	140-20194-9
Client ID:	SV-015-A-29		
Operator ID:	HMT	ALS Bottle#:	7 Worklist Smp#: 11
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

76 Ethylbenzene, CAS: 100-41-4

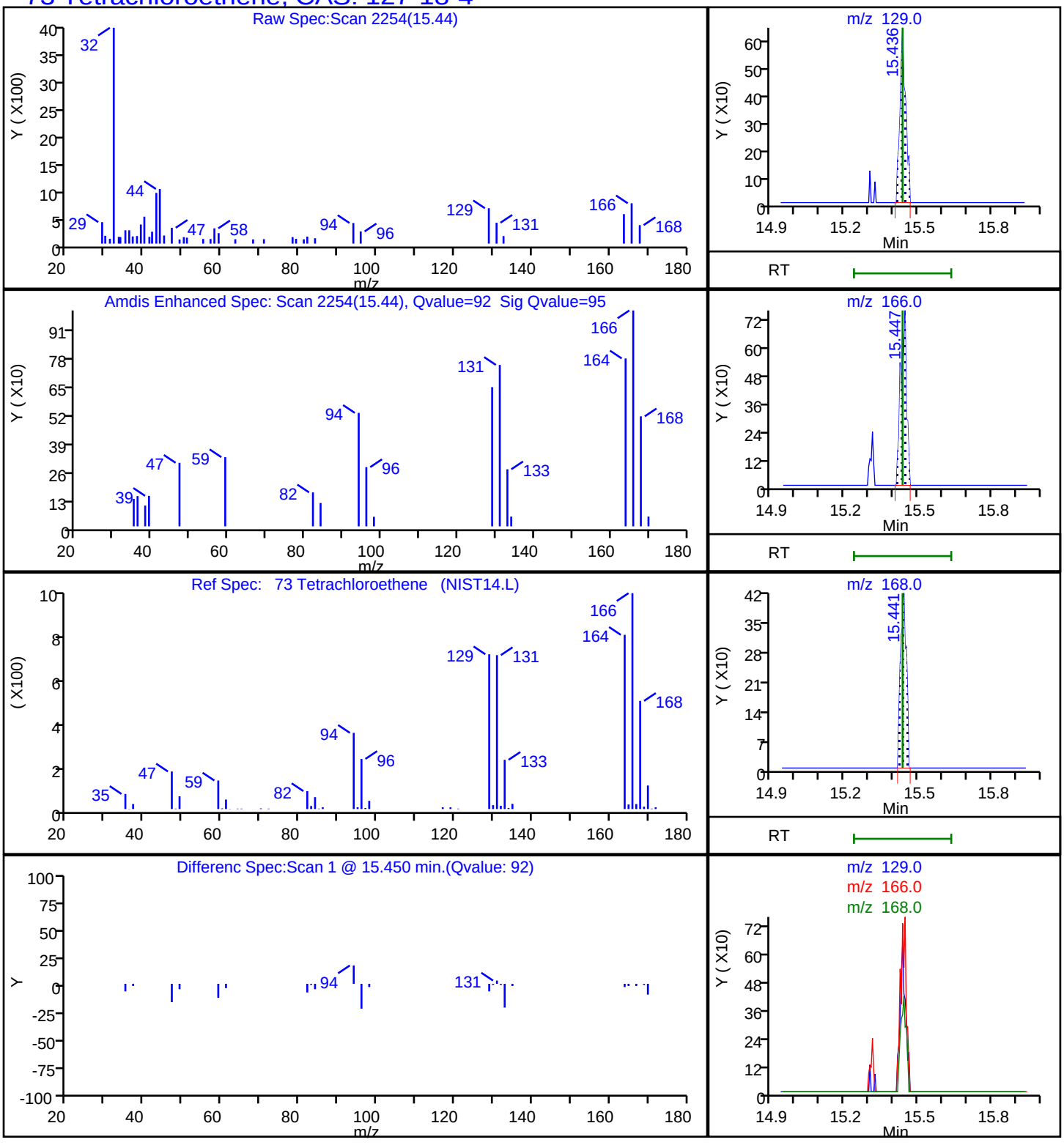


Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P107.D

Injection Date:	08-Sep-2020 22:04:30	Instrument ID:	MH		
Lims ID:	140-20194-A-9	Lab Sample ID:	140-20194-9		
Client ID:	SV-015-A-29				
Operator ID:	HMT	ALS Bottle#:	7	Worklist Smp#:	11
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

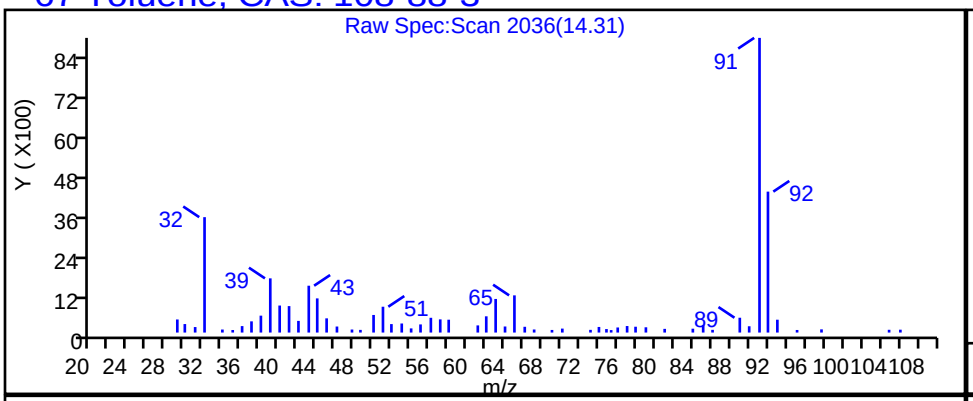
73 Tetrachloroethene, CAS: 127-18-4

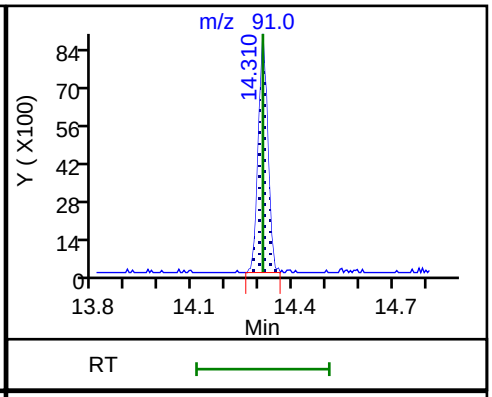


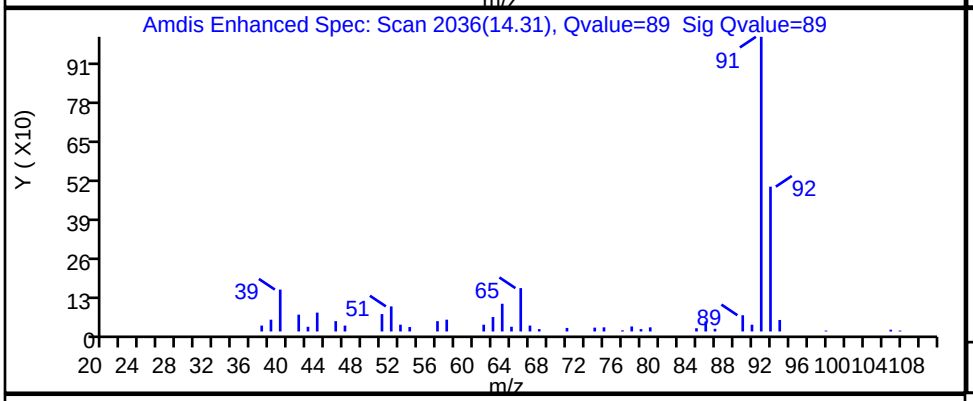
Eurofins TestAmerica, Knoxville

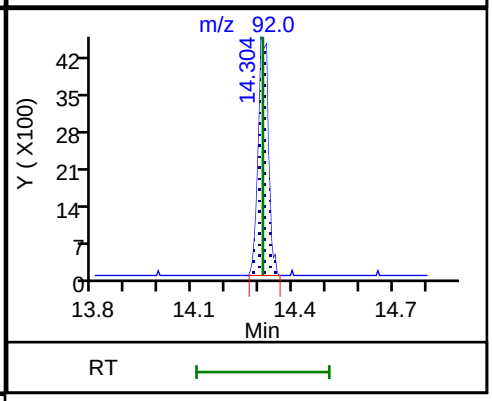
Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P107.D		
Injection Date:	08-Sep-2020 22:04:30	Instrument ID:	MH
Lims ID:	140-20194-A-9	Lab Sample ID:	140-20194-9
Client ID:	SV-015-A-29		
Operator ID:	HMT	ALS Bottle#:	7 Worklist Smp#: 11
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

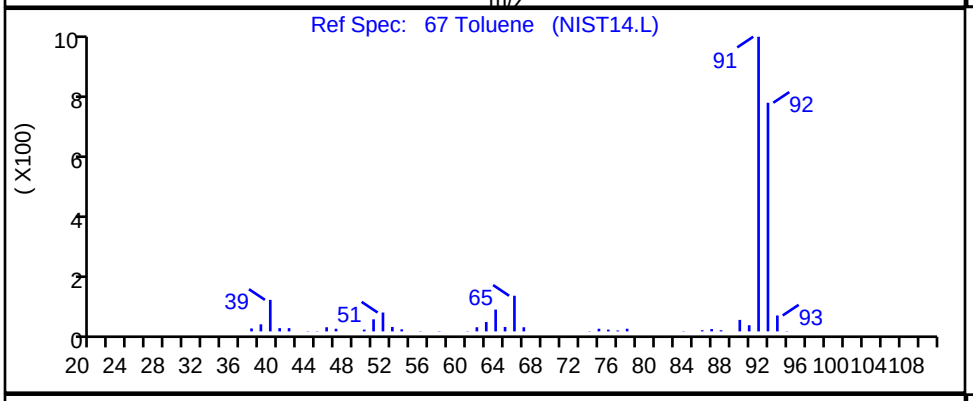
67 Toluene, CAS: 108-88-3

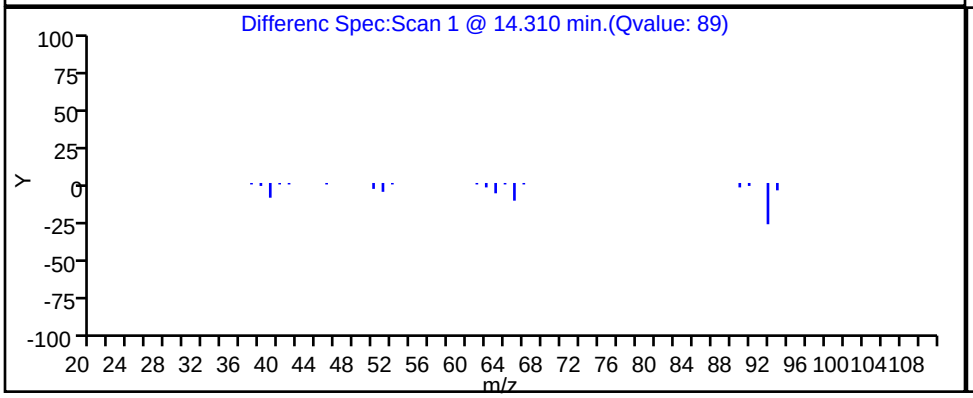


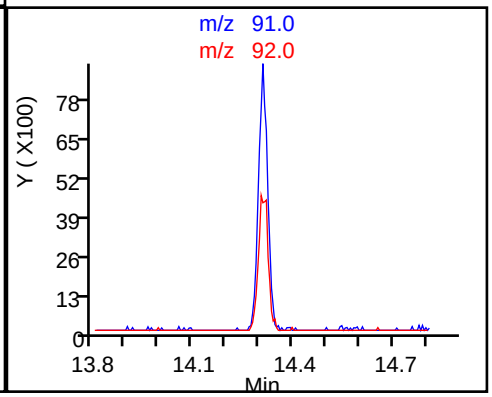










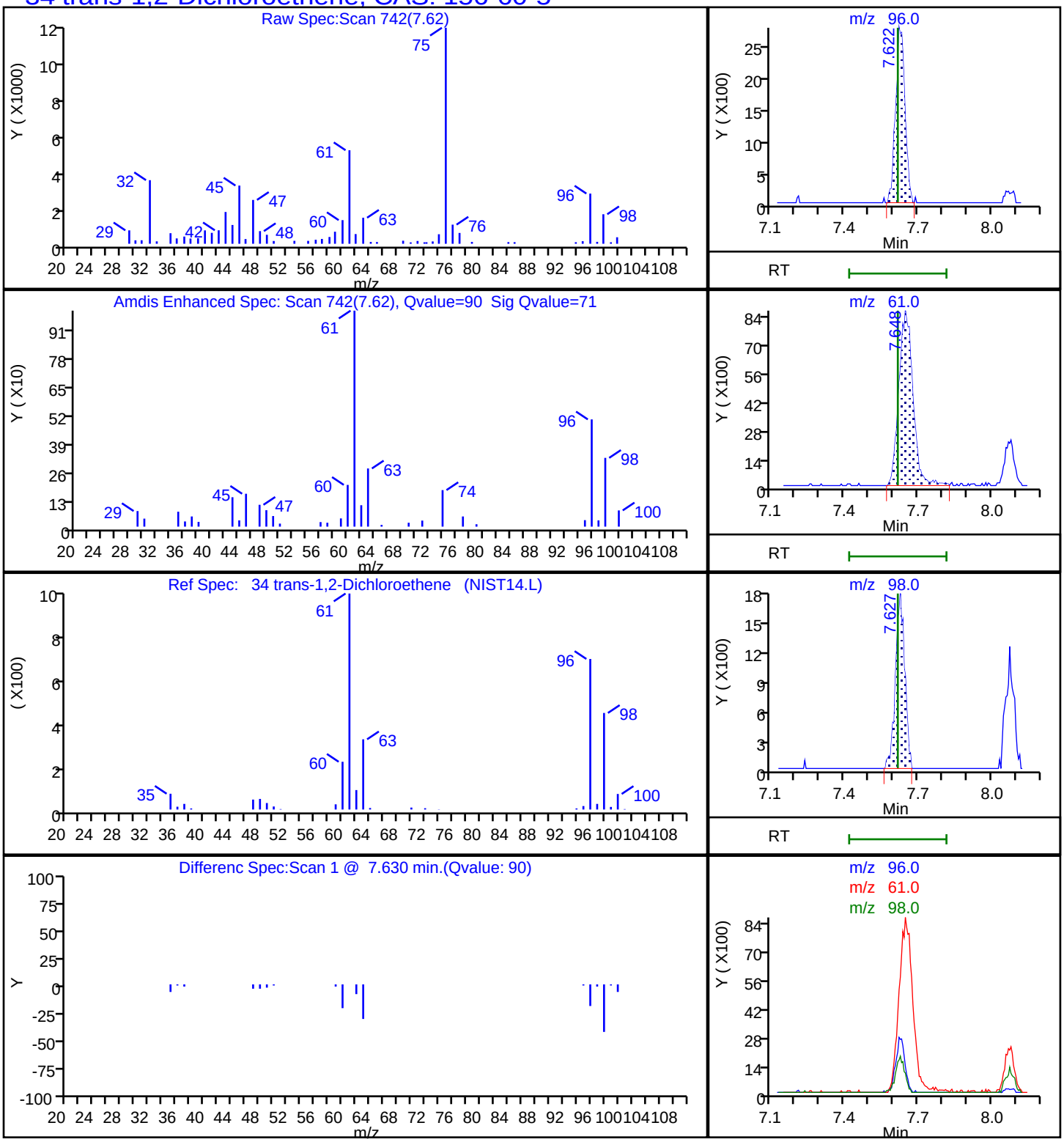


Report Date: 10-Sep-2020 10:26:44 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P107.D				
Injection Date:	08-Sep-2020 22:04:30	Instrument ID:	MH		
Lims ID:	140-20194-A-9	Lab Sample ID:	140-20194-9		
Client ID:	SV-015-A-29				
Operator ID:	HMT	ALS Bottle#:	7	Worklist Smp#:	11
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

34 trans-1,2-Dichloroethene, CAS: 156-60-5

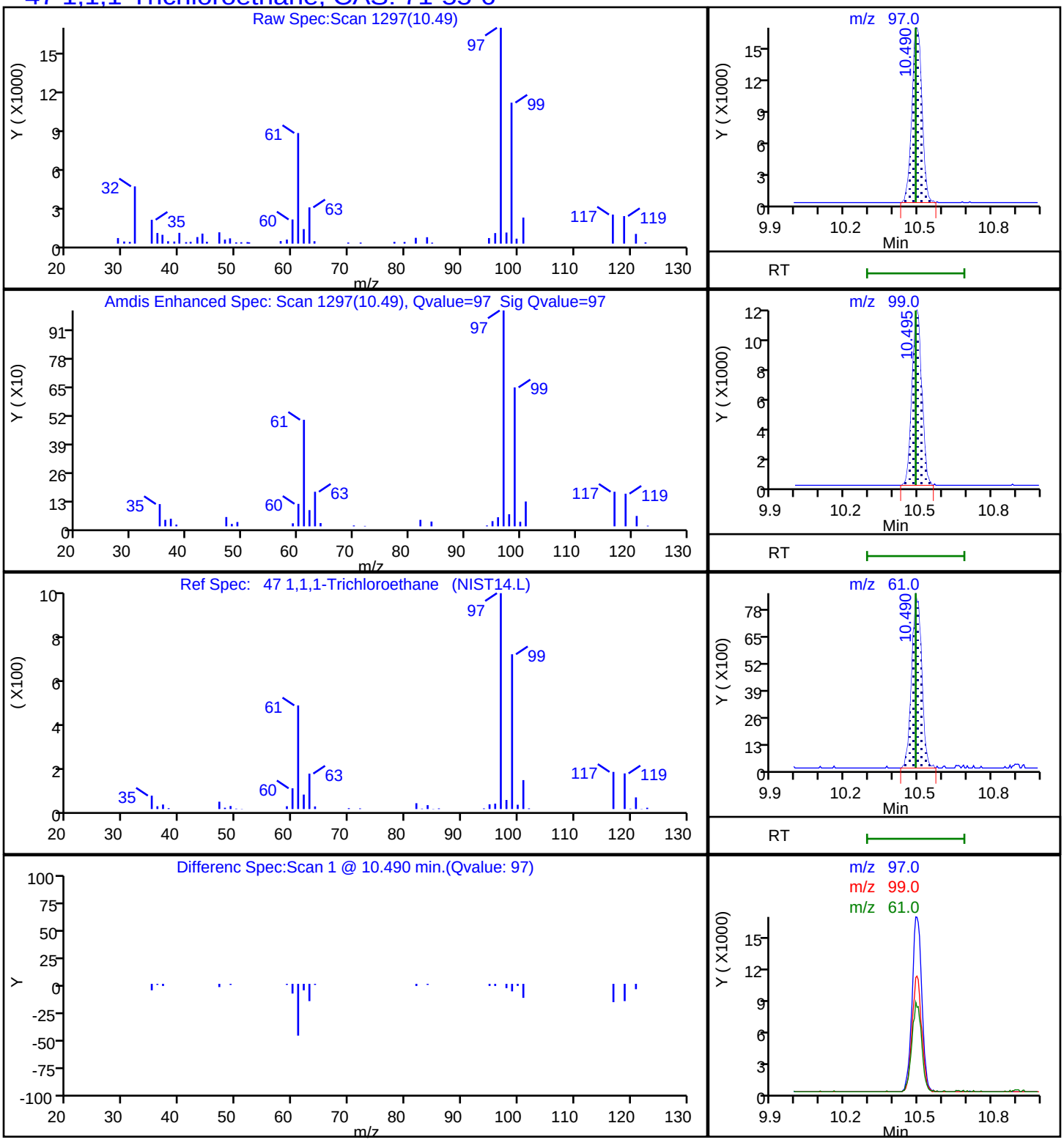


Report Date: 10-Sep-2020 10:26:44 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P107.D				
Injection Date:	08-Sep-2020 22:04:30	Instrument ID:	MH		
Lims ID:	140-20194-A-9	Lab Sample ID:	140-20194-9		
Client ID:	SV-015-A-29				
Operator ID:	HMT	ALS Bottle#:	7	Worklist Smp#:	11
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

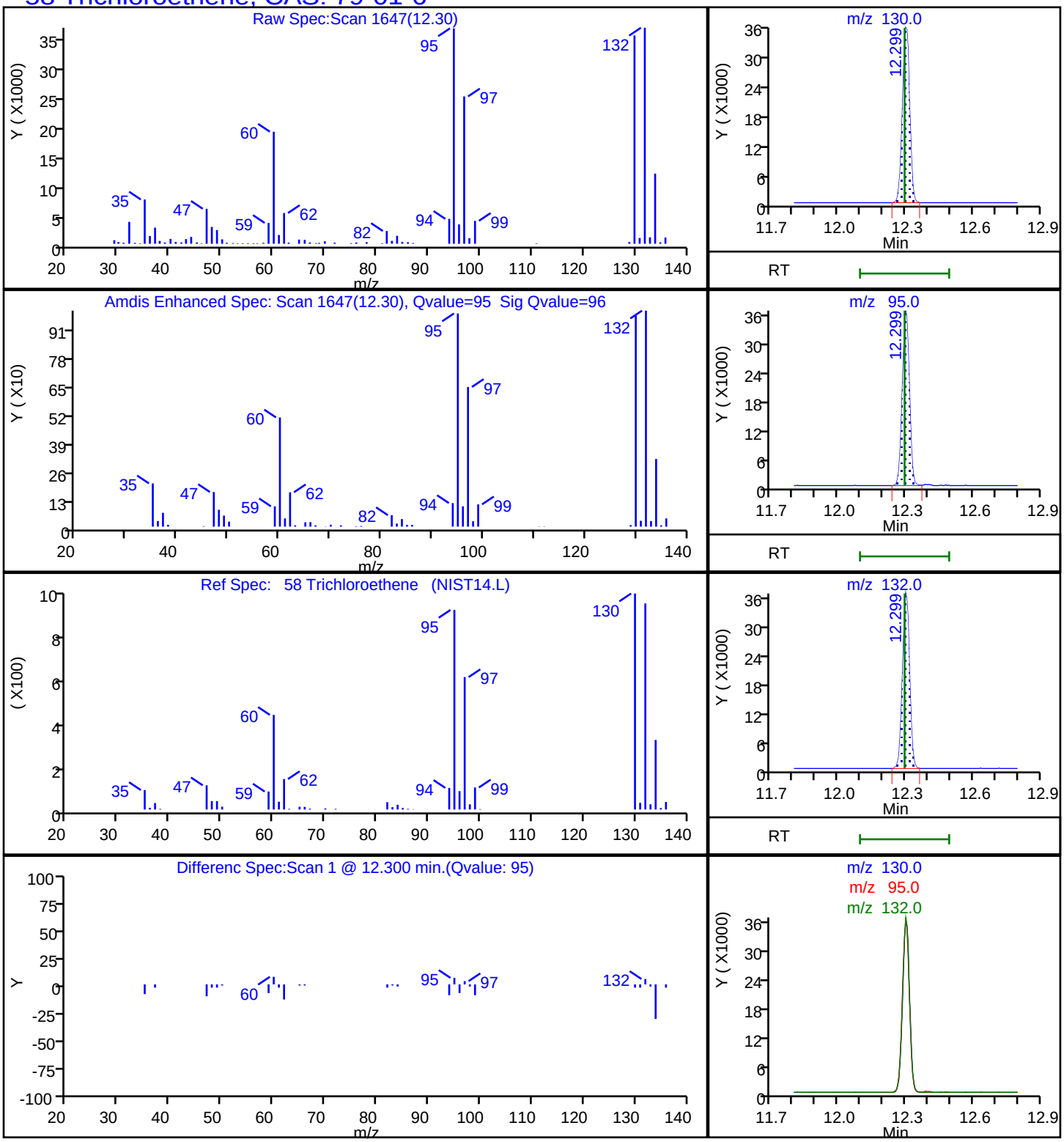
47 1,1,1-Trichloroethane, CAS: 71-55-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P107.D		
Injection Date:	08-Sep-2020 22:04:30	Instrument ID:	MH
Lims ID:	140-20194-A-9	Lab Sample ID:	140-20194-9
Client ID:	SV-015-A-29		
Operator ID:	HMT	ALS Bottle#:	7 Worklist Smp#: 11
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

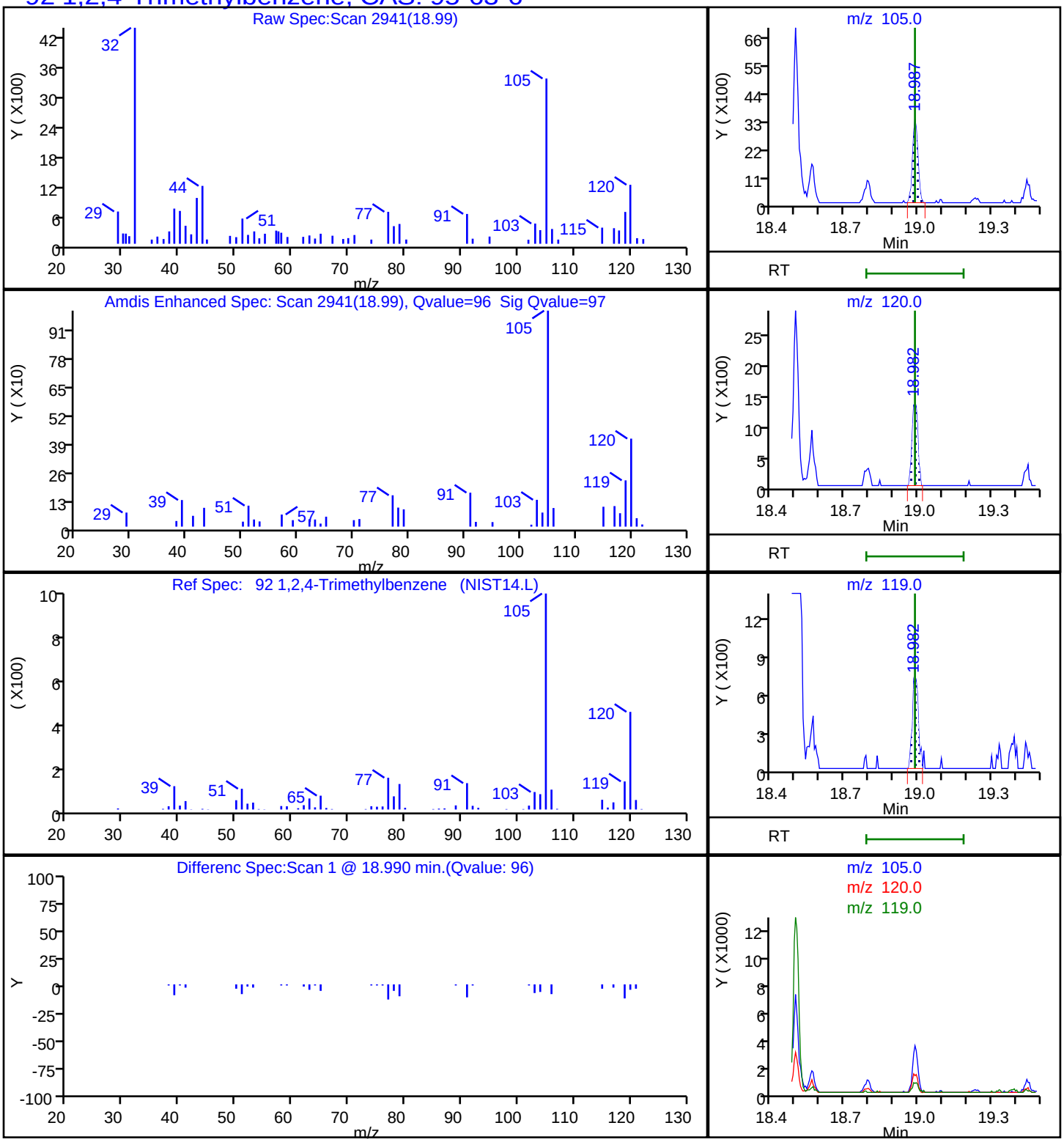
58 Trichloroethene, CAS: 79-01-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P107.D		
Injection Date:	08-Sep-2020 22:04:30	Instrument ID:	MH
Lims ID:	140-20194-A-9	Lab Sample ID:	140-20194-9
Client ID:	SV-015-A-29		
Operator ID:	HMT	ALS Bottle#:	7 Worklist Smp#: 11
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

92 1,2,4-Trimethylbenzene, CAS: 95-63-6

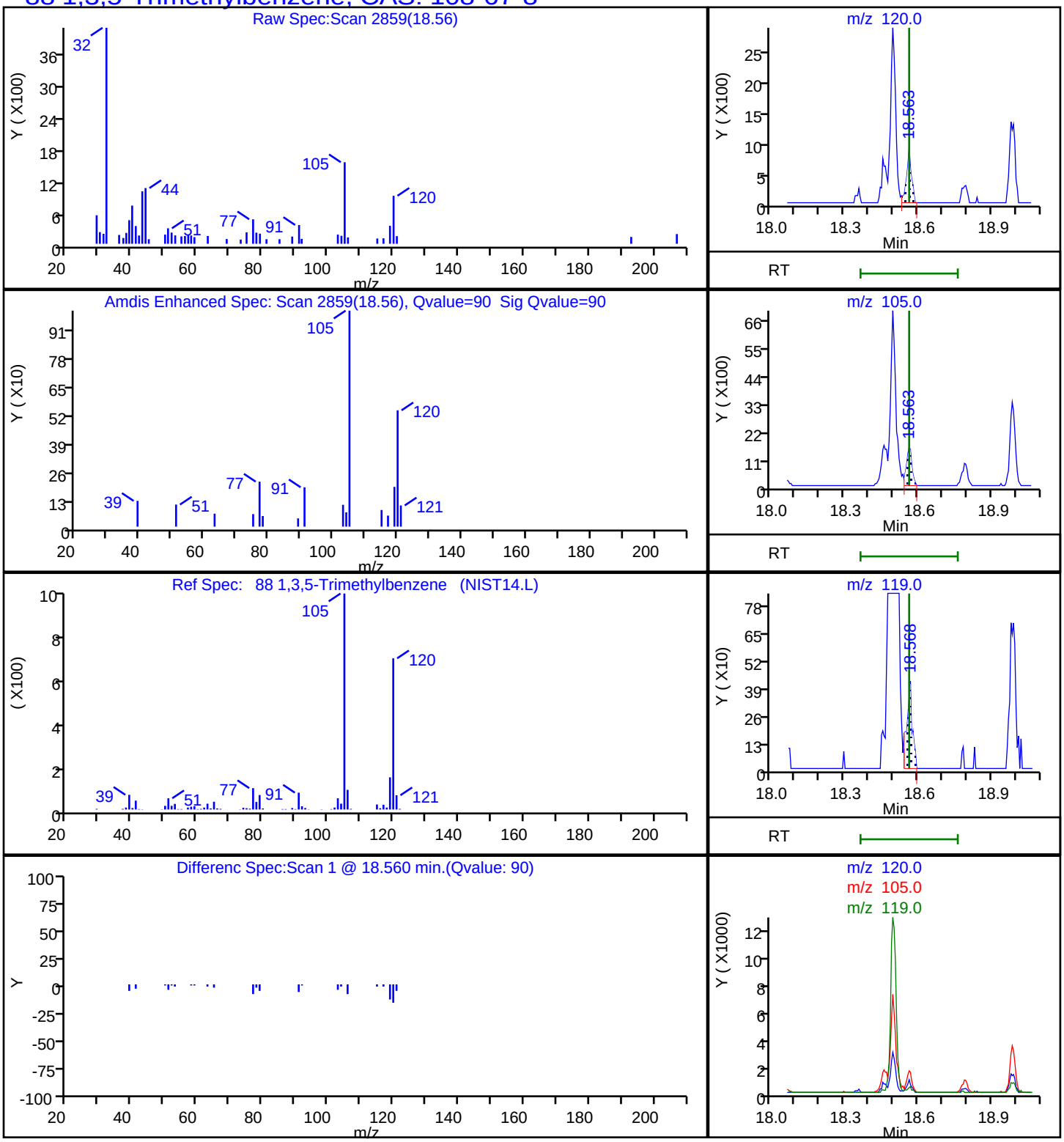


Report Date: 10-Sep-2020 10:26:44 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P107.D		
Injection Date:	08-Sep-2020 22:04:30	Instrument ID:	MH
Lims ID:	140-20194-A-9	Lab Sample ID:	140-20194-9
Client ID:	SV-015-A-29		
Operator ID:	HMT	ALS Bottle#:	7 Worklist Smp#: 11
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

88 1,3,5-Trimethylbenzene, CAS: 108-67-8

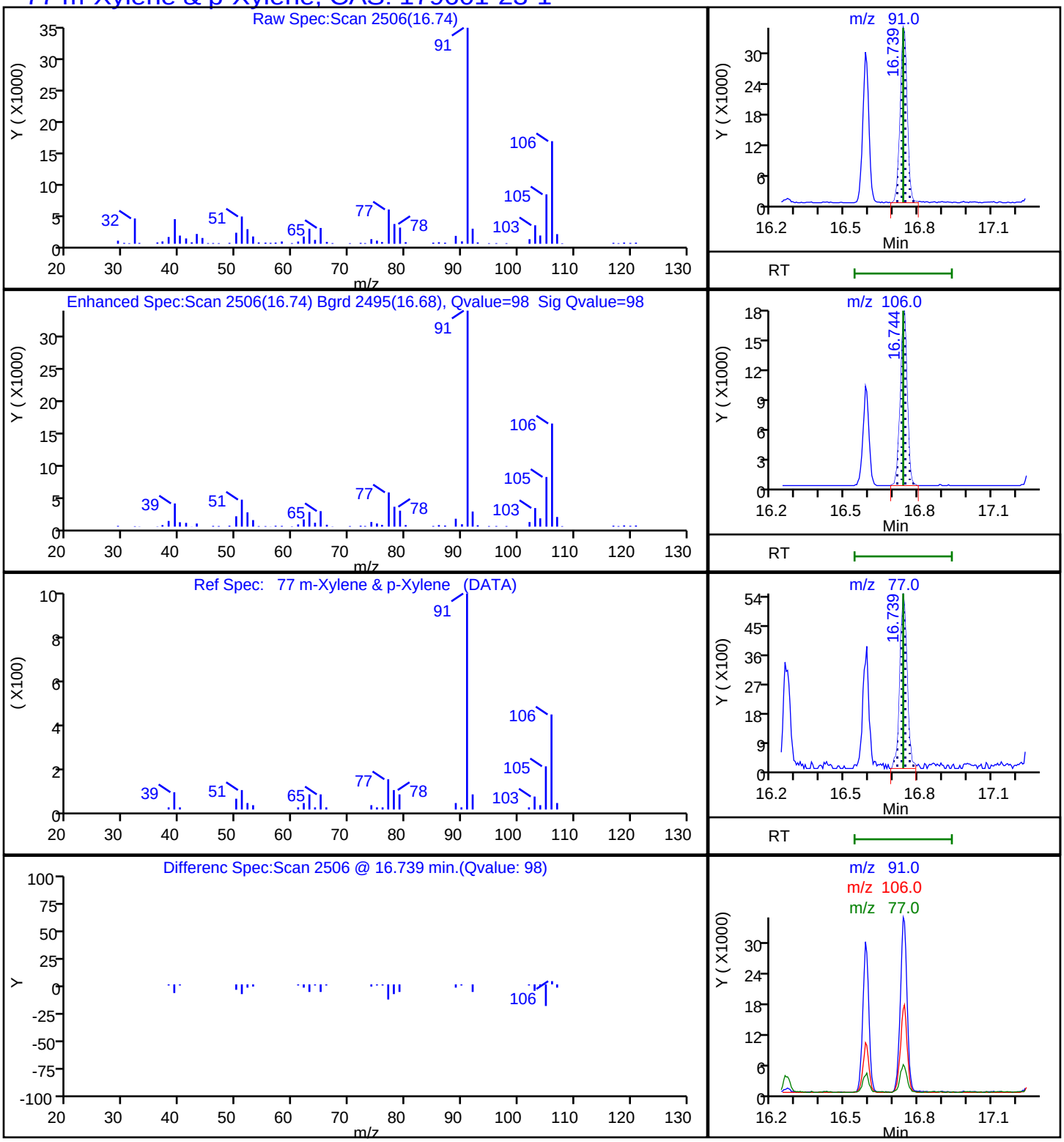


Report Date: 10-Sep-2020 10:26:44 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P107.D		
Injection Date:	08-Sep-2020 22:04:30	Instrument ID:	MH
Lims ID:	140-20194-A-9	Lab Sample ID:	140-20194-9
Client ID:	SV-015-A-29		
Operator ID:	HMT	ALS Bottle#:	7 Worklist Smp#: 11
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

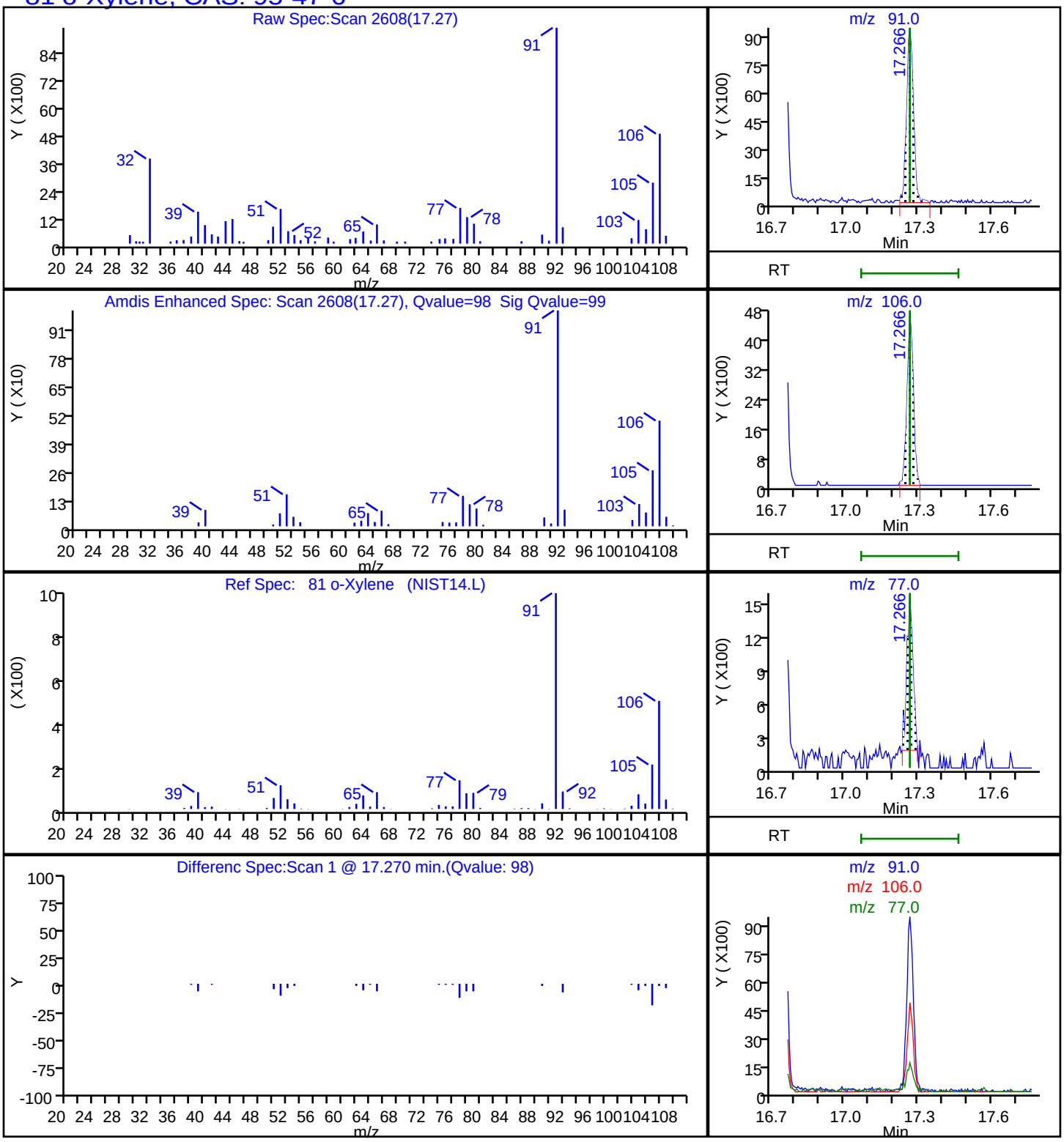
77 m-Xylene & p-Xylene, CAS: 179601-23-1



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P107.D		
Injection Date:	08-Sep-2020 22:04:30	Instrument ID:	MH
Lims ID:	140-20194-A-9	Lab Sample ID:	140-20194-9
Client ID:	SV-015-A-29		
Operator ID:	HMT	ALS Bottle#:	7 Worklist Smp#: 11
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

81 o-Xylene, CAS: 95-47-6



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: SV-078-A-29 Lab Sample ID: 140-20194-10

Matrix: Air Lab File ID: HI08P108.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 10:16

Sample wt/vol: 100(mL) Date Analyzed: 09/08/2020 23:00

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42504 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.097	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.075	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	0.36	J	0.40	0.11
67-66-3	Chloroform	119.38	0.20	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	1.0		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	ND		0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	0.42		0.40	0.035
108-88-3	Toluene	92.14	ND		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND	*	0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	0.54		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	5.0		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	0.15	J	0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	0.29	J	0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.32	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	92		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: SV-078-A-29 Lab Sample ID: 140-20194-10

Matrix: Air Lab File ID: HI08P108.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 10:16

Sample wt/vol: 100(mL) Date Analyzed: 09/08/2020 23:00

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42504 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.31	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.47	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	1.3	J	1.4	0.39
67-66-3	Chloroform	119.38	0.98	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	5.0		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	ND		1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	2.9		2.7	0.24
108-88-3	Toluene	92.14	ND		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND	*	3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	2.9		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	27		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	0.72	J	2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	1.4	J	2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	1.4	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	92		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P108.D
Lims ID: 140-20194-A-10
Client ID: SV-078-A-29
Sample Type: Client
Inject. Date: 08-Sep-2020 23:00:30 ALS Bottle#: 8 Worklist Smp#: 12
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016520-012
Misc. Info.: 140-20194-a-10
Operator ID: HMT Instrument ID: MH

Method: \\chromfs\Knoxville\ChromData\MH\20200904-16520.b\MH_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 10-Sep-2020 10:25:53 Calib Date: 29-Aug-2020 23:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1028

First Level Reviewer: khachitpongpanits Date: 10-Sep-2020 10:27:20

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.431	9.431	0.000	95	224248	4.80	
* 2 1,4-Difluorobenzene	114	11.591	11.591	0.000	95	895355	4.80	
* 3 Chlorobenzene-d5 (IS)	117	16.258	16.258	0.000	86	594581	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.876	17.876	0.000	94	295653	4.28	
6 Chlorodifluoromethane	51	3.921	3.916	0.005	96	8972	0.0717	
8 Dichlorodifluoromethane	85	3.988	3.988	0.000	100	34341	0.2026	
44 Chloroform	83	9.441	9.436	0.005	28	5445	0.0400	
47 1,1,1-Trichloroethane	97	10.495	10.490	0.005	96	13274	0.1075	
51 Benzene	78	11.074	11.069	0.005	95	3196	0.0194	
52 Carbon tetrachloride	117	11.100	11.095	0.005	91	1521	0.0149	
58 Trichloroethene	130	12.299	12.294	0.005	98	74498	1.01	
67 Toluene	91	14.310	14.310	0.000	89	7753	0.0506	
73 Tetrachloroethene	129	15.436	15.441	0.000	94	5410	0.0843	
77 m-Xylene & p-Xylene	91	16.739	16.739	0.000	95	5644	0.0385	
81 o-Xylene	91	17.266	17.266	0.000	96	3856	0.0251	
88 1,3,5-Trimethylbenzene	120	18.568	18.568	0.005	90	1039	0.0586	
92 1,2,4-Trimethylbenzene	105	18.987	18.993	0.000	96	5163	0.0291	
S 116 Xylenes, Total	100				0		0.0636	

Reagents:

40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

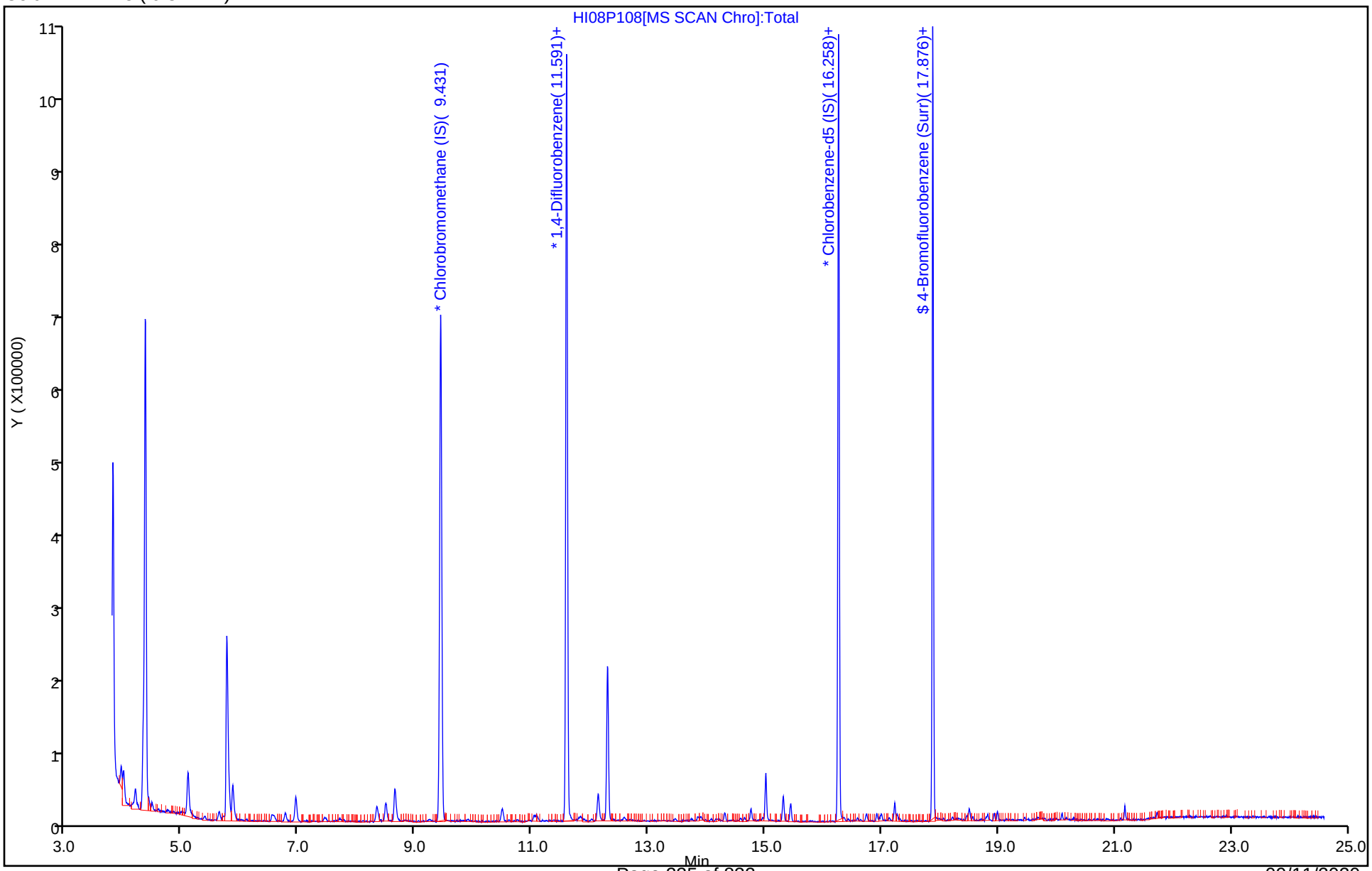
Report Date: 10-Sep-2020 10:27:20 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P108.D

Injection Date:	08-Sep-2020 23:00:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	140-20194-A-10	Lab Sample ID:	140-20194-10	Worklist Smp#:	12
Client ID:	SV-078-A-29				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

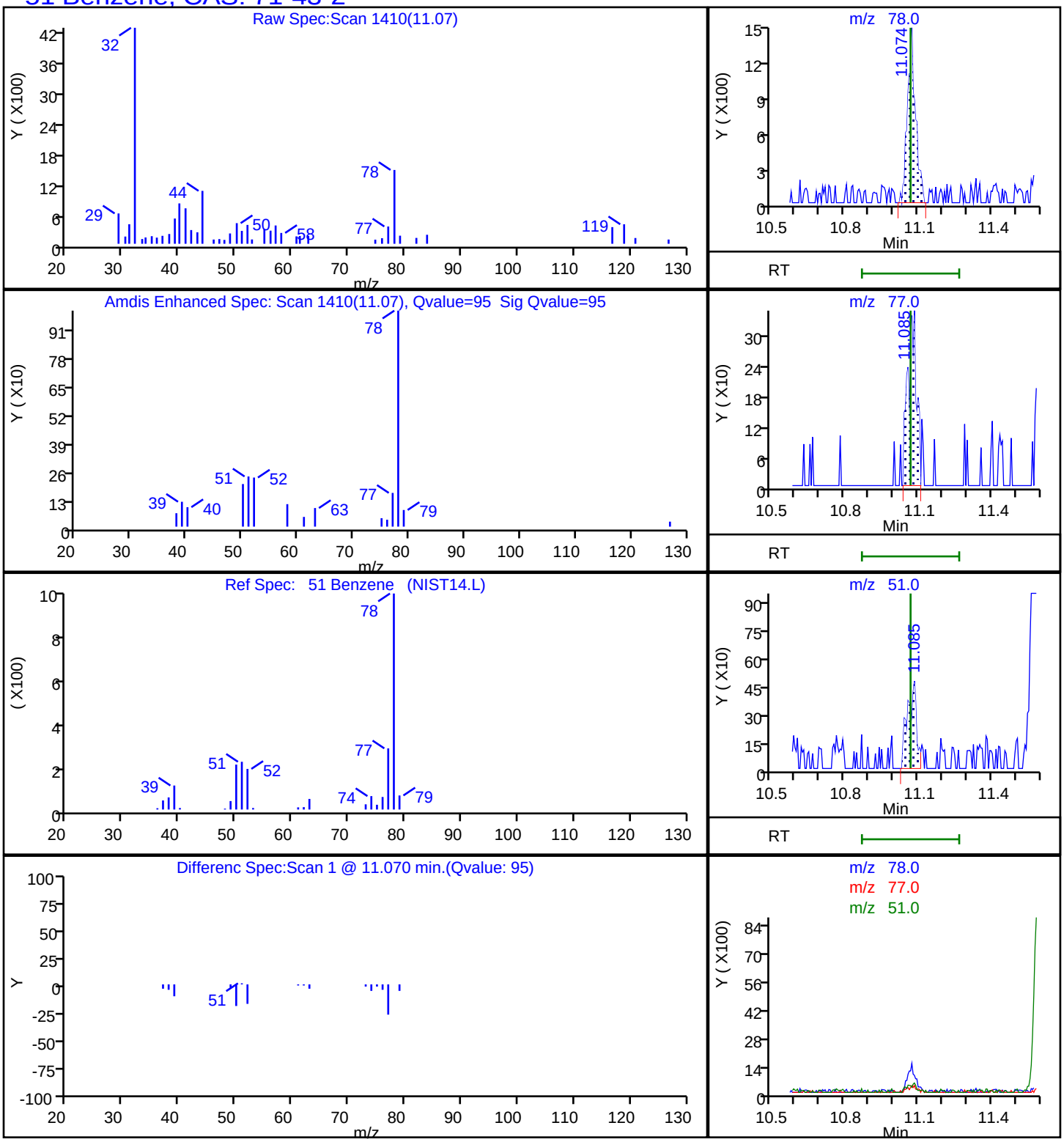
Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P108.D				
Lims ID:	140-20194-A-10				
Client ID:	SV-078-A-29				
Sample Type:	Client				
Inject. Date:	08-Sep-2020 23:00:30	ALS Bottle#:	8	Worklist Smp#:	12
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016520-012				
Misc. Info.:	140-20194-a-10				
Operator ID:	HMT	Instrument ID:	MH		
Method:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\MH_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	10-Sep-2020 10:25:53	Calib Date:	29-Aug-2020 23:57:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1028				
First Level Reviewer: khachitpongpanits		Date:	10-Sep-2020 10:27:20		

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	4.28	92.23

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P108.D		
Injection Date:	08-Sep-2020 23:00:30	Instrument ID:	MH
Lims ID:	140-20194-A-10	Lab Sample ID:	140-20194-10
Client ID:	SV-078-A-29		
Operator ID:	HMT	ALS Bottle#:	8 Worklist Smp#: 12
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

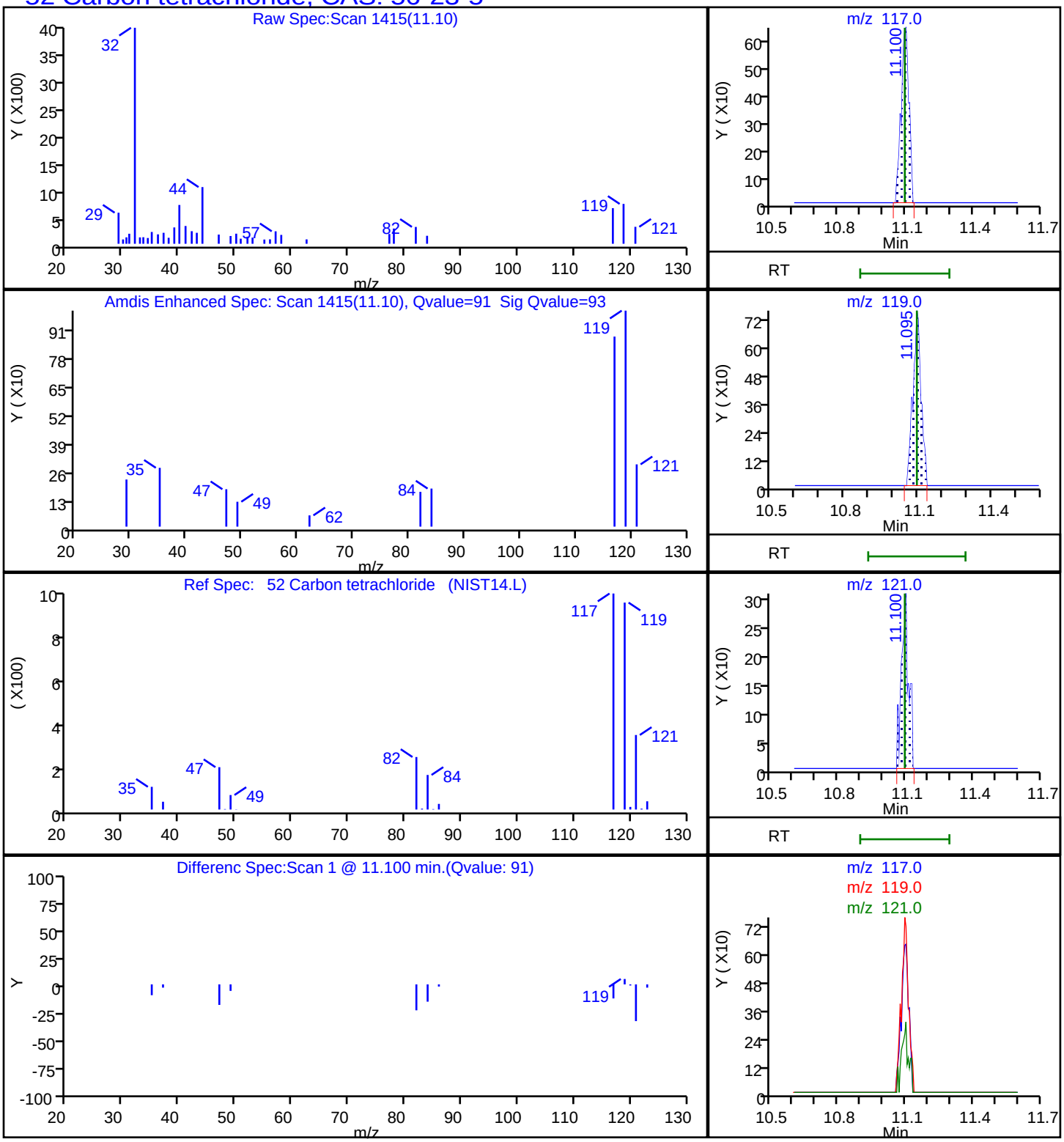
51 Benzene, CAS: 71-43-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P108.D		
Injection Date:	08-Sep-2020 23:00:30	Instrument ID:	MH
Lims ID:	140-20194-A-10	Lab Sample ID:	140-20194-10
Client ID:	SV-078-A-29		
Operator ID:	HMT	ALS Bottle#:	8 Worklist Smp#: 12
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

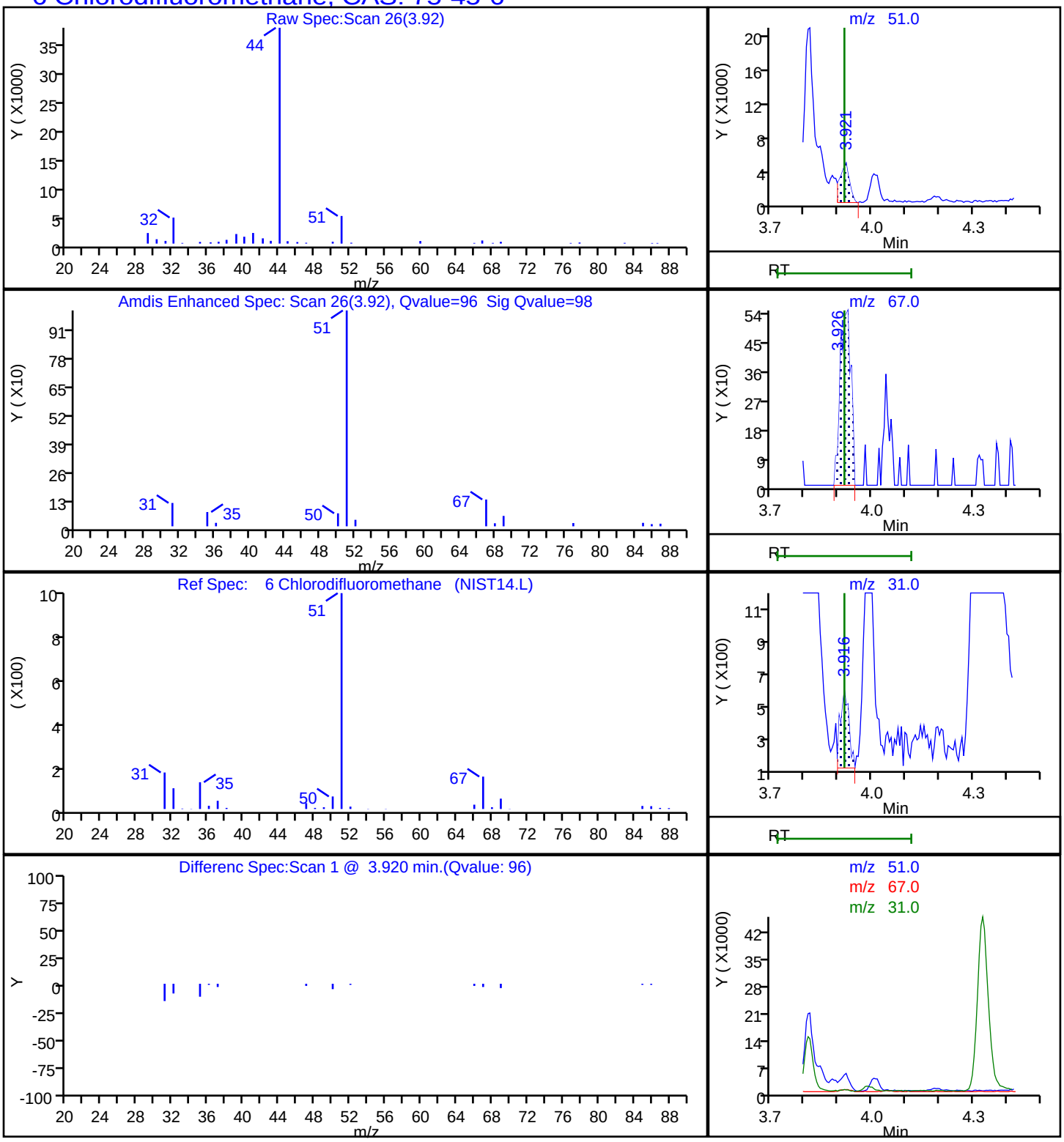
52 Carbon tetrachloride, CAS: 56-23-5



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P108.D		
Injection Date:	08-Sep-2020 23:00:30	Instrument ID:	MH
Lims ID:	140-20194-A-10	Lab Sample ID:	140-20194-10
Client ID:	SV-078-A-29		
Operator ID:	HMT	ALS Bottle#:	8 Worklist Smp#: 12
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

6 Chlorodifluoromethane, CAS: 75-45-6

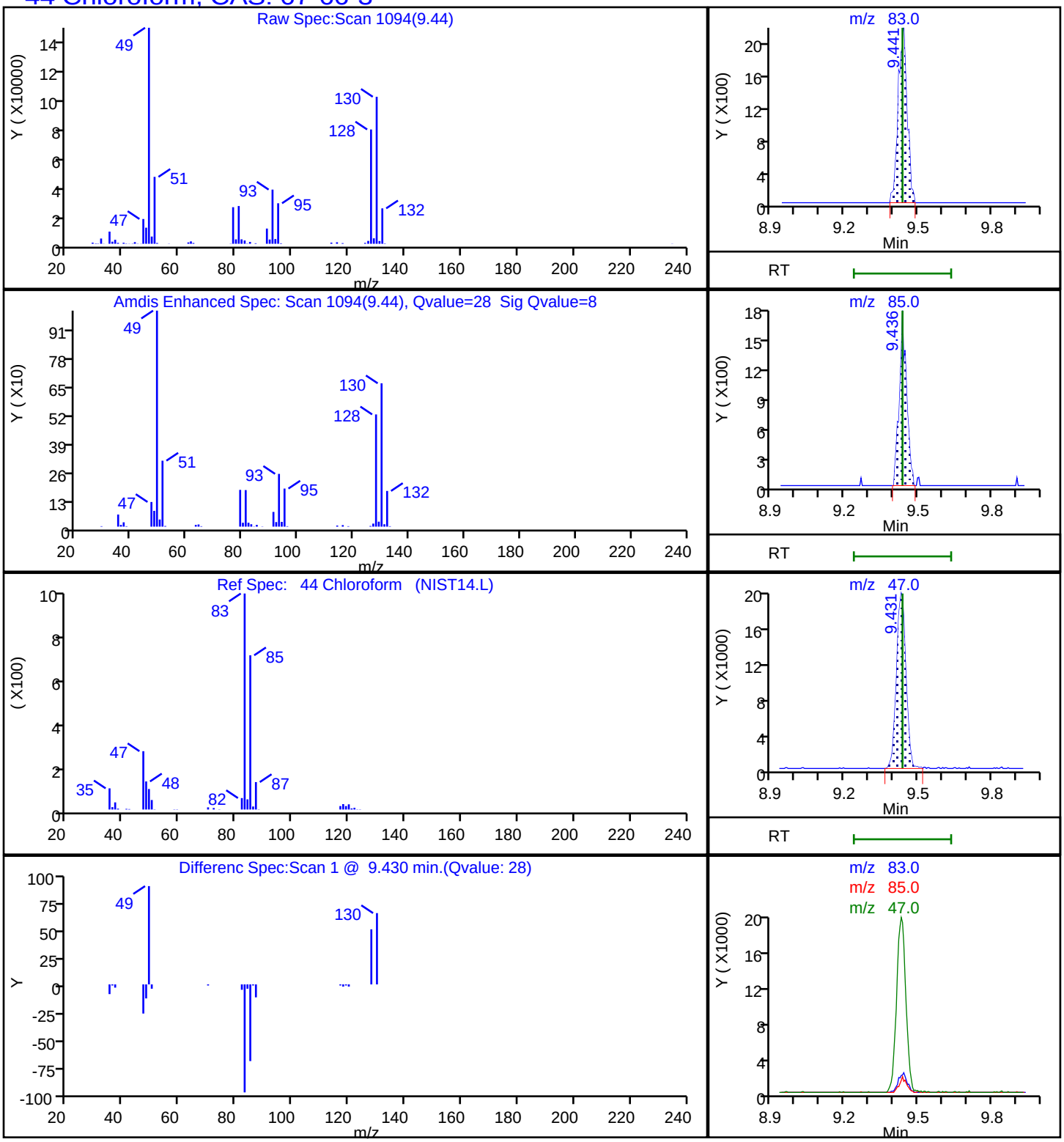


Report Date: 10-Sep-2020 10:27:20 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P108.D		
Injection Date:	08-Sep-2020 23:00:30	Instrument ID:	MH
Lims ID:	140-20194-A-10	Lab Sample ID:	140-20194-10
Client ID:	SV-078-A-29		
Operator ID:	HMT	ALS Bottle#:	8 Worklist Smp#: 12
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

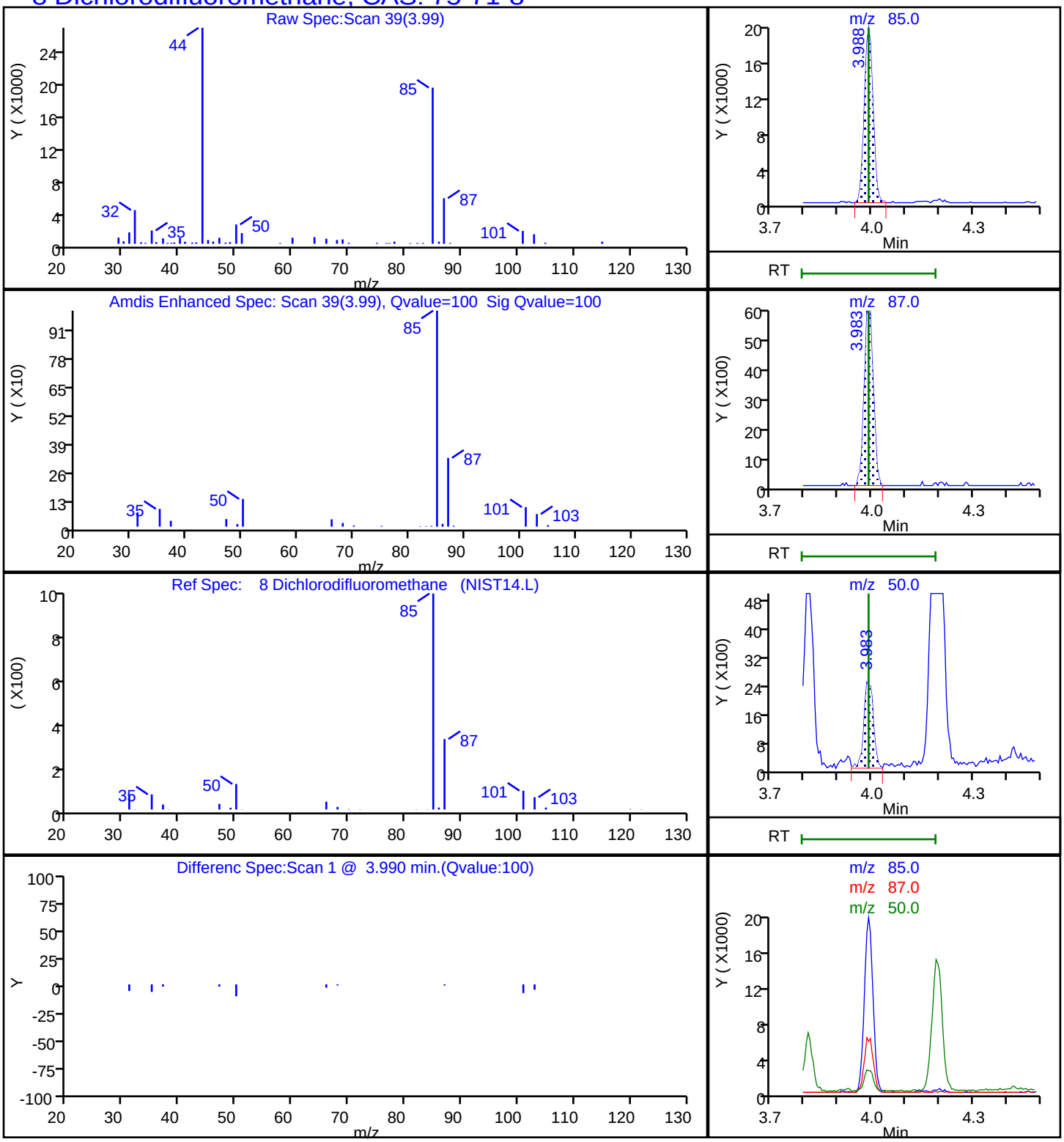
44 Chloroform, CAS: 67-66-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P108.D		
Injection Date:	08-Sep-2020 23:00:30	Instrument ID:	MH
Lims ID:	140-20194-A-10	Lab Sample ID:	140-20194-10
Client ID:	SV-078-A-29		
Operator ID:	HMT	ALS Bottle#:	8 Worklist Smp#: 12
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

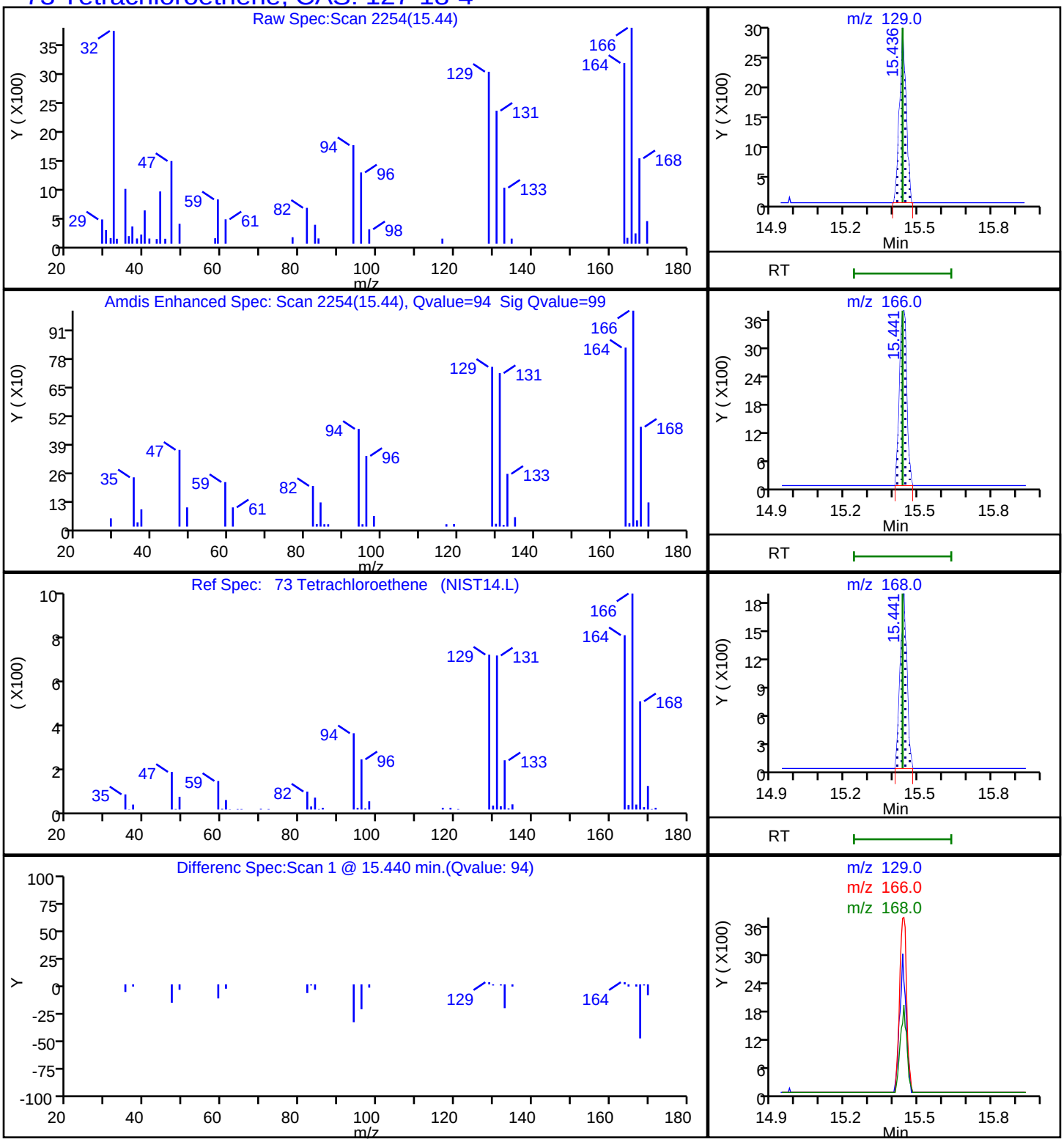
8 Dichlorodifluoromethane, CAS: 75-71-8



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P108.D				
Injection Date:	08-Sep-2020 23:00:30	Instrument ID:	MH		
Lims ID:	140-20194-A-10	Lab Sample ID:	140-20194-10		
Client ID:	SV-078-A-29				
Operator ID:	HMT	ALS Bottle#:	8	Worklist Smp#:	12
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

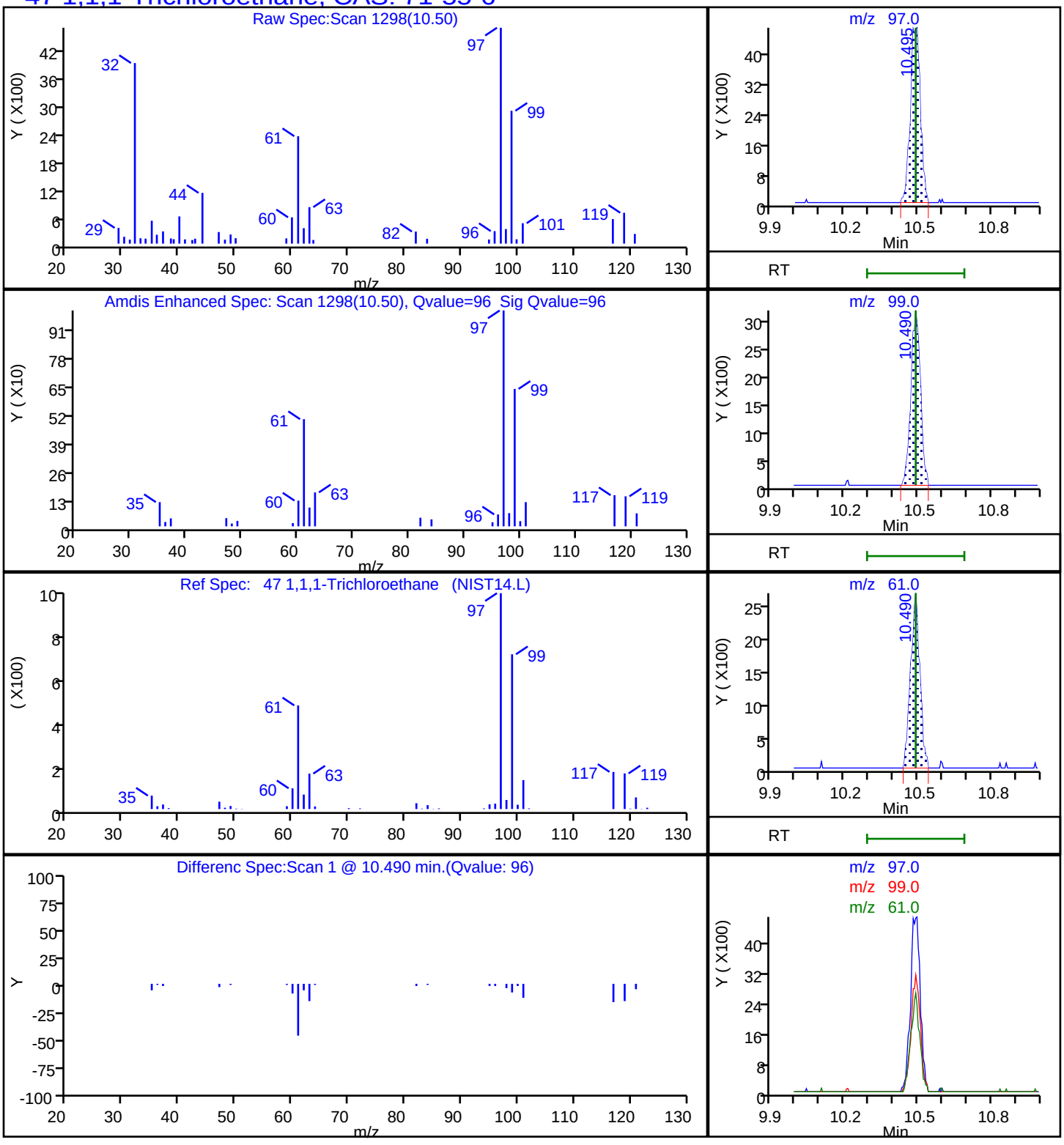
73 Tetrachloroethene, CAS: 127-18-4



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P108.D		
Injection Date:	08-Sep-2020 23:00:30	Instrument ID:	MH
Lims ID:	140-20194-A-10	Lab Sample ID:	140-20194-10
Client ID:	SV-078-A-29		
Operator ID:	HMT	ALS Bottle#:	8 Worklist Smp#: 12
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

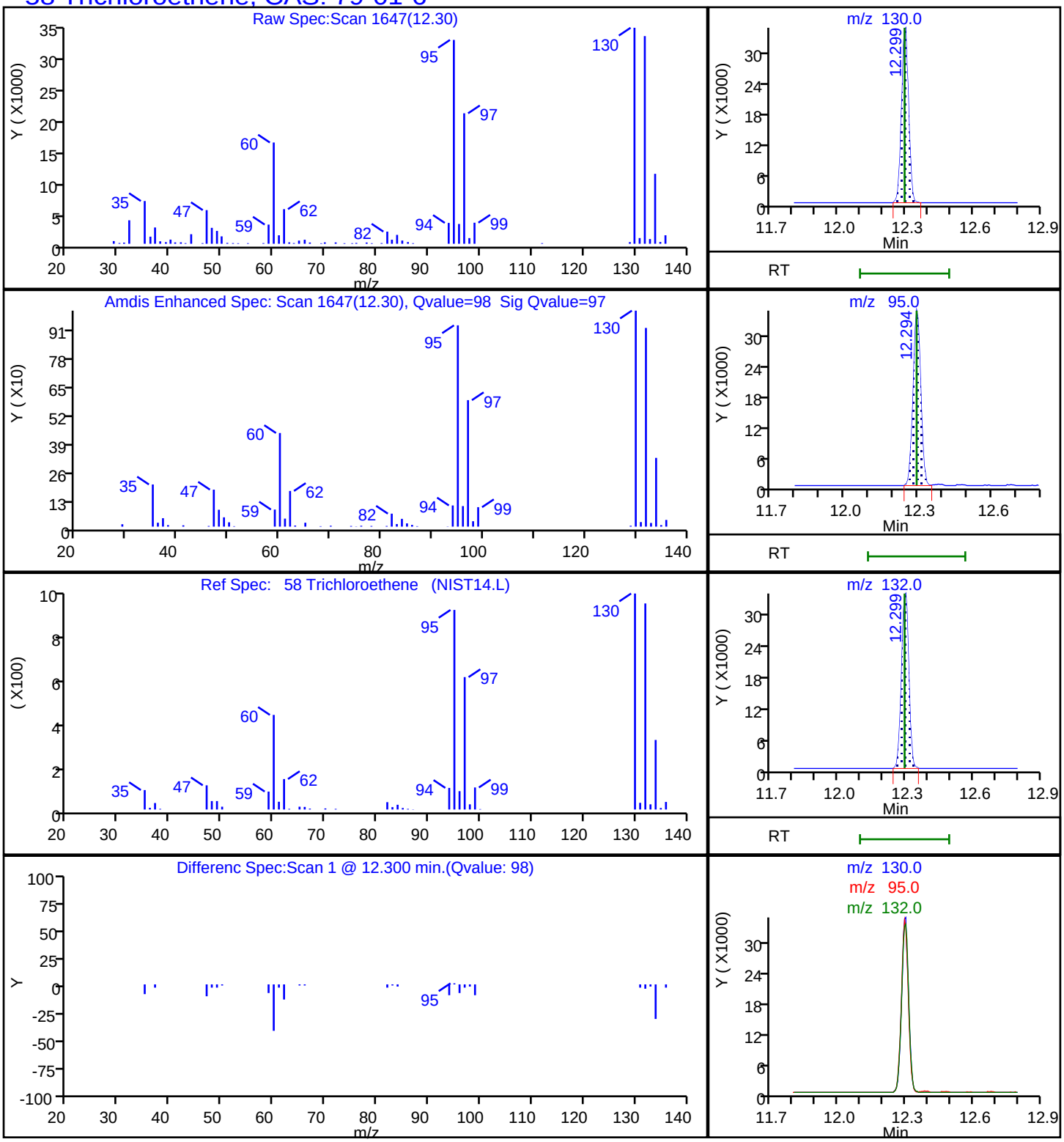
47 1,1,1-Trichloroethane, CAS: 71-55-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P108.D		
Injection Date:	08-Sep-2020 23:00:30	Instrument ID:	MH
Lims ID:	140-20194-A-10	Lab Sample ID:	140-20194-10
Client ID:	SV-078-A-29		
Operator ID:	HMT	ALS Bottle#:	8 Worklist Smp#: 12
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

58 Trichloroethene, CAS: 79-01-6

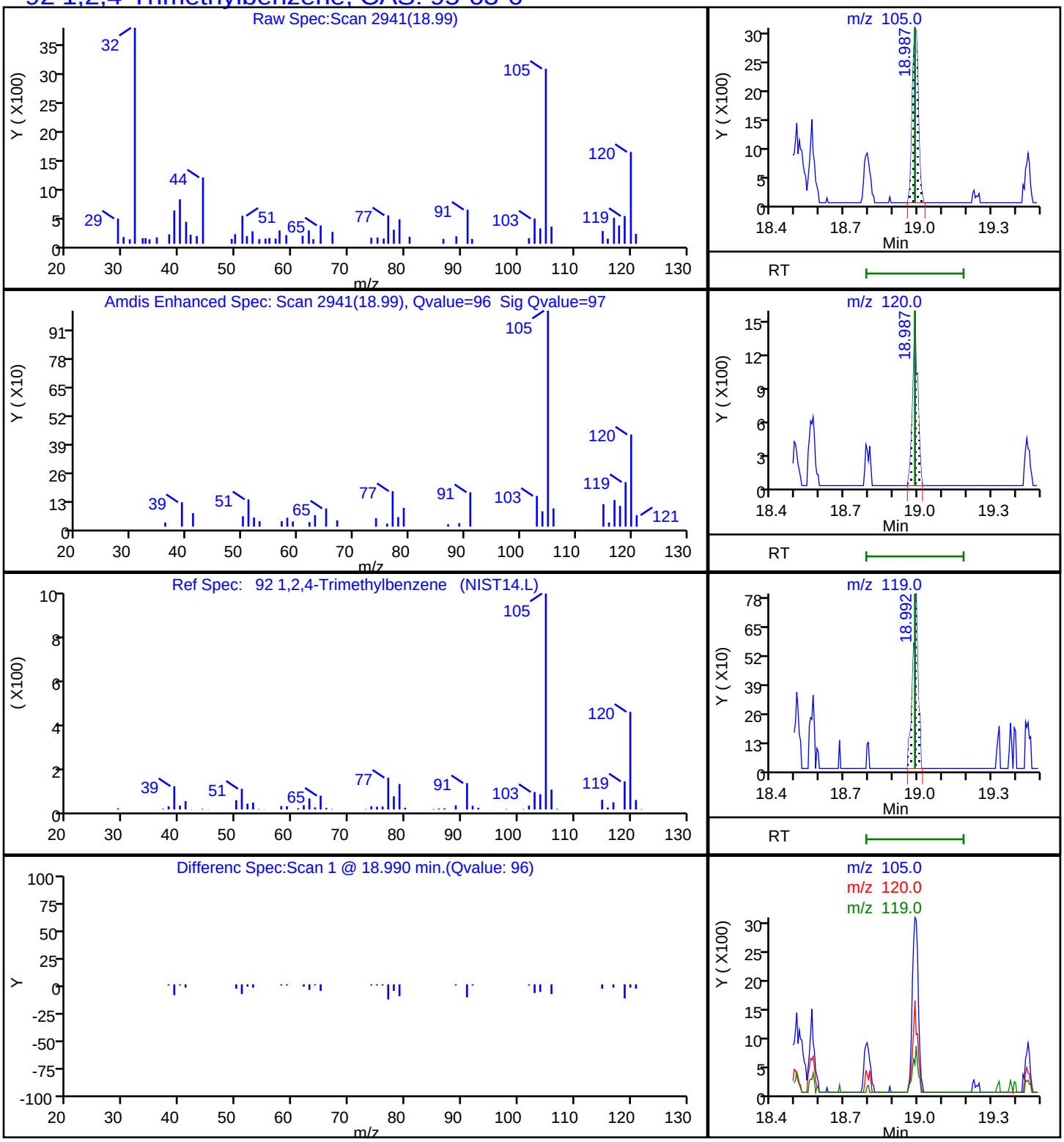


Report Date: 10-Sep-2020 10:27:21 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P108.D				
Injection Date:	08-Sep-2020 23:00:30	Instrument ID:	MH		
Lims ID:	140-20194-A-10	Lab Sample ID:	140-20194-10		
Client ID:	SV-078-A-29				
Operator ID:	HMT	ALS Bottle#:	8	Worklist Smp#:	12
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

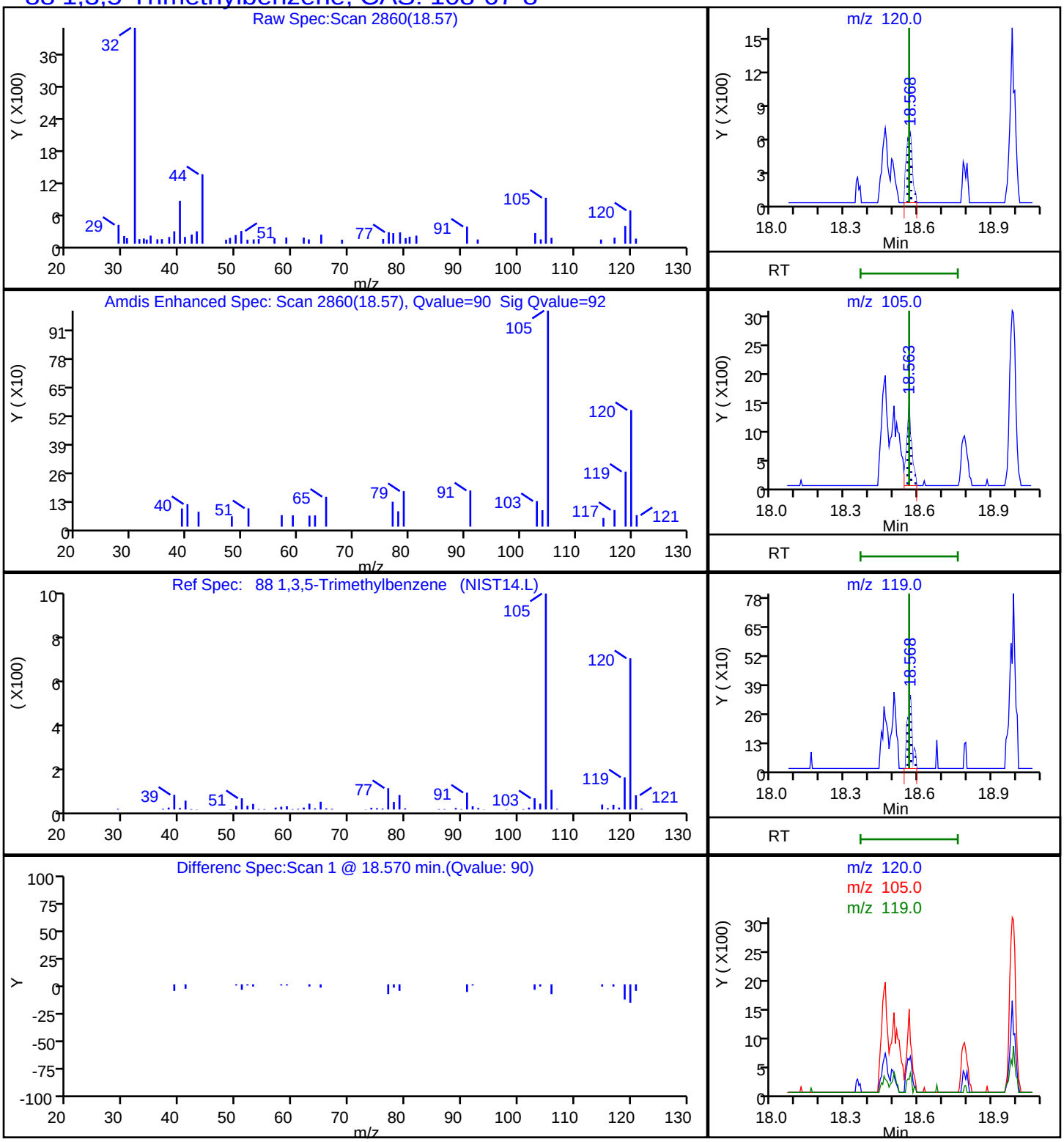
92 1,2,4-Trimethylbenzene, CAS: 95-63-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P108.D				
Injection Date:	08-Sep-2020 23:00:30	Instrument ID:	MH		
Lims ID:	140-20194-A-10	Lab Sample ID:	140-20194-10		
Client ID:	SV-078-A-29				
Operator ID:	HMT	ALS Bottle#:	8	Worklist Smp#:	12
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

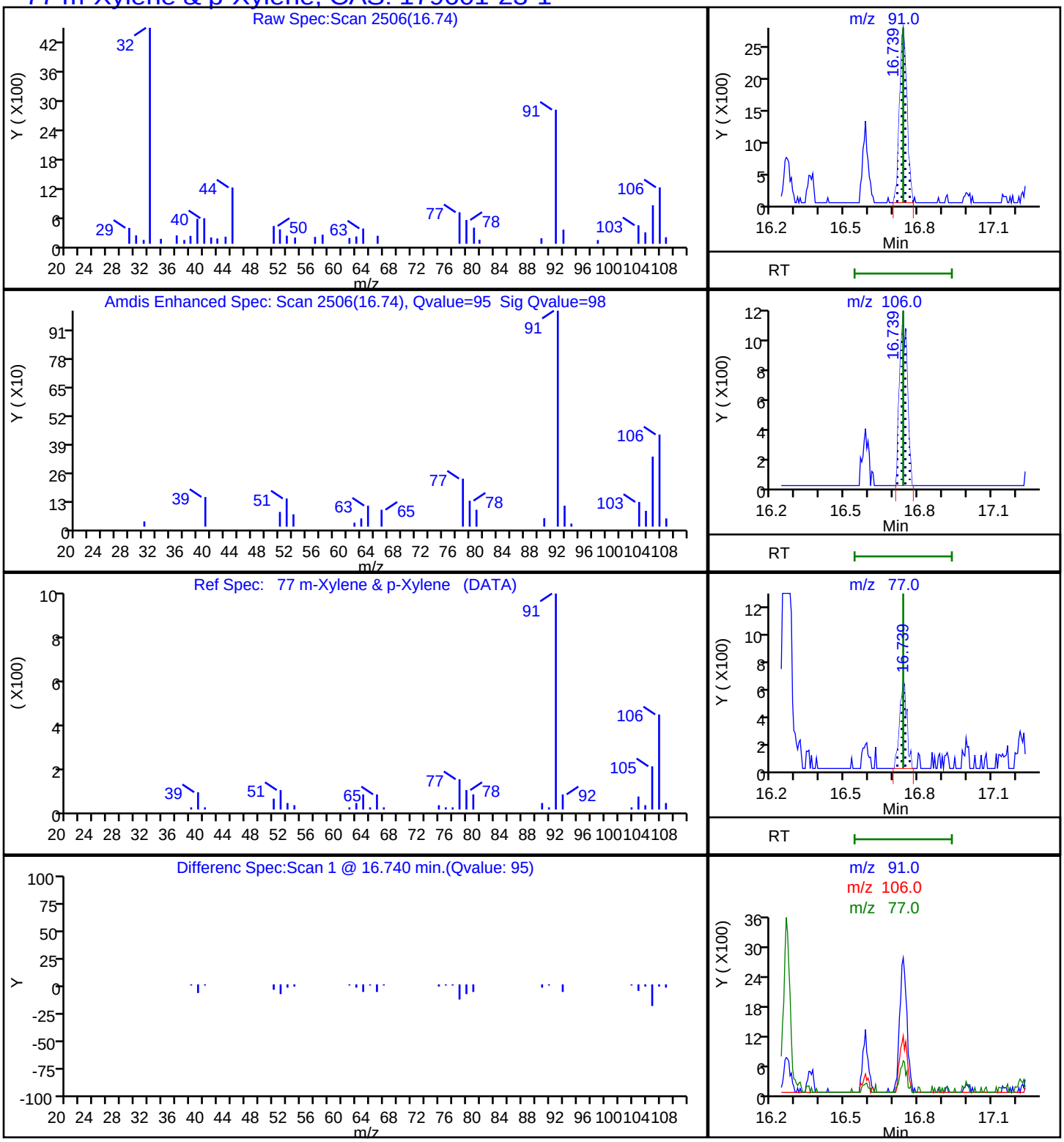
88 1,3,5-Trimethylbenzene, CAS: 108-67-8



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P108.D		
Injection Date:	08-Sep-2020 23:00:30	Instrument ID:	MH
Lims ID:	140-20194-A-10	Lab Sample ID:	140-20194-10
Client ID:	SV-078-A-29		
Operator ID:	HMT	ALS Bottle#:	8 Worklist Smp#: 12
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

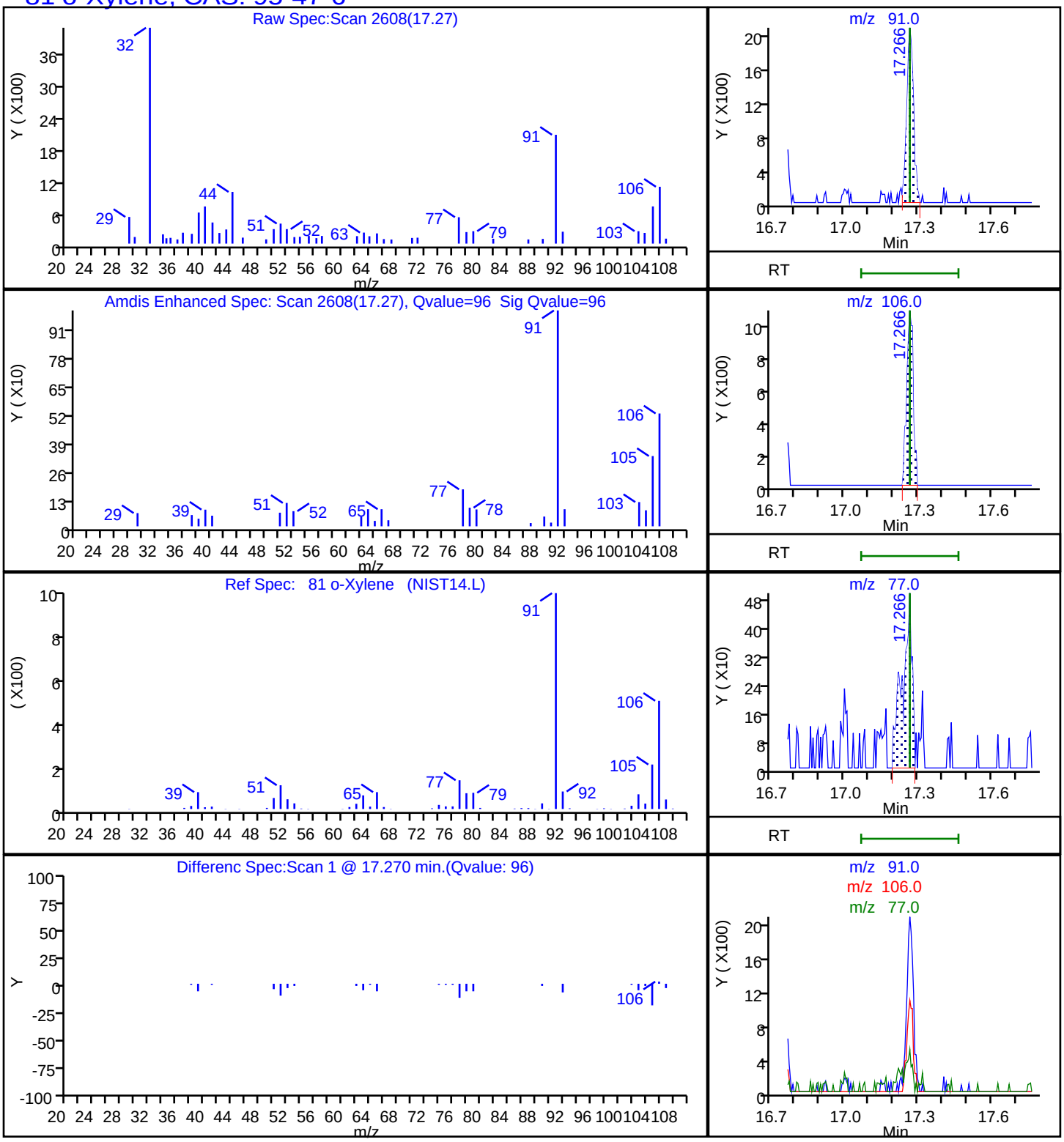
77 m-Xylene & p-Xylene, CAS: 179601-23-1



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P108.D		
Injection Date:	08-Sep-2020 23:00:30	Instrument ID:	MH
Lims ID:	140-20194-A-10	Lab Sample ID:	140-20194-10
Client ID:	SV-078-A-29		
Operator ID:	HMT	ALS Bottle#:	8 Worklist Smp#: 12
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

81 o-Xylene, CAS: 95-47-6



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: SV-076-A-29 Lab Sample ID: 140-20194-11

Matrix: Air Lab File ID: HI08P109.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 10:18

Sample wt/vol: 100(mL) Date Analyzed: 09/08/2020 23:55

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42504 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.12	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.085	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	0.28	J	0.40	0.11
67-66-3	Chloroform	119.38	0.051	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.52		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	ND		0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	0.19	J	0.40	0.035
108-88-3	Toluene	92.14	ND		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND	*	0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	0.39	J	0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	0.89		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	1.4		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	1.1		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	1.7		0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.37	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	91		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: SV-076-A-29 Lab Sample ID: 140-20194-11

Matrix: Air Lab File ID: HI08P109.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 10:18

Sample wt/vol: 100(mL) Date Analyzed: 09/08/2020 23:55

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42504 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.37	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.53	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	1.0	J	1.4	0.39
67-66-3	Chloroform	119.38	0.25	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.6		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	ND		1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	1.3	J	2.7	0.24
108-88-3	Toluene	92.14	ND		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND	*	3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	2.1	J	2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	4.8		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	7.0		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	5.4		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	8.3		2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	1.6	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	91		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P109.D
Lims ID: 140-20194-A-11
Client ID: SV-076-A-29
Sample Type: Client
Inject. Date: 08-Sep-2020 23:55:30 ALS Bottle#: 9 Worklist Smp#: 13
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016520-013
Misc. Info.: 140-20194-a-11
Operator ID: HMT Instrument ID: MH

Method: \\chromfs\Knoxville\ChromData\MH\20200904-16520.b\MH_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 10-Sep-2020 10:28:42 Calib Date: 29-Aug-2020 23:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1028

First Level Reviewer: khachitpongpanits Date: 10-Sep-2020 10:28:42

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.431	9.431	0.000	96	215583	4.80	
* 2 1,4-Difluorobenzene	114	11.591	11.591	0.000	95	858322	4.80	
* 3 Chlorobenzene-d5 (IS)	117	16.258	16.258	0.000	87	604862	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.876	17.876	0.000	94	296952	4.23	
6 Chlorodifluoromethane	51	3.921	3.921	0.005	96	6847	0.0569	M
8 Dichlorodifluoromethane	85	3.988	3.988	0.000	99	17054	0.1046	
44 Chloroform	83	9.446	9.436	0.010	28	1338	0.0102	
47 1,1,1-Trichloroethane	97	10.485	10.490	-0.005	97	9155	0.0771	
51 Benzene	78	11.069	11.069	0.000	89	3669	0.0233	
52 Carbon tetrachloride	117	11.095	11.095	0.000	70	1655	0.0170	
58 Trichloroethene	130	12.299	12.294	0.005	97	12650	0.1785	
67 Toluene	91	14.315	14.310	0.005	90	9289	0.0596	
73 Tetrachloroethene	129	15.441	15.441	0.005	90	2541	0.0389	
77 m-Xylene & p-Xylene	91	16.734	16.739	-0.005	95	6419	0.0431	
81 o-Xylene	91	17.266	17.266	0.000	95	4611	0.0295	
88 1,3,5-Trimethylbenzene	120	18.563	18.568	0.000	93	27372	0.3356	
92 1,2,4-Trimethylbenzene	105	18.992	18.993	0.005	98	39302	0.2178	
98 1,2,3-Trimethylbenzene	105	19.452	19.453	0.005	97	49679	0.2865	
S 116 Xylenes, Total	100				0		0.0726	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

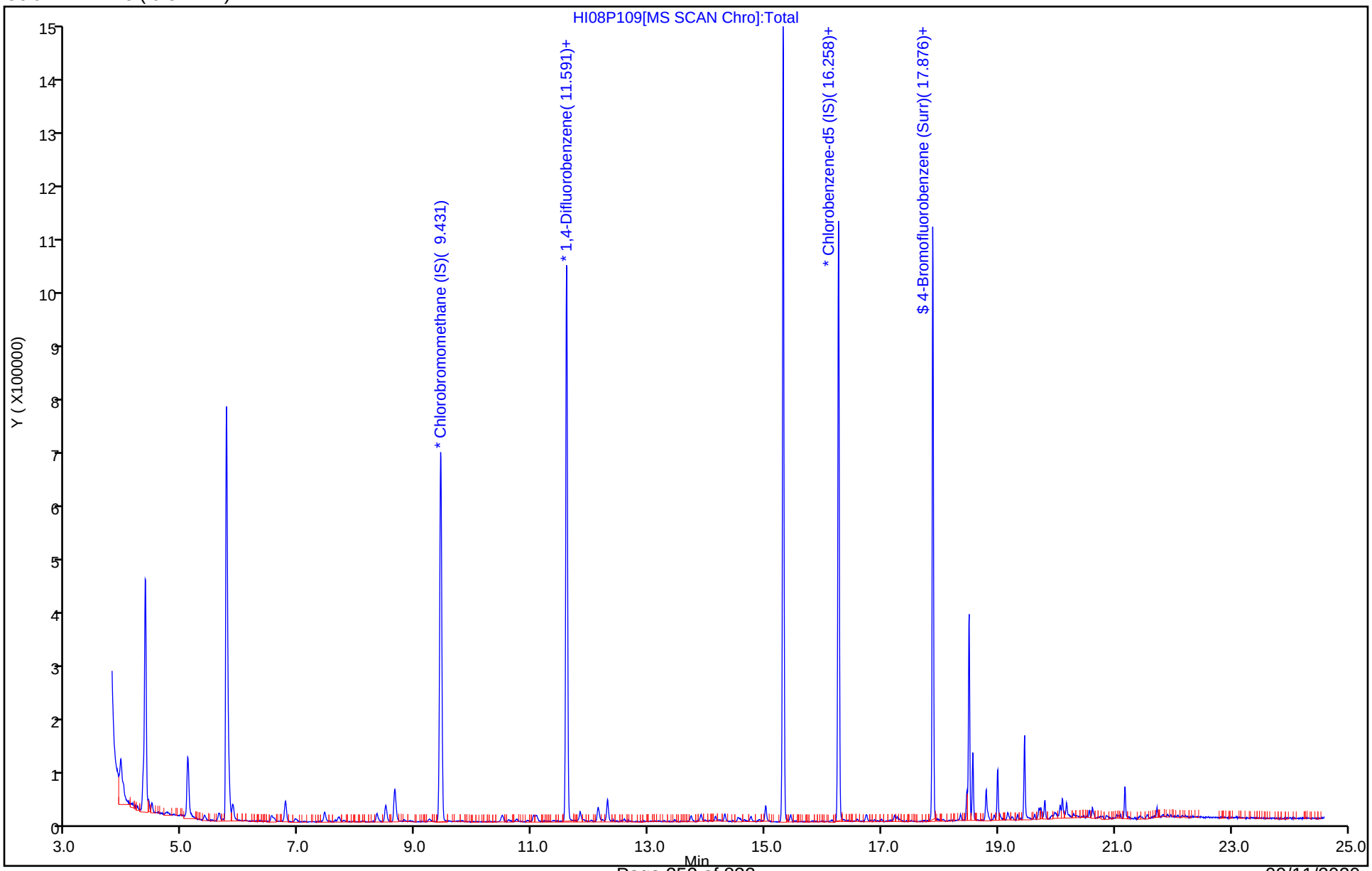
Report Date: 10-Sep-2020 10:28:42 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P109.D

Injection Date:	08-Sep-2020 23:55:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	140-20194-A-11	Lab Sample ID:	140-20194-11	Worklist Smp#:	13
Client ID:	SV-076-A-29				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P109.D				
Lims ID:	140-20194-A-11				
Client ID:	SV-076-A-29				
Sample Type:	Client				
Inject. Date:	08-Sep-2020 23:55:30	ALS Bottle#:	9	Worklist Smp#:	13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016520-013				
Misc. Info.:	140-20194-a-11				
Operator ID:	HMT	Instrument ID:	MH		
Method:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\MH_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	10-Sep-2020 10:28:42	Calib Date:	29-Aug-2020 23:57:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1028				

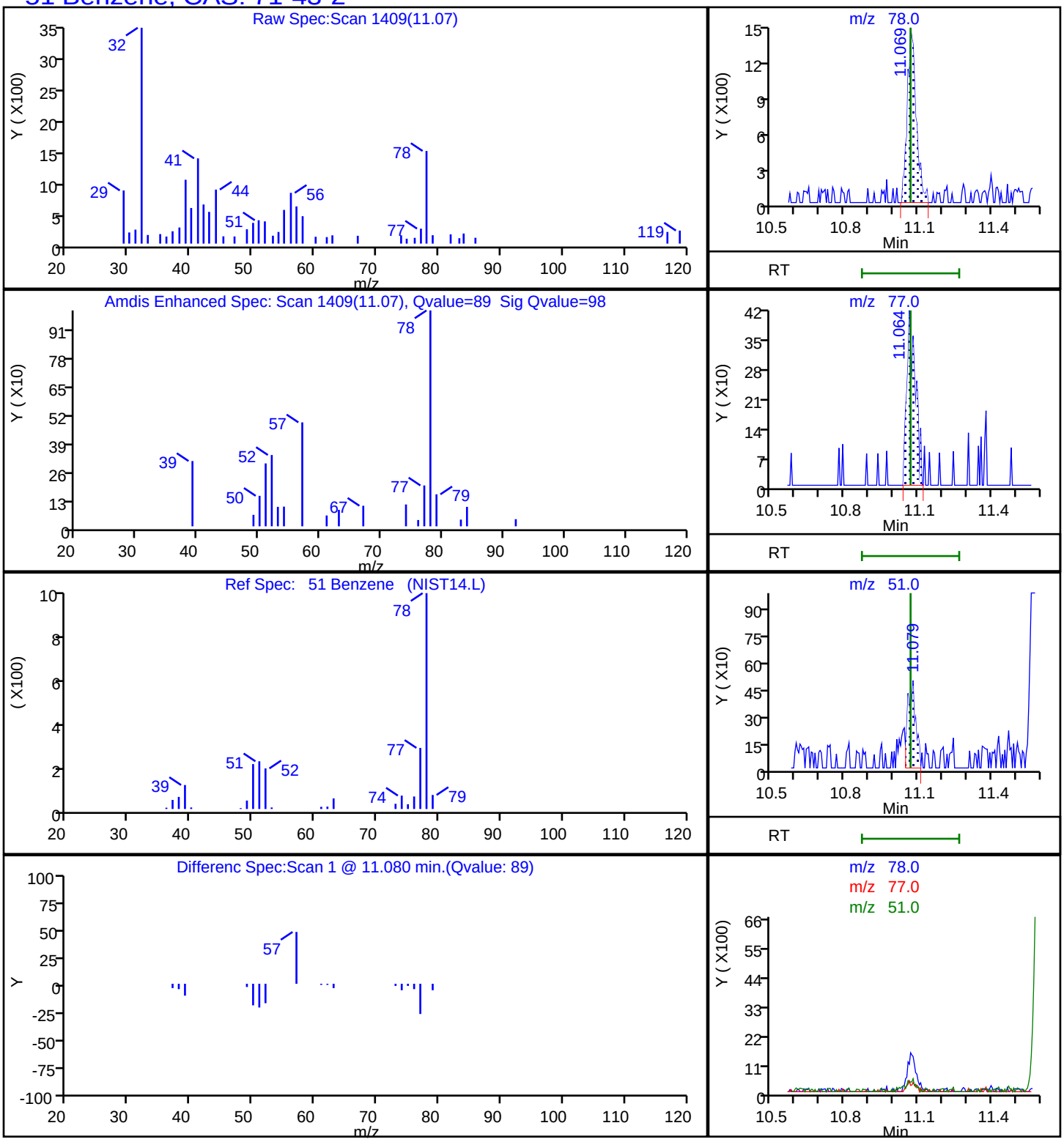
First Level Reviewer: khachitpongpanits Date: 10-Sep-2020 10:28:42

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	4.23	91.06

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P109.D		
Injection Date:	08-Sep-2020 23:55:30	Instrument ID:	MH
Lims ID:	140-20194-A-11	Lab Sample ID:	140-20194-11
Client ID:	SV-076-A-29		
Operator ID:	HMT	ALS Bottle#:	9 Worklist Smp#: 13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

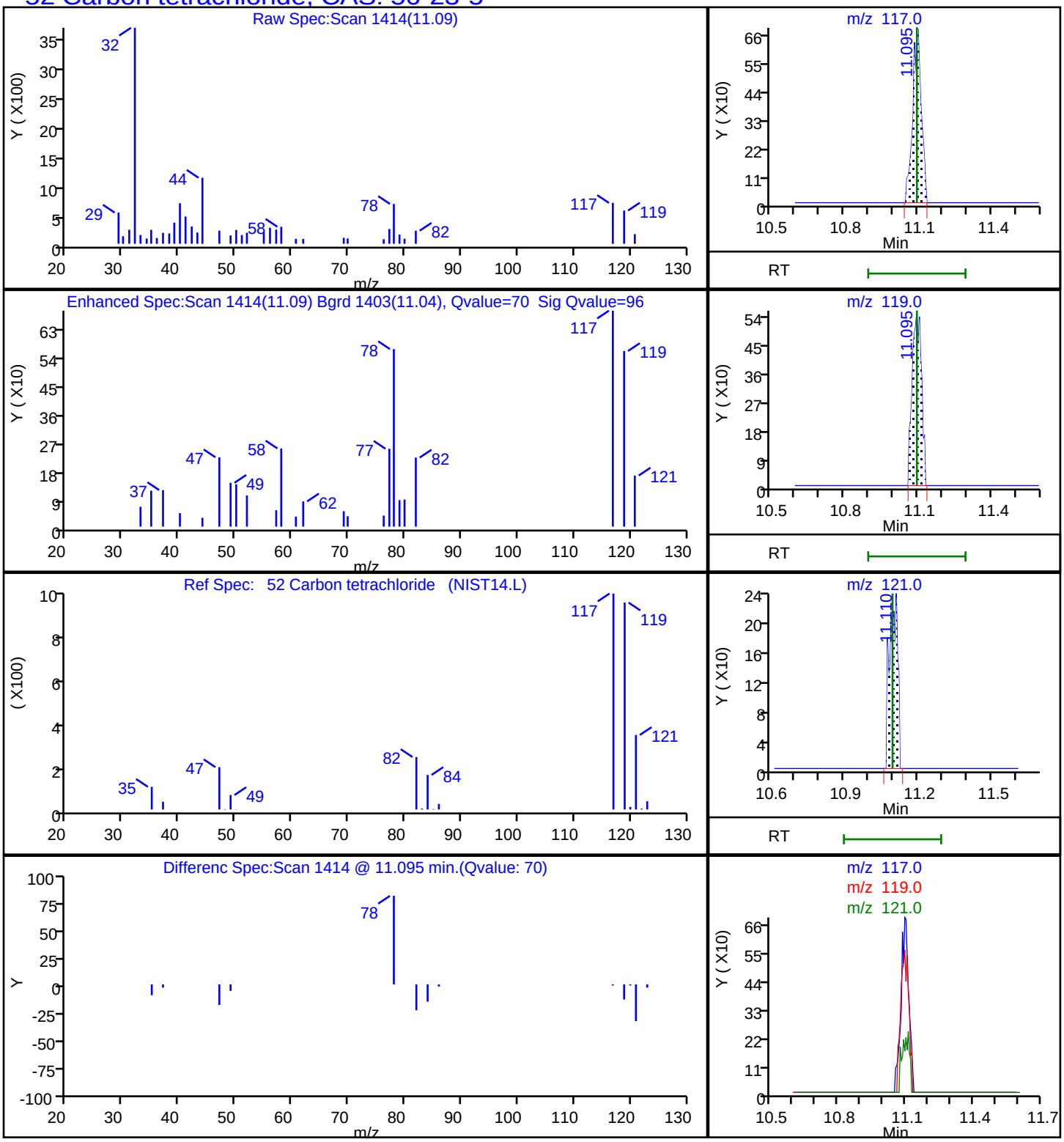
51 Benzene, CAS: 71-43-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P109.D		
Injection Date:	08-Sep-2020 23:55:30	Instrument ID:	MH
Lims ID:	140-20194-A-11	Lab Sample ID:	140-20194-11
Client ID:	SV-076-A-29		
Operator ID:	HMT	ALS Bottle#:	9 Worklist Smp#: 13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

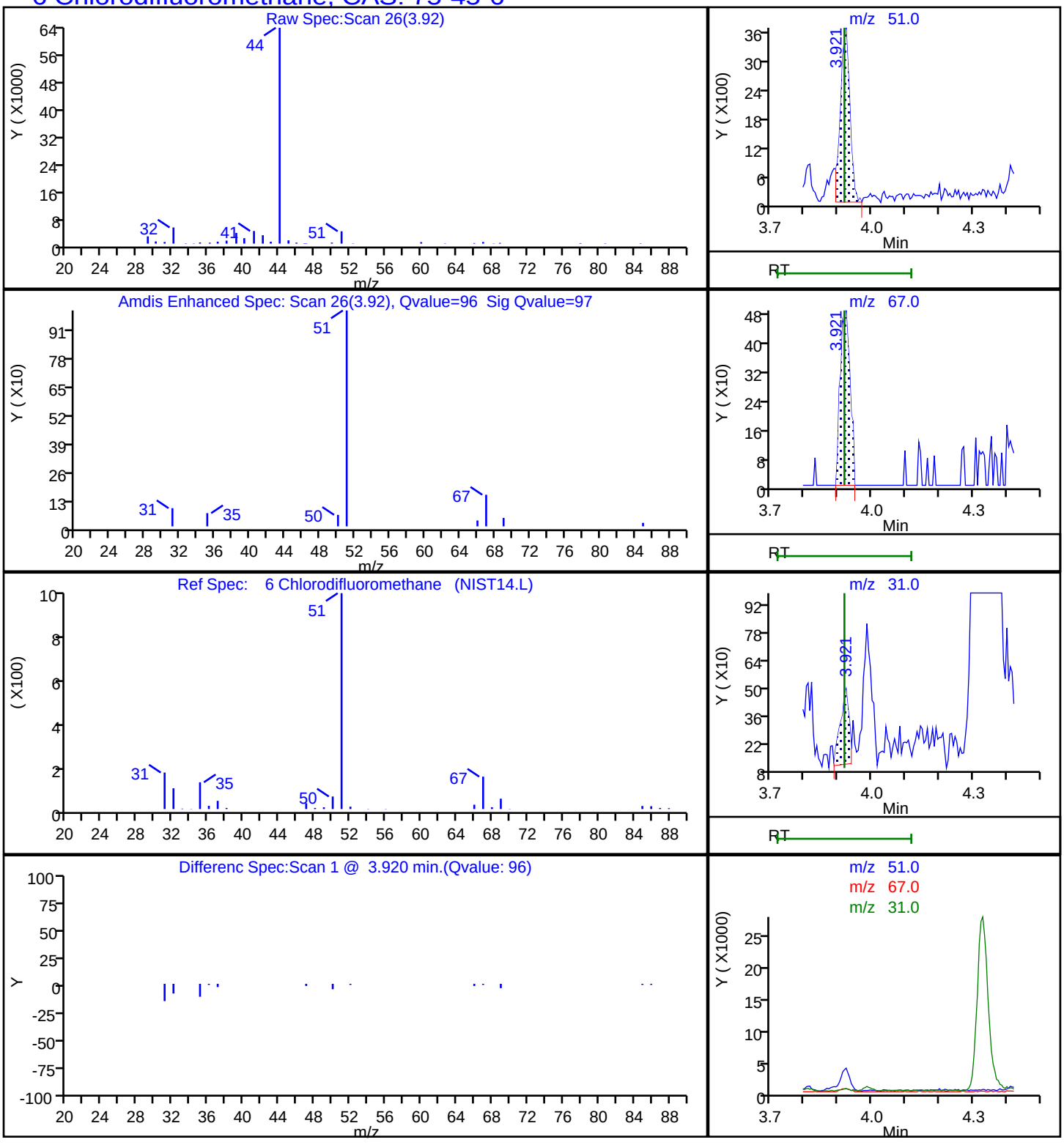
52 Carbon tetrachloride, CAS: 56-23-5



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P109.D		
Injection Date:	08-Sep-2020 23:55:30	Instrument ID:	MH
Lims ID:	140-20194-A-11	Lab Sample ID:	140-20194-11
Client ID:	SV-076-A-29		
Operator ID:	HMT	ALS Bottle#:	9 Worklist Smp#: 13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

6 Chlorodifluoromethane, CAS: 75-45-6

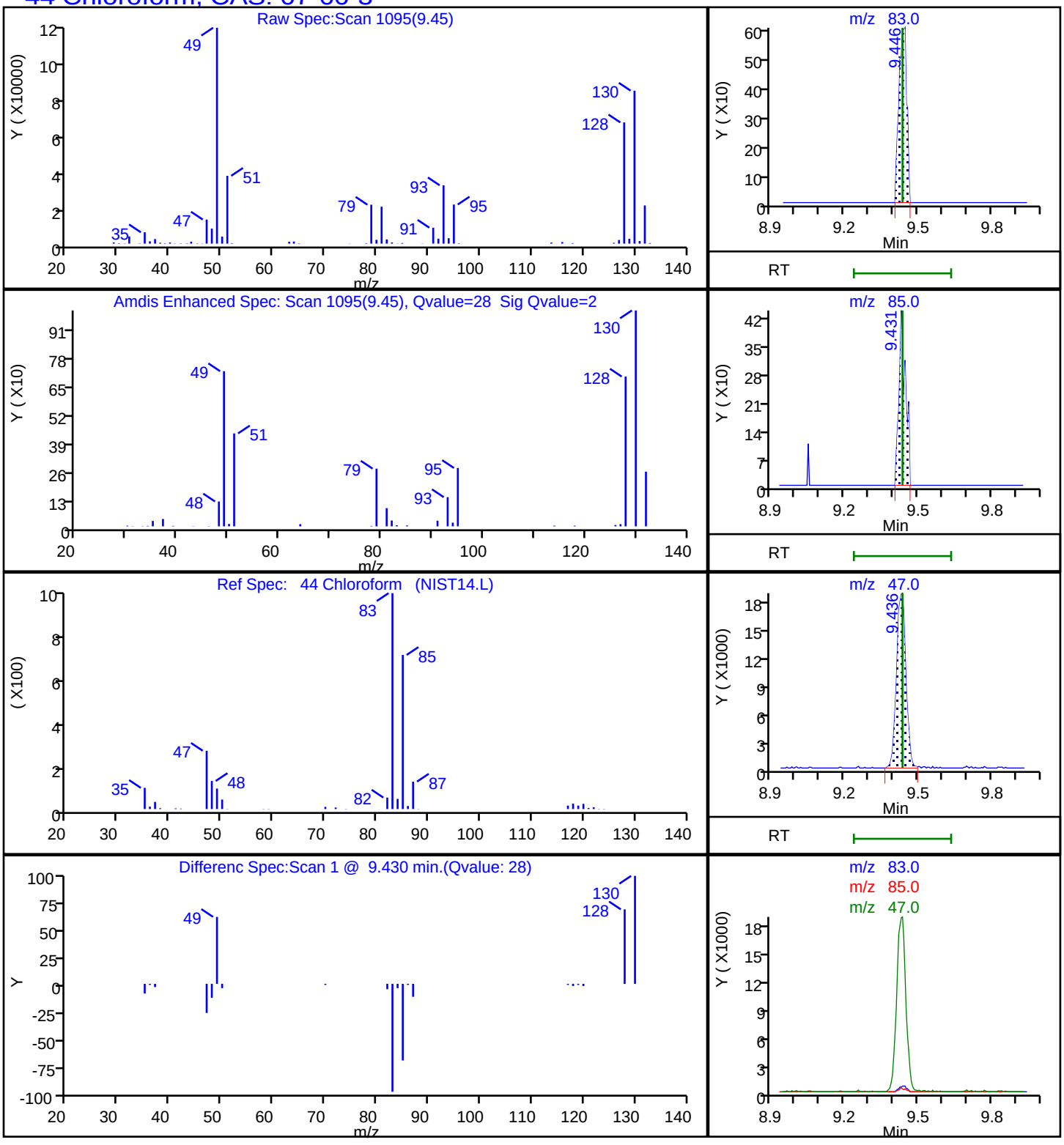


Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P109.D

Injection Date:	08-Sep-2020 23:55:30	Instrument ID:	MH
Lims ID:	140-20194-A-11	Lab Sample ID:	140-20194-11
Client ID:	SV-076-A-29		
Operator ID:	HMT	ALS Bottle#:	9 Worklist Smp#: 13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

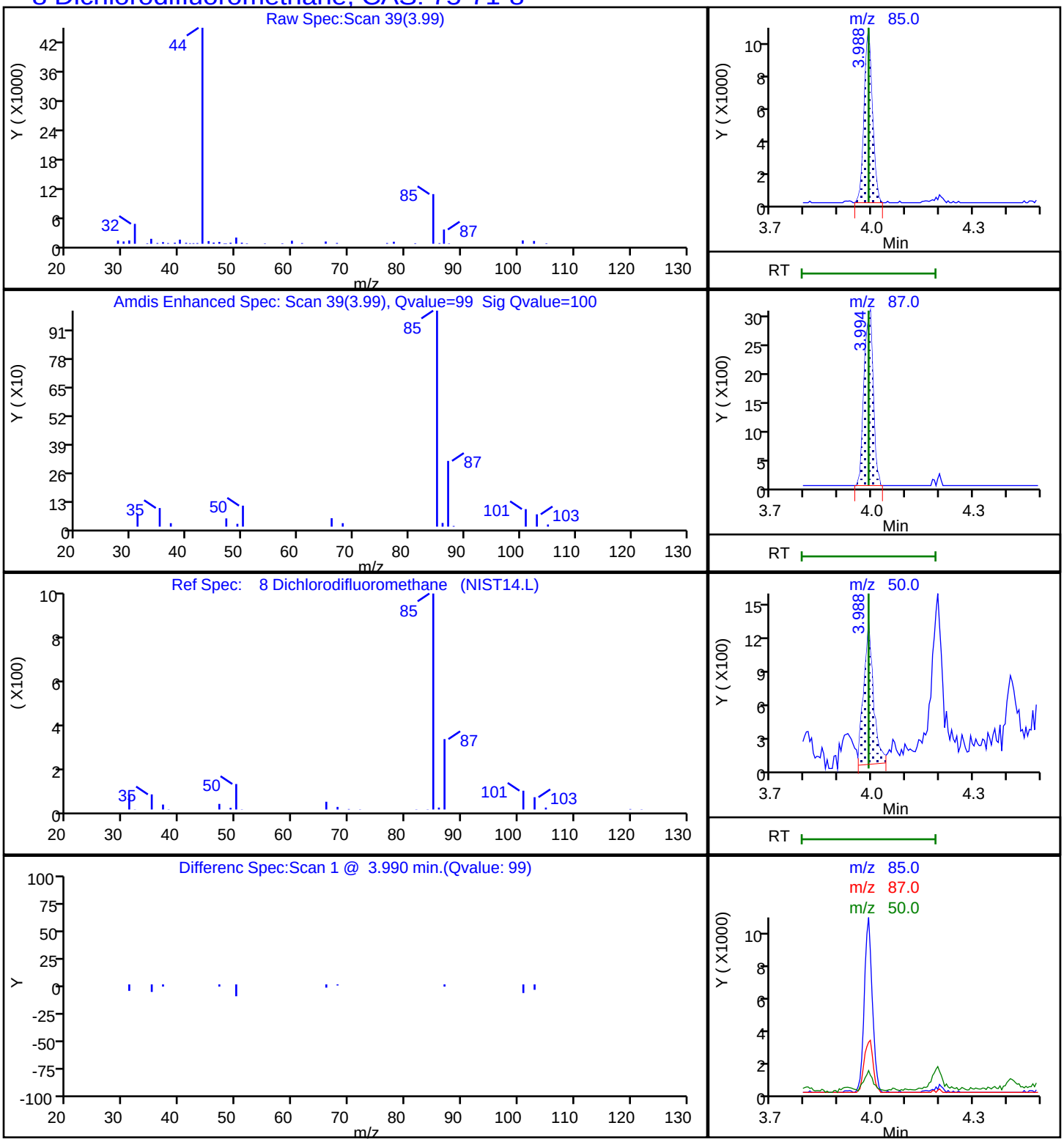
44 Chloroform, CAS: 67-66-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P109.D		
Injection Date:	08-Sep-2020 23:55:30	Instrument ID:	MH
Lims ID:	140-20194-A-11	Lab Sample ID:	140-20194-11
Client ID:	SV-076-A-29		
Operator ID:	HMT	ALS Bottle#:	9 Worklist Smp#: 13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

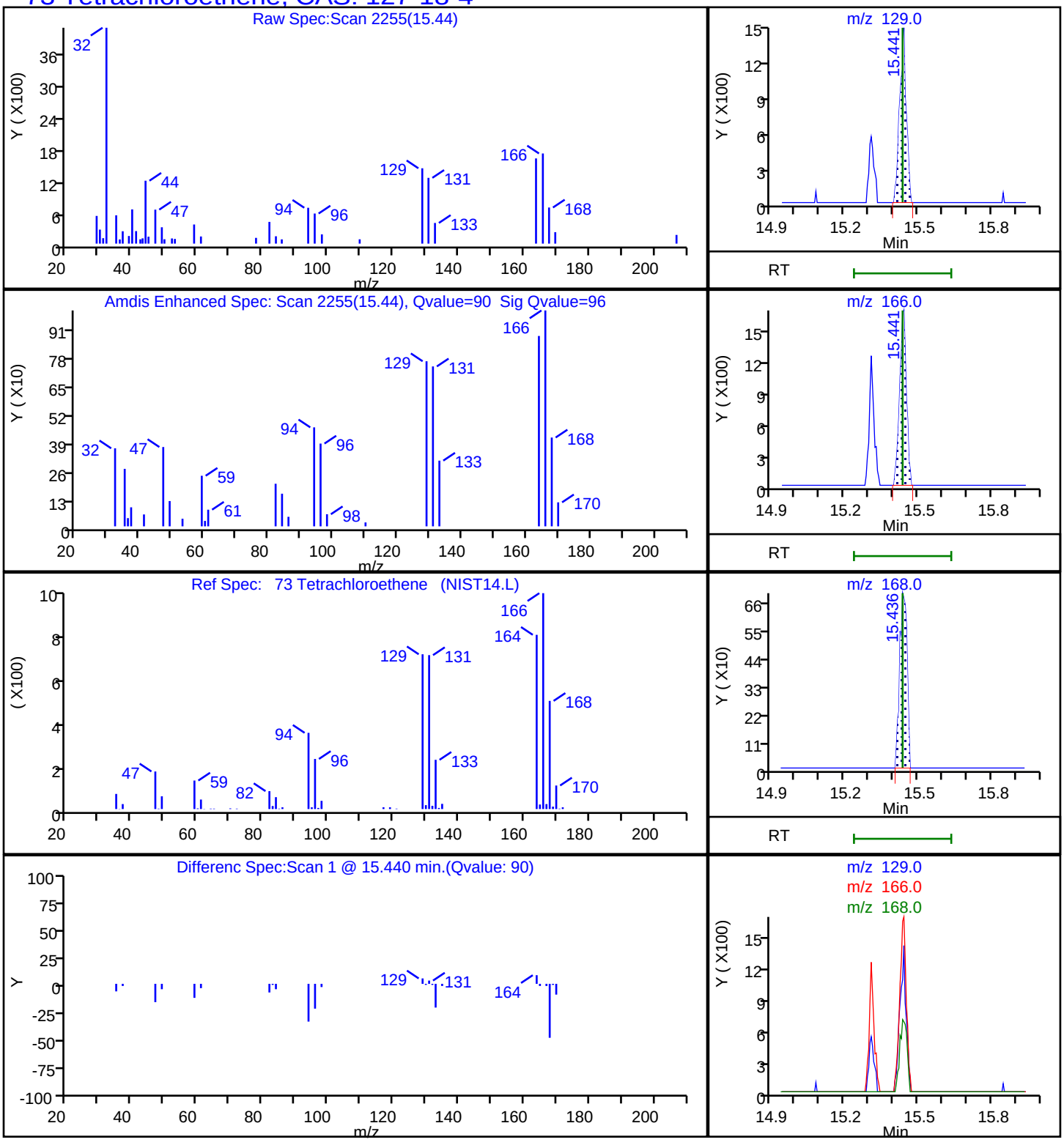
8 Dichlorodifluoromethane, CAS: 75-71-8



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P109.D		
Injection Date:	08-Sep-2020 23:55:30	Instrument ID:	MH
Lims ID:	140-20194-A-11	Lab Sample ID:	140-20194-11
Client ID:	SV-076-A-29		
Operator ID:	HMT	ALS Bottle#:	9 Worklist Smp#: 13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

73 Tetrachloroethene, CAS: 127-18-4

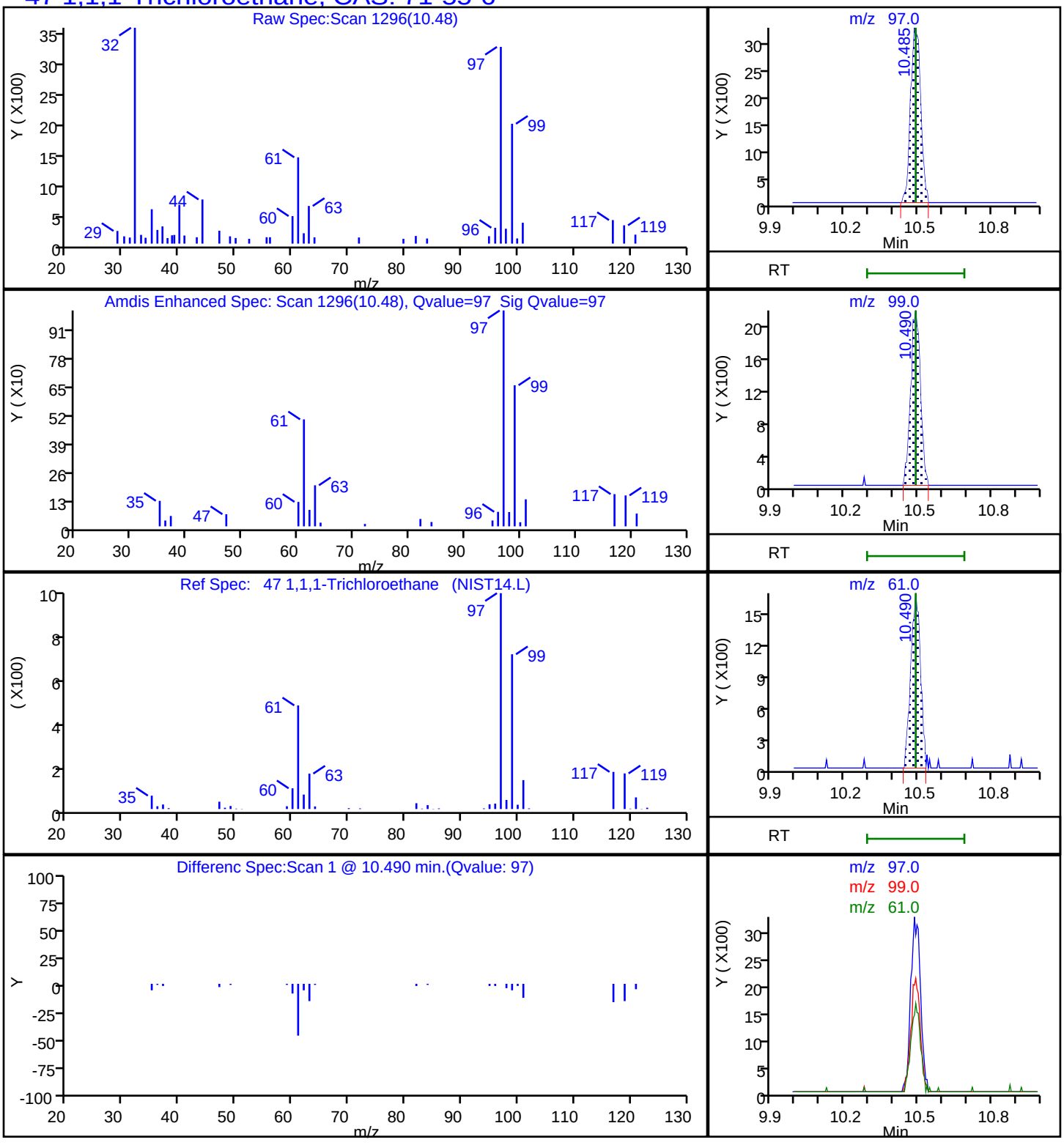


Report Date: 10-Sep-2020 10:28:42 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P109.D		
Injection Date:	08-Sep-2020 23:55:30	Instrument ID:	MH
Lims ID:	140-20194-A-11	Lab Sample ID:	140-20194-11
Client ID:	SV-076-A-29		
Operator ID:	HMT	ALS Bottle#:	9 Worklist Smp#: 13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

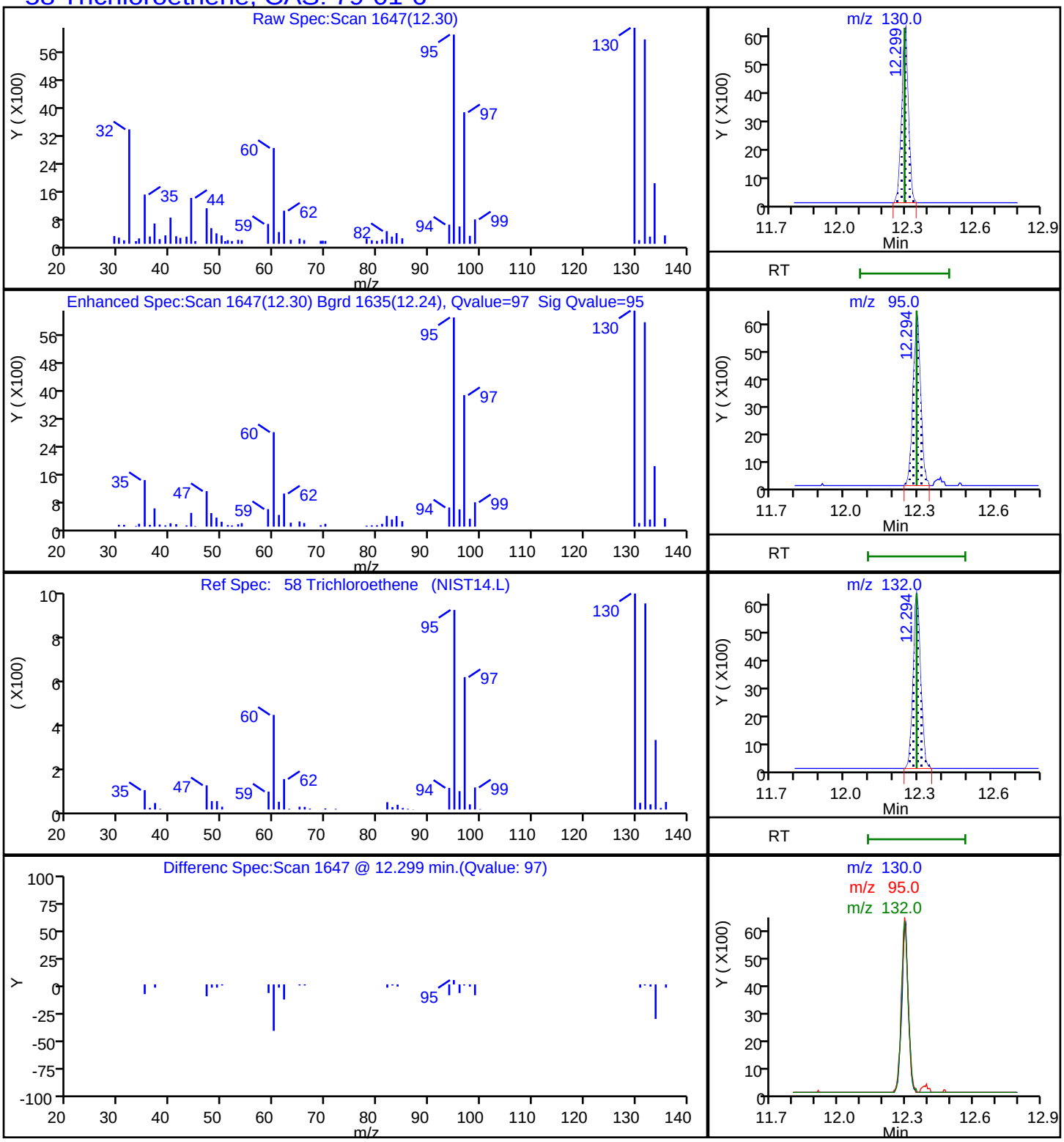
47 1,1,1-Trichloroethane, CAS: 71-55-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P109.D		
Injection Date:	08-Sep-2020 23:55:30	Instrument ID:	MH
Lims ID:	140-20194-A-11	Lab Sample ID:	140-20194-11
Client ID:	SV-076-A-29		
Operator ID:	HMT	ALS Bottle#:	9 Worklist Smp#: 13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

58 Trichloroethene, CAS: 79-01-6

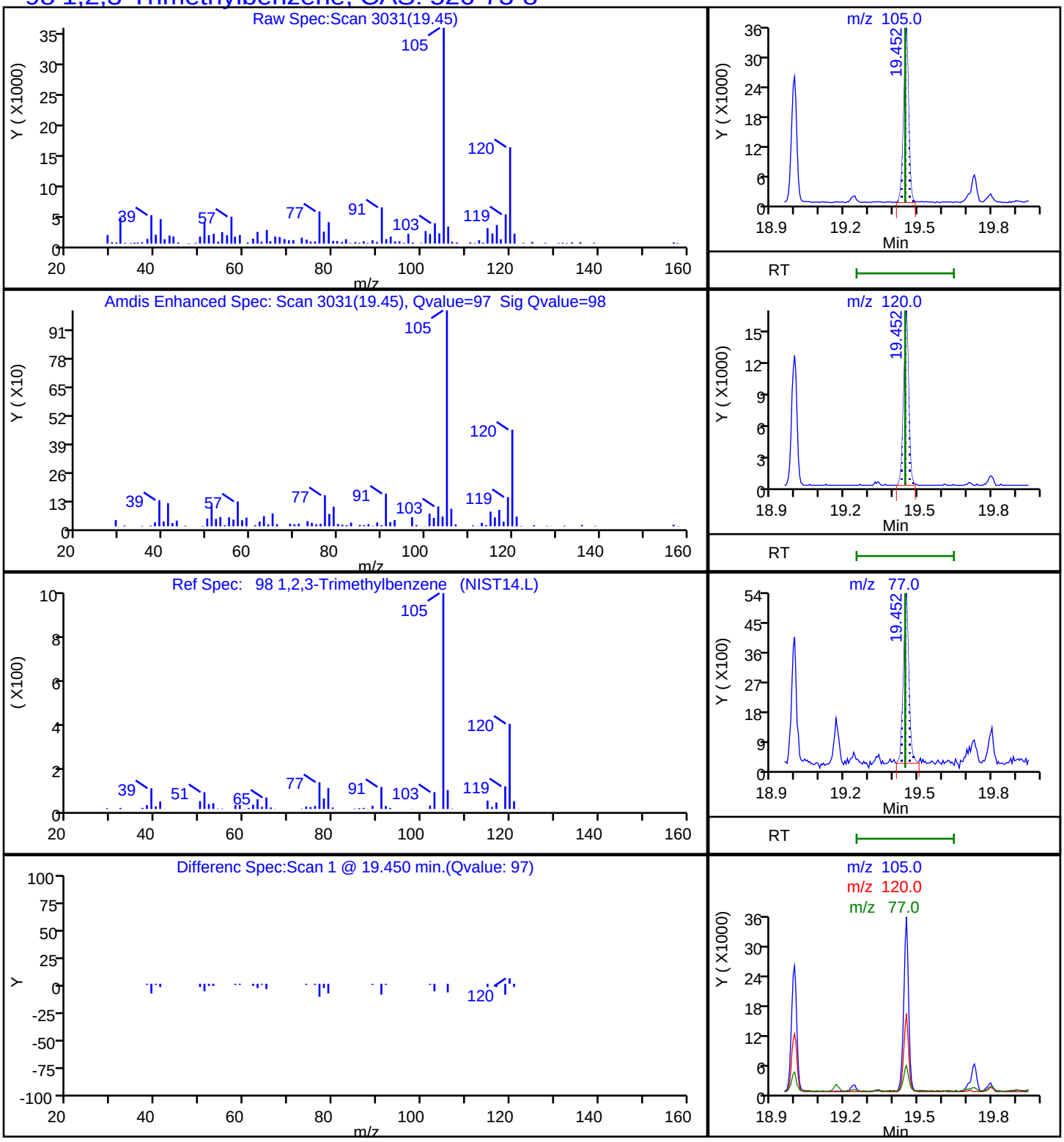


Report Date: 10-Sep-2020 10:28:43 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P109.D		
Injection Date:	08-Sep-2020 23:55:30	Instrument ID:	MH
Lims ID:	140-20194-A-11	Lab Sample ID:	140-20194-11
Client ID:	SV-076-A-29		
Operator ID:	HMT	ALS Bottle#:	9 Worklist Smp#: 13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

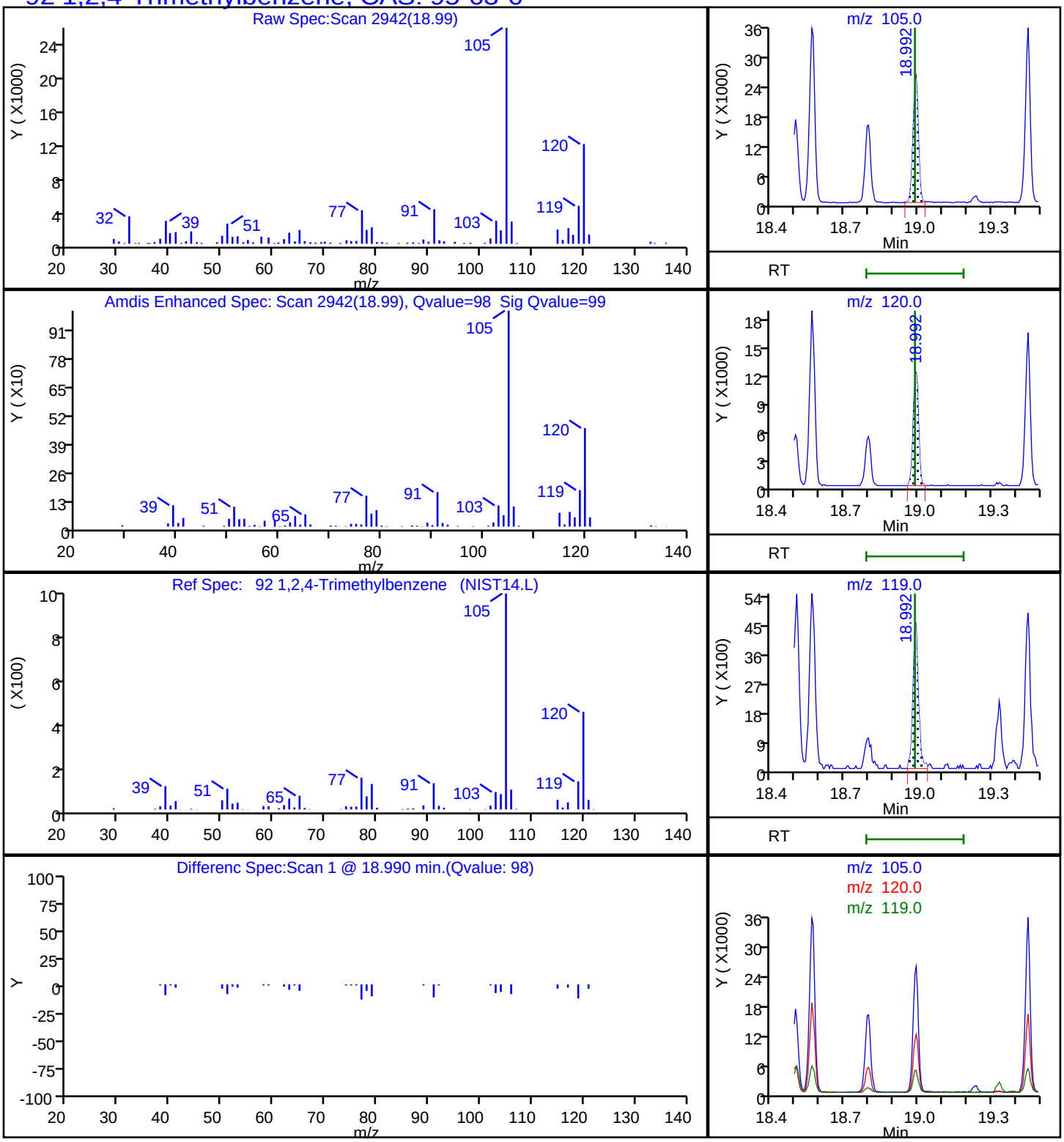
98 1,2,3-Trimethylbenzene, CAS: 526-73-8



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P109.D		
Injection Date:	08-Sep-2020 23:55:30	Instrument ID:	MH
Lims ID:	140-20194-A-11	Lab Sample ID:	140-20194-11
Client ID:	SV-076-A-29		
Operator ID:	HMT	ALS Bottle#:	9 Worklist Smp#: 13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

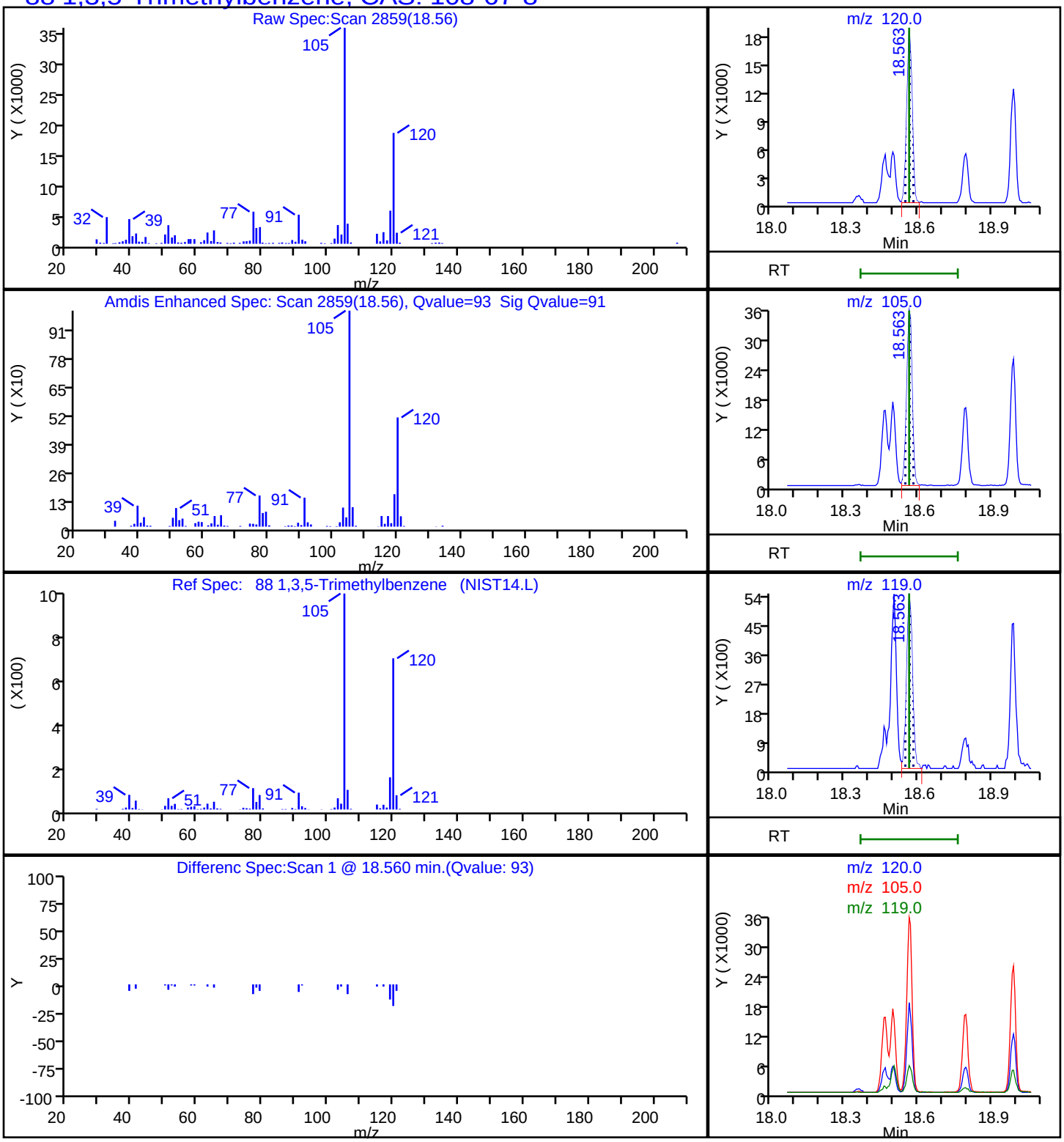
92 1,2,4-Trimethylbenzene, CAS: 95-63-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P109.D		
Injection Date:	08-Sep-2020 23:55:30	Instrument ID:	MH
Lims ID:	140-20194-A-11	Lab Sample ID:	140-20194-11
Client ID:	SV-076-A-29		
Operator ID:	HMT	ALS Bottle#:	9 Worklist Smp#: 13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

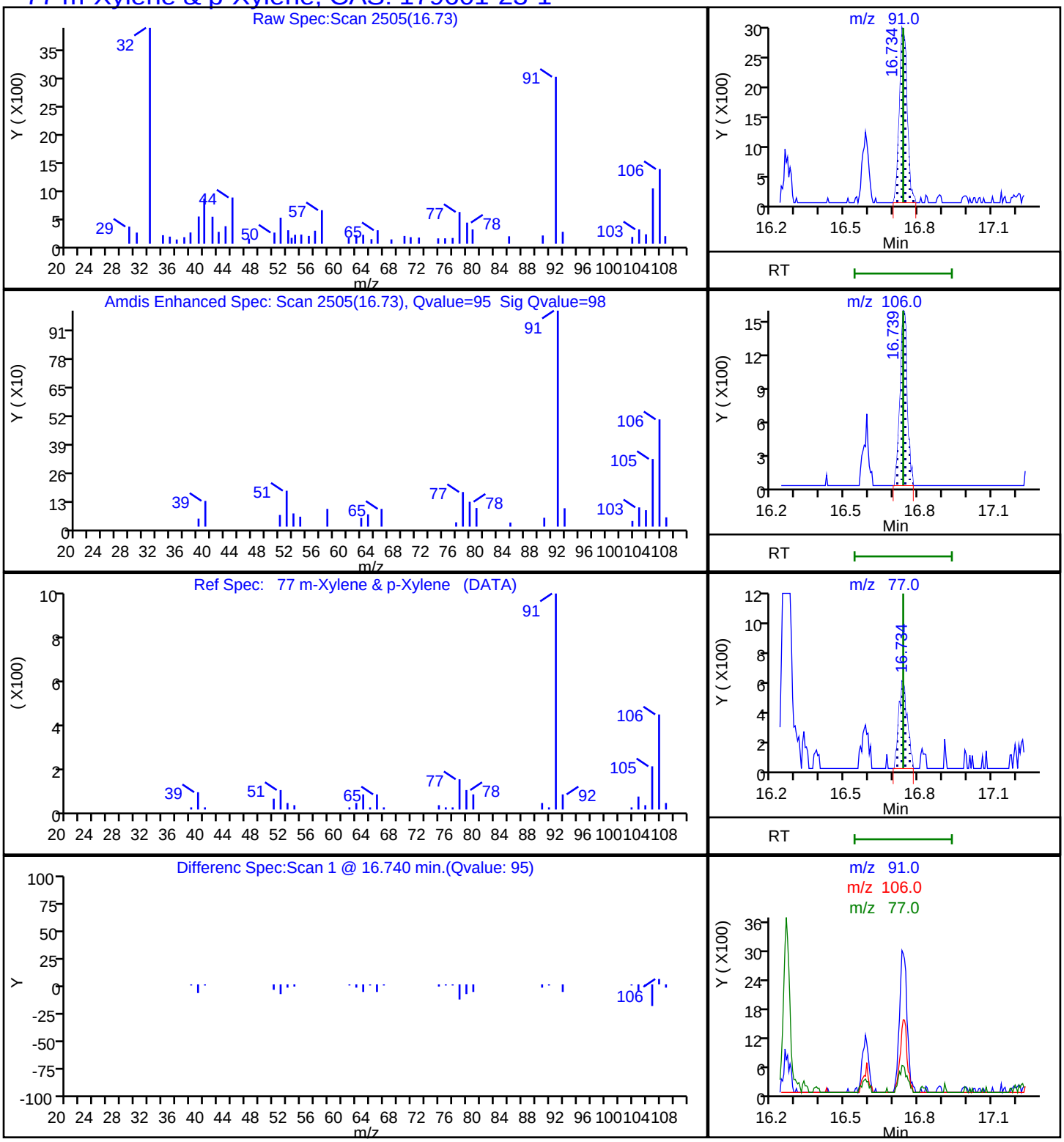
88 1,3,5-Trimethylbenzene, CAS: 108-67-8



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P109.D				
Injection Date:	08-Sep-2020 23:55:30	Instrument ID:	MH		
Lims ID:	140-20194-A-11	Lab Sample ID:	140-20194-11		
Client ID:	SV-076-A-29				
Operator ID:	HMT	ALS Bottle#:	9	Worklist Smp#:	13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

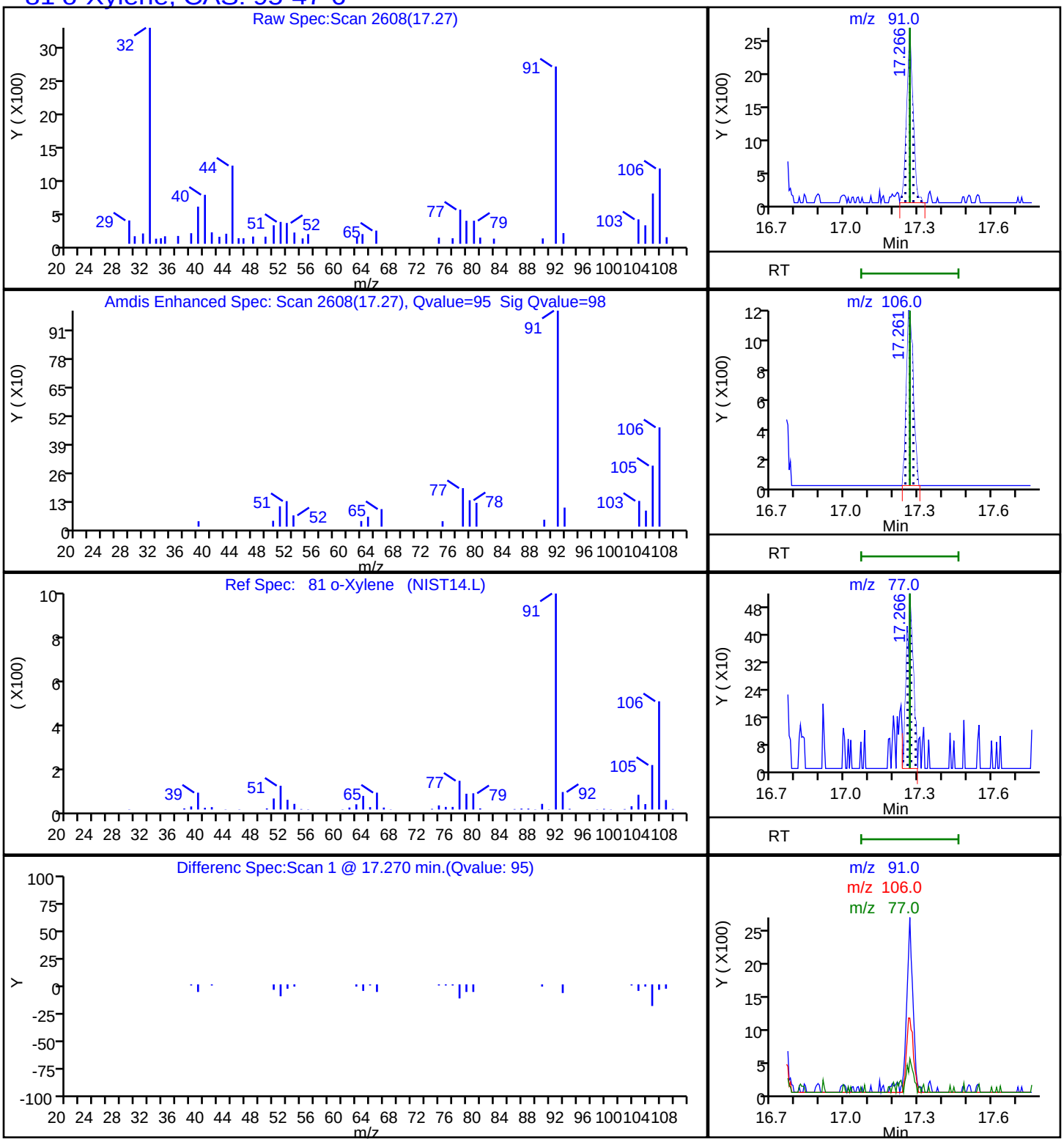
77 m-Xylene & p-Xylene, CAS: 179601-23-1



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P109.D		
Injection Date:	08-Sep-2020 23:55:30	Instrument ID:	MH
Lims ID:	140-20194-A-11	Lab Sample ID:	140-20194-11
Client ID:	SV-076-A-29		
Operator ID:	HMT	ALS Bottle#:	9 Worklist Smp#: 13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

81 o-Xylene, CAS: 95-47-6



Eurofins TestAmerica, Knoxville

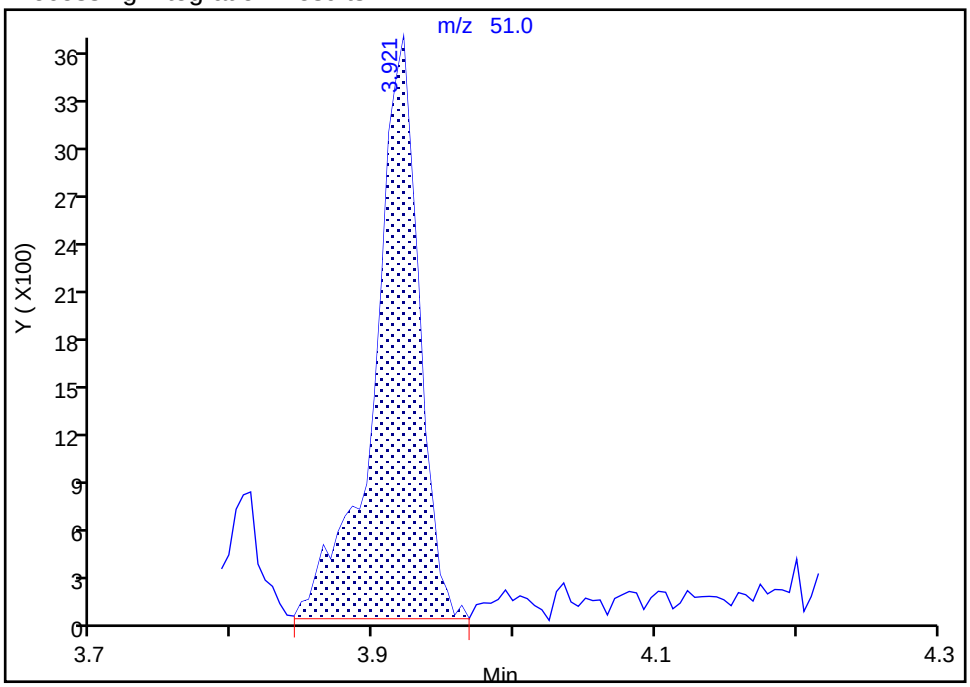
Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P109.D				
Injection Date:	08-Sep-2020 23:55:30	Instrument ID:	MH		
Lims ID:	140-20194-A-11	Lab Sample ID:	140-20194-11		
Client ID:	SV-076-A-29				
Operator ID:	HMT	ALS Bottle#:	9	Worklist Smp#:	13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

6 Chlorodifluoromethane, CAS: 75-45-6

Signal: 1

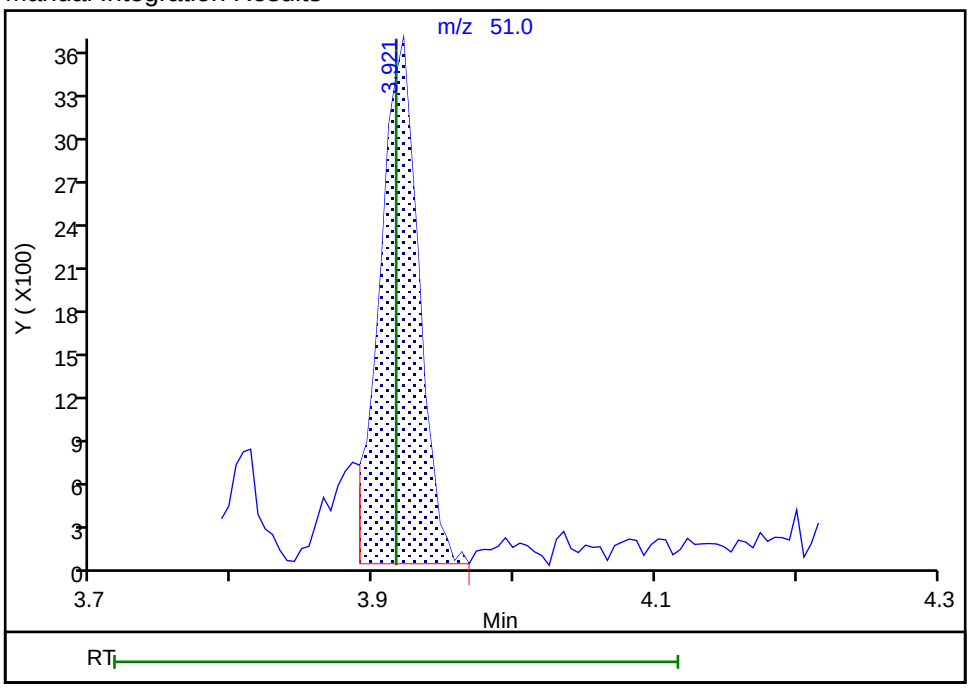
Processing Integration Results

RT: 3.92
Area: 7829
Amount: 0.065078
Amount Units: ppb v/v



Manual Integration Results

RT: 3.92
Area: 6847
Amount: 0.056915
Amount Units: ppb v/v



Reviewer: khachitpongpanits, 10-Sep-2020 10:27:35
Audit Action: Split an Integrated Peak Audit Reason: Split Peak

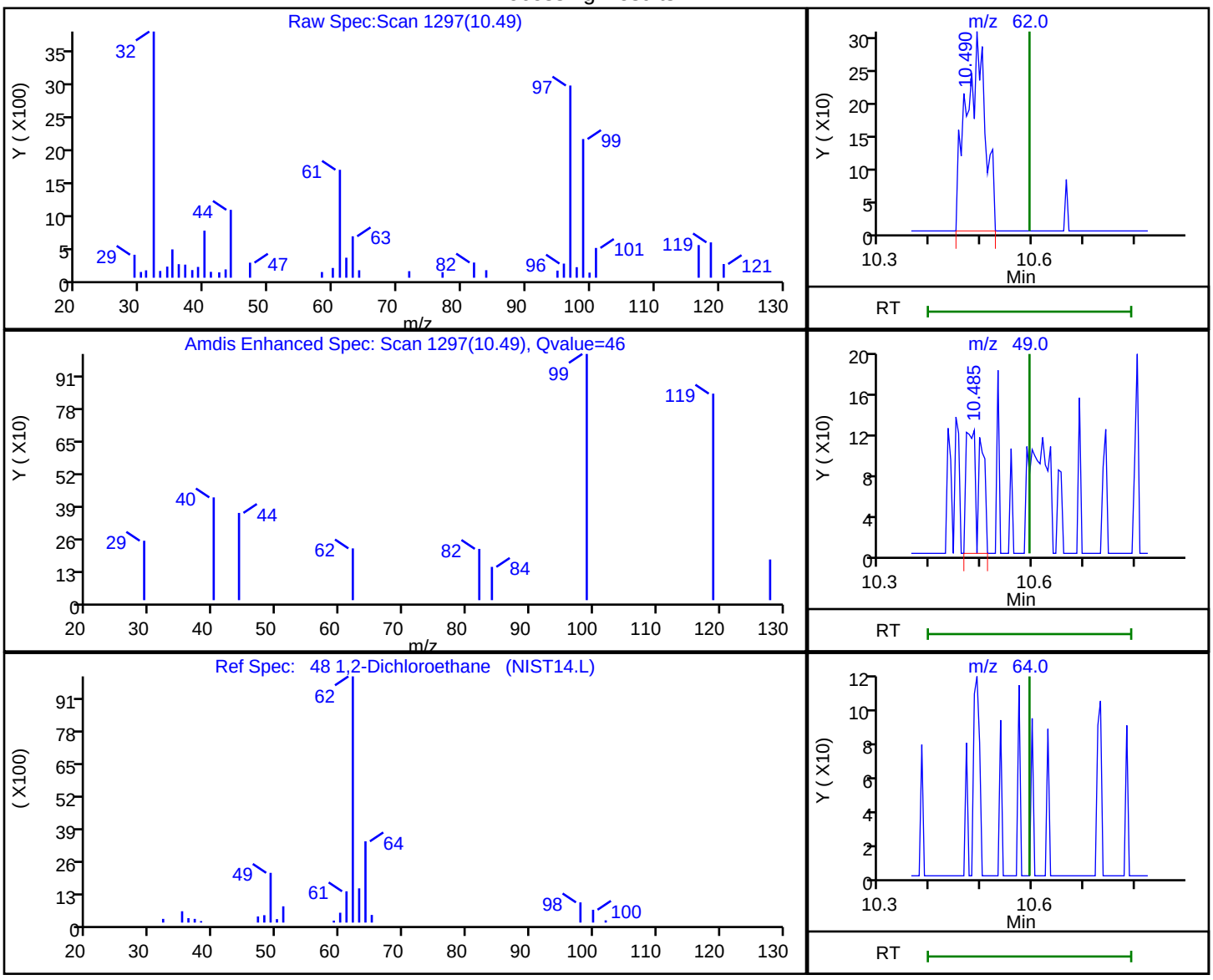
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P109.D				
Injection Date:	08-Sep-2020 23:55:30	Instrument ID:	MH		
Lims ID:	140-20194-A-11	Lab Sample ID:	140-20194-11		
Client ID:	SV-076-A-29				
Operator ID:	HMT	ALS Bottle#:	9	Worklist Smp#:	13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

48 1,2-Dichloroethane, CAS: 107-06-2

Processing Results



RT	Mass	Response	Amount
10.49	62.00	793	0.010161
10.48	49.00	241	
10.59	64.00	0	

Reviewer: khachitpongpanits, 10-Sep-2020 10:28:28

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: SV-168-A-29 Lab Sample ID: 140-20194-12

Matrix: Air Lab File ID: HI08P110R.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 10:20

Sample wt/vol: 100(mL) Date Analyzed: 09/09/2020 08:03

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42504 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.055	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.098	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	0.48		0.40	0.11
67-66-3	Chloroform	119.38	0.58		0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	0.072	J	0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.51		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	0.18	J	0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	7.2		0.40	0.040
100-41-4	Ethylbenzene	106.17	ND		0.40	0.065
75-09-2	Methylene Chloride	84.93	5.7		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	0.047	J	0.40	0.035
108-88-3	Toluene	92.14	ND		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND	*	0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	1.8		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	6.4		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	ND		0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	88		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: SV-168-A-29 Lab Sample ID: 140-20194-12

Matrix: Air Lab File ID: HI08P110R.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 10:20

Sample wt/vol: 100(mL) Date Analyzed: 09/09/2020 08:03

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42504 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.18	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.62	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	1.7		1.4	0.39
67-66-3	Chloroform	119.38	2.8		2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	0.29	J	1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.5		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	0.73	J	1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	28		1.6	0.16
100-41-4	Ethylbenzene	106.17	ND		1.7	0.28
75-09-2	Methylene Chloride	84.93	20		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	0.32	J	2.7	0.24
108-88-3	Toluene	92.14	ND		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND	*	3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	9.7		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	34		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	ND		3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	88		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P110R.D
Lims ID: 140-20194-A-12
Client ID: SV-168-A-29
Sample Type: Client
Inject. Date: 09-Sep-2020 08:03:30 ALS Bottle#: 17 Worklist Smp#: 24
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016520-024
Misc. Info.: 140-20194-a-12
Operator ID: HMT Instrument ID: MH

Method: \\chromfs\Knoxville\ChromData\MH\20200904-16520.b\MH_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 10-Sep-2020 10:37:31 Calib Date: 29-Aug-2020 23:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1028

First Level Reviewer: khachitpongpanits Date: 10-Sep-2020 10:37:55

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.431	9.431	0.000	95	233954	4.80	
* 2 1,4-Difluorobenzene	114	11.591	11.591	0.000	95	936484	4.80	
* 3 Chlorobenzene-d5 (IS)	117	16.258	16.258	0.000	87	573740	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.876	17.876	0.000	93	271278	4.07	
6 Chlorodifluoromethane	51	3.916	3.921	0.000	96	12529	0.0960	
8 Dichlorodifluoromethane	85	3.988	3.988	0.000	99	17870	0.1010	
27 1,1-Dichloroethene	96	6.392	6.392	0.000	96	81116	1.43	
31 Methylene Chloride	84	6.764	6.764	0.000	96	65450	1.14	
37 1,1-Dichloroethane	63	8.077	8.065	0.016	87	4215	0.0358	
42 cis-1,2-Dichloroethene	96	9.074	9.094	-0.015	93	869	0.0145	
44 Chloroform	83	9.436	9.436	0.000	45	16350	0.1151	
47 1,1,1-Trichloroethane	97	10.490	10.490	0.000	97	46022	0.3573	
51 Benzene	78	11.079	11.069	0.010	83	1899	0.0110	
52 Carbon tetrachloride	117	11.095	11.095	0.000	86	2094	0.0197	
58 Trichloroethene	130	12.299	12.294	0.005	96	98432	1.27	
73 Tetrachloroethene	129	15.436	15.441	0.000	87	582	0.009393	

Reagents:

40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

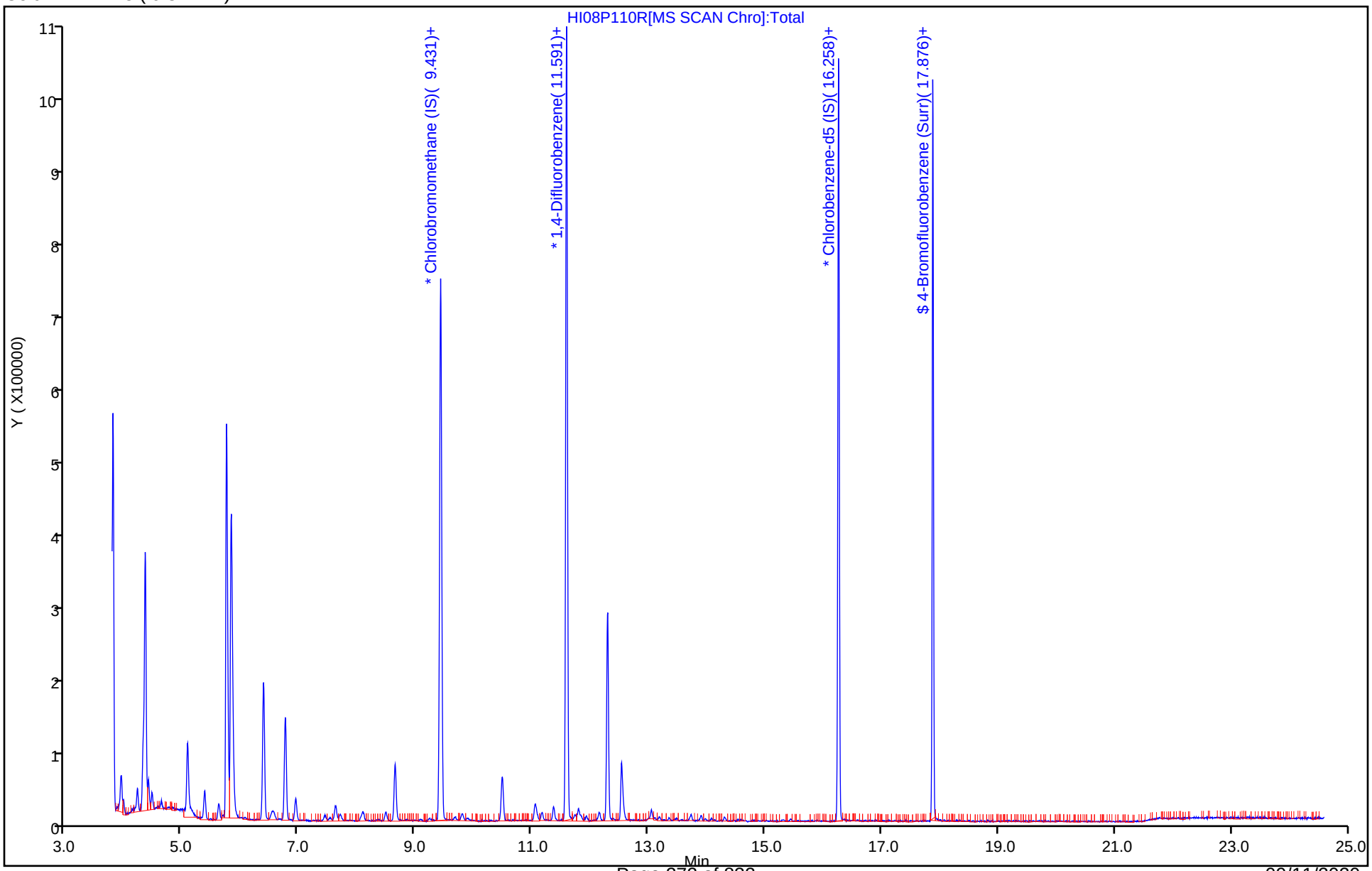
Report Date: 10-Sep-2020 10:37:55 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P110R.D

Injection Date:	09-Sep-2020 08:03:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	140-20194-A-12	Lab Sample ID:	140-20194-12	Worklist Smp#:	24
Client ID:	SV-168-A-29				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P110R.D				
Lims ID:	140-20194-A-12				
Client ID:	SV-168-A-29				
Sample Type:	Client				
Inject. Date:	09-Sep-2020 08:03:30	ALS Bottle#:	17	Worklist Smp#:	24
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016520-024				
Misc. Info.:	140-20194-a-12				
Operator ID:	HMT	Instrument ID:	MH		
Method:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\MH_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	10-Sep-2020 10:37:31	Calib Date:	29-Aug-2020 23:57:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1028				

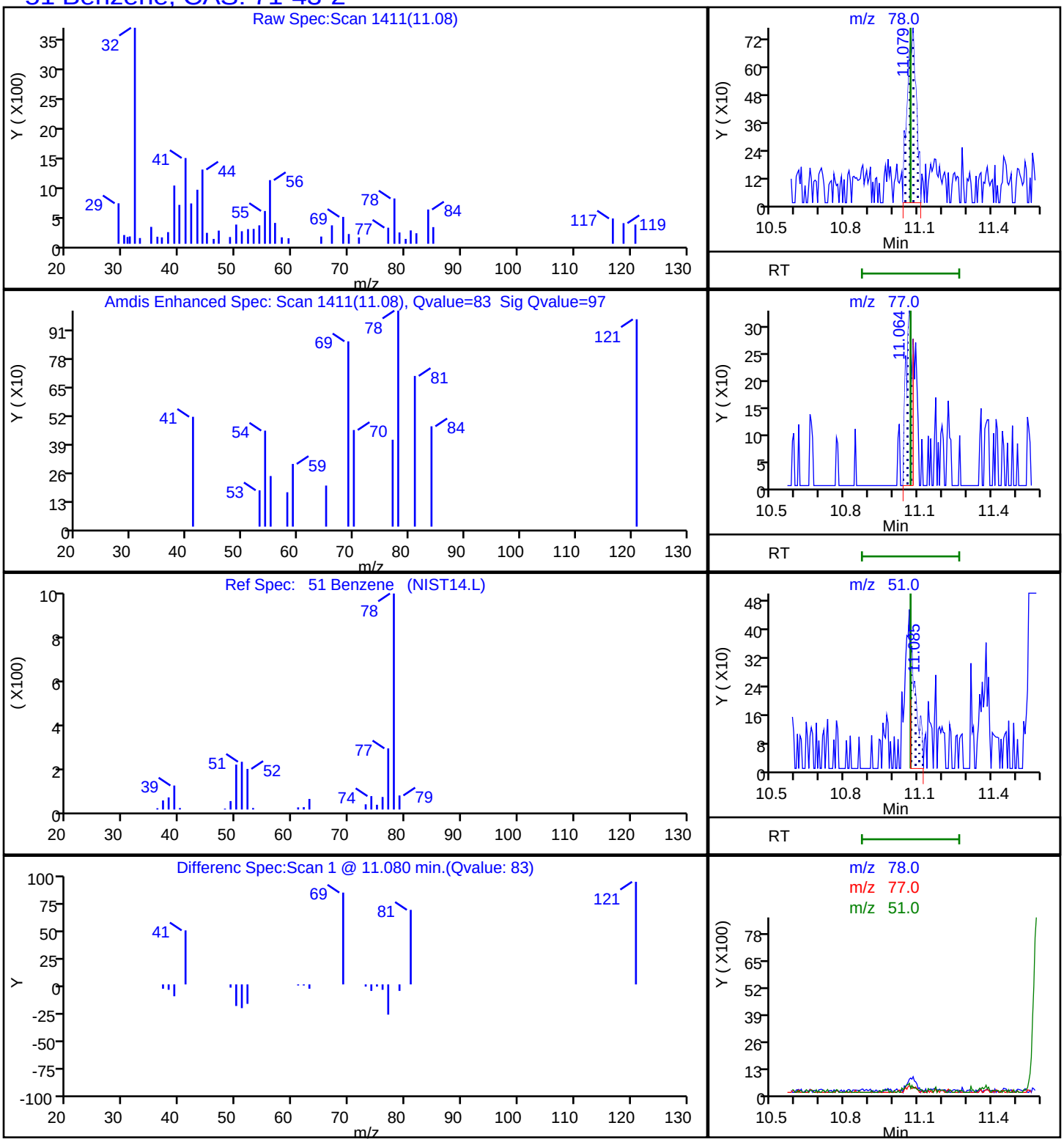
First Level Reviewer: khachitpongpanits Date: 10-Sep-2020 10:37:55

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	4.07	87.70

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P110R.D		
Injection Date:	09-Sep-2020 08:03:30	Instrument ID:	MH
Lims ID:	140-20194-A-12	Lab Sample ID:	140-20194-12
Client ID:	SV-168-A-29		
Operator ID:	HMT	ALS Bottle#:	17 Worklist Smp#: 24
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

51 Benzene, CAS: 71-43-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P110R.D				
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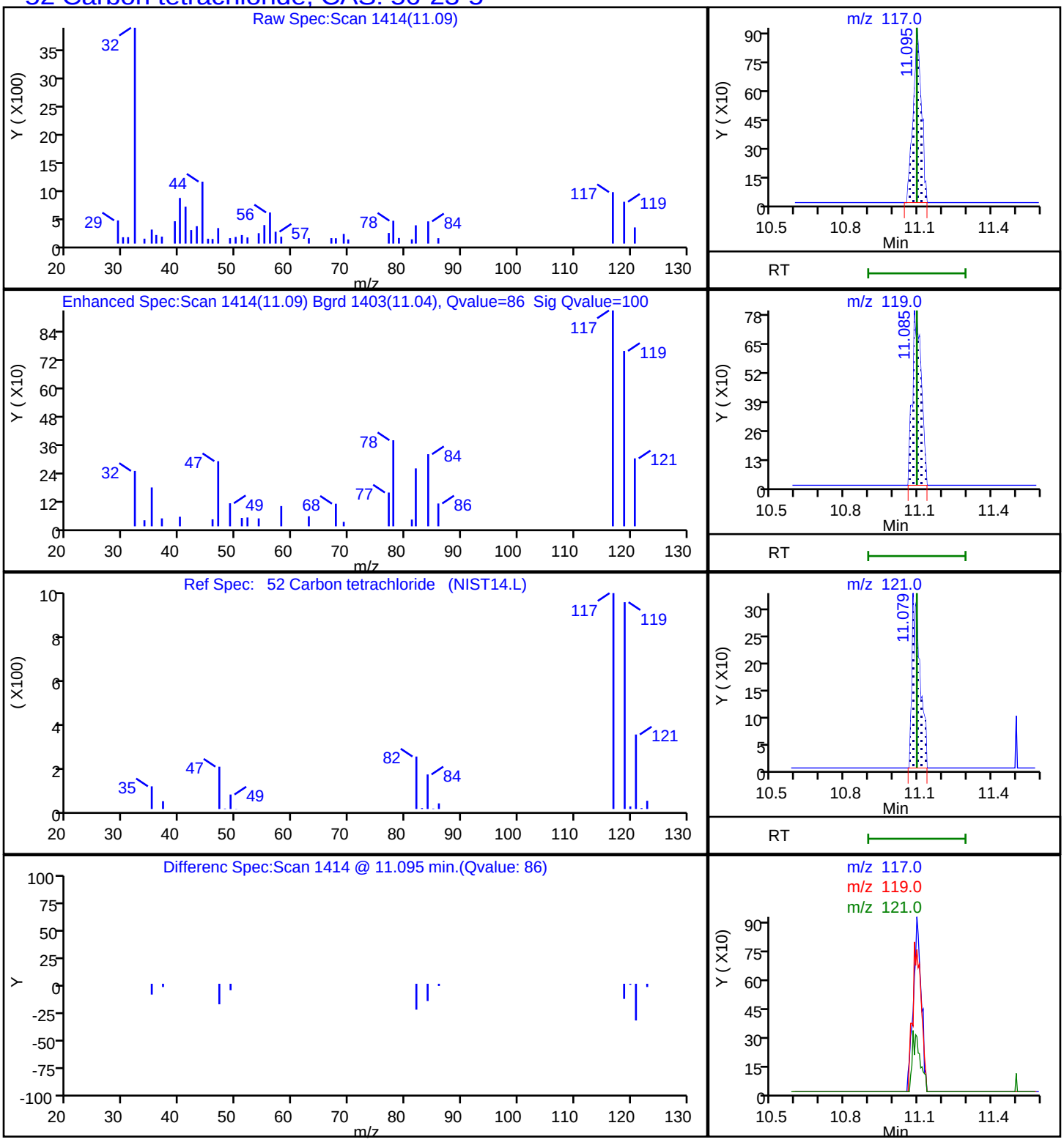
Lims ID:	140-20194-A-12	Lab Sample ID:	140-20194-12		
Client ID:	SV-168-A-29				
Operator ID:	HMT	ALS Bottle#:	17	Worklist Smp#:	24
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

52 Carbon tetrachloride, CAS: 56-23-5



Report Date: 10-Sep-2020 10:37:55 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

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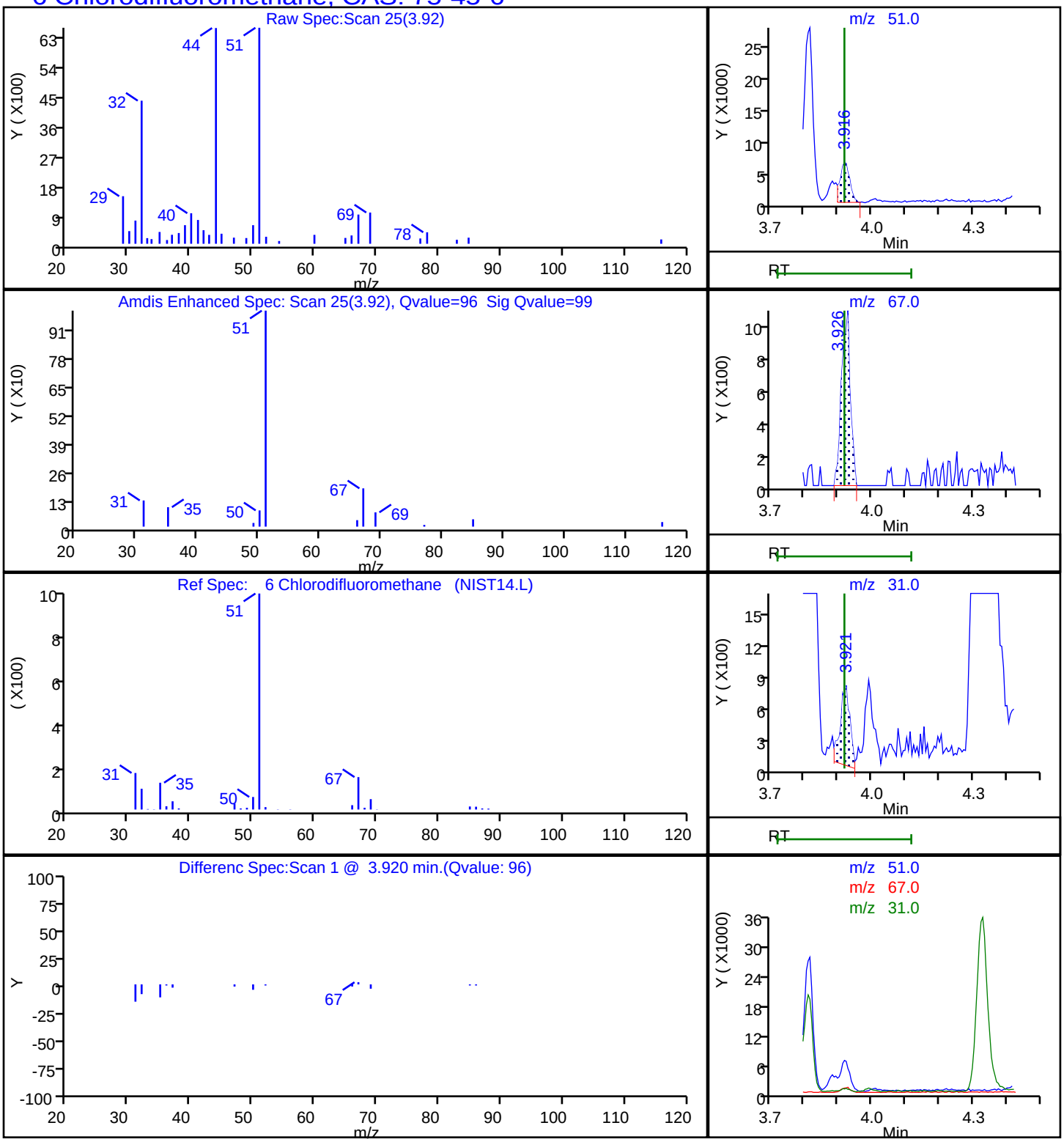
Lims ID:	140-20194-A-12	Lab Sample ID:	140-20194-12		
Client ID:	SV-168-A-29				
Operator ID:	HMT	ALS Bottle#:	17	Worklist Smp#:	24
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

6 Chlorodifluoromethane, CAS: 75-45-6



Eurofins TestAmerica, Knoxville

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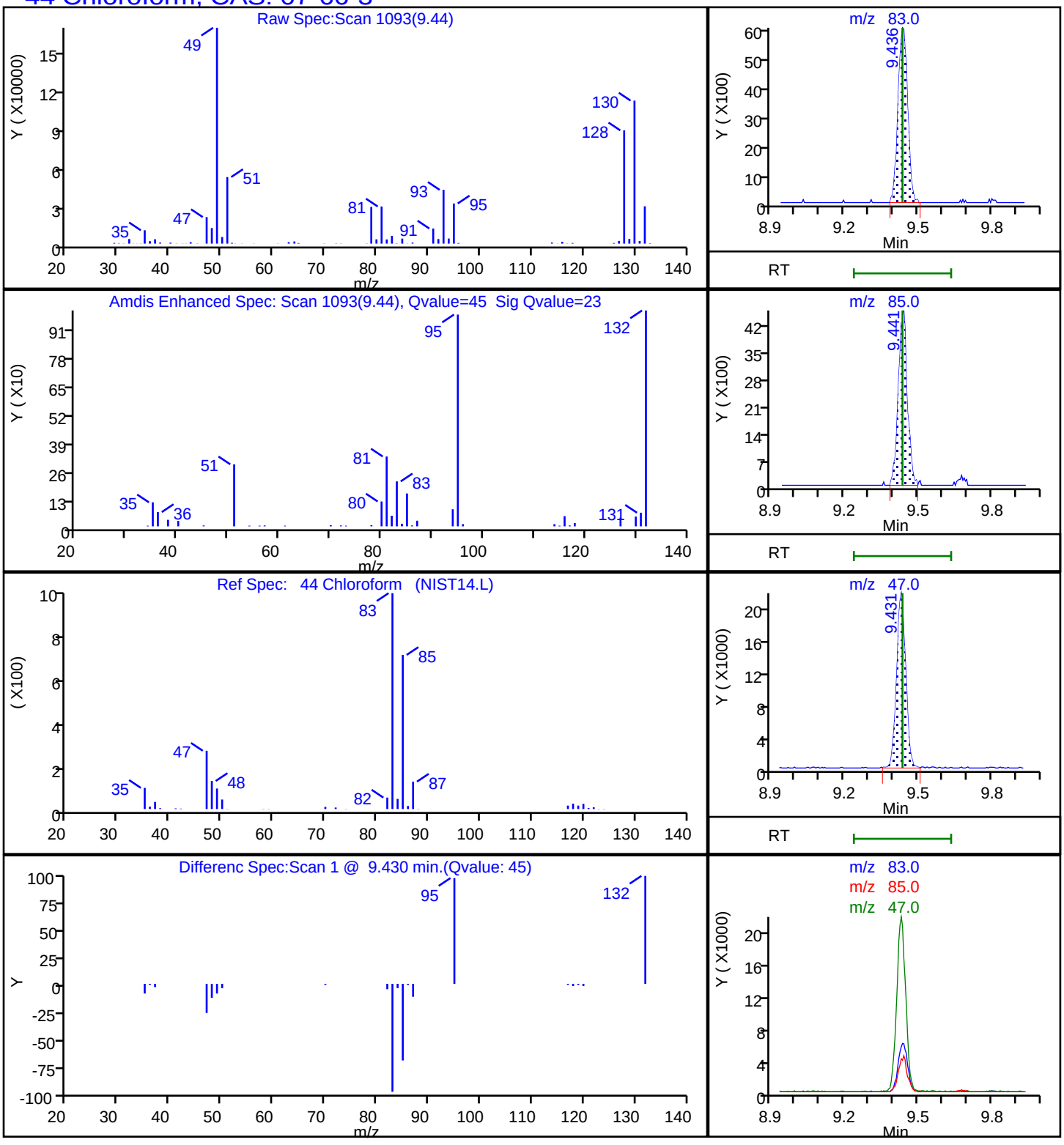
Lims ID:	140-20194-A-12	Lab Sample ID:	140-20194-12
Client ID:	SV-168-A-29		
Operator ID:	HMT	ALS Bottle#:	17 Worklist Smp#: 24
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

44 Chloroform, CAS: 67-66-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P110R.D				
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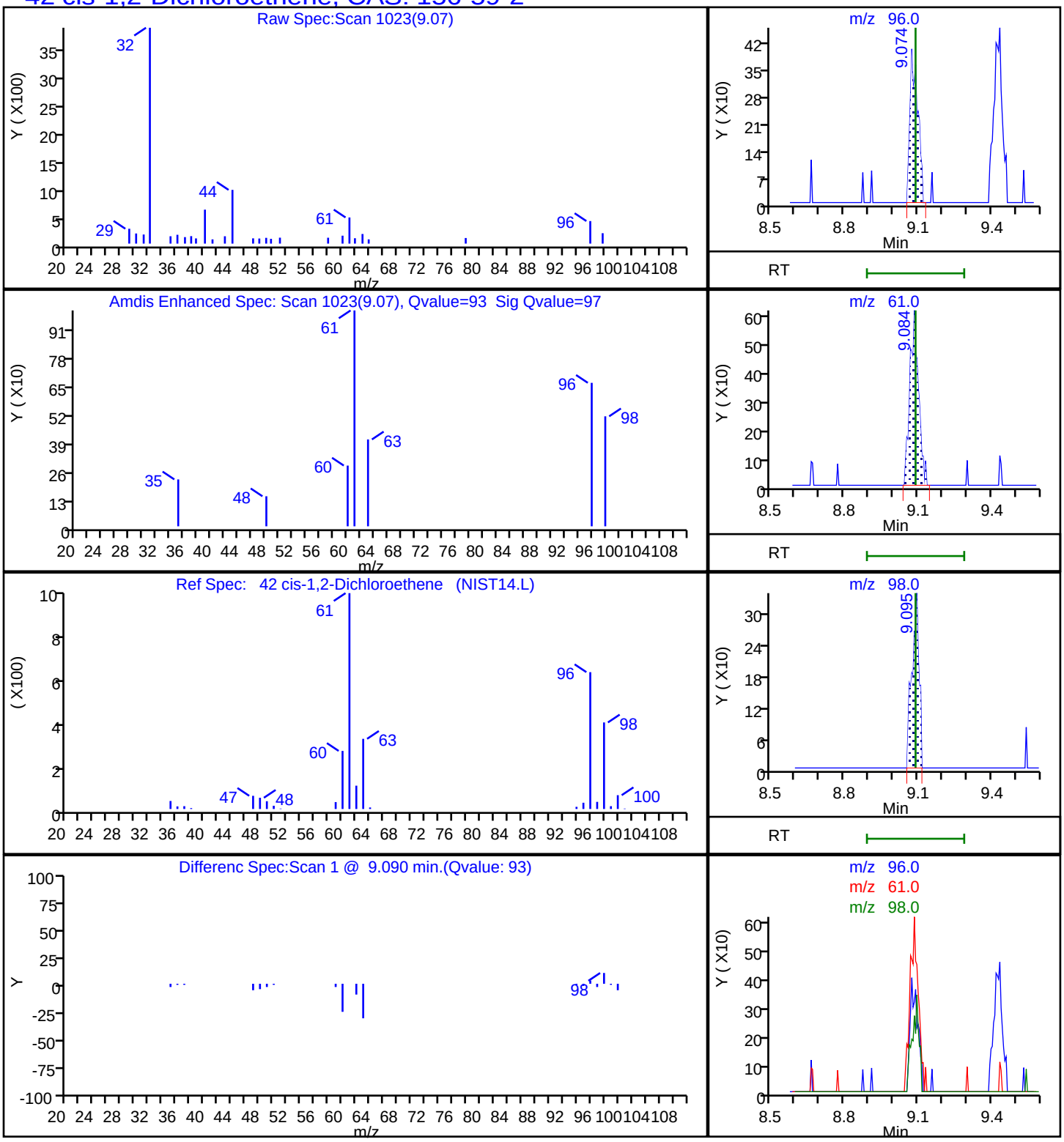
Lims ID:	140-20194-A-12	Lab Sample ID:	140-20194-12		
Client ID:	SV-168-A-29				
Operator ID:	HMT	ALS Bottle#:	17	Worklist Smp#:	24
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

42 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins TestAmerica, Knoxville

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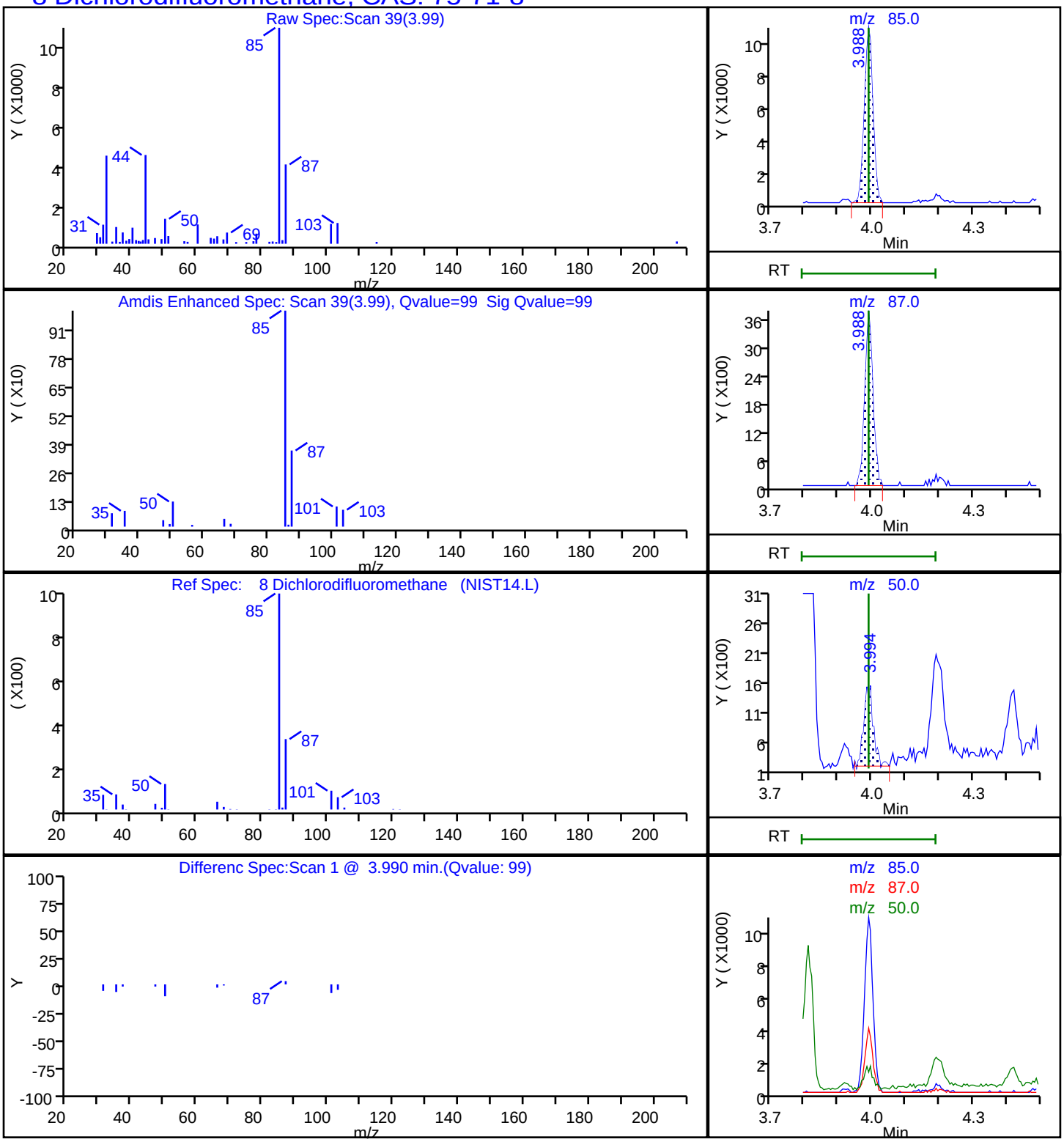
Lims ID:	140-20194-A-12	Lab Sample ID:	140-20194-12		
Client ID:	SV-168-A-29				
Operator ID:	HMT	ALS Bottle#:	17	Worklist Smp#:	24
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

8 Dichlorodifluoromethane, CAS: 75-71-8



Eurofins TestAmerica, Knoxville

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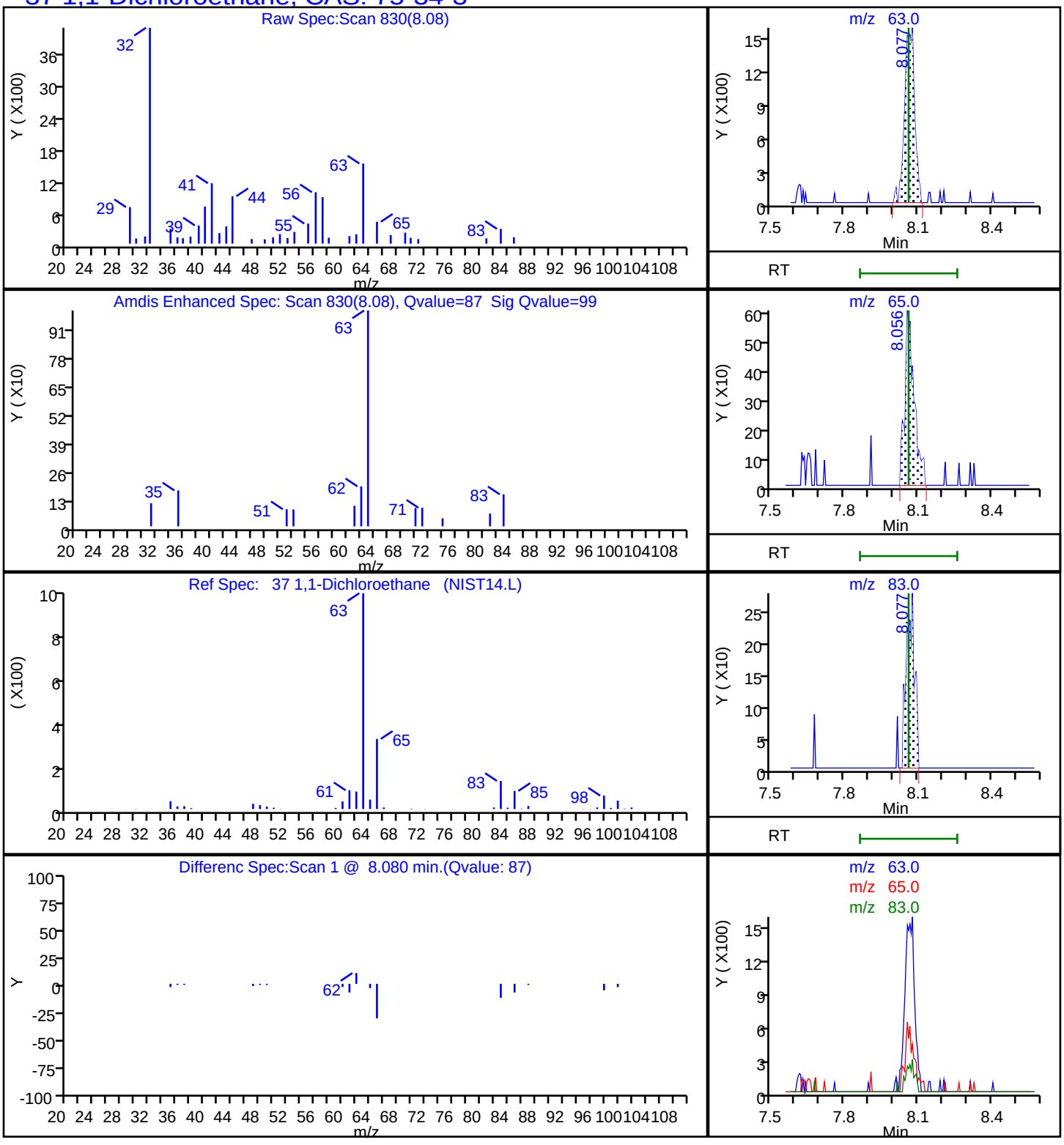
Lims ID:	140-20194-A-12	Lab Sample ID:	140-20194-12		
Client ID:	SV-168-A-29				
Operator ID:	HMT	ALS Bottle#:	17	Worklist Smp#:	24
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

37 1,1-Dichloroethane, CAS: 75-34-3



Eurofins TestAmerica, Knoxville

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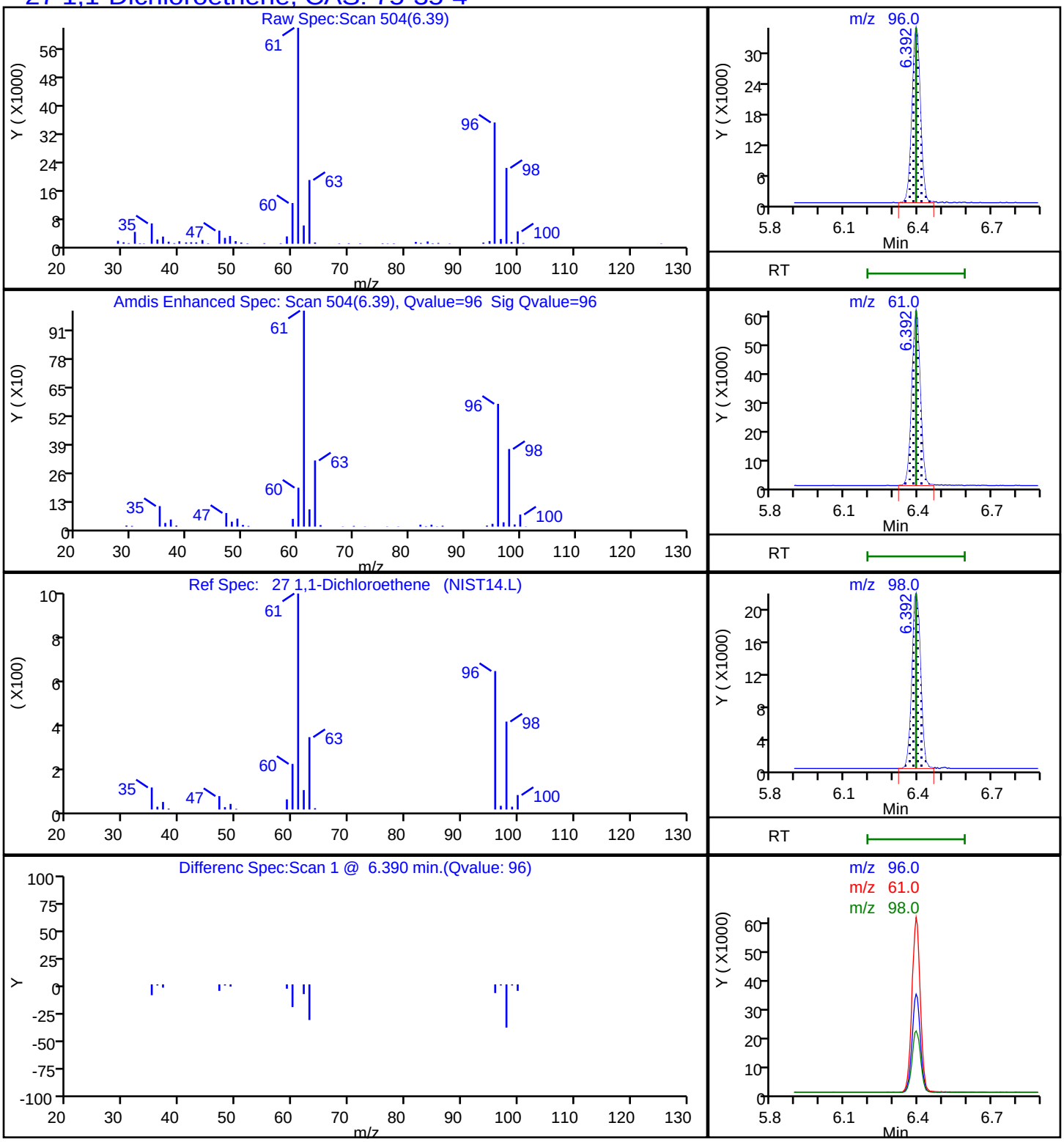
Injection Date:	09-Sep-2020 08:03:30	Instrument ID:	MH		
Lims ID:	140-20194-A-12	Lab Sample ID:	140-20194-12		
Client ID:	SV-168-A-29				
Operator ID:	HMT	ALS Bottle#:	17	Worklist Smp#:	24
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

27 1,1-Dichloroethene, CAS: 75-35-4



Eurofins TestAmerica, Knoxville

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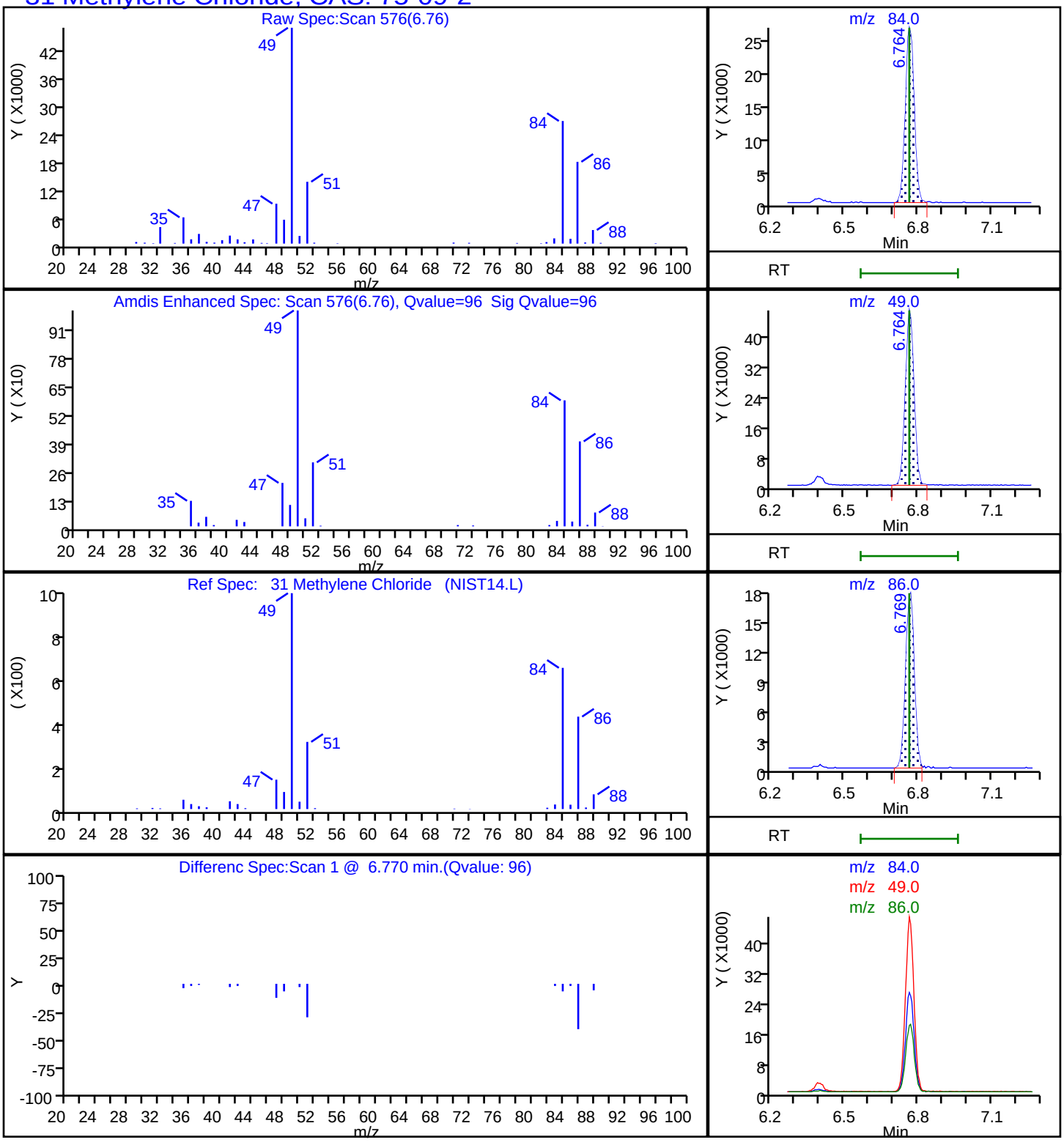
Lims ID:	140-20194-A-12	Lab Sample ID:	140-20194-12
Client ID:	SV-168-A-29		
Operator ID:	HMT	ALS Bottle#:	17 Worklist Smp#: 24
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

31 Methylene Chloride, CAS: 75-09-2



Eurofins TestAmerica, Knoxville

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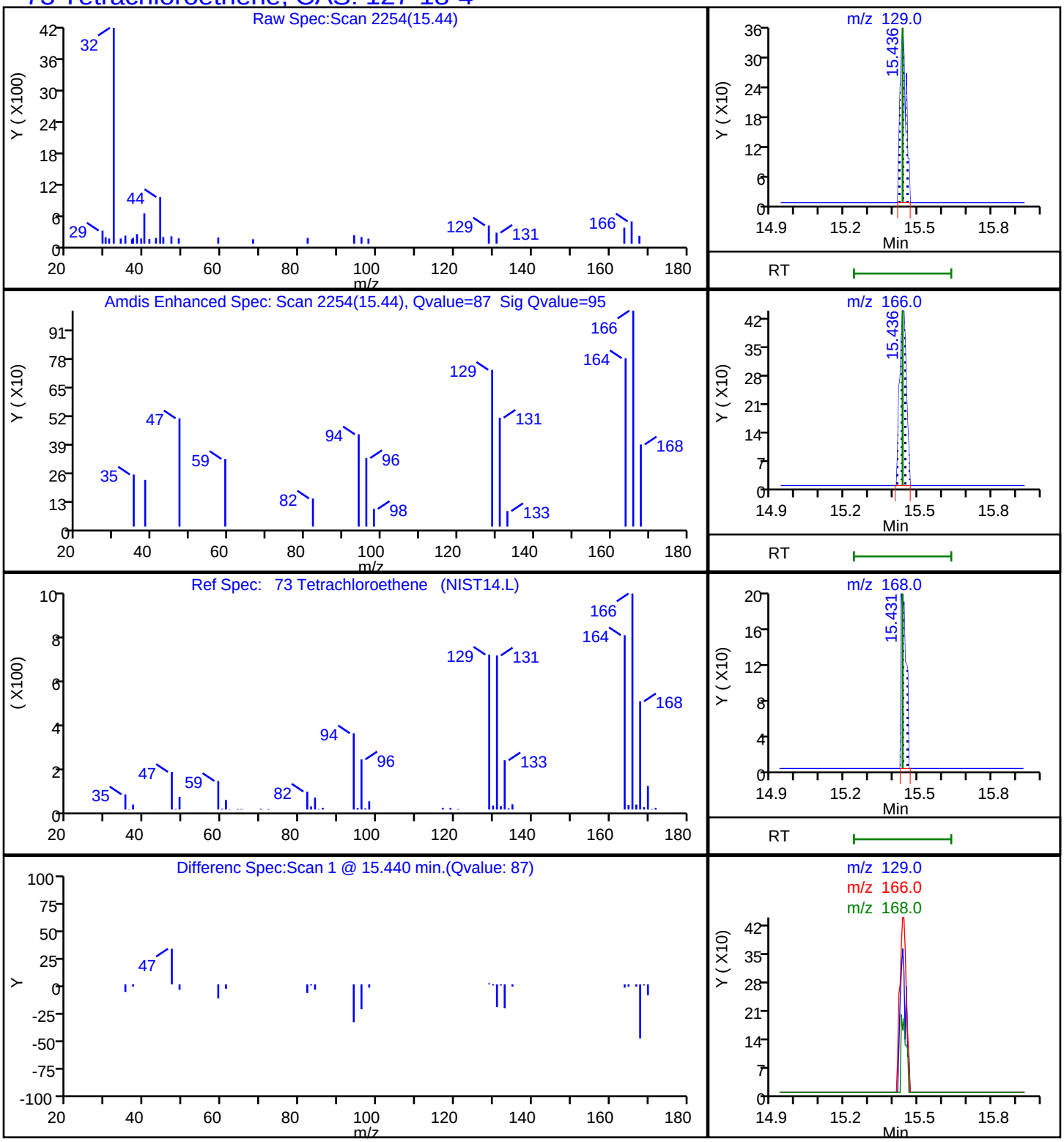
Lims ID:	140-20194-A-12	Lab Sample ID:	140-20194-12
Client ID:	SV-168-A-29		
Operator ID:	HMT	ALS Bottle#:	17 Worklist Smp#: 24
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

73 Tetrachloroethene, CAS: 127-18-4

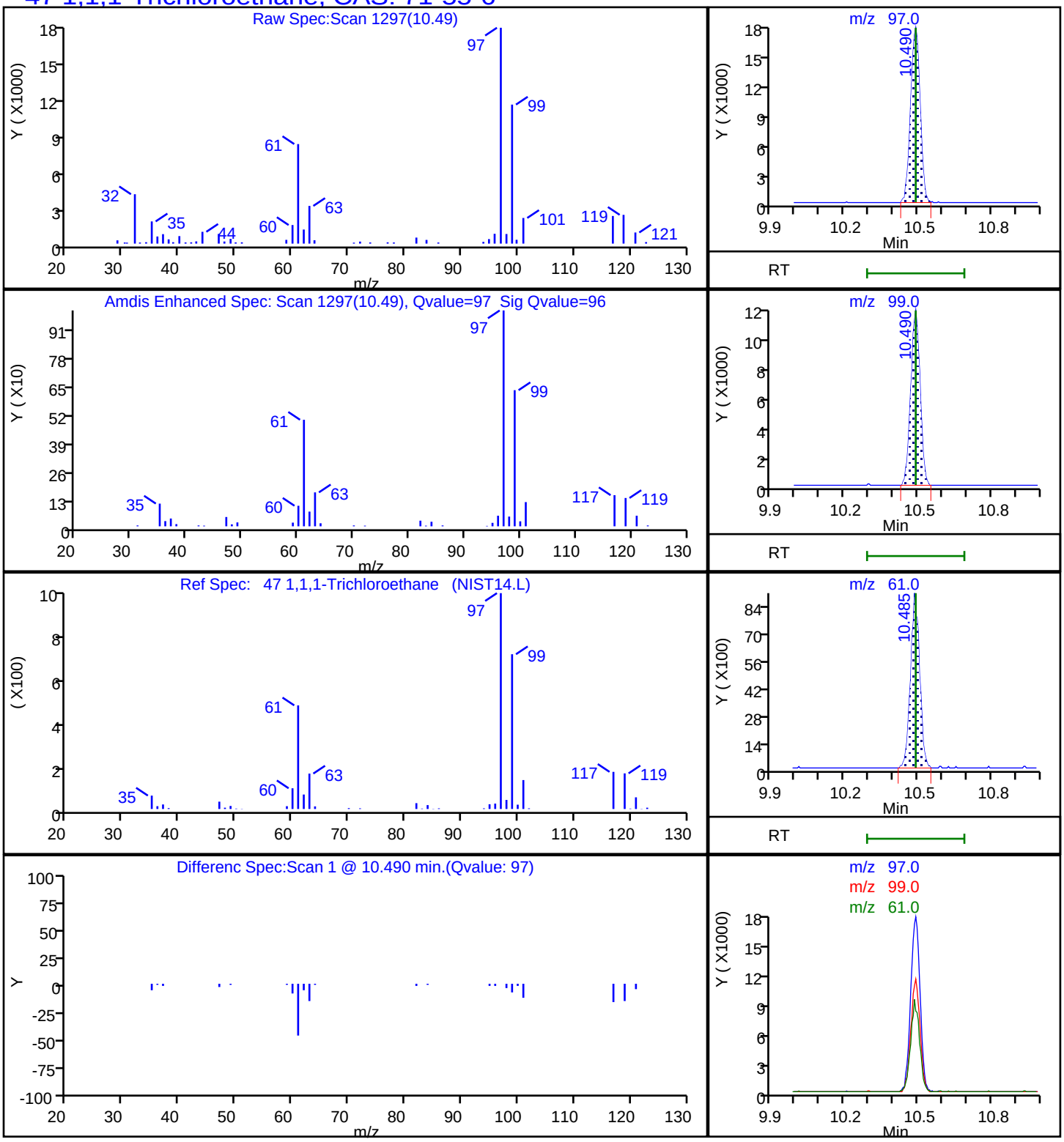


Report Date: 10-Sep-2020 10:37:55 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P110R.D				
Injection Date:	09-Sep-2020 08:03:30	Instrument ID:	MH		
Lims ID:	140-20194-A-12	Lab Sample ID:	140-20194-12		
Client ID:	SV-168-A-29				
Operator ID:	HMT	ALS Bottle#:	17	Worklist Smp#:	24
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

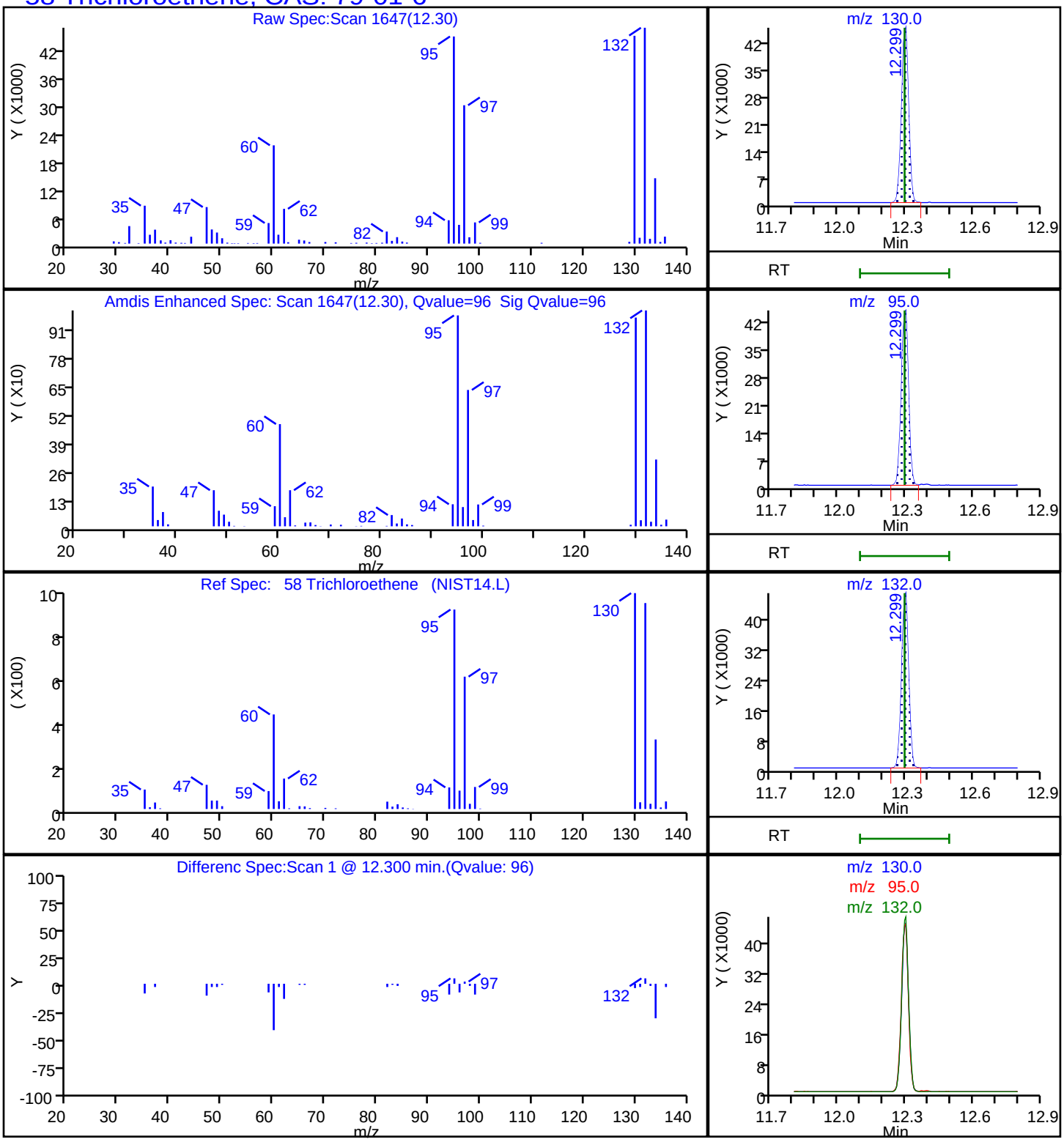
47 1,1,1-Trichloroethane, CAS: 71-55-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P110R.D		
Injection Date:	09-Sep-2020 08:03:30	Instrument ID:	MH
Lims ID:	140-20194-A-12	Lab Sample ID:	140-20194-12
Client ID:	SV-168-A-29		
Operator ID:	HMT	ALS Bottle#:	17 Worklist Smp#: 24
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

58 Trichloroethene, CAS: 79-01-6



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: SV-DUP 4-A-29 Lab Sample ID: 140-20194-13

Matrix: Air Lab File ID: HI08P111.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 00:00

Sample wt/vol: 100(mL) Date Analyzed: 09/09/2020 01:42

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42504 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.17	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.12	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	0.50		0.40	0.11
67-66-3	Chloroform	119.38	0.66		0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	0.11	J	0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.50		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	0.19	J	0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	8.7		0.40	0.040
100-41-4	Ethylbenzene	106.17	ND		0.40	0.065
75-09-2	Methylene Chloride	84.93	5.3		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	0.072	J	0.40	0.035
108-88-3	Toluene	92.14	0.48	J	0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	0.053	J	0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND	*	0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	1.9		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	34		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	0.15	J	0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	0.28	J	0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.28	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	91		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: SV-DUP 4-A-29 Lab Sample ID: 140-20194-13

Matrix: Air Lab File ID: HI08P111.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 00:00

Sample wt/vol: 100(mL) Date Analyzed: 09/09/2020 01:42

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42504 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.55	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.74	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	1.8		1.4	0.39
67-66-3	Chloroform	119.38	3.2		2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	0.42	J	1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.5		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	0.77	J	1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	35		1.6	0.16
100-41-4	Ethylbenzene	106.17	ND		1.7	0.28
75-09-2	Methylene Chloride	84.93	19		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	0.49	J	2.7	0.24
108-88-3	Toluene	92.14	1.8	J	2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	0.21	J	1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND	*	3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	11		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	180		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	0.71	J	2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	1.4	J	2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	1.2	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	91		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P111.D
Lims ID: 140-20194-A-13
Client ID: SV-DUP 4-A-29
Sample Type: Client
Inject. Date: 09-Sep-2020 01:42:30 ALS Bottle#: 11 Worklist Smp#: 15
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016520-015
Misc. Info.: 140-20194-a-13
Operator ID: HMT Instrument ID: MH

Method: \\chromfs\Knoxville\ChromData\MH\20200904-16520.b\MH_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 10-Sep-2020 10:27:39 Calib Date: 29-Aug-2020 23:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1028

First Level Reviewer: khachitpongpanits Date: 10-Sep-2020 10:28:05

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.431	9.431	0.000	96	228740	4.80	
* 2 1,4-Difluorobenzene	114	11.591	11.591	0.000	95	837467	4.80	
* 3 Chlorobenzene-d5 (IS)	117	16.258	16.258	0.000	87	632871	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.876	17.876	0.000	96	310529	4.22	
6 Chlorodifluoromethane	51	3.911	3.921	-0.005	97	12744	0.0998	
8 Dichlorodifluoromethane	85	3.983	3.988	-0.005	99	17325	0.1002	
27 1,1-Dichloroethene	96	6.387	6.392	-0.006	97	96501	1.74	
31 Methylene Chloride	84	6.764	6.764	0.000	97	59892	1.07	
34 trans-1,2-Dichloroethene	96	7.622	7.617	0.006	26	615	0.0106	
37 1,1-Dichloroethane	63	8.066	8.061	0.005	99	4349	0.0378	
42 cis-1,2-Dichloroethene	96	9.105	9.090	0.016	26	1235	0.0211	
44 Chloroform	83	9.431	9.436	-0.005	68	18414	0.1326	
47 1,1,1-Trichloroethane	97	10.485	10.490	-0.005	97	48835	0.3878	
51 Benzene	78	11.069	11.069	0.000	96	5326	0.0346	
52 Carbon tetrachloride	117	11.100	11.095	0.005	90	2230	0.0234	
58 Trichloroethene	130	12.294	12.294	0.000	96	467273	6.76	
67 Toluene	91	14.315	14.310	0.005	92	15601	0.0957	
73 Tetrachloroethene	129	15.431	15.441	-0.005	88	987	0.0144	
77 m-Xylene & p-Xylene	91	16.734	16.739	-0.005	95	5208	0.0334	
81 o-Xylene	91	17.266	17.266	0.000	95	3530	0.0216	
88 1,3,5-Trimethylbenzene	120	18.558	18.568	-0.005	88	928	0.0568	
92 1,2,4-Trimethylbenzene	105	18.992	18.993	0.005	96	5485	0.0290	
S 116 Xylenes, Total	100				0		0.0550	

Reagents:

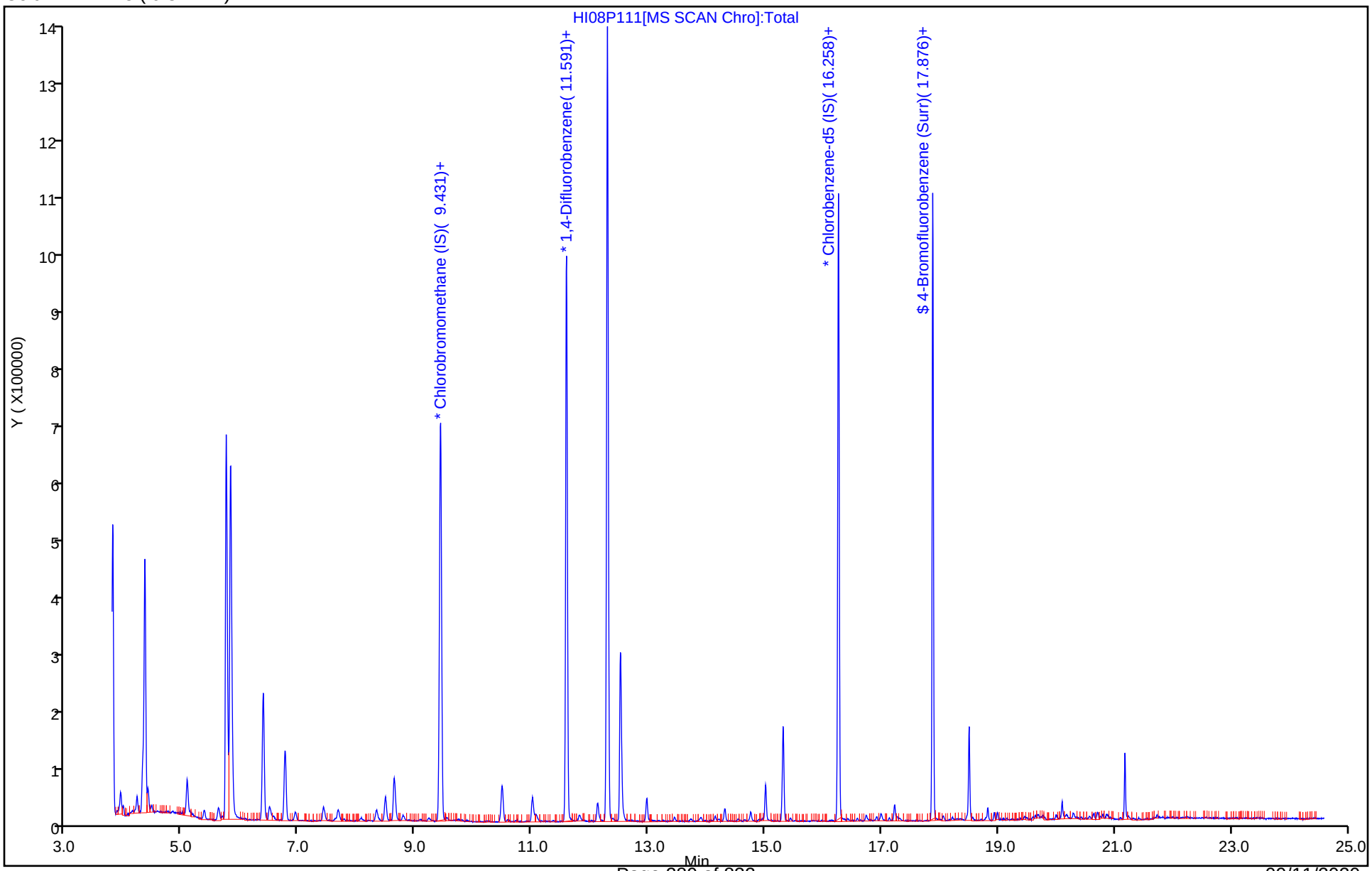
40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

Report Date: 10-Sep-2020 10:28:06 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P111.D				
Injection Date:	09-Sep-2020 01:42:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	140-20194-A-13	Lab Sample ID:	140-20194-13	Worklist Smp#:	15
Client ID:	SV-DUP 4-A-29				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

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Lims ID:	140-20194-A-13				
Client ID:	SV-DUP 4-A-29				
Sample Type:	Client				
Inject. Date:	09-Sep-2020 01:42:30	ALS Bottle#:	11	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016520-015				
Misc. Info.:	140-20194-a-13				
Operator ID:	HMT	Instrument ID:	MH		
Method:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\MH_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	10-Sep-2020 10:27:39	Calib Date:	29-Aug-2020 23:57:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1028				

First Level Reviewer: khachitpongpanits Date: 10-Sep-2020 10:28:05

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	4.22	91.01

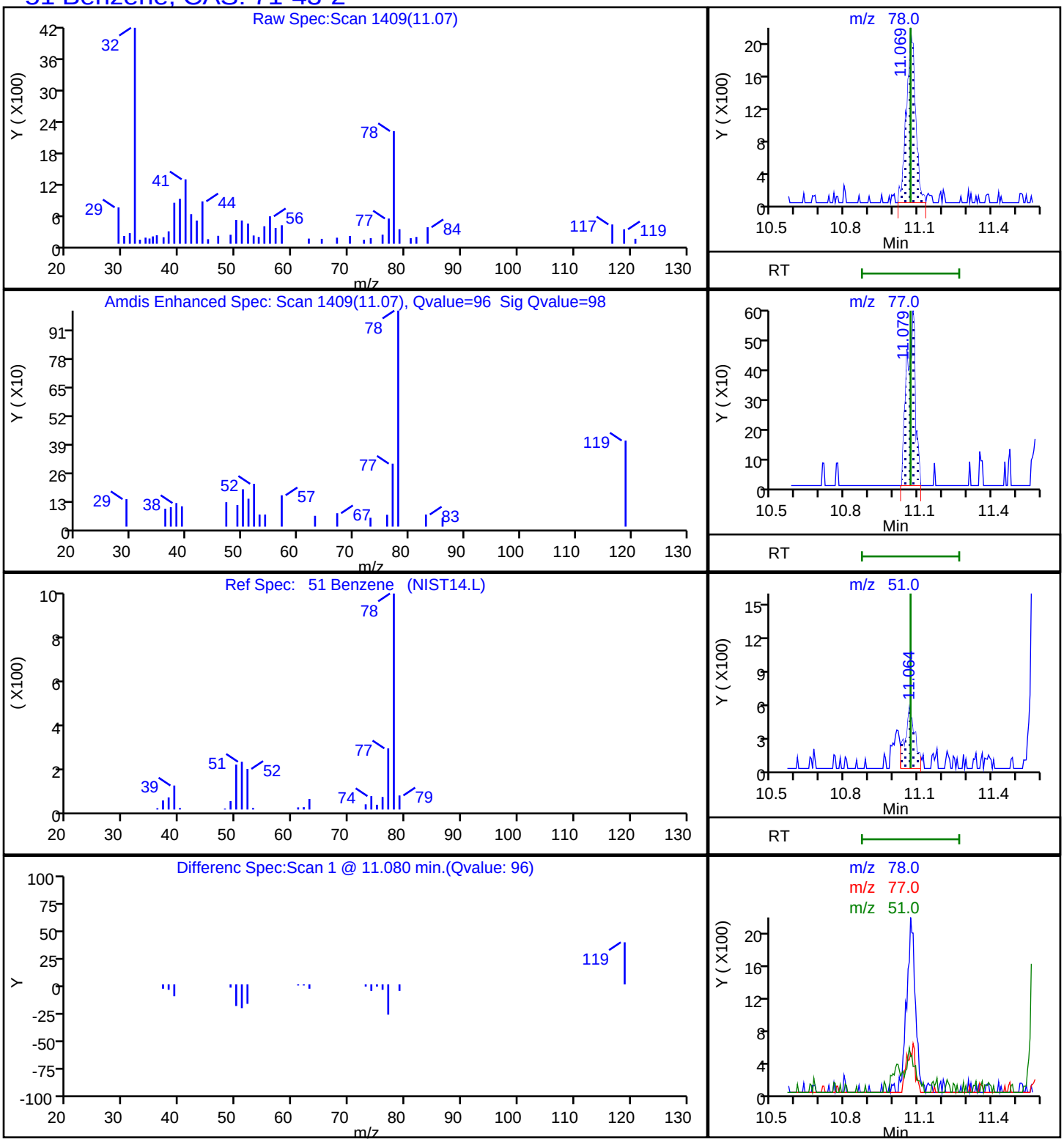
Report Date: 10-Sep-2020 10:28:06 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P111.D

Injection Date:	09-Sep-2020 01:42:30	Instrument ID:	MH
Lims ID:	140-20194-A-13	Lab Sample ID:	140-20194-13
Client ID:	SV-DUP 4-A-29		
Operator ID:	HMT	ALS Bottle#:	11 Worklist Smp#: 15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

51 Benzene, CAS: 71-43-2



Eurofins TestAmerica, Knoxville

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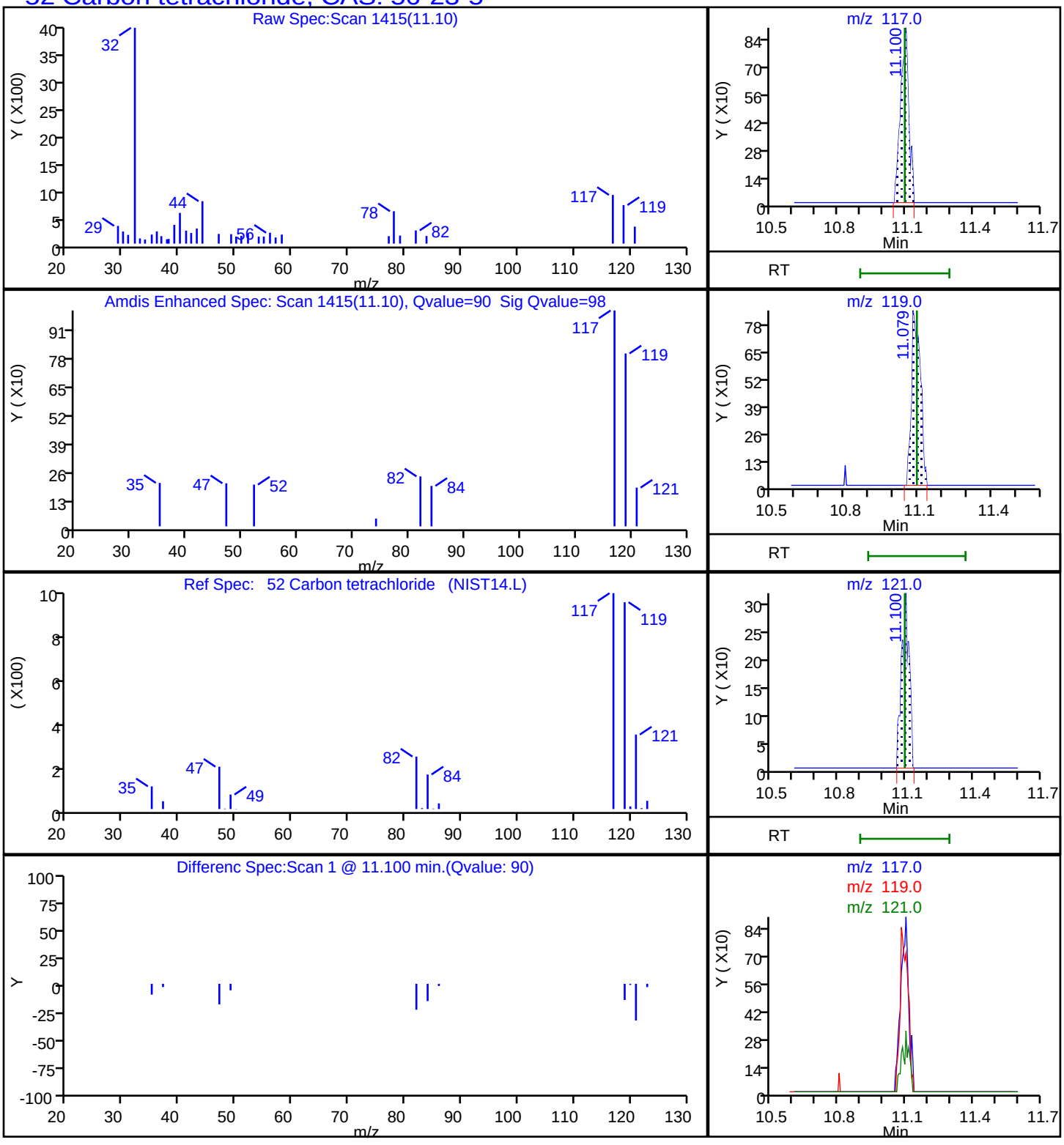
Lims ID:	140-20194-A-13	Lab Sample ID:	140-20194-13
Client ID:	SV-DUP 4-A-29		
Operator ID:	HMT	ALS Bottle#:	11 Worklist Smp#: 15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

52 Carbon tetrachloride, CAS: 56-23-5



Eurofins TestAmerica, Knoxville

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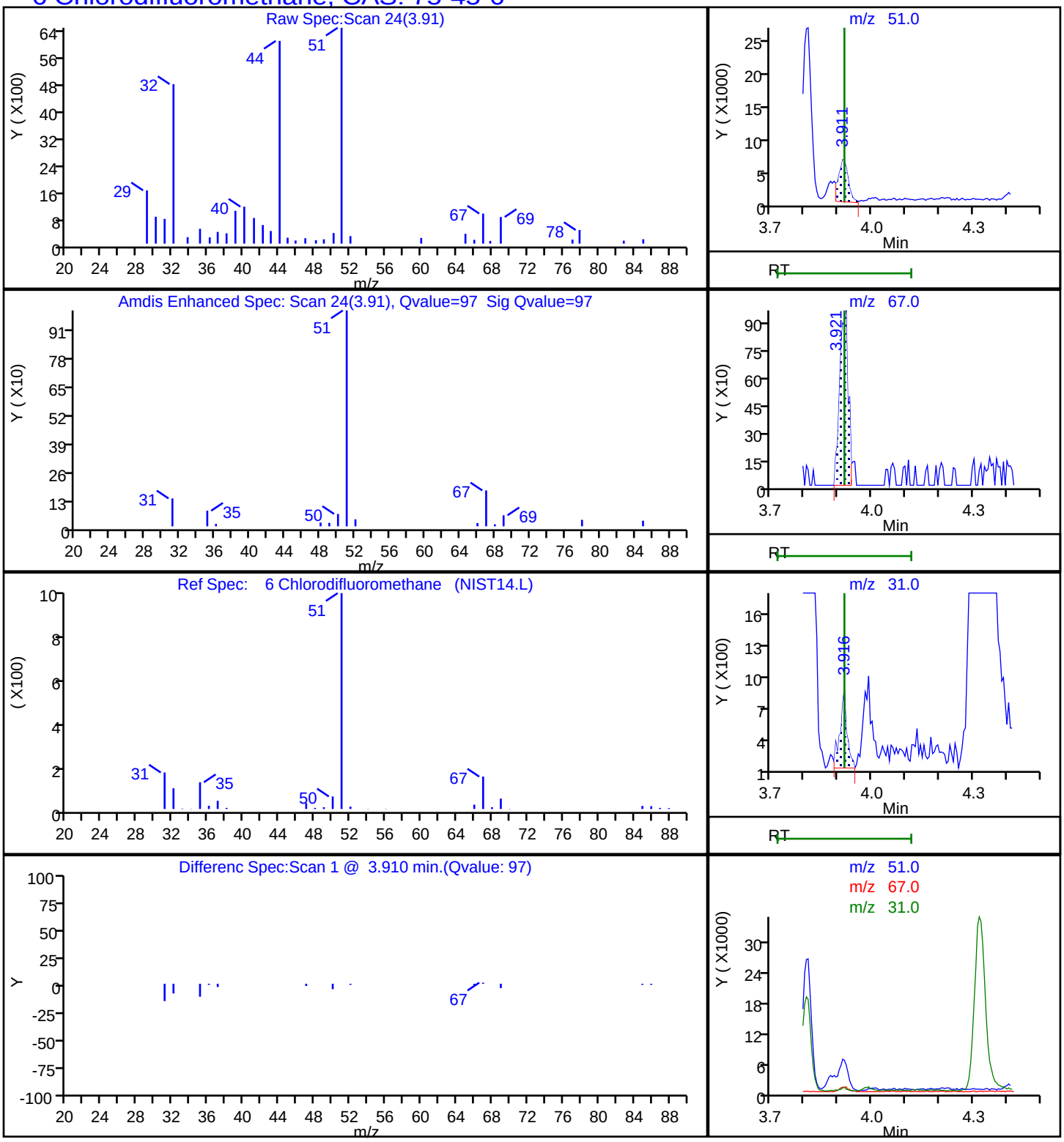
Lims ID:	140-20194-A-13	Lab Sample ID:	140-20194-13
Client ID:	SV-DUP 4-A-29		
Operator ID:	HMT	ALS Bottle#:	11 Worklist Smp#: 15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

6 Chlorodifluoromethane, CAS: 75-45-6



Eurofins TestAmerica, Knoxville

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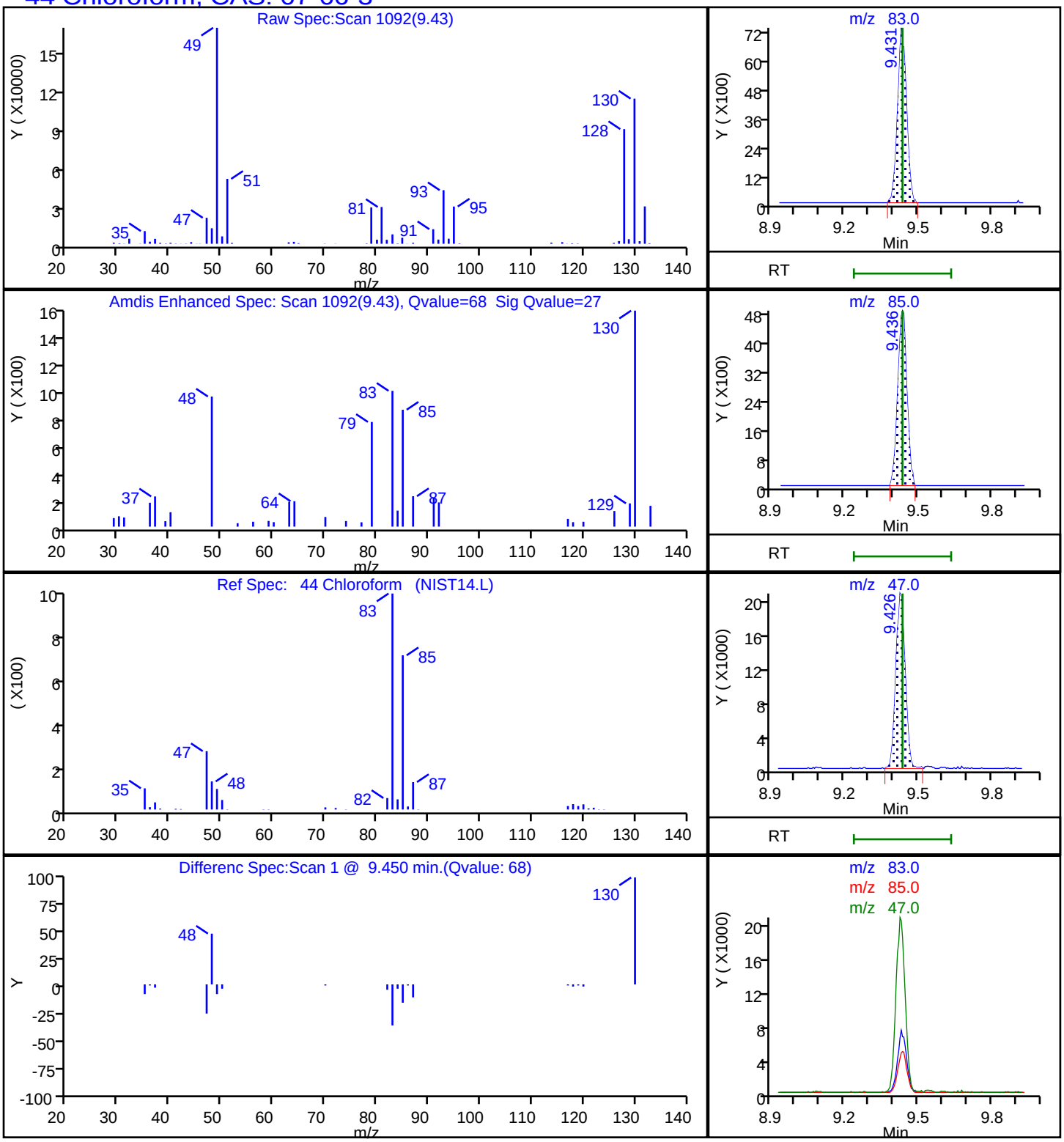
Lims ID:	140-20194-A-13	Lab Sample ID:	140-20194-13
Client ID:	SV-DUP 4-A-29		
Operator ID:	HMT	ALS Bottle#:	11 Worklist Smp#: 15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

44 Chloroform, CAS: 67-66-3



Eurofins TestAmerica, Knoxville

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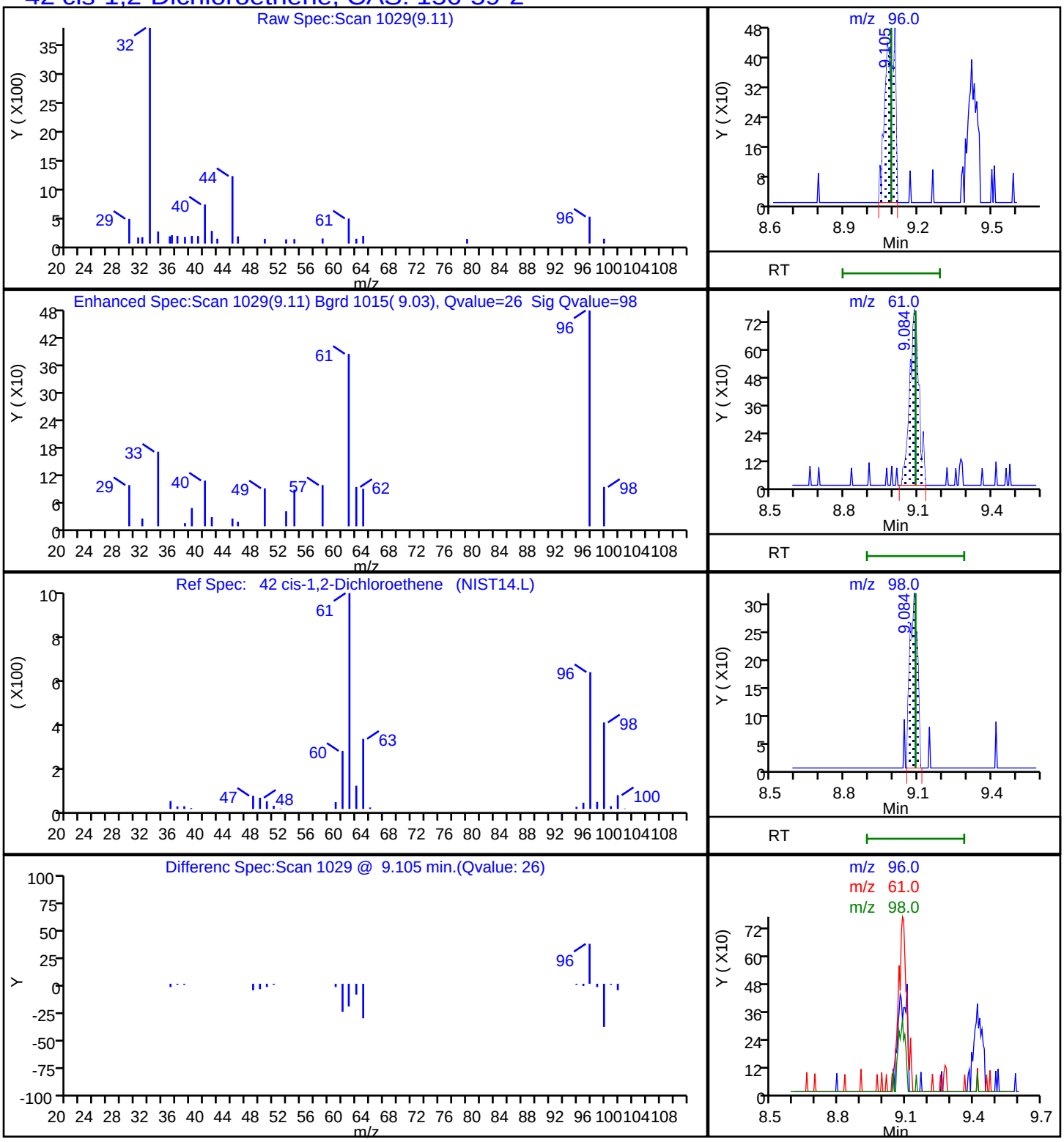
Lims ID:	140-20194-A-13	Lab Sample ID:	140-20194-13		
Client ID:	SV-DUP 4-A-29				
Operator ID:	HMT	ALS Bottle#:	11	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

42 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins TestAmerica, Knoxville

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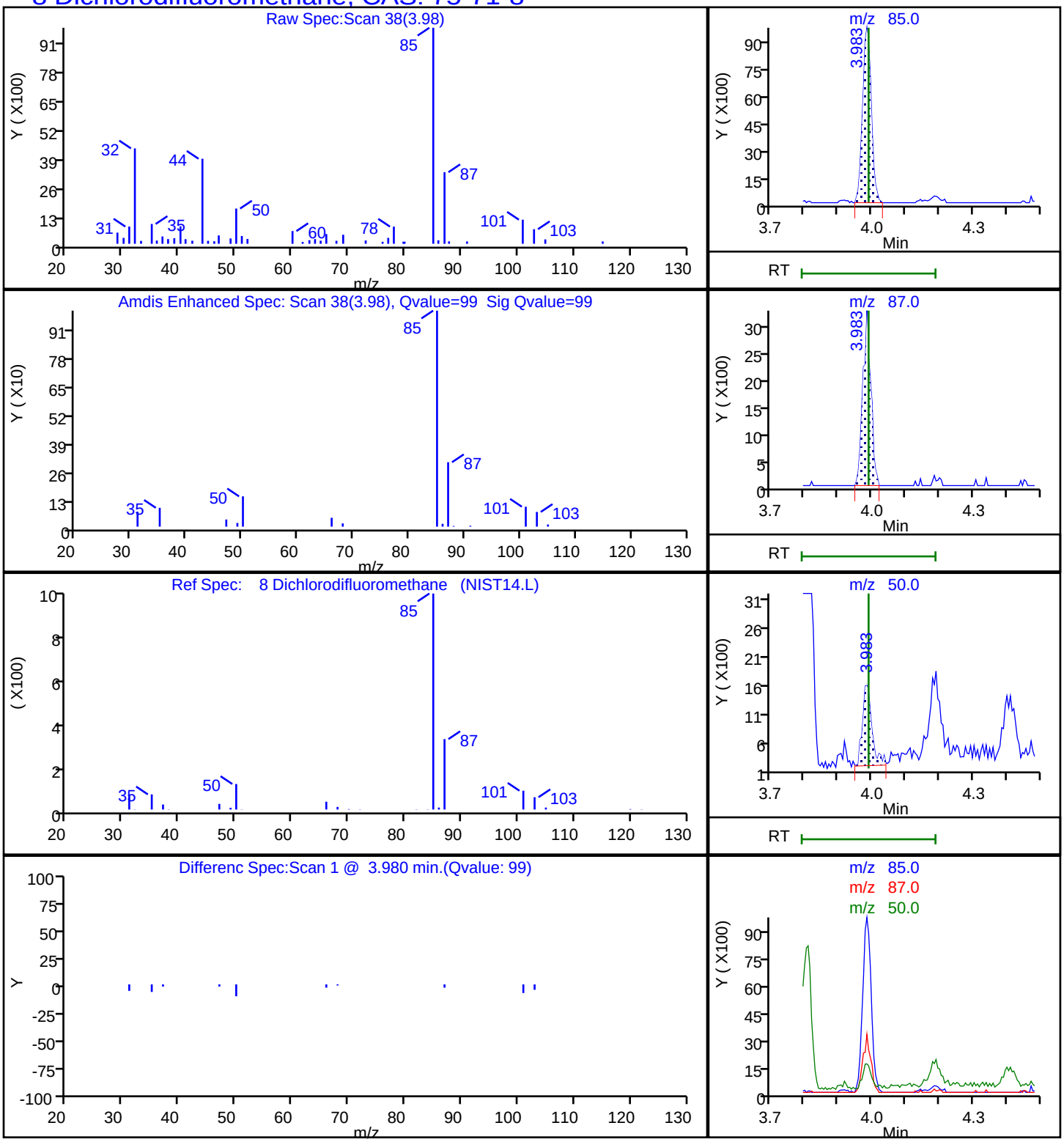
Lims ID:	140-20194-A-13	Lab Sample ID:	140-20194-13		
Client ID:	SV-DUP 4-A-29				
Operator ID:	HMT	ALS Bottle#:	11	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

8 Dichlorodifluoromethane, CAS: 75-71-8



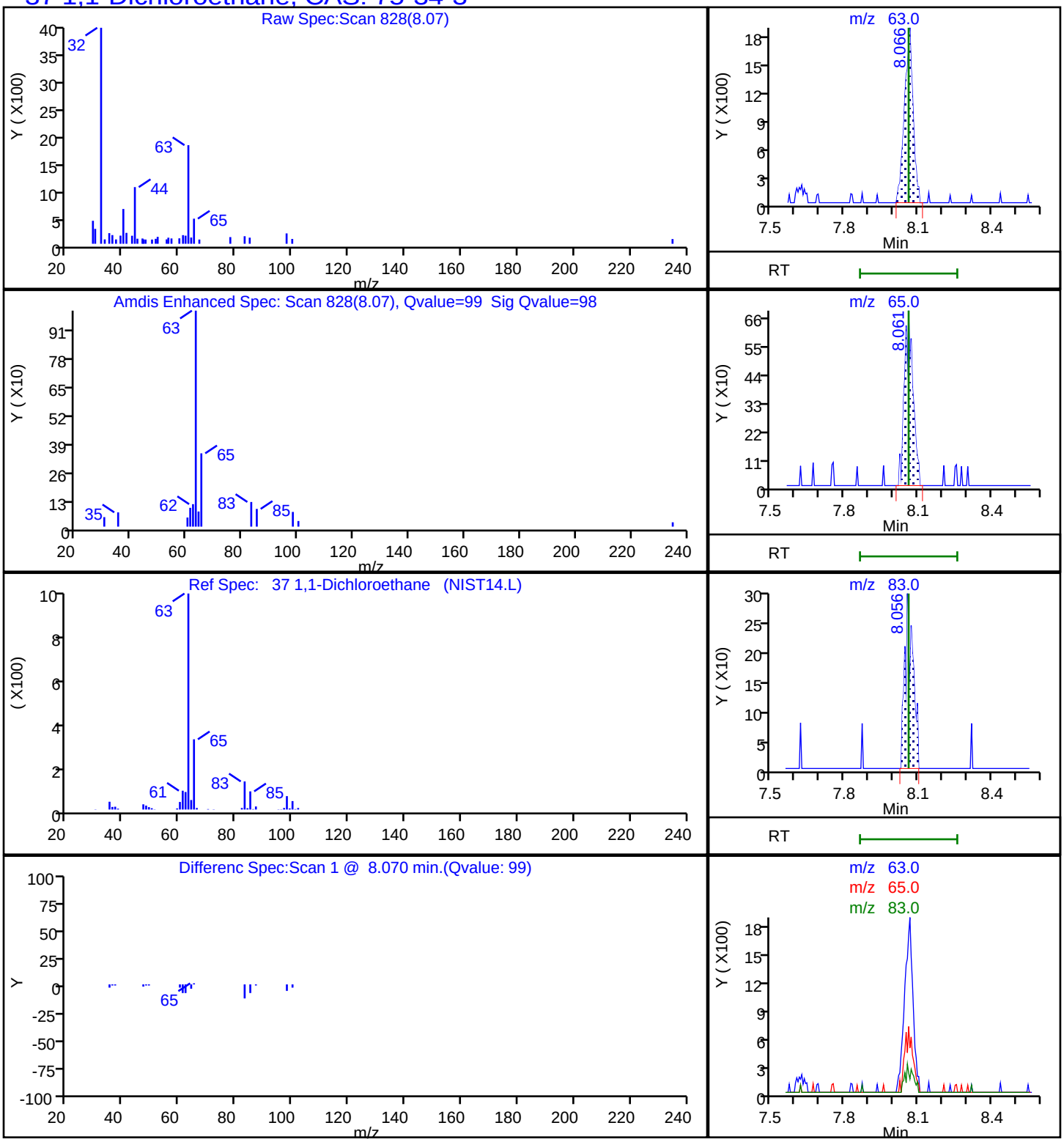
Report Date: 10-Sep-2020 10:28:06 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P111.D

Injection Date:	09-Sep-2020 01:42:30	Instrument ID:	MH
Lims ID:	140-20194-A-13	Lab Sample ID:	140-20194-13
Client ID:	SV-DUP 4-A-29		
Operator ID:	HMT	ALS Bottle#:	11 Worklist Smp#: 15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

37 1,1-Dichloroethane, CAS: 75-34-3



Eurofins TestAmerica, Knoxville

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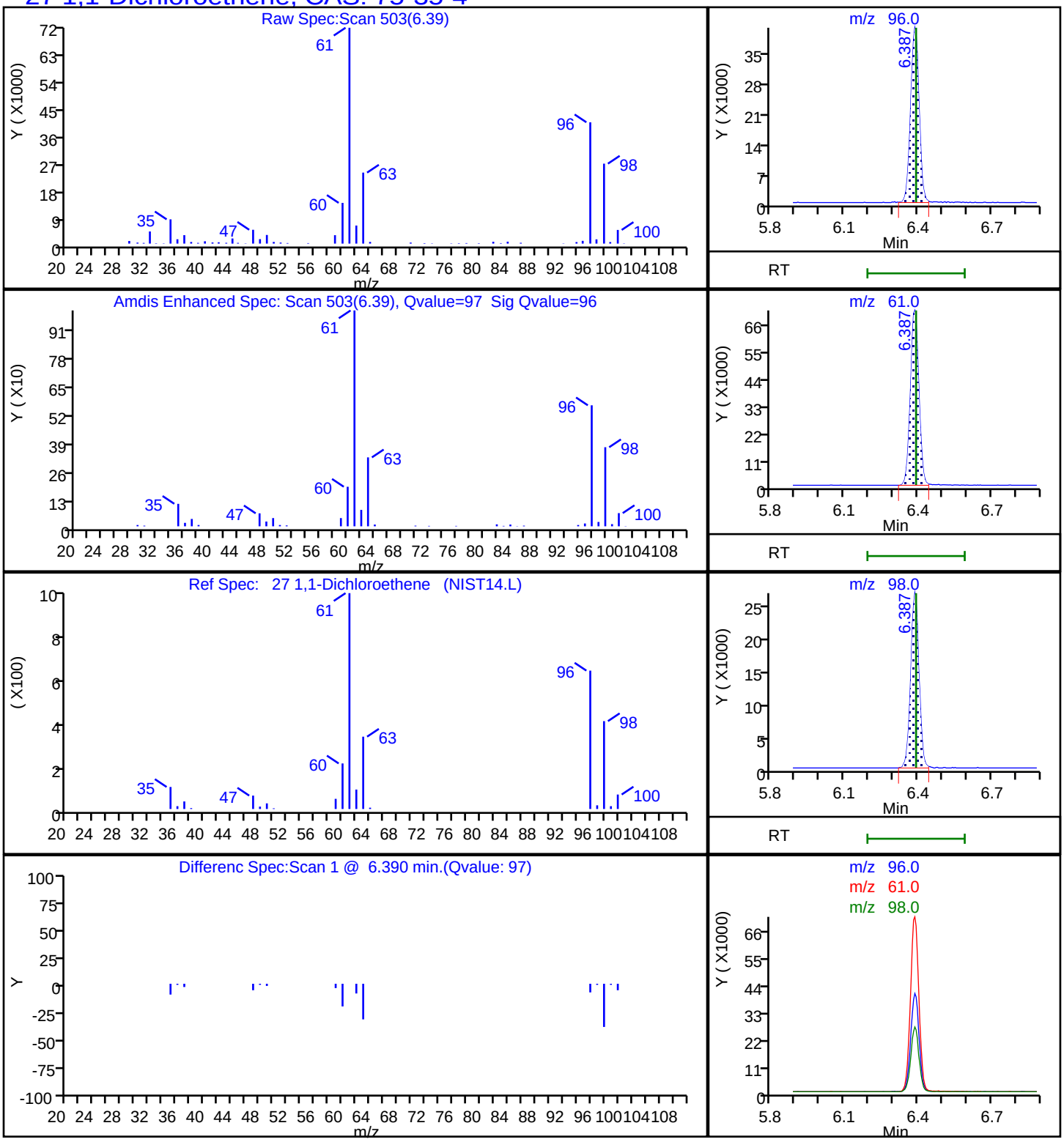
Lims ID:	140-20194-A-13	Lab Sample ID:	140-20194-13
Client ID:	SV-DUP 4-A-29		
Operator ID:	HMT	ALS Bottle#:	11 Worklist Smp#: 15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

27 1,1-Dichloroethene, CAS: 75-35-4



Report Date: 10-Sep-2020 10:28:06 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

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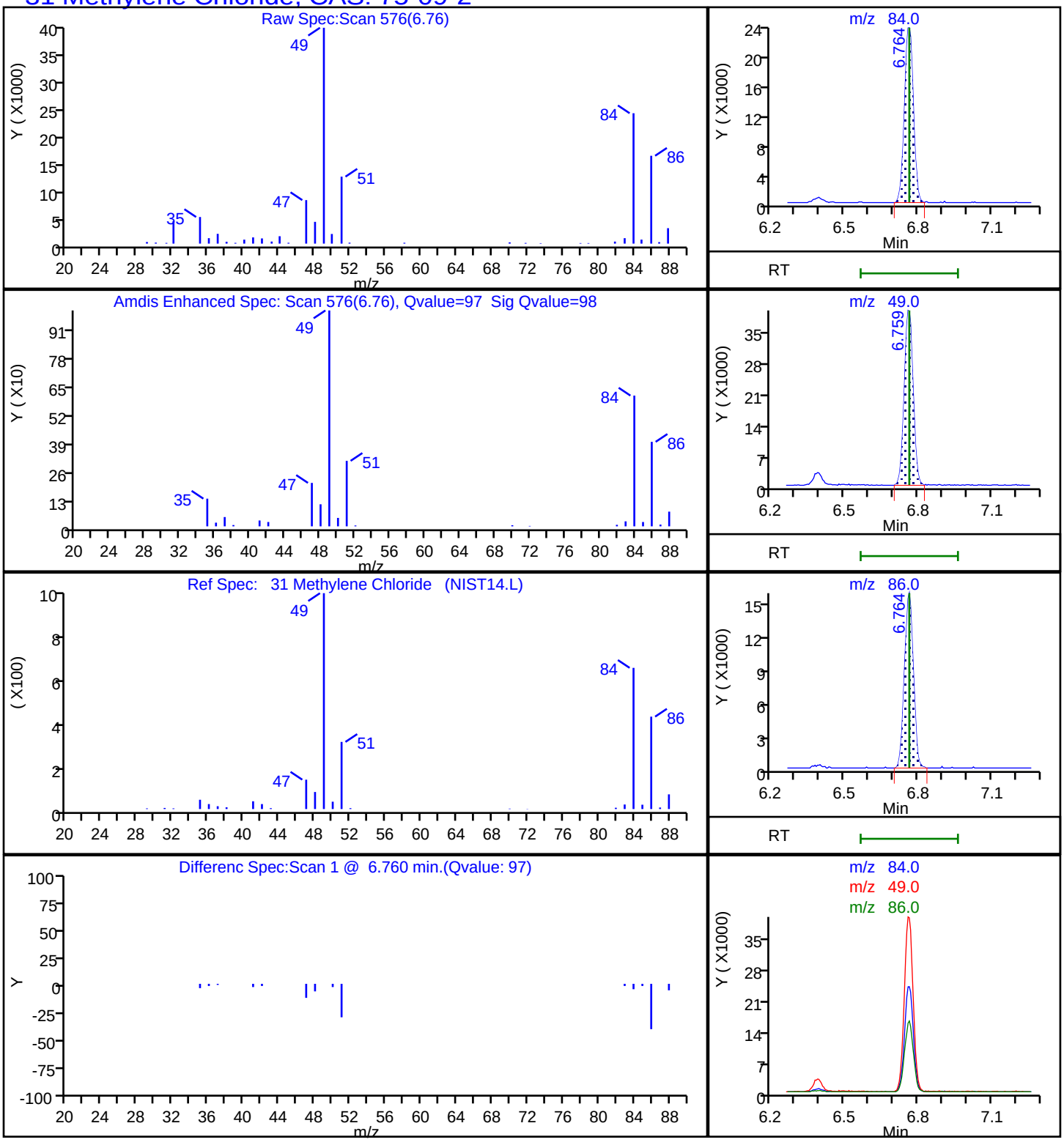
Lims ID:	140-20194-A-13	Lab Sample ID:	140-20194-13		
Client ID:	SV-DUP 4-A-29				
Operator ID:	HMT	ALS Bottle#:	11	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

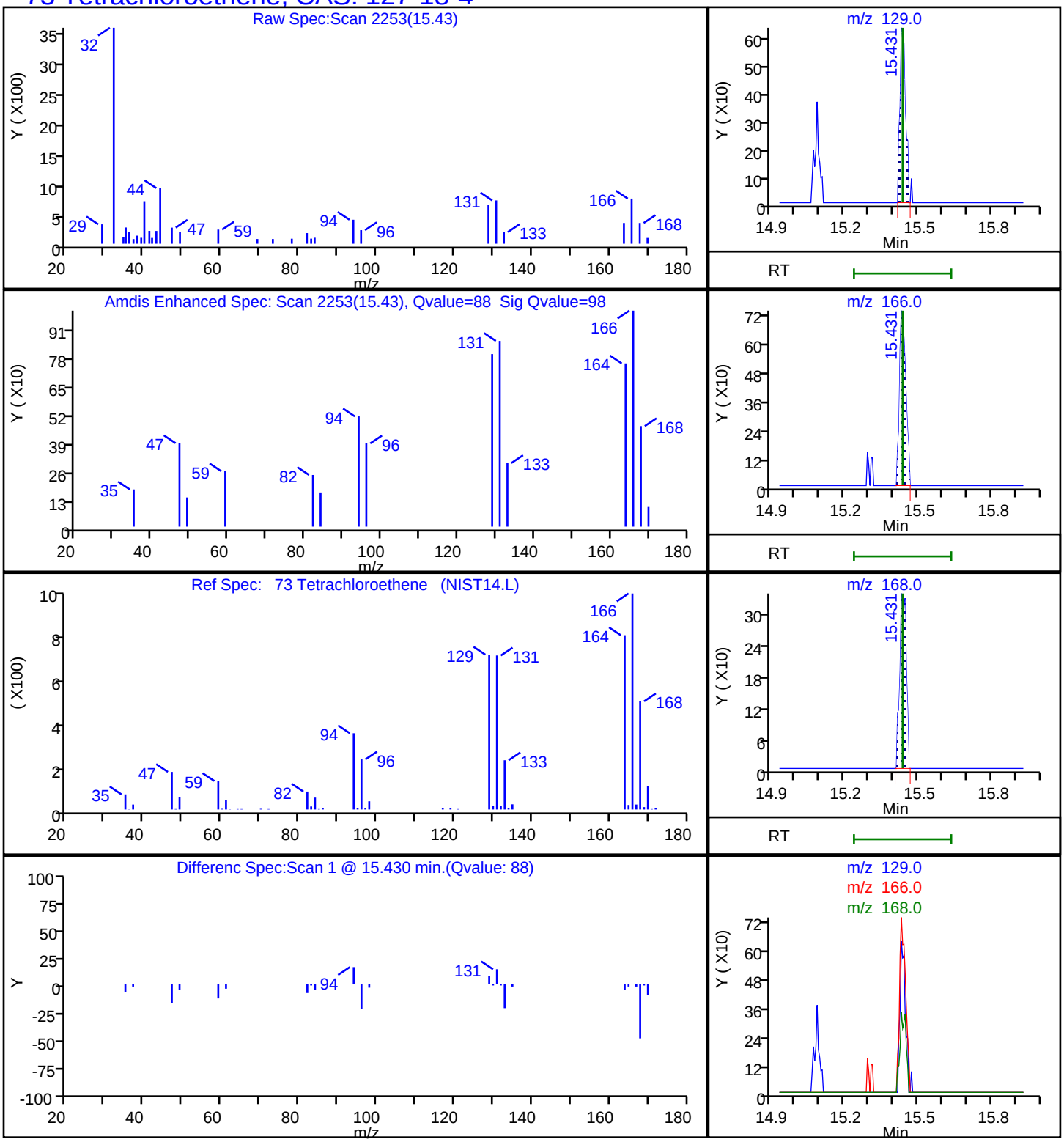
31 Methylene Chloride, CAS: 75-09-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P111.D		
Injection Date:	09-Sep-2020 01:42:30	Instrument ID:	MH
Lims ID:	140-20194-A-13	Lab Sample ID:	140-20194-13
Client ID:	SV-DUP 4-A-29		
Operator ID:	HMT	ALS Bottle#:	11 Worklist Smp#: 15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

73 Tetrachloroethene, CAS: 127-18-4



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P111.D		
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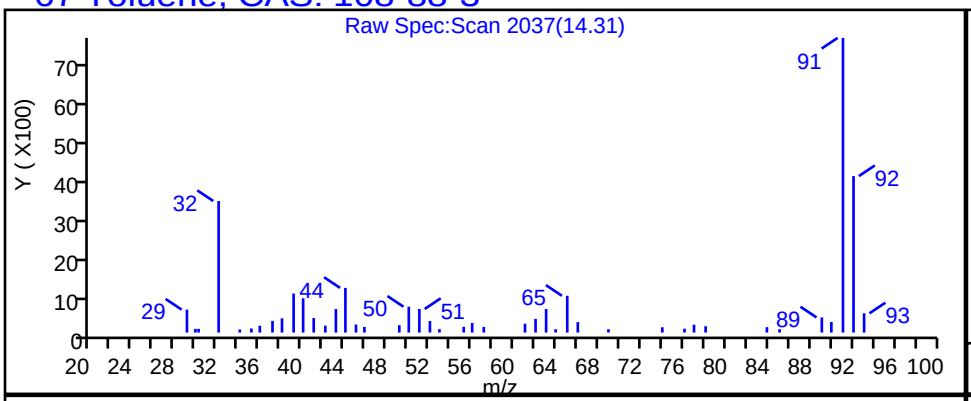
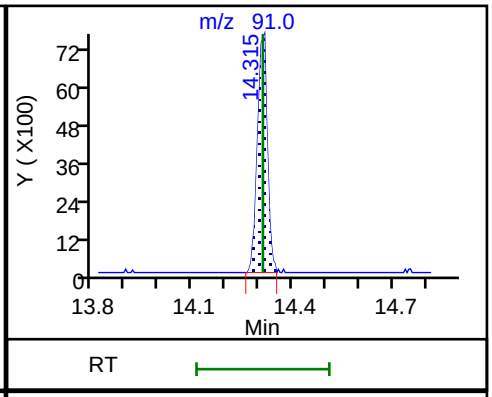
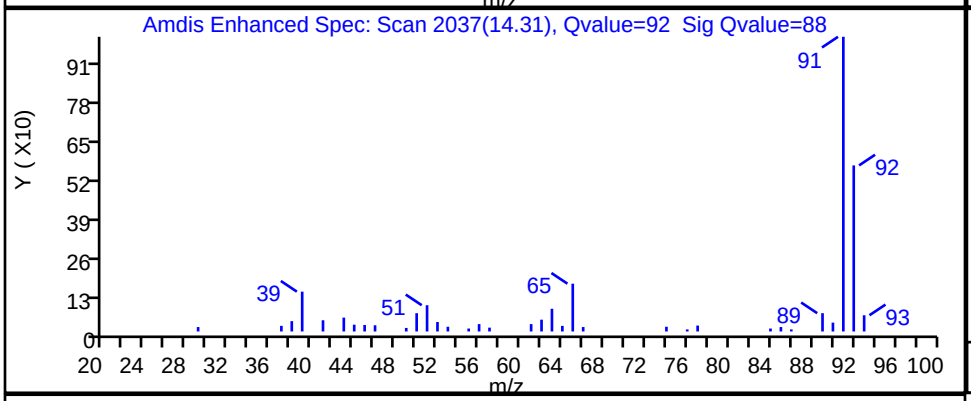
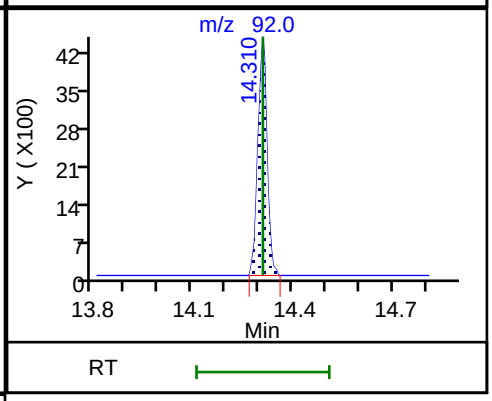
Lims ID:	140-20194-A-13	Lab Sample ID:	140-20194-13
Client ID:	SV-DUP 4-A-29		
Operator ID:	HMT	ALS Bottle#:	11 Worklist Smp#: 15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

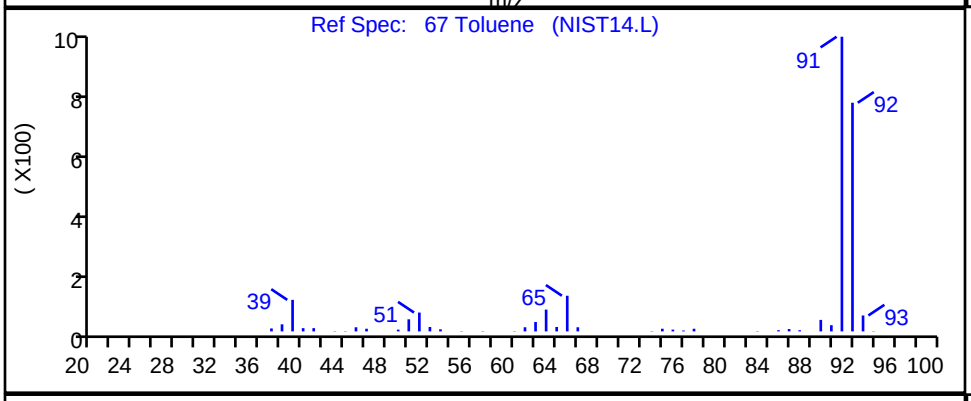
67 Toluene, CAS: 108-88-3

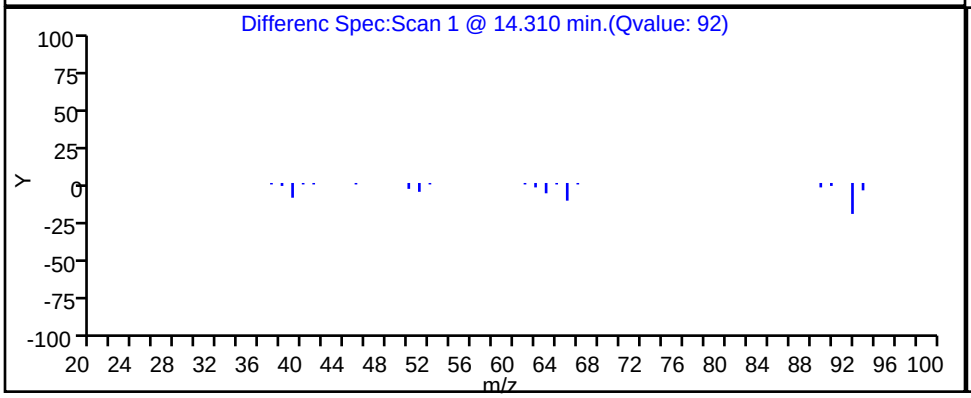


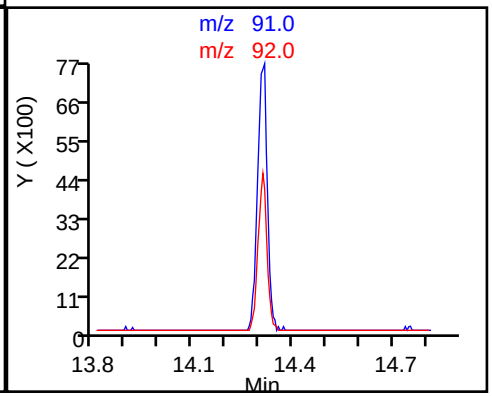








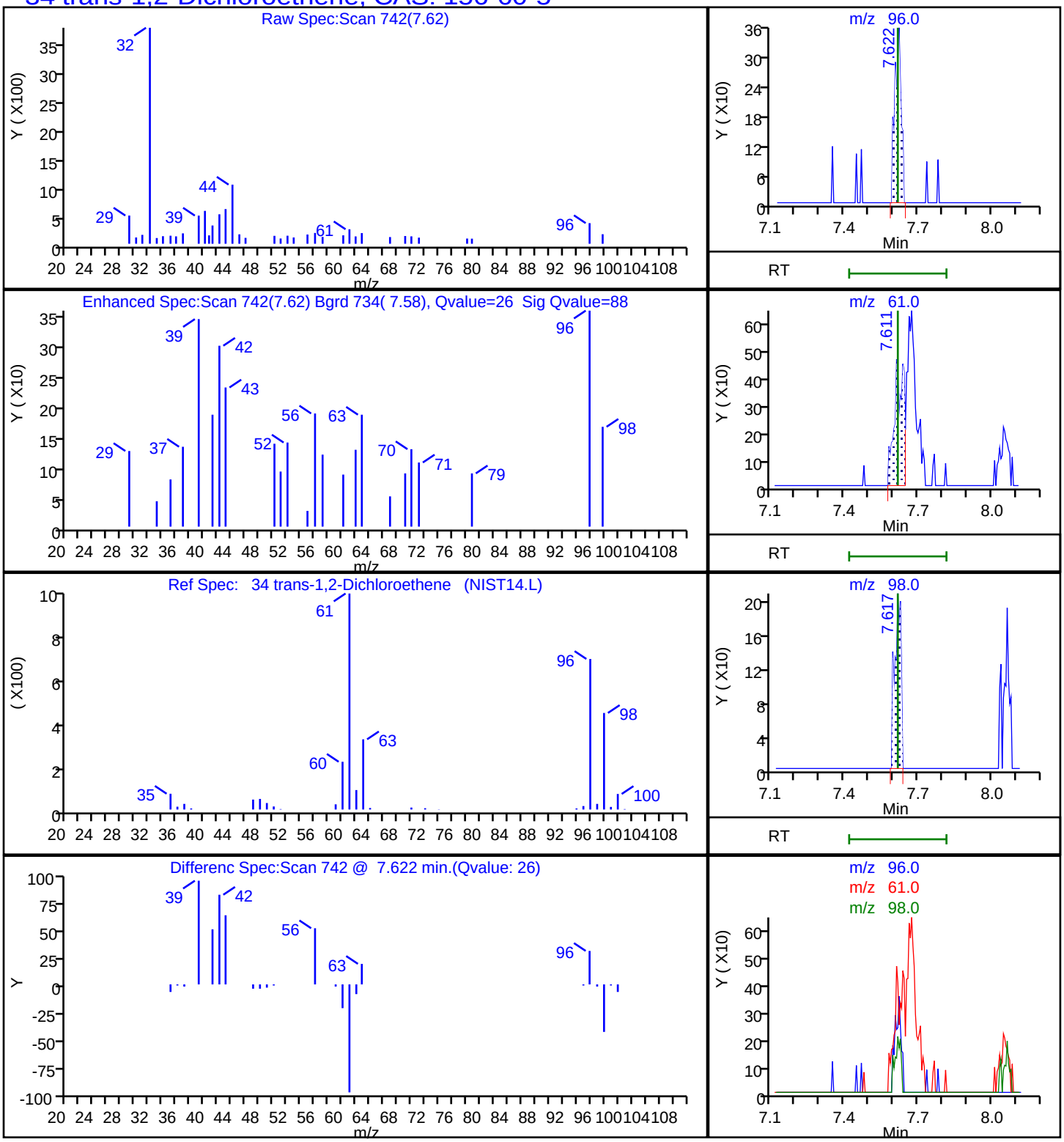




Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P111.D				
Injection Date:	09-Sep-2020 01:42:30	Instrument ID:	MH		
Lims ID:	140-20194-A-13	Lab Sample ID:	140-20194-13		
Client ID:	SV-DUP 4-A-29				
Operator ID:	HMT	ALS Bottle#:	11	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

34 trans-1,2-Dichloroethene, CAS: 156-60-5

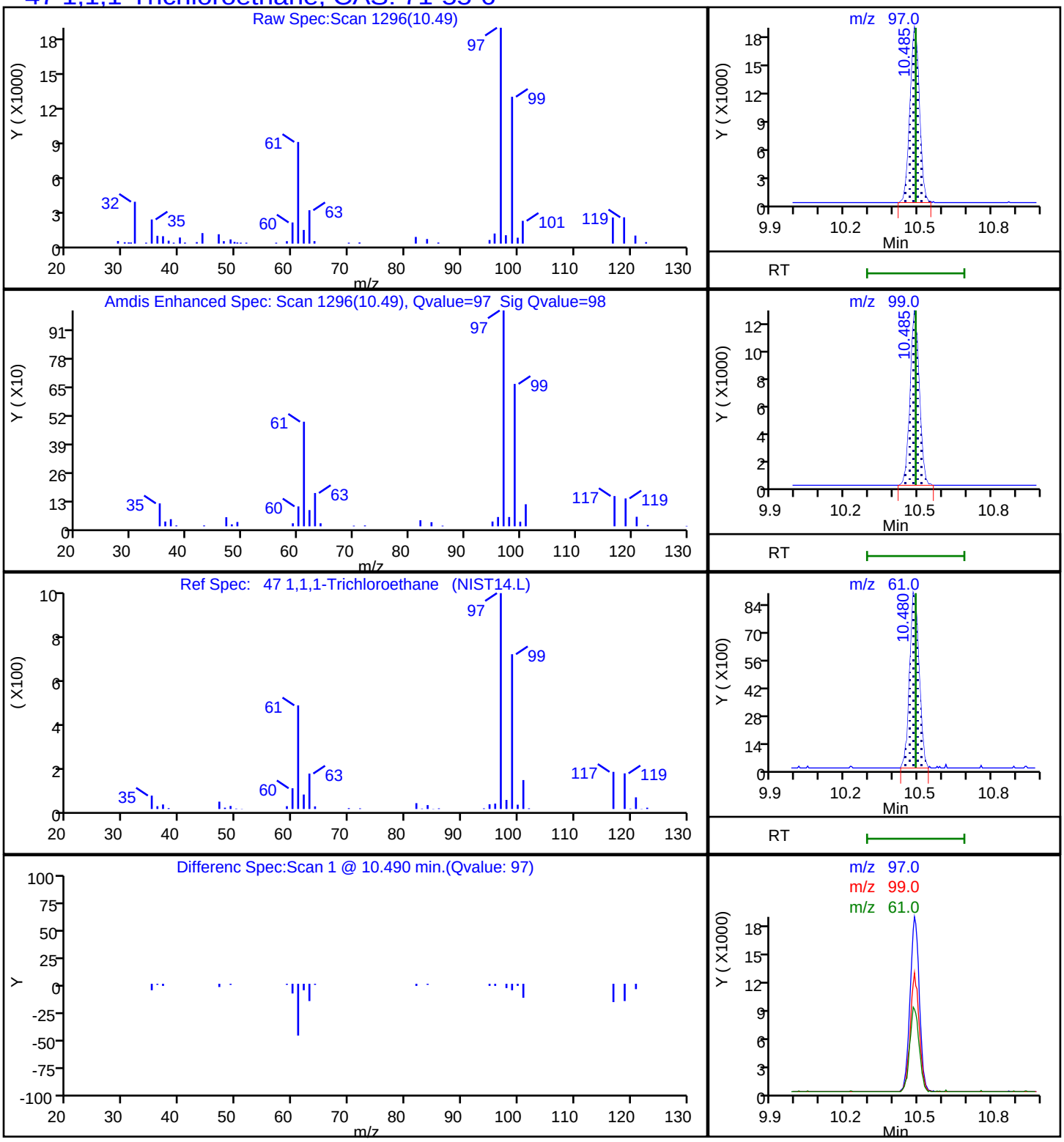


Report Date: 10-Sep-2020 10:28:06 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P111.D				
Injection Date:	09-Sep-2020 01:42:30	Instrument ID:	MH		
Lims ID:	140-20194-A-13	Lab Sample ID:	140-20194-13		
Client ID:	SV-DUP 4-A-29				
Operator ID:	HMT	ALS Bottle#:	11	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

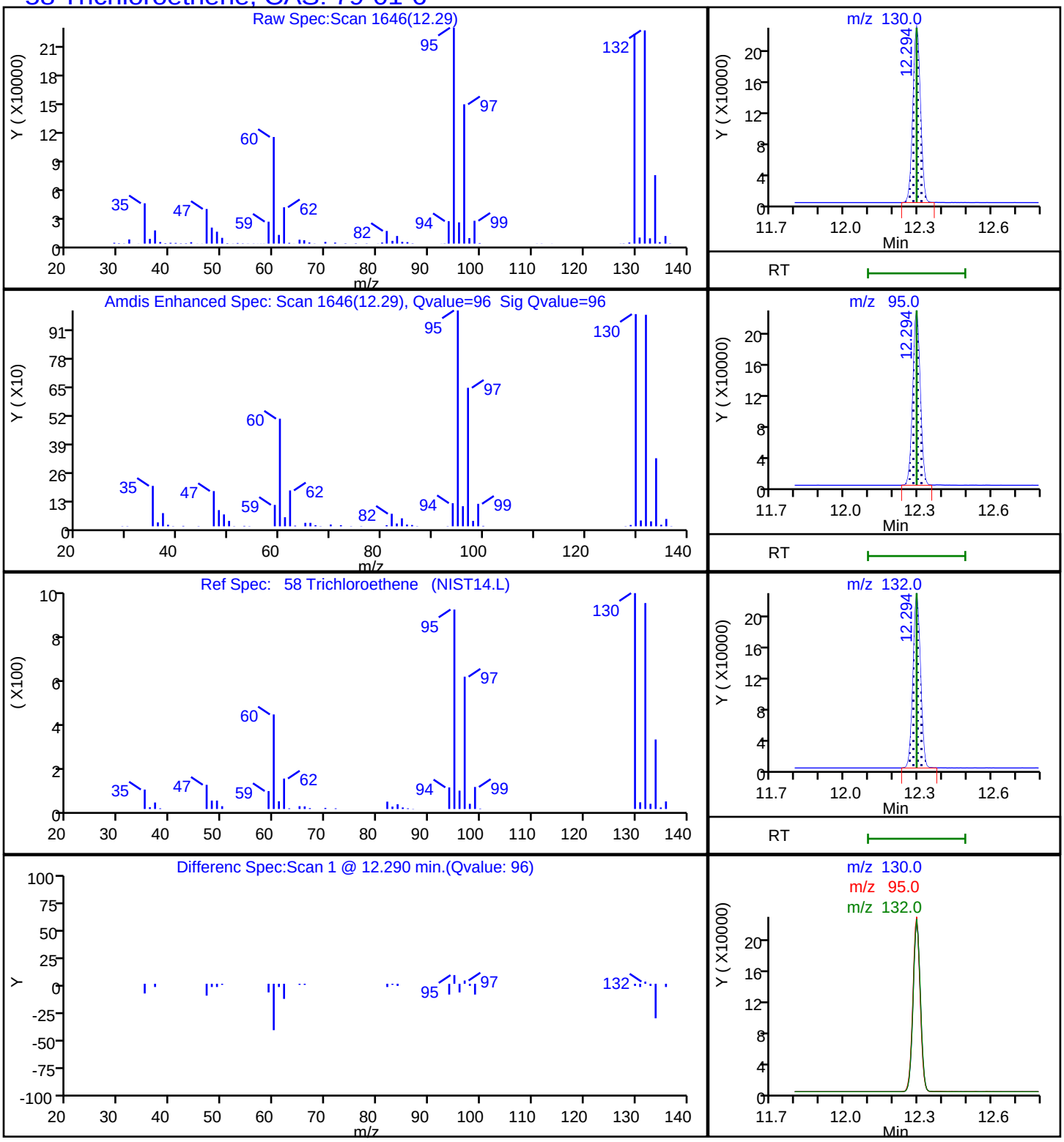
47 1,1,1-Trichloroethane, CAS: 71-55-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P111.D		
Injection Date:	09-Sep-2020 01:42:30	Instrument ID:	MH
Lims ID:	140-20194-A-13	Lab Sample ID:	140-20194-13
Client ID:	SV-DUP 4-A-29		
Operator ID:	HMT	ALS Bottle#:	11 Worklist Smp#: 15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

58 Trichloroethene, CAS: 79-01-6



Eurofins TestAmerica, Knoxville

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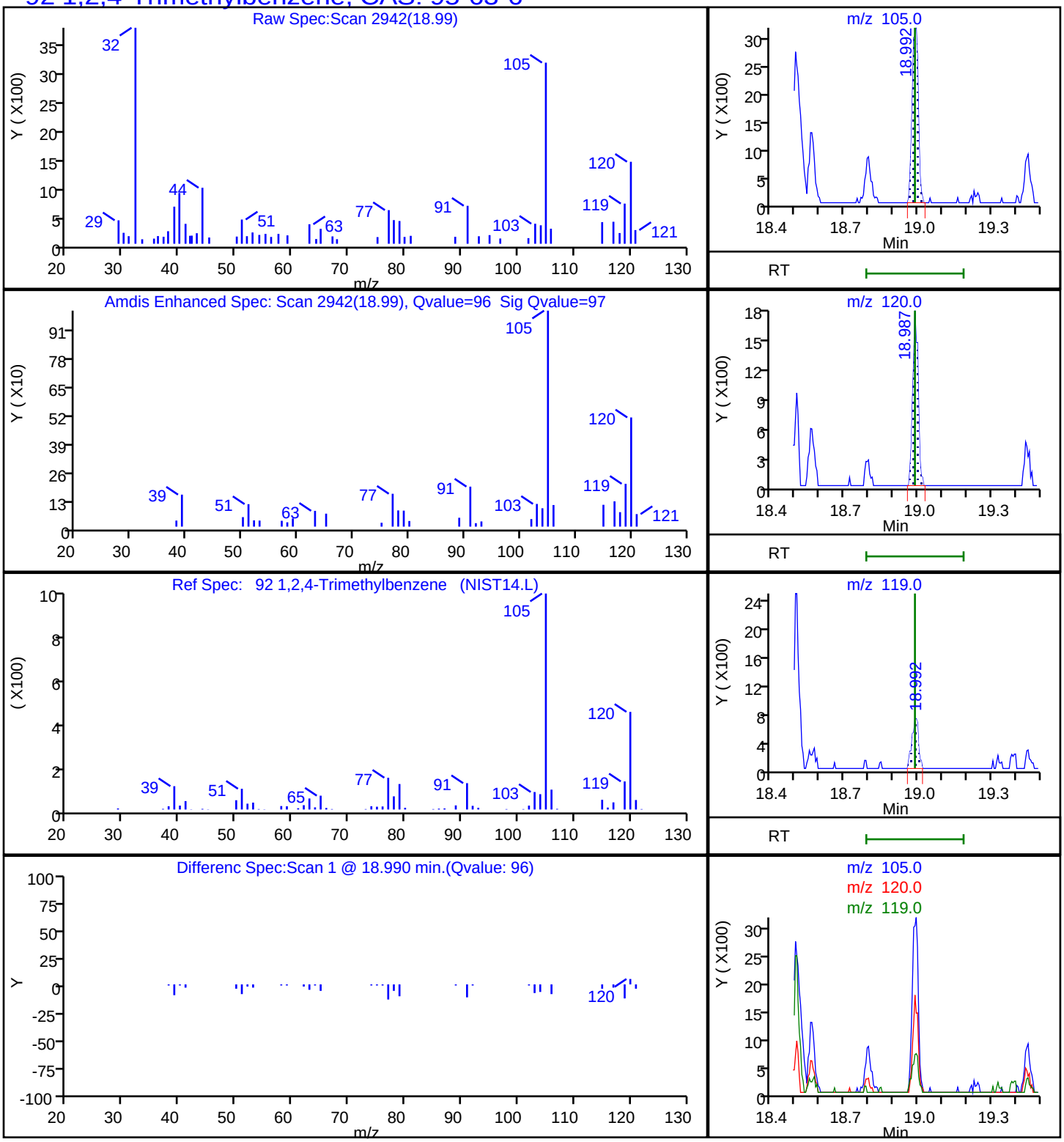
Injection Date:	09-Sep-2020 01:42:30	Instrument ID:	MH
Lims ID:	140-20194-A-13	Lab Sample ID:	140-20194-13
Client ID:	SV-DUP 4-A-29		
Operator ID:	HMT	ALS Bottle#:	11 Worklist Smp#: 15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

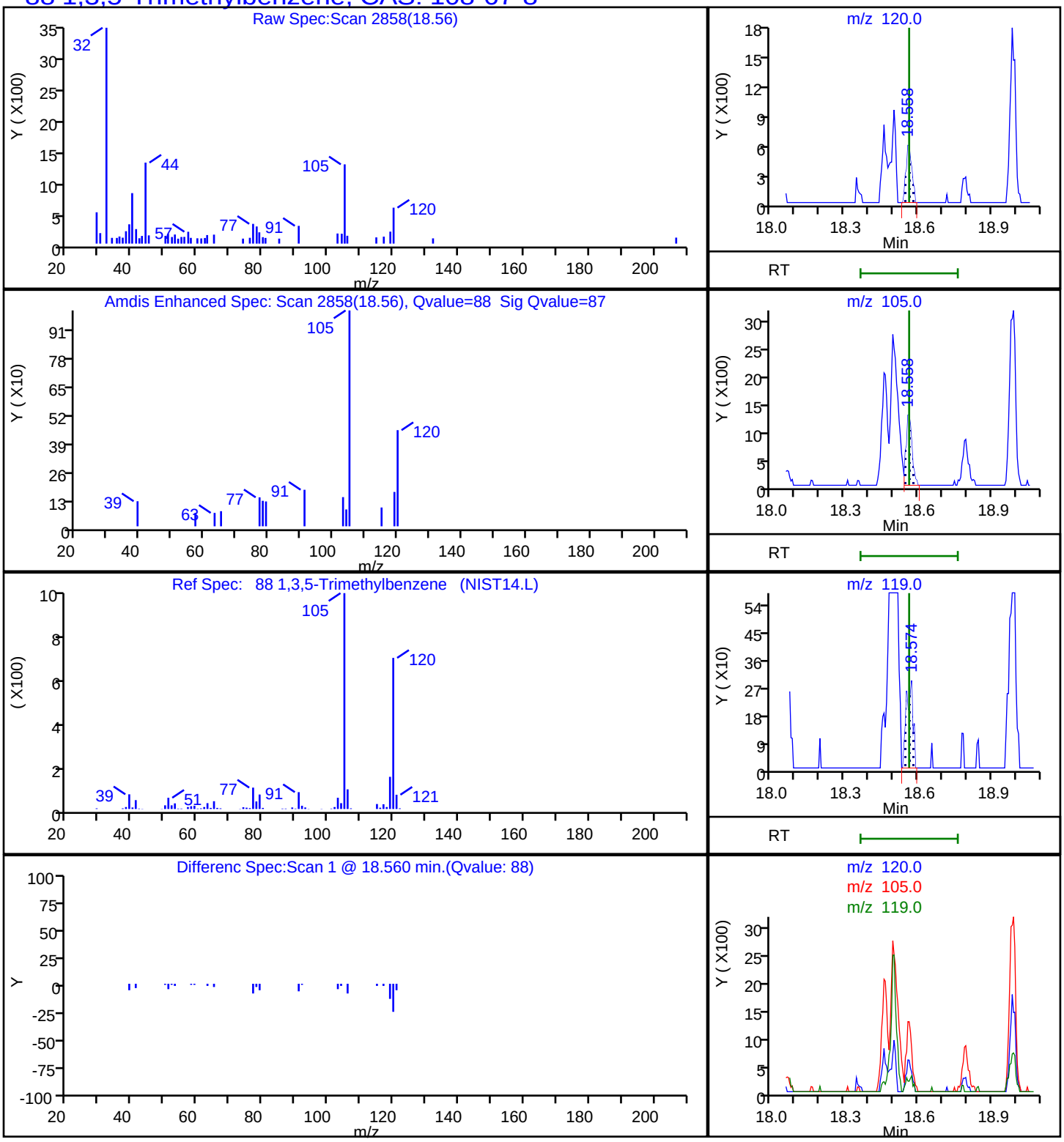
92 1,2,4-Trimethylbenzene, CAS: 95-63-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P111.D		
Injection Date:	09-Sep-2020 01:42:30	Instrument ID:	MH
Lims ID:	140-20194-A-13	Lab Sample ID:	140-20194-13
Client ID:	SV-DUP 4-A-29		
Operator ID:	HMT	ALS Bottle#:	11 Worklist Smp#: 15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

88 1,3,5-Trimethylbenzene, CAS: 108-67-8

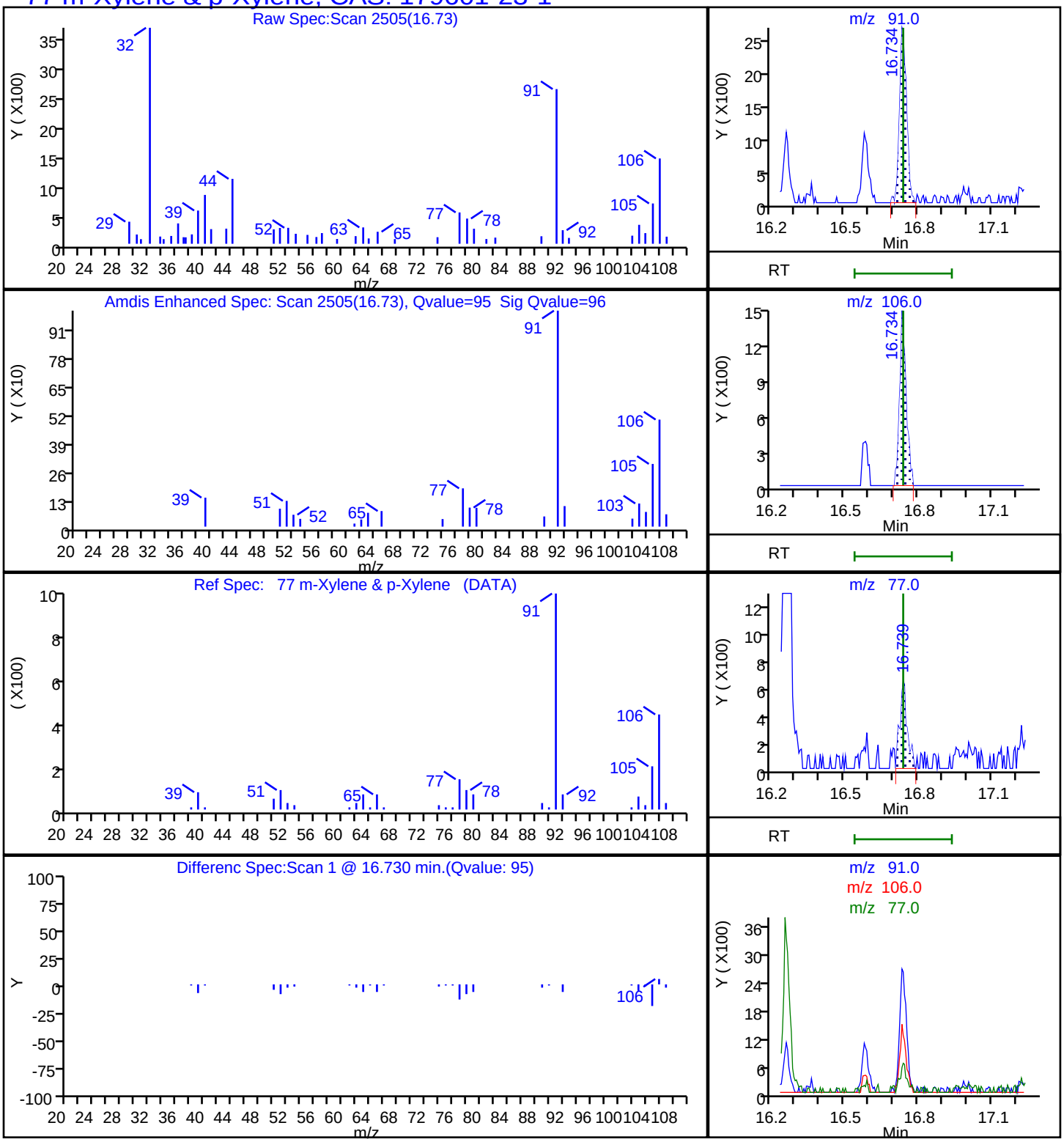


Report Date: 10-Sep-2020 10:28:06 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P111.D				
Injection Date:	09-Sep-2020 01:42:30	Instrument ID:	MH		
Lims ID:	140-20194-A-13	Lab Sample ID:	140-20194-13		
Client ID:	SV-DUP 4-A-29				
Operator ID:	HMT	ALS Bottle#:	11	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

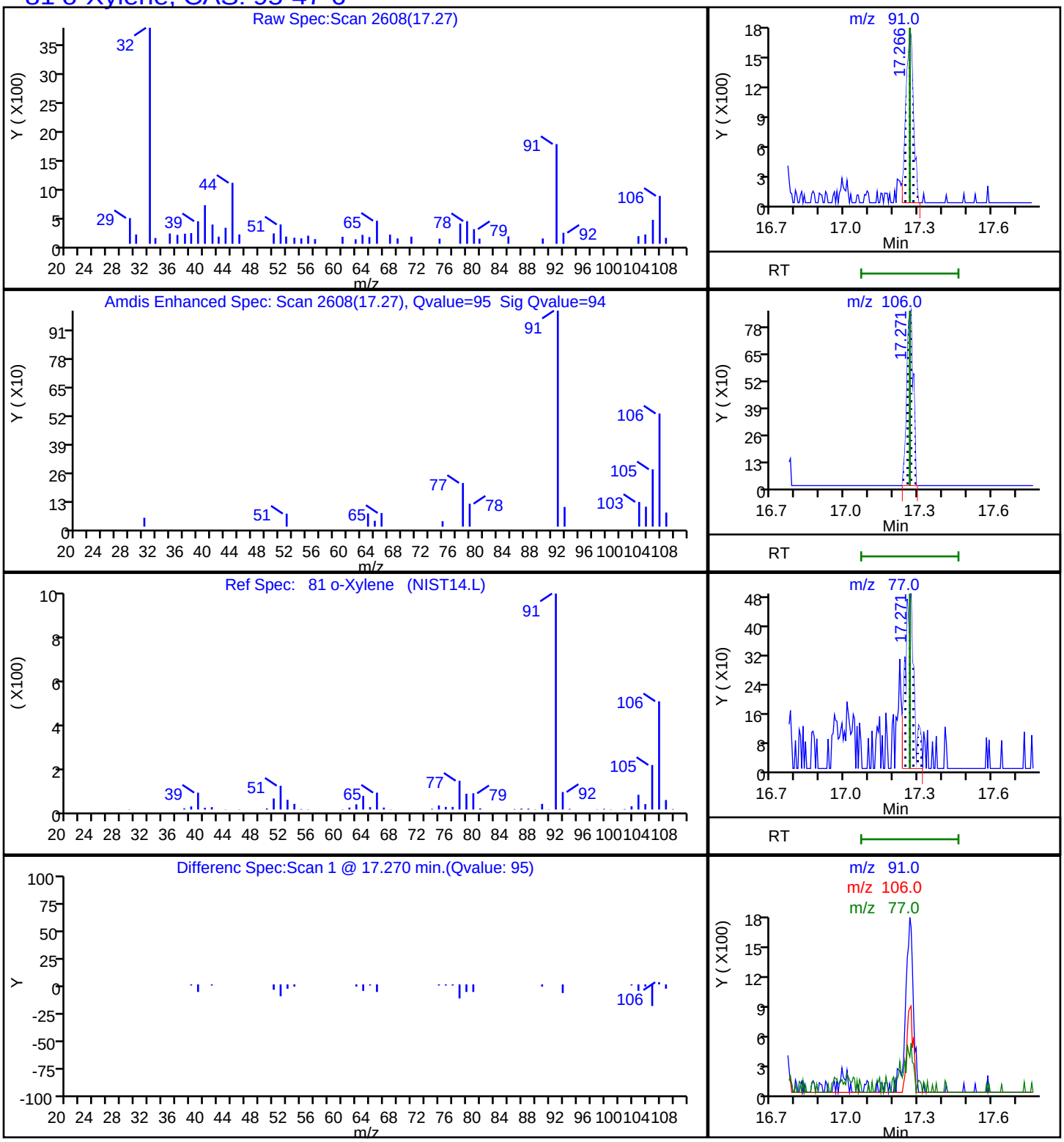
77 m-Xylene & p-Xylene, CAS: 179601-23-1



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P111.D				
Injection Date:	09-Sep-2020 01:42:30	Instrument ID:	MH		
Lims ID:	140-20194-A-13	Lab Sample ID:	140-20194-13		
Client ID:	SV-DUP 4-A-29				
Operator ID:	HMT	ALS Bottle#:	11	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

81 o-Xylene, CAS: 95-47-6



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: SV-075-A-29 Lab Sample ID: 140-20194-14

Matrix: Air Lab File ID: HI08P112.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 10:24

Sample wt/vol: 100(mL) Date Analyzed: 09/09/2020 02:36

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42504 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.056	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.085	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	2.3		0.40	0.11
67-66-3	Chloroform	119.38	0.079	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.53		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	0.11	J	0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	2.0		0.20	0.20
127-18-4	Tetrachloroethene	165.83	0.13	J	0.40	0.035
108-88-3	Toluene	92.14	2.0		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND	*	0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	0.52		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	0.72		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	2.0		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	1.1		0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.73	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	94		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: SV-075-A-29 Lab Sample ID: 140-20194-14

Matrix: Air Lab File ID: HI08P112.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 10:24

Sample wt/vol: 100(mL) Date Analyzed: 09/09/2020 02:36

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42504 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.18	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.54	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	8.2		1.4	0.39
67-66-3	Chloroform	119.38	0.38	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.6		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	0.49	J	1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	10		1.0	1.0
127-18-4	Tetrachloroethene	165.83	0.89	J	2.7	0.24
108-88-3	Toluene	92.14	7.4		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND	*	3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	2.8		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	3.6		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	10		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	5.7		2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	3.2	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	94		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P112.D
Lims ID: 140-20194-A-14
Client ID: SV-075-A-29
Sample Type: Client
Inject. Date: 09-Sep-2020 02:36:30 ALS Bottle#: 12 Worklist Smp#: 16
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016520-016
Misc. Info.: 140-20194-a-14
Operator ID: HMT Instrument ID: MH

Method: \\chromfs\Knoxville\ChromData\MH\20200904-16520.b\MH_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 10-Sep-2020 10:33:49 Calib Date: 29-Aug-2020 23:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1028

First Level Reviewer: khachitpongpanits Date: 10-Sep-2020 10:34:09

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.431	9.431	0.000	95	210055	4.80	
* 2 1,4-Difluorobenzene	114	11.591	11.591	0.000	95	837649	4.80	
* 3 Chlorobenzene-d5 (IS)	117	16.258	16.258	0.000	87	587721	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.876	17.876	0.000	94	296281	4.34	
6 Chlorodifluoromethane	51	3.916	3.916	0.000	96	54627	0.4660	M
8 Dichlorodifluoromethane	85	3.983	3.988	-0.005	99	16771	0.1056	
44 Chloroform	83	9.441	9.436	0.005	34	2010	0.0158	
47 1,1,1-Trichloroethane	97	10.485	10.490	-0.005	95	1931	0.0167	
51 Benzene	78	11.079	11.069	0.010	87	1731	0.0113	
52 Carbon tetrachloride	117	11.100	11.095	0.005	79	1620	0.0170	
58 Trichloroethene	130	12.294	12.294	0.000	95	7230	0.1045	
67 Toluene	91	14.315	14.310	0.005	90	59578	0.3935	
73 Tetrachloroethene	129	15.431	15.441	-0.005	89	1671	0.0263	
76 Ethylbenzene	91	16.584	16.584	0.000	95	4120	0.0225	
77 m-Xylene & p-Xylene	91	16.744	16.739	0.005	95	13569	0.0937	
81 o-Xylene	91	17.271	17.266	0.005	96	7931	0.0523	
88 1,3,5-Trimethylbenzene	120	18.568	18.568	0.005	92	16843	0.2300	
92 1,2,4-Trimethylbenzene	105	18.992	18.993	0.005	98	71815	0.4095	
98 1,2,3-Trimethylbenzene	105	19.452	19.453	0.005	97	24417	0.1449	
109 Naphthalene	128	21.561	21.556	0.005	99	55090	0.3989	
S 116 Xylenes, Total	100				0		0.1460	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

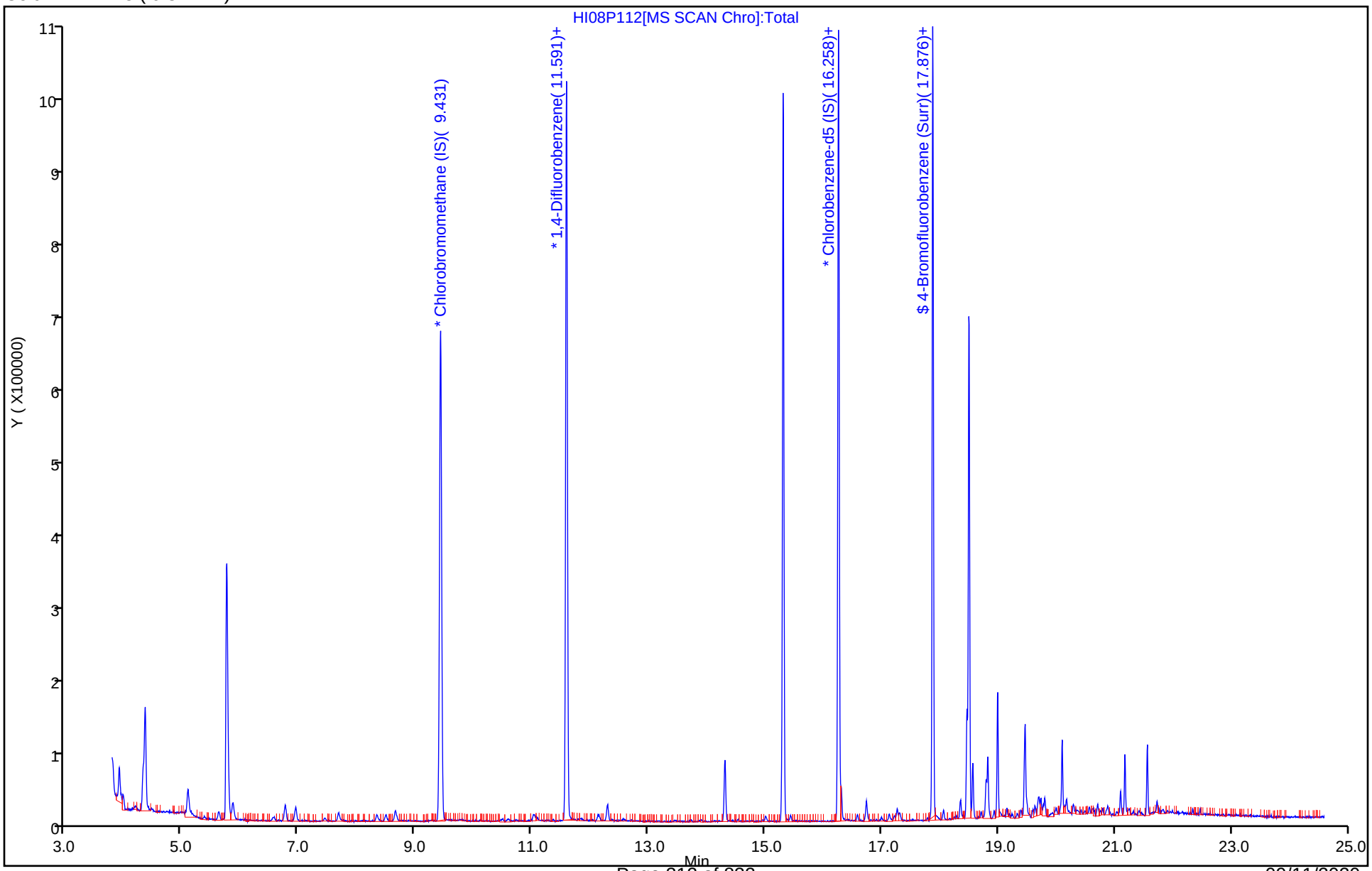
Report Date: 10-Sep-2020 10:34:09 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P112.D

Injection Date:	09-Sep-2020 02:36:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	140-20194-A-14	Lab Sample ID:	140-20194-14	Worklist Smp#:	16
Client ID:	SV-075-A-29				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P112.D				
Lims ID:	140-20194-A-14				
Client ID:	SV-075-A-29				
Sample Type:	Client				
Inject. Date:	09-Sep-2020 02:36:30	ALS Bottle#:	12	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016520-016				
Misc. Info.:	140-20194-a-14				
Operator ID:	HMT	Instrument ID:	MH		
Method:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\MH_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	10-Sep-2020 10:33:49	Calib Date:	29-Aug-2020 23:57:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1028				

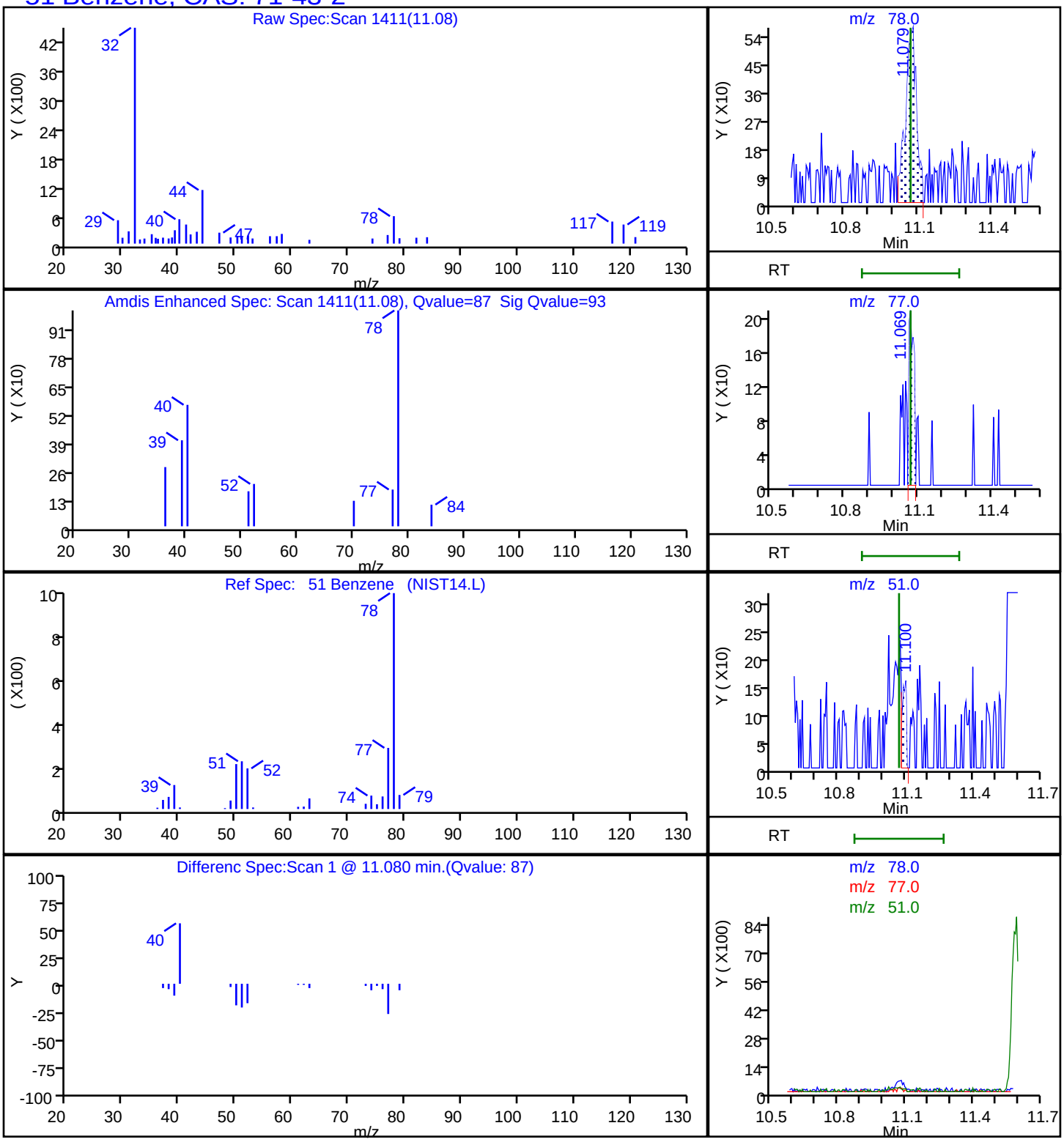
First Level Reviewer: khachitpongpanits Date: 10-Sep-2020 10:34:09

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	4.34	93.51

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P112.D		
Injection Date:	09-Sep-2020 02:36:30	Instrument ID:	MH
Lims ID:	140-20194-A-14	Lab Sample ID:	140-20194-14
Client ID:	SV-075-A-29		
Operator ID:	HMT	ALS Bottle#:	12 Worklist Smp#: 16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

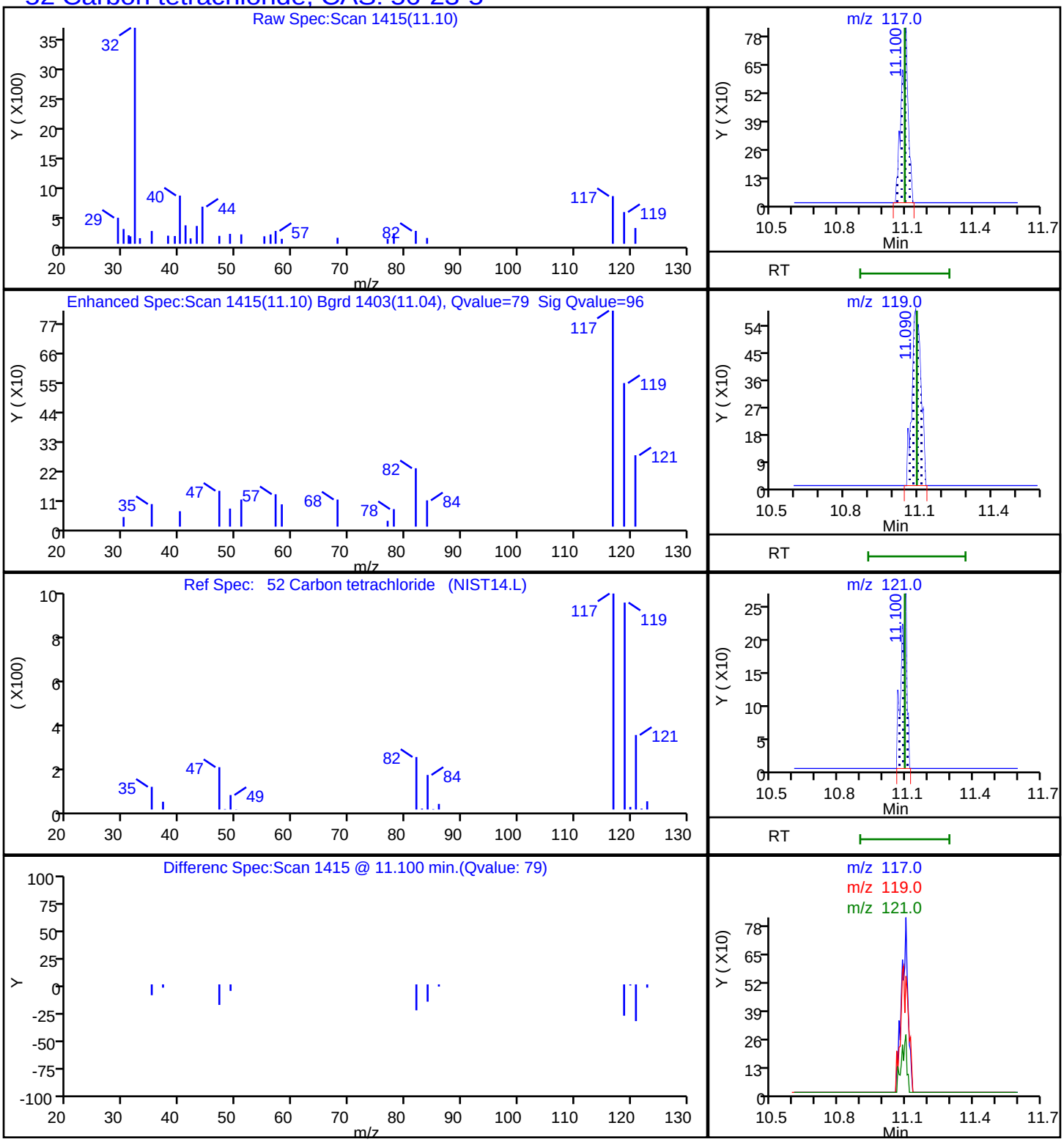
51 Benzene, CAS: 71-43-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P112.D		
Injection Date:	09-Sep-2020 02:36:30	Instrument ID:	MH
Lims ID:	140-20194-A-14	Lab Sample ID:	140-20194-14
Client ID:	SV-075-A-29		
Operator ID:	HMT	ALS Bottle#:	12 Worklist Smp#: 16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

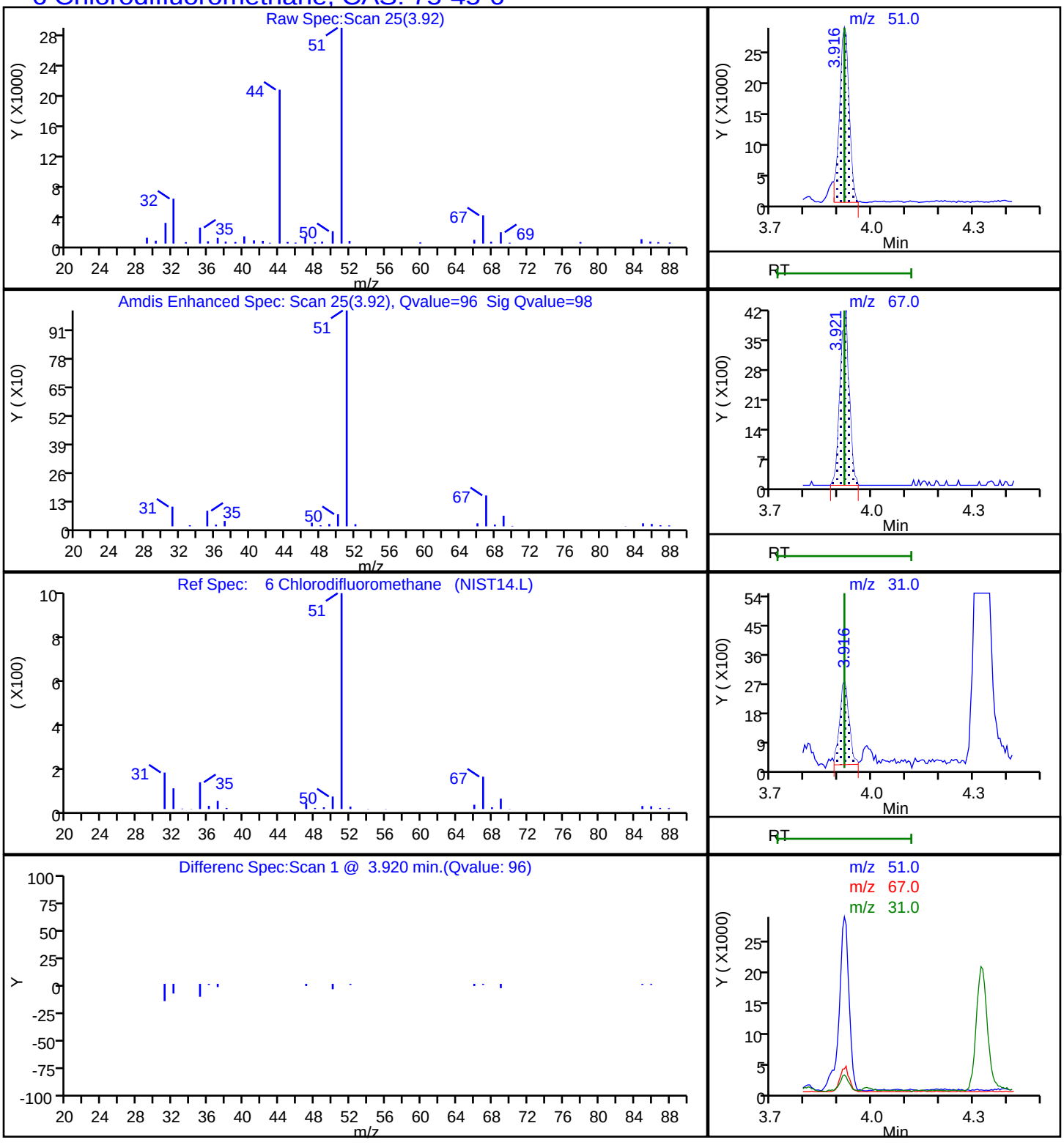
52 Carbon tetrachloride, CAS: 56-23-5



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P112.D				
Injection Date:	09-Sep-2020 02:36:30	Instrument ID:	MH		
Lims ID:	140-20194-A-14	Lab Sample ID:	140-20194-14		
Client ID:	SV-075-A-29				
Operator ID:	HMT	ALS Bottle#:	12	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

6 Chlorodifluoromethane, CAS: 75-45-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P112.D		
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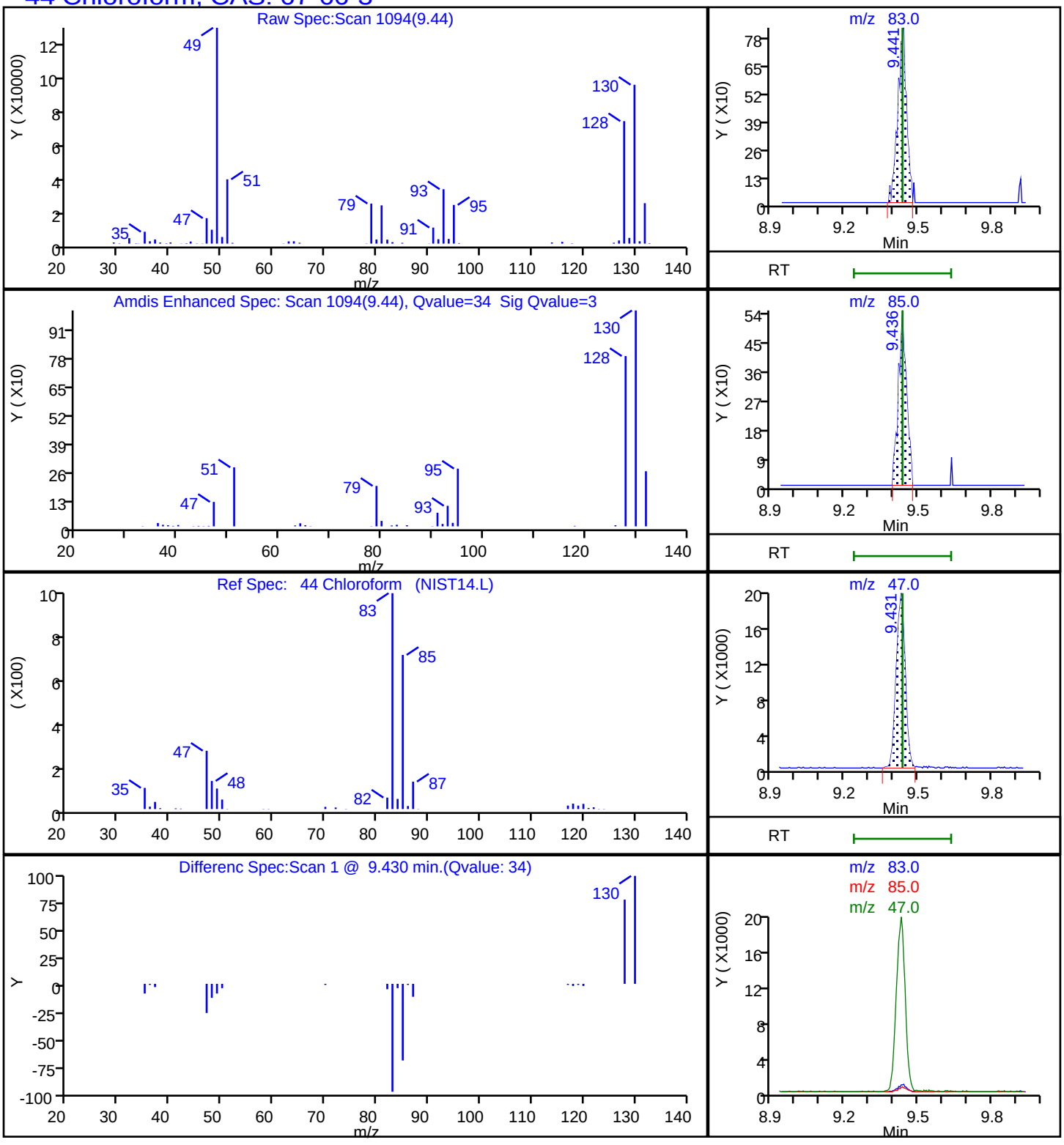
Lims ID:	140-20194-A-14	Lab Sample ID:	140-20194-14
Client ID:	SV-075-A-29		
Operator ID:	HMT	ALS Bottle#:	12 Worklist Smp#: 16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

44 Chloroform, CAS: 67-66-3



Eurofins TestAmerica, Knoxville

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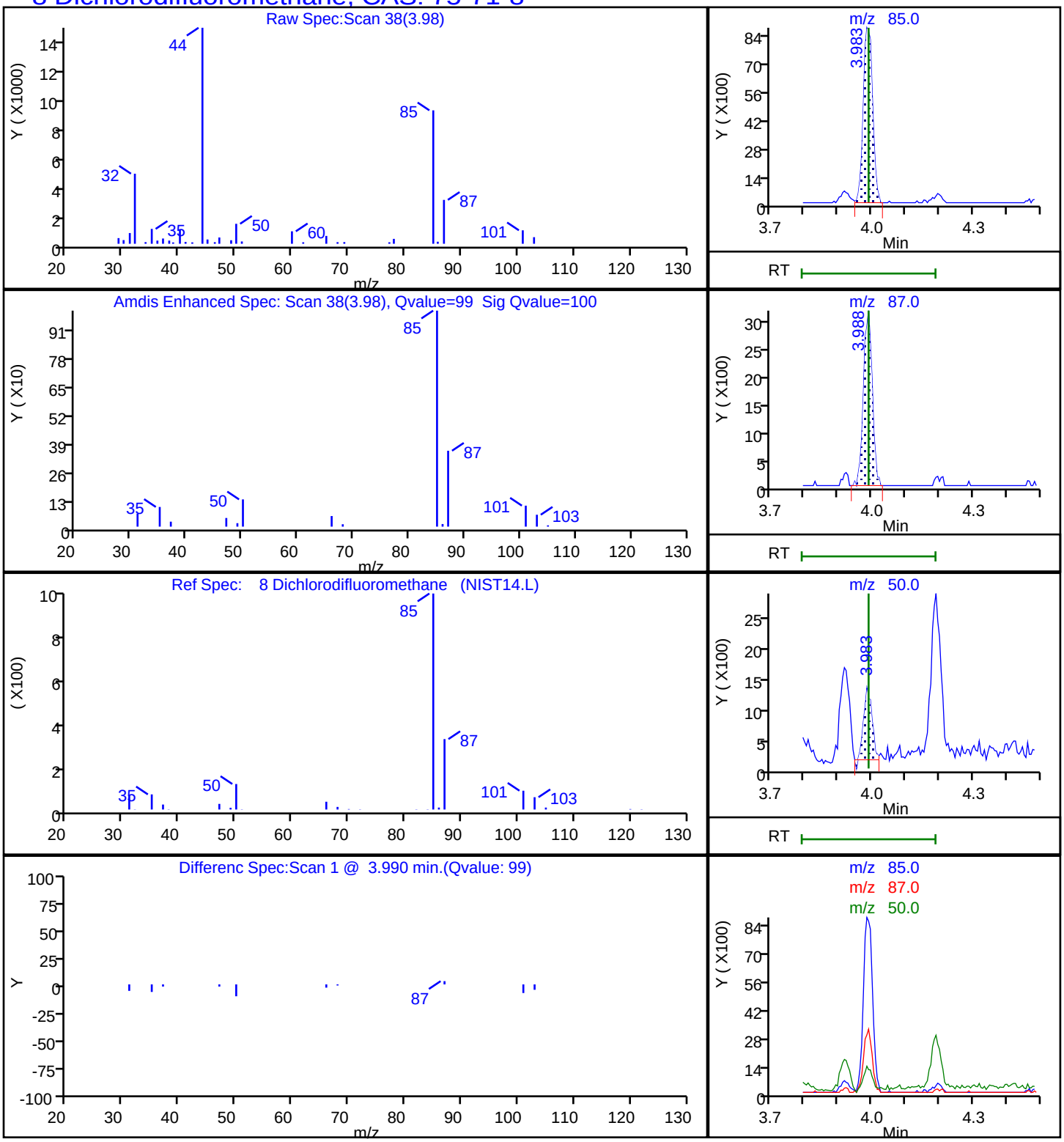
Lims ID:	140-20194-A-14	Lab Sample ID:	140-20194-14
Client ID:	SV-075-A-29		
Operator ID:	HMT	ALS Bottle#:	12 Worklist Smp#: 16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

8 Dichlorodifluoromethane, CAS: 75-71-8



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P112.D				
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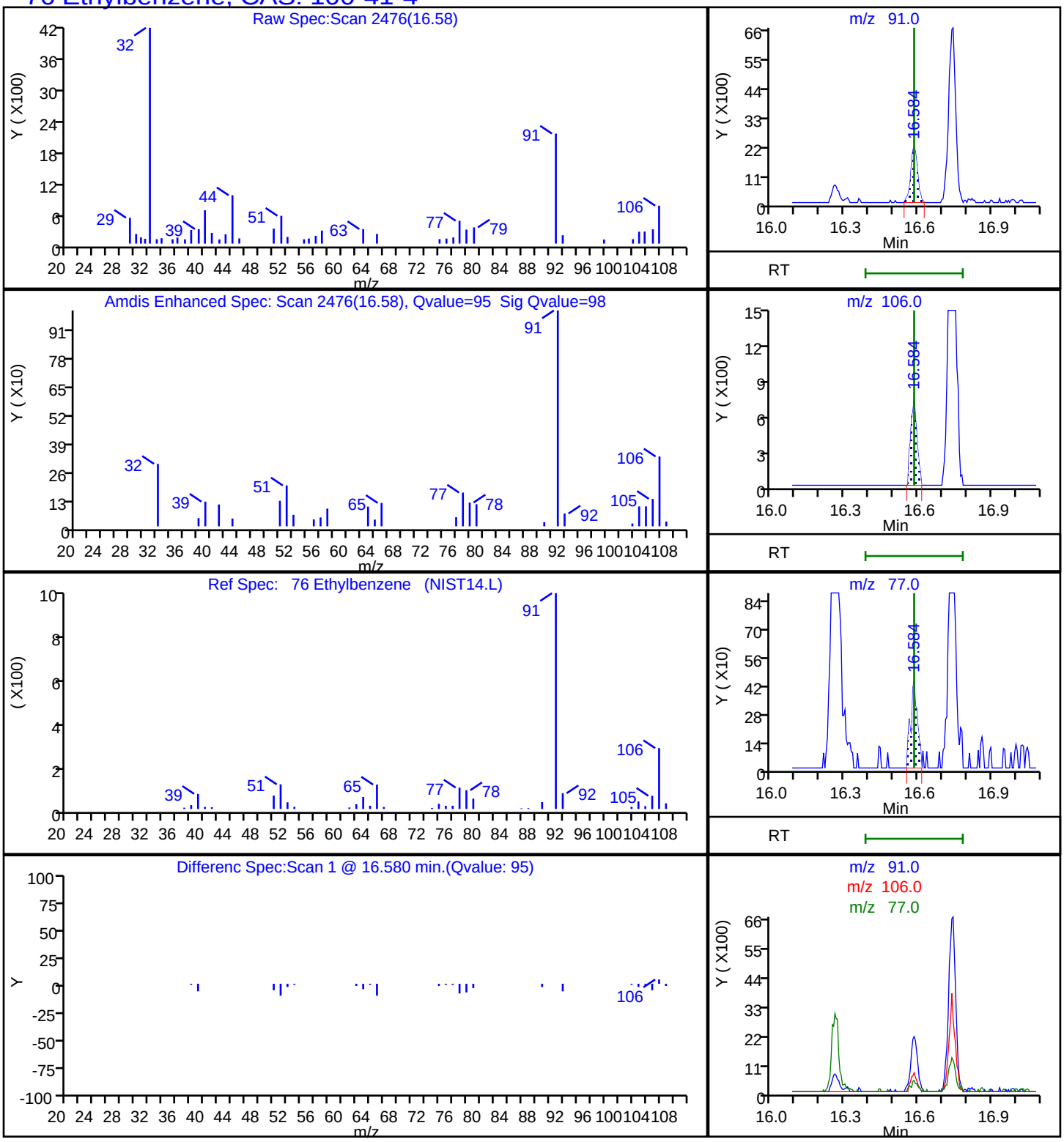
Lims ID:	140-20194-A-14	Lab Sample ID:	140-20194-14		
Client ID:	SV-075-A-29				
Operator ID:	HMT	ALS Bottle#:	12	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

76 Ethylbenzene, CAS: 100-41-4



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P112.D		
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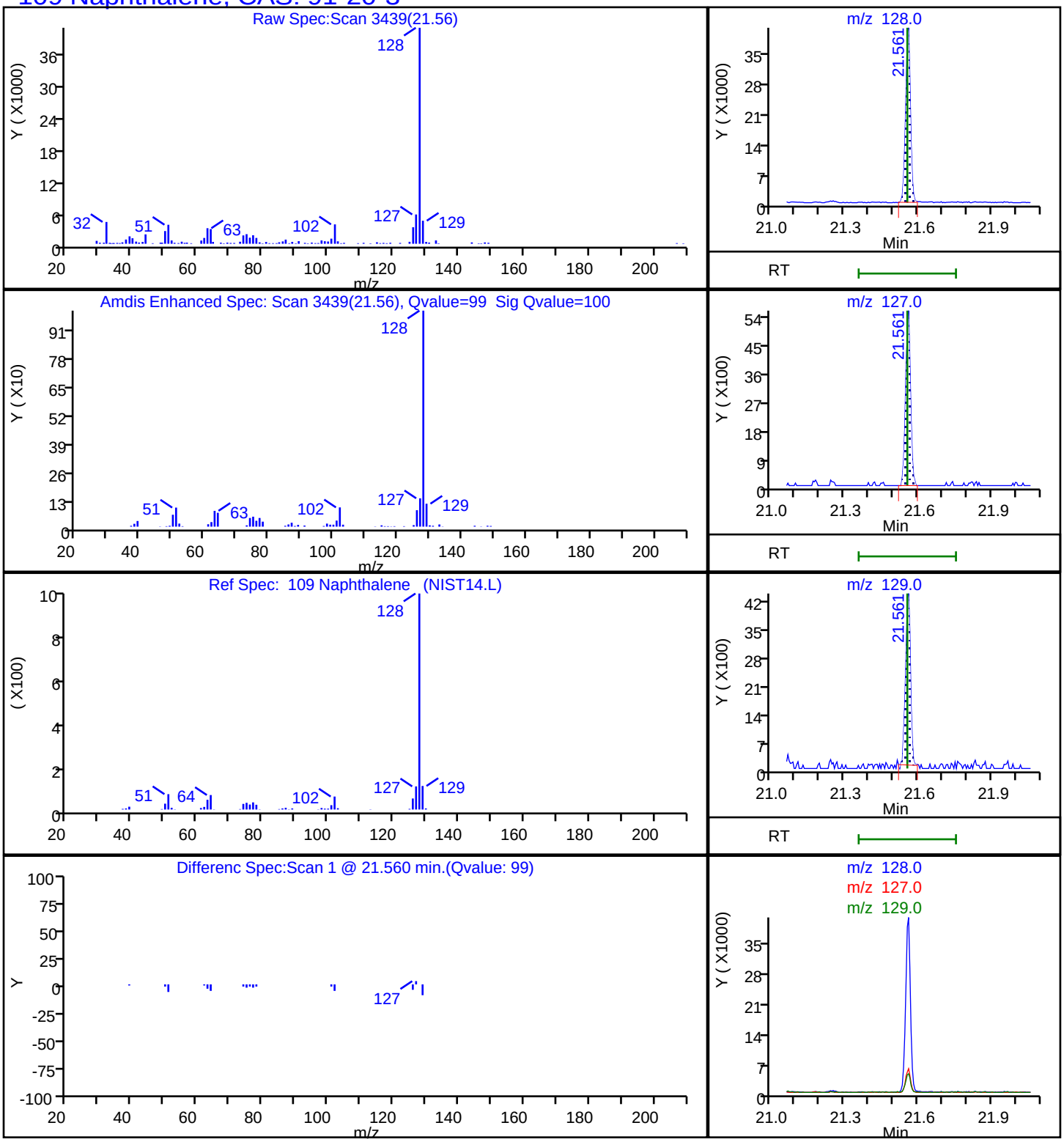
Lims ID:	140-20194-A-14	Lab Sample ID:	140-20194-14
Client ID:	SV-075-A-29		
Operator ID:	HMT	ALS Bottle#:	12 Worklist Smp#: 16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

109 Naphthalene, CAS: 91-20-3



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Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P112.D				
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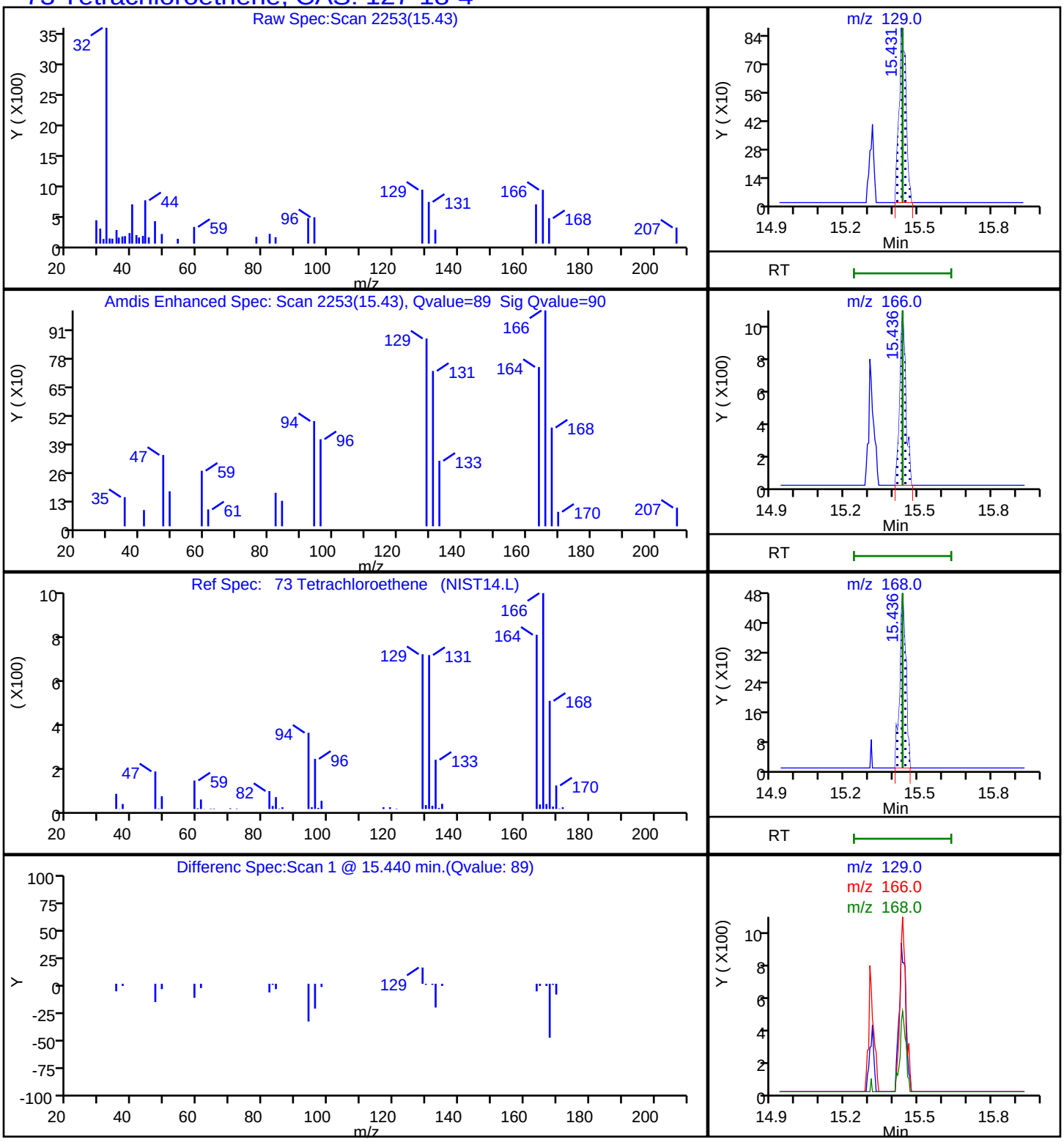
Lims ID:	140-20194-A-14	Lab Sample ID:	140-20194-14		
Client ID:	SV-075-A-29				
Operator ID:	HMT	ALS Bottle#:	12	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

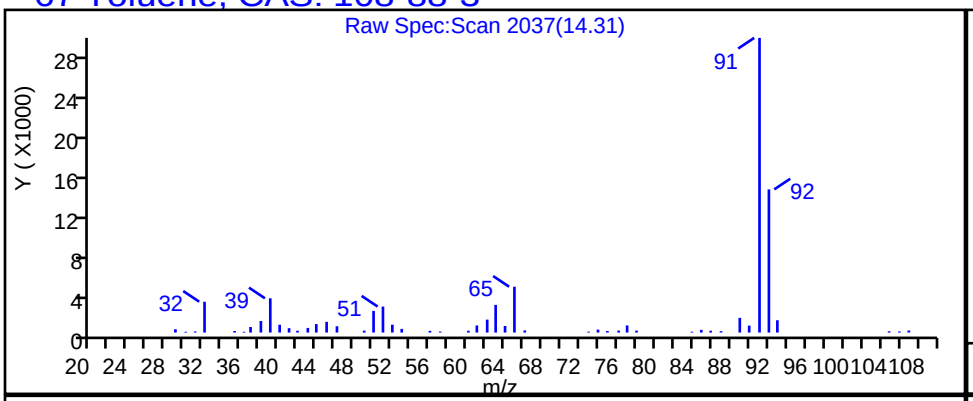
73 Tetrachloroethene, CAS: 127-18-4

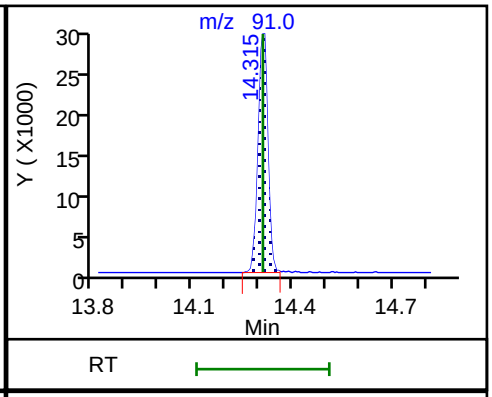


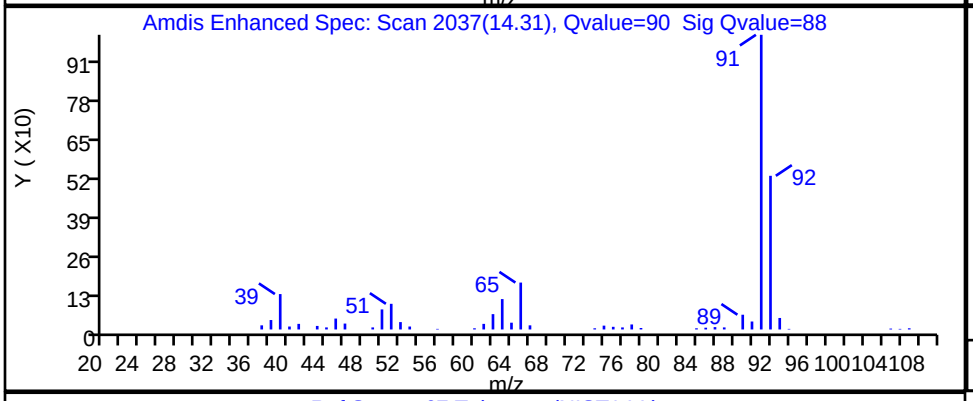
Eurofins TestAmerica, Knoxville

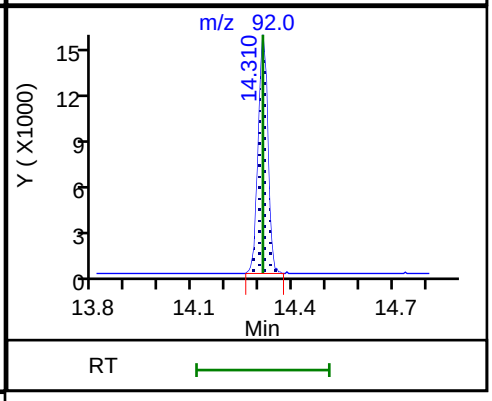
Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P112.D		
Injection Date:	09-Sep-2020 02:36:30	Instrument ID:	MH
Lims ID:	140-20194-A-14	Lab Sample ID:	140-20194-14
Client ID:	SV-075-A-29		
Operator ID:	HMT	ALS Bottle#:	12 Worklist Smp#: 16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

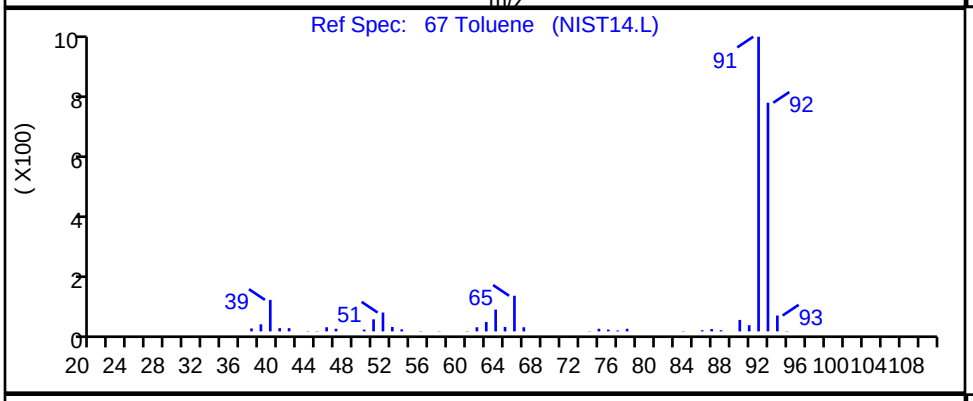
67 Toluene, CAS: 108-88-3

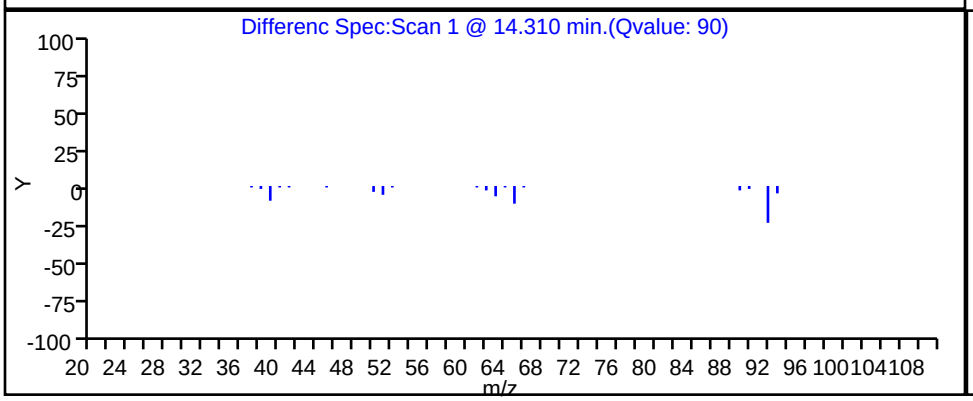


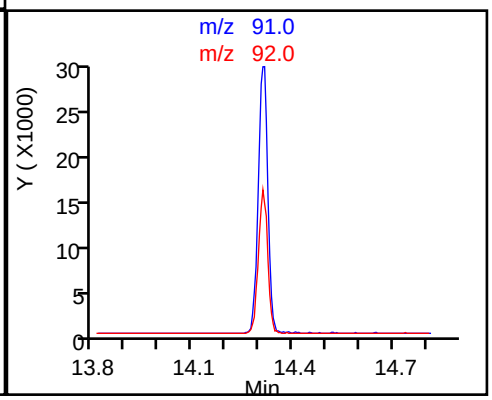








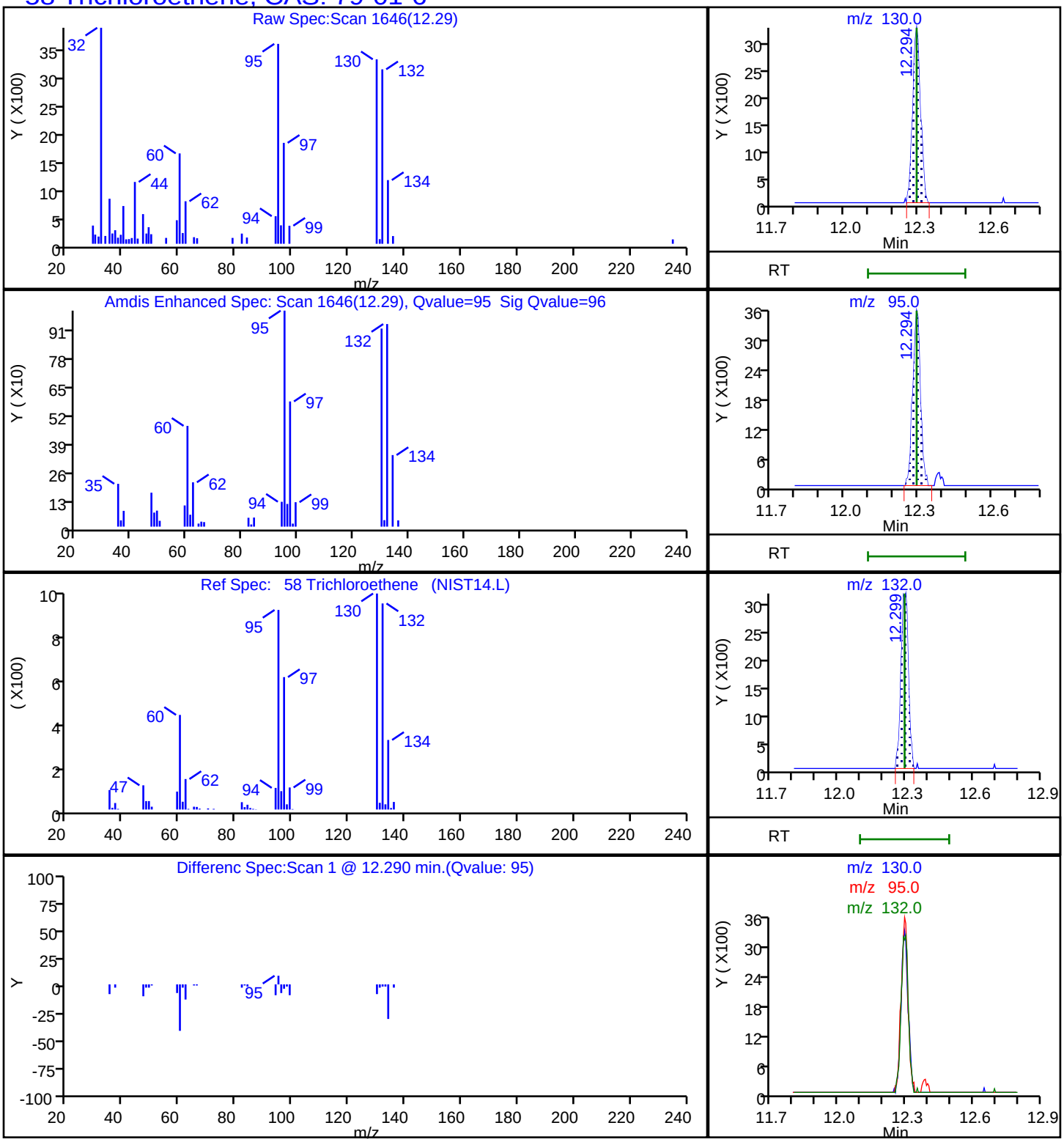




Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P112.D		
Injection Date:	09-Sep-2020 02:36:30	Instrument ID:	MH
Lims ID:	140-20194-A-14	Lab Sample ID:	140-20194-14
Client ID:	SV-075-A-29		
Operator ID:	HMT	ALS Bottle#:	12 Worklist Smp#: 16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

58 Trichloroethene, CAS: 79-01-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P112.D		
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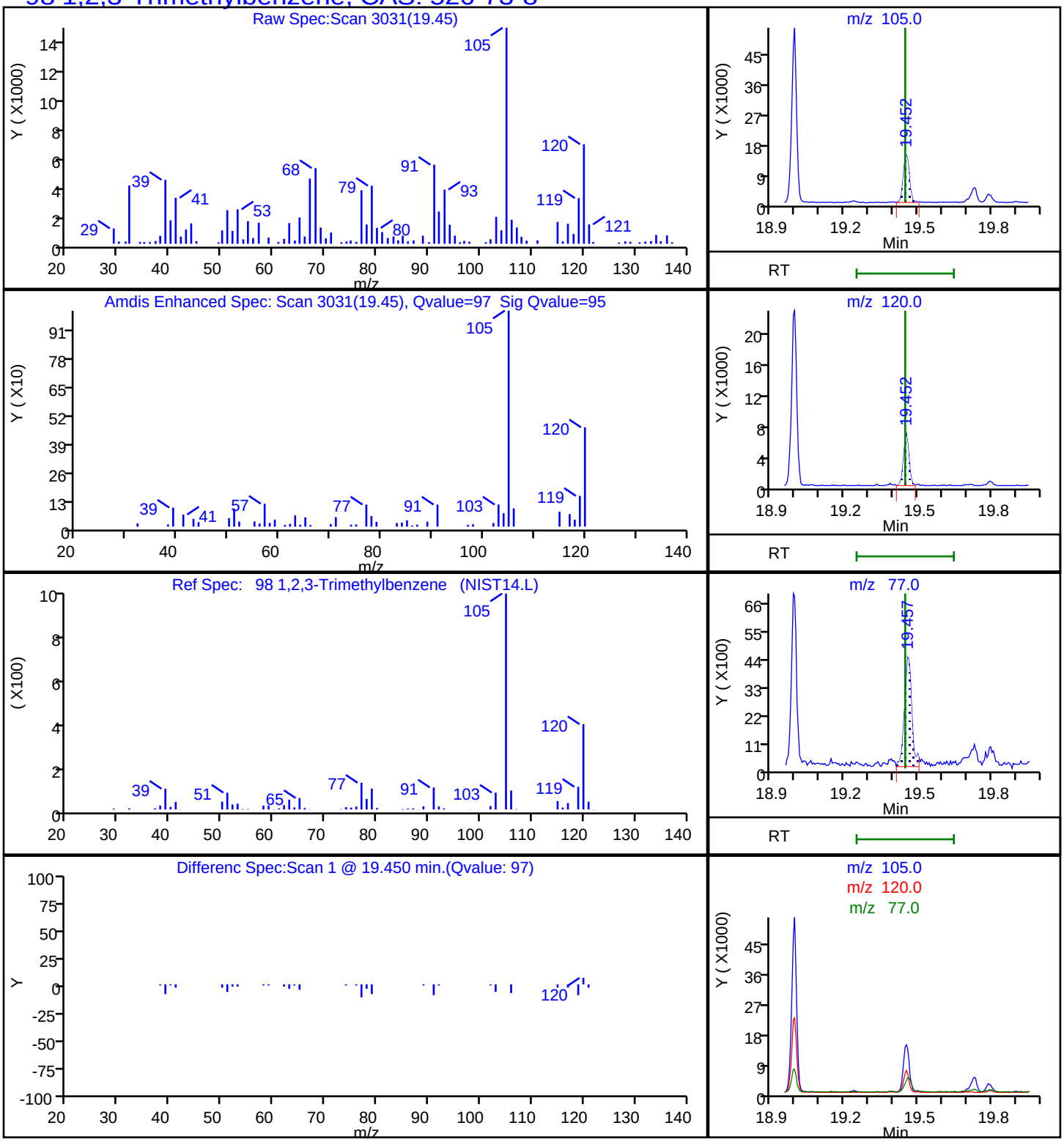
Lims ID:	140-20194-A-14	Lab Sample ID:	140-20194-14
Client ID:	SV-075-A-29		
Operator ID:	HMT	ALS Bottle#:	12 Worklist Smp#: 16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

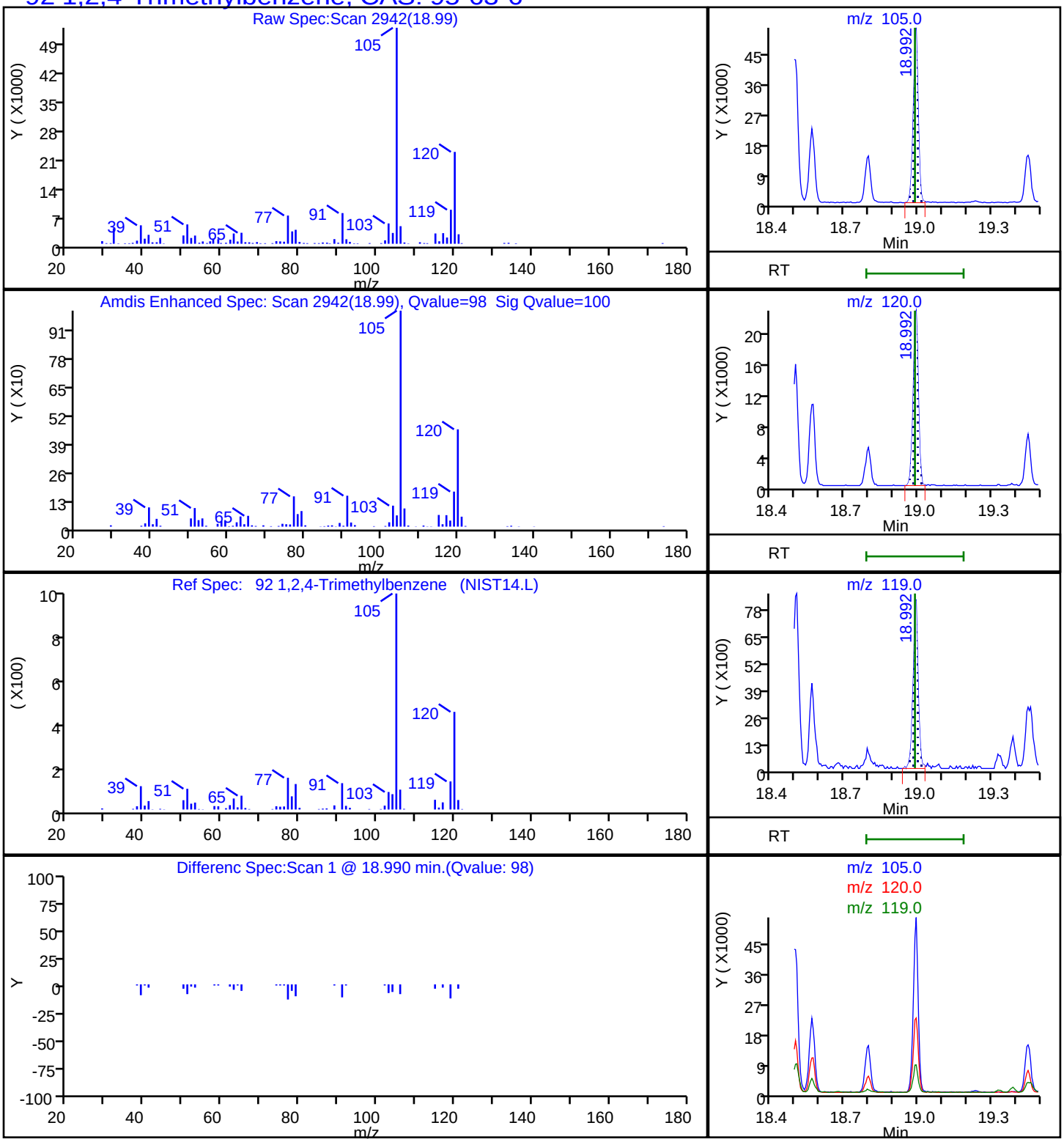
98 1,2,3-Trimethylbenzene, CAS: 526-73-8



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P112.D				
Injection Date:	09-Sep-2020 02:36:30	Instrument ID:	MH		
Lims ID:	140-20194-A-14	Lab Sample ID:	140-20194-14		
Client ID:	SV-075-A-29				
Operator ID:	HMT	ALS Bottle#:	12	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

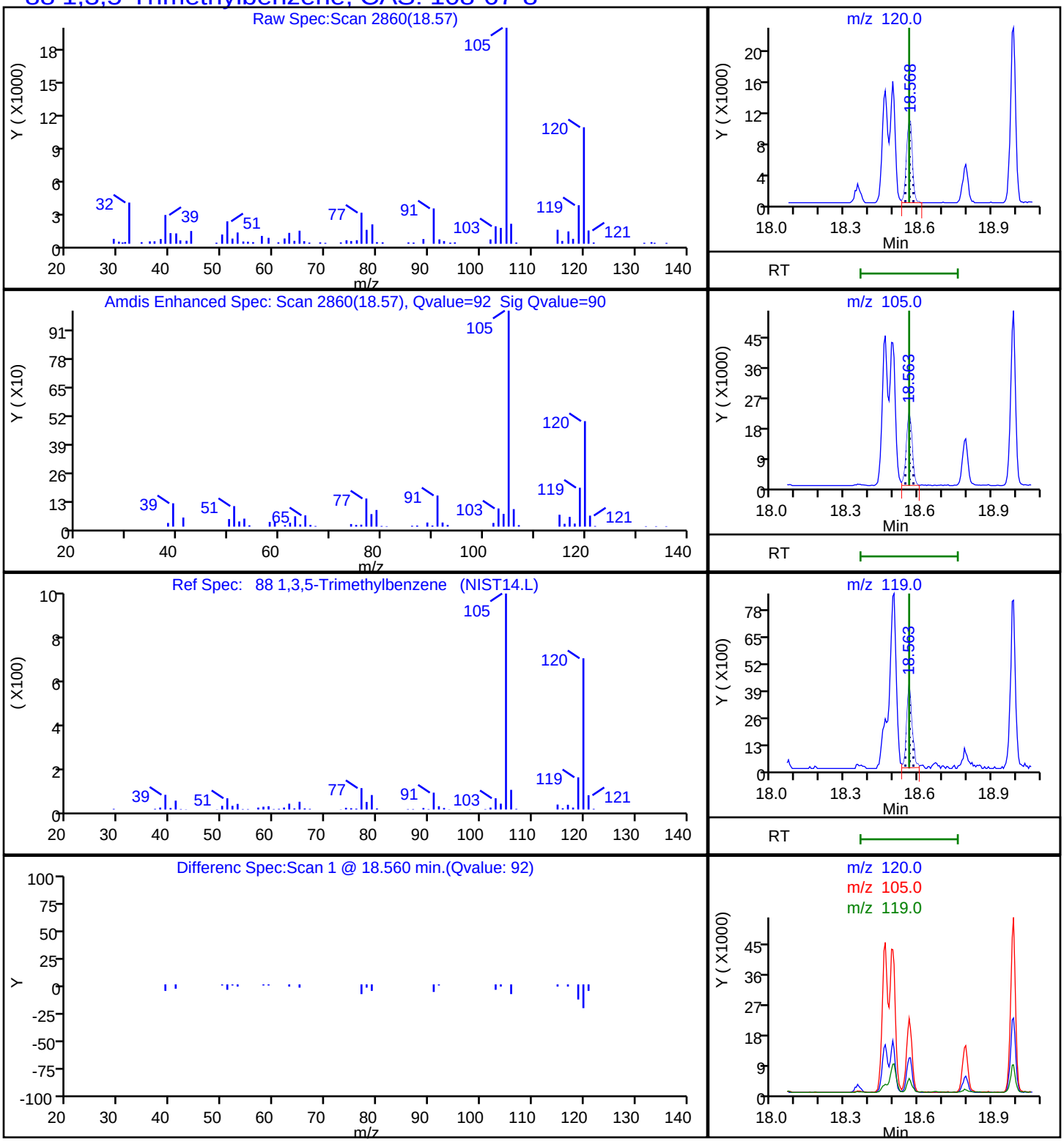
92 1,2,4-Trimethylbenzene, CAS: 95-63-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P112.D		
Injection Date:	09-Sep-2020 02:36:30	Instrument ID:	MH
Lims ID:	140-20194-A-14	Lab Sample ID:	140-20194-14
Client ID:	SV-075-A-29		
Operator ID:	HMT	ALS Bottle#:	12 Worklist Smp#: 16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

88 1,3,5-Trimethylbenzene, CAS: 108-67-8



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P112.D				
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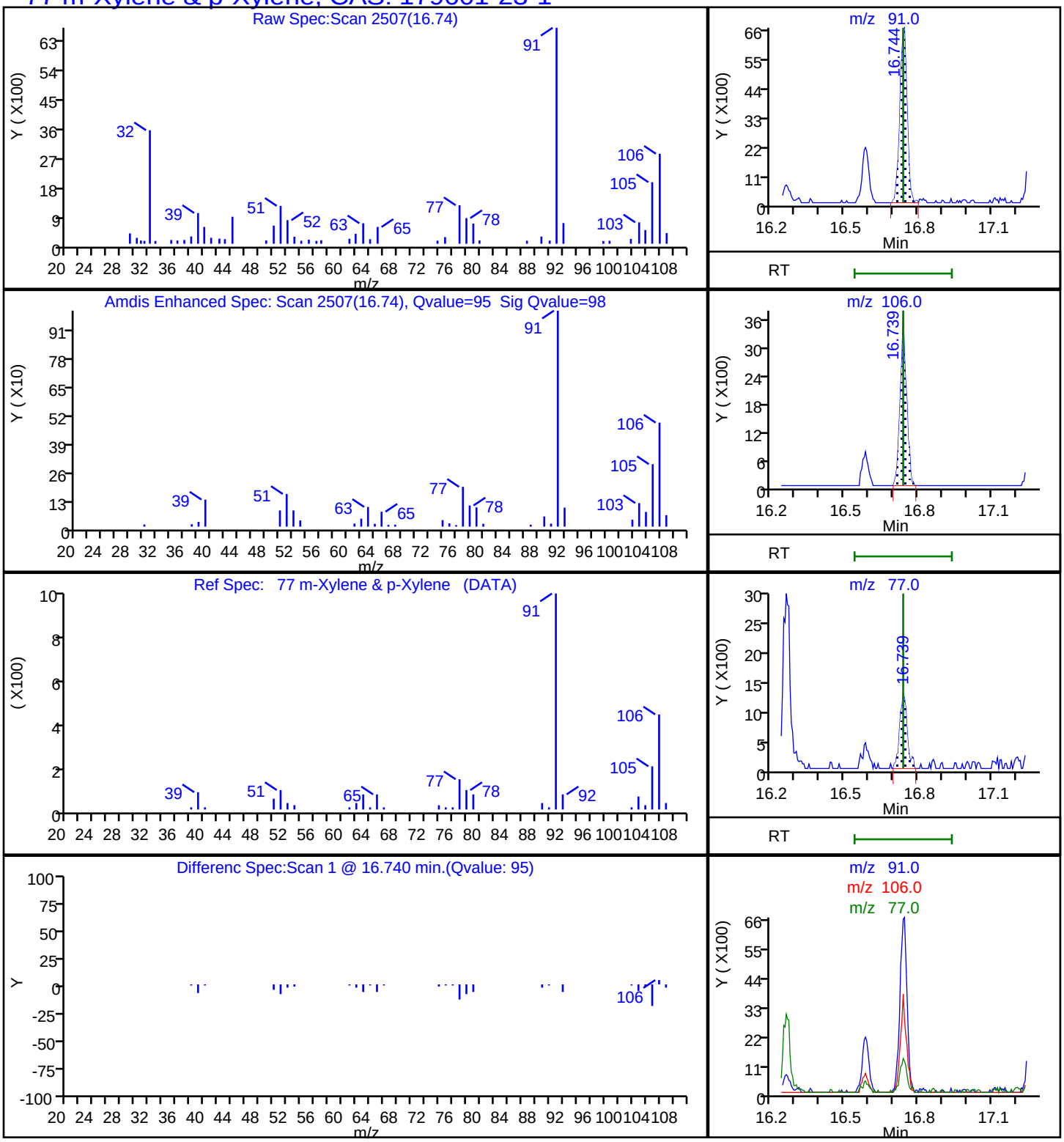
Lims ID:	140-20194-A-14	Lab Sample ID:	140-20194-14		
Client ID:	SV-075-A-29				
Operator ID:	HMT	ALS Bottle#:	12	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

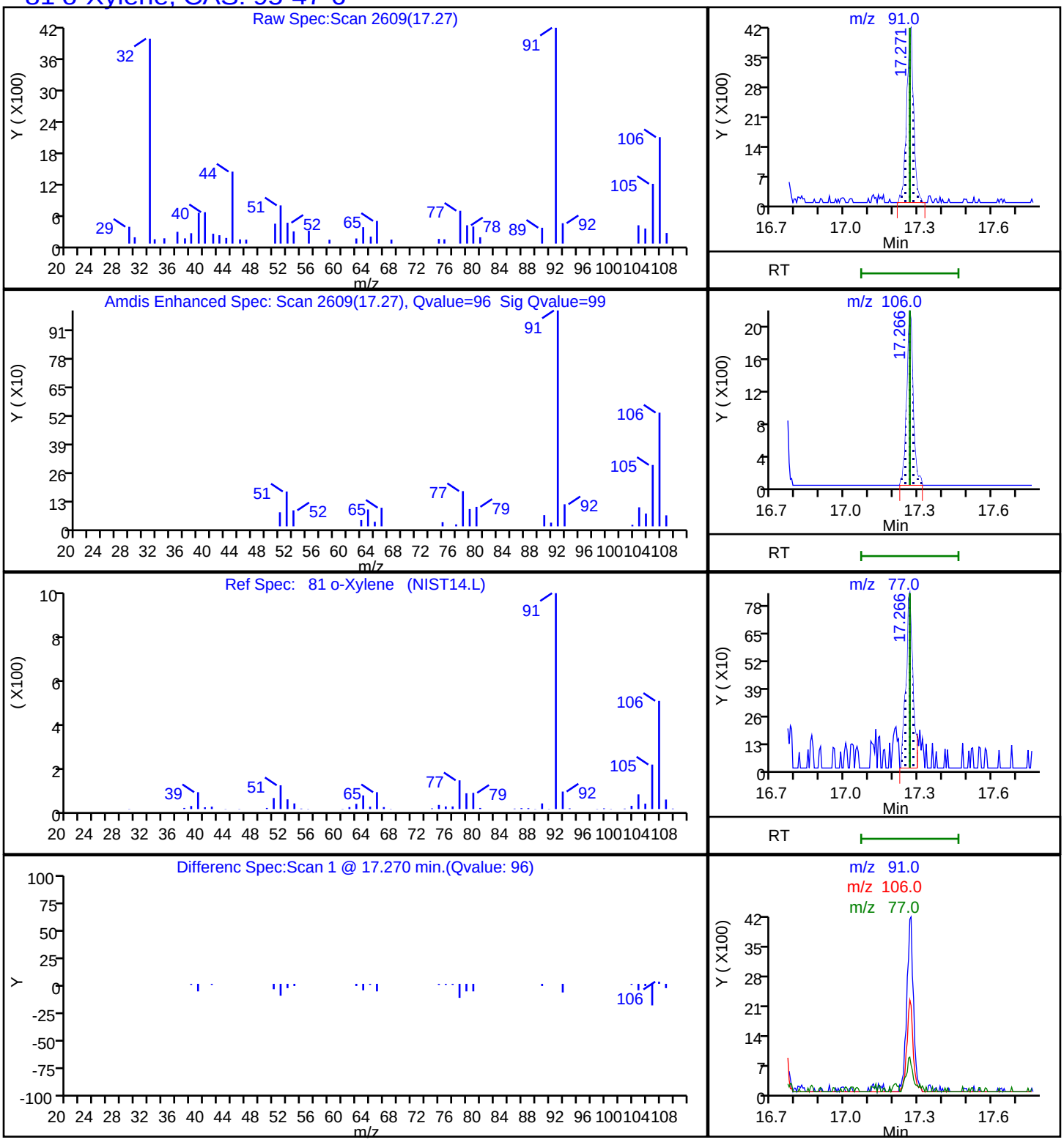
77 m-Xylene & p-Xylene, CAS: 179601-23-1



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P112.D				
Injection Date:	09-Sep-2020 02:36:30	Instrument ID:	MH		
Lims ID:	140-20194-A-14	Lab Sample ID:	140-20194-14		
Client ID:	SV-075-A-29				
Operator ID:	HMT	ALS Bottle#:	12	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

81 o-Xylene, CAS: 95-47-6



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Knoxville

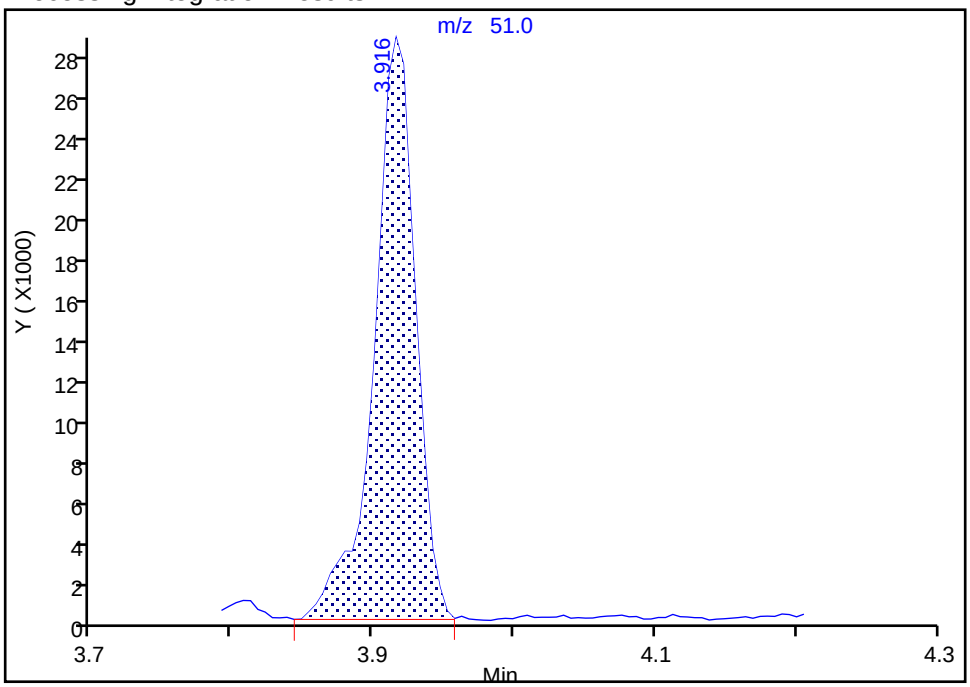
Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P112.D				
Injection Date:	09-Sep-2020 02:36:30	Instrument ID:	MH		
Lims ID:	140-20194-A-14	Lab Sample ID:	140-20194-14		
Client ID:	SV-075-A-29				
Operator ID:	HMT	ALS Bottle#:	12	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

6 Chlorodifluoromethane, CAS: 75-45-6

Signal: 1

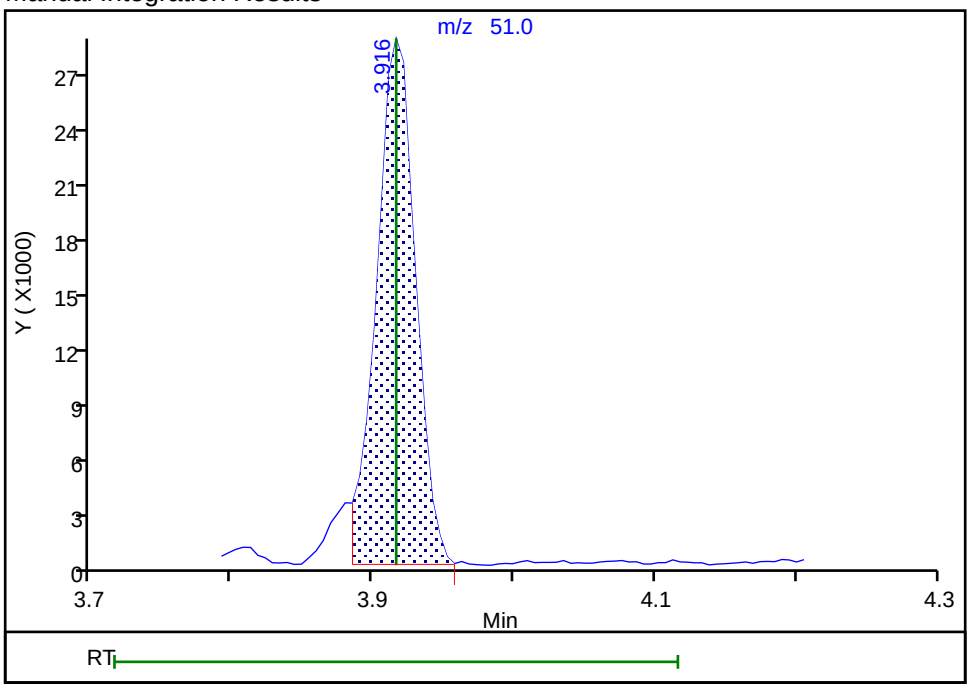
Processing Integration Results

RT: 3.92
Area: 57948
Amount: 0.494365
Amount Units: ppb v/v



Manual Integration Results

RT: 3.92
Area: 54627
Amount: 0.466033
Amount Units: ppb v/v



Reviewer: khachitpongpanits, 10-Sep-2020 10:33:47

Audit Action: Split an Integrated Peak Audit Reason: Split Peak

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: SV-136-A-29 Lab Sample ID: 140-20194-15

Matrix: Air Lab File ID: HI08P113.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 10:26

Sample wt/vol: 20(mL) Date Analyzed: 09/09/2020 03:32

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42504 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.81	J	2.0	0.20
56-23-5	Carbon tetrachloride	153.81	ND		2.0	0.18
75-45-6	Chlorodifluoromethane	86.47	ND		2.0	0.55
67-66-3	Chloroform	119.38	0.37	J	2.0	0.18
156-59-2	cis-1,2-Dichloroethene	96.94	0.45	J	2.0	0.25
75-71-8	Dichlorodifluoromethane	120.91	0.45	J	2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		2.0	0.18
107-06-2	1,2-Dichloroethane	98.96	ND		2.0	0.25
75-35-4	1,1-Dichloroethene	96.94	ND		2.0	0.20
100-41-4	Ethylbenzene	106.17	ND		2.0	0.33
75-09-2	Methylene Chloride	84.93	ND		10	9.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		10	1.3
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.0	0.18
108-88-3	Toluene	92.14	ND		3.0	2.0
156-60-5	trans-1,2-Dichloroethene	96.94	ND		2.0	0.18
120-82-1	1,2,4-Trichlorobenzene	181.45	ND	*	2.0	1.6
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.0	0.93
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.0	0.18
79-01-6	Trichloroethene	131.39	89		1.0	0.15
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.90
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		2.0	0.50
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.55
75-01-4	Vinyl chloride	62.50	ND		1.0	0.65
1330-20-7	Xylenes, Total	106.17	ND		4.0	0.60

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	94		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: SV-136-A-29 Lab Sample ID: 140-20194-15

Matrix: Air Lab File ID: HI08P113.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 10:26

Sample wt/vol: 20(mL) Date Analyzed: 09/09/2020 03:32

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42504 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	2.6	J	6.4	0.64
56-23-5	Carbon tetrachloride	153.81	ND		13	1.1
75-45-6	Chlorodifluoromethane	86.47	ND		7.1	1.9
67-66-3	Chloroform	119.38	1.8	J	9.8	0.85
156-59-2	cis-1,2-Dichloroethene	96.94	1.8	J	7.9	0.99
75-71-8	Dichlorodifluoromethane	120.91	2.2	J	9.9	1.7
75-34-3	1,1-Dichloroethane	98.96	ND		8.1	0.71
107-06-2	1,2-Dichloroethane	98.96	ND		8.1	1.0
75-35-4	1,1-Dichloroethene	96.94	ND		7.9	0.79
100-41-4	Ethylbenzene	106.17	ND		8.7	1.4
75-09-2	Methylene Chloride	84.93	ND		35	34
1634-04-4	Methyl tert-butyl ether	88.15	ND		36	4.7
91-20-3	Naphthalene	128.17	ND		5.2	5.2
127-18-4	Tetrachloroethene	165.83	ND		14	1.2
108-88-3	Toluene	92.14	ND		11	7.3
156-60-5	trans-1,2-Dichloroethene	96.94	ND		7.9	0.69
120-82-1	1,2,4-Trichlorobenzene	181.45	ND	*	15	12
71-55-6	1,1,1-Trichloroethane	133.41	ND		11	5.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		11	0.95
79-01-6	Trichloroethene	131.39	480		5.4	0.81
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		9.8	4.4
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		9.8	2.5
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		9.8	2.7
75-01-4	Vinyl chloride	62.50	ND		2.6	1.7
1330-20-7	Xylenes, Total	106.17	ND		17	2.6

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	94		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P113.D				
Lims ID:	140-20194-A-15				
Client ID:	SV-136-A-29				
Sample Type:	Client				
Inject. Date:	09-Sep-2020 03:32:30	ALS Bottle#:	13	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016520-017				
Misc. Info.:	140-20194-a-15				
Operator ID:	HMT	Instrument ID:	MH		
Method:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\MH_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	10-Sep-2020 10:33:49	Calib Date:	29-Aug-2020 23:57:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1028				
First Level Reviewer: khachitpongpanits		Date:	10-Sep-2020 10:34:32		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.431	9.431	0.000	95	237690	4.80	
* 2 1,4-Difluorobenzene	114	11.591	11.591	0.000	95	933516	4.80	
* 3 Chlorobenzene-d5 (IS)	117	16.258	16.258	0.000	87	673440	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.876	17.876	0.000	95	339879	4.34	
8 Dichlorodifluoromethane	85	3.988	3.988	0.000	98	3201	0.0178	
42 cis-1,2-Dichloroethene	96	9.079	9.090	-0.010	85	1105	0.0181	
44 Chloroform	83	9.431	9.436	-0.005	28	2141	0.0148	
51 Benzene	78	11.069	11.069	0.000	93	5569	0.0325	
58 Trichloroethene	130	12.294	12.294	0.000	96	273030	3.54	
67 Toluene	91	14.310	14.310	0.000	89	9805	0.0565	

Reagents:

40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

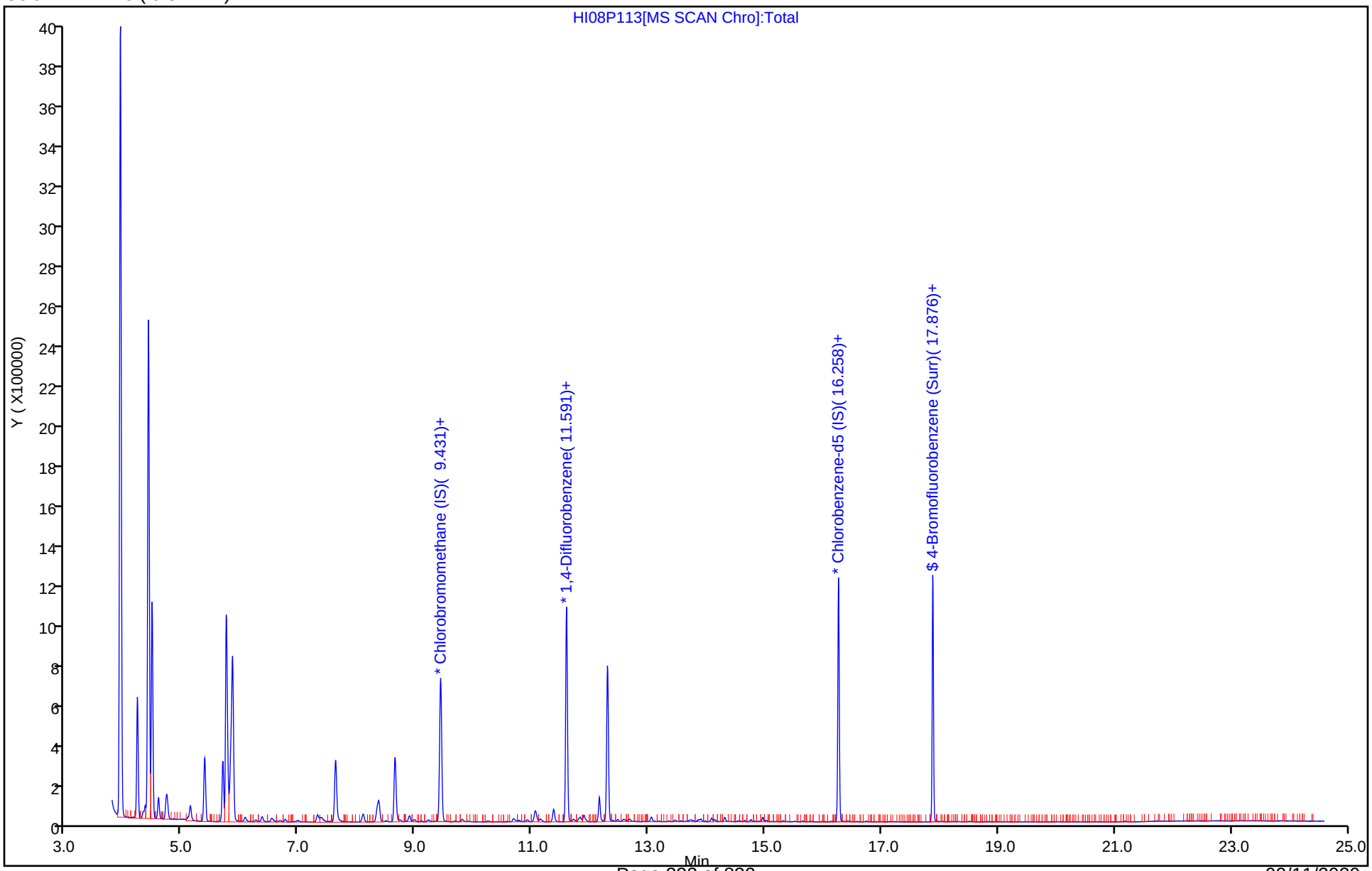
Report Date: 10-Sep-2020 10:34:32 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P113.D

Injection Date:	09-Sep-2020 03:32:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	140-20194-A-15	Lab Sample ID:	140-20194-15	Worklist Smp#:	17
Client ID:	SV-136-A-29				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

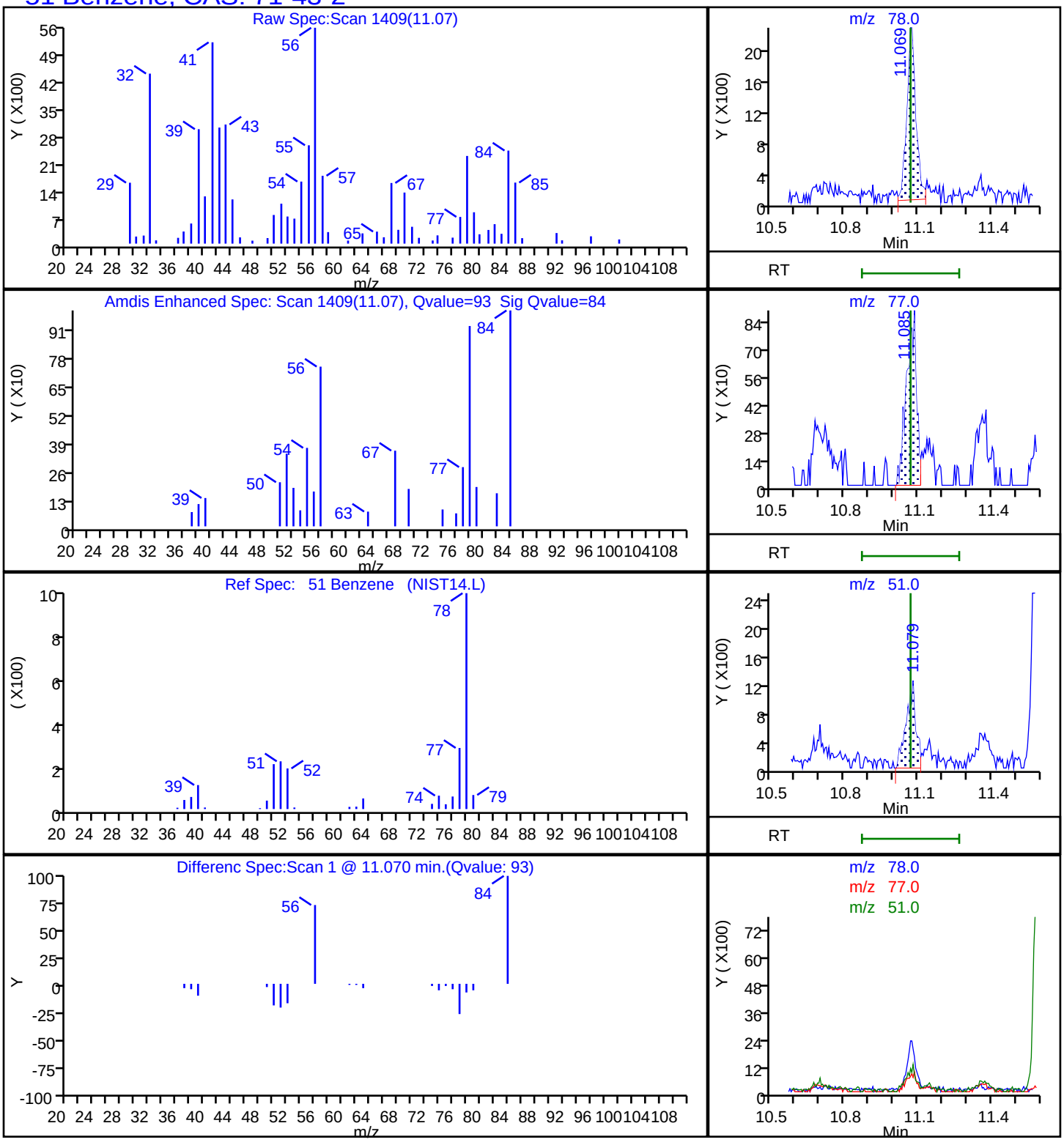
Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P113.D				
Lims ID:	140-20194-A-15				
Client ID:	SV-136-A-29				
Sample Type:	Client				
Inject. Date:	09-Sep-2020 03:32:30	ALS Bottle#:	13	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016520-017				
Misc. Info.:	140-20194-a-15				
Operator ID:	HMT	Instrument ID:	MH		
Method:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\MH_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	10-Sep-2020 10:33:49	Calib Date:	29-Aug-2020 23:57:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1028				
First Level Reviewer: khachitpongpanits		Date:	10-Sep-2020 10:34:32		

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	4.34	93.61

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P113.D		
Injection Date:	09-Sep-2020 03:32:30	Instrument ID:	MH
Lims ID:	140-20194-A-15	Lab Sample ID:	140-20194-15
Client ID:	SV-136-A-29		
Operator ID:	HMT	ALS Bottle#:	13 Worklist Smp#: 17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

51 Benzene, CAS: 71-43-2

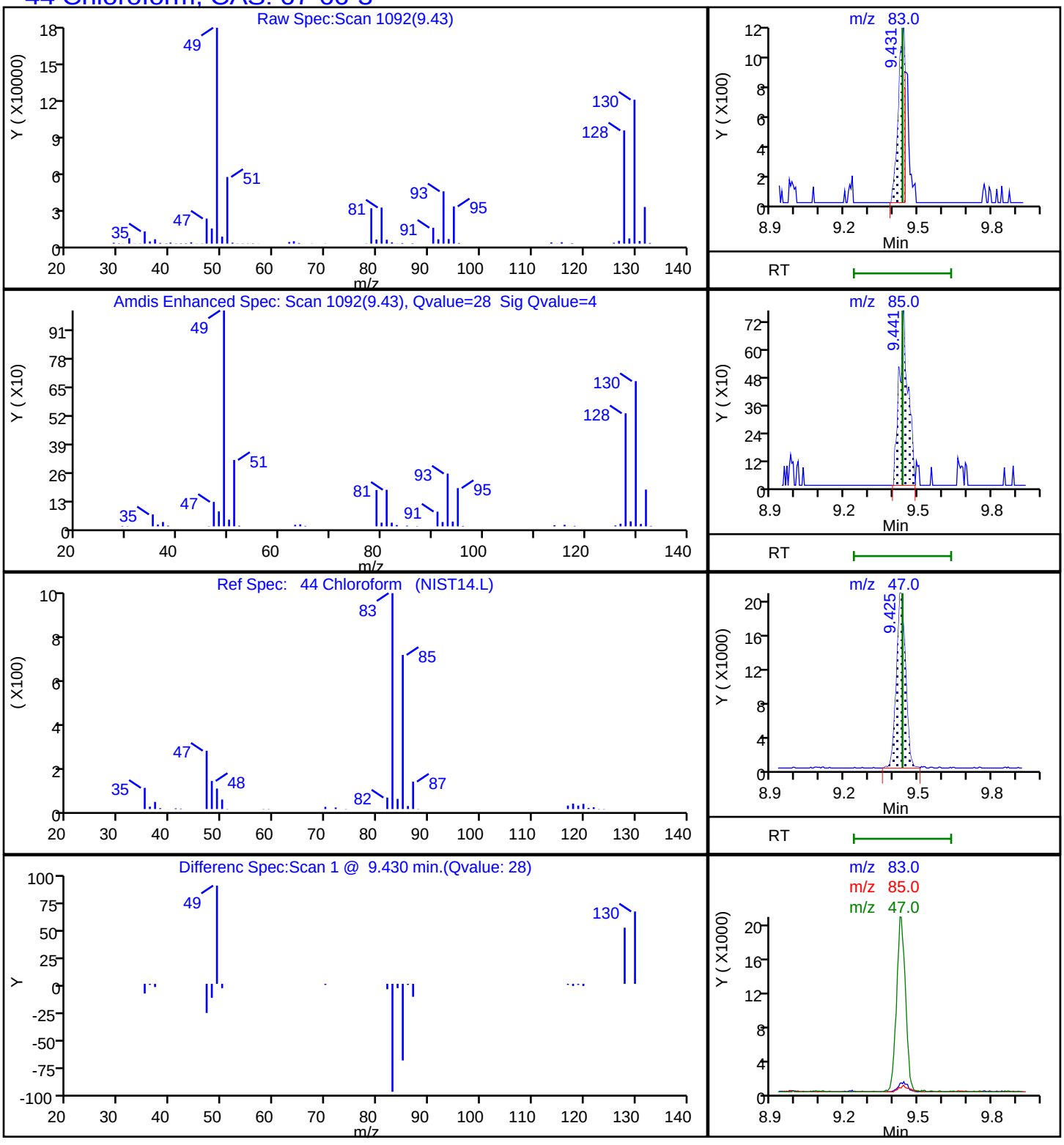


Report Date: 10-Sep-2020 10:34:32 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P113.D				
Injection Date:	09-Sep-2020 03:32:30	Instrument ID:	MH		
Lims ID:	140-20194-A-15	Lab Sample ID:	140-20194-15		
Client ID:	SV-136-A-29				
Operator ID:	HMT	ALS Bottle#:	13	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

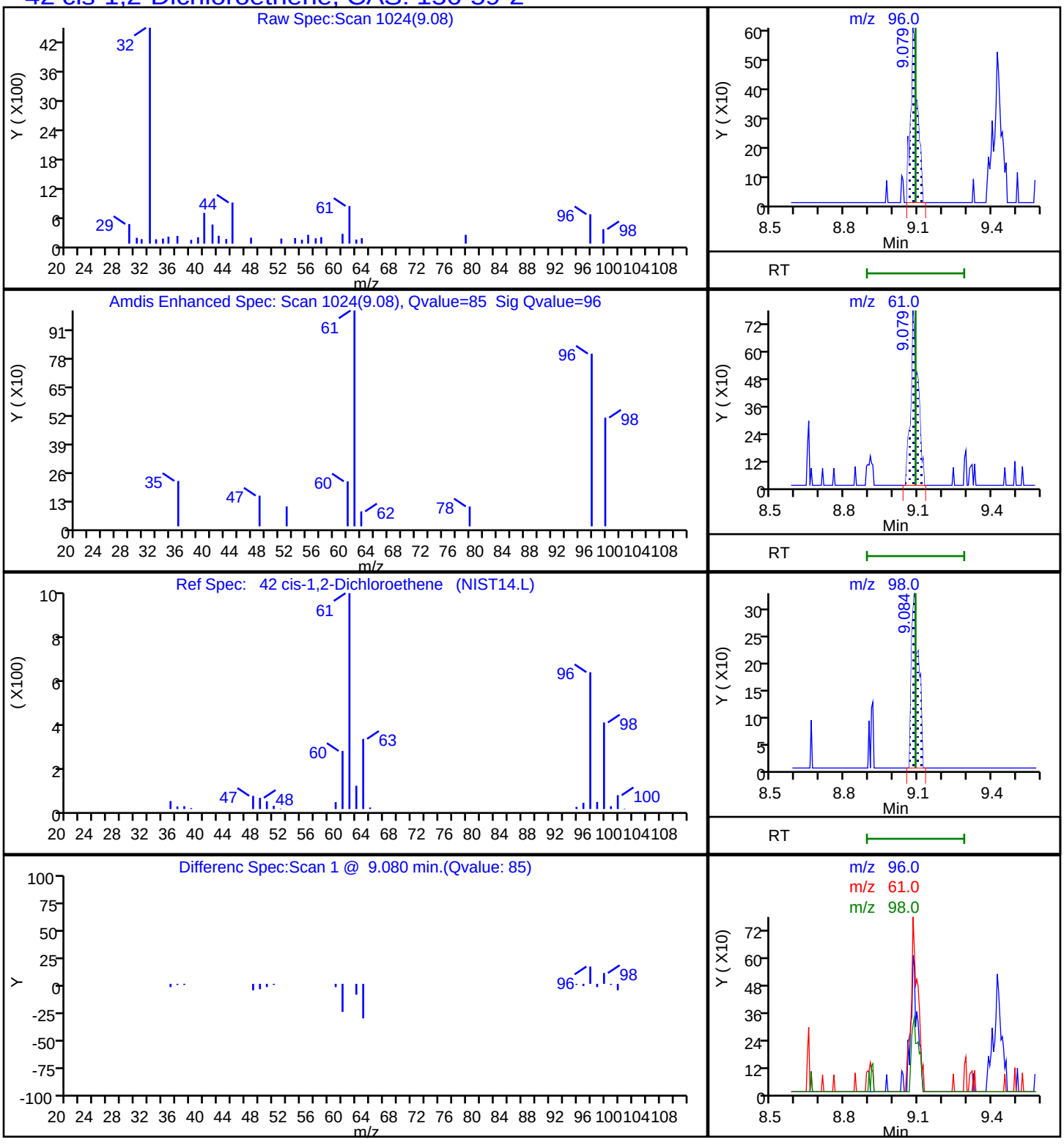
44 Chloroform, CAS: 67-66-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P113.D				
Injection Date:	09-Sep-2020 03:32:30	Instrument ID:	MH		
Lims ID:	140-20194-A-15	Lab Sample ID:	140-20194-15		
Client ID:	SV-136-A-29				
Operator ID:	HMT	ALS Bottle#:	13	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

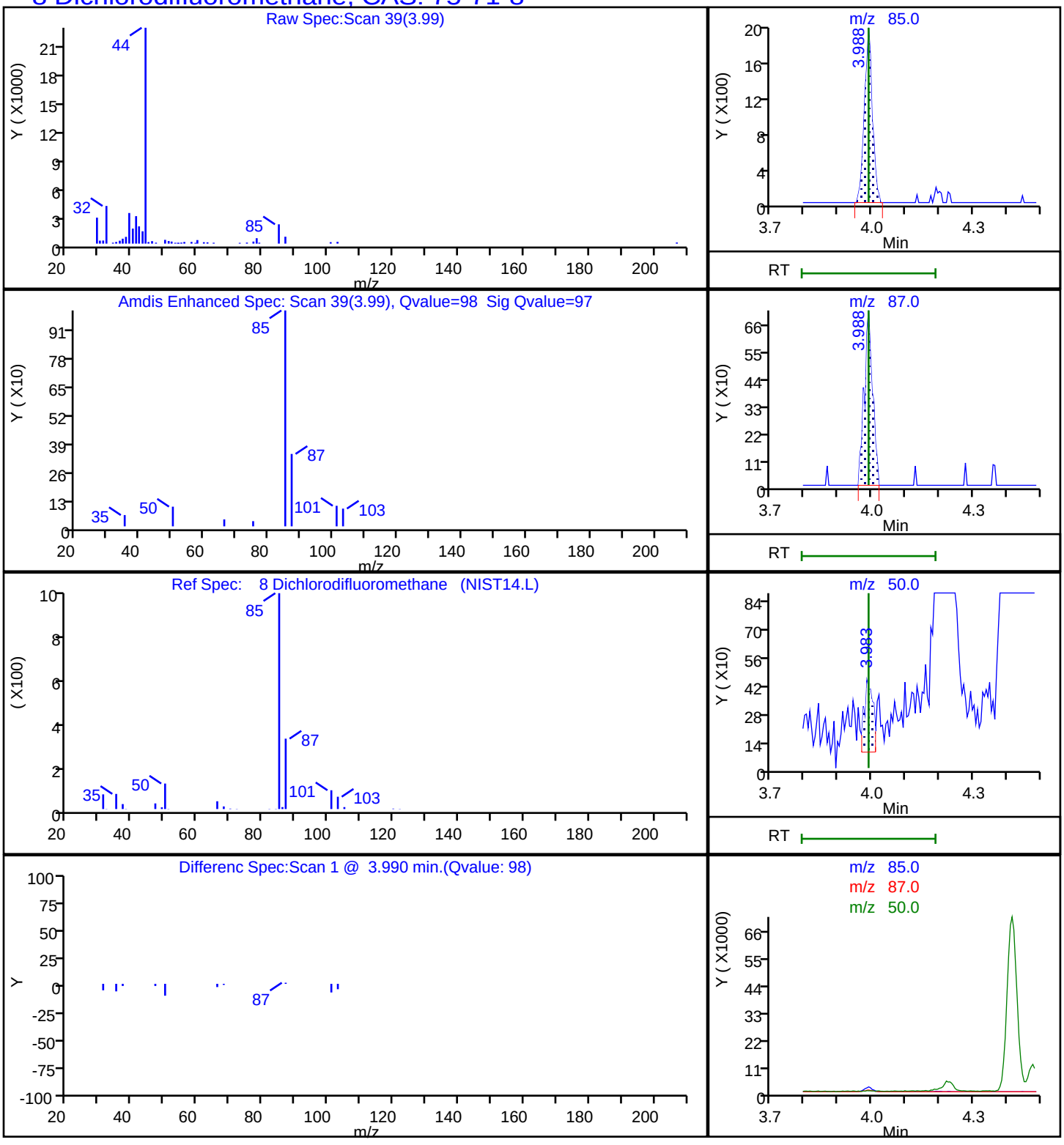
42 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P113.D				
Injection Date:	09-Sep-2020 03:32:30	Instrument ID:	MH		
Lims ID:	140-20194-A-15	Lab Sample ID:	140-20194-15		
Client ID:	SV-136-A-29				
Operator ID:	HMT	ALS Bottle#:	13	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

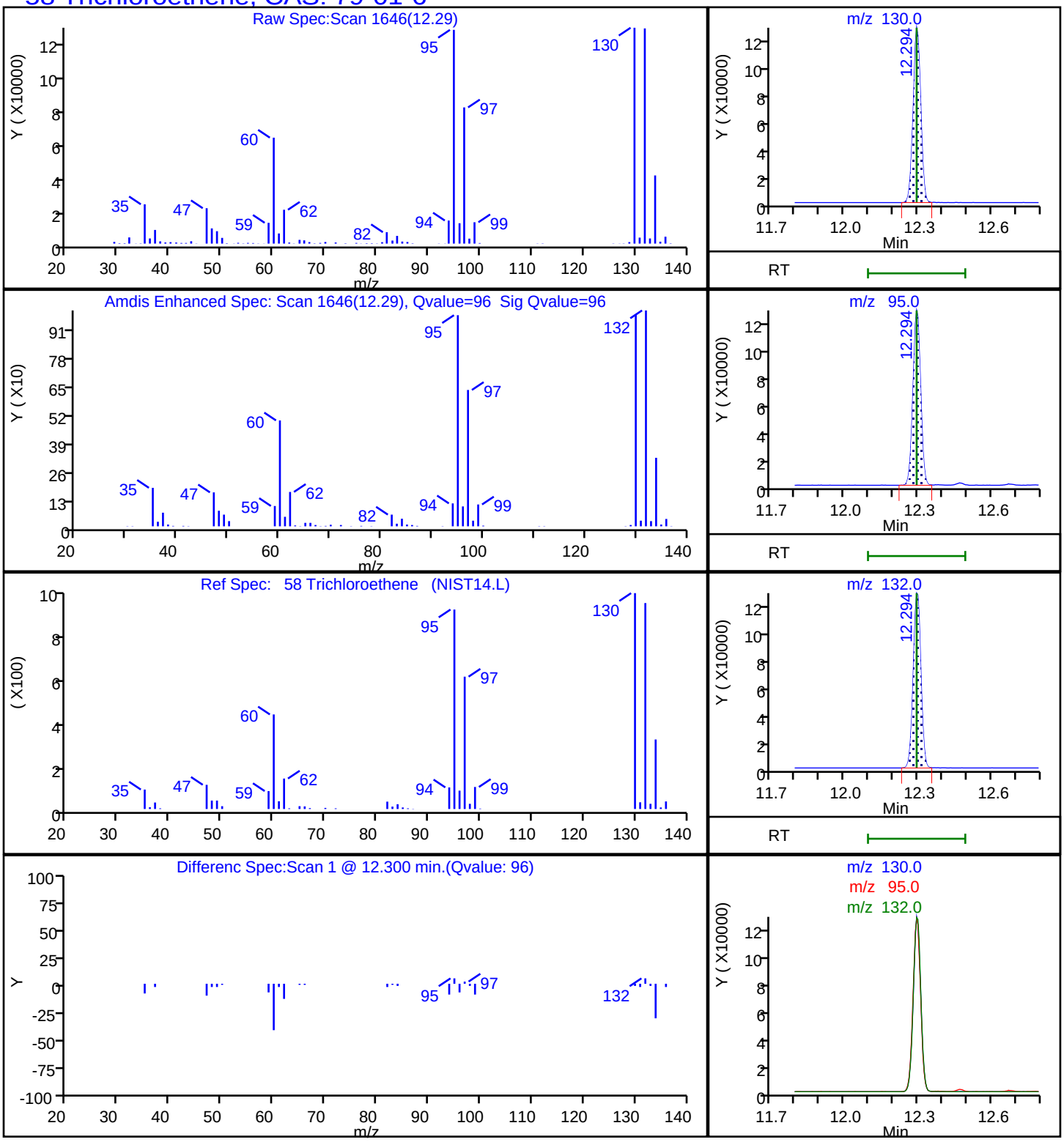
8 Dichlorodifluoromethane, CAS: 75-71-8



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P113.D		
Injection Date:	09-Sep-2020 03:32:30	Instrument ID:	MH
Lims ID:	140-20194-A-15	Lab Sample ID:	140-20194-15
Client ID:	SV-136-A-29		
Operator ID:	HMT	ALS Bottle#:	13 Worklist Smp#: 17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

58 Trichloroethene, CAS: 79-01-6



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: SV-101-B-29 Lab Sample ID: 140-20194-16

Matrix: Air Lab File ID: HI08P114.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 10:27

Sample wt/vol: 100(mL) Date Analyzed: 09/09/2020 04:29

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42504 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.060	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	1.1		0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	0.86		0.40	0.11
67-66-3	Chloroform	119.38	0.18	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	1.2		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	ND		0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	0.55		0.20	0.20
127-18-4	Tetrachloroethene	165.83	11		0.40	0.035
108-88-3	Toluene	92.14	0.44	J	0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND	*	0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	41		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	29		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	1.1		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	3.0		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	1.2		0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.39	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	89		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: SV-101-B-29 Lab Sample ID: 140-20194-16

Matrix: Air Lab File ID: HI08P114.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 10:27

Sample wt/vol: 100(mL) Date Analyzed: 09/09/2020 04:29

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42504 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.19	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	6.8		2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	3.0		1.4	0.39
67-66-3	Chloroform	119.38	0.87	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	6.0		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	ND		1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	2.9		1.0	1.0
127-18-4	Tetrachloroethene	165.83	73		2.7	0.24
108-88-3	Toluene	92.14	1.7	J	2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND	*	3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	220		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	160		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	5.3		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	15		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	5.7		2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	1.7	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	89		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P114.D
Lims ID: 140-20194-A-16
Client ID: SV-101-B-29
Sample Type: Client
Inject. Date: 09-Sep-2020 04:29:30 ALS Bottle#: 14 Worklist Smp#: 18
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016520-018
Misc. Info.: 140-20194-a-16
Operator ID: HMT Instrument ID: MH

Method: \\chromfs\Knoxville\ChromData\MH\20200904-16520.b\MH_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 10-Sep-2020 10:35:05 Calib Date: 29-Aug-2020 23:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1028

First Level Reviewer: khachitpongpanits Date: 10-Sep-2020 10:35:24

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.436	9.431	0.005	95	218037	4.80	
* 2 1,4-Difluorobenzene	114	11.591	11.591	0.000	95	867833	4.80	
* 3 Chlorobenzene-d5 (IS)	117	16.258	16.258	0.000	87	634435	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.876	17.876	0.000	94	304180	4.13	
6 Chlorodifluoromethane	51	3.916	3.916	0.000	96	20927	0.1720	M
8 Dichlorodifluoromethane	85	3.983	3.988	-0.005	100	39957	0.2424	
44 Chloroform	83	9.441	9.436	0.005	28	4724	0.0357	
47 1,1,1-Trichloroethane	97	10.490	10.490	0.000	97	986479	8.22	
51 Benzene	78	11.064	11.069	-0.005	64	1925	0.0121	
52 Carbon tetrachloride	117	11.090	11.095	-0.005	98	21311	0.2161	
58 Trichloroethene	130	12.299	12.294	0.005	96	418144	5.84	
67 Toluene	91	14.310	14.310	0.000	90	14463	0.0885	
73 Tetrachloroethene	129	15.436	15.441	0.000	95	147379	2.15	
77 m-Xylene & p-Xylene	91	16.734	16.739	-0.005	94	5337	0.0341	
81 o-Xylene	91	17.266	17.266	0.000	93	7158	0.0437	
88 1,3,5-Trimethylbenzene	120	18.563	18.568	0.000	92	18441	0.2326	
92 1,2,4-Trimethylbenzene	105	18.992	18.993	0.005	99	112208	0.5927	
98 1,2,3-Trimethylbenzene	105	19.452	19.453	0.005	97	38926	0.2140	
109 Naphthalene	128	21.556	21.556	0.000	98	16446	0.1102	
S 116 Xylenes, Total	100				0		0.0778	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

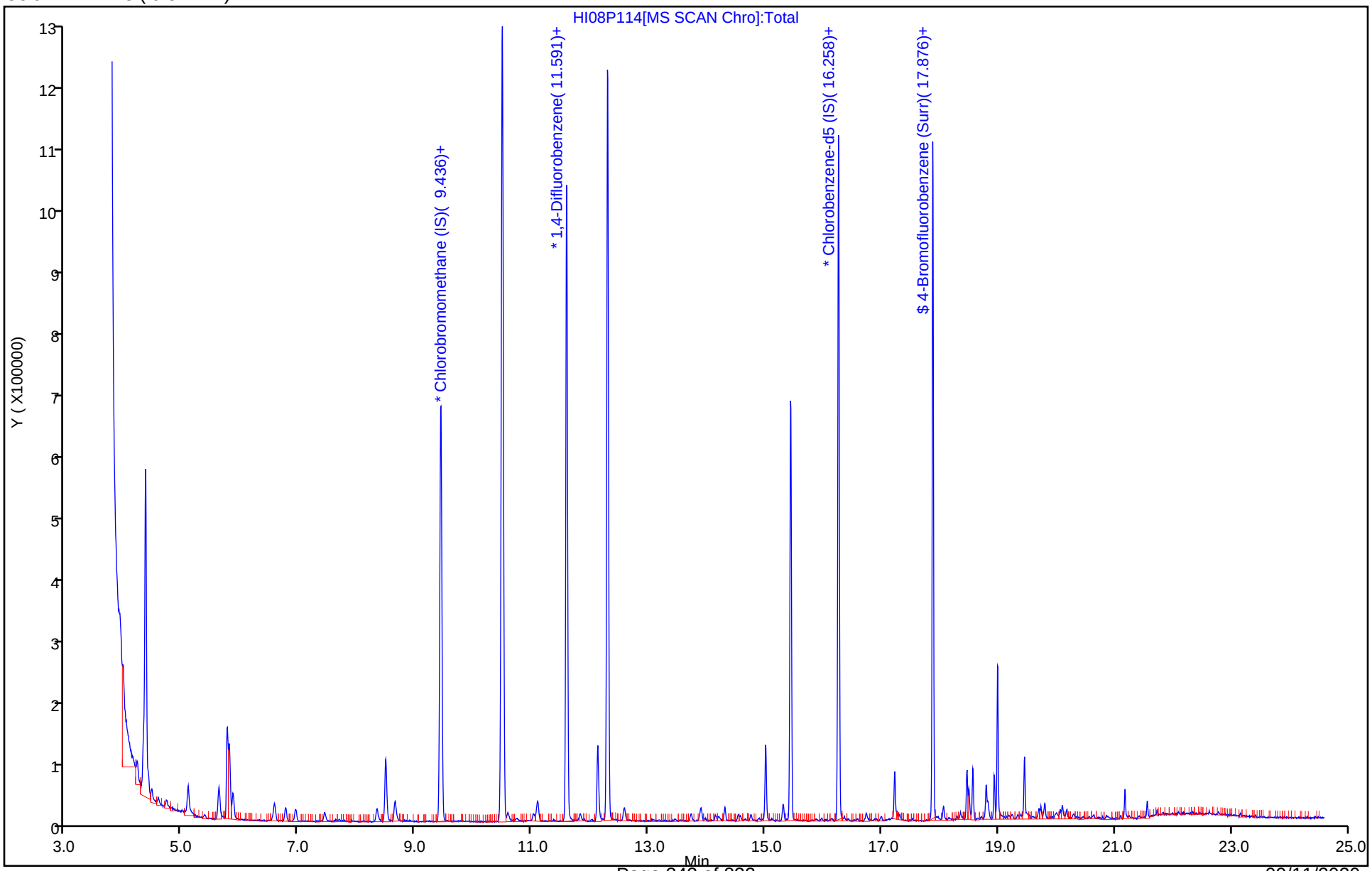
40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

Report Date: 10-Sep-2020 10:35:24 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P114.D				
Injection Date:	09-Sep-2020 04:29:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	140-20194-A-16	Lab Sample ID:	140-20194-16	Worklist Smp#:	18
Client ID:	SV-101-B-29				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P114.D				
Lims ID:	140-20194-A-16				
Client ID:	SV-101-B-29				
Sample Type:	Client				
Inject. Date:	09-Sep-2020 04:29:30	ALS Bottle#:	14	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016520-018				
Misc. Info.:	140-20194-a-16				
Operator ID:	HMT	Instrument ID:	MH		
Method:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\MH_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	10-Sep-2020 10:35:05	Calib Date:	29-Aug-2020 23:57:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1028				
First Level Reviewer: khachitpongpanits		Date:	10-Sep-2020 10:35:24		

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	4.13	88.93

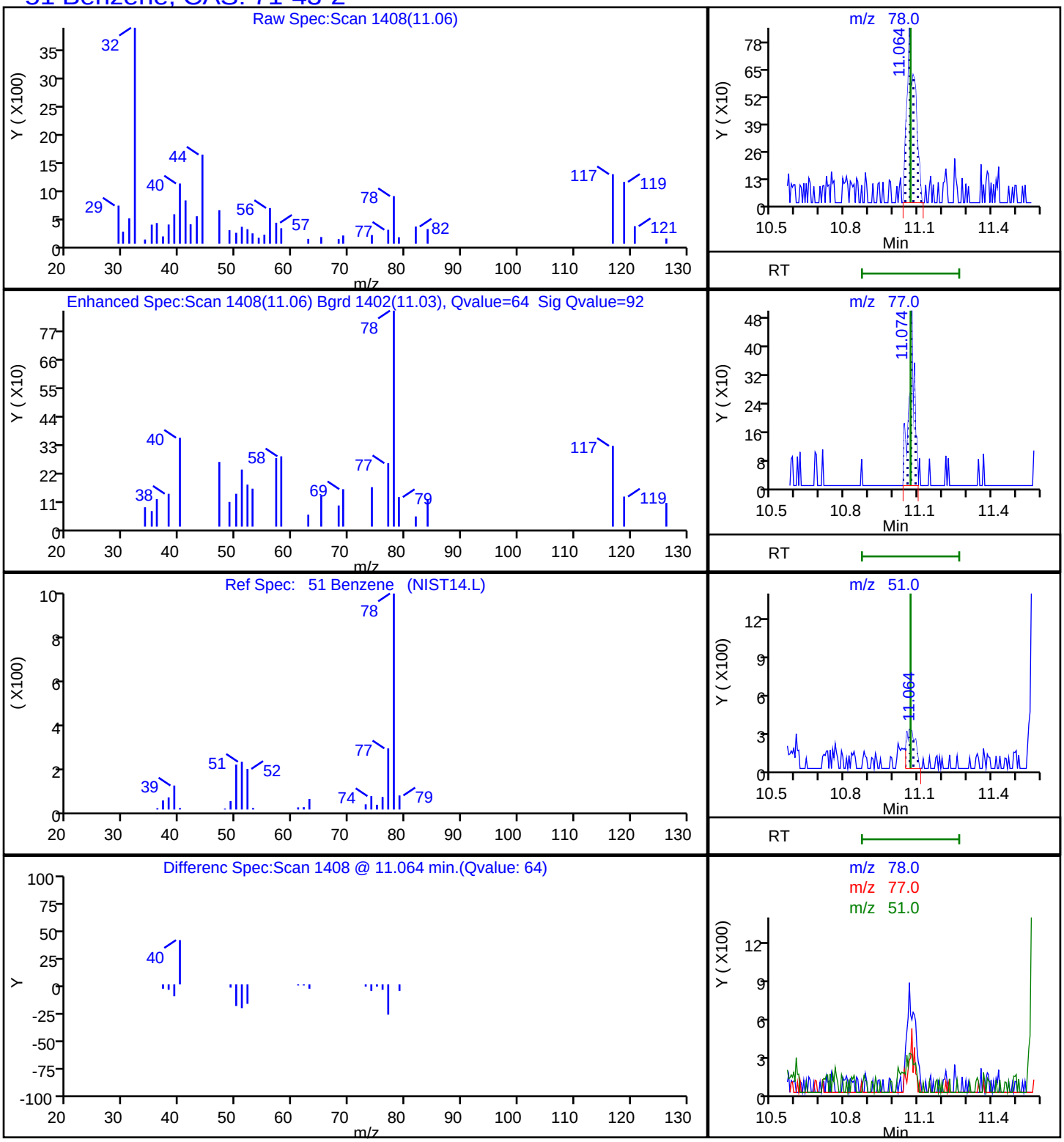
Report Date: 10-Sep-2020 10:35:24 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P114.D

Injection Date:	09-Sep-2020 04:29:30	Instrument ID:	MH		
Lims ID:	140-20194-A-16	Lab Sample ID:	140-20194-16		
Client ID:	SV-101-B-29				
Operator ID:	HMT	ALS Bottle#:	14	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

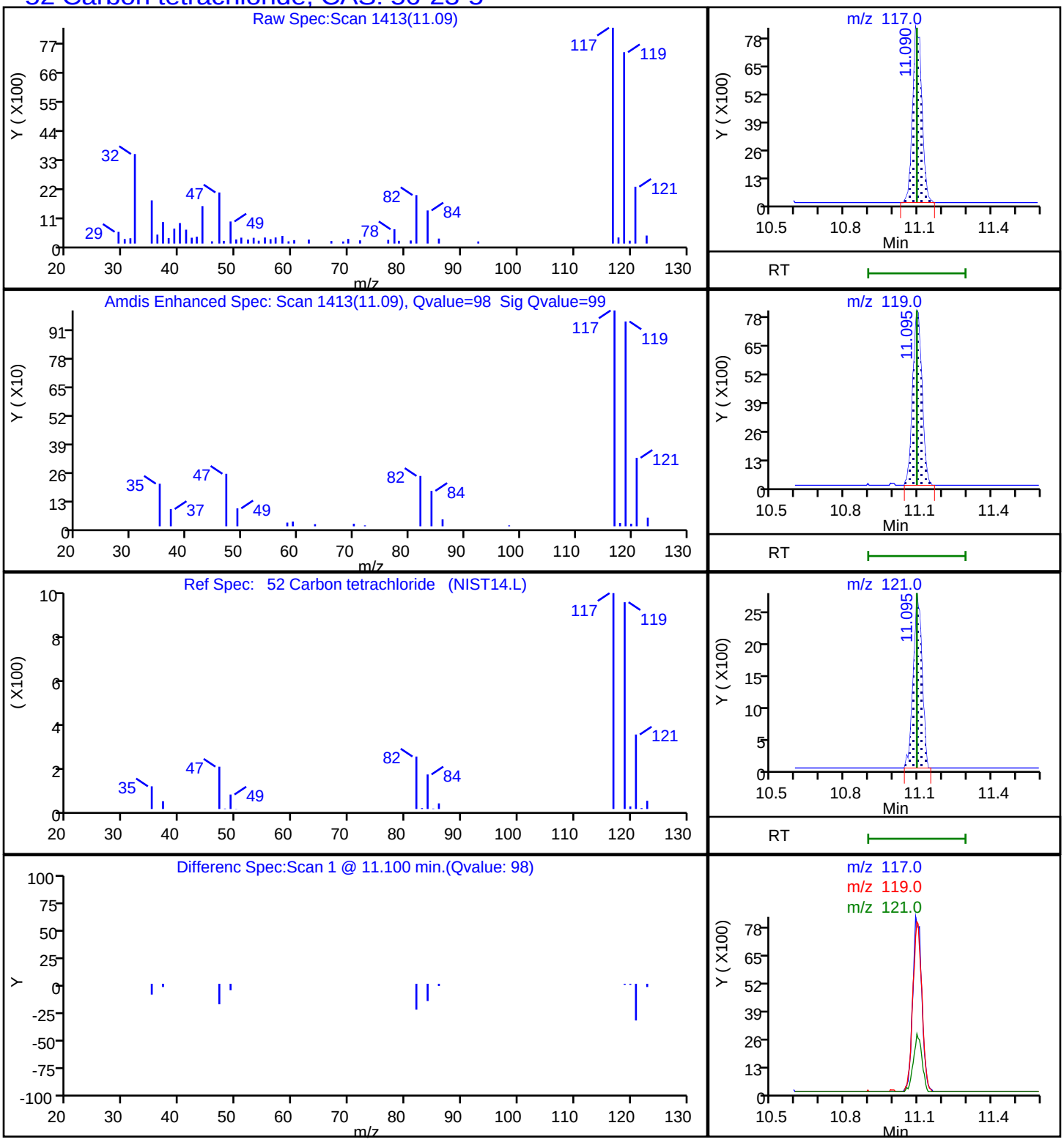
51 Benzene, CAS: 71-43-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P114.D		
Injection Date:	09-Sep-2020 04:29:30	Instrument ID:	MH
Lims ID:	140-20194-A-16	Lab Sample ID:	140-20194-16
Client ID:	SV-101-B-29		
Operator ID:	HMT	ALS Bottle#:	14 Worklist Smp#: 18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

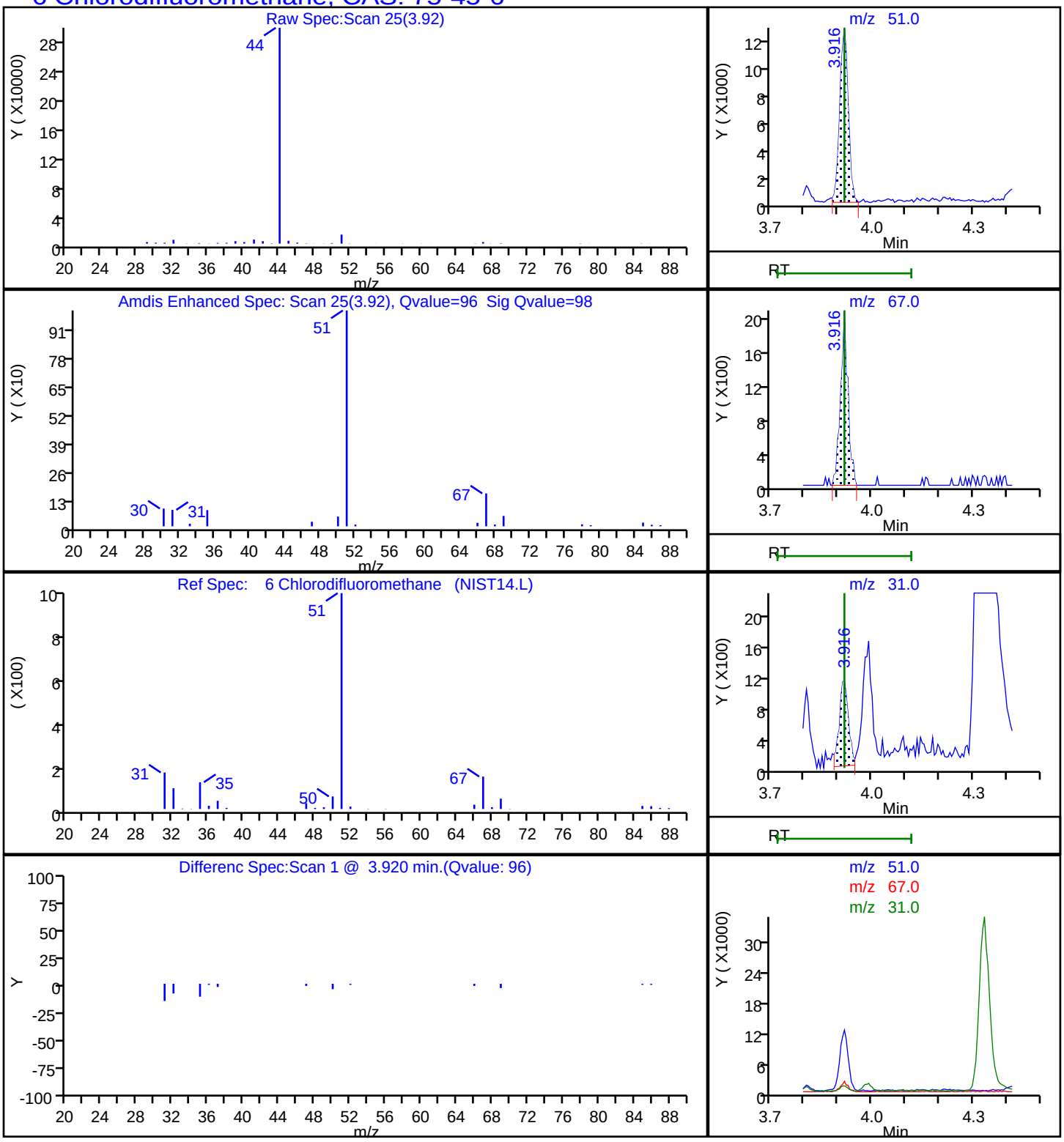
52 Carbon tetrachloride, CAS: 56-23-5



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P114.D				
Injection Date:	09-Sep-2020 04:29:30	Instrument ID:	MH		
Lims ID:	140-20194-A-16	Lab Sample ID:	140-20194-16		
Client ID:	SV-101-B-29				
Operator ID:	HMT	ALS Bottle#:	14	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

6 Chlorodifluoromethane, CAS: 75-45-6

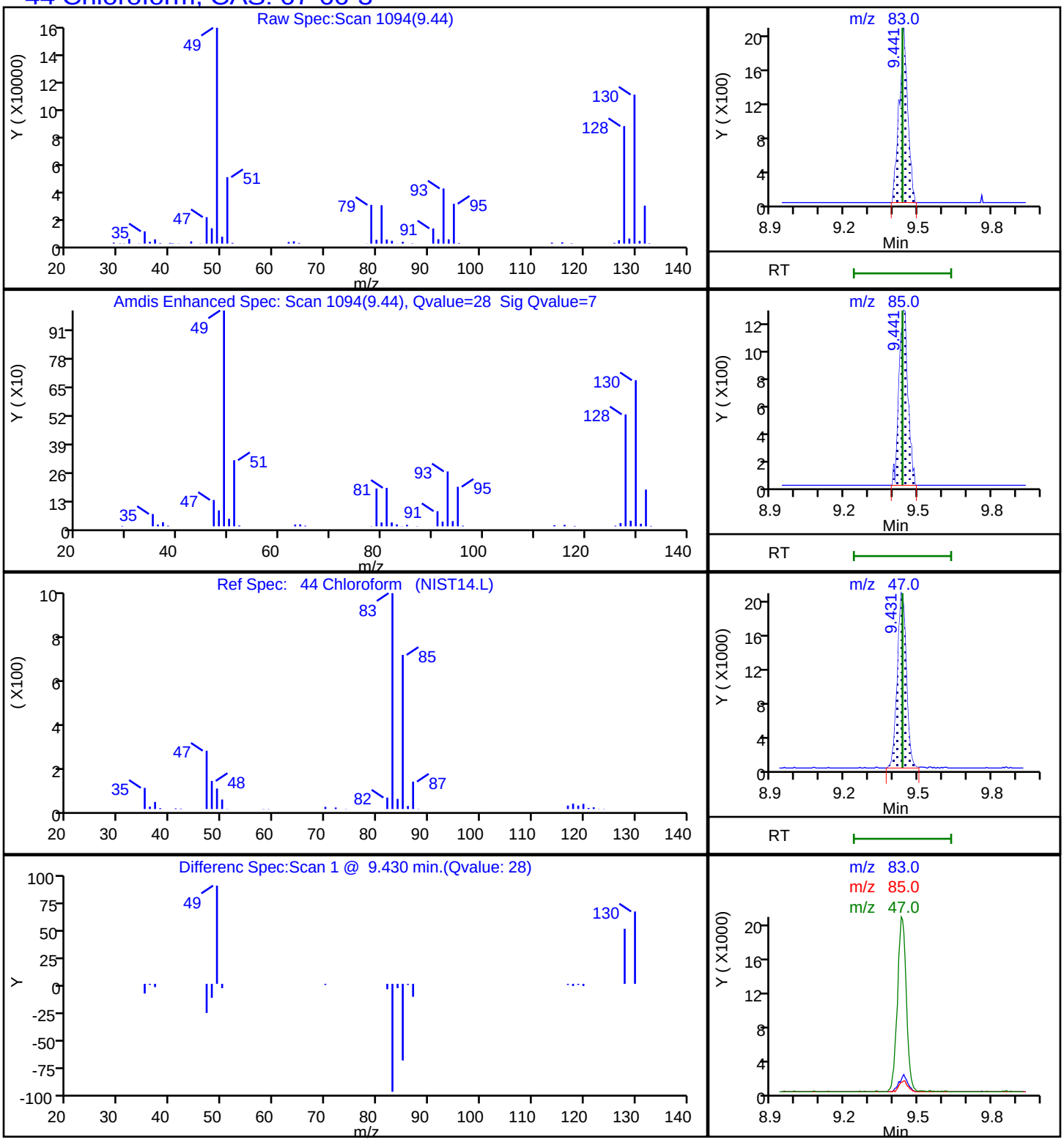


Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P114.D

Injection Date:	09-Sep-2020 04:29:30	Instrument ID:	MH
Lims ID:	140-20194-A-16	Lab Sample ID:	140-20194-16
Client ID:	SV-101-B-29		
Operator ID:	HMT	ALS Bottle#:	14 Worklist Smp#: 18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

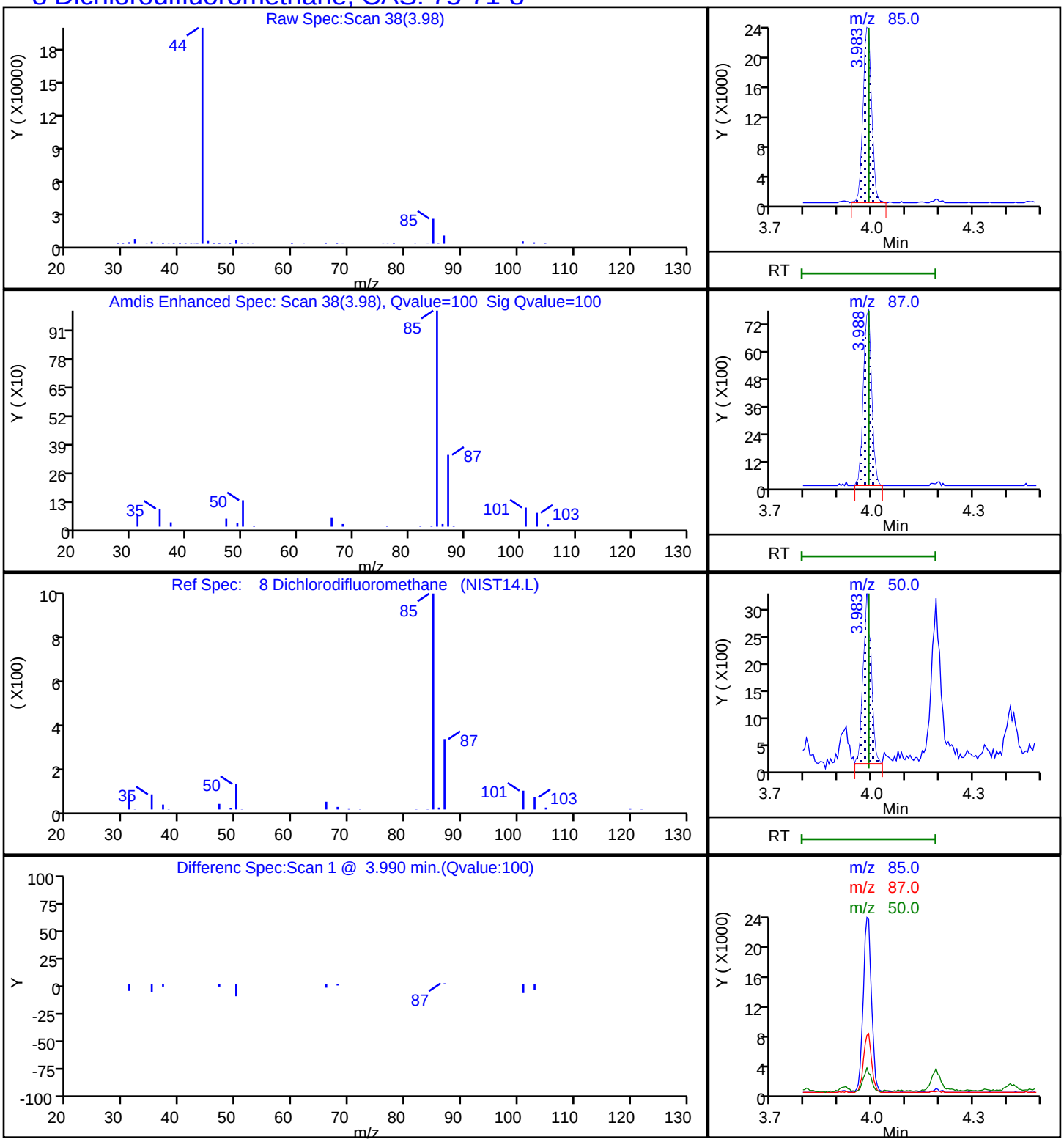
44 Chloroform, CAS: 67-66-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P114.D				
Injection Date:	09-Sep-2020 04:29:30	Instrument ID:	MH		
Lims ID:	140-20194-A-16	Lab Sample ID:	140-20194-16		
Client ID:	SV-101-B-29				
Operator ID:	HMT	ALS Bottle#:	14	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

8 Dichlorodifluoromethane, CAS: 75-71-8



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P114.D		
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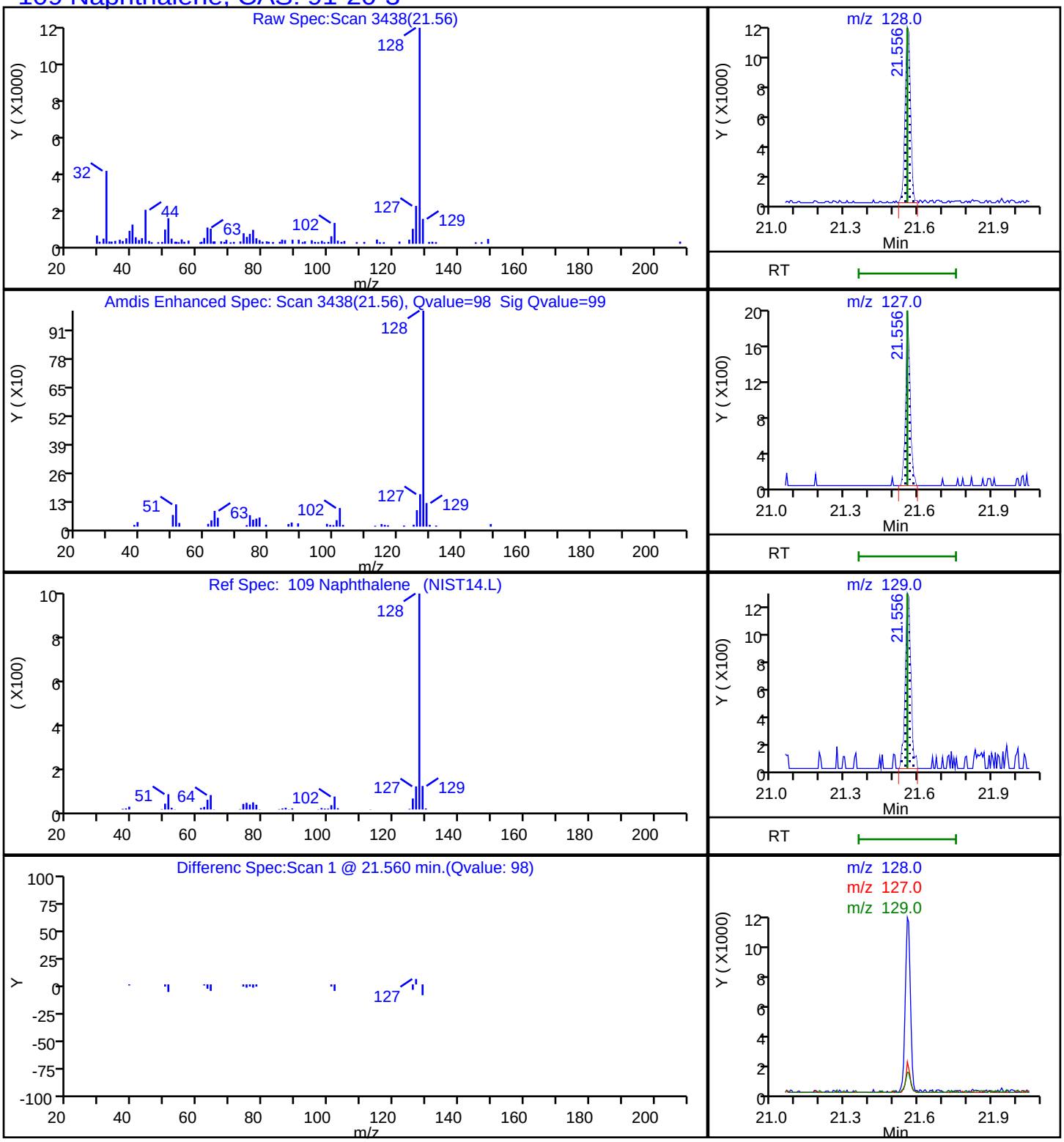
Lims ID:	140-20194-A-16	Lab Sample ID:	140-20194-16
Client ID:	SV-101-B-29		
Operator ID:	HMT	ALS Bottle#:	14 Worklist Smp#: 18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

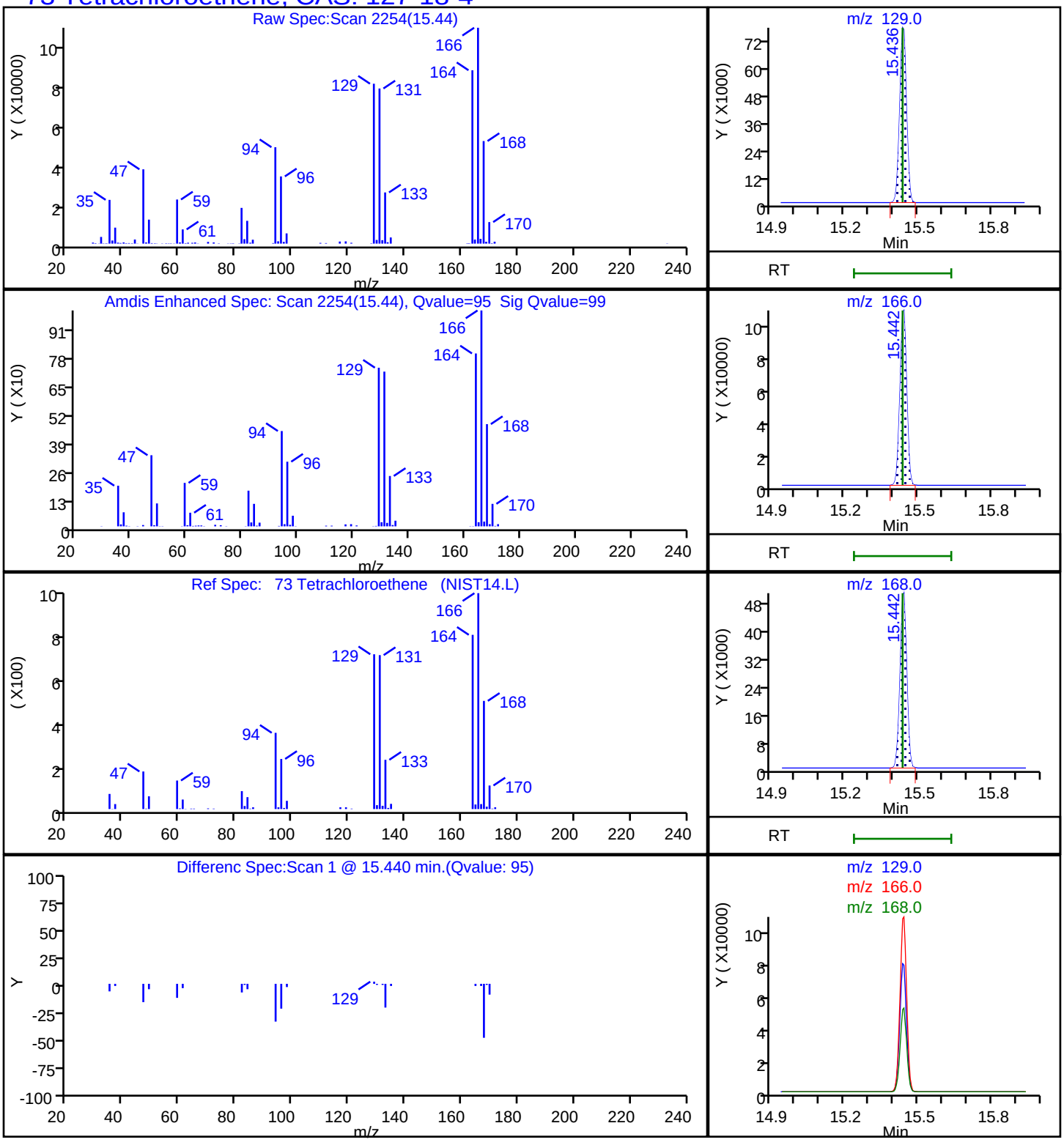
109 Naphthalene, CAS: 91-20-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P114.D		
Injection Date:	09-Sep-2020 04:29:30	Instrument ID:	MH
Lims ID:	140-20194-A-16	Lab Sample ID:	140-20194-16
Client ID:	SV-101-B-29		
Operator ID:	HMT	ALS Bottle#:	14 Worklist Smp#: 18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

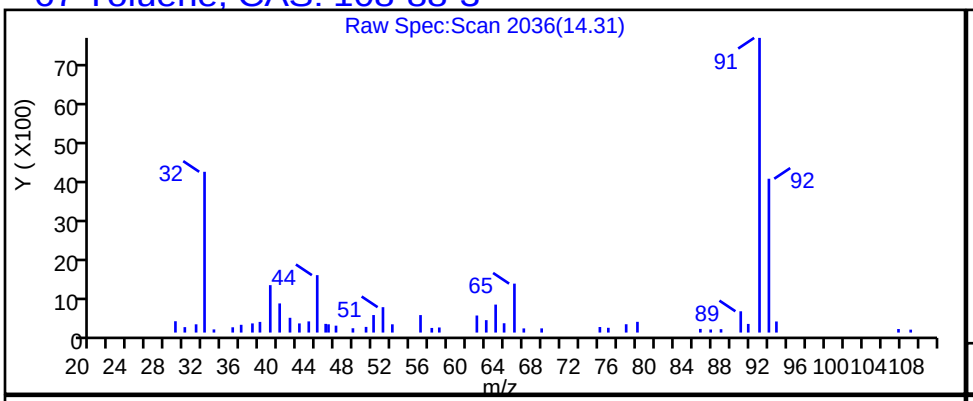
73 Tetrachloroethene, CAS: 127-18-4

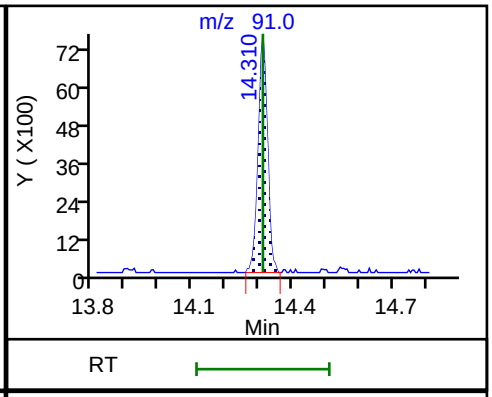


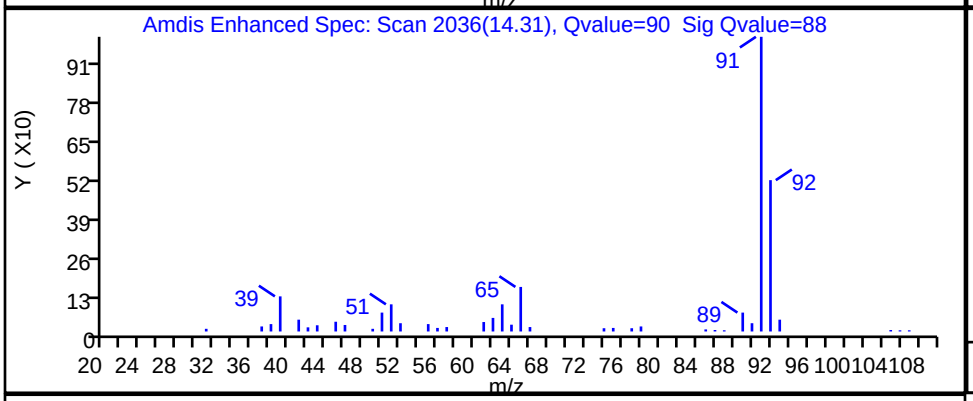
Eurofins TestAmerica, Knoxville

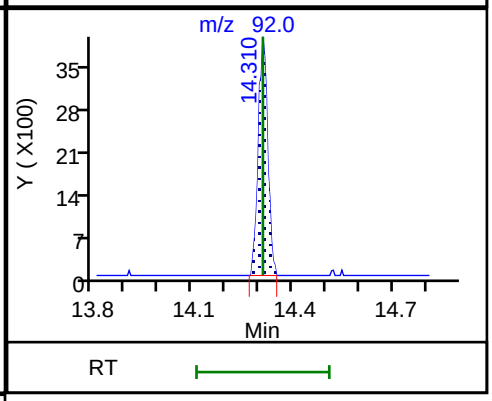
Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P114.D				
Injection Date:	09-Sep-2020 04:29:30	Instrument ID:	MH		
Lims ID:	140-20194-A-16	Lab Sample ID:	140-20194-16		
Client ID:	SV-101-B-29				
Operator ID:	HMT	ALS Bottle#:	14	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

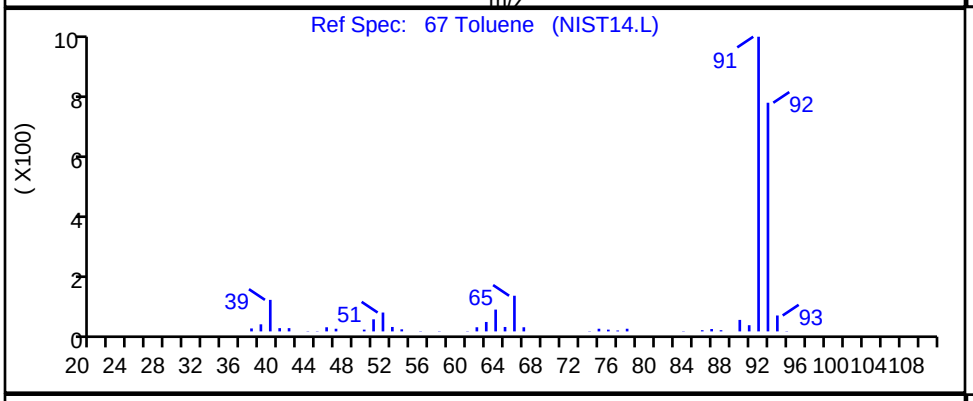
67 Toluene, CAS: 108-88-3

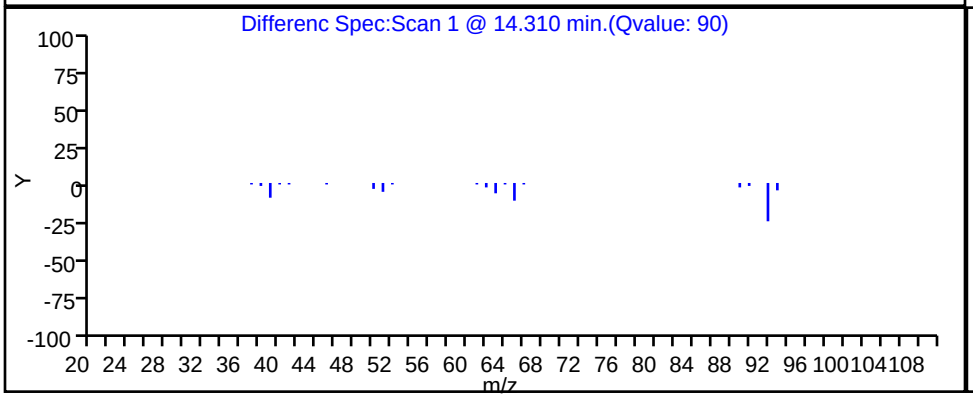


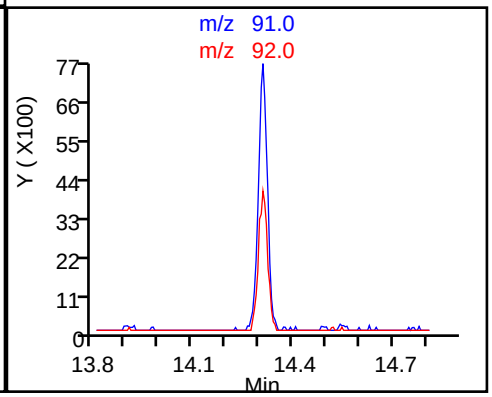








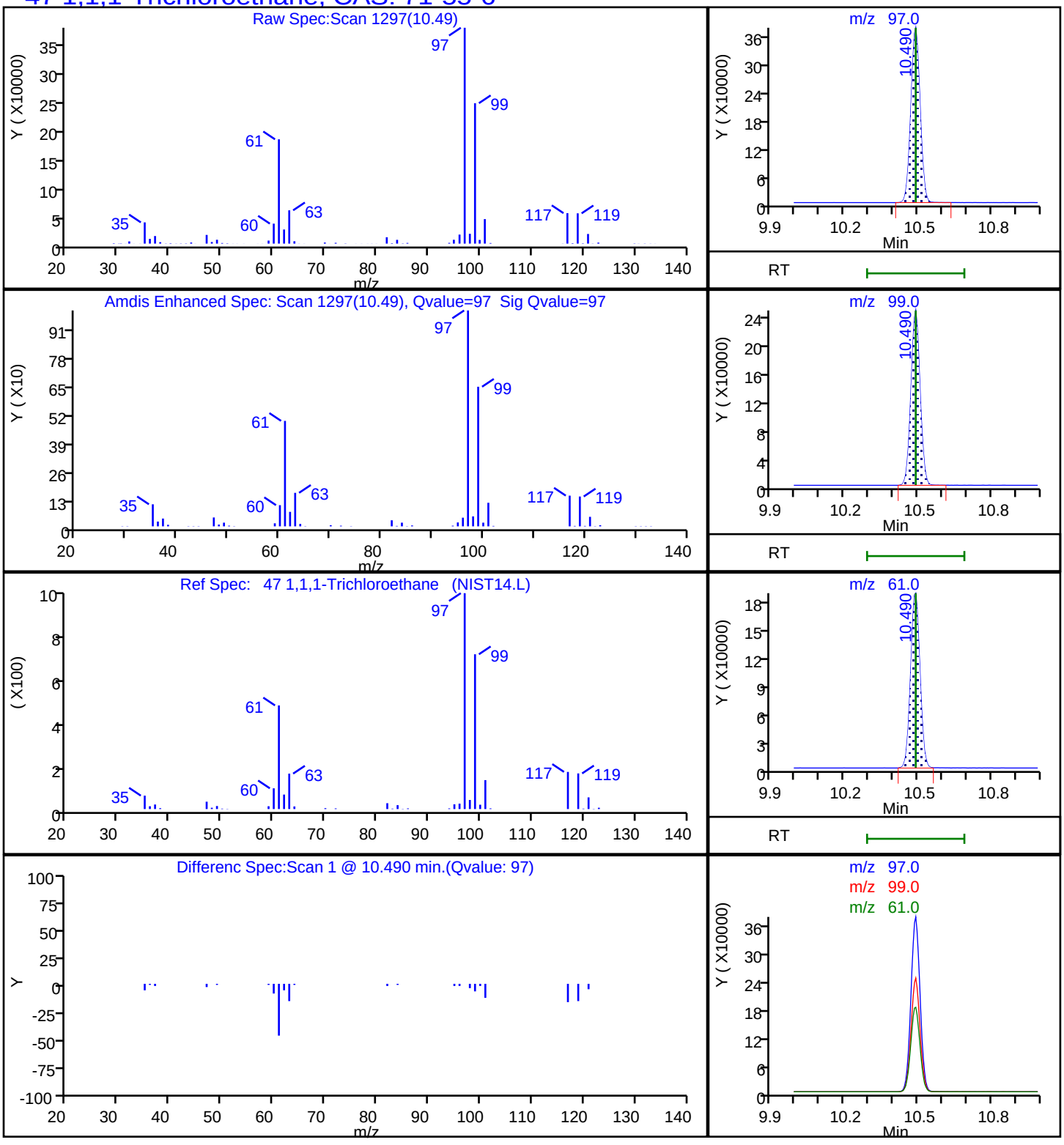




Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P114.D				
Injection Date:	09-Sep-2020 04:29:30	Instrument ID:	MH		
Lims ID:	140-20194-A-16	Lab Sample ID:	140-20194-16		
Client ID:	SV-101-B-29				
Operator ID:	HMT	ALS Bottle#:	14	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

47 1,1,1-Trichloroethane, CAS: 71-55-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P114.D		
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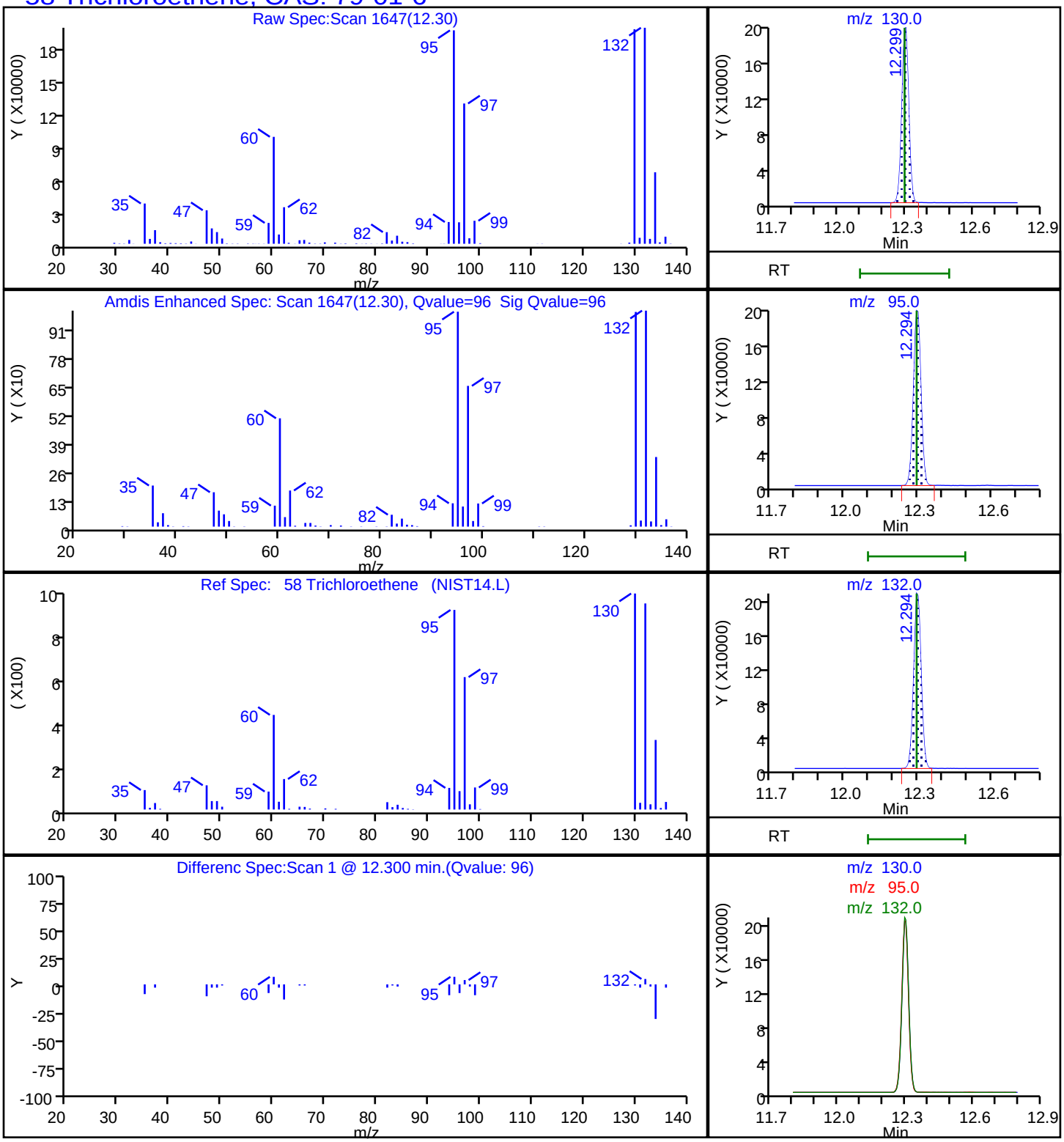
Lims ID:	140-20194-A-16	Lab Sample ID:	140-20194-16
Client ID:	SV-101-B-29		
Operator ID:	HMT	ALS Bottle#:	14 Worklist Smp#: 18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

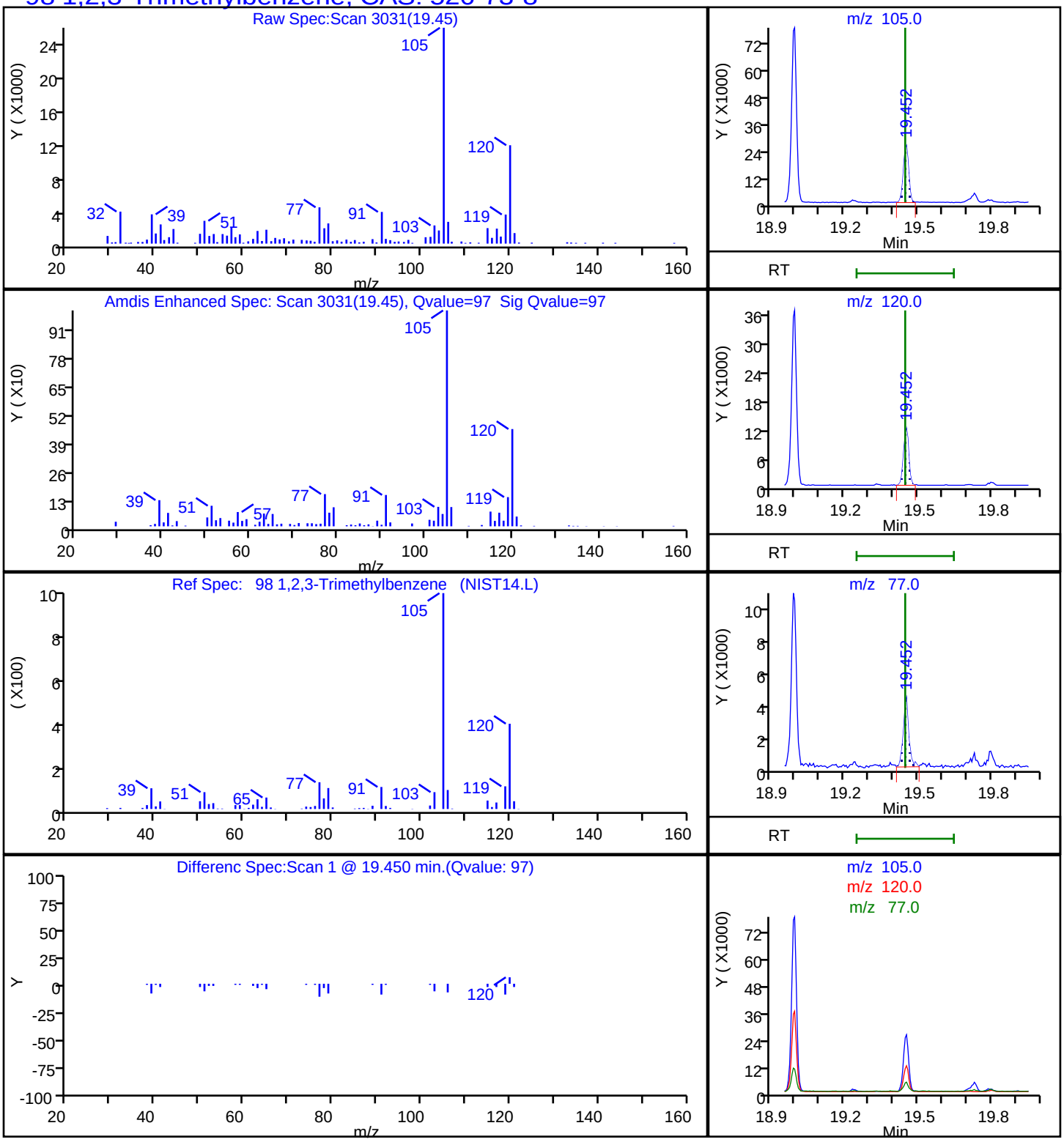
58 Trichloroethene, CAS: 79-01-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P114.D		
Injection Date:	09-Sep-2020 04:29:30	Instrument ID:	MH
Lims ID:	140-20194-A-16	Lab Sample ID:	140-20194-16
Client ID:	SV-101-B-29		
Operator ID:	HMT	ALS Bottle#:	14 Worklist Smp#: 18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

98 1,2,3-Trimethylbenzene, CAS: 526-73-8

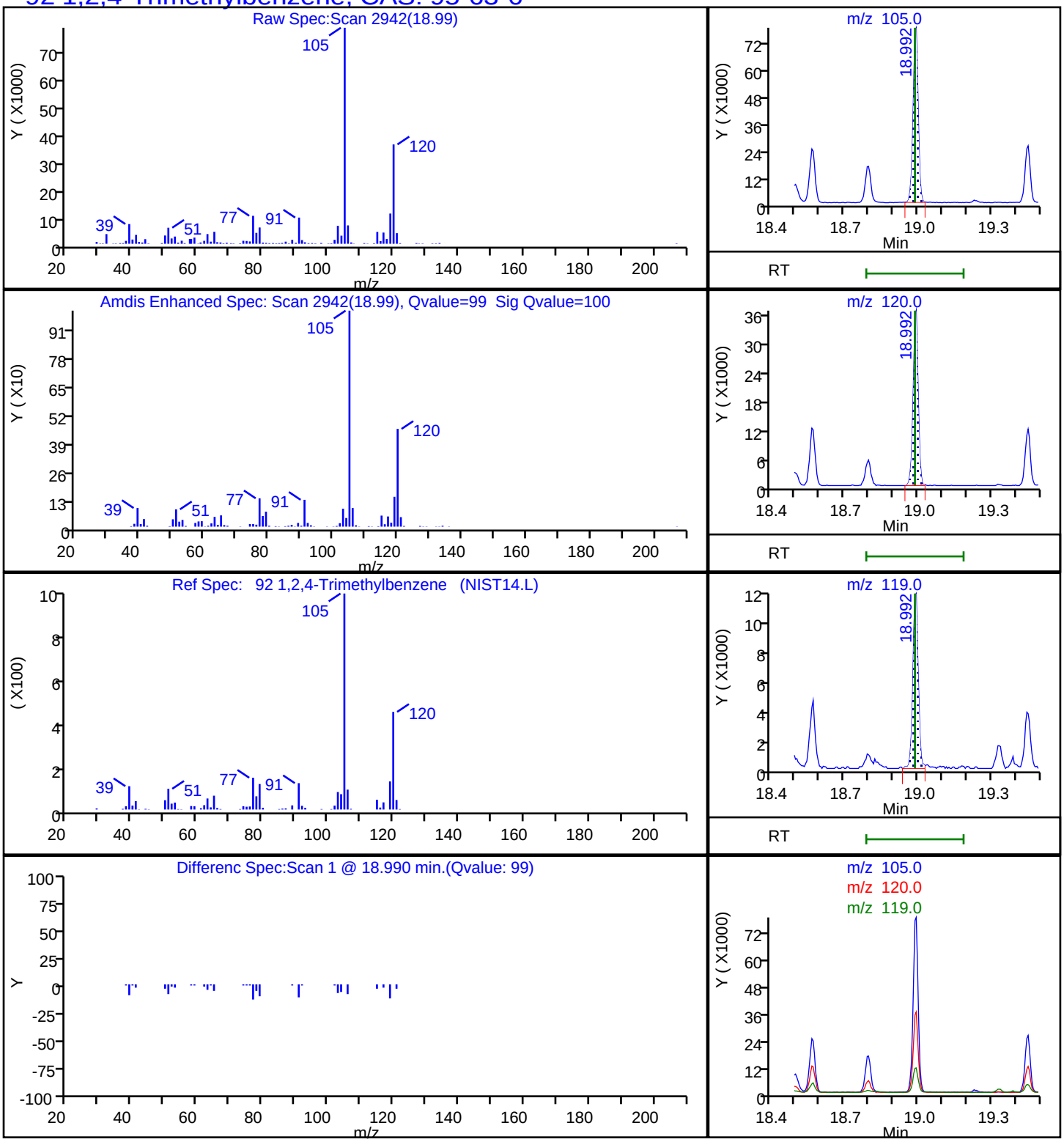


Report Date: 10-Sep-2020 10:35:25 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P114.D				
Injection Date:	09-Sep-2020 04:29:30	Instrument ID:	MH		
Lims ID:	140-20194-A-16	Lab Sample ID:	140-20194-16		
Client ID:	SV-101-B-29				
Operator ID:	HMT	ALS Bottle#:	14	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

92 1,2,4-Trimethylbenzene, CAS: 95-63-6



Report Date: 10-Sep-2020 10:35:25 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P114.D				
Injection Date:	09-Sep-2020 04:29:30	Instrument ID:	MH		
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Client ID:	SV-101-B-29				
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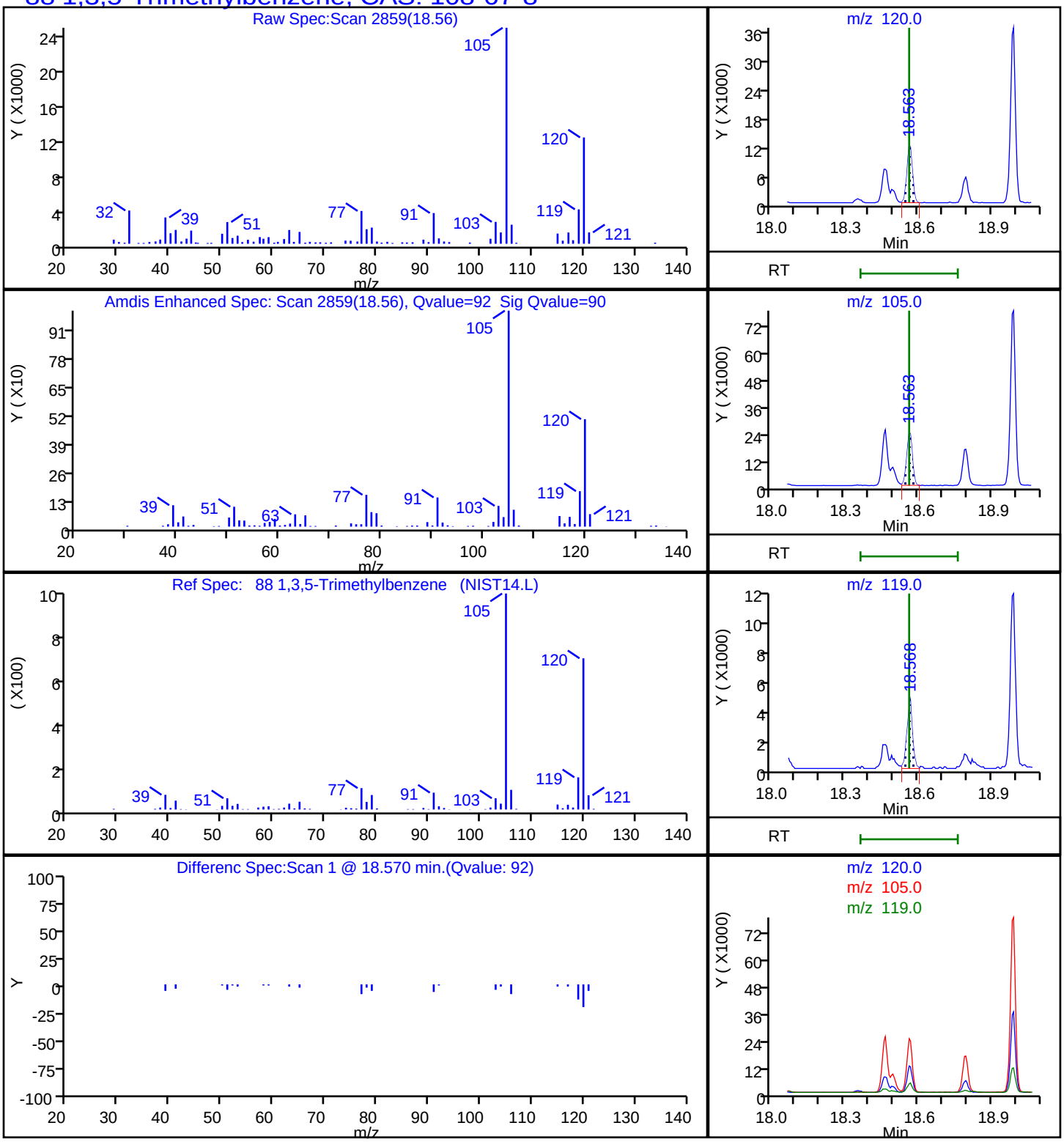
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

88 1,3,5-Trimethylbenzene, CAS: 108-67-8



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P114.D				
Injection Date:	09-Sep-2020 04:29:30	Instrument ID:	MH		
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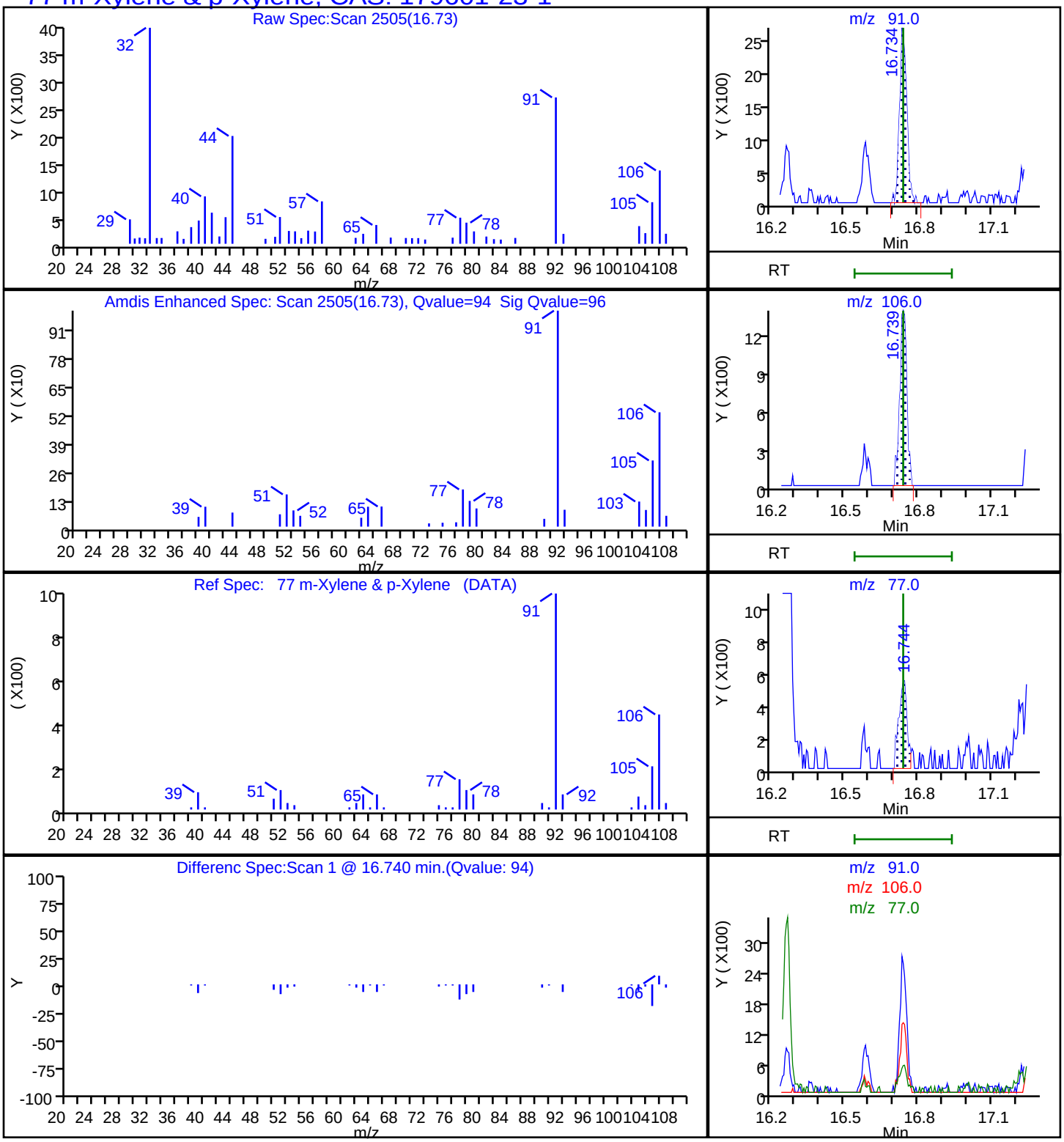
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

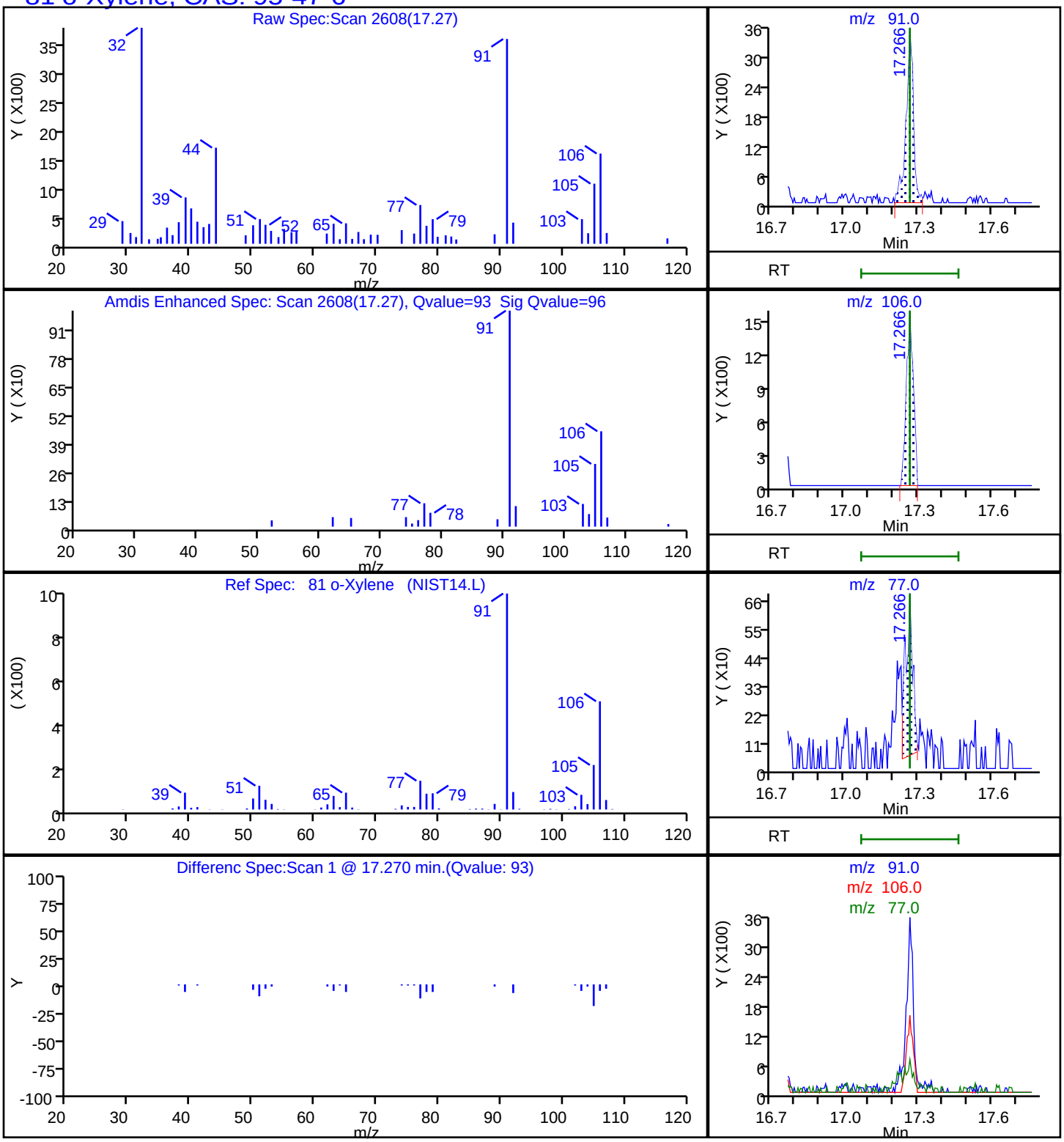
77 m-Xylene & p-Xylene, CAS: 179601-23-1



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P114.D				
Injection Date:	09-Sep-2020 04:29:30	Instrument ID:	MH		
Lims ID:	140-20194-A-16	Lab Sample ID:	140-20194-16		
Client ID:	SV-101-B-29				
Operator ID:	HMT	ALS Bottle#:	14	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

81 o-Xylene, CAS: 95-47-6



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Knoxville

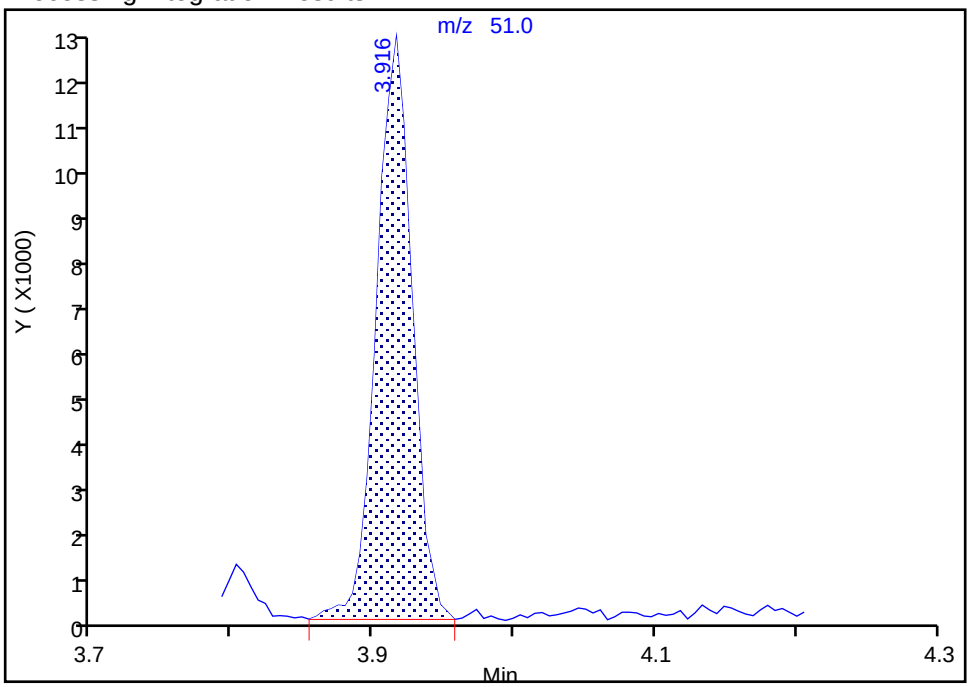
Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P114.D				
Injection Date:	09-Sep-2020 04:29:30	Instrument ID:	MH		
Lims ID:	140-20194-A-16	Lab Sample ID:	140-20194-16		
Client ID:	SV-101-B-29				
Operator ID:	HMT	ALS Bottle#:	14	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

6 Chlorodifluoromethane, CAS: 75-45-6

Signal: 1

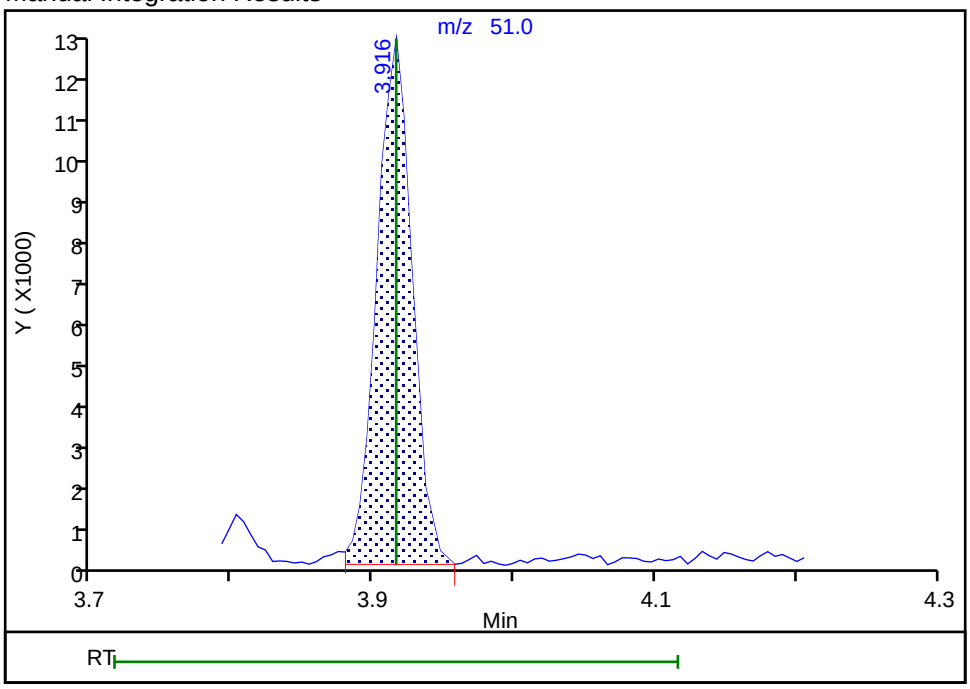
Processing Integration Results

RT: 3.92
Area: 21157
Amount: 0.173887
Amount Units: ppb v/v



Manual Integration Results

RT: 3.92
Area: 20927
Amount: 0.171996
Amount Units: ppb v/v



Reviewer: khachitpongpanits, 10-Sep-2020 10:35:03

Audit Action: Split an Integrated Peak Audit Reason: Split Peak

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: SV-100-B-29 Lab Sample ID: 140-20194-17

Matrix: Air Lab File ID: HI08P115.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 10:30

Sample wt/vol: 100(mL) Date Analyzed: 09/09/2020 05:22

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42504 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	ND		0.40	0.040
56-23-5	Carbon tetrachloride	153.81	6.6		0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	0.43		0.40	0.11
67-66-3	Chloroform	119.38	1.4		0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	1.0		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	ND		0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	0.80		0.40	0.035
108-88-3	Toluene	92.14	ND		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND	*	0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	0.58		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	5.8		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	0.25	J	0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	ND		0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	82		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: SV-100-B-29 Lab Sample ID: 140-20194-17

Matrix: Air Lab File ID: HI08P115.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 10:30

Sample wt/vol: 100(mL) Date Analyzed: 09/09/2020 05:22

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42504 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	ND		1.3	0.13
56-23-5	Carbon tetrachloride	153.81	42		2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	1.5		1.4	0.39
67-66-3	Chloroform	119.38	6.8		2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	5.1		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	ND		1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	5.4		2.7	0.24
108-88-3	Toluene	92.14	ND		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND	*	3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	3.2		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	31		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	1.2	J	2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	ND		3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	82		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P115.D				
Lims ID:	140-20194-A-17				
Client ID:	SV-100-B-29				
Sample Type:	Client				
Inject. Date:	09-Sep-2020 05:22:30	ALS Bottle#:	15	Worklist Smp#:	19
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016520-019				
Misc. Info.:	140-20194-a-17				
Operator ID:	HMT	Instrument ID:	MH		
Method:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\MH_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	10-Sep-2020 10:36:28	Calib Date:	29-Aug-2020 23:57:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1028				
First Level Reviewer: khachitpongpanits		Date:	10-Sep-2020 10:36:28		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.436	9.431	0.005	96	202296	4.80	
* 2 1,4-Difluorobenzene	114	11.596	11.591	0.005	95	787120	4.80	
* 3 Chlorobenzene-d5 (IS)	117	16.258	16.258	0.000	87	520637	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.876	17.876	0.000	94	230765	3.81	
6 Chlorodifluoromethane	51	3.916	3.916	0.000	96	9664	0.0856	
8 Dichlorodifluoromethane	85	3.988	3.988	0.000	99	31384	0.2052	
44 Chloroform	83	9.436	9.436	0.000	78	34149	0.2780	
47 1,1,1-Trichloroethane	97	10.490	10.490	0.000	96	12904	0.1159	
52 Carbon tetrachloride	117	11.095	11.095	0.000	98	118909	1.33	
58 Trichloroethene	130	12.299	12.294	0.005	97	75208	1.16	
67 Toluene	91	14.310	14.310	0.000	92	9529	0.0710	
73 Tetrachloroethene	129	15.436	15.441	0.000	94	8977	0.1597	
88 1,3,5-Trimethylbenzene	120	18.568	18.568	0.005	14	239	0.0504	M

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

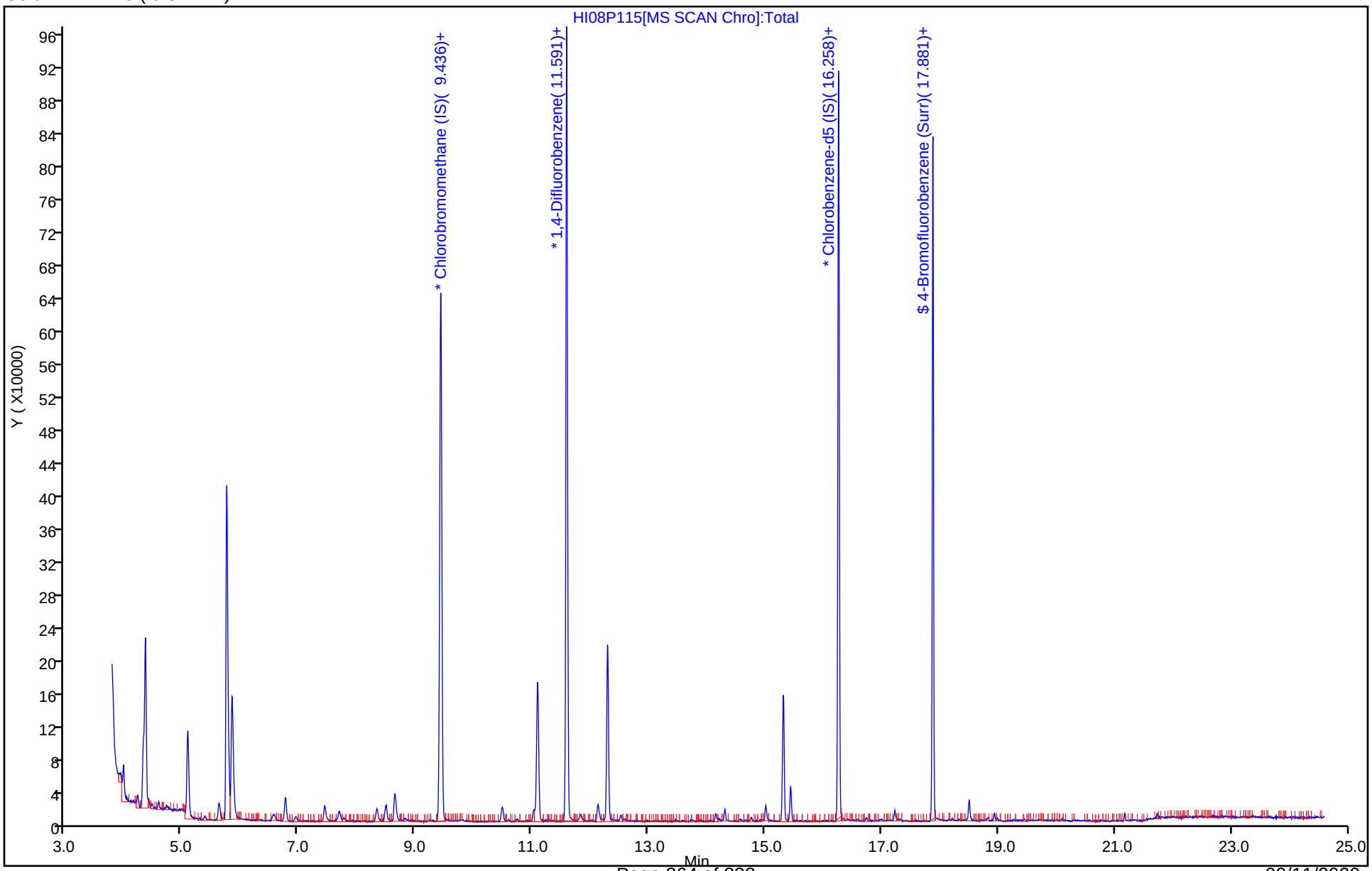
Report Date: 10-Sep-2020 10:36:28 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P115.D

Injection Date:	09-Sep-2020 05:22:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	140-20194-A-17	Lab Sample ID:	140-20194-17	Worklist Smp#:	19
Client ID:	SV-100-B-29				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P115.D				
Lims ID:	140-20194-A-17				
Client ID:	SV-100-B-29				
Sample Type:	Client				
Inject. Date:	09-Sep-2020 05:22:30	ALS Bottle#:	15	Worklist Smp#:	19
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016520-019				
Misc. Info.:	140-20194-a-17				
Operator ID:	HMT	Instrument ID:	MH		
Method:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\MH_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	10-Sep-2020 10:36:28	Calib Date:	29-Aug-2020 23:57:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1028				

First Level Reviewer: khachitpongpanits Date: 10-Sep-2020 10:36:28

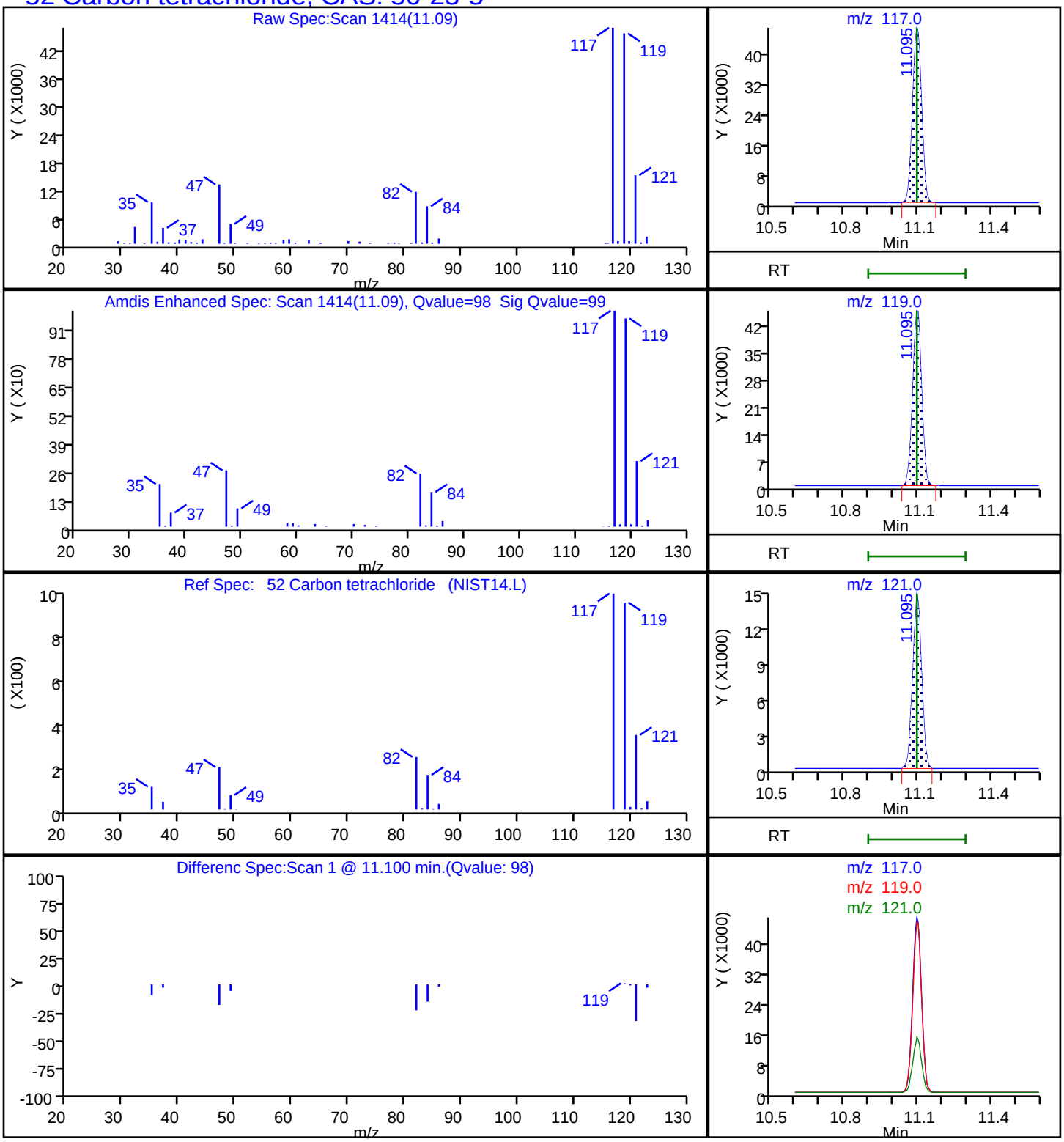
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	3.81	82.21

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P115.D

Injection Date:	09-Sep-2020 05:22:30	Instrument ID:	MH		
Lims ID:	140-20194-A-17	Lab Sample ID:	140-20194-17		
Client ID:	SV-100-B-29				
Operator ID:	HMT	ALS Bottle#:	15	Worklist Smp#:	19
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

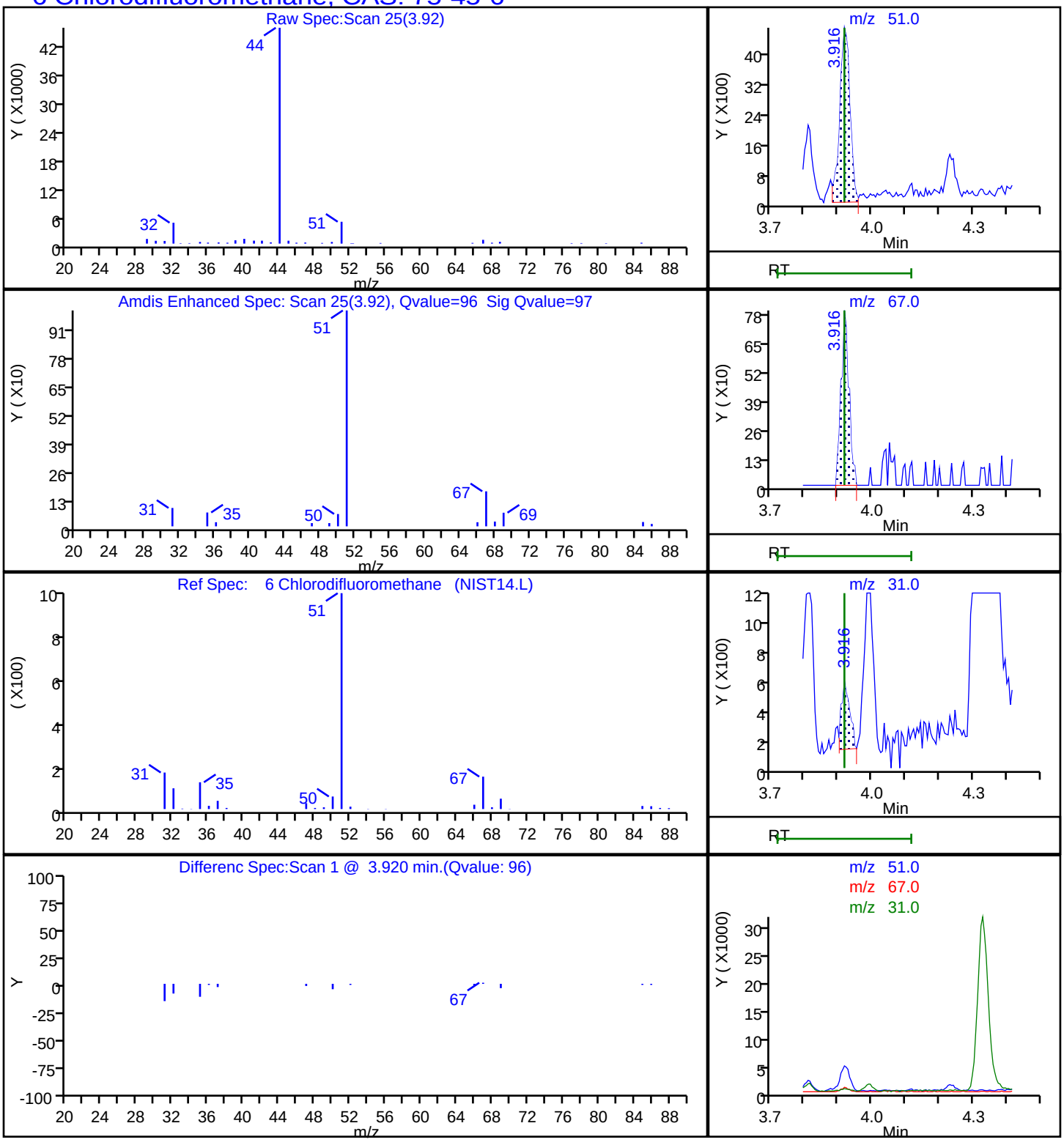
52 Carbon tetrachloride, CAS: 56-23-5



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P115.D				
Injection Date:	09-Sep-2020 05:22:30	Instrument ID:	MH		
Lims ID:	140-20194-A-17	Lab Sample ID:	140-20194-17		
Client ID:	SV-100-B-29				
Operator ID:	HMT	ALS Bottle#:	15	Worklist Smp#:	19
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

6 Chlorodifluoromethane, CAS: 75-45-6

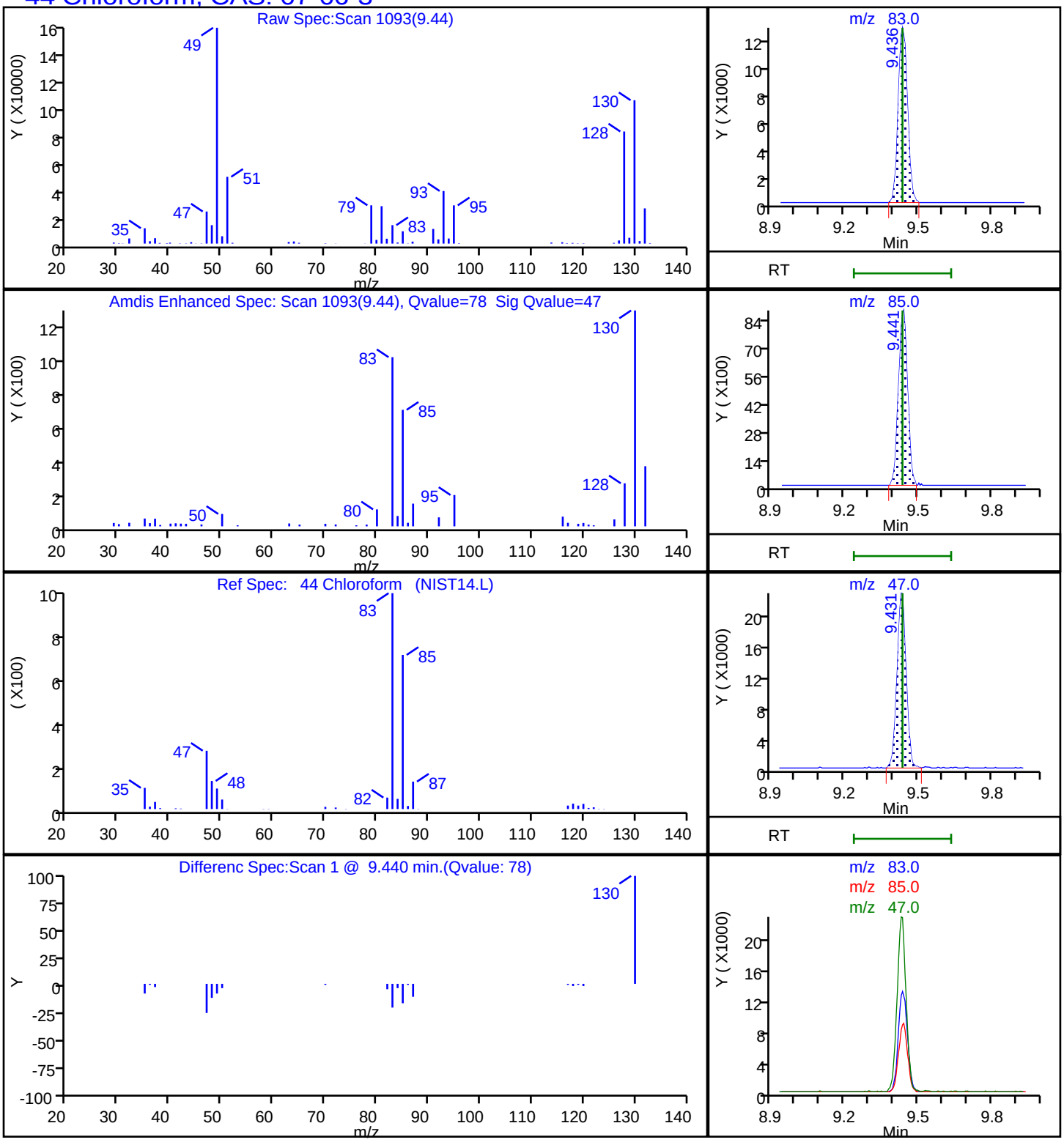


Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P115.D

Injection Date:	09-Sep-2020 05:22:30	Instrument ID:	MH
Lims ID:	140-20194-A-17	Lab Sample ID:	140-20194-17
Client ID:	SV-100-B-29		
Operator ID:	HMT	ALS Bottle#:	15 Worklist Smp#: 19
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

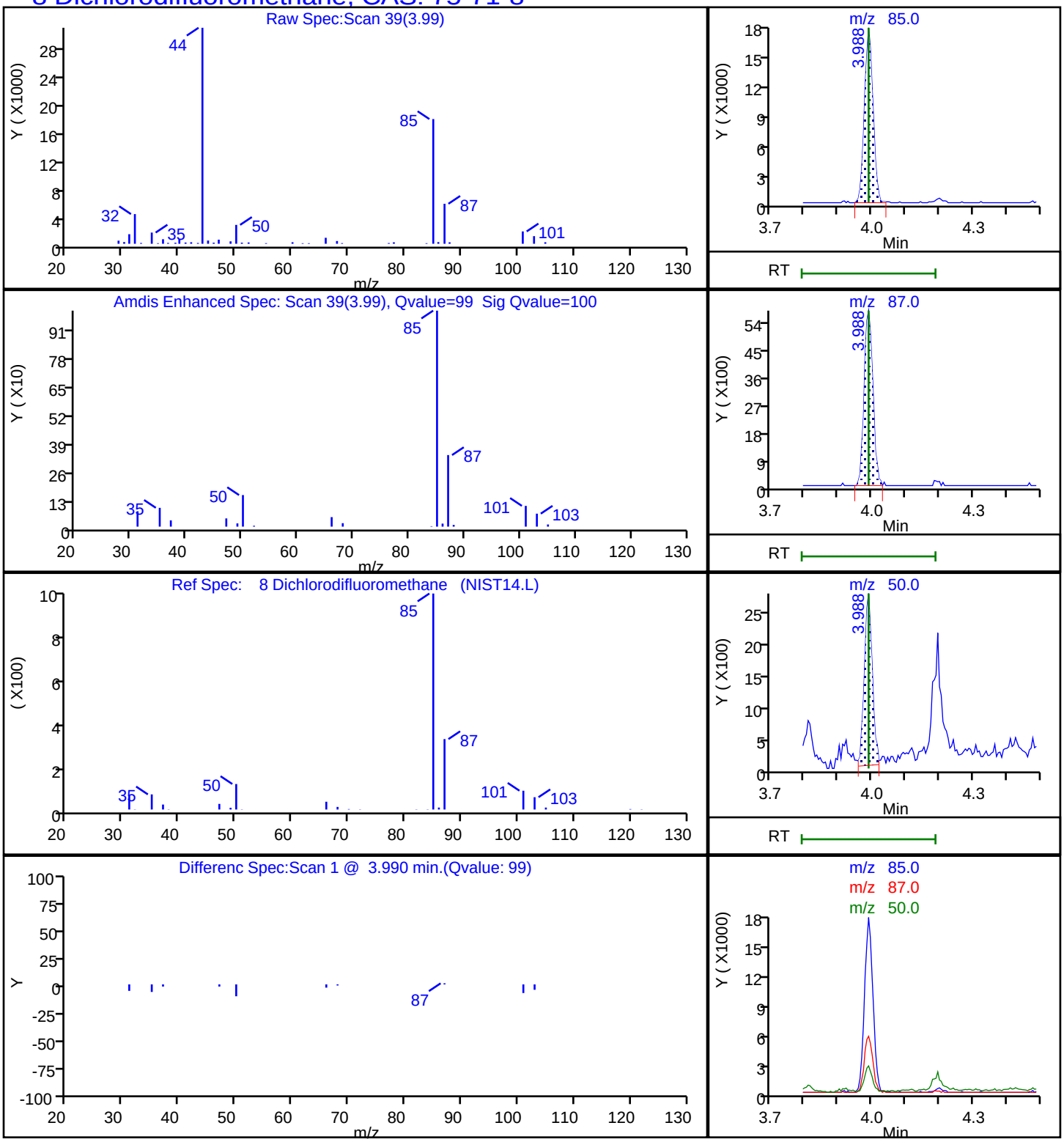
44 Chloroform, CAS: 67-66-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P115.D		
Injection Date:	09-Sep-2020 05:22:30	Instrument ID:	MH
Lims ID:	140-20194-A-17	Lab Sample ID:	140-20194-17
Client ID:	SV-100-B-29		
Operator ID:	HMT	ALS Bottle#:	15 Worklist Smp#: 19
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

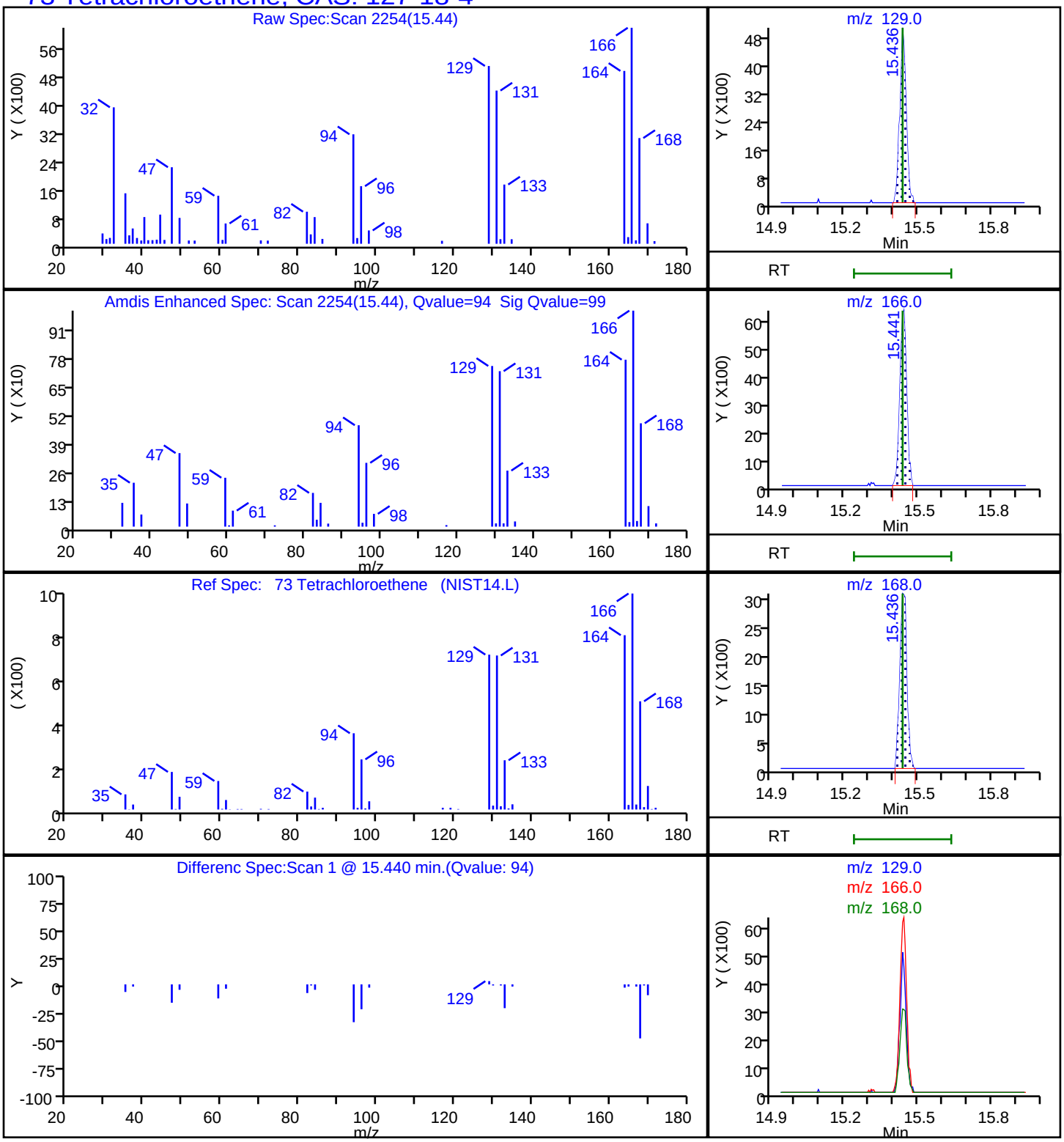
8 Dichlorodifluoromethane, CAS: 75-71-8



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P115.D				
Injection Date:	09-Sep-2020 05:22:30	Instrument ID:	MH		
Lims ID:	140-20194-A-17	Lab Sample ID:	140-20194-17		
Client ID:	SV-100-B-29				
Operator ID:	HMT	ALS Bottle#:	15	Worklist Smp#:	19
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

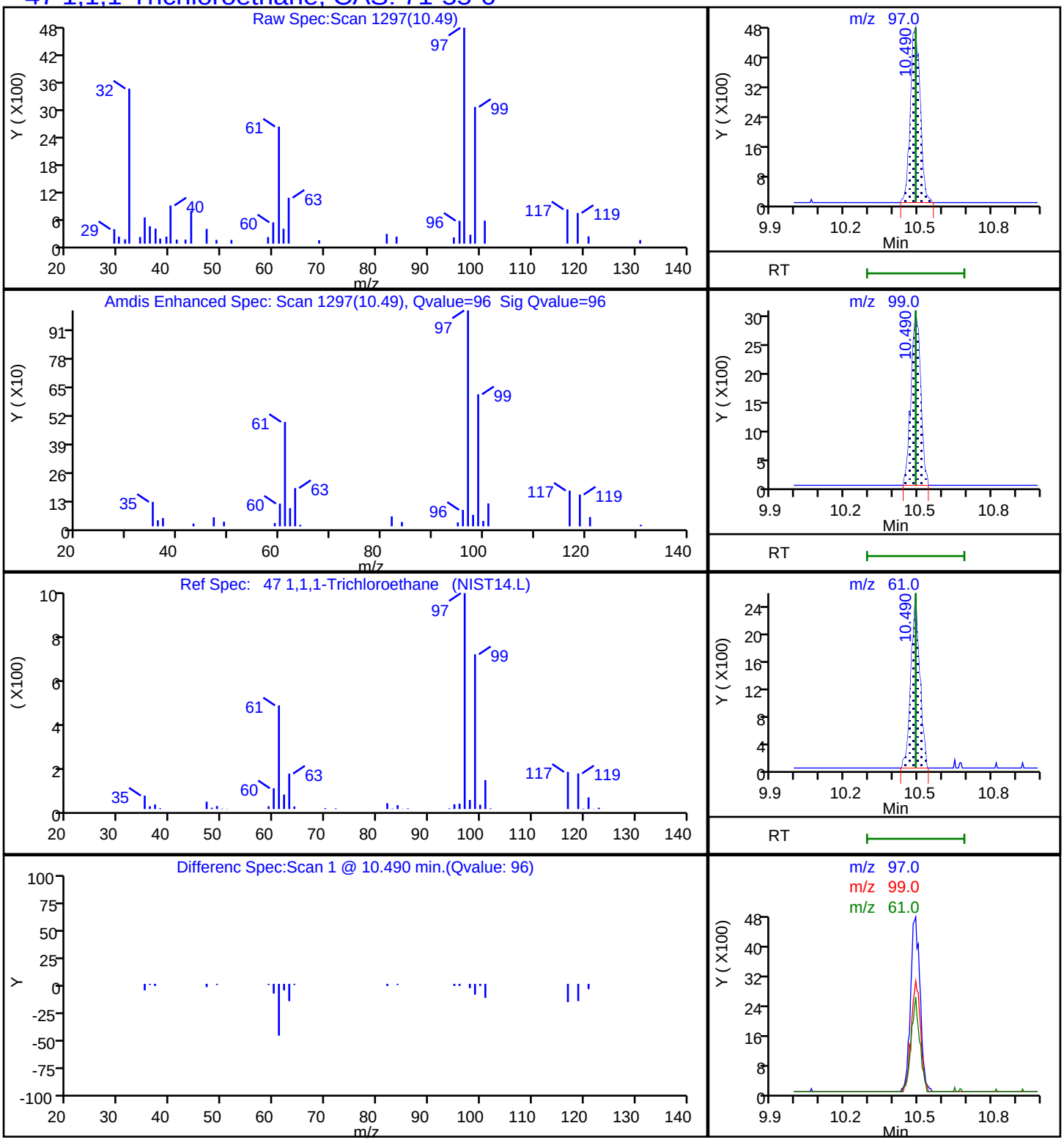
73 Tetrachloroethene, CAS: 127-18-4



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P115.D				
Injection Date:	09-Sep-2020 05:22:30	Instrument ID:	MH		
Lims ID:	140-20194-A-17	Lab Sample ID:	140-20194-17		
Client ID:	SV-100-B-29				
Operator ID:	HMT	ALS Bottle#:	15	Worklist Smp#:	19
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

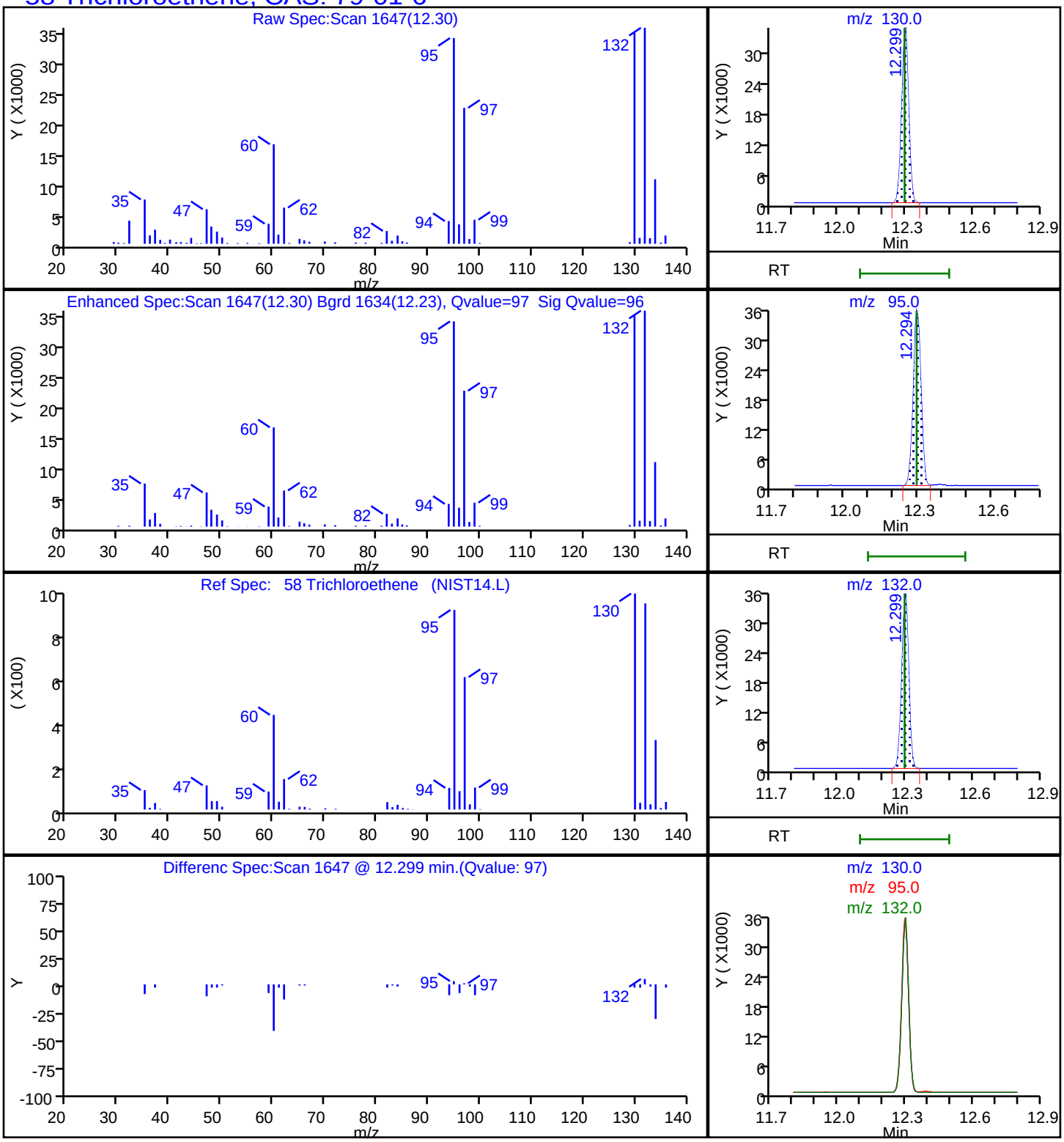
47 1,1,1-Trichloroethane, CAS: 71-55-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P115.D		
Injection Date:	09-Sep-2020 05:22:30	Instrument ID:	MH
Lims ID:	140-20194-A-17	Lab Sample ID:	140-20194-17
Client ID:	SV-100-B-29		
Operator ID:	HMT	ALS Bottle#:	15 Worklist Smp#: 19
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

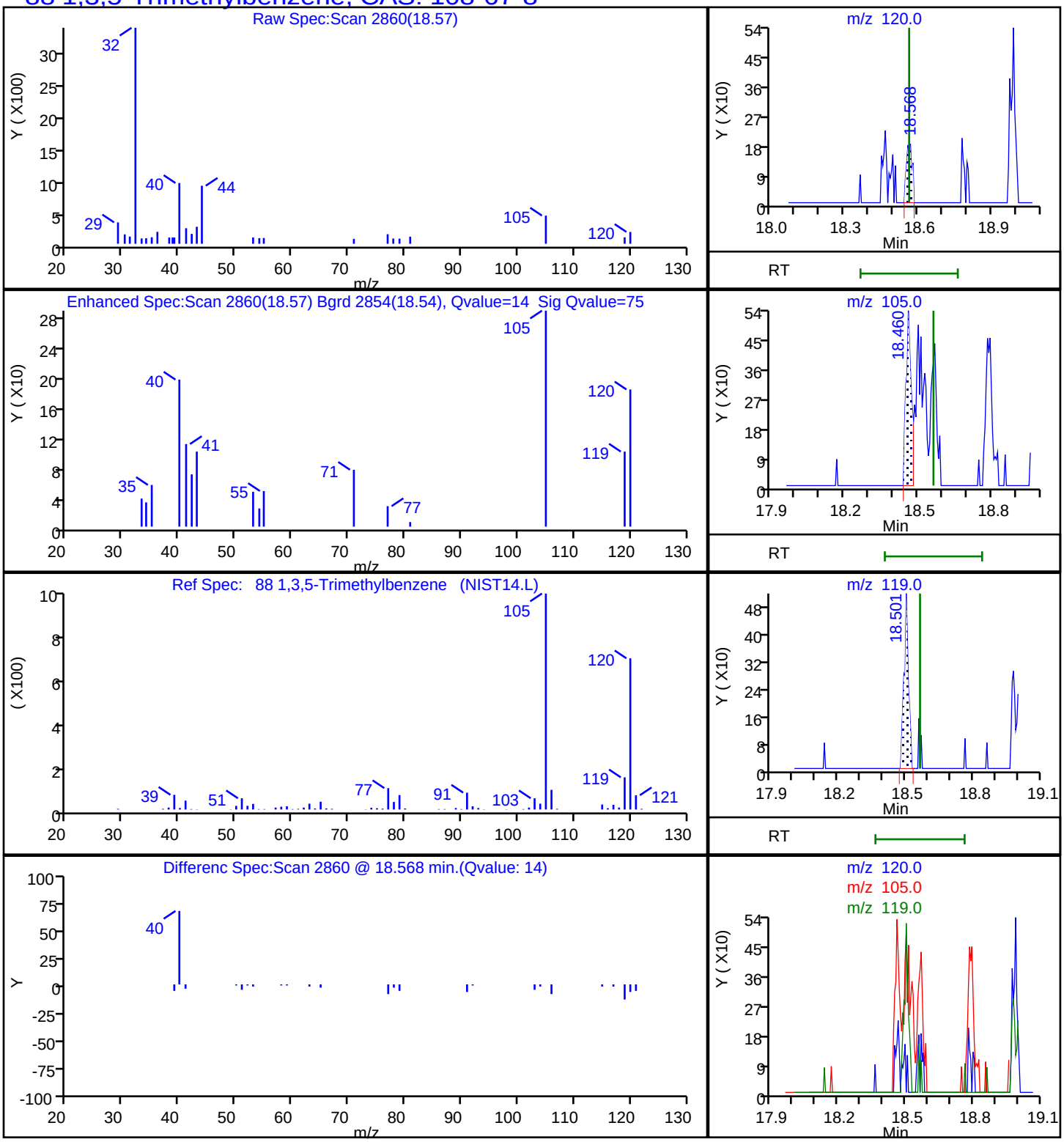
58 Trichloroethene, CAS: 79-01-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P115.D		
Injection Date:	09-Sep-2020 05:22:30	Instrument ID:	MH
Lims ID:	140-20194-A-17	Lab Sample ID:	140-20194-17
Client ID:	SV-100-B-29		
Operator ID:	HMT	ALS Bottle#:	15 Worklist Smp#: 19
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

88 1,3,5-Trimethylbenzene, CAS: 108-67-8



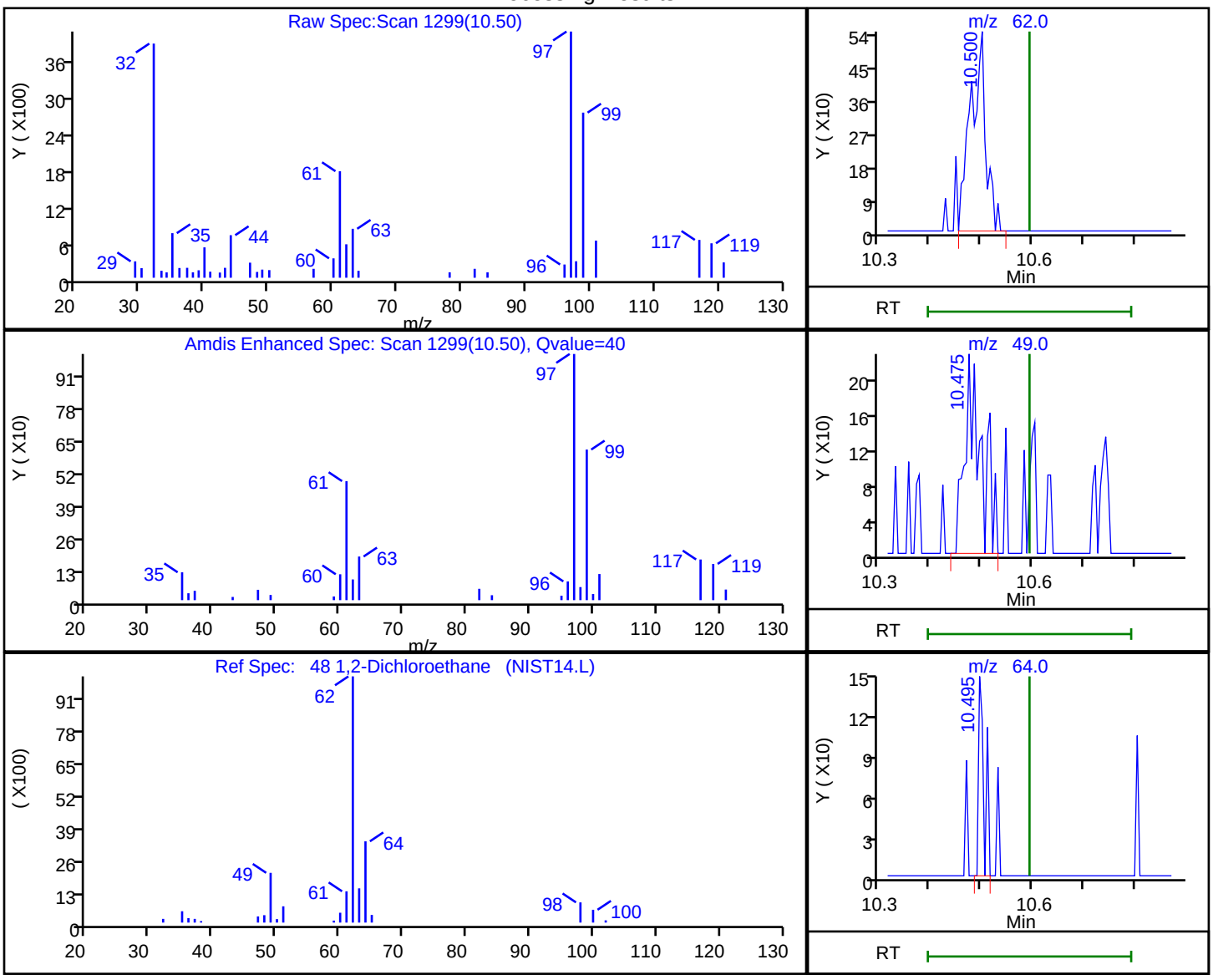
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P115.D				
Injection Date:	09-Sep-2020 05:22:30	Instrument ID:	MH		
Lims ID:	140-20194-A-17	Lab Sample ID:	140-20194-17		
Client ID:	SV-100-B-29				
Operator ID:	HMT	ALS Bottle#:	15	Worklist Smp#:	19
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

48 1,2-Dichloroethane, CAS: 107-06-2

Processing Results



RT	Mass	Response	Amount
10.50	62.00	1123	0.015691
10.47	49.00	505	
10.50	64.00	114	

Reviewer: khachitpongpanits, 10-Sep-2020 10:35:36

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Knoxville

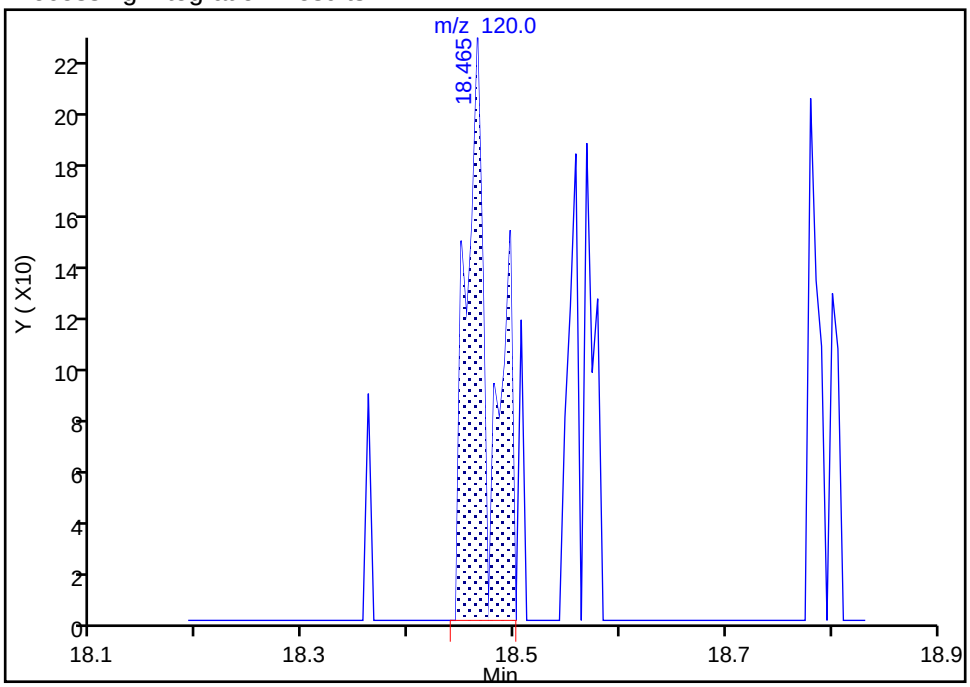
Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P115.D				
Injection Date:	09-Sep-2020 05:22:30	Instrument ID:	MH		
Lims ID:	140-20194-A-17	Lab Sample ID:	140-20194-17		
Client ID:	SV-100-B-29				
Operator ID:	HMT	ALS Bottle#:	15	Worklist Smp#:	19
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

88 1,3,5-Trimethylbenzene, CAS: 108-67-8

Signal: 1

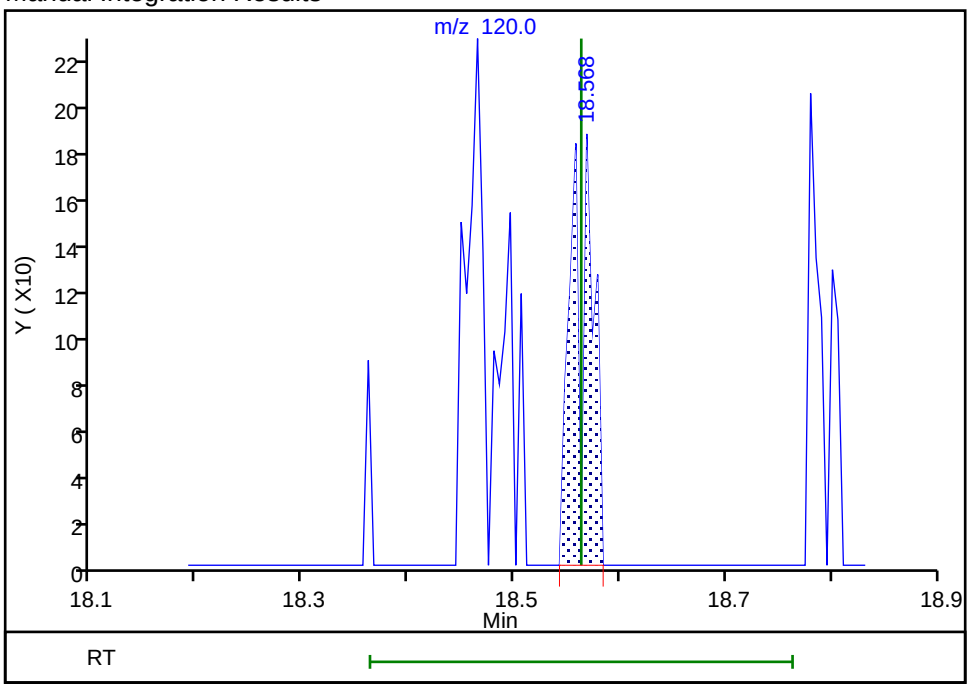
Processing Integration Results

RT: 18.46
Area: 364
Amount: 0.051901
Amount Units: ppb v/v



Manual Integration Results

RT: 18.57
Area: 239
Amount: 0.050372
Amount Units: ppb v/v



Reviewer: khachitpongpanits, 10-Sep-2020 10:36:19

Audit Action: Manually Integrated Audit Reason: Wrong peak

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: SV-079-A-29 Lab Sample ID: 140-20194-18

Matrix: Air Lab File ID: HI08P116.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 10:35

Sample wt/vol: 100(mL) Date Analyzed: 09/09/2020 07:09

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42504 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.13	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.076	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	0.62		0.40	0.11
67-66-3	Chloroform	119.38	0.15	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.56		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	0.39	J	0.40	0.065
75-09-2	Methylene Chloride	84.93	8.5		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	2.0		0.40	0.035
108-88-3	Toluene	92.14	0.72		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	0.080	J	0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND	*	0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	0.41		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	25		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	0.28	J	0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	0.39	J	0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	1.7		0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	91		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: SV-079-A-29 Lab Sample ID: 140-20194-18

Matrix: Air Lab File ID: HI08P116.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 10:35

Sample wt/vol: 100(mL) Date Analyzed: 09/09/2020 07:09

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42504 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.42	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.48	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	2.2		1.4	0.39
67-66-3	Chloroform	119.38	0.74	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.8		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	1.7	J	1.7	0.28
75-09-2	Methylene Chloride	84.93	30		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	13		2.7	0.24
108-88-3	Toluene	92.14	2.7		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	0.32	J	1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND	*	3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	2.3		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	130		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	1.4	J	2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	1.9	J	2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	7.2		3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	91		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P116.D
Lims ID: 140-20194-A-18
Client ID: SV-079-A-29
Sample Type: Client
Inject. Date: 09-Sep-2020 07:09:30 ALS Bottle#: 16 Worklist Smp#: 21
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016520-021
Misc. Info.: 140-20194-a-18
Operator ID: HMT Instrument ID: MH

Method: \\chromfs\Knoxville\ChromData\MH\20200904-16520.b\MH_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 10-Sep-2020 10:37:31 Calib Date: 29-Aug-2020 23:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1028

First Level Reviewer: khachitpongpanits Date: 10-Sep-2020 10:37:31

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.431	9.431	0.000	96	204275	4.80	
* 2 1,4-Difluorobenzene	114	11.591	11.591	0.000	95	796569	4.80	
* 3 Chlorobenzene-d5 (IS)	117	16.258	16.258	0.000	87	582729	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.876	17.876	0.000	95	284389	4.20	
6 Chlorodifluoromethane	51	3.921	3.921	0.005	96	14047	0.1232	M
8 Dichlorodifluoromethane	85	3.988	3.988	0.000	98	17361	0.1124	
31 Methylene Chloride	84	6.764	6.764	0.000	96	85072	1.70	
34 trans-1,2-Dichloroethene	96	7.622	7.621	0.006	79	832	0.0161	
44 Chloroform	83	9.441	9.436	0.005	28	3759	0.0303	
47 1,1,1-Trichloroethane	97	10.490	10.490	0.000	97	9276	0.0825	
51 Benzene	78	11.079	11.069	0.010	91	3851	0.0263	
52 Carbon tetrachloride	117	11.090	11.095	-0.005	71	1368	0.0151	
58 Trichloroethene	130	12.294	12.294	0.000	96	329966	5.02	
67 Toluene	91	14.310	14.310	0.000	89	21561	0.1436	
73 Tetrachloroethene	129	15.436	15.441	0.000	94	24924	0.3961	
76 Ethylbenzene	91	16.584	16.584	0.000	98	14090	0.0775	
77 m-Xylene & p-Xylene	91	16.739	16.739	0.000	96	13300	0.0926	
81 o-Xylene	91	17.266	17.266	0.000	99	35057	0.2331	
88 1,3,5-Trimethylbenzene	120	18.563	18.568	0.000	91	2778	0.0778	
92 1,2,4-Trimethylbenzene	105	18.987	18.993	0.000	97	9761	0.0561	
S 116 Xylenes, Total	100				0		0.3257	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

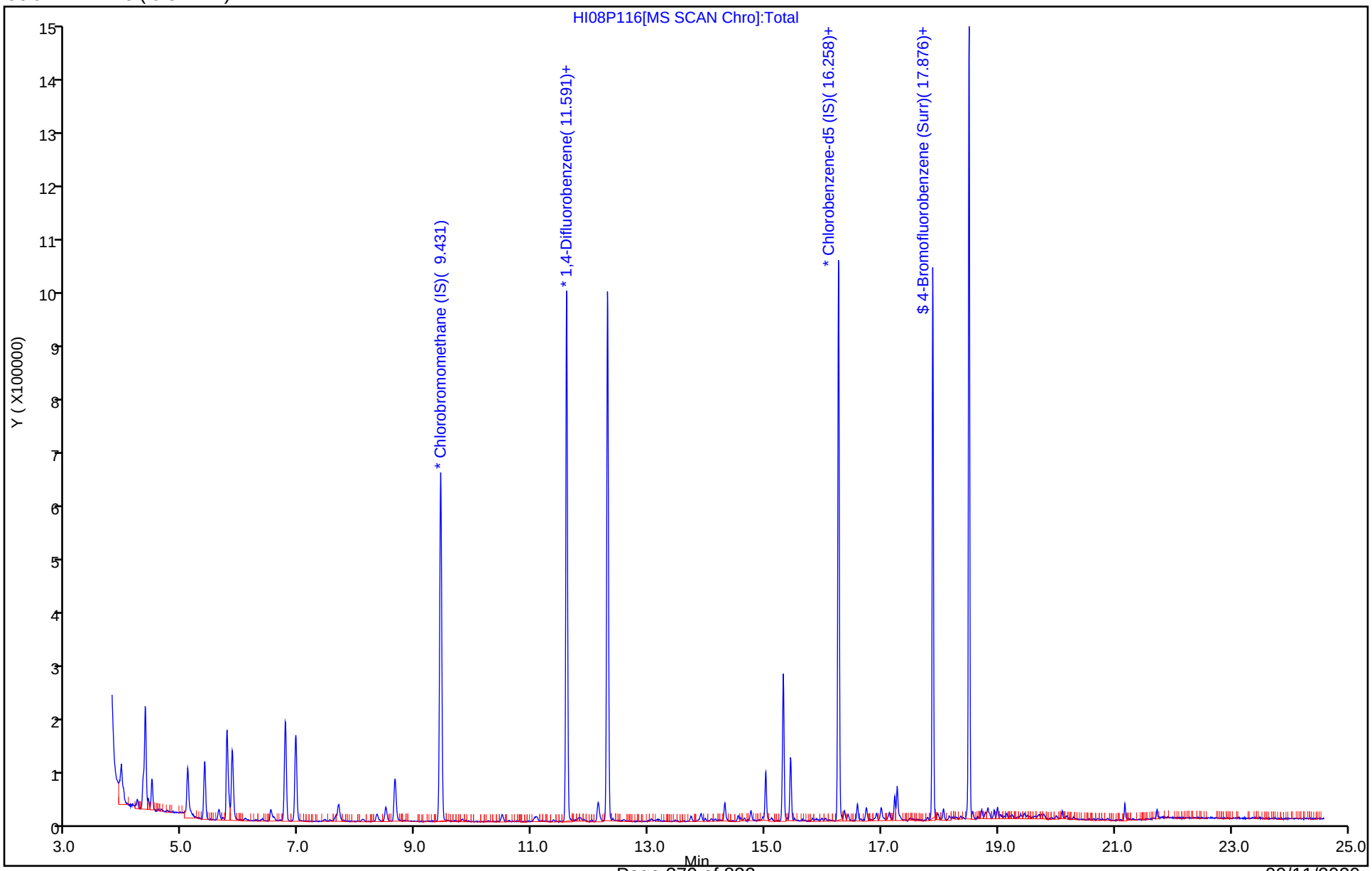
Report Date: 10-Sep-2020 10:37:32 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P116.D

Injection Date:	09-Sep-2020 07:09:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	140-20194-A-18	Lab Sample ID:	140-20194-18	Worklist Smp#:	21
Client ID:	SV-079-A-29				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

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Lims ID:	140-20194-A-18				
Client ID:	SV-079-A-29				
Sample Type:	Client				
Inject. Date:	09-Sep-2020 07:09:30	ALS Bottle#:	16	Worklist Smp#:	21
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016520-021				
Misc. Info.:	140-20194-a-18				
Operator ID:	HMT	Instrument ID:	MH		
Method:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\MH_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	10-Sep-2020 10:37:31	Calib Date:	29-Aug-2020 23:57:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1028				

First Level Reviewer: khachitpongpanits Date: 10-Sep-2020 10:37:31

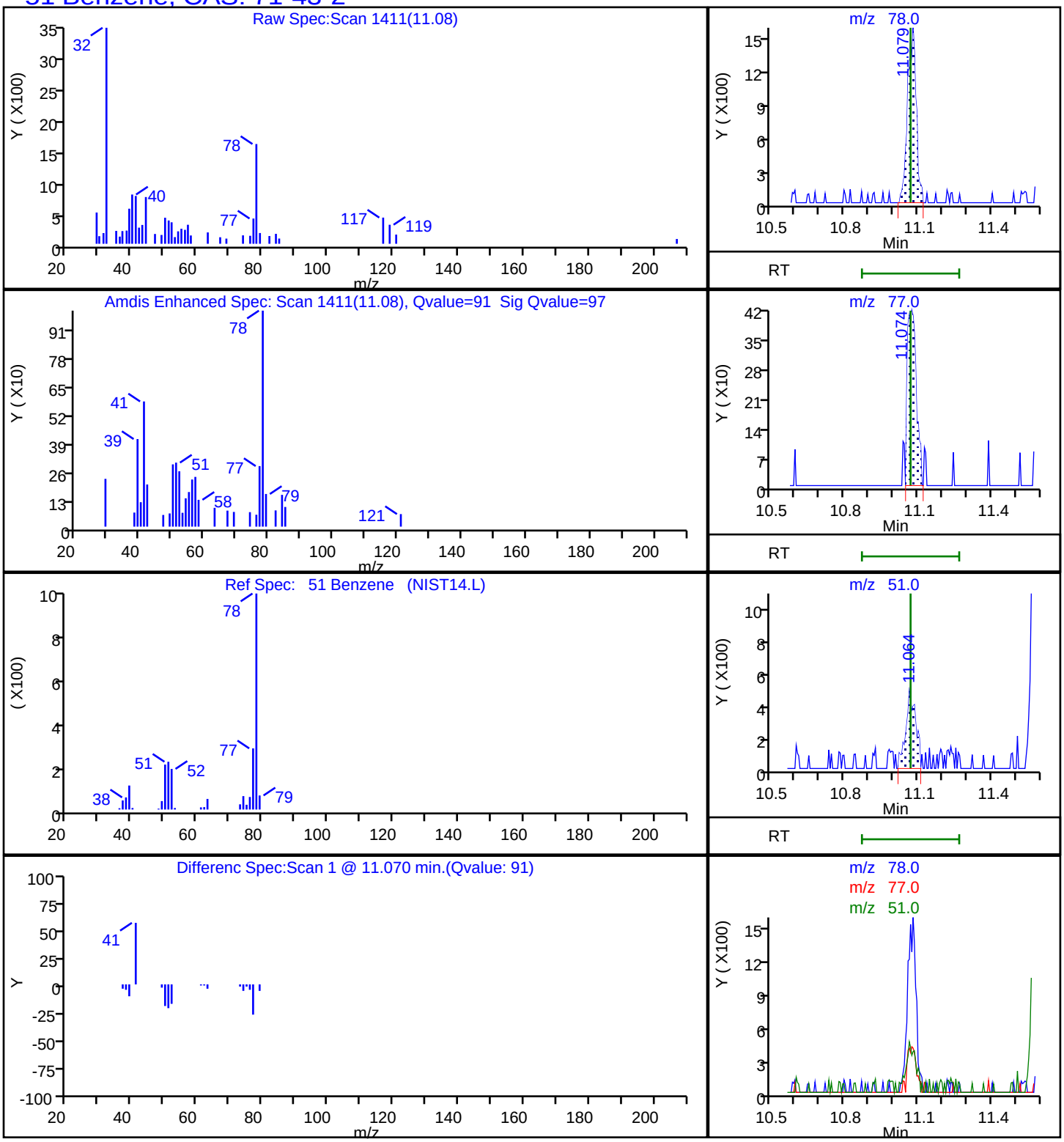
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	4.20	90.52

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P116.D

Injection Date:	09-Sep-2020 07:09:30	Instrument ID:	MH		
Lims ID:	140-20194-A-18	Lab Sample ID:	140-20194-18		
Client ID:	SV-079-A-29				
Operator ID:	HMT	ALS Bottle#:	16	Worklist Smp#:	21
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

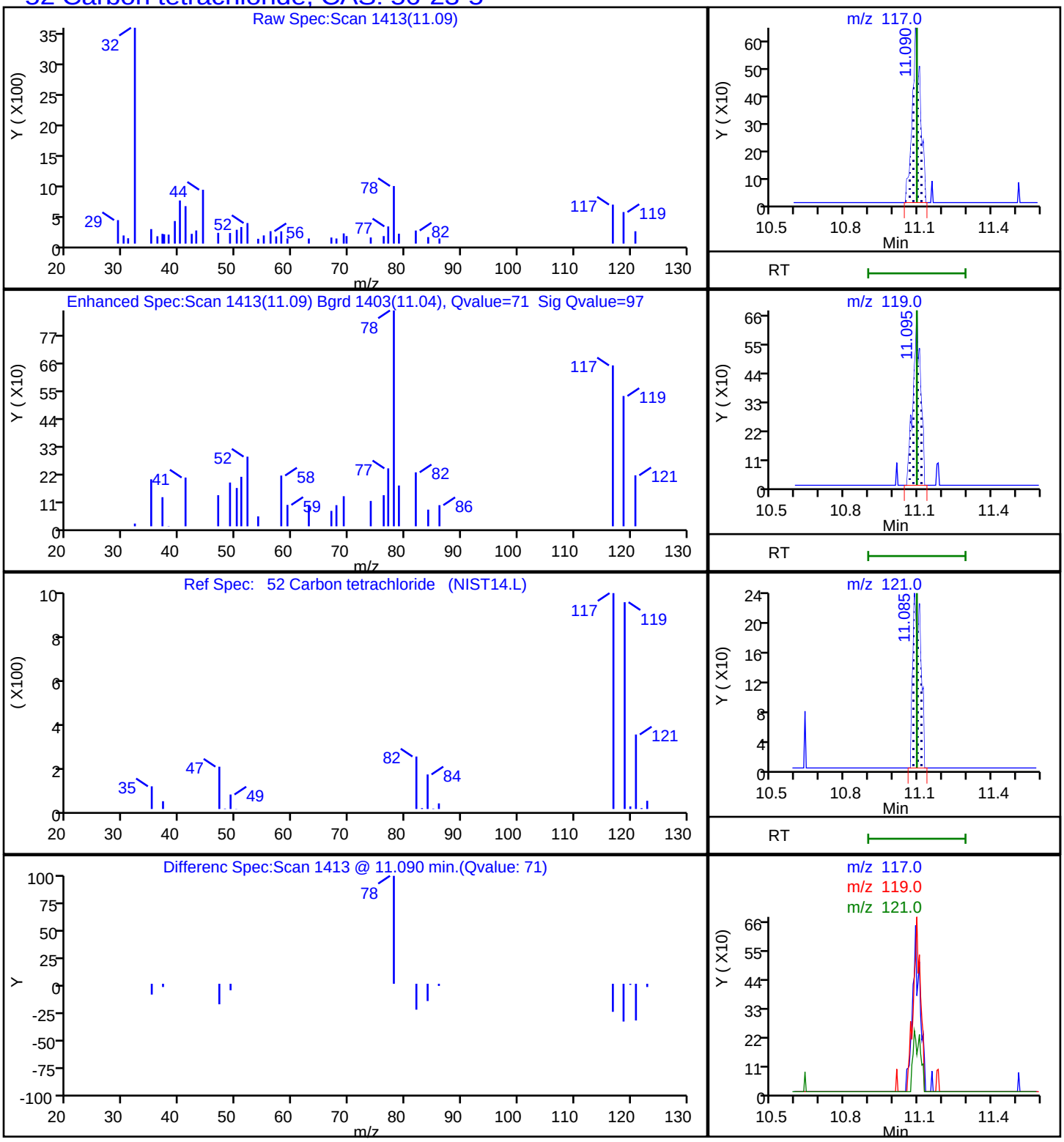
51 Benzene, CAS: 71-43-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P116.D		
Injection Date:	09-Sep-2020 07:09:30	Instrument ID:	MH
Lims ID:	140-20194-A-18	Lab Sample ID:	140-20194-18
Client ID:	SV-079-A-29		
Operator ID:	HMT	ALS Bottle#:	16 Worklist Smp#: 21
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

52 Carbon tetrachloride, CAS: 56-23-5



Report Date: 10-Sep-2020 10:37:32 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

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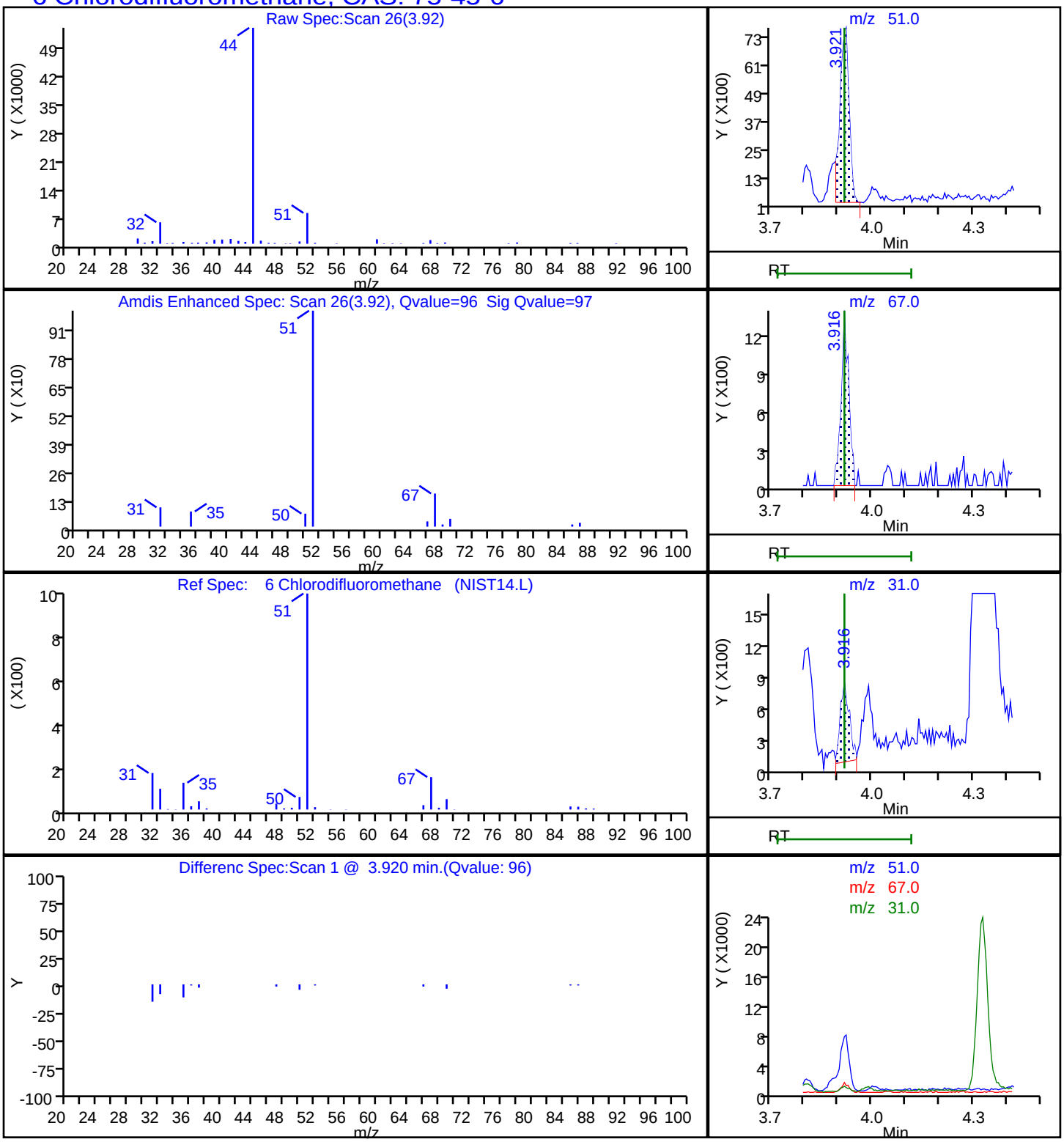
Lims ID:	140-20194-A-18	Lab Sample ID:	140-20194-18		
Client ID:	SV-079-A-29				
Operator ID:	HMT	ALS Bottle#:	16	Worklist Smp#:	21
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

6 Chlorodifluoromethane, CAS: 75-45-6



Eurofins TestAmerica, Knoxville

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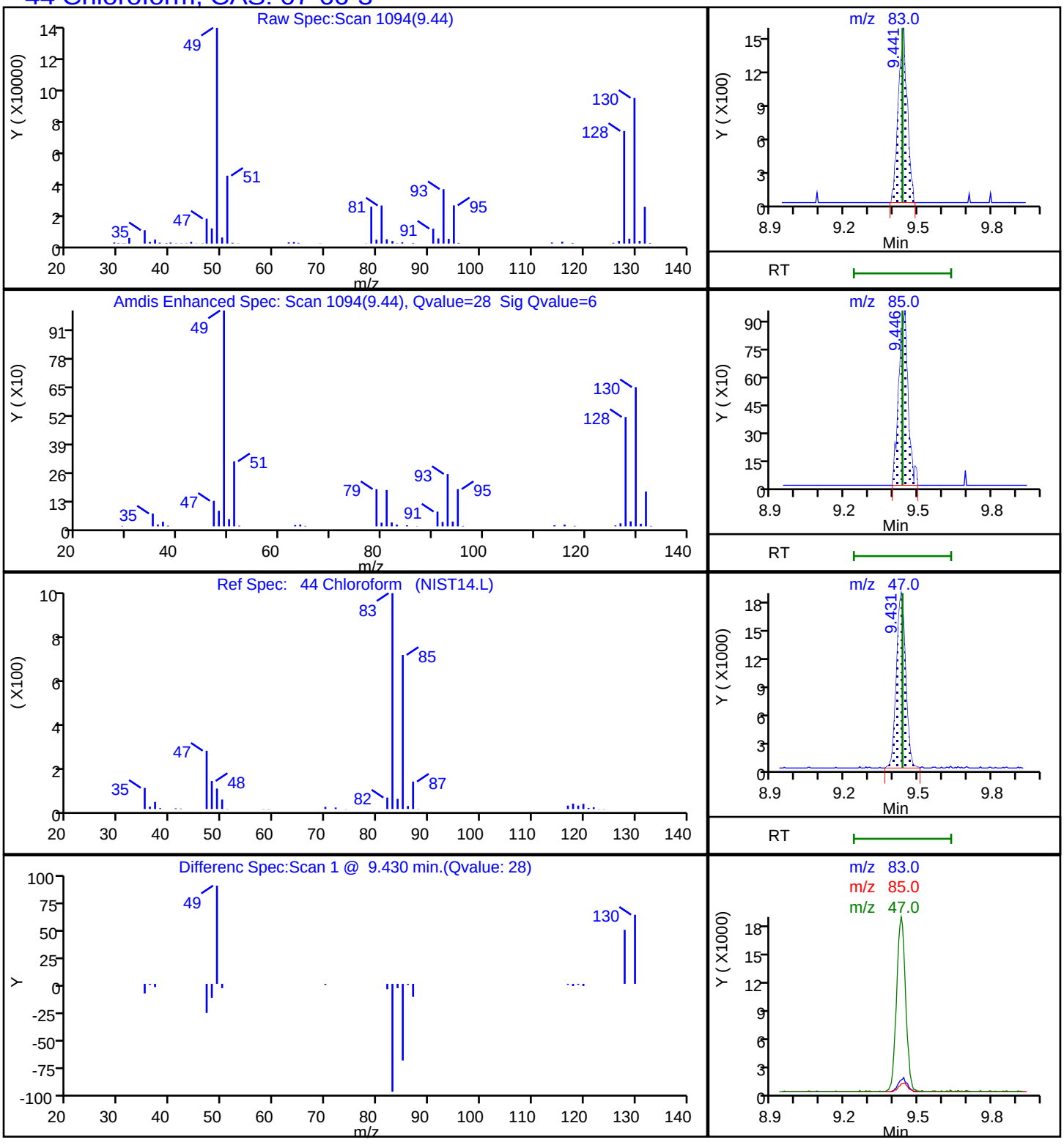
Injection Date:	09-Sep-2020 07:09:30	Instrument ID:	MH
Lims ID:	140-20194-A-18	Lab Sample ID:	140-20194-18
Client ID:	SV-079-A-29		
Operator ID:	HMT	ALS Bottle#:	16 Worklist Smp#: 21
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

44 Chloroform, CAS: 67-66-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P116.D				
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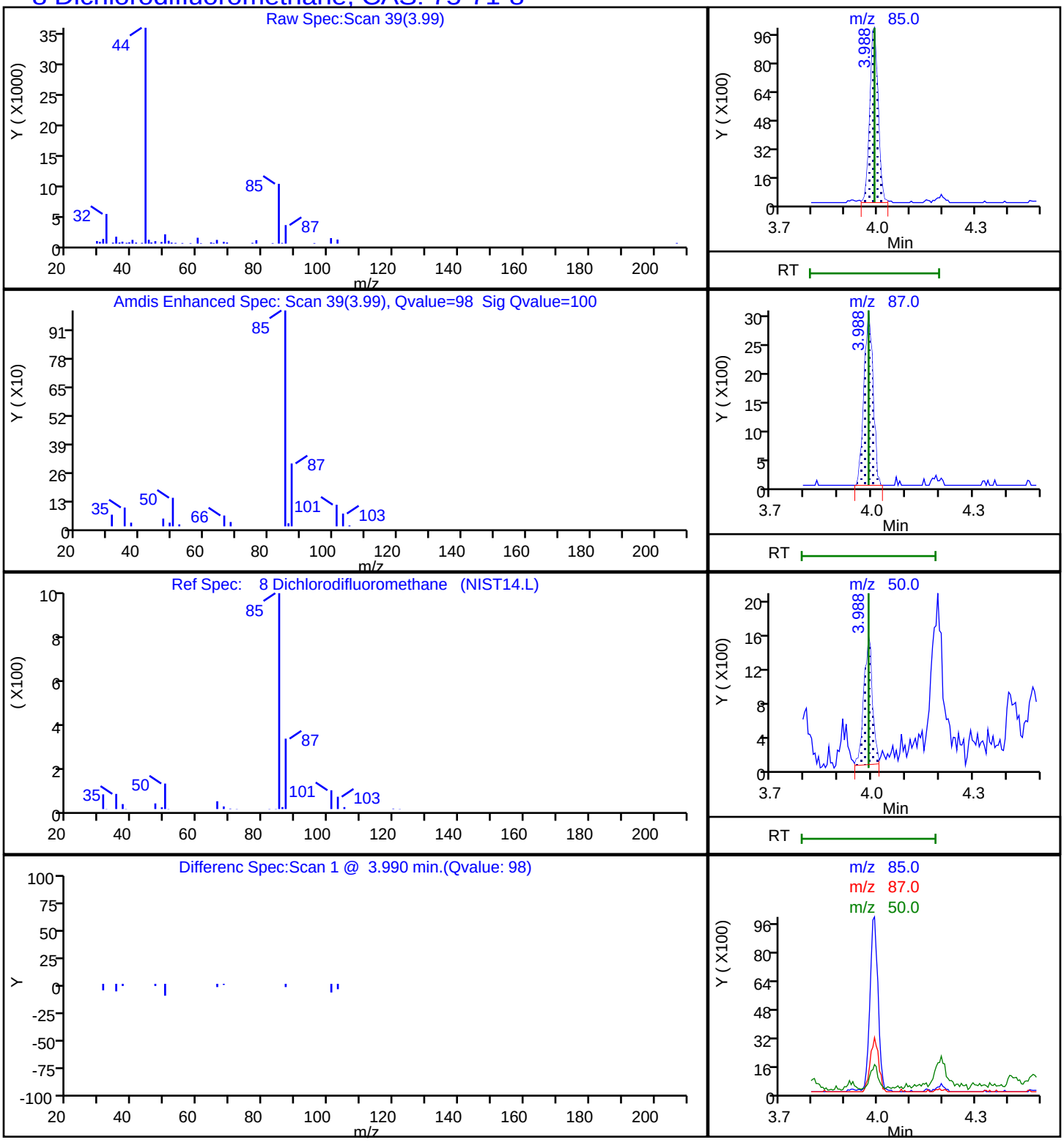
Lims ID:	140-20194-A-18	Lab Sample ID:	140-20194-18		
Client ID:	SV-079-A-29				
Operator ID:	HMT	ALS Bottle#:	16	Worklist Smp#:	21
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

8 Dichlorodifluoromethane, CAS: 75-71-8



Eurofins TestAmerica, Knoxville

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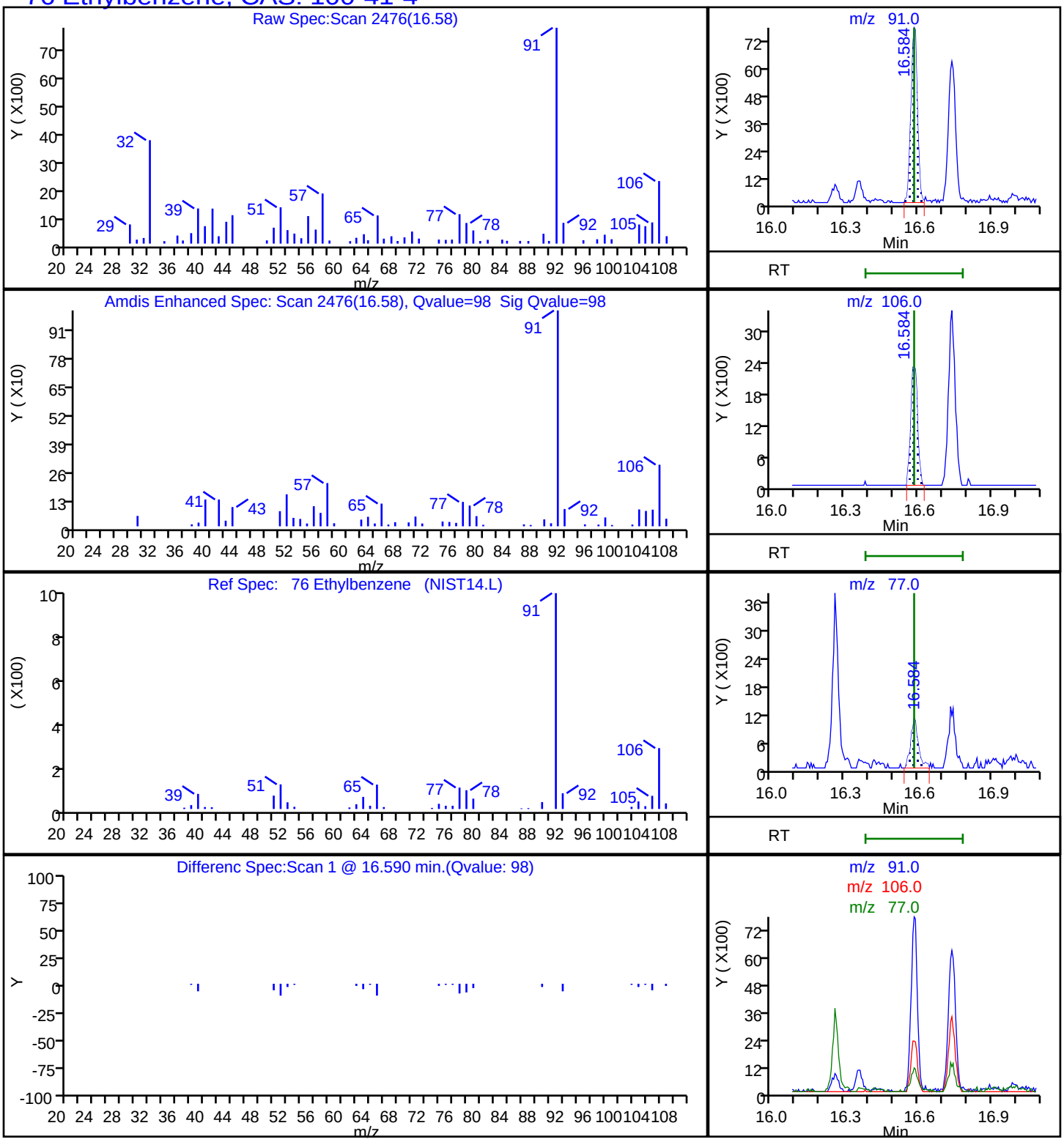
Lims ID:	140-20194-A-18	Lab Sample ID:	140-20194-18
Client ID:	SV-079-A-29		
Operator ID:	HMT	ALS Bottle#:	16 Worklist Smp#: 21
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

76 Ethylbenzene, CAS: 100-41-4



Eurofins TestAmerica, Knoxville

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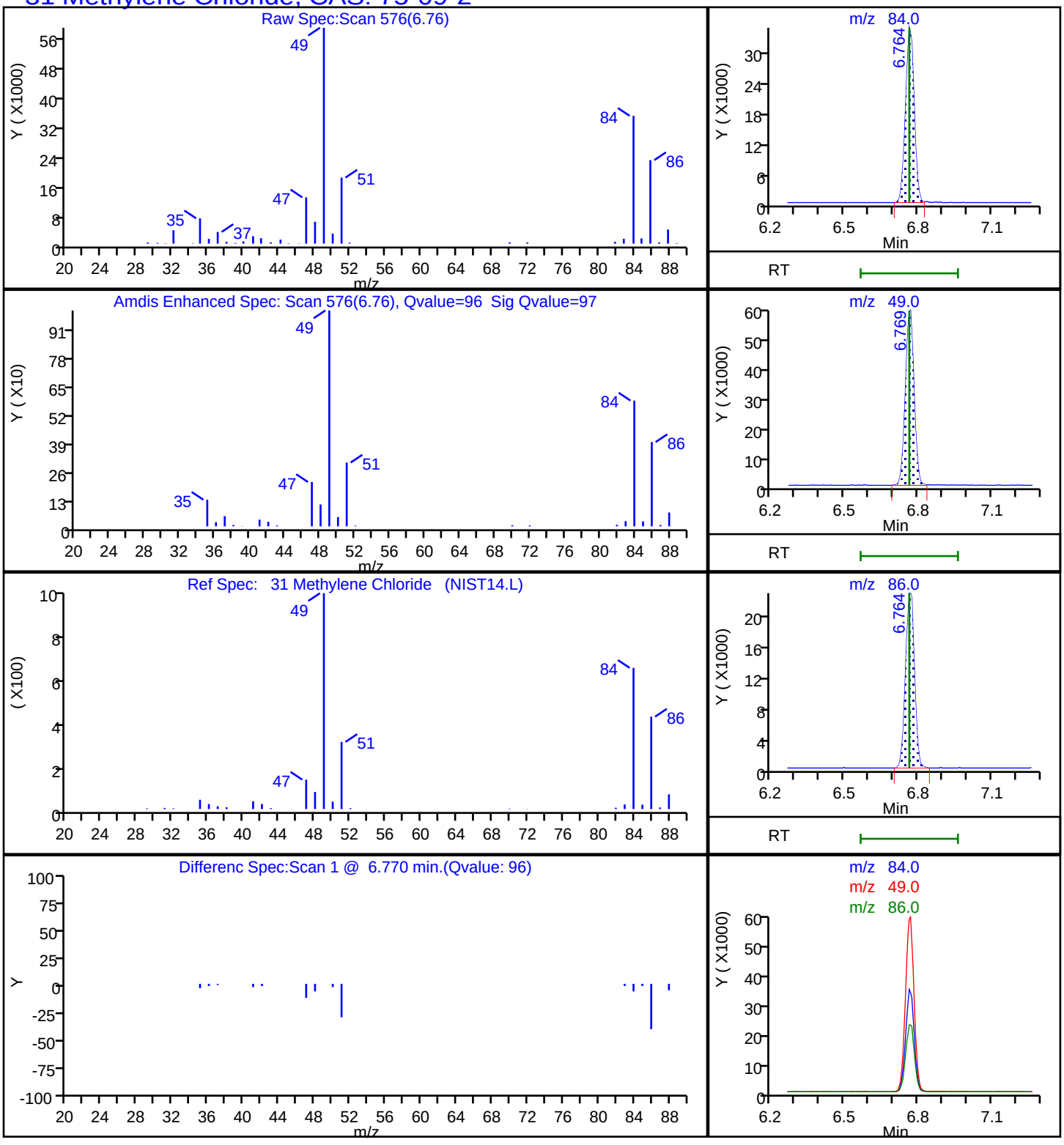
Lims ID:	140-20194-A-18	Lab Sample ID:	140-20194-18
Client ID:	SV-079-A-29		
Operator ID:	HMT	ALS Bottle#:	16 Worklist Smp#: 21
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

31 Methylene Chloride, CAS: 75-09-2



Eurofins TestAmerica, Knoxville

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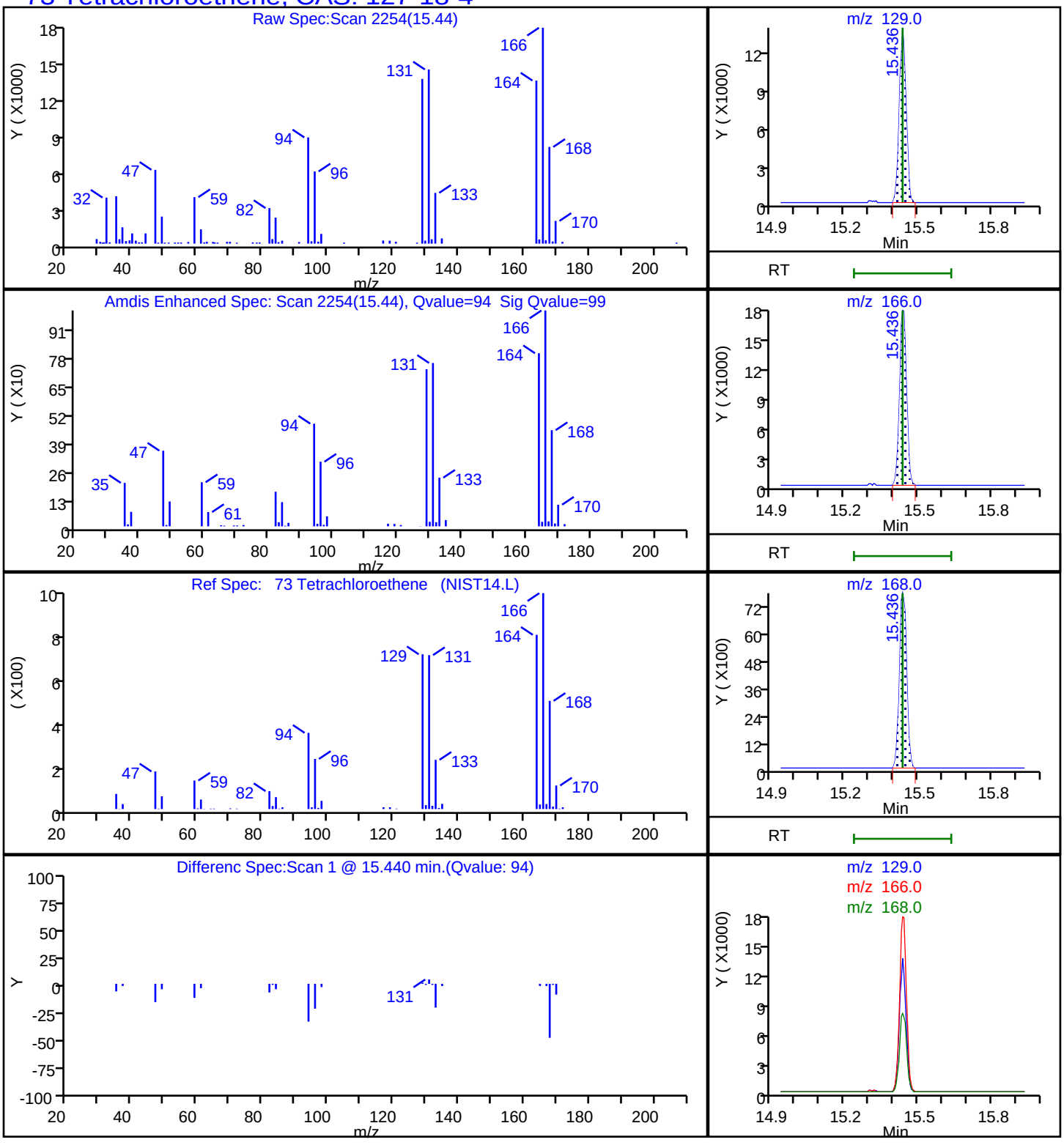
Injection Date:	09-Sep-2020 07:09:30	Instrument ID:	MH
Lims ID:	140-20194-A-18	Lab Sample ID:	140-20194-18
Client ID:	SV-079-A-29		
Operator ID:	HMT	ALS Bottle#:	16 Worklist Smp#: 21
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

73 Tetrachloroethene, CAS: 127-18-4



Eurofins TestAmerica, Knoxville

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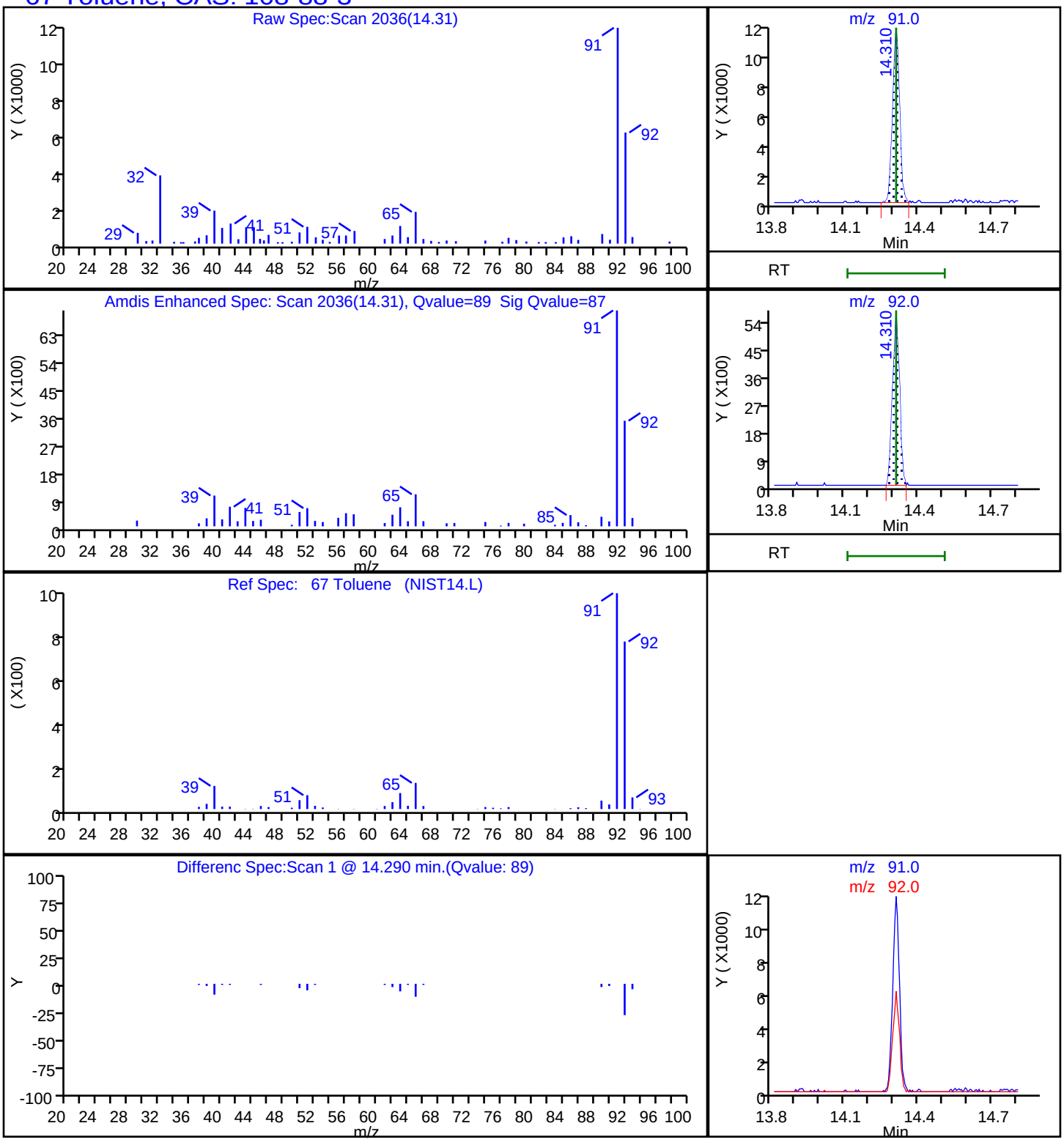
Lims ID:	140-20194-A-18	Lab Sample ID:	140-20194-18
Client ID:	SV-079-A-29		
Operator ID:	HMT	ALS Bottle#:	16 Worklist Smp#: 21
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

67 Toluene, CAS: 108-88-3



Report Date: 10-Sep-2020 10:37:32 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

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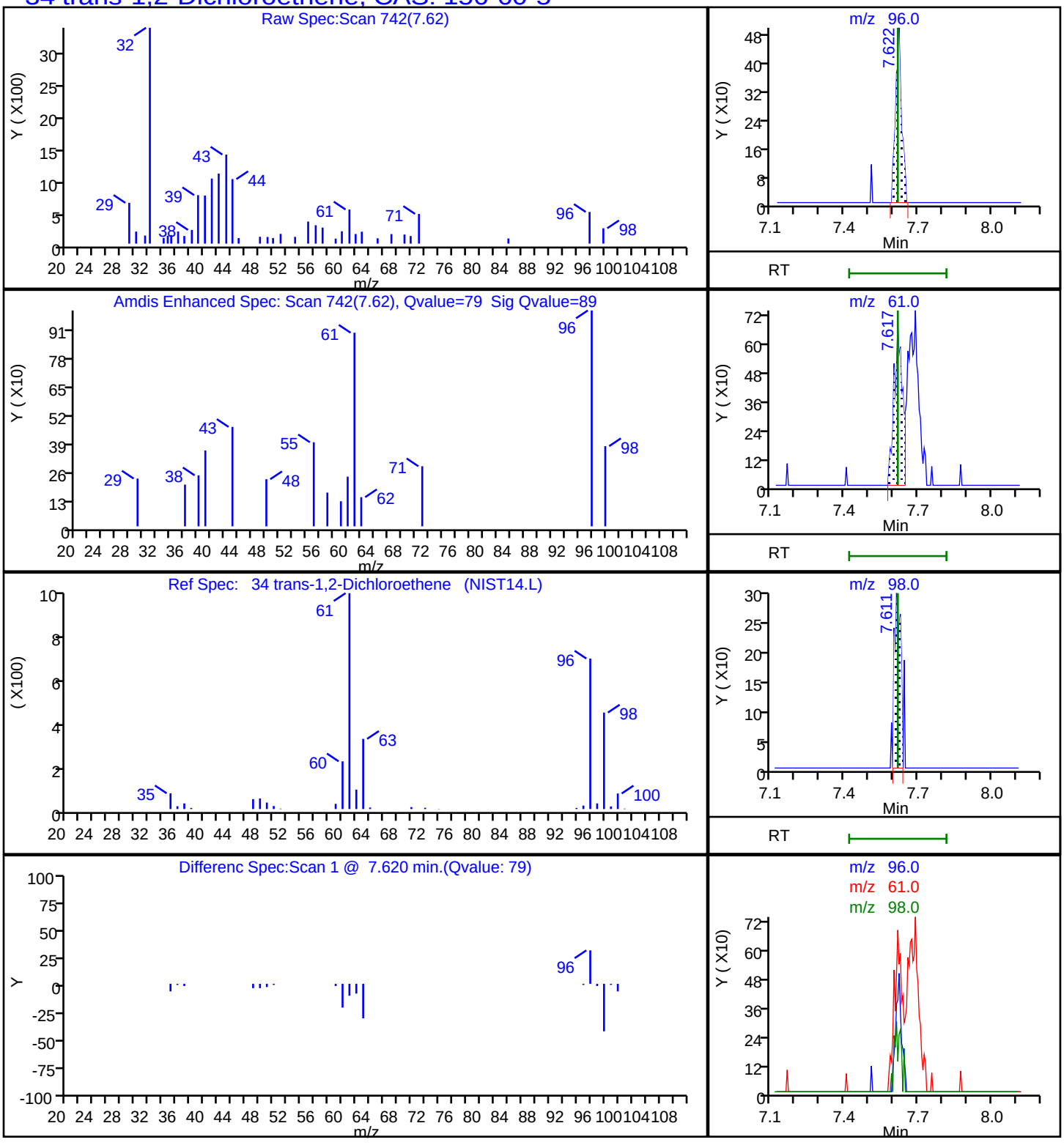
Lims ID:	140-20194-A-18	Lab Sample ID:	140-20194-18		
Client ID:	SV-079-A-29				
Operator ID:	HMT	ALS Bottle#:	16	Worklist Smp#:	21
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

34 trans-1,2-Dichloroethene, CAS: 156-60-5



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P116.D		
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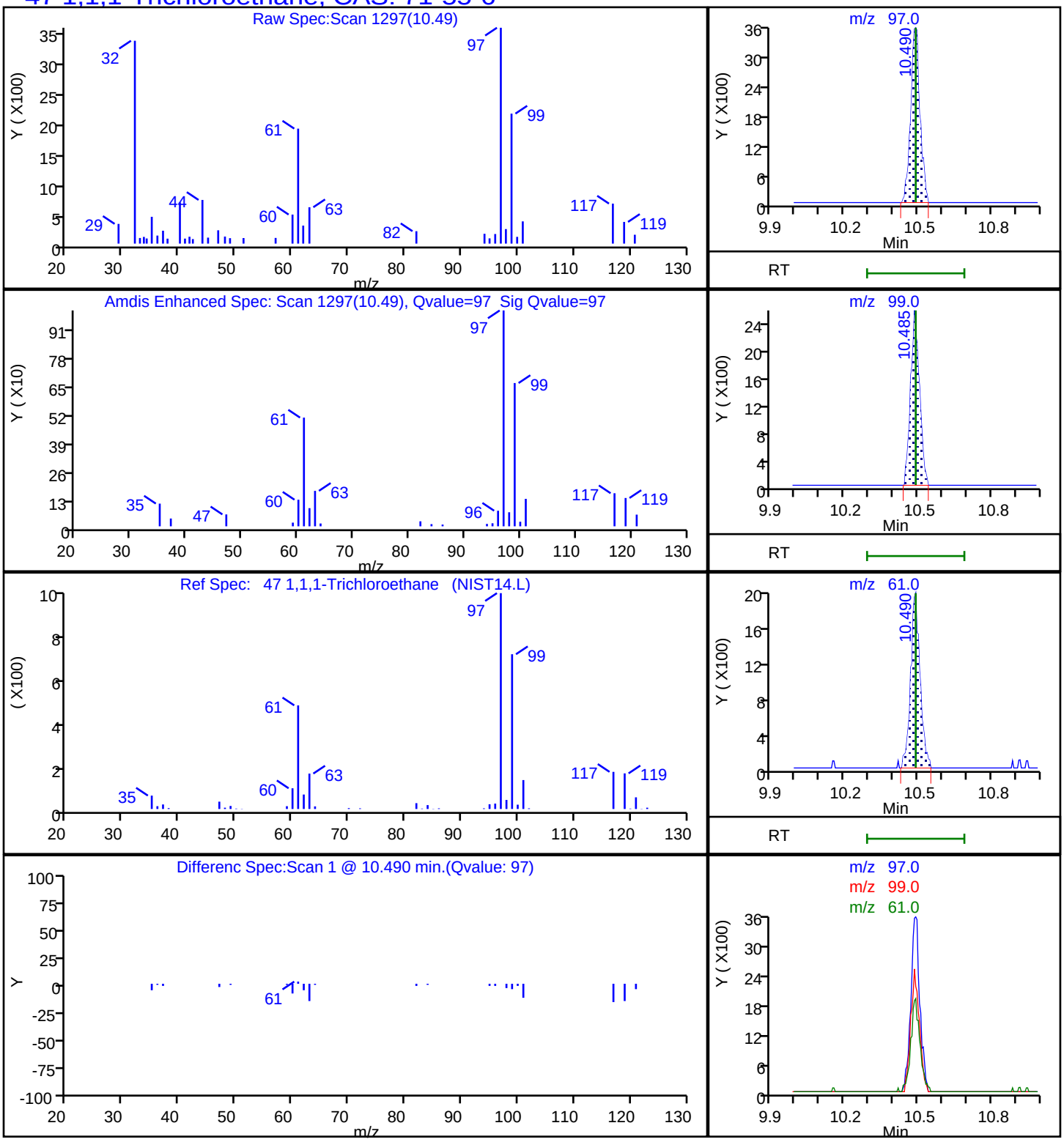
Lims ID:	140-20194-A-18	Lab Sample ID:	140-20194-18
Client ID:	SV-079-A-29		
Operator ID:	HMT	ALS Bottle#:	16 Worklist Smp#: 21
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

47 1,1,1-Trichloroethane, CAS: 71-55-6

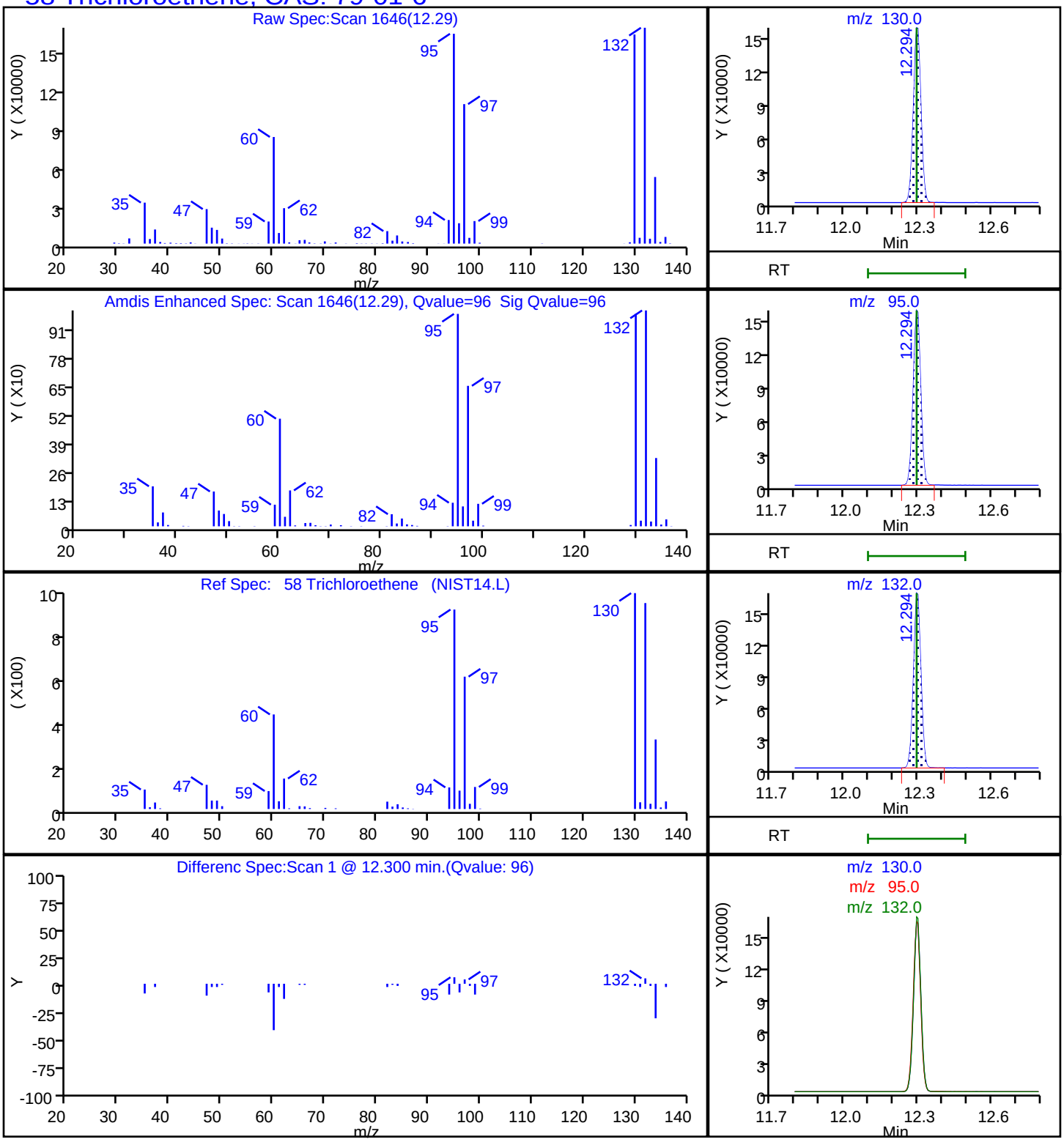


Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P116.D

Injection Date:	09-Sep-2020 07:09:30	Instrument ID:	MH
Lims ID:	140-20194-A-18	Lab Sample ID:	140-20194-18
Client ID:	SV-079-A-29		
Operator ID:	HMT	ALS Bottle#:	16 Worklist Smp#: 21
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

58 Trichloroethene, CAS: 79-01-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P116.D		
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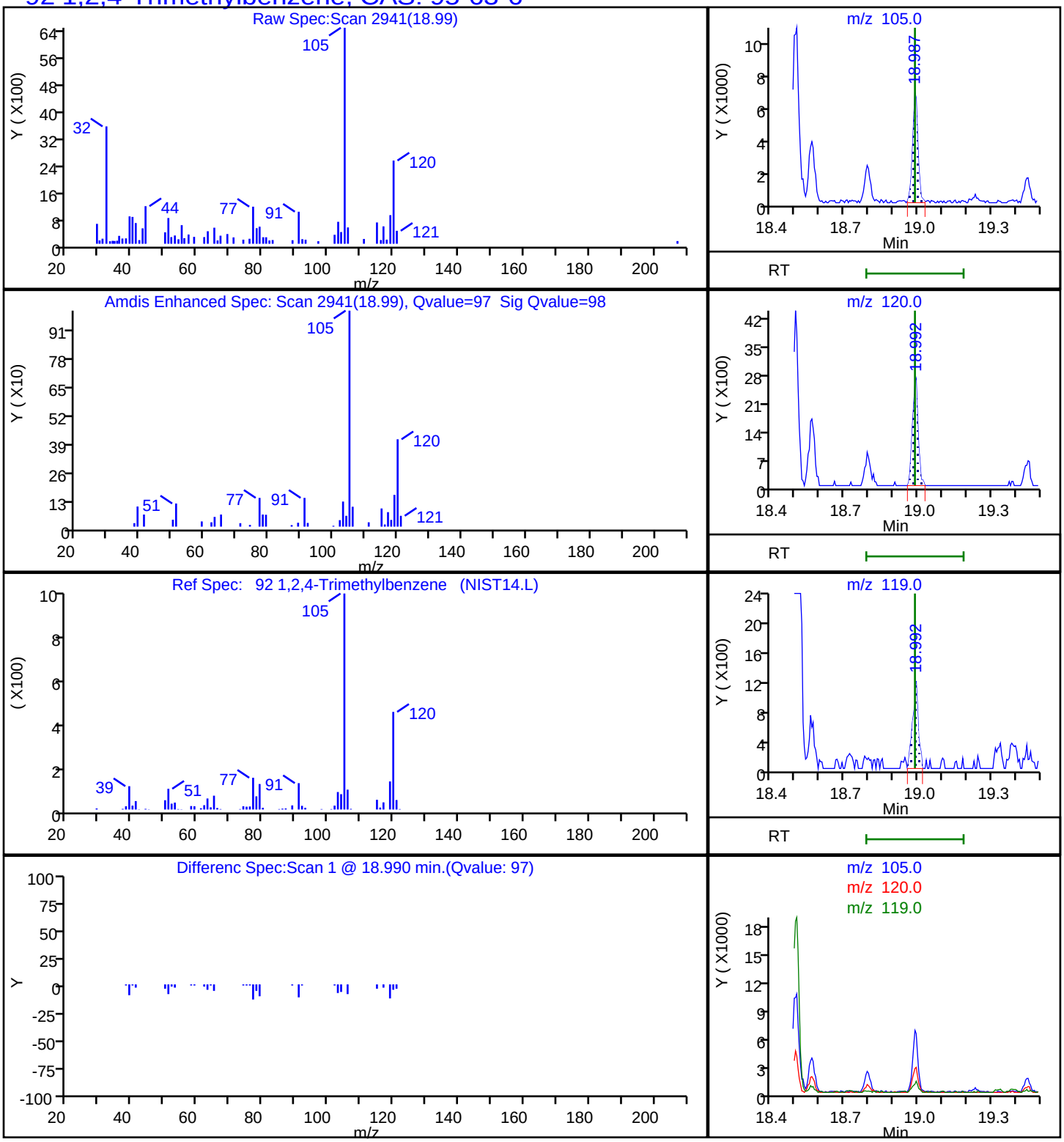
Lims ID:	140-20194-A-18	Lab Sample ID:	140-20194-18
Client ID:	SV-079-A-29		
Operator ID:	HMT	ALS Bottle#:	16 Worklist Smp#: 21
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

92 1,2,4-Trimethylbenzene, CAS: 95-63-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P116.D		
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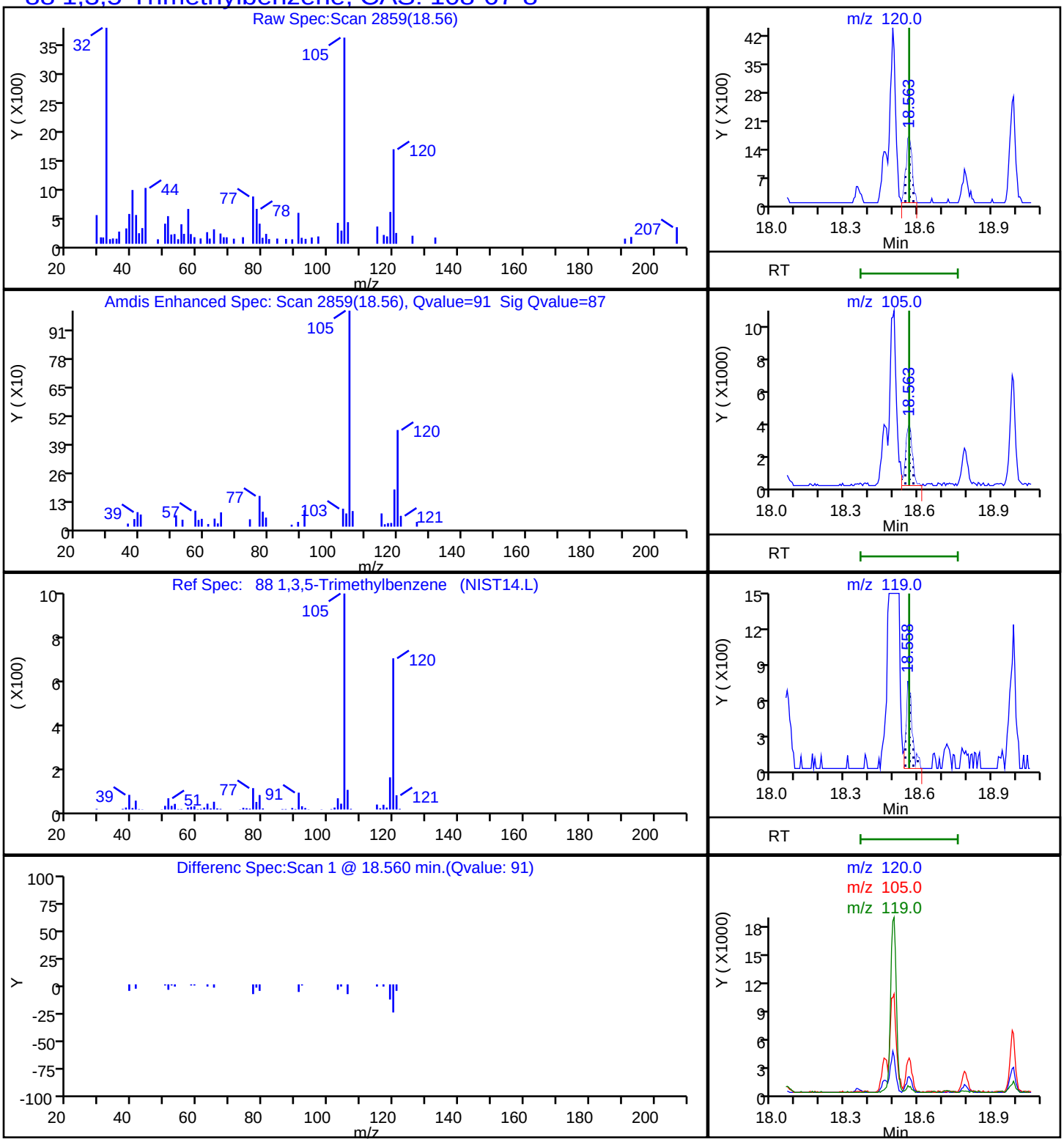
Lims ID:	140-20194-A-18	Lab Sample ID:	140-20194-18
Client ID:	SV-079-A-29		
Operator ID:	HMT	ALS Bottle#:	16 Worklist Smp#: 21
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

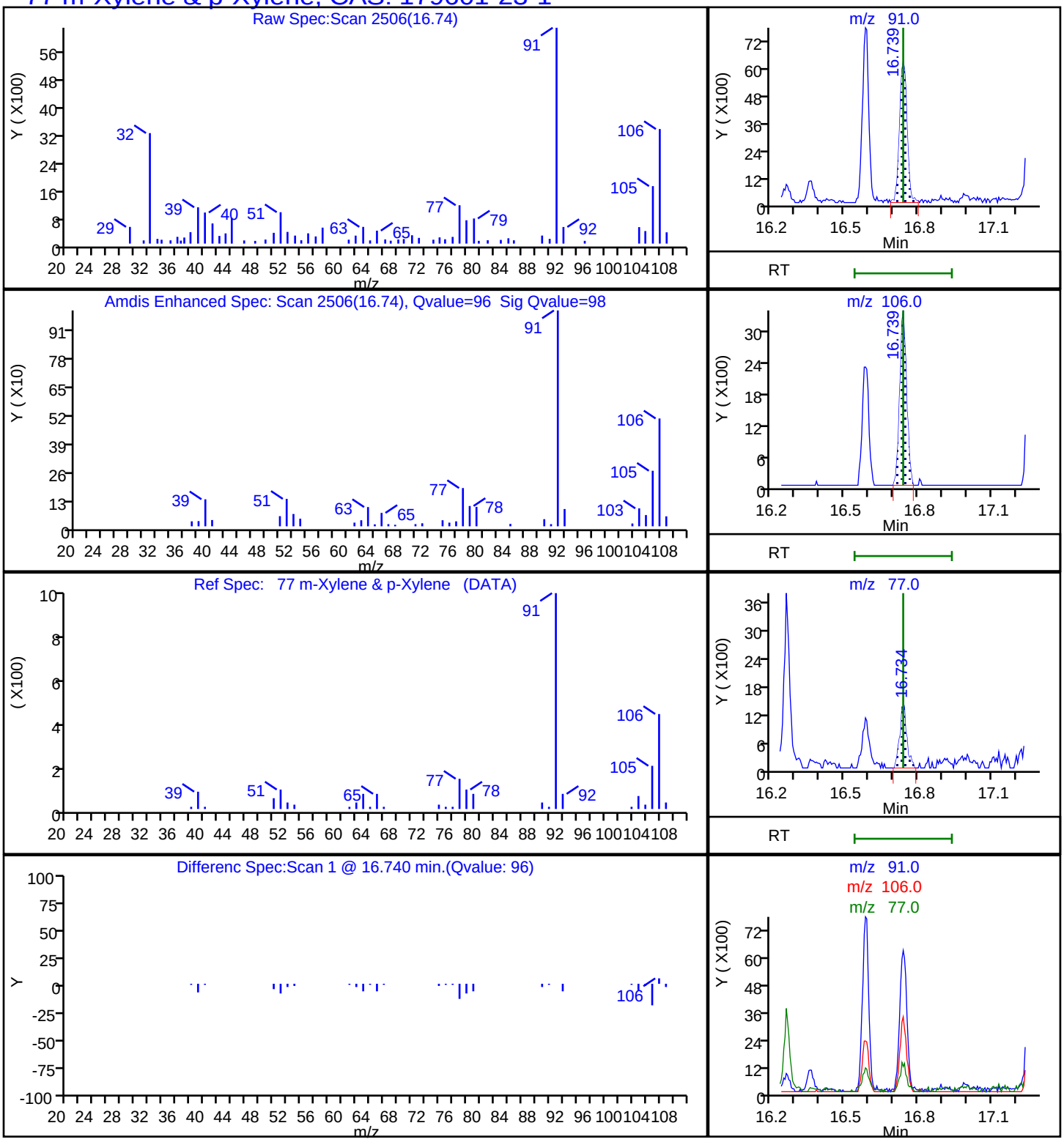
88 1,3,5-Trimethylbenzene, CAS: 108-67-8



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P116.D				
Injection Date:	09-Sep-2020 07:09:30	Instrument ID:	MH		
Lims ID:	140-20194-A-18	Lab Sample ID:	140-20194-18		
Client ID:	SV-079-A-29				
Operator ID:	HMT	ALS Bottle#:	16	Worklist Smp#:	21
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

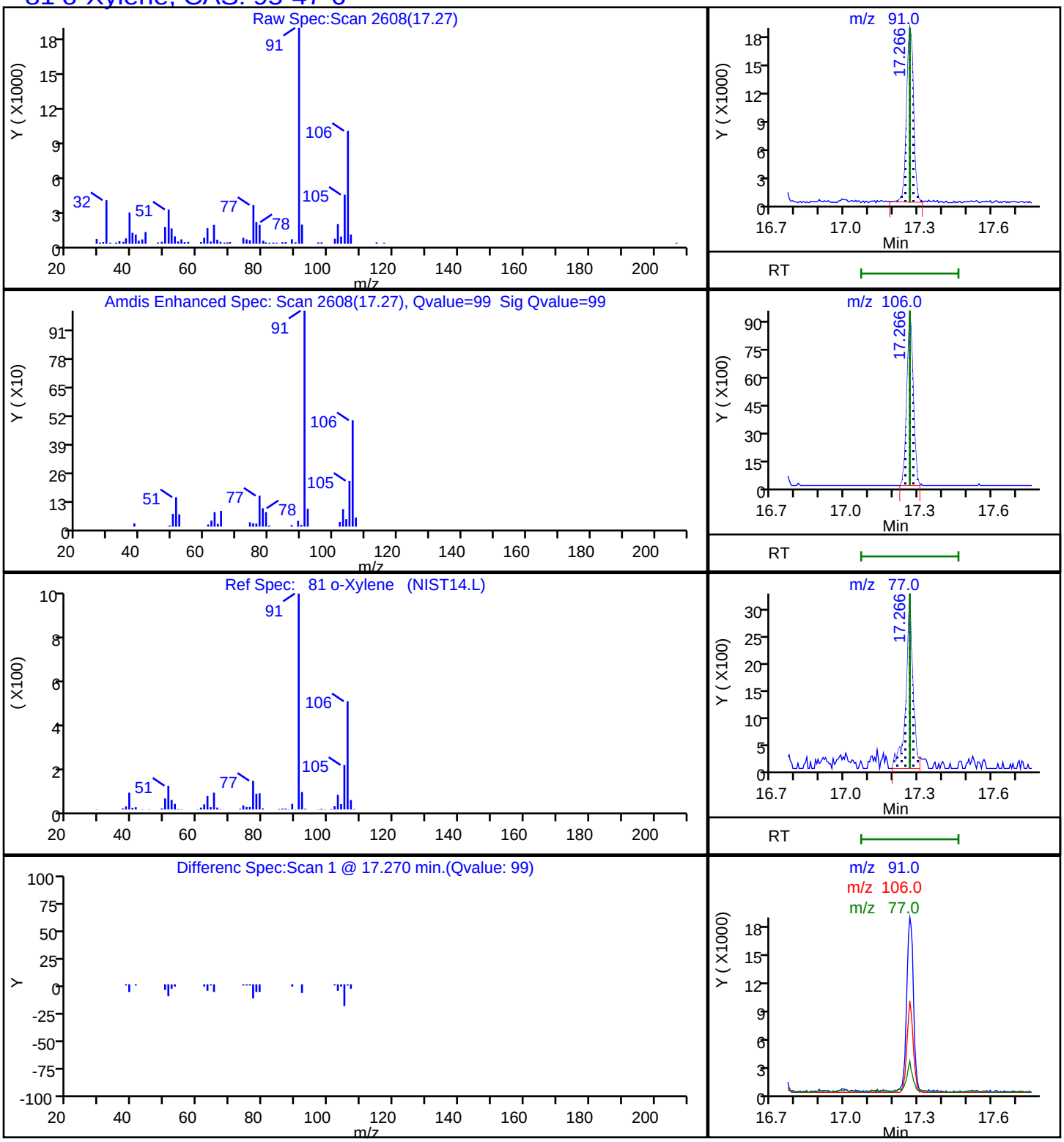
77 m-Xylene & p-Xylene, CAS: 179601-23-1



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P116.D		
Injection Date:	09-Sep-2020 07:09:30	Instrument ID:	MH
Lims ID:	140-20194-A-18	Lab Sample ID:	140-20194-18
Client ID:	SV-079-A-29		
Operator ID:	HMT	ALS Bottle#:	16 Worklist Smp#: 21
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

81 o-Xylene, CAS: 95-47-6



Eurofins TestAmerica, Knoxville

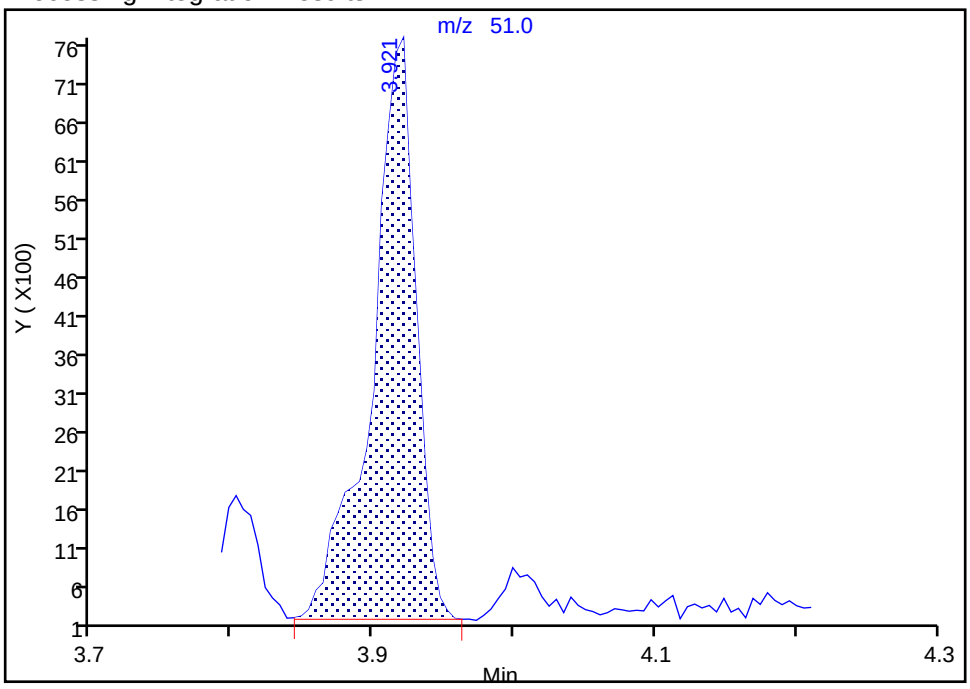
Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P116.D				
Injection Date:	09-Sep-2020 07:09:30	Instrument ID:	MH		
Lims ID:	140-20194-A-18	Lab Sample ID:	140-20194-18		
Client ID:	SV-079-A-29				
Operator ID:	HMT	ALS Bottle#:	16	Worklist Smp#:	21
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

6 Chlorodifluoromethane, CAS: 75-45-6

Signal: 1

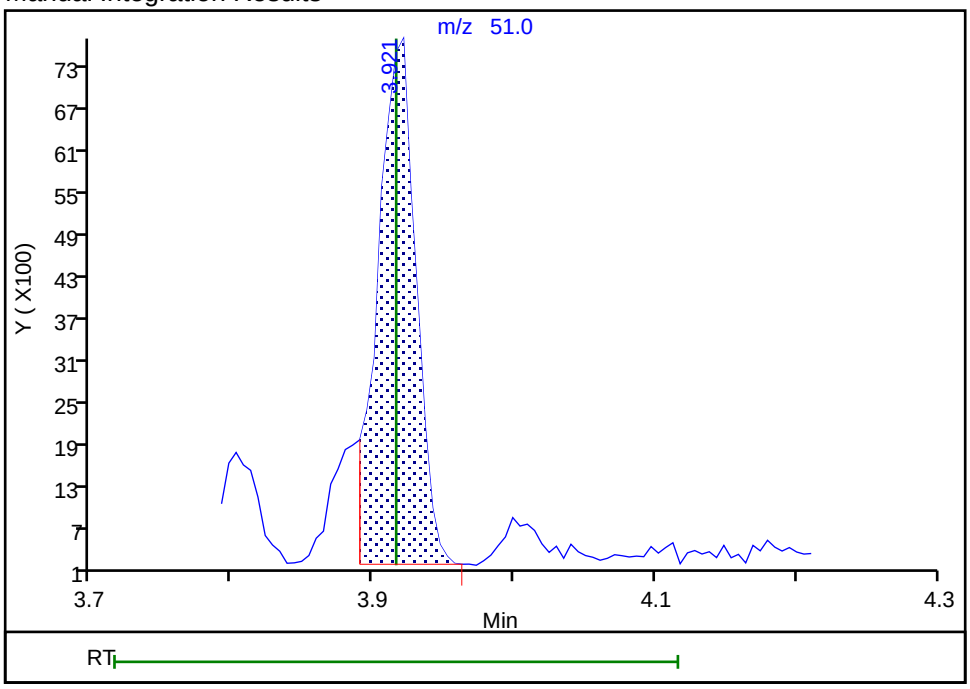
Processing Integration Results

RT: 3.92
Area: 16158
Amount: 0.141747
Amount Units: ppb v/v



Manual Integration Results

RT: 3.92
Area: 14047
Amount: 0.123228
Amount Units: ppb v/v



Reviewer: khachitpongpanits, 10-Sep-2020 10:37:07
Audit Action: Split an Integrated Peak Audit Reason: Shouldering

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: SV-139-A-29 Lab Sample ID: 140-20194-19

Matrix: Air Lab File ID: GI08P108.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 10:38

Sample wt/vol: 100(mL) Date Analyzed: 09/08/2020 23:24

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42503 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.085	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.090	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	0.51		0.40	0.11
67-66-3	Chloroform	119.38	ND		0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.47		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	0.95		0.40	0.065
75-09-2	Methylene Chloride	84.93	7.4		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	0.78		0.20	0.20
127-18-4	Tetrachloroethene	165.83	0.68		0.40	0.035
108-88-3	Toluene	92.14	0.96		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	0.29		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	1.3	*	0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	1.5		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	1.3		0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	9.7		0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	101		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: SV-139-A-29 Lab Sample ID: 140-20194-19

Matrix: Air Lab File ID: GI08P108.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 10:38

Sample wt/vol: 100(mL) Date Analyzed: 09/08/2020 23:24

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42503 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.27	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.57	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	1.8		1.4	0.39
67-66-3	Chloroform	119.38	ND		2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.3		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	4.1		1.7	0.28
75-09-2	Methylene Chloride	84.93	26		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	4.1		1.0	1.0
127-18-4	Tetrachloroethene	165.83	4.6		2.7	0.24
108-88-3	Toluene	92.14	3.6		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	1.6		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	6.5	*	2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	7.5		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	6.5		2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	42		3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	101		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P108.D
Lims ID: 140-20194-A-19
Client ID: SV-139-A-29
Sample Type: Client
Inject. Date: 08-Sep-2020 23:24:30 ALS Bottle#: 8 Worklist Smp#: 13
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016519-013
Misc. Info.: 140-20194-a-19
Operator ID: HMT Instrument ID: MG

Method: \\chromfs\Knoxville\ChromData\MG\20200904-16519.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 09-Sep-2020 14:03:43 Calib Date: 02-Sep-2020 03:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1034

First Level Reviewer: barlozhetskayaa Date: 09-Sep-2020 14:07:24

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.811	8.806	0.005	85	86582	4.80	
* 2 1,4-Difluorobenzene	114	10.995	10.990	0.005	98	410202	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.724	15.724	0.000	96	454862	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.369	17.369	0.000	80	335911	4.71	
6 Chlorodifluoromethane	51	3.705	3.699	0.006	98	7958	0.1026	
8 Dichlorodifluoromethane	85	3.775	3.766	0.011	96	8127	0.0937	
31 Methylene Chloride	84	6.277	6.271	0.006	87	31786	1.49	
47 1,1,1-Trichloroethane	97	9.836	9.852	-0.016	1	1066	0.0182	
50 Benzene	78	10.456	10.445	0.011	43	1440	0.0171	
52 Carbon tetrachloride	117	10.478	10.467	0.011	51	941	0.0181	
58 Trichloroethene	130	11.712	11.702	0.010	84	2154	0.0586	
67 Toluene	91	13.762	13.756	0.006	92	19173	0.1911	
73 Tetrachloroethene	129	14.905	14.899	0.006	77	5130	0.1356	
78 Ethylbenzene	91	16.064	16.064	0.000	98	24422	0.1894	
79 m-Xylene & p-Xylene	91	16.221	16.231	-0.010	97	136165	1.33	
83 o-Xylene	91	16.754	16.754	0.000	96	61379	0.5946	
90 1,3,5-Trimethylbenzene	120	18.102	18.108	-0.006	90	14255	0.2634	
95 1,2,4-Trimethylbenzene	105	18.545	18.545	0.001	97	35997	0.3041	
101 1,2,3-Trimethylbenzene	105	19.014	19.014	0.000	98	26282	0.2641	
112 Naphthalene	128	21.090	21.090	0.000	98	26721	0.1556	
S 124 Xylenes, Total	100				0		1.93	

Reagents:

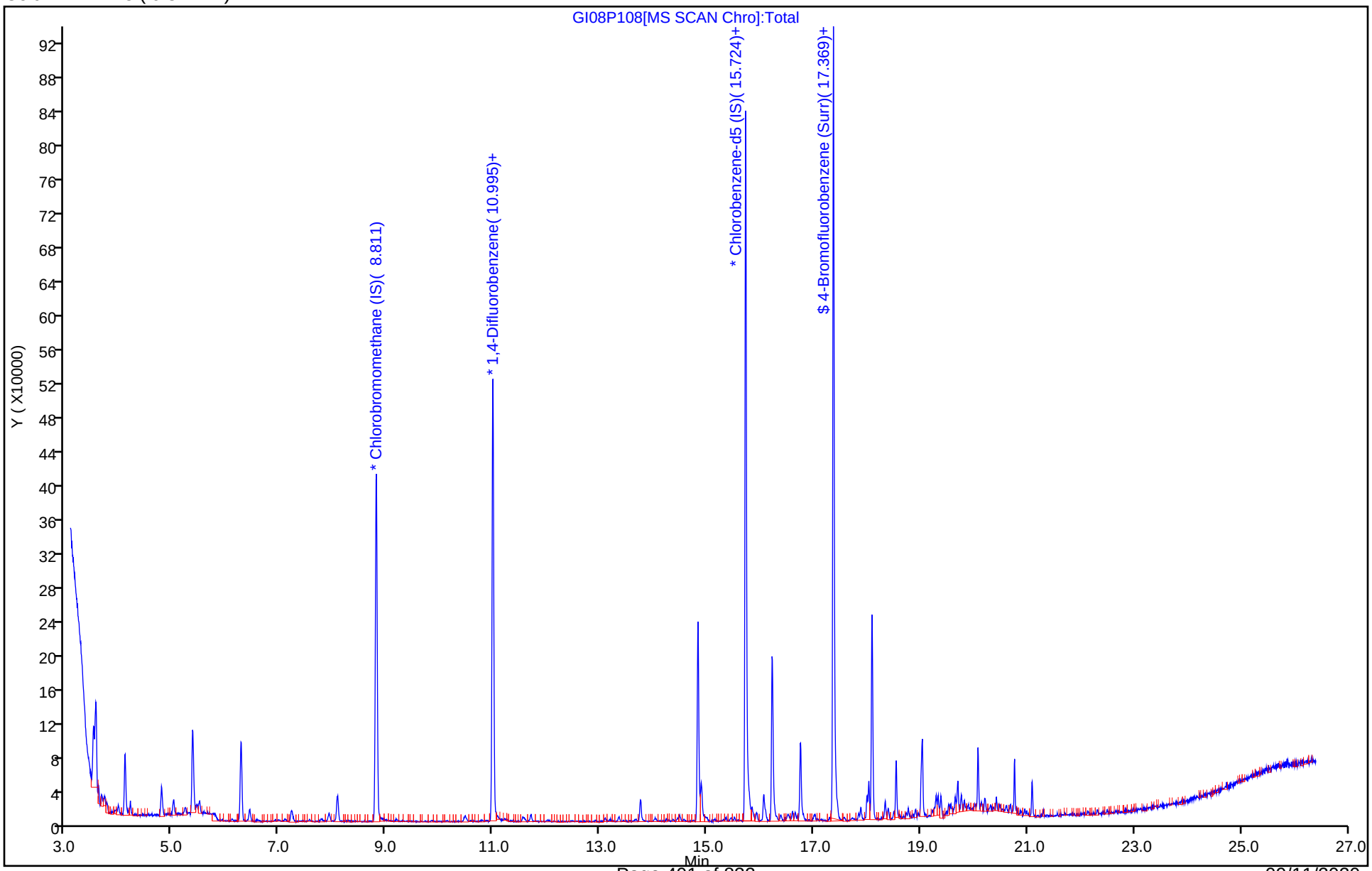
40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

Report Date: 09-Sep-2020 14:07:24 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P108.D				
Injection Date:	08-Sep-2020 23:24:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	140-20194-A-19	Lab Sample ID:	140-20194-19	Worklist Smp#:	13
Client ID:	SV-139-A-29				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P108.D				
Lims ID:	140-20194-A-19				
Client ID:	SV-139-A-29				
Sample Type:	Client				
Inject. Date:	08-Sep-2020 23:24:30	ALS Bottle#:	8	Worklist Smp#:	13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016519-013				
Misc. Info.:	140-20194-a-19				
Operator ID:	HMT	Instrument ID:	MG		
Method:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\MG_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	09-Sep-2020 14:03:43	Calib Date:	02-Sep-2020 03:27:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1034				

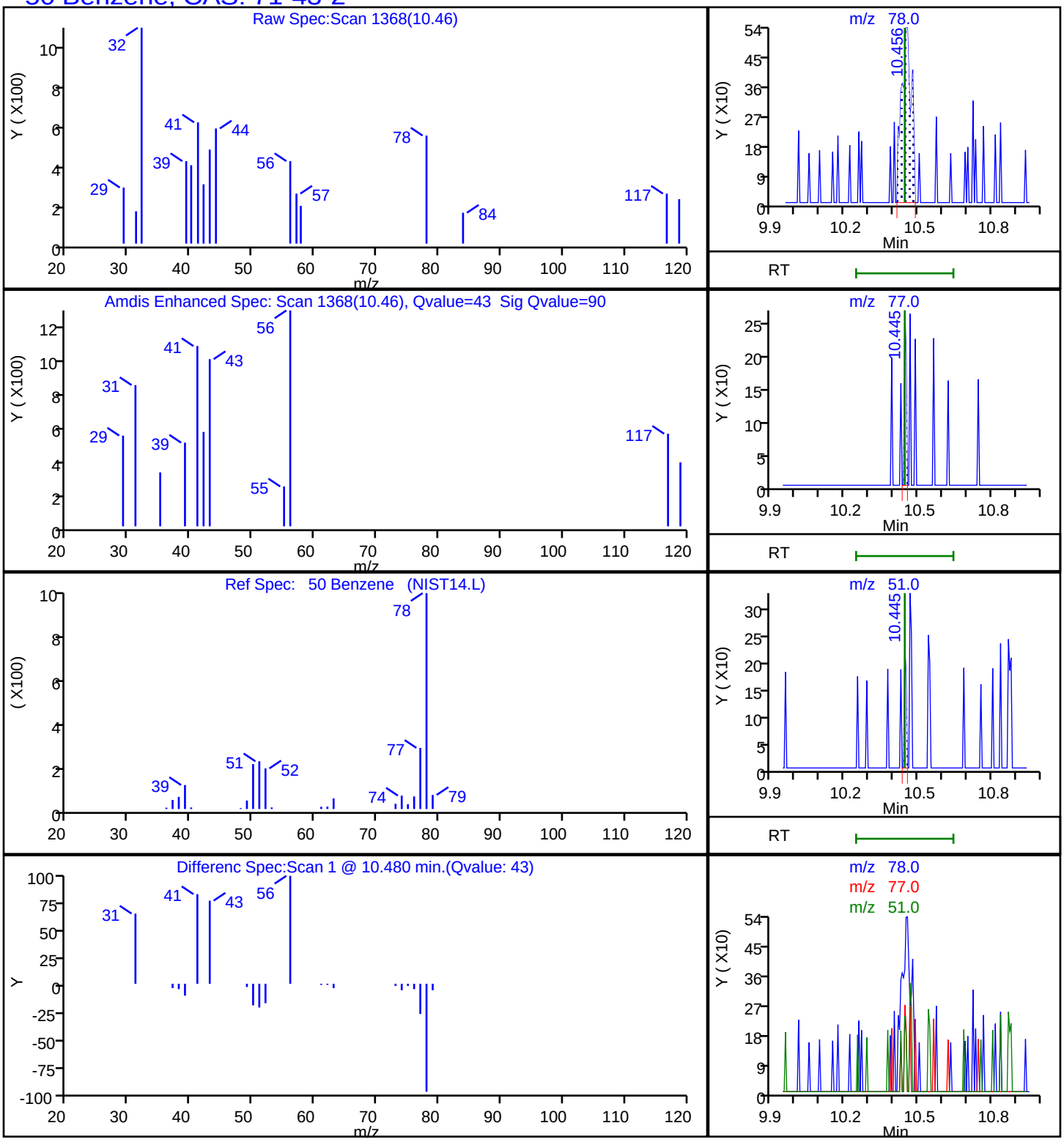
First Level Reviewer: barlozhetskayaa Date: 09-Sep-2020 14:07:24

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	4.71	101.43

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P108.D				
Injection Date:	08-Sep-2020 23:24:30	Instrument ID:	MG		
Lims ID:	140-20194-A-19	Lab Sample ID:	140-20194-19		
Client ID:	SV-139-A-29				
Operator ID:	HMT	ALS Bottle#:	8	Worklist Smp#:	13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

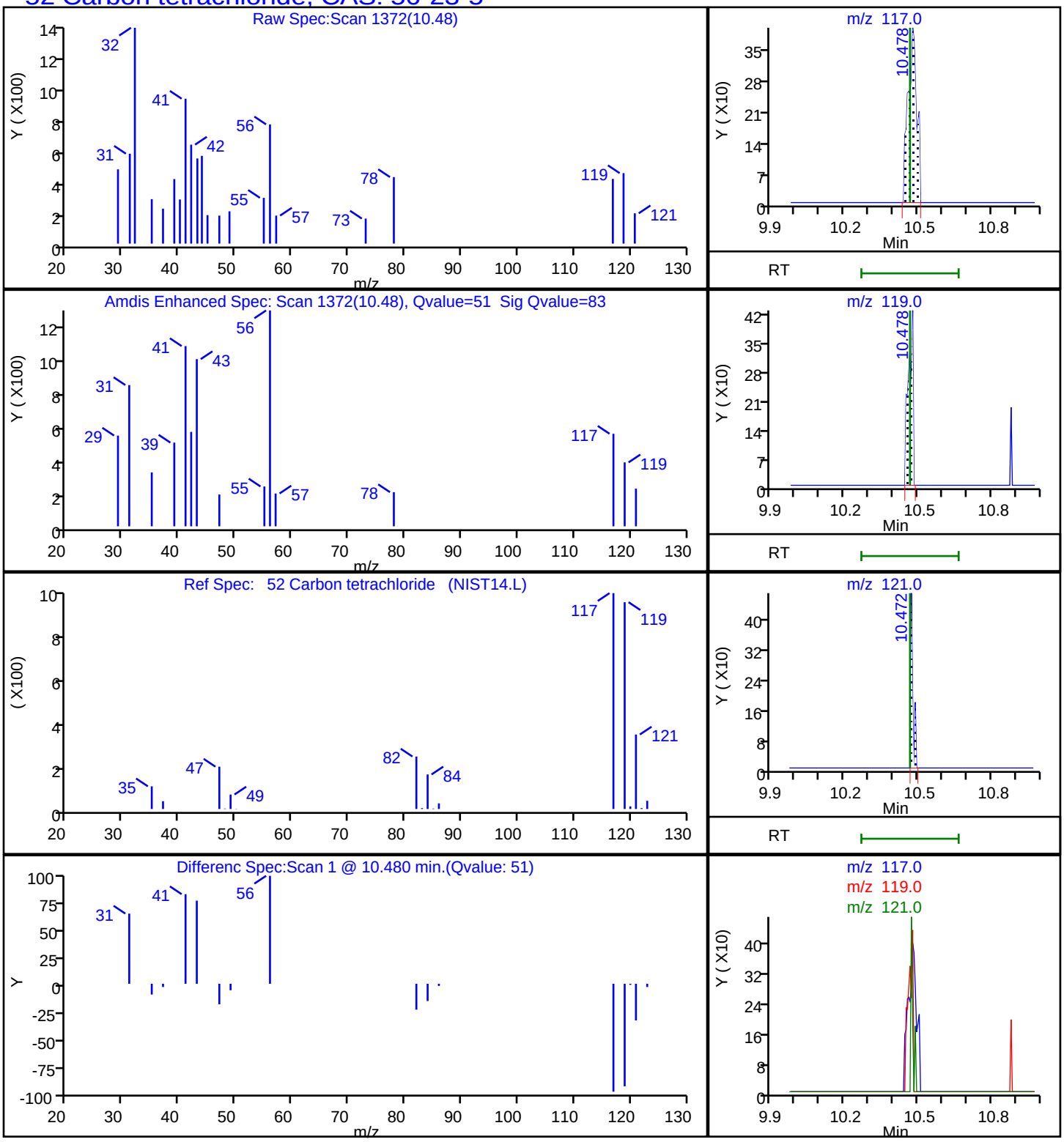
50 Benzene, CAS: 71-43-2



Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P108.D
Injection Date: 08-Sep-2020 23:24:30 Instrument ID: MG
Lims ID: 140-20194-A-19 Lab Sample ID: 140-20194-19
Client ID: SV-139-A-29
Operator ID: HMT ALS Bottle#: 8 Worklist Smp#: 13
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Method: MG_TO15 Limit Group: MSA TO14A_15 Routine ICAL
Column: RTX-5 (0.32 mm) Detector MS SCAN

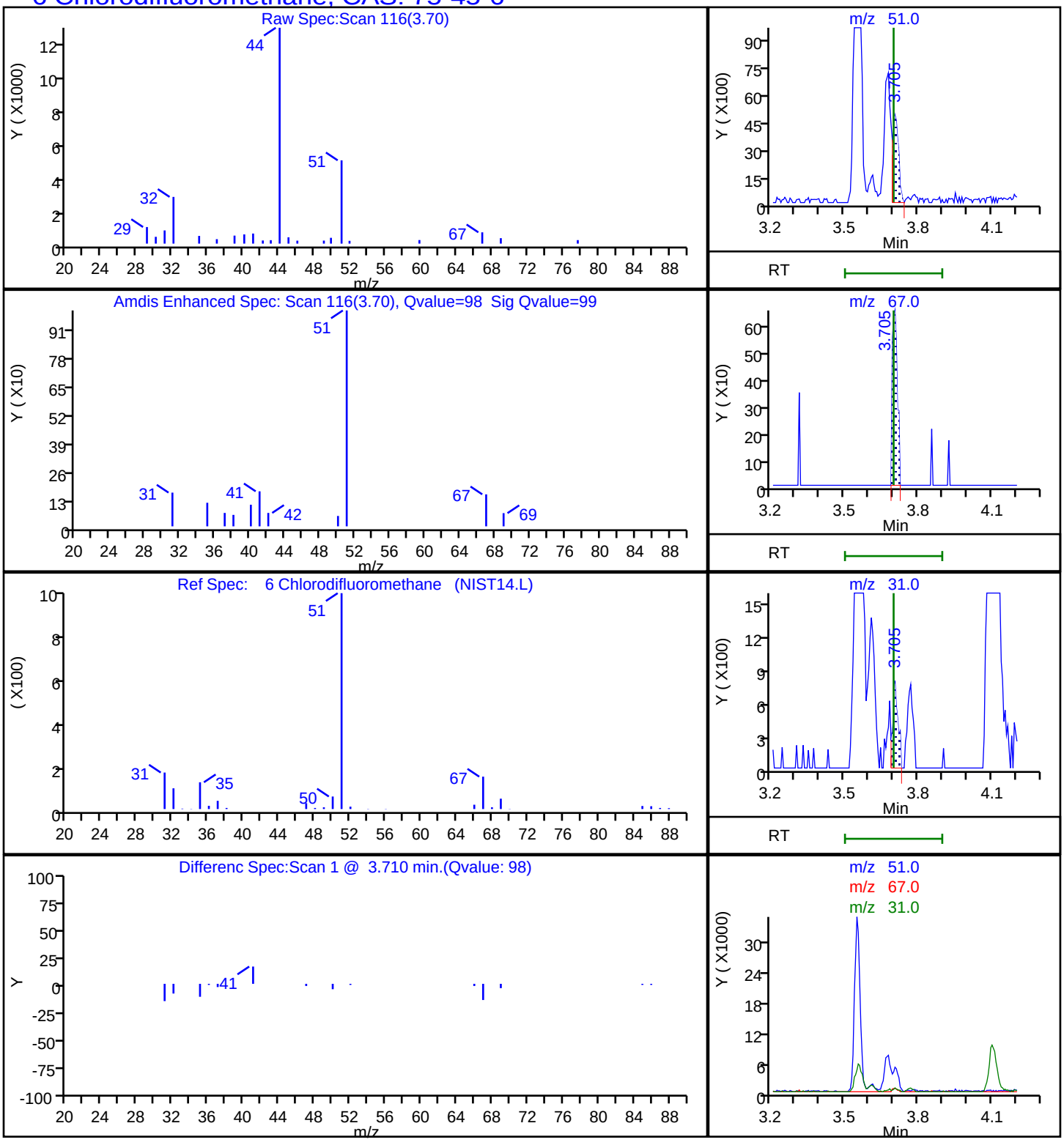
52 Carbon tetrachloride, CAS: 56-23-5



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P108.D				
Injection Date:	08-Sep-2020 23:24:30	Instrument ID:	MG		
Lims ID:	140-20194-A-19	Lab Sample ID:	140-20194-19		
Client ID:	SV-139-A-29				
Operator ID:	HMT	ALS Bottle#:	8	Worklist Smp#:	13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

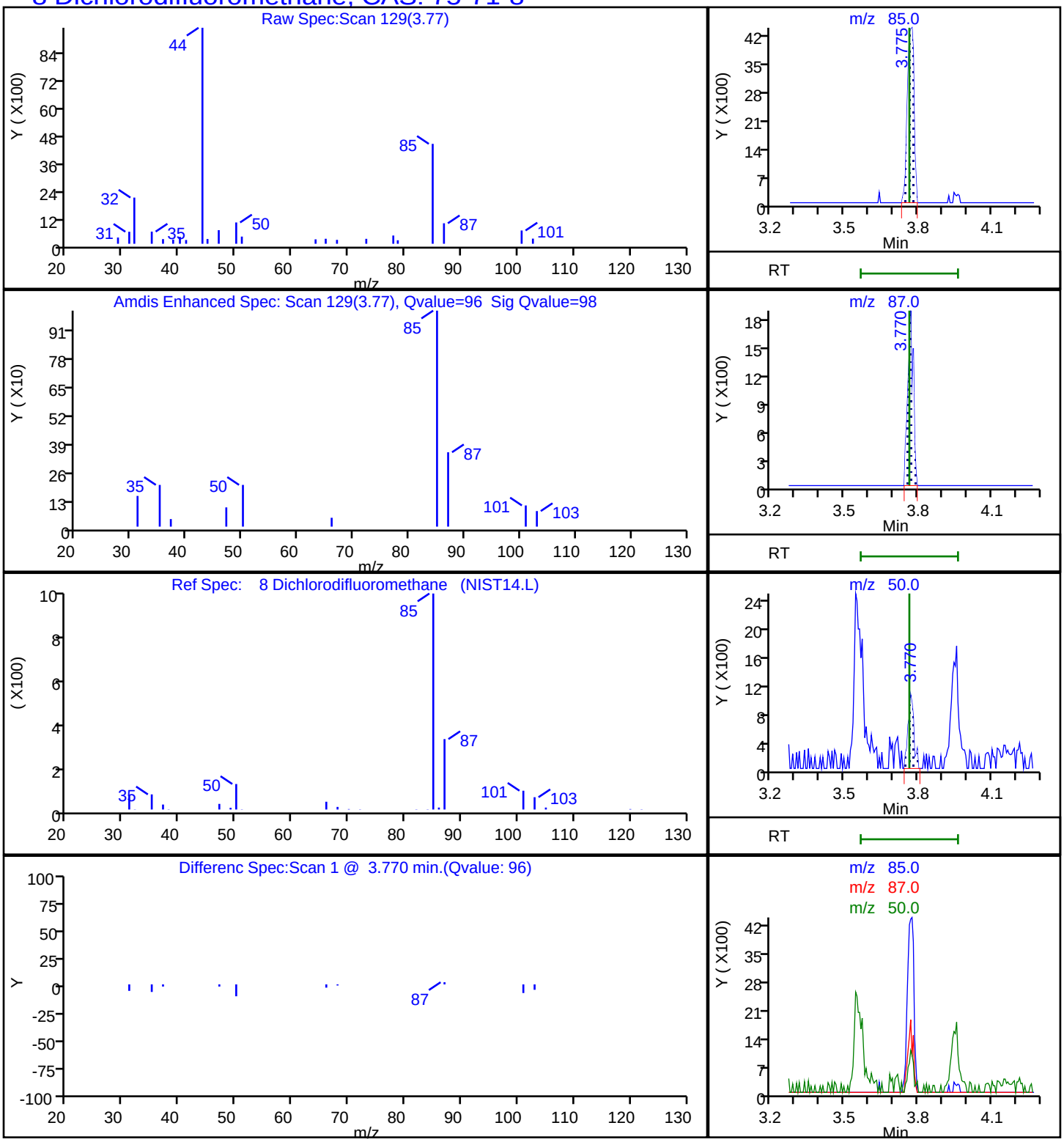
6 Chlorodifluoromethane, CAS: 75-45-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P108.D				
Injection Date:	08-Sep-2020 23:24:30	Instrument ID:	MG		
Lims ID:	140-20194-A-19	Lab Sample ID:	140-20194-19		
Client ID:	SV-139-A-29				
Operator ID:	HMT	ALS Bottle#:	8	Worklist Smp#:	13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

8 Dichlorodifluoromethane, CAS: 75-71-8



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P108.D				
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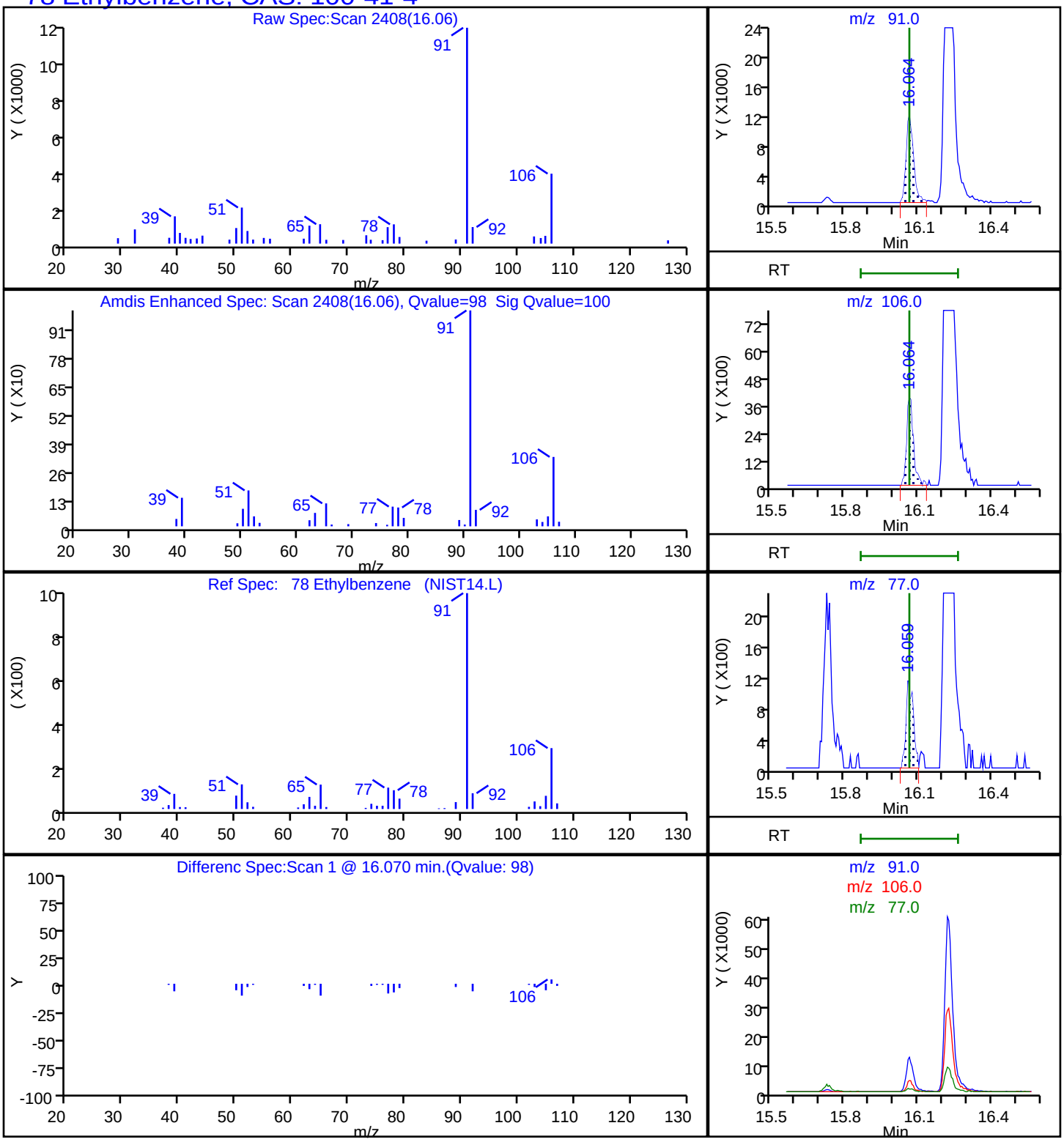
Lims ID:	140-20194-A-19	Lab Sample ID:	140-20194-19		
Client ID:	SV-139-A-29				
Operator ID:	HMT	ALS Bottle#:	8	Worklist Smp#:	13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

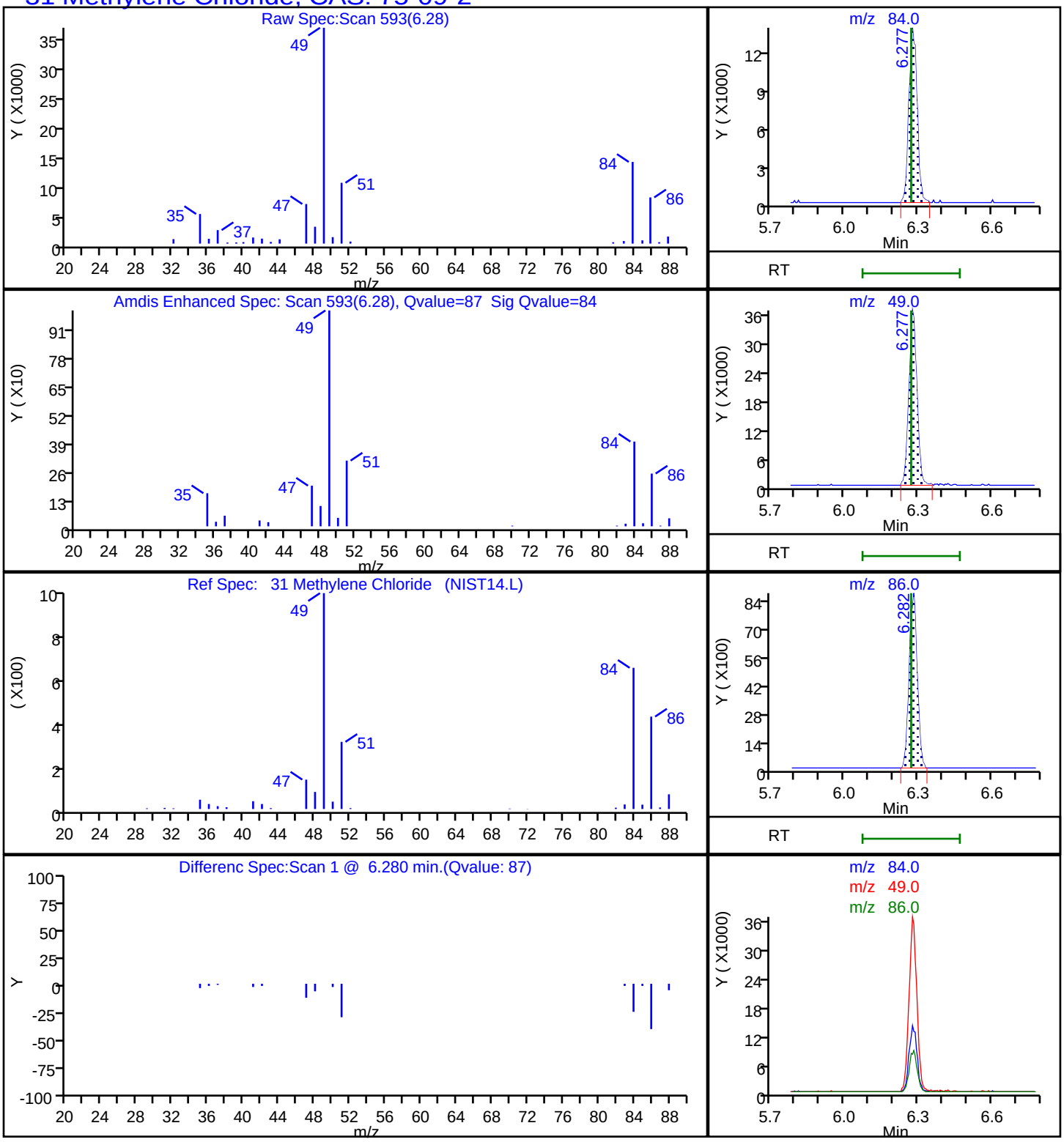
78 Ethylbenzene, CAS: 100-41-4



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P108.D				
Injection Date:	08-Sep-2020 23:24:30	Instrument ID:	MG		
Lims ID:	140-20194-A-19	Lab Sample ID:	140-20194-19		
Client ID:	SV-139-A-29				
Operator ID:	HMT	ALS Bottle#:	8	Worklist Smp#:	13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

31 Methylene Chloride, CAS: 75-09-2

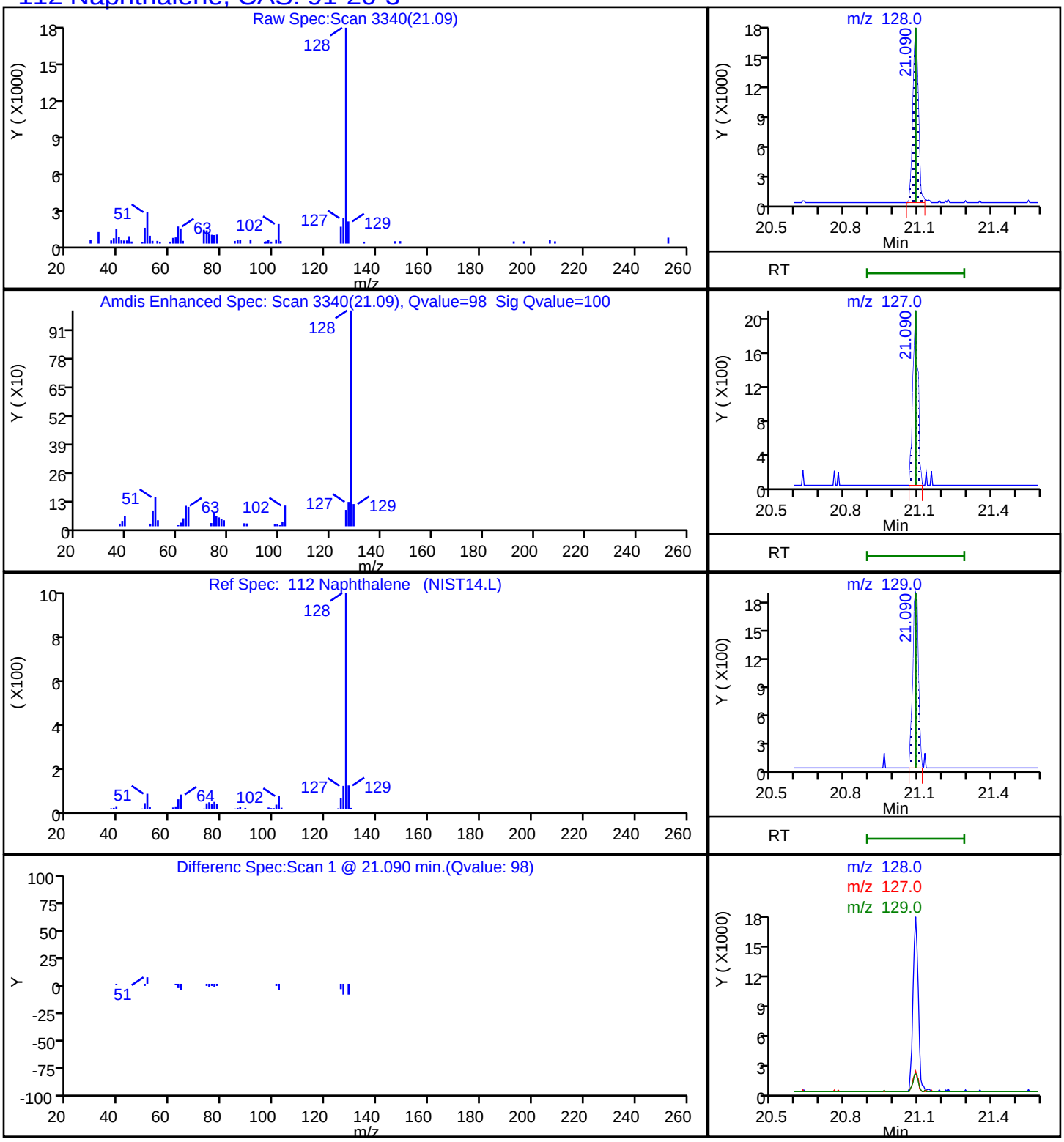


Report Date: 09-Sep-2020 14:07:25 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P108.D				
Injection Date:	08-Sep-2020 23:24:30	Instrument ID:	MG		
Lims ID:	140-20194-A-19	Lab Sample ID:	140-20194-19		
Client ID:	SV-139-A-29				
Operator ID:	HMT	ALS Bottle#:	8	Worklist Smp#:	13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

112 Naphthalene, CAS: 91-20-3

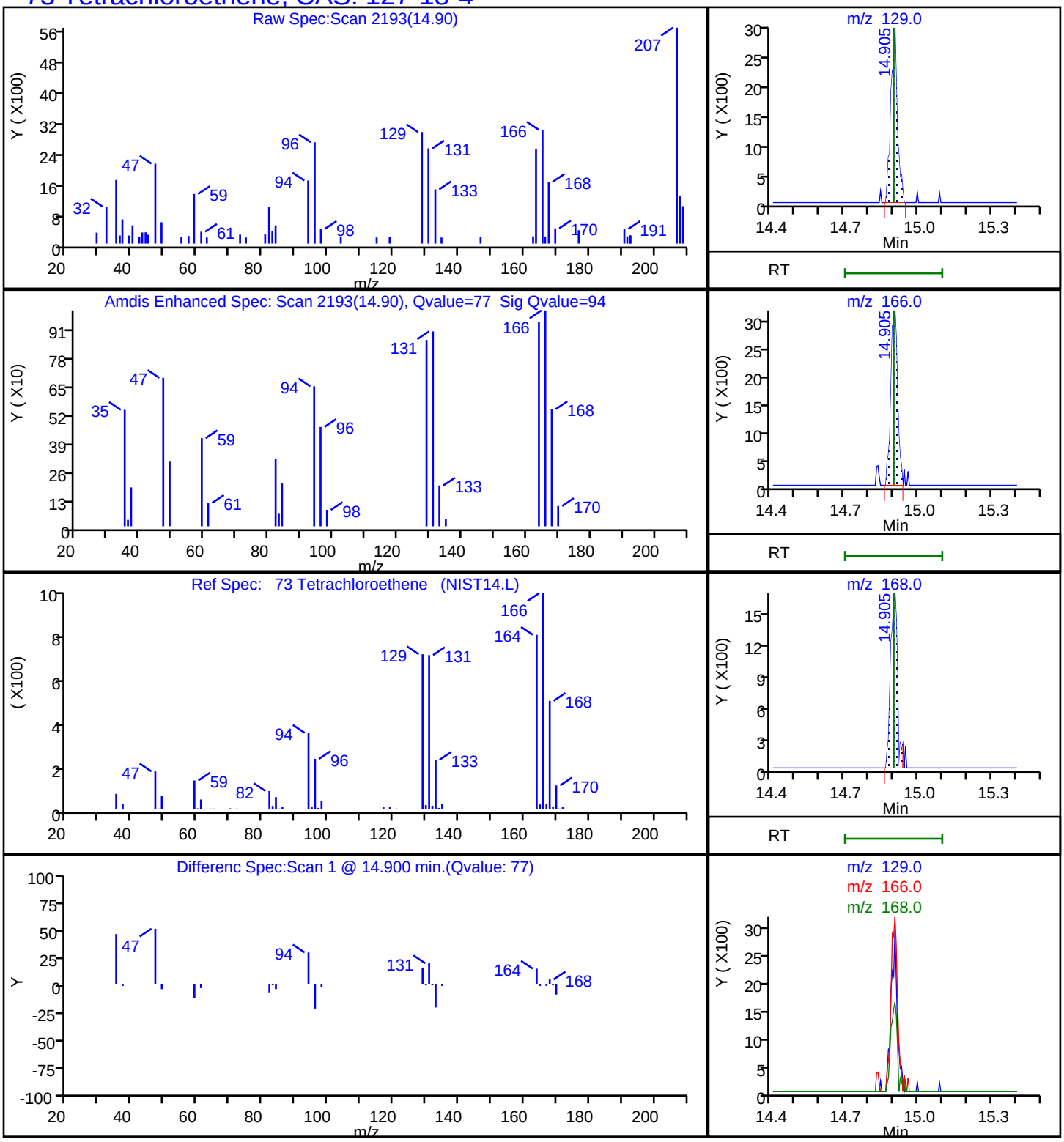


Report Date: 09-Sep-2020 14:07:24 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P108.D				
Injection Date:	08-Sep-2020 23:24:30	Instrument ID:	MG		
Lims ID:	140-20194-A-19	Lab Sample ID:	140-20194-19		
Client ID:	SV-139-A-29				
Operator ID:	HMT	ALS Bottle#:	8	Worklist Smp#:	13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

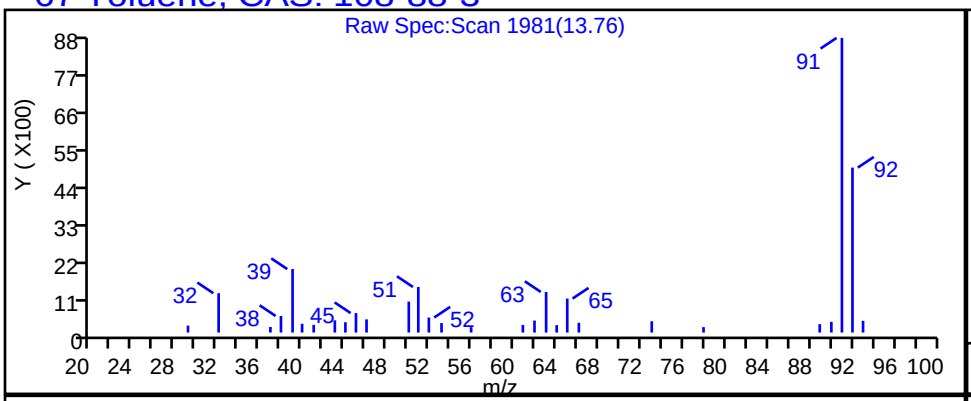
73 Tetrachloroethene, CAS: 127-18-4

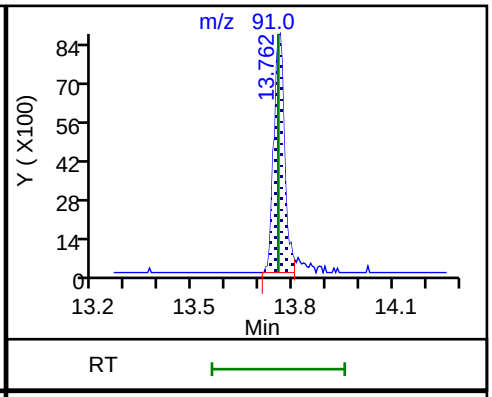


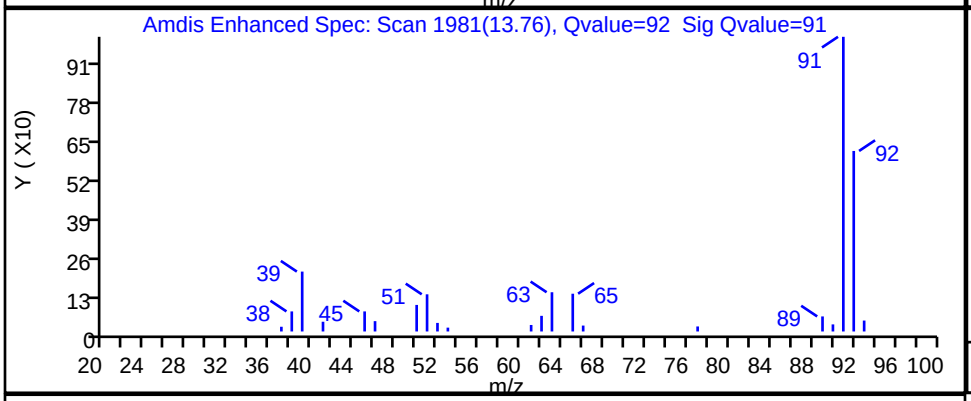
Eurofins TestAmerica, Knoxville

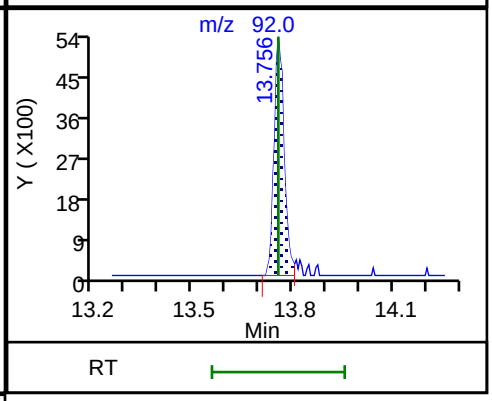
Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P108.D				
Injection Date:	08-Sep-2020 23:24:30	Instrument ID:	MG		
Lims ID:	140-20194-A-19	Lab Sample ID:	140-20194-19		
Client ID:	SV-139-A-29				
Operator ID:	HMT	ALS Bottle#:	8	Worklist Smp#:	13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

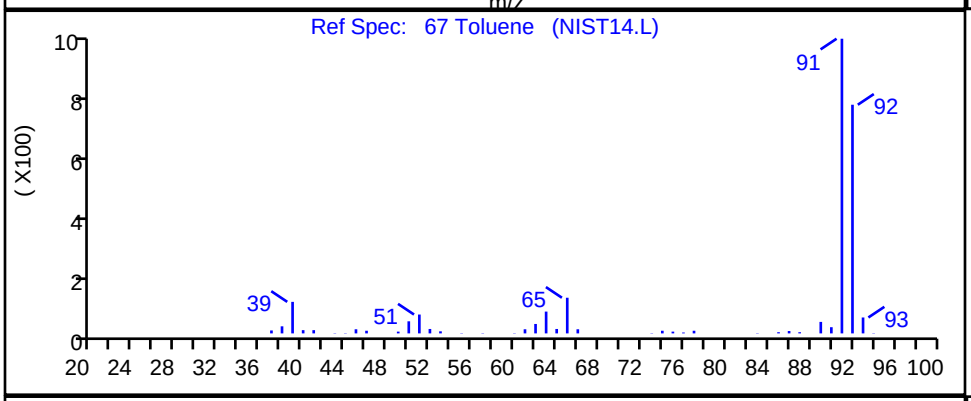
67 Toluene, CAS: 108-88-3

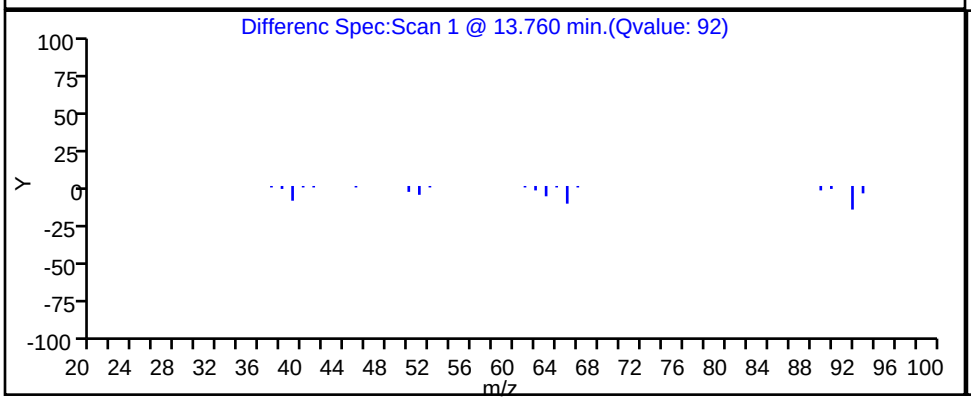


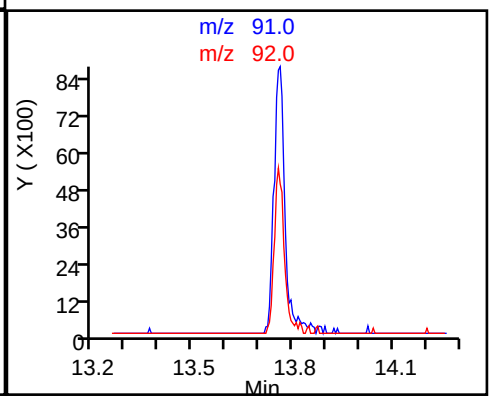












Eurofins TestAmerica, Knoxville

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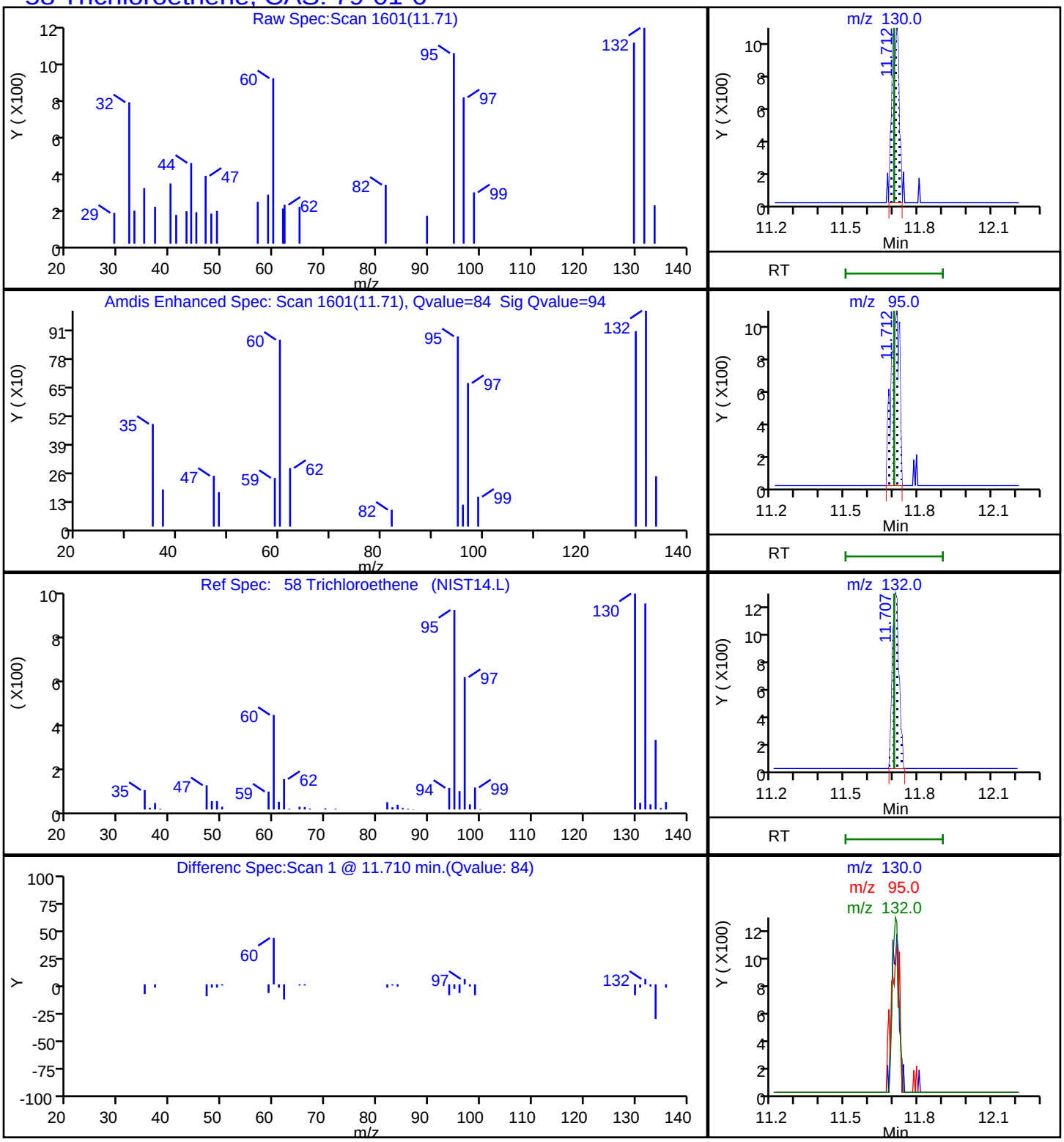
Injection Date:	08-Sep-2020 23:24:30	Instrument ID:	MG		
Lims ID:	140-20194-A-19	Lab Sample ID:	140-20194-19		
Client ID:	SV-139-A-29				
Operator ID:	HMT	ALS Bottle#:	8	Worklist Smp#:	13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

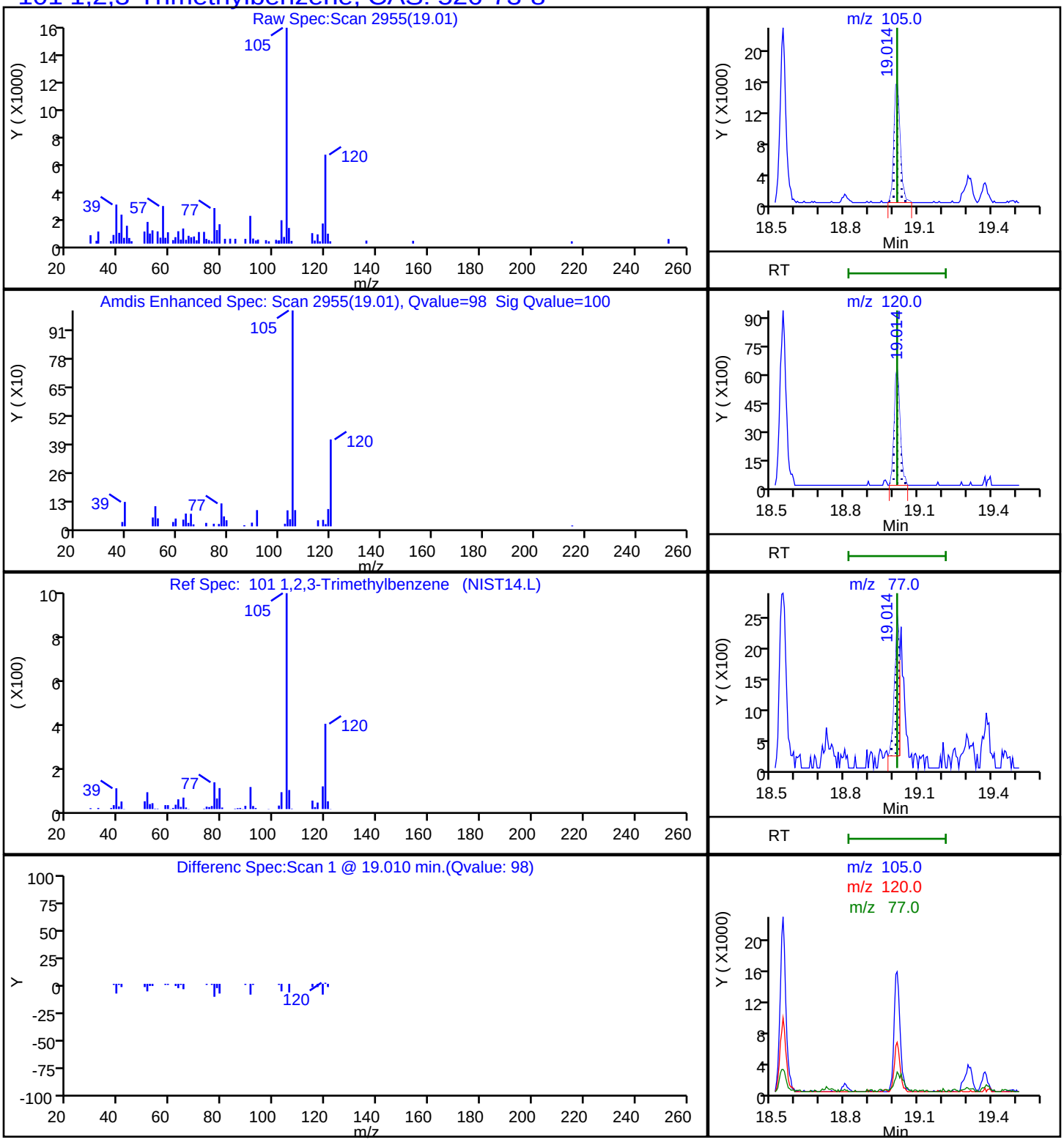
58 Trichloroethene, CAS: 79-01-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P108.D				
Injection Date:	08-Sep-2020 23:24:30	Instrument ID:	MG		
Lims ID:	140-20194-A-19	Lab Sample ID:	140-20194-19		
Client ID:	SV-139-A-29				
Operator ID:	HMT	ALS Bottle#:	8	Worklist Smp#:	13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

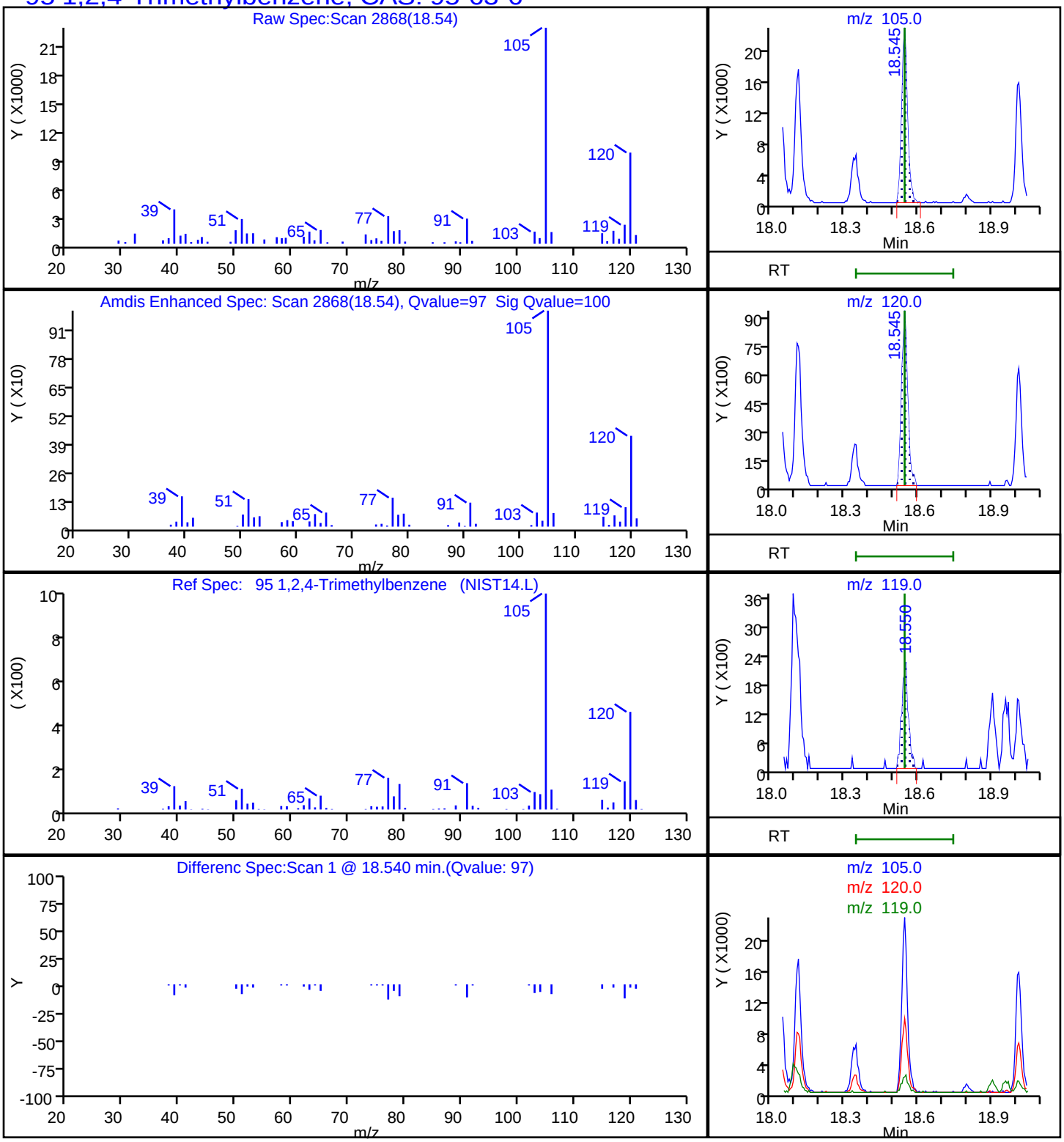
101 1,2,3-Trimethylbenzene, CAS: 526-73-8



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P108.D				
Injection Date:	08-Sep-2020 23:24:30	Instrument ID:	MG		
Lims ID:	140-20194-A-19	Lab Sample ID:	140-20194-19		
Client ID:	SV-139-A-29				
Operator ID:	HMT	ALS Bottle#:	8	Worklist Smp#:	13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

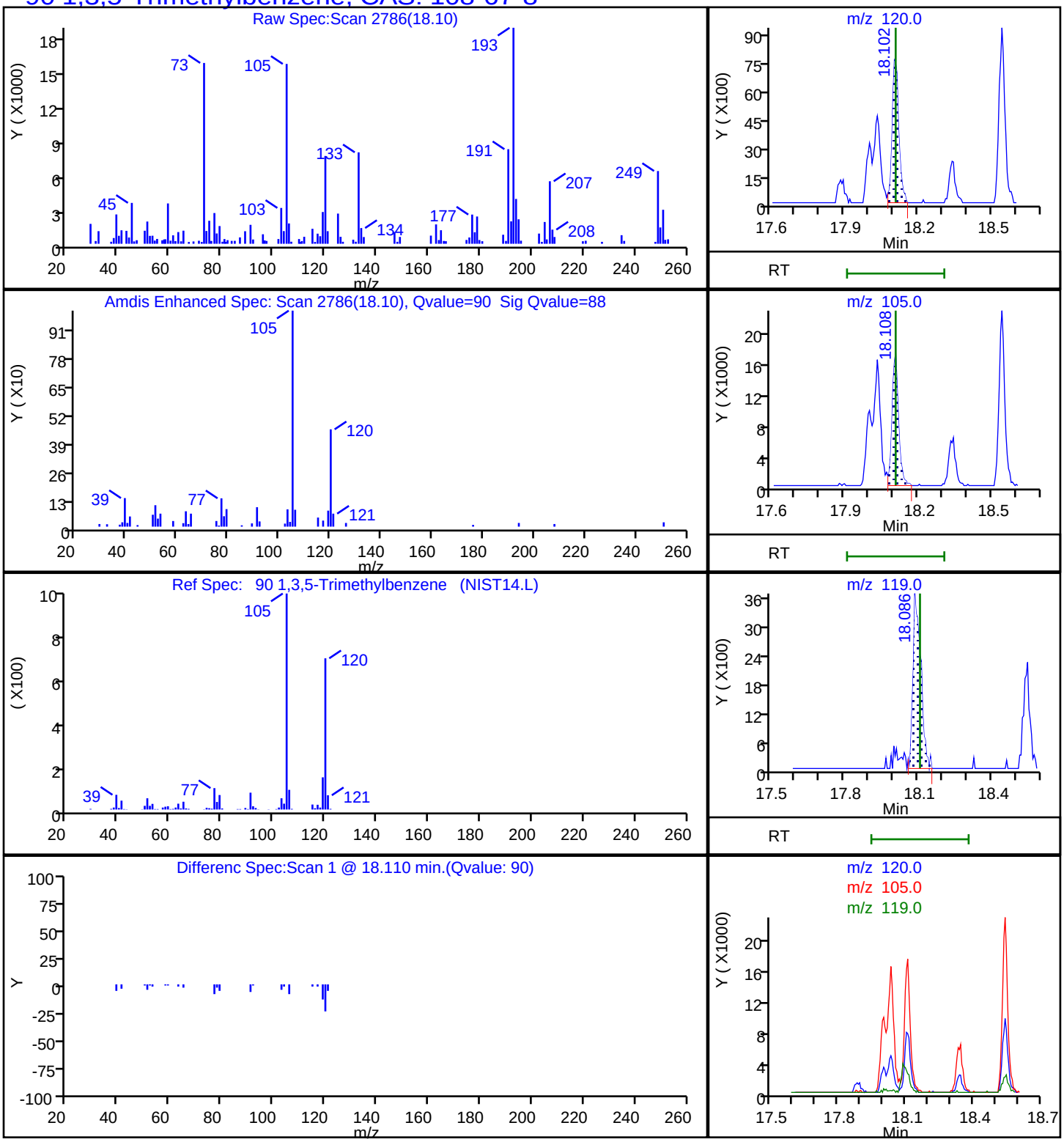
95 1,2,4-Trimethylbenzene, CAS: 95-63-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P108.D				
Injection Date:	08-Sep-2020 23:24:30	Instrument ID:	MG		
Lims ID:	140-20194-A-19	Lab Sample ID:	140-20194-19		
Client ID:	SV-139-A-29				
Operator ID:	HMT	ALS Bottle#:	8	Worklist Smp#:	13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

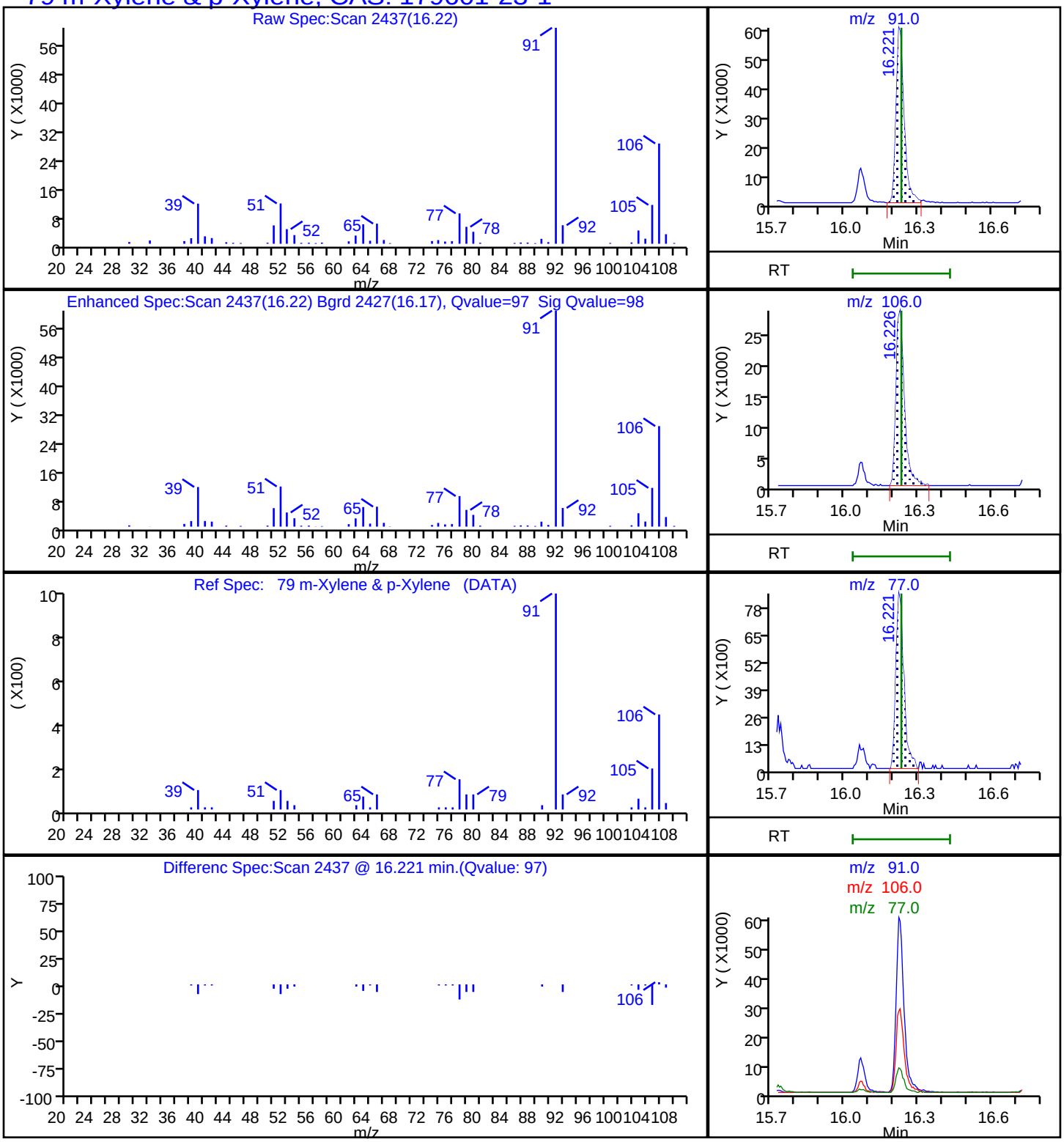
90 1,3,5-Trimethylbenzene, CAS: 108-67-8



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P108.D				
Injection Date:	08-Sep-2020 23:24:30	Instrument ID:	MG		
Lims ID:	140-20194-A-19	Lab Sample ID:	140-20194-19		
Client ID:	SV-139-A-29				
Operator ID:	HMT	ALS Bottle#:	8	Worklist Smp#:	13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

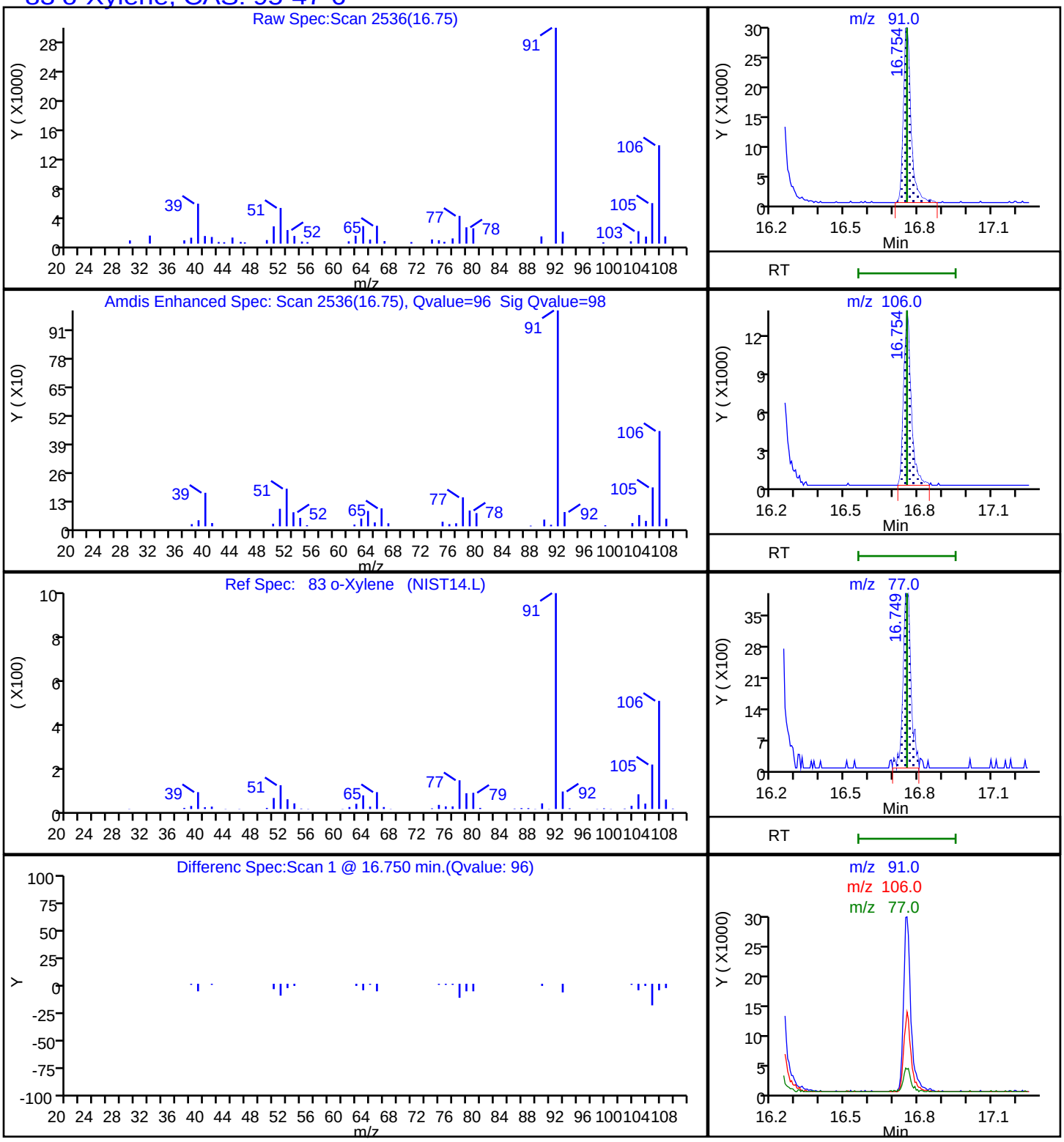
79 m-Xylene & p-Xylene, CAS: 179601-23-1



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P108.D				
Injection Date:	08-Sep-2020 23:24:30	Instrument ID:	MG		
Lims ID:	140-20194-A-19	Lab Sample ID:	140-20194-19		
Client ID:	SV-139-A-29				
Operator ID:	HMT	ALS Bottle#:	8	Worklist Smp#:	13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

83 o-Xylene, CAS: 95-47-6



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: SV-118-A-29 Lab Sample ID: 140-20194-20

Matrix: Air Lab File ID: GI08P109R.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 10:41

Sample wt/vol: 100(mL) Date Analyzed: 09/09/2020 10:14

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42503 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.071	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.061	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	ND		0.40	0.11
67-66-3	Chloroform	119.38	0.35	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	10		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.43		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	2.4		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	18		0.40	0.040
100-41-4	Ethylbenzene	106.17	1.5		0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.035
108-88-3	Toluene	92.14	0.39	J	0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	0.81		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	0.72		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	*Trichloroethene*	*131.39*	*97*	*E*	*0.20*	*0.030*
526-73-8	1,2,3-Trimethylbenzene	120.19	0.69	*	0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	1.4		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	1.0		0.40	0.11
75-01-4	Vinyl chloride	62.50	0.27		0.20	0.13
1330-20-7	Xylenes, Total	106.17	14		0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	99		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: SV-118-A-29 Lab Sample ID: 140-20194-20

Matrix: Air Lab File ID: GI08P109R.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 10:41

Sample wt/vol: 100(mL) Date Analyzed: 09/09/2020 10:14

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42503 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.23	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.38	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	ND		1.4	0.39
67-66-3	Chloroform	119.38	1.7	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	40		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.1		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	9.7		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	72		1.6	0.16
100-41-4	Ethylbenzene	106.17	6.6		1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.24
108-88-3	Toluene	92.14	1.5	J	2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	3.2		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	3.9		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	*Trichloroethene*	*131.39*	*520*	*E*	*1.1*	*0.16*
526-73-8	1,2,3-Trimethylbenzene	120.19	3.4	*	2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	6.7		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	5.0		2.0	0.54
75-01-4	Vinyl chloride	62.50	0.69		0.51	0.33
1330-20-7	Xylenes, Total	106.17	61		3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	99		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P109R.D				
Lims ID:	140-20194-A-20				
Client ID:	SV-118-A-29				
Sample Type:	Client				
Inject. Date:	09-Sep-2020 10:14:30	ALS Bottle#:	9	Worklist Smp#:	30
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016519-030				
Misc. Info.:	140-20194-a-20				
Operator ID:	HMT	Instrument ID:	MG		
Method:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\MG_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	09-Sep-2020 14:21:02	Calib Date:	02-Sep-2020 03:27:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1034				
First Level Reviewer: barlozhetskayaa		Date:	09-Sep-2020 14:22:40		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.806	8.806	0.000	85	86015	4.80	
* 2 1,4-Difluorobenzene	114	10.990	10.990	0.000	98	482523	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.724	15.724	0.000	96	462676	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.369	17.369	0.000	80	332746	4.58	
8 Dichlorodifluoromethane	85	3.764	3.764	0.000	94	7470	0.0867	
12 Vinyl chloride	62	4.114	4.107	0.005	95	2327	0.0540	
27 1,1-Dichloroethene	96	5.926	5.917	0.005	88	76750	3.62	
34 trans-1,2-Dichloroethene	96	7.086	7.081	0.000	89	4036	0.1617	
37 1,1-Dichloroethane	63	7.496	7.495	0.001	98	29860	0.4798	
42 cis-1,2-Dichloroethene	96	8.477	8.477	-0.005	95	54204	2.04	
44 Chloroform	83	8.817	8.817	0.000	27	4258	0.0706	
47 1,1,1-Trichloroethane	97	9.847	9.852	-0.005	94	8337	0.1436	
50 Benzene	78	10.451	10.445	0.006	1	1407	0.0142	
52 Carbon tetrachloride	117	10.467	10.467	0.000	44	745	0.0122	
58 Trichloroethene	130	11.702	11.702	0.000	86	838623	19.4	E
67 Toluene	91	13.751	13.756	-0.005	94	7974	0.0781	
78 Ethylbenzene	91	16.064	16.064	0.000	98	39833	0.3037	
79 m-Xylene & p-Xylene	91	16.220	16.231	-0.011	97	209447	2.02	
83 o-Xylene	91	16.754	16.754	0.000	97	86709	0.8258	
90 1,3,5-Trimethylbenzene	120	18.102	18.097	-0.006	92	11122	0.2020	
95 1,2,4-Trimethylbenzene	105	18.539	18.544	-0.005	97	32928	0.2735	
101 1,2,3-Trimethylbenzene	105	19.008	19.014	-0.006	98	13989	0.1385	
S 124 Xylenes, Total	100				0		2.84	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Reagents:

40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

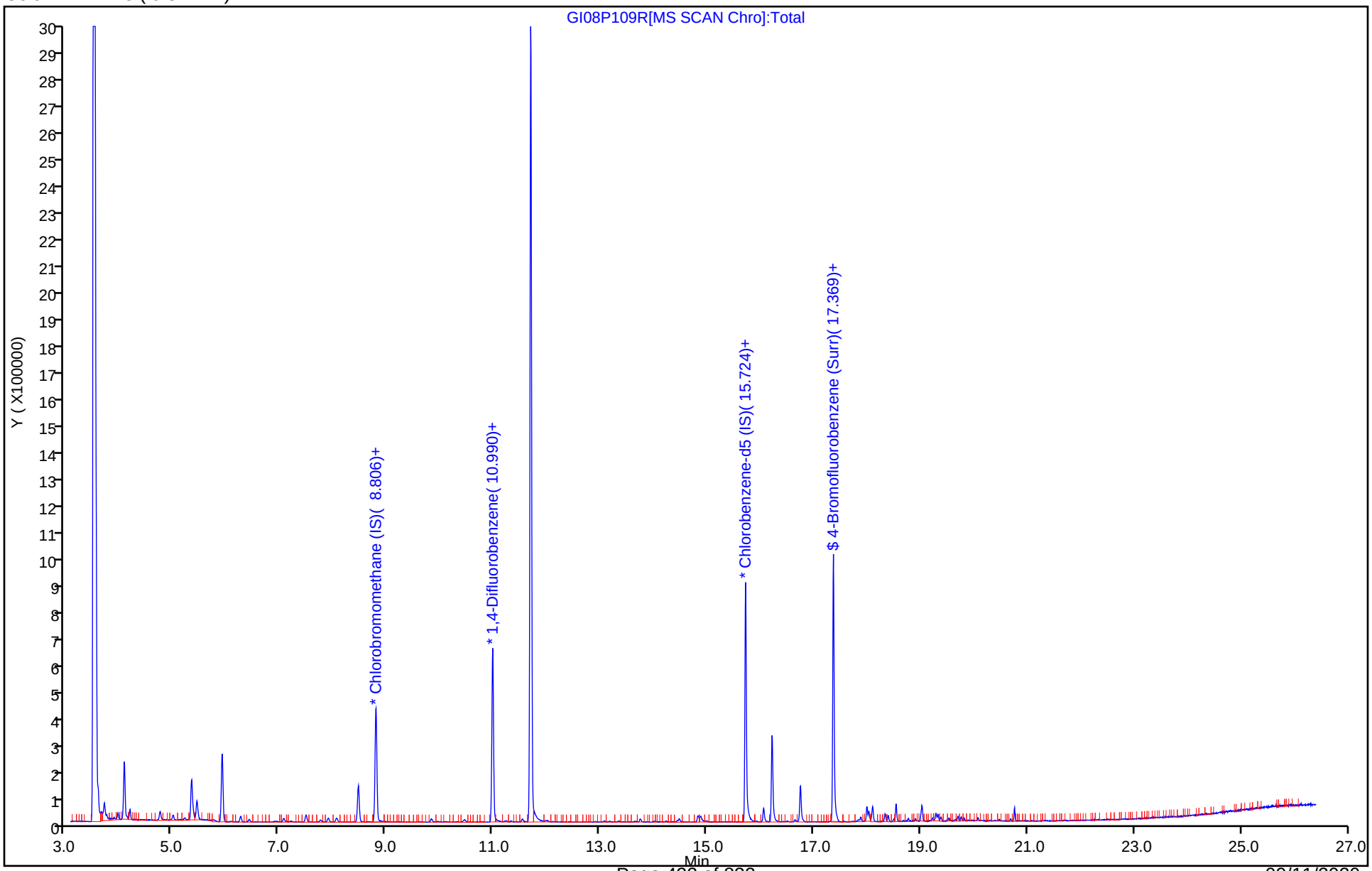
Report Date: 09-Sep-2020 14:22:40 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P109R.D

Injection Date:	09-Sep-2020 10:14:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	140-20194-A-20	Lab Sample ID:	140-20194-20	Worklist Smp#:	30
Client ID:	SV-118-A-29				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P109R.D				
Lims ID:	140-20194-A-20				
Client ID:	SV-118-A-29				
Sample Type:	Client				
Inject. Date:	09-Sep-2020 10:14:30	ALS Bottle#:	9	Worklist Smp#:	30
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016519-030				
Misc. Info.:	140-20194-a-20				
Operator ID:	HMT	Instrument ID:	MG		
Method:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\MG_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	09-Sep-2020 14:21:02	Calib Date:	02-Sep-2020 03:27:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1034				

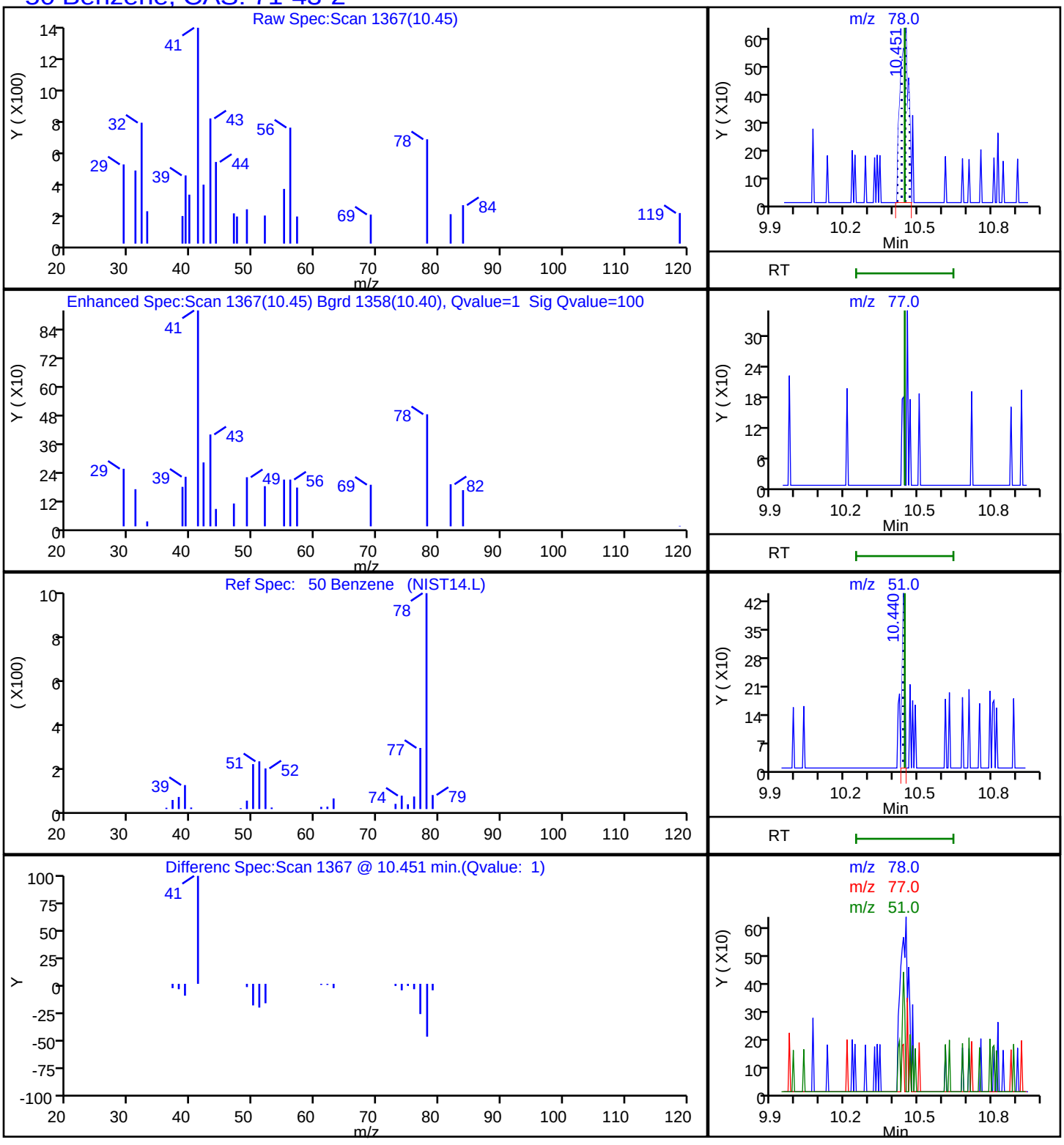
First Level Reviewer: barlozhetskayaa Date: 09-Sep-2020 14:22:40

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	4.58	98.77

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P109R.D				
Injection Date:	09-Sep-2020 10:14:30	Instrument ID:	MG		
Lims ID:	140-20194-A-20	Lab Sample ID:	140-20194-20		
Client ID:	SV-118-A-29				
Operator ID:	HMT	ALS Bottle#:	9	Worklist Smp#:	30
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

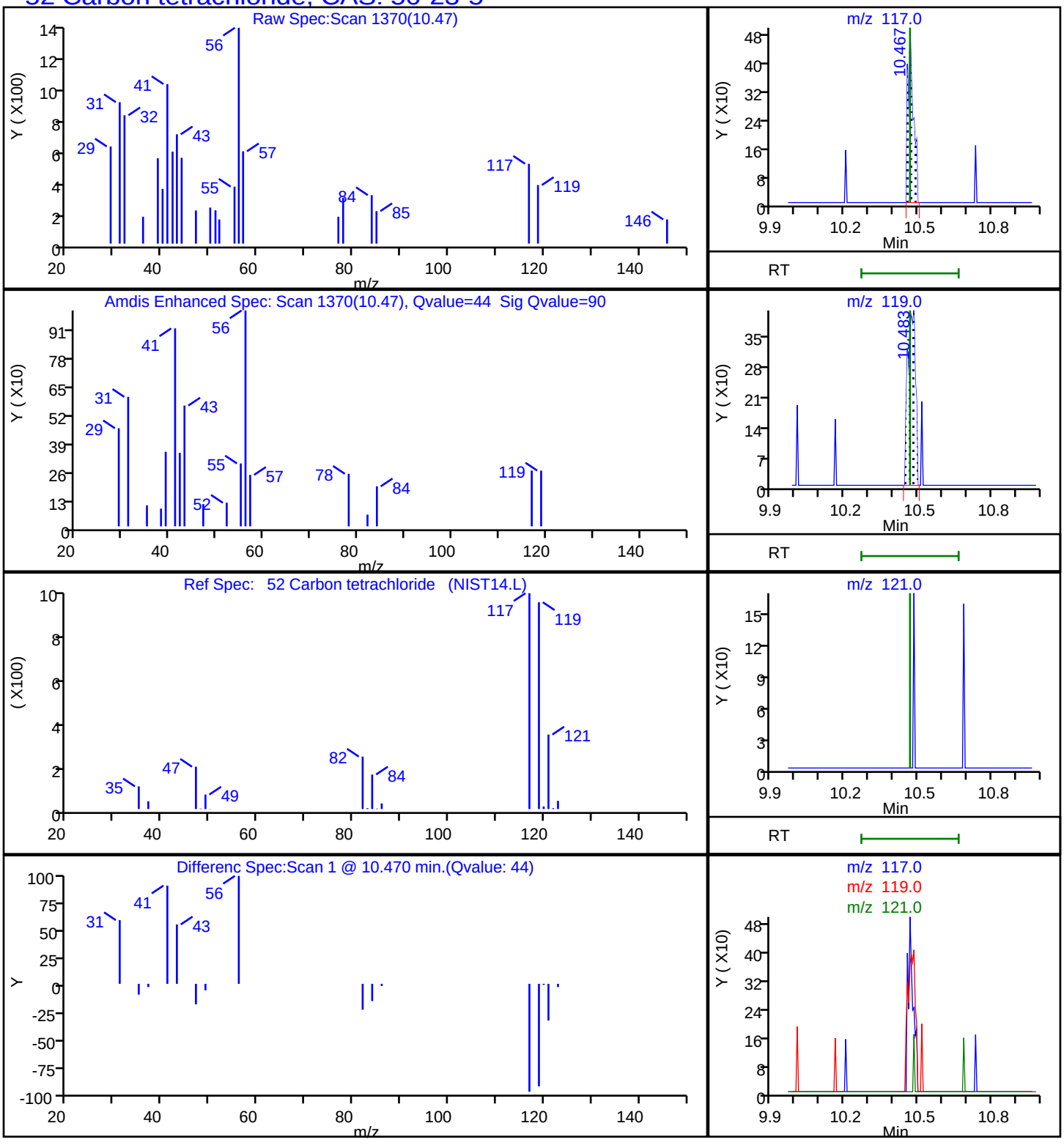
50 Benzene, CAS: 71-43-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P109R.D		
Injection Date:	09-Sep-2020 10:14:30	Instrument ID:	MG
Lims ID:	140-20194-A-20	Lab Sample ID:	140-20194-20
Client ID:	SV-118-A-29		
Operator ID:	HMT	ALS Bottle#:	9 Worklist Smp#: 30
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

52 Carbon tetrachloride, CAS: 56-23-5



Eurofins TestAmerica, Knoxville

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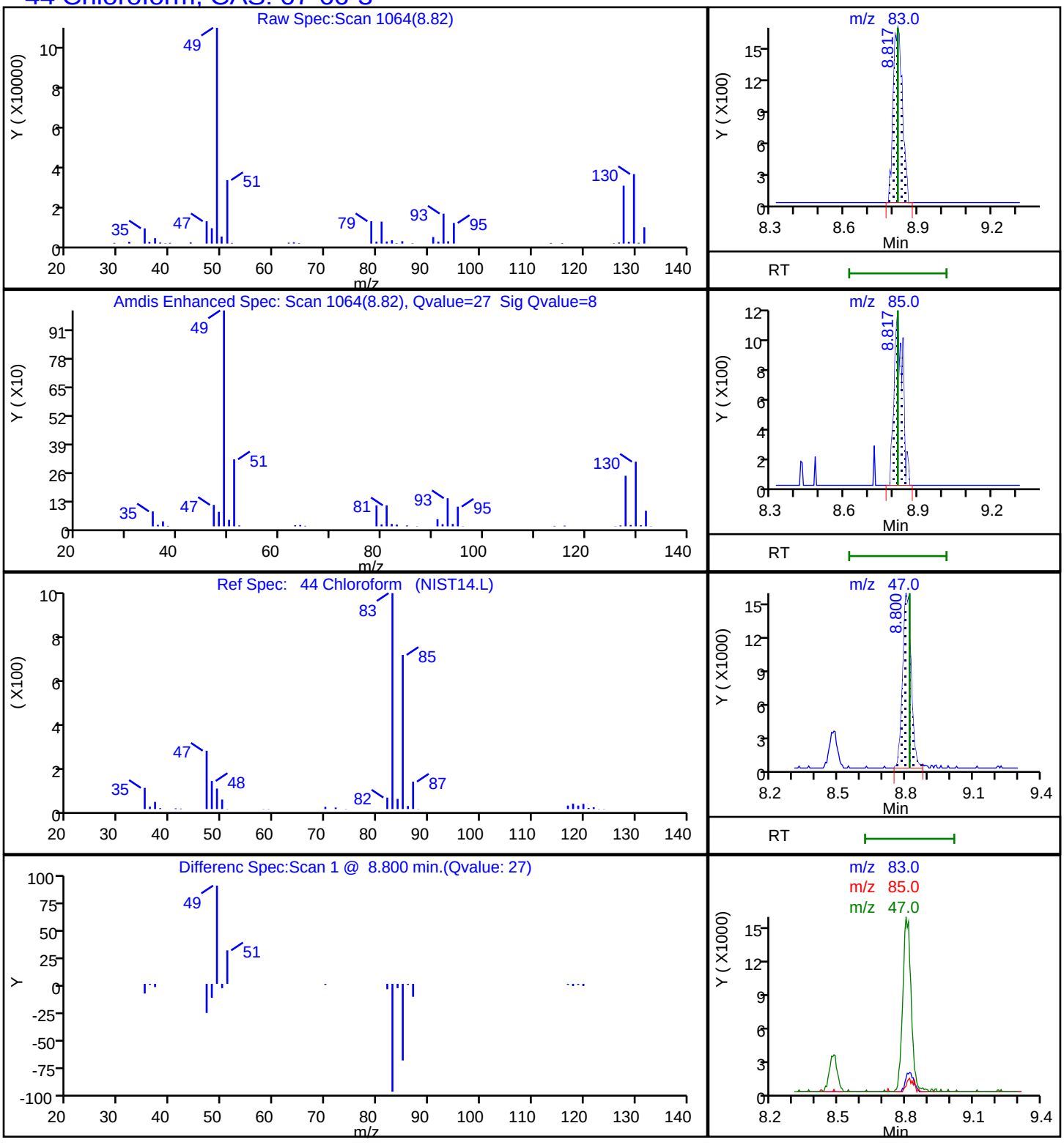
Injection Date:	09-Sep-2020 10:14:30	Instrument ID:	MG
Lims ID:	140-20194-A-20	Lab Sample ID:	140-20194-20
Client ID:	SV-118-A-29		
Operator ID:	HMT	ALS Bottle#:	9 Worklist Smp#: 30
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

44 Chloroform, CAS: 67-66-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P109R.D				
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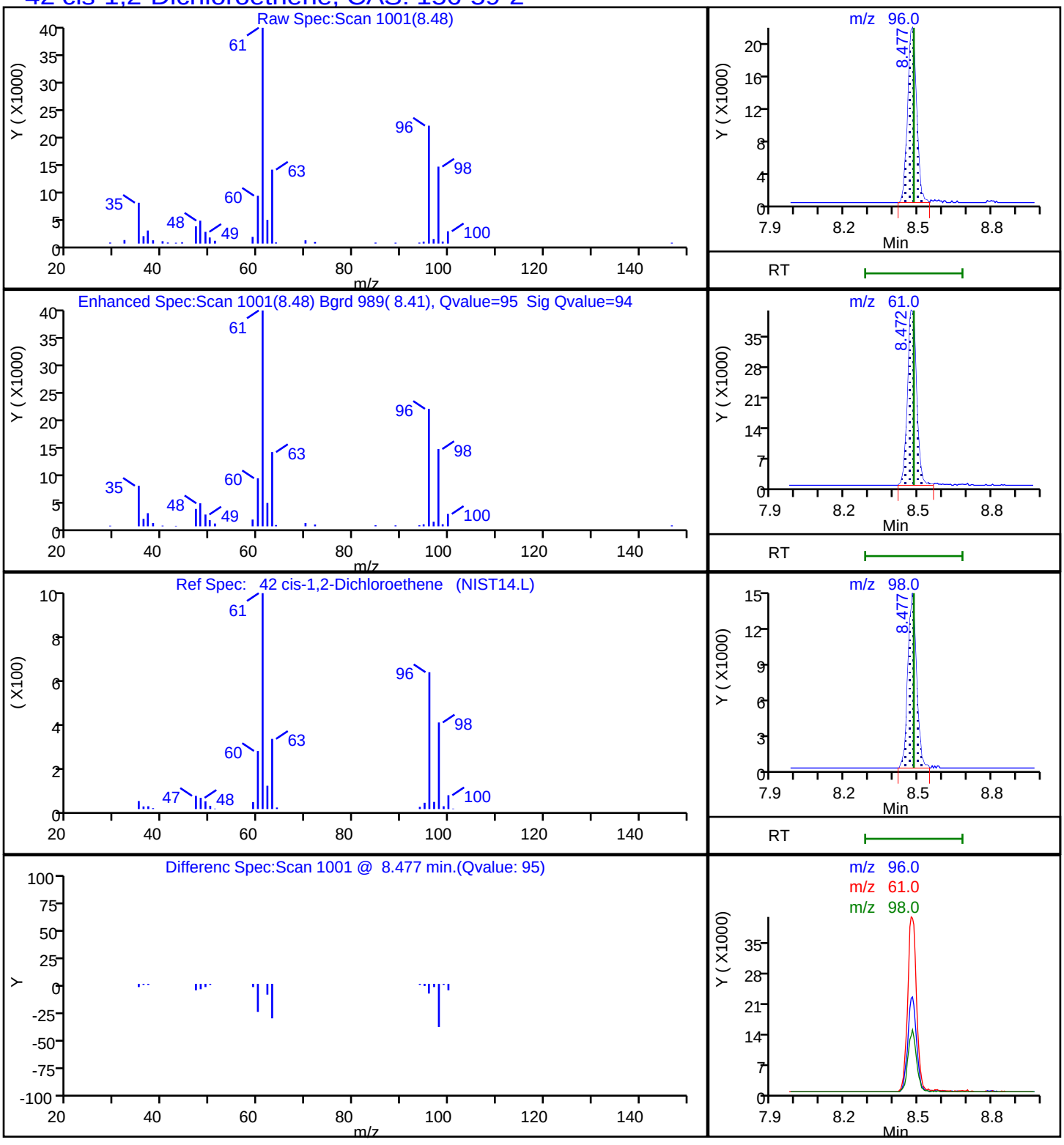
Lims ID:	140-20194-A-20	Lab Sample ID:	140-20194-20		
Client ID:	SV-118-A-29				
Operator ID:	HMT	ALS Bottle#:	9	Worklist Smp#:	30
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

42 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P109R.D				
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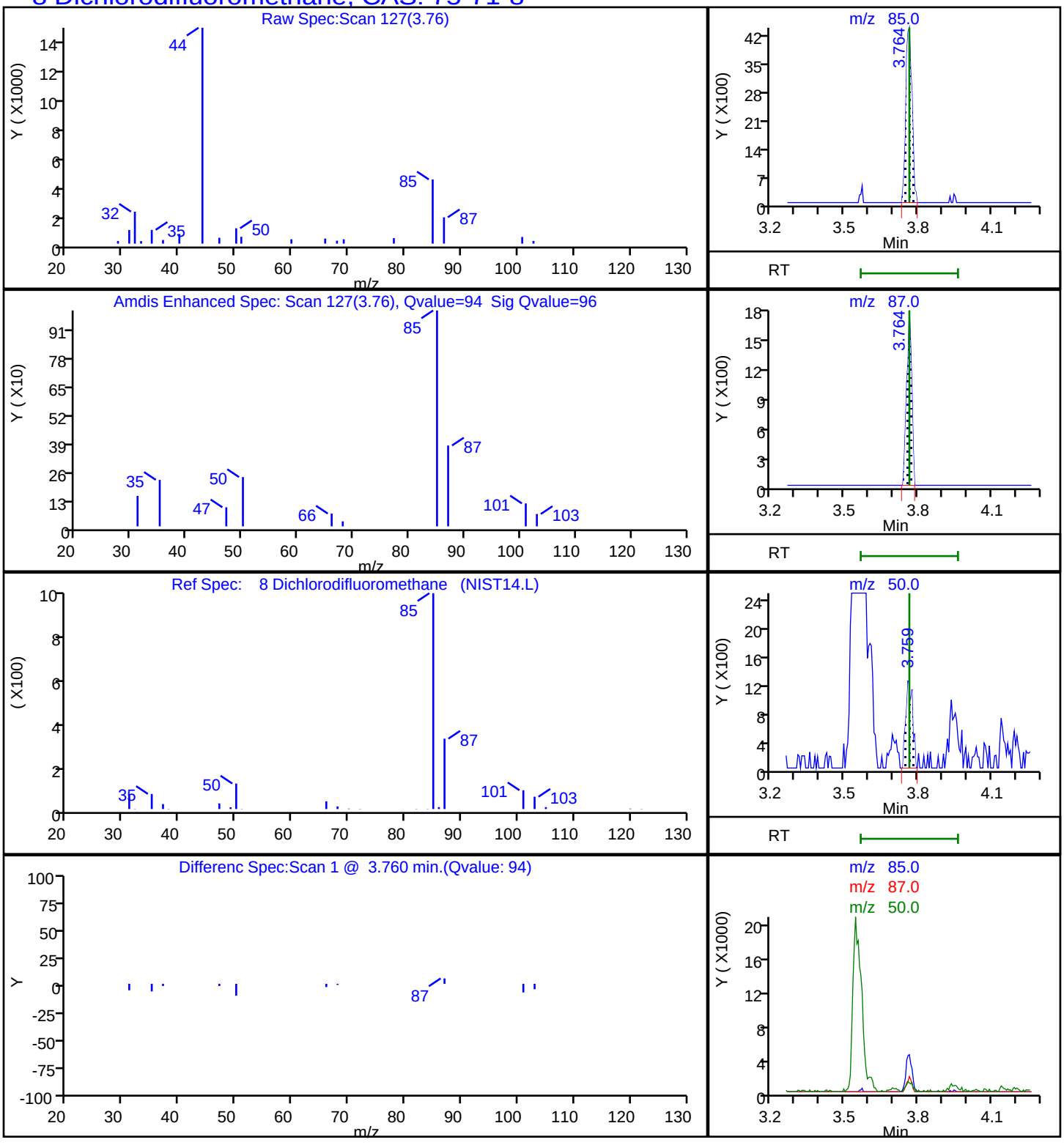
Lims ID:	140-20194-A-20	Lab Sample ID:	140-20194-20		
Client ID:	SV-118-A-29				
Operator ID:	HMT	ALS Bottle#:	9	Worklist Smp#:	30
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

8 Dichlorodifluoromethane, CAS: 75-71-8



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P109R.D		
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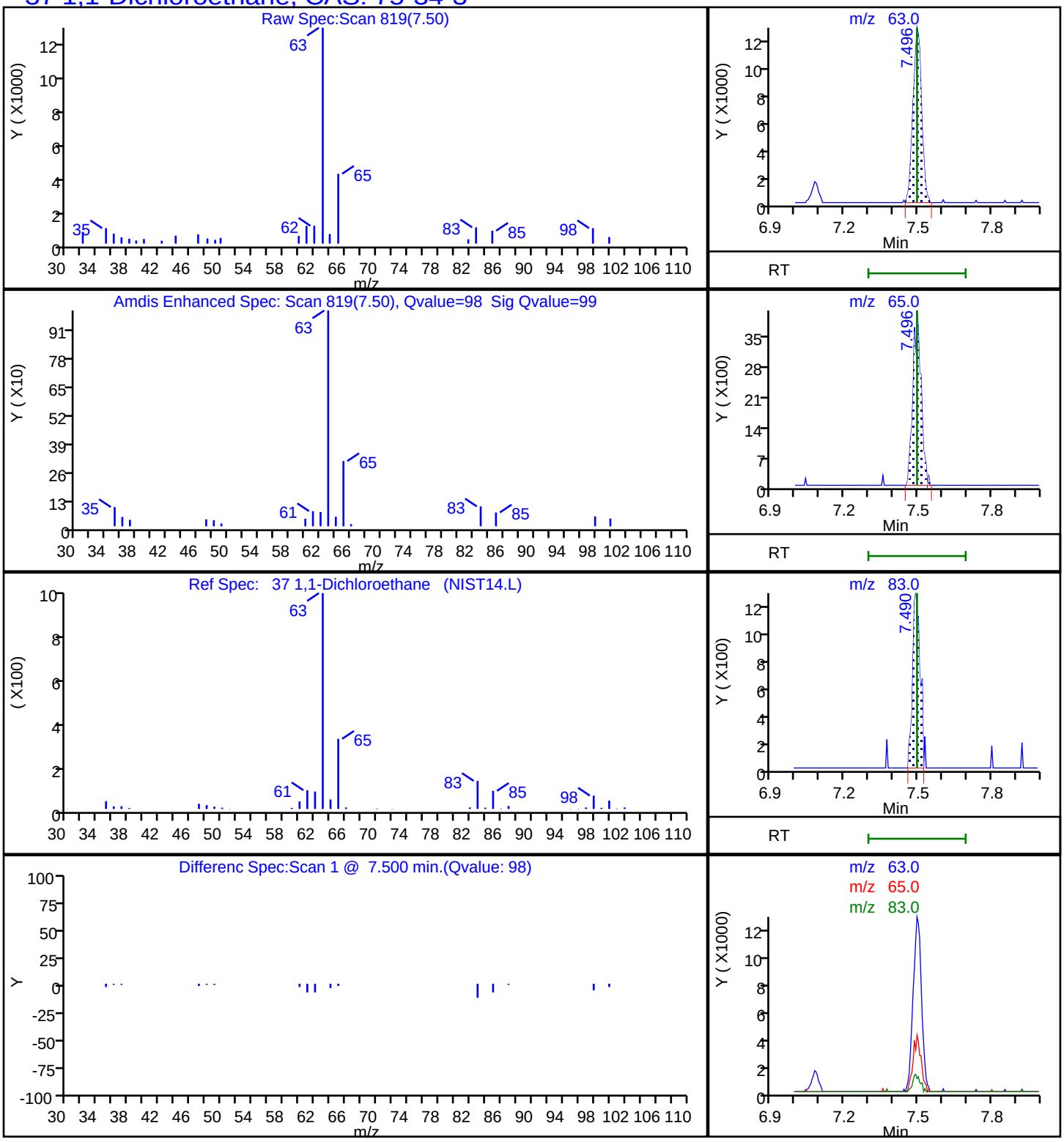
Lims ID:	140-20194-A-20	Lab Sample ID:	140-20194-20
Client ID:	SV-118-A-29		
Operator ID:	HMT	ALS Bottle#:	9 Worklist Smp#: 30
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

37 1,1-Dichloroethane, CAS: 75-34-3



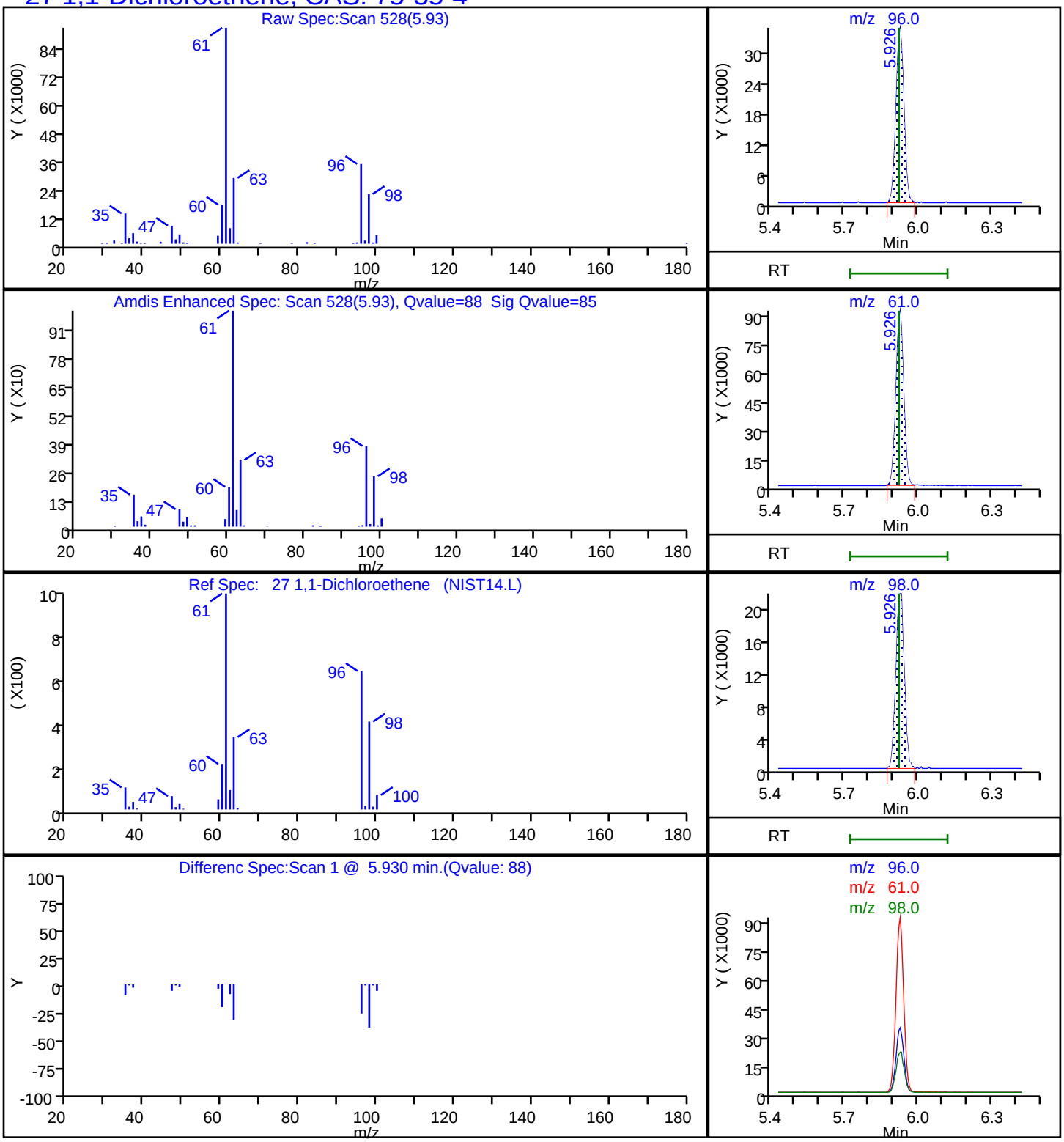
Report Date: 09-Sep-2020 14:22:41 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P109R.D

Injection Date:	09-Sep-2020 10:14:30	Instrument ID:	MG		
Lims ID:	140-20194-A-20	Lab Sample ID:	140-20194-20		
Client ID:	SV-118-A-29				
Operator ID:	HMT	ALS Bottle#:	9	Worklist Smp#:	30
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

27 1,1-Dichloroethene, CAS: 75-35-4



Eurofins TestAmerica, Knoxville

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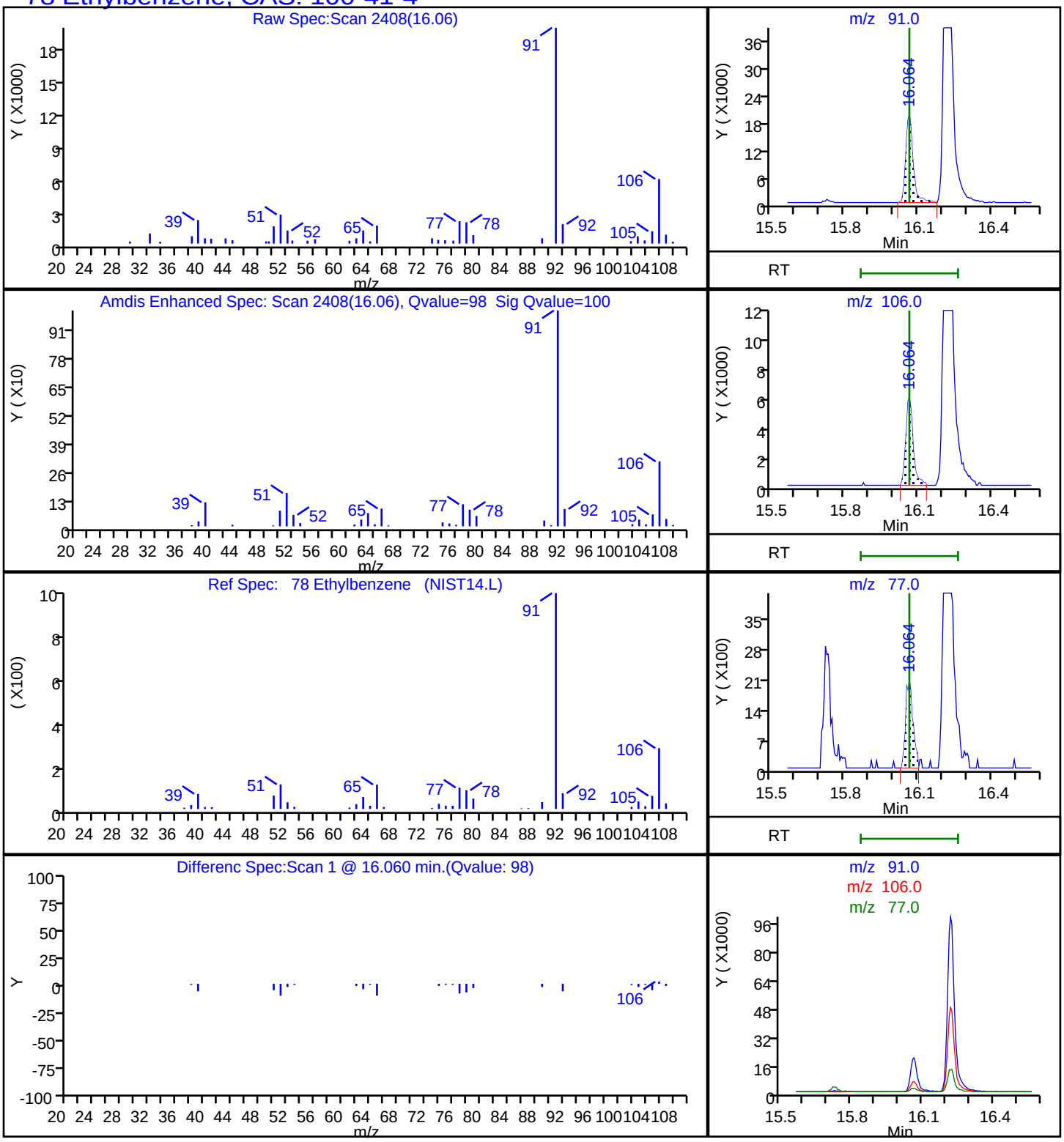
Lims ID:	140-20194-A-20	Lab Sample ID:	140-20194-20		
Client ID:	SV-118-A-29				
Operator ID:	HMT	ALS Bottle#:	9	Worklist Smp#:	30
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

78 Ethylbenzene, CAS: 100-41-4



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P109R.D				
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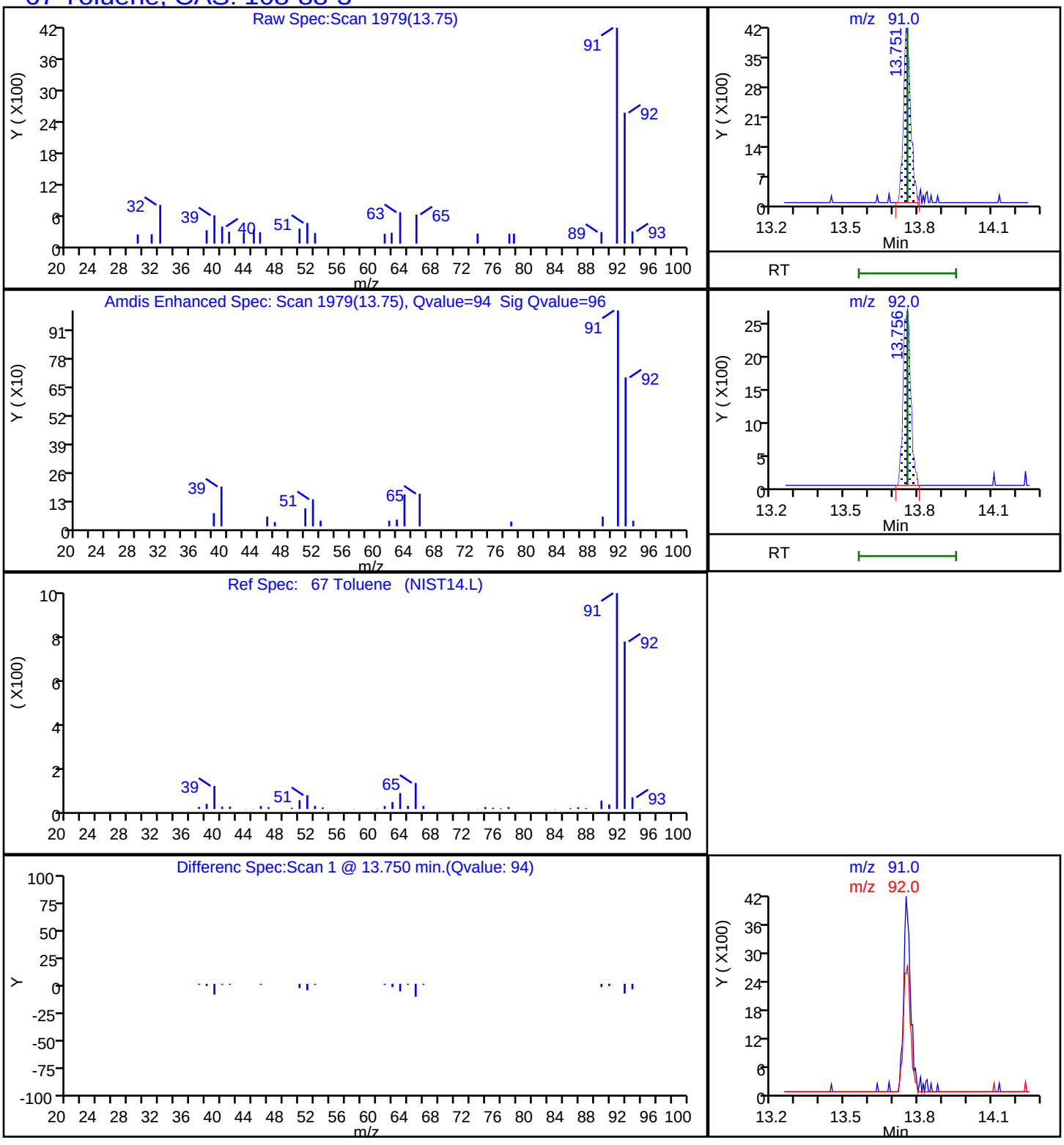
Lims ID:	140-20194-A-20	Lab Sample ID:	140-20194-20		
Client ID:	SV-118-A-29				
Operator ID:	HMT	ALS Bottle#:	9	Worklist Smp#:	30
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

67 Toluene, CAS: 108-88-3

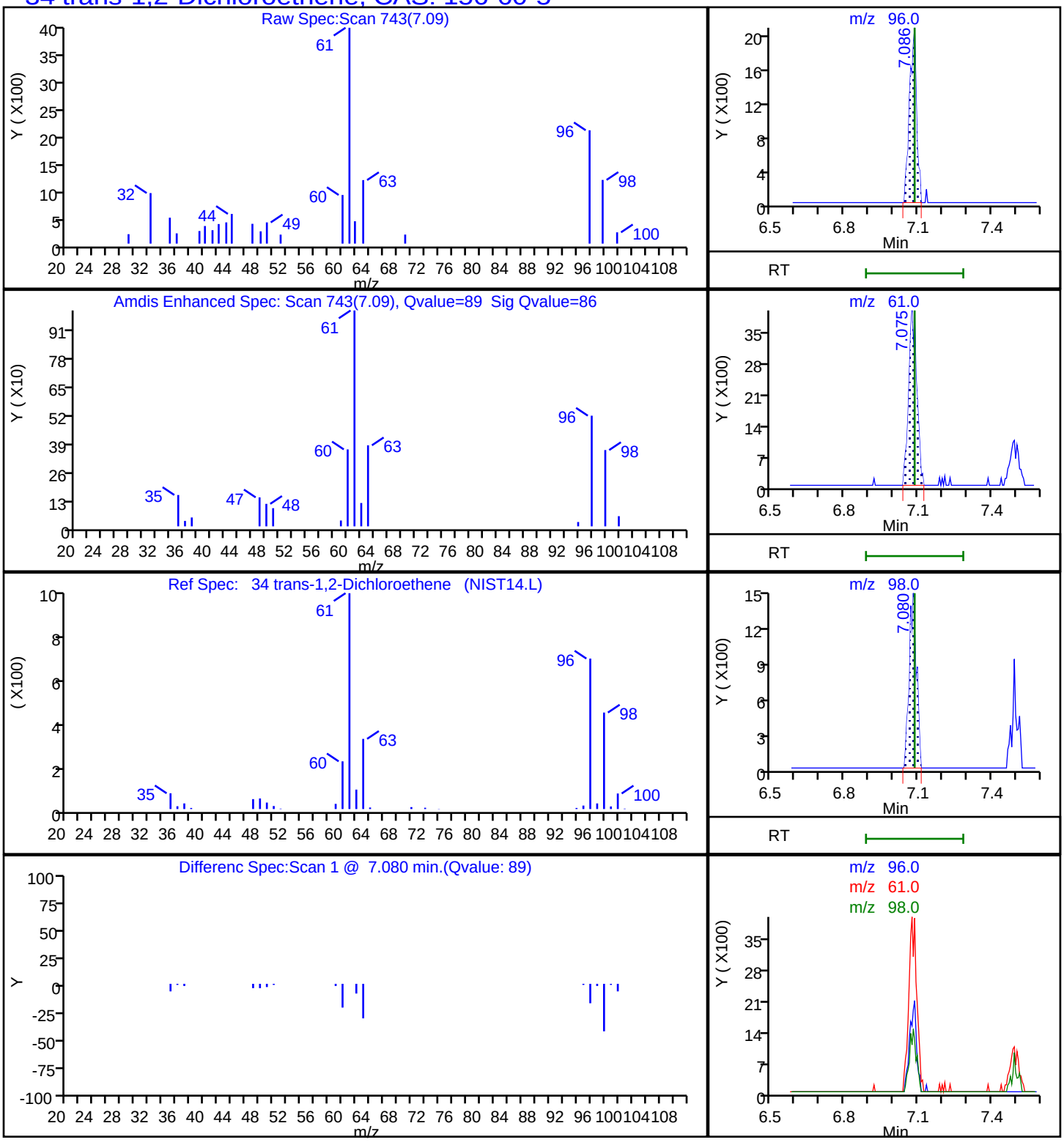


Report Date: 09-Sep-2020 14:22:41 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P109R.D				
Injection Date:	09-Sep-2020 10:14:30	Instrument ID:	MG		
Lims ID:	140-20194-A-20	Lab Sample ID:	140-20194-20		
Client ID:	SV-118-A-29				
Operator ID:	HMT	ALS Bottle#:	9	Worklist Smp#:	30
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

34 trans-1,2-Dichloroethene, CAS: 156-60-5



Report Date: 09-Sep-2020 14:22:41 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P109R.D				
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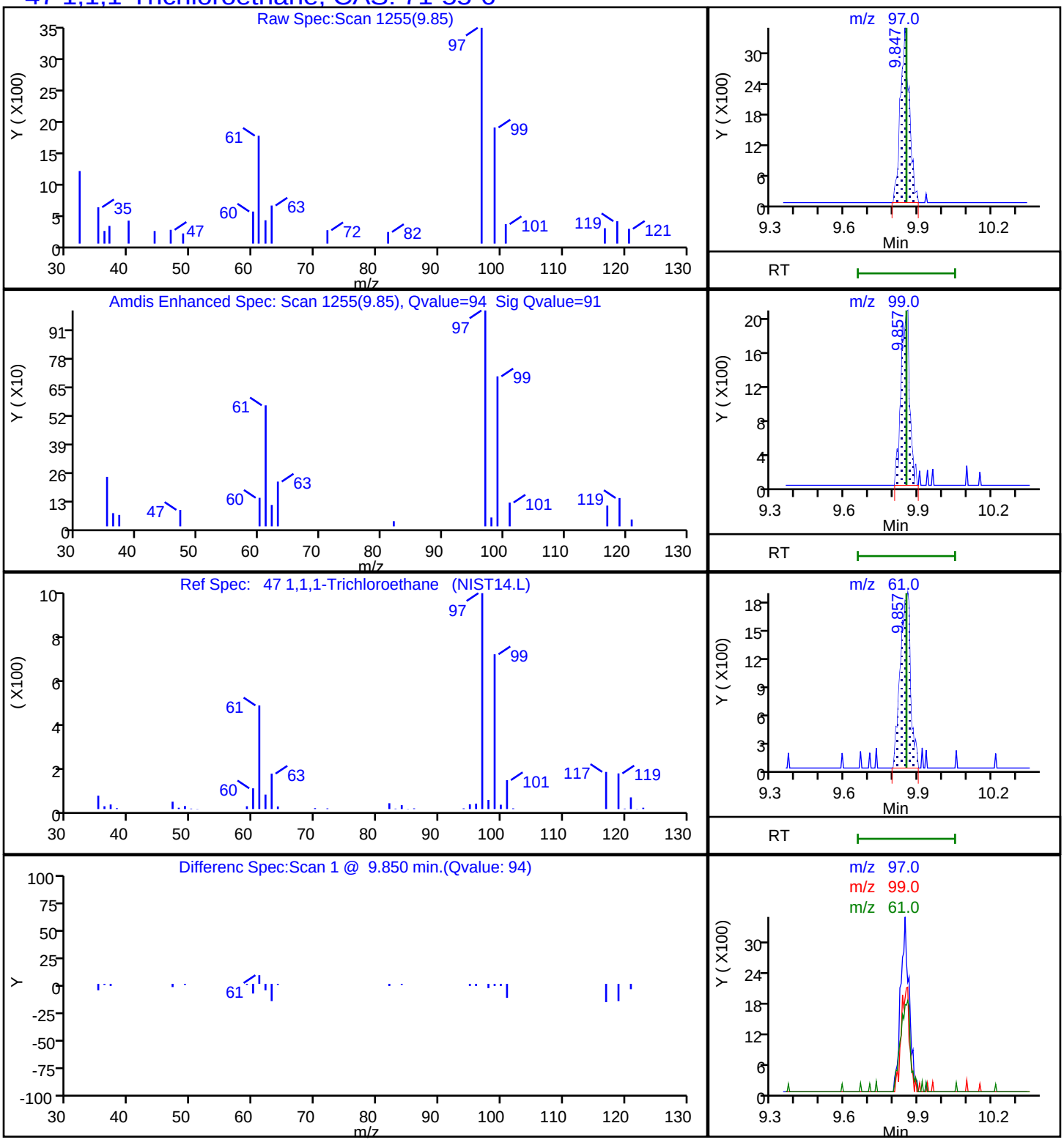
Lims ID:	140-20194-A-20	Lab Sample ID:	140-20194-20		
Client ID:	SV-118-A-29				
Operator ID:	HMT	ALS Bottle#:	9	Worklist Smp#:	30
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

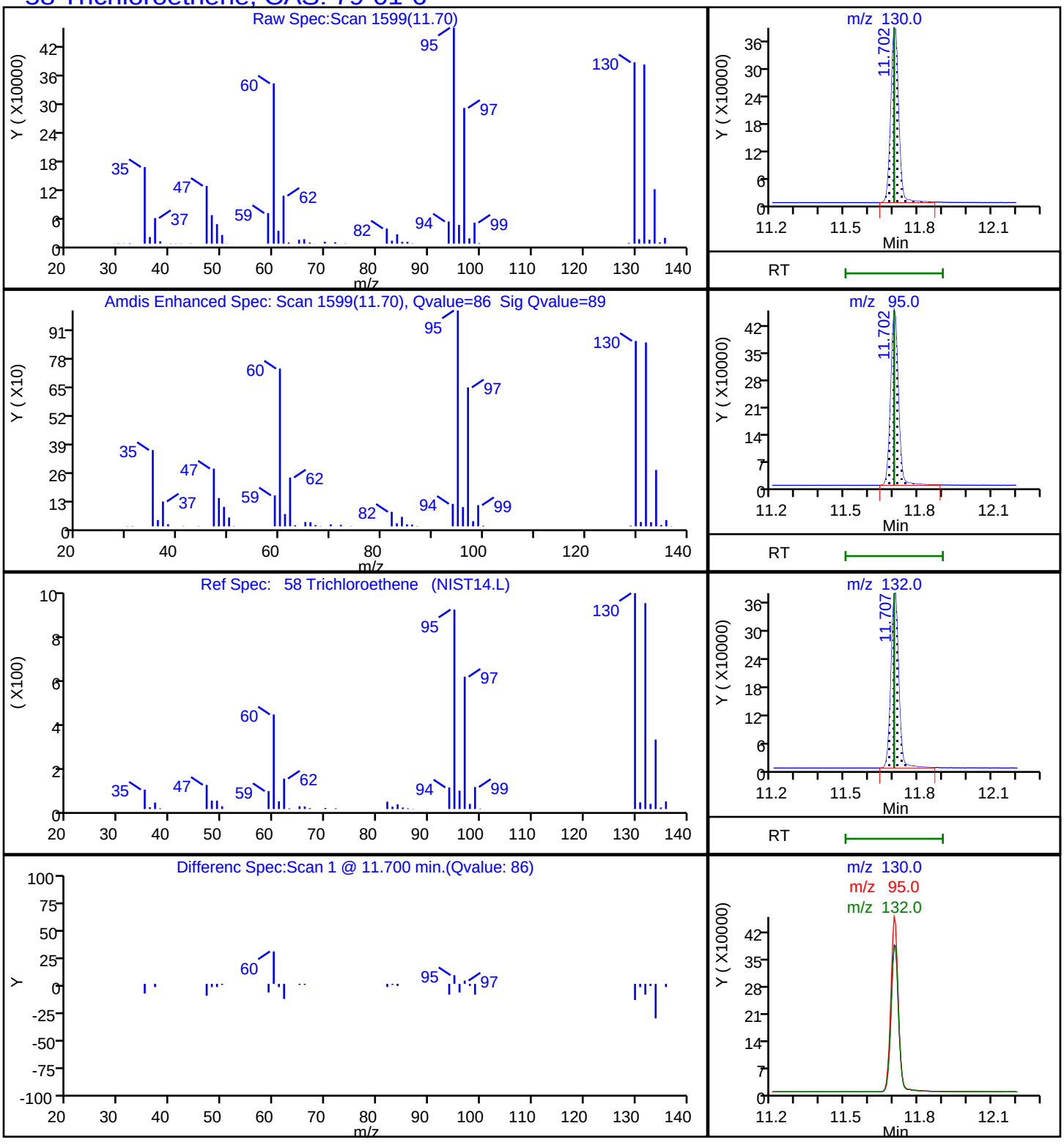
47 1,1,1-Trichloroethane, CAS: 71-55-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P109R.D		
Injection Date:	09-Sep-2020 10:14:30	Instrument ID:	MG
Lims ID:	140-20194-A-20	Lab Sample ID:	140-20194-20
Client ID:	SV-118-A-29		
Operator ID:	HMT	ALS Bottle#:	9 Worklist Smp#: 30
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

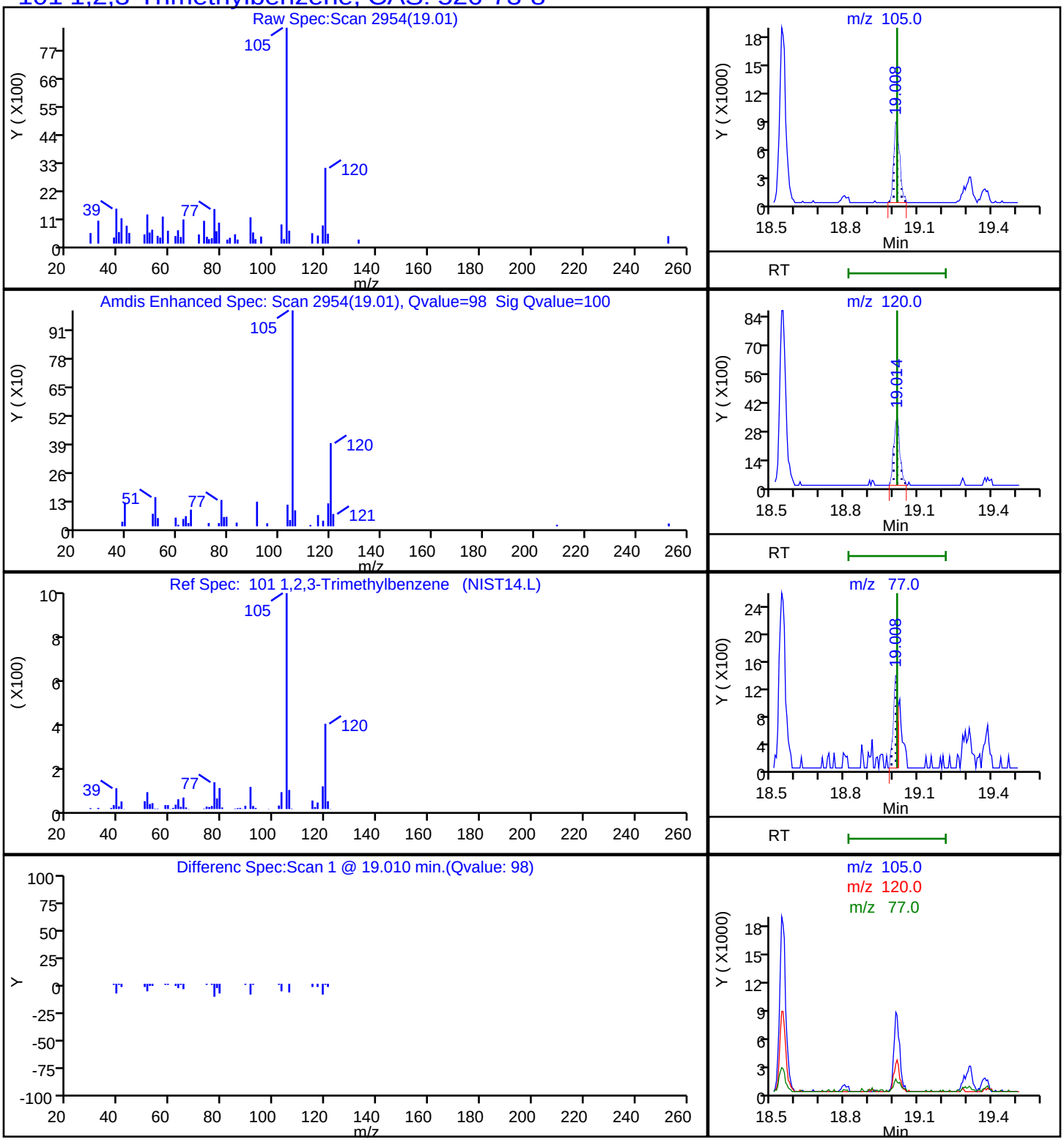
58 Trichloroethene, CAS: 79-01-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P109R.D				
Injection Date:	09-Sep-2020 10:14:30	Instrument ID:	MG		
Lims ID:	140-20194-A-20	Lab Sample ID:	140-20194-20		
Client ID:	SV-118-A-29				
Operator ID:	HMT	ALS Bottle#:	9	Worklist Smp#:	30
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

101 1,2,3-Trimethylbenzene, CAS: 526-73-8

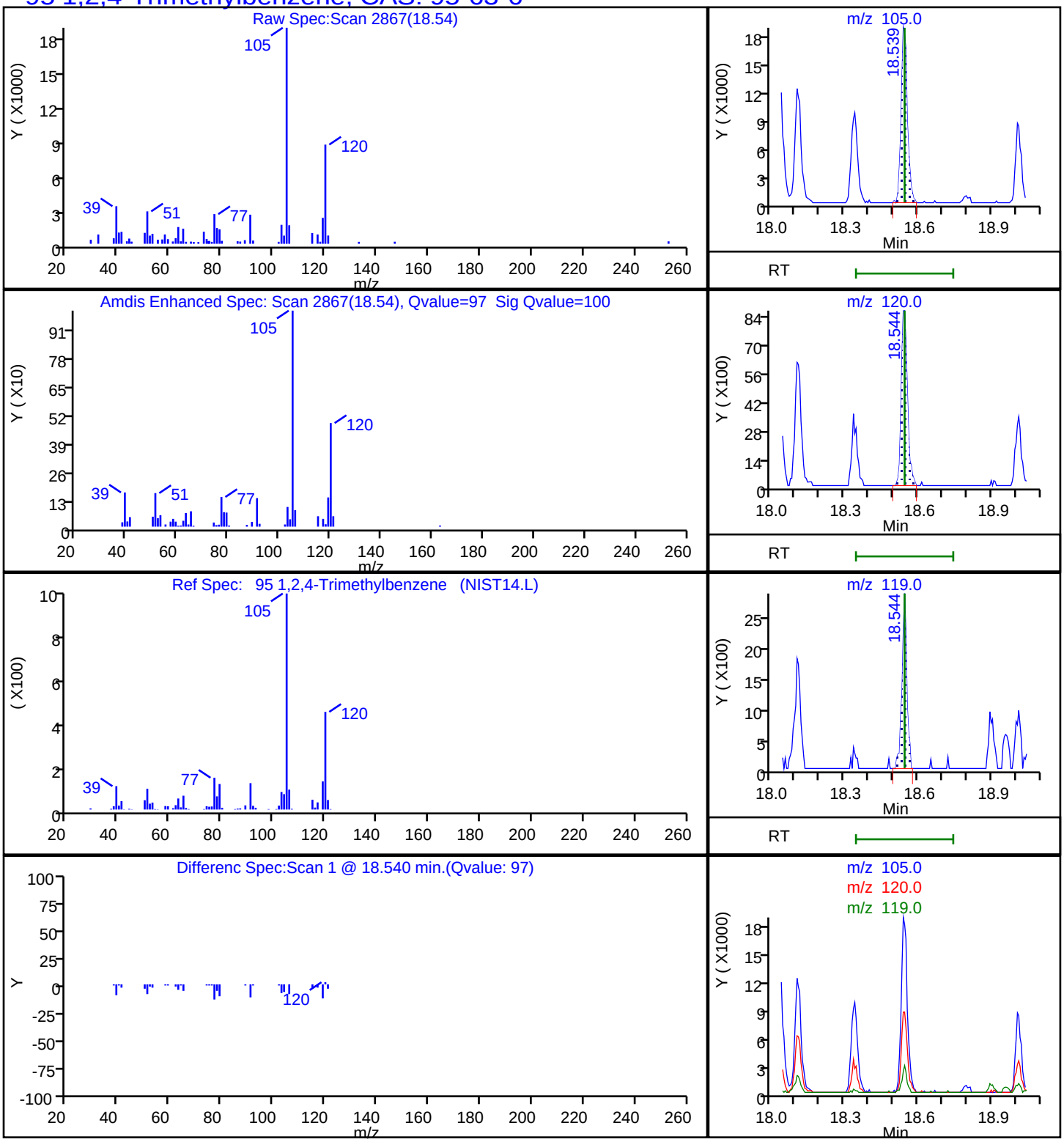


Report Date: 09-Sep-2020 14:22:41 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P109R.D				
Injection Date:	09-Sep-2020 10:14:30	Instrument ID:	MG		
Lims ID:	140-20194-A-20	Lab Sample ID:	140-20194-20		
Client ID:	SV-118-A-29				
Operator ID:	HMT	ALS Bottle#:	9	Worklist Smp#:	30
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

95 1,2,4-Trimethylbenzene, CAS: 95-63-6

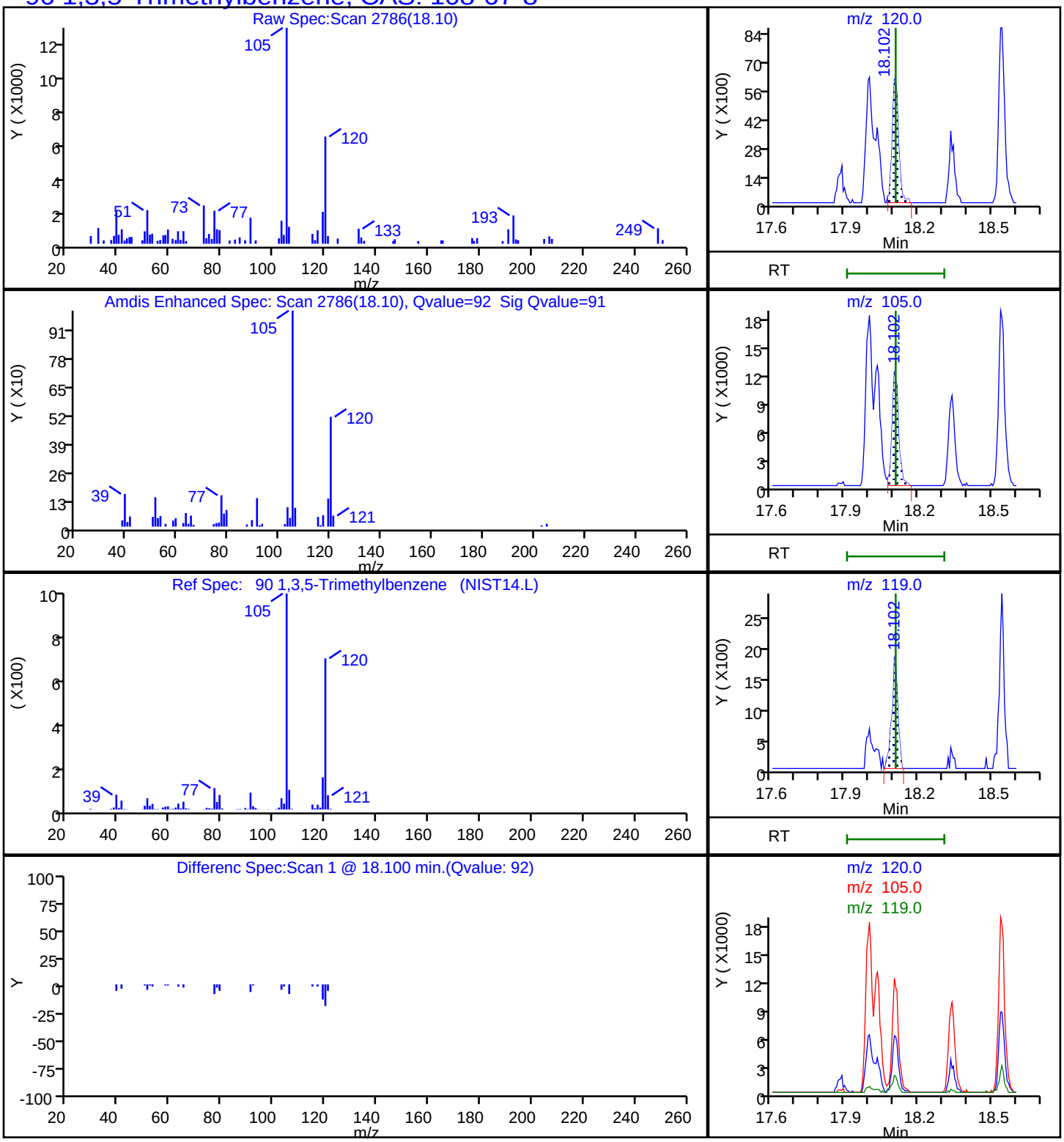


Report Date: 09-Sep-2020 14:22:41 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P109R.D				
Injection Date:	09-Sep-2020 10:14:30	Instrument ID:	MG		
Lims ID:	140-20194-A-20	Lab Sample ID:	140-20194-20		
Client ID:	SV-118-A-29				
Operator ID:	HMT	ALS Bottle#:	9	Worklist Smp#:	30
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

90 1,3,5-Trimethylbenzene, CAS: 108-67-8

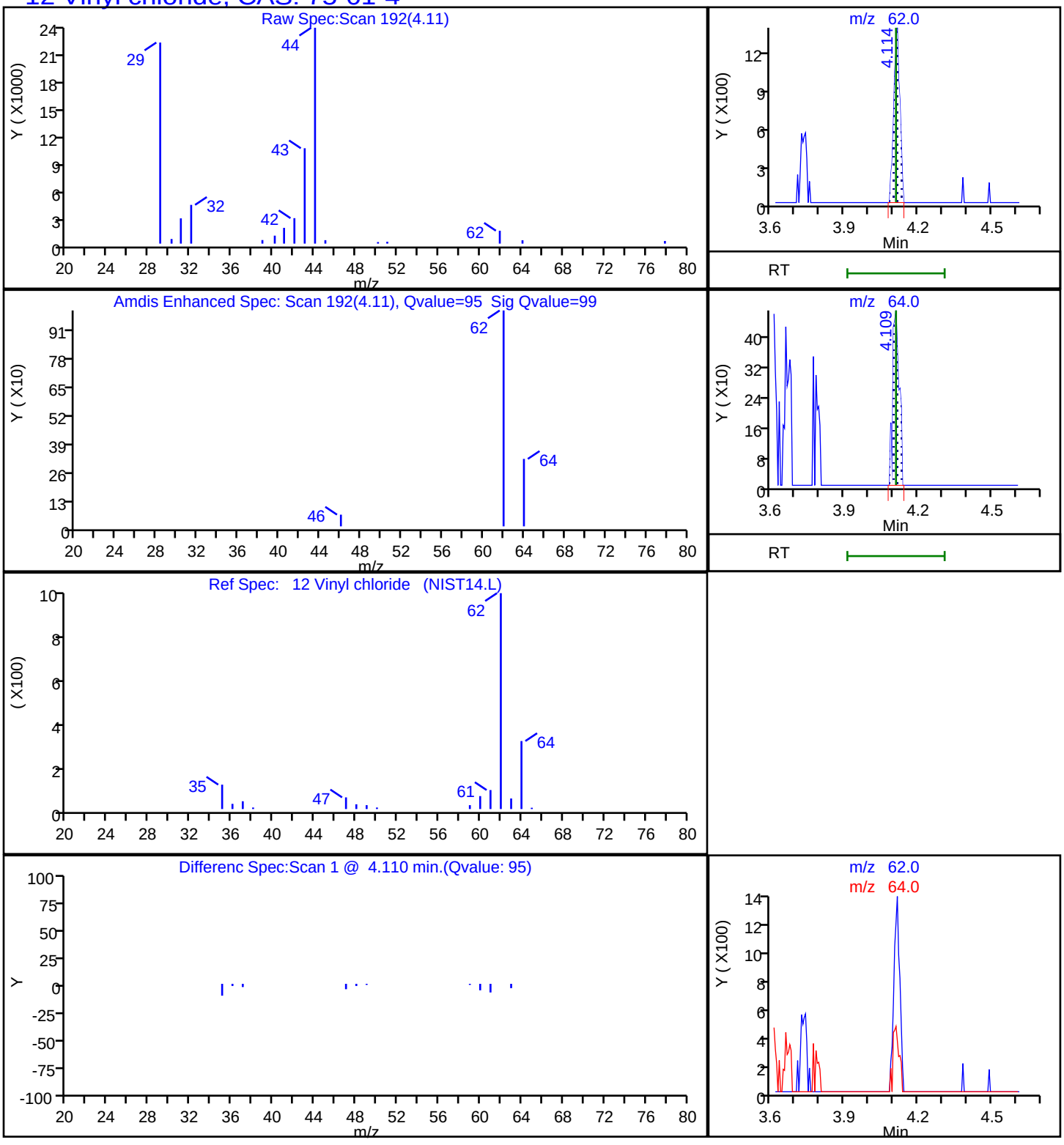


Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P109R.D

Injection Date:	09-Sep-2020 10:14:30	Instrument ID:	MG
Lims ID:	140-20194-A-20	Lab Sample ID:	140-20194-20
Client ID:	SV-118-A-29		
Operator ID:	HMT	ALS Bottle#:	9 Worklist Smp#: 30
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

12 Vinyl chloride, CAS: 75-01-4

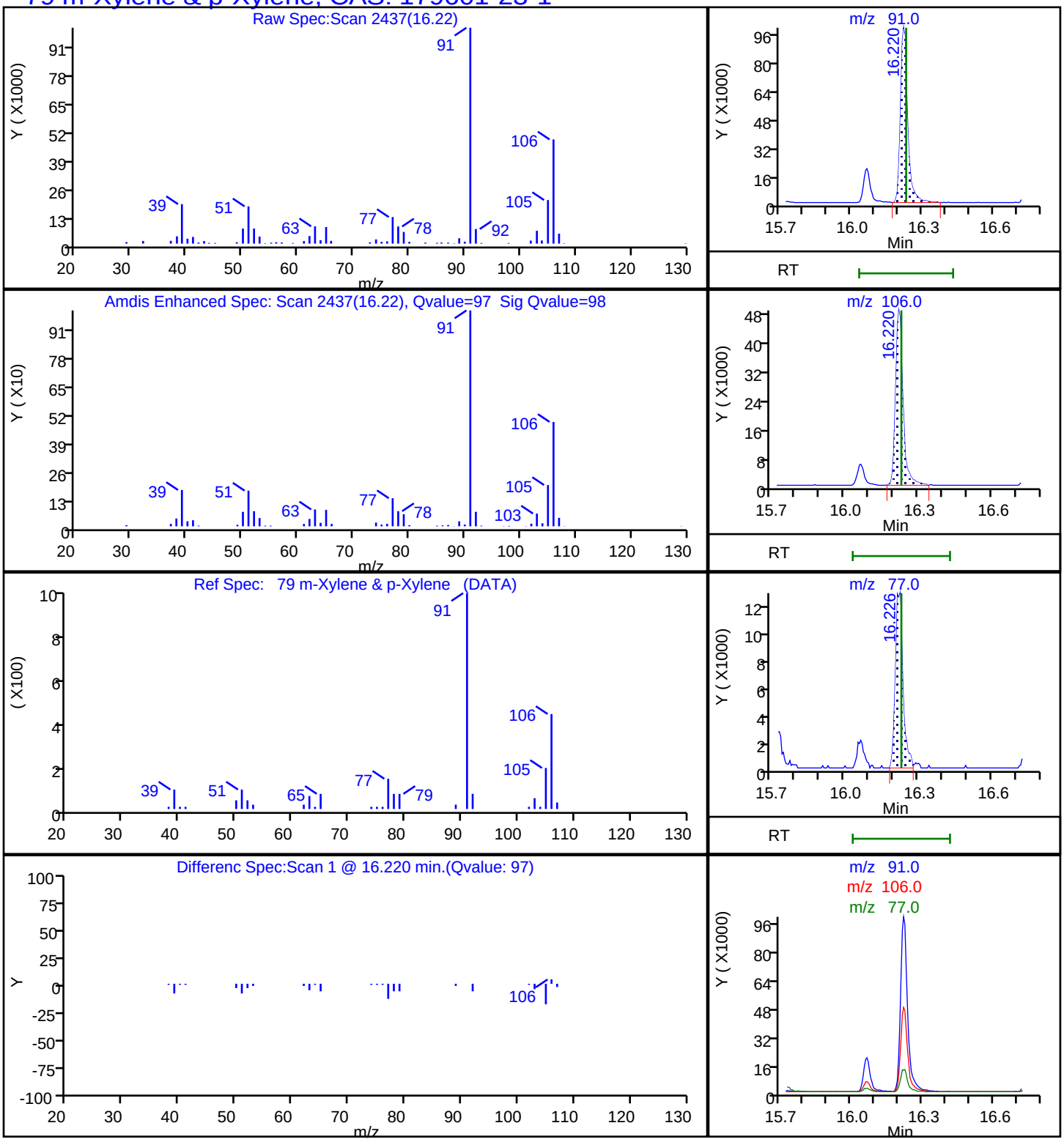


Report Date: 09-Sep-2020 14:22:41 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P109R.D				
Injection Date:	09-Sep-2020 10:14:30	Instrument ID:	MG		
Lims ID:	140-20194-A-20	Lab Sample ID:	140-20194-20		
Client ID:	SV-118-A-29				
Operator ID:	HMT	ALS Bottle#:	9	Worklist Smp#:	30
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

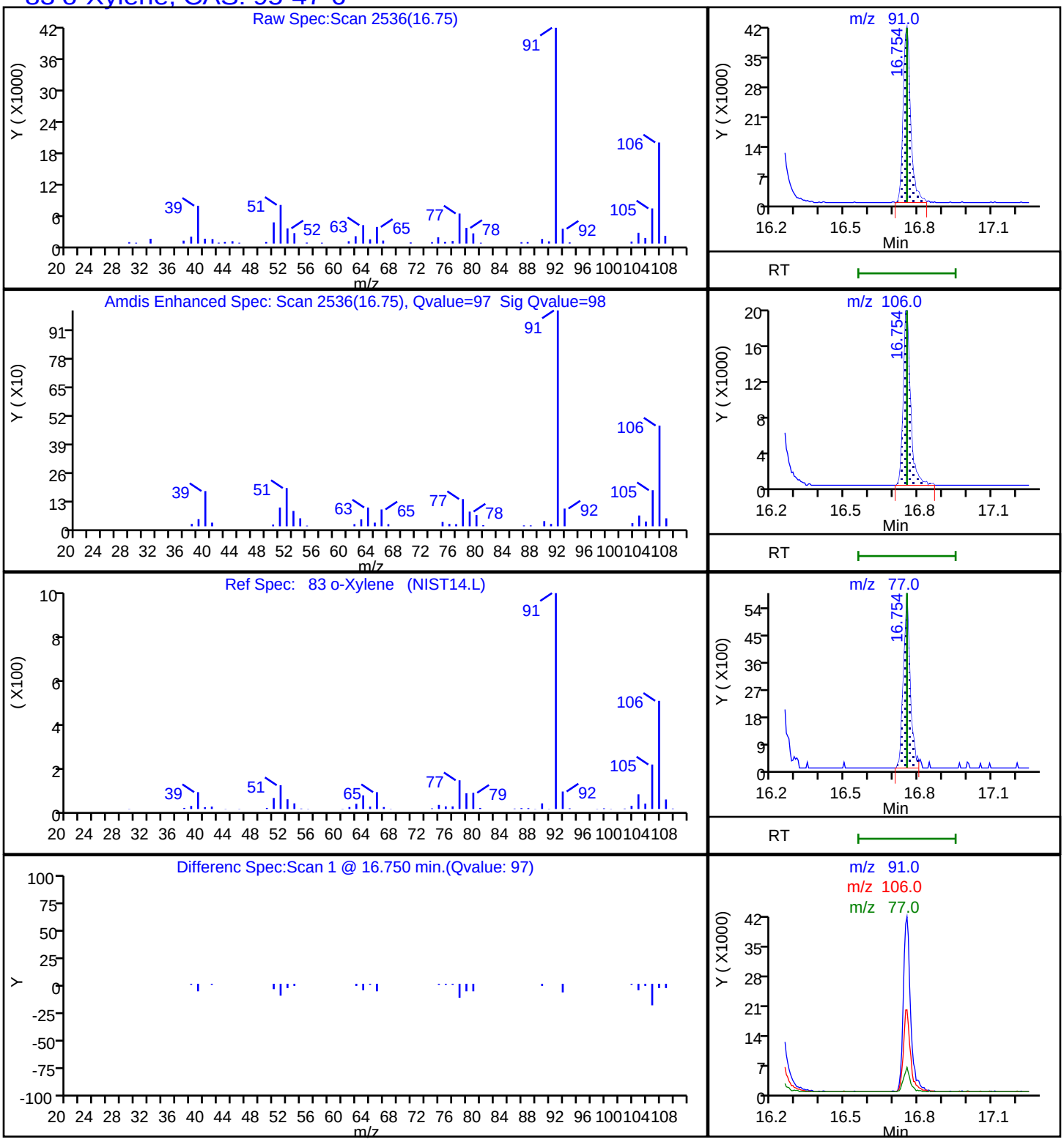
79 m-Xylene & p-Xylene, CAS: 179601-23-1



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GI08P109R.D		
Injection Date:	09-Sep-2020 10:14:30	Instrument ID:	MG
Lims ID:	140-20194-A-20	Lab Sample ID:	140-20194-20
Client ID:	SV-118-A-29		
Operator ID:	HMT	ALS Bottle#:	9 Worklist Smp#: 30
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

83 o-Xylene, CAS: 95-47-6



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: SV-118-A-29 DL Lab Sample ID: 140-20194-20 DL

Matrix: Air Lab File ID: RI09P101.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 10:41

Sample wt/vol: 50(mL) Date Analyzed: 09/09/2020 14:44

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42515 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
79-01-6	Trichloroethene	131.39	120		0.40	0.060

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	97		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: SV-118-A-29 DL Lab Sample ID: 140-20194-20 DL

Matrix: Air Lab File ID: RI09P101.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 10:41

Sample wt/vol: 50(mL) Date Analyzed: 09/09/2020 14:44

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42515 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
79-01-6	Trichloroethene	131.39	650		2.1	0.32

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	97		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MR\20200908-16524.b\RI09P101.D
Lims ID: 140-20194-A-20
Client ID: SV-118-A-29
Sample Type: Client
Inject. Date: 09-Sep-2020 14:44:30 ALS Bottle#: 1 Worklist Smp#: 5
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016524-005
Misc. Info.: 140-20194-a-20
Operator ID: HMT Instrument ID: MR

Method: \\chromfs\Knoxville\ChromData\MR\20200908-16524.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 10-Sep-2020 11:04:46 Calib Date: 29-Aug-2020 00:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1028

First Level Reviewer: khachitpongpanits Date: 10-Sep-2020 11:04:46

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.274	8.274	0.000	96	116898	4.80	
* 2 1,4-Difluorobenzene	114	10.507	10.507	0.000	95	601573	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.344	15.349	-0.005	90	477691	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	16.999	16.999	0.000	92	287255	4.50	
6 Chlorodifluoromethane	51	3.346	3.346	0.006	34	4468	0.0683	a
8 Dichlorodifluoromethane	85	3.399	3.400	-0.001	94	3220	0.0656	
27 1,1-Dichloroethene	96	5.427	5.422	0.005	95	67011	1.94	
31 Methylene Chloride	84	5.772	5.762	0.010	91	12547	0.4405	
34 trans-1,2-Dichloroethene	96	6.559	6.554	0.005	71	3007	0.0939	
37 1,1-Dichloroethane	63	6.975	6.964	0.011	97	16053	0.2887	
42 cis-1,2-Dichloroethene	96	7.945	7.945	0.000	93	36863	1.00	
44 Chloroform	83	8.274	8.291	-0.017	32	2592	0.0368	
47 1,1,1-Trichloroethane	97	9.299	9.310	-0.011	93	5428	0.0808	
51 Benzene	78	9.919	9.924	-0.005	1	1347	0.0128	
58 Trichloroethene	130	11.240	11.246	-0.006	92	628271	12.0	
67 Toluene	91	13.354	13.354	0.000	97	6467	0.0503	
76 Ethylbenzene	91	15.694	15.689	0.005	99	23437	0.1439	
77 m-Xylene & p-Xylene	91	15.850	15.856	-0.006	96	118029	0.9502	
81 o-Xylene	91	16.379	16.385	-0.006	98	50313	0.3911	
88 1,3,5-Trimethylbenzene	120	17.759	17.760	-0.001	96	8340	0.1029	
92 1,2,4-Trimethylbenzene	105	18.207	18.213	-0.006	94	18515	0.1212	
98 1,2,3-Trimethylbenzene	105	18.692	18.692	0.000	95	9298	0.0687	
S 117 Xylenes, Total	100				0		1.34	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

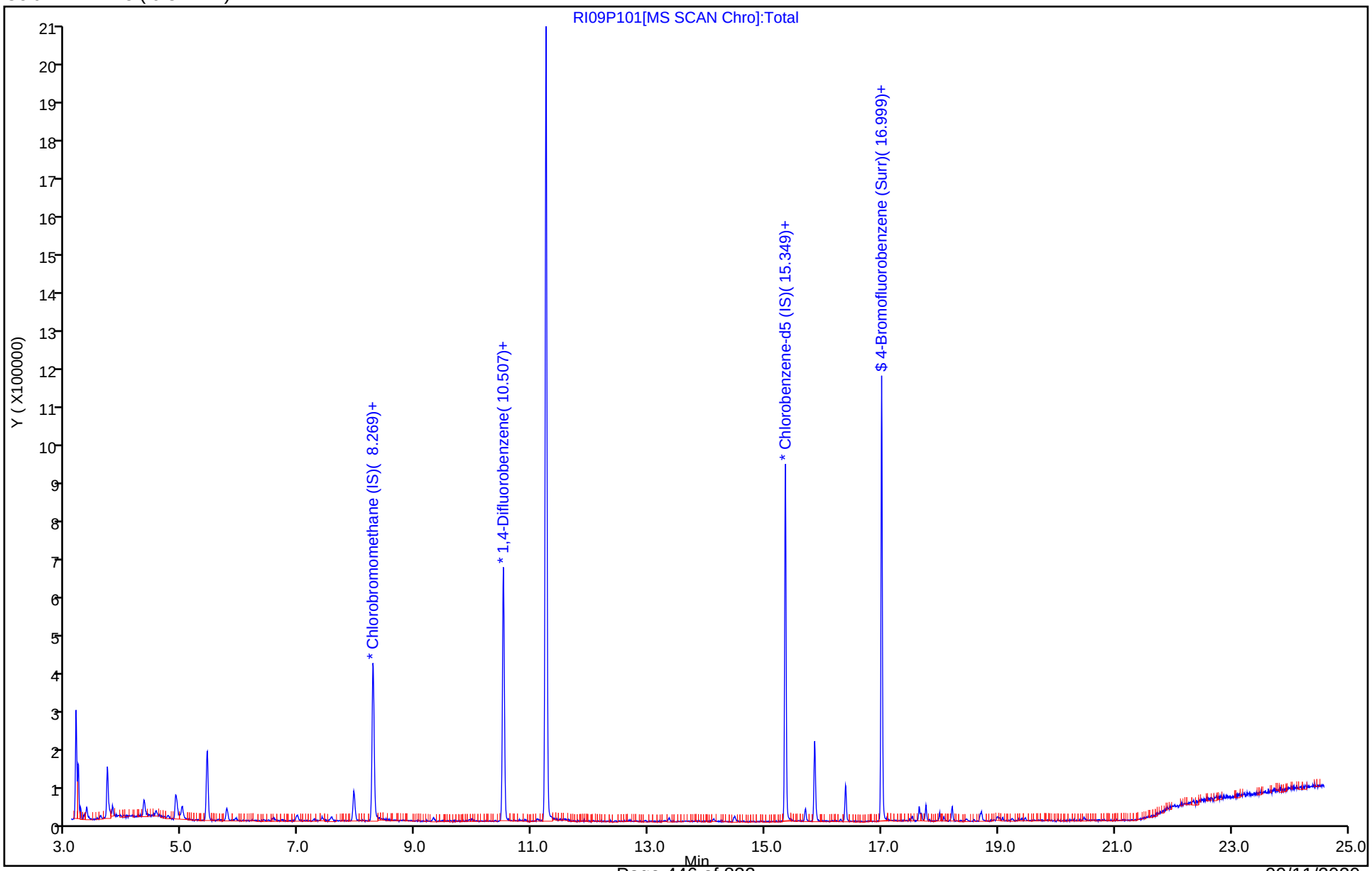
40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

Report Date: 10-Sep-2020 11:04:46 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200908-16524.b\RI09P101.D				
Injection Date:	09-Sep-2020 14:44:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	140-20194-A-20	Lab Sample ID:	140-20194-20	Worklist Smp#:	5
Client ID:	SV-118-A-29				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MR\20200908-16524.b\RI09P101.D				
Lims ID:	140-20194-A-20				
Client ID:	SV-118-A-29				
Sample Type:	Client				
Inject. Date:	09-Sep-2020 14:44:30	ALS Bottle#:	1	Worklist Smp#:	5
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016524-005				
Misc. Info.:	140-20194-a-20				
Operator ID:	HMT	Instrument ID:	MR		
Method:	\\chromfs\Knoxville\ChromData\MR\20200908-16524.b\MR_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	10-Sep-2020 11:04:46	Calib Date:	29-Aug-2020 00:02:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1028				

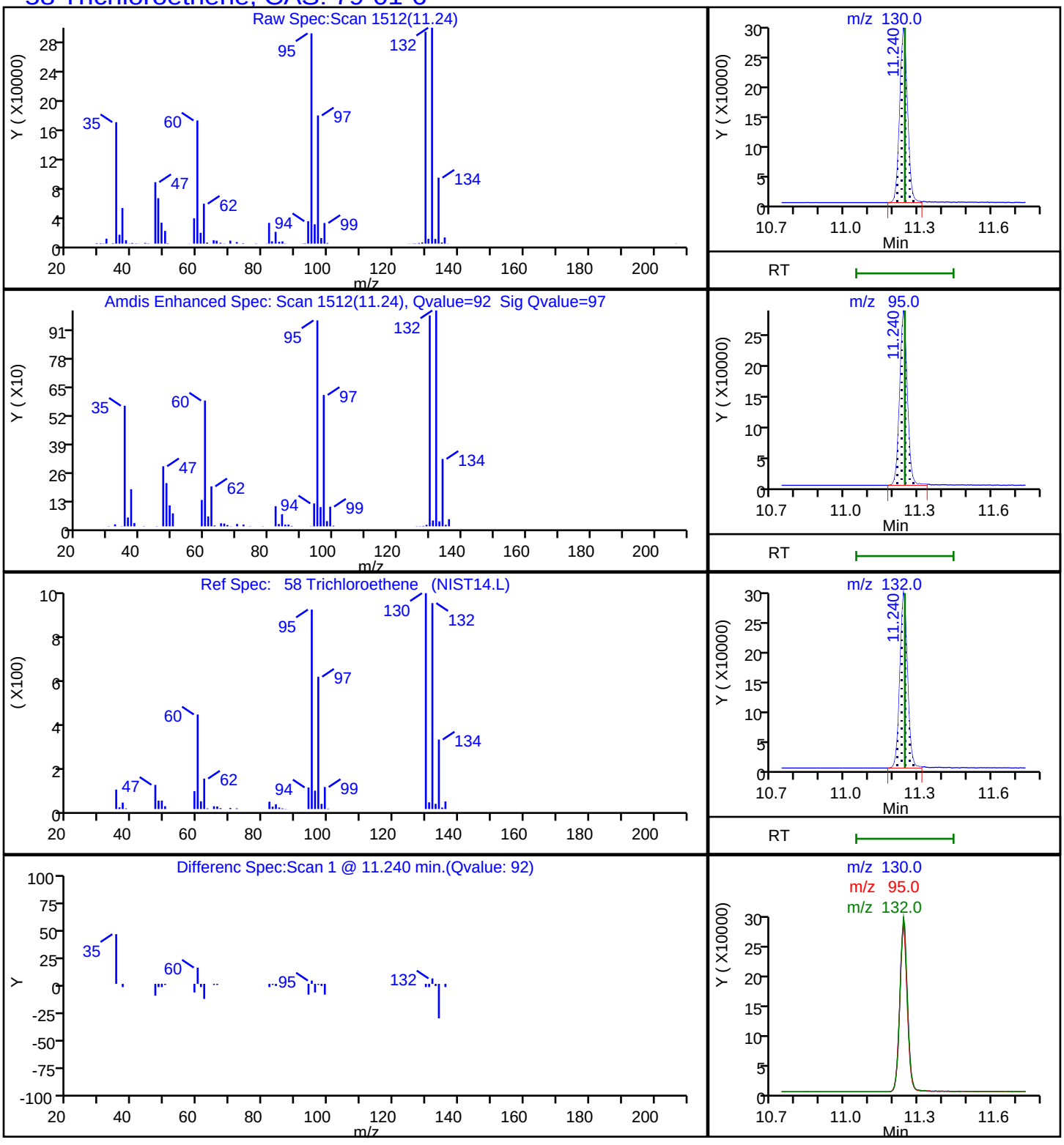
First Level Reviewer: khachitpongpanits Date: 10-Sep-2020 11:04:46

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	4.50	96.93

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200908-16524.b\RI09P101.D		
Injection Date:	09-Sep-2020 14:44:30	Instrument ID:	MR
Lims ID:	140-20194-A-20	Lab Sample ID:	140-20194-20
Client ID:	SV-118-A-29		
Operator ID:	HMT	ALS Bottle#:	1 Worklist Smp#: 5
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

58 Trichloroethene, CAS: 79-01-6



FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 140-42295/9	GI01IC01.D
Level 2	IC 140-42295/10	GI01IC02.D
Level 3	IC 140-42295/11	GI01IC03.D
Level 4	IC 140-42295/12	GI01IC04.D
Level 5	IC 140-42295/13	GI01IC05.D
Level 6	IC 140-42295/14	GI01IC06.D
Level 7	ICIS 140-42295/15	GI01IC07.D
Level 8	IC 140-42295/7	GI01IC08.D
Level 9	IC 140-42295/5	GI01IC09.D
Level 10	IC 140-42295/3	GI01IC10.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Chlorodifluoromethane	+++++ 4.2174	+++++ 3.9338	5.0807 4.6204	4.1800 4.4013	4.2893 3.6854	Ave		4.3010				9.8		30.0			
Propene	+++++ 2.1016	+++++ 1.9924	+++++ 2.2188	2.4122 2.0989	2.1914 1.7884	Ave		2.1148				9.2		30.0			
Dichlorodifluoromethane	+++++ 4.6221	+++++ 4.5171	5.1025 5.2936	5.0254 5.0487	4.6333 4.2256	Ave		4.8085				7.5		30.0			
Chloromethane	+++++ 0.8378	+++++ 0.7711	+++++ 0.9046	1.0496 0.8511	0.9048 0.7078	Ave		0.8610				12.7		30.0			
1,2-Dichloro-1,1,2,2-tetrafluoroethane	2.7419 2.4849	3.0305 2.6157	2.6182 3.1606	2.5493 3.1468	2.5986 2.4827	Ave		2.7429				9.8		30.0			
Vinyl chloride	2.2108 2.3591	3.0033 2.2051	2.6105 2.5785	2.2040 2.4712	2.3833 2.0097	Ave		2.4035				11.7		30.0			
1,3-Butadiene	+++++ 2.1302	+++++ 1.9721	+++++ 2.3036	2.1726 2.2136	2.2042 1.8343	Ave		2.1187				7.6		30.0			
Butane	+++++ 4.3488	+++++ 4.0253	4.6585 4.5089	4.6118 4.2262	4.5015 3.5538	Ave		4.3044				8.6		30.0			
Bromomethane	+++++ 1.3715	+++++ 1.3578	1.5650 1.6350	1.4697 1.5631	1.4210 1.2343	Ave		1.4522				9.1		30.0			
Chloroethane	+++++ 0.9275	+++++ 0.9381	1.2120 1.0916	0.9857 1.0523	0.9542 0.8144	Ave		0.9970				12.1		30.0			
Ethanol	+++++ 0.8956	+++++ 0.9494	+++++ 1.0644	0.8703 0.7979	1.0301 0.7479	Ave		0.9079				12.8		30.0			
Vinyl bromide	+++++ 1.1432	1.2751 1.1648	1.2369 1.4478	1.2077 1.3491	1.2537 1.0693	Ave		1.2386				9.1		30.0			
2-Methylbutane	+++++ 2.9599	+++++ 2.7561	+++++ 3.3238	2.9753 3.0693	2.9458 2.4296	Ave		2.9228				9.5		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Trichlorofluoromethane	3.9167 3.5393	4.1610 3.2865	4.1430 4.0916	3.5786 3.8541	3.5904 3.2131	Ave		3.7374				9.3		30.0			
Acrolein	+++++ 0.4569	+++++ 0.4173	+++++ 0.3780	+++++ 0.4417	0.5137 0.4710	Ave		0.4464				10.4		30.0			
Acetonitrile	+++++ 0.7945	+++++ 0.8380	+++++ 0.7024	+++++ 0.6506	1.0870 0.7195	Ave		0.7987				19.6		30.0			
Acetone	+++++ 0.9473	+++++ 0.8615	+++++ 0.6959	0.7948 0.6300	0.9823 0.6878	Ave		0.7999				17.0		30.0			
Isopropyl alcohol	+++++ 2.3768	+++++ 2.2904	+++++ 3.0620	2.2332 2.0902	2.6720 1.9961	Ave		2.3887				15.4		30.0			
Pentane	+++++ 0.2407	+++++ 0.2227	+++++ 0.2836	0.2386 0.2584	0.2444 0.2123	Ave		0.2430				9.6		30.0			
Ethyl ether	+++++ 1.8676	+++++ 1.8292	+++++ 1.5681	1.5565 1.5554	1.9511 1.6408	Ave		1.7098				9.8		30.0			
1,1-Dichloroethene	+++++ 1.1460	1.2138 1.1071	1.3220 1.2854	1.0888 1.2140	1.2249 1.0475	Ave		1.1833				7.8		30.0			
Acrylonitrile	+++++ 1.1577	+++++ 1.1526	+++++ 0.9121	1.0056 1.0241	1.2114 1.1792	Ave		1.0918				10.2		30.0			
tert-Butyl alcohol	+++++ 2.4598	+++++ 2.1786	+++++ 3.1532	2.3200 2.0921	2.6745 2.0080	Ave		2.4123				16.5		30.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	2.9739 2.5990	2.9936 2.5089	2.9993 2.8289	2.7308 2.7120	2.6787 2.3381	Ave		2.7363				8.0		30.0			
Methylene Chloride	+++++ 1.1888	+++++ 1.1040	+++++ 1.2681	+++++ 1.2031	1.2912 1.0471	Ave		1.1837				7.9		30.0			
3-Chloropropene	+++++ 2.0584	+++++ 1.8527	3.4211 2.1137	2.3717 2.1326	2.2916 +++++	Ave		2.3203				22.1		30.0			
Carbon disulfide	+++++ 3.9864	+++++ 3.6463	4.6626 4.2662	3.9658 3.9565	3.9101 3.4240	Ave		3.9773				9.4		30.0			
trans-1,2-Dichloroethene	+++++ 1.3276	1.4977 1.2596	1.6040 1.4777	1.2760 1.4233	1.4268 1.2441	Ave		1.3930				8.9		30.0			
2-Methylpentane	+++++ 5.3070	+++++ 4.9992	6.5041 5.4750	5.2908 5.3755	5.6347 4.8807	Ave		5.4334				9.1		30.0			
Methyl tert-butyl ether	+++++ 3.1393	+++++ 3.0946	+++++ 2.7875	2.3858 2.6178	3.2114 2.9473	Ave		2.8834				10.5		30.0			
1,1-Dichloroethane	+++++ 3.4115	3.7876 3.2158	3.9181 3.5051	3.4555 3.4303	3.4976 3.0350	Ave		3.4730				7.6		30.0			
Vinyl acetate	+++++ 4.8276	+++++ 5.0004	+++++ 3.9048	3.8303 4.2643	4.9123 5.0941	Ave		4.5477				11.8		30.0			
2-Butanone (MEK)	+++++ 0.6548	+++++ 0.6135	+++++ 0.5527	0.4972 0.4919	0.6747 0.5569	Ave		0.5774				12.6		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Hexane	+++++ 1.7503	+++++ 1.6732	2.0176 1.8319	1.8921 1.7798	1.8022 1.5922	Ave		1.7924				7.3		30.0			
cis-1,2-Dichloroethene	+++++ 1.4665	1.5582 1.3982	1.5881 1.5642	1.4357 1.4968	1.4885 1.3297	Ave		1.4807				5.7		30.0			
Ethyl acetate	+++++ 4.2053	+++++ 4.2696	+++++ 3.7315	+++++ 3.3697	4.2713 4.0410	Ave		3.9814				9.1		30.0			
Chloroform	3.6326 3.2428	3.8455 3.0621	4.0330 3.2724	3.2505 3.1262	3.3547 2.8423	Ave		3.3662				10.9		30.0			
Tetrahydrofuran	+++++ 2.1055	+++++ 2.1356	+++++ 1.9106	1.7359 1.7485	2.2340 2.1111	Ave		1.9973				10.0		30.0			
1,1,1-Trichloroethane	+++++ 3.1201	3.6579 2.9347	3.6746 3.3019	3.1348 3.2238	3.1883 2.9270	Ave		3.2403				8.4		30.0			
1,2-Dichloroethane	+++++ 0.5726	+++++ 0.4842	0.6275 0.6150	0.5495 0.5076	0.5324 0.4483	Ave		0.5421				11.5		30.0			
1-Butanol	+++++ 0.1665	+++++ 0.1260	+++++ 0.2219	+++++ 0.1221	0.1708 0.1138	Ave		0.1535				26.8		30.0			
Benzene	+++++ 1.0472	+++++ 0.8775	1.1251 1.1183	1.0176 0.9183	0.9768 0.8127	Ave		0.9867				11.4		30.0			
Cyclohexane	+++++ 0.1851	+++++ 0.1422	+++++ 0.1911	0.1843 0.1565	0.1713 0.1325	Ave		0.1661				13.8		30.0			
Carbon tetrachloride	0.6115 0.6342	0.7855 0.3732	0.6372 0.7687	0.6496 0.5332	0.6314 0.4745	Ave		0.6099				20.4		30.0			
2,3-Dimethylpentane	+++++ 0.2742	+++++ 0.2228	0.3087 0.2832	0.2513 0.2297	0.2718 0.1969	Ave		0.2548				14.4		30.0			
Thiophene	+++++ 0.6226	+++++ 0.5084	0.6481 0.6440	0.5323 0.5147	0.5936 0.4600	Ave		0.5655				12.5		30.0			
2,2,4-Trimethylpentane	+++++ 2.6529	+++++ 2.1576	2.5968 2.7357	2.5821 2.2056	2.4393 1.9434	Ave		2.4142				11.6		30.0			
Heptane	+++++ 0.4225	+++++ 0.3493	0.4467 0.4306	0.4137 0.3481	0.3833 0.3098	Ave		0.3880				12.5		30.0			
1,2-Dichloropropane	+++++ 0.4903	+++++ 0.4198	0.5242 0.4544	0.4420 0.4070	0.4670 0.3907	Ave		0.4494				9.9		30.0			
Trichloroethene	0.4268 0.4287	0.6851 0.3531	0.4447 0.4566	0.3977 0.3715	0.3907 0.3471	Ave		0.4302				22.6		30.0			
Dibromomethane	+++++ 0.4913	+++++ 0.3719	0.4798 0.4731	0.4427 0.3774	0.4069 0.3477	Ave		0.4239				13.0		30.0			
Bromodichloromethane	+++++ 0.7898	+++++ 0.6710	0.7786 0.8678	0.7548 0.6917	0.7246 0.6155	Ave		0.7367				10.7		30.0			
1,4-Dioxane	+++++ 0.0995	+++++ 0.1146	0.1383 0.1433	0.0983 0.0995	0.1218 0.1060	Ave		0.1151				15.5		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Methyl methacrylate	+++++ 0.6126	+++++ 0.5158	+++++ 0.5430	0.4167 0.4267	0.5480 0.4984	Ave		0.5088				13.6		30.0			
Methylcyclohexane	+++++ 0.7141	+++++ 0.5799	0.7102 0.7331	0.6975 0.6005	0.6391 0.5295	Ave		0.6505				11.5		30.0			
4-Methyl-2-pentanone (MIBK)	+++++ 0.9278	+++++ 0.8261	+++++ 1.0804	0.7409 0.6478	0.9390 0.8352	Ave		0.8567				16.5		30.0			
cis-1,3-Dichloropropene	+++++ 0.6560	+++++ 0.5378	0.6234 0.6358	0.6180 0.5649	0.5766 0.5208	Ave		0.5917				8.2		30.0			
trans-1,3-Dichloropropene	+++++ 0.5080	+++++ 0.4807	0.5744 0.5058	0.4699 0.4430	0.4959 0.4618	Ave		0.4924				8.1		30.0			
Toluene	+++++ 1.1362	+++++ 1.0313	1.2507 1.0326	0.9784 0.9458	1.1137 0.9804	Ave		1.0587				9.6		30.0			
1,1,2-Trichloroethane	+++++ 0.3651	+++++ 0.3332	0.3544 0.3478	0.3135 0.3004	0.3359 0.3042	Ave		0.3318				7.2		30.0			
2-Hexanone	+++++ 0.4283	+++++ 0.3609	+++++ 0.5255	0.3215 0.2913	0.4231 0.3950	Ave		0.3922				19.8		30.0			
Octane	+++++ 0.4065	+++++ 0.3682	0.4218 0.4332	0.3669 0.3485	0.4038 0.3377	Ave		0.3858				9.1		30.0			
C8 Range	+++++ 5.1496	+++++ 4.5413	+++++ 5.0824	4.9366 4.1728	4.8692 4.0260	Ave		4.6826				9.5		30.0			
Dibromochloromethane	+++++ 0.6038	+++++ 0.6015	0.6071 0.7470	0.5882 0.6071	0.6039 0.6314	Ave		0.6238				8.2		30.0			
1,2-Dibromoethane (EDB)	+++++ 0.6113	+++++ 0.5807	0.6903 0.6152	0.5414 0.5554	0.5986 0.5707	Ave		0.5955				7.8		30.0			
Tetrachloroethene	0.3922 0.3899	0.5714 0.3494	0.4232 0.4129	0.3811 0.3486	0.3633 0.3589	Ave		0.3991				16.5		30.0			
Chlorobenzene	+++++ 0.8917	+++++ 0.8359	0.9456 0.8804	0.8214 0.7793	0.8728 0.8230	Ave		0.8562				6.0		30.0			
Ethylbenzene	+++++ 1.4845	+++++ 1.3986	1.5812 1.3093	1.1895 1.1688	1.4349 1.3181	Ave		1.3606				10.4		30.0			
m-Xylene & p-Xylene	+++++ 1.1395	1.3560 1.0689	1.1696 1.0189	0.9045 0.9029	1.0775 1.0501	Ave		1.0764				12.9		30.0			
Nonane	+++++ 1.1178	+++++ 1.0412	1.1918 1.1156	0.9832 0.9695	1.0531 1.0220	Ave		1.0618				7.1		30.0			
Bromoform	+++++ 0.3530	0.4932 0.5262	0.4773 0.6766	0.4669 0.5829	0.4831 0.6638	Ave		0.5248				19.5		30.0			
Styrene	+++++ 0.8496	0.8564 0.8197	0.7693 0.8021	0.6128 0.7235	0.7599 0.8482	Ave		0.7824				10.0		30.0			
o-Xylene	+++++ 1.1834	+++++ 1.1099	1.2724 1.0625	0.9632 0.9188	1.1394 1.0648	Ave		1.0893				10.5		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
1,1,2,2-Tetrachloroethane	+++++ 0.9568	+++++ 0.8965	0.9614 0.9003	0.7850 0.7111	0.9017 0.8402	Ave		0.8691				9.9		30.0			
1,2,3-Trichloropropane	+++++ 0.2303	+++++ 0.2224	0.2139 0.2285	0.1808 0.1846	0.2198 0.2199	Ave		0.2125				9.0		30.0			
Isopropylbenzene	+++++ 1.5477	+++++ 1.4846	1.6346 1.4298	1.1749 1.2363	1.4395 1.5017	Ave		1.4311				10.8		30.0			
Propylbenzene	+++++ 0.4096	+++++ 0.3881	0.4490 0.3889	0.2983 0.3382	0.3607 0.4238	Ave		0.3821				12.7		30.0			
2-Chlorotoluene	+++++ 0.3740	+++++ 0.3672	0.3653 0.3802	0.3033 0.3491	0.3890 0.3999	Ave		0.3660				8.1		30.0			
4-Ethyltoluene	+++++ 1.5444	+++++ 1.4874	1.6377 1.4488	1.1082 1.2285	1.4027 1.5756	Ave		1.4292				12.6		30.0			
1,3,5-Trimethylbenzene	+++++ 0.6287	+++++ 0.5816	0.6485 0.5885	0.4212 0.4949	0.5763 0.6295	Ave		0.5712				13.5		30.0			
Alpha Methyl Styrene	+++++ 0.6091	+++++ 0.5921	+++++ 0.6036	0.4018 0.5445	0.5103 0.6897	Ave		0.5644				16.1		30.0			
Decane	+++++ 1.3958	+++++ 1.3245	1.4453 1.2935	1.1663 1.0979	1.3010 1.2736	Ave		1.2872				8.8		30.0			
tert-Butylbenzene	+++++ 1.3443	+++++ 1.3045	1.3391 1.3134	0.9248 1.1315	1.1828 1.5072	Ave		1.2560				13.9		30.0			
1,2,4-Trimethylbenzene	+++++ 1.3349	+++++ 1.2958	1.3725 1.3030	0.9005 1.0916	1.2317 1.4632	Ave		1.2492				14.2		30.0			
sec-Butylbenzene	+++++ 2.0106	+++++ 1.9451	2.0566 1.9618	1.4032 1.6599	1.7616 2.2768	Ave		1.8845				14.3		30.0			
1,3-Dichlorobenzene	0.7914 0.8744	1.0379 0.8623	0.9071 0.9390	0.7225 0.8650	0.7989 1.1012	Ave		0.8900				12.8		30.0			
Benzyl chloride	+++++ 1.1627	+++++ 1.2981	1.2725 1.2526	0.8444 1.0752	1.0888 1.4189	Ave		1.1766				15.0		30.0			
1,4-Dichlorobenzene	0.8212 0.8662	1.1563 0.8485	0.9244 0.9286	0.7311 0.8537	0.8219 1.0629	Ave		0.9015				13.9		30.0			
4-Isopropyltoluene	+++++ 1.5739	+++++ 1.5520	1.5326 1.5665	1.0593 1.3129	1.3776 1.6980	Ave		1.4591				13.8		30.0			
1,2,3-Trimethylbenzene	+++++ 1.3535	+++++ 1.3304	1.3699 1.3206	0.9147 1.0928	1.2244 1.3703	QuaF		1.0451	0.0196912						0.9950		0.9900
1,2-Dichlorobenzene	+++++ 0.8393	+++++ 0.8396	0.9032 0.9175	0.6871 0.8170	0.7522 1.0674	Ave		0.8529				13.4		30.0			
Indane	+++++ 1.2941	1.3808 1.2787	1.3052 1.2997	0.8717 1.1236	1.1373 1.5429	Ave		1.2482				15.1		30.0			
Indene	+++++ 1.1144	+++++ 1.1166	1.0943 1.1458	0.7537 0.9883	0.9911 1.3506	Ave		1.0694				15.9		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Butylbenzene	+++++ 1.7840	+++++ 1.7332	1.8906 1.7260	1.2003 1.4015	1.6122 1.8819	Ave		1.6537				14.6		30.0			
Undecane	+++++ 1.5657	+++++ 1.4831	1.6754 1.4503	1.1926 1.1849	1.4250 1.5159	Ave		1.4366				11.9		30.0			
1,2-Dibromo-3-Chloropropane	+++++ 0.3524	+++++ 0.4563	0.3665 0.5320	0.2980 0.4064	0.3669 0.5757	QuaF		0.3520	0.0136829						0.9930		0.9900
1,2,4,5-Tetramethylbenzene	+++++ 1.3759	+++++ 1.4754	1.5696 1.5953	0.8949 1.2219	1.2986 1.7205	QuaF		1.0880	0.0385563						0.9930		0.9900
Dodecane	+++++ 1.4953	+++++ 1.1035	+++++ 1.4579	1.0479 1.0511	1.3963 1.2270	Ave		1.2542				15.5		30.0			
1,2,4-Trichlorobenzene	+++++ 0.6689	+++++ 0.7087	0.8181 0.8251	0.5088 0.7325	0.6450 1.1015	Ave		0.7511				23.1		30.0			
Naphthalene	+++++ 1.5967	2.4276 1.7346	2.1874 1.9122	1.1790 1.4929	1.6126 2.1629	Ave		1.8118				21.8		30.0			
Hexachlorobutadiene	+++++ 0.6043	+++++ 0.6330	0.7229 0.7599	0.4569 0.7265	0.5378 +++++	Ave		0.6345				17.5		30.0			
1,2,3-Trichlorobenzene	+++++ 0.6619	+++++ 0.6779	0.8148 0.8166	0.4626 0.7112	0.6095 1.0297	Ave		0.7230				23.3		30.0			
2-Methylnaphthalene	+++++ 0.6920	+++++ 0.4527	+++++ 1.2986	+++++ 0.8133	0.7500 0.6688	Ave		0.7792				36.2		50.0			
1-Methylnaphthalene	+++++ 0.7883	+++++ 0.4816	+++++ 1.3389	0.6525 0.8306	0.8523 0.6090	Ave		0.7933				34.7		50.0			
4-Bromofluorobenzene (Surr)	0.7279 0.7634	0.7355 0.7715	0.7208 0.7607	0.7393 0.7936	0.7384 0.7811	Ave		0.7532				3.2		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 140-42295/9	GI01IC01.D
Level 2	IC 140-42295/10	GI01IC02.D
Level 3	IC 140-42295/11	GI01IC03.D
Level 4	IC 140-42295/12	GI01IC04.D
Level 5	IC 140-42295/13	GI01IC05.D
Level 6	IC 140-42295/14	GI01IC06.D
Level 7	ICIS 140-42295/15	GI01IC07.D
Level 8	IC 140-42295/7	GI01IC08.D
Level 9	IC 140-42295/5	GI01IC09.D
Level 10	IC 140-42295/3	GI01IC10.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
Chlorodifluoromethane	CBM	Ave	+++++ 126387	+++++ 254491	11226 595533	19940 1219560	48665 2051104	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Propene	CBM	Ave	+++++ 62980	+++++ 128895	+++++ 285979	11507 581585	24863 995335	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Dichlorodifluoromethane	CBM	Ave	+++++ 138515	+++++ 292225	11274 682291	23973 1398945	52568 2351785	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Chloromethane	CBM	Ave	+++++ 25107	+++++ 49882	+++++ 116599	5007 235833	10266 393942	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,2-Dichloro-1,1,2,2-tetrafluoroethane	CBM	Ave	1998 74466	3458 169218	5785 407375	12161 871962	29483 1381764	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Vinyl chloride	CBM	Ave	1611 70697	3427 142653	5768 332339	10514 684743	27040 1118505	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,3-Butadiene	CBM	Ave	+++++ 63838	+++++ 127581	+++++ 296910	10364 613368	25008 1020894	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Butane	CBM	Ave	+++++ 130324	+++++ 260407	10293 581152	22000 1171057	51072 1977905	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Bromomethane	CBM	Ave	+++++ 41102	+++++ 87843	3458 210733	7011 433116	16122 686953	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Chloroethane	CBM	Ave	+++++ 27795	+++++ 60690	2678 140702	4702 291588	10826 453281	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Ethanol	CBM	Ave	+++++ 134201	+++++ 307085	+++++ 685930	20757 1105422	58436 2081107	+++++ 5.00	+++++ 10.0	+++++ 20.0	0.800 40.0	2.00 80.0
Vinyl bromide	CBM	Ave	+++++ 34260	1455 75357	2733 186602	5761 373832	14224 595103	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Methylbutane	CBM	Ave	+++++ 88701	+++++ 178302	+++++ 428407	14193 850465	33422 1352213	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Trichlorofluoromethane	CBM	Ave	2854 106066	4748 212612	9154 527367	17071 1067934	40736 1788276	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
Acrolein	CBM	Ave	+++++ 13692	+++++ 26996	+++++ 48727	+++++ 122401	5828 262114	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
Acetonitrile	CBM	Ave	+++++ 23808	+++++ 54213	+++++ 90528	+++++ 180279	12333 400450	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
Acetone	CBM	Ave	+++++ 85167	+++++ 167195	+++++ 269068	11375 523707	33434 1148398	+++++ 3.00	+++++ 6.00	+++++ 12.0	0.480 24.0	1.20 48.0
Isopropyl alcohol	CBM	Ave	+++++ 213678	+++++ 444518	+++++ 1184009	31959 1737523	90947 3332728	+++++ 3.00	+++++ 6.00	+++++ 12.0	0.480 24.0	1.20 48.0
Pentane	CBM	Ave	+++++ 7214	+++++ 14405	+++++ 36548	1138 71611	2773 118178	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Ethyl ether	CBM	Ave	+++++ 55969	+++++ 118337	+++++ 202112	7425 431001	22137 913197	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,1-Dichloroethene	CBM	Ave	+++++ 34343	1385 71623	2921 165673	5194 336401	13897 583003	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Acrylonitrile	CBM	Ave	+++++ 34693	+++++ 74563	+++++ 117560	4797 283762	13744 656282	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
tert-Butyl alcohol	CBM	Ave	+++++ 73714	+++++ 140940	+++++ 406423	11067 579708	30344 1117573	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,1,2-Trichloro-1,2,2-trifluoroetha ne	CBM	Ave	2167 77887	3416 162311	6627 364620	13027 751469	30392 1301292	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Methylene Chloride	CBM	Ave	+++++ 35627	+++++ 71422	+++++ 163443	+++++ 333362	14649 582763	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
3-Chloropropene	CBM	Ave	+++++ 61687	+++++ 119860	7559 272432	11314 590936	26000 +++++	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
Carbon disulfide	CBM	Ave	+++++ 119464	+++++ 235894	10302 549880	18918 1096319	44363 1905658	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
trans-1,2-Dichloroethene	CBM	Ave	+++++ 39785	1709 81489	3544 190465	6087 394374	16188 692384	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Methylpentane	CBM	Ave	+++++ 159038	+++++ 323413	14371 705673	25239 1489517	63929 2716361	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Methyl tert-butyl ether	CBM	Ave	+++++ 94079	+++++ 200198	+++++ 359280	11381 725384	36435 1640351	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,1-Dichloroethane	CBM	Ave	+++++ 102235	4322 208044	8657 451772	16484 950498	39683 1689157	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Vinyl acetate	CBM	Ave	+++++ 144673	+++++ 323495	+++++ 503287	18272 1181597	55733 2835157	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
2-Butanone (MEK)	CBM	Ave	+++++ 19622	+++++ 39691	+++++ 71237	2372 136308	7655 309968	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Hexane	CBM	Ave	+++++ 52452	+++++ 108248	4458 236115	9026 493163	20447 886142	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
cis-1,2-Dichloroethene	CBM	Ave	+++++ 43948	1778 90453	3509 201607	6849 414738	16888 740051	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
Ethyl acetate	CBM	Ave	+++++ 126022	+++++ 276215	+++++ 480959	+++++ 933715	48461 2249047	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
Chloroform	CBM	Ave	2647 97178	4388 198099	8911 421785	15506 866236	38061 1581905	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Tetrahydrofuran	CBM	Ave	+++++ 63096	+++++ 138158	+++++ 246265	8281 484501	25346 1174961	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,1,1-Trichloroethane	CBM	Ave	+++++ 93502	4174 189856	8119 425590	14954 893295	36173 1629049	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2-Dichloroethane	DFBZ	Ave	+++++ 74570	+++++ 156222	6831 340796	11727 712592	29376 1309457	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1-Butanol	DFBZ	Ave	+++++ 21677	+++++ 40646	+++++ 122991	+++++ 171394	9421 332356	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
Benzene	DFBZ	Ave	+++++ 136368	+++++ 283155	12247 619691	21718 1289194	53895 2374147	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Cyclohexane	DFBZ	Ave	+++++ 24100	+++++ 45891	+++++ 105905	3934 219701	9450 386947	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Carbon tetrachloride	DFBZ	Ave	2115 82585	3137 120424	6936 425976	13863 748515	34839 1386144	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2,3-Dimethylpentane	DFBZ	Ave	+++++ 35713	+++++ 71885	3360 156938	5364 322420	14994 575076	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Thiophene	DFBZ	Ave	+++++ 81080	+++++ 164043	7055 356857	11360 722547	32749 1343789	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2,2,4-Trimethylpentane	DFBZ	Ave	+++++ 345476	+++++ 696193	28267 1515982	55108 3096308	134587 5676918	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Heptane	DFBZ	Ave	+++++ 55017	+++++ 112703	4863 238604	8829 488721	21146 905044	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2-Dichloropropane	DFBZ	Ave	+++++ 63849	+++++ 135449	5706 251789	9433 571342	25767 1141437	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Trichloroethene	DFBZ	Ave	1476 55829	2736 113938	4841 253014	8487 521549	21557 1014059	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Dibromomethane	DFBZ	Ave	+++++ 63978	+++++ 119998	5223 262180	9449 529820	22450 1015819	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Bromodichloromethane	DFBZ	Ave	+++++ 102850	+++++ 216520	8475 480892	16110 971037	39980 1797881	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,4-Dioxane	DFBZ	Ave	+++++ 12962	+++++ 36968	1505 79403	2097 139641	6721 309615	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Methyl methacrylate	DFBZ	Ave	+++++ 79777	+++++ 166422	+++++ 300901	8893 599074	30238 1456048	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Methylcyclohexane	DFBZ	Ave	+++++ 92997	+++++ 187114	7731 406216	14886 842977	35264 1546743	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
4-Methyl-2-pentanone (MIBK)	DFBZ	Ave	+++++ 120828	+++++ 266548	+++++ 598699	15812 909376	51809 2439624	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
cis-1,3-Dichloropropene	DFBZ	Ave	+++++ 85421	+++++ 173523	6786 352319	13190 793045	31812 1521326	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
trans-1,3-Dichloropropene	CBZd 5	Ave	+++++ 68823	+++++ 152113	6177 296890	10340 658647	27117 1383502	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Toluene	CBZd 5	Ave	+++++ 153919	+++++ 326329	13451 606087	21528 1406174	60905 2937051	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,1,2-Trichloroethane	CBZd 5	Ave	+++++ 49466	+++++ 105417	3811 204172	6897 446561	18372 911205	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Hexanone	CBZd 5	Ave	+++++ 58020	+++++ 114195	+++++ 308468	7073 433145	23138 1183432	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Octane	CBZd 5	Ave	+++++ 55073	+++++ 116497	4536 254271	8073 518088	22082 1011643	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
C8 Range	CBZd 5	Ave	+++++ 697619	+++++ 1436960	+++++ 2983142	108617 6203684	266284 12060880	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Dibromochloromethane	CBZd 5	Ave	+++++ 81803	+++++ 190331	6529 438464	12942 902612	33024 1891483	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2-Dibromoethane (EDB)	CBZd 5	Ave	+++++ 82810	+++++ 183756	7424 361106	11912 825710	32736 1709784	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Tetrachloroethene	CBZd 5	Ave	1279 52818	2500 110572	4551 242360	8385 518316	19868 1075236	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Chlorobenzene	CBZd 5	Ave	+++++ 120798	+++++ 264485	10169 516782	18072 1158553	47729 2465447	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Ethylbenzene	CBZd 5	Ave	+++++ 201106	+++++ 442535	17005 768480	26172 1737569	78472 3948553	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
m-Xylene & p-Xylene	CBZd 5	Ave	+++++ 308731	11865 676428	25157 1196112	39802 2684790	117852 6291833	+++++ 2.00	0.0800 4.00	0.160 8.00	0.320 16.0	0.800 32.0
Nonane	CBZd 5	Ave	+++++ 151433	+++++ 329467	12817 654836	21633 1441294	57593 3061549	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Bromoform	CBZd 5	Ave	+++++ 47825	2158 166485	5133 397152	10274 866530	26419 1988611	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Styrene	CBZd 5	Ave	+++++ 115089	3747 259361	8273 470774	13483 1075638	41558 2541086	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
o-Xylene	CBZd 5	Ave	+++++ 160310	+++++ 351197	13684 623631	21193 1365939	62312 3189901	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,1,2,2-Tetrachloroethane	CBZd 5	Ave	+++++ 129612	+++++ 283671	10339 528435	17273 1057194	49310 2516976	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2,3-Trichloropropane	CBZd 5	Ave	+++++ 31198	+++++ 70357	2300 134141	3979 274369	12020 658777	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Isopropylbenzene	CBZd 5	Ave	+++++ 209664	+++++ 469762	17579 839245	25851 1838036	78721 4498773	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Propylbenzene	CBZd 5	Ave	+++++ 55490	+++++ 122801	4829 228287	6564 502759	19728 1269531	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
2-Chlorotoluene	CBZd 5	Ave	+++++ 50660	+++++ 116178	3929 223185	6674 519001	21271 1197945	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
4-Ethyltoluene	CBZd 5	Ave	+++++ 209216	+++++ 470643	17613 850389	24383 1826353	76712 4720069	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,3,5-Trimethylbenzene	CBZd 5	Ave	+++++ 85164	+++++ 184043	6974 345419	9268 735810	31514 1885947	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Alpha Methyl Styrene	CBZd 5	Ave	+++++ 82510	+++++ 187336	+++++ 354303	8841 809517	27908 2066076	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Decane	CBZd 5	Ave	+++++ 189083	+++++ 419090	15543 759257	25661 1632200	71149 3815257	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
tert-Butylbenzene	CBZd 5	Ave	+++++ 182107	+++++ 412773	14401 770891	20349 1682234	64684 4515312	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2,4-Trimethylbenzene	CBZd 5	Ave	+++++ 180832	+++++ 410005	14761 764817	19813 1622836	67360 4383450	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
sec-Butylbenzene	CBZd 5	Ave	+++++ 272380	+++++ 615450	22118 1151509	30874 2467800	96336 6820666	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,3-Dichlorobenzene	CBZd 5	Ave	2581 118460	4541 272851	9755 551149	15896 1286011	43692 3298828	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Benzyl chloride	CBZd 5	Ave	+++++ 157512	+++++ 410741	13685 735219	18578 1598462	59541 4250505	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,4-Dichlorobenzene	CBZd 5	Ave	2678 117341	5059 268488	9941 545052	16086 1269190	44948 3184224	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
4-Isopropyltoluene	CBZd 5	Ave	+++++ 213219	+++++ 491082	16482 919460	23308 1951840	75338 5086898	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2,3-Trimethylbenzene	CBZd 5	QuaF	+++++ 183353	+++++ 420978	14733 775110	20125 1624627	66959 4105097	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2-Dichlorobenzene	CBZd 5	Ave	+++++ 113702	+++++ 265655	9714 538536	15119 1214657	41138 3197685	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Indane	CBZd 5	Ave	+++++ 175316	6041 404591	14037 762843	19180 1670413	62198 4622214	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Indene	CBZd 5	Ave	+++++ 150965	+++++ 353313	11769 672537	16584 1469257	54200 4046053	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Butylbenzene	CBZd 5	Ave	+++++ 241684	+++++ 548406	20333 1013104	26410 2083566	88169 5637666	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Undecane	CBZd 5	Ave	+++++ 212100	+++++ 469276	18018 851240	26240 1761528	77930 4541178	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2-Dibromo-3-Chloropropane	CBZd 5	QuaF	+++++ 47740	+++++ 144381	3942 312261	6556 604213	20067 1724558	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2,4,5-Tetramethylbenzene	CBZd 5	QuaF	+++++ 186389	+++++ 466848	16880 936361	19690 1816600	71014 5154231	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Dodecane	CBZd 5	Ave	+++++ 202565	+++++ 349178	+++++ 855739	23057 1562672	76360 3675886	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
1,2,4-Trichlorobenzene	CBZd5	Ave	+++++ 90620	+++++ 224232	8798 484290	11196 1089060	35272 3299699	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Naphthalene	CBZd5	Ave	+++++ 216311	10621 548866	23525 1122391	25941 2219533	88191 6479441	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Hexachlorobutadiene	CBZd5	Ave	+++++ 81866	+++++ 200284	7774 446054	10052 1080114	29410 +++++	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
1,2,3-Trichlorobenzene	CBZd5	Ave	+++++ 89666	+++++ 214504	8763 479297	10179 1057388	33331 3084852	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Methylnaphthalene	CBZd5	Ave	+++++ 93743	+++++ 143251	+++++ 762263	+++++ 1209161	41015 2003736	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
1-Methylnaphthalene	CBZd5	Ave	+++++ 106800	+++++ 152396	+++++ 785887	14358 1234833	46614 1824509	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
4-Bromofluorobenzene (Surr)	CBZd5	Ave	550738 479859	373260 566331	449593 517937	471736 684275	468432 678598	4.64 4.64	4.64 4.64	4.64 4.64	4.64 4.64	4.64 4.64

Curve Type Legend:

Ave = Average ISTD
QuaF = Quadratic ISTD forced zero

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 140-42295/9	GI01IC01.D
Level 2	IC 140-42295/10	GI01IC02.D
Level 3	IC 140-42295/11	GI01IC03.D
Level 4	IC 140-42295/12	GI01IC04.D
Level 5	IC 140-42295/13	GI01IC05.D
Level 6	IC 140-42295/14	GI01IC06.D
Level 7	ICIS 140-42295/15	GI01IC07.D
Level 8	IC 140-42295/7	GI01IC08.D
Level 9	IC 140-42295/5	GI01IC09.D
Level 10	IC 140-42295/3	GI01IC10.D

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
Chlorodifluoromethane	+++++	+++++	18.1						50			
Propene	+++++	+++++	+++++	14.1						50		
Dichlorodifluoromethane	+++++	+++++	6.1						50			
Chloromethane	+++++	+++++	+++++	21.9						50		
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.0						50					
Vinyl chloride	-8.0						50					
1,3-Butadiene	+++++	+++++	+++++	2.5						50		
Butane	+++++	+++++	8.2						50			
Bromomethane	+++++	+++++	7.8						50			
Chloroethane	+++++	+++++	21.6						50			
Ethanol	+++++	+++++	+++++	-4.1						50		
Vinyl bromide	+++++	2.9						50				
2-Methylbutane	+++++	+++++	+++++	1.8						50		
Trichlorofluoromethane	4.8						50					

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
Acrolein	+++++	+++++	+++++	+++++	15.1						50	
Acetonitrile	+++++	+++++	+++++	+++++	36.1						50	
Acetone	+++++	+++++	+++++	-0.6						80		
Isopropyl alcohol	+++++	+++++	+++++	-6.5						50		
Pentane	+++++	+++++	+++++	-1.8						50		
Ethyl ether	+++++	+++++	+++++	-9.0						50		
1,1-Dichloroethene	+++++	2.6						50				
Acrylonitrile	+++++	+++++	+++++	-7.9						50		
tert-Butyl alcohol	+++++	+++++	+++++	-3.8						50		
1,1,2-Trichloro-1,2,2-trifluoroethane	8.7						50					
Methylene Chloride	+++++	+++++	+++++	+++++	9.1						80	
3-Chloropropene	+++++	+++++	47.4	+++++					50			
Carbon disulfide	+++++	+++++	17.2						50			
trans-1,2-Dichloroethene	+++++	7.5						50				
2-Methylpentane	+++++	+++++	19.7						50			
Methyl tert-butyl ether	+++++	+++++	+++++	-17.3						50		
1,1-Dichloroethane	+++++	9.1						50				
Vinyl acetate	+++++	+++++	+++++	-15.8						50		
2-Butanone (MEK)	+++++	+++++	+++++	-13.9						50		
Hexane	+++++	+++++	12.6						50			
cis-1,2-Dichloroethene	+++++	5.2						50				

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
Ethyl acetate	+++++	+++++	+++++	+++++	7.3						50	
Chloroform	7.9						50					
Tetrahydrofuran	+++++	+++++	+++++	-13.1						50		
1,1,1-Trichloroethane	+++++	12.9						50				
1,2-Dichloroethane	+++++	+++++	15.8						50			
1-Butanol	+++++	+++++	+++++	+++++	11.2						50	
Benzene	+++++	+++++	14.0						50			
Cyclohexane	+++++	+++++	+++++	10.9						50		
Carbon tetrachloride	0.3						50					
2,3-Dimethylpentane	+++++	+++++	21.1						50			
Thiophene	+++++	+++++	14.6						50			
2,2,4-Trimethylpentane	+++++	+++++	7.6						50			
Heptane	+++++	+++++	15.1						50			
1,2-Dichloropropane	+++++	+++++	16.6						50			
Trichloroethene	-0.8						50					
Dibromomethane	+++++	+++++	13.2						50			
Bromodichloromethane	+++++	+++++	5.7						50			
1,4-Dioxane	+++++	+++++	20.1						50			
Methyl methacrylate	+++++	+++++	+++++	-18.1						50		
Methylcyclohexane	+++++	+++++	9.2						50			
4-Methyl-2-pentanone (MIBK)	+++++	+++++	+++++	-13.5						50		

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
cis-1,3-Dichloropropene	+++++	+++++	5.4						50			
trans-1,3-Dichloropropene	+++++	+++++	16.6						50			
Toluene	+++++	+++++	18.1						50			
1,1,2-Trichloroethane	+++++	+++++	6.8						50			
2-Hexanone	+++++	+++++	+++++	-18.0						50		
Octane	+++++	+++++	9.3						50			
Dibromochloromethane	+++++	+++++	-2.7						50			
1,2-Dibromoethane (EDB)	+++++	+++++	15.9						50			
Tetrachloroethene	-1.7						50					
Chlorobenzene	+++++	+++++	10.4						50			
Ethylbenzene	+++++	+++++	16.2						50			
m-Xylene & p-Xylene	+++++	26.0						50				
Nonane	+++++	+++++	12.2						50			
Bromoform	+++++	-6.0						50				
Styrene	+++++	9.5						50				
o-Xylene	+++++	+++++	16.8						50			
1,1,2,2-Tetrachloroethane	+++++	+++++	10.6						50			
1,2,3-Trichloropropane	+++++	+++++	0.6						50			
Isopropylbenzene	+++++	+++++	14.2						50			
Propylbenzene	+++++	+++++	17.5						50			
2-Chlorotoluene	+++++	+++++	-0.2						50			

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
4-Ethyltoluene	+++++	+++++	14.6						50			
1,3,5-Trimethylbenzene	+++++	+++++	13.5						50			
Alpha Methyl Styrene	+++++	+++++	+++++	-28.8						50		
Decane	+++++	+++++	12.3						50			
tert-Butylbenzene	+++++	+++++	6.6						50			
1,2,4-Trimethylbenzene	+++++	+++++	9.9						50			
sec-Butylbenzene	+++++	+++++	9.1						50			
1,3-Dichlorobenzene	-11.1						50					
Benzyl chloride	+++++	+++++	8.1						50			
1,4-Dichlorobenzene	-8.9						50					
4-Isopropyltoluene	+++++	+++++	5.0						50			
1,2,3-Trimethylbenzene	+++++	+++++	30.8						50			
1,2-Dichlorobenzene	+++++	+++++	5.9						50			
Indane	+++++	10.6						50				
Indene	+++++	+++++	2.3						50			
Butylbenzene	+++++	+++++	14.3						50			
Undecane	+++++	+++++	16.6						50			
1,2-Dibromo-3-Chloropropane	+++++	+++++	3.8						50			
1,2,4,5-Tetramethylbenzene	+++++	+++++	43.7						50			
Dodecane	+++++	+++++	+++++	-16.4						50		
1,2,4-Trichlorobenzene	+++++	+++++	8.9						50			

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
Naphthalene	+++++	34.0						80				
Hexachlorobutadiene	+++++	+++++	13.9	+++++					50			
1,2,3-Trichlorobenzene	+++++	+++++	12.7						50			
2-Methylnaphthalene	+++++	+++++	+++++	+++++	-3.8						80	
1-Methylnaphthalene	+++++	+++++	+++++	-17.7						80		

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC10.D
Lims ID: IC L10
Client ID:
Sample Type: IC Calib Level: 10
Inject. Date: 01-Sep-2020 18:07:30 ALS Bottle#: 1 Worklist Smp#: 3
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016453-003
Misc. Info.: 314600
Operator ID: AFB Instrument ID: MG
Sublist: chrom-MG_TO15*sub17

Method: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 02-Sep-2020 12:23:04 Calib Date: 02-Sep-2020 03:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1035

First Level Reviewer: tajh Date: 02-Sep-2020 07:24:43

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.817	8.812	0.005	86	166966	4.80	4.80	
* 2 1,4-Difluorobenzene	114	11.001	10.996	0.005	97	876347	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.735	15.730	0.005	91	898721	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.374	17.374	0.000	95	678598	4.64	4.81	
6 Chlorodifluoromethane	51	3.699	3.703	-0.004	97	2051104	16.0	13.7	
7 Propene	41	3.716	3.716	0.000	99	995335	16.0	13.5	
8 Dichlorodifluoromethane	85	3.764	3.765	-0.001	99	2351785	16.0	14.1	
9 Chloromethane	52	3.947	3.945	0.002	98	393942	16.0	13.2	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.953	3.951	0.002	93	1381764	16.0	14.5	
11 Acetaldehyde	44	4.093	4.096	-0.003	98	2392045	80.0	67.9	
12 Vinyl chloride	62	4.115	4.114	0.001	99	1118505	16.0	13.4	
14 Butadiene	54	4.201	4.201	0.000	67	1020894	16.0	13.9	
13 Butane	43	4.201	4.202	-0.001	86	1977905	16.0	13.2	
15 Bromomethane	94	4.519	4.521	-0.002	98	686953	16.0	13.6	
16 Chloroethane	64	4.659	4.658	0.001	91	453281	16.0	13.1	
17 Ethanol	31	4.756	4.759	-0.003	95	2081107	80.0	65.9	
18 Vinyl bromide	106	4.961	4.960	0.001	98	595103	16.0	13.8	
19 2-Methylbutane	43	5.010	5.010	0.000	93	1352213	16.0	13.3	
20 Trichlorofluoromethane	101	5.231	5.229	0.002	98	1788276	16.0	13.8	
21 Acrolein	56	5.236	5.235	0.001	92	262114	16.0	16.9	
22 Acetonitrile	40	5.301	5.301	0.000	99	400450	16.0	14.4	
23 Acetone	58	5.344	5.355	-0.011	99	1148398	48.0	41.3	
24 Pentane	72	5.447	5.448	-0.001	95	118178	16.0	14.0	
25 Isopropyl alcohol	45	5.441	5.451	-0.010	93	3332728	48.0	40.1	
26 Ethyl ether	31	5.608	5.619	-0.011	90	913197	16.0	15.4	
27 1,1-Dichloroethene	96	5.932	5.928	0.004	90	583003	16.0	14.2	
28 Acrylonitrile	53	6.034	6.032	0.002	77	656282	16.0	17.3	
30 2-Methyl-2-propanol	59	6.034	6.059	-0.025	96	1117573	16.0	13.3	
29 1,1,2-Trichloro-1,2,2-trifluoroe	101	6.110	6.107	0.003	92	1301292	16.0	13.7	
31 Methylene Chloride	84	6.277	6.273	0.004	88	582763	16.0	14.2	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.293	6.289	0.004	93	1056256	16.0	13.1	
33 Carbon disulfide	76	6.439	6.438	0.001	97	1905658	16.0	13.8	
34 trans-1,2-Dichloroethene	96	7.086	7.082	0.004	91	692384	16.0	14.3	
35 2-Methylpentane	43	7.102	7.101	0.001	97	2716361	16.0	14.4	
36 Methyl tert-butyl ether	73	7.210	7.230	-0.020	94	1640351	16.0	16.4	
37 1,1-Dichloroethane	63	7.506	7.499	0.007	98	1689157	16.0	14.0	
38 Vinyl acetate	43	7.609	7.607	0.002	100	2835157	16.0	17.9	
39 2-Butanone (MEK)	72	8.056	8.063	-0.007	96	309968	16.0	15.4	
40 Hexane	56	8.083	8.082	0.001	92	886142	16.0	14.2	
41 Isopropyl ether	45	8.240	8.246	-0.006	96	3357122	16.0	16.1	
42 cis-1,2-Dichloroethene	96	8.488	8.483	0.005	96	740051	16.0	14.4	
43 Ethyl acetate	43	8.671	8.676	-0.005	97	2249047	16.0	16.2	
44 Chloroform	83	8.833	8.825	0.008	93	1581905	16.0	13.5	
45 Tert-butyl ethyl ether	59	8.914	8.928	-0.014	96	2787393	16.0	16.0	
46 Tetrahydrofuran	42	9.227	9.244	-0.017	91	1174961	16.0	16.9	
47 1,1,1-Trichloroethane	97	9.857	9.851	0.006	94	1629049	16.0	14.5	
48 1,2-Dichloroethane	62	9.965	9.958	0.007	95	1309457	16.0	13.2	
51 n-Butanol	31	10.418	10.442	-0.024	82	332356	16.0	11.9	
50 Benzene	78	10.456	10.451	0.005	93	2374147	16.0	13.2	
49 Cyclohexane	69	10.461	10.455	0.006	79	386947	16.0	12.8	
52 Carbon tetrachloride	117	10.483	10.476	0.007	92	1386144	16.0	12.4	
53 2,3-Dimethylpentane	71	10.580	10.577	0.003	90	575076	16.0	12.4	
54 Thiophene	84	10.731	10.725	0.006	93	1343789	16.0	13.0	
55 Isooctane	57	11.222	11.219	0.003	98	5676918	16.0	12.9	
56 n-Heptane	71	11.599	11.594	0.005	94	905044	16.0	12.8	
57 1,2-Dichloropropane	63	11.675	11.669	0.006	88	1141437	16.0	13.9	
58 Trichloroethene	130	11.712	11.706	0.006	93	1014059	16.0	12.9	
59 Dibromomethane	93	11.793	11.791	0.002	94	1015819	16.0	13.1	
60 Dichlorobromomethane	83	11.939	11.936	0.003	95	1797881	16.0	13.4	
61 1,4-Dioxane	88	11.955	11.974	-0.019	91	309615	16.0	14.7	
62 Methyl methacrylate	41	12.036	12.038	-0.002	86	1456048	16.0	15.7	
63 Methylcyclohexane	83	12.484	12.480	0.004	86	1546743	16.0	13.0	
64 4-Methyl-2-pentanone (MIBK)	43	12.888	12.898	-0.010	98	2439624	16.0	15.6	
65 cis-1,3-Dichloropropene	75	12.942	12.938	0.004	97	1521326	16.0	14.1	
66 trans-1,3-Dichloropropene	75	13.638	13.632	0.006	92	1383502	16.0	15.0	
67 Toluene	91	13.762	13.759	0.003	92	2937051	16.0	14.8	
68 1,1,2-Trichloroethane	83	13.837	13.831	0.006	95	911205	16.0	14.7	
69 2-Hexanone	58	14.225	14.231	-0.006	91	1183432	16.0	16.1	
70 n-Octane	85	14.457	14.454	0.003	97	1011643	16.0	14.0	
71 Chlorodibromomethane	129	14.538	14.536	0.002	96	1891483	16.0	16.2	
72 Ethylene Dibromide	107	14.829	14.826	0.003	97	1709784	16.0	15.3	
73 Tetrachloroethene	129	14.910	14.904	0.006	93	1075236	16.0	14.4	
75 Chlorobenzene	112	15.784	15.779	0.005	91	2465447	16.0	15.4	
74 2,3-Dimethylheptane	43	15.805	15.801	0.004	93	4656713	16.0	13.6	
78 Ethylbenzene	91	16.069	16.068	0.001	98	3948553	16.0	15.5	
79 m-Xylene & p-Xylene	91	16.237	16.232	0.005	97	6291833	32.0	31.2	
80 n-Nonane	57	16.657	16.654	0.003	93	3061549	16.0	15.4	
81 Bromoform	173	16.679	16.676	0.003	95	1988611	16.0	20.2	
82 Styrene	104	16.700	16.695	0.005	96	2541086	16.0	17.3	
83 o-Xylene	91	16.760	16.757	0.003	98	3189901	16.0	15.6	
84 1,1,2,2-Tetrachloroethane	83	17.083	17.078	0.005	98	2516976	16.0	15.5	
85 1,2,3-Trichloropropane	110	17.240	17.237	0.003	93	658777	16.0	16.6	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
86 Isopropylbenzene	105	17.347	17.344	0.003	97	4498773	16.0	16.8	
87 N-Propylbenzene	120	17.887	17.887	0.000	99	1269531	16.0	17.7	
88 2-Chlorotoluene	126	17.935	17.930	0.005	97	1197945	16.0	17.5	
89 4-Ethyltoluene	105	18.038	18.038	0.000	98	4720069	16.0	17.6	
90 1,3,5-Trimethylbenzene	120	18.113	18.109	0.004	92	1885947	16.0	17.6	
92 Alpha Methyl Styrene	118	18.345	18.340	0.005	88	2066076	16.0	19.5	
93 n-Decane	57	18.404	18.401	0.003	88	3815257	16.0	15.8	
94 tert-Butylbenzene	119	18.539	18.533	0.006	93	4515312	16.0	19.2	
95 1,2,4-Trimethylbenzene	105	18.550	18.547	0.003	96	4383450	16.0	18.7	
96 sec-Butylbenzene	105	18.809	18.804	0.005	98	6820666	16.0	19.3	
97 1,3-Dichlorobenzene	146	18.820	18.815	0.005	97	3298828	16.0	19.8	
98 Benzyl chloride	91	18.895	18.891	0.004	98	4250505	16.0	19.3	
99 1,4-Dichlorobenzene	146	18.906	18.905	0.001	94	3184224	16.0	18.9	
100 4-Isopropyltoluene	119	18.971	18.965	0.006	96	5086898	16.0	18.6	
101 1,2,3-Trimethylbenzene	105	19.019	19.019	0.000	99	4105097	16.0	16.1	
102 Butylcyclohexane	83	19.078	19.074	0.004	88	3628135	16.0	15.9	
103 2,3-Dihydroindene	117	19.267	19.262	0.005	93	4622214	16.0	19.8	
104 1,2-Dichlorobenzene	146	19.267	19.262	0.005	81	3197685	16.0	20.0	
106 Indene	116	19.397	19.392	0.005	90	4046053	16.0	20.2	
105 n-Butylbenzene	91	19.397	19.398	-0.001	98	5637666	16.0	18.2	
107 Undecane	57	19.709	19.708	0.001	93	4541178	16.0	16.9	
108 1,2-Dibromo-3-Chloropropane	157	19.860	19.858	0.002	95	1724558	16.0	16.1	
109 1,2,4,5-Tetramethylbenzene	119	20.152	20.150	0.002	98	5154231	16.0	16.1	
110 Dodecane	57	20.766	20.765	0.001	94	3675886	16.0	15.7	
111 1,2,4-Trichlorobenzene	180	20.960	20.957	0.003	94	3299699	16.0	23.5	
112 Naphthalene	128	21.095	21.095	0.000	99	6479441	16.0	19.1	
113 Hexachlorobutadiene	225	21.305	21.304	0.001	96	3184218	16.0	26.8	
114 1,2,3-Trichlorobenzene	180	21.376	21.372	0.004	96	3084852	16.0	22.8	
115 2-Methylnaphthalene	142	22.147	22.144	0.003	99	2003736	16.0	13.7	
116 1-Methylnaphthalene	142	22.319	22.319	0.000	99	1824509	16.0	12.3	
A 122 C8 Range	1	14.508	(14.393-14.597)		0	12060880	16.0	13.8	
S 123 1,2-Dichloroethene, Total	1				0		32.0	28.7	
S 124 Xylenes, Total	100				0		48.0	46.9	

Reagents:

40L10DQP_00019	Amount Added: 200.00	Units: mL	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

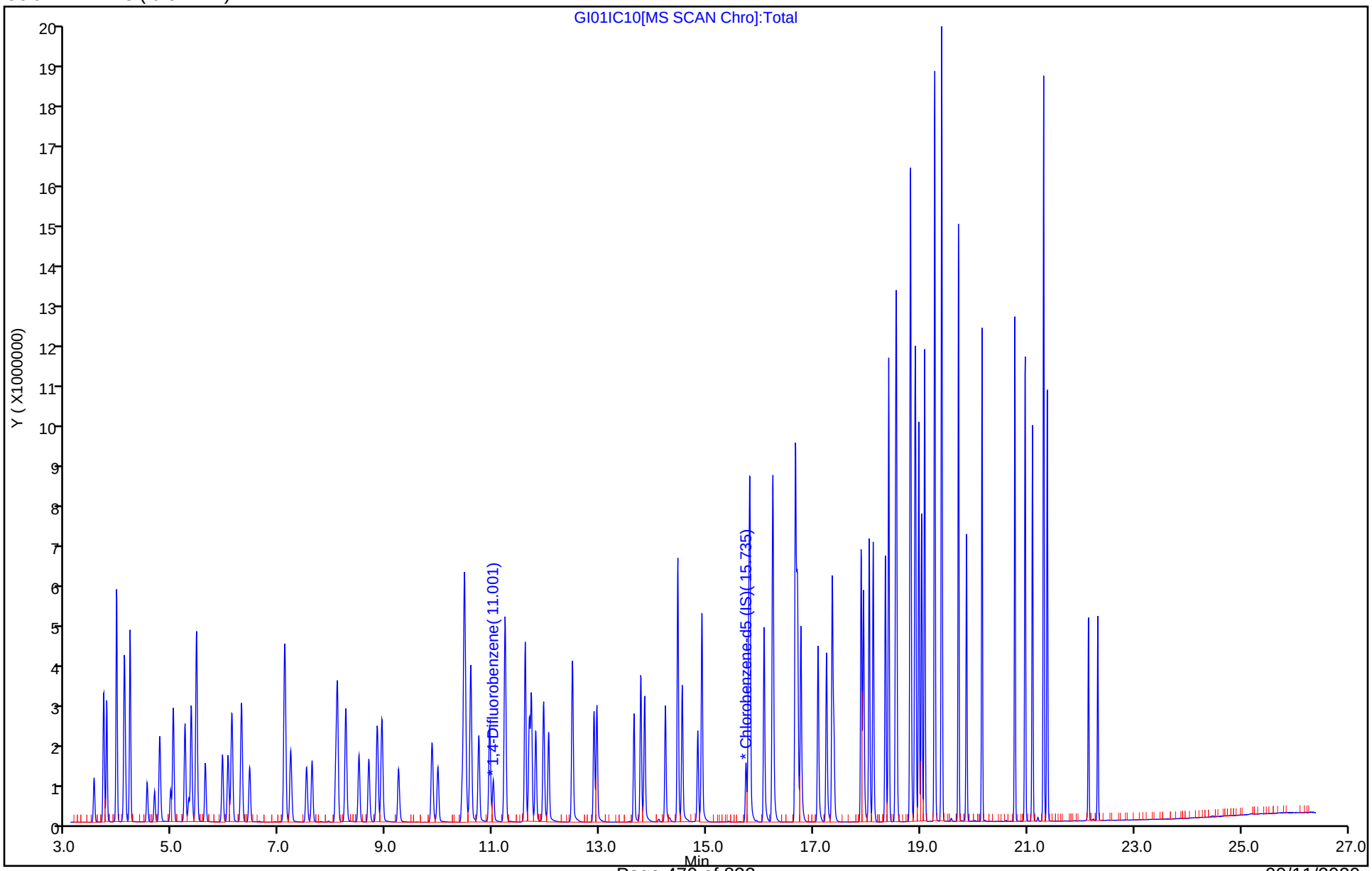
Report Date: 02-Sep-2020 12:23:05 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC10.D

Injection Date:	01-Sep-2020 18:07:30	Instrument ID:	MG	Operator ID:	AFB
Lims ID:	IC L10			Worklist Smp#:	3
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

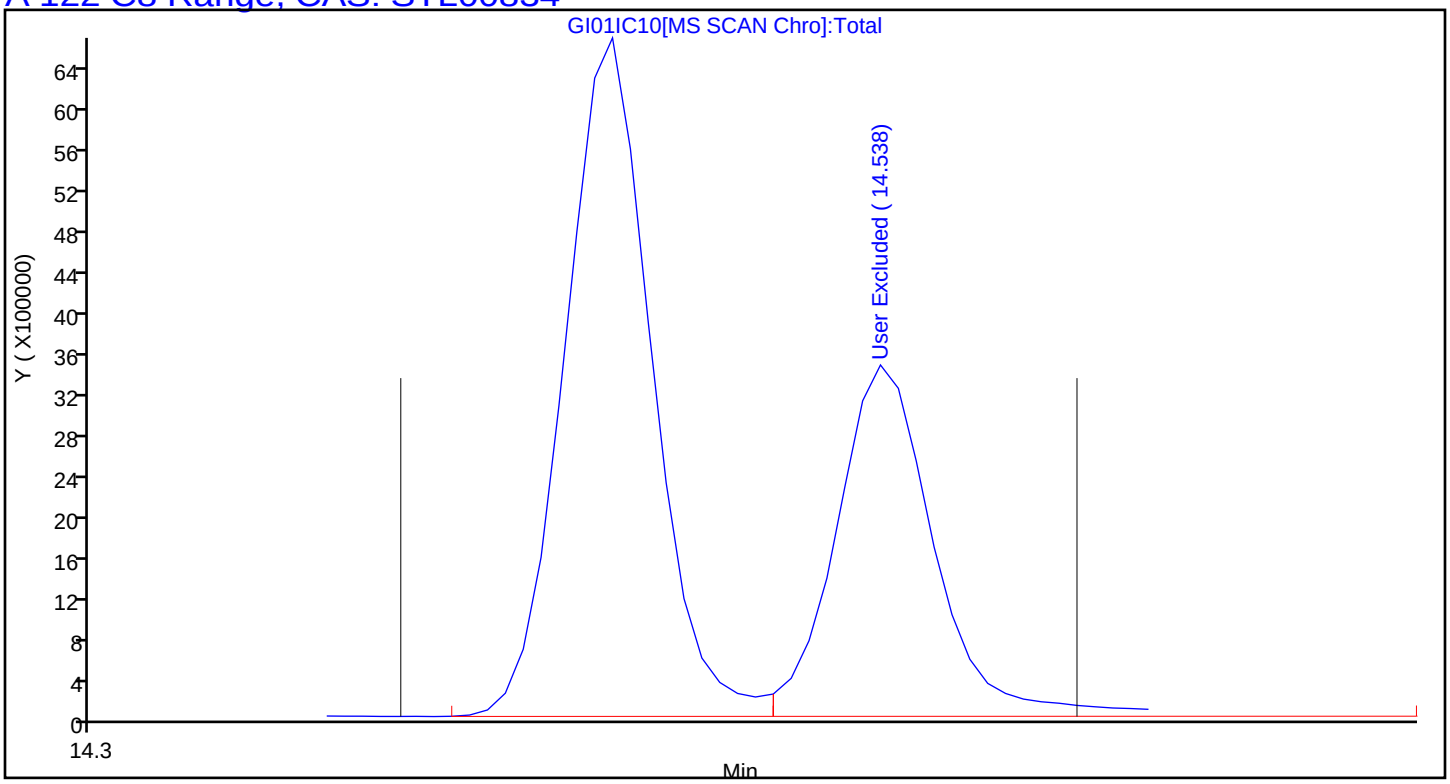


Report Date: 02-Sep-2020 12:23:05 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC10.D				
Injection Date:	01-Sep-2020 18:07:30	Instrument ID:	MG		
Lims ID:	IC L10				
Client ID:					
Operator ID:	AFB	ALS Bottle#:	1	Worklist Smp#:	3
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 122 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC09.D
Lims ID: IC L9
Client ID:
Sample Type: IC Calib Level: 9
Inject. Date: 01-Sep-2020 19:43:30 ALS Bottle#: 1 Worklist Smp#: 5
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016453-005
Misc. Info.: 314600
Operator ID: AFB Instrument ID: MG
Sublist: chrom-MG_TO15*sub17

Method: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 02-Sep-2020 12:23:12 Calib Date: 02-Sep-2020 03:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1035

First Level Reviewer: tajh Date: 02-Sep-2020 07:23:47

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.817	8.812	0.005	89	166255	4.80	4.80	
* 2 1,4-Difluorobenzene	114	11.001	10.996	0.005	98	842312	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.730	15.730	0.000	92	892014	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.374	17.374	0.000	94	684275	4.64	4.89	
6 Chlorodifluoromethane	51	3.705	3.703	0.002	97	1219560	8.00	8.19	
7 Propene	41	3.716	3.716	0.000	99	581585	8.00	7.94	
8 Dichlorodifluoromethane	85	3.764	3.765	-0.001	99	1398945	8.00	8.40	
9 Chloromethane	52	3.947	3.945	0.002	98	235833	8.00	7.91	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.953	3.951	0.002	92	871962	8.00	9.18	
11 Acetaldehyde	44	4.093	4.096	-0.003	95	1150692	40.0	32.8	
12 Vinyl chloride	62	4.115	4.114	0.001	98	684743	8.00	8.23	
14 Butadiene	54	4.201	4.201	0.000	67	613368	8.00	8.36	
13 Butane	43	4.201	4.202	-0.001	85	1171057	8.00	7.85	
15 Bromomethane	94	4.519	4.521	-0.002	99	433116	8.00	8.61	
16 Chloroethane	64	4.659	4.658	0.001	92	291588	8.00	8.44	
17 Ethanol	31	4.751	4.759	-0.008	94	1105422	40.0	35.2	
18 Vinyl bromide	106	4.961	4.960	0.001	98	373832	8.00	8.71	
19 2-Methylbutane	43	5.010	5.010	0.000	93	850465	8.00	8.40	
20 Trichlorofluoromethane	101	5.231	5.229	0.002	99	1067934	8.00	8.25	
21 Acrolein	56	5.231	5.235	-0.004	92	122401	8.00	7.92	
22 Acetonitrile	40	5.296	5.301	-0.005	100	180279	8.00	6.52	
23 Acetone	58	5.349	5.355	-0.006	99	523707	24.0	18.9	
25 Isopropyl alcohol	45	5.441	5.451	-0.010	99	1737523	24.0	21.0	
24 Pentane	72	5.447	5.448	-0.001	94	71611	8.00	8.51	
26 Ethyl ether	31	5.614	5.619	-0.005	90	431001	8.00	7.28	
27 1,1-Dichloroethene	96	5.932	5.928	0.004	90	336401	8.00	8.21	
30 2-Methyl-2-propanol	59	6.040	6.059	-0.019	96	579708	8.00	6.94	
28 Acrylonitrile	53	6.034	6.032	0.002	94	283762	8.00	7.50	
29 1,1,2-Trichloro-1,2,2-trifluoroe	101	6.104	6.107	-0.003	91	751469	8.00	7.93	
31 Methylene Chloride	84	6.277	6.273	0.004	89	333362	8.00	8.13	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.293	6.289	0.004	94	590936	8.00	7.35	
33 Carbon disulfide	76	6.439	6.438	0.001	97	1096319	8.00	7.96	
34 trans-1,2-Dichloroethene	96	7.086	7.082	0.004	91	394374	8.00	8.17	
35 2-Methylpentane	43	7.102	7.101	0.001	97	1489517	8.00	7.91	
36 Methyl tert-butyl ether	73	7.215	7.230	-0.015	92	725384	8.00	7.26	
37 1,1-Dichloroethane	63	7.501	7.499	0.002	98	950498	8.00	7.90	
38 Vinyl acetate	43	7.609	7.607	0.002	100	1181597	8.00	7.50	
39 2-Butanone (MEK)	72	8.051	8.063	-0.012	95	136308	8.00	6.82	
40 Hexane	56	8.083	8.082	0.001	93	493163	8.00	7.94	
41 Isopropyl ether	45	8.240	8.246	-0.006	95	1425530	8.00	6.89	
42 cis-1,2-Dichloroethene	96	8.482	8.483	-0.001	96	414738	8.00	8.09	
43 Ethyl acetate	43	8.671	8.676	-0.005	97	933715	8.00	6.77	
44 Chloroform	83	8.828	8.825	0.003	93	866236	8.00	7.43	
45 Tert-butyl ethyl ether	59	8.914	8.928	-0.014	96	1222689	8.00	7.04	
46 Tetrahydrofuran	42	9.232	9.244	-0.012	91	484501	8.00	7.00	
47 1,1,1-Trichloroethane	97	9.852	9.851	0.001	94	893295	8.00	7.96	
48 1,2-Dichloroethane	62	9.960	9.958	0.002	95	712592	8.00	7.49	
51 n-Butanol	31	10.418	10.442	-0.024	87	171394	8.00	6.36	
50 Benzene	78	10.456	10.451	0.005	93	1289194	8.00	7.45	
49 Cyclohexane	69	10.461	10.455	0.006	86	219701	8.00	7.54	
52 Carbon tetrachloride	117	10.478	10.476	0.002	94	748515	8.00	6.99	
53 2,3-Dimethylpentane	71	10.580	10.577	0.003	89	322420	8.00	7.21	
54 Thiophene	84	10.731	10.725	0.006	93	722547	8.00	7.28	
55 Isooctane	57	11.222	11.219	0.003	98	3096308	8.00	7.31	
56 n-Heptane	71	11.599	11.594	0.005	94	488721	8.00	7.18	
57 1,2-Dichloropropane	63	11.675	11.669	0.006	89	571342	8.00	7.24	
58 Trichloroethene	130	11.712	11.706	0.006	91	521549	8.00	6.91	
59 Dibromomethane	93	11.793	11.791	0.002	91	529820	8.00	7.12	
60 Dichlorobromomethane	83	11.939	11.936	0.003	95	971037	8.00	7.51	
61 1,4-Dioxane	88	11.955	11.974	-0.019	89	139641	8.00	6.91	
62 Methyl methacrylate	41	12.036	12.038	-0.002	86	599074	8.00	6.71	
63 Methylcyclohexane	83	12.484	12.480	0.004	86	842977	8.00	7.38	
64 4-Methyl-2-pentanone (MIBK)	43	12.888	12.898	-0.010	98	909376	8.00	6.05	
65 cis-1,3-Dichloropropene	75	12.942	12.938	0.004	96	793045	8.00	7.64	
66 trans-1,3-Dichloropropene	75	13.632	13.632	0.000	92	658647	8.00	7.20	
67 Toluene	91	13.762	13.759	0.003	92	1406174	8.00	7.15	
68 1,1,2-Trichloroethane	83	13.837	13.831	0.006	95	446561	8.00	7.24	
69 2-Hexanone	58	14.225	14.231	-0.006	92	433145	8.00	5.94	
70 n-Octane	85	14.457	14.454	0.003	97	518088	8.00	7.23	
71 Chlorodibromomethane	129	14.538	14.536	0.002	95	902612	8.00	7.79	
72 Ethylene Dibromide	107	14.829	14.826	0.003	98	825710	8.00	7.46	
73 Tetrachloroethene	129	14.905	14.904	0.001	92	518316	8.00	6.99	
75 Chlorobenzene	112	15.778	15.779	-0.001	91	1158553	8.00	7.28	
74 2,3-Dimethylheptane	43	15.805	15.801	0.004	93	2350533	8.00	6.90	
78 Ethylbenzene	91	16.070	16.068	0.002	99	1737569	8.00	6.87	
79 m-Xylene & p-Xylene	91	16.231	16.232	-0.001	98	2684790	16.0	13.4	
80 n-Nonane	57	16.657	16.654	0.003	93	1441294	8.00	7.30	
81 Bromoform	173	16.679	16.676	0.003	94	866530	8.00	8.89	
82 Styrene	104	16.695	16.695	0.000	97	1075638	8.00	7.40	
83 o-Xylene	91	16.760	16.757	0.003	98	1365939	8.00	6.75	
84 1,1,2,2-Tetrachloroethane	83	17.078	17.078	0.000	98	1057194	8.00	6.55	
85 1,2,3-Trichloropropane	110	17.240	17.237	0.003	93	274369	8.00	6.95	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
86 Isopropylbenzene	105	17.348	17.344	0.004	97	1838036	8.00	6.91	
87 N-Propylbenzene	120	17.887	17.887	0.000	98	502759	8.00	7.08	
88 2-Chlorotoluene	126	17.930	17.930	0.000	98	519001	8.00	7.63	
89 4-Ethyltoluene	105	18.038	18.038	0.000	98	1826353	8.00	6.88	
90 1,3,5-Trimethylbenzene	120	18.113	18.109	0.004	92	735810	8.00	6.93	
92 Alpha Methyl Styrene	118	18.340	18.340	0.000	86	809517	8.00	7.72	
93 n-Decane	57	18.404	18.401	0.003	88	1632200	8.00	6.82	
94 tert-Butylbenzene	119	18.534	18.533	0.001	97	1682234	8.00	7.21	
95 1,2,4-Trimethylbenzene	105	18.550	18.547	0.003	96	1622836	8.00	6.99	
96 sec-Butylbenzene	105	18.803	18.804	-0.001	99	2467800	8.00	7.05	
97 1,3-Dichlorobenzene	146	18.814	18.815	-0.001	97	1286011	8.00	7.78	
98 Benzyl chloride	91	18.890	18.891	-0.001	97	1598462	8.00	7.31	
99 1,4-Dichlorobenzene	146	18.906	18.905	0.001	96	1269190	8.00	7.58	
100 4-Isopropyltoluene	119	18.965	18.965	0.000	96	1951840	8.00	7.20	
101 1,2,3-Trimethylbenzene	105	19.019	19.019	0.000	99	1624627	8.00	7.35	
102 Butylcyclohexane	83	19.073	19.074	-0.001	86	1574993	8.00	6.94	
103 2,3-Dihydroindene	117	19.262	19.262	0.000	93	1670413	8.00	7.20	
104 1,2-Dichlorobenzene	146	19.262	19.262	0.000	83	1214657	8.00	7.66	
105 n-Butylbenzene	91	19.397	19.398	-0.001	98	2083566	8.00	6.78	
106 Indene	116	19.391	19.392	-0.001	90	1469257	8.00	7.39	
107 Undecane	57	19.709	19.708	0.001	94	1761528	8.00	6.60	
108 1,2-Dibromo-3-Chloropropane	157	19.860	19.858	0.002	94	604213	8.00	7.21	
109 1,2,4,5-Tetramethylbenzene	119	20.152	20.150	0.002	97	1816600	8.00	7.17	
110 Dodecane	57	20.766	20.765	0.001	93	1562672	8.00	6.70	
111 1,2,4-Trichlorobenzene	180	20.955	20.957	-0.002	94	1089060	8.00	7.80	
112 Naphthalene	128	21.095	21.095	0.000	99	2219533	8.00	6.59	
113 Hexachlorobutadiene	225	21.306	21.304	0.002	96	1080114	8.00	9.16	
114 1,2,3-Trichlorobenzene	180	21.370	21.372	-0.002	96	1057388	8.00	7.87	
115 2-Methylnaphthalene	142	22.147	22.144	0.003	99	1209161	8.00	8.35	
116 1-Methylnaphthalene	142	22.319	22.319	0.000	99	1234833	8.00	8.38	
A 122 C8 Range	1	14.505	(14.399-14.592)		0	6203684	8.00	7.13	
S 123 1,2-Dichloroethene, Total	1				0		16.0	16.3	
S 124 Xylenes, Total	100				0		24.0	20.2	

Reagents:

40L10DQP_00019	Amount Added: 100.00	Units: mL	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

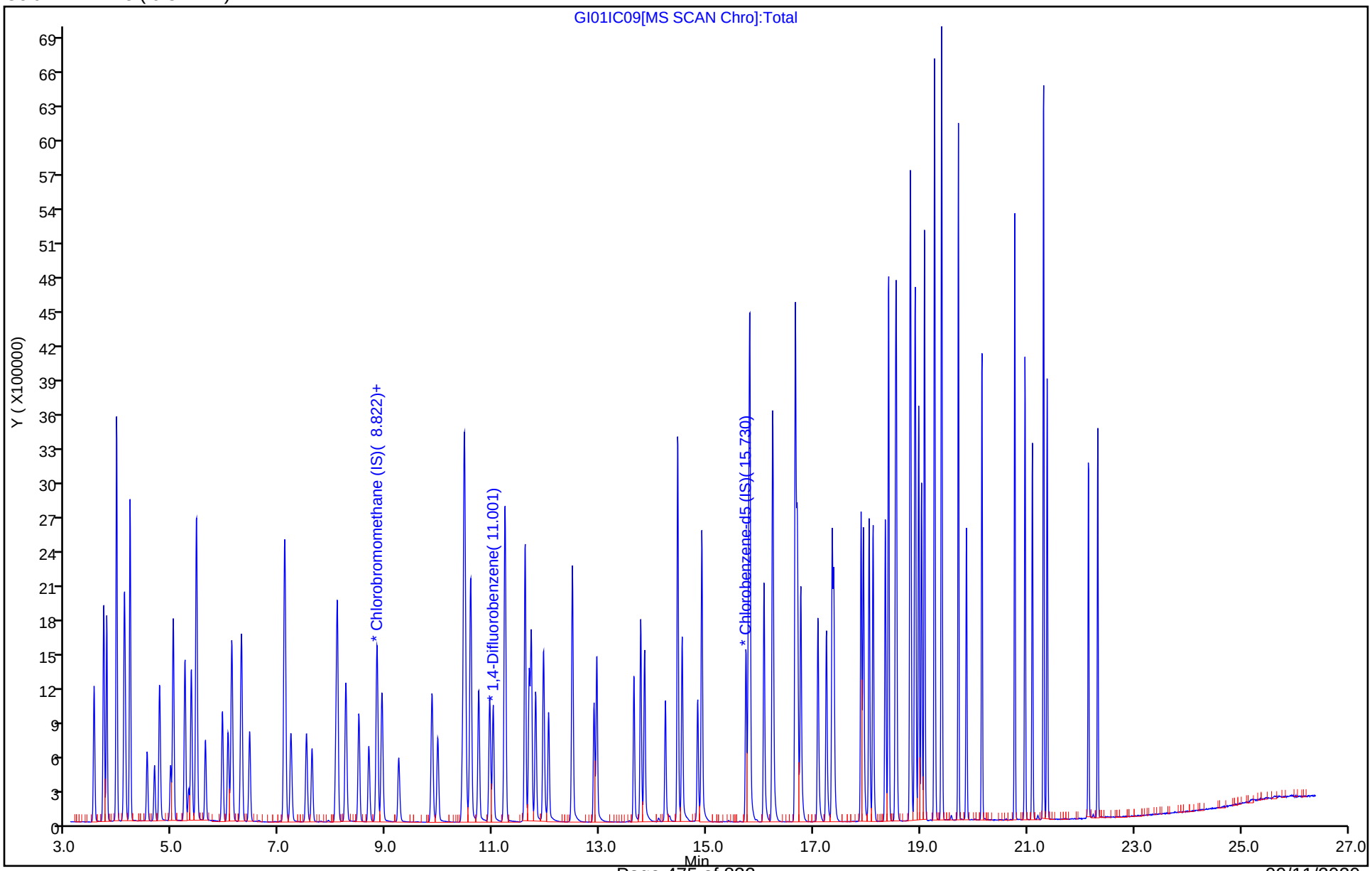
Report Date: 02-Sep-2020 12:23:13 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC09.D

Injection Date:	01-Sep-2020 19:43:30	Instrument ID:	MG	Operator ID:	AFB
Lims ID:	IC L9			Worklist Smp#:	5
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

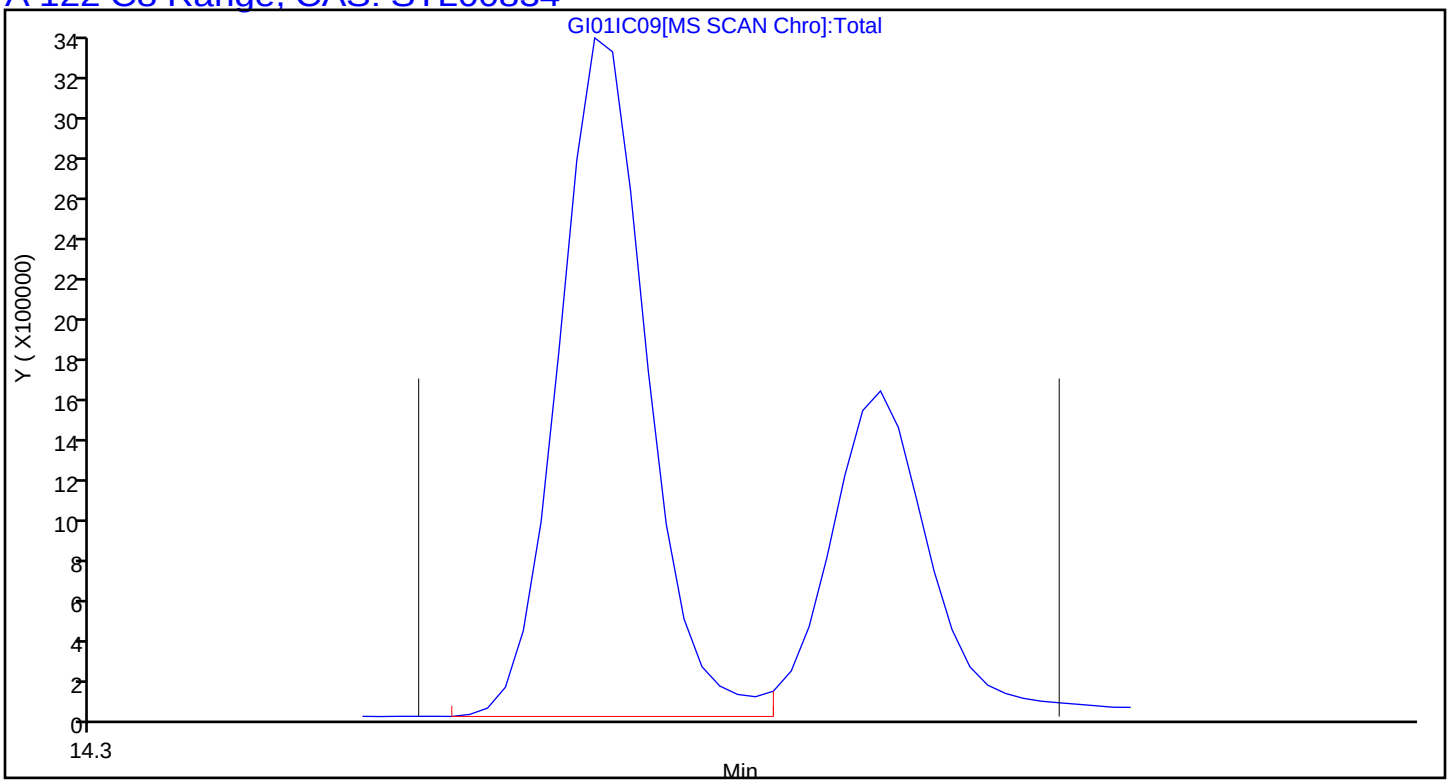


Report Date: 02-Sep-2020 12:23:13 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC09.D				
Injection Date:	01-Sep-2020 19:43:30	Instrument ID:	MG		
Lims ID:	IC L9				
Client ID:					
Operator ID:	AFB	ALS Bottle#:	1	Worklist Smp#:	5
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 122 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC08.D
Lims ID: IC L8
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 01-Sep-2020 21:19:30 ALS Bottle#: 2 Worklist Smp#: 7
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016453-007
Misc. Info.: 314607
Operator ID: AFB Instrument ID: MG
Sublist: chrom-MG_TO15*sub17

Method: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 02-Sep-2020 12:23:20 Calib Date: 02-Sep-2020 03:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1035

First Level Reviewer: barlozhetskayaa Date: 02-Sep-2020 10:52:47

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.811	8.812	-0.001	88	154669	4.80	4.80	
* 2 1,4-Difluorobenzene	114	10.995	10.996	-0.001	98	664974	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.730	15.730	0.000	92	704348	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.374	17.374	0.000	86	517937	4.64	4.69	
6 Chlorodifluoromethane	51	3.705	3.703	0.002	97	595533	4.00	4.30	
7 Propene	41	3.716	3.716	0.000	99	285979	4.00	4.20	
8 Dichlorodifluoromethane	85	3.764	3.765	-0.001	99	682291	4.00	4.40	
9 Chloromethane	52	3.942	3.945	-0.003	98	116599	4.00	4.20	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.953	3.951	0.002	93	407375	4.00	4.61	
11 Acetaldehyde	44	4.093	4.096	-0.003	98	461347	20.0	14.1	
12 Vinyl chloride	62	4.115	4.114	0.001	98	332339	4.00	4.29	
14 Butadiene	54	4.201	4.201	0.000	66	296910	4.00	4.35	
13 Butane	43	4.201	4.202	-0.001	86	581152	4.00	4.19	
15 Bromomethane	94	4.519	4.521	-0.002	99	210733	4.00	4.50	
16 Chloroethane	64	4.659	4.658	0.001	92	140702	4.00	4.38	
17 Ethanol	31	4.751	4.759	-0.008	94	685930	20.0	23.4	
18 Vinyl bromide	106	4.956	4.960	-0.004	98	186602	4.00	4.68	
19 2-Methylbutane	43	5.010	5.010	0.000	93	428407	4.00	4.55	
20 Trichlorofluoromethane	101	5.225	5.229	-0.004	98	527367	4.00	4.38	
21 Acrolein	56	5.231	5.235	-0.004	32	48727	4.00	3.39	
22 Acetonitrile	40	5.296	5.301	-0.005	100	90528	4.00	3.52	
23 Acetone	58	5.344	5.355	-0.011	99	269068	12.0	10.4	
25 Isopropyl alcohol	45	5.430	5.451	-0.021	95	1184009	12.0	15.4	
24 Pentane	72	5.447	5.448	-0.001	96	36548	4.00	4.67	
26 Ethyl ether	31	5.608	5.619	-0.011	89	202112	4.00	3.67	
27 1,1-Dichloroethene	96	5.926	5.928	-0.002	90	165673	4.00	4.35	
28 Acrylonitrile	53	6.029	6.032	-0.003	91	117560	4.00	3.34	
30 2-Methyl-2-propanol	59	6.034	6.059	-0.025	96	406423	4.00	5.23	
29 1,1,2-Trichloro-1,2,2-trifluoroe	101	6.104	6.107	-0.003	90	364620	4.00	4.14	
31 Methylene Chloride	84	6.272	6.273	-0.001	89	163443	4.00	4.29	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.288	6.289	-0.001	94	272432	4.00	3.64	
33 Carbon disulfide	76	6.439	6.438	0.001	97	549880	4.00	4.29	
34 trans-1,2-Dichloroethene	96	7.080	7.082	-0.002	91	190465	4.00	4.24	
35 2-Methylpentane	43	7.102	7.101	0.001	96	705673	4.00	4.03	
36 Methyl tert-butyl ether	73	7.215	7.230	-0.015	93	359280	4.00	3.87	
37 1,1-Dichloroethane	63	7.501	7.499	0.002	98	451772	4.00	4.04	
38 Vinyl acetate	43	7.603	7.607	-0.004	100	503287	4.00	3.43	
39 2-Butanone (MEK)	72	8.051	8.063	-0.012	95	71237	4.00	3.83	
40 Hexane	56	8.078	8.082	-0.004	91	236115	4.00	4.09	
41 Isopropyl ether	45	8.240	8.246	-0.006	96	731542	4.00	3.80	
42 cis-1,2-Dichloroethene	96	8.477	8.483	-0.006	96	201607	4.00	4.23	
43 Ethyl acetate	43	8.666	8.676	-0.010	97	480959	4.00	3.75	
44 Chloroform	83	8.828	8.825	0.003	93	421785	4.00	3.89	
45 Tert-butyl ethyl ether	59	8.914	8.928	-0.014	96	634982	4.00	3.93	
46 Tetrahydrofuran	42	9.232	9.244	-0.012	91	246265	4.00	3.83	
47 1,1,1-Trichloroethane	97	9.852	9.851	0.001	94	425590	4.00	4.08	
48 1,2-Dichloroethane	62	9.960	9.958	0.002	95	340796	4.00	4.54	
51 n-Butanol	31	10.424	10.442	-0.018	90	122991	4.00	5.78	
50 Benzene	78	10.451	10.451	0.000	95	619691	4.00	4.53	
49 Cyclohexane	69	10.451	10.455	-0.004	84	105905	4.00	4.60	
52 Carbon tetrachloride	117	10.478	10.476	0.002	93	425976	4.00	5.04	
53 2,3-Dimethylpentane	71	10.575	10.577	-0.002	90	156938	4.00	4.45	
54 Thiophene	84	10.726	10.725	0.001	95	356857	4.00	4.56	
55 Isooctane	57	11.216	11.219	-0.003	98	1515982	4.00	4.53	
56 n-Heptane	71	11.594	11.594	0.000	94	238604	4.00	4.44	
57 1,2-Dichloropropane	63	11.669	11.669	0.000	90	251789	4.00	4.04	
58 Trichloroethene	130	11.707	11.706	0.001	90	253014	4.00	4.25	
59 Dibromomethane	93	11.793	11.791	0.002	89	262180	4.00	4.46	
60 Dichlorobromomethane	83	11.939	11.936	0.003	95	480892	4.00	4.71	
61 1,4-Dioxane	88	11.961	11.974	-0.014	93	79403	4.00	4.98	
62 Methyl methacrylate	41	12.036	12.038	-0.002	86	300901	4.00	4.27	
63 Methylcyclohexane	83	12.478	12.480	-0.002	86	406216	4.00	4.51	
64 4-Methyl-2-pentanone (MIBK)	43	12.888	12.898	-0.010	98	598699	4.00	5.04	
65 cis-1,3-Dichloropropene	75	12.937	12.938	-0.001	97	352319	4.00	4.30	
66 trans-1,3-Dichloropropene	75	13.632	13.632	0.000	92	296890	4.00	4.11	
67 Toluene	91	13.762	13.759	0.003	92	606087	4.00	3.90	
68 1,1,2-Trichloroethane	83	13.832	13.831	0.001	95	204172	4.00	4.19	
69 2-Hexanone	58	14.220	14.231	-0.011	92	308468	4.00	5.36	
70 n-Octane	85	14.452	14.454	-0.002	97	254271	4.00	4.49	
71 Chlorodibromomethane	129	14.533	14.536	-0.003	95	438464	4.00	4.79	
72 Ethylene Dibromide	107	14.824	14.826	-0.002	97	361106	4.00	4.13	
73 Tetrachloroethene	129	14.905	14.904	0.001	91	242360	4.00	4.14	
75 Chlorobenzene	112	15.778	15.779	-0.001	90	516782	4.00	4.11	
74 2,3-Dimethylheptane	43	15.800	15.801	-0.001	92	1131139	4.00	4.21	
78 Ethylbenzene	91	16.069	16.068	0.001	99	768480	4.00	3.85	
79 m-Xylene & p-Xylene	91	16.231	16.232	-0.001	97	1196112	8.00	7.57	
80 n-Nonane	57	16.652	16.654	-0.002	93	654836	4.00	4.20	
81 Bromoform	173	16.679	16.676	0.003	93	397152	4.00	5.16	
82 Styrene	104	16.695	16.695	0.000	96	470774	4.00	4.10	
83 o-Xylene	91	16.754	16.757	-0.003	97	623631	4.00	3.90	
84 1,1,2,2-Tetrachloroethane	83	17.078	17.078	0.000	98	528435	4.00	4.14	
85 1,2,3-Trichloropropane	110	17.234	17.237	-0.003	93	134141	4.00	4.30	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
86 Isopropylbenzene	105	17.347	17.344	0.003	97	839245	4.00	4.00	
87 N-Propylbenzene	120	17.887	17.887	0.000	98	228287	4.00	4.07	
88 2-Chlorotoluene	126	17.930	17.930	0.000	98	223185	4.00	4.16	
89 4-Ethyltoluene	105	18.038	18.038	0.000	98	850389	4.00	4.05	
90 1,3,5-Trimethylbenzene	120	18.113	18.109	0.004	92	345419	4.00	4.12	
92 Alpha Methyl Styrene	118	18.340	18.340	0.000	86	354303	4.00	4.28	
93 n-Decane	57	18.399	18.401	-0.002	88	759257	4.00	4.02	
94 tert-Butylbenzene	119	18.534	18.533	0.001	92	770891	4.00	4.18	
95 1,2,4-Trimethylbenzene	105	18.550	18.547	0.003	96	764817	4.00	4.17	
96 sec-Butylbenzene	105	18.803	18.804	-0.001	98	1151509	4.00	4.16	
97 1,3-Dichlorobenzene	146	18.814	18.815	-0.001	97	551149	4.00	4.22	
98 Benzyl chloride	91	18.890	18.891	-0.001	97	735219	4.00	4.26	
99 1,4-Dichlorobenzene	146	18.906	18.905	0.001	94	545052	4.00	4.12	
100 4-Isopropyltoluene	119	18.965	18.965	0.000	96	919460	4.00	4.29	
101 1,2,3-Trimethylbenzene	105	19.019	19.019	0.000	99	775110	4.00	4.65	
102 Butylcyclohexane	83	19.073	19.074	-0.001	86	734092	4.00	4.10	
103 2,3-Dihydroindene	117	19.262	19.262	0.000	92	762843	4.00	4.16	
104 1,2-Dichlorobenzene	146	19.262	19.262	0.000	81	538536	4.00	4.30	
106 Indene	116	19.391	19.392	-0.001	89	672537	4.00	4.29	
105 n-Butylbenzene	91	19.397	19.398	-0.001	98	1013104	4.00	4.17	
107 Undecane	57	19.709	19.708	0.001	94	851240	4.00	4.04	
108 1,2-Dibromo-3-Chloropropane	157	19.860	19.858	0.002	93	312261	4.00	5.05	
109 1,2,4,5-Tetramethylbenzene	119	20.152	20.150	0.002	97	936361	4.00	4.98	
110 Dodecane	57	20.766	20.765	0.001	92	855739	4.00	4.65	
111 1,2,4-Trichlorobenzene	180	20.955	20.957	-0.002	94	484290	4.00	4.39	
112 Naphthalene	128	21.095	21.095	0.000	99	1122391	4.00	4.22	
113 Hexachlorobutadiene	225	21.305	21.304	0.001	94	446054	4.00	4.79	
114 1,2,3-Trichlorobenzene	180	21.370	21.372	-0.002	94	479297	4.00	4.52	
115 2-Methylnaphthalene	142	22.147	22.144	0.003	99	762263	4.00	6.67	
116 1-Methylnaphthalene	142	22.319	22.319	0.000	99	785887	4.00	6.75	
A 122 C8 Range	1	14.474	(14.388-14.560)		0	2983142	4.00	4.34	
S 123 1,2-Dichloroethene, Total	1				0		8.00	8.47	
S 124 Xylenes, Total	100				0		12.0	11.5	

Reagents:

40L8DQP_00018	Amount Added: 200.00	Units: mL	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

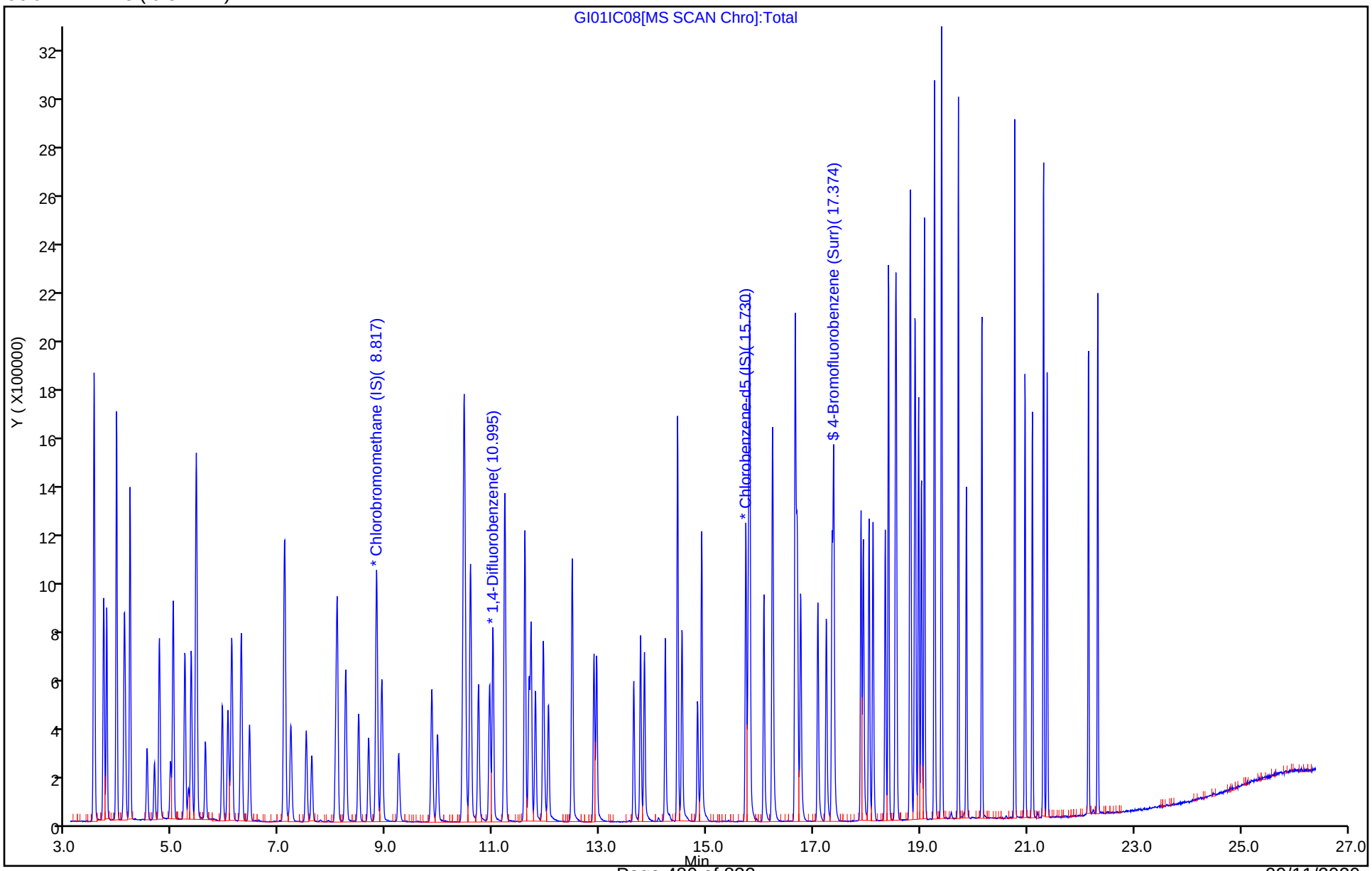
Report Date: 02-Sep-2020 12:23:21 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC08.D

Injection Date:	01-Sep-2020 21:19:30	Instrument ID:	MG	Operator ID:	AFB
Lims ID:	IC L8			Worklist Smp#:	7
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

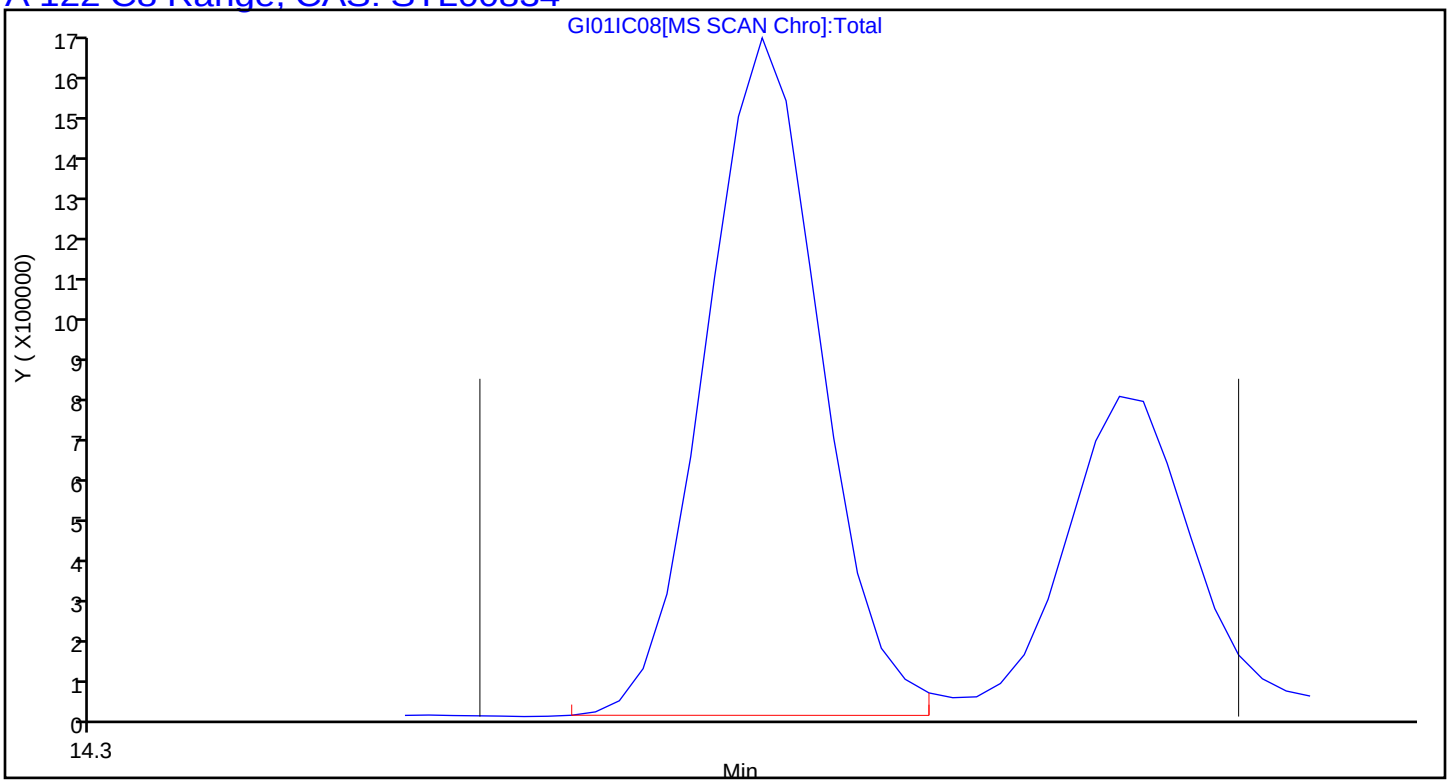


Report Date: 02-Sep-2020 12:23:21 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC08.D				
Injection Date:	01-Sep-2020 21:19:30	Instrument ID:	MG		
Lims ID:	IC L8				
Client ID:					
Operator ID:	AFB	ALS Bottle#:	2	Worklist Smp#:	7
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 122 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC01.D
Lims ID: IC L1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 01-Sep-2020 22:55:30 ALS Bottle#: 3 Worklist Smp#: 9
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016453-009
Misc. Info.: 314720
Operator ID: AFB Instrument ID: MG
Sublist: chrom-MG_TO15*sub17

Method: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 02-Sep-2020 12:23:28 Calib Date: 02-Sep-2020 03:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1035

First Level Reviewer: barlozhetskayaa Date: 02-Sep-2020 10:36:43

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.811	8.812	-0.001	90	174884	4.80	4.80	
* 2 1,4-Difluorobenzene	114	10.995	10.996	-0.001	98	830080	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.730	15.730	0.000	94	782665	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.374	17.374	0.000	82	550738	4.64	4.48	
6 Chlorodifluoromethane	51	3.705	3.703	0.002	78	3340	0.0200	0.0213	
7 Propene	41	3.715	3.716	-0.001	89	2496	0.0200	0.0324	
8 Dichlorodifluoromethane	85	3.764	3.765	-0.001	93	3603	0.0200	0.0206	
9 Chloromethane	52	3.942	3.945	-0.003	62	1142	0.0200	0.0364	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.947	3.951	-0.004	94	1998	0.0200	0.0200	
11 Acetaldehyde	44	4.093	4.096	-0.003	96	11229	0.1000	0.3043	
12 Vinyl chloride	62	4.109	4.114	-0.005	36	1611	0.0200	0.0184	
14 Butadiene	54	4.201	4.201	0.000	61	1667	0.0200	0.0216	
13 Butane	43	4.201	4.202	-0.001	88	4506	0.0200	0.0287	
15 Bromomethane	94	4.524	4.521	0.003	44	1045	0.0200	0.0198	
16 Chloroethane	64	4.648	4.658	-0.010	44	913	0.0200	0.0251	
17 Ethanol	31	4.767	4.759	0.008	94	4007	0.1000	0.1211	
18 Vinyl bromide	106	4.956	4.960	-0.004	44	1153	0.0200	0.0255	
19 2-Methylbutane	43	5.015	5.010	0.005	68	3421	0.0200	0.0321	
20 Trichlorofluoromethane	101	5.225	5.229	-0.004	70	2854	0.0200	0.0210	
23 Acetone	58	5.365	5.355	0.010	98	3541	0.0600	0.1215	
25 Isopropyl alcohol	45	5.473	5.451	0.022	90	6635	0.0600	0.0762	
29 1,1,2-Trichloro-1,2,2-trifluoroe	101	6.115	6.107	0.008	83	2167	0.0200	0.0217	
31 Methylene Chloride	84	6.271	6.273	-0.002	95	2122	0.0200	0.0492	
32 3-Chloro-1-propene	39	6.282	6.289	-0.007	49	2625	0.0200	0.0311	
33 Carbon disulfide	76	6.439	6.438	0.001	92	2949	0.0200	0.0204	
34 trans-1,2-Dichloroethene	96	7.075	7.082	-0.007	88	698	0.0200	0.0138	
35 2-Methylpentane	43	7.096	7.101	-0.005	90	4691	0.0200	0.0237	
36 Methyl tert-butyl ether	73	7.247	7.230	0.017	22	1484	0.0200	0.0141	
37 1,1-Dichloroethane	63	7.495	7.499	-0.004	95	3087	0.0200	0.0244	
38 Vinyl acetate	43	7.614	7.607	0.007	70	2709	0.0200	0.0163	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
39 2-Butanone (MEK)	72	8.072	8.063	0.009	86	677	0.0200	0.0322	
40 Hexane	56	8.089	8.082	0.007	78	1669	0.0200	0.0256	
42 cis-1,2-Dichloroethene	96	8.471	8.483	-0.012	57	1103	0.0200	0.0204	
43 Ethyl acetate	43	8.682	8.676	0.006	24	2501	0.0200	0.0172	
44 Chloroform	83	8.817	8.825	-0.008	27	2647	0.0200	0.0216	
45 Tert-butyl ethyl ether	59	8.957	8.928	0.029	78	2000	0.0200	0.0109	
47 1,1,1-Trichloroethane	97	9.847	9.851	-0.004	10	1560	0.0200	0.0132	
48 1,2-Dichloroethane	62	9.954	9.958	-0.004	47	1462	0.0200	0.0156	
49 Cyclohexane	69	10.456	10.455	0.001	84	762	0.0200	0.0265	
50 Benzene	78	10.445	10.451	-0.006	82	3804	0.0200	0.0223	
52 Carbon tetrachloride	117	10.477	10.476	0.001	80	2115	0.0200	0.0201	
53 2,3-Dimethylpentane	71	10.580	10.577	0.003	85	909	0.0200	0.0206	
54 Thiophene	84	10.726	10.725	0.001	35	2028	0.0200	0.0207	
55 Isooctane	57	11.222	11.219	0.003	94	9413	0.0200	0.0225	
56 n-Heptane	71	11.594	11.594	0.000	91	1488	0.0200	0.0222	
57 1,2-Dichloropropane	63	11.669	11.669	0.000	28	1596	0.0200	0.0205	
58 Trichloroethene	130	11.707	11.706	0.001	50	1476	0.0200	0.0198	
59 Dibromomethane	93	11.788	11.791	-0.003	59	1732	0.0200	0.0236	
60 Dichlorobromomethane	83	11.933	11.936	-0.003	92	2327	0.0200	0.0183	
62 Methyl methacrylate	41	12.030	12.038	-0.008	1	2118	0.0200	0.0241	
63 Methylcyclohexane	83	12.478	12.480	-0.002	85	2436	0.0200	0.0217	
64 4-Methyl-2-pentanone (MIBK)	43	12.920	12.898	0.022	45	2393	0.0200	0.0162	
65 cis-1,3-Dichloropropene	75	12.931	12.938	-0.007	37	1341	0.0200	0.0131	
66 trans-1,3-Dichloropropene	75	13.627	13.632	-0.005	1	1104	0.0200	0.0137	
67 Toluene	91	13.761	13.759	0.002	93	3107	0.0200	0.0180	
68 1,1,2-Trichloroethane	83	13.826	13.831	-0.005	1	869	0.0200	0.0161	
69 2-Hexanone	58	14.247	14.231	0.016	90	1070	0.0200	0.0167	
70 n-Octane	85	14.452	14.454	-0.002	96	1117	0.0200	0.0178	
71 Chlorodibromomethane	129	14.533	14.536	-0.004	91	1445	0.0200	0.0142	
72 Ethylene Dibromide	107	14.829	14.826	0.003	95	1375	0.0200	0.0142	
73 Tetrachloroethene	129	14.899	14.904	-0.005	70	1279	0.0200	0.0197	
75 Chlorobenzene	112	15.778	15.779	-0.001	88	2304	0.0200	0.0165	
74 2,3-Dimethylheptane	43	15.800	15.801	-0.001	95	5600	0.0200	0.0187	
78 Ethylbenzene	91	16.069	16.068	0.001	94	3031	0.0200	0.0137	
79 m-Xylene & p-Xylene	91	16.231	16.232	-0.001	96	5086	0.0400	0.0290	
80 n-Nonane	57	16.652	16.654	-0.002	90	3685	0.0200	0.0213	
81 Bromoform	173	16.679	16.676	0.003	40	1041	0.0200	0.0122	
82 Styrene	104	16.700	16.695	0.005	36	1656	0.0200	0.0130	
83 o-Xylene	91	16.754	16.757	-0.003	90	2884	0.0200	0.0162	
84 1,1,2,2-Tetrachloroethane	83	17.078	17.078	0.000	90	1786	0.0200	0.0126	
86 Isopropylbenzene	105	17.342	17.344	-0.002	1	1654	0.0200	0.007088	
87 N-Propylbenzene	120	17.887	17.887	0.000	96	405	0.0200	0.006501	
89 4-Ethyltoluene	105	18.043	18.038	0.005	91	2826	0.0200	0.0121	
90 1,3,5-Trimethylbenzene	120	18.108	18.109	-0.001	90	1238	0.0200	0.0133	
92 Alpha Methyl Styrene	118	18.340	18.340	0.000	35	793	0.0200	0.008616	
93 n-Decane	57	18.399	18.401	-0.002	92	3174	0.0200	0.0151	
94 tert-Butylbenzene	119	18.528	18.533	-0.005	69	2202	0.0200	0.0108	
95 1,2,4-Trimethylbenzene	105	18.544	18.547	-0.003	90	2764	0.0200	0.0136	
96 sec-Butylbenzene	105	18.803	18.804	-0.001	97	2858	0.0200	0.009301	
97 1,3-Dichlorobenzene	146	18.814	18.815	-0.001	81	2581	0.0200	0.0178	
98 Benzyl chloride	91	18.900	18.891	0.009	90	2494	0.0200	0.0130	
99 1,4-Dichlorobenzene	146	18.900	18.905	-0.005	85	2678	0.0200	0.0182	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
100 4-Isopropyltoluene	119	18.960	18.965	-0.005	26	1413	0.0200	0.005939	
101 1,2,3-Trimethylbenzene	105	19.019	19.019	0.000	55	1654	0.0200	0.009704	
102 Butylcyclohexane	83	19.073	19.074	-0.001	90	3132	0.0200	0.0157	
103 2,3-Dihydroindene	117	19.262	19.262	0.000	86	2515	0.0200	0.0124	
104 1,2-Dichlorobenzene	146	19.262	19.262	0.000	78	2148	0.0200	0.0154	
106 Indene	116	19.396	19.392	0.004	63	1715	0.0200	0.009836	
105 n-Butylbenzene	91	19.402	19.398	0.004	92	3050	0.0200	0.0113	
107 Undecane	57	19.704	19.708	-0.004	88	2975	0.0200	0.0127	
108 1,2-Dibromo-3-Chloropropane	157	19.855	19.858	-0.003	30	701	0.0200	0.0122	
109 1,2,4,5-Tetramethylbenzene	119	20.151	20.150	0.001	91	2896	0.0200	0.0163	
110 Dodecane	57	20.766	20.765	0.001	86	3368	0.0200	0.0165	
111 1,2,4-Trichlorobenzene	180	20.955	20.957	-0.002	85	2095	0.0200	0.0171	
112 Naphthalene	128	21.090	21.095	-0.005	97	4347	0.0200	0.0147	
113 Hexachlorobutadiene	225	21.305	21.304	0.001	85	1528	0.0200	0.0148	
114 1,2,3-Trichlorobenzene	180	21.375	21.372	0.003	89	1945	0.0200	0.0165	
115 2-Methylnaphthalene	142	22.147	22.144	0.003	92	2532	0.0200	0.0199	
116 1-Methylnaphthalene	142	22.319	22.319	0.000	96	3046	0.0200	0.0235	
A 122 C8 Range	1	14.454	(14.420-14.473)		0	21162	0.0200	0.0277	
S 123 1,2-Dichloroethene, Total	1				0		0.0400	0.0342	
S 124 Xylenes, Total	100				0		0.0600	0.0452	

Reagents:

40L1-3DQP_00031	Amount Added: 50.00	Units: mL	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

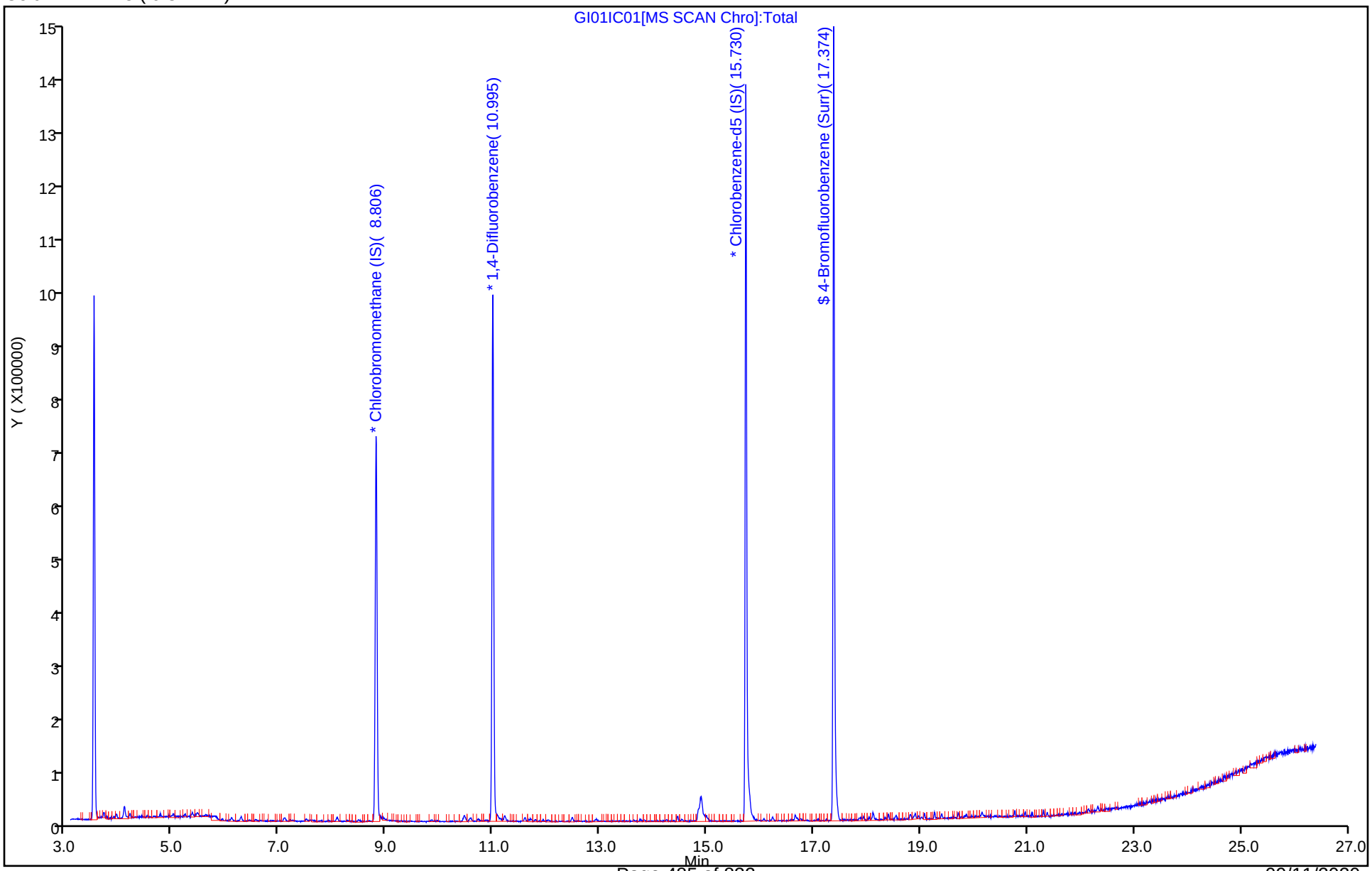
Report Date: 02-Sep-2020 12:23:28 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC01.D

Injection Date:	01-Sep-2020 22:55:30	Instrument ID:	MG	Operator ID:	AFB
Lims ID:	IC L1			Worklist Smp#:	9
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

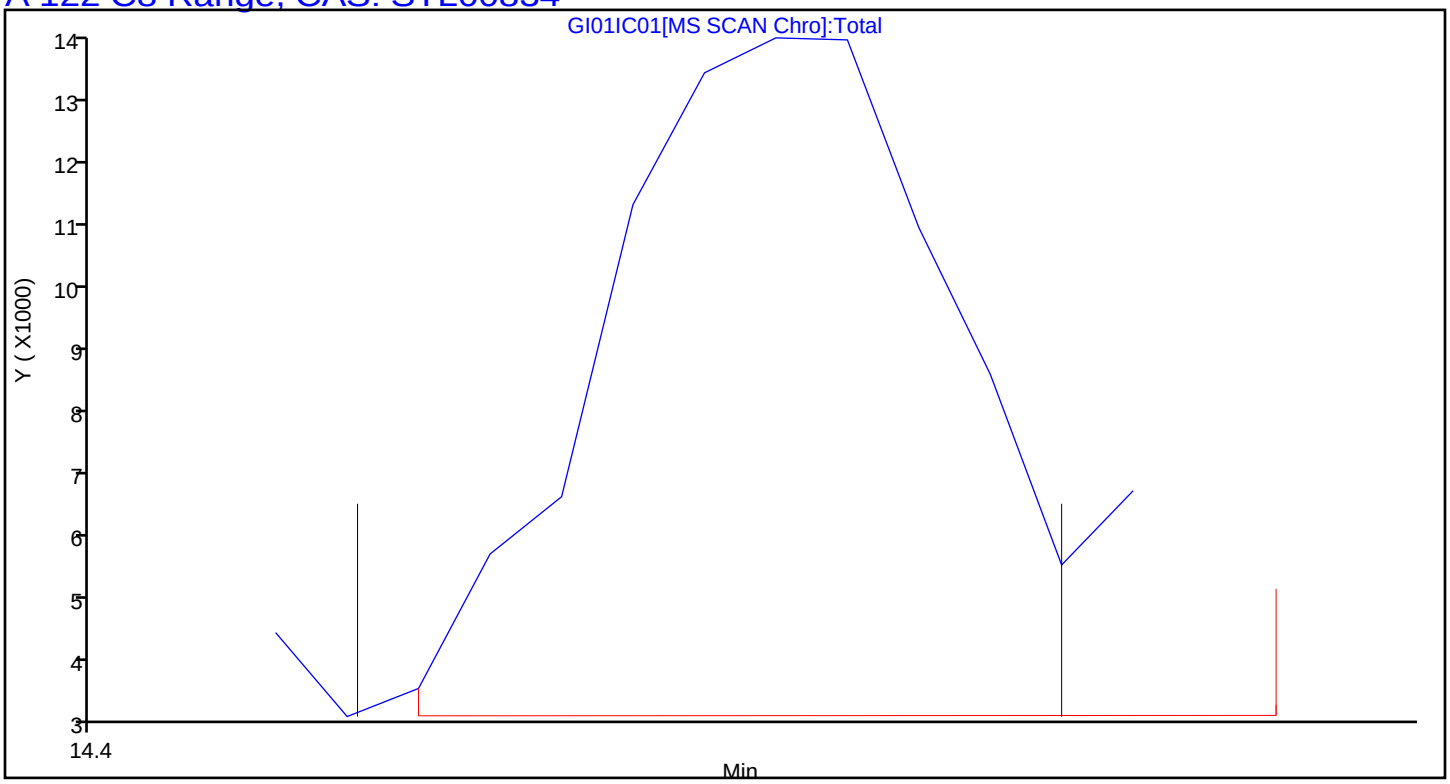


Report Date: 02-Sep-2020 12:23:29 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC01.D				
Injection Date:	01-Sep-2020 22:55:30	Instrument ID:	MG		
Lims ID:	IC L1				
Client ID:					
Operator ID:	AFB	ALS Bottle#:	3	Worklist Smp#:	9
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 122 C8 Range, CAS: STL00834



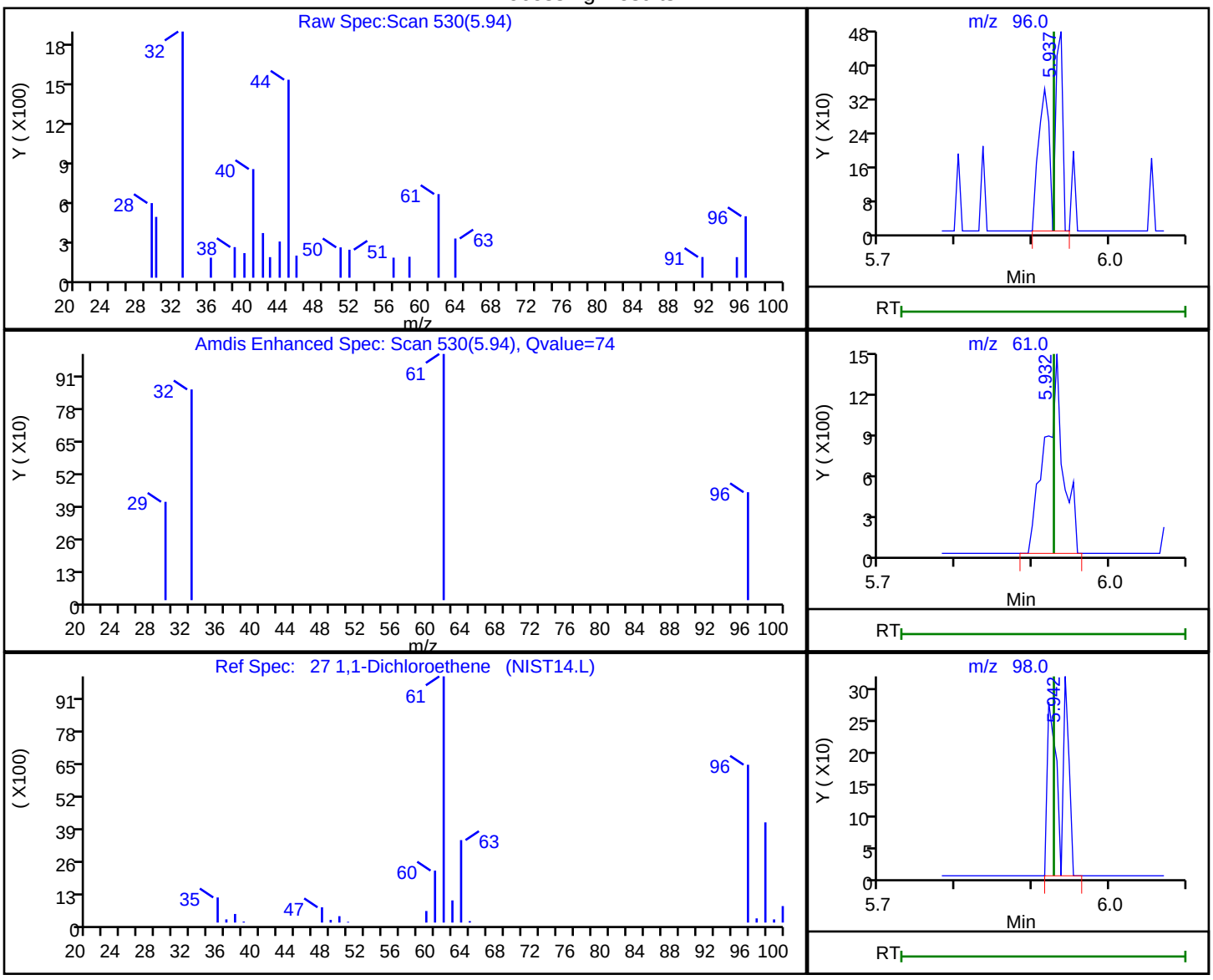
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC01.D				
Injection Date:	01-Sep-2020 22:55:30	Instrument ID:	MG		
Lims ID:	IC L1				
Client ID:					
Operator ID:	AFB	ALS Bottle#:	3	Worklist Smp#:	9
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

27 1,1-Dichloroethene, CAS: 75-35-4

Processing Results



RT	Mass	Response	Amount
5.94	96.00	615	0.014265
5.93	61.00	2311	
5.94	98.00	381	

Reviewer: barlozhetskayaa, 02-Sep-2020 10:49:58

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

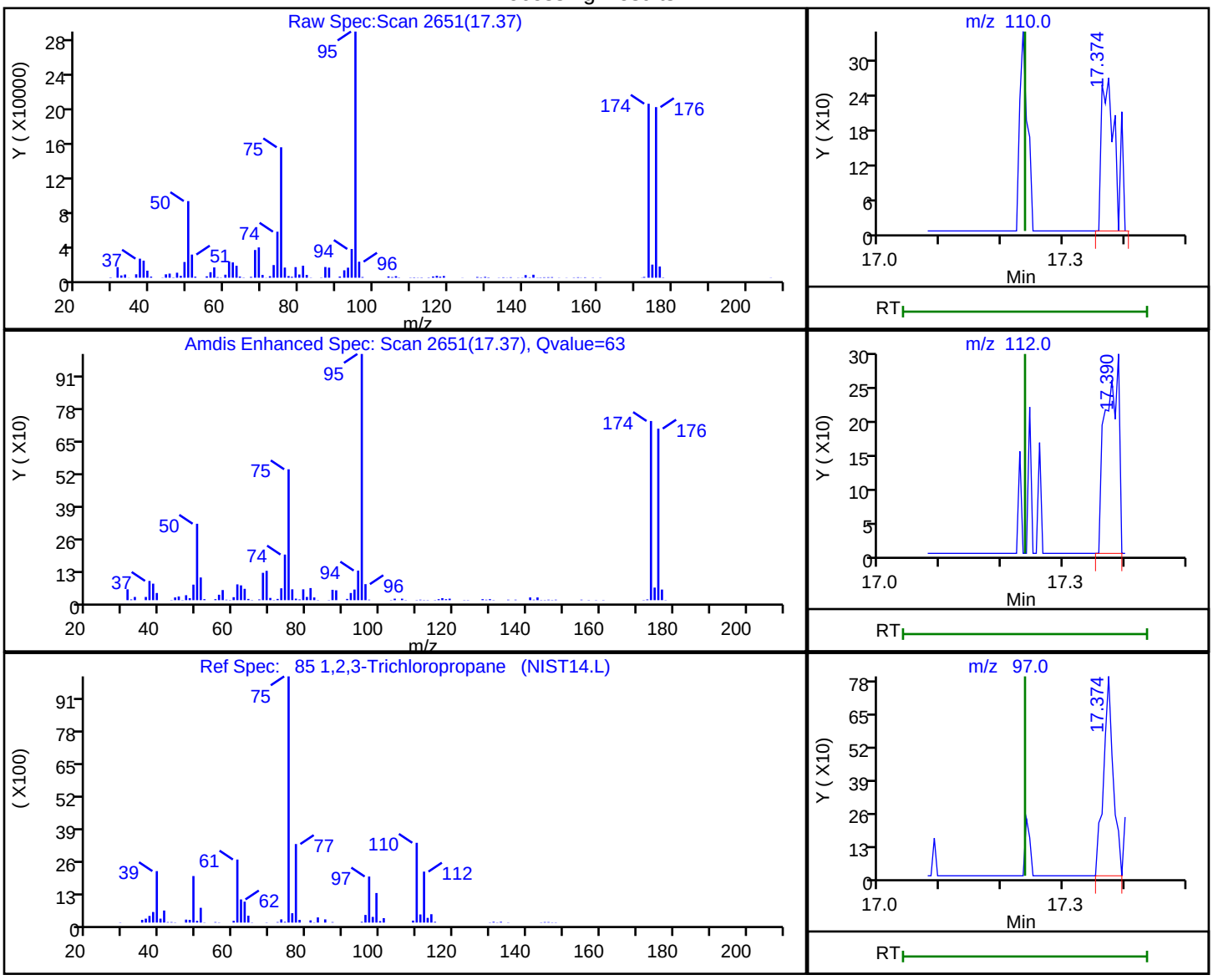
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC01.D				
Injection Date:	01-Sep-2020 22:55:30	Instrument ID:	MG		
Lims ID:	IC L1				
Client ID:					
Operator ID:	AFB	ALS Bottle#:	3	Worklist Smp#:	9
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

85 1,2,3-Trichloropropane, CAS: 96-18-4

Processing Results



RT	Mass	Response	Amount
17.37	110.00	424	0.012236
17.39	112.00	444	
17.37	97.00	876	

Reviewer: barlozhetskayaa, 02-Sep-2020 10:51:13

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

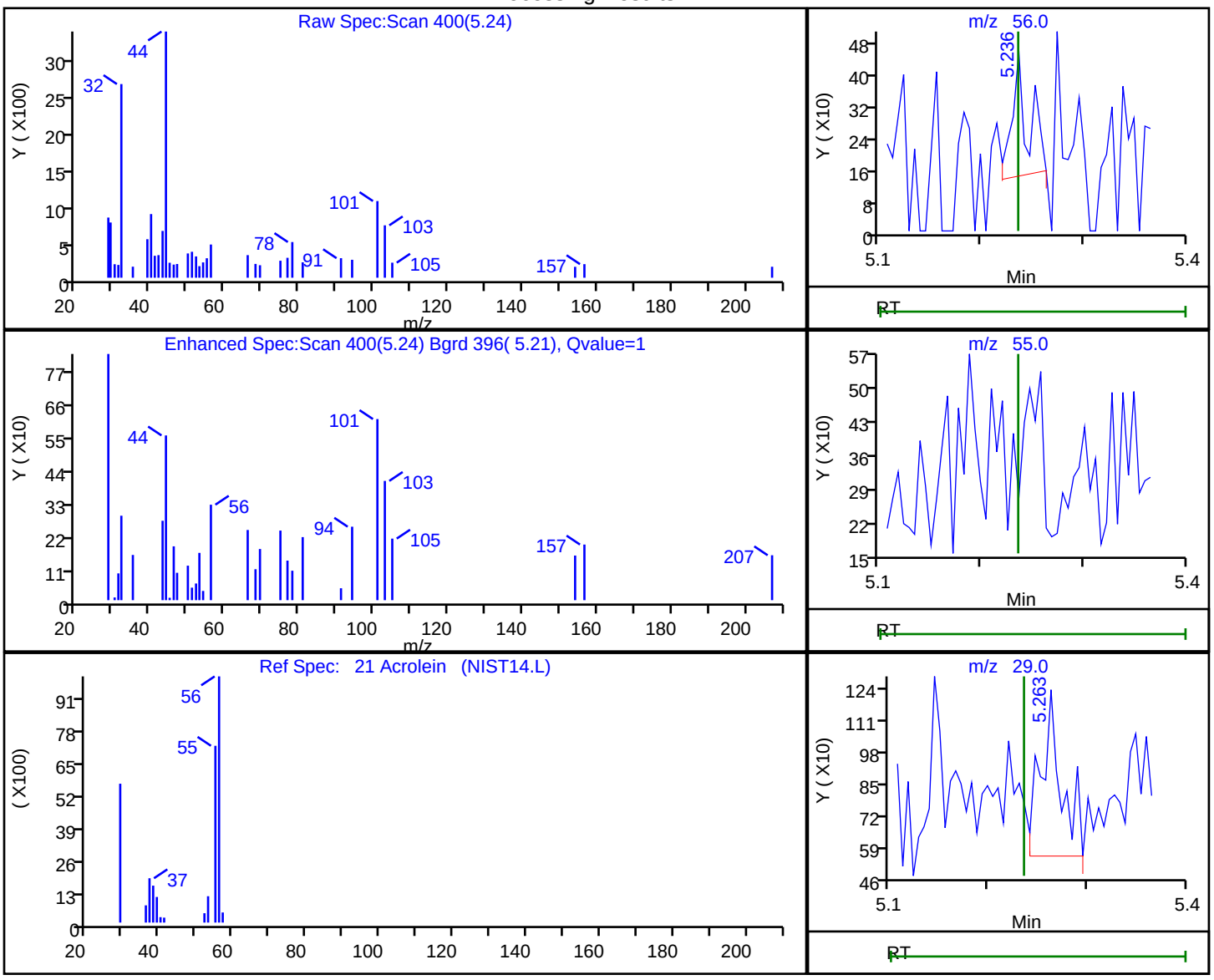
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC01.D				
Injection Date:	01-Sep-2020 22:55:30	Instrument ID:	MG		
Lims ID:	IC L1				
Client ID:					
Operator ID:	AFB	ALS Bottle#:	3	Worklist Smp#:	9
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

21 Acrolein, CAS: 107-02-8

Processing Results



RT	Mass	Response	Amount
5.24	56.00	344	0.021149
5.24	55.00	0	
5.26	29.00	991	

Reviewer: barlozhetskayaa, 02-Sep-2020 10:49:48

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

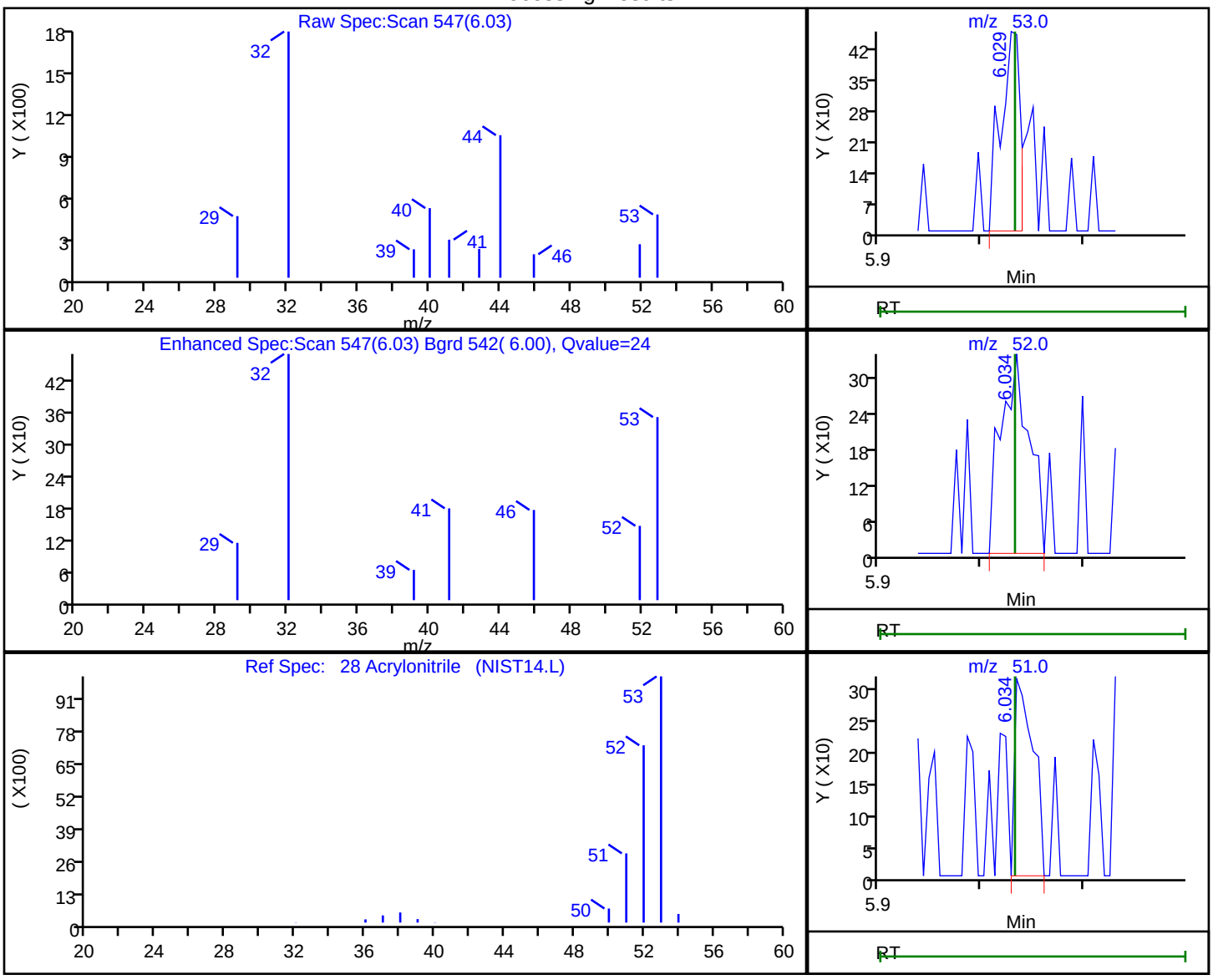
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC01.D				
Injection Date:	01-Sep-2020 22:55:30	Instrument ID:	MG		
Lims ID:	IC L1				
Client ID:					
Operator ID:	AFB	ALS Bottle#:	3	Worklist Smp#:	9
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

28 Acrylonitrile, CAS: 107-13-1

Processing Results



RT	Mass	Response	Amount
6.03	53.00	607	0.015259
6.03	52.00	646	
6.03	51.00	390	

Reviewer: barlozhetskayaa, 02-Sep-2020 10:50:01

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

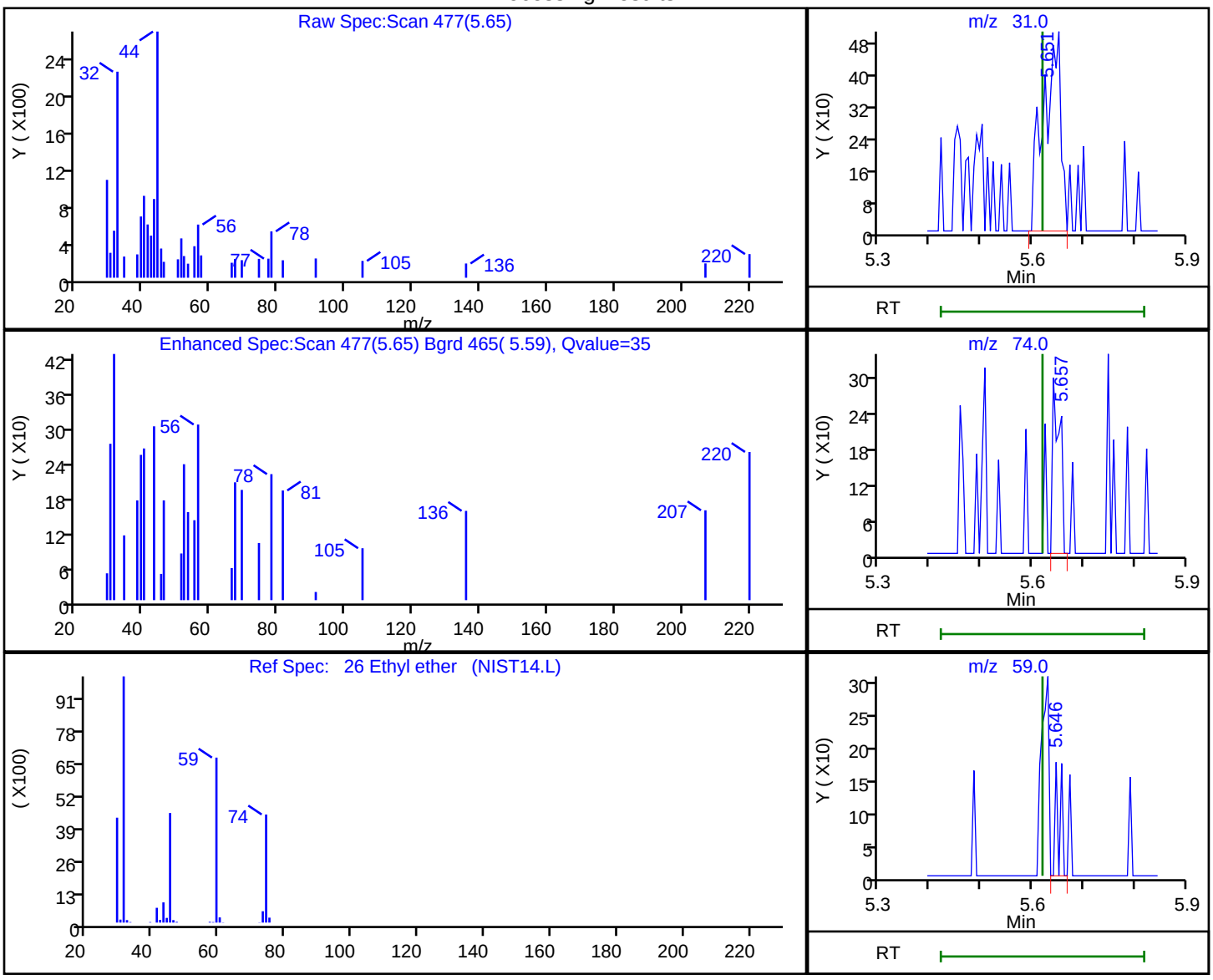
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC01.D
Injection Date: 01-Sep-2020 22:55:30 Instrument ID: MG
Lims ID: IC L1
Client ID:
Operator ID: AFB ALS Bottle#: 3 Worklist Smp#: 9
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Method: MG_TO15 Limit Group: MSA TO14A_15 Routine ICAL
Column: RTX-5 (0.32 mm) Detector MS SCAN

26 Ethyl ether, CAS: 60-29-7

Processing Results



RT	Mass	Response	Amount
5.65	31.00	1187	0.019054
5.66	74.00	298	
5.65	59.00	113	

Reviewer: barlozhetskayaa, 02-Sep-2020 10:49:54
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

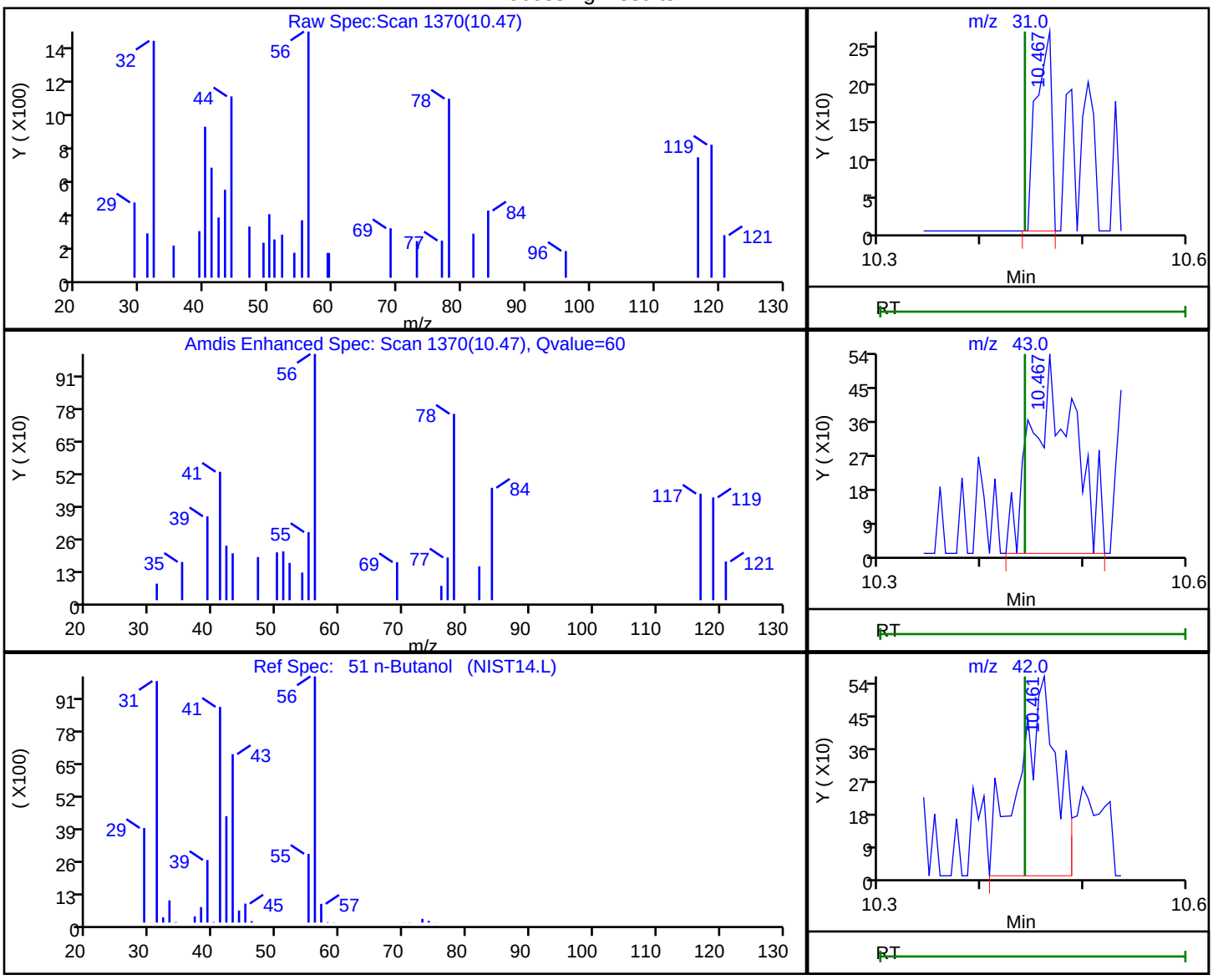
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC01.D				
Injection Date:	01-Sep-2020 22:55:30	Instrument ID:	MG		
Lims ID:	IC L1				
Client ID:					
Operator ID:	AFB	ALS Bottle#:	3	Worklist Smp#:	9
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

51 n-Butanol, CAS: 71-36-3

Processing Results



RT	Mass	Response	Amount
10.47	31.00	276	0.010397
10.47	43.00	1509	
10.46	42.00	1436	

Reviewer: barlozhetskayaa, 02-Sep-2020 10:51:01

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

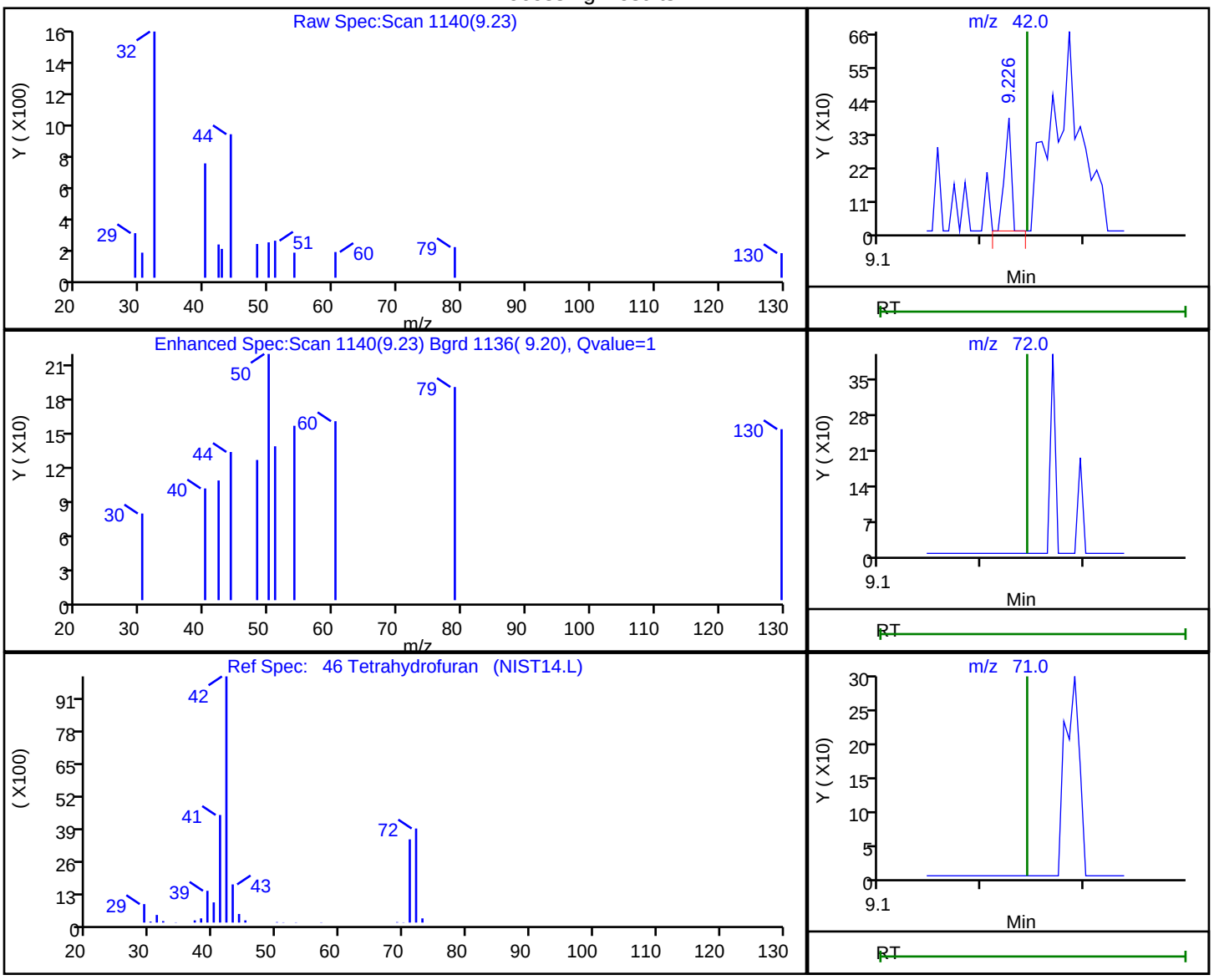
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC01.D				
Injection Date:	01-Sep-2020 22:55:30	Instrument ID:	MG		
Lims ID:	IC L1				
Client ID:					
Operator ID:	AFB	ALS Bottle#:	3	Worklist Smp#:	9
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

46 Tetrahydrofuran, CAS: 109-99-9

Processing Results



RT	Mass	Response	Amount
9.23	42.00	174	0.002391
9.24	72.00	0	
9.24	71.00	0	

Reviewer: barlozhetskayaa, 02-Sep-2020 10:50:56

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC02.D
Lims ID: IC L2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 01-Sep-2020 23:39:30 ALS Bottle#: 3 Worklist Smp#: 10
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016453-010
Misc. Info.: 314720
Operator ID: AFB Instrument ID: MG
Sublist: chrom-MG_TO15*sub17

Method: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 02-Sep-2020 12:23:36 Calib Date: 02-Sep-2020 03:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1035

First Level Reviewer: tajh Date: 02-Sep-2020 08:46:24

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.806	8.812	-0.006	89	136930	4.80	4.80	
* 2 1,4-Difluorobenzene	114	10.990	10.996	-0.006	98	479256	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.730	15.730	0.000	94	525013	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.374	17.374	0.000	89	373260	4.64	4.53	
6 Chlorodifluoromethane	51	3.694	3.703	-0.009	83	6128	0.0400	0.0499	
7 Propene	41	3.716	3.716	0.000	96	3806	0.0400	0.0631	
8 Dichlorodifluoromethane	85	3.759	3.765	-0.006	96	6618	0.0400	0.0482	
9 Chloromethane	52	3.942	3.945	-0.003	72	1377	0.0400	0.0561	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.942	3.951	-0.009	94	3458	0.0400	0.0442	
11 Acetaldehyde	44	4.098	4.096	0.002	99	18891	0.2000	0.6539	
12 Vinyl chloride	62	4.109	4.114	-0.005	31	3427	0.0400	0.0500	
14 Butadiene	54	4.201	4.201	0.000	65	3482	0.0400	0.0576	
13 Butane	43	4.201	4.202	-0.001	82	6880	0.0400	0.0560	
15 Bromomethane	94	4.519	4.521	-0.002	96	2081	0.0400	0.0502	
16 Chloroethane	64	4.648	4.658	-0.010	60	1311	0.0400	0.0461	
17 Ethanol	31	4.762	4.759	0.003	93	8488	0.2000	0.3277	
18 Vinyl bromide	106	4.961	4.960	0.001	68	1455	0.0400	0.0412	
19 2-Methylbutane	43	5.004	5.010	-0.006	84	5791	0.0400	0.0695	
20 Trichlorofluoromethane	101	5.225	5.229	-0.004	96	4748	0.0400	0.0445	
23 Acetone	58	5.371	5.355	0.016	99	8166	0.1200	0.3578	
24 Pentane	72	5.452	5.448	0.004	93	254	0.0400	0.0366	
25 Isopropyl alcohol	45	5.457	5.451	0.006	96	8322	0.1200	0.1221	
26 Ethyl ether	31	5.624	5.619	0.005	72	2911	0.0400	0.0597	
27 1,1-Dichloroethene	96	5.921	5.928	-0.007	72	1385	0.0400	0.0410	
28 Acrylonitrile	53	6.040	6.032	0.008	75	1630	0.0400	0.0523	
30 2-Methyl-2-propanol	59	6.083	6.059	0.024	88	4072	0.0400	0.0592	
29 1,1,2-Trichloro-1,2,2-trifluoroe	101	6.099	6.107	-0.008	83	3416	0.0400	0.0438	
31 Methylene Chloride	84	6.266	6.273	-0.007	85	2287	0.0400	0.0677	
32 3-Chloro-1-propene	39	6.293	6.289	0.004	75	4120	0.0400	0.0622	
33 Carbon disulfide	76	6.433	6.438	-0.005	95	5385	0.0400	0.0475	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
34 trans-1,2-Dichloroethene	96	7.070	7.082	-0.012	85	1709	0.0400	0.0430	
35 2-Methylpentane	43	7.097	7.101	-0.004	97	7961	0.0400	0.0514	
36 Methyl tert-butyl ether	73	7.253	7.230	0.023	79	4414	0.0400	0.0537	
37 1,1-Dichloroethane	63	7.485	7.499	-0.014	54	4322	0.0400	0.0436	
38 Vinyl acetate	43	7.603	7.607	-0.004	98	6339	0.0400	0.0489	
39 2-Butanone (MEK)	72	8.089	8.063	0.026	88	1172	0.0400	0.0712	
40 Hexane	56	8.078	8.082	-0.004	70	2714	0.0400	0.0531	
41 Isopropyl ether	45	8.272	8.246	0.026	92	8253	0.0400	0.0484	
42 cis-1,2-Dichloroethene	96	8.488	8.483	0.005	92	1778	0.0400	0.0421	
43 Ethyl acetate	43	8.682	8.676	0.006	95	6176	0.0400	0.0544	
44 Chloroform	83	8.822	8.825	-0.003	27	4388	0.0400	0.0457	
45 Tert-butyl ethyl ether	59	8.946	8.928	0.018	94	6153	0.0400	0.0430	
46 Tetrahydrofuran	42	9.275	9.244	0.031	60	3187	0.0400	0.0559	
47 1,1,1-Trichloroethane	97	9.847	9.851	-0.004	88	4174	0.0400	0.0452	
48 1,2-Dichloroethane	62	9.949	9.958	-0.009	91	2849	0.0400	0.0526	
51 n-Butanol	31	10.445	10.442	0.003	71	1601	0.0400	0.1045	
50 Benzene	78	10.445	10.451	-0.006	87	5876	0.0400	0.0596	
49 Cyclohexane	69	10.456	10.455	0.001	79	1000	0.0400	0.0603	
52 Carbon tetrachloride	117	10.472	10.476	-0.004	88	3137	0.0400	0.0515	
53 2,3-Dimethylpentane	71	10.580	10.577	0.003	90	1520	0.0400	0.0597	
54 Thiophene	84	10.720	10.725	-0.005	91	3236	0.0400	0.0573	
55 Isooctane	57	11.222	11.219	0.003	92	15246	0.0400	0.0633	
56 n-Heptane	71	11.588	11.594	-0.006	93	2377	0.0400	0.0614	
57 1,2-Dichloropropane	63	11.669	11.669	0.000	89	2570	0.0400	0.0573	
58 Trichloroethene	130	11.696	11.706	-0.010	85	2736	0.0400	0.0637	
59 Dibromomethane	93	11.788	11.791	-0.003	88	2434	0.0400	0.0575	
60 Dichlorobromomethane	83	11.939	11.936	0.003	91	4579	0.0400	0.0622	
61 1,4-Dioxane	88	11.993	11.974	0.019	58	941	0.0400	0.0818	
62 Methyl methacrylate	41	12.041	12.038	0.003	81	4500	0.0400	0.0886	
63 Methylcyclohexane	83	12.478	12.480	-0.002	89	3723	0.0400	0.0573	
64 4-Methyl-2-pentanone (MIBK)	43	12.899	12.898	0.001	68	5712	0.0400	0.0668	
65 cis-1,3-Dichloropropene	75	12.942	12.938	0.004	92	3325	0.0400	0.0563	
66 trans-1,3-Dichloropropene	75	13.627	13.632	-0.005	88	3357	0.0400	0.0623	
67 Toluene	91	13.751	13.759	-0.008	94	6411	0.0400	0.0554	
68 1,1,2-Trichloroethane	83	13.832	13.831	0.001	88	1724	0.0400	0.0475	
69 2-Hexanone	58	14.236	14.231	0.005	88	3160	0.0400	0.0737	
70 n-Octane	85	14.457	14.454	0.003	98	1972	0.0400	0.0467	
71 Chlorodibromomethane	129	14.538	14.536	0.002	93	3335	0.0400	0.0489	
72 Ethylene Dibromide	107	14.829	14.826	0.003	96	3248	0.0400	0.0499	
73 Tetrachloroethene	129	14.905	14.904	0.001	83	2500	0.0400	0.0573	
75 Chlorobenzene	112	15.784	15.779	0.005	93	5000	0.0400	0.0534	
74 2,3-Dimethylheptane	43	15.800	15.801	-0.001	90	9338	0.0400	0.0466	
78 Ethylbenzene	91	16.064	16.068	-0.004	97	7158	0.0400	0.0481	
79 m-Xylene & p-Xylene	91	16.231	16.232	-0.001	97	11865	0.0800	0.1008	
80 n-Nonane	57	16.657	16.654	0.003	94	6097	0.0400	0.0525	
81 Bromoform	173	16.668	16.676	-0.008	78	2158	0.0400	0.0376	
82 Styrene	104	16.690	16.695	-0.005	88	3747	0.0400	0.0438	
83 o-Xylene	91	16.765	16.757	0.008	96	6008	0.0400	0.0504	
84 1,1,2,2-Tetrachloroethane	83	17.078	17.078	0.000	95	5272	0.0400	0.0555	
85 1,2,3-Trichloropropane	110	17.240	17.237	0.003	92	1349	0.0400	0.0580	
86 Isopropylbenzene	105	17.342	17.344	-0.002	86	8674	0.0400	0.0554	
87 N-Propylbenzene	120	17.892	17.887	0.005	99	2286	0.0400	0.0547	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
88 2-Chlorotoluene	126	17.924	17.930	-0.006	95	2016	0.0400	0.0504	
89 4-Ethyltoluene	105	18.032	18.038	-0.006	98	8740	0.0400	0.0559	
90 1,3,5-Trimethylbenzene	120	18.108	18.109	-0.001	90	3362	0.0400	0.0538	
92 Alpha Methyl Styrene	118	18.345	18.340	0.005	75	3084	0.0400	0.0500	
93 n-Decane	57	18.404	18.401	0.003	84	7315	0.0400	0.0520	
94 tert-Butylbenzene	119	18.534	18.533	0.001	87	7547	0.0400	0.0549	
95 1,2,4-Trimethylbenzene	105	18.550	18.547	0.003	94	6713	0.0400	0.0491	
96 sec-Butylbenzene	105	18.803	18.804	-0.001	98	10835	0.0400	0.0526	
97 1,3-Dichlorobenzene	146	18.814	18.815	-0.001	90	4541	0.0400	0.0466	
99 1,4-Dichlorobenzene	146	18.906	18.905	0.001	89	5059	0.0400	0.0513	
98 Benzyl chloride	91	18.890	18.891	-0.001	97	7655	0.0400	0.0595	
100 4-Isopropyltoluene	119	18.965	18.965	0.000	95	8175	0.0400	0.0512	
101 1,2,3-Trimethylbenzene	105	19.019	19.019	0.000	94	6880	0.0400	0.0601	
102 Butylcyclohexane	83	19.073	19.074	-0.001	82	7078	0.0400	0.0530	
103 2,3-Dihydroindene	117	19.262	19.262	0.000	92	6041	0.0400	0.0442	
104 1,2-Dichlorobenzene	146	19.267	19.262	0.005	83	4702	0.0400	0.0504	
106 Indene	116	19.386	19.392	-0.006	76	5153	0.0400	0.0441	
105 n-Butylbenzene	91	19.402	19.398	0.004	95	9273	0.0400	0.0513	
107 Undecane	57	19.709	19.708	0.001	87	9041	0.0400	0.0575	
108 1,2-Dibromo-3-Chloropropane	157	19.849	19.858	-0.009	34	830	0.0400	0.0215	
109 1,2,4,5-Tetramethylbenzene	119	20.151	20.150	0.001	96	8612	0.0400	0.0722	
110 Dodecane	57	20.761	20.765	-0.004	88	10113	0.0400	0.0737	
111 1,2,4-Trichlorobenzene	180	20.960	20.957	0.003	89	4559	0.0400	0.0555	
112 Naphthalene	128	21.101	21.095	0.006	96	10621	0.0400	0.0536	
113 Hexachlorobutadiene	225	21.300	21.304	-0.004	88	3572	0.0400	0.0515	
114 1,2,3-Trichlorobenzene	180	21.370	21.372	-0.002	94	4616	0.0400	0.0584	
115 2-Methylnaphthalene	142	22.141	22.144	-0.003	95	6137	0.0400	0.0720	
116 1-Methylnaphthalene	142	22.319	22.319	0.000	96	6836	0.0400	0.0788	
A 122 C8 Range	1	14.447	(14.409-14.484)		0	34657	0.0400	0.0677	
S 123 1,2-Dichloroethene, Total	1				0		0.0800	0.0851	
S 124 Xylenes, Total	100				0		0.1200	0.1512	

Reagents:

40L1-3DQP_00031	Amount Added: 100.00	Units: mL	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

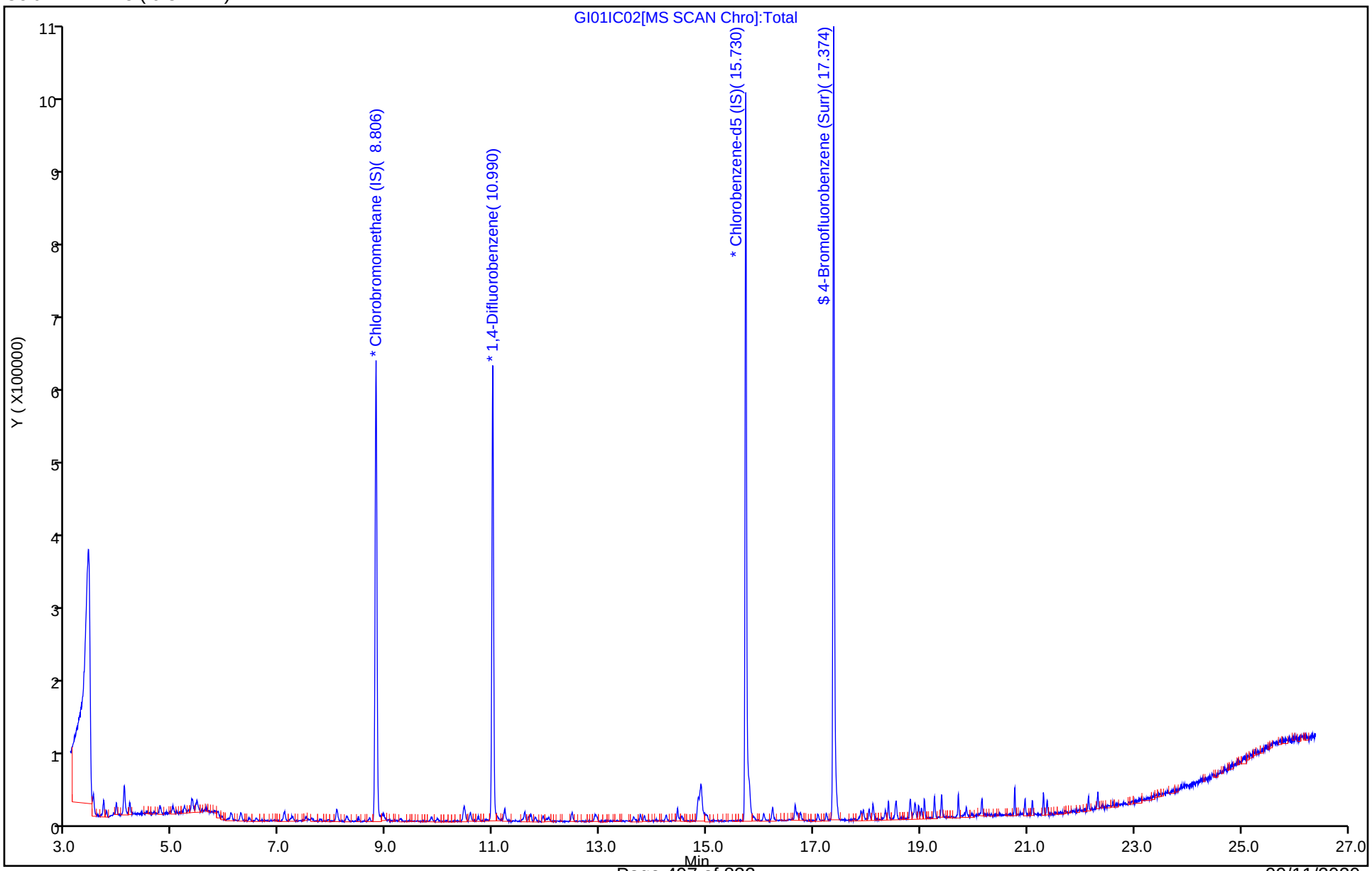
Report Date: 02-Sep-2020 12:23:37 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC02.D

Injection Date:	01-Sep-2020 23:39:30	Instrument ID:	MG	Operator ID:	AFB
Lims ID:	IC L2			Worklist Smp#:	10
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

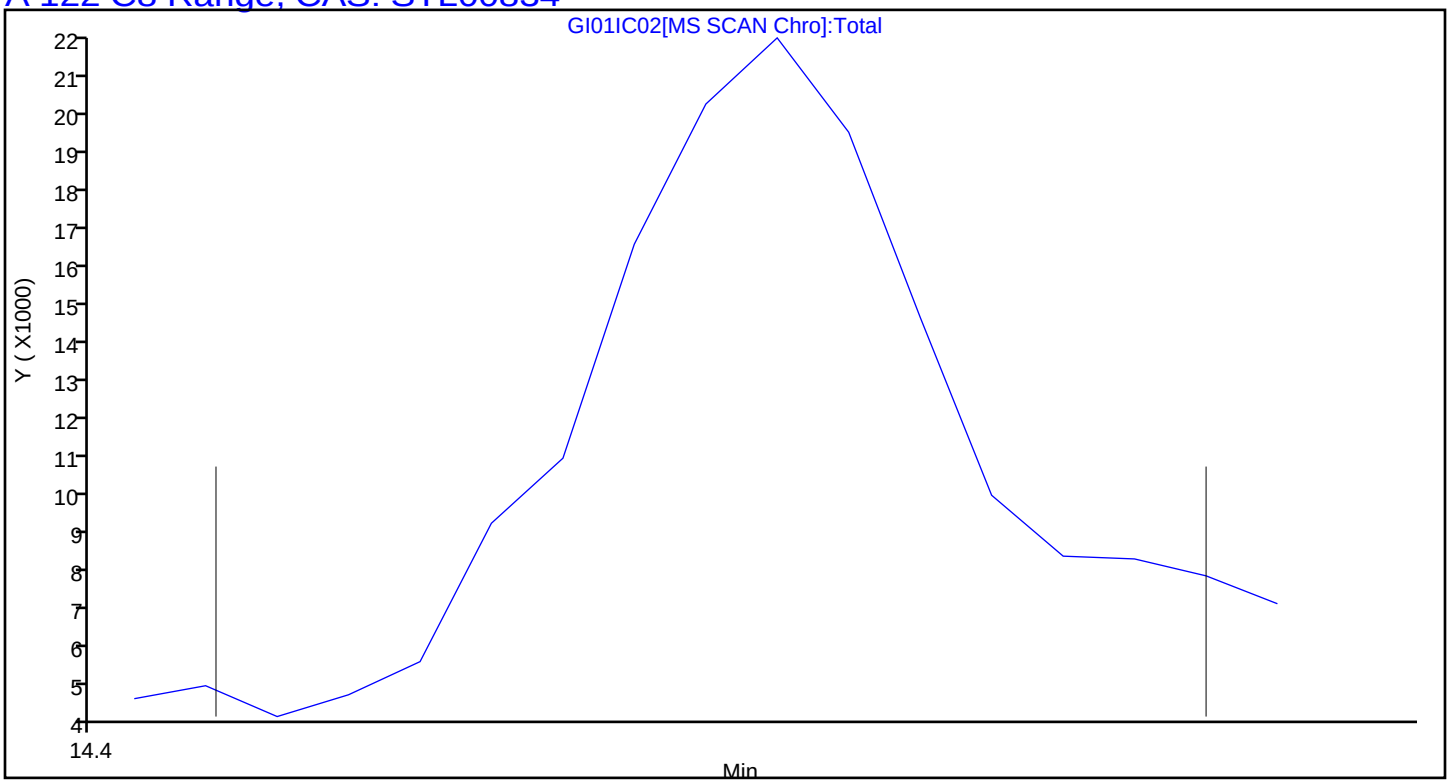


Report Date: 02-Sep-2020 12:23:37 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC02.D				
Injection Date:	01-Sep-2020 23:39:30	Instrument ID:	MG		
Lims ID:	IC L2				
Client ID:					
Operator ID:	AFB	ALS Bottle#:	3	Worklist Smp#:	10
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 122 C8 Range, CAS: STL00834



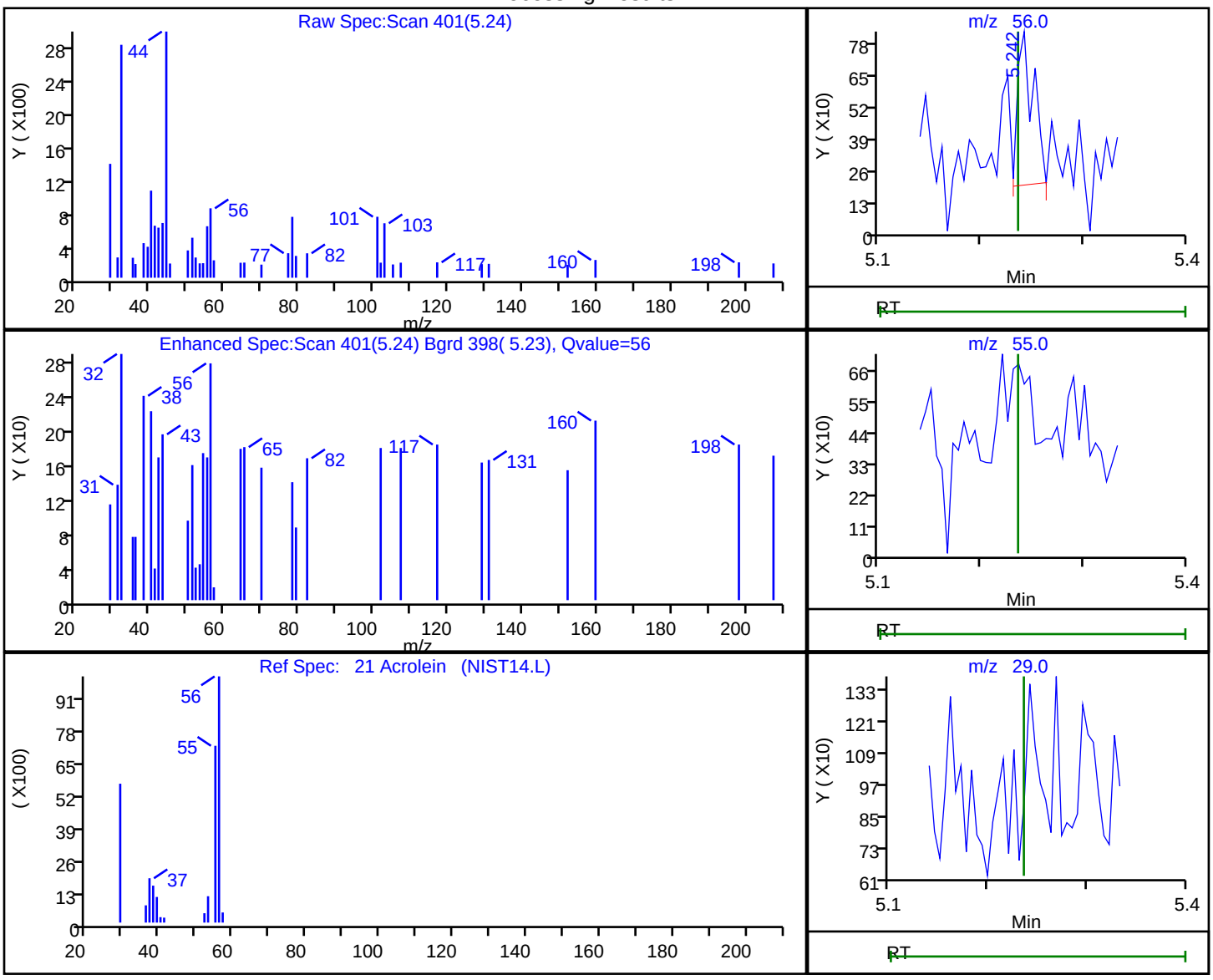
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC02.D				
Injection Date:	01-Sep-2020 23:39:30	Instrument ID:	MG		
Lims ID:	IC L2				
Client ID:					
Operator ID:	AFB	ALS Bottle#:	3	Worklist Smp#:	10
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

21 Acrolein, CAS: 107-02-8

Processing Results



RT	Mass	Response	Amount
5.24	56.00	680	0.053394
5.24	55.00	0	
5.24	29.00	0	

Reviewer: barlozhetskayaa, 02-Sep-2020 10:43:59

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC03.D
Lims ID: IC L3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 02-Sep-2020 00:24:30 ALS Bottle#: 3 Worklist Smp#: 11
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016453-011
Misc. Info.: 314720
Operator ID: AFB Instrument ID: MG
Sublist: chrom-MG_TO15*sub17

Method: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 02-Sep-2020 12:23:42 Calib Date: 02-Sep-2020 03:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1035

First Level Reviewer: barlozhetskayaa Date: 02-Sep-2020 10:38:00

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.811	8.812	-0.001	89	132571	4.80	4.80	
* 2 1,4-Difluorobenzene	114	10.995	10.996	-0.001	98	653131	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.730	15.730	0.000	93	645272	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.374	17.374	0.000	83	449593	4.64	4.44	
6 Chlorodifluoromethane	51	3.705	3.703	0.002	88	11226	0.0800	0.0945	
7 Propene	41	3.721	3.716	0.005	96	5751	0.0800	0.0985	
8 Dichlorodifluoromethane	85	3.764	3.765	-0.001	97	11274	0.0800	0.0849	
9 Chloromethane	52	3.942	3.945	-0.003	75	2873	0.0800	0.1208	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.953	3.951	0.002	92	5785	0.0800	0.0764	
11 Acetaldehyde	44	4.098	4.096	0.002	99	39777	0.4000	1.42	
12 Vinyl chloride	62	4.114	4.114	0.000	96	5768	0.0800	0.0869	
14 Butadiene	54	4.201	4.201	0.000	74	5655	0.0800	0.0966	
13 Butane	43	4.206	4.202	0.004	83	10293	0.0800	0.0866	
15 Bromomethane	94	4.524	4.521	0.003	94	3458	0.0800	0.0862	
16 Chloroethane	64	4.659	4.658	0.001	89	2678	0.0800	0.0973	
17 Ethanol	31	4.772	4.759	0.013	95	16047	0.4000	0.6399	
18 Vinyl bromide	106	4.961	4.960	0.001	97	2733	0.0800	0.0799	
19 2-Methylbutane	43	5.010	5.010	0.000	88	8464	0.0800	0.1048	
20 Trichlorofluoromethane	101	5.236	5.229	0.007	96	9154	0.0800	0.0887	
21 Acrolein	56	5.241	5.235	0.006	29	1960	0.0800	0.1590	
22 Acetonitrile	40	5.312	5.301	0.011	71	2884	0.0800	0.1307	
23 Acetone	58	5.355	5.355	0.000	100	16115	0.2400	0.7294	
24 Pentane	72	5.452	5.448	0.004	94	506	0.0800	0.0754	
25 Isopropyl alcohol	45	5.473	5.451	0.022	95	23180	0.2400	0.3514	
26 Ethyl ether	31	5.635	5.619	0.016	85	5547	0.0800	0.1175	
27 1,1-Dichloroethene	96	5.926	5.928	-0.002	88	2921	0.0800	0.0894	
28 Acrylonitrile	53	6.034	6.032	0.002	78	3178	0.0800	0.1054	
30 2-Methyl-2-propanol	59	6.083	6.059	0.024	96	7941	0.0800	0.1192	
29 1,1,2-Trichloro-1,2,2-trifluoroe	101	6.115	6.107	0.008	87	6627	0.0800	0.0877	
31 Methylene Chloride	84	6.266	6.273	-0.007	87	3527	0.0800	0.1079	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.288	6.289	-0.001	94	7559	0.0800	0.1180	
33 Carbon disulfide	76	6.439	6.438	0.001	94	10302	0.0800	0.0938	
34 trans-1,2-Dichloroethene	96	7.086	7.082	0.004	91	3544	0.0800	0.0921	
35 2-Methylpentane	43	7.107	7.101	0.006	96	14371	0.0800	0.0958	
36 Methyl tert-butyl ether	73	7.247	7.230	0.017	88	8506	0.0800	0.1068	
37 1,1-Dichloroethane	63	7.501	7.499	0.002	98	8657	0.0800	0.0903	
38 Vinyl acetate	43	7.609	7.607	0.002	99	12385	0.0800	0.0986	
40 Hexane	56	8.078	8.082	-0.004	66	4458	0.0800	0.0901	
39 2-Butanone (MEK)	72	8.078	8.063	0.015	86	2587	0.0800	0.1622	
41 Isopropyl ether	45	8.256	8.246	0.010	96	15835	0.0800	0.0959	
42 cis-1,2-Dichloroethene	96	8.482	8.483	-0.001	94	3509	0.0800	0.0858	
43 Ethyl acetate	43	8.682	8.676	0.006	95	12098	0.0800	0.1100	
44 Chloroform	83	8.827	8.825	0.002	92	8911	0.0800	0.0958	
45 Tert-butyl ethyl ether	59	8.935	8.928	0.007	96	13167	0.0800	0.0950	
46 Tetrahydrofuran	42	9.264	9.244	0.020	90	6568	0.0800	0.1191	
47 1,1,1-Trichloroethane	97	9.852	9.851	0.001	93	8119	0.0800	0.0907	
48 1,2-Dichloroethane	62	9.960	9.958	0.002	93	6831	0.0800	0.0926	
50 Benzene	78	10.450	10.451	-0.001	89	12247	0.0800	0.0912	
51 n-Butanol	31	10.477	10.442	0.035	65	2601	0.0800	0.1245	
49 Cyclohexane	69	10.450	10.455	-0.005	84	2208	0.0800	0.0977	
52 Carbon tetrachloride	117	10.477	10.476	0.001	92	6936	0.0800	0.0836	
53 2,3-Dimethylpentane	71	10.580	10.577	0.003	88	3360	0.0800	0.0969	
54 Thiophene	84	10.731	10.725	0.006	91	7055	0.0800	0.0917	
55 Isooctane	57	11.216	11.219	-0.003	98	28267	0.0800	0.0861	
56 n-Heptane	71	11.588	11.594	-0.006	93	4863	0.0800	0.0921	
57 1,2-Dichloropropane	63	11.658	11.669	-0.011	86	5706	0.0800	0.0933	
58 Trichloroethene	130	11.702	11.706	-0.004	86	4841	0.0800	0.0827	
59 Dibromomethane	93	11.793	11.791	0.002	86	5223	0.0800	0.0906	
60 Dichlorobromomethane	83	11.933	11.936	-0.003	92	8475	0.0800	0.0845	
61 1,4-Dioxane	88	11.987	11.974	0.013	79	1505	0.0800	0.0961	
62 Methyl methacrylate	41	12.047	12.038	0.009	84	7935	0.0800	0.1146	
63 Methylcyclohexane	83	12.483	12.480	0.003	87	7731	0.0800	0.0873	
64 4-Methyl-2-pentanone (MIBK)	43	12.909	12.898	0.011	97	12922	0.0800	0.1108	
65 cis-1,3-Dichloropropene	75	12.942	12.938	0.004	97	6786	0.0800	0.0843	
66 trans-1,3-Dichloropropene	75	13.632	13.632	0.000	94	6177	0.0800	0.0933	
67 Toluene	91	13.761	13.759	0.002	90	13451	0.0800	0.0945	
68 1,1,2-Trichloroethane	83	13.831	13.831	0.000	91	3811	0.0800	0.0854	
69 2-Hexanone	58	14.231	14.231	0.000	89	5186	0.0800	0.0984	
70 n-Octane	85	14.452	14.454	-0.002	97	4536	0.0800	0.0875	
71 Chlorodibromomethane	129	14.538	14.536	0.002	94	6529	0.0800	0.0779	
72 Ethylene Dibromide	107	14.824	14.826	-0.002	66	7424	0.0800	0.0927	
73 Tetrachloroethene	129	14.899	14.904	-0.005	86	4551	0.0800	0.0848	
75 Chlorobenzene	112	15.778	15.779	-0.001	92	10169	0.0800	0.0883	
74 2,3-Dimethylheptane	43	15.800	15.801	-0.001	91	22325	0.0800	0.0906	
78 Ethylbenzene	91	16.064	16.068	-0.004	98	17005	0.0800	0.0930	
79 m-Xylene & p-Xylene	91	16.236	16.232	0.004	96	25157	0.1600	0.1738	
80 n-Nonane	57	16.652	16.654	-0.002	92	12817	0.0800	0.0898	
81 Bromoform	173	16.673	16.676	-0.003	87	5133	0.0800	0.0728	
82 Styrene	104	16.695	16.695	0.000	96	8273	0.0800	0.0787	
83 o-Xylene	91	16.760	16.757	0.003	97	13684	0.0800	0.0934	
84 1,1,2,2-Tetrachloroethane	83	17.072	17.078	-0.006	96	10339	0.0800	0.0885	
85 1,2,3-Trichloropropane	110	17.234	17.237	-0.003	91	2300	0.0800	0.0805	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
86 Isopropylbenzene	105	17.342	17.344	-0.002	95	17579	0.0800	0.0914	
87 N-Propylbenzene	120	17.887	17.887	0.000	98	4829	0.0800	0.0940	
88 2-Chlorotoluene	126	17.935	17.930	0.005	96	3929	0.0800	0.0799	
89 4-Ethyltoluene	105	18.038	18.038	0.000	98	17613	0.0800	0.0917	
90 1,3,5-Trimethylbenzene	120	18.108	18.109	-0.001	92	6974	0.0800	0.0908	
92 Alpha Methyl Styrene	118	18.334	18.340	-0.006	83	6104	0.0800	0.0804	
93 n-Decane	57	18.399	18.401	-0.002	86	15543	0.0800	0.0898	
94 tert-Butylbenzene	119	18.528	18.533	-0.005	88	14401	0.0800	0.0853	
95 1,2,4-Trimethylbenzene	105	18.544	18.547	-0.003	93	14761	0.0800	0.0879	
96 sec-Butylbenzene	105	18.803	18.804	-0.001	98	22118	0.0800	0.0873	
97 1,3-Dichlorobenzene	146	18.814	18.815	-0.001	93	9755	0.0800	0.0815	
98 Benzyl chloride	91	18.890	18.891	-0.001	96	13685	0.0800	0.0865	
99 1,4-Dichlorobenzene	146	18.906	18.905	0.001	84	9941	0.0800	0.0820	
100 4-Isopropyltoluene	119	18.965	18.965	0.000	96	16482	0.0800	0.0840	
101 1,2,3-Trimethylbenzene	105	19.019	19.019	0.000	98	14733	0.0800	0.1047	
102 Butylcyclohexane	83	19.073	19.074	-0.001	86	14842	0.0800	0.0904	
103 2,3-Dihydroindene	117	19.262	19.262	0.000	91	14037	0.0800	0.0837	
104 1,2-Dichlorobenzene	146	19.262	19.262	0.000	79	9714	0.0800	0.0847	
106 Indene	116	19.391	19.392	-0.001	74	11769	0.0800	0.0819	
105 n-Butylbenzene	91	19.396	19.398	-0.002	96	20333	0.0800	0.0915	
107 Undecane	57	19.709	19.708	0.001	91	18018	0.0800	0.0933	
108 1,2-Dibromo-3-Chloropropane	157	19.860	19.858	0.002	78	3942	0.0800	0.0830	
109 1,2,4,5-Tetramethylbenzene	119	20.146	20.150	-0.004	95	16880	0.0800	0.1149	
110 Dodecane	57	20.766	20.765	0.001	90	22403	0.0800	0.1329	
111 1,2,4-Trichlorobenzene	180	20.955	20.957	-0.002	89	8798	0.0800	0.0871	
112 Naphthalene	128	21.095	21.095	0.000	98	23525	0.0800	0.0966	
113 Hexachlorobutadiene	225	21.305	21.304	0.001	88	7774	0.0800	0.0911	
114 1,2,3-Trichlorobenzene	180	21.370	21.372	-0.002	92	8763	0.0800	0.0902	
115 2-Methylnaphthalene	142	22.141	22.144	-0.003	98	12763	0.0800	0.1218	
116 1-Methylnaphthalene	142	22.319	22.319	0.000	99	14747	0.0800	0.1383	
A 122 C8 Range	1	14.452	(14.409-14.495)		0	66296	0.0800	0.1053	
S 123 1,2-Dichloroethene, Total	1				0		0.1600	0.1779	
S 124 Xylenes, Total	100				0		0.2400	0.2673	

Reagents:

40L1-3DQP_00031	Amount Added: 200.00	Units: mL	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

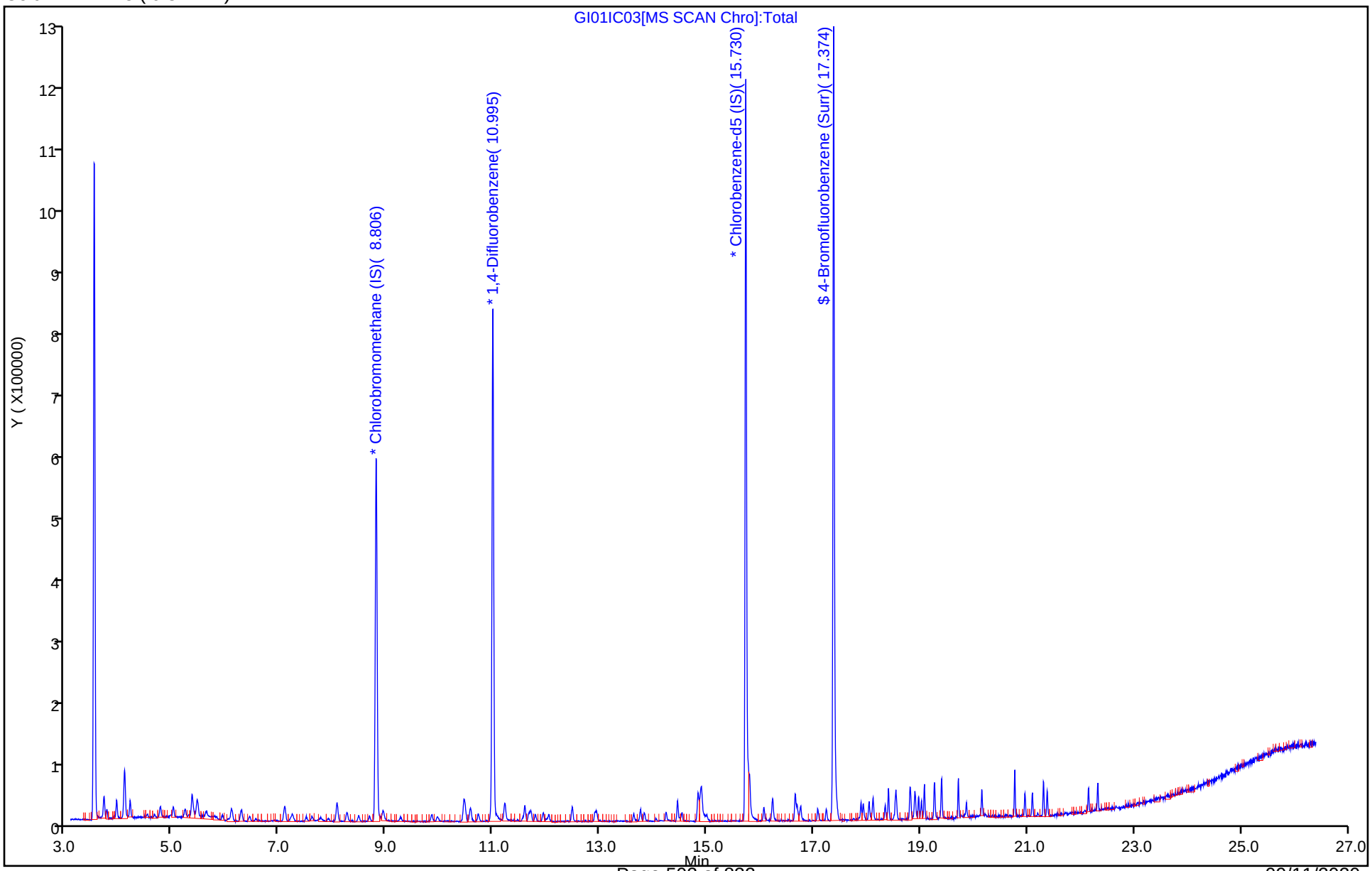
Report Date: 02-Sep-2020 12:23:43 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC03.D

Injection Date:	02-Sep-2020 00:24:30	Instrument ID:	MG	Operator ID:	AFB
Lims ID:	IC L3			Worklist Smp#:	11
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

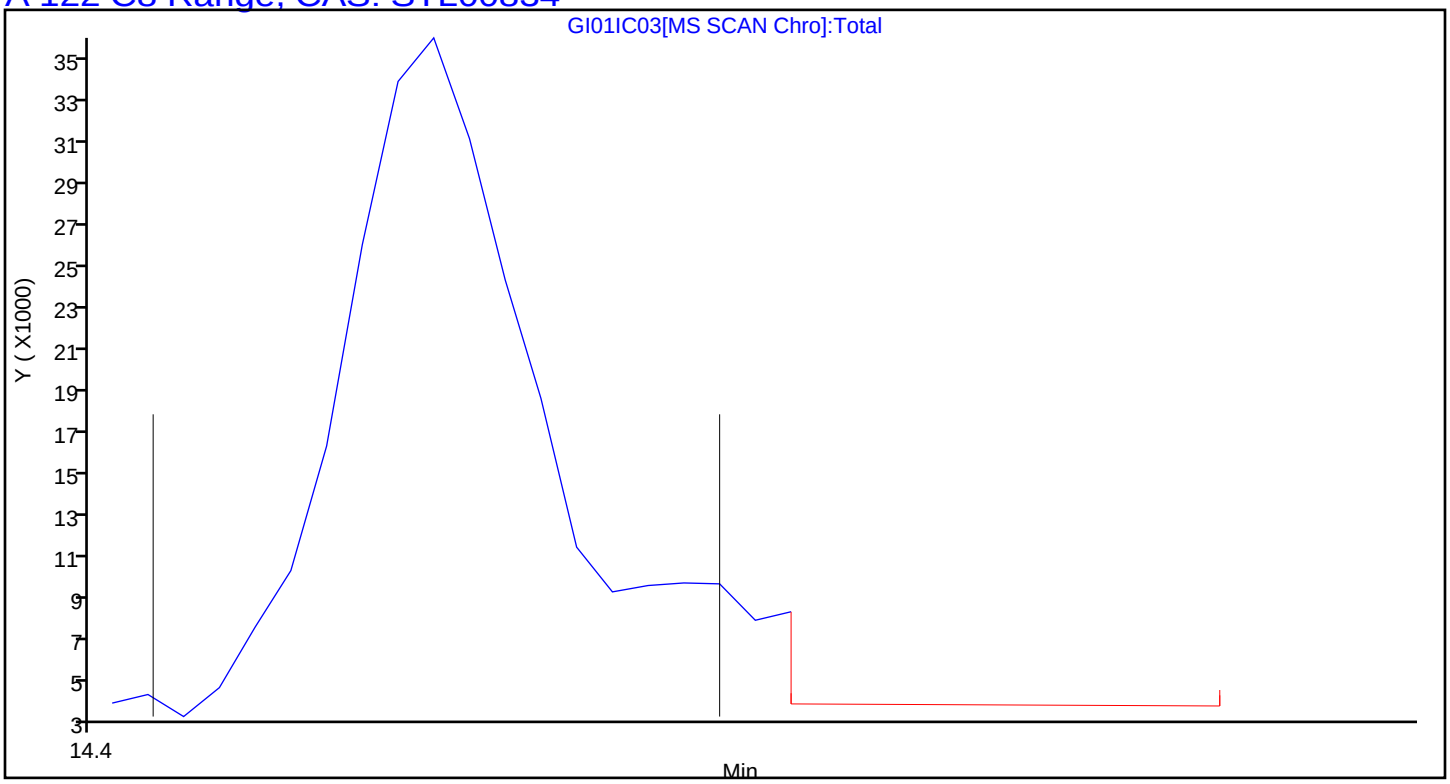


Report Date: 02-Sep-2020 12:23:43 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC03.D				
Injection Date:	02-Sep-2020 00:24:30	Instrument ID:	MG		
Lims ID:	IC L3				
Client ID:					
Operator ID:	AFB	ALS Bottle#:	3	Worklist Smp#:	11
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 122 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC04.D
Lims ID: IC L4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 02-Sep-2020 01:08:30 ALS Bottle#: 4 Worklist Smp#: 12
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016453-012
Misc. Info.: 314717
Operator ID: AFB Instrument ID: MG
Sublist: chrom-MG_TO15*sub17

Method: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 02-Sep-2020 12:23:49 Calib Date: 02-Sep-2020 03:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1035

First Level Reviewer: barlozhetskayaa Date: 02-Sep-2020 10:39:39

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.811	8.812	-0.001	89	143110	4.80	4.80	
* 2 1,4-Difluorobenzene	114	10.995	10.996	-0.001	98	640266	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.730	15.730	0.000	93	660078	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.374	17.374	0.000	82	471736	4.64	4.55	
6 Chlorodifluoromethane	51	3.699	3.703	-0.004	98	19940	0.1600	0.1555	
7 Propene	41	3.716	3.716	0.000	97	11507	0.1600	0.1825	
8 Dichlorodifluoromethane	85	3.764	3.765	-0.001	97	23973	0.1600	0.1672	
9 Chloromethane	52	3.947	3.945	0.002	70	5007	0.1600	0.1951	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.953	3.951	0.002	94	12161	0.1600	0.1487	
11 Acetaldehyde	44	4.104	4.096	0.008	98	28254	0.8000	0.9358	
12 Vinyl chloride	62	4.115	4.114	0.001	55	10514	0.1600	0.1467	
14 Butadiene	54	4.201	4.201	0.000	66	10364	0.1600	0.1641	
13 Butane	43	4.201	4.202	-0.001	85	22000	0.1600	0.1714	
15 Bromomethane	94	4.524	4.521	0.003	97	7011	0.1600	0.1619	
16 Chloroethane	64	4.659	4.658	0.001	81	4702	0.1600	0.1582	
17 Ethanol	31	4.778	4.759	0.019	95	20757	0.8000	0.7668	
18 Vinyl bromide	106	4.967	4.960	0.007	95	5761	0.1600	0.1560	
19 2-Methylbutane	43	5.015	5.010	0.005	93	14193	0.1600	0.1629	
20 Trichlorofluoromethane	101	5.231	5.229	0.002	97	17071	0.1600	0.1532	
21 Acrolein	56	5.236	5.235	0.001	27	2402	0.1600	0.1805	
22 Acetonitrile	40	5.312	5.301	0.011	92	3339	0.1600	0.1402	
23 Acetone	58	5.371	5.355	0.016	98	11375	0.4800	0.4769	
24 Pentane	72	5.452	5.448	0.004	95	1138	0.1600	0.1571	
25 Isopropyl alcohol	45	5.479	5.451	0.028	97	31959	0.4800	0.4488	
26 Ethyl ether	31	5.635	5.619	0.016	88	7425	0.1600	0.1457	
27 1,1-Dichloroethene	96	5.921	5.928	-0.007	89	5194	0.1600	0.1472	
28 Acrylonitrile	53	6.045	6.032	0.013	97	4797	0.1600	0.1474	
30 2-Methyl-2-propanol	59	6.099	6.059	0.040	86	11067	0.1600	0.1539	
29 1,1,2-Trichloro-1,2,2-trifluoroe	101	6.110	6.107	0.003	86	13027	0.1600	0.1597	
31 Methylene Chloride	84	6.277	6.273	0.004	89	6840	0.1600	0.1938	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.293	6.289	0.004	85	11314	0.1600	0.1635	
33 Carbon disulfide	76	6.439	6.438	0.001	96	18918	0.1600	0.1595	
34 trans-1,2-Dichloroethene	96	7.091	7.082	0.009	92	6087	0.1600	0.1466	
35 2-Methylpentane	43	7.102	7.101	0.001	95	25239	0.1600	0.1558	
36 Methyl tert-butyl ether	73	7.253	7.230	0.023	92	11381	0.1600	0.1324	
37 1,1-Dichloroethane	63	7.501	7.499	0.002	98	16484	0.1600	0.1592	
38 Vinyl acetate	43	7.609	7.607	0.002	100	18272	0.1600	0.1348	
39 2-Butanone (MEK)	72	8.067	8.063	0.004	84	2372	0.1600	0.1378	
40 Hexane	56	8.089	8.082	0.007	88	9026	0.1600	0.1689	
41 Isopropyl ether	45	8.261	8.249	0.012	95	22166	0.1600	0.1244	
42 cis-1,2-Dichloroethene	96	8.493	8.483	0.010	95	6849	0.1600	0.1551	
43 Ethyl acetate	43	8.698	8.676	0.022	97	14255	0.1600	0.1201	
44 Chloroform	83	8.833	8.825	0.008	28	15506	0.1600	0.1545	
45 Tert-butyl ethyl ether	59	8.941	8.928	0.013	96	18642	0.1600	0.1246	
46 Tetrahydrofuran	42	9.270	9.244	0.026	91	8281	0.1600	0.1391	
47 1,1,1-Trichloroethane	97	9.857	9.851	0.006	93	14954	0.1600	0.1548	
48 1,2-Dichloroethane	62	9.960	9.958	0.002	95	11727	0.1600	0.1622	
49 Cyclohexane	69	10.456	10.455	0.001	83	3934	0.1600	0.1775	
50 Benzene	78	10.456	10.451	0.005	92	21718	0.1600	0.1650	
52 Carbon tetrachloride	117	10.478	10.476	0.002	91	13863	0.1600	0.1704	
51 n-Butanol	31	10.478	10.442	0.036	66	3605	0.1600	0.1761	
53 2,3-Dimethylpentane	71	10.569	10.577	-0.008	91	5364	0.1600	0.1578	
54 Thiophene	84	10.720	10.725	-0.005	87	11360	0.1600	0.1506	
55 Isooctane	57	11.222	11.219	0.003	97	55108	0.1600	0.1711	
56 n-Heptane	71	11.599	11.594	0.005	94	8829	0.1600	0.1706	
57 1,2-Dichloropropane	63	11.669	11.669	0.000	88	9433	0.1600	0.1574	
58 Trichloroethene	130	11.707	11.706	0.001	88	8487	0.1600	0.1479	
59 Dibromomethane	93	11.793	11.791	0.002	89	9449	0.1600	0.1671	
60 Dichlorobromomethane	83	11.939	11.936	0.003	95	16110	0.1600	0.1639	
61 1,4-Dioxane	88	12.009	11.974	0.035	80	2097	0.1600	0.1365	
62 Methyl methacrylate	41	12.047	12.038	0.009	83	8893	0.1600	0.1310	
63 Methylcyclohexane	83	12.478	12.480	-0.002	85	14886	0.1600	0.1716	
64 4-Methyl-2-pentanone (MIBK)	43	12.904	12.898	0.006	96	15812	0.1600	0.1384	
65 cis-1,3-Dichloropropene	75	12.936	12.938	-0.002	97	13190	0.1600	0.1671	
66 trans-1,3-Dichloropropene	75	13.632	13.632	0.000	89	10340	0.1600	0.1527	
67 Toluene	91	13.762	13.759	0.003	90	21528	0.1600	0.1479	
68 1,1,2-Trichloroethane	83	13.832	13.831	0.001	96	6897	0.1600	0.1512	
69 2-Hexanone	58	14.241	14.231	0.010	91	7073	0.1600	0.1311	
70 n-Octane	85	14.457	14.454	0.003	97	8073	0.1600	0.1522	
71 Chlorodibromomethane	129	14.538	14.536	0.002	91	12942	0.1600	0.1509	
72 Ethylene Dibromide	107	14.824	14.826	-0.002	96	11912	0.1600	0.1455	
73 Tetrachloroethene	129	14.905	14.904	0.001	90	8385	0.1600	0.1528	
75 Chlorobenzene	112	15.778	15.779	-0.001	93	18072	0.1600	0.1535	
74 2,3-Dimethylheptane	43	15.800	15.801	-0.001	92	41603	0.1600	0.1651	
78 Ethylbenzene	91	16.069	16.068	0.001	98	26172	0.1600	0.1399	
79 m-Xylene & p-Xylene	91	16.231	16.232	-0.001	98	39802	0.3200	0.2689	
80 n-Nonane	57	16.657	16.654	0.003	94	21633	0.1600	0.1482	
81 Bromoform	173	16.673	16.676	-0.003	88	10274	0.1600	0.1424	
82 Styrene	104	16.690	16.695	-0.005	95	13483	0.1600	0.1253	
83 o-Xylene	91	16.754	16.757	-0.003	96	21193	0.1600	0.1415	
84 1,1,2,2-Tetrachloroethane	83	17.078	17.078	0.000	97	17273	0.1600	0.1445	
85 1,2,3-Trichloropropane	110	17.240	17.237	0.003	92	3979	0.1600	0.1362	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
86 Isopropylbenzene	105	17.342	17.344	-0.002	90	25851	0.1600	0.1314	
87 N-Propylbenzene	120	17.881	17.887	-0.006	98	6564	0.1600	0.1249	
88 2-Chlorotoluene	126	17.930	17.930	0.000	98	6674	0.1600	0.1326	
89 4-Ethyltoluene	105	18.038	18.038	0.000	98	24383	0.1600	0.1241	
90 1,3,5-Trimethylbenzene	120	18.108	18.109	-0.001	90	9268	0.1600	0.1180	
92 Alpha Methyl Styrene	118	18.340	18.340	0.000	87	8841	0.1600	0.1139	
93 n-Decane	57	18.399	18.401	-0.002	89	25661	0.1600	0.1450	
94 tert-Butylbenzene	119	18.534	18.533	0.001	90	20349	0.1600	0.1178	
95 1,2,4-Trimethylbenzene	105	18.545	18.547	-0.002	96	19813	0.1600	0.1153	
96 sec-Butylbenzene	105	18.803	18.804	-0.001	97	30874	0.1600	0.1191	
97 1,3-Dichlorobenzene	146	18.820	18.815	0.005	95	15896	0.1600	0.1299	
98 Benzyl chloride	91	18.890	18.891	-0.001	93	18578	0.1600	0.1148	
99 1,4-Dichlorobenzene	146	18.906	18.905	0.001	91	16086	0.1600	0.1298	
100 4-Isopropyltoluene	119	18.965	18.965	0.000	96	23308	0.1600	0.1162	
101 1,2,3-Trimethylbenzene	105	19.019	19.019	0.000	97	20125	0.1600	0.1397	
102 Butylcyclohexane	83	19.073	19.074	-0.001	86	24085	0.1600	0.1434	
103 2,3-Dihydroindene	117	19.262	19.262	0.000	90	19180	0.1600	0.1117	
104 1,2-Dichlorobenzene	146	19.256	19.262	-0.006	83	15119	0.1600	0.1289	
106 Indene	116	19.391	19.392	-0.001	89	16584	0.1600	0.1128	
105 n-Butylbenzene	91	19.397	19.398	-0.001	98	26410	0.1600	0.1161	
107 Undecane	57	19.704	19.708	-0.004	91	26240	0.1600	0.1328	
108 1,2-Dibromo-3-Chloropropane	157	19.860	19.858	0.002	82	6556	0.1600	0.1347	
109 1,2,4,5-Tetramethylbenzene	119	20.146	20.150	-0.004	96	19690	0.1600	0.1310	
110 Dodecane	57	20.766	20.765	0.001	89	23057	0.1600	0.1337	
111 1,2,4-Trichlorobenzene	180	20.960	20.957	0.003	92	11196	0.1600	0.1084	
112 Naphthalene	128	21.095	21.095	0.000	98	25941	0.1600	0.1041	
113 Hexachlorobutadiene	225	21.300	21.304	-0.004	88	10052	0.1600	0.1152	
114 1,2,3-Trichlorobenzene	180	21.376	21.372	0.004	92	10179	0.1600	0.1024	
115 2-Methylnaphthalene	142	22.141	22.144	-0.003	98	11539	0.1600	0.1077	
116 1-Methylnaphthalene	142	22.314	22.319	-0.005	98	14358	0.1600	0.1316	
A 122 C8 Range	1	14.452	(14.409-14.495)		0	108617	0.1600	0.1687	
S 123 1,2-Dichloroethene, Total	1				0		0.3200	0.3017	
S 124 Xylenes, Total	100				0		0.4800	0.4104	

Reagents:

40L5DQP_00020	Amount Added: 80.00	Units: mL	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

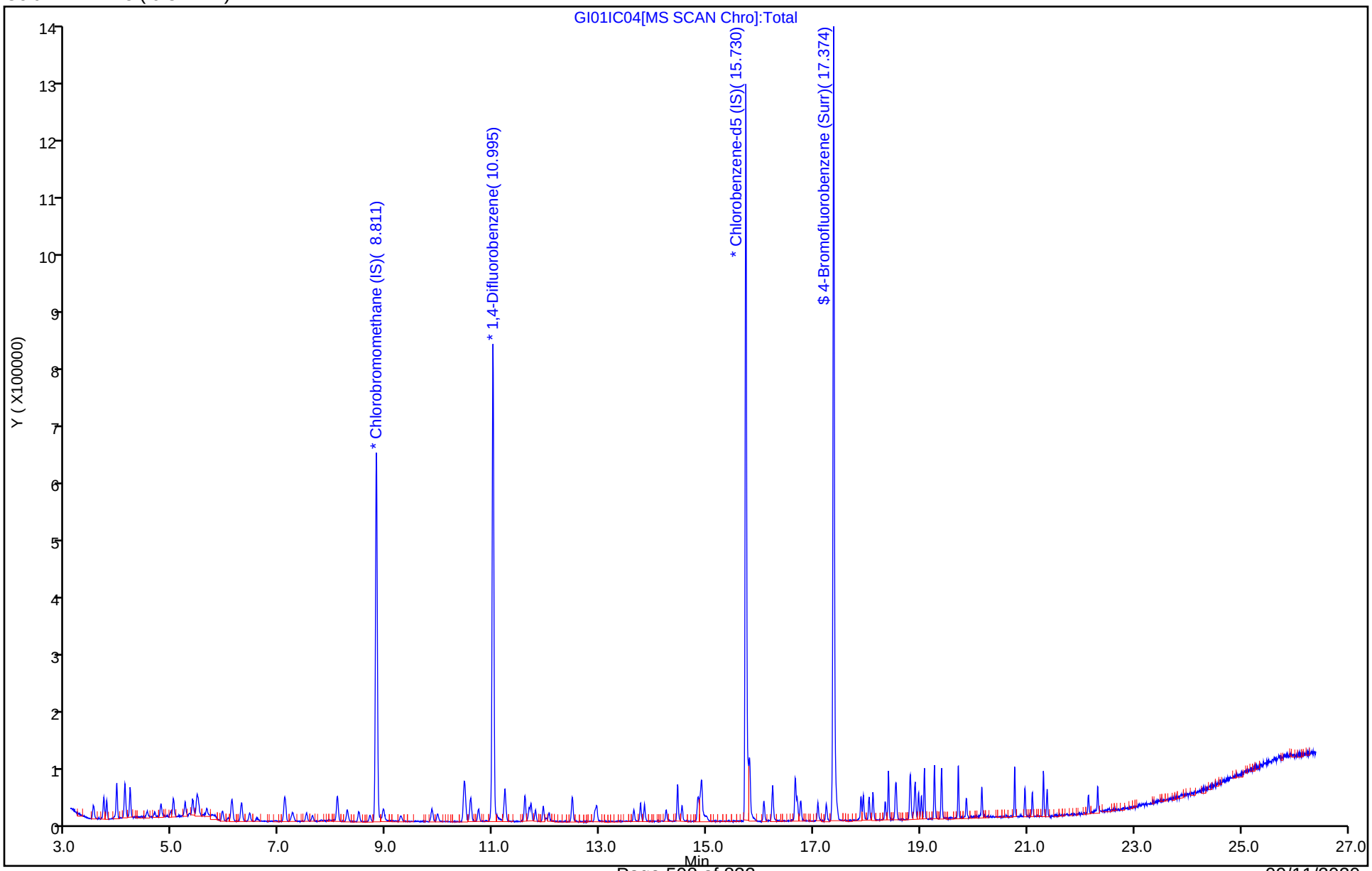
Report Date: 02-Sep-2020 12:23:50 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC04.D

Injection Date:	02-Sep-2020 01:08:30	Instrument ID:	MG	Operator ID:	AFB
Lims ID:	IC L4			Worklist Smp#:	12
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

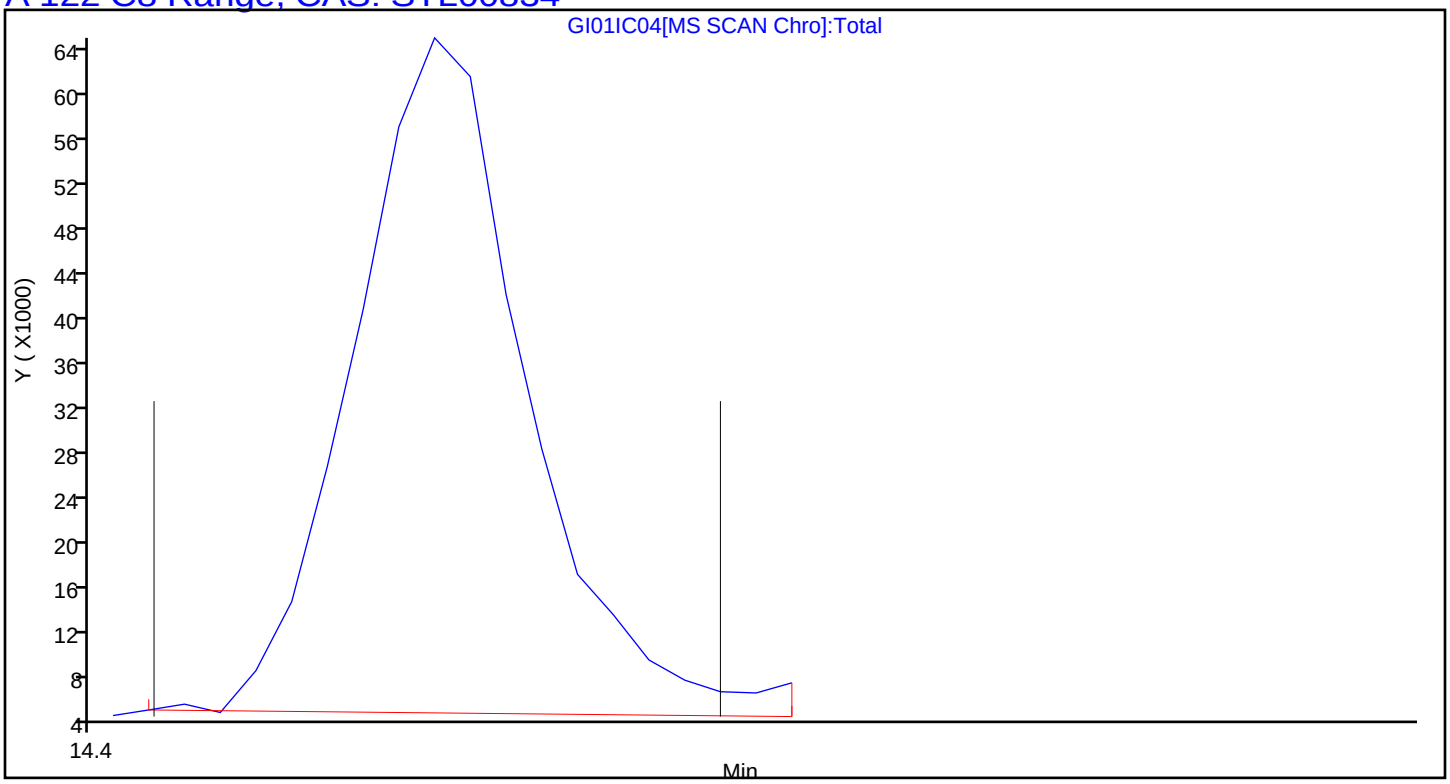


Report Date: 02-Sep-2020 12:23:50 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC04.D				
Injection Date:	02-Sep-2020 01:08:30	Instrument ID:	MG		
Lims ID:	IC L4				
Client ID:					
Operator ID:	AFB	ALS Bottle#:	4	Worklist Smp#:	12
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 122 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC05.D
Lims ID: IC L5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 02-Sep-2020 01:52:30 ALS Bottle#: 4 Worklist Smp#: 13
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016453-013
Misc. Info.: 314717
Operator ID: AFB Instrument ID: MG
Sublist: chrom-MG_TO15*sub17

Method: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 02-Sep-2020 12:23:56 Calib Date: 02-Sep-2020 03:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1035

First Level Reviewer: barlozhetskayaa Date: 02-Sep-2020 10:40:34

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.811	8.812	-0.001	89	136148	4.80	4.80	
* 2 1,4-Difluorobenzene	114	10.995	10.996	-0.001	98	662086	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.730	15.730	0.000	93	656245	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.374	17.374	0.000	83	468432	4.64	4.55	
6 Chlorodifluoromethane	51	3.705	3.703	0.002	98	48665	0.4000	0.3989	
7 Propene	41	3.716	3.716	0.000	97	24863	0.4000	0.4145	
8 Dichlorodifluoromethane	85	3.770	3.765	0.005	98	52568	0.4000	0.3854	
9 Chloromethane	52	3.953	3.945	0.008	67	10266	0.4000	0.4204	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.947	3.951	-0.004	94	29483	0.4000	0.3790	
11 Acetaldehyde	44	4.098	4.096	0.002	99	73859	2.00	2.57	
12 Vinyl chloride	62	4.120	4.114	0.006	99	27040	0.4000	0.3966	
14 Butadiene	54	4.206	4.201	0.005	66	25008	0.4000	0.4161	
13 Butane	43	4.206	4.202	0.004	85	51072	0.4000	0.4183	
15 Bromomethane	94	4.524	4.521	0.003	98	16122	0.4000	0.3914	
16 Chloroethane	64	4.665	4.658	0.007	88	10826	0.4000	0.3828	
17 Ethanol	31	4.756	4.759	-0.003	96	58436	2.00	2.27	
18 Vinyl bromide	106	4.961	4.960	0.001	97	14224	0.4000	0.4049	
19 2-Methylbutane	43	5.010	5.010	0.000	92	33422	0.4000	0.4031	
20 Trichlorofluoromethane	101	5.225	5.229	-0.004	97	40736	0.4000	0.3843	
21 Acrolein	56	5.242	5.235	0.007	32	5828	0.4000	0.4602	
22 Acetonitrile	40	5.301	5.301	0.000	99	12333	0.4000	0.5444	
23 Acetone	58	5.355	5.355	0.000	99	33434	1.20	1.47	
24 Pentane	72	5.452	5.448	0.004	80	2773	0.4000	0.4024	
25 Isopropyl alcohol	45	5.447	5.451	-0.004	77	90947	1.20	1.34	
26 Ethyl ether	31	5.619	5.619	0.000	91	22137	0.4000	0.4565	
27 1,1-Dichloroethene	96	5.932	5.928	0.004	88	13897	0.4000	0.4141	
28 Acrylonitrile	53	6.024	6.032	-0.008	94	13744	0.4000	0.4438	
30 2-Methyl-2-propanol	59	6.067	6.059	0.008	97	30344	0.4000	0.4435	
29 1,1,2-Trichloro-1,2,2-trifluoroe	101	6.104	6.107	-0.003	89	30392	0.4000	0.3916	
31 Methylene Chloride	84	6.272	6.273	-0.001	88	14649	0.4000	0.4363	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.288	6.289	-0.001	94	26000	0.4000	0.3951	
33 Carbon disulfide	76	6.439	6.438	0.001	96	44363	0.4000	0.3932	
34 trans-1,2-Dichloroethene	96	7.086	7.082	0.004	92	16188	0.4000	0.4097	
35 2-Methylpentane	43	7.102	7.101	0.001	96	63929	0.4000	0.4148	
36 Methyl tert-butyl ether	73	7.226	7.230	-0.004	90	36435	0.4000	0.4455	
37 1,1-Dichloroethane	63	7.501	7.499	0.002	98	39683	0.4000	0.4028	
38 Vinyl acetate	43	7.603	7.607	-0.004	100	55733	0.4000	0.4321	
39 2-Butanone (MEK)	72	8.056	8.063	-0.007	95	7655	0.4000	0.4674	
40 Hexane	56	8.078	8.082	-0.004	87	20447	0.4000	0.4022	
41 Isopropyl ether	45	8.245	8.248	-0.003	96	72295	0.4000	0.4264	
42 cis-1,2-Dichloroethene	96	8.482	8.483	-0.001	96	16888	0.4000	0.4021	
43 Ethyl acetate	43	8.677	8.676	0.001	97	48461	0.4000	0.4291	
44 Chloroform	83	8.822	8.825	-0.003	91	38061	0.4000	0.3986	
45 Tert-butyl ethyl ether	59	8.925	8.928	-0.003	97	60350	0.4000	0.4241	
46 Tetrahydrofuran	42	9.248	9.244	0.004	90	25346	0.4000	0.4474	
47 1,1,1-Trichloroethane	97	9.852	9.851	0.001	94	36173	0.4000	0.3936	
48 1,2-Dichloroethane	62	9.960	9.958	0.002	95	29376	0.4000	0.3928	
49 Cyclohexane	69	10.451	10.455	-0.004	82	9450	0.4000	0.4124	
50 Benzene	78	10.451	10.451	0.000	92	53895	0.4000	0.3960	
52 Carbon tetrachloride	117	10.472	10.476	-0.004	92	34839	0.4000	0.4141	
51 n-Butanol	31	10.451	10.442	0.009	66	9421	0.4000	0.4450	
53 2,3-Dimethylpentane	71	10.575	10.577	-0.002	91	14994	0.4000	0.4266	
54 Thiophene	84	10.720	10.725	-0.005	94	32749	0.4000	0.4199	
55 Isooctane	57	11.216	11.219	-0.003	98	134587	0.4000	0.4042	
56 n-Heptane	71	11.594	11.594	0.000	95	21146	0.4000	0.3951	
57 1,2-Dichloropropane	63	11.669	11.669	0.000	90	25767	0.4000	0.4157	
58 Trichloroethene	130	11.707	11.706	0.001	90	21557	0.4000	0.3633	
59 Dibromomethane	93	11.793	11.791	0.002	88	22450	0.4000	0.3840	
60 Dichlorobromomethane	83	11.934	11.936	-0.002	94	39980	0.4000	0.3934	
61 1,4-Dioxane	88	11.982	11.974	0.008	98	6721	0.4000	0.4232	
62 Methyl methacrylate	41	12.036	12.038	-0.002	84	30238	0.4000	0.4309	
63 Methylcyclohexane	83	12.484	12.480	0.004	86	35264	0.4000	0.3930	
64 4-Methyl-2-pentanone (MIBK)	43	12.899	12.898	0.001	96	51809	0.4000	0.4384	
65 cis-1,3-Dichloropropene	75	12.937	12.938	-0.001	95	31812	0.4000	0.3898	
66 trans-1,3-Dichloropropene	75	13.632	13.632	0.000	90	27117	0.4000	0.4028	
67 Toluene	91	13.756	13.759	-0.003	91	60905	0.4000	0.4208	
68 1,1,2-Trichloroethane	83	13.826	13.831	-0.005	95	18372	0.4000	0.4050	
69 2-Hexanone	58	14.231	14.231	0.000	91	23138	0.4000	0.4315	
70 n-Octane	85	14.452	14.454	-0.002	97	22082	0.4000	0.4186	
71 Chlorodibromomethane	129	14.538	14.536	0.002	93	33024	0.4000	0.3872	
72 Ethylene Dibromide	107	14.824	14.826	-0.002	98	32736	0.4000	0.4021	
73 Tetrachloroethene	129	14.899	14.904	-0.005	88	19868	0.4000	0.3641	
75 Chlorobenzene	112	15.778	15.779	-0.001	89	47729	0.4000	0.4077	
74 2,3-Dimethylheptane	43	15.800	15.801	-0.001	92	98500	0.4000	0.3932	
78 Ethylbenzene	91	16.069	16.068	0.001	99	78472	0.4000	0.4219	
79 m-Xylene & p-Xylene	91	16.231	16.232	-0.001	98	117852	0.8000	0.8008	
80 n-Nonane	57	16.657	16.654	0.003	92	57593	0.4000	0.3967	
81 Bromoform	173	16.673	16.676	-0.003	89	26419	0.4000	0.3682	
82 Styrene	104	16.695	16.695	0.000	96	41558	0.4000	0.3885	
83 o-Xylene	91	16.754	16.757	-0.003	97	62312	0.4000	0.4184	
84 1,1,2,2-Tetrachloroethane	83	17.078	17.078	0.000	97	49310	0.4000	0.4150	
85 1,2,3-Trichloropropane	110	17.234	17.237	-0.003	93	12020	0.4000	0.4137	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
86 Isopropylbenzene	105	17.342	17.344	-0.002	97	78721	0.4000	0.4023	
87 N-Propylbenzene	120	17.887	17.887	0.000	97	19728	0.4000	0.3777	
88 2-Chlorotoluene	126	17.924	17.930	-0.006	98	21271	0.4000	0.4251	
89 4-Ethyltoluene	105	18.038	18.038	0.000	98	76712	0.4000	0.3926	
90 1,3,5-Trimethylbenzene	120	18.108	18.109	-0.001	91	31514	0.4000	0.4036	
92 Alpha Methyl Styrene	118	18.340	18.340	0.000	83	27908	0.4000	0.3616	
93 n-Decane	57	18.399	18.401	-0.002	88	71149	0.4000	0.4043	
94 tert-Butylbenzene	119	18.534	18.533	0.001	89	64684	0.4000	0.3767	
95 1,2,4-Trimethylbenzene	105	18.545	18.547	-0.002	95	67360	0.4000	0.3944	
96 sec-Butylbenzene	105	18.803	18.804	-0.001	98	96336	0.4000	0.3739	
97 1,3-Dichlorobenzene	146	18.814	18.815	-0.001	95	43692	0.4000	0.3591	
98 Benzyl chloride	91	18.890	18.891	-0.001	95	59541	0.4000	0.3701	
99 1,4-Dichlorobenzene	146	18.906	18.905	0.001	91	44948	0.4000	0.3647	
100 4-Isopropyltoluene	119	18.965	18.965	0.000	96	75338	0.4000	0.3777	
101 1,2,3-Trimethylbenzene	105	19.019	19.019	0.000	98	66959	0.4000	0.4645	
102 Butylcyclohexane	83	19.073	19.074	-0.001	85	66421	0.4000	0.3978	
104 1,2-Dichlorobenzene	146	19.262	19.262	0.000	78	41138	0.4000	0.3528	
103 2,3-Dihydroindene	117	19.262	19.262	0.000	91	62198	0.4000	0.3645	
106 Indene	116	19.391	19.392	-0.001	93	54200	0.4000	0.3707	
105 n-Butylbenzene	91	19.397	19.398	-0.001	96	88169	0.4000	0.3900	
107 Undecane	57	19.709	19.708	0.001	92	77930	0.4000	0.3968	
108 1,2-Dibromo-3-Chloropropane	157	19.860	19.858	0.002	81	20067	0.4000	0.4105	
109 1,2,4,5-Tetramethylbenzene	119	20.152	20.150	0.002	95	71014	0.4000	0.4696	
110 Dodecane	57	20.766	20.765	0.001	89	76360	0.4000	0.4453	
111 1,2,4-Trichlorobenzene	180	20.955	20.957	-0.002	91	35272	0.4000	0.3435	
112 Naphthalene	128	21.095	21.095	0.000	98	88191	0.4000	0.3560	
113 Hexachlorobutadiene	225	21.305	21.304	0.001	88	29410	0.4000	0.3390	
114 1,2,3-Trichlorobenzene	180	21.376	21.372	0.004	93	33331	0.4000	0.3372	
115 2-Methylnaphthalene	142	22.147	22.144	0.003	98	41015	0.4000	0.3850	
116 1-Methylnaphthalene	142	22.319	22.319	0.000	99	46614	0.4000	0.4298	
A 122 C8 Range	1	14.449	(14.399-14.516)		0	266284	0.4000	0.4159	
S 123 1,2-Dichloroethene, Total	1				0		0.8000	0.8118	
S 124 Xylenes, Total	100				0		1.20	1.22	

Reagents:

40L5DQP_00020	Amount Added: 200.00	Units: mL	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

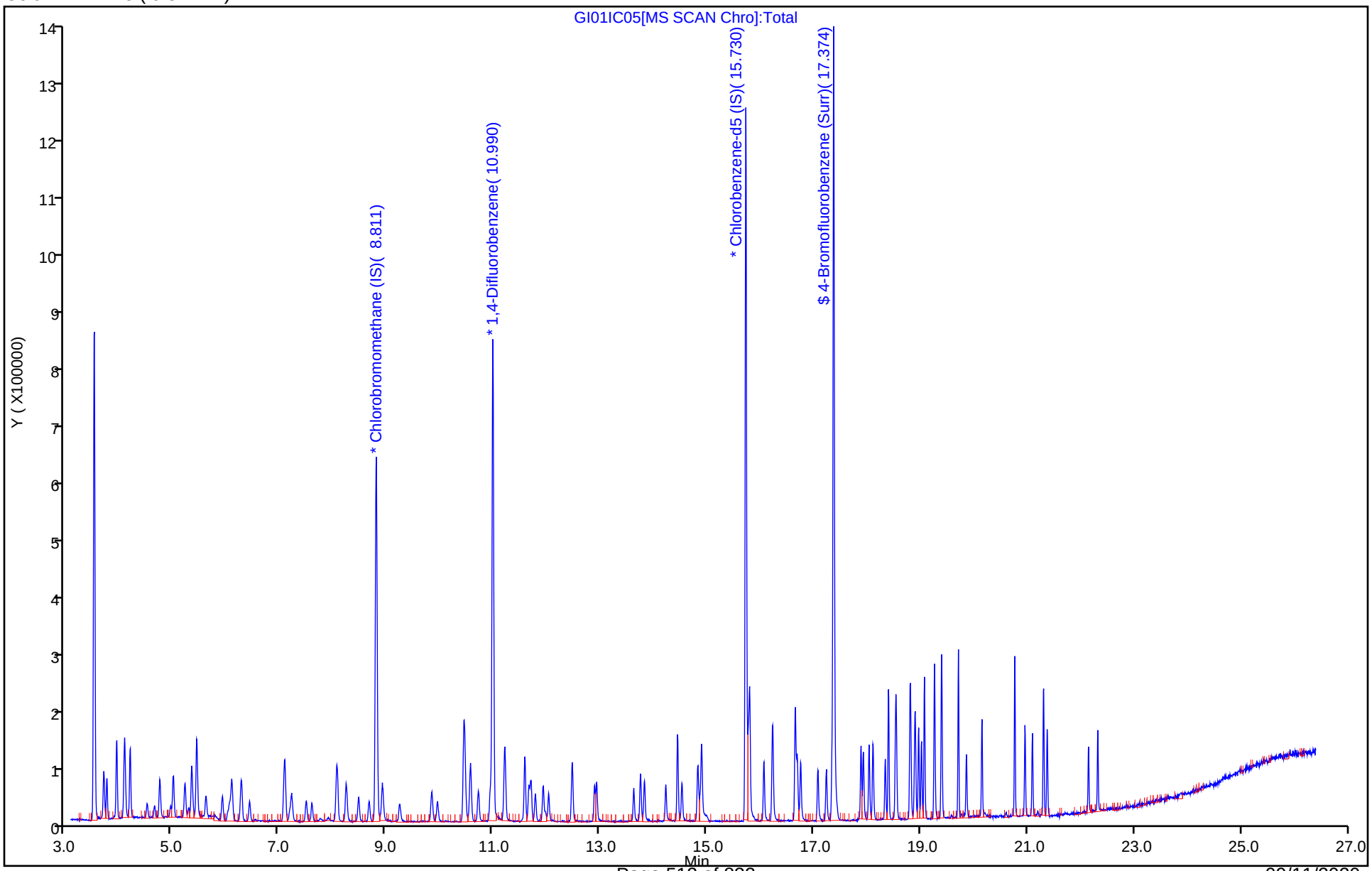
Report Date: 02-Sep-2020 12:23:57 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC05.D

Injection Date:	02-Sep-2020 01:52:30	Instrument ID:	MG	Operator ID:	AFB
Lims ID:	IC L5			Worklist Smp#:	13
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

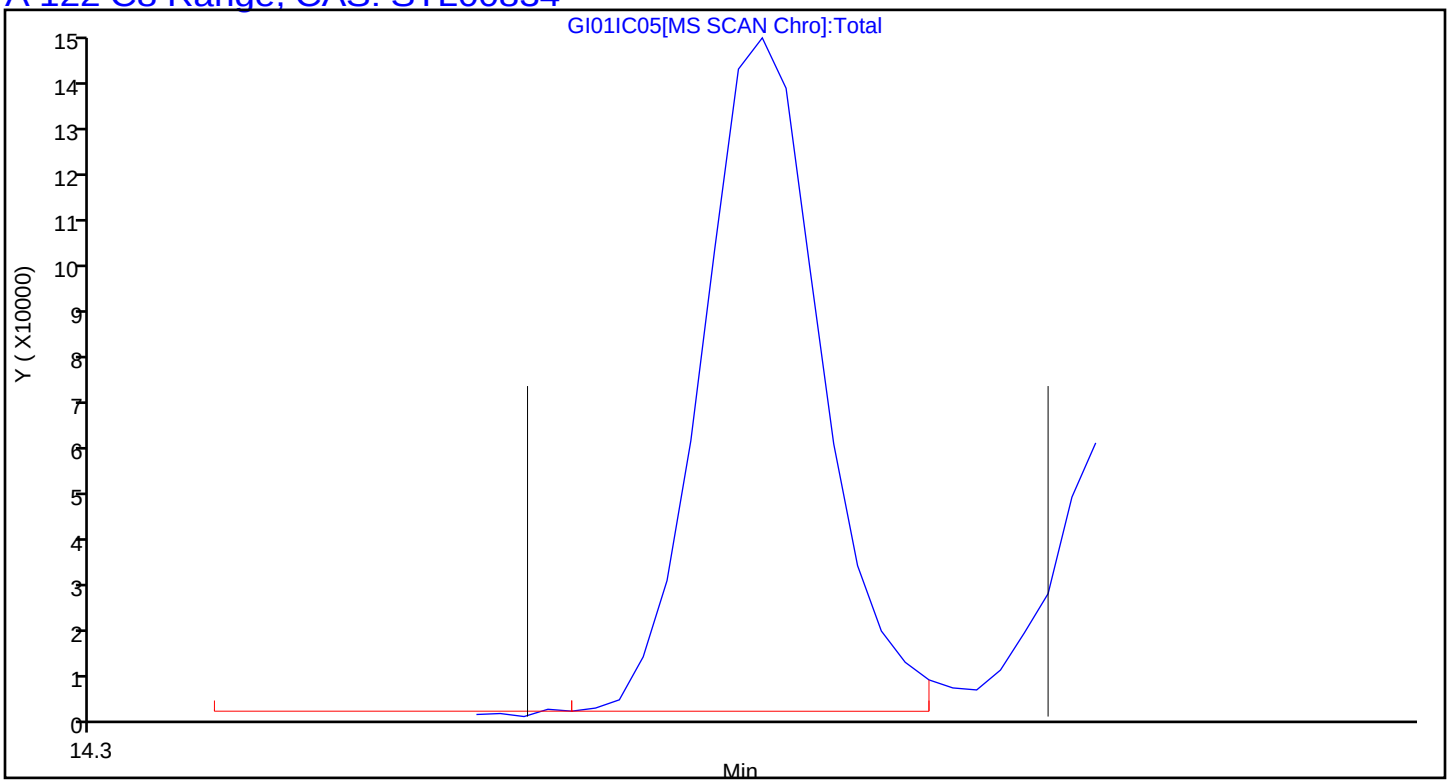


Report Date: 02-Sep-2020 12:23:57 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC05.D				
Injection Date:	02-Sep-2020 01:52:30	Instrument ID:	MG		
Lims ID:	IC L5				
Client ID:					
Operator ID:	AFB	ALS Bottle#:	4	Worklist Smp#:	13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 122 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC06.D
Lims ID: IC L6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 02-Sep-2020 02:38:30 ALS Bottle#: 5 Worklist Smp#: 14
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016453-014
Misc. Info.: 314716
Operator ID: AFB Instrument ID: MG
Sublist: chrom-MG_TO15*sub17

Method: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 02-Sep-2020 12:24:03 Calib Date: 02-Sep-2020 03:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1035

First Level Reviewer: barlozhetskayaa Date: 02-Sep-2020 10:41:18

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.811	8.812	-0.001	88	143845	4.80	4.80	
* 2 1,4-Difluorobenzene	114	10.995	10.996	-0.001	98	625077	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.730	15.730	0.000	93	650254	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.374	17.374	0.000	84	479859	4.64	4.70	
6 Chlorodifluoromethane	51	3.705	3.703	0.002	97	126387	1.00	0.9806	
7 Propene	41	3.710	3.716	-0.006	98	62980	1.00	0.99	
8 Dichlorodifluoromethane	85	3.764	3.765	-0.001	98	138515	1.00	0.9612	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.953	3.951	0.002	94	74466	1.00	0.9059	
9 Chloromethane	52	3.942	3.945	-0.003	79	25107	1.00	0.9731	
11 Acetaldehyde	44	4.093	4.096	-0.003	100	173325	5.00	5.71	
12 Vinyl chloride	62	4.114	4.114	0.000	98	70697	1.00	0.9815	
14 Butadiene	54	4.201	4.201	0.000	81	63838	1.00	1.01	
13 Butane	43	4.201	4.202	-0.001	87	130324	1.00	1.01	
15 Bromomethane	94	4.519	4.521	-0.002	97	41102	1.00	0.9445	
16 Chloroethane	64	4.659	4.658	0.001	86	27795	1.00	0.9303	
17 Ethanol	31	4.751	4.759	-0.008	96	134201	5.00	4.93	
18 Vinyl bromide	106	4.956	4.960	-0.004	97	34260	1.00	0.9230	
19 2-Methylbutane	43	5.004	5.010	-0.006	95	88701	1.00	1.01	
20 Trichlorofluoromethane	101	5.231	5.229	0.002	98	106066	1.00	0.9470	
21 Acrolein	56	5.236	5.235	0.001	33	13692	1.00	1.02	
22 Acetonitrile	40	5.295	5.301	-0.006	98	23808	1.00	0.99	
23 Acetone	58	5.349	5.355	-0.006	99	85167	3.00	3.55	
25 Isopropyl alcohol	45	5.435	5.451	-0.016	82	213678	3.00	2.99	
24 Pentane	72	5.441	5.448	-0.007	86	7214	1.00	0.99	
26 Ethyl ether	31	5.613	5.619	-0.006	90	55969	1.00	1.09	
27 1,1-Dichloroethene	96	5.926	5.928	-0.002	89	34343	1.00	0.9685	
28 Acrylonitrile	53	6.023	6.032	-0.009	95	34693	1.00	1.06	
30 2-Methyl-2-propanol	59	6.045	6.059	-0.014	94	73714	1.00	1.02	
29 1,1,2-Trichloro-1,2,2-trifluoroe	101	6.104	6.107	-0.003	89	77887	1.00	0.9498	
31 Methylene Chloride	84	6.271	6.273	-0.002	89	35627	1.00	1.00	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.287	6.289	-0.002	93	61687	1.00	0.8872	
33 Carbon disulfide	76	6.433	6.438	-0.005	97	119464	1.00	1.00	
34 trans-1,2-Dichloroethene	96	7.080	7.082	-0.002	90	39785	1.00	0.9531	
35 2-Methylpentane	43	7.102	7.101	0.001	96	159038	1.00	0.9767	
36 Methyl tert-butyl ether	73	7.220	7.230	-0.010	90	94079	1.00	1.09	
37 1,1-Dichloroethane	63	7.495	7.499	-0.004	99	102235	1.00	0.9823	
38 Vinyl acetate	43	7.603	7.607	-0.004	100	144673	1.00	1.06	
39 2-Butanone (MEK)	72	8.056	8.063	-0.007	95	19622	1.00	1.13	
40 Hexane	56	8.078	8.082	-0.004	93	52452	1.00	0.9765	
41 Isopropyl ether	45	8.240	8.248	-0.008	96	193913	1.00	1.08	
42 cis-1,2-Dichloroethene	96	8.482	8.483	-0.001	95	43948	1.00	0.99	
43 Ethyl acetate	43	8.666	8.676	-0.010	97	126022	1.00	1.06	
44 Chloroform	83	8.822	8.825	-0.003	93	97178	1.00	0.9633	
45 Tert-butyl ethyl ether	59	8.919	8.928	-0.009	96	158268	1.00	1.05	
46 Tetrahydrofuran	42	9.237	9.244	-0.007	90	63096	1.00	1.05	
47 1,1,1-Trichloroethane	97	9.852	9.851	0.001	94	93502	1.00	0.9629	
48 1,2-Dichloroethane	62	9.954	9.958	-0.004	94	74570	1.00	1.06	
49 Cyclohexane	69	10.450	10.455	-0.005	88	24100	1.00	1.11	
50 Benzene	78	10.450	10.451	-0.001	93	136368	1.00	1.06	
51 n-Butanol	31	10.440	10.442	-0.002	63	21677	1.00	1.08	
52 Carbon tetrachloride	117	10.472	10.476	-0.004	92	82585	1.00	1.04	
53 2,3-Dimethylpentane	71	10.574	10.577	-0.003	90	35713	1.00	1.08	
54 Thiophene	84	10.720	10.725	-0.005	93	81080	1.00	1.10	
55 Isooctane	57	11.216	11.219	-0.003	98	345476	1.00	1.10	
56 n-Heptane	71	11.594	11.594	0.000	94	55017	1.00	1.09	
57 1,2-Dichloropropane	63	11.669	11.669	0.000	89	63849	1.00	1.09	
58 Trichloroethene	130	11.701	11.706	-0.005	90	55829	1.00	1.00	
59 Dibromomethane	93	11.788	11.791	-0.003	86	63978	1.00	1.16	
60 Dichlorobromomethane	83	11.933	11.936	-0.003	95	102850	1.00	1.07	
61 1,4-Dioxane	88	11.966	11.974	-0.008	91	12962	1.00	0.8644	
62 Methyl methacrylate	41	12.030	12.038	-0.008	86	79777	1.00	1.20	
63 Methylcyclohexane	83	12.478	12.480	-0.002	86	92997	1.00	1.10	
64 4-Methyl-2-pentanone (MIBK)	43	12.893	12.898	-0.005	96	120828	1.00	1.08	
65 cis-1,3-Dichloropropene	75	12.936	12.938	-0.002	97	85421	1.00	1.11	
66 trans-1,3-Dichloropropene	75	13.632	13.632	0.000	91	68823	1.00	1.03	
67 Toluene	91	13.756	13.759	-0.003	92	153919	1.00	1.07	
68 1,1,2-Trichloroethane	83	13.826	13.831	-0.005	95	49466	1.00	1.10	
69 2-Hexanone	58	14.225	14.231	-0.006	91	58020	1.00	1.09	
70 n-Octane	85	14.452	14.454	-0.002	98	55073	1.00	1.05	
71 Chlorodibromomethane	129	14.532	14.536	-0.004	95	81803	1.00	0.9681	
72 Ethylene Dibromide	107	14.824	14.826	-0.002	99	82810	1.00	1.03	
73 Tetrachloroethene	129	14.904	14.904	0.000	90	52818	1.00	0.9769	
75 Chlorobenzene	112	15.778	15.779	-0.001	90	120798	1.00	1.04	
74 2,3-Dimethylheptane	43	15.800	15.801	-0.001	92	258919	1.00	1.04	
78 Ethylbenzene	91	16.064	16.068	-0.004	99	201106	1.00	1.09	
79 m-Xylene & p-Xylene	91	16.231	16.232	-0.001	97	308731	2.00	2.12	
80 n-Nonane	57	16.652	16.654	-0.002	94	151433	1.00	1.05	
81 Bromoform	173	16.679	16.676	0.003	89	47825	1.00	0.6727	
82 Styrene	104	16.695	16.695	0.000	96	115089	1.00	1.09	
83 o-Xylene	91	16.754	16.757	-0.003	97	160310	1.00	1.09	
84 1,1,2,2-Tetrachloroethane	83	17.078	17.078	0.000	97	129612	1.00	1.10	
85 1,2,3-Trichloropropane	110	17.234	17.237	-0.003	94	31198	1.00	1.08	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
86 Isopropylbenzene	105	17.342	17.344	-0.002	97	209664	1.00	1.08	
87 N-Propylbenzene	120	17.886	17.887	-0.001	98	55490	1.00	1.07	
88 2-Chlorotoluene	126	17.930	17.930	0.000	97	50660	1.00	1.02	
89 4-Ethyltoluene	105	18.037	18.038	-0.001	98	209216	1.00	1.08	
90 1,3,5-Trimethylbenzene	120	18.108	18.109	-0.001	92	85164	1.00	1.10	
92 Alpha Methyl Styrene	118	18.339	18.340	-0.001	85	82510	1.00	1.08	
93 n-Decane	57	18.399	18.401	-0.002	87	189083	1.00	1.08	
94 tert-Butylbenzene	119	18.534	18.533	0.001	90	182107	1.00	1.07	
95 1,2,4-Trimethylbenzene	105	18.544	18.547	-0.003	96	180832	1.00	1.07	
96 sec-Butylbenzene	105	18.803	18.804	-0.001	98	272380	1.00	1.07	
97 1,3-Dichlorobenzene	146	18.814	18.815	-0.001	96	118460	1.00	0.9825	
98 Benzyl chloride	91	18.889	18.891	-0.002	96	157512	1.00	0.9882	
99 1,4-Dichlorobenzene	146	18.900	18.905	-0.005	94	117341	1.00	0.9608	
100 4-Isopropyltoluene	119	18.965	18.965	0.000	96	213219	1.00	1.08	
101 1,2,3-Trimethylbenzene	105	19.013	19.019	-0.006	99	183353	1.00	1.26	
102 Butylcyclohexane	83	19.073	19.074	-0.001	86	179536	1.00	1.09	
103 2,3-Dihydroindene	117	19.262	19.262	0.000	92	175316	1.00	1.04	
104 1,2-Dichlorobenzene	146	19.262	19.262	0.000	77	113702	1.00	0.9840	
106 Indene	116	19.391	19.392	-0.001	88	150965	1.00	1.04	
105 n-Butylbenzene	91	19.396	19.398	-0.002	97	241684	1.00	1.08	
107 Undecane	57	19.709	19.708	0.001	91	212100	1.00	1.09	
108 1,2-Dibromo-3-Chloropropane	157	19.860	19.858	0.002	84	47740	1.00	0.9650	
109 1,2,4,5-Tetramethylbenzene	119	20.151	20.150	0.001	96	186389	1.00	1.21	
110 Dodecane	57	20.761	20.765	-0.004	90	202565	1.00	1.19	
111 1,2,4-Trichlorobenzene	180	20.955	20.957	-0.002	92	90620	1.00	0.8906	
112 Naphthalene	128	21.095	21.095	0.000	98	216311	1.00	0.8813	
113 Hexachlorobutadiene	225	21.305	21.304	0.001	90	81866	1.00	0.9525	
114 1,2,3-Trichlorobenzene	180	21.370	21.372	-0.002	93	89666	1.00	0.9154	
115 2-Methylnaphthalene	142	22.146	22.144	0.002	99	93743	1.00	0.8880	
116 1-Methylnaphthalene	142	22.319	22.319	0.000	99	106800	1.00	0.99	
A 122 C8 Range	1	14.439	(14.398-14.527)		0	697619	1.00	1.10	
S 123 1,2-Dichloroethene, Total	1				0		2.00	1.94	
S 124 Xylenes, Total	100				0		3.00	3.20	

Reagents:

40L6DQP_00019	Amount Added: 200.00	Units: mL	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

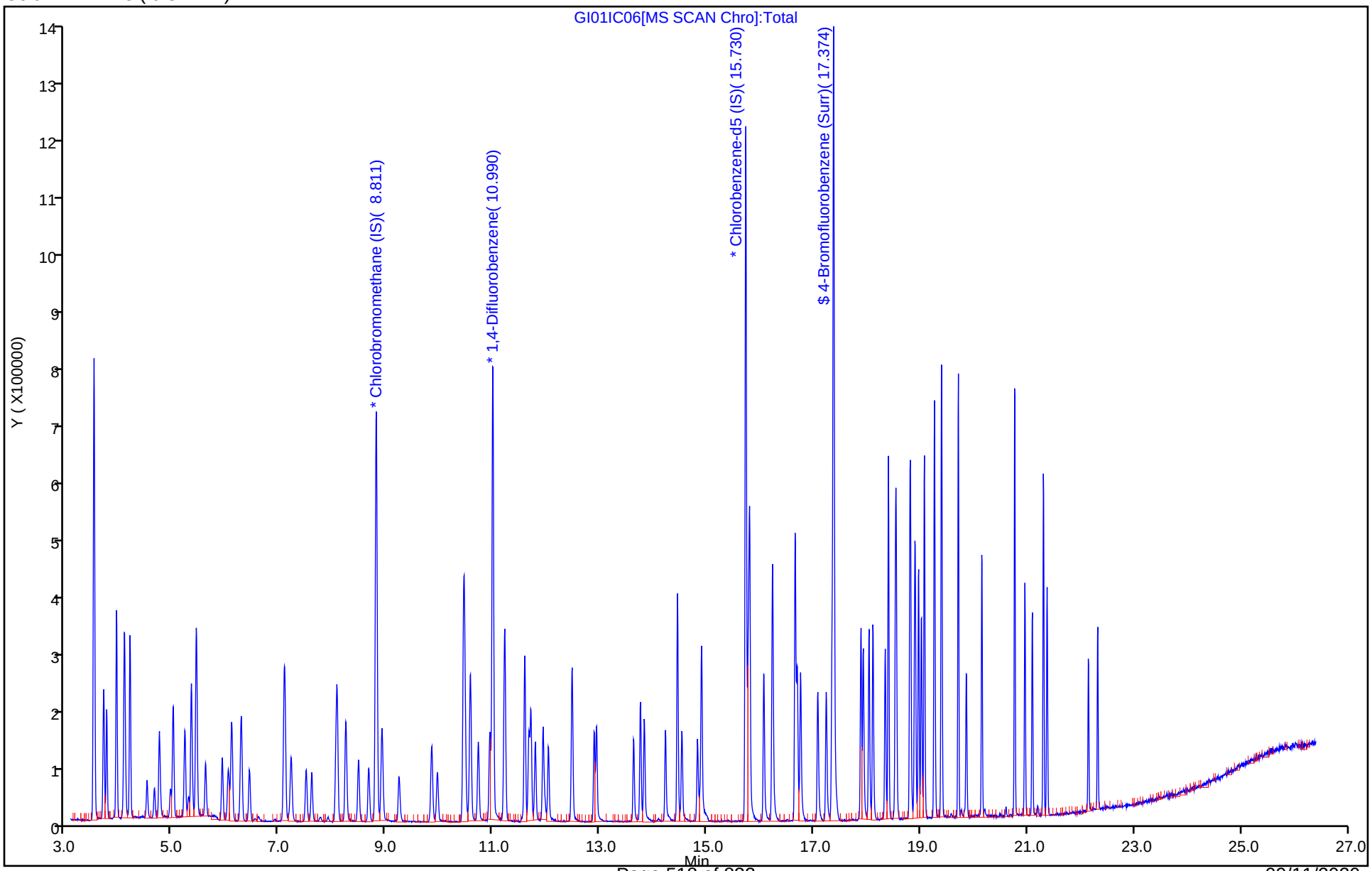
Report Date: 02-Sep-2020 12:24:04 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC06.D

Injection Date:	02-Sep-2020 02:38:30	Instrument ID:	MG	Operator ID:	AFB
Lims ID:	IC L6			Worklist Smp#:	14
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

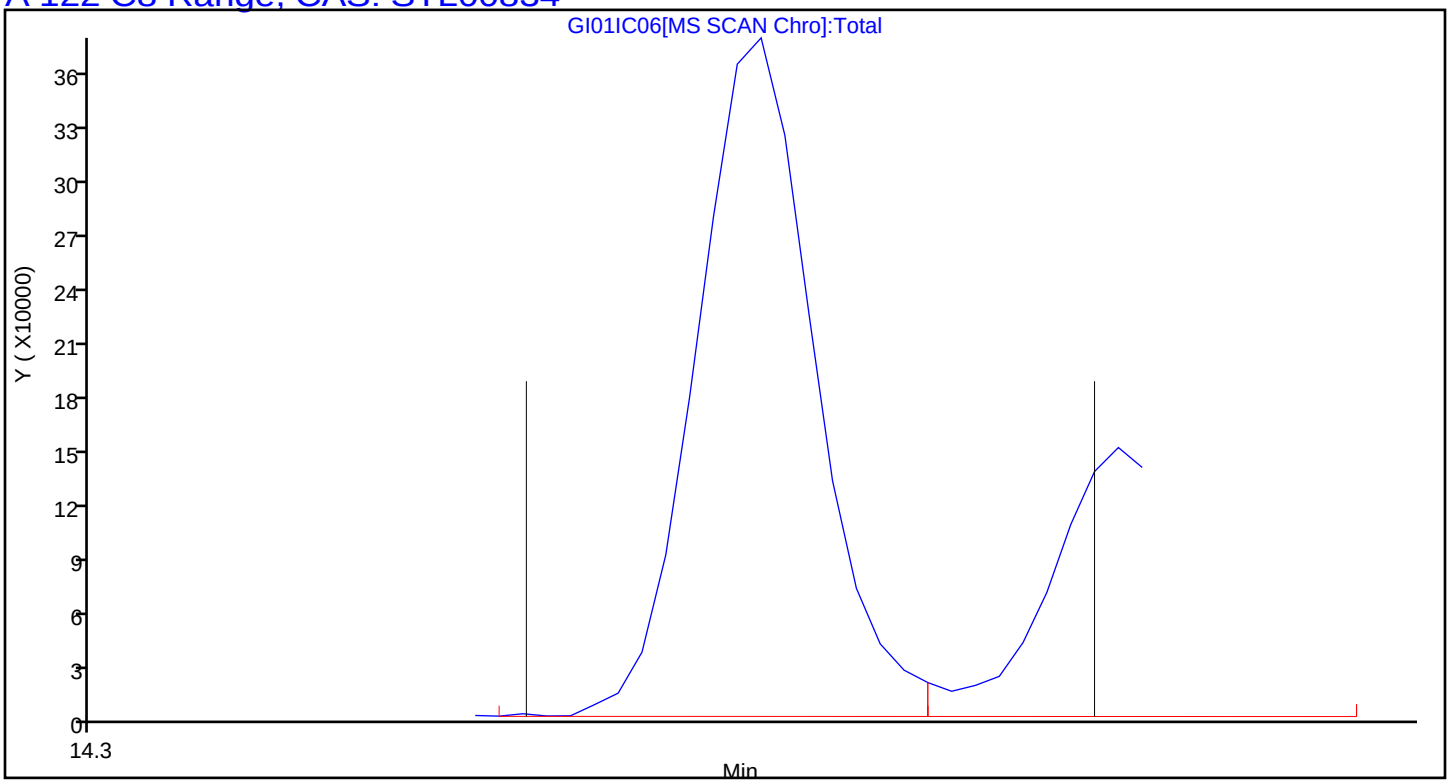


Report Date: 02-Sep-2020 12:24:04 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC06.D				
Injection Date:	02-Sep-2020 02:38:30	Instrument ID:	MG		
Lims ID:	IC L6				
Client ID:					
Operator ID:	AFB	ALS Bottle#:	5	Worklist Smp#:	14
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 122 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D
Lims ID: ICIS L7
Client ID:
Sample Type: ICIS Calib Level: 7
Inject. Date: 02-Sep-2020 03:27:30 ALS Bottle#: 6 Worklist Smp#: 15
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016453-015
Misc. Info.: 314608
Operator ID: AFB Instrument ID: MG
Sublist: chrom-MG_TO15*sub17

Method: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 02-Sep-2020 12:24:11 Calib Date: 02-Sep-2020 03:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1035

First Level Reviewer: tajh Date: 02-Sep-2020 07:22:50

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.811	8.812	-0.001	88	155264	4.80	4.80	
* 2 1,4-Difluorobenzene	114	10.995	10.996	-0.001	98	774405	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.730	15.730	0.000	93	759403	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.374	17.374	0.000	85	566331	4.64	4.75	
6 Chlorodifluoromethane	51	3.705	3.703	0.002	97	254491	2.00	1.83	
7 Propene	41	3.716	3.716	0.000	98	128895	2.00	1.88	
8 Dichlorodifluoromethane	85	3.770	3.765	0.005	99	292225	2.00	1.88	
9 Chloromethane	52	3.947	3.945	0.002	98	49882	2.00	1.79	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.953	3.951	0.002	93	169218	2.00	1.91	
11 Acetaldehyde	44	4.093	4.096	-0.003	98	336190	10.0	10.3	
12 Vinyl chloride	62	4.115	4.114	0.001	98	142653	2.00	1.83	
14 Butadiene	54	4.201	4.201	0.000	67	127581	2.00	1.86	
13 Butane	43	4.206	4.202	0.004	86	260407	2.00	1.87	
15 Bromomethane	94	4.519	4.521	-0.002	98	87843	2.00	1.87	
16 Chloroethane	64	4.659	4.658	0.001	88	60690	2.00	1.88	
17 Ethanol	31	4.751	4.759	-0.008	94	307085	10.0	10.5	
18 Vinyl bromide	106	4.961	4.960	0.001	98	75357	2.00	1.88	
19 2-Methylbutane	43	5.010	5.010	0.000	94	178302	2.00	1.89	
20 Trichlorofluoromethane	101	5.231	5.229	0.002	97	212612	2.00	1.76	
21 Acrolein	56	5.231	5.235	-0.004	34	26996	2.00	1.87	
22 Acetonitrile	40	5.296	5.301	-0.005	99	54213	2.00	2.10	
23 Acetone	58	5.349	5.355	-0.006	99	167195	6.00	6.46	
25 Isopropyl alcohol	45	5.436	5.451	-0.015	93	444518	6.00	5.75	
24 Pentane	72	5.447	5.448	-0.001	96	14405	2.00	1.83	
26 Ethyl ether	31	5.614	5.619	-0.005	90	118337	2.00	2.14	
27 1,1-Dichloroethene	96	5.932	5.928	0.004	90	71623	2.00	1.87	
28 Acrylonitrile	53	6.029	6.032	-0.003	96	74563	2.00	2.11	
30 2-Methyl-2-propanol	59	6.045	6.059	-0.014	96	140940	2.00	1.81	
29 1,1,2-Trichloro-1,2,2-trifluoroe	101	6.104	6.107	-0.003	89	162311	2.00	1.83	
31 Methylene Chloride	84	6.277	6.273	0.004	88	71422	2.00	1.87	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.288	6.289	-0.001	94	119860	2.00	1.60	
33 Carbon disulfide	76	6.439	6.438	0.001	97	235894	2.00	1.83	
34 trans-1,2-Dichloroethene	96	7.080	7.082	-0.002	89	81489	2.00	1.81	
35 2-Methylpentane	43	7.102	7.101	0.001	97	323413	2.00	1.84	
36 Methyl tert-butyl ether	73	7.215	7.230	-0.015	91	200198	2.00	2.15	
37 1,1-Dichloroethane	63	7.501	7.499	0.002	98	208044	2.00	1.85	
38 Vinyl acetate	43	7.603	7.607	-0.004	100	323495	2.00	2.20	
39 2-Butanone (MEK)	72	8.056	8.063	-0.007	95	39691	2.00	2.13	
40 Hexane	56	8.083	8.082	0.001	89	108248	2.00	1.87	
41 Isopropyl ether	45	8.240	8.248	-0.008	95	408213	2.00	2.11	
42 cis-1,2-Dichloroethene	96	8.488	8.483	0.005	96	90453	2.00	1.89	
43 Ethyl acetate	43	8.671	8.676	-0.005	97	276215	2.00	2.14	
44 Chloroform	83	8.822	8.825	-0.003	85	198099	2.00	1.82	
45 Tert-butyl ethyl ether	59	8.919	8.928	-0.009	96	344105	2.00	2.12	
46 Tetrahydrofuran	42	9.232	9.244	-0.012	91	138158	2.00	2.14	
47 1,1,1-Trichloroethane	97	9.847	9.851	-0.004	93	189856	2.00	1.81	
48 1,2-Dichloroethane	62	9.960	9.958	0.002	94	156222	2.00	1.79	
51 n-Butanol	31	10.429	10.442	-0.013	81	40646	2.00	1.64	
49 Cyclohexane	69	10.456	10.455	0.001	89	45891	2.00	1.71	
50 Benzene	78	10.451	10.451	0.000	96	283155	2.00	1.78	
52 Carbon tetrachloride	117	10.478	10.476	0.002	91	120424	2.00	1.22	
53 2,3-Dimethylpentane	71	10.575	10.577	-0.002	89	71885	2.00	1.75	
54 Thiophene	84	10.720	10.725	-0.005	93	164043	2.00	1.80	
55 Isooctane	57	11.216	11.219	-0.003	97	696193	2.00	1.79	
56 n-Heptane	71	11.594	11.594	0.000	95	112703	2.00	1.80	
57 1,2-Dichloropropane	63	11.669	11.669	0.000	89	135449	2.00	1.87	
58 Trichloroethene	130	11.712	11.706	0.006	90	113938	2.00	1.64	
59 Dibromomethane	93	11.788	11.791	-0.003	88	119998	2.00	1.75	
60 Dichlorobromomethane	83	11.934	11.936	-0.002	95	216520	2.00	1.82	
61 1,4-Dioxane	88	11.961	11.974	-0.013	87	36968	2.00	1.99	
62 Methyl methacrylate	41	12.036	12.038	-0.002	86	166422	2.00	2.03	
63 Methylcyclohexane	83	12.478	12.480	-0.002	86	187114	2.00	1.78	
64 4-Methyl-2-pentanone (MIBK)	43	12.888	12.898	-0.010	97	266548	2.00	1.93	
65 cis-1,3-Dichloropropene	75	12.937	12.938	-0.001	98	173523	2.00	1.82	
66 trans-1,3-Dichloropropene	75	13.632	13.632	0.000	91	152113	2.00	1.95	
67 Toluene	91	13.756	13.759	-0.003	92	326329	2.00	1.95	
68 1,1,2-Trichloroethane	83	13.832	13.831	0.001	94	105417	2.00	2.01	
69 2-Hexanone	58	14.225	14.231	-0.006	92	114195	2.00	1.84	
70 n-Octane	85	14.452	14.454	-0.002	98	116497	2.00	1.91	
71 Chlorodibromomethane	129	14.533	14.536	-0.003	95	190331	2.00	1.93	
72 Ethylene Dibromide	107	14.824	14.826	-0.002	96	183756	2.00	1.95	
73 Tetrachloroethene	129	14.905	14.904	0.001	91	110572	2.00	1.75	
75 Chlorobenzene	112	15.778	15.779	-0.001	90	264485	2.00	1.95	
74 2,3-Dimethylheptane	43	15.800	15.801	-0.001	92	547136	2.00	1.89	
78 Ethylbenzene	91	16.070	16.068	0.002	99	442535	2.00	2.06	
79 m-Xylene & p-Xylene	91	16.231	16.232	-0.001	97	676428	4.00	3.97	
80 n-Nonane	57	16.652	16.654	-0.002	94	329467	2.00	1.96	
81 Bromoform	173	16.679	16.676	0.003	92	166485	2.00	2.01	
82 Styrene	104	16.695	16.695	0.000	96	259361	2.00	2.10	
83 o-Xylene	91	16.754	16.757	-0.003	97	351197	2.00	2.04	
84 1,1,2,2-Tetrachloroethane	83	17.078	17.078	0.000	97	283671	2.00	2.06	
85 1,2,3-Trichloropropane	110	17.240	17.237	0.003	93	70357	2.00	2.09	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
86 Isopropylbenzene	105	17.347	17.344	0.003	97	469762	2.00	2.07	
87 N-Propylbenzene	120	17.887	17.887	0.000	98	122801	2.00	2.03	
88 2-Chlorotoluene	126	17.930	17.930	0.000	98	116178	2.00	2.01	
89 4-Ethyltoluene	105	18.038	18.038	0.000	99	470643	2.00	2.08	
90 1,3,5-Trimethylbenzene	120	18.108	18.109	-0.001	91	184043	2.00	2.04	
92 Alpha Methyl Styrene	118	18.340	18.340	0.000	84	187336	2.00	2.10	
93 n-Decane	57	18.399	18.401	-0.002	87	419090	2.00	2.06	
94 tert-Butylbenzene	119	18.534	18.533	0.001	91	412773	2.00	2.08	
95 1,2,4-Trimethylbenzene	105	18.550	18.547	0.003	96	410005	2.00	2.07	
96 sec-Butylbenzene	105	18.803	18.804	-0.001	98	615450	2.00	2.06	
97 1,3-Dichlorobenzene	146	18.814	18.815	-0.001	96	272851	2.00	1.94	
98 Benzyl chloride	91	18.890	18.891	-0.001	97	410741	2.00	2.21	
99 1,4-Dichlorobenzene	146	18.906	18.905	0.001	93	268488	2.00	1.88	
100 4-Isopropyltoluene	119	18.965	18.965	0.000	97	491082	2.00	2.13	
101 1,2,3-Trimethylbenzene	105	19.019	19.019	0.000	99	420978	2.00	2.43	
102 Butylcyclohexane	83	19.073	19.074	-0.001	86	390777	2.00	2.02	
103 2,3-Dihydroindene	117	19.262	19.262	0.000	92	404591	2.00	2.05	
104 1,2-Dichlorobenzene	146	19.262	19.262	0.000	78	265655	2.00	1.97	
106 Indene	116	19.391	19.392	-0.001	89	353313	2.00	2.09	
105 n-Butylbenzene	91	19.397	19.398	-0.001	98	548406	2.00	2.10	
107 Undecane	57	19.709	19.708	0.001	93	469276	2.00	2.06	
108 1,2-Dibromo-3-Chloropropane	157	19.860	19.859	0.001	96	144381	2.00	2.37	
109 1,2,4,5-Tetramethylbenzene	119	20.152	20.150	0.002	97	466848	2.00	2.49	
110 Dodecane	57	20.761	20.765	-0.004	90	349178	2.00	1.76	
111 1,2,4-Trichlorobenzene	180	20.955	20.957	-0.002	93	224232	2.00	1.89	
112 Naphthalene	128	21.095	21.095	0.000	98	548866	2.00	1.91	
113 Hexachlorobutadiene	225	21.305	21.304	0.001	92	200284	2.00	2.00	
114 1,2,3-Trichlorobenzene	180	21.370	21.372	-0.002	94	214504	2.00	1.88	
115 2-Methylnaphthalene	142	22.141	22.144	-0.003	98	143251	2.00	1.16	
116 1-Methylnaphthalene	142	22.319	22.319	0.000	99	152396	2.00	1.21	
A 122 C8 Range	1	14.449	(14.399-14.517)		0	1436960	2.00	1.94	
S 123 1,2-Dichloroethene, Total	1				0		4.00	3.70	
S 124 Xylenes, Total	100				0		6.00	6.01	

Reagents:

40L7DQP_00019	Amount Added: 200.00	Units: mL	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

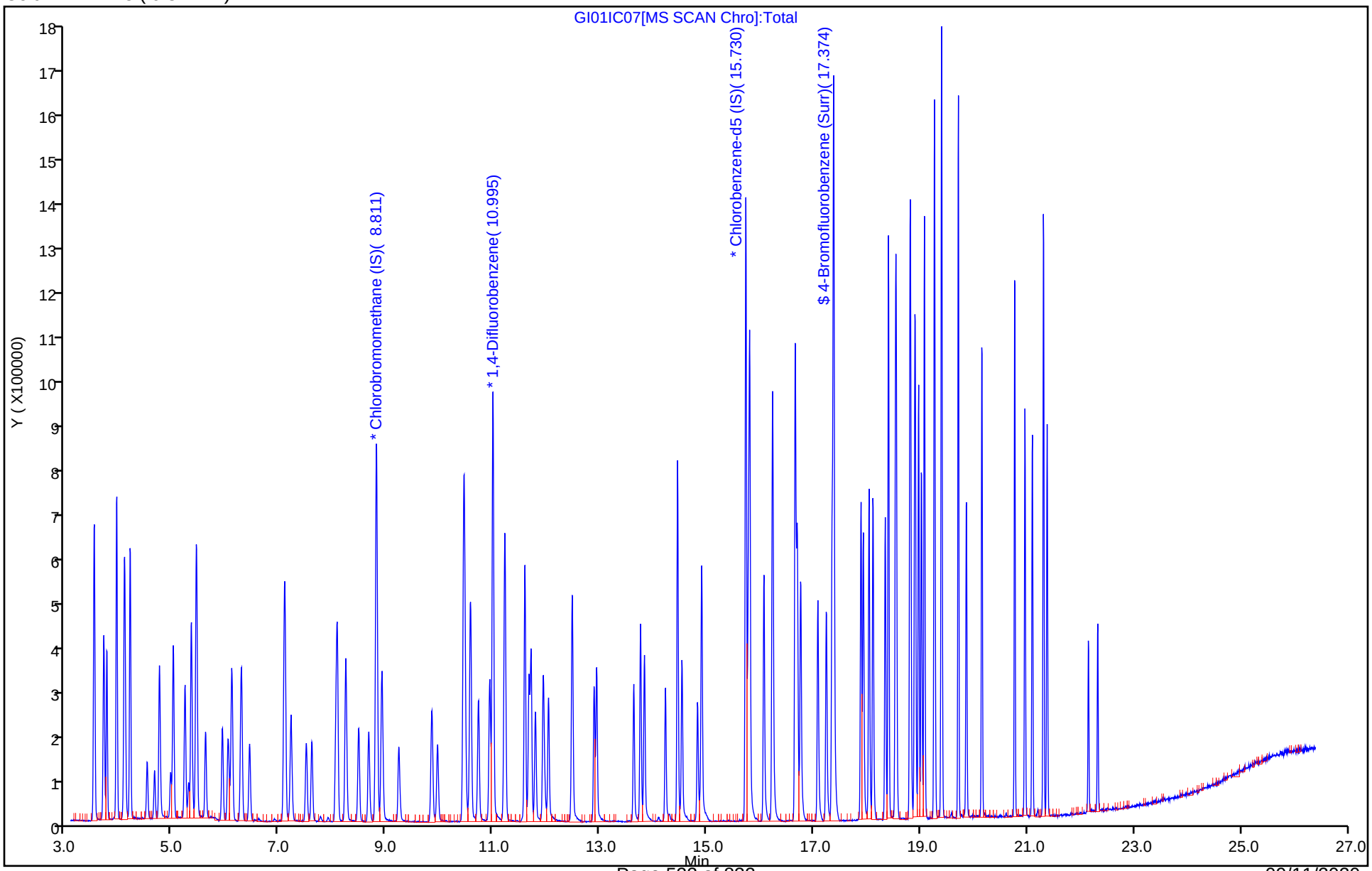
Report Date: 02-Sep-2020 12:24:12 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D

Injection Date:	02-Sep-2020 03:27:30	Instrument ID:	MG	Operator ID:	AFB
Lims ID:	ICIS L7			Worklist Smp#:	15
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

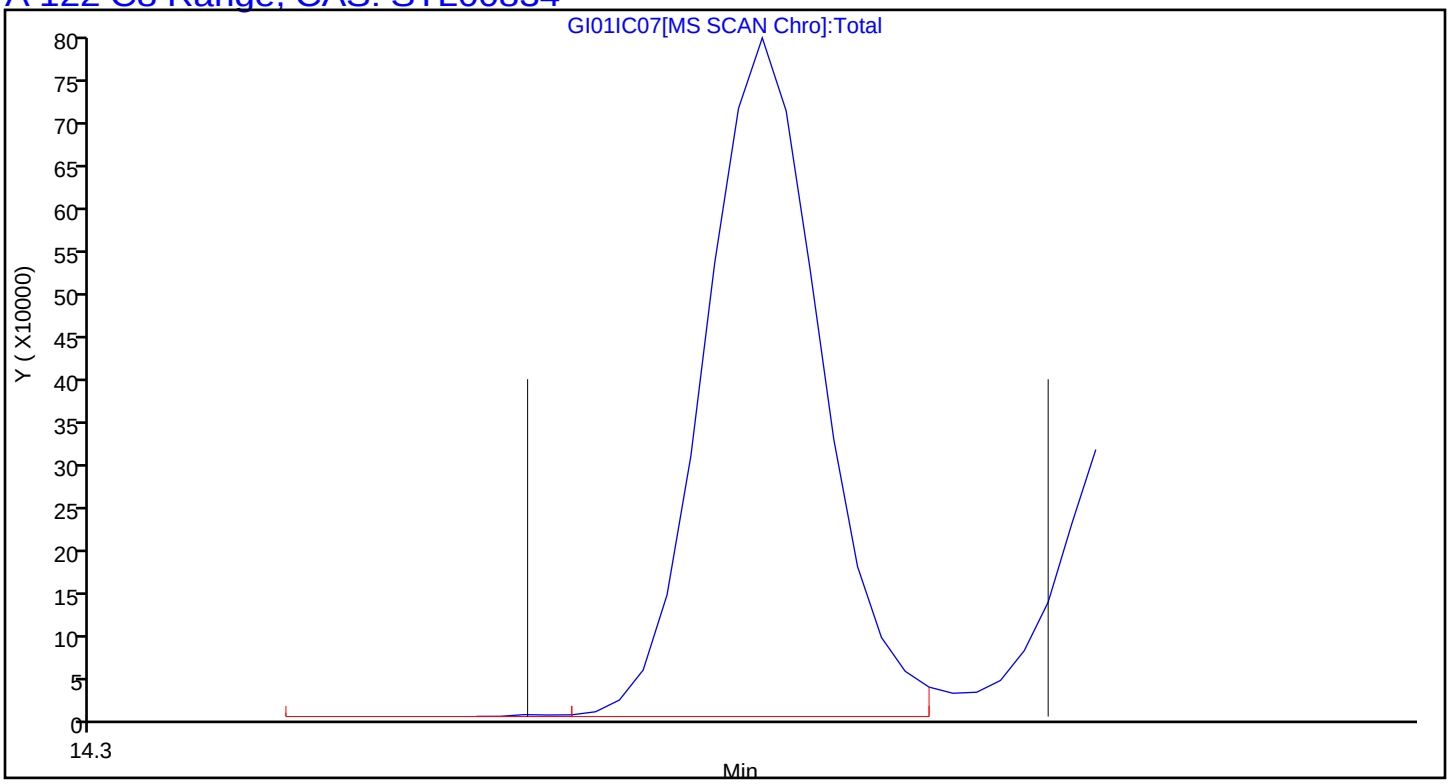


Report Date: 02-Sep-2020 12:24:12 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D				
Injection Date:	02-Sep-2020 03:27:30	Instrument ID:	MG		
Lims ID:	ICIS L7				
Client ID:					
Operator ID:	AFB	ALS Bottle#:	6	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 122 C8 Range, CAS: STL00834



FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42290

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/29/2020 12:34 Calibration End Date: 08/29/2020 23:57 Calibration ID: 2592

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 140-42290/9	HH29IC01.D
Level 2	IC 140-42290/10	HH29IC02.D
Level 3	IC 140-42290/11	HH29IC03.D
Level 4	IC 140-42290/12	HH29IC04.D
Level 5	IC 140-42290/13	HH29IC05.D
Level 6	IC 140-42290/14	HH29IC06.D
Level 7	ICIS 140-42290/15	HH29IC07.D
Level 8	IC 140-42290/7	HH29IC08.D
Level 9	IC 140-42290/5	HH29IC09.D
Level 10	IC 140-42290/3	HH29IC10.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Chlorodifluoromethane	+++++ 2.7055	+++++ 2.6133	3.4173 2.4773	2.8362 2.3638	2.7135 2.3014	Ave		2.6785				13.1		30.0			
Propene	+++++ 1.2455	+++++ 1.1794	+++++ 1.1222	+++++ 1.0487	1.2046 1.0659	Ave		1.1444				6.9		30.0			
Dichlorodifluoromethane	+++++ 3.7367	+++++ 3.7564	4.2037 3.5581	3.9703 2.7867	3.7783 3.2382	Ave		3.6285				12.2		30.0			
Chloromethane	+++++ 0.5127	+++++ 0.5118	+++++ 0.4596	0.5380 0.4000	0.5470 0.3674	Ave		0.4766				14.7		30.0			
1,2-Dichloro-1,1,2,2-tetrafluoroethane	+++++ 2.9877	+++++ 2.7959	3.2885 2.7391	3.2420 2.4960	3.0064 2.6296	Ave		2.8982				9.8		30.0			
Vinyl chloride	1.7873 1.6144	1.8695 1.5602	1.9103 1.4490	1.6595 1.2848	1.6154 1.2032	Ave		1.5954				14.6		30.0			
Butane	+++++ 2.3867	+++++ 2.4155	+++++ 2.1618	2.3074 1.9057	2.4206 1.6706	Ave		2.1812				13.3		30.0			
1,3-Butadiene	+++++ 1.1774	+++++ 1.1465	+++++ 1.0761	1.2028 0.9453	1.1764 0.8821	Ave		1.0867				11.6		30.0			
Bromomethane	+++++ 1.5739	+++++ 1.5439	2.0317 1.4379	1.5846 1.2654	1.6586 1.2286	Ave		1.5406				16.3		30.0			
Chloroethane	+++++ 0.6907	+++++ 0.6738	0.9193 0.6224	0.7437 0.5388	0.7005 0.5001	Ave		0.6737				19.2		30.0			
Ethanol	+++++ 0.7845	+++++ 0.9095	+++++ 0.7809	0.7532 0.8165	0.8148 0.5491	Ave		0.7726				14.3		30.0			
Vinyl bromide	+++++ 1.2798	1.3352 1.2694	1.4263 1.2825	1.2693 1.1540	1.3043 1.2354	Ave		1.2840				5.7		30.0			
2-Methylbutane	+++++ 1.6662	1.8377 1.6690	1.9496 1.6417	1.7086 1.4854	1.6132 1.5623	Ave		1.6815				8.3		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42290

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/29/2020 12:34 Calibration End Date: 08/29/2020 23:57 Calibration ID: 2592

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Trichlorofluoromethane	+++++ 3.4997	+++++ 3.4683	4.1168 3.3912	3.6804 3.1171	3.6481 3.3569	Ave		3.5348				8.3		30.0			
Acrolein	+++++ 0.3293	+++++ 0.3359	0.4055 0.4067	0.4056 0.3724	0.3317 0.3998	Lin1	-0.005	0.3879							0.9970		0.9900
Acetonitrile	+++++ 0.6616	+++++ 0.7202	+++++ 0.6820	0.6370 0.6220	0.7799 0.6271	Ave		0.6757				8.5		30.0			
Acetone	+++++ 0.8548	+++++ 0.7750	+++++ 0.6482	+++++ 0.7691	0.8359 0.5956	Ave		0.7464				13.9		30.0			
Pentane	+++++ 0.1775	+++++ 0.1759	0.1172 0.1687	0.1468 0.1515	0.1590 0.1568	Ave		0.1567				12.4		30.0			
Isopropyl alcohol	2.0200 1.7223	1.7659 1.9942	1.7685 1.9544	1.7938 1.8109	1.7172 1.8953	Ave		1.8442				6.1		30.0			
Ethyl ether	+++++ 1.5445	1.6582 1.6027	1.4358 1.6309	1.5079 1.4897	1.4064 1.5818	Ave		1.5398				5.6		30.0			
1,1-Dichloroethene	+++++ 1.1304	1.2419 1.1553	1.1621 1.2092	1.1867 1.1118	1.0808 1.1941	Ave		1.1636				4.3		30.0			
Acrylonitrile	+++++ 1.0013	1.0778 1.0766	0.9669 1.0679	1.0503 0.9586	0.9959 1.0166	Ave		1.0235				4.5		30.0			
tert-Butyl alcohol	+++++ 1.7110	1.8603 1.9553	1.9674 2.0796	1.8294 1.9515	1.6805 2.0862	Ave		1.9024				7.6		30.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	+++++ 2.9548	3.2652 2.9270	3.4016 2.8617	3.0642 2.5989	3.1091 2.8034	Ave		2.9984				8.1		30.0			
Methylene Chloride	+++++ 1.1853	+++++ 1.1753	+++++ 1.1585	1.2554 1.0871	1.2838 1.0915	Ave		1.1767				6.3		30.0			
3-Chloropropene	+++++ 1.0940	+++++ 1.1188	1.3944 1.1878	1.2931 1.1146	1.1655 1.2774	Ave		1.2057				8.8		30.0			
Carbon disulfide	+++++ 3.7487	4.1379 3.8002	4.0389 3.7839	3.7726 3.3931	3.7879 3.5723	Ave		3.7817				5.8		30.0			
trans-1,2-Dichloroethene	+++++ 1.2025	1.2337 1.2302	1.2296 1.2714	1.2008 1.1522	1.1882 1.2283	Ave		1.2152				2.8		30.0			
2-Methylpentane	+++++ 2.9073	+++++ 3.0918	2.5445 3.1447	2.8000 2.8906	2.7099 3.0978	Ave		2.8983				7.2		30.0			
Methyl tert-butyl ether	+++++ 2.4539	+++++ 2.6104	+++++ 2.8096	2.3468 2.6114	2.2261 2.8991	Ave		2.5653				9.4		30.0			
1,1-Dichloroethane	+++++ 2.3589	+++++ 2.4022	2.6392 2.3824	2.5463 2.1792	2.4463 2.3517	Ave		2.4133				5.7		30.0			
Vinyl acetate	+++++ 2.8453	+++++ 3.1704	+++++ 3.5025	2.6214 3.2862	2.5279 3.7316	Ave		3.0979				14.6		30.0			
2-Butanone (MEK)	+++++ 0.6082	+++++ 0.5881	+++++ 0.5856	0.5879 0.5694	0.5982 0.5777	Ave		0.5879				2.2		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42290

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/29/2020 12:34 Calibration End Date: 08/29/2020 23:57 Calibration ID: 2592

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Hexane	+++++ 1.0080	0.9773 1.0550	1.0130 1.0448	0.9838 0.9870	0.9509 1.0318	Ave		1.0057				3.4		30.0			
cis-1,2-Dichloroethene	+++++ 1.2006	1.3116 1.2181	1.2071 1.2852	1.1877 1.1989	1.1672 1.2990	Ave		1.2306				4.3		30.0			
Ethyl acetate	+++++ 2.9537	3.2426 3.0946	3.0860 3.2045	3.0580 2.9864	2.8380 3.2849	Ave		3.0832				4.7		30.0			
Chloroform	+++++ 2.8096	3.2252 2.8206	3.2462 2.8108	2.9724 2.5718	2.9615 2.8168	Ave		2.9150				7.4		30.0			
Tetrahydrofuran	+++++ 1.4066	1.3660 1.5320	1.3295 1.5894	1.3844 1.4788	1.3361 1.6073	Ave		1.4478				7.4		30.0			
1,1,1-Trichloroethane	+++++ 2.5370	2.7730 2.5666	2.8490 2.6074	2.6261 2.4100	2.6714 2.7422	Ave		2.6425				5.1		30.0			
1,2-Dichloroethane	+++++ 0.4161	0.5015 0.4090	0.4638 0.4108	0.4474 0.3989	0.4303 0.4502	Ave		0.4365				7.5		30.0			
1-Butanol	+++++ 0.1165	+++++ 0.1336	+++++ 0.1377	+++++ 0.1423	0.1277 0.1580	Ave		0.1360				10.3		30.0			
Cyclohexane	+++++ 0.1198	+++++ 0.1249	+++++ 0.1277	0.1004 0.1227	0.1139 0.1347	Ave		0.1206				9.1		30.0			
Benzene	+++++ 0.8717	+++++ 0.8688	0.9571 0.8628	0.8914 0.8210	0.8833 0.8951	Ave		0.8814				4.3		30.0			
Carbon tetrachloride	0.5108 0.5438	0.5330 0.4095	0.5691 0.6501	0.5793 0.4135	0.6039 0.6426	Ave		0.5456				15.3		30.0			
2,3-Dimethylpentane	+++++ 0.1708	+++++ 0.1774	0.1466 0.1831	0.1419 0.1757	0.1521 0.1876	Ave		0.1669				10.5		30.0			
Thiophene	+++++ 0.4580	+++++ 0.4695	0.4528 0.4902	0.4129 0.4728	0.4335 0.5188	Ave		0.4636				7.1		30.0			
2,2,4-Trimethylpentane	+++++ 1.3767	1.2986 1.4447	1.2613 1.4999	1.1363 1.4507	1.2859 1.5790	Ave		1.3703				10.0		30.0			
Heptane	+++++ 0.2507	+++++ 0.2627	+++++ 0.2778	0.1771 0.2716	0.2236 0.2949	Ave		0.2512				15.8		30.0			
1,2-Dichloropropane	+++++ 0.3611	0.3921 0.3664	0.4016 0.3701	0.3866 0.3598	0.3648 0.3925	Ave		0.3772				4.2		30.0			
Trichloroethene	0.4333 0.3724	0.4130 0.3723	0.3957 0.3910	0.3650 0.4321	0.3607 0.4274	Ave		0.3963				7.2		30.0			
Dibromomethane	+++++ 0.4361	+++++ 0.3943	+++++ 0.4009	0.4554 0.3985	0.4038 0.4475	Ave		0.4195				6.2		30.0			
Bromodichloromethane	0.6294 0.5862	0.5994 0.6091	0.6386 0.6497	0.5894 0.6277	0.5998 0.7176	Ave		0.6247				6.3		30.0			
1,4-Dioxane	+++++ 0.1088	+++++ 0.1402	+++++ 0.1440	0.0949 0.1381	0.1070 0.1457	Ave		0.1255				16.9		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42290

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/29/2020 12:34 Calibration End Date: 08/29/2020 23:57 Calibration ID: 2592

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Methyl methacrylate	+++++ 0.4015	+++++ 0.4210	0.4173 0.4469	0.3162 0.4328	0.3641 0.4756	Ave		0.4094				12.2		30.0			
Methylcyclohexane	+++++ 0.4388	+++++ 0.4675	0.3567 0.5019	0.3227 0.4863	0.3660 0.5253	Lin1	-0.026	0.5093							0.9980		0.9900
4-Methyl-2-pentanone (MIBK)	+++++ 0.7878	0.8746 0.8200	0.7030 0.8472	0.6829 0.8431	0.6160 0.9050	Ave		0.7866				12.4		30.0			
cis-1,3-Dichloropropene	0.4198 0.4295	0.3993 0.4424	0.3681 0.4700	0.3727 0.4805	0.3526 0.5444	Ave		0.4279				13.8		30.0			
trans-1,3-Dichloropropene	+++++ 0.4260	0.4080 0.4418	0.3705 0.4908	0.3941 0.5133	0.3133 0.5954	Ave		0.4392				19.1		30.0			
Toluene	+++++ 1.2601	1.2066 1.3006	1.2235 1.3441	1.0657 1.3045	1.0583 1.3667	Ave		1.2367				9.0		30.0			
1,1,2-Trichloroethane	+++++ 0.4421	+++++ 0.4441	0.4803 0.4351	0.4483 0.4076	0.4571 0.4404	Ave		0.4444				4.6		30.0			
2-Hexanone	+++++ 0.3858	+++++ 0.4326	+++++ 0.4558	0.2776 0.4485	0.2517 0.5036	Ave		0.3937				24.1		30.0			
Octane	+++++ 0.3553	+++++ 0.3811	+++++ 0.3933	0.2316 0.3675	0.2819 0.4047	Ave		0.3450				18.6		30.0			
C8 Range	+++++ 3.1573	+++++ 3.2462	+++++ 3.2801	+++++ 3.2149	2.7086 3.5763	Ave		3.1972				8.8		30.0			
Dibromochloromethane	0.6546 0.6509	0.6558 0.7687	0.6791 0.8540	0.6591 0.7744	0.6935 0.9490	Ave		0.7339				13.9		30.0			
1,2-Dibromoethane (EDB)	0.7544 0.6217	0.6964 0.6241	0.5894 0.6594	0.6677 0.6710	0.5662 0.8020	Ave		0.6652				10.8		30.0			
Tetrachloroethene	0.5714 0.4879	0.5262 0.4977	0.5628 0.5126	0.4947 0.4884	0.4911 0.5510	Ave		0.5184				6.3		30.0			
Chlorobenzene	+++++ 0.9716	+++++ 0.9844	1.0329 0.9914	1.0019 0.9321	1.0223 1.0762	Ave		1.0016				4.3		30.0			
Ethylbenzene	1.5785 1.4962	1.4684 1.5829	1.3909 1.6686	1.1901 1.5737	1.2383 1.7796	Ave		1.4967				12.2		30.0			
m-Xylene & p-Xylene	1.1967 1.1962	1.0298 1.2777	1.0159 1.3281	0.9436 1.2680	1.0880 1.4862	Ave		1.1830				14.0		30.0			
Nonane	+++++ 0.8542	+++++ 0.9145	+++++ 0.9462	0.5962 0.9084	0.7075 1.0313	Ave		0.8512				17.6		30.0			
Bromoform	0.4185 0.3621	0.3850 0.6034	0.3917 0.7563	0.4488 +++++	0.4598 +++++	QuaF		0.3745	0.0961863						0.9980		0.9900
Styrene	+++++ 0.7392	+++++ 0.8288	0.5299 0.9084	0.5286 0.8821	0.6138 +++++	Ave		0.7187				22.6		30.0			
o-Xylene	+++++ 1.2464	1.1840 1.3067	1.1076 1.3521	1.0587 1.2666	1.1918 1.4374	Ave		1.2390				9.6		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42290

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/29/2020 12:34 Calibration End Date: 08/29/2020 23:57 Calibration ID: 2592

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
1,1,2,2-Tetrachloroethane	+++++ 1.0743	+++++ 1.0946	1.1993 1.0639	1.2054 0.8526	1.1482 1.1332	Ave		1.0964				10.2		30.0			
1,2,3-Trichloropropane	+++++ 0.2413	0.2644 0.2435	0.2540 0.2439	0.2567 0.2233	0.2427 0.2640	Ave		0.2482				5.2		30.0			
Isopropylbenzene	+++++ 1.5898	1.6136 1.7042	1.1288 1.7866	1.2884 1.6697	1.3313 1.9874	Ave		1.5667				17.2		30.0			
Propylbenzene	+++++ 0.4042	+++++ 0.4452	+++++ 0.4665	0.3276 0.4339	0.3240 0.5387	Ave		0.4200				18.2		30.0			
2-Chlorotoluene	+++++ 0.3810	+++++ 0.4108	+++++ 0.4223	0.3547 0.3849	0.3872 0.4701	Ave		0.4016				9.3		30.0			
4-Ethyltoluene	+++++ 1.4865	+++++ 1.6384	+++++ 1.7505	1.1820 1.5660	1.4387 1.9506	Ave		1.5732				15.5		30.0			
1,3,5-Trimethylbenzene	+++++ 0.6401	+++++ 0.7166	0.4384 0.7256	0.5526 0.6505	0.6648 0.8121	Lin1	-0.036	0.7537							0.9910		0.9900
Alpha Methyl Styrene	+++++ 0.5198	+++++ 0.6458	+++++ 0.6857	0.4073 0.6079	0.3977 +++++	Ave		0.5440				22.5		30.0			
Decane	+++++ 1.1794	+++++ 1.2671	+++++ 1.2589	+++++ 1.1749	1.2088 1.3795	Ave		1.2448				6.1		30.0			
tert-Butylbenzene	+++++ 1.5059	+++++ 1.6813	+++++ 1.6720	1.2811 1.5401	1.5547 1.9269	Ave		1.5946				12.4		30.0			
1,2,4-Trimethylbenzene	+++++ 1.4308	+++++ 1.5594	0.9977 1.5184	1.2515 1.3957	1.5472 1.7572	Ave		1.4322				15.9		30.0			
sec-Butylbenzene	+++++ 2.0544	+++++ 2.2913	+++++ 2.2519	1.7213 2.0088	1.9453 2.5087	Ave		2.1117				12.3		30.0			
1,3-Dichlorobenzene	+++++ 0.6744	+++++ 0.7630	0.5723 0.7869	0.6757 0.7537	0.6956 1.0262	Ave		0.7435				17.8		30.0			
Benzyl chloride	+++++ 0.5965	+++++ 0.8377	+++++ 0.8757	0.5101 0.8718	0.5402 +++++	Lin1	-0.096	0.8755							0.9950		0.9900
1,4-Dichlorobenzene	+++++ 0.5451	0.4496 0.6379	0.3789 0.6959	0.4954 0.6868	0.4983 +++++	Ave		0.5485				21.0		30.0			
4-Isopropyltoluene	+++++ 1.8294	+++++ 2.0580	0.9462 1.9698	1.3130 1.6893	1.7718 2.0975	Ave		1.7094				23.2		30.0			
1,2,3-Trimethylbenzene	+++++ 1.4294	+++++ 1.5408	0.9821 1.4515	1.2191 1.2701	1.5076 1.6067	Ave		1.3759				15.0		30.0			
Indane	+++++ 1.1354	+++++ 1.2527	0.7558 1.2305	1.0301 1.1346	1.1008 1.4807	Ave		1.1401				18.1		30.0			
1,2-Dichlorobenzene	0.9523 0.7714	0.7900 0.8237	0.6887 0.7936	0.8221 0.7418	0.8326 0.9898	Ave		0.8206				11.0		30.0			
Butylbenzene	+++++ 1.9322	+++++ 2.1536	+++++ 1.9888	1.4314 1.7204	1.9128 2.0980	Ave		1.8910				13.0		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42290

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/29/2020 12:34 Calibration End Date: 08/29/2020 23:57 Calibration ID: 2592

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Indene	+++++ 0.9711	+++++ 1.0654	+++++ 0.9911	0.8038 0.8419	0.9727 1.1970	Ave		0.9776				13.5		30.0			
Undecane	+++++ 1.3782	+++++ 1.5245	+++++ 1.4385	+++++ 1.3412	1.2044 1.6345	Ave		1.4202				10.5		30.0			
1,2-Dibromo-3-Chloropropane	+++++ 0.3687	+++++ 0.5347	0.2516 0.5090	0.3511 0.4216	0.3755 0.5438	Ave		0.4195				24.5		30.0			
1,2,4,5-Tetramethylbenzene	+++++ 1.5935	+++++ 1.8239	0.5811 1.8233	1.0074 1.6457	1.1795 +++++	Lin1	-0.108	1.7348							0.9960		0.9900
Dodecane	+++++ 1.0696	+++++ 1.0645	+++++ 1.0349	+++++ 1.2145	0.6204 +++++	Ave		1.0008				22.4		30.0			
1,2,4-Trichlorobenzene	+++++ 0.3142	+++++ 0.3577	0.1451 0.4022	0.2191 0.4125	0.2199 +++++	Lin1	-0.032	0.4028							0.9940		0.9900
Naphthalene	0.9418 0.9413	0.5365 1.0963	0.3423 1.1573	0.6009 1.0956	0.5838 +++++	QuaF		1.1293	-0.003652						0.9980		0.9900
Hexachlorobutadiene	+++++ 0.8071	+++++ 0.7669	0.8537 0.6872	0.9582 0.6153	0.8167 0.7764	Ave		0.7852				13.2		30.0			
1,2,3-Trichlorobenzene	+++++ 0.4407	+++++ 0.4530	+++++ 0.4697	0.3501 0.4927	0.3083 0.7127	Ave		0.4610				28.1		30.0			
2-Methylnaphthalene	+++++ 0.0479	+++++ 0.0574	+++++ 0.0895	+++++ 0.2206	+++++ 0.4797	Ave		0.1790				01.5	*	50.0			
1-Methylnaphthalene	+++++ 0.0870	+++++ 0.0863	+++++ 0.1078	+++++ 0.2461	+++++ 0.5059	Ave		0.2066				87.1	*	50.0			
4-Bromofluorobenzene (Surr)	0.4842 0.5620	0.4989 0.5844	0.4590 0.6018	0.5397 0.6213	0.5523 0.6736	Ave		0.5577				11.8		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42290

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/29/2020 12:34 Calibration End Date: 08/29/2020 23:57 Calibration ID: 2592

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 140-42290/9	HH29IC01.D
Level 2	IC 140-42290/10	HH29IC02.D
Level 3	IC 140-42290/11	HH29IC03.D
Level 4	IC 140-42290/12	HH29IC04.D
Level 5	IC 140-42290/13	HH29IC05.D
Level 6	IC 140-42290/14	HH29IC06.D
Level 7	ICIS 140-42290/15	HH29IC07.D
Level 8	IC 140-42290/7	HH29IC08.D
Level 9	IC 140-42290/5	HH29IC09.D
Level 10	IC 140-42290/3	HH29IC10.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
Chlorodifluoromethane	CBM	Ave	+++++ 71178	+++++ 135250	6531 291670	11434 564270	26384 1170804	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Propene	CBM	Ave	+++++ 32766	+++++ 61039	+++++ 132120	+++++ 250332	11713 542250	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
Dichlorodifluoromethane	CBM	Ave	+++++ 98306	+++++ 194412	8034 418915	16006 665212	36737 1647380	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Chloromethane	CBM	Ave	+++++ 13487	+++++ 26488	+++++ 54109	2169 95475	5319 186886	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,2-Dichloro-1,1,2,2-tetrafluoroethane	CBM	Ave	+++++ 78601	+++++ 144701	6285 322487	13070 595826	29232 1337769	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Vinyl chloride	CBM	Ave	932 42471	1823 80749	3651 170593	6690 306691	15707 612100	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Butane	CBM	Ave	+++++ 62791	+++++ 125013	+++++ 254521	9302 454922	23536 849872	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,3-Butadiene	CBM	Ave	+++++ 30976	+++++ 59336	+++++ 126693	4849 225651	11438 448776	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Bromomethane	CBM	Ave	+++++ 41408	+++++ 79903	3883 169287	6388 302073	16127 625059	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Chloroethane	CBM	Ave	+++++ 18172	+++++ 34873	1757 73280	2998 128615	6811 254400	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Ethanol	CBM	Ave	+++++ 103194	+++++ 235349	+++++ 459695	15182 974505	39613 1396709	+++++ 5.00	+++++ 10.0	+++++ 20.0	0.800 40.0	2.00 80.0
Vinyl bromide	CBM	Ave	+++++ 33670	1302 65698	2726 150998	5117 275481	12682 628508	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Methylbutane	CBM	Ave	+++++ 43836	1792 86376	3726 193291	6888 354580	15686 794816	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Trichlorofluoromethane	CBM	Ave	+++++ 92071	+++++ 179500	7868 399259	14837 744095	35471 1707786	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42290

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/29/2020 12:34 Calibration End Date: 08/29/2020 23:57 Calibration ID: 2592

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
Acrolein	CBM	Lin1	+++++ 8663	+++++ 17382	775 47885	1635 88893	3225 203402	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Acetonitrile	CBM	Ave	+++++ 17405	+++++ 37274	+++++ 80296	2568 148489	7583 319051	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Acetone	CBM	Ave	+++++ 67466	+++++ 120332	+++++ 228958	+++++ 550794	24383 908970	+++++ 3.00	+++++ 6.00	+++++ 12.0	+++++ 24.0	1.20 48.0
Pentane	CBM	Ave	+++++ 4670	+++++ 9103	224 19860	592 36172	1546 79750	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Isopropyl alcohol	CBM	Ave	3160 135930	5166 309623	10140 690311	21694 1296845	50090 2892621	0.0600 3.00	0.120 6.00	0.240 12.0	0.480 24.0	1.20 48.0
Ethyl ether	CBM	Ave	+++++ 40634	1617 82949	2744 192018	6079 355621	13675 804708	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,1-Dichloroethene	CBM	Ave	+++++ 29740	1211 59790	2221 142360	4784 265390	10509 607494	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Acrylonitrile	CBM	Ave	+++++ 26342	1051 55721	1848 125727	4234 228821	9683 517174	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
tert-Butyl alcohol	CBM	Ave	+++++ 45014	1814 101194	3760 244846	7375 465853	16340 1061322	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,1,2-Trichloro-1,2,2-trifluoroetha ne	CBM	Ave	+++++ 77735	3184 151488	6501 336927	12353 620382	30231 1426183	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Methylene Chloride	CBM	Ave	+++++ 31182	+++++ 60826	+++++ 136401	5061 259505	12483 555280	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
3-Chloropropene	CBM	Ave	+++++ 28782	+++++ 57903	2665 139845	5213 266061	11332 649836	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Carbon disulfide	CBM	Ave	+++++ 98622	4035 196676	7719 445503	15209 809975	36831 1817383	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
trans-1,2-Dichloroethene	CBM	Ave	+++++ 31637	1203 63666	2350 149694	4841 275057	11553 624883	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Methylpentane	CBM	Ave	+++++ 76485	+++++ 160016	4863 370246	11288 690025	26349 1575951	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Methyl tert-butyl ether	CBM	Ave	+++++ 64559	+++++ 135102	+++++ 330791	9461 623376	21645 1474857	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,1-Dichloroethane	CBM	Ave	+++++ 62058	+++++ 124325	5044 280496	10265 520203	23786 1196411	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Vinyl acetate	CBM	Ave	+++++ 74856	+++++ 164085	+++++ 412364	10568 784451	24579 1898417	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
2-Butanone (MEK)	CBM	Ave	+++++ 16000	+++++ 30439	+++++ 68948	2370 135925	5816 293914	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Hexane	CBM	Ave	+++++ 26520	953 54603	1936 123014	3966 235600	9246 524911	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
cis-1,2-Dichloroethene	CBM	Ave	+++++ 31585	1279 63040	2307 151318	4788 286195	11349 660849	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42290

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/29/2020 12:34 Calibration End Date: 08/29/2020 23:57 Calibration ID: 2592

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
Ethyl acetate	CBM	Ave	+++++ 77708	3162 160162	5898 377279	12328 712888	27595 1671126	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Chloroform	CBM	Ave	+++++ 73917	3145 145980	6204 330924	11983 613922	28795 1433018	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Tetrahydrofuran	CBM	Ave	+++++ 37004	1332 79287	2541 187127	5581 352999	12991 817677	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,1,1-Trichloroethane	CBM	Ave	+++++ 66743	2704 132832	5445 306983	10587 575307	25975 1395034	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2-Dichloroethane	DFBZ	Ave	+++++ 47284	2085 93346	3781 213048	7312 401489	17988 963858	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1-Butanol	DFBZ	Ave	+++++ 13235	+++++ 30500	+++++ 71434	+++++ 143170	5338 338272	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
Cyclohexane	DFBZ	Ave	+++++ 13610	+++++ 28513	+++++ 66211	1641 123486	4760 288406	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Benzene	DFBZ	Ave	+++++ 99057	+++++ 198272	7802 447438	14569 826207	36921 1916459	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Carbon tetrachloride	DFBZ	Ave	1133 61795	2216 93449	4639 337106	9468 416169	25244 1375702	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2,3-Dimethylpentane	DFBZ	Ave	+++++ 19407	+++++ 40490	1195 94974	2320 176820	6357 401567	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Thiophene	DFBZ	Ave	+++++ 52043	+++++ 107154	3691 254231	6749 475836	18120 1110676	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2,2,4-Trimethylpentane	DFBZ	Ave	+++++ 156443	5399 329728	10282 777814	18572 1459914	53753 3380543	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Heptane	DFBZ	Ave	+++++ 28489	+++++ 59951	+++++ 144047	2894 273309	9346 631336	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,2-Dichloropropane	DFBZ	Ave	+++++ 41034	1630 83631	3274 191949	6318 362074	15250 840266	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Trichloroethene	DFBZ	Ave	961 42319	1717 84978	3226 202744	5965 434833	15077 915128	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Dibromomethane	DFBZ	Ave	+++++ 49560	+++++ 89996	+++++ 207883	7443 401008	16878 958099	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Bromodichloromethane	DFBZ	Ave	1396 66609	2492 139005	5206 336939	9634 631688	25071 1536417	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,4-Dioxane	DFBZ	Ave	+++++ 12361	+++++ 32004	+++++ 74690	1551 138998	4471 311891	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Methyl methacrylate	DFBZ	Ave	+++++ 45630	+++++ 96083	3402 231736	5168 435605	15220 1018216	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Methylcyclohexane	DFBZ	Lin1	+++++ 49859	+++++ 106694	2908 260282	5275 489358	15301 1124722	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
4-Methyl-2-pentanone (MIBK)	DFBZ	Ave	+++++ 89525	3636 187155	5731 439352	11162 848466	25748 1937646	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42290

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/29/2020 12:34 Calibration End Date: 08/29/2020 23:57 Calibration ID: 2592

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
cis-1,3-Dichloropropene	DFBZ	Ave	931 48811	1660 100971	3001 243759	6091 483570	14738 1165499	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
trans-1,3-Dichloropropene	CBZd 5	Ave	+++++ 35446	1225 73899	2144 194299	4654 409325	8657 1033921	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Toluene	CBZd 5	Ave	+++++ 104851	3623 217553	7081 532092	12584 1040202	29243 2373066	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,1,2-Trichloroethane	CBZd 5	Ave	+++++ 36787	+++++ 74295	2780 172251	5294 324985	12630 764760	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Hexanone	CBZd 5	Ave	+++++ 32100	+++++ 72367	+++++ 180452	3278 357602	6955 874521	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Octane	CBZd 5	Ave	+++++ 29562	+++++ 63752	+++++ 155695	2735 293032	7788 702692	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
C8 Range	DFBZ	Ave	+++++ 358784	+++++ 740857	+++++ 1701005	+++++ 3235392	113223 7656734	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
Dibromochloromethane	CBZd 5	Ave	1062 54160	1969 128589	3930 338056	7783 617460	19161 1647856	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2-Dibromoethane (EDB)	CBZd 5	Ave	1224 51730	2091 104398	3411 261015	7884 535038	15646 1392569	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Tetrachloroethene	CBZd 5	Ave	927 40597	1580 83258	3257 202921	5841 389413	13570 956734	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Chlorobenzene	CBZd 5	Ave	+++++ 80847	+++++ 164669	5978 392452	11831 743269	28248 1868757	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Ethylbenzene	CBZd 5	Ave	2561 124500	4409 264773	8050 660533	14053 1254862	34216 3089994	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
m-Xylene & p-Xylene	CBZd 5	Ave	3883 199075	6184 427470	11759 1051498	22284 2022188	60126 5161120	0.0400 2.00	0.0800 4.00	0.160 8.00	0.320 16.0	0.800 32.0
Nonane	CBZd 5	Ave	+++++ 71082	+++++ 152966	+++++ 374564	7040 724315	19548 1790733	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Bromoform	CBZd 5	QuaF	679 30128	1156 100938	2267 299387	5299 +++++	12706 +++++	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 +++++	0.400 +++++
Styrene	CBZd 5	Ave	+++++ 61513	+++++ 138635	3067 359605	6242 703366	16959 +++++	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
o-Xylene	CBZd 5	Ave	+++++ 103713	3555 218585	6410 535239	12502 1010000	32930 2495830	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,1,2,2-Tetrachloroethane	CBZd 5	Ave	+++++ 89392	+++++ 183101	6941 421162	14234 679869	31726 1967574	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2,3-Trichloropropane	CBZd 5	Ave	+++++ 20078	794 40738	1470 96559	3031 178026	6706 458317	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Isopropylbenzene	CBZd 5	Ave	+++++ 132293	4845 285073	6533 707258	15214 1331394	36786 3450814	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Propylbenzene	CBZd 5	Ave	+++++ 33634	+++++ 74473	+++++ 184674	3868 345970	8952 935298	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42290

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/29/2020 12:34 Calibration End Date: 08/29/2020 23:57 Calibration ID: 2592

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
2-Chlorotoluene	CBZd 5	Ave	+++++ 31701	+++++ 68725	+++++ 167167	4189 306918	10698 816298	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
4-Ethyltoluene	CBZd 5	Ave	+++++ 123694	+++++ 274063	+++++ 692968	13957 1248739	39753 3386928	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,3,5-Trimethylbenzene	CBZd 5	Lin1	+++++ 53265	+++++ 119868	2537 287240	6525 518722	18369 1410023	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Alpha Methyl Styrene	CBZd 5	Ave	+++++ 43249	+++++ 108031	+++++ 271429	4809 484735	10989 +++++	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 +++++
Decane	CBZd 5	Ave	+++++ 98138	+++++ 211962	+++++ 498369	+++++ 936873	33400 2395266	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
tert-Butylbenzene	CBZd 5	Ave	+++++ 125306	+++++ 281235	+++++ 661899	15128 1228047	42959 3345761	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,2,4-Trimethylbenzene	CBZd 5	Ave	+++++ 119057	+++++ 260842	5774 601094	14778 1112935	42752 3051181	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
sec-Butylbenzene	CBZd 5	Ave	+++++ 170946	+++++ 383279	+++++ 891452	20326 1601820	53752 4356098	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,3-Dichlorobenzene	CBZd 5	Ave	+++++ 56119	+++++ 127639	3312 311522	7979 600990	19220 1781787	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Benzyl chloride	CBZd 5	Lin1	+++++ 49639	+++++ 140127	+++++ 346656	6023 695153	14926 +++++	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 +++++
1,4-Dichlorobenzene	CBZd 5	Ave	+++++ 45361	1350 106707	2193 275478	5850 547614	13769 +++++	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
4-Isopropyltoluene	CBZd 5	Ave	+++++ 152230	+++++ 344253	5476 779777	15504 1347034	48957 3642103	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2,3-Trimethylbenzene	CBZd 5	Ave	+++++ 118943	+++++ 257743	5684 574609	14395 1012757	41656 2789911	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Indane	CBZd 5	Ave	+++++ 94480	+++++ 209539	4374 487092	12164 904716	30416 2571055	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2-Dichlorobenzene	CBZd 5	Ave	1545 64192	2372 137779	3986 314163	9708 591518	23005 1718635	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Butylbenzene	CBZd 5	Ave	+++++ 160783	+++++ 360249	+++++ 787301	16902 1371797	52853 3642930	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Indene	CBZd 5	Ave	+++++ 80808	+++++ 178212	+++++ 392352	9491 671298	26876 2078384	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Undecane	CBZd 5	Ave	+++++ 114678	+++++ 255017	+++++ 569435	+++++ 1069442	33280 2838035	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
1,2-Dibromo-3-Chloropropane	CBZd 5	Ave	+++++ 30683	+++++ 89447	1456 201489	4146 336214	10376 944276	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2,4,5-Tetramethylbenzene	CBZd 5	Lin1	+++++ 132594	+++++ 305087	3363 721787	11896 1312226	32591 +++++	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
Dodecane	CBZd 5	Ave	+++++ 88999	+++++ 178065	+++++ 409669	+++++ 968430	17141 +++++	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 +++++

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42290

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/29/2020 12:34 Calibration End Date: 08/29/2020 23:57 Calibration ID: 2592

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
1,2,4-Trichlorobenzene	CBZd5	Lin1	+++++ 26147	+++++ 59828	840 159208	2587 328959	6075 +++++	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
Naphthalene	CBZd5	QuaF	1528 78327	1611 183378	1981 458116	7096 873625	16130 +++++	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
Hexachlorobutadiene	CBZd5	Ave	+++++ 67162	+++++ 128278	4941 272041	11315 490625	22566 1348081	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2,3-Trichlorobenzene	CBZd5	Ave	+++++ 36670	+++++ 75774	+++++ 185934	4134 392883	8519 1237502	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
2-Methylnaphthalene	CBZd5	Ave	+++++ 3986	+++++ 9604	+++++ 35445	+++++ 175877	+++++ 832938	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	+++++ 16.0
1-Methylnaphthalene	CBZd5	Ave	+++++ 7239	+++++ 14439	+++++ 42682	+++++ 196232	+++++ 878408	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	+++++ 16.0
4-Bromofluorobenzene (Surr)	CBZd5	Ave	182238 216986	173759 226803	154059 276345	184823 287349	177016 339176	4.64 4.64	4.64 4.64	4.64 4.64	4.64 4.64	4.64 4.64

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD
QuaF = Quadratic ISTD forced zero

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42290

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/29/2020 12:34 Calibration End Date: 08/29/2020 23:57 Calibration ID: 2592

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 140-42290/9	HH29IC01.D
Level 2	IC 140-42290/10	HH29IC02.D
Level 3	IC 140-42290/11	HH29IC03.D
Level 4	IC 140-42290/12	HH29IC04.D
Level 5	IC 140-42290/13	HH29IC05.D
Level 6	IC 140-42290/14	HH29IC06.D
Level 7	ICIS 140-42290/15	HH29IC07.D
Level 8	IC 140-42290/7	HH29IC08.D
Level 9	IC 140-42290/5	HH29IC09.D
Level 10	IC 140-42290/3	HH29IC10.D

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
Chlorodifluoromethane	+++++	+++++	27.6						50			
Propene	+++++	+++++	+++++	+++++	5.3						50	
Dichlorodifluoromethane	+++++	+++++	15.9						50			
Chloromethane	+++++	+++++	+++++	12.9						50		
1,2-Dichloro-1,1,2,2-tetrafluoroethane	+++++	+++++	13.5						50			
Vinyl chloride	12.0						50					
Butane	+++++	+++++	+++++	5.8						50		
1,3-Butadiene	+++++	+++++	+++++	10.7						50		
Bromomethane	+++++	+++++	31.9						50			
Chloroethane	+++++	+++++	36.5						50			
Ethanol	+++++	+++++	+++++	-2.5						50		
Vinyl bromide	+++++	4.0						50				
2-Methylbutane	+++++	9.3						50				
Trichlorofluoromethane	+++++	+++++	16.5						50			

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42290

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/29/2020 12:34 Calibration End Date: 08/29/2020 23:57 Calibration ID: 2592

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
Acrolein	+++++	+++++	20.7						50			
Acetonitrile	+++++	+++++	+++++	-5.7						50		
Acetone	+++++	+++++	+++++	+++++	12.0						80	
Pentane	+++++	+++++	-25.2						50			
Isopropyl alcohol	9.5						50					
Ethyl ether	+++++	7.7						50				
1,1-Dichloroethene	+++++	6.7						50				
Acrylonitrile	+++++	5.3						50				
tert-Butyl alcohol	+++++	-2.2						50				
1,1,2-Trichloro-1,2,2-trifluoroethane	+++++	8.9						50				
Methylene Chloride	+++++	+++++	+++++	6.7						80		
3-Chloropropene	+++++	+++++	15.7						50			
Carbon disulfide	+++++	9.4						50				
trans-1,2-Dichloroethene	+++++	1.5						50				
2-Methylpentane	+++++	+++++	-12.2						50			
Methyl tert-butyl ether	+++++	+++++	+++++	-8.5						50		
1,1-Dichloroethane	+++++	+++++	9.4						50			
Vinyl acetate	+++++	+++++	+++++	-15.4						50		
2-Butanone (MEK)	+++++	+++++	+++++	0.0						50		
Hexane	+++++	-2.8						50				
cis-1,2-Dichloroethene	+++++	6.6						50				

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42290

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/29/2020 12:34 Calibration End Date: 08/29/2020 23:57 Calibration ID: 2592

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
Ethyl acetate	+++++	5.2						50				
Chloroform	+++++	10.6						50				
Tetrahydrofuran	+++++	-5.7						50				
1,1,1-Trichloroethane	+++++	4.9						50				
1,2-Dichloroethane	+++++	14.9						50				
1-Butanol	+++++	+++++	+++++	+++++	-6.1						50	
Cyclohexane	+++++	+++++	+++++	-16.7						50		
Benzene	+++++	+++++	8.6						50			
Carbon tetrachloride	-6.4						50					
2,3-Dimethylpentane	+++++	+++++	-12.2						50			
Thiophene	+++++	+++++	-2.3						50			
2,2,4-Trimethylpentane	+++++	-5.2						50				
Heptane	+++++	+++++	+++++	-29.5						50		
1,2-Dichloropropane	+++++	3.9						50				
Trichloroethene	9.3						50					
Dibromomethane	+++++	+++++	+++++	8.6						50		
Bromodichloromethane	0.8						50					
1,4-Dioxane	+++++	+++++	+++++	-24.4						50		
Methyl methacrylate	+++++	+++++	1.9						50			
Methylcyclohexane	+++++	+++++	34.5						50			
4-Methyl-2-pentanone (MIBK)	+++++	11.2						50				

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42290

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/29/2020 12:34 Calibration End Date: 08/29/2020 23:57 Calibration ID: 2592

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
cis-1,3-Dichloropropene	-1.9						50					
trans-1,3-Dichloropropene	+++++	-7.1						50				
Toluene	+++++	-2.4						50				
1,1,2-Trichloroethane	+++++	+++++	8.1						50			
2-Hexanone	+++++	+++++	+++++	-29.5						50		
Octane	+++++	+++++	+++++	-32.9						50		
Dibromochloromethane	-10.8						50					
1,2-Dibromoethane (EDB)	13.4						50					
Tetrachloroethene	10.2						50					
Chlorobenzene	+++++	+++++	3.1						50			
Ethylbenzene	5.5						50					
m-Xylene & p-Xylene	1.2						50					
Nonane	+++++	+++++	+++++	-30.0						50		
Bromoform	11.1		+++++	+++++			50					
Styrene	+++++	+++++	-26.3	+++++					50			
o-Xylene	+++++	-4.4						50				
1,1,2,2-Tetrachloroethane	+++++	+++++	9.4						50			
1,2,3-Trichloropropane	+++++	6.5						50				
Isopropylbenzene	+++++	3.0						50				
Propylbenzene	+++++	+++++	+++++	-22.0						50		
2-Chlorotoluene	+++++	+++++	+++++	-11.7						50		

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42290

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/29/2020 12:34 Calibration End Date: 08/29/2020 23:57 Calibration ID: 2592

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
4-Ethyltoluene	+++++	+++++	+++++	-24.9						50		
1,3,5-Trimethylbenzene	+++++	+++++	17.5						50			
Alpha Methyl Styrene	+++++	+++++	+++++	-25.1 +++++						50		
Decane	+++++	+++++	+++++	+++++	-2.9						50	
tert-Butylbenzene	+++++	+++++	+++++	-19.7						50		
1,2,4-Trimethylbenzene	+++++	+++++	-30.3						50			
sec-Butylbenzene	+++++	+++++	+++++	-18.5						50		
1,3-Dichlorobenzene	+++++	+++++	-23.0						50			
Benzyl chloride	+++++	+++++	+++++	26.9 +++++						50		
1,4-Dichlorobenzene	+++++	-18.0		+++++				50				
4-Isopropyltoluene	+++++	+++++	-44.6						50			
1,2,3-Trimethylbenzene	+++++	+++++	-28.6						50			
Indane	+++++	+++++	-33.7						50			
1,2-Dichlorobenzene	16.0						50					
Butylbenzene	+++++	+++++	+++++	-24.3						50		
Indene	+++++	+++++	+++++	-17.8						50		
Undecane	+++++	+++++	+++++	+++++	-15.2						50	
1,2-Dibromo-3-Chloropropane	+++++	+++++	-40.0						50			
1,2,4,5-Tetramethylbenzene	+++++	+++++	11.1	+++++					50			
Dodecane	+++++	+++++	+++++	+++++ +++++	-38.0						50	
1,2,4-Trichlorobenzene	+++++	+++++	36.5	+++++					50			

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42290

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/29/2020 12:34 Calibration End Date: 08/29/2020 23:57 Calibration ID: 2592

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
Naphthalene	-16.6			+++++			80					
Hexachlorobutadiene	+++++	+++++	8.7						50			
1,2,3-Trichlorobenzene	+++++	+++++	+++++	-24.1						50		
2-Methylnaphthalene	+++++	+++++	+++++	+++++	+++++	-73.2						80
1-Methylnaphthalene	+++++	+++++	+++++	+++++	+++++	-57.9						80

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC10.D
Lims ID: IC L10
Client ID:
Sample Type: IC Calib Level: 10
Inject. Date: 29-Aug-2020 12:34:30 ALS Bottle#: 15 Worklist Smp#: 3
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016451-003
Misc. Info.: 314600
Operator ID: HMT Instrument ID: MH
Sublist: chrom-MH_TO15*sub7

Method: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\MH_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 31-Aug-2020 12:24:07 Calib Date: 29-Aug-2020 23:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1064

First Level Reviewer: tajh Date: 30-Aug-2020 07:35:41

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.436	9.432	0.004	97	152621	4.80	4.80	
* 2 1,4-Difluorobenzene	114	11.596	11.594	0.002	95	642283	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	16.263	16.260	0.003	88	520911	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.881	17.877	0.004	93	339176	4.64	5.60	
6 Chlorodifluoromethane	51	3.911	3.920	-0.009	97	1170804	16.0	13.7	
7 Propene	41	3.926	3.935	-0.009	98	542250	16.0	14.9	
8 Dichlorodifluoromethane	85	3.983	3.989	-0.006	100	1647380	16.0	14.3	
9 Chloromethane	52	4.185	4.191	-0.006	55	186886	16.0	12.3	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	4.190	4.197	-0.007	90	1337769	16.0	14.5	
11 Acetaldehyde	44	4.355	4.365	-0.010	97	1146821	80.0	51.0	
12 Vinyl chloride	62	4.376	4.383	-0.007	99	612100	16.0	12.1	
14 Butadiene	54	4.474	4.479	-0.005	72	448776	16.0	13.0	
13 Butane	43	4.474	4.479	-0.005	82	849872	16.0	12.3	
15 Bromomethane	94	4.836	4.842	-0.006	98	625059	16.0	12.8	
16 Chloroethane	64	4.991	4.997	-0.006	87	254400	16.0	11.9	
17 Ethanol	31	5.089	5.099	-0.010	97	1396709	80.0	56.9	
18 Vinyl bromide	106	5.327	5.334	-0.007	98	628508	16.0	15.4	
19 2-Methylbutane	43	5.374	5.382	-0.008	93	794816	16.0	14.9	
20 Trichlorofluoromethane	101	5.622	5.626	-0.004	100	1707786	16.0	15.2	
21 Acrolein	56	5.632	5.646	-0.014	96	203402	16.0	16.5	
22 Acetonitrile	40	5.710	5.715	-0.005	99	319051	16.0	14.9	
23 Acetone	58	5.751	5.775	-0.024	99	908970	48.0	38.3	
24 Pentane	72	5.854	5.865	-0.011	94	79750	16.0	16.0	
25 Isopropyl alcohol	45	5.839	5.868	-0.029	97	2892621	48.0	49.3	
26 Ethyl ether	31	6.030	6.065	-0.035	91	804708	16.0	16.4	
27 1,1-Dichloroethene	96	6.387	6.393	-0.006	96	607494	16.0	16.4	
28 Acrylonitrile	53	6.500	6.508	-0.008	93	517174	16.0	15.9	
29 2-Methyl-2-propanol	59	6.475	6.535	-0.061	97	1061322	16.0	17.5	
30 112TCTFE	101	6.568	6.575	-0.007	96	1426183	16.0	15.0	
31 Methylene Chloride	84	6.764	6.766	-0.002	95	555280	16.0	14.8	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.779	6.781	-0.002	95	649836	16.0	17.0	
33 Carbon disulfide	76	6.940	6.946	-0.006	100	1817383	16.0	15.1	
34 trans-1,2-Dichloroethene	96	7.617	7.620	-0.003	93	624883	16.0	16.2	
35 2-Methylpentane	43	7.622	7.626	-0.004	96	1575951	16.0	17.1	
36 Methyl tert-butyl ether	73	7.725	7.785	-0.060	96	1474857	16.0	18.1	
37 1,1-Dichloroethane	63	8.066	8.066	0.000	100	1196411	16.0	15.6	
38 Vinyl acetate	43	8.159	8.165	-0.006	100	1898417	16.0	19.3	
40 Hexane	56	8.645	8.650	-0.005	88	524911	16.0	16.4	
39 2-Butanone (MEK)	72	8.619	8.660	-0.041	96	293914	16.0	15.7	
41 Isopropyl ether	45	8.800	8.836	-0.036	97	2478210	16.0	18.2	
42 cis-1,2-Dichloroethene	96	9.090	9.086	0.004	97	660849	16.0	16.9	
43 Ethyl acetate	43	9.250	9.277	-0.027	98	1671126	16.0	17.0	
44 Chloroform	83	9.441	9.438	0.003	96	1433018	16.0	15.5	
45 Tert-butyl ethyl ether	59	9.498	9.539	-0.041	98	1987944	16.0	19.1	
46 Tetrahydrofuran	42	9.834	9.897	-0.063	94	817677	16.0	17.8	
47 1,1,1-Trichloroethane	97	10.490	10.492	-0.002	97	1395034	16.0	16.6	
48 1,2-Dichloroethane	62	10.604	10.600	0.004	96	963858	16.0	16.5	
49 n-Butanol	31	10.986	11.038	-0.052	92	338272	16.0	18.6	
50 Cyclohexane	69	11.069	11.072	-0.003	92	288406	16.0	17.9	
51 Benzene	78	11.074	11.076	-0.002	98	1916459	16.0	16.2	
52 Carbon tetrachloride	117	11.095	11.095	0.000	96	1375702	16.0	18.8	
53 2,3-Dimethylpentane	71	11.173	11.172	0.001	91	401567	16.0	18.0	
54 Thiophene	84	11.348	11.344	0.004	97	1110676	16.0	17.9	
55 Isooctane	57	11.798	11.796	0.002	98	3380543	16.0	18.4	
56 n-Heptane	71	12.160	12.159	0.001	95	631336	16.0	18.8	
57 1,2-Dichloropropane	63	12.268	12.269	-0.001	90	840266	16.0	16.6	
58 Trichloroethene	130	12.299	12.298	0.001	95	915128	16.0	17.3	
59 Dibromomethane	93	12.392	12.390	0.002	97	958099	16.0	17.1	
60 Dichlorobromomethane	83	12.527	12.526	0.001	99	1536417	16.0	18.4	
61 1,4-Dioxane	88	12.522	12.571	-0.049	98	311891	16.0	18.6	
62 Methyl methacrylate	41	12.594	12.600	-0.006	89	1018216	16.0	18.6	
63 Methylcyclohexane	83	13.049	13.049	0.000	91	1124722	16.0	16.6	
64 4-Methyl-2-pentanone (MIBK)	43	13.426	13.452	-0.026	98	1937646	16.0	18.4	
65 cis-1,3-Dichloropropene	75	13.503	13.503	0.000	98	1165499	16.0	20.4	
66 trans-1,3-Dichloropropene	75	14.186	14.185	0.001	98	1033921	16.0	21.7	
67 Toluene	91	14.315	14.310	0.005	93	2373066	16.0	17.7	
68 1,1,2-Trichloroethane	83	14.387	14.386	0.001	97	764760	16.0	15.9	
69 2-Hexanone	58	14.739	14.759	-0.020	90	874521	16.0	20.5	
70 n-Octane	85	14.961	14.962	-0.001	96	702692	16.0	18.8	
71 Chlorodibromomethane	129	15.090	15.086	0.004	98	1647856	16.0	20.7	
72 Ethylene Dibromide	107	15.380	15.378	0.002	98	1392569	16.0	19.3	
73 Tetrachloroethene	129	15.442	15.439	0.003	96	956734	16.0	17.0	
75 2,3-Dimethylheptane	43	16.300	16.295	0.005	94	2763894	16.0	16.0	
74 Chlorobenzene	112	16.310	16.309	0.001	92	1868757	16.0	17.2	
76 Ethylbenzene	91	16.589	16.585	0.004	99	3089994	16.0	19.0	
77 m-Xylene & p-Xylene	91	16.749	16.745	0.004	98	5161120	32.0	40.2	
78 n-Nonane	57	17.137	17.134	0.003	94	1790733	16.0	19.4	
79 Bromoform	173	17.209	17.208	0.001	88	1643245	16.0	10.8	
80 Styrene	104	17.209	17.209	0.000	99	1897882	16.0	24.3	
81 o-Xylene	91	17.271	17.270	0.001	99	2495830	16.0	18.6	
82 1,1,2,2-Tetrachloroethane	83	17.592	17.591	0.001	98	1967574	16.0	16.5	
83 1,2,3-Trichloropropane	110	17.752	17.747	0.005	97	458317	16.0	17.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	17.845	17.842	0.003	97	3450814	16.0	20.3	
85 N-Propylbenzene	120	18.357	18.356	0.001	99	935298	16.0	20.5	
86 2-Chlorotoluene	126	18.408	18.408	0.000	98	816298	16.0	18.7	
87 4-Ethyltoluene	105	18.501	18.496	0.005	98	3386928	16.0	19.8	
88 1,3,5-Trimethylbenzene	120	18.568	18.567	0.001	92	1410023	16.0	17.3	
89 Alpha Methyl Styrene	118	18.791	18.791	0.000	88	1428730	16.0	24.2	
90 n-Decane	57	18.827	18.822	0.005	90	2395266	16.0	17.7	
91 tert-Butylbenzene	119	18.982	18.979	0.003	91	3345761	16.0	19.3	
92 1,2,4-Trimethylbenzene	105	18.992	18.991	0.001	96	3051181	16.0	19.6	
93 sec-Butylbenzene	105	19.240	19.239	0.001	98	4356098	16.0	19.0	
94 1,3-Dichlorobenzene	146	19.266	19.263	0.003	98	1781787	16.0	22.1	
95 Benzyl chloride	91	19.333	19.333	0.000	98	2129244	16.0	22.5	
96 1,4-Dichlorobenzene	146	19.349	19.345	0.004	98	1662191	16.0	27.9	
97 4-Isopropyltoluene	119	19.395	19.393	0.002	97	3642103	16.0	19.6	
98 1,2,3-Trimethylbenzene	105	19.452	19.452	0.000	99	2789911	16.0	18.7	
99 Butylcyclohexane	83	19.499	19.494	0.005	91	2440443	16.0	19.0	
101 2,3-Dihydroindene	117	19.700	19.695	0.005	95	2571055	16.0	20.8	
100 1,2-Dichlorobenzene	146	19.700	19.699	0.001	97	1718635	16.0	19.3	
103 n-Butylbenzene	91	19.814	19.814	0.000	98	3642930	16.0	17.8	
102 Indene	116	19.824	19.824	0.000	92	2078384	16.0	19.6	
104 Undecane	57	20.098	20.098	0.000	95	2838035	16.0	18.4	
105 1,2-Dibromo-3-Chloropropane	157	20.290	20.288	0.002	98	944276	16.0	20.7	
106 1,2,4,5-Tetramethylbenzene	119	20.563	20.563	0.000	97	3620004	16.0	19.3	
107 Dodecane	57	21.179	21.175	0.004	95	2958200	16.0	27.2	
108 1,2,4-Trichlorobenzene	180	21.421	21.418	0.003	94	1180416	16.0	27.1	
109 Naphthalene	128	21.561	21.559	0.002	99	2794001	16.0	24.8	
110 Hexachlorobutadiene	225	21.732	21.727	0.005	93	1348081	16.0	15.8	
111 1,2,3-Trichlorobenzene	180	21.794	21.793	0.001	96	1237502	16.0	24.7	
112 2-Methylnaphthalene	142	22.341	22.340	0.001	100	832938	16.0	42.9	
113 1-Methylnaphthalene	142	22.471	22.468	0.003	100	878408	16.0	39.2	
A 115 C8 Range	1	14.966	(14.914-15.007)		0	7656734	16.0	17.9	
S 116 Xylenes, Total	100				0		48.0	58.8	
S 117 1,2-Dichloroethene, Total	1				0		32.0	33.1	

Reagents:

40L10DQP_00019	Amount Added: 200.00	Units: mL	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

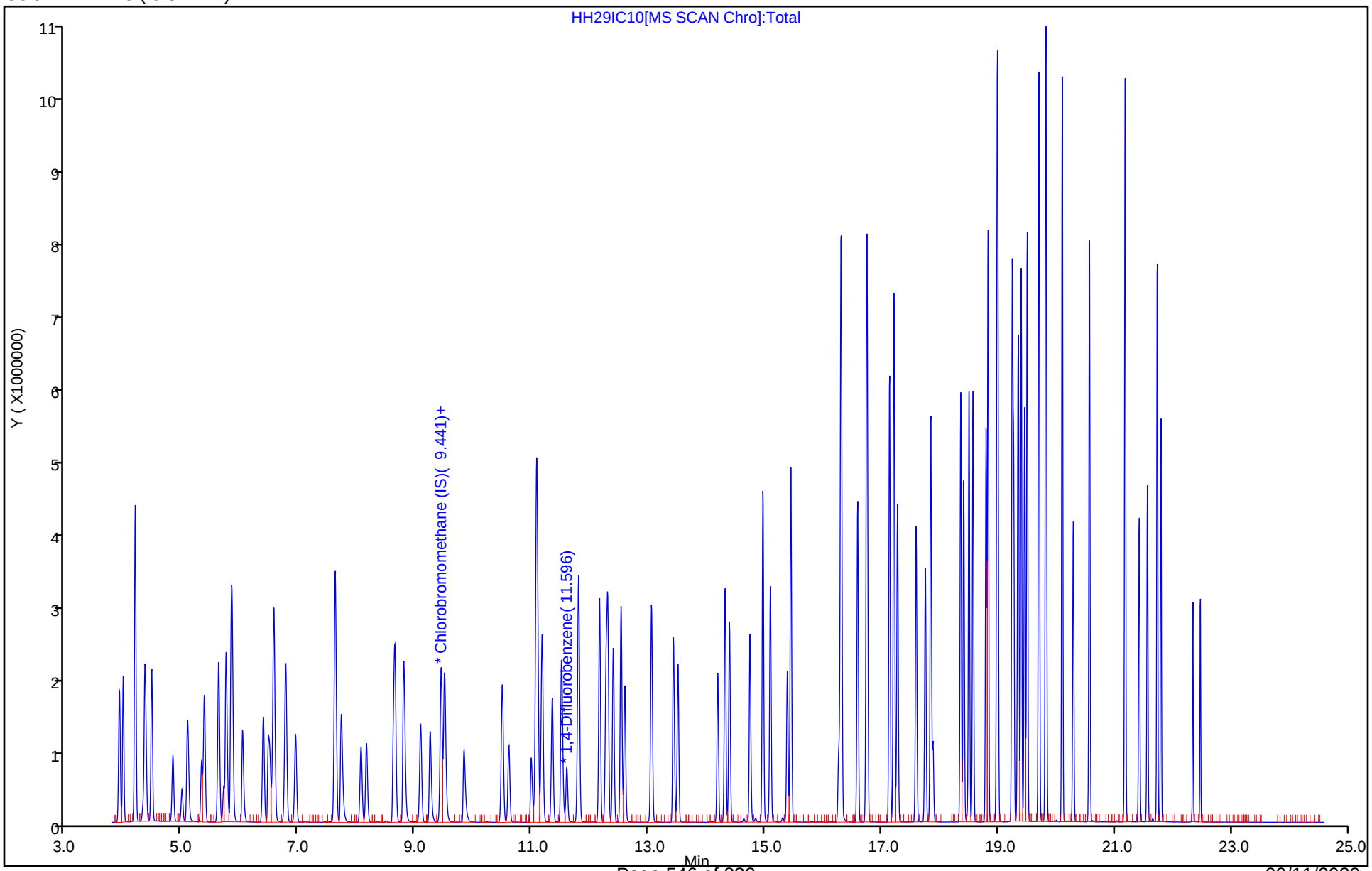
Report Date: 31-Aug-2020 12:24:08 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC10.D

Injection Date:	29-Aug-2020 12:34:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	IC L10			Worklist Smp#:	3
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

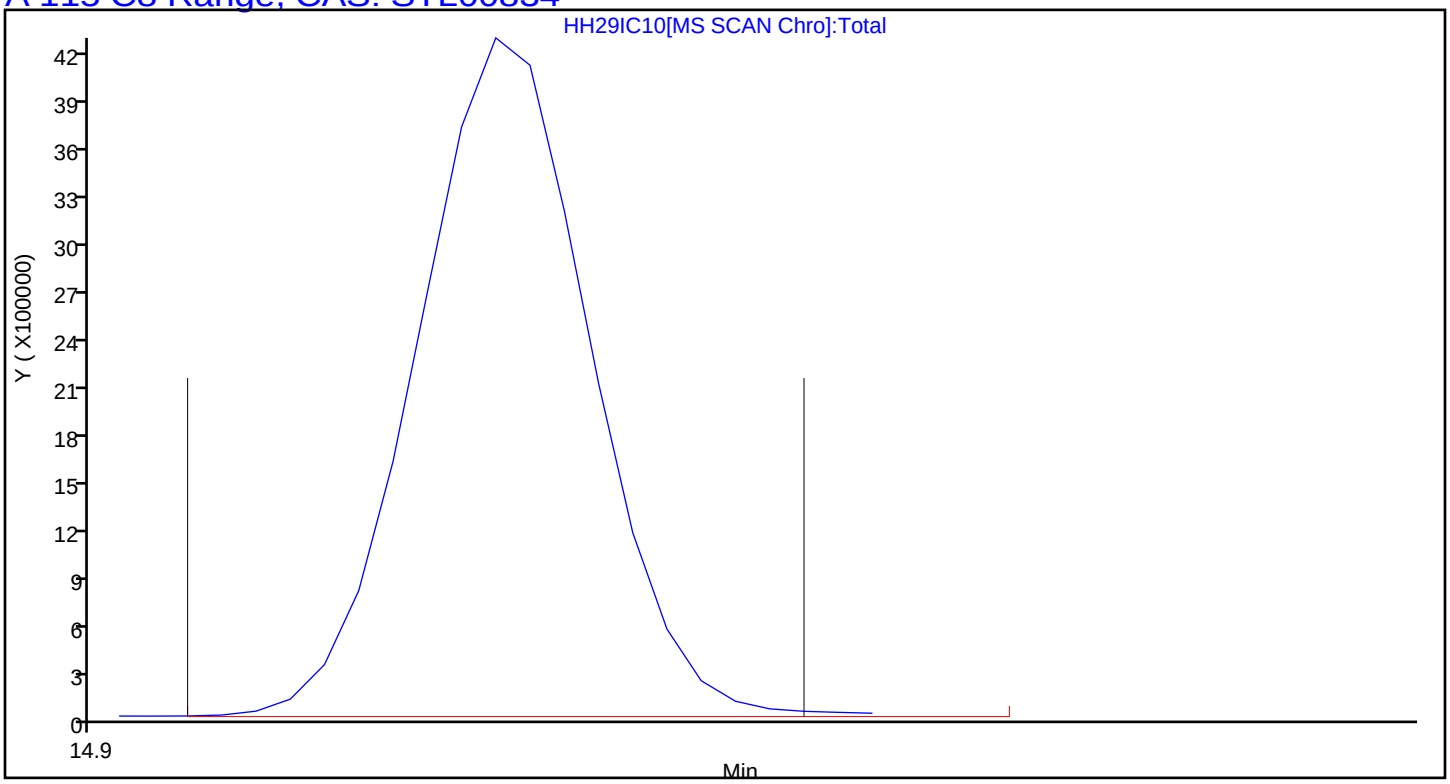
Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC10.D				
Injection Date:	29-Aug-2020 12:34:30	Instrument ID:	MH		
Lims ID:	IC L10				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	15	Worklist Smp#:	3
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 115 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC09.D
Lims ID: IC L9
Client ID:
Sample Type: IC Calib Level: 9
Inject. Date: 29-Aug-2020 14:25:30 ALS Bottle#: 14 Worklist Smp#: 5
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016451-005
Misc. Info.: 314601
Operator ID: HMT Instrument ID: MH
Sublist: chrom-MH_TO15*sub7

Method: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\MH_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 31-Aug-2020 12:24:15 Calib Date: 29-Aug-2020 23:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1064

First Level Reviewer: tajh Date: 30-Aug-2020 07:38:57

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.436	9.432	0.004	98	143228	4.80	4.80	
* 2 1,4-Difluorobenzene	114	11.596	11.594	0.002	95	603830	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	16.263	16.260	0.003	88	478433	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.881	17.877	0.004	94	287349	4.64	5.17	
6 Chlorodifluoromethane	51	3.921	3.920	0.001	97	564270	8.00	7.06	M
7 Propene	41	3.937	3.935	0.002	99	250332	8.00	7.33	
8 Dichlorodifluoromethane	85	3.994	3.989	0.005	100	665212	8.00	6.14	
9 Chloromethane	52	4.195	4.191	0.004	57	95475	8.00	6.71	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	4.200	4.197	0.003	91	595826	8.00	6.89	
11 Acetaldehyde	44	4.366	4.365	0.001	97	755942	40.0	35.8	
12 Vinyl chloride	62	4.386	4.383	0.003	99	306691	8.00	6.44	
14 Butadiene	54	4.485	4.479	0.005	69	225651	8.00	6.96	
13 Butane	43	4.479	4.479	0.000	84	454922	8.00	6.99	
15 Bromomethane	94	4.846	4.842	0.004	98	302073	8.00	6.57	
16 Chloroethane	64	5.001	4.997	0.004	93	128615	8.00	6.40	
17 Ethanol	31	5.094	5.099	-0.005	97	974505	40.0	42.3	
18 Vinyl bromide	106	5.337	5.334	0.003	98	275481	8.00	7.19	
19 2-Methylbutane	43	5.384	5.382	0.002	94	354580	8.00	7.07	
20 Trichlorofluoromethane	101	5.627	5.626	0.001	100	744095	8.00	7.05	
21 Acrolein	56	5.642	5.646	-0.004	95	88893	8.00	7.69	
22 Acetonitrile	40	5.715	5.715	0.000	99	148489	8.00	7.36	
23 Acetone	58	5.756	5.775	-0.019	99	550794	24.0	24.7	
25 Isopropyl alcohol	45	5.839	5.868	-0.029	97	1296845	24.0	23.6	
24 Pentane	72	5.864	5.865	-0.001	97	36172	8.00	7.74	
26 Ethyl ether	31	6.040	6.065	-0.025	91	355621	8.00	7.74	
27 1,1-Dichloroethene	96	6.397	6.393	0.004	96	265390	8.00	7.64	
29 2-Methyl-2-propanol	59	6.479	6.535	-0.056	96	465853	8.00	8.21	
28 Acrylonitrile	53	6.505	6.508	-0.003	93	228821	8.00	7.49	
30 112TCTFE	101	6.573	6.575	-0.002	97	620382	8.00	6.93	
31 Methylene Chloride	84	6.769	6.766	0.003	96	259505	8.00	7.39	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.784	6.781	0.003	95	266061	8.00	7.40	
33 Carbon disulfide	76	6.950	6.946	0.004	100	809975	8.00	7.18	
34 trans-1,2-Dichloroethene	96	7.622	7.620	0.002	95	275057	8.00	7.59	
35 2-Methylpentane	43	7.632	7.626	0.006	96	690025	8.00	7.98	
36 Methyl tert-butyl ether	73	7.735	7.785	-0.050	96	623376	8.00	8.14	
37 1,1-Dichloroethane	63	8.066	8.066	0.000	100	520203	8.00	7.22	
38 Vinyl acetate	43	8.159	8.165	-0.006	100	784451	8.00	8.49	
39 2-Butanone (MEK)	72	8.624	8.660	-0.036	96	135925	8.00	7.75	
40 Hexane	56	8.650	8.650	0.000	91	235600	8.00	7.85	
41 Isopropyl ether	45	8.805	8.836	-0.031	97	1066420	8.00	8.35	
42 cis-1,2-Dichloroethene	96	9.090	9.086	0.004	96	286195	8.00	7.79	
43 Ethyl acetate	43	9.255	9.277	-0.022	98	712888	8.00	7.75	
44 Chloroform	83	9.441	9.438	0.003	97	613922	8.00	7.06	
45 Tert-butyl ethyl ether	59	9.503	9.539	-0.036	98	832498	8.00	8.50	
46 Tetrahydrofuran	42	9.839	9.897	-0.058	94	352999	8.00	8.17	
47 1,1,1-Trichloroethane	97	10.490	10.492	-0.002	97	575307	8.00	7.30	
48 1,2-Dichloroethane	62	10.604	10.600	0.004	96	401489	8.00	7.31	
49 n-Butanol	31	10.991	11.038	-0.047	93	143170	8.00	8.37	
50 Cyclohexane	69	11.074	11.072	0.002	91	123486	8.00	8.14	
51 Benzene	78	11.079	11.076	0.003	98	826207	8.00	7.45	
52 Carbon tetrachloride	117	11.095	11.095	0.000	97	416169	8.00	6.06	
53 2,3-Dimethylpentane	71	11.178	11.172	0.006	92	176820	8.00	8.42	
54 Thiophene	84	11.348	11.344	0.004	97	475836	8.00	8.16	
55 Isooctane	57	11.798	11.796	0.002	98	1459914	8.00	8.47	
56 n-Heptane	71	12.160	12.159	0.001	95	273309	8.00	8.65	
57 1,2-Dichloropropane	63	12.268	12.269	-0.001	91	362074	8.00	7.63	
58 Trichloroethene	130	12.299	12.298	0.001	96	434833	8.00	8.72	
59 Dibromomethane	93	12.392	12.390	0.002	96	401008	8.00	7.60	
61 1,4-Dioxane	88	12.526	12.571	-0.045	41	138998	8.00	8.80	
60 Dichlorobromomethane	83	12.526	12.526	0.000	98	631688	8.00	8.04	
62 Methyl methacrylate	41	12.594	12.600	-0.006	90	435605	8.00	8.46	
63 Methylcyclohexane	83	13.048	13.049	-0.001	92	489358	8.00	7.69	
64 4-Methyl-2-pentanone (MIBK)	43	13.426	13.452	-0.026	98	848466	8.00	8.57	
65 cis-1,3-Dichloropropene	75	13.503	13.503	0.000	97	483570	8.00	8.98	
66 trans-1,3-Dichloropropene	75	14.186	14.185	0.001	98	409325	8.00	9.35	
67 Toluene	91	14.310	14.310	0.000	93	1040202	8.00	8.44	
68 1,1,2-Trichloroethane	83	14.387	14.386	0.001	97	324985	8.00	7.34	
69 2-Hexanone	58	14.739	14.759	-0.020	90	357602	8.00	9.11	
70 n-Octane	85	14.961	14.962	-0.001	97	293032	8.00	8.52	
71 Chlorodibromomethane	129	15.090	15.086	0.004	98	617460	8.00	8.44	
72 Ethylene Dibromide	107	15.379	15.378	0.001	98	535038	8.00	8.07	
73 Tetrachloroethene	129	15.441	15.439	0.002	96	389413	8.00	7.54	
75 2,3-Dimethylheptane	43	16.299	16.295	0.004	94	1190642	8.00	7.50	
74 Chlorobenzene	112	16.310	16.309	0.001	93	743269	8.00	7.44	
76 Ethylbenzene	91	16.589	16.585	0.004	99	1254862	8.00	8.41	
77 m-Xylene & p-Xylene	91	16.744	16.745	-0.001	98	2022188	16.0	17.1	
78 n-Nonane	57	17.132	17.134	-0.002	95	724315	8.00	8.54	
79 Bromoform	173	17.209	17.208	0.001	85	518648	8.00	5.66	
80 Styrene	104	17.209	17.209	0.000	99	703366	8.00	9.82	
81 o-Xylene	91	17.271	17.270	0.001	99	1010000	8.00	8.18	
82 1,1,2,2-Tetrachloroethane	83	17.591	17.591	0.000	98	679869	8.00	6.22	
83 1,2,3-Trichloropropane	110	17.747	17.747	0.000	97	178026	8.00	7.20	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	17.845	17.842	0.003	97	1331394	8.00	8.53	
85 N-Propylbenzene	120	18.356	18.356	0.000	99	345970	8.00	8.26	
86 2-Chlorotoluene	126	18.408	18.408	0.000	98	306918	8.00	7.67	
87 4-Ethyltoluene	105	18.496	18.496	0.000	98	1248739	8.00	7.96	
88 1,3,5-Trimethylbenzene	120	18.568	18.567	0.001	92	518722	8.00	6.95	
89 Alpha Methyl Styrene	118	18.791	18.791	0.000	88	484735	8.00	8.94	
90 n-Decane	57	18.822	18.822	0.000	87	936873	8.00	7.55	
91 tert-Butylbenzene	119	18.982	18.979	0.003	90	1228047	8.00	7.73	
92 1,2,4-Trimethylbenzene	105	18.992	18.991	0.001	96	1112935	8.00	7.80	
93 sec-Butylbenzene	105	19.240	19.239	0.001	99	1601820	8.00	7.61	
94 1,3-Dichlorobenzene	146	19.266	19.263	0.003	98	600990	8.00	8.11	
95 Benzyl chloride	91	19.333	19.333	0.000	98	695153	8.00	8.08	
96 1,4-Dichlorobenzene	146	19.349	19.345	0.004	95	547614	8.00	10.0	
97 4-Isopropyltoluene	119	19.395	19.393	0.002	97	1347034	8.00	7.91	
98 1,2,3-Trimethylbenzene	105	19.452	19.452	0.000	99	1012757	8.00	7.38	
99 Butylcyclohexane	83	19.493	19.494	-0.001	90	922051	8.00	7.82	
101 2,3-Dihydroindene	117	19.695	19.695	0.000	94	904716	8.00	7.96	
100 1,2-Dichlorobenzene	146	19.700	19.699	0.001	96	591518	8.00	7.23	
103 n-Butylbenzene	91	19.814	19.814	0.000	97	1371797	8.00	7.28	
102 Indene	116	19.824	19.824	0.000	94	671298	8.00	6.89	
104 Undecane	57	20.098	20.098	0.000	95	1069442	8.00	7.55	
105 1,2-Dibromo-3-Chloropropane	157	20.289	20.288	0.001	97	336214	8.00	8.04	
106 1,2,4,5-Tetramethylbenzene	119	20.563	20.563	0.000	97	1312226	8.00	7.65	
107 Dodecane	57	21.173	21.175	-0.002	93	968430	8.00	9.71	
108 1,2,4-Trichlorobenzene	180	21.421	21.418	0.003	94	328959	8.00	8.27	
109 Naphthalene	128	21.561	21.559	0.002	99	873625	8.00	7.97	
110 Hexachlorobutadiene	225	21.731	21.727	0.004	93	490625	8.00	6.27	
111 1,2,3-Trichlorobenzene	180	21.793	21.793	0.000	95	392883	8.00	8.55	
112 2-Methylnaphthalene	142	22.341	22.340	0.001	100	175877	8.00	9.86	
113 1-Methylnaphthalene	142	22.465	22.468	-0.003	100	196232	8.00	9.53	
A 115 C8 Range	1	14.966	(14.919-15.012)		0	3235392	8.00	8.04	
S 116 Xylenes, Total	100				0		24.0	25.3	
S 117 1,2-Dichloroethene, Total	1				0		16.0	15.4	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

40L9DQP_00019	Amount Added: 200.00	Units: mL	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

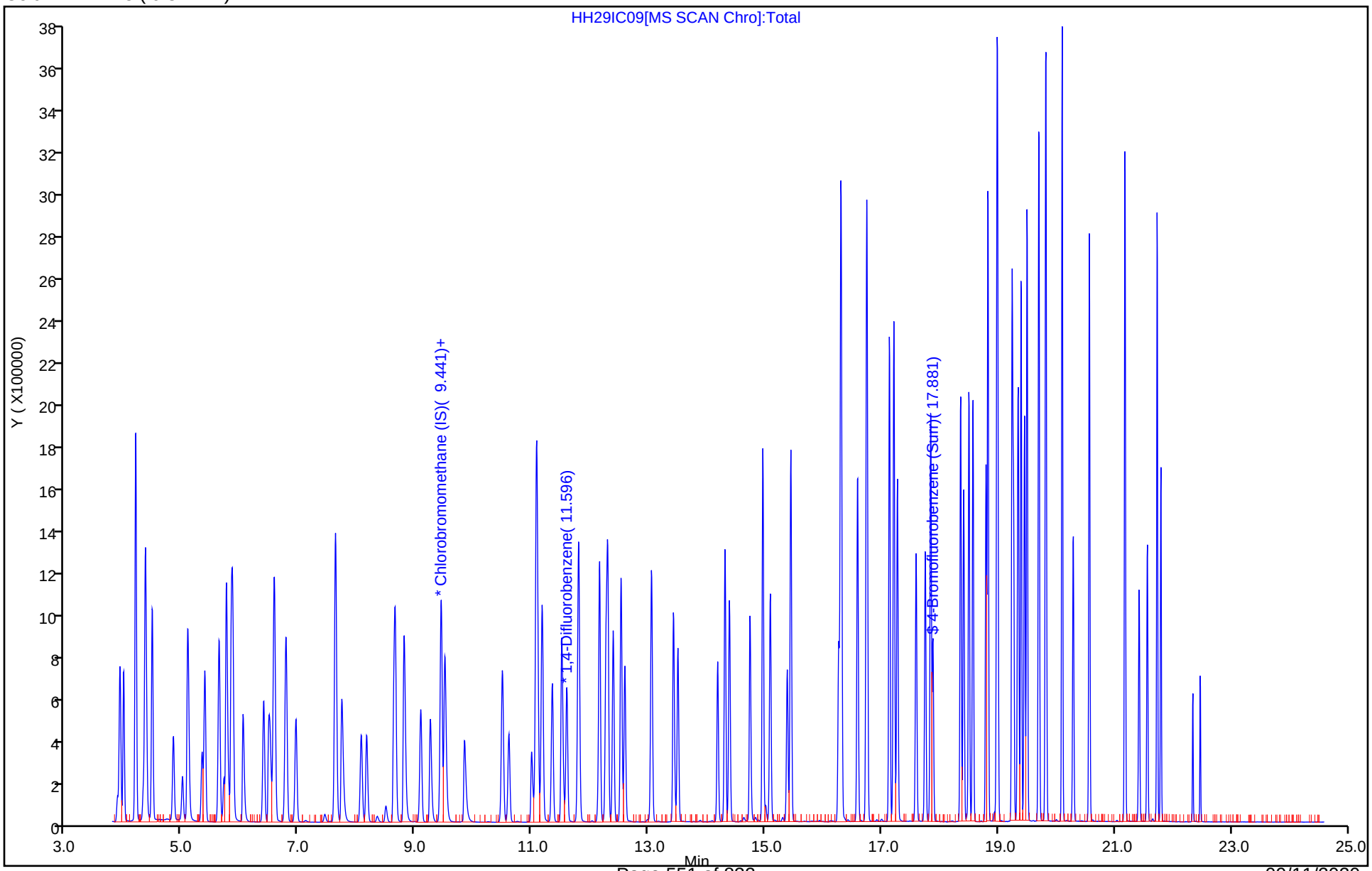
Report Date: 31-Aug-2020 12:24:16 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC09.D

Injection Date:	29-Aug-2020 14:25:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	IC L9			Worklist Smp#:	5
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

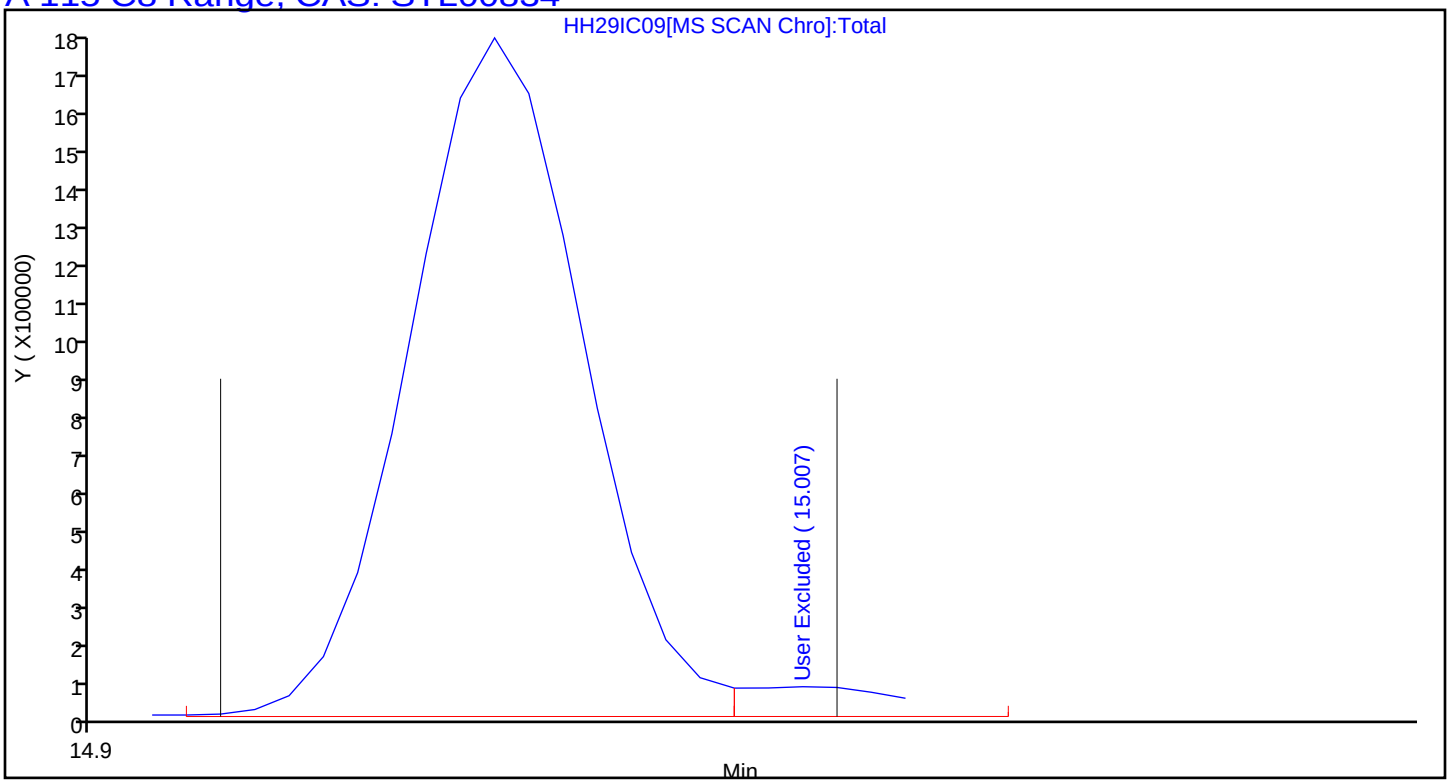


Report Date: 31-Aug-2020 12:24:16 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC09.D				
Injection Date:	29-Aug-2020 14:25:30	Instrument ID:	MH		
Lims ID:	IC L9				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	14	Worklist Smp#:	5
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 115 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville

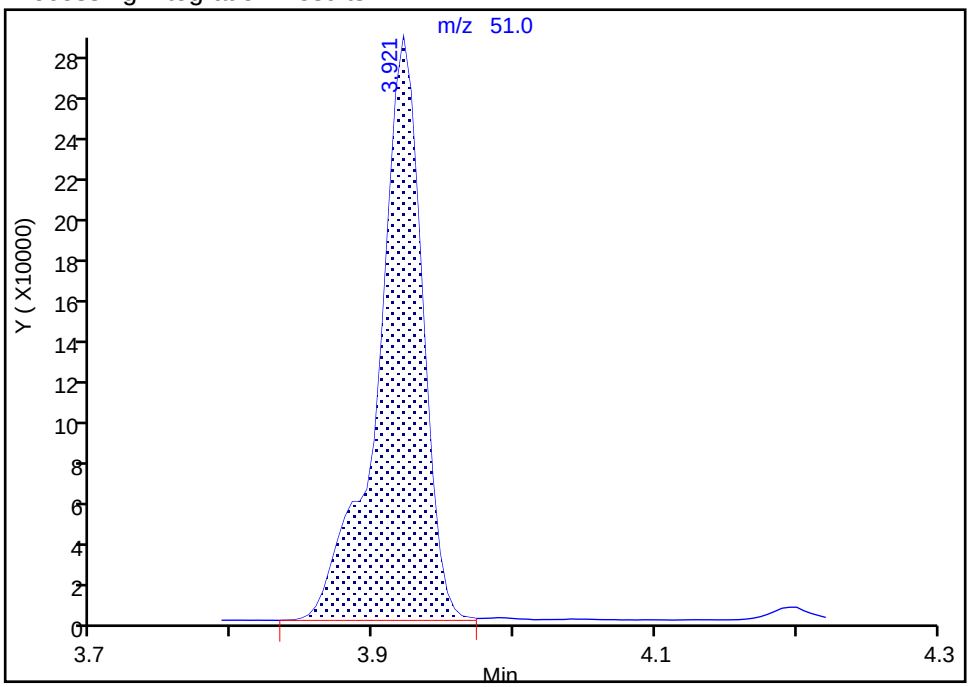
Data File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC09.D
Injection Date: 29-Aug-2020 14:25:30 Instrument ID: MH
Lims ID: IC L9
Client ID:
Operator ID: HMT ALS Bottle#: 14 Worklist Smp#: 5
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Method: MH_TO15 Limit Group: MSA TO14A_15 Routine ICAL
Column: RTX-5 (0.32 mm) Detector MS SCAN

6 Chlorodifluoromethane, CAS: 75-45-6

Signal: 1

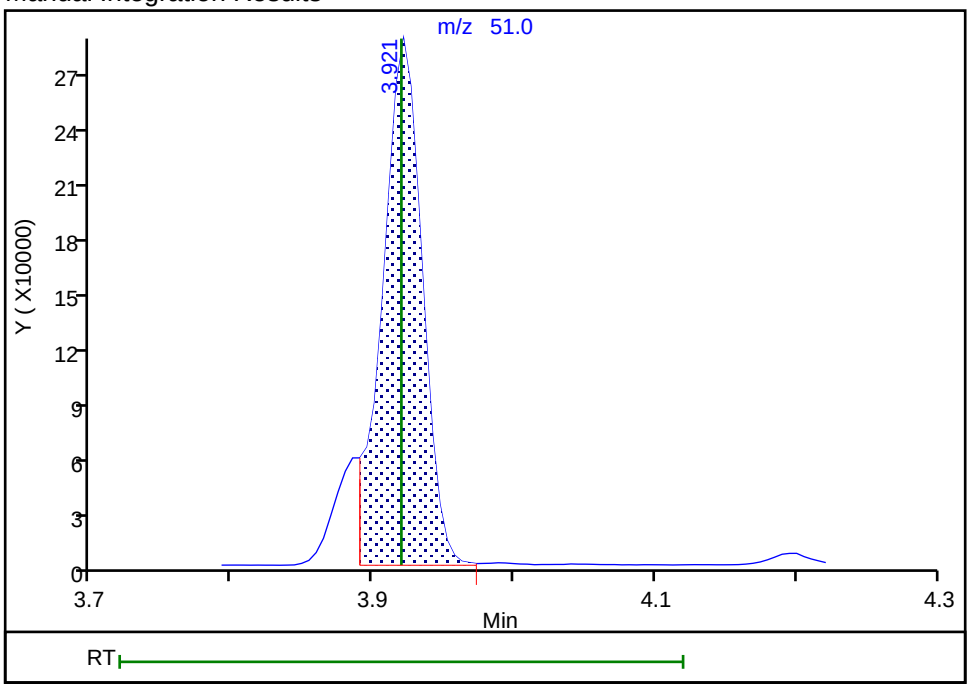
Processing Integration Results

RT: 3.92
Area: 626764
Amount: 7.747203
Amount Units: ppb v/v



Manual Integration Results

RT: 3.92
Area: 564270
Amount: 7.059949
Amount Units: ppb v/v



Reviewer: barlozhetskayaa, 31-Aug-2020 10:49:49
Audit Action: Split an Integrated Peak Audit Reason: Split Peak

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC08.D
Lims ID: IC L8
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 29-Aug-2020 16:25:30 ALS Bottle#: 13 Worklist Smp#: 7
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016451-007
Misc. Info.: 314607
Operator ID: HMT Instrument ID: MH
Sublist: chrom-MH_TO15*sub7

Method: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\MH_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 31-Aug-2020 12:24:23 Calib Date: 29-Aug-2020 23:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1064

First Level Reviewer: barlozhetskayaa Date: 31-Aug-2020 09:54:21

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.431	9.432	-0.001	97	141282	4.80	4.80	
* 2 1,4-Difluorobenzene	114	11.596	11.594	0.002	91	622298	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	16.263	16.260	0.003	87	475034	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.881	17.877	0.004	94	276345	4.64	5.01	
6 Chlorodifluoromethane	51	3.916	3.920	-0.004	97	291670	4.00	3.70	
7 Propene	41	3.932	3.935	-0.003	99	132120	4.00	3.92	
8 Dichlorodifluoromethane	85	3.988	3.989	-0.001	100	418915	4.00	3.92	
9 Chloromethane	52	4.190	4.191	-0.001	59	54109	4.00	3.86	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	4.195	4.197	-0.002	91	322487	4.00	3.78	
11 Acetaldehyde	44	4.361	4.365	-0.005	97	361009	20.0	17.3	
12 Vinyl chloride	62	4.381	4.383	-0.002	99	170593	4.00	3.63	
13 Butane	43	4.479	4.479	0.000	84	254521	4.00	3.96	
14 Butadiene	54	4.479	4.479	0.000	69	126693	4.00	3.96	
15 Bromomethane	94	4.841	4.842	-0.001	98	169287	4.00	3.73	
16 Chloroethane	64	4.996	4.997	-0.001	88	73280	4.00	3.70	
17 Ethanol	31	5.089	5.099	-0.010	97	459695	20.0	20.2	
18 Vinyl bromide	106	5.337	5.334	0.003	98	150998	4.00	4.00	
19 2-Methylbutane	43	5.384	5.382	0.002	93	193291	4.00	3.91	
20 Trichlorofluoromethane	101	5.627	5.626	0.001	99	399259	4.00	3.84	
21 Acrolein	56	5.642	5.646	-0.004	95	47885	4.00	4.21	
22 Acetonitrile	40	5.709	5.715	-0.006	98	80296	4.00	4.04	
23 Acetone	58	5.756	5.775	-0.019	98	228958	12.0	10.4	
25 Isopropyl alcohol	45	5.839	5.868	-0.029	96	690311	12.0	12.7	
24 Pentane	72	5.865	5.865	-0.001	96	19860	4.00	4.31	
26 Ethyl ether	31	6.045	6.065	-0.020	91	192018	4.00	4.24	
27 1,1-Dichloroethene	96	6.392	6.393	-0.001	96	142360	4.00	4.16	
29 2-Methyl-2-propanol	59	6.485	6.535	-0.050	95	244846	4.00	4.37	
28 Acrylonitrile	53	6.505	6.508	-0.003	94	125727	4.00	4.17	
30 112TCTFE	101	6.573	6.575	-0.002	96	336927	4.00	3.82	
31 Methylene Chloride	84	6.769	6.766	0.003	96	136401	4.00	3.94	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.784	6.781	0.003	95	139845	4.00	3.94	
33 Carbon disulfide	76	6.945	6.946	-0.001	100	445503	4.00	4.00	
34 trans-1,2-Dichloroethene	96	7.622	7.620	0.002	95	149694	4.00	4.19	
35 2-Methylpentane	43	7.627	7.626	0.001	96	370246	4.00	4.34	
36 Methyl tert-butyl ether	73	7.741	7.785	-0.044	95	330791	4.00	4.38	
37 1,1-Dichloroethane	63	8.066	8.066	0.000	100	280496	4.00	3.95	
38 Vinyl acetate	43	8.159	8.165	-0.006	100	412364	4.00	4.52	
39 2-Butanone (MEK)	72	8.630	8.660	-0.030	96	68948	4.00	3.98	
40 Hexane	56	8.650	8.650	0.000	85	123014	4.00	4.16	
41 Isopropyl ether	45	8.805	8.836	-0.031	97	563683	4.00	4.47	
42 cis-1,2-Dichloroethene	96	9.090	9.086	0.004	97	151318	4.00	4.18	
43 Ethyl acetate	43	9.255	9.277	-0.022	98	377279	4.00	4.16	
44 Chloroform	83	9.441	9.438	0.003	97	330924	4.00	3.86	
45 Tert-butyl ethyl ether	59	9.508	9.539	-0.031	98	440890	4.00	4.56	
46 Tetrahydrofuran	42	9.849	9.897	-0.048	94	187127	4.00	4.39	
47 1,1,1-Trichloroethane	97	10.490	10.492	-0.002	97	306983	4.00	3.95	
48 1,2-Dichloroethane	62	10.599	10.600	-0.001	96	213048	4.00	3.77	
49 n-Butanol	31	10.997	11.038	-0.041	93	71434	4.00	4.05	
50 Cyclohexane	69	11.069	11.072	-0.003	82	66211	4.00	4.24	
51 Benzene	78	11.074	11.076	-0.002	98	447438	4.00	3.92	
52 Carbon tetrachloride	117	11.095	11.095	0.000	97	337106	4.00	4.77	
53 2,3-Dimethylpentane	71	11.172	11.172	0.000	93	94974	4.00	4.39	
54 Thiophene	84	11.348	11.344	0.004	96	254231	4.00	4.23	
55 Isooctane	57	11.798	11.796	0.002	98	777814	4.00	4.38	
56 n-Heptane	71	12.160	12.159	0.001	95	144047	4.00	4.42	
57 1,2-Dichloropropane	63	12.268	12.269	-0.001	91	191949	4.00	3.92	
58 Trichloroethene	130	12.299	12.298	0.001	96	202744	4.00	3.95	
59 Dibromomethane	93	12.392	12.390	0.002	96	207883	4.00	3.82	
60 Dichlorobromomethane	83	12.527	12.526	0.001	99	336939	4.00	4.16	
61 1,4-Dioxane	88	12.532	12.571	-0.039	93	74690	4.00	4.59	
62 Methyl methacrylate	41	12.594	12.600	-0.006	90	231736	4.00	4.37	
63 Methylcyclohexane	83	13.049	13.049	0.000	92	260282	4.00	3.99	
64 4-Methyl-2-pentanone (MIBK)	43	13.431	13.452	-0.021	98	439352	4.00	4.31	
65 cis-1,3-Dichloropropene	75	13.503	13.503	0.000	97	243759	4.00	4.39	
66 trans-1,3-Dichloropropene	75	14.186	14.185	0.001	98	194299	4.00	4.47	
67 Toluene	91	14.310	14.310	0.000	92	532092	4.00	4.35	
68 1,1,2-Trichloroethane	83	14.387	14.386	0.001	97	172251	4.00	3.92	
69 2-Hexanone	58	14.744	14.759	-0.015	90	180452	4.00	4.63	
70 n-Octane	85	14.961	14.962	-0.001	97	155695	4.00	4.56	
71 Chlorodibromomethane	129	15.085	15.086	-0.001	98	338056	4.00	4.65	
72 Ethylene Dibromide	107	15.379	15.378	0.001	98	261015	4.00	3.96	
73 Tetrachloroethene	129	15.442	15.439	0.003	96	202921	4.00	3.96	
75 2,3-Dimethylheptane	43	16.294	16.295	-0.001	94	630662	4.00	4.00	
74 Chlorobenzene	112	16.310	16.309	0.001	94	392452	4.00	3.96	
76 Ethylbenzene	91	16.584	16.585	-0.001	99	660533	4.00	4.46	
77 m-Xylene & p-Xylene	91	16.744	16.745	-0.001	98	1051498	8.00	8.98	
78 n-Nonane	57	17.132	17.134	-0.002	95	374564	4.00	4.45	
79 Bromoform	173	17.209	17.208	0.001	83	299387	4.00	3.99	
80 Styrene	104	17.209	17.209	0.000	98	359605	4.00	5.06	
81 o-Xylene	91	17.271	17.270	0.001	99	535239	4.00	4.36	
82 1,1,2,2-Tetrachloroethane	83	17.592	17.591	0.001	98	421162	4.00	3.88	
83 1,2,3-Trichloropropane	110	17.747	17.747	0.000	97	96559	4.00	3.93	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	17.840	17.842	-0.002	96	707258	4.00	4.56	
85 N-Propylbenzene	120	18.356	18.356	0.000	99	184674	4.00	4.44	
86 2-Chlorotoluene	126	18.408	18.408	0.000	98	167167	4.00	4.21	
87 4-Ethyltoluene	105	18.496	18.496	0.000	98	692968	4.00	4.45	
88 1,3,5-Trimethylbenzene	120	18.568	18.567	0.001	93	287240	4.00	3.90	
89 Alpha Methyl Styrene	118	18.791	18.791	0.000	88	271429	4.00	5.04	
90 n-Decane	57	18.822	18.822	0.000	87	498369	4.00	4.05	
91 tert-Butylbenzene	119	18.977	18.979	-0.002	90	661899	4.00	4.19	
92 1,2,4-Trimethylbenzene	105	18.992	18.991	0.001	96	601094	4.00	4.24	
93 sec-Butylbenzene	105	19.235	19.239	-0.004	99	891452	4.00	4.27	
94 1,3-Dichlorobenzene	146	19.261	19.263	-0.002	98	311522	4.00	4.23	
95 Benzyl chloride	91	19.333	19.333	0.000	98	346656	4.00	4.11	
96 1,4-Dichlorobenzene	146	19.344	19.345	-0.001	96	275478	4.00	5.07	
97 4-Isopropyltoluene	119	19.390	19.393	-0.003	97	779777	4.00	4.61	
98 1,2,3-Trimethylbenzene	105	19.452	19.452	0.000	99	574609	4.00	4.22	
99 Butylcyclohexane	83	19.494	19.494	0.000	90	493736	4.00	4.22	
101 2,3-Dihydroindene	117	19.695	19.695	0.000	94	487092	4.00	4.32	
100 1,2-Dichlorobenzene	146	19.700	19.699	0.001	98	314163	4.00	3.87	
103 n-Butylbenzene	91	19.814	19.814	0.000	97	787301	4.00	4.21	
102 Indene	116	19.824	19.824	0.000	90	392352	4.00	4.06	
104 Undecane	57	20.098	20.098	0.000	94	569435	4.00	4.05	
105 1,2-Dibromo-3-Chloropropane	157	20.289	20.288	0.001	97	201489	4.00	4.85	
106 1,2,4,5-Tetramethylbenzene	119	20.563	20.563	0.000	97	721787	4.00	4.27	
107 Dodecane	57	21.173	21.175	-0.002	92	409669	4.00	4.14	
108 1,2,4-Trichlorobenzene	180	21.421	21.418	0.003	94	159208	4.00	4.07	
109 Naphthalene	128	21.561	21.559	0.002	99	458116	4.00	4.15	
110 Hexachlorobutadiene	225	21.726	21.727	-0.001	92	272041	4.00	3.50	
111 1,2,3-Trichlorobenzene	180	21.793	21.793	0.000	95	185934	4.00	4.08	
112 2-Methylnaphthalene	142	22.341	22.340	0.001	100	35445	4.00	2.00	
113 1-Methylnaphthalene	142	22.465	22.468	-0.003	99	42682	4.00	2.09	
A 115 C8 Range	1	14.961	(14.909-15.013)		0	1701005	4.00	4.10	
S 116 Xylenes, Total	100				0		12.0	13.3	
S 117 1,2-Dichloroethene, Total	1				0		8.00	8.36	

Reagents:

40L8DQP_00018	Amount Added: 200.00	Units: mL	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

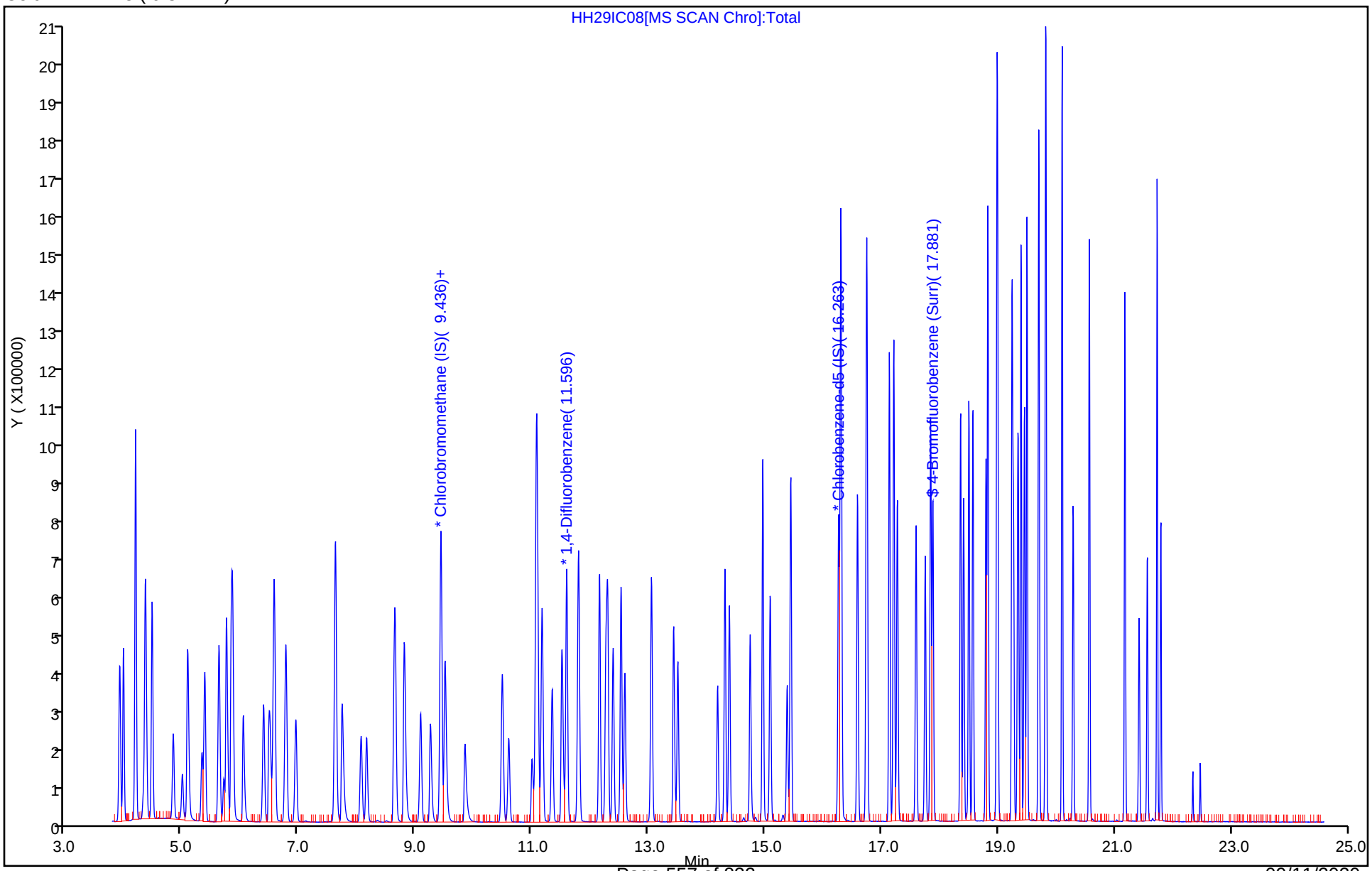
Report Date: 31-Aug-2020 12:24:24 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC08.D

Injection Date:	29-Aug-2020 16:25:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	IC L8			Worklist Smp#:	7
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

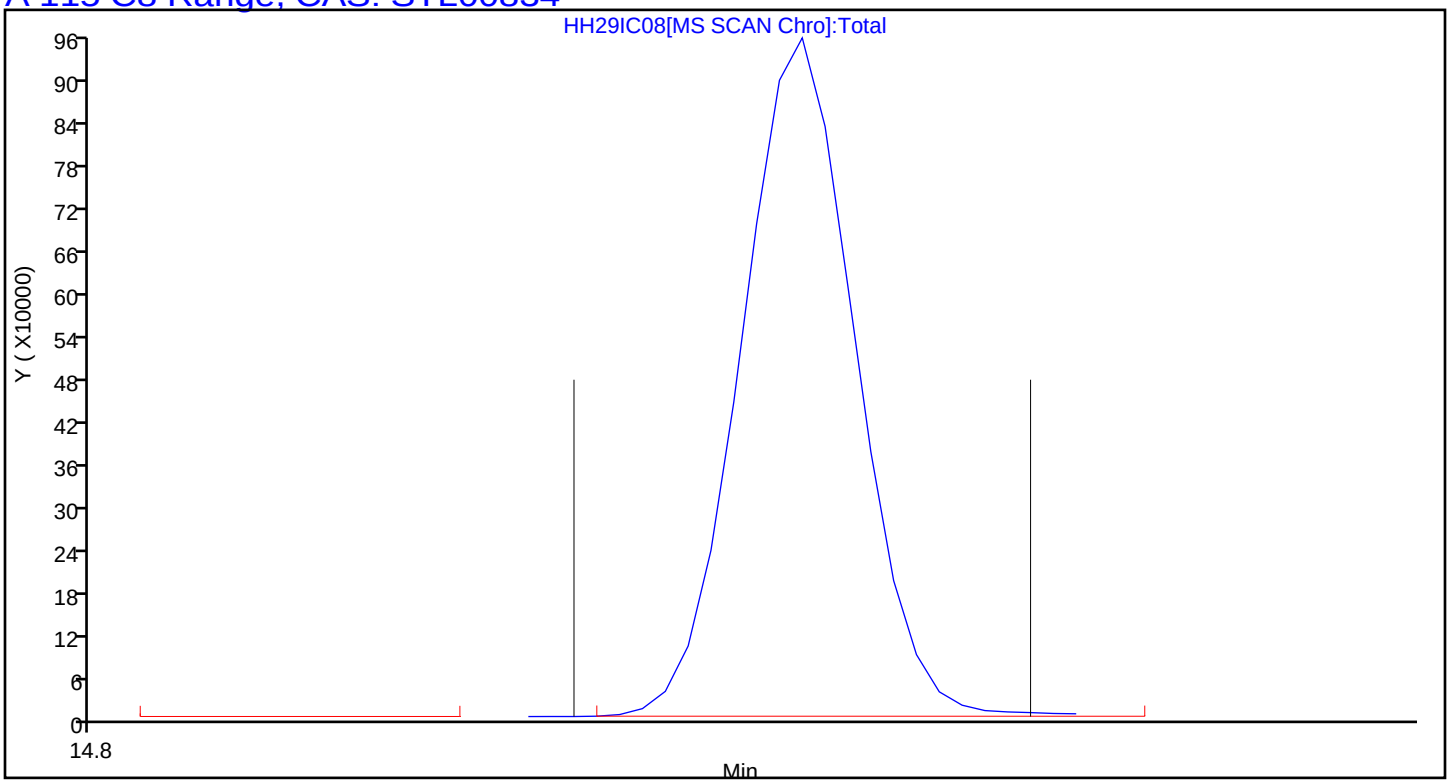


Report Date: 31-Aug-2020 12:24:24 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC08.D				
Injection Date:	29-Aug-2020 16:25:30	Instrument ID:	MH		
Lims ID:	IC L8				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	13	Worklist Smp#:	7
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 115 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC01.D
Lims ID: IC L1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 29-Aug-2020 18:16:30 ALS Bottle#: 9 Worklist Smp#: 9
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016451-009
Misc. Info.: 314720
Operator ID: HMT Instrument ID: MH
Sublist: chrom-MH_TO15*sub7

Method: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\MH_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 31-Aug-2020 12:24:30 Calib Date: 29-Aug-2020 23:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1064

First Level Reviewer: barlozhetskayaa Date: 31-Aug-2020 09:54:05

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.431	9.432	-0.001	98	125148	4.80	4.80	
* 2 1,4-Difluorobenzene	114	11.591	11.594	-0.003	95	532294	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	16.258	16.260	-0.002	88	389380	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.876	17.877	-0.001	91	182238	4.64	4.03	
6 Chlorodifluoromethane	51	3.926	3.920	0.006	87	1619	0.0200	0.0232	
7 Propene	41	3.942	3.935	0.007	89	1361	0.0200	0.0456	
8 Dichlorodifluoromethane	85	3.988	3.989	-0.001	97	2066	0.0200	0.0218	
9 Chloromethane	52	4.180	4.191	-0.011	64	639	0.0200	0.0514	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	4.200	4.197	0.003	90	1929	0.0200	0.0255	
11 Acetaldehyde	44	4.366	4.365	0.001	95	8034	0.1000	0.4357	
12 Vinyl chloride	62	4.381	4.383	-0.002	96	932	0.0200	0.0224	
14 Butadiene	54	4.474	4.479	-0.005	76	1074	0.0200	0.0379	
15 Bromomethane	94	4.841	4.842	-0.001	95	1532	0.0200	0.0381	
16 Chloroethane	64	4.996	4.997	-0.001	63	500	0.0200	0.0285	
17 Ethanol	31	5.115	5.099	0.016	97	3028	0.1000	0.1503	
18 Vinyl bromide	106	5.337	5.334	0.003	95	712	0.0200	0.0213	
19 2-Methylbutane	43	5.379	5.382	-0.003	86	1607	0.0200	0.0367	
20 Trichlorofluoromethane	101	5.632	5.626	0.006	96	1938	0.0200	0.0210	
21 Acrolein	56	5.653	5.646	0.007	45	258	0.0200	0.0385	
23 Acetone	58	5.802	5.775	0.027	96	3530	0.0600	0.1814	
25 Isopropyl alcohol	45	5.916	5.868	0.048	96	3160	0.0600	0.0657	
26 Ethyl ether	31	6.097	6.065	0.032	83	1045	0.0200	0.0260	
27 1,1-Dichloroethene	96	6.402	6.393	0.009	91	651	0.0200	0.0215	
29 2-Methyl-2-propanol	59	6.624	6.535	0.089	32	1039	0.0200	0.0209	
28 Acrylonitrile	53	6.521	6.508	0.013	76	684	0.0200	0.0256	
30 112TCTFE	101	6.578	6.575	0.003	91	1631	0.0200	0.0209	
31 Methylene Chloride	84	6.764	6.766	-0.002	95	1124	0.0200	0.0366	
32 3-Chloro-1-propene	39	6.784	6.781	0.003	63	1034	0.0200	0.0329	
33 Carbon disulfide	76	6.950	6.946	0.004	92	2085	0.0200	0.0211	
34 trans-1,2-Dichloroethene	96	7.622	7.620	0.002	93	602	0.0200	0.0190	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
35 2-Methylpentane	43	7.617	7.626	-0.010	89	1533	0.0200	0.0203	
36 Methyl tert-butyl ether	73	7.859	7.785	0.074	92	1127	0.0200	0.0168	
37 1,1-Dichloroethane	63	8.066	8.066	0.000	51	1432	0.0200	0.0228	
38 Vinyl acetate	43	8.170	8.165	0.005	98	1516	0.0200	0.0188	
39 2-Butanone (MEK)	72	8.717	8.660	0.057	98	433	0.0200	0.0283	
40 Hexane	56	8.661	8.650	0.011	87	524	0.0200	0.0200	
42 cis-1,2-Dichloroethene	96	9.089	9.086	0.003	91	749	0.0200	0.0233	
43 Ethyl acetate	43	9.312	9.277	0.035	95	1939	0.0200	0.0241	
44 Chloroform	83	9.441	9.438	0.003	32	1718	0.0200	0.0226	
46 Tetrahydrofuran	42	9.989	9.897	0.092	73	992	0.0200	0.0263	
47 1,1,1-Trichloroethane	97	10.500	10.492	0.008	93	1436	0.0200	0.0208	
48 1,2-Dichloroethane	62	10.604	10.600	0.004	83	1102	0.0200	0.0228	
49 n-Butanol	31	11.090	11.038	0.052	52	717	0.0200	0.0476	
51 Benzene	78	11.074	11.076	-0.002	90	2307	0.0200	0.0236	
52 Carbon tetrachloride	117	11.095	11.095	0.000	87	1133	0.0200	0.0187	
53 2,3-Dimethylpentane	71	11.167	11.172	-0.005	86	301	0.0200	0.0163	
54 Thiophene	84	11.338	11.344	-0.006	91	976	0.0200	0.0190	
55 Isooctane	57	11.793	11.796	-0.003	92	2699	0.0200	0.0178	
56 n-Heptane	71	12.165	12.159	0.006	84	425	0.0200	0.0153	
57 1,2-Dichloropropane	63	12.273	12.269	0.004	76	946	0.0200	0.0226	
58 Trichloroethene	130	12.299	12.298	0.001	89	961	0.0200	0.0219	
59 Dibromomethane	93	12.387	12.390	-0.003	94	1351	0.0200	0.0290	
60 Dichlorobromomethane	83	12.526	12.526	0.000	92	1396	0.0200	0.0202	
61 1,4-Dioxane	88	12.651	12.571	0.079	1	240	0.0200	0.0172	
62 Methyl methacrylate	41	12.604	12.600	0.004	79	1367	0.0200	0.0301	
63 Methylcyclohexane	83	13.054	13.049	0.005	90	826	0.0200	0.0662	
64 4-Methyl-2-pentanone (MIBK)	43	13.483	13.452	0.031	95	2579	0.0200	0.0296	
65 cis-1,3-Dichloropropene	75	13.508	13.503	0.005	83	931	0.0200	0.0196	
66 trans-1,3-Dichloropropene	75	14.186	14.185	0.001	89	717	0.0200	0.0201	
67 Toluene	91	14.310	14.310	0.000	92	2175	0.0200	0.0217	
68 1,1,2-Trichloroethane	83	14.387	14.386	0.001	92	769	0.0200	0.0213	
69 2-Hexanone	58	14.780	14.759	0.021	86	615	0.0200	0.0193	
70 n-Octane	85	14.966	14.962	0.004	89	426	0.0200	0.0152	
71 Chlorodibromomethane	129	15.090	15.086	0.004	95	1062	0.0200	0.0178	
72 Ethylene Dibromide	107	15.379	15.378	0.001	91	1224	0.0200	0.0227	
73 Tetrachloroethene	129	15.436	15.439	-0.003	92	927	0.0200	0.0220	
75 2,3-Dimethylheptane	43	16.294	16.295	-0.001	89	3234	0.0200	0.0250	
74 Chlorobenzene	112	16.310	16.309	0.001	91	1989	0.0200	0.0245	
76 Ethylbenzene	91	16.584	16.585	-0.001	96	2561	0.0200	0.0211	
77 m-Xylene & p-Xylene	91	16.749	16.745	0.004	96	3883	0.0400	0.0405	
78 n-Nonane	57	17.137	17.134	0.003	89	1057	0.0200	0.0153	
79 Bromoform	173	17.209	17.208	0.001	82	679	0.0200	0.0222	
80 Styrene	104	17.199	17.209	-0.010	90	878	0.0200	0.0151	
81 o-Xylene	91	17.266	17.270	-0.004	94	1635	0.0200	0.0163	
82 1,1,2,2-Tetrachloroethane	83	17.591	17.591	0.000	94	2106	0.0200	0.0237	
83 1,2,3-Trichloropropane	110	17.741	17.747	-0.006	93	402	0.0200	0.0200	
84 Isopropylbenzene	105	17.840	17.842	-0.002	89	2235	0.0200	0.0176	
85 N-Propylbenzene	120	18.356	18.356	0.000	97	406	0.0200	0.0119	
86 2-Chlorotoluene	126	18.408	18.408	0.000	95	577	0.0200	0.0177	
87 4-Ethyltoluene	105	18.496	18.496	0.000	96	1869	0.0200	0.0146	
88 1,3,5-Trimethylbenzene	120	18.568	18.567	0.001	93	802	0.0200	0.0606	
89 Alpha Methyl Styrene	118	18.796	18.791	0.005	88	697	0.0200	0.0158	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
90 n-Decane	57	18.822	18.822	0.000	91	1046	0.0200	0.0104	
91 tert-Butylbenzene	119	18.977	18.979	-0.002	83	1774	0.0200	0.0137	
92 1,2,4-Trimethylbenzene	105	18.987	18.991	-0.004	91	1634	0.0200	0.0141	
93 sec-Butylbenzene	105	19.240	19.239	0.001	97	2269	0.0200	0.0132	
94 1,3-Dichlorobenzene	146	19.266	19.263	0.003	94	1257	0.0200	0.0208	
95 Benzyl chloride	91	19.333	19.333	0.000	94	997	0.0200	0.1238	
96 1,4-Dichlorobenzene	146	19.349	19.345	0.004	84	970	0.0200	0.0218	
97 4-Isopropyltoluene	119	19.390	19.393	-0.003	92	1671	0.0200	0.0121	
98 1,2,3-Trimethylbenzene	105	19.452	19.452	0.000	95	1615	0.0200	0.0145	
99 Butylcyclohexane	83	19.493	19.494	-0.001	78	1194	0.0200	0.0124	
101 2,3-Dihydroindene	117	19.695	19.695	0.000	87	1644	0.0200	0.0178	
100 1,2-Dichlorobenzene	146	19.695	19.699	-0.004	89	1545	0.0200	0.0232	
103 n-Butylbenzene	91	19.814	19.814	0.000	93	1988	0.0200	0.0130	
102 Indene	116	19.824	19.824	0.000	71	1172	0.0200	0.0148	
104 Undecane	57	20.098	20.098	0.000	85	1105	0.0200	0.009591	
105 1,2-Dibromo-3-Chloropropane	157	20.289	20.288	0.001	87	631	0.0200	0.0185	
106 1,2,4,5-Tetramethylbenzene	119	20.563	20.563	0.000	94	1513	0.0200	0.0728	
107 Dodecane	57	21.178	21.175	0.003	74	713	0.0200	0.008783	
108 1,2,4-Trichlorobenzene	180	21.411	21.418	-0.007	87	562	0.0200	0.0976	
109 Naphthalene	128	21.561	21.559	0.002	97	1528	0.0200	0.0167	
110 Hexachlorobutadiene	225	21.726	21.727	-0.001	88	1697	0.0200	0.0266	
111 1,2,3-Trichlorobenzene	180	21.793	21.793	0.000	92	950	0.0200	0.0254	
112 2-Methylnaphthalene	142	22.336	22.340	-0.004	79	193	0.0200	0.0133	
113 1-Methylnaphthalene	142	22.465	22.468	-0.003	77	295	0.0200	0.0176	
A 115 C8 Range	1	14.966	(14.940-14.992)		0	7815	0.0200	0.0220	
S 116 Xylenes, Total	100				0		0.0600	0.0567	
S 117 1,2-Dichloroethene, Total	1				0		0.0400	0.0423	

Reagents:

40L1-3DQP_00031	Amount Added: 50.00	Units: mL	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

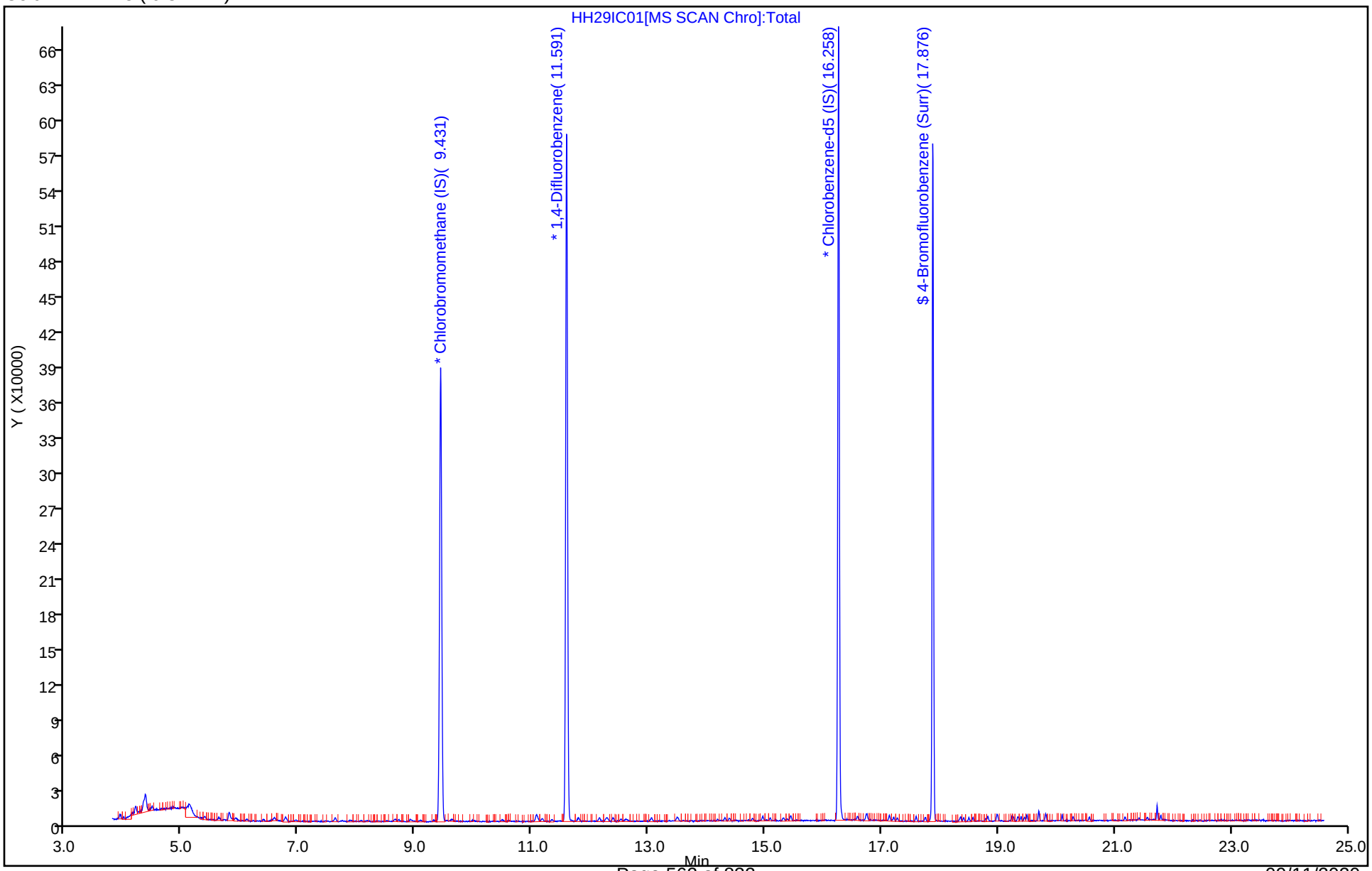
Report Date: 31-Aug-2020 12:24:31 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC01.D

Injection Date:	29-Aug-2020 18:16:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	IC L1			Worklist Smp#:	9
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

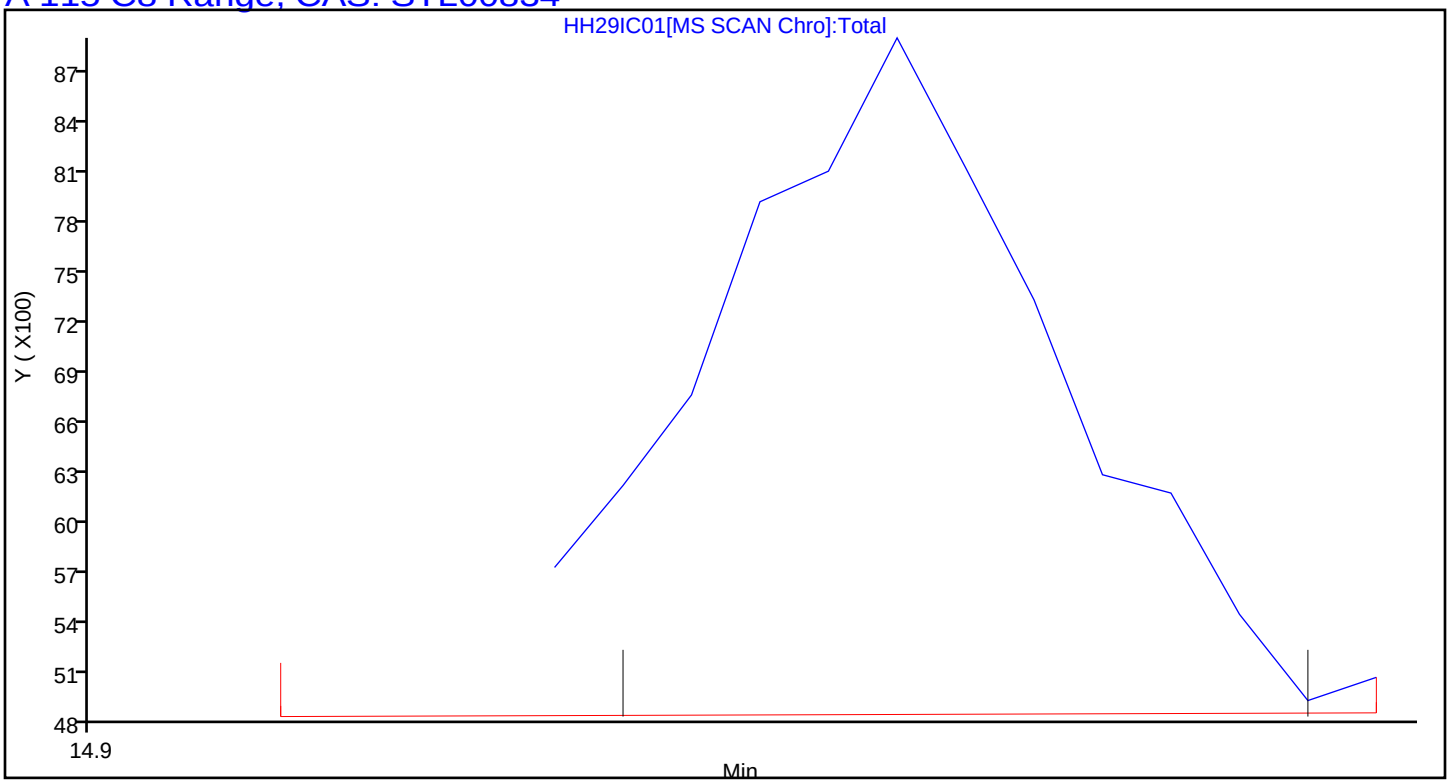


Report Date: 31-Aug-2020 12:24:31 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC01.D				
Injection Date:	29-Aug-2020 18:16:30	Instrument ID:	MH		
Lims ID:	IC L1				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	9	Worklist Smp#:	9
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 115 C8 Range, CAS: STL00834



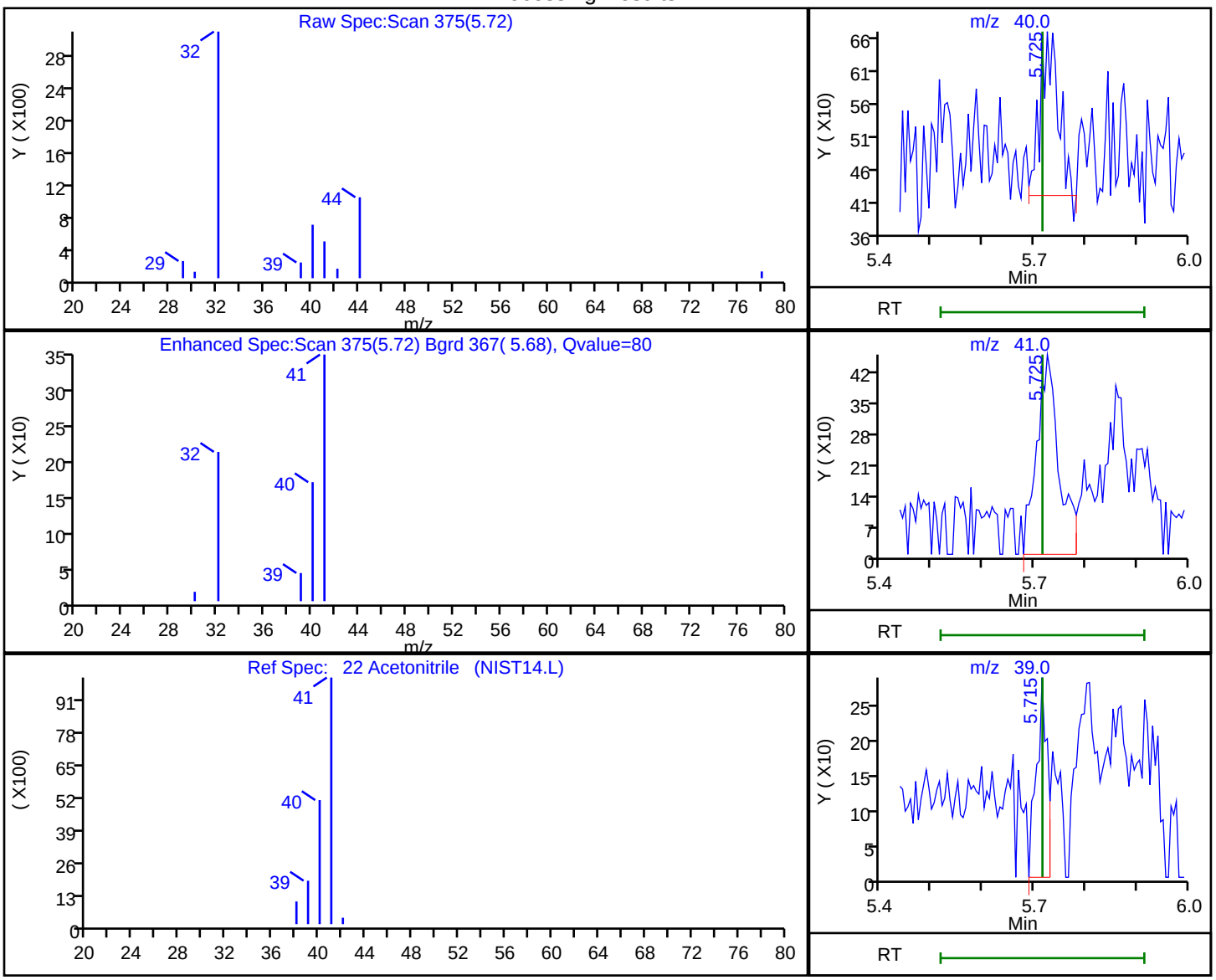
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC01.D				
Injection Date:	29-Aug-2020 18:16:30	Instrument ID:	MH		
Lims ID:	IC L1				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	9	Worklist Smp#:	9
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

22 Acetonitrile, CAS: 75-05-8

Processing Results



RT	Mass	Response	Amount
5.72	40.00	598	0.033944
5.72	41.00	1372	
5.71	39.00	410	

Reviewer: barlozhetskayaa, 31-Aug-2020 10:46:58

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC02.D
Lims ID: IC L2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 29-Aug-2020 19:13:30 ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016451-010
Misc. Info.: 314720
Operator ID: HMT Instrument ID: MH
Sublist: chrom-MH_TO15*sub7

Method: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\MH_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 31-Aug-2020 12:24:37 Calib Date: 29-Aug-2020 23:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1064

First Level Reviewer: tajh Date: 30-Aug-2020 08:11:36

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.430	9.432	-0.002	98	117016	4.80	4.80	
* 2 1,4-Difluorobenzene	114	11.591	11.594	-0.003	95	498897	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	16.258	16.260	-0.002	88	360304	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.876	17.877	-0.001	92	173759	4.64	4.15	
6 Chlorodifluoromethane	51	3.921	3.920	0.001	95	3392	0.0400	0.0519	
7 Propene	41	3.942	3.935	0.007	92	1755	0.0400	0.0629	
8 Dichlorodifluoromethane	85	3.988	3.989	-0.001	98	4202	0.0400	0.0475	
9 Chloromethane	52	4.190	4.191	-0.001	61	884	0.0400	0.0761	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	4.200	4.197	0.003	90	3554	0.0400	0.0503	
11 Acetaldehyde	44	4.371	4.365	0.006	98	13990	0.2000	0.8115	
12 Vinyl chloride	62	4.381	4.383	-0.002	97	1823	0.0400	0.0469	
14 Butadiene	54	4.479	4.479	0.000	74	1425	0.0400	0.0538	
13 Butane	43	4.479	4.479	0.000	85	2687	0.0400	0.0505	
15 Bromomethane	94	4.841	4.842	-0.001	94	2275	0.0400	0.0606	
16 Chloroethane	64	4.996	4.997	-0.001	63	915	0.0400	0.0557	
17 Ethanol	31	5.110	5.099	0.011	98	5788	0.2000	0.3073	
18 Vinyl bromide	106	5.342	5.334	0.008	96	1302	0.0400	0.0416	
19 2-Methylbutane	43	5.384	5.382	0.002	92	1792	0.0400	0.0437	
20 Trichlorofluoromethane	101	5.626	5.626	0.000	99	3885	0.0400	0.0451	
21 Acrolein	56	5.658	5.646	0.012	27	401	0.0400	0.0554	
23 Acetone	58	5.807	5.775	0.032	98	5745	0.1200	0.3157	
25 Isopropyl alcohol	45	5.911	5.868	0.043	96	5166	0.1200	0.1149	
26 Ethyl ether	31	6.102	6.065	0.037	90	1617	0.0400	0.0431	
27 1,1-Dichloroethene	96	6.386	6.393	-0.007	97	1211	0.0400	0.0427	
28 Acrylonitrile	53	6.510	6.508	0.002	73	1051	0.0400	0.0421	
30 112TCTFE	101	6.577	6.575	0.002	94	3184	0.0400	0.0436	
29 2-Methyl-2-propanol	59	6.603	6.535	0.068	87	1814	0.0400	0.0391	
31 Methylene Chloride	84	6.769	6.766	0.003	96	1808	0.0400	0.0630	
32 3-Chloro-1-propene	39	6.769	6.781	-0.012	52	1514	0.0400	0.0515	
33 Carbon disulfide	76	6.950	6.946	0.004	95	4035	0.0400	0.0438	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
35 2-Methylpentane	43	7.627	7.626	0.001	90	2532	0.0400	0.0358	
34 trans-1,2-Dichloroethene	96	7.621	7.620	0.001	93	1203	0.0400	0.0406	
36 Methyl tert-butyl ether	73	7.859	7.785	0.074	87	1991	0.0400	0.0318	
37 1,1-Dichloroethane	63	8.066	8.066	0.000	98	2684	0.0400	0.0456	
38 Vinyl acetate	43	8.174	8.165	0.009	96	2476	0.0400	0.0328	
40 Hexane	56	8.655	8.650	0.005	73	953	0.0400	0.0389	
39 2-Butanone (MEK)	72	8.707	8.660	0.047	98	845	0.0400	0.0590	
41 Isopropyl ether	45	8.903	8.836	0.067	88	3331	0.0400	0.0319	
42 cis-1,2-Dichloroethene	96	9.084	9.086	-0.002	93	1279	0.0400	0.0426	
43 Ethyl acetate	43	9.312	9.277	0.035	96	3162	0.0400	0.0421	
44 Chloroform	83	9.436	9.438	-0.002	28	3145	0.0400	0.0443	
45 Tert-butyl ethyl ether	59	9.601	9.539	0.062	90	2441	0.0400	0.0305	
46 Tetrahydrofuran	42	9.958	9.897	0.061	86	1332	0.0400	0.0377	
47 1,1,1-Trichloroethane	97	10.490	10.492	-0.002	95	2704	0.0400	0.0420	
48 1,2-Dichloroethane	62	10.598	10.600	-0.002	93	2085	0.0400	0.0460	
50 Cyclohexane	69	11.079	11.072	0.007	63	352	0.0400	0.0281	
51 Benzene	78	11.079	11.076	0.003	96	4309	0.0400	0.0470	
49 n-Butanol	31	11.079	11.038	0.041	47	806	0.0400	0.0570	
52 Carbon tetrachloride	117	11.089	11.095	-0.006	81	2216	0.0400	0.0391	
53 2,3-Dimethylpentane	71	11.172	11.172	0.000	88	530	0.0400	0.0306	
54 Thiophene	84	11.343	11.344	-0.001	94	1672	0.0400	0.0347	
55 Isooctane	57	11.792	11.796	-0.004	92	5399	0.0400	0.0379	
56 n-Heptane	71	12.154	12.159	-0.005	85	802	0.0400	0.0307	
57 1,2-Dichloropropane	63	12.268	12.269	-0.001	77	1630	0.0400	0.0416	
58 Trichloroethene	130	12.299	12.298	0.001	93	1717	0.0400	0.0417	
59 Dibromomethane	93	12.392	12.390	0.002	96	2255	0.0400	0.0517	
60 Dichlorobromomethane	83	12.531	12.526	0.005	94	2492	0.0400	0.0384	
62 Methyl methacrylate	41	12.614	12.600	0.014	87	1868	0.0400	0.0439	
61 1,4-Dioxane	88	12.630	12.571	0.059	45	380	0.0400	0.0291	
63 Methylcyclohexane	83	13.053	13.049	0.004	83	1397	0.0400	0.0780	
64 4-Methyl-2-pentanone (MIBK)	43	13.482	13.452	0.030	97	3636	0.0400	0.0445	
65 cis-1,3-Dichloropropene	75	13.508	13.503	0.005	78	1660	0.0400	0.0373	
66 trans-1,3-Dichloropropene	75	14.180	14.185	-0.005	93	1225	0.0400	0.0372	
67 Toluene	91	14.309	14.310	-0.001	93	3623	0.0400	0.0390	
68 1,1,2-Trichloroethane	83	14.387	14.386	0.001	94	1566	0.0400	0.0469	
69 2-Hexanone	58	14.775	14.759	0.015	88	998	0.0400	0.0338	
70 n-Octane	85	14.966	14.962	0.004	89	688	0.0400	0.0266	
71 Chlorodibromomethane	129	15.085	15.086	-0.001	95	1969	0.0400	0.0357	
72 Ethylene Dibromide	107	15.374	15.378	-0.004	97	2091	0.0400	0.0419	
73 Tetrachloroethene	129	15.436	15.439	-0.003	89	1580	0.0400	0.0406	
75 2,3-Dimethylheptane	43	16.294	16.295	-0.001	89	5454	0.0400	0.0456	
74 Chlorobenzene	112	16.310	16.309	0.001	96	3431	0.0400	0.0456	
76 Ethylbenzene	91	16.583	16.585	-0.002	98	4409	0.0400	0.0392	
77 m-Xylene & p-Xylene	91	16.744	16.745	-0.001	96	6184	0.0800	0.0696	
78 n-Nonane	57	17.136	17.134	0.002	87	1867	0.0400	0.0292	
80 Styrene	104	17.214	17.209	0.005	92	1594	0.0400	0.0295	
79 Bromoform	173	17.204	17.208	-0.004	78	1156	0.0400	0.0407	
81 o-Xylene	91	17.266	17.270	-0.004	97	3555	0.0400	0.0382	
82 1,1,2,2-Tetrachloroethane	83	17.586	17.591	-0.005	97	3883	0.0400	0.0472	
83 1,2,3-Trichloropropane	110	17.741	17.747	-0.006	95	794	0.0400	0.0426	
84 Isopropylbenzene	105	17.845	17.842	0.003	96	4845	0.0400	0.0412	
85 N-Propylbenzene	120	18.356	18.356	0.000	98	1079	0.0400	0.0342	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
86 2-Chlorotoluene	126	18.408	18.408	0.000	96	1163	0.0400	0.0386	
87 4-Ethyltoluene	105	18.496	18.496	0.000	96	3800	0.0400	0.0322	
88 1,3,5-Trimethylbenzene	120	18.563	18.567	-0.004	92	1641	0.0400	0.0765	
89 Alpha Methyl Styrene	118	18.796	18.791	0.005	91	1088	0.0400	0.0266	
90 n-Decane	57	18.821	18.822	-0.001	87	1926	0.0400	0.0206	
91 tert-Butylbenzene	119	18.976	18.979	-0.003	86	3095	0.0400	0.0259	
92 1,2,4-Trimethylbenzene	105	18.992	18.991	0.001	95	2955	0.0400	0.0275	
93 sec-Butylbenzene	105	19.235	19.239	-0.004	96	4176	0.0400	0.0263	
94 1,3-Dichlorobenzene	146	19.266	19.263	0.003	96	1822	0.0400	0.0326	
95 Benzyl chloride	91	19.333	19.333	0.000	95	1365	0.0400	0.1306	
96 1,4-Dichlorobenzene	146	19.343	19.345	-0.002	89	1350	0.0400	0.0328	
97 4-Isopropyltoluene	119	19.395	19.393	0.002	93	2975	0.0400	0.0232	
98 1,2,3-Trimethylbenzene	105	19.452	19.452	0.000	98	3050	0.0400	0.0295	
99 Butylcyclohexane	83	19.493	19.494	-0.001	79	2315	0.0400	0.0261	
101 2,3-Dihydroindene	117	19.690	19.695	-0.005	85	2766	0.0400	0.0323	
100 1,2-Dichlorobenzene	146	19.700	19.699	0.001	87	2372	0.0400	0.0385	
103 n-Butylbenzene	91	19.814	19.814	0.000	95	3363	0.0400	0.0237	
102 Indene	116	19.824	19.824	0.000	63	1871	0.0400	0.0255	
104 Undecane	57	20.098	20.098	0.000	84	1853	0.0400	0.0174	
105 1,2-Dibromo-3-Chloropropane	157	20.284	20.288	-0.004	83	854	0.0400	0.0271	
106 1,2,4,5-Tetramethylbenzene	119	20.563	20.563	0.000	95	2353	0.0400	0.0801	
107 Dodecane	57	21.173	21.175	-0.002	82	1221	0.0400	0.0163	
108 1,2,4-Trichlorobenzene	180	21.421	21.418	0.003	88	542	0.0400	0.0983	
109 Naphthalene	128	21.555	21.559	-0.004	98	1611	0.0400	0.0190	
110 Hexachlorobutadiene	225	21.726	21.727	-0.001	87	2923	0.0400	0.0496	
111 1,2,3-Trichlorobenzene	180	21.788	21.793	-0.005	91	900	0.0400	0.0260	
113 1-Methylnaphthalene	142	22.470	22.468	0.002	18	194	0.0400	0.0125	
A 115 C8 Range	1	14.955	(14.930-14.981)		0	11821	0.0400	0.0356	
S 116 Xylenes, Total	100				0		0.1200	0.1079	
S 117 1,2-Dichloroethene, Total	1				0		0.0800	0.0832	

Reagents:

40L1-3DQP_00031	Amount Added: 100.00	Units: mL	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

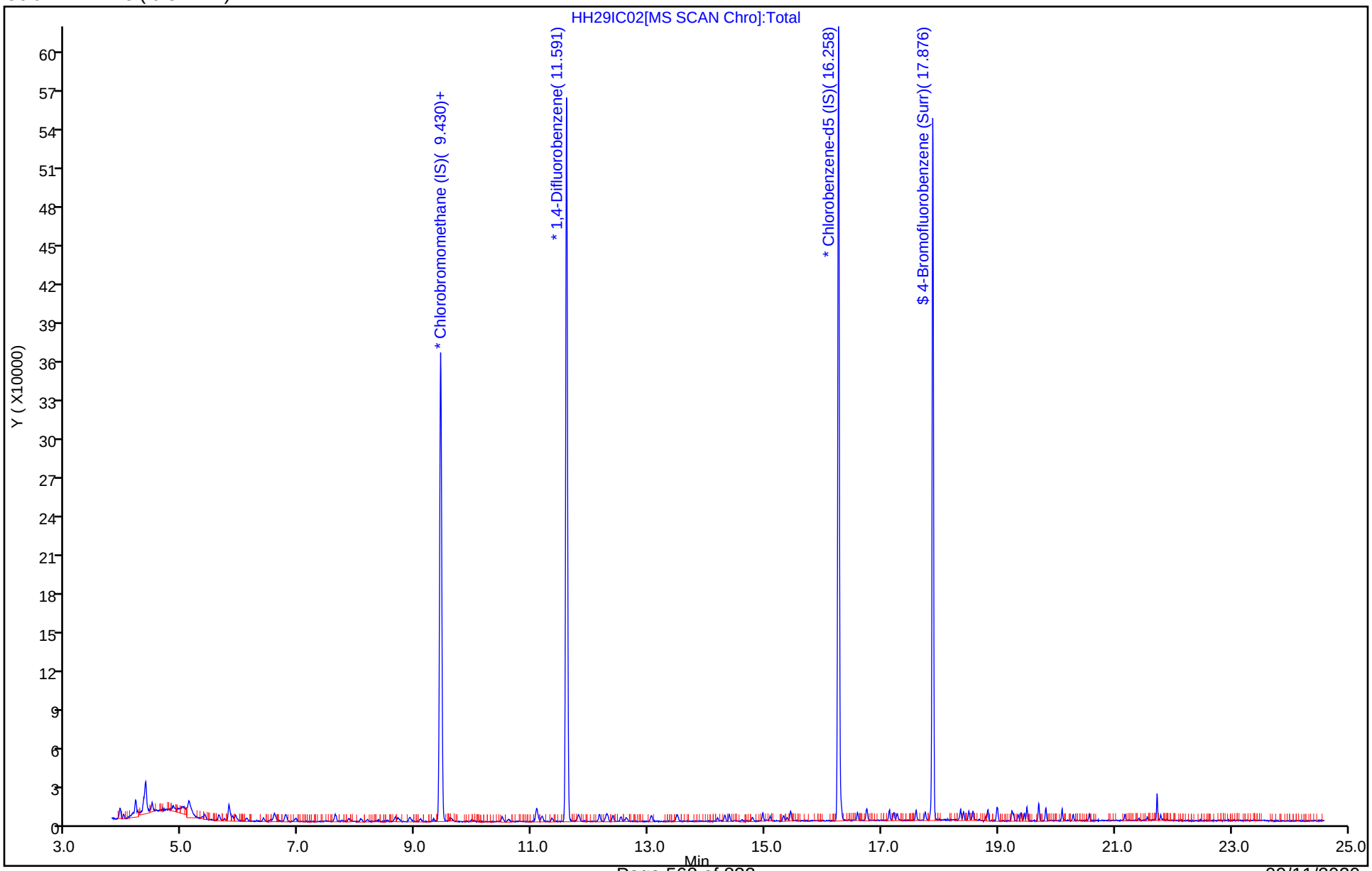
Report Date: 31-Aug-2020 12:24:37 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC02.D

Injection Date:	29-Aug-2020 19:13:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	IC L2			Worklist Smp#:	10
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

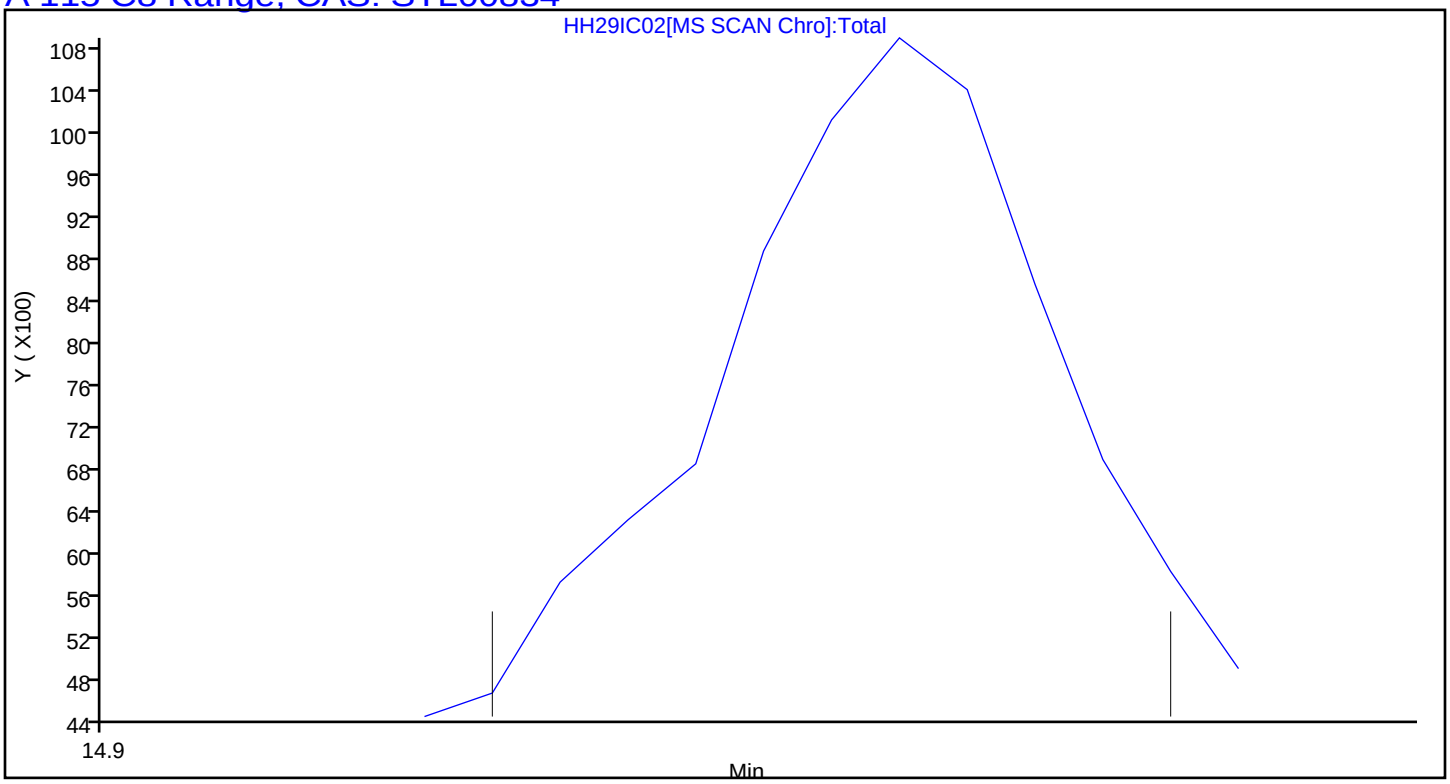
Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC02.D				
Injection Date:	29-Aug-2020 19:13:30	Instrument ID:	MH		
Lims ID:	IC L2				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	9	Worklist Smp#:	10
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 115 C8 Range, CAS: STL00834



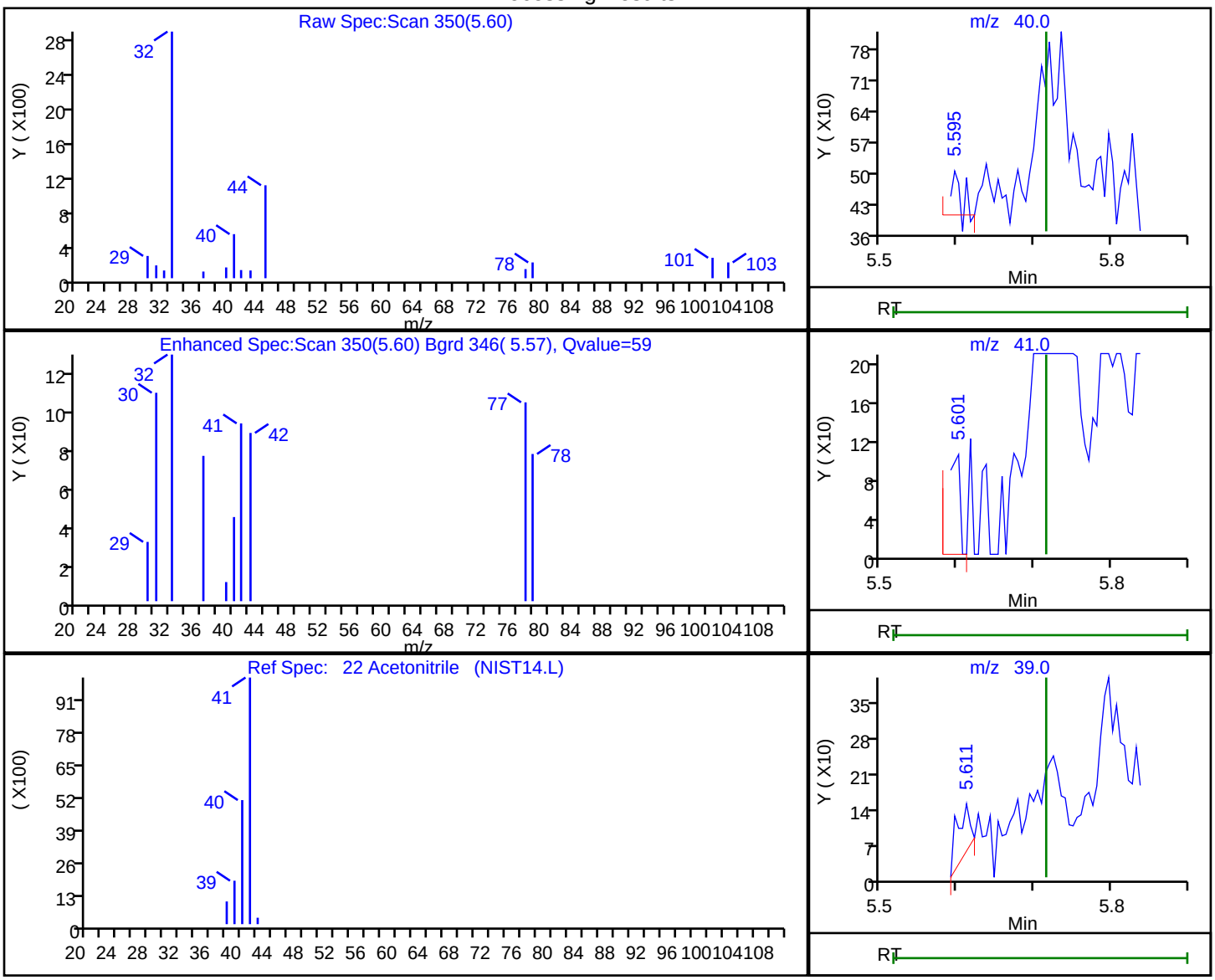
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC02.D				
Injection Date:	29-Aug-2020 19:13:30	Instrument ID:	MH		
Lims ID:	IC L2				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	9	Worklist Smp#:	10
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

22 Acetonitrile, CAS: 75-05-8

Processing Results



RT	Mass	Response	Amount
5.60	40.00	68	0.004128
5.60	41.00	87	
5.61	39.00	116	

Reviewer: barlozhetskayaa, 31-Aug-2020 10:45:28

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC03.D
Lims ID: IC L3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 29-Aug-2020 20:11:30 ALS Bottle#: 9 Worklist Smp#: 11
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016451-011
Misc. Info.: 314720
Operator ID: HMT Instrument ID: MH
Sublist: chrom-MH_TO15*sub7

Method: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\MH_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 31-Aug-2020 12:24:43 Calib Date: 29-Aug-2020 23:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1064

First Level Reviewer: tajh Date: 30-Aug-2020 07:57:10

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.431	9.432	-0.001	98	114671	4.80	4.80	
* 2 1,4-Difluorobenzene	114	11.596	11.594	0.002	95	489127	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	16.258	16.260	-0.002	88	347248	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.876	17.877	-0.001	90	154059	4.64	3.82	
6 Chlorodifluoromethane	51	3.926	3.920	0.006	90	6531	0.0800	0.1021	
7 Propene	41	3.937	3.935	0.002	76	2747	0.0800	0.1005	
8 Dichlorodifluoromethane	85	3.994	3.989	0.005	99	8034	0.0800	0.0927	
9 Chloromethane	52	4.200	4.191	0.009	58	1608	0.0800	0.1412	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	4.200	4.197	0.003	91	6285	0.0800	0.0908	
11 Acetaldehyde	44	4.371	4.365	0.006	98	26182	0.4000	1.55	
12 Vinyl chloride	62	4.392	4.383	0.009	99	3651	0.0800	0.0958	
14 Butadiene	54	4.485	4.479	0.006	71	2713	0.0800	0.1045	
13 Butane	43	4.485	4.479	0.006	82	4904	0.0800	0.0941	
15 Bromomethane	94	4.846	4.842	0.004	96	3883	0.0800	0.1055	
16 Chloroethane	64	5.007	4.997	0.010	89	1757	0.0800	0.1092	
17 Ethanol	31	5.115	5.099	0.016	96	10913	0.4000	0.5912	
18 Vinyl bromide	106	5.332	5.334	-0.002	95	2726	0.0800	0.0889	
19 2-Methylbutane	43	5.384	5.382	0.002	89	3726	0.0800	0.0928	
20 Trichlorofluoromethane	101	5.627	5.626	0.001	99	7868	0.0800	0.0932	
21 Acrolein	56	5.653	5.646	0.007	83	775	0.0800	0.0966	
22 Acetonitrile	40	5.730	5.715	0.015	99	1691	0.0800	0.1048	
23 Acetone	58	5.792	5.775	0.017	98	10681	0.2400	0.5990	
24 Pentane	72	5.875	5.865	0.010	72	224	0.0800	0.0598	
25 Isopropyl alcohol	45	5.906	5.868	0.038	97	10140	0.2400	0.2301	
26 Ethyl ether	31	6.092	6.065	0.027	85	2744	0.0800	0.0746	
27 1,1-Dichloroethene	96	6.397	6.393	0.004	96	2221	0.0800	0.0799	
28 Acrylonitrile	53	6.516	6.508	0.008	92	1848	0.0800	0.0756	
30 112TCTFE	101	6.578	6.575	0.003	93	6501	0.0800	0.0908	
29 2-Methyl-2-propanol	59	6.588	6.535	0.053	81	3760	0.0800	0.0827	
31 Methylene Chloride	84	6.769	6.766	0.003	96	3116	0.0800	0.1108	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.779	6.781	-0.002	96	2665	0.0800	0.0925	
33 Carbon disulfide	76	6.945	6.946	-0.001	100	7719	0.0800	0.0854	
34 trans-1,2-Dichloroethene	96	7.622	7.620	0.002	95	2350	0.0800	0.0809	
35 2-Methylpentane	43	7.632	7.626	0.006	91	4863	0.0800	0.0702	
36 Methyl tert-butyl ether	73	7.834	7.785	0.049	88	4086	0.0800	0.0667	
37 1,1-Dichloroethane	63	8.071	8.066	0.005	98	5044	0.0800	0.0875	
38 Vinyl acetate	43	8.170	8.165	0.005	97	4502	0.0800	0.0608	
40 Hexane	56	8.645	8.650	-0.005	70	1936	0.0800	0.0806	
39 2-Butanone (MEK)	72	8.686	8.660	0.026	97	1540	0.0800	0.1097	
41 Isopropyl ether	45	8.878	8.836	0.042	88	6586	0.0800	0.0644	
42 cis-1,2-Dichloroethene	96	9.079	9.086	-0.007	97	2307	0.0800	0.0785	
43 Ethyl acetate	43	9.301	9.277	0.024	97	5898	0.0800	0.0801	
44 Chloroform	83	9.436	9.438	-0.002	28	6204	0.0800	0.0891	
45 Tert-butyl ethyl ether	59	9.591	9.539	0.052	92	5068	0.0800	0.0646	
46 Tetrahydrofuran	42	9.948	9.897	0.051	91	2541	0.0800	0.0735	
47 1,1,1-Trichloroethane	97	10.495	10.492	0.003	97	5445	0.0800	0.0863	
48 1,2-Dichloroethane	62	10.604	10.600	0.004	96	3781	0.0800	0.0850	
51 Benzene	78	11.079	11.076	0.003	96	7802	0.0800	0.0869	
49 n-Butanol	31	11.090	11.038	0.052	57	1194	0.0800	0.0862	
50 Cyclohexane	69	11.074	11.072	0.002	66	726	0.0800	0.0591	
52 Carbon tetrachloride	117	11.095	11.095	0.000	93	4639	0.0800	0.0834	
53 2,3-Dimethylpentane	71	11.167	11.172	-0.005	84	1195	0.0800	0.0703	
54 Thiophene	84	11.338	11.344	-0.006	96	3691	0.0800	0.0781	
55 Isooctane	57	11.798	11.796	0.002	95	10282	0.0800	0.0736	
56 n-Heptane	71	12.160	12.159	0.001	84	1717	0.0800	0.0671	
57 1,2-Dichloropropane	63	12.273	12.269	0.004	86	3274	0.0800	0.0852	
58 Trichloroethene	130	12.299	12.298	0.001	92	3226	0.0800	0.0799	
59 Dibromomethane	93	12.387	12.390	-0.003	93	3899	0.0800	0.0912	
60 Dichlorobromomethane	83	12.521	12.526	-0.005	97	5206	0.0800	0.0818	
62 Methyl methacrylate	41	12.609	12.600	0.009	90	3402	0.0800	0.0815	
61 1,4-Dioxane	88	12.609	12.571	0.038	46	690	0.0800	0.0539	
63 Methylcyclohexane	83	13.049	13.049	0.000	85	2908	0.0800	0.1076	
64 4-Methyl-2-pentanone (MIBK)	43	13.478	13.452	0.026	97	5731	0.0800	0.0715	
65 cis-1,3-Dichloropropene	75	13.498	13.503	-0.005	97	3001	0.0800	0.0688	
66 trans-1,3-Dichloropropene	75	14.186	14.185	0.001	94	2144	0.0800	0.0675	
67 Toluene	91	14.310	14.310	0.000	92	7081	0.0800	0.0791	
68 1,1,2-Trichloroethane	83	14.387	14.386	0.001	95	2780	0.0800	0.0865	
69 2-Hexanone	58	14.780	14.759	0.021	87	1837	0.0800	0.0645	
70 n-Octane	85	14.961	14.962	-0.001	89	1592	0.0800	0.0638	
71 Chlorodibromomethane	129	15.085	15.086	-0.001	96	3930	0.0800	0.0740	
72 Ethylene Dibromide	107	15.379	15.378	0.001	96	3411	0.0800	0.0709	
73 Tetrachloroethene	129	15.441	15.439	0.002	90	3257	0.0800	0.0869	
75 2,3-Dimethylheptane	43	16.294	16.295	-0.001	88	9495	0.0800	0.0824	
74 Chlorobenzene	112	16.310	16.309	0.001	94	5978	0.0800	0.0825	
76 Ethylbenzene	91	16.584	16.585	-0.001	97	8050	0.0800	0.0743	
77 m-Xylene & p-Xylene	91	16.744	16.745	-0.001	96	11759	0.1600	0.1374	
78 n-Nonane	57	17.132	17.134	-0.002	90	3820	0.0800	0.0620	
79 Bromoform	173	17.209	17.208	0.001	82	2267	0.0800	0.0820	
80 Styrene	104	17.209	17.209	0.000	95	3067	0.0800	0.0590	
81 o-Xylene	91	17.271	17.270	0.001	99	6410	0.0800	0.0715	
82 1,1,2,2-Tetrachloroethane	83	17.592	17.591	0.001	97	6941	0.0800	0.0875	
83 1,2,3-Trichloropropane	110	17.752	17.747	0.005	97	1470	0.0800	0.0819	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	17.845	17.842	0.003	95	6533	0.0800	0.0576	
85 N-Propylbenzene	120	18.356	18.356	0.000	98	1506	0.0800	0.0496	
86 2-Chlorotoluene	126	18.403	18.408	-0.005	98	1701	0.0800	0.0586	
87 4-Ethyltoluene	105	18.496	18.496	0.000	97	5485	0.0800	0.0482	
88 1,3,5-Trimethylbenzene	120	18.568	18.567	0.001	92	2537	0.0800	0.0940	
89 Alpha Methyl Styrene	118	18.791	18.791	0.000	84	1746	0.0800	0.0444	
90 n-Decane	57	18.822	18.822	0.000	89	4222	0.0800	0.0469	
91 tert-Butylbenzene	119	18.982	18.979	0.003	82	5964	0.0800	0.0517	
92 1,2,4-Trimethylbenzene	105	18.992	18.991	0.001	94	5774	0.0800	0.0557	
93 sec-Butylbenzene	105	19.240	19.239	0.001	96	7473	0.0800	0.0489	
94 1,3-Dichlorobenzene	146	19.261	19.263	-0.002	95	3312	0.0800	0.0616	
95 Benzyl chloride	91	19.328	19.333	-0.005	94	2343	0.0800	0.1468	
96 1,4-Dichlorobenzene	146	19.344	19.345	-0.001	90	2193	0.0800	0.0553	
97 4-Isopropyltoluene	119	19.395	19.393	0.002	94	5476	0.0800	0.0443	
98 1,2,3-Trimethylbenzene	105	19.452	19.452	0.000	98	5684	0.0800	0.0571	
99 Butylcyclohexane	83	19.493	19.494	-0.001	82	4566	0.0800	0.0534	
101 2,3-Dihydroindene	117	19.695	19.695	0.000	86	4374	0.0800	0.0530	
100 1,2-Dichlorobenzene	146	19.700	19.699	0.001	90	3986	0.0800	0.0671	
103 n-Butylbenzene	91	19.814	19.814	0.000	98	6346	0.0800	0.0464	
102 Indene	116	19.824	19.824	0.000	86	3301	0.0800	0.0467	
104 Undecane	57	20.098	20.098	0.000	84	3439	0.0800	0.0335	
105 1,2-Dibromo-3-Chloropropane	157	20.284	20.288	-0.004	85	1456	0.0800	0.0480	
106 1,2,4,5-Tetramethylbenzene	119	20.563	20.563	0.000	95	3363	0.0800	0.0889	
107 Dodecane	57	21.173	21.175	-0.002	80	1713	0.0800	0.0237	
108 1,2,4-Trichlorobenzene	180	21.416	21.418	-0.002	88	840	0.0800	0.1092	
109 Naphthalene	128	21.556	21.559	-0.003	97	1981	0.0800	0.0242	
110 Hexachlorobutadiene	225	21.726	21.727	-0.001	89	4941	0.0800	0.0870	
111 1,2,3-Trichlorobenzene	180	21.793	21.793	0.000	92	1210	0.0800	0.0363	
A 115 C8 Range	1	14.961	(14.930-14.992)		0	24409	0.0800	0.0749	
S 116 Xylenes, Total	100				0		0.2400	0.2089	
S 117 1,2-Dichloroethene, Total	1				0		0.1600	0.1594	

Reagents:

40L1-3DQP_00031	Amount Added: 200.00	Units: mL	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

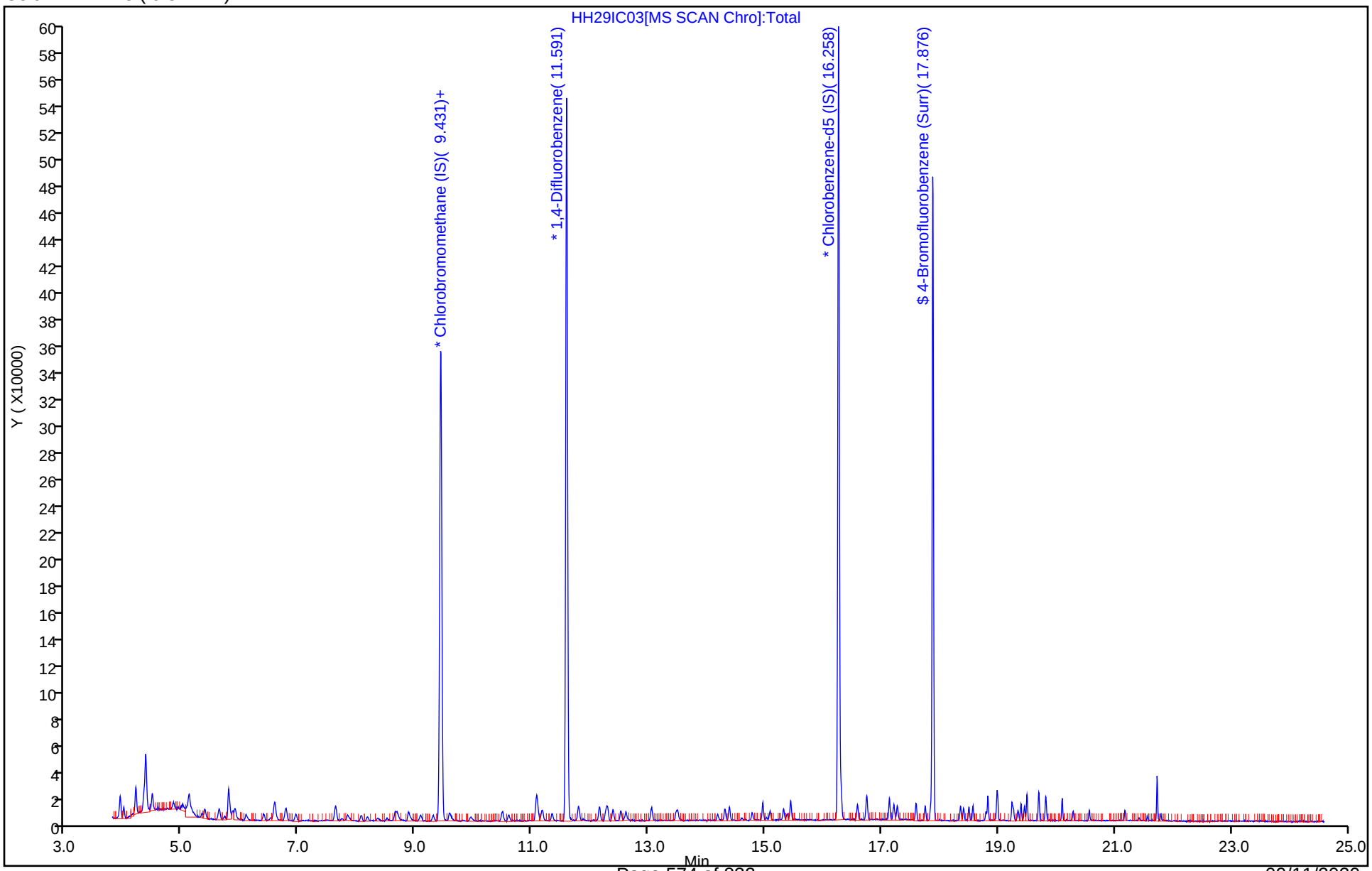
Report Date: 31-Aug-2020 12:24:44 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC03.D

Injection Date:	29-Aug-2020 20:11:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	IC L3			Worklist Smp#:	11
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

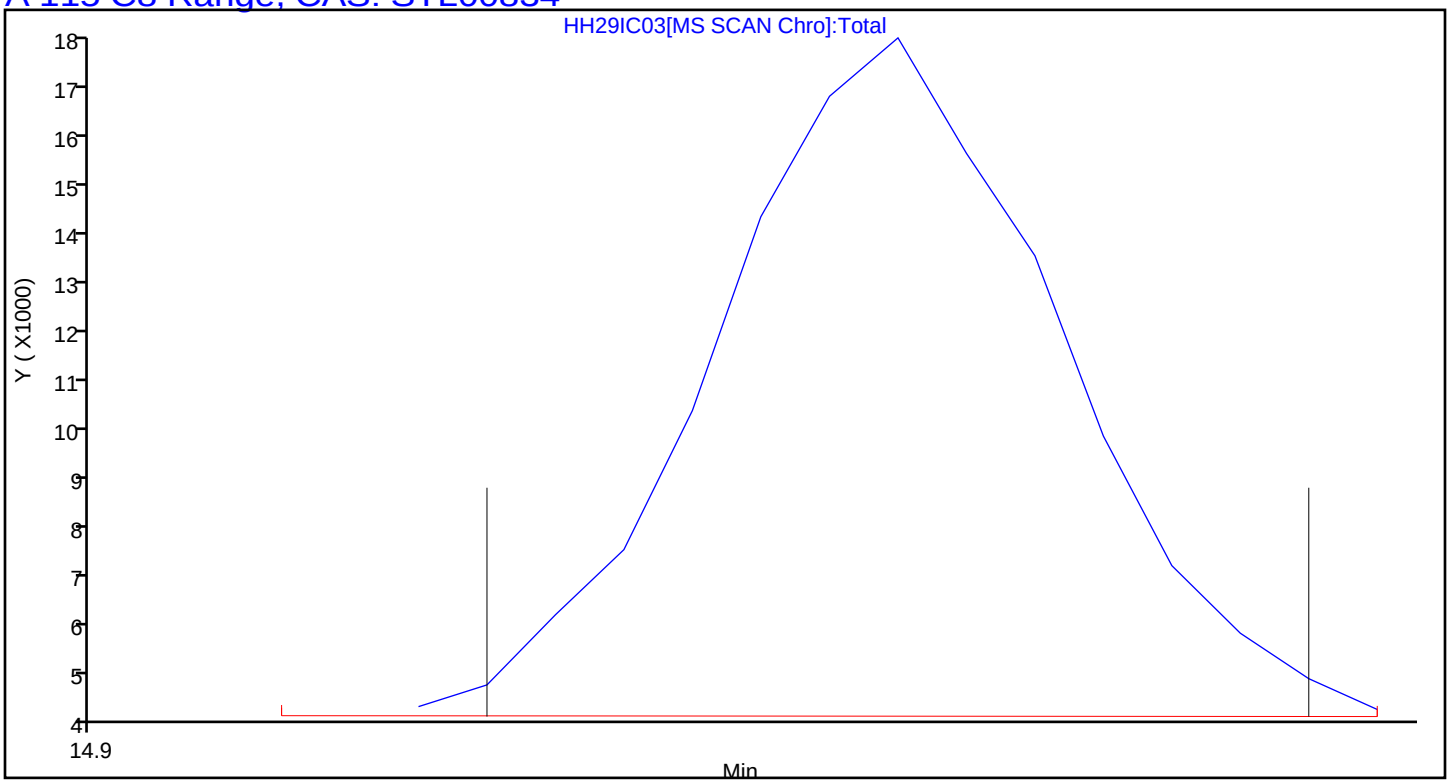


Report Date: 31-Aug-2020 12:24:44 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC03.D				
Injection Date:	29-Aug-2020 20:11:30	Instrument ID:	MH		
Lims ID:	IC L3				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	9	Worklist Smp#:	11
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 115 C8 Range, CAS: STL00834



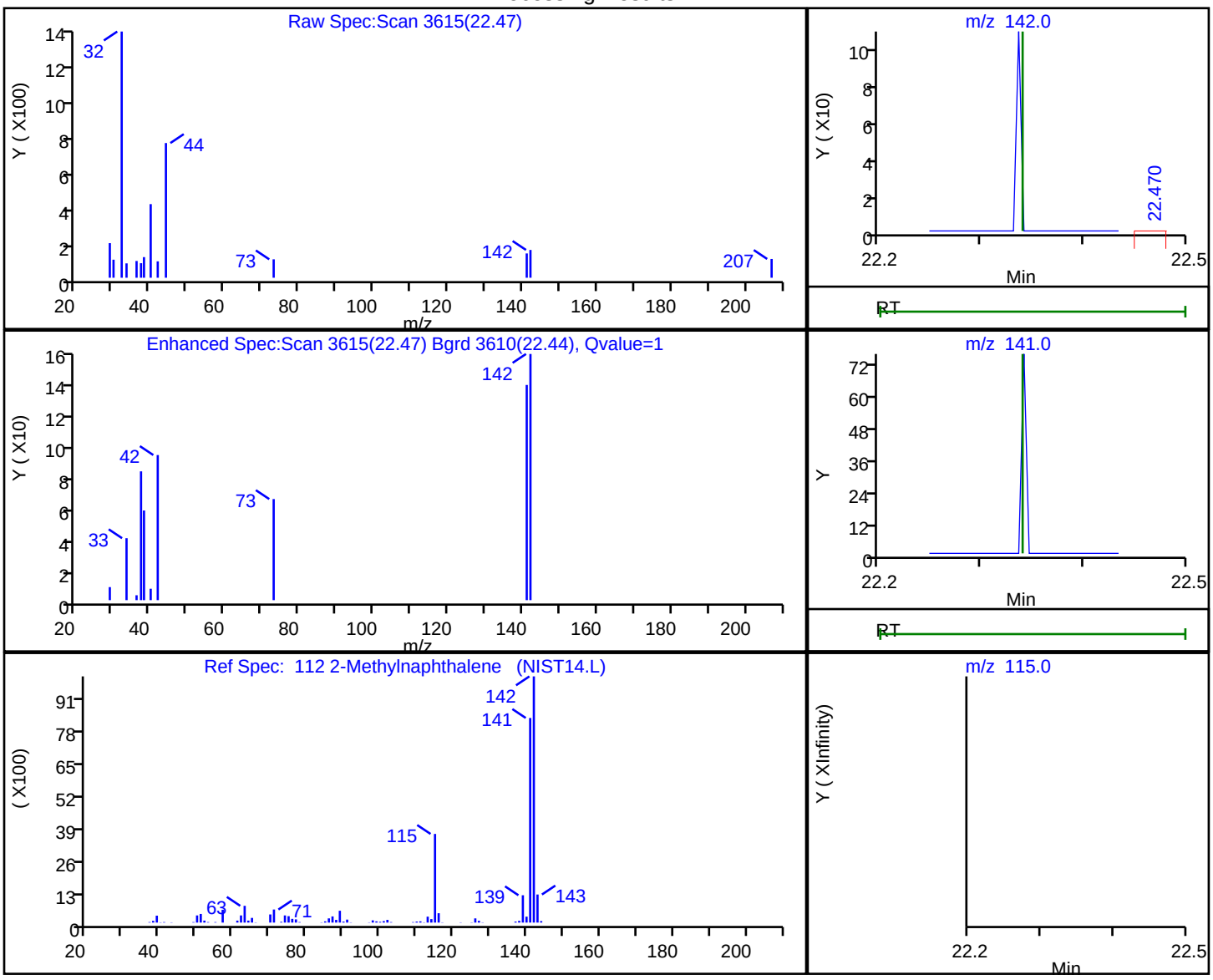
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC03.D				
Injection Date:	29-Aug-2020 20:11:30	Instrument ID:	MH		
Lims ID:	IC L3				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	9	Worklist Smp#:	11
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

112 2-Methylnaphthalene, CAS: 91-57-6

Processing Results



RT	Mass	Response	Amount
22.47	142.00	117	0.009034
22.34	141.00	0	
22.34	115.00	0	

Reviewer: barlozhetskayaa, 31-Aug-2020 10:45:03

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC04.D
Lims ID: IC L4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 29-Aug-2020 21:03:30 ALS Bottle#: 10 Worklist Smp#: 12
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016451-012
Misc. Info.: 314717
Operator ID: HMT Instrument ID: MH
Sublist: chrom-MH_TO15*sub7

Method: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\MH_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 31-Aug-2020 12:24:51 Calib Date: 29-Aug-2020 23:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1064

First Level Reviewer: barlozhetskayaa Date: 31-Aug-2020 09:53:23

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.431	9.432	-0.001	98	120942	4.80	4.80	
* 2 1,4-Difluorobenzene	114	11.591	11.594	-0.003	95	490325	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	16.258	16.260	-0.002	88	354250	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.876	17.877	-0.001	91	184823	4.64	4.49	
6 Chlorodifluoromethane	51	3.916	3.920	-0.004	97	11434	0.1600	0.1694	
7 Propene	41	3.931	3.935	-0.004	97	5401	0.1600	0.1873	
8 Dichlorodifluoromethane	85	3.983	3.989	-0.006	100	16006	0.1600	0.1751	
9 Chloromethane	52	4.190	4.191	-0.001	58	2169	0.1600	0.1806	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	4.190	4.197	-0.007	90	13070	0.1600	0.1790	
11 Acetaldehyde	44	4.360	4.365	-0.005	98	19567	0.8000	1.10	
12 Vinyl chloride	62	4.381	4.383	-0.002	99	6690	0.1600	0.1664	
14 Butadiene	54	4.469	4.479	-0.010	70	4849	0.1600	0.1771	
13 Butane	43	4.474	4.479	-0.005	84	9302	0.1600	0.1693	
15 Bromomethane	94	4.836	4.842	-0.006	97	6388	0.1600	0.1646	
16 Chloroethane	64	4.986	4.997	-0.011	88	2998	0.1600	0.1766	
17 Ethanol	31	5.094	5.099	-0.005	97	15182	0.8000	0.7799	
18 Vinyl bromide	106	5.327	5.334	-0.007	94	5117	0.1600	0.1582	
19 2-Methylbutane	43	5.373	5.382	-0.009	94	6888	0.1600	0.1626	
20 Trichlorofluoromethane	101	5.616	5.626	-0.010	99	14837	0.1600	0.1666	
21 Acrolein	56	5.647	5.646	0.001	89	1635	0.1600	0.1802	
22 Acetonitrile	40	5.720	5.715	0.005	98	2568	0.1600	0.1508	
23 Acetone	58	5.782	5.775	0.007	99	10813	0.4800	0.5749	
24 Pentane	72	5.864	5.865	-0.001	77	592	0.1600	0.1500	
25 Isopropyl alcohol	45	5.870	5.868	0.002	95	21694	0.4800	0.4669	
26 Ethyl ether	31	6.071	6.065	0.006	87	6079	0.1600	0.1567	
27 1,1-Dichloroethene	96	6.386	6.393	-0.007	95	4784	0.1600	0.1632	
28 Acrylonitrile	53	6.510	6.508	0.002	97	4234	0.1600	0.1642	
30 112TCTFE	101	6.572	6.575	-0.003	95	12353	0.1600	0.1635	
29 2-Methyl-2-propanol	59	6.552	6.535	0.017	93	7375	0.1600	0.1539	
31 Methylene Chloride	84	6.753	6.766	-0.013	93	5061	0.1600	0.1707	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.779	6.781	-0.002	96	5213	0.1600	0.1716	
33 Carbon disulfide	76	6.945	6.946	-0.001	99	15209	0.1600	0.1596	
34 trans-1,2-Dichloroethene	96	7.611	7.620	-0.009	95	4841	0.1600	0.1581	
35 2-Methylpentane	43	7.622	7.626	-0.004	91	11288	0.1600	0.1546	
36 Methyl tert-butyl ether	73	7.797	7.785	0.012	92	9461	0.1600	0.1464	
37 1,1-Dichloroethane	63	8.061	8.066	-0.005	99	10265	0.1600	0.1688	
38 Vinyl acetate	43	8.164	8.165	-0.001	99	10568	0.1600	0.1354	
40 Hexane	56	8.645	8.650	-0.005	78	3966	0.1600	0.1565	
39 2-Butanone (MEK)	72	8.666	8.660	0.006	97	2370	0.1600	0.1600	
41 Isopropyl ether	45	8.857	8.836	0.021	92	15829	0.1600	0.1468	
42 cis-1,2-Dichloroethene	96	9.084	9.086	-0.002	97	4788	0.1600	0.1544	
43 Ethyl acetate	43	9.281	9.277	0.004	98	12328	0.1600	0.1587	
44 Chloroform	83	9.431	9.438	-0.007	31	11983	0.1600	0.1632	
45 Tert-butyl ethyl ether	59	9.565	9.539	0.026	96	11715	0.1600	0.1417	
46 Tetrahydrofuran	42	9.916	9.897	0.019	89	5581	0.1600	0.1530	
47 1,1,1-Trichloroethane	97	10.490	10.492	-0.002	96	10587	0.1600	0.1590	
48 1,2-Dichloroethane	62	10.593	10.600	-0.007	96	7312	0.1600	0.1640	
50 Cyclohexane	69	11.064	11.072	-0.008	65	1641	0.1600	0.1332	
51 Benzene	78	11.074	11.076	-0.002	98	14569	0.1600	0.1618	
49 n-Butanol	31	11.059	11.038	0.021	43	1925	0.1600	0.1386	
52 Carbon tetrachloride	117	11.100	11.095	0.005	95	9468	0.1600	0.1699	
53 2,3-Dimethylpentane	71	11.172	11.172	0.000	87	2320	0.1600	0.1361	
54 Thiophene	84	11.343	11.344	-0.001	96	6749	0.1600	0.1425	
55 Isooctane	57	11.793	11.796	-0.003	93	18572	0.1600	0.1327	
56 n-Heptane	71	12.159	12.159	0.000	86	2894	0.1600	0.1128	
57 1,2-Dichloropropane	63	12.273	12.269	0.004	89	6318	0.1600	0.1640	
58 Trichloroethene	130	12.299	12.298	0.001	93	5965	0.1600	0.1474	
59 Dibromomethane	93	12.387	12.390	-0.003	92	7443	0.1600	0.1737	
60 Dichlorobromomethane	83	12.526	12.526	0.000	97	9634	0.1600	0.1510	
62 Methyl methacrylate	41	12.604	12.600	0.004	90	5168	0.1600	0.1236	
61 1,4-Dioxane	88	12.583	12.571	0.012	75	1551	0.1600	0.1210	
63 Methylcyclohexane	83	13.043	13.049	-0.006	84	5275	0.1600	0.1530	
64 4-Methyl-2-pentanone (MIBK)	43	13.462	13.452	0.010	95	11162	0.1600	0.1389	
65 cis-1,3-Dichloropropene	75	13.503	13.503	0.000	97	6091	0.1600	0.1393	
66 trans-1,3-Dichloropropene	75	14.180	14.185	-0.005	96	4654	0.1600	0.1436	
67 Toluene	91	14.310	14.310	0.000	91	12584	0.1600	0.1379	
68 1,1,2-Trichloroethane	83	14.382	14.386	-0.004	96	5294	0.1600	0.1614	
69 2-Hexanone	58	14.764	14.759	0.005	88	3278	0.1600	0.1128	
70 n-Octane	85	14.961	14.962	-0.001	91	2735	0.1600	0.1074	
71 Chlorodibromomethane	129	15.085	15.086	-0.001	96	7783	0.1600	0.1437	
72 Ethylene Dibromide	107	15.374	15.378	-0.004	97	7884	0.1600	0.1606	
73 Tetrachloroethene	129	15.436	15.439	-0.003	91	5841	0.1600	0.1527	
75 2,3-Dimethylheptane	43	16.294	16.295	-0.001	91	18466	0.1600	0.1571	
74 Chlorobenzene	112	16.305	16.309	-0.005	96	11831	0.1600	0.1600	
76 Ethylbenzene	91	16.584	16.585	-0.001	99	14053	0.1600	0.1272	
77 m-Xylene & p-Xylene	91	16.744	16.745	-0.001	97	22284	0.3200	0.2552	
78 n-Nonane	57	17.131	17.134	-0.003	88	7040	0.1600	0.1121	
80 Styrene	104	17.209	17.209	0.000	97	6242	0.1600	0.1177	
79 Bromoform	173	17.204	17.208	-0.004	83	5299	0.1600	0.1831	
81 o-Xylene	91	17.271	17.270	0.001	98	12502	0.1600	0.1367	
82 1,1,2,2-Tetrachloroethane	83	17.591	17.591	0.000	99	14234	0.1600	0.1759	
83 1,2,3-Trichloropropane	110	17.746	17.747	-0.001	97	3031	0.1600	0.1655	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	17.840	17.842	-0.002	91	15214	0.1600	0.1316	
85 N-Propylbenzene	120	18.356	18.356	0.000	98	3868	0.1600	0.1248	
86 2-Chlorotoluene	126	18.408	18.408	0.000	98	4189	0.1600	0.1413	
87 4-Ethyltoluene	105	18.496	18.496	0.000	97	13957	0.1600	0.1202	
88 1,3,5-Trimethylbenzene	120	18.563	18.567	-0.004	91	6525	0.1600	0.1647	
89 Alpha Methyl Styrene	118	18.785	18.791	-0.006	84	4809	0.1600	0.1198	
90 n-Decane	57	18.822	18.822	0.000	89	10860	0.1600	0.1182	
91 tert-Butylbenzene	119	18.982	18.979	0.003	88	15128	0.1600	0.1285	
92 1,2,4-Trimethylbenzene	105	18.992	18.991	0.001	96	14778	0.1600	0.1398	
93 sec-Butylbenzene	105	19.240	19.239	0.001	98	20326	0.1600	0.1304	
94 1,3-Dichlorobenzene	146	19.266	19.263	0.003	98	7979	0.1600	0.1454	
95 Benzyl chloride	91	19.333	19.333	0.000	97	6023	0.1600	0.2030	
96 1,4-Dichlorobenzene	146	19.344	19.345	-0.001	92	5850	0.1600	0.1445	
97 4-Isopropyltoluene	119	19.395	19.393	0.002	96	15504	0.1600	0.1229	
98 1,2,3-Trimethylbenzene	105	19.452	19.452	0.000	98	14395	0.1600	0.1418	
99 Butylcyclohexane	83	19.493	19.494	-0.001	85	12911	0.1600	0.1479	
101 2,3-Dihydroindene	117	19.695	19.695	0.000	89	12164	0.1600	0.1446	
100 1,2-Dichlorobenzene	146	19.700	19.699	0.001	97	9708	0.1600	0.1603	
103 n-Butylbenzene	91	19.814	19.814	0.000	95	16902	0.1600	0.1211	
102 Indene	116	19.819	19.824	-0.005	89	9491	0.1600	0.1316	
104 Undecane	57	20.098	20.098	0.000	87	10740	0.1600	0.1025	
105 1,2-Dibromo-3-Chloropropane	157	20.284	20.288	-0.004	88	4146	0.1600	0.1339	
106 1,2,4,5-Tetramethylbenzene	119	20.563	20.563	0.000	96	11896	0.1600	0.1550	
107 Dodecane	57	21.178	21.175	0.003	84	6708	0.1600	0.0908	
108 1,2,4-Trichlorobenzene	180	21.421	21.418	0.003	94	2587	0.1600	0.1674	
109 Naphthalene	128	21.556	21.559	-0.003	98	7096	0.1600	0.0852	
110 Hexachlorobutadiene	225	21.726	21.727	-0.001	91	11315	0.1600	0.1953	
111 1,2,3-Trichlorobenzene	180	21.793	21.793	0.000	95	4134	0.1600	0.1215	
112 2-Methylnaphthalene	142	22.341	22.340	0.001	94	465	0.1600	0.0352	
113 1-Methylnaphthalene	142	22.465	22.468	-0.003	96	1044	0.1600	0.0685	
A 115 C8 Range	1	14.961	(14.930-14.992)		0	44189	0.1600	0.1353	
S 116 Xylenes, Total	100				0		0.4800	0.3919	
S 117 1,2-Dichloroethene, Total	1				0		0.3200	0.3125	

Reagents:

40L5DQP_00020	Amount Added: 80.00	Units: mL	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

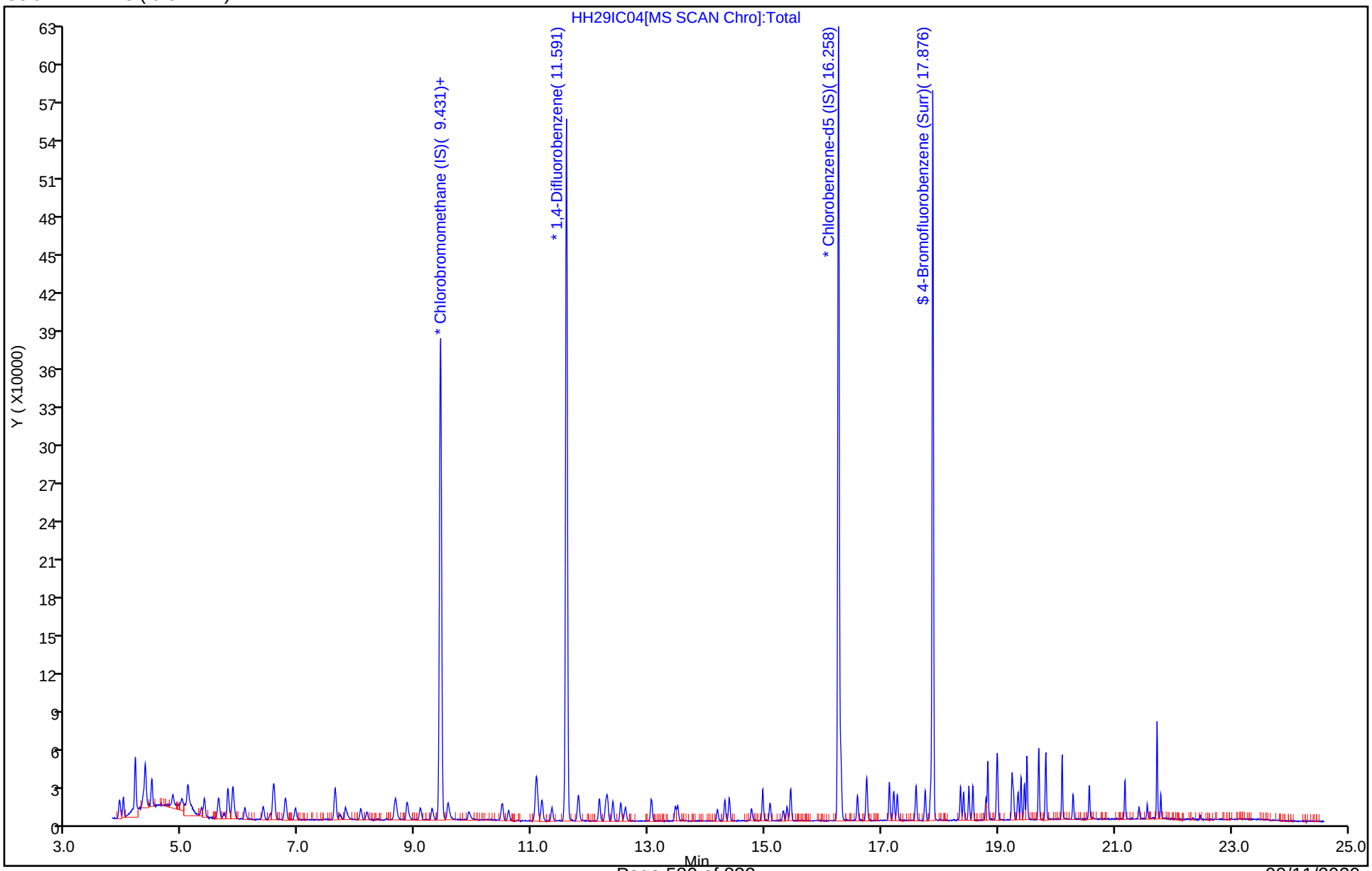
Report Date: 31-Aug-2020 12:24:52 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC04.D

Injection Date:	29-Aug-2020 21:03:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	IC L4			Worklist Smp#:	12
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

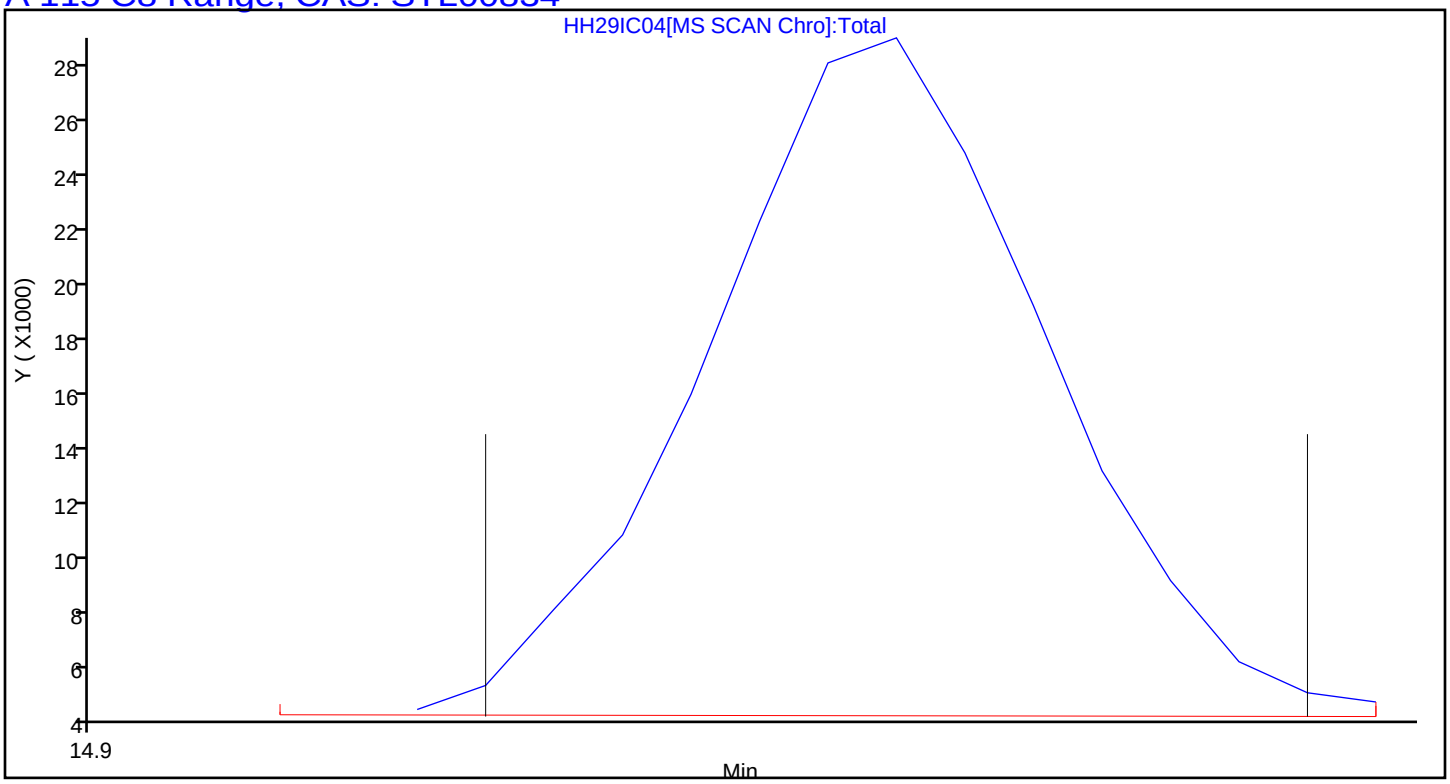


Report Date: 31-Aug-2020 12:24:52 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC04.D				
Injection Date:	29-Aug-2020 21:03:30	Instrument ID:	MH		
Lims ID:	IC L4				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	10	Worklist Smp#:	12
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 115 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC05.D
Lims ID: IC L5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 29-Aug-2020 21:58:30 ALS Bottle#: 10 Worklist Smp#: 13
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016451-013
Misc. Info.: 314717
Operator ID: HMT Instrument ID: MH
Sublist: chrom-MH_TO15*sub7

Method: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\MH_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 31-Aug-2020 12:24:59 Calib Date: 29-Aug-2020 23:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1064

First Level Reviewer: tajh Date: 30-Aug-2020 07:58:19

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.431	9.432	-0.001	98	116679	4.80	4.80	
* 2 1,4-Difluorobenzene	114	11.591	11.594	-0.003	95	501609	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	16.258	16.260	-0.002	88	331574	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.876	17.877	-0.001	91	177016	4.64	4.59	
6 Chlorodifluoromethane	51	3.921	3.920	0.001	97	26384	0.4000	0.4052	
7 Propene	41	3.937	3.935	0.002	98	11713	0.4000	0.4211	
8 Dichlorodifluoromethane	85	3.994	3.989	0.005	100	36737	0.4000	0.4165	
9 Chloromethane	52	4.190	4.191	-0.001	61	5319	0.4000	0.4591	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	4.200	4.197	0.003	92	29232	0.4000	0.4149	
11 Acetaldehyde	44	4.366	4.365	0.001	97	45941	2.00	2.67	
12 Vinyl chloride	62	4.386	4.383	0.003	99	15707	0.4000	0.4050	
14 Butadiene	54	4.479	4.479	0.000	70	11438	0.4000	0.4330	
13 Butane	43	4.479	4.479	0.000	83	23536	0.4000	0.4439	
15 Bromomethane	94	4.841	4.842	-0.001	97	16127	0.4000	0.4306	
16 Chloroethane	64	4.996	4.997	-0.001	85	6811	0.4000	0.4159	
17 Ethanol	31	5.100	5.099	0.001	97	39613	2.00	2.11	
18 Vinyl bromide	106	5.332	5.334	-0.002	98	12682	0.4000	0.4063	
19 2-Methylbutane	43	5.384	5.382	0.002	91	15686	0.4000	0.3838	
20 Trichlorofluoromethane	101	5.627	5.626	0.001	99	35471	0.4000	0.4128	
21 Acrolein	56	5.642	5.646	-0.004	92	3225	0.4000	0.3550	
22 Acetonitrile	40	5.715	5.715	0.000	99	7583	0.4000	0.4617	
23 Acetone	58	5.777	5.775	0.002	99	24383	1.20	1.34	
24 Pentane	72	5.864	5.865	-0.001	77	1546	0.4000	0.4059	
25 Isopropyl alcohol	45	5.864	5.868	-0.004	79	50090	1.20	1.12	
26 Ethyl ether	31	6.066	6.065	0.001	87	13675	0.4000	0.3654	
27 1,1-Dichloroethene	96	6.392	6.393	-0.001	96	10509	0.4000	0.3715	
28 Acrylonitrile	53	6.505	6.508	-0.003	93	9683	0.4000	0.3892	
29 2-Methyl-2-propanol	59	6.536	6.535	0.001	93	16340	0.4000	0.3534	
30 112TCTFE	101	6.578	6.575	0.003	94	30231	0.4000	0.4148	
31 Methylene Chloride	84	6.769	6.766	0.003	95	12483	0.4000	0.4364	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.779	6.781	-0.002	96	11332	0.4000	0.3867	
33 Carbon disulfide	76	6.945	6.946	-0.001	100	36831	0.4000	0.4007	
34 trans-1,2-Dichloroethene	96	7.622	7.620	0.002	95	11553	0.4000	0.3911	
35 2-Methylpentane	43	7.627	7.626	0.001	95	26349	0.4000	0.3740	
36 Methyl tert-butyl ether	73	7.782	7.785	-0.003	93	21645	0.4000	0.3471	
37 1,1-Dichloroethane	63	8.061	8.066	-0.005	99	23786	0.4000	0.4055	
38 Vinyl acetate	43	8.170	8.165	0.005	98	24579	0.4000	0.3264	
40 Hexane	56	8.650	8.650	0.000	71	9246	0.4000	0.3782	
39 2-Butanone (MEK)	72	8.661	8.660	0.001	96	5816	0.4000	0.4070	
41 Isopropyl ether	45	8.841	8.836	0.005	92	37008	0.4000	0.3557	
42 cis-1,2-Dichloroethene	96	9.084	9.086	-0.002	96	11349	0.4000	0.3794	
43 Ethyl acetate	43	9.276	9.277	-0.001	98	27595	0.4000	0.3682	
44 Chloroform	83	9.436	9.438	-0.002	95	28795	0.4000	0.4064	
45 Tert-butyl ethyl ether	59	9.539	9.539	0.000	96	27765	0.4000	0.3480	
46 Tetrahydrofuran	42	9.896	9.897	-0.001	89	12991	0.4000	0.3691	
47 1,1,1-Trichloroethane	97	10.490	10.492	-0.002	96	25975	0.4000	0.4044	
48 1,2-Dichloroethane	62	10.599	10.600	-0.001	96	17988	0.4000	0.3944	
49 n-Butanol	31	11.048	11.038	0.010	89	5338	0.4000	0.3757	
50 Cyclohexane	69	11.074	11.072	0.002	71	4760	0.4000	0.3777	
51 Benzene	78	11.079	11.076	0.003	97	36921	0.4000	0.4009	
52 Carbon tetrachloride	117	11.100	11.095	0.005	96	25244	0.4000	0.4428	
53 2,3-Dimethylpentane	71	11.172	11.172	0.000	88	6357	0.4000	0.3645	
54 Thiophene	84	11.343	11.344	-0.001	96	18120	0.4000	0.3740	
55 Isooctane	57	11.798	11.796	0.002	96	53753	0.4000	0.3754	
56 n-Heptane	71	12.154	12.159	-0.005	92	9346	0.4000	0.3561	
57 1,2-Dichloropropane	63	12.263	12.269	-0.006	87	15250	0.4000	0.3869	
58 Trichloroethene	130	12.294	12.298	-0.004	95	15077	0.4000	0.3641	
59 Dibromomethane	93	12.392	12.390	0.002	95	16878	0.4000	0.3850	
60 Dichlorobromomethane	83	12.521	12.526	-0.005	98	25071	0.4000	0.3840	
61 1,4-Dioxane	88	12.568	12.571	-0.003	92	4471	0.4000	0.3408	
62 Methyl methacrylate	41	12.599	12.600	-0.001	89	15220	0.4000	0.3557	
63 Methylcyclohexane	83	13.049	13.049	-0.001	87	15301	0.4000	0.3391	
64 4-Methyl-2-pentanone (MIBK)	43	13.452	13.452	0.000	95	25748	0.4000	0.3132	
65 cis-1,3-Dichloropropene	75	13.503	13.503	0.000	96	14738	0.4000	0.3296	
66 trans-1,3-Dichloropropene	75	14.186	14.185	0.001	96	8657	0.4000	0.2853	
67 Toluene	91	14.310	14.310	0.000	92	29243	0.4000	0.3423	
68 1,1,2-Trichloroethane	83	14.387	14.386	0.001	97	12630	0.4000	0.4114	
69 2-Hexanone	58	14.764	14.759	0.005	88	6955	0.4000	0.2558	
70 n-Octane	85	14.961	14.962	-0.001	94	7788	0.4000	0.3267	
71 Chlorodibromomethane	129	15.085	15.086	-0.001	96	19161	0.4000	0.3780	
72 Ethylene Dibromide	107	15.374	15.378	-0.004	98	15646	0.4000	0.3405	
73 Tetrachloroethene	129	15.441	15.439	0.002	93	13570	0.4000	0.3790	
75 2,3-Dimethylheptane	43	16.294	16.295	-0.001	92	45111	0.4000	0.4100	
74 Chlorobenzene	112	16.305	16.309	-0.004	94	28248	0.4000	0.4083	
76 Ethylbenzene	91	16.589	16.585	0.004	99	34216	0.4000	0.3309	
77 m-Xylene & p-Xylene	91	16.744	16.745	-0.001	98	60126	0.8000	0.7358	
78 n-Nonane	57	17.137	17.134	0.003	91	19548	0.4000	0.3325	
79 Bromoform	173	17.209	17.208	0.001	88	12706	0.4000	0.4412	
80 Styrene	104	17.209	17.209	0.000	98	16959	0.4000	0.3416	
81 o-Xylene	91	17.271	17.270	0.001	99	32930	0.4000	0.3847	
82 1,1,2,2-Tetrachloroethane	83	17.592	17.591	0.001	98	31726	0.4000	0.4189	
83 1,2,3-Trichloropropane	110	17.747	17.747	0.000	97	6706	0.4000	0.3911	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	17.840	17.842	-0.002	97	36786	0.4000	0.3399	
85 N-Propylbenzene	120	18.356	18.356	0.000	98	8952	0.4000	0.3086	
86 2-Chlorotoluene	126	18.408	18.408	0.000	98	10698	0.4000	0.3856	
87 4-Ethyltoluene	105	18.496	18.496	0.000	98	39753	0.4000	0.3658	
88 1,3,5-Trimethylbenzene	120	18.563	18.567	-0.004	92	18369	0.4000	0.4002	
89 Alpha Methyl Styrene	118	18.791	18.791	0.000	85	10989	0.4000	0.2924	
90 n-Decane	57	18.822	18.822	0.000	89	33400	0.4000	0.3884	
91 tert-Butylbenzene	119	18.982	18.979	0.003	89	42959	0.4000	0.3900	
92 1,2,4-Trimethylbenzene	105	18.987	18.991	-0.004	95	42752	0.4000	0.4321	
93 sec-Butylbenzene	105	19.240	19.239	0.001	98	53752	0.4000	0.3685	
94 1,3-Dichlorobenzene	146	19.261	19.263	-0.002	97	19220	0.4000	0.3742	
95 Benzyl chloride	91	19.333	19.333	0.000	97	14926	0.4000	0.3566	
96 1,4-Dichlorobenzene	146	19.344	19.345	-0.001	91	13769	0.4000	0.3634	
97 4-Isopropyltoluene	119	19.390	19.393	-0.003	96	48957	0.4000	0.4146	
98 1,2,3-Trimethylbenzene	105	19.452	19.452	0.000	99	41656	0.4000	0.4383	
99 Butylcyclohexane	83	19.493	19.494	-0.001	89	35771	0.4000	0.4377	
101 2,3-Dihydroindene	117	19.695	19.695	0.000	90	30416	0.4000	0.3862	
100 1,2-Dichlorobenzene	146	19.695	19.699	-0.004	97	23005	0.4000	0.4058	
103 n-Butylbenzene	91	19.814	19.814	0.000	97	52853	0.4000	0.4046	
102 Indene	116	19.824	19.824	0.000	90	26876	0.4000	0.3980	
104 Undecane	57	20.098	20.098	0.000	93	33280	0.4000	0.3392	
105 1,2-Dibromo-3-Chloropropane	157	20.289	20.288	0.001	89	10376	0.4000	0.3580	
106 1,2,4,5-Tetramethylbenzene	119	20.563	20.563	0.000	96	32591	0.4000	0.3340	
107 Dodecane	57	21.178	21.175	0.003	87	17141	0.4000	0.2480	
108 1,2,4-Trichlorobenzene	180	21.416	21.418	-0.002	94	6075	0.4000	0.2987	
109 Naphthalene	128	21.561	21.559	0.002	98	16130	0.4000	0.2069	
110 Hexachlorobutadiene	225	21.726	21.727	-0.001	90	22566	0.4000	0.4160	
111 1,2,3-Trichlorobenzene	180	21.793	21.793	0.000	94	8519	0.4000	0.2675	
112 2-Methylnaphthalene	142	22.336	22.340	-0.004	95	481	0.4000	0.0389	
113 1-Methylnaphthalene	142	22.465	22.468	-0.003	95	831	0.4000	0.0582	
A 115 C8 Range	1	14.961	(14.919-15.002)		0	113223	0.4000	0.3389	
S 116 Xylenes, Total	100				0		1.20	1.12	
S 117 1,2-Dichloroethene, Total	1				0		0.8000	0.7705	

Reagents:

40L5DQP_00020	Amount Added: 200.00	Units: mL	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

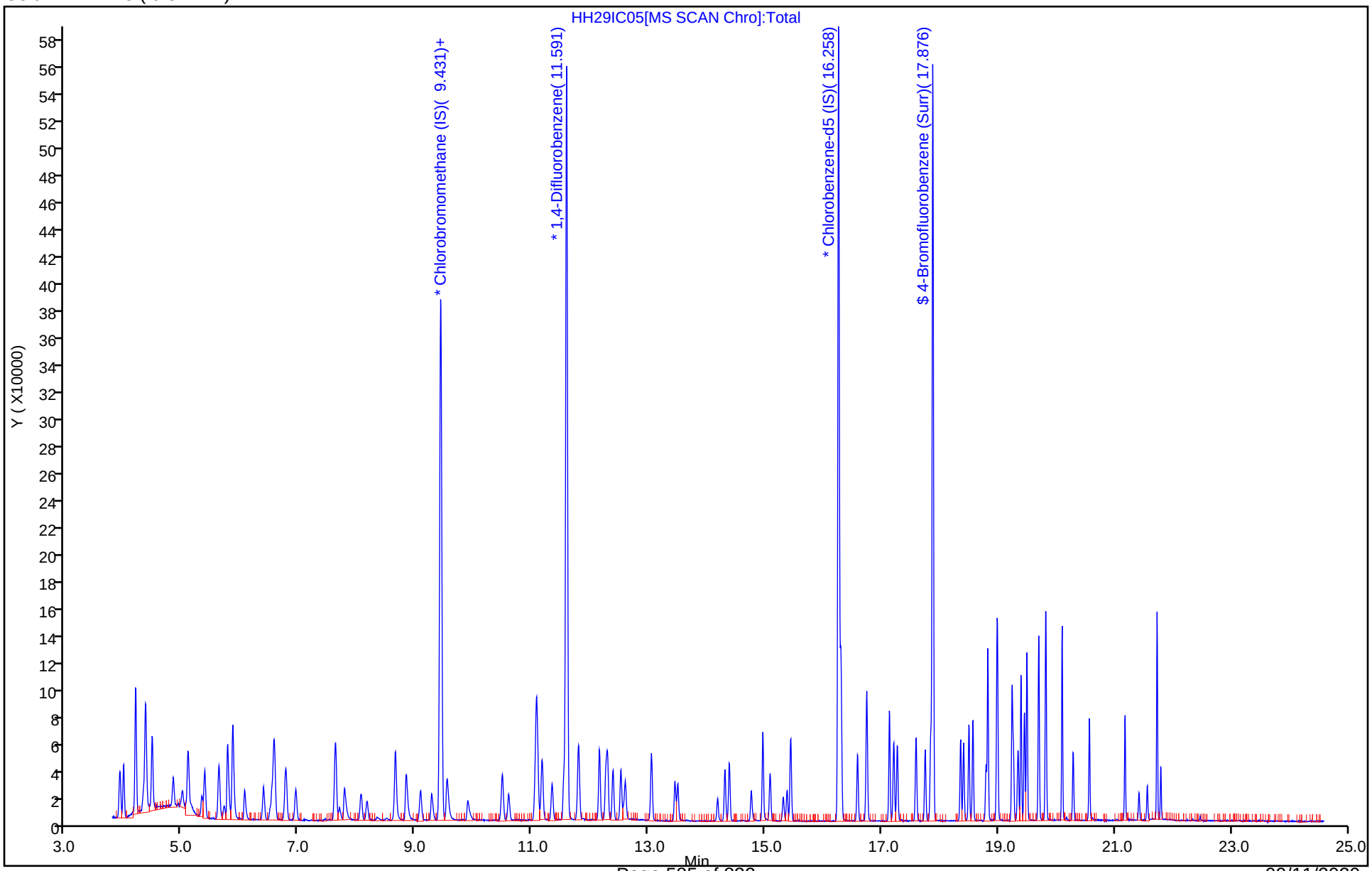
Report Date: 31-Aug-2020 12:25:00 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC05.D

Injection Date:	29-Aug-2020 21:58:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	IC L5			Worklist Smp#:	13
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



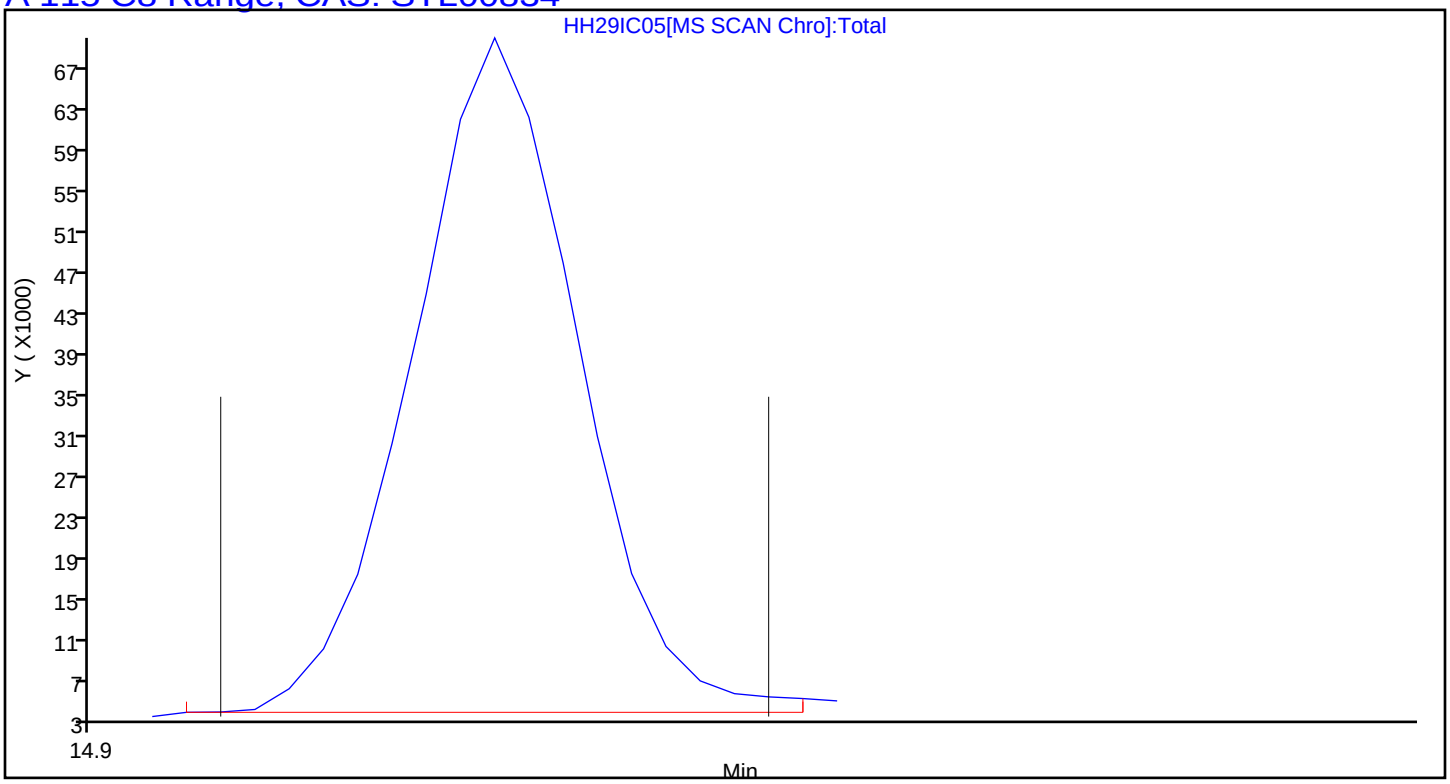
09/11/2020

Report Date: 31-Aug-2020 12:25:00 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC05.D				
Injection Date:	29-Aug-2020 21:58:30	Instrument ID:	MH		
Lims ID:	IC L5				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	10	Worklist Smp#:	13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 115 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC06.D
Lims ID: IC L6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 29-Aug-2020 22:57:30 ALS Bottle#: 11 Worklist Smp#: 14
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016451-014
Misc. Info.: 314716
Operator ID: HMT Instrument ID: MH
Sublist: chrom-MH_TO15*sub7

Method: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\MH_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 31-Aug-2020 12:25:10 Calib Date: 29-Aug-2020 23:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1064

First Level Reviewer: barlozhetskayaa Date: 31-Aug-2020 09:52:50

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.431	9.432	-0.001	97	126280	4.80	4.80	
* 2 1,4-Difluorobenzene	114	11.591	11.594	-0.003	95	545458	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	16.258	16.260	-0.002	88	399413	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.876	17.877	-0.001	92	216986	4.64	4.68	
6 Chlorodifluoromethane	51	3.916	3.920	-0.004	97	71178	1.00	1.01	
7 Propene	41	3.932	3.935	-0.003	97	32766	1.00	1.09	
8 Dichlorodifluoromethane	85	3.988	3.989	-0.001	100	98306	1.00	1.03	
9 Chloromethane	52	4.190	4.191	-0.001	59	13487	1.00	1.08	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	4.195	4.197	-0.002	91	78601	1.00	1.03	
11 Acetaldehyde	44	4.366	4.365	0.001	97	112582	5.00	6.05	
12 Vinyl chloride	62	4.381	4.383	-0.002	99	42471	1.00	1.01	
14 Butadiene	54	4.479	4.479	0.000	68	30976	1.00	1.08	
13 Butane	43	4.479	4.479	0.000	84	62791	1.00	1.09	
15 Bromomethane	94	4.841	4.842	-0.001	98	41408	1.00	1.02	
16 Chloroethane	64	4.996	4.997	-0.001	88	18172	1.00	1.03	
17 Ethanol	31	5.089	5.099	-0.010	98	103194	5.00	5.08	
18 Vinyl bromide	106	5.332	5.334	-0.002	98	33670	1.00	1.00	
19 2-Methylbutane	43	5.384	5.382	0.002	93	43836	1.00	0.99	
20 Trichlorofluoromethane	101	5.627	5.626	0.001	99	92071	1.00	0.99	
21 Acrolein	56	5.642	5.646	-0.004	95	8663	1.00	0.8618	
22 Acetonitrile	40	5.710	5.715	-0.005	99	17405	1.00	0.9791	
23 Acetone	58	5.766	5.775	-0.009	99	67466	3.00	3.44	
24 Pentane	72	5.865	5.865	0.000	95	4670	1.00	1.13	
25 Isopropyl alcohol	45	5.849	5.868	-0.019	92	135930	3.00	2.80	
26 Ethyl ether	31	6.056	6.065	-0.009	89	40634	1.00	1.00	
27 1,1-Dichloroethene	96	6.392	6.393	-0.001	96	29740	1.00	0.9715	
28 Acrylonitrile	53	6.505	6.508	-0.003	92	26342	1.00	0.9783	
29 2-Methyl-2-propanol	59	6.516	6.535	-0.019	93	45014	1.00	0.8994	
30 112TCTFE	101	6.573	6.575	-0.002	95	77735	1.00	0.9854	
31 Methylene Chloride	84	6.769	6.766	0.003	96	31182	1.00	1.01	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.785	6.781	0.004	95	28782	1.00	0.9074	
33 Carbon disulfide	76	6.945	6.946	-0.001	100	98622	1.00	0.99	
34 trans-1,2-Dichloroethene	96	7.622	7.620	0.002	95	31637	1.00	0.9896	
35 2-Methylpentane	43	7.627	7.626	0.001	96	76485	1.00	1.00	
36 Methyl tert-butyl ether	73	7.767	7.785	-0.018	93	64559	1.00	0.9566	
37 1,1-Dichloroethane	63	8.061	8.066	-0.005	100	62058	1.00	0.9775	
38 Vinyl acetate	43	8.165	8.165	-0.001	99	74856	1.00	0.9185	
40 Hexane	56	8.650	8.650	0.000	77	26520	1.00	1.00	
39 2-Butanone (MEK)	72	8.645	8.660	-0.015	95	16000	1.00	1.03	
41 Isopropyl ether	45	8.821	8.836	-0.015	95	113438	1.00	1.01	
42 cis-1,2-Dichloroethene	96	9.084	9.086	-0.002	97	31585	1.00	0.9756	
43 Ethyl acetate	43	9.265	9.277	-0.012	98	77708	1.00	0.9580	
44 Chloroform	83	9.436	9.438	-0.002	98	73917	1.00	0.9639	
45 Tert-butyl ethyl ether	59	9.524	9.539	-0.015	98	84652	1.00	0.9804	
46 Tetrahydrofuran	42	9.875	9.897	-0.022	92	37004	1.00	0.9715	
47 1,1,1-Trichloroethane	97	10.490	10.492	-0.002	97	66743	1.00	0.9601	
48 1,2-Dichloroethane	62	10.599	10.600	-0.001	96	47284	1.00	0.9534	
49 n-Butanol	31	11.023	11.038	-0.015	59	13235	1.00	0.8566	
50 Cyclohexane	69	11.074	11.072	0.002	90	13610	1.00	0.99	
51 Benzene	78	11.074	11.076	-0.002	97	99057	1.00	0.9890	
52 Carbon tetrachloride	117	11.095	11.095	0.000	95	61795	1.00	1.00	
53 2,3-Dimethylpentane	71	11.172	11.172	0.000	93	19407	1.00	1.02	
54 Thiophene	84	11.343	11.344	-0.001	97	52043	1.00	0.9879	
55 Isooctane	57	11.798	11.796	0.002	97	156443	1.00	1.00	
56 n-Heptane	71	12.154	12.159	-0.005	94	28489	1.00	1.00	
57 1,2-Dichloropropane	63	12.268	12.269	-0.001	88	41034	1.00	0.9573	
58 Trichloroethene	130	12.294	12.298	-0.004	95	42319	1.00	0.9397	
59 Dibromomethane	93	12.387	12.390	-0.003	94	49560	1.00	1.04	
60 Dichlorobromomethane	83	12.527	12.526	0.001	98	66609	1.00	0.9383	
61 1,4-Dioxane	88	12.558	12.571	-0.013	96	12361	1.00	0.8666	
62 Methyl methacrylate	41	12.594	12.600	-0.006	90	45630	1.00	0.9807	
63 Methylcyclohexane	83	13.049	13.049	0.000	93	49859	1.00	0.9131	
64 4-Methyl-2-pentanone (MIBK)	43	13.441	13.452	-0.011	98	89525	1.00	1.00	
65 cis-1,3-Dichloropropene	75	13.498	13.503	-0.005	98	48811	1.00	1.00	
66 trans-1,3-Dichloropropene	75	14.186	14.185	0.001	98	35446	1.00	0.9698	
67 Toluene	91	14.310	14.310	0.000	92	104851	1.00	1.02	
68 1,1,2-Trichloroethane	83	14.382	14.386	-0.004	96	36787	1.00	0.99	
69 2-Hexanone	58	14.754	14.759	-0.005	89	32100	1.00	0.9799	
70 n-Octane	85	14.961	14.962	-0.001	96	29562	1.00	1.03	
71 Chlorodibromomethane	129	15.085	15.086	-0.001	97	54160	1.00	0.8869	
72 Ethylene Dibromide	107	15.380	15.378	0.002	97	51730	1.00	0.9345	
73 Tetrachloroethene	129	15.436	15.439	-0.003	94	40597	1.00	0.9412	
75 2,3-Dimethylheptane	43	16.294	16.295	-0.001	93	133014	1.00	1.00	
74 Chlorobenzene	112	16.310	16.309	0.001	94	80847	1.00	0.9700	
76 Ethylbenzene	91	16.584	16.585	-0.001	99	124500	1.00	1.00	
77 m-Xylene & p-Xylene	91	16.744	16.745	-0.001	98	199075	2.00	2.02	
78 n-Nonane	57	17.132	17.134	-0.002	94	71082	1.00	1.00	
80 Styrene	104	17.209	17.209	0.000	98	61513	1.00	1.03	
79 Bromoform	173	17.209	17.208	0.001	69	30128	1.00	0.8018	
81 o-Xylene	91	17.266	17.270	-0.004	98	103713	1.00	1.01	
82 1,1,2,2-Tetrachloroethane	83	17.592	17.591	0.001	98	89392	1.00	0.9798	
83 1,2,3-Trichloropropane	110	17.747	17.747	0.000	97	20078	1.00	0.9722	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	17.840	17.842	-0.002	97	132293	1.00	1.01	
85 N-Propylbenzene	120	18.357	18.356	0.001	99	33634	1.00	0.9624	
86 2-Chlorotoluene	126	18.408	18.408	0.000	98	31701	1.00	0.9487	
87 4-Ethyltoluene	105	18.496	18.496	0.000	98	123694	1.00	0.9449	
88 1,3,5-Trimethylbenzene	120	18.568	18.567	0.001	92	53265	1.00	0.8967	
89 Alpha Methyl Styrene	118	18.791	18.791	0.000	87	43249	1.00	0.9554	
90 n-Decane	57	18.822	18.822	0.000	87	98138	1.00	0.9475	
91 tert-Butylbenzene	119	18.977	18.979	-0.002	92	125306	1.00	0.9444	
92 1,2,4-Trimethylbenzene	105	18.987	18.991	-0.004	95	119057	1.00	1.00	
93 sec-Butylbenzene	105	19.235	19.239	-0.004	99	170946	1.00	0.9729	
94 1,3-Dichlorobenzene	146	19.261	19.263	-0.002	98	56119	1.00	0.9071	
95 Benzyl chloride	91	19.333	19.333	0.000	97	49639	1.00	0.7911	
96 1,4-Dichlorobenzene	146	19.344	19.345	-0.001	93	45361	1.00	0.99	
97 4-Isopropyltoluene	119	19.390	19.393	-0.003	97	152230	1.00	1.07	
98 1,2,3-Trimethylbenzene	105	19.452	19.452	0.000	99	118943	1.00	1.04	
99 Butylcyclohexane	83	19.494	19.494	0.000	89	99985	1.00	1.02	
101 2,3-Dihydroindene	117	19.695	19.695	0.000	92	94480	1.00	1.00	
100 1,2-Dichlorobenzene	146	19.700	19.699	0.001	97	64192	1.00	0.9401	
103 n-Butylbenzene	91	19.814	19.814	0.000	97	160783	1.00	1.02	
102 Indene	116	19.824	19.824	0.000	93	80808	1.00	0.99	
104 Undecane	57	20.098	20.098	0.000	93	114678	1.00	0.9704	
105 1,2-Dibromo-3-Chloropropane	157	20.290	20.288	0.002	94	30683	1.00	0.8790	
106 1,2,4,5-Tetramethylbenzene	119	20.563	20.563	0.000	97	132594	1.00	0.9806	
107 Dodecane	57	21.173	21.175	-0.002	90	88999	1.00	1.07	
108 1,2,4-Trichlorobenzene	180	21.416	21.418	-0.002	94	26147	1.00	0.8605	
109 Naphthalene	128	21.561	21.559	0.002	99	78327	1.00	0.8358	
110 Hexachlorobutadiene	225	21.726	21.727	-0.001	91	67162	1.00	1.03	
111 1,2,3-Trichlorobenzene	180	21.794	21.793	0.001	94	36670	1.00	0.9559	
112 2-Methylnaphthalene	142	22.341	22.340	0.001	99	3986	1.00	0.2676	
113 1-Methylnaphthalene	142	22.471	22.468	0.003	97	7239	1.00	0.4211	
A 115 C8 Range	1	14.953	(14.920-15.002)		0	358784	1.00	0.9875	
S 116 Xylenes, Total	100				0		3.00	3.03	
S 117 1,2-Dichloroethene, Total	1				0		2.00	1.97	

Reagents:

40L6DQP_00019	Amount Added: 200.00	Units: mL	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

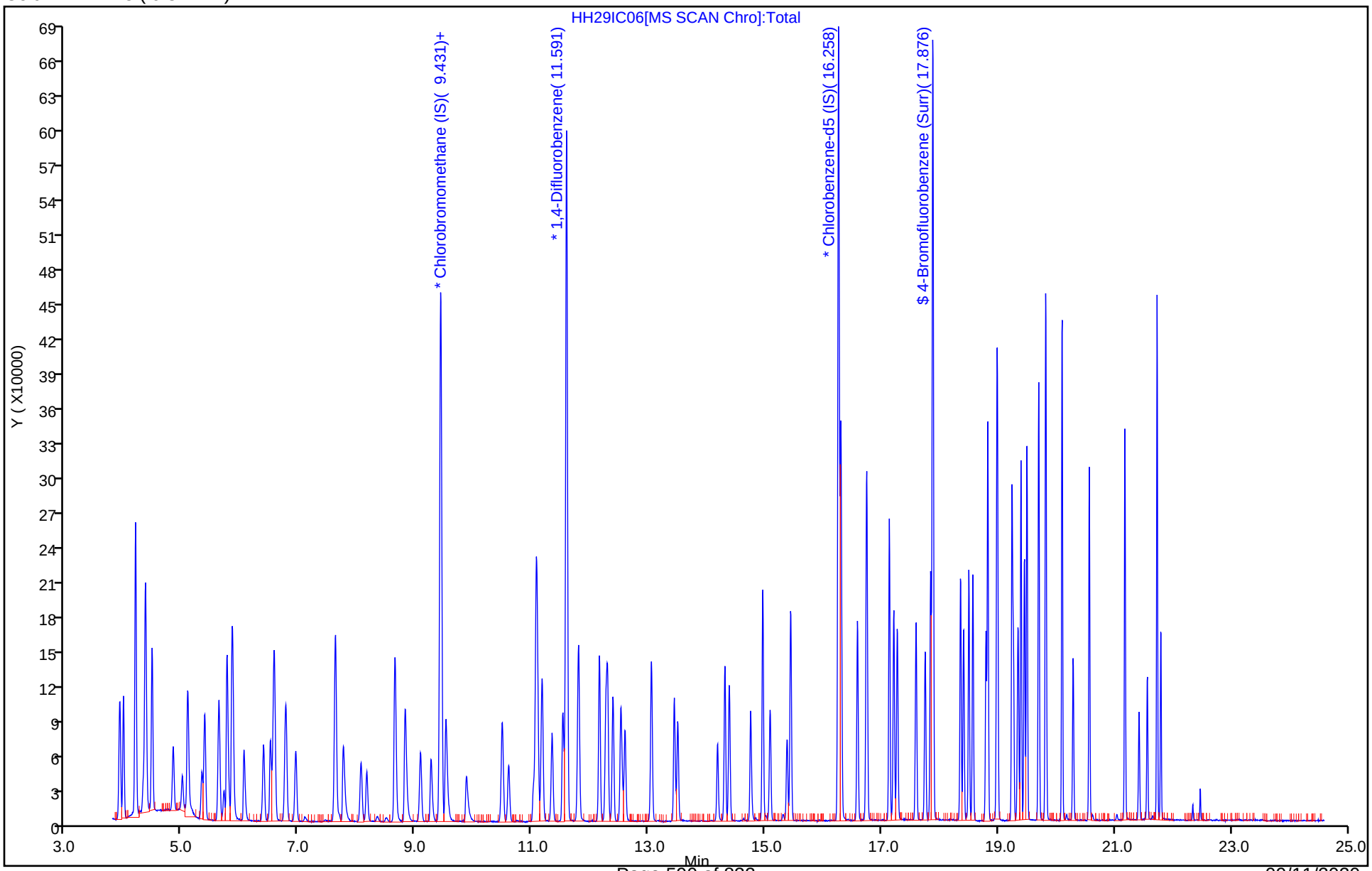
Report Date: 31-Aug-2020 12:25:12 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC06.D

Injection Date:	29-Aug-2020 22:57:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	IC L6			Worklist Smp#:	14
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



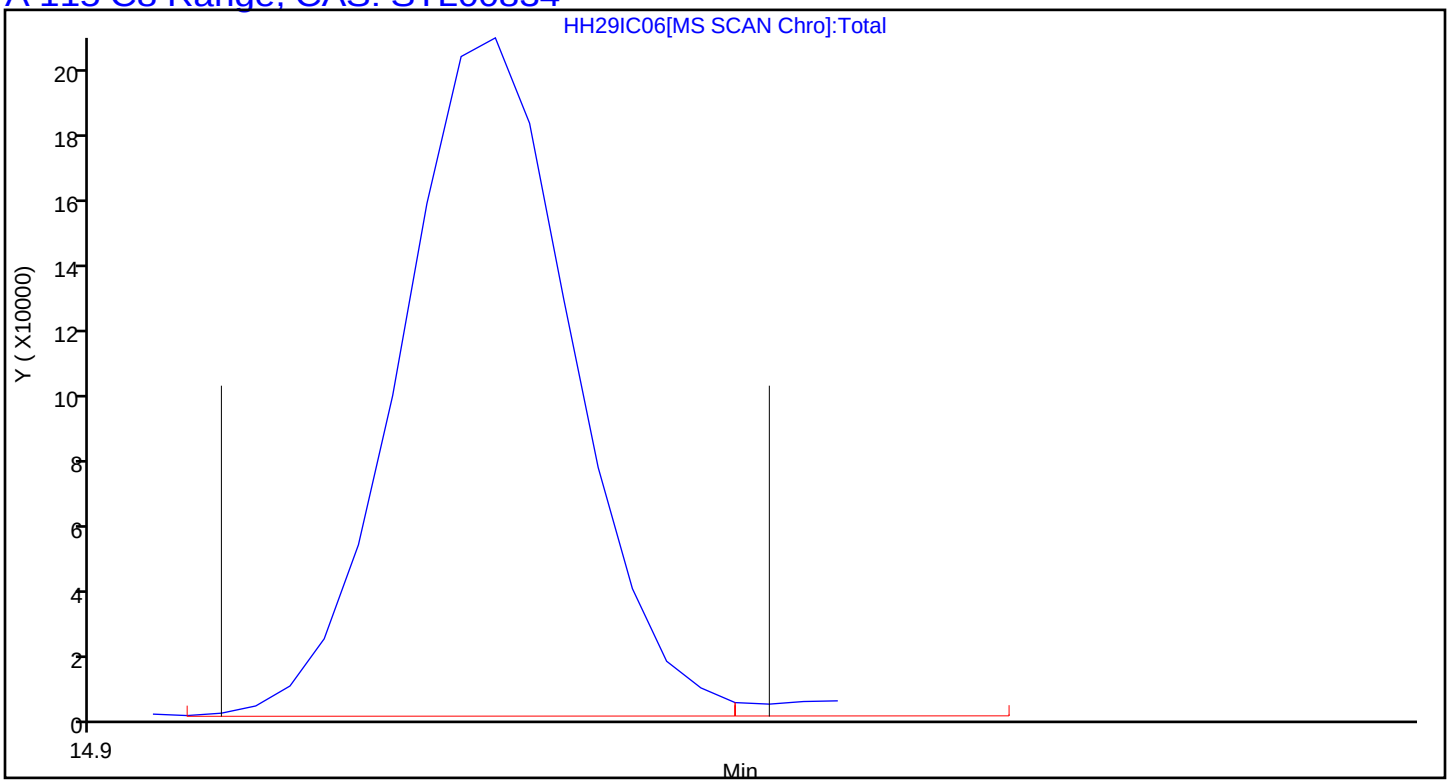
09/11/2020

Report Date: 31-Aug-2020 12:25:12 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC06.D				
Injection Date:	29-Aug-2020 22:57:30	Instrument ID:	MH		
Lims ID:	IC L6				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	11	Worklist Smp#:	14
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 115 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D
Lims ID: ICIS L7
Client ID:
Sample Type: ICIS Calib Level: 7
Inject. Date: 29-Aug-2020 23:57:30 ALS Bottle#: 12 Worklist Smp#: 15
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016451-015
Misc. Info.: 314608
Operator ID: HMT Instrument ID: MH
Sublist: chrom-MH_TO15*sub7

Method: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\MH_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 31-Aug-2020 12:25:20 Calib Date: 29-Aug-2020 23:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1064

First Level Reviewer: tajh Date: 30-Aug-2020 07:56:08

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.436	9.432	0.004	96	124211	4.80	4.80	
* 2 1,4-Difluorobenzene	114	11.596	11.594	0.002	95	547740	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	16.263	16.260	0.003	87	401461	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.876	17.877	-0.001	93	226803	4.64	4.86	
6 Chlorodifluoromethane	51	3.921	3.920	0.001	97	135250	2.00	1.95	
7 Propene	41	3.937	3.935	0.002	99	61039	2.00	2.06	
8 Dichlorodifluoromethane	85	3.994	3.989	0.005	100	194412	2.00	2.07	
9 Chloromethane	52	4.200	4.191	0.009	71	26488	2.00	2.15	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	4.200	4.197	0.003	94	144701	2.00	1.93	
11 Acetaldehyde	44	4.366	4.365	0.001	97	192758	10.0	10.5	
12 Vinyl chloride	62	4.386	4.383	0.003	99	80749	2.00	1.96	
14 Butadiene	54	4.485	4.479	0.005	68	59336	2.00	2.11	
13 Butane	43	4.485	4.479	0.005	84	125013	2.00	2.21	
15 Bromomethane	94	4.846	4.842	0.004	98	79903	2.00	2.00	
16 Chloroethane	64	5.007	4.997	0.009	87	34873	2.00	2.00	
17 Ethanol	31	5.094	5.099	-0.005	98	235349	10.0	11.8	
18 Vinyl bromide	106	5.337	5.334	0.003	98	65698	2.00	1.98	
19 2-Methylbutane	43	5.389	5.382	0.007	93	86376	2.00	1.99	
20 Trichlorofluoromethane	101	5.627	5.626	0.001	99	179500	2.00	1.96	
21 Acrolein	56	5.647	5.646	0.001	94	17382	2.00	1.74	
22 Acetonitrile	40	5.715	5.715	0.000	100	37274	2.00	2.13	
23 Acetone	58	5.761	5.775	-0.014	99	120332	6.00	6.23	
25 Isopropyl alcohol	45	5.844	5.868	-0.024	97	309623	6.00	6.49	
24 Pentane	72	5.870	5.865	0.005	96	9103	2.00	2.25	
26 Ethyl ether	31	6.051	6.065	-0.014	91	82949	2.00	2.08	
27 1,1-Dichloroethene	96	6.397	6.393	0.004	96	59790	2.00	1.99	
28 Acrylonitrile	53	6.505	6.508	-0.003	96	55721	2.00	2.10	
29 2-Methyl-2-propanol	59	6.495	6.535	-0.040	94	101194	2.00	2.06	
30 112TCTFE	101	6.578	6.575	0.003	96	151488	2.00	1.95	
31 Methylene Chloride	84	6.769	6.766	0.003	96	60826	2.00	2.00	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.784	6.781	0.003	94	57903	2.00	1.86	
33 Carbon disulfide	76	6.950	6.946	0.004	100	196676	2.00	2.01	
34 trans-1,2-Dichloroethene	96	7.622	7.620	0.002	95	63666	2.00	2.02	
35 2-Methylpentane	43	7.632	7.626	0.006	96	160016	2.00	2.13	
36 Methyl tert-butyl ether	73	7.751	7.785	-0.034	94	135102	2.00	2.04	
37 1,1-Dichloroethane	63	8.071	8.066	0.005	100	124325	2.00	1.99	
38 Vinyl acetate	43	8.164	8.165	-0.001	100	164085	2.00	2.05	
39 2-Butanone (MEK)	72	8.640	8.660	-0.020	96	30439	2.00	2.00	
40 Hexane	56	8.650	8.650	0.000	77	54603	2.00	2.10	
41 Isopropyl ether	45	8.816	8.836	-0.020	96	239411	2.00	2.16	
42 cis-1,2-Dichloroethene	96	9.090	9.086	0.004	97	63040	2.00	1.98	
43 Ethyl acetate	43	9.265	9.277	-0.012	98	160162	2.00	2.01	
44 Chloroform	83	9.441	9.438	0.003	97	145980	2.00	1.94	
45 Tert-butyl ethyl ether	59	9.518	9.539	-0.021	98	180364	2.00	2.12	
46 Tetrahydrofuran	42	9.865	9.897	-0.032	93	79287	2.00	2.12	
47 1,1,1-Trichloroethane	97	10.490	10.492	-0.002	96	132832	2.00	1.94	
48 1,2-Dichloroethane	62	10.599	10.600	-0.001	96	93346	2.00	1.87	
49 n-Butanol	31	11.017	11.038	-0.021	95	30500	2.00	1.97	
51 Benzene	78	11.074	11.076	-0.002	98	198272	2.00	1.97	
50 Cyclohexane	69	11.074	11.072	0.002	82	28513	2.00	2.07	
52 Carbon tetrachloride	117	11.095	11.095	0.000	96	93449	2.00	1.50	
53 2,3-Dimethylpentane	71	11.172	11.172	0.000	93	40490	2.00	2.13	
54 Thiophene	84	11.348	11.344	0.004	96	107154	2.00	2.03	
55 Isooctane	57	11.798	11.796	0.002	98	329728	2.00	2.11	
56 n-Heptane	71	12.160	12.159	0.001	95	59951	2.00	2.09	
57 1,2-Dichloropropane	63	12.268	12.269	-0.001	90	83631	2.00	1.94	
58 Trichloroethene	130	12.299	12.298	0.001	95	84978	2.00	1.88	
59 Dibromomethane	93	12.392	12.390	0.002	94	89996	2.00	1.88	
60 Dichlorobromomethane	83	12.526	12.526	0.000	98	139005	2.00	1.95	
61 1,4-Dioxane	88	12.537	12.571	-0.034	94	32004	2.00	2.23	
62 Methyl methacrylate	41	12.594	12.600	-0.006	90	96083	2.00	2.06	
63 Methylcyclohexane	83	13.048	13.049	-0.001	91	106694	2.00	1.89	
64 4-Methyl-2-pentanone (MIBK)	43	13.436	13.452	-0.016	98	187155	2.00	2.08	
65 cis-1,3-Dichloropropene	75	13.503	13.503	0.000	97	100971	2.00	2.07	
66 trans-1,3-Dichloropropene	75	14.186	14.185	0.001	97	73899	2.00	2.01	
67 Toluene	91	14.310	14.310	0.000	92	217553	2.00	2.10	
68 1,1,2-Trichloroethane	83	14.387	14.386	0.001	97	74295	2.00	2.00	
69 2-Hexanone	58	14.749	14.759	-0.010	90	72367	2.00	2.20	
70 n-Octane	85	14.961	14.962	-0.001	97	63752	2.00	2.21	
71 Chlorodibromomethane	129	15.085	15.086	-0.001	97	128589	2.00	2.09	
72 Ethylene Dibromide	107	15.379	15.378	0.001	98	104398	2.00	1.88	
73 Tetrachloroethene	129	15.441	15.439	0.002	94	83258	2.00	1.92	
75 2,3-Dimethylheptane	43	16.294	16.295	-0.001	94	272648	2.00	2.05	
74 Chlorobenzene	112	16.310	16.309	0.001	94	164669	2.00	1.97	
76 Ethylbenzene	91	16.584	16.585	-0.001	99	264773	2.00	2.12	
77 m-Xylene & p-Xylene	91	16.744	16.745	-0.001	98	427470	4.00	4.32	
78 n-Nonane	57	17.132	17.134	-0.002	95	152966	2.00	2.15	
80 Styrene	104	17.209	17.209	0.000	98	138635	2.00	2.31	
79 Bromoform	173	17.209	17.208	0.001	77	100938	2.00	2.10	
81 o-Xylene	91	17.271	17.270	0.001	99	218585	2.00	2.11	
82 1,1,2,2-Tetrachloroethane	83	17.591	17.591	0.000	98	183101	2.00	2.00	
83 1,2,3-Trichloropropane	110	17.747	17.747	0.000	97	40738	2.00	1.96	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	17.840	17.842	-0.002	96	285073	2.00	2.18	
85 N-Propylbenzene	120	18.356	18.356	0.000	99	74473	2.00	2.12	
86 2-Chlorotoluene	126	18.408	18.408	0.000	98	68725	2.00	2.05	
87 4-Ethyltoluene	105	18.496	18.496	0.000	98	274063	2.00	2.08	
88 1,3,5-Trimethylbenzene	120	18.568	18.567	0.001	92	119868	2.00	1.95	
89 Alpha Methyl Styrene	118	18.791	18.791	0.000	87	108031	2.00	2.37	
90 n-Decane	57	18.822	18.822	0.000	87	211962	2.00	2.04	
91 tert-Butylbenzene	119	18.977	18.979	-0.002	92	281235	2.00	2.11	
92 1,2,4-Trimethylbenzene	105	18.992	18.991	0.001	96	260842	2.00	2.18	
93 sec-Butylbenzene	105	19.240	19.239	0.001	99	383279	2.00	2.17	
94 1,3-Dichlorobenzene	146	19.261	19.263	-0.002	98	127639	2.00	2.05	
95 Benzyl chloride	91	19.333	19.333	0.000	98	140127	2.00	2.02	
96 1,4-Dichlorobenzene	146	19.344	19.345	-0.001	95	106707	2.00	2.33	
97 4-Isopropyltoluene	119	19.390	19.393	-0.003	97	344253	2.00	2.41	
98 1,2,3-Trimethylbenzene	105	19.452	19.452	0.000	99	257743	2.00	2.24	
99 Butylcyclohexane	83	19.493	19.494	-0.001	90	213538	2.00	2.16	
101 2,3-Dihydroindene	117	19.695	19.695	0.000	93	209539	2.00	2.20	
100 1,2-Dichlorobenzene	146	19.700	19.699	0.001	99	137779	2.00	2.01	
103 n-Butylbenzene	91	19.814	19.814	0.000	97	360249	2.00	2.28	
102 Indene	116	19.824	19.824	0.000	97	178212	2.00	2.18	
104 Undecane	57	20.098	20.098	0.000	93	255017	2.00	2.15	
105 1,2-Dibromo-3-Chloropropane	157	20.289	20.288	0.001	96	89447	2.00	2.55	
106 1,2,4,5-Tetramethylbenzene	119	20.563	20.563	0.000	97	305087	2.00	2.16	
107 Dodecane	57	21.173	21.175	-0.002	91	178065	2.00	2.13	
108 1,2,4-Trichlorobenzene	180	21.416	21.418	-0.002	94	59828	2.00	1.86	
109 Naphthalene	128	21.561	21.559	0.002	99	183378	2.00	1.95	
110 Hexachlorobutadiene	225	21.726	21.727	-0.001	91	128278	2.00	1.95	
111 1,2,3-Trichlorobenzene	180	21.793	21.793	0.000	95	75774	2.00	1.97	
112 2-Methylnaphthalene	142	22.341	22.340	0.001	99	9604	2.00	0.6414	
113 1-Methylnaphthalene	142	22.470	22.468	0.002	99	14439	2.00	0.8356	
A 115 C8 Range	1	14.966	(14.914-15.007)		0	740857	2.00	2.03	
S 116 Xylenes, Total	100				0		6.00	6.43	
S 117 1,2-Dichloroethene, Total	1				0		4.00	4.00	

Reagents:

40L7DQP_00019	Amount Added: 200.00	Units: mL	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

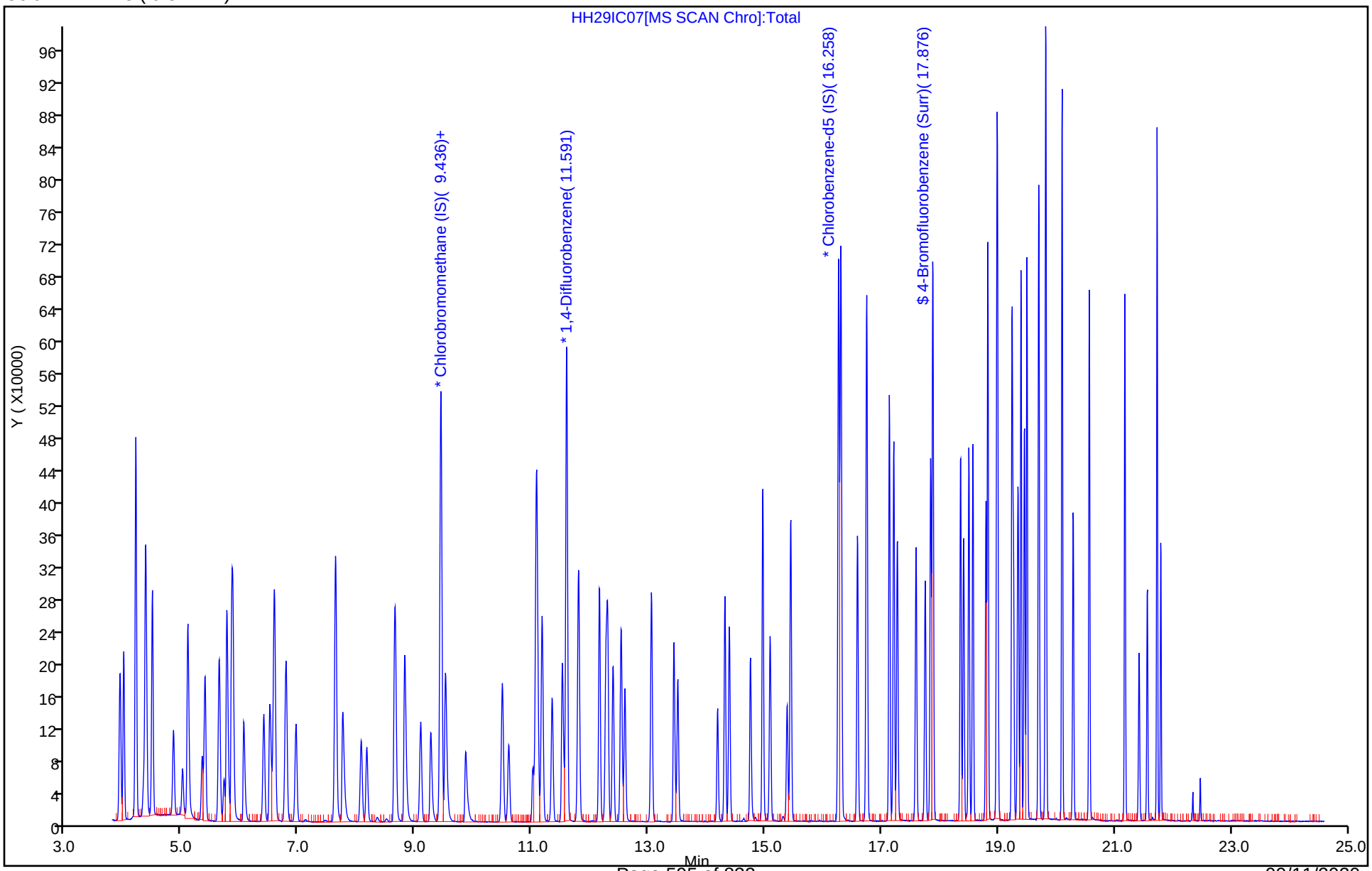
Report Date: 31-Aug-2020 12:25:21 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D

Injection Date:	29-Aug-2020 23:57:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	ICIS L7			Worklist Smp#:	15
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



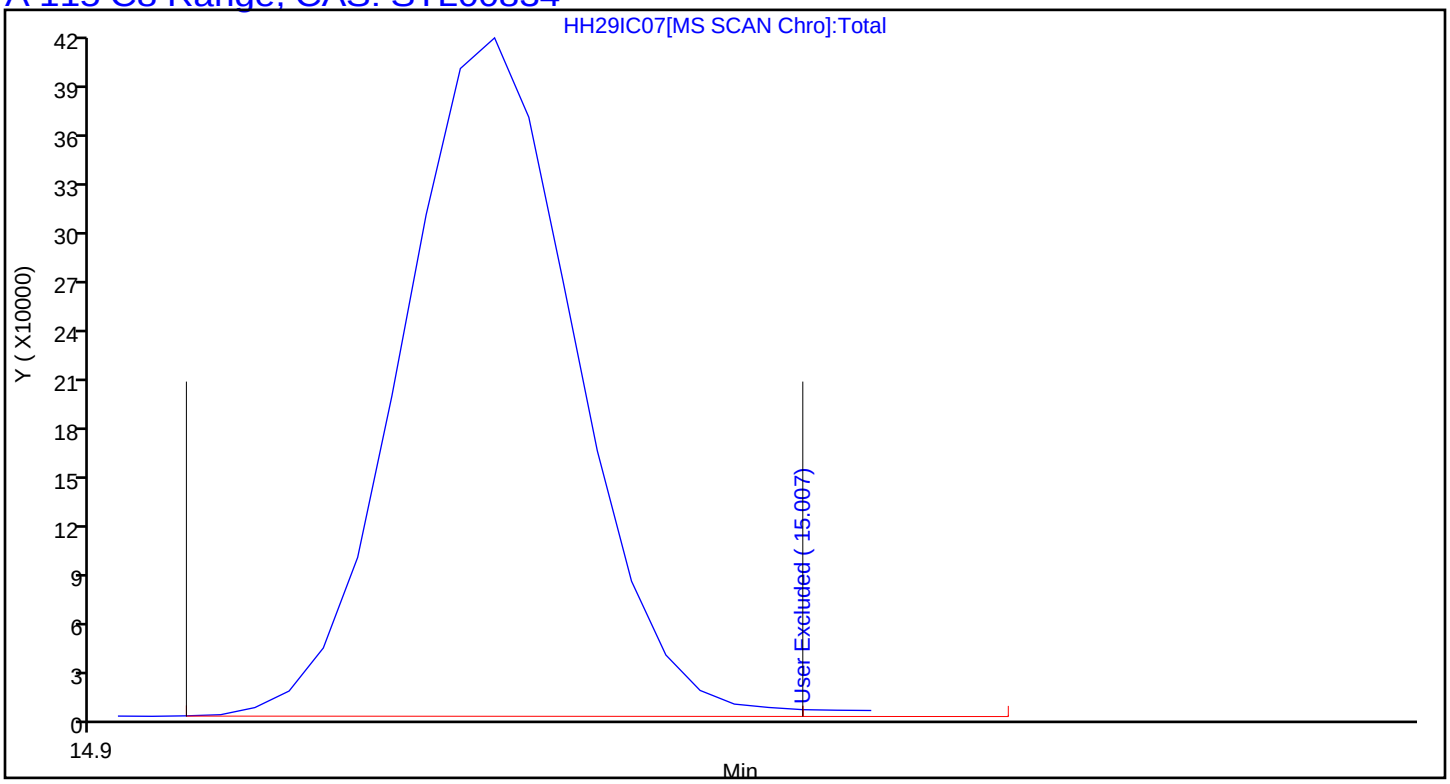
09/11/2020

Report Date: 31-Aug-2020 12:25:21 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D				
Injection Date:	29-Aug-2020 23:57:30	Instrument ID:	MH		
Lims ID:	ICIS L7				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	12	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 115 C8 Range, CAS: STL00834



FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42222

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2020 14:01 Calibration End Date: 08/29/2020 00:02 Calibration ID: 2588

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 140-42222/9	RH28IC01.D
Level 2	IC 140-42222/10	RH28IC02.D
Level 3	IC 140-42222/11	RH28IC03.D
Level 4	IC 140-42222/12	RH28IC04.D
Level 5	IC 140-42222/13	RH28IC05.D
Level 6	IC 140-42222/14	RH28IC06.D
Level 7	ICIS 140-42222/15	RH28IC07.D
Level 8	IC 140-42222/7	RH28IC08.D
Level 9	IC 140-42222/5	RH28IC09.D
Level 10	IC 140-42222/3	RH28IC10X.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Chlorodifluoromethane	+++++ 2.6107	+++++ 2.7021	3.2111 2.4612	2.8921 2.5686	2.5376 2.5100	Ave		2.6867				9.3		30.0			
Propene	+++++ 1.3377	+++++ 1.3956	+++++ 1.2227	+++++ 1.1436	1.2930 1.2580	Ave		1.2751				6.9		30.0			
Dichlorodifluoromethane	+++++ 2.1218	+++++ 2.3299	2.2530 2.0272	2.7264 1.0941	1.8744 1.7080	Ave		2.0169				24.0		30.0			
Chloromethane	+++++ 0.5202	+++++ 0.5116	+++++ 0.4425	0.5370 0.3959	0.4955 0.4360	Ave		0.4770				11.0		30.0			
1,2-Dichloro-1,1,2,2-tetrafluoroethane	+++++ 2.9556	+++++ 3.1185	3.4544 2.6564	3.3270 1.9204	2.7209 2.4653	Ave		2.8273				17.6		30.0			
Vinyl chloride	+++++ 1.7273	1.9789 1.7775	1.9488 1.4472	1.7168 1.3224	1.6350 1.4500	Lin1	0.0423	1.4404							0.9940		0.9900
1,3-Butadiene	+++++ 1.3346	+++++ 1.4072	+++++ 1.1716	1.3263 1.0425	1.2088 1.1264	Ave		1.2311				10.6		30.0			
Butane	+++++ 2.8578	+++++ 2.9598	+++++ 2.3471	2.9689 2.1336	2.6772 2.2726	Ave		2.6024				13.4		30.0			
Bromomethane	+++++ 1.7493	+++++ 1.7724	2.3301 1.5377	1.9003 1.3768	1.6820 1.4836	Lin2	0.0619	1.5496							0.9930		0.9900
Chloroethane	+++++ 0.7930	+++++ 0.8669	1.1070 0.7330	0.8834 0.6465	0.8172 0.7032	Lin2	0.0291	0.7344							0.9910		0.9900
Ethanol	+++++ 0.9083	+++++ 1.1465	1.3520 0.9252	0.8763 1.0506	0.9238 0.9145	Lin1	0.0876	0.9613							0.9930		0.9900
Vinyl bromide	+++++ 1.5352	+++++ 1.5943	2.1364 1.4075	1.7435 1.2824	1.4402 1.3939	Ave		1.5667				17.2		30.0			
2-Methylbutane	+++++ 2.0457	+++++ 2.0889	2.5536 1.7561	2.2915 1.5923	2.0892 1.7524	Ave		2.0212				15.6		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42222

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2020 14:01 Calibration End Date: 08/29/2020 00:02 Calibration ID: 2588

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Trichlorofluoromethane	+++++ 3.9263	4.5526 4.0016	4.7647 3.3893	4.1249 3.1571	3.9554 3.5072	Ave		3.9310				13.3		30.0			
Acrolein	+++++ 0.3342	+++++ 0.3698	+++++ 0.3807	+++++ 0.3405	0.4206 0.3989	Ave		0.3741				8.9		30.0			
Acetonitrile	+++++ 0.5218	+++++ 0.5928	+++++ 0.5367	+++++ 0.5152	0.5565 0.5738	Ave		0.5495				5.5		30.0			
Acetone	+++++ 0.8127	+++++ 0.7531	+++++ 0.6341	0.7132 0.7062	0.7734 0.6277	Ave		0.7172				9.6		30.0			
Pentane	+++++ 0.2352	+++++ 0.2488	+++++ 0.2357	+++++ 0.1973	0.2386 0.2230	Ave		0.2298				7.8		30.0			
Isopropyl alcohol	+++++ 1.8669	+++++ 2.1571	+++++ 1.9439	1.9930 1.6988	1.9338 1.8861	Ave		1.9256				7.2		30.0			
Ethyl ether	+++++ 1.7091	+++++ 1.7125	+++++ 1.5465	2.0445 1.3833	1.7290 1.5826	Ave		1.6725				12.3		30.0			
1,1-Dichloroethene	+++++ 1.3350	1.9399 1.3374	1.5655 1.3004	1.4989 1.1507	1.3336 1.3025	Ave		1.4182				16.2		30.0			
Acrylonitrile	+++++ 0.8189	+++++ 0.7775	+++++ 0.8468	0.7507 0.7754	0.8034 0.9257	Ave		0.8140				7.2		30.0			
tert-Butyl alcohol	+++++ 2.2882	+++++ 2.5656	+++++ 2.3857	2.6766 2.1426	2.3148 2.4255	Ave		2.3999				7.4		30.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	+++++ 2.9870	3.4885 3.0388	3.5493 2.9029	3.3221 2.5905	2.9463 2.9359	Ave		3.0846				10.0		30.0			
Methylene Chloride	+++++ 1.1693	+++++ 1.1403	+++++ 1.1240	1.3252 1.0360	1.2442 1.1484	Ave		1.1696				7.9		30.0			
3-Chloropropene	+++++ 1.3861	+++++ 1.2522	2.4529 1.2930	1.7850 1.1346	1.3930 1.3789	Lin2	0.0948	1.2347							0.9940		0.9900
Carbon disulfide	+++++ 3.7809	+++++ 3.6595	4.3860 3.5647	3.9759 3.1531	3.8159 3.6005	Ave		3.7421				9.5		30.0			
trans-1,2-Dichloroethene	+++++ 1.3446	+++++ 1.2740	1.5936 1.2677	1.2357 1.1653	1.2725 1.3665	Ave		1.3150				9.8		30.0			
2-Methylpentane	+++++ 3.0664	+++++ 3.0821	4.1716 2.8763	3.3877 2.6060	3.0351 3.0350	Ave		3.1575				14.7		30.0			
Methyl tert-butyl ether	+++++ 3.3024	+++++ 3.2507	+++++ 3.0594	3.6529 2.7228	3.2273 3.1566	Ave		3.1960				8.7		30.0			
1,1-Dichloroethane	+++++ 2.2465	+++++ 2.2234	2.6066 2.1279	2.6248 1.9158	2.3351 2.1842	Ave		2.2830				10.4		30.0			
Vinyl acetate	+++++ 3.3796	+++++ 3.5745	3.5064 3.5863	3.2953 3.2450	3.2326 3.9772	Ave		3.4746				7.1		30.0			
2-Butanone (MEK)	+++++ 0.6582	+++++ 0.6786	+++++ 0.6042	0.7318 0.5890	0.5994 0.6544	Ave		0.6451				8.0		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42222

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2020 14:01 Calibration End Date: 08/29/2020 00:02 Calibration ID: 2588

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Hexane	+++++ 0.9916	+++++ 0.9670	+++++ 0.9389	1.0579 0.8854	0.9660 0.9985	Ave		0.9722				5.5		30.0			
cis-1,2-Dichloroethene	+++++ 1.4151	1.8687 1.4034	1.9769 1.3567	1.6141 1.2253	1.4188 1.4000	Ave		1.5199				16.5		30.0			
Ethyl acetate	+++++ 3.3043	+++++ 3.4449	+++++ 3.2179	3.2448 2.9014	3.0505 3.4322	Ave		3.2280				6.1		30.0			
Chloroform	+++++ 2.8302	3.4065 2.8080	3.4563 2.6266	3.0176 2.3841	2.7318 2.7371	Ave		2.8887				12.2		30.0			
Tetrahydrofuran	+++++ 1.6540	+++++ 1.6863	1.7958 1.5310	1.8290 1.4025	1.7268 1.6005	Ave		1.6533				8.5		30.0			
1,1,1-Trichloroethane	+++++ 2.7253	+++++ 2.6891	3.0889 2.5963	3.1076 2.3440	2.8099 2.7095	Ave		2.7588				9.1		30.0			
1,2-Dichloroethane	+++++ 0.3129	0.3269 0.3151	0.3761 0.3025	0.3448 0.2790	0.2869 0.3375	Ave		0.3202				9.4		30.0			
1-Butanol	+++++ 0.1532	+++++ 0.1843	+++++ 0.1684	+++++ 0.1559	0.1705 0.1980	Ave		0.1717				9.9		30.0			
Cyclohexane	+++++ 0.1134	+++++ 0.1175	+++++ 0.1162	0.1299 0.1083	0.1109 0.1320	Ave		0.1183				7.8		30.0			
Benzene	+++++ 0.8098	+++++ 0.8066	0.9347 0.8056	0.8958 0.7460	0.8119 0.9019	Ave		0.8390				7.6		30.0			
Carbon tetrachloride	0.6680 0.5386	0.5496 0.3919	0.6184 0.5641	0.6065 0.3389	0.5810 0.5543	Ave		0.5411				18.7		30.0			
2,3-Dimethylpentane	+++++ 0.1693	+++++ 0.1780	0.2366 0.1701	0.1907 0.1592	0.1833 0.1852	Ave		0.1840				12.8		30.0			
Thiophene	0.5188 0.4569	0.5575 0.4727	0.5254 0.4550	0.4783 0.4180	0.4549 0.5011	Ave		0.4839				8.6		30.0			
2,2,4-Trimethylpentane	+++++ 1.2664	1.5195 1.2620	1.5640 1.2273	1.4197 1.1562	1.2339 1.3930	Ave		1.3380				10.6		30.0			
Heptane	+++++ 0.2710	+++++ 0.2631	+++++ 0.2624	0.2963 0.2501	0.2673 0.2952	Ave		0.2722				6.4		30.0			
1,2-Dichloropropane	+++++ 0.3177	+++++ 0.3066	0.3645 0.2952	0.3483 0.2774	0.3160 0.3298	Ave		0.3195				8.8		30.0			
Trichloroethene	0.4497 0.3926	0.5298 0.3879	0.4481 0.3687	0.4188 0.3827	0.3813 0.4108	Ave		0.4170				11.6		30.0			
Dibromomethane	+++++ 0.3725	+++++ 0.3485	0.4057 0.3337	0.3569 0.3152	0.3309 0.3921	Ave		0.3569				8.8		30.0			
Bromodichloromethane	+++++ 0.5806	0.6048 0.5864	0.6525 0.5848	0.6050 0.5363	0.6066 0.6685	Ave		0.6028				6.5		30.0			
1,4-Dioxane	+++++ 0.1193	+++++ 0.1472	+++++ 0.1364	0.1623 0.1262	0.1286 0.1438	Ave		0.1377				10.7		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42222

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2020 14:01 Calibration End Date: 08/29/2020 00:02 Calibration ID: 2588

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Methyl methacrylate	+++++ 0.3762	+++++ 0.3852	+++++ 0.3799	0.3616 0.3656	0.3544 0.4380	Ave		0.3801				7.3		30.0			
Methylcyclohexane	+++++ 0.4802	+++++ 0.4840	0.5216 0.4655	0.5248 0.4501	0.4901 0.5293	Ave		0.4932				5.9		30.0			
4-Methyl-2-pentanone (MIBK)	+++++ 0.7725	+++++ 0.7853	0.7472 0.7464	0.7384 0.7266	0.7651 0.8871	Ave		0.7711				6.6		30.0			
cis-1,3-Dichloropropene	+++++ 0.4190	0.4401 0.4418	0.4007 0.4344	0.4131 0.4161	0.3920 0.5123	Ave		0.4299				8.2		30.0			
trans-1,3-Dichloropropene	+++++ 0.4258	0.4704 0.4577	0.4391 0.4665	0.3729 0.4381	0.4085 0.5148	Ave		0.4438				9.1		30.0			
Toluene	1.5227 1.2166	1.4950 1.1968	1.4220 1.2049	1.2887 1.1262	1.2065 1.2431	Ave		1.2923				10.7		30.0			
1,1,2-Trichloroethane	+++++ 0.3841	0.4554 0.3772	0.4175 0.3814	0.3831 0.3370	0.3990 0.3844	Ave		0.3910				8.2		30.0			
2-Hexanone	+++++ 0.3988	+++++ 0.4064	+++++ 0.4116	0.3451 0.3796	0.3498 0.4469	Ave		0.3912				9.2		30.0			
C8 Range	+++++ 2.9679	+++++ 2.9908	+++++ 2.8076	3.1426 2.8844	2.9568 3.5063	Ave		3.0366				7.6		30.0			
Octane	+++++ 0.3405	+++++ 0.3568	0.4173 0.3457	0.3796 0.3306	0.3316 0.3795	Ave		0.3602				8.3		30.0			
Dibromochloromethane	0.7815 0.7039	0.9506 0.7884	0.8680 0.8169	0.7735 0.6994	0.7833 0.8665	Ave		0.8032				9.5		30.0			
1,2-Dibromoethane (EDB)	0.7695 0.6724	0.7671 0.6886	0.6946 0.6890	0.6792 0.6397	0.6444 0.7566	Ave		0.7001				6.9		30.0			
Tetrachloroethene	0.4610 0.4410	0.5741 0.4449	0.5821 0.4318	0.4698 0.3965	0.4838 0.4631	Ave		0.4748				12.5		30.0			
Chlorobenzene	+++++ 0.9237	1.1167 0.9513	1.1452 0.9260	0.9890 0.8674	0.9522 1.0344	Ave		0.9896				9.4		30.0			
Ethylbenzene	+++++ 1.5474	1.8237 1.5917	1.6932 1.5793	1.7106 1.4790	1.5485 1.7595	Ave		1.6370				7.0		30.0			
m-Xylene & p-Xylene	+++++ 1.1650	1.4009 1.2117	1.3095 1.2299	1.2166 1.1594	1.1245 1.4158	Ave		1.2481				8.4		30.0			
Nonane	+++++ 0.7139	0.7828 0.7333	0.7824 0.7708	0.7143 0.7329	0.6910 0.9372	Ave		0.7621				9.6		30.0			
Bromoform	+++++ 0.5881	+++++ 0.8951	0.8517 0.9880	0.8166 0.8099	0.7994 1.2274	Ave		0.8720				20.9		30.0			
Styrene	1.0335 0.8845	0.9510 0.9122	0.9533 0.9157	0.7994 0.8265	0.8445 0.9404	Ave		0.9061				7.7		30.0			
o-Xylene	1.4960 1.2289	1.4610 1.2425	1.3820 1.2551	1.2803 1.1235	1.1730 1.2844	Ave		1.2927				9.3		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42222

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2020 14:01 Calibration End Date: 08/29/2020 00:02 Calibration ID: 2588

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
1,1,2,2-Tetrachloroethane	+++++ 1.0569	1.1258 1.0810	1.0582 1.0709	1.0127 0.8626	1.0351 1.1717	Ave		1.0528				8.1		30.0			
1,2,3-Trichloropropane	+++++ 0.2703	+++++ 0.2851	0.3103 0.2824	0.3054 0.2539	0.2684 0.3047	Ave		0.2850				7.2		30.0			
Isopropylbenzene	+++++ 1.7794	2.0621 1.8117	1.9639 1.8078	1.7919 1.6382	1.7608 1.9665	Ave		1.8425				7.1		30.0			
Propylbenzene	+++++ 0.5297	0.5537 0.5354	0.5514 0.5431	0.5304 0.4982	0.5056 0.6091	Ave		0.5396				5.9		30.0			
2-Chlorotoluene	+++++ 0.4899	+++++ 0.4996	0.5244 0.4913	0.4923 0.4552	0.4929 0.5290	Ave		0.4968				4.6		30.0			
4-Ethyltoluene	1.9783 1.7908	1.9444 1.8488	1.8701 1.8736	1.7237 1.7256	1.7106 2.0878	Ave		1.8554				6.6		30.0			
1,3,5-Trimethylbenzene	0.8183 0.7768	0.9198 0.7933	0.8531 0.7968	0.8230 0.7077	0.7919 0.8664	Ave		0.8147				7.0		30.0			
Alpha Methyl Styrene	+++++ 0.7042	0.6979 0.7563	0.7015 0.7933	0.6041 0.7034	0.6763 0.9270	Ave		0.7293				12.4		30.0			
Decane	0.8780 0.9428	0.9411 0.9986	0.9429 1.0406	0.8645 0.9692	0.9119 1.2074	Ave		0.9697				10.2		30.0			
tert-Butylbenzene	2.0483 1.7167	1.8895 1.7502	1.7434 1.8038	1.6991 1.6353	1.6484 2.1972	Ave		1.8132				10.0		30.0			
1,2,4-Trimethylbenzene	1.3114 1.4930	1.5304 1.5670	1.5493 1.6179	1.4642 1.4653	1.4483 1.8995	Ave		1.5346				10.0		30.0			
sec-Butylbenzene	2.0774 2.2811	2.4783 2.3979	2.3657 2.5098	2.2577 2.3164	2.2150 3.1003	Ave		2.4000				11.5		30.0			
1,3-Dichlorobenzene	1.1715 1.1150	1.0596 1.1693	1.2256 1.1751	0.9666 1.1048	1.0669 1.5638	Ave		1.1618				13.7		30.0			
Benzyl chloride	+++++ 1.0678	+++++ 1.2909	1.0657 1.3483	0.9789 1.3285	0.9689 +++++	Ave		1.1499				14.5		30.0			
1,4-Dichlorobenzene	+++++ 1.0968	1.2433 1.1389	1.1419 1.1582	1.0527 1.0585	1.0058 1.4055	Ave		1.1446				10.5		30.0			
4-Isopropyltoluene	1.9776 1.9680	1.9472 2.0484	1.9781 2.0769	1.8973 1.8590	1.8917 2.3582	Ave		2.0002				7.1		30.0			
1,2,3-Trimethylbenzene	+++++ 1.5094	+++++ 1.5689	1.5858 1.6363	1.4419 1.4574	1.4603 1.7475	QuaF		1.3574	0.0238707						0.9980		0.9900
1,2-Dichlorobenzene	1.4030 1.1143	1.3072 1.1632	1.1104 1.1739	1.0866 1.0794	1.0926 1.5622	Ave		1.2093				13.5		30.0			
Indane	1.6506 1.5307	1.6808 1.6026	1.5876 1.6320	1.4412 1.4820	1.4669 2.0435	Ave		1.6118				10.7		30.0			
Indene	+++++ 1.2483	+++++ 1.3699	+++++ 1.4182	1.0599 1.1927	1.1302 1.7651	Ave		1.3120				18.0		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42222

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2020 14:01 Calibration End Date: 08/29/2020 00:02 Calibration ID: 2588

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Butylbenzene	+++++ 1.9203	+++++ 2.0602	1.8296 2.1045	1.6609 1.9023	1.7395 2.4978	Ave		1.9644				13.3		30.0			
Undecane	+++++ 1.1033	+++++ 1.1941	+++++ 1.2678	+++++ 1.1545	0.9439 1.5855	Ave		1.2082				17.7		30.0			
1,2-Dibromo-3-Chloropropane	+++++ 0.4915	+++++ 0.6600	0.4513 0.6724	0.4935 0.6041	0.5134 0.7710	Ave		0.5821				19.3		30.0			
1,2,4,5-Tetramethylbenzene	+++++ 1.8110	+++++ 1.9043	1.6911 1.9685	1.5337 1.7952	1.6140 2.4458	Ave		1.8455				15.3		30.0			
Dodecane	+++++ 0.9514	+++++ 1.1673	+++++ 1.2766	+++++ 1.1566	0.8186 +++++	Ave		1.0741				17.2		30.0			
1,2,4-Trichlorobenzene	1.1514 0.9610	0.9721 1.0561	0.8105 1.0666	0.7225 0.9662	0.8074 1.3675	Ave		0.9881				19.0		30.0			
Naphthalene	2.3112 1.8770	1.5627 2.1846	1.8704 2.1078	1.5305 1.7941	1.7672 2.2522	Ave		1.9258				14.4		30.0			
Hexachlorobutadiene	1.2118 1.0888	1.3758 1.1207	1.3250 1.0345	1.0426 0.8985	1.0677 1.2938	Ave		1.1459				13.2		30.0			
1,2,3-Trichlorobenzene	+++++ 0.9354	1.0893 1.0383	1.2290 0.9483	0.8446 0.7775	0.9291 0.9989	Ave		0.9767				13.7		30.0			
2-Methylnaphthalene	+++++ 0.6876	+++++ 1.2166	+++++ 1.5188	+++++ 1.5680	0.6373 +++++	Ave		1.1257				39.5		50.0			
1-Methylnaphthalene	+++++ 1.2225	+++++ 1.8713	1.6323 2.0880	1.0166 1.9880	1.3245 +++++	Ave		1.5919				25.9		50.0			
4-Bromofluorobenzene (Surr)	0.5970 0.6379	0.6102 0.6606	0.5988 0.7097	0.6120 0.6779	0.6321 0.6811	Ave		0.6418				6.1		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42222

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2020 14:01 Calibration End Date: 08/29/2020 00:02 Calibration ID: 2588

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 140-42222/9	RH28IC01.D
Level 2	IC 140-42222/10	RH28IC02.D
Level 3	IC 140-42222/11	RH28IC03.D
Level 4	IC 140-42222/12	RH28IC04.D
Level 5	IC 140-42222/13	RH28IC05.D
Level 6	IC 140-42222/14	RH28IC06.D
Level 7	ICIS 140-42222/15	RH28IC07.D
Level 8	IC 140-42222/7	RH28IC08.D
Level 9	IC 140-42222/5	RH28IC09.D
Level 10	IC 140-42222/3	RH28IC10X.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
Chlorodifluoromethane	CBM	Ave	+++++ 127298	+++++ 265191	12116 650155	22349 1304143	49801 2275714	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Propene	CBM	Ave	+++++ 65227	+++++ 136966	+++++ 322982	+++++ 580652	25376 1140577	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
Dichlorodifluoromethane	CBM	Ave	+++++ 103463	+++++ 228663	8501 535510	21069 555502	36786 1548541	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Chloromethane	CBM	Ave	+++++ 25367	+++++ 50211	+++++ 116889	4150 200994	9725 395335	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,2-Dichloro-1,1,2,2-tetrafluoroethane	CBM	Ave	+++++ 144116	+++++ 306061	13034 701732	25710 975066	53398 2235145	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Vinyl chloride	CBM	Lin1	+++++ 84224	4006 174448	7353 382291	13267 671429	32086 1314670	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,3-Butadiene	CBM	Ave	+++++ 65078	+++++ 138107	+++++ 309504	10249 529338	23722 1021294	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Butane	CBM	Ave	+++++ 139349	+++++ 290488	+++++ 620005	22943 1083279	52540 2060495	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Bromomethane	CBM	Lin2	+++++ 85297	+++++ 173948	8792 406202	14685 699062	33010 1345114	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Chloroethane	CBM	Lin2	+++++ 38665	+++++ 85082	4177 193624	6827 328258	16037 637533	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Ethanol	CBM	Lin1	+++++ 221455	+++++ 562595	25506 1222004	33858 2667054	90649 4145838	+++++ 5.00	+++++ 10.0	0.400 20.0	0.800 40.0	2.00 80.0
Vinyl bromide	CBM	Ave	+++++ 74856	+++++ 156474	8061 371798	13473 651128	28263 1263816	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Methylbutane	CBM	Ave	+++++ 99751	+++++ 205009	9635 463903	17708 808457	41000 1588785	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Trichlorofluoromethane	CBM	Ave	+++++ 191450	9216 392725	17978 895318	31876 1602992	77624 3179856	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42222

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2020 14:01 Calibration End Date: 08/29/2020 00:02 Calibration ID: 2588

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
Acrolein	CBM	Ave	+++++ 16296	+++++ 36292	+++++ 100565	+++++ 172897	8255 361684	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
Acetonitrile	CBM	Ave	+++++ 25442	+++++ 58184	+++++ 141775	+++++ 261561	10922 520199	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
Acetone	CBM	Ave	+++++ 118879	+++++ 221734	+++++ 502478	16535 1075673	45535 1707400	+++++ 3.00	+++++ 6.00	+++++ 12.0	0.480 24.0	1.20 48.0
Pentane	CBM	Ave	+++++ 11470	+++++ 24417	+++++ 62271	+++++ 100157	4682 202182	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
Isopropyl alcohol	CBM	Ave	+++++ 273089	+++++ 635105	+++++ 1540486	46204 2587659	113852 5130084	+++++ 3.00	+++++ 6.00	+++++ 12.0	0.480 24.0	1.20 48.0
Ethyl ether	CBM	Ave	+++++ 83338	+++++ 168072	+++++ 408518	15799 702368	33932 1434919	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,1-Dichloroethene	CBM	Ave	+++++ 65097	3927 131261	5907 343522	11583 584264	26172 1180876	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Acrylonitrile	CBM	Ave	+++++ 39929	+++++ 76309	+++++ 223695	5801 393674	15766 839327	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
tert-Butyl alcohol	CBM	Ave	+++++ 111576	+++++ 251800	+++++ 630225	20684 1087876	45427 2199065	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,1,2-Trichloro-1,2,2-trifluoroetha ne	CBM	Ave	+++++ 145650	7062 298238	13392 766832	25672 1315291	57821 2661840	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Methylene Chloride	CBM	Ave	+++++ 57015	+++++ 111917	+++++ 296909	10241 526013	24417 1041211	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
3-Chloropropene	CBM	Lin2	+++++ 67588	+++++ 122895	9255 341550	13794 576055	27338 1250194	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Carbon disulfide	CBM	Ave	+++++ 184361	+++++ 359151	16549 941650	30725 1600962	74887 3264452	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
trans-1,2-Dichloroethene	CBM	Ave	+++++ 65564	+++++ 125032	6013 334887	9549 591662	24973 1238959	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Methylpentane	CBM	Ave	+++++ 149522	+++++ 302486	15740 759801	26179 1323151	59564 2751716	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Methyl tert-butyl ether	CBM	Ave	+++++ 161027	+++++ 319038	+++++ 808171	28229 1382456	63335 2861968	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,1-Dichloroethane	CBM	Ave	+++++ 109543	+++++ 218207	9835 562108	20284 972743	45826 1980304	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Vinyl acetate	CBM	Ave	+++++ 164791	+++++ 350811	13230 947376	25465 1647589	63440 3605976	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Butanone (MEK)	CBM	Ave	+++++ 32092	+++++ 66602	+++++ 159615	5655 299060	11764 593341	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Hexane	CBM	Ave	+++++ 48352	+++++ 94902	+++++ 248032	8175 449542	18958 905328	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
cis-1,2-Dichloroethene	CBM	Ave	+++++ 69003	3783 137736	7459 358383	12473 622149	27844 1269311	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42222

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2020 14:01 Calibration End Date: 08/29/2020 00:02 Calibration ID: 2588

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
Ethyl acetate	CBM	Ave	+++++ 161118	+++++ 338095	+++++ 850049	25075 1473148	59867 3111841	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Chloroform	CBM	Ave	+++++ 138005	6896 275584	13041 693845	23319 1210475	53612 2481600	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Tetrahydrofuran	CBM	Ave	+++++ 80650	+++++ 165501	6776 404434	14134 712114	33889 1451125	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,1,1-Trichloroethane	CBM	Ave	+++++ 132887	+++++ 263917	11655 685853	24015 1190125	55145 2456565	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2-Dichloroethane	DFBZ	Ave	+++++ 74410	3317 151483	7149 377659	13273 669529	27571 1378531	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1-Butanol	DFBZ	Ave	+++++ 36431	+++++ 88621	+++++ 210201	+++++ 374149	16387 808642	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
Cyclohexane	DFBZ	Ave	+++++ 26969	+++++ 56508	+++++ 145010	5002 259931	10658 539211	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Benzene	DFBZ	Ave	+++++ 192558	+++++ 387828	17766 1005771	34483 1789877	78024 3684390	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Carbon tetrachloride	DFBZ	Ave	3577 128080	5576 188413	11755 704270	23349 813090	55838 2264347	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2,3-Dimethylpentane	DFBZ	Ave	+++++ 40258	+++++ 85591	4497 212342	7341 381971	17614 756504	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Thiophene	DFBZ	Ave	2778 108649	5656 227296	9987 568076	18414 1002834	43711 2047191	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2,2,4-Trimethylpentane	DFBZ	Ave	+++++ 301136	15416 606757	29729 1532236	54652 2774121	118580 5690429	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Heptane	DFBZ	Ave	+++++ 64445	+++++ 126478	+++++ 327659	11408 600087	25685 1206014	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,2-Dichloropropane	DFBZ	Ave	+++++ 75552	+++++ 147432	6928 368593	13409 665617	30367 1347228	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Trichloroethene	DFBZ	Ave	2408 93344	5375 186495	8518 460313	16123 918209	36639 1678146	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Dibromomethane	DFBZ	Ave	+++++ 88564	+++++ 167543	7712 416603	13741 756385	31799 1601897	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Bromodichloromethane	DFBZ	Ave	+++++ 138050	6136 281919	12403 730160	23290 1286733	58298 2730666	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,4-Dioxane	DFBZ	Ave	+++++ 28356	+++++ 70796	+++++ 170270	6249 302822	12357 587447	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Methyl methacrylate	DFBZ	Ave	+++++ 89454	+++++ 185193	+++++ 474303	13921 877144	34057 1789286	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Methylcyclohexane	DFBZ	Ave	+++++ 114174	+++++ 232691	9915 581197	20204 1079994	47102 2162335	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
4-Methyl-2-pentanone (MIBK)	DFBZ	Ave	+++++ 183690	+++++ 377560	14203 931901	28426 1743415	73528 3624018	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42222

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2020 14:01 Calibration End Date: 08/29/2020 00:02 Calibration ID: 2588

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
cis-1,3-Dichloropropene	DFBZ	Ave	+++++ 99621	4465 212426	7616 542319	15902 998372	37667 2092713	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
trans-1,3-Dichloropropene	CBZd 5	Ave	+++++ 81690	3725 178293	6617 458192	11410 892213	30968 1882319	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Toluene	CBZd 5	Ave	6500 233387	11839 466172	21430 1183470	39429 2293689	91467 4545670	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,1,2-Trichloroethane	CBZd 5	Ave	+++++ 73682	3606 146935	6292 374576	11721 686436	30249 1405700	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Hexanone	CBZd 5	Ave	+++++ 76512	+++++ 158306	+++++ 404266	10559 773120	26516 1634007	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
C8 Range	DFBZ	Ave	+++++ 705715	+++++ 1437970	+++++ 3505252	120977 6920701	284144 14323556	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Octane	CBZd 5	Ave	+++++ 65320	+++++ 138962	6289 339542	11613 673298	25142 1387808	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Dibromochloromethane	CBZd 5	Ave	3336 135038	7528 307102	13081 802340	23664 1424458	59382 3168351	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2-Dibromoethane (EDB)	CBZd 5	Ave	3285 128985	6075 268235	10468 676768	20780 1302791	48853 2766666	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Tetrachloroethene	CBZd 5	Ave	1968 84607	4546 173290	8773 424142	14375 807488	36680 1693538	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Chlorobenzene	CBZd 5	Ave	+++++ 177202	8843 370564	17259 909511	30260 1766662	72187 3782505	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Ethylbenzene	CBZd 5	Ave	+++++ 296847	14442 619977	25517 1551175	52336 3012093	117394 6434077	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
m-Xylene & p-Xylene	CBZd 5	Ave	+++++ 446971	22187 943918	39468 2416062	74443 4722635	170497 10354326	+++++ 2.00	0.0800 4.00	0.160 8.00	0.320 16.0	0.800 32.0
Nonane	CBZd 5	Ave	+++++ 136944	6199 285635	11791 757072	21853 1492619	52388 3426882	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Bromoform	CBZd 5	Ave	+++++ 112819	+++++ 348652	12835 970471	24984 1649540	60606 4488198	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Styrene	CBZd 5	Ave	4412 169678	7531 355324	14366 899378	24458 1683260	64024 3438805	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
o-Xylene	CBZd 5	Ave	6386 235739	11570 483966	20827 1232727	39171 2288199	88929 4696734	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,1,2,2-Tetrachloroethane	CBZd 5	Ave	+++++ 202741	8915 421084	15948 1051867	30983 1756745	78471 4284716	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2,3-Trichloropropane	CBZd 5	Ave	+++++ 51846	+++++ 111032	4676 277341	9345 517052	20345 1114033	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Isopropylbenzene	CBZd 5	Ave	+++++ 341357	16330 705690	29597 1775686	54823 3336387	133486 7190839	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Propylbenzene	CBZd 5	Ave	+++++ 101614	4385 208556	8310 533438	16229 1014657	38332 2227195	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42222

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2020 14:01 Calibration End Date: 08/29/2020 00:02 Calibration ID: 2588

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
2-Chlorotoluene	CBZd 5	Ave	+++++ 93983	+++++ 194607	7903 482530	15062 927008	37371 1934483	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
4-Ethyltoluene	CBZd 5	Ave	8445 343535	15398 720149	28183 1840276	52736 3514356	129680 7634335	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,3,5-Trimethylbenzene	CBZd 5	Ave	3493 149024	7284 309009	12856 782651	25181 1441235	60035 3168156	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Alpha Methyl Styrene	CBZd 5	Ave	+++++ 135090	5527 294594	10571 779234	18483 1432499	51272 3389797	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Decane	CBZd 5	Ave	3748 180855	7453 388959	14210 1022123	26449 1973903	69136 4415206	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
tert-Butylbenzene	CBZd 5	Ave	8744 329329	14963 681711	26273 1771724	51984 3330576	124968 8034487	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2,4-Trimethylbenzene	CBZd 5	Ave	5598 286404	12119 610351	23348 1589105	44796 2984296	109799 6945966	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
sec-Butylbenzene	CBZd 5	Ave	8868 437590	19626 934003	35652 2465129	69073 4717663	167919 11336996	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,3-Dichlorobenzene	CBZd 5	Ave	5001 213903	8391 455458	18470 1154226	29573 2250010	80880 5718247	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Benzyl chloride	CBZd 5	Ave	+++++ 204834	+++++ 502843	16061 1324267	29950 2705606	73450 +++++	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
1,4-Dichlorobenzene	CBZd 5	Ave	+++++ 210409	9846 443624	17209 1137617	32208 2155852	76253 5139306	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
4-Isopropyltoluene	CBZd 5	Ave	8442 377534	15420 797863	29811 2039984	58048 3785986	143416 8623233	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2,3-Trimethylbenzene	CBZd 5	QuaF	+++++ 289551	+++++ 611095	23899 1607154	44115 2968221	110706 6390147	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2-Dichlorobenzene	CBZd 5	Ave	5989 213760	10352 453097	16734 1152986	33245 2198253	82831 5712566	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Indane	CBZd 5	Ave	7046 293635	13310 624224	23925 1602979	44093 3018326	111206 7472425	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Indene	CBZd 5	Ave	+++++ 239465	+++++ 533579	+++++ 1393000	32427 2429019	85683 6454449	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Butylbenzene	CBZd 5	Ave	+++++ 368369	+++++ 802465	27573 2067016	50815 3874165	131876 9133646	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Undecane	CBZd 5	Ave	+++++ 211658	+++++ 465102	+++++ 1245231	+++++ 2351229	71560 5797790	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
1,2-Dibromo-3-Chloropropane	CBZd 5	Ave	+++++ 94295	+++++ 257066	6801 660392	15099 1230284	38919 2819167	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2,4,5-Tetramethylbenzene	CBZd 5	Ave	+++++ 347414	+++++ 741766	25485 1933526	46923 3656188	122363 8943677	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Dodecane	CBZd 5	Ave	+++++ 182504	+++++ 454692	+++++ 1253840	+++++ 2355654	62063 +++++	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 +++++

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42222

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2020 14:01 Calibration End Date: 08/29/2020 00:02 Calibration ID: 2588

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
1,2,4-Trichlorobenzene	CBZd5	Ave	4915 184352	7698 411351	12214 1047600	22105 1967788	61208 5000474	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Naphthalene	CBZd5	Ave	9866 360065	12375 850922	28187 2070294	46825 3653921	133974 8235513	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Hexachlorobutadiene	CBZd5	Ave	5173 208874	10895 436547	19968 1016101	31897 1829979	80947 4731090	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2,3-Trichlorobenzene	CBZd5	Ave	+++++ 179439	8626 404438	18521 931429	25842 1583400	70435 3652527	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Methylnaphthalene	CBZd5	Ave	+++++ 131911	+++++ 473896	+++++ 1491875	+++++ 3193576	48315 +++++	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 +++++
1-Methylnaphthalene	CBZd5	Ave	+++++ 234530	+++++ 728929	24600 2050918	31105 4049020	100421 +++++	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
4-Bromofluorobenzene (Surr)	CBZd5	Ave	591232 567801	560541 596993	523427 808580	543030 800804	555919 722319	4.64 4.64	4.64 4.64	4.64 4.64	4.64 4.64	4.64 4.64

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD
Lin2 = Linear 1/conc^2 ISTD
QuaF = Quadratic ISTD forced zero

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42222

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2020 14:01 Calibration End Date: 08/29/2020 00:02 Calibration ID: 2588

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 140-42222/9	RH28IC01.D
Level 2	IC 140-42222/10	RH28IC02.D
Level 3	IC 140-42222/11	RH28IC03.D
Level 4	IC 140-42222/12	RH28IC04.D
Level 5	IC 140-42222/13	RH28IC05.D
Level 6	IC 140-42222/14	RH28IC06.D
Level 7	ICIS 140-42222/15	RH28IC07.D
Level 8	IC 140-42222/7	RH28IC08.D
Level 9	IC 140-42222/5	RH28IC09.D
Level 10	IC 140-42222/3	RH28IC10X.D

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
Chlorodifluoromethane	+++++	+++++	19.5						50			
Propene	+++++	+++++	+++++	+++++	1.4						50	
Dichlorodifluoromethane	+++++	+++++	11.7						50			
Chloromethane	+++++	+++++	+++++	12.6						50		
1,2-Dichloro-1,1,2,2-tetrafluoroethane	+++++	+++++	22.2						50			
Vinyl chloride	+++++	-36.1						50				
1,3-Butadiene	+++++	+++++	+++++	7.7						50		
Butane	+++++	+++++	+++++	14.1						50		
Bromomethane	+++++	+++++	0.4						50			
Chloroethane	+++++	+++++	1.2						50			
Ethanol	+++++	+++++	17.8						50			
Vinyl bromide	+++++	+++++	36.4						50			
2-Methylbutane	+++++	+++++	26.3						50			
Trichlorofluoromethane	+++++	15.8						50				

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42222

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2020 14:01 Calibration End Date: 08/29/2020 00:02 Calibration ID: 2588

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
Acrolein	+++++	+++++	+++++	+++++	12.4						50	
Acetonitrile	+++++	+++++	+++++	+++++	1.3						50	
Acetone	+++++	+++++	+++++	-0.6						80		
Pentane	+++++	+++++	+++++	+++++	3.8						50	
Isopropyl alcohol	+++++	+++++	+++++	3.5						50		
Ethyl ether	+++++	+++++	+++++	22.2						50		
1,1-Dichloroethene	+++++	36.8						50				
Acrylonitrile	+++++	+++++	+++++	-7.8						50		
tert-Butyl alcohol	+++++	+++++	+++++	11.5						50		
1,1,2-Trichloro-1,2,2-trifluoroethane	+++++	13.1						50				
Methylene Chloride	+++++	+++++	+++++	13.3						80		
3-Chloropropene	+++++	+++++	2.7						50			
Carbon disulfide	+++++	+++++	17.2						50			
trans-1,2-Dichloroethene	+++++	+++++	21.2						50			
2-Methylpentane	+++++	+++++	32.1						50			
Methyl tert-butyl ether	+++++	+++++	+++++	14.3						50		
1,1-Dichloroethane	+++++	+++++	14.2						50			
Vinyl acetate	+++++	+++++	0.9						50			
2-Butanone (MEK)	+++++	+++++	+++++	13.4						50		
Hexane	+++++	+++++	+++++	8.8						50		
cis-1,2-Dichloroethene	+++++	23.0						50				

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42222

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2020 14:01 Calibration End Date: 08/29/2020 00:02 Calibration ID: 2588

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
Ethyl acetate	+++++	+++++	+++++	0.5						50		
Chloroform	+++++	17.9						50				
Tetrahydrofuran	+++++	+++++	8.6						50			
1,1,1-Trichloroethane	+++++	+++++	12.0						50			
1,2-Dichloroethane	+++++	2.1						50				
1-Butanol	+++++	+++++	+++++	+++++	-0.7						50	
Cyclohexane	+++++	+++++	+++++	9.8						50		
Benzene	+++++	+++++	11.4						50			
Carbon tetrachloride	23.4						50					
2,3-Dimethylpentane	+++++	+++++	28.5						50			
Thiophene	7.2						50					
2,2,4-Trimethylpentane	+++++	13.6						50				
Heptane	+++++	+++++	+++++	8.9						50		
1,2-Dichloropropane	+++++	+++++	14.1						50			
Trichloroethene	7.8						50					
Dibromomethane	+++++	+++++	13.7						50			
Bromodichloromethane	+++++	0.3						50				
1,4-Dioxane	+++++	+++++	+++++	17.9						50		
Methyl methacrylate	+++++	+++++	+++++	-4.9						50		
Methylcyclohexane	+++++	+++++	5.8						50			
4-Methyl-2-pentanone (MIBK)	+++++	+++++	-3.1						50			

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42222

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2020 14:01 Calibration End Date: 08/29/2020 00:02 Calibration ID: 2588

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
cis-1,3-Dichloropropene	+++++	2.4						50				
trans-1,3-Dichloropropene	+++++	6.0						50				
Toluene	17.8						50					
1,1,2-Trichloroethane	+++++	16.5						50				
2-Hexanone	+++++	+++++	+++++	-11.8						50		
Octane	+++++	+++++	15.9						50			
Dibromochloromethane	-2.7						50					
1,2-Dibromoethane (EDB)	9.9						50					
Tetrachloroethene	-2.9						50					
Chlorobenzene	+++++	12.8						50				
Ethylbenzene	+++++	11.4						50				
m-Xylene & p-Xylene	+++++	12.2						50				
Nonane	+++++	2.7						50				
Bromoform	+++++	+++++	-2.3						50			
Styrene	14.1						50					
o-Xylene	15.7						50					
1,1,2,2-Tetrachloroethane	+++++	6.9						50				
1,2,3-Trichloropropane	+++++	+++++	8.9						50			
Isopropylbenzene	+++++	11.9						50				
Propylbenzene	+++++	2.6						50				
2-Chlorotoluene	+++++	+++++	5.6						50			

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42222

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2020 14:01 Calibration End Date: 08/29/2020 00:02 Calibration ID: 2588

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
4-Ethyltoluene	6.6						50					
1,3,5-Trimethylbenzene	0.4						50					
Alpha Methyl Styrene	+++++	-4.3						50				
Decane	-9.5						50					
tert-Butylbenzene	13.0						50					
1,2,4-Trimethylbenzene	-14.5						50					
sec-Butylbenzene	-13.4						50					
1,3-Dichlorobenzene	0.8						50					
Benzyl chloride	+++++	+++++	-7.3	+++++					50			
1,4-Dichlorobenzene	+++++	8.6						50				
4-Isopropyltoluene	-1.1						50					
1,2,3-Trimethylbenzene	+++++	+++++	16.6						50			
1,2-Dichlorobenzene	16.0						50					
Indane	2.4						50					
Indene	+++++	+++++	+++++	-19.2						50		
Butylbenzene	+++++	+++++	-6.9						50			
Undecane	+++++	+++++	+++++	+++++	-21.9						50	
1,2-Dibromo-3-Chloropropane	+++++	+++++	-22.5						50			
1,2,4,5-Tetramethylbenzene	+++++	+++++	-8.4						50			
Dodecane	+++++	+++++	+++++	+++++ +++++	-23.8						50	
1,2,4-Trichlorobenzene	16.5						50					

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42222

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2020 14:01 Calibration End Date: 08/29/2020 00:02 Calibration ID: 2588

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
Naphthalene	20.0						80					
Hexachlorobutadiene	5.7						50					
1,2,3-Trichlorobenzene	+++++	11.5						50				
2-Methylnaphthalene	+++++	+++++	+++++	+++++ +++++	-43.4						80	
1-Methylnaphthalene	+++++	+++++	2.5	+++++					80			

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC10X.D
Lims ID: IC L10
Client ID:
Sample Type: IC Calib Level: 10
Inject. Date: 28-Aug-2020 14:01:30 ALS Bottle#: 15 Worklist Smp#: 3
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016425-003
Misc. Info.: 314600
Operator ID: HMT Instrument ID: MR
Sublist: chrom-MR_TO15*sub16

Method: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 31-Aug-2020 13:42:30 Calib Date: 29-Aug-2020 00:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1064

First Level Reviewer: barlozhetskayaa Date: 31-Aug-2020 13:34:14

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.301	8.283	0.018	97	271997	4.80	4.80	
* 2 1,4-Difluorobenzene	114	10.534	10.519	0.015	93	1225515	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.360	15.356	0.004	86	1097008	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.010	17.006	0.004	95	722319	4.64	4.92	
7 Propene	41	3.340	3.343	-0.003	98	1140577	16.0	15.8	
6 Chlorodifluoromethane	51	3.335	3.345	-0.010	99	2275714	16.0	14.9	
8 Dichlorodifluoromethane	85	3.389	3.390	-0.001	99	1548541	16.0	13.5	
9 Chloromethane	52	3.556	3.559	-0.003	97	395335	16.0	14.6	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.567	3.568	-0.001	93	2235145	16.0	14.0	
11 Acetaldehyde	44	3.707	3.709	-0.002	89	2901246	80.0	68.3	
12 Vinyl chloride	62	3.712	3.716	-0.004	99	1314670	16.0	16.1	
14 Butadiene	54	3.799	3.798	0.001	68	1021294	16.0	14.6	
13 Butane	43	3.799	3.799	0.000	86	2060495	16.0	14.0	
15 Bromomethane	94	4.095	4.094	0.001	98	1345114	16.0	15.3	
16 Chloroethane	64	4.225	4.221	0.004	89	637533	16.0	15.3	
17 Ethanol	31	4.359	4.345	0.014	99	4145838	80.0	76.0	
18 Vinyl bromide	106	4.510	4.502	0.008	96	1263816	16.0	14.2	
19 2-Methylbutane	43	4.548	4.547	0.001	94	1588785	16.0	13.9	
20 Trichlorofluoromethane	101	4.758	4.751	0.007	97	3179856	16.0	14.3	
21 Acrolein	56	4.775	4.775	0.000	93	361684	16.0	17.1	
22 Acetonitrile	40	4.856	4.841	0.015	99	520199	16.0	16.7	
23 Acetone	58	4.882	4.891	-0.009	99	1707400	48.0	42.0	
24 Pentane	72	4.963	4.960	0.003	97	202182	16.0	15.5	
25 Isopropyl alcohol	45	5.007	4.996	0.010	99	5130084	48.0	47.0	
26 Ethyl ether	31	5.131	5.143	-0.012	89	1434919	16.0	15.1	
27 1,1-Dichloroethene	96	5.438	5.430	0.008	97	1180876	16.0	14.7	
28 Acrylonitrile	53	5.557	5.548	0.009	94	839327	16.0	18.2	
29 2-Methyl-2-propanol	59	5.578	5.589	-0.011	96	2199065	16.0	16.2	
30 1,1,2-Trichloro-1,2,2-trifluoroe	101	5.610	5.603	0.007	96	2661840	16.0	15.2	
31 Methylene Chloride	84	5.783	5.768	0.015	97	1041211	16.0	15.7	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	5.794	5.782	0.012	97	1250194	16.0	17.8	
33 Carbon disulfide	76	5.929	5.921	0.008	98	3264452	16.0	15.4	
34 trans-1,2-Dichloroethene	96	6.576	6.561	0.015	95	1238959	16.0	16.6	
35 2-Methylpentane	43	6.586	6.579	0.007	95	2751716	16.0	15.4	
36 Methyl tert-butyl ether	73	6.694	6.716	-0.022	97	2861968	16.0	15.8	
37 1,1-Dichloroethane	63	6.996	6.977	0.019	99	1980304	16.0	15.3	
38 Vinyl acetate	43	7.104	7.100	0.004	99	3605976	16.0	18.3	
39 2-Butanone (MEK)	72	7.546	7.551	-0.005	97	593341	16.0	16.2	
40 Hexane	56	7.562	7.553	0.009	84	905328	16.0	16.4	
41 Isopropyl ether	45	7.724	7.736	-0.012	96	4258196	16.0	15.8	
42 cis-1,2-Dichloroethene	96	7.972	7.953	0.019	89	1269311	16.0	14.7	
43 Ethyl acetate	43	8.166	8.165	0.001	97	3111841	16.0	17.0	
44 Chloroform	83	8.323	8.300	0.023	94	2481600	16.0	15.2	
45 Tert-butyl ethyl ether	59	8.404	8.413	-0.009	98	3491851	16.0	15.8	
46 Tetrahydrofuran	42	8.700	8.722	-0.022	93	1451125	16.0	15.5	
47 1,1,1-Trichloroethane	97	9.337	9.320	0.017	95	2456565	16.0	15.7	
48 1,2-Dichloroethane	62	9.450	9.434	0.016	93	1378531	16.0	16.9	
50 Cyclohexane	69	9.941	9.928	0.013	86	539211	16.0	17.8	
51 Benzene	78	9.946	9.933	0.013	97	3684390	16.0	17.2	
49 n-Butanol	31	9.924	9.944	-0.020	80	808642	16.0	18.4	
52 Carbon tetrachloride	117	9.967	9.957	0.010	93	2264347	16.0	16.4	
53 2,3-Dimethylpentane	71	10.081	10.069	0.012	90	756504	16.0	16.1	
54 Thiophene	84	10.237	10.221	0.016	93	2047191	16.0	16.6	
55 Isooctane	57	10.755	10.745	0.010	96	5690429	16.0	16.7	
56 n-Heptane	71	11.154	11.139	0.015	96	1206014	16.0	17.4	
57 1,2-Dichloropropane	63	11.224	11.212	0.012	88	1347228	16.0	16.5	
58 Trichloroethene	130	11.262	11.251	0.011	96	1678146	16.0	15.8	
59 Dibromomethane	93	11.348	11.334	0.014	93	1601897	16.0	17.6	
60 Dichlorobromomethane	83	11.499	11.487	0.012	96	2730666	16.0	17.7	
61 1,4-Dioxane	88	11.510	11.532	-0.022	92	587447	16.0	16.7	
62 Methyl methacrylate	41	11.612	11.607	0.005	89	1789286	16.0	18.4	
63 Methylcyclohexane	83	12.054	12.043	0.011	93	2162335	16.0	17.2	
64 4-Methyl-2-pentanone (MIBK)	43	12.480	12.489	-0.009	99	3624018	16.0	18.4	
65 cis-1,3-Dichloropropene	75	12.534	12.528	0.006	97	2092713	16.0	19.1	
66 trans-1,3-Dichloropropene	75	13.251	13.241	0.010	95	1882319	16.0	18.6	
67 Toluene	91	13.370	13.360	0.010	92	4545670	16.0	15.4	
68 1,1,2-Trichloroethane	83	13.451	13.440	0.011	96	1405700	16.0	15.7	
69 2-Hexanone	58	13.845	13.853	-0.008	90	1634007	16.0	18.3	
70 n-Octane	85	14.082	14.077	0.005	93	1387808	16.0	16.9	
71 Chlorodibromomethane	129	14.157	14.148	0.009	97	3168351	16.0	17.3	
72 Ethylene Dibromide	107	14.449	14.441	0.008	96	2766666	16.0	17.3	
73 Tetrachloroethene	129	14.529	14.519	0.010	93	1693538	16.0	15.6	
74 Chlorobenzene	112	15.408	15.404	0.004	94	3782505	16.0	16.7	
75 2,3-Dimethylheptane	43	15.441	15.438	0.003	94	5035608	16.0	16.7	
76 Ethylbenzene	91	15.705	15.698	0.007	99	6434077	16.0	17.2	
77 m-Xylene & p-Xylene	91	15.867	15.863	0.004	98	10354326	32.0	36.3	
78 n-Nonane	57	16.304	16.296	0.008	92	3426882	16.0	19.7	
79 Bromoform	173	16.309	16.304	0.005	97	4488198	16.0	22.5	
80 Styrene	104	16.336	16.328	0.008	98	3438805	16.0	16.6	
81 o-Xylene	91	16.395	16.389	0.006	98	4696734	16.0	15.9	
82 1,1,2,2-Tetrachloroethane	83	16.719	16.715	0.004	98	4284716	16.0	17.8	
83 1,2,3-Trichloropropane	110	16.881	16.877	0.003	93	1114033	16.0	17.1	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	16.983	16.980	0.003	97	7190839	16.0	17.1	
85 N-Propylbenzene	120	17.533	17.529	0.004	99	2227195	16.0	18.1	
86 2-Chlorotoluene	126	17.576	17.572	0.004	98	1934483	16.0	17.0	
87 4-Ethyltoluene	105	17.689	17.688	0.001	98	7634335	16.0	18.0	
88 1,3,5-Trimethylbenzene	120	17.770	17.766	0.004	93	3168156	16.0	17.0	
89 Alpha Methyl Styrene	118	18.008	18.005	0.003	87	3389797	16.0	20.3	
90 n-Decane	57	18.078	18.075	0.003	87	4415206	16.0	19.9	
91 tert-Butylbenzene	119	18.207	18.202	0.005	92	8034487	16.0	19.4	
92 1,2,4-Trimethylbenzene	105	18.218	18.216	0.002	96	6945966	16.0	19.8	
93 sec-Butylbenzene	105	18.482	18.479	0.003	98	11336996	16.0	20.7	
94 1,3-Dichlorobenzene	146	18.493	18.489	0.004	97	5718247	16.0	21.5	
95 Benzyl chloride	91	18.574	18.568	0.006	98	6427866	16.0	24.5	
96 1,4-Dichlorobenzene	146	18.585	18.580	0.004	96	5139306	16.0	19.6	
97 4-Isopropyltoluene	119	18.655	18.648	0.007	97	8623233	16.0	18.9	
98 1,2,3-Trimethylbenzene	105	18.703	18.698	0.005	99	6390147	16.0	16.1	
99 Butylcyclohexane	83	18.762	18.757	0.005	91	5373889	16.0	18.0	
101 1,2-Dichlorobenzene	146	18.951	18.945	0.006	84	5712566	16.0	20.7	
100 2,3-Dihydroindene	117	18.951	18.947	0.004	92	7472425	16.0	20.3	
102 Indene	116	19.086	19.081	0.005	88	6454449	16.0	21.5	
103 n-Butylbenzene	91	19.091	19.092	-0.001	97	9133646	16.0	20.3	
104 Undecane	57	19.420	19.418	0.002	90	5797790	16.0	21.0	
105 1,2-Dibromo-3-Chloropropane	157	19.566	19.560	0.006	92	2819167	16.0	21.2	
106 1,2,4,5-Tetramethylbenzene	119	19.862	19.860	0.002	97	8943677	16.0	21.2	
107 Dodecane	57	20.483	20.478	0.005	91	6425914	16.0	26.2	
108 1,2,4-Trichlorobenzene	180	20.661	20.658	0.003	93	5000474	16.0	22.1	
109 Naphthalene	128	20.795	20.794	0.001	99	8235513	16.0	18.7	
110 Hexachlorobutadiene	225	21.016	21.014	0.002	94	4731090	16.0	18.1	
111 1,2,3-Trichlorobenzene	180	21.081	21.081	0.000	94	3652527	16.0	16.4	
112 2-Methylnaphthalene	142	21.825	21.825	0.000	98	8615424	16.0	33.5	e
113 1-Methylnaphthalene	142	21.960	21.957	0.003	98	8938615	16.0	24.6	e
A 116 C8 Range	1	14.069	(14.033-14.130)		0	14323556	16.0	18.5	
S 117 Xylenes, Total	100				0		48.0	52.2	
S 118 1,2-Dichloroethene, Total	1				0		32.0	31.4	

QC Flag Legend

Processing Flags

e - Potential Peak Saturated

Reagents:

40L10DQP_00019	Amount Added: 200.00	Units: mL	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

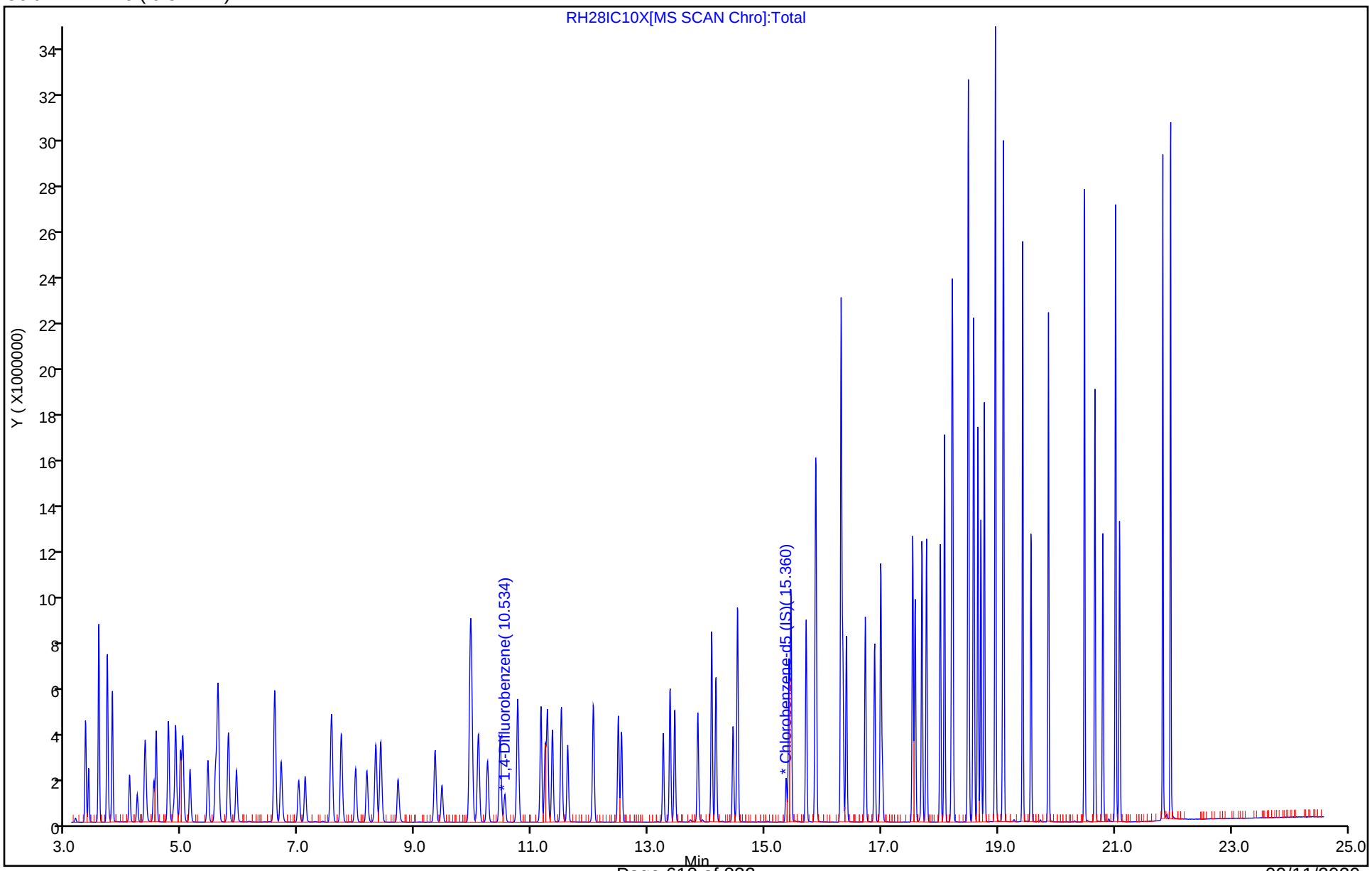
Report Date: 31-Aug-2020 13:42:31 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC10X.D

Injection Date:	28-Aug-2020 14:01:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	IC L10			Worklist Smp#:	3
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

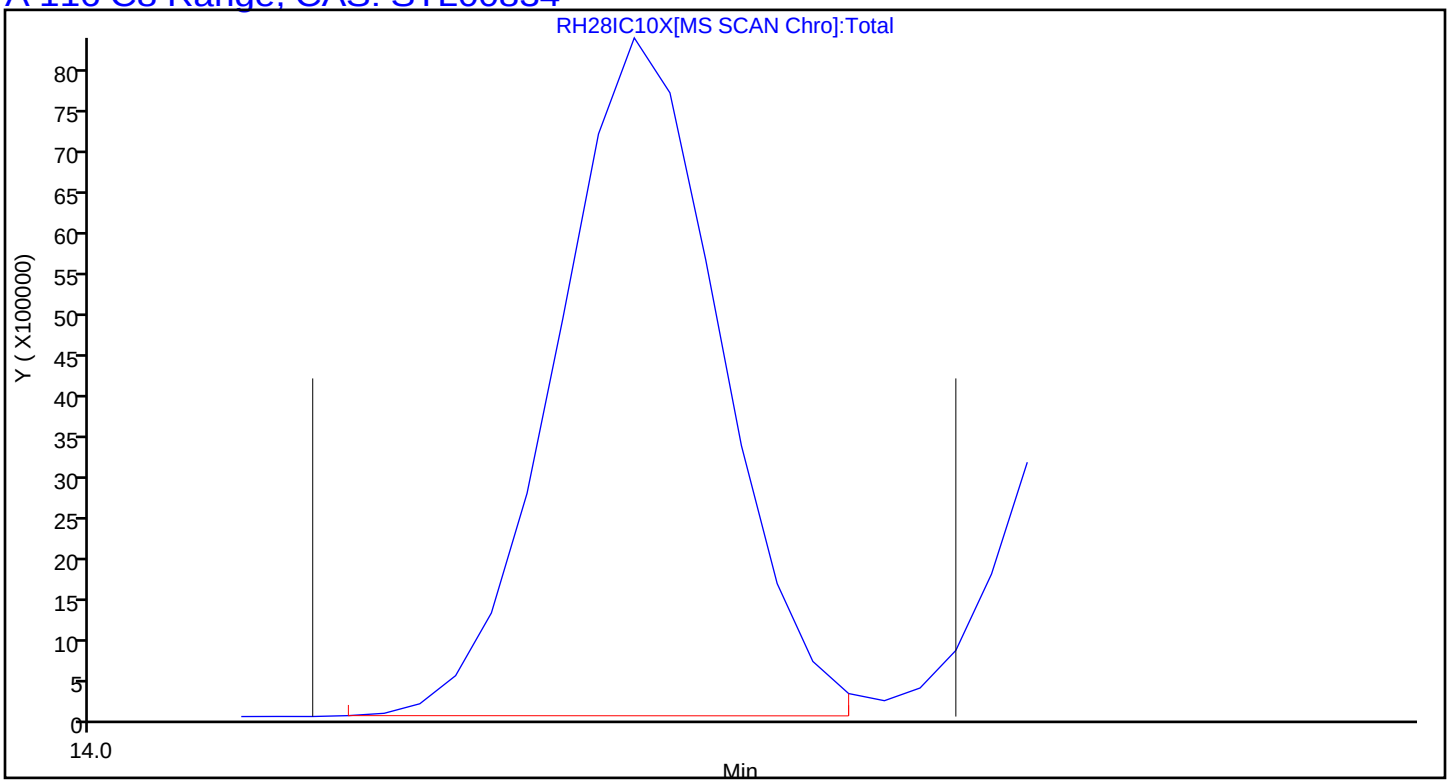


Report Date: 31-Aug-2020 13:42:31 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC10X.D				
Injection Date:	28-Aug-2020 14:01:30	Instrument ID:	MR		
Lims ID:	IC L10				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	15	Worklist Smp#:	3
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 116 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC09.D
Lims ID: IC L9
Client ID:
Sample Type: IC Calib Level: 9
Inject. Date: 28-Aug-2020 15:43:30 ALS Bottle#: 14 Worklist Smp#: 5
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016425-005
Misc. Info.: 314601
Operator ID: HMT Instrument ID: MR
Sublist: chrom-MR_TO15*sub16

Method: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 31-Aug-2020 13:42:37 Calib Date: 29-Aug-2020 00:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1064

First Level Reviewer: tajh Date: 29-Aug-2020 11:14:26

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.312	8.283	0.029	95	304641	4.80	4.80	
* 2 1,4-Difluorobenzene	114	10.539	10.519	0.020	94	1439630	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.360	15.356	0.004	87	1221971	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.010	17.006	0.004	97	800804	4.64	4.90	
6 Chlorodifluoromethane	51	3.346	3.345	0.001	99	1304143	8.00	7.65	
7 Propene	41	3.356	3.343	0.013	99	580652	8.00	7.18	
8 Dichlorodifluoromethane	85	3.405	3.390	0.015	98	555502	8.00	4.34	
9 Chloromethane	52	3.578	3.559	0.019	98	200994	8.00	6.64	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.588	3.568	0.020	93	975066	8.00	5.43	
11 Acetaldehyde	44	3.734	3.709	0.025	90	1810719	40.0	38.1	
12 Vinyl chloride	62	3.734	3.716	0.018	49	671429	8.00	7.32	
14 Butadiene	54	3.820	3.798	0.022	68	529338	8.00	6.77	
13 Butane	43	3.820	3.799	0.021	86	1083279	8.00	6.56	
15 Bromomethane	94	4.117	4.094	0.023	98	699062	8.00	7.07	
16 Chloroethane	64	4.246	4.221	0.025	88	328258	8.00	7.00	
17 Ethanol	31	4.386	4.345	0.041	99	2667054	40.0	43.6	
18 Vinyl bromide	106	4.532	4.502	0.030	96	651128	8.00	6.55	
19 2-Methylbutane	43	4.570	4.547	0.023	94	808457	8.00	6.30	
20 Trichlorofluoromethane	101	4.780	4.751	0.029	97	1602992	8.00	6.43	
21 Acrolein	56	4.802	4.775	0.027	93	172897	8.00	7.28	
22 Acetonitrile	40	4.877	4.841	0.036	99	261561	8.00	7.50	
23 Acetone	58	4.909	4.891	0.018	99	1075673	24.0	23.6	
24 Pentane	72	4.990	4.960	0.030	97	100157	8.00	6.87	
25 Isopropyl alcohol	45	5.028	4.996	0.032	98	2587659	24.0	21.2	
26 Ethyl ether	31	5.157	5.143	0.014	89	702368	8.00	6.62	
27 1,1-Dichloroethene	96	5.459	5.430	0.029	97	584264	8.00	6.49	
28 Acrylonitrile	53	5.578	5.548	0.030	94	393674	8.00	7.62	
29 2-Methyl-2-propanol	59	5.594	5.589	0.005	96	1087876	8.00	7.14	
30 1,1,2-Trichloro-1,2,2-trifluoroe	101	5.632	5.603	0.029	97	1315291	8.00	6.72	
31 Methylene Chloride	84	5.805	5.768	0.037	97	526013	8.00	7.09	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	5.815	5.782	0.033	97	576055	8.00	7.27	
33 Carbon disulfide	76	5.950	5.921	0.029	98	1600962	8.00	6.74	
34 trans-1,2-Dichloroethene	96	6.597	6.561	0.036	95	591662	8.00	7.09	
35 2-Methylpentane	43	6.608	6.579	0.029	94	1323151	8.00	6.60	
36 Methyl tert-butyl ether	73	6.721	6.716	0.005	97	1382456	8.00	6.82	
37 1,1-Dichloroethane	63	7.012	6.977	0.035	99	972743	8.00	6.71	
38 Vinyl acetate	43	7.126	7.100	0.026	99	1647589	8.00	7.47	
39 2-Butanone (MEK)	72	7.557	7.551	0.006	96	299060	8.00	7.30	
40 Hexane	56	7.579	7.553	0.026	82	449542	8.00	7.29	
41 Isopropyl ether	45	7.740	7.736	0.004	96	2073427	8.00	6.88	
42 cis-1,2-Dichloroethene	96	7.983	7.953	0.030	89	622149	8.00	6.45	
43 Ethyl acetate	43	8.177	8.165	0.012	97	1473148	8.00	7.19	
44 Chloroform	83	8.334	8.300	0.034	93	1210475	8.00	6.60	
45 Tert-butyl ethyl ether	59	8.420	8.413	0.007	97	1713465	8.00	6.92	
46 Tetrahydrofuran	42	8.716	8.722	-0.006	93	712114	8.00	6.79	
47 1,1,1-Trichloroethane	97	9.347	9.320	0.027	96	1190125	8.00	6.80	
48 1,2-Dichloroethane	62	9.461	9.434	0.027	93	669529	8.00	6.97	
49 n-Butanol	31	9.935	9.944	-0.009	74	374149	8.00	7.26	
50 Cyclohexane	69	9.946	9.928	0.018	86	259931	8.00	7.32	
51 Benzene	78	9.957	9.933	0.024	97	1789877	8.00	7.11	
52 Carbon tetrachloride	117	9.973	9.957	0.016	91	813090	8.00	5.01	
53 2,3-Dimethylpentane	71	10.086	10.069	0.017	90	381971	8.00	6.92	
54 Thiophene	84	10.243	10.221	0.021	93	1002834	8.00	6.91	
55 Isooctane	57	10.760	10.745	0.015	96	2774121	8.00	6.91	
56 n-Heptane	71	11.154	11.139	0.015	95	600087	8.00	7.35	
57 1,2-Dichloropropane	63	11.229	11.212	0.017	88	665617	8.00	6.95	
58 Trichloroethene	130	11.267	11.251	0.016	96	918209	8.00	7.34	
59 Dibromomethane	93	11.353	11.334	0.019	93	756385	8.00	7.07	
60 Dichlorobromomethane	83	11.504	11.487	0.017	97	1286733	8.00	7.12	
61 1,4-Dioxane	88	11.515	11.532	-0.017	91	302822	8.00	7.33	
62 Methyl methacrylate	41	11.612	11.607	0.005	90	877144	8.00	7.69	
63 Methylcyclohexane	83	12.054	12.043	0.011	94	1079994	8.00	7.30	
64 4-Methyl-2-pentanone (MIBK)	43	12.480	12.489	-0.009	99	1743415	8.00	7.54	
65 cis-1,3-Dichloropropene	75	12.540	12.528	0.012	96	998372	8.00	7.74	
66 trans-1,3-Dichloropropene	75	13.251	13.241	0.010	96	892213	8.00	7.90	
67 Toluene	91	13.370	13.360	0.010	92	2293689	8.00	6.97	
68 1,1,2-Trichloroethane	83	13.451	13.440	0.011	95	686436	8.00	6.90	
69 2-Hexanone	58	13.845	13.853	-0.008	90	773120	8.00	7.76	
70 n-Octane	85	14.082	14.077	0.005	93	673298	8.00	7.34	
71 Chlorodibromomethane	129	14.157	14.148	0.009	98	1424458	8.00	6.97	
72 Ethylene Dibromide	107	14.449	14.441	0.008	97	1302791	8.00	7.31	
73 Tetrachloroethene	129	14.524	14.519	0.005	93	807488	8.00	6.68	
74 Chlorobenzene	112	15.408	15.404	0.004	94	1766662	8.00	7.01	
75 2,3-Dimethylheptane	43	15.441	15.438	0.003	95	2338473	8.00	6.97	
76 Ethylbenzene	91	15.705	15.698	0.007	98	3012093	8.00	7.23	
77 m-Xylene & p-Xylene	91	15.867	15.863	0.004	98	4722635	16.0	14.9	
78 n-Nonane	57	16.298	16.296	0.002	93	1492619	8.00	7.69	
79 Bromoform	173	16.304	16.304	0.000	96	1649540	8.00	7.43	
80 Styrene	104	16.330	16.328	0.002	98	1683260	8.00	7.30	
81 o-Xylene	91	16.390	16.389	0.001	99	2288199	8.00	6.95	
82 1,1,2,2-Tetrachloroethane	83	16.719	16.715	0.004	98	1756745	8.00	6.55	
83 1,2,3-Trichloropropane	110	16.881	16.877	0.003	93	517052	8.00	7.13	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	16.983	16.980	0.003	96	3336387	8.00	7.11	
85 N-Propylbenzene	120	17.533	17.529	0.004	99	1014657	8.00	7.39	
86 2-Chlorotoluene	126	17.571	17.572	-0.001	97	927008	8.00	7.33	
87 4-Ethyltoluene	105	17.689	17.688	0.001	98	3514356	8.00	7.44	
88 1,3,5-Trimethylbenzene	120	17.770	17.766	0.004	93	1441235	8.00	6.95	
89 Alpha Methyl Styrene	118	18.002	18.005	-0.003	87	1432499	8.00	7.72	
90 n-Decane	57	18.078	18.075	0.003	88	1973903	8.00	8.00	
91 tert-Butylbenzene	119	18.202	18.202	0.000	93	3330576	8.00	7.22	
92 1,2,4-Trimethylbenzene	105	18.218	18.216	0.002	96	2984296	8.00	7.64	
93 sec-Butylbenzene	105	18.482	18.479	0.003	98	4717663	8.00	7.72	
94 1,3-Dichlorobenzene	146	18.487	18.489	-0.002	97	2250010	8.00	7.61	
95 Benzyl chloride	91	18.568	18.568	0.000	98	2705606	8.00	9.24	
96 1,4-Dichlorobenzene	146	18.579	18.580	-0.001	96	2155852	8.00	7.40	
97 4-Isopropyltoluene	119	18.649	18.648	0.001	97	3785986	8.00	7.43	
98 1,2,3-Trimethylbenzene	105	18.698	18.698	0.000	99	2968221	8.00	7.58	
99 Butylcyclohexane	83	18.757	18.757	0.000	93	2449016	8.00	7.35	
101 1,2-Dichlorobenzene	146	18.946	18.945	0.001	88	2198253	8.00	7.14	
100 2,3-Dihydroindene	117	18.951	18.947	0.004	93	3018326	8.00	7.36	
102 Indene	116	19.081	19.081	0.000	96	2429019	8.00	7.27	
103 n-Butylbenzene	91	19.091	19.092	-0.001	98	3874165	8.00	7.75	
104 Undecane	57	19.420	19.418	0.002	90	2351229	8.00	7.64	
105 1,2-Dibromo-3-Chloropropane	157	19.561	19.560	0.001	92	1230284	8.00	8.30	
106 1,2,4,5-Tetramethylbenzene	119	19.862	19.860	0.002	97	3656188	8.00	7.78	
107 Dodecane	57	20.477	20.478	-0.001	90	2355654	8.00	8.61	
108 1,2,4-Trichlorobenzene	180	20.661	20.658	0.003	93	1967788	8.00	7.82	
109 Naphthalene	128	20.795	20.794	0.001	99	3653921	8.00	7.45	
110 Hexachlorobutadiene	225	21.016	21.014	0.002	94	1829979	8.00	6.27	
111 1,2,3-Trichlorobenzene	180	21.081	21.081	0.000	94	1583400	8.00	6.37	
112 2-Methylnaphthalene	142	21.825	21.825	0.000	100	3193576	8.00	11.1	
113 1-Methylnaphthalene	142	21.955	21.957	-0.002	100	4049020	8.00	10.0	
A 116 C8 Range	1	14.069	(14.033-14.130)		0	6920701	8.00	7.60	
S 117 Xylenes, Total	100				0		24.0	21.8	
S 118 1,2-Dichloroethene, Total	1				0		16.0	13.5	

Reagents:

40L9DQP_00019	Amount Added: 200.00	Units: mL	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

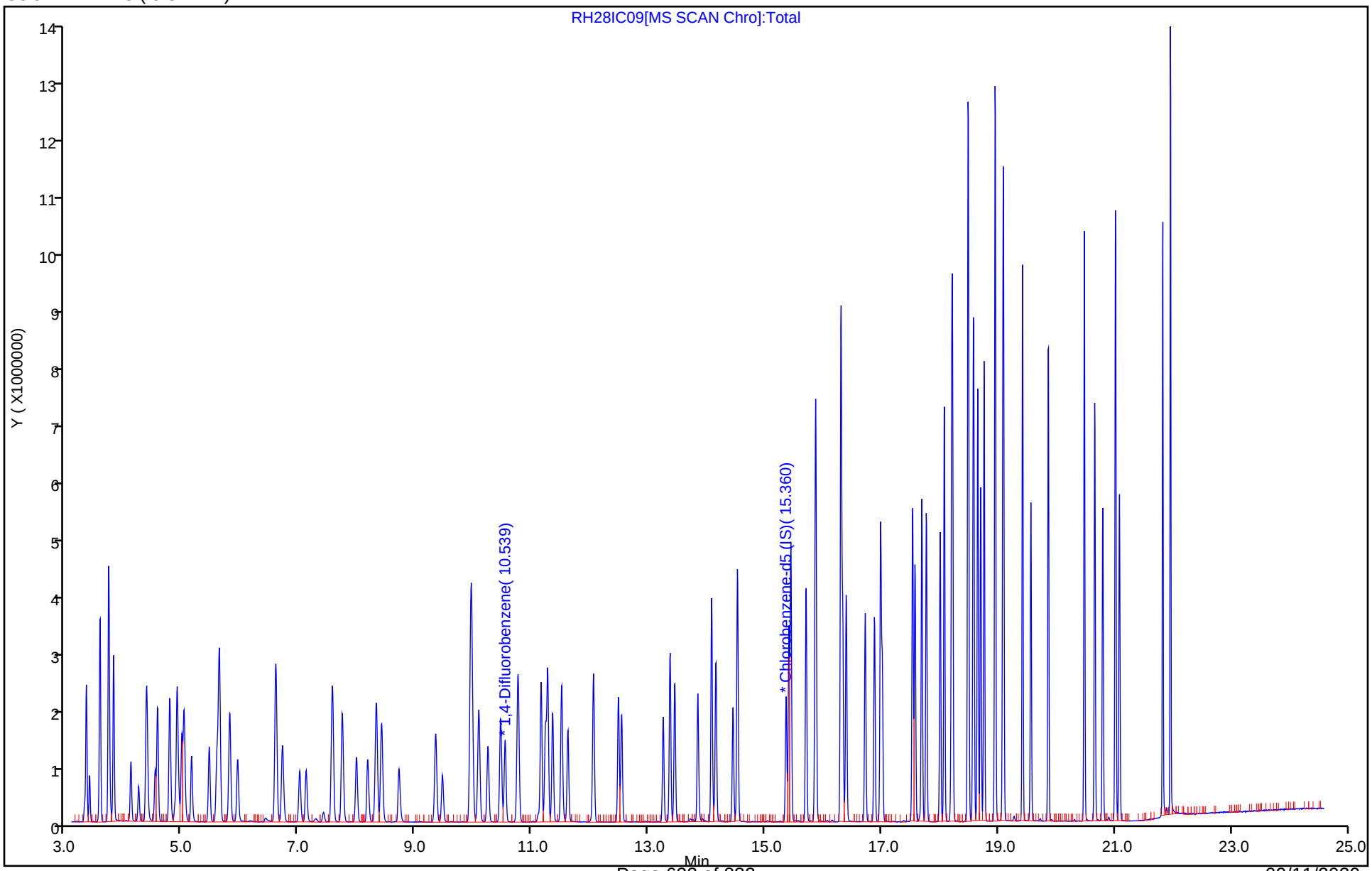
Report Date: 31-Aug-2020 13:42:38 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC09.D

Injection Date:	28-Aug-2020 15:43:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	IC L9			Worklist Smp#:	5
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

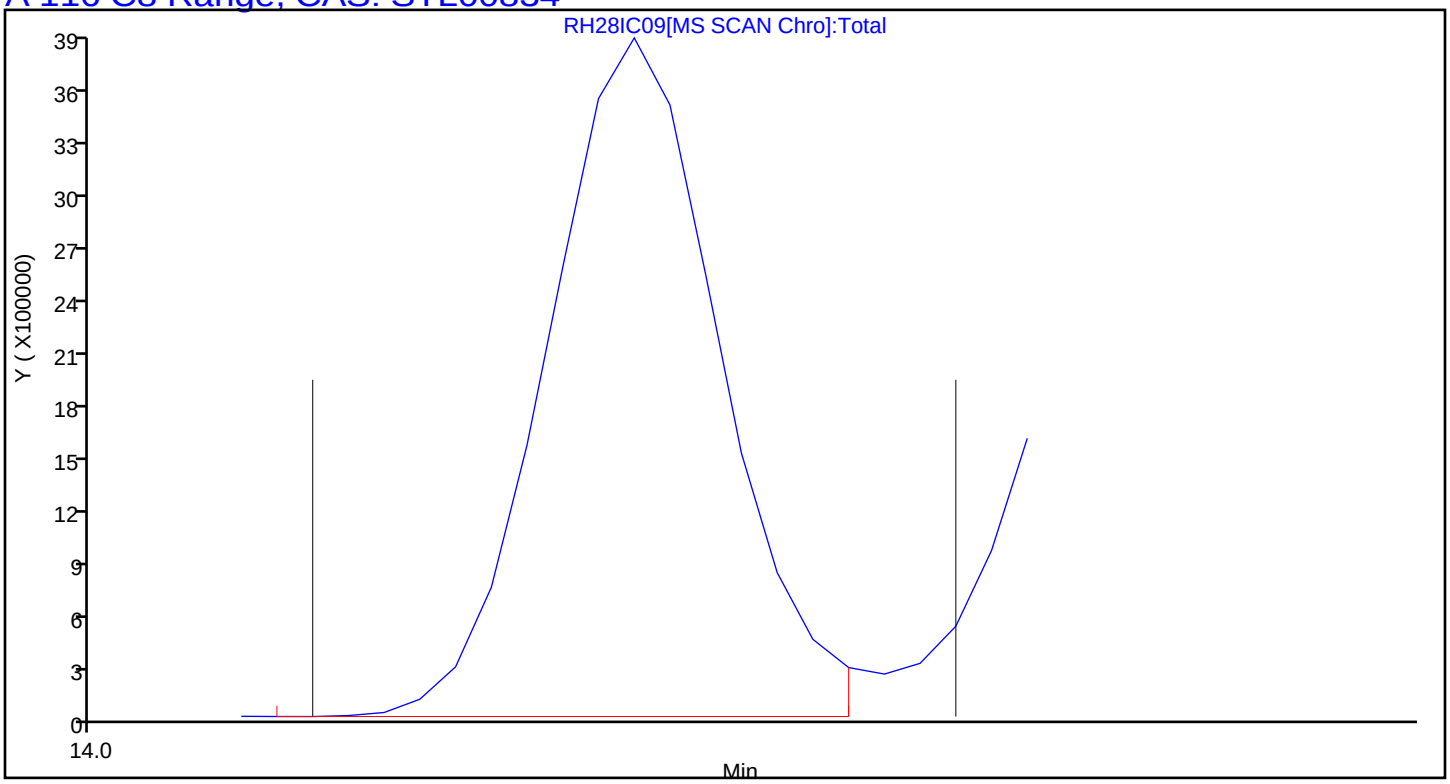


Report Date: 31-Aug-2020 13:42:38 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC09.D				
Injection Date:	28-Aug-2020 15:43:30	Instrument ID:	MR		
Lims ID:	IC L9				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	14	Worklist Smp#:	5
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 116 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC08.D
Lims ID: IC L8
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 28-Aug-2020 17:27:30 ALS Bottle#: 13 Worklist Smp#: 7
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016425-007
Misc. Info.: 314607
Operator ID: HMT Instrument ID: MR
Sublist: chrom-MR_TO15*sub16

Method: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 31-Aug-2020 13:42:47 Calib Date: 29-Aug-2020 00:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1064

First Level Reviewer: barlozhetskayaa Date: 31-Aug-2020 13:31:23

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.301	8.283	0.018	94	316995	4.80	4.80	
* 2 1,4-Difluorobenzene	114	10.528	10.519	0.009	94	1498166	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.360	15.356	0.004	87	1178651	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.010	17.006	0.004	96	808580	4.64	5.13	
6 Chlorodifluoromethane	51	3.340	3.345	-0.005	99	650155	4.00	3.66	
7 Propene	41	3.351	3.343	0.008	98	322982	4.00	3.84	
8 Dichlorodifluoromethane	85	3.400	3.390	0.010	99	535510	4.00	4.02	
9 Chloromethane	52	3.567	3.559	0.008	98	116889	4.00	3.71	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.577	3.568	0.009	90	701732	4.00	3.76	
11 Acetaldehyde	44	3.718	3.709	0.009	91	836062	20.0	16.9	
12 Vinyl chloride	62	3.723	3.716	0.007	100	382291	4.00	3.99	
14 Butadiene	54	3.809	3.798	0.011	68	309504	4.00	3.81	
13 Butane	43	3.809	3.799	0.010	86	620005	4.00	3.61	
15 Bromomethane	94	4.101	4.094	0.007	98	406202	4.00	3.93	
16 Chloroethane	64	4.235	4.221	0.014	89	193624	4.00	3.95	
17 Ethanol	31	4.359	4.345	0.014	99	1222004	20.0	19.2	
18 Vinyl bromide	106	4.516	4.502	0.014	97	371798	4.00	3.59	
19 2-Methylbutane	43	4.559	4.547	0.012	93	463903	4.00	3.48	
20 Trichlorofluoromethane	101	4.764	4.751	0.013	97	895318	4.00	3.45	
21 Acrolein	56	4.785	4.775	0.010	92	100565	4.00	4.07	
22 Acetonitrile	40	4.855	4.841	0.014	95	141775	4.00	3.91	
23 Acetone	58	4.893	4.891	0.002	98	502478	12.0	10.6	
24 Pentane	72	4.980	4.960	0.020	97	62271	4.00	4.10	
25 Isopropyl alcohol	45	5.001	4.996	0.005	98	1540486	12.0	12.1	
26 Ethyl ether	31	5.141	5.143	-0.002	89	408518	4.00	3.70	
27 1,1-Dichloroethene	96	5.443	5.430	0.013	97	343522	4.00	3.67	
28 Acrylonitrile	53	5.562	5.548	0.014	96	223695	4.00	4.16	
29 2-Methyl-2-propanol	59	5.578	5.589	-0.011	95	630225	4.00	3.98	
30 1,1,2-Trichloro-1,2,2-trifluoroe	101	5.621	5.603	0.018	96	766832	4.00	3.76	
31 Methylene Chloride	84	5.788	5.768	0.020	96	296909	4.00	3.84	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	5.799	5.782	0.017	96	341550	4.00	4.11	
33 Carbon disulfide	76	5.934	5.921	0.013	98	941650	4.00	3.81	
34 trans-1,2-Dichloroethene	96	6.581	6.561	0.020	93	334887	4.00	3.86	
35 2-Methylpentane	43	6.597	6.579	0.018	94	759801	4.00	3.64	
36 Methyl tert-butyl ether	73	6.705	6.716	-0.011	97	808171	4.00	3.83	
37 1,1-Dichloroethane	63	6.996	6.977	0.019	99	562108	4.00	3.73	
38 Vinyl acetate	43	7.109	7.100	0.009	99	947376	4.00	4.13	
39 2-Butanone (MEK)	72	7.546	7.551	-0.005	96	159615	4.00	3.75	
40 Hexane	56	7.573	7.553	0.020	87	248032	4.00	3.86	
41 Isopropyl ether	45	7.730	7.736	-0.006	96	1179432	4.00	3.76	
42 cis-1,2-Dichloroethene	96	7.972	7.953	0.019	88	358383	4.00	3.57	
43 Ethyl acetate	43	8.166	8.165	0.001	97	850049	4.00	3.99	
44 Chloroform	83	8.323	8.300	0.023	95	693845	4.00	3.64	
45 Tert-butyl ethyl ether	59	8.409	8.413	-0.004	97	979415	4.00	3.80	
46 Tetrahydrofuran	42	8.711	8.722	-0.011	94	404434	4.00	3.70	
47 1,1,1-Trichloroethane	97	9.337	9.320	0.017	95	685853	4.00	3.76	
48 1,2-Dichloroethane	62	9.450	9.434	0.016	93	377659	4.00	3.78	
49 n-Butanol	31	9.940	9.944	-0.004	73	210201	4.00	3.92	
50 Cyclohexane	69	9.946	9.928	0.018	86	145010	4.00	3.93	
51 Benzene	78	9.946	9.933	0.013	97	1005771	4.00	3.84	
52 Carbon tetrachloride	117	9.973	9.957	0.016	93	704270	4.00	4.17	
53 2,3-Dimethylpentane	71	10.081	10.069	0.012	90	212342	4.00	3.70	
54 Thiophene	84	10.232	10.221	0.011	93	568076	4.00	3.76	
55 Isooctane	57	10.755	10.745	0.010	96	1532236	4.00	3.67	
56 n-Heptane	71	11.148	11.139	0.009	95	327659	4.00	3.86	
57 1,2-Dichloropropane	63	11.224	11.212	0.012	88	368593	4.00	3.70	
58 Trichloroethene	130	11.262	11.251	0.011	96	460313	4.00	3.54	
59 Dibromomethane	93	11.348	11.334	0.014	93	416603	4.00	3.74	
60 Dichlorobromomethane	83	11.499	11.487	0.012	97	730160	4.00	3.88	
61 1,4-Dioxane	88	11.510	11.532	-0.022	91	170270	4.00	3.96	
62 Methyl methacrylate	41	11.612	11.607	0.005	90	474303	4.00	4.00	
63 Methylcyclohexane	83	12.054	12.043	0.011	94	581197	4.00	3.78	
64 4-Methyl-2-pentanone (MIBK)	43	12.480	12.489	-0.009	98	931901	4.00	3.87	
65 cis-1,3-Dichloropropene	75	12.534	12.528	0.006	96	542319	4.00	4.04	
66 trans-1,3-Dichloropropene	75	13.246	13.241	0.005	95	458192	4.00	4.20	
67 Toluene	91	13.365	13.360	0.005	92	1183470	4.00	3.73	
68 1,1,2-Trichloroethane	83	13.446	13.440	0.006	95	374576	4.00	3.90	
69 2-Hexanone	58	13.845	13.853	-0.008	90	404266	4.00	4.21	
70 n-Octane	85	14.082	14.077	0.005	93	339542	4.00	3.84	
71 Chlorodibromomethane	129	14.152	14.148	0.004	97	802340	4.00	4.07	
72 Ethylene Dibromide	107	14.443	14.441	0.002	96	676768	4.00	3.94	
73 Tetrachloroethene	129	14.524	14.519	0.005	93	424142	4.00	3.64	
74 Chlorobenzene	112	15.408	15.404	0.004	95	909511	4.00	3.74	
75 2,3-Dimethylheptane	43	15.441	15.438	0.003	95	1194978	4.00	3.69	
76 Ethylbenzene	91	15.700	15.698	0.002	98	1551175	4.00	3.86	
77 m-Xylene & p-Xylene	91	15.867	15.863	0.004	97	2416062	8.00	7.88	
78 n-Nonane	57	16.298	16.296	0.002	93	757072	4.00	4.05	
79 Bromoform	173	16.309	16.304	0.005	96	970471	4.00	4.53	
80 Styrene	104	16.330	16.328	0.002	98	899378	4.00	4.04	
81 o-Xylene	91	16.390	16.389	0.001	98	1232727	4.00	3.88	
82 1,1,2,2-Tetrachloroethane	83	16.713	16.715	-0.002	98	1051867	4.00	4.07	
83 1,2,3-Trichloropropane	110	16.875	16.877	-0.002	92	277341	4.00	3.96	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	16.983	16.980	0.003	97	1775686	4.00	3.92	
85 N-Propylbenzene	120	17.533	17.529	0.004	99	533438	4.00	4.03	
86 2-Chlorotoluene	126	17.576	17.572	0.004	97	482530	4.00	3.96	
87 4-Ethyltoluene	105	17.689	17.688	0.001	98	1840276	4.00	4.04	
88 1,3,5-Trimethylbenzene	120	17.770	17.766	0.004	93	782651	4.00	3.91	
89 Alpha Methyl Styrene	118	18.002	18.005	-0.003	88	779234	4.00	4.35	
90 n-Decane	57	18.078	18.075	0.003	87	1022123	4.00	4.29	
91 tert-Butylbenzene	119	18.202	18.202	0.000	94	1771724	4.00	3.98	
92 1,2,4-Trimethylbenzene	105	18.218	18.216	0.002	96	1589105	4.00	4.22	
93 sec-Butylbenzene	105	18.482	18.479	0.003	99	2465129	4.00	4.18	
94 1,3-Dichlorobenzene	146	18.487	18.489	-0.002	97	1154226	4.00	4.05	
95 Benzyl chloride	91	18.568	18.568	0.000	98	1324267	4.00	4.69	
96 1,4-Dichlorobenzene	146	18.579	18.580	-0.001	94	1137617	4.00	4.05	
97 4-Isopropyltoluene	119	18.649	18.648	0.001	97	2039984	4.00	4.15	
98 1,2,3-Trimethylbenzene	105	18.698	18.698	0.000	98	1607154	4.00	4.47	
99 Butylcyclohexane	83	18.757	18.757	0.000	92	1319539	4.00	4.11	
101 1,2-Dichlorobenzene	146	18.946	18.945	0.001	82	1152986	4.00	3.88	
100 2,3-Dihydroindene	117	18.946	18.947	-0.001	92	1602979	4.00	4.05	
102 Indene	116	19.081	19.081	0.000	93	1393000	4.00	4.32	
103 n-Butylbenzene	91	19.091	19.092	-0.001	97	2067016	4.00	4.29	
104 Undecane	57	19.420	19.418	0.002	91	1245231	4.00	4.20	
105 1,2-Dibromo-3-Chloropropane	157	19.560	19.560	0.000	91	660392	4.00	4.62	
106 1,2,4,5-Tetramethylbenzene	119	19.862	19.860	0.002	97	1933526	4.00	4.27	
107 Dodecane	57	20.477	20.478	-0.001	90	1253840	4.00	4.75	
108 1,2,4-Trichlorobenzene	180	20.655	20.658	-0.003	93	1047600	4.00	4.32	
109 Naphthalene	128	20.795	20.794	0.001	99	2070294	4.00	4.38	
110 Hexachlorobutadiene	225	21.011	21.014	-0.003	93	1016101	4.00	3.61	
111 1,2,3-Trichlorobenzene	180	21.081	21.081	0.000	95	931429	4.00	3.88	
112 2-Methylnaphthalene	142	21.825	21.825	0.000	100	1491875	4.00	5.40	
113 1-Methylnaphthalene	142	21.955	21.957	-0.002	99	2050918	4.00	5.25	
A 116 C8 Range	1	14.069	(14.033-14.130)		0	3505252	4.00	3.70	
S 117 Xylenes, Total	100				0		12.0	11.8	
S 118 1,2-Dichloroethene, Total	1				0		8.00	7.43	

Reagents:

40L8DQP_00018	Amount Added: 200.00	Units: mL	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

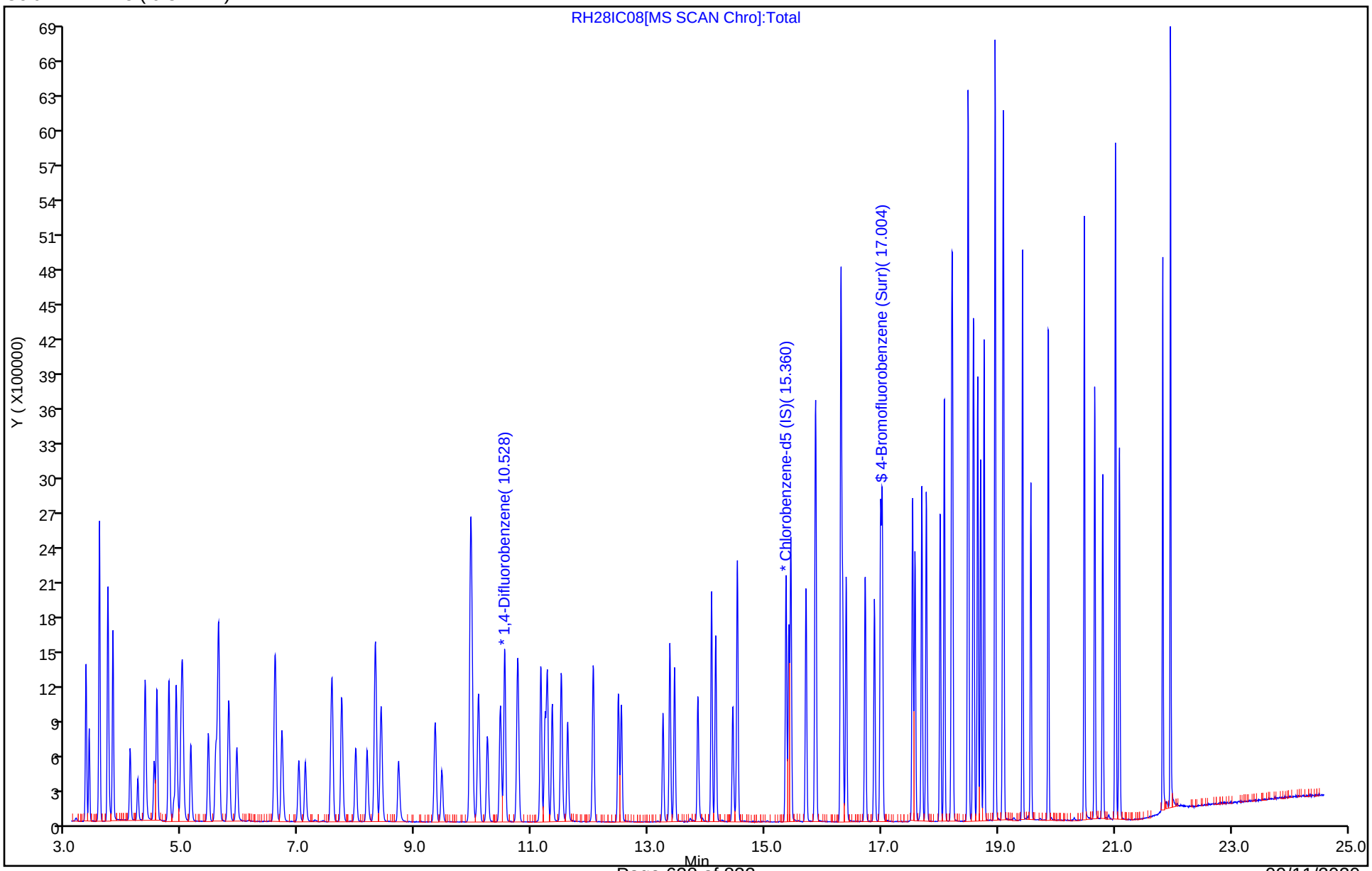
Report Date: 31-Aug-2020 13:42:48 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC08.D

Injection Date:	28-Aug-2020 17:27:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	IC L8			Worklist Smp#:	7
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

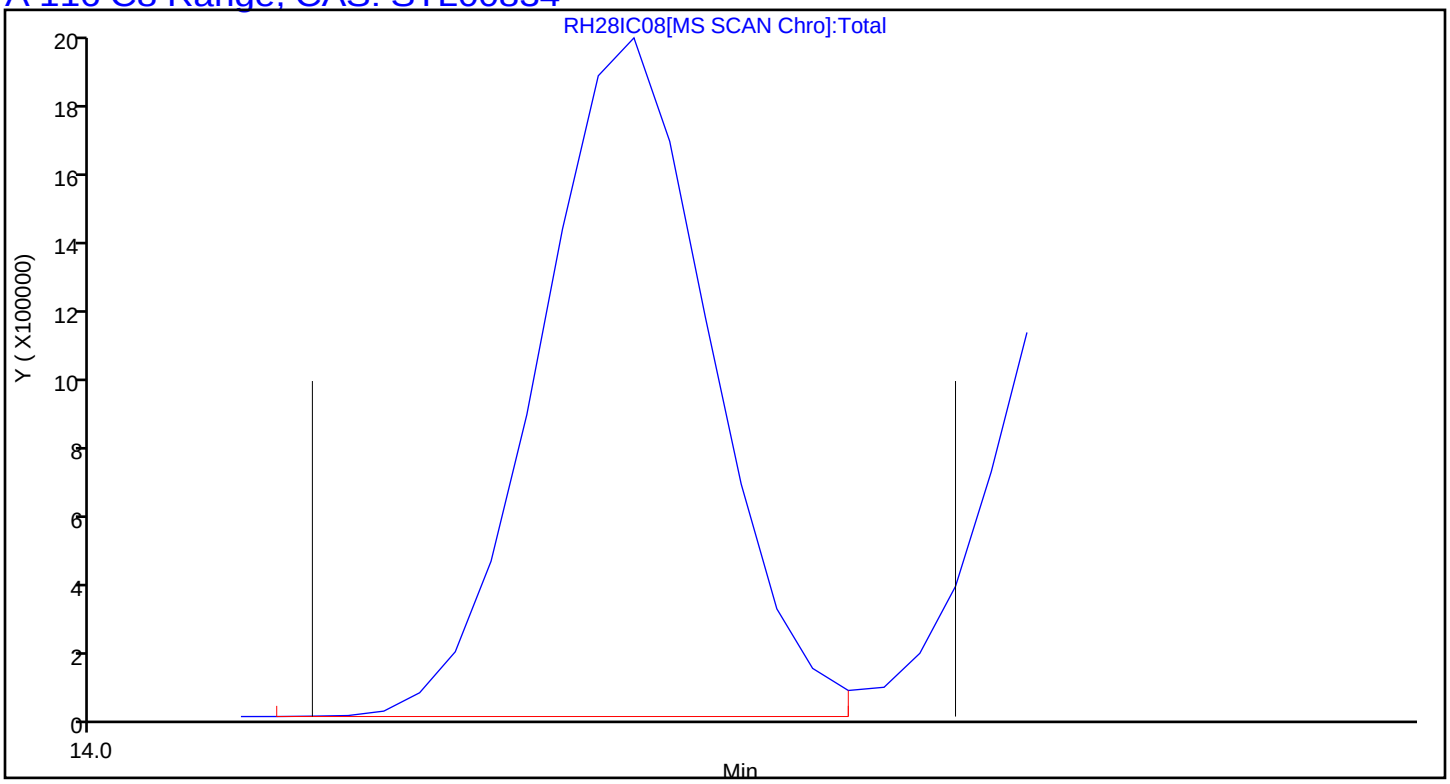


Report Date: 31-Aug-2020 13:42:48 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC08.D				
Injection Date:	28-Aug-2020 17:27:30	Instrument ID:	MR		
Lims ID:	IC L8				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	13	Worklist Smp#:	7
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 116 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC01.D
Lims ID: IC L1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 28-Aug-2020 19:11:30 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016425-009
Misc. Info.: 314720
Operator ID: HMT Instrument ID: MR
Sublist: chrom-MR_TO15*sub16

Method: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 31-Aug-2020 13:42:56 Calib Date: 29-Aug-2020 00:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1064

First Level Reviewer: barlozhetskayaa Date: 31-Aug-2020 13:08:56

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.274	8.283	-0.009	91	256577	4.80	4.80	
* 2 1,4-Difluorobenzene	114	10.512	10.519	-0.007	94	1285099	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.355	15.356	-0.001	87	1024513	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.005	17.006	-0.001	94	591232	4.64	4.32	
6 Chlorodifluoromethane	51	3.443	3.345	0.098	27	1595	0.0200	0.0111	
7 Propene	41	3.340	3.343	-0.003	77	1970	0.0200	0.0289	
8 Dichlorodifluoromethane	85	3.389	3.390	-0.001	73	4109	0.0200	0.0381	
9 Chloromethane	52	3.561	3.559	0.002	55	1359	0.0200	0.0533	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.567	3.568	-0.001	87	4700	0.0200	0.0311	
11 Acetaldehyde	44	3.712	3.709	0.003	99	9148	0.1000	0.2283	
12 Vinyl chloride	62	3.718	3.716	0.002	55	1998	0.0200	-0.003438	
14 Butadiene	54	3.788	3.798	-0.010	48	2023	0.0200	0.0307	
13 Butane	43	3.793	3.799	-0.006	68	4703	0.0200	0.0338	
15 Bromomethane	94	4.095	4.094	0.001	68	2610	0.0200	-0.008448	
16 Chloroethane	64	4.214	4.221	-0.007	17	1160	0.0200	-0.0101	
17 Ethanol	31	4.343	4.345	-0.002	50	2619	0.1000	-0.0402	
18 Vinyl bromide	106	4.500	4.502	-0.002	33	2462	0.0200	0.0294	
19 2-Methylbutane	43	4.554	4.547	0.007	57	5545	0.0200	0.0513	
20 Trichlorofluoromethane	101	4.742	4.751	-0.009	97	5184	0.0200	0.0247	
23 Acetone	58	4.915	4.891	0.024	94	6289	0.0600	0.1640	
24 Pentane	72	4.963	4.960	0.003	1	242	0.0200	0.0197	
25 Isopropyl alcohol	45	5.023	4.996	0.027	12	9554	0.0600	0.0928	
26 Ethyl ether	31	5.168	5.143	0.025	16	2453	0.0200	0.0274	
27 1,1-Dichloroethene	96	5.422	5.430	-0.008	64	2601	0.0200	0.0343	
29 2-Methyl-2-propanol	59	5.638	5.589	0.049	39	4623	0.0200	0.0360	
30 1,1,2-Trichloro-1,2,2-trifluoroe	101	5.594	5.603	-0.009	73	4730	0.0200	0.0287	
31 Methylene Chloride	84	5.767	5.768	-0.001	73	1911	0.0200	0.0306	
32 3-Chloro-1-propene	39	5.778	5.782	-0.004	67	2268	0.0200	-0.0424	
33 Carbon disulfide	76	5.918	5.921	-0.003	91	5486	0.0200	0.0274	
34 trans-1,2-Dichloroethene	96	6.549	6.561	-0.012	22	1585	0.0200	0.0225	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
35 2-Methylpentane	43	6.565	6.579	-0.014	52	5964	0.0200	0.0353	
36 Methyl tert-butyl ether	73	6.754	6.716	0.038	53	4926	0.0200	0.0288	
37 1,1-Dichloroethane	63	6.959	6.977	-0.018	25	3006	0.0200	0.0246	
38 Vinyl acetate	43	7.104	7.100	0.004	80	4967	0.0200	0.0267	
39 2-Butanone (MEK)	72	7.573	7.551	0.022	49	1146	0.0200	0.0332	
40 Hexane	56	7.525	7.553	-0.028	1	1269	0.0200	0.0244	
41 Isopropyl ether	45	7.767	7.736	0.031	80	6715	0.0200	0.0265	
42 cis-1,2-Dichloroethene	96	7.935	7.953	-0.018	17	2354	0.0200	0.0290	
44 Chloroform	83	8.280	8.300	-0.020	28	4796	0.0200	0.0311	
45 Tert-butyl ethyl ether	59	8.442	8.413	0.029	63	2362	0.0200	0.0113	
46 Tetrahydrofuran	42	8.770	8.722	0.048	78	2687	0.0200	0.0304	
47 1,1,1-Trichloroethane	97	9.315	9.320	-0.005	69	3631	0.0200	0.0246	
48 1,2-Dichloroethane	62	9.439	9.434	0.005	1	1746	0.0200	0.0204	
51 Benzene	78	9.930	9.933	-0.003	92	6905	0.0200	0.0307	
50 Cyclohexane	69	9.914	9.928	-0.014	69	714	0.0200	0.0225	
52 Carbon tetrachloride	117	9.951	9.957	-0.006	78	3577	0.0200	0.0247	
53 2,3-Dimethylpentane	71	10.048	10.069	-0.021	30	1232	0.0200	0.0250	
54 Thiophene	84	10.216	10.221	-0.005	38	2778	0.0200	0.0214	
55 Isooctane	57	10.739	10.745	-0.006	95	10422	0.0200	0.0291	
56 n-Heptane	71	11.127	11.139	-0.012	48	1981	0.0200	0.0272	
57 1,2-Dichloropropane	63	11.213	11.212	0.001	12	2346	0.0200	0.0274	
58 Trichloroethene	130	11.240	11.251	-0.011	62	2408	0.0200	0.0216	
59 Dibromomethane	93	11.321	11.334	-0.013	66	2776	0.0200	0.0290	
60 Dichlorobromomethane	83	11.472	11.487	-0.015	52	4050	0.0200	0.0251	
61 1,4-Dioxane	88	11.575	11.532	0.042	2	1099	0.0200	0.0298	
63 Methylcyclohexane	83	12.027	12.043	-0.016	73	3122	0.0200	0.0236	
64 4-Methyl-2-pentanone (MIBK)	43	12.513	12.489	0.024	52	5080	0.0200	0.0246	
65 cis-1,3-Dichloropropene	75	12.524	12.528	-0.004	57	2248	0.0200	0.0195	
66 trans-1,3-Dichloropropene	75	13.235	13.241	-0.006	45	2734	0.0200	0.0289	
67 Toluene	91	13.354	13.360	-0.006	92	6500	0.0200	0.0236	
68 1,1,2-Trichloroethane	83	13.435	13.440	-0.005	52	2167	0.0200	0.0260	
69 2-Hexanone	58	13.872	13.853	0.019	26	1395	0.0200	0.0167	
70 n-Octane	85	14.077	14.077	0.000	74	1984	0.0200	0.0258	
71 Chlorodibromomethane	129	14.147	14.148	-0.001	24	3336	0.0200	0.0195	
72 Ethylene Dibromide	107	14.432	14.441	-0.009	87	3285	0.0200	0.0220	
73 Tetrachloroethene	129	14.519	14.519	0.000	83	1968	0.0200	0.0194	
74 Chlorobenzene	112	15.408	15.404	0.004	1	5584	0.0200	0.0264	
75 2,3-Dimethylheptane	43	15.430	15.438	-0.008	55	7058	0.0200	0.0251	
76 Ethylbenzene	91	15.700	15.698	0.002	96	8765	0.0200	0.0251	
77 m-Xylene & p-Xylene	91	15.867	15.863	0.004	95	12973	0.0400	0.0487	
78 n-Nonane	57	16.293	16.296	-0.003	85	4291	0.0200	0.0264	
79 Bromoform	173	16.304	16.304	0.000	83	3237	0.0200	0.0174	
80 Styrene	104	16.320	16.328	-0.008	47	4412	0.0200	0.0228	
81 o-Xylene	91	16.390	16.389	0.001	96	6386	0.0200	0.0231	
82 1,1,2,2-Tetrachloroethane	83	16.719	16.715	0.004	92	5656	0.0200	0.0252	
83 1,2,3-Trichloropropane	110	16.881	16.877	0.004	95	1009	0.0200	0.0166	
84 Isopropylbenzene	105	16.983	16.980	0.003	86	9971	0.0200	0.0254	
85 N-Propylbenzene	120	17.533	17.529	0.004	96	1840	0.0200	0.0160	
86 2-Chlorotoluene	126	17.576	17.572	0.004	3	2860	0.0200	0.0270	
87 4-Ethyltoluene	105	17.689	17.688	0.001	92	8445	0.0200	0.0213	
88 1,3,5-Trimethylbenzene	120	17.760	17.766	-0.006	89	3493	0.0200	0.0201	
89 Alpha Methyl Styrene	118	18.018	18.005	0.013	43	2507	0.0200	0.0161	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
90 n-Decane	57	18.078	18.075	0.003	86	3748	0.0200	0.0181	
91 tert-Butylbenzene	119	18.202	18.202	0.000	94	8744	0.0200	0.0226	
92 1,2,4-Trimethylbenzene	105	18.218	18.216	0.002	70	5598	0.0200	0.0171	
93 sec-Butylbenzene	105	18.482	18.479	0.003	95	8868	0.0200	0.0173	
94 1,3-Dichlorobenzene	146	18.493	18.489	0.004	91	5001	0.0200	0.0202	
95 Benzyl chloride	91	18.574	18.568	0.006	93	6449	0.0200	0.0263	
96 1,4-Dichlorobenzene	146	18.579	18.580	-0.001	91	6409	0.0200	0.0262	
97 4-Isopropyltoluene	119	18.649	18.648	0.001	95	8442	0.0200	0.0198	
98 1,2,3-Trimethylbenzene	105	18.698	18.698	0.000	48	8213	0.0200	0.0283	
99 Butylcyclohexane	83	18.757	18.757	0.000	88	5864	0.0200	0.0210	
101 1,2-Dichlorobenzene	146	18.946	18.945	0.001	89	5989	0.0200	0.0232	
100 2,3-Dihydroindene	117	18.946	18.947	-0.001	93	7046	0.0200	0.0205	
102 Indene	116	19.081	19.081	0.000	80	5231	0.0200	0.0187	
103 n-Butylbenzene	91	19.097	19.092	0.005	93	9975	0.0200	0.0238	
104 Undecane	57	19.420	19.418	0.002	83	3583	0.0200	0.0139	
105 1,2-Dibromo-3-Chloropropane	157	19.561	19.560	0.001	87	3162	0.0200	0.0254	
106 1,2,4,5-Tetramethylbenzene	119	19.863	19.860	0.003	96	6728	0.0200	0.0171	
107 Dodecane	57	20.477	20.478	-0.001	39	2329	0.0200	0.0102	
108 1,2,4-Trichlorobenzene	180	20.661	20.658	0.003	88	4915	0.0200	0.0233	
109 Naphthalene	128	20.790	20.794	-0.004	97	9866	0.0200	0.0240	
110 Hexachlorobutadiene	225	21.011	21.014	-0.003	88	5173	0.0200	0.0211	
111 1,2,3-Trichlorobenzene	180	21.081	21.081	0.000	93	6234	0.0200	0.0299	
112 2-Methylnaphthalene	142	21.825	21.825	0.000	92	6613	0.0200	0.0275	
113 1-Methylnaphthalene	142	21.960	21.957	0.003	94	14583	0.0200	0.0429	
A 116 C8 Range	1	14.076	(14.039-14.104)		0	23790	0.0200	0.0293	
S 117 Xylenes, Total	100				0		0.0600	0.0718	
S 118 1,2-Dichloroethene, Total	1				0		0.0400	0.0515	

Reagents:

40L1-3DQP_00031	Amount Added: 50.00	Units: mL	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

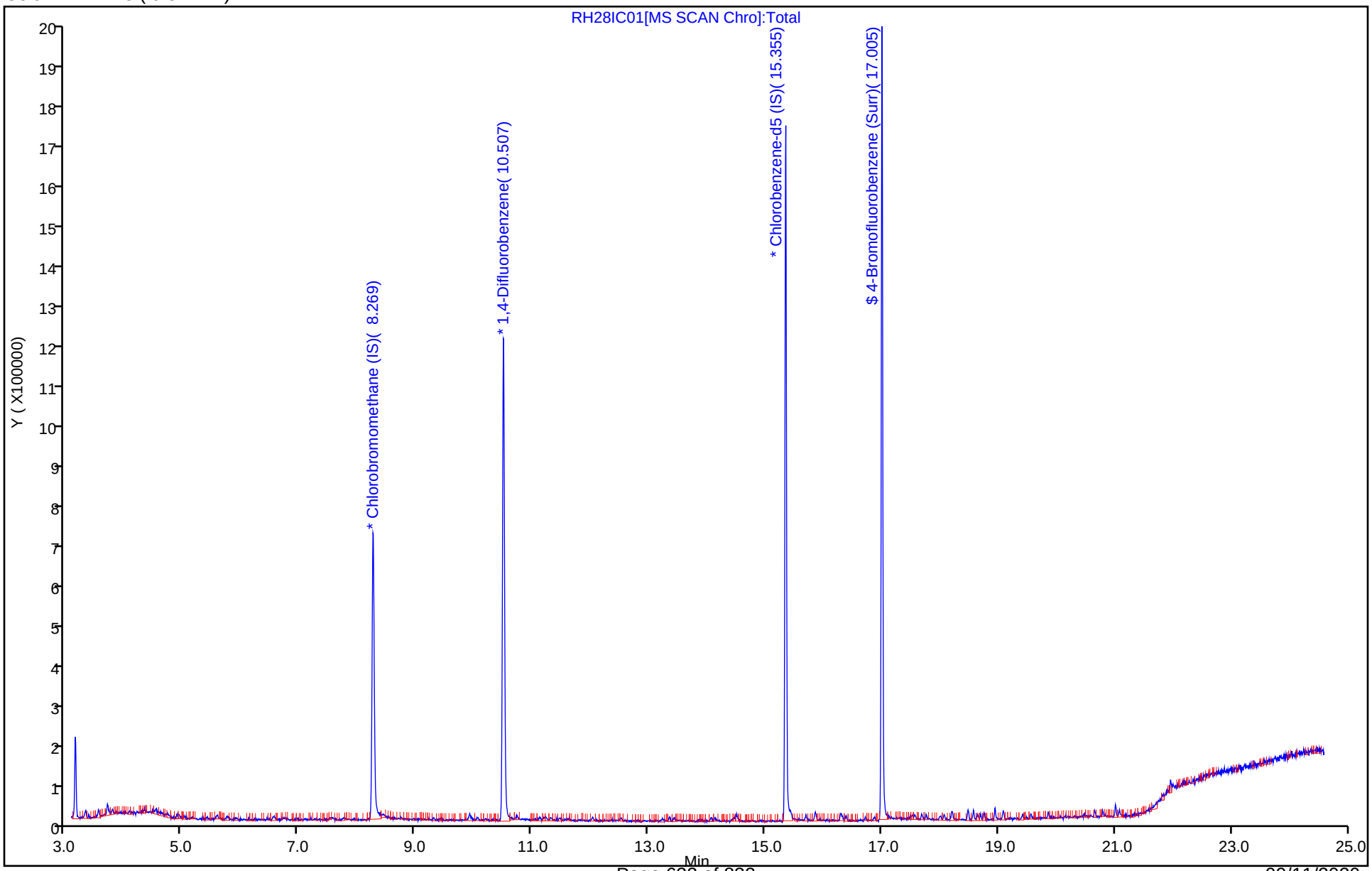
Report Date: 31-Aug-2020 13:42:57 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC01.D

Injection Date:	28-Aug-2020 19:11:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	IC L1			Worklist Smp#:	9
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

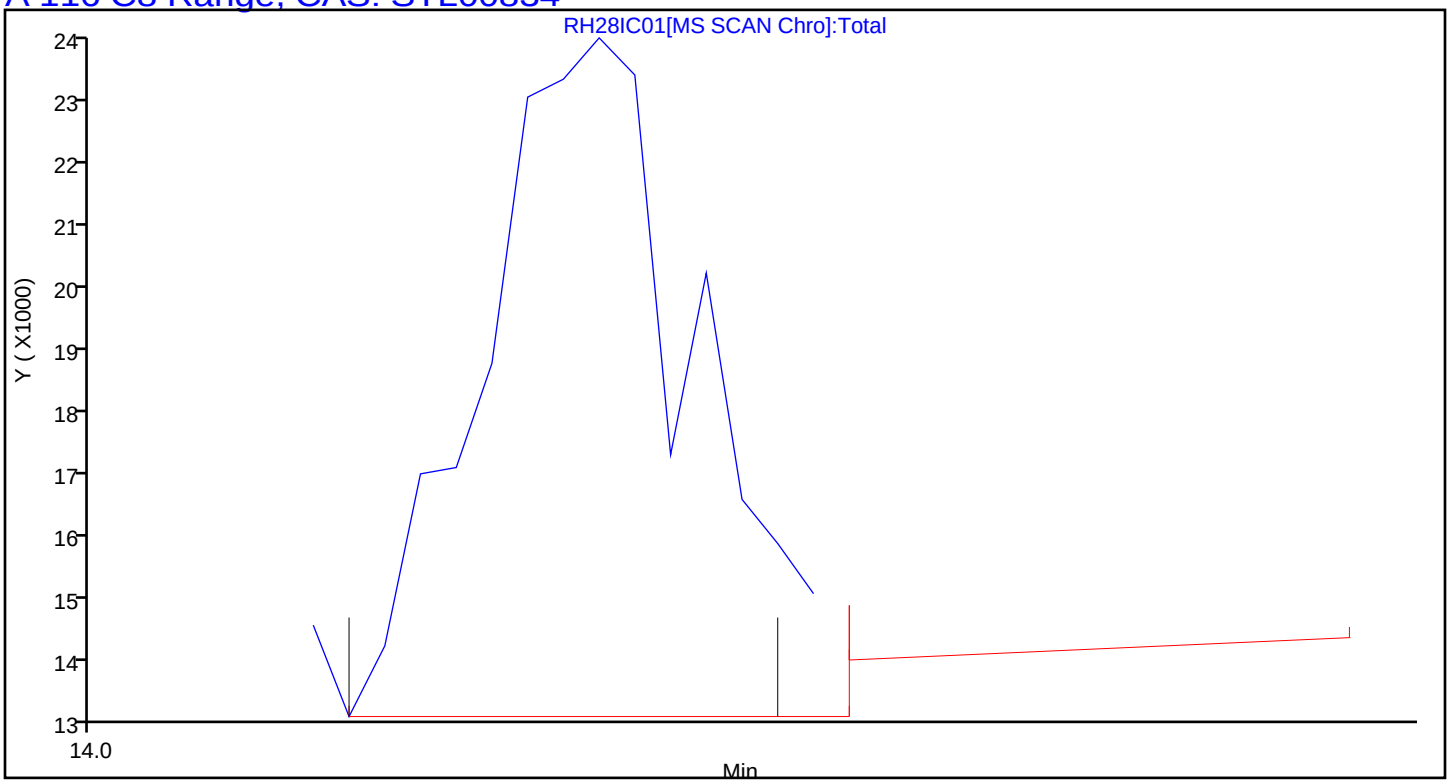


Report Date: 31-Aug-2020 13:42:57 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC01.D				
Injection Date:	28-Aug-2020 19:11:30	Instrument ID:	MR		
Lims ID:	IC L1				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 116 C8 Range, CAS: STL00834



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Knoxville

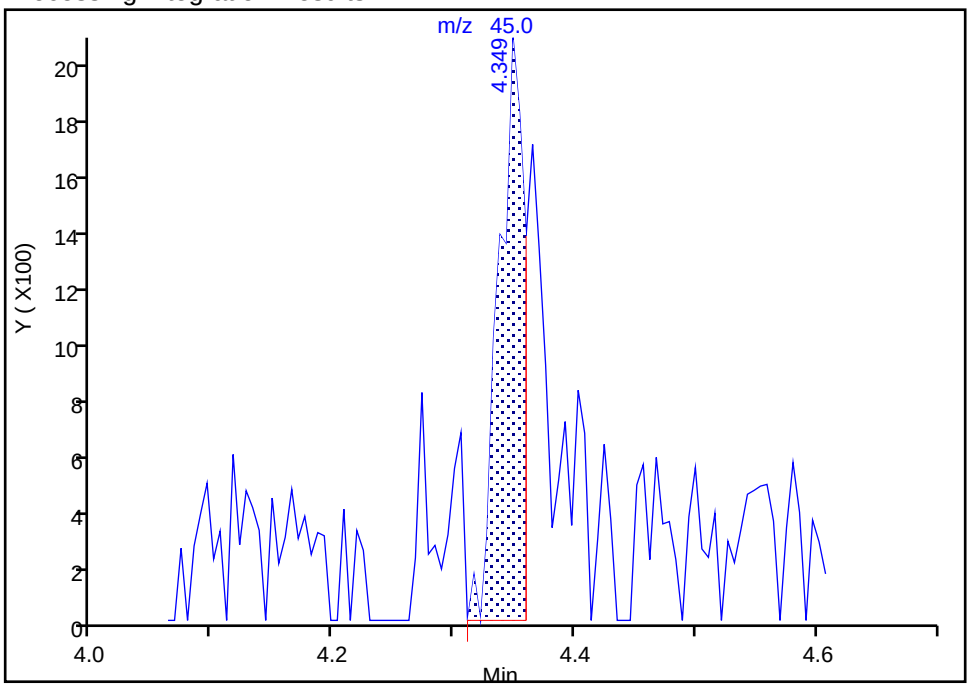
Data File: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC01.D
Injection Date: 28-Aug-2020 19:11:30 Instrument ID: MR
Lims ID: IC L1
Client ID:
Operator ID: HMT ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Method: MR_TO15 Limit Group: MSA TO14A_15 Routine ICAL
Column: RTX-5 (0.32 mm) Detector MS SCAN

17 Ethanol, CAS: 64-17-5

Signal: 2

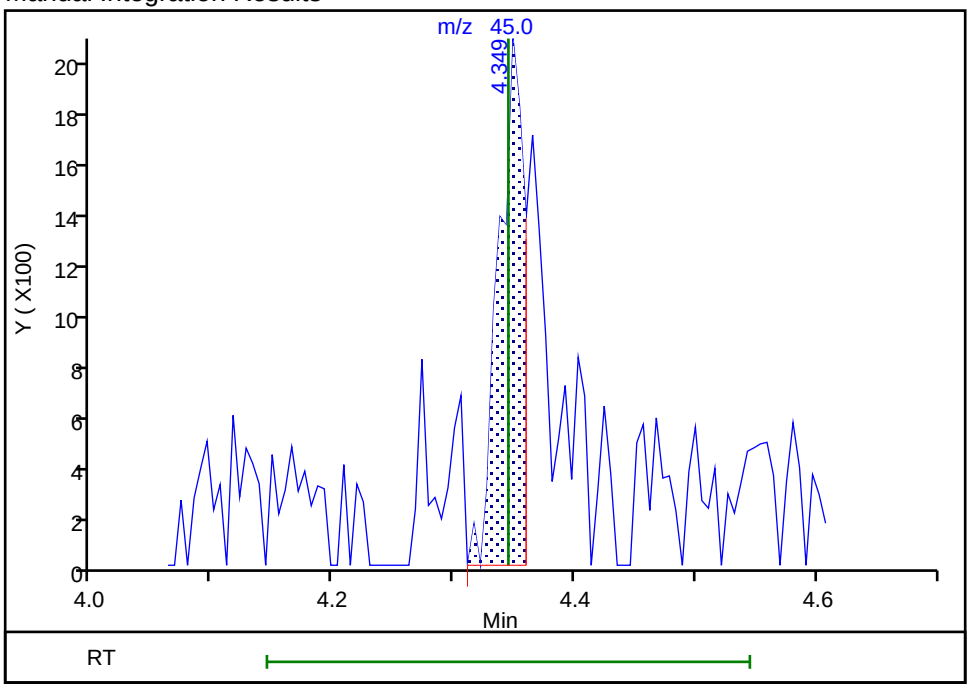
Processing Integration Results

RT: 4.35
Area: 2951
Amount: -0.040201
Amount Units: ppb v/v



Manual Integration Results

RT: 4.35
Area: 2951
Amount: -0.040201
Amount Units: ppb v/v



Reviewer: barlozhetskayaa, 31-Aug-2020 13:29:17
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

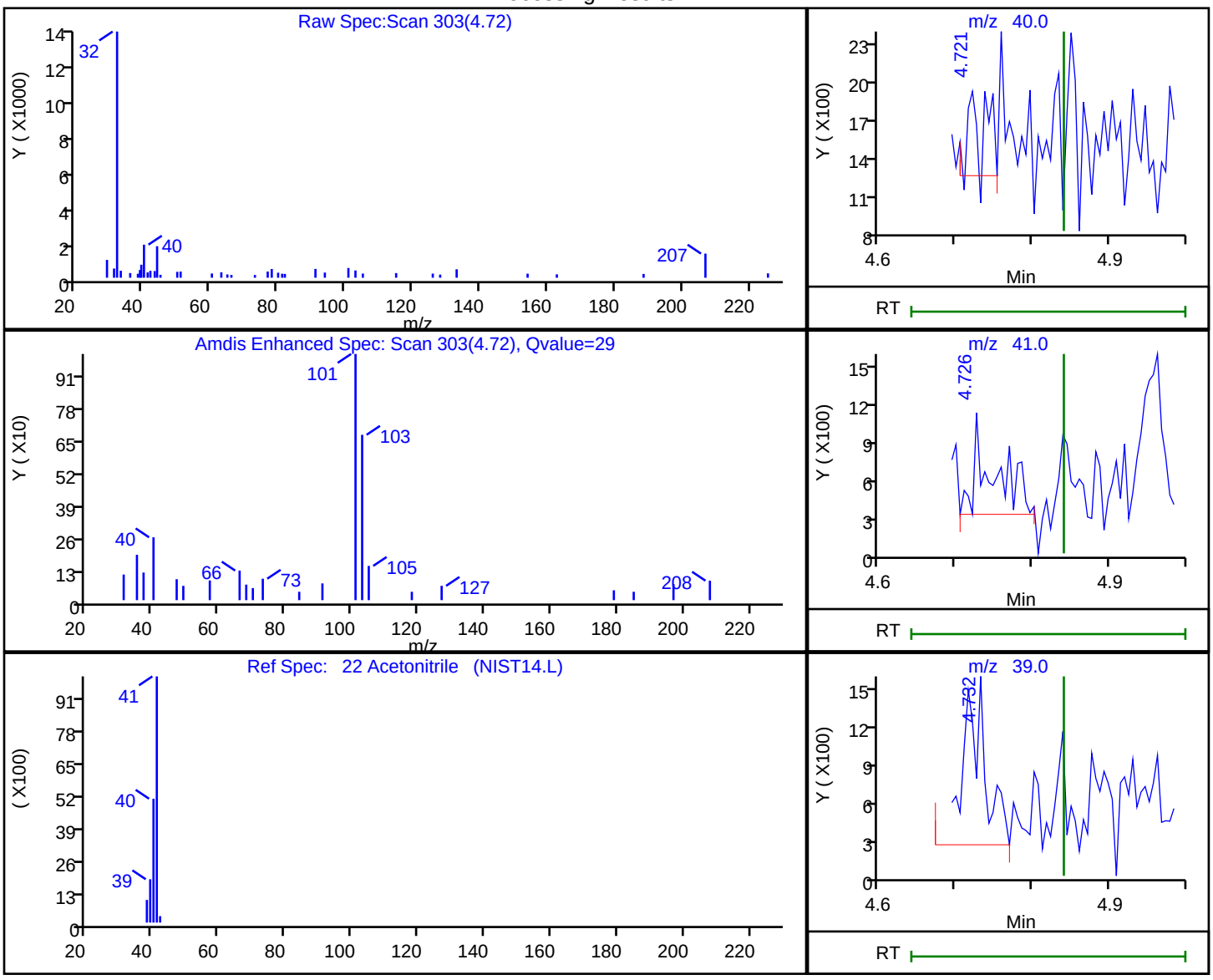
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC01.D
Injection Date: 28-Aug-2020 19:11:30 Instrument ID: MR
Lims ID: IC L1
Client ID:
Operator ID: HMT ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Method: MR_TO15 Limit Group: MSA TO14A_15 Routine ICAL
Column: RTX-5 (0.32 mm) Detector MS SCAN

22 Acetonitrile, CAS: 75-05-8

Processing Results



RT	Mass	Response	Amount
4.72	40.00	1023	0.034831
4.73	41.00	1425	
4.73	39.00	2917	

Reviewer: barlozhetskayaa, 31-Aug-2020 13:29:09
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

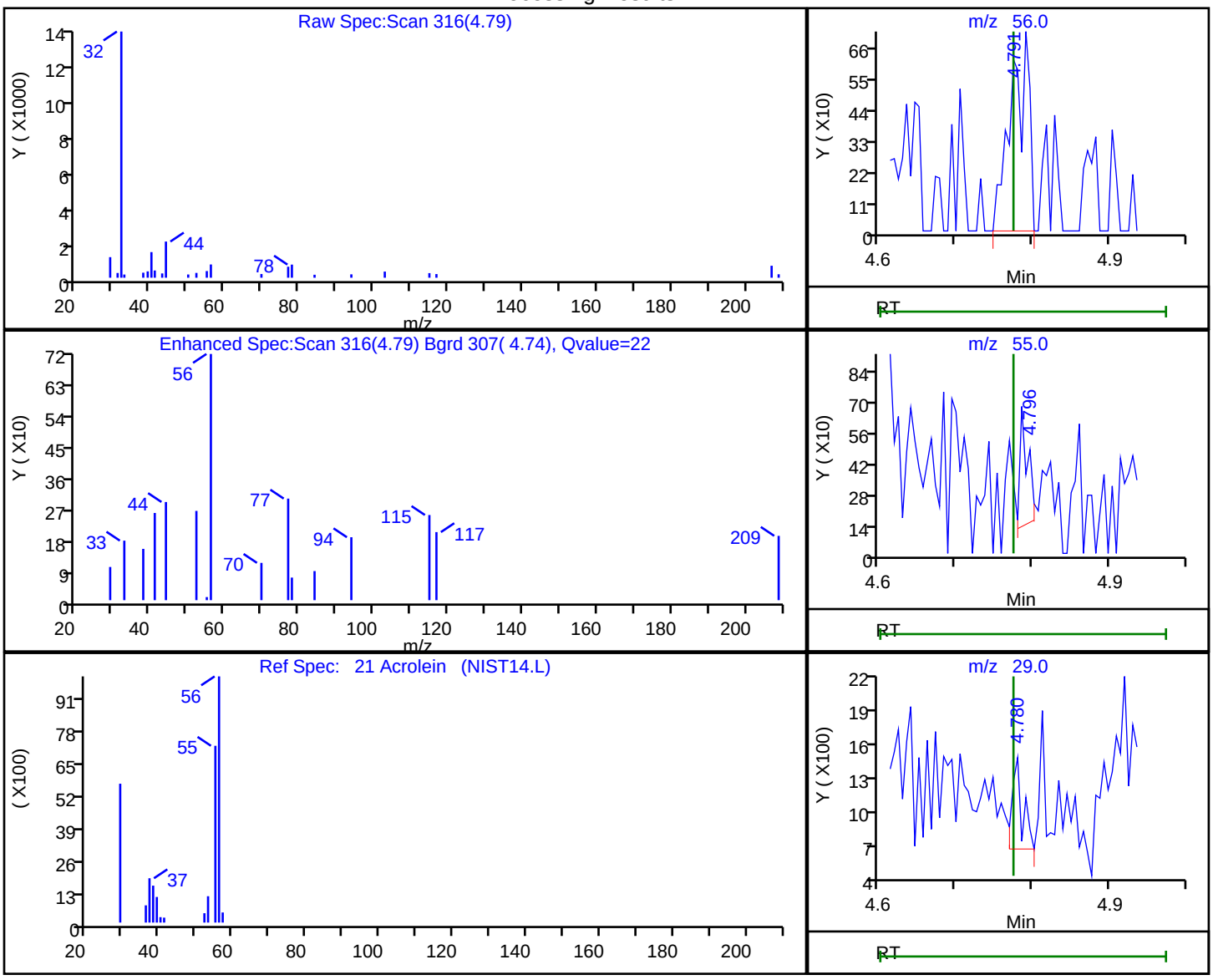
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC01.D				
Injection Date:	28-Aug-2020 19:11:30	Instrument ID:	MR		
Lims ID:	IC L1				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

21 Acrolein, CAS: 107-02-8

Processing Results



RT	Mass	Response	Amount
4.79	56.00	1206	0.060305
4.80	55.00	396	
4.78	29.00	733	

Reviewer: barlozhetskayaa, 31-Aug-2020 13:29:12

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

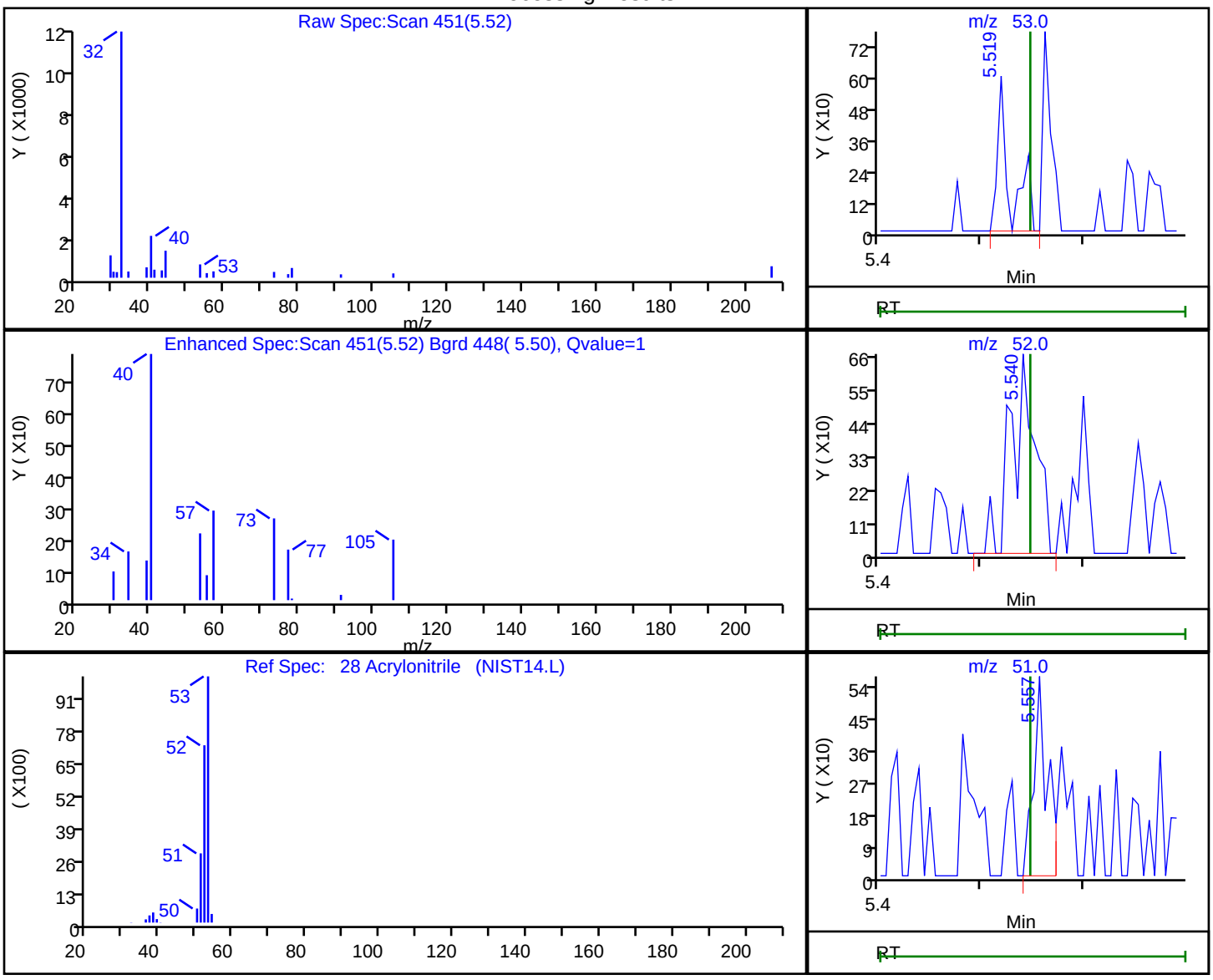
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC01.D				
Injection Date:	28-Aug-2020 19:11:30	Instrument ID:	MR		
Lims ID:	IC L1				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

28 Acrylonitrile, CAS: 107-13-1

Processing Results



RT	Mass	Response	Amount
5.52	53.00	505	0.011606
5.54	52.00	1098	
5.56	51.00	539	

Reviewer: barlozhetskayaa, 31-Aug-2020 13:29:05

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

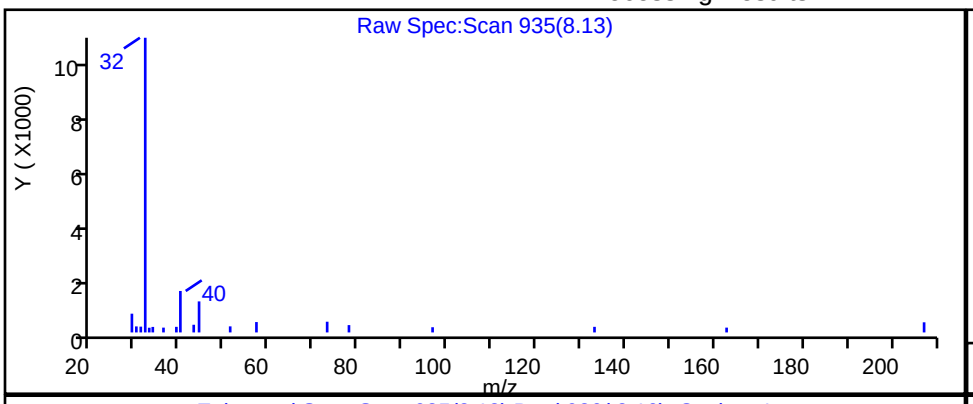
User Disabled Compound Report

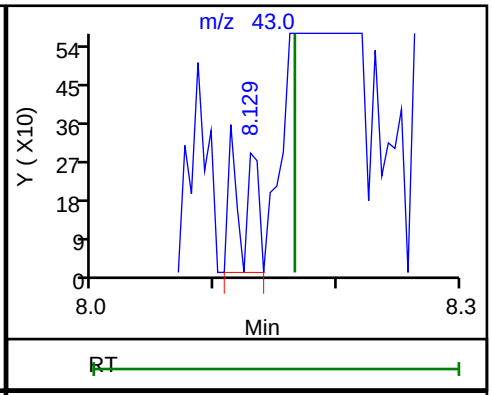
Eurofins TestAmerica, Knoxville

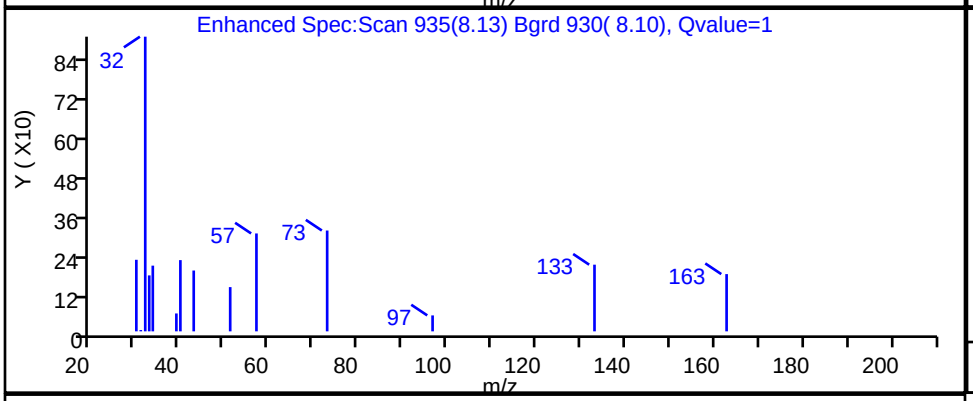
Data File:	\\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC01.D				
Injection Date:	28-Aug-2020 19:11:30	Instrument ID:	MR		
Lims ID:	IC L1				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

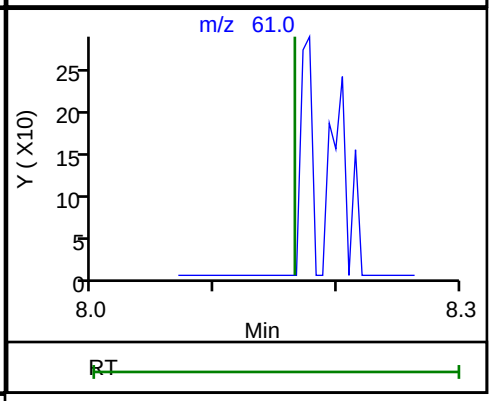
43 Ethyl acetate, CAS: 141-78-6

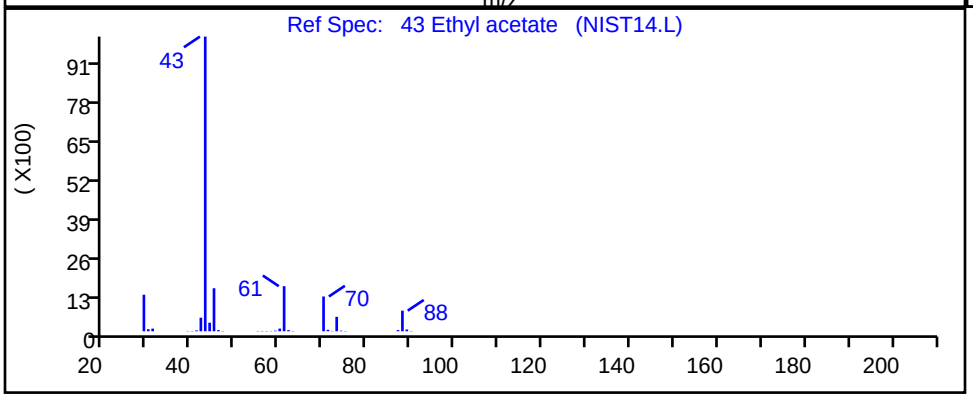
Processing Results











RT	Mass	Response	Amount
8.13	43.00	337	0.001953
8.16	61.00	0	

Reviewer: barlozhetskayaa, 31-Aug-2020 13:28:52

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

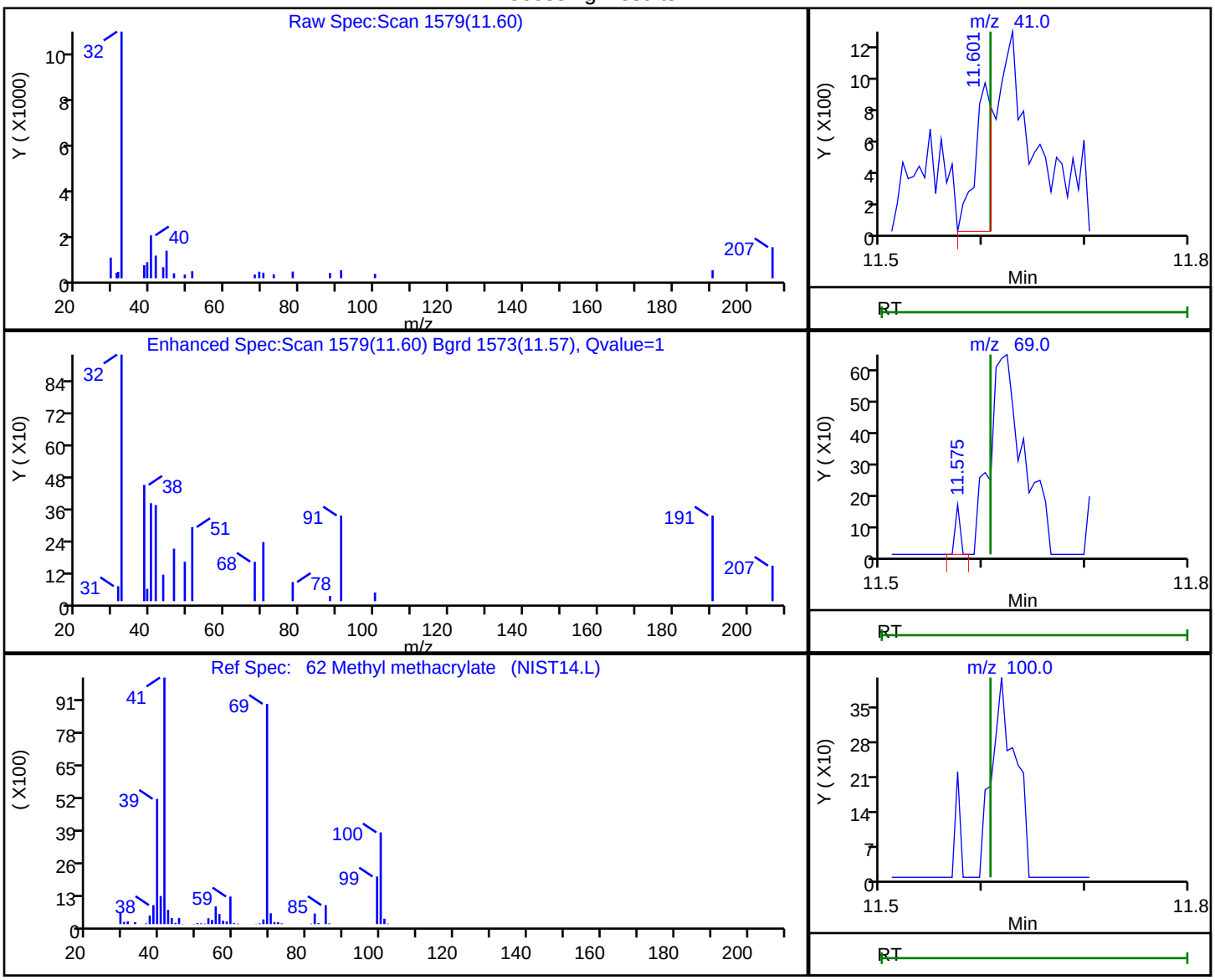
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC01.D				
Injection Date:	28-Aug-2020 19:11:30	Instrument ID:	MR		
Lims ID:	IC L1				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

62 Methyl methacrylate, CAS: 80-62-6

Processing Results



RT	Mass	Response	Amount
11.60	41.00	1030	0.010121
11.57	69.00	52	
11.61	100.00	0	

Reviewer: barlozhetskayaa, 31-Aug-2020 13:28:37

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

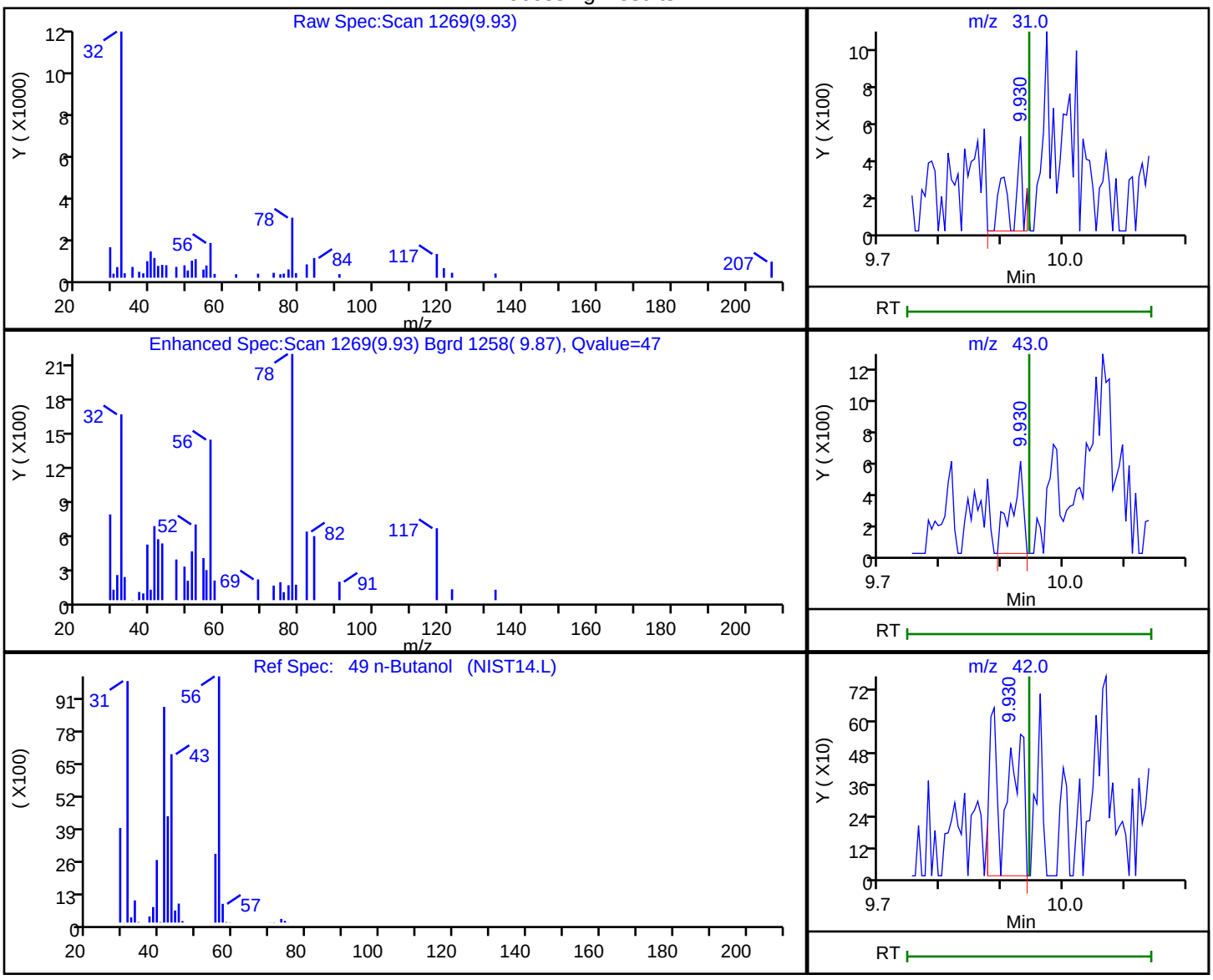
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC01.D				
Injection Date:	28-Aug-2020 19:11:30	Instrument ID:	MR		
Lims ID:	IC L1				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

49 n-Butanol, CAS: 71-36-3

Processing Results



RT	Mass	Response	Amount
9.93	31.00	602	0.013094
9.93	43.00	807	
9.93	42.00	1477	

Reviewer: barlozhetskayaa, 31-Aug-2020 13:28:43

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC02.D
Lims ID: IC L2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 28-Aug-2020 20:00:30 ALS Bottle#: 8 Worklist Smp#: 10
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016425-010
Misc. Info.: 314720
Operator ID: HMT Instrument ID: MR
Sublist: chrom-MR_TO15*sub16

Method: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 31-Aug-2020 13:43:06 Calib Date: 29-Aug-2020 00:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1064

First Level Reviewer: barlozhetskayaa Date: 31-Aug-2020 13:26:52

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.274	8.283	-0.009	91	242923	4.80	4.80	
* 2 1,4-Difluorobenzene	114	10.507	10.519	-0.012	94	1217481	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.354	15.356	-0.002	87	950287	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.004	17.006	-0.002	95	560541	4.64	4.41	
7 Propene	41	3.346	3.343	0.003	62	4536	0.0400	0.0703	
8 Dichlorodifluoromethane	85	3.383	3.390	-0.007	95	5805	0.0400	0.0569	
6 Chlorodifluoromethane	51	3.335	3.345	-0.010	79	7245	0.0400	0.0533	
9 Chloromethane	52	3.556	3.559	-0.003	63	1173	0.0400	0.0486	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.567	3.568	-0.001	91	6816	0.0400	0.0476	
11 Acetaldehyde	44	3.712	3.709	0.003	87	21562	0.2000	0.5684	
12 Vinyl chloride	62	3.712	3.716	-0.004	40	4006	0.0400	0.0256	
14 Butadiene	54	3.793	3.798	-0.005	76	3436	0.0400	0.0551	
13 Butane	43	3.799	3.799	0.000	78	7223	0.0400	0.0548	
15 Bromomethane	94	4.095	4.094	0.001	94	3968	0.0400	0.0106	
16 Chloroethane	64	4.225	4.221	0.004	57	2253	0.0400	0.0210	
17 Ethanol	31	4.354	4.345	0.009	94	11445	0.2000	0.1441	
18 Vinyl bromide	106	4.494	4.502	-0.008	79	4929	0.0400	0.0622	
19 2-Methylbutane	43	4.543	4.547	-0.004	81	5175	0.0400	0.0506	
20 Trichlorofluoromethane	101	4.753	4.751	0.002	96	9216	0.0400	0.0463	
21 Acrolein	56	4.785	4.775	0.010	13	895	0.0400	0.0473	
23 Acetone	58	4.909	4.891	0.018	95	10759	0.1200	0.2964	
24 Pentane	72	4.958	4.960	-0.002	58	571	0.0400	0.0491	
25 Isopropyl alcohol	45	5.012	4.996	0.016	93	14331	0.1200	0.1471	
26 Ethyl ether	31	5.168	5.143	0.025	63	4459	0.0400	0.0527	
27 1,1-Dichloroethene	96	5.438	5.430	0.008	52	3927	0.0400	0.0547	
28 Acrylonitrile	53	5.556	5.548	0.008	35	1291	0.0400	0.0313	
30 1,1,2-Trichloro-1,2,2-trifluoroe	101	5.600	5.603	-0.003	92	7062	0.0400	0.0452	
29 2-Methyl-2-propanol	59	5.621	5.589	0.032	54	6107	0.0400	0.0503	
31 Methylene Chloride	84	5.761	5.768	-0.007	91	3663	0.0400	0.0619	
32 3-Chloro-1-propene	39	5.772	5.782	-0.010	86	4644	0.0400	-0.002457	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
33 Carbon disulfide	76	5.918	5.921	-0.003	85	8355	0.0400	0.0441	
34 trans-1,2-Dichloroethene	96	6.554	6.561	-0.007	57	3278	0.0400	0.0493	
35 2-Methylpentane	43	6.570	6.579	-0.009	91	8673	0.0400	0.0543	
36 Methyl tert-butyl ether	73	6.759	6.716	0.043	83	8536	0.0400	0.0528	
37 1,1-Dichloroethane	63	6.975	6.977	-0.002	86	6489	0.0400	0.0562	
38 Vinyl acetate	43	7.099	7.100	-0.001	81	8425	0.0400	0.0479	
40 Hexane	56	7.546	7.553	-0.007	78	2294	0.0400	0.0466	
39 2-Butanone (MEK)	72	7.579	7.551	0.028	91	1803	0.0400	0.0552	
41 Isopropyl ether	45	7.757	7.736	0.021	92	12479	0.0400	0.0519	
42 cis-1,2-Dichloroethene	96	7.951	7.953	-0.002	37	3783	0.0400	0.0492	
43 Ethyl acetate	43	8.188	8.165	0.023	54	9658	0.0400	0.0591	
44 Chloroform	83	8.290	8.300	-0.010	29	6896	0.0400	0.0472	
45 Tert-butyl ethyl ether	59	8.447	8.413	0.034	92	9108	0.0400	0.0461	
46 Tetrahydrofuran	42	8.760	8.722	0.038	69	4252	0.0400	0.0508	
47 1,1,1-Trichloroethane	97	9.304	9.320	-0.016	93	7497	0.0400	0.0537	
48 1,2-Dichloroethane	62	9.412	9.434	-0.022	67	3317	0.0400	0.0408	
50 Cyclohexane	69	9.924	9.928	-0.004	63	1518	0.0400	0.0506	
51 Benzene	78	9.919	9.933	-0.014	95	11422	0.0400	0.0537	
49 n-Butanol	31	9.973	9.944	0.029	38	2037	0.0400	0.0468	
52 Carbon tetrachloride	117	9.951	9.957	-0.006	88	5576	0.0400	0.0406	
53 2,3-Dimethylpentane	71	10.064	10.069	-0.005	88	1791	0.0400	0.0384	
54 Thiophene	84	10.221	10.221	0.000	40	5656	0.0400	0.0461	
55 Isooctane	57	10.744	10.745	-0.001	89	15416	0.0400	0.0454	
56 n-Heptane	71	11.132	11.139	-0.007	91	3712	0.0400	0.0538	
57 1,2-Dichloropropane	63	11.197	11.212	-0.015	58	4573	0.0400	0.0564	
58 Trichloroethene	130	11.256	11.251	0.005	87	5375	0.0400	0.0508	
59 Dibromomethane	93	11.332	11.334	-0.002	82	4151	0.0400	0.0458	
60 Dichlorobromomethane	83	11.483	11.487	-0.004	96	6136	0.0400	0.0401	
61 1,4-Dioxane	88	11.564	11.532	0.032	25	786	0.0400	0.0225	
62 Methyl methacrylate	41	11.612	11.607	0.005	56	4834	0.0400	0.0501	
63 Methylcyclohexane	83	12.038	12.043	-0.005	86	5845	0.0400	0.0467	
64 4-Methyl-2-pentanone (MIBK)	43	12.518	12.489	0.029	84	9302	0.0400	0.0476	
65 cis-1,3-Dichloropropene	75	12.523	12.528	-0.005	87	4465	0.0400	0.0409	
66 trans-1,3-Dichloropropene	75	13.241	13.241	0.000	88	3725	0.0400	0.0424	
67 Toluene	91	13.359	13.360	-0.001	95	11839	0.0400	0.0463	
68 1,1,2-Trichloroethane	83	13.429	13.440	-0.011	90	3606	0.0400	0.0466	
69 2-Hexanone	58	13.871	13.853	0.018	88	3204	0.0400	0.0414	
70 n-Octane	85	14.076	14.077	-0.001	89	2725	0.0400	0.0382	
71 Chlorodibromomethane	129	14.141	14.148	-0.007	93	7528	0.0400	0.0473	
72 Ethylene Dibromide	107	14.438	14.441	-0.003	90	6075	0.0400	0.0438	
73 Tetrachloroethene	129	14.508	14.519	-0.011	71	4546	0.0400	0.0484	
74 Chlorobenzene	112	15.398	15.404	-0.006	88	8843	0.0400	0.0451	
75 2,3-Dimethylheptane	43	15.441	15.438	0.003	93	11551	0.0400	0.0443	
76 Ethylbenzene	91	15.694	15.698	-0.004	99	14442	0.0400	0.0446	
77 m-Xylene & p-Xylene	91	15.861	15.863	-0.002	92	22187	0.0800	0.0898	
78 n-Nonane	57	16.293	16.296	-0.003	92	6199	0.0400	0.0411	
79 Bromoform	173	16.303	16.304	-0.001	83	6787	0.0400	0.0393	
80 Styrene	104	16.325	16.328	-0.003	91	7531	0.0400	0.0420	
81 o-Xylene	91	16.384	16.389	-0.005	98	11570	0.0400	0.0452	
82 1,1,2,2-Tetrachloroethane	83	16.713	16.715	-0.002	97	8915	0.0400	0.0428	
83 1,2,3-Trichloropropane	110	16.875	16.877	-0.002	90	2480	0.0400	0.0439	
84 Isopropylbenzene	105	16.977	16.980	-0.003	89	16330	0.0400	0.0448	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
85 N-Propylbenzene	120	17.522	17.529	-0.007	97	4385	0.0400	0.0410	
86 2-Chlorotoluene	126	17.571	17.572	-0.001	96	4662	0.0400	0.0474	
87 4-Ethyltoluene	105	17.689	17.688	0.001	99	15398	0.0400	0.0419	
88 1,3,5-Trimethylbenzene	120	17.765	17.766	-0.001	95	7284	0.0400	0.0452	
89 Alpha Methyl Styrene	118	18.007	18.005	0.002	90	5527	0.0400	0.0383	
90 n-Decane	57	18.078	18.075	0.003	91	7453	0.0400	0.0388	
91 tert-Butylbenzene	119	18.202	18.202	0.000	95	14963	0.0400	0.0417	
92 1,2,4-Trimethylbenzene	105	18.218	18.216	0.002	94	12119	0.0400	0.0399	
93 sec-Butylbenzene	105	18.477	18.479	-0.002	97	19626	0.0400	0.0413	
94 1,3-Dichlorobenzene	146	18.487	18.489	-0.002	94	8391	0.0400	0.0365	
95 Benzyl chloride	91	18.563	18.568	-0.005	90	10562	0.0400	0.0464	
96 1,4-Dichlorobenzene	146	18.579	18.580	-0.001	94	9846	0.0400	0.0434	
97 4-Isopropyltoluene	119	18.649	18.648	0.001	96	15420	0.0400	0.0389	
98 1,2,3-Trimethylbenzene	105	18.703	18.698	0.005	97	13530	0.0400	0.0503	
99 Butylcyclohexane	83	18.752	18.757	-0.005	83	10259	0.0400	0.0396	
101 1,2-Dichlorobenzene	146	18.946	18.945	0.001	81	10352	0.0400	0.0432	
100 2,3-Dihydroindene	117	18.951	18.947	0.004	91	13310	0.0400	0.0417	
102 Indene	116	19.081	19.081	-0.001	85	9272	0.0400	0.0357	
103 n-Butylbenzene	91	19.097	19.092	0.005	98	13814	0.0400	0.0355	
104 Undecane	57	19.420	19.418	0.002	89	7653	0.0400	0.0320	
105 1,2-Dibromo-3-Chloropropane	157	19.560	19.560	0.000	85	4510	0.0400	0.0391	
106 1,2,4,5-Tetramethylbenzene	119	19.857	19.860	-0.003	97	13935	0.0400	0.0381	
107 Dodecane	57	20.483	20.478	0.005	84	4267	0.0400	0.0201	
108 1,2,4-Trichlorobenzene	180	20.655	20.658	-0.003	92	7698	0.0400	0.0394	
109 Naphthalene	128	20.795	20.794	0.001	98	12375	0.0400	0.0325	
110 Hexachlorobutadiene	225	21.016	21.014	0.002	90	10895	0.0400	0.0480	
111 1,2,3-Trichlorobenzene	180	21.081	21.081	0.000	94	8626	0.0400	0.0446	
112 2-Methylnaphthalene	142	21.831	21.826	0.005	95	6978	0.0400	0.0313	
113 1-Methylnaphthalene	142	21.960	21.957	0.003	94	15388	0.0400	0.0488	
A 116 C8 Range	1	14.066	(14.039-14.114)		0	34571	0.0400	0.0449	
S 117 Xylenes, Total	100				0		0.1200	0.1350	
S 118 1,2-Dichloroethene, Total	1				0		0.0800	0.0984	

Reagents:

40L1-3DQP_00031	Amount Added: 100.00	Units: mL	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

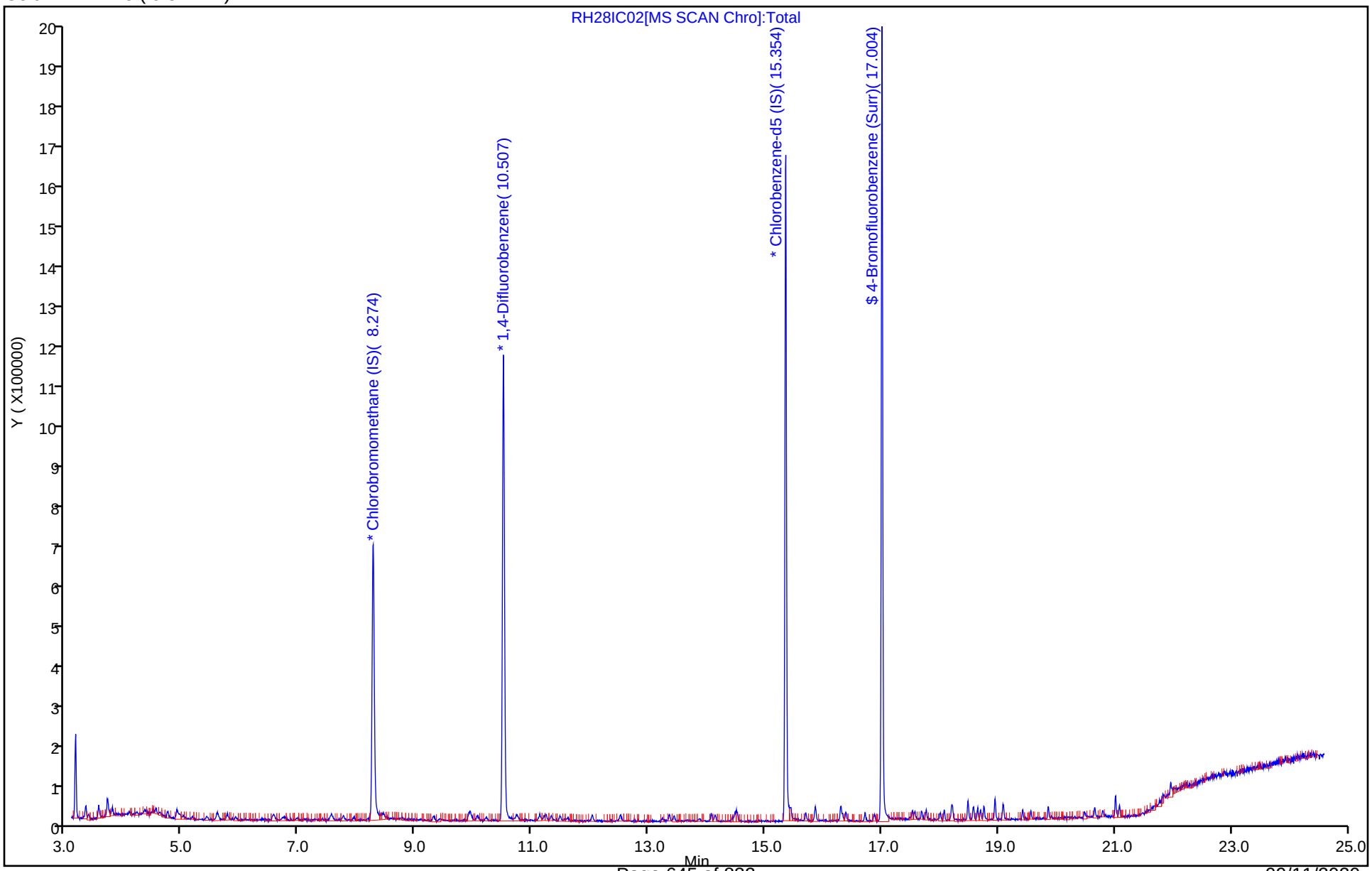
Report Date: 31-Aug-2020 13:43:07 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC02.D

Injection Date:	28-Aug-2020 20:00:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	IC L2			Worklist Smp#:	10
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

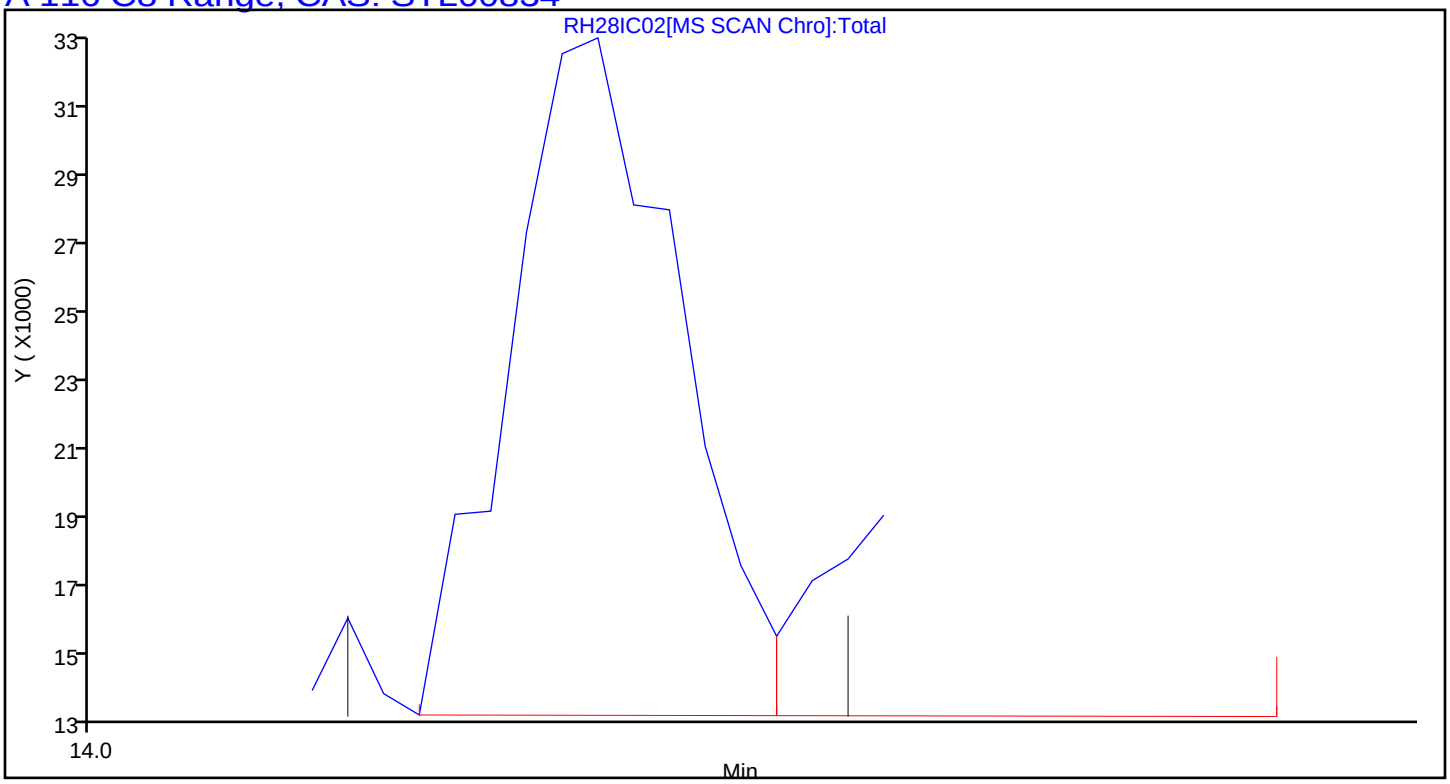


Report Date: 31-Aug-2020 13:43:07 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC02.D				
Injection Date:	28-Aug-2020 20:00:30	Instrument ID:	MR		
Lims ID:	IC L2				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	8	Worklist Smp#:	10
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 116 C8 Range, CAS: STL00834



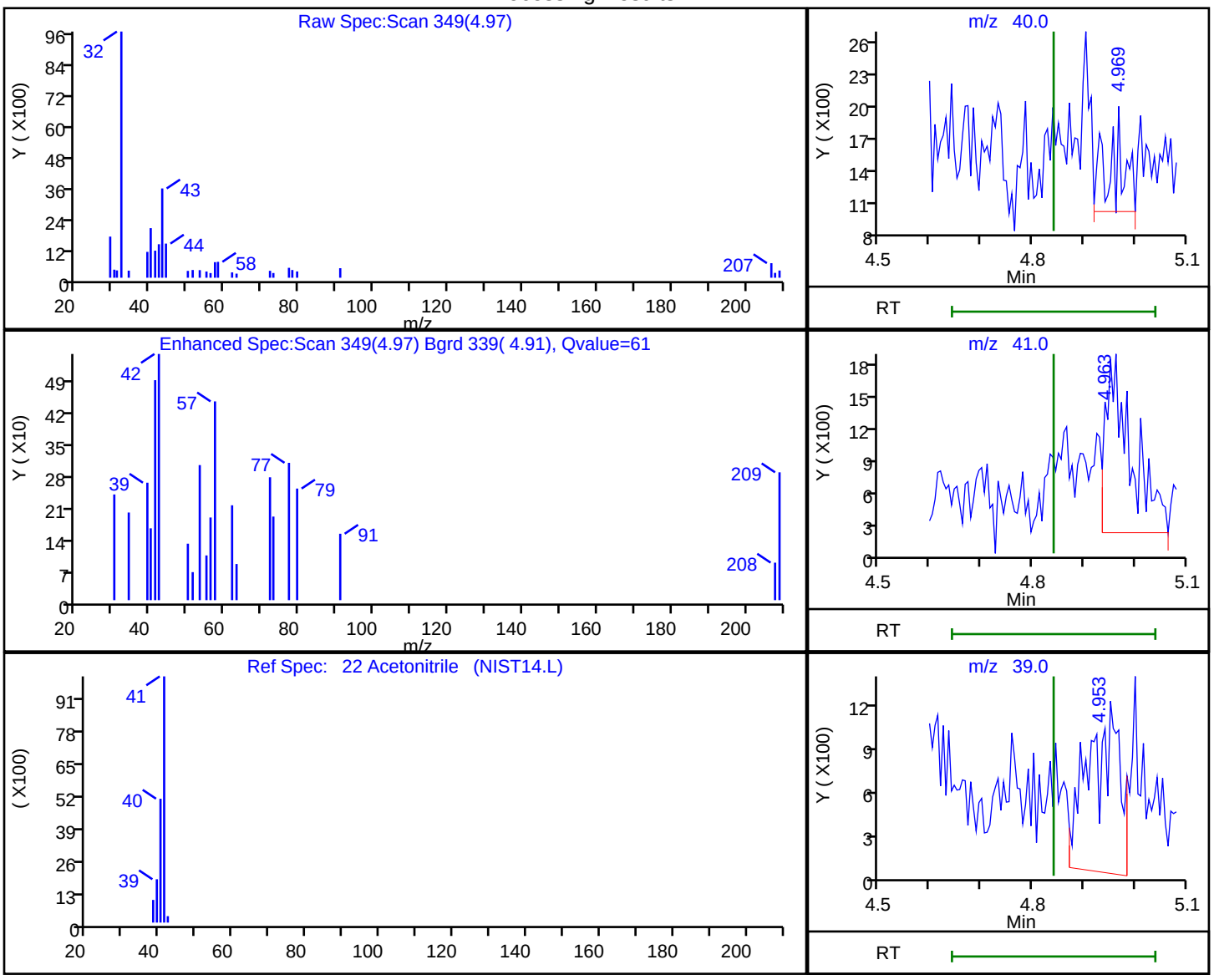
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC02.D				
Injection Date:	28-Aug-2020 20:00:30	Instrument ID:	MR		
Lims ID:	IC L2				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	8	Worklist Smp#:	10
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

22 Acetonitrile, CAS: 75-05-8

Processing Results



RT	Mass	Response	Amount
4.97	40.00	1897	0.068219
4.96	41.00	5632	
4.95	39.00	5052	

Reviewer: barlozhetskayaa, 31-Aug-2020 13:27:19

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC03.D
Lims ID: IC L3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 28-Aug-2020 20:50:30 ALS Bottle#: 8 Worklist Smp#: 11
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016425-011
Misc. Info.: 314720
Operator ID: HMT Instrument ID: MR
Sublist: chrom-MR_TO15*sub16

Method: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 31-Aug-2020 13:43:14 Calib Date: 29-Aug-2020 00:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1064

First Level Reviewer: barlozhetskayaa Date: 31-Aug-2020 13:26:36

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.269	8.283	-0.014	93	226389	4.80	4.80	
* 2 1,4-Difluorobenzene	114	10.507	10.519	-0.012	94	1140479	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.354	15.356	-0.002	87	904210	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.004	17.006	-0.002	95	523427	4.64	4.33	
6 Chlorodifluoromethane	51	3.329	3.345	-0.016	82	12116	0.0800	0.0956	
7 Propene	41	3.335	3.343	-0.008	69	5931	0.0800	0.0986	
8 Dichlorodifluoromethane	85	3.383	3.390	-0.007	95	8501	0.0800	0.0894	
9 Chloromethane	52	3.561	3.559	0.002	63	4722	0.0800	0.2099	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.561	3.568	-0.007	86	13034	0.0800	0.0977	
12 Vinyl chloride	62	3.712	3.716	-0.004	39	7353	0.0800	0.0788	
11 Acetaldehyde	44	3.701	3.709	-0.008	89	45155	0.4000	1.28	
14 Butadiene	54	3.788	3.798	-0.010	59	5995	0.0800	0.1033	
13 Butane	43	3.788	3.799	-0.011	87	13671	0.0800	0.1114	
15 Bromomethane	94	4.079	4.094	-0.015	87	8792	0.0800	0.0803	
16 Chloroethane	64	4.214	4.221	-0.007	89	4177	0.0800	0.0809	
17 Ethanol	31	4.338	4.345	-0.007	98	25506	0.4000	0.4714	
18 Vinyl bromide	106	4.494	4.502	-0.008	96	8061	0.0800	0.1091	
19 2-Methylbutane	43	4.543	4.547	-0.004	94	9635	0.0800	0.1011	
20 Trichlorofluoromethane	101	4.737	4.751	-0.014	96	17978	0.0800	0.0970	
21 Acrolein	56	4.774	4.775	-0.001	27	1436	0.0800	0.0814	
22 Acetonitrile	40	4.823	4.841	-0.018	58	4323	0.0800	0.1668	
23 Acetone	58	4.893	4.891	0.002	99	20997	0.2400	0.6207	
24 Pentane	72	4.936	4.960	-0.024	18	1467	0.0800	0.1354	
25 Isopropyl alcohol	45	4.990	4.996	-0.006	97	30563	0.2400	0.3365	
26 Ethyl ether	31	5.147	5.143	0.004	88	8883	0.0800	0.1126	
27 1,1-Dichloroethene	96	5.411	5.430	-0.019	96	5907	0.0800	0.0883	
28 Acrylonitrile	53	5.535	5.548	-0.013	50	3106	0.0800	0.0809	
30 1,1,2-Trichloro-1,2,2-trifluoroe	101	5.589	5.603	-0.014	91	13392	0.0800	0.0921	
29 2-Methyl-2-propanol	59	5.600	5.589	0.011	76	12907	0.0800	0.1140	
31 Methylene Chloride	84	5.751	5.768	-0.017	92	6055	0.0800	0.1098	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	5.767	5.782	-0.015	88	9255	0.0800	0.0822	
33 Carbon disulfide	76	5.907	5.921	-0.014	97	16549	0.0800	0.0938	
34 trans-1,2-Dichloroethene	96	6.554	6.561	-0.007	74	6013	0.0800	0.0970	
35 2-Methylpentane	43	6.570	6.579	-0.009	95	15740	0.0800	0.1057	
36 Methyl tert-butyl ether	73	6.727	6.716	0.011	95	14447	0.0800	0.0958	
37 1,1-Dichloroethane	63	6.969	6.977	-0.008	97	9835	0.0800	0.0913	
38 Vinyl acetate	43	7.104	7.100	0.004	99	13230	0.0800	0.0807	
40 Hexane	56	7.541	7.553	-0.012	74	4637	0.0800	0.1011	
39 2-Butanone (MEK)	72	7.546	7.551	-0.005	83	4135	0.0800	0.1359	
41 Isopropyl ether	45	7.746	7.736	0.010	96	20620	0.0800	0.0921	
42 cis-1,2-Dichloroethene	96	7.945	7.953	-0.008	85	7459	0.0800	0.1041	
43 Ethyl acetate	43	8.166	8.165	0.001	83	13590	0.0800	0.0893	
44 Chloroform	83	8.280	8.300	-0.020	29	13041	0.0800	0.0957	
45 Tert-butyl ethyl ether	59	8.425	8.413	0.012	95	16601	0.0800	0.0902	
46 Tetrahydrofuran	42	8.727	8.722	0.005	84	6776	0.0800	0.0869	
47 1,1,1-Trichloroethane	97	9.309	9.320	-0.011	94	11655	0.0800	0.0896	
48 1,2-Dichloroethane	62	9.423	9.434	-0.011	69	7149	0.0800	0.0940	
51 Benzene	78	9.930	9.933	-0.003	96	17766	0.0800	0.0891	
50 Cyclohexane	69	9.908	9.928	-0.020	68	2627	0.0800	0.0934	
52 Carbon tetrachloride	117	9.946	9.957	-0.011	90	11755	0.0800	0.0914	
49 n-Butanol	31	9.973	9.944	0.029	41	3452	0.0800	0.0846	
53 2,3-Dimethylpentane	71	10.064	10.069	-0.005	89	4497	0.0800	0.1028	
54 Thiophene	84	10.205	10.221	-0.016	91	9987	0.0800	0.0869	
55 Isooctane	57	10.733	10.745	-0.012	95	29729	0.0800	0.0935	
56 n-Heptane	71	11.132	11.139	-0.007	92	7132	0.0800	0.1103	
57 1,2-Dichloropropane	63	11.208	11.212	-0.004	78	6928	0.0800	0.0913	
58 Trichloroethene	130	11.240	11.251	-0.011	90	8518	0.0800	0.0860	
59 Dibromomethane	93	11.321	11.334	-0.013	93	7712	0.0800	0.0909	
60 Dichlorobromomethane	83	11.477	11.487	-0.010	94	12403	0.0800	0.0866	
61 1,4-Dioxane	88	11.553	11.532	0.021	58	2541	0.0800	0.0777	
62 Methyl methacrylate	41	11.601	11.607	-0.006	84	8554	0.0800	0.0947	
63 Methylcyclohexane	83	12.043	12.043	0.000	90	9915	0.0800	0.0846	
64 4-Methyl-2-pentanone (MIBK)	43	12.502	12.489	0.013	93	14203	0.0800	0.0775	
65 cis-1,3-Dichloropropene	75	12.529	12.528	0.001	84	7616	0.0800	0.0746	
66 trans-1,3-Dichloropropene	75	13.241	13.241	0.000	92	6617	0.0800	0.0792	
67 Toluene	91	13.354	13.360	-0.006	91	21430	0.0800	0.0880	
68 1,1,2-Trichloroethane	83	13.445	13.440	0.005	91	6292	0.0800	0.0854	
69 2-Hexanone	58	13.866	13.853	0.013	89	6915	0.0800	0.0938	
70 n-Octane	85	14.071	14.077	-0.006	90	6289	0.0800	0.0927	
71 Chlorodibromomethane	129	14.146	14.148	-0.002	90	13081	0.0800	0.0865	
72 Ethylene Dibromide	107	14.443	14.441	0.002	95	10468	0.0800	0.0794	
73 Tetrachloroethene	129	14.513	14.519	-0.006	92	8773	0.0800	0.0981	
74 Chlorobenzene	112	15.403	15.404	-0.001	95	17259	0.0800	0.0926	
75 2,3-Dimethylheptane	43	15.441	15.438	0.003	94	22122	0.0800	0.0891	
76 Ethylbenzene	91	15.694	15.698	-0.004	99	25517	0.0800	0.0827	
77 m-Xylene & p-Xylene	91	15.861	15.863	-0.002	97	39468	0.1600	0.1679	
78 n-Nonane	57	16.298	16.296	0.002	93	11791	0.0800	0.0821	
79 Bromoform	173	16.303	16.304	-0.001	85	12835	0.0800	0.0781	
80 Styrene	104	16.330	16.328	0.002	95	14366	0.0800	0.0842	
81 o-Xylene	91	16.390	16.389	0.001	99	20827	0.0800	0.0855	
82 1,1,2,2-Tetrachloroethane	83	16.719	16.715	0.004	98	15948	0.0800	0.0804	
83 1,2,3-Trichloropropane	110	16.875	16.877	-0.002	88	4676	0.0800	0.0871	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	16.977	16.980	-0.003	94	29597	0.0800	0.0853	
85 N-Propylbenzene	120	17.527	17.529	-0.002	99	8310	0.0800	0.0817	
86 2-Chlorotoluene	126	17.565	17.572	-0.007	95	7903	0.0800	0.0844	
87 4-Ethyltoluene	105	17.689	17.688	0.001	98	28183	0.0800	0.0806	
88 1,3,5-Trimethylbenzene	120	17.765	17.766	-0.001	93	12856	0.0800	0.0838	
89 Alpha Methyl Styrene	118	18.002	18.005	-0.003	85	10571	0.0800	0.0769	
90 n-Decane	57	18.072	18.075	-0.003	85	14210	0.0800	0.0778	
91 tert-Butylbenzene	119	18.202	18.202	0.000	95	26273	0.0800	0.0769	
92 1,2,4-Trimethylbenzene	105	18.218	18.216	0.002	93	23348	0.0800	0.0808	
93 sec-Butylbenzene	105	18.477	18.479	-0.003	98	35652	0.0800	0.0789	
94 1,3-Dichlorobenzene	146	18.487	18.489	-0.002	95	18470	0.0800	0.0844	
95 Benzyl chloride	91	18.563	18.568	-0.005	90	16061	0.0800	0.0741	
96 1,4-Dichlorobenzene	146	18.579	18.580	-0.001	95	17209	0.0800	0.0798	
97 4-Isopropyltoluene	119	18.649	18.648	0.001	97	29811	0.0800	0.0791	
98 1,2,3-Trimethylbenzene	105	18.692	18.698	-0.006	95	23899	0.0800	0.0933	
99 Butylcyclohexane	83	18.757	18.757	0.000	95	20292	0.0800	0.0823	
101 1,2-Dichlorobenzene	146	18.940	18.945	-0.005	84	16734	0.0800	0.0735	
100 2,3-Dihydroindene	117	18.946	18.947	-0.001	90	23925	0.0800	0.0788	
102 Indene	116	19.080	19.081	-0.001	87	17900	0.0800	0.0724	
103 n-Butylbenzene	91	19.091	19.092	-0.001	96	27573	0.0800	0.0745	
104 Undecane	57	19.420	19.418	0.002	87	14433	0.0800	0.0634	
105 1,2-Dibromo-3-Chloropropane	157	19.560	19.560	0.000	86	6801	0.0800	0.0620	
106 1,2,4,5-Tetramethylbenzene	119	19.857	19.860	-0.003	97	25485	0.0800	0.0733	
107 Dodecane	57	20.477	20.478	-0.001	90	12191	0.0800	0.0603	
108 1,2,4-Trichlorobenzene	180	20.660	20.658	0.002	92	12214	0.0800	0.0656	
109 Naphthalene	128	20.790	20.794	-0.004	98	28187	0.0800	0.0777	
110 Hexachlorobutadiene	225	21.016	21.014	0.002	94	19968	0.0800	0.0925	
111 1,2,3-Trichlorobenzene	180	21.081	21.081	0.000	91	18521	0.0800	0.1007	
112 2-Methylnaphthalene	142	21.825	21.826	-0.001	95	8700	0.0800	0.0410	
113 1-Methylnaphthalene	142	21.960	21.957	0.003	95	24600	0.0800	0.0820	
A 116 C8 Range	1	14.066	(14.039-14.125)		0	70355	0.0800	0.0975	
S 117 Xylenes, Total	100				0		0.2400	0.2534	
S 118 1,2-Dichloroethene, Total	1				0		0.1600	0.2010	

Reagents:

40L1-3DQP_00031	Amount Added: 200.00	Units: mL	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

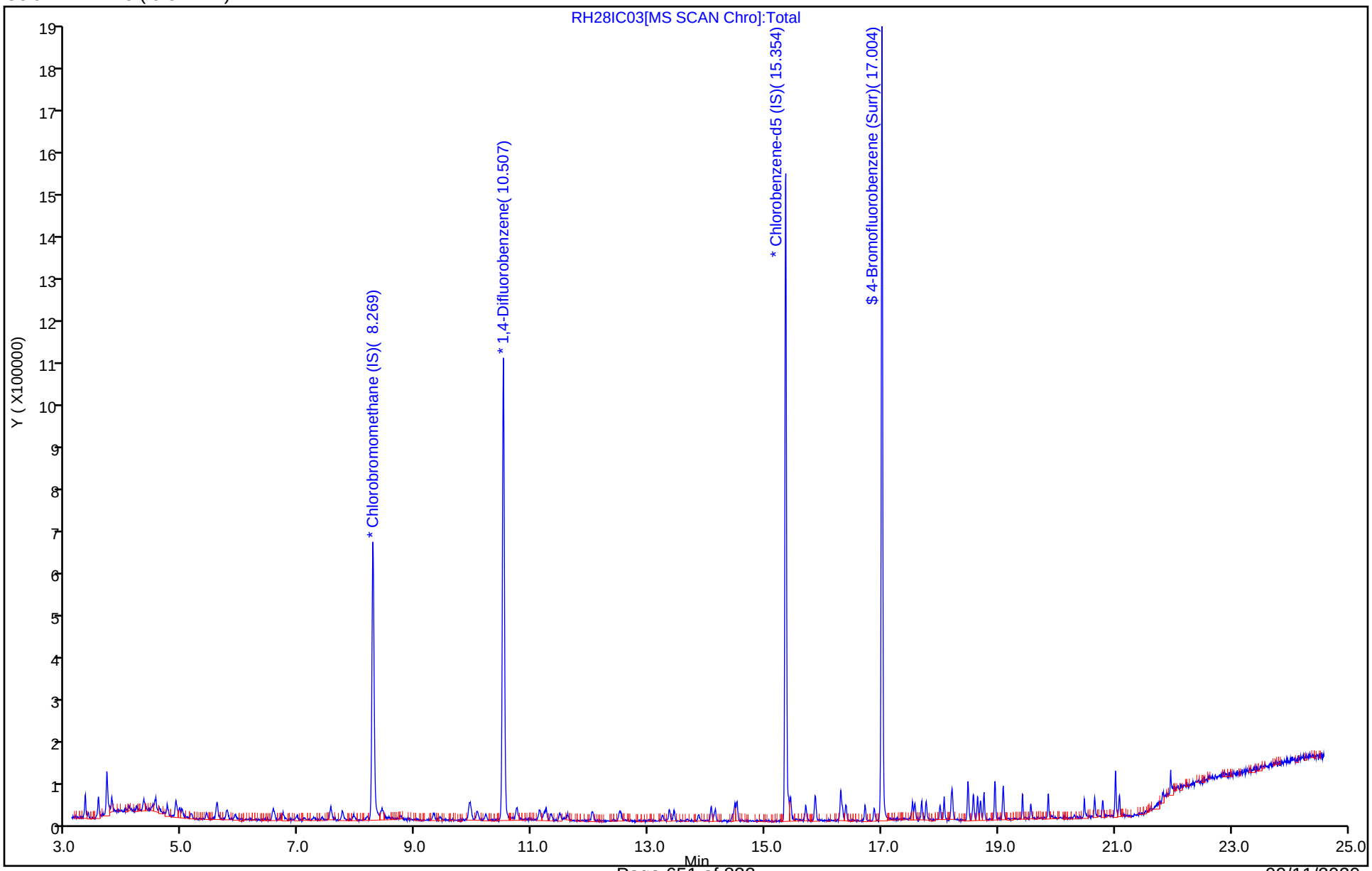
Report Date: 31-Aug-2020 13:43:15 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC03.D

Injection Date:	28-Aug-2020 20:50:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	IC L3			Worklist Smp#:	11
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

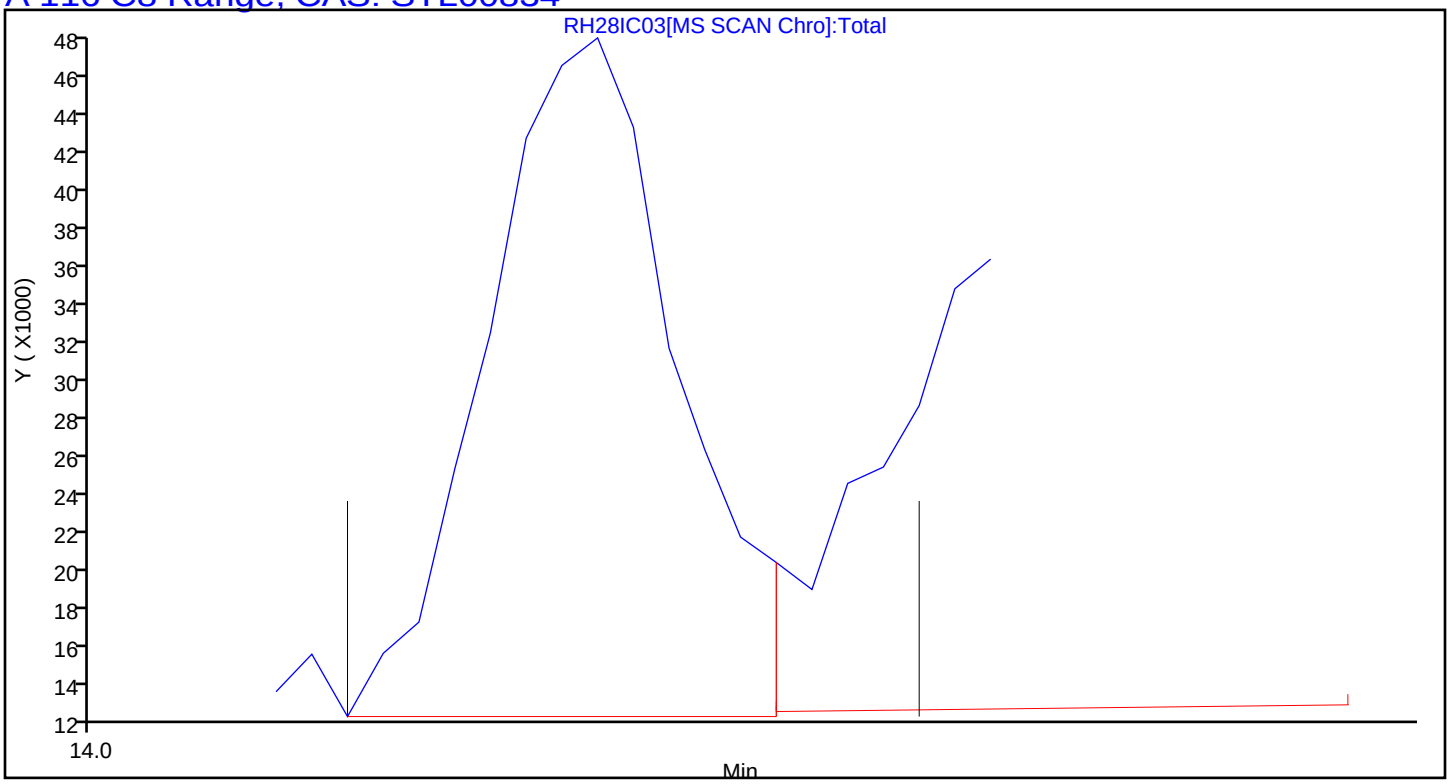


Report Date: 31-Aug-2020 13:43:15 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC03.D				
Injection Date:	28-Aug-2020 20:50:30	Instrument ID:	MR		
Lims ID:	IC L3				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	8	Worklist Smp#:	11
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 116 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC04.D
Lims ID: IC L4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 28-Aug-2020 21:38:30 ALS Bottle#: 9 Worklist Smp#: 12
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016425-012
Misc. Info.: 314717
Operator ID: HMT Instrument ID: MR
Sublist: chrom-MR_TO15*sub16

Method: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 31-Aug-2020 13:43:22 Calib Date: 29-Aug-2020 00:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1064

First Level Reviewer: barlozhetskayaa Date: 31-Aug-2020 13:20:36

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.280	8.283	-0.003	92	231832	4.80	4.80	
* 2 1,4-Difluorobenzene	114	10.517	10.519	-0.002	93	1154880	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.354	15.356	-0.002	87	917851	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.004	17.006	-0.002	94	543030	4.64	4.43	
6 Chlorodifluoromethane	51	3.340	3.345	-0.005	98	22349	0.1600	0.1722	
7 Propene	41	3.346	3.343	0.003	64	12382	0.1600	0.2011	
8 Dichlorodifluoromethane	85	3.399	3.390	0.009	97	21069	0.1600	0.2163	
9 Chloromethane	52	3.567	3.559	0.008	56	4150	0.1600	0.1801	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.572	3.568	0.004	88	25710	0.1600	0.1883	
11 Acetaldehyde	44	3.712	3.709	0.003	82	29061	0.8000	0.8027	
12 Vinyl chloride	62	3.718	3.716	0.002	50	13267	0.1600	0.1613	
14 Butadiene	54	3.804	3.798	0.006	64	10249	0.1600	0.1724	
13 Butane	43	3.804	3.799	0.005	87	22943	0.1600	0.1825	
15 Bromomethane	94	4.100	4.094	0.006	98	14685	0.1600	0.1563	
16 Chloroethane	64	4.219	4.221	-0.002	89	6827	0.1600	0.1528	
17 Ethanol	31	4.338	4.345	-0.007	97	33858	0.8000	0.6380	
18 Vinyl bromide	106	4.505	4.502	0.003	94	13473	0.1600	0.1781	
19 2-Methylbutane	43	4.548	4.547	0.001	94	17708	0.1600	0.1814	
20 Trichlorofluoromethane	101	4.753	4.751	0.002	96	31876	0.1600	0.1679	
21 Acrolein	56	4.785	4.775	0.010	53	3254	0.1600	0.1801	
22 Acetonitrile	40	4.834	4.841	-0.007	66	3234	0.1600	0.1219	
23 Acetone	58	4.899	4.891	0.008	99	16535	0.4800	0.4773	
24 Pentane	72	4.952	4.960	-0.008	56	946	0.1600	0.0852	
25 Isopropyl alcohol	45	5.001	4.996	0.005	91	46204	0.4800	0.4968	
26 Ethyl ether	31	5.152	5.143	0.009	87	15799	0.1600	0.1956	
27 1,1-Dichloroethene	96	5.432	5.430	0.002	96	11583	0.1600	0.1691	
28 Acrylonitrile	53	5.546	5.548	-0.002	81	5801	0.1600	0.1475	
30 1,1,2-Trichloro-1,2,2-trifluoroe	101	5.600	5.603	-0.003	93	25672	0.1600	0.1723	
29 2-Methyl-2-propanol	59	5.600	5.589	0.011	69	20684	0.1600	0.1784	
31 Methylene Chloride	84	5.767	5.768	-0.001	94	10241	0.1600	0.1813	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	5.783	5.782	0.001	91	13794	0.1600	0.1545	
33 Carbon disulfide	76	5.923	5.921	0.002	97	30725	0.1600	0.1700	
34 trans-1,2-Dichloroethene	96	6.559	6.561	-0.002	92	9549	0.1600	0.1503	
35 2-Methylpentane	43	6.581	6.579	0.002	91	26179	0.1600	0.1717	
36 Methyl tert-butyl ether	73	6.721	6.716	0.005	94	28229	0.1600	0.1829	
37 1,1-Dichloroethane	63	6.975	6.977	-0.002	98	20284	0.1600	0.1840	
38 Vinyl acetate	43	7.099	7.100	-0.001	99	25465	0.1600	0.1517	
40 Hexane	56	7.562	7.553	0.009	75	8175	0.1600	0.1741	
39 2-Butanone (MEK)	72	7.557	7.551	0.006	81	5655	0.1600	0.1815	
41 Isopropyl ether	45	7.746	7.736	0.010	97	41195	0.1600	0.1797	
42 cis-1,2-Dichloroethene	96	7.945	7.953	-0.008	89	12473	0.1600	0.1699	
43 Ethyl acetate	43	8.166	8.165	0.001	97	25075	0.1600	0.1608	
44 Chloroform	83	8.296	8.300	-0.004	32	23319	0.1600	0.1671	
45 Tert-butyl ethyl ether	59	8.414	8.413	0.001	97	32190	0.1600	0.1708	
46 Tetrahydrofuran	42	8.727	8.722	0.005	88	14134	0.1600	0.1770	
47 1,1,1-Trichloroethane	97	9.315	9.320	-0.005	92	24015	0.1600	0.1802	
48 1,2-Dichloroethane	62	9.434	9.434	0.000	94	13273	0.1600	0.1723	
50 Cyclohexane	69	9.930	9.928	0.002	69	5002	0.1600	0.1757	
51 Benzene	78	9.935	9.933	0.002	96	34483	0.1600	0.1708	
52 Carbon tetrachloride	117	9.957	9.957	0.000	91	23349	0.1600	0.1793	
49 n-Butanol	31	9.962	9.944	0.018	70	7645	0.1600	0.1850	
53 2,3-Dimethylpentane	71	10.075	10.069	0.006	90	7341	0.1600	0.1658	
54 Thiophene	84	10.221	10.221	0.000	93	18414	0.1600	0.1582	
55 Isooctane	57	10.744	10.745	-0.001	96	54652	0.1600	0.1698	
56 n-Heptane	71	11.143	11.139	0.004	96	11408	0.1600	0.1742	
57 1,2-Dichloropropane	63	11.208	11.212	-0.004	85	13409	0.1600	0.1745	
58 Trichloroethene	130	11.251	11.251	0.000	95	16123	0.1600	0.1607	
59 Dibromomethane	93	11.326	11.334	-0.008	89	13741	0.1600	0.1600	
60 Dichlorobromomethane	83	11.483	11.487	-0.004	96	23290	0.1600	0.1606	
61 1,4-Dioxane	88	11.542	11.532	0.010	82	6249	0.1600	0.1886	
62 Methyl methacrylate	41	11.607	11.607	0.000	87	13921	0.1600	0.1522	
63 Methylcyclohexane	83	12.043	12.043	0.000	90	20204	0.1600	0.1703	
64 4-Methyl-2-pentanone (MIBK)	43	12.491	12.489	0.002	96	28426	0.1600	0.1532	
65 cis-1,3-Dichloropropene	75	12.529	12.528	0.001	93	15902	0.1600	0.1537	
66 trans-1,3-Dichloropropene	75	13.235	13.241	-0.006	91	11410	0.1600	0.1345	
67 Toluene	91	13.365	13.360	0.005	92	39429	0.1600	0.1596	
68 1,1,2-Trichloroethane	83	13.440	13.440	0.000	93	11721	0.1600	0.1568	
69 2-Hexanone	58	13.861	13.853	0.008	91	10559	0.1600	0.1412	
70 n-Octane	85	14.082	14.077	0.005	93	11613	0.1600	0.1686	
71 Chlorodibromomethane	129	14.146	14.148	-0.002	95	23664	0.1600	0.1541	
72 Ethylene Dibromide	107	14.443	14.441	0.002	95	20780	0.1600	0.1552	
73 Tetrachloroethene	129	14.524	14.519	0.005	91	14375	0.1600	0.1583	
74 Chlorobenzene	112	15.403	15.404	-0.001	96	30260	0.1600	0.1599	
75 2,3-Dimethylheptane	43	15.441	15.438	0.003	95	41485	0.1600	0.1646	
76 Ethylbenzene	91	15.694	15.698	-0.004	99	52336	0.1600	0.1672	
77 m-Xylene & p-Xylene	91	15.856	15.863	-0.007	96	74443	0.3200	0.3119	
78 n-Nonane	57	16.293	16.296	-0.003	90	21853	0.1600	0.1500	
79 Bromoform	173	16.298	16.304	-0.006	84	24984	0.1600	0.1498	
80 Styrene	104	16.330	16.328	0.002	96	24458	0.1600	0.1412	
81 o-Xylene	91	16.390	16.389	0.001	97	39171	0.1600	0.1585	
82 1,1,2,2-Tetrachloroethane	83	16.713	16.715	-0.002	95	30983	0.1600	0.1539	
83 1,2,3-Trichloropropane	110	16.880	16.877	0.003	93	9345	0.1600	0.1715	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	16.977	16.980	-0.003	93	54823	0.1600	0.1556	
85 N-Propylbenzene	120	17.528	17.529	-0.001	99	16229	0.1600	0.1573	
86 2-Chlorotoluene	126	17.571	17.572	-0.001	96	15062	0.1600	0.1585	
87 4-Ethyltoluene	105	17.689	17.688	0.001	99	52736	0.1600	0.1486	
88 1,3,5-Trimethylbenzene	120	17.765	17.766	-0.001	93	25181	0.1600	0.1616	
89 Alpha Methyl Styrene	118	18.002	18.005	-0.003	85	18483	0.1600	0.1325	
90 n-Decane	57	18.078	18.075	0.003	88	26449	0.1600	0.1426	
91 tert-Butylbenzene	119	18.202	18.202	0.000	93	51984	0.1600	0.1499	
92 1,2,4-Trimethylbenzene	105	18.218	18.216	0.002	94	44796	0.1600	0.1527	
93 sec-Butylbenzene	105	18.477	18.479	-0.002	98	69073	0.1600	0.1505	
94 1,3-Dichlorobenzene	146	18.493	18.489	0.004	95	29573	0.1600	0.1331	
95 Benzyl chloride	91	18.568	18.568	0.000	98	29950	0.1600	0.1362	
96 1,4-Dichlorobenzene	146	18.579	18.580	-0.001	97	32208	0.1600	0.1472	
97 4-Isopropyltoluene	119	18.644	18.648	-0.004	98	58048	0.1600	0.1518	
98 1,2,3-Trimethylbenzene	105	18.698	18.698	0.000	97	44115	0.1600	0.1695	
99 Butylcyclohexane	83	18.757	18.757	0.000	92	36896	0.1600	0.1474	
101 1,2-Dichlorobenzene	146	18.940	18.945	-0.005	90	33245	0.1600	0.1438	
100 2,3-Dihydroindene	117	18.946	18.947	-0.001	93	44093	0.1600	0.1431	
102 Indene	116	19.075	19.081	-0.006	84	32427	0.1600	0.1292	
103 n-Butylbenzene	91	19.091	19.092	-0.001	96	50815	0.1600	0.1353	
104 Undecane	57	19.415	19.418	-0.003	88	26252	0.1600	0.1136	
105 1,2-Dibromo-3-Chloropropane	157	19.555	19.560	-0.005	88	15099	0.1600	0.1356	
106 1,2,4,5-Tetramethylbenzene	119	19.862	19.860	0.002	98	46923	0.1600	0.1330	
107 Dodecane	57	20.477	20.478	-0.001	90	18925	0.1600	0.0921	
108 1,2,4-Trichlorobenzene	180	20.660	20.658	0.002	92	22105	0.1600	0.1170	
109 Naphthalene	128	20.795	20.794	0.001	99	46825	0.1600	0.1272	
110 Hexachlorobutadiene	225	21.016	21.014	0.002	93	31897	0.1600	0.1456	
111 1,2,3-Trichlorobenzene	180	21.081	21.081	0.000	91	25842	0.1600	0.1384	
112 2-Methylnaphthalene	142	21.825	21.826	-0.001	98	15517	0.1600	0.0721	
113 1-Methylnaphthalene	142	21.960	21.957	0.003	97	31105	0.1600	0.1022	
A 116 C8 Range	1	14.066	(14.039-14.114)		0	120977	0.1600	0.1656	
S 117 Xylenes, Total	100				0		0.4800	0.4704	
S 118 1,2-Dichloroethene, Total	1				0		0.3200	0.3203	

Reagents:

40L5DQP_00020	Amount Added: 80.00	Units: mL	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

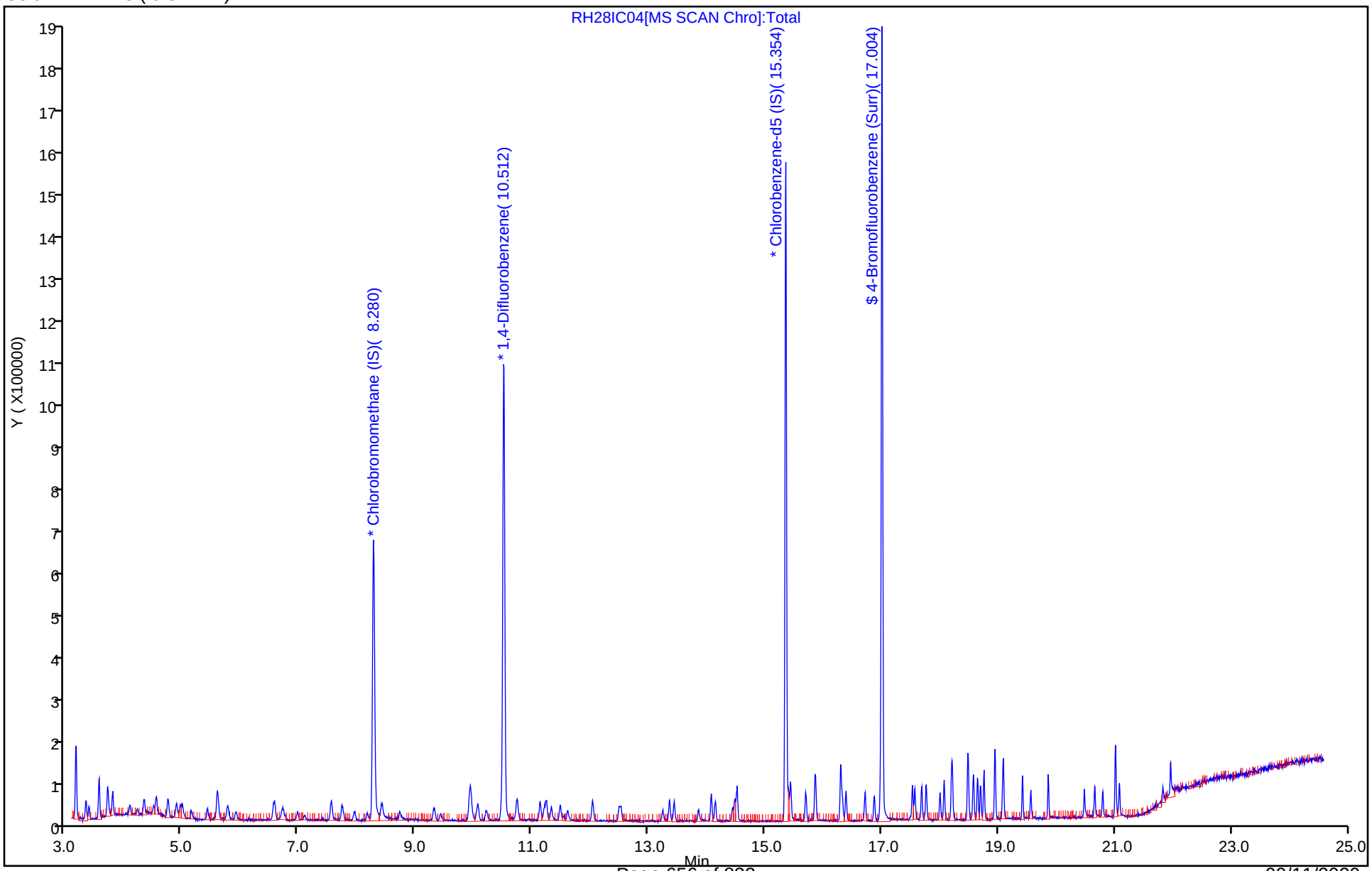
Report Date: 31-Aug-2020 13:43:23 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC04.D

Injection Date:	28-Aug-2020 21:38:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	IC L4			Worklist Smp#:	12
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

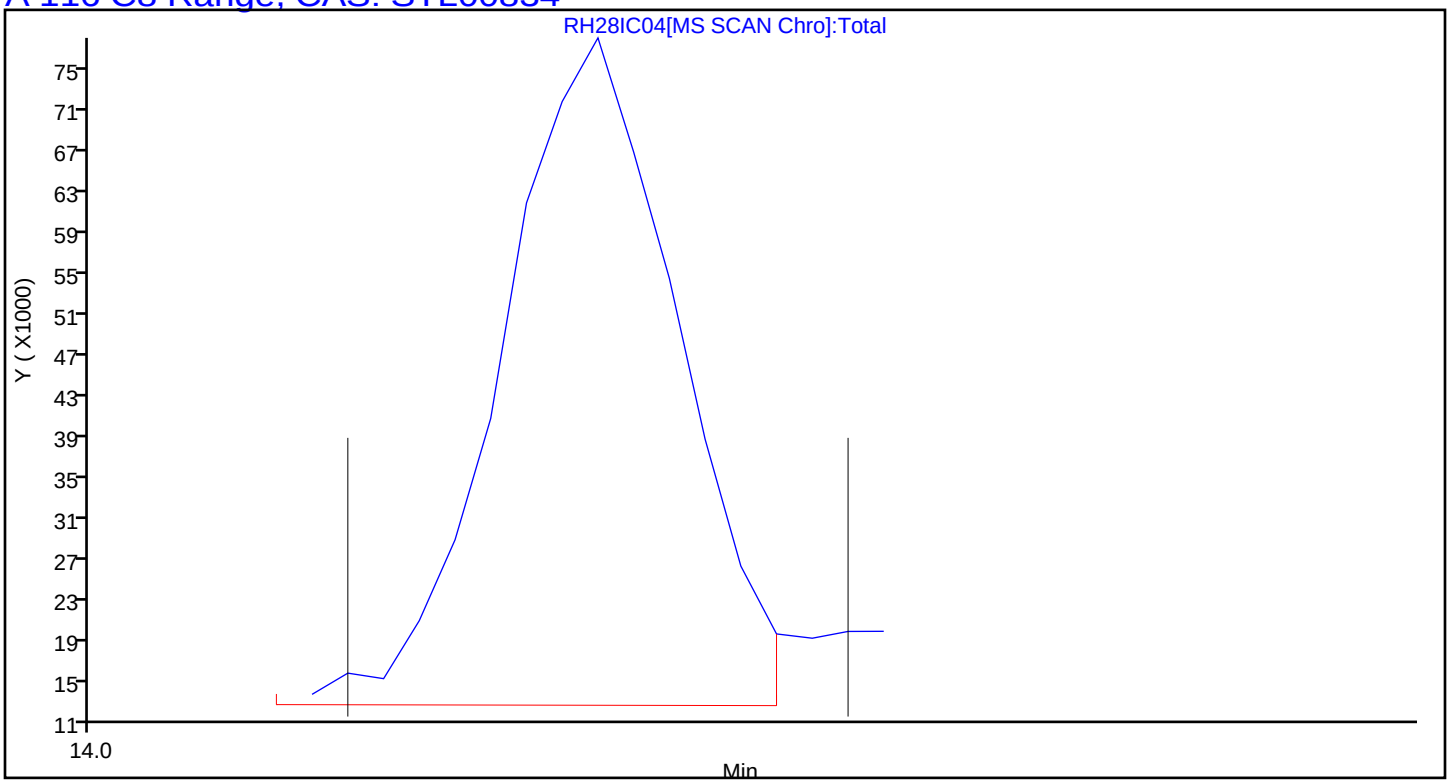


Report Date: 31-Aug-2020 13:43:23 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC04.D				
Injection Date:	28-Aug-2020 21:38:30	Instrument ID:	MR		
Lims ID:	IC L4				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	9	Worklist Smp#:	12
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 116 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC05.D
Lims ID: IC L5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 28-Aug-2020 22:26:30 ALS Bottle#: 10 Worklist Smp#: 13
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016425-013
Misc. Info.: 314717
Operator ID: HMT Instrument ID: MR
Sublist: chrom-MR_TO15*sub16

Method: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 31-Aug-2020 13:43:32 Calib Date: 29-Aug-2020 00:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1064

First Level Reviewer: barlozhetskayaa Date: 31-Aug-2020 13:16:49

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.274	8.283	-0.009	92	235500	4.80	4.80	
* 2 1,4-Difluorobenzene	114	10.512	10.519	-0.007	93	1153196	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.355	15.356	-0.001	87	909738	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.005	17.006	-0.001	95	555919	4.64	4.57	
6 Chlorodifluoromethane	51	3.330	3.345	-0.015	98	49801	0.4000	0.3778	
7 Propene	41	3.340	3.343	-0.003	96	25376	0.4000	0.4056	
8 Dichlorodifluoromethane	85	3.383	3.390	-0.007	98	36786	0.4000	0.3718	
9 Chloromethane	52	3.551	3.559	-0.008	69	9725	0.4000	0.4156	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.561	3.568	-0.007	88	53398	0.4000	0.3849	
11 Acetaldehyde	44	3.702	3.709	-0.007	90	77670	2.00	2.11	
12 Vinyl chloride	62	3.707	3.716	-0.009	55	32086	0.4000	0.4246	
14 Butadiene	54	3.793	3.798	-0.005	69	23722	0.4000	0.3928	
13 Butane	43	3.793	3.799	-0.006	88	52540	0.4000	0.4115	
15 Bromomethane	94	4.090	4.094	-0.004	96	33010	0.4000	0.3942	
16 Chloroethane	64	4.214	4.221	-0.007	86	16037	0.4000	0.4054	
17 Ethanol	31	4.322	4.345	-0.023	99	90649	2.00	1.83	
18 Vinyl bromide	106	4.494	4.502	-0.008	95	28263	0.4000	0.3677	
19 2-Methylbutane	43	4.537	4.547	-0.010	94	41000	0.4000	0.4135	
20 Trichlorofluoromethane	101	4.742	4.751	-0.009	95	77624	0.4000	0.4025	
21 Acrolein	56	4.759	4.775	-0.016	92	8255	0.4000	0.4497	
22 Acetonitrile	40	4.829	4.841	-0.012	94	10922	0.4000	0.4052	
23 Acetone	58	4.877	4.891	-0.014	99	45535	1.20	1.29	
24 Pentane	72	4.947	4.960	-0.013	95	4682	0.4000	0.4153	
25 Isopropyl alcohol	45	4.974	4.996	-0.022	95	113852	1.20	1.21	
26 Ethyl ether	31	5.136	5.143	-0.007	91	33932	0.4000	0.4135	
27 1,1-Dichloroethene	96	5.416	5.430	-0.014	96	26172	0.4000	0.3761	
28 Acrylonitrile	53	5.535	5.548	-0.013	94	15766	0.4000	0.3947	
29 2-Methyl-2-propanol	59	5.578	5.589	-0.011	82	45427	0.4000	0.3858	
30 1,1,2-Trichloro-1,2,2-trifluoroe	101	5.594	5.603	-0.009	95	57821	0.4000	0.3821	
31 Methylene Chloride	84	5.751	5.768	-0.017	94	24417	0.4000	0.4255	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	5.767	5.782	-0.015	96	27338	0.4000	0.3745	
33 Carbon disulfide	76	5.912	5.921	-0.009	97	74887	0.4000	0.4079	
34 trans-1,2-Dichloroethene	96	6.543	6.561	-0.018	91	24973	0.4000	0.3871	
35 2-Methylpentane	43	6.570	6.579	-0.009	93	59564	0.4000	0.3845	
36 Methyl tert-butyl ether	73	6.700	6.716	-0.016	96	63335	0.4000	0.4039	
37 1,1-Dichloroethane	63	6.964	6.977	-0.013	99	45826	0.4000	0.4091	
38 Vinyl acetate	43	7.088	7.100	-0.012	100	63440	0.4000	0.3721	
39 2-Butanone (MEK)	72	7.546	7.551	-0.005	93	11764	0.4000	0.3717	
40 Hexane	56	7.546	7.553	-0.007	88	18958	0.4000	0.3975	
41 Isopropyl ether	45	7.724	7.736	-0.012	95	89020	0.4000	0.3823	
42 cis-1,2-Dichloroethene	96	7.940	7.953	-0.013	91	27844	0.4000	0.3734	
43 Ethyl acetate	43	8.161	8.165	-0.004	97	59867	0.4000	0.3780	
44 Chloroform	83	8.291	8.300	-0.009	94	53612	0.4000	0.3783	
45 Tert-butyl ethyl ether	59	8.398	8.413	-0.015	97	76613	0.4000	0.4002	
46 Tetrahydrofuran	42	8.717	8.722	-0.005	94	33889	0.4000	0.4178	
47 1,1,1-Trichloroethane	97	9.315	9.320	-0.005	93	55145	0.4000	0.4074	
48 1,2-Dichloroethane	62	9.418	9.434	-0.016	93	27571	0.4000	0.3584	
50 Cyclohexane	69	9.930	9.928	0.002	71	10658	0.4000	0.3749	
51 Benzene	78	9.924	9.933	-0.009	94	78024	0.4000	0.3871	
52 Carbon tetrachloride	117	9.951	9.957	-0.006	93	55838	0.4000	0.4295	
49 n-Butanol	31	9.951	9.944	0.007	70	16387	0.4000	0.3972	
53 2,3-Dimethylpentane	71	10.059	10.069	-0.010	91	17614	0.4000	0.3984	
54 Thiophene	84	10.216	10.221	-0.005	91	43711	0.4000	0.3760	
55 Isooctane	57	10.739	10.745	-0.006	94	118580	0.4000	0.3689	
56 n-Heptane	71	11.132	11.139	-0.007	96	25685	0.4000	0.3927	
57 1,2-Dichloropropane	63	11.202	11.212	-0.010	87	30367	0.4000	0.3957	
58 Trichloroethene	130	11.246	11.251	-0.005	95	36639	0.4000	0.3657	
59 Dibromomethane	93	11.332	11.334	-0.002	90	31799	0.4000	0.3708	
60 Dichlorobromomethane	83	11.483	11.487	-0.004	94	58298	0.4000	0.4025	
61 1,4-Dioxane	88	11.526	11.532	-0.006	92	12357	0.4000	0.3736	
62 Methyl methacrylate	41	11.607	11.607	0.000	91	34057	0.4000	0.3729	
63 Methylcyclohexane	83	12.038	12.043	-0.005	92	47102	0.4000	0.3975	
64 4-Methyl-2-pentanone (MIBK)	43	12.480	12.489	-0.009	97	73528	0.4000	0.3969	
65 cis-1,3-Dichloropropene	75	12.518	12.528	-0.010	95	37667	0.4000	0.3647	
66 trans-1,3-Dichloropropene	75	13.235	13.241	-0.006	91	30968	0.4000	0.3682	
67 Toluene	91	13.354	13.360	-0.006	93	91467	0.4000	0.3735	
68 1,1,2-Trichloroethane	83	13.435	13.440	-0.005	95	30249	0.4000	0.4082	
69 2-Hexanone	58	13.850	13.853	-0.003	89	26516	0.4000	0.3577	
70 n-Octane	85	14.071	14.077	-0.006	95	25142	0.4000	0.3683	
71 Chlorodibromomethane	129	14.141	14.148	-0.007	96	59382	0.4000	0.3901	
72 Ethylene Dibromide	107	14.438	14.441	-0.003	96	48853	0.4000	0.3682	
73 Tetrachloroethene	129	14.519	14.519	0.000	93	36680	0.4000	0.4076	
74 Chlorobenzene	112	15.403	15.404	-0.001	93	72187	0.4000	0.3849	
75 2,3-Dimethylheptane	43	15.435	15.438	-0.003	94	99308	0.4000	0.3976	
76 Ethylbenzene	91	15.700	15.698	0.002	98	117394	0.4000	0.3784	
77 m-Xylene & p-Xylene	91	15.861	15.863	-0.002	96	170497	0.8000	0.7207	
78 n-Nonane	57	16.298	16.296	0.002	92	52388	0.4000	0.3627	
79 Bromoform	173	16.304	16.304	0.000	96	60606	0.4000	0.3667	
80 Styrene	104	16.331	16.328	0.003	96	64024	0.4000	0.3728	
81 o-Xylene	91	16.390	16.389	0.001	97	88929	0.4000	0.3630	
82 1,1,2,2-Tetrachloroethane	83	16.713	16.715	-0.002	97	78471	0.4000	0.3933	
83 1,2,3-Trichloropropane	110	16.875	16.877	-0.002	90	20345	0.4000	0.3766	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	16.978	16.980	-0.002	96	133486	0.4000	0.3823	
85 N-Propylbenzene	120	17.528	17.529	-0.001	99	38332	0.4000	0.3748	
86 2-Chlorotoluene	126	17.571	17.572	-0.001	97	37371	0.4000	0.3969	
87 4-Ethyltoluene	105	17.689	17.688	0.001	99	129680	0.4000	0.3688	
88 1,3,5-Trimethylbenzene	120	17.765	17.766	-0.001	94	60035	0.4000	0.3888	
89 Alpha Methyl Styrene	118	18.002	18.005	-0.003	91	51272	0.4000	0.3709	
90 n-Decane	57	18.072	18.075	-0.003	87	69136	0.4000	0.3762	
91 tert-Butylbenzene	119	18.202	18.202	0.000	95	124968	0.4000	0.3636	
92 1,2,4-Trimethylbenzene	105	18.212	18.216	-0.004	96	109799	0.4000	0.3775	
93 sec-Butylbenzene	105	18.477	18.479	-0.002	99	167919	0.4000	0.3692	
94 1,3-Dichlorobenzene	146	18.488	18.489	-0.001	96	80880	0.4000	0.3673	
95 Benzyl chloride	91	18.568	18.568	0.000	98	73450	0.4000	0.3370	
96 1,4-Dichlorobenzene	146	18.579	18.580	-0.001	95	76253	0.4000	0.3515	
97 4-Isopropyltoluene	119	18.644	18.648	-0.004	98	143416	0.4000	0.3783	
98 1,2,3-Trimethylbenzene	105	18.698	18.698	0.000	98	110706	0.4000	0.4271	
99 Butylcyclohexane	83	18.757	18.757	0.000	94	91598	0.4000	0.3693	
101 1,2-Dichlorobenzene	146	18.946	18.945	0.001	82	82831	0.4000	0.3614	
100 2,3-Dihydroindene	117	18.946	18.947	-0.001	93	111206	0.4000	0.3640	
102 Indene	116	19.081	19.081	0.000	88	85683	0.4000	0.3446	
103 n-Butylbenzene	91	19.091	19.092	-0.001	97	131876	0.4000	0.3542	
104 Undecane	57	19.415	19.418	-0.003	87	71560	0.4000	0.3125	
105 1,2-Dibromo-3-Chloropropane	157	19.561	19.560	0.001	87	38919	0.4000	0.3527	
106 1,2,4,5-Tetramethylbenzene	119	19.857	19.860	-0.003	99	122363	0.4000	0.3498	
107 Dodecane	57	20.477	20.478	-0.001	89	62063	0.4000	0.3049	
108 1,2,4-Trichlorobenzene	180	20.655	20.658	-0.003	92	61208	0.4000	0.3268	
109 Naphthalene	128	20.795	20.794	0.001	99	133974	0.4000	0.3671	
110 Hexachlorobutadiene	225	21.011	21.014	-0.003	93	80947	0.4000	0.3727	
111 1,2,3-Trichlorobenzene	180	21.081	21.081	0.000	94	70435	0.4000	0.3805	
112 2-Methylnaphthalene	142	21.825	21.826	-0.001	100	48315	0.4000	0.2265	
113 1-Methylnaphthalene	142	21.955	21.957	-0.002	97	100421	0.4000	0.3328	
A 116 C8 Range	1	14.061	(14.028-14.114)		0	284144	0.4000	0.3895	
S 117 Xylenes, Total	100				0		1.20	1.08	
S 118 1,2-Dichloroethene, Total	1				0		0.8000	0.7605	

Reagents:

40L5DQP_00020	Amount Added: 200.00	Units: mL	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

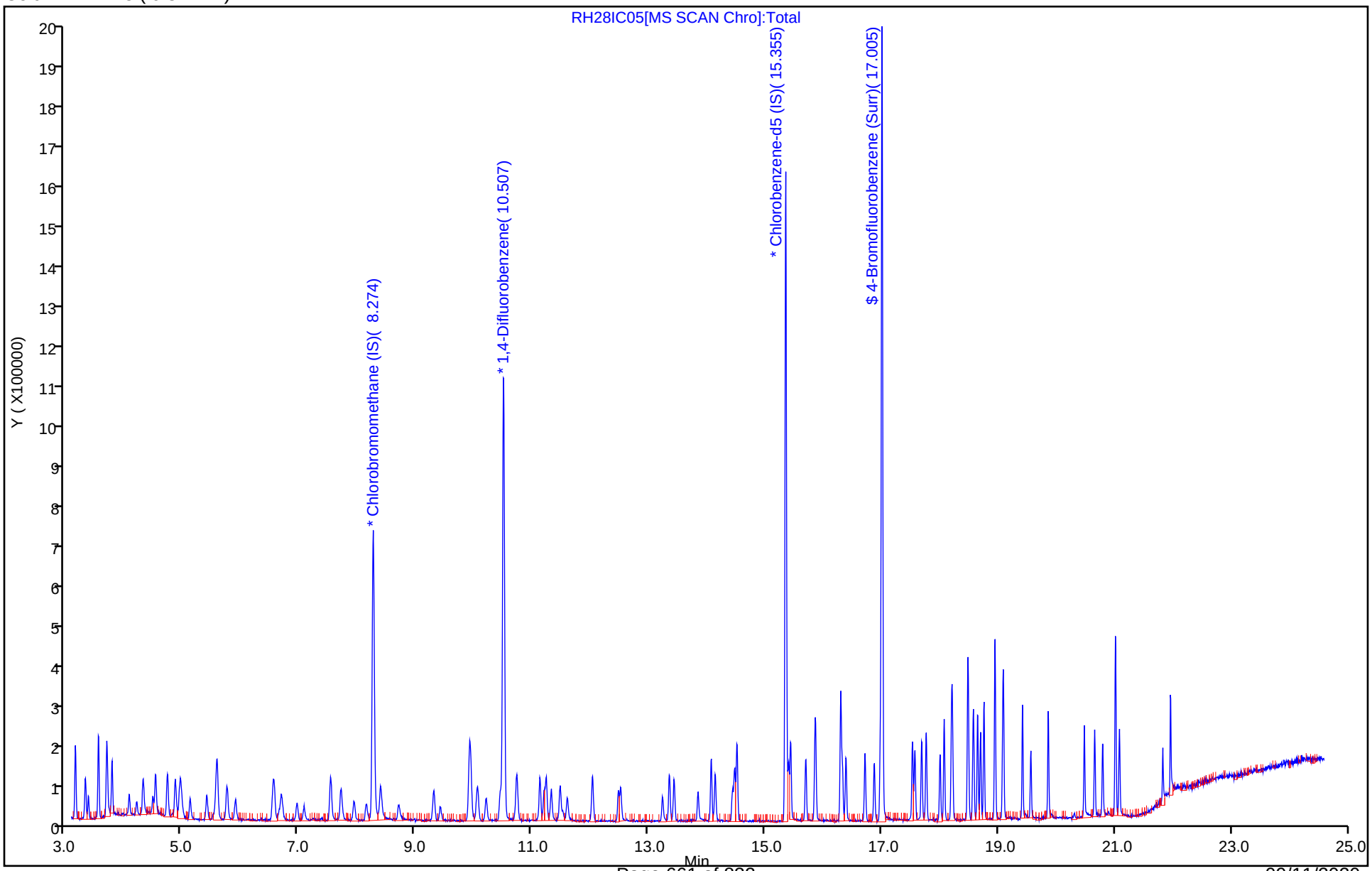
Report Date: 31-Aug-2020 13:43:35 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC05.D

Injection Date:	28-Aug-2020 22:26:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	IC L5			Worklist Smp#:	13
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

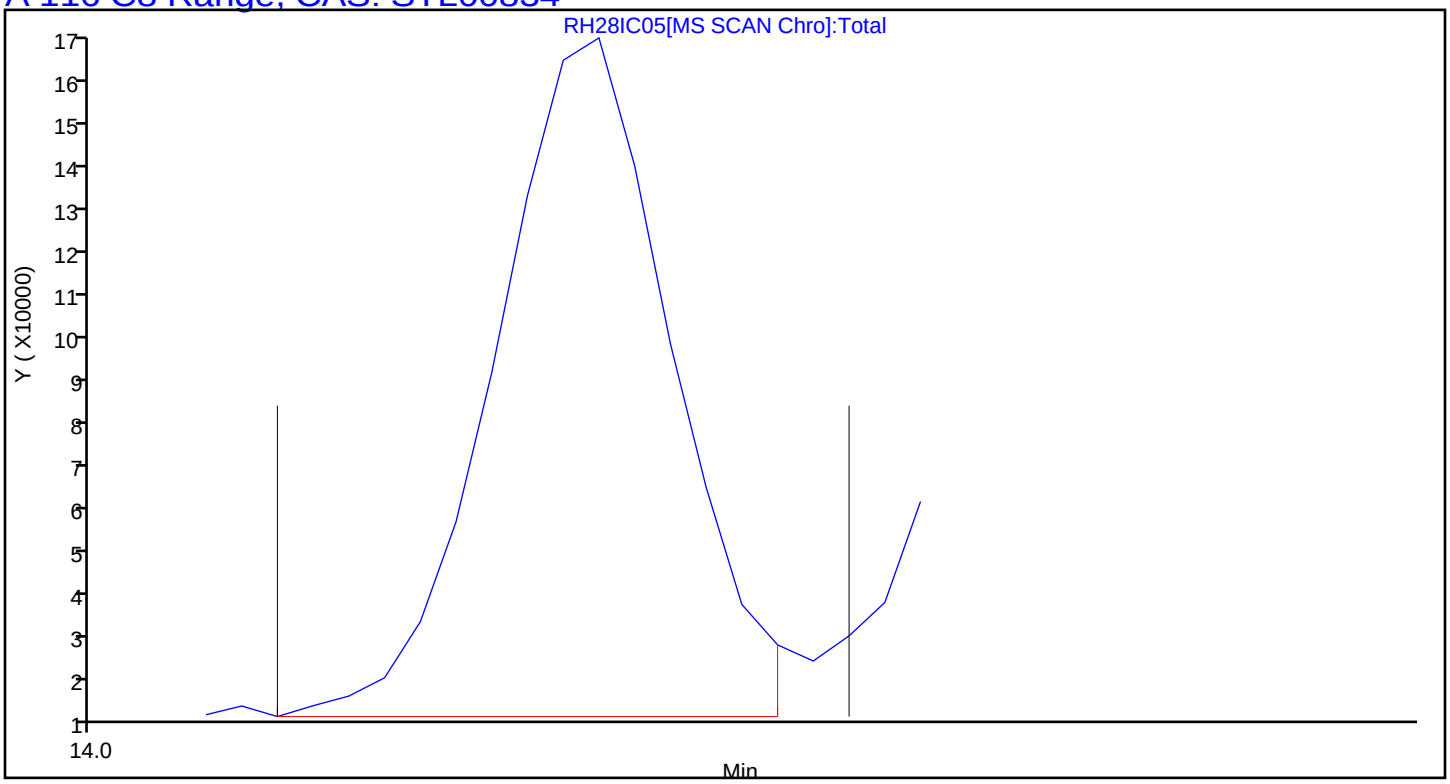


Report Date: 31-Aug-2020 13:43:35 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC05.D				
Injection Date:	28-Aug-2020 22:26:30	Instrument ID:	MR		
Lims ID:	IC L5				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	10	Worklist Smp#:	13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 116 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC06.D
Lims ID: IC L6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 28-Aug-2020 23:14:30 ALS Bottle#: 11 Worklist Smp#: 14
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016425-014
Misc. Info.: 314716
Operator ID: HMT Instrument ID: MR
Sublist: chrom-MR_TO15*sub16

Method: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 31-Aug-2020 13:43:42 Calib Date: 29-Aug-2020 00:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1064

First Level Reviewer: barlozhetskayaa Date: 31-Aug-2020 13:12:24

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.269	8.283	-0.014	94	234052	4.80	4.80	
* 2 1,4-Difluorobenzene	114	10.512	10.519	-0.007	94	1141373	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.354	15.356	-0.002	87	920801	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.004	17.006	-0.002	94	567801	4.64	4.61	
6 Chlorodifluoromethane	51	3.329	3.345	-0.016	99	127298	1.00	0.9717	
7 Propene	41	3.340	3.343	-0.003	97	65227	1.00	1.05	
8 Dichlorodifluoromethane	85	3.383	3.390	-0.007	98	103463	1.00	1.05	
9 Chloromethane	52	3.550	3.559	-0.009	67	25367	1.00	1.09	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.561	3.568	-0.007	88	144116	1.00	1.05	
11 Acetaldehyde	44	3.696	3.709	-0.013	89	218804	5.00	5.99	
12 Vinyl chloride	62	3.712	3.716	-0.004	99	84224	1.00	1.17	
14 Butadiene	54	3.793	3.798	-0.005	64	65078	1.00	1.08	
13 Butane	43	3.793	3.799	-0.006	87	139349	1.00	1.10	
15 Bromomethane	94	4.084	4.094	-0.010	97	85297	1.00	1.09	
16 Chloroethane	64	4.208	4.221	-0.013	88	38665	1.00	1.04	
17 Ethanol	31	4.322	4.345	-0.023	98	221455	5.00	4.63	
18 Vinyl bromide	106	4.489	4.502	-0.013	97	74856	1.00	0.9799	
19 2-Methylbutane	43	4.537	4.547	-0.010	94	99751	1.00	1.01	
20 Trichlorofluoromethane	101	4.742	4.751	-0.009	97	191450	1.00	1.00	
21 Acrolein	56	4.758	4.775	-0.017	91	16296	1.00	0.8933	
22 Acetonitrile	40	4.828	4.841	-0.013	95	25442	1.00	0.9496	
23 Acetone	58	4.866	4.891	-0.025	99	118879	3.00	3.40	
24 Pentane	72	4.953	4.960	-0.008	94	11470	1.00	1.02	
25 Isopropyl alcohol	45	4.963	4.996	-0.033	93	273089	3.00	2.91	
26 Ethyl ether	31	5.120	5.143	-0.023	88	83338	1.00	1.02	
27 1,1-Dichloroethene	96	5.422	5.430	-0.008	97	65097	1.00	0.9413	
28 Acrylonitrile	53	5.529	5.548	-0.019	95	39929	1.00	1.01	
29 2-Methyl-2-propanol	59	5.562	5.589	-0.027	95	111576	1.00	0.9535	
30 1,1,2-Trichloro-1,2,2-trifluoroe	101	5.594	5.603	-0.009	94	145650	1.00	0.9684	
31 Methylene Chloride	84	5.756	5.768	-0.012	98	57015	1.00	1.00	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	5.772	5.782	-0.010	95	67588	1.00	1.05	
33 Carbon disulfide	76	5.912	5.921	-0.009	97	184361	1.00	1.01	
34 trans-1,2-Dichloroethene	96	6.543	6.561	-0.018	94	65564	1.00	1.02	
35 2-Methylpentane	43	6.570	6.579	-0.009	95	149522	1.00	0.9712	
36 Methyl tert-butyl ether	73	6.689	6.716	-0.027	96	161027	1.00	1.03	
37 1,1-Dichloroethane	63	6.964	6.977	-0.013	99	109543	1.00	0.9840	
38 Vinyl acetate	43	7.082	7.100	-0.018	99	164791	1.00	0.9727	
40 Hexane	56	7.546	7.553	-0.007	79	48352	1.00	1.02	
39 2-Butanone (MEK)	72	7.530	7.551	-0.021	88	32092	1.00	1.02	
41 Isopropyl ether	45	7.708	7.736	-0.028	96	228003	1.00	0.9851	
42 cis-1,2-Dichloroethene	96	7.940	7.953	-0.013	88	69003	1.00	0.9311	
43 Ethyl acetate	43	8.145	8.165	-0.020	97	161118	1.00	1.02	
44 Chloroform	83	8.290	8.300	-0.010	94	138005	1.00	0.9798	
45 Tert-butyl ethyl ether	59	8.387	8.413	-0.026	97	191302	1.00	1.01	
46 Tetrahydrofuran	42	8.700	8.722	-0.022	95	80650	1.00	1.00	
47 1,1,1-Trichloroethane	97	9.310	9.320	-0.010	96	132887	1.00	0.9878	
48 1,2-Dichloroethane	62	9.423	9.434	-0.011	93	74410	1.00	0.9773	
51 Benzene	78	9.924	9.933	-0.009	95	192558	1.00	0.9652	
50 Cyclohexane	69	9.919	9.928	-0.009	74	26969	1.00	0.9585	
52 Carbon tetrachloride	117	9.951	9.957	-0.006	92	128080	1.00	1.00	
49 n-Butanol	31	9.930	9.944	-0.014	53	36431	1.00	0.8922	
53 2,3-Dimethylpentane	71	10.064	10.069	-0.005	90	40258	1.00	0.9199	
54 Thiophene	84	10.210	10.221	-0.011	93	108649	1.00	0.9443	
55 Isooctane	57	10.739	10.745	-0.006	96	301136	1.00	0.9465	
56 n-Heptane	71	11.132	11.139	-0.007	95	64445	1.00	1.00	
57 1,2-Dichloropropane	63	11.208	11.212	-0.004	90	75552	1.00	0.99	
58 Trichloroethene	130	11.240	11.251	-0.011	94	93344	1.00	0.9413	
59 Dibromomethane	93	11.326	11.334	-0.008	92	88564	1.00	1.04	
60 Dichlorobromomethane	83	11.483	11.487	-0.004	96	138050	1.00	0.9631	
61 1,4-Dioxane	88	11.515	11.532	-0.017	90	28356	1.00	0.8661	
62 Methyl methacrylate	41	11.601	11.607	-0.006	87	89454	1.00	0.9897	
63 Methylcyclohexane	83	12.033	12.043	-0.010	93	114174	1.00	0.9735	
64 4-Methyl-2-pentanone (MIBK)	43	12.469	12.489	-0.020	96	183690	1.00	1.00	
65 cis-1,3-Dichloropropene	75	12.523	12.528	-0.005	95	99621	1.00	0.9745	
66 trans-1,3-Dichloropropene	75	13.235	13.241	-0.006	93	81690	1.00	0.9596	
67 Toluene	91	13.354	13.360	-0.006	92	233387	1.00	0.9415	
68 1,1,2-Trichloroethane	83	13.435	13.440	-0.005	94	73682	1.00	0.9823	
69 2-Hexanone	58	13.839	13.853	-0.014	91	76512	1.00	1.02	
70 n-Octane	85	14.071	14.077	-0.006	94	65320	1.00	0.9453	
71 Chlorodibromomethane	129	14.141	14.148	-0.007	97	135038	1.00	0.8764	
72 Ethylene Dibromide	107	14.438	14.441	-0.003	96	128985	1.00	0.9604	
73 Tetrachloroethene	129	14.513	14.519	-0.006	92	84607	1.00	0.9289	
74 Chlorobenzene	112	15.398	15.404	-0.006	96	177202	1.00	0.9335	
75 2,3-Dimethylheptane	43	15.435	15.438	-0.003	94	241219	1.00	0.9541	
76 Ethylbenzene	91	15.694	15.698	-0.004	98	296847	1.00	0.9453	
77 m-Xylene & p-Xylene	91	15.861	15.863	-0.002	96	446971	2.00	1.87	
78 n-Nonane	57	16.293	16.296	-0.003	91	136944	1.00	0.9368	
79 Bromoform	173	16.303	16.304	-0.001	96	112819	1.00	0.6744	
80 Styrene	104	16.325	16.328	-0.003	97	169678	1.00	0.9762	
81 o-Xylene	91	16.384	16.389	-0.005	99	235739	1.00	0.9506	
82 1,1,2,2-Tetrachloroethane	83	16.713	16.715	-0.002	97	202741	1.00	1.00	
83 1,2,3-Trichloropropane	110	16.875	16.877	-0.002	92	51846	1.00	0.9482	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	16.977	16.980	-0.003	96	341357	1.00	0.9658	
85 N-Propylbenzene	120	17.528	17.529	-0.001	99	101614	1.00	0.9816	
86 2-Chlorotoluene	126	17.571	17.572	-0.001	97	93983	1.00	0.9861	
87 4-Ethyltoluene	105	17.684	17.688	-0.004	99	343535	1.00	0.9652	
88 1,3,5-Trimethylbenzene	120	17.765	17.766	-0.001	94	149024	1.00	0.9535	
89 Alpha Methyl Styrene	118	18.002	18.005	-0.003	87	135090	1.00	0.9655	
90 n-Decane	57	18.072	18.075	-0.003	87	180855	1.00	0.9722	
91 tert-Butylbenzene	119	18.202	18.202	0.000	95	329329	1.00	0.9468	
92 1,2,4-Trimethylbenzene	105	18.212	18.216	-0.004	95	286404	1.00	0.9729	
93 sec-Butylbenzene	105	18.477	18.479	-0.002	98	437590	1.00	0.9505	
94 1,3-Dichlorobenzene	146	18.487	18.489	-0.002	96	213903	1.00	0.9597	
95 Benzyl chloride	91	18.568	18.568	0.000	98	204834	1.00	0.9286	
96 1,4-Dichlorobenzene	146	18.579	18.580	-0.001	96	210409	1.00	0.9582	
97 4-Isopropyltoluene	119	18.644	18.648	-0.004	97	377534	1.00	0.9839	
98 1,2,3-Trimethylbenzene	105	18.698	18.698	0.000	98	289551	1.00	1.09	
99 Butylcyclohexane	83	18.757	18.757	0.000	94	249656	1.00	0.99	
101 1,2-Dichlorobenzene	146	18.946	18.945	0.001	82	213760	1.00	0.9215	
100 2,3-Dihydroindene	117	18.946	18.947	-0.001	92	293635	1.00	0.9497	
102 Indene	116	19.081	19.081	0.000	89	239465	1.00	0.9514	
103 n-Butylbenzene	91	19.091	19.092	-0.001	97	368369	1.00	0.9775	
104 Undecane	57	19.415	19.418	-0.003	90	211658	1.00	0.9132	
105 1,2-Dibromo-3-Chloropropane	157	19.560	19.560	0.000	90	94295	1.00	0.8444	
106 1,2,4,5-Tetramethylbenzene	119	19.857	19.860	-0.003	97	347414	1.00	0.9813	
107 Dodecane	57	20.477	20.478	-0.001	88	182504	1.00	0.8857	
108 1,2,4-Trichlorobenzene	180	20.655	20.658	-0.003	93	184352	1.00	0.9726	
109 Naphthalene	128	20.795	20.794	0.001	99	360065	1.00	0.9747	
110 Hexachlorobutadiene	225	21.011	21.014	-0.003	83	208874	1.00	0.9502	
111 1,2,3-Trichlorobenzene	180	21.081	21.081	0.000	94	179439	1.00	0.9577	
112 2-Methylnaphthalene	142	21.825	21.826	-0.001	99	131911	1.00	0.6109	
113 1-Methylnaphthalene	142	21.955	21.957	-0.002	99	234530	1.00	0.7680	
A 116 C8 Range	1	14.061	(14.028-14.125)		0	705715	1.00	0.9774	
S 117 Xylenes, Total	100				0		3.00	2.82	
S 118 1,2-Dichloroethene, Total	1				0		2.00	1.95	

Reagents:

40L6DQP_00019	Amount Added: 200.00	Units: mL	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

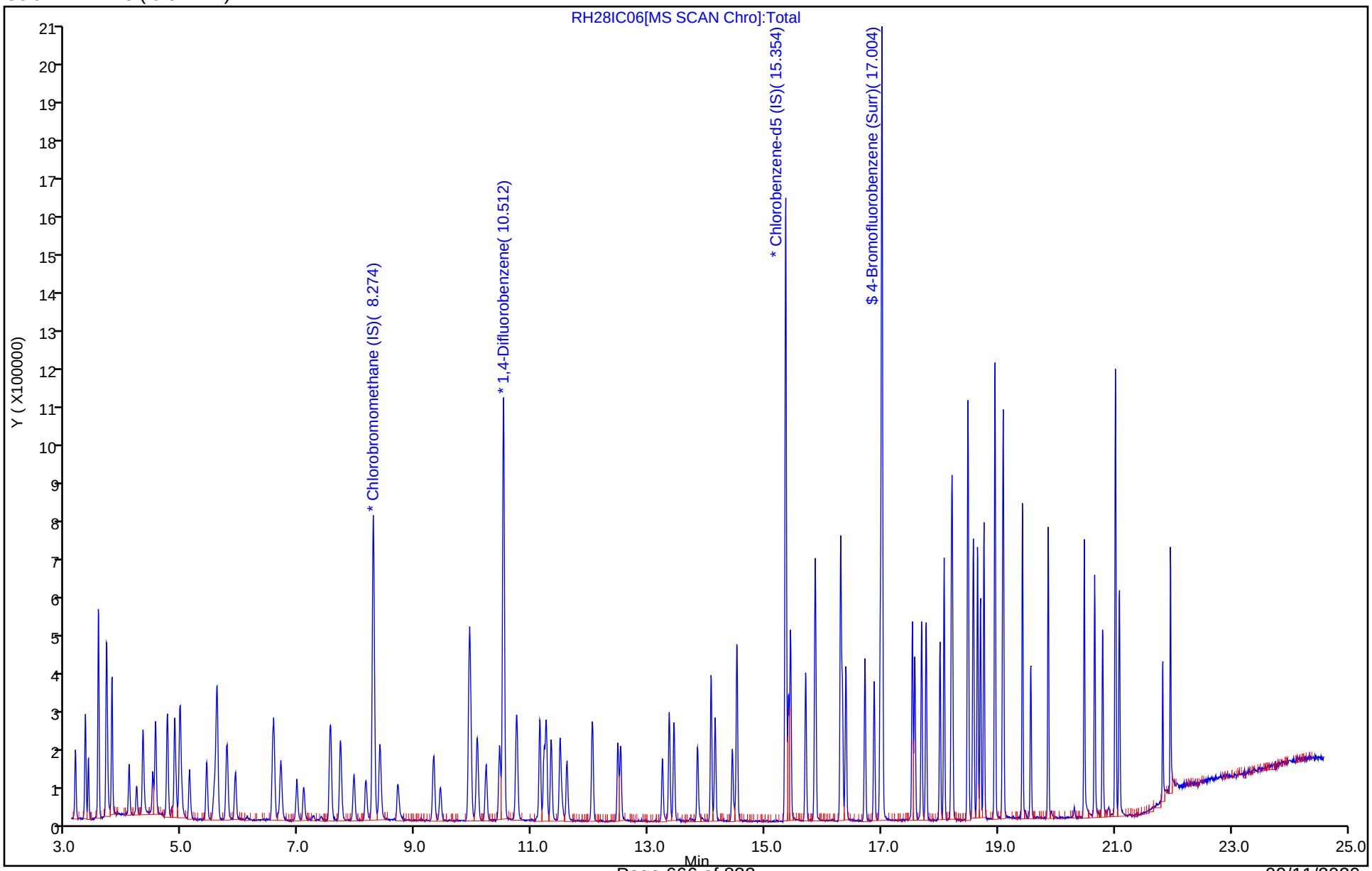
Report Date: 31-Aug-2020 13:43:44 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC06.D

Injection Date:	28-Aug-2020 23:14:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	IC L6			Worklist Smp#:	14
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

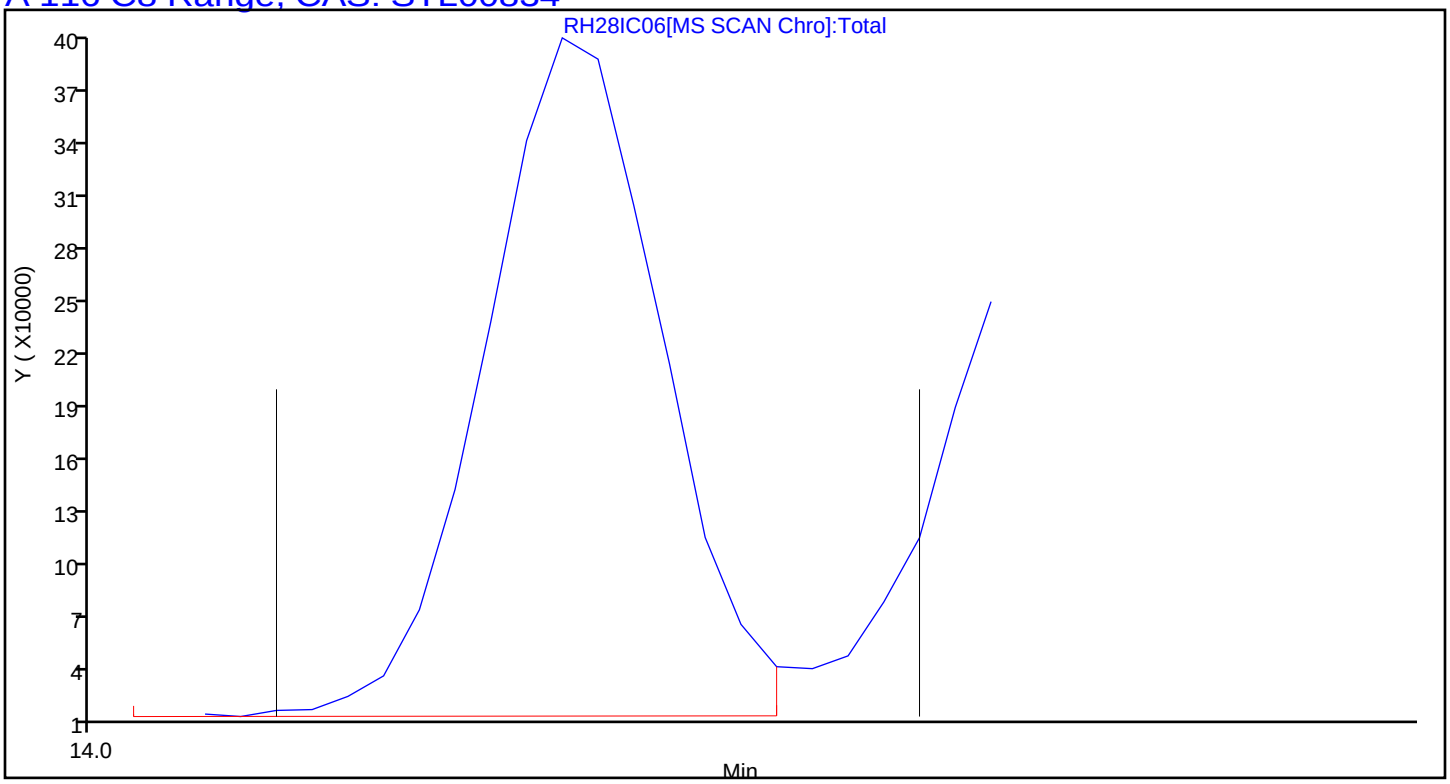


Report Date: 31-Aug-2020 13:43:44 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC06.D				
Injection Date:	28-Aug-2020 23:14:30	Instrument ID:	MR		
Lims ID:	IC L6				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	11	Worklist Smp#:	14
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 116 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC07.D
Lims ID: ICIS L7
Client ID:
Sample Type: ICIS Calib Level: 7
Inject. Date: 29-Aug-2020 00:02:30 ALS Bottle#: 12 Worklist Smp#: 15
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016425-015
Misc. Info.: 314608
Operator ID: HMT Instrument ID: MR
Sublist: chrom-MR_TO15*sub16

Method: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 31-Aug-2020 13:43:55 Calib Date: 29-Aug-2020 00:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1064

First Level Reviewer: tajh Date: 31-Aug-2020 09:21:14

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.280	8.283	-0.003	93	235543	4.80	4.80	
* 2 1,4-Difluorobenzene	114	10.518	10.519	-0.001	88	1153917	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.355	15.356	-0.001	82	934834	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.005	17.006	-0.001	94	596993	4.64	4.78	
6 Chlorodifluoromethane	51	3.324	3.345	-0.021	96	265191	2.00	2.01	
7 Propene	41	3.335	3.343	-0.008	89	136966	2.00	2.19	
8 Dichlorodifluoromethane	85	3.384	3.390	-0.006	98	228663	2.00	2.31	
9 Chloromethane	52	3.545	3.559	-0.014	69	50211	2.00	2.15	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.556	3.568	-0.012	88	306061	2.00	2.21	
11 Acetaldehyde	44	3.691	3.709	-0.018	89	403575	10.0	11.0	
12 Vinyl chloride	62	3.707	3.716	-0.009	76	174448	2.00	2.44	
14 Butadiene	54	3.788	3.798	-0.010	65	138107	2.00	2.29	
13 Butane	43	3.788	3.799	-0.011	87	290488	2.00	2.27	
15 Bromomethane	94	4.085	4.094	-0.009	98	173948	2.00	2.25	
16 Chloroethane	64	4.214	4.221	-0.007	89	85082	2.00	2.32	
17 Ethanol	31	4.327	4.345	-0.018	98	562595	10.0	11.8	
18 Vinyl bromide	106	4.489	4.502	-0.013	94	156474	2.00	2.04	
19 2-Methylbutane	43	4.532	4.547	-0.015	93	205009	2.00	2.07	
20 Trichlorofluoromethane	101	4.737	4.751	-0.014	95	392725	2.00	2.04	
21 Acrolein	56	4.748	4.775	-0.027	22	36292	2.00	1.98	
22 Acetonitrile	40	4.823	4.841	-0.018	93	58184	2.00	2.16	
23 Acetone	58	4.861	4.891	-0.030	55	221734	6.00	6.30	
24 Pentane	72	4.953	4.960	-0.007	80	24417	2.00	2.17	
25 Isopropyl alcohol	45	4.963	4.996	-0.033	90	635105	6.00	6.72	
26 Ethyl ether	31	5.114	5.143	-0.029	88	168072	2.00	2.05	
27 1,1-Dichloroethene	96	5.416	5.430	-0.014	96	131261	2.00	1.89	
28 Acrylonitrile	53	5.530	5.548	-0.018	51	76309	2.00	1.91	
29 2-Methyl-2-propanol	59	5.546	5.589	-0.043	95	251800	2.00	2.14	
30 1,1,2-Trichloro-1,2,2-trifluoroe	101	5.594	5.603	-0.009	95	298238	2.00	1.97	
31 Methylene Chloride	84	5.751	5.768	-0.017	95	111917	2.00	1.95	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	5.772	5.782	-0.010	90	122895	2.00	1.95	
33 Carbon disulfide	76	5.907	5.921	-0.014	97	359151	2.00	1.96	
34 trans-1,2-Dichloroethene	96	6.549	6.561	-0.012	90	125032	2.00	1.94	
35 2-Methylpentane	43	6.570	6.579	-0.009	93	302486	2.00	1.95	
36 Methyl tert-butyl ether	73	6.689	6.716	-0.027	96	319038	2.00	2.03	
37 1,1-Dichloroethane	63	6.964	6.977	-0.013	98	218207	2.00	1.95	
38 Vinyl acetate	43	7.083	7.100	-0.017	100	350811	2.00	2.06	
39 2-Butanone (MEK)	72	7.530	7.551	-0.021	88	66602	2.00	2.10	
40 Hexane	56	7.546	7.553	-0.007	81	94902	2.00	1.99	
41 Isopropyl ether	45	7.714	7.736	-0.022	94	463161	2.00	1.99	
42 cis-1,2-Dichloroethene	96	7.951	7.953	-0.002	87	137736	2.00	1.85	
43 Ethyl acetate	43	8.150	8.165	-0.015	96	338095	2.00	2.13	
44 Chloroform	83	8.291	8.300	-0.009	60	275584	2.00	1.94	
45 Tert-butyl ethyl ether	59	8.388	8.413	-0.025	97	381447	2.00	1.99	
46 Tetrahydrofuran	42	8.690	8.722	-0.032	93	165501	2.00	2.04	
47 1,1,1-Trichloroethane	97	9.315	9.320	-0.005	94	263917	2.00	1.95	
48 1,2-Dichloroethane	62	9.434	9.434	0.000	93	151483	2.00	1.97	
50 Cyclohexane	69	9.924	9.928	-0.004	74	56508	2.00	1.99	
51 Benzene	78	9.924	9.933	-0.009	94	387828	2.00	1.92	
49 n-Butanol	31	9.908	9.944	-0.036	63	88621	2.00	2.15	
52 Carbon tetrachloride	117	9.946	9.957	-0.011	74	188413	2.00	1.45	
53 2,3-Dimethylpentane	71	10.065	10.069	-0.004	90	85591	2.00	1.93	
54 Thiophene	84	10.216	10.221	-0.005	92	227296	2.00	1.95	
55 Isooctane	57	10.739	10.745	-0.006	96	606757	2.00	1.89	
56 n-Heptane	71	11.138	11.139	-0.001	94	126478	2.00	1.93	
57 1,2-Dichloropropane	63	11.208	11.212	-0.004	83	147432	2.00	1.92	
58 Trichloroethene	130	11.251	11.251	0.000	89	186495	2.00	1.86	
59 Dibromomethane	93	11.332	11.334	-0.002	89	167543	2.00	1.95	
60 Dichlorobromomethane	83	11.488	11.487	0.001	96	281919	2.00	1.95	
61 1,4-Dioxane	88	11.510	11.532	-0.022	88	70796	2.00	2.14	
62 Methyl methacrylate	41	11.596	11.607	-0.011	89	185193	2.00	2.03	
63 Methylcyclohexane	83	12.044	12.043	0.001	92	232691	2.00	1.96	
64 4-Methyl-2-pentanone (MIBK)	43	12.475	12.489	-0.014	98	377560	2.00	2.04	
65 cis-1,3-Dichloropropene	75	12.524	12.528	-0.004	94	212426	2.00	2.06	
66 trans-1,3-Dichloropropene	75	13.241	13.241	0.000	95	178293	2.00	2.06	
67 Toluene	91	13.359	13.360	-0.001	90	466172	2.00	1.85	
68 1,1,2-Trichloroethane	83	13.435	13.440	-0.005	93	146935	2.00	1.93	
69 2-Hexanone	58	13.839	13.853	-0.014	90	158306	2.00	2.08	
70 n-Octane	85	14.077	14.077	0.000	92	138962	2.00	1.98	
71 Chlorodibromomethane	129	14.147	14.148	-0.001	95	307102	2.00	1.96	
72 Ethylene Dibromide	107	14.438	14.441	-0.003	91	268235	2.00	1.97	
73 Tetrachloroethene	129	14.519	14.519	0.000	93	173290	2.00	1.87	
74 Chlorobenzene	112	15.403	15.404	-0.001	87	370564	2.00	1.92	
75 2,3-Dimethylheptane	43	15.435	15.438	-0.003	93	494682	2.00	1.93	
76 Ethylbenzene	91	15.700	15.698	0.002	98	619977	2.00	1.94	
77 m-Xylene & p-Xylene	91	15.861	15.863	-0.002	97	943918	4.00	3.88	
78 n-Nonane	57	16.293	16.296	-0.003	91	285635	2.00	1.92	
79 Bromoform	173	16.304	16.304	0.000	95	348652	2.00	2.05	
80 Styrene	104	16.325	16.328	-0.003	93	355324	2.00	2.01	
81 o-Xylene	91	16.390	16.389	0.001	75	483966	2.00	1.92	
82 1,1,2,2-Tetrachloroethane	83	16.713	16.715	-0.002	98	421084	2.00	2.05	
83 1,2,3-Trichloropropane	110	16.870	16.877	-0.007	89	111032	2.00	2.00	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	16.978	16.980	-0.002	96	705690	2.00	1.97	
85 N-Propylbenzene	120	17.528	17.529	-0.001	98	208556	2.00	1.98	
86 2-Chlorotoluene	126	17.571	17.572	-0.001	75	194607	2.00	2.01	
87 4-Ethyltoluene	105	17.684	17.688	-0.004	97	720149	2.00	1.99	
88 1,3,5-Trimethylbenzene	120	17.765	17.766	-0.001	93	309009	2.00	1.95	
89 Alpha Methyl Styrene	118	18.002	18.005	-0.003	84	294594	2.00	2.07	
90 n-Decane	57	18.072	18.075	-0.003	85	388959	2.00	2.06	
91 tert-Butylbenzene	119	18.202	18.202	0.000	88	681711	2.00	1.93	
92 1,2,4-Trimethylbenzene	105	18.213	18.216	-0.003	89	610351	2.00	2.04	
93 sec-Butylbenzene	105	18.477	18.479	-0.002	98	934003	2.00	2.00	
94 1,3-Dichlorobenzene	146	18.488	18.489	-0.001	86	455458	2.00	2.01	
95 Benzyl chloride	91	18.568	18.568	0.000	97	502843	2.00	2.25	
96 1,4-Dichlorobenzene	146	18.579	18.580	-0.001	95	443624	2.00	1.99	
97 4-Isopropyltoluene	119	18.644	18.648	-0.004	84	797863	2.00	2.05	
98 1,2,3-Trimethylbenzene	105	18.698	18.698	0.000	92	611095	2.00	2.22	
99 Butylcyclohexane	83	18.757	18.757	0.000	92	522472	2.00	2.05	
101 1,2-Dichlorobenzene	146	18.946	18.945	0.001	82	453097	2.00	1.92	
100 2,3-Dihydroindene	117	18.946	18.947	-0.001	88	624224	2.00	1.99	
102 Indene	116	19.081	19.081	0.000	84	533579	2.00	2.09	
103 n-Butylbenzene	91	19.091	19.092	-0.001	97	802465	2.00	2.10	
104 Undecane	57	19.415	19.418	-0.003	90	465102	2.00	1.98	
105 1,2-Dibromo-3-Chloropropane	157	19.561	19.560	0.001	90	257066	2.00	2.27	
106 1,2,4,5-Tetramethylbenzene	119	19.857	19.860	-0.003	96	741766	2.00	2.06	
107 Dodecane	57	20.477	20.478	-0.001	89	454692	2.00	2.17	
108 1,2,4-Trichlorobenzene	180	20.655	20.658	-0.003	93	411351	2.00	2.14	
109 Naphthalene	128	20.795	20.794	0.001	99	850922	2.00	2.27	
110 Hexachlorobutadiene	225	21.011	21.014	-0.003	83	436547	2.00	1.96	
111 1,2,3-Trichlorobenzene	180	21.081	21.081	0.000	93	404438	2.00	2.13	
112 2-Methylnaphthalene	142	21.825	21.826	-0.001	98	473896	2.00	2.16	
113 1-Methylnaphthalene	142	21.955	21.957	-0.002	99	728929	2.00	2.35	
A 116 C8 Range	1	14.066	(14.028-14.125)		0	1437970	2.00	1.97	
S 117 Xylenes, Total	100				0		6.00	5.81	
S 118 1,2-Dichloroethene, Total	1				0		4.00	3.78	

Reagents:

40L7DQP_00019	Amount Added: 200.00	Units: mL	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

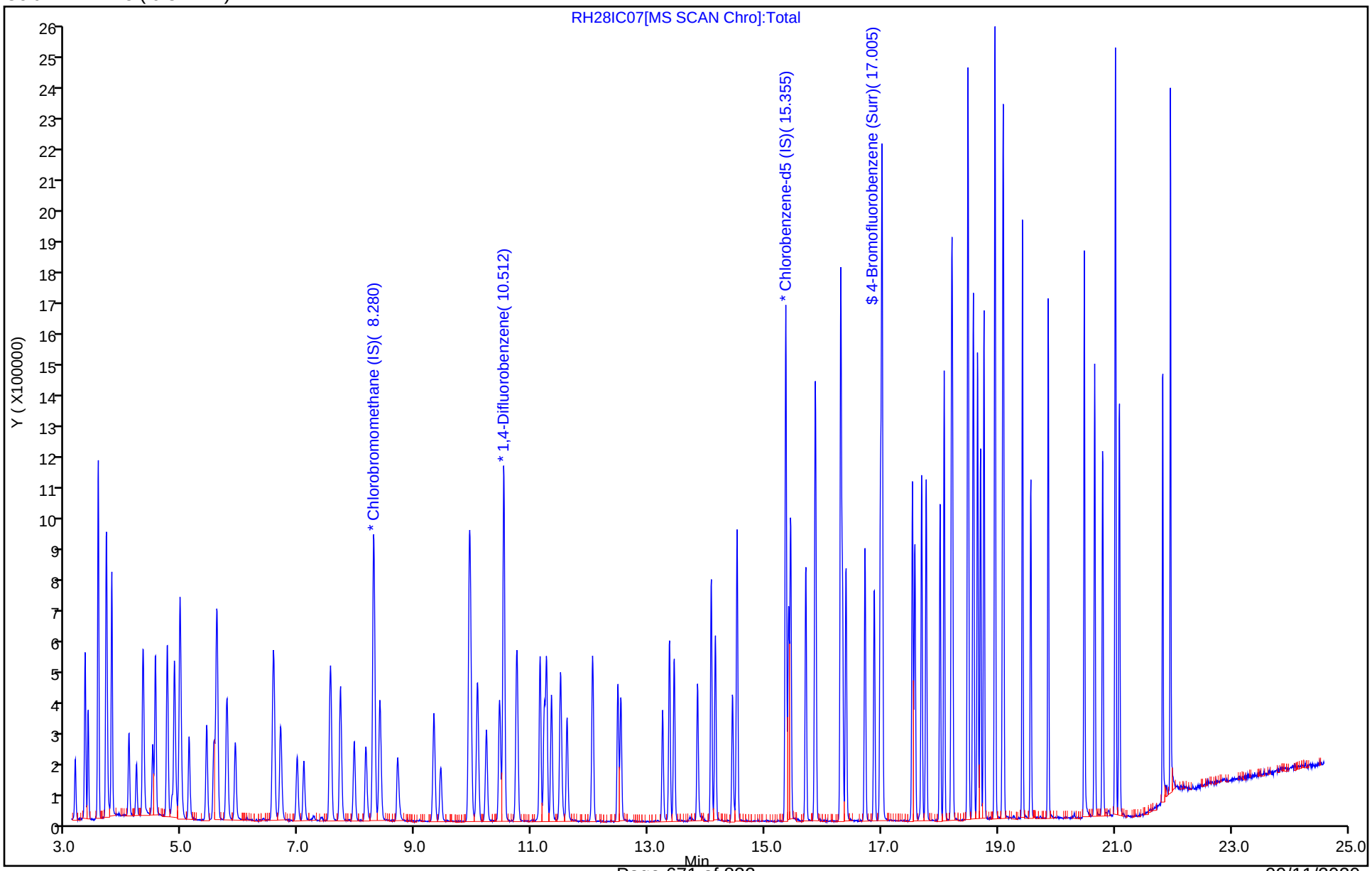
Report Date: 31-Aug-2020 13:43:56 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC07.D

Injection Date:	29-Aug-2020 00:02:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	ICIS L7			Worklist Smp#:	15
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

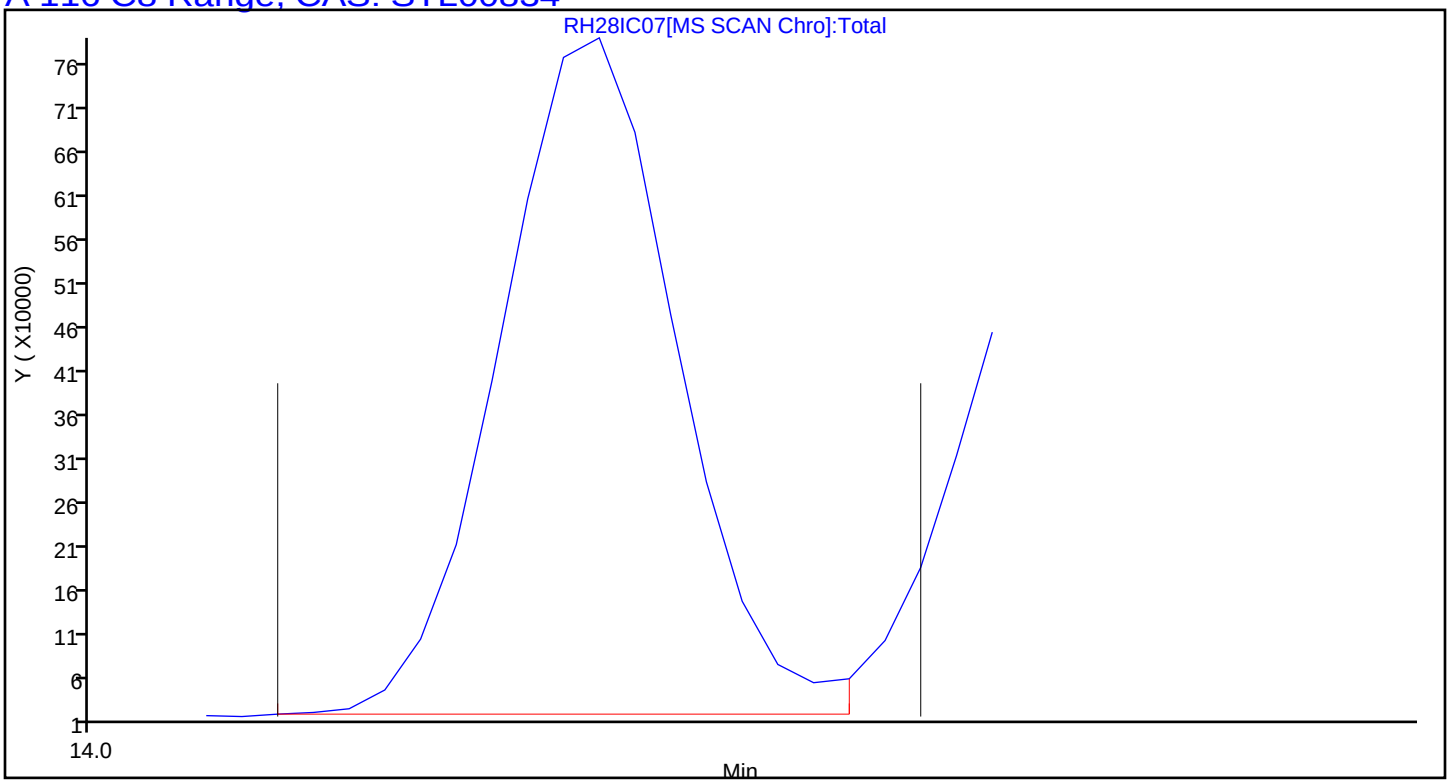


Report Date: 31-Aug-2020 13:43:56 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC07.D				
Injection Date:	29-Aug-2020 00:02:30	Instrument ID:	MR		
Lims ID:	ICIS L7				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	12	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 116 C8 Range, CAS: STL00834



FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Lab Sample ID: ICV 140-42295/22 Calibration Date: 09/02/2020 08:56

Instrument ID: MG Calib Start Date: 09/01/2020 18:07

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 09/02/2020 03:27

Lab File ID: GI01ICVR.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorodifluoromethane	Ave	4.301	3.929		4.57	5.00	-8.6	35.0
Propene	Ave	2.115	1.931		4.57	5.00	-8.7	35.0
Dichlorodifluoromethane	Ave	4.809	4.292		4.46	5.00	-10.7	35.0
Chloromethane	Ave	0.8610	0.7442		4.32	5.00	-13.6	35.0
1,2-Dichloro-1,1,2,2-tetrafluoroethane	Ave	2.743	2.277		4.15	5.00	-17.0	35.0
Acetaldehyde	Ave	1.013	0.8426		20.8	25.0	-16.8	35.0
Vinyl chloride	Ave	2.404	2.220		4.62	5.00	-7.6	35.0
1,3-Butadiene	Ave	2.119	1.970		4.65	5.00	-7.0	35.0
Butane	Ave	4.304	4.065		4.72	5.00	-5.6	35.0
Bromomethane	Ave	1.452	1.260		4.34	5.00	-13.2	35.0
Chloroethane	Ave	0.997	0.8957		4.49	5.00	-10.2	35.0
Ethanol	Ave	0.9079	0.6562		18.1	25.0	-27.7	35.0
Vinyl bromide	Ave	1.239	1.117		4.51	5.00	-9.8	35.0
2-Methylbutane	Ave	2.923	2.831		4.84	5.00	-3.1	35.0
Trichlorofluoromethane	Ave	3.737	3.130		4.19	5.00	-16.3	35.0
Acrolein	Ave	0.4464	0.4931		5.52	5.00	10.5	35.0
Acetonitrile	Ave	0.7987	0.6668		4.17	5.00	-16.5	35.0
Acetone	Ave	0.7999	0.8016		5.01	5.00	0.2	35.0
Isopropyl alcohol	Ave	2.389	2.423		5.07	5.00	1.5	35.0
Pentane	Ave	0.2430	0.2227		4.58	5.00	-8.4	35.0
Ethyl ether	Ave	1.710	1.790		5.23	5.00	4.7	35.0
1,1-Dichloroethene	Ave	1.183	1.025		4.33	5.00	-13.4	35.0
Acrylonitrile	Ave	1.092	1.075		4.92	5.00	-1.6	35.0
tert-Butyl alcohol	Ave	2.412	1.818		3.77	5.00	-24.6	35.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	2.736	2.359		4.31	5.00	-13.8	35.0
Methylene Chloride	Ave	1.184	1.067		4.51	5.00	-9.9	35.0
3-Chloropropene	Ave	2.320	1.903		4.10	5.00	-18.0	35.0
Carbon disulfide	Ave	3.977	3.544		4.46	5.00	-10.9	35.0
trans-1,2-Dichloroethene	Ave	1.393	1.226		4.40	5.00	-12.0	35.0
2-Methylpentane	Ave	5.433	4.474		4.12	5.00	-17.6	35.0
Methyl tert-butyl ether	Ave	2.883	2.736		4.74	5.00	-5.1	35.0
1,1-Dichloroethane	Ave	3.473	3.181		4.58	5.00	-8.4	35.0
Vinyl acetate	Ave	4.548	4.694		5.16	5.00	3.2	35.0
2-Butanone (MEK)	Ave	0.5774	0.5305		4.59	5.00	-8.1	35.0
Hexane	Ave	1.792	1.607		4.48	5.00	-10.3	35.0
Isopropyl ether	Ave	5.977	5.799		4.85	5.00	-3.0	35.0
cis-1,2-Dichloroethene	Ave	1.481	1.325		4.47	5.00	-10.5	35.0
Ethyl acetate	Ave	3.981	3.588		4.51	5.00	-9.9	35.0
Chloroform	Ave	3.366	2.934		4.36	5.00	-12.8	35.0
Tert-butyl ethyl ether	Ave	5.017	4.408		4.39	5.00	-12.1	35.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Lab Sample ID: ICV 140-42295/22 Calibration Date: 09/02/2020 08:56

Instrument ID: MG Calib Start Date: 09/01/2020 18:07

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 09/02/2020 03:27

Lab File ID: GI01ICVR.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Tetrahydrofuran	Ave	1.997	1.896		4.75	5.00	-5.1	35.0
1,1,1-Trichloroethane	Ave	3.240	2.865		4.42	5.00	-11.6	35.0
1,2-Dichloroethane	Ave	0.5421	0.4409		4.07	5.00	-18.7	35.0
1-Butanol	Ave	0.1535	0.1036		3.38	5.00	-32.5	35.0
Benzene	Ave	0.9867	0.8211		4.16	5.00	-16.8	35.0
Cyclohexane	Ave	0.1661	0.1347		4.05	5.00	-18.9	35.0
Carbon tetrachloride	Ave	0.6099	0.5409		4.43	5.00	-11.3	35.0
2,3-Dimethylpentane	Ave	0.2548	0.1966		3.86	5.00	-22.8	35.0
Thiophene	Ave	0.5655	0.4452		3.94	5.00	-21.3	35.0
2,2,4-Trimethylpentane	Ave	2.414	1.987		4.12	5.00	-17.7	35.0
Heptane	Ave	0.3880	0.3065		3.95	5.00	-21.0	35.0
1,2-Dichloropropane	Ave	0.4494	0.3788		4.21	5.00	-15.7	35.0
Trichloroethene	Ave	0.4302	0.3138		3.65	5.00	-27.0	35.0
Dibromomethane	Ave	0.4239	0.3454		4.07	5.00	-18.5	35.0
Bromodichloromethane	Ave	0.7367	0.6419		4.36	5.00	-12.9	35.0
1,4-Dioxane	Ave	0.1151	0.0858		3.73	5.00	-25.5	35.0
Methyl methacrylate	Ave	0.5088	0.4152		4.08	5.00	-18.4	35.0
Methylcyclohexane	Ave	0.6505	0.6281		4.83	5.00	-3.4	35.0
4-Methyl-2-pentanone (MIBK)	Ave	0.8567	0.6695		3.91	5.00	-21.9	35.0
cis-1,3-Dichloropropene	Ave	0.5917	0.5245		4.43	5.00	-11.3	35.0
trans-1,3-Dichloropropene	Ave	0.4924	0.4541		4.61	5.00	-7.8	35.0
Toluene	Ave	1.059	0.9715		4.59	5.00	-8.2	35.0
1,1,2-Trichloroethane	Ave	0.3318	0.2919		4.40	5.00	-12.0	35.0
2-Hexanone	Ave	0.3922	0.2950		3.76	5.00	-24.8	35.0
Octane	Ave	0.3858	0.3458		4.48	5.00	-10.4	35.0
Dibromochloromethane	Ave	0.6238	0.5958		4.78	5.00	-4.5	35.0
1,2-Dibromoethane (EDB)	Ave	0.5955	0.5271		4.43	5.00	-11.5	35.0
Tetrachloroethene	Ave	0.3991	0.3272		4.10	5.00	-18.0	35.0
Chlorobenzene	Ave	0.8562	0.7813		4.56	5.00	-8.8	35.0
2,3-Dimethylheptane	Ave	1.832	1.469		4.01	5.00	-19.8	35.0
Ethylbenzene	Ave	1.361	1.213		4.46	5.00	-10.8	35.0
m-Xylene & p-Xylene	Ave	1.076	0.9236		8.58	10.0	-14.2	35.0
Nonane	Ave	1.062	0.9751		4.59	5.00	-8.2	35.0
Bromoform	Ave	0.5248	0.5270		5.02	5.00	0.4	35.0
Styrene	Ave	0.7824	0.6733		4.30	5.00	-13.9	35.0
o-Xylene	Ave	1.089	0.9679		4.44	5.00	-11.1	35.0
1,1,2,2-Tetrachloroethane	Ave	0.8691	0.7611		4.38	5.00	-12.4	35.0
1,2,3-Trichloropropane	Ave	0.2125	0.1885		4.43	5.00	-11.3	35.0
Isopropylbenzene	Ave	1.431	1.289		4.50	5.00	-9.9	35.0
Propylbenzene	Ave	0.3821	0.3364		4.40	5.00	-12.0	35.0
2-Chlorotoluene	Ave	0.3660	0.3422		4.67	5.00	-6.5	35.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Lab Sample ID: ICV 140-42295/22 Calibration Date: 09/02/2020 08:56

Instrument ID: MG Calib Start Date: 09/01/2020 18:07

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 09/02/2020 03:27

Lab File ID: GI01ICVR.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Ethyltoluene	Ave	1.429	1.215		4.25	5.00	-15.0	35.0
1,3,5-Trimethylbenzene	Ave	0.5712	0.5698		4.99	5.00	-0.2	35.0
Alpha Methyl Styrene	Ave	0.5644	0.4904		4.34	5.00	-13.1	35.0
Decane	Ave	1.287	1.157		4.49	5.00	-10.1	35.0
tert-Butylbenzene	Ave	1.256	1.107		4.41	5.00	-11.8	35.0
1,2,4-Trimethylbenzene	Ave	1.249	1.123		4.49	5.00	-10.1	35.0
sec-Butylbenzene	Ave	1.884	1.651		4.38	5.00	-12.4	35.0
1,3-Dichlorobenzene	Ave	0.8900	0.7770		4.37	5.00	-12.7	35.0
Benzyl chloride	Ave	1.177	1.122		4.77	5.00	-4.6	35.0
1,4-Dichlorobenzene	Ave	0.9015	0.7590		4.21	5.00	-15.8	35.0
4-Isopropyltoluene	Ave	1.459	1.292		4.43	5.00	-11.4	35.0
1,2,3-Trimethylbenzene	QuaF		0.8283		3.85	5.00	-23.0	35.0
Butylcyclohexane	Ave	1.221	1.032		4.22	5.00	-15.5	35.0
1,2-Dichlorobenzene	Ave	0.8529	0.7455		4.37	5.00	-12.6	35.0
Indane	Ave	1.248	1.052		4.22	5.00	-15.7	35.0
Indene	Ave	1.069	0.7883		3.69	5.00	-26.3	35.0
Butylbenzene	Ave	1.654	1.495		4.52	5.00	-9.6	35.0
Undecane	Ave	1.437	1.263		4.40	5.00	-12.1	35.0
1,2-Dibromo-3-Chloropropane	QuaF		0.2886		3.87	5.00	-22.7	35.0
1,2,4,5-Tetramethylbenzene	QuaF		1.092		4.70	5.00	-5.9	35.0
Dodecane	Ave	1.254	1.200		4.79	5.00	-4.3	35.0
1,2,4-Trichlorobenzene	Ave	0.7511	0.6306		4.20	5.00	-16.0	35.0
Naphthalene	Ave	1.812	1.517		4.19	5.00	-16.3	35.0
Hexachlorobutadiene	Ave	0.6345	0.5377		4.24	5.00	-15.3	35.0
1,2,3-Trichlorobenzene	Ave	0.7230	0.6231		4.31	5.00	-13.8	35.0
2-Methylnaphthalene	Ave	0.7792	0.6437		4.13	5.00	-17.4	50.0
1-Methylnaphthalene	Ave	0.7933	0.6885		4.34	5.00	-13.2	50.0
4-Bromofluorobenzene (Surr)	Ave	0.7532	0.7643		11.8	11.6	1.5	35.0

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01ICVR.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 02-Sep-2020 08:56:30 ALS Bottle#: 7 Worklist Smp#: 22
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016453-022
Misc. Info.: S123 100ML 314619
Operator ID: AFB Instrument ID: MG
Sublist:

Method: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 02-Sep-2020 12:24:11 Calib Date: 02-Sep-2020 03:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1035

First Level Reviewer: barlozhetskayaa Date: 02-Sep-2020 10:29:43

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.811	8.811	0.000	87	147601	4.80	4.80	
* 2 1,4-Difluorobenzene	114	10.995	10.995	0.000	98	795164	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.730	15.730	0.000	94	773847	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.374	17.374	0.000	83	571756	4.64	4.71	
6 Chlorodifluoromethane	51	3.705	3.705	0.000	97	241643	2.00	1.83	
7 Propene	41	3.716	3.716	0.000	98	118767	2.00	1.83	
8 Dichlorodifluoromethane	85	3.764	3.770	-0.006	98	263975	2.00	1.79	
9 Chloromethane	52	3.947	3.947	0.000	72	45771	2.00	1.73	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.953	3.953	0.000	94	140044	2.00	1.66	
11 Acetaldehyde	44	4.098	4.093	0.005	100	259096	10.0	8.32	
12 Vinyl chloride	62	4.115	4.115	0.000	99	136539	2.00	1.85	
14 Butadiene	54	4.201	4.201	0.000	68	121148	2.00	1.86	
13 Butane	43	4.206	4.206	0.000	87	249996	2.00	1.89	
15 Bromomethane	94	4.519	4.519	0.000	98	77519	2.00	1.74	
16 Chloroethane	64	4.659	4.659	0.000	84	55088	2.00	1.80	
17 Ethanol	31	4.751	4.751	0.000	96	201798	10.0	7.23	
18 Vinyl bromide	106	4.961	4.961	0.000	96	68705	2.00	1.80	
19 2-Methylbutane	43	5.010	5.010	0.000	94	174113	2.00	1.94	
20 Trichlorofluoromethane	101	5.225	5.231	-0.006	98	192500	2.00	1.67	
21 Acrolein	56	5.231	5.231	0.000	36	30327	2.00	2.21	
22 Acetonitrile	40	5.295	5.296	-0.001	100	41007	2.00	1.67	
23 Acetone	58	5.355	5.349	0.006	99	49297	2.00	2.00	
25 Isopropyl alcohol	45	5.441	5.436	0.005	94	149039	2.00	2.03	
24 Pentane	72	5.446	5.447	-0.001	95	13694	2.00	1.83	
26 Ethyl ether	31	5.614	5.614	0.000	88	110080	2.00	2.09	
27 1,1-Dichloroethene	96	5.926	5.932	-0.006	89	63012	2.00	1.73	
28 Acrylonitrile	53	6.034	6.029	0.005	94	66087	2.00	1.97	
30 2-Methyl-2-propanol	59	6.040	6.045	-0.005	96	111815	2.00	1.51	
29 1,1,2-Trichloro-1,2,2-trifluoroe	101	6.104	6.104	0.000	89	145077	2.00	1.72	
31 Methylene Chloride	84	6.277	6.277	0.000	88	65615	2.00	1.80	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.288	6.288	0.000	94	117015	2.00	1.64	
33 Carbon disulfide	76	6.439	6.439	0.000	97	217959	2.00	1.78	
34 trans-1,2-Dichloroethene	96	7.086	7.080	0.006	90	75393	2.00	1.76	
35 2-Methylpentane	43	7.102	7.102	0.000	96	275179	2.00	1.65	
36 Methyl tert-butyl ether	73	7.221	7.215	0.006	92	168285	2.00	1.90	
37 1,1-Dichloroethane	63	7.501	7.501	0.000	98	195631	2.00	1.83	
38 Vinyl acetate	43	7.603	7.603	0.000	100	288713	2.00	2.06	
39 2-Butanone (MEK)	72	8.051	8.056	-0.005	95	32629	2.00	1.84	
40 Hexane	56	8.083	8.083	0.000	91	98855	2.00	1.79	
41 Isopropyl ether	45	8.240	8.240	0.000	95	356651	2.00	1.94	
42 cis-1,2-Dichloroethene	96	8.482	8.488	-0.006	94	81476	2.00	1.79	
43 Ethyl acetate	43	8.671	8.671	0.000	97	220650	2.00	1.80	
44 Chloroform	83	8.827	8.822	0.005	95	180444	2.00	1.74	
45 Tert-butyl ethyl ether	59	8.914	8.919	-0.005	96	271100	2.00	1.76	
46 Tetrahydrofuran	42	9.232	9.232	0.000	90	116632	2.00	1.90	
47 1,1,1-Trichloroethane	97	9.852	9.847	0.005	93	176228	2.00	1.77	
48 1,2-Dichloroethane	62	9.960	9.960	0.000	95	146090	2.00	1.63	
51 n-Butanol	31	10.434	10.429	0.005	71	34331	2.00	1.35	
50 Benzene	78	10.451	10.451	0.000	93	272043	2.00	1.66	
49 Cyclohexane	69	10.456	10.456	0.000	88	44638	2.00	1.62	
52 Carbon tetrachloride	117	10.478	10.478	0.000	92	179216	2.00	1.77	
53 2,3-Dimethylpentane	71	10.580	10.575	0.005	90	65148	2.00	1.54	
54 Thiophene	84	10.720	10.720	0.000	93	147498	2.00	1.57	
55 Isooctane	57	11.216	11.216	0.000	98	658344	2.00	1.65	
56 n-Heptane	71	11.594	11.594	0.000	94	101560	2.00	1.58	
57 1,2-Dichloropropane	63	11.675	11.669	0.006	88	125503	2.00	1.69	
58 Trichloroethene	130	11.712	11.712	0.000	89	103984	2.00	1.46	
59 Dibromomethane	93	11.788	11.788	0.000	87	114445	2.00	1.63	
60 Dichlorobromomethane	83	11.939	11.934	0.005	95	212678	2.00	1.74	
61 1,4-Dioxane	88	11.966	11.961	0.005	91	28433	2.00	1.49	
62 Methyl methacrylate	41	12.036	12.036	0.000	85	137568	2.00	1.63	
63 Methylcyclohexane	83	12.478	12.478	0.000	86	208092	2.00	1.93	
64 4-Methyl-2-pentanone (MIBK)	43	12.888	12.888	0.000	97	221805	2.00	1.56	
65 cis-1,3-Dichloropropene	75	12.936	12.937	-0.001	97	173786	2.00	1.77	
66 trans-1,3-Dichloropropene	75	13.632	13.632	0.000	91	146415	2.00	1.84	
67 Toluene	91	13.756	13.756	0.000	92	313239	2.00	1.84	
68 1,1,2-Trichloroethane	83	13.832	13.832	0.000	94	94123	2.00	1.76	
69 2-Hexanone	58	14.225	14.225	0.000	91	95107	2.00	1.50	
70 n-Octane	85	14.452	14.452	0.000	98	111511	2.00	1.79	
71 Chlorodibromomethane	129	14.538	14.533	0.005	94	192113	2.00	1.91	
72 Ethylene Dibromide	107	14.824	14.824	0.000	97	169944	2.00	1.77	
73 Tetrachloroethene	129	14.905	14.905	0.000	90	105515	2.00	1.64	
75 Chlorobenzene	112	15.778	15.778	0.000	90	251919	2.00	1.82	
74 2,3-Dimethylheptane	43	15.800	15.800	0.000	92	473562	2.00	1.60	
78 Ethylbenzene	91	16.069	16.070	-0.001	98	391211	2.00	1.78	
79 m-Xylene & p-Xylene	91	16.231	16.231	0.000	98	595631	4.00	3.43	
80 n-Nonane	57	16.652	16.652	0.000	93	314394	2.00	1.84	
81 Bromoform	173	16.679	16.679	0.000	90	169932	2.00	2.01	
82 Styrene	104	16.695	16.695	0.000	96	217105	2.00	1.72	
83 o-Xylene	91	16.754	16.754	0.000	97	312087	2.00	1.78	
84 1,1,2,2-Tetrachloroethane	83	17.078	17.078	0.000	97	245410	2.00	1.75	
85 1,2,3-Trichloropropane	110	17.234	17.240	-0.006	92	60775	2.00	1.77	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
86 Isopropylbenzene	105	17.342	17.347	-0.005	97	415722	2.00	1.80	
87 N-Propylbenzene	120	17.887	17.887	0.000	98	108476	2.00	1.76	
88 2-Chlorotoluene	126	17.930	17.930	0.000	98	110334	2.00	1.87	
89 4-Ethyltoluene	105	18.038	18.038	0.000	99	391682	2.00	1.70	
90 1,3,5-Trimethylbenzene	120	18.108	18.108	0.000	91	183721	2.00	2.00	
92 Alpha Methyl Styrene	118	18.340	18.340	0.000	84	158132	2.00	1.74	
93 n-Decane	57	18.399	18.399	0.000	87	372994	2.00	1.80	
94 tert-Butylbenzene	119	18.534	18.534	0.000	89	357090	2.00	1.76	
95 1,2,4-Trimethylbenzene	105	18.545	18.550	-0.005	96	361981	2.00	1.80	
96 sec-Butylbenzene	105	18.803	18.803	0.000	98	532479	2.00	1.75	
97 1,3-Dichlorobenzene	146	18.814	18.814	0.000	97	250519	2.00	1.75	
98 Benzyl chloride	91	18.890	18.890	0.000	96	361904	2.00	1.91	
99 1,4-Dichlorobenzene	146	18.900	18.906	-0.006	94	244726	2.00	1.68	
100 4-Isopropyltoluene	119	18.965	18.965	0.000	96	416724	2.00	1.77	
101 1,2,3-Trimethylbenzene	105	19.014	19.019	-0.005	99	267065	2.00	1.54	
102 Butylcyclohexane	83	19.073	19.073	0.000	85	332763	2.00	1.69	
103 2,3-Dihydroindene	117	19.262	19.262	0.000	92	339297	2.00	1.69	
104 1,2-Dichlorobenzene	146	19.262	19.262	0.000	80	240366	2.00	1.75	
106 Indene	116	19.391	19.391	0.000	92	254181	2.00	1.47	
105 n-Butylbenzene	91	19.397	19.397	0.000	98	482020	2.00	1.81	
107 Undecane	57	19.709	19.709	0.000	92	407210	2.00	1.76	
108 1,2-Dibromo-3-Chloropropane	157	19.860	19.860	0.000	86	93039	2.00	1.55	
109 1,2,4,5-Tetramethylbenzene	119	20.146	20.152	-0.006	97	352073	2.00	1.88	
110 Dodecane	57	20.766	20.761	0.005	91	387080	2.00	1.91	
111 1,2,4-Trichlorobenzene	180	20.955	20.955	0.000	93	203324	2.00	1.68	
112 Naphthalene	128	21.095	21.095	0.000	98	489225	2.00	1.67	
113 Hexachlorobutadiene	225	21.305	21.305	0.000	91	173369	2.00	1.69	
114 1,2,3-Trichlorobenzene	180	21.370	21.370	0.000	94	200917	2.00	1.72	
115 2-Methylnaphthalene	142	22.141	22.141	0.000	97	207554	2.00	1.65	
116 1-Methylnaphthalene	142	22.319	22.319	0.000	99	222006	2.00	1.74	
A 122 C8 Range	1	14.449	(14.399-14.517)		0	1388561	2.00	1.84	
S 123 1,2-Dichloroethene, Total	1				0		4.00	3.55	
S 124 Xylenes, Total	100				0		6.00	5.21	
T 136 2-Methylthiophene TIC	97	13.912	13.917	-0.006	97	242304	2.00	1.50	
T 137 3-Methylthiophene TIC	97	14.112	14.974	-0.863	95	245771	2.00	1.52	
T 154 2-Ethylthiophene TIC	97	16.172	17.374	-1.202	97	286980	2.00	1.78	
T 161 1,2,3,5-Tetramethylbenzene TIC	119	20.200	18.970	1.230	96	208289	2.00	1.29	
T 162 1,2,3,4-Tetramethylbenzene TIC	119	20.604	18.970	1.634	96	275647	2.00	1.71	
T 160 1,2-Dimethyl-4-Ethylbenzene TIC	119	19.763	19.865	-0.103	96	295157	2.00	1.83	
T 163 Benzo(b)thiophene TIC	134	21.198	23.310	-2.113	97	257697	2.00	1.60	

Reagents:

40CV101S_00123	Amount Added: 100.00	Units: mL	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

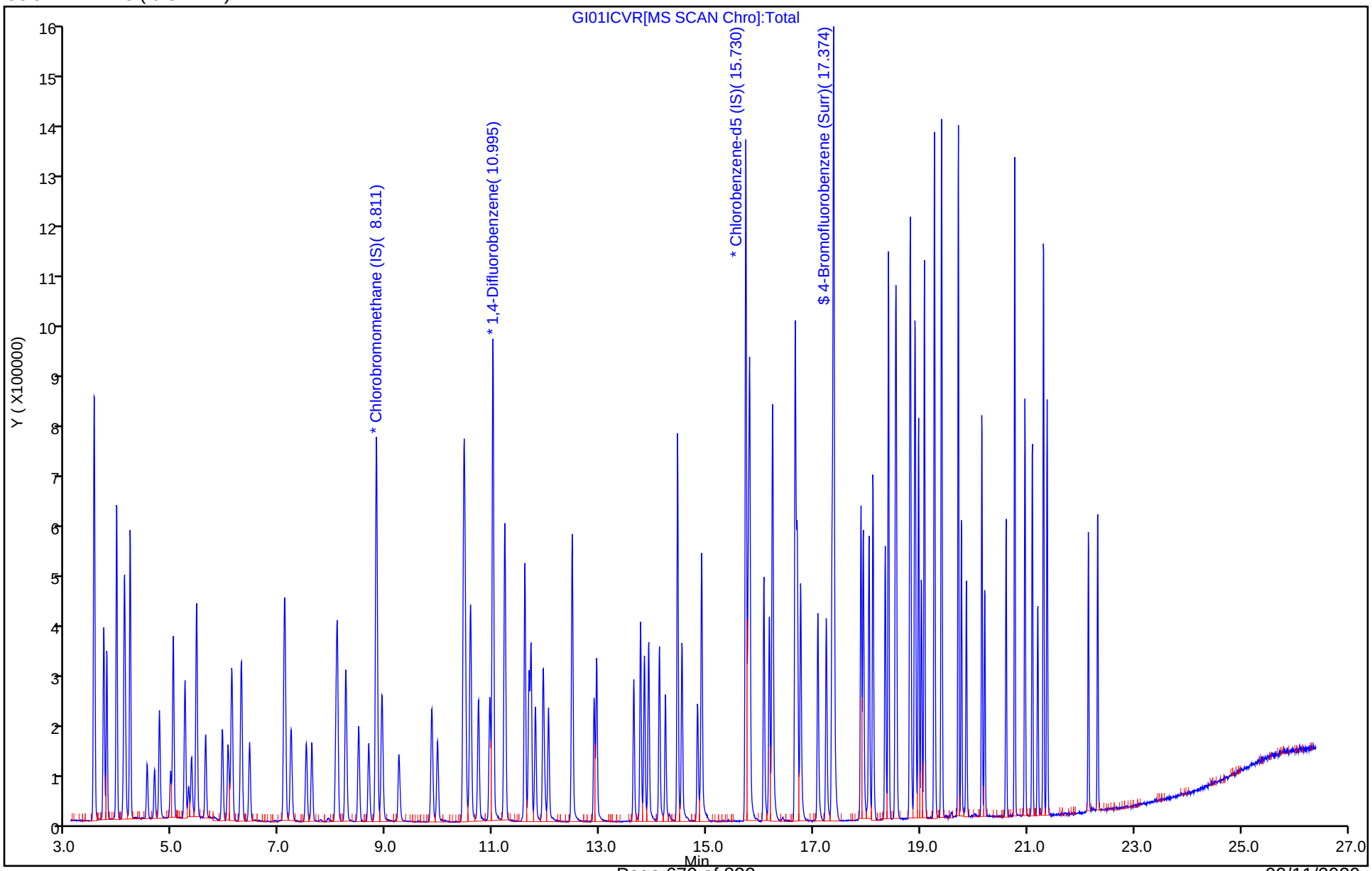
Report Date: 02-Sep-2020 12:35:07 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01ICVR.D

Injection Date:	02-Sep-2020 08:56:30	Instrument ID:	MG	Operator ID:	AFB
Lims ID:	ICV			Worklist Smp#:	22
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Lab Sample ID: CCVIS 140-42503/2 Calibration Date: 09/08/2020 15:52

Instrument ID: MG Calib Start Date: 09/01/2020 18:07

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 09/02/2020 03:27

Lab File ID: GCCVI08Z.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorodifluoromethane	Ave	4.301	4.660		1.73	1.60	8.4	30.0
Propene	Ave	2.115	2.251		1.70	1.60	6.4	30.0
Dichlorodifluoromethane	Ave	4.809	4.437		1.48	1.60	-7.7	30.0
Chloromethane	Ave	0.8610	0.9690		1.80	1.60	12.5	30.0
1,2-Dichloro-1,1,2,2-tetrafluoroethane	Ave	2.743	2.370		1.38	1.60	-13.6	30.0
Acetaldehyde	Ave	1.013	0.9793		7.74	8.00	-3.3	30.0
Vinyl chloride	Ave	2.404	2.601		1.73	1.60	8.2	30.0
1,3-Butadiene	Ave	2.119	2.538		1.92	1.60	19.8	30.0
Butane	Ave	4.304	5.403		2.01	1.60	25.5	30.0
Bromomethane	Ave	1.452	1.393		1.54	1.60	-4.0	30.0
Chloroethane	Ave	0.997	1.078		1.73	1.60	8.1	30.0
Ethanol	Ave	0.9079	0.9203		8.11	8.00	1.4	30.0
Vinyl bromide	Ave	1.239	1.240		1.60	1.60	0.1	30.0
2-Methylbutane	Ave	2.923	4.127		2.26	1.60	41.2*	30.0
Trichlorofluoromethane	Ave	3.737	3.635		1.56	1.60	-2.7	30.0
Acrolein	Ave	0.4464	0.7566		2.71	1.60	69.5*	30.0
Acetonitrile	Ave	0.7987	0.9470		1.90	1.60	18.6	30.0
Acetone	Ave	0.7999	0.8371		1.67	1.60	4.6	30.0
Isopropyl alcohol	Ave	2.389	4.008		2.68	1.60	67.8*	30.0
Pentane	Ave	0.2430	0.2564		1.69	1.60	5.5	30.0
Ethyl ether	Ave	1.710	2.538		2.37	1.60	48.4*	30.0
1,1-Dichloroethene	Ave	1.183	1.139		1.54	1.60	-3.8	30.0
Acrylonitrile	Ave	1.092	1.355		1.99	1.60	24.1	30.0
tert-Butyl alcohol	Ave	2.412	2.757		1.83	1.60	14.3	30.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	2.736	2.480		1.45	1.60	-9.4	30.0
Methylene Chloride	Ave	1.184	1.141		1.54	1.60	-3.6	30.0
3-Chloropropene	Ave	2.320	2.286		1.58	1.60	-1.5	30.0
Carbon disulfide	Ave	3.977	3.826		1.54	1.60	-3.8	30.0
trans-1,2-Dichloroethene	Ave	1.393	1.255		1.44	1.60	-9.9	30.0
2-Methylpentane	Ave	5.433	5.558		1.64	1.60	2.3	30.0
Methyl tert-butyl ether	Ave	2.883	2.746		1.52	1.60	-4.8	30.0
1,1-Dichloroethane	Ave	3.473	3.571		1.65	1.60	2.8	30.0
Vinyl acetate	Ave	4.548	5.485		1.93	1.60	20.6	30.0
2-Butanone (MEK)	Ave	0.5774	0.5047		1.40	1.60	-12.6	30.0
Hexane	Ave	1.792	1.837		1.64	1.60	2.5	30.0
Isopropyl ether	Ave	5.977	6.502		1.74	1.60	8.8	30.0
cis-1,2-Dichloroethene	Ave	1.481	1.376		1.49	1.60	-7.1	30.0
Ethyl acetate	Ave	3.981	3.754		1.51	1.60	-5.7	30.0
Chloroform	Ave	3.366	3.143		1.49	1.60	-6.6	30.0
Tert-butyl ethyl ether	Ave	5.017	4.491		1.43	1.60	-10.5	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Lab Sample ID: CCVIS 140-42503/2 Calibration Date: 09/08/2020 15:52

Instrument ID: MG Calib Start Date: 09/01/2020 18:07

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 09/02/2020 03:27

Lab File ID: GCCVI08Z.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Tetrahydrofuran	Ave	1.997	2.257		1.81	1.60	13.0	30.0
1,1,1-Trichloroethane	Ave	3.240	2.933		1.45	1.60	-9.5	30.0
1,2-Dichloroethane	Ave	0.5421	0.4958		1.46	1.60	-8.5	30.0
1-Butanol	Ave	0.1535	0.1925		2.01	1.60	25.4	30.0
Benzene	Ave	0.9867	0.8682		1.41	1.60	-12.0	30.0
Cyclohexane	Ave	0.1661	0.1517		1.46	1.60	-8.7	30.0
Carbon tetrachloride	Ave	0.6099	0.5775		1.51	1.60	-5.3	30.0
2,3-Dimethylpentane	Ave	0.2548	0.2258		1.42	1.60	-11.4	30.0
Thiophene	Ave	0.5655	0.4913		1.39	1.60	-13.1	30.0
2,2,4-Trimethylpentane	Ave	2.414	2.458		1.63	1.60	1.8	30.0
Heptane	Ave	0.3880	0.3683		1.52	1.60	-5.1	30.0
1,2-Dichloropropane	Ave	0.4494	0.4276		1.52	1.60	-4.9	30.0
Trichloroethene	Ave	0.4302	0.3391		1.26	1.60	-21.2	30.0
Dibromomethane	Ave	0.4239	0.3702		1.40	1.60	-12.7	30.0
Bromodichloromethane	Ave	0.7367	0.6819		1.48	1.60	-7.4	30.0
1,4-Dioxane	Ave	0.1151	0.0850		1.18	1.60	-26.2	30.0
Methyl methacrylate	Ave	0.5088	0.4786		1.51	1.60	-5.9	30.0
Methylcyclohexane	Ave	0.6505	0.7027		1.73	1.60	8.0	30.0
4-Methyl-2-pentanone (MIBK)	Ave	0.8567	0.9404		1.76	1.60	9.8	30.0
cis-1,3-Dichloropropene	Ave	0.5917	0.5272		1.43	1.60	-10.9	30.0
trans-1,3-Dichloropropene	Ave	0.4924	0.4286		1.39	1.60	-13.0	30.0
Toluene	Ave	1.059	0.9047		1.37	1.60	-14.5	30.0
1,1,2-Trichloroethane	Ave	0.3318	0.2815		1.36	1.60	-15.2	30.0
2-Hexanone	Ave	0.3922	0.4111		1.68	1.60	4.8	30.0
Octane	Ave	0.3858	0.3366		1.40	1.60	-12.8	30.0
Dibromochloromethane	Ave	0.6238	0.5356		1.37	1.60	-14.1	30.0
1,2-Dibromoethane (EDB)	Ave	0.5955	0.4728		1.27	1.60	-20.6	30.0
Tetrachloroethene	Ave	0.3991	0.3090		1.24	1.60	-22.6	30.0
Chlorobenzene	Ave	0.8562	0.7283		1.36	1.60	-14.9	30.0
2,3-Dimethylheptane	Ave	1.832	1.647		1.44	1.60	-10.1	30.0
Ethylbenzene	Ave	1.361	1.182		1.39	1.60	-13.1	30.0
m-Xylene & p-Xylene	Ave	1.076	0.9181		2.73	3.20	-14.7	30.0
Nonane	Ave	1.062	1.001		1.51	1.60	-5.7	30.0
Bromoform	Ave	0.5248	0.4385		1.34	1.60	-16.4	30.0
Styrene	Ave	0.7824	0.7032		1.44	1.60	-10.1	30.0
o-Xylene	Ave	1.089	0.9336		1.37	1.60	-14.3	30.0
1,1,2,2-Tetrachloroethane	Ave	0.8691	0.7703		1.42	1.60	-11.4	30.0
1,2,3-Trichloropropane	Ave	0.2125	0.1785		1.34	1.60	-16.0	30.0
Isopropylbenzene	Ave	1.431	1.233		1.38	1.60	-13.9	30.0
Propylbenzene	Ave	0.3821	0.3183		1.33	1.60	-16.7	30.0
2-Chlorotoluene	Ave	0.3660	0.3254		1.42	1.60	-11.1	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Lab Sample ID: CCVIS 140-42503/2 Calibration Date: 09/08/2020 15:52

Instrument ID: MG Calib Start Date: 09/01/2020 18:07

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 09/02/2020 03:27

Lab File ID: GCCVI08Z.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Ethyltoluene	Ave	1.429	1.131		1.27	1.60	-20.8	30.0
1,3,5-Trimethylbenzene	Ave	0.5712	0.5197		1.46	1.60	-9.0	30.0
Alpha Methyl Styrene	Ave	0.5644	0.4834		1.37	1.60	-14.4	30.0
Decane	Ave	1.287	1.216		1.51	1.60	-5.5	30.0
tert-Butylbenzene	Ave	1.256	0.9771		1.24	1.60	-22.2	30.0
1,2,4-Trimethylbenzene	Ave	1.249	0.9803		1.26	1.60	-21.5	30.0
sec-Butylbenzene	Ave	1.884	1.500		1.27	1.60	-20.4	30.0
1,3-Dichlorobenzene	Ave	0.8900	0.6658		1.20	1.60	-25.2	30.0
Benzyl chloride	Ave	1.177	1.006		1.37	1.60	-14.5	30.0
1,4-Dichlorobenzene	Ave	0.9015	0.6719		1.19	1.60	-25.5	30.0
4-Isopropyltoluene	Ave	1.459	1.108		1.22	1.60	-24.1	30.0
1,2,3-Trimethylbenzene	QuaF		0.7290		1.09	1.60	-31.7*	30.0
Butylcyclohexane	Ave	1.221	1.016		1.33	1.60	-16.8	30.0
Indane	Ave	1.248	0.9549		1.22	1.60	-23.5	30.0
1,2-Dichlorobenzene	Ave	0.8529	0.6594		1.24	1.60	-22.7	30.0
Indene	Ave	1.069	0.7312		1.09	1.60	-31.6*	30.0
Butylbenzene	Ave	1.654	1.329		1.29	1.60	-19.7	30.0
Undecane	Ave	1.437	1.257		1.40	1.60	-12.5	30.0
1,2-Dibromo-3-Chloropropane	QuaF		0.2527		1.10	1.60	-31.2*	30.0
1,2,4,5-Tetramethylbenzene	QuaF		0.9358		1.31	1.60	-17.8	30.0
Dodecane	Ave	1.254	1.153		1.47	1.60	-8.1	30.0
1,2,4-Trichlorobenzene	Ave	0.7511	0.5314		1.13	1.60	-29.2	30.0
Naphthalene	Ave	1.812	1.327		1.17	1.60	-26.8	30.0
Hexachlorobutadiene	Ave	0.6345	0.4730		1.19	1.60	-25.4	30.0
1,2,3-Trichlorobenzene	Ave	0.7230	0.5211		1.15	1.60	-27.9	30.0
2-Methylnaphthalene	Ave	0.7792	0.7539		1.55	1.60	-3.3	50.0
1-Methylnaphthalene	Ave	0.7933	0.7903		1.59	1.60	-0.4	50.0
4-Bromofluorobenzene (Surr)	Ave	0.7532	0.7870		4.85	4.64	4.5	30.0

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GCCVI08Z.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 08-Sep-2020 15:52:30 ALS Bottle#: 16 Worklist Smp#: 2
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016519-002
Misc. Info.: s127 80ML
Operator ID: HMT Instrument ID: MG
Sublist: chrom-MG_TO15*sub19

Method: \\chromfs\Knoxville\ChromData\MG\20200904-16519.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 09-Sep-2020 14:14:33 Calib Date: 02-Sep-2020 03:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1034

First Level Reviewer: barlozhetskayaa Date: 09-Sep-2020 13:53:41

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.806	8.806	0.000	85	85639	4.80	4.80	s
* 2 1,4-Difluorobenzene	114	10.990	10.990	0.000	98	429335	4.80	4.80	s
* 3 Chlorobenzene-d5 (IS)	117	15.724	15.724	0.000	96	458464	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.369	17.369	0.000	81	348774	4.64	4.85	
6 Chlorodifluoromethane	51	3.699	3.699	0.000	97	133039	1.60	1.73	
7 Propene	41	3.710	3.710	0.000	99	64247	1.60	1.70	
8 Dichlorodifluoromethane	85	3.764	3.764	0.000	97	126670	1.60	1.48	
9 Chloromethane	52	3.942	3.942	0.000	82	27660	1.60	1.80	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.947	3.947	0.000	92	67647	1.60	1.38	
11 Acetaldehyde	44	4.093	4.093	0.000	99	139783	8.00	7.74	
12 Vinyl chloride	62	4.109	4.109	0.000	99	74241	1.60	1.73	
14 Butadiene	54	4.201	4.201	0.000	64	72459	1.60	1.92	
13 Butane	43	4.201	4.201	0.000	87	154234	1.60	2.01	
15 Bromomethane	94	4.519	4.519	0.000	98	39779	1.60	1.54	
16 Chloroethane	64	4.659	4.659	0.000	81	30770	1.60	1.73	
17 Ethanol	31	4.751	4.751	0.000	97	131351	8.00	8.11	
18 Vinyl bromide	106	4.961	4.961	0.000	96	35403	1.60	1.60	
19 2-Methylbutane	43	5.010	5.010	0.000	94	117808	1.60	2.26	
20 Trichlorofluoromethane	101	5.225	5.225	0.000	96	103761	1.60	1.56	
21 Acrolein	56	5.236	5.236	0.000	38	21599	1.60	2.71	
22 Acetonitrile	40	5.295	5.295	0.000	100	27032	1.60	1.90	
23 Acetone	58	5.349	5.349	0.000	99	23895	1.60	1.67	
25 Isopropyl alcohol	45	5.441	5.441	0.000	43	114409	1.60	2.68	
24 Pentane	72	5.452	5.452	0.000	93	7319	1.60	1.69	
26 Ethyl ether	31	5.614	5.614	0.000	86	72439	1.60	2.37	
27 1,1-Dichloroethene	96	5.921	5.921	0.000	88	32508	1.60	1.54	
28 Acrylonitrile	53	6.029	6.029	0.000	95	38676	1.60	1.99	
30 2-Methyl-2-propanol	59	6.045	6.045	0.000	95	78702	1.60	1.83	
29 1,1,2-Trichloro-1,2,2-trifluoroe	101	6.099	6.099	0.000	86	70792	1.60	1.45	
31 Methylene Chloride	84	6.271	6.271	0.000	85	32562	1.60	1.54	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.288	6.288	0.000	92	65271	1.60	1.58	
33 Carbon disulfide	76	6.433	6.433	0.000	94	109229	1.60	1.54	
34 trans-1,2-Dichloroethene	96	7.086	7.086	0.000	89	35814	1.60	1.44	
35 2-Methylpentane	43	7.096	7.096	0.000	96	158659	1.60	1.64	
36 Methyl tert-butyl ether	73	7.215	7.215	0.000	89	78397	1.60	1.52	
37 1,1-Dichloroethane	63	7.495	7.495	0.000	98	101940	1.60	1.65	
38 Vinyl acetate	43	7.603	7.603	0.000	100	156579	1.60	1.93	
39 2-Butanone (MEK)	72	8.045	8.045	0.000	93	14408	1.60	1.40	
40 Hexane	56	8.078	8.078	0.000	91	52442	1.60	1.64	
41 Isopropyl ether	45	8.234	8.234	0.000	96	185601	1.60	1.74	
42 cis-1,2-Dichloroethene	96	8.482	8.482	0.000	93	39279	1.60	1.49	
43 Ethyl acetate	43	8.666	8.666	0.000	96	107166	1.60	1.51	
44 Chloroform	83	8.817	8.817	0.000	92	89711	1.60	1.49	
45 Tert-butyl ethyl ether	59	8.919	8.919	0.000	96	128214	1.60	1.43	
46 Tetrahydrofuran	42	9.232	9.232	0.000	89	64442	1.60	1.81	
47 1,1,1-Trichloroethane	97	9.852	9.852	0.000	93	83716	1.60	1.45	
48 1,2-Dichloroethane	62	9.954	9.954	0.000	93	70957	1.60	1.46	
51 n-Butanol	31	10.434	10.434	0.000	70	27548	1.60	2.01	
50 Benzene	78	10.445	10.445	0.000	91	124248	1.60	1.41	
49 Cyclohexane	69	10.450	10.450	0.000	83	21712	1.60	1.46	
52 Carbon tetrachloride	117	10.467	10.467	0.000	89	82641	1.60	1.51	
53 2,3-Dimethylpentane	71	10.575	10.575	0.000	89	32317	1.60	1.42	
54 Thiophene	84	10.720	10.720	0.000	90	70311	1.60	1.39	
55 Isooctane	57	11.216	11.216	0.000	97	351776	1.60	1.63	
56 n-Heptane	71	11.588	11.588	0.000	95	52709	1.60	1.52	
57 1,2-Dichloropropane	63	11.664	11.664	0.000	88	61193	1.60	1.52	
58 Trichloroethene	130	11.702	11.702	0.000	86	48534	1.60	1.26	
59 Dibromomethane	93	11.788	11.788	0.000	84	52979	1.60	1.40	
60 Dichlorobromomethane	83	11.933	11.933	0.000	92	97586	1.60	1.48	
61 1,4-Dioxane	88	11.966	11.966	0.000	85	12169	1.60	1.18	
62 Methyl methacrylate	41	12.030	12.030	0.000	85	68494	1.60	1.51	
63 Methylcyclohexane	83	12.478	12.478	0.000	83	100568	1.60	1.73	
64 4-Methyl-2-pentanone (MIBK)	43	12.888	12.888	0.000	96	134588	1.60	1.76	
65 cis-1,3-Dichloropropene	75	12.936	12.936	0.000	96	75451	1.60	1.43	
66 trans-1,3-Dichloropropene	75	13.627	13.627	0.000	88	65495	1.60	1.39	
67 Toluene	91	13.756	13.756	0.000	92	138264	1.60	1.37	
68 1,1,2-Trichloroethane	83	13.826	13.826	0.000	91	43025	1.60	1.36	
69 2-Hexanone	58	14.225	14.225	0.000	89	62823	1.60	1.68	
70 n-Octane	85	14.452	14.452	0.000	98	51442	1.60	1.40	
71 Chlorodibromomethane	129	14.533	14.533	0.000	92	81847	1.60	1.37	
72 Ethylene Dibromide	107	14.824	14.824	0.000	97	72258	1.60	1.27	
73 Tetrachloroethene	129	14.899	14.899	0.000	85	47229	1.60	1.24	
75 Chlorobenzene	112	15.773	15.773	0.000	88	111296	1.60	1.36	
74 2,3-Dimethylheptane	43	15.800	15.800	0.000	90	251682	1.60	1.44	
78 Ethylbenzene	91	16.064	16.064	0.000	98	180695	1.60	1.39	
79 m-Xylene & p-Xylene	91	16.231	16.231	0.000	96	280616	3.20	2.73	
80 n-Nonane	57	16.652	16.652	0.000	94	152984	1.60	1.51	
81 Bromoform	173	16.673	16.673	0.000	88	67010	1.60	1.34	
82 Styrene	104	16.695	16.695	0.000	95	107471	1.60	1.44	
83 o-Xylene	91	16.754	16.754	0.000	97	142681	1.60	1.37	
84 1,1,2,2-Tetrachloroethane	83	17.078	17.078	0.000	96	117711	1.60	1.42	
85 1,2,3-Trichloropropane	110	17.234	17.234	0.000	91	27285	1.60	1.34	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
86 Isopropylbenzene	105	17.342	17.342	0.000	97	188407	1.60	1.38	
87 N-Propylbenzene	120	17.881	17.881	0.000	97	48641	1.60	1.33	
88 2-Chlorotoluene	126	17.930	17.930	0.000	97	49726	1.60	1.42	
89 4-Ethyltoluene	105	18.032	18.032	0.000	98	172903	1.60	1.27	
90 1,3,5-Trimethylbenzene	120	18.108	18.108	0.000	91	79423	1.60	1.46	
92 Alpha Methyl Styrene	118	18.340	18.340	0.000	86	73871	1.60	1.37	
93 n-Decane	57	18.399	18.399	0.000	84	185869	1.60	1.51	
94 tert-Butylbenzene	119	18.528	18.528	0.000	90	149316	1.60	1.24	
95 1,2,4-Trimethylbenzene	105	18.544	18.544	0.000	96	149812	1.60	1.26	
96 sec-Butylbenzene	105	18.803	18.803	0.000	98	229281	1.60	1.27	
97 1,3-Dichlorobenzene	146	18.814	18.814	0.000	95	101742	1.60	1.20	
98 Benzyl chloride	91	18.890	18.890	0.000	96	153721	1.60	1.37	
99 1,4-Dichlorobenzene	146	18.900	18.900	0.000	87	102686	1.60	1.19	
100 4-Isopropyltoluene	119	18.965	18.965	0.000	96	169334	1.60	1.22	
101 1,2,3-Trimethylbenzene	105	19.014	19.014	0.000	98	111405	1.60	1.09	
102 Butylcyclohexane	83	19.073	19.073	0.000	84	155244	1.60	1.33	
103 2,3-Dihydroindene	117	19.256	19.256	0.000	91	145924	1.60	1.22	
104 1,2-Dichlorobenzene	146	19.262	19.262	0.000	81	100767	1.60	1.24	
106 Indene	116	19.391	19.391	0.000	95	111736	1.60	1.09	
105 n-Butylbenzene	91	19.396	19.396	0.000	98	203063	1.60	1.29	
107 Undecane	57	19.704	19.704	0.000	89	192086	1.60	1.40	
108 1,2-Dibromo-3-Chloropropane	157	19.855	19.855	0.000	78	38612	1.60	1.10	
109 1,2,4,5-Tetramethylbenzene	119	20.146	20.146	0.000	96	143011	1.60	1.31	
110 Dodecane	57	20.761	20.761	0.000	87	176205	1.60	1.47	
111 1,2,4-Trichlorobenzene	180	20.955	20.955	0.000	92	81213	1.60	1.13	
112 Naphthalene	128	21.090	21.090	0.000	98	202730	1.60	1.17	
113 Hexachlorobutadiene	225	21.300	21.300	0.000	90	72287	1.60	1.19	
114 1,2,3-Trichlorobenzene	180	21.370	21.370	0.000	94	79631	1.60	1.15	
115 2-Methylnaphthalene	142	22.141	22.141	0.000	99	115215	1.60	1.55	
116 1-Methylnaphthalene	142	22.314	22.314	0.000	99	120778	1.60	1.59	
A 122 C8 Range	1	14.474	(14.393-14.554)		0	727964	1.60	1.63	
S 123 1,2-Dichloroethene, Total	1				0		3.20	2.93	
S 124 Xylenes, Total	100				0		4.80	4.10	
T 136 2-Methylthiophene TIC	97	13.907	13.907	0.000	97	102291	1.60	1.07	
T 137 3-Methylthiophene TIC	97	14.107	14.107	0.000	97	104672	1.60	1.10	
T 154 2-Ethylthiophene TIC	97	16.166	16.166	0.000	95	129343	1.60	1.35	
T 160 1,2-Dimethyl-4-Ethylbenzene TIC	119	19.763	19.763	0.000	96	114988	1.60	1.20	
T 161 1,2,3,5-Tetramethylbenzene TIC	119	20.200	20.200	0.000	94	86137	1.60	0.9018	
T 162 1,2,3,4-Tetramethylbenzene TIC	119	20.599	20.599	0.000	97	115894	1.60	1.21	a
T 163 Benzo(b)thiophene TIC	134	21.192	21.192	0.000	97	108671	1.60	1.14	

QC Flag Legend

Processing Flags

s - Failed ISTD Recovery Test

Review Flags

a - User Assigned ID

Reagents:

40CV101S_00127	Amount Added: 80.00	Units: mL	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

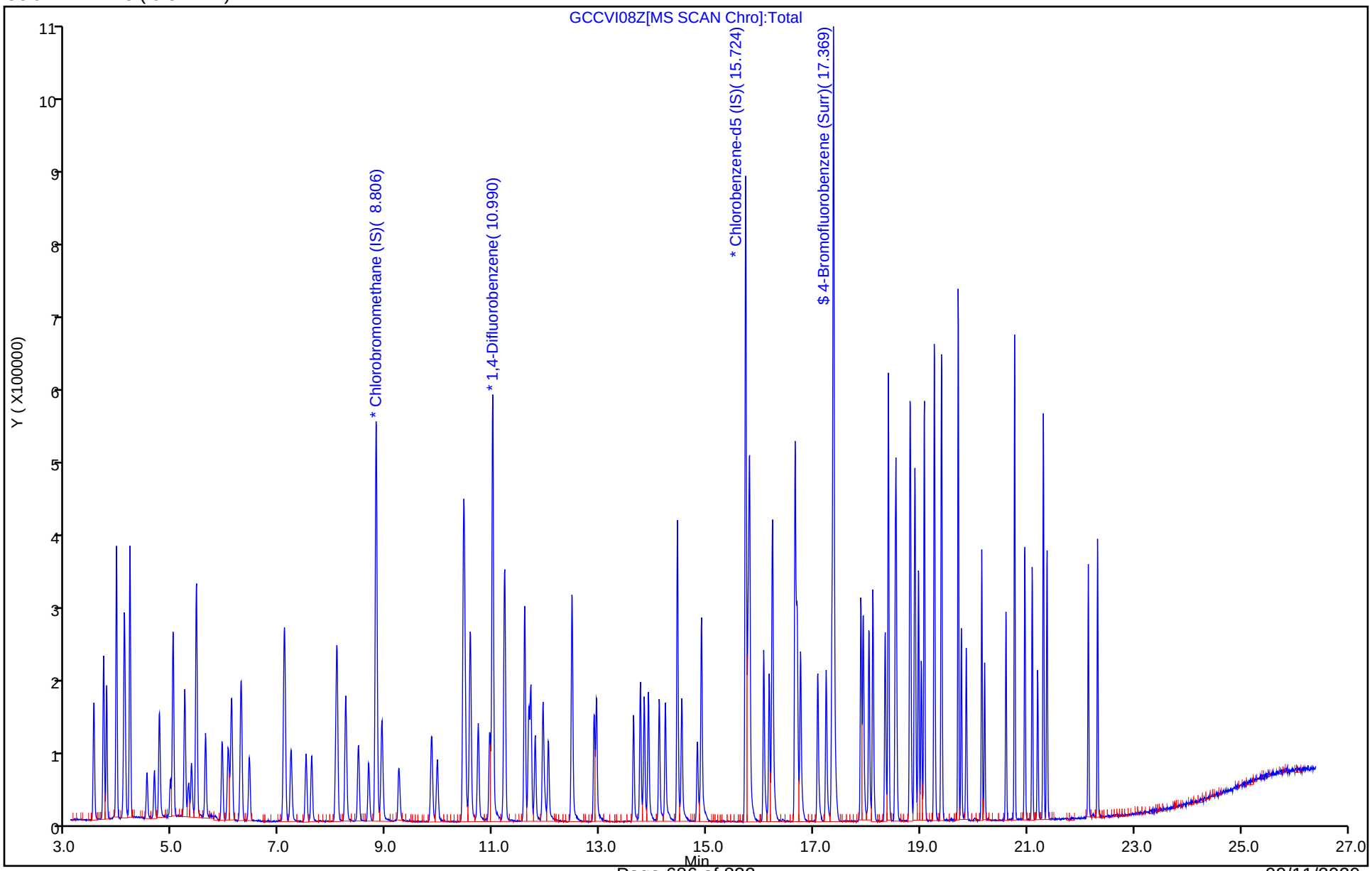
Report Date: 09-Sep-2020 14:14:34 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GCCVI08Z.D

Injection Date:	08-Sep-2020 15:52:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	CCVIS			Worklist Smp#:	2
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Lab Sample ID: ICV 140-42290/18 Calibration Date: 08/30/2020 02:47

Instrument ID: MH Calib Start Date: 08/29/2020 12:34

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 08/29/2020 23:57

Lab File ID: HH29LCS.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorodifluoromethane	Ave	2.679	2.781		1.66	1.60	3.8	35.0
Propene	Ave	1.144	1.209		1.69	1.60	5.7	35.0
Dichlorodifluoromethane	Ave	3.629	3.949		1.74	1.60	8.8	35.0
1,2-Dichloro-1,1,2,2-tetrafluoroethane	Ave	2.898	3.181		1.76	1.60	9.8	35.0
Chloromethane	Ave	0.4766	0.5581		1.87	1.60	17.1	35.0
Acetaldehyde	Ave	0.7072	0.6771		7.66	8.00	-4.3	35.0
Vinyl chloride	Ave	1.595	1.723		1.73	1.60	8.0	35.0
1,3-Butadiene	Ave	1.087	1.239		1.82	1.60	14.0	35.0
Butane	Ave	2.181	2.591		1.90	1.60	18.8	35.0
Bromomethane	Ave	1.541	1.577		1.64	1.60	2.3	35.0
Chloroethane	Ave	0.6737	0.7027		1.67	1.60	4.3	35.0
Ethanol	Ave	0.7726	0.6660		6.90	8.00	-13.8	35.0
Vinyl bromide	Ave	1.284	1.389		1.73	1.60	8.2	35.0
2-Methylbutane	Ave	1.682	1.767		1.68	1.60	5.1	35.0
Trichlorofluoromethane	Ave	3.535	3.518		1.59	1.60	-0.5	35.0
Acrolein	Lin1		0.5141		2.13	1.60	33.3	35.0
Acetonitrile	Ave	0.6757	0.6832		1.62	1.60	1.1	35.0
Acetone	Ave	0.7464	0.7233		1.55	1.60	-3.1	35.0
Isopropyl alcohol	Ave	1.844	2.328		2.02	1.60	26.2	35.0
Pentane	Ave	0.1567	0.1785		1.82	1.60	13.9	35.0
Ethyl ether	Ave	1.540	1.709		1.78	1.60	11.0	35.0
1,1-Dichloroethene	Ave	1.164	1.183		1.63	1.60	1.7	35.0
tert-Butyl alcohol	Ave	1.902	1.992		1.68	1.60	4.7	35.0
Acrylonitrile	Ave	1.024	1.111		1.74	1.60	8.5	35.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	2.998	2.997		1.60	1.60	-0.0	35.0
Methylene Chloride	Ave	1.177	1.198		1.63	1.60	1.8	35.0
3-Chloropropene	Ave	1.206	1.136		1.51	1.60	-5.7	35.0
Carbon disulfide	Ave	3.782	3.778		1.60	1.60	-0.1	35.0
trans-1,2-Dichloroethene	Ave	1.215	1.218		1.60	1.60	0.2	35.0
2-Methylpentane	Ave	2.898	2.851		1.57	1.60	-1.6	35.0
Methyl tert-butyl ether	Ave	2.565	2.642		1.65	1.60	3.0	35.0
1,1-Dichloroethane	Ave	2.413	2.475		1.64	1.60	2.6	35.0
Vinyl acetate	Ave	3.098	3.333		1.72	1.60	7.6	35.0
2-Butanone (MEK)	Ave	0.5879	0.5954		1.62	1.60	1.3	35.0
Hexane	Ave	1.006	1.052		1.67	1.60	4.6	35.0
Isopropyl ether	Ave	4.280	4.770		1.78	1.60	11.4	35.0
cis-1,2-Dichloroethene	Ave	1.231	1.265		1.64	1.60	2.8	35.0
Ethyl acetate	Ave	3.083	3.081		1.60	1.60	-0.0	35.0
Chloroform	Ave	2.915	2.895		1.59	1.60	-0.7	35.0
Tert-butyl ethyl ether	Ave	3.282	3.254		1.59	1.60	-0.8	35.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Lab Sample ID: ICV 140-42290/18 Calibration Date: 08/30/2020 02:47

Instrument ID: MH Calib Start Date: 08/29/2020 12:34

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 08/29/2020 23:57

Lab File ID: HH29LCS.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Tetrahydrofuran	Ave	1.448	1.528		1.69	1.60	5.6	35.0
1,1,1-Trichloroethane	Ave	2.643	2.587		1.57	1.60	-2.1	35.0
1,2-Dichloroethane	Ave	0.4365	0.4354		1.60	1.60	-0.2	35.0
1-Butanol	Ave	0.1360	0.1382		1.63	1.60	1.6	35.0
Benzene	Ave	0.8814	0.9188		1.67	1.60	4.2	35.0
Cyclohexane	Ave	0.1206	0.1297		1.72	1.60	7.5	35.0
Carbon tetrachloride	Ave	0.5456	0.6384		1.87	1.60	17.0	35.0
2,3-Dimethylpentane	Ave	0.1669	0.1743		1.67	1.60	4.4	35.0
Thiophene	Ave	0.4636	0.4730		1.63	1.60	2.0	35.0
2,2,4-Trimethylpentane	Ave	1.370	1.504		1.76	1.60	9.8	35.0
Heptane	Ave	0.2512	0.2656		1.69	1.60	5.7	35.0
1,2-Dichloropropane	Ave	0.3772	0.3845		1.63	1.60	1.9	35.0
Trichloroethene	Ave	0.3963	0.3943		1.59	1.60	-0.5	35.0
Dibromomethane	Ave	0.4195	0.4223		1.61	1.60	0.7	35.0
Bromodichloromethane	Ave	0.6247	0.6504		1.67	1.60	4.1	35.0
1,4-Dioxane	Ave	0.1255	0.1251		1.59	1.60	-0.3	35.0
Methyl methacrylate	Ave	0.4094	0.4316		1.69	1.60	5.4	35.0
Methylcyclohexane	Lin1		0.5858		1.89	1.60	18.2	35.0
4-Methyl-2-pentanone (MIBK)	Ave	0.7866	0.8536		1.74	1.60	8.5	35.0
cis-1,3-Dichloropropene	Ave	0.4279	0.4697		1.76	1.60	9.8	35.0
trans-1,3-Dichloropropene	Ave	0.4392	0.4863		1.77	1.60	10.7	35.0
Toluene	Ave	1.237	1.342		1.74	1.60	8.5	35.0
1,1,2-Trichloroethane	Ave	0.4444	0.4511		1.62	1.60	1.5	35.0
2-Hexanone	Ave	0.3937	0.4569		1.86	1.60	16.1	35.0
Octane	Ave	0.3450	0.3910		1.81	1.60	13.3	35.0
Dibromochloromethane	Ave	0.7339	0.8331		1.82	1.60	13.5	35.0
1,2-Dibromoethane (EDB)	Ave	0.6652	0.6699		1.61	1.60	0.7	35.0
Tetrachloroethene	Ave	0.5184	0.5192		1.60	1.60	0.2	35.0
2,3-Dimethylheptane	Ave	1.593	1.483		1.49	1.60	-6.9	35.0
Chlorobenzene	Ave	1.002	1.035		1.65	1.60	3.4	35.0
Ethylbenzene	Ave	1.497	1.654		1.77	1.60	10.5	35.0
m-Xylene & p-Xylene	Ave	1.183	1.376		3.72	3.20	16.3	35.0
Nonane	Ave	0.8512	0.9355		1.76	1.60	9.9	35.0
Bromoform	QuaF		0.6859		1.95	1.60	22.0	35.0
Styrene	Ave	0.7187	0.8674		1.93	1.60	20.7	35.0
o-Xylene	Ave	1.239	1.336		1.73	1.60	7.8	35.0
1,1,2,2-Tetrachloroethane	Ave	1.096	1.119		1.63	1.60	2.0	35.0
1,2,3-Trichloropropane	Ave	0.2482	0.2462		1.59	1.60	-0.8	35.0
Isopropylbenzene	Ave	1.567	1.722		1.76	1.60	9.9	35.0
Propylbenzene	Ave	0.4200	0.4545		1.73	1.60	8.2	35.0
2-Chlorotoluene	Ave	0.4016	0.4289		1.71	1.60	6.8	35.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Lab Sample ID: ICV 140-42290/18 Calibration Date: 08/30/2020 02:47

Instrument ID: MH Calib Start Date: 08/29/2020 12:34

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 08/29/2020 23:57

Lab File ID: HH29LCS.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Ethyltoluene	Ave	1.573	1.665		1.69	1.60	5.9	35.0
1,3,5-Trimethylbenzene	Lin1		0.8605		1.87	1.60	17.1	35.0
Alpha Methyl Styrene	Ave	0.5440	0.6760		1.99	1.60	24.3	35.0
Decane	Ave	1.245	1.320		1.70	1.60	6.1	35.0
tert-Butylbenzene	Ave	1.595	1.750		1.76	1.60	9.7	35.0
1,2,4-Trimethylbenzene	Ave	1.432	1.673		1.87	1.60	16.8	35.0
sec-Butylbenzene	Ave	2.112	2.401		1.82	1.60	13.7	35.0
1,3-Dichlorobenzene	Ave	0.7435	0.8347		1.80	1.60	12.3	35.0
Benzyl chloride	Lin1		0.9537		1.85	1.60	15.8	35.0
1,4-Dichlorobenzene	Ave	0.5485	0.7042		2.05	1.60	28.4	35.0
4-Isopropyltoluene	Ave	1.709	2.102		1.97	1.60	23.0	35.0
1,2,3-Trimethylbenzene	Ave	1.376	1.210		1.41	1.60	-12.1	35.0
Butylcyclohexane	Ave	1.183	1.247		1.69	1.60	5.4	35.0
Indane	Ave	1.140	1.323		1.86	1.60	16.0	35.0
1,2-Dichlorobenzene	Ave	0.8206	0.9347		1.82	1.60	13.9	35.0
Butylbenzene	Ave	1.891	2.293		1.94	1.60	21.3	35.0
Indene	Ave	0.9776	1.023		1.67	1.60	4.7	35.0
Undecane	Ave	1.420	1.561		1.76	1.60	9.9	35.0
1,2-Dibromo-3-Chloropropane	Ave	0.4195	0.4561		1.74	1.60	8.7	35.0
1,2,4,5-Tetramethylbenzene	Lin1		1.729		1.66	1.60	3.5	35.0
Dodecane	Ave	1.001	1.263		2.02	1.60	26.2	35.0
1,2,4-Trichlorobenzene	Lin1		0.4891		2.02	1.60	26.5	35.0
Naphthalene	QuaF		1.439		2.05	1.60	28.3	35.0
Hexachlorobutadiene	Ave	0.7852	0.9322		1.90	1.60	18.7	35.0
1,2,3-Trichlorobenzene	Ave	0.4610	0.6220		2.16	1.60	34.9	35.0
2-Methylnaphthalene	Ave	0.1790	0.0996		0.890	1.60	-44.4	50.0
1-Methylnaphthalene	Ave	0.2066	0.1558		1.21	1.60	-24.6	50.0
4-Bromofluorobenzene (Surr)	Ave	0.5577	0.5614		4.67	4.64	0.7	35.0

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29LCS.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 30-Aug-2020 02:47:30 ALS Bottle#: 2 Worklist Smp#: 18
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016451-018
Misc. Info.: 80 ML S124
Operator ID: HMT Instrument ID: MH
Sublist:

Method: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\MH_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 31-Aug-2020 12:57:08 Calib Date: 29-Aug-2020 23:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1064

First Level Reviewer: barlozhetskayaa Date: 31-Aug-2020 12:29:23

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.430	9.430	0.000	96	125635	4.80	4.80	
* 2 1,4-Difluorobenzene	114	11.591	11.591	0.000	95	541139	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	16.258	16.258	0.000	87	407551	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.876	17.875	0.000	92	221161	4.64	4.67	
6 Chlorodifluoromethane	51	3.921	3.921	0.000	97	116446	1.60	1.66	
7 Propene	41	3.931	3.931	0.000	99	50646	1.60	1.69	
8 Dichlorodifluoromethane	85	3.988	3.988	0.000	100	165379	1.60	1.74	
9 Chloromethane	52	4.195	4.195	0.000	59	23373	1.60	1.87	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	4.195	4.195	0.000	91	133222	1.60	1.76	
11 Acetaldehyde	44	4.360	4.360	0.000	99	141771	8.00	7.66	
12 Vinyl chloride	62	4.381	4.381	0.000	99	72138	1.60	1.73	
14 Butadiene	54	4.479	4.479	0.000	68	51867	1.60	1.82	
13 Butane	43	4.479	4.479	0.000	84	108502	1.60	1.90	
15 Bromomethane	94	4.841	4.841	0.000	98	66027	1.60	1.64	
16 Chloroethane	64	5.001	5.001	0.000	95	29429	1.60	1.67	
17 Ethanol	31	5.089	5.089	0.000	97	139448	8.00	6.90	
18 Vinyl bromide	106	5.332	5.332	0.000	98	58185	1.60	1.73	
19 2-Methylbutane	43	5.384	5.384	0.000	94	73999	1.60	1.68	
20 Trichlorofluoromethane	101	5.621	5.621	0.000	100	147330	1.60	1.59	
21 Acrolein	56	5.642	5.642	0.000	96	21530	1.60	2.13	
22 Acetonitrile	40	5.714	5.714	0.000	99	28613	1.60	1.62	
23 Acetone	58	5.771	5.771	0.000	98	30292	1.60	1.55	
25 Isopropyl alcohol	45	5.849	5.849	0.000	92	97482	1.60	2.02	
24 Pentane	72	5.859	5.859	0.000	97	7475	1.60	1.82	
26 Ethyl ether	31	6.050	6.050	0.000	90	71553	1.60	1.78	
27 1,1-Dichloroethene	96	6.397	6.397	0.000	97	49538	1.60	1.63	
29 2-Methyl-2-propanol	59	6.495	6.495	0.000	94	83402	1.60	1.68	
28 Acrylonitrile	53	6.505	6.505	0.000	93	46528	1.60	1.74	
30 112TCTFE	101	6.572	6.572	0.000	95	125502	1.60	1.60	
31 Methylene Chloride	84	6.769	6.769	0.000	95	50150	1.60	1.63	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.784	6.784	0.000	95	47590	1.60	1.51	
33 Carbon disulfide	76	6.944	6.944	0.000	100	158202	1.60	1.60	
34 trans-1,2-Dichloroethene	96	7.621	7.621	0.000	95	51007	1.60	1.60	
35 2-Methylpentane	43	7.627	7.627	0.000	96	119412	1.60	1.57	
36 Methyl tert-butyl ether	73	7.751	7.751	0.000	94	110623	1.60	1.65	
37 1,1-Dichloroethane	63	8.066	8.066	0.000	100	103663	1.60	1.64	
38 Vinyl acetate	43	8.159	8.159	0.000	100	139594	1.60	1.72	
39 2-Butanone (MEK)	72	8.640	8.640	0.000	95	24936	1.60	1.62	
40 Hexane	56	8.645	8.645	0.000	75	44071	1.60	1.67	
41 Isopropyl ether	45	8.815	8.815	0.000	96	199762	1.60	1.78	
42 cis-1,2-Dichloroethene	96	9.089	9.089	0.000	96	52966	1.60	1.64	
43 Ethyl acetate	43	9.260	9.260	0.000	98	129014	1.60	1.60	
44 Chloroform	83	9.436	9.436	0.000	97	121240	1.60	1.59	
45 Tert-butyl ethyl ether	59	9.513	9.513	0.000	98	136290	1.60	1.59	
46 Tetrahydrofuran	42	9.865	9.865	0.000	93	64005	1.60	1.69	
47 1,1,1-Trichloroethane	97	10.485	10.485	0.000	96	108337	1.60	1.57	
48 1,2-Dichloroethane	62	10.598	10.598	0.000	96	78534	1.60	1.60	
49 n-Butanol	31	11.012	11.012	0.000	96	24926	1.60	1.63	
50 Cyclohexane	69	11.074	11.074	0.000	81	23387	1.60	1.72	
51 Benzene	78	11.074	11.074	0.000	97	165734	1.60	1.67	
52 Carbon tetrachloride	117	11.095	11.095	0.000	95	115150	1.60	1.87	
53 2,3-Dimethylpentane	71	11.172	11.172	0.000	92	31436	1.60	1.67	
54 Thiophene	84	11.343	11.343	0.000	96	85321	1.60	1.63	
55 Isooctane	57	11.798	11.798	0.000	98	271343	1.60	1.76	
56 n-Heptane	71	12.159	12.159	0.000	95	47912	1.60	1.69	
57 1,2-Dichloropropane	63	12.268	12.268	0.000	92	69353	1.60	1.63	
58 Trichloroethene	130	12.294	12.294	0.000	95	71125	1.60	1.59	
59 Dibromomethane	93	12.387	12.387	0.000	94	76182	1.60	1.61	
60 Dichlorobromomethane	83	12.526	12.526	0.000	97	117326	1.60	1.67	
61 1,4-Dioxane	88	12.542	12.542	0.000	96	22571	1.60	1.59	
62 Methyl methacrylate	41	12.593	12.593	0.000	89	77845	1.60	1.69	
63 Methylcyclohexane	83	13.048	13.048	0.000	91	105661	1.60	1.89	
64 4-Methyl-2-pentanone (MIBK)	43	13.436	13.436	0.000	97	153981	1.60	1.74	
65 cis-1,3-Dichloropropene	75	13.503	13.503	0.000	98	84722	1.60	1.76	
66 trans-1,3-Dichloropropene	75	14.180	14.180	0.000	97	66065	1.60	1.77	
67 Toluene	91	14.309	14.309	0.000	92	182291	1.60	1.74	
68 1,1,2-Trichloroethane	83	14.382	14.382	0.000	96	61282	1.60	1.62	
69 2-Hexanone	58	14.749	14.749	0.000	90	62076	1.60	1.86	
70 n-Octane	85	14.961	14.961	0.000	97	53112	1.60	1.81	
71 Chlorodibromomethane	129	15.085	15.085	0.000	98	113172	1.60	1.82	
72 Ethylene Dibromide	107	15.379	15.379	0.000	99	91000	1.60	1.61	
73 Tetrachloroethene	129	15.436	15.436	0.000	95	70528	1.60	1.60	
75 2,3-Dimethylheptane	43	16.294	16.294	0.000	94	201433	1.60	1.49	
74 Chlorobenzene	112	16.310	16.310	0.000	94	140657	1.60	1.65	
76 Ethylbenzene	91	16.583	16.583	0.000	99	224760	1.60	1.77	
77 m-Xylene & p-Xylene	91	16.744	16.744	0.000	98	373796	3.20	3.72	
78 n-Nonane	57	17.131	17.131	0.000	95	127094	1.60	1.76	
80 Styrene	104	17.209	17.209	0.000	96	117833	1.60	1.93	
79 Bromoform	173	17.209	17.209	0.000	71	93185	1.60	1.95	
81 o-Xylene	91	17.266	17.266	0.000	99	181484	1.60	1.73	
82 1,1,2,2-Tetrachloroethane	83	17.591	17.591	0.000	98	151965	1.60	1.63	
83 1,2,3-Trichloropropane	110	17.746	17.746	0.000	97	33451	1.60	1.59	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	17.839	17.839	0.000	97	233874	1.60	1.76	
85 N-Propylbenzene	120	18.351	18.351	0.000	98	61742	1.60	1.73	
86 2-Chlorotoluene	126	18.408	18.408	0.000	98	58269	1.60	1.71	
87 4-Ethyltoluene	105	18.496	18.496	0.000	98	226255	1.60	1.69	
88 1,3,5-Trimethylbenzene	120	18.568	18.568	0.000	92	116903	1.60	1.87	
89 Alpha Methyl Styrene	118	18.790	18.790	0.000	88	91830	1.60	1.99	
90 n-Decane	57	18.821	18.821	0.000	87	179360	1.60	1.70	
91 tert-Butylbenzene	119	18.976	18.976	0.000	90	237737	1.60	1.76	
92 1,2,4-Trimethylbenzene	105	18.992	18.992	0.000	96	227299	1.60	1.87	
93 sec-Butylbenzene	105	19.235	19.235	0.000	99	326153	1.60	1.82	
94 1,3-Dichlorobenzene	146	19.261	19.261	0.000	98	113393	1.60	1.80	
95 Benzyl chloride	91	19.333	19.333	0.000	98	129554	1.60	1.85	
96 1,4-Dichlorobenzene	146	19.343	19.343	0.000	95	95666	1.60	2.05	
97 4-Isopropyltoluene	119	19.390	19.390	0.000	97	285564	1.60	1.97	
98 1,2,3-Trimethylbenzene	105	19.452	19.452	0.000	99	164358	1.60	1.41	
99 Butylcyclohexane	83	19.493	19.493	0.000	90	169445	1.60	1.69	
101 2,3-Dihydroindene	117	19.695	19.695	0.000	94	179696	1.60	1.86	
100 1,2-Dichlorobenzene	146	19.700	19.700	0.000	97	126982	1.60	1.82	
103 n-Butylbenzene	91	19.814	19.814	0.000	97	311516	1.60	1.94	
102 Indene	116	19.819	19.819	0.000	91	138981	1.60	1.67	
104 Undecane	57	20.098	20.098	0.000	93	212039	1.60	1.76	
105 1,2-Dibromo-3-Chloropropane	157	20.289	20.289	0.000	96	61956	1.60	1.74	
106 1,2,4,5-Tetramethylbenzene	119	20.563	20.563	0.000	97	234894	1.60	1.66	
107 Dodecane	57	21.173	21.173	0.000	92	171614	1.60	2.02	
108 1,2,4-Trichlorobenzene	180	21.416	21.416	0.000	94	66448	1.60	2.02	
109 Naphthalene	128	21.561	21.561	0.000	99	195533	1.60	2.05	
110 Hexachlorobutadiene	225	21.726	21.726	0.000	92	126638	1.60	1.90	
111 1,2,3-Trichlorobenzene	180	21.793	21.793	0.000	94	84497	1.60	2.16	
112 2-Methylnaphthalene	142	22.341	22.341	0.000	98	13534	1.60	0.8904	
113 1-Methylnaphthalene	142	22.465	22.465	0.000	100	21166	1.60	1.21	
A 115 C8 Range	1	14.968	(14.924-15.012)		0	632639	1.60	1.76	
S 116 Xylenes, Total	100				0		4.80	5.45	
S 117 1,2-Dichloroethene, Total	1				0		3.20	3.25	
T 139 2-Methylthiophene TIC	97	14.464	14.464	0.000	98	138595	1.60	1.63	
T 142 3-Methylthiophene TIC	97	14.661	14.661	0.000	99	135290	1.60	1.59	
T 141 2-Ethylthiophene TIC	97	16.687	16.687	0.000	98	158529	1.60	1.87	
T 152 1,2-Dimethyl-4-Ethylbenzene TIC	119	20.175	20.175	0.000	98	205249	1.60	2.42	
T 149 1,2,3,5-Tetramethylbenzene TIC	119	20.620	20.615	0.005	94	143636	1.60	1.69	a
T 150 1,2,3,4-Tetramethylbenzene TIC	119	21.039	21.039	0.000	97	176663	1.60	2.08	a
T 151 Benzo(b)thiophene TIC	134	21.654	21.654	0.000	99	62601	1.60	0.7373	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

40CV101S_00124	Amount Added: 80.00	Units: mL	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

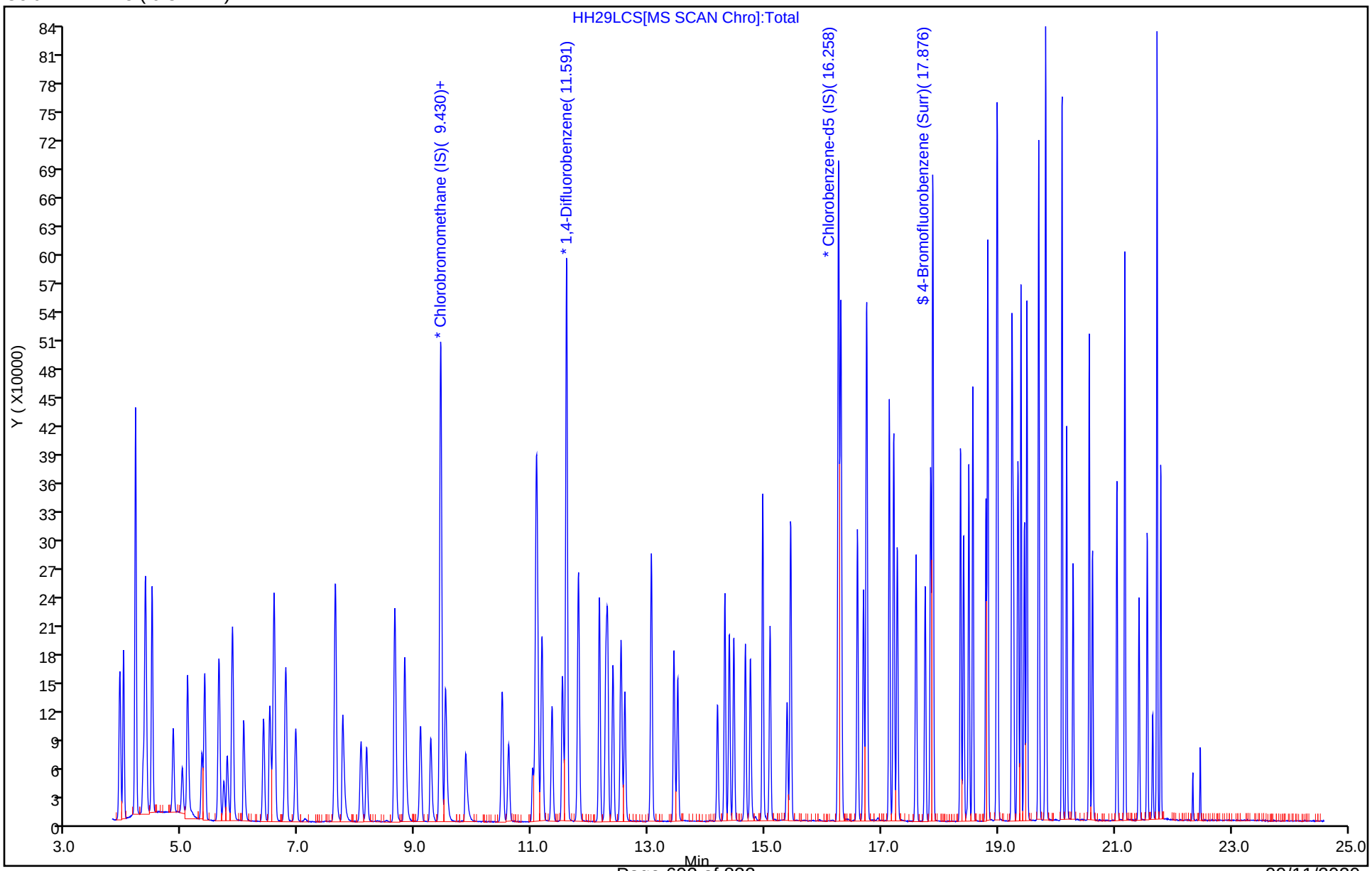
Report Date: 31-Aug-2020 12:57:09 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29LCS.D

Injection Date:	30-Aug-2020 02:47:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	ICV			Worklist Smp#:	18
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Lab Sample ID: CCVIS 140-42504/2 Calibration Date: 09/08/2020 13:10

Instrument ID: MH Calib Start Date: 08/29/2020 12:34

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 08/29/2020 23:57

Lab File ID: HCCV08B.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorodifluoromethane	Ave	2.679	2.494		1.49	1.60	-6.9	30.0
Propene	Ave	1.144	1.026		1.43	1.60	-10.4	30.0
Dichlorodifluoromethane	Ave	3.629	3.710		1.64	1.60	2.3	30.0
1,2-Dichloro-1,1,2,2-tetrafluoroethane	Ave	2.898	3.041		1.68	1.60	4.9	30.0
Chloromethane	Ave	0.4766	0.4787		1.61	1.60	0.4	30.0
Acetaldehyde	Ave	0.7072	0.6114		6.92	8.00	-13.5	30.0
Vinyl chloride	Ave	1.595	1.505		1.51	1.60	-5.6	30.0
Butane	Ave	2.181	2.166		1.59	1.60	-0.7	30.0
1,3-Butadiene	Ave	1.087	1.046		1.54	1.60	-3.7	30.0
Bromomethane	Ave	1.541	1.470		1.53	1.60	-4.6	30.0
Chloroethane	Ave	0.6737	0.6004		1.43	1.60	-10.9	30.0
Ethanol	Ave	0.7726	0.4996		5.17	8.00	-35.3*	30.0
Vinyl bromide	Ave	1.284	1.329		1.66	1.60	3.5	30.0
2-Methylbutane	Ave	1.682	1.562		1.49	1.60	-7.1	30.0
Trichlorofluoromethane	Ave	3.535	3.596		1.63	1.60	1.7	30.0
Acrolein	Lin1		0.4251		1.77	1.60	10.4	30.0
Acetonitrile	Ave	0.6757	0.5928		1.40	1.60	-12.3	30.0
Acetone	Ave	0.7464	0.8312		1.78	1.60	11.4	30.0
Isopropyl alcohol	Ave	1.844	1.863		1.62	1.60	1.0	30.0
Pentane	Ave	0.1567	0.1654		1.69	1.60	5.5	30.0
Ethyl ether	Ave	1.540	1.372		1.43	1.60	-10.9	30.0
1,1-Dichloroethene	Ave	1.164	1.128		1.55	1.60	-3.1	30.0
tert-Butyl alcohol	Ave	1.902	1.592		1.34	1.60	-16.3	30.0
Acrylonitrile	Ave	1.024	1.043		1.63	1.60	1.9	30.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	2.998	3.035		1.62	1.60	1.2	30.0
Methylene Chloride	Ave	1.177	1.121		1.52	1.60	-4.7	30.0
3-Chloropropene	Ave	1.206	1.030		1.37	1.60	-14.6	30.0
Carbon disulfide	Ave	3.782	3.490		1.48	1.60	-7.7	30.0
trans-1,2-Dichloroethene	Ave	1.215	1.213		1.60	1.60	-0.2	30.0
2-Methylpentane	Ave	2.898	2.534		1.40	1.60	-12.6	30.0
Methyl tert-butyl ether	Ave	2.565	2.312		1.44	1.60	-9.9	30.0
1,1-Dichloroethane	Ave	2.413	2.309		1.53	1.60	-4.3	30.0
Vinyl acetate	Ave	3.098	2.396		1.24	1.60	-22.6	30.0
2-Butanone (MEK)	Ave	0.5879	0.5277		1.44	1.60	-10.2	30.0
Hexane	Ave	1.006	0.9742		1.55	1.60	-3.1	30.0
Isopropyl ether	Ave	4.280	4.171		1.56	1.60	-2.5	30.0
cis-1,2-Dichloroethene	Ave	1.231	1.218		1.58	1.60	-1.0	30.0
Ethyl acetate	Ave	3.083	2.723		1.41	1.60	-11.7	30.0
Chloroform	Ave	2.915	2.801		1.54	1.60	-3.9	30.0
Tert-butyl ethyl ether	Ave	3.282	2.790		1.36	1.60	-15.0	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Lab Sample ID: CCVIS 140-42504/2 Calibration Date: 09/08/2020 13:10

Instrument ID: MH Calib Start Date: 08/29/2020 12:34

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 08/29/2020 23:57

Lab File ID: HCCV08B.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Tetrahydrofuran	Ave	1.448	1.345		1.49	1.60	-7.1	30.0
1,1,1-Trichloroethane	Ave	2.643	2.588		1.57	1.60	-2.1	30.0
1,2-Dichloroethane	Ave	0.4365	0.4305		1.58	1.60	-1.4	30.0
1-Butanol	Ave	0.1360	0.1031		1.21	1.60	-24.2	30.0
Benzene	Ave	0.8814	0.8558		1.55	1.60	-2.9	30.0
Cyclohexane	Ave	0.1206	0.1161		1.54	1.60	-3.7	30.0
Carbon tetrachloride	Ave	0.5456	0.7034		2.06	1.60	28.9	30.0
2,3-Dimethylpentane	Ave	0.1669	0.1615		1.55	1.60	-3.3	30.0
Thiophene	Ave	0.4636	0.4451		1.54	1.60	-4.0	30.0
2,2,4-Trimethylpentane	Ave	1.370	1.385		1.62	1.60	1.1	30.0
Heptane	Ave	0.2512	0.2428		1.55	1.60	-3.3	30.0
1,2-Dichloropropane	Ave	0.3772	0.3522		1.49	1.60	-6.6	30.0
Trichloroethene	Ave	0.3963	0.4098		1.65	1.60	3.4	30.0
Dibromomethane	Ave	0.4195	0.4163		1.59	1.60	-0.8	30.0
Bromodichloromethane	Ave	0.6247	0.6359		1.63	1.60	1.8	30.0
1,4-Dioxane	Ave	0.1255	0.1109		1.41	1.60	-11.6	30.0
Methyl methacrylate	Ave	0.4094	0.3710		1.45	1.60	-9.4	30.0
Methylcyclohexane	Lin1		0.5368		1.74	1.60	8.6	30.0
4-Methyl-2-pentanone (MIBK)	Ave	0.7866	0.7615		1.55	1.60	-3.2	30.0
cis-1,3-Dichloropropene	Ave	0.4279	0.4245		1.59	1.60	-0.8	30.0
trans-1,3-Dichloropropene	Ave	0.4392	0.4125		1.50	1.60	-6.1	30.0
Toluene	Ave	1.237	1.231		1.59	1.60	-0.4	30.0
1,1,2-Trichloroethane	Ave	0.4444	0.4333		1.56	1.60	-2.5	30.0
2-Hexanone	Ave	0.3937	0.4108		1.67	1.60	4.4	30.0
Octane	Ave	0.3450	0.3771		1.75	1.60	9.3	30.0
Dibromochloromethane	Ave	0.7339	0.8630		1.88	1.60	17.6	30.0
1,2-Dibromoethane (EDB)	Ave	0.6652	0.6618		1.59	1.60	-0.5	30.0
Tetrachloroethene	Ave	0.5184	0.5276		1.63	1.60	1.8	30.0
2,3-Dimethylheptane	Ave	1.593	1.340		1.35	1.60	-15.9	30.0
Chlorobenzene	Ave	1.002	1.018		1.63	1.60	1.7	30.0
Ethylbenzene	Ave	1.497	1.431		1.53	1.60	-4.4	30.0
m-Xylene & p-Xylene	Ave	1.183	1.266		3.42	3.20	7.0	30.0
Nonane	Ave	0.8512	0.8376		1.57	1.60	-1.6	30.0
Styrene	Ave	0.7187	0.7708		1.72	1.60	7.3	30.0
Bromoform	QuaF		0.7387		2.06	1.60	28.9	30.0
o-Xylene	Ave	1.239	1.192		1.54	1.60	-3.8	30.0
1,1,2,2-Tetrachloroethane	Ave	1.096	1.080		1.58	1.60	-1.5	30.0
1,2,3-Trichloropropane	Ave	0.2482	0.2523		1.63	1.60	1.6	30.0
Isopropylbenzene	Ave	1.567	1.637		1.67	1.60	4.5	30.0
Propylbenzene	Ave	0.4200	0.4472		1.70	1.60	6.5	30.0
2-Chlorotoluene	Ave	0.4016	0.4096		1.63	1.60	2.0	30.0

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Instrument ID: MH Calib Start Date: 08/29/2020 12:34

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 08/29/2020 23:57

Lab File ID: HCCV08B.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Ethyltoluene	Ave	1.573	1.618		1.65	1.60	2.8	30.0
1,3,5-Trimethylbenzene	Lin1		0.8754		1.91	1.60	19.1	30.0
Alpha Methyl Styrene	Ave	0.5440	0.6072		1.79	1.60	11.6	30.0
Decane	Ave	1.245	1.248		1.60	1.60	0.3	30.0
tert-Butylbenzene	Ave	1.595	1.866		1.87	1.60	17.0	30.0
1,2,4-Trimethylbenzene	Ave	1.432	1.722		1.92	1.60	20.2	30.0
sec-Butylbenzene	Ave	2.112	2.456		1.86	1.60	16.3	30.0
1,3-Dichlorobenzene	Ave	0.7435	0.8795		1.89	1.60	18.3	30.0
Benzyl chloride	Lin1		0.8956		1.75	1.60	9.1	30.0
1,4-Dichlorobenzene	Ave	0.5485	0.7470		2.18	1.60	36.2*	30.0
4-Isopropyltoluene	Ave	1.709	2.267		2.12	1.60	32.6*	30.0
1,2,3-Trimethylbenzene	Ave	1.376	1.213		1.41	1.60	-11.8	30.0
Butylcyclohexane	Ave	1.183	1.146		1.55	1.60	-3.1	30.0
Indane	Ave	1.140	1.302		1.83	1.60	14.2	30.0
1,2-Dichlorobenzene	Ave	0.8206	0.9774		1.91	1.60	19.1	30.0
Butylbenzene	Ave	1.891	2.345		1.98	1.60	24.0	30.0
Indene	Ave	0.9776	1.012		1.66	1.60	3.5	30.0
Undecane	Ave	1.420	1.549		1.75	1.60	9.1	30.0
1,2-Dibromo-3-Chloropropane	Ave	0.4195	0.5281		2.01	1.60	25.9	30.0
1,2,4,5-Tetramethylbenzene	Lin1		1.863		1.78	1.60	11.3	30.0
Dodecane	Ave	1.001	1.397		2.23	1.60	39.6*	30.0
1,2,4-Trichlorobenzene	Lin1		0.5988		2.46	1.60	53.7*	30.0
Naphthalene	QuaF		1.496		2.13	1.60	33.4*	30.0
Hexachlorobutadiene	Ave	0.7852	1.183		2.41	1.60	50.7*	30.0
1,2,3-Trichlorobenzene	Ave	0.4610	0.7010		2.43	1.60	52.1*	30.0
2-Methylnaphthalene	Ave	0.1790	0.1237		1.11	1.60	-30.9	50.0
1-Methylnaphthalene	Ave	0.2066	0.2265		1.75	1.60	9.6	50.0
4-Bromofluorobenzene (Surr)	Ave	0.5577	0.5972		4.97	4.64	7.1	30.0

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HCCV08B.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 08-Sep-2020 13:10:30 ALS Bottle#: 21 Worklist Smp#: 2
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016517-002
Misc. Info.: S126 80ML
Operator ID: HMT Instrument ID: MH
Sublist: chrom-MH_TO15*sub6

Method: \\chromfs\Knoxville\ChromData\MH\20200904-16520.b\MH_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 09-Sep-2020 17:03:27 Calib Date: 29-Aug-2020 23:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1034

First Level Reviewer: barlozhetskayaa Date: 09-Sep-2020 17:03:27

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.431	9.431	0.000	98	277460	4.80	4.80	s
* 2 1,4-Difluorobenzene	114	11.591	11.591	0.000	94	1172334	4.80	4.80	s
* 3 Chlorobenzene-d5 (IS)	117	16.258	16.258	0.000	86	835308	4.80	4.80	s
$ 4 4-Bromofluorobenzene (Surr)	95	17.876	17.876	0.000	97	482200	4.64	4.97	
6 Chlorodifluoromethane	51	3.916	3.916	0.000	97	230654	1.60	1.49	
7 Propene	41	3.931	3.931	0.000	98	94877	1.60	1.43	
8 Dichlorodifluoromethane	85	3.988	3.988	0.000	100	343146	1.60	1.64	
9 Chloromethane	52	4.195	4.195	0.000	92	44274	1.60	1.61	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	4.195	4.195	0.000	90	281262	1.60	1.68	
11 Acetaldehyde	44	4.360	4.360	0.000	99	282736	8.00	6.92	
12 Vinyl chloride	62	4.381	4.381	0.000	99	139236	1.60	1.51	
13 Butane	43	4.474	4.474	0.000	83	200345	1.60	1.59	
14 Butadiene	54	4.479	4.479	0.000	69	96757	1.60	1.54	
15 Bromomethane	94	4.841	4.841	0.000	97	135990	1.60	1.53	
16 Chloroethane	64	4.996	4.996	0.000	93	55533	1.60	1.43	
17 Ethanol	31	5.079	5.079	0.000	97	231043	8.00	5.17	
18 Vinyl bromide	106	5.332	5.332	0.000	97	122908	1.60	1.66	
19 2-Methylbutane	43	5.379	5.379	0.000	93	144455	1.60	1.49	
20 Trichlorofluoromethane	101	5.621	5.621	0.000	99	332557	1.60	1.63	
21 Acrolein	56	5.632	5.632	0.000	95	39319	1.60	1.77	
22 Acetonitrile	40	5.704	5.704	0.000	99	54827	1.60	1.40	
23 Acetone	58	5.761	5.761	0.000	99	76876	1.60	1.78	
25 Isopropyl alcohol	45	5.839	5.839	0.000	94	172309	1.60	1.62	
24 Pentane	72	5.859	5.859	0.000	97	15293	1.60	1.69	
26 Ethyl ether	31	6.040	6.040	0.000	91	126903	1.60	1.43	
27 1,1-Dichloroethene	96	6.392	6.392	0.000	97	104330	1.60	1.55	
29 2-Methyl-2-propanol	59	6.479	6.479	0.000	92	147228	1.60	1.34	
28 Acrylonitrile	53	6.500	6.500	0.000	94	96500	1.60	1.63	
30 112TCTFE	101	6.567	6.567	0.000	97	280677	1.60	1.62	
31 Methylene Chloride	84	6.764	6.764	0.000	96	103723	1.60	1.52	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.779	6.779	0.000	95	95222	1.60	1.37	
33 Carbon disulfide	76	6.945	6.945	0.000	100	322760	1.60	1.48	
34 trans-1,2-Dichloroethene	96	7.616	7.616	0.000	96	112164	1.60	1.60	
35 2-Methylpentane	43	7.627	7.627	0.000	97	234335	1.60	1.40	
36 Methyl tert-butyl ether	73	7.735	7.735	0.000	93	213836	1.60	1.44	
37 1,1-Dichloroethane	63	8.061	8.061	0.000	100	213553	1.60	1.53	
38 Vinyl acetate	43	8.154	8.154	0.000	99	221640	1.60	1.24	
39 2-Butanone (MEK)	72	8.624	8.624	0.000	96	48806	1.60	1.44	
40 Hexane	56	8.645	8.645	0.000	88	90097	1.60	1.55	
41 Isopropyl ether	45	8.805	8.805	0.000	96	385804	1.60	1.56	
42 cis-1,2-Dichloroethene	96	9.089	9.089	0.000	95	112648	1.60	1.58	
43 Ethyl acetate	43	9.250	9.250	0.000	98	251875	1.60	1.41	
44 Chloroform	83	9.436	9.436	0.000	98	259072	1.60	1.54	
45 Tert-butyl ethyl ether	59	9.503	9.503	0.000	97	258046	1.60	1.36	
46 Tetrahydrofuran	42	9.844	9.844	0.000	92	124357	1.60	1.49	
47 1,1,1-Trichloroethane	97	10.490	10.490	0.000	97	239383	1.60	1.57	
48 1,2-Dichloroethane	62	10.593	10.593	0.000	97	168225	1.60	1.58	
49 n-Butanol	31	10.997	10.997	0.000	92	40273	1.60	1.21	
50 Cyclohexane	69	11.069	11.069	0.000	86	45363	1.60	1.54	
51 Benzene	78	11.069	11.069	0.000	98	334426	1.60	1.55	
52 Carbon tetrachloride	117	11.095	11.095	0.000	96	274858	1.60	2.06	
53 2,3-Dimethylpentane	71	11.167	11.167	0.000	92	63092	1.60	1.55	
54 Thiophene	84	11.343	11.343	0.000	97	173935	1.60	1.54	
55 Isooctane	57	11.793	11.793	0.000	97	541150	1.60	1.62	
56 n-Heptane	71	12.154	12.154	0.000	94	94883	1.60	1.55	
57 1,2-Dichloropropane	63	12.263	12.263	0.000	89	137629	1.60	1.49	
58 Trichloroethene	130	12.294	12.294	0.000	96	160133	1.60	1.65	
59 Dibromomethane	93	12.387	12.387	0.000	96	162685	1.60	1.59	
60 Dichlorobromomethane	83	12.521	12.521	0.000	99	248479	1.60	1.63	
61 1,4-Dioxane	88	12.526	12.526	0.000	92	43341	1.60	1.41	
62 Methyl methacrylate	41	12.588	12.588	0.000	91	144962	1.60	1.45	
63 Methylcyclohexane	83	13.048	13.048	0.000	91	209752	1.60	1.74	
64 4-Methyl-2-pentanone (MIBK)	43	13.426	13.426	0.000	98	297593	1.60	1.55	
65 cis-1,3-Dichloropropene	75	13.498	13.498	0.000	97	165866	1.60	1.59	
66 trans-1,3-Dichloropropene	75	14.185	14.185	0.000	98	114850	1.60	1.50	
67 Toluene	91	14.310	14.310	0.000	92	342841	1.60	1.59	
68 1,1,2-Trichloroethane	83	14.382	14.382	0.000	98	120653	1.60	1.56	
69 2-Hexanone	58	14.744	14.744	0.000	90	114394	1.60	1.67	
70 n-Octane	85	14.961	14.961	0.000	95	105003	1.60	1.75	
71 Chlorodibromomethane	129	15.085	15.085	0.000	98	240293	1.60	1.88	
72 Ethylene Dibromide	107	15.374	15.374	0.000	98	184258	1.60	1.59	
73 Tetrachloroethene	129	15.436	15.436	0.000	96	146894	1.60	1.63	
75 2,3-Dimethylheptane	43	16.294	16.294	0.000	94	373201	1.60	1.35	
74 Chlorobenzene	112	16.305	16.305	0.000	95	283500	1.60	1.63	
76 Ethylbenzene	91	16.584	16.584	0.000	99	398479	1.60	1.53	
77 m-Xylene & p-Xylene	91	16.739	16.739	0.000	97	704753	3.20	3.42	
78 n-Nonane	57	17.131	17.131	0.000	95	233220	1.60	1.57	
80 Styrene	104	17.204	17.204	0.000	98	214623	1.60	1.72	
79 Bromoform	173	17.209	17.209	0.000	88	205692	1.60	2.06	
81 o-Xylene	91	17.266	17.266	0.000	99	331884	1.60	1.54	
82 1,1,2,2-Tetrachloroethane	83	17.586	17.586	0.000	98	300830	1.60	1.58	
83 1,2,3-Trichloropropane	110	17.746	17.746	0.000	97	70237	1.60	1.63	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	17.840	17.840	0.000	96	455920	1.60	1.67	
85 N-Propylbenzene	120	18.351	18.351	0.000	99	124522	1.60	1.70	
86 2-Chlorotoluene	126	18.403	18.403	0.000	97	114036	1.60	1.63	
87 4-Ethyltoluene	105	18.496	18.496	0.000	98	450517	1.60	1.65	
88 1,3,5-Trimethylbenzene	120	18.563	18.563	0.000	93	243754	1.60	1.91	
89 Alpha Methyl Styrene	118	18.790	18.790	0.000	88	169055	1.60	1.79	
90 n-Decane	57	18.822	18.822	0.000	87	347477	1.60	1.60	
91 tert-Butylbenzene	119	18.977	18.977	0.000	92	519438	1.60	1.87	
92 1,2,4-Trimethylbenzene	105	18.987	18.987	0.000	97	479377	1.60	1.92	
93 sec-Butylbenzene	105	19.235	19.235	0.000	99	683848	1.60	1.86	
94 1,3-Dichlorobenzene	146	19.261	19.261	0.000	97	244896	1.60	1.89	
95 Benzyl chloride	91	19.333	19.333	0.000	98	249361	1.60	1.75	
96 1,4-Dichlorobenzene	146	19.344	19.344	0.000	97	207995	1.60	2.18	
97 4-Isopropyltoluene	119	19.390	19.390	0.000	97	631120	1.60	2.12	
98 1,2,3-Trimethylbenzene	105	19.447	19.447	0.000	98	337861	1.60	1.41	
99 Butylcyclohexane	83	19.493	19.493	0.000	91	319171	1.60	1.55	
101 2,3-Dihydroindene	117	19.690	19.690	0.000	93	362387	1.60	1.83	
100 1,2-Dichlorobenzene	146	19.695	19.695	0.000	98	272139	1.60	1.91	
103 n-Butylbenzene	91	19.814	19.814	0.000	97	652887	1.60	1.98	
102 Indene	116	19.819	19.819	0.000	91	281787	1.60	1.66	
104 Undecane	57	20.093	20.093	0.000	94	431376	1.60	1.75	
105 1,2-Dibromo-3-Chloropropane	157	20.284	20.284	0.000	96	147035	1.60	2.01	
106 1,2,4,5-Tetramethylbenzene	119	20.563	20.563	0.000	97	518707	1.60	1.78	a
107 Dodecane	57	21.173	21.173	0.000	92	389017	1.60	2.23	
108 1,2,4-Trichlorobenzene	180	21.416	21.416	0.000	94	166724	1.60	2.46	
109 Naphthalene	128	21.556	21.556	0.000	99	416511	1.60	2.13	
110 Hexachlorobutadiene	225	21.726	21.726	0.000	92	329372	1.60	2.41	
111 1,2,3-Trichlorobenzene	180	21.788	21.788	0.000	95	195188	1.60	2.43	
112 2-Methylnaphthalene	142	22.341	22.341	0.000	99	34444	1.60	1.11	
113 1-Methylnaphthalene	142	22.465	22.465	0.000	99	63072	1.60	1.75	
A 115 C8 Range	1	14.971	(14.919-15.023)		0	1233117	1.60	1.58	
S 116 Xylenes, Total	100				0		4.80	4.96	
S 117 1,2-Dichloroethene, Total	1				0		3.20	3.18	
T 139 2-Methylthiophene TIC	97	14.459	14.459	0.000	96	255529	1.60	1.47	
T 142 3-Methylthiophene TIC	97	14.661	14.661	0.000	94	251711	1.60	1.45	
T 141 2-Ethylthiophene TIC	97	16.687	16.687	0.000	95	289340	1.60	1.66	
T 152 1,2-Dimethyl-4-Ethylbenzene TIC	119	20.176	20.176	0.000	95	443769	1.60	2.55	
T 149 1,2,3,5-Tetramethylbenzene TIC	119	20.620	20.620	0.000	96	317888	1.60	1.83	a
T 150 1,2,3,4-Tetramethylbenzene TIC	119	21.039	21.039	0.000	97	394422	1.60	2.27	a
T 151 Benzo(b)thiophene TIC	134	21.649	21.649	0.000	99	123062	1.60	0.7072	

QC Flag Legend

Processing Flags

s - Failed ISTD Recovery Test

Review Flags

a - User Assigned ID

Reagents:

40CV101S_00126	Amount Added: 80.00	Units: ml	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

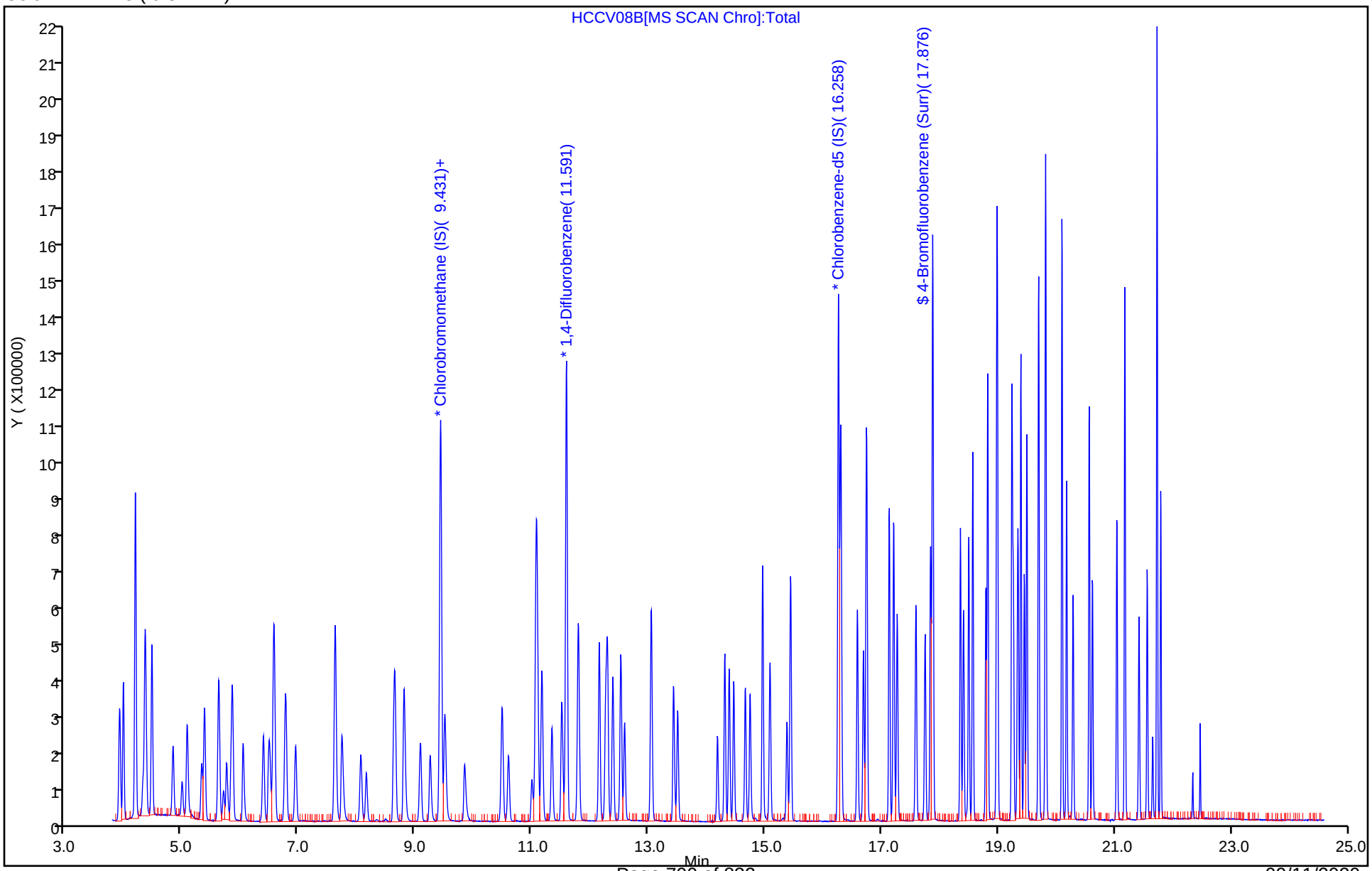
Report Date: 09-Sep-2020 17:03:28 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HCCV08B.D

Injection Date:	08-Sep-2020 13:10:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	CCVIS			Worklist Smp#:	2
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Knoxville

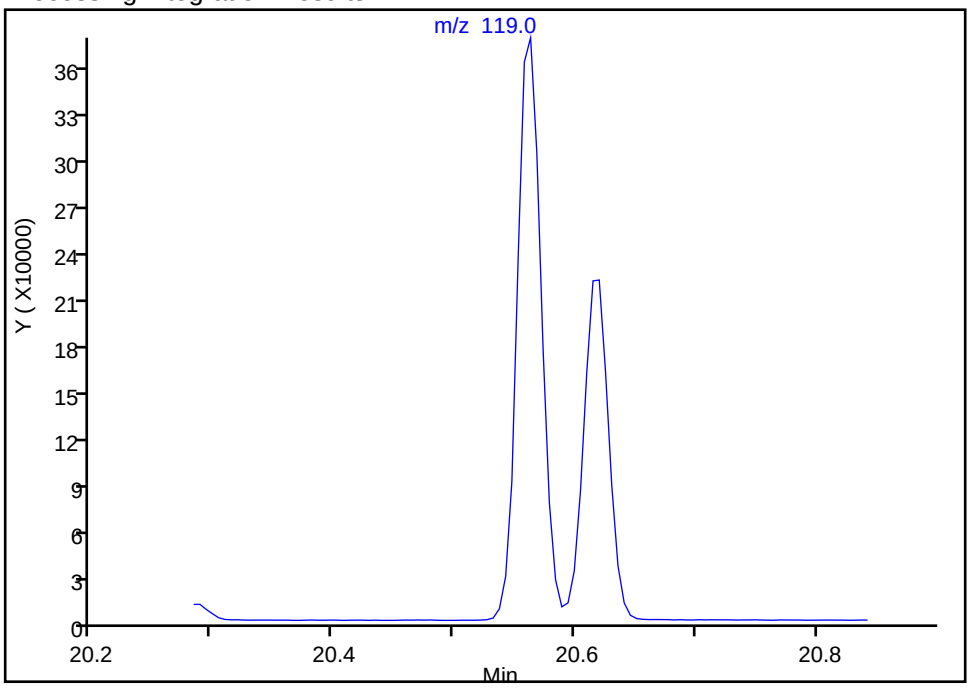
Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HCCV08B.D				
Injection Date:	08-Sep-2020 13:10:30	Instrument ID:	MH		
Lims ID:	CCVIS				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	21	Worklist Smp#:	2
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

106 1,2,4,5-Tetramethylbenzene, CAS: 95-93-2

Signal: 1

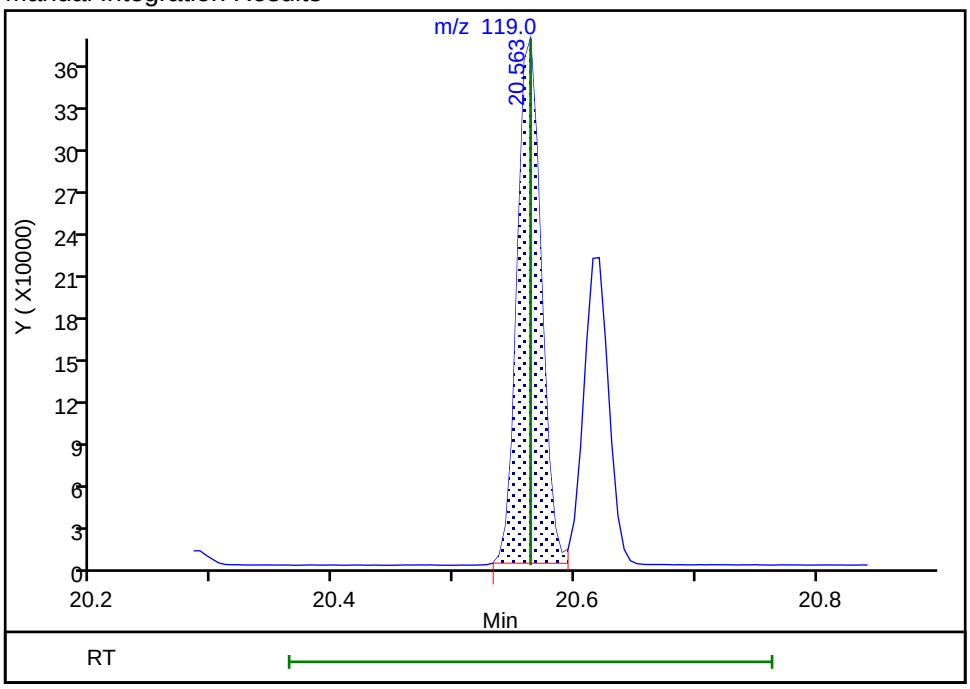
Not Detected
Expected RT: 20.56

Processing Integration Results



Manual Integration Results

RT: 20.56
Area: 518707
Amount: 1.780195
Amount Units: ppb v/v



Reviewer: barlozhetskayaa, 08-Sep-2020 14:39:14
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Lab Sample ID: ICV 140-42222/17 Calibration Date: 08/29/2020 01:37

Instrument ID: MR Calib Start Date: 08/28/2020 14:01

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 08/29/2020 00:02

Lab File ID: RH28ICV.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorodifluoromethane	Ave	2.687	2.484		1.85	2.00	-7.5	35.0
Propene	Ave	1.275	1.235		1.94	2.00	-3.2	35.0
Dichlorodifluoromethane	Ave	2.017	2.359		2.34	2.00	17.0	35.0
Chloromethane	Ave	0.4770	0.4754		1.99	2.00	-0.3	35.0
1,2-Dichloro-1,1,2,2-tetrafluoroethane	Ave	2.827	2.985		2.11	2.00	5.6	35.0
Acetaldehyde	Ave	0.7496	0.6490		8.66	10.0	-13.4	35.0
Vinyl chloride	Lin1		1.580		2.16	2.00	8.2	35.0
1,3-Butadiene	Ave	1.231	1.231		2.00	2.00	-0.0	35.0
Butane	Ave	2.602	2.572		1.98	2.00	-1.2	35.0
Bromomethane	Lin2		1.570		1.99	2.00	-0.7	35.0
Chloroethane	Lin2		0.7885		2.11	2.00	5.4	35.0
Ethanol	Lin1		0.7559		7.77	10.0	-22.3	35.0
Vinyl bromide	Ave	1.567	1.624		2.07	2.00	3.6	35.0
2-Methylbutane	Ave	2.021	2.058		2.04	2.00	1.8	35.0
Trichlorofluoromethane	Ave	3.931	3.865		1.97	2.00	-1.7	35.0
Acrolein	Ave	0.3741	0.4728		2.53	2.00	26.4	35.0
Acetonitrile	Ave	0.5495	0.5537		2.02	2.00	0.8	35.0
Acetone	Ave	0.7172	0.7376		2.06	2.00	2.8	35.0
Pentane	Ave	0.2298	0.2437		2.12	2.00	6.1	35.0
Isopropyl alcohol	Ave	1.926	2.371		2.46	2.00	23.1	35.0
Ethyl ether	Ave	1.673	1.735		2.07	2.00	3.7	35.0
1,1-Dichloroethene	Ave	1.418	1.349		1.90	2.00	-4.9	35.0
Acrylonitrile	Ave	0.8140	0.8759		2.15	2.00	7.6	35.0
tert-Butyl alcohol	Ave	2.400	2.413		2.01	2.00	0.5	35.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	3.085	3.077		2.00	2.00	-0.2	35.0
Methylene Chloride	Ave	1.170	1.138		1.95	2.00	-2.7	35.0
3-Chloropropene	Lin2		1.378		2.16	2.00	7.8	35.0
Carbon disulfide	Ave	3.742	3.651		1.95	2.00	-2.4	35.0
trans-1,2-Dichloroethene	Ave	1.315	1.276		1.94	2.00	-3.0	35.0
2-Methylpentane	Ave	3.158	2.759		1.75	2.00	-12.6	35.0
Methyl tert-butyl ether	Ave	3.196	3.228		2.02	2.00	1.0	35.0
1,1-Dichloroethane	Ave	2.283	2.271		1.99	2.00	-0.5	35.0
Vinyl acetate	Ave	3.475	3.789		2.18	2.00	9.0	35.0
2-Butanone (MEK)	Ave	0.6451	0.6316		1.96	2.00	-2.1	35.0
Hexane	Ave	0.9722	0.9753		2.01	2.00	0.3	35.0
Isopropyl ether	Ave	4.747	4.890		2.06	2.00	3.0	35.0
cis-1,2-Dichloroethene	Ave	1.520	1.426		1.88	2.00	-6.2	35.0
Ethyl acetate	Ave	3.228	3.239		2.01	2.00	0.3	35.0
Chloroform	Ave	2.889	2.748		1.90	2.00	-4.9	35.0
Tert-butyl ethyl ether	Ave	3.902	3.641		1.87	2.00	-6.7	35.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Lab Sample ID: ICV 140-42222/17 Calibration Date: 08/29/2020 01:37

Instrument ID: MR Calib Start Date: 08/28/2020 14:01

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 08/29/2020 00:02

Lab File ID: RH28ICV.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Tetrahydrofuran	Ave	1.653	1.650		2.00	2.00	-0.2	35.0
1,1,1-Trichloroethane	Ave	2.759	2.761		2.00	2.00	0.0	35.0
1,2-Dichloroethane	Ave	0.3202	0.3215		2.01	2.00	0.4	35.0
1-Butanol	Ave	0.1717	0.1713		1.99	2.00	-0.3	35.0
Benzene	Ave	0.8390	0.8229		1.96	2.00	-1.9	35.0
Cyclohexane	Ave	0.1183	0.1168		1.97	2.00	-1.3	35.0
Carbon tetrachloride	Ave	0.5411	0.6089		2.25	2.00	12.5	35.0
2,3-Dimethylpentane	Ave	0.1840	0.1692		1.84	2.00	-8.0	35.0
Thiophene	Ave	0.4839	0.4513		1.87	2.00	-6.7	35.0
2,2,4-Trimethylpentane	Ave	1.338	1.302		1.95	2.00	-2.7	35.0
Heptane	Ave	0.2722	0.2639		1.94	2.00	-3.0	35.0
1,2-Dichloropropane	Ave	0.3195	0.3101		1.94	2.00	-2.9	35.0
Trichloroethene	Ave	0.4170	0.3849		1.85	2.00	-7.7	35.0
Dibromomethane	Ave	0.3569	0.3535		1.98	2.00	-1.0	35.0
Bromodichloromethane	Ave	0.6028	0.6116		2.03	2.00	1.4	35.0
1,4-Dioxane	Ave	0.1377	0.1261		1.83	2.00	-8.4	35.0
Methyl methacrylate	Ave	0.3801	0.3834		2.02	2.00	0.9	35.0
Methylcyclohexane	Ave	0.4932	0.5851		2.37	2.00	18.6	35.0
4-Methyl-2-pentanone (MIBK)	Ave	0.7711	0.7637		1.98	2.00	-1.0	35.0
cis-1,3-Dichloropropene	Ave	0.4299	0.4423		2.06	2.00	2.9	35.0
trans-1,3-Dichloropropene	Ave	0.4438	0.4803		2.16	2.00	8.2	35.0
Toluene	Ave	1.292	1.218		1.89	2.00	-5.7	35.0
1,1,2-Trichloroethane	Ave	0.3910	0.3890		1.99	2.00	-0.5	35.0
2-Hexanone	Ave	0.3912	0.4204		2.15	2.00	7.5	35.0
Octane	Ave	0.3602	0.3608		2.00	2.00	0.2	35.0
Dibromochloromethane	Ave	0.8032	0.8549		2.13	2.00	6.4	35.0
1,2-Dibromoethane (EDB)	Ave	0.7001	0.7224		2.06	2.00	3.2	35.0
Tetrachloroethene	Ave	0.4748	0.4456		1.88	2.00	-6.2	35.0
Chlorobenzene	Ave	0.9896	0.9948		2.01	2.00	0.5	35.0
2,3-Dimethylheptane	Ave	1.318	1.166		1.77	2.00	-11.5	35.0
Ethylbenzene	Ave	1.637	1.652		2.02	2.00	0.9	35.0
m-Xylene & p-Xylene	Ave	1.248	1.278		4.10	4.00	2.4	35.0
Nonane	Ave	0.7621	0.7750		2.03	2.00	1.7	35.0
Bromoform	Ave	0.8720	1.037		2.38	2.00	18.9	35.0
Styrene	Ave	0.9061	0.9563		2.11	2.00	5.5	35.0
o-Xylene	Ave	1.293	1.280		1.98	2.00	-1.0	35.0
1,1,2,2-Tetrachloroethane	Ave	1.053	1.117		2.12	2.00	6.1	35.0
1,2,3-Trichloropropane	Ave	0.2850	0.3045		2.14	2.00	6.8	35.0
Isopropylbenzene	Ave	1.842	1.910		2.07	2.00	3.7	35.0
Propylbenzene	Ave	0.5396	0.5666		2.10	2.00	5.0	35.0
2-Chlorotoluene	Ave	0.4968	0.5371		2.16	2.00	8.1	35.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Lab Sample ID: ICV 140-42222/17 Calibration Date: 08/29/2020 01:37

Instrument ID: MR Calib Start Date: 08/28/2020 14:01

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 08/29/2020 00:02

Lab File ID: RH28ICV.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Ethyltoluene	Ave	1.855	1.821		1.96	2.00	-1.9	35.0
1,3,5-Trimethylbenzene	Ave	0.8147	0.9497		2.33	2.00	16.6	35.0
Alpha Methyl Styrene	Ave	0.7293	0.7766		2.13	2.00	6.5	35.0
Decane	Ave	0.9697	1.033		2.13	2.00	6.5	35.0
tert-Butylbenzene	Ave	1.813	1.861		2.05	2.00	2.7	35.0
1,2,4-Trimethylbenzene	Ave	1.535	1.656		2.16	2.00	7.9	35.0
sec-Butylbenzene	Ave	2.400	2.508		2.09	2.00	4.5	35.0
1,3-Dichlorobenzene	Ave	1.162	1.258		2.17	2.00	8.3	35.0
Benzyl chloride	Ave	1.150	1.413		2.46	2.00	22.8	35.0
1,4-Dichlorobenzene	Ave	1.145	1.219		2.13	2.00	6.5	35.0
4-Isopropyltoluene	Ave	2.000	2.128		2.13	2.00	6.4	35.0
1,2,3-Trimethylbenzene	QuaF		1.187		1.70	2.00	-15.1	35.0
Butylcyclohexane	Ave	1.309	1.301		1.99	2.00	-0.6	35.0
1,2-Dichlorobenzene	Ave	1.209	1.253		2.07	2.00	3.6	35.0
Indane	Ave	1.612	1.612		2.00	2.00	0.0	35.0
Indene	Ave	1.312	1.182		1.80	2.00	-9.9	35.0
Butylbenzene	Ave	1.964	2.211		2.25	2.00	12.6	35.0
Undecane	Ave	1.208	1.232		2.04	2.00	2.0	35.0
1,2-Dibromo-3-Chloropropane	Ave	0.5821	0.5712		1.96	2.00	-1.9	35.0
1,2,4,5-Tetramethylbenzene	Ave	1.845	1.845		2.00	2.00	-0.0	35.0
Dodecane	Ave	1.074	1.209		2.25	2.00	12.6	35.0
1,2,4-Trichlorobenzene	Ave	0.9881	1.226		2.48	2.00	24.1	35.0
Naphthalene	Ave	1.926	2.444		2.54	2.00	26.9	35.0
Hexachlorobutadiene	Ave	1.146	1.185		2.07	2.00	3.4	35.0
1,2,3-Trichlorobenzene	Ave	0.9767	1.167		2.39	2.00	19.5	35.0
2-Methylnaphthalene	Ave	1.126	1.160		2.06	2.00	3.1	50.0
1-Methylnaphthalene	Ave	1.592	1.752		2.20	2.00	10.0	50.0
4-Bromofluorobenzene (Surr)	Ave	0.6418	0.6745		4.88	4.64	5.1	35.0

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28ICV.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 29-Aug-2020 01:37:30 ALS Bottle#: 5 Worklist Smp#: 17
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016425-017
Misc. Info.: S123 80ML
Operator ID: HMT Instrument ID: MR
Sublist:

Method: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 31-Aug-2020 13:45:04 Calib Date: 29-Aug-2020 00:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1064

First Level Reviewer: tajh Date: 29-Aug-2020 09:14:41

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.285	8.283	0.002	92	241131	4.80	4.80	
* 2 1,4-Difluorobenzene	114	10.517	10.519	-0.002	93	1181864	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.354	15.356	-0.002	87	954759	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.004	17.004	-0.002	95	622523	4.64	4.88	
7 Propene	41	3.346	3.344	0.003	99	124045	2.00	1.94	
6 Chlorodifluoromethane	51	3.335	3.346	-0.010	99	249560	2.00	1.85	
8 Dichlorodifluoromethane	85	3.394	3.390	0.004	97	237013	2.00	2.34	
9 Chloromethane	52	3.561	3.560	0.002	60	47762	2.00	1.99	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.567	3.568	-0.001	89	299895	2.00	2.11	
11 Acetaldehyde	44	3.701	3.709	-0.008	88	326049	10.0	8.66	
12 Vinyl chloride	62	3.718	3.716	0.002	100	158721	2.00	2.16	
14 Butadiene	54	3.799	3.798	0.001	67	123656	2.00	2.00	
13 Butane	43	3.799	3.799	0.000	87	258432	2.00	1.98	
15 Bromomethane	94	4.095	4.095	0.001	98	157708	2.00	1.99	
16 Chloroethane	64	4.219	4.222	-0.002	86	79226	2.00	2.11	
17 Ethanol	31	4.332	4.346	-0.013	98	379727	10.0	7.77	
18 Vinyl bromide	106	4.500	4.503	-0.002	96	163146	2.00	2.07	
19 2-Methylbutane	43	4.543	4.548	-0.004	94	206751	2.00	2.04	
20 Trichlorofluoromethane	101	4.748	4.752	-0.003	97	388344	2.00	1.97	
21 Acrolein	56	4.764	4.775	-0.011	93	47501	2.00	2.53	
22 Acetonitrile	40	4.828	4.842	-0.013	98	55631	2.00	2.02	
23 Acetone	58	4.877	4.891	-0.014	98	74107	2.00	2.06	
24 Pentane	72	4.953	4.961	-0.008	96	24487	2.00	2.12	
25 Isopropyl alcohol	45	4.974	4.997	-0.022	93	238170	2.00	2.46	
26 Ethyl ether	31	5.125	5.144	-0.018	89	174301	2.00	2.07	
27 1,1-Dichloroethene	96	5.422	5.431	-0.008	98	135565	2.00	1.90	
28 Acrylonitrile	53	5.535	5.549	-0.013	64	88000	2.00	2.15	
29 2-Methyl-2-propanol	59	5.546	5.590	-0.043	95	242393	2.00	2.01	
30 1,1,2-Trichloro-1,2,2-trifluoroe	101	5.600	5.604	-0.003	96	309171	2.00	2.00	
31 Methylene Chloride	84	5.761	5.769	-0.007	97	114311	2.00	1.95	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	5.778	5.783	-0.004	96	138447	2.00	2.16	
33 Carbon disulfide	76	5.918	5.922	-0.003	96	366852	2.00	1.95	
34 trans-1,2-Dichloroethene	96	6.559	6.562	-0.002	91	128183	2.00	1.94	
35 2-Methylpentane	43	6.576	6.580	-0.003	94	277183	2.00	1.75	
36 Methyl tert-butyl ether	73	6.694	6.717	-0.022	97	324315	2.00	2.02	
37 1,1-Dichloroethane	63	6.969	6.979	-0.008	99	228143	2.00	1.99	
38 Vinyl acetate	43	7.088	7.101	-0.012	99	380643	2.00	2.18	
39 2-Butanone (MEK)	72	7.530	7.553	-0.021	96	63454	2.00	1.96	
40 Hexane	56	7.546	7.554	-0.007	86	97991	2.00	2.01	
41 Isopropyl ether	45	7.719	7.737	-0.017	96	491273	2.00	2.06	
42 cis-1,2-Dichloroethene	96	7.956	7.955	0.003	89	143243	2.00	1.88	
43 Ethyl acetate	43	8.150	8.167	-0.015	97	325448	2.00	2.01	
44 Chloroform	83	8.296	8.301	-0.004	94	276145	2.00	1.90	
45 Tert-butyl ethyl ether	59	8.393	8.415	-0.020	97	365827	2.00	1.87	
46 Tetrahydrofuran	42	8.700	8.723	-0.022	93	165773	2.00	2.00	
47 1,1,1-Trichloroethane	97	9.320	9.322	0.000	94	277395	2.00	2.00	
48 1,2-Dichloroethane	62	9.434	9.433	0.000	93	158315	2.00	2.01	
50 Cyclohexane	69	9.930	9.927	0.002	78	57496	2.00	1.97	
51 Benzene	78	9.930	9.932	-0.003	97	405223	2.00	1.96	
49 n-Butanol	31	9.919	9.943	-0.025	72	84335	2.00	1.99	
52 Carbon tetrachloride	117	9.957	9.956	0.000	91	299863	2.00	2.25	
53 2,3-Dimethylpentane	71	10.070	10.068	0.001	91	83343	2.00	1.84	
54 Thiophene	84	10.221	10.220	0.000	93	222252	2.00	1.87	
55 Isooctane	57	10.744	10.743	-0.001	97	641021	2.00	1.95	
56 n-Heptane	71	11.138	11.138	-0.001	95	129962	2.00	1.94	
57 1,2-Dichloropropane	63	11.208	11.211	-0.004	87	152714	2.00	1.94	
58 Trichloroethene	130	11.251	11.250	0.000	94	189520	2.00	1.85	
59 Dibromomethane	93	11.332	11.333	-0.002	92	174090	2.00	1.98	
60 Dichlorobromomethane	83	11.488	11.486	0.001	96	301162	2.00	2.03	
61 1,4-Dioxane	88	11.515	11.531	-0.017	90	62079	2.00	1.83	
62 Methyl methacrylate	41	11.601	11.605	-0.006	89	188818	2.00	2.02	
63 Methylcyclohexane	83	12.043	12.042	0.000	93	288114	2.00	2.37	
64 4-Methyl-2-pentanone (MIBK)	43	12.475	12.488	-0.014	98	376090	2.00	1.98	
65 cis-1,3-Dichloropropene	75	12.523	12.526	-0.005	96	217827	2.00	2.06	
66 trans-1,3-Dichloropropene	75	13.241	13.240	0.000	95	191086	2.00	2.16	
67 Toluene	91	13.359	13.359	-0.001	93	484726	2.00	1.89	
68 1,1,2-Trichloroethane	83	13.440	13.443	0.000	95	154763	2.00	1.99	
69 2-Hexanone	58	13.845	13.852	-0.008	91	167259	2.00	2.15	
70 n-Octane	85	14.076	14.075	-0.001	94	143551	2.00	2.00	
71 Chlorodibromomethane	129	14.147	14.146	-0.002	97	340085	2.00	2.13	
72 Ethylene Dibromide	107	14.443	14.439	0.002	96	287377	2.00	2.06	
73 Tetrachloroethene	129	14.519	14.518	0.000	91	177254	2.00	1.88	
74 Chlorobenzene	112	15.403	15.402	-0.001	95	395742	2.00	2.01	
75 2,3-Dimethylheptane	43	15.435	15.436	-0.003	95	463819	2.00	1.77	
76 Ethylbenzene	91	15.700	15.697	0.002	98	657207	2.00	2.02	
77 m-Xylene & p-Xylene	91	15.861	15.861	-0.002	97	1017200	4.00	4.10	
78 n-Nonane	57	16.298	16.294	0.002	92	308310	2.00	2.03	
79 Bromoform	173	16.303	16.302	-0.001	96	412504	2.00	2.38	
80 Styrene	104	16.325	16.327	-0.003	98	380440	2.00	2.11	
81 o-Xylene	91	16.390	16.387	0.001	99	509055	2.00	1.98	
82 1,1,2,2-Tetrachloroethane	83	16.713	16.714	-0.002	98	444270	2.00	2.12	
83 1,2,3-Trichloropropane	110	16.875	16.875	-0.002	91	121136	2.00	2.14	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	16.977	16.978	-0.003	96	759739	2.00	2.07	
85 N-Propylbenzene	120	17.528	17.527	-0.001	99	225401	2.00	2.10	
86 2-Chlorotoluene	126	17.571	17.570	-0.001	97	213683	2.00	2.16	
87 4-Ethyltoluene	105	17.689	17.686	0.001	98	724262	2.00	1.96	
88 1,3,5-Trimethylbenzene	120	17.765	17.764	-0.001	94	377792	2.00	2.33	
89 Alpha Methyl Styrene	118	18.002	18.003	-0.003	88	308951	2.00	2.13	
90 n-Decane	57	18.072	18.073	-0.003	87	410982	2.00	2.13	
91 tert-Butylbenzene	119	18.202	18.200	0.000	97	740520	2.00	2.05	
92 1,2,4-Trimethylbenzene	105	18.218	18.214	0.002	95	658838	2.00	2.16	
93 sec-Butylbenzene	105	18.477	18.477	-0.002	98	997657	2.00	2.09	
94 1,3-Dichlorobenzene	146	18.487	18.487	-0.002	96	500620	2.00	2.17	
95 Benzyl chloride	91	18.568	18.566	0.000	99	561941	2.00	2.46	
96 1,4-Dichlorobenzene	146	18.579	18.578	-0.001	97	485078	2.00	2.13	
97 4-Isopropyltoluene	119	18.649	18.646	0.001	97	846528	2.00	2.13	
98 1,2,3-Trimethylbenzene	105	18.698	18.696	0.000	98	472238	2.00	1.70	
99 Butylcyclohexane	83	18.757	18.755	0.000	93	517527	2.00	1.99	
101 1,2-Dichlorobenzene	146	18.946	18.943	0.001	85	498443	2.00	2.07	
100 2,3-Dihydroindene	117	18.946	18.945	-0.001	92	641244	2.00	2.00	
102 Indene	116	19.081	19.078	0.000	89	470149	2.00	1.80	
103 n-Butylbenzene	91	19.091	19.090	-0.001	97	879667	2.00	2.25	
104 Undecane	57	19.415	19.416	-0.003	89	490104	2.00	2.04	
105 1,2-Dibromo-3-Chloropropane	157	19.560	19.558	0.000	90	227242	2.00	1.96	
106 1,2,4,5-Tetramethylbenzene	119	19.857	19.858	-0.003	97	733833	2.00	2.00	
107 Dodecane	57	20.477	20.476	-0.001	89	480943	2.00	2.25	
108 1,2,4-Trichlorobenzene	180	20.655	20.656	-0.003	94	487920	2.00	2.48	
109 Naphthalene	128	20.795	20.792	0.001	99	972412	2.00	2.54	
110 Hexachlorobutadiene	225	21.011	21.011	-0.003	93	471504	2.00	2.07	
111 1,2,3-Trichlorobenzene	180	21.081	21.079	0.000	94	464154	2.00	2.39	
112 2-Methylnaphthalene	142	21.825	21.823	0.000	99	461517	2.00	2.06	
113 1-Methylnaphthalene	142	21.955	21.955	-0.002	99	696840	2.00	2.20	
A 116 C8 Range	1	14.071	(14.039-14.104)		0	1533351	2.00	2.05	
S 117 Xylenes, Total	100				0		6.00	6.08	
S 118 1,2-Dichloroethene, Total	1				0		4.00	3.82	
T 143 2-Methylthiophene TIC	97	13.516	13.435	0.081	97	396925	2.00	2.00	
T 142 3-Methylthiophene TIC	97	13.721	13.505	0.215	94	397031	2.00	2.00	
T 150 2-Ethylthiophene TIC	97	15.802	16.999	-1.197	97	485603	2.00	2.44	
T 153 1,2-Dimethyl-4-Ethylbenzene TIC	119	19.469	18.644	0.825	95	610940	2.00	3.07	
T 155 1,2,3,5-Tetramethylbenzene TIC	119	19.911	19.911	0.054	97	438440	2.00	2.20	a
T 156 1,2,3,4-Tetramethylbenzene TIC	119	20.305	20.305	-0.005	98	592364	2.00	2.98	a
T 157 Benzo(b)thiophene TIC	134	20.898	22.677	-1.779	91	476194	2.00	2.39	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

40CV101S_00123	Amount Added: 100.00	Units: mL	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

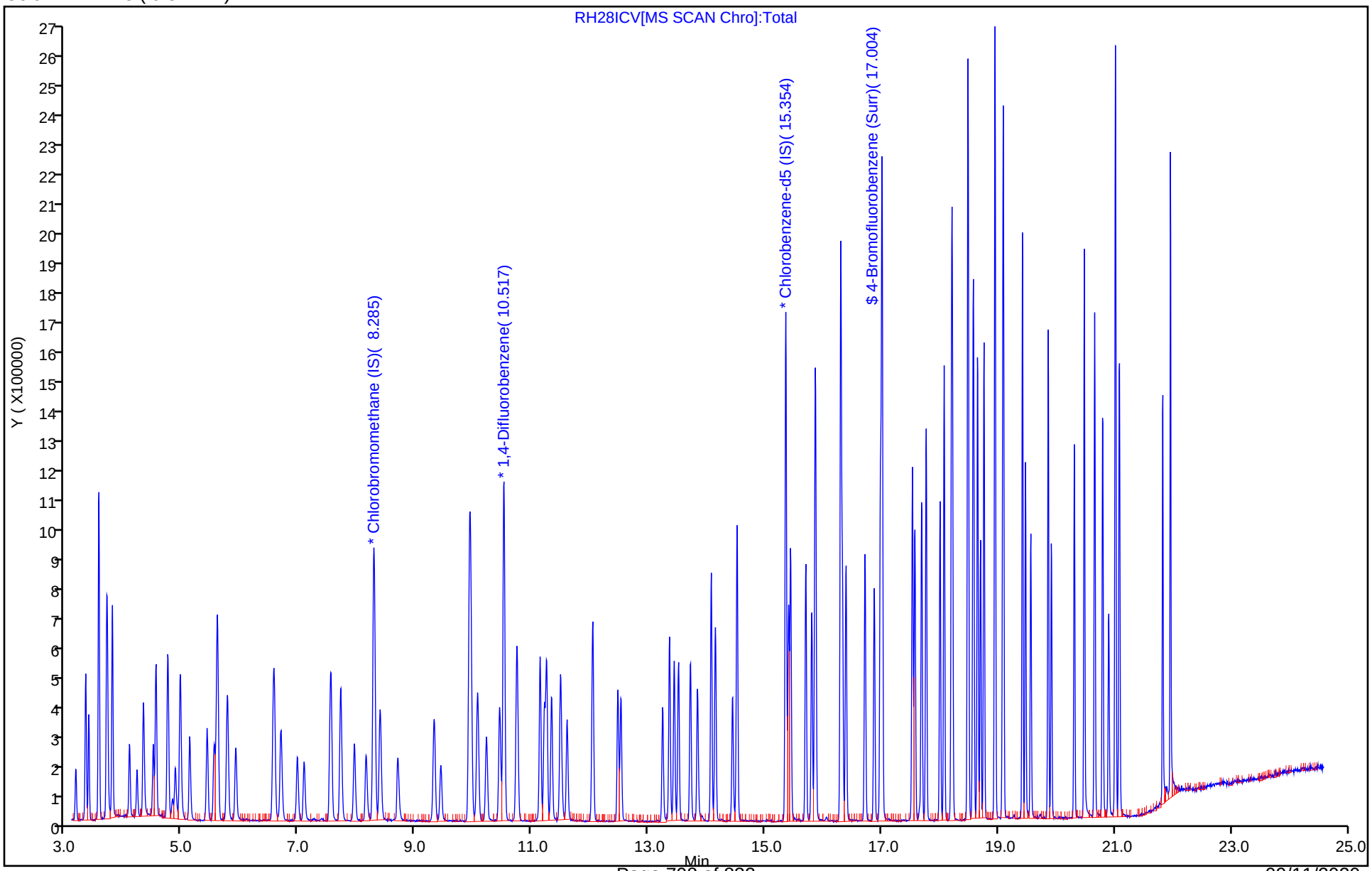
Report Date: 31-Aug-2020 13:45:06 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28ICV.D

Injection Date:	29-Aug-2020 01:37:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	ICV			Worklist Smp#:	17
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Lab Sample ID: CCVIS 140-42515/2 Calibration Date: 09/09/2020 11:27

Instrument ID: MR Calib Start Date: 08/28/2020 14:01

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 08/29/2020 00:02

Lab File ID: RCCVI09.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorodifluoromethane	Ave	2.687	2.965		1.77	1.60	10.4	30.0
Propene	Ave	1.275	1.582		1.99	1.60	24.1	30.0
Dichlorodifluoromethane	Ave	2.017	2.635		2.09	1.60	30.6*	30.0
Chloromethane	Ave	0.4770	0.5364		1.80	1.60	12.5	30.0
1,2-Dichloro-1,1,2,2-tetrafluoroethane	Ave	2.827	2.738		1.55	1.60	-3.2	30.0
Acetaldehyde	Ave	0.7496	0.9085		9.70	8.00	21.2	30.0
Vinyl chloride	Lin1		1.795		1.96	1.60	22.8	30.0
Butane	Ave	2.602	3.390		2.08	1.60	30.2*	30.0
1,3-Butadiene	Ave	1.231	1.518		1.97	1.60	23.3	30.0
Bromomethane	Lin2		1.797		1.82	1.60	13.5	30.0
Chloroethane	Lin2		0.9015		1.92	1.60	20.3	30.0
Ethanol	Lin1		1.673		13.8	8.00	72.9*	30.0
Vinyl bromide	Ave	1.567	1.574		1.61	1.60	0.5	30.0
2-Methylbutane	Ave	2.021	2.548		2.02	1.60	26.1	30.0
Trichlorofluoromethane	Ave	3.931	4.373		1.78	1.60	11.3	30.0
Acrolein	Ave	0.3741	0.5784		2.47	1.60	54.6*	30.0
Acetonitrile	Ave	0.5495	0.7104		2.07	1.60	29.3	30.0
Acetone	Ave	0.7172	0.7569		5.07	4.80	5.5	30.0
Pentane	Ave	0.2298	0.2706		1.88	1.60	17.8	30.0
Isopropyl alcohol	Ave	1.926	2.977		7.42	4.80	54.6*	30.0
Ethyl ether	Ave	1.673	2.471		2.36	1.60	47.8*	30.0
1,1-Dichloroethene	Ave	1.418	1.283		1.45	1.60	-9.6	30.0
Acrylonitrile	Ave	0.8140	0.9632		1.89	1.60	18.3	30.0
tert-Butyl alcohol	Ave	2.400	3.121		2.08	1.60	30.0	30.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	3.085	2.915		1.51	1.60	-5.5	30.0
Methylene Chloride	Ave	1.170	1.229		1.68	1.60	5.1	30.0
3-Chloropropene	Lin2		1.727		2.16	1.60	35.0*	30.0
Carbon disulfide	Ave	3.742	3.856		1.65	1.60	3.0	30.0
trans-1,2-Dichloroethene	Ave	1.315	1.272		1.55	1.60	-3.2	30.0
2-Methylpentane	Ave	3.158	3.909		1.98	1.60	23.8	30.0
Methyl tert-butyl ether	Ave	3.196	3.576		1.79	1.60	11.9	30.0
1,1-Dichloroethane	Ave	2.283	2.592		1.82	1.60	13.5	30.0
Vinyl acetate	Ave	3.475	4.496		2.07	1.60	29.4	30.0
2-Butanone (MEK)	Ave	0.6451	0.6450		1.60	1.60	-0.0	30.0
Hexane	Ave	0.9722	1.175		1.93	1.60	20.9	30.0
Isopropyl ether	Ave	4.747	5.897		1.99	1.60	24.2	30.0
cis-1,2-Dichloroethene	Ave	1.520	1.296		1.36	1.60	-14.8	30.0
Ethyl acetate	Ave	3.228	4.262		2.11	1.60	32.0*	30.0
Chloroform	Ave	2.889	3.024		1.68	1.60	4.7	30.0
Tert-butyl ethyl ether	Ave	3.902	4.470		1.83	1.60	14.6	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Lab Sample ID: CCVIS 140-42515/2 Calibration Date: 09/09/2020 11:27

Instrument ID: MR Calib Start Date: 08/28/2020 14:01

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 08/29/2020 00:02

Lab File ID: RCCVI09.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Tetrahydrofuran	Ave	1.653	2.121		2.05	1.60	28.3	30.0
1,1,1-Trichloroethane	Ave	2.759	2.884		1.67	1.60	4.5	30.0
1,2-Dichloroethane	Ave	0.3202	0.3868		1.93	1.60	20.8	30.0
1-Butanol	Ave	0.1717	0.2745		2.56	1.60	59.9*	30.0
Cyclohexane	Ave	0.1183	0.1248		1.69	1.60	5.5	30.0
Benzene	Ave	0.8390	0.8623		1.64	1.60	2.8	30.0
Carbon tetrachloride	Ave	0.5411	0.6077		1.80	1.60	12.3	30.0
2,3-Dimethylpentane	Ave	0.1840	0.1845		1.60	1.60	0.2	30.0
Thiophene	Ave	0.4839	0.4636		1.53	1.60	-4.2	30.0
2,2,4-Trimethylpentane	Ave	1.338	1.489		1.78	1.60	11.3	30.0
Heptane	Ave	0.2722	0.2779		1.63	1.60	2.1	30.0
1,2-Dichloropropane	Ave	0.3195	0.3549		1.78	1.60	11.1	30.0
Trichloroethene	Ave	0.4170	0.3730		1.43	1.60	-10.6	30.0
Dibromomethane	Ave	0.3569	0.3573		1.60	1.60	0.1	30.0
Bromodichloromethane	Ave	0.6028	0.6681		1.77	1.60	10.8	30.0
1,4-Dioxane	Ave	0.1377	0.1624		1.89	1.60	17.9	30.0
Methyl methacrylate	Ave	0.3801	0.4861		2.05	1.60	27.9	30.0
Methylcyclohexane	Ave	0.4932	0.4928		1.60	1.60	-0.0	30.0
4-Methyl-2-pentanone (MIBK)	Ave	0.7711	1.015		2.11	1.60	31.6*	30.0
cis-1,3-Dichloropropene	Ave	0.4299	0.4748		1.77	1.60	10.4	30.0
trans-1,3-Dichloropropene	Ave	0.4438	0.4380		1.58	1.60	-1.3	30.0
Toluene	Ave	1.292	1.139		1.41	1.60	-11.8	30.0
1,1,2-Trichloroethane	Ave	0.3910	0.3570		1.46	1.60	-8.7	30.0
2-Hexanone	Ave	0.3912	0.4517		1.85	1.60	15.5	30.0
Octane	Ave	0.3602	0.3258		1.45	1.60	-9.5	30.0
Dibromochloromethane	Ave	0.8032	0.7264		1.45	1.60	-9.6	30.0
1,2-Dibromoethane (EDB)	Ave	0.7001	0.6472		1.48	1.60	-7.6	30.0
Tetrachloroethene	Ave	0.4748	0.3970		1.34	1.60	-16.4	30.0
Chlorobenzene	Ave	0.9896	0.8834		1.43	1.60	-10.7	30.0
2,3-Dimethylheptane	Ave	1.318	1.587		1.93	1.60	20.4	30.0
Ethylbenzene	Ave	1.637	1.515		1.48	1.60	-7.5	30.0
m-Xylene & p-Xylene	Ave	1.248	1.165		2.99	3.20	-6.7	30.0
Nonane	Ave	0.7621	0.7942		1.67	1.60	4.2	30.0
Bromoform	Ave	0.8720	0.7576		1.39	1.60	-13.1	30.0
Styrene	Ave	0.9061	0.8761		1.55	1.60	-3.3	30.0
o-Xylene	Ave	1.293	1.195		1.48	1.60	-7.6	30.0
1,1,2,2-Tetrachloroethane	Ave	1.053	1.048		1.59	1.60	-0.5	30.0
1,2,3-Trichloropropane	Ave	0.2850	0.2644		1.48	1.60	-7.3	30.0
Isopropylbenzene	Ave	1.842	1.711		1.49	1.60	-7.1	30.0
Propylbenzene	Ave	0.5396	0.4984		1.48	1.60	-7.6	30.0
2-Chlorotoluene	Ave	0.4968	0.4679		1.51	1.60	-5.8	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Lab Sample ID: CCVIS 140-42515/2 Calibration Date: 09/09/2020 11:27

Instrument ID: MR Calib Start Date: 08/28/2020 14:01

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 08/29/2020 00:02

Lab File ID: RCCVI09.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Ethyltoluene	Ave	1.855	1.687		1.45	1.60	-9.1	30.0
1,3,5-Trimethylbenzene	Ave	0.8147	0.7356		1.44	1.60	-9.7	30.0
Alpha Methyl Styrene	Ave	0.7293	0.6781		1.49	1.60	-7.0	30.0
Decane	Ave	0.9697	1.046		1.73	1.60	7.9	30.0
tert-Butylbenzene	Ave	1.813	1.664		1.47	1.60	-8.2	30.0
1,2,4-Trimethylbenzene	Ave	1.535	1.479		1.54	1.60	-3.6	30.0
sec-Butylbenzene	Ave	2.400	2.257		1.50	1.60	-6.0	30.0
1,3-Dichlorobenzene	Ave	1.162	1.093		1.51	1.60	-5.9	30.0
Benzyl chloride	Ave	1.150	1.182		1.65	1.60	2.8	30.0
1,4-Dichlorobenzene	Ave	1.145	1.072		1.50	1.60	-6.4	30.0
4-Isopropyltoluene	Ave	2.000	1.924		1.54	1.60	-3.8	30.0
1,2,3-Trimethylbenzene	QuaF		1.451		1.66	1.60	3.8	30.0
Butylcyclohexane	Ave	1.309	1.275		1.56	1.60	-2.5	30.0
1,2-Dichlorobenzene	Ave	1.209	1.081		1.43	1.60	-10.6	30.0
Indane	Ave	1.612	1.441		1.43	1.60	-10.6	30.0
Indene	Ave	1.312	1.244		1.52	1.60	-5.2	30.0
Butylbenzene	Ave	1.964	1.964		1.60	1.60	0.0	30.0
Undecane	Ave	1.208	1.234		1.63	1.60	2.1	30.0
1,2-Dibromo-3-Chloropropane	Ave	0.5821	0.5333		1.47	1.60	-8.4	30.0
1,2,4,5-Tetramethylbenzene	Ave	1.845	1.730		1.50	1.60	-6.2	30.0
Dodecane	Ave	1.074	1.124		1.67	1.60	4.7	30.0
1,2,4-Trichlorobenzene	Ave	0.9881	0.8879		1.44	1.60	-10.1	30.0
Naphthalene	Ave	1.926	1.820		1.51	1.60	-5.5	30.0
Hexachlorobutadiene	Ave	1.146	0.8636		1.21	1.60	-24.6	30.0
1,2,3-Trichlorobenzene	Ave	0.9767	0.8714		1.43	1.60	-10.8	30.0
2-Methylnaphthalene	Ave	1.126	1.206		1.71	1.60	7.1	50.0
1-Methylnaphthalene	Ave	1.592	1.796		1.81	1.60	12.8	50.0
4-Bromofluorobenzene (Surr)	Ave	0.6418	0.6756		4.88	4.64	5.3	30.0

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MR\20200908-16524.b\RCCVI09.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 09-Sep-2020 11:27:30 ALS Bottle#: 11 Worklist Smp#: 2
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016515-002
Misc. Info.: P119 80ML
Operator ID: HMT Instrument ID: MR
Sublist: chrom-MR_TO15*sub16

Method: \\chromfs\Knoxville\ChromData\MR\20200908-16524.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 10-Sep-2020 11:02:15 Calib Date: 29-Aug-2020 00:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1028

First Level Reviewer: khachitpongpanits Date: 10-Sep-2020 11:02:15

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.274	8.274	0.000	94	123371	4.80	4.80	s
* 2 1,4-Difluorobenzene	114	10.507	10.507	0.000	95	593621	4.80	4.80	s
* 3 Chlorobenzene-d5 (IS)	117	15.349	15.349	0.000	90	504150	4.80	4.80	s
$ 4 4-Bromofluorobenzene (Surr)	95	16.999	16.999	0.000	93	329241	4.64	4.88	
6 Chlorodifluoromethane	51	3.340	3.340	0.000	99	121930	1.60	1.77	
7 Propene	41	3.351	3.351	0.000	98	65069	1.60	1.99	
8 Dichlorodifluoromethane	85	3.400	3.400	0.000	95	108359	1.60	2.09	
9 Chloromethane	52	3.567	3.567	0.000	93	22059	1.60	1.80	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.572	3.572	0.000	89	112601	1.60	1.55	
11 Acetaldehyde	44	3.707	3.707	0.000	87	186809	8.00	9.70	
12 Vinyl chloride	62	3.723	3.723	0.000	99	73819	1.60	1.96	
13 Butane	43	3.799	3.799	0.000	85	139389	1.60	2.08	
14 Butadiene	54	3.804	3.804	0.000	70	62423	1.60	1.97	
15 Bromomethane	94	4.095	4.095	0.000	95	73912	1.60	1.82	
16 Chloroethane	64	4.225	4.225	0.000	76	37074	1.60	1.92	
17 Ethanol	31	4.333	4.333	0.000	97	344086	8.00	13.8	
18 Vinyl bromide	106	4.500	4.500	0.000	96	64720	1.60	1.61	
19 2-Methylbutane	43	4.548	4.548	0.000	92	104789	1.60	2.02	
20 Trichlorofluoromethane	101	4.753	4.753	0.000	93	179847	1.60	1.78	
21 Acrolein	56	4.759	4.759	0.000	36	23787	1.60	2.47	
22 Acetonitrile	40	4.829	4.829	0.000	94	29215	1.60	2.07	
23 Acetone	58	4.866	4.866	0.000	100	93378	4.80	5.07	
24 Pentane	72	4.958	4.958	0.000	95	11130	1.60	1.88	
25 Isopropyl alcohol	45	4.969	4.969	0.000	94	367249	4.80	7.42	
26 Ethyl ether	31	5.125	5.125	0.000	85	101636	1.60	2.36	
27 1,1-Dichloroethene	96	5.422	5.422	0.000	92	52745	1.60	1.45	
28 Acrylonitrile	53	5.530	5.530	0.000	98	39610	1.60	1.89	
29 2-Methyl-2-propanol	59	5.557	5.557	0.000	94	128341	1.60	2.08	
30 1,1,2-Trichloro-1,2,2-trifluoroe	101	5.594	5.594	0.000	94	119896	1.60	1.51	
31 Methylene Chloride	84	5.762	5.762	0.000	93	50560	1.60	1.68	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	5.772	5.772	0.000	93	71002	1.60	2.16	
33 Carbon disulfide	76	5.918	5.918	0.000	94	158576	1.60	1.65	
34 trans-1,2-Dichloroethene	96	6.554	6.554	0.000	93	52329	1.60	1.55	
35 2-Methylpentane	43	6.576	6.576	0.000	94	160747	1.60	1.98	
36 Methyl tert-butyl ether	73	6.689	6.689	0.000	94	147066	1.60	1.79	
37 1,1-Dichloroethane	63	6.964	6.964	0.000	99	106598	1.60	1.82	
38 Vinyl acetate	43	7.083	7.083	0.000	99	184910	1.60	2.07	
39 2-Butanone (MEK)	72	7.530	7.530	0.000	95	26523	1.60	1.60	
40 Hexane	56	7.546	7.546	0.000	82	48335	1.60	1.93	
41 Isopropyl ether	45	7.708	7.708	0.000	94	242517	1.60	1.99	
42 cis-1,2-Dichloroethene	96	7.945	7.945	0.000	93	53277	1.60	1.36	
43 Ethyl acetate	43	8.145	8.145	0.000	96	175286	1.60	2.11	
44 Chloroform	83	8.291	8.291	0.000	81	124365	1.60	1.68	
45 Tert-butyl ethyl ether	59	8.388	8.388	0.000	97	183824	1.60	1.83	
46 Tetrahydrofuran	42	8.690	8.690	0.000	90	87206	1.60	2.05	
47 1,1,1-Trichloroethane	97	9.310	9.310	0.000	93	118600	1.60	1.67	
48 1,2-Dichloroethane	62	9.428	9.428	0.000	92	76528	1.60	1.93	
49 n-Butanol	31	9.919	9.919	0.000	63	54326	1.60	2.56	
50 Cyclohexane	69	9.919	9.919	0.000	73	24702	1.60	1.69	
51 Benzene	78	9.924	9.924	0.000	93	170632	1.60	1.64	
52 Carbon tetrachloride	117	9.946	9.946	0.000	83	120252	1.60	1.80	
53 2,3-Dimethylpentane	71	10.059	10.059	0.000	85	36500	1.60	1.60	
54 Thiophene	84	10.205	10.205	0.000	91	91741	1.60	1.53	
55 Isooctane	57	10.733	10.733	0.000	93	294596	1.60	1.78	
56 n-Heptane	71	11.132	11.132	0.000	95	54980	1.60	1.63	
57 1,2-Dichloropropane	63	11.208	11.208	0.000	84	70225	1.60	1.78	
58 Trichloroethene	130	11.246	11.246	0.000	91	73807	1.60	1.43	
59 Dibromomethane	93	11.321	11.321	0.000	92	70708	1.60	1.60	
60 Dichlorobromomethane	83	11.477	11.477	0.000	92	132194	1.60	1.77	
61 1,4-Dioxane	88	11.499	11.499	0.000	81	32131	1.60	1.89	
62 Methyl methacrylate	41	11.591	11.591	0.000	83	96195	1.60	2.05	
63 Methylcyclohexane	83	12.033	12.033	0.000	88	97517	1.60	1.60	
64 4-Methyl-2-pentanone (MIBK)	43	12.470	12.470	0.000	97	200859	1.60	2.11	
65 cis-1,3-Dichloropropene	75	12.518	12.518	0.000	93	93958	1.60	1.77	
66 trans-1,3-Dichloropropene	75	13.235	13.235	0.000	88	73606	1.60	1.58	
67 Toluene	91	13.354	13.354	0.000	91	191462	1.60	1.41	
68 1,1,2-Trichloroethane	83	13.430	13.430	0.000	89	59990	1.60	1.46	
69 2-Hexanone	58	13.834	13.834	0.000	88	75905	1.60	1.85	
70 n-Octane	85	14.071	14.071	0.000	94	54752	1.60	1.45	
71 Chlorodibromomethane	129	14.136	14.136	0.000	94	122065	1.60	1.45	
72 Ethylene Dibromide	107	14.433	14.433	0.000	94	108761	1.60	1.48	
73 Tetrachloroethene	129	14.513	14.513	0.000	86	66718	1.60	1.34	
74 Chlorobenzene	112	15.392	15.392	0.000	92	148454	1.60	1.43	
75 2,3-Dimethylheptane	43	15.430	15.430	0.000	90	266622	1.60	1.93	
76 Ethylbenzene	91	15.689	15.689	0.000	98	254592	1.60	1.48	
77 m-Xylene & p-Xylene	91	15.856	15.856	0.000	96	391389	3.20	2.99	
78 n-Nonane	57	16.293	16.293	0.000	89	133461	1.60	1.67	
79 Bromoform	173	16.298	16.298	0.000	92	127315	1.60	1.39	
80 Styrene	104	16.320	16.320	0.000	96	147227	1.60	1.55	
81 o-Xylene	91	16.385	16.385	0.000	94	200753	1.60	1.48	
82 1,1,2,2-Tetrachloroethane	83	16.708	16.708	0.000	96	176102	1.60	1.59	
83 1,2,3-Trichloropropane	110	16.864	16.864	0.000	93	44426	1.60	1.48	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	16.972	16.972	0.000	98	287498	1.60	1.49	
85 N-Propylbenzene	120	17.522	17.522	0.000	99	83749	1.60	1.48	
86 2-Chlorotoluene	126	17.565	17.565	0.000	95	78627	1.60	1.51	
87 4-Ethyltoluene	105	17.684	17.684	0.000	98	283507	1.60	1.45	
88 1,3,5-Trimethylbenzene	120	17.760	17.760	0.000	92	123610	1.60	1.44	
89 Alpha Methyl Styrene	118	17.997	17.997	0.000	86	113953	1.60	1.49	
90 n-Decane	57	18.067	18.067	0.000	83	175826	1.60	1.73	
91 tert-Butylbenzene	119	18.196	18.196	0.000	94	279641	1.60	1.47	
92 1,2,4-Trimethylbenzene	105	18.213	18.213	0.000	95	248502	1.60	1.54	
93 sec-Butylbenzene	105	18.477	18.477	0.000	99	379213	1.60	1.50	
94 1,3-Dichlorobenzene	146	18.482	18.482	0.000	94	183745	1.60	1.51	
95 Benzyl chloride	91	18.563	18.563	0.000	96	198707	1.60	1.65	
96 1,4-Dichlorobenzene	146	18.574	18.574	0.000	94	180068	1.60	1.50	
97 4-Isopropyltoluene	119	18.644	18.644	0.000	97	323298	1.60	1.54	
98 1,2,3-Trimethylbenzene	105	18.692	18.692	0.000	98	243782	1.60	1.66	
99 Butylcyclohexane	83	18.752	18.752	0.000	87	214341	1.60	1.56	
101 1,2-Dichlorobenzene	146	18.941	18.941	0.000	94	181627	1.60	1.43	
100 2,3-Dihydroindene	117	18.941	18.941	0.000	92	242168	1.60	1.43	
102 Indene	116	19.075	19.075	0.000	87	208996	1.60	1.52	
103 n-Butylbenzene	91	19.086	19.086	0.000	96	330102	1.60	1.60	
104 Undecane	57	19.415	19.415	0.000	85	207310	1.60	1.63	
105 1,2-Dibromo-3-Chloropropane	157	19.555	19.555	0.000	84	89629	1.60	1.47	
106 1,2,4,5-Tetramethylbenzene	119	19.852	19.852	0.000	97	290752	1.60	1.50	
107 Dodecane	57	20.472	20.472	0.000	83	188955	1.60	1.67	
108 1,2,4-Trichlorobenzene	180	20.650	20.650	0.000	93	149214	1.60	1.44	
109 Naphthalene	128	20.785	20.785	0.000	99	305865	1.60	1.51	
110 Hexachlorobutadiene	225	21.006	21.006	0.000	92	145133	1.60	1.21	
111 1,2,3-Trichlorobenzene	180	21.076	21.076	0.000	93	146436	1.60	1.43	
112 2-Methylnaphthalene	142	21.820	21.820	0.000	99	202638	1.60	1.71	
113 1-Methylnaphthalene	142	21.955	21.955	0.000	98	301812	1.60	1.81	
A 116 C8 Range	1	14.058	(14.023-14.131)		0	736451	1.60	1.96	
S 117 Xylenes, Total	100				0		4.80	4.46	
S 118 1,2-Dichloroethene, Total	1				0		3.20	2.91	

QC Flag Legend

Processing Flags

s - Failed ISTD Recovery Test

Reagents:

40CV101P_00119	Amount Added: 80.00	Units: ml	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

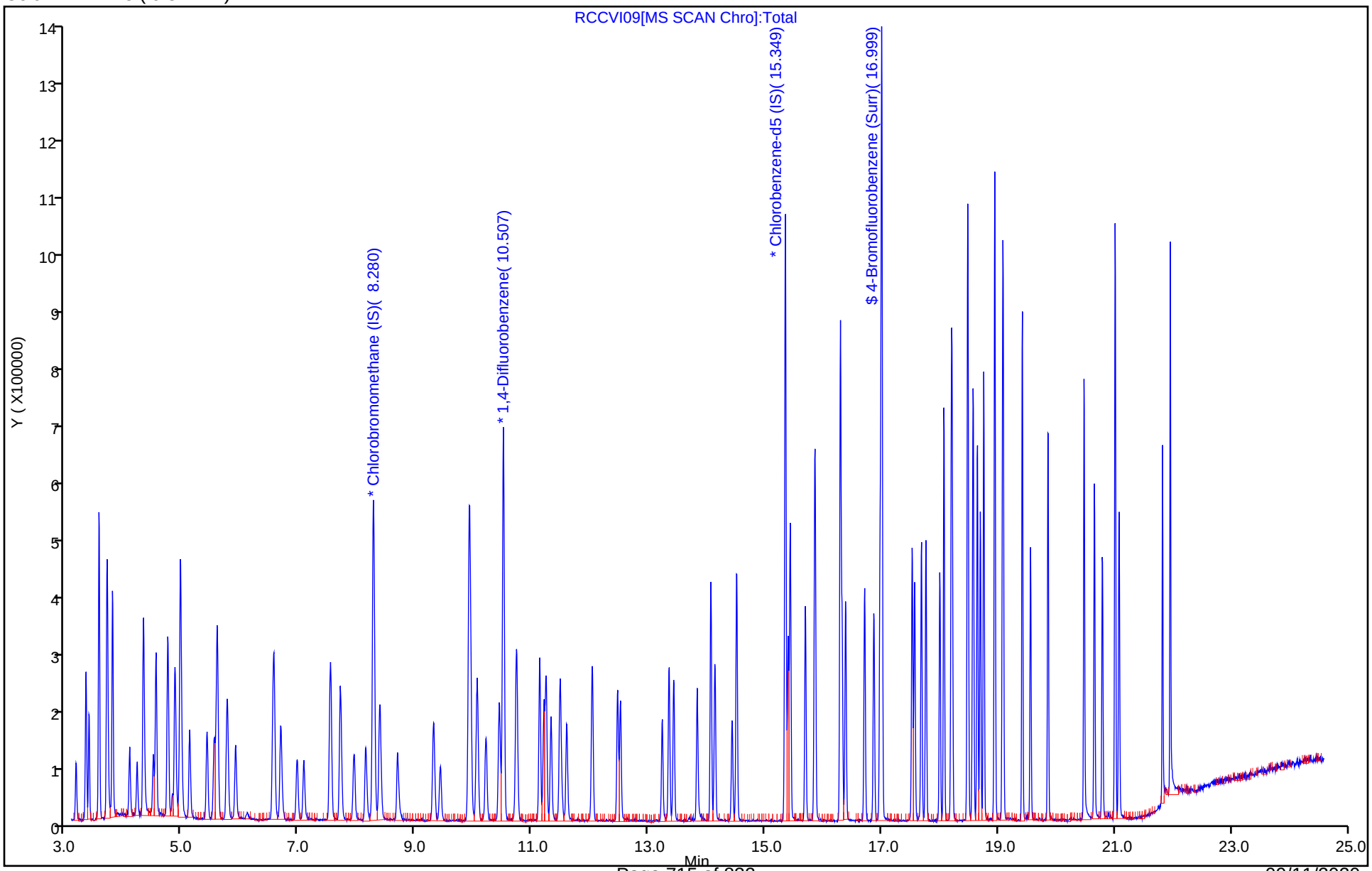
Report Date: 10-Sep-2020 11:02:16 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200908-16524.b\RCCVI09.D

Injection Date:	09-Sep-2020 11:27:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	CCVIS			Worklist Smp#:	2
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01BFB.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	01-Sep-2020 16:42:30	ALS Bottle#:	16	Worklist Smp#:	1
Injection Vol:	500.0 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016453-001				
Misc. Info.:	BFB				
Operator ID:	AFB	Instrument ID:	MG		
Method:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\MG_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	02-Sep-2020 13:24:52	Calib Date:	02-Sep-2020 03:27:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1046				
First Level Reviewer: barlozhetskayaa		Date:	02-Sep-2020 13:24:52		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
$ 5 BFB	95	5.025	5.025	0.000	0	331196	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

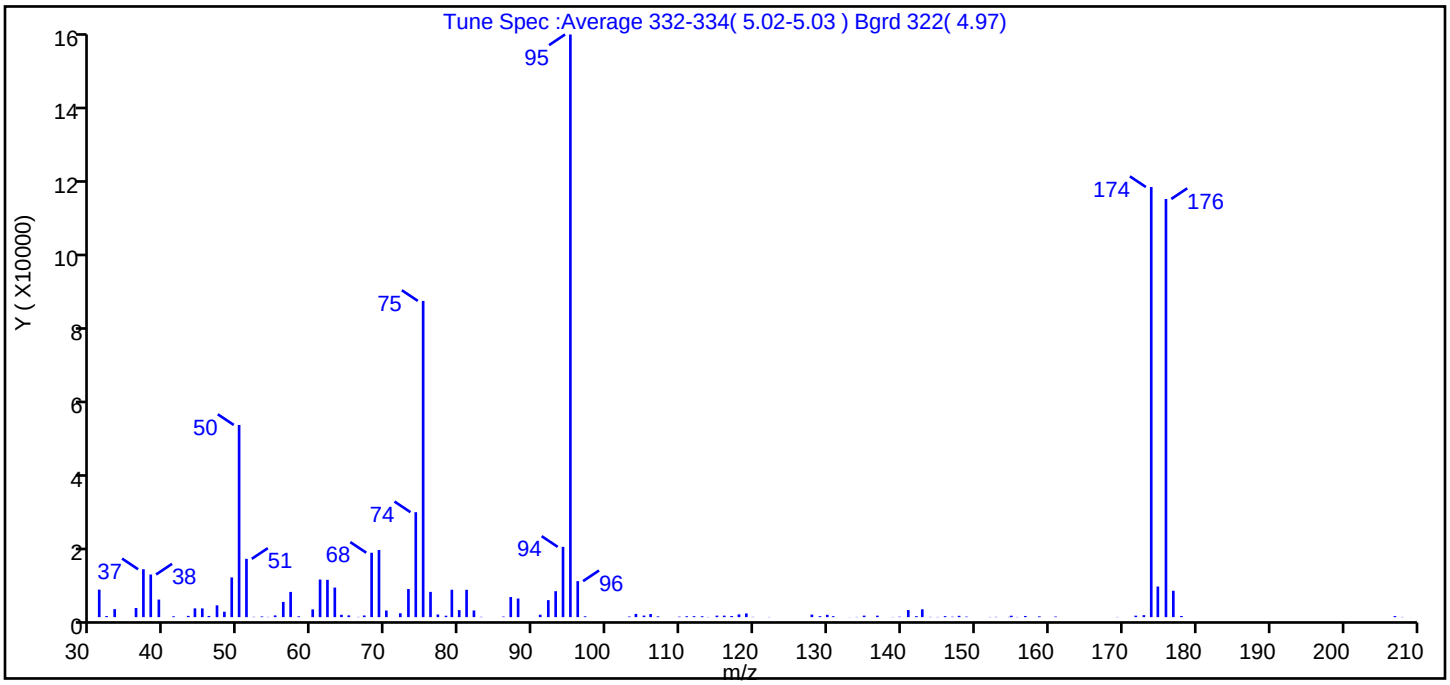
40MXBFB_00001 Amount Added: 40.00 Units: mL

MS Tune Report

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01BFB.D
Injection Date: 01-Sep-2020 16:42:30 Instrument ID: MG
Lims ID: BFB
Client ID:
Operator ID: AFB ALS Bottle#: 16 Worklist Smp#: 1
Injection Vol: 500.0 mL Dil. Factor: 1.0000
Method: MG_TO15 Limit Group: MSA TO14A_15 Routine ICAL
Tune Method: BFB Method 8260

$ 5 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	33.0
75	30 to 60% of m/z 95	54.3
96	5 to 9% of m/z 95	6.2
173	Less than 2% of m/z 174	0.3 (0.5)
174	50 to 120% of m/z 95	73.8
175	5 to 9% of m/z 174	5.3 (7.1)
176	Greater than 95% but less than 101% of m/z 174	71.8 (97.2)
177	5 to 9% of m/z 176	4.5 (6.3)

Data File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01BFB.D\MG_TO15.rslt\spectra.d
Injection Date: 01-Sep-2020 16:42:30
Spectrum: Tune Spec :Average 332-334(5.02-5.03) Bgrd 322(4.97)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 112

m/z	Y	m/z	Y	m/z	Y	m/z	Y
31.00	7094	64.00	607	97.00	217	141.00	1824
32.00	288	65.00	459	103.00	159	142.00	261
33.00	2064	66.00	60	104.00	836	143.00	2018
36.00	2368	67.00	427	105.00	400	144.00	69
37.00	12353	68.00	16608	106.00	799	145.00	58
38.00	10999	69.00	17320	107.00	192	146.00	259
39.00	4535	70.00	1704	110.00	124	147.00	103
41.00	221	72.00	1003	111.00	228	148.00	344
43.00	327	73.00	7253	112.00	247	149.00	136
44.00	2263	74.00	27072	113.00	233	152.00	54
45.00	2256	75.00	81560	114.00	51	153.00	72
46.00	307	76.00	6516	115.00	391	155.00	71
47.00	3048	77.00	684	116.00	382	155.00	369
48.00	1395	78.00	371	117.00	283	156.00	54
49.00	10242	79.00	7062	118.00	712	157.00	303
50.00	49568	80.00	1809	119.00	958	159.00	205
51.00	15036	81.00	7049	120.00	66	161.00	156
52.00	82	82.00	1725	122.00	51	169.00	51
53.00	180	83.00	79	128.00	659	172.00	381
54.00	61	86.00	140	129.00	240	173.00	510
55.00	444	87.00	5191	130.00	600	174.00	110928
56.00	3922	88.00	4807	131.00	243	175.00	7893
57.00	6505	91.00	619	133.00	25	176.00	107848
58.00	203	92.00	4387	134.00	56	177.00	6803
60.00	2003	93.00	6692	135.00	391	178.00	305
61.00	9698	94.00	18128	137.00	382	207.00	278
62.00	9630	95.00	150272	139.00	50	208.00	54
63.00	7632	96.00	9288	140.00	108	209.00	9

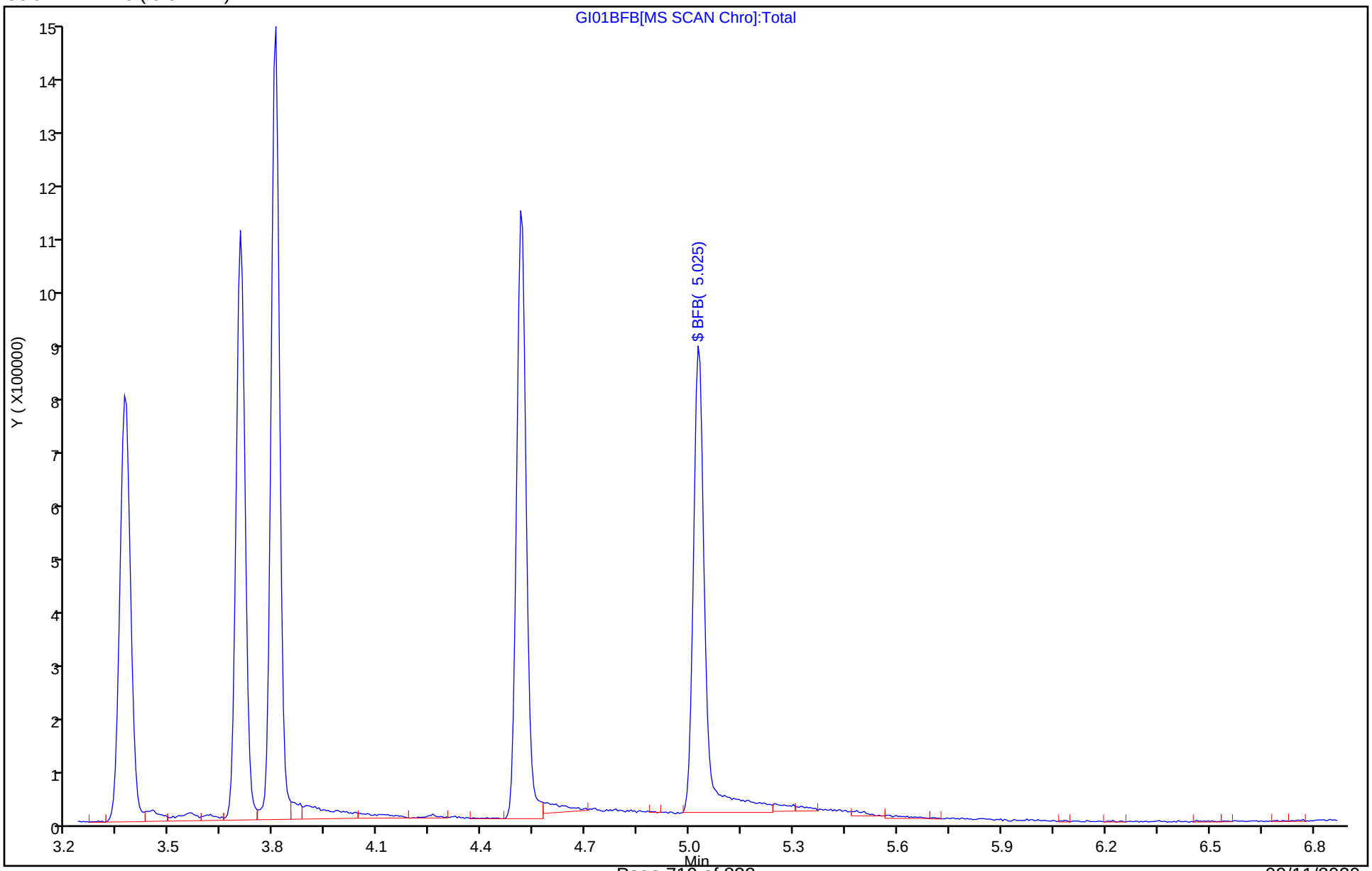
Report Date: 02-Sep-2020 13:24:52 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01BFB.D

Injection Date:	01-Sep-2020 16:42:30	Instrument ID:	MG	Operator ID:	AFB
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	500.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GBFBI08Z.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	08-Sep-2020 14:50:30	ALS Bottle#:	16	Worklist Smp#:	1
Injection Vol:	500.0 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016519-001				
Misc. Info.:	BFB				
Operator ID:	HMT	Instrument ID:	MG		
Method:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\MG_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	09-Sep-2020 14:14:21	Calib Date:	02-Sep-2020 03:27:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1034				
First Level Reviewer: barlozhetskayaa		Date:	09-Sep-2020 11:48:11		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
$ 5 BFB	95	5.009	5.009	0.000	0	239811	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

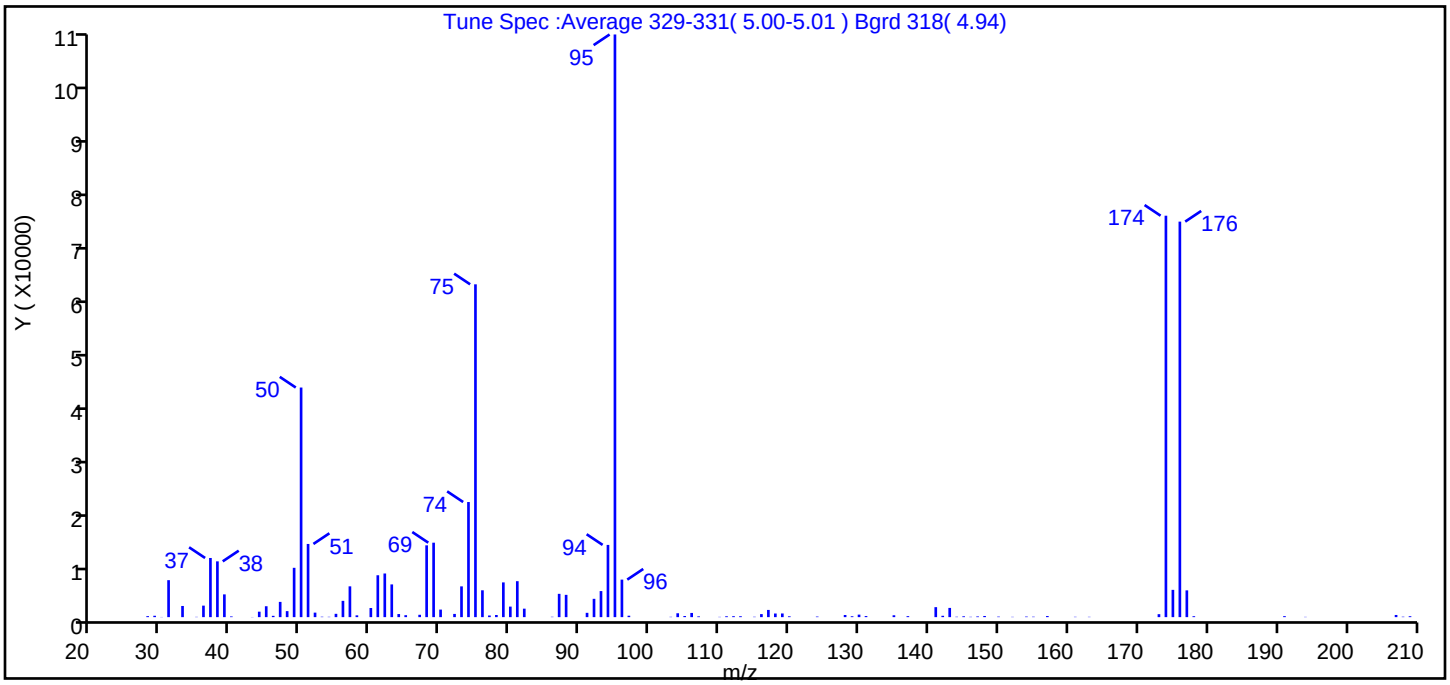
40MXBFB_00001 Amount Added: 40.00 Units: ml

MS Tune Report

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GBFBI08Z.D
Injection Date: 08-Sep-2020 14:50:30 Instrument ID: MG
Lims ID: BFB
Client ID:
Operator ID: HMT ALS Bottle#: 16 Worklist Smp#: 1
Injection Vol: 500.0 mL Dil. Factor: 1.0000
Method: MG_TO15 Limit Group: MSA TO14A_15 Routine ICAL
Tune Method: BFB Method 8260

$ 5 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	39.4
75	30 to 60% of m/z 95	57.1
96	5 to 9% of m/z 95	6.4
173	Less than 2% of m/z 174	0.5 (0.7)
174	50 to 120% of m/z 95	68.9
175	5 to 9% of m/z 174	4.7 (6.8)
176	Greater than 95% but less than 101% of m/z 174	67.9 (98.5)
177	5 to 9% of m/z 176	4.6 (6.8)

Data File: \\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GBFBI08Z.D\MG_TO15.rslt\spectra.d
Injection Date: 08-Sep-2020 14:50:30
Spectrum: Tune Spec :Average 329-331(5.00-5.01) Bgrd 318(4.94)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 106

m/z	Y	m/z	Y	m/z	Y	m/z	Y
28.00	183	60.00	1670	94.00	13197	142.00	246
29.00	252	61.00	7654	95.00	106456	143.00	1686
30.00	32	62.00	7975	96.00	6855	144.00	74
31.00	6755	63.00	5981	97.00	262	145.00	153
33.00	2040	64.00	565	103.00	59	146.00	61
35.00	52	65.00	357	104.00	710	147.00	129
36.00	2103	67.00	432	105.00	204	148.00	211
37.00	10810	68.00	13121	106.00	767	150.00	96
38.00	10193	69.00	13603	107.00	139	152.00	54
39.00	4160	70.00	1381	110.00	50	154.00	105
40.00	128	72.00	589	111.00	158	155.00	80
43.00	28	73.00	5623	112.00	173	157.00	200
44.00	998	74.00	21032	113.00	164	161.00	62
45.00	1993	75.00	60808	115.00	69	163.00	58
46.00	238	76.00	4906	116.00	556	173.00	542
47.00	2787	77.00	302	117.00	1318	174.00	73344
48.00	1100	78.00	392	118.00	663	175.00	4986
49.00	9013	79.00	6348	119.00	671	176.00	72264
50.00	41952	80.00	1925	120.00	151	177.00	4893
51.00	13372	81.00	6570	124.00	106	178.00	168
52.00	825	82.00	1549	128.00	391	191.00	180
53.00	78	86.00	66	129.00	160	194.00	50
54.00	62	87.00	4258	130.00	460	207.00	395
55.00	607	88.00	4072	131.00	201	208.00	81
56.00	2977	91.00	788	135.00	342	209.00	166
57.00	5628	92.00	3347	137.00	180		
58.00	329	93.00	4762	141.00	1825		

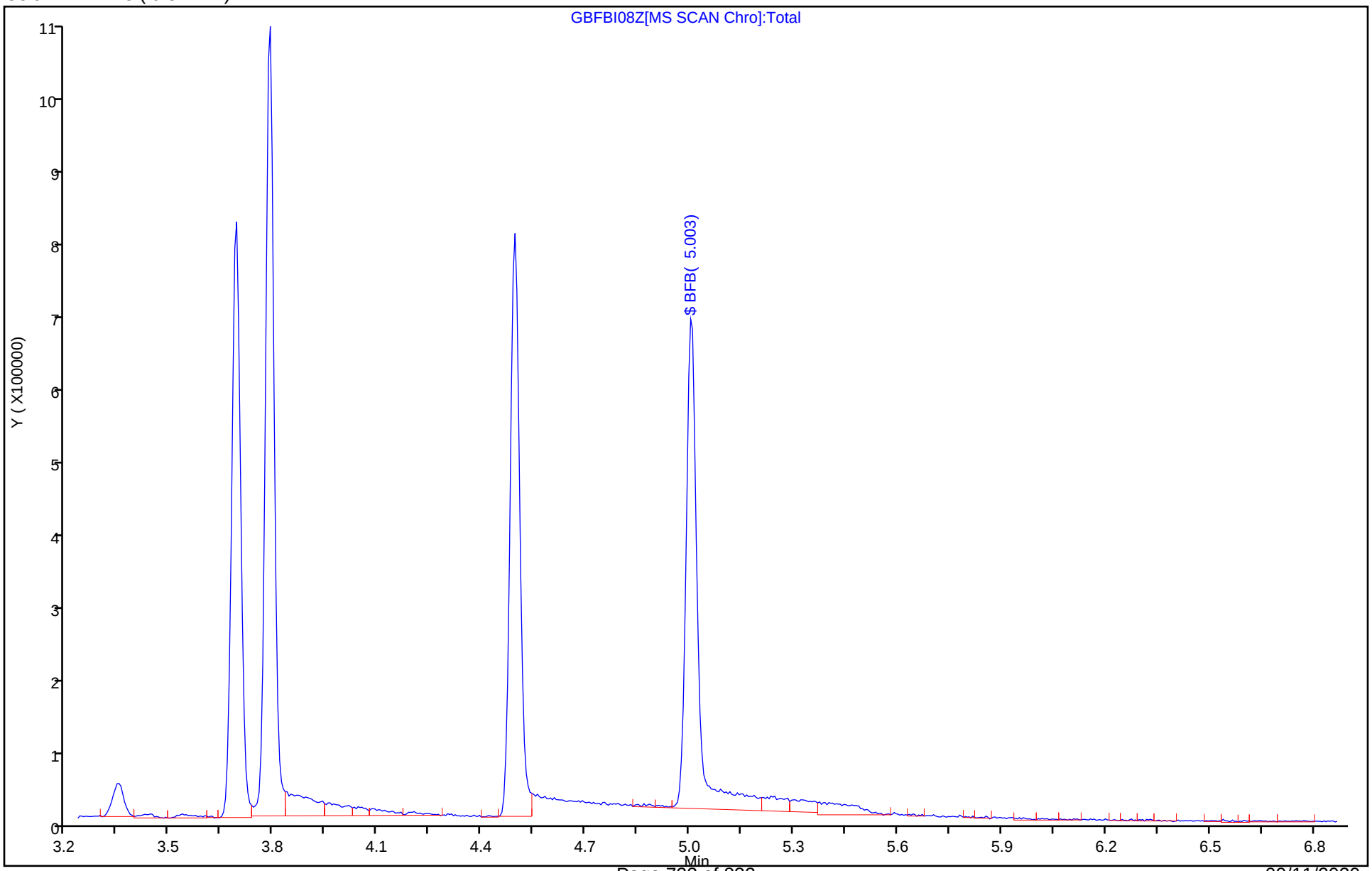
Report Date: 09-Sep-2020 14:14:22 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GBFBI08Z.D

Injection Date:	08-Sep-2020 14:50:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	500.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HBFBH29.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	29-Aug-2020 10:00:30	ALS Bottle#:	26	Worklist Smp#:	1
Injection Vol:	500.0 mL	Dil. Factor:	1.0000		
Sample Info:					
Misc. Info.:	bfb				
Operator ID:	HMT	Instrument ID:	MH		
Method:	\\chromfs\Knoxville\ChromData\MH\20200829-16451.b\MH_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	31-Aug-2020 12:29:54	Calib Date:	29-Aug-2020 23:57:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1064				
First Level Reviewer: barlozhetskayaa		Date:	31-Aug-2020 12:29:54		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
$ 5 BFB	95	5.363	5.363	0.000	0	77298	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

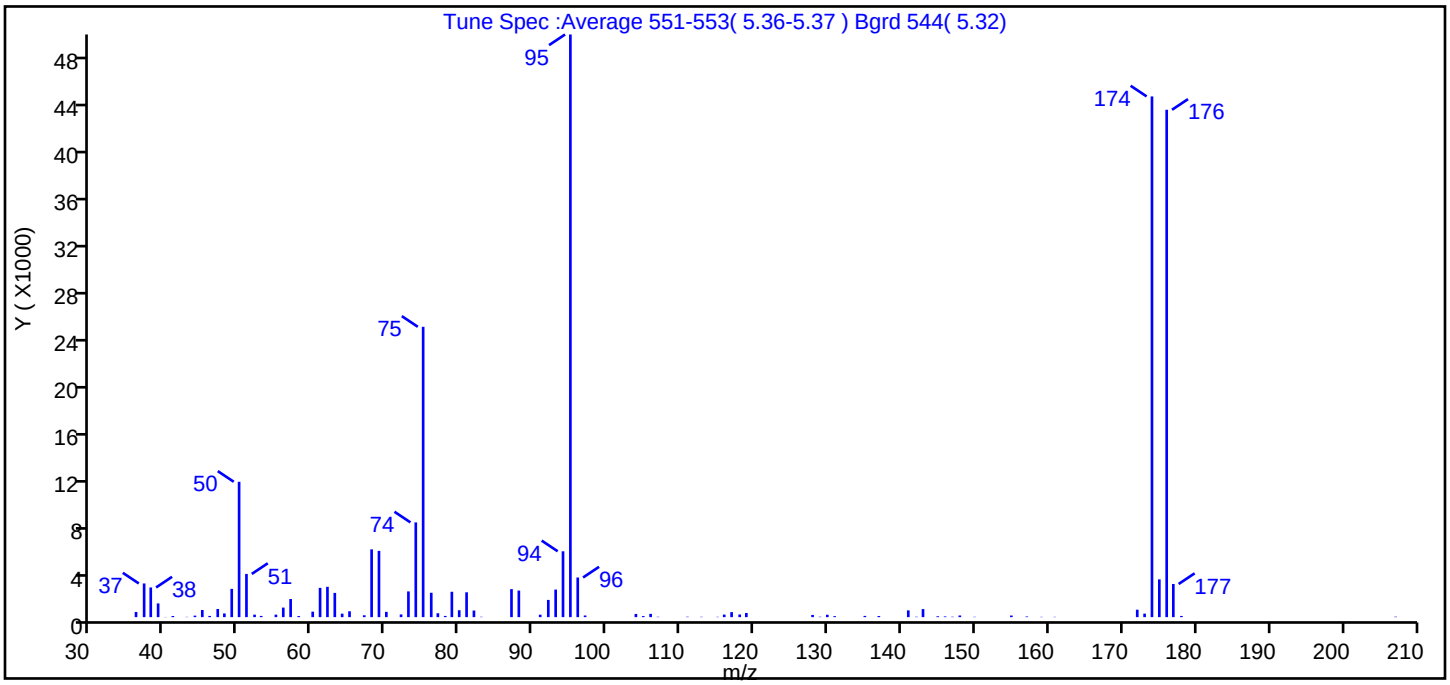
40MXBFB_00001 Amount Added: 40.00 Units: mL

MS Tune Report

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HBFBH29.D
Injection Date: 29-Aug-2020 10:00:30 Instrument ID: MH
Lims ID: BFB
Client ID:
Operator ID: HMT ALS Bottle#: 26 Worklist Smp#: 1
Injection Vol: 500.0 mL Dil. Factor: 1.0000
Method: MH_TO15 Limit Group: MSA TO14A_15 Routine ICAL
Tune Method: BFB Method 8260

$ 5 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	23.2
75	30 to 60% of m/z 95	49.8
96	5 to 9% of m/z 95	6.8
173	Less than 2% of m/z 174	0.6 (0.7)
174	50 to 120% of m/z 95	89.4
175	5 to 9% of m/z 174	6.5 (7.3)
176	Greater than 95% but less than 101% of m/z 174	87.1 (97.4)
177	5 to 9% of m/z 176	5.7 (6.5)

Data File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HBFBH29.D\MH_TO15.rslt\spectra.d
Injection Date: 29-Aug-2020 10:00:30
Spectrum: Tune Spec :Average 551-553(5.36-5.37) Bgrd 544(5.32)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 89

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	446	62.00	2600	92.00	1478	141.00	581
37.00	2888	63.00	2080	93.00	2364	142.00	36
38.00	2545	64.00	298	94.00	5647	143.00	692
39.00	1178	65.00	502	95.00	49960	145.00	74
40.00	14	67.00	161	96.00	3400	146.00	60
41.00	97	68.00	5812	97.00	141	147.00	35
43.00	23	69.00	5684	104.00	275	148.00	142
44.00	130	70.00	454	105.00	91	150.00	28
45.00	611	72.00	234	106.00	281	155.00	137
46.00	104	73.00	2206	107.00	31	157.00	56
47.00	697	74.00	8123	111.00	36	159.00	25
48.00	317	75.00	24896	113.00	30	161.00	26
49.00	2424	76.00	2091	115.00	28	172.00	637
50.00	11606	77.00	335	116.00	219	173.00	301
51.00	3705	78.00	105	117.00	430	174.00	44648
52.00	213	79.00	2175	118.00	228	175.00	3239
53.00	106	80.00	594	119.00	358	176.00	43504
55.00	214	81.00	2131	128.00	190	177.00	2843
56.00	818	82.00	568	129.00	34	178.00	103
57.00	1556	83.00	30	130.00	204	207.00	40
58.00	90	87.00	2404	131.00	83		
60.00	472	88.00	2278	135.00	107		
61.00	2512	91.00	212	137.00	95		

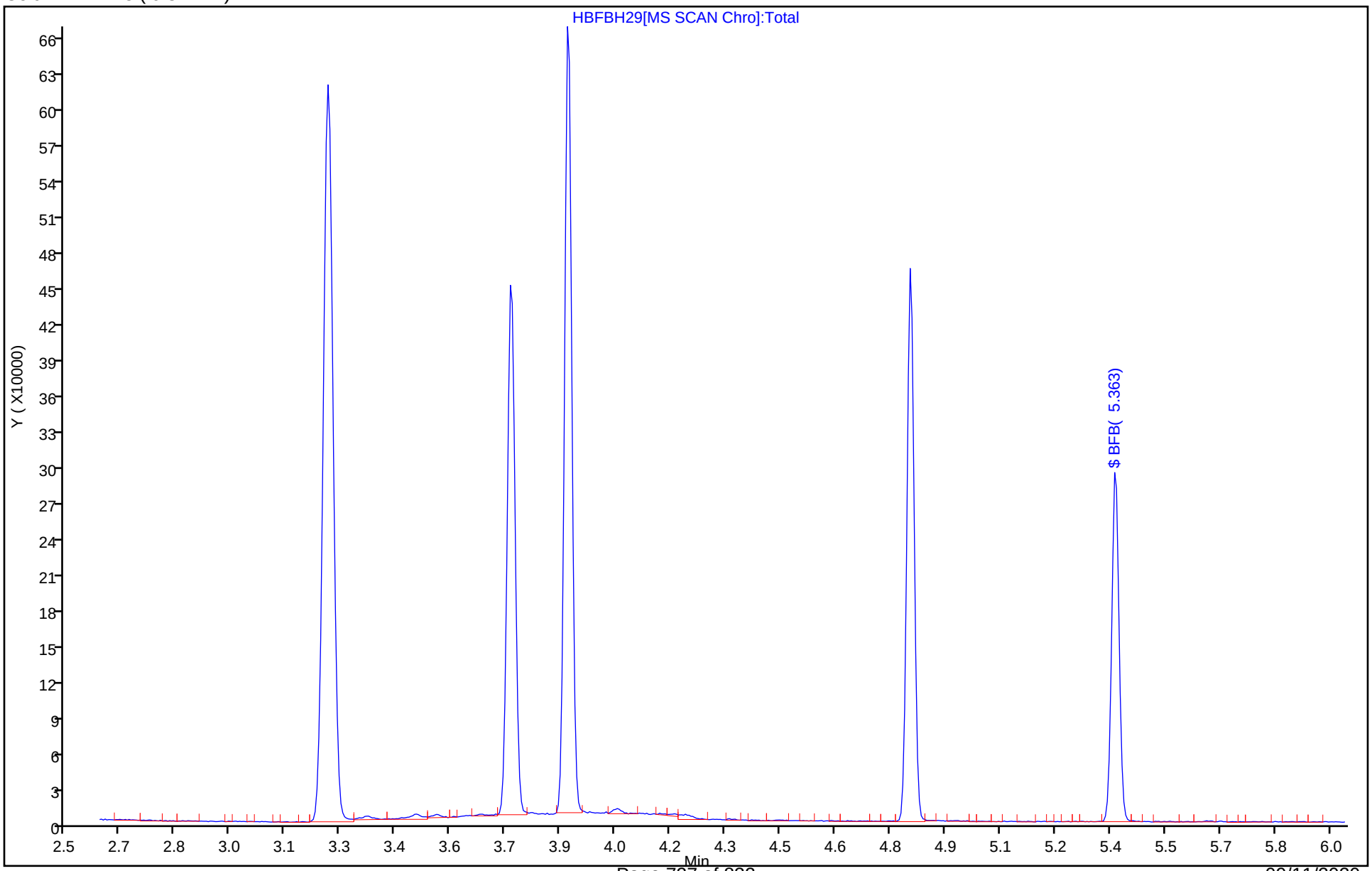
Report Date: 31-Aug-2020 12:29:54 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HBFBH29.D

Injection Date:	29-Aug-2020 10:00:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	500.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	26
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HBFBI08B.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	08-Sep-2020 12:40:30	ALS Bottle#:	20	Worklist Smp#:	1
Injection Vol:	500.0 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016517-006				
Misc. Info.:	BFB				
Operator ID:	HMT	Instrument ID:	MH		
Method:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\MH_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	09-Sep-2020 16:56:10	Calib Date:	29-Aug-2020 23:57:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1034				
First Level Reviewer: barlozhetskayaa		Date:	09-Sep-2020 16:56:10		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
$ 5 BFB	95	4.946	4.946	0.000	0	137702	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

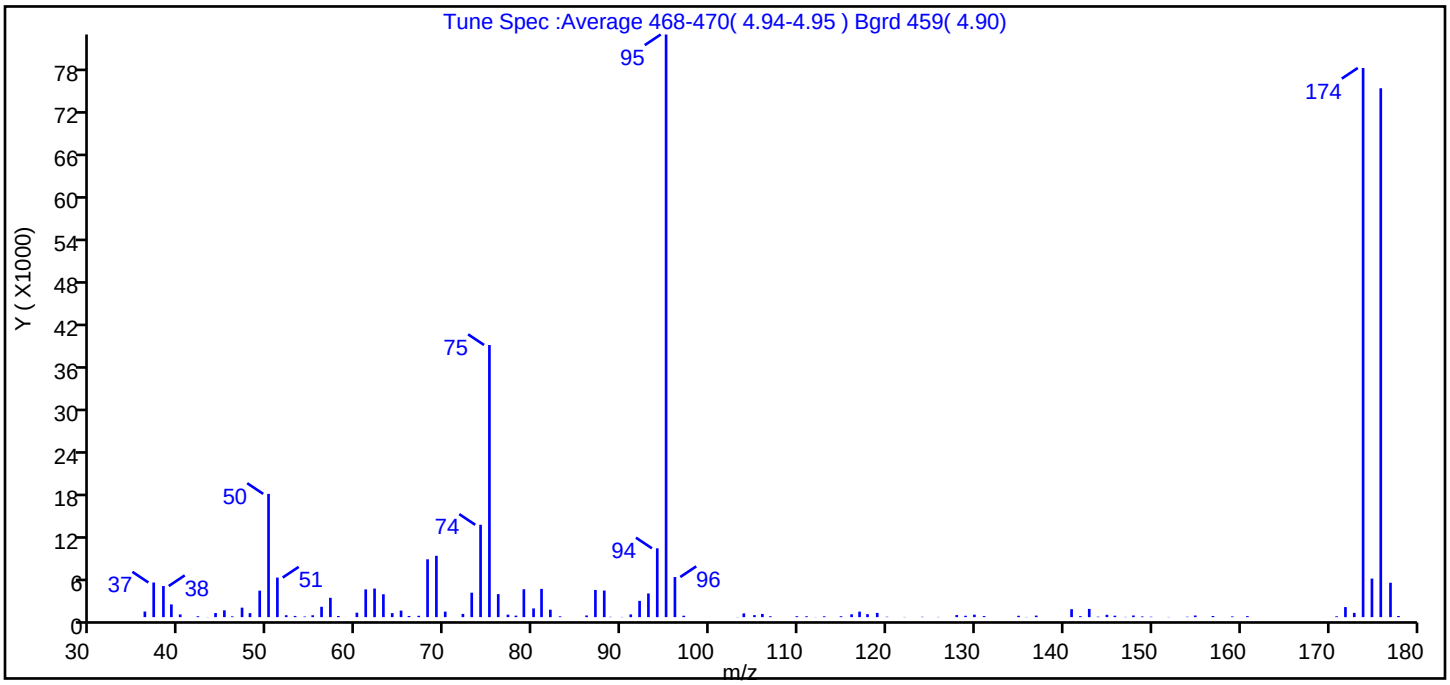
40MXBFB_00001 Amount Added: 40.00 Units: mL

MS Tune Report

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HBFBI08B.D
Injection Date: 08-Sep-2020 12:40:30 Instrument ID: MH
Lims ID: BFB
Client ID:
Operator ID: HMT ALS Bottle#: 20 Worklist Smp#: 1
Injection Vol: 500.0 mL Dil. Factor: 1.0000
Method: MH_TO15 Limit Group: MSA TO14A_15 Routine ICAL
Tune Method: BFB Method 8260

$ 5 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	21.2
75	30 to 60% of m/z 95	46.7
96	5 to 9% of m/z 95	6.9
173	Less than 2% of m/z 174	0.7 (0.8)
174	50 to 120% of m/z 95	94.3
175	5 to 9% of m/z 174	6.6 (7.0)
176	Greater than 95% but less than 101% of m/z 174	90.8 (96.3)
177	5 to 9% of m/z 176	5.9 (6.5)

Data File: \\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HBFBI08B.D\MH_TO15.rslt\spectra.d
Injection Date: 08-Sep-2020 12:40:30
Spectrum: Tune Spec :Average 468-470(4.94-4.95) Bgrd 459(4.90)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 106

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	796	65.00	931	95.00	82520	137.00	221
37.00	4908	66.00	167	96.00	5681	141.00	1127
38.00	4405	67.00	193	97.00	201	142.00	136
39.00	1803	68.00	8192	103.00	27	143.00	1168
40.00	386	69.00	8690	104.00	529	144.00	69
42.00	128	70.00	784	105.00	283	145.00	331
43.00	21	72.00	457	106.00	456	146.00	204
44.00	585	73.00	3467	107.00	120	147.00	34
45.00	965	74.00	13081	110.00	135	148.00	234
46.00	110	75.00	38544	111.00	123	149.00	98
47.00	1344	76.00	3263	112.00	19	150.00	61
48.00	569	77.00	352	113.00	120	152.00	30
49.00	3752	78.00	214	115.00	127	154.00	57
50.00	17456	79.00	3953	116.00	401	155.00	233
51.00	5606	80.00	1235	117.00	781	157.00	163
52.00	274	81.00	4002	118.00	426	159.00	103
53.00	173	82.00	1053	119.00	601	161.00	143
54.00	88	83.00	112	120.00	56	171.00	123
55.00	265	86.00	239	122.00	28	172.00	1425
56.00	1467	87.00	3851	124.00	49	173.00	602
57.00	2739	88.00	3769	126.00	30	174.00	77776
58.00	157	89.00	45	128.00	294	175.00	5459
60.00	630	90.00	30	129.00	197	176.00	74904
61.00	3927	91.00	386	130.00	350	177.00	4875
62.00	4049	92.00	2304	131.00	150	178.00	163
63.00	3243	93.00	3353	135.00	195		
64.00	569	94.00	9748	136.00	26		

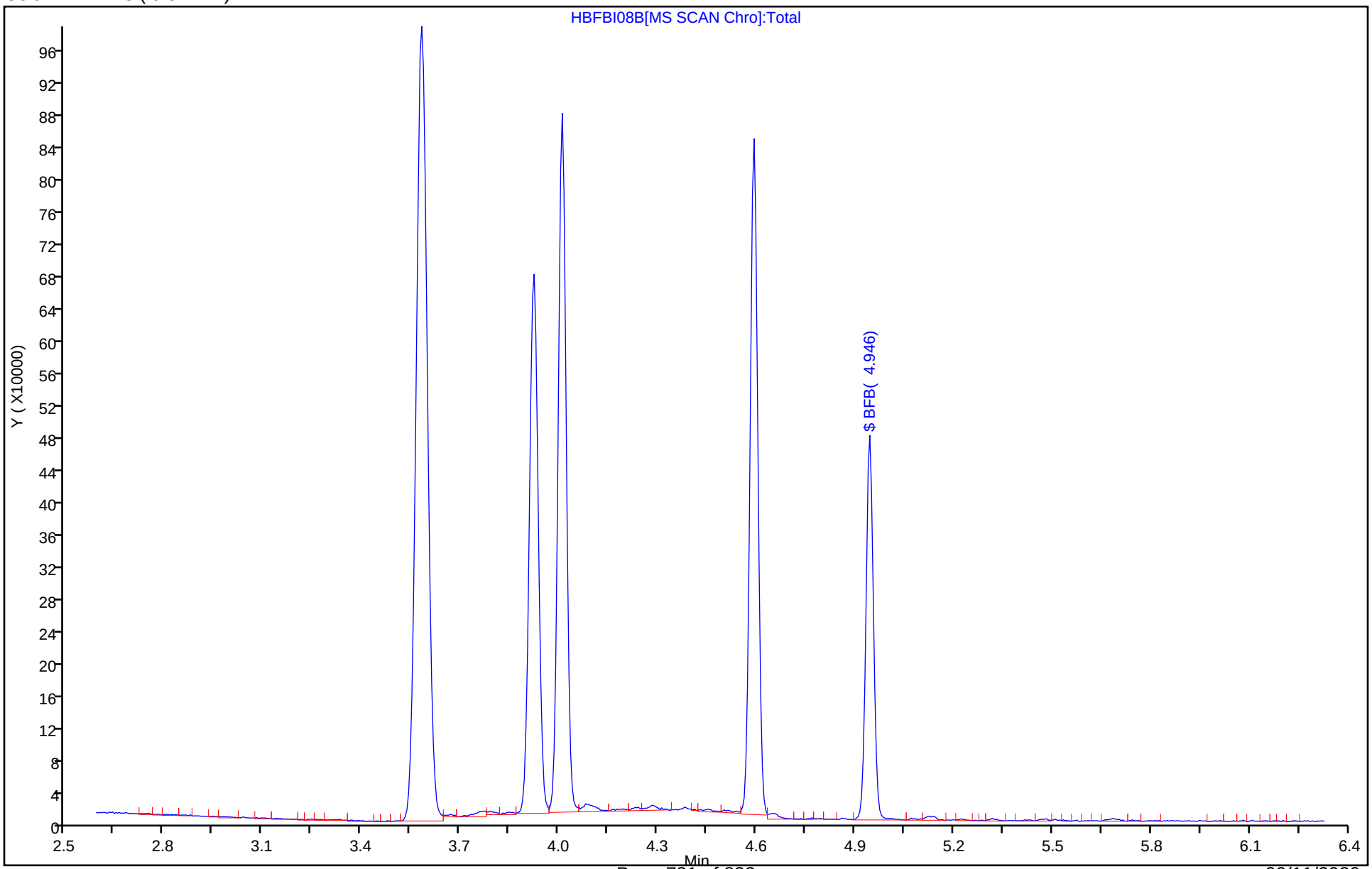
Report Date: 09-Sep-2020 16:56:10 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HBFBI08B.D

Injection Date:	08-Sep-2020 12:40:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	500.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH287BLK2.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	28-Aug-2020 12:43:30	ALS Bottle#:	16	Worklist Smp#:	1
Injection Vol:	500.0 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016373-064				
Misc. Info.:	BFB				
Operator ID:	HMT	Instrument ID:	MR		
Method:	\\chromfs\Knoxville\ChromData\MR\20200827-16425.b\MR_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	31-Aug-2020 09:23:26	Calib Date:	29-Aug-2020 00:02:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1014				
First Level Reviewer: tajh		Date:	28-Aug-2020 13:14:46		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
$ 5 BFB	95	17.005	17.005	0.000	0	668146	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

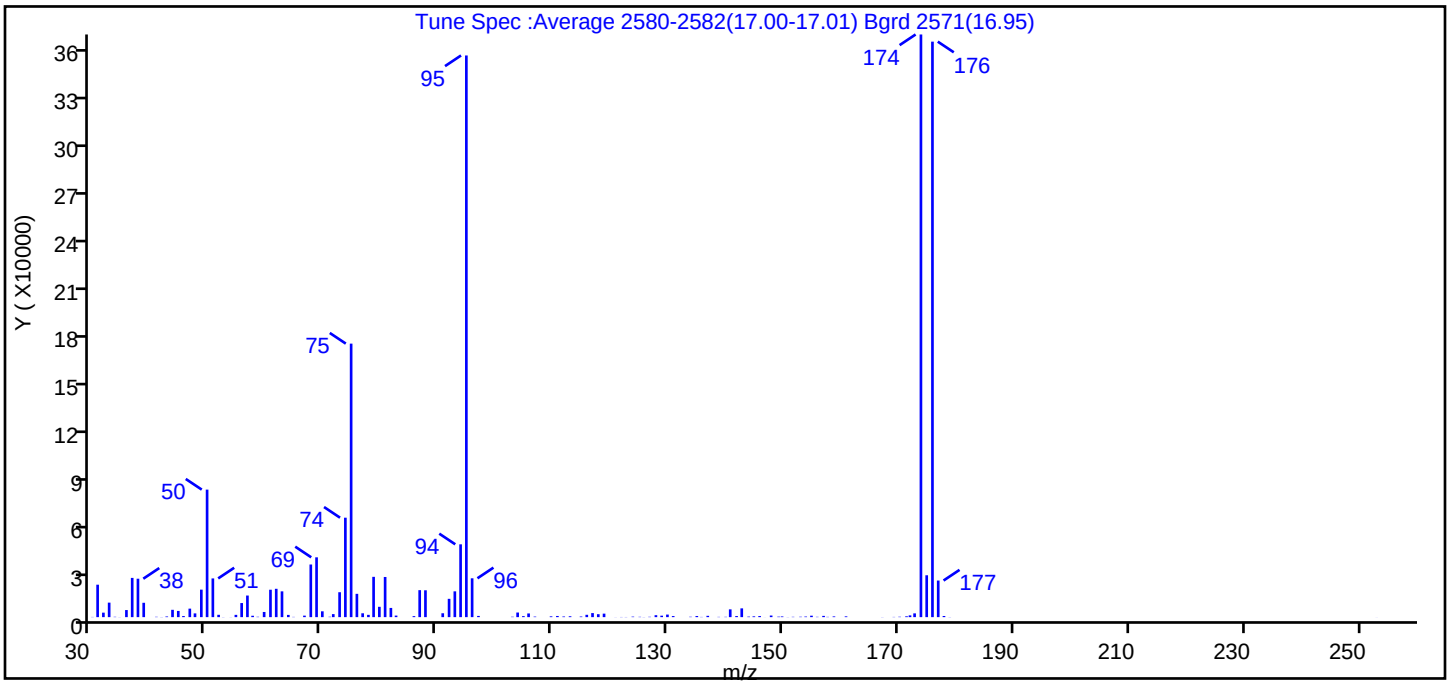
40MXBFB_00001 Amount Added: 40.00 Units: mL

MS Tune Report

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH287BLK2.D
Injection Date: 28-Aug-2020 12:43:30 Instrument ID: MR
Lims ID: BFB
Client ID:
Operator ID: HMT ALS Bottle#: 16 Worklist Smp#: 1
Injection Vol: 500.0 mL Dil. Factor: 1.0000
Method: MR_TO15 Limit Group: MSA TO14A_15 Routine ICAL
Tune Method: BFB Method 8260

$ 5 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	22.7
75	30 to 60% of m/z 95	48.7
96	5 to 9% of m/z 95	6.9
173	Less than 2% of m/z 174	0.7 (0.6)
174	50 to 120% of m/z 95	103.7
175	5 to 9% of m/z 174	7.5 (7.2)
176	Greater than 95% but less than 101% of m/z 174	102.5 (98.8)
177	5 to 9% of m/z 176	6.5 (6.4)

Data File: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH287BLK2.D\MR_TO15.rslt\spectra.d
Injection Date: 28-Aug-2020 12:43:30
Spectrum: Tune Spec :Average 2580-2582(17.00-17.01) Bgrd 2571(16.95)
Base Peak: 173.90
Minimum % Base Peak: 0
Number of Points: 126

m/z	Y	m/z	Y	m/z	Y	m/z	Y
30.00	126	63.00	16127	105.00	627	144.00	331
31.00	20288	64.00	1396	106.00	2312	145.00	499
32.00	2810	65.00	153	107.00	341	146.00	677
33.00	9071	67.00	946	110.00	500	147.00	29
34.00	217	68.00	32912	111.00	733	148.00	1002
35.00	68	69.00	37400	112.00	409	149.00	304
36.00	4434	70.00	3646	113.00	549	150.00	433
37.00	24536	71.00	235	115.00	386	151.00	66
38.00	24024	72.00	1898	116.00	1468	152.00	204
39.00	8979	73.00	15579	117.00	2537	153.00	255
41.00	218	74.00	62176	118.00	1840	154.00	376
42.00	82	75.00	171008	119.00	2192	155.00	907
43.00	422	76.00	14572	121.00	50	156.00	199
44.00	4583	77.00	2415	122.00	105	157.00	782
45.00	3883	78.00	1435	123.00	98	158.00	170
46.00	677	79.00	25200	124.00	319	159.00	455
47.00	5318	80.00	6465	125.00	204	161.00	489
48.00	2344	81.00	25112	126.00	72	167.00	70
49.00	17200	82.00	5760	127.00	217	169.00	139
50.00	79728	83.00	977	128.00	1216	170.00	250
51.00	24208	86.00	628	129.00	916	171.00	518
52.00	1465	87.00	16872	130.00	1609	172.00	1100
53.00	75	88.00	16792	131.00	674	173.00	2359
54.00	55	91.00	2429	134.00	248	174.00	364288
55.00	1428	92.00	11453	135.00	701	175.00	26184
56.00	8811	93.00	16129	136.00	133	176.00	359808
57.00	13509	94.00	45528	137.00	824	177.00	22888
58.00	865	95.00	351168	139.00	163	178.00	714
59.00	230	96.00	24288	140.00	193	179.00	80
60.00	3230	97.00	760	141.00	4866	253.00	30
61.00	17144	103.00	253	142.00	680		
62.00	17720	104.00	2887	143.00	5491		

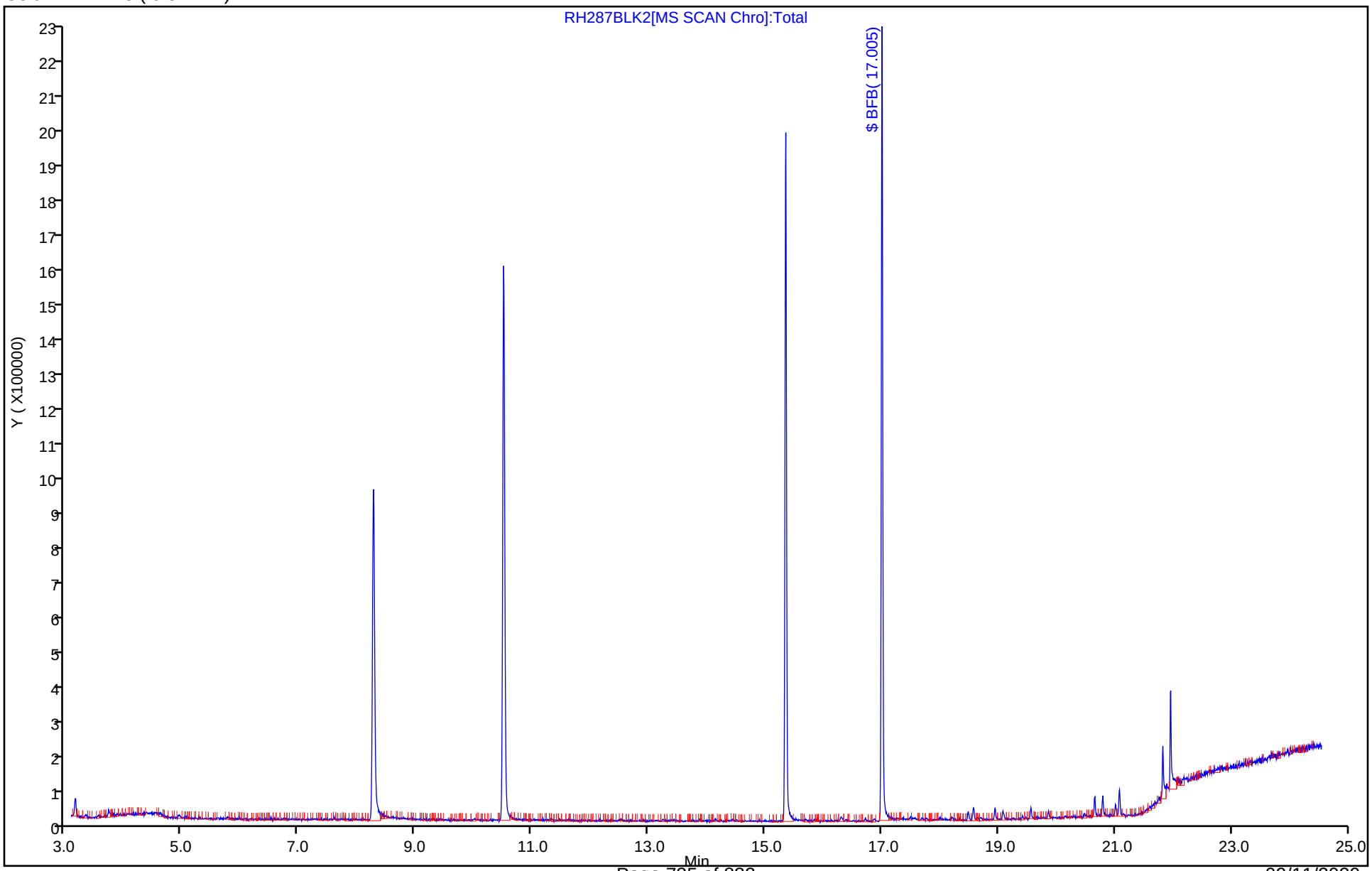
Report Date: 31-Aug-2020 09:23:26 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH287BLK2.D

Injection Date:	28-Aug-2020 12:43:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	500.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MR\20200908-16524.b\RBFBI09.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	09-Sep-2020 10:50:30	ALS Bottle#:	16	Worklist Smp#:	1
Injection Vol:	500.0 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016515-001				
Misc. Info.:	BFB				
Operator ID:	HMT	Instrument ID:	MR		
Method:	\\chromfs\Knoxville\ChromData\MR\20200908-16524.b\MR_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	10-Sep-2020 11:00:55	Calib Date:	29-Aug-2020 00:02:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1028				
First Level Reviewer: khachitpongpanits		Date:	10-Sep-2020 11:00:55		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
$ 5 BFB	95	5.941	5.941	0.000	0	197558	NR	NR	8

QC Flag Legend

Processing Flags
NR - Missing Quant Standard
8 - Failed MS Tune Ratio Test

Reagents:

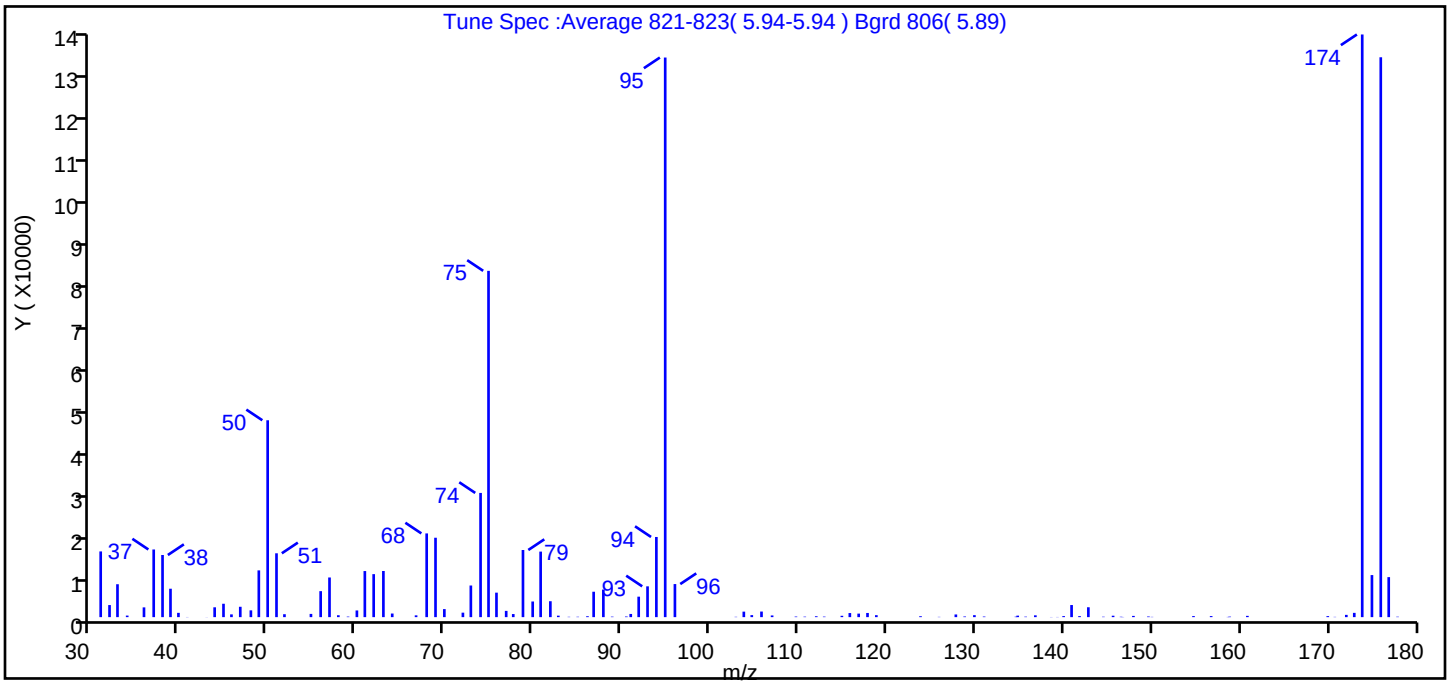
40MXBFB_00001 Amount Added: 40.00 Units: mL

MS Tune Report

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200908-16524.b\RBFBI09.D
Injection Date: 09-Sep-2020 10:50:30 Instrument ID: MR
Lims ID: BFB
Client ID:
Operator ID: HMT ALS Bottle#: 16 Worklist Smp#: 1
Injection Vol: 500.0 mL Dil. Factor: 1.0000
Method: MR_TO15 Limit Group: MSA TO14A_15 Routine ICAL
Tune Method: BFB Method 8260

$ 5 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	35.2
75	30 to 60% of m/z 95	61.9*
96	5 to 9% of m/z 95	5.9
173	Less than 2% of m/z 174	0.8 (0.7)
174	50 to 120% of m/z 95	104.1
175	5 to 9% of m/z 174	7.5 (7.2)
176	Greater than 95% but less than 101% of m/z 174	100.0 (96.1)
177	5 to 9% of m/z 176	7.1 (7.1)

Data File: \\chromfs\Knoxville\ChromData\MR\20200908-16524.b\RBFBI09.D\MR_TO15.rslt\spectra.d
Injection Date: 09-Sep-2020 10:50:30
Spectrum: Tune Spec :Average 821-823(5.94-5.94) Bgrd 806(5.89)
Base Peak: 173.80
Minimum % Base Peak: 0
Number of Points: 110

m/z	Y	m/z	Y	m/z	Y	m/z	Y
31.00	15686	63.00	11014	94.00	19136	139.00	43
32.00	2885	64.00	864	95.00	133568	140.00	246
33.00	7857	67.00	429	96.00	7897	141.00	2890
34.00	374	68.00	19984	103.00	77	142.00	244
36.00	2332	69.00	18952	104.00	1315	143.00	2360
37.00	16150	70.00	1919	105.00	482	144.00	100
38.00	14832	72.00	1071	106.00	1337	146.00	339
39.00	6783	73.00	7551	107.00	405	146.00	91
40.00	1025	74.00	29648	110.00	142	147.00	41
41.00	38	75.00	82656	111.00	117	148.00	295
43.00	22	76.00	5845	112.00	212	150.00	153
44.00	2349	77.00	1494	113.00	127	150.00	65
45.00	3198	78.00	738	115.00	322	155.00	250
46.00	660	79.00	16026	116.00	978	157.00	251
47.00	2474	80.00	3734	117.00	843	159.00	51
48.00	1621	81.00	15643	118.00	996	159.00	122
49.00	11160	82.00	3799	119.00	469	161.00	306
50.00	46992	83.00	354	124.00	216	170.00	242
51.00	15240	84.00	80	126.00	66	171.00	64
52.00	701	85.00	92	128.00	641	172.00	542
55.00	773	86.00	214	129.00	155	173.00	1022
56.00	6204	87.00	6066	130.00	474	174.00	139072
57.00	9467	88.00	6575	131.00	140	175.00	10040
58.00	456	89.00	120	135.00	114	176.00	133632
59.00	129	90.00	151	135.00	357	177.00	9550
60.00	1596	91.00	762	136.00	117	178.00	105
61.00	10999	92.00	4887	137.00	433		
62.00	10264	93.00	7353	139.00	37		

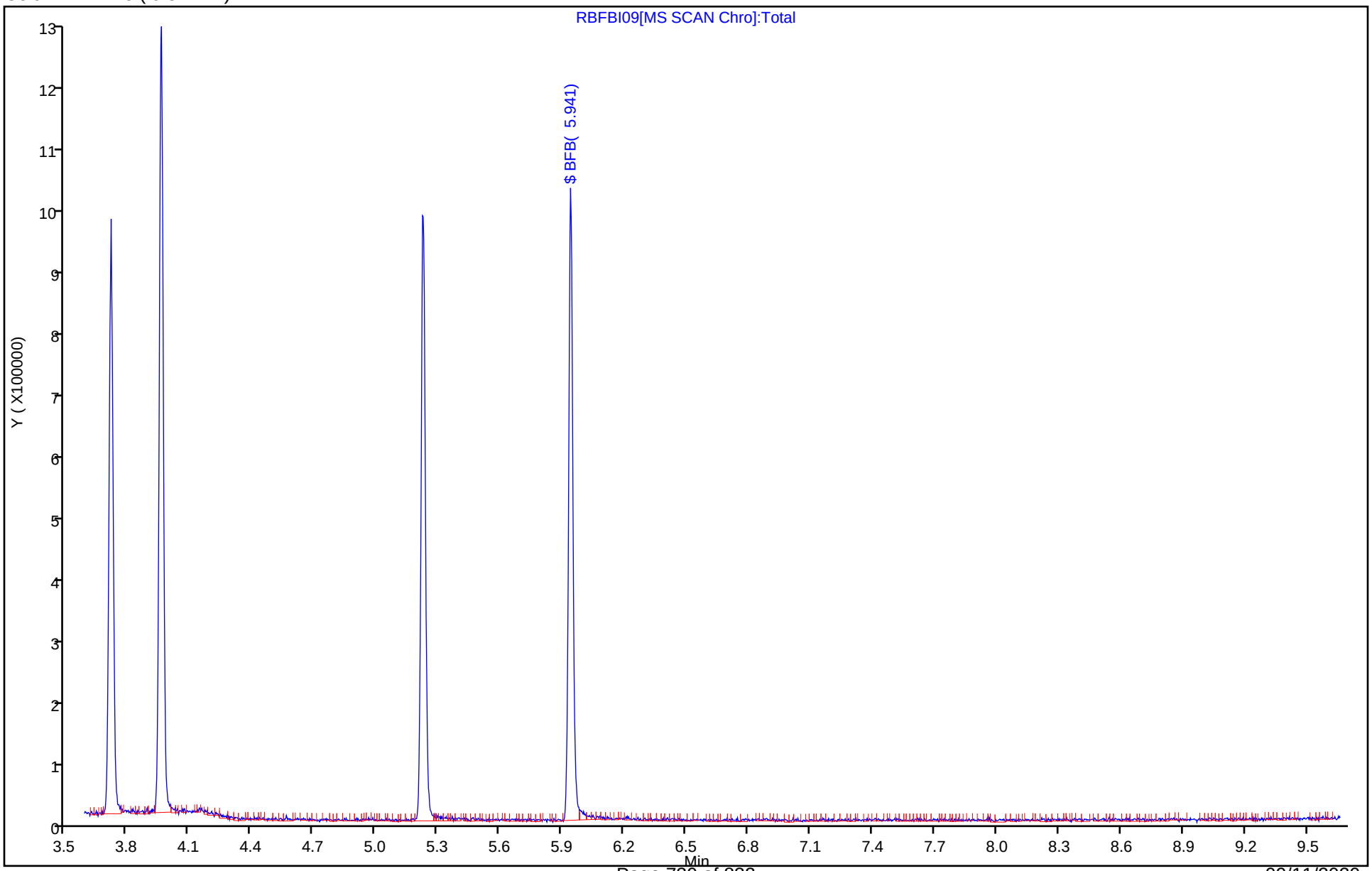
Report Date: 10-Sep-2020 11:00:55 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200908-16524.b\RBFBI09.D

Injection Date:	09-Sep-2020 10:50:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	500.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 140-42503/5

Matrix: Air Lab File ID: G500BI08.D

Analysis Method: TO 15 LL Date Collected:

Sample wt/vol: 500(mL) Date Analyzed: 09/08/2020 17:16

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42503 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	ND		0.080	0.0080
56-23-5	Carbon tetrachloride	153.81	ND		0.080	0.0070
75-45-6	Chlorodifluoromethane	86.47	ND		0.080	0.022
67-66-3	Chloroform	119.38	ND		0.080	0.0070
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.080	0.010
75-71-8	Dichlorodifluoromethane	120.91	ND		0.080	0.014
75-34-3	1,1-Dichloroethane	98.96	ND		0.080	0.0070
107-06-2	1,2-Dichloroethane	98.96	ND		0.080	0.010
75-35-4	1,1-Dichloroethene	96.94	ND		0.080	0.0080
100-41-4	Ethylbenzene	106.17	ND		0.080	0.013
75-09-2	Methylene Chloride	84.93	ND		0.40	0.39
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.40	0.052
91-20-3	Naphthalene	128.17	ND		0.040	0.040
127-18-4	Tetrachloroethene	165.83	ND		0.080	0.0070
108-88-3	Toluene	92.14	ND		0.12	0.078
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.080	0.0070
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.080	0.064
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.080	0.037
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.080	0.0070
79-01-6	Trichloroethene	131.39	ND		0.040	0.0060
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.080	0.036
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.080	0.020
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.080	0.022
75-01-4	Vinyl chloride	62.50	ND		0.040	0.026
1330-20-7	Xylenes, Total	106.17	ND		0.16	0.024

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	98		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 140-42503/5

Matrix: Air Lab File ID: G500BI08.D

Analysis Method: TO 15 LL Date Collected:

Sample wt/vol: 500(mL) Date Analyzed: 09/08/2020 17:16

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42503 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	ND		0.26	0.026
56-23-5	Carbon tetrachloride	153.81	ND		0.50	0.044
75-45-6	Chlorodifluoromethane	86.47	ND		0.28	0.078
67-66-3	Chloroform	119.38	ND		0.39	0.034
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.32	0.040
75-71-8	Dichlorodifluoromethane	120.91	ND		0.40	0.069
75-34-3	1,1-Dichloroethane	98.96	ND		0.32	0.028
107-06-2	1,2-Dichloroethane	98.96	ND		0.32	0.040
75-35-4	1,1-Dichloroethene	96.94	ND		0.32	0.032
100-41-4	Ethylbenzene	106.17	ND		0.35	0.056
75-09-2	Methylene Chloride	84.93	ND		1.4	1.4
1634-04-4	Methyl tert-butyl ether	88.15	ND		1.4	0.19
91-20-3	Naphthalene	128.17	ND		0.21	0.21
127-18-4	Tetrachloroethene	165.83	ND		0.54	0.047
108-88-3	Toluene	92.14	ND		0.45	0.29
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.32	0.028
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.59	0.47
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.44	0.20
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.44	0.038
79-01-6	Trichloroethene	131.39	ND		0.21	0.032
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.39	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.39	0.098
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.39	0.11
75-01-4	Vinyl chloride	62.50	ND		0.10	0.066
1330-20-7	Xylenes, Total	106.17	ND		0.69	0.10

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	98		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\G500BI08.D				
Lims ID:	mb				
Client ID:					
Sample Type:	MB				
Inject. Date:	08-Sep-2020 17:16:30	ALS Bottle#:	16	Worklist Smp#:	5
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016519-005				
Misc. Info.:	500ML BLK				
Operator ID:	HMT	Instrument ID:	MG		
Method:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\MG_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	09-Sep-2020 14:13:04	Calib Date:	02-Sep-2020 03:27:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1034				
First Level Reviewer: barlozhetskayaa		Date:	09-Sep-2020 13:28:09		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.806	8.806	0.000	85	92424	4.80	4.80	
* 2 1,4-Difluorobenzene	114	10.990	10.990	0.000	98	511454	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.730	15.724	0.006	95	492844	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.369	17.369	0.000	81	352653	4.64	4.56	
46 Tetrahydrofuran	42	9.264	9.232	0.032	87	1759		0.0457	

Reagents:

40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

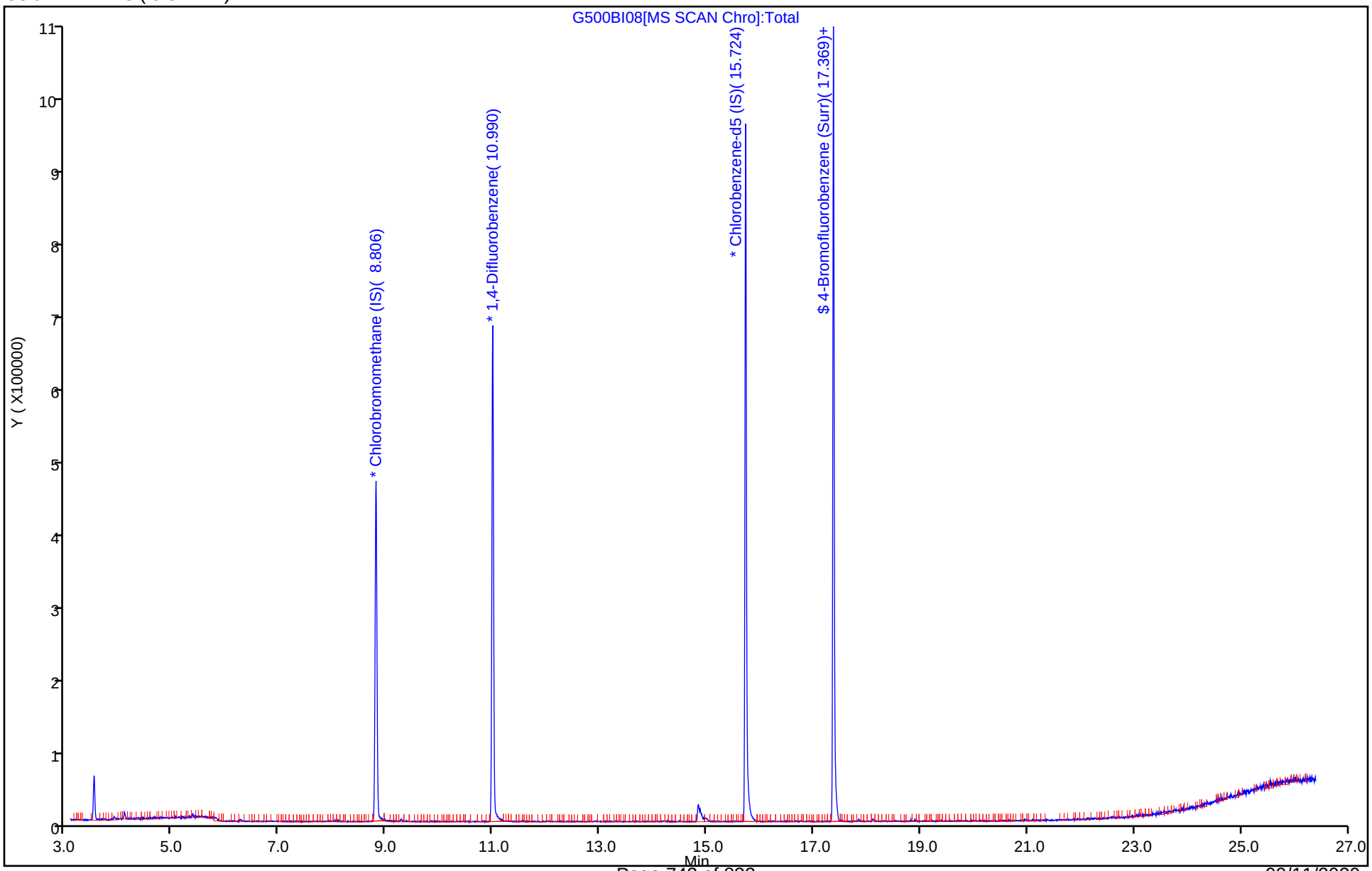
Report Date: 09-Sep-2020 14:14:19 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200904-16519.b\G500BI08.D

Injection Date:	08-Sep-2020 17:16:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	mb			Worklist Smp#:	5
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\G500BI08.D				
Lims ID:	mb				
Client ID:					
Sample Type:	MB				
Inject. Date:	08-Sep-2020 17:16:30	ALS Bottle#:	16	Worklist Smp#:	5
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016519-005				
Misc. Info.:	500ML BLK				
Operator ID:	HMT	Instrument ID:	MG		
Method:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\MG_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	09-Sep-2020 14:13:04	Calib Date:	02-Sep-2020 03:27:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1034				

First Level Reviewer: barlozhetskayaa Date: 09-Sep-2020 13:28:09

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	4.56	98.27

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 140-42504/4

Matrix: Air Lab File ID: H500BI08.D

Analysis Method: TO 15 LL Date Collected:

Sample wt/vol: 500(mL) Date Analyzed: 09/08/2020 15:46

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42504 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	ND		0.080	0.0080
56-23-5	Carbon tetrachloride	153.81	ND		0.080	0.0070
75-45-6	Chlorodifluoromethane	86.47	ND		0.080	0.022
67-66-3	Chloroform	119.38	ND		0.080	0.0070
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.080	0.010
75-71-8	Dichlorodifluoromethane	120.91	ND		0.080	0.014
75-34-3	1,1-Dichloroethane	98.96	ND		0.080	0.0070
107-06-2	1,2-Dichloroethane	98.96	ND		0.080	0.010
75-35-4	1,1-Dichloroethene	96.94	ND		0.080	0.0080
100-41-4	Ethylbenzene	106.17	ND		0.080	0.013
75-09-2	Methylene Chloride	84.93	ND		0.40	0.39
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.40	0.052
91-20-3	Naphthalene	128.17	ND		0.040	0.040
127-18-4	Tetrachloroethene	165.83	ND		0.080	0.0070
108-88-3	Toluene	92.14	ND		0.12	0.078
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.080	0.0070
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.080	0.064
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.080	0.037
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.080	0.0070
79-01-6	Trichloroethene	131.39	ND		0.040	0.0060
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.080	0.036
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.080	0.020
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.080	0.022
75-01-4	Vinyl chloride	62.50	ND		0.040	0.026
1330-20-7	Xylenes, Total	106.17	ND		0.16	0.024

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	70		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 140-42504/4

Matrix: Air Lab File ID: H500BI08.D

Analysis Method: TO 15 LL Date Collected:

Sample wt/vol: 500(mL) Date Analyzed: 09/08/2020 15:46

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42504 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	ND		0.26	0.026
56-23-5	Carbon tetrachloride	153.81	ND		0.50	0.044
75-45-6	Chlorodifluoromethane	86.47	ND		0.28	0.078
67-66-3	Chloroform	119.38	ND		0.39	0.034
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.32	0.040
75-71-8	Dichlorodifluoromethane	120.91	ND		0.40	0.069
75-34-3	1,1-Dichloroethane	98.96	ND		0.32	0.028
107-06-2	1,2-Dichloroethane	98.96	ND		0.32	0.040
75-35-4	1,1-Dichloroethene	96.94	ND		0.32	0.032
100-41-4	Ethylbenzene	106.17	ND		0.35	0.056
75-09-2	Methylene Chloride	84.93	ND		1.4	1.4
1634-04-4	Methyl tert-butyl ether	88.15	ND		1.4	0.19
91-20-3	Naphthalene	128.17	ND		0.21	0.21
127-18-4	Tetrachloroethene	165.83	ND		0.54	0.047
108-88-3	Toluene	92.14	ND		0.45	0.29
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.32	0.028
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.59	0.47
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.44	0.20
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.44	0.038
79-01-6	Trichloroethene	131.39	ND		0.21	0.032
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.39	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.39	0.098
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.39	0.11
75-01-4	Vinyl chloride	62.50	ND		0.10	0.066
1330-20-7	Xylenes, Total	106.17	ND		0.69	0.10

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	70		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\H500BI08.D				
Lims ID:	MB				
Client ID:					
Sample Type:	MB				
Inject. Date:	08-Sep-2020 15:46:30	ALS Bottle#:	16	Worklist Smp#:	4
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016520-004				
Misc. Info.:	S126 80ML				
Operator ID:	HMT	Instrument ID:	MH		
Method:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\MH_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	09-Sep-2020 17:04:57	Calib Date:	29-Aug-2020 23:57:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1034				
First Level Reviewer: barlozhetskayaa		Date:	09-Sep-2020 17:04:57		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.431	9.431	0.000	96	225364	4.80	4.80	
* 2 1,4-Difluorobenzene	114	11.591	11.591	0.000	95	984804	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	16.263	16.258	0.005	86	583162	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.881	17.876	0.005	96	218833	4.64	3.23	

Reagents:

40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

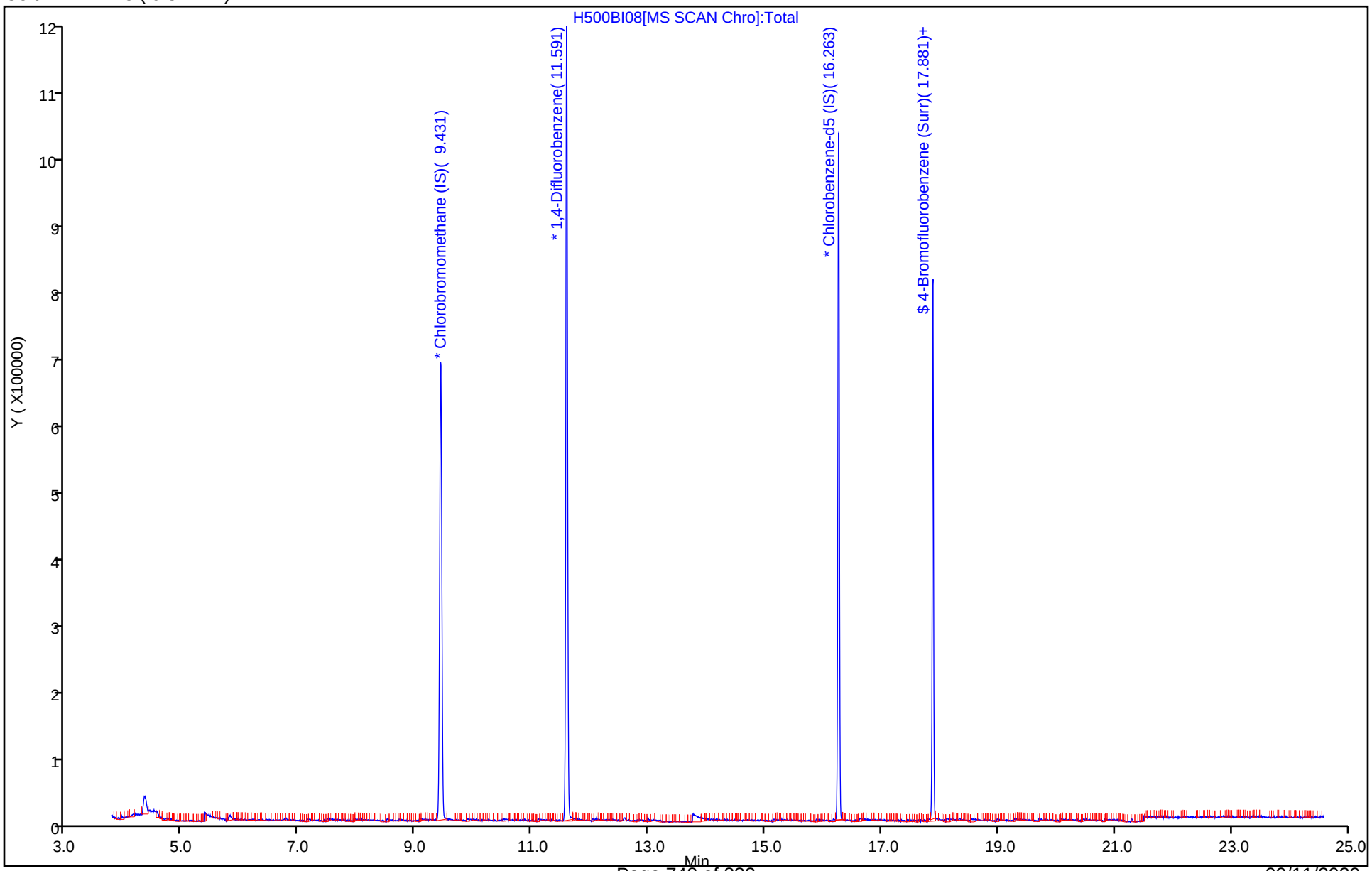
Report Date: 09-Sep-2020 17:04:58 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200904-16520.b\H500BI08.D

Injection Date:	08-Sep-2020 15:46:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	MB			Worklist Smp#:	4
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\H500BI08.D				
Lims ID:	MB				
Client ID:					
Sample Type:	MB				
Inject. Date:	08-Sep-2020 15:46:30	ALS Bottle#:	16	Worklist Smp#:	4
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016520-004				
Misc. Info.:	S126 80ML				
Operator ID:	HMT	Instrument ID:	MH		
Method:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\MH_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	09-Sep-2020 17:04:57	Calib Date:	29-Aug-2020 23:57:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1034				

First Level Reviewer: barlozhetskayaa Date: 09-Sep-2020 17:04:57

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	3.23	69.60

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 140-42515/4

Matrix: Air Lab File ID: R500BI09.D

Analysis Method: TO 15 LL Date Collected:

Sample wt/vol: 500(mL) Date Analyzed: 09/09/2020 13:56

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42515 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	ND		0.080	0.0080
56-23-5	Carbon tetrachloride	153.81	ND		0.080	0.0070
75-45-6	Chlorodifluoromethane	86.47	ND		0.080	0.022
67-66-3	Chloroform	119.38	ND		0.080	0.0070
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.080	0.010
75-71-8	Dichlorodifluoromethane	120.91	ND		0.080	0.014
75-34-3	1,1-Dichloroethane	98.96	ND		0.080	0.0070
107-06-2	1,2-Dichloroethane	98.96	ND		0.080	0.010
75-35-4	1,1-Dichloroethene	96.94	ND		0.080	0.0080
100-41-4	Ethylbenzene	106.17	ND		0.080	0.013
75-09-2	Methylene Chloride	84.93	ND		0.40	0.39
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.40	0.052
91-20-3	Naphthalene	128.17	ND		0.040	0.040
127-18-4	Tetrachloroethene	165.83	ND		0.080	0.0070
108-88-3	Toluene	92.14	ND		0.12	0.078
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.080	0.0070
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.080	0.064
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.080	0.037
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.080	0.0070
79-01-6	Trichloroethene	131.39	ND		0.040	0.0060
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.080	0.036
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.080	0.020
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.080	0.022
75-01-4	Vinyl chloride	62.50	ND		0.040	0.026
1330-20-7	Xylenes, Total	106.17	ND		0.16	0.024

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	100		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 140-42515/4

Matrix: Air Lab File ID: R500BI09.D

Analysis Method: TO 15 LL Date Collected:

Sample wt/vol: 500(mL) Date Analyzed: 09/09/2020 13:56

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42515 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	ND		0.26	0.026
56-23-5	Carbon tetrachloride	153.81	ND		0.50	0.044
75-45-6	Chlorodifluoromethane	86.47	ND		0.28	0.078
67-66-3	Chloroform	119.38	ND		0.39	0.034
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.32	0.040
75-71-8	Dichlorodifluoromethane	120.91	ND		0.40	0.069
75-34-3	1,1-Dichloroethane	98.96	ND		0.32	0.028
107-06-2	1,2-Dichloroethane	98.96	ND		0.32	0.040
75-35-4	1,1-Dichloroethene	96.94	ND		0.32	0.032
100-41-4	Ethylbenzene	106.17	ND		0.35	0.056
75-09-2	Methylene Chloride	84.93	ND		1.4	1.4
1634-04-4	Methyl tert-butyl ether	88.15	ND		1.4	0.19
91-20-3	Naphthalene	128.17	ND		0.21	0.21
127-18-4	Tetrachloroethene	165.83	ND		0.54	0.047
108-88-3	Toluene	92.14	ND		0.45	0.29
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.32	0.028
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.59	0.47
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.44	0.20
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.44	0.038
79-01-6	Trichloroethene	131.39	ND		0.21	0.032
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.39	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.39	0.098
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.39	0.11
75-01-4	Vinyl chloride	62.50	ND		0.10	0.066
1330-20-7	Xylenes, Total	106.17	ND		0.69	0.10

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	100		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MR\20200908-16524.b\R500BI09.D				
Lims ID:	MB				
Client ID:					
Sample Type:	MB				
Inject. Date:	09-Sep-2020 13:56:30	ALS Bottle#:	16	Worklist Smp#:	4
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016524-004				
Misc. Info.:	500ML BLK				
Operator ID:	HMT	Instrument ID:	MR		
Method:	\\chromfs\Knoxville\ChromData\MR\20200908-16524.b\MR_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	10-Sep-2020 11:02:41	Calib Date:	29-Aug-2020 00:02:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1028				
First Level Reviewer: khachitpongpanits		Date:	10-Sep-2020 11:03:22		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.274	8.274	0.000	96	135548	4.80	4.80	
* 2 1,4-Difluorobenzene	114	10.501	10.507	-0.006	95	676979	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.349	15.349	0.000	91	529837	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	16.999	16.999	0.000	93	329153	4.64	4.65	
25 Isopropyl alcohol	45	5.071	4.969	0.102	70	3666		0.0674	

Reagents:

40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

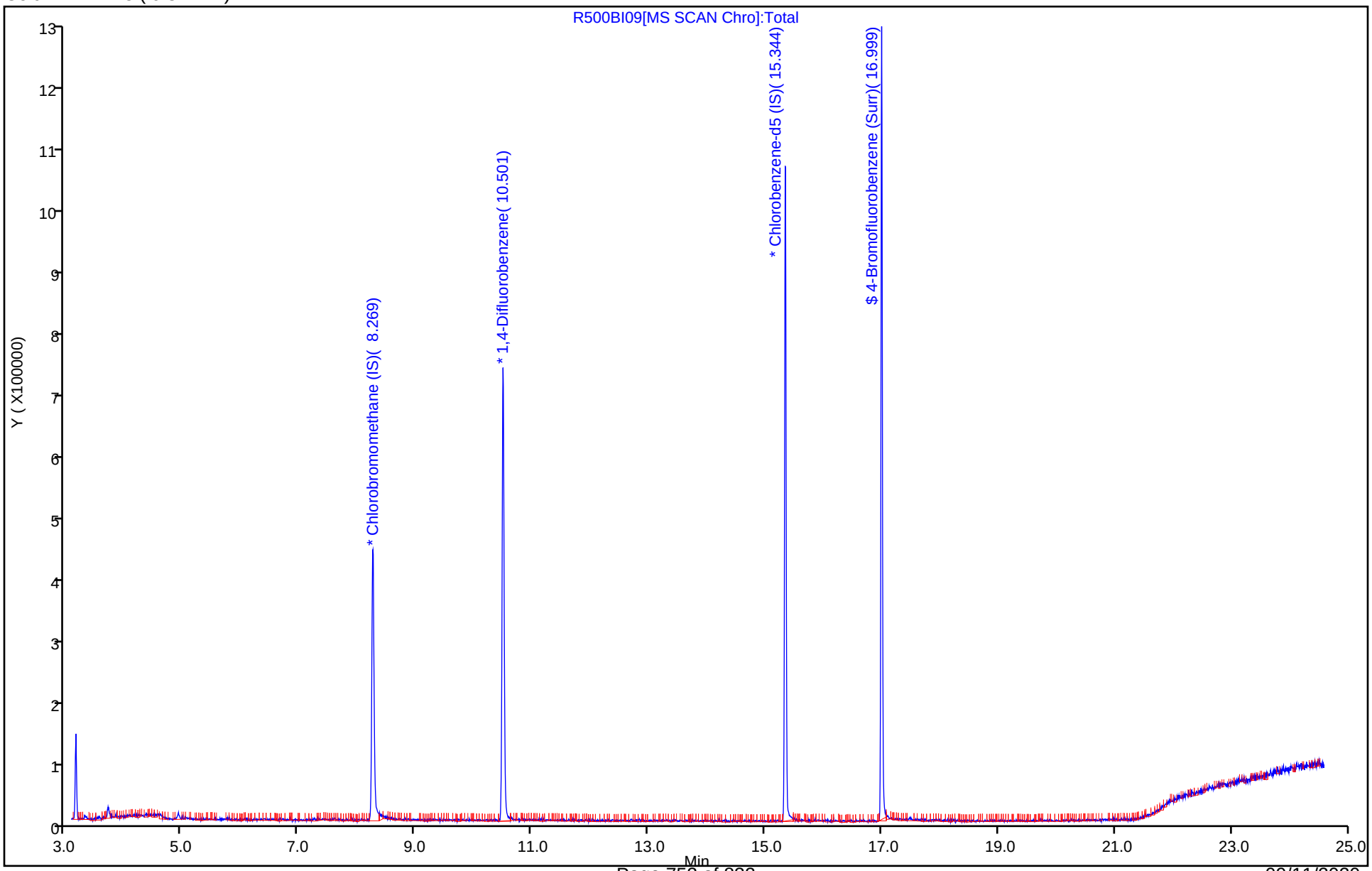
Report Date: 10-Sep-2020 11:03:23 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200908-16524.b\R500BI09.D

Injection Date:	09-Sep-2020 13:56:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	MB			Worklist Smp#:	4
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MR\20200908-16524.b\R500BI09.D				
Lims ID:	MB				
Client ID:					
Sample Type:	MB				
Inject. Date:	09-Sep-2020 13:56:30	ALS Bottle#:	16	Worklist Smp#:	4
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016524-004				
Misc. Info.:	500ML BLK				
Operator ID:	HMT	Instrument ID:	MR		
Method:	\\chromfs\Knoxville\ChromData\MR\20200908-16524.b\MR_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	10-Sep-2020 11:02:41	Calib Date:	29-Aug-2020 00:02:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1028				

First Level Reviewer: khachitpongpanits Date: 10-Sep-2020 11:03:22

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	4.65	100.14

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 140-42503/1002

Matrix: Air Lab File ID: GCCVI08Z-LCS.d

Analysis Method: TO 15 LL Date Collected:

Sample wt/vol: 500(mL) Date Analyzed: 09/08/2020 15:52

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42503 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	1.41		0.080	0.0080
56-23-5	Carbon tetrachloride	153.81	1.51		0.080	0.0070
75-45-6	Chlorodifluoromethane	86.47	1.73		0.080	0.022
67-66-3	Chloroform	119.38	1.49		0.080	0.0070
156-59-2	cis-1,2-Dichloroethene	96.94	1.49		0.080	0.010
75-71-8	Dichlorodifluoromethane	120.91	1.48		0.080	0.014
75-34-3	1,1-Dichloroethane	98.96	1.65		0.080	0.0070
107-06-2	1,2-Dichloroethane	98.96	1.46		0.080	0.010
75-35-4	1,1-Dichloroethene	96.94	1.54		0.080	0.0080
100-41-4	Ethylbenzene	106.17	1.39		0.080	0.013
75-09-2	Methylene Chloride	84.93	1.54		0.40	0.39
1634-04-4	Methyl tert-butyl ether	88.15	1.52		0.40	0.052
91-20-3	Naphthalene	128.17	1.17		0.040	0.040
127-18-4	Tetrachloroethene	165.83	1.24		0.080	0.0070
108-88-3	Toluene	92.14	1.37		0.12	0.078
156-60-5	trans-1,2-Dichloroethene	96.94	1.44		0.080	0.0070
120-82-1	1,2,4-Trichlorobenzene	181.45	1.13		0.080	0.064
71-55-6	1,1,1-Trichloroethane	133.41	1.45		0.080	0.037
79-00-5	1,1,2-Trichloroethane	133.41	1.36		0.080	0.0070
79-01-6	Trichloroethene	131.39	1.26		0.040	0.0060
526-73-8	1,2,3-Trimethylbenzene	120.19	1.09		0.080	0.036
95-63-6	1,2,4-Trimethylbenzene	120.20	1.26		0.080	0.020
108-67-8	1,3,5-Trimethylbenzene	120.20	1.46		0.080	0.022
75-01-4	Vinyl chloride	62.50	1.73		0.040	0.026
1330-20-7	Xylenes, Total	106.17	4.10		0.16	0.024

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	104		60-140

Eurofins Environment Testing America
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GCCVI08Z-LCS.d
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 08-Sep-2020 15:52:30 ALS Bottle#: 16 Worklist Smp#: 1002
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016519-002
Misc. Info.: s127 80ML
Operator ID: HMT Instrument ID: MG

Method: \\chromfs\Knoxville\ChromData\MG\20200904-16519.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 09-Sep-2020 14:14:33 Calib Date: 02-Sep-2020 03:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1034

First Level Reviewer: barlozhetskayaa Date: 09-Sep-2020 13:53:41

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.806	8.806	0.000	85	85639	4.80	4.80	
* 2 1,4-Difluorobenzene	114	10.990	10.990	0.000	98	429335	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.724	15.724	0.000	96	458464	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.369	17.369	0.000	81	348774	4.64	4.85	
6 Chlorodifluoromethane	51	3.699	3.699	0.000	97	133039	1.60	1.73	
7 Propene	41	3.710	3.710	0.000	99	64247	1.60	1.70	
8 Dichlorodifluoromethane	85	3.764	3.764	0.000	97	126670	1.60	1.48	
9 Chloromethane	52	3.942	3.942	0.000	82	27660	1.60	1.80	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.947	3.947	0.000	92	67647	1.60	1.38	
11 Acetaldehyde	44	4.093	4.093	0.000	99	139783	8.00	7.74	
12 Vinyl chloride	62	4.109	4.109	0.000	99	74241	1.60	1.73	
14 Butadiene	54	4.201	4.201	0.000	64	72459	1.60	1.92	
13 Butane	43	4.201	4.201	0.000	87	154234	1.60	2.01	
15 Bromomethane	94	4.519	4.519	0.000	98	39779	1.60	1.54	
16 Chloroethane	64	4.659	4.659	0.000	81	30770	1.60	1.73	
17 Ethanol	31	4.751	4.751	0.000	97	131351	8.00	8.11	
18 Vinyl bromide	106	4.961	4.961	0.000	96	35403	1.60	1.60	
19 2-Methylbutane	43	5.010	5.010	0.000	94	117808	1.60	2.26	
20 Trichlorofluoromethane	101	5.225	5.225	0.000	96	103761	1.60	1.56	
21 Acrolein	56	5.236	5.236	0.000	38	21599	1.60	2.71	
22 Acetonitrile	40	5.295	5.295	0.000	100	27032	1.60	1.90	
23 Acetone	58	5.349	5.349	0.000	99	23895	1.60	1.67	
25 Isopropyl alcohol	45	5.441	5.441	0.000	43	114409	1.60	2.68	
24 Pentane	72	5.452	5.452	0.000	93	7319	1.60	1.69	
26 Ethyl ether	31	5.614	5.614	0.000	86	72439	1.60	2.37	
27 1,1-Dichloroethene	96	5.921	5.921	0.000	88	32508	1.60	1.54	
28 Acrylonitrile	53	6.029	6.029	0.000	95	38676	1.60	1.99	
30 2-Methyl-2-propanol	59	6.045	6.045	0.000	95	78702	1.60	1.83	
29 1,1,2-Trichloro-1,2,2-trifluoroe	101	6.099	6.099	0.000	86	70792	1.60	1.45	
31 Methylene Chloride	84	6.271	6.271	0.000	85	32562	1.60	1.54	
32 3-Chloro-1-propene	39	6.288	6.288	0.000	92	65271	1.60	1.58	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
33 Carbon disulfide	76	6.433	6.433	0.000	94	109229	1.60	1.54	
34 trans-1,2-Dichloroethene	96	7.086	7.086	0.000	89	35814	1.60	1.44	
35 2-Methylpentane	43	7.096	7.096	0.000	96	158659	1.60	1.64	
36 Methyl tert-butyl ether	73	7.215	7.215	0.000	89	78397	1.60	1.52	
37 1,1-Dichloroethane	63	7.495	7.495	0.000	98	101940	1.60	1.65	
38 Vinyl acetate	43	7.603	7.603	0.000	100	156579	1.60	1.93	
39 2-Butanone (MEK)	72	8.045	8.045	0.000	93	14408	1.60	1.40	
40 Hexane	56	8.078	8.078	0.000	91	52442	1.60	1.64	
41 Isopropyl ether	45	8.234	8.234	0.000	96	185601	1.60	1.74	
42 cis-1,2-Dichloroethene	96	8.482	8.482	0.000	93	39279	1.60	1.49	
43 Ethyl acetate	43	8.666	8.666	0.000	96	107166	1.60	1.51	
44 Chloroform	83	8.817	8.817	0.000	92	89711	1.60	1.49	
45 Tert-butyl ethyl ether	59	8.919	8.919	0.000	96	128214	1.60	1.43	
46 Tetrahydrofuran	42	9.232	9.232	0.000	89	64442	1.60	1.81	
47 1,1,1-Trichloroethane	97	9.852	9.852	0.000	93	83716	1.60	1.45	
48 1,2-Dichloroethane	62	9.954	9.954	0.000	93	70957	1.60	1.46	
51 n-Butanol	31	10.434	10.434	0.000	70	27548	1.60	2.01	
50 Benzene	78	10.445	10.445	0.000	91	124248	1.60	1.41	
49 Cyclohexane	69	10.450	10.450	0.000	83	21712	1.60	1.46	
52 Carbon tetrachloride	117	10.467	10.467	0.000	89	82641	1.60	1.51	
53 2,3-Dimethylpentane	71	10.575	10.575	0.000	89	32317	1.60	1.42	
54 Thiophene	84	10.720	10.720	0.000	90	70311	1.60	1.39	
55 Isooctane	57	11.216	11.216	0.000	97	351776	1.60	1.63	
56 n-Heptane	71	11.588	11.588	0.000	95	52709	1.60	1.52	
57 1,2-Dichloropropane	63	11.664	11.664	0.000	88	61193	1.60	1.52	
58 Trichloroethene	130	11.702	11.702	0.000	86	48534	1.60	1.26	
59 Dibromomethane	93	11.788	11.788	0.000	84	52979	1.60	1.40	
60 Dichlorobromomethane	83	11.933	11.933	0.000	92	97586	1.60	1.48	
61 1,4-Dioxane	88	11.966	11.966	0.000	85	12169	1.60	1.18	
62 Methyl methacrylate	41	12.030	12.030	0.000	85	68494	1.60	1.51	
63 Methylcyclohexane	83	12.478	12.478	0.000	83	100568	1.60	1.73	
64 4-Methyl-2-pentanone (MIBK)	43	12.888	12.888	0.000	96	134588	1.60	1.76	
65 cis-1,3-Dichloropropene	75	12.936	12.936	0.000	96	75451	1.60	1.43	
66 trans-1,3-Dichloropropene	75	13.627	13.627	0.000	88	65495	1.60	1.39	
67 Toluene	91	13.756	13.756	0.000	92	138264	1.60	1.37	
68 1,1,2-Trichloroethane	83	13.826	13.826	0.000	91	43025	1.60	1.36	
69 2-Hexanone	58	14.225	14.225	0.000	89	62823	1.60	1.68	
70 n-Octane	85	14.452	14.452	0.000	98	51442	1.60	1.40	
71 Chlorodibromomethane	129	14.533	14.533	0.000	92	81847	1.60	1.37	
72 Ethylene Dibromide	107	14.824	14.824	0.000	97	72258	1.60	1.27	
73 Tetrachloroethene	129	14.899	14.899	0.000	85	47229	1.60	1.24	
75 Chlorobenzene	112	15.773	15.773	0.000	88	111296	1.60	1.36	
74 2,3-Dimethylheptane	43	15.800	15.800	0.000	90	251682	1.60	1.44	
78 Ethylbenzene	91	16.064	16.064	0.000	98	180695	1.60	1.39	
79 m-Xylene & p-Xylene	91	16.231	16.231	0.000	96	280616	3.20	2.73	
80 n-Nonane	57	16.652	16.652	0.000	94	152984	1.60	1.51	
81 Bromoform	173	16.673	16.673	0.000	88	67010	1.60	1.34	
82 Styrene	104	16.695	16.695	0.000	95	107471	1.60	1.44	
83 o-Xylene	91	16.754	16.754	0.000	97	142681	1.60	1.37	
84 1,1,2,2-Tetrachloroethane	83	17.078	17.078	0.000	96	117711	1.60	1.42	
85 1,2,3-Trichloropropane	110	17.234	17.234	0.000	91	27285	1.60	1.34	
86 Isopropylbenzene	105	17.342	17.342	0.000	97	188407	1.60	1.38	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
87 N-Propylbenzene	120	17.881	17.881	0.000	97	48641	1.60	1.33	
88 2-Chlorotoluene	126	17.930	17.930	0.000	97	49726	1.60	1.42	
89 4-Ethyltoluene	105	18.032	18.032	0.000	98	172903	1.60	1.27	
90 1,3,5-Trimethylbenzene	120	18.108	18.108	0.000	91	79423	1.60	1.46	
92 Alpha Methyl Styrene	118	18.340	18.340	0.000	86	73871	1.60	1.37	
93 n-Decane	57	18.399	18.399	0.000	84	185869	1.60	1.51	
94 tert-Butylbenzene	119	18.528	18.528	0.000	90	149316	1.60	1.24	
95 1,2,4-Trimethylbenzene	105	18.544	18.544	0.000	96	149812	1.60	1.26	
96 sec-Butylbenzene	105	18.803	18.803	0.000	98	229281	1.60	1.27	
97 1,3-Dichlorobenzene	146	18.814	18.814	0.000	95	101742	1.60	1.20	
98 Benzyl chloride	91	18.890	18.890	0.000	96	153721	1.60	1.37	
99 1,4-Dichlorobenzene	146	18.900	18.900	0.000	87	102686	1.60	1.19	
100 4-Isopropyltoluene	119	18.965	18.965	0.000	96	169334	1.60	1.22	
101 1,2,3-Trimethylbenzene	105	19.014	19.014	0.000	98	111405	1.60	1.09	
102 Butylcyclohexane	83	19.073	19.073	0.000	84	155244	1.60	1.33	
103 2,3-Dihydroindene	117	19.256	19.256	0.000	91	145924	1.60	1.22	
104 1,2-Dichlorobenzene	146	19.262	19.262	0.000	81	100767	1.60	1.24	
106 Indene	116	19.391	19.391	0.000	95	111736	1.60	1.09	
105 n-Butylbenzene	91	19.396	19.396	0.000	98	203063	1.60	1.29	
107 Undecane	57	19.704	19.704	0.000	89	192086	1.60	1.40	
108 1,2-Dibromo-3-Chloropropane	157	19.855	19.855	0.000	78	38612	1.60	1.10	
109 1,2,4,5-Tetramethylbenzene	119	20.146	20.146	0.000	96	143011	1.60	1.31	
110 Dodecane	57	20.761	20.761	0.000	87	176205	1.60	1.47	
111 1,2,4-Trichlorobenzene	180	20.955	20.955	0.000	92	81213	1.60	1.13	
112 Naphthalene	128	21.090	21.090	0.000	98	202730	1.60	1.17	
113 Hexachlorobutadiene	225	21.300	21.300	0.000	90	72287	1.60	1.19	
114 1,2,3-Trichlorobenzene	180	21.370	21.370	0.000	94	79631	1.60	1.15	
115 2-Methylnaphthalene	142	22.141	22.141	0.000	99	115215	1.60	1.55	
116 1-Methylnaphthalene	142	22.314	22.314	0.000	99	120778	1.60	1.59	
A 122 C8 Range	1	14.474	(14.393-14.554)		0	727964	1.60	1.63	
S 123 1,2-Dichloroethene, Total	1				0		3.20	2.93	
S 124 Xylenes, Total	100				0		4.80	4.10	
T 136 2-Methylthiophene TIC	97	13.907	13.907	0.000	97	102291	1.60	1.07	
T 137 3-Methylthiophene TIC	97	14.107	14.107	0.000	97	104672	1.60	1.10	
T 154 2-Ethylthiophene TIC	97	16.166	16.166	0.000	95	129343	1.60	1.35	
T 160 1,2-Dimethyl-4-Ethylbenzene TIC	119	19.763	19.763	0.000	96	114988	1.60	1.20	
T 161 1,2,3,5-Tetramethylbenzene TIC	119	20.200	20.200	0.000	94	86137	1.60	0.9018	
T 162 1,2,3,4-Tetramethylbenzene TIC	119	20.599	20.599	0.000	97	115894	1.60	1.21	a
T 163 Benzo(b)thiophene TIC	134	21.192	21.192	0.000	97	108671	1.60	1.14	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

40CV101S_00127	Amount Added: 80.00	Units: mL	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

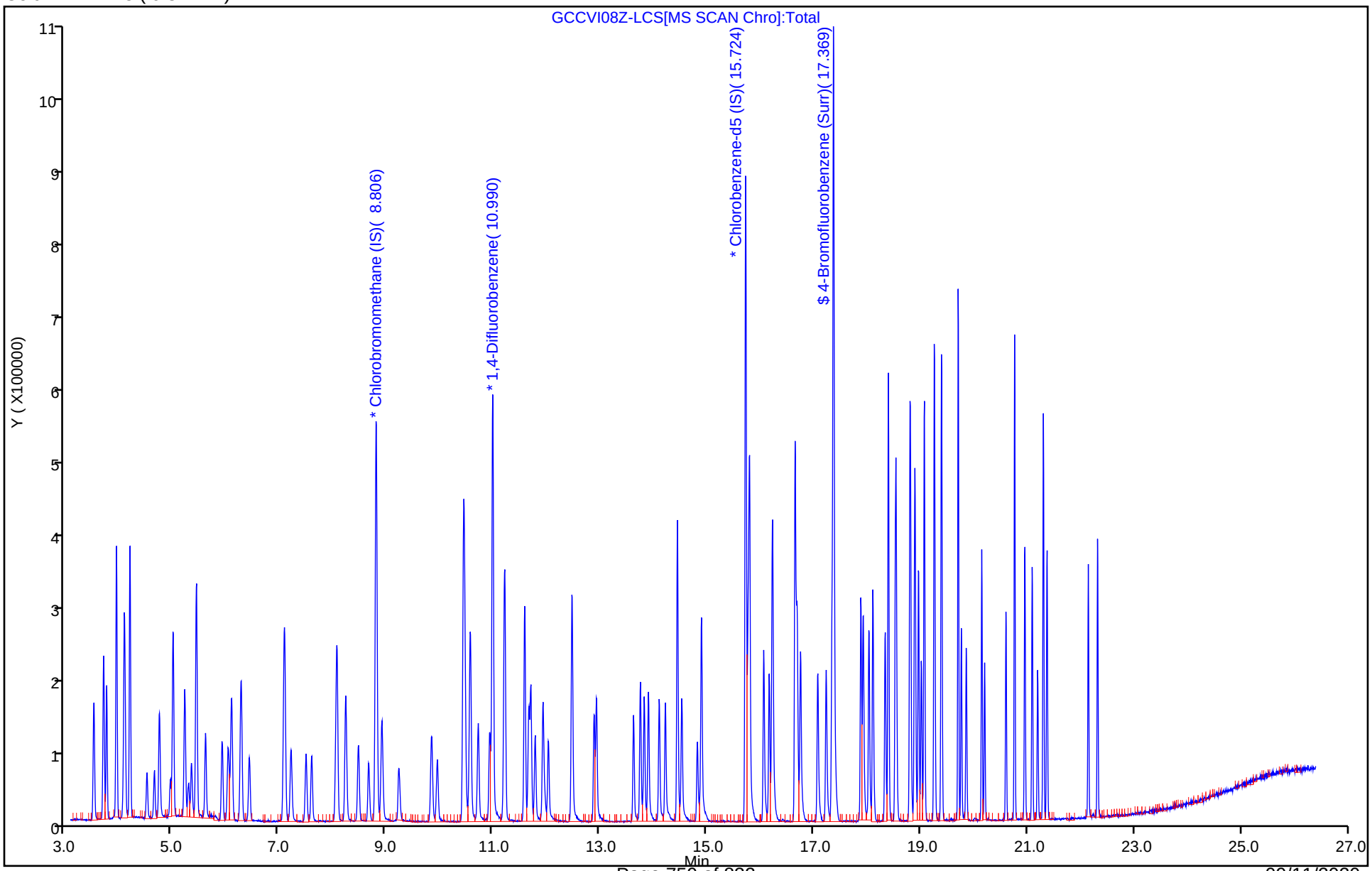
Report Date: 09-Sep-2020 14:14:38 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins Environment Testing America

Data File: \\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GCCVI08Z-LCS.d

Injection Date:	08-Sep-2020 15:52:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	LCS			Worklist Smp#:	1002
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins Environment Testing America
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\GCCVI08Z-LCS.d				
Lims ID:	LCS				
Client ID:					
Sample Type:	LCS				
Inject. Date:	08-Sep-2020 15:52:30	ALS Bottle#:	16	Worklist Smp#:	1002
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016519-002				
Misc. Info.:	s127 80ML				
Operator ID:	HMT	Instrument ID:	MG		
Method:	\\chromfs\Knoxville\ChromData\MG\20200904-16519.b\MG_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	09-Sep-2020 14:14:33	Calib Date:	02-Sep-2020 03:27:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1034				
First Level Reviewer: barlozhetskayaa		Date:	09-Sep-2020 13:53:41		

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	4.85	104.48

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 140-42504/1002

Matrix: Air Lab File ID: HCCV08B-LCS.d

Analysis Method: TO 15 LL Date Collected:

Sample wt/vol: 500(mL) Date Analyzed: 09/08/2020 13:10

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42504 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	1.55		0.080	0.0080
56-23-5	Carbon tetrachloride	153.81	2.06		0.080	0.0070
75-45-6	Chlorodifluoromethane	86.47	1.49		0.080	0.022
67-66-3	Chloroform	119.38	1.54		0.080	0.0070
156-59-2	cis-1,2-Dichloroethene	96.94	1.58		0.080	0.010
75-71-8	Dichlorodifluoromethane	120.91	1.64		0.080	0.014
75-34-3	1,1-Dichloroethane	98.96	1.53		0.080	0.0070
107-06-2	1,2-Dichloroethane	98.96	1.58		0.080	0.010
75-35-4	1,1-Dichloroethene	96.94	1.55		0.080	0.0080
100-41-4	Ethylbenzene	106.17	1.53		0.080	0.013
75-09-2	Methylene Chloride	84.93	1.52		0.40	0.39
1634-04-4	Methyl tert-butyl ether	88.15	1.44		0.40	0.052
91-20-3	Naphthalene	128.17	2.13		0.040	0.040
127-18-4	Tetrachloroethene	165.83	1.63		0.080	0.0070
108-88-3	Toluene	92.14	1.59		0.12	0.078
156-60-5	trans-1,2-Dichloroethene	96.94	1.60		0.080	0.0070
120-82-1	1,2,4-Trichlorobenzene	181.45	2.46		0.080	0.064
71-55-6	1,1,1-Trichloroethane	133.41	1.57		0.080	0.037
79-00-5	1,1,2-Trichloroethane	133.41	1.56		0.080	0.0070
79-01-6	Trichloroethene	131.39	1.65		0.040	0.0060
526-73-8	1,2,3-Trimethylbenzene	120.19	1.41		0.080	0.036
95-63-6	1,2,4-Trimethylbenzene	120.20	1.92		0.080	0.020
108-67-8	1,3,5-Trimethylbenzene	120.20	1.91		0.080	0.022
75-01-4	Vinyl chloride	62.50	1.51		0.040	0.026
1330-20-7	Xylenes, Total	106.17	4.96		0.16	0.024

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	107		60-140

Eurofins Environment Testing America
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HCCV08B-LCS.d
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 08-Sep-2020 13:10:30 ALS Bottle#: 21 Worklist Smp#: 1002
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016517-002
Misc. Info.: S126 80ML
Operator ID: HMT Instrument ID: MH

Method: \\chromfs\Knoxville\ChromData\MH\20200904-16520.b\MH_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 09-Sep-2020 17:03:27 Calib Date: 29-Aug-2020 23:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1034

First Level Reviewer: barlozhetskayaa Date: 09-Sep-2020 17:03:27

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.431	9.431	0.000	98	277460	4.80	4.80	
* 2 1,4-Difluorobenzene	114	11.591	11.591	0.000	94	1172334	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	16.258	16.258	0.000	86	835308	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.876	17.876	0.000	97	482200	4.64	4.97	
6 Chlorodifluoromethane	51	3.916	3.916	0.000	97	230654	1.60	1.49	
7 Propene	41	3.931	3.931	0.000	98	94877	1.60	1.43	
8 Dichlorodifluoromethane	85	3.988	3.988	0.000	100	343146	1.60	1.64	
9 Chloromethane	52	4.195	4.195	0.000	92	44274	1.60	1.61	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	4.195	4.195	0.000	90	281262	1.60	1.68	
11 Acetaldehyde	44	4.360	4.360	0.000	99	282736	8.00	6.92	
12 Vinyl chloride	62	4.381	4.381	0.000	99	139236	1.60	1.51	
13 Butane	43	4.474	4.474	0.000	83	200345	1.60	1.59	
14 Butadiene	54	4.479	4.479	0.000	69	96757	1.60	1.54	
15 Bromomethane	94	4.841	4.841	0.000	97	135990	1.60	1.53	
16 Chloroethane	64	4.996	4.996	0.000	93	55533	1.60	1.43	
17 Ethanol	31	5.079	5.079	0.000	97	231043	8.00	5.17	
18 Vinyl bromide	106	5.332	5.332	0.000	97	122908	1.60	1.66	
19 2-Methylbutane	43	5.379	5.379	0.000	93	144455	1.60	1.49	
20 Trichlorofluoromethane	101	5.621	5.621	0.000	99	332557	1.60	1.63	
21 Acrolein	56	5.632	5.632	0.000	95	39319	1.60	1.77	
22 Acetonitrile	40	5.704	5.704	0.000	99	54827	1.60	1.40	
23 Acetone	58	5.761	5.761	0.000	99	76876	1.60	1.78	
25 Isopropyl alcohol	45	5.839	5.839	0.000	94	172309	1.60	1.62	
24 Pentane	72	5.859	5.859	0.000	97	15293	1.60	1.69	
26 Ethyl ether	31	6.040	6.040	0.000	91	126903	1.60	1.43	
27 1,1-Dichloroethene	96	6.392	6.392	0.000	97	104330	1.60	1.55	
29 2-Methyl-2-propanol	59	6.479	6.479	0.000	92	147228	1.60	1.34	
28 Acrylonitrile	53	6.500	6.500	0.000	94	96500	1.60	1.63	
30 112TCTFE	101	6.567	6.567	0.000	97	280677	1.60	1.62	
31 Methylene Chloride	84	6.764	6.764	0.000	96	103723	1.60	1.52	
32 3-Chloro-1-propene	39	6.779	6.779	0.000	95	95222	1.60	1.37	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
33 Carbon disulfide	76	6.945	6.945	0.000	100	322760	1.60	1.48	
34 trans-1,2-Dichloroethene	96	7.616	7.616	0.000	96	112164	1.60	1.60	
35 2-Methylpentane	43	7.627	7.627	0.000	97	234335	1.60	1.40	
36 Methyl tert-butyl ether	73	7.735	7.735	0.000	93	213836	1.60	1.44	
37 1,1-Dichloroethane	63	8.061	8.061	0.000	100	213553	1.60	1.53	
38 Vinyl acetate	43	8.154	8.154	0.000	99	221640	1.60	1.24	
39 2-Butanone (MEK)	72	8.624	8.624	0.000	96	48806	1.60	1.44	
40 Hexane	56	8.645	8.645	0.000	88	90097	1.60	1.55	
41 Isopropyl ether	45	8.805	8.805	0.000	96	385804	1.60	1.56	
42 cis-1,2-Dichloroethene	96	9.089	9.089	0.000	95	112648	1.60	1.58	
43 Ethyl acetate	43	9.250	9.250	0.000	98	251875	1.60	1.41	
44 Chloroform	83	9.436	9.436	0.000	98	259072	1.60	1.54	
45 Tert-butyl ethyl ether	59	9.503	9.503	0.000	97	258046	1.60	1.36	
46 Tetrahydrofuran	42	9.844	9.844	0.000	92	124357	1.60	1.49	
47 1,1,1-Trichloroethane	97	10.490	10.490	0.000	97	239383	1.60	1.57	
48 1,2-Dichloroethane	62	10.593	10.593	0.000	97	168225	1.60	1.58	
49 n-Butanol	31	10.997	10.997	0.000	92	40273	1.60	1.21	
50 Cyclohexane	69	11.069	11.069	0.000	86	45363	1.60	1.54	
51 Benzene	78	11.069	11.069	0.000	98	334426	1.60	1.55	
52 Carbon tetrachloride	117	11.095	11.095	0.000	96	274858	1.60	2.06	
53 2,3-Dimethylpentane	71	11.167	11.167	0.000	92	63092	1.60	1.55	
54 Thiophene	84	11.343	11.343	0.000	97	173935	1.60	1.54	
55 Isooctane	57	11.793	11.793	0.000	97	541150	1.60	1.62	
56 n-Heptane	71	12.154	12.154	0.000	94	94883	1.60	1.55	
57 1,2-Dichloropropane	63	12.263	12.263	0.000	89	137629	1.60	1.49	
58 Trichloroethene	130	12.294	12.294	0.000	96	160133	1.60	1.65	
59 Dibromomethane	93	12.387	12.387	0.000	96	162685	1.60	1.59	
60 Dichlorobromomethane	83	12.521	12.521	0.000	99	248479	1.60	1.63	
61 1,4-Dioxane	88	12.526	12.526	0.000	92	43341	1.60	1.41	
62 Methyl methacrylate	41	12.588	12.588	0.000	91	144962	1.60	1.45	
63 Methylcyclohexane	83	13.048	13.048	0.000	91	209752	1.60	1.74	
64 4-Methyl-2-pentanone (MIBK)	43	13.426	13.426	0.000	98	297593	1.60	1.55	
65 cis-1,3-Dichloropropene	75	13.498	13.498	0.000	97	165866	1.60	1.59	
66 trans-1,3-Dichloropropene	75	14.185	14.185	0.000	98	114850	1.60	1.50	
67 Toluene	91	14.310	14.310	0.000	92	342841	1.60	1.59	
68 1,1,2-Trichloroethane	83	14.382	14.382	0.000	98	120653	1.60	1.56	
69 2-Hexanone	58	14.744	14.744	0.000	90	114394	1.60	1.67	
70 n-Octane	85	14.961	14.961	0.000	95	105003	1.60	1.75	
71 Chlorodibromomethane	129	15.085	15.085	0.000	98	240293	1.60	1.88	
72 Ethylene Dibromide	107	15.374	15.374	0.000	98	184258	1.60	1.59	
73 Tetrachloroethene	129	15.436	15.436	0.000	96	146894	1.60	1.63	
75 2,3-Dimethylheptane	43	16.294	16.294	0.000	94	373201	1.60	1.35	
74 Chlorobenzene	112	16.305	16.305	0.000	95	283500	1.60	1.63	
76 Ethylbenzene	91	16.584	16.584	0.000	99	398479	1.60	1.53	
77 m-Xylene & p-Xylene	91	16.739	16.739	0.000	97	704753	3.20	3.42	
78 n-Nonane	57	17.131	17.131	0.000	95	233220	1.60	1.57	
80 Styrene	104	17.204	17.204	0.000	98	214623	1.60	1.72	
79 Bromoform	173	17.209	17.209	0.000	88	205692	1.60	2.06	
81 o-Xylene	91	17.266	17.266	0.000	99	331884	1.60	1.54	
82 1,1,2,2-Tetrachloroethane	83	17.586	17.586	0.000	98	300830	1.60	1.58	
83 1,2,3-Trichloropropane	110	17.746	17.746	0.000	97	70237	1.60	1.63	
84 Isopropylbenzene	105	17.840	17.840	0.000	96	455920	1.60	1.67	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
85 N-Propylbenzene	120	18.351	18.351	0.000	99	124522	1.60	1.70	
86 2-Chlorotoluene	126	18.403	18.403	0.000	97	114036	1.60	1.63	
87 4-Ethyltoluene	105	18.496	18.496	0.000	98	450517	1.60	1.65	
88 1,3,5-Trimethylbenzene	120	18.563	18.563	0.000	93	243754	1.60	1.91	
89 Alpha Methyl Styrene	118	18.790	18.790	0.000	88	169055	1.60	1.79	
90 n-Decane	57	18.822	18.822	0.000	87	347477	1.60	1.60	
91 tert-Butylbenzene	119	18.977	18.977	0.000	92	519438	1.60	1.87	
92 1,2,4-Trimethylbenzene	105	18.987	18.987	0.000	97	479377	1.60	1.92	
93 sec-Butylbenzene	105	19.235	19.235	0.000	99	683848	1.60	1.86	
94 1,3-Dichlorobenzene	146	19.261	19.261	0.000	97	244896	1.60	1.89	
95 Benzyl chloride	91	19.333	19.333	0.000	98	249361	1.60	1.75	
96 1,4-Dichlorobenzene	146	19.344	19.344	0.000	97	207995	1.60	2.18	
97 4-Isopropyltoluene	119	19.390	19.390	0.000	97	631120	1.60	2.12	
98 1,2,3-Trimethylbenzene	105	19.447	19.447	0.000	98	337861	1.60	1.41	
99 Butylcyclohexane	83	19.493	19.493	0.000	91	319171	1.60	1.55	
101 2,3-Dihydroindene	117	19.690	19.690	0.000	93	362387	1.60	1.83	
100 1,2-Dichlorobenzene	146	19.695	19.695	0.000	98	272139	1.60	1.91	
103 n-Butylbenzene	91	19.814	19.814	0.000	97	652887	1.60	1.98	
102 Indene	116	19.819	19.819	0.000	91	281787	1.60	1.66	
104 Undecane	57	20.093	20.093	0.000	94	431376	1.60	1.75	
105 1,2-Dibromo-3-Chloropropane	157	20.284	20.284	0.000	96	147035	1.60	2.01	
106 1,2,4,5-Tetramethylbenzene	119	20.563	20.563	0.000	97	518707	1.60	1.78	a
107 Dodecane	57	21.173	21.173	0.000	92	389017	1.60	2.23	
108 1,2,4-Trichlorobenzene	180	21.416	21.416	0.000	94	166724	1.60	2.46	
109 Naphthalene	128	21.556	21.556	0.000	99	416511	1.60	2.13	
110 Hexachlorobutadiene	225	21.726	21.726	0.000	92	329372	1.60	2.41	
111 1,2,3-Trichlorobenzene	180	21.788	21.788	0.000	95	195188	1.60	2.43	
112 2-Methylnaphthalene	142	22.341	22.341	0.000	99	34444	1.60	1.11	
113 1-Methylnaphthalene	142	22.465	22.465	0.000	99	63072	1.60	1.75	
A 115 C8 Range	1	14.971	(14.919-15.023)		0	1233117	1.60	1.58	
S 116 Xylenes, Total	100				0		4.80	4.96	
S 117 1,2-Dichloroethene, Total	1				0		3.20	3.18	
T 139 2-Methylthiophene TIC	97	14.459	14.459	0.000	96	255529	1.60	1.47	
T 142 3-Methylthiophene TIC	97	14.661	14.661	0.000	94	251711	1.60	1.45	
T 141 2-Ethylthiophene TIC	97	16.687	16.687	0.000	95	289340	1.60	1.66	
T 152 1,2-Dimethyl-4-Ethylbenzene TIC	119	20.176	20.176	0.000	95	443769	1.60	2.55	
T 149 1,2,3,5-Tetramethylbenzene TIC	119	20.620	20.620	0.000	96	317888	1.60	1.83	a
T 150 1,2,3,4-Tetramethylbenzene TIC	119	21.039	21.039	0.000	97	394422	1.60	2.27	a
T 151 Benzo(b)thiophene TIC	134	21.649	21.649	0.000	99	123062	1.60	0.7072	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

40CV101S_00126	Amount Added: 80.00	Units: ml	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

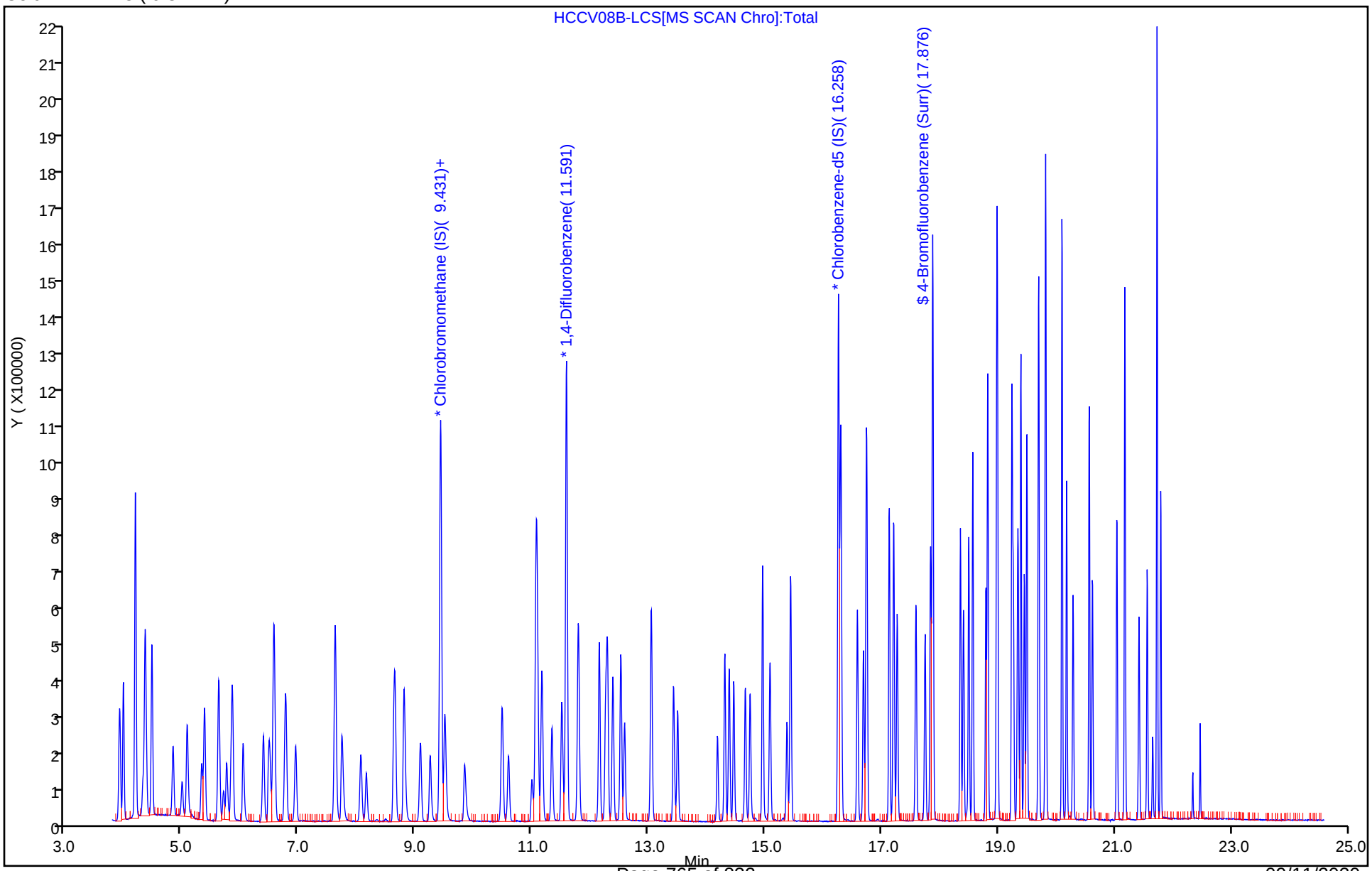
Report Date: 09-Sep-2020 17:03:30 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins Environment Testing America

Data File: \\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HCCV08B-LCS.d

Injection Date:	08-Sep-2020 13:10:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	LCS			Worklist Smp#:	1002
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins Environment Testing America
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HCCV08B-LCS.d				
Lims ID:	LCS				
Client ID:					
Sample Type:	LCS				
Inject. Date:	08-Sep-2020 13:10:30	ALS Bottle#:	21	Worklist Smp#:	1002
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016517-002				
Misc. Info.:	S126 80ML				
Operator ID:	HMT	Instrument ID:	MH		
Method:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\MH_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	09-Sep-2020 17:03:27	Calib Date:	29-Aug-2020 23:57:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1034				

First Level Reviewer: barlozhetskayaa Date: 09-Sep-2020 17:03:27

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	4.97	107.08

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 140-42515/1002

Matrix: Air Lab File ID: RCCVI09-LCS.d

Analysis Method: TO 15 LL Date Collected:

Sample wt/vol: 500(mL) Date Analyzed: 09/09/2020 11:27

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42515 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	1.64		0.080	0.0080
56-23-5	Carbon tetrachloride	153.81	1.80		0.080	0.0070
75-45-6	Chlorodifluoromethane	86.47	1.77		0.080	0.022
67-66-3	Chloroform	119.38	1.68		0.080	0.0070
156-59-2	cis-1,2-Dichloroethene	96.94	1.36		0.080	0.010
75-71-8	Dichlorodifluoromethane	120.91	2.09		0.080	0.014
75-34-3	1,1-Dichloroethane	98.96	1.82		0.080	0.0070
107-06-2	1,2-Dichloroethane	98.96	1.93		0.080	0.010
75-35-4	1,1-Dichloroethene	96.94	1.45		0.080	0.0080
100-41-4	Ethylbenzene	106.17	1.48		0.080	0.013
75-09-2	Methylene Chloride	84.93	1.68		0.40	0.39
1634-04-4	Methyl tert-butyl ether	88.15	1.79		0.40	0.052
91-20-3	Naphthalene	128.17	1.51		0.040	0.040
127-18-4	Tetrachloroethene	165.83	1.34		0.080	0.0070
108-88-3	Toluene	92.14	1.41		0.12	0.078
156-60-5	trans-1,2-Dichloroethene	96.94	1.55		0.080	0.0070
120-82-1	1,2,4-Trichlorobenzene	181.45	1.44		0.080	0.064
71-55-6	1,1,1-Trichloroethane	133.41	1.67		0.080	0.037
79-00-5	1,1,2-Trichloroethane	133.41	1.46		0.080	0.0070
79-01-6	Trichloroethene	131.39	1.43		0.040	0.0060
526-73-8	1,2,3-Trimethylbenzene	120.19	1.66		0.080	0.036
95-63-6	1,2,4-Trimethylbenzene	120.20	1.54		0.080	0.020
108-67-8	1,3,5-Trimethylbenzene	120.20	1.44		0.080	0.022
75-01-4	Vinyl chloride	62.50	1.96		0.040	0.026
1330-20-7	Xylenes, Total	106.17	4.47		0.16	0.024

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	105		60-140

Eurofins Environment Testing America
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MR\20200908-16524.b\RCCVI09-LCS.d
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 09-Sep-2020 11:27:30 ALS Bottle#: 11 Worklist Smp#: 1002
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016515-002
Misc. Info.: P119 80ML
Operator ID: HMT Instrument ID: MR

Method: \\chromfs\Knoxville\ChromData\MR\20200908-16524.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 10-Sep-2020 11:02:15 Calib Date: 29-Aug-2020 00:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1028

First Level Reviewer: khachitpongpanits Date: 10-Sep-2020 11:02:15

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.274	8.274	0.000	94	123371	4.80	4.80	
* 2 1,4-Difluorobenzene	114	10.507	10.507	0.000	95	593621	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.349	15.349	0.000	90	504150	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	16.999	16.999	0.000	93	329241	4.64	4.88	
6 Chlorodifluoromethane	51	3.340	3.340	0.000	99	121930	1.60	1.77	
7 Propene	41	3.351	3.351	0.000	98	65069	1.60	1.99	
8 Dichlorodifluoromethane	85	3.400	3.400	0.000	95	108359	1.60	2.09	
9 Chloromethane	52	3.567	3.567	0.000	93	22059	1.60	1.80	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.572	3.572	0.000	89	112601	1.60	1.55	
11 Acetaldehyde	44	3.707	3.707	0.000	87	186809	8.00	9.70	
12 Vinyl chloride	62	3.723	3.723	0.000	99	73819	1.60	1.96	
13 Butane	43	3.799	3.799	0.000	85	139389	1.60	2.08	
14 Butadiene	54	3.804	3.804	0.000	70	62423	1.60	1.97	
15 Bromomethane	94	4.095	4.095	0.000	95	73912	1.60	1.82	
16 Chloroethane	64	4.225	4.225	0.000	76	37074	1.60	1.92	
17 Ethanol	31	4.333	4.333	0.000	97	344086	8.00	13.8	
18 Vinyl bromide	106	4.500	4.500	0.000	96	64720	1.60	1.61	
19 2-Methylbutane	43	4.548	4.548	0.000	92	104789	1.60	2.02	
20 Trichlorofluoromethane	101	4.753	4.753	0.000	93	179847	1.60	1.78	
21 Acrolein	56	4.759	4.759	0.000	36	23787	1.60	2.47	
22 Acetonitrile	40	4.829	4.829	0.000	94	29215	1.60	2.07	
23 Acetone	58	4.866	4.866	0.000	100	93378	4.80	5.07	
24 Pentane	72	4.958	4.958	0.000	95	11130	1.60	1.88	
25 Isopropyl alcohol	45	4.969	4.969	0.000	94	367249	4.80	7.42	
26 Ethyl ether	31	5.125	5.125	0.000	85	101636	1.60	2.36	
27 1,1-Dichloroethene	96	5.422	5.422	0.000	92	52745	1.60	1.45	
28 Acrylonitrile	53	5.530	5.530	0.000	98	39610	1.60	1.89	
29 2-Methyl-2-propanol	59	5.557	5.557	0.000	94	128341	1.60	2.08	
30 1,1,2-Trichloro-1,2,2-trifluoroe	101	5.594	5.594	0.000	94	119896	1.60	1.51	
31 Methylene Chloride	84	5.762	5.762	0.000	93	50560	1.60	1.68	
32 3-Chloro-1-propene	39	5.772	5.772	0.000	93	71002	1.60	2.16	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
33 Carbon disulfide	76	5.918	5.918	0.000	94	158576	1.60	1.65	
34 trans-1,2-Dichloroethene	96	6.554	6.554	0.000	93	52329	1.60	1.55	
35 2-Methylpentane	43	6.576	6.576	0.000	94	160747	1.60	1.98	
36 Methyl tert-butyl ether	73	6.689	6.689	0.000	94	147066	1.60	1.79	
37 1,1-Dichloroethane	63	6.964	6.964	0.000	99	106598	1.60	1.82	
38 Vinyl acetate	43	7.083	7.083	0.000	99	184910	1.60	2.07	
39 2-Butanone (MEK)	72	7.530	7.530	0.000	95	26523	1.60	1.60	
40 Hexane	56	7.546	7.546	0.000	82	48335	1.60	1.93	
41 Isopropyl ether	45	7.708	7.708	0.000	94	242517	1.60	1.99	
42 cis-1,2-Dichloroethene	96	7.945	7.945	0.000	93	53277	1.60	1.36	
43 Ethyl acetate	43	8.145	8.145	0.000	96	175286	1.60	2.11	
44 Chloroform	83	8.291	8.291	0.000	81	124365	1.60	1.68	
45 Tert-butyl ethyl ether	59	8.388	8.388	0.000	97	183824	1.60	1.83	
46 Tetrahydrofuran	42	8.690	8.690	0.000	90	87206	1.60	2.05	
47 1,1,1-Trichloroethane	97	9.310	9.310	0.000	93	118600	1.60	1.67	
48 1,2-Dichloroethane	62	9.428	9.428	0.000	92	76528	1.60	1.93	
49 n-Butanol	31	9.919	9.919	0.000	63	54326	1.60	2.56	
50 Cyclohexane	69	9.919	9.919	0.000	73	24702	1.60	1.69	
51 Benzene	78	9.924	9.924	0.000	93	170632	1.60	1.64	
52 Carbon tetrachloride	117	9.946	9.946	0.000	83	120252	1.60	1.80	
53 2,3-Dimethylpentane	71	10.059	10.059	0.000	85	36500	1.60	1.60	
54 Thiophene	84	10.205	10.205	0.000	91	91741	1.60	1.53	
55 Isooctane	57	10.733	10.733	0.000	93	294596	1.60	1.78	
56 n-Heptane	71	11.132	11.132	0.000	95	54980	1.60	1.63	
57 1,2-Dichloropropane	63	11.208	11.208	0.000	84	70225	1.60	1.78	
58 Trichloroethene	130	11.246	11.246	0.000	91	73807	1.60	1.43	
59 Dibromomethane	93	11.321	11.321	0.000	92	70708	1.60	1.60	
60 Dichlorobromomethane	83	11.477	11.477	0.000	92	132194	1.60	1.77	
61 1,4-Dioxane	88	11.499	11.499	0.000	81	32131	1.60	1.89	
62 Methyl methacrylate	41	11.591	11.591	0.000	83	96195	1.60	2.05	
63 Methylcyclohexane	83	12.033	12.033	0.000	88	97517	1.60	1.60	
64 4-Methyl-2-pentanone (MIBK)	43	12.470	12.470	0.000	97	200859	1.60	2.11	
65 cis-1,3-Dichloropropene	75	12.518	12.518	0.000	93	93958	1.60	1.77	
66 trans-1,3-Dichloropropene	75	13.235	13.235	0.000	88	73606	1.60	1.58	
67 Toluene	91	13.354	13.354	0.000	91	191462	1.60	1.41	
68 1,1,2-Trichloroethane	83	13.430	13.430	0.000	89	59990	1.60	1.46	
69 2-Hexanone	58	13.834	13.834	0.000	88	75905	1.60	1.85	
70 n-Octane	85	14.071	14.071	0.000	94	54752	1.60	1.45	
71 Chlorodibromomethane	129	14.136	14.136	0.000	94	122065	1.60	1.45	
72 Ethylene Dibromide	107	14.433	14.433	0.000	94	108761	1.60	1.48	
73 Tetrachloroethene	129	14.513	14.513	0.000	86	66718	1.60	1.34	
74 Chlorobenzene	112	15.392	15.392	0.000	92	148454	1.60	1.43	
75 2,3-Dimethylheptane	43	15.430	15.430	0.000	90	266622	1.60	1.93	
76 Ethylbenzene	91	15.689	15.689	0.000	98	254592	1.60	1.48	
77 m-Xylene & p-Xylene	91	15.856	15.856	0.000	96	391389	3.20	2.99	
78 n-Nonane	57	16.293	16.293	0.000	89	133461	1.60	1.67	
79 Bromoform	173	16.298	16.298	0.000	92	127315	1.60	1.39	
80 Styrene	104	16.320	16.320	0.000	96	147227	1.60	1.55	
81 o-Xylene	91	16.385	16.385	0.000	94	200753	1.60	1.48	
82 1,1,2,2-Tetrachloroethane	83	16.708	16.708	0.000	96	176102	1.60	1.59	
83 1,2,3-Trichloropropane	110	16.864	16.864	0.000	93	44426	1.60	1.48	
84 Isopropylbenzene	105	16.972	16.972	0.000	98	287498	1.60	1.49	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
85 N-Propylbenzene	120	17.522	17.522	0.000	99	83749	1.60	1.48	
86 2-Chlorotoluene	126	17.565	17.565	0.000	95	78627	1.60	1.51	
87 4-Ethyltoluene	105	17.684	17.684	0.000	98	283507	1.60	1.45	
88 1,3,5-Trimethylbenzene	120	17.760	17.760	0.000	92	123610	1.60	1.44	
89 Alpha Methyl Styrene	118	17.997	17.997	0.000	86	113953	1.60	1.49	
90 n-Decane	57	18.067	18.067	0.000	83	175826	1.60	1.73	
91 tert-Butylbenzene	119	18.196	18.196	0.000	94	279641	1.60	1.47	
92 1,2,4-Trimethylbenzene	105	18.213	18.213	0.000	95	248502	1.60	1.54	
93 sec-Butylbenzene	105	18.477	18.477	0.000	99	379213	1.60	1.50	
94 1,3-Dichlorobenzene	146	18.482	18.482	0.000	94	183745	1.60	1.51	
95 Benzyl chloride	91	18.563	18.563	0.000	96	198707	1.60	1.65	
96 1,4-Dichlorobenzene	146	18.574	18.574	0.000	94	180068	1.60	1.50	
97 4-Isopropyltoluene	119	18.644	18.644	0.000	97	323298	1.60	1.54	
98 1,2,3-Trimethylbenzene	105	18.692	18.692	0.000	98	243782	1.60	1.66	
99 Butylcyclohexane	83	18.752	18.752	0.000	87	214341	1.60	1.56	
101 1,2-Dichlorobenzene	146	18.941	18.941	0.000	94	181627	1.60	1.43	
100 2,3-Dihydroindene	117	18.941	18.941	0.000	92	242168	1.60	1.43	
102 Indene	116	19.075	19.075	0.000	87	208996	1.60	1.52	
103 n-Butylbenzene	91	19.086	19.086	0.000	96	330102	1.60	1.60	
104 Undecane	57	19.415	19.415	0.000	85	207310	1.60	1.63	
105 1,2-Dibromo-3-Chloropropane	157	19.555	19.555	0.000	84	89629	1.60	1.47	
106 1,2,4,5-Tetramethylbenzene	119	19.852	19.852	0.000	97	290752	1.60	1.50	
107 Dodecane	57	20.472	20.472	0.000	83	188955	1.60	1.67	
108 1,2,4-Trichlorobenzene	180	20.650	20.650	0.000	93	149214	1.60	1.44	
109 Naphthalene	128	20.785	20.785	0.000	99	305865	1.60	1.51	
110 Hexachlorobutadiene	225	21.006	21.006	0.000	92	145133	1.60	1.21	
111 1,2,3-Trichlorobenzene	180	21.076	21.076	0.000	93	146436	1.60	1.43	
112 2-Methylnaphthalene	142	21.820	21.820	0.000	99	202638	1.60	1.71	
113 1-Methylnaphthalene	142	21.955	21.955	0.000	98	301812	1.60	1.81	
A 116 C8 Range	1	14.058	(14.023-14.131)		0	736451	1.60	1.96	
S 117 Xylenes, Total	100				0		4.80	4.46	
S 118 1,2-Dichloroethene, Total	1				0		3.20	2.91	

Reagents:

40CV101P_00119	Amount Added: 80.00	Units: ml	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

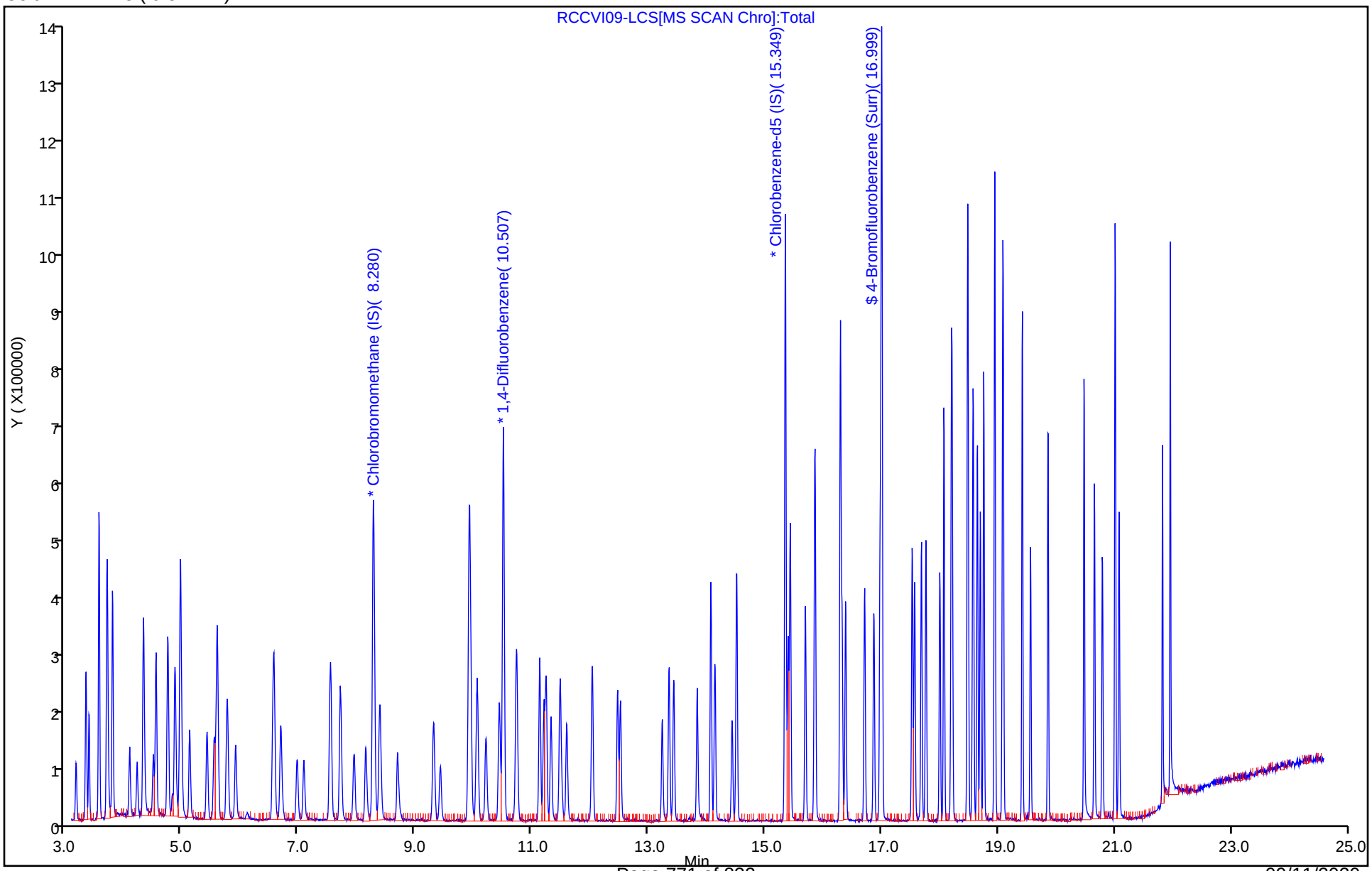
Report Date: 10-Sep-2020 11:02:18 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins Environment Testing America

Data File: \\chromfs\Knoxville\ChromData\MR\20200908-16524.b\RCCVI09-LCS.d

Injection Date:	09-Sep-2020 11:27:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	LCS			Worklist Smp#:	1002
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins Environment Testing America
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MR\20200908-16524.b\RCCVI09-LCS.d				
Lims ID:	LCS				
Client ID:					
Sample Type:	LCS				
Inject. Date:	09-Sep-2020 11:27:30	ALS Bottle#:	11	Worklist Smp#:	1002
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016515-002				
Misc. Info.:	P119 80ML				
Operator ID:	HMT	Instrument ID:	MR		
Method:	\\chromfs\Knoxville\ChromData\MR\20200908-16524.b\MR_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	10-Sep-2020 11:02:15	Calib Date:	29-Aug-2020 00:02:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1028				

First Level Reviewer: khachitpongpanits Date: 10-Sep-2020 11:02:15

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	4.88	105.27

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Instrument ID: MR Start Date: 08/28/2020 12:43

Analysis Batch Number: 42222 End Date: 08/29/2020 04:09

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 140-42222/1		08/28/2020 12:43	1	RH287BLK2.D	RTX-5 0.32(mm)
IC 140-42222/3		08/28/2020 14:01	1	RH28IC10X.D	RTX-5 0.32(mm)
IC 140-42222/5		08/28/2020 15:43	1	RH28IC09.D	RTX-5 0.32(mm)
IC 140-42222/7		08/28/2020 17:27	1	RH28IC08.D	RTX-5 0.32(mm)
IC 140-42222/9		08/28/2020 19:11	1	RH28IC01.D	RTX-5 0.32(mm)
IC 140-42222/10		08/28/2020 20:00	1	RH28IC02.D	RTX-5 0.32(mm)
140-19590-A-5 MDLV		08/28/2020 20:00	1		RTX-5 0.32(mm)
IC 140-42222/11		08/28/2020 20:50	1	RH28IC03.D	RTX-5 0.32(mm)
140-19590-A-6 MDLV		08/28/2020 20:50	1		RTX-5 0.32(mm)
IC 140-42222/12		08/28/2020 21:38	1	RH28IC04.D	RTX-5 0.32(mm)
140-19590-A-7 MDLV		08/28/2020 21:38	1		RTX-5 0.32(mm)
IC 140-42222/13		08/28/2020 22:26	1	RH28IC05.D	RTX-5 0.32(mm)
140-19590-A-8 MDLV		08/28/2020 22:26	1		RTX-5 0.32(mm)
IC 140-42222/14		08/28/2020 23:14	1	RH28IC06.D	RTX-5 0.32(mm)
ICIS 140-42222/15		08/29/2020 00:02	1	RH28IC07.D	RTX-5 0.32(mm)
ICV 140-42222/17		08/29/2020 01:37	1	RH28ICV.D	RTX-5 0.32(mm)
ZZZZZ		08/29/2020 04:09	1		RTX-5 0.32(mm)

Eurofins/TestAmerica Knoxville GC/MS Air - Initial Calibration Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 21 & KNOX-MS-0023, Rev 4

Analysis Date:	8/28/20	Instrument:	MR	Chrom WL #:	16425	TALS Batch & Event #	TO14/15: 2588 / 42222	DOD: 2591 / 42225	DOD5: 2589 42223	OHIO: 2590 / 42224

Chrom/Worklist Review	1st	Comments	2nd
1. Re-read each Limit Group [method editor-limit groups]	✓		na
2. Verify LODV in Chrom [method editor -> edit -> MDL]	✓		na
3. Are the reagents and init/final volumes correct and first level "unlock/clear"? (Verify reagents & amt. injected at each level) [WL Sample Reagents Tab vs. Entech]	✓		✓
4. Files linked properly to calibration levels? [Sample List- Lab ID vs. Info]	✓		✓
5. Did BFB meet tune criteria? [F8]	✓		✓
6. Were all standards injected within 24 hr of BFB? [F7]	✓		✓
7. High point checked for saturation and point removed if so? [Chrom]	✓		✓
8. If manual integrations performed, are they properly performed, correct, baseline clearly identified, and correct reason given? [Chrom]	✓		MA
9. RT for each IS ±20 sec avg. RT? [F6 IstdRec]	✓		✓
10. Area for each IS ± 40% avg. area? [F6 IstdRec]	✓		✓
11. Each analyte ± 0.06 RRT of avg. RRT? [F6 - RRT]	✓		✓
12. Elution order checked on isomeric pairs? [Chrom]			
• dichlorodifluoromethane / 1,2-dichlorotetrafluoroethane	✓		✓
• 2-methyl butane / acrolein	✓		✓
• trichlorofluoromethane / 1,1,2-trichlorotrifluoroethane	✓		✓
• vinyl acetate / hexane	✓		✓
• cis- and trans- isomers	✓		✓
• ethyl benzene / m/p-xylene / o-xylene	✓		✓
• n-propylbenzene/4-ethyl toluene/1,3,5-trimethylbenzene/1,2,4-trimethylbenzene/ sec-butylbenzene/1,2,3-trimethylbenzene			✓
• tert-butylbenzene/4-isopropyltoluene	✓		✓
• 1,3- , 1,4- , and 1,2-dichlorobenzene	✓		✓
• 1,2-dimethyl-4-ethylbenzene/1,2,4,5-, 1,2,3,5-, and 1,2,3,4-tetramethylbenzenes	✓	DN ICV	✓
• 1,2,4- and 1,2,3-trichlorobenzenes	✓		✓
• 2-, and 1-methylnaphthalene	✓		✓
13. "Range" analytes & internal standard RIC ID'd correctly, inspected for interferences & proper integration?	✓		✓

MLG Review	TO	DOD	OH	Comments	TO-	DOD	OH
14. Is %RSD for all target analytes ≤ 30%? (with up to 2 compounds with RSD ≤ 40%) 1& 2 methylnaphthalene ≤ 50% [F6 Σ]	✓	✓	✓		✓	✓	✓
15. Were at least 5 levels of each compound analyzed? [F6]	✓	✓	✓		✓	✓	✓
16. Is low level std at or <RL and are the remaining points consec.? [F6]	✓	✓	✓		✓	✓	✓
17. At least 6 consec. points used for quad curves; at least 5 consec. points for linear curves? (Note: Ohio does not allow quad) [F6]	✓	✓	✓		✓	✓	✓
18. If curves were used, is correlation coefficient ≥0.990? [F6]	✓	✓	✓		✓	✓	✓
19. Is the intercept less than the RL for each curve? [F6]	✓	✓			✓	✓	✓
20. For quadratic: is a tangent's slope to the curve entirely positive or negative and continuous. [Cntrl-C, details]	NS	na			✓	MA	na
21. Is low point RSE ≤ 50 %? [F6]	✓	✓	✓		✓	✓	✓
22. Is the second source analysis within limits? [F8 - icv]	✓	✓	✓		✓	✓	✓

Analyst/Date: 8/29/20

2nd Level Reviewer/Date: 8/31/20

TALS Review	TO	DOD	OH	Comments	TO	DOD	OH
23. Upload ICAL	✓				na	na	na
24. Graphics uploaded? [paperclip]	✓	✓	✓		✓	✓	✓
25. All points are in the most recent active calibration event? [Calibration Events –'Fix ICAL linkage' if needed]	✓	✓	✓		✓	✓	✓
26. Runs linked to BFB? [QC Links]	✓	✓	✓		✓	✓	✓
27. Run Checklist and acknowledge findings [F8]	✓	✓	✓		✓	✓	✓
28. If criteria not met, was a NCM generated?					MA		
29. After review in TALS, approve the method in TALS.	na	na	na		✓	✓	✓
30. After verifying TALS is correct, lock method in Chrom <resolve any error issues>	na	na	na		✓	✓	✓
31. Checklist & Entech report scanned, attached & assigned properly?	na	na	na		✓	✓	✓

Analyst/date: 8/29/20

2nd Level Reviewer/date: 8/31/20

Comments:

Comments: 8/31/20

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Instrument ID: MH Start Date: 08/29/2020 10:00

Analysis Batch Number: 42290 End Date: 08/30/2020 09:10

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 140-42290/1		08/29/2020 10:00	1	HBFBH29.D	RTX-5 0.32(mm)
IC 140-42290/3		08/29/2020 12:34	1	HH29IC10.D	RTX-5 0.32(mm)
IC 140-42290/5		08/29/2020 14:25	1	HH29IC09.D	RTX-5 0.32(mm)
IC 140-42290/7		08/29/2020 16:25	1	HH29IC08.D	RTX-5 0.32(mm)
IC 140-42290/9		08/29/2020 18:16	1	HH29IC01.D	RTX-5 0.32(mm)
IC 140-42290/10		08/29/2020 19:13	1	HH29IC02.D	RTX-5 0.32(mm)
IC 140-42290/11		08/29/2020 20:11	1	HH29IC03.D	RTX-5 0.32(mm)
IC 140-42290/12		08/29/2020 21:03	1	HH29IC04.D	RTX-5 0.32(mm)
IC 140-42290/13		08/29/2020 21:58	1	HH29IC05.D	RTX-5 0.32(mm)
IC 140-42290/14		08/29/2020 22:57	1	HH29IC06.D	RTX-5 0.32(mm)
ICIS 140-42290/15		08/29/2020 23:57	1	HH29IC07.D	RTX-5 0.32(mm)
ICV 140-42290/18		08/30/2020 02:47	1	HH29LCS.D	RTX-5 0.32(mm)
CCVIS 140-42290/28		08/30/2020 02:47	1		RTX-5 0.32(mm)
ZZZZZ		08/30/2020 05:54	1		RTX-5 0.32(mm)
ZZZZZ		08/30/2020 06:59	1		RTX-5 0.32(mm)
ZZZZZ		08/30/2020 08:04	1		RTX-5 0.32(mm)
ZZZZZ		08/30/2020 09:10	1		RTX-5 0.32(mm)

Eurofins/TestAmerica Knoxville GC/MS Air - Initial Calibration Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 21 & KNOX-MS-0023, Rev 4

Analysis Date:	8/29/20	Instrument:	MH	Chrom WL #:	16451	TALS Batch & Event #	TO14/15: 42290 / 2592	DOD5: 42291 / 2593
							DOD: 42293 / 2595	OHIO: 42292 / 2594

Chrom/Worklist Review	1st	Comments	2nd
1. Re-read each Limit Group [method editor-limit groups]	✓		na
2. Verify LODV in Chrom [method editor -> edit -> MDL]	✓		na
3. Are the reagents and init/final volumes correct and first level "unlock/clear"? (Verify reagents & amt. injected at each level) [WL Sample Reagents Tab vs. Entech]	✓		✓
4. Files linked properly to calibration levels? [Sample List- Lab ID vs. Info]	✓		✓
5. Did BFB meet tune criteria? [F8]	✓		✓
6. Were all standards injected within 24 hr of BFB? [F7]	✓		✓
7. High point checked for saturation and point removed if so? [Chrom]	✓		✓
8. If manual integrations performed, are they properly performed, correct, baseline clearly identified, and correct reason given? [Chrom]	✓	(M) CDFM lvl 9	
9. RT for each IS ±20 sec avg. RT? [F6 IstdRec]	✓		✓
10. Area for each IS ± 40% avg. area? [F6 IstdRec]	✓		✓
11. Each analyte ± 0.06 RRT of avg. RRT? [F6 - RRT]	✓		✓
12. Elution order checked on isomeric pairs? [Chrom]			
• dichlorodifluoromethane / 1,2-dichlorotetrafluoroethane	✓		✓
• 2-methyl butane / acrolein	✓		✓
• trichlorofluoromethane / 1,1,2-trichlorotrifluoroethane	✓		✓
• vinyl acetate / hexane	✓		✓
• cis- and trans- isomers	✓		✓
• ethyl benzene / m/p-xylene / o-xylene	✓		✓
• n-propylbenzene/4-ethyl toluene/1,3,5-trimethylbenzene/1,2,4-trimethylbenzene/ sec-butylbenzene/1,2,3-trimethylbenzene	✓		✓
• tert-butylbenzene/4-isopropyltoluene	✓		✓
• 1,3- , 1,4- , and 1,2-dichlorobenzene	✓		✓
• 1,2-dimethyl-4-ethylbenzene/1,2,4,5-, 1,2,3,5-, and 1,2,3,4-tetramethylbenzenes	✓		INICC
• 1,2,4- and 1,2,3-trichlorobenzenes	✓		✓
• 2-, and 1-methylnaphthalene	✓		✓
13. "Range" analytes & internal standard RIC ID'd correctly, inspected for interferences & proper integration?	✓		✓

MLG Review	TO	DOD	OH	Comments	TO-	DOD	OH
14. Is %RSD for all target analytes ≤ 30%? (with up to 2 compounds with RSD ≤ 40%) 1& 2 methylnaphthalene ≤ 50% naph 1,2,4-tc/bz [F6 Σ]	✓	✓	✓		✓	✓	✓
15. Were at least 5 levels of each compound analyzed? [F6]	✓	✓	✓		✓	✓	✓
16. Is low level std at or <RL and are the remaining points consec.? [F6]	✓	✓	✓		✓	✓	✓
17. At least 6 consec. points used for quad curves; at least 5 consec. points for linear curves? (Note: Ohio does not allow quad) [F6]	✓	✓	✓		✓	✓	✓
18. If curves were used, is correlation coefficient ≥0.990? [F6]	✓	✓	✓		✓	✓	✓
19. Is the intercept less than the RL for each curve? [F6]	✓	✓	✓		✓	✓	✓
20. For quadratic: is a tangent's slope to the curve entirely positive or negative and continuous. [Cntrl-C, details]	✓	✓	na		✓	✓	na
21. Is low point RSE ≤ 50 %? [F6]	✓	✓	✓		✓	✓	✓
22. Is the second source analysis within limits? [F8 - icv]	✓	✓	✓		✓	✓	✓

Analyst/Date: JB 8/31/20 — **2nd Level Reviewer/Date:** 8/31/20

TALS Review	TO	DOD	OH	Comments	TO	DOD	OH
23. Upload ICAL		✓			na	na	na
24. Graphics uploaded? [paperclip]	✓	✓	✓		✓	✓	✓
25. All points are in the most recent active calibration event? [Calibration Events –'Fix ICAL linkage' if needed]	✓	✓	✓		✓	✓	✓
26. Runs linked to BFB? [QC Links]	✓	✓	✓		✓	✓	✓
27. Run Checklist and acknowledge findings [F8]	✓	✓	✓		✓	✓	✓
28. If criteria not met, was a NCM generated?	NA →				✓	✓	✓
29. After review in TALS, approve the method in TALS.	na	na	na		✓	✓	✓
30. After verifying TALS is correct, lock method in Chrom <resolve any error issues>	na	na	na		✓	✓	✓
31. Checklist & Entech report scanned, attached & assigned properly?	na	na	na		✓	✓	✓

Analyst/date: JB 8/31/20	2nd Level Reviewer/date: 8/31/20
Comments: DNA 1 or 2-methylnapth.	Comments:

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Instrument ID: MG Start Date: 09/01/2020 16:42

Analysis Batch Number: 42295 End Date: 09/02/2020 08:56

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 140-42295/1		09/01/2020 16:42	1	GI01BFB.D	RTX-5 0.32(mm)
IC 140-42295/3		09/01/2020 18:07	1	GI01IC10.D	RTX-5 0.32(mm)
IC 140-42295/5		09/01/2020 19:43	1	GI01IC09.D	RTX-5 0.32(mm)
IC 140-42295/7		09/01/2020 21:19	1	GI01IC08.D	RTX-5 0.32(mm)
IC 140-42295/9		09/01/2020 22:55	1	GI01IC01.D	RTX-5 0.32(mm)
IC 140-42295/10		09/01/2020 23:39	1	GI01IC02.D	RTX-5 0.32(mm)
140-19589-A-5 MDLV		09/01/2020 23:39	1		RTX-5 0.32(mm)
IC 140-42295/11		09/02/2020 00:24	1	GI01IC03.D	RTX-5 0.32(mm)
140-19589-A-6 MDLV		09/02/2020 00:24	1		RTX-5 0.32(mm)
IC 140-42295/12		09/02/2020 01:08	1	GI01IC04.D	RTX-5 0.32(mm)
140-19589-A-7 MDLV		09/02/2020 01:08	1		RTX-5 0.32(mm)
IC 140-42295/13		09/02/2020 01:52	1	GI01IC05.D	RTX-5 0.32(mm)
140-19589-A-8 MDLV		09/02/2020 01:52	1		RTX-5 0.32(mm)
IC 140-42295/14		09/02/2020 02:38	1	GI01IC06.D	RTX-5 0.32(mm)
ICIS 140-42295/15		09/02/2020 03:27	1	GI01IC07.D	RTX-5 0.32(mm)
ZZZZZ		09/02/2020 07:23	1		RTX-5 0.32(mm)
ZZZZZ		09/02/2020 08:08	1		RTX-5 0.32(mm)
ICV 140-42295/22		09/02/2020 08:56	1	GI01ICVR.D	RTX-5 0.32(mm)

Eurofins/TestAmerica Knoxville GC/MS Air - Initial Calibration Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 21 & KNOX-MS-0023, Rev 4

Analysis Date:	9/1/20	Instrument:	MG	Chrom WL #:	16453	TALS Batch & Event #	TO14/15: 2602 / 42295	DOD: 2603 42296
							DOD: 2605 / 42298	OHIO: 2604 / 42297

Chrom/Worklist Review	1st	Comments	2nd
1. Re-read each Limit Group [method editor-limit groups]	✓		na
2. Verify LODV in Chrom [method editor -> edit -> MDL]	✓		na
3. Are the reagents and init/final volumes correct and first level "unlock/clear"? (Verify reagents & amt. injected at each level) [WL Sample Reagents Tab vs. Entech]	✓		✓
4. Files linked properly to calibration levels? [Sample List- Lab ID vs. Info]	✓		✓
5. Did BFB meet tune criteria? [F8]	✓		✓
6. Were all standards injected within 24 hr of BFB? [F7]	✓		✓
7. High point checked for saturation and point removed if so? [Chrom]	✓		✓
8. If manual integrations performed, are they properly performed, correct, baseline clearly identified, and correct reason given? [Chrom]	✓		NA
9. RT for each IS ±20 sec avg. RT? [F6 IstdRec]	✓		✓
10. Area for each IS ± 40% avg. area? [F6 IstdRec]	✓		✓
11. Each analyte ± 0.06 RRT of avg. RRT? [F6 - RRT]	✓		✓
12. Elution order checked on isomeric pairs? [Chrom]			
• dichlorodifluoromethane / 1,2-dichlorotetrafluoroethane	✓		✓
• 2-methyl butane / acrolein	✓		✓
• trichlorofluoromethane / 1,1,2-trichlorotrifluoroethane	✓		✓
• vinyl acetate / hexane	✓		✓
• cis- and trans- isomers	✓		✓
• ethyl benzene / m/p-xylene / o-xylene	✓		✓
• n-propylbenzene/4-ethyl toluene/1,3,5-trimethylbenzene/1,2,4-trimethylbenzene/ sec-butylbenzene/1,2,3-trimethylbenzene	✓		✓
• tert-butylbenzene/4-isopropyltoluene	✓		✓
• 1,3- , 1,4- , and 1,2-dichlorobenzene	✓		✓
• 1,2-dimethyl-4-ethylbenzene/1,2,4,5-, 1,2,3,5-, and 1,2,3,4-tetramethylbenzenes	N	In ICV	✓
• 1,2,4- and 1,2,3-trichlorobenzenes	✓		✓
• 2-, and 1-methylnaphthalene	✓		✓
13. "Range" analytes & internal standard RIC ID'd correctly, inspected for interferences & proper integration?	✓		✓

MLG Review	TO	DOD	OH	Comments	TO-	DOD	OH
14. Is %RSD for all target analytes ≤ 30%? (with up to 2 compounds with RSD ≤ 40%) 1& 2 methylnaphthalene ≤ 50% [F6 Σ]	✓	✓	✓		✓	✓	✓
15. Were at least 5 levels of each compound analyzed? [F6]	✓	✓	✓		✓	✓	✓
16. Is low level std at or <RL and are the remaining points consec.? [F6]	✓	✓			✓	✓	✓
17. At least 6 consec. points used for quad curves; at least 5 consec. points for linear curves? (Note: Ohio does not allow quad) [F6]	✓	✓	✓		✓	✓	✓
18. If curves were used, is correlation coefficient ≥0.990? [F6]	✓	✓	✓		✓	✓	✓
19. Is the intercept less than the RL for each curve? [F6]	✓	✓	✓		✓	✓	✓
20. For quadratic: is a tangent's slope to the curve entirely positive or negative and continuous. [Cntrl-C, details]	✓	✓	na		✓	✓	na
21. Is low point RSE ≤ 50 %? [F6]	✓	✓	✓		✓	✓	✓
22. Is the second source analysis within limits? [F8 - icv]	✓	✓	✓		✓	✓	✓

Analyst/Date: 9/2/20 **2nd Level Reviewer/Date:** 9/2/20

TALS Review	TO	DOD	OH	Comments	TO	DOD	OH
23. Upload ICAL	✓				na	na	na
24. Graphics uploaded? [paperclip]	✓	✓	✓		✓	✓	✓
25. All points are in the most recent active calibration event? [Calibration Events – 'Fix ICAL linkage' if needed]	✓	✓	✓		✓	✓	✓
26. Runs linked to BFB? [QC Links]	✓	✓	✓		✓	✓	✓
27. Run Checklist and acknowledge findings [F8]	✓	✓	✓		✓	✓	✓
28. If criteria not met, was a NCM generated?	✓	✓	✓		NA →		
29. After review in TALS, approve the method in TALS.	na	na	na		✓	✓	✓
30. After verifying TALS is correct, lock method in Chrom <resolve any error issues>	na	na	na		✓	✓	✓
31. Checklist & Entech report scanned, attached & assigned properly?	na	na	na		✓	✓	✓

Analyst/date:	2nd Level Reviewer/date:
Comments:	Comments:
9/2/20	9/2/20

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Instrument ID: MG Start Date: 09/08/2020 14:50

Analysis Batch Number: 42503 End Date: 09/09/2020 10:14

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 140-42503/1		09/08/2020 14:50	1	GBFBI08Z.D	RTX-5 0.32(mm)
CCVIS 140-42503/2		09/08/2020 15:52	1	GCCVI08Z.D	RTX-5 0.32(mm)
LCS 140-42503/1002		09/08/2020 15:52	1	GCCVI08Z-LCS.d	RTX-5 0.32(mm)
MB 140-42503/5		09/08/2020 17:16	1	G500BI08.D	RTX-5 0.32(mm)
ZZZZZ		09/08/2020 18:03	3.43		RTX-5 0.32(mm)
ZZZZZ		09/08/2020 18:49	3.6		RTX-5 0.32(mm)
ZZZZZ		09/08/2020 20:19	1.55		RTX-5 0.32(mm)
ZZZZZ		09/08/2020 22:39	1		RTX-5 0.32(mm)
140-20194-19	SV-139-A-29	09/08/2020 23:24	1	GI08P108.D	RTX-5 0.32(mm)
140-20194-1	SV-172-A-29	09/09/2020 00:58	1	GI08P110.D	RTX-5 0.32(mm)
140-20194-2	SV-116-A-29	09/09/2020 01:43	1	GI08P111.D	RTX-5 0.32(mm)
140-20194-3	SV-DUP 3-A-29	09/09/2020 02:29	1	GI08P112.D	RTX-5 0.32(mm)
140-20194-4	SV-138-A-29	09/09/2020 03:15	1	GI08P113.D	RTX-5 0.32(mm)
140-20194-5	SV-173-A-29	09/09/2020 04:00	9.23	GI08P114.D	RTX-5 0.32(mm)
140-20194-6	SV-171-A-29	09/09/2020 04:44	3.03	GI08P115.D	RTX-5 0.32(mm)
ZZZZZ		09/09/2020 07:56	12.39		RTX-5 0.32(mm)
ZZZZZ		09/09/2020 08:42	1.55		RTX-5 0.32(mm)
140-20194-8	SV-177-A-29	09/09/2020 09:26	1	GI08P107R.D	RTX-5 0.32(mm)
140-20194-20	SV-118-A-29	09/09/2020 10:14	1	GI08P109R.D	RTX-5 0.32(mm)

Eurofins/TestAmerica Knoxville GC/MS Air - Batch Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 21 & KNOX-MS-0023, Rev 4

Instrument/Date	MG 9/9/20		Routine	DOD	OHIO VAP
CCAL Chrom WL #	16579	CCAL Batch #	42503		42542
ICAL Chrom WL #	16453	ICAL Batch # / Event #	42295 / 2602	/	42297 / 2604

Chrom Review	1st	If No, why is data reportable?	2nd
1. Are the reagents & init/final volumes correct? (Verify reagents & amt. injected) [WL Sample Reagent Tab]	✓	tce confirmation only	na
2. Did BFB meet tune criteria? [F8]	✓	□ [Failed TO-14A, but passes TO-15]	
3. Was the CCAL compared to the most recent & correct ICAL (correct last ICal File batch #/start/end Cal date/time)? [F8]	✓	List Target analytes outside CCV limits: 123 tmbz	
4. Elution order checked on isomeric pairs? [Chrom]			
• dichlorodifluoromethane / 1,2-dichlorotetrafluoroethane	✓		
• 2-methyl butane / acrolein	✓		
• trichlorofluoromethane / 1,1,2-trichlorotrifluoroethane	✓		
• vinyl acetate / hexane	✓		
• cis- and trans- isomers	✓		
• ethyl benzene / m/p-xylene / o-xylene	✓		
• n-propylbenzene/4-ethyl toluene/1,3,5-trimethylbenzene/1,2,4-trimethylbenzene/sec-butylbenzene/1,2,3-trimethylbenzene	✓		
• tert-butylbenzene/4-isopropyltoluene	✓		
• 1,3- , 1,4- , and 1,2-dichlorobenzene	✓		
• 1,2-dimethyl-4-ethylbenzene/1,2,4,5-, 1,2,3,5-, and 1,2,3,4-tetramethylbenzenes	✓		
• 1,2,4-trichlorobenzene/1,2,3-trichlorobenzene	✓		
• 2-, and 1-methylnaphthalene	✓		
5. "Range" analytes & internal standard RIC ID'd correctly, inspected for interferences & proper integration?	✓		
6. Has the RT been updated to the method?	✓		
Analyst/date JB 9/9/20		**2nd Level Reviewer/date**	

7. Has the vol injected been verified vs Entech & corrected if actual amount differs >5%? [WL Sample Info: init amt = sample amt; final amt = 500 mL]	✓		
8. Do the lab ID, Info 1 and Dilution Factor columns correlate in Chrom? [Sample List - Lab ID vs. Info 1 vs. Dilution]	✓		
9. Can dilution history verified? [Mgmt Report]	✓		
10. Are all analytes present in the system blank < RL? (<1/2 RL for DoD). *If no, list blank ID:*	✓	□ Method Blank – Report, ND (NCM#_____) □ Method Blank – Report, 10X (NCM#_____)	
11. All runs - peaks ID'd correctly and false positives removed?	✓		
12. If manual integrations performed, are they properly performed, baseline clearly identified, and correct reason given?	✓		
13. IS/Surr within limits? *List samples and reason (e.g., 1 thru 5):* [Batch Results IS & SUR Tab] Sample / Reason / Sample / Reason	✓	□ (1) Surrogate – Matrix (NCM#_____) □ (2) Surrogate – High, ND (NCM#_____) □ (3) ISTD – RA/RA Concurs (NCM#_____) □ (4) Surrogate –RX concur, Report both (NCM#_____) □ (5) ISTD – Matrix, DL required (NCM#_____)	
14. Samples outside calibration range scheduled for dilution?	✓	□ ICAL – Range Exceeded; Minimum Dilution	

Chrom Review	1st	If No, why is data reportable?	2nd
15. For first analysis that is at a dilution, is highest target analyte >20% cal range? *List samples and reason:* Sample / Reason / Sample / Reason	NA	□ (1) Reporting Limit – Dilution, Matrix (NCM#_____) □ (2) Reporting Limit – Dilution, Non-Target (NCM#_____) □ (3) Issues with initial collection volume; see DRC.	
16. RIC inspected for proper integration for TPH?			
17. Obvious non-TPH peaks excluded?			
18. Individual TPH peak area < octane high point area?			

TALS Review	1st	If No, why is data reportable?	2nd

Eurofins/TestAmerica Knoxville GC/MS Air - Batch Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 21 & KNOX-MS-0023, Rev 4

19. Graphics uploaded? [open one paperclip]	✓		
20. NCM generated if BFB failed TO-14A criteria, but passes TO-15?	✓	□ [Failed TO-14A, but passes TO-15] (NCM#)	
21. Is the %D ≤ 30% for all target analytes? [≤ 50% for 1&2 methylnaphthalene] [Chrom-F8] [TALS-Sample Results Tab]	✓	☒ CCV - %D - LCS criteria met (NCM# ~~25067~~ 9/9/20) □ CCV - %D high - outside criteria, samples ND, Sample IDs Included (NCM# 25007)	
22. Undiluted volume analyzed meets the method requirement (200 mL vs. 500 mL)?	✓		na
23. Project & sample special instructions verified?	✓		
24. If samples were Tedlar bags, was the 72 hr HT met? ** Narrate transfer to can.	NA	□ Air Analysis - Air Sample Transfer to Canister (NCM#____)	
25. Sample analyses done within analytical holding time?	✓	□ Holding Time – Received w/Insufficient Time (NCM#_____) □ Holding Time – Receipt (NCM#_____)	
26. Did the LCS meet criteria (70-130% with a limited # allowed 60-140% (see table) provisional analyte limit 60-140% with a limited # allowed 50-150%, and no two consecutive MEs). [Sample Results Tab] Note: No LCS required for OH VAP.	✓	☒ Marginal Exceedances - Within ME Limits and Random; Report (NCM# ___) □ LCS/LCSD - %R High (NCM#_____) 25008	
27. Suffixes assigned properly (DL/RE)? [Sample List Tab]	✓		
28. Each job has QC created (BFB, CCV, LCS, MB)? [Sample List Tab]	✓		
29. Analytes over calibration range set to secondary [Conditions Review Tab]	✓		
30. Samples not reported set to 'Acceptable' or 'Rejected'? [Sample Results Tab]	✓		
31. DUP done per 20 samples and are all RPDs within limits? (for target analytes >5x RL, <25% RPD; no criteria for n-butanol) *(If DUP not reported - set to 'Acceptable' for each job)*	✓		
32. Samples linked to proper blank (200 mL or 500 mL)? [QC links]	✓	**500 mL blank ID:** 5 **200 mL blank ID:**	
33. Samples linked to job's BFB/CCV/LCS/MB? [QC Links]	✓		
34. Correct ICV linked to each MB? [QC Links]	✓		
35. Were all samples/QC analyzed within 24 hr of BFB? [F7]	✓		
36. If criteria were not met, was a NCM generated, and assigned to proper QC & samples? [Also see Conditions Review Tab]	✓		
37. Run Checklist and acknowledge findings [F8]	✓		
38. Runs set to 1st level review?	✓	Runs set to 2nd level review?	
39. QC checker run and items addressed?	-na-		
40. Checklist & Entech report scanned, attached & assigned properly?	-na-		

Analyst:	Date: 9/9/20	2nd Level Reviewer :	Date:
Comments:		**Comments:**	

Example Calculation:

On-column ppbv x Final Vol (mL)/Entech Initial Vol (mL) x Canister Dilution Log DF

20210 DL 5.289 → 8/1.98 ✓

Eurofins/TestAmerica Knoxville GC/MS Air - Batch Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 20 & KNOX-MS-0023, Rev 4

Instrument/Date	MG 9/8/20		Routine	DOD	OHIO VAP
CCAL Chrom WL #	16519	CCAL Batch #	42503		42542
ICAL Chrom WL #	16453	ICAL Batch # / Event #	42295/2602		42297/2604

Chrom Review	1st	If No, why is data reportable?	2nd
1. Are the reagents & init/final volumes correct? (Verify reagents & amt. injected) [WL Sample Reagent Tab]			na
2. Did BFB meet tune criteria? [F8]		□ [Failed TO-14A, but passes TO-15]	Y
3. Was the CCAL compared to the most recent & correct ICAL (correct last ICal File batch #/start/end Cal date/time)? [F8]		List Target analytes outside CCV limits: _____ _____ _____	Y
4. Elution order checked on isomeric pairs? [Chrom]			
• dichlorodifluoromethane / 1,2-dichlorotetrafluoroethane			Y
• 2-methyl butane / acrolein			Y
• trichlorofluoromethane / 1,1,2-trichlorotrifluoroethane			Y
• vinyl acetate / hexane			Y
• cis- and trans- isomers			Y
• ethyl benzene / m/p-xylene / o-xylene			Y
• n-propylbenzene/4-ethyl toluene/1,3,5-trimethylbenzene/1,2,4-trimethylbenzene/sec-butylbenzene/1,2,3-trimethylbenzene			Y
• tert-butylbenzene/4-isopropyltoluene			Y
• 1,3- , 1,4- , and 1,2-dichlorobenzene			Y
• 1,2-dimethyl-4-ethylbenzene/1,2,4,5-, 1,2,3,5-, and 1,2,3,4-tetramethylbenzenes			NA
• 1,2,4-trichlorobenzene/1,2,3-trichlorobenzene			Y
• 2-, and 1-methylnaphthalene			Y
5. "Range" analytes & internal standard RIC ID'd correctly, inspected for interferences & proper integration?			**NA**
6. Has the RT been updated to the method?			**Y**
Analyst/date		**2nd Level Reviewer/date LL 9/9/20**	

7. Has the vol injected been verified vs Entech & corrected if actual amount differs >5%? [WL Sample Info: init amt = sample amt; final amt = 500 mL]			**Y**
8. Do the lab ID, Info 1 and Dilution Factor columns correlate in Chrom? [Sample List - Lab ID vs. Info 1 vs. Dilution]			**Y**
9. Can dilution history verified? [Mgmt Report]			**Y**
10. Are all analytes present in the system blank < RL**?** (<1/2 RL for DoD). *If no, list blank ID:*		□ Method Blank – Report, ND (NCM#_____) □ Method Blank – Report, 10X (NCM#_____)	**Y**
11. All runs - peaks ID'd correctly and false positives removed?			**Y**
12. If manual integrations performed, are they properly performed, baseline clearly identified, and correct reason given?			**Y**
13. IS/Surr within limits? *List samples and reason (e.g.,* 1 thru 5*):* [Batch Results IS & SUR Tab] Sample Reason Sample Reason _____ _____ _____ _____ _____ _____ _____ _____		□ (1) Surrogate – Matrix (NCM#_____) □ (2) Surrogate – High, ND (NCM#_____) □ (3) ISTD – RA/RA Concurs (NCM#_____) □ (4) Surrogate –RX concur, Report both (NCM#_____) □ (5) ISTD – Matrix, DL required (NCM#_____)	**Y**
14. Samples outside calibration range scheduled for dilution?		□ ICAL – Range Exceeded; Minimum Dilution	**Y**
Chrom Review	**1st**	**If No, why is data reportable?**	**2nd**
15. For first analysis that is at a dilution, is highest target analyte >20% cal range? *List samples and reason:* Sample Reason Sample Reason _____ _____ _____ _____ _____ _____ _____ _____		□ (1) Reporting Limit – Dilution, Matrix (NCM#_____) □ (2) Reporting Limit – Dilution, Non-Target (NCM#_____) □ (3) Issues with initial collection volume; see DRC.	**Y**
16. RIC inspected for proper integration for TPH?			**NA**
17. Obvious non-TPH peaks excluded?			**NA**
18. Individual TPH peak area < octane high point area?			**NA**

Eurofins/TestAmerica Knoxville GC/MS Air - Batch Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 20 & KNOX-MS-0023, Rev 4

TALS Review	**1st**	**If No, why is data reportable?**	**2nd**
19. Graphics uploaded? [open one paperclip]			**Y**
20. NCM generated if BFB failed TO-14A criteria, but passes TO-15?		□ [Failed TO-14A, but passes TO-15] (NCM#_____)	**NA**
21. Is the %D ≤ 30% for all target analytes? [≤ 50% for 1&2 methylnaphthalene] [Chrom-F8] [TALS-Sample Results Tab]		□ CCV - %D - LCS criteria met (NCM#_____) □ CCV - %D high - outside criteria, samples ND, Sample IDs Included (NCM#_____)	**Y**
22. Undiluted volume analyzed meets the method requirement (200 mL vs. 500 mL)?			**na**
23. Project & sample special instructions verified?			**Y**
24. If samples were Tedlar bags, was the 72 hr HT met? ** Narrate transfer to can.		□ Air Analysis - Air Sample Transfer to Canister (NCM#____)	**NA**
25. Sample analyses done within analytical holding time?		□ Holding Time – Received w/Insufficient Time (NCM#_____) □ Holding Time – Receipt (NCM#_____)	**Y**
26. Did the LCS meet criteria (70-130% with a limited # allowed 60-140% (see table) provisional analyte limit 60-140% with a limited # allowed 50-150%, and no two consecutive MEs). [Sample Results Tab] Note: No LCS required for OH VAP.		□ Marginal Exceedances - Within ME Limits and Random; Report (NCM# ___) □ LCS/LCSD - %R High (NCM#_____)	**Y**
27. Suffixes assigned properly (DL/RE)? [Sample List Tab]			**Y**
28. Each job has QC created (BFB, CCV, LCS, MB)? [Sample List Tab]			**Y**
29. Analytes over calibration range set to secondary [Conditions Review Tab]			**Y**
30. Samples not reported set to 'Acceptable' or 'Rejected'? [Sample Results Tab]			**Y**
31. DUP done per 20 samples and are all RPDs within limits? (for target analytes >5x RL, <25% RPD; no criteria for n-butanol) *(If DUP not reported - set to 'Acceptable' for each job)*			**Y**
32. Samples linked to proper blank (200 mL or 500 mL)? [QC links]		**500 mL blank ID: 5** **200 mL blank ID: NA**	**Y**
33. Samples linked to job's BFB/CCV/LCS/MB? [QC Links]			**Y**
34. Correct ICV linked to each MB? [QC Links]			**Y**
35. Were all samples/QC analyzed within 24 hr of BFB? [F7]			**Y**
36. If criteria were not met, was a NCM generated, and assigned to proper QC & samples? [Also see Conditions Review Tab]			**Y**
37. Run Checklist and acknowledge findings [F8]			**Y**
38. Runs set to 1st level review?		Runs set to 2nd level review?	**Y**
39. QC checker run and items addressed?	**-na-**		**Y**
40. Checklist & Entech report scanned, attached & assigned properly?	**-na-**		**Y**

Analyst:	**Date:**	**2nd Level Reviewer : LL**	**Date: 9/9/20**
Comments:		**Comments:**	
Example Calculation:			
On-column ppbv x Final Vol (mL)/Entech Initial Vol (mL) x Canister Dilution Log DF			

Number of target analytes in LCS	# marginal exceedances of LCS control limits allowed
>90	5
71 - 90	4
51 - 70	3
31 - 50	2
11 - 30	1
< 11	0

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Instrument ID: MH Start Date: 09/08/2020 12:40

Analysis Batch Number: 42504 End Date: 09/09/2020 08:03

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 140-42504/1		09/08/2020 12:40	1	HBFBI08B.D	RTX-5 0.32(mm)
CCVIS 140-42504/2		09/08/2020 13:10	1	HCCV08B.D	RTX-5 0.32(mm)
LCS 140-42504/1002		09/08/2020 13:10	1	HCCV08B-LCS.d	RTX-5 0.32(mm)
MB 140-42504/4		09/08/2020 15:46	1	H500BI08.D	RTX-5 0.32(mm)
ZZZZZ		09/08/2020 16:39	1.61		RTX-5 0.32(mm)
ZZZZZ		09/08/2020 17:33	1		RTX-5 0.32(mm)
ZZZZZ		09/08/2020 18:28	1		RTX-5 0.32(mm)
ZZZZZ		09/08/2020 19:22	1		RTX-5 0.32(mm)
ZZZZZ		09/08/2020 20:15	1.51		RTX-5 0.32(mm)
ZZZZZ		09/08/2020 21:08	1		RTX-5 0.32(mm)
140-20194-9	SV-015-A-29	09/08/2020 22:04	1	HI08P107.D	RTX-5 0.32(mm)
140-20194-10	SV-078-A-29	09/08/2020 23:00	1	HI08P108.D	RTX-5 0.32(mm)
140-20194-11	SV-076-A-29	09/08/2020 23:55	1	HI08P109.D	RTX-5 0.32(mm)
140-20194-13	SV-DUP 4-A-29	09/09/2020 01:42	1	HI08P111.D	RTX-5 0.32(mm)
140-20194-14	SV-075-A-29	09/09/2020 02:36	1	HI08P112.D	RTX-5 0.32(mm)
140-20194-15	SV-136-A-29	09/09/2020 03:32	1	HI08P113.D	RTX-5 0.32(mm)
140-20194-16	SV-101-B-29	09/09/2020 04:29	1	HI08P114.D	RTX-5 0.32(mm)
140-20194-17	SV-100-B-29	09/09/2020 05:22	1	HI08P115.D	RTX-5 0.32(mm)
ZZZZZ		09/09/2020 06:16	1		RTX-5 0.32(mm)
140-20194-18	SV-079-A-29	09/09/2020 07:09	1	HI08P116.D	RTX-5 0.32(mm)
140-20194-12	SV-168-A-29	09/09/2020 08:03	1	HI08P110R.D	RTX-5 0.32(mm)

Eurofins/TestAmerica Knoxville GC/MS Air - Batch Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 21 & KNOX-MS-0023, Rev 4

Instrument/Date	MH 9/8/2020		Routine	DOD	OHIO VAP
CCAL Chrom WL #	16520	CCAL Batch #	42504		
ICAL Chrom WL #	16451	ICAL Batch # / Event #	42290 / 2592	/	/

Chrom Review	1st	If No, why is data reportable?	2nd
1. Are the reagents & init/final volumes correct? (Verify reagents & amt. injected) [WL Sample Reagent Tab]	✓		na
2. Did BFB meet tune criteria? [F8]	✓	□ [Failed TO-14A, but passes TO-15]	
3. Was the CCAL compared to the most recent & correct ICAL (correct last ICal File batch #/start/end Cal date/time)? [F8]	✓	List Target analytes outside CCV limits: 1,2,4-Trichlorobenzene, 1,4-Dichlorobenzene, Naphthalene, Hexachlorobutadiene	
4. Elution order checked on isomeric pairs? [Chrom]			
• dichlorodifluoromethane / 1,2-dichlorotetrafluoroethane	✓		
• 2-methyl butane / acrolein	✓		
• trichlorofluoromethane / 1,1,2-trichlorotrifluoroethane	✓		
• vinyl acetate / hexane	✓		
• cis- and trans- isomers	✓		
• ethyl benzene / m/p-xylene / o-xylene	✓		
• n-propylbenzene/4-ethyl toluene/1,3,5-trimethylbenzene/1,2,4-trimethylbenzene/sec-butylbenzene/1,2,3-trimethylbenzene	✓		
• tert-butylbenzene/4-isopropyltoluene	✓		
• 1,3- , 1,4- , and 1,2-dichlorobenzene	✓		
• 1,2-dimethyl-4-ethylbenzene/1,2,4,5-, 1,2,3,5-, and 1,2,3,4-tetramethylbenzenes	✓		
• 1,2,4-trichlorobenzene/1,2,3-trichlorobenzene	✓		
• 2-, and 1-methylnaphthalene	✓		
5. "Range" analytes & internal standard RIC ID'd correctly, inspected for interferences & proper integration?	NA		
6. Has the RT been updated to the method?	✓		
Analyst/date Suphawan Kh. 9/10/2020		**2nd Level Reviewer/date**	

7. Has the vol injected been verified vs Entech & corrected if actual amount differs >5%? [WL Sample Info: init amt = sample amt; final amt = 500 mL]	✓		
8. Do the lab ID, Info 1 and Dilution Factor columns correlate in Chrom? [Sample List - Lab ID vs. Info 1 vs. Dilution]	✓		
9. Can dilution history verified? [Mgmt Report]	✓		
10. Are all analytes present in the system blank < RL? (<1/2 RL for DoD). *If no, list blank ID:*	✓	□ Method Blank – Report, ND (NCM#_____) □ Method Blank – Report, 10X (NCM#_____)	
11. All runs - peaks ID'd correctly and false positives removed?	✓		
12. If manual integrations performed, are they properly performed, baseline clearly identified, and correct reason given?	✓		
13. IS/Surr within limits? *List samples and reason (e.g., 1 thru 5):* [Batch Results IS & SUR Tab] Sample / Reason / Sample / Reason	✓	□ (1) Surrogate – Matrix (NCM#_____) □ (2) Surrogate – High, ND (NCM#_____) □ (3) ISTD – RA/RA Concurs (NCM#_____) □ (4) Surrogate –RX concur, Report both (NCM#_____) □ (5) ISTD – Matrix, DL required (NCM#_____)	
14. Samples outside calibration range scheduled for dilution?	✓	□ ICAL – Range Exceeded; Minimum Dilution	

Chrom Review	1st	If No, why is data reportable?	2nd
15. For first analysis that is at a dilution, is highest target analyte >20% cal range? *List samples and reason:* Sample / Reason / Sample / Reason	✓	□ (1) Reporting Limit – Dilution, Matrix (NCM#_____) □ (2) Reporting Limit – Dilution, Non-Target (NCM#_____) □ (3) Issues with initial collection volume; see DRC.	
16. RIC inspected for proper integration for TPH?	NA		
17. Obvious non-TPH peaks excluded?	↓		
18. Individual TPH peak area < octane high point area?	↓		

TALS Review	1st	If No, why is data reportable?	2nd

Eurofins/TestAmerica Knoxville GC/MS Air - Batch Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 21 & KNOX-MS-0023, Rev 4

19. Graphics uploaded? [open one paperclip]	/		
20. NCM generated if BFB failed TO-14A criteria, but passes TO-15?	NA	□ [Failed TO-14A, but passes TO-15] (NCM#)	
21. Is the %D ≤ 30% for all target analytes? [≤ 50% for 1&2 methylnaphthalene] [Chrom-F8] [TALS-Sample Results Tab]	/	☑ CCV - %D - LCS criteria met (NCM# 25020) ☑ CCV - %D high - outside criteria, samples ND, Sample IDs Included (NCM# 25021)	
22. Undiluted volume analyzed meets the method requirement (200 mL vs. 500 mL)?	/		na
23. Project & sample special instructions verified?	/		
24. If samples were Tedlar bags, was the 72 hr HT met? ** Narrate transfer to can.	NA	□ Air Analysis - Air Sample Transfer to Canister (NCM#____)	
25. Sample analyses done within analytical holding time?	/	□ Holding Time – Received w/Insufficient Time (NCM#_____) □ Holding Time – Receipt (NCM#)	
26. Did the LCS meet criteria (70-130% with a limited # allowed 60-140% (see table) provisional analyte limit 60-140% with a limited # allowed 50-150%, and no two consecutive MEs). [Sample Results Tab] Note: No LCS required for OH VAP.	/	□ Marginal Exceedances - Within ME Limits and Random; Report (NCM# ___) ☑ LCS/LCSD - %R High (NCM# 25022)	
27. Suffixes assigned properly (DL/RE)? [Sample List Tab]	NA		
28. Each job has QC created (BFB, CCV, LCS, MB)? [Sample List Tab]	/		
29. Analytes over calibration range set to secondary [Conditions Review Tab]	/		
30. Samples not reported set to 'Acceptable' or 'Rejected'? [Sample Results Tab]	/		
31. DUP done per 20 samples and are all RPDs within limits? (for target analytes >5x RL, <25% RPD; no criteria for n-butanol) *(If DUP not reported - set to 'Acceptable' for each job)*	/		
32. Samples linked to proper blank (200 mL or 500 mL)? [QC links]	/	**500 mL blank ID:** #4 **200 mL blank ID:** NA	
33. Samples linked to job's BFB/CCV/LCS/MB? [QC Links]	/		
34. Correct ICV linked to each MB? [QC Links]	/		
35. Were all samples/QC analyzed within 24 hr of BFB? [F7]	/		
36. If criteria were not met, was a NCM generated, and assigned to proper QC & samples? [Also see Conditions Review Tab]	/		
37. Run Checklist and acknowledge findings [F8]	/		
38. Runs set to 1st level review?	/	Runs set to 2nd level review?	
39. QC checker run and items addressed?	-na-		
40. Checklist & Entech report scanned, attached & assigned properly?	-na-		

Analyst: Suphavee Kh.	**Date:** 9/10/2020	**2nd Level Reviewer :**	**Date:**
Comments:		**Comments:**	

Example Calculation: 140-20194-15 TCE

On-column ppbv x Final Vol (mL)/Entech Initial Vol (mL) x Canister Dilution Log DF

$3.542571 \times \frac{500}{20} \times 1.0 = 89$

Eurofins/TestAmerica Knoxville GC/MS Air - Batch Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 20 & KNOX-MS-0023, Rev 4

Instrument/Date	MH 9/8/20		Routine	DOD	OHIO VAP
CCAL Chrom WL #	16520	CCAL Batch #	42504		
ICAL Chrom WL #	16451	ICAL Batch # / Event #	42290 /2592		

Chrom Review	1st	If No, why is data reportable?	2nd
1. Are the reagents & init/final volumes correct? (Verify reagents & amt. injected) [WL Sample Reagent Tab]			na
2. Did BFB meet tune criteria? [F8]		□ [Failed TO-14A, but passes TO-15]	Y
3. Was the CCAL compared to the most recent & correct ICAL (correct last ICal File batch #/start/end Cal date/time)? [F8]		List Target analytes outside CCV limits: _____ _____ _____	Y
4. Elution order checked on isomeric pairs? [Chrom]			
• dichlorodifluoromethane / 1,2-dichlorotetrafluoroethane			Y
• 2-methyl butane / acrolein			Y
• trichlorofluoromethane / 1,1,2-trichlorotrifluoroethane			Y
• vinyl acetate / hexane			Y
• cis- and trans- isomers			Y
• ethyl benzene / m/p-xylene / o-xylene			Y
• n-propylbenzene/4-ethyl toluene/1,3,5-trimethylbenzene/1,2,4-trimethylbenzene/sec-butylbenzene/1,2,3-trimethylbenzene			Y
• tert-butylbenzene/4-isopropyltoluene			Y
• 1,3- , 1,4- , and 1,2-dichlorobenzene			Y
• 1,2-dimethyl-4-ethylbenzene/1,2,4,5-, 1,2,3,5-, and 1,2,3,4-tetramethylbenzenes			NA
• 1,2,4-trichlorobenzene/1,2,3-trichlorobenzene			Y
• 2-, and 1-methylnaphthalene			Y
5. "Range" analytes & internal standard RIC ID'd correctly, inspected for interferences & proper integration?			NA
6. Has the RT been updated to the method?			Y
Analyst/date		**2nd Level Reviewer/date LL 9/10/20**	

7. Has the vol injected been verified vs Entech & corrected if actual amount differs >5%? [WL Sample Info: init amt = sample amt; final amt = 500 mL]			Y
8. Do the lab ID, Info 1 and Dilution Factor columns correlate in Chrom? [Sample List - Lab ID vs. Info 1 vs. Dilution]			Y
9. Can dilution history verified? [Mgmt Report]			Y
10. Are all analytes present in the system blank < RL**?** (<1/2 RL for DoD). *If no, list blank ID:*		□ Method Blank – Report, ND (NCM#_____) □ Method Blank – Report, 10X (NCM#_____)	Y
11. All runs - peaks ID'd correctly and false positives removed?			Y
12. If manual integrations performed, are they properly performed, baseline clearly identified, and correct reason given?			Y
13. IS/Surr within limits? *List samples and reason (e.g.,* 1 thru 5*):* [Batch Results IS & SUR Tab] Sample Reason Sample Reason _____ _____ _____ _____ _____ _____ _____ _____		□ (1) Surrogate – Matrix (NCM#_____) □ (2) Surrogate – High, ND (NCM#_____) □ (3) ISTD – RA/RA Concurs (NCM#_____) □ (4) Surrogate –RX concur, Report both (NCM#_____) □ (5) ISTD – Matrix, DL required (NCM#_____)	Y
14. Samples outside calibration range scheduled for dilution?		□ ICAL – Range Exceeded; Minimum Dilution	Y

Chrom Review	1st	If No, why is data reportable?	2nd
15. For first analysis that is at a dilution, is highest target analyte >20% cal range? *List samples and reason:* Sample Reason Sample Reason _____ _____ _____ _____ _____ _____ _____ _____		□ (1) Reporting Limit – Dilution, Matrix (NCM#_____) □ (2) Reporting Limit – Dilution, Non-Target (NCM#_____) □ (3) Issues with initial collection volume; see DRC.	Y
16. RIC inspected for proper integration for TPH?			NA
17. Obvious non-TPH peaks excluded?			NA
18. Individual TPH peak area < octane high point area?			NA

Eurofins/TestAmerica Knoxville GC/MS Air - Batch Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 20 & KNOX-MS-0023, Rev 4

TALS Review	**1st**	**If No, why is data reportable?**	**2nd**
19. Graphics uploaded? [open one paperclip]			**Y**
20. NCM generated if BFB failed TO-14A criteria, but passes TO-15?		□ [Failed TO-14A, but passes TO-15] (NCM#_____)	**NA**
21. Is the %D ≤ 30% for all target analytes? [≤ 50% for 1&2 methylnaphthalene] [Chrom-F8] [TALS-Sample Results Tab]		□ CCV - %D - LCS criteria met (NCM#_____) □ CCV - %D high - outside criteria, samples ND, Sample IDs Included (NCM#_____)	**Y**
22. Undiluted volume analyzed meets the method requirement (200 mL vs. 500 mL)?			**na**
23. Project & sample special instructions verified?			**Y**
24. If samples were Tedlar bags, was the 72 hr HT met? ** Narrate transfer to can.		□ Air Analysis - Air Sample Transfer to Canister (NCM#____)	**NA**
25. Sample analyses done within analytical holding time?		□ Holding Time – Received w/Insufficient Time (NCM#_____) □ Holding Time – Receipt (NCM#_____)	**Y**
26. Did the LCS meet criteria (70-130% with a limited # allowed 60-140% (see table) provisional analyte limit 60-140% with a limited # allowed 50-150%, and no two consecutive MEs). [Sample Results Tab] Note: No LCS required for OH VAP.		□ Marginal Exceedances - Within ME Limits and Random; Report (NCM# ___) □ LCS/LCSD - %R High (NCM#_____)	**Y**
27. Suffixes assigned properly (DL/RE)? [Sample List Tab]			**NA**
28. Each job has QC created (BFB, CCV, LCS, MB)? [Sample List Tab]			**Y**
29. Analytes over calibration range set to secondary [Conditions Review Tab]			**Y**
30. Samples not reported set to 'Acceptable' or 'Rejected'? [Sample Results Tab]			**Y**
31. DUP done per 20 samples and are all RPDs within limits? (for target analytes >5x RL, <25% RPD; no criteria for n-butanol) *(If DUP not reported - set to 'Acceptable' for each job)*			**Y**
32. Samples linked to proper blank (200 mL or 500 mL)? [QC links]		**500 mL blank ID: 4** **200 mL blank ID: NA**	**Y**
33. Samples linked to job's BFB/CCV/LCS/MB? [QC Links]			**Y**
34. Correct ICV linked to each MB? [QC Links]			**Y**
35. Were all samples/QC analyzed within 24 hr of BFB? [F7]			**Y**
36. If criteria were not met, was a NCM generated, and assigned to proper QC & samples? [Also see Conditions Review Tab]			**Y**
37. Run Checklist and acknowledge findings [F8]			**Y**
38. Runs set to 1st level review?		Runs set to 2nd level review?	**Y**
39. QC checker run and items addressed?	**-na-**		**Y**
40. Checklist & Entech report scanned, attached & assigned properly?	**-na-**		**Y**

Analyst:	**Date:**	**2nd Level Reviewer : LL**	**Date: 9/10/20**
Comments:		**Comments:**	
Example Calculation:			
On-column ppbv x Final Vol (mL)/Entech Initial Vol (mL) x Canister Dilution Log DF			

Number of target analytes in LCS	# marginal exceedances of LCS control limits allowed
>90	5
71 - 90	4
51 - 70	3
31 - 50	2
11 - 30	1
< 11	0

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Instrument ID: MR Start Date: 09/09/2020 10:50

Analysis Batch Number: 42515 End Date: 09/10/2020 08:47

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 140-42515/1		09/09/2020 10:50	1	RBFBI09.D	RTX-5 0.32(mm)
CCVIS 140-42515/2		09/09/2020 11:27	1	RCCVI09.D	RTX-5 0.32(mm)
LCS 140-42515/1002		09/09/2020 11:27	1	RCCVI09-LCS.d	RTX-5 0.32(mm)
MB 140-42515/4		09/09/2020 13:56	1	R500BI09.D	RTX-5 0.32(mm)
140-20194-20 DL	SV-118-A-29 DL	09/09/2020 14:44	1	RI09P101.D	RTX-5 0.32(mm)
ZZZZZ		09/09/2020 15:36	1		RTX-5 0.32(mm)
ZZZZZ		09/09/2020 16:29	1		RTX-5 0.32(mm)
ZZZZZ		09/09/2020 17:21	1		RTX-5 0.32(mm)
ZZZZZ		09/09/2020 18:09	1		RTX-5 0.32(mm)
ZZZZZ		09/09/2020 18:56	1		RTX-5 0.32(mm)
ZZZZZ		09/09/2020 19:44	1		RTX-5 0.32(mm)
ZZZZZ		09/09/2020 20:30	1		RTX-5 0.32(mm)
ZZZZZ		09/09/2020 21:18	1		RTX-5 0.32(mm)
ZZZZZ		09/09/2020 22:05	1		RTX-5 0.32(mm)
ZZZZZ		09/09/2020 22:52	1		RTX-5 0.32(mm)
ZZZZZ		09/09/2020 23:41	1		RTX-5 0.32(mm)
ZZZZZ		09/10/2020 00:28	1		RTX-5 0.32(mm)
ZZZZZ		09/10/2020 01:20	1		RTX-5 0.32(mm)
ZZZZZ		09/10/2020 02:13	1		RTX-5 0.32(mm)
ZZZZZ		09/10/2020 03:06	1		RTX-5 0.32(mm)
ZZZZZ		09/10/2020 07:11	1		RTX-5 0.32(mm)
140-20194-7	SV-174-A-29	09/10/2020 08:00	120	RI09P202R.D	RTX-5 0.32(mm)
ZZZZZ		09/10/2020 08:47	1		RTX-5 0.32(mm)

Eurofins/TestAmerica Knoxville GC/MS Air - Batch Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 21 & KNOX-MS-0023, Rev 4

Instrument/Date	MR 9/9/2020		Routine	DOD	OHIO VAP
CCAL Chrom WL #	16524	CCAL Batch #	42515		
ICAL Chrom WL #	16425	ICAL Batch # / Event #	42222 / 2588	/	/

Chrom Review	1st	If No, why is data reportable?	2nd
1. Are the reagents & init/final volumes correct? (Verify reagents & amt. injected) [WL Sample Reagent Tab]	✓		na
2. Did BFB meet tune criteria? [F8]	✓	☑ [Failed TO-14A, but passes TO-15]	
3. Was the CCAL compared to the most recent & correct ICAL (correct last ICal File batch #/start/end Cal date/time)? [F8]	✓	List Target analytes outside CCV limits: Dichlorodifluoromethane	
4. Elution order checked on isomeric pairs? [Chrom]			
• dichlorodifluoromethane / 1,2-dichlorotetrafluoroethane	✓		
• 2-methyl butane / acrolein	✓		
• trichlorofluoromethane / 1,1,2-trichlorotrifluoroethane	✓		
• vinyl acetate / hexane	✓		
• cis- and trans- isomers	✓		
• ethyl benzene / m/p-xylene / o-xylene	✓		
• n-propylbenzene/4-ethyl toluene/1,3,5-trimethylbenzene/1,2,4-trimethylbenzene/sec-butylbenzene/1,2,3-trimethylbenzene	✓		
• tert-butylbenzene/4-isopropyltoluene	✓		
• 1,3- , 1,4- , and 1,2-dichlorobenzene	✓		
• 1,2-dimethyl-4-ethylbenzene/1,2,4,5-, 1,2,3,5-, and 1,2,3,4-tetramethylbenzenes	NA		
• 1,2,4-trichlorobenzene/1,2,3-trichlorobenzene	✓		
• 2-, and 1-methylnaphthalene	✓		
5. "Range" analytes & internal standard RIC ID'd correctly, inspected for interferences & proper integration?	NA		
6. Has the RT been updated to the method?	✓		
Analyst/date Suphawan K. 9/10/2020		**2nd Level Reviewer/date**	

7. Has the vol injected been verified vs Entech & corrected if actual amount differs >5%? [WL Sample Info: init amt = sample amt; final amt = 500 mL]	✓		
8. Do the lab ID, Info 1 and Dilution Factor columns correlate in Chrom? [Sample List - Lab ID vs. Info 1 vs. Dilution]	✓		
9. Can dilution history verified? [Mgmt Report]	✓		
10. Are all analytes present in the system blank < RL? (<1/2 RL for DoD). *If no, list blank ID:*	✓	☐ Method Blank – Report, ND (NCM#_____) ☐ Method Blank – Report, 10X (NCM#_____)	
11. All runs - peaks ID'd correctly and false positives removed?	✓		
12. If manual integrations performed, are they properly performed, baseline clearly identified, and correct reason given?	✓		
13. IS/Surr within limits? *List samples and reason (e.g., 1 thru 5):* [Batch Results IS & SUR Tab] Sample / Reason / Sample / Reason	✓	☐ (1) Surrogate – Matrix (NCM#_____) ☐ (2) Surrogate – High, ND (NCM#_____) ☐ (3) ISTD – RA/RA Concurs (NCM#_____) ☐ (4) Surrogate –RX concur, Report both (NCM#_____) ☐ (5) ISTD – Matrix, DL required (NCM#_____)	
14. Samples outside calibration range scheduled for dilution?	✓	☐ ICAL – Range Exceeded; Minimum Dilution	

Chrom Review	1st	If No, why is data reportable?	2nd
15. For first analysis that is at a dilution, is highest target analyte >20% cal range? *List samples and reason:* Sample / Reason / Sample / Reason	✓	☐ (1) Reporting Limit – Dilution, Matrix (NCM#_____) ☐ (2) Reporting Limit – Dilution, Non-Target (NCM#_____) ☐ (3) Issues with initial collection volume; see DRC.	
16. RIC inspected for proper integration for TPH?	NA		
17. Obvious non-TPH peaks excluded?	↓		
18. Individual TPH peak area < octane high point area?	↓		

TALS Review	1st	If No, why is data reportable?	2nd

Eurofins/TestAmerica Knoxville GC/MS Air - Batch Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 21 & KNOX-MS-0023, Rev 4

19. Graphics uploaded? [open one paperclip]	✓		
20. NCM generated if BFB failed TO-14A criteria, but passes TO-15?	✓	☐ [Failed TO-14A, but passes TO-15] (NCM# 25023)	
21. Is the %D ≤ 30% for all target analytes? [≤ 50% for 1&2 methylnaphthalene] [Chrom-F8] [TALS-Sample Results Tab]	✓	☐ CCV - %D - LCS criteria met (NCM# 25024) ☐ CCV - %D high - outside criteria, samples ND, Sample IDs Included (NCM#_____)	
22. Undiluted volume analyzed meets the method requirement (200 mL vs. 500 mL)?	✓		na
23. Project & sample special instructions verified?	✓		
24. If samples were Tedlar bags, was the 72 hr HT met? ** Narrate transfer to can.	NA	☐ Air Analysis - Air Sample Transfer to Canister (NCM#____)	
25. Sample analyses done within analytical holding time?	✓	☐ Holding Time – Received w/Insufficient Time (NCM#_____) ☐ Holding Time – Receipt (NCM#_____)	
26. Did the LCS meet criteria (70-130% with a limited # allowed 60-140% (see table) provisional analyte limit 60-140% with a limited # allowed 50-150%, and no two consecutive MEs). [Sample Results Tab] Note: No LCS required for OH VAP.	✓	☐ Marginal Exceedances - Within ME Limits and Random; Report (NCM# ___) ☐ LCS/LCSD - %R High (NCM#_____)	
27. Suffixes assigned properly (DL/RE)? [Sample List Tab]	✓		
28. Each job has QC created (BFB, CCV, LCS, MB)? [Sample List Tab]	✓		
29. Analytes over calibration range set to secondary [Conditions Review Tab]	NA		
30. Samples not reported set to 'Acceptable' or 'Rejected'? [Sample Results Tab]	✓		
31. DUP done per 20 samples and are all RPDs within limits? (for target analytes >5x RL, <25% RPD; no criteria for n-butanol) *(If DUP not reported - set to 'Acceptable' for each job)*	✓		
32. Samples linked to proper blank (200 mL or 500 mL)? [QC links]	✓	**500 mL blank ID:** #4 **200 mL blank ID:** NA	
33. Samples linked to job's BFB/CCV/LCS/MB? [QC Links]	✓		
34. Correct ICV linked to each MB? [QC Links]	✓		
35. Were all samples/QC analyzed within 24 hr of BFB? [F7]	✓		
36. If criteria were not met, was a NCM generated, and assigned to proper QC & samples? [Also see Conditions Review Tab]	✓		
37. Run Checklist and acknowledge findings [F8]	✓		
38. Runs set to 1st level review?	✓	Runs set to 2nd level review?	
39. QC checker run and items addressed?	-na-		
40. Checklist & Entech report scanned, attached & assigned properly?	-na-		

Analyst: Suphana Kh.	**Date:** 9/10/2020	**2nd Level Reviewer :**	**Date:**
Comments:		**Comments:**	

Example Calculation: 140-20194-20 TCE

On-column ppbv x Final Vol (mL)/Entech Initial Vol (mL) x Canister Dilution Log DF

12.02069 * 500 / 50 * 1.0 = 120

Number of target analytes in LCS	# marginal exceedances of LCS control limits allowed
>90	5
71 - 90	4
51 - 70	3
31 - 50	2
11 - 30	1
< 11	0

Eurofins/TestAmerica Knoxville GC/MS Air - Batch Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 20 & KNOX-MS-0023, Rev 4

Instrument/Date	MR 9/9/20		Routine	DOD	OHIO VAP
CCAL Chrom WL #	16524	CCAL Batch #	42515		
ICAL Chrom WL #	16425	ICAL Batch # / Event #	42222/2588		

Chrom Review	1st	If No, why is data reportable?	2nd
1. Are the reagents & init/final volumes correct? (Verify reagents & amt. injected) [WL Sample Reagent Tab]			na
2. Did BFB meet tune criteria? [F8]		□ [Failed TO-14A, but passes TO-15]	N
3. Was the CCAL compared to the most recent & correct ICAL (correct last ICal File batch #/start/end Cal date/time)? [F8]		List Target analytes outside CCV limits: _____ _____ _____	Y
4. Elution order checked on isomeric pairs? [Chrom]			
• dichlorodifluoromethane / 1,2-dichlorotetrafluoroethane			Y
• 2-methyl butane / acrolein			Y
• trichlorofluoromethane / 1,1,2-trichlorotrifluoroethane			Y
• vinyl acetate / hexane			Y
• cis- and trans- isomers			Y
• ethyl benzene / m/p-xylene / o-xylene			Y
• n-propylbenzene/4-ethyl toluene/1,3,5-trimethylbenzene/1,2,4-trimethylbenzene/sec-butylbenzene/1,2,3-trimethylbenzene			Y
• tert-butylbenzene/4-isopropyltoluene			Y
• 1,3- , 1,4- , and 1,2-dichlorobenzene			Y
• 1,2-dimethyl-4-ethylbenzene/1,2,4,5-, 1,2,3,5-, and 1,2,3,4-tetramethylbenzenes			NA
• 1,2,4-trichlorobenzene/1,2,3-trichlorobenzene			Y
• 2-, and 1-methylnaphthalene			Y
5. "Range" analytes & internal standard RIC ID'd correctly, inspected for interferences & proper integration?			NA
6. Has the RT been updated to the method?			Y
Analyst/date		**2nd Level Reviewer/date LL 9/10/20**	

7. Has the vol injected been verified vs Entech & corrected if actual amount differs >5%? [WL Sample Info: init amt = sample amt; final amt = 500 mL]			Y
8. Do the lab ID, Info 1 and Dilution Factor columns correlate in Chrom? [Sample List - Lab ID vs. Info 1 vs. Dilution]			Y
9. Can dilution history verified? [Mgmt Report]			Y
10. Are all analytes present in the system blank < RL**?** (<1/2 RL for DoD). *If no, list blank ID:*		□ Method Blank – Report, ND (NCM#_____) □ Method Blank – Report, 10X (NCM#_____)	Y
11. All runs - peaks ID'd correctly and false positives removed?			Y
12. If manual integrations performed, are they properly performed, baseline clearly identified, and correct reason given?			Y
13. IS/Surr within limits? *List samples and reason (e.g.,* 1 thru 5*):* [Batch Results IS & SUR Tab] Sample Reason Sample Reason _____ _____ _____ _____ _____ _____ _____ _____		□ (1) Surrogate – Matrix (NCM#_____) □ (2) Surrogate – High, ND (NCM#_____) □ (3) ISTD – RA/RA Concurs (NCM#_____) □ (4) Surrogate –RX concur, Report both (NCM#_____) □ (5) ISTD – Matrix, DL required (NCM#_____)	Y
14. Samples outside calibration range scheduled for dilution?		□ ICAL – Range Exceeded; Minimum Dilution	Y
Chrom Review	**1st**	**If No, why is data reportable?**	**2nd**
15. For first analysis that is at a dilution, is highest target analyte >20% cal range? *List samples and reason:* Sample Reason Sample Reason _____ _____ _____ _____ _____ _____ _____ _____		□ (1) Reporting Limit – Dilution, Matrix (NCM#_____) □ (2) Reporting Limit – Dilution, Non-Target (NCM#_____) □ (3) Issues with initial collection volume; see DRC.	Y
16. RIC inspected for proper integration for TPH?			NA
17. Obvious non-TPH peaks excluded?			NA
18. Individual TPH peak area < octane high point area?			NA

Eurofins/TestAmerica Knoxville GC/MS Air - Batch Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 20 & KNOX-MS-0023, Rev 4

TALS Review	**1st**	**If No, why is data reportable?**	**2nd**
19. Graphics uploaded? [open one paperclip]			**Y**
20. NCM generated if BFB failed TO-14A criteria, but passes TO-15?		□ [Failed TO-14A, but passes TO-15] (NCM#_____)	**Y**
21. Is the %D ≤ 30% for all target analytes? [≤ 50% for 1&2 methylnaphthalene] [Chrom-F8] [TALS-Sample Results Tab]		□ CCV - %D - LCS criteria met (NCM#_____) □ CCV - %D high - outside criteria, samples ND, Sample IDs Included (NCM#_____)	**Y**
22. Undiluted volume analyzed meets the method requirement (200 mL vs. 500 mL)?			**na**
23. Project & sample special instructions verified?			**Y**
24. If samples were Tedlar bags, was the 72 hr HT met? ** Narrate transfer to can.		□ Air Analysis - Air Sample Transfer to Canister (NCM#____)	**NA**
25. Sample analyses done within analytical holding time?		□ Holding Time – Received w/Insufficient Time (NCM#_____) □ Holding Time – Receipt (NCM#_____)	**Y**
26. Did the LCS meet criteria (70-130% with a limited # allowed 60-140% (see table) provisional analyte limit 60-140% with a limited # allowed 50-150%, and no two consecutive MEs). [Sample Results Tab] Note: No LCS required for OH VAP.		□ Marginal Exceedances - Within ME Limits and Random; Report (NCM# ___) □ LCS/LCSD - %R High (NCM#_____)	**Y**
27. Suffixes assigned properly (DL/RE)? [Sample List Tab]			**Y**
28. Each job has QC created (BFB, CCV, LCS, MB)? [Sample List Tab]			**Y**
29. Analytes over calibration range set to secondary [Conditions Review Tab]			**Y**
30. Samples not reported set to 'Acceptable' or 'Rejected'? [Sample Results Tab]			**Y**
31. DUP done per 20 samples and are all RPDs within limits? (for target analytes >5x RL, <25% RPD; no criteria for n-butanol) *(If DUP not reported - set to 'Acceptable' for each job)*			**Y**
32. Samples linked to proper blank (200 mL or 500 mL)? [QC links]		**500 mL blank ID: ___4** **200 mL blank ID: ___NA____**	**Y**
33. Samples linked to job's BFB/CCV/LCS/MB? [QC Links]			**Y**
34. Correct ICV linked to each MB? [QC Links]			**Y**
35. Were all samples/QC analyzed within 24 hr of BFB? [F7]			**Y**
36. If criteria were not met, was a NCM generated, and assigned to proper QC & samples? [Also see Conditions Review Tab]			**Y**
37. Run Checklist and acknowledge findings [F8]			**Y**
38. Runs set to 1st level review?		Runs set to 2nd level review?	**Y**
39. QC checker run and items addressed?	**-na-**		**Y**
40. Checklist & Entech report scanned, attached & assigned properly?	**-na-**		**Y**

Note: No LCS required for OH VAP.

Number of target analytes in LCS	# marginal exceedances of LCS control limits allowed
>90	5
71 - 90	4
51 - 70	3
31 - 50	2
11 - 30	1
< 11	0

Analyst:	**Date:**	**2nd Level Reviewer : LL**	**Date: 9/10/20**
Comments:		**Comments:**	
Example Calculation:			
On-column ppbv x Final Vol (mL)/Entech Initial Vol (mL) x Canister Dilution Log DF			

AIR - GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Knoxvill Job No.: 140-20194-1

SDG No.:

Batch Number: 42503 Batch Start Date: 09/08/20 14:50 Batch Analyst: Barlozhetskaya, Anna F

Batch Method: TO 15 LL Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	InitialPressure	FinalPressure	40CV101S 00127	40MXBFB 00001
BFB 140-42503/1		TO 15 LL		500 mL	500 mL	1	1		40 mL
CCVIS 140-42503/2		TO 15 LL		500 mL	500 mL	1	1	80 mL	
MB 140-42503/5		TO 15 LL		500 mL	500 mL	1	1		
140-20194-A-19	SV-139-A-29	TO 15 LL	T	100 mL	500 mL	1	1		
140-20194-A-1	SV-172-A-29	TO 15 LL	T	100 mL	500 mL	1	1		
140-20194-A-2	SV-116-A-29	TO 15 LL	T	100 mL	500 mL	1	1		
140-20194-A-3	SV-DUP 3-A-29	TO 15 LL	T	100 mL	500 mL	1	1		
140-20194-A-4	SV-138-A-29	TO 15 LL	T	100 mL	500 mL	1	1		
140-20194-A-5	SV-173-A-29	TO 15 LL	T	14 mL	500 mL	1	1		
140-20194-A-6	SV-171-A-29	TO 15 LL	T	13 mL	500 mL	1	1		
140-20194-A-8	SV-177-A-29	TO 15 LL	T	150 mL	500 mL	1	1		
140-20194-A-20	SV-118-A-29	TO 15 LL	T	100 mL	500 mL	1	1		
LCS 140-42503/1002		TO 15 LL		500 mL	500 mL	1	1	80 mL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	40MXISSUR 00001					
BFB 140-42503/1		TO 15 LL							
CCVIS 140-42503/2		TO 15 LL		40 mL					
MB 140-42503/5		TO 15 LL		40 mL					
140-20194-A-19	SV-139-A-29	TO 15 LL	T	40 mL					
140-20194-A-1	SV-172-A-29	TO 15 LL	T	40 mL					
140-20194-A-2	SV-116-A-29	TO 15 LL	T	40 mL					
140-20194-A-3	SV-DUP 3-A-29	TO 15 LL	T	40 mL					
140-20194-A-4	SV-138-A-29	TO 15 LL	T	40 mL					
140-20194-A-5	SV-173-A-29	TO 15 LL	T	40 mL					
140-20194-A-6	SV-171-A-29	TO 15 LL	T	40 mL					
140-20194-A-8	SV-177-A-29	TO 15 LL	T	40 mL					
140-20194-A-20	SV-118-A-29	TO 15 LL	T	40 mL					
LCS 140-42503/1002		TO 15 LL		40 mL					

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

AIR - GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Knoxvill Job No.: 140-20194-1

SDG No.:

Batch Number: 42503 Batch Start Date: 09/08/20 14:50 Batch Analyst: Barlozhetskaya, Anna F

Batch Method: TO 15 LL Batch End Date:

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

AIR - GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Knoxvill Job No.: 140-20194-1

SDG No.:

Batch Number: 42504 Batch Start Date: 09/08/20 12:40 Batch Analyst: Khachitpongpanit, Suphawa

Batch Method: TO 15 LL Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	InitialPressure	FinalPressure	40CV101S 00126	40MXBFB 00001
BFB 140-42504/1		TO 15 LL		500 mL	500 mL	1	1		40 mL
CCVIS 140-42504/2		TO 15 LL		500 mL	500 mL	1	1	80 mL	
MB 140-42504/4		TO 15 LL		500 mL	500 mL	1	1		
140-20194-A-9	SV-015-A-29	TO 15 LL	T	100 mL	500 mL	1	1		
140-20194-A-10	SV-078-A-29	TO 15 LL	T	100 mL	500 mL	1	1		
140-20194-A-11	SV-076-A-29	TO 15 LL	T	100 mL	500 mL	1	1		
140-20194-A-13	SV-DUP 4-A-29	TO 15 LL	T	100 mL	500 mL	1	1		
140-20194-A-14	SV-075-A-29	TO 15 LL	T	100 mL	500 mL	1	1		
140-20194-A-15	SV-136-A-29	TO 15 LL	T	20 mL	500 mL	1	1		
140-20194-A-16	SV-101-B-29	TO 15 LL	T	100 mL	500 mL	1	1		
140-20194-A-17	SV-100-B-29	TO 15 LL	T	100 mL	500 mL	1	1		
140-20194-A-18	SV-079-A-29	TO 15 LL	T	100 mL	500 mL	1	1		
140-20194-A-12	SV-168-A-29	TO 15 LL	T	100 mL	500 mL	1	1		
LCS 140-42504/1002		TO 15 LL		500 mL	500 mL	1	1	80 mL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	40MXISSUR 00001					
BFB 140-42504/1		TO 15 LL							
CCVIS 140-42504/2		TO 15 LL		40 mL					
MB 140-42504/4		TO 15 LL		40 mL					
140-20194-A-9	SV-015-A-29	TO 15 LL	T	40 mL					
140-20194-A-10	SV-078-A-29	TO 15 LL	T	40 mL					
140-20194-A-11	SV-076-A-29	TO 15 LL	T	40 mL					
140-20194-A-13	SV-DUP 4-A-29	TO 15 LL	T	40 mL					
140-20194-A-14	SV-075-A-29	TO 15 LL	T	40 mL					
140-20194-A-15	SV-136-A-29	TO 15 LL	T	40 mL					
140-20194-A-16	SV-101-B-29	TO 15 LL	T	40 mL					
140-20194-A-17	SV-100-B-29	TO 15 LL	T	40 mL					
140-20194-A-18	SV-079-A-29	TO 15 LL	T	40 mL					
140-20194-A-12	SV-168-A-29	TO 15 LL	T	40 mL					

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

AIR - GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Knoxvill Job No.: 140-20194-1

SDG No.:

Batch Number: 42504 Batch Start Date: 09/08/20 12:40 Batch Analyst: Khachitpongpanit, Suphawa

Batch Method: TO 15 LL Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	40MXISSUR 00001					
LCS 140-42504/1002		TO 15 LL		40 mL					

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

AIR - GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Knoxvill Job No.: 140-20194-1

SDG No.:

Batch Number: 42515 Batch Start Date: 09/09/20 10:50 Batch Analyst: Khachitpongpanit, Suphawa

Batch Method: TO 15 LL Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	InitialPressure	FinalPressure	40CV101P 00119	40MXBFB 00001
BFB 140-42515/1		TO 15 LL		500 mL	500 mL	1	1		40 mL
CCVIS 140-42515/2		TO 15 LL		500 mL	500 mL	1	1	80 mL	
MB 140-42515/4		TO 15 LL		500 mL	500 mL	1	1		
140-20194-A-20	SV-118-A-29	TO 15 LL	T	50 mL	500 mL	1	1		
140-20194-B-7	SV-174-A-29	TO 15 LL	T	20 mL	500 mL	1	1		
LCS 140-42515/1002		TO 15 LL		500 mL	500 mL	1	1	80 mL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	40MXISSUR 00001					
BFB 140-42515/1		TO 15 LL							
CCVIS 140-42515/2		TO 15 LL		40 mL					
MB 140-42515/4		TO 15 LL		40 mL					
140-20194-A-20	SV-118-A-29	TO 15 LL	T	40 mL					
140-20194-B-7	SV-174-A-29	TO 15 LL	T	40 mL					
LCS 140-42515/1002		TO 15 LL		40 mL					

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Summa Canister Dilution Worksheet

Client: Tetra Tech, Inc.
Project/Site: Middle River - MRC

Job No.: 140-20194-1

Lab Sample ID	Canister Volume (L)	Preadjusted Pressure ("Hg)	Preadjusted Pressure (atm)	Preadjusted Volume (L)	Adjusted Pressure (psig)	Adjusted Pressure (atm)	Adjusted Volume (L)	Initial Volume (mL)	Dilution Factor	Final Dilution Factor	Pressure Gauge ID	Date	Analyst Initals
140-20194-5	1	0.0	1.00	1.00	29.6	3.01	3.01		3.01	3.01	G5	09/03/20 12:09	BRS
140-20194-5	1	0.0	1.00	1.00	30.3	3.06	3.06		3.06	9.23	G5	09/03/20 12:25	BRS
140-20194-6	1	0.0	1.00	1.00	29.9	3.03	3.03		3.03	3.03	G5	09/03/20 12:10	BRS
140-20194-7	1	0.0	1.00	1.00	0.0	1.00	1.00		1.00	1.00	G5	09/03/20 12:15	BRS
140-20194-7	6	0	1.00	6.00	0.0	1.00	6.00	50	120.00	120.00	G5 9003	09/03/20 12:20	BRS

Formulae:

Preadjusted Volume (L) = (Preadjusted Pressure ("Hg) + 29.92 "Hg * Vol L) / 29.92 "Hg
Adjusted Volume (L) = (Adjusted Pressure (psig) + 14.7 psig * Vol L) / 14.7 psig
Dilution Factor = Adjusted Volume (L) / Preadjusted Volume (L)

Where:

29.92 "Hg = Standard atmospheric pressure in inches of Mercury (“Hg)
14.7 psig = Standard atmospheric pressure in pounds per square inch gauge (psig)

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19809-1

SDG No.:

Client Sample ID: 10335 Lab Sample ID: 140-19809-7

Matrix: Air Lab File ID: GG27L19809.D

Analysis Method: TO-15 Date Collected: 07/23/2020 16:30

Sample wt/vol: 200(mL) Date Analyzed: 07/27/2020 11:12

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 41299 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	ND		0.20	
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.20	
79-00-5	1,1,2-Trichloroethane	ND		0.20	
76-13-1	1,1,2-Trichlorotrifluoroethane	ND		0.20	
75-34-3	1,1-Dichloroethane	ND		0.20	
75-35-4	1,1-Dichloroethene	ND		0.20	
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	
96-18-4	1,2,3-Trichloropropane	ND		0.50	
526-73-8	1,2,3-Trimethylbenzene	ND		0.20	
95-93-2	1,2,4,5-Tetramethylbenzene	ND		0.20	
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	
95-63-6	1,2,4-Trimethylbenzene	ND		0.20	
96-12-8	1,2-Dibromo-3-Chloropropane	ND		0.40	
106-93-4	1,2-Dibromoethane	ND		0.20	
95-50-1	1,2-Dichlorobenzene	ND		0.40	
107-06-2	1,2-Dichloroethane	ND		0.20	
78-87-5	1,2-Dichloropropane	ND		0.20	
76-14-2	1,2-Dichlorotetrafluoroethane	ND		0.20	
108-67-8	1,3,5-Trimethylbenzene	ND		0.20	
106-99-0	1,3-Butadiene	ND		0.40	
541-73-1	1,3-Dichlorobenzene	ND		0.20	
106-46-7	1,4-Dichlorobenzene	ND		0.20	
123-91-1	1,4-Dioxane	ND		0.40	
71-36-3	1-Butanol	ND		2.0	
90-12-0	1-Methylnaphthalene	ND		2.5	
540-84-1	2,2,4-Trimethylpentane	ND		0.40	
565-59-3	2,3-Dimethylpentane	ND		0.20	
78-93-3	2-Butanone	ND		1.0	
95-49-8	2-Chlorotoluene	ND		0.40	
591-78-6	2-Hexanone	ND		0.40	
78-78-4	2-Methylbutane	ND		0.50	
91-57-6	2-Methylnaphthalene	ND		2.5	
107-83-5	2-Methylpentane	ND		0.20	
107-05-1	3-Chloropropene	ND		0.20	
622-96-8	4-Ethyltoluene	ND		0.40	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		1.0	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19809-1

SDG No.:

Client Sample ID: 10335 Lab Sample ID: 140-19809-7

Matrix: Air Lab File ID: GG27L19809.D

Analysis Method: TO-15 Date Collected: 07/23/2020 16:30

Sample wt/vol: 200(mL) Date Analyzed: 07/27/2020 11:12

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 41299 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
67-64-1	Acetone	ND		7.5	
75-05-8	Acetonitrile	ND		1.0	
107-02-8	Acrolein	ND		1.0	
107-13-1	Acrylonitrile	ND		2.0	
98-83-9	Alpha Methyl Styrene	ND		0.40	
71-43-2	Benzene	ND		0.20	
100-44-7	Benzyl chloride	ND		0.40	
75-27-4	Bromodichloromethane	ND		0.20	
75-25-2	Bromoform	ND		0.20	
74-83-9	Bromomethane	ND		0.20	
106-97-8	Butane	ND		1.0	
75-15-0	Carbon disulfide	ND		0.40	
56-23-5	Carbon tetrachloride	ND		0.20	
108-90-7	Chlorobenzene	ND		0.20	
75-45-6	Chlorodifluoromethane	ND		0.20	
75-00-3	Chloroethane	ND		0.20	
67-66-3	Chloroform	ND		0.20	
74-87-3	Chloromethane	ND		1.0	
156-59-2	cis-1,2-Dichloroethene	ND		0.20	
10061-01-5	cis-1,3-Dichloropropene	ND		0.40	
98-82-8	Cumene	ND		0.40	
110-82-7	Cyclohexane	ND		0.40	
124-48-1	Dibromochloromethane	ND		0.20	
74-95-3	Dibromomethane	ND		0.40	
75-71-8	Dichlorodifluoromethane	ND		0.20	
64-17-5	Ethanol	ND		5.0	
141-78-6	Ethyl acetate	ND		2.0	
60-29-7	Ethyl ether	ND		2.0	
100-41-4	Ethylbenzene	ND		0.20	
87-68-3	Hexachlorobutadiene	ND		1.0	
110-54-3	Hexane	ND		0.40	
496-11-7	Indane	ND		0.20	
95-13-6	Indene	ND		0.40	
67-63-0	Isopropyl alcohol	ND		1.2	
179601-23-1	m&p-Xylene	ND		0.20	
80-62-6	Methyl methacrylate	ND		0.40	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19809-1

SDG No.:

Client Sample ID: 10335 Lab Sample ID: 140-19809-7

Matrix: Air Lab File ID: GG27L19809.D

Analysis Method: TO-15 Date Collected: 07/23/2020 16:30

Sample wt/vol: 200(mL) Date Analyzed: 07/27/2020 11:12

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 41299 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
1634-04-4	Methyl tert-butyl ether	ND		1.0	
108-87-2	Methylcyclohexane	ND		0.20	
75-09-2	Methylene Chloride	ND		1.0	
91-20-3	Naphthalene	ND		0.40	
104-51-8	n-Butylbenzene	ND		0.40	
124-18-5	n-Decane	ND		1.0	
112-40-3	n-Dodecane	ND		1.0	
142-82-5	n-Heptane	ND		0.40	
111-84-2	n-Nonane	ND		0.40	
111-65-9	n-Octane	ND		0.40	
103-65-1	N-Propylbenzene	ND		0.40	
1120-21-4	n-Undecane	ND		1.0	
95-47-6	o-Xylene	ND		0.20	
99-87-6	p-Cymene	ND		0.20	
109-66-0	Pentane	ND		2.5	
115-07-1	Propene	ND		2.5	
135-98-8	sec-Butylbenzene	ND		0.40	
100-42-5	Styrene	ND		0.20	
75-65-0	tert-Butanol	ND		1.0	
98-06-6	tert-Butylbenzene	ND		0.40	
127-18-4	Tetrachloroethene	ND		0.20	
109-99-9	Tetrahydrofuran	ND		1.0	
110-02-1	Thiophene	ND		0.20	
108-88-3	Toluene	ND		1.0	
156-60-5	trans-1,2-Dichloroethene	ND		0.20	
10061-02-6	trans-1,3-Dichloropropene	ND		0.20	
79-01-6	Trichloroethene	ND		0.20	
75-69-4	Trichlorofluoromethane	ND		0.20	
108-05-4	Vinyl acetate	ND		1.0	
593-60-2	Vinyl bromide	ND		0.20	
75-01-4	Vinyl chloride	ND		0.40	

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200724-16113.b\GG27L19809.D
Lims ID: 140-19809-A-7
Client ID: 10335
Sample Type: Client
Inject. Date: 27-Jul-2020 11:12:30 ALS Bottle#: 16 Worklist Smp#: 6
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016113-006
Misc. Info.: 200ML10335
Operator ID: HMT Instrument ID: MG

Method: \\chromfs\Knoxville\ChromData\MG\20200724-16113.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 28-Jul-2020 10:38:18 Calib Date: 15-Jul-2020 22:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1057

First Level Reviewer: khachitpongpanits Date: 28-Jul-2020 10:38:59

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.833	8.838	-0.005	94	205468	4.00	
* 2 1,4-Difluorobenzene	114	11.017	11.022	-0.005	97	1872932	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.746	15.751	-0.005	94	1596319	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.391	17.385	0.000	76	1198813	3.69	
7 Propene	41	3.721	3.719	0.000	98	102178	-0.3058	7
47 1,1,1-Trichloroethane	97	9.874	9.868	0.000	96	14859	0.0504	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

40MXISSURP_00004 Amount Added: 40.00 Units: mL Run Reagent

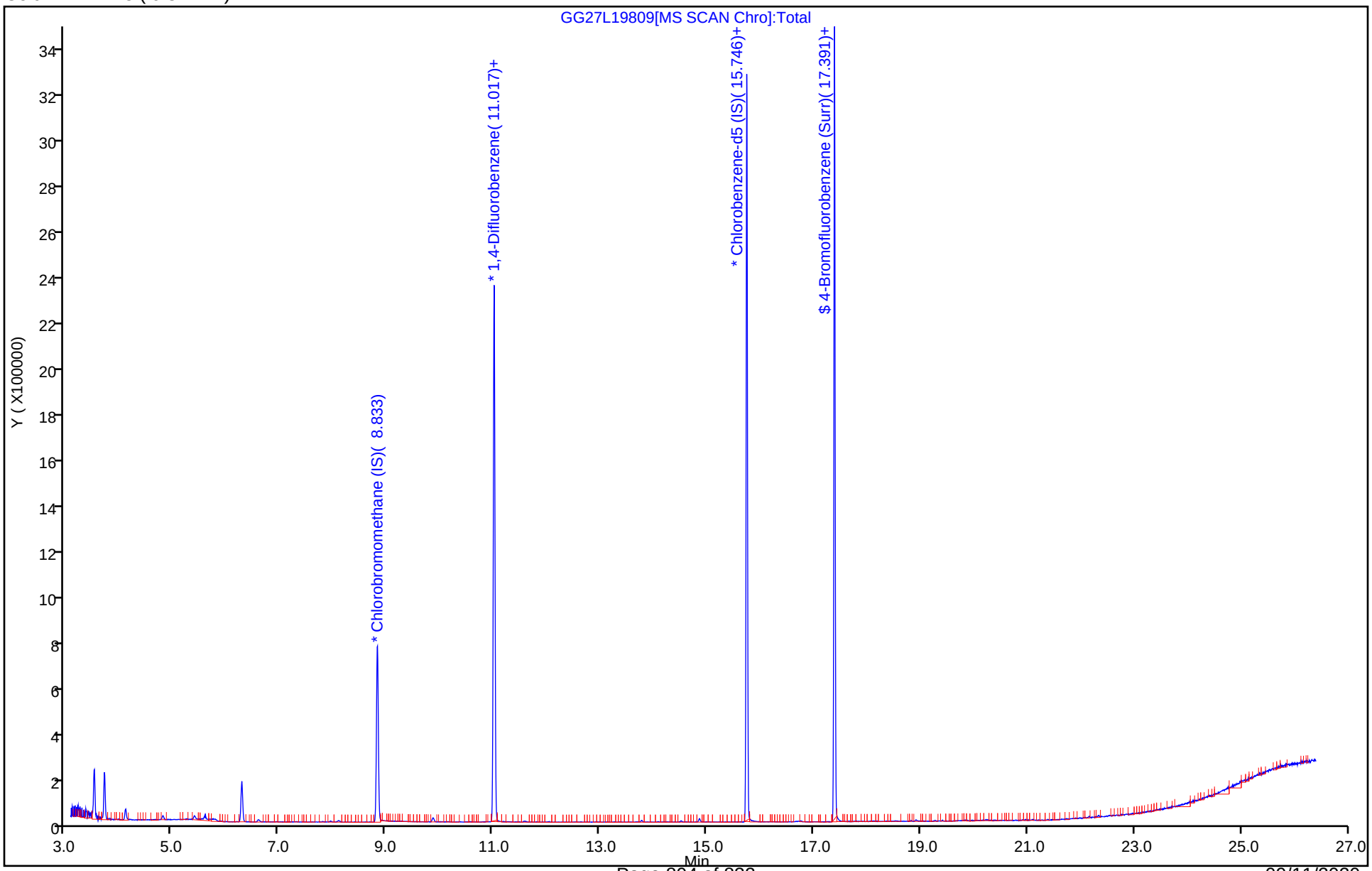
Report Date: 28-Jul-2020 10:39:00 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200724-16113.b\GG27L19809.D

Injection Date:	27-Jul-2020 11:12:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	140-19809-A-7	Lab Sample ID:	140-19809-7	Worklist Smp#:	6
Client ID:	10335				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19822-1

SDG No.:

Client Sample ID: 11830 Lab Sample ID: 140-19822-14

Matrix: Air Lab File ID: G29L19822.D

Analysis Method: TO-15 Date Collected: 07/24/2020 16:45

Sample wt/vol: 200(mL) Date Analyzed: 07/29/2020 13:04

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 41354 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	ND		0.20	
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.20	
79-00-5	1,1,2-Trichloroethane	ND		0.20	
76-13-1	1,1,2-Trichlorotrifluoroethane	ND		0.20	
75-34-3	1,1-Dichloroethane	ND		0.20	
75-35-4	1,1-Dichloroethene	ND		0.20	
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	
96-18-4	1,2,3-Trichloropropane	ND		0.50	
526-73-8	1,2,3-Trimethylbenzene	ND		0.20	
95-93-2	1,2,4,5-Tetramethylbenzene	ND		0.20	
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	
95-63-6	1,2,4-Trimethylbenzene	ND		0.20	
96-12-8	1,2-Dibromo-3-Chloropropane	ND		0.40	
106-93-4	1,2-Dibromoethane	ND		0.20	
95-50-1	1,2-Dichlorobenzene	ND		0.40	
107-06-2	1,2-Dichloroethane	ND		0.20	
78-87-5	1,2-Dichloropropane	ND		0.20	
76-14-2	1,2-Dichlorotetrafluoroethane	ND		0.20	
108-67-8	1,3,5-Trimethylbenzene	ND		0.20	
106-99-0	1,3-Butadiene	ND		0.40	
541-73-1	1,3-Dichlorobenzene	ND		0.20	
106-46-7	1,4-Dichlorobenzene	ND		0.20	
123-91-1	1,4-Dioxane	ND		0.40	
71-36-3	1-Butanol	ND		2.0	
90-12-0	1-Methylnaphthalene	ND		2.5	
540-84-1	2,2,4-Trimethylpentane	ND		0.40	
565-59-3	2,3-Dimethylpentane	ND		0.20	
78-93-3	2-Butanone	ND		1.0	
95-49-8	2-Chlorotoluene	ND		0.40	
591-78-6	2-Hexanone	ND		0.40	
78-78-4	2-Methylbutane	ND		0.50	
91-57-6	2-Methylnaphthalene	ND		2.5	
107-83-5	2-Methylpentane	ND		0.20	
107-05-1	3-Chloropropene	ND		0.20	
622-96-8	4-Ethyltoluene	ND		0.40	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		1.0	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19822-1

SDG No.:

Client Sample ID: 11830 Lab Sample ID: 140-19822-14

Matrix: Air Lab File ID: G29L19822.D

Analysis Method: TO-15 Date Collected: 07/24/2020 16:45

Sample wt/vol: 200(mL) Date Analyzed: 07/29/2020 13:04

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 41354 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
67-64-1	Acetone	ND		7.5	
75-05-8	Acetonitrile	ND		1.0	
107-02-8	Acrolein	ND		1.0	
107-13-1	Acrylonitrile	ND		2.0	
98-83-9	Alpha Methyl Styrene	ND		0.40	
71-43-2	Benzene	ND		0.20	
100-44-7	Benzyl chloride	ND		0.40	
75-27-4	Bromodichloromethane	ND		0.20	
75-25-2	Bromoform	ND		0.20	
74-83-9	Bromomethane	ND		0.20	
106-97-8	Butane	ND		1.0	
75-15-0	Carbon disulfide	ND		0.40	
56-23-5	Carbon tetrachloride	ND		0.20	
108-90-7	Chlorobenzene	ND		0.20	
75-45-6	Chlorodifluoromethane	ND		0.20	
75-00-3	Chloroethane	ND		0.20	
67-66-3	Chloroform	ND		0.20	
74-87-3	Chloromethane	ND		1.0	
156-59-2	cis-1,2-Dichloroethene	ND		0.20	
10061-01-5	cis-1,3-Dichloropropene	ND		0.40	
98-82-8	Cumene	ND		0.40	
110-82-7	Cyclohexane	ND		0.40	
124-48-1	Dibromochloromethane	ND		0.20	
74-95-3	Dibromomethane	ND		0.40	
75-71-8	Dichlorodifluoromethane	ND		0.20	
64-17-5	Ethanol	ND		5.0	
141-78-6	Ethyl acetate	ND		2.0	
60-29-7	Ethyl ether	ND		2.0	
100-41-4	Ethylbenzene	ND		0.20	
87-68-3	Hexachlorobutadiene	ND		1.0	
110-54-3	Hexane	ND		0.40	
496-11-7	Indane	ND		0.20	
95-13-6	Indene	ND		0.40	
67-63-0	Isopropyl alcohol	ND		1.2	
179601-23-1	m&p-Xylene	ND		0.20	
80-62-6	Methyl methacrylate	ND		0.40	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19822-1

SDG No.:

Client Sample ID: 11830 Lab Sample ID: 140-19822-14

Matrix: Air Lab File ID: G29L19822.D

Analysis Method: TO-15 Date Collected: 07/24/2020 16:45

Sample wt/vol: 200(mL) Date Analyzed: 07/29/2020 13:04

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 41354 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
1634-04-4	Methyl tert-butyl ether	ND		1.0	
108-87-2	Methylcyclohexane	ND		0.20	
75-09-2	Methylene Chloride	ND		1.0	
91-20-3	Naphthalene	ND		0.40	
104-51-8	n-Butylbenzene	ND		0.40	
124-18-5	n-Decane	ND		1.0	
112-40-3	n-Dodecane	ND		1.0	
142-82-5	n-Heptane	ND		0.40	
111-84-2	n-Nonane	ND		0.40	
111-65-9	n-Octane	ND		0.40	
103-65-1	N-Propylbenzene	ND		0.40	
1120-21-4	n-Undecane	ND		1.0	
95-47-6	o-Xylene	ND		0.20	
99-87-6	p-Cymene	ND		0.20	
109-66-0	Pentane	ND		2.5	
115-07-1	Propene	ND		2.5	
135-98-8	sec-Butylbenzene	ND		0.40	
100-42-5	Styrene	ND		0.20	
75-65-0	tert-Butanol	ND		1.0	
98-06-6	tert-Butylbenzene	ND		0.40	
127-18-4	Tetrachloroethene	ND		0.20	
109-99-9	Tetrahydrofuran	ND		1.0	
110-02-1	Thiophene	ND		0.20	
108-88-3	Toluene	ND		1.0	
156-60-5	trans-1,2-Dichloroethene	ND		0.20	
10061-02-6	trans-1,3-Dichloropropene	ND		0.20	
79-01-6	Trichloroethene	ND		0.20	
75-69-4	Trichlorofluoromethane	ND		0.20	
108-05-4	Vinyl acetate	ND		1.0	
593-60-2	Vinyl bromide	ND		0.20	
75-01-4	Vinyl chloride	ND		0.40	

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MR\20200728-16133.b\G29L19822.D
Lims ID: 140-19822-A-14
Client ID: 11830
Sample Type: Client
Inject. Date: 29-Jul-2020 13:04:30 ALS Bottle#: 6 Worklist Smp#: 9
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016133-009
Misc. Info.: 11830
Operator ID: HMT Instrument ID: MR

Method: \\chromfs\Knoxville\ChromData\MR\20200728-16133.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 30-Jul-2020 10:01:05 Calib Date: 28-Jul-2020 09:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC09R.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1069

First Level Reviewer: barlozhetskayaa Date: 30-Jul-2020 10:02:07

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.301	8.312	-0.011	92	143475	4.00	
* 2 1,4-Difluorobenzene	114	10.544	10.539	0.005	96	1257432	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.376	15.371	0.006	90	1016983	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.026	17.021	0.005	94	556392	3.62	
7 Propene	41	3.351	3.356	-0.005	98	71609	0.3957	7
40 Hexane	56	7.584	7.573	0.011	21	1231	0.0159	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

40MXISSURP_00004 Amount Added: 40.00 Units: mL Run Reagent

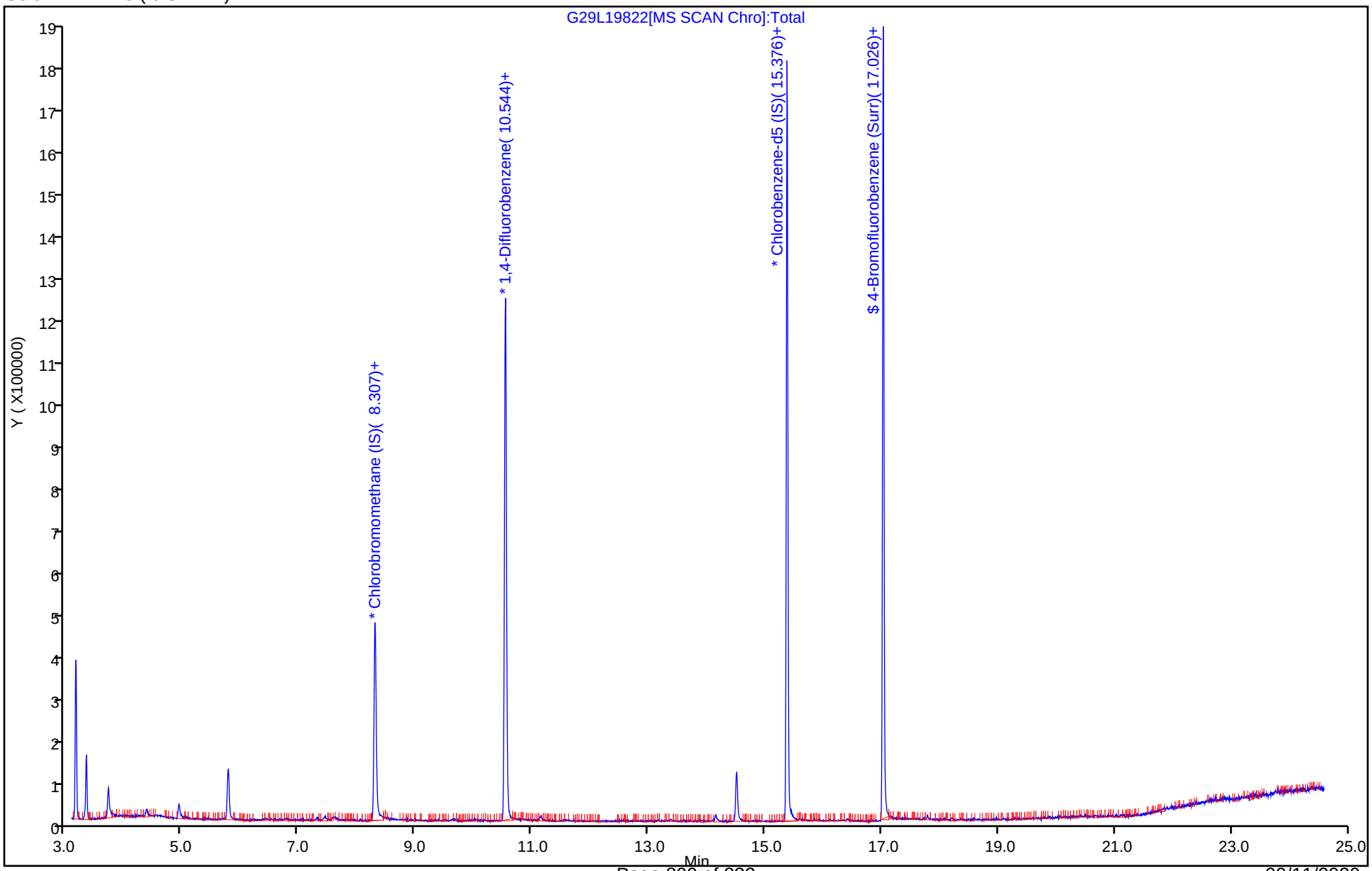
Report Date: 30-Jul-2020 10:02:07 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200728-16133.b\G29L19822.D

Injection Date:	29-Jul-2020 13:04:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	140-19822-A-14	Lab Sample ID:	140-19822-14	Worklist Smp#:	9
Client ID:	11830				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19827-1

SDG No.:

Client Sample ID: 34002461 Lab Sample ID: 140-19827-9

Matrix: Air Lab File ID: G30L19827.D

Analysis Method: TO-15 Date Collected: 07/25/2020 11:45

Sample wt/vol: 200(mL) Date Analyzed: 07/31/2020 05:57

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 41393 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	ND		0.20	
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.20	
79-00-5	1,1,2-Trichloroethane	ND		0.20	
76-13-1	1,1,2-Trichlorotrifluoroethane	ND		0.20	
75-34-3	1,1-Dichloroethane	ND		0.20	
75-35-4	1,1-Dichloroethene	ND		0.20	
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	
96-18-4	1,2,3-Trichloropropane	ND		0.50	
526-73-8	1,2,3-Trimethylbenzene	ND		0.20	
95-93-2	1,2,4,5-Tetramethylbenzene	ND		0.20	
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	
95-63-6	1,2,4-Trimethylbenzene	ND		0.20	
96-12-8	1,2-Dibromo-3-Chloropropane	ND		0.40	
106-93-4	1,2-Dibromoethane	ND		0.20	
95-50-1	1,2-Dichlorobenzene	ND		0.40	
107-06-2	1,2-Dichloroethane	ND		0.20	
78-87-5	1,2-Dichloropropane	ND		0.20	
76-14-2	1,2-Dichlorotetrafluoroethane	ND		0.20	
108-67-8	1,3,5-Trimethylbenzene	ND		0.20	
106-99-0	1,3-Butadiene	ND		0.40	
541-73-1	1,3-Dichlorobenzene	ND		0.20	
106-46-7	1,4-Dichlorobenzene	ND		0.20	
123-91-1	1,4-Dioxane	ND		0.40	
71-36-3	1-Butanol	ND	*	2.0	
90-12-0	1-Methylnaphthalene	ND		2.5	
540-84-1	2,2,4-Trimethylpentane	ND		0.40	
565-59-3	2,3-Dimethylpentane	ND		0.20	
78-93-3	2-Butanone	ND		1.0	
95-49-8	2-Chlorotoluene	ND		0.40	
591-78-6	2-Hexanone	ND		0.40	
78-78-4	2-Methylbutane	ND		0.50	
91-57-6	2-Methylnaphthalene	ND		2.5	
107-83-5	2-Methylpentane	ND		0.20	
107-05-1	3-Chloropropene	ND		0.20	
622-96-8	4-Ethyltoluene	ND		0.40	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		1.0	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19827-1

SDG No.:

Client Sample ID: 34002461 Lab Sample ID: 140-19827-9

Matrix: Air Lab File ID: G30L19827.D

Analysis Method: TO-15 Date Collected: 07/25/2020 11:45

Sample wt/vol: 200(mL) Date Analyzed: 07/31/2020 05:57

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 41393 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
67-64-1	Acetone	ND	*	7.5	
75-05-8	Acetonitrile	ND		1.0	
107-02-8	Acrolein	ND		1.0	
107-13-1	Acrylonitrile	ND		2.0	
98-83-9	Alpha Methyl Styrene	ND		0.40	
71-43-2	Benzene	ND		0.20	
100-44-7	Benzyl chloride	ND		0.40	
75-27-4	Bromodichloromethane	ND		0.20	
75-25-2	Bromoform	ND		0.20	
74-83-9	Bromomethane	ND		0.20	
106-97-8	Butane	ND		1.0	
75-15-0	Carbon disulfide	ND		0.40	
56-23-5	Carbon tetrachloride	ND		0.20	
108-90-7	Chlorobenzene	ND		0.20	
75-45-6	Chlorodifluoromethane	ND		0.20	
75-00-3	Chloroethane	ND		0.20	
67-66-3	Chloroform	ND		0.20	
74-87-3	Chloromethane	ND		1.0	
156-59-2	cis-1,2-Dichloroethene	ND		0.20	
10061-01-5	cis-1,3-Dichloropropene	ND		0.40	
98-82-8	Cumene	ND		0.40	
110-82-7	Cyclohexane	ND		0.40	
124-48-1	Dibromochloromethane	ND		0.20	
74-95-3	Dibromomethane	ND		0.40	
75-71-8	Dichlorodifluoromethane	ND		0.20	
64-17-5	Ethanol	ND		5.0	
141-78-6	Ethyl acetate	ND		2.0	
60-29-7	Ethyl ether	ND		2.0	
100-41-4	Ethylbenzene	ND		0.20	
87-68-3	Hexachlorobutadiene	ND		1.0	
110-54-3	Hexane	ND		0.40	
496-11-7	Indane	ND		0.20	
95-13-6	Indene	ND		0.40	
67-63-0	Isopropyl alcohol	ND		1.2	
179601-23-1	m&p-Xylene	ND		0.20	
80-62-6	Methyl methacrylate	ND		0.40	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19827-1

SDG No.:

Client Sample ID: 34002461 Lab Sample ID: 140-19827-9

Matrix: Air Lab File ID: G30L19827.D

Analysis Method: TO-15 Date Collected: 07/25/2020 11:45

Sample wt/vol: 200(mL) Date Analyzed: 07/31/2020 05:57

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 41393 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
1634-04-4	Methyl tert-butyl ether	ND		1.0	
108-87-2	Methylcyclohexane	ND	*	0.20	
75-09-2	Methylene Chloride	ND		1.0	
91-20-3	Naphthalene	ND		0.40	
104-51-8	n-Butylbenzene	ND		0.40	
124-18-5	n-Decane	ND		1.0	
112-40-3	n-Dodecane	ND		1.0	
142-82-5	n-Heptane	ND		0.40	
111-84-2	n-Nonane	ND		0.40	
111-65-9	n-Octane	ND		0.40	
103-65-1	N-Propylbenzene	ND		0.40	
1120-21-4	n-Undecane	ND		1.0	
95-47-6	o-Xylene	ND		0.20	
99-87-6	p-Cymene	ND		0.20	
109-66-0	Pentane	ND		2.5	
115-07-1	Propene	ND		2.5	
135-98-8	sec-Butylbenzene	ND		0.40	
100-42-5	Styrene	ND		0.20	
75-65-0	tert-Butanol	ND		1.0	
98-06-6	tert-Butylbenzene	ND		0.40	
127-18-4	Tetrachloroethene	ND		0.20	
109-99-9	Tetrahydrofuran	ND		1.0	
110-02-1	Thiophene	ND		0.20	
108-88-3	Toluene	ND		1.0	
156-60-5	trans-1,2-Dichloroethene	ND		0.20	
10061-02-6	trans-1,3-Dichloropropene	ND		0.20	
79-01-6	Trichloroethene	ND		0.20	
75-69-4	Trichlorofluoromethane	ND		0.20	
108-05-4	Vinyl acetate	ND		1.0	
593-60-2	Vinyl bromide	ND		0.20	
75-01-4	Vinyl chloride	ND		0.40	

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MR\20200729-16151.b\G30L19827.D				
Lims ID:	140-19827-A-9				
Client ID:	34002461				
Sample Type:	Client				
Inject. Date:	31-Jul-2020 05:57:30	ALS Bottle#:	17	Worklist Smp#:	25
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016151-025				
Misc. Info.:	34002461				
Operator ID:	HMT	Instrument ID:	MR		
Method:	\\chromfs\Knoxville\ChromData\MR\20200729-16151.b\MR_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	31-Jul-2020 17:38:18	Calib Date:	28-Jul-2020 09:59:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC09R.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1020				
First Level Reviewer: khachitpongpanits		Date:	31-Jul-2020 17:38:18		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.307	8.307	0.000	89	82993	4.00	
* 2 1,4-Difluorobenzene	114	10.539	10.539	0.000	96	764973	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.376	15.371	0.005	91	631383	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.026	17.032	0.000	94	327483	3.43	
7 Propene	41	3.351	3.356	-0.005	99	49379	0.4952	7
17 Ethanol	31	4.376	4.343	0.033	97	23544	0.7139	
25 Isopropyl alcohol	45	5.066	4.990	0.076	59	7585	0.0717	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

40MXISSURP_00004 Amount Added: 40.00 Units: mL Run Reagent

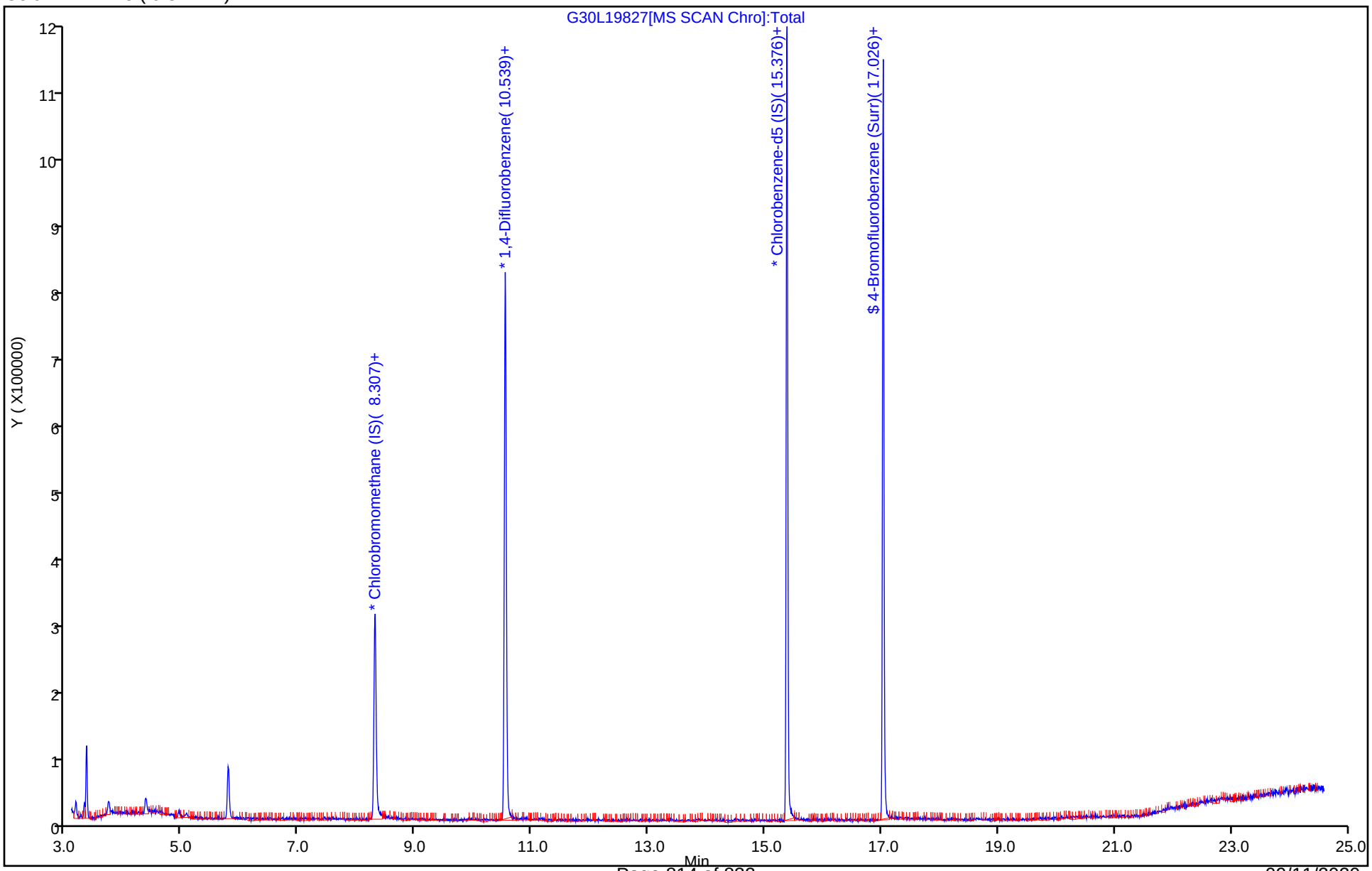
Report Date: 31-Jul-2020 17:38:19 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200729-16151.b\G30L19827.D

Injection Date:	31-Jul-2020 05:57:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	140-19827-A-9	Lab Sample ID:	140-19827-9	Worklist Smp#:	25
Client ID:	34002461				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



09/11/2020

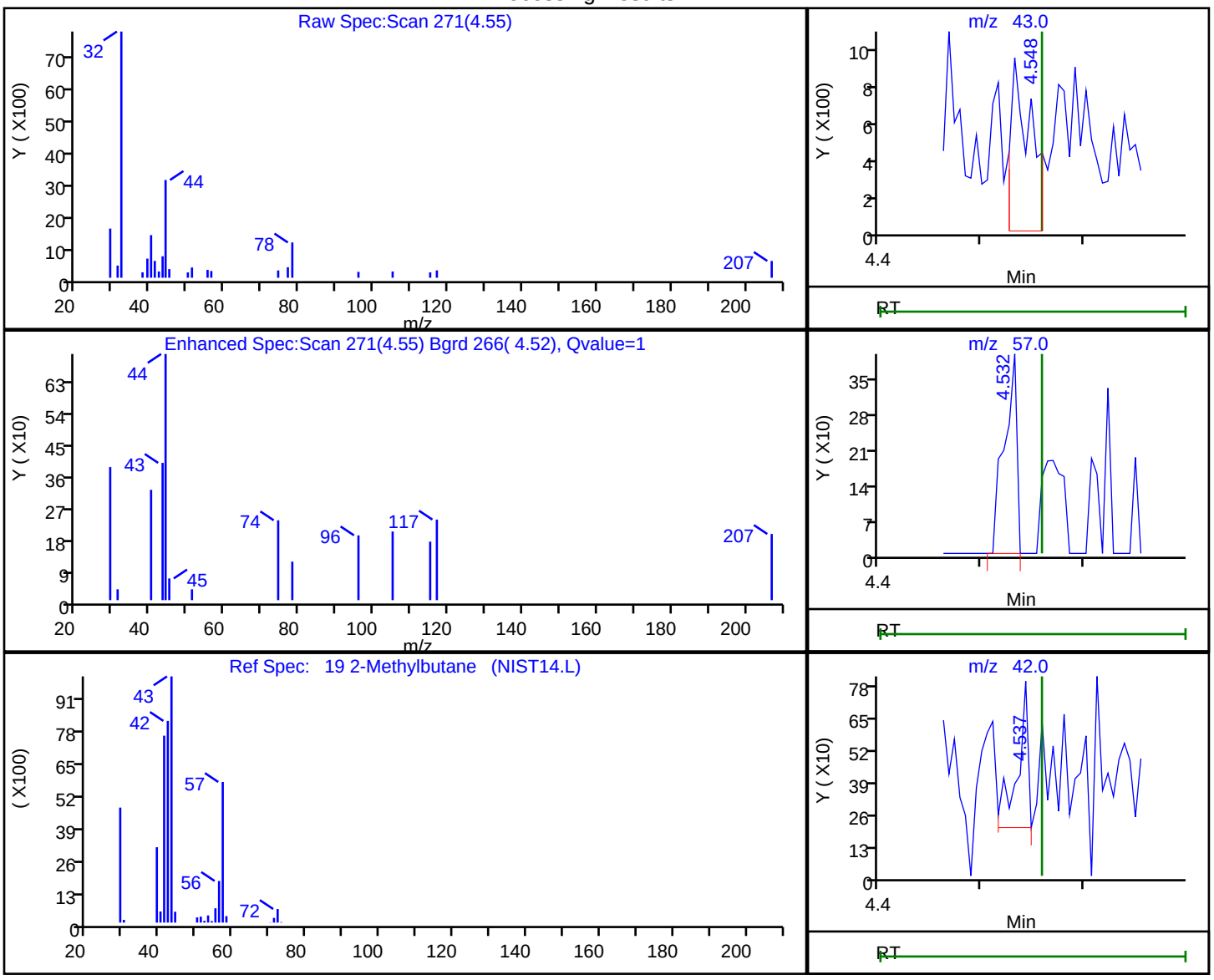
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200729-16151.b\G30L19827.D				
Injection Date:	31-Jul-2020 05:57:30	Instrument ID:	MR		
Lims ID:	140-19827-A-9	Lab Sample ID:	140-19827-9		
Client ID:	34002461				
Operator ID:	HMT	ALS Bottle#:	17	Worklist Smp#:	25
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

19 2-Methylbutane, CAS: 78-78-4

Processing Results



RT	Mass	Response	Amount
4.55	43.00	1201	0.014992
4.53	57.00	339	
4.54	42.00	427	

Reviewer: khachitpongpanits, 31-Jul-2020 17:37:54

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19838-1

SDG No.:

Client Sample ID: 10336 Lab Sample ID: 140-19838-7

Matrix: Air Lab File ID: G29L19838.D

Analysis Method: TO-15 Date Collected: 07/27/2020 14:55

Sample wt/vol: 200(mL) Date Analyzed: 07/30/2020 05:16

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 41351 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	ND		0.20	
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.20	
79-00-5	1,1,2-Trichloroethane	ND		0.20	
76-13-1	1,1,2-Trichlorotrifluoroethane	ND		0.20	
75-34-3	1,1-Dichloroethane	ND		0.20	
75-35-4	1,1-Dichloroethene	ND		0.20	
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	
96-18-4	1,2,3-Trichloropropane	ND		0.50	
526-73-8	1,2,3-Trimethylbenzene	ND		0.20	
95-93-2	1,2,4,5-Tetramethylbenzene	ND		0.20	
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	
95-63-6	1,2,4-Trimethylbenzene	ND		0.20	
96-12-8	1,2-Dibromo-3-Chloropropane	ND		0.40	
106-93-4	1,2-Dibromoethane	ND		0.20	
95-50-1	1,2-Dichlorobenzene	ND		0.40	
107-06-2	1,2-Dichloroethane	ND		0.20	
78-87-5	1,2-Dichloropropane	ND		0.20	
76-14-2	1,2-Dichlorotetrafluoroethane	ND		0.20	
108-67-8	1,3,5-Trimethylbenzene	ND		0.20	
106-99-0	1,3-Butadiene	ND		0.40	
541-73-1	1,3-Dichlorobenzene	ND		0.20	
106-46-7	1,4-Dichlorobenzene	ND		0.20	
123-91-1	1,4-Dioxane	ND		0.40	
71-36-3	1-Butanol	ND		2.0	
90-12-0	1-Methylnaphthalene	ND		2.5	
540-84-1	2,2,4-Trimethylpentane	ND		0.40	
565-59-3	2,3-Dimethylpentane	ND		0.20	
78-93-3	2-Butanone	ND		1.0	
95-49-8	2-Chlorotoluene	ND		0.40	
591-78-6	2-Hexanone	ND		0.40	
78-78-4	2-Methylbutane	ND		0.50	
91-57-6	2-Methylnaphthalene	ND		2.5	
107-83-5	2-Methylpentane	ND		0.20	
107-05-1	3-Chloropropene	ND		0.20	
622-96-8	4-Ethyltoluene	ND		0.40	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		1.0	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19838-1

SDG No.:

Client Sample ID: 10336 Lab Sample ID: 140-19838-7

Matrix: Air Lab File ID: G29L19838.D

Analysis Method: TO-15 Date Collected: 07/27/2020 14:55

Sample wt/vol: 200(mL) Date Analyzed: 07/30/2020 05:16

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 41351 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
67-64-1	Acetone	ND		7.5	
75-05-8	Acetonitrile	ND		1.0	
107-02-8	Acrolein	ND		1.0	
107-13-1	Acrylonitrile	ND		2.0	
98-83-9	Alpha Methyl Styrene	ND		0.40	
71-43-2	Benzene	ND		0.20	
100-44-7	Benzyl chloride	ND		0.40	
75-27-4	Bromodichloromethane	ND		0.20	
75-25-2	Bromoform	ND		0.20	
74-83-9	Bromomethane	ND		0.20	
106-97-8	Butane	ND		1.0	
75-15-0	Carbon disulfide	ND		0.40	
56-23-5	Carbon tetrachloride	ND		0.20	
108-90-7	Chlorobenzene	ND		0.20	
75-45-6	Chlorodifluoromethane	ND		0.20	
75-00-3	Chloroethane	ND		0.20	
67-66-3	Chloroform	ND		0.20	
74-87-3	Chloromethane	ND		1.0	
156-59-2	cis-1,2-Dichloroethene	ND		0.20	
10061-01-5	cis-1,3-Dichloropropene	ND		0.40	
98-82-8	Cumene	ND		0.40	
110-82-7	Cyclohexane	ND		0.40	
124-48-1	Dibromochloromethane	ND		0.20	
74-95-3	Dibromomethane	ND		0.40	
75-71-8	Dichlorodifluoromethane	ND		0.20	
64-17-5	Ethanol	ND		5.0	
141-78-6	Ethyl acetate	ND		2.0	
60-29-7	Ethyl ether	ND		2.0	
100-41-4	Ethylbenzene	ND		0.20	
87-68-3	Hexachlorobutadiene	ND		1.0	
110-54-3	Hexane	ND		0.40	
496-11-7	Indane	ND		0.20	
95-13-6	Indene	ND		0.40	
67-63-0	Isopropyl alcohol	ND		1.2	
179601-23-1	m&p-Xylene	ND		0.20	
80-62-6	Methyl methacrylate	ND		0.40	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19838-1

SDG No.:

Client Sample ID: 10336 Lab Sample ID: 140-19838-7

Matrix: Air Lab File ID: G29L19838.D

Analysis Method: TO-15 Date Collected: 07/27/2020 14:55

Sample wt/vol: 200(mL) Date Analyzed: 07/30/2020 05:16

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 41351 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
1634-04-4	Methyl tert-butyl ether	ND		1.0	
108-87-2	Methylcyclohexane	ND		0.20	
75-09-2	Methylene Chloride	ND		1.0	
91-20-3	Naphthalene	ND		0.40	
104-51-8	n-Butylbenzene	ND		0.40	
124-18-5	n-Decane	ND		1.0	
112-40-3	n-Dodecane	ND		1.0	
142-82-5	n-Heptane	ND		0.40	
111-84-2	n-Nonane	ND		0.40	
111-65-9	n-Octane	ND		0.40	
103-65-1	N-Propylbenzene	ND		0.40	
1120-21-4	n-Undecane	ND		1.0	
95-47-6	o-Xylene	ND		0.20	
99-87-6	p-Cymene	ND		0.20	
109-66-0	Pentane	ND		2.5	
115-07-1	Propene	ND		2.5	
135-98-8	sec-Butylbenzene	ND		0.40	
100-42-5	Styrene	ND		0.20	
75-65-0	tert-Butanol	ND		1.0	
98-06-6	tert-Butylbenzene	ND		0.40	
127-18-4	Tetrachloroethene	ND		0.20	
109-99-9	Tetrahydrofuran	ND		1.0	
110-02-1	Thiophene	ND		0.20	
108-88-3	Toluene	ND		1.0	
156-60-5	trans-1,2-Dichloroethene	ND		0.20	
10061-02-6	trans-1,3-Dichloropropene	ND		0.20	
79-01-6	Trichloroethene	ND		0.20	
75-69-4	Trichlorofluoromethane	ND		0.20	
108-05-4	Vinyl acetate	ND		1.0	
593-60-2	Vinyl bromide	ND		0.20	
75-01-4	Vinyl chloride	ND		0.40	

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200728-16131.b\G29L19838.D
Lims ID: 140-19838-A-7
Client ID: 10336
Sample Type: Client
Inject. Date: 30-Jul-2020 05:16:30 ALS Bottle#: 1 Worklist Smp#: 26
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016131-026
Operator ID: HMT Instrument ID: MG

Method: \\chromfs\Knoxville\ChromData\MG\20200728-16131.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 30-Jul-2020 11:18:55 Calib Date: 15-Jul-2020 22:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1069

First Level Reviewer: barlozhetskayaa Date: 30-Jul-2020 11:23:36

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.833	8.838	-0.005	92	136689	4.00	
* 2 1,4-Difluorobenzene	114	11.017	11.022	-0.005	97	1175803	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.746	15.751	-0.005	94	1036433	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.390	17.385	0.000	74	799632	3.80	
7 Propene	41	3.721	3.719	0.000	99	77310	-0.1473	7
17 Ethanol	31	4.815	4.775	0.037	99	20026	0.8411	
25 Isopropyl alcohol	45	5.560	5.465	0.092	94	3898	0.0544	
31 Methylene Chloride	84	6.293	6.289	0.000	98	61039	0.1341	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

40MXISSURP_00004 Amount Added: 40.00 Units: mL Run Reagent

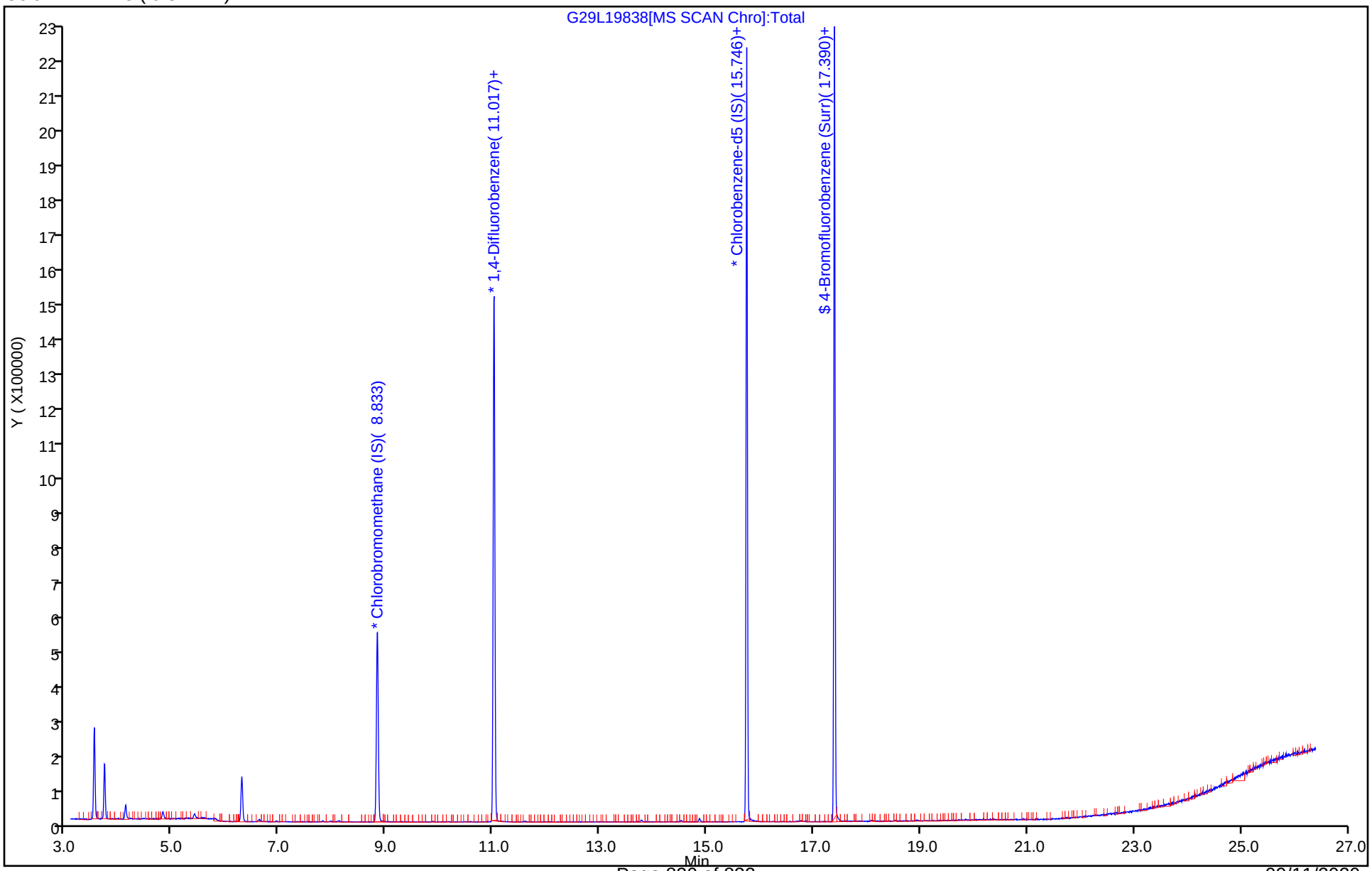
Report Date: 30-Jul-2020 11:23:36 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200728-16131.b\G29L19838.D

Injection Date:	30-Jul-2020 05:16:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	140-19838-A-7	Lab Sample ID:	140-19838-7	Worklist Smp#:	26
Client ID:	10336				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20188-1

SDG No.:

Client Sample ID: 9075 Lab Sample ID: 140-20188-3

Matrix: Air Lab File ID: H31L20188.D

Analysis Method: TO 15 LL Date Collected: 08/28/2020 15:50

Sample wt/vol: 500(mL) Date Analyzed: 09/01/2020 06:37

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42314 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	ND		0.080	
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.080	
79-00-5	1,1,2-Trichloroethane	ND		0.080	
76-13-1	1,1,2-Trichlorotrifluoroethane	ND		0.080	
75-34-3	1,1-Dichloroethane	ND		0.080	
75-35-4	1,1-Dichloroethene	ND		0.040	
87-61-6	1,2,3-Trichlorobenzene	ND		0.40	
96-18-4	1,2,3-Trichloropropane	ND		0.20	
526-73-8	1,2,3-Trimethylbenzene	ND		0.080	
95-93-2	1,2,4,5-Tetramethylbenzene	ND		0.080	
120-82-1	1,2,4-Trichlorobenzene	ND		0.080	
95-63-6	1,2,4-Trimethylbenzene	ND	*	0.080	
96-12-8	1,2-Dibromo-3-Chloropropane	ND		0.16	
106-93-4	1,2-Dibromoethane	ND		0.080	
95-50-1	1,2-Dichlorobenzene	ND		0.080	
107-06-2	1,2-Dichloroethane	ND		0.080	
78-87-5	1,2-Dichloropropane	ND		0.080	
76-14-2	1,2-Dichlorotetrafluoroethane	ND		0.080	
108-67-8	1,3,5-Trimethylbenzene	ND	*	0.080	
106-99-0	1,3-Butadine	ND		0.16	
541-73-1	1,3-Dichlorobenzene	ND		0.080	
106-46-7	1,4-Dichlorobenzene	ND	*	0.080	
123-91-1	1,4-Dioxane	ND		0.20	
71-36-3	1-Butanol	ND		0.80	
90-12-0	1-Methylnaphthalene	ND	*	1.0	
540-84-1	2,2,4-Trimethylpentane	ND		0.20	
565-59-3	2,3-Dimethylpentane	ND		0.080	
78-93-3	2-Butanone	ND		0.32	
95-49-8	2-Chlorotoluene	ND		0.16	
591-78-6	2-Hexanone	ND		0.20	
78-78-4	2-Methylbutane	ND		0.20	
91-57-6	2-Methylnaphthalene	ND	*	1.0	
107-83-5	2-Methylpentane	ND		0.080	
107-05-1	3-Chloroprene	ND		0.080	
622-96-8	4-Ethyltoluene	ND		0.16	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		0.20	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20188-1

SDG No.:

Client Sample ID: 9075 Lab Sample ID: 140-20188-3

Matrix: Air Lab File ID: H31L20188.D

Analysis Method: TO 15 LL Date Collected: 08/28/2020 15:50

Sample wt/vol: 500(mL) Date Analyzed: 09/01/2020 06:37

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42314 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
67-64-1	Acetone	ND		2.0	
75-05-8	Acetonitrile	ND		0.40	
107-02-8	Acrolein	ND		0.40	
107-13-1	Acrylonitrile	ND		0.80	
98-83-9	Alpha Methyl Styrene	ND		0.16	
71-43-2	Benzene	ND		0.080	
100-44-7	Benzyl chloride	ND		0.16	
75-27-4	Bromodichloromethane	ND		0.080	
75-25-2	Bromoform	ND		0.080	
74-83-9	Bromomethane	ND		0.080	
106-97-8	Butane	ND		0.16	
75-15-0	Carbon disulfide	ND		0.20	
56-23-5	Carbon tetrachloride	ND		0.032	
108-90-7	Chlorobenzene	ND		0.080	
75-45-6	Chlorodifluoromethane	ND		0.080	
75-00-3	Chloroethane	ND		0.080	
67-66-3	Chloroform	ND		0.080	
74-87-3	Chloromethane	ND		0.20	
156-59-2	cis-1,2-Dichloroethene	ND		0.040	
10061-01-5	cis-1,3-Dichloropropene	ND		0.080	
98-82-8	Cumene	ND		0.16	
110-82-7	Cyclohexane	ND		0.20	
124-48-1	Dibromochloromethane	ND		0.080	
74-95-3	Dibromomethane	ND		0.16	
75-71-8	Dichlorodifluoromethane	ND		0.080	
64-17-5	Ethanol	ND		2.0	
141-78-6	Ethyl acetate	ND		0.80	
60-29-7	Ethyl ether	ND		0.80	
100-41-4	Ethylbenzene	ND		0.080	
87-68-3	Hexachlorobutadiene	ND		0.080	
110-54-3	Hexane	ND		0.20	
496-11-7	Indane	ND		0.080	
95-13-6	Indene	ND		0.16	
67-63-0	Isopropyl alcohol	ND		0.80	
80-62-6	Methyl methacrylate	ND		0.20	
1634-04-4	Methyl tert-butyl ether	ND		0.16	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20188-1

SDG No.:

Client Sample ID: 9075 Lab Sample ID: 140-20188-3

Matrix: Air Lab File ID: H31L20188.D

Analysis Method: TO 15 LL Date Collected: 08/28/2020 15:50

Sample wt/vol: 500(mL) Date Analyzed: 09/01/2020 06:37

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42314 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
108-87-2	Methylcyclohexane	ND		0.080	
75-09-2	Methylene Chloride	ND		0.40	
179601-23-1	m-Xylene & p-Xylene	ND	*	0.080	
91-20-3	Naphthalene	ND		0.20	
104-51-8	n-Butylbenzene	ND	*	0.16	
124-18-5	n-Decane	ND		0.40	
112-40-3	n-Dodecane	ND		0.40	
142-82-5	n-Heptane	ND		0.20	
111-84-2	n-Nonane	ND		0.20	
111-65-9	n-Octane	ND	*	0.16	
103-65-1	N-Propylbenzene	ND		0.16	
95-47-6	o-Xylene	ND		0.080	
99-87-6	p-Cymene	ND	*	0.080	
109-66-0	Pentane	ND		0.40	
115-07-1	Propene	ND		1.0	
135-98-8	sec-Butylbenzene	ND	*	0.16	
100-42-5	Styrene	ND		0.080	
75-65-0	tert-Butanol	ND		0.32	
98-06-6	tert-Butylbenzene	ND	*	0.20	
127-18-4	Tetrachloroethene	ND		0.040	
109-99-9	Tetrahydrofuran	ND		0.40	
110-02-1	Thiophene	ND		0.080	
108-88-3	Toluene	ND		0.12	
156-60-5	trans-1,2-Dichloroethene	ND		0.080	
10061-02-6	trans-1,3-Dichloropropene	ND		0.080	
79-01-6	Trichloroethene	ND		0.036	
75-69-4	Trichlorofluoromethane	ND		0.080	
1120-21-4	Undecane	ND		0.40	
108-05-4	Vinyl acetate	ND		0.40	
593-60-2	Vinyl bromide	ND		0.080	
75-01-4	Vinyl chloride	ND		0.040	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TARGETED TENATIVELY IDENTIFIED COMPOUNDS

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20188-1

SDG No.:

Client Sample ID: 9075 Lab Sample ID: 140-20188-3

Matrix: Air Lab File ID: H31L20188.D

Analysis Method: TO 15 LL Date Collected: 08/28/2020 15:50

Sample wt/vol: 500(mL) Date Analyzed: 09/01/2020 06:37

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42314 Units: ppb v/v

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
488-23-3	1,2,3,4-Tetramethylbenzene TIC		ND		
527-53-7	1,2,3,5-Tetramethylbenzene TIC		ND		
934-80-5	1,2-Dimethyl-4-Ethylbenzene TIC		ND		
872-55-9	2-Ethylthiophene TIC		ND		
554-14-3	2-Methylthiophene TIC		ND		
616-44-4	3-Methylthiophene TIC		ND		
95-15-8	Benzo(b)thiophene TIC		ND		

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MH\20200831-16455.b\H31L20188.D				
Lims ID:	140-20188-A-3				
Client ID:	9075				
Sample Type:	Client				
Inject. Date:	01-Sep-2020 06:37:30	ALS Bottle#:	17	Worklist Smp#:	24
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016455-024				
Misc. Info.:	9075				
Operator ID:	HMT	Instrument ID:	MH		
Method:	\\chromfs\Knoxville\ChromData\MH\20200831-16455.b\MH_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	01-Sep-2020 18:24:19	Calib Date:	29-Aug-2020 23:57:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1060				
First Level Reviewer: khachitpongpanits		Date:	01-Sep-2020 18:24:19		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.436	9.431	0.005	98	131349	4.80	
* 2 1,4-Difluorobenzene	114	11.596	11.591	0.005	95	597844	4.80	
* 3 Chlorobenzene-d5 (IS)	117	16.258	16.258	0.000	88	351346	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.876	17.876	0.000	93	127621	3.13	
19 2-Methylbutane	43	5.389	5.387	0.005	75	922	0.0200	

Reagents:

40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

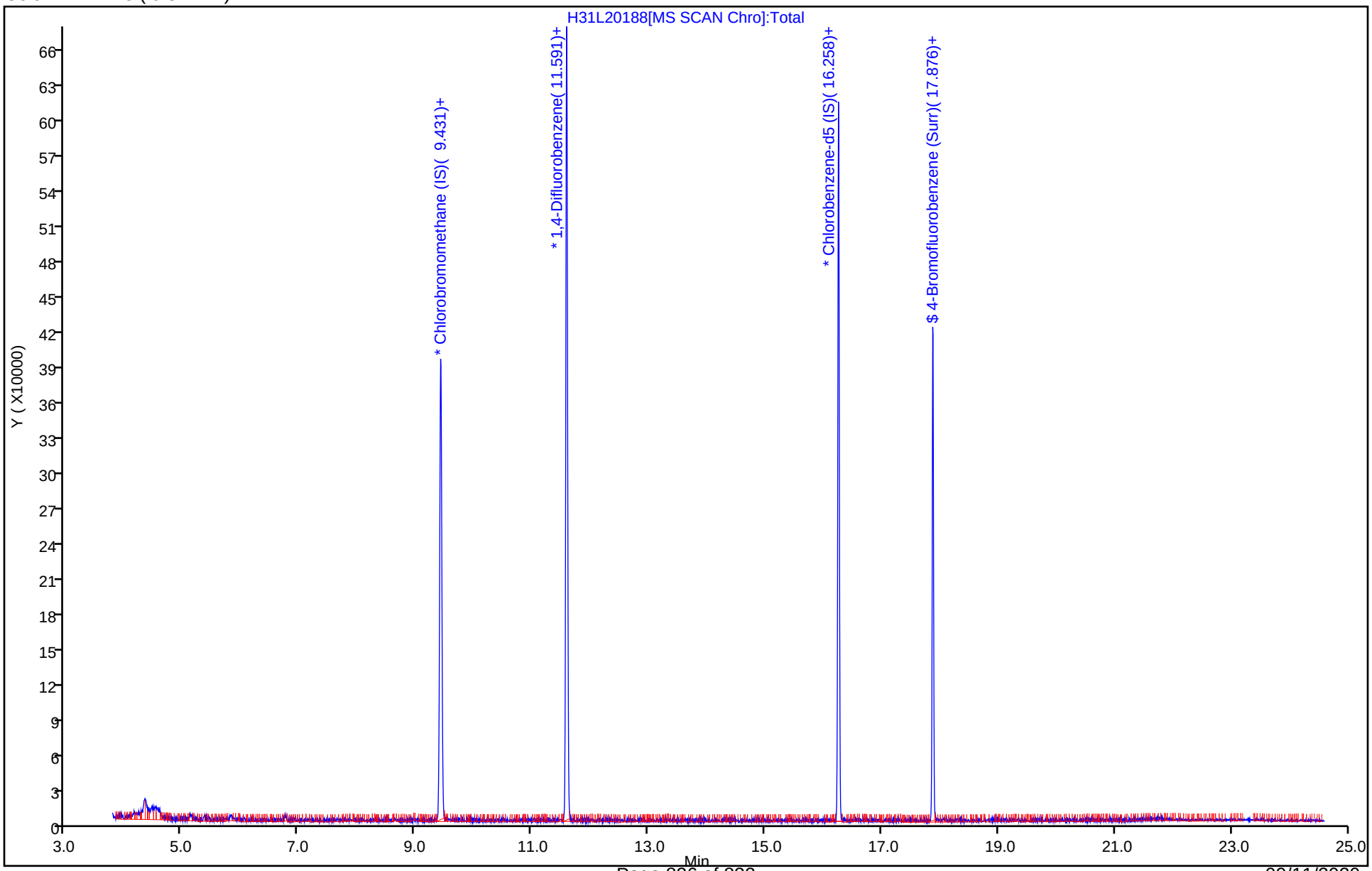
Report Date: 01-Sep-2020 18:24:19 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200831-16455.b\H31L20188.D

Injection Date:	01-Sep-2020 06:37:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	140-20188-A-3	Lab Sample ID:	140-20188-3	Worklist Smp#:	24
Client ID:	9075				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



09/11/2020

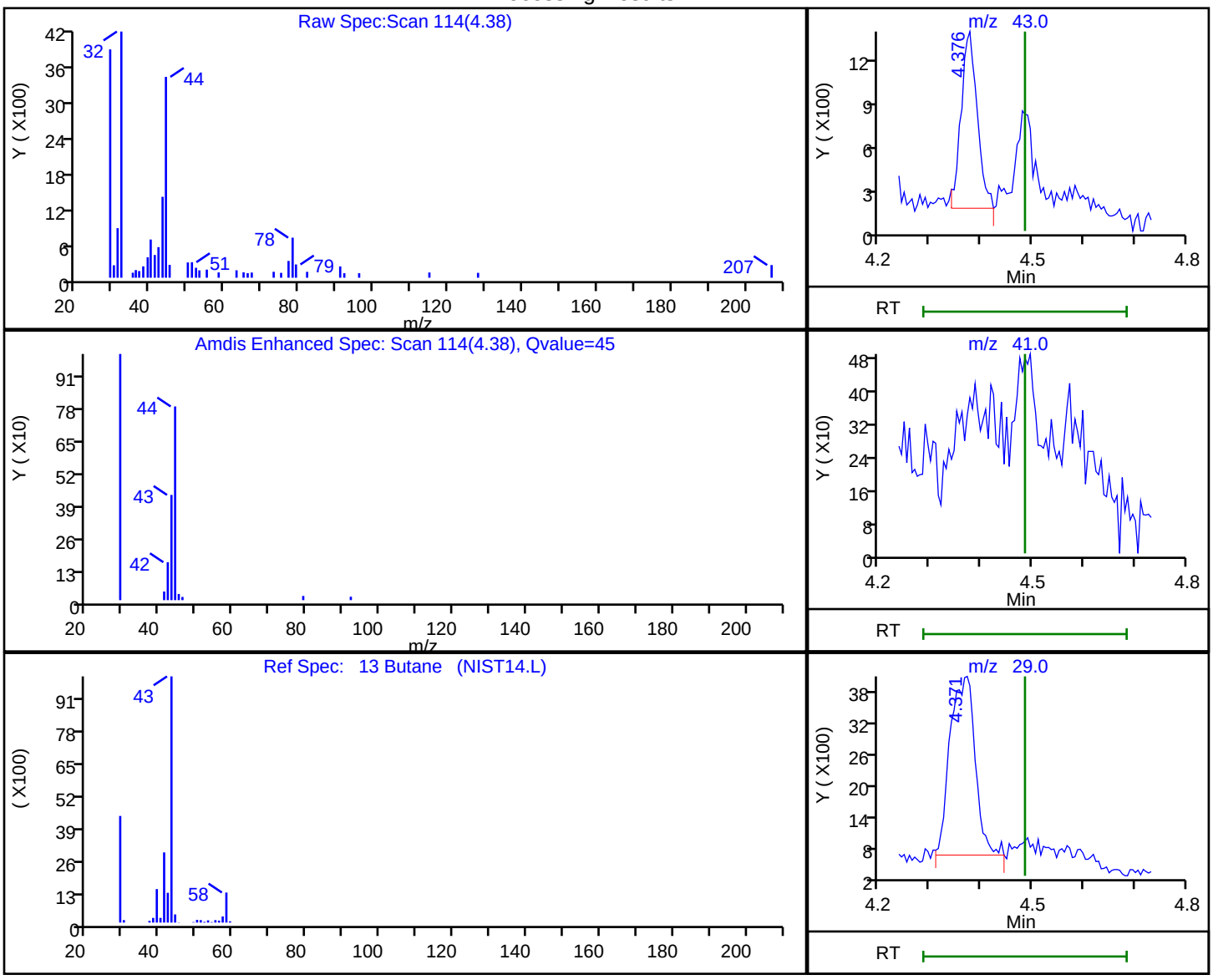
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200831-16455.b\H31L20188.D				
Injection Date:	01-Sep-2020 06:37:30	Instrument ID:	MH		
Lims ID:	140-20188-A-3	Lab Sample ID:	140-20188-3		
Client ID:	9075				
Operator ID:	HMT	ALS Bottle#:	17	Worklist Smp#:	24
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

13 Butane, CAS: 106-97-8

Processing Results



RT	Mass	Response	Amount
4.38	43.00	2661	0.044583
4.48	41.00	0	
4.37	29.00	11544	

Reviewer: khachitpongpanits, 01-Sep-2020 18:23:47

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Shipping and Receiving Documents

Eurofins TestAmerica, Knoxville
5815 Middlebrook Pike
Knoxville, TN 37921-5947
phone 865.291.3000 fax 865.584.4315

Baltimore #201

Canister Samples Chain of Custody Record

TestAmerica Laboratories, Inc. assumes no liability with respect to the collection and shipment of these samples.

140-20194 Chain of Custody

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact Information	**Client Project Manager:** Josh Mullis	**Samples Collected By:** Josh Mullis/ Walt Pyar	COC No: 1 of 4 COCs
Company Name: TETRA TECH INC	Phone: 410-279-2700		TALS Project #:
Address: 10251 Century Blvd Ste. 200	Email: josh.mullis@tetratech.com		For Lab Use Only:
City/State/Zip Germantown, MD, 20874			Walk-in Client:
Phone: 410-279-2700	Site Contact: Josh Mullis		Lab Sampling:
FAX: —	Tel/Fax 410-279-2700		
Project Name: MAC Indoor Air / Soil Vapor	**Analysis Turnaround Time**		Job / SDG No.:
Site/Location: Middle Run Complex	Standard (Specific): ✓		(See below for Add'l Items)
P O # 1128C09388	Rush (Specifiy):		

Sample Identification	Sample Start Date	Time Start	Sample End Date	Time Stop	Canister Vacuum in Field, "Hg (Start)	Canister Vacuum in Field, "Hg (Stop)	Flow Controller ID	Canister ID	TO-14/15 (Standard / Low Level)	TO-15 SIM	EPA 3C	EPA 25C	ASTM D-1946	EPA 15/16	Other (Please specify in notes section)	Sample Type	Indoor Air/Ambient Air	Sub-Slab	Soil Gas	Soil Vapor Extraction (SVE)	Landfill Gas	Other (Please specify in notes section)	Sample Specific Notes:
SV-172-A-29	8/26/20	0840	8/26/20	1002	-30	0	10056	11720	X									R					
SV-116-A-29		0843		0958	-30	0	11894	3400 2449	X									R					
SV-DUP3-A-29		0000		0000	-28	0	11314	3400 2455	X									R					
SV-138-A-29		0848		1003	-26	+2	11260	10753	X									R					
SV-173-A-29		0850		1004	-30	0	7269	3400 2475	X									R					
SV-171-A-29		0852		1006	-30	-1	10446	11848	X									R					
SV-174-A-29		0854		1007	-30	0	11759	11751	X									R					
SV-177-A-29		0857		1008	-30	0	7259	11111	X									R					
SV-015-A-29		0903		1012	-30	-1	11924	3400 2488	X									R					
SV-078-A-29	✓	0908	✓	1016	-29	-2	11648	10960	X									R					

Temperature (Fahrenheit)	Interior	Ambient
Start		
Stop		

Pressure (inches of Hg)	Interior	Ambient
Start		
Stop		

Received @ ambient, 2 boxes
Fedex po, Custody seal intact
trk# 7713 7973 0430
7972 9951

Special Instructions/QC Requirements & Comments: MAC Indoor Air / Soil Vapor Bi-Annual Sampling KW 8/28/20

Samples Shipped by:	Date / Time: 8/27/20 1230	Samples Received by:	1230
Samples Relinquished by:	Date / Time: 8/27/20 1700	Received by: ETA 8/28/20	1000
Relinquished by:	Date / Time:	Received by:	4T
Lab Use Only: Shipper Name:	Opened by:	Condition:	20 cans, 20 flows

Form No. CA-C-WI-003, Rev. 2.23, dated 5/4/2020

Baltimore #201

Eurofins TestAmerica, Knoxville
5815 Middlebrook Pike

Knoxville, TN 37921-5947
phone 865.291.3000 fax 865.584.4315

Canister Samples Chain of Custody Record

TestAmerica Laboratories, Inc. assumes no liability with respect to the collection and shipment of these samples.

eurofins | Environment Testing TestAmerica

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact Information	**Client Project Manager:** Josh Mullis	**Samples Collected By:** Josh Mullis/ Walt Pryor	COC No: 2 of 4 COCs
Company Name: TETRA TECH INC	Phone: 410-279-2700		TALS Project #:
Address: 20251 Century Blvd Ste. 200	Email: josh.mullis@tetratech.com		**For Lab Use Only:**
City/State/Zip Germantown, MD, 20878			Walk-in Client:
Phone: 410-279-2700	Site Contact: Josh Mullis		Lab Sampling:
FAX: —	Tel/Fax 410-279-2700		
Project Name: MRC Indoor Air / Soil Vapor	**Analysis Turnaround Time**		Job / SDG No.:
Site/Location: Middle River Complex	Standard (Specific): —		(See below for Add'l Items)
P O # 112EC09388	Rush (Specifiy):		

Sample Identification	Sample Start Date	Time Start	Sample End Date	Time Stop	Canister Vacuum in Field, "Hg (Start)	Canister Vacuum in Field, "Hg (Stop)	Flow Controller ID	Canister ID	TO-14/15 (Standard / Low Level)	TO-15 SIM	EPA 3C	EPA 25C	ASTM D-1946	EPA 15/16	Other (Please specify in notes section)	Sample Type	Indoor Air/Ambient Air	Sub-Slab	Soil Gas	Soil Vapor Extraction (SVE)	Landfill Gas	Other (Please specify in notes section)	Sample Specific Notes:
SV-076-A-29	8/26/20	0912	8/26/20	1018	-30	0	~~7837~~ 7367	11830	X									X					Time = 1018, flow 7367
SV-168-A-29	↓	0916	↓	1020	-30	-2	7640	34000763	X									X					
SV-DUP4-A-29		0000		0000	-30	-3	8137	34002412	X									X					
SV-075-A-29		0920		1024	-30	-2	10301	34000730	X									X					
SV-136-A-29		0924		1026	-28	-3	10874	09789	X									X					
SV-101-B-29		0927		1027	-25	0	11582	34002178	X									X					
SV-100-B-29		0930		1030	+23	0	7491	11672	X									X					* regulator cracked
SV-079-A-29		0935		1035	-30	-3	7192	34002185	X									X					34002185
SV-139-A-29		0938		1038	-30	-5	11273	34000662	X									X					
SV-118-A-29		0941		1041	-28	-4	7437	34002461	X									X					

Temperature (Fahrenheit)			
Start	Interior	Ambient	
Stop			

Pressure (inches of Hg)			
Start	Interior	Ambient	
Stop			

Special Instructions/QC Requirements & Comments: MRC Indoor Air / Soil Vapor Bi-Annual Sampling

Samples Shipped by: Walt Pryor	**Date / Time:** 8/27/20 1230	**Samples Received by:** [signature] 1230	
Samples Relinquished by: [signature]	**Date / Time:** 8/27/20 1700	**Received by:** [signature] ETA 8/28/20 1000	
Relinquished by:	**Date / Time:**	**Received by:**	
Lab Use Only: **Shipper Name:**	**Opened by:**	**Condition:**	

Form No. CA-C-WI-003, Rev. 2.23, dated 5/4/2020

Loc: 140

EUROFINS/TESTAMERICA KNOXVILLE SAMPLE RECEIPT/CONDITION UPON RECEIPT ANOMALY CHECKLIST **Log In Number: 20194**

Review Items	Yes	No	NA	If No, what was the problem?	Comments/Actions Taken
1. Are the shipping containers intact?	/			☐ **Containers, Broken**	
2. Were ambient air containers received intact?			/	☑ Checked in lab	
3. The coolers/containers custody seal if present, is it intact?	/			☐ Yes ☐ NA	
4. Is the cooler temperature within limits? (> freezing temp. of water to 6 °C, VOST: 10°C) Thermometer ID :_____ Correction factor: _____			/	☐ **Cooler Out of Temp, Client Contacted, Proceed/Cancel** ☐ **Cooler Out of Temp, Same Day Receipt**	
5. Were all of the sample containers received intact?	/			☐ **Containers, Broken**	
6. Were samples received in appropriate containers?	/			☐ **Containers, Improper; Client Contacted; Proceed/Cancel**	
7. Do sample container labels match COC? (IDs, Dates, Times)	/			☐ **COC & Samples Do Not Match** ☐ **COC Incorrect/Incomplete** ☐ **COC Not Received**	
8. Were all of the samples listed on the COC received?	/			☐ **Sample Received, Not on COC** ☐ **Sample on COC, Not Received**	
9. Is the date/time of sample collection noted?	/			☐ **COC; No Date/Time; Client Contacted**	**Labeling Verified by:** **Date:**
10. Was the sampler identified on the COC?	/			☐ **Sampler Not Listed on COC**	
11. Is the client and project name/# identified?	/			☐ **COC Incorrect/Incomplete**	**pH test strip lot number:**
12. Are tests/parameters listed for each sample?	/			☐ **COC No tests on COC**	
13. Is the matrix of the samples noted?	/			☐ **COC Incorrect/Incomplete**	
14. Was COC relinquished? (Signed/Dated/Timed)	/			☐ **COC Incorrect/Incomplete**	
15. Were samples received within holding time?	/			☐ **Holding Time - Receipt**	
16. Were samples received with correct chemical preservative (excluding Encore)?			/	☐ **pH Adjusted, pH Included (See box 16A)** ☐ **Incorrect Preservative**	
17. Were VOA samples received without headspace?			/	☐ **Headspace (VOA only)**	
18. Did you check for residual chlorine, if necessary? (e.g. 1613B, 1668) Chlorine test strip lot number:_____			/	☐ **Residual Chlorine**	
19. For 1613B water samples is pH<9?			/	☐ If no, notify lab to adjust	
20. For rad samples was sample activity info. Provided?			/	☐ Project missing info	

	Box 16A: pH Preservation	Box 18A: Residual Chlorine
Preservative:		
Lot Number:		
Exp Date:		
Analyst:		
Date:		
Time:		

Project #: 1400295 PM Instructions: _____

Sample Receiving Associate: _____ Date: 8/28/20

QA026R32.doc, 062719

TestAmerica Knoxville - Air Canister Initial Pressure Check

Gauge ID: G5
Date: 9/2/2020

Analyst	Sample ID	Asset #	Cleaning Job	Cert	Size (L)	Pressure @ Receipt (-in Hg or +psig)	Time	Comments
BRS	140-20194-a-1	11720	19809	B	1	0.0	12:02	
BRS	140-20194-a-2	34002449	19827	B	1	0.0	12:03	
BRS	140-20194-a-3	34002455	19827	B	1	0.0	12:04	
BRS	140-20194-a-4	10753	19809	B	1	0.0	12:05	
BRS	140-20194-a-5	34002475	19827	B	1	0.0	12:06	
BRS	140-20194-a-6	11848	19838	B	1	0.0	12:07	
BRS	140-20194-a-7	11751	19809	B	1	0.0	12:08	
BRS	140-20194-a-8	11111	19822	B	1	0.0	12:09	
BRS	140-20194-a-9	34002488	19827	B	1	-1.1	12:10	
BRS	140-20194-a-10	10960	19822	B	1	-1.6	12:11	
BRS	140-20194-a-11	11830	19822	B	1	-1.7	13:01	
BRS	140-20194-a-12	34000763	19838	B	1	-2.0	13:02	
BRS	140-20194-a-13	34002412	19827	B	1	-2.4	13:03	
BRS	140-20194-a-14	34000730	19827	B	1	-2.0	13:04	
BRS	140-20194-a-15	09789	19838	B	1	-3.0	13:05	
BRS	140-20194-a-16	34002478	19838	B	1	-3.5	13:06	
BRS	140-20194-a-17	11672	19809	B	1	-2.4	13:07	
BRS	140-20194-a-18	34002185	19827	B	1	-3.5	13:08	
BRS	140-20194-a-19	34000662	19838	B	1	-3.3	13:09	
BRS	140-20194-a-20	34002461	19827	B	1	-3.5	13:10	

□ Receiving –Air Can –Calve Open (NCM #_____)
□ Air - Can P -24 to -25 " - Flow Contr. Works (NCM#_____)
□ Air - Can P -24 to -25 " - Flow Contr. Faulty (NCM#_____)
□ Air - Can P Out -26" - Flow Contr. Works (NCM#_____)
□ Air - Can P Out -26" - Flow Contr. Faulty (NCM#_____)
□ Air - Can P Low -24 to -25 " - Grab Sample (NCM#_____)
□ Air - Can P Low -26 "- Grab Sample (NCM#_____)

ANALYTICAL REPORT

Job Number: 140-20195-1

Job Description: Middle River - MRC

For:
Tetra Tech, Inc.
20251 Century Blvd
Suite 200
Germantown, MD 20874

Attention: Samantha Brenner



Approved for release.
Diana L Lange
Project Management Assistant II
9/10/2020 12:27 PM

Designee for
Jamie A McKinney, Senior Project Manager
5815 Middlebrook Pike, Knoxville, TN, 37921
(865)291-3000
Jamie.McKinney@Eurofinset.com
09/10/2020

cc: Amy Thomson

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins TestAmerica Project Manager.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

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Definitions/Glossary

Client: Tetra Tech, Inc. Job ID: 140-20195-1
Project/Site: Middle River - MRC

Qualifiers

Air - GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Comments
No additional comments.

Receipt
The samples were received on 8/28/2020 10:00 AM; the samples arrived in good condition, and where required, properly preserved and on ice.

Air - GC/MS VOA
Methods 3005A, TO 15 LL, TO-14A, TO-15: EPA methods TO-14A and TO-15 specify the use of humidified "zero air" as the blank reagent for canister cleaning, instrument calibration and sample analysis. Ultra-high purity humidified nitrogen from a cryogenic reservoir is used in place of "zero air" by TestAmerica Knoxville.

Methods TO 15 LL, TO-15: Although the BFB is flagged as outside control limits for TO-14 on batch 140-42481, the results are within limits for TO-15, which is required for this project.

Methods TO 15 LL, TO-15: The continuing calibration verification (CCV) associated with batch 140-42481 exhibited % difference of > 30% for the following analyte(s) 1,2,3-Trimethylbenzene and 1,4-dioxane; however, the results were within the LCS acceptance limits. The EPA method requires that all target analytes in the continuing calibration verification standard be within 30% difference from the initial calibration. According to the laboratory standard operating procedure, the continuing calibration is acceptable if it meets the laboratory control sample acceptance criteria.

Method TO 15 LL: The following analyte(s) recovered outside control limits for the LCS associated with analytical batch 140-42481: 1,2,3-Trimethylbenzene. This is not indicative of a systematic control problem because these were random marginal exceedances. Qualified results have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: Tetra Tech, Inc.
Project/Site: Middle River - MRC

Job ID: 140-20195-1

Client Sample ID: IA-018-A-29 — Lab Sample ID: 140-20195-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.16	J	0.40	0.040	ppb v/v	1.49		TO 15 LL	Total/NA
Carbon tetrachloride	0.087	J	0.40	0.035	ppb v/v	1.49		TO 15 LL	Total/NA
Chlorodifluoromethane	0.33	J	0.40	0.11	ppb v/v	1.49		TO 15 LL	Total/NA
Chloroform	3.9		0.40	0.035	ppb v/v	1.49		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	0.12	J	0.40	0.050	ppb v/v	1.49		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.34	J	0.40	0.070	ppb v/v	1.49		TO 15 LL	Total/NA
1,1-Dichloroethene	0.31	J	0.40	0.040	ppb v/v	1.49		TO 15 LL	Total/NA
Naphthalene	0.23		0.20	0.20	ppb v/v	1.49		TO 15 LL	Total/NA
Trichloroethene	1.1		0.20	0.030	ppb v/v	1.49		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.51	J	1.3	0.13	ug/m3	1.49		TO 15 LL	Total/NA
Carbon tetrachloride	0.55	J	2.5	0.22	ug/m3	1.49		TO 15 LL	Total/NA
Chlorodifluoromethane	1.2	J	1.4	0.39	ug/m3	1.49		TO 15 LL	Total/NA
Chloroform	19		2.0	0.17	ug/m3	1.49		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	0.49	J	1.6	0.20	ug/m3	1.49		TO 15 LL	Total/NA
Dichlorodifluoromethane	1.7	J	2.0	0.35	ug/m3	1.49		TO 15 LL	Total/NA
1,1-Dichloroethene	1.2	J	1.6	0.16	ug/m3	1.49		TO 15 LL	Total/NA
Naphthalene	1.2		1.0	1.0	ug/m3	1.49		TO 15 LL	Total/NA
Trichloroethene	5.8		1.1	0.16	ug/m3	1.49		TO 15 LL	Total/NA

Client Sample ID: IA-DUP 3-A-29 — Lab Sample ID: 140-20195-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.13	J	0.40	0.040	ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.064	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Chlorodifluoromethane	0.32	J	0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Chloroform	4.1		0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.35	J	0.40	0.070	ppb v/v	1		TO 15 LL	Total/NA
1,1-Dichloroethene	0.31	J	0.40	0.040	ppb v/v	1		TO 15 LL	Total/NA
Naphthalene	0.49		0.20	0.20	ppb v/v	1		TO 15 LL	Total/NA
Toluene	0.46	J	0.60	0.39	ppb v/v	1		TO 15 LL	Total/NA
Trichloroethene	1.1		0.20	0.030	ppb v/v	1		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.43	J	1.3	0.13	ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.40	J	2.5	0.22	ug/m3	1		TO 15 LL	Total/NA
Chlorodifluoromethane	1.1	J	1.4	0.39	ug/m3	1		TO 15 LL	Total/NA
Chloroform	20		2.0	0.17	ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	1.7	J	2.0	0.35	ug/m3	1		TO 15 LL	Total/NA
1,1-Dichloroethene	1.2	J	1.6	0.16	ug/m3	1		TO 15 LL	Total/NA
Naphthalene	2.6		1.0	1.0	ug/m3	1		TO 15 LL	Total/NA
Toluene	1.7	J	2.3	1.5	ug/m3	1		TO 15 LL	Total/NA
Trichloroethene	5.8		1.1	0.16	ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: IA-138-A-29 — Lab Sample ID: 140-20195-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.13	J	0.40	0.040	ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.093	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Chlorodifluoromethane	0.39	J	0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Chloroform	0.13	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.42		0.40	0.070	ppb v/v	1		TO 15 LL	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: IA-138-A-29 (Continued)

Lab Sample ID: 140-20195-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	0.27	J	0.40	0.040	ppb v/v	1		TO 15 LL	Total/NA
Trichloroethene	1.4		0.20	0.030	ppb v/v	1		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.42	J	1.3	0.13	ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.58	J	2.5	0.22	ug/m3	1		TO 15 LL	Total/NA
Chlorodifluoromethane	1.4	J	1.4	0.39	ug/m3	1		TO 15 LL	Total/NA
Chloroform	0.62	J	2.0	0.17	ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.1		2.0	0.35	ug/m3	1		TO 15 LL	Total/NA
1,1-Dichloroethene	1.1	J	1.6	0.16	ug/m3	1		TO 15 LL	Total/NA
Trichloroethene	7.7		1.1	0.16	ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: IA-174-A-29

Lab Sample ID: 140-20195-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.13	J	0.40	0.040	ppb v/v	1		TO 15 LL	Total/NA
Chlorodifluoromethane	0.34	J	0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Chloroform	0.062	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.43		0.40	0.070	ppb v/v	1		TO 15 LL	Total/NA
1,1-Dichloroethene	0.18	J	0.40	0.040	ppb v/v	1		TO 15 LL	Total/NA
Methylene Chloride	2.2		2.0	2.0	ppb v/v	1		TO 15 LL	Total/NA
Tetrachloroethene	0.090	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Toluene	0.42	J	0.60	0.39	ppb v/v	1		TO 15 LL	Total/NA
Trichloroethene	1.2		0.20	0.030	ppb v/v	1		TO 15 LL	Total/NA
Xylenes, Total	0.24	J	0.80	0.12	ppb v/v	1		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.41	J	1.3	0.13	ug/m3	1		TO 15 LL	Total/NA
Chlorodifluoromethane	1.2	J	1.4	0.39	ug/m3	1		TO 15 LL	Total/NA
Chloroform	0.30	J	2.0	0.17	ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.1		2.0	0.35	ug/m3	1		TO 15 LL	Total/NA
1,1-Dichloroethene	0.73	J	1.6	0.16	ug/m3	1		TO 15 LL	Total/NA
Methylene Chloride	7.6		6.9	6.8	ug/m3	1		TO 15 LL	Total/NA
Tetrachloroethene	0.61	J	2.7	0.24	ug/m3	1		TO 15 LL	Total/NA
Toluene	1.6	J	2.3	1.5	ug/m3	1		TO 15 LL	Total/NA
Trichloroethene	6.4		1.1	0.16	ug/m3	1		TO 15 LL	Total/NA
Xylenes, Total	1.0	J	3.5	0.52	ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: IA-093-A-29

Lab Sample ID: 140-20195-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.11	J	0.40	0.040	ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.052	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Chlorodifluoromethane	0.34	J	0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Chloroform	0.11	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.41		0.40	0.070	ppb v/v	1		TO 15 LL	Total/NA
1,1-Dichloroethene	0.25	J	0.40	0.040	ppb v/v	1		TO 15 LL	Total/NA
Ethylbenzene	0.095	J	0.40	0.065	ppb v/v	1		TO 15 LL	Total/NA
Toluene	0.39	J	0.60	0.39	ppb v/v	1		TO 15 LL	Total/NA
Trichloroethene	0.82		0.20	0.030	ppb v/v	1		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.36	J	1.3	0.13	ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.33	J	2.5	0.22	ug/m3	1		TO 15 LL	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: IA-093-A-29 (Continued)

Lab Sample ID: 140-20195-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chlorodifluoromethane	1.2	J	1.4	0.39	ug/m3	1		TO 15 LL	Total/NA
Chloroform	0.53	J	2.0	0.17	ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.0		2.0	0.35	ug/m3	1		TO 15 LL	Total/NA
1,1-Dichloroethene	0.98	J	1.6	0.16	ug/m3	1		TO 15 LL	Total/NA
Ethylbenzene	0.41	J	1.7	0.28	ug/m3	1		TO 15 LL	Total/NA
Toluene	1.5	J	2.3	1.5	ug/m3	1		TO 15 LL	Total/NA
Trichloroethene	4.4		1.1	0.16	ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: IA-015-A-29

Lab Sample ID: 140-20195-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.079	J	0.40	0.040	ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.058	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Chlorodifluoromethane	0.34	J	0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Chloroform	0.11	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.41		0.40	0.070	ppb v/v	1		TO 15 LL	Total/NA
Ethylbenzene	0.072	J	0.40	0.065	ppb v/v	1		TO 15 LL	Total/NA
Toluene	0.46	J	0.60	0.39	ppb v/v	1		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	0.22	J	0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Xylenes, Total	0.28	J	0.80	0.12	ppb v/v	1		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.25	J	1.3	0.13	ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.36	J	2.5	0.22	ug/m3	1		TO 15 LL	Total/NA
Chlorodifluoromethane	1.2	J	1.4	0.39	ug/m3	1		TO 15 LL	Total/NA
Chloroform	0.53	J	2.0	0.17	ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.0		2.0	0.35	ug/m3	1		TO 15 LL	Total/NA
Ethylbenzene	0.31	J	1.7	0.28	ug/m3	1		TO 15 LL	Total/NA
Toluene	1.7	J	2.3	1.5	ug/m3	1		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	1.1	J	2.0	0.54	ug/m3	1		TO 15 LL	Total/NA
Xylenes, Total	1.2	J	3.5	0.52	ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: IA-078-A-29

Lab Sample ID: 140-20195-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.10	J	0.40	0.040	ppb v/v	1.45		TO 15 LL	Total/NA
Carbon tetrachloride	0.075	J	0.40	0.035	ppb v/v	1.45		TO 15 LL	Total/NA
Chlorodifluoromethane	0.50		0.40	0.11	ppb v/v	1.45		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.39	J	0.40	0.070	ppb v/v	1.45		TO 15 LL	Total/NA
Ethylbenzene	0.094	J	0.40	0.065	ppb v/v	1.45		TO 15 LL	Total/NA
Toluene	1.9		0.60	0.39	ppb v/v	1.45		TO 15 LL	Total/NA
Xylenes, Total	0.46	J	0.80	0.12	ppb v/v	1.45		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.33	J	1.3	0.13	ug/m3	1.45		TO 15 LL	Total/NA
Carbon tetrachloride	0.47	J	2.5	0.22	ug/m3	1.45		TO 15 LL	Total/NA
Chlorodifluoromethane	1.8		1.4	0.39	ug/m3	1.45		TO 15 LL	Total/NA
Dichlorodifluoromethane	1.9	J	2.0	0.35	ug/m3	1.45		TO 15 LL	Total/NA
Ethylbenzene	0.41	J	1.7	0.28	ug/m3	1.45		TO 15 LL	Total/NA
Toluene	7.0		2.3	1.5	ug/m3	1.45		TO 15 LL	Total/NA
Xylenes, Total	2.0	J	3.5	0.52	ug/m3	1.45		TO 15 LL	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: IA-076-A-29 — Lab Sample ID: 140-20195-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon tetrachloride	0.082	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Chlorodifluoromethane	0.30	J	0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Chloroform	0.098	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.35	J	0.40	0.070	ppb v/v	1		TO 15 LL	Total/NA
Ethylbenzene	0.086	J	0.40	0.065	ppb v/v	1		TO 15 LL	Total/NA
Toluene	3.4		0.60	0.39	ppb v/v	1		TO 15 LL	Total/NA
Xylenes, Total	0.46	J	0.80	0.12	ppb v/v	1		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon tetrachloride	0.52	J	2.5	0.22	ug/m3	1		TO 15 LL	Total/NA
Chlorodifluoromethane	1.1	J	1.4	0.39	ug/m3	1		TO 15 LL	Total/NA
Chloroform	0.48	J	2.0	0.17	ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	1.7	J	2.0	0.35	ug/m3	1		TO 15 LL	Total/NA
Ethylbenzene	0.37	J	1.7	0.28	ug/m3	1		TO 15 LL	Total/NA
Toluene	13		2.3	1.5	ug/m3	1		TO 15 LL	Total/NA
Xylenes, Total	2.0	J	3.5	0.52	ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: IA-168-A-29 — Lab Sample ID: 140-20195-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.096	J	0.40	0.040	ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.049	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Chlorodifluoromethane	0.38	J	0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.42		0.40	0.070	ppb v/v	1		TO 15 LL	Total/NA
Ethylbenzene	0.077	J	0.40	0.065	ppb v/v	1		TO 15 LL	Total/NA
Toluene	2.6		0.60	0.39	ppb v/v	1		TO 15 LL	Total/NA
Xylenes, Total	0.33	J	0.80	0.12	ppb v/v	1		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.31	J	1.3	0.13	ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.31	J	2.5	0.22	ug/m3	1		TO 15 LL	Total/NA
Chlorodifluoromethane	1.3	J	1.4	0.39	ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.1		2.0	0.35	ug/m3	1		TO 15 LL	Total/NA
Ethylbenzene	0.33	J	1.7	0.28	ug/m3	1		TO 15 LL	Total/NA
Toluene	9.8		2.3	1.5	ug/m3	1		TO 15 LL	Total/NA
Xylenes, Total	1.4	J	3.5	0.52	ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: IA-DUP 4-A-29 — Lab Sample ID: 140-20195-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.14	J	0.40	0.040	ppb v/v	1.56		TO 15 LL	Total/NA
Carbon tetrachloride	0.059	J	0.40	0.035	ppb v/v	1.56		TO 15 LL	Total/NA
Chlorodifluoromethane	0.44		0.40	0.11	ppb v/v	1.56		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	0.083	J	0.40	0.050	ppb v/v	1.56		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.34	J	0.40	0.070	ppb v/v	1.56		TO 15 LL	Total/NA
Ethylbenzene	0.075	J	0.40	0.065	ppb v/v	1.56		TO 15 LL	Total/NA
Tetrachloroethene	0.071	J	0.40	0.035	ppb v/v	1.56		TO 15 LL	Total/NA
Toluene	2.6		0.60	0.39	ppb v/v	1.56		TO 15 LL	Total/NA
Trichloroethene	0.45		0.20	0.030	ppb v/v	1.56		TO 15 LL	Total/NA
Xylenes, Total	0.34	J	0.80	0.12	ppb v/v	1.56		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.43	J	1.3	0.13	ug/m3	1.56		TO 15 LL	Total/NA
Carbon tetrachloride	0.37	J	2.5	0.22	ug/m3	1.56		TO 15 LL	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: IA-DUP 4-A-29 (Continued)

Lab Sample ID: 140-20195-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chlorodifluoromethane	1.6		1.4	0.39	ug/m3	1.56		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	0.33	J	1.6	0.20	ug/m3	1.56		TO 15 LL	Total/NA
Dichlorodifluoromethane	1.7	J	2.0	0.35	ug/m3	1.56		TO 15 LL	Total/NA
Ethylbenzene	0.33	J	1.7	0.28	ug/m3	1.56		TO 15 LL	Total/NA
Tetrachloroethene	0.48	J	2.7	0.24	ug/m3	1.56		TO 15 LL	Total/NA
Toluene	9.8		2.3	1.5	ug/m3	1.56		TO 15 LL	Total/NA
Trichloroethene	2.4		1.1	0.16	ug/m3	1.56		TO 15 LL	Total/NA
Xylenes, Total	1.5	J	3.5	0.52	ug/m3	1.56		TO 15 LL	Total/NA

Client Sample ID: IA-075-A-29

Lab Sample ID: 140-20195-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.13	J	0.40	0.040	ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.078	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Chlorodifluoromethane	0.97		0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Chloroform	0.041	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.39	J	0.40	0.070	ppb v/v	1		TO 15 LL	Total/NA
Ethylbenzene	0.94		0.40	0.065	ppb v/v	1		TO 15 LL	Total/NA
Methylene Chloride	2.0		2.0	2.0	ppb v/v	1		TO 15 LL	Total/NA
Toluene	54		0.60	0.39	ppb v/v	1		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	0.11	J	0.40	0.10	ppb v/v	1		TO 15 LL	Total/NA
Xylenes, Total	3.8		0.80	0.12	ppb v/v	1		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.41	J	1.3	0.13	ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.49	J	2.5	0.22	ug/m3	1		TO 15 LL	Total/NA
Chlorodifluoromethane	3.4		1.4	0.39	ug/m3	1		TO 15 LL	Total/NA
Chloroform	0.20	J	2.0	0.17	ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	1.9	J	2.0	0.35	ug/m3	1		TO 15 LL	Total/NA
Ethylbenzene	4.1		1.7	0.28	ug/m3	1		TO 15 LL	Total/NA
Methylene Chloride	6.8		6.9	6.8	ug/m3	1		TO 15 LL	Total/NA
Toluene	200		2.3	1.5	ug/m3	1		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	0.52	J	2.0	0.49	ug/m3	1		TO 15 LL	Total/NA
Xylenes, Total	17		3.5	0.52	ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: IA-021-A-29

Lab Sample ID: 140-20195-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.082	J	0.40	0.040	ppb v/v	1.41		TO 15 LL	Total/NA
Carbon tetrachloride	0.088	J	0.40	0.035	ppb v/v	1.41		TO 15 LL	Total/NA
Chlorodifluoromethane	0.33	J	0.40	0.11	ppb v/v	1.41		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.44		0.40	0.070	ppb v/v	1.41		TO 15 LL	Total/NA
Ethylbenzene	0.16	J	0.40	0.065	ppb v/v	1.41		TO 15 LL	Total/NA
Toluene	4.7		0.60	0.39	ppb v/v	1.41		TO 15 LL	Total/NA
Xylenes, Total	0.63	J	0.80	0.12	ppb v/v	1.41		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.26	J	1.3	0.13	ug/m3	1.41		TO 15 LL	Total/NA
Carbon tetrachloride	0.56	J	2.5	0.22	ug/m3	1.41		TO 15 LL	Total/NA
Chlorodifluoromethane	1.2	J	1.4	0.39	ug/m3	1.41		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.2		2.0	0.35	ug/m3	1.41		TO 15 LL	Total/NA
Ethylbenzene	0.72	J	1.7	0.28	ug/m3	1.41		TO 15 LL	Total/NA
Toluene	18		2.3	1.5	ug/m3	1.41		TO 15 LL	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: IA-021-A-29 (Continued)

Lab Sample ID: 140-20195-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Xylenes, Total	2.7	J	3.5	0.52	ug/m3	1.41		TO 15 LL	Total/NA

Client Sample ID: IA-136-A-29

Lab Sample ID: 140-20195-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.045	J	0.40	0.040	ppb v/v	1.56		TO 15 LL	Total/NA
Carbon tetrachloride	0.083	J	0.40	0.035	ppb v/v	1.56		TO 15 LL	Total/NA
Chlorodifluoromethane	0.30	J	0.40	0.11	ppb v/v	1.56		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.35	J	0.40	0.070	ppb v/v	1.56		TO 15 LL	Total/NA
Ethylbenzene	0.096	J	0.40	0.065	ppb v/v	1.56		TO 15 LL	Total/NA
Toluene	2.5		0.60	0.39	ppb v/v	1.56		TO 15 LL	Total/NA
Xylenes, Total	0.41	J	0.80	0.12	ppb v/v	1.56		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.15	J	1.3	0.13	ug/m3	1.56		TO 15 LL	Total/NA
Carbon tetrachloride	0.52	J	2.5	0.22	ug/m3	1.56		TO 15 LL	Total/NA
Chlorodifluoromethane	1.1	J	1.4	0.39	ug/m3	1.56		TO 15 LL	Total/NA
Dichlorodifluoromethane	1.7	J	2.0	0.35	ug/m3	1.56		TO 15 LL	Total/NA
Ethylbenzene	0.42	J	1.7	0.28	ug/m3	1.56		TO 15 LL	Total/NA
Toluene	9.5		2.3	1.5	ug/m3	1.56		TO 15 LL	Total/NA
Xylenes, Total	1.8	J	3.5	0.52	ug/m3	1.56		TO 15 LL	Total/NA

Client Sample ID: IA-117-A-29

Lab Sample ID: 140-20195-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.040	J	0.40	0.040	ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.070	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Chlorodifluoromethane	0.38	J	0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	0.12	J	0.40	0.050	ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.38	J	0.40	0.070	ppb v/v	1		TO 15 LL	Total/NA
Ethylbenzene	0.15	J	0.40	0.065	ppb v/v	1		TO 15 LL	Total/NA
Methylene Chloride	23		2.0	2.0	ppb v/v	1		TO 15 LL	Total/NA
Toluene	2.5		0.60	0.39	ppb v/v	1		TO 15 LL	Total/NA
Trichloroethene	0.87		0.20	0.030	ppb v/v	1		TO 15 LL	Total/NA
Xylenes, Total	0.67	J	0.80	0.12	ppb v/v	1		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.13	J	1.3	0.13	ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.44	J	2.5	0.22	ug/m3	1		TO 15 LL	Total/NA
Chlorodifluoromethane	1.4	J	1.4	0.39	ug/m3	1		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	0.48	J	1.6	0.20	ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	1.9	J	2.0	0.35	ug/m3	1		TO 15 LL	Total/NA
Ethylbenzene	0.63	J	1.7	0.28	ug/m3	1		TO 15 LL	Total/NA
Methylene Chloride	80		6.9	6.8	ug/m3	1		TO 15 LL	Total/NA
Toluene	9.5		2.3	1.5	ug/m3	1		TO 15 LL	Total/NA
Trichloroethene	4.7		1.1	0.16	ug/m3	1		TO 15 LL	Total/NA
Xylenes, Total	2.9	J	3.5	0.52	ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: IA-079-A-29

Lab Sample ID: 140-20195-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.065	J	0.40	0.040	ppb v/v	1.45		TO 15 LL	Total/NA
Carbon tetrachloride	0.072	J	0.40	0.035	ppb v/v	1.45		TO 15 LL	Total/NA
Chlorodifluoromethane	0.30	J	0.40	0.11	ppb v/v	1.45		TO 15 LL	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: IA-079-A-29 (Continued)

Lab Sample ID: 140-20195-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dichlorodifluoromethane	0.37	J	0.40	0.070	ppb v/v	1.45		TO 15 LL	Total/NA
Ethylbenzene	0.14	J	0.40	0.065	ppb v/v	1.45		TO 15 LL	Total/NA
Toluene	1.8		0.60	0.39	ppb v/v	1.45		TO 15 LL	Total/NA
Xylenes, Total	0.68	J	0.80	0.12	ppb v/v	1.45		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.21	J	1.3	0.13	ug/m3	1.45		TO 15 LL	Total/NA
Carbon tetrachloride	0.45	J	2.5	0.22	ug/m3	1.45		TO 15 LL	Total/NA
Chlorodifluoromethane	1.1	J	1.4	0.39	ug/m3	1.45		TO 15 LL	Total/NA
Dichlorodifluoromethane	1.8	J	2.0	0.35	ug/m3	1.45		TO 15 LL	Total/NA
Ethylbenzene	0.59	J	1.7	0.28	ug/m3	1.45		TO 15 LL	Total/NA
Toluene	6.7		2.3	1.5	ug/m3	1.45		TO 15 LL	Total/NA
Xylenes, Total	3.0	J	3.5	0.52	ug/m3	1.45		TO 15 LL	Total/NA

Client Sample ID: IA-118-A-29

Lab Sample ID: 140-20195-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.13	J	0.40	0.040	ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.097	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Chlorodifluoromethane	0.34	J	0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.37	J	0.40	0.070	ppb v/v	1		TO 15 LL	Total/NA
Ethylbenzene	0.12	J	0.40	0.065	ppb v/v	1		TO 15 LL	Total/NA
Methylene Chloride	3.9		2.0	2.0	ppb v/v	1		TO 15 LL	Total/NA
Toluene	1.2		0.60	0.39	ppb v/v	1		TO 15 LL	Total/NA
Xylenes, Total	0.64	J	0.80	0.12	ppb v/v	1		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.41	J	1.3	0.13	ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.61	J	2.5	0.22	ug/m3	1		TO 15 LL	Total/NA
Chlorodifluoromethane	1.2	J	1.4	0.39	ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	1.8	J	2.0	0.35	ug/m3	1		TO 15 LL	Total/NA
Ethylbenzene	0.54	J	1.7	0.28	ug/m3	1		TO 15 LL	Total/NA
Methylene Chloride	14		6.9	6.8	ug/m3	1		TO 15 LL	Total/NA
Toluene	4.5		2.3	1.5	ug/m3	1		TO 15 LL	Total/NA
Xylenes, Total	2.8	J	3.5	0.52	ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: IA-081-A-29

Lab Sample ID: 140-20195-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.074	J	0.40	0.040	ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.047	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Chlorodifluoromethane	0.31	J	0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.40		0.40	0.070	ppb v/v	1		TO 15 LL	Total/NA
Ethylbenzene	0.79		0.40	0.065	ppb v/v	1		TO 15 LL	Total/NA
Toluene	29		0.60	0.39	ppb v/v	1		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	0.12	J	0.40	0.10	ppb v/v	1		TO 15 LL	Total/NA
Xylenes, Total	3.3		0.80	0.12	ppb v/v	1		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.24	J	1.3	0.13	ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.30	J	2.5	0.22	ug/m3	1		TO 15 LL	Total/NA
Chlorodifluoromethane	1.1	J	1.4	0.39	ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.0		2.0	0.35	ug/m3	1		TO 15 LL	Total/NA
Ethylbenzene	3.4		1.7	0.28	ug/m3	1		TO 15 LL	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: IA-081-A-29 (Continued)

Lab Sample ID: 140-20195-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Toluene	110		2.3	1.5	ug/m3	1		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	0.57	J	2.0	0.49	ug/m3	1		TO 15 LL	Total/NA
Xylenes, Total	14		3.5	0.52	ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: IA-100-B-29

Lab Sample ID: 140-20195-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon tetrachloride	0.038	J	0.40	0.035	ppb v/v	1.65		TO 15 LL	Total/NA
Chlorodifluoromethane	0.62		0.40	0.11	ppb v/v	1.65		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.34	J	0.40	0.070	ppb v/v	1.65		TO 15 LL	Total/NA
Ethylbenzene	0.18	J	0.40	0.065	ppb v/v	1.65		TO 15 LL	Total/NA
Tetrachloroethene	0.49		0.40	0.035	ppb v/v	1.65		TO 15 LL	Total/NA
Toluene	4.1		0.60	0.39	ppb v/v	1.65		TO 15 LL	Total/NA
Trichloroethene	0.11	J	0.20	0.030	ppb v/v	1.65		TO 15 LL	Total/NA
Xylenes, Total	0.73	J	0.80	0.12	ppb v/v	1.65		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon tetrachloride	0.24	J	2.5	0.22	ug/m3	1.65		TO 15 LL	Total/NA
Chlorodifluoromethane	2.2		1.4	0.39	ug/m3	1.65		TO 15 LL	Total/NA
Dichlorodifluoromethane	1.7	J	2.0	0.35	ug/m3	1.65		TO 15 LL	Total/NA
Ethylbenzene	0.77	J	1.7	0.28	ug/m3	1.65		TO 15 LL	Total/NA
Tetrachloroethene	3.3		2.7	0.24	ug/m3	1.65		TO 15 LL	Total/NA
Toluene	15		2.3	1.5	ug/m3	1.65		TO 15 LL	Total/NA
Trichloroethene	0.61	J	1.1	0.16	ug/m3	1.65		TO 15 LL	Total/NA
Xylenes, Total	3.2	J	3.5	0.52	ug/m3	1.65		TO 15 LL	Total/NA

Client Sample ID: IA-101-B-29

Lab Sample ID: 140-20195-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.085	J	0.40	0.040	ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.054	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Chlorodifluoromethane	0.42		0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.37	J	0.40	0.070	ppb v/v	1		TO 15 LL	Total/NA
Ethylbenzene	0.10	J	0.40	0.065	ppb v/v	1		TO 15 LL	Total/NA
Methylene Chloride	10		2.0	2.0	ppb v/v	1		TO 15 LL	Total/NA
Toluene	3.6		0.60	0.39	ppb v/v	1		TO 15 LL	Total/NA
Xylenes, Total	0.43	J	0.80	0.12	ppb v/v	1		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.27	J	1.3	0.13	ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.34	J	2.5	0.22	ug/m3	1		TO 15 LL	Total/NA
Chlorodifluoromethane	1.5		1.4	0.39	ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	1.8	J	2.0	0.35	ug/m3	1		TO 15 LL	Total/NA
Ethylbenzene	0.43	J	1.7	0.28	ug/m3	1		TO 15 LL	Total/NA
Methylene Chloride	35		6.9	6.8	ug/m3	1		TO 15 LL	Total/NA
Toluene	13		2.3	1.5	ug/m3	1		TO 15 LL	Total/NA
Xylenes, Total	1.9	J	3.5	0.52	ug/m3	1		TO 15 LL	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: IA-018-A-29

Lab Sample ID: 140-20195-1

Date Collected: 08/26/20 15:38
Matrix: Air
Date Received: 08/29/20 09:54
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.16**	**J**	0.40	0.040	ppb v/v			09/05/20 15:23	1.49
Carbon tetrachloride	**0.087**	**J**	0.40	0.035	ppb v/v			09/05/20 15:23	1.49
Chlorodifluoromethane	**0.33**	**J**	0.40	0.11	ppb v/v			09/05/20 15:23	1.49
Chloroform	**3.9**		0.40	0.035	ppb v/v			09/05/20 15:23	1.49
cis-1,2-Dichloroethene	**0.12**	**J**	0.40	0.050	ppb v/v			09/05/20 15:23	1.49
Dichlorodifluoromethane	**0.34**	**J**	0.40	0.070	ppb v/v			09/05/20 15:23	1.49
1,1-Dichloroethane	ND		0.40	0.035	ppb v/v			09/05/20 15:23	1.49
1,2-Dichloroethane	ND		0.40	0.050	ppb v/v			09/05/20 15:23	1.49
1,1-Dichloroethene	**0.31**	**J**	0.40	0.040	ppb v/v			09/05/20 15:23	1.49
Ethylbenzene	ND		0.40	0.065	ppb v/v			09/05/20 15:23	1.49
Methylene Chloride	ND		2.0	2.0	ppb v/v			09/05/20 15:23	1.49
Methyl tert-butyl ether	ND		2.0	0.26	ppb v/v			09/05/20 15:23	1.49
Naphthalene	**0.23**		0.20	0.20	ppb v/v			09/05/20 15:23	1.49
Tetrachloroethene	ND		0.40	0.035	ppb v/v			09/05/20 15:23	1.49
Toluene	ND		0.60	0.39	ppb v/v			09/05/20 15:23	1.49
trans-1,2-Dichloroethene	ND		0.40	0.035	ppb v/v			09/05/20 15:23	1.49
1,2,4-Trichlorobenzene	ND		0.40	0.32	ppb v/v			09/05/20 15:23	1.49
1,1,1-Trichloroethane	ND		0.40	0.19	ppb v/v			09/05/20 15:23	1.49
1,1,2-Trichloroethane	ND		0.40	0.035	ppb v/v			09/05/20 15:23	1.49
Trichloroethene	**1.1**		0.20	0.030	ppb v/v			09/05/20 15:23	1.49
1,2,3-Trimethylbenzene	ND		0.40	0.18	ppb v/v			09/05/20 15:23	1.49
1,2,4-Trimethylbenzene	ND		0.40	0.10	ppb v/v			09/05/20 15:23	1.49
1,3,5-Trimethylbenzene	ND		0.40	0.11	ppb v/v			09/05/20 15:23	1.49
Vinyl chloride	ND		0.20	0.13	ppb v/v			09/05/20 15:23	1.49
Xylenes, Total	ND		0.80	0.12	ppb v/v			09/05/20 15:23	1.49

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.51**	**J**	1.3	0.13	ug/m3			09/05/20 15:23	1.49
Carbon tetrachloride	**0.55**	**J**	2.5	0.22	ug/m3			09/05/20 15:23	1.49
Chlorodifluoromethane	**1.2**	**J**	1.4	0.39	ug/m3			09/05/20 15:23	1.49
Chloroform	**19**		2.0	0.17	ug/m3			09/05/20 15:23	1.49
cis-1,2-Dichloroethene	**0.49**	**J**	1.6	0.20	ug/m3			09/05/20 15:23	1.49
Dichlorodifluoromethane	**1.7**	**J**	2.0	0.35	ug/m3			09/05/20 15:23	1.49
1,1-Dichloroethane	ND		1.6	0.14	ug/m3			09/05/20 15:23	1.49
1,2-Dichloroethane	ND		1.6	0.20	ug/m3			09/05/20 15:23	1.49
1,1-Dichloroethene	**1.2**	**J**	1.6	0.16	ug/m3			09/05/20 15:23	1.49
Ethylbenzene	ND		1.7	0.28	ug/m3			09/05/20 15:23	1.49
Methylene Chloride	ND		6.9	6.8	ug/m3			09/05/20 15:23	1.49
Methyl tert-butyl ether	ND		7.2	0.94	ug/m3			09/05/20 15:23	1.49
Naphthalene	**1.2**		1.0	1.0	ug/m3			09/05/20 15:23	1.49
Tetrachloroethene	ND		2.7	0.24	ug/m3			09/05/20 15:23	1.49
Toluene	ND		2.3	1.5	ug/m3			09/05/20 15:23	1.49
trans-1,2-Dichloroethene	ND		1.6	0.14	ug/m3			09/05/20 15:23	1.49
1,2,4-Trichlorobenzene	ND		3.0	2.4	ug/m3			09/05/20 15:23	1.49
1,1,1-Trichloroethane	ND		2.2	1.0	ug/m3			09/05/20 15:23	1.49
1,1,2-Trichloroethane	ND		2.2	0.19	ug/m3			09/05/20 15:23	1.49
Trichloroethene	**5.8**		1.1	0.16	ug/m3			09/05/20 15:23	1.49
1,2,3-Trimethylbenzene	ND		2.0	0.88	ug/m3			09/05/20 15:23	1.49
1,2,4-Trimethylbenzene	ND		2.0	0.49	ug/m3			09/05/20 15:23	1.49

Client Sample ID: IA-018-A-29
Lab Sample ID: 140-20195-1
Date Collected: 08/26/20 15:38
Matrix: Air
Date Received: 08/29/20 09:54
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		2.0	0.54	ug/m3			09/05/20 15:23	1.49
Vinyl chloride	ND		0.51	0.33	ug/m3			09/05/20 15:23	1.49
Xylenes, Total	ND		3.5	0.52	ug/m3			09/05/20 15:23	1.49

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*60 - 140*		*09/05/20 15:23*	*1.49*

Client Sample ID: IA-DUP 3-A-29

Date Collected: 08/26/20 00:00
Date Received: 08/29/20 09:54
Sample Container: Summa Canister 1L

Lab Sample ID: 140-20195-2

Matrix: Air

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.13**	**J**	0.40	0.040	ppb v/v			09/05/20 16:12	1
Carbon tetrachloride	**0.064**	**J**	0.40	0.035	ppb v/v			09/05/20 16:12	1
Chlorodifluoromethane	**0.32**	**J**	0.40	0.11	ppb v/v			09/05/20 16:12	1
Chloroform	**4.1**		0.40	0.035	ppb v/v			09/05/20 16:12	1
cis-1,2-Dichloroethene	ND		0.40	0.050	ppb v/v			09/05/20 16:12	1
Dichlorodifluoromethane	**0.35**	**J**	0.40	0.070	ppb v/v			09/05/20 16:12	1
1,1-Dichloroethane	ND		0.40	0.035	ppb v/v			09/05/20 16:12	1
1,2-Dichloroethane	ND		0.40	0.050	ppb v/v			09/05/20 16:12	1
1,1-Dichloroethene	**0.31**	**J**	0.40	0.040	ppb v/v			09/05/20 16:12	1
Ethylbenzene	ND		0.40	0.065	ppb v/v			09/05/20 16:12	1
Methylene Chloride	ND		2.0	2.0	ppb v/v			09/05/20 16:12	1
Methyl tert-butyl ether	ND		2.0	0.26	ppb v/v			09/05/20 16:12	1
Naphthalene	**0.49**		0.20	0.20	ppb v/v			09/05/20 16:12	1
Tetrachloroethene	ND		0.40	0.035	ppb v/v			09/05/20 16:12	1
Toluene	**0.46**	**J**	0.60	0.39	ppb v/v			09/05/20 16:12	1
trans-1,2-Dichloroethene	ND		0.40	0.035	ppb v/v			09/05/20 16:12	1
1,2,4-Trichlorobenzene	ND		0.40	0.32	ppb v/v			09/05/20 16:12	1
1,1,1-Trichloroethane	ND		0.40	0.19	ppb v/v			09/05/20 16:12	1
1,1,2-Trichloroethane	ND		0.40	0.035	ppb v/v			09/05/20 16:12	1
Trichloroethene	**1.1**		0.20	0.030	ppb v/v			09/05/20 16:12	1
1,2,3-Trimethylbenzene	ND		0.40	0.18	ppb v/v			09/05/20 16:12	1
1,2,4-Trimethylbenzene	ND		0.40	0.10	ppb v/v			09/05/20 16:12	1
1,3,5-Trimethylbenzene	ND		0.40	0.11	ppb v/v			09/05/20 16:12	1
Vinyl chloride	ND		0.20	0.13	ppb v/v			09/05/20 16:12	1
Xylenes, Total	ND		0.80	0.12	ppb v/v			09/05/20 16:12	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.43**	**J**	1.3	0.13	ug/m3			09/05/20 16:12	1
Carbon tetrachloride	**0.40**	**J**	2.5	0.22	ug/m3			09/05/20 16:12	1
Chlorodifluoromethane	**1.1**	**J**	1.4	0.39	ug/m3			09/05/20 16:12	1
Chloroform	**20**		2.0	0.17	ug/m3			09/05/20 16:12	1
cis-1,2-Dichloroethene	ND		1.6	0.20	ug/m3			09/05/20 16:12	1
Dichlorodifluoromethane	**1.7**	**J**	2.0	0.35	ug/m3			09/05/20 16:12	1
1,1-Dichloroethane	ND		1.6	0.14	ug/m3			09/05/20 16:12	1
1,2-Dichloroethane	ND		1.6	0.20	ug/m3			09/05/20 16:12	1
1,1-Dichloroethene	**1.2**	**J**	1.6	0.16	ug/m3			09/05/20 16:12	1
Ethylbenzene	ND		1.7	0.28	ug/m3			09/05/20 16:12	1
Methylene Chloride	ND		6.9	6.8	ug/m3			09/05/20 16:12	1
Methyl tert-butyl ether	ND		7.2	0.94	ug/m3			09/05/20 16:12	1
Naphthalene	**2.6**		1.0	1.0	ug/m3			09/05/20 16:12	1
Tetrachloroethene	ND		2.7	0.24	ug/m3			09/05/20 16:12	1
Toluene	**1.7**	**J**	2.3	1.5	ug/m3			09/05/20 16:12	1
trans-1,2-Dichloroethene	ND		1.6	0.14	ug/m3			09/05/20 16:12	1
1,2,4-Trichlorobenzene	ND		3.0	2.4	ug/m3			09/05/20 16:12	1
1,1,1-Trichloroethane	ND		2.2	1.0	ug/m3			09/05/20 16:12	1
1,1,2-Trichloroethane	ND		2.2	0.19	ug/m3			09/05/20 16:12	1
Trichloroethene	**5.8**		1.1	0.16	ug/m3			09/05/20 16:12	1
1,2,3-Trimethylbenzene	ND		2.0	0.88	ug/m3			09/05/20 16:12	1
1,2,4-Trimethylbenzene	ND		2.0	0.49	ug/m3			09/05/20 16:12	1

Client Sample ID: IA-DUP 3-A-29
Lab Sample ID: 140-20195-2
Date Collected: 08/26/20 00:00
Matrix: Air
Date Received: 08/29/20 09:54
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		2.0	0.54	ug/m3			09/05/20 16:12	1
Vinyl chloride	ND		0.51	0.33	ug/m3			09/05/20 16:12	1
Xylenes, Total	ND		3.5	0.52	ug/m3			09/05/20 16:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*60 - 140*		*09/05/20 16:12*	*1*

Client Sample ID: IA-138-A-29

Lab Sample ID: 140-20195-3

Date Collected: 08/26/20 15:40
Matrix: Air
Date Received: 08/29/20 09:54
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.13**	**J**	0.40	0.040	ppb v/v			09/05/20 17:01	1
Carbon tetrachloride	**0.093**	**J**	0.40	0.035	ppb v/v			09/05/20 17:01	1
Chlorodifluoromethane	**0.39**	**J**	0.40	0.11	ppb v/v			09/05/20 17:01	1
Chloroform	**0.13**	**J**	0.40	0.035	ppb v/v			09/05/20 17:01	1
cis-1,2-Dichloroethene	ND		0.40	0.050	ppb v/v			09/05/20 17:01	1
Dichlorodifluoromethane	**0.42**		0.40	0.070	ppb v/v			09/05/20 17:01	1
1,1-Dichloroethane	ND		0.40	0.035	ppb v/v			09/05/20 17:01	1
1,2-Dichloroethane	ND		0.40	0.050	ppb v/v			09/05/20 17:01	1
1,1-Dichloroethene	**0.27**	**J**	0.40	0.040	ppb v/v			09/05/20 17:01	1
Ethylbenzene	ND		0.40	0.065	ppb v/v			09/05/20 17:01	1
Methylene Chloride	ND		2.0	2.0	ppb v/v			09/05/20 17:01	1
Methyl tert-butyl ether	ND		2.0	0.26	ppb v/v			09/05/20 17:01	1
Naphthalene	ND		0.20	0.20	ppb v/v			09/05/20 17:01	1
Tetrachloroethene	ND		0.40	0.035	ppb v/v			09/05/20 17:01	1
Toluene	ND		0.60	0.39	ppb v/v			09/05/20 17:01	1
trans-1,2-Dichloroethene	ND		0.40	0.035	ppb v/v			09/05/20 17:01	1
1,2,4-Trichlorobenzene	ND		0.40	0.32	ppb v/v			09/05/20 17:01	1
1,1,1-Trichloroethane	ND		0.40	0.19	ppb v/v			09/05/20 17:01	1
1,1,2-Trichloroethane	ND		0.40	0.035	ppb v/v			09/05/20 17:01	1
Trichloroethene	**1.4**		0.20	0.030	ppb v/v			09/05/20 17:01	1
1,2,3-Trimethylbenzene	ND		0.40	0.18	ppb v/v			09/05/20 17:01	1
1,2,4-Trimethylbenzene	ND		0.40	0.10	ppb v/v			09/05/20 17:01	1
1,3,5-Trimethylbenzene	ND		0.40	0.11	ppb v/v			09/05/20 17:01	1
Vinyl chloride	ND		0.20	0.13	ppb v/v			09/05/20 17:01	1
Xylenes, Total	ND		0.80	0.12	ppb v/v			09/05/20 17:01	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.42**	**J**	1.3	0.13	ug/m3			09/05/20 17:01	1
Carbon tetrachloride	**0.58**	**J**	2.5	0.22	ug/m3			09/05/20 17:01	1
Chlorodifluoromethane	**1.4**	**J**	1.4	0.39	ug/m3			09/05/20 17:01	1
Chloroform	**0.62**	**J**	2.0	0.17	ug/m3			09/05/20 17:01	1
cis-1,2-Dichloroethene	ND		1.6	0.20	ug/m3			09/05/20 17:01	1
Dichlorodifluoromethane	**2.1**		2.0	0.35	ug/m3			09/05/20 17:01	1
1,1-Dichloroethane	ND		1.6	0.14	ug/m3			09/05/20 17:01	1
1,2-Dichloroethane	ND		1.6	0.20	ug/m3			09/05/20 17:01	1
1,1-Dichloroethene	**1.1**	**J**	1.6	0.16	ug/m3			09/05/20 17:01	1
Ethylbenzene	ND		1.7	0.28	ug/m3			09/05/20 17:01	1
Methylene Chloride	ND		6.9	6.8	ug/m3			09/05/20 17:01	1
Methyl tert-butyl ether	ND		7.2	0.94	ug/m3			09/05/20 17:01	1
Naphthalene	ND		1.0	1.0	ug/m3			09/05/20 17:01	1
Tetrachloroethene	ND		2.7	0.24	ug/m3			09/05/20 17:01	1
Toluene	ND		2.3	1.5	ug/m3			09/05/20 17:01	1
trans-1,2-Dichloroethene	ND		1.6	0.14	ug/m3			09/05/20 17:01	1
1,2,4-Trichlorobenzene	ND		3.0	2.4	ug/m3			09/05/20 17:01	1
1,1,1-Trichloroethane	ND		2.2	1.0	ug/m3			09/05/20 17:01	1
1,1,2-Trichloroethane	ND		2.2	0.19	ug/m3			09/05/20 17:01	1
Trichloroethene	**7.7**		1.1	0.16	ug/m3			09/05/20 17:01	1
1,2,3-Trimethylbenzene	ND		2.0	0.88	ug/m3			09/05/20 17:01	1
1,2,4-Trimethylbenzene	ND		2.0	0.49	ug/m3			09/05/20 17:01	1

Client Sample ID: IA-138-A-29
Lab Sample ID: 140-20195-3
Date Collected: 08/26/20 15:40
Matrix: Air
Date Received: 08/29/20 09:54
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		2.0	0.54	ug/m3			09/05/20 17:01	1
Vinyl chloride	ND		0.51	0.33	ug/m3			09/05/20 17:01	1
Xylenes, Total	ND		3.5	0.52	ug/m3			09/05/20 17:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*60 - 140*		*09/05/20 17:01*	*1*

Client Sample ID: IA-174-A-29

Lab Sample ID: 140-20195-4

Date Collected: 08/26/20 15:44
Matrix: Air
Date Received: 08/29/20 09:54
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.13**	**J**	0.40	0.040	ppb v/v			09/05/20 17:51	1
Carbon tetrachloride	ND		0.40	0.035	ppb v/v			09/05/20 17:51	1
Chlorodifluoromethane	**0.34**	**J**	0.40	0.11	ppb v/v			09/05/20 17:51	1
Chloroform	**0.062**	**J**	0.40	0.035	ppb v/v			09/05/20 17:51	1
cis-1,2-Dichloroethene	ND		0.40	0.050	ppb v/v			09/05/20 17:51	1
Dichlorodifluoromethane	**0.43**		0.40	0.070	ppb v/v			09/05/20 17:51	1
1,1-Dichloroethane	ND		0.40	0.035	ppb v/v			09/05/20 17:51	1
1,2-Dichloroethane	ND		0.40	0.050	ppb v/v			09/05/20 17:51	1
1,1-Dichloroethene	**0.18**	**J**	0.40	0.040	ppb v/v			09/05/20 17:51	1
Ethylbenzene	ND		0.40	0.065	ppb v/v			09/05/20 17:51	1
Methylene Chloride	**2.2**		2.0	2.0	ppb v/v			09/05/20 17:51	1
Methyl tert-butyl ether	ND		2.0	0.26	ppb v/v			09/05/20 17:51	1
Naphthalene	ND		0.20	0.20	ppb v/v			09/05/20 17:51	1
Tetrachloroethene	**0.090**	**J**	0.40	0.035	ppb v/v			09/05/20 17:51	1
Toluene	**0.42**	**J**	0.60	0.39	ppb v/v			09/05/20 17:51	1
trans-1,2-Dichloroethene	ND		0.40	0.035	ppb v/v			09/05/20 17:51	1
1,2,4-Trichlorobenzene	ND		0.40	0.32	ppb v/v			09/05/20 17:51	1
1,1,1-Trichloroethane	ND		0.40	0.19	ppb v/v			09/05/20 17:51	1
1,1,2-Trichloroethane	ND		0.40	0.035	ppb v/v			09/05/20 17:51	1
Trichloroethene	**1.2**		0.20	0.030	ppb v/v			09/05/20 17:51	1
1,2,3-Trimethylbenzene	ND		0.40	0.18	ppb v/v			09/05/20 17:51	1
1,2,4-Trimethylbenzene	ND		0.40	0.10	ppb v/v			09/05/20 17:51	1
1,3,5-Trimethylbenzene	ND		0.40	0.11	ppb v/v			09/05/20 17:51	1
Vinyl chloride	ND		0.20	0.13	ppb v/v			09/05/20 17:51	1
Xylenes, Total	**0.24**	**J**	0.80	0.12	ppb v/v			09/05/20 17:51	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.41**	**J**	1.3	0.13	ug/m3			09/05/20 17:51	1
Carbon tetrachloride	ND		2.5	0.22	ug/m3			09/05/20 17:51	1
Chlorodifluoromethane	**1.2**	**J**	1.4	0.39	ug/m3			09/05/20 17:51	1
Chloroform	**0.30**	**J**	2.0	0.17	ug/m3			09/05/20 17:51	1
cis-1,2-Dichloroethene	ND		1.6	0.20	ug/m3			09/05/20 17:51	1
Dichlorodifluoromethane	**2.1**		2.0	0.35	ug/m3			09/05/20 17:51	1
1,1-Dichloroethane	ND		1.6	0.14	ug/m3			09/05/20 17:51	1
1,2-Dichloroethane	ND		1.6	0.20	ug/m3			09/05/20 17:51	1
1,1-Dichloroethene	**0.73**	**J**	1.6	0.16	ug/m3			09/05/20 17:51	1
Ethylbenzene	ND		1.7	0.28	ug/m3			09/05/20 17:51	1
Methylene Chloride	**7.6**		6.9	6.8	ug/m3			09/05/20 17:51	1
Methyl tert-butyl ether	ND		7.2	0.94	ug/m3			09/05/20 17:51	1
Naphthalene	ND		1.0	1.0	ug/m3			09/05/20 17:51	1
Tetrachloroethene	**0.61**	**J**	2.7	0.24	ug/m3			09/05/20 17:51	1
Toluene	**1.6**	**J**	2.3	1.5	ug/m3			09/05/20 17:51	1
trans-1,2-Dichloroethene	ND		1.6	0.14	ug/m3			09/05/20 17:51	1
1,2,4-Trichlorobenzene	ND		3.0	2.4	ug/m3			09/05/20 17:51	1
1,1,1-Trichloroethane	ND		2.2	1.0	ug/m3			09/05/20 17:51	1
1,1,2-Trichloroethane	ND		2.2	0.19	ug/m3			09/05/20 17:51	1
Trichloroethene	**6.4**		1.1	0.16	ug/m3			09/05/20 17:51	1
1,2,3-Trimethylbenzene	ND		2.0	0.88	ug/m3			09/05/20 17:51	1
1,2,4-Trimethylbenzene	ND		2.0	0.49	ug/m3			09/05/20 17:51	1

Client Sample ID: IA-174-A-29
Lab Sample ID: 140-20195-4
Date Collected: 08/26/20 15:44
Matrix: Air
Date Received: 08/29/20 09:54
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		2.0	0.54	ug/m3			09/05/20 17:51	1
Vinyl chloride	ND		0.51	0.33	ug/m3			09/05/20 17:51	1
Xylenes, Total	**1.0**	**J**	3.5	0.52	ug/m3			09/05/20 17:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*60 - 140*		*09/05/20 17:51*	*1*

Client Sample ID: IA-093-A-29

Lab Sample ID: 140-20195-5

Date Collected: 08/26/20 15:45
Matrix: Air
Date Received: 08/29/20 09:54
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.11**	**J**	0.40	0.040	ppb v/v			09/05/20 18:41	1
Carbon tetrachloride	**0.052**	**J**	0.40	0.035	ppb v/v			09/05/20 18:41	1
Chlorodifluoromethane	**0.34**	**J**	0.40	0.11	ppb v/v			09/05/20 18:41	1
Chloroform	**0.11**	**J**	0.40	0.035	ppb v/v			09/05/20 18:41	1
cis-1,2-Dichloroethene	ND		0.40	0.050	ppb v/v			09/05/20 18:41	1
Dichlorodifluoromethane	**0.41**		0.40	0.070	ppb v/v			09/05/20 18:41	1
1,1-Dichloroethane	ND		0.40	0.035	ppb v/v			09/05/20 18:41	1
1,2-Dichloroethane	ND		0.40	0.050	ppb v/v			09/05/20 18:41	1
1,1-Dichloroethene	**0.25**	**J**	0.40	0.040	ppb v/v			09/05/20 18:41	1
Ethylbenzene	**0.095**	**J**	0.40	0.065	ppb v/v			09/05/20 18:41	1
Methylene Chloride	ND		2.0	2.0	ppb v/v			09/05/20 18:41	1
Methyl tert-butyl ether	ND		2.0	0.26	ppb v/v			09/05/20 18:41	1
Naphthalene	ND		0.20	0.20	ppb v/v			09/05/20 18:41	1
Tetrachloroethene	ND		0.40	0.035	ppb v/v			09/05/20 18:41	1
Toluene	**0.39**	**J**	0.60	0.39	ppb v/v			09/05/20 18:41	1
trans-1,2-Dichloroethene	ND		0.40	0.035	ppb v/v			09/05/20 18:41	1
1,2,4-Trichlorobenzene	ND		0.40	0.32	ppb v/v			09/05/20 18:41	1
1,1,1-Trichloroethane	ND		0.40	0.19	ppb v/v			09/05/20 18:41	1
1,1,2-Trichloroethane	ND		0.40	0.035	ppb v/v			09/05/20 18:41	1
Trichloroethene	**0.82**		0.20	0.030	ppb v/v			09/05/20 18:41	1
1,2,3-Trimethylbenzene	ND		0.40	0.18	ppb v/v			09/05/20 18:41	1
1,2,4-Trimethylbenzene	ND		0.40	0.10	ppb v/v			09/05/20 18:41	1
1,3,5-Trimethylbenzene	ND		0.40	0.11	ppb v/v			09/05/20 18:41	1
Vinyl chloride	ND		0.20	0.13	ppb v/v			09/05/20 18:41	1
Xylenes, Total	ND		0.80	0.12	ppb v/v			09/05/20 18:41	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.36**	**J**	1.3	0.13	ug/m3			09/05/20 18:41	1
Carbon tetrachloride	**0.33**	**J**	2.5	0.22	ug/m3			09/05/20 18:41	1
Chlorodifluoromethane	**1.2**	**J**	1.4	0.39	ug/m3			09/05/20 18:41	1
Chloroform	**0.53**	**J**	2.0	0.17	ug/m3			09/05/20 18:41	1
cis-1,2-Dichloroethene	ND		1.6	0.20	ug/m3			09/05/20 18:41	1
Dichlorodifluoromethane	**2.0**		2.0	0.35	ug/m3			09/05/20 18:41	1
1,1-Dichloroethane	ND		1.6	0.14	ug/m3			09/05/20 18:41	1
1,2-Dichloroethane	ND		1.6	0.20	ug/m3			09/05/20 18:41	1
1,1-Dichloroethene	**0.98**	**J**	1.6	0.16	ug/m3			09/05/20 18:41	1
Ethylbenzene	**0.41**	**J**	1.7	0.28	ug/m3			09/05/20 18:41	1
Methylene Chloride	ND		6.9	6.8	ug/m3			09/05/20 18:41	1
Methyl tert-butyl ether	ND		7.2	0.94	ug/m3			09/05/20 18:41	1
Naphthalene	ND		1.0	1.0	ug/m3			09/05/20 18:41	1
Tetrachloroethene	ND		2.7	0.24	ug/m3			09/05/20 18:41	1
Toluene	**1.5**	**J**	2.3	1.5	ug/m3			09/05/20 18:41	1
trans-1,2-Dichloroethene	ND		1.6	0.14	ug/m3			09/05/20 18:41	1
1,2,4-Trichlorobenzene	ND		3.0	2.4	ug/m3			09/05/20 18:41	1
1,1,1-Trichloroethane	ND		2.2	1.0	ug/m3			09/05/20 18:41	1
1,1,2-Trichloroethane	ND		2.2	0.19	ug/m3			09/05/20 18:41	1
Trichloroethene	**4.4**		1.1	0.16	ug/m3			09/05/20 18:41	1
1,2,3-Trimethylbenzene	ND		2.0	0.88	ug/m3			09/05/20 18:41	1
1,2,4-Trimethylbenzene	ND		2.0	0.49	ug/m3			09/05/20 18:41	1

Client Sample ID: IA-093-A-29
Lab Sample ID: 140-20195-5
Date Collected: 08/26/20 15:45
Matrix: Air
Date Received: 08/29/20 09:54
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		2.0	0.54	ug/m3			09/05/20 18:41	1
Vinyl chloride	ND		0.51	0.33	ug/m3			09/05/20 18:41	1
Xylenes, Total	ND		3.5	0.52	ug/m3			09/05/20 18:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*60 - 140*		*09/05/20 18:41*	*1*

Client Sample ID: IA-015-A-29

Lab Sample ID: 140-20195-6

Date Collected: 08/26/20 15:50
Matrix: Air
Date Received: 08/29/20 09:54
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.079**	**J**	0.40	0.040	ppb v/v			09/05/20 19:30	1
Carbon tetrachloride	**0.058**	**J**	0.40	0.035	ppb v/v			09/05/20 19:30	1
Chlorodifluoromethane	**0.34**	**J**	0.40	0.11	ppb v/v			09/05/20 19:30	1
Chloroform	**0.11**	**J**	0.40	0.035	ppb v/v			09/05/20 19:30	1
cis-1,2-Dichloroethene	ND		0.40	0.050	ppb v/v			09/05/20 19:30	1
Dichlorodifluoromethane	**0.41**		0.40	0.070	ppb v/v			09/05/20 19:30	1
1,1-Dichloroethane	ND		0.40	0.035	ppb v/v			09/05/20 19:30	1
1,2-Dichloroethane	ND		0.40	0.050	ppb v/v			09/05/20 19:30	1
1,1-Dichloroethene	ND		0.40	0.040	ppb v/v			09/05/20 19:30	1
Ethylbenzene	**0.072**	**J**	0.40	0.065	ppb v/v			09/05/20 19:30	1
Methylene Chloride	ND		2.0	2.0	ppb v/v			09/05/20 19:30	1
Methyl tert-butyl ether	ND		2.0	0.26	ppb v/v			09/05/20 19:30	1
Naphthalene	ND		0.20	0.20	ppb v/v			09/05/20 19:30	1
Tetrachloroethene	ND		0.40	0.035	ppb v/v			09/05/20 19:30	1
Toluene	**0.46**	**J**	0.60	0.39	ppb v/v			09/05/20 19:30	1
trans-1,2-Dichloroethene	ND		0.40	0.035	ppb v/v			09/05/20 19:30	1
1,2,4-Trichlorobenzene	ND		0.40	0.32	ppb v/v			09/05/20 19:30	1
1,1,1-Trichloroethane	ND		0.40	0.19	ppb v/v			09/05/20 19:30	1
1,1,2-Trichloroethane	ND		0.40	0.035	ppb v/v			09/05/20 19:30	1
Trichloroethene	ND		0.20	0.030	ppb v/v			09/05/20 19:30	1
1,2,3-Trimethylbenzene	ND		0.40	0.18	ppb v/v			09/05/20 19:30	1
1,2,4-Trimethylbenzene	ND		0.40	0.10	ppb v/v			09/05/20 19:30	1
1,3,5-Trimethylbenzene	**0.22**	**J**	0.40	0.11	ppb v/v			09/05/20 19:30	1
Vinyl chloride	ND		0.20	0.13	ppb v/v			09/05/20 19:30	1
Xylenes, Total	**0.28**	**J**	0.80	0.12	ppb v/v			09/05/20 19:30	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.25**	**J**	1.3	0.13	ug/m3			09/05/20 19:30	1
Carbon tetrachloride	**0.36**	**J**	2.5	0.22	ug/m3			09/05/20 19:30	1
Chlorodifluoromethane	**1.2**	**J**	1.4	0.39	ug/m3			09/05/20 19:30	1
Chloroform	**0.53**	**J**	2.0	0.17	ug/m3			09/05/20 19:30	1
cis-1,2-Dichloroethene	ND		1.6	0.20	ug/m3			09/05/20 19:30	1
Dichlorodifluoromethane	**2.0**		2.0	0.35	ug/m3			09/05/20 19:30	1
1,1-Dichloroethane	ND		1.6	0.14	ug/m3			09/05/20 19:30	1
1,2-Dichloroethane	ND		1.6	0.20	ug/m3			09/05/20 19:30	1
1,1-Dichloroethene	ND		1.6	0.16	ug/m3			09/05/20 19:30	1
Ethylbenzene	**0.31**	**J**	1.7	0.28	ug/m3			09/05/20 19:30	1
Methylene Chloride	ND		6.9	6.8	ug/m3			09/05/20 19:30	1
Methyl tert-butyl ether	ND		7.2	0.94	ug/m3			09/05/20 19:30	1
Naphthalene	ND		1.0	1.0	ug/m3			09/05/20 19:30	1
Tetrachloroethene	ND		2.7	0.24	ug/m3			09/05/20 19:30	1
Toluene	**1.7**	**J**	2.3	1.5	ug/m3			09/05/20 19:30	1
trans-1,2-Dichloroethene	ND		1.6	0.14	ug/m3			09/05/20 19:30	1
1,2,4-Trichlorobenzene	ND		3.0	2.4	ug/m3			09/05/20 19:30	1
1,1,1-Trichloroethane	ND		2.2	1.0	ug/m3			09/05/20 19:30	1
1,1,2-Trichloroethane	ND		2.2	0.19	ug/m3			09/05/20 19:30	1
Trichloroethene	ND		1.1	0.16	ug/m3			09/05/20 19:30	1
1,2,3-Trimethylbenzene	ND		2.0	0.88	ug/m3			09/05/20 19:30	1
1,2,4-Trimethylbenzene	ND		2.0	0.49	ug/m3			09/05/20 19:30	1

Client Sample ID: IA-015-A-29
Lab Sample ID: 140-20195-6
Date Collected: 08/26/20 15:50
Matrix: Air
Date Received: 08/29/20 09:54
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	**1.1**	**J**	2.0	0.54	ug/m3			09/05/20 19:30	1
Vinyl chloride	ND		0.51	0.33	ug/m3			09/05/20 19:30	1
Xylenes, Total	**1.2**	**J**	3.5	0.52	ug/m3			09/05/20 19:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*60 - 140*		*09/05/20 19:30*	*1*

Client Sample ID: IA-078-A-29

Lab Sample ID: 140-20195-7

Date Collected: 08/26/20 15:53
Matrix: Air
Date Received: 08/29/20 09:54
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.10**	**J**	0.40	0.040	ppb v/v			09/05/20 20:22	1.45
Carbon tetrachloride	**0.075**	**J**	0.40	0.035	ppb v/v			09/05/20 20:22	1.45
Chlorodifluoromethane	**0.50**		0.40	0.11	ppb v/v			09/05/20 20:22	1.45
Chloroform	ND		0.40	0.035	ppb v/v			09/05/20 20:22	1.45
cis-1,2-Dichloroethene	ND		0.40	0.050	ppb v/v			09/05/20 20:22	1.45
Dichlorodifluoromethane	**0.39**	**J**	0.40	0.070	ppb v/v			09/05/20 20:22	1.45
1,1-Dichloroethane	ND		0.40	0.035	ppb v/v			09/05/20 20:22	1.45
1,2-Dichloroethane	ND		0.40	0.050	ppb v/v			09/05/20 20:22	1.45
1,1-Dichloroethene	ND		0.40	0.040	ppb v/v			09/05/20 20:22	1.45
Ethylbenzene	**0.094**	**J**	0.40	0.065	ppb v/v			09/05/20 20:22	1.45
Methylene Chloride	ND		2.0	2.0	ppb v/v			09/05/20 20:22	1.45
Methyl tert-butyl ether	ND		2.0	0.26	ppb v/v			09/05/20 20:22	1.45
Naphthalene	ND		0.20	0.20	ppb v/v			09/05/20 20:22	1.45
Tetrachloroethene	ND		0.40	0.035	ppb v/v			09/05/20 20:22	1.45
Toluene	**1.9**		0.60	0.39	ppb v/v			09/05/20 20:22	1.45
trans-1,2-Dichloroethene	ND		0.40	0.035	ppb v/v			09/05/20 20:22	1.45
1,2,4-Trichlorobenzene	ND		0.40	0.32	ppb v/v			09/05/20 20:22	1.45
1,1,1-Trichloroethane	ND		0.40	0.19	ppb v/v			09/05/20 20:22	1.45
1,1,2-Trichloroethane	ND		0.40	0.035	ppb v/v			09/05/20 20:22	1.45
Trichloroethene	ND		0.20	0.030	ppb v/v			09/05/20 20:22	1.45
1,2,3-Trimethylbenzene	ND		0.40	0.18	ppb v/v			09/05/20 20:22	1.45
1,2,4-Trimethylbenzene	ND		0.40	0.10	ppb v/v			09/05/20 20:22	1.45
1,3,5-Trimethylbenzene	ND		0.40	0.11	ppb v/v			09/05/20 20:22	1.45
Vinyl chloride	ND		0.20	0.13	ppb v/v			09/05/20 20:22	1.45
Xylenes, Total	**0.46**	**J**	0.80	0.12	ppb v/v			09/05/20 20:22	1.45

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.33**	**J**	1.3	0.13	ug/m3			09/05/20 20:22	1.45
Carbon tetrachloride	**0.47**	**J**	2.5	0.22	ug/m3			09/05/20 20:22	1.45
Chlorodifluoromethane	**1.8**		1.4	0.39	ug/m3			09/05/20 20:22	1.45
Chloroform	ND		2.0	0.17	ug/m3			09/05/20 20:22	1.45
cis-1,2-Dichloroethene	ND		1.6	0.20	ug/m3			09/05/20 20:22	1.45
Dichlorodifluoromethane	**1.9**	**J**	2.0	0.35	ug/m3			09/05/20 20:22	1.45
1,1-Dichloroethane	ND		1.6	0.14	ug/m3			09/05/20 20:22	1.45
1,2-Dichloroethane	ND		1.6	0.20	ug/m3			09/05/20 20:22	1.45
1,1-Dichloroethene	ND		1.6	0.16	ug/m3			09/05/20 20:22	1.45
Ethylbenzene	**0.41**	**J**	1.7	0.28	ug/m3			09/05/20 20:22	1.45
Methylene Chloride	ND		6.9	6.8	ug/m3			09/05/20 20:22	1.45
Methyl tert-butyl ether	ND		7.2	0.94	ug/m3			09/05/20 20:22	1.45
Naphthalene	ND		1.0	1.0	ug/m3			09/05/20 20:22	1.45
Tetrachloroethene	ND		2.7	0.24	ug/m3			09/05/20 20:22	1.45
Toluene	**7.0**		2.3	1.5	ug/m3			09/05/20 20:22	1.45
trans-1,2-Dichloroethene	ND		1.6	0.14	ug/m3			09/05/20 20:22	1.45
1,2,4-Trichlorobenzene	ND		3.0	2.4	ug/m3			09/05/20 20:22	1.45
1,1,1-Trichloroethane	ND		2.2	1.0	ug/m3			09/05/20 20:22	1.45
1,1,2-Trichloroethane	ND		2.2	0.19	ug/m3			09/05/20 20:22	1.45
Trichloroethene	ND		1.1	0.16	ug/m3			09/05/20 20:22	1.45
1,2,3-Trimethylbenzene	ND		2.0	0.88	ug/m3			09/05/20 20:22	1.45
1,2,4-Trimethylbenzene	ND		2.0	0.49	ug/m3			09/05/20 20:22	1.45

Client Sample ID: IA-078-A-29
Lab Sample ID: 140-20195-7
Date Collected: 08/26/20 15:53
Matrix: Air
Date Received: 08/29/20 09:54
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		2.0	0.54	ug/m3			09/05/20 20:22	1.45
Vinyl chloride	ND		0.51	0.33	ug/m3			09/05/20 20:22	1.45
Xylenes, Total	**2.0**	**J**	3.5	0.52	ug/m3			09/05/20 20:22	1.45

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*60 - 140*		*09/05/20 20:22*	*1.45*

Client Sample ID: IA-076-A-29

Lab Sample ID: 140-20195-8

Date Collected: 08/26/20 15:54
Matrix: Air
Date Received: 08/29/20 09:54
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.40	0.040	ppb v/v			09/05/20 21:13	1
Carbon tetrachloride	**0.082**	**J**	0.40	0.035	ppb v/v			09/05/20 21:13	1
Chlorodifluoromethane	**0.30**	**J**	0.40	0.11	ppb v/v			09/05/20 21:13	1
Chloroform	**0.098**	**J**	0.40	0.035	ppb v/v			09/05/20 21:13	1
cis-1,2-Dichloroethene	ND		0.40	0.050	ppb v/v			09/05/20 21:13	1
Dichlorodifluoromethane	**0.35**	**J**	0.40	0.070	ppb v/v			09/05/20 21:13	1
1,1-Dichloroethane	ND		0.40	0.035	ppb v/v			09/05/20 21:13	1
1,2-Dichloroethane	ND		0.40	0.050	ppb v/v			09/05/20 21:13	1
1,1-Dichloroethene	ND		0.40	0.040	ppb v/v			09/05/20 21:13	1
Ethylbenzene	**0.086**	**J**	0.40	0.065	ppb v/v			09/05/20 21:13	1
Methylene Chloride	ND		2.0	2.0	ppb v/v			09/05/20 21:13	1
Methyl tert-butyl ether	ND		2.0	0.26	ppb v/v			09/05/20 21:13	1
Naphthalene	ND		0.20	0.20	ppb v/v			09/05/20 21:13	1
Tetrachloroethene	ND		0.40	0.035	ppb v/v			09/05/20 21:13	1
Toluene	**3.4**		0.60	0.39	ppb v/v			09/05/20 21:13	1
trans-1,2-Dichloroethene	ND		0.40	0.035	ppb v/v			09/05/20 21:13	1
1,2,4-Trichlorobenzene	ND		0.40	0.32	ppb v/v			09/05/20 21:13	1
1,1,1-Trichloroethane	ND		0.40	0.19	ppb v/v			09/05/20 21:13	1
1,1,2-Trichloroethane	ND		0.40	0.035	ppb v/v			09/05/20 21:13	1
Trichloroethene	ND		0.20	0.030	ppb v/v			09/05/20 21:13	1
1,2,3-Trimethylbenzene	ND		0.40	0.18	ppb v/v			09/05/20 21:13	1
1,2,4-Trimethylbenzene	ND		0.40	0.10	ppb v/v			09/05/20 21:13	1
1,3,5-Trimethylbenzene	ND		0.40	0.11	ppb v/v			09/05/20 21:13	1
Vinyl chloride	ND		0.20	0.13	ppb v/v			09/05/20 21:13	1
Xylenes, Total	**0.46**	**J**	0.80	0.12	ppb v/v			09/05/20 21:13	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.3	0.13	ug/m3			09/05/20 21:13	1
Carbon tetrachloride	**0.52**	**J**	2.5	0.22	ug/m3			09/05/20 21:13	1
Chlorodifluoromethane	**1.1**	**J**	1.4	0.39	ug/m3			09/05/20 21:13	1
Chloroform	**0.48**	**J**	2.0	0.17	ug/m3			09/05/20 21:13	1
cis-1,2-Dichloroethene	ND		1.6	0.20	ug/m3			09/05/20 21:13	1
Dichlorodifluoromethane	**1.7**	**J**	2.0	0.35	ug/m3			09/05/20 21:13	1
1,1-Dichloroethane	ND		1.6	0.14	ug/m3			09/05/20 21:13	1
1,2-Dichloroethane	ND		1.6	0.20	ug/m3			09/05/20 21:13	1
1,1-Dichloroethene	ND		1.6	0.16	ug/m3			09/05/20 21:13	1
Ethylbenzene	**0.37**	**J**	1.7	0.28	ug/m3			09/05/20 21:13	1
Methylene Chloride	ND		6.9	6.8	ug/m3			09/05/20 21:13	1
Methyl tert-butyl ether	ND		7.2	0.94	ug/m3			09/05/20 21:13	1
Naphthalene	ND		1.0	1.0	ug/m3			09/05/20 21:13	1
Tetrachloroethene	ND		2.7	0.24	ug/m3			09/05/20 21:13	1
Toluene	**13**		2.3	1.5	ug/m3			09/05/20 21:13	1
trans-1,2-Dichloroethene	ND		1.6	0.14	ug/m3			09/05/20 21:13	1
1,2,4-Trichlorobenzene	ND		3.0	2.4	ug/m3			09/05/20 21:13	1
1,1,1-Trichloroethane	ND		2.2	1.0	ug/m3			09/05/20 21:13	1
1,1,2-Trichloroethane	ND		2.2	0.19	ug/m3			09/05/20 21:13	1
Trichloroethene	ND		1.1	0.16	ug/m3			09/05/20 21:13	1
1,2,3-Trimethylbenzene	ND		2.0	0.88	ug/m3			09/05/20 21:13	1
1,2,4-Trimethylbenzene	ND		2.0	0.49	ug/m3			09/05/20 21:13	1

Client Sample ID: IA-076-A-29
Lab Sample ID: 140-20195-8
Date Collected: 08/26/20 15:54
Matrix: Air
Date Received: 08/29/20 09:54
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		2.0	0.54	ug/m3			09/05/20 21:13	1
Vinyl chloride	ND		0.51	0.33	ug/m3			09/05/20 21:13	1
Xylenes, Total	**2.0**	**J**	3.5	0.52	ug/m3			09/05/20 21:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*60 - 140*		*09/05/20 21:13*	*1*

Client Sample ID: IA-168-A-29

Lab Sample ID: 140-20195-9

Date Collected: 08/26/20 15:56
Matrix: Air
Date Received: 08/29/20 09:54
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.096**	**J**	0.40	0.040	ppb v/v			09/05/20 22:03	1
Carbon tetrachloride	**0.049**	**J**	0.40	0.035	ppb v/v			09/05/20 22:03	1
Chlorodifluoromethane	**0.38**	**J**	0.40	0.11	ppb v/v			09/05/20 22:03	1
Chloroform	ND		0.40	0.035	ppb v/v			09/05/20 22:03	1
cis-1,2-Dichloroethene	ND		0.40	0.050	ppb v/v			09/05/20 22:03	1
Dichlorodifluoromethane	**0.42**		0.40	0.070	ppb v/v			09/05/20 22:03	1
1,1-Dichloroethane	ND		0.40	0.035	ppb v/v			09/05/20 22:03	1
1,2-Dichloroethane	ND		0.40	0.050	ppb v/v			09/05/20 22:03	1
1,1-Dichloroethene	ND		0.40	0.040	ppb v/v			09/05/20 22:03	1
Ethylbenzene	**0.077**	**J**	0.40	0.065	ppb v/v			09/05/20 22:03	1
Methylene Chloride	ND		2.0	2.0	ppb v/v			09/05/20 22:03	1
Methyl tert-butyl ether	ND		2.0	0.26	ppb v/v			09/05/20 22:03	1
Naphthalene	ND		0.20	0.20	ppb v/v			09/05/20 22:03	1
Tetrachloroethene	ND		0.40	0.035	ppb v/v			09/05/20 22:03	1
Toluene	**2.6**		0.60	0.39	ppb v/v			09/05/20 22:03	1
trans-1,2-Dichloroethene	ND		0.40	0.035	ppb v/v			09/05/20 22:03	1
1,2,4-Trichlorobenzene	ND		0.40	0.32	ppb v/v			09/05/20 22:03	1
1,1,1-Trichloroethane	ND		0.40	0.19	ppb v/v			09/05/20 22:03	1
1,1,2-Trichloroethane	ND		0.40	0.035	ppb v/v			09/05/20 22:03	1
Trichloroethene	ND		0.20	0.030	ppb v/v			09/05/20 22:03	1
1,2,3-Trimethylbenzene	ND		0.40	0.18	ppb v/v			09/05/20 22:03	1
1,2,4-Trimethylbenzene	ND		0.40	0.10	ppb v/v			09/05/20 22:03	1
1,3,5-Trimethylbenzene	ND		0.40	0.11	ppb v/v			09/05/20 22:03	1
Vinyl chloride	ND		0.20	0.13	ppb v/v			09/05/20 22:03	1
Xylenes, Total	**0.33**	**J**	0.80	0.12	ppb v/v			09/05/20 22:03	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.31**	**J**	1.3	0.13	ug/m3			09/05/20 22:03	1
Carbon tetrachloride	**0.31**	**J**	2.5	0.22	ug/m3			09/05/20 22:03	1
Chlorodifluoromethane	**1.3**	**J**	1.4	0.39	ug/m3			09/05/20 22:03	1
Chloroform	ND		2.0	0.17	ug/m3			09/05/20 22:03	1
cis-1,2-Dichloroethene	ND		1.6	0.20	ug/m3			09/05/20 22:03	1
Dichlorodifluoromethane	**2.1**		2.0	0.35	ug/m3			09/05/20 22:03	1
1,1-Dichloroethane	ND		1.6	0.14	ug/m3			09/05/20 22:03	1
1,2-Dichloroethane	ND		1.6	0.20	ug/m3			09/05/20 22:03	1
1,1-Dichloroethene	ND		1.6	0.16	ug/m3			09/05/20 22:03	1
Ethylbenzene	**0.33**	**J**	1.7	0.28	ug/m3			09/05/20 22:03	1
Methylene Chloride	ND		6.9	6.8	ug/m3			09/05/20 22:03	1
Methyl tert-butyl ether	ND		7.2	0.94	ug/m3			09/05/20 22:03	1
Naphthalene	ND		1.0	1.0	ug/m3			09/05/20 22:03	1
Tetrachloroethene	ND		2.7	0.24	ug/m3			09/05/20 22:03	1
Toluene	**9.8**		2.3	1.5	ug/m3			09/05/20 22:03	1
trans-1,2-Dichloroethene	ND		1.6	0.14	ug/m3			09/05/20 22:03	1
1,2,4-Trichlorobenzene	ND		3.0	2.4	ug/m3			09/05/20 22:03	1
1,1,1-Trichloroethane	ND		2.2	1.0	ug/m3			09/05/20 22:03	1
1,1,2-Trichloroethane	ND		2.2	0.19	ug/m3			09/05/20 22:03	1
Trichloroethene	ND		1.1	0.16	ug/m3			09/05/20 22:03	1
1,2,3-Trimethylbenzene	ND		2.0	0.88	ug/m3			09/05/20 22:03	1
1,2,4-Trimethylbenzene	ND		2.0	0.49	ug/m3			09/05/20 22:03	1

Client Sample ID: IA-168-A-29
Lab Sample ID: 140-20195-9
Date Collected: 08/26/20 15:56
Matrix: Air
Date Received: 08/29/20 09:54
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		2.0	0.54	ug/m3			09/05/20 22:03	1
Vinyl chloride	ND		0.51	0.33	ug/m3			09/05/20 22:03	1
Xylenes, Total	**1.4**	**J**	3.5	0.52	ug/m3			09/05/20 22:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*60 - 140*		*09/05/20 22:03*	*1*

Client Sample ID: IA-DUP 4-A-29

Date Collected: 08/26/20 00:00
Date Received: 08/29/20 09:54
Sample Container: Summa Canister 1L

Lab Sample ID: 140-20195-10

Matrix: Air

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.14**	**J**	0.40	0.040	ppb v/v			09/05/20 22:54	1.56
Carbon tetrachloride	**0.059**	**J**	0.40	0.035	ppb v/v			09/05/20 22:54	1.56
Chlorodifluoromethane	**0.44**		0.40	0.11	ppb v/v			09/05/20 22:54	1.56
Chloroform	ND		0.40	0.035	ppb v/v			09/05/20 22:54	1.56
cis-1,2-Dichloroethene	**0.083**	**J**	0.40	0.050	ppb v/v			09/05/20 22:54	1.56
Dichlorodifluoromethane	**0.34**	**J**	0.40	0.070	ppb v/v			09/05/20 22:54	1.56
1,1-Dichloroethane	ND		0.40	0.035	ppb v/v			09/05/20 22:54	1.56
1,2-Dichloroethane	ND		0.40	0.050	ppb v/v			09/05/20 22:54	1.56
1,1-Dichloroethene	ND		0.40	0.040	ppb v/v			09/05/20 22:54	1.56
Ethylbenzene	**0.075**	**J**	0.40	0.065	ppb v/v			09/05/20 22:54	1.56
Methylene Chloride	ND		2.0	2.0	ppb v/v			09/05/20 22:54	1.56
Methyl tert-butyl ether	ND		2.0	0.26	ppb v/v			09/05/20 22:54	1.56
Naphthalene	ND		0.20	0.20	ppb v/v			09/05/20 22:54	1.56
Tetrachloroethene	**0.071**	**J**	0.40	0.035	ppb v/v			09/05/20 22:54	1.56
Toluene	**2.6**		0.60	0.39	ppb v/v			09/05/20 22:54	1.56
trans-1,2-Dichloroethene	ND		0.40	0.035	ppb v/v			09/05/20 22:54	1.56
1,2,4-Trichlorobenzene	ND		0.40	0.32	ppb v/v			09/05/20 22:54	1.56
1,1,1-Trichloroethane	ND		0.40	0.19	ppb v/v			09/05/20 22:54	1.56
1,1,2-Trichloroethane	ND		0.40	0.035	ppb v/v			09/05/20 22:54	1.56
Trichloroethene	**0.45**		0.20	0.030	ppb v/v			09/05/20 22:54	1.56
1,2,3-Trimethylbenzene	ND		0.40	0.18	ppb v/v			09/05/20 22:54	1.56
1,2,4-Trimethylbenzene	ND		0.40	0.10	ppb v/v			09/05/20 22:54	1.56
1,3,5-Trimethylbenzene	ND		0.40	0.11	ppb v/v			09/05/20 22:54	1.56
Vinyl chloride	ND		0.20	0.13	ppb v/v			09/05/20 22:54	1.56
Xylenes, Total	**0.34**	**J**	0.80	0.12	ppb v/v			09/05/20 22:54	1.56

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.43**	**J**	1.3	0.13	ug/m3			09/05/20 22:54	1.56
Carbon tetrachloride	**0.37**	**J**	2.5	0.22	ug/m3			09/05/20 22:54	1.56
Chlorodifluoromethane	**1.6**		1.4	0.39	ug/m3			09/05/20 22:54	1.56
Chloroform	ND		2.0	0.17	ug/m3			09/05/20 22:54	1.56
cis-1,2-Dichloroethene	**0.33**	**J**	1.6	0.20	ug/m3			09/05/20 22:54	1.56
Dichlorodifluoromethane	**1.7**	**J**	2.0	0.35	ug/m3			09/05/20 22:54	1.56
1,1-Dichloroethane	ND		1.6	0.14	ug/m3			09/05/20 22:54	1.56
1,2-Dichloroethane	ND		1.6	0.20	ug/m3			09/05/20 22:54	1.56
1,1-Dichloroethene	ND		1.6	0.16	ug/m3			09/05/20 22:54	1.56
Ethylbenzene	**0.33**	**J**	1.7	0.28	ug/m3			09/05/20 22:54	1.56
Methylene Chloride	ND		6.9	6.8	ug/m3			09/05/20 22:54	1.56
Methyl tert-butyl ether	ND		7.2	0.94	ug/m3			09/05/20 22:54	1.56
Naphthalene	ND		1.0	1.0	ug/m3			09/05/20 22:54	1.56
Tetrachloroethene	**0.48**	**J**	2.7	0.24	ug/m3			09/05/20 22:54	1.56
Toluene	**9.8**		2.3	1.5	ug/m3			09/05/20 22:54	1.56
trans-1,2-Dichloroethene	ND		1.6	0.14	ug/m3			09/05/20 22:54	1.56
1,2,4-Trichlorobenzene	ND		3.0	2.4	ug/m3			09/05/20 22:54	1.56
1,1,1-Trichloroethane	ND		2.2	1.0	ug/m3			09/05/20 22:54	1.56
1,1,2-Trichloroethane	ND		2.2	0.19	ug/m3			09/05/20 22:54	1.56
Trichloroethene	**2.4**		1.1	0.16	ug/m3			09/05/20 22:54	1.56
1,2,3-Trimethylbenzene	ND		2.0	0.88	ug/m3			09/05/20 22:54	1.56
1,2,4-Trimethylbenzene	ND		2.0	0.49	ug/m3			09/05/20 22:54	1.56

Client Sample ID: IA-DUP 4-A-29
Lab Sample ID: 140-20195-10
Date Collected: 08/26/20 00:00
Matrix: Air
Date Received: 08/29/20 09:54
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		2.0	0.54	ug/m3			09/05/20 22:54	1.56
Vinyl chloride	ND		0.51	0.33	ug/m3			09/05/20 22:54	1.56
Xylenes, Total	**1.5**	**J**	3.5	0.52	ug/m3			09/05/20 22:54	1.56

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*60 - 140*		*09/05/20 22:54*	*1.56*

Client Sample ID: IA-075-A-29

Lab Sample ID: 140-20195-11

Date Collected: 08/26/20 16:02
Matrix: Air
Date Received: 08/29/20 09:54
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.13**	**J**	0.40	0.040	ppb v/v			09/05/20 23:43	1
Carbon tetrachloride	**0.078**	**J**	0.40	0.035	ppb v/v			09/05/20 23:43	1
Chlorodifluoromethane	**0.97**		0.40	0.11	ppb v/v			09/05/20 23:43	1
Chloroform	**0.041**	**J**	0.40	0.035	ppb v/v			09/05/20 23:43	1
cis-1,2-Dichloroethene	ND		0.40	0.050	ppb v/v			09/05/20 23:43	1
Dichlorodifluoromethane	**0.39**	**J**	0.40	0.070	ppb v/v			09/05/20 23:43	1
1,1-Dichloroethane	ND		0.40	0.035	ppb v/v			09/05/20 23:43	1
1,2-Dichloroethane	ND		0.40	0.050	ppb v/v			09/05/20 23:43	1
1,1-Dichloroethene	ND		0.40	0.040	ppb v/v			09/05/20 23:43	1
Ethylbenzene	**0.94**		0.40	0.065	ppb v/v			09/05/20 23:43	1
Methylene Chloride	**2.0**		2.0	2.0	ppb v/v			09/05/20 23:43	1
Methyl tert-butyl ether	ND		2.0	0.26	ppb v/v			09/05/20 23:43	1
Naphthalene	ND		0.20	0.20	ppb v/v			09/05/20 23:43	1
Tetrachloroethene	ND		0.40	0.035	ppb v/v			09/05/20 23:43	1
Toluene	**54**		0.60	0.39	ppb v/v			09/05/20 23:43	1
trans-1,2-Dichloroethene	ND		0.40	0.035	ppb v/v			09/05/20 23:43	1
1,2,4-Trichlorobenzene	ND		0.40	0.32	ppb v/v			09/05/20 23:43	1
1,1,1-Trichloroethane	ND		0.40	0.19	ppb v/v			09/05/20 23:43	1
1,1,2-Trichloroethane	ND		0.40	0.035	ppb v/v			09/05/20 23:43	1
Trichloroethene	ND		0.20	0.030	ppb v/v			09/05/20 23:43	1
1,2,3-Trimethylbenzene	ND		0.40	0.18	ppb v/v			09/05/20 23:43	1
1,2,4-Trimethylbenzene	**0.11**	**J**	0.40	0.10	ppb v/v			09/05/20 23:43	1
1,3,5-Trimethylbenzene	ND		0.40	0.11	ppb v/v			09/05/20 23:43	1
Vinyl chloride	ND		0.20	0.13	ppb v/v			09/05/20 23:43	1
Xylenes, Total	**3.8**		0.80	0.12	ppb v/v			09/05/20 23:43	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.41**	**J**	1.3	0.13	ug/m3			09/05/20 23:43	1
Carbon tetrachloride	**0.49**	**J**	2.5	0.22	ug/m3			09/05/20 23:43	1
Chlorodifluoromethane	**3.4**		1.4	0.39	ug/m3			09/05/20 23:43	1
Chloroform	**0.20**	**J**	2.0	0.17	ug/m3			09/05/20 23:43	1
cis-1,2-Dichloroethene	ND		1.6	0.20	ug/m3			09/05/20 23:43	1
Dichlorodifluoromethane	**1.9**	**J**	2.0	0.35	ug/m3			09/05/20 23:43	1
1,1-Dichloroethane	ND		1.6	0.14	ug/m3			09/05/20 23:43	1
1,2-Dichloroethane	ND		1.6	0.20	ug/m3			09/05/20 23:43	1
1,1-Dichloroethene	ND		1.6	0.16	ug/m3			09/05/20 23:43	1
Ethylbenzene	**4.1**		1.7	0.28	ug/m3			09/05/20 23:43	1
Methylene Chloride	**6.8**		6.9	6.8	ug/m3			09/05/20 23:43	1
Methyl tert-butyl ether	ND		7.2	0.94	ug/m3			09/05/20 23:43	1
Naphthalene	ND		1.0	1.0	ug/m3			09/05/20 23:43	1
Tetrachloroethene	ND		2.7	0.24	ug/m3			09/05/20 23:43	1
Toluene	**200**		2.3	1.5	ug/m3			09/05/20 23:43	1
trans-1,2-Dichloroethene	ND		1.6	0.14	ug/m3			09/05/20 23:43	1
1,2,4-Trichlorobenzene	ND		3.0	2.4	ug/m3			09/05/20 23:43	1
1,1,1-Trichloroethane	ND		2.2	1.0	ug/m3			09/05/20 23:43	1
1,1,2-Trichloroethane	ND		2.2	0.19	ug/m3			09/05/20 23:43	1
Trichloroethene	ND		1.1	0.16	ug/m3			09/05/20 23:43	1
1,2,3-Trimethylbenzene	ND		2.0	0.88	ug/m3			09/05/20 23:43	1
1,2,4-Trimethylbenzene	**0.52**	**J**	2.0	0.49	ug/m3			09/05/20 23:43	1

Client Sample ID: IA-075-A-29
Lab Sample ID: 140-20195-11
Date Collected: 08/26/20 16:02
Matrix: Air
Date Received: 08/29/20 09:54
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		2.0	0.54	ug/m3			09/05/20 23:43	1
Vinyl chloride	ND		0.51	0.33	ug/m3			09/05/20 23:43	1
Xylenes, Total	**17**		3.5	0.52	ug/m3			09/05/20 23:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*60 - 140*		*09/05/20 23:43*	*1*

Client Sample ID: IA-021-A-29

Lab Sample ID: 140-20195-12

Date Collected: 08/26/20 16:04
Matrix: Air
Date Received: 08/29/20 09:54
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.082**	**J**	0.40	0.040	ppb v/v			09/06/20 00:32	1.41
Carbon tetrachloride	**0.088**	**J**	0.40	0.035	ppb v/v			09/06/20 00:32	1.41
Chlorodifluoromethane	**0.33**	**J**	0.40	0.11	ppb v/v			09/06/20 00:32	1.41
Chloroform	ND		0.40	0.035	ppb v/v			09/06/20 00:32	1.41
cis-1,2-Dichloroethene	ND		0.40	0.050	ppb v/v			09/06/20 00:32	1.41
Dichlorodifluoromethane	**0.44**		0.40	0.070	ppb v/v			09/06/20 00:32	1.41
1,1-Dichloroethane	ND		0.40	0.035	ppb v/v			09/06/20 00:32	1.41
1,2-Dichloroethane	ND		0.40	0.050	ppb v/v			09/06/20 00:32	1.41
1,1-Dichloroethene	ND		0.40	0.040	ppb v/v			09/06/20 00:32	1.41
Ethylbenzene	**0.16**	**J**	0.40	0.065	ppb v/v			09/06/20 00:32	1.41
Methylene Chloride	ND		2.0	2.0	ppb v/v			09/06/20 00:32	1.41
Methyl tert-butyl ether	ND		2.0	0.26	ppb v/v			09/06/20 00:32	1.41
Naphthalene	ND		0.20	0.20	ppb v/v			09/06/20 00:32	1.41
Tetrachloroethene	ND		0.40	0.035	ppb v/v			09/06/20 00:32	1.41
Toluene	**4.7**		0.60	0.39	ppb v/v			09/06/20 00:32	1.41
trans-1,2-Dichloroethene	ND		0.40	0.035	ppb v/v			09/06/20 00:32	1.41
1,2,4-Trichlorobenzene	ND		0.40	0.32	ppb v/v			09/06/20 00:32	1.41
1,1,1-Trichloroethane	ND		0.40	0.19	ppb v/v			09/06/20 00:32	1.41
1,1,2-Trichloroethane	ND		0.40	0.035	ppb v/v			09/06/20 00:32	1.41
Trichloroethene	ND		0.20	0.030	ppb v/v			09/06/20 00:32	1.41
1,2,3-Trimethylbenzene	ND		0.40	0.18	ppb v/v			09/06/20 00:32	1.41
1,2,4-Trimethylbenzene	ND		0.40	0.10	ppb v/v			09/06/20 00:32	1.41
1,3,5-Trimethylbenzene	ND		0.40	0.11	ppb v/v			09/06/20 00:32	1.41
Vinyl chloride	ND		0.20	0.13	ppb v/v			09/06/20 00:32	1.41
Xylenes, Total	**0.63**	**J**	0.80	0.12	ppb v/v			09/06/20 00:32	1.41

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.26**	**J**	1.3	0.13	ug/m3			09/06/20 00:32	1.41
Carbon tetrachloride	**0.56**	**J**	2.5	0.22	ug/m3			09/06/20 00:32	1.41
Chlorodifluoromethane	**1.2**	**J**	1.4	0.39	ug/m3			09/06/20 00:32	1.41
Chloroform	ND		2.0	0.17	ug/m3			09/06/20 00:32	1.41
cis-1,2-Dichloroethene	ND		1.6	0.20	ug/m3			09/06/20 00:32	1.41
Dichlorodifluoromethane	**2.2**		2.0	0.35	ug/m3			09/06/20 00:32	1.41
1,1-Dichloroethane	ND		1.6	0.14	ug/m3			09/06/20 00:32	1.41
1,2-Dichloroethane	ND		1.6	0.20	ug/m3			09/06/20 00:32	1.41
1,1-Dichloroethene	ND		1.6	0.16	ug/m3			09/06/20 00:32	1.41
Ethylbenzene	**0.72**	**J**	1.7	0.28	ug/m3			09/06/20 00:32	1.41
Methylene Chloride	ND		6.9	6.8	ug/m3			09/06/20 00:32	1.41
Methyl tert-butyl ether	ND		7.2	0.94	ug/m3			09/06/20 00:32	1.41
Naphthalene	ND		1.0	1.0	ug/m3			09/06/20 00:32	1.41
Tetrachloroethene	ND		2.7	0.24	ug/m3			09/06/20 00:32	1.41
Toluene	**18**		2.3	1.5	ug/m3			09/06/20 00:32	1.41
trans-1,2-Dichloroethene	ND		1.6	0.14	ug/m3			09/06/20 00:32	1.41
1,2,4-Trichlorobenzene	ND		3.0	2.4	ug/m3			09/06/20 00:32	1.41
1,1,1-Trichloroethane	ND		2.2	1.0	ug/m3			09/06/20 00:32	1.41
1,1,2-Trichloroethane	ND		2.2	0.19	ug/m3			09/06/20 00:32	1.41
Trichloroethene	ND		1.1	0.16	ug/m3			09/06/20 00:32	1.41
1,2,3-Trimethylbenzene	ND		2.0	0.88	ug/m3			09/06/20 00:32	1.41
1,2,4-Trimethylbenzene	ND		2.0	0.49	ug/m3			09/06/20 00:32	1.41

Client Sample ID: IA-021-A-29
Lab Sample ID: 140-20195-12
Date Collected: 08/26/20 16:04
Matrix: Air
Date Received: 08/29/20 09:54
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		2.0	0.54	ug/m3			09/06/20 00:32	1.41
Vinyl chloride	ND		0.51	0.33	ug/m3			09/06/20 00:32	1.41
Xylenes, Total	**2.7**	**J**	3.5	0.52	ug/m3			09/06/20 00:32	1.41

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*60 - 140*		*09/06/20 00:32*	*1.41*

Client Sample ID: IA-136-A-29

Lab Sample ID: 140-20195-13

Date Collected: 08/26/20 16:05
Matrix: Air
Date Received: 08/29/20 09:54
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.045**	**J**	0.40	0.040	ppb v/v			09/06/20 01:20	1.56
Carbon tetrachloride	**0.083**	**J**	0.40	0.035	ppb v/v			09/06/20 01:20	1.56
Chlorodifluoromethane	**0.30**	**J**	0.40	0.11	ppb v/v			09/06/20 01:20	1.56
Chloroform	ND		0.40	0.035	ppb v/v			09/06/20 01:20	1.56
cis-1,2-Dichloroethene	ND		0.40	0.050	ppb v/v			09/06/20 01:20	1.56
Dichlorodifluoromethane	**0.35**	**J**	0.40	0.070	ppb v/v			09/06/20 01:20	1.56
1,1-Dichloroethane	ND		0.40	0.035	ppb v/v			09/06/20 01:20	1.56
1,2-Dichloroethane	ND		0.40	0.050	ppb v/v			09/06/20 01:20	1.56
1,1-Dichloroethene	ND		0.40	0.040	ppb v/v			09/06/20 01:20	1.56
Ethylbenzene	**0.096**	**J**	0.40	0.065	ppb v/v			09/06/20 01:20	1.56
Methylene Chloride	ND		2.0	2.0	ppb v/v			09/06/20 01:20	1.56
Methyl tert-butyl ether	ND		2.0	0.26	ppb v/v			09/06/20 01:20	1.56
Naphthalene	ND		0.20	0.20	ppb v/v			09/06/20 01:20	1.56
Tetrachloroethene	ND		0.40	0.035	ppb v/v			09/06/20 01:20	1.56
Toluene	**2.5**		0.60	0.39	ppb v/v			09/06/20 01:20	1.56
trans-1,2-Dichloroethene	ND		0.40	0.035	ppb v/v			09/06/20 01:20	1.56
1,2,4-Trichlorobenzene	ND		0.40	0.32	ppb v/v			09/06/20 01:20	1.56
1,1,1-Trichloroethane	ND		0.40	0.19	ppb v/v			09/06/20 01:20	1.56
1,1,2-Trichloroethane	ND		0.40	0.035	ppb v/v			09/06/20 01:20	1.56
Trichloroethene	ND		0.20	0.030	ppb v/v			09/06/20 01:20	1.56
1,2,3-Trimethylbenzene	ND		0.40	0.18	ppb v/v			09/06/20 01:20	1.56
1,2,4-Trimethylbenzene	ND		0.40	0.10	ppb v/v			09/06/20 01:20	1.56
1,3,5-Trimethylbenzene	ND		0.40	0.11	ppb v/v			09/06/20 01:20	1.56
Vinyl chloride	ND		0.20	0.13	ppb v/v			09/06/20 01:20	1.56
Xylenes, Total	**0.41**	**J**	0.80	0.12	ppb v/v			09/06/20 01:20	1.56

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.15**	**J**	1.3	0.13	ug/m3			09/06/20 01:20	1.56
Carbon tetrachloride	**0.52**	**J**	2.5	0.22	ug/m3			09/06/20 01:20	1.56
Chlorodifluoromethane	**1.1**	**J**	1.4	0.39	ug/m3			09/06/20 01:20	1.56
Chloroform	ND		2.0	0.17	ug/m3			09/06/20 01:20	1.56
cis-1,2-Dichloroethene	ND		1.6	0.20	ug/m3			09/06/20 01:20	1.56
Dichlorodifluoromethane	**1.7**	**J**	2.0	0.35	ug/m3			09/06/20 01:20	1.56
1,1-Dichloroethane	ND		1.6	0.14	ug/m3			09/06/20 01:20	1.56
1,2-Dichloroethane	ND		1.6	0.20	ug/m3			09/06/20 01:20	1.56
1,1-Dichloroethene	ND		1.6	0.16	ug/m3			09/06/20 01:20	1.56
Ethylbenzene	**0.42**	**J**	1.7	0.28	ug/m3			09/06/20 01:20	1.56
Methylene Chloride	ND		6.9	6.8	ug/m3			09/06/20 01:20	1.56
Methyl tert-butyl ether	ND		7.2	0.94	ug/m3			09/06/20 01:20	1.56
Naphthalene	ND		1.0	1.0	ug/m3			09/06/20 01:20	1.56
Tetrachloroethene	ND		2.7	0.24	ug/m3			09/06/20 01:20	1.56
Toluene	**9.5**		2.3	1.5	ug/m3			09/06/20 01:20	1.56
trans-1,2-Dichloroethene	ND		1.6	0.14	ug/m3			09/06/20 01:20	1.56
1,2,4-Trichlorobenzene	ND		3.0	2.4	ug/m3			09/06/20 01:20	1.56
1,1,1-Trichloroethane	ND		2.2	1.0	ug/m3			09/06/20 01:20	1.56
1,1,2-Trichloroethane	ND		2.2	0.19	ug/m3			09/06/20 01:20	1.56
Trichloroethene	ND		1.1	0.16	ug/m3			09/06/20 01:20	1.56
1,2,3-Trimethylbenzene	ND		2.0	0.88	ug/m3			09/06/20 01:20	1.56
1,2,4-Trimethylbenzene	ND		2.0	0.49	ug/m3			09/06/20 01:20	1.56

Client Sample ID: IA-136-A-29
Lab Sample ID: 140-20195-13
Date Collected: 08/26/20 16:05
Matrix: Air
Date Received: 08/29/20 09:54
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		2.0	0.54	ug/m3			09/06/20 01:20	1.56
Vinyl chloride	ND		0.51	0.33	ug/m3			09/06/20 01:20	1.56
Xylenes, Total	**1.8**	**J**	3.5	0.52	ug/m3			09/06/20 01:20	1.56

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*60 - 140*		*09/06/20 01:20*	*1.56*

Client Sample ID: IA-117-A-29

Lab Sample ID: 140-20195-14

Date Collected: 08/26/20 16:07
Matrix: Air
Date Received: 08/29/20 09:54
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.040**	**J**	0.40	0.040	ppb v/v			09/06/20 02:07	1
Carbon tetrachloride	**0.070**	**J**	0.40	0.035	ppb v/v			09/06/20 02:07	1
Chlorodifluoromethane	**0.38**	**J**	0.40	0.11	ppb v/v			09/06/20 02:07	1
Chloroform	ND		0.40	0.035	ppb v/v			09/06/20 02:07	1
cis-1,2-Dichloroethene	**0.12**	**J**	0.40	0.050	ppb v/v			09/06/20 02:07	1
Dichlorodifluoromethane	**0.38**	**J**	0.40	0.070	ppb v/v			09/06/20 02:07	1
1,1-Dichloroethane	ND		0.40	0.035	ppb v/v			09/06/20 02:07	1
1,2-Dichloroethane	ND		0.40	0.050	ppb v/v			09/06/20 02:07	1
1,1-Dichloroethene	ND		0.40	0.040	ppb v/v			09/06/20 02:07	1
Ethylbenzene	**0.15**	**J**	0.40	0.065	ppb v/v			09/06/20 02:07	1
Methylene Chloride	**23**		2.0	2.0	ppb v/v			09/06/20 02:07	1
Methyl tert-butyl ether	ND		2.0	0.26	ppb v/v			09/06/20 02:07	1
Naphthalene	ND		0.20	0.20	ppb v/v			09/06/20 02:07	1
Tetrachloroethene	ND		0.40	0.035	ppb v/v			09/06/20 02:07	1
Toluene	**2.5**		0.60	0.39	ppb v/v			09/06/20 02:07	1
trans-1,2-Dichloroethene	ND		0.40	0.035	ppb v/v			09/06/20 02:07	1
1,2,4-Trichlorobenzene	ND		0.40	0.32	ppb v/v			09/06/20 02:07	1
1,1,1-Trichloroethane	ND		0.40	0.19	ppb v/v			09/06/20 02:07	1
1,1,2-Trichloroethane	ND		0.40	0.035	ppb v/v			09/06/20 02:07	1
Trichloroethene	**0.87**		0.20	0.030	ppb v/v			09/06/20 02:07	1
1,2,3-Trimethylbenzene	ND		0.40	0.18	ppb v/v			09/06/20 02:07	1
1,2,4-Trimethylbenzene	ND		0.40	0.10	ppb v/v			09/06/20 02:07	1
1,3,5-Trimethylbenzene	ND		0.40	0.11	ppb v/v			09/06/20 02:07	1
Vinyl chloride	ND		0.20	0.13	ppb v/v			09/06/20 02:07	1
Xylenes, Total	**0.67**	**J**	0.80	0.12	ppb v/v			09/06/20 02:07	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.13**	**J**	1.3	0.13	ug/m3			09/06/20 02:07	1
Carbon tetrachloride	**0.44**	**J**	2.5	0.22	ug/m3			09/06/20 02:07	1
Chlorodifluoromethane	**1.4**	**J**	1.4	0.39	ug/m3			09/06/20 02:07	1
Chloroform	ND		2.0	0.17	ug/m3			09/06/20 02:07	1
cis-1,2-Dichloroethene	**0.48**	**J**	1.6	0.20	ug/m3			09/06/20 02:07	1
Dichlorodifluoromethane	**1.9**	**J**	2.0	0.35	ug/m3			09/06/20 02:07	1
1,1-Dichloroethane	ND		1.6	0.14	ug/m3			09/06/20 02:07	1
1,2-Dichloroethane	ND		1.6	0.20	ug/m3			09/06/20 02:07	1
1,1-Dichloroethene	ND		1.6	0.16	ug/m3			09/06/20 02:07	1
Ethylbenzene	**0.63**	**J**	1.7	0.28	ug/m3			09/06/20 02:07	1
Methylene Chloride	**80**		6.9	6.8	ug/m3			09/06/20 02:07	1
Methyl tert-butyl ether	ND		7.2	0.94	ug/m3			09/06/20 02:07	1
Naphthalene	ND		1.0	1.0	ug/m3			09/06/20 02:07	1
Tetrachloroethene	ND		2.7	0.24	ug/m3			09/06/20 02:07	1
Toluene	**9.5**		2.3	1.5	ug/m3			09/06/20 02:07	1
trans-1,2-Dichloroethene	ND		1.6	0.14	ug/m3			09/06/20 02:07	1
1,2,4-Trichlorobenzene	ND		3.0	2.4	ug/m3			09/06/20 02:07	1
1,1,1-Trichloroethane	ND		2.2	1.0	ug/m3			09/06/20 02:07	1
1,1,2-Trichloroethane	ND		2.2	0.19	ug/m3			09/06/20 02:07	1
Trichloroethene	**4.7**		1.1	0.16	ug/m3			09/06/20 02:07	1
1,2,3-Trimethylbenzene	ND		2.0	0.88	ug/m3			09/06/20 02:07	1
1,2,4-Trimethylbenzene	ND		2.0	0.49	ug/m3			09/06/20 02:07	1

Client Sample ID: IA-117-A-29 **Lab Sample ID: 140-20195-14**
Date Collected: 08/26/20 16:07 **Matrix: Air**
Date Received: 08/29/20 09:54
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		2.0	0.54	ug/m3			09/06/20 02:07	1
Vinyl chloride	ND		0.51	0.33	ug/m3			09/06/20 02:07	1
Xylenes, Total	**2.9**	**J**	3.5	0.52	ug/m3			09/06/20 02:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*60 - 140*		*09/06/20 02:07*	*1*

Client Sample ID: IA-079-A-29

Lab Sample ID: 140-20195-15

Date Collected: 08/26/20 16:09
Matrix: Air
Date Received: 08/29/20 09:54
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.065**	**J**	0.40	0.040	ppb v/v			09/06/20 02:55	1.45
Carbon tetrachloride	**0.072**	**J**	0.40	0.035	ppb v/v			09/06/20 02:55	1.45
Chlorodifluoromethane	**0.30**	**J**	0.40	0.11	ppb v/v			09/06/20 02:55	1.45
Chloroform	ND		0.40	0.035	ppb v/v			09/06/20 02:55	1.45
cis-1,2-Dichloroethene	ND		0.40	0.050	ppb v/v			09/06/20 02:55	1.45
Dichlorodifluoromethane	**0.37**	**J**	0.40	0.070	ppb v/v			09/06/20 02:55	1.45
1,1-Dichloroethane	ND		0.40	0.035	ppb v/v			09/06/20 02:55	1.45
1,2-Dichloroethane	ND		0.40	0.050	ppb v/v			09/06/20 02:55	1.45
1,1-Dichloroethene	ND		0.40	0.040	ppb v/v			09/06/20 02:55	1.45
Ethylbenzene	**0.14**	**J**	0.40	0.065	ppb v/v			09/06/20 02:55	1.45
Methylene Chloride	ND		2.0	2.0	ppb v/v			09/06/20 02:55	1.45
Methyl tert-butyl ether	ND		2.0	0.26	ppb v/v			09/06/20 02:55	1.45
Naphthalene	ND		0.20	0.20	ppb v/v			09/06/20 02:55	1.45
Tetrachloroethene	ND		0.40	0.035	ppb v/v			09/06/20 02:55	1.45
Toluene	**1.8**		0.60	0.39	ppb v/v			09/06/20 02:55	1.45
trans-1,2-Dichloroethene	ND		0.40	0.035	ppb v/v			09/06/20 02:55	1.45
1,2,4-Trichlorobenzene	ND		0.40	0.32	ppb v/v			09/06/20 02:55	1.45
1,1,1-Trichloroethane	ND		0.40	0.19	ppb v/v			09/06/20 02:55	1.45
1,1,2-Trichloroethane	ND		0.40	0.035	ppb v/v			09/06/20 02:55	1.45
Trichloroethene	ND		0.20	0.030	ppb v/v			09/06/20 02:55	1.45
1,2,3-Trimethylbenzene	ND		0.40	0.18	ppb v/v			09/06/20 02:55	1.45
1,2,4-Trimethylbenzene	ND		0.40	0.10	ppb v/v			09/06/20 02:55	1.45
1,3,5-Trimethylbenzene	ND		0.40	0.11	ppb v/v			09/06/20 02:55	1.45
Vinyl chloride	ND		0.20	0.13	ppb v/v			09/06/20 02:55	1.45
Xylenes, Total	**0.68**	**J**	0.80	0.12	ppb v/v			09/06/20 02:55	1.45

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.21**	**J**	1.3	0.13	ug/m3			09/06/20 02:55	1.45
Carbon tetrachloride	**0.45**	**J**	2.5	0.22	ug/m3			09/06/20 02:55	1.45
Chlorodifluoromethane	**1.1**	**J**	1.4	0.39	ug/m3			09/06/20 02:55	1.45
Chloroform	ND		2.0	0.17	ug/m3			09/06/20 02:55	1.45
cis-1,2-Dichloroethene	ND		1.6	0.20	ug/m3			09/06/20 02:55	1.45
Dichlorodifluoromethane	**1.8**	**J**	2.0	0.35	ug/m3			09/06/20 02:55	1.45
1,1-Dichloroethane	ND		1.6	0.14	ug/m3			09/06/20 02:55	1.45
1,2-Dichloroethane	ND		1.6	0.20	ug/m3			09/06/20 02:55	1.45
1,1-Dichloroethene	ND		1.6	0.16	ug/m3			09/06/20 02:55	1.45
Ethylbenzene	**0.59**	**J**	1.7	0.28	ug/m3			09/06/20 02:55	1.45
Methylene Chloride	ND		6.9	6.8	ug/m3			09/06/20 02:55	1.45
Methyl tert-butyl ether	ND		7.2	0.94	ug/m3			09/06/20 02:55	1.45
Naphthalene	ND		1.0	1.0	ug/m3			09/06/20 02:55	1.45
Tetrachloroethene	ND		2.7	0.24	ug/m3			09/06/20 02:55	1.45
Toluene	**6.7**		2.3	1.5	ug/m3			09/06/20 02:55	1.45
trans-1,2-Dichloroethene	ND		1.6	0.14	ug/m3			09/06/20 02:55	1.45
1,2,4-Trichlorobenzene	ND		3.0	2.4	ug/m3			09/06/20 02:55	1.45
1,1,1-Trichloroethane	ND		2.2	1.0	ug/m3			09/06/20 02:55	1.45
1,1,2-Trichloroethane	ND		2.2	0.19	ug/m3			09/06/20 02:55	1.45
Trichloroethene	ND		1.1	0.16	ug/m3			09/06/20 02:55	1.45
1,2,3-Trimethylbenzene	ND		2.0	0.88	ug/m3			09/06/20 02:55	1.45
1,2,4-Trimethylbenzene	ND		2.0	0.49	ug/m3			09/06/20 02:55	1.45

Client Sample ID: IA-079-A-29
Lab Sample ID: 140-20195-15
Date Collected: 08/26/20 16:09
Matrix: Air
Date Received: 08/29/20 09:54
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		2.0	0.54	ug/m3			09/06/20 02:55	1.45
Vinyl chloride	ND		0.51	0.33	ug/m3			09/06/20 02:55	1.45
Xylenes, Total	**3.0**	**J**	3.5	0.52	ug/m3			09/06/20 02:55	1.45

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*60 - 140*		*09/06/20 02:55*	*1.45*

Client Sample ID: IA-118-A-29

Lab Sample ID: 140-20195-16

Date Collected: 08/26/20 16:11
Matrix: Air
Date Received: 08/29/20 09:54
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.13**	**J**	0.40	0.040	ppb v/v			09/06/20 05:18	1
Carbon tetrachloride	**0.097**	**J**	0.40	0.035	ppb v/v			09/06/20 05:18	1
Chlorodifluoromethane	**0.34**	**J**	0.40	0.11	ppb v/v			09/06/20 05:18	1
Chloroform	ND		0.40	0.035	ppb v/v			09/06/20 05:18	1
cis-1,2-Dichloroethene	ND		0.40	0.050	ppb v/v			09/06/20 05:18	1
Dichlorodifluoromethane	**0.37**	**J**	0.40	0.070	ppb v/v			09/06/20 05:18	1
1,1-Dichloroethane	ND		0.40	0.035	ppb v/v			09/06/20 05:18	1
1,2-Dichloroethane	ND		0.40	0.050	ppb v/v			09/06/20 05:18	1
1,1-Dichloroethene	ND		0.40	0.040	ppb v/v			09/06/20 05:18	1
Ethylbenzene	**0.12**	**J**	0.40	0.065	ppb v/v			09/06/20 05:18	1
Methylene Chloride	**3.9**		2.0	2.0	ppb v/v			09/06/20 05:18	1
Methyl tert-butyl ether	ND		2.0	0.26	ppb v/v			09/06/20 05:18	1
Naphthalene	ND		0.20	0.20	ppb v/v			09/06/20 05:18	1
Tetrachloroethene	ND		0.40	0.035	ppb v/v			09/06/20 05:18	1
Toluene	**1.2**		0.60	0.39	ppb v/v			09/06/20 05:18	1
trans-1,2-Dichloroethene	ND		0.40	0.035	ppb v/v			09/06/20 05:18	1
1,2,4-Trichlorobenzene	ND		0.40	0.32	ppb v/v			09/06/20 05:18	1
1,1,1-Trichloroethane	ND		0.40	0.19	ppb v/v			09/06/20 05:18	1
1,1,2-Trichloroethane	ND		0.40	0.035	ppb v/v			09/06/20 05:18	1
Trichloroethene	ND		0.20	0.030	ppb v/v			09/06/20 05:18	1
1,2,3-Trimethylbenzene	ND		0.40	0.18	ppb v/v			09/06/20 05:18	1
1,2,4-Trimethylbenzene	ND		0.40	0.10	ppb v/v			09/06/20 05:18	1
1,3,5-Trimethylbenzene	ND		0.40	0.11	ppb v/v			09/06/20 05:18	1
Vinyl chloride	ND		0.20	0.13	ppb v/v			09/06/20 05:18	1
Xylenes, Total	**0.64**	**J**	0.80	0.12	ppb v/v			09/06/20 05:18	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.41**	**J**	1.3	0.13	ug/m3			09/06/20 05:18	1
Carbon tetrachloride	**0.61**	**J**	2.5	0.22	ug/m3			09/06/20 05:18	1
Chlorodifluoromethane	**1.2**	**J**	1.4	0.39	ug/m3			09/06/20 05:18	1
Chloroform	ND		2.0	0.17	ug/m3			09/06/20 05:18	1
cis-1,2-Dichloroethene	ND		1.6	0.20	ug/m3			09/06/20 05:18	1
Dichlorodifluoromethane	**1.8**	**J**	2.0	0.35	ug/m3			09/06/20 05:18	1
1,1-Dichloroethane	ND		1.6	0.14	ug/m3			09/06/20 05:18	1
1,2-Dichloroethane	ND		1.6	0.20	ug/m3			09/06/20 05:18	1
1,1-Dichloroethene	ND		1.6	0.16	ug/m3			09/06/20 05:18	1
Ethylbenzene	**0.54**	**J**	1.7	0.28	ug/m3			09/06/20 05:18	1
Methylene Chloride	**14**		6.9	6.8	ug/m3			09/06/20 05:18	1
Methyl tert-butyl ether	ND		7.2	0.94	ug/m3			09/06/20 05:18	1
Naphthalene	ND		1.0	1.0	ug/m3			09/06/20 05:18	1
Tetrachloroethene	ND		2.7	0.24	ug/m3			09/06/20 05:18	1
Toluene	**4.5**		2.3	1.5	ug/m3			09/06/20 05:18	1
trans-1,2-Dichloroethene	ND		1.6	0.14	ug/m3			09/06/20 05:18	1
1,2,4-Trichlorobenzene	ND		3.0	2.4	ug/m3			09/06/20 05:18	1
1,1,1-Trichloroethane	ND		2.2	1.0	ug/m3			09/06/20 05:18	1
1,1,2-Trichloroethane	ND		2.2	0.19	ug/m3			09/06/20 05:18	1
Trichloroethene	ND		1.1	0.16	ug/m3			09/06/20 05:18	1
1,2,3-Trimethylbenzene	ND		2.0	0.88	ug/m3			09/06/20 05:18	1
1,2,4-Trimethylbenzene	ND		2.0	0.49	ug/m3			09/06/20 05:18	1

Client Sample ID: IA-118-A-29
Lab Sample ID: 140-20195-16
Date Collected: 08/26/20 16:11
Matrix: Air
Date Received: 08/29/20 09:54
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		2.0	0.54	ug/m3			09/06/20 05:18	1
Vinyl chloride	ND		0.51	0.33	ug/m3			09/06/20 05:18	1
Xylenes, Total	**2.8**	**J**	3.5	0.52	ug/m3			09/06/20 05:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*60 - 140*		*09/06/20 05:18*	*1*

Client Sample ID: IA-081-A-29

Lab Sample ID: 140-20195-17

Date Collected: 08/26/20 16:15
Matrix: Air
Date Received: 08/29/20 09:54
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.074**	**J**	0.40	0.040	ppb v/v			09/06/20 02:17	1
Carbon tetrachloride	**0.047**	**J**	0.40	0.035	ppb v/v			09/06/20 02:17	1
Chlorodifluoromethane	**0.31**	**J**	0.40	0.11	ppb v/v			09/06/20 02:17	1
Chloroform	ND		0.40	0.035	ppb v/v			09/06/20 02:17	1
cis-1,2-Dichloroethene	ND		0.40	0.050	ppb v/v			09/06/20 02:17	1
Dichlorodifluoromethane	**0.40**		0.40	0.070	ppb v/v			09/06/20 02:17	1
1,1-Dichloroethane	ND		0.40	0.035	ppb v/v			09/06/20 02:17	1
1,2-Dichloroethane	ND		0.40	0.050	ppb v/v			09/06/20 02:17	1
1,1-Dichloroethene	ND		0.40	0.040	ppb v/v			09/06/20 02:17	1
Ethylbenzene	**0.79**		0.40	0.065	ppb v/v			09/06/20 02:17	1
Methylene Chloride	ND		2.0	2.0	ppb v/v			09/06/20 02:17	1
Methyl tert-butyl ether	ND		2.0	0.26	ppb v/v			09/06/20 02:17	1
Naphthalene	ND		0.20	0.20	ppb v/v			09/06/20 02:17	1
Tetrachloroethene	ND		0.40	0.035	ppb v/v			09/06/20 02:17	1
Toluene	**29**		0.60	0.39	ppb v/v			09/06/20 02:17	1
trans-1,2-Dichloroethene	ND		0.40	0.035	ppb v/v			09/06/20 02:17	1
1,2,4-Trichlorobenzene	ND		0.40	0.32	ppb v/v			09/06/20 02:17	1
1,1,1-Trichloroethane	ND		0.40	0.19	ppb v/v			09/06/20 02:17	1
1,1,2-Trichloroethane	ND		0.40	0.035	ppb v/v			09/06/20 02:17	1
Trichloroethene	ND		0.20	0.030	ppb v/v			09/06/20 02:17	1
1,2,3-Trimethylbenzene	ND	*	0.40	0.18	ppb v/v			09/06/20 02:17	1
1,2,4-Trimethylbenzene	**0.12**	**J**	0.40	0.10	ppb v/v			09/06/20 02:17	1
1,3,5-Trimethylbenzene	ND		0.40	0.11	ppb v/v			09/06/20 02:17	1
Vinyl chloride	ND		0.20	0.13	ppb v/v			09/06/20 02:17	1
Xylenes, Total	**3.3**		0.80	0.12	ppb v/v			09/06/20 02:17	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.24**	**J**	1.3	0.13	ug/m3			09/06/20 02:17	1
Carbon tetrachloride	**0.30**	**J**	2.5	0.22	ug/m3			09/06/20 02:17	1
Chlorodifluoromethane	**1.1**	**J**	1.4	0.39	ug/m3			09/06/20 02:17	1
Chloroform	ND		2.0	0.17	ug/m3			09/06/20 02:17	1
cis-1,2-Dichloroethene	ND		1.6	0.20	ug/m3			09/06/20 02:17	1
Dichlorodifluoromethane	**2.0**		2.0	0.35	ug/m3			09/06/20 02:17	1
1,1-Dichloroethane	ND		1.6	0.14	ug/m3			09/06/20 02:17	1
1,2-Dichloroethane	ND		1.6	0.20	ug/m3			09/06/20 02:17	1
1,1-Dichloroethene	ND		1.6	0.16	ug/m3			09/06/20 02:17	1
Ethylbenzene	**3.4**		1.7	0.28	ug/m3			09/06/20 02:17	1
Methylene Chloride	ND		6.9	6.8	ug/m3			09/06/20 02:17	1
Methyl tert-butyl ether	ND		7.2	0.94	ug/m3			09/06/20 02:17	1
Naphthalene	ND		1.0	1.0	ug/m3			09/06/20 02:17	1
Tetrachloroethene	ND		2.7	0.24	ug/m3			09/06/20 02:17	1
Toluene	**110**		2.3	1.5	ug/m3			09/06/20 02:17	1
trans-1,2-Dichloroethene	ND		1.6	0.14	ug/m3			09/06/20 02:17	1
1,2,4-Trichlorobenzene	ND		3.0	2.4	ug/m3			09/06/20 02:17	1
1,1,1-Trichloroethane	ND		2.2	1.0	ug/m3			09/06/20 02:17	1
1,1,2-Trichloroethane	ND		2.2	0.19	ug/m3			09/06/20 02:17	1
Trichloroethene	ND		1.1	0.16	ug/m3			09/06/20 02:17	1
1,2,3-Trimethylbenzene	ND	*	2.0	0.88	ug/m3			09/06/20 02:17	1
1,2,4-Trimethylbenzene	**0.57**	**J**	2.0	0.49	ug/m3			09/06/20 02:17	1

Client Sample ID: IA-081-A-29
Lab Sample ID: 140-20195-17
Date Collected: 08/26/20 16:15
Matrix: Air
Date Received: 08/29/20 09:54
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		2.0	0.54	ug/m3			09/06/20 02:17	1
Vinyl chloride	ND		0.51	0.33	ug/m3			09/06/20 02:17	1
Xylenes, Total	**14**		3.5	0.52	ug/m3			09/06/20 02:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*60 - 140*		*09/06/20 02:17*	*1*

Client Sample ID: IA-100-B-29

Lab Sample ID: 140-20195-18

Date Collected: 08/26/20 16:20
Matrix: Air
Date Received: 08/29/20 09:54
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.40	0.040	ppb v/v			09/06/20 03:04	1.65
Carbon tetrachloride	**0.038**	**J**	0.40	0.035	ppb v/v			09/06/20 03:04	1.65
Chlorodifluoromethane	**0.62**		0.40	0.11	ppb v/v			09/06/20 03:04	1.65
Chloroform	ND		0.40	0.035	ppb v/v			09/06/20 03:04	1.65
cis-1,2-Dichloroethene	ND		0.40	0.050	ppb v/v			09/06/20 03:04	1.65
Dichlorodifluoromethane	**0.34**	**J**	0.40	0.070	ppb v/v			09/06/20 03:04	1.65
1,1-Dichloroethane	ND		0.40	0.035	ppb v/v			09/06/20 03:04	1.65
1,2-Dichloroethane	ND		0.40	0.050	ppb v/v			09/06/20 03:04	1.65
1,1-Dichloroethene	ND		0.40	0.040	ppb v/v			09/06/20 03:04	1.65
Ethylbenzene	**0.18**	**J**	0.40	0.065	ppb v/v			09/06/20 03:04	1.65
Methylene Chloride	ND		2.0	2.0	ppb v/v			09/06/20 03:04	1.65
Methyl tert-butyl ether	ND		2.0	0.26	ppb v/v			09/06/20 03:04	1.65
Naphthalene	ND		0.20	0.20	ppb v/v			09/06/20 03:04	1.65
Tetrachloroethene	**0.49**		0.40	0.035	ppb v/v			09/06/20 03:04	1.65
Toluene	**4.1**		0.60	0.39	ppb v/v			09/06/20 03:04	1.65
trans-1,2-Dichloroethene	ND		0.40	0.035	ppb v/v			09/06/20 03:04	1.65
1,2,4-Trichlorobenzene	ND		0.40	0.32	ppb v/v			09/06/20 03:04	1.65
1,1,1-Trichloroethane	ND		0.40	0.19	ppb v/v			09/06/20 03:04	1.65
1,1,2-Trichloroethane	ND		0.40	0.035	ppb v/v			09/06/20 03:04	1.65
Trichloroethene	**0.11**	**J**	0.20	0.030	ppb v/v			09/06/20 03:04	1.65
1,2,3-Trimethylbenzene	ND	*	0.40	0.18	ppb v/v			09/06/20 03:04	1.65
1,2,4-Trimethylbenzene	ND		0.40	0.10	ppb v/v			09/06/20 03:04	1.65
1,3,5-Trimethylbenzene	ND		0.40	0.11	ppb v/v			09/06/20 03:04	1.65
Vinyl chloride	ND		0.20	0.13	ppb v/v			09/06/20 03:04	1.65
Xylenes, Total	**0.73**	**J**	0.80	0.12	ppb v/v			09/06/20 03:04	1.65

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.3	0.13	ug/m3			09/06/20 03:04	1.65
Carbon tetrachloride	**0.24**	**J**	2.5	0.22	ug/m3			09/06/20 03:04	1.65
Chlorodifluoromethane	**2.2**		1.4	0.39	ug/m3			09/06/20 03:04	1.65
Chloroform	ND		2.0	0.17	ug/m3			09/06/20 03:04	1.65
cis-1,2-Dichloroethene	ND		1.6	0.20	ug/m3			09/06/20 03:04	1.65
Dichlorodifluoromethane	**1.7**	**J**	2.0	0.35	ug/m3			09/06/20 03:04	1.65
1,1-Dichloroethane	ND		1.6	0.14	ug/m3			09/06/20 03:04	1.65
1,2-Dichloroethane	ND		1.6	0.20	ug/m3			09/06/20 03:04	1.65
1,1-Dichloroethene	ND		1.6	0.16	ug/m3			09/06/20 03:04	1.65
Ethylbenzene	**0.77**	**J**	1.7	0.28	ug/m3			09/06/20 03:04	1.65
Methylene Chloride	ND		6.9	6.8	ug/m3			09/06/20 03:04	1.65
Methyl tert-butyl ether	ND		7.2	0.94	ug/m3			09/06/20 03:04	1.65
Naphthalene	ND		1.0	1.0	ug/m3			09/06/20 03:04	1.65
Tetrachloroethene	**3.3**		2.7	0.24	ug/m3			09/06/20 03:04	1.65
Toluene	**15**		2.3	1.5	ug/m3			09/06/20 03:04	1.65
trans-1,2-Dichloroethene	ND		1.6	0.14	ug/m3			09/06/20 03:04	1.65
1,2,4-Trichlorobenzene	ND		3.0	2.4	ug/m3			09/06/20 03:04	1.65
1,1,1-Trichloroethane	ND		2.2	1.0	ug/m3			09/06/20 03:04	1.65
1,1,2-Trichloroethane	ND		2.2	0.19	ug/m3			09/06/20 03:04	1.65
Trichloroethene	**0.61**	**J**	1.1	0.16	ug/m3			09/06/20 03:04	1.65
1,2,3-Trimethylbenzene	ND	*	2.0	0.88	ug/m3			09/06/20 03:04	1.65
1,2,4-Trimethylbenzene	ND		2.0	0.49	ug/m3			09/06/20 03:04	1.65

Client Sample ID: IA-100-B-29
Lab Sample ID: 140-20195-18
Date Collected: 08/26/20 16:20
Matrix: Air
Date Received: 08/29/20 09:54
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		2.0	0.54	ug/m3			09/06/20 03:04	1.65
Vinyl chloride	ND		0.51	0.33	ug/m3			09/06/20 03:04	1.65
Xylenes, Total	**3.2**	**J**	3.5	0.52	ug/m3			09/06/20 03:04	1.65

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*60 - 140*		*09/06/20 03:04*	*1.65*

Client Sample ID: IA-101-B-29

Lab Sample ID: 140-20195-19

Date Collected: 08/26/20 16:22
Matrix: Air
Date Received: 08/29/20 09:54
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.085**	**J**	0.40	0.040	ppb v/v			09/06/20 03:49	1
Carbon tetrachloride	**0.054**	**J**	0.40	0.035	ppb v/v			09/06/20 03:49	1
Chlorodifluoromethane	**0.42**		0.40	0.11	ppb v/v			09/06/20 03:49	1
Chloroform	ND		0.40	0.035	ppb v/v			09/06/20 03:49	1
cis-1,2-Dichloroethene	ND		0.40	0.050	ppb v/v			09/06/20 03:49	1
Dichlorodifluoromethane	**0.37**	**J**	0.40	0.070	ppb v/v			09/06/20 03:49	1
1,1-Dichloroethane	ND		0.40	0.035	ppb v/v			09/06/20 03:49	1
1,2-Dichloroethane	ND		0.40	0.050	ppb v/v			09/06/20 03:49	1
1,1-Dichloroethene	ND		0.40	0.040	ppb v/v			09/06/20 03:49	1
Ethylbenzene	**0.10**	**J**	0.40	0.065	ppb v/v			09/06/20 03:49	1
Methylene Chloride	**10**		2.0	2.0	ppb v/v			09/06/20 03:49	1
Methyl tert-butyl ether	ND		2.0	0.26	ppb v/v			09/06/20 03:49	1
Naphthalene	ND		0.20	0.20	ppb v/v			09/06/20 03:49	1
Tetrachloroethene	ND		0.40	0.035	ppb v/v			09/06/20 03:49	1
Toluene	**3.6**		0.60	0.39	ppb v/v			09/06/20 03:49	1
trans-1,2-Dichloroethene	ND		0.40	0.035	ppb v/v			09/06/20 03:49	1
1,2,4-Trichlorobenzene	ND		0.40	0.32	ppb v/v			09/06/20 03:49	1
1,1,1-Trichloroethane	ND		0.40	0.19	ppb v/v			09/06/20 03:49	1
1,1,2-Trichloroethane	ND		0.40	0.035	ppb v/v			09/06/20 03:49	1
Trichloroethene	ND		0.20	0.030	ppb v/v			09/06/20 03:49	1
1,2,3-Trimethylbenzene	ND	*	0.40	0.18	ppb v/v			09/06/20 03:49	1
1,2,4-Trimethylbenzene	ND		0.40	0.10	ppb v/v			09/06/20 03:49	1
1,3,5-Trimethylbenzene	ND		0.40	0.11	ppb v/v			09/06/20 03:49	1
Vinyl chloride	ND		0.20	0.13	ppb v/v			09/06/20 03:49	1
Xylenes, Total	**0.43**	**J**	0.80	0.12	ppb v/v			09/06/20 03:49	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.27**	**J**	1.3	0.13	ug/m3			09/06/20 03:49	1
Carbon tetrachloride	**0.34**	**J**	2.5	0.22	ug/m3			09/06/20 03:49	1
Chlorodifluoromethane	**1.5**		1.4	0.39	ug/m3			09/06/20 03:49	1
Chloroform	ND		2.0	0.17	ug/m3			09/06/20 03:49	1
cis-1,2-Dichloroethene	ND		1.6	0.20	ug/m3			09/06/20 03:49	1
Dichlorodifluoromethane	**1.8**	**J**	2.0	0.35	ug/m3			09/06/20 03:49	1
1,1-Dichloroethane	ND		1.6	0.14	ug/m3			09/06/20 03:49	1
1,2-Dichloroethane	ND		1.6	0.20	ug/m3			09/06/20 03:49	1
1,1-Dichloroethene	ND		1.6	0.16	ug/m3			09/06/20 03:49	1
Ethylbenzene	**0.43**	**J**	1.7	0.28	ug/m3			09/06/20 03:49	1
Methylene Chloride	**35**		6.9	6.8	ug/m3			09/06/20 03:49	1
Methyl tert-butyl ether	ND		7.2	0.94	ug/m3			09/06/20 03:49	1
Naphthalene	ND		1.0	1.0	ug/m3			09/06/20 03:49	1
Tetrachloroethene	ND		2.7	0.24	ug/m3			09/06/20 03:49	1
Toluene	**13**		2.3	1.5	ug/m3			09/06/20 03:49	1
trans-1,2-Dichloroethene	ND		1.6	0.14	ug/m3			09/06/20 03:49	1
1,2,4-Trichlorobenzene	ND		3.0	2.4	ug/m3			09/06/20 03:49	1
1,1,1-Trichloroethane	ND		2.2	1.0	ug/m3			09/06/20 03:49	1
1,1,2-Trichloroethane	ND		2.2	0.19	ug/m3			09/06/20 03:49	1
Trichloroethene	ND		1.1	0.16	ug/m3			09/06/20 03:49	1
1,2,3-Trimethylbenzene	ND	*	2.0	0.88	ug/m3			09/06/20 03:49	1
1,2,4-Trimethylbenzene	ND		2.0	0.49	ug/m3			09/06/20 03:49	1

Client Sample ID: IA-101-B-29
Lab Sample ID: 140-20195-19
Date Collected: 08/26/20 16:22
Matrix: Air
Date Received: 08/29/20 09:54
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		2.0	0.54	ug/m3			09/06/20 03:49	1
Vinyl chloride	ND		0.51	0.33	ug/m3			09/06/20 03:49	1
Xylenes, Total	**1.9**	**J**	3.5	0.52	ug/m3			09/06/20 03:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*60 - 140*		*09/06/20 03:49*	*1*

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	RL	MDL	Units
1,1,1-Trichloroethane	0.080	0.037	ppb v/v
1,1,1-Trichloroethane	0.44	0.20	ug/m3
1,1,2-Trichloroethane	0.080	0.0070	ppb v/v
1,1,2-Trichloroethane	0.44	0.038	ug/m3
1,1-Dichloroethane	0.080	0.0070	ppb v/v
1,1-Dichloroethane	0.32	0.028	ug/m3
1,1-Dichloroethene	0.080	0.0080	ppb v/v
1,1-Dichloroethene	0.32	0.032	ug/m3
1,2,3-Trimethylbenzene	0.080	0.036	ppb v/v
1,2,3-Trimethylbenzene	0.39	0.18	ug/m3
1,2,4-Trichlorobenzene	0.080	0.064	ppb v/v
1,2,4-Trichlorobenzene	0.59	0.47	ug/m3
1,2,4-Trimethylbenzene	0.080	0.020	ppb v/v
1,2,4-Trimethylbenzene	0.39	0.098	ug/m3
1,2-Dichloroethane	0.080	0.010	ppb v/v
1,2-Dichloroethane	0.32	0.040	ug/m3
1,3,5-Trimethylbenzene	0.080	0.022	ppb v/v
1,3,5-Trimethylbenzene	0.39	0.11	ug/m3
Benzene	0.080	0.0080	ppb v/v
Benzene	0.26	0.026	ug/m3
Carbon tetrachloride	0.080	0.0070	ppb v/v
Carbon tetrachloride	0.50	0.044	ug/m3
Chlorodifluoromethane	0.080	0.022	ppb v/v
Chlorodifluoromethane	0.28	0.078	ug/m3
Chloroform	0.080	0.0070	ppb v/v
Chloroform	0.39	0.034	ug/m3
cis-1,2-Dichloroethene	0.080	0.010	ppb v/v
cis-1,2-Dichloroethene	0.32	0.040	ug/m3
Dichlorodifluoromethane	0.080	0.014	ppb v/v
Dichlorodifluoromethane	0.40	0.069	ug/m3
Ethylbenzene	0.080	0.013	ppb v/v
Ethylbenzene	0.35	0.056	ug/m3
Methyl tert-butyl ether	0.40	0.052	ppb v/v
Methyl tert-butyl ether	1.4	0.19	ug/m3
Methylene Chloride	0.40	0.39	ppb v/v
Methylene Chloride	1.4	1.4	ug/m3
Naphthalene	0.040	0.040	ppb v/v
Naphthalene	0.21	0.21	ug/m3
Tetrachloroethene	0.080	0.0070	ppb v/v
Tetrachloroethene	0.54	0.047	ug/m3
Toluene	0.12	0.078	ppb v/v
Toluene	0.45	0.29	ug/m3
trans-1,2-Dichloroethene	0.080	0.0070	ppb v/v
trans-1,2-Dichloroethene	0.32	0.028	ug/m3
Trichloroethene	0.040	0.0060	ppb v/v
Trichloroethene	0.21	0.032	ug/m3
Vinyl chloride	0.040	0.026	ppb v/v
Vinyl chloride	0.10	0.066	ug/m3
Xylenes, Total	0.16	0.024	ppb v/v
Xylenes, Total	0.69	0.10	ug/m3

Surrogate Summary

Client: Tetra Tech, Inc.
Project/Site: Middle River - MRC

Job ID: 140-20195-1

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Matrix: Air **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	BFB (60-140)							
140-20195-1	IA-018-A-29	90							
140-20195-2	IA-DUP 3-A-29	90							
140-20195-3	IA-138-A-29	90							
140-20195-4	IA-174-A-29	91							
140-20195-5	IA-093-A-29	90							
140-20195-6	IA-015-A-29	90							
140-20195-7	IA-078-A-29	91							
140-20195-8	IA-076-A-29	90							
140-20195-9	IA-168-A-29	91							
140-20195-10	IA-DUP 4-A-29	92							
140-20195-11	IA-075-A-29	92							
140-20195-12	IA-021-A-29	92							
140-20195-13	IA-136-A-29	91							
140-20195-14	IA-117-A-29	91							
140-20195-15	IA-079-A-29	89							
140-20195-16	IA-118-A-29	90							
140-20195-17	IA-081-A-29	97							
140-20195-18	IA-100-B-29	96							
140-20195-19	IA-101-B-29	96							
LCS 140-42481/1002	Lab Control Sample	100							
LCS 140-42483/1002	Lab Control Sample	99							
MB 140-42481/4	Method Blank	92							
MB 140-42483/4	Method Blank	88							

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Lab Sample ID: MB 140-42481/4
Matrix: Air
Analysis Batch: 42481

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.080	0.0080	ppb v/v			09/05/20 12:59	1
Carbon tetrachloride	ND		0.080	0.0070	ppb v/v			09/05/20 12:59	1
Chlorodifluoromethane	ND		0.080	0.022	ppb v/v			09/05/20 12:59	1
Chloroform	ND		0.080	0.0070	ppb v/v			09/05/20 12:59	1
cis-1,2-Dichloroethene	ND		0.080	0.010	ppb v/v			09/05/20 12:59	1
Dichlorodifluoromethane	ND		0.080	0.014	ppb v/v			09/05/20 12:59	1
1,1-Dichloroethane	ND		0.080	0.0070	ppb v/v			09/05/20 12:59	1
1,2-Dichloroethane	ND		0.080	0.010	ppb v/v			09/05/20 12:59	1
1,1-Dichloroethene	ND		0.080	0.0080	ppb v/v			09/05/20 12:59	1
Ethylbenzene	ND		0.080	0.013	ppb v/v			09/05/20 12:59	1
Methylene Chloride	ND		0.40	0.39	ppb v/v			09/05/20 12:59	1
Methyl tert-butyl ether	ND		0.40	0.052	ppb v/v			09/05/20 12:59	1
Naphthalene	ND		0.040	0.040	ppb v/v			09/05/20 12:59	1
Tetrachloroethene	ND		0.080	0.0070	ppb v/v			09/05/20 12:59	1
Toluene	ND		0.12	0.078	ppb v/v			09/05/20 12:59	1
trans-1,2-Dichloroethene	ND		0.080	0.0070	ppb v/v			09/05/20 12:59	1
1,2,4-Trichlorobenzene	ND		0.080	0.064	ppb v/v			09/05/20 12:59	1
1,1,1-Trichloroethane	ND		0.080	0.037	ppb v/v			09/05/20 12:59	1
1,1,2-Trichloroethane	ND		0.080	0.0070	ppb v/v			09/05/20 12:59	1
Trichloroethene	ND		0.040	0.0060	ppb v/v			09/05/20 12:59	1
1,2,3-Trimethylbenzene	ND		0.080	0.036	ppb v/v			09/05/20 12:59	1
1,2,4-Trimethylbenzene	ND		0.080	0.020	ppb v/v			09/05/20 12:59	1
1,3,5-Trimethylbenzene	ND		0.080	0.022	ppb v/v			09/05/20 12:59	1
Vinyl chloride	ND		0.040	0.026	ppb v/v			09/05/20 12:59	1
Xylenes, Total	ND		0.16	0.024	ppb v/v			09/05/20 12:59	1

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.26	0.026	ug/m3			09/05/20 12:59	1
Carbon tetrachloride	ND		0.50	0.044	ug/m3			09/05/20 12:59	1
Chlorodifluoromethane	ND		0.28	0.078	ug/m3			09/05/20 12:59	1
Chloroform	ND		0.39	0.034	ug/m3			09/05/20 12:59	1
cis-1,2-Dichloroethene	ND		0.32	0.040	ug/m3			09/05/20 12:59	1
Dichlorodifluoromethane	ND		0.40	0.069	ug/m3			09/05/20 12:59	1
1,1-Dichloroethane	ND		0.32	0.028	ug/m3			09/05/20 12:59	1
1,2-Dichloroethane	ND		0.32	0.040	ug/m3			09/05/20 12:59	1
1,1-Dichloroethene	ND		0.32	0.032	ug/m3			09/05/20 12:59	1
Ethylbenzene	ND		0.35	0.056	ug/m3			09/05/20 12:59	1
Methylene Chloride	ND		1.4	1.4	ug/m3			09/05/20 12:59	1
Methyl tert-butyl ether	ND		1.4	0.19	ug/m3			09/05/20 12:59	1
Naphthalene	ND		0.21	0.21	ug/m3			09/05/20 12:59	1
Tetrachloroethene	ND		0.54	0.047	ug/m3			09/05/20 12:59	1
Toluene	ND		0.45	0.29	ug/m3			09/05/20 12:59	1
trans-1,2-Dichloroethene	ND		0.32	0.028	ug/m3			09/05/20 12:59	1
1,2,4-Trichlorobenzene	ND		0.59	0.47	ug/m3			09/05/20 12:59	1
1,1,1-Trichloroethane	ND		0.44	0.20	ug/m3			09/05/20 12:59	1
1,1,2-Trichloroethane	ND		0.44	0.038	ug/m3			09/05/20 12:59	1
Trichloroethene	ND		0.21	0.032	ug/m3			09/05/20 12:59	1
1,2,3-Trimethylbenzene	ND		0.39	0.18	ug/m3			09/05/20 12:59	1

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Lab Sample ID: MB 140-42481/4
Matrix: Air
Analysis Batch: 42481

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.39	0.098	ug/m3			09/05/20 12:59	1
1,3,5-Trimethylbenzene	ND		0.39	0.11	ug/m3			09/05/20 12:59	1
Vinyl chloride	ND		0.10	0.066	ug/m3			09/05/20 12:59	1
Xylenes, Total	ND		0.69	0.10	ug/m3			09/05/20 12:59	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*60 - 140*		*09/05/20 12:59*	*1*

Lab Sample ID: LCS 140-42481/1002
Matrix: Air
Analysis Batch: 42481

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	2.00	1.54		ppb v/v		77	70 - 130
Carbon tetrachloride	2.00	1.79		ppb v/v		89	70 - 130
Chlorodifluoromethane	2.00	1.71		ppb v/v		85	60 - 140
Chloroform	2.00	1.53		ppb v/v		76	70 - 130
cis-1,2-Dichloroethene	2.00	1.67		ppb v/v		83	70 - 130
Dichlorodifluoromethane	2.00	1.56		ppb v/v		78	60 - 140
1,1-Dichloroethane	2.00	1.51		ppb v/v		76	70 - 130
1,2-Dichloroethane	2.00	1.58		ppb v/v		79	70 - 130
1,1-Dichloroethene	2.00	1.56		ppb v/v		78	70 - 130
Ethylbenzene	2.00	1.59		ppb v/v		80	70 - 130
Methylene Chloride	2.00	1.55		ppb v/v		78	70 - 130
Methyl tert-butyl ether	2.00	1.58		ppb v/v		79	60 - 140
Naphthalene	2.00	1.77		ppb v/v		88	60 - 140
Tetrachloroethene	2.00	1.56		ppb v/v		78	70 - 130
Toluene	2.00	1.58		ppb v/v		79	70 - 130
trans-1,2-Dichloroethene	2.00	1.57		ppb v/v		79	70 - 130
1,2,4-Trichlorobenzene	2.00	2.12		ppb v/v		106	60 - 140
1,1,1-Trichloroethane	2.00	1.62		ppb v/v		81	70 - 130
1,1,2-Trichloroethane	2.00	1.44		ppb v/v		72	70 - 130
Trichloroethene	2.00	1.55		ppb v/v		77	70 - 130
1,2,3-Trimethylbenzene	2.00	1.38	*	ppb v/v		69	70 - 130
1,2,4-Trimethylbenzene	2.00	1.64		ppb v/v		82	70 - 130
1,3,5-Trimethylbenzene	2.00	1.98		ppb v/v		99	70 - 130
Vinyl chloride	2.00	1.57		ppb v/v		79	70 - 130
Xylenes, Total	6.00	4.69		ppb v/v		78	70 - 130

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	6.4	4.93		ug/m3		77	70 - 130
Carbon tetrachloride	13	11.3		ug/m3		89	70 - 130
Chlorodifluoromethane	7.1	6.05		ug/m3		85	60 - 140
Chloroform	9.8	7.45		ug/m3		76	70 - 130
cis-1,2-Dichloroethene	7.9	6.62		ug/m3		83	70 - 130
Dichlorodifluoromethane	9.9	7.72		ug/m3		78	60 - 140
1,1-Dichloroethane	8.1	6.11		ug/m3		76	70 - 130

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Lab Sample ID: LCS 140-42481/1002
Matrix: Air
Analysis Batch: 42481

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloroethane	8.1	6.39		ug/m3		79	70 - 130
1,1-Dichloroethene	7.9	6.20		ug/m3		78	70 - 130
Ethylbenzene	8.7	6.91		ug/m3		80	70 - 130
Methylene Chloride	6.9	5.39		ug/m3		78	70 - 130
Methyl tert-butyl ether	7.2	5.70		ug/m3		79	60 - 140
Naphthalene	10	9.26		ug/m3		88	60 - 140
Tetrachloroethene	14	10.6		ug/m3		78	70 - 130
Toluene	7.5	5.95		ug/m3		79	70 - 130
trans-1,2-Dichloroethene	7.9	6.24		ug/m3		79	70 - 130
1,2,4-Trichlorobenzene	15	15.7		ug/m3		106	60 - 140
1,1,1-Trichloroethane	11	8.82		ug/m3		81	70 - 130
1,1,2-Trichloroethane	11	7.86		ug/m3		72	70 - 130
Trichloroethene	11	8.33		ug/m3		77	70 - 130
1,2,3-Trimethylbenzene	9.8	6.79	*	ug/m3		69	70 - 130
1,2,4-Trimethylbenzene	9.8	8.08		ug/m3		82	70 - 130
1,3,5-Trimethylbenzene	9.8	9.72		ug/m3		99	70 - 130
Vinyl chloride	5.1	4.02		ug/m3		79	70 - 130
Xylenes, Total	26	20.4		ug/m3		78	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*60 - 140*

Lab Sample ID: MB 140-42483/4
Matrix: Air
Analysis Batch: 42483

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.080	0.0080	ppb v/v			09/05/20 09:47	1
Carbon tetrachloride	ND		0.080	0.0070	ppb v/v			09/05/20 09:47	1
Chlorodifluoromethane	ND		0.080	0.022	ppb v/v			09/05/20 09:47	1
Chloroform	ND		0.080	0.0070	ppb v/v			09/05/20 09:47	1
cis-1,2-Dichloroethene	ND		0.080	0.010	ppb v/v			09/05/20 09:47	1
Dichlorodifluoromethane	ND		0.080	0.014	ppb v/v			09/05/20 09:47	1
1,1-Dichloroethane	ND		0.080	0.0070	ppb v/v			09/05/20 09:47	1
1,2-Dichloroethane	ND		0.080	0.010	ppb v/v			09/05/20 09:47	1
1,1-Dichloroethene	ND		0.080	0.0080	ppb v/v			09/05/20 09:47	1
Ethylbenzene	ND		0.080	0.013	ppb v/v			09/05/20 09:47	1
Methylene Chloride	ND		0.40	0.39	ppb v/v			09/05/20 09:47	1
Methyl tert-butyl ether	ND		0.40	0.052	ppb v/v			09/05/20 09:47	1
Naphthalene	ND		0.040	0.040	ppb v/v			09/05/20 09:47	1
Tetrachloroethene	ND		0.080	0.0070	ppb v/v			09/05/20 09:47	1
Toluene	ND		0.12	0.078	ppb v/v			09/05/20 09:47	1
trans-1,2-Dichloroethene	ND		0.080	0.0070	ppb v/v			09/05/20 09:47	1
1,2,4-Trichlorobenzene	ND		0.080	0.064	ppb v/v			09/05/20 09:47	1
1,1,1-Trichloroethane	ND		0.080	0.037	ppb v/v			09/05/20 09:47	1
1,1,2-Trichloroethane	ND		0.080	0.0070	ppb v/v			09/05/20 09:47	1
Trichloroethene	ND		0.040	0.0060	ppb v/v			09/05/20 09:47	1

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Lab Sample ID: MB 140-42483/4
Matrix: Air
Analysis Batch: 42483

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trimethylbenzene	ND		0.080	0.036	ppb v/v			09/05/20 09:47	1
1,2,4-Trimethylbenzene	ND		0.080	0.020	ppb v/v			09/05/20 09:47	1
1,3,5-Trimethylbenzene	ND		0.080	0.022	ppb v/v			09/05/20 09:47	1
Vinyl chloride	ND		0.040	0.026	ppb v/v			09/05/20 09:47	1
Xylenes, Total	ND		0.16	0.024	ppb v/v			09/05/20 09:47	1

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.26	0.026	ug/m3			09/05/20 09:47	1
Carbon tetrachloride	ND		0.50	0.044	ug/m3			09/05/20 09:47	1
Chlorodifluoromethane	ND		0.28	0.078	ug/m3			09/05/20 09:47	1
Chloroform	ND		0.39	0.034	ug/m3			09/05/20 09:47	1
cis-1,2-Dichloroethene	ND		0.32	0.040	ug/m3			09/05/20 09:47	1
Dichlorodifluoromethane	ND		0.40	0.069	ug/m3			09/05/20 09:47	1
1,1-Dichloroethane	ND		0.32	0.028	ug/m3			09/05/20 09:47	1
1,2-Dichloroethane	ND		0.32	0.040	ug/m3			09/05/20 09:47	1
1,1-Dichloroethene	ND		0.32	0.032	ug/m3			09/05/20 09:47	1
Ethylbenzene	ND		0.35	0.056	ug/m3			09/05/20 09:47	1
Methylene Chloride	ND		1.4	1.4	ug/m3			09/05/20 09:47	1
Methyl tert-butyl ether	ND		1.4	0.19	ug/m3			09/05/20 09:47	1
Naphthalene	ND		0.21	0.21	ug/m3			09/05/20 09:47	1
Tetrachloroethene	ND		0.54	0.047	ug/m3			09/05/20 09:47	1
Toluene	ND		0.45	0.29	ug/m3			09/05/20 09:47	1
trans-1,2-Dichloroethene	ND		0.32	0.028	ug/m3			09/05/20 09:47	1
1,2,4-Trichlorobenzene	ND		0.59	0.47	ug/m3			09/05/20 09:47	1
1,1,1-Trichloroethane	ND		0.44	0.20	ug/m3			09/05/20 09:47	1
1,1,2-Trichloroethane	ND		0.44	0.038	ug/m3			09/05/20 09:47	1
Trichloroethene	ND		0.21	0.032	ug/m3			09/05/20 09:47	1
1,2,3-Trimethylbenzene	ND		0.39	0.18	ug/m3			09/05/20 09:47	1
1,2,4-Trimethylbenzene	ND		0.39	0.098	ug/m3			09/05/20 09:47	1
1,3,5-Trimethylbenzene	ND		0.39	0.11	ug/m3			09/05/20 09:47	1
Vinyl chloride	ND		0.10	0.066	ug/m3			09/05/20 09:47	1
Xylenes, Total	ND		0.69	0.10	ug/m3			09/05/20 09:47	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*60 - 140*		*09/05/20 09:47*	*1*

Lab Sample ID: LCS 140-42483/1002
Matrix: Air
Analysis Batch: 42483

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	1.60	1.45		ppb v/v		91	70 - 130
Carbon tetrachloride	1.60	1.73		ppb v/v		108	70 - 130
Chlorodifluoromethane	1.60	1.44		ppb v/v		90	60 - 140
Chloroform	1.60	1.50		ppb v/v		93	70 - 130
cis-1,2-Dichloroethene	1.60	1.32		ppb v/v		83	70 - 130
Dichlorodifluoromethane	1.60	2.00		ppb v/v		125	60 - 140

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Lab Sample ID: LCS 140-42483/1002
Matrix: Air
Analysis Batch: 42483

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	1.60	1.50		ppb v/v		94	70 - 130
1,2-Dichloroethane	1.60	1.54		ppb v/v		96	70 - 130
1,1-Dichloroethene	1.60	1.43		ppb v/v		89	70 - 130
Ethylbenzene	1.60	1.39		ppb v/v		87	70 - 130
Methylene Chloride	1.60	1.48		ppb v/v		93	70 - 130
Methyl tert-butyl ether	1.60	1.55		ppb v/v		97	60 - 140
Naphthalene	1.60	1.50		ppb v/v		94	60 - 140
Tetrachloroethene	1.60	1.37		ppb v/v		85	70 - 130
Toluene	1.60	1.33		ppb v/v		83	70 - 130
trans-1,2-Dichloroethene	1.60	1.49		ppb v/v		93	70 - 130
1,2,4-Trichlorobenzene	1.60	1.48		ppb v/v		93	60 - 140
1,1,1-Trichloroethane	1.60	1.52		ppb v/v		95	70 - 130
1,1,2-Trichloroethane	1.60	1.43		ppb v/v		89	70 - 130
Trichloroethene	1.60	1.40		ppb v/v		87	70 - 130
1,2,3-Trimethylbenzene	1.60	1.58		ppb v/v		99	70 - 130
1,2,4-Trimethylbenzene	1.60	1.40		ppb v/v		88	70 - 130
1,3,5-Trimethylbenzene	1.60	1.40		ppb v/v		88	70 - 130
Vinyl chloride	1.60	1.78		ppb v/v		111	70 - 130
Xylenes, Total	4.80	4.09		ppb v/v		85	70 - 130

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	5.1	4.63		ug/m3		91	70 - 130
Carbon tetrachloride	10	10.9		ug/m3		108	70 - 130
Chlorodifluoromethane	5.7	5.10		ug/m3		90	60 - 140
Chloroform	7.8	7.30		ug/m3		93	70 - 130
cis-1,2-Dichloroethene	6.3	5.25		ug/m3		83	70 - 130
Dichlorodifluoromethane	7.9	9.90		ug/m3		125	60 - 140
1,1-Dichloroethane	6.5	6.08		ug/m3		94	70 - 130
1,2-Dichloroethane	6.5	6.23		ug/m3		96	70 - 130
1,1-Dichloroethene	6.3	5.67		ug/m3		89	70 - 130
Ethylbenzene	6.9	6.03		ug/m3		87	70 - 130
Methylene Chloride	5.6	5.15		ug/m3		93	70 - 130
Methyl tert-butyl ether	5.8	5.58		ug/m3		97	60 - 140
Naphthalene	8.4	7.87		ug/m3		94	60 - 140
Tetrachloroethene	11	9.26		ug/m3		85	70 - 130
Toluene	6.0	5.03		ug/m3		83	70 - 130
trans-1,2-Dichloroethene	6.3	5.92		ug/m3		93	70 - 130
1,2,4-Trichlorobenzene	12	11.0		ug/m3		93	60 - 140
1,1,1-Trichloroethane	8.7	8.27		ug/m3		95	70 - 130
1,1,2-Trichloroethane	8.7	7.80		ug/m3		89	70 - 130
Trichloroethene	8.6	7.50		ug/m3		87	70 - 130
1,2,3-Trimethylbenzene	7.9	7.75		ug/m3		99	70 - 130
1,2,4-Trimethylbenzene	7.9	6.90		ug/m3		88	70 - 130
1,3,5-Trimethylbenzene	7.9	6.88		ug/m3		88	70 - 130
Vinyl chloride	4.1	4.55		ug/m3		111	70 - 130
Xylenes, Total	21	17.8		ug/m3		85	70 - 130

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Lab Sample ID: LCS 140-42483/1002
Matrix: Air
Analysis Batch: 42483

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	99		60 - 140

QC Association Summary

Client: Tetra Tech, Inc.
Project/Site: Middle River - MRC

Job ID: 140-20195-1

Air - GC/MS VOA

Analysis Batch: 42481

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-20195-17	IA-081-A-29	Total/NA	Air	TO 15 LL	
140-20195-18	IA-100-B-29	Total/NA	Air	TO 15 LL	
140-20195-19	IA-101-B-29	Total/NA	Air	TO 15 LL	
MB 140-42481/4	Method Blank	Total/NA	Air	TO 15 LL	
LCS 140-42481/1002	Lab Control Sample	Total/NA	Air	TO 15 LL	

Analysis Batch: 42483

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-20195-1	IA-018-A-29	Total/NA	Air	TO 15 LL	
140-20195-2	IA-DUP 3-A-29	Total/NA	Air	TO 15 LL	
140-20195-3	IA-138-A-29	Total/NA	Air	TO 15 LL	
140-20195-4	IA-174-A-29	Total/NA	Air	TO 15 LL	
140-20195-5	IA-093-A-29	Total/NA	Air	TO 15 LL	
140-20195-6	IA-015-A-29	Total/NA	Air	TO 15 LL	
140-20195-7	IA-078-A-29	Total/NA	Air	TO 15 LL	
140-20195-8	IA-076-A-29	Total/NA	Air	TO 15 LL	
140-20195-9	IA-168-A-29	Total/NA	Air	TO 15 LL	
140-20195-10	IA-DUP 4-A-29	Total/NA	Air	TO 15 LL	
140-20195-11	IA-075-A-29	Total/NA	Air	TO 15 LL	
140-20195-12	IA-021-A-29	Total/NA	Air	TO 15 LL	
140-20195-13	IA-136-A-29	Total/NA	Air	TO 15 LL	
140-20195-14	IA-117-A-29	Total/NA	Air	TO 15 LL	
140-20195-15	IA-079-A-29	Total/NA	Air	TO 15 LL	
140-20195-16	IA-118-A-29	Total/NA	Air	TO 15 LL	
MB 140-42483/4	Method Blank	Total/NA	Air	TO 15 LL	
LCS 140-42483/1002	Lab Control Sample	Total/NA	Air	TO 15 LL	

Client Sample ID: IA-018-A-29
Date Collected: 08/26/20 15:38
Date Received: 08/29/20 09:54

Lab Sample ID: 140-20195-1
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1.49	149 mL	500 mL	42483	09/05/20 15:23	HMT	TAL KNX
	Instrument ID: MR									

Client Sample ID: IA-DUP 3-A-29
Date Collected: 08/26/20 00:00
Date Received: 08/29/20 09:54

Lab Sample ID: 140-20195-2
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	100 mL	500 mL	42483	09/05/20 16:12	HMT	TAL KNX
	Instrument ID: MR									

Client Sample ID: IA-138-A-29
Date Collected: 08/26/20 15:40
Date Received: 08/29/20 09:54

Lab Sample ID: 140-20195-3
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	100 mL	500 mL	42483	09/05/20 17:01	HMT	TAL KNX
	Instrument ID: MR									

Client Sample ID: IA-174-A-29
Date Collected: 08/26/20 15:44
Date Received: 08/29/20 09:54

Lab Sample ID: 140-20195-4
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	100 mL	500 mL	42483	09/05/20 17:51	HMT	TAL KNX
	Instrument ID: MR									

Client Sample ID: IA-093-A-29
Date Collected: 08/26/20 15:45
Date Received: 08/29/20 09:54

Lab Sample ID: 140-20195-5
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	100 mL	500 mL	42483	09/05/20 18:41	HMT	TAL KNX
	Instrument ID: MR									

Client Sample ID: IA-015-A-29
Date Collected: 08/26/20 15:50
Date Received: 08/29/20 09:54

Lab Sample ID: 140-20195-6
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	100 mL	500 mL	42483	09/05/20 19:30	HMT	TAL KNX
	Instrument ID: MR									

Client Sample ID: IA-078-A-29 — Lab Sample ID: 140-20195-7

Date Collected: 08/26/20 15:53 — **Matrix: Air**
Date Received: 08/29/20 09:54

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1.45	145 mL	500 mL	42483	09/05/20 20:22	HMT	TAL KNX
	Instrument ID: MR									

Client Sample ID: IA-076-A-29 — Lab Sample ID: 140-20195-8

Date Collected: 08/26/20 15:54 — **Matrix: Air**
Date Received: 08/29/20 09:54

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	100 mL	500 mL	42483	09/05/20 21:13	HMT	TAL KNX
	Instrument ID: MR									

Client Sample ID: IA-168-A-29 — Lab Sample ID: 140-20195-9

Date Collected: 08/26/20 15:56 — **Matrix: Air**
Date Received: 08/29/20 09:54

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	100 mL	500 mL	42483	09/05/20 22:03	HMT	TAL KNX
	Instrument ID: MR									

Client Sample ID: IA-DUP 4-A-29 — Lab Sample ID: 140-20195-10

Date Collected: 08/26/20 00:00 — **Matrix: Air**
Date Received: 08/29/20 09:54

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1.56	156 mL	500 mL	42483	09/05/20 22:54	HMT	TAL KNX
	Instrument ID: MR									

Client Sample ID: IA-075-A-29 — Lab Sample ID: 140-20195-11

Date Collected: 08/26/20 16:02 — **Matrix: Air**
Date Received: 08/29/20 09:54

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	100 mL	500 mL	42483	09/05/20 23:43	HMT	TAL KNX
	Instrument ID: MR									

Client Sample ID: IA-021-A-29 — Lab Sample ID: 140-20195-12

Date Collected: 08/26/20 16:04 — **Matrix: Air**
Date Received: 08/29/20 09:54

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1.41	141 mL	500 mL	42483	09/06/20 00:32	HMT	TAL KNX
	Instrument ID: MR									

Client Sample ID: IA-136-A-29
Date Collected: 08/26/20 16:05
Date Received: 08/29/20 09:54

Lab Sample ID: 140-20195-13
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1.56	156 mL	500 mL	42483	09/06/20 01:20	HMT	TAL KNX
	Instrument ID: MR									

Client Sample ID: IA-117-A-29
Date Collected: 08/26/20 16:07
Date Received: 08/29/20 09:54

Lab Sample ID: 140-20195-14
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	100 mL	500 mL	42483	09/06/20 02:07	HMT	TAL KNX
	Instrument ID: MR									

Client Sample ID: IA-079-A-29
Date Collected: 08/26/20 16:09
Date Received: 08/29/20 09:54

Lab Sample ID: 140-20195-15
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1.45	145 mL	500 mL	42483	09/06/20 02:55	HMT	TAL KNX
	Instrument ID: MR									

Client Sample ID: IA-118-A-29
Date Collected: 08/26/20 16:11
Date Received: 08/29/20 09:54

Lab Sample ID: 140-20195-16
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	100 mL	500 mL	42483	09/06/20 05:18	HMT	TAL KNX
	Instrument ID: MR									

Client Sample ID: IA-081-A-29
Date Collected: 08/26/20 16:15
Date Received: 08/29/20 09:54

Lab Sample ID: 140-20195-17
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	100 mL	500 mL	42481	09/06/20 02:17	HMT	TAL KNX
	Instrument ID: MG									

Client Sample ID: IA-100-B-29
Date Collected: 08/26/20 16:20
Date Received: 08/29/20 09:54

Lab Sample ID: 140-20195-18
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1.65	165 mL	500 mL	42481	09/06/20 03:04	HMT	TAL KNX
	Instrument ID: MG									

Client Sample ID: IA-101-B-29
Date Collected: 08/26/20 16:22
Date Received: 08/29/20 09:54

Lab Sample ID: 140-20195-19
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	100 mL	500 mL	42481	09/06/20 03:49	HMT	TAL KNX
	Instrument ID: MG									

Client Sample ID: Method Blank
Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 140-42481/4
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	500 mL	500 mL	42481	09/05/20 12:59	HMT	TAL KNX
	Instrument ID: MG									

Client Sample ID: Method Blank
Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 140-42483/4
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	500 mL	500 mL	42483	09/05/20 09:47	HMT	TAL KNX
	Instrument ID: MR									

Client Sample ID: Lab Control Sample
Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCS 140-42481/1002
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	500 mL	500 mL	42481	09/05/20 11:32	HMT	TAL KNX
	Instrument ID: MG									

Client Sample ID: Lab Control Sample
Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCS 140-42483/1002
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	500 mL	500 mL	42483	09/05/20 08:28	HMT	TAL KNX
	Instrument ID: MR									

Laboratory References:

TAL KNX = Eurofins TestAmerica, Knoxville, 5815 Middlebrook Pike, Knoxville, TN 37921, TEL (865)291-3000

Method Summary

Client: Tetra Tech, Inc.
Project/Site: Middle River - MRC

Job ID: 140-20195-1

Method	Method Description	Protocol	Laboratory
TO 15 LL	Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)	EPA	TAL KNX

Protocol References:

EPA = US Environmental Protection Agency

Laboratory References:

TAL KNX = Eurofins TestAmerica, Knoxville, 5815 Middlebrook Pike, Knoxville, TN 37921, TEL (865)291-3000

Sample Summary

Client: Tetra Tech, Inc.
Project/Site: Middle River - MRC

Job ID: 140-20195-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
140-20195-1	IA-018-A-29	Air	08/26/20 15:38	08/29/20 09:54	Air Canister (1-Liter) #34002427
140-20195-2	IA-DUP 3-A-29	Air	08/26/20 00:00	08/29/20 09:54	Air Canister (1-Liter) #34000768
140-20195-3	IA-138-A-29	Air	08/26/20 15:40	08/29/20 09:54	Air Canister (1-Liter) #09787
140-20195-4	IA-174-A-29	Air	08/26/20 15:44	08/29/20 09:54	Air Canister (1-Liter) #09632
140-20195-5	IA-093-A-29	Air	08/26/20 15:45	08/29/20 09:54	Air Canister (1-Liter) #11592
140-20195-6	IA-015-A-29	Air	08/26/20 15:50	08/29/20 09:54	Air Canister (1-Liter) #11806
140-20195-7	IA-078-A-29	Air	08/26/20 15:53	08/29/20 09:54	Air Canister (1-Liter) #34002420
140-20195-8	IA-076-A-29	Air	08/26/20 15:54	08/29/20 09:54	Air Canister (1-Liter) #11877
140-20195-9	IA-168-A-29	Air	08/26/20 15:56	08/29/20 09:54	Air Canister (1-Liter) #11840
140-20195-10	IA-DUP 4-A-29	Air	08/26/20 00:00	08/29/20 09:54	Air Canister (1-Liter) #10924
140-20195-11	IA-075-A-29	Air	08/26/20 16:02	08/29/20 09:54	Air Canister (1-Liter) #11858
140-20195-12	IA-021-A-29	Air	08/26/20 16:04	08/29/20 09:54	Air Canister (1-Liter) #10758
140-20195-13	IA-136-A-29	Air	08/26/20 16:05	08/29/20 09:54	Air Canister (1-Liter) #10736
140-20195-14	IA-117-A-29	Air	08/26/20 16:07	08/29/20 09:54	Air Canister (1-Liter) #34001625
140-20195-15	IA-079-A-29	Air	08/26/20 16:09	08/29/20 09:54	Air Canister (1-Liter) #34001971
140-20195-16	IA-118-A-29	Air	08/26/20 16:11	08/29/20 09:54	Air Canister (1-Liter) #10739
140-20195-17	IA-081-A-29	Air	08/26/20 16:15	08/29/20 09:54	Air Canister (1-Liter) #34000687
140-20195-18	IA-100-B-29	Air	08/26/20 16:20	08/29/20 09:54	Air Canister (1-Liter) #11658
140-20195-19	IA-101-B-29	Air	08/26/20 16:22	08/29/20 09:54	Air Canister (1-Liter) #34001187

Method TO15 Low Level

Volatile Organic Compounds - Low level (GC/MS) by Method TO 15

FORM II
AIR - GC/MS VOA SURROGATE RECOVERY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Matrix: Air Level: Low

GC Column (1): RTX-5 ID: 0.32(mm)

Client Sample ID	Lab Sample ID	BFB #
IA-018-A-29	140-20195-1	90
IA-DUP 3-A-29	140-20195-2	90
IA-138-A-29	140-20195-3	90
IA-174-A-29	140-20195-4	91
IA-093-A-29	140-20195-5	90
IA-015-A-29	140-20195-6	90
IA-078-A-29	140-20195-7	91
IA-076-A-29	140-20195-8	90
IA-168-A-29	140-20195-9	91
IA-DUP 4-A-29	140-20195-10	92
IA-075-A-29	140-20195-11	92
IA-021-A-29	140-20195-12	92
IA-136-A-29	140-20195-13	91
IA-117-A-29	140-20195-14	91
IA-079-A-29	140-20195-15	89
IA-118-A-29	140-20195-16	90
IA-081-A-29	140-20195-17	97
IA-100-B-29	140-20195-18	96
IA-101-B-29	140-20195-19	96
	MB 140-42481/4	92
	MB 140-42483/4	88
	LCS 140-42481/1002	100
	LCS 140-42483/1002	99

	QC LIMITS
BFB = 4-Bromofluorobenzene (Surr)	60-140

Column to be used to flag recovery values

FORM II TO 15 LL

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Matrix: Air Level: Low Lab File ID: GLCSI05-LCS.d

Lab ID: LCS 140-42481/1002 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Benzene	2.00	1.54	77	70-130	
Carbon tetrachloride	2.00	1.79	89	70-130	
Chlorodifluoromethane	2.00	1.71	85	60-140	
Chloroform	2.00	1.53	76	70-130	
cis-1,2-Dichloroethene	2.00	1.67	83	70-130	
Dichlorodifluoromethane	2.00	1.56	78	60-140	
1,1-Dichloroethane	2.00	1.51	76	70-130	
1,2-Dichloroethane	2.00	1.58	79	70-130	
1,1-Dichloroethene	2.00	1.56	78	70-130	
Ethylbenzene	2.00	1.59	80	70-130	
Methylene Chloride	2.00	1.55	78	70-130	
Methyl tert-butyl ether	2.00	1.58	79	60-140	
Naphthalene	2.00	1.77	88	60-140	
Tetrachloroethene	2.00	1.56	78	70-130	
Toluene	2.00	1.58	79	70-130	
trans-1,2-Dichloroethene	2.00	1.57	79	70-130	
1,2,4-Trichlorobenzene	2.00	2.12	106	60-140	
1,1,1-Trichloroethane	2.00	1.62	81	70-130	
1,1,2-Trichloroethane	2.00	1.44	72	70-130	
Trichloroethene	2.00	1.55	77	70-130	
1,2,3-Trimethylbenzene	2.00	1.38	69	70-130	*
1,2,4-Trimethylbenzene	2.00	1.64	82	70-130	
1,3,5-Trimethylbenzene	2.00	1.98	99	70-130	
Vinyl chloride	2.00	1.57	79	70-130	
Xylenes, Total	6.00	4.69	78	70-130	

Column to be used to flag recovery and RPD values

FORM III TO 15 LL

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Matrix: Air Level: Low Lab File ID: RCCVI05-LCS.d

Lab ID: LCS 140-42483/1002 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Benzene	1.60	1.45	91	70-130	
Carbon tetrachloride	1.60	1.73	108	70-130	
Chlorodifluoromethane	1.60	1.44	90	60-140	
Chloroform	1.60	1.50	93	70-130	
cis-1,2-Dichloroethene	1.60	1.32	83	70-130	
Dichlorodifluoromethane	1.60	2.00	125	60-140	
1,1-Dichloroethane	1.60	1.50	94	70-130	
1,2-Dichloroethane	1.60	1.54	96	70-130	
1,1-Dichloroethene	1.60	1.43	89	70-130	
Ethylbenzene	1.60	1.39	87	70-130	
Methylene Chloride	1.60	1.48	93	70-130	
Methyl tert-butyl ether	1.60	1.55	97	60-140	
Naphthalene	1.60	1.50	94	60-140	
Tetrachloroethene	1.60	1.37	85	70-130	
Toluene	1.60	1.33	83	70-130	
trans-1,2-Dichloroethene	1.60	1.49	93	70-130	
1,2,4-Trichlorobenzene	1.60	1.48	93	60-140	
1,1,1-Trichloroethane	1.60	1.52	95	70-130	
1,1,2-Trichloroethane	1.60	1.43	89	70-130	
Trichloroethene	1.60	1.40	87	70-130	
1,2,3-Trimethylbenzene	1.60	1.58	99	70-130	
1,2,4-Trimethylbenzene	1.60	1.40	88	70-130	
1,3,5-Trimethylbenzene	1.60	1.40	88	70-130	
Vinyl chloride	1.60	1.78	111	70-130	
Xylenes, Total	4.80	4.09	85	70-130	

Column to be used to flag recovery and RPD values

FORM III TO 15 LL

FORM IV
AIR - GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Lab File ID: G500BI05.D Lab Sample ID: MB 140-42481/4

Matrix: Air Heated Purge:(Y/N) N

Instrument ID: MG Date Analyzed: 09/05/2020 12:59

GC Column: RTX-5 ID: 0.32(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 140-42481/1002	GLCSI05-LCS.d	09/05/2020 11:32
IA-081-A-29	140-20195-17	GI05P113.D	09/06/2020 02:17
IA-100-B-29	140-20195-18	GI05P114.D	09/06/2020 03:04
IA-101-B-29	140-20195-19	GI05P115.D	09/06/2020 03:49

FORM IV
AIR - GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Lab File ID: R500BI05.D Lab Sample ID: MB 140-42483/4

Matrix: Air Heated Purge:(Y/N) N

Instrument ID: MR Date Analyzed: 09/05/2020 09:47

GC Column: RTX-5 ID: 0.32(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 140-42483/1002	RCCVI05-LCS.d	09/05/2020 08:28
IA-018-A-29	140-20195-1	RI05P102.D	09/05/2020 15:23
IA-DUP 3-A-29	140-20195-2	RI05P103.D	09/05/2020 16:12
IA-138-A-29	140-20195-3	RI05P104.D	09/05/2020 17:01
IA-174-A-29	140-20195-4	RI05P105.D	09/05/2020 17:51
IA-093-A-29	140-20195-5	RI05P106.D	09/05/2020 18:41
IA-015-A-29	140-20195-6	RI05P107.D	09/05/2020 19:30
IA-078-A-29	140-20195-7	RI05P108.D	09/05/2020 20:22
IA-076-A-29	140-20195-8	RI05P109.D	09/05/2020 21:13
IA-168-A-29	140-20195-9	RI05P110.D	09/05/2020 22:03
IA-DUP 4-A-29	140-20195-10	RI05P111.D	09/05/2020 22:54
IA-075-A-29	140-20195-11	RI05P112.D	09/05/2020 23:43
IA-021-A-29	140-20195-12	RI05P113.D	09/06/2020 00:32
IA-136-A-29	140-20195-13	RI05P114.D	09/06/2020 01:20
IA-117-A-29	140-20195-14	RI05P115.D	09/06/2020 02:07
IA-079-A-29	140-20195-15	RI05P116.D	09/06/2020 02:55
IA-118-A-29	140-20195-16	RI05P201R.D	09/06/2020 05:18

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Lab File ID: GI01BFB.D BFB Injection Date: 09/01/2020

Instrument ID: MG BFB Injection Time: 16:42

Analysis Batch No.: 42295

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	33.0	
75	30.0 - 60.0 % of mass 95	54.3	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.2	
173	Less than 2.0 % of mass 174	0.3	(0.5) 1
174	Greater than 50% of mass 95	73.8	
175	5.0 - 9.0 % of mass 174	5.3	(7.1) 1
176	95.0 - 101.0 % of mass 174	71.8	(97.2) 1
177	5.0 - 9.0 % of mass 176	4.5	(6.3) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 140-42295/3	GI01IC10.D	09/01/2020	18:07
	IC 140-42295/5	GI01IC09.D	09/01/2020	19:43
	IC 140-42295/7	GI01IC08.D	09/01/2020	21:19
	IC 140-42295/9	GI01IC01.D	09/01/2020	22:55
	IC 140-42295/10	GI01IC02.D	09/01/2020	23:39
	IC 140-42295/11	GI01IC03.D	09/02/2020	0:24
	IC 140-42295/12	GI01IC04.D	09/02/2020	1:08
	IC 140-42295/13	GI01IC05.D	09/02/2020	1:52
	IC 140-42295/14	GI01IC06.D	09/02/2020	2:38
	ICIS 140-42295/15	GI01IC07.D	09/02/2020	3:27
	ICV 140-42295/22	GI01ICVR.D	09/02/2020	8:56

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Lab File ID: GDNUI05S.D BFB Injection Date: 09/05/2020

Instrument ID: MG BFB Injection Time: 10:56

Analysis Batch No.: 42481

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE		
50	15.0 - 40.0 % of mass 95	34.6		
75	30.0 - 60.0 % of mass 95	53.2		
95	Base Peak, 100% relative abundance	100.0		
96	5.0 - 9.0 % of mass 95	6.3		
173	Less than 2.0 % of mass 174	0.5	(0.5) 1	
174	Greater than 50% of mass 95	92.2		
175	5.0 - 9.0 % of mass 174	6.3	(6.8) 1	
176	95.0 - 101.0 % of mass 174	87.1	(94.5) 1	*
177	5.0 - 9.0 % of mass 176	5.8	(6.7) 2	

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 140-42481/2	GLCSI05.D	09/05/2020	11:32
	LCS 140-42481/1002	GLCSI05-LCS.d	09/05/2020	11:32
	MB 140-42481/4	G500BI05.D	09/05/2020	12:59
IA-081-A-29	140-20195-17	GI05P113.D	09/06/2020	2:17
IA-100-B-29	140-20195-18	GI05P114.D	09/06/2020	3:04
IA-101-B-29	140-20195-19	GI05P115.D	09/06/2020	3:49

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Lab File ID: RH287BLK2.D BFB Injection Date: 08/28/2020

Instrument ID: MR BFB Injection Time: 12:43

Analysis Batch No.: 42222

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	22.7	
75	30.0 - 60.0 % of mass 95	48.7	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.9	
173	Less than 2.0 % of mass 174	0.7	(0.6) 1
174	Greater than 50% of mass 95	103.7	
175	5.0 - 9.0 % of mass 174	7.5	(7.2) 1
176	95.0 - 101.0 % of mass 174	102.5	(98.8) 1
177	5.0 - 9.0 % of mass 176	6.5	(6.4) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 140-42222/3	RH28IC10X.D	08/28/2020	14:01
	IC 140-42222/5	RH28IC09.D	08/28/2020	15:43
	IC 140-42222/7	RH28IC08.D	08/28/2020	17:27
	IC 140-42222/9	RH28IC01.D	08/28/2020	19:11
	IC 140-42222/10	RH28IC02.D	08/28/2020	20:00
	IC 140-42222/11	RH28IC03.D	08/28/2020	20:50
	IC 140-42222/12	RH28IC04.D	08/28/2020	21:38
	IC 140-42222/13	RH28IC05.D	08/28/2020	22:26
	IC 140-42222/14	RH28IC06.D	08/28/2020	23:14
	ICIS 140-42222/15	RH28IC07.D	08/29/2020	0:02
	ICV 140-42222/17	RH28ICV.D	08/29/2020	1:37

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Lab File ID: RBFBI05.D BFB Injection Date: 09/05/2020

Instrument ID: MR BFB Injection Time: 08:00

Analysis Batch No.: 42483

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	28.8	
75	30.0 - 60.0 % of mass 95	58.0	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.4	
173	Less than 2.0 % of mass 174	1.2	(1.0) 1
174	Greater than 50% of mass 95	117.0	
175	5.0 - 9.0 % of mass 174	9.6	(8.2) 1
176	95.0 - 101.0 % of mass 174	111.8	(95.5) 1
177	5.0 - 9.0 % of mass 176	7.7	(6.9) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 140-42483/2	RCCVI05.D	09/05/2020	8:28
	LCS 140-42483/1002	RCCVI05-LCS.d	09/05/2020	8:28
	MB 140-42483/4	R500BI05.D	09/05/2020	9:47
IA-018-A-29	140-20195-1	RI05P102.D	09/05/2020	15:23
IA-DUP 3-A-29	140-20195-2	RI05P103.D	09/05/2020	16:12
IA-138-A-29	140-20195-3	RI05P104.D	09/05/2020	17:01
IA-174-A-29	140-20195-4	RI05P105.D	09/05/2020	17:51
IA-093-A-29	140-20195-5	RI05P106.D	09/05/2020	18:41
IA-015-A-29	140-20195-6	RI05P107.D	09/05/2020	19:30
IA-078-A-29	140-20195-7	RI05P108.D	09/05/2020	20:22
IA-076-A-29	140-20195-8	RI05P109.D	09/05/2020	21:13
IA-168-A-29	140-20195-9	RI05P110.D	09/05/2020	22:03
IA-DUP 4-A-29	140-20195-10	RI05P111.D	09/05/2020	22:54
IA-075-A-29	140-20195-11	RI05P112.D	09/05/2020	23:43
IA-021-A-29	140-20195-12	RI05P113.D	09/06/2020	0:32
IA-136-A-29	140-20195-13	RI05P114.D	09/06/2020	1:20
IA-117-A-29	140-20195-14	RI05P115.D	09/06/2020	2:07
IA-079-A-29	140-20195-15	RI05P116.D	09/06/2020	2:55
IA-118-A-29	140-20195-16	RI05P201R.D	09/06/2020	5:18

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Sample No.: ICIS 140-42295/15 Date Analyzed: 09/02/2020 03:27

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm)

Lab File ID (Standard): GI01IC07.D Heated Purge: (Y/N) N

Calibration ID: 2602

		CBM		DFBZ		CBZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		155264	8.81	774405	11.00	759403	15.73
UPPER LIMIT		217370	9.14	1084167	11.33	1063164	16.06
LOWER LIMIT		93158	8.48	464643	10.67	455642	15.40
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 140-42295/22		147601	8.81	795164	11.00	773847	15.73

CBM = Chlorobromomethane (IS)
DFBZ = 1,4-Difluorobenzene
CBZd5 = Chlorobenzene-d5 (IS)

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO 15 LL

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Sample No.: CCVIS 140-42481/2 Date Analyzed: 09/05/2020 11:32

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm)

Lab File ID (Standard): GLCSI05.D Heated Purge: (Y/N) N

Calibration ID: 2602

		CBM		DFBZ		CBZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		124564	8.81	616523	11.00	638191	15.73
UPPER LIMIT		174390	9.14	863132	11.33	893467	16.06
LOWER LIMIT		74738	8.48	369914	10.67	382915	15.40
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 140-42481/1002		124564	8.81	616523	11.00	638191	15.73
MB 140-42481/4		122815	8.81	628785	11.00	639792	15.73
140-20195-17	IA-081-A-29	107463	8.81	539058	10.99	565024	15.73
140-20195-18	IA-100-B-29	117891	8.82	630852	11.00	606486	15.73
140-20195-19	IA-101-B-29	114518	8.81	603696	10.99	566349	15.72

CBM = Chlorobromomethane (IS)
DFBZ = 1,4-Difluorobenzene
CBZd5 = Chlorobenzene-d5 (IS)

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO 15 LL

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Sample No.: ICIS 140-42222/15 Date Analyzed: 08/29/2020 00:02

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm)

Lab File ID (Standard): RH28IC07.D Heated Purge: (Y/N) N

Calibration ID: 2588

		CBM		DFBZ		CBZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		235543	8.28	1153917	10.52	934834	15.36
UPPER LIMIT		329760	8.61	1615484	10.85	1308768	15.69
LOWER LIMIT		141326	7.95	692350	10.19	560900	15.03
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 140-42222/17		241131	8.29	1181864	10.52	954759	15.35

CBM = Chlorobromomethane (IS)
DFBZ = 1,4-Difluorobenzene
CBZd5 = Chlorobenzene-d5 (IS)

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO 15 LL

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Sample No.: CCVIS 140-42483/2 Date Analyzed: 09/05/2020 08:28

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm)

Lab File ID (Standard): RCCVI05.D Heated Purge: (Y/N) N

Calibration ID: 2588

		CBM		DFBZ		CBZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		138971	8.27	675656	10.51	548163	15.35
UPPER LIMIT		194559	8.60	945918	10.84	767428	15.68
LOWER LIMIT		83383	7.94	405394	10.18	328898	15.02
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 140-42483/1002		138971	8.27	675656	10.51	548163	15.35
MB 140-42483/4		137464	8.26	704230	10.51	562616	15.35
140-20195-1	IA-018-A-29	142488	8.27	690411	10.51	545335	15.35
140-20195-2	IA-DUP 3-A-29	141948	8.28	668760	10.51	526086	15.35
140-20195-3	IA-138-A-29	133220	8.27	653842	10.51	516172	15.35
140-20195-4	IA-174-A-29	134846	8.29	652657	10.52	511185	15.35
140-20195-5	IA-093-A-29	132296	8.28	639048	10.52	479222	15.35
140-20195-6	IA-015-A-29	135896	8.29	636148	10.52	492742	15.35
140-20195-7	IA-078-A-29	141348	8.29	667030	10.51	520905	15.35
140-20195-8	IA-076-A-29	139497	8.30	625841	10.52	490797	15.35
140-20195-9	IA-168-A-29	141988	8.29	641407	10.51	506013	15.35
140-20195-10	IA-DUP 4-A-29	140683	8.30	639276	10.51	496411	15.35
140-20195-11	IA-075-A-29	141067	8.32	661658	10.53	526300	15.35
140-20195-12	IA-021-A-29	143499	8.28	664938	10.51	515854	15.35
140-20195-13	IA-136-A-29	145585	8.28	680058	10.51	539351	15.35
140-20195-14	IA-117-A-29	139794	8.27	666342	10.50	535053	15.35
140-20195-15	IA-079-A-29	137279	8.27	641931	10.50	515232	15.35
140-20195-16	IA-118-A-29	135275	8.29	632484	10.51	510854	15.35

CBM = Chlorobromomethane (IS)
DFBZ = 1,4-Difluorobenzene
CBZd5 = Chlorobenzene-d5 (IS)

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO 15 LL

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Client Sample ID: IA-018-A-29 Lab Sample ID: 140-20195-1

Matrix: Air Lab File ID: RI05P102.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 15:38

Sample wt/vol: 149(mL) Date Analyzed: 09/05/2020 15:23

Soil Aliquot Vol: Dilution Factor: 1.49

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42483 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.16	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.087	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	0.33	J	0.40	0.11
67-66-3	Chloroform	119.38	3.9		0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	0.12	J	0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.34	J	0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	0.31	J	0.40	0.040
100-41-4	Ethylbenzene	106.17	ND		0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	0.23		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.035
108-88-3	Toluene	92.14	ND		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	1.1		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	ND		0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	90		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Client Sample ID: IA-018-A-29 Lab Sample ID: 140-20195-1

Matrix: Air Lab File ID: RI05P102.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 15:38

Sample wt/vol: 149(mL) Date Analyzed: 09/05/2020 15:23

Soil Aliquot Vol: Dilution Factor: 1.49

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42483 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.51	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.55	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	1.2	J	1.4	0.39
67-66-3	Chloroform	119.38	19		2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	0.49	J	1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	1.7	J	2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	1.2	J	1.6	0.16
100-41-4	Ethylbenzene	106.17	ND		1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	1.2		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.24
108-88-3	Toluene	92.14	ND		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	5.8		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	ND		3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	90		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P102.D				
Lims ID:	140-20195-A-1				
Client ID:	IA-018-A-29				
Sample Type:	Client				
Inject. Date:	05-Sep-2020 15:23:30	ALS Bottle#:	2	Worklist Smp#:	8
Purge Vol:	500.000 mL	Dil. Factor:	1.4900		
Sample Info:	140-0016508-008				
Misc. Info.:	140-20195-a-1@1.49				
Operator ID:	HMT	Instrument ID:	MR		
Method:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\MR_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	06-Sep-2020 07:11:26	Calib Date:	29-Aug-2020 00:02:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1023				
First Level Reviewer: tajh		Date:	06-Sep-2020 07:02:42		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.274	8.274	0.000	95	142488	4.80	
* 2 1,4-Difluorobenzene	114	10.507	10.512	-0.005	94	690411	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.349	15.349	0.000	87	545335	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	16.999	16.999	0.000	93	306056	4.20	
6 Chlorodifluoromethane	51	3.329	3.329	0.000	66	5242	0.0657	
8 Dichlorodifluoromethane	85	3.394	3.383	0.011	91	4099	0.0685	
27 1,1-Dichloroethene	96	5.422	5.416	0.006	80	2595	0.0616	
42 cis-1,2-Dichloroethene	96	7.951	7.940	0.011	12	1125	0.0249	
44 Chloroform	83	8.285	8.285	0.000	46	67518	0.7874	
47 1,1,1-Trichloroethane	97	9.320	9.309	0.011	1	1718	0.0210	
51 Benzene	78	9.913	9.924	-0.011	38	3825	0.0317	
52 Carbon tetrachloride	117	9.946	9.946	0.000	47	1355	0.0174	
58 Trichloroethene	130	11.240	11.240	0.000	92	12930	0.2156	
67 Toluene	91	13.354	13.354	0.000	94	10965	0.0747	
109 Naphthalene	128	20.790	20.790	0.000	97	10173	0.0465	

Reagents:

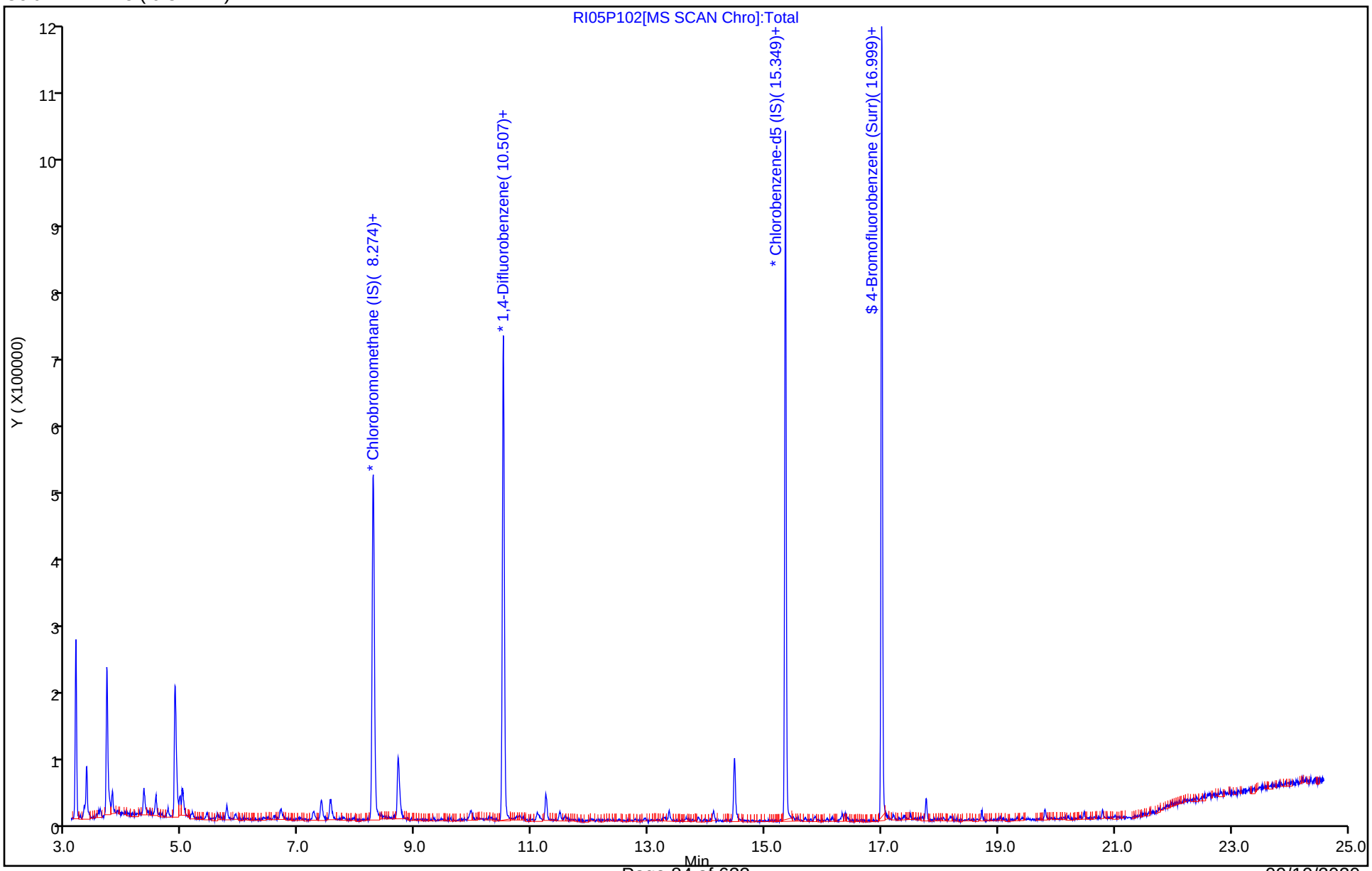
40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

Report Date: 06-Sep-2020 07:11:37 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P102.D				
Injection Date:	05-Sep-2020 15:23:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	140-20195-A-1	Lab Sample ID:	140-20195-1	Worklist Smp#:	8
Client ID:	IA-018-A-29				
Purge Vol:	500.000 mL	Dil. Factor:	1.4900	ALS Bottle#:	2
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P102.D				
Lims ID:	140-20195-A-1				
Client ID:	IA-018-A-29				
Sample Type:	Client				
Inject. Date:	05-Sep-2020 15:23:30	ALS Bottle#:	2	Worklist Smp#:	8
Purge Vol:	500.000 mL	Dil. Factor:	1.4900		
Sample Info:	140-0016508-008				
Misc. Info.:	140-20195-a-1@1.49				
Operator ID:	HMT	Instrument ID:	MR		
Method:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\MR_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	06-Sep-2020 07:11:26	Calib Date:	29-Aug-2020 00:02:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1023				
First Level Reviewer: tajh		Date:	06-Sep-2020 07:02:42		

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	4.20	90.47

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P102.D

Injection Date: 05-Sep-2020 15:23:30 Instrument ID: MR

Lims ID: 140-20195-A-1 Lab Sample ID: 140-20195-1

Client ID: IA-018-A-29

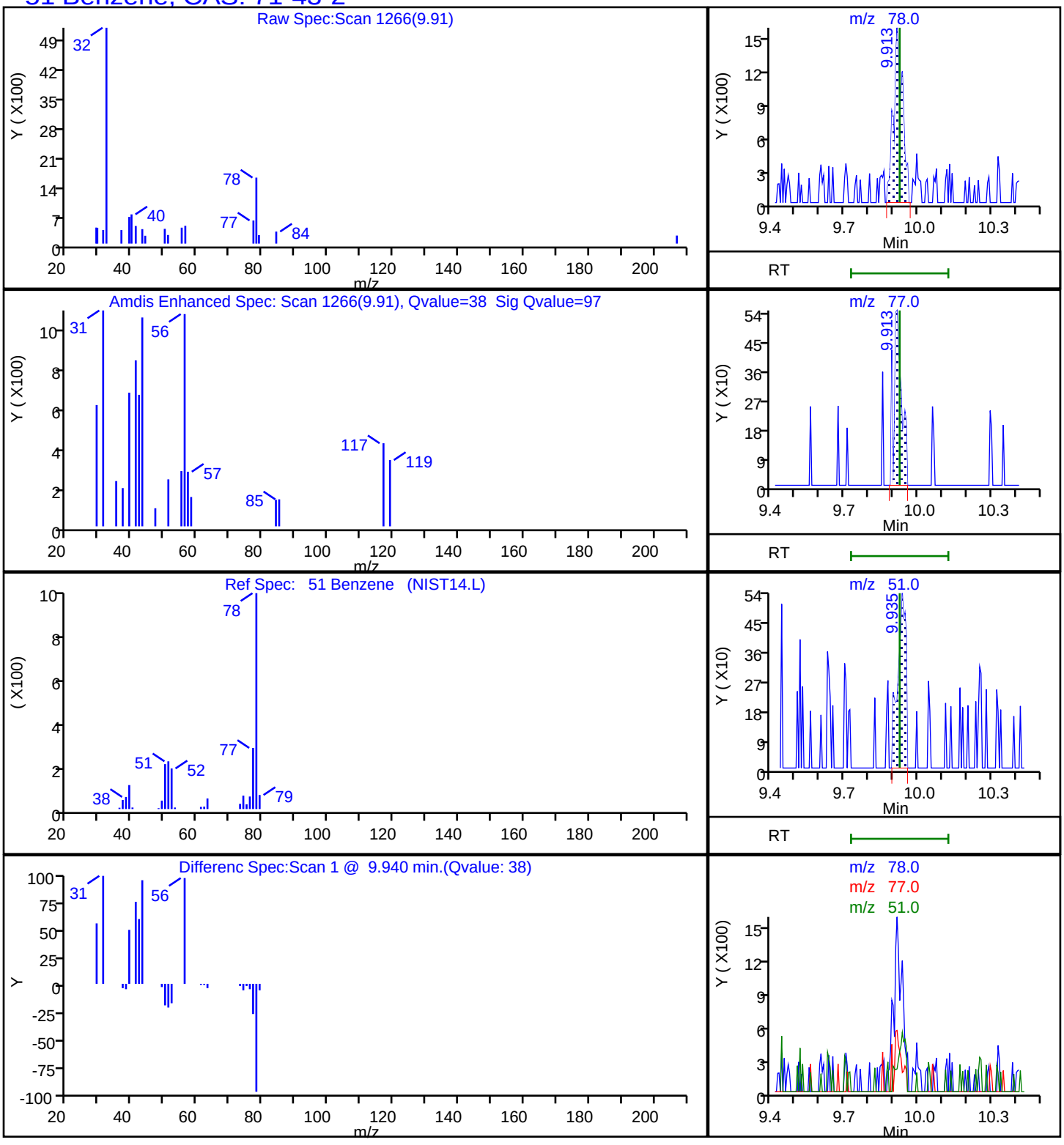
Operator ID: HMT ALS Bottle#: 2 Worklist Smp#: 8

Purge Vol: 500.000 mL Dil. Factor: 1.4900

Method: MR_TO15 Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm) Detector MS SCAN

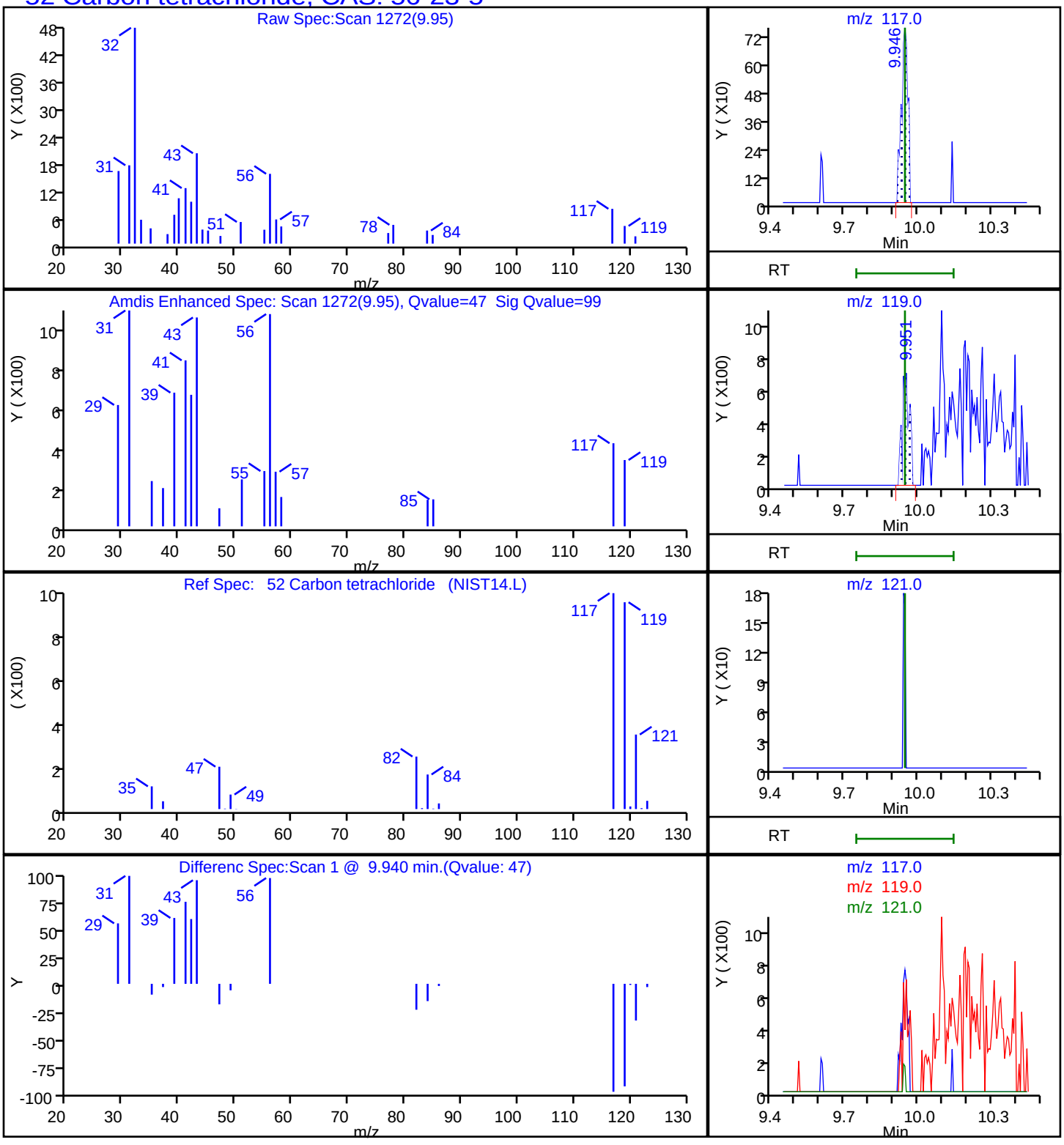
51 Benzene, CAS: 71-43-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P102.D		
Injection Date:	05-Sep-2020 15:23:30	Instrument ID:	MR
Lims ID:	140-20195-A-1	Lab Sample ID:	140-20195-1
Client ID:	IA-018-A-29		
Operator ID:	HMT	ALS Bottle#:	2 Worklist Smp#: 8
Purge Vol:	500.000 mL	Dil. Factor:	1.4900
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

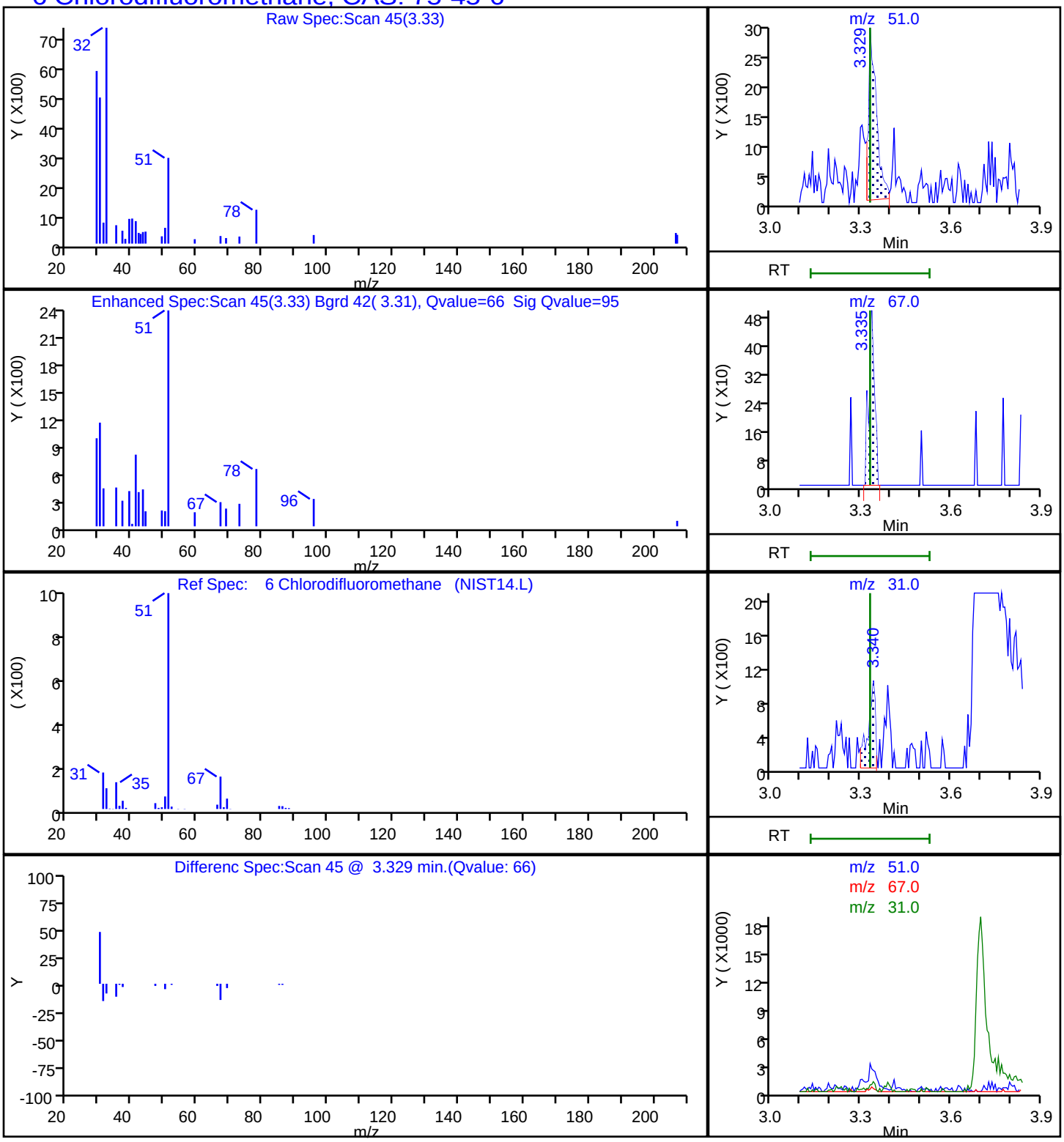
52 Carbon tetrachloride, CAS: 56-23-5



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P102.D				
Injection Date:	05-Sep-2020 15:23:30	Instrument ID:	MR		
Lims ID:	140-20195-A-1	Lab Sample ID:	140-20195-1		
Client ID:	IA-018-A-29				
Operator ID:	HMT	ALS Bottle#:	2	Worklist Smp#:	8
Purge Vol:	500.000 mL	Dil. Factor:	1.4900		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

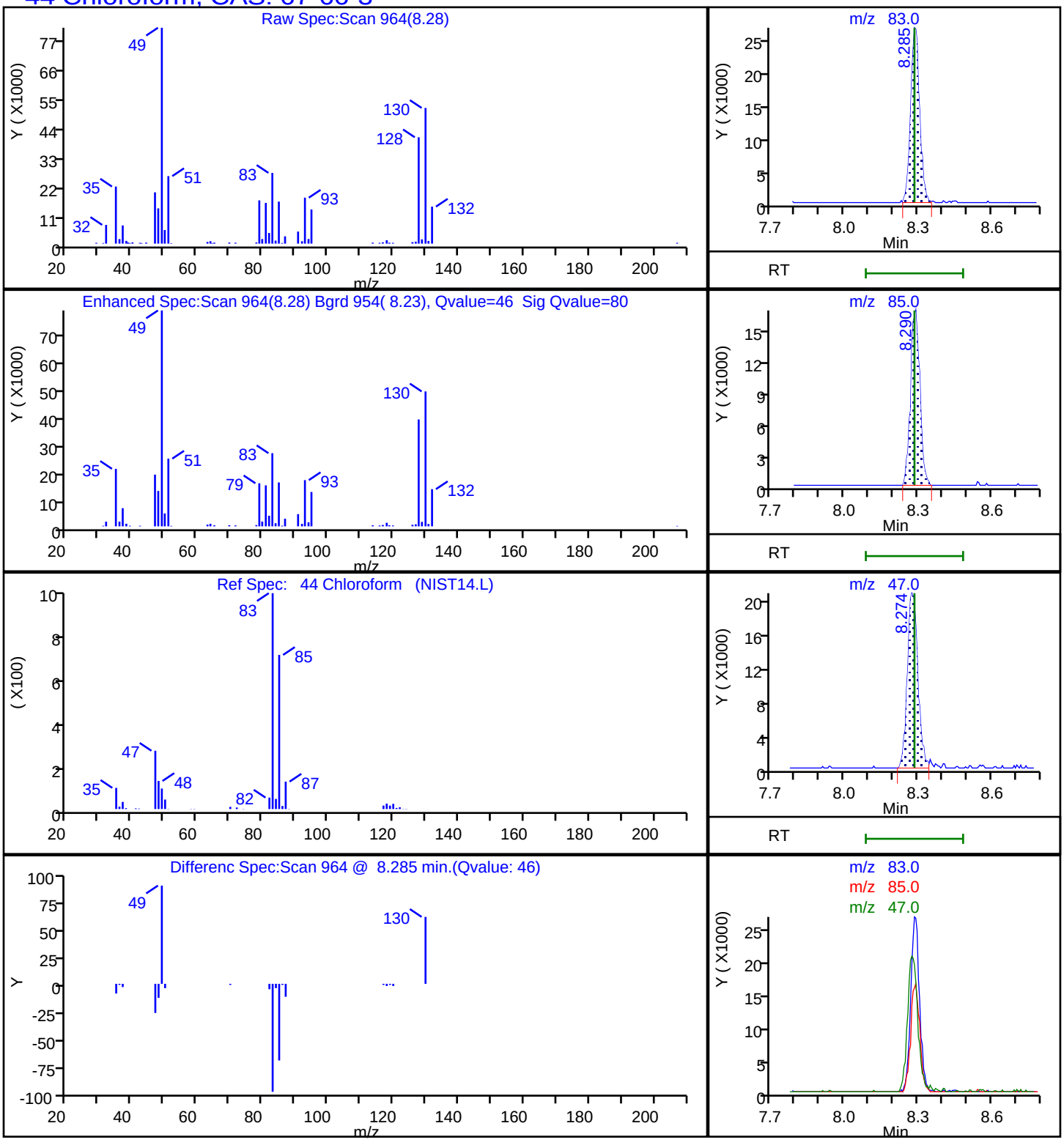
6 Chlorodifluoromethane, CAS: 75-45-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P102.D		
Injection Date:	05-Sep-2020 15:23:30	Instrument ID:	MR
Lims ID:	140-20195-A-1	Lab Sample ID:	140-20195-1
Client ID:	IA-018-A-29		
Operator ID:	HMT	ALS Bottle#:	2 Worklist Smp#: 8
Purge Vol:	500.000 mL	Dil. Factor:	1.4900
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

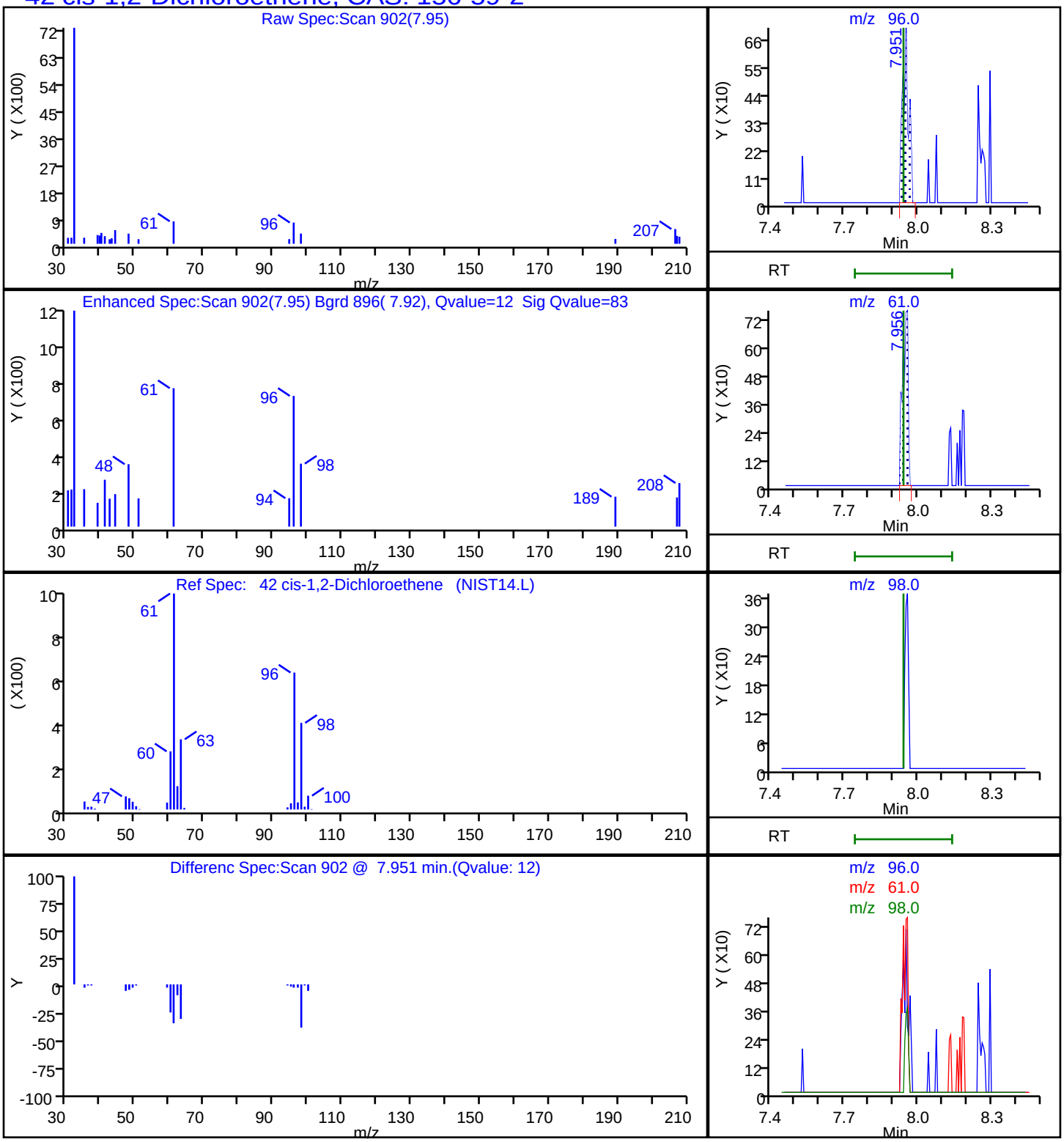
44 Chloroform, CAS: 67-66-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P102.D				
Injection Date:	05-Sep-2020 15:23:30	Instrument ID:	MR		
Lims ID:	140-20195-A-1	Lab Sample ID:	140-20195-1		
Client ID:	IA-018-A-29				
Operator ID:	HMT	ALS Bottle#:	2	Worklist Smp#:	8
Purge Vol:	500.000 mL	Dil. Factor:	1.4900		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

42 cis-1,2-Dichloroethene, CAS: 156-59-2

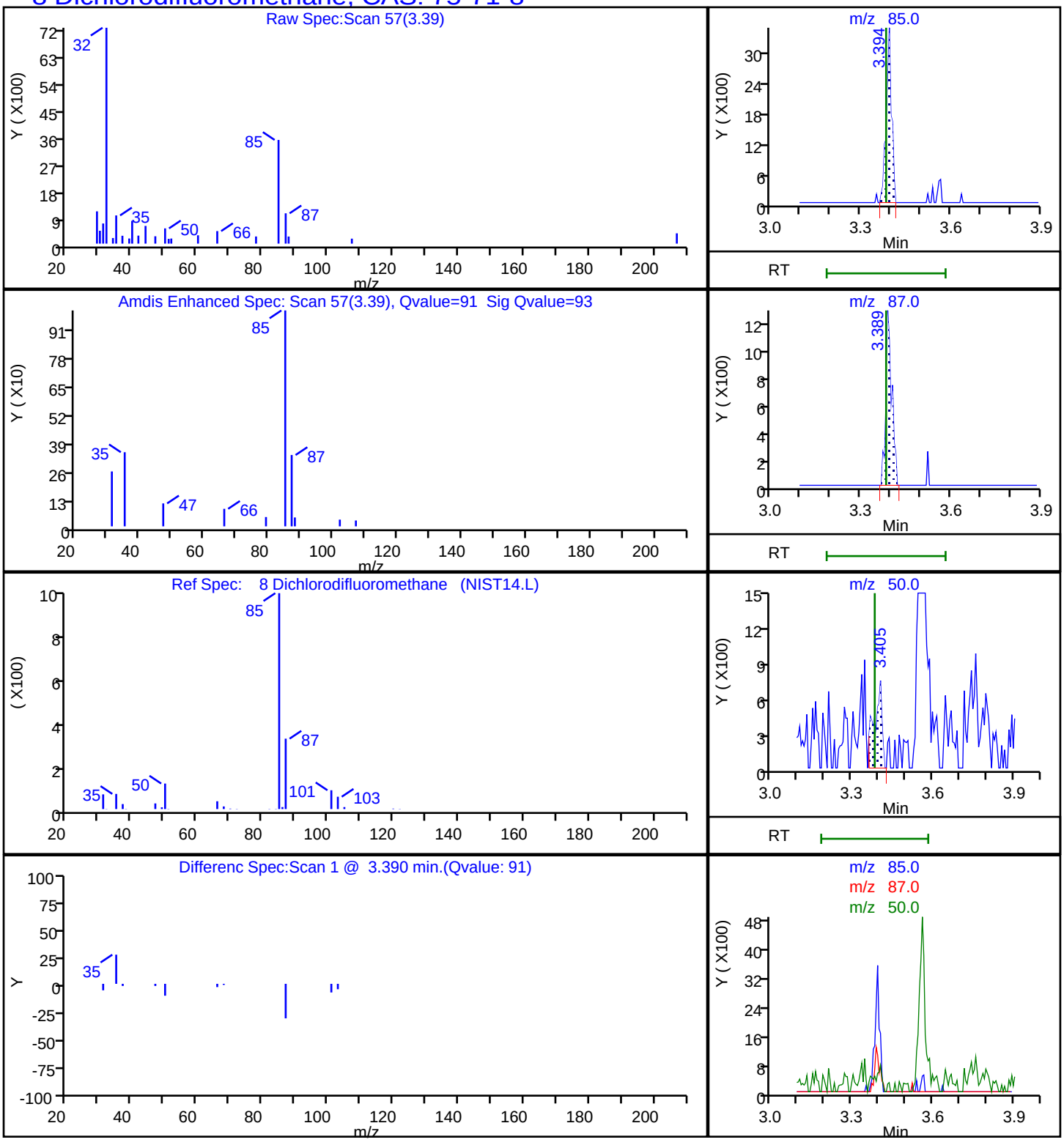


Report Date: 06-Sep-2020 07:11:37 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P102.D				
Injection Date:	05-Sep-2020 15:23:30	Instrument ID:	MR		
Lims ID:	140-20195-A-1	Lab Sample ID:	140-20195-1		
Client ID:	IA-018-A-29				
Operator ID:	HMT	ALS Bottle#:	2	Worklist Smp#:	8
Purge Vol:	500.000 mL	Dil. Factor:	1.4900		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

8 Dichlorodifluoromethane, CAS: 75-71-8



Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P102.D

Injection Date: 05-Sep-2020 15:23:30 Instrument ID: MR

Lims ID: 140-20195-A-1 Lab Sample ID: 140-20195-1

Client ID: IA-018-A-29

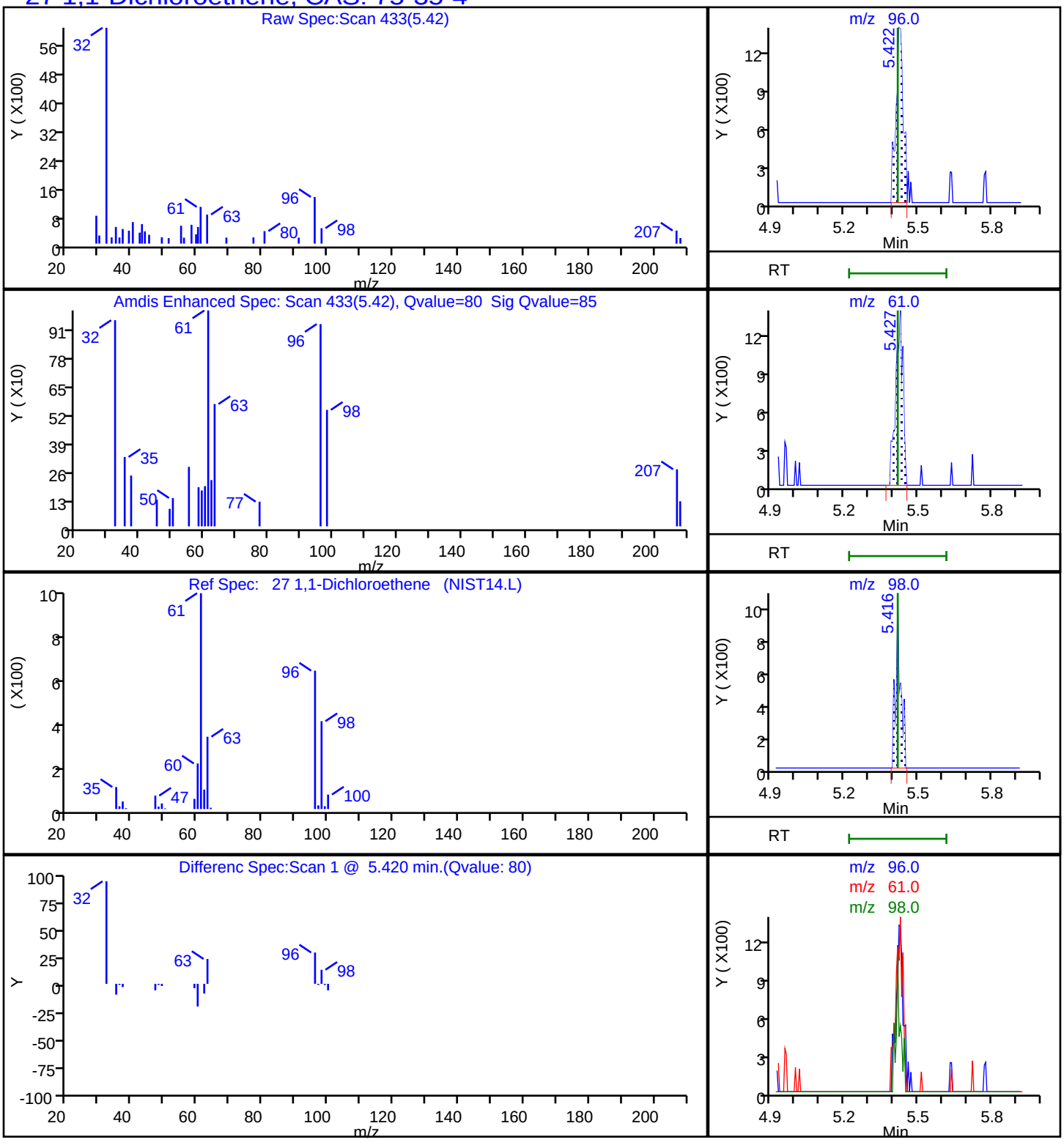
Operator ID: HMT ALS Bottle#: 2 Worklist Smp#: 8

Purge Vol: 500.000 mL Dil. Factor: 1.4900

Method: MR_TO15 Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm) Detector MS SCAN

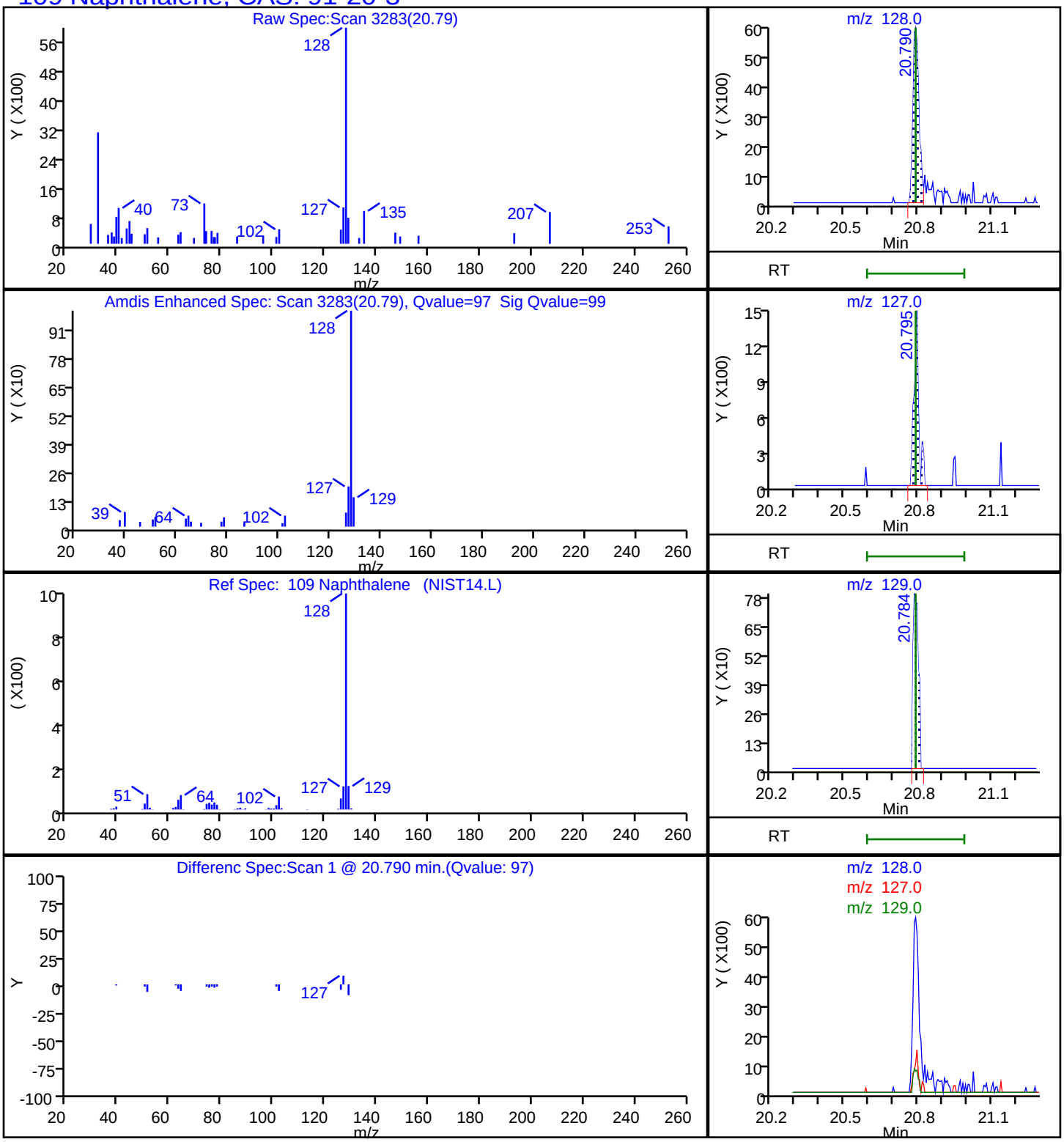
27 1,1-Dichloroethene, CAS: 75-35-4



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P102.D		
Injection Date:	05-Sep-2020 15:23:30	Instrument ID:	MR
Lims ID:	140-20195-A-1	Lab Sample ID:	140-20195-1
Client ID:	IA-018-A-29		
Operator ID:	HMT	ALS Bottle#:	2 Worklist Smp#: 8
Purge Vol:	500.000 mL	Dil. Factor:	1.4900
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

109 Naphthalene, CAS: 91-20-3

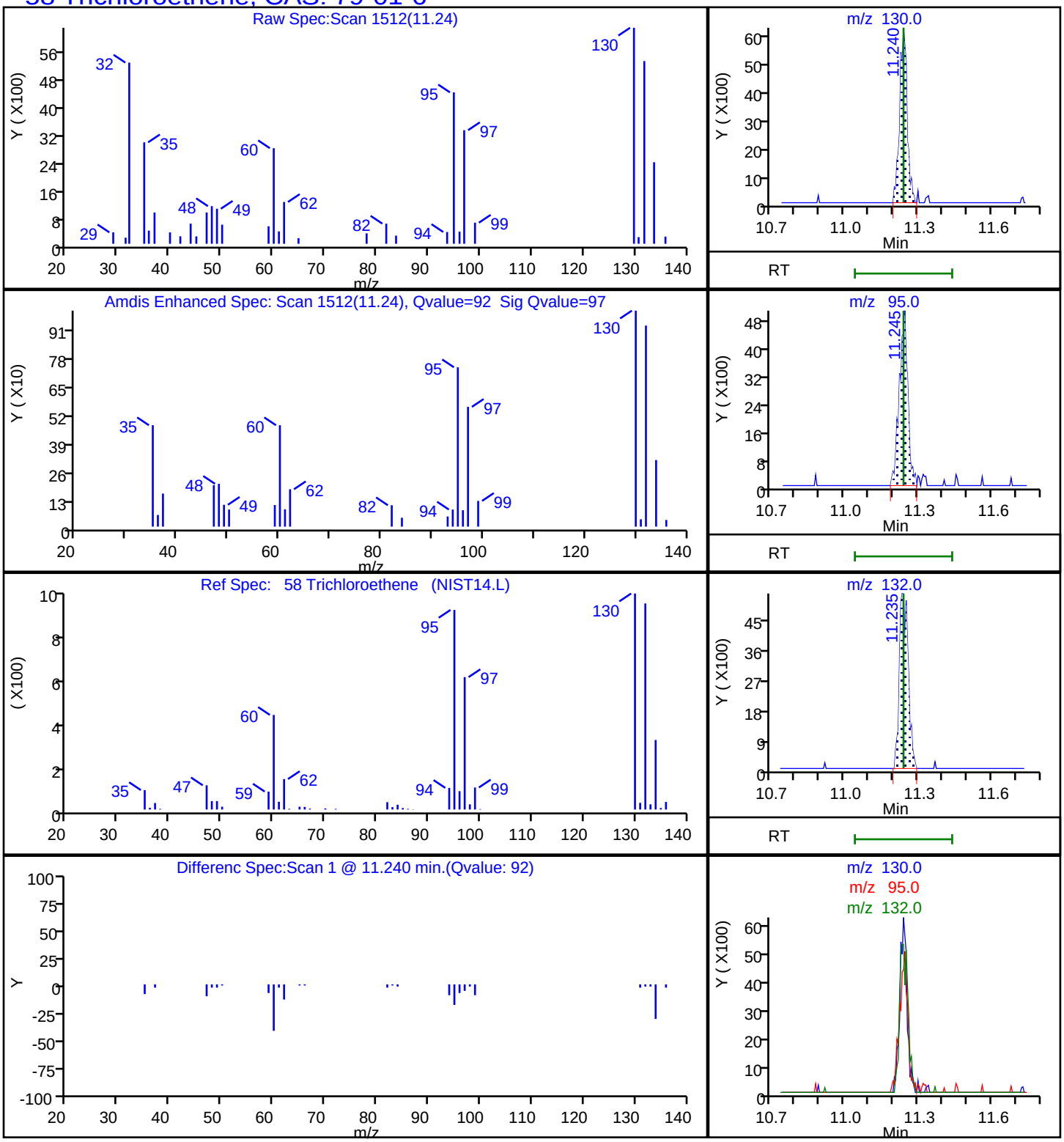


Report Date: 06-Sep-2020 07:11:37 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P102.D				
Injection Date:	05-Sep-2020 15:23:30	Instrument ID:	MR		
Lims ID:	140-20195-A-1	Lab Sample ID:	140-20195-1		
Client ID:	IA-018-A-29				
Operator ID:	HMT	ALS Bottle#:	2	Worklist Smp#:	8
Purge Vol:	500.000 mL	Dil. Factor:	1.4900		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

58 Trichloroethene, CAS: 79-01-6



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Client Sample ID: IA-DUP 3-A-29 Lab Sample ID: 140-20195-2

Matrix: Air Lab File ID: RI05P103.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 00:00

Sample wt/vol: 100(mL) Date Analyzed: 09/05/2020 16:12

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42483 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.13	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.064	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	0.32	J	0.40	0.11
67-66-3	Chloroform	119.38	4.1		0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.35	J	0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	0.31	J	0.40	0.040
100-41-4	Ethylbenzene	106.17	ND		0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	0.49		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.035
108-88-3	Toluene	92.14	0.46	J	0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	1.1		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	ND		0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	90		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Client Sample ID: IA-DUP 3-A-29 Lab Sample ID: 140-20195-2

Matrix: Air Lab File ID: RI05P103.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 00:00

Sample wt/vol: 100(mL) Date Analyzed: 09/05/2020 16:12

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42483 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.43	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.40	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	1.1	J	1.4	0.39
67-66-3	Chloroform	119.38	20		2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	1.7	J	2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	1.2	J	1.6	0.16
100-41-4	Ethylbenzene	106.17	ND		1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	2.6		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.24
108-88-3	Toluene	92.14	1.7	J	2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	5.8		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	ND		3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	90		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P103.D				
Lims ID:	140-20195-A-2				
Client ID:	IA-DUP 3-A-29				
Sample Type:	Client				
Inject. Date:	05-Sep-2020 16:12:30	ALS Bottle#:	3	Worklist Smp#:	9
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016508-009				
Misc. Info.:	140-20195-a-2				
Operator ID:	HMT	Instrument ID:	MR		
Method:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\MR_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	06-Sep-2020 07:11:26	Calib Date:	29-Aug-2020 00:02:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1023				
First Level Reviewer: tajh		Date:	06-Sep-2020 07:03:43		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.280	8.274	0.006	95	141948	4.80	
* 2 1,4-Difluorobenzene	114	10.512	10.512	0.000	94	668760	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.349	15.349	0.000	88	526086	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	16.999	16.999	0.000	93	293149	4.17	
6 Chlorodifluoromethane	51	3.346	3.329	0.017	96	5050	0.0636	
8 Dichlorodifluoromethane	85	3.400	3.383	0.017	95	4172	0.0699	
27 1,1-Dichloroethene	96	5.427	5.416	0.011	52	2586	0.0617	
44 Chloroform	83	8.291	8.285	0.006	93	70785	0.8286	
47 1,1,1-Trichloroethane	97	9.315	9.309	0.006	0	1171	0.0144	
51 Benzene	78	9.919	9.924	-0.005	6	3153	0.0270	
52 Carbon tetrachloride	117	9.946	9.946	0.000	38	970	0.0129	
58 Trichloroethene	130	11.246	11.240	0.006	92	12591	0.2167	
67 Toluene	91	13.359	13.354	0.005	90	13101	0.0925	
109 Naphthalene	128	20.790	20.790	0.000	97	20768	0.0984	

Reagents:

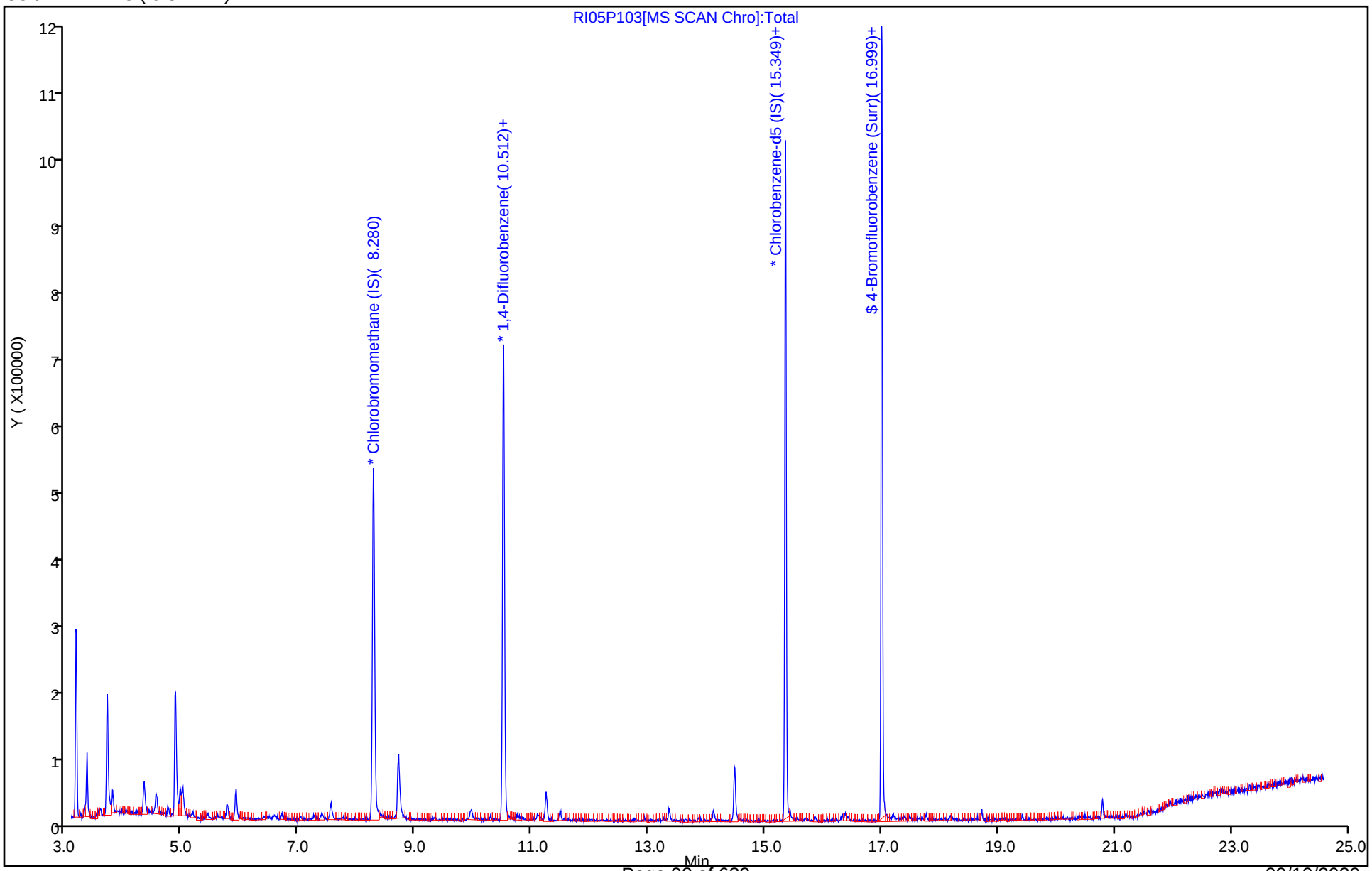
40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

Report Date: 06-Sep-2020 07:11:38 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P103.D				
Injection Date:	05-Sep-2020 16:12:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	140-20195-A-2	Lab Sample ID:	140-20195-2	Worklist Smp#:	9
Client ID:	IA-DUP 3-A-29				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P103.D				
Lims ID:	140-20195-A-2				
Client ID:	IA-DUP 3-A-29				
Sample Type:	Client				
Inject. Date:	05-Sep-2020 16:12:30	ALS Bottle#:	3	Worklist Smp#:	9
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016508-009				
Misc. Info.:	140-20195-a-2				
Operator ID:	HMT	Instrument ID:	MR		
Method:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\MR_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	06-Sep-2020 07:11:26	Calib Date:	29-Aug-2020 00:02:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1023				
First Level Reviewer: tajh		Date:	06-Sep-2020 07:03:43		

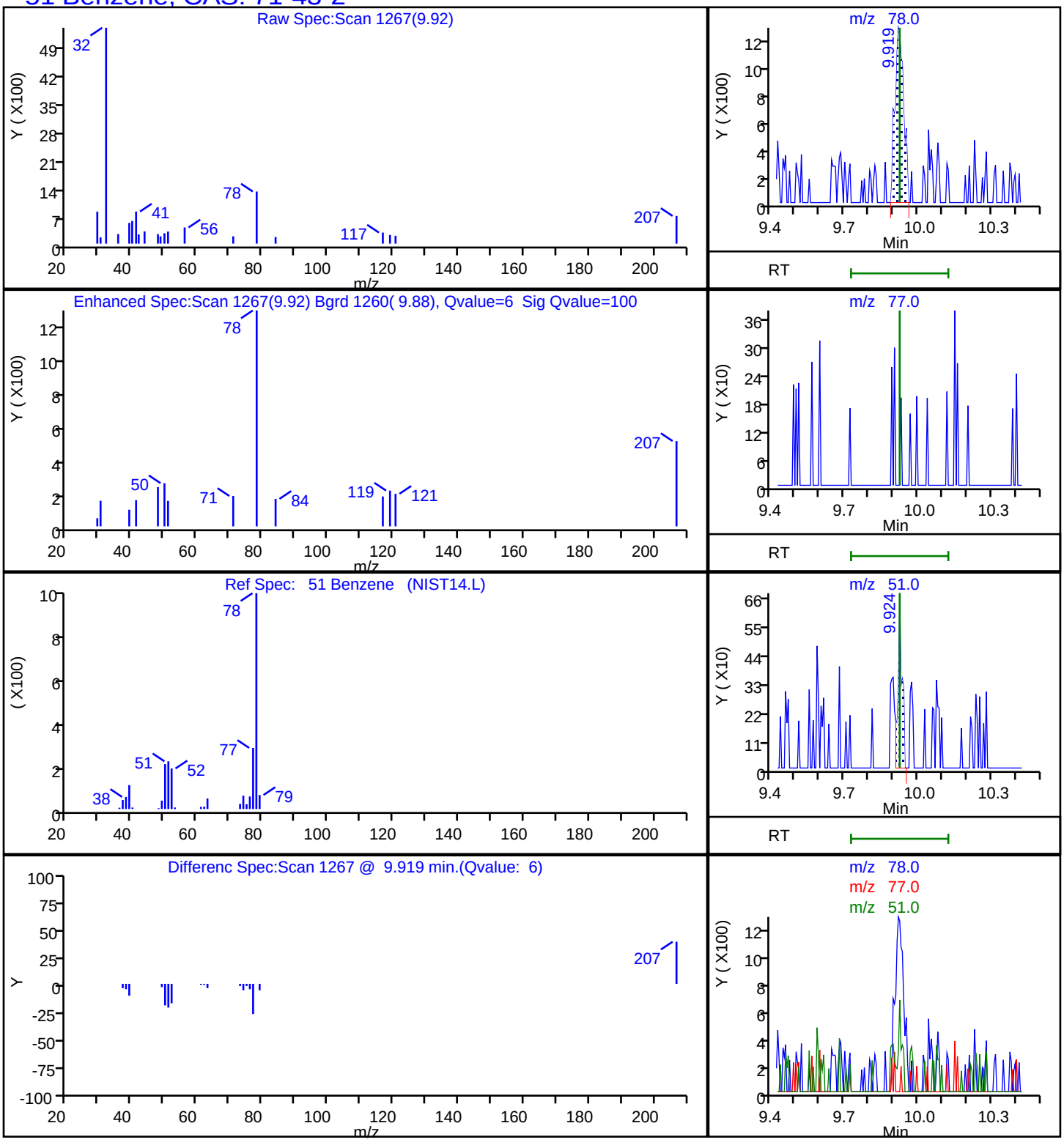
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	4.17	89.82

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P103.D

Injection Date:	05-Sep-2020 16:12:30	Instrument ID:	MR		
Lims ID:	140-20195-A-2	Lab Sample ID:	140-20195-2		
Client ID:	IA-DUP 3-A-29				
Operator ID:	HMT	ALS Bottle#:	3	Worklist Smp#:	9
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

51 Benzene, CAS: 71-43-2



Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P103.D

Injection Date: 05-Sep-2020 16:12:30 Instrument ID: MR

Lims ID: 140-20195-A-2 Lab Sample ID: 140-20195-2

Client ID: IA-DUP 3-A-29

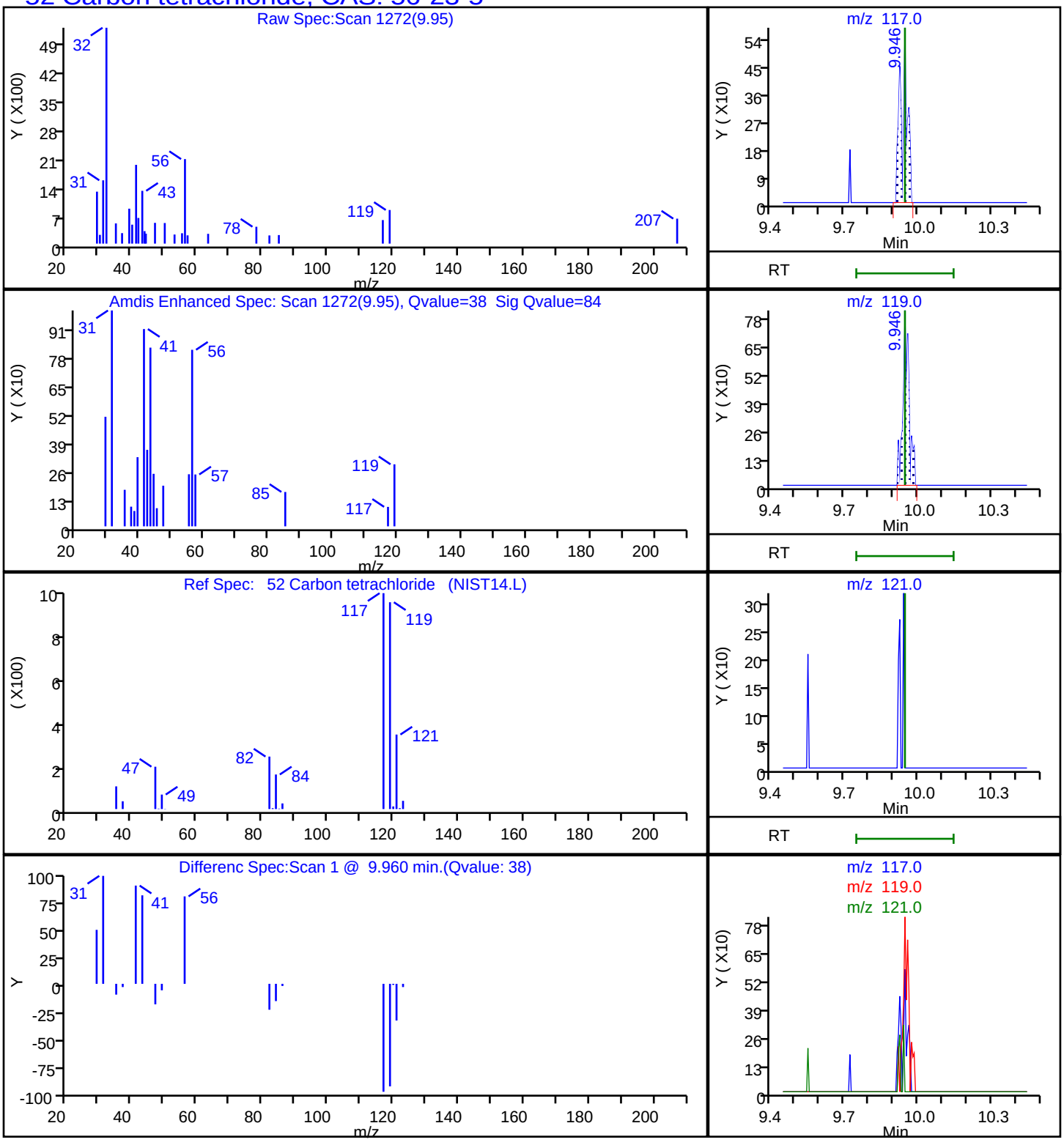
Operator ID: HMT ALS Bottle#: 3 Worklist Smp#: 9

Purge Vol: 500.000 mL Dil. Factor: 1.0000

Method: MR_TO15 Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm) Detector MS SCAN

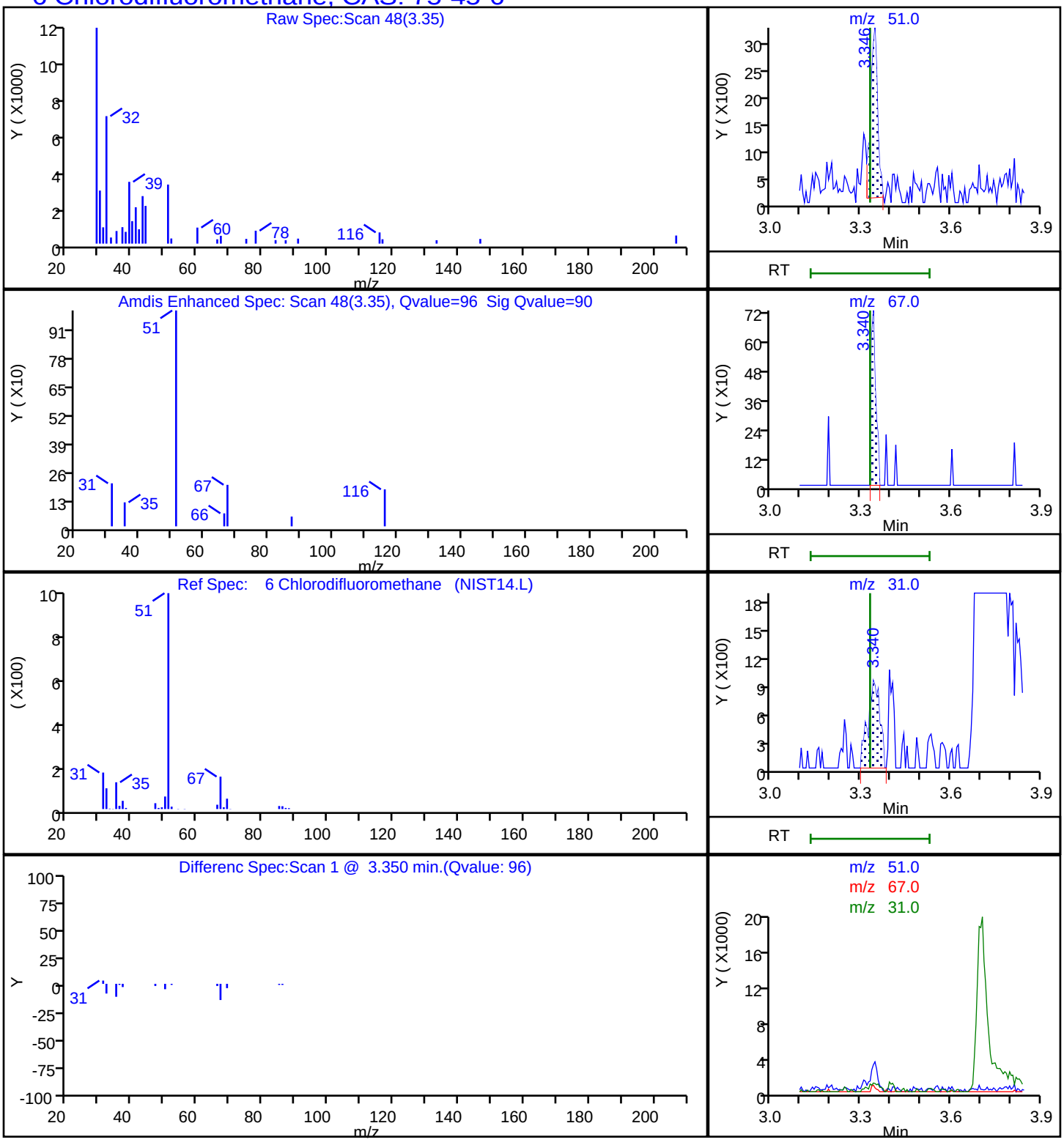
52 Carbon tetrachloride, CAS: 56-23-5



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P103.D		
Injection Date:	05-Sep-2020 16:12:30	Instrument ID:	MR
Lims ID:	140-20195-A-2	Lab Sample ID:	140-20195-2
Client ID:	IA-DUP 3-A-29		
Operator ID:	HMT	ALS Bottle#:	3 Worklist Smp#: 9
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

6 Chlorodifluoromethane, CAS: 75-45-6

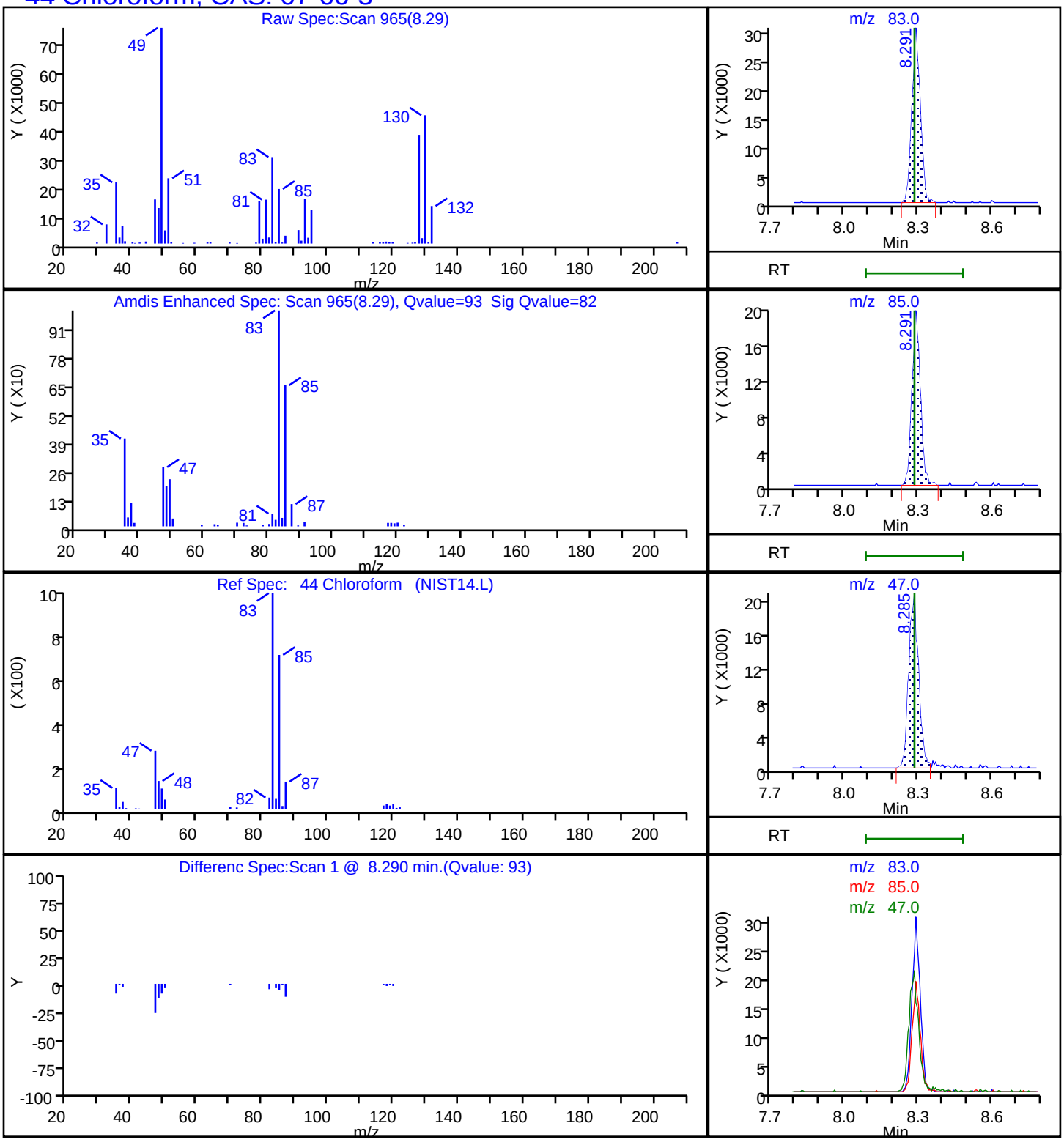


Report Date: 06-Sep-2020 07:11:38 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P103.D		
Injection Date:	05-Sep-2020 16:12:30	Instrument ID:	MR
Lims ID:	140-20195-A-2	Lab Sample ID:	140-20195-2
Client ID:	IA-DUP 3-A-29		
Operator ID:	HMT	ALS Bottle#:	3 Worklist Smp#: 9
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

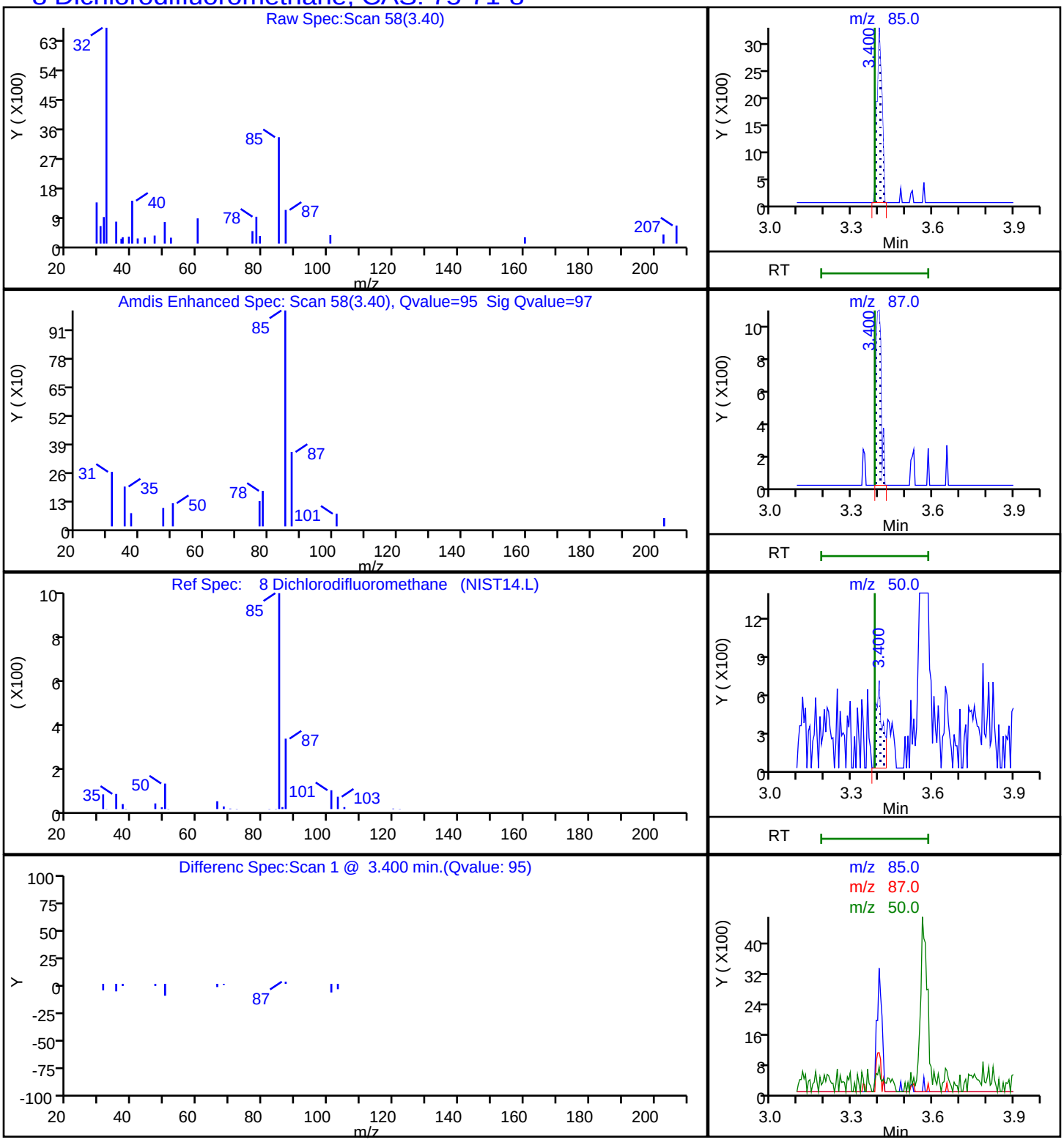
44 Chloroform, CAS: 67-66-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P103.D		
Injection Date:	05-Sep-2020 16:12:30	Instrument ID:	MR
Lims ID:	140-20195-A-2	Lab Sample ID:	140-20195-2
Client ID:	IA-DUP 3-A-29		
Operator ID:	HMT	ALS Bottle#:	3 Worklist Smp#: 9
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

8 Dichlorodifluoromethane, CAS: 75-71-8



Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P103.D

Injection Date: 05-Sep-2020 16:12:30 Instrument ID: MR

Lims ID: 140-20195-A-2 Lab Sample ID: 140-20195-2

Client ID: IA-DUP 3-A-29

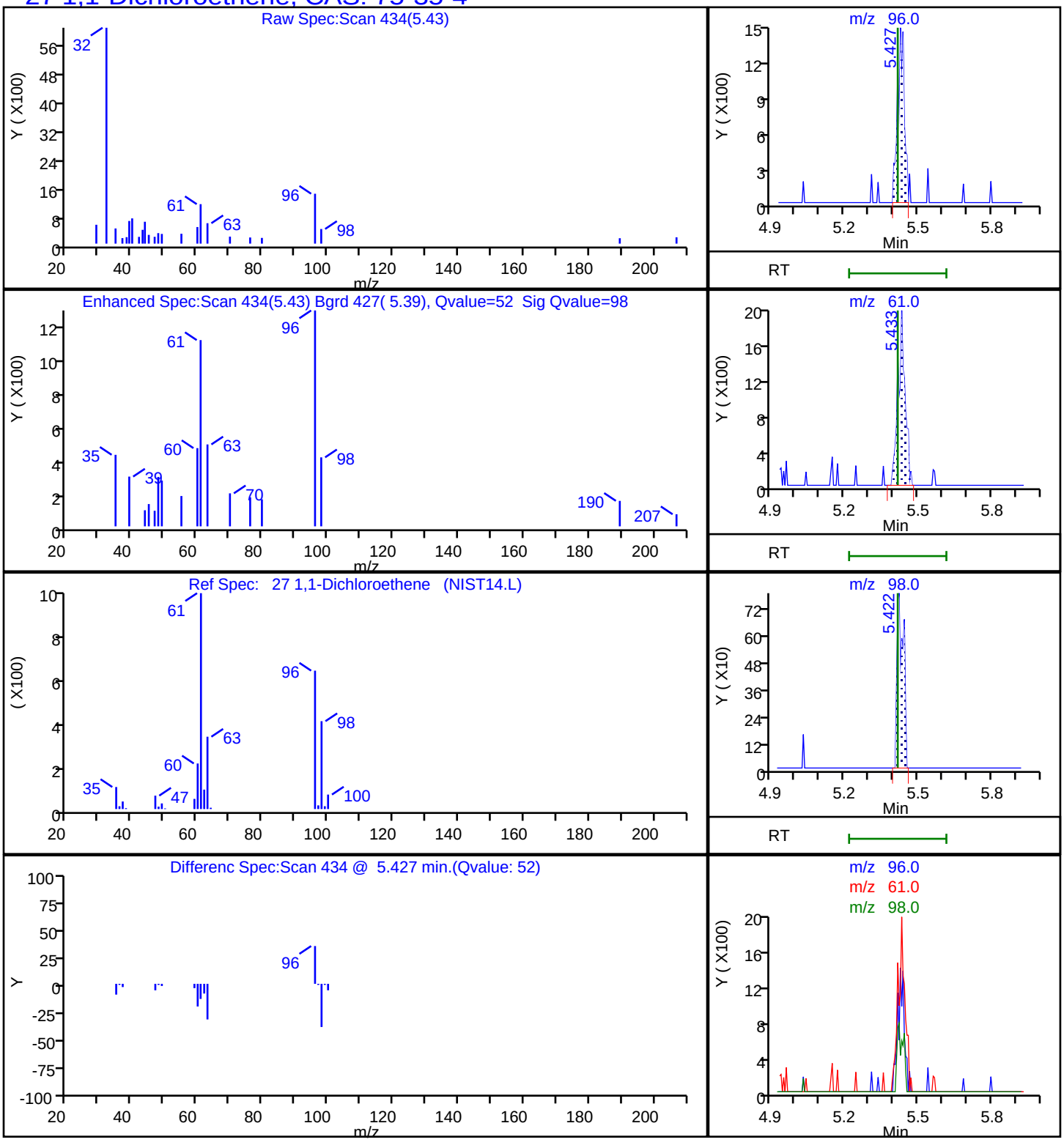
Operator ID: HMT ALS Bottle#: 3 Worklist Smp#: 9

Purge Vol: 500.000 mL Dil. Factor: 1.0000

Method: MR_TO15 Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm) Detector MS SCAN

27 1,1-Dichloroethene, CAS: 75-35-4

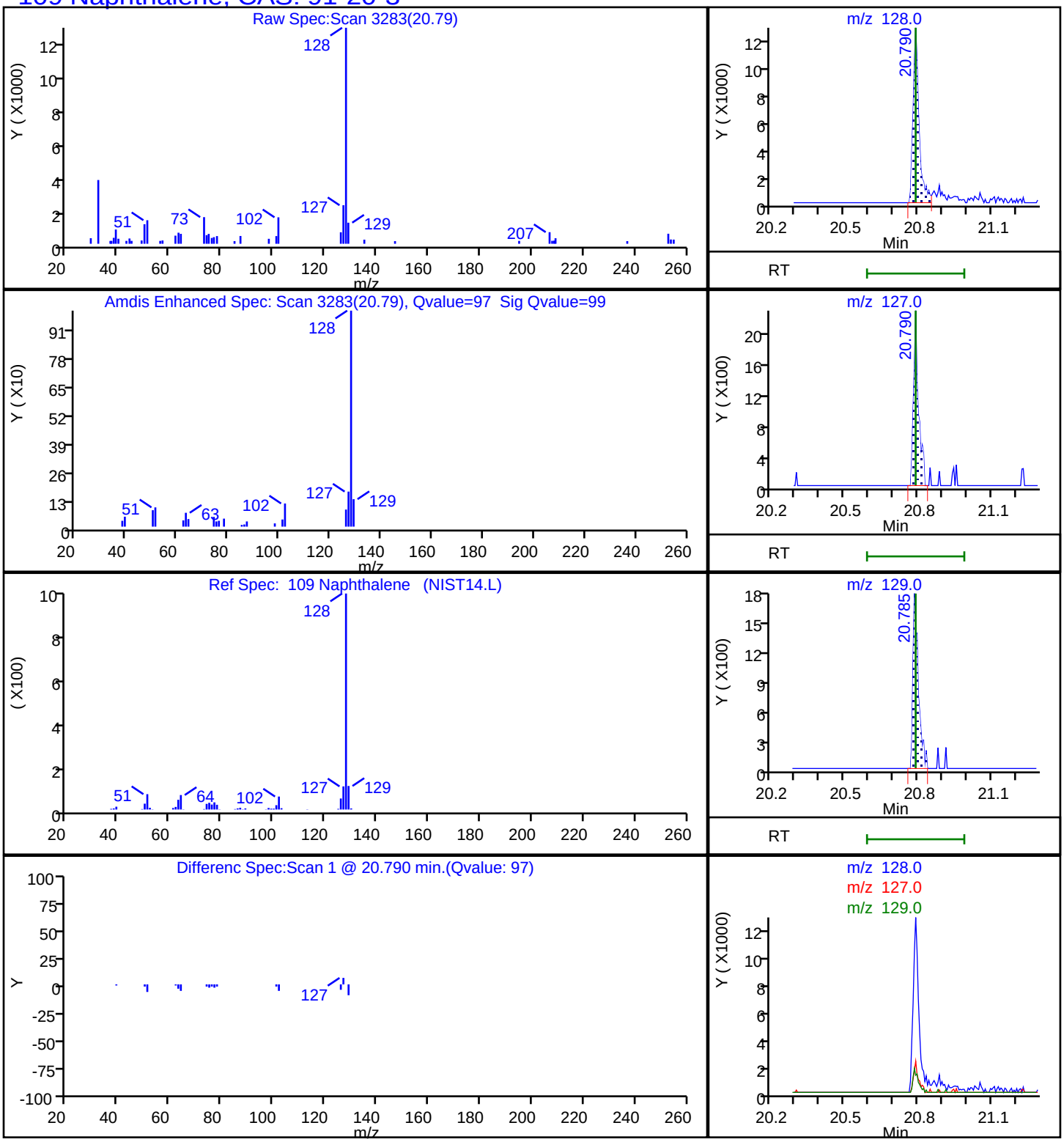


Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P103.D

Injection Date:	05-Sep-2020 16:12:30	Instrument ID:	MR
Lims ID:	140-20195-A-2	Lab Sample ID:	140-20195-2
Client ID:	IA-DUP 3-A-29		
Operator ID:	HMT	ALS Bottle#:	3 Worklist Smp#: 9
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

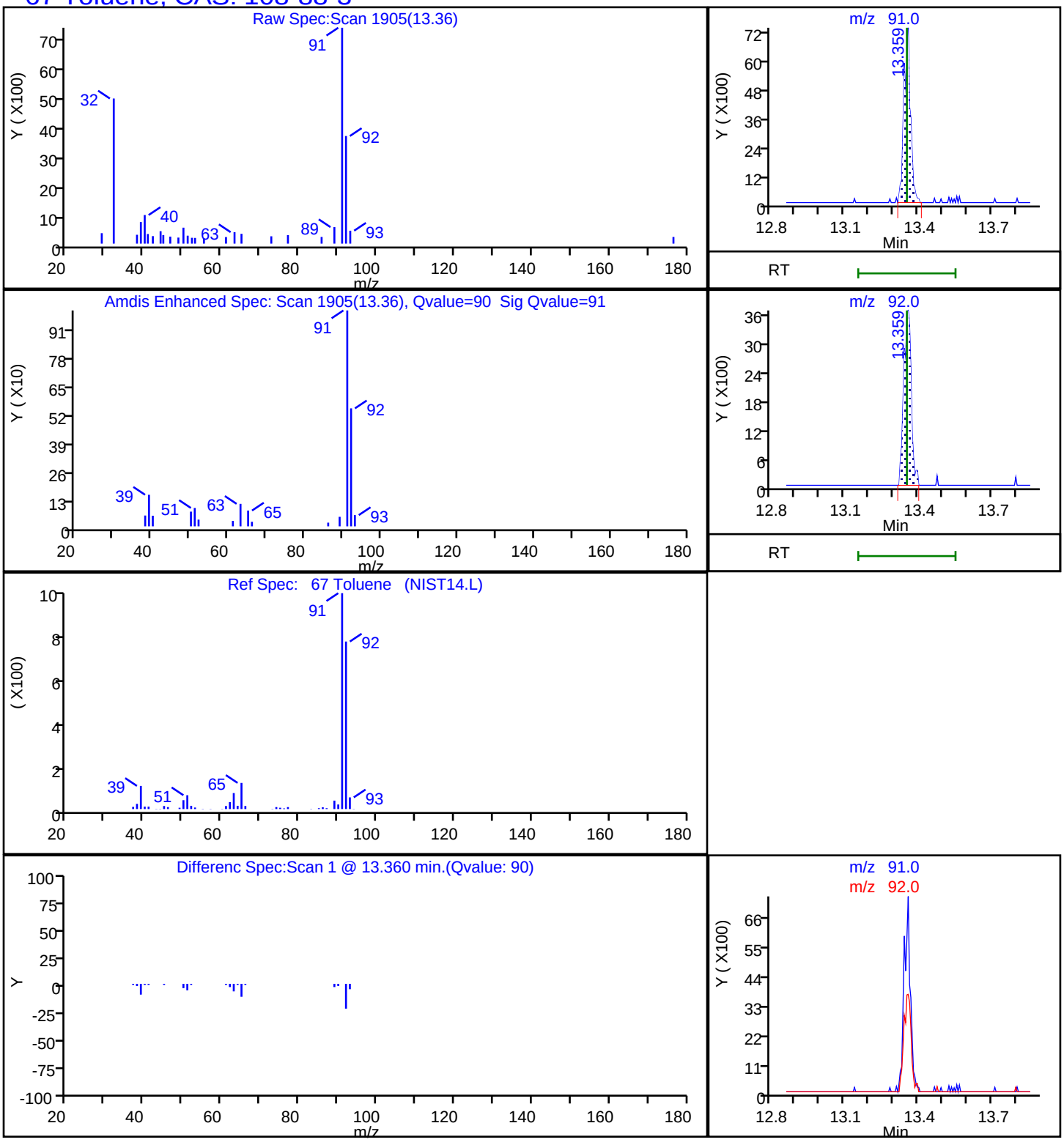
109 Naphthalene, CAS: 91-20-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P103.D		
Injection Date:	05-Sep-2020 16:12:30	Instrument ID:	MR
Lims ID:	140-20195-A-2	Lab Sample ID:	140-20195-2
Client ID:	IA-DUP 3-A-29		
Operator ID:	HMT	ALS Bottle#:	3 Worklist Smp#: 9
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

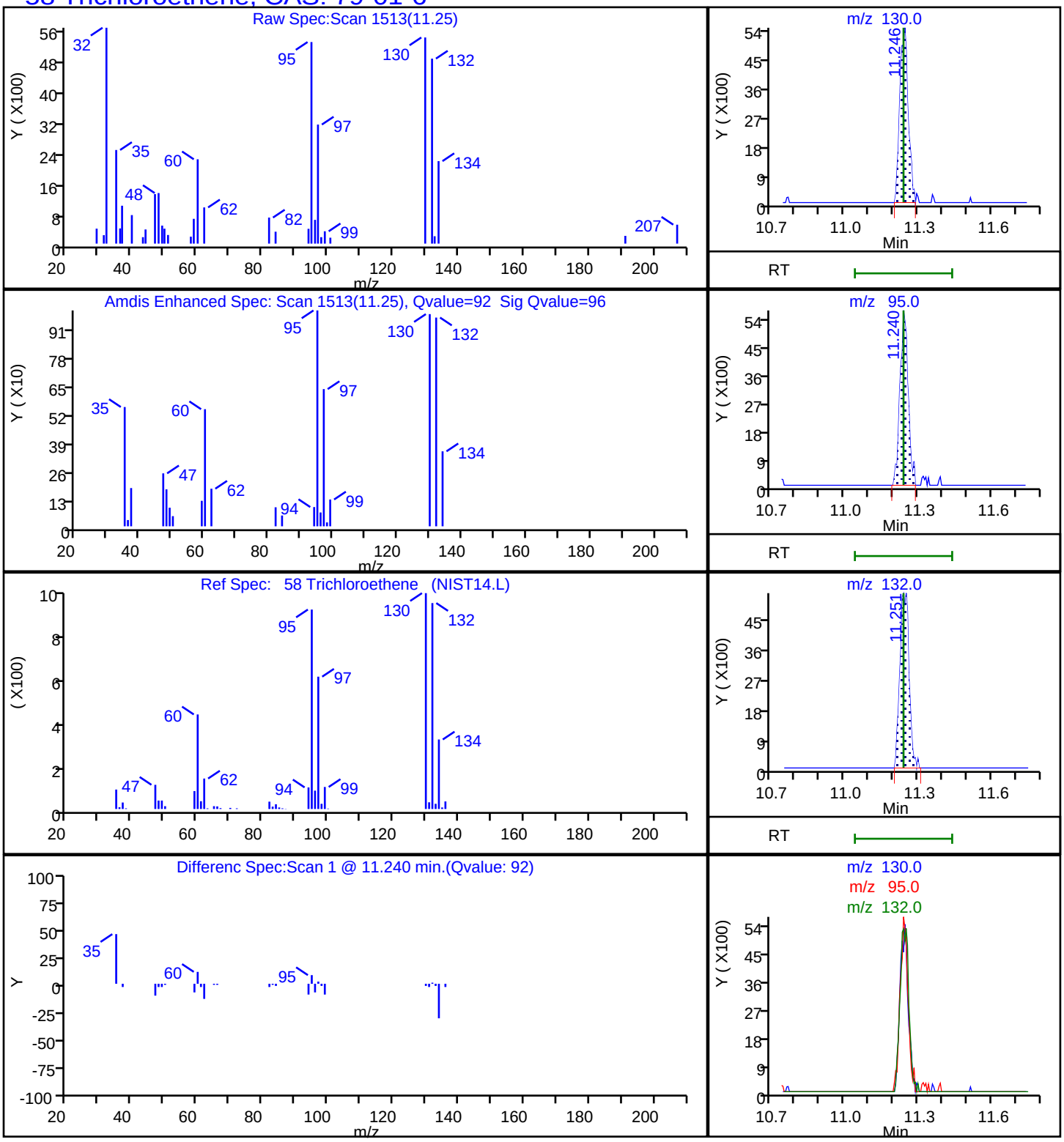
67 Toluene, CAS: 108-88-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P103.D		
Injection Date:	05-Sep-2020 16:12:30	Instrument ID:	MR
Lims ID:	140-20195-A-2	Lab Sample ID:	140-20195-2
Client ID:	IA-DUP 3-A-29		
Operator ID:	HMT	ALS Bottle#:	3 Worklist Smp#: 9
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

58 Trichloroethene, CAS: 79-01-6



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Client Sample ID: IA-138-A-29 Lab Sample ID: 140-20195-3

Matrix: Air Lab File ID: RI05P104.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 15:40

Sample wt/vol: 100(mL) Date Analyzed: 09/05/2020 17:01

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42483 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.13	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.093	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	0.39	J	0.40	0.11
67-66-3	Chloroform	119.38	0.13	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.42		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	0.27	J	0.40	0.040
100-41-4	Ethylbenzene	106.17	ND		0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.035
108-88-3	Toluene	92.14	ND		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	1.4		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	ND		0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	90		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Client Sample ID: IA-138-A-29 Lab Sample ID: 140-20195-3

Matrix: Air Lab File ID: RI05P104.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 15:40

Sample wt/vol: 100(mL) Date Analyzed: 09/05/2020 17:01

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42483 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.42	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.58	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	1.4	J	1.4	0.39
67-66-3	Chloroform	119.38	0.62	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.1		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	1.1	J	1.6	0.16
100-41-4	Ethylbenzene	106.17	ND		1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.24
108-88-3	Toluene	92.14	ND		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	7.7		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	ND		3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	90		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P104.D
Lims ID: 140-20195-A-3
Client ID: IA-138-A-29
Sample Type: Client
Inject. Date: 05-Sep-2020 17:01:30 ALS Bottle#: 4 Worklist Smp#: 10
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016508-010
Misc. Info.: 140-20195-a-3
Operator ID: HMT Instrument ID: MR

Method: \\chromfs\Knoxville\ChromData\MR\20200904-16508.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 06-Sep-2020 07:11:26 Calib Date: 29-Aug-2020 00:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1023

First Level Reviewer: tajh Date: 06-Sep-2020 07:04:02

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.274	8.274	0.000	96	133220	4.80	
* 2 1,4-Difluorobenzene	114	10.507	10.512	-0.005	94	653842	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.349	15.349	0.000	88	516172	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	16.999	16.999	0.000	92	288193	4.18	
6 Chlorodifluoromethane	51	3.340	3.329	0.011	94	5822	0.0781	
8 Dichlorodifluoromethane	85	3.400	3.383	0.017	93	4671	0.0834	
27 1,1-Dichloroethene	96	5.427	5.416	0.011	75	2150	0.0546	
44 Chloroform	83	8.274	8.285	-0.011	28	2032	0.0253	
51 Benzene	78	9.919	9.924	-0.005	1	2994	0.0262	
52 Carbon tetrachloride	117	9.951	9.946	0.005	32	1367	0.0185	
58 Trichloroethene	130	11.235	11.240	-0.005	91	16181	0.2848	
67 Toluene	91	13.359	13.354	0.005	91	9898	0.0712	

Reagents:

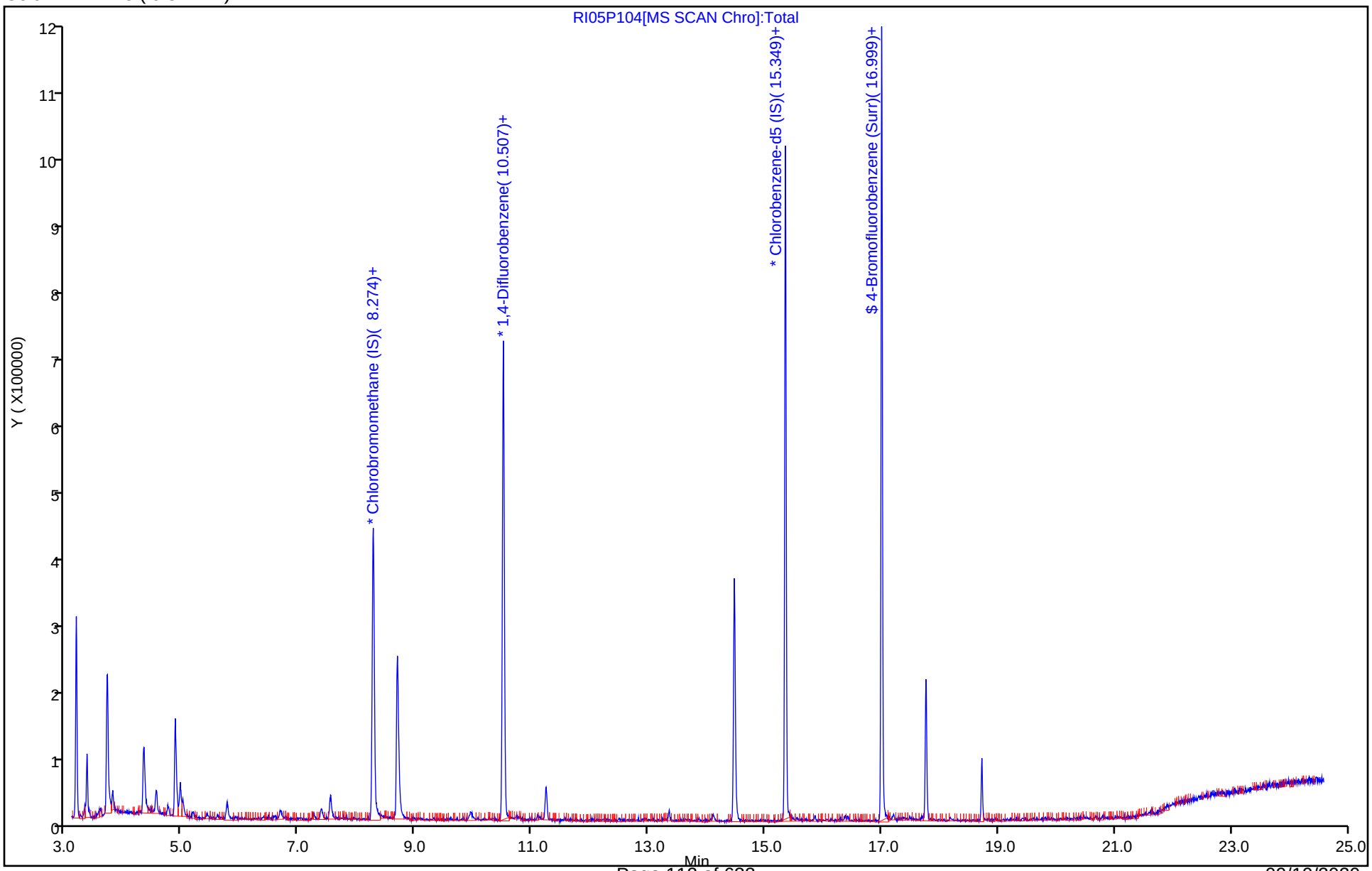
40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

Report Date: 06-Sep-2020 07:11:40 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P104.D				
Injection Date:	05-Sep-2020 17:01:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	140-20195-A-3	Lab Sample ID:	140-20195-3	Worklist Smp#:	10
Client ID:	IA-138-A-29				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P104.D				
Lims ID:	140-20195-A-3				
Client ID:	IA-138-A-29				
Sample Type:	Client				
Inject. Date:	05-Sep-2020 17:01:30	ALS Bottle#:	4	Worklist Smp#:	10
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016508-010				
Misc. Info.:	140-20195-a-3				
Operator ID:	HMT	Instrument ID:	MR		
Method:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\MR_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	06-Sep-2020 07:11:26	Calib Date:	29-Aug-2020 00:02:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1023				

First Level Reviewer: tajh Date: 06-Sep-2020 07:04:02

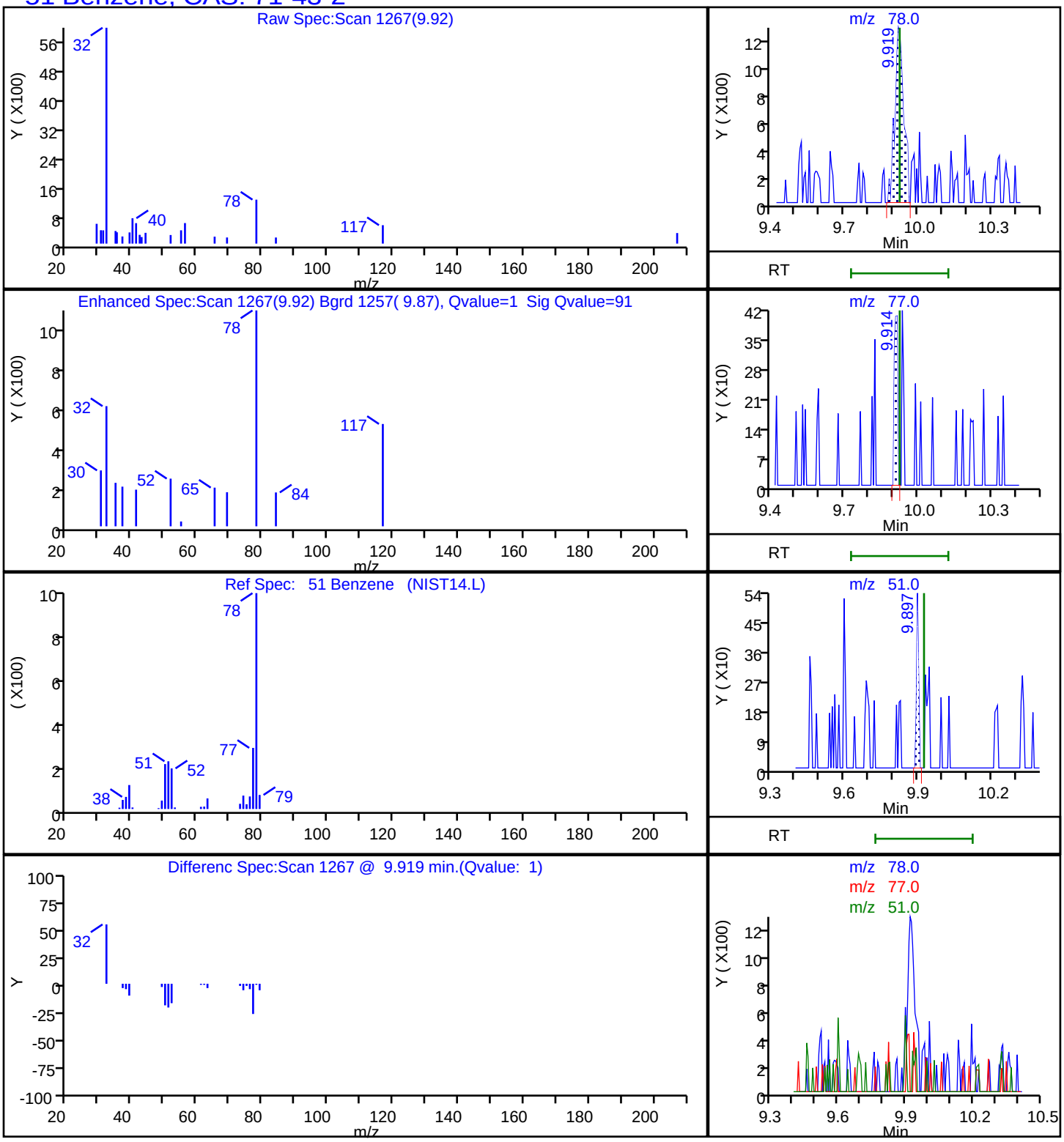
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	4.18	90.00

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P104.D

Injection Date:	05-Sep-2020 17:01:30	Instrument ID:	MR		
Lims ID:	140-20195-A-3	Lab Sample ID:	140-20195-3		
Client ID:	IA-138-A-29				
Operator ID:	HMT	ALS Bottle#:	4	Worklist Smp#:	10
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

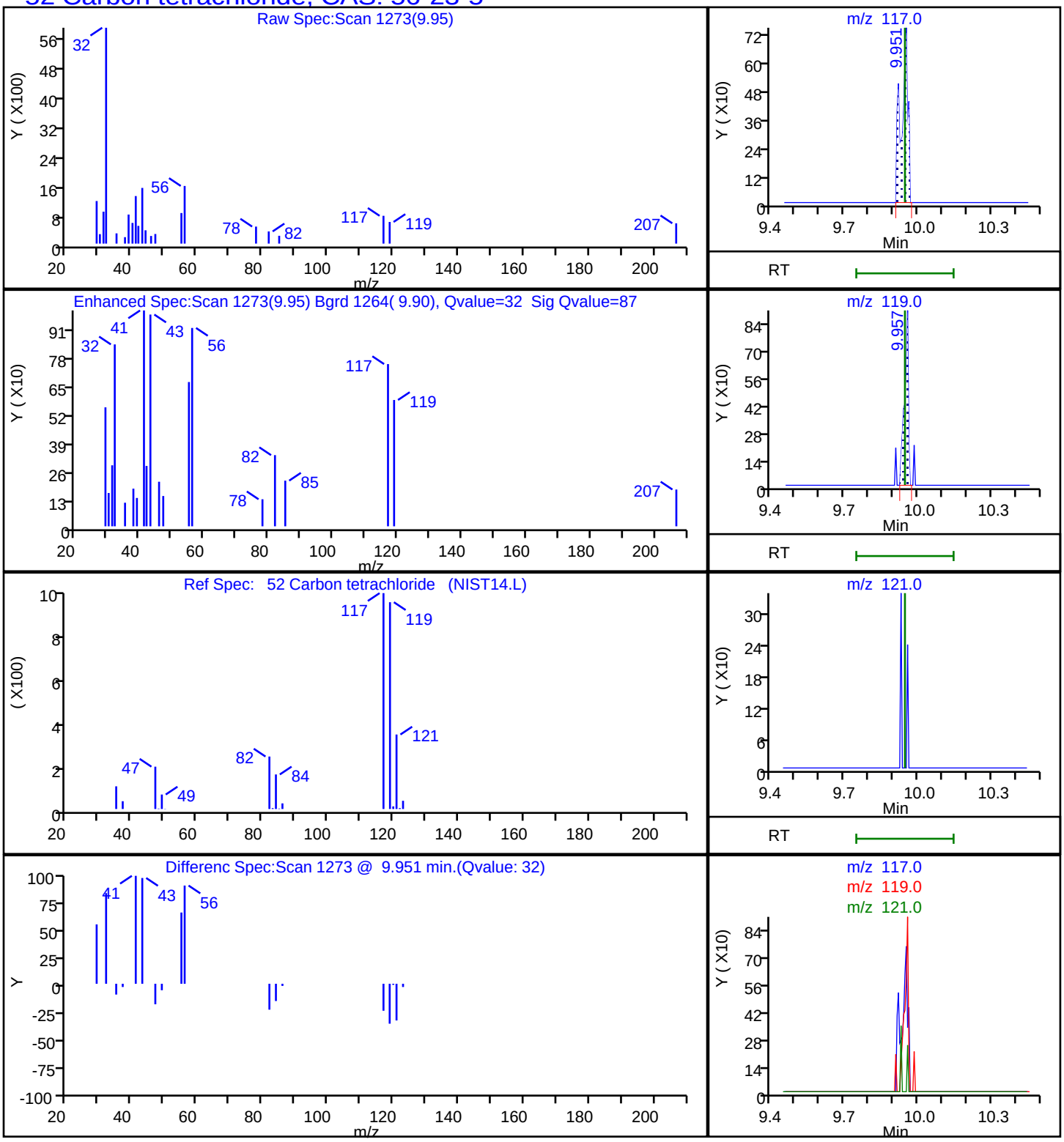
51 Benzene, CAS: 71-43-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P104.D				
Injection Date:	05-Sep-2020 17:01:30	Instrument ID:	MR		
Lims ID:	140-20195-A-3	Lab Sample ID:	140-20195-3		
Client ID:	IA-138-A-29				
Operator ID:	HMT	ALS Bottle#:	4	Worklist Smp#:	10
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

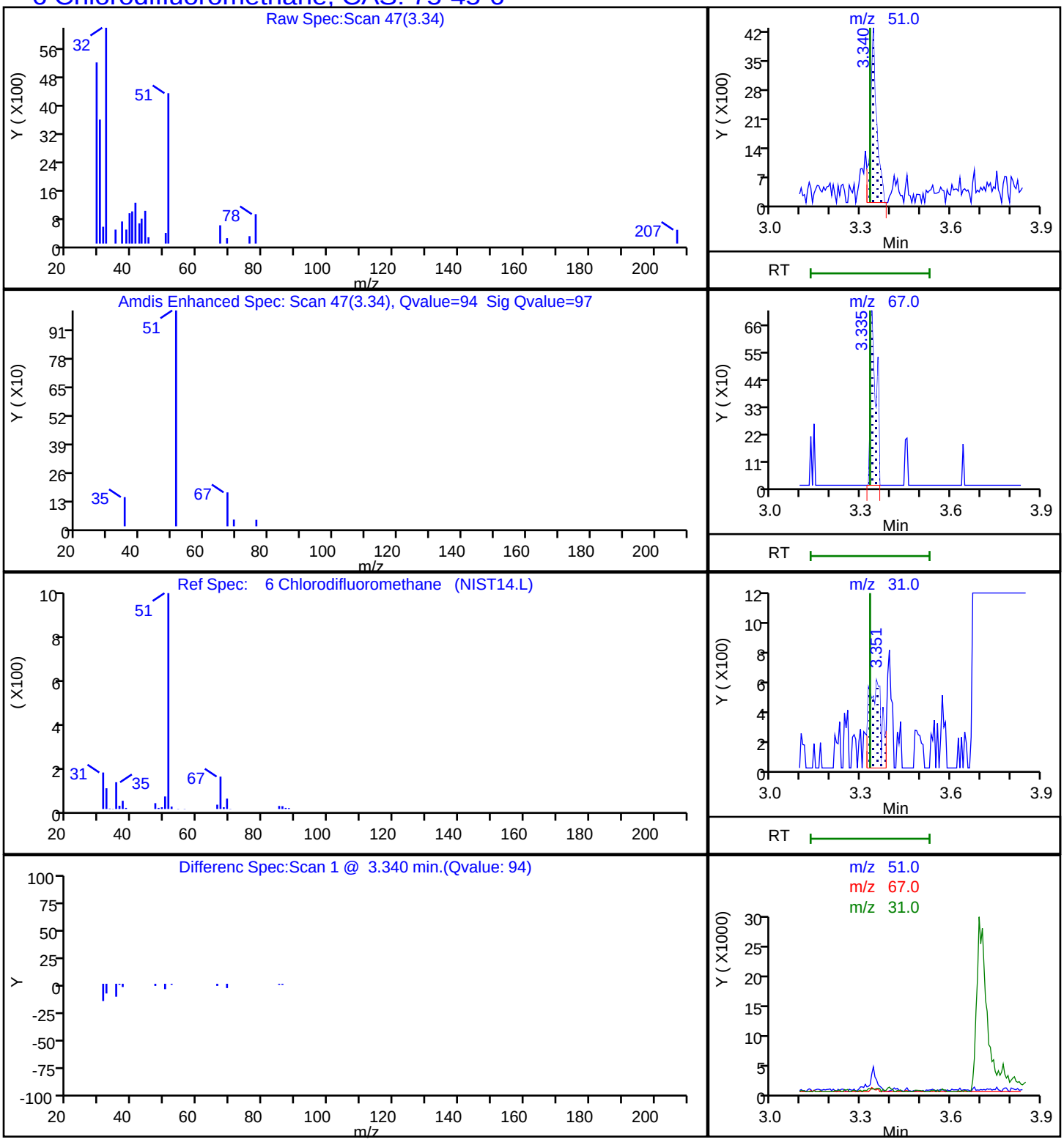
52 Carbon tetrachloride, CAS: 56-23-5



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P104.D		
Injection Date:	05-Sep-2020 17:01:30	Instrument ID:	MR
Lims ID:	140-20195-A-3	Lab Sample ID:	140-20195-3
Client ID:	IA-138-A-29		
Operator ID:	HMT	ALS Bottle#:	4 Worklist Smp#: 10
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

6 Chlorodifluoromethane, CAS: 75-45-6

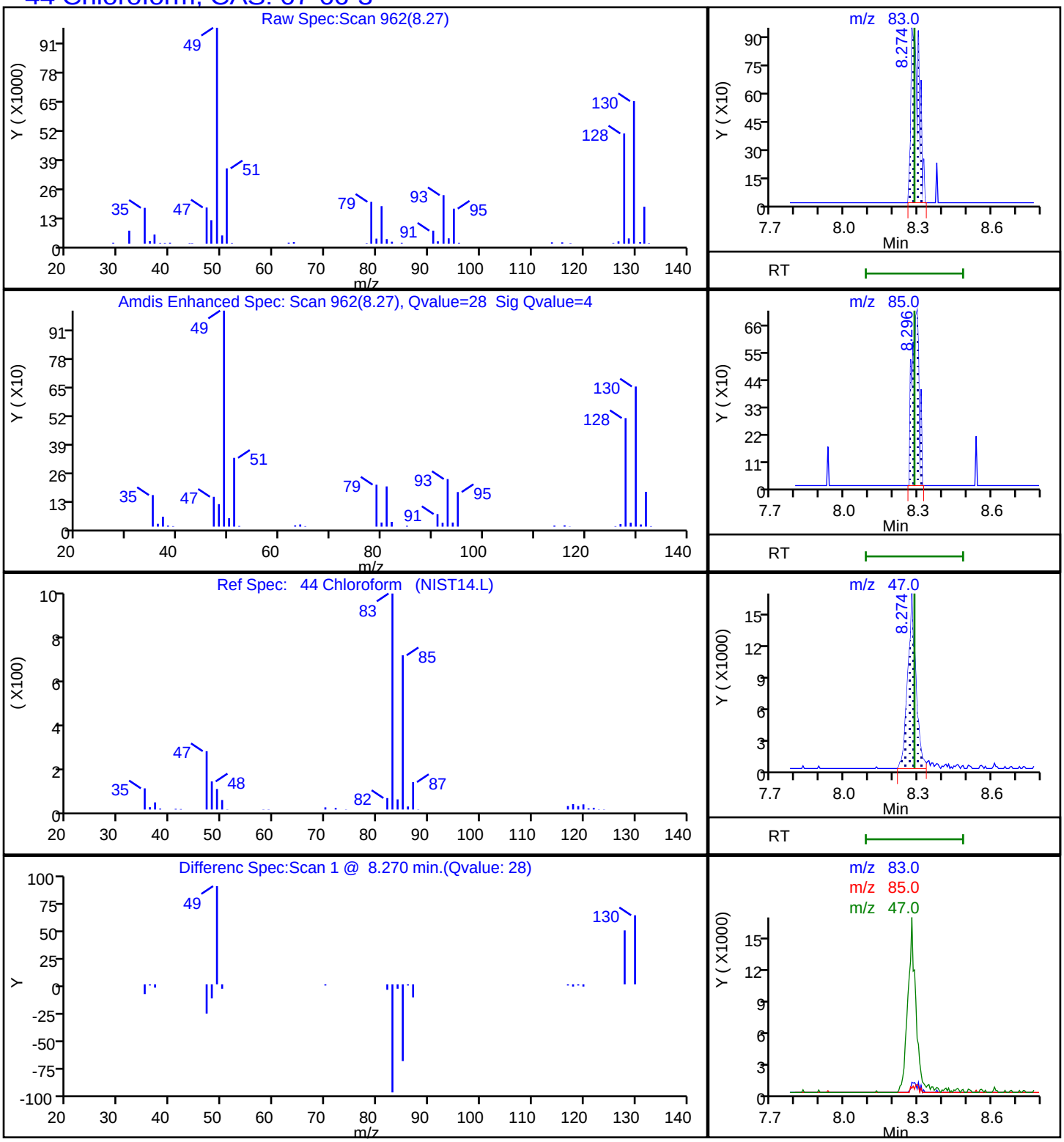


Report Date: 06-Sep-2020 07:11:40 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P104.D		
Injection Date:	05-Sep-2020 17:01:30	Instrument ID:	MR
Lims ID:	140-20195-A-3	Lab Sample ID:	140-20195-3
Client ID:	IA-138-A-29		
Operator ID:	HMT	ALS Bottle#:	4 Worklist Smp#: 10
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

44 Chloroform, CAS: 67-66-3

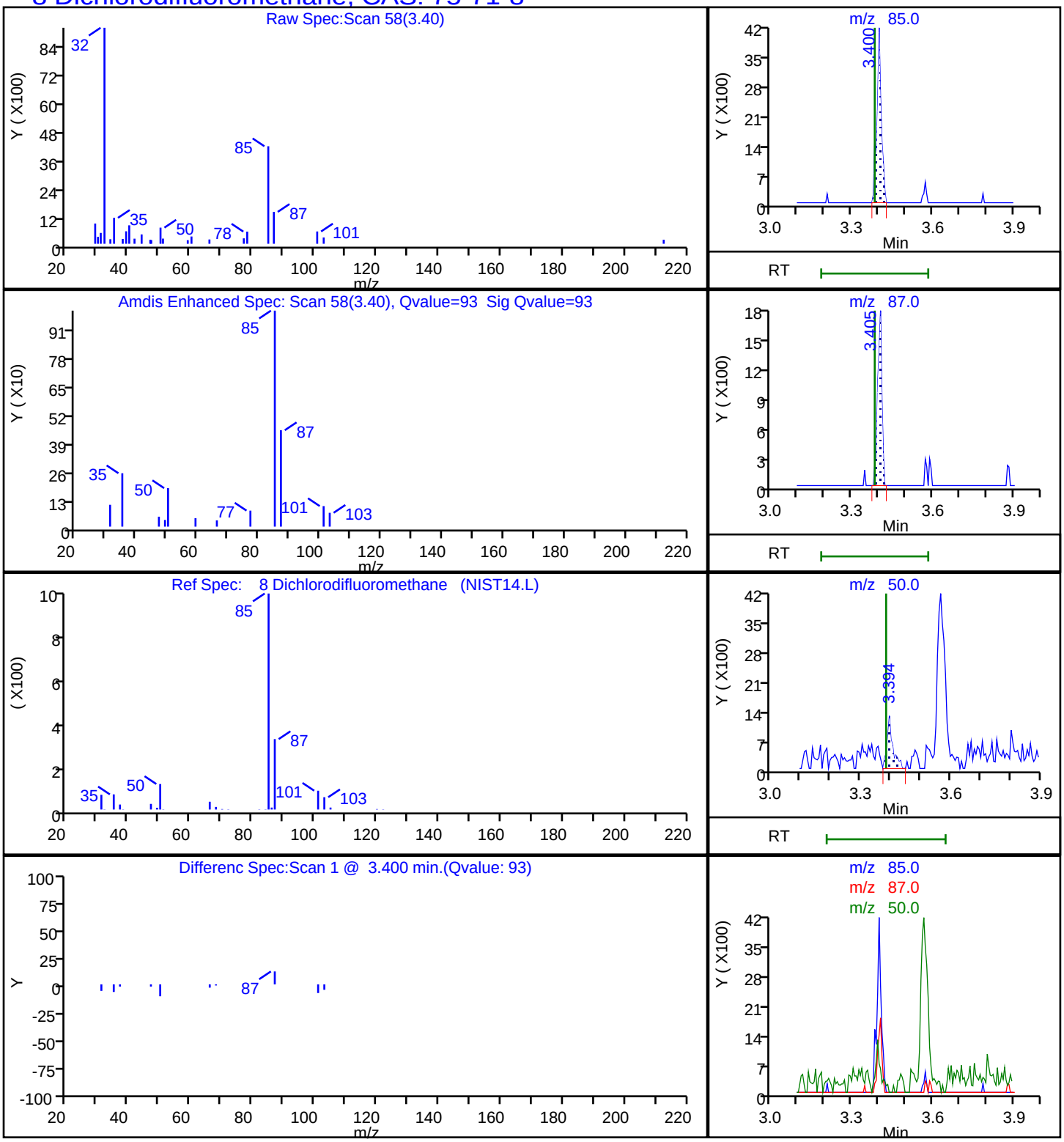


Report Date: 06-Sep-2020 07:11:40 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P104.D				
Injection Date:	05-Sep-2020 17:01:30	Instrument ID:	MR		
Lims ID:	140-20195-A-3	Lab Sample ID:	140-20195-3		
Client ID:	IA-138-A-29				
Operator ID:	HMT	ALS Bottle#:	4	Worklist Smp#:	10
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

8 Dichlorodifluoromethane, CAS: 75-71-8

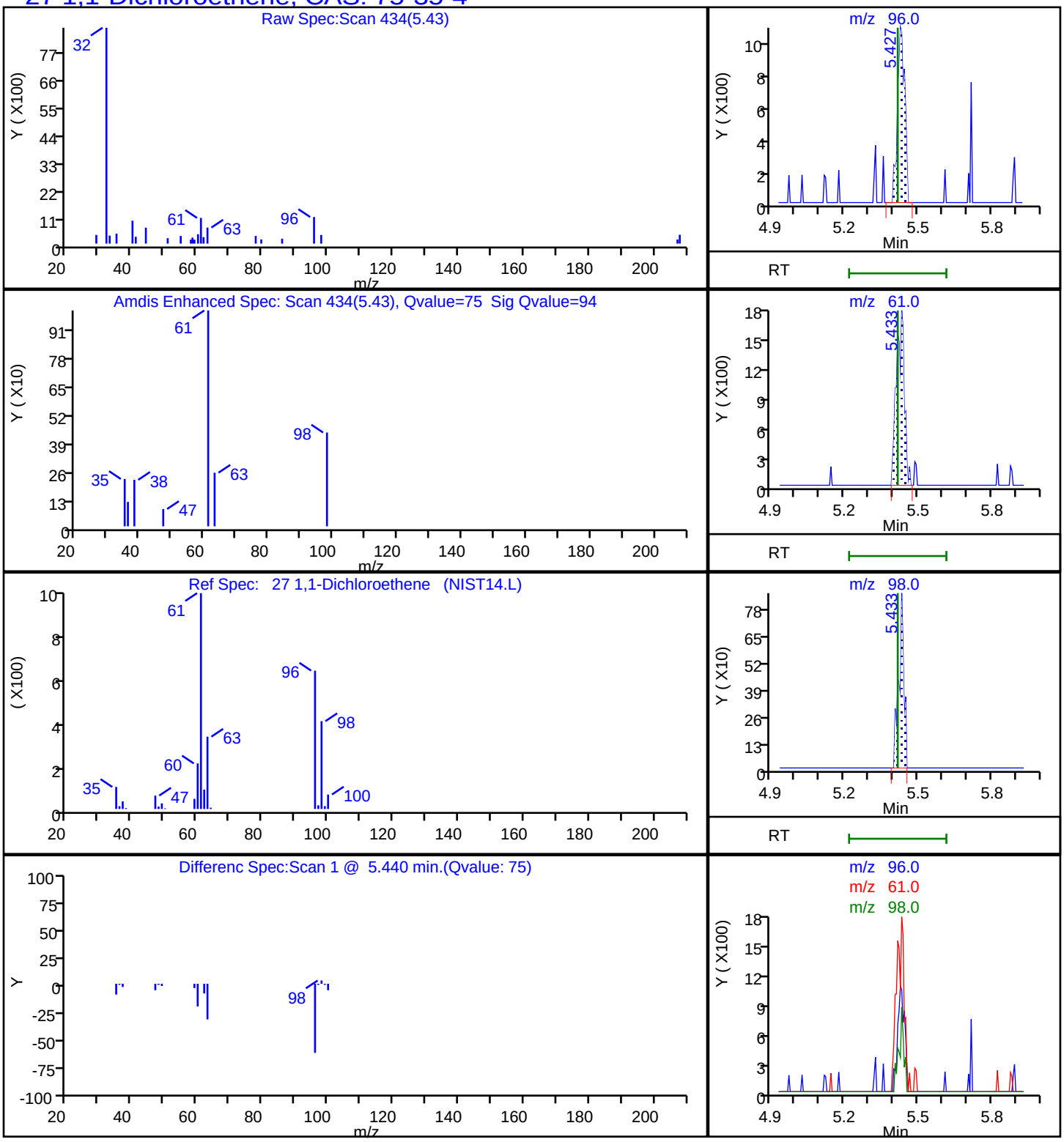


Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P104.D

Injection Date:	05-Sep-2020 17:01:30	Instrument ID:	MR		
Lims ID:	140-20195-A-3	Lab Sample ID:	140-20195-3		
Client ID:	IA-138-A-29				
Operator ID:	HMT	ALS Bottle#:	4	Worklist Smp#:	10
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

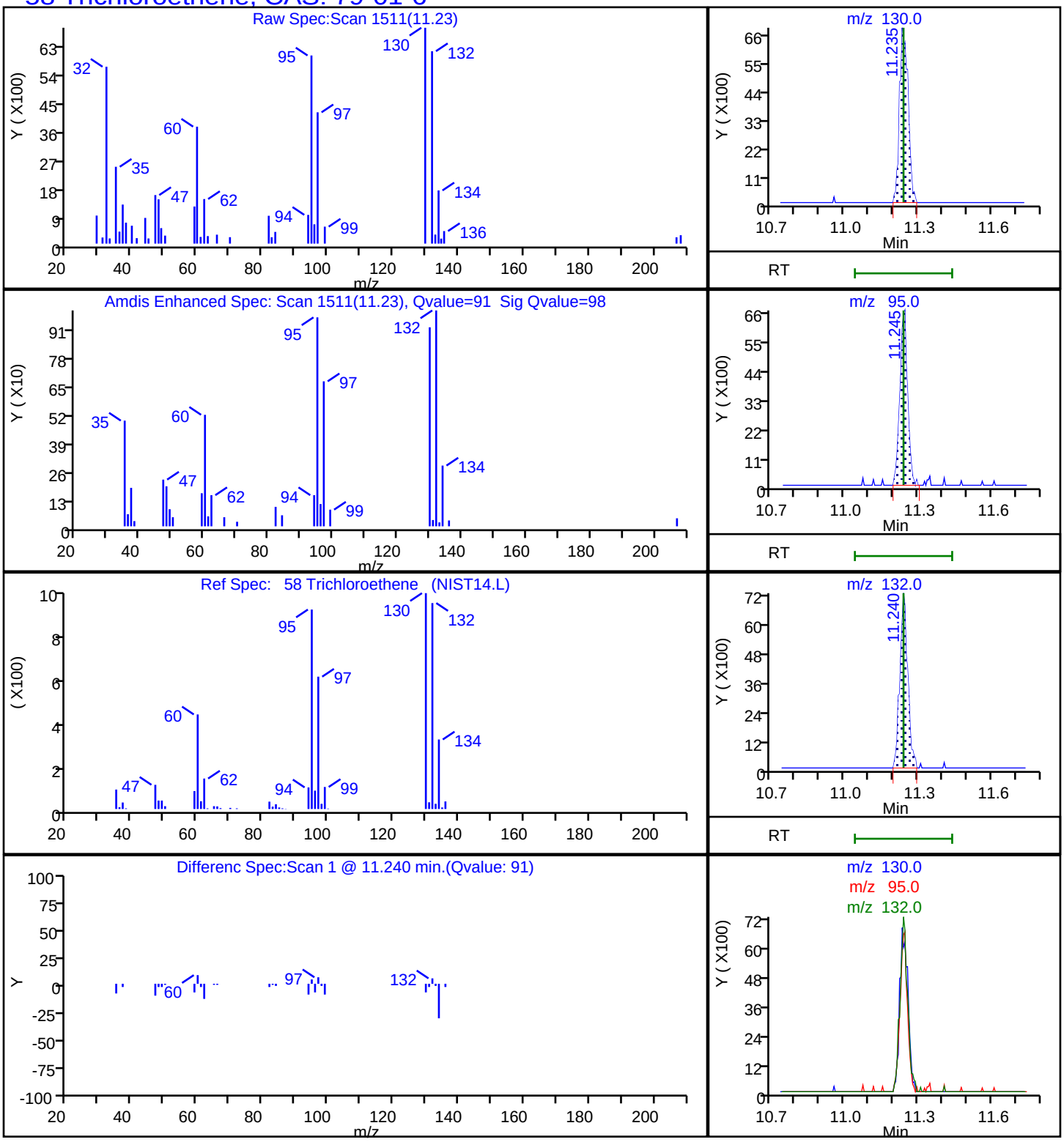
27 1,1-Dichloroethene, CAS: 75-35-4



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P104.D		
Injection Date:	05-Sep-2020 17:01:30	Instrument ID:	MR
Lims ID:	140-20195-A-3	Lab Sample ID:	140-20195-3
Client ID:	IA-138-A-29		
Operator ID:	HMT	ALS Bottle#:	4 Worklist Smp#: 10
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

58 Trichloroethene, CAS: 79-01-6



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Client Sample ID: IA-174-A-29 Lab Sample ID: 140-20195-4

Matrix: Air Lab File ID: RI05P105.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 15:44

Sample wt/vol: 100(mL) Date Analyzed: 09/05/2020 17:51

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42483 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.13	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	ND		0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	0.34	J	0.40	0.11
67-66-3	Chloroform	119.38	0.062	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.43		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	0.18	J	0.40	0.040
100-41-4	Ethylbenzene	106.17	ND		0.40	0.065
75-09-2	Methylene Chloride	84.93	2.2		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	0.090	J	0.40	0.035
108-88-3	Toluene	92.14	0.42	J	0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	1.2		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.24	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	91		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Client Sample ID: IA-174-A-29 Lab Sample ID: 140-20195-4

Matrix: Air Lab File ID: RI05P105.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 15:44

Sample wt/vol: 100(mL) Date Analyzed: 09/05/2020 17:51

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42483 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.41	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	ND		2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	1.2	J	1.4	0.39
67-66-3	Chloroform	119.38	0.30	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.1		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	0.73	J	1.6	0.16
100-41-4	Ethylbenzene	106.17	ND		1.7	0.28
75-09-2	Methylene Chloride	84.93	7.6		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	0.61	J	2.7	0.24
108-88-3	Toluene	92.14	1.6	J	2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	6.4		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	1.0	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	91		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P105.D
Lims ID: 140-20195-A-4
Client ID: IA-174-A-29
Sample Type: Client
Inject. Date: 05-Sep-2020 17:51:30 ALS Bottle#: 5 Worklist Smp#: 11
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016508-011
Misc. Info.: 140-20195-a-4
Operator ID: HMT Instrument ID: MR

Method: \\chromfs\Knoxville\ChromData\MR\20200904-16508.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 06-Sep-2020 07:11:26 Calib Date: 29-Aug-2020 00:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1023

First Level Reviewer: tajh Date: 06-Sep-2020 07:04:24

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.285	8.274	0.011	96	134846	4.80	
* 2 1,4-Difluorobenzene	114	10.518	10.512	0.006	94	652657	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.349	15.349	0.000	88	511185	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	16.999	16.999	0.000	93	287020	4.20	
6 Chlorodifluoromethane	51	3.357	3.329	0.028	35	5196	0.0688	
8 Dichlorodifluoromethane	85	3.416	3.383	0.033	92	4895	0.0864	
27 1,1-Dichloroethene	96	5.443	5.416	0.027	82	1474	0.0370	
31 Methylene Chloride	84	5.783	5.756	0.027	93	14292	0.4350	
44 Chloroform	83	8.312	8.285	0.027	28	1012	0.0125	
51 Benzene	78	9.935	9.924	0.011	22	2963	0.0260	
58 Trichloroethene	130	11.246	11.240	0.006	94	13406	0.2364	
67 Toluene	91	13.354	13.354	0.000	95	11539	0.0838	
73 Tetrachloroethene	129	14.481	14.519	-0.038	30	912	0.0180	
77 m-Xylene & p-Xylene	91	15.861	15.856	0.005	87	4115	0.0310	
81 o-Xylene	91	16.379	16.384	-0.005	40	2422	0.0176	
S 117 Xylenes, Total	100				0		0.0486	

Reagents:

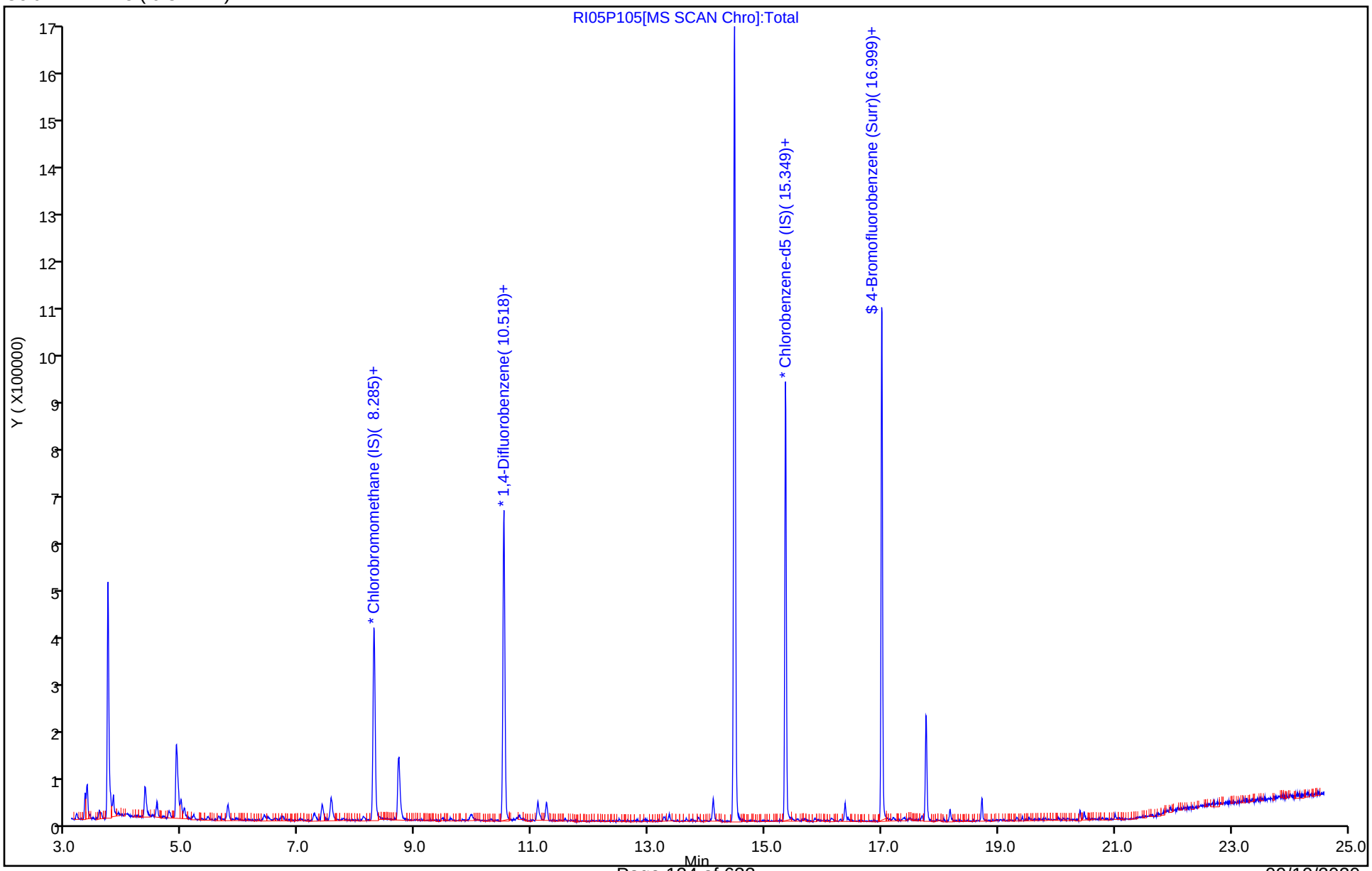
40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

Report Date: 06-Sep-2020 07:11:41 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P105.D				
Injection Date:	05-Sep-2020 17:51:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	140-20195-A-4	Lab Sample ID:	140-20195-4	Worklist Smp#:	11
Client ID:	IA-174-A-29				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P105.D				
Lims ID:	140-20195-A-4				
Client ID:	IA-174-A-29				
Sample Type:	Client				
Inject. Date:	05-Sep-2020 17:51:30	ALS Bottle#:	5	Worklist Smp#:	11
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016508-011				
Misc. Info.:	140-20195-a-4				
Operator ID:	HMT	Instrument ID:	MR		
Method:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\MR_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	06-Sep-2020 07:11:26	Calib Date:	29-Aug-2020 00:02:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1023				
First Level Reviewer: tajh		Date:	06-Sep-2020 07:04:24		

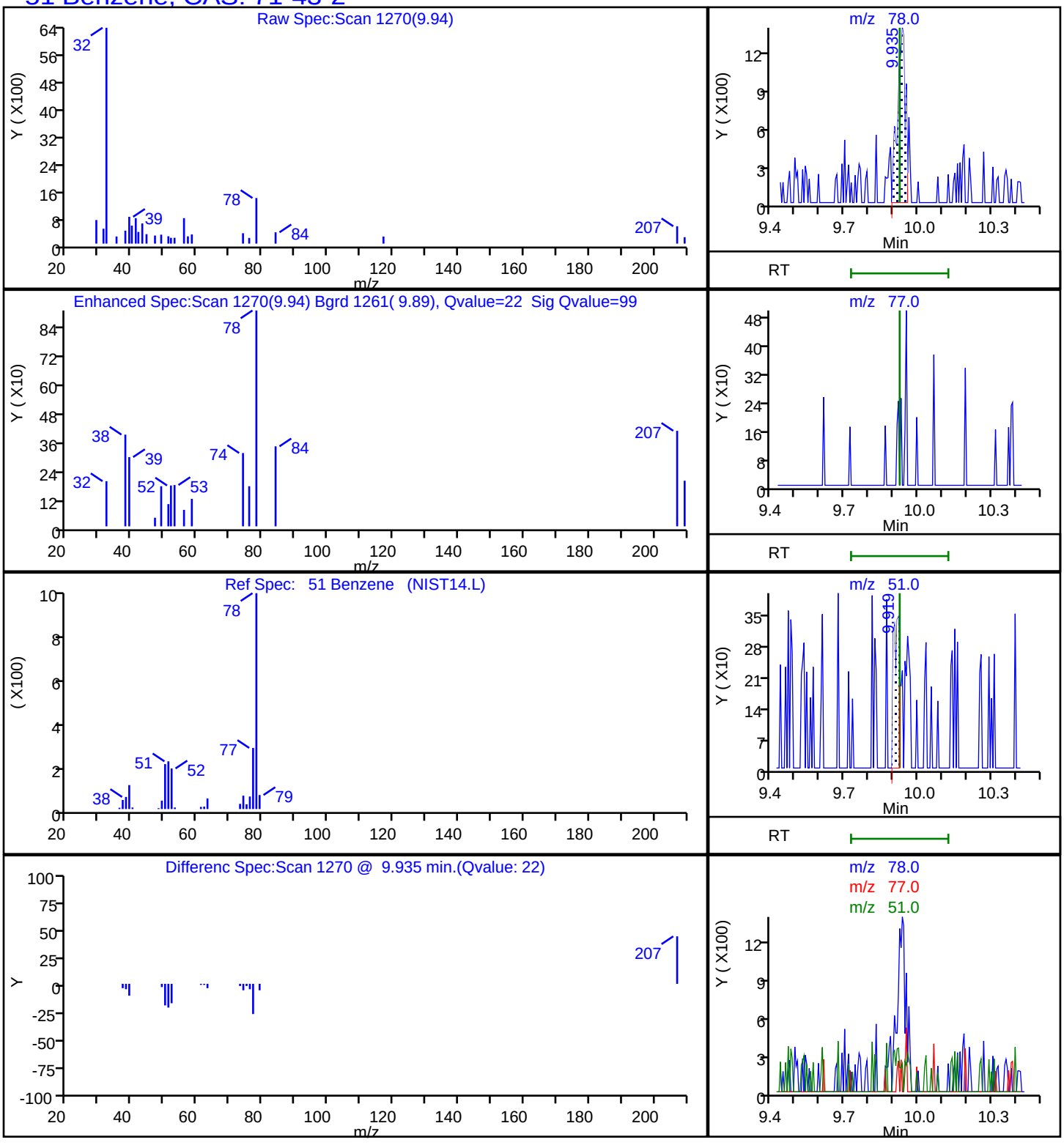
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	4.20	90.51

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P105.D

Injection Date:	05-Sep-2020 17:51:30	Instrument ID:	MR		
Lims ID:	140-20195-A-4	Lab Sample ID:	140-20195-4		
Client ID:	IA-174-A-29				
Operator ID:	HMT	ALS Bottle#:	5	Worklist Smp#:	11
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

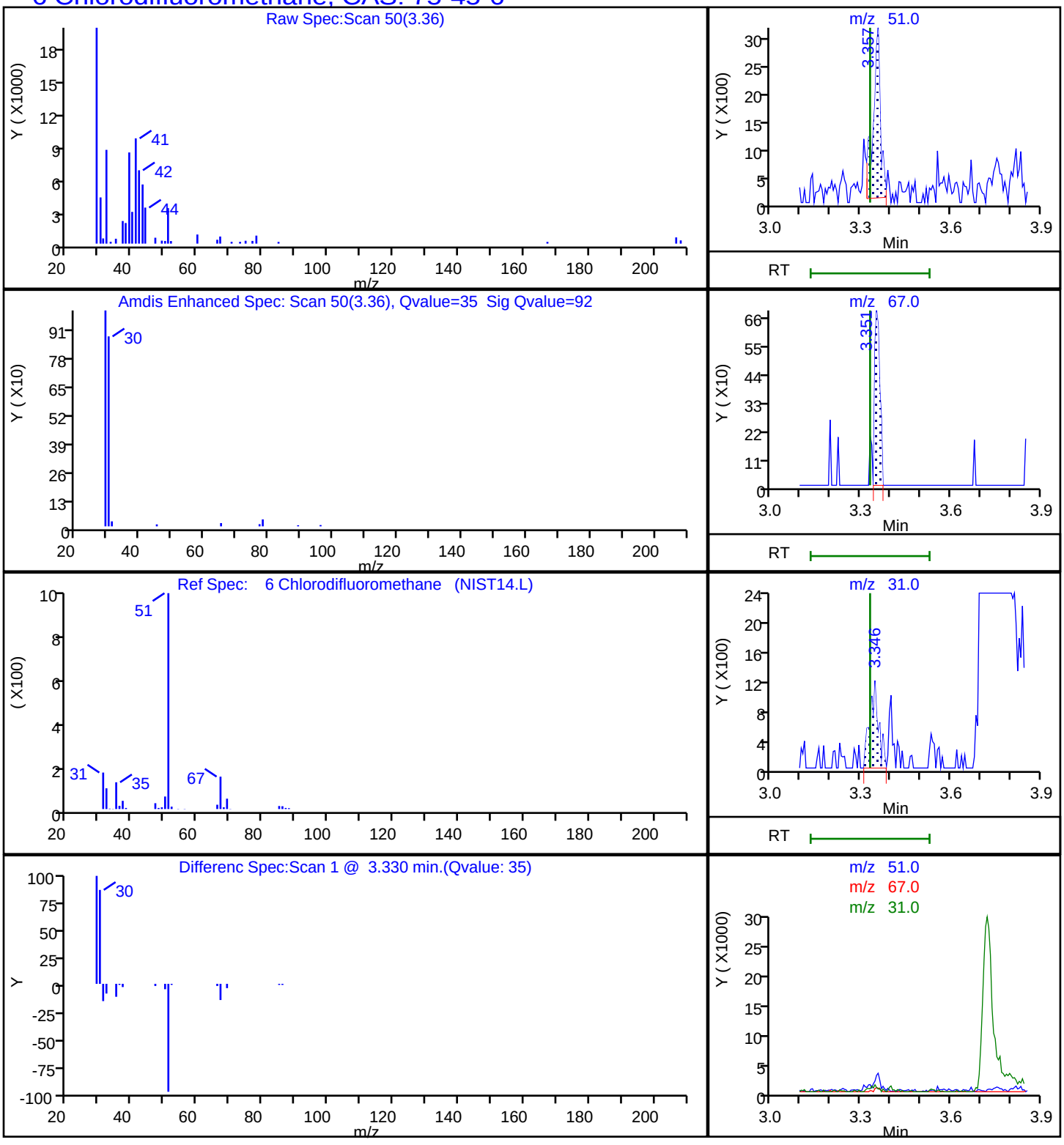
51 Benzene, CAS: 71-43-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P105.D		
Injection Date:	05-Sep-2020 17:51:30	Instrument ID:	MR
Lims ID:	140-20195-A-4	Lab Sample ID:	140-20195-4
Client ID:	IA-174-A-29		
Operator ID:	HMT	ALS Bottle#:	5 Worklist Smp#: 11
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

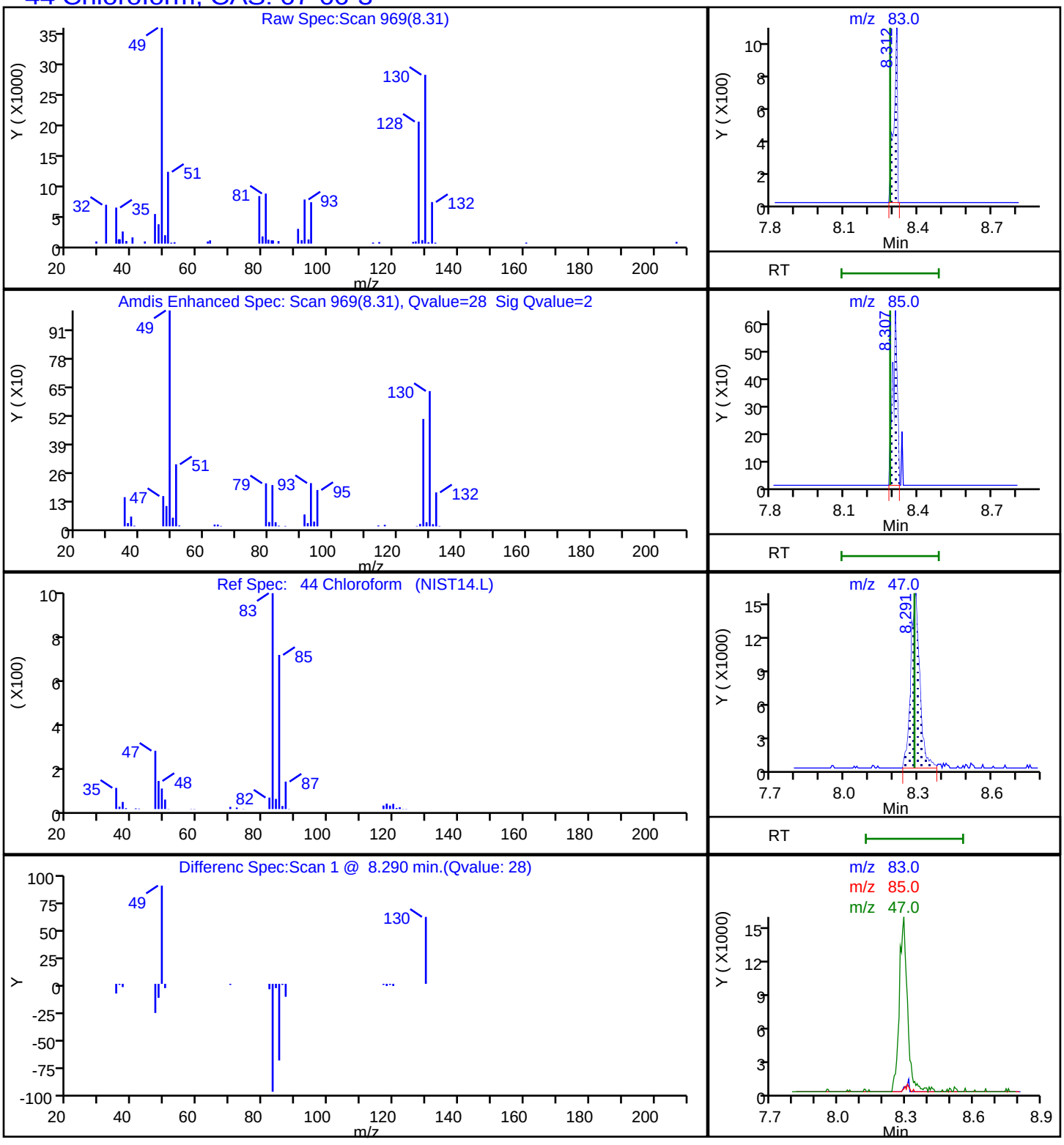
6 Chlorodifluoromethane, CAS: 75-45-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P105.D		
Injection Date:	05-Sep-2020 17:51:30	Instrument ID:	MR
Lims ID:	140-20195-A-4	Lab Sample ID:	140-20195-4
Client ID:	IA-174-A-29		
Operator ID:	HMT	ALS Bottle#:	5 Worklist Smp#: 11
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

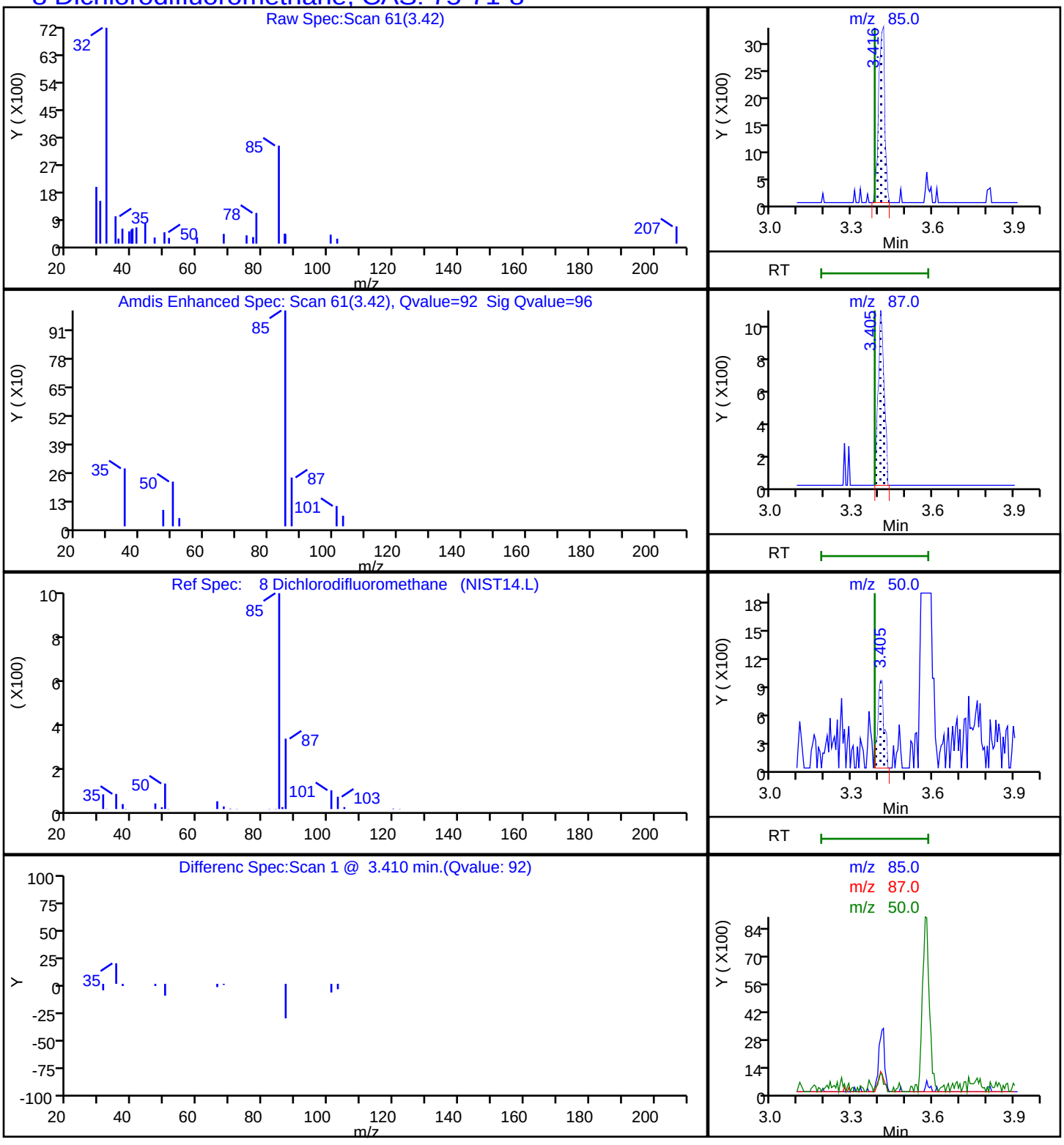
44 Chloroform, CAS: 67-66-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P105.D		
Injection Date:	05-Sep-2020 17:51:30	Instrument ID:	MR
Lims ID:	140-20195-A-4	Lab Sample ID:	140-20195-4
Client ID:	IA-174-A-29		
Operator ID:	HMT	ALS Bottle#:	5 Worklist Smp#: 11
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

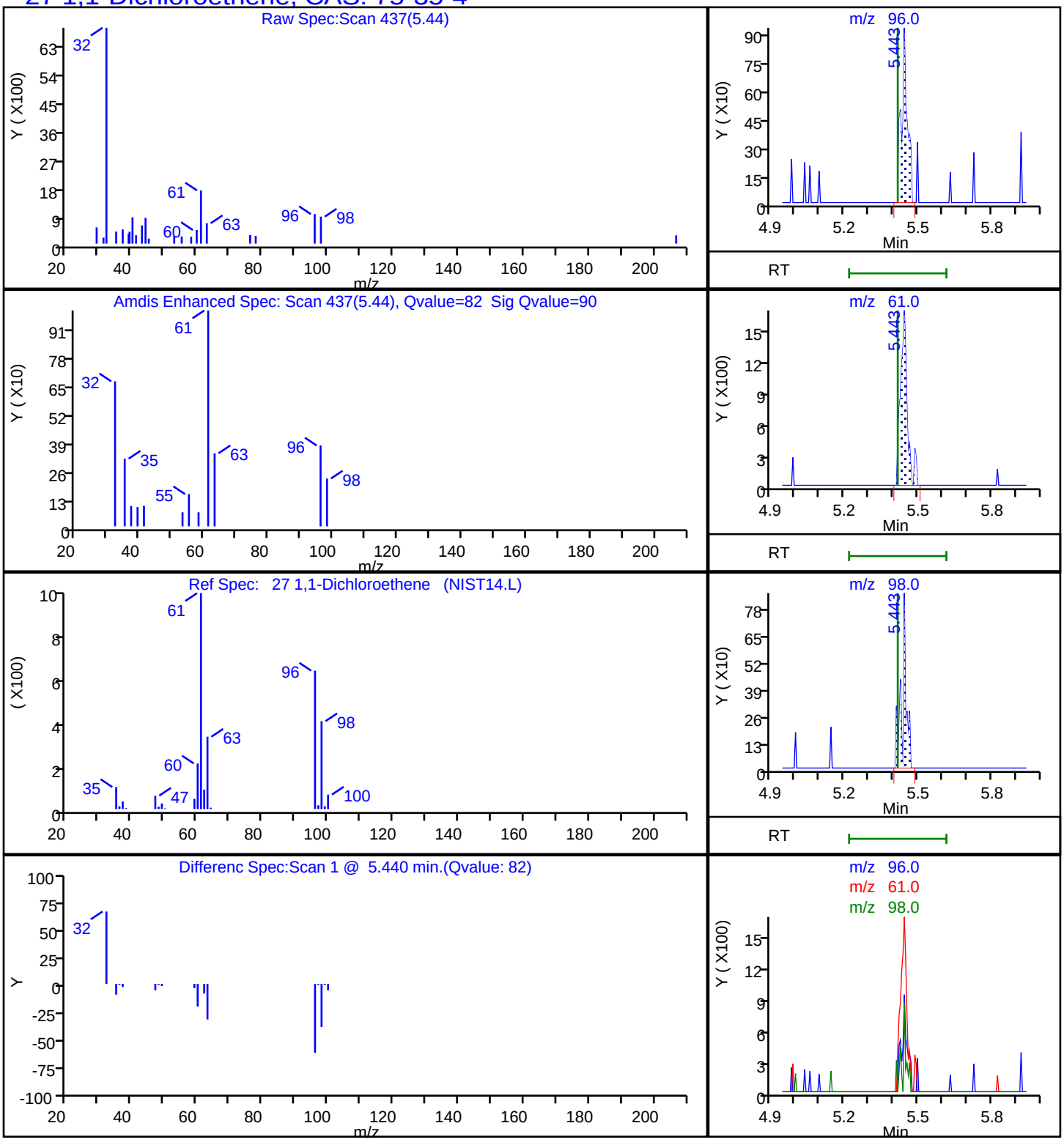
8 Dichlorodifluoromethane, CAS: 75-71-8



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P105.D		
Injection Date:	05-Sep-2020 17:51:30	Instrument ID:	MR
Lims ID:	140-20195-A-4	Lab Sample ID:	140-20195-4
Client ID:	IA-174-A-29		
Operator ID:	HMT	ALS Bottle#:	5 Worklist Smp#: 11
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

27 1,1-Dichloroethene, CAS: 75-35-4

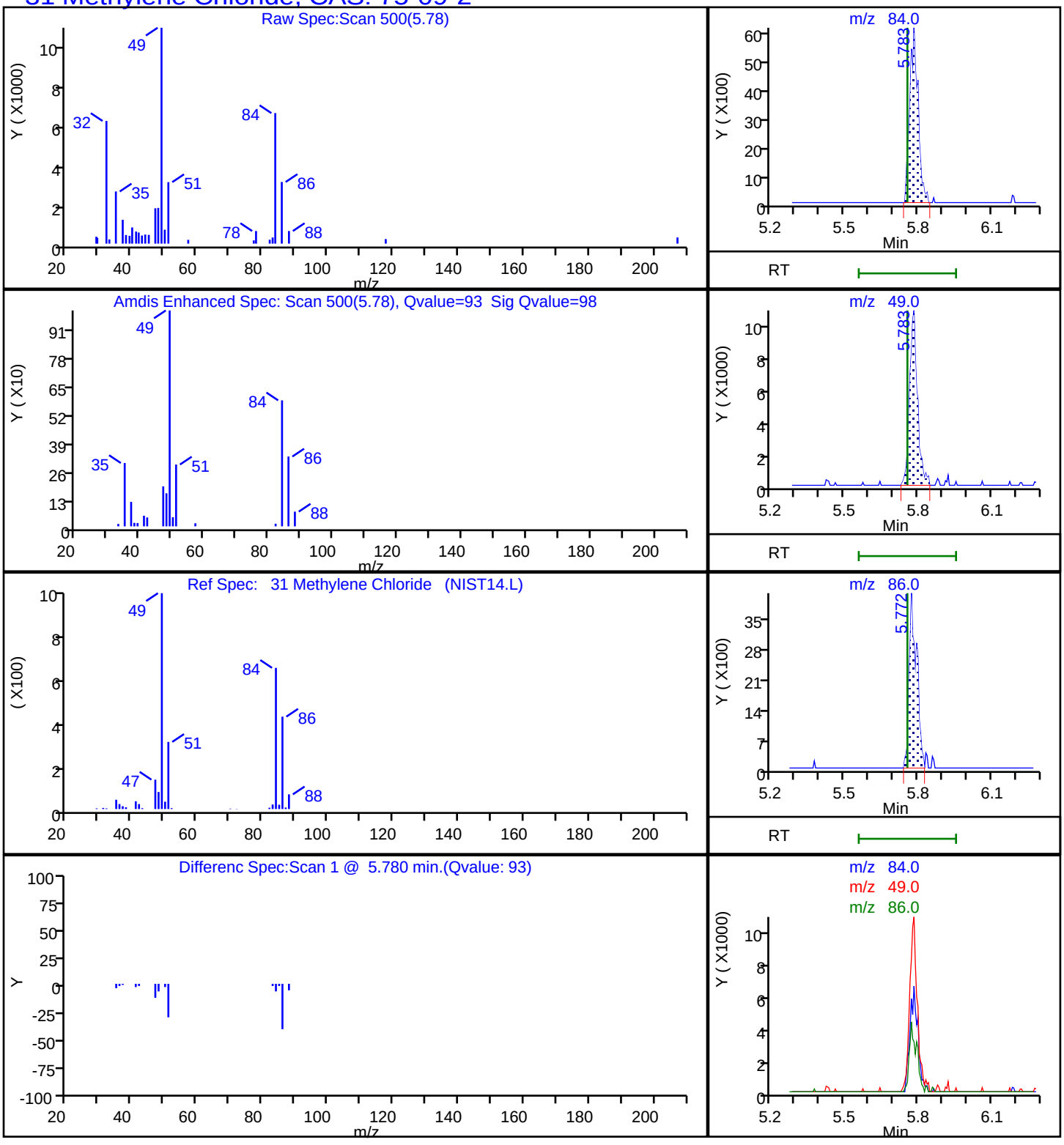


Report Date: 06-Sep-2020 07:11:42 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P105.D		
Injection Date:	05-Sep-2020 17:51:30	Instrument ID:	MR
Lims ID:	140-20195-A-4	Lab Sample ID:	140-20195-4
Client ID:	IA-174-A-29		
Operator ID:	HMT	ALS Bottle#:	5 Worklist Smp#: 11
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

31 Methylene Chloride, CAS: 75-09-2

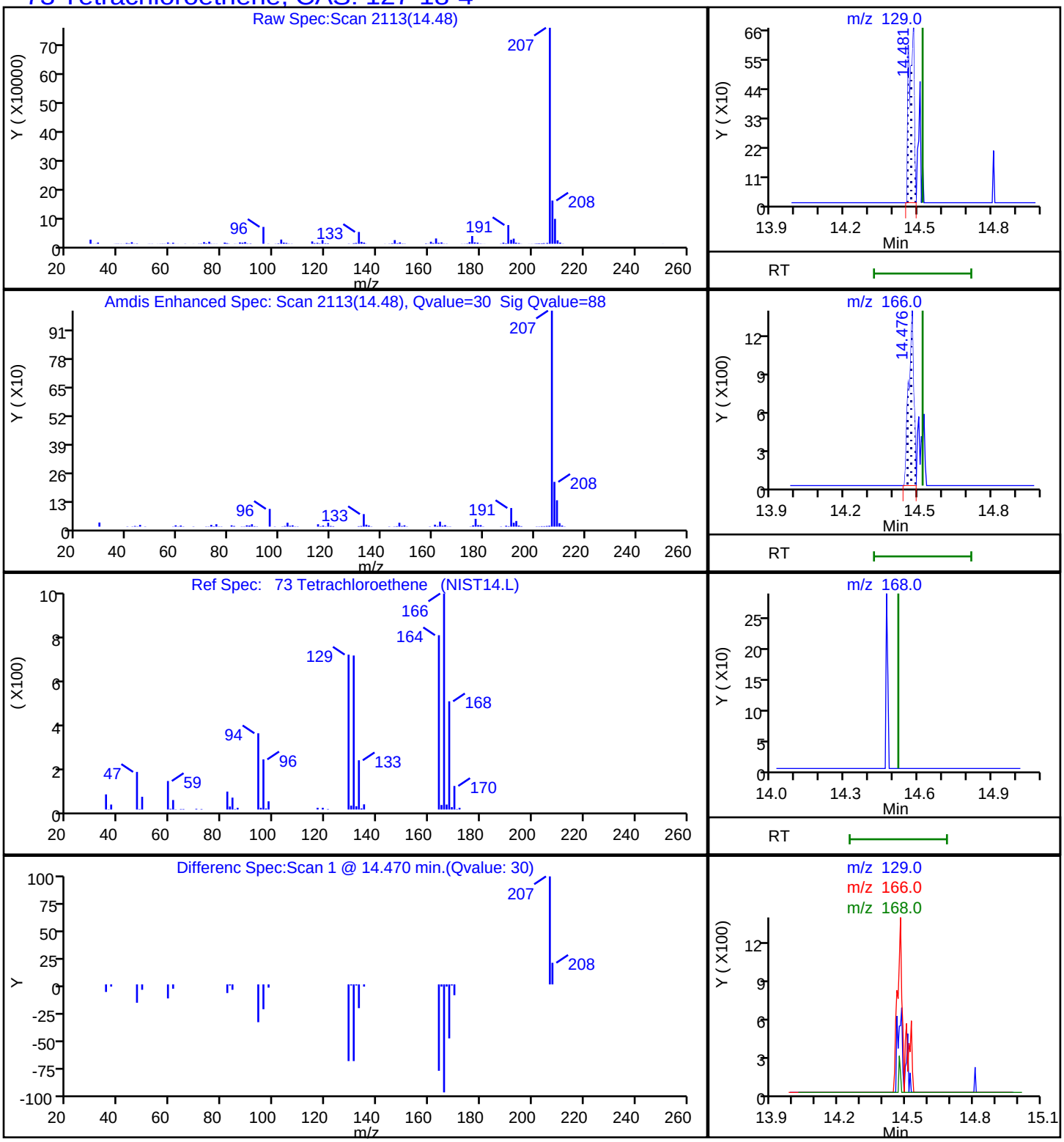


Report Date: 06-Sep-2020 07:11:42 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P105.D		
Injection Date:	05-Sep-2020 17:51:30	Instrument ID:	MR
Lims ID:	140-20195-A-4	Lab Sample ID:	140-20195-4
Client ID:	IA-174-A-29		
Operator ID:	HMT	ALS Bottle#:	5 Worklist Smp#: 11
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

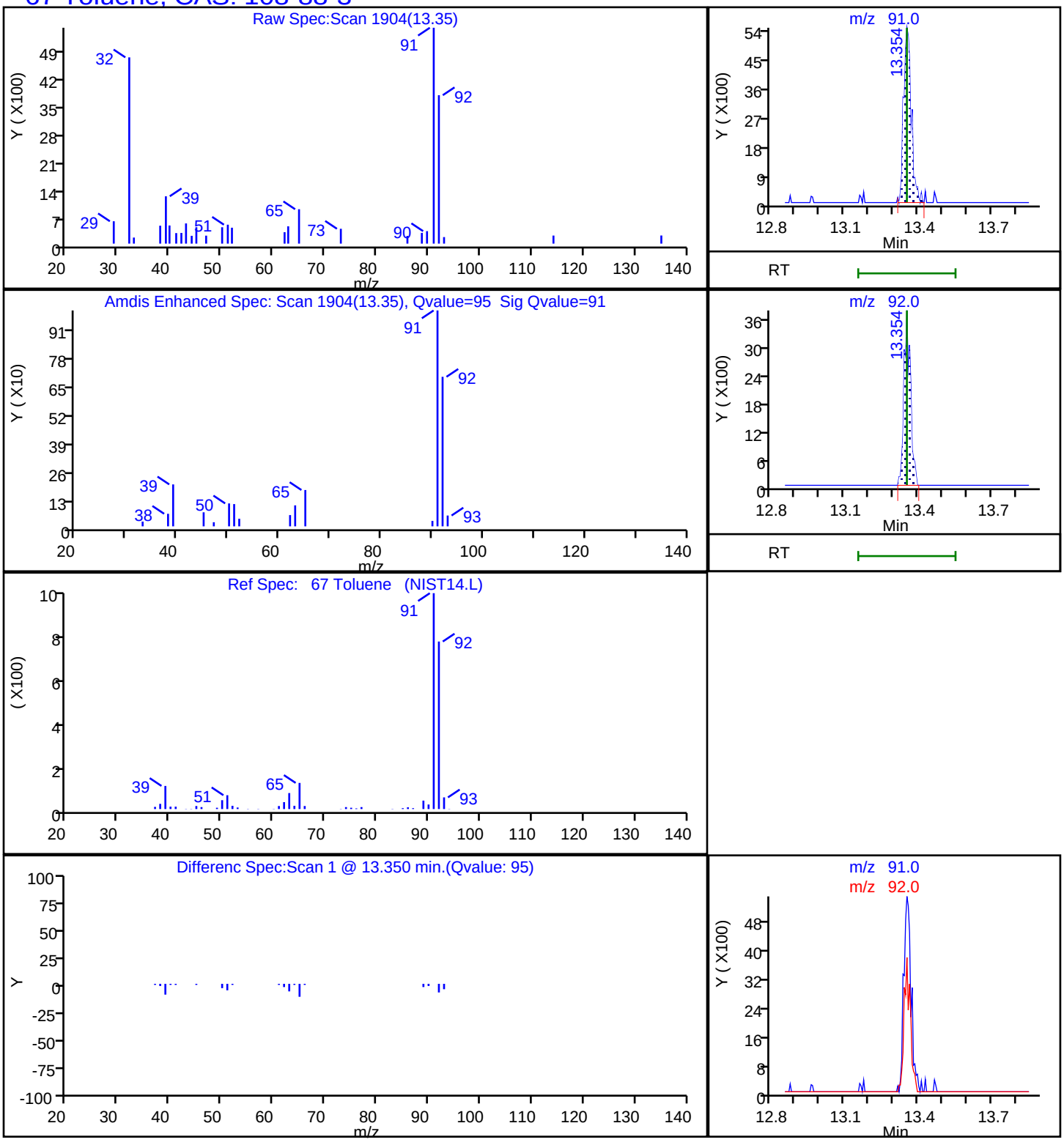
73 Tetrachloroethene, CAS: 127-18-4



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P105.D		
Injection Date:	05-Sep-2020 17:51:30	Instrument ID:	MR
Lims ID:	140-20195-A-4	Lab Sample ID:	140-20195-4
Client ID:	IA-174-A-29		
Operator ID:	HMT	ALS Bottle#:	5 Worklist Smp#: 11
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

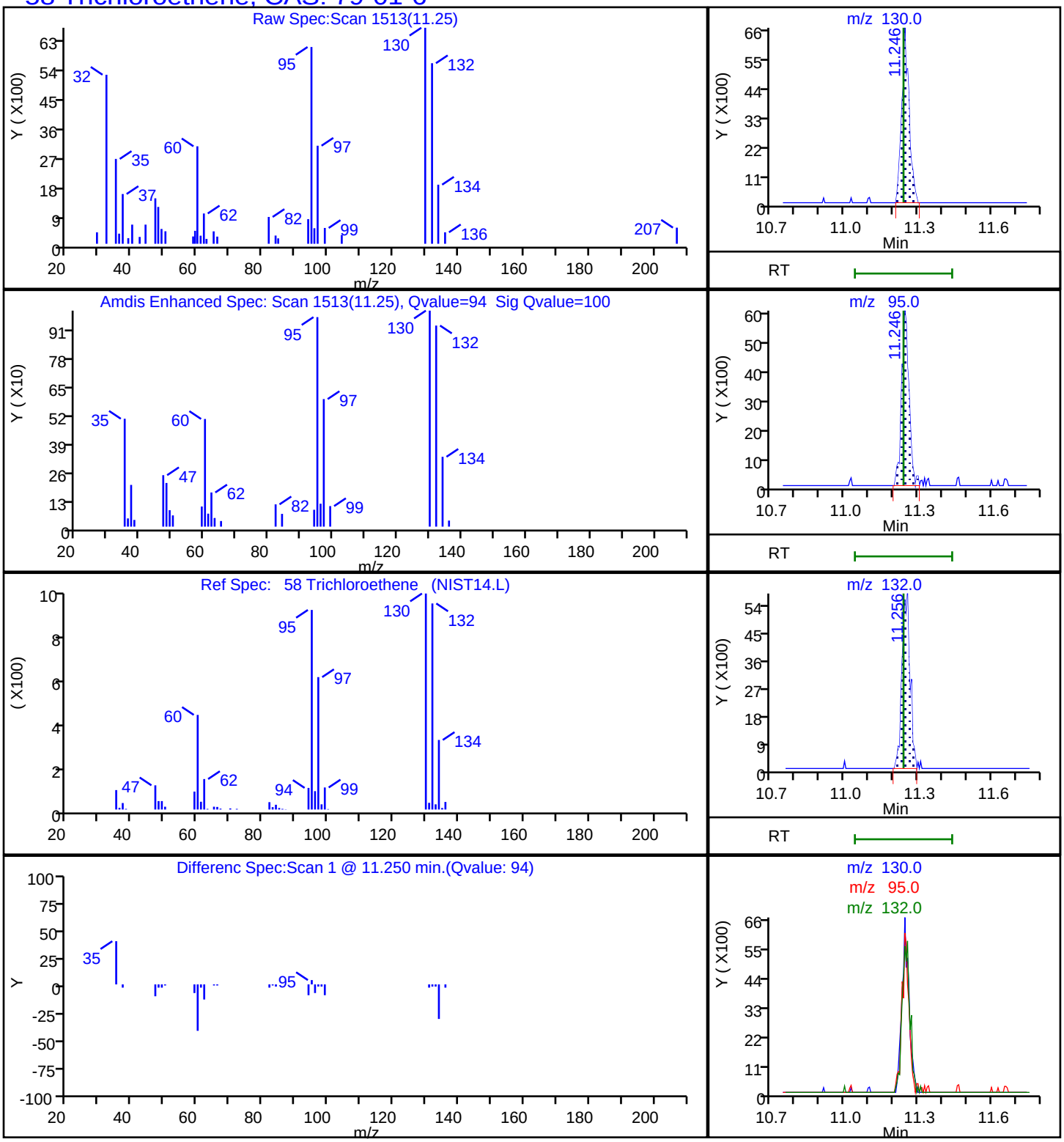
67 Toluene, CAS: 108-88-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P105.D		
Injection Date:	05-Sep-2020 17:51:30	Instrument ID:	MR
Lims ID:	140-20195-A-4	Lab Sample ID:	140-20195-4
Client ID:	IA-174-A-29		
Operator ID:	HMT	ALS Bottle#:	5 Worklist Smp#: 11
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

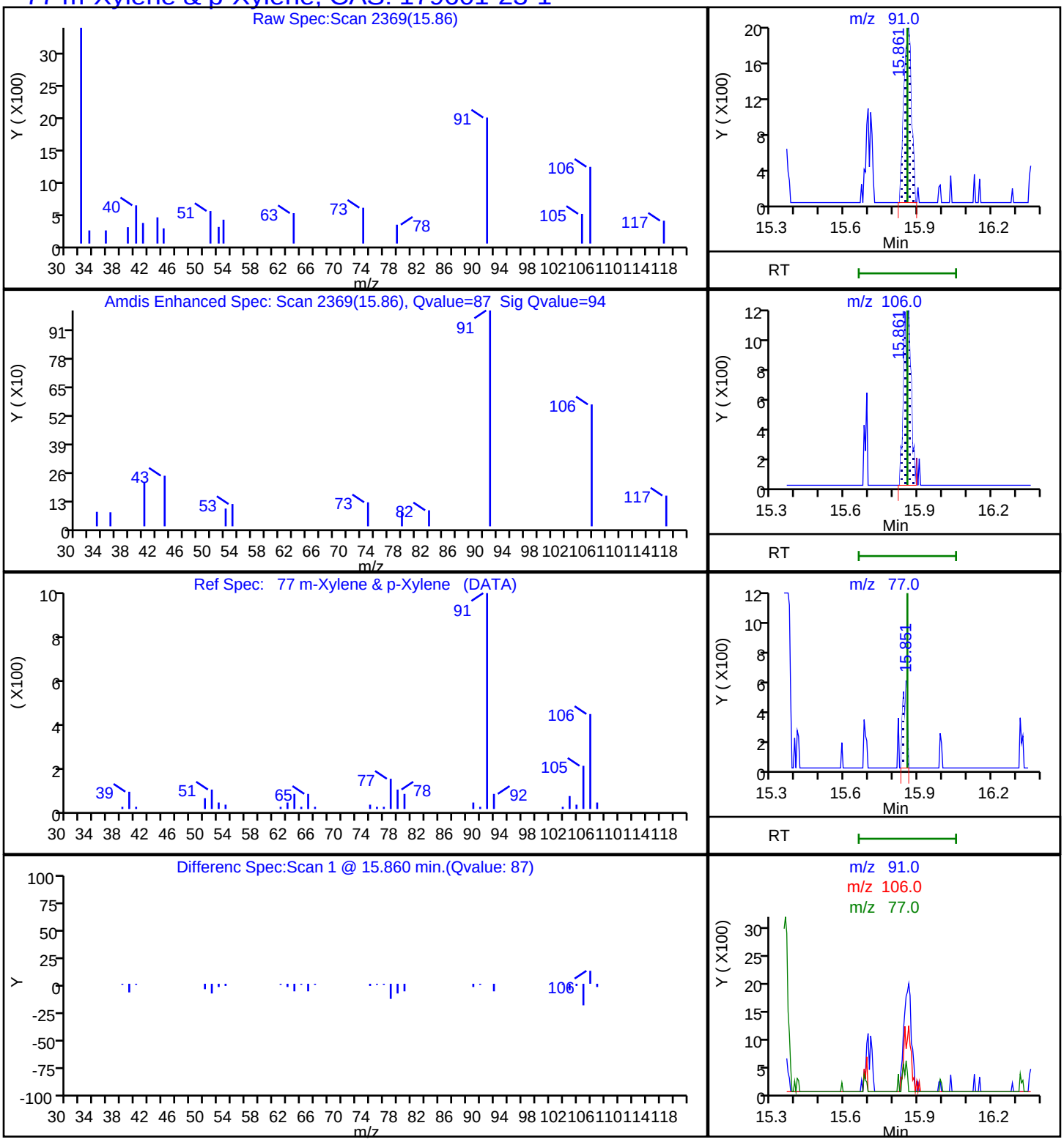
58 Trichloroethene, CAS: 79-01-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P105.D				
Injection Date:	05-Sep-2020 17:51:30	Instrument ID:	MR		
Lims ID:	140-20195-A-4	Lab Sample ID:	140-20195-4		
Client ID:	IA-174-A-29				
Operator ID:	HMT	ALS Bottle#:	5	Worklist Smp#:	11
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

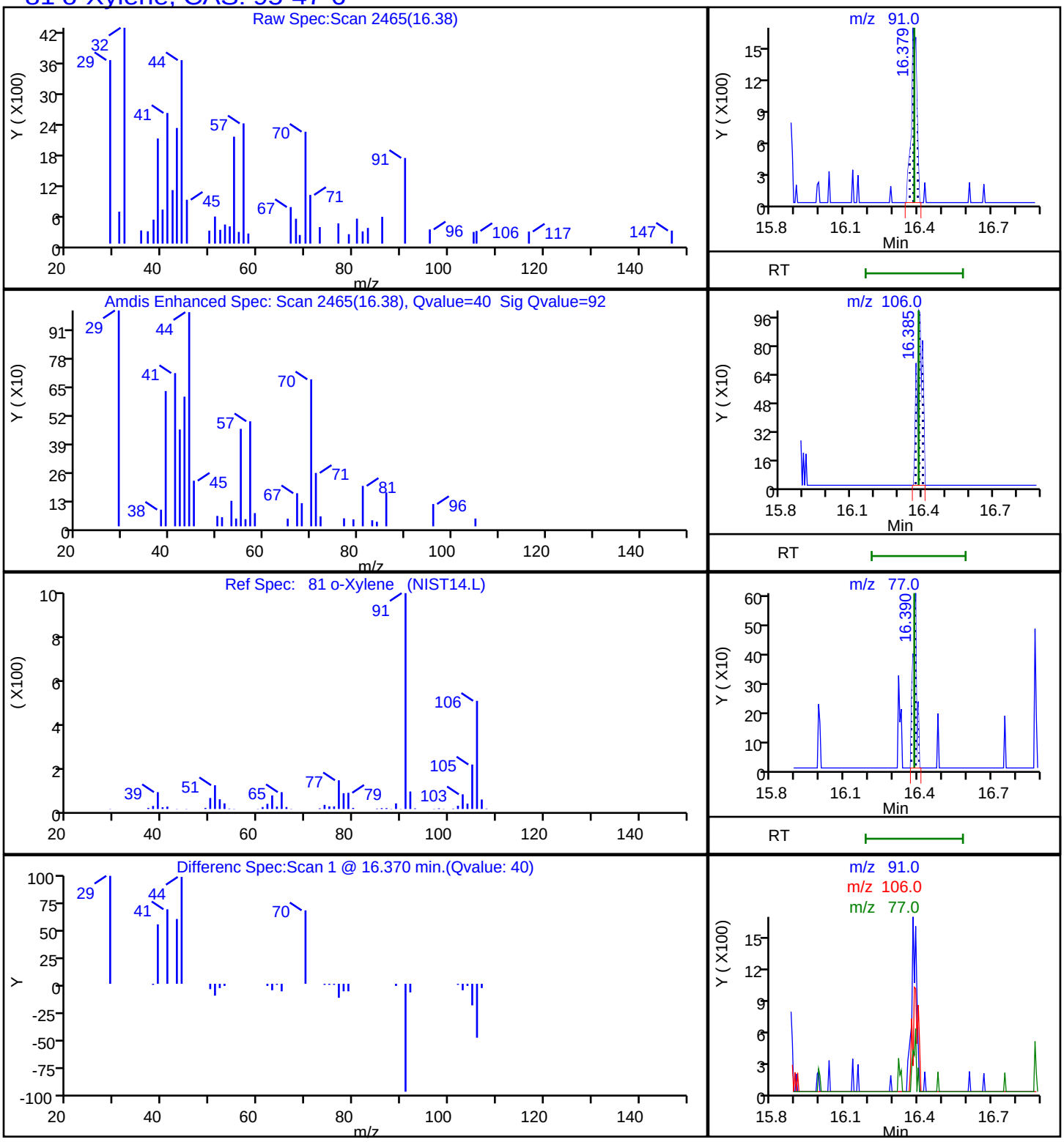
77 m-Xylene & p-Xylene, CAS: 179601-23-1



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P105.D		
Injection Date:	05-Sep-2020 17:51:30	Instrument ID:	MR
Lims ID:	140-20195-A-4	Lab Sample ID:	140-20195-4
Client ID:	IA-174-A-29		
Operator ID:	HMT	ALS Bottle#:	5 Worklist Smp#: 11
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

81 o-Xylene, CAS: 95-47-6



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Client Sample ID: IA-093-A-29 Lab Sample ID: 140-20195-5

Matrix: Air Lab File ID: RI05P106.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 15:45

Sample wt/vol: 100(mL) Date Analyzed: 09/05/2020 18:41

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42483 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.11	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.052	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	0.34	J	0.40	0.11
67-66-3	Chloroform	119.38	0.11	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.41		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	0.25	J	0.40	0.040
100-41-4	Ethylbenzene	106.17	0.095	J	0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.035
108-88-3	Toluene	92.14	0.39	J	0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	0.82		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	ND		0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	90		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Client Sample ID: IA-093-A-29 Lab Sample ID: 140-20195-5

Matrix: Air Lab File ID: RI05P106.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 15:45

Sample wt/vol: 100(mL) Date Analyzed: 09/05/2020 18:41

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42483 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.36	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.33	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	1.2	J	1.4	0.39
67-66-3	Chloroform	119.38	0.53	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.0		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	0.98	J	1.6	0.16
100-41-4	Ethylbenzene	106.17	0.41	J	1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.24
108-88-3	Toluene	92.14	1.5	J	2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	4.4		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	ND		3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	90		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P106.D
Lims ID: 140-20195-A-5
Client ID: IA-093-A-29
Sample Type: Client
Inject. Date: 05-Sep-2020 18:41:30 ALS Bottle#: 6 Worklist Smp#: 12
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016508-012
Misc. Info.: 140-20195-a-5
Operator ID: HMT Instrument ID: MR

Method: \\chromfs\Knoxville\ChromData\MR\20200904-16508.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 06-Sep-2020 07:11:26 Calib Date: 29-Aug-2020 00:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1023

First Level Reviewer: tajh Date: 06-Sep-2020 07:04:44

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.280	8.274	0.006	97	132296	4.80	
* 2 1,4-Difluorobenzene	114	10.517	10.512	0.005	94	639048	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.349	15.349	0.000	88	479222	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.005	16.999	0.005	93	269016	4.20	
6 Chlorodifluoromethane	51	3.351	3.329	0.022	36	5036	0.0680	
8 Dichlorodifluoromethane	85	3.405	3.383	0.022	93	4595	0.0827	
27 1,1-Dichloroethene	96	5.438	5.416	0.022	43	1925	0.0492	
44 Chloroform	83	8.285	8.285	0.000	28	1719	0.0216	
51 Benzene	78	9.914	9.924	-0.010	31	2533	0.0227	
52 Carbon tetrachloride	117	9.957	9.946	0.011	45	748	0.0104	
58 Trichloroethene	130	11.245	11.240	0.005	89	9053	0.1631	
67 Toluene	91	13.359	13.354	0.005	94	10125	0.0785	
76 Ethylbenzene	91	15.856	15.694	0.162	90	3099	0.0190	
81 o-Xylene	91	16.384	16.384	0.000	56	2261	0.0175	

Reagents:

40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

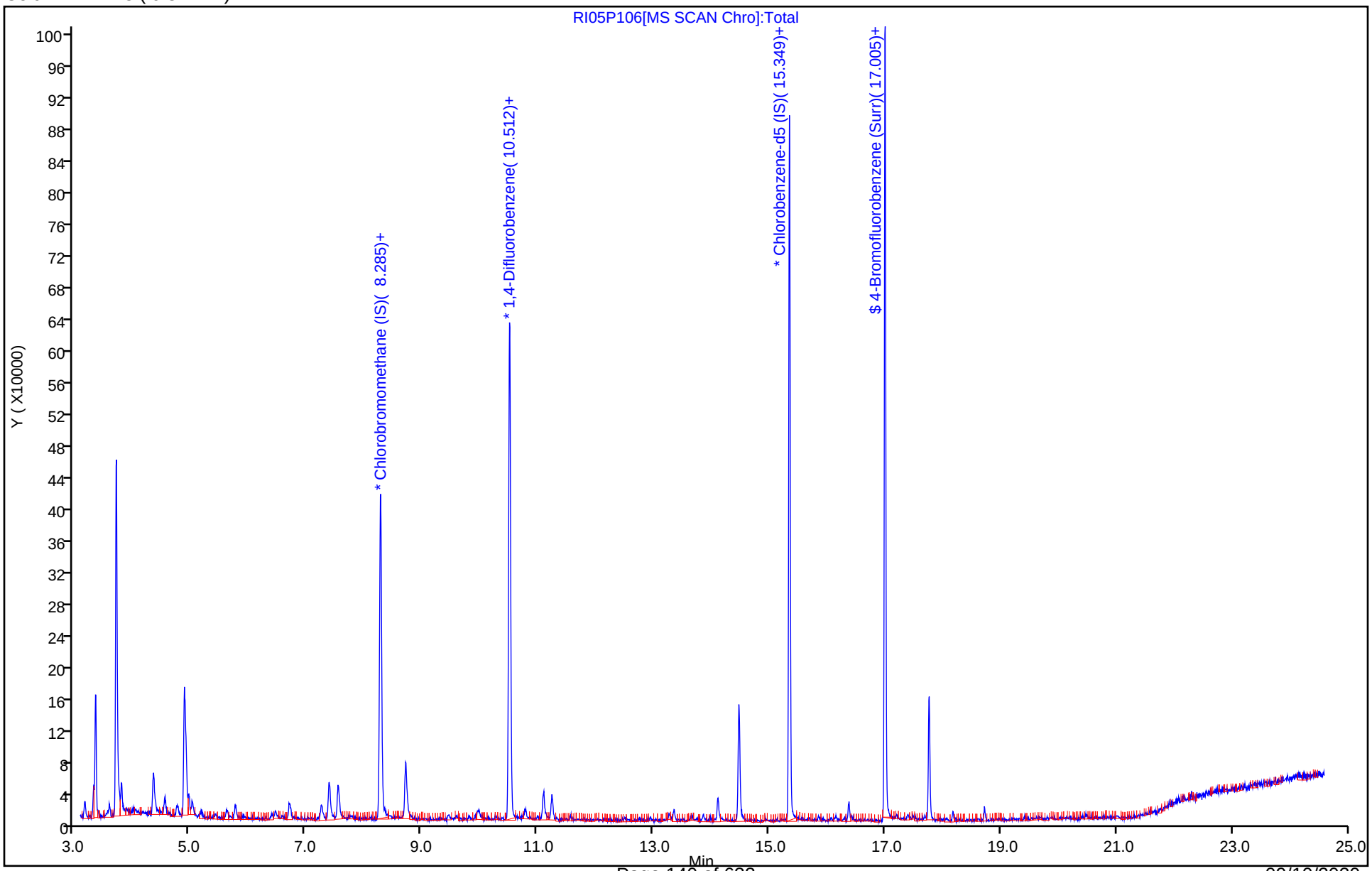
Report Date: 06-Sep-2020 07:11:43 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P106.D

Injection Date:	05-Sep-2020 18:41:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	140-20195-A-5	Lab Sample ID:	140-20195-5	Worklist Smp#:	12
Client ID:	IA-093-A-29				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P106.D				
Lims ID:	140-20195-A-5				
Client ID:	IA-093-A-29				
Sample Type:	Client				
Inject. Date:	05-Sep-2020 18:41:30	ALS Bottle#:	6	Worklist Smp#:	12
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016508-012				
Misc. Info.:	140-20195-a-5				
Operator ID:	HMT	Instrument ID:	MR		
Method:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\MR_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	06-Sep-2020 07:11:26	Calib Date:	29-Aug-2020 00:02:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1023				
First Level Reviewer: tajh		Date:	06-Sep-2020 07:04:44		

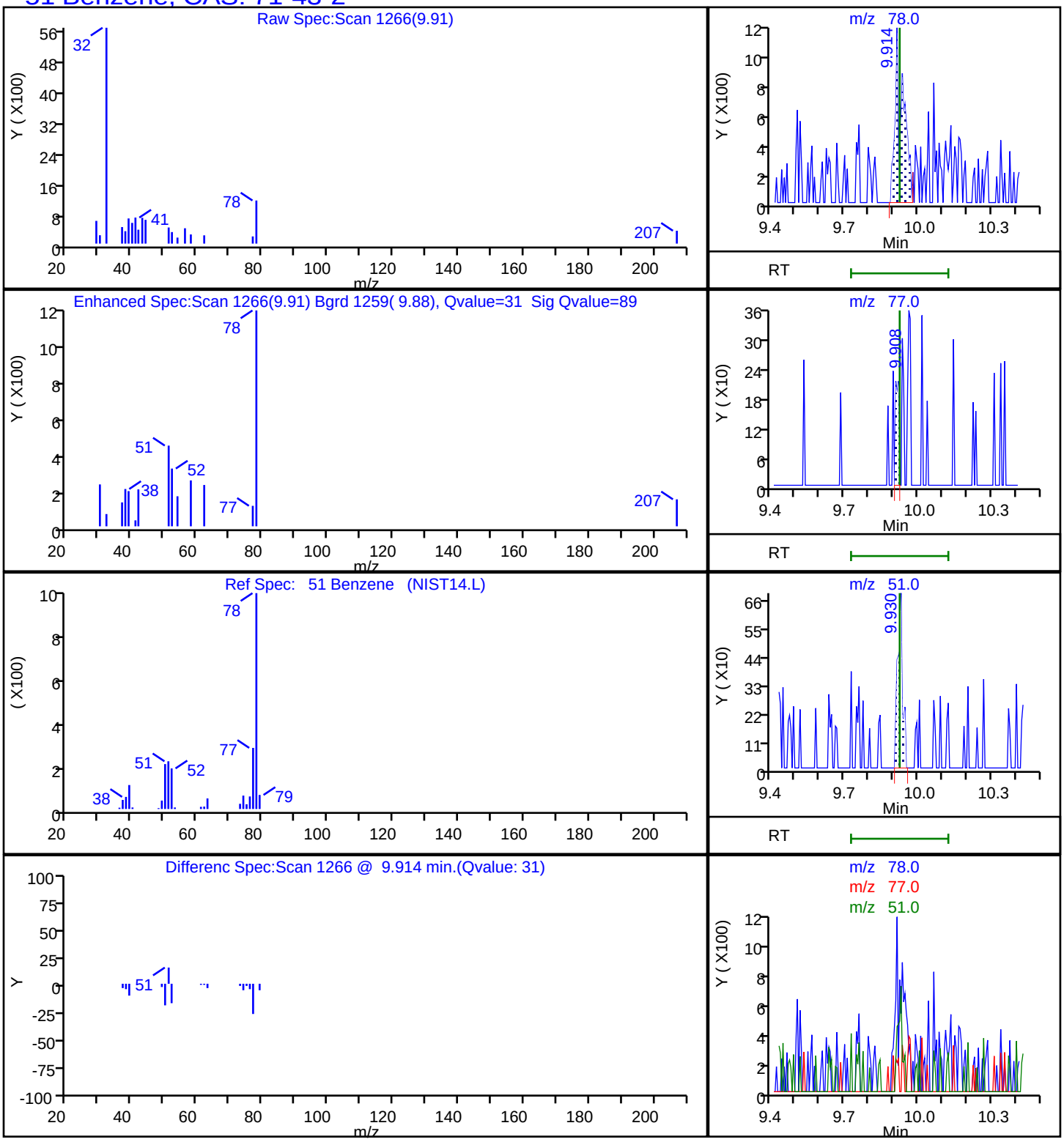
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	4.20	90.49

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P106.D

Injection Date:	05-Sep-2020 18:41:30	Instrument ID:	MR		
Lims ID:	140-20195-A-5	Lab Sample ID:	140-20195-5		
Client ID:	IA-093-A-29				
Operator ID:	HMT	ALS Bottle#:	6	Worklist Smp#:	12
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

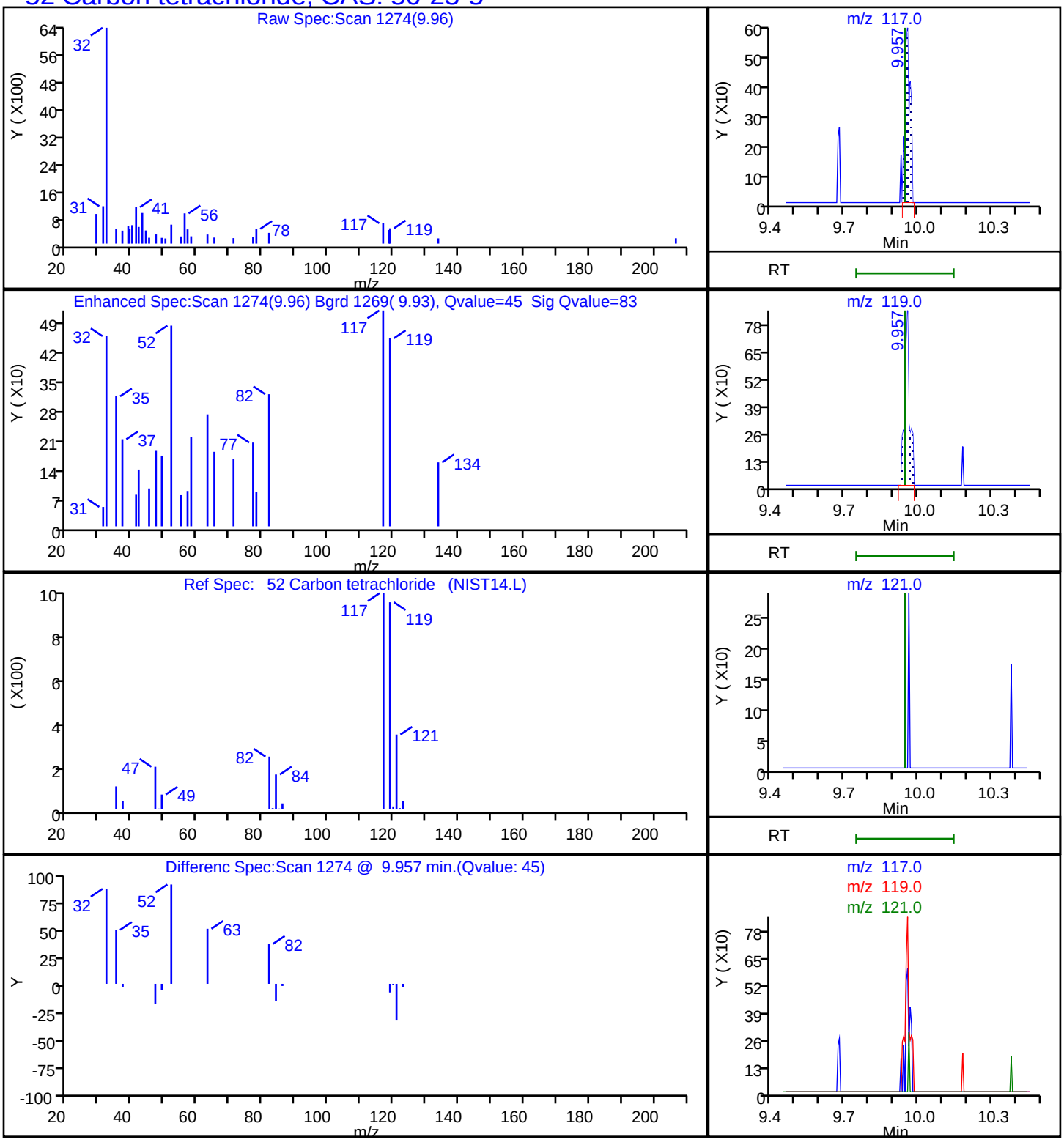
51 Benzene, CAS: 71-43-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P106.D		
Injection Date:	05-Sep-2020 18:41:30	Instrument ID:	MR
Lims ID:	140-20195-A-5	Lab Sample ID:	140-20195-5
Client ID:	IA-093-A-29		
Operator ID:	HMT	ALS Bottle#:	6 Worklist Smp#: 12
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

52 Carbon tetrachloride, CAS: 56-23-5

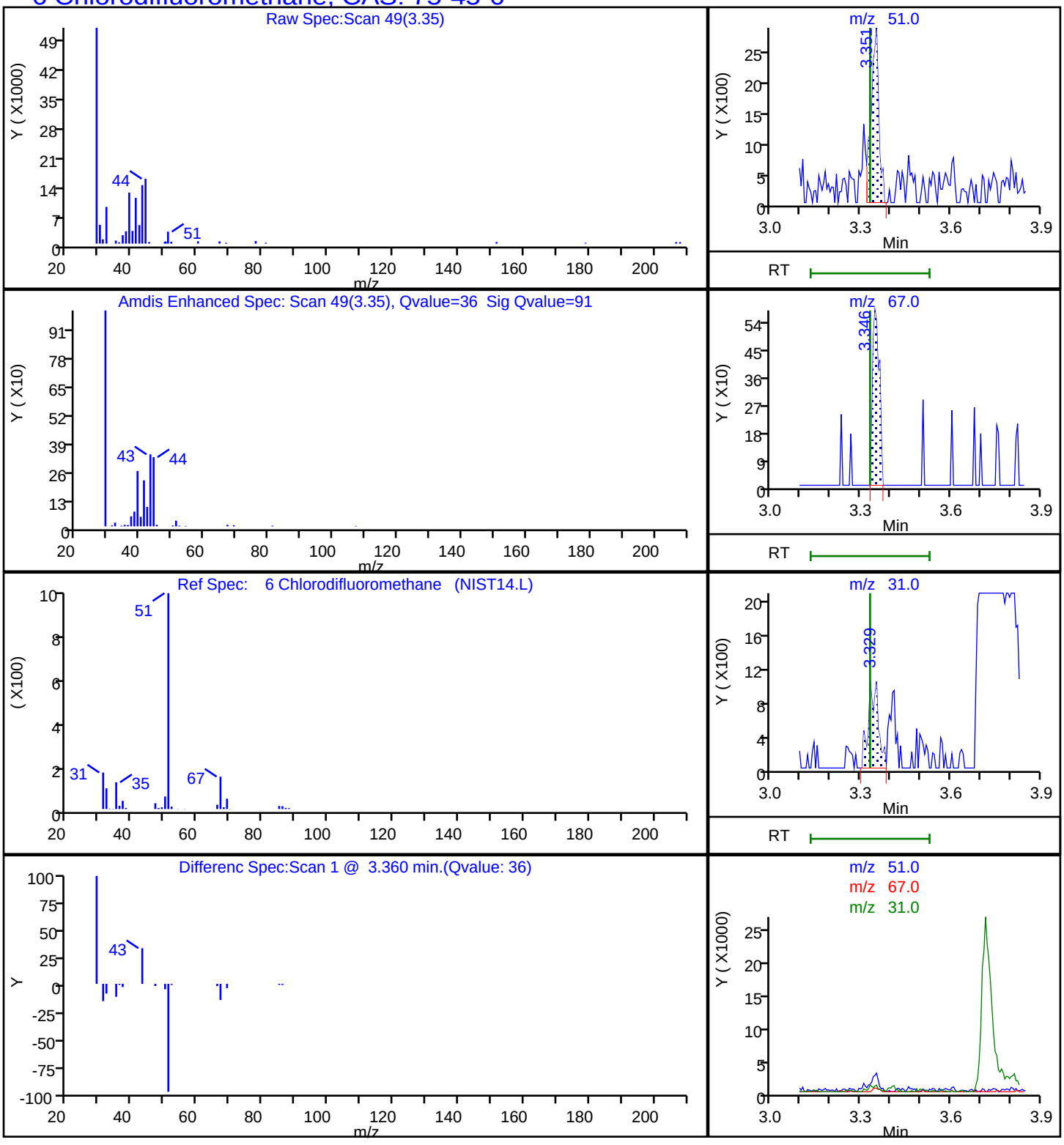


Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P106.D

Injection Date:	05-Sep-2020 18:41:30	Instrument ID:	MR
Lims ID:	140-20195-A-5	Lab Sample ID:	140-20195-5
Client ID:	IA-093-A-29		
Operator ID:	HMT	ALS Bottle#:	6 Worklist Smp#: 12
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

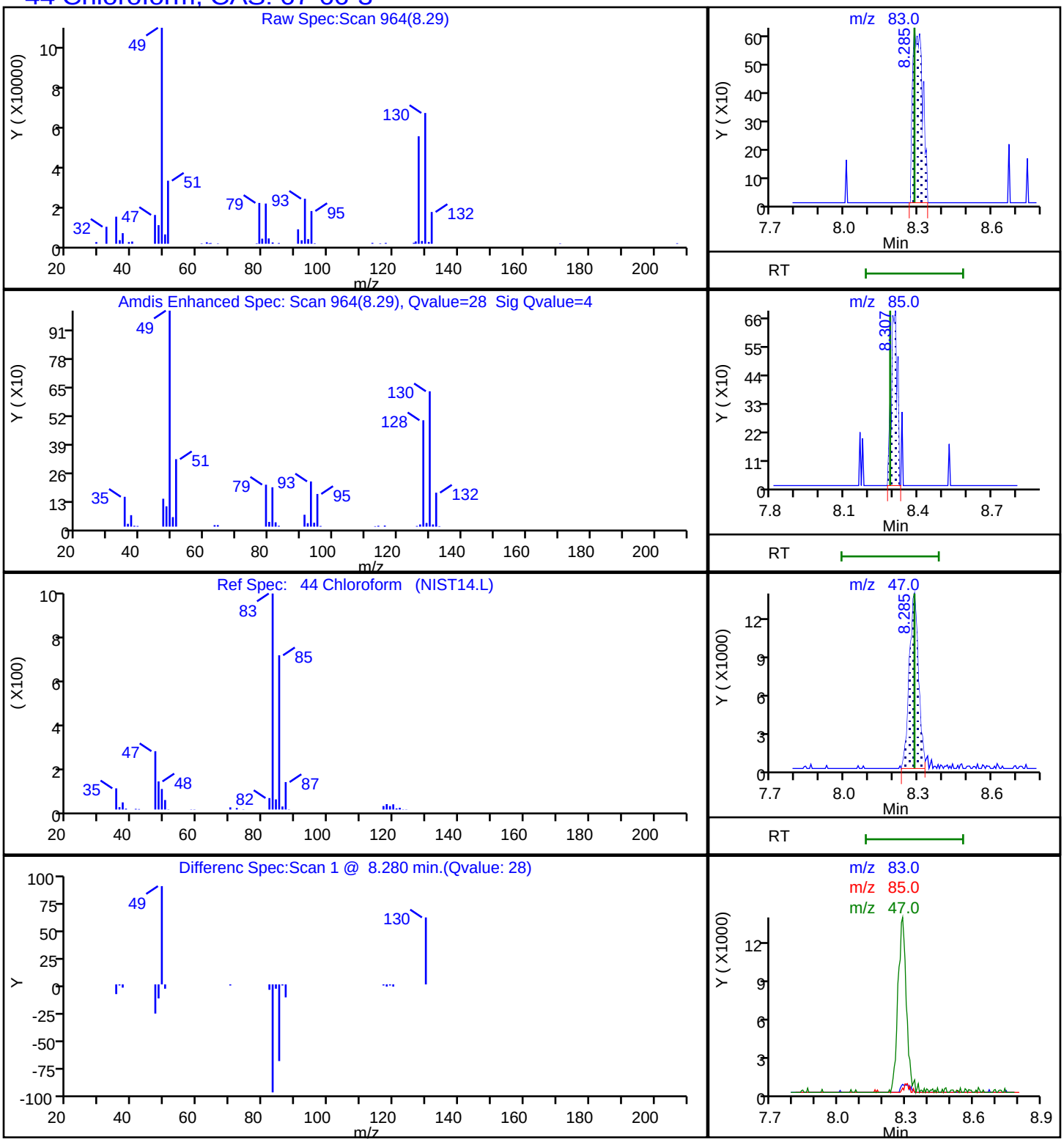
6 Chlorodifluoromethane, CAS: 75-45-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P106.D		
Injection Date:	05-Sep-2020 18:41:30	Instrument ID:	MR
Lims ID:	140-20195-A-5	Lab Sample ID:	140-20195-5
Client ID:	IA-093-A-29		
Operator ID:	HMT	ALS Bottle#:	6 Worklist Smp#: 12
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

44 Chloroform, CAS: 67-66-3



Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P106.D

Injection Date: 05-Sep-2020 18:41:30 Instrument ID: MR

Lims ID: 140-20195-A-5 Lab Sample ID: 140-20195-5

Client ID: IA-093-A-29

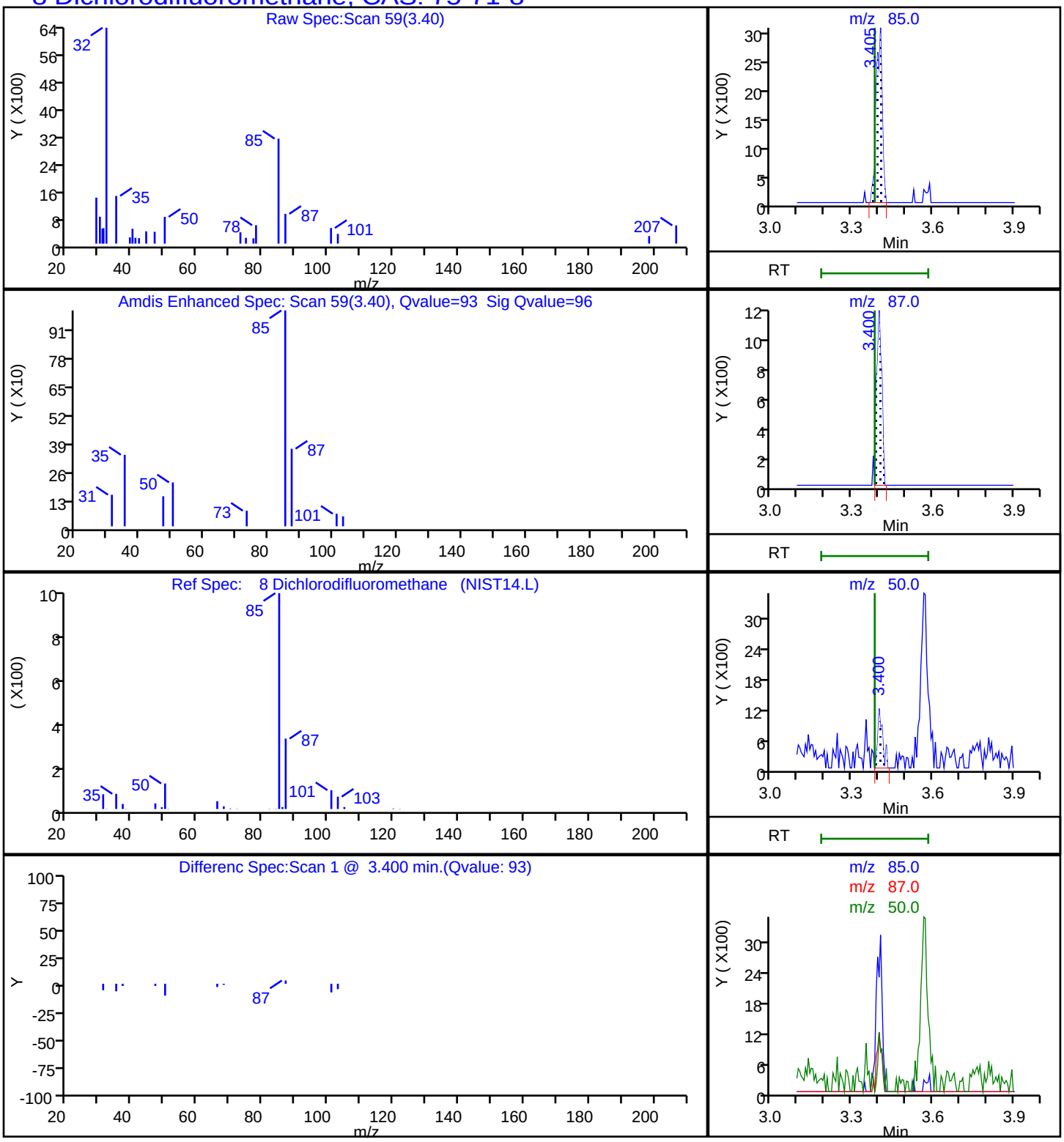
Operator ID: HMT ALS Bottle#: 6 Worklist Smp#: 12

Purge Vol: 500.000 mL Dil. Factor: 1.0000

Method: MR_TO15 Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm) Detector MS SCAN

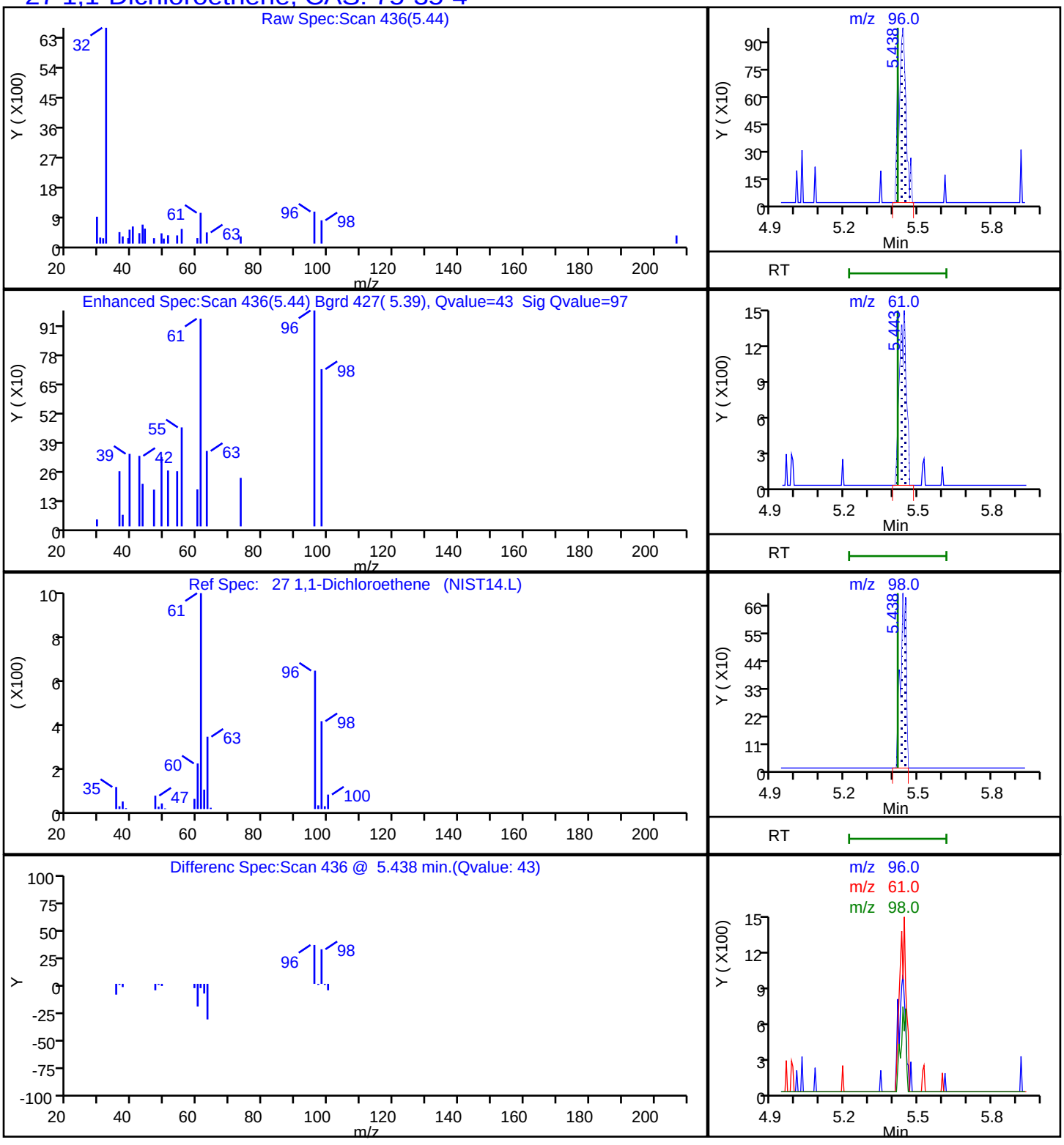
8 Dichlorodifluoromethane, CAS: 75-71-8



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P106.D		
Injection Date:	05-Sep-2020 18:41:30	Instrument ID:	MR
Lims ID:	140-20195-A-5	Lab Sample ID:	140-20195-5
Client ID:	IA-093-A-29		
Operator ID:	HMT	ALS Bottle#:	6 Worklist Smp#: 12
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

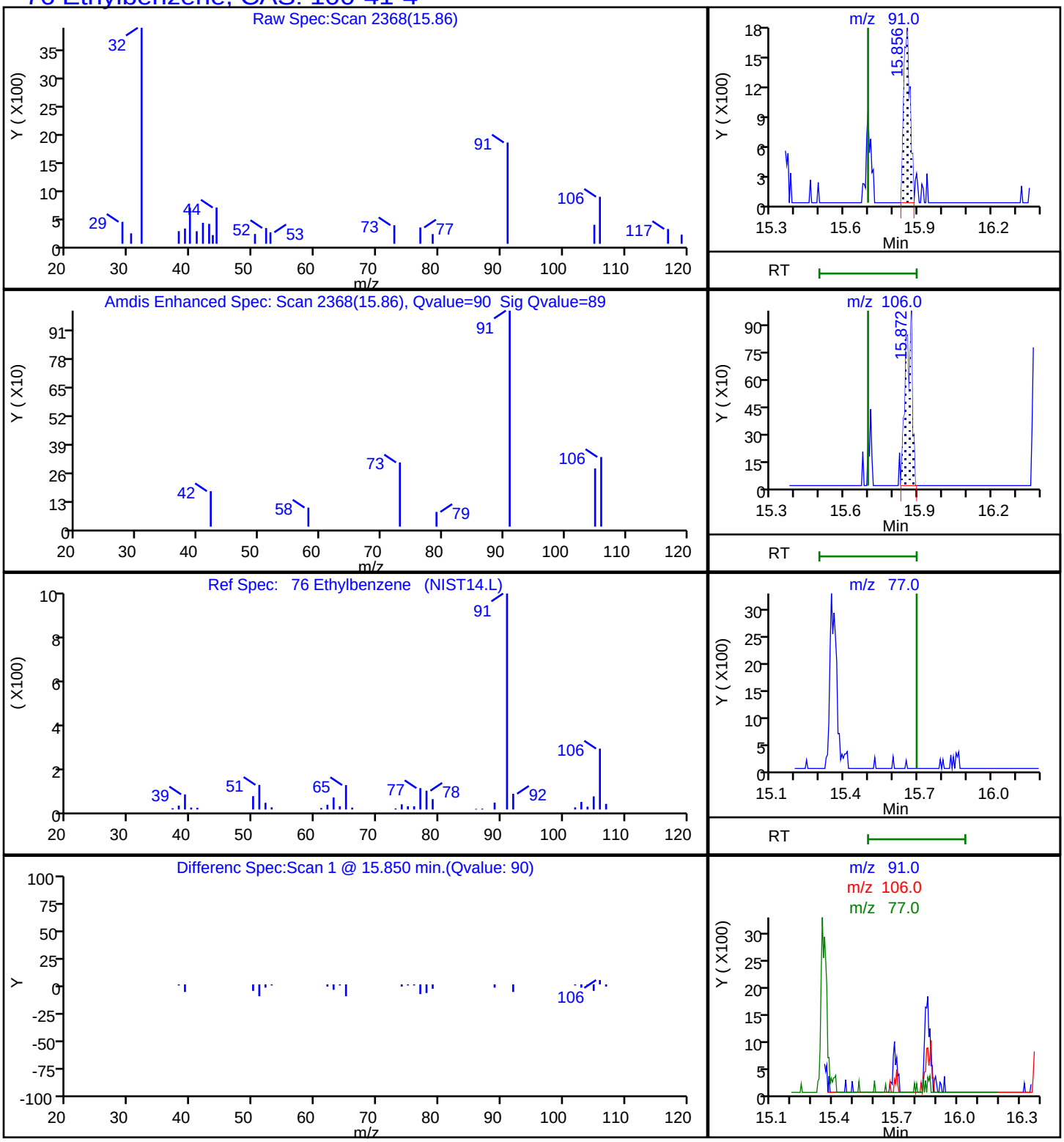
27 1,1-Dichloroethene, CAS: 75-35-4



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P106.D		
Injection Date:	05-Sep-2020 18:41:30	Instrument ID:	MR
Lims ID:	140-20195-A-5	Lab Sample ID:	140-20195-5
Client ID:	IA-093-A-29		
Operator ID:	HMT	ALS Bottle#:	6 Worklist Smp#: 12
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

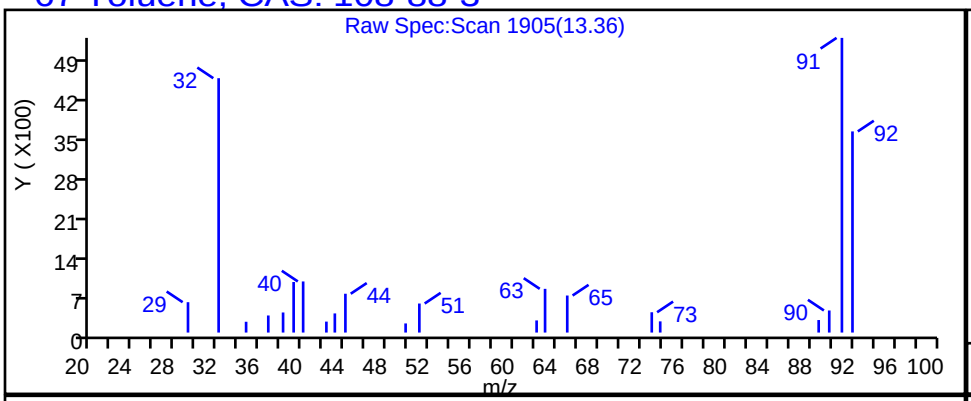
76 Ethylbenzene, CAS: 100-41-4

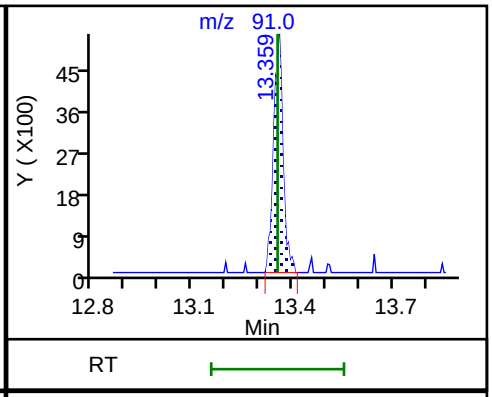


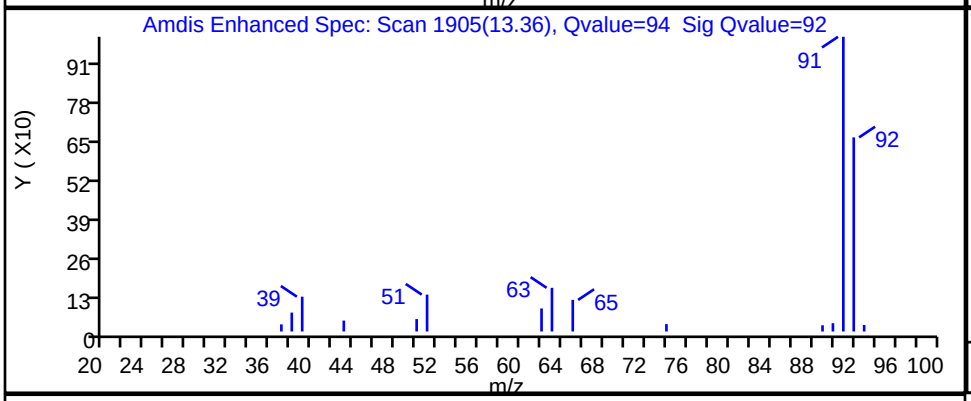
Eurofins TestAmerica, Knoxville

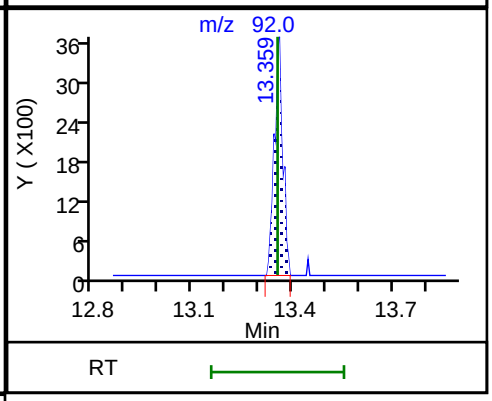
Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P106.D		
Injection Date:	05-Sep-2020 18:41:30	Instrument ID:	MR
Lims ID:	140-20195-A-5	Lab Sample ID:	140-20195-5
Client ID:	IA-093-A-29		
Operator ID:	HMT	ALS Bottle#:	6 Worklist Smp#: 12
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

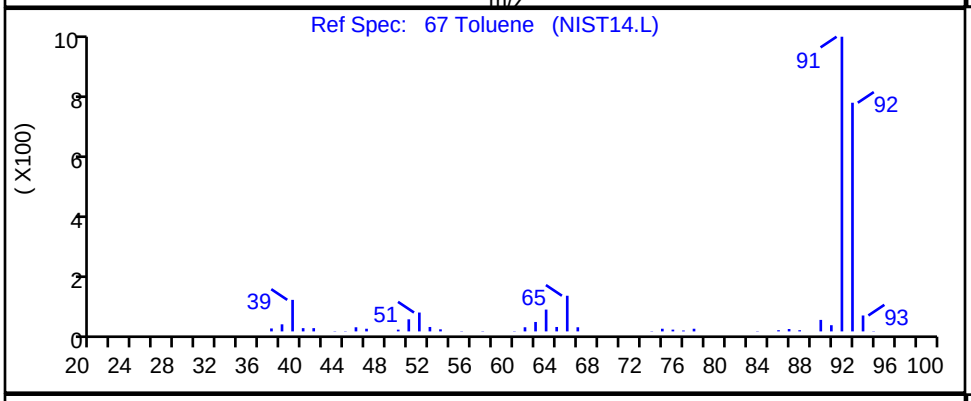
67 Toluene, CAS: 108-88-3

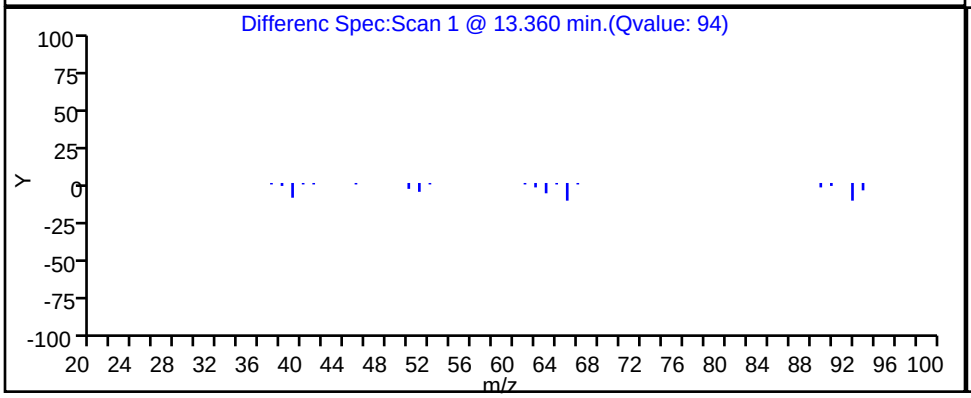


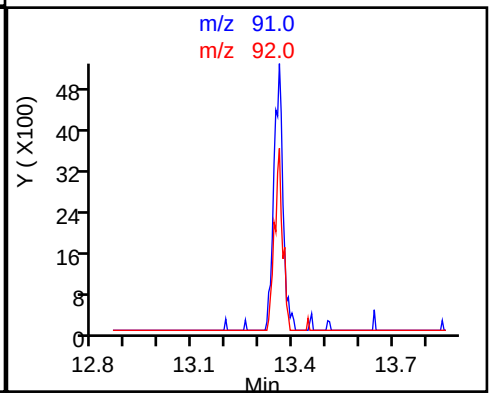








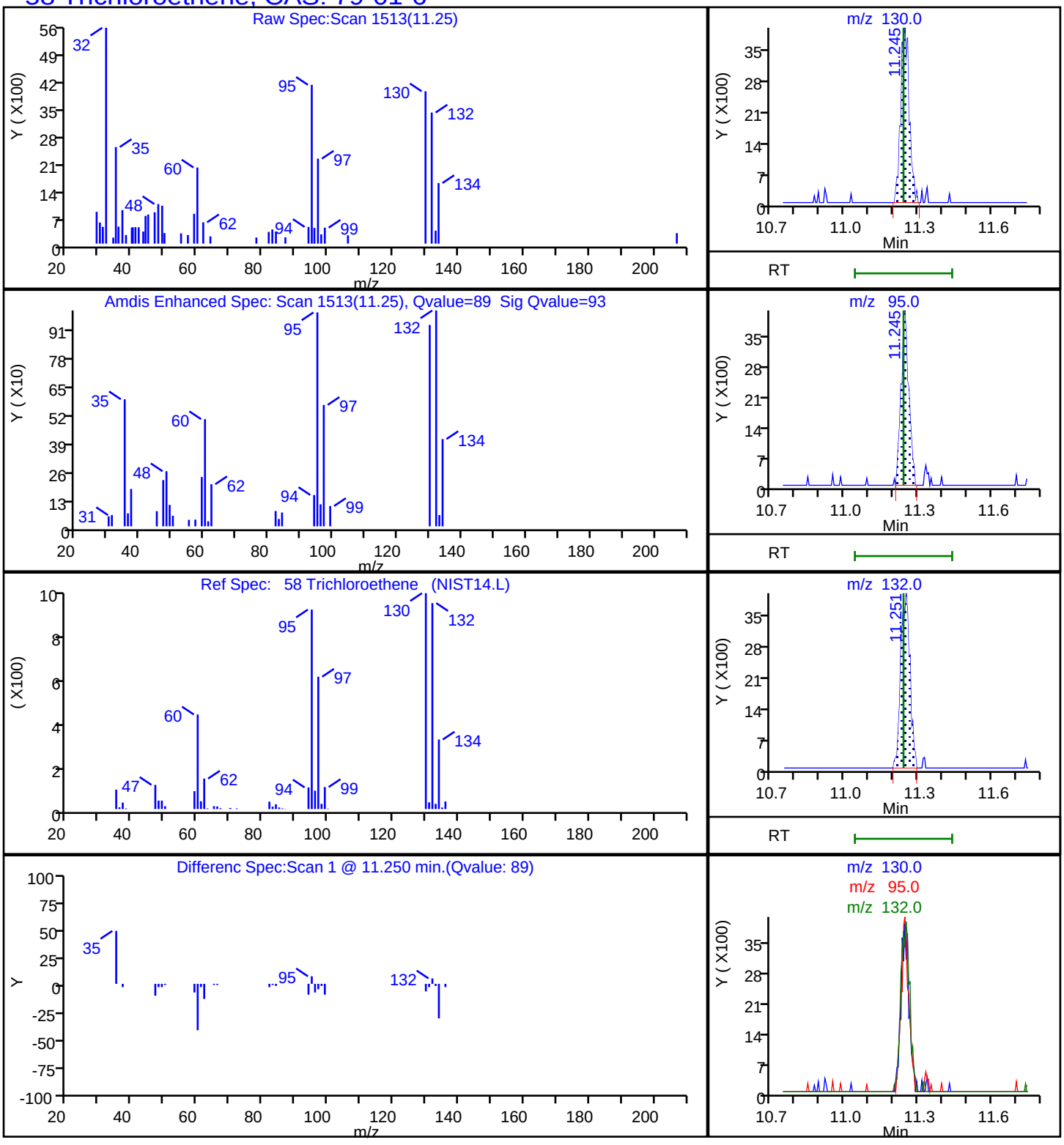




Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P106.D		
Injection Date:	05-Sep-2020 18:41:30	Instrument ID:	MR
Lims ID:	140-20195-A-5	Lab Sample ID:	140-20195-5
Client ID:	IA-093-A-29		
Operator ID:	HMT	ALS Bottle#:	6 Worklist Smp#: 12
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

58 Trichloroethene, CAS: 79-01-6



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Client Sample ID: IA-015-A-29 Lab Sample ID: 140-20195-6

Matrix: Air Lab File ID: RI05P107.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 15:50

Sample wt/vol: 100(mL) Date Analyzed: 09/05/2020 19:30

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42483 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.079	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.058	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	0.34	J	0.40	0.11
67-66-3	Chloroform	119.38	0.11	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.41		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	0.072	J	0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.035
108-88-3	Toluene	92.14	0.46	J	0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	ND		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	0.22	J	0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.28	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	90		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Client Sample ID: IA-015-A-29 Lab Sample ID: 140-20195-6

Matrix: Air Lab File ID: RI05P107.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 15:50

Sample wt/vol: 100(mL) Date Analyzed: 09/05/2020 19:30

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42483 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.25	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.36	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	1.2	J	1.4	0.39
67-66-3	Chloroform	119.38	0.53	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.0		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	0.31	J	1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.24
108-88-3	Toluene	92.14	1.7	J	2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	ND		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	1.1	J	2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	1.2	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	90		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P107.D
Lims ID: 140-20195-A-6
Client ID: IA-015-A-29
Sample Type: Client
Inject. Date: 05-Sep-2020 19:30:30 ALS Bottle#: 7 Worklist Smp#: 13
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016508-013
Misc. Info.: 140-20195-a-6
Operator ID: HMT Instrument ID: MR

Method: \\chromfs\Knoxville\ChromData\MR\20200904-16508.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 06-Sep-2020 07:11:26 Calib Date: 29-Aug-2020 00:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1023

First Level Reviewer: tajh Date: 06-Sep-2020 07:04:55

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.290	8.274	0.016	97	135896	4.80	
* 2 1,4-Difluorobenzene	114	10.517	10.512	0.005	94	636148	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.349	15.349	0.000	88	492742	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	16.999	16.999	0.000	93	275585	4.18	
6 Chlorodifluoromethane	51	3.340	3.329	0.011	96	5114	0.0672	
8 Dichlorodifluoromethane	85	3.400	3.383	0.017	92	4711	0.0825	
44 Chloroform	83	8.301	8.285	0.016	28	1759	0.0215	
51 Benzene	78	9.919	9.924	-0.005	1	1764	0.0159	
52 Carbon tetrachloride	117	9.951	9.946	0.005	57	831	0.0116	
67 Toluene	91	13.348	13.354	-0.006	96	12215	0.0921	
76 Ethylbenzene	91	15.700	15.694	0.006	1	2431	0.0145	
77 m-Xylene & p-Xylene	91	15.856	15.856	0.000	87	4921	0.0384	
81 o-Xylene	91	16.379	16.384	-0.005	75	2469	0.0186	
88 1,3,5-Trimethylbenzene	120	17.754	17.759	-0.005	40	3646	0.0436	
S 117 Xylenes, Total	100				0		0.0570	

Reagents:

40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

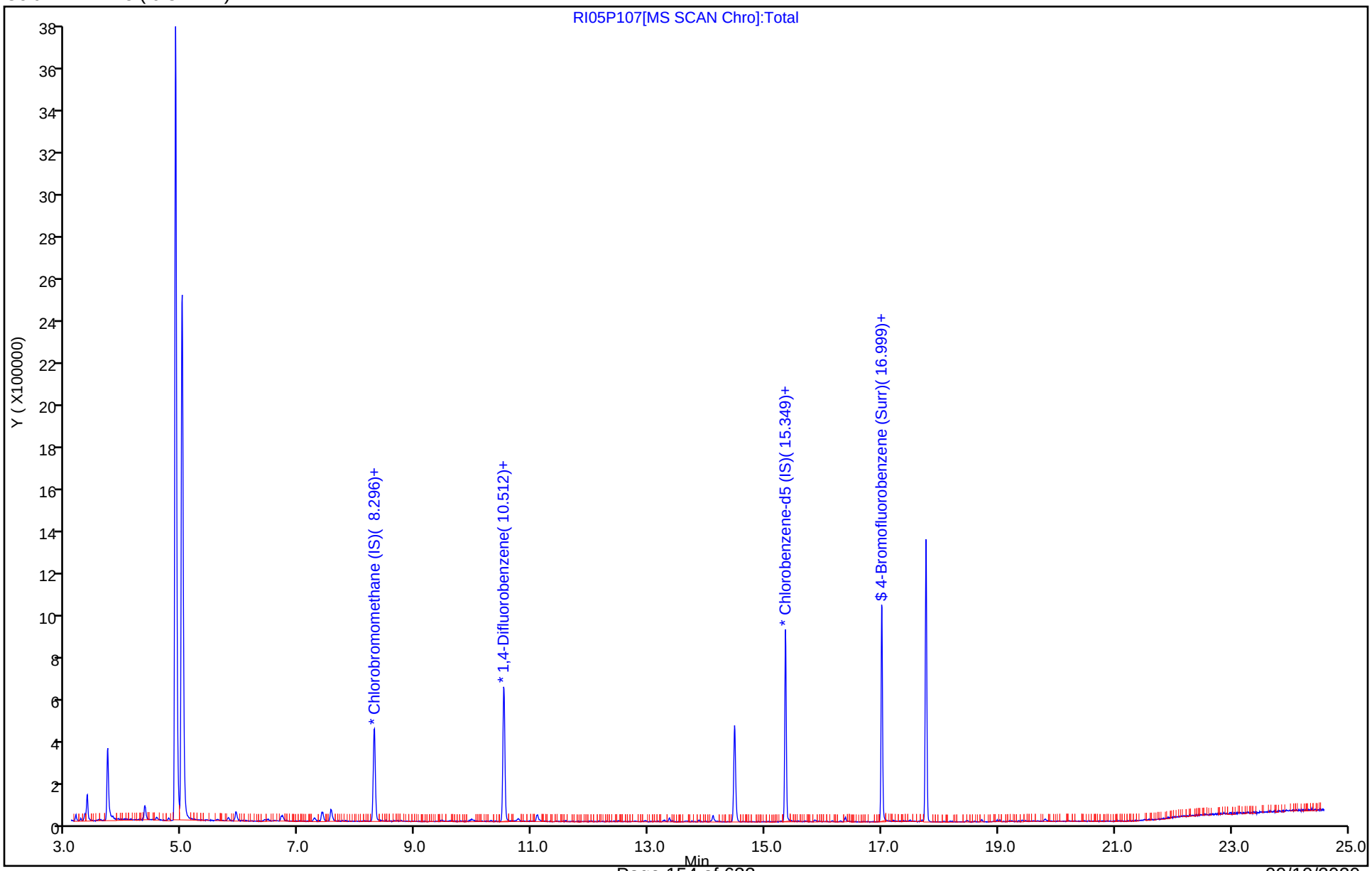
Report Date: 06-Sep-2020 07:11:45 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P107.D

Injection Date:	05-Sep-2020 19:30:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	140-20195-A-6	Lab Sample ID:	140-20195-6	Worklist Smp#:	13
Client ID:	IA-015-A-29				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P107.D				
Lims ID:	140-20195-A-6				
Client ID:	IA-015-A-29				
Sample Type:	Client				
Inject. Date:	05-Sep-2020 19:30:30	ALS Bottle#:	7	Worklist Smp#:	13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016508-013				
Misc. Info.:	140-20195-a-6				
Operator ID:	HMT	Instrument ID:	MR		
Method:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\MR_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	06-Sep-2020 07:11:26	Calib Date:	29-Aug-2020 00:02:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1023				
First Level Reviewer: tajh		Date:	06-Sep-2020 07:04:55		

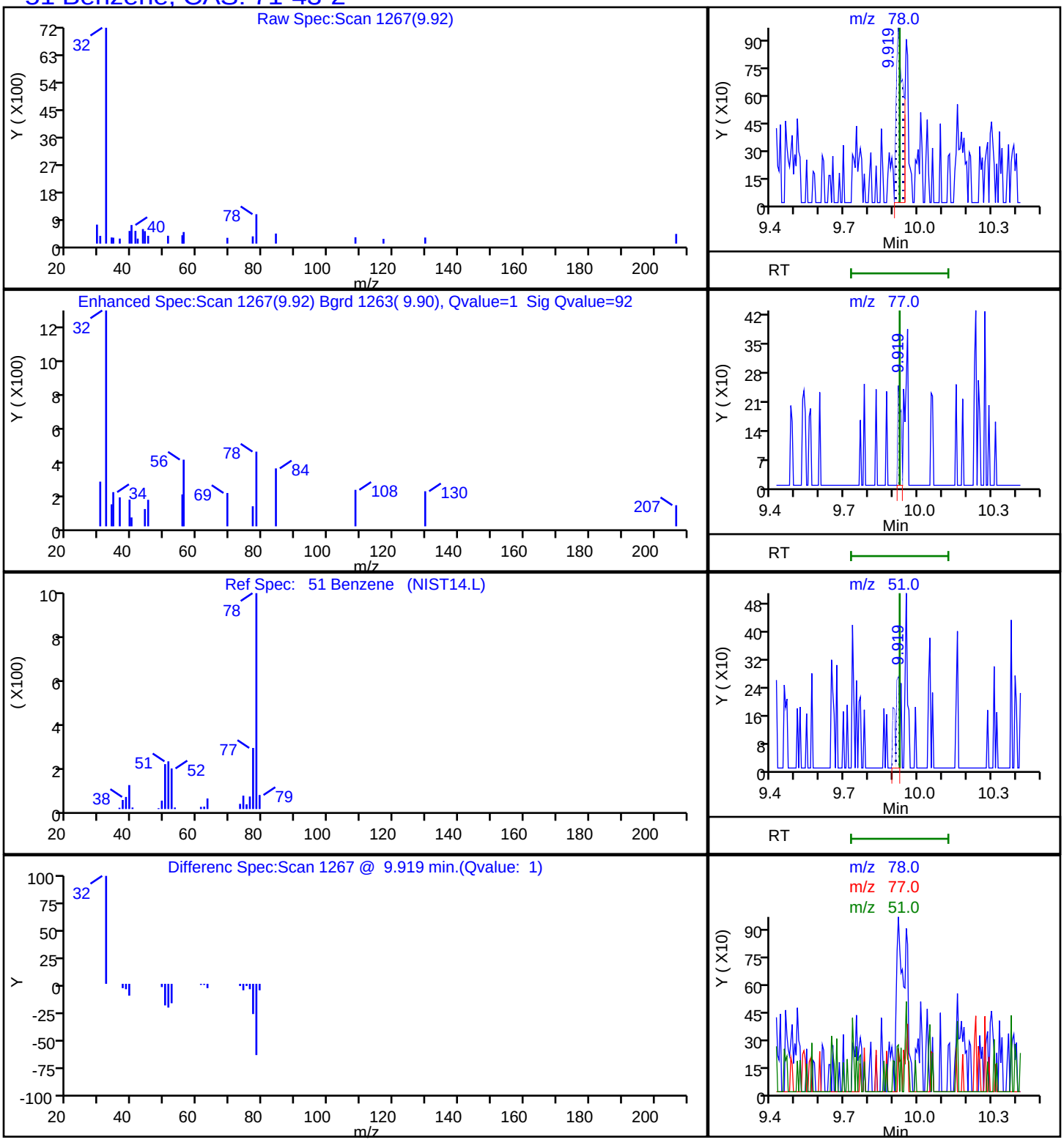
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	4.18	90.16

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P107.D

Injection Date:	05-Sep-2020 19:30:30	Instrument ID:	MR		
Lims ID:	140-20195-A-6	Lab Sample ID:	140-20195-6		
Client ID:	IA-015-A-29				
Operator ID:	HMT	ALS Bottle#:	7	Worklist Smp#:	13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

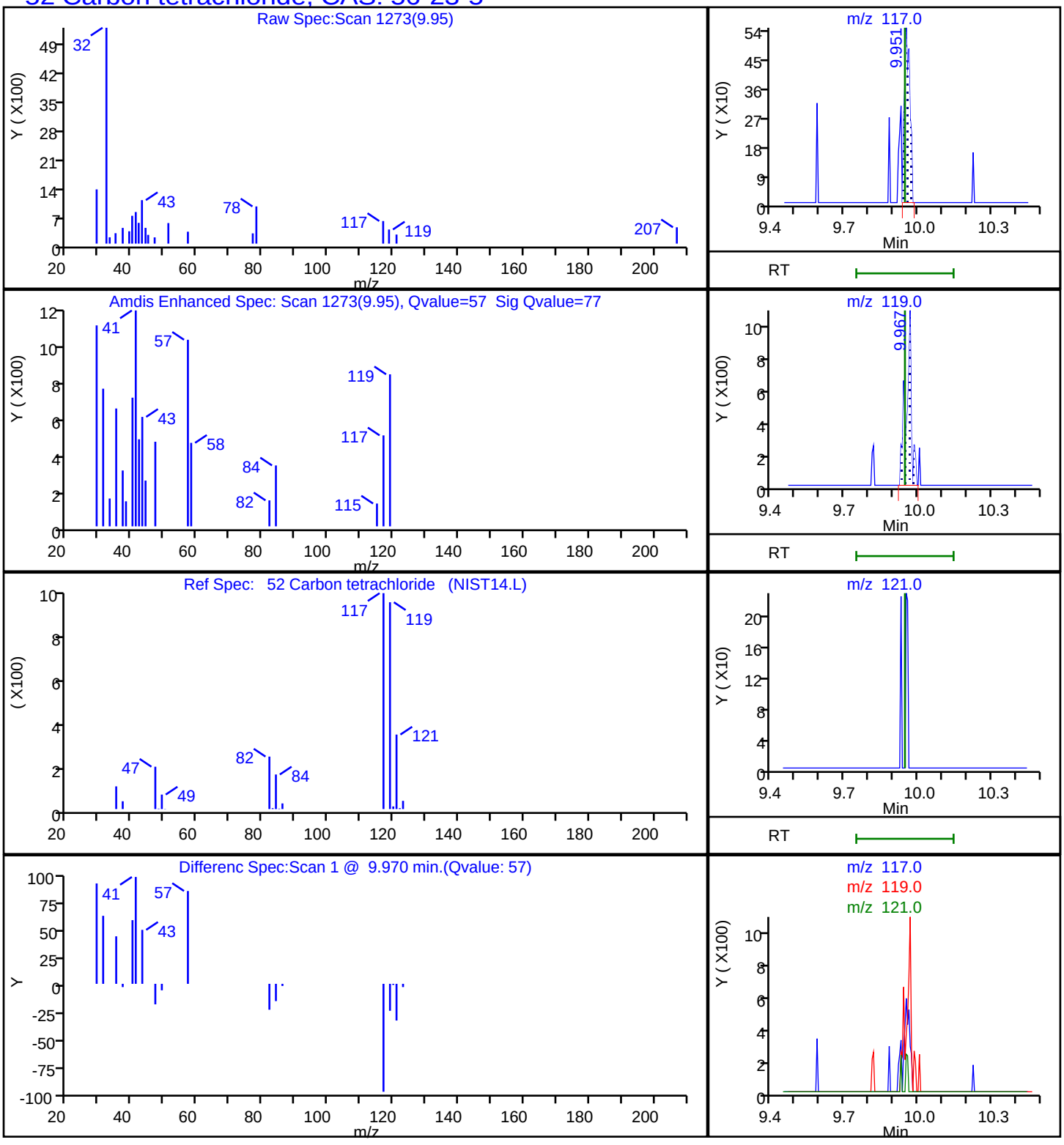
51 Benzene, CAS: 71-43-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P107.D		
Injection Date:	05-Sep-2020 19:30:30	Instrument ID:	MR
Lims ID:	140-20195-A-6	Lab Sample ID:	140-20195-6
Client ID:	IA-015-A-29		
Operator ID:	HMT	ALS Bottle#:	7 Worklist Smp#: 13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

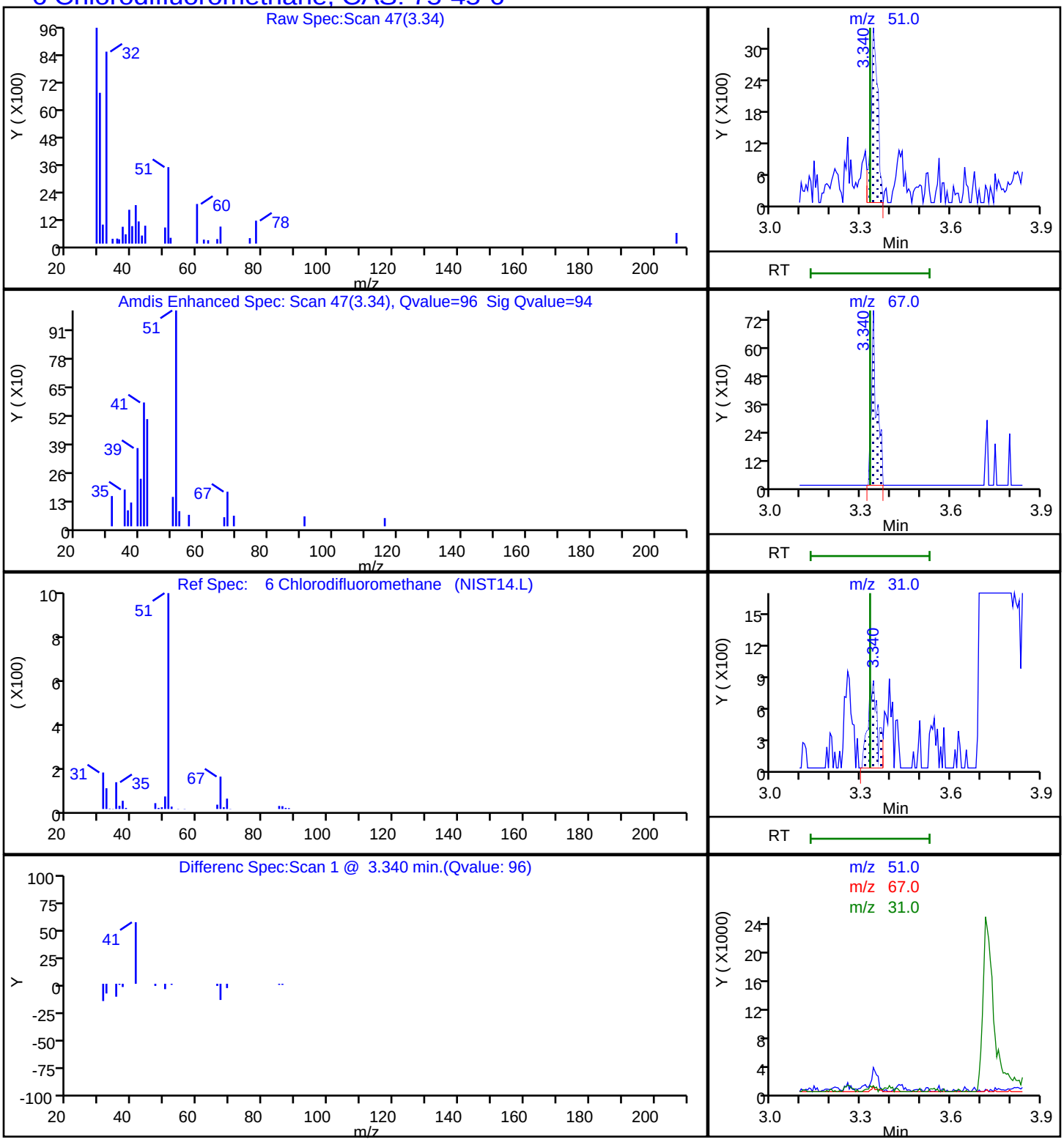
52 Carbon tetrachloride, CAS: 56-23-5



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P107.D				
Injection Date:	05-Sep-2020 19:30:30	Instrument ID:	MR		
Lims ID:	140-20195-A-6	Lab Sample ID:	140-20195-6		
Client ID:	IA-015-A-29				
Operator ID:	HMT	ALS Bottle#:	7	Worklist Smp#:	13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

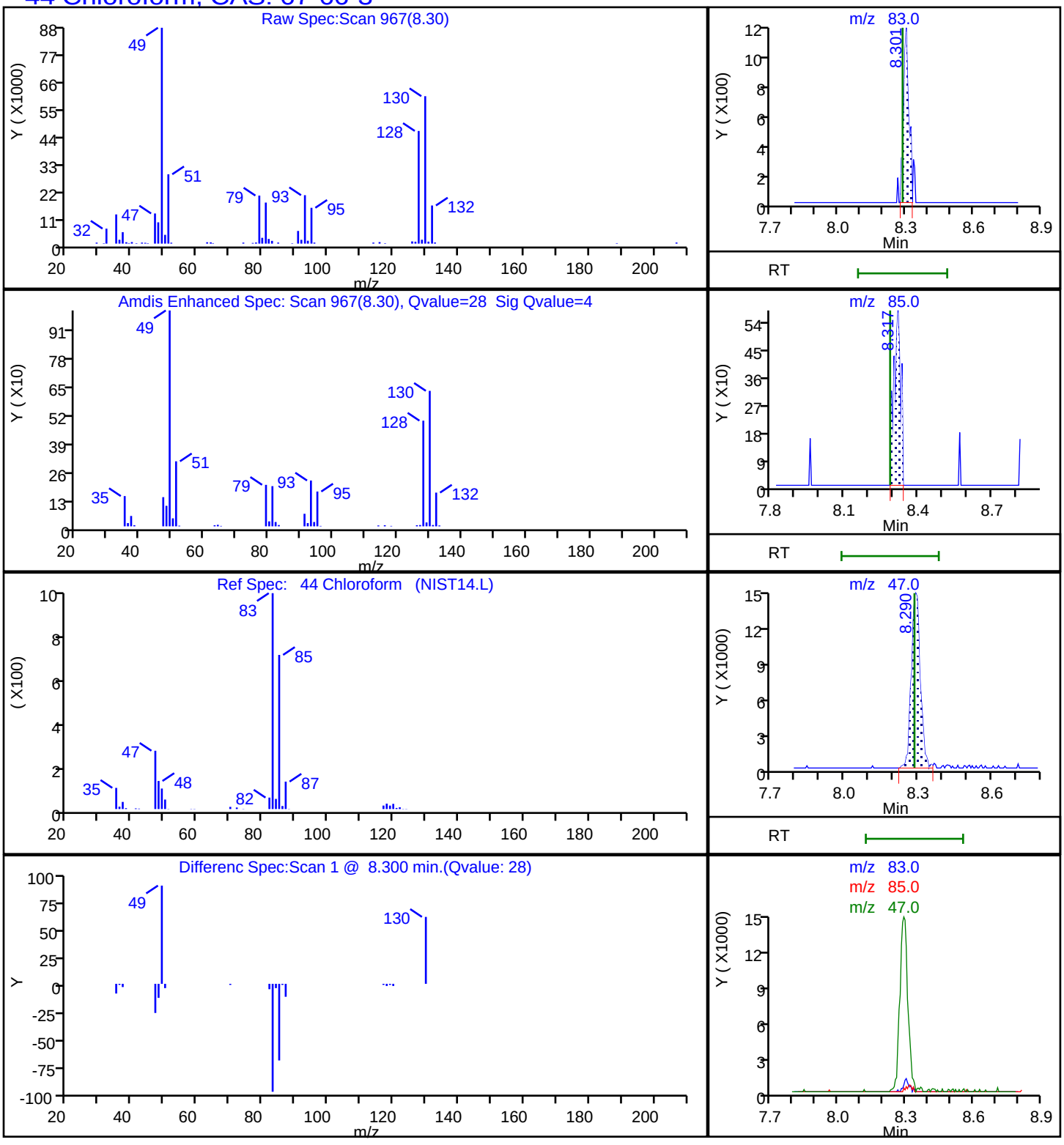
6 Chlorodifluoromethane, CAS: 75-45-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P107.D		
Injection Date:	05-Sep-2020 19:30:30	Instrument ID:	MR
Lims ID:	140-20195-A-6	Lab Sample ID:	140-20195-6
Client ID:	IA-015-A-29		
Operator ID:	HMT	ALS Bottle#:	7 Worklist Smp#: 13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

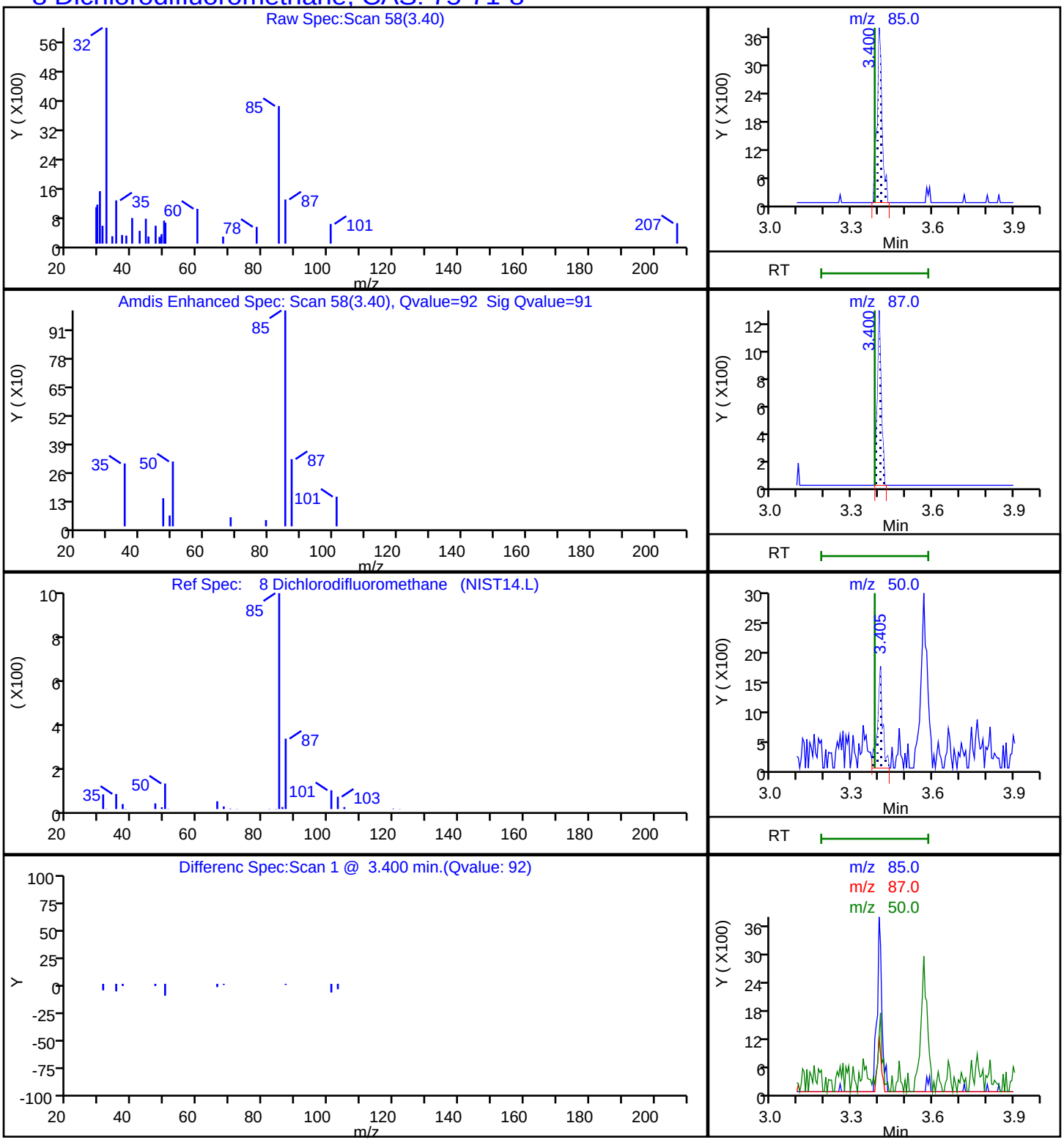
44 Chloroform, CAS: 67-66-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P107.D		
Injection Date:	05-Sep-2020 19:30:30	Instrument ID:	MR
Lims ID:	140-20195-A-6	Lab Sample ID:	140-20195-6
Client ID:	IA-015-A-29		
Operator ID:	HMT	ALS Bottle#:	7 Worklist Smp#: 13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

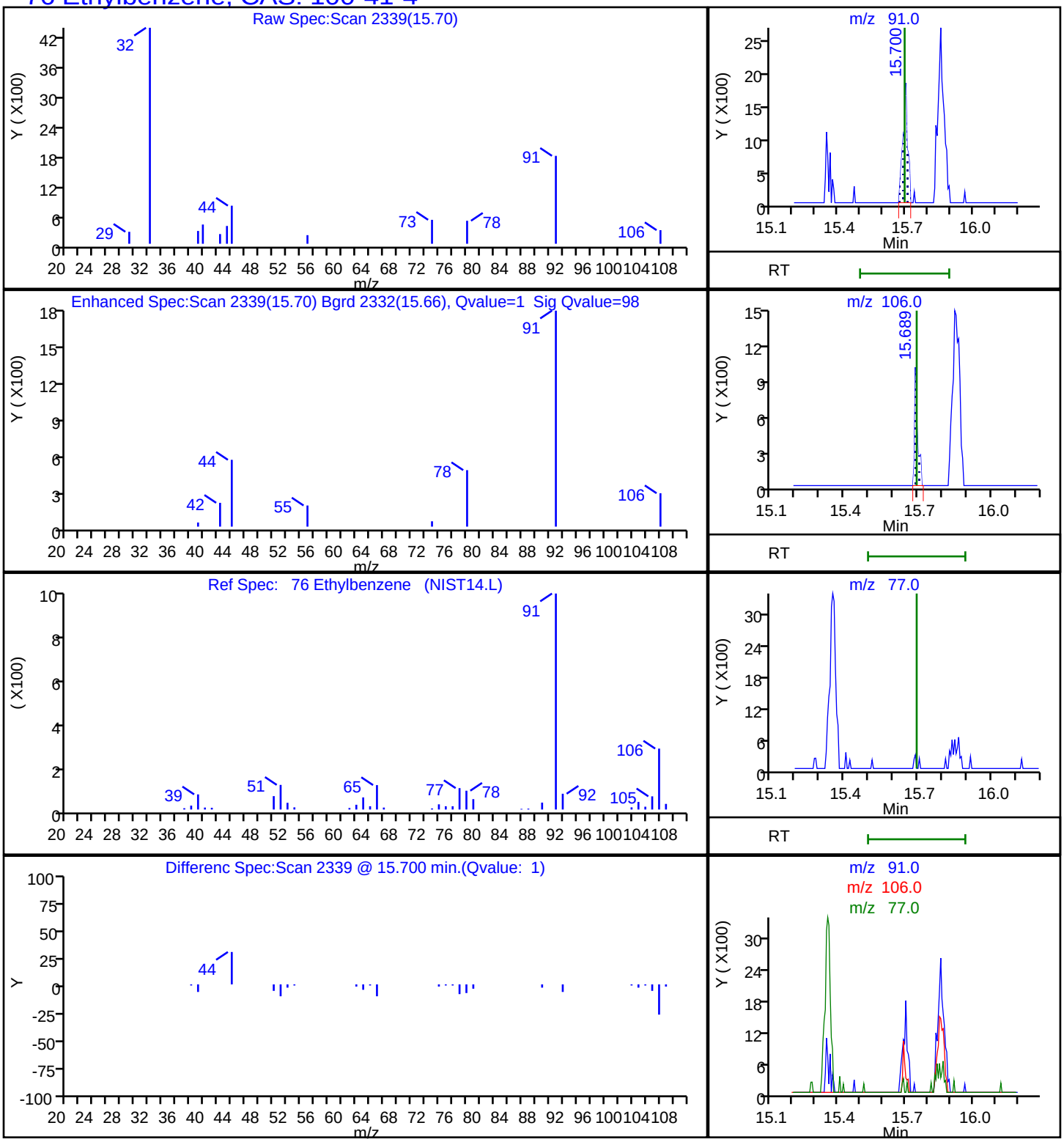
8 Dichlorodifluoromethane, CAS: 75-71-8



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P107.D		
Injection Date:	05-Sep-2020 19:30:30	Instrument ID:	MR
Lims ID:	140-20195-A-6	Lab Sample ID:	140-20195-6
Client ID:	IA-015-A-29		
Operator ID:	HMT	ALS Bottle#:	7 Worklist Smp#: 13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

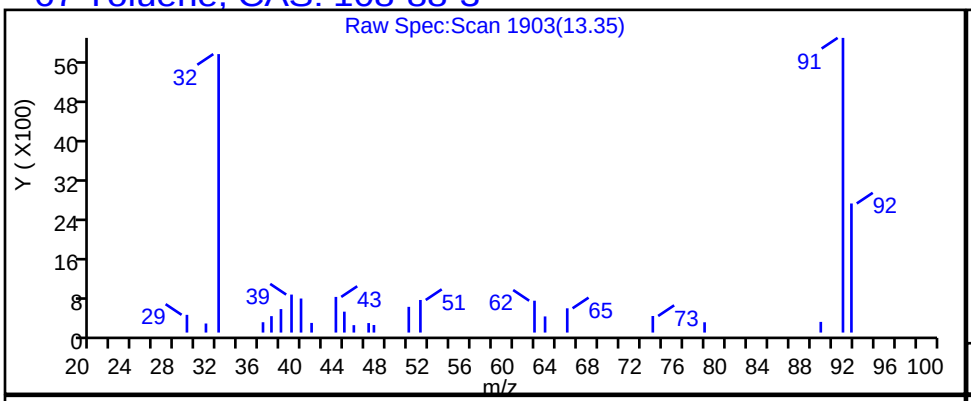
76 Ethylbenzene, CAS: 100-41-4

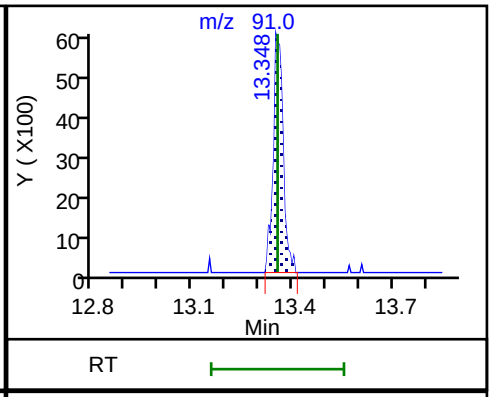


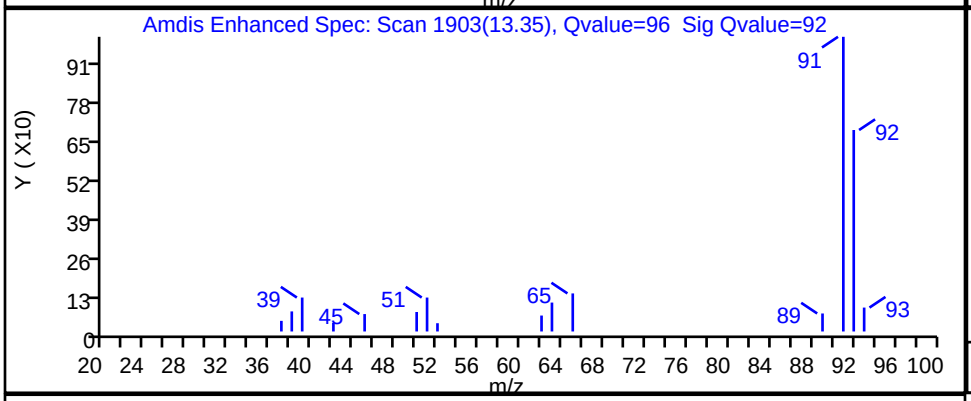
Eurofins TestAmerica, Knoxville

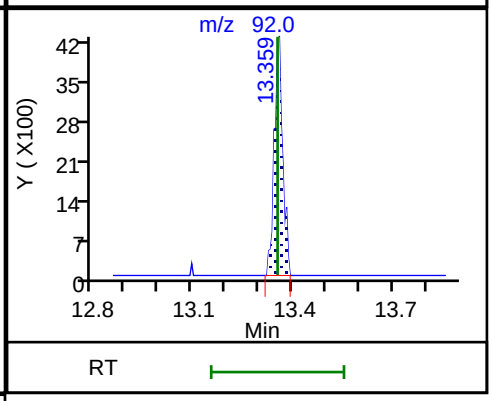
Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P107.D		
Injection Date:	05-Sep-2020 19:30:30	Instrument ID:	MR
Lims ID:	140-20195-A-6	Lab Sample ID:	140-20195-6
Client ID:	IA-015-A-29		
Operator ID:	HMT	ALS Bottle#:	7 Worklist Smp#: 13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

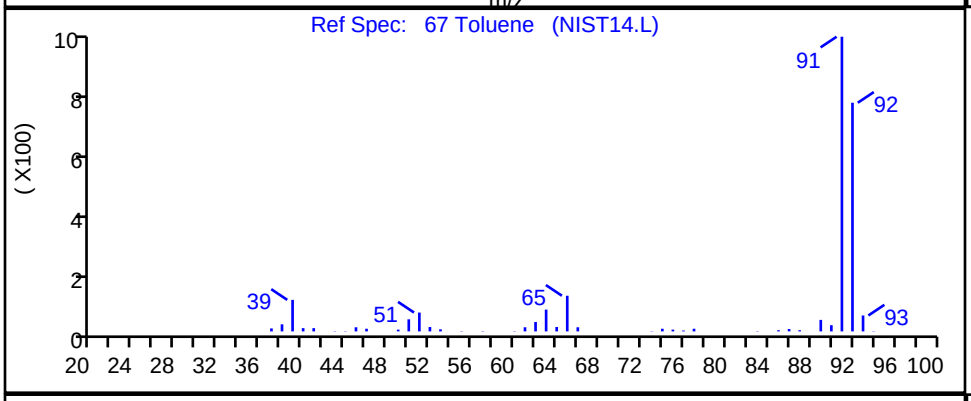
67 Toluene, CAS: 108-88-3

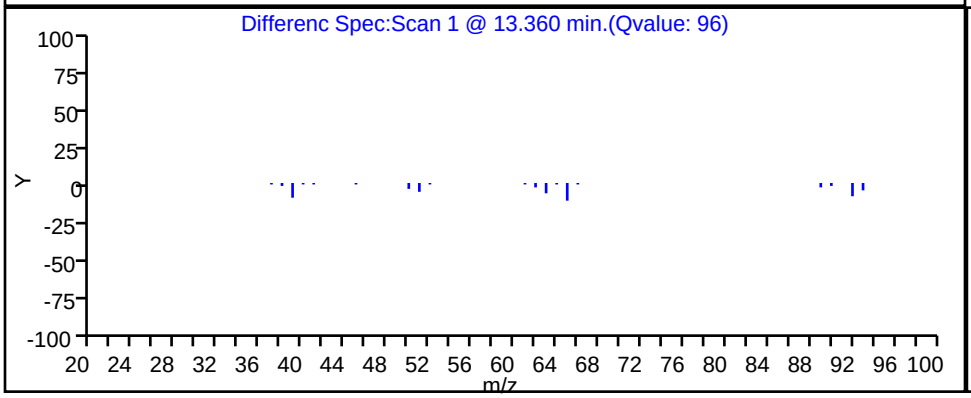


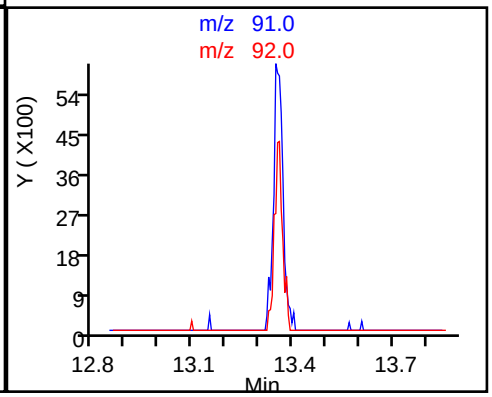








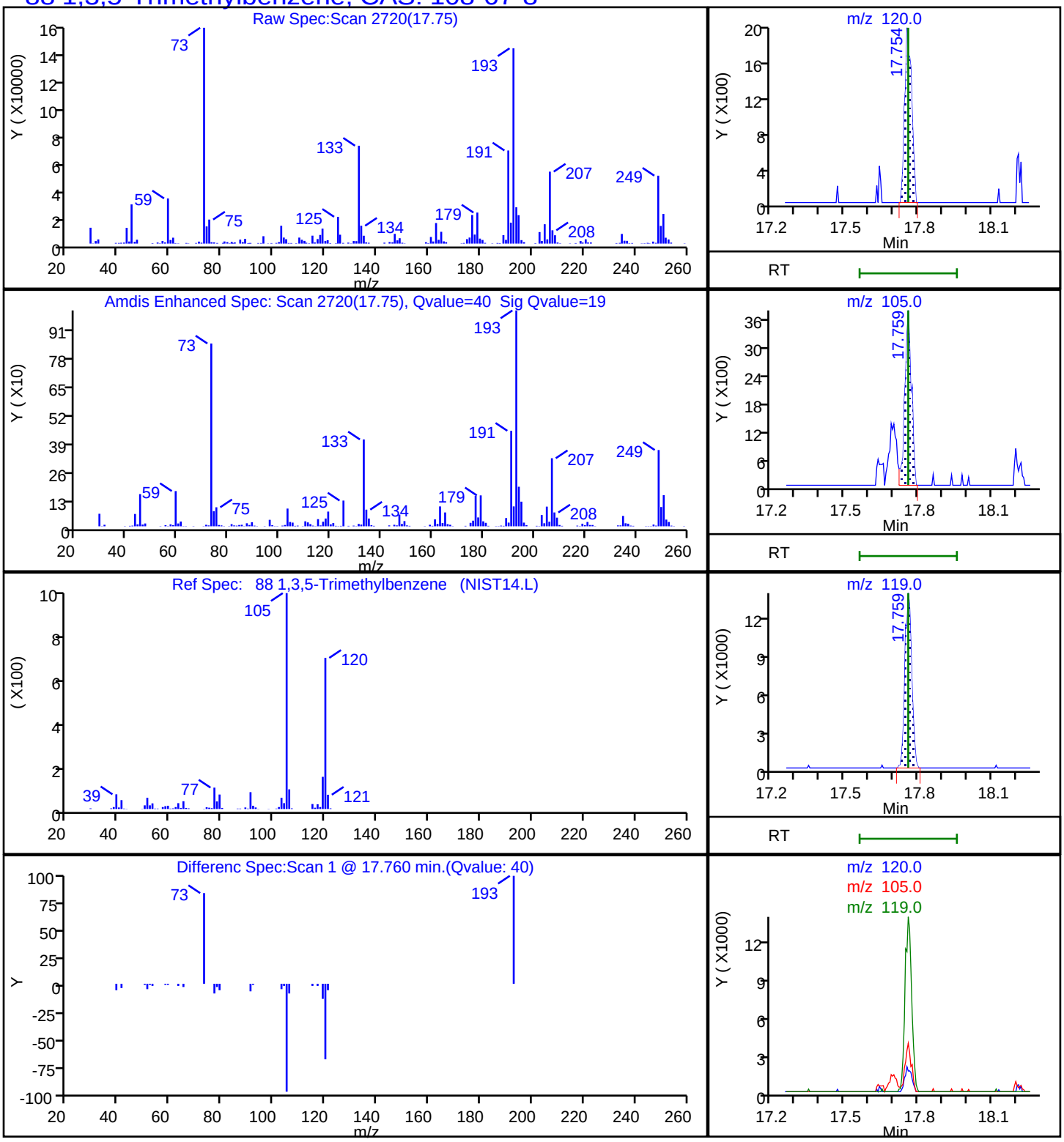




Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P107.D		
Injection Date:	05-Sep-2020 19:30:30	Instrument ID:	MR
Lims ID:	140-20195-A-6	Lab Sample ID:	140-20195-6
Client ID:	IA-015-A-29		
Operator ID:	HMT	ALS Bottle#:	7 Worklist Smp#: 13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

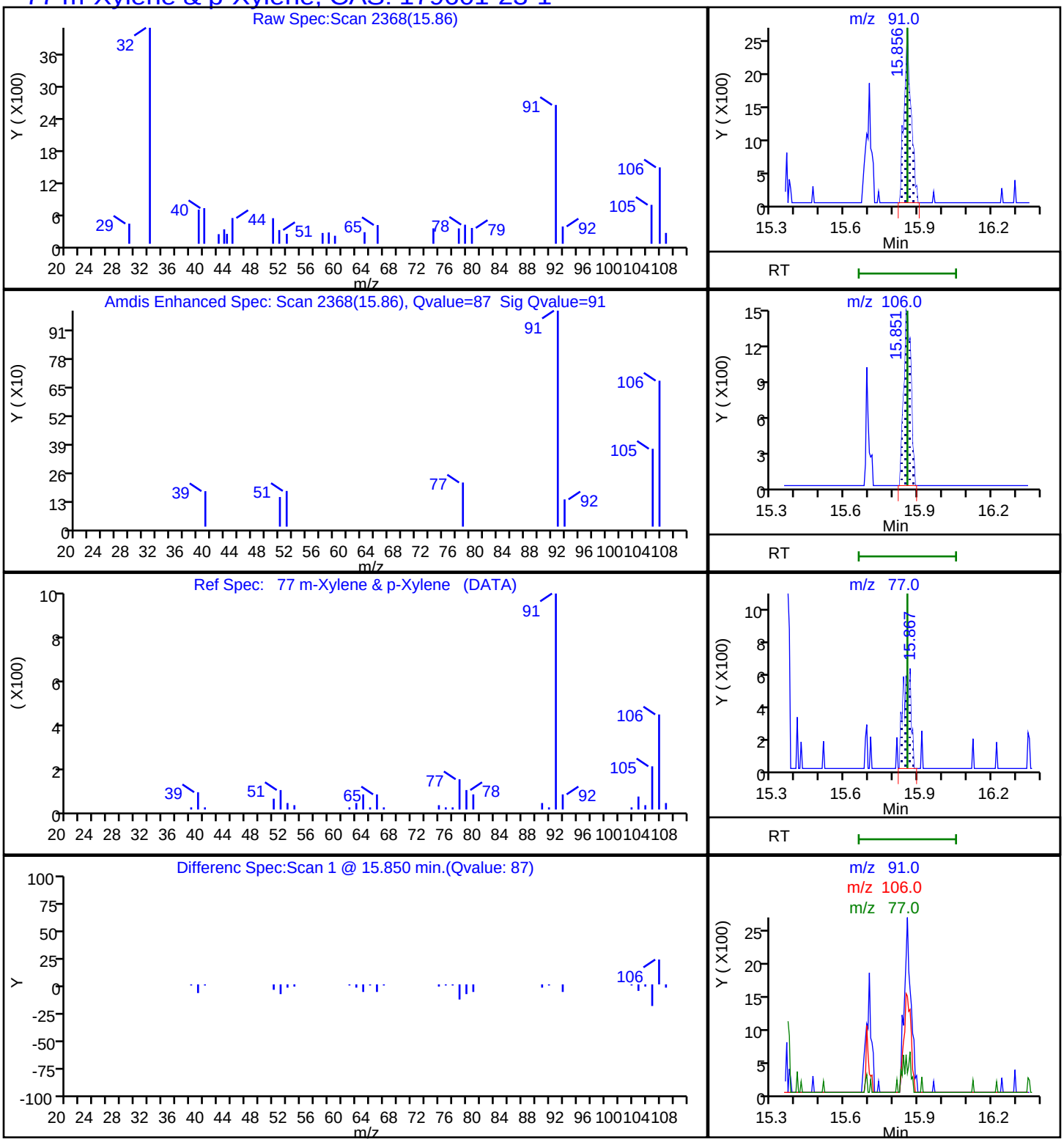
88 1,3,5-Trimethylbenzene, CAS: 108-67-8



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P107.D				
Injection Date:	05-Sep-2020 19:30:30	Instrument ID:	MR		
Lims ID:	140-20195-A-6	Lab Sample ID:	140-20195-6		
Client ID:	IA-015-A-29				
Operator ID:	HMT	ALS Bottle#:	7	Worklist Smp#:	13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

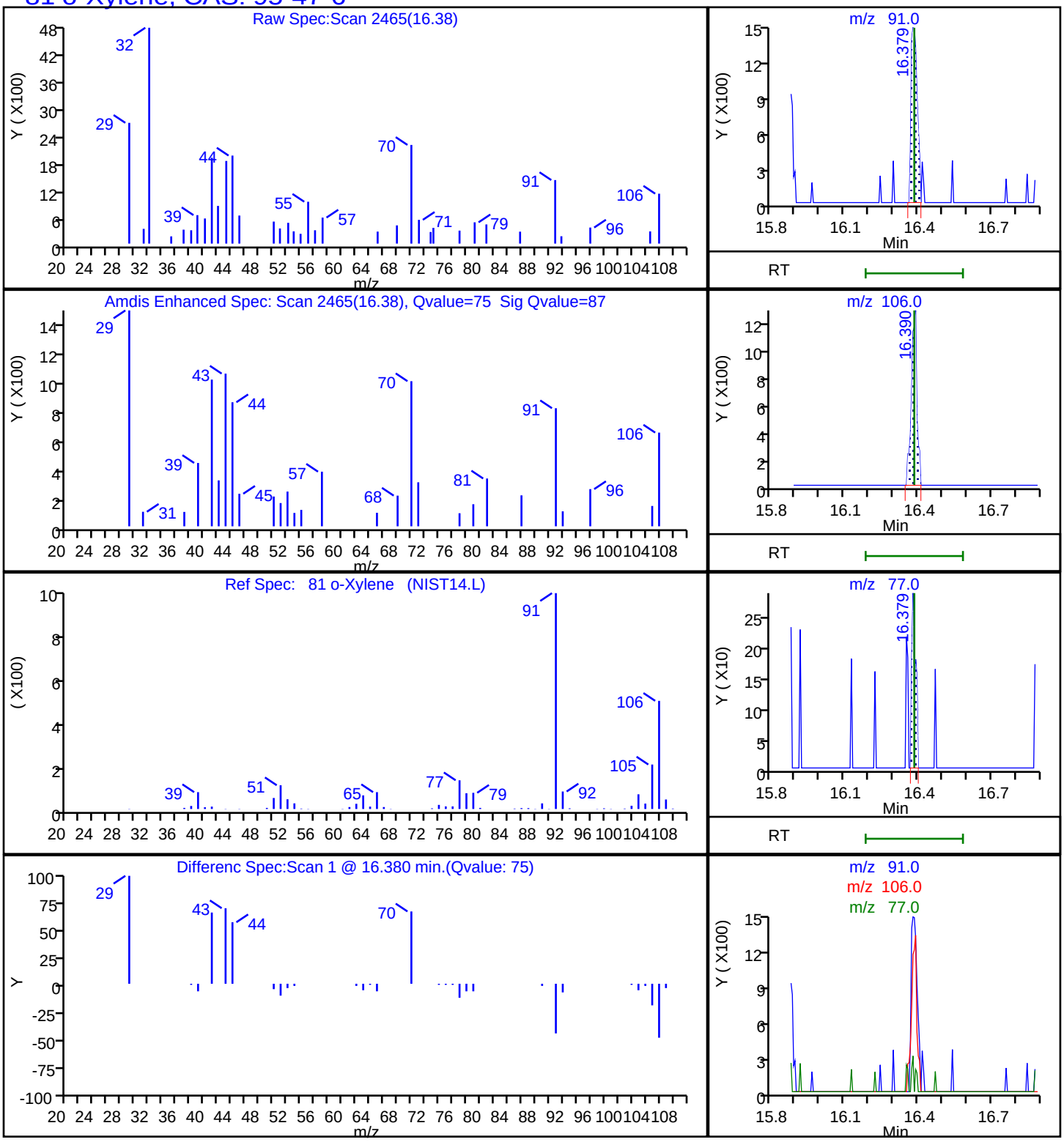
77 m-Xylene & p-Xylene, CAS: 179601-23-1



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P107.D				
Injection Date:	05-Sep-2020 19:30:30	Instrument ID:	MR		
Lims ID:	140-20195-A-6	Lab Sample ID:	140-20195-6		
Client ID:	IA-015-A-29				
Operator ID:	HMT	ALS Bottle#:	7	Worklist Smp#:	13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

81 o-Xylene, CAS: 95-47-6



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Client Sample ID: IA-078-A-29 Lab Sample ID: 140-20195-7

Matrix: Air Lab File ID: RI05P108.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 15:53

Sample wt/vol: 145(mL) Date Analyzed: 09/05/2020 20:22

Soil Aliquot Vol: Dilution Factor: 1.45

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42483 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.10	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.075	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	0.50		0.40	0.11
67-66-3	Chloroform	119.38	ND		0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.39	J	0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	0.094	J	0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.035
108-88-3	Toluene	92.14	1.9		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	ND		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.46	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	91		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Client Sample ID: IA-078-A-29 Lab Sample ID: 140-20195-7

Matrix: Air Lab File ID: RI05P108.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 15:53

Sample wt/vol: 145(mL) Date Analyzed: 09/05/2020 20:22

Soil Aliquot Vol: Dilution Factor: 1.45

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42483 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.33	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.47	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	1.8		1.4	0.39
67-66-3	Chloroform	119.38	ND		2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	1.9	J	2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	0.41	J	1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.24
108-88-3	Toluene	92.14	7.0		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	ND		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	2.0	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	91		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P108.D				
Lims ID:	140-20195-A-7				
Client ID:	IA-078-A-29				
Sample Type:	Client				
Inject. Date:	05-Sep-2020 20:22:30	ALS Bottle#:	8	Worklist Smp#:	14
Purge Vol:	500.000 mL	Dil. Factor:	1.4500		
Sample Info:	140-0016508-014				
Misc. Info.:	140-20195-a-7@1.45				
Operator ID:	HMT	Instrument ID:	MR		
Method:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\MR_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	06-Sep-2020 07:11:26	Calib Date:	29-Aug-2020 00:02:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1023				
First Level Reviewer: tajh		Date:	06-Sep-2020 07:05:06		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.285	8.274	0.011	96	141348	4.80	
* 2 1,4-Difluorobenzene	114	10.507	10.512	-0.005	94	667030	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.349	15.349	0.000	88	520905	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	16.999	16.999	0.000	93	292777	4.20	
6 Chlorodifluoromethane	51	3.340	3.329	0.011	95	7845	0.0992	
8 Dichlorodifluoromethane	85	3.400	3.383	0.017	94	4583	0.0772	
51 Benzene	78	9.919	9.924	-0.005	40	2436	0.0209	
52 Carbon tetrachloride	117	9.946	9.946	0.000	40	1128	0.0150	
67 Toluene	91	13.349	13.354	-0.005	90	52287	0.3728	
76 Ethylbenzene	91	15.694	15.694	0.000	34	3353	0.0189	
77 m-Xylene & p-Xylene	91	15.861	15.856	0.005	94	8569	0.0633	
81 o-Xylene	91	16.390	16.384	0.006	42	3916	0.0279	
S 117 Xylenes, Total	100				0		0.0912	

Reagents:

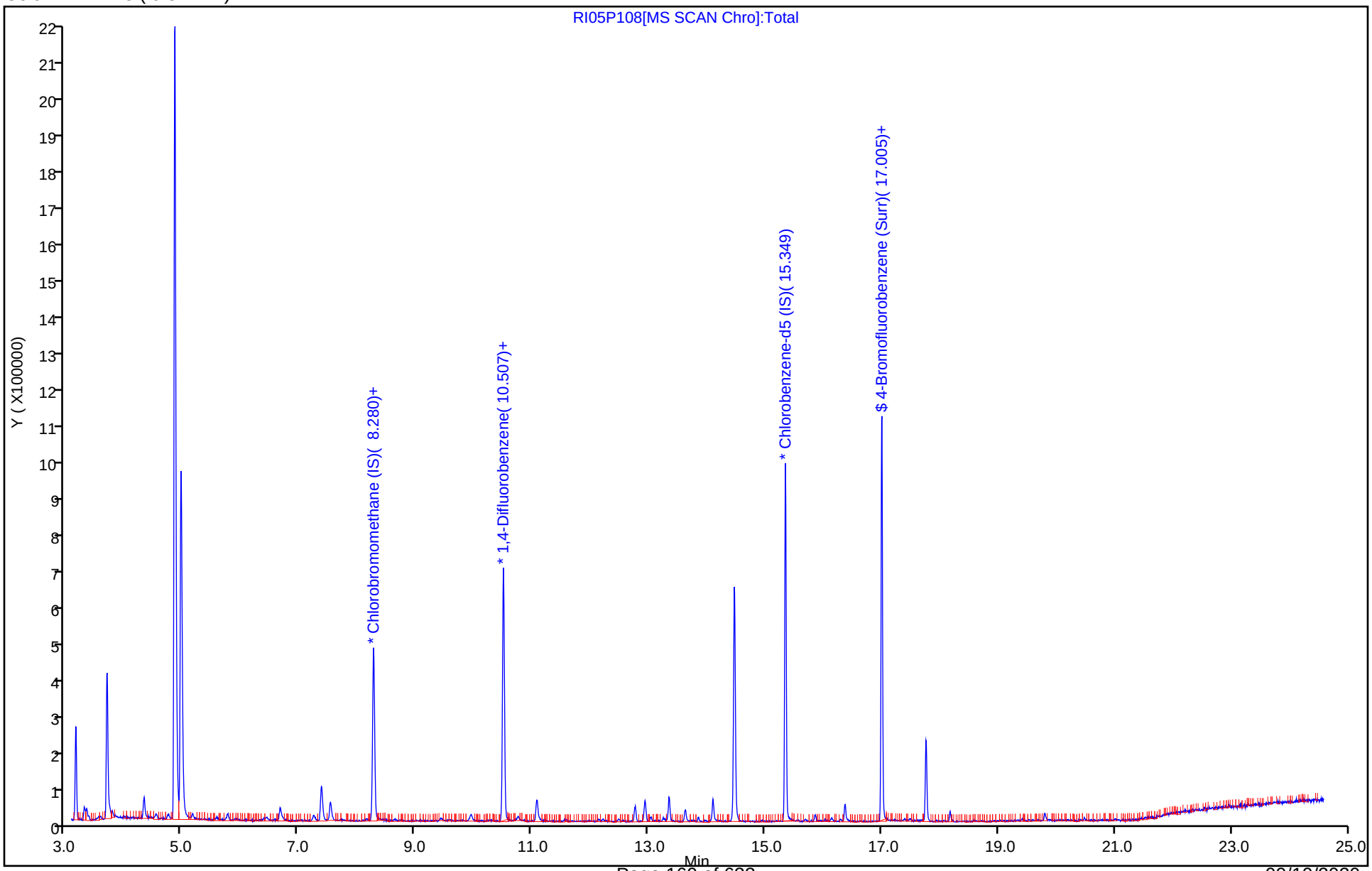
40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

Report Date: 06-Sep-2020 07:11:47 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P108.D				
Injection Date:	05-Sep-2020 20:22:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	140-20195-A-7	Lab Sample ID:	140-20195-7	Worklist Smp#:	14
Client ID:	IA-078-A-29				
Purge Vol:	500.000 mL	Dil. Factor:	1.4500	ALS Bottle#:	8
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P108.D				
Lims ID:	140-20195-A-7				
Client ID:	IA-078-A-29				
Sample Type:	Client				
Inject. Date:	05-Sep-2020 20:22:30	ALS Bottle#:	8	Worklist Smp#:	14
Purge Vol:	500.000 mL	Dil. Factor:	1.4500		
Sample Info:	140-0016508-014				
Misc. Info.:	140-20195-a-7@1.45				
Operator ID:	HMT	Instrument ID:	MR		
Method:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\MR_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	06-Sep-2020 07:11:26	Calib Date:	29-Aug-2020 00:02:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1023				
First Level Reviewer: tajh		Date:	06-Sep-2020 07:05:06		

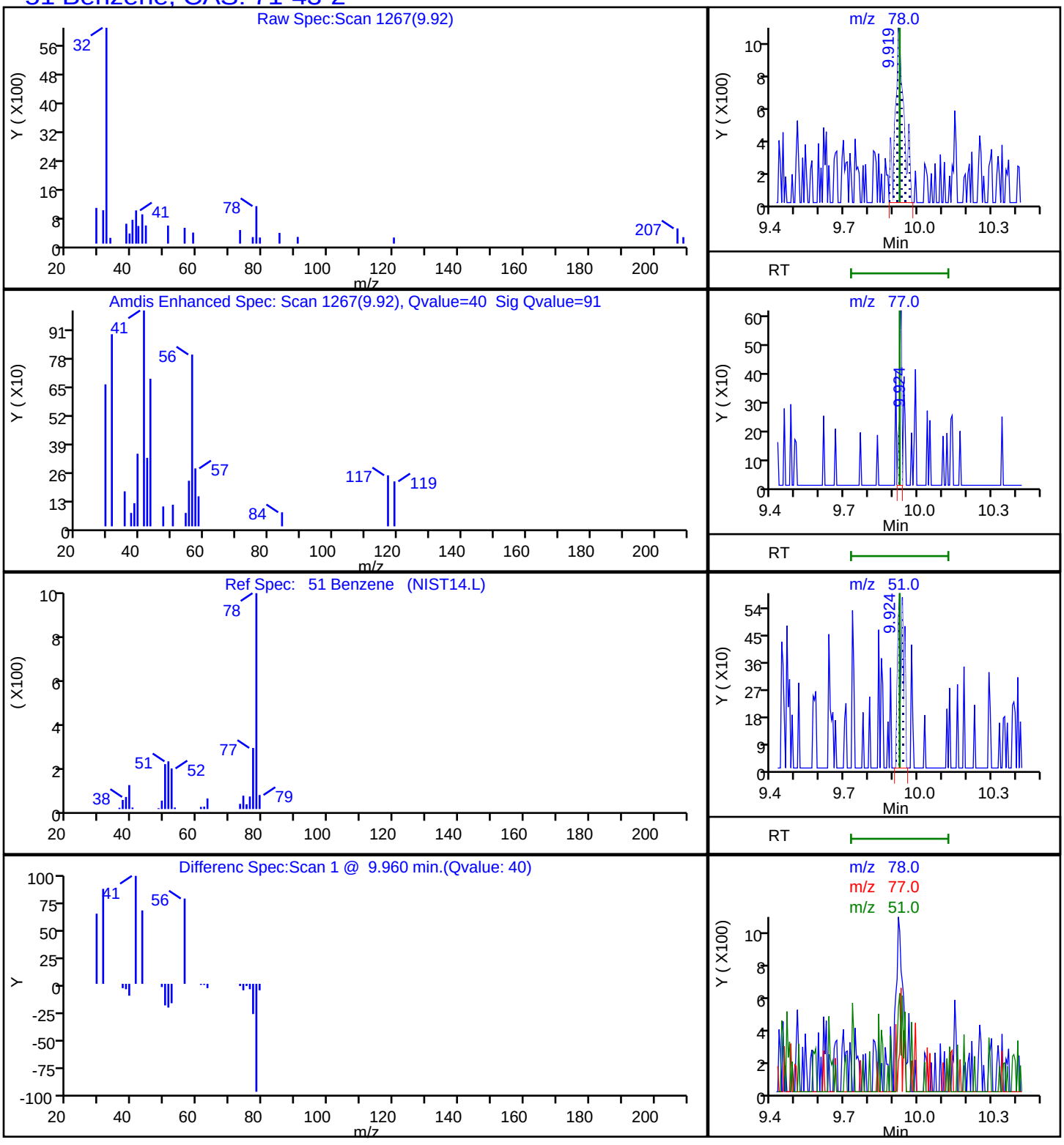
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	4.20	90.60

Report Date: 06-Sep-2020 07:11:47 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P108.D		
Injection Date:	05-Sep-2020 20:22:30	Instrument ID:	MR
Lims ID:	140-20195-A-7	Lab Sample ID:	140-20195-7
Client ID:	IA-078-A-29		
Operator ID:	HMT	ALS Bottle#:	8 Worklist Smp#: 14
Purge Vol:	500.000 mL	Dil. Factor:	1.4500
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

51 Benzene, CAS: 71-43-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P108.D		
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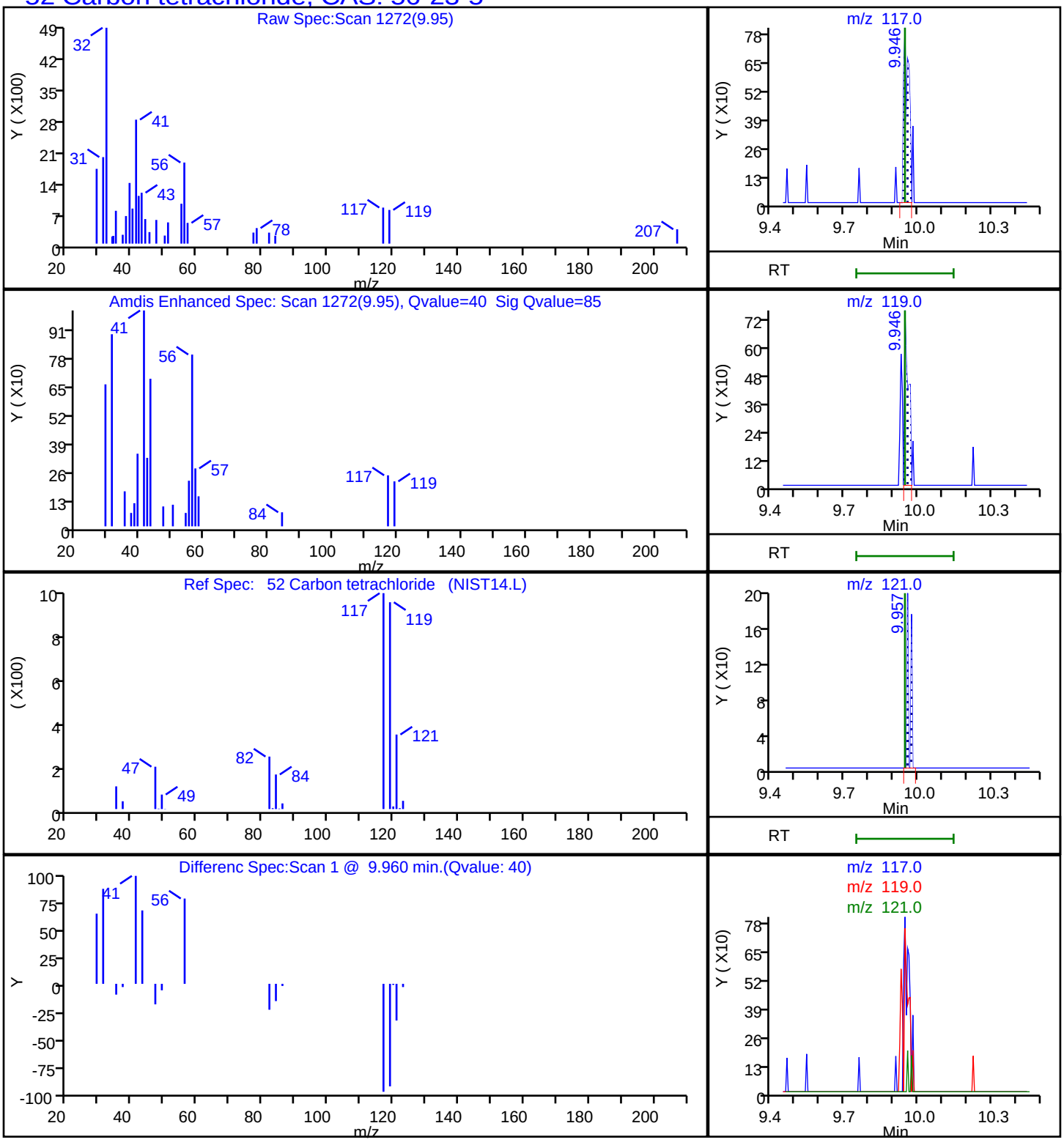
Lims ID:	140-20195-A-7	Lab Sample ID:	140-20195-7
Client ID:	IA-078-A-29		
Operator ID:	HMT	ALS Bottle#:	8 Worklist Smp#: 14
Purge Vol:	500.000 mL	Dil. Factor:	1.4500
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

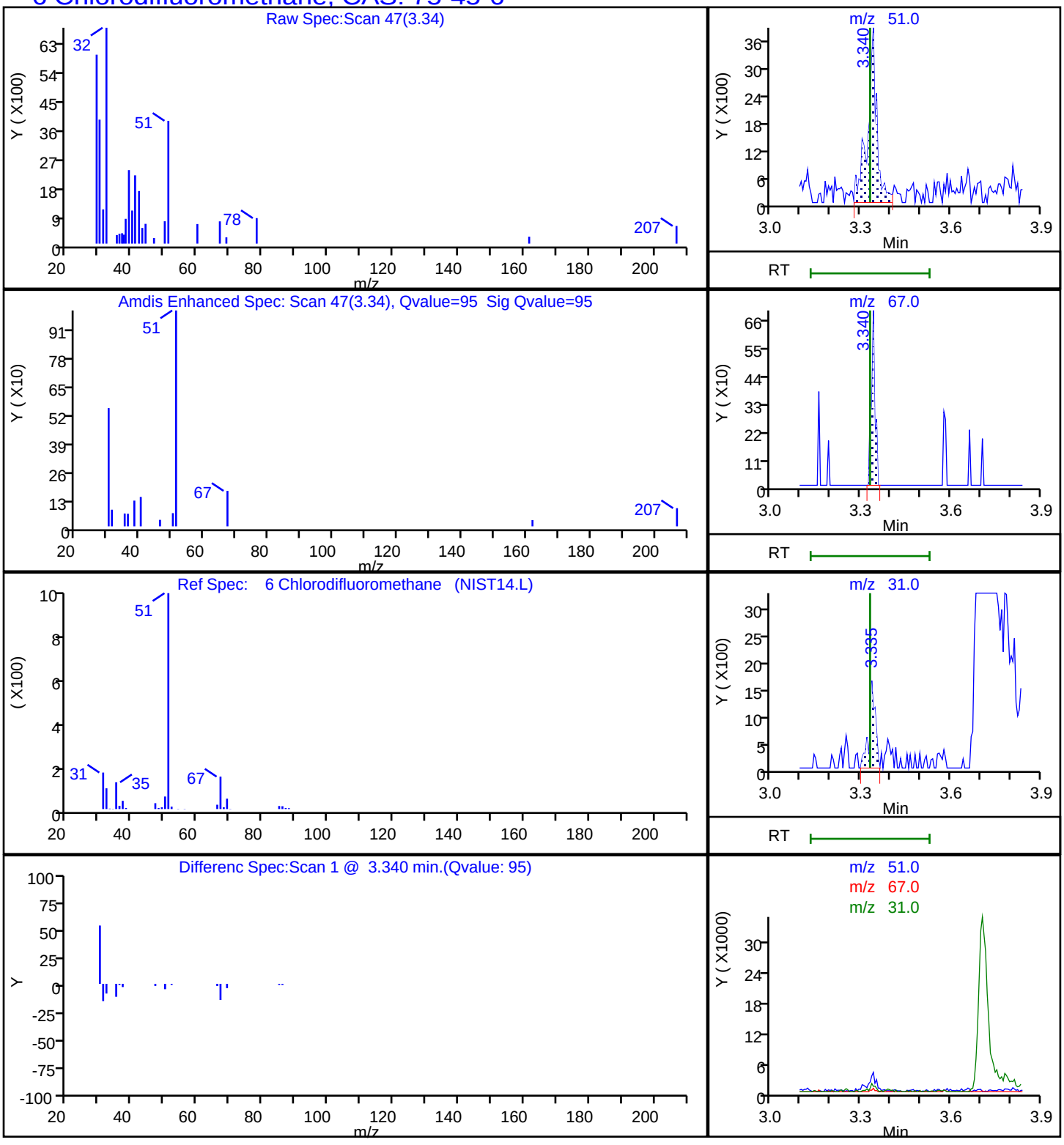
52 Carbon tetrachloride, CAS: 56-23-5



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P108.D		
Injection Date:	05-Sep-2020 20:22:30	Instrument ID:	MR
Lims ID:	140-20195-A-7	Lab Sample ID:	140-20195-7
Client ID:	IA-078-A-29		
Operator ID:	HMT	ALS Bottle#:	8 Worklist Smp#: 14
Purge Vol:	500.000 mL	Dil. Factor:	1.4500
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

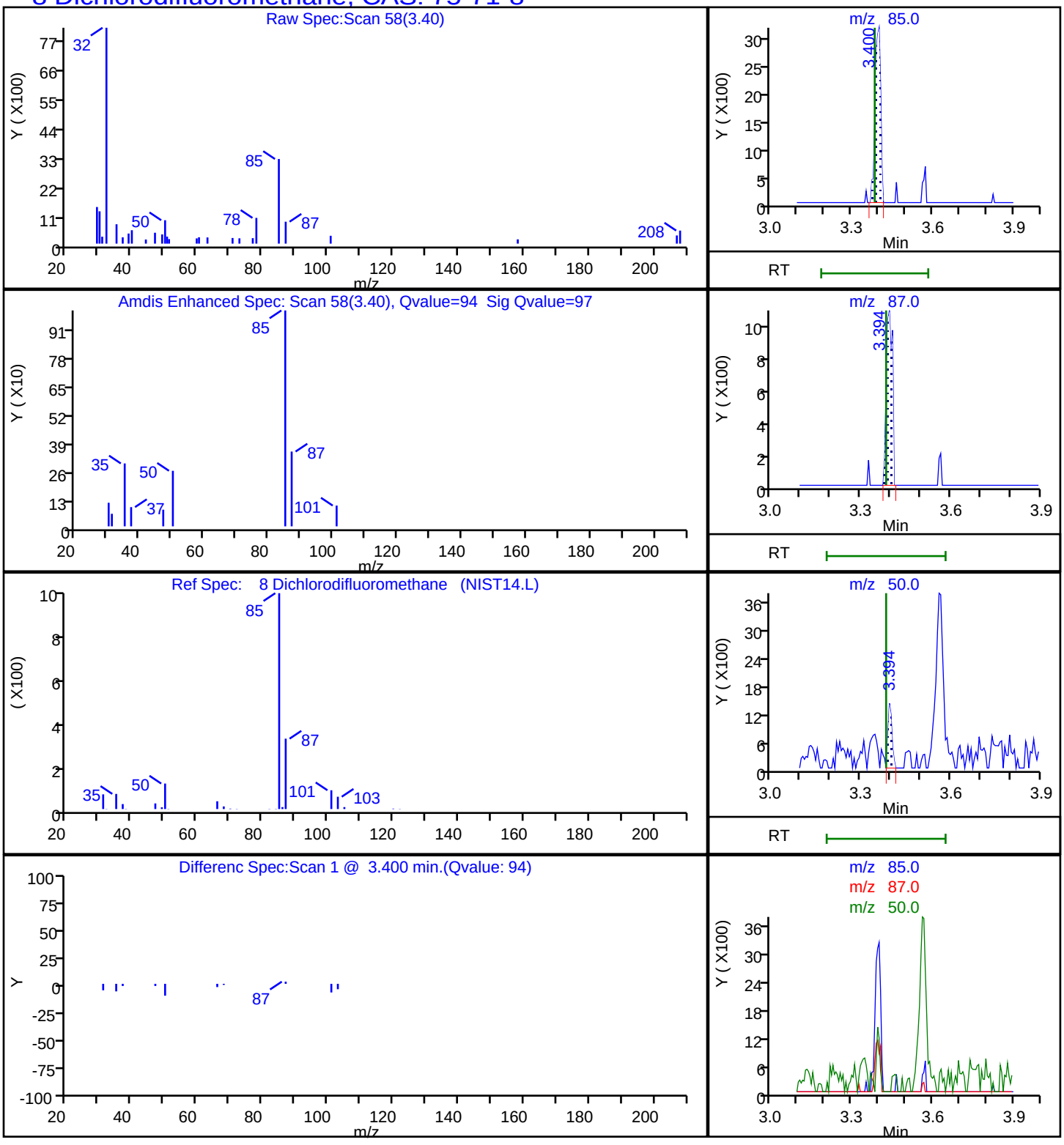
6 Chlorodifluoromethane, CAS: 75-45-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P108.D				
Injection Date:	05-Sep-2020 20:22:30	Instrument ID:	MR		
Lims ID:	140-20195-A-7	Lab Sample ID:	140-20195-7		
Client ID:	IA-078-A-29				
Operator ID:	HMT	ALS Bottle#:	8	Worklist Smp#:	14
Purge Vol:	500.000 mL	Dil. Factor:	1.4500		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

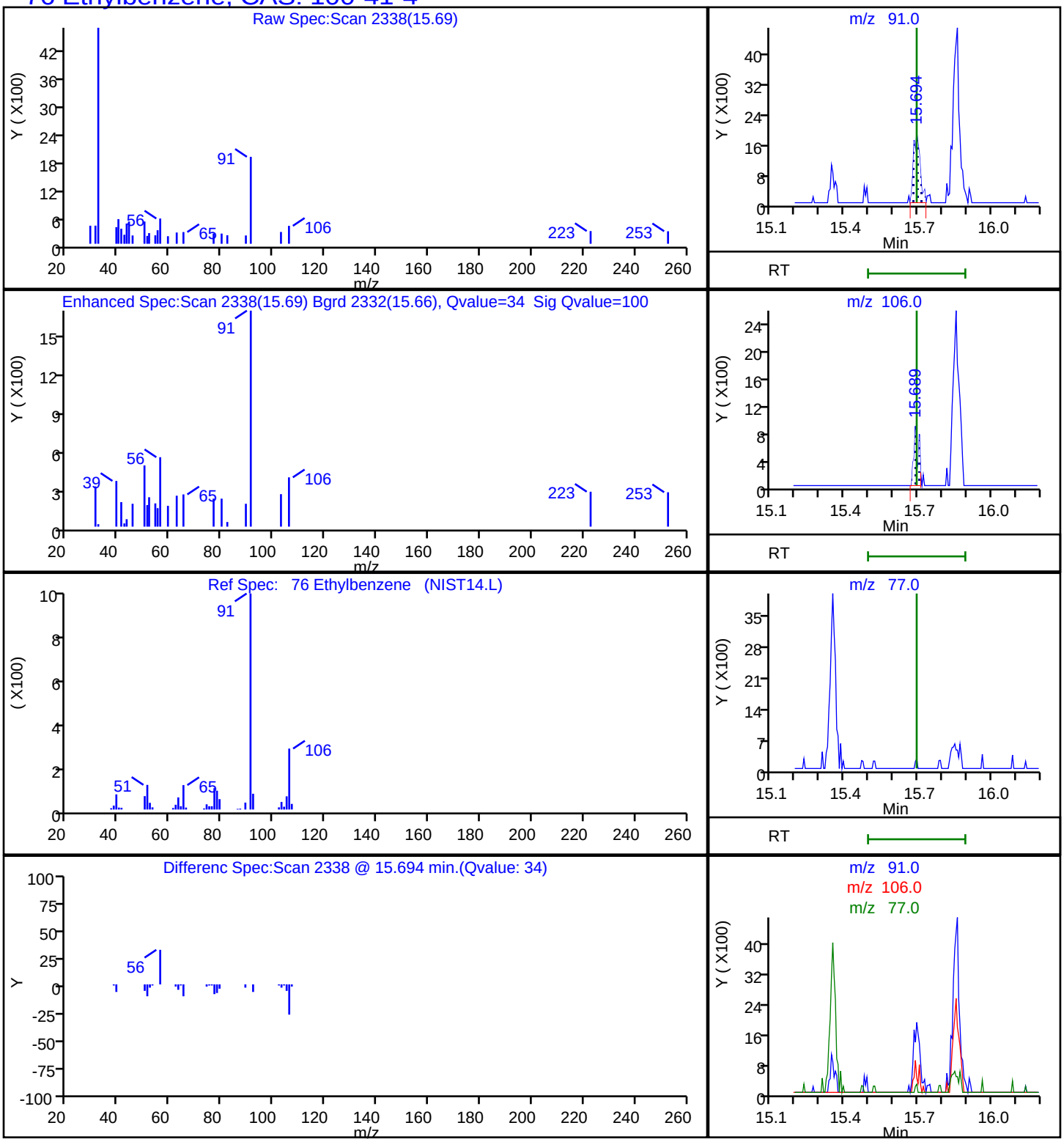
8 Dichlorodifluoromethane, CAS: 75-71-8



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P108.D		
Injection Date:	05-Sep-2020 20:22:30	Instrument ID:	MR
Lims ID:	140-20195-A-7	Lab Sample ID:	140-20195-7
Client ID:	IA-078-A-29		
Operator ID:	HMT	ALS Bottle#:	8 Worklist Smp#: 14
Purge Vol:	500.000 mL	Dil. Factor:	1.4500
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

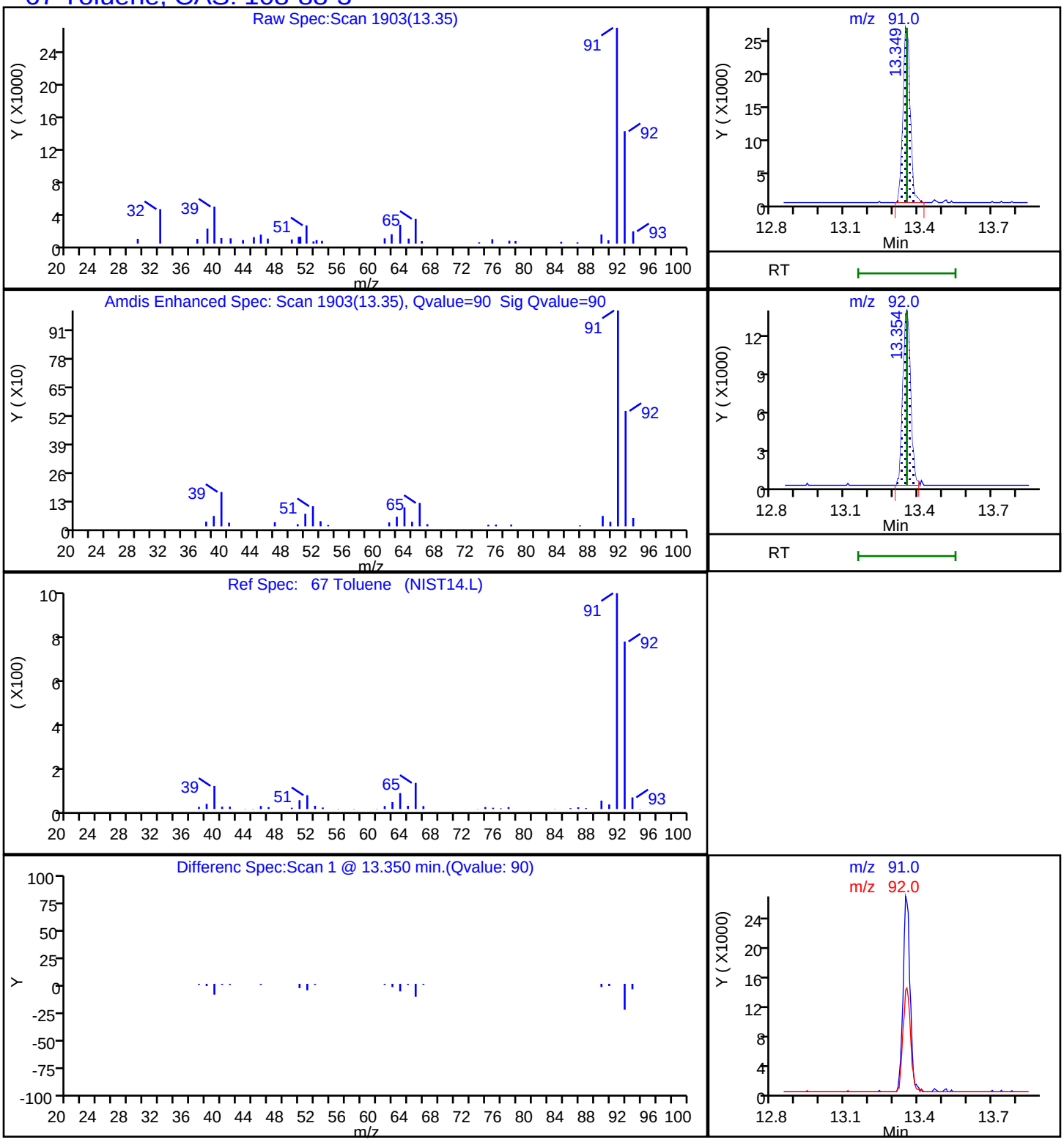
76 Ethylbenzene, CAS: 100-41-4



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P108.D				
Injection Date:	05-Sep-2020 20:22:30	Instrument ID:	MR		
Lims ID:	140-20195-A-7	Lab Sample ID:	140-20195-7		
Client ID:	IA-078-A-29				
Operator ID:	HMT	ALS Bottle#:	8	Worklist Smp#:	14
Purge Vol:	500.000 mL	Dil. Factor:	1.4500		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

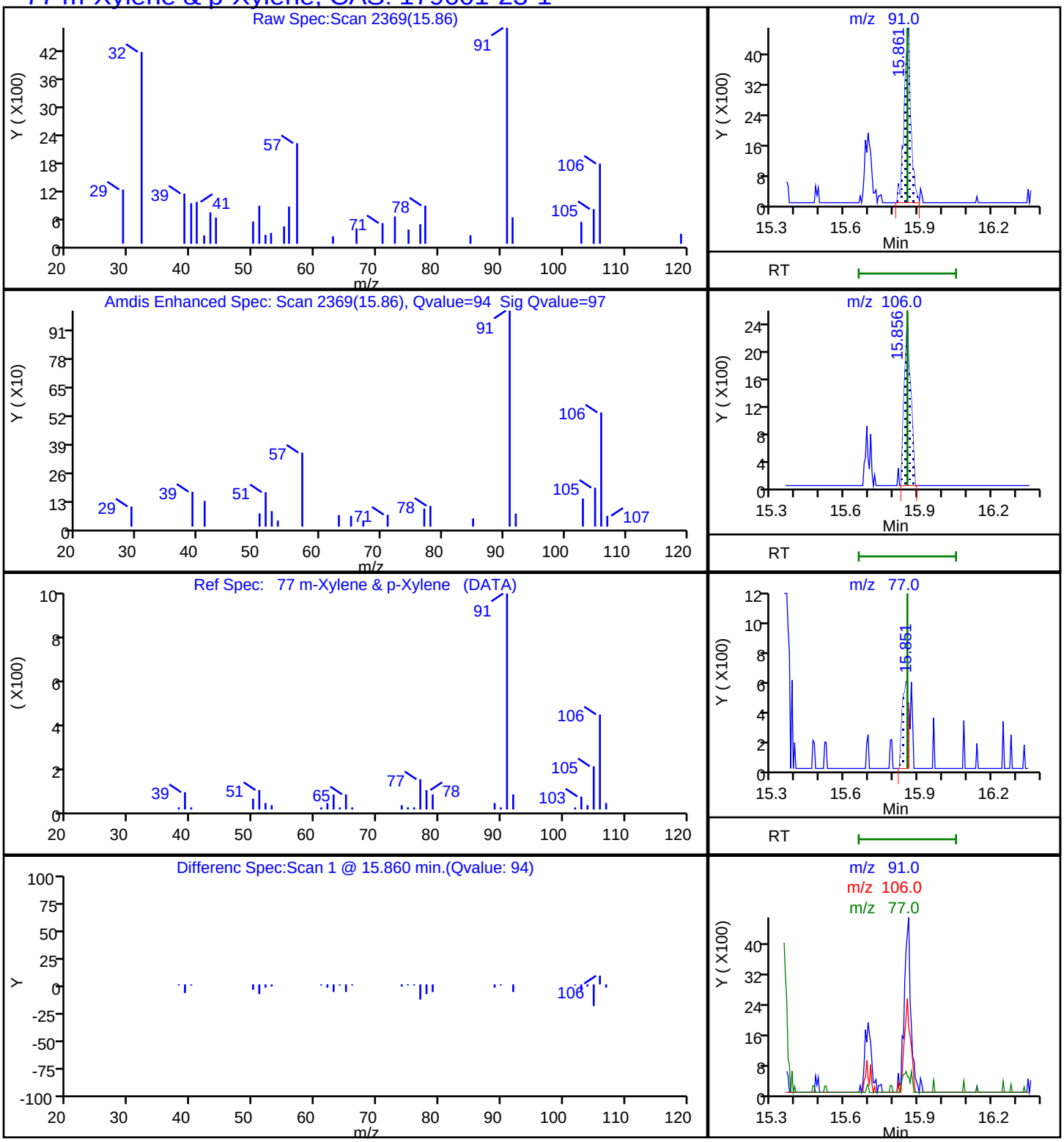
67 Toluene, CAS: 108-88-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P108.D				
Injection Date:	05-Sep-2020 20:22:30	Instrument ID:	MR		
Lims ID:	140-20195-A-7	Lab Sample ID:	140-20195-7		
Client ID:	IA-078-A-29				
Operator ID:	HMT	ALS Bottle#:	8	Worklist Smp#:	14
Purge Vol:	500.000 mL	Dil. Factor:	1.4500		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

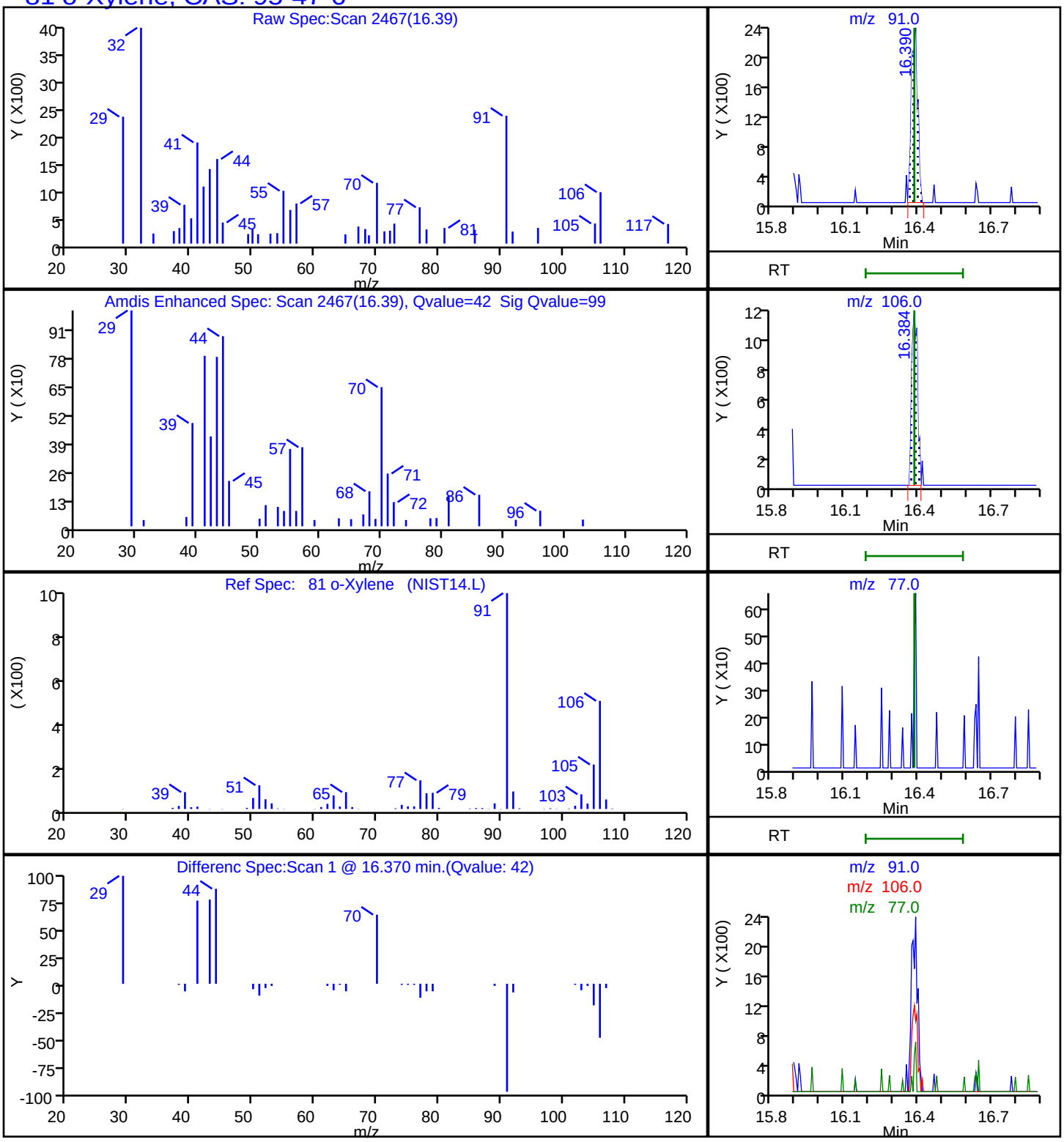
77 m-Xylene & p-Xylene, CAS: 179601-23-1



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P108.D				
Injection Date:	05-Sep-2020 20:22:30	Instrument ID:	MR		
Lims ID:	140-20195-A-7	Lab Sample ID:	140-20195-7		
Client ID:	IA-078-A-29				
Operator ID:	HMT	ALS Bottle#:	8	Worklist Smp#:	14
Purge Vol:	500.000 mL	Dil. Factor:	1.4500		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

81 o-Xylene, CAS: 95-47-6



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Client Sample ID: IA-076-A-29 Lab Sample ID: 140-20195-8

Matrix: Air Lab File ID: RI05P109.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 15:54

Sample wt/vol: 100(mL) Date Analyzed: 09/05/2020 21:13

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42483 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	ND		0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.082	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	0.30	J	0.40	0.11
67-66-3	Chloroform	119.38	0.098	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.35	J	0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	0.086	J	0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.035
108-88-3	Toluene	92.14	3.4		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	ND		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.46	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	90		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Client Sample ID: IA-076-A-29 Lab Sample ID: 140-20195-8

Matrix: Air Lab File ID: RI05P109.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 15:54

Sample wt/vol: 100(mL) Date Analyzed: 09/05/2020 21:13

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42483 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	ND		1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.52	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	1.1	J	1.4	0.39
67-66-3	Chloroform	119.38	0.48	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	1.7	J	2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	0.37	J	1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.24
108-88-3	Toluene	92.14	13		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	ND		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	2.0	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	90		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P109.D				
Lims ID:	140-20195-A-8				
Client ID:	IA-076-A-29				
Sample Type:	Client				
Inject. Date:	05-Sep-2020 21:13:30	ALS Bottle#:	9	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016508-015				
Misc. Info.:	140-20195-a-8				
Operator ID:	HMT	Instrument ID:	MR		
Method:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\MR_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	06-Sep-2020 07:11:26	Calib Date:	29-Aug-2020 00:02:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1023				
First Level Reviewer: tajh		Date:	06-Sep-2020 07:05:19		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.301	8.274	0.027	97	139497	4.80	
* 2 1,4-Difluorobenzene	114	10.517	10.512	0.005	94	625841	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.349	15.349	0.000	88	490797	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	16.999	16.999	0.000	93	272722	4.16	
6 Chlorodifluoromethane	51	3.346	3.329	0.017	60	4750	0.0608	
8 Dichlorodifluoromethane	85	3.405	3.383	0.022	95	4090	0.0698	
44 Chloroform	83	8.301	8.285	0.016	28	1639	0.0195	
52 Carbon tetrachloride	117	9.957	9.946	0.011	40	1161	0.0165	
67 Toluene	91	13.359	13.354	0.005	92	90474	0.6847	
76 Ethylbenzene	91	15.699	15.694	0.005	1	2888	0.0173	
77 m-Xylene & p-Xylene	91	15.850	15.856	-0.006	96	8606	0.0674	
81 o-Xylene	91	16.379	16.384	-0.005	53	3217	0.0243	
S 117 Xylenes, Total	100				0		0.0918	

Reagents:

40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

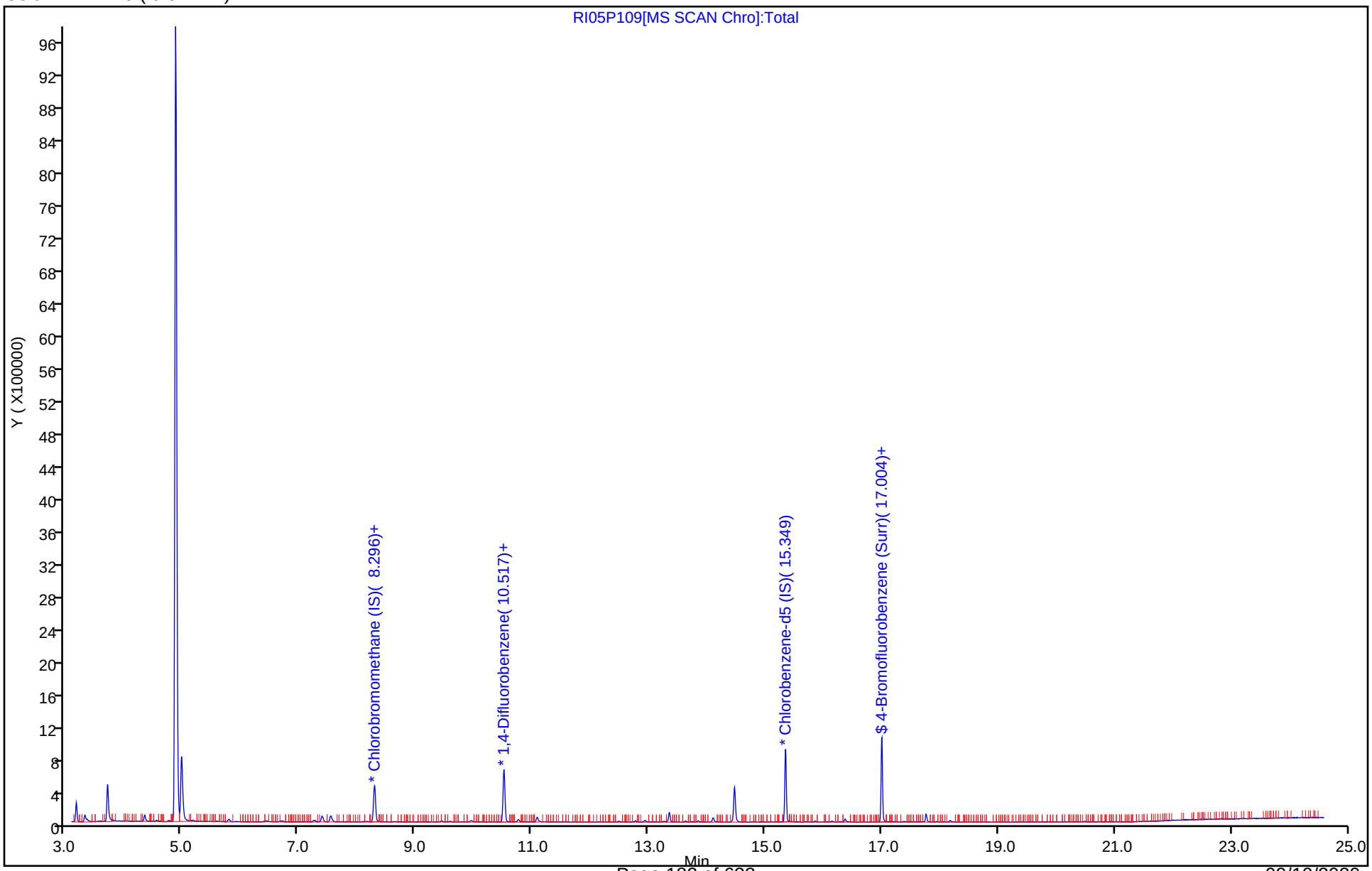
Report Date: 06-Sep-2020 07:11:48 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P109.D

Injection Date:	05-Sep-2020 21:13:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	140-20195-A-8	Lab Sample ID:	140-20195-8	Worklist Smp#:	15
Client ID:	IA-076-A-29				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

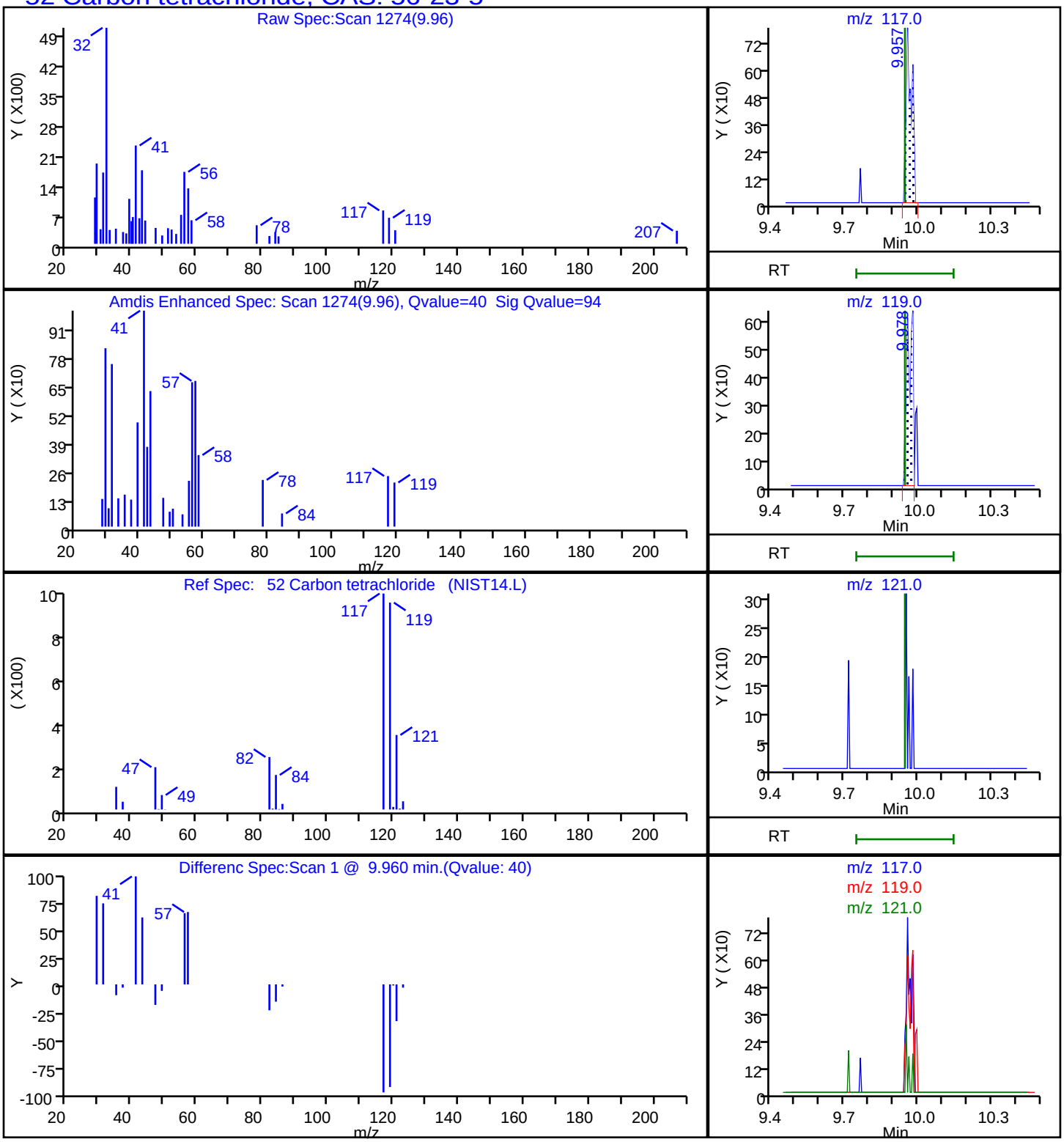
Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P109.D				
Lims ID:	140-20195-A-8				
Client ID:	IA-076-A-29				
Sample Type:	Client				
Inject. Date:	05-Sep-2020 21:13:30	ALS Bottle#:	9	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016508-015				
Misc. Info.:	140-20195-a-8				
Operator ID:	HMT	Instrument ID:	MR		
Method:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\MR_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	06-Sep-2020 07:11:26	Calib Date:	29-Aug-2020 00:02:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1023				
First Level Reviewer: tajh		Date:	06-Sep-2020 07:05:19		

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	4.16	89.57

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P109.D		
Injection Date:	05-Sep-2020 21:13:30	Instrument ID:	MR
Lims ID:	140-20195-A-8	Lab Sample ID:	140-20195-8
Client ID:	IA-076-A-29		
Operator ID:	HMT	ALS Bottle#:	9 Worklist Smp#: 15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

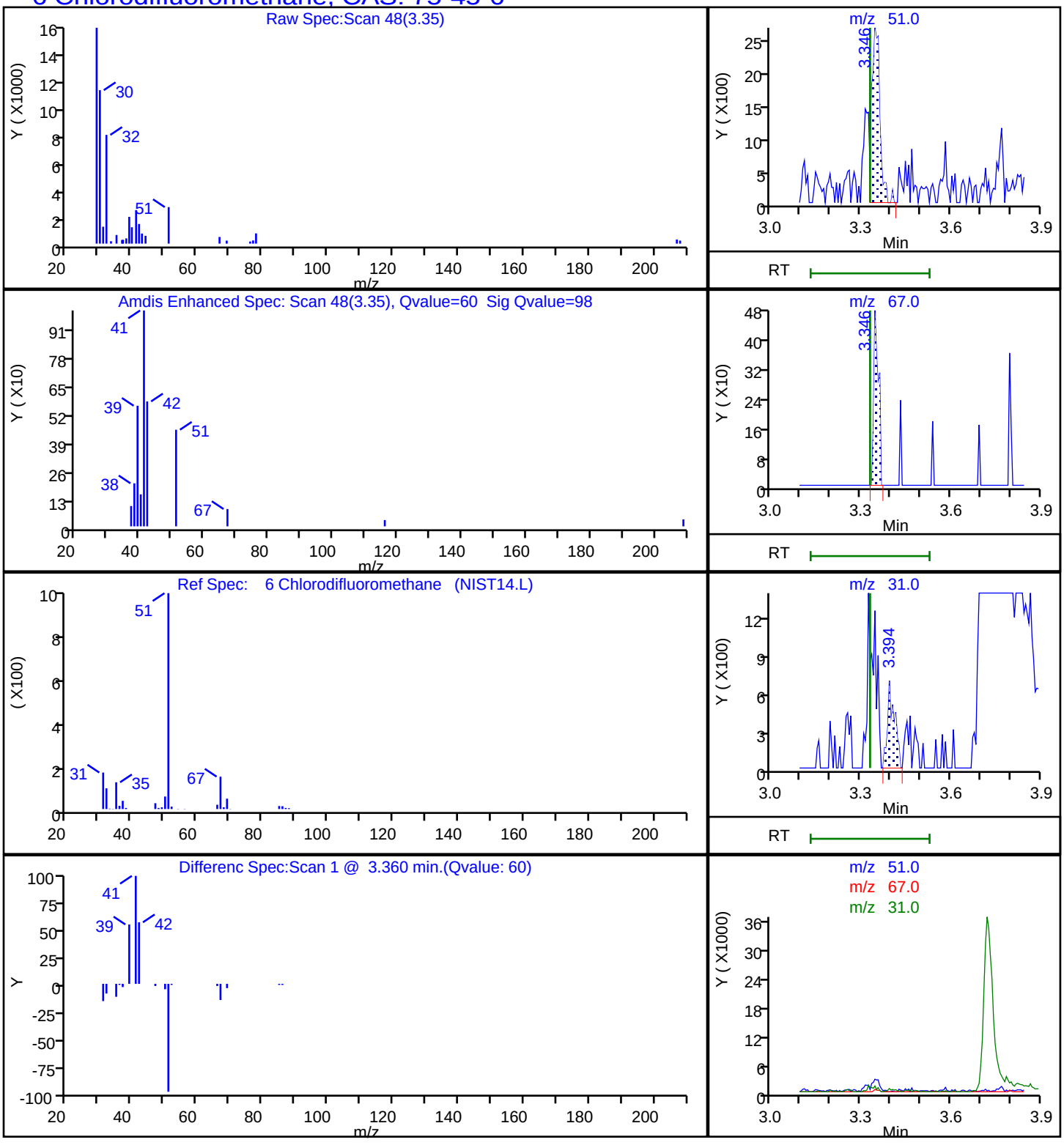
52 Carbon tetrachloride, CAS: 56-23-5



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P109.D		
Injection Date:	05-Sep-2020 21:13:30	Instrument ID:	MR
Lims ID:	140-20195-A-8	Lab Sample ID:	140-20195-8
Client ID:	IA-076-A-29		
Operator ID:	HMT	ALS Bottle#:	9 Worklist Smp#: 15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

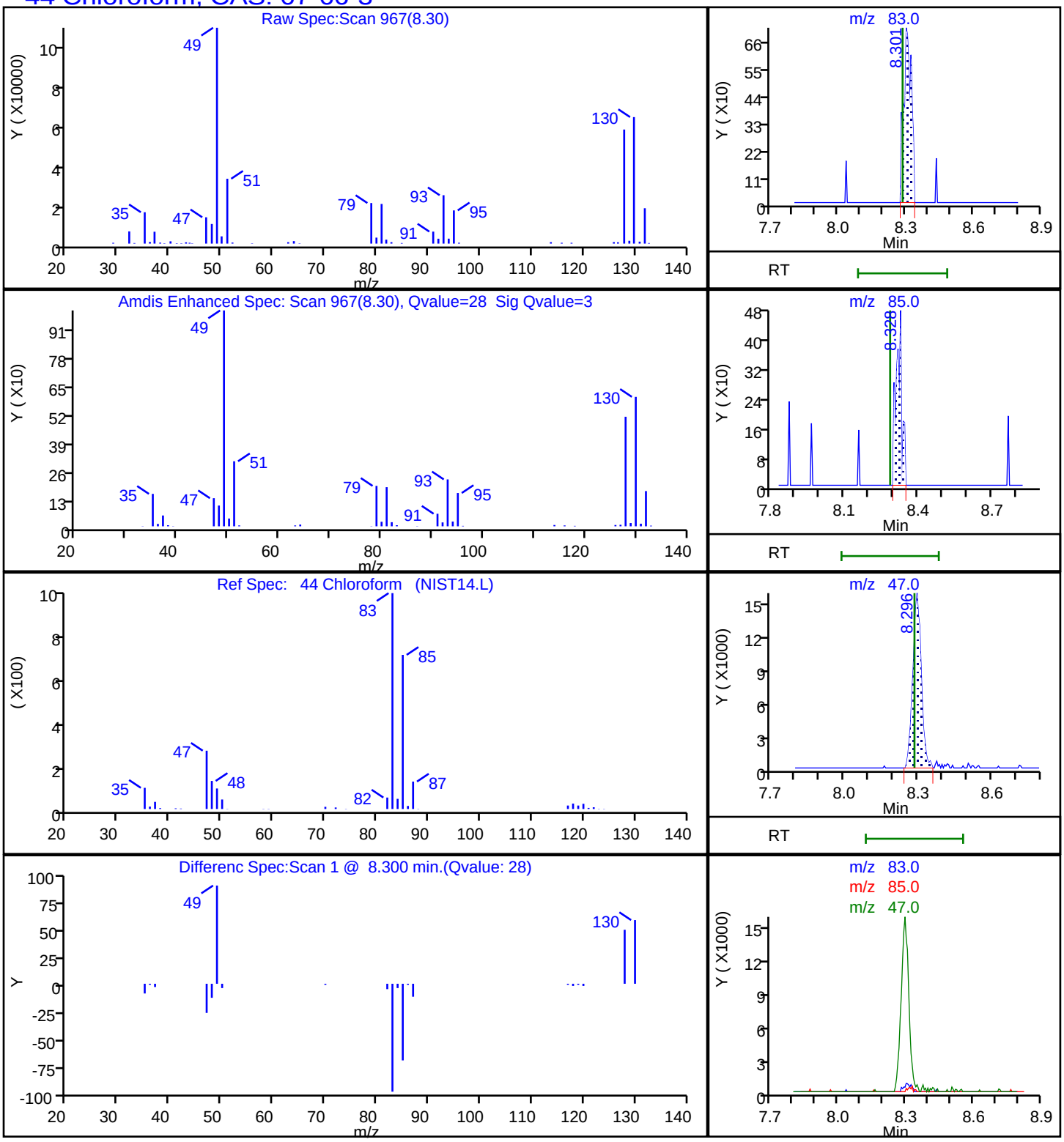
6 Chlorodifluoromethane, CAS: 75-45-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P109.D		
Injection Date:	05-Sep-2020 21:13:30	Instrument ID:	MR
Lims ID:	140-20195-A-8	Lab Sample ID:	140-20195-8
Client ID:	IA-076-A-29		
Operator ID:	HMT	ALS Bottle#:	9 Worklist Smp#: 15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

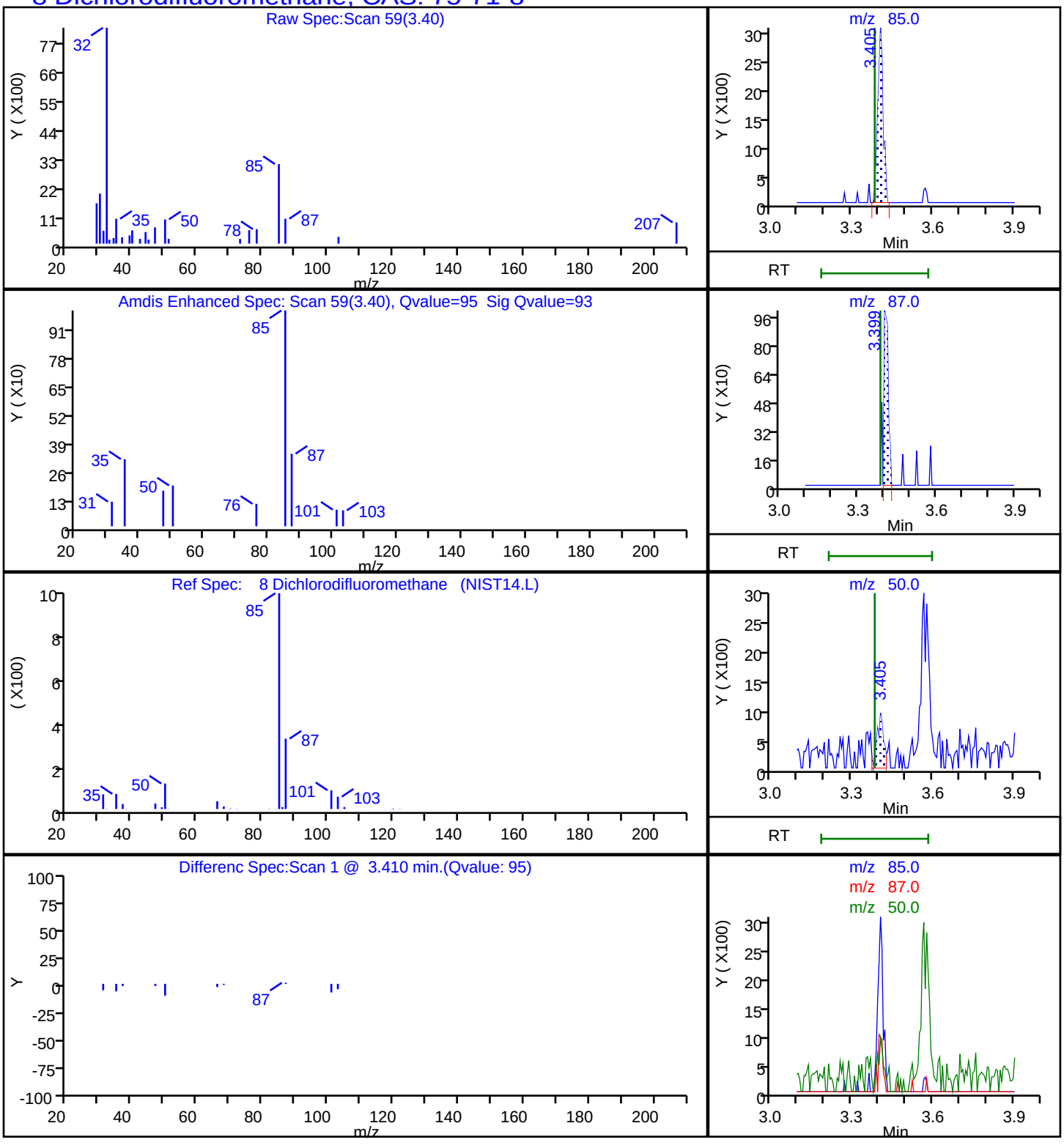
44 Chloroform, CAS: 67-66-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P109.D				
Injection Date:	05-Sep-2020 21:13:30	Instrument ID:	MR		
Lims ID:	140-20195-A-8	Lab Sample ID:	140-20195-8		
Client ID:	IA-076-A-29				
Operator ID:	HMT	ALS Bottle#:	9	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

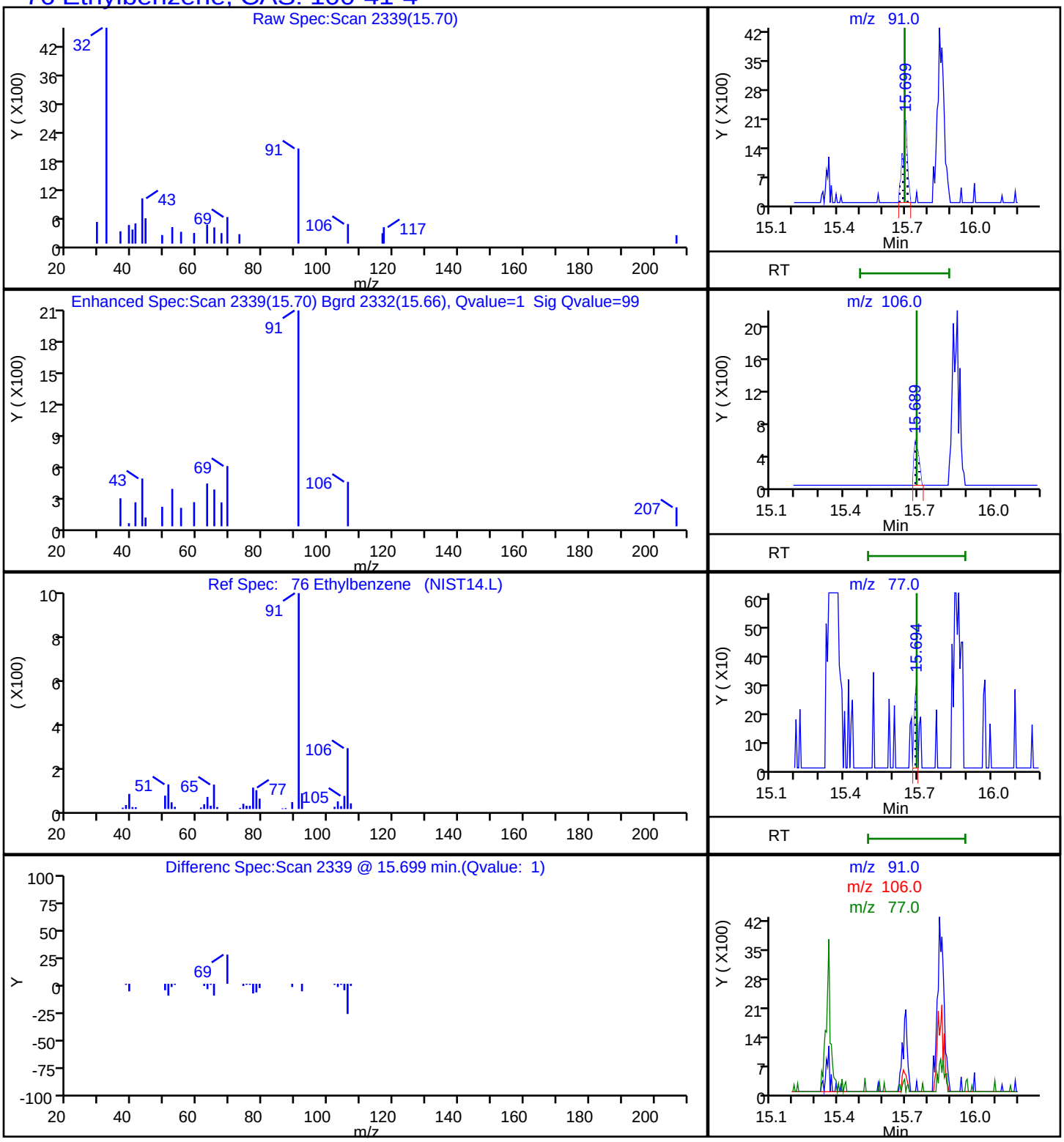
8 Dichlorodifluoromethane, CAS: 75-71-8



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P109.D		
Injection Date:	05-Sep-2020 21:13:30	Instrument ID:	MR
Lims ID:	140-20195-A-8	Lab Sample ID:	140-20195-8
Client ID:	IA-076-A-29		
Operator ID:	HMT	ALS Bottle#:	9 Worklist Smp#: 15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

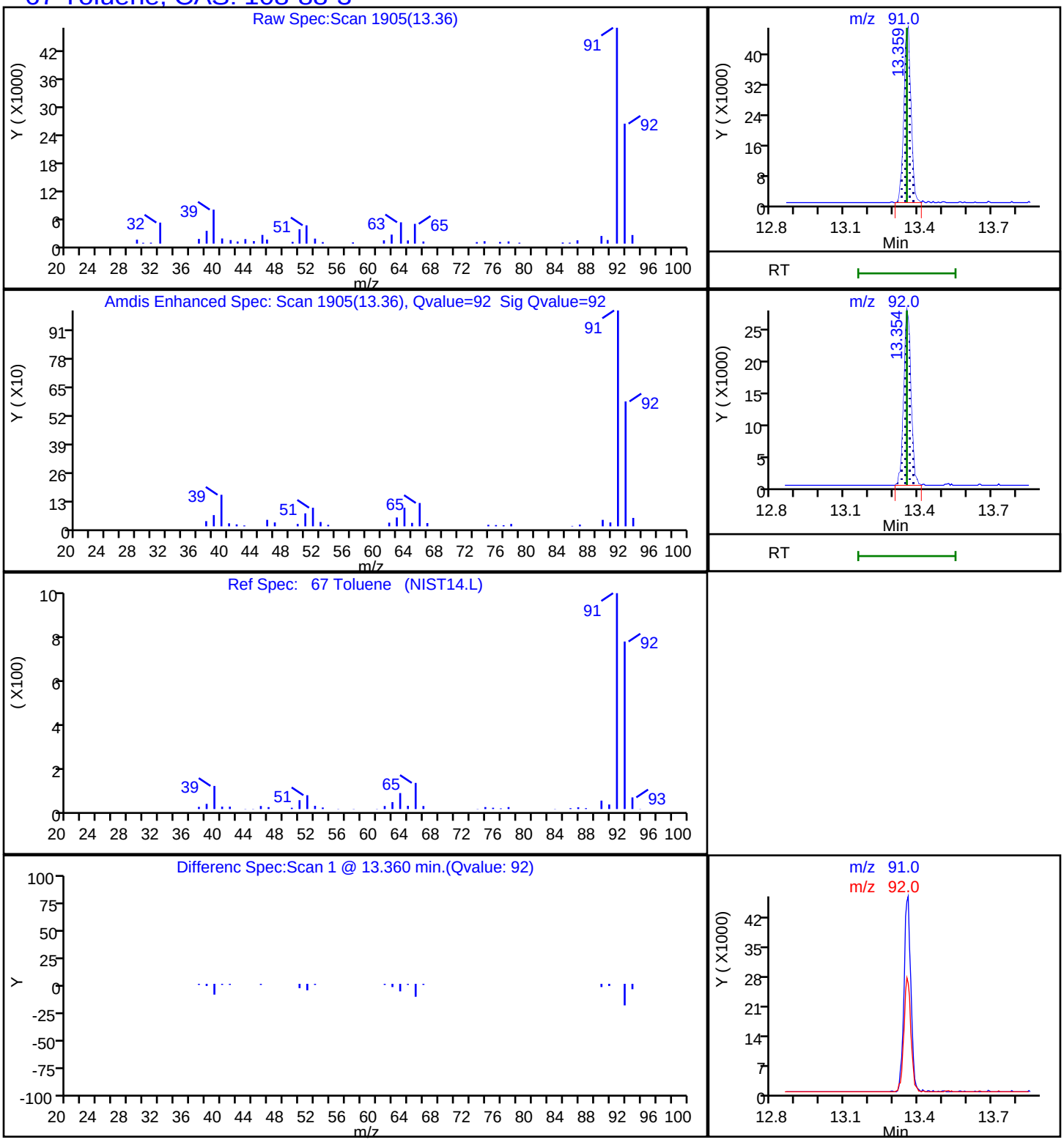
76 Ethylbenzene, CAS: 100-41-4



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P109.D		
Injection Date:	05-Sep-2020 21:13:30	Instrument ID:	MR
Lims ID:	140-20195-A-8	Lab Sample ID:	140-20195-8
Client ID:	IA-076-A-29		
Operator ID:	HMT	ALS Bottle#:	9 Worklist Smp#: 15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

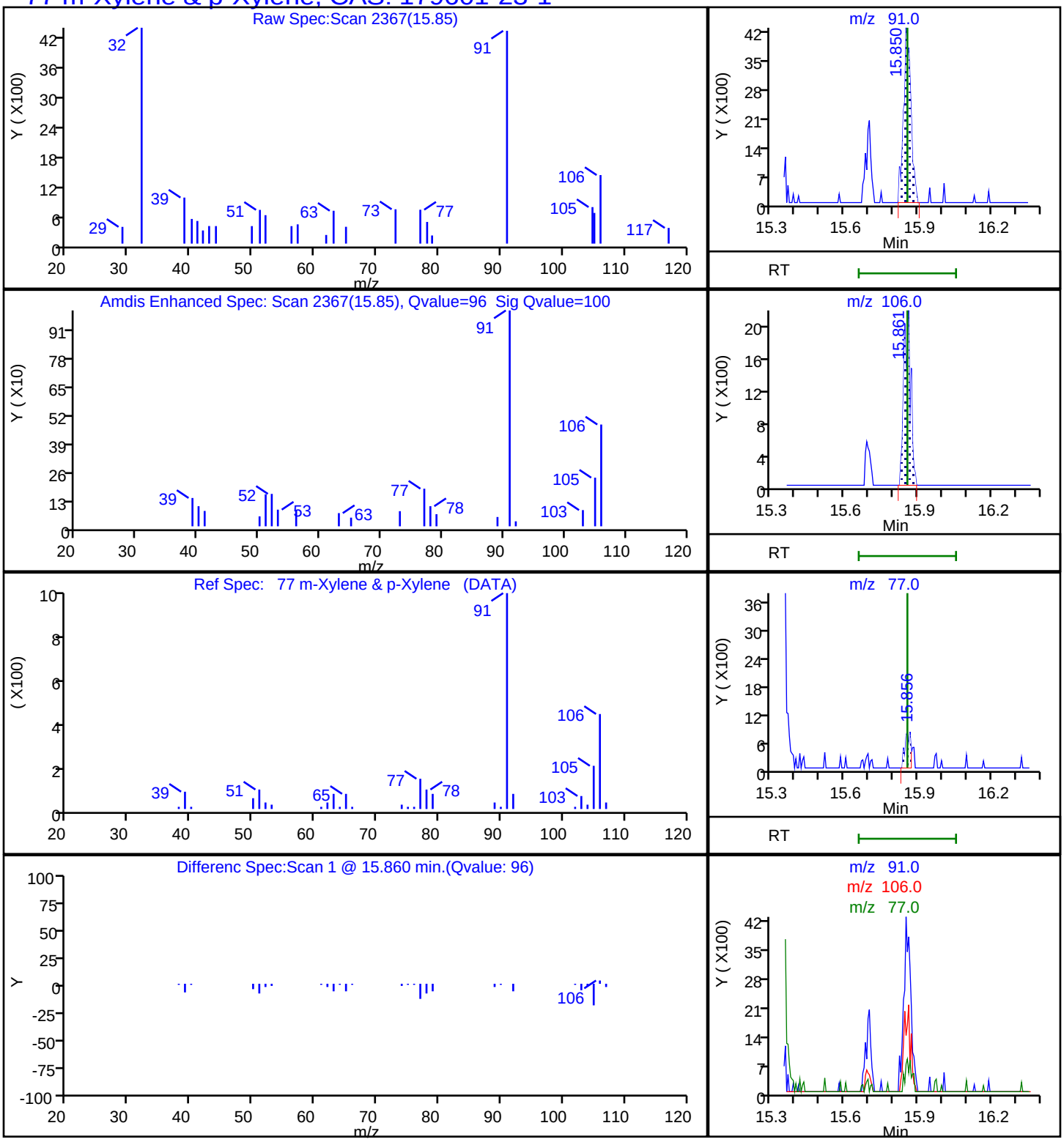
67 Toluene, CAS: 108-88-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P109.D				
Injection Date:	05-Sep-2020 21:13:30	Instrument ID:	MR		
Lims ID:	140-20195-A-8	Lab Sample ID:	140-20195-8		
Client ID:	IA-076-A-29				
Operator ID:	HMT	ALS Bottle#:	9	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

77 m-Xylene & p-Xylene, CAS: 179601-23-1



Eurofins TestAmerica, Knoxville

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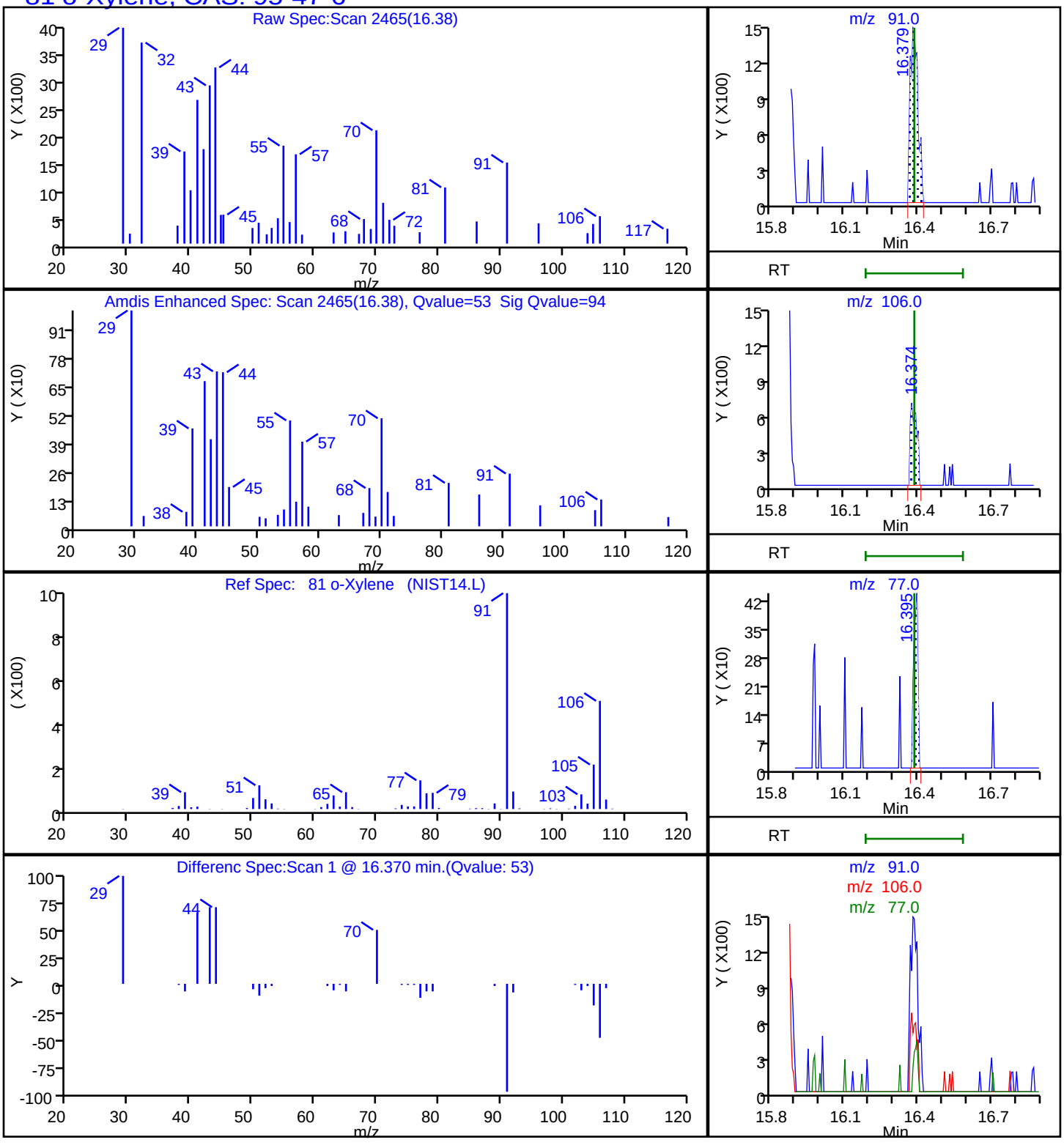
Injection Date:	05-Sep-2020 21:13:30	Instrument ID:	MR
Lims ID:	140-20195-A-8	Lab Sample ID:	140-20195-8
Client ID:	IA-076-A-29		
Operator ID:	HMT	ALS Bottle#:	9 Worklist Smp#: 15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

81 o-Xylene, CAS: 95-47-6



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Client Sample ID: IA-168-A-29 Lab Sample ID: 140-20195-9

Matrix: Air Lab File ID: RI05P110.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 15:56

Sample wt/vol: 100(mL) Date Analyzed: 09/05/2020 22:03

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42483 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.096	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.049	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	0.38	J	0.40	0.11
67-66-3	Chloroform	119.38	ND		0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.42		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	0.077	J	0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.035
108-88-3	Toluene	92.14	2.6		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	ND		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.33	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	91		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Client Sample ID: IA-168-A-29 Lab Sample ID: 140-20195-9

Matrix: Air Lab File ID: RI05P110.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 15:56

Sample wt/vol: 100(mL) Date Analyzed: 09/05/2020 22:03

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42483 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.31	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.31	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	1.3	J	1.4	0.39
67-66-3	Chloroform	119.38	ND		2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.1		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	0.33	J	1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.24
108-88-3	Toluene	92.14	9.8		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	ND		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	1.4	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	91		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P110.D				
Lims ID:	140-20195-A-9				
Client ID:	IA-168-A-29				
Sample Type:	Client				
Inject. Date:	05-Sep-2020 22:03:30	ALS Bottle#:	10	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016508-016				
Misc. Info.:	140-20195-a-9				
Operator ID:	HMT	Instrument ID:	MR		
Method:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\MR_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	06-Sep-2020 07:11:26	Calib Date:	29-Aug-2020 00:02:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1023				
First Level Reviewer: tajh		Date:	06-Sep-2020 07:05:31		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.285	8.274	0.011	96	141988	4.80	
* 2 1,4-Difluorobenzene	114	10.512	10.512	0.000	94	641407	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.349	15.349	0.000	88	506013	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	16.999	16.999	0.000	93	286973	4.24	
6 Chlorodifluoromethane	51	3.335	3.329	0.006	34	5996	0.0754	
8 Dichlorodifluoromethane	85	3.389	3.383	0.006	96	5038	0.0844	
51 Benzene	78	9.924	9.924	0.000	39	2154	0.0192	
52 Carbon tetrachloride	117	9.951	9.946	0.005	33	706	0.009763	
67 Toluene	91	13.354	13.354	0.000	92	70813	0.5198	
76 Ethylbenzene	91	15.700	15.694	0.006	1	2651	0.0154	
77 m-Xylene & p-Xylene	91	15.851	15.856	-0.005	93	5980	0.0454	
81 o-Xylene	91	16.379	16.384	-0.005	73	2697	0.0198	
S 117 Xylenes, Total	100				0		0.0652	

Reagents:

40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

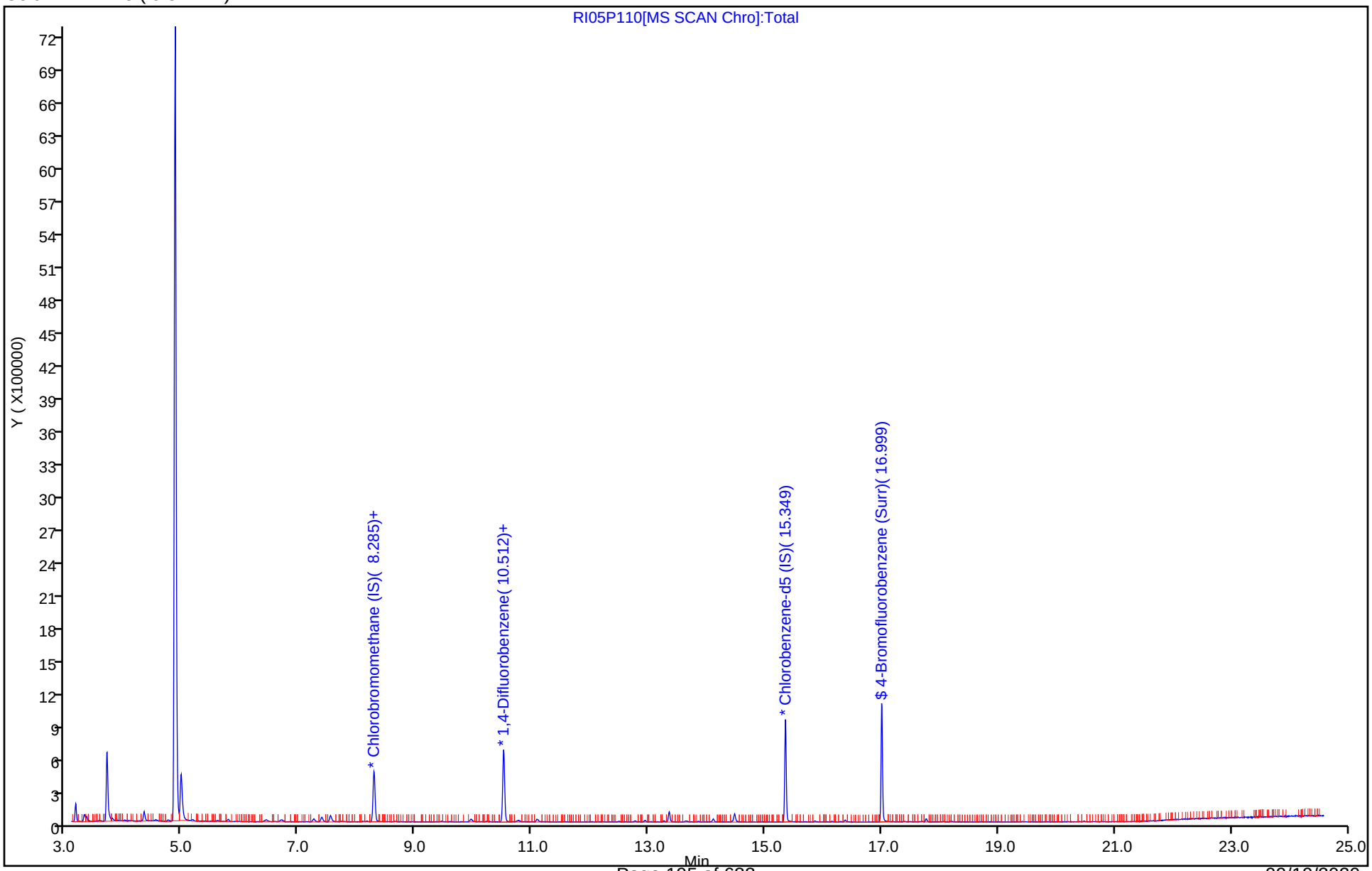
Report Date: 06-Sep-2020 07:11:50 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P110.D

Injection Date:	05-Sep-2020 22:03:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	140-20195-A-9	Lab Sample ID:	140-20195-9	Worklist Smp#:	16
Client ID:	IA-168-A-29				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P110.D				
Lims ID:	140-20195-A-9				
Client ID:	IA-168-A-29				
Sample Type:	Client				
Inject. Date:	05-Sep-2020 22:03:30	ALS Bottle#:	10	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016508-016				
Misc. Info.:	140-20195-a-9				
Operator ID:	HMT	Instrument ID:	MR		
Method:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\MR_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	06-Sep-2020 07:11:26	Calib Date:	29-Aug-2020 00:02:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1023				
First Level Reviewer: tajh		Date:	06-Sep-2020 07:05:31		

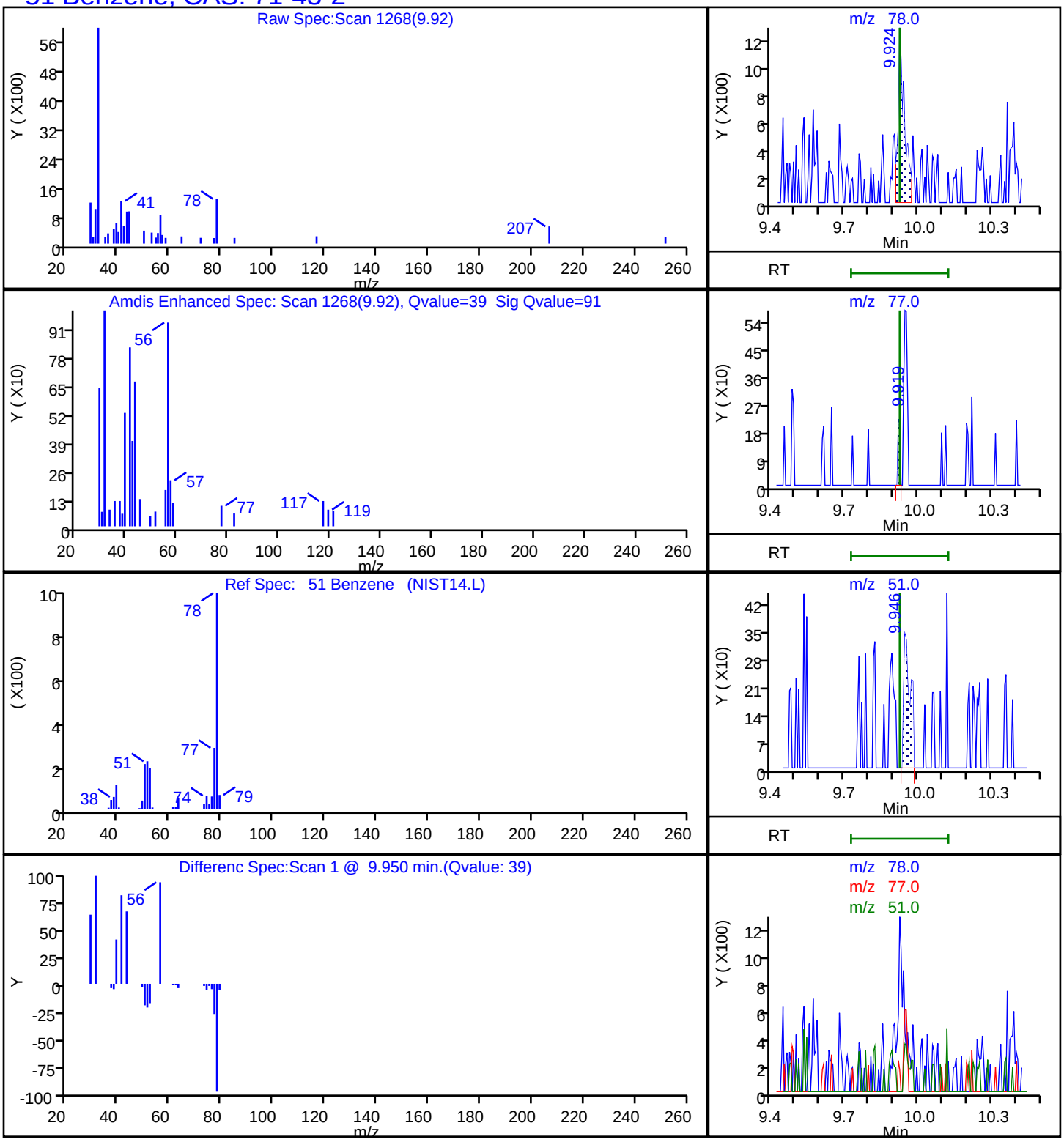
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	4.24	91.42

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P110.D

Injection Date:	05-Sep-2020 22:03:30	Instrument ID:	MR		
Lims ID:	140-20195-A-9	Lab Sample ID:	140-20195-9		
Client ID:	IA-168-A-29				
Operator ID:	HMT	ALS Bottle#:	10	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

51 Benzene, CAS: 71-43-2



Eurofins TestAmerica, Knoxville

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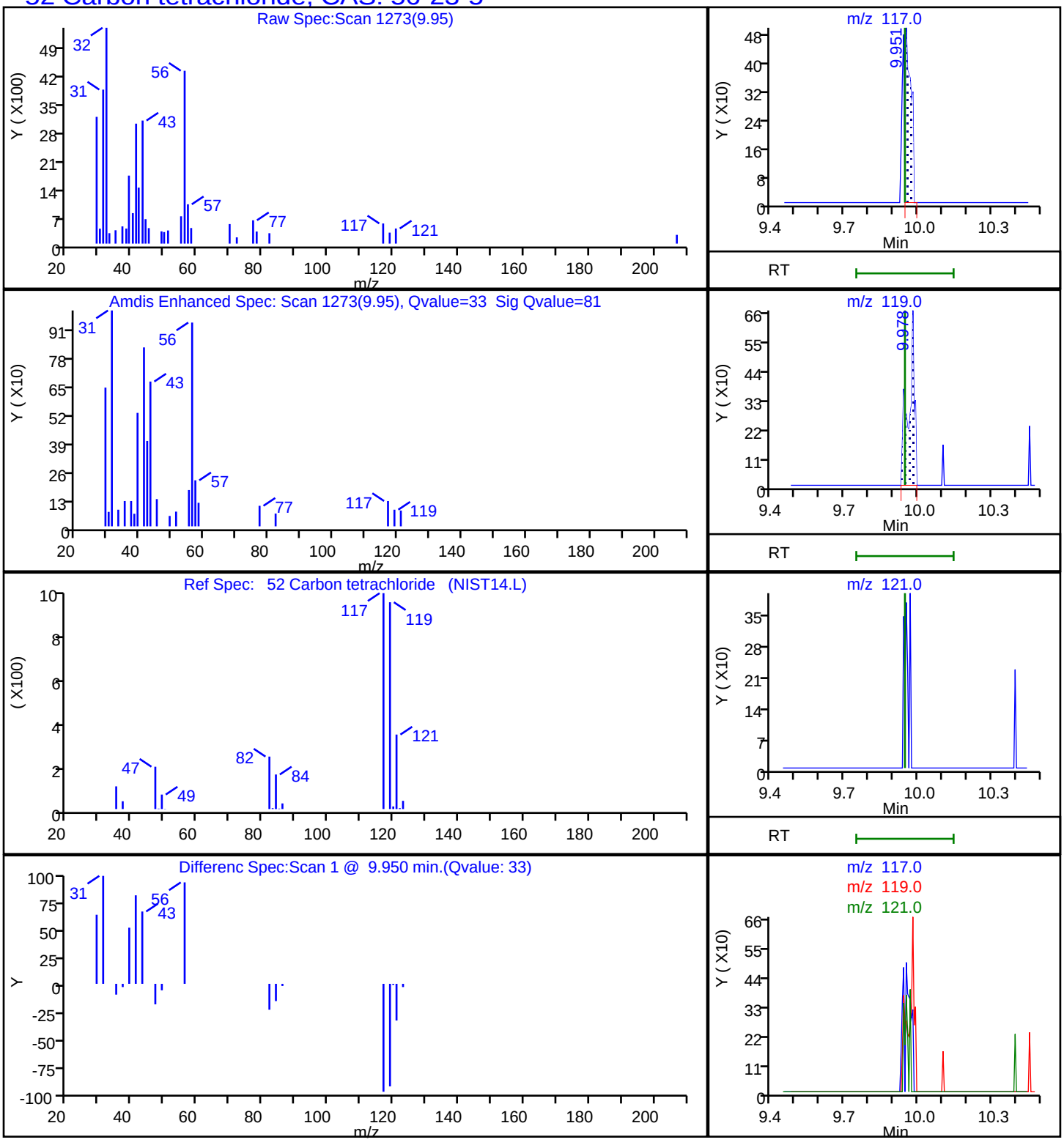
Lims ID:	140-20195-A-9	Lab Sample ID:	140-20195-9		
Client ID:	IA-168-A-29				
Operator ID:	HMT	ALS Bottle#:	10	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

52 Carbon tetrachloride, CAS: 56-23-5



Eurofins TestAmerica, Knoxville

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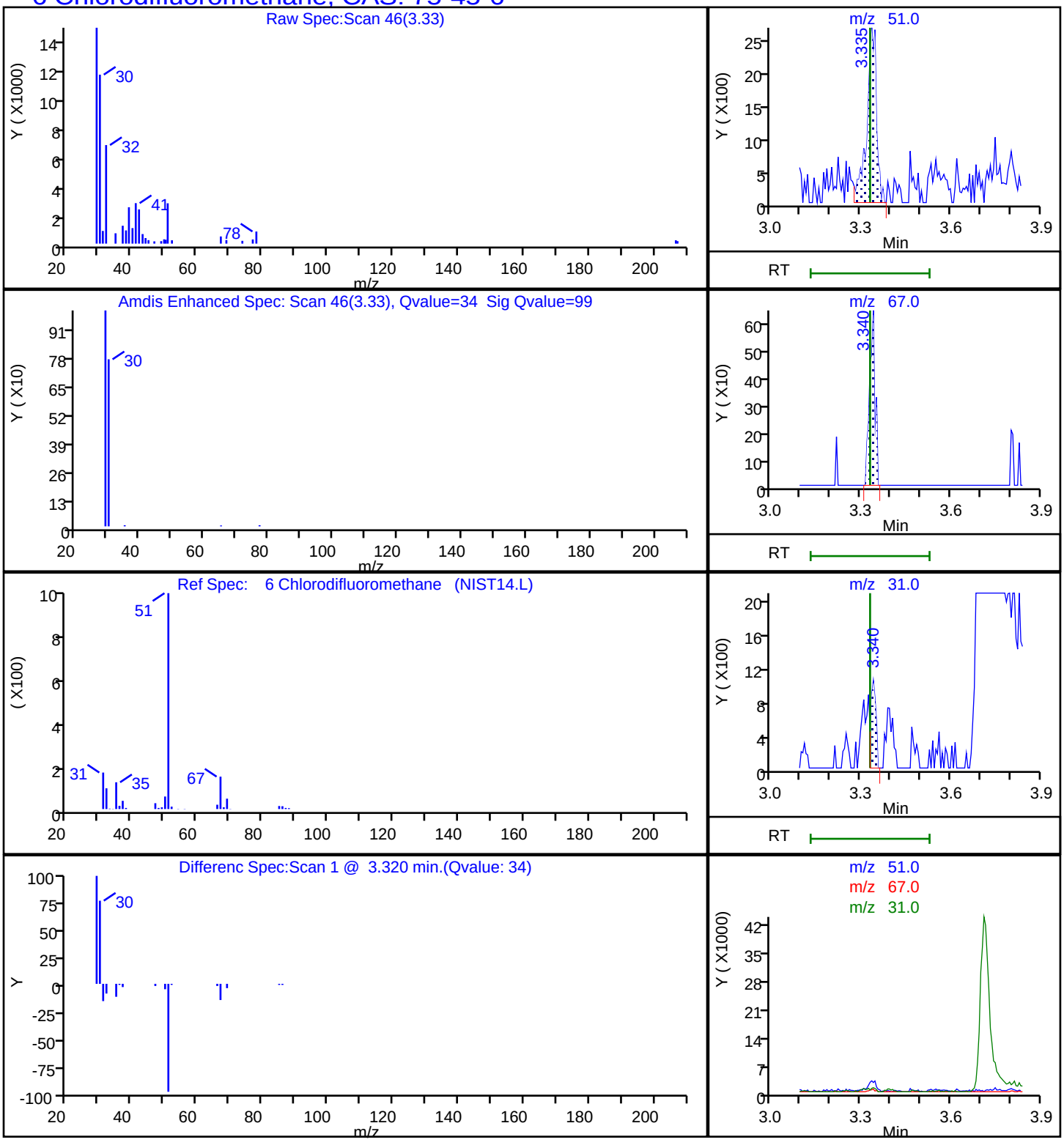
Lims ID:	140-20195-A-9	Lab Sample ID:	140-20195-9		
Client ID:	IA-168-A-29				
Operator ID:	HMT	ALS Bottle#:	10	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

6 Chlorodifluoromethane, CAS: 75-45-6



Eurofins TestAmerica, Knoxville

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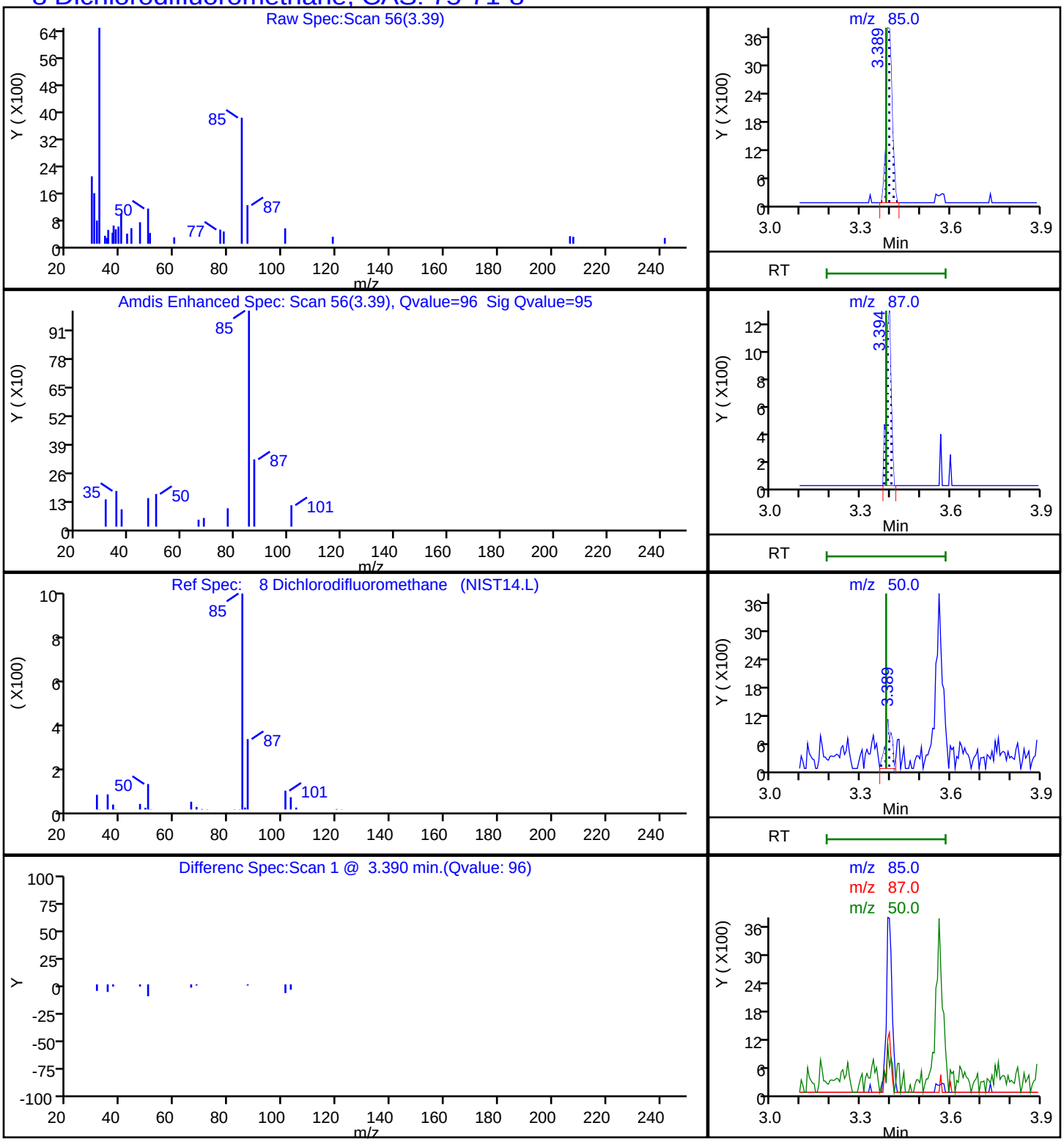
Lims ID:	140-20195-A-9	Lab Sample ID:	140-20195-9		
Client ID:	IA-168-A-29				
Operator ID:	HMT	ALS Bottle#:	10	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

8 Dichlorodifluoromethane, CAS: 75-71-8

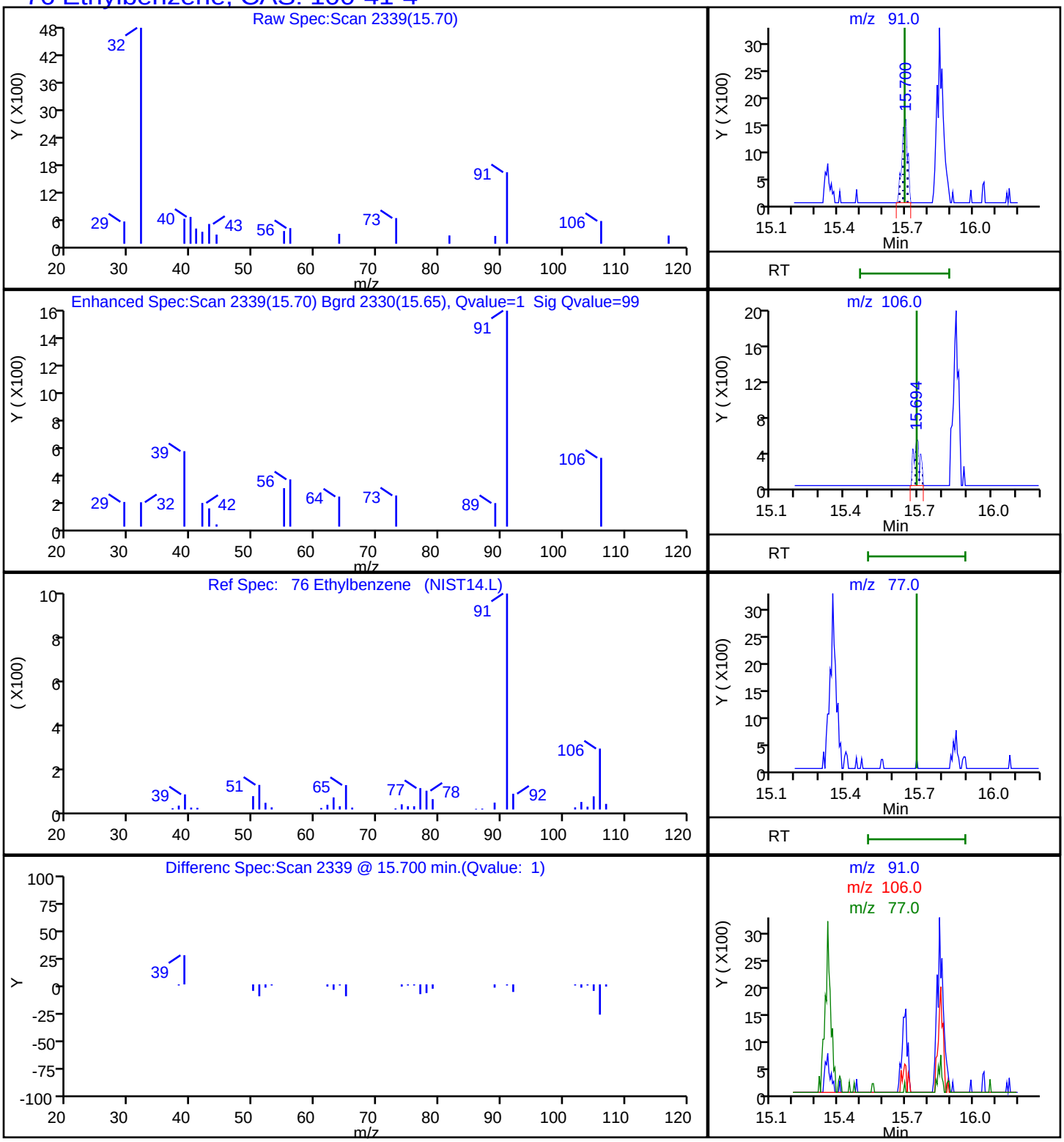


Report Date: 06-Sep-2020 07:11:50 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P110.D				
Injection Date:	05-Sep-2020 22:03:30	Instrument ID:	MR		
Lims ID:	140-20195-A-9	Lab Sample ID:	140-20195-9		
Client ID:	IA-168-A-29				
Operator ID:	HMT	ALS Bottle#:	10	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

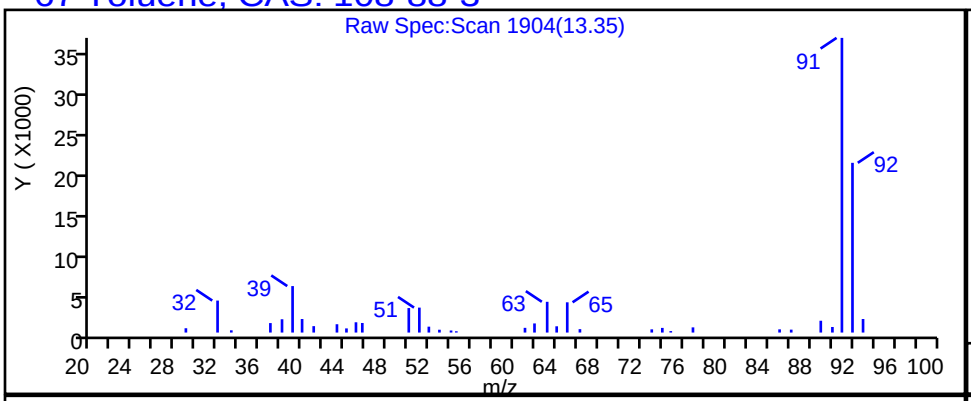
76 Ethylbenzene, CAS: 100-41-4

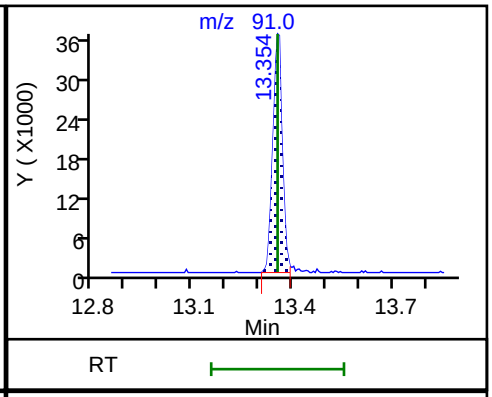


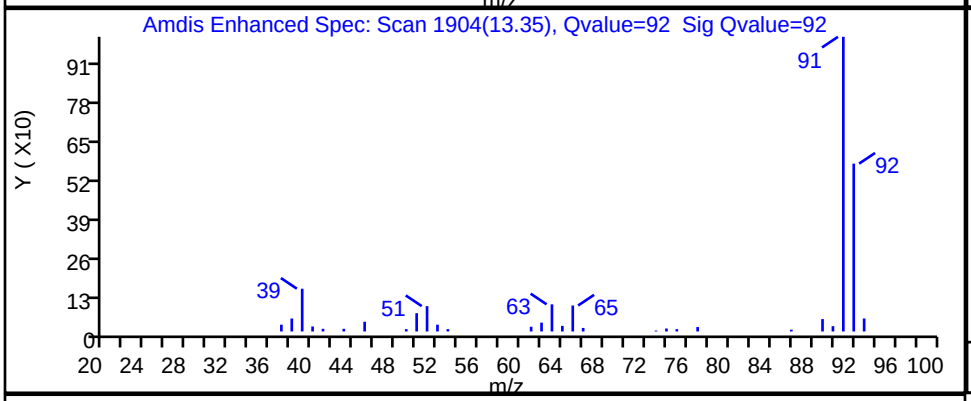
Eurofins TestAmerica, Knoxville

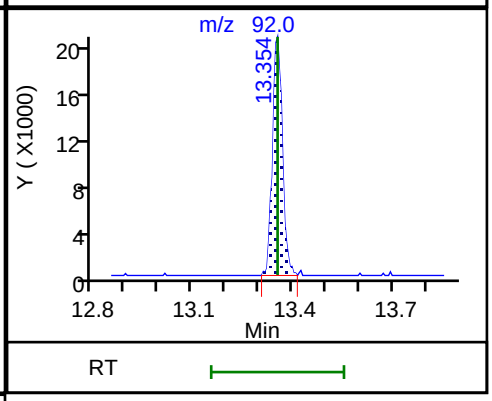
Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P110.D		
Injection Date:	05-Sep-2020 22:03:30	Instrument ID:	MR
Lims ID:	140-20195-A-9	Lab Sample ID:	140-20195-9
Client ID:	IA-168-A-29		
Operator ID:	HMT	ALS Bottle#:	10 Worklist Smp#: 16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

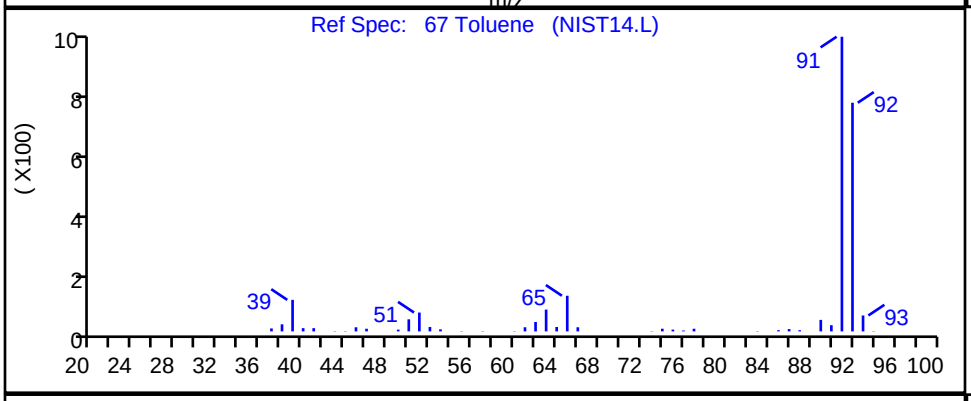
67 Toluene, CAS: 108-88-3

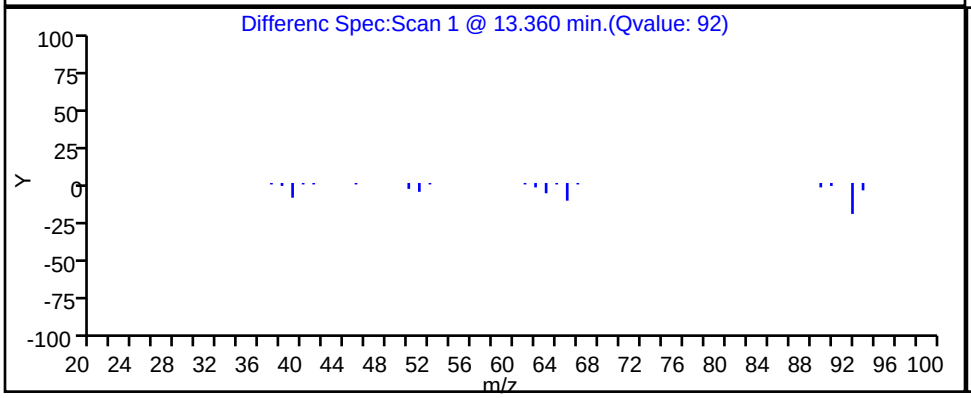


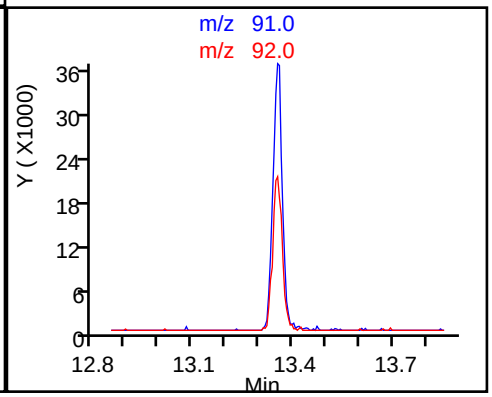








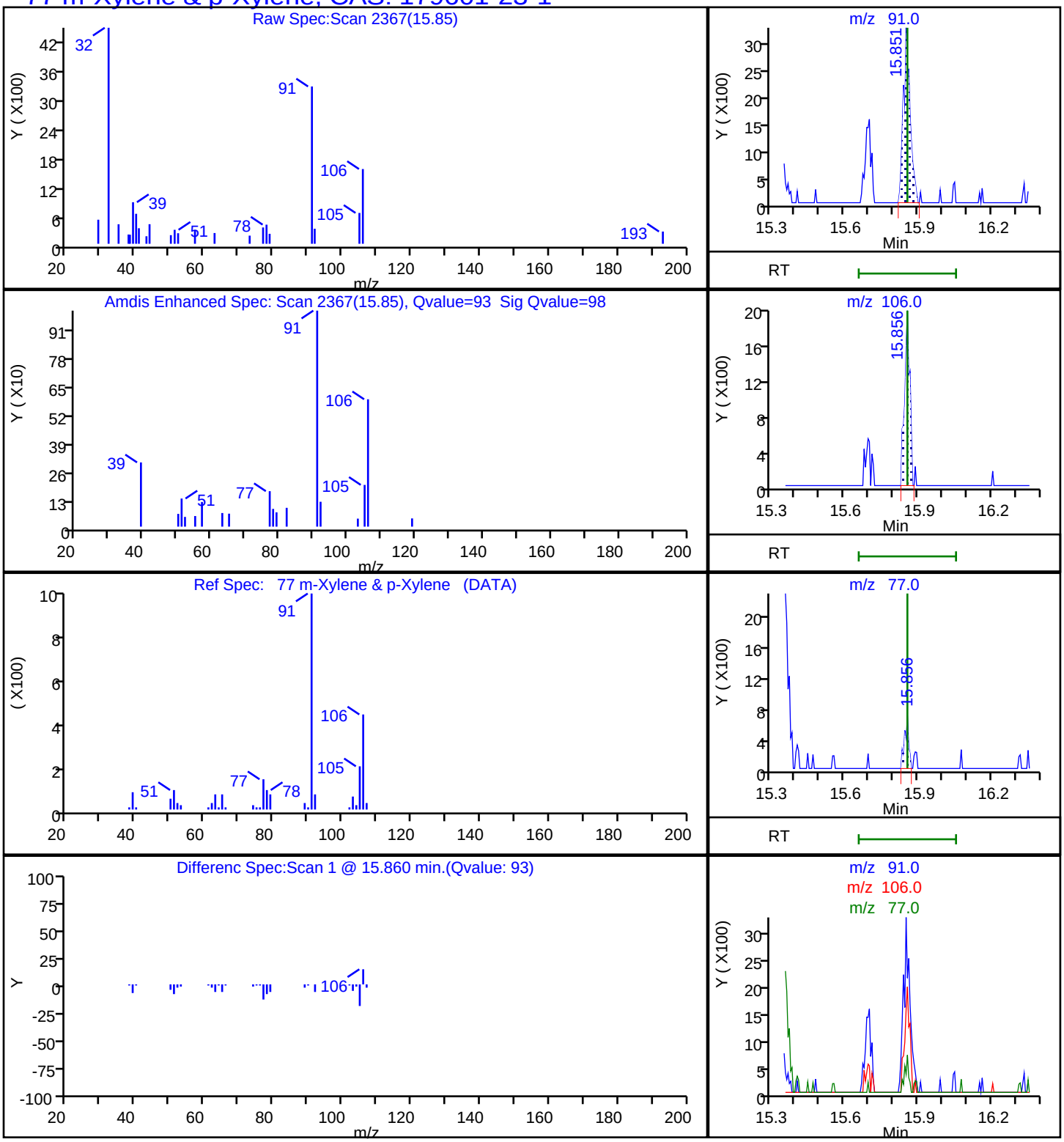




Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P110.D				
Injection Date:	05-Sep-2020 22:03:30	Instrument ID:	MR		
Lims ID:	140-20195-A-9	Lab Sample ID:	140-20195-9		
Client ID:	IA-168-A-29				
Operator ID:	HMT	ALS Bottle#:	10	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

77 m-Xylene & p-Xylene, CAS: 179601-23-1

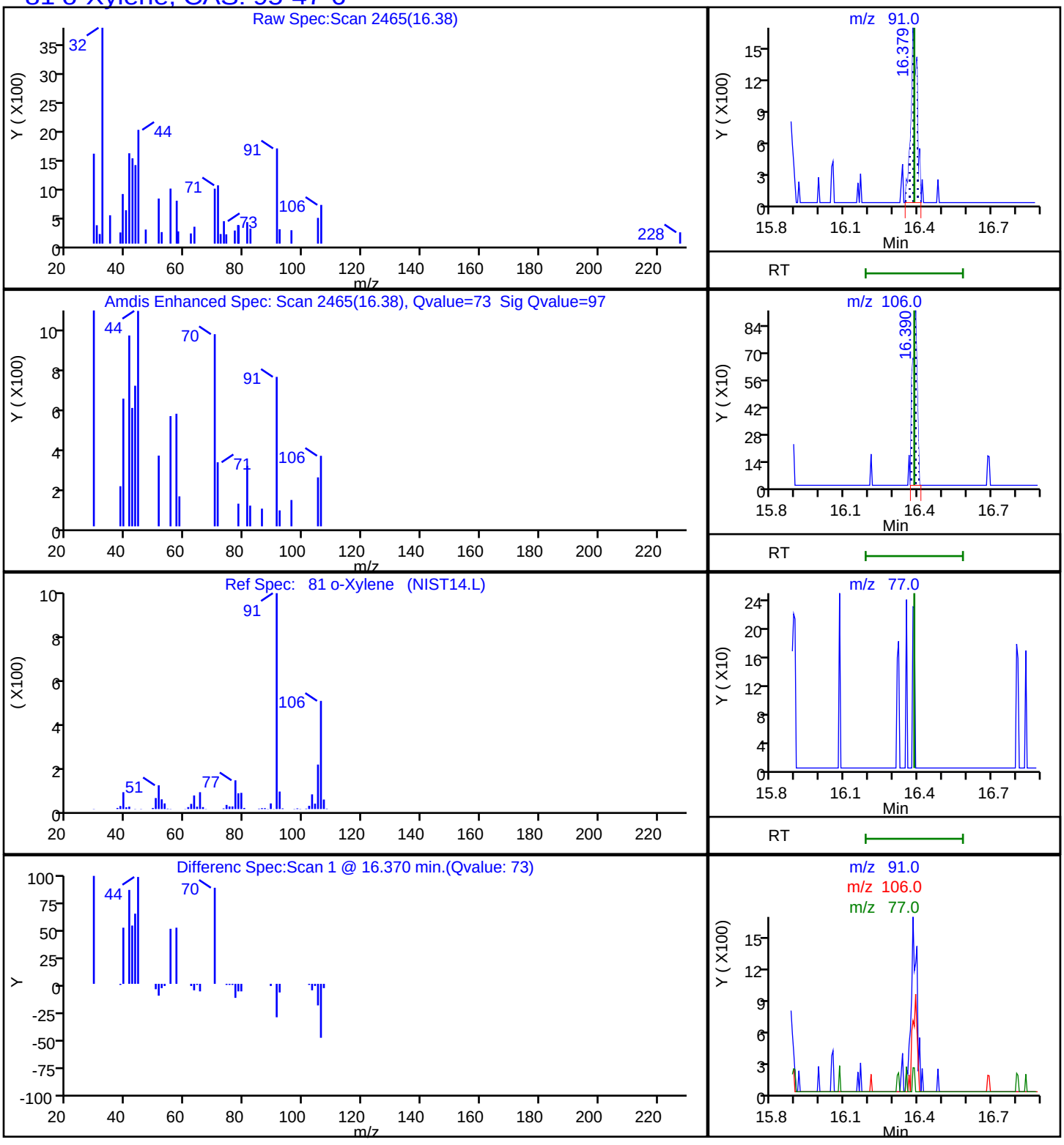


Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P110.D

Injection Date:	05-Sep-2020 22:03:30	Instrument ID:	MR
Lims ID:	140-20195-A-9	Lab Sample ID:	140-20195-9
Client ID:	IA-168-A-29		
Operator ID:	HMT	ALS Bottle#:	10 Worklist Smp#: 16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

81 o-Xylene, CAS: 95-47-6



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Client Sample ID: IA-DUP 4-A-29 Lab Sample ID: 140-20195-10

Matrix: Air Lab File ID: RI05P111.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 00:00

Sample wt/vol: 156(mL) Date Analyzed: 09/05/2020 22:54

Soil Aliquot Vol: Dilution Factor: 1.56

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42483 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.14	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.059	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	0.44		0.40	0.11
67-66-3	Chloroform	119.38	ND		0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	0.083	J	0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.34	J	0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	0.075	J	0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	0.071	J	0.40	0.035
108-88-3	Toluene	92.14	2.6		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	0.45		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.34	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	92		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Client Sample ID: IA-DUP 4-A-29 Lab Sample ID: 140-20195-10

Matrix: Air Lab File ID: RI05P111.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 00:00

Sample wt/vol: 156(mL) Date Analyzed: 09/05/2020 22:54

Soil Aliquot Vol: Dilution Factor: 1.56

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42483 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.43	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.37	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	1.6		1.4	0.39
67-66-3	Chloroform	119.38	ND		2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	0.33	J	1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	1.7	J	2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	0.33	J	1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	0.48	J	2.7	0.24
108-88-3	Toluene	92.14	9.8		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	2.4		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	1.5	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	92		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P111.D
Lims ID: 140-20195-A-10
Client ID: IA-DUP 4-A-29
Sample Type: Client
Inject. Date: 05-Sep-2020 22:54:30 ALS Bottle#: 11 Worklist Smp#: 17
Purge Vol: 500.000 mL Dil. Factor: 1.5600
Sample Info: 140-0016508-017
Misc. Info.: 140-20195-a-10@1.56
Operator ID: HMT Instrument ID: MR

Method: \\chromfs\Knoxville\ChromData\MR\20200904-16508.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 06-Sep-2020 07:11:26 Calib Date: 29-Aug-2020 00:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1023

First Level Reviewer: tajh Date: 06-Sep-2020 07:06:50

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.296	8.274	0.022	96	140683	4.80	
* 2 1,4-Difluorobenzene	114	10.512	10.512	0.000	94	639276	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.349	15.349	0.000	88	496411	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	16.999	16.999	0.000	93	282455	4.26	
6 Chlorodifluoromethane	51	3.346	3.329	0.017	93	6947	0.0882	
8 Dichlorodifluoromethane	85	3.405	3.383	0.022	92	4048	0.0685	
42 cis-1,2-Dichloroethene	96	7.988	7.940	0.048	1	738	0.0166	
51 Benzene	78	9.919	9.924	-0.005	39	3019	0.0270	
52 Carbon tetrachloride	117	9.962	9.946	0.016	44	844	0.0117	
58 Trichloroethene	130	11.245	11.240	0.005	92	5003	0.0901	
67 Toluene	91	13.354	13.354	0.000	95	69527	0.5202	
73 Tetrachloroethene	129	14.519	14.519	-0.001	18	697	0.0142	
76 Ethylbenzene	91	15.689	15.694	-0.005	9	2549	0.0151	
77 m-Xylene & p-Xylene	91	15.856	15.856	0.000	93	6246	0.0484	
81 o-Xylene	91	16.384	16.384	0.000	57	2776	0.0208	
S 117 Xylenes, Total	100				0		0.0692	

Reagents:

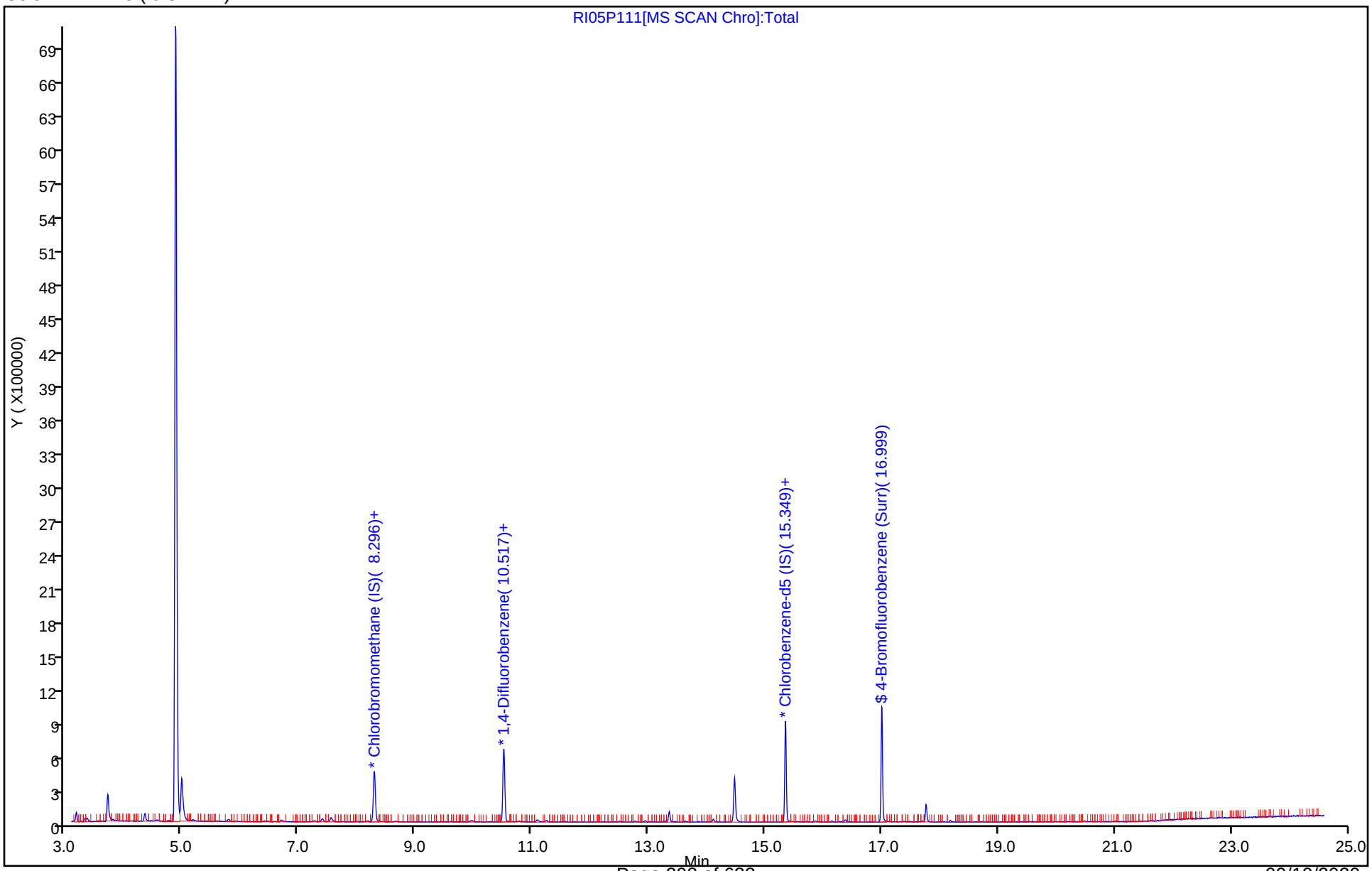
40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

Report Date: 06-Sep-2020 07:11:52 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P111.D				
Injection Date:	05-Sep-2020 22:54:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	140-20195-A-10	Lab Sample ID:	140-20195-10	Worklist Smp#:	17
Client ID:	IA-DUP 4-A-29				
Purge Vol:	500.000 mL	Dil. Factor:	1.5600	ALS Bottle#:	11
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

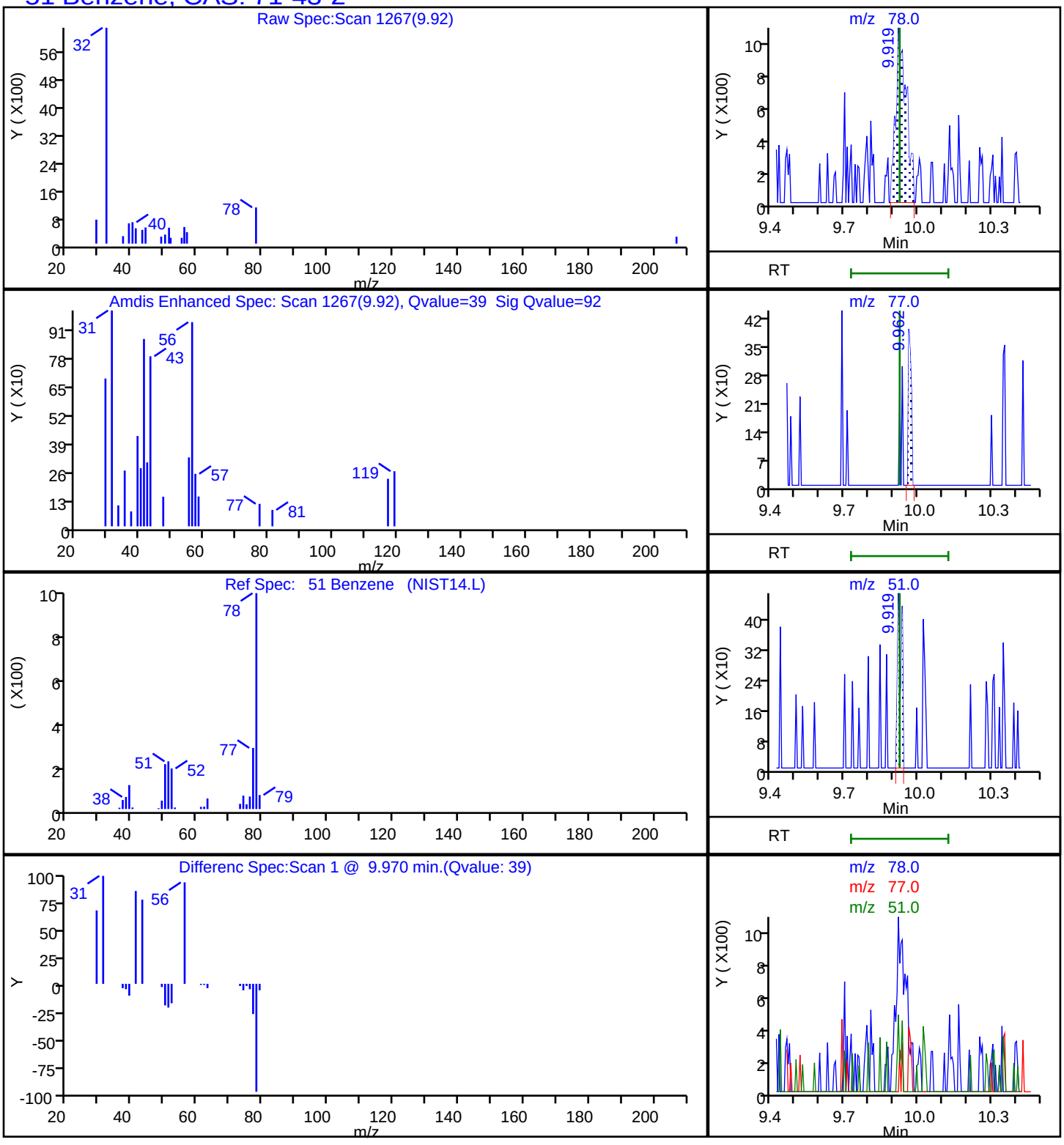
Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P111.D				
Lims ID:	140-20195-A-10				
Client ID:	IA-DUP 4-A-29				
Sample Type:	Client				
Inject. Date:	05-Sep-2020 22:54:30	ALS Bottle#:	11	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.5600		
Sample Info:	140-0016508-017				
Misc. Info.:	140-20195-a-10@1.56				
Operator ID:	HMT	Instrument ID:	MR		
Method:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\MR_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	06-Sep-2020 07:11:26	Calib Date:	29-Aug-2020 00:02:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1023				
First Level Reviewer: tajh		Date:	06-Sep-2020 07:06:50		

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	4.26	91.72

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P111.D		
Injection Date:	05-Sep-2020 22:54:30	Instrument ID:	MR
Lims ID:	140-20195-A-10	Lab Sample ID:	140-20195-10
Client ID:	IA-DUP 4-A-29		
Operator ID:	HMT	ALS Bottle#:	11 Worklist Smp#: 17
Purge Vol:	500.000 mL	Dil. Factor:	1.5600
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

51 Benzene, CAS: 71-43-2



Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P111.D

Injection Date: 05-Sep-2020 22:54:30 Instrument ID: MR

Lims ID: 140-20195-A-10 Lab Sample ID: 140-20195-10

Client ID: IA-DUP 4-A-29

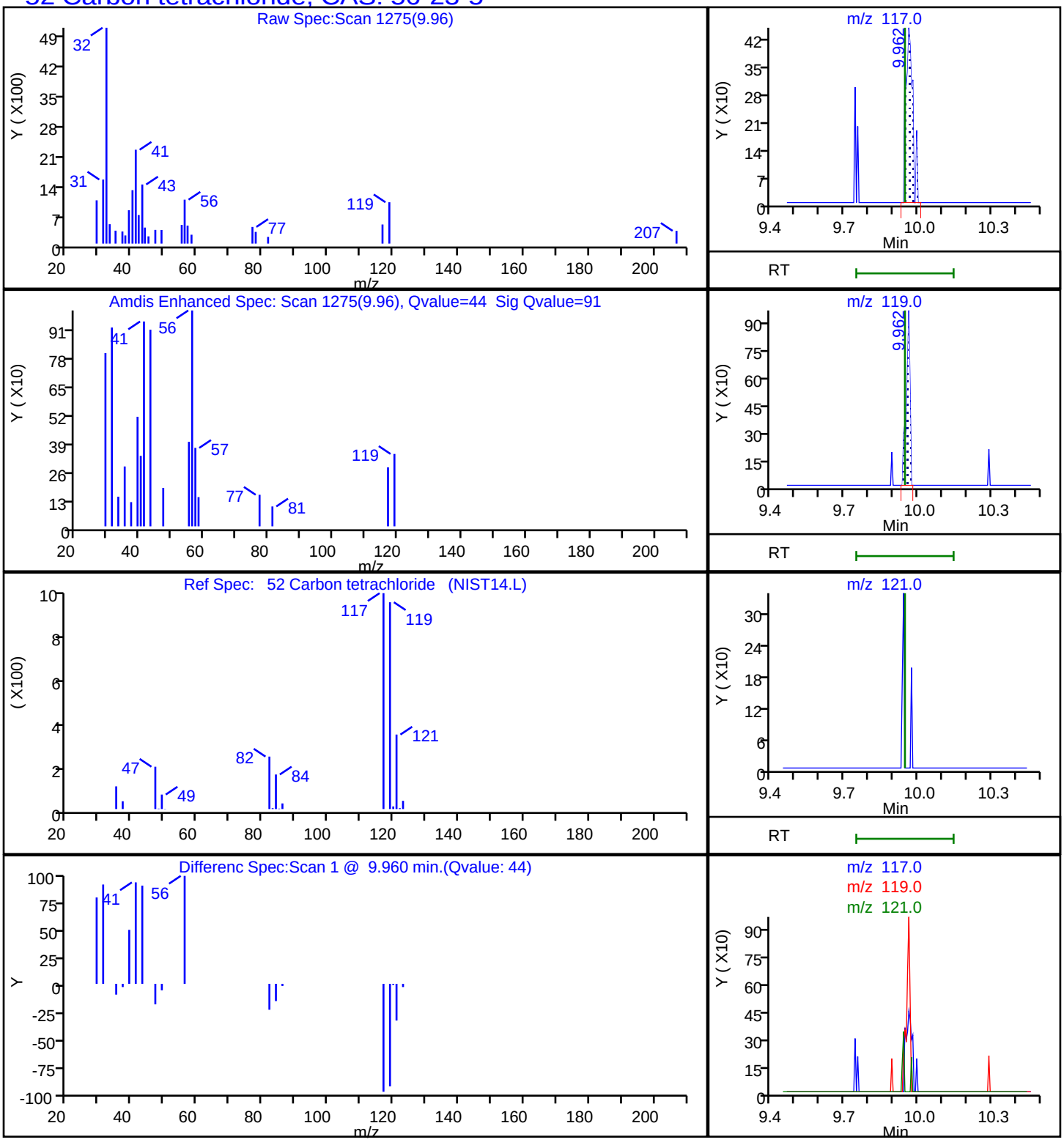
Operator ID: HMT ALS Bottle#: 11 Worklist Smp#: 17

Purge Vol: 500.000 mL Dil. Factor: 1.5600

Method: MR_TO15 Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm) Detector MS SCAN

52 Carbon tetrachloride, CAS: 56-23-5



Eurofins TestAmerica, Knoxville

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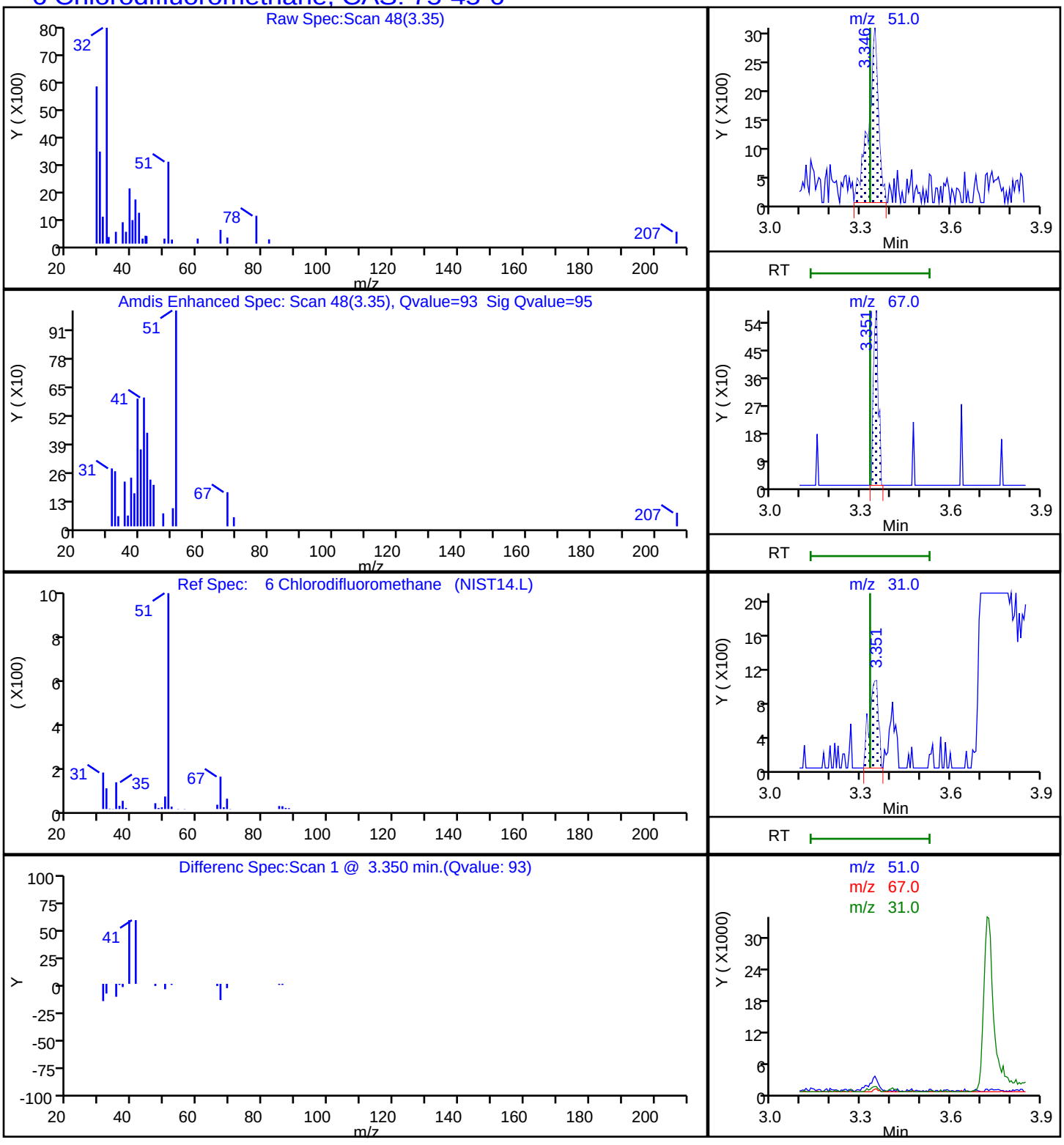
Lims ID:	140-20195-A-10	Lab Sample ID:	140-20195-10		
Client ID:	IA-DUP 4-A-29				
Operator ID:	HMT	ALS Bottle#:	11	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.5600		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

6 Chlorodifluoromethane, CAS: 75-45-6



Eurofins TestAmerica, Knoxville

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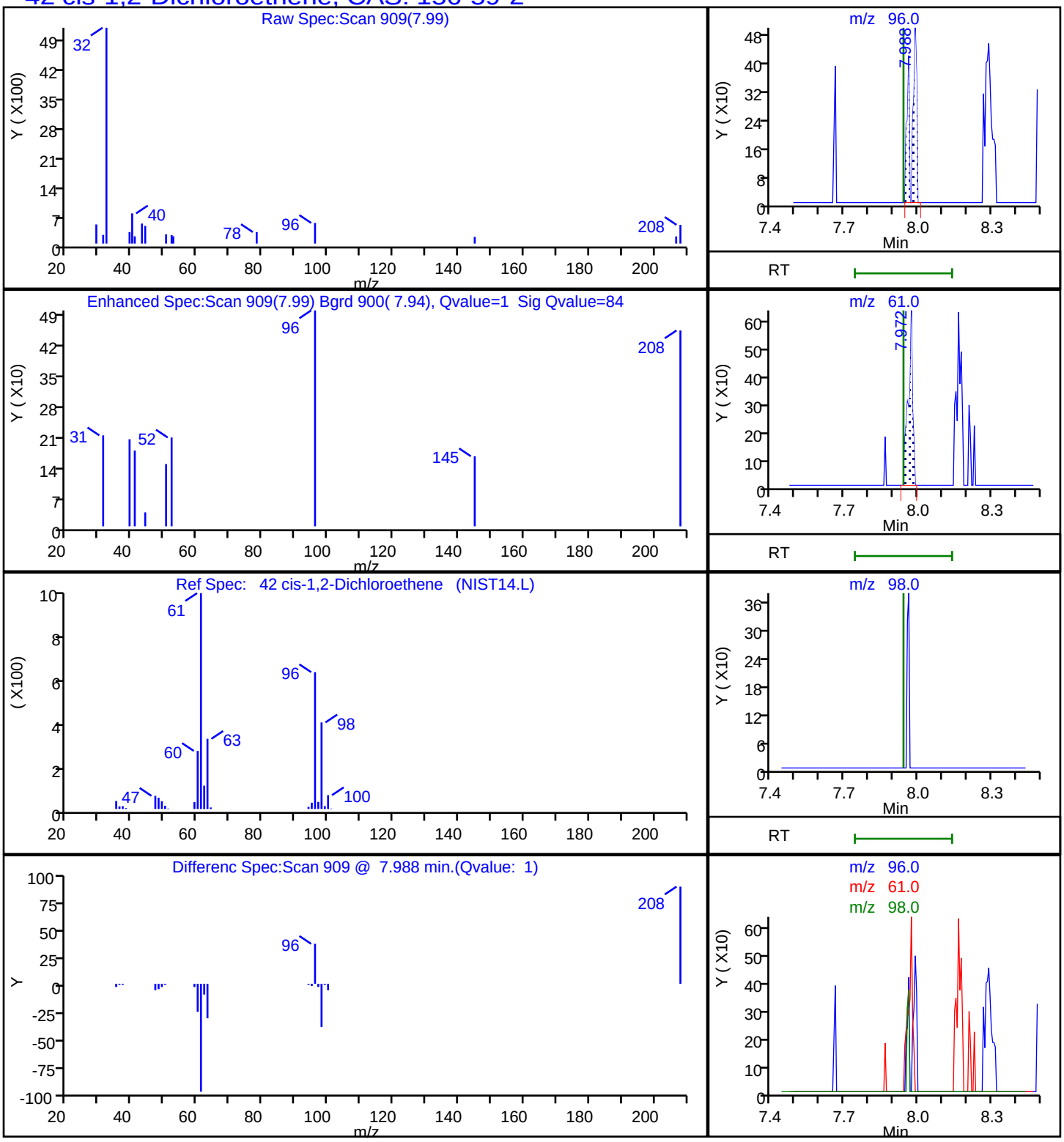
Lims ID:	140-20195-A-10	Lab Sample ID:	140-20195-10
Client ID:	IA-DUP 4-A-29		
Operator ID:	HMT	ALS Bottle#:	11 Worklist Smp#: 17
Purge Vol:	500.000 mL	Dil. Factor:	1.5600
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

42 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P111.D				
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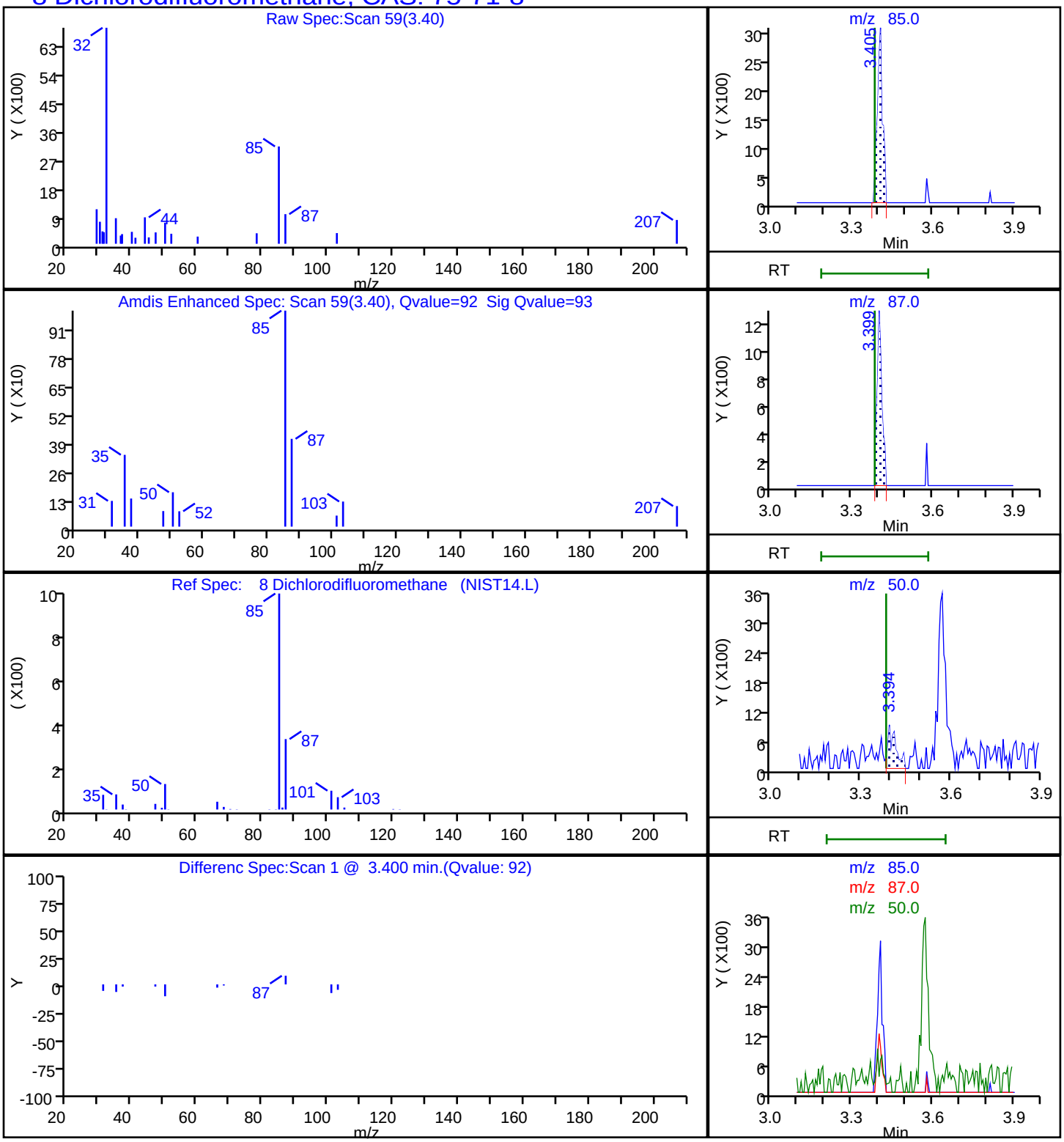
Lims ID:	140-20195-A-10	Lab Sample ID:	140-20195-10		
Client ID:	IA-DUP 4-A-29				
Operator ID:	HMT	ALS Bottle#:	11	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.5600		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

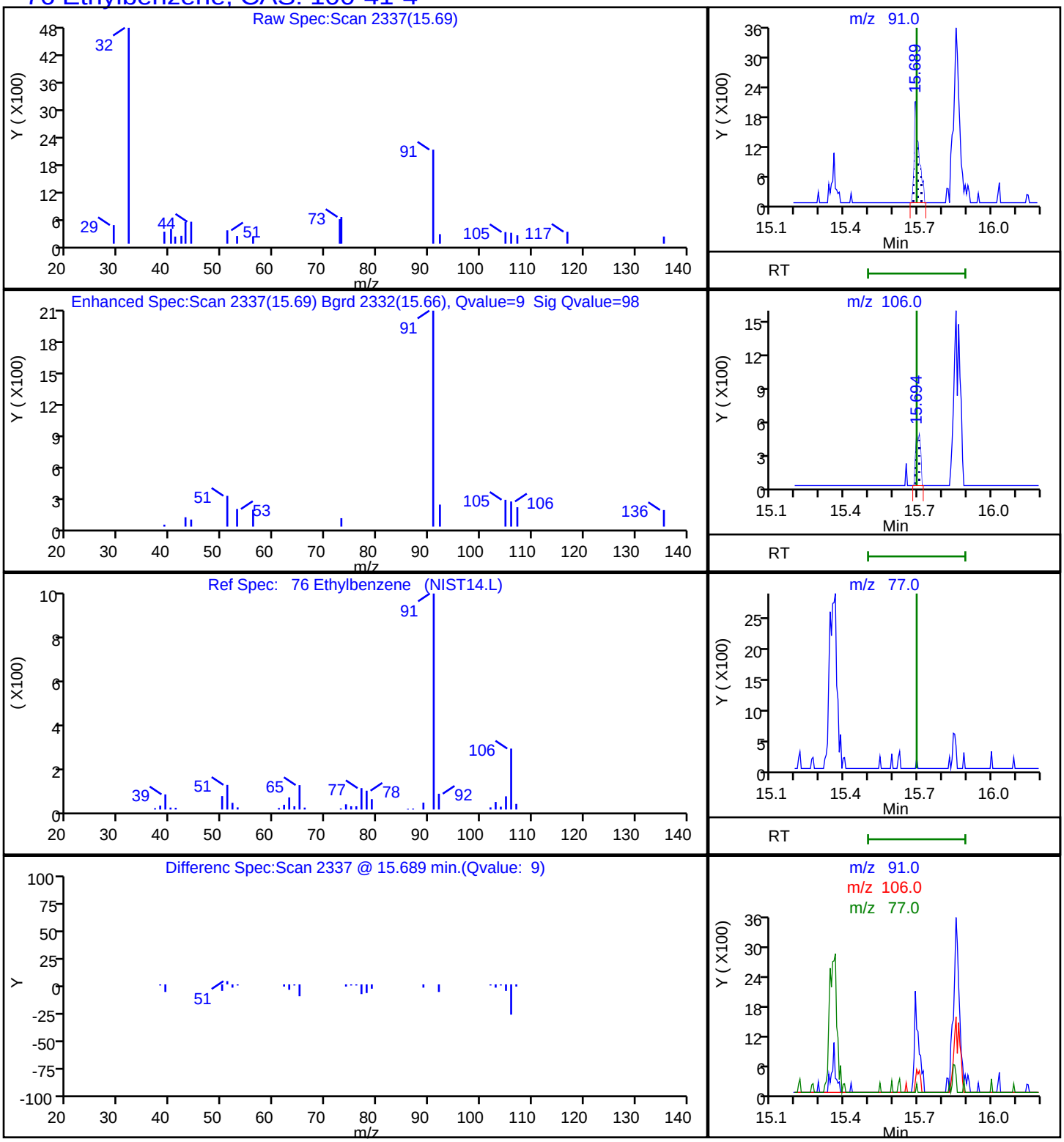
8 Dichlorodifluoromethane, CAS: 75-71-8



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P111.D				
Injection Date:	05-Sep-2020 22:54:30	Instrument ID:	MR		
Lims ID:	140-20195-A-10	Lab Sample ID:	140-20195-10		
Client ID:	IA-DUP 4-A-29				
Operator ID:	HMT	ALS Bottle#:	11	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.5600		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

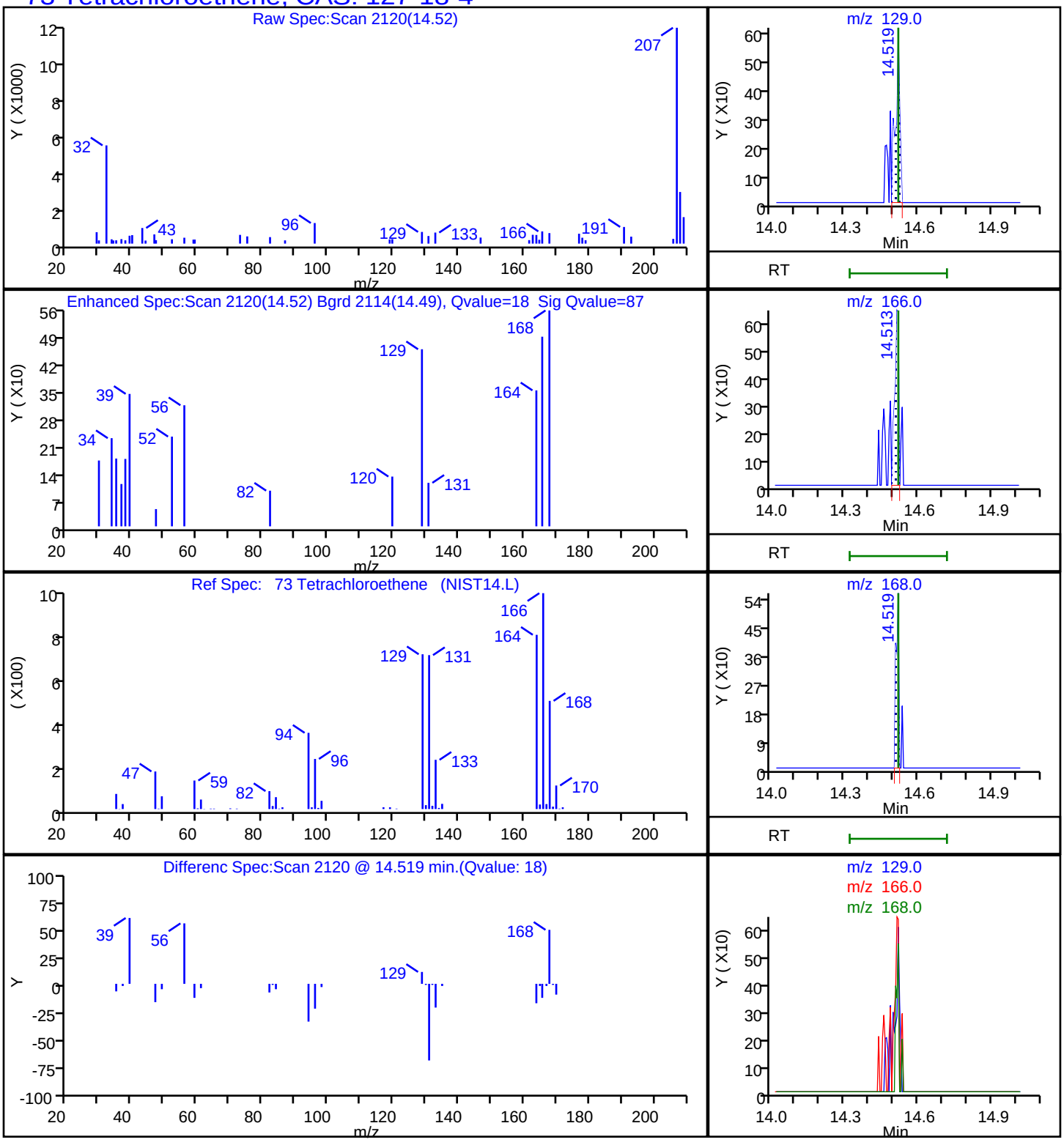
76 Ethylbenzene, CAS: 100-41-4



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P111.D		
Injection Date:	05-Sep-2020 22:54:30	Instrument ID:	MR
Lims ID:	140-20195-A-10	Lab Sample ID:	140-20195-10
Client ID:	IA-DUP 4-A-29		
Operator ID:	HMT	ALS Bottle#:	11 Worklist Smp#: 17
Purge Vol:	500.000 mL	Dil. Factor:	1.5600
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

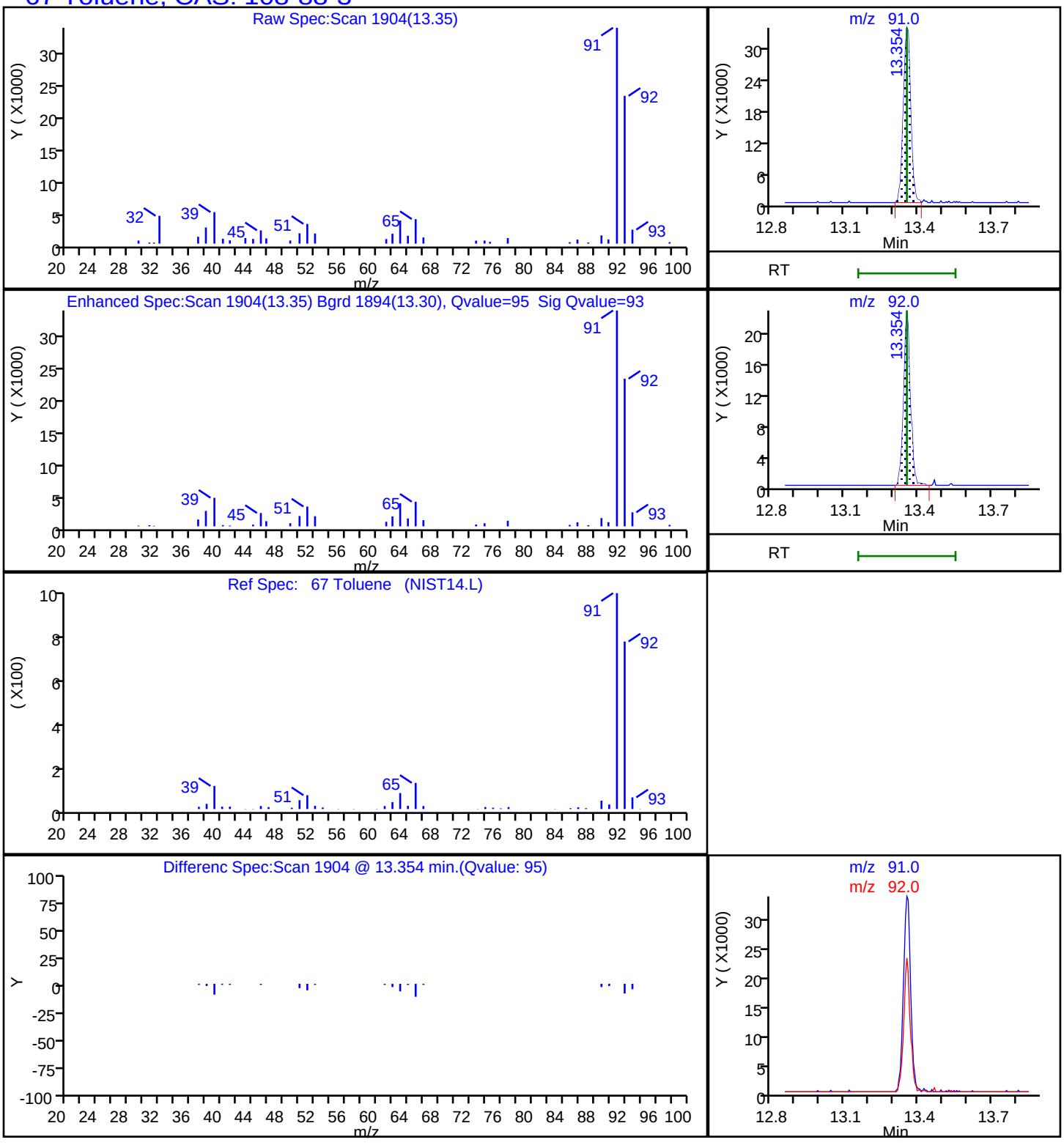
73 Tetrachloroethene, CAS: 127-18-4



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P111.D		
Injection Date:	05-Sep-2020 22:54:30	Instrument ID:	MR
Lims ID:	140-20195-A-10	Lab Sample ID:	140-20195-10
Client ID:	IA-DUP 4-A-29		
Operator ID:	HMT	ALS Bottle#:	11 Worklist Smp#: 17
Purge Vol:	500.000 mL	Dil. Factor:	1.5600
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

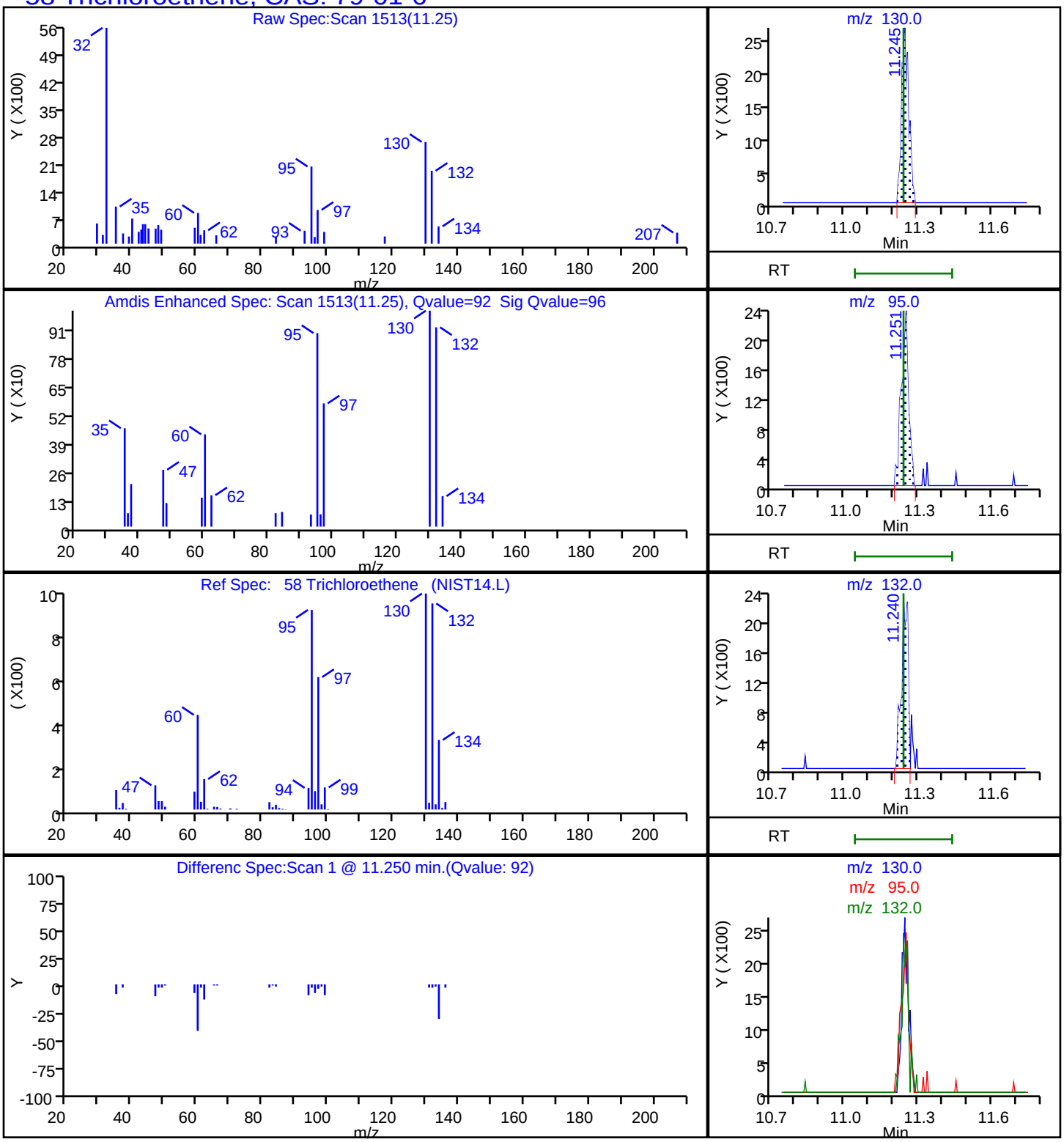
67 Toluene, CAS: 108-88-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P111.D		
Injection Date:	05-Sep-2020 22:54:30	Instrument ID:	MR
Lims ID:	140-20195-A-10	Lab Sample ID:	140-20195-10
Client ID:	IA-DUP 4-A-29		
Operator ID:	HMT	ALS Bottle#:	11 Worklist Smp#: 17
Purge Vol:	500.000 mL	Dil. Factor:	1.5600
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

58 Trichloroethene, CAS: 79-01-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P111.D				
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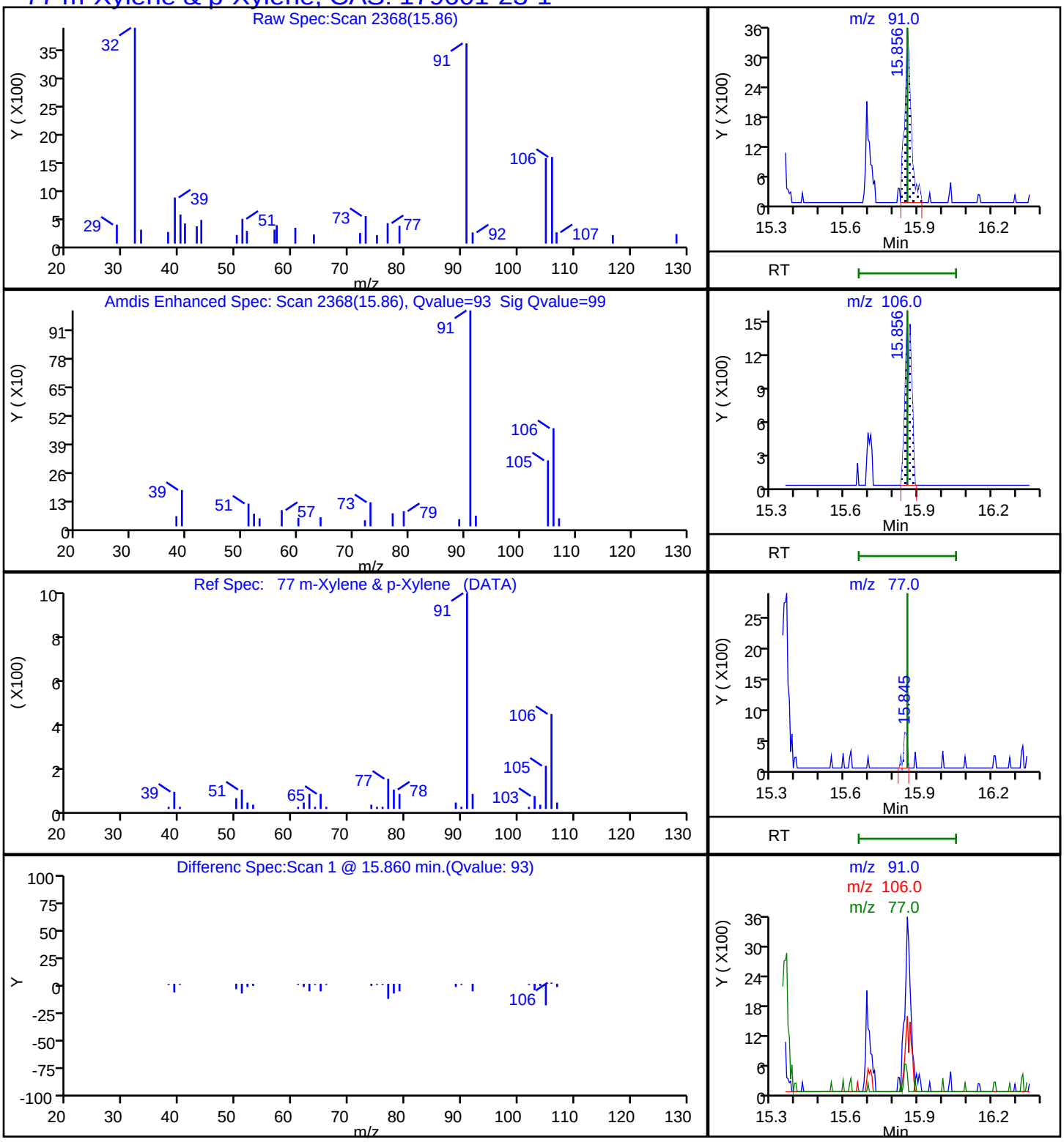
Lims ID:	140-20195-A-10	Lab Sample ID:	140-20195-10		
Client ID:	IA-DUP 4-A-29				
Operator ID:	HMT	ALS Bottle#:	11	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.5600		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

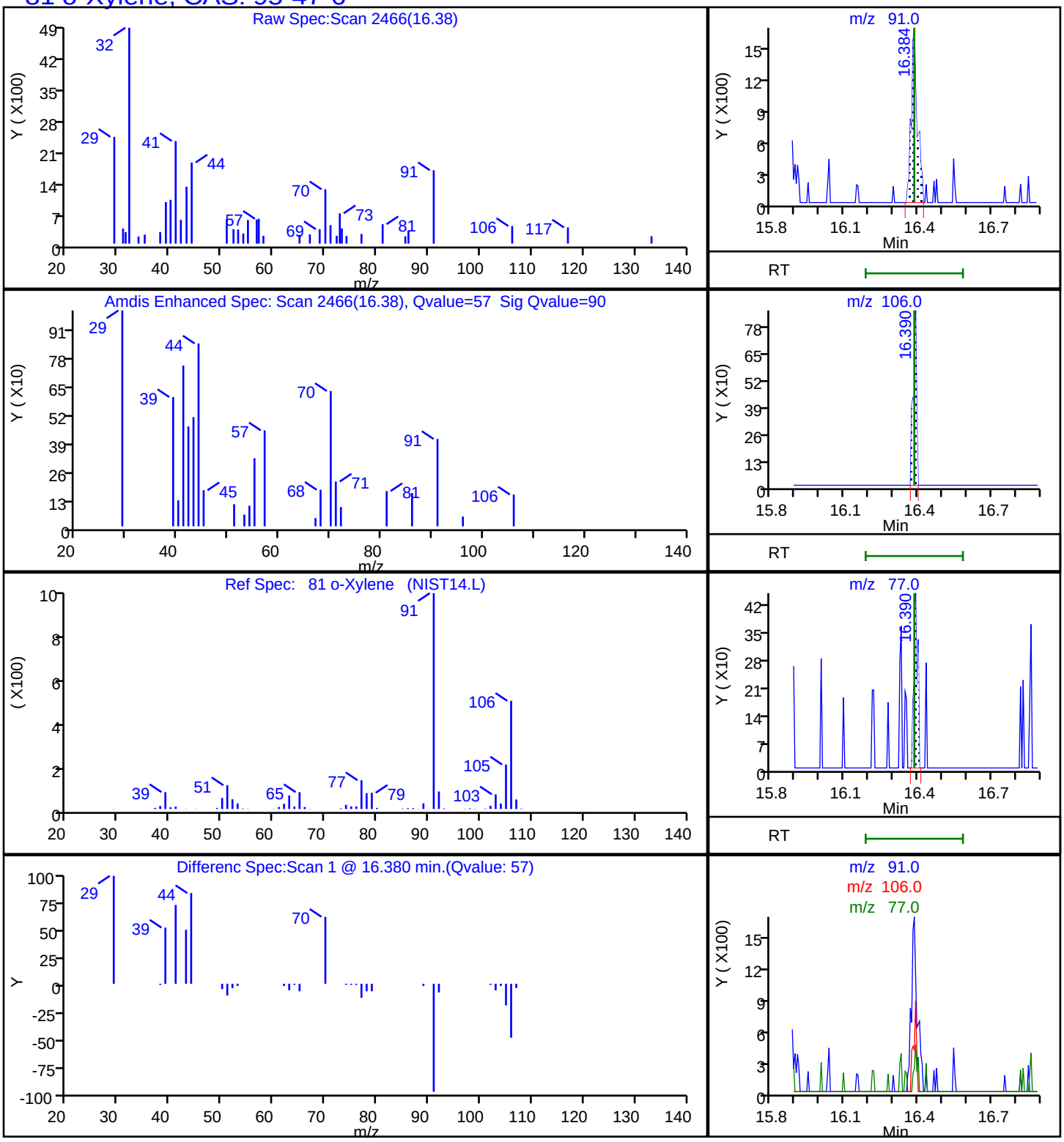
77 m-Xylene & p-Xylene, CAS: 179601-23-1



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P111.D				
Injection Date:	05-Sep-2020 22:54:30	Instrument ID:	MR		
Lims ID:	140-20195-A-10	Lab Sample ID:	140-20195-10		
Client ID:	IA-DUP 4-A-29				
Operator ID:	HMT	ALS Bottle#:	11	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.5600		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

81 o-Xylene, CAS: 95-47-6



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Client Sample ID: IA-075-A-29 Lab Sample ID: 140-20195-11

Matrix: Air Lab File ID: RI05P112.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 16:02

Sample wt/vol: 100(mL) Date Analyzed: 09/05/2020 23:43

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42483 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.13	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.078	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	0.97		0.40	0.11
67-66-3	Chloroform	119.38	0.041	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.39	J	0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	0.94		0.40	0.065
75-09-2	Methylene Chloride	84.93	2.0		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.035
108-88-3	Toluene	92.14	54		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	ND		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	0.11	J	0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	3.8		0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	92		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Client Sample ID: IA-075-A-29 Lab Sample ID: 140-20195-11

Matrix: Air Lab File ID: RI05P112.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 16:02

Sample wt/vol: 100(mL) Date Analyzed: 09/05/2020 23:43

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42483 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.41	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.49	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	3.4		1.4	0.39
67-66-3	Chloroform	119.38	0.20	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	1.9	J	2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	4.1		1.7	0.28
75-09-2	Methylene Chloride	84.93	6.8		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.24
108-88-3	Toluene	92.14	200		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	ND		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	0.52	J	2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	17		3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	92		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P112.D
Lims ID: 140-20195-A-11
Client ID: IA-075-A-29
Sample Type: Client
Inject. Date: 05-Sep-2020 23:43:30 ALS Bottle#: 12 Worklist Smp#: 18
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016508-018
Misc. Info.: 140-20195-a-11
Operator ID: HMT Instrument ID: MR

Method: \\chromfs\Knoxville\ChromData\MR\20200904-16508.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 06-Sep-2020 07:11:26 Calib Date: 29-Aug-2020 00:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1023

First Level Reviewer: tajh Date: 06-Sep-2020 07:07:05

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.318	8.274	0.044	97	141067	4.80	
* 2 1,4-Difluorobenzene	114	10.528	10.512	0.016	94	661658	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.349	15.349	0.000	88	526300	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.005	16.999	0.006	93	301638	4.29	
6 Chlorodifluoromethane	51	3.340	3.329	0.011	97	15395	0.1950	
8 Dichlorodifluoromethane	85	3.394	3.383	0.011	94	4655	0.0785	
31 Methylene Chloride	84	5.826	5.756	0.070	95	13425	0.3906	
44 Chloroform	83	8.334	8.285	0.049	28	693	0.008163	
51 Benzene	78	9.957	9.924	0.033	21	2980	0.0258	
52 Carbon tetrachloride	117	9.957	9.946	0.011	25	1165	0.0156	
67 Toluene	91	13.359	13.354	0.005	93	1529227	10.8	
76 Ethylbenzene	91	15.694	15.694	0.000	98	33595	0.1872	
77 m-Xylene & p-Xylene	91	15.856	15.856	0.000	95	80061	0.5850	
81 o-Xylene	91	16.385	16.384	0.001	97	26546	0.1873	
92 1,2,4-Trimethylbenzene	105	18.207	18.212	-0.005	90	3536	0.0210	
S 117 Xylenes, Total	100				0		0.7723	

Reagents:

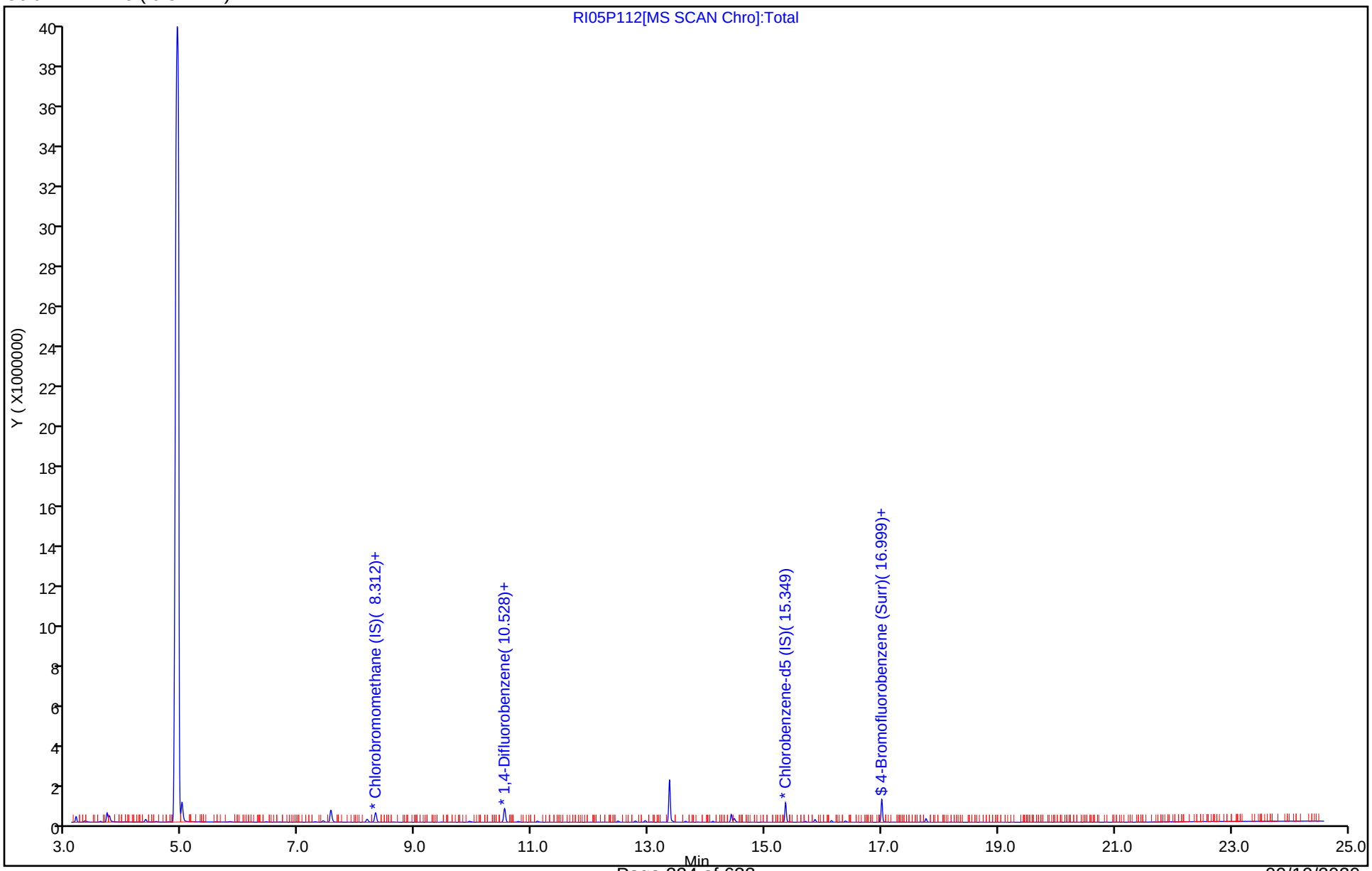
40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

Report Date: 06-Sep-2020 07:11:53 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P112.D				
Injection Date:	05-Sep-2020 23:43:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	140-20195-A-11	Lab Sample ID:	140-20195-11	Worklist Smp#:	18
Client ID:	IA-075-A-29				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

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Lims ID:	140-20195-A-11				
Client ID:	IA-075-A-29				
Sample Type:	Client				
Inject. Date:	05-Sep-2020 23:43:30	ALS Bottle#:	12	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016508-018				
Misc. Info.:	140-20195-a-11				
Operator ID:	HMT	Instrument ID:	MR		
Method:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\MR_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	06-Sep-2020 07:11:26	Calib Date:	29-Aug-2020 00:02:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1023				

First Level Reviewer: tajh Date: 06-Sep-2020 07:07:05

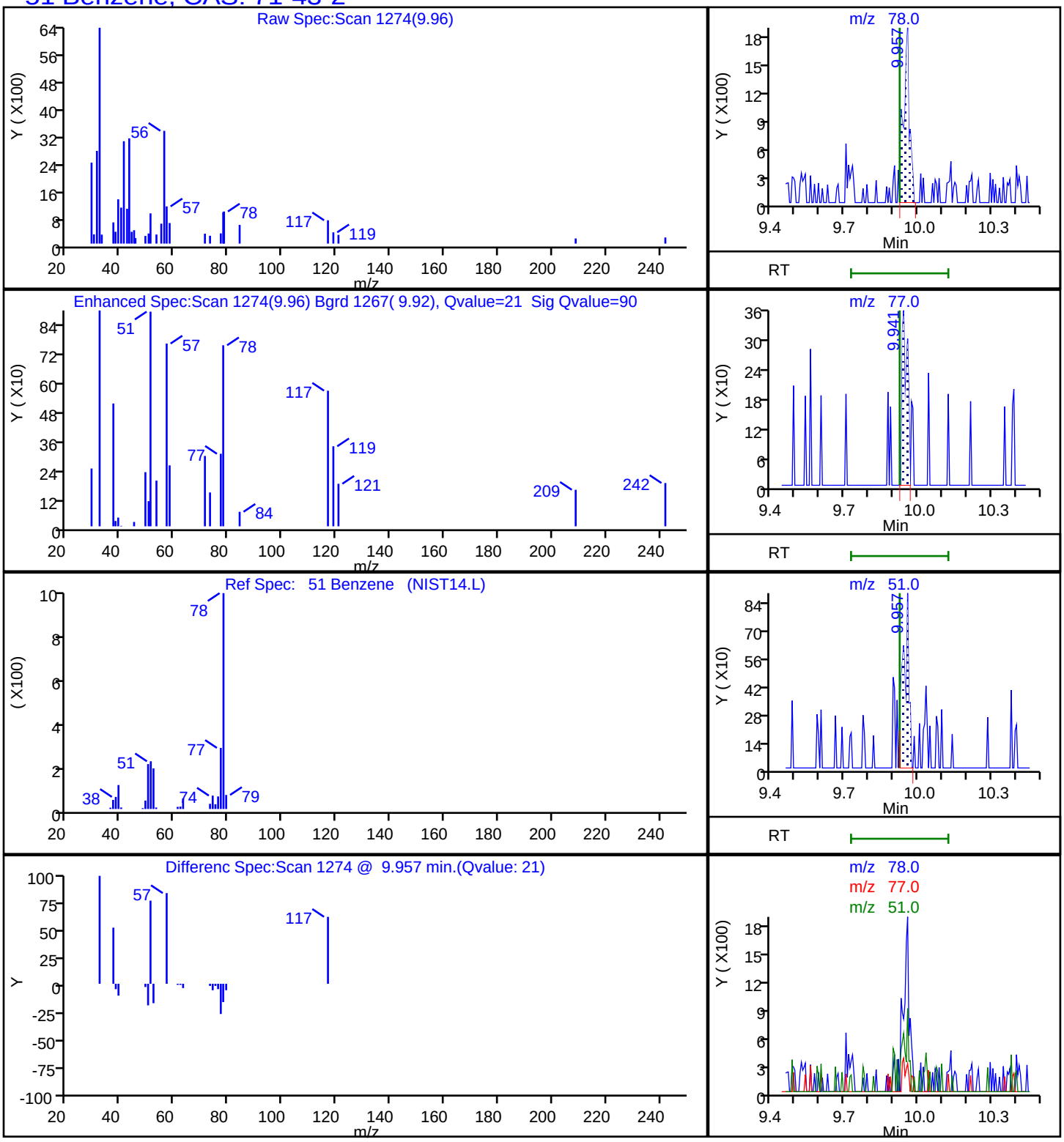
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	4.29	92.39

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P112.D

Injection Date:	05-Sep-2020 23:43:30	Instrument ID:	MR		
Lims ID:	140-20195-A-11	Lab Sample ID:	140-20195-11		
Client ID:	IA-075-A-29				
Operator ID:	HMT	ALS Bottle#:	12	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

51 Benzene, CAS: 71-43-2



Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P112.D

Injection Date: 05-Sep-2020 23:43:30 Instrument ID: MR

Lims ID: 140-20195-A-11 Lab Sample ID: 140-20195-11

Client ID: IA-075-A-29

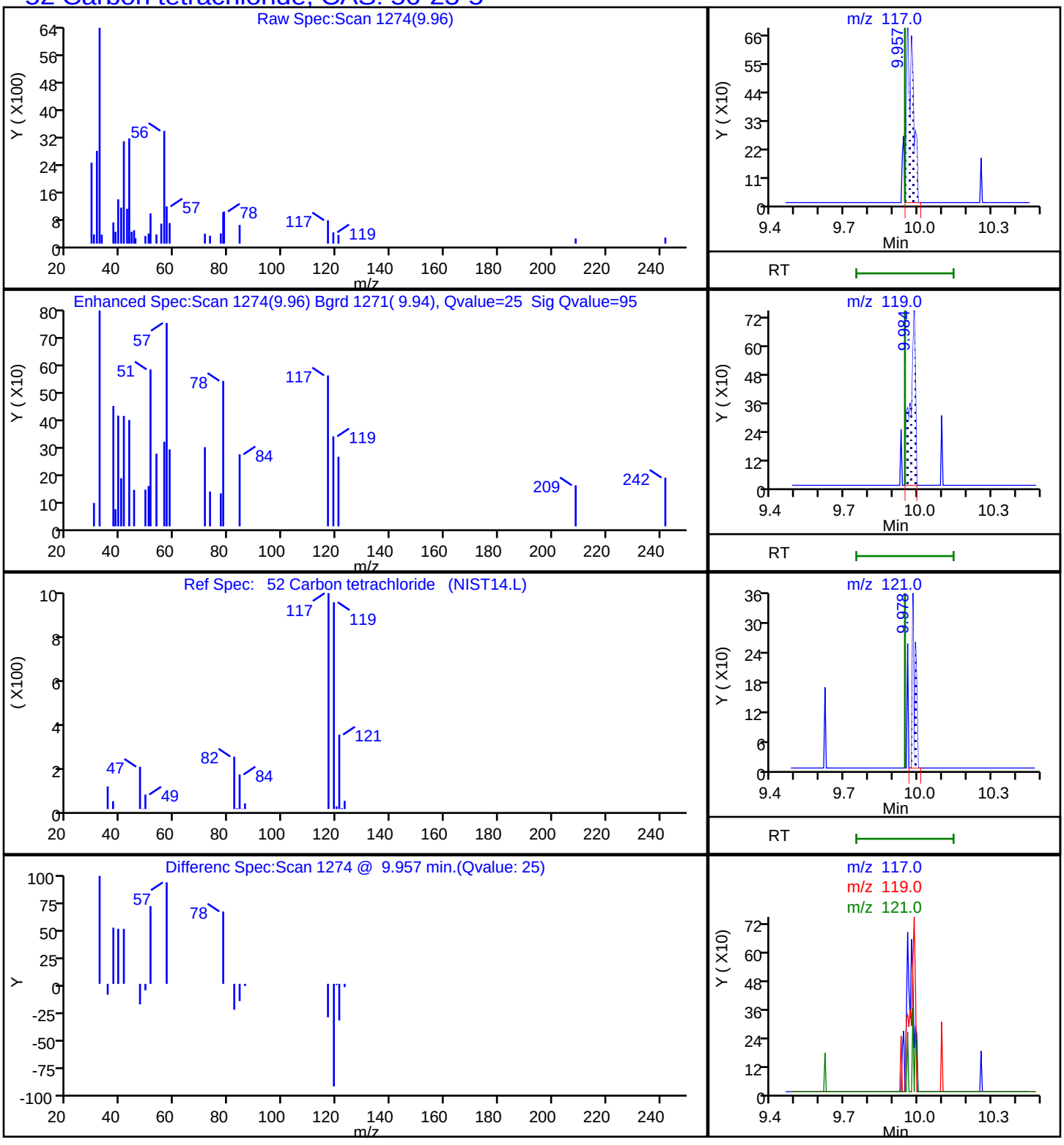
Operator ID: HMT ALS Bottle#: 12 Worklist Smp#: 18

Purge Vol: 500.000 mL Dil. Factor: 1.0000

Method: MR_TO15 Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm) Detector MS SCAN

52 Carbon tetrachloride, CAS: 56-23-5



Eurofins TestAmerica, Knoxville

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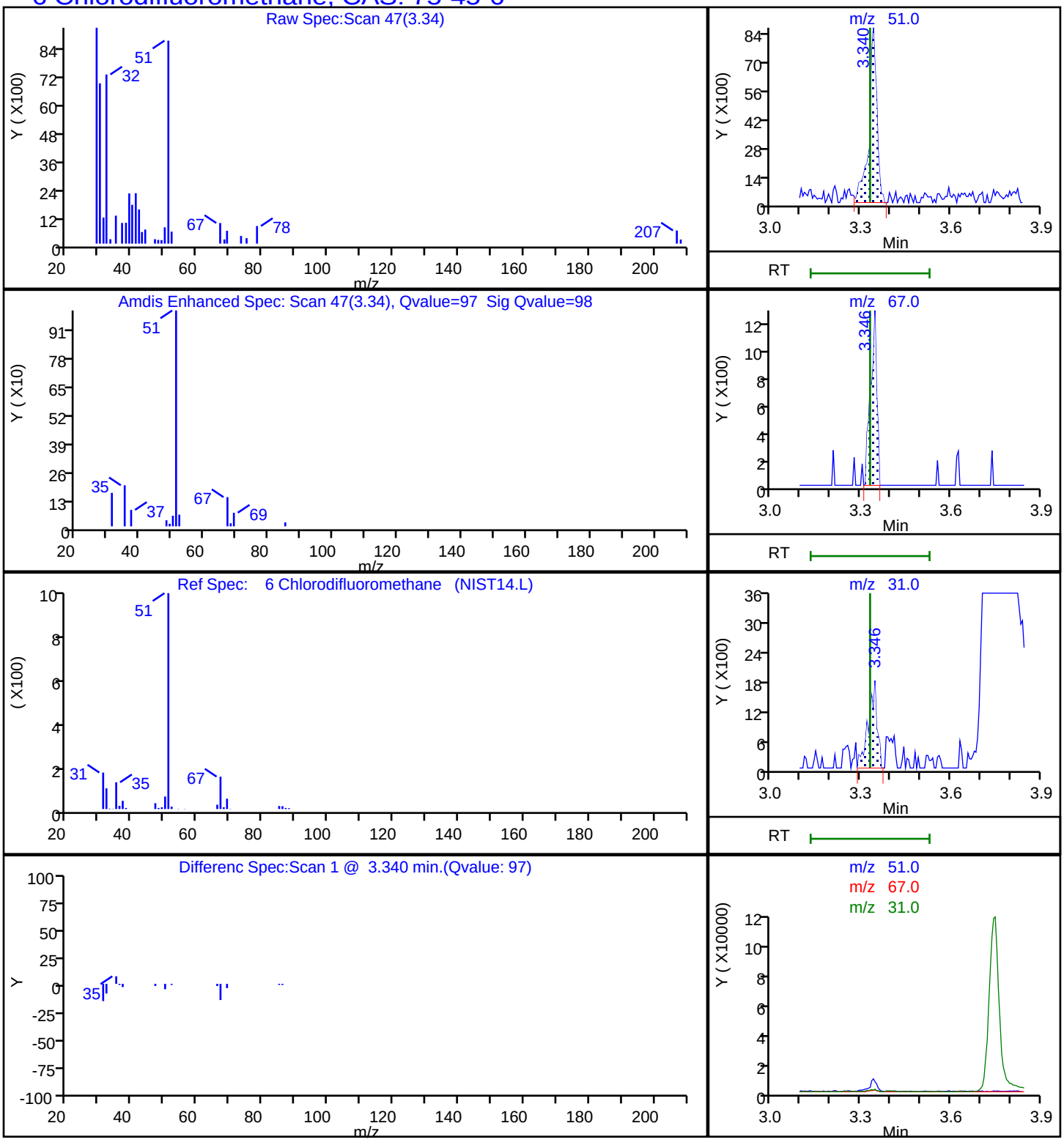
Lims ID:	140-20195-A-11	Lab Sample ID:	140-20195-11		
Client ID:	IA-075-A-29				
Operator ID:	HMT	ALS Bottle#:	12	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

6 Chlorodifluoromethane, CAS: 75-45-6



Eurofins TestAmerica, Knoxville

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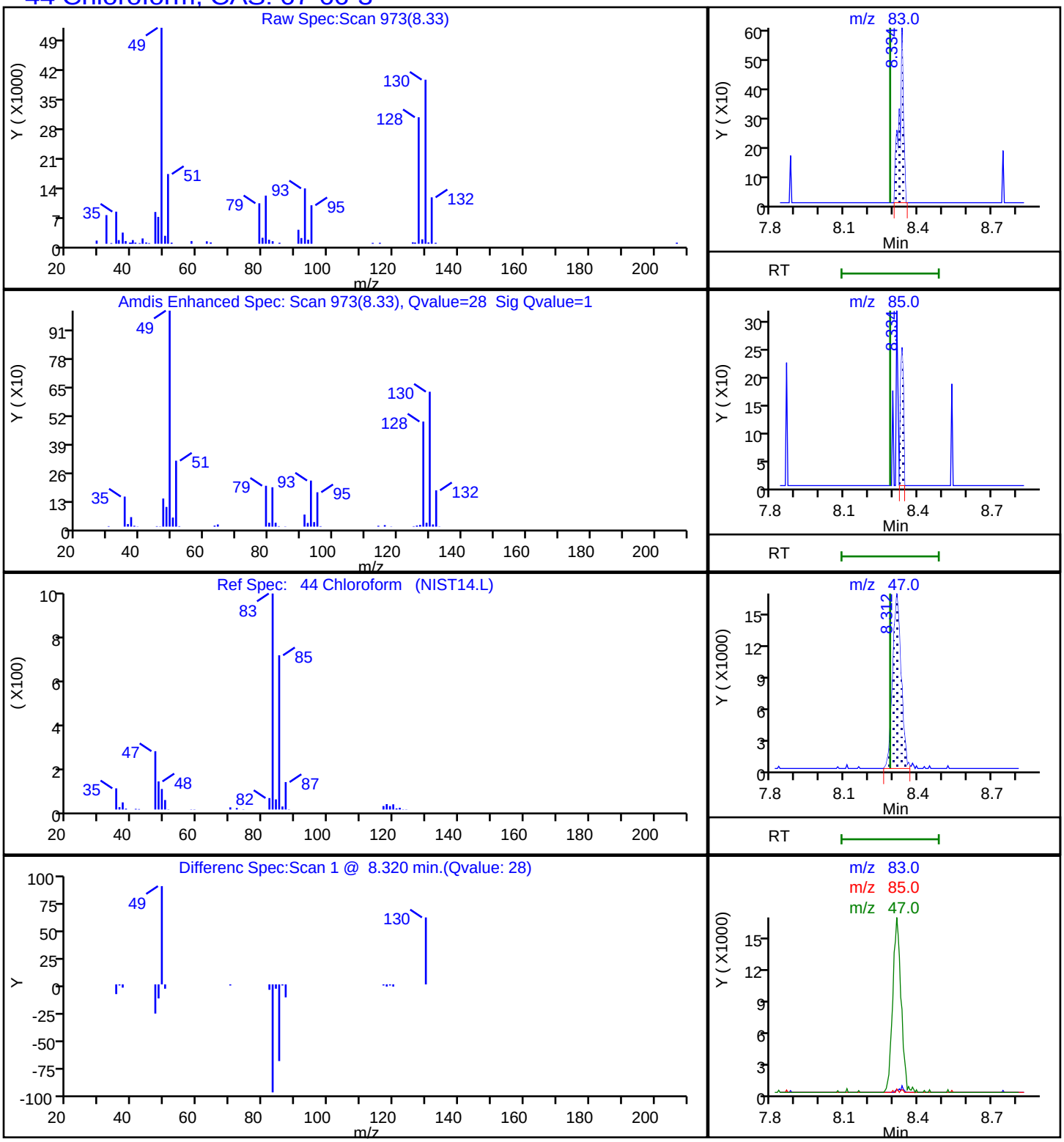
Injection Date:	05-Sep-2020 23:43:30	Instrument ID:	MR		
Lims ID:	140-20195-A-11	Lab Sample ID:	140-20195-11		
Client ID:	IA-075-A-29				
Operator ID:	HMT	ALS Bottle#:	12	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

44 Chloroform, CAS: 67-66-3

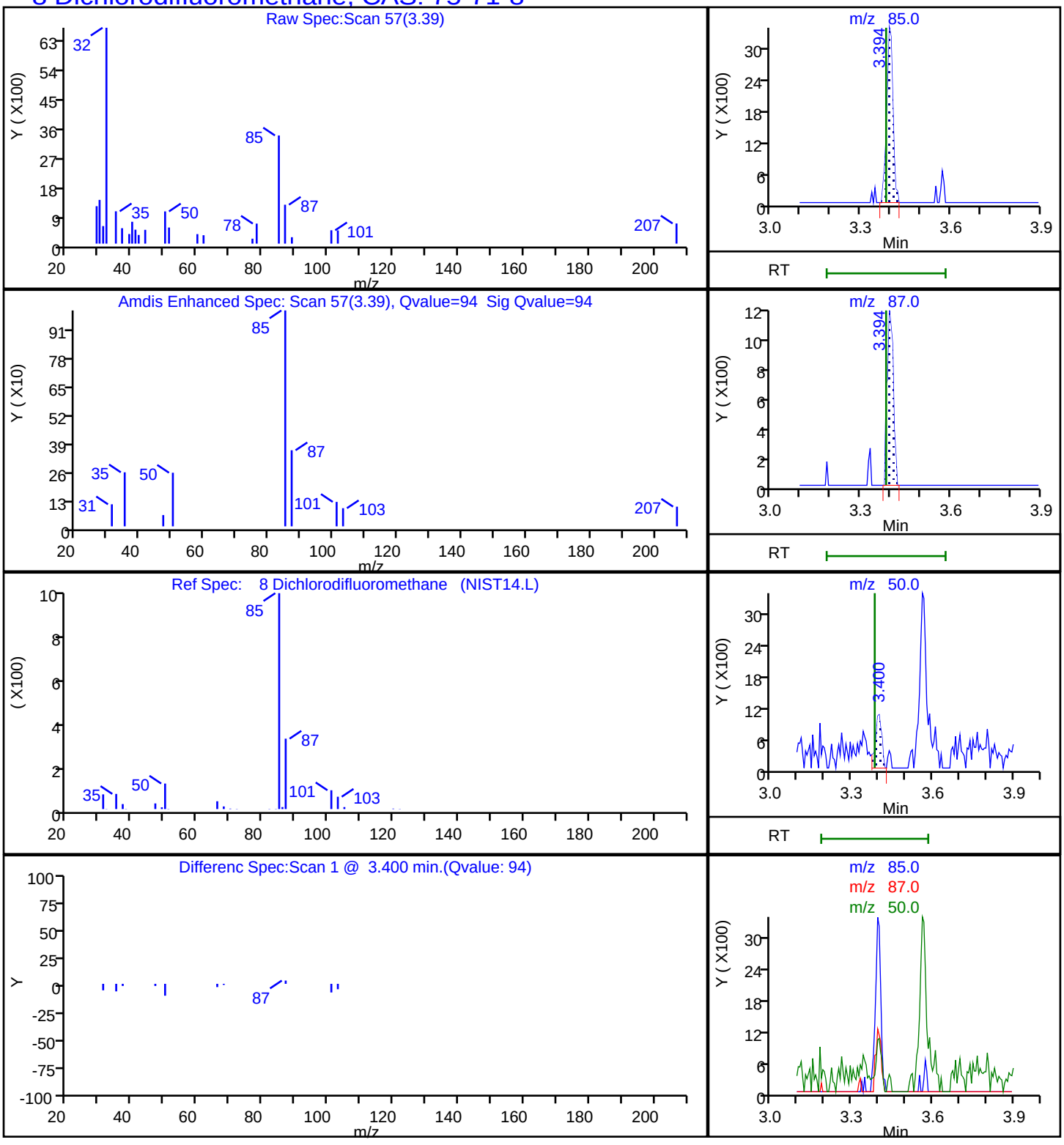


Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P112.D

Injection Date:	05-Sep-2020 23:43:30	Instrument ID:	MR		
Lims ID:	140-20195-A-11	Lab Sample ID:	140-20195-11		
Client ID:	IA-075-A-29				
Operator ID:	HMT	ALS Bottle#:	12	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

8 Dichlorodifluoromethane, CAS: 75-71-8



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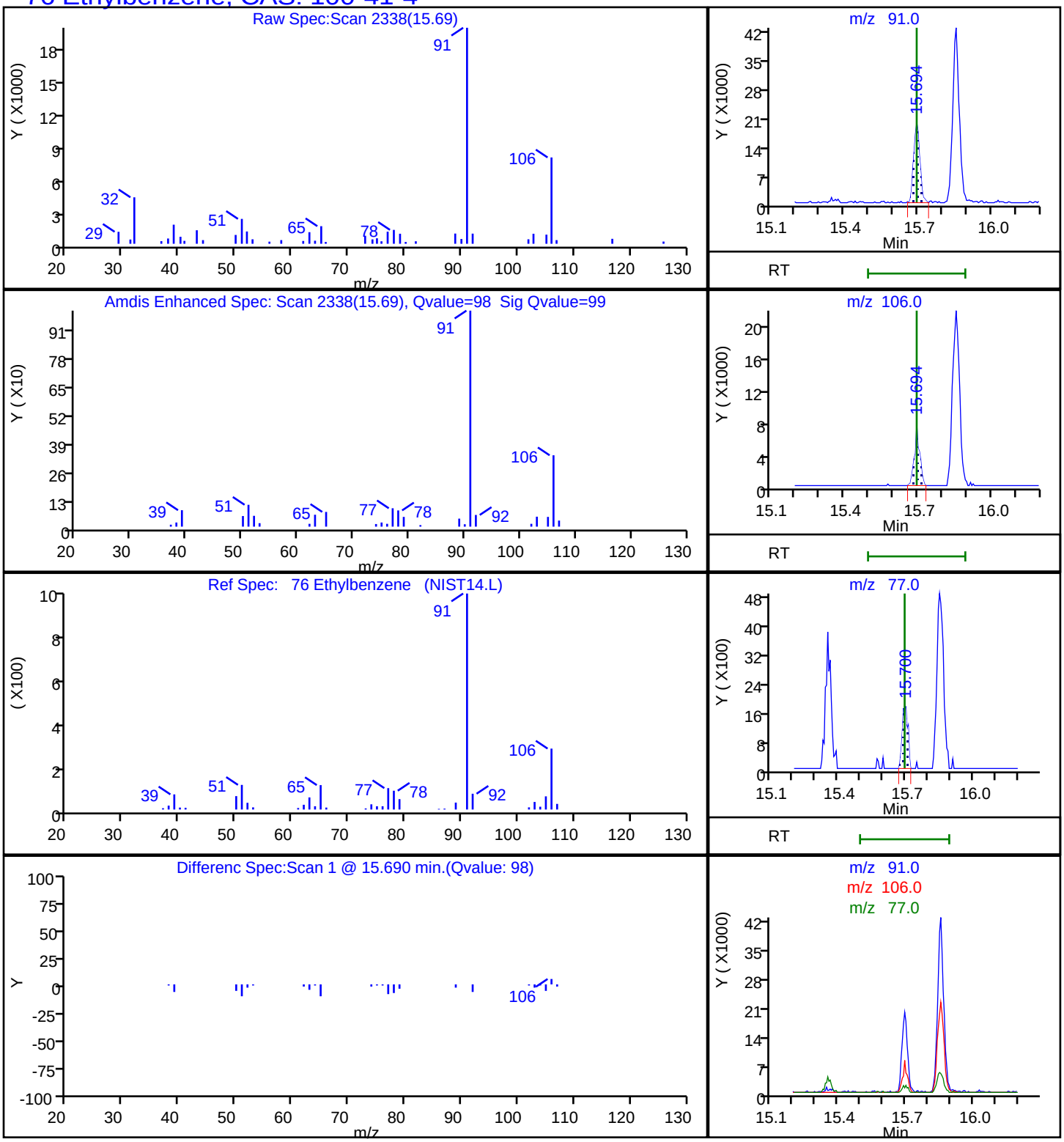
Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P112.D

Injection Date:	05-Sep-2020 23:43:30	Instrument ID:	MR		
Lims ID:	140-20195-A-11	Lab Sample ID:	140-20195-11		
Client ID:	IA-075-A-29				
Operator ID:	HMT	ALS Bottle#:	12	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

76 Ethylbenzene, CAS: 100-41-4



Eurofins TestAmerica, Knoxville

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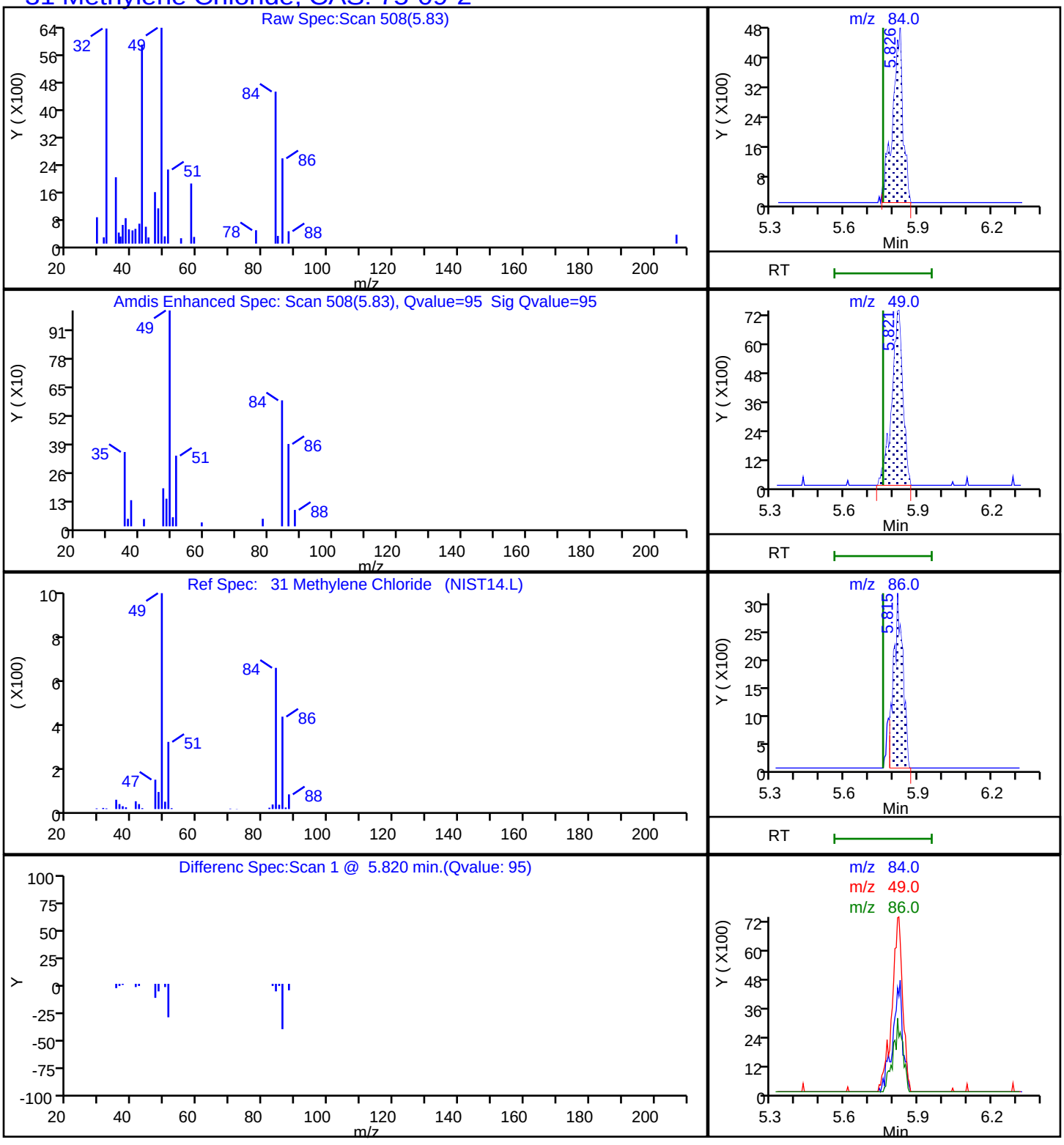
Lims ID:	140-20195-A-11	Lab Sample ID:	140-20195-11		
Client ID:	IA-075-A-29				
Operator ID:	HMT	ALS Bottle#:	12	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

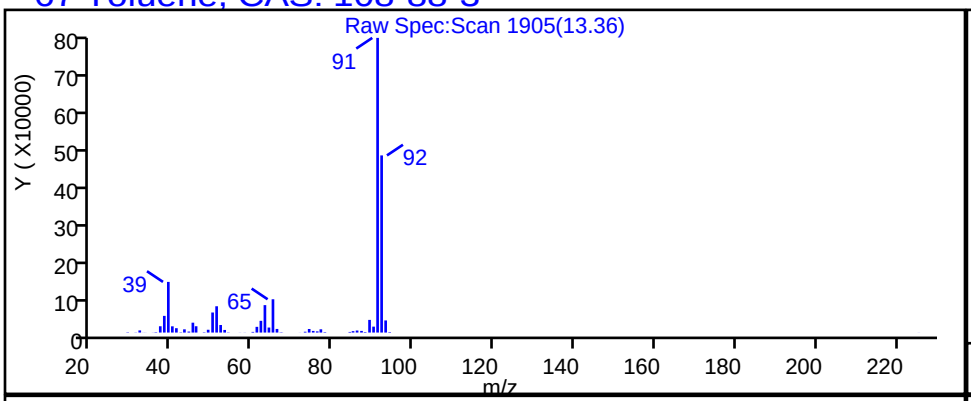
31 Methylene Chloride, CAS: 75-09-2

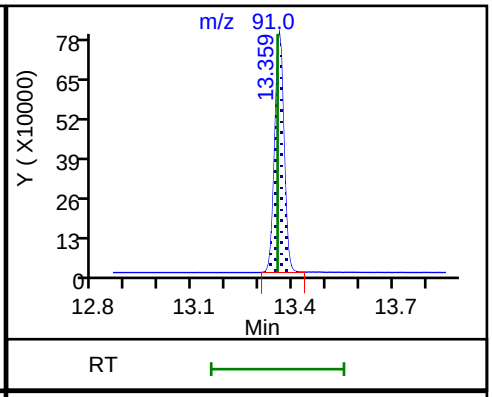


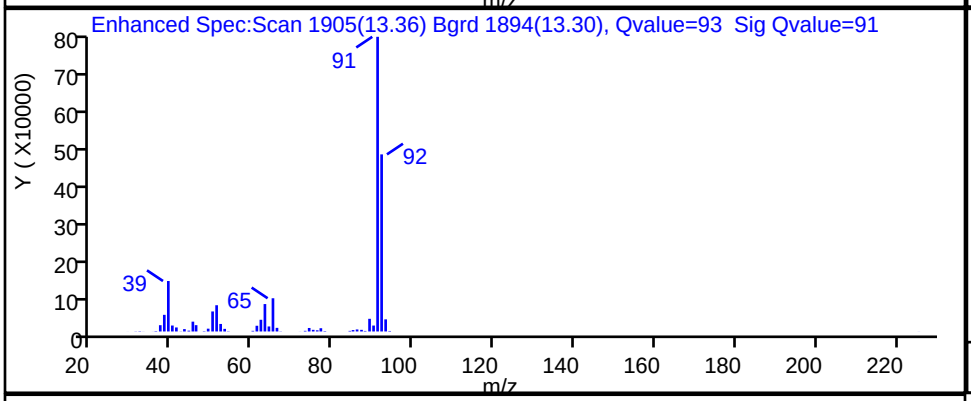
Eurofins TestAmerica, Knoxville

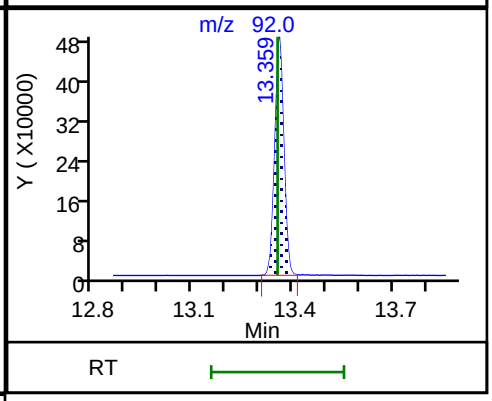
Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P112.D		
Injection Date:	05-Sep-2020 23:43:30	Instrument ID:	MR
Lims ID:	140-20195-A-11	Lab Sample ID:	140-20195-11
Client ID:	IA-075-A-29		
Operator ID:	HMT	ALS Bottle#:	12 Worklist Smp#: 18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

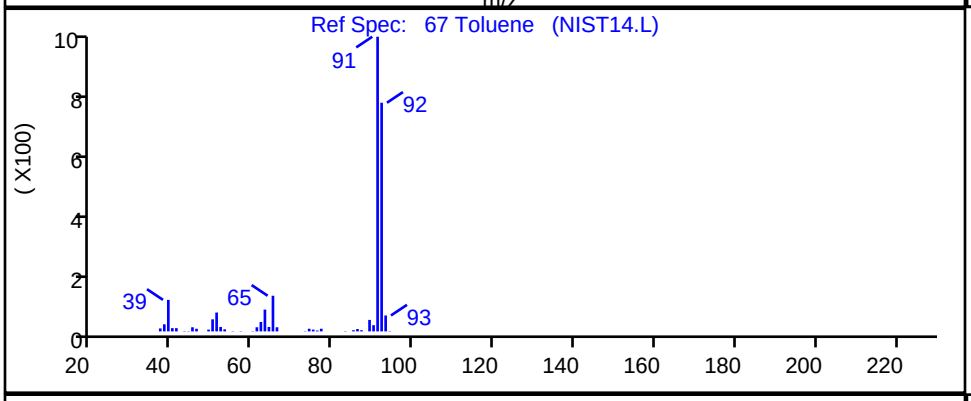
67 Toluene, CAS: 108-88-3

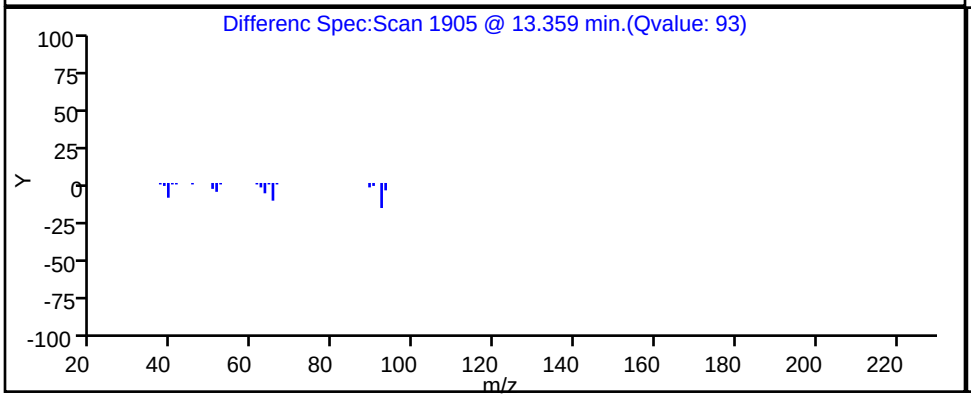


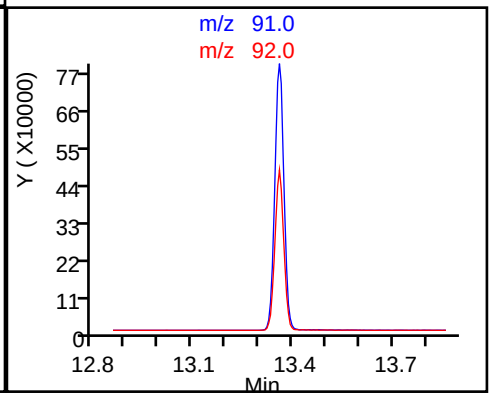












Eurofins TestAmerica, Knoxville

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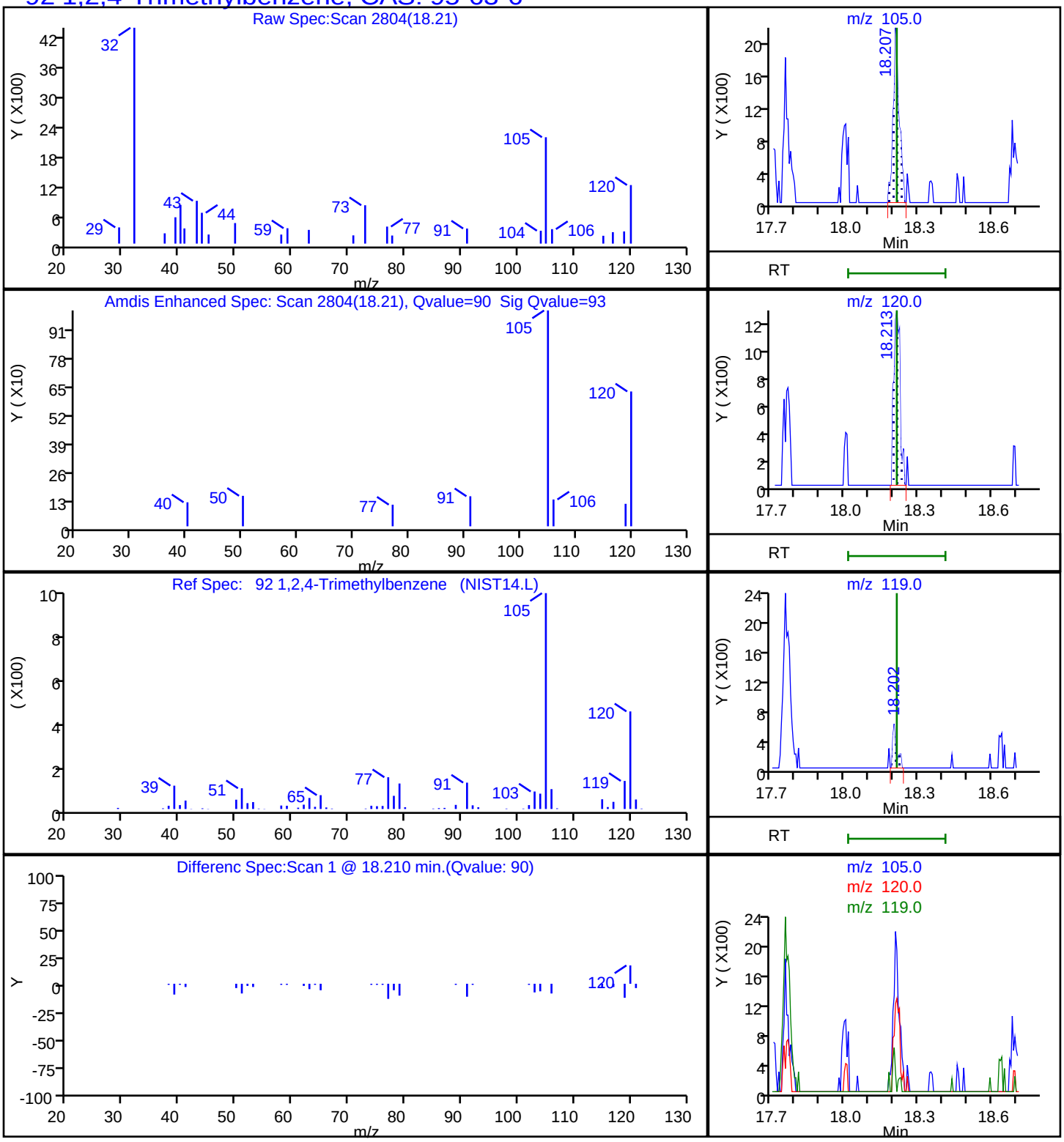
Lims ID:	140-20195-A-11	Lab Sample ID:	140-20195-11		
Client ID:	IA-075-A-29				
Operator ID:	HMT	ALS Bottle#:	12	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

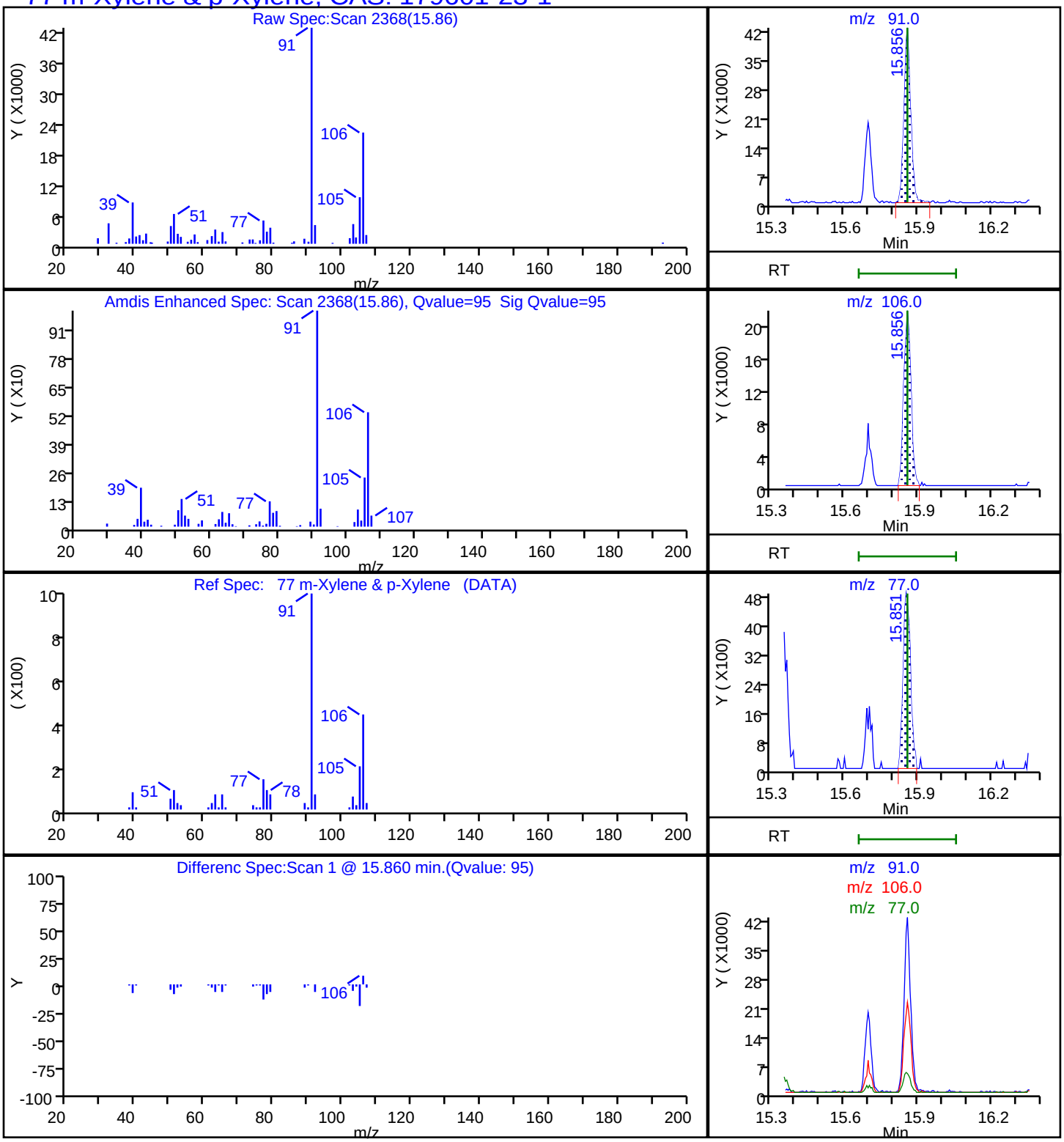
92 1,2,4-Trimethylbenzene, CAS: 95-63-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P112.D				
Injection Date:	05-Sep-2020 23:43:30	Instrument ID:	MR		
Lims ID:	140-20195-A-11	Lab Sample ID:	140-20195-11		
Client ID:	IA-075-A-29				
Operator ID:	HMT	ALS Bottle#:	12	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

77 m-Xylene & p-Xylene, CAS: 179601-23-1



Eurofins TestAmerica, Knoxville

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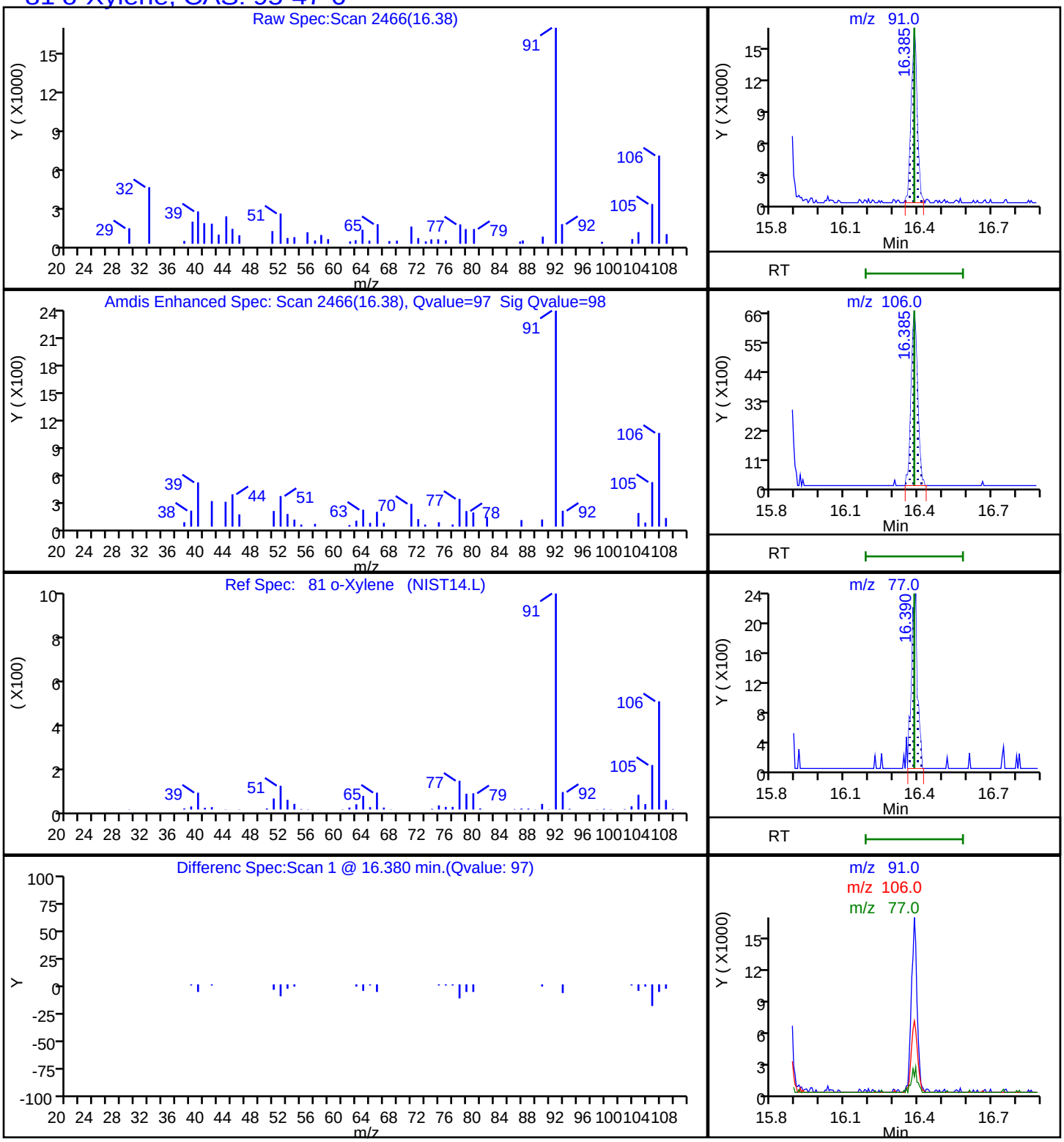
Injection Date:	05-Sep-2020 23:43:30	Instrument ID:	MR		
Lims ID:	140-20195-A-11	Lab Sample ID:	140-20195-11		
Client ID:	IA-075-A-29				
Operator ID:	HMT	ALS Bottle#:	12	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

81 o-Xylene, CAS: 95-47-6



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Client Sample ID: IA-021-A-29 Lab Sample ID: 140-20195-12

Matrix: Air Lab File ID: RI05P113.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 16:04

Sample wt/vol: 141(mL) Date Analyzed: 09/06/2020 00:32

Soil Aliquot Vol: Dilution Factor: 1.41

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42483 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.082	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.088	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	0.33	J	0.40	0.11
67-66-3	Chloroform	119.38	ND		0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.44		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	0.16	J	0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.035
108-88-3	Toluene	92.14	4.7		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	ND		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.63	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	92		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Client Sample ID: IA-021-A-29 Lab Sample ID: 140-20195-12

Matrix: Air Lab File ID: RI05P113.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 16:04

Sample wt/vol: 141(mL) Date Analyzed: 09/06/2020 00:32

Soil Aliquot Vol: Dilution Factor: 1.41

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42483 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.26	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.56	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	1.2	J	1.4	0.39
67-66-3	Chloroform	119.38	ND		2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.2		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	0.72	J	1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.24
108-88-3	Toluene	92.14	18		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	ND		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	2.7	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	92		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P113.D				
Lims ID:	140-20195-A-12				
Client ID:	IA-021-A-29				
Sample Type:	Client				
Inject. Date:	06-Sep-2020 00:32:30	ALS Bottle#:	13	Worklist Smp#:	19
Purge Vol:	500.000 mL	Dil. Factor:	1.4100		
Sample Info:	140-0016508-019				
Misc. Info.:	140-20195-a-12@1.41				
Operator ID:	HMT	Instrument ID:	MR		
Method:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\MR_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	06-Sep-2020 07:11:26	Calib Date:	29-Aug-2020 00:02:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1023				
First Level Reviewer: tajh		Date:	06-Sep-2020 07:07:16		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.280	8.274	0.006	97	143499	4.80	
* 2 1,4-Difluorobenzene	114	10.507	10.512	-0.005	94	664938	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.349	15.349	0.000	88	515854	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	16.999	16.999	0.000	93	295022	4.28	
6 Chlorodifluoromethane	51	3.340	3.329	0.011	96	5304	0.0660	
8 Dichlorodifluoromethane	85	3.399	3.383	0.016	95	5299	0.0879	
51 Benzene	78	9.924	9.924	0.000	45	1896	0.0163	
52 Carbon tetrachloride	117	9.962	9.946	0.016	36	1323	0.0176	
67 Toluene	91	13.354	13.354	0.000	93	131485	0.9468	
76 Ethylbenzene	91	15.689	15.694	-0.005	96	5799	0.0330	
77 m-Xylene & p-Xylene	91	15.850	15.856	-0.006	97	12399	0.0924	
81 o-Xylene	91	16.384	16.384	0.000	92	4703	0.0339	
S 117 Xylenes, Total	100				0		0.1263	

Reagents:

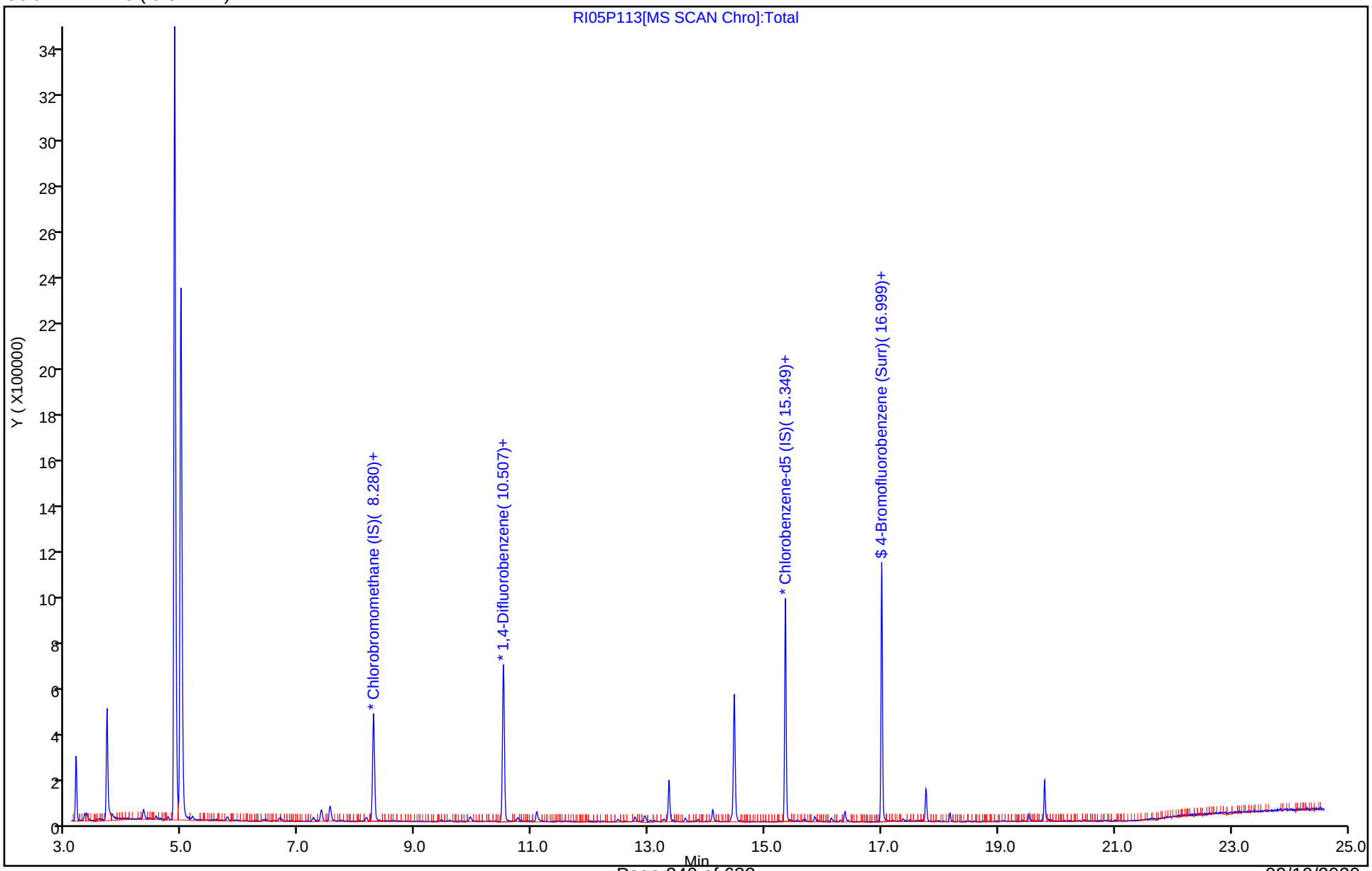
40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

Report Date: 06-Sep-2020 07:11:55 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P113.D				
Injection Date:	06-Sep-2020 00:32:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	140-20195-A-12	Lab Sample ID:	140-20195-12	Worklist Smp#:	19
Client ID:	IA-021-A-29				
Purge Vol:	500.000 mL	Dil. Factor:	1.4100	ALS Bottle#:	13
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P113.D				
Lims ID:	140-20195-A-12				
Client ID:	IA-021-A-29				
Sample Type:	Client				
Inject. Date:	06-Sep-2020 00:32:30	ALS Bottle#:	13	Worklist Smp#:	19
Purge Vol:	500.000 mL	Dil. Factor:	1.4100		
Sample Info:	140-0016508-019				
Misc. Info.:	140-20195-a-12@1.41				
Operator ID:	HMT	Instrument ID:	MR		
Method:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\MR_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	06-Sep-2020 07:11:26	Calib Date:	29-Aug-2020 00:02:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1023				

First Level Reviewer: tajh Date: 06-Sep-2020 07:07:16

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	4.28	92.19

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P113.D

Injection Date: 06-Sep-2020 00:32:30 Instrument ID: MR

Lims ID: 140-20195-A-12 Lab Sample ID: 140-20195-12

Client ID: IA-021-A-29

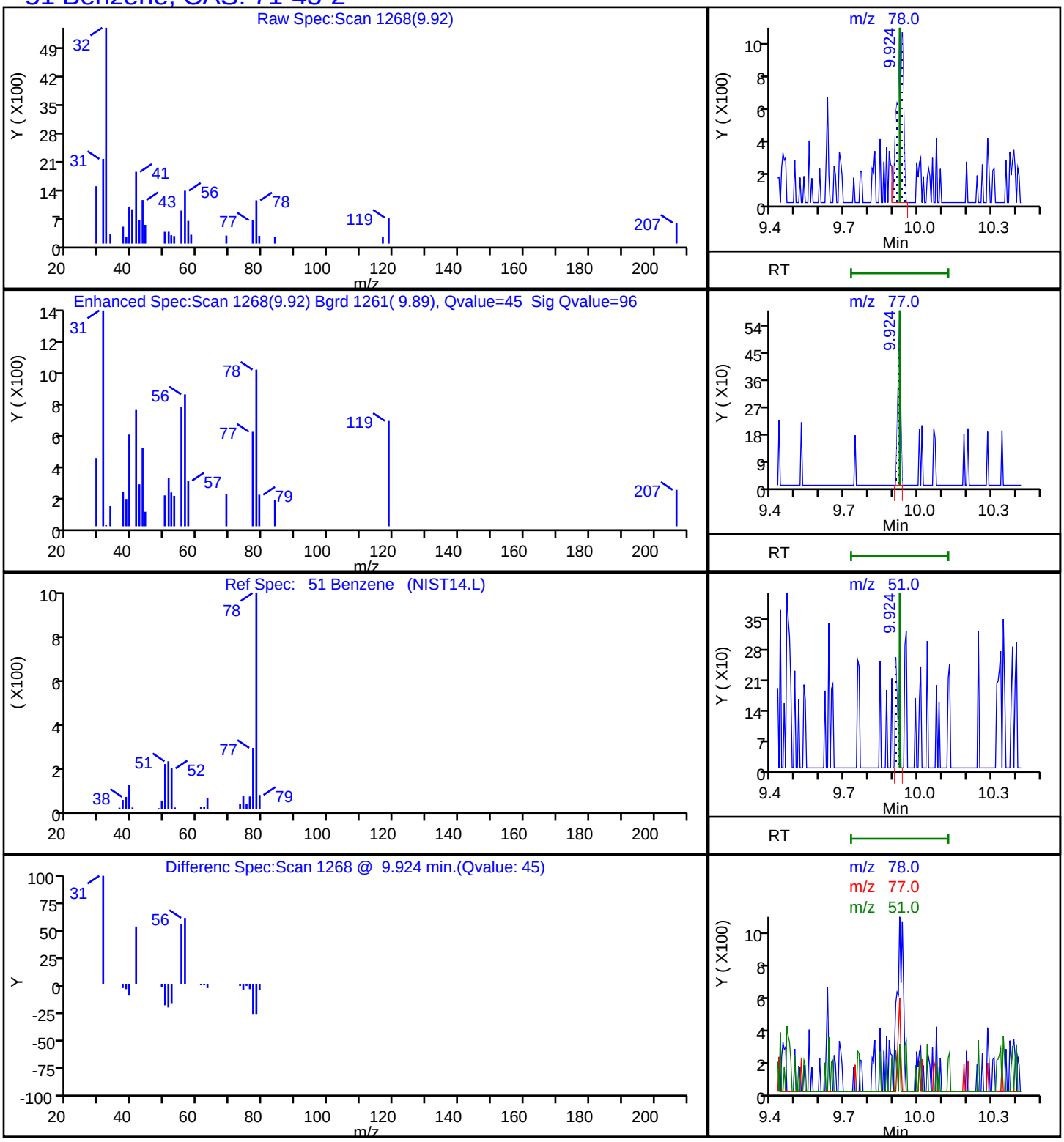
Operator ID: HMT ALS Bottle#: 13 Worklist Smp#: 19

Purge Vol: 500.000 mL Dil. Factor: 1.4100

Method: MR_TO15 Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm) Detector MS SCAN

51 Benzene, CAS: 71-43-2



Eurofins TestAmerica, Knoxville

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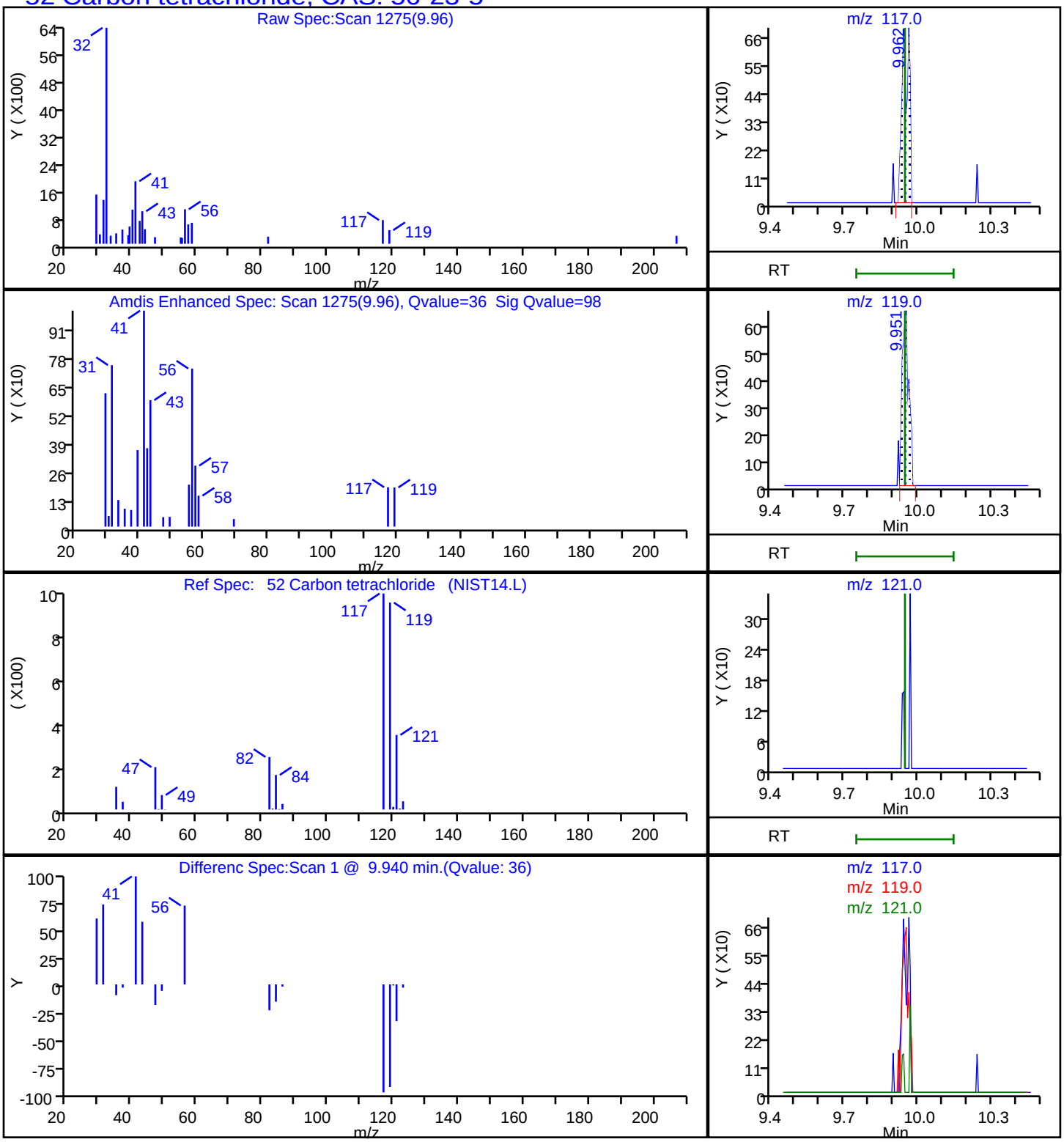
Lims ID:	140-20195-A-12	Lab Sample ID:	140-20195-12		
Client ID:	IA-021-A-29				
Operator ID:	HMT	ALS Bottle#:	13	Worklist Smp#:	19
Purge Vol:	500.000 mL	Dil. Factor:	1.4100		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

52 Carbon tetrachloride, CAS: 56-23-5



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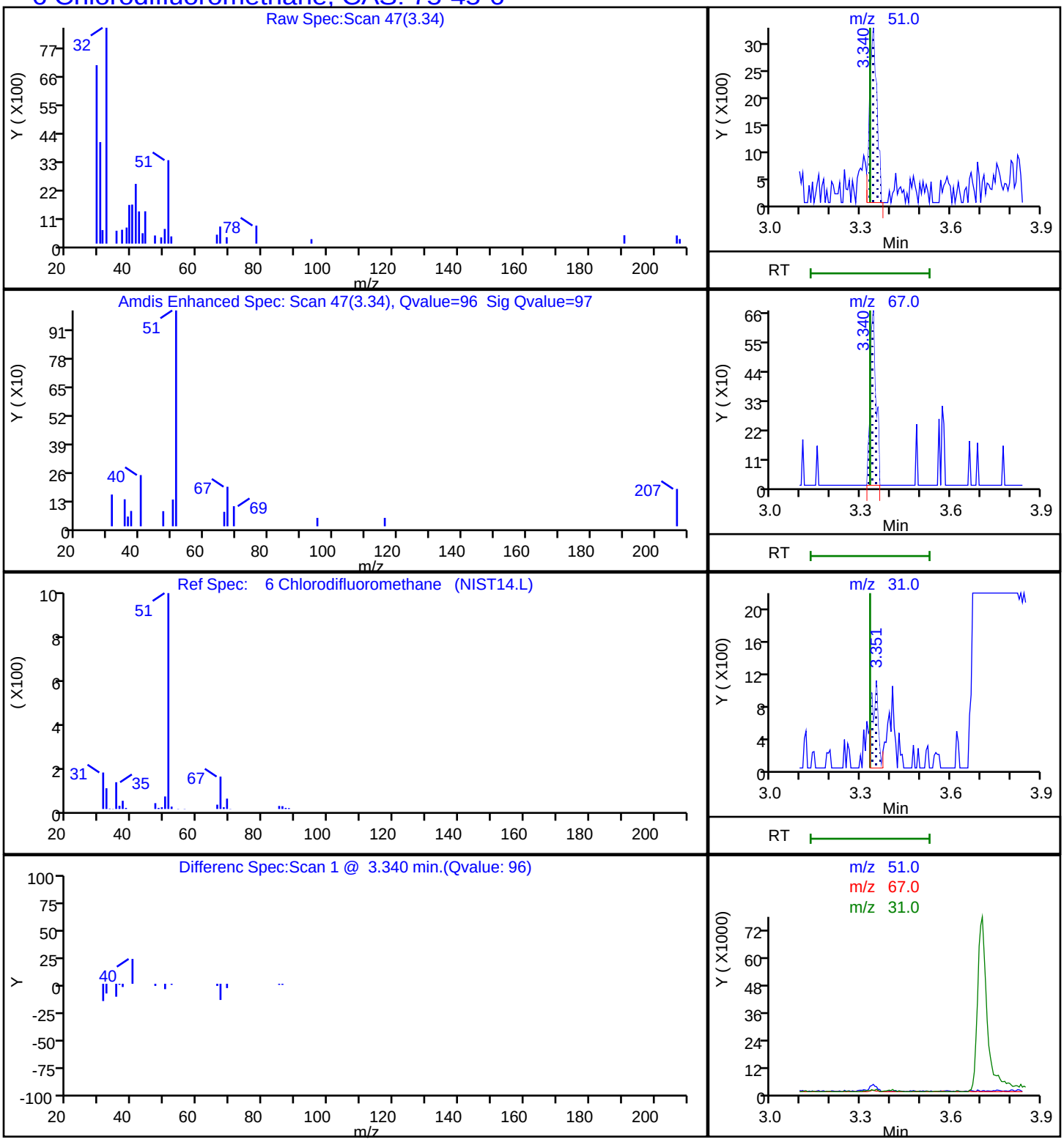
Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P113.D				
Injection Date:	06-Sep-2020 00:32:30	Instrument ID:	MR		
Lims ID:	140-20195-A-12	Lab Sample ID:	140-20195-12		
Client ID:	IA-021-A-29				
Operator ID:	HMT	ALS Bottle#:	13	Worklist Smp#:	19
Purge Vol:	500.000 mL	Dil. Factor:	1.4100		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

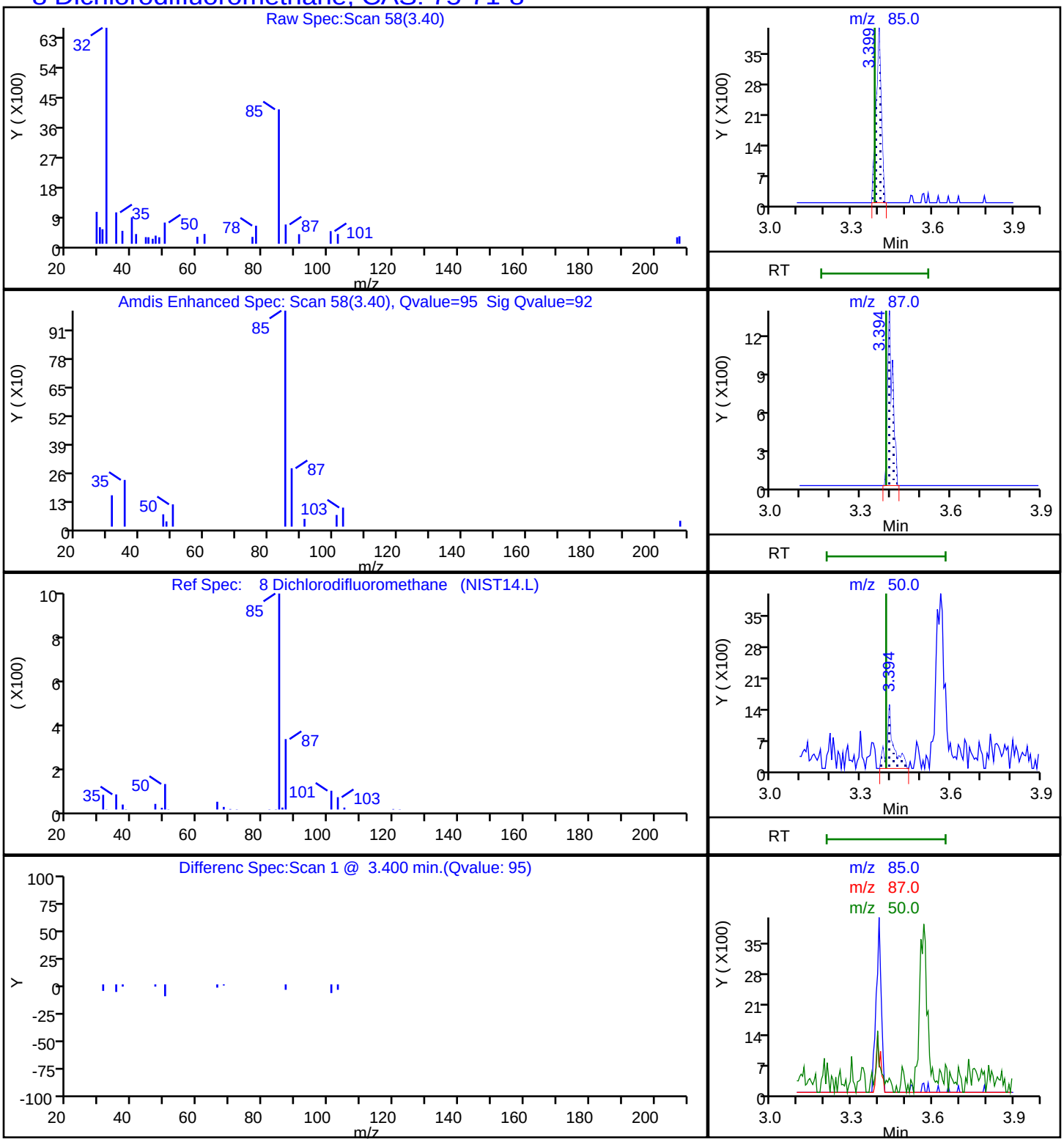
6 Chlorodifluoromethane, CAS: 75-45-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P113.D				
Injection Date:	06-Sep-2020 00:32:30	Instrument ID:	MR		
Lims ID:	140-20195-A-12	Lab Sample ID:	140-20195-12		
Client ID:	IA-021-A-29				
Operator ID:	HMT	ALS Bottle#:	13	Worklist Smp#:	19
Purge Vol:	500.000 mL	Dil. Factor:	1.4100		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

8 Dichlorodifluoromethane, CAS: 75-71-8

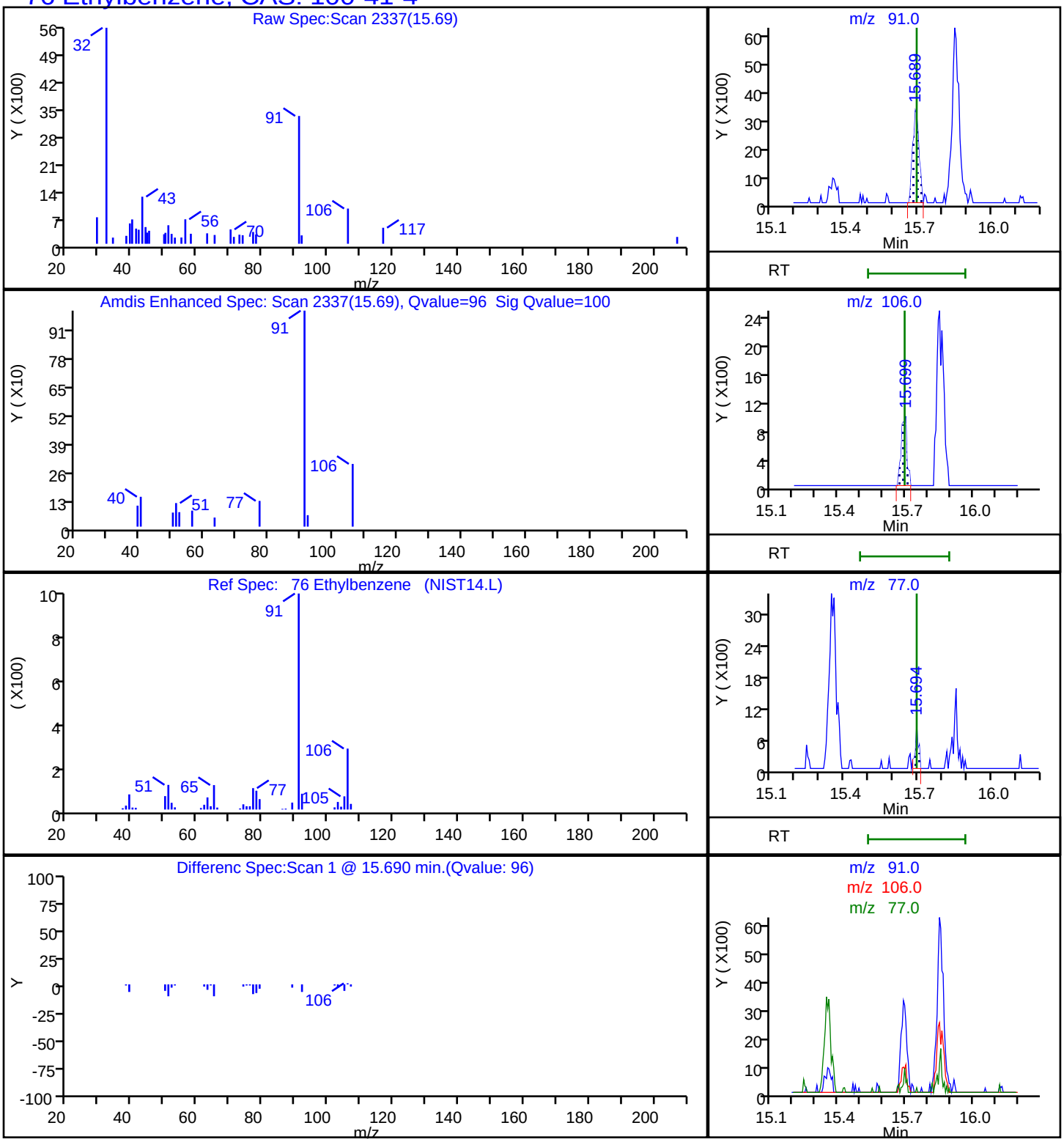


Report Date: 06-Sep-2020 07:11:55 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P113.D				
Injection Date:	06-Sep-2020 00:32:30	Instrument ID:	MR		
Lims ID:	140-20195-A-12	Lab Sample ID:	140-20195-12		
Client ID:	IA-021-A-29				
Operator ID:	HMT	ALS Bottle#:	13	Worklist Smp#:	19
Purge Vol:	500.000 mL	Dil. Factor:	1.4100		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

76 Ethylbenzene, CAS: 100-41-4



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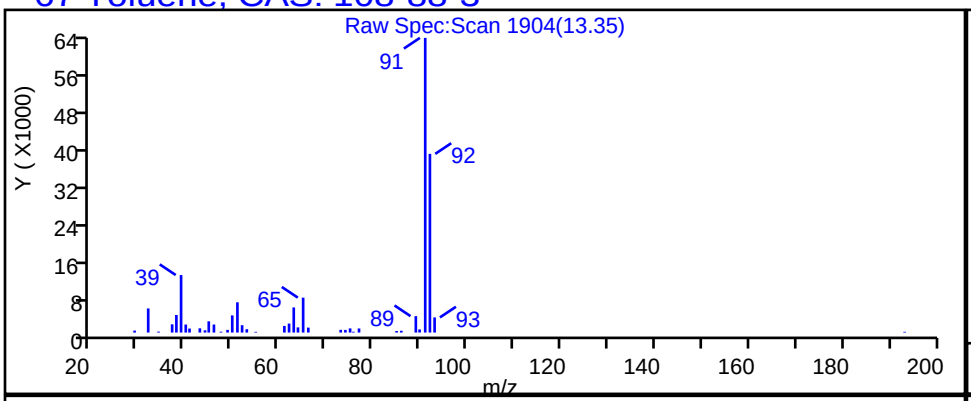
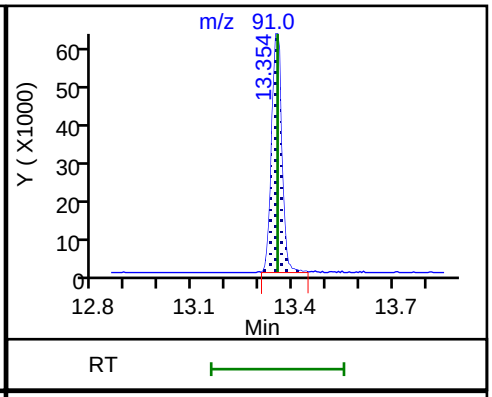
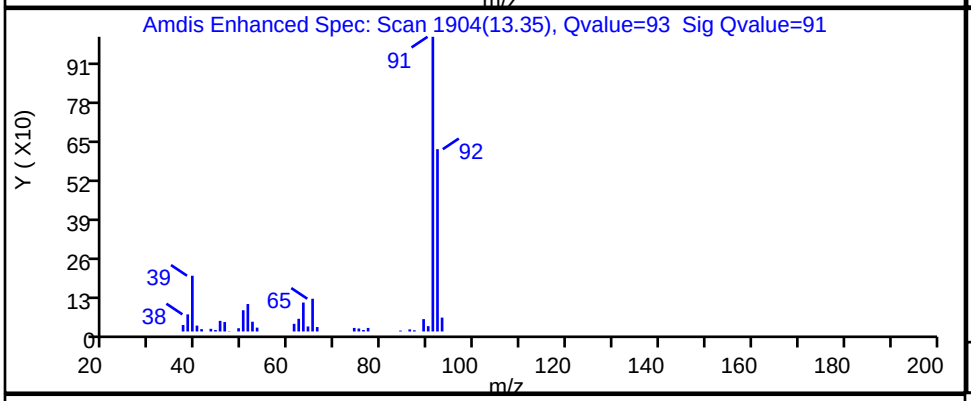
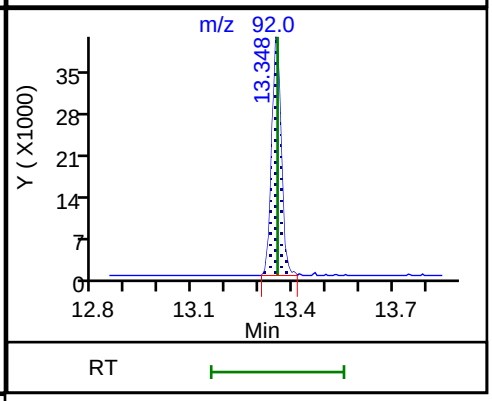
Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P113.D				
Injection Date:	06-Sep-2020 00:32:30	Instrument ID:	MR		
Lims ID:	140-20195-A-12	Lab Sample ID:	140-20195-12		
Client ID:	IA-021-A-29				
Operator ID:	HMT	ALS Bottle#:	13	Worklist Smp#:	19
Purge Vol:	500.000 mL	Dil. Factor:	1.4100		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

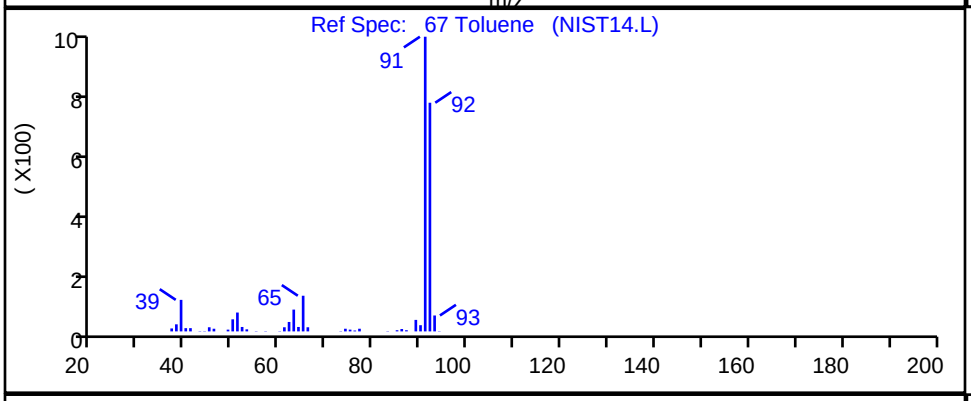
67 Toluene, CAS: 108-88-3

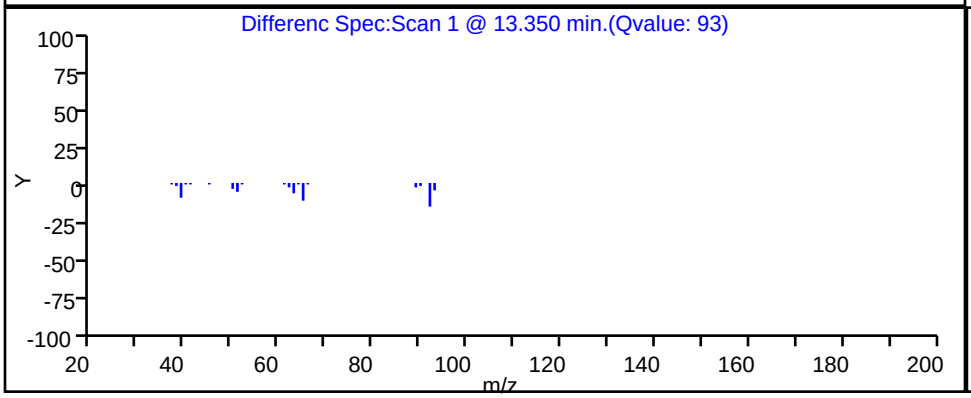


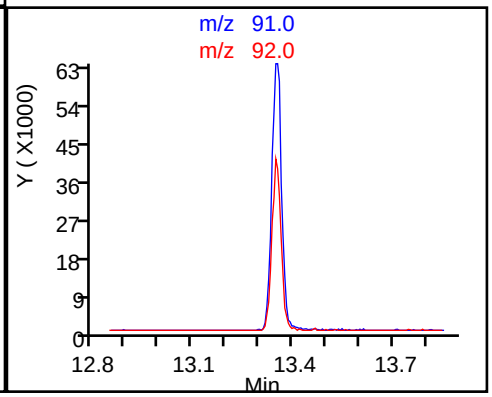








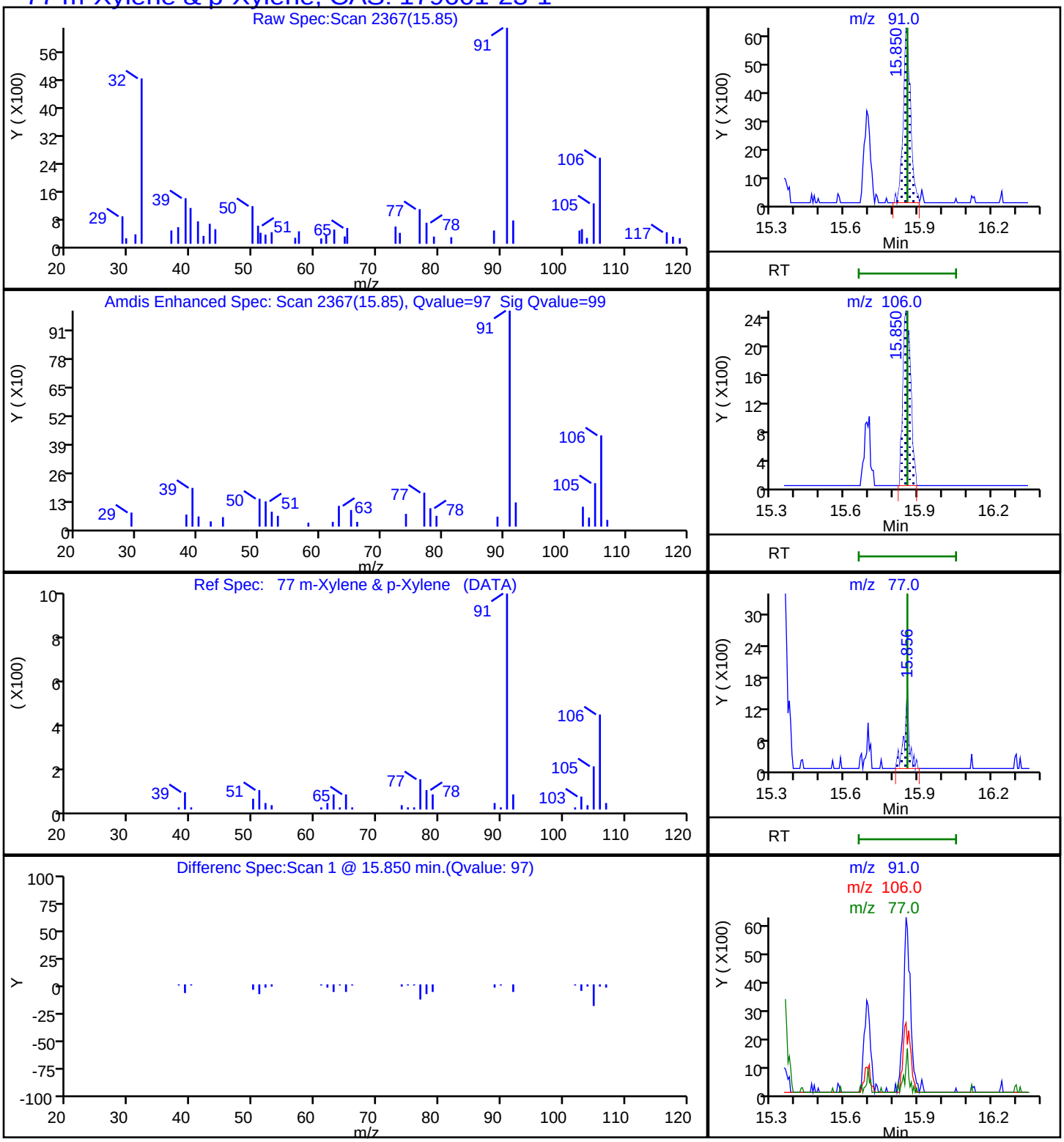




Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P113.D				
Injection Date:	06-Sep-2020 00:32:30	Instrument ID:	MR		
Lims ID:	140-20195-A-12	Lab Sample ID:	140-20195-12		
Client ID:	IA-021-A-29				
Operator ID:	HMT	ALS Bottle#:	13	Worklist Smp#:	19
Purge Vol:	500.000 mL	Dil. Factor:	1.4100		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

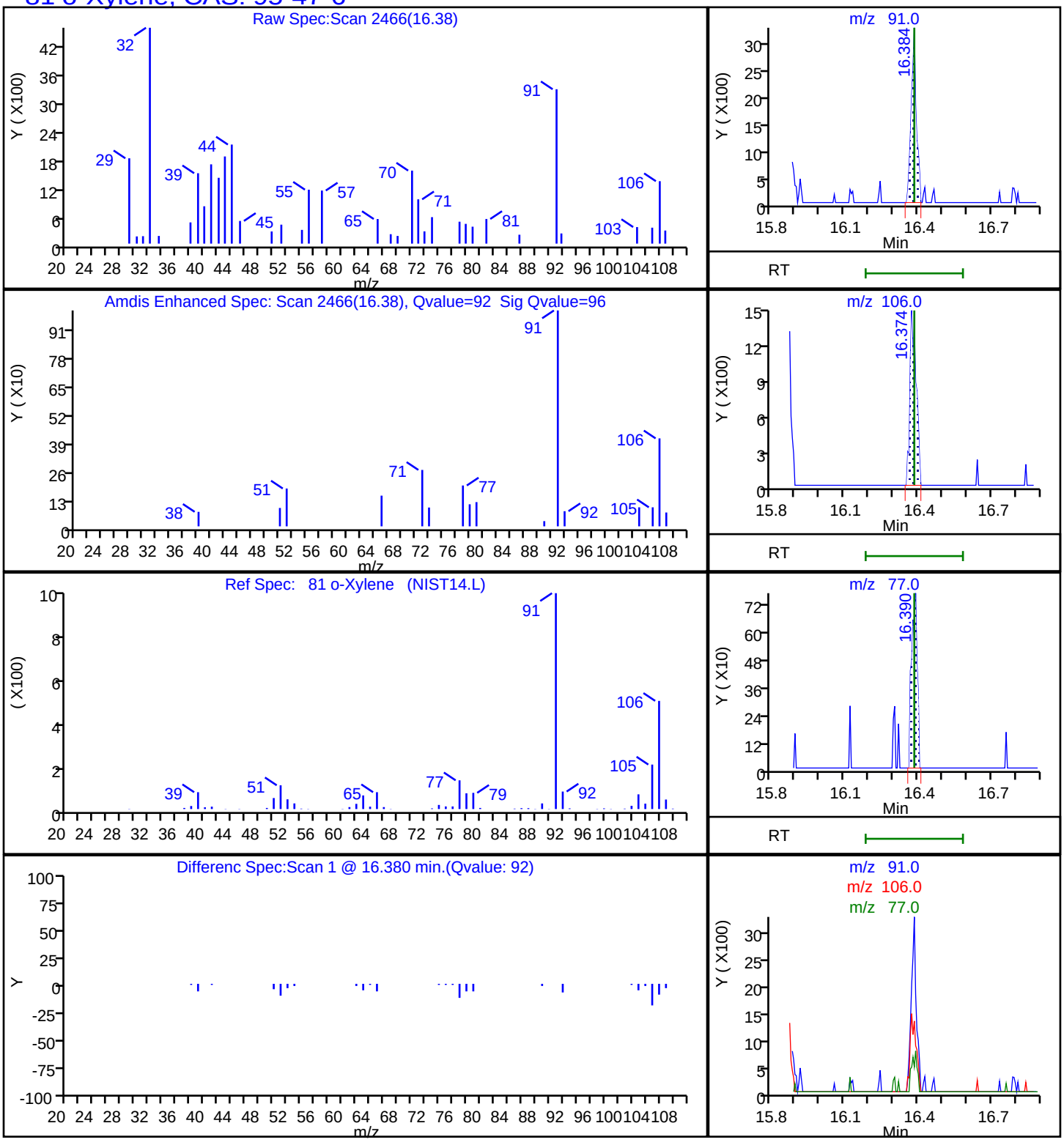
77 m-Xylene & p-Xylene, CAS: 179601-23-1



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P113.D				
Injection Date:	06-Sep-2020 00:32:30	Instrument ID:	MR		
Lims ID:	140-20195-A-12	Lab Sample ID:	140-20195-12		
Client ID:	IA-021-A-29				
Operator ID:	HMT	ALS Bottle#:	13	Worklist Smp#:	19
Purge Vol:	500.000 mL	Dil. Factor:	1.4100		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

81 o-Xylene, CAS: 95-47-6



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Client Sample ID: IA-136-A-29 Lab Sample ID: 140-20195-13

Matrix: Air Lab File ID: RI05P114.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 16:05

Sample wt/vol: 156(mL) Date Analyzed: 09/06/2020 01:20

Soil Aliquot Vol: Dilution Factor: 1.56

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42483 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.045	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.083	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	0.30	J	0.40	0.11
67-66-3	Chloroform	119.38	ND		0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.35	J	0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	0.096	J	0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.035
108-88-3	Toluene	92.14	2.5		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	ND		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.41	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	91		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Client Sample ID: IA-136-A-29 Lab Sample ID: 140-20195-13

Matrix: Air Lab File ID: RI05P114.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 16:05

Sample wt/vol: 156(mL) Date Analyzed: 09/06/2020 01:20

Soil Aliquot Vol: Dilution Factor: 1.56

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42483 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.15	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.52	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	1.1	J	1.4	0.39
67-66-3	Chloroform	119.38	ND		2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	1.7	J	2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	0.42	J	1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.24
108-88-3	Toluene	92.14	9.5		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	ND		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	1.8	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	91		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P114.D
Lims ID: 140-20195-A-13
Client ID: IA-136-A-29
Sample Type: Client
Inject. Date: 06-Sep-2020 01:20:30 ALS Bottle#: 14 Worklist Smp#: 20
Purge Vol: 500.000 mL Dil. Factor: 1.5600
Sample Info: 140-0016508-020
Misc. Info.: 140-20195-a-13@1.56
Operator ID: HMT Instrument ID: MR

Method: \\chromfs\Knoxville\ChromData\MR\20200904-16508.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 06-Sep-2020 07:11:26 Calib Date: 29-Aug-2020 00:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1023

First Level Reviewer: tajh Date: 06-Sep-2020 07:07:26

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.280	8.274	0.006	97	145585	4.80	
* 2 1,4-Difluorobenzene	114	10.507	10.512	-0.005	94	680058	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.349	15.349	0.000	88	539351	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	16.999	16.999	0.000	93	303732	4.21	
6 Chlorodifluoromethane	51	3.340	3.329	0.011	97	4885	0.0599	a
8 Dichlorodifluoromethane	85	3.400	3.383	0.017	92	4293	0.0702	
51 Benzene	78	9.935	9.924	0.011	37	1081	0.009094	
52 Carbon tetrachloride	117	9.946	9.946	0.000	35	1271	0.0166	
67 Toluene	91	13.349	13.354	-0.005	91	72941	0.5023	
76 Ethylbenzene	91	15.689	15.694	-0.005	26	3544	0.0193	
77 m-Xylene & p-Xylene	91	15.845	15.856	-0.011	89	7531	0.0537	
81 o-Xylene	91	16.390	16.384	0.006	93	4102	0.0282	
S 117 Xylenes, Total	100				0		0.0819	

QC Flag Legend

Review Flags
a - User Assigned ID

Reagents:

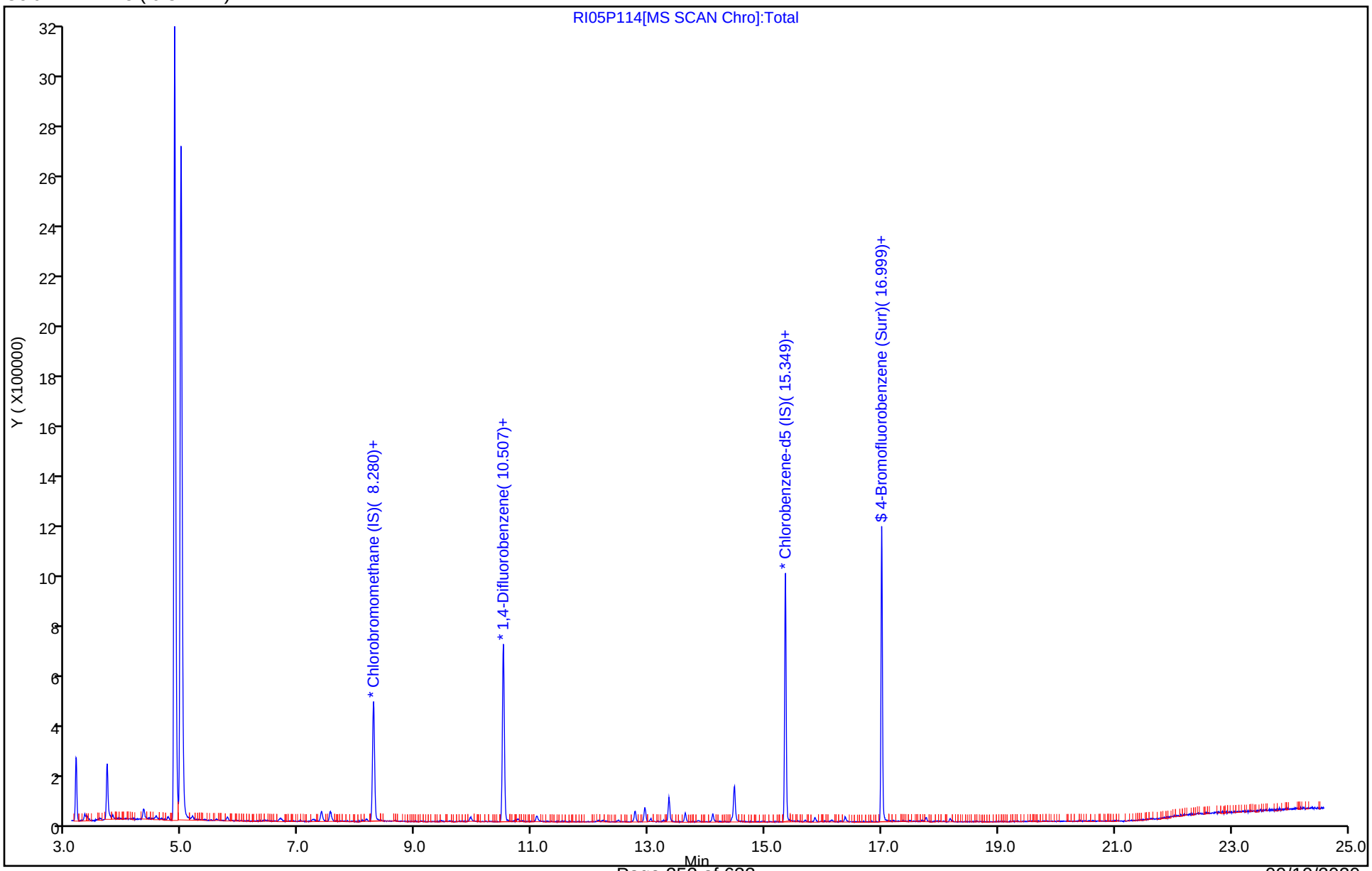
40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

Report Date: 06-Sep-2020 07:11:57 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P114.D				
Injection Date:	06-Sep-2020 01:20:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	140-20195-A-13	Lab Sample ID:	140-20195-13	Worklist Smp#:	20
Client ID:	IA-136-A-29				
Purge Vol:	500.000 mL	Dil. Factor:	1.5600	ALS Bottle#:	14
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P114.D				
Lims ID:	140-20195-A-13				
Client ID:	IA-136-A-29				
Sample Type:	Client				
Inject. Date:	06-Sep-2020 01:20:30	ALS Bottle#:	14	Worklist Smp#:	20
Purge Vol:	500.000 mL	Dil. Factor:	1.5600		
Sample Info:	140-0016508-020				
Misc. Info.:	140-20195-a-13@1.56				
Operator ID:	HMT	Instrument ID:	MR		
Method:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\MR_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	06-Sep-2020 07:11:26	Calib Date:	29-Aug-2020 00:02:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1023				

First Level Reviewer: tajh Date: 06-Sep-2020 07:07:26

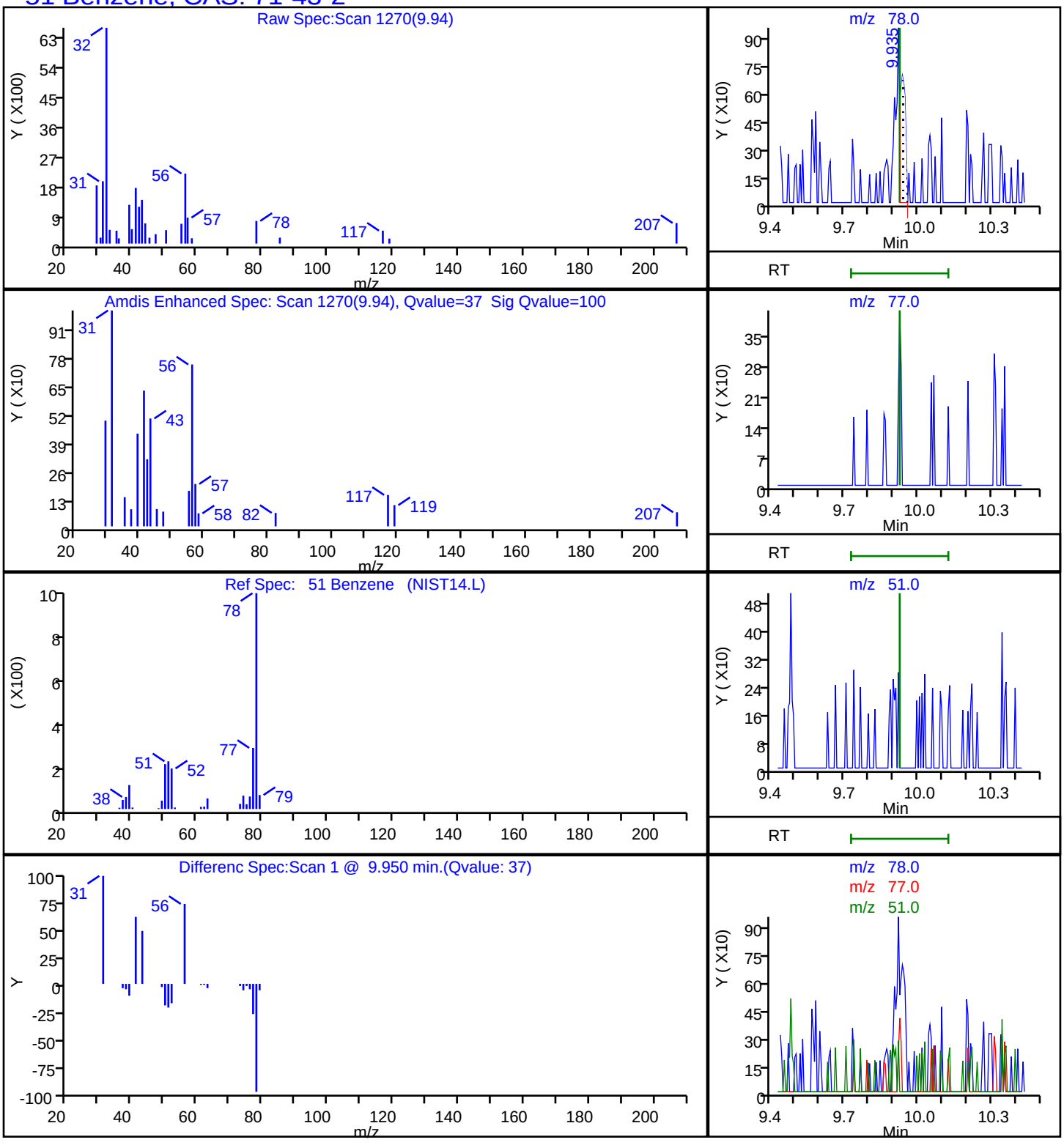
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	4.21	90.78

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P114.D

Injection Date:	06-Sep-2020 01:20:30	Instrument ID:	MR		
Lims ID:	140-20195-A-13	Lab Sample ID:	140-20195-13		
Client ID:	IA-136-A-29				
Operator ID:	HMT	ALS Bottle#:	14	Worklist Smp#:	20
Purge Vol:	500.000 mL	Dil. Factor:	1.5600		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

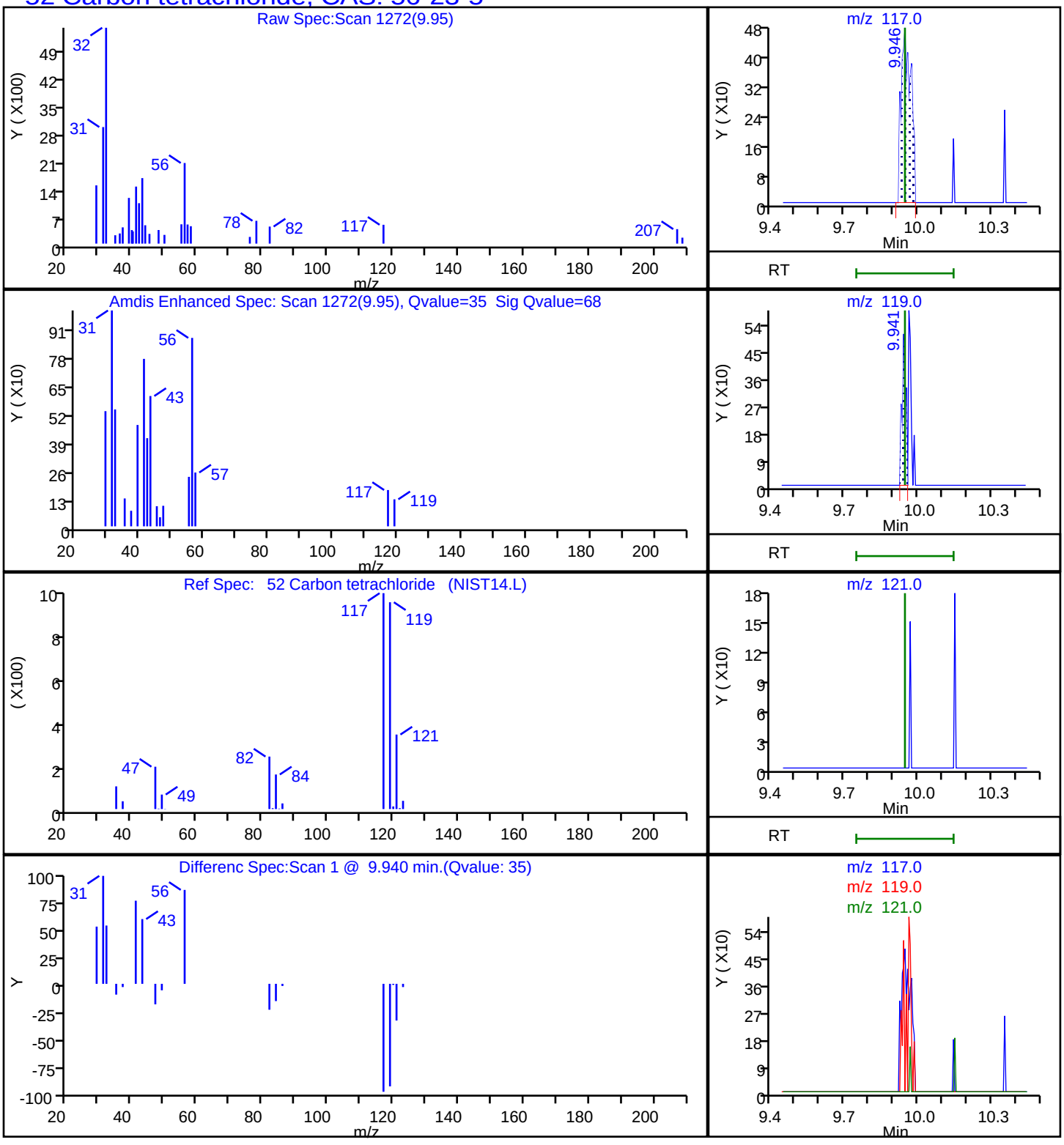
51 Benzene, CAS: 71-43-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P114.D		
Injection Date:	06-Sep-2020 01:20:30	Instrument ID:	MR
Lims ID:	140-20195-A-13	Lab Sample ID:	140-20195-13
Client ID:	IA-136-A-29		
Operator ID:	HMT	ALS Bottle#:	14 Worklist Smp#: 20
Purge Vol:	500.000 mL	Dil. Factor:	1.5600
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

52 Carbon tetrachloride, CAS: 56-23-5



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P114.D				
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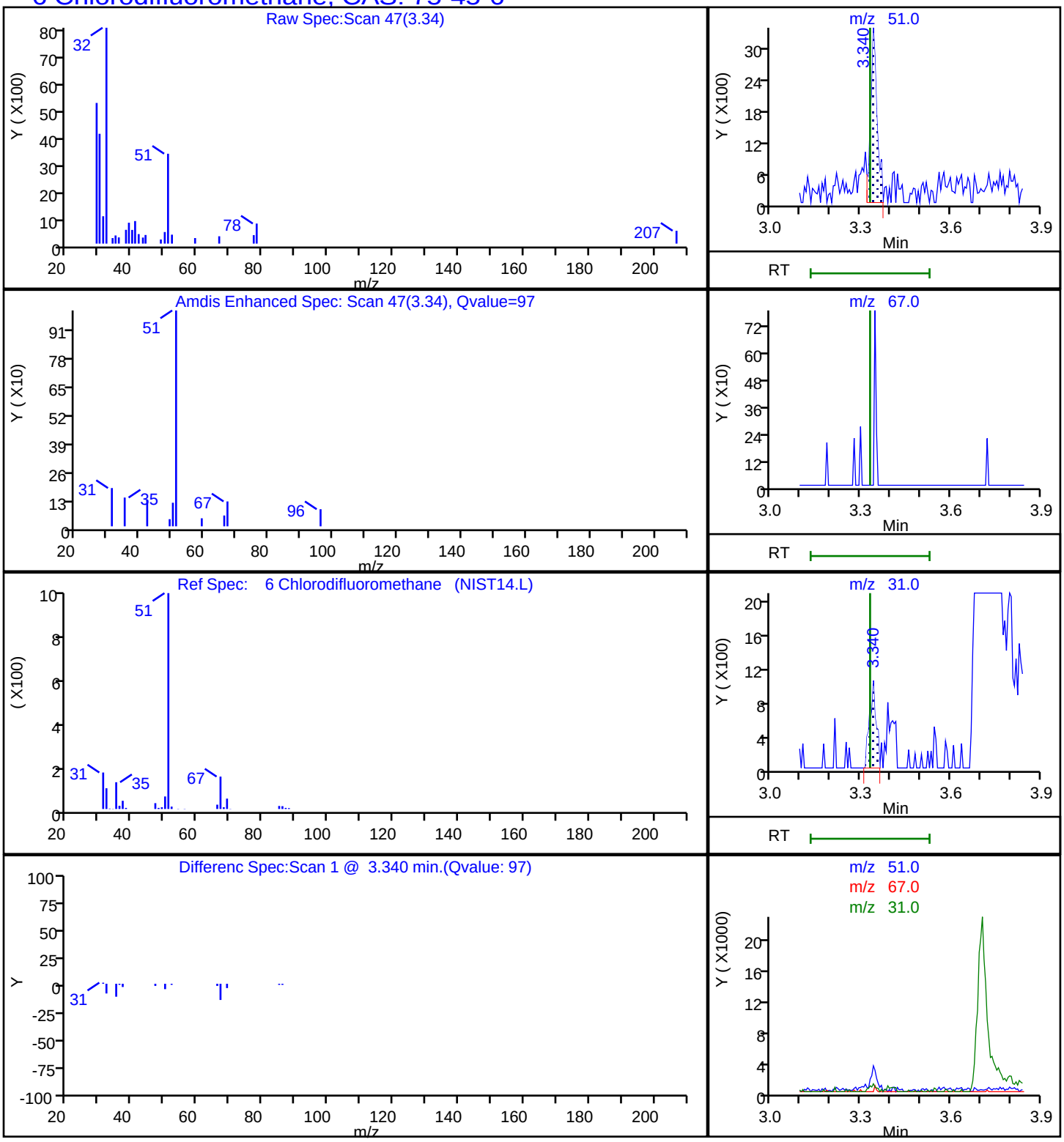
Lims ID:	140-20195-A-13	Lab Sample ID:	140-20195-13		
Client ID:	IA-136-A-29				
Operator ID:	HMT	ALS Bottle#:	14	Worklist Smp#:	20
Purge Vol:	500.000 mL	Dil. Factor:	1.5600		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

6 Chlorodifluoromethane, CAS: 75-45-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P114.D				
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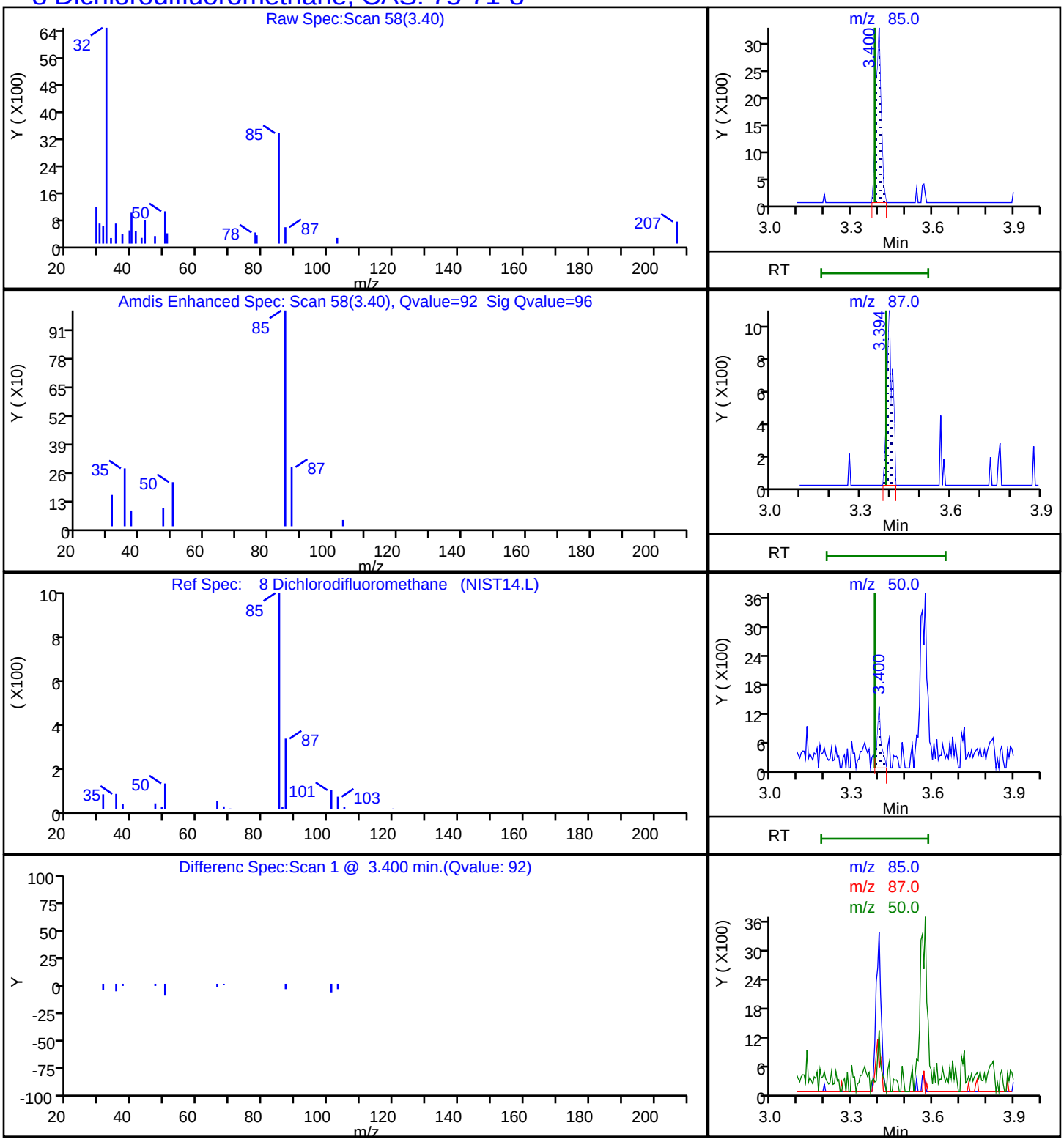
Lims ID:	140-20195-A-13	Lab Sample ID:	140-20195-13		
Client ID:	IA-136-A-29				
Operator ID:	HMT	ALS Bottle#:	14	Worklist Smp#:	20
Purge Vol:	500.000 mL	Dil. Factor:	1.5600		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

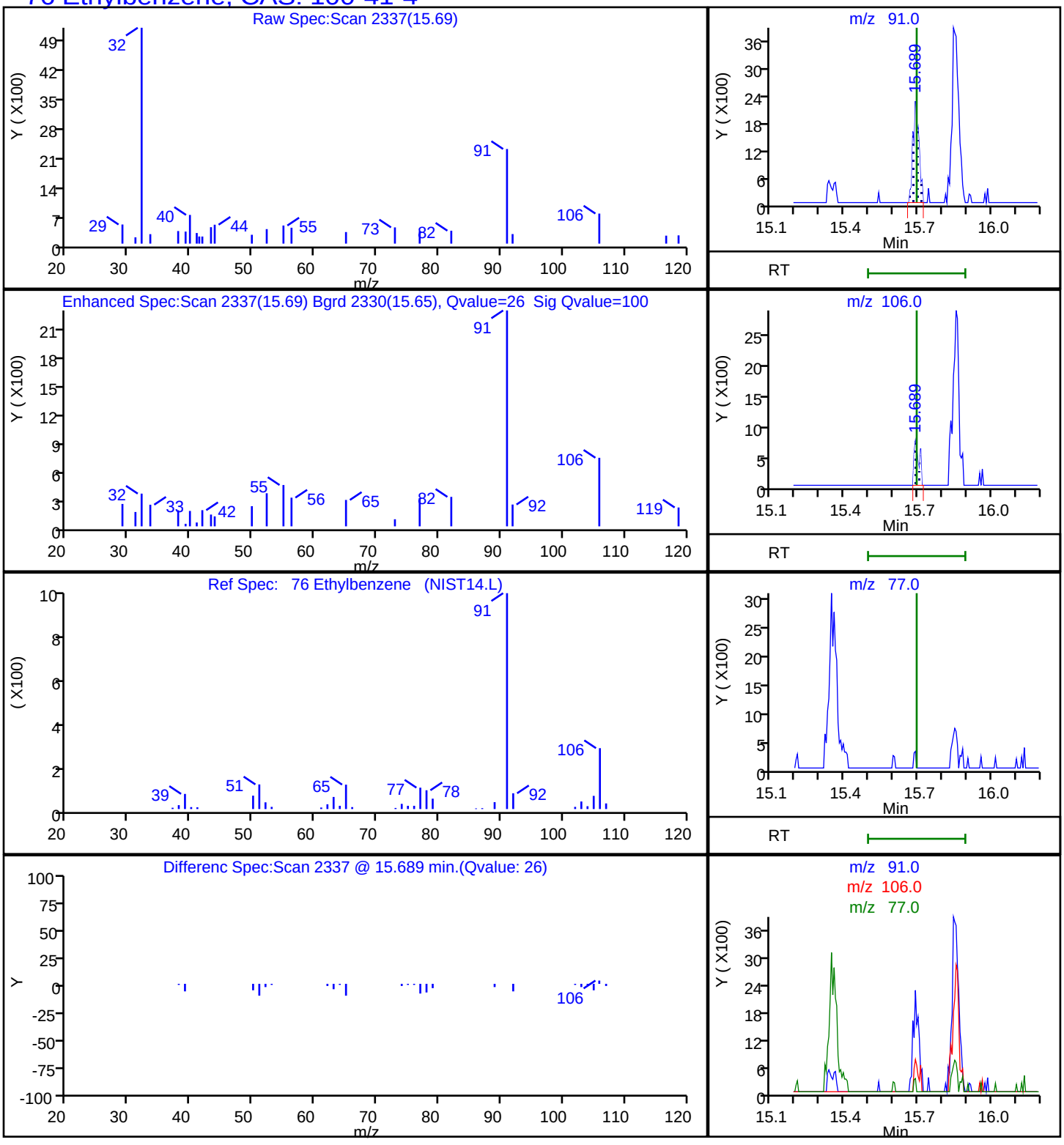
8 Dichlorodifluoromethane, CAS: 75-71-8



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P114.D		
Injection Date:	06-Sep-2020 01:20:30	Instrument ID:	MR
Lims ID:	140-20195-A-13	Lab Sample ID:	140-20195-13
Client ID:	IA-136-A-29		
Operator ID:	HMT	ALS Bottle#:	14 Worklist Smp#: 20
Purge Vol:	500.000 mL	Dil. Factor:	1.5600
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

76 Ethylbenzene, CAS: 100-41-4



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P114.D		
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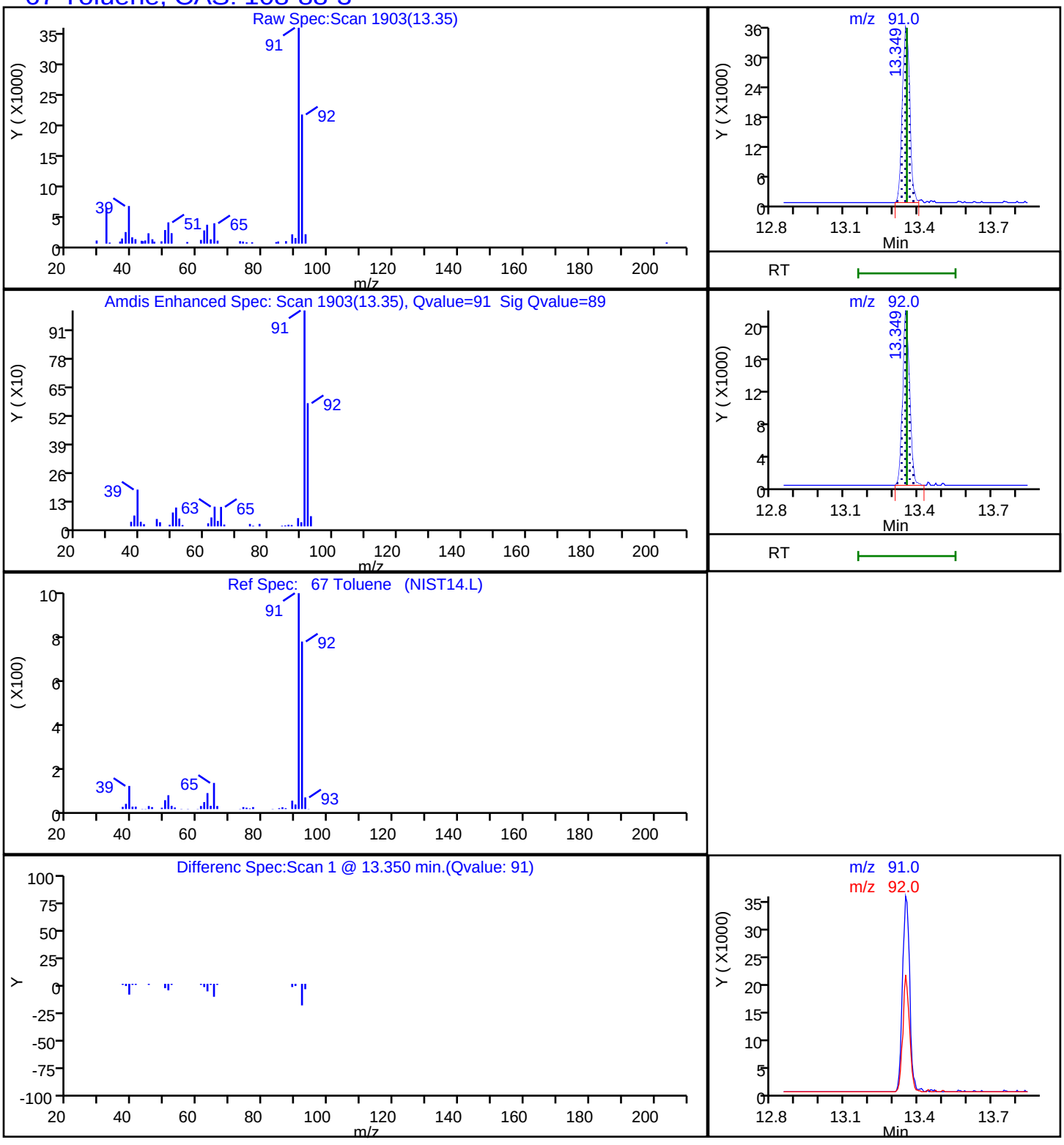
Lims ID:	140-20195-A-13	Lab Sample ID:	140-20195-13
Client ID:	IA-136-A-29		
Operator ID:	HMT	ALS Bottle#:	14 Worklist Smp#: 20
Purge Vol:	500.000 mL	Dil. Factor:	1.5600
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

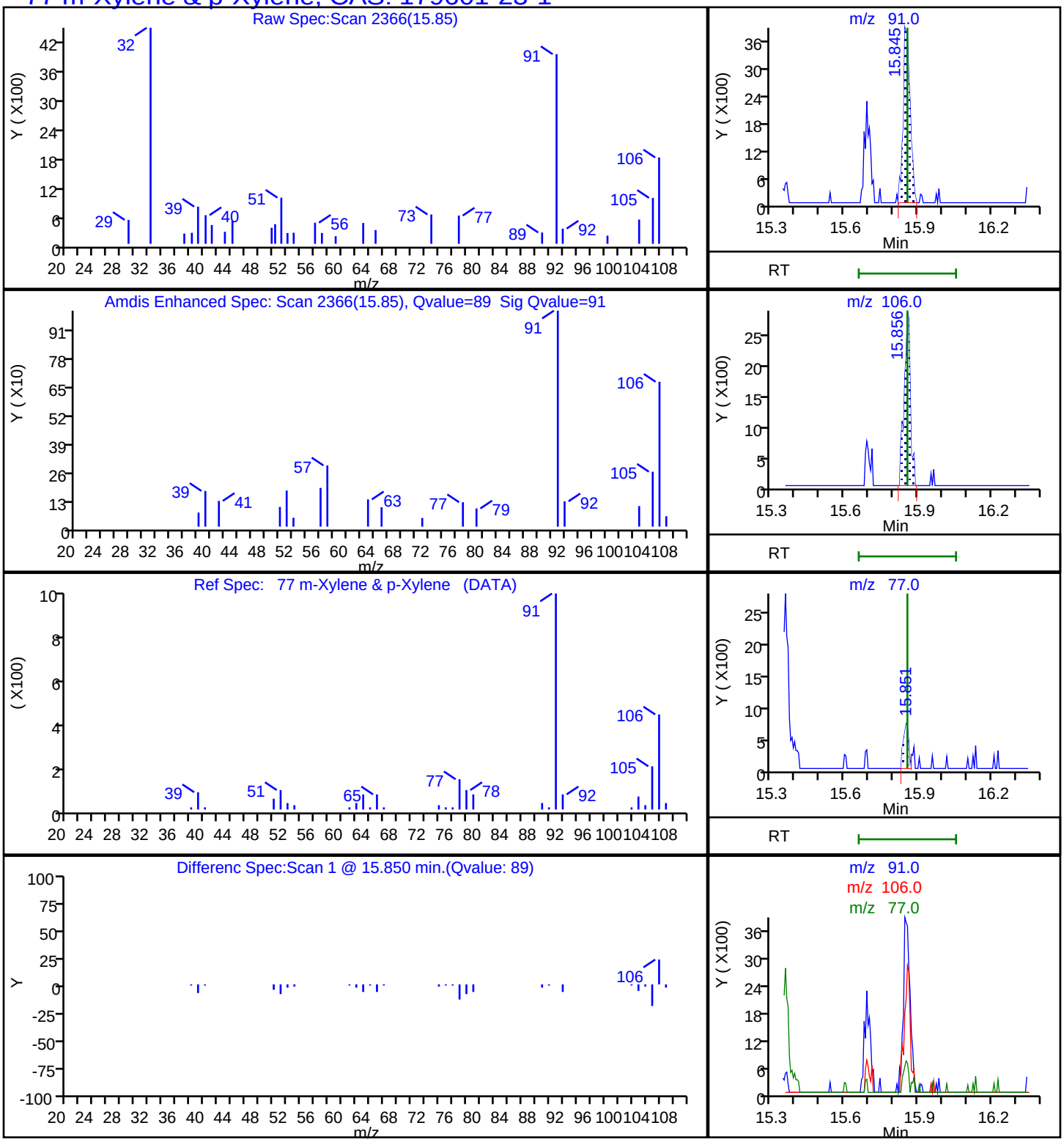
67 Toluene, CAS: 108-88-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P114.D				
Injection Date:	06-Sep-2020 01:20:30	Instrument ID:	MR		
Lims ID:	140-20195-A-13	Lab Sample ID:	140-20195-13		
Client ID:	IA-136-A-29				
Operator ID:	HMT	ALS Bottle#:	14	Worklist Smp#:	20
Purge Vol:	500.000 mL	Dil. Factor:	1.5600		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

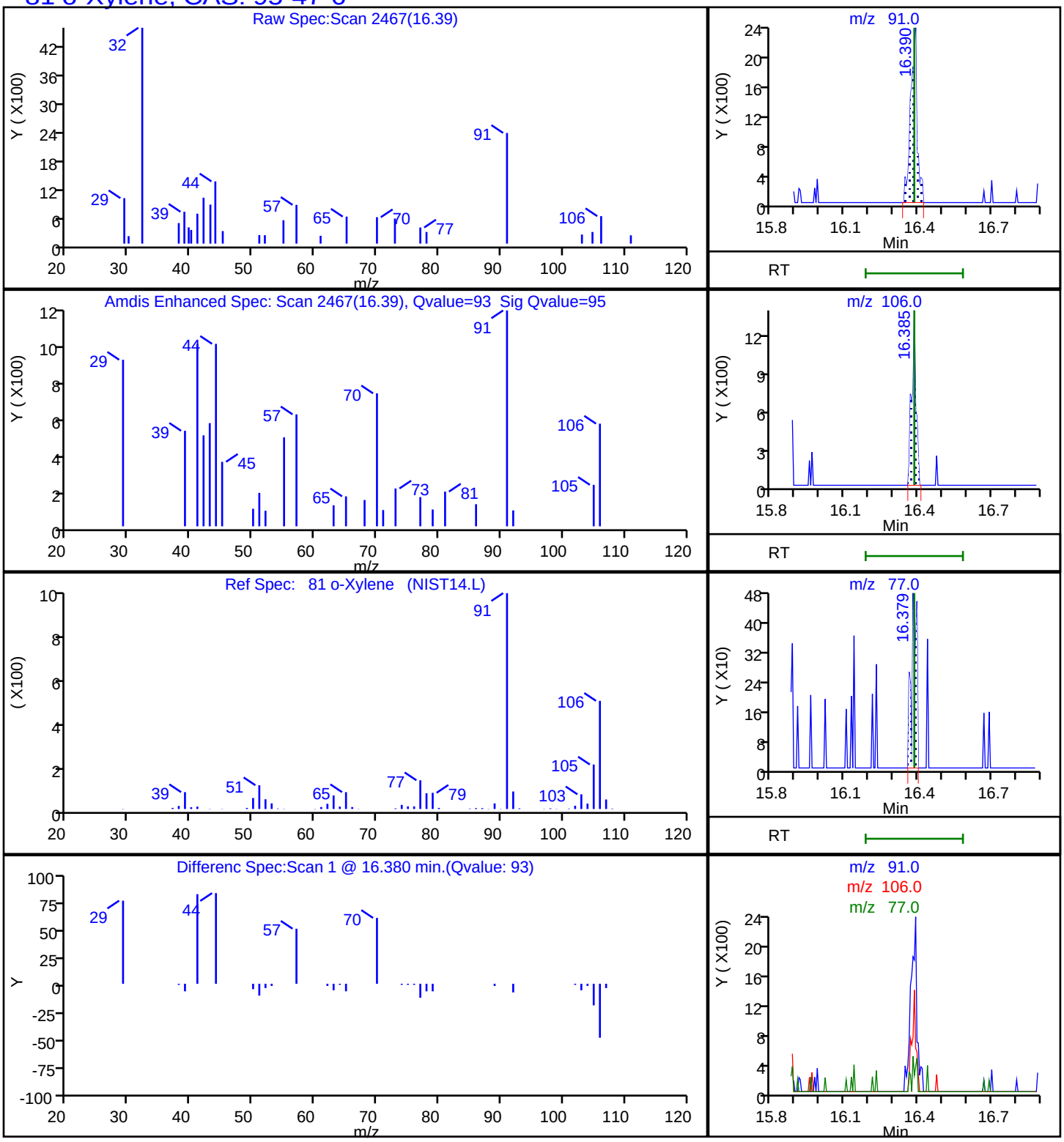
77 m-Xylene & p-Xylene, CAS: 179601-23-1



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P114.D				
Injection Date:	06-Sep-2020 01:20:30	Instrument ID:	MR		
Lims ID:	140-20195-A-13	Lab Sample ID:	140-20195-13		
Client ID:	IA-136-A-29				
Operator ID:	HMT	ALS Bottle#:	14	Worklist Smp#:	20
Purge Vol:	500.000 mL	Dil. Factor:	1.5600		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

81 o-Xylene, CAS: 95-47-6



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Knoxville

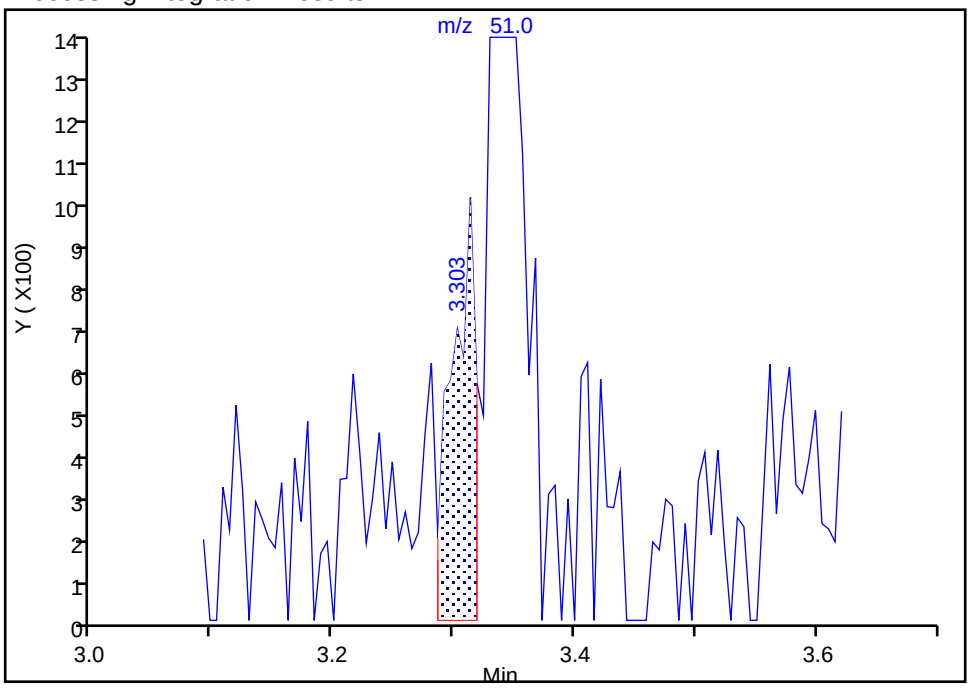
Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P114.D				
Injection Date:	06-Sep-2020 01:20:30	Instrument ID:	MR		
Lims ID:	140-20195-A-13	Lab Sample ID:	140-20195-13		
Client ID:	IA-136-A-29				
Operator ID:	HMT	ALS Bottle#:	14	Worklist Smp#:	20
Purge Vol:	500.000 mL	Dil. Factor:	1.5600		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

6 Chlorodifluoromethane, CAS: 75-45-6

Signal: 1

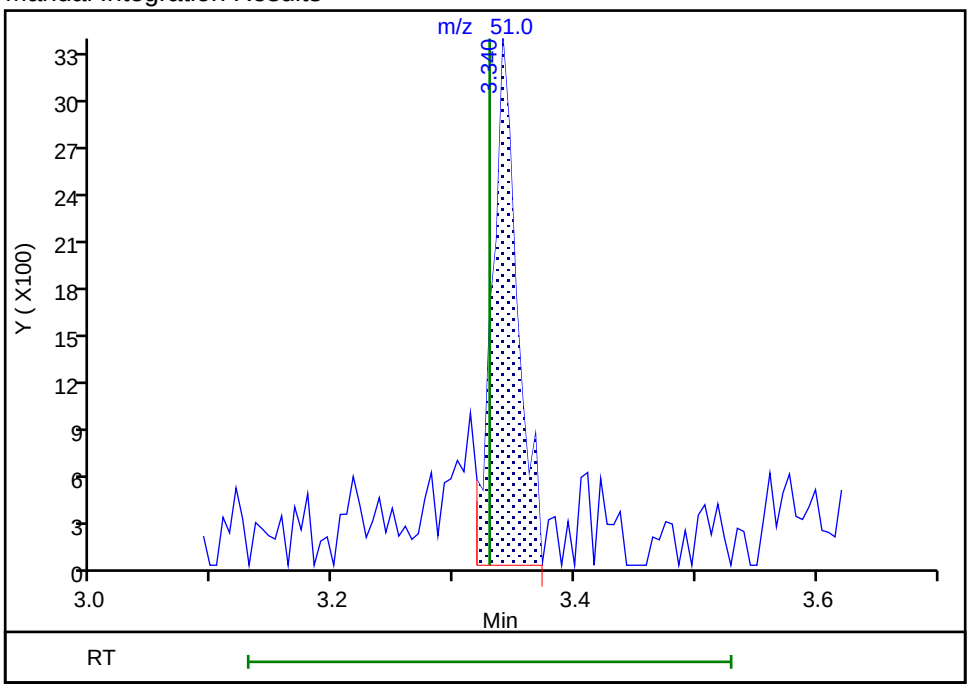
Processing Integration Results

RT: 3.30
Area: 1311
Amount: 0.016088
Amount Units: ppb v/v



Manual Integration Results

RT: 3.34
Area: 4885
Amount: 0.059948
Amount Units: ppb v/v



Reviewer: tajh, 06-Sep-2020 07:08:03
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Client Sample ID: IA-117-A-29 Lab Sample ID: 140-20195-14

Matrix: Air Lab File ID: RI05P115.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 16:07

Sample wt/vol: 100(mL) Date Analyzed: 09/06/2020 02:07

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42483 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.040	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.070	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	0.38	J	0.40	0.11
67-66-3	Chloroform	119.38	ND		0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	0.12	J	0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.38	J	0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	0.15	J	0.40	0.065
75-09-2	Methylene Chloride	84.93	23		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.035
108-88-3	Toluene	92.14	2.5		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	0.87		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.67	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	91		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Client Sample ID: IA-117-A-29 Lab Sample ID: 140-20195-14

Matrix: Air Lab File ID: RI05P115.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 16:07

Sample wt/vol: 100(mL) Date Analyzed: 09/06/2020 02:07

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42483 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.13	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.44	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	1.4	J	1.4	0.39
67-66-3	Chloroform	119.38	ND		2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	0.48	J	1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	1.9	J	2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	0.63	J	1.7	0.28
75-09-2	Methylene Chloride	84.93	80		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.24
108-88-3	Toluene	92.14	9.5		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	4.7		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	2.9	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	91		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P115.D
Lims ID: 140-20195-A-14
Client ID: IA-117-A-29
Sample Type: Client
Inject. Date: 06-Sep-2020 02:07:30 ALS Bottle#: 15 Worklist Smp#: 21
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016508-021
Misc. Info.: 140-20195-a-14
Operator ID: HMT Instrument ID: MR

Method: \\chromfs\Knoxville\ChromData\MR\20200904-16508.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 06-Sep-2020 07:11:26 Calib Date: 29-Aug-2020 00:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1023

First Level Reviewer: tajh Date: 06-Sep-2020 07:08:28

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.274	8.274	0.000	96	139794	4.80	
* 2 1,4-Difluorobenzene	114	10.501	10.512	-0.011	94	666342	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.349	15.349	0.000	88	535053	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	16.999	16.999	0.000	92	303581	4.24	
6 Chlorodifluoromethane	51	3.329	3.329	0.000	34	6019	0.0769	M
8 Dichlorodifluoromethane	85	3.389	3.383	0.006	94	4500	0.0766	
31 Methylene Chloride	84	5.761	5.756	0.005	96	157039	4.61	
42 cis-1,2-Dichloroethene	96	7.940	7.940	0.000	9	1079	0.0244	
51 Benzene	78	9.940	9.924	0.016	56	941	0.008079	
52 Carbon tetrachloride	117	9.935	9.946	-0.011	38	1045	0.0139	
58 Trichloroethene	130	11.235	11.240	-0.005	92	10108	0.1746	
67 Toluene	91	13.348	13.354	-0.006	93	72596	0.5040	
76 Ethylbenzene	91	15.683	15.694	-0.011	93	5316	0.0291	
77 m-Xylene & p-Xylene	91	15.856	15.856	0.000	90	12738	0.0916	
81 o-Xylene	91	16.379	16.384	-0.005	93	5991	0.0416	
S 117 Xylenes, Total	100				0		0.1331	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

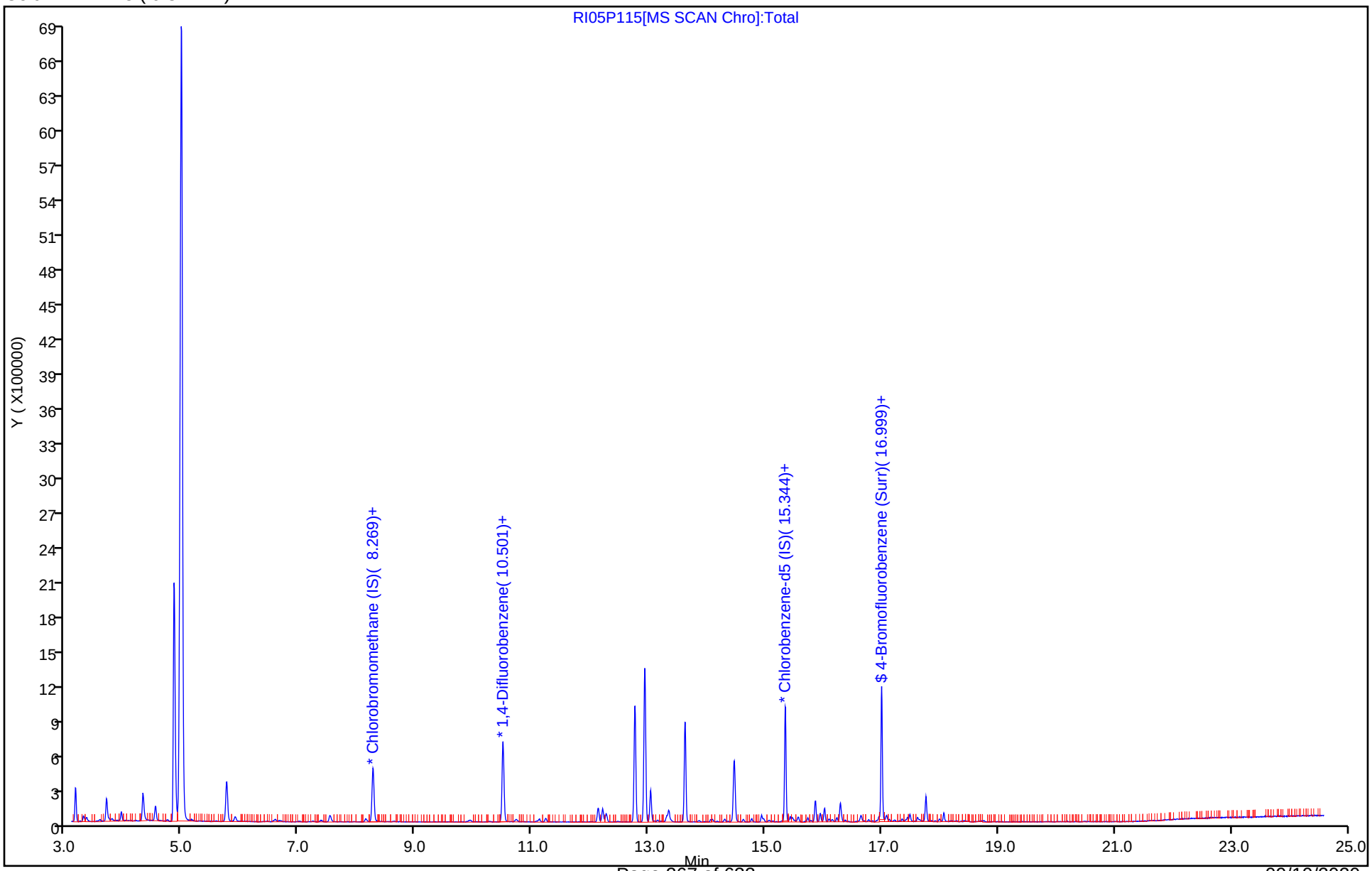
40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

Report Date: 06-Sep-2020 07:11:59 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P115.D				
Injection Date:	06-Sep-2020 02:07:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	140-20195-A-14	Lab Sample ID:	140-20195-14	Worklist Smp#:	21
Client ID:	IA-117-A-29				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P115.D				
Lims ID:	140-20195-A-14				
Client ID:	IA-117-A-29				
Sample Type:	Client				
Inject. Date:	06-Sep-2020 02:07:30	ALS Bottle#:	15	Worklist Smp#:	21
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016508-021				
Misc. Info.:	140-20195-a-14				
Operator ID:	HMT	Instrument ID:	MR		
Method:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\MR_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	06-Sep-2020 07:11:26	Calib Date:	29-Aug-2020 00:02:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1023				
First Level Reviewer: tajh		Date:	06-Sep-2020 07:08:28		

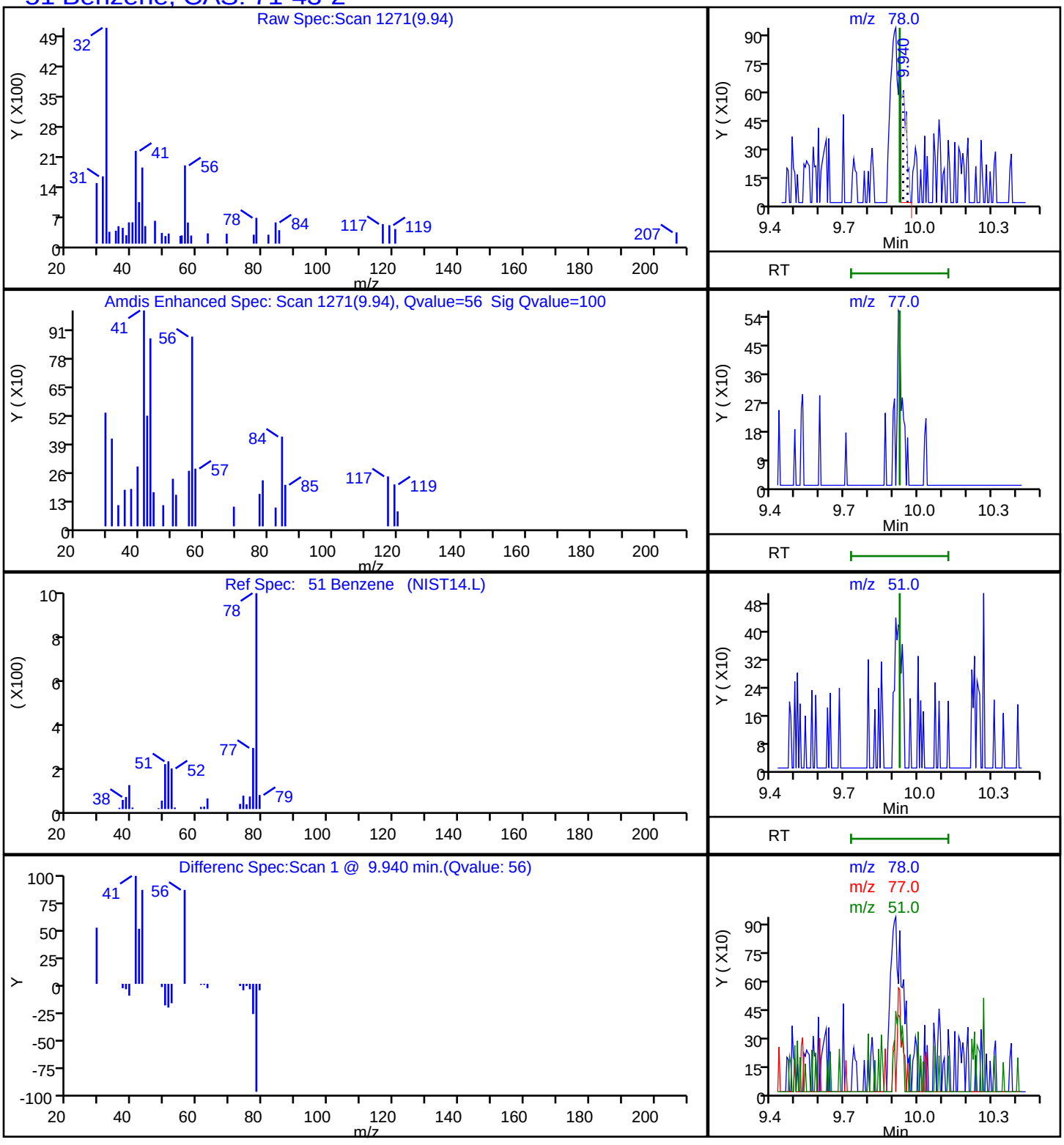
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	4.24	91.46

Report Date: 06-Sep-2020 07:11:59 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P115.D		
Injection Date:	06-Sep-2020 02:07:30	Instrument ID:	MR
Lims ID:	140-20195-A-14	Lab Sample ID:	140-20195-14
Client ID:	IA-117-A-29		
Operator ID:	HMT	ALS Bottle#:	15 Worklist Smp#: 21
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

51 Benzene, CAS: 71-43-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P115.D		
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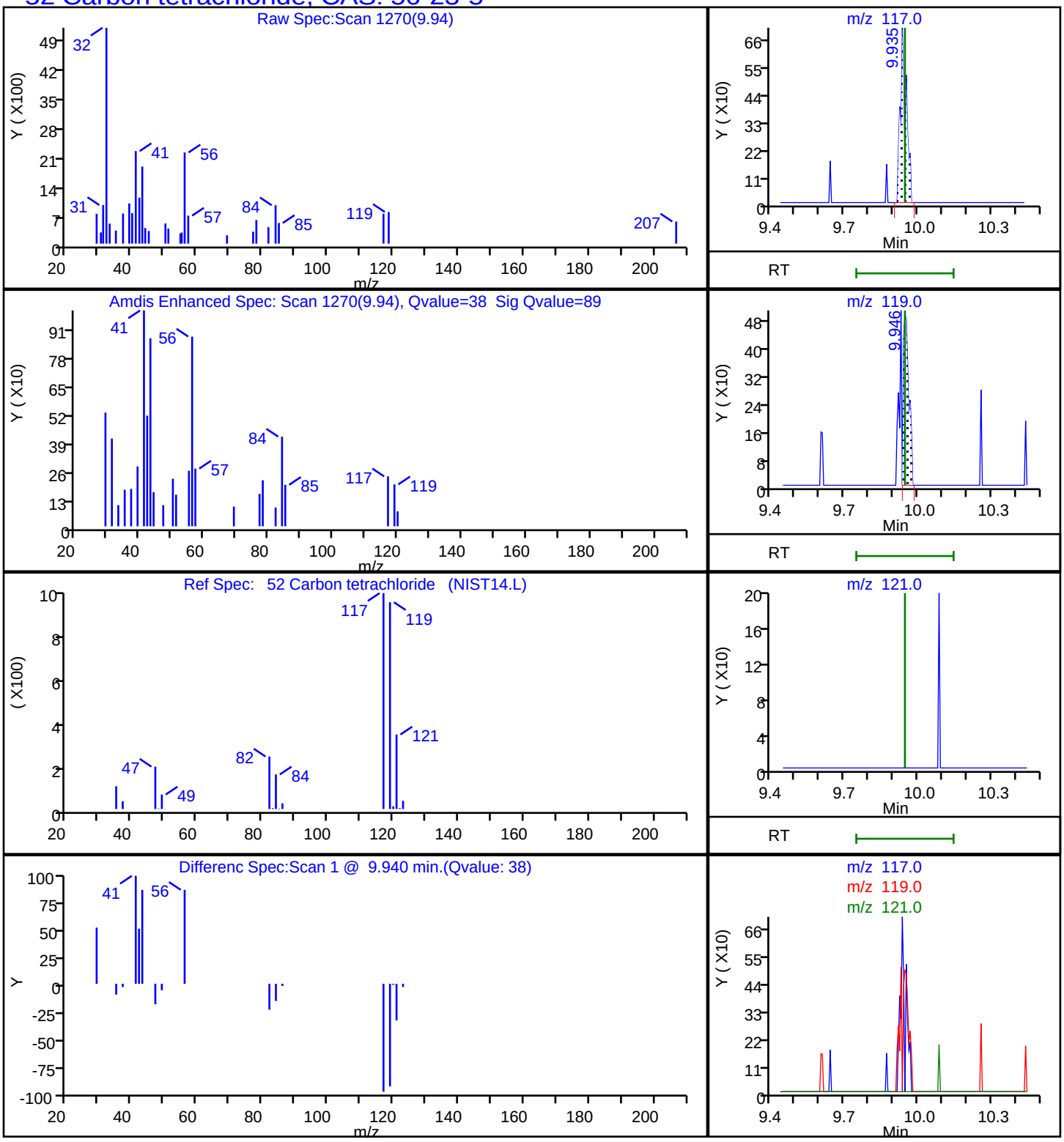
Lims ID:	140-20195-A-14	Lab Sample ID:	140-20195-14
Client ID:	IA-117-A-29		
Operator ID:	HMT	ALS Bottle#:	15 Worklist Smp#: 21
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

52 Carbon tetrachloride, CAS: 56-23-5



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P115.D				
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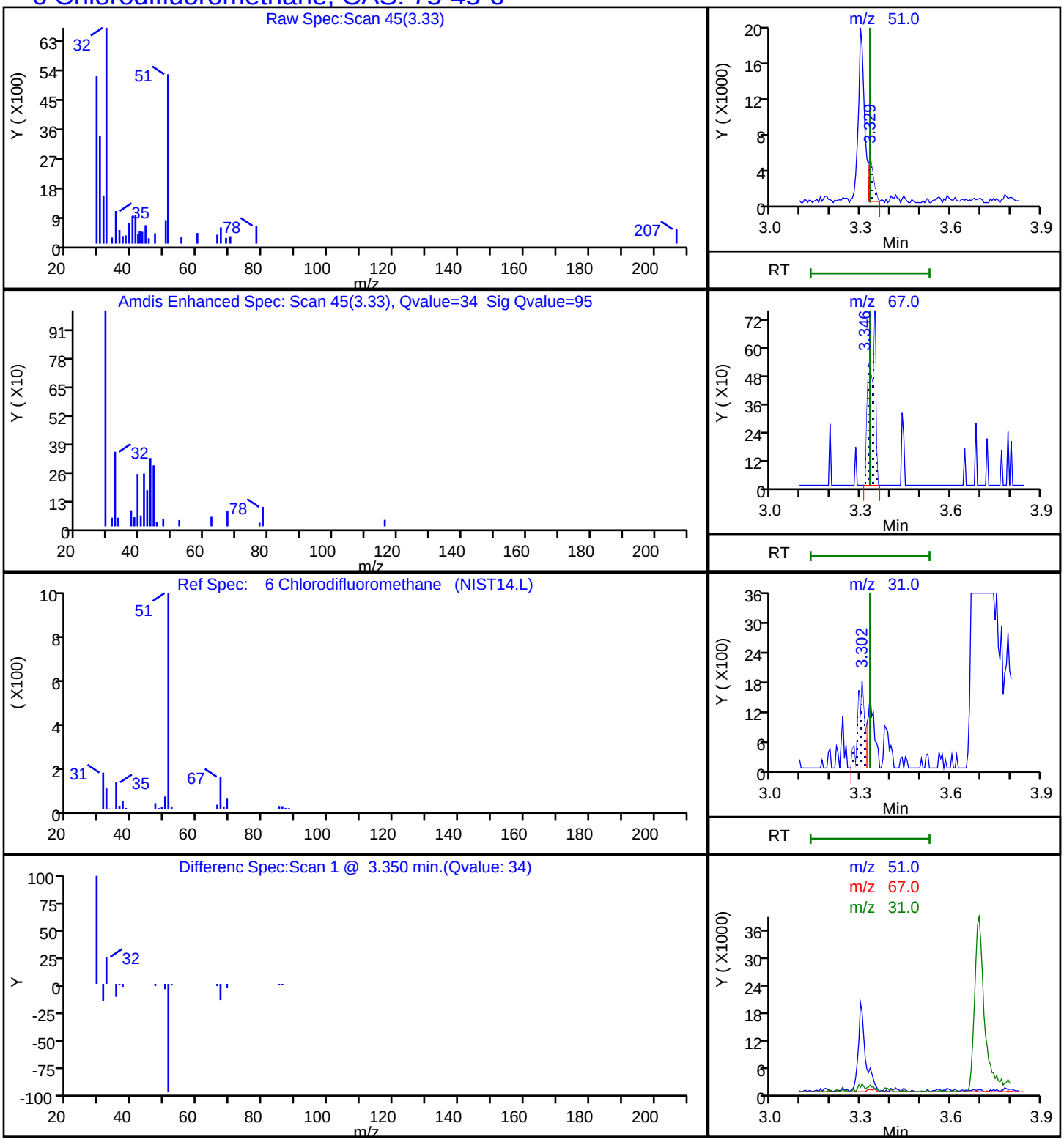
Lims ID:	140-20195-A-14	Lab Sample ID:	140-20195-14		
Client ID:	IA-117-A-29				
Operator ID:	HMT	ALS Bottle#:	15	Worklist Smp#:	21
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

6 Chlorodifluoromethane, CAS: 75-45-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P115.D				
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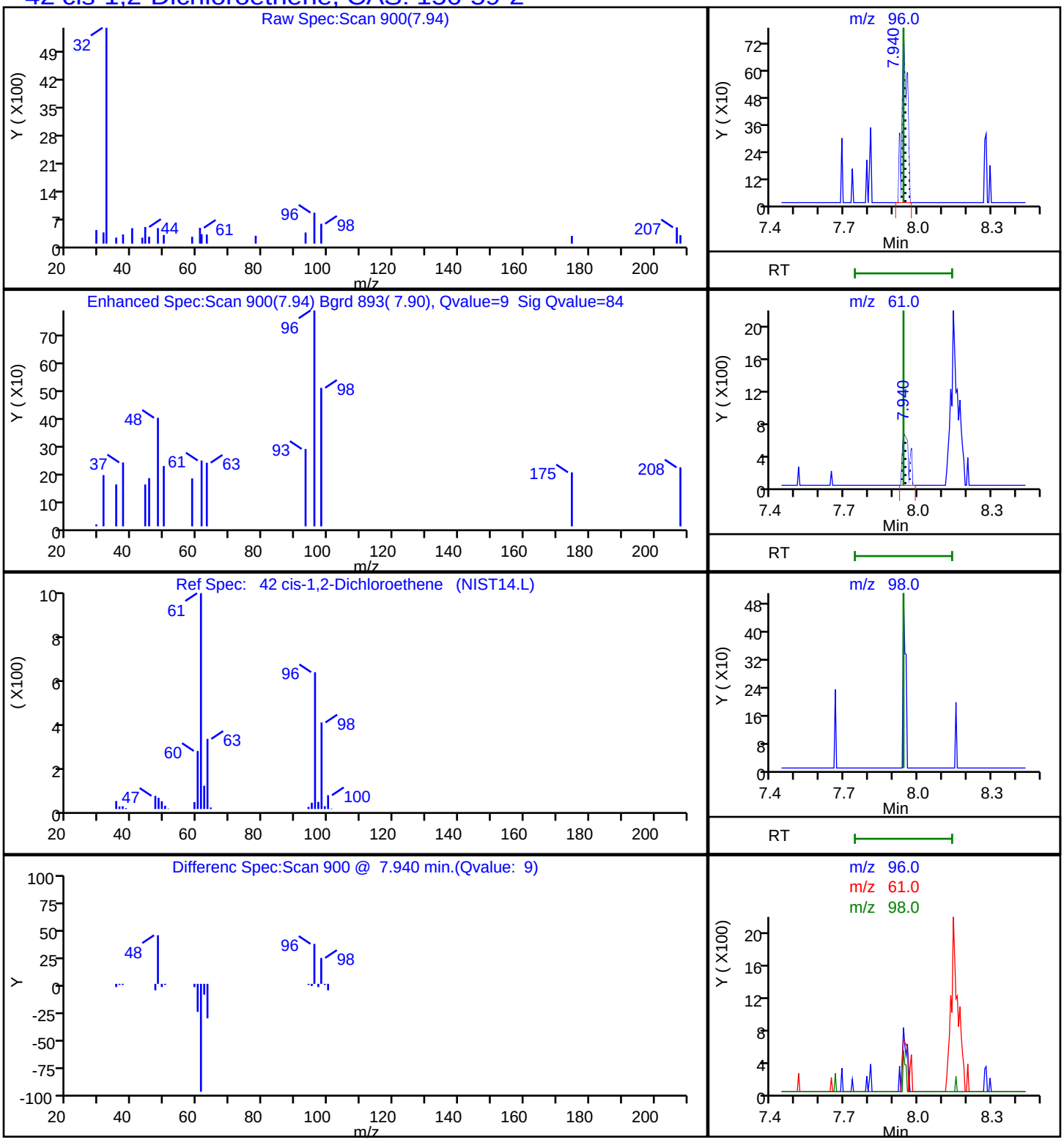
Lims ID:	140-20195-A-14	Lab Sample ID:	140-20195-14		
Client ID:	IA-117-A-29				
Operator ID:	HMT	ALS Bottle#:	15	Worklist Smp#:	21
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

42 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins TestAmerica, Knoxville

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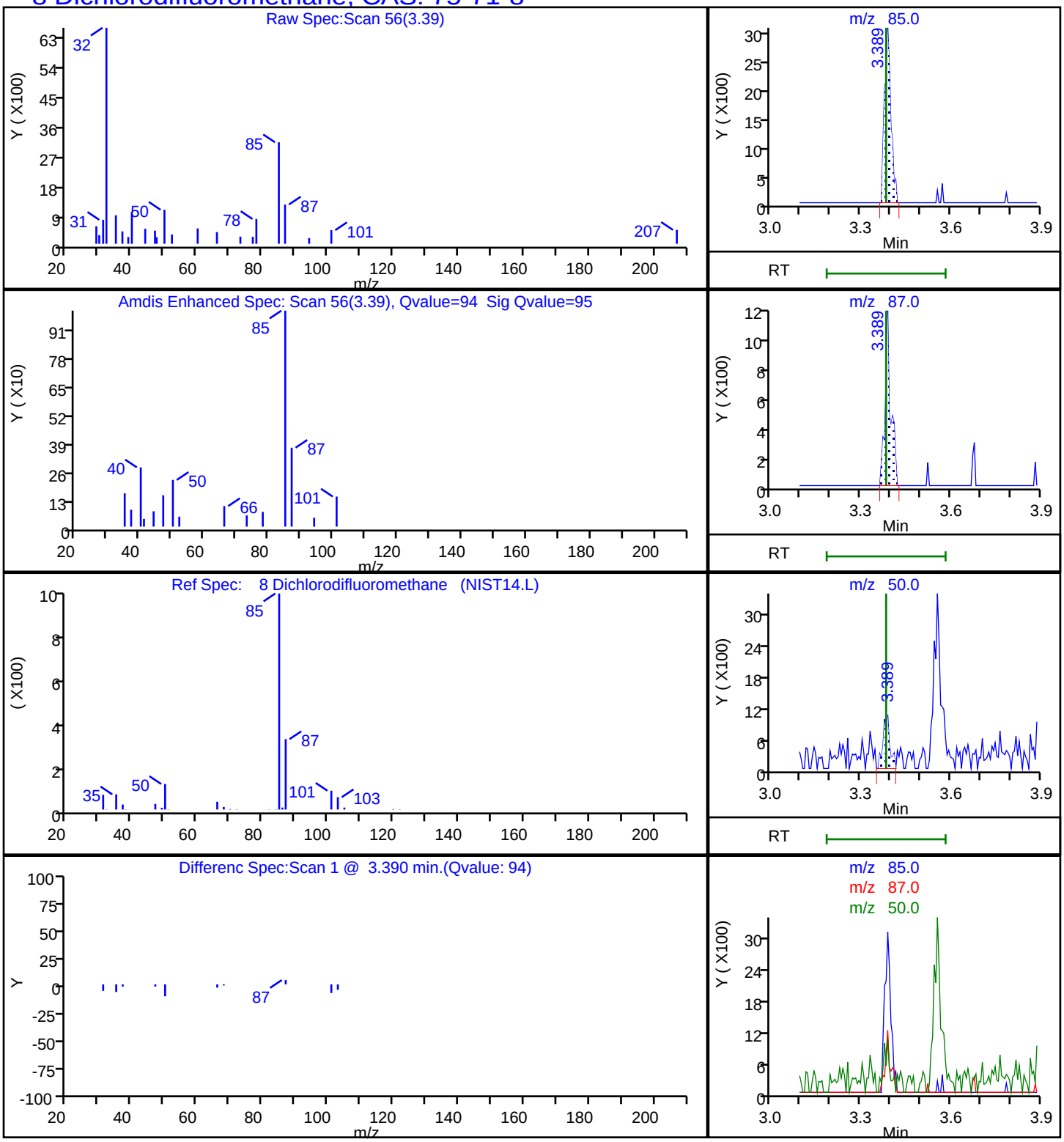
Lims ID:	140-20195-A-14	Lab Sample ID:	140-20195-14
Client ID:	IA-117-A-29		
Operator ID:	HMT	ALS Bottle#:	15 Worklist Smp#: 21
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

8 Dichlorodifluoromethane, CAS: 75-71-8



Eurofins TestAmerica, Knoxville

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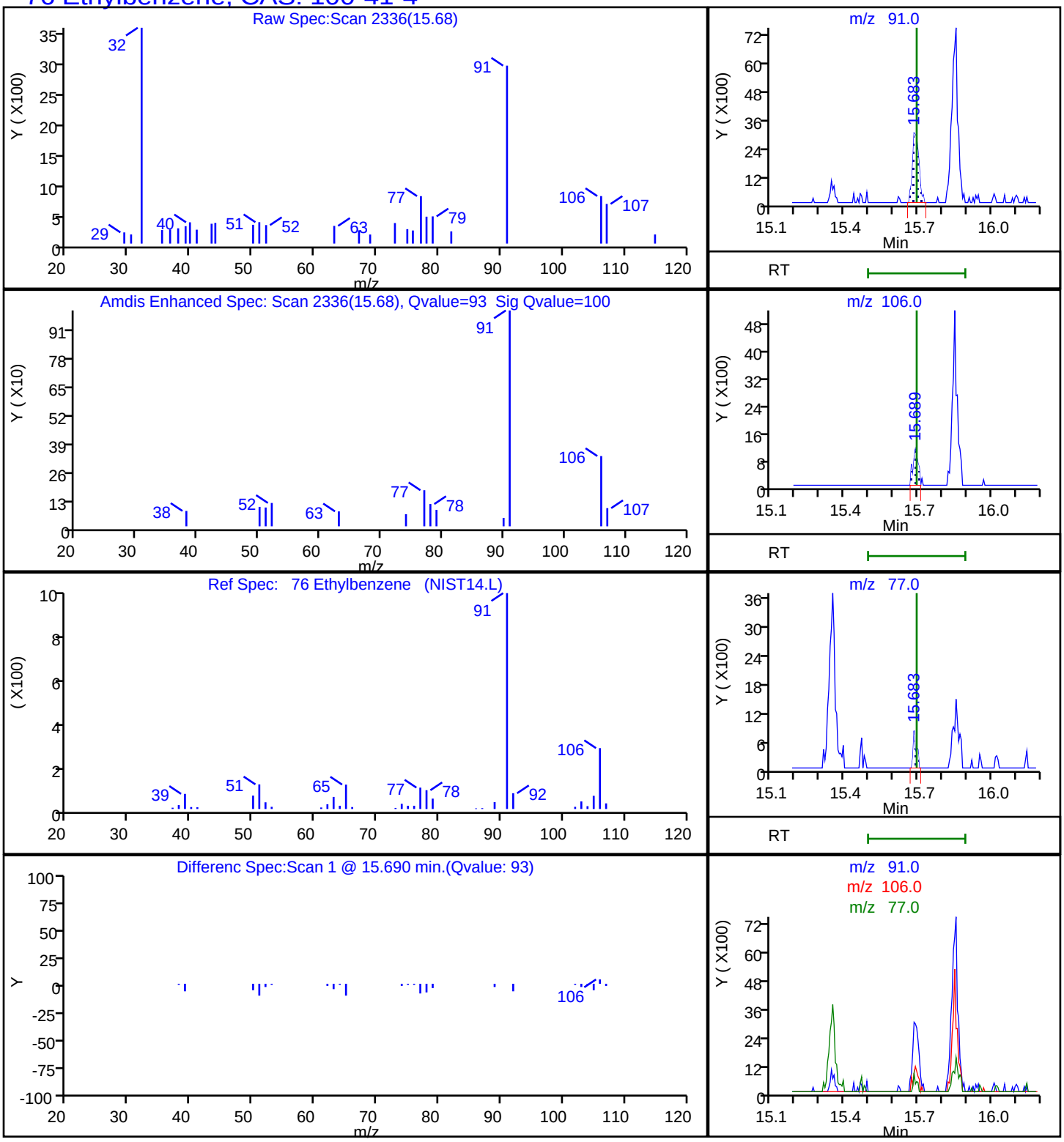
Lims ID:	140-20195-A-14	Lab Sample ID:	140-20195-14
Client ID:	IA-117-A-29		
Operator ID:	HMT	ALS Bottle#:	15 Worklist Smp#: 21
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

76 Ethylbenzene, CAS: 100-41-4



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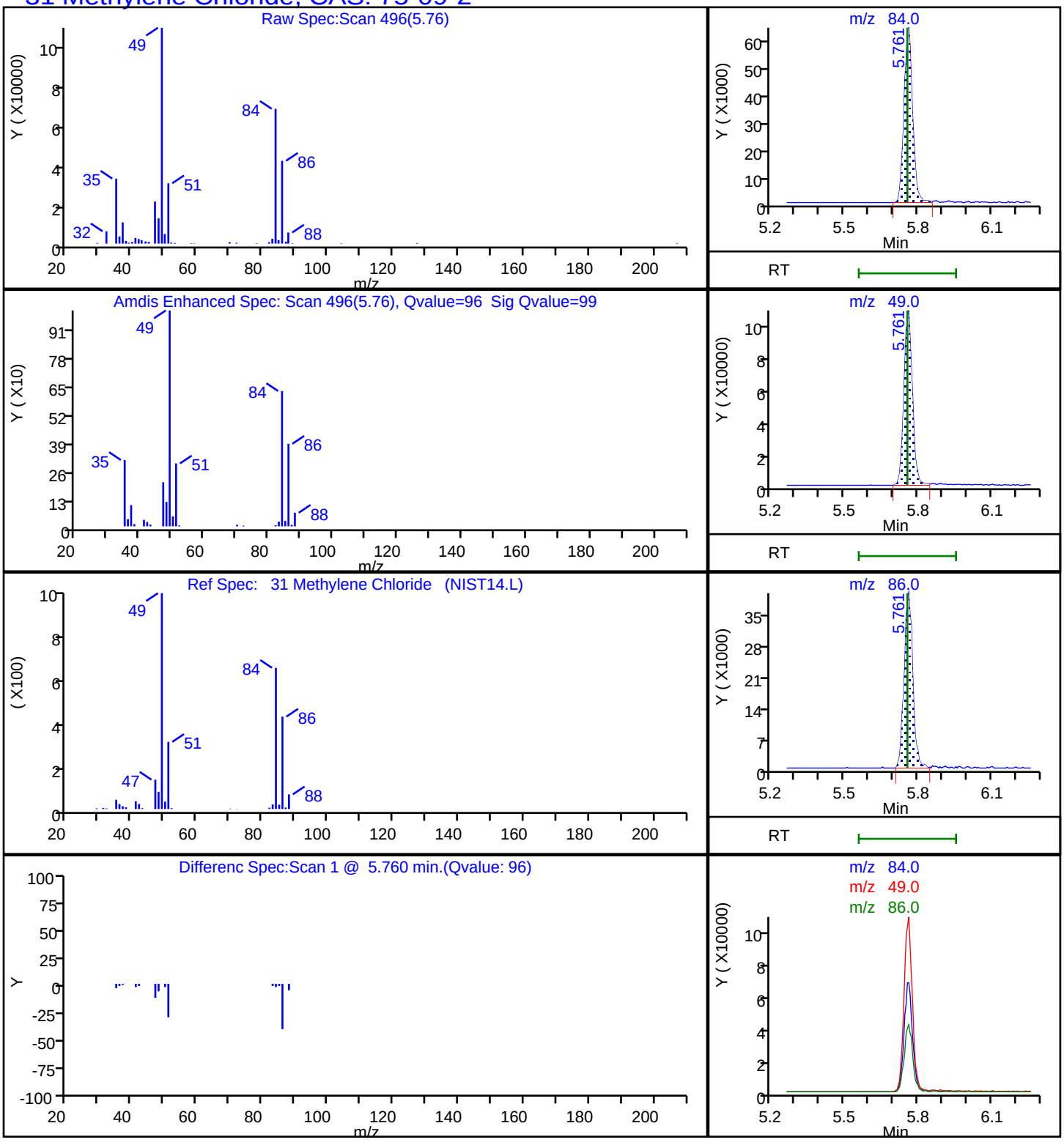
Lims ID:	140-20195-A-14	Lab Sample ID:	140-20195-14
Client ID:	IA-117-A-29		
Operator ID:	HMT	ALS Bottle#:	15 Worklist Smp#: 21
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

31 Methylene Chloride, CAS: 75-09-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P115.D		
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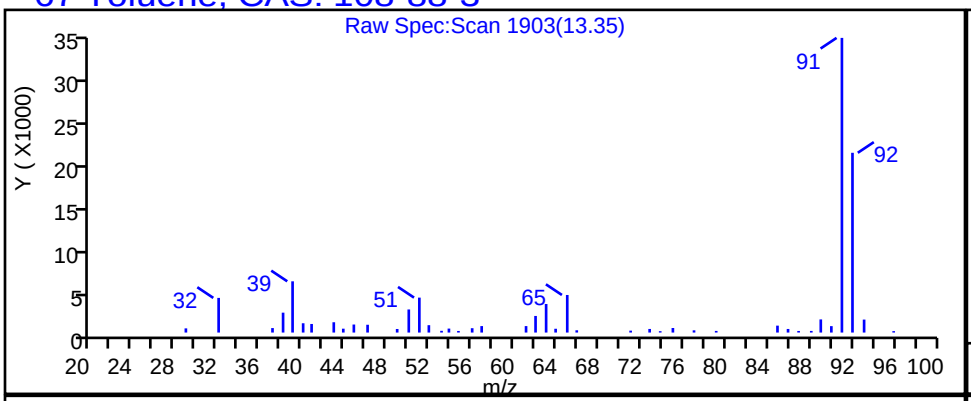
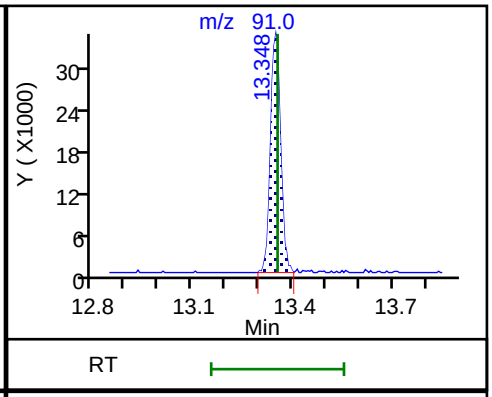
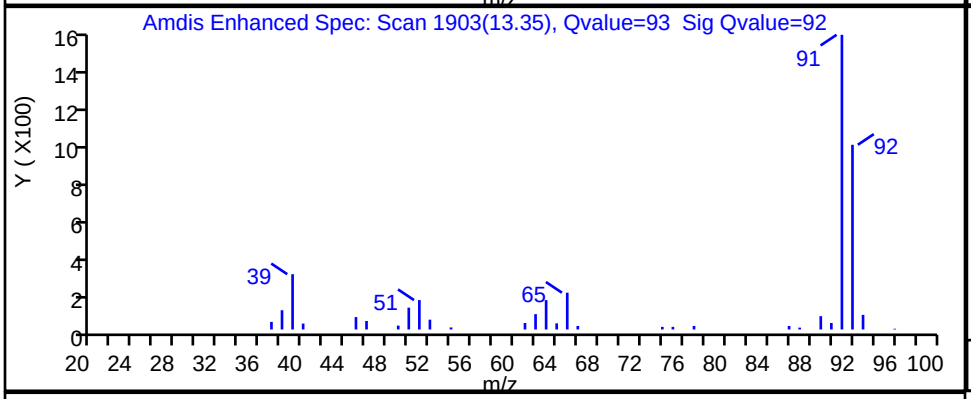
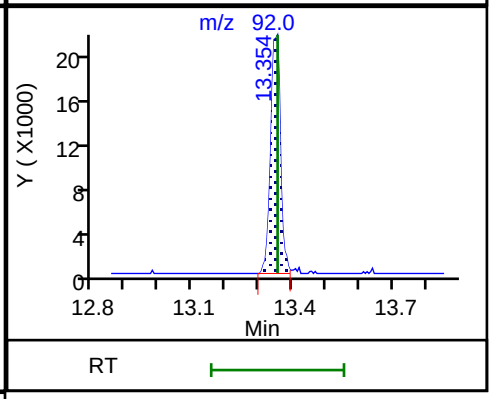
Lims ID:	140-20195-A-14	Lab Sample ID:	140-20195-14
Client ID:	IA-117-A-29		
Operator ID:	HMT	ALS Bottle#:	15 Worklist Smp#: 21
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

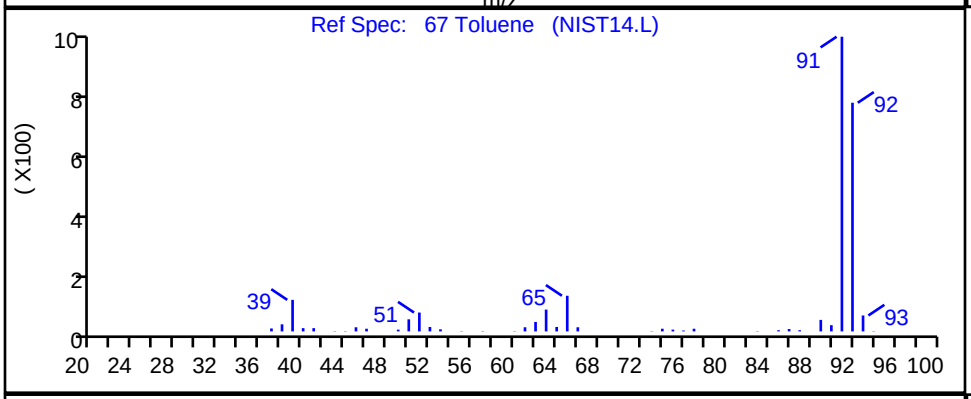
67 Toluene, CAS: 108-88-3

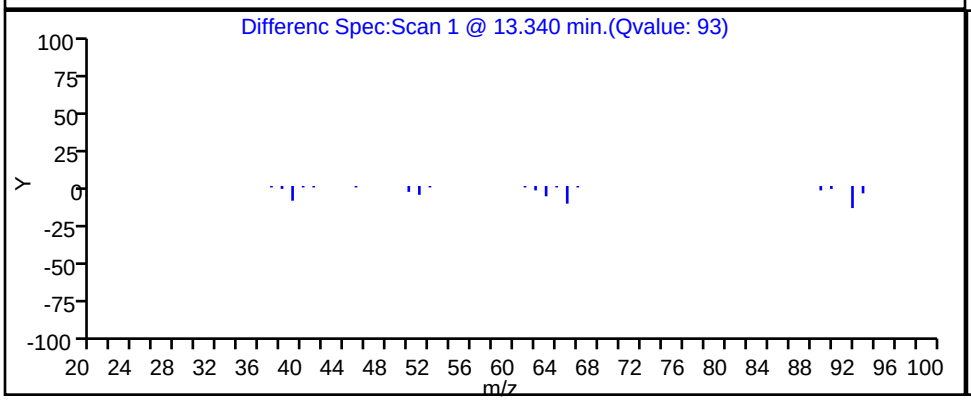


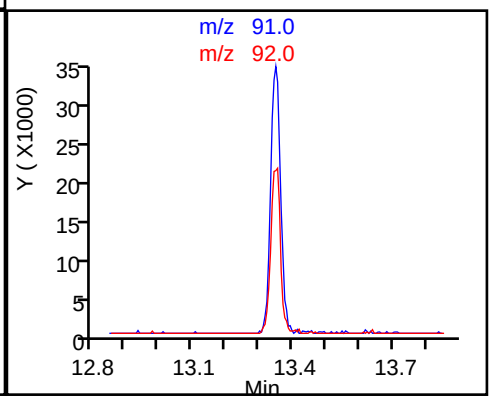








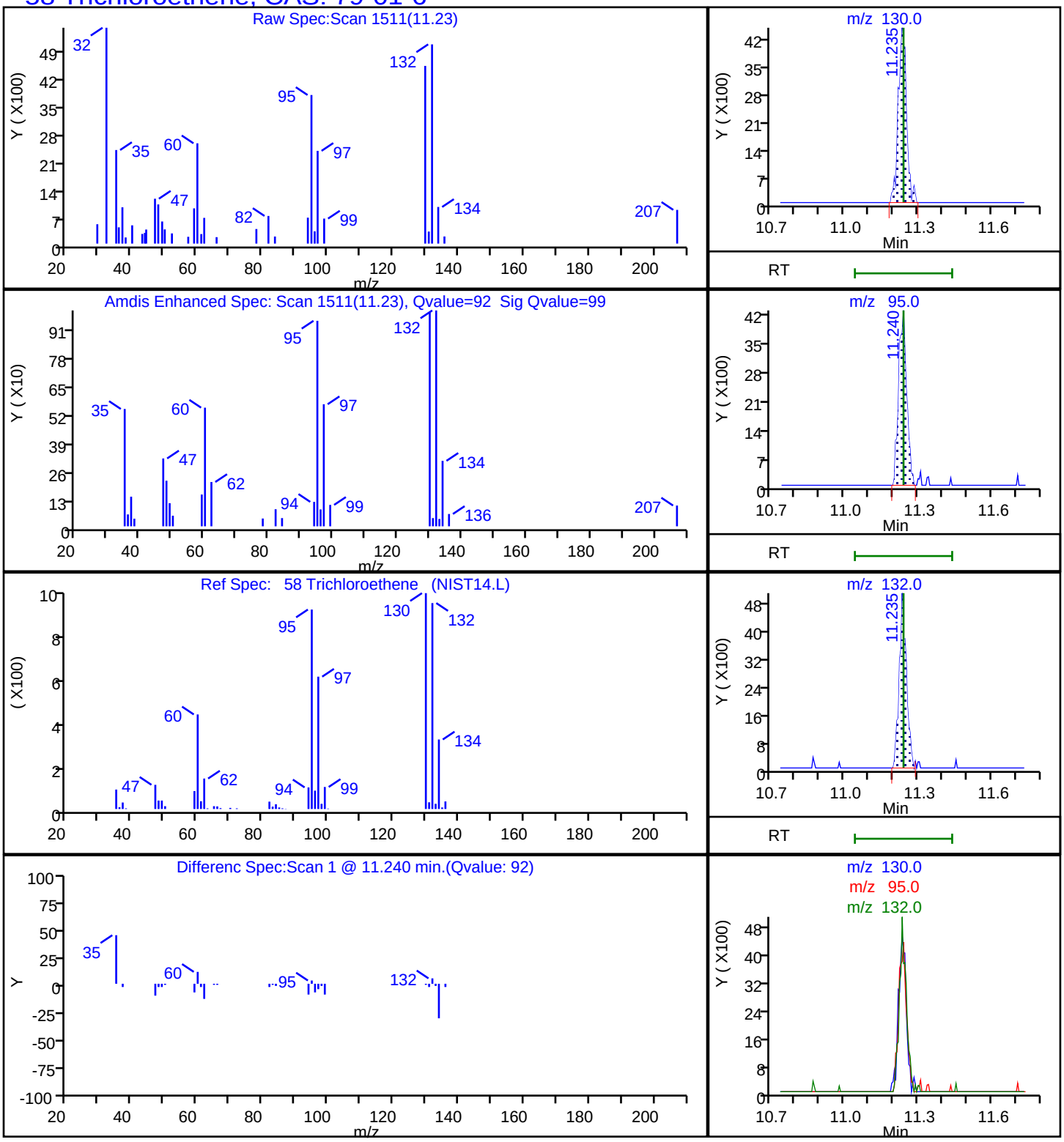




Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P115.D		
Injection Date:	06-Sep-2020 02:07:30	Instrument ID:	MR
Lims ID:	140-20195-A-14	Lab Sample ID:	140-20195-14
Client ID:	IA-117-A-29		
Operator ID:	HMT	ALS Bottle#:	15 Worklist Smp#: 21
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

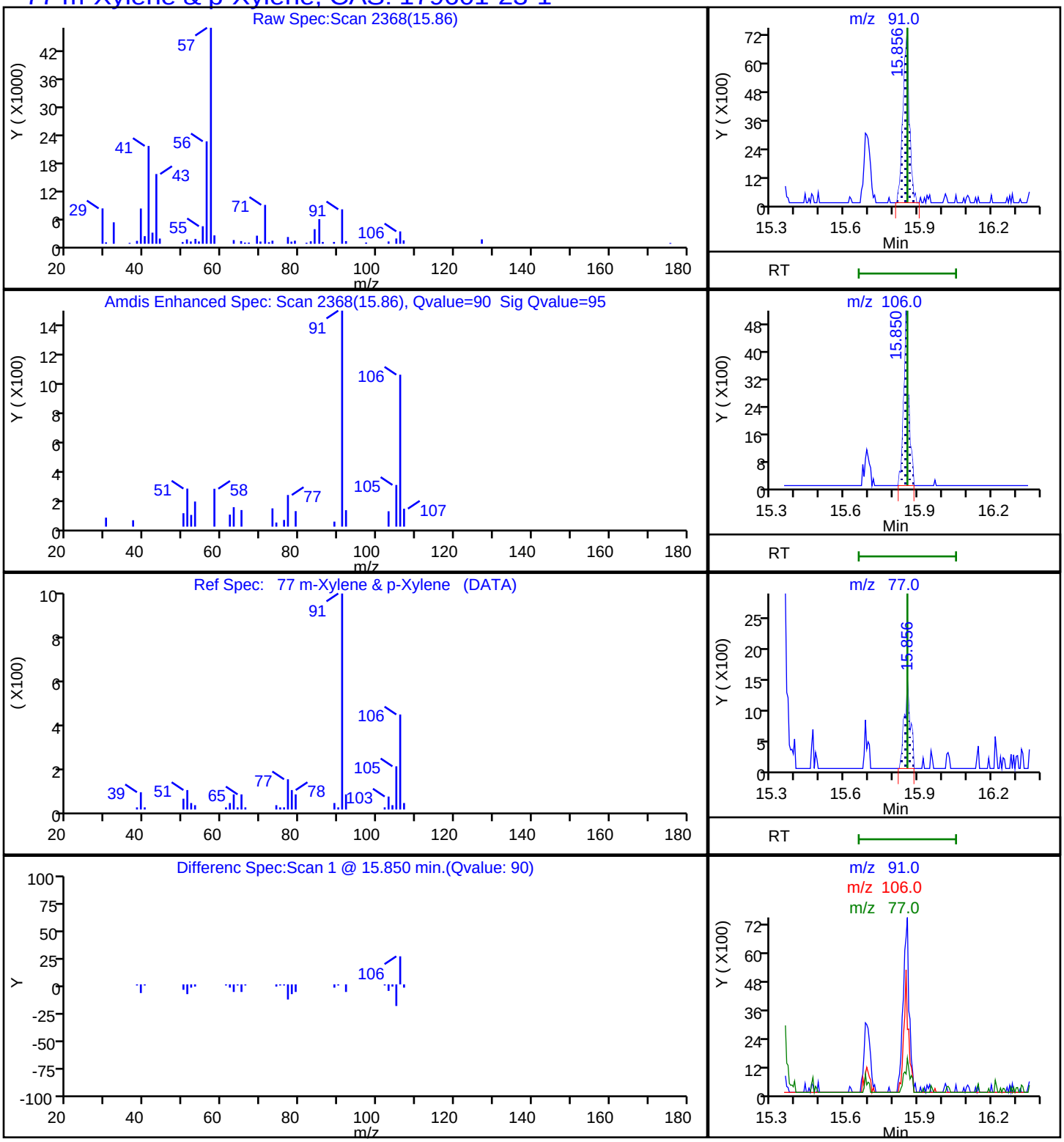
58 Trichloroethene, CAS: 79-01-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P115.D				
Injection Date:	06-Sep-2020 02:07:30	Instrument ID:	MR		
Lims ID:	140-20195-A-14	Lab Sample ID:	140-20195-14		
Client ID:	IA-117-A-29				
Operator ID:	HMT	ALS Bottle#:	15	Worklist Smp#:	21
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

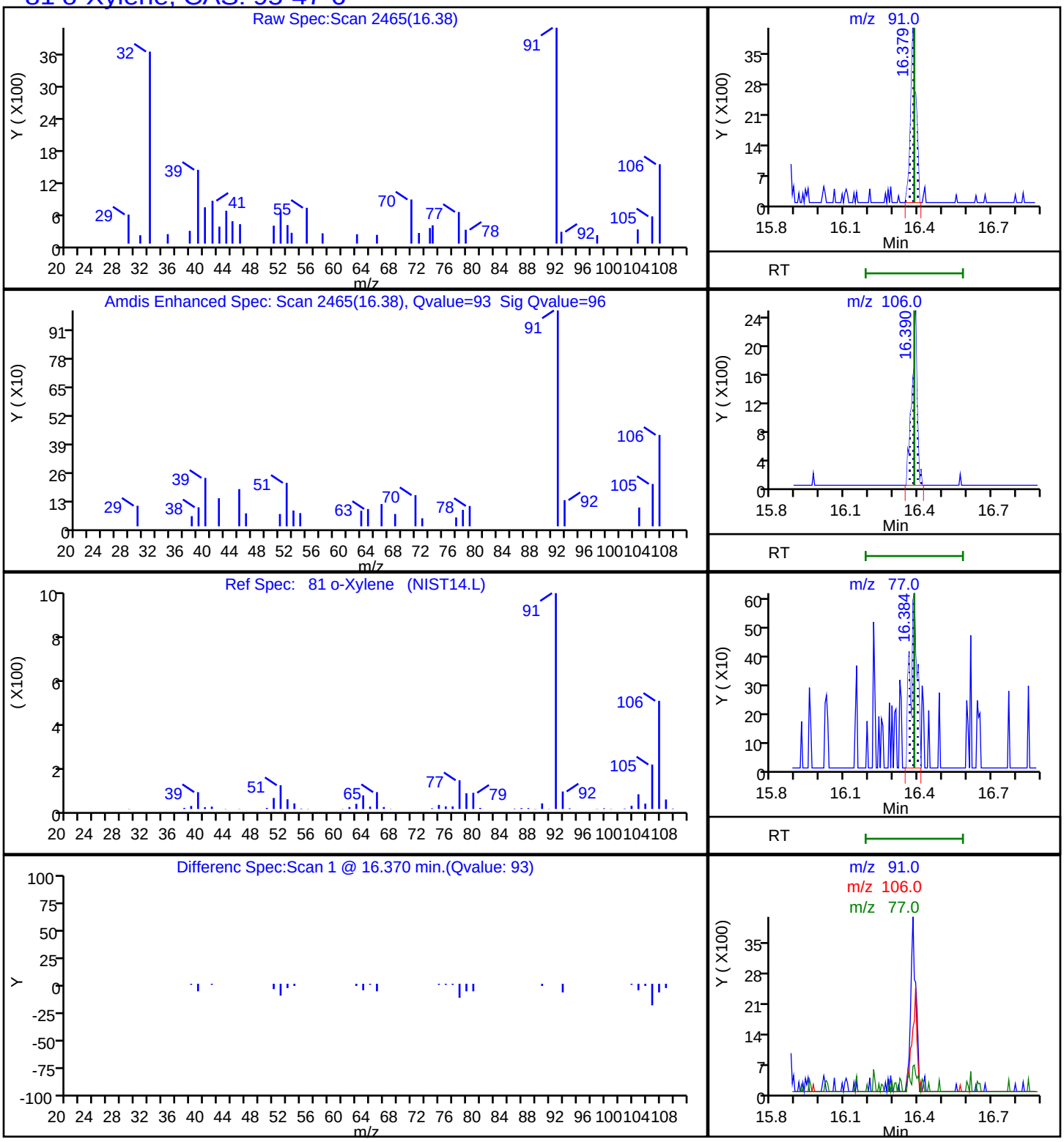
77 m-Xylene & p-Xylene, CAS: 179601-23-1



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P115.D				
Injection Date:	06-Sep-2020 02:07:30	Instrument ID:	MR		
Lims ID:	140-20195-A-14	Lab Sample ID:	140-20195-14		
Client ID:	IA-117-A-29				
Operator ID:	HMT	ALS Bottle#:	15	Worklist Smp#:	21
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

81 o-Xylene, CAS: 95-47-6



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Knoxville

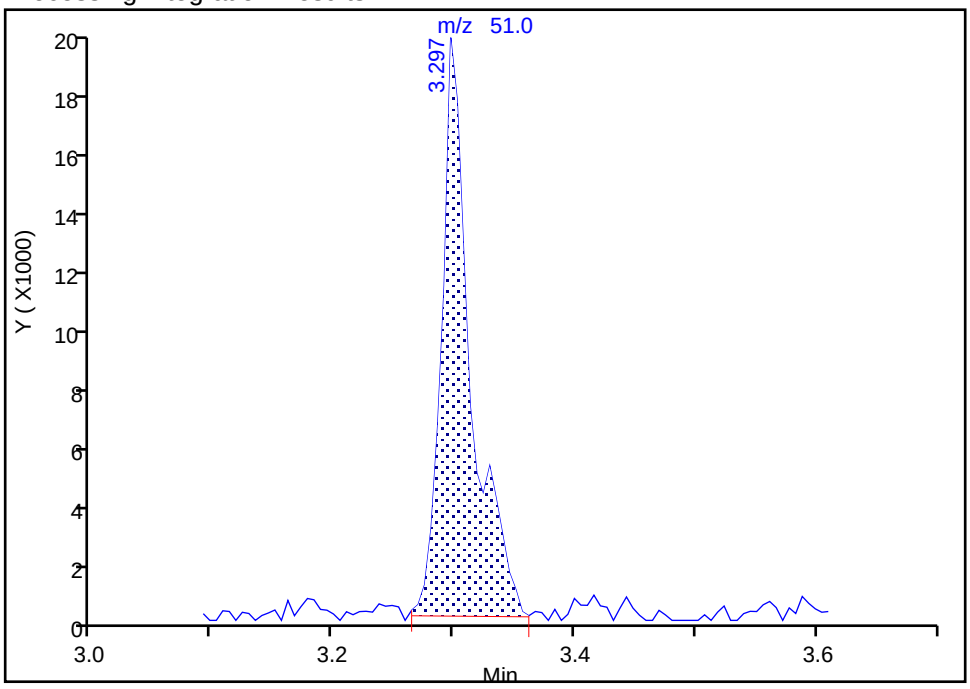
Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P115.D				
Injection Date:	06-Sep-2020 02:07:30	Instrument ID:	MR		
Lims ID:	140-20195-A-14	Lab Sample ID:	140-20195-14		
Client ID:	IA-117-A-29				
Operator ID:	HMT	ALS Bottle#:	15	Worklist Smp#:	21
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

6 Chlorodifluoromethane, CAS: 75-45-6

Signal: 1

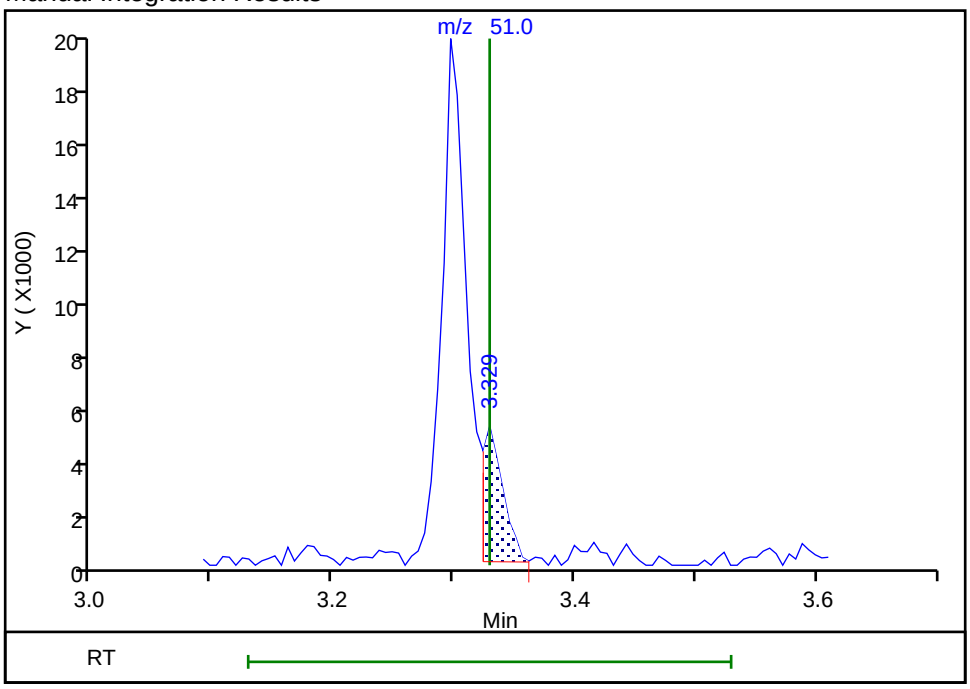
Processing Integration Results

RT: 3.30
Area: 33079
Amount: 0.422758
Amount Units: ppb v/v



Manual Integration Results

RT: 3.33
Area: 6019
Amount: 0.076924
Amount Units: ppb v/v



Reviewer: tajh, 06-Sep-2020 07:08:18
Audit Action: Split an Integrated Peak Audit Reason: Split Peak

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Client Sample ID: IA-079-A-29 Lab Sample ID: 140-20195-15

Matrix: Air Lab File ID: RI05P116.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 16:09

Sample wt/vol: 145(mL) Date Analyzed: 09/06/2020 02:55

Soil Aliquot Vol: Dilution Factor: 1.45

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42483 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.065	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.072	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	0.30	J	0.40	0.11
67-66-3	Chloroform	119.38	ND		0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.37	J	0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	0.14	J	0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.035
108-88-3	Toluene	92.14	1.8		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	ND		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.68	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	89		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Client Sample ID: IA-079-A-29 Lab Sample ID: 140-20195-15

Matrix: Air Lab File ID: RI05P116.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 16:09

Sample wt/vol: 145(mL) Date Analyzed: 09/06/2020 02:55

Soil Aliquot Vol: Dilution Factor: 1.45

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42483 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.21	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.45	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	1.1	J	1.4	0.39
67-66-3	Chloroform	119.38	ND		2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	1.8	J	2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	0.59	J	1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.24
108-88-3	Toluene	92.14	6.7		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	ND		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	3.0	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	89		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P116.D				
Lims ID:	140-20195-A-15				
Client ID:	IA-079-A-29				
Sample Type:	Client				
Inject. Date:	06-Sep-2020 02:55:30	ALS Bottle#:	16	Worklist Smp#:	22
Purge Vol:	500.000 mL	Dil. Factor:	1.4500		
Sample Info:	140-0016508-022				
Misc. Info.:	140-20195-a-15@1.45				
Operator ID:	HMT	Instrument ID:	MR		
Method:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\MR_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	06-Sep-2020 07:11:26	Calib Date:	29-Aug-2020 00:02:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1023				
First Level Reviewer: tajh		Date:	06-Sep-2020 07:08:43		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.274	8.274	0.000	98	137279	4.80	
* 2 1,4-Difluorobenzene	114	10.501	10.512	-0.011	94	641931	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.349	15.349	0.000	88	515232	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	16.999	16.999	0.000	92	284567	4.13	
6 Chlorodifluoromethane	51	3.329	3.329	0.000	67	4584	0.0597	
8 Dichlorodifluoromethane	85	3.383	3.383	0.000	91	4234	0.0734	
51 Benzene	78	9.914	9.924	-0.010	1	1452	0.0129	
52 Carbon tetrachloride	117	9.946	9.946	0.000	46	1036	0.0143	
67 Toluene	91	13.354	13.354	0.000	93	49246	0.3550	
76 Ethylbenzene	91	15.700	15.694	0.006	90	4768	0.0271	
77 m-Xylene & p-Xylene	91	15.856	15.856	0.000	48	13679	0.1021	
81 o-Xylene	91	16.379	16.384	-0.005	79	4799	0.0346	
S 117 Xylenes, Total	100				0		0.1367	

Reagents:

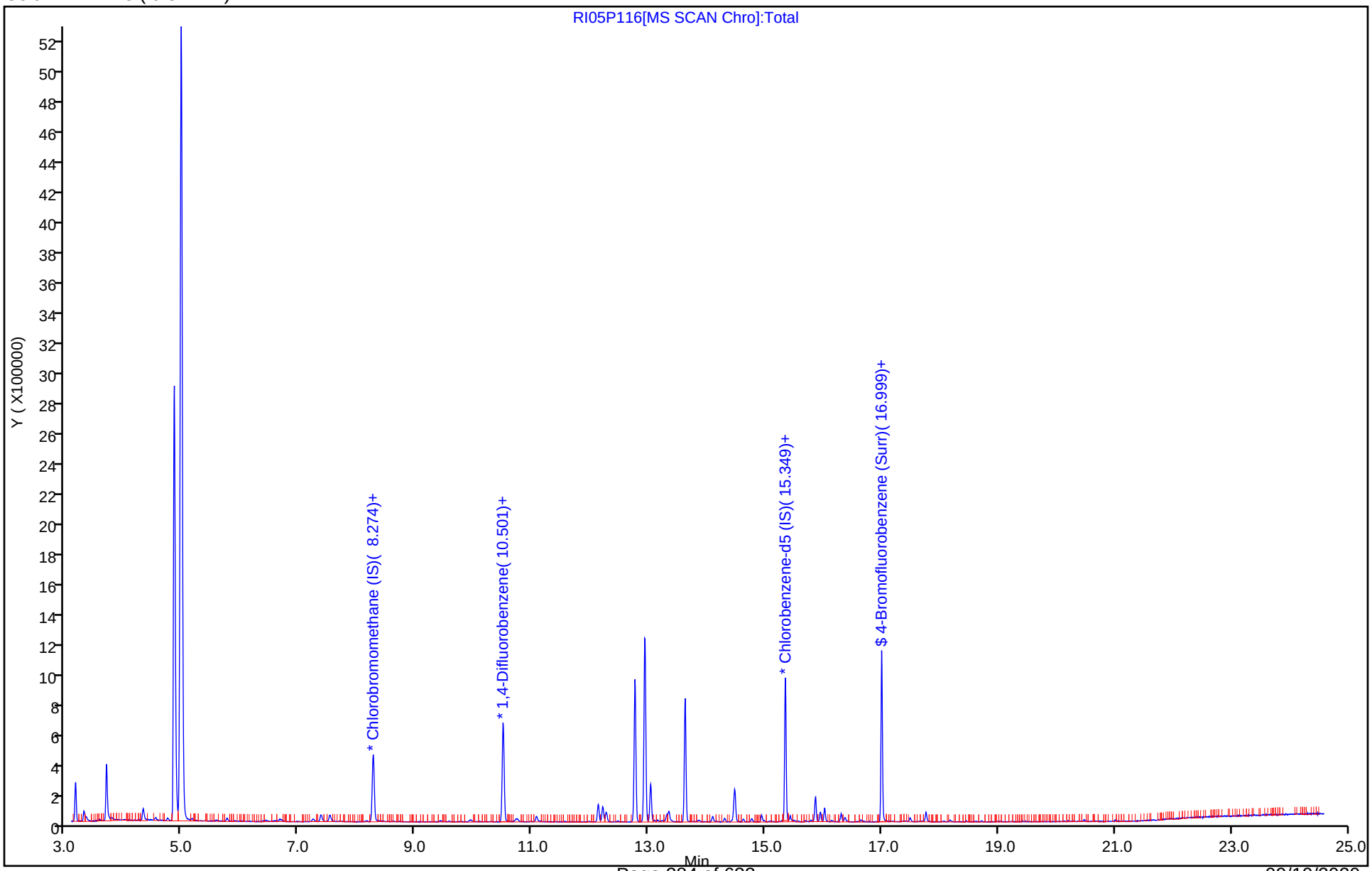
40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

Report Date: 06-Sep-2020 07:12:01 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P116.D				
Injection Date:	06-Sep-2020 02:55:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	140-20195-A-15	Lab Sample ID:	140-20195-15	Worklist Smp#:	22
Client ID:	IA-079-A-29				
Purge Vol:	500.000 mL	Dil. Factor:	1.4500	ALS Bottle#:	16
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P116.D				
Lims ID:	140-20195-A-15				
Client ID:	IA-079-A-29				
Sample Type:	Client				
Inject. Date:	06-Sep-2020 02:55:30	ALS Bottle#:	16	Worklist Smp#:	22
Purge Vol:	500.000 mL	Dil. Factor:	1.4500		
Sample Info:	140-0016508-022				
Misc. Info.:	140-20195-a-15@1.45				
Operator ID:	HMT	Instrument ID:	MR		
Method:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\MR_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	06-Sep-2020 07:11:26	Calib Date:	29-Aug-2020 00:02:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1023				
First Level Reviewer: tajh		Date:	06-Sep-2020 07:08:43		

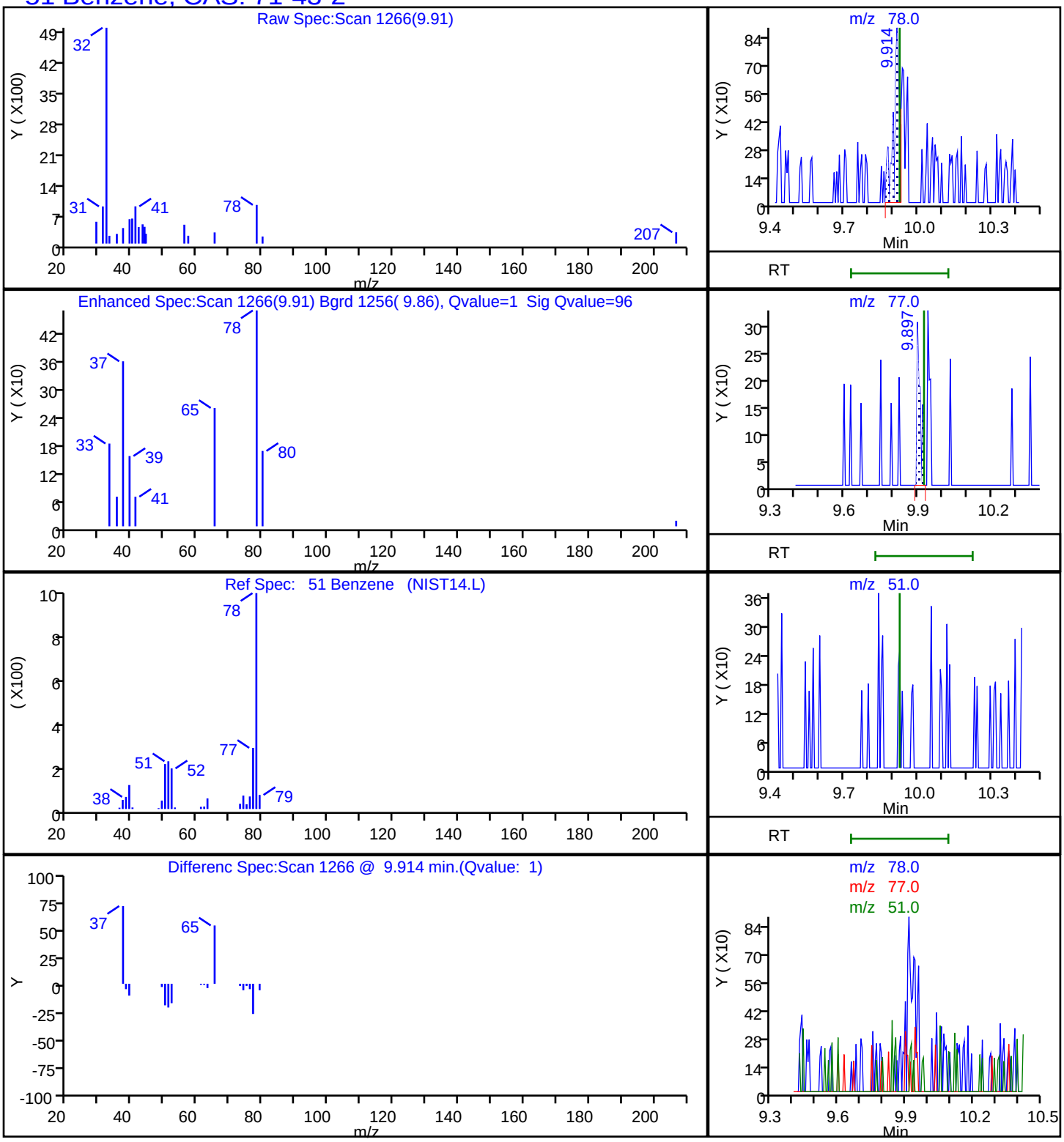
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	4.13	89.03

Report Date: 06-Sep-2020 07:12:01 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P116.D		
Injection Date:	06-Sep-2020 02:55:30	Instrument ID:	MR
Lims ID:	140-20195-A-15	Lab Sample ID:	140-20195-15
Client ID:	IA-079-A-29		
Operator ID:	HMT	ALS Bottle#:	16 Worklist Smp#: 22
Purge Vol:	500.000 mL	Dil. Factor:	1.4500
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

51 Benzene, CAS: 71-43-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P116.D				
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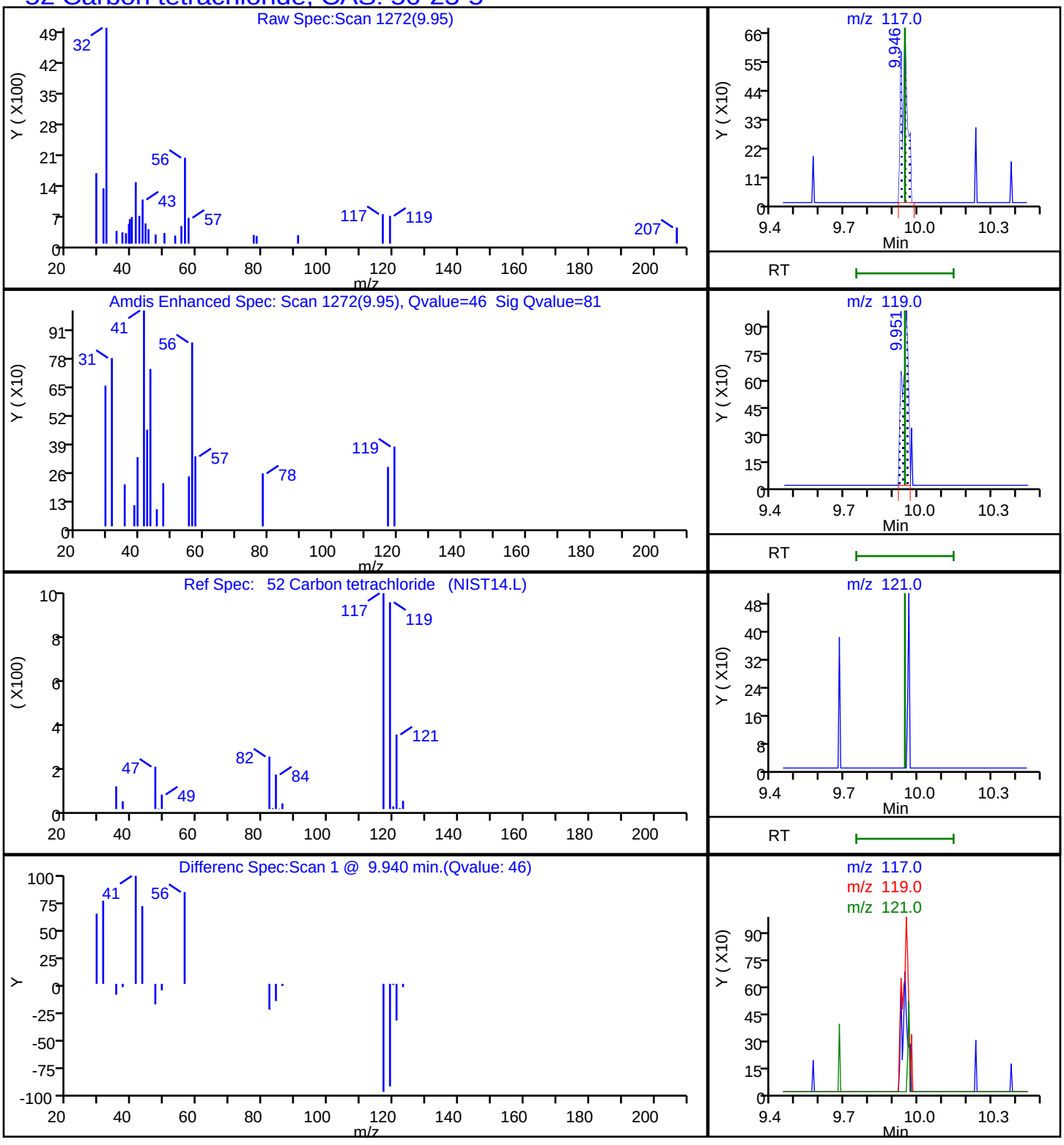
Lims ID:	140-20195-A-15	Lab Sample ID:	140-20195-15		
Client ID:	IA-079-A-29				
Operator ID:	HMT	ALS Bottle#:	16	Worklist Smp#:	22
Purge Vol:	500.000 mL	Dil. Factor:	1.4500		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

52 Carbon tetrachloride, CAS: 56-23-5



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P116.D				
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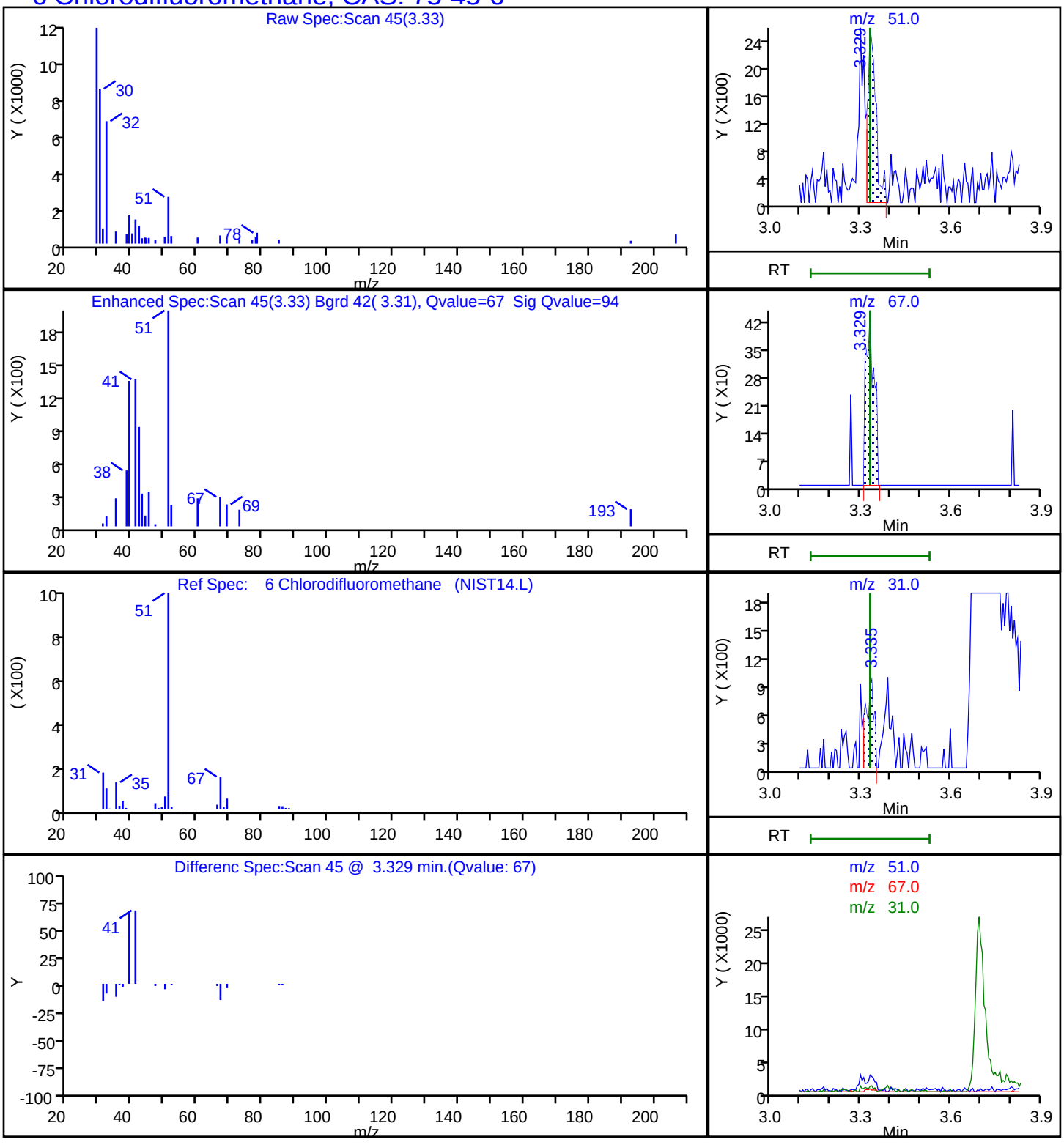
Lims ID:	140-20195-A-15	Lab Sample ID:	140-20195-15		
Client ID:	IA-079-A-29				
Operator ID:	HMT	ALS Bottle#:	16	Worklist Smp#:	22
Purge Vol:	500.000 mL	Dil. Factor:	1.4500		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

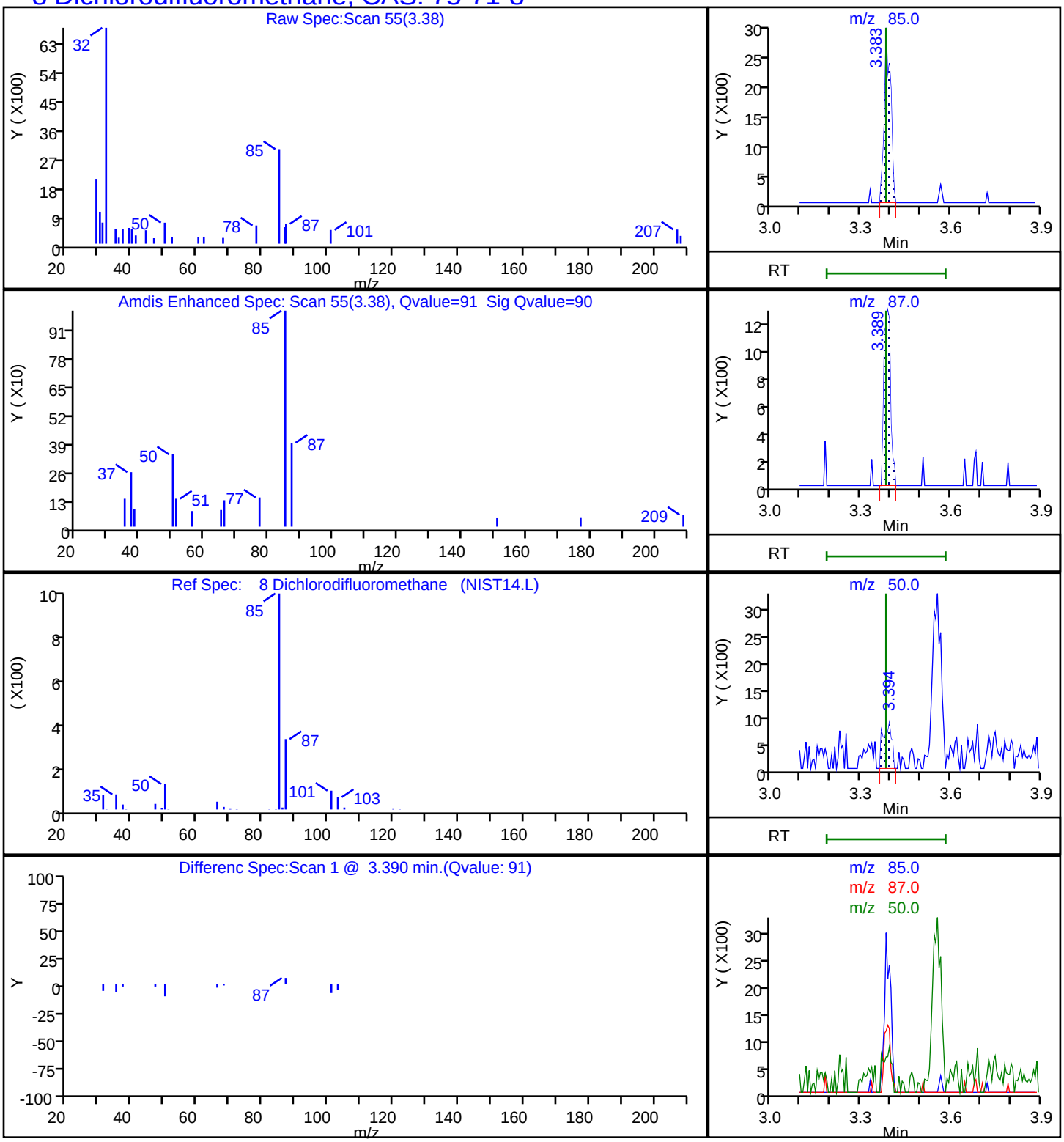
6 Chlorodifluoromethane, CAS: 75-45-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P116.D		
Injection Date:	06-Sep-2020 02:55:30	Instrument ID:	MR
Lims ID:	140-20195-A-15	Lab Sample ID:	140-20195-15
Client ID:	IA-079-A-29		
Operator ID:	HMT	ALS Bottle#:	16 Worklist Smp#: 22
Purge Vol:	500.000 mL	Dil. Factor:	1.4500
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

8 Dichlorodifluoromethane, CAS: 75-71-8



Eurofins TestAmerica, Knoxville

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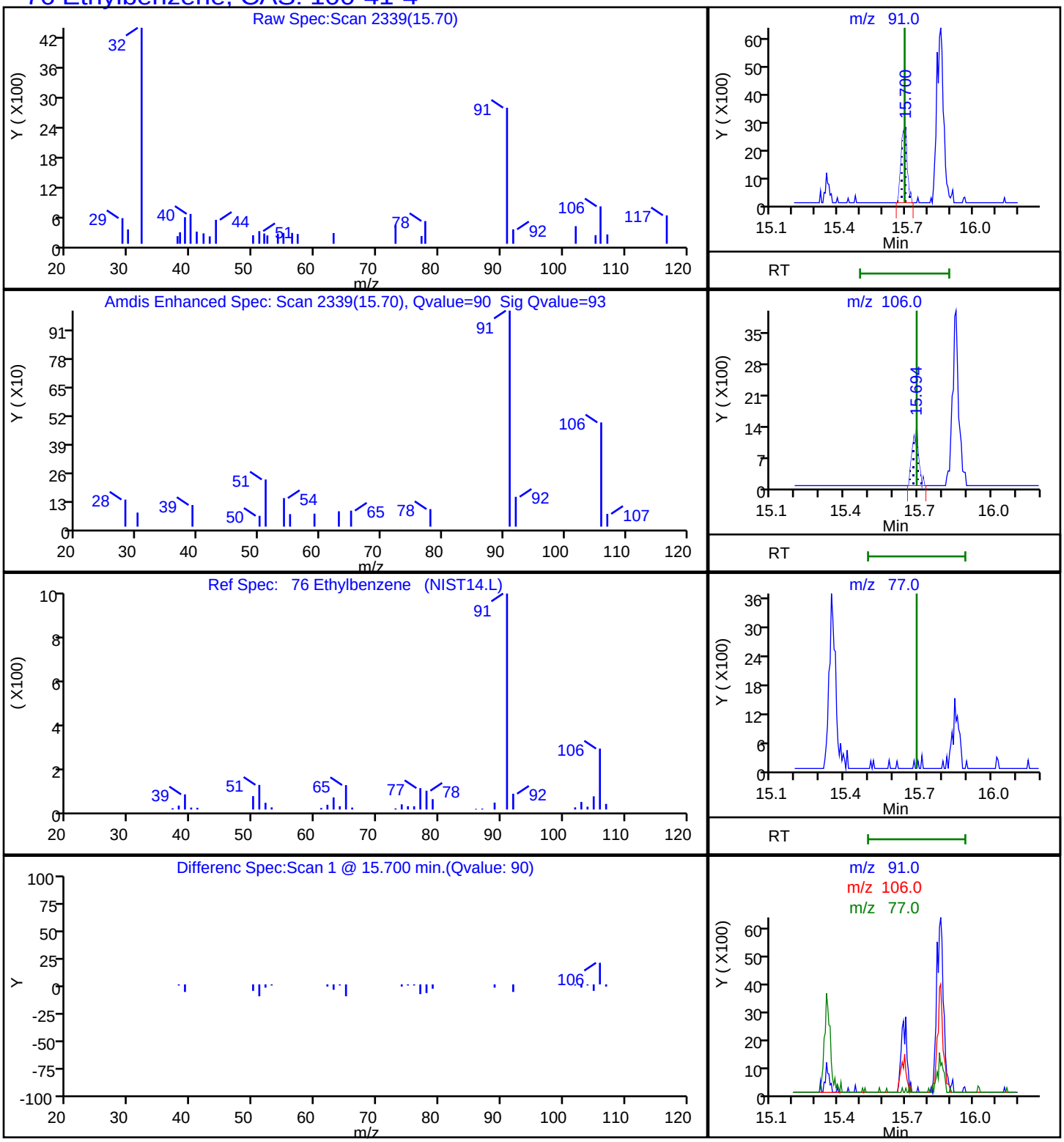
Lims ID:	140-20195-A-15	Lab Sample ID:	140-20195-15		
Client ID:	IA-079-A-29				
Operator ID:	HMT	ALS Bottle#:	16	Worklist Smp#:	22
Purge Vol:	500.000 mL	Dil. Factor:	1.4500		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

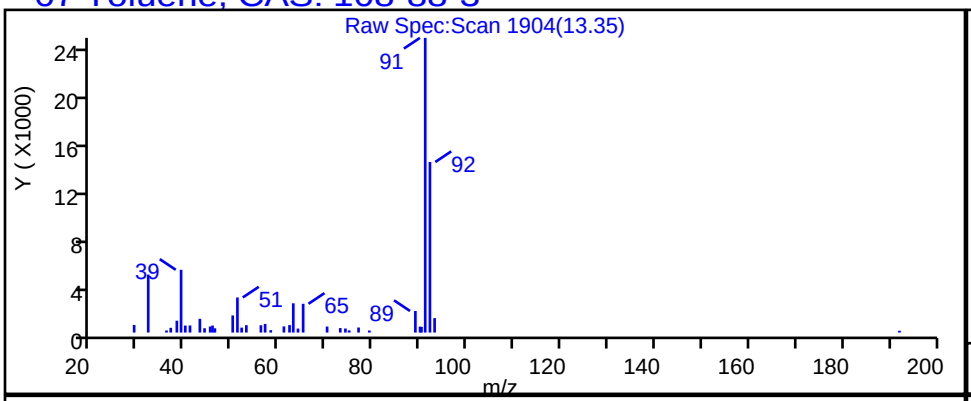
76 Ethylbenzene, CAS: 100-41-4

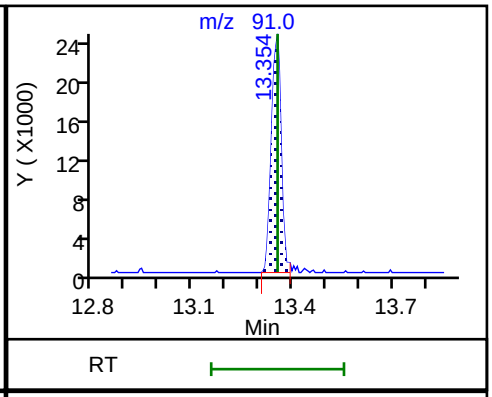


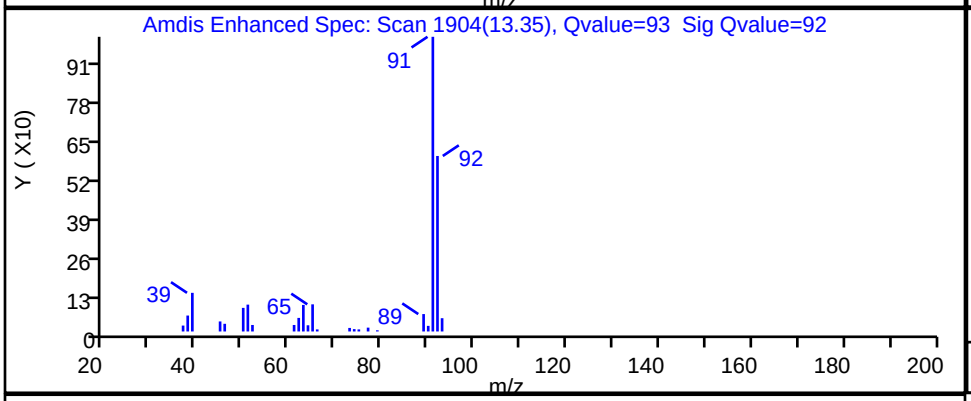
Eurofins TestAmerica, Knoxville

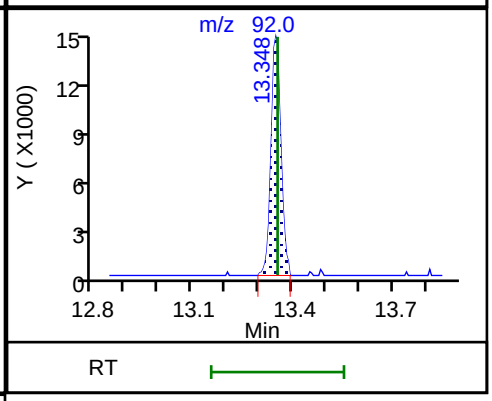
Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P116.D		
Injection Date:	06-Sep-2020 02:55:30	Instrument ID:	MR
Lims ID:	140-20195-A-15	Lab Sample ID:	140-20195-15
Client ID:	IA-079-A-29		
Operator ID:	HMT	ALS Bottle#:	16 Worklist Smp#: 22
Purge Vol:	500.000 mL	Dil. Factor:	1.4500
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

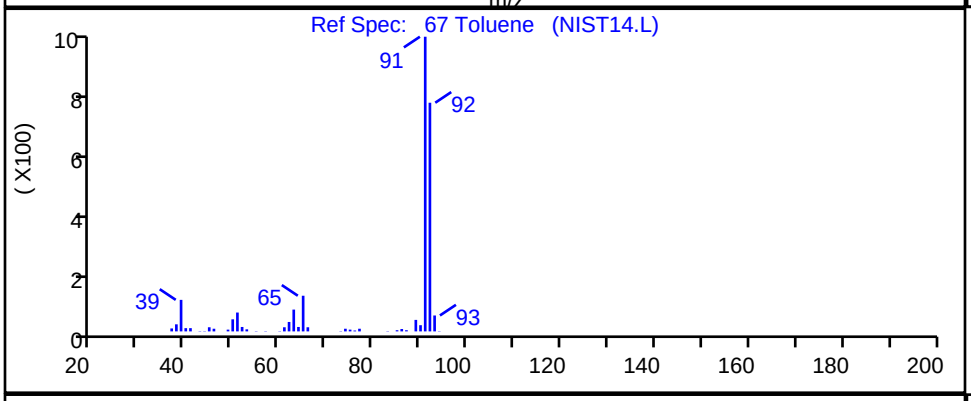
67 Toluene, CAS: 108-88-3

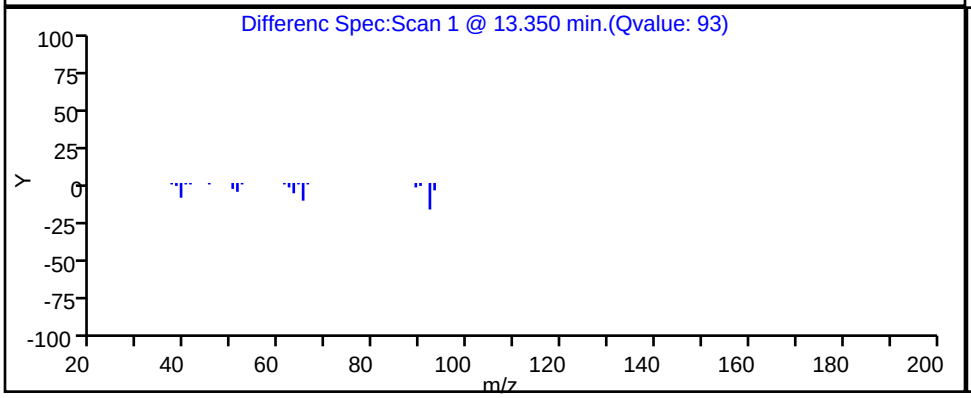


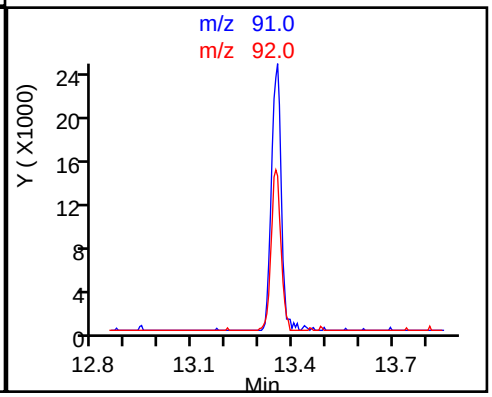










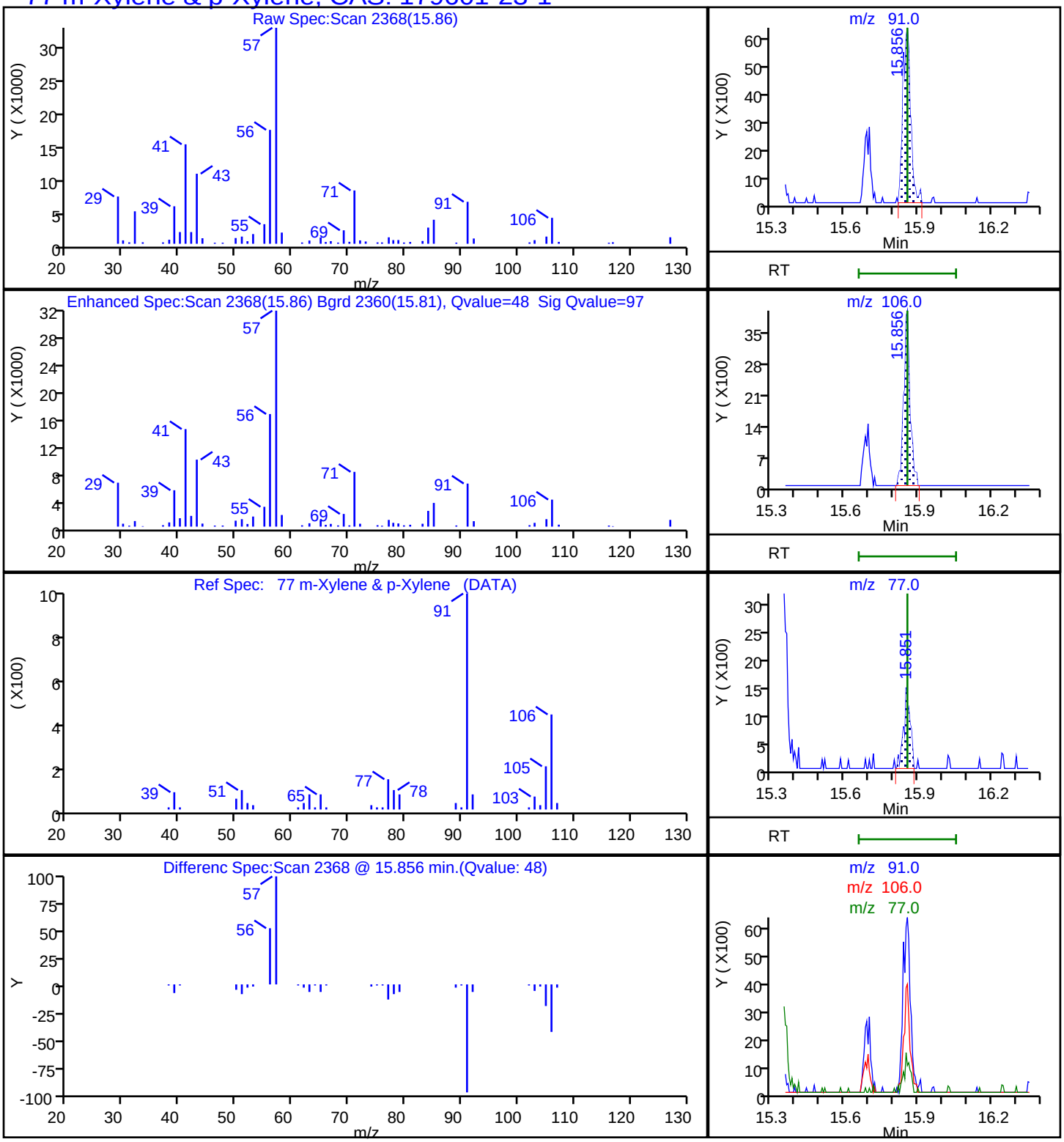


Report Date: 06-Sep-2020 07:12:01 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P116.D				
Injection Date:	06-Sep-2020 02:55:30	Instrument ID:	MR		
Lims ID:	140-20195-A-15	Lab Sample ID:	140-20195-15		
Client ID:	IA-079-A-29				
Operator ID:	HMT	ALS Bottle#:	16	Worklist Smp#:	22
Purge Vol:	500.000 mL	Dil. Factor:	1.4500		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

77 m-Xylene & p-Xylene, CAS: 179601-23-1

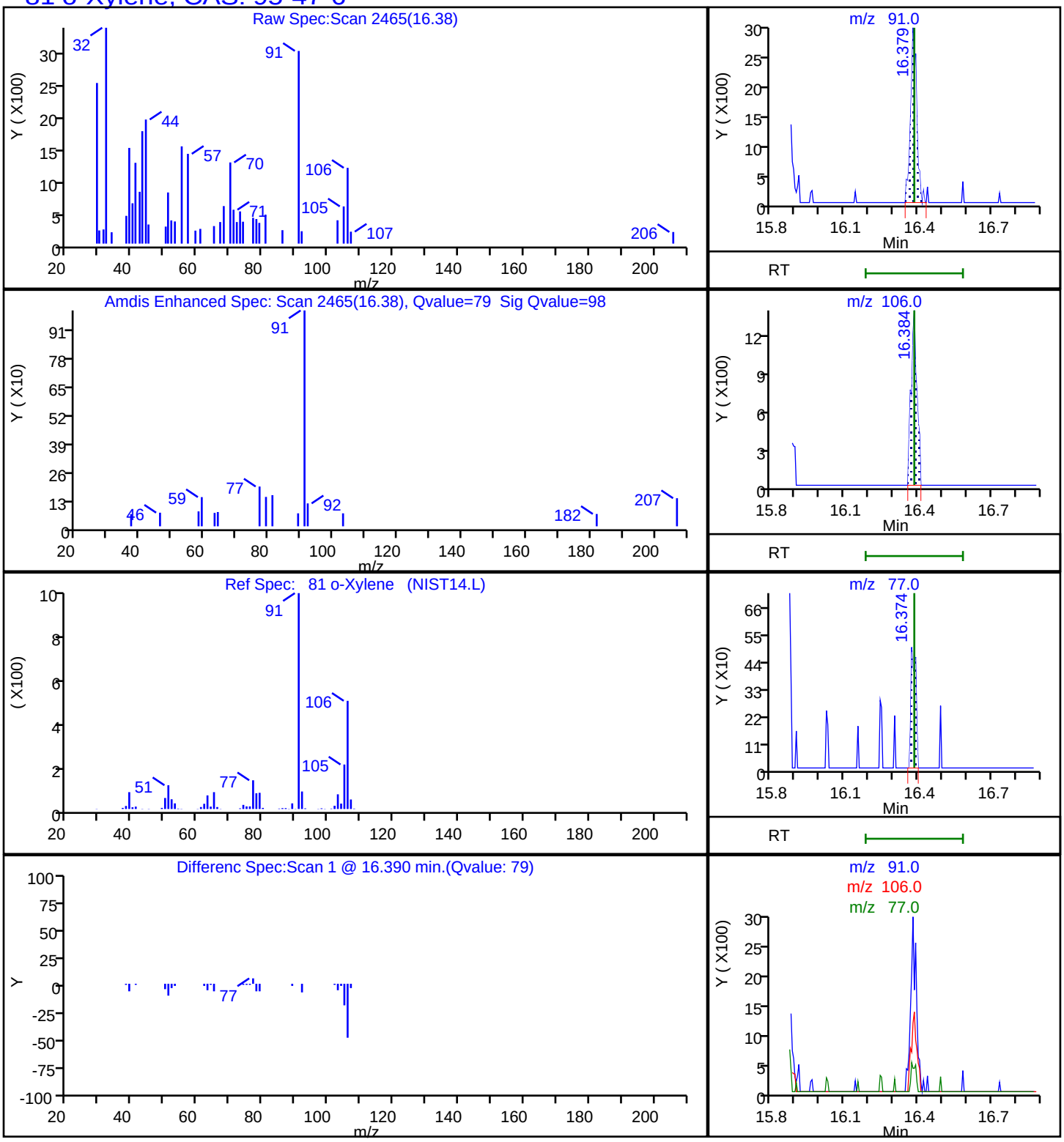


Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P116.D

Injection Date:	06-Sep-2020 02:55:30	Instrument ID:	MR		
Lims ID:	140-20195-A-15	Lab Sample ID:	140-20195-15		
Client ID:	IA-079-A-29				
Operator ID:	HMT	ALS Bottle#:	16	Worklist Smp#:	22
Purge Vol:	500.000 mL	Dil. Factor:	1.4500		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

81 o-Xylene, CAS: 95-47-6



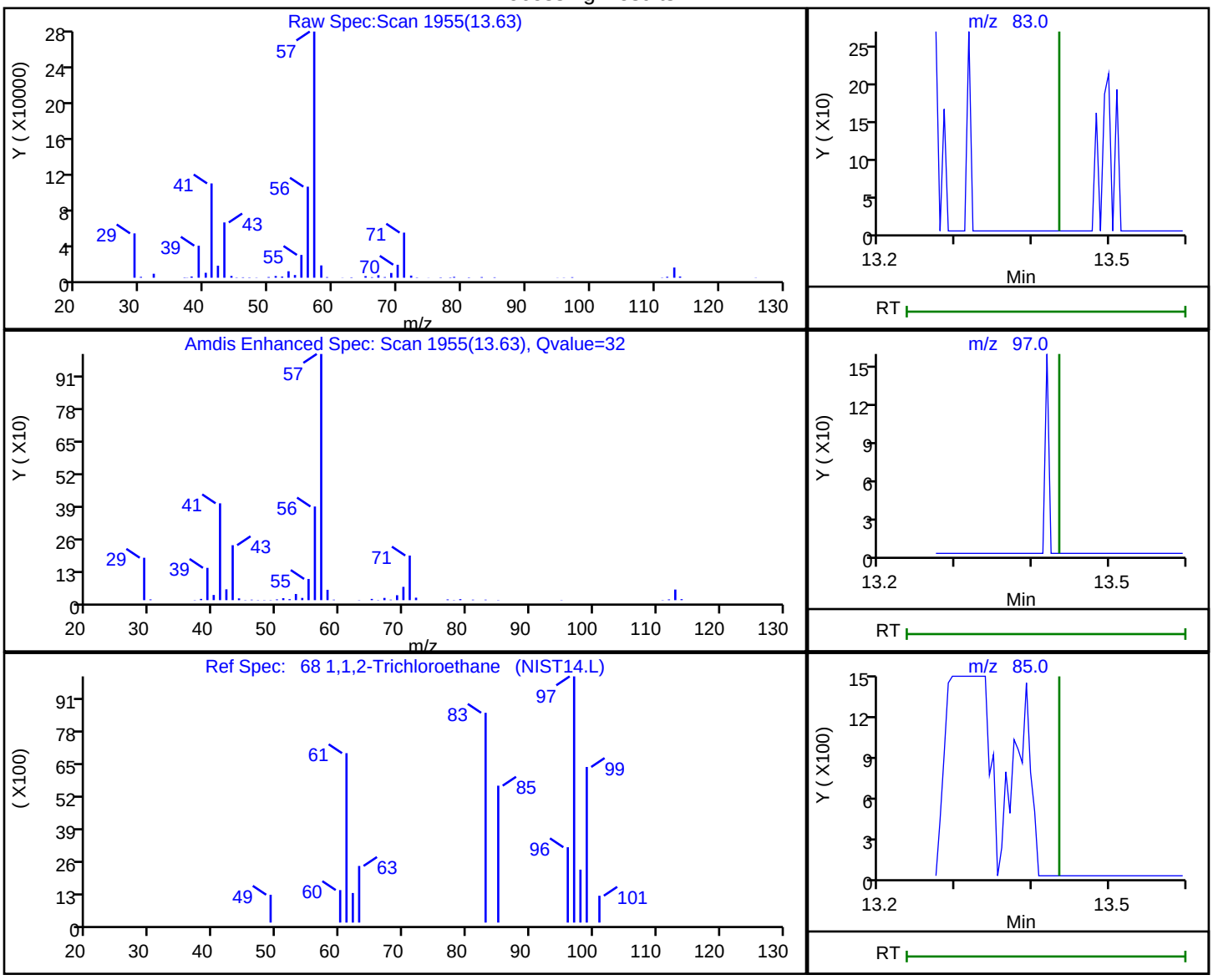
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P116.D				
Injection Date:	06-Sep-2020 02:55:30	Instrument ID:	MR		
Lims ID:	140-20195-A-15	Lab Sample ID:	140-20195-15		
Client ID:	IA-079-A-29				
Operator ID:	HMT	ALS Bottle#:	16	Worklist Smp#:	22
Purge Vol:	500.000 mL	Dil. Factor:	1.4500		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

68 1,1,2-Trichloroethane, CAS: 79-00-5

Processing Results



RT	Mass	Response	Amount
13.63	83.00	905	0.021562
13.63	97.00	607	
13.62	85.00	363	

Reviewer: tajh, 06-Sep-2020 07:08:39

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Client Sample ID: IA-118-A-29 Lab Sample ID: 140-20195-16

Matrix: Air Lab File ID: RI05P201R.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 16:11

Sample wt/vol: 100(mL) Date Analyzed: 09/06/2020 05:18

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42483 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.13	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.097	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	0.34	J	0.40	0.11
67-66-3	Chloroform	119.38	ND		0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.37	J	0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	0.12	J	0.40	0.065
75-09-2	Methylene Chloride	84.93	3.9		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.035
108-88-3	Toluene	92.14	1.2		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	ND		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.64	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	90		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Client Sample ID: IA-118-A-29 Lab Sample ID: 140-20195-16

Matrix: Air Lab File ID: RI05P201R.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 16:11

Sample wt/vol: 100(mL) Date Analyzed: 09/06/2020 05:18

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42483 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.41	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.61	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	1.2	J	1.4	0.39
67-66-3	Chloroform	119.38	ND		2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	1.8	J	2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	0.54	J	1.7	0.28
75-09-2	Methylene Chloride	84.93	14		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.24
108-88-3	Toluene	92.14	4.5		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	ND		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	2.8	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	90		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P201R.D
Lims ID: 140-20195-A-16
Client ID: IA-118-A-29
Sample Type: Client
Inject. Date: 06-Sep-2020 05:18:30 ALS Bottle#: 1 Worklist Smp#: 25
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016508-025
Misc. Info.: 140-20195-a-16
Operator ID: HMT Instrument ID: MR

Method: \\chromfs\Knoxville\ChromData\MR\20200904-16508.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 06-Sep-2020 07:11:26 Calib Date: 29-Aug-2020 00:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1023

First Level Reviewer: tajh Date: 06-Sep-2020 07:10:47

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.285	8.274	0.011	96	135275	4.80	
* 2 1,4-Difluorobenzene	114	10.512	10.512	0.000	94	632484	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.349	15.349	0.000	88	510854	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	16.999	16.999	0.000	92	286427	4.19	
6 Chlorodifluoromethane	51	3.324	3.329	-0.005	93	5167	0.0682	
8 Dichlorodifluoromethane	85	3.389	3.383	0.006	91	4212	0.0741	
31 Methylene Chloride	84	5.788	5.756	0.032	95	25881	0.7852	
51 Benzene	78	9.919	9.924	-0.005	65	2856	0.0258	
52 Carbon tetrachloride	117	9.946	9.946	0.000	40	1385	0.0194	
67 Toluene	91	13.349	13.354	-0.005	90	33057	0.2404	
76 Ethylbenzene	91	15.694	15.694	0.000	91	4330	0.0249	
77 m-Xylene & p-Xylene	91	15.851	15.856	-0.005	96	12113	0.0912	
81 o-Xylene	91	16.390	16.384	0.006	71	4991	0.0363	
S 117 Xylenes, Total	100				0		0.1275	

Reagents:

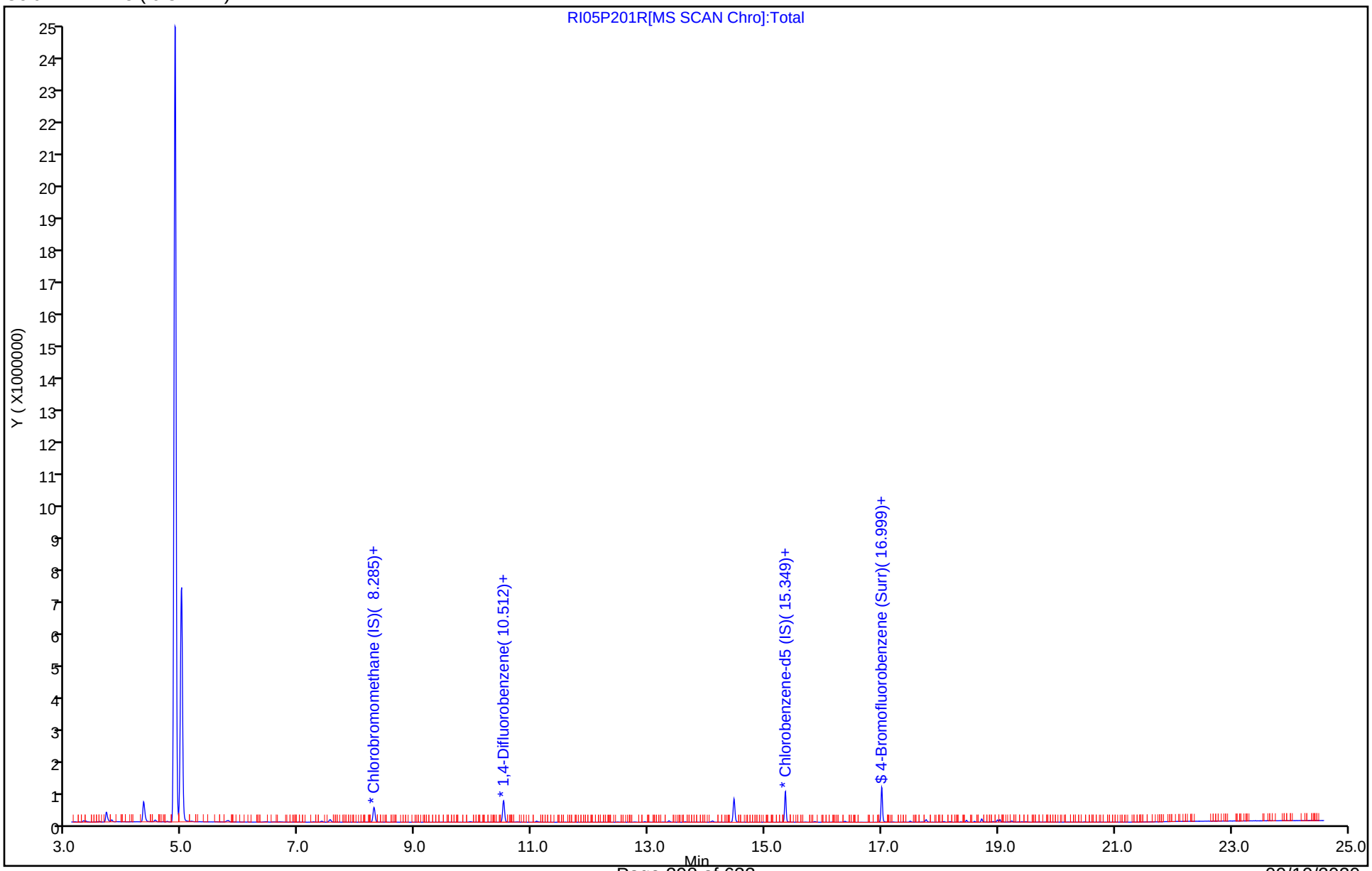
40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

Report Date: 06-Sep-2020 07:12:04 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P201R.D				
Injection Date:	06-Sep-2020 05:18:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	140-20195-A-16	Lab Sample ID:	140-20195-16	Worklist Smp#:	25
Client ID:	IA-118-A-29				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P201R.D				
Lims ID:	140-20195-A-16				
Client ID:	IA-118-A-29				
Sample Type:	Client				
Inject. Date:	06-Sep-2020 05:18:30	ALS Bottle#:	1	Worklist Smp#:	25
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016508-025				
Misc. Info.:	140-20195-a-16				
Operator ID:	HMT	Instrument ID:	MR		
Method:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\MR_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	06-Sep-2020 07:11:26	Calib Date:	29-Aug-2020 00:02:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1023				
First Level Reviewer: tajh		Date:	06-Sep-2020 07:10:47		

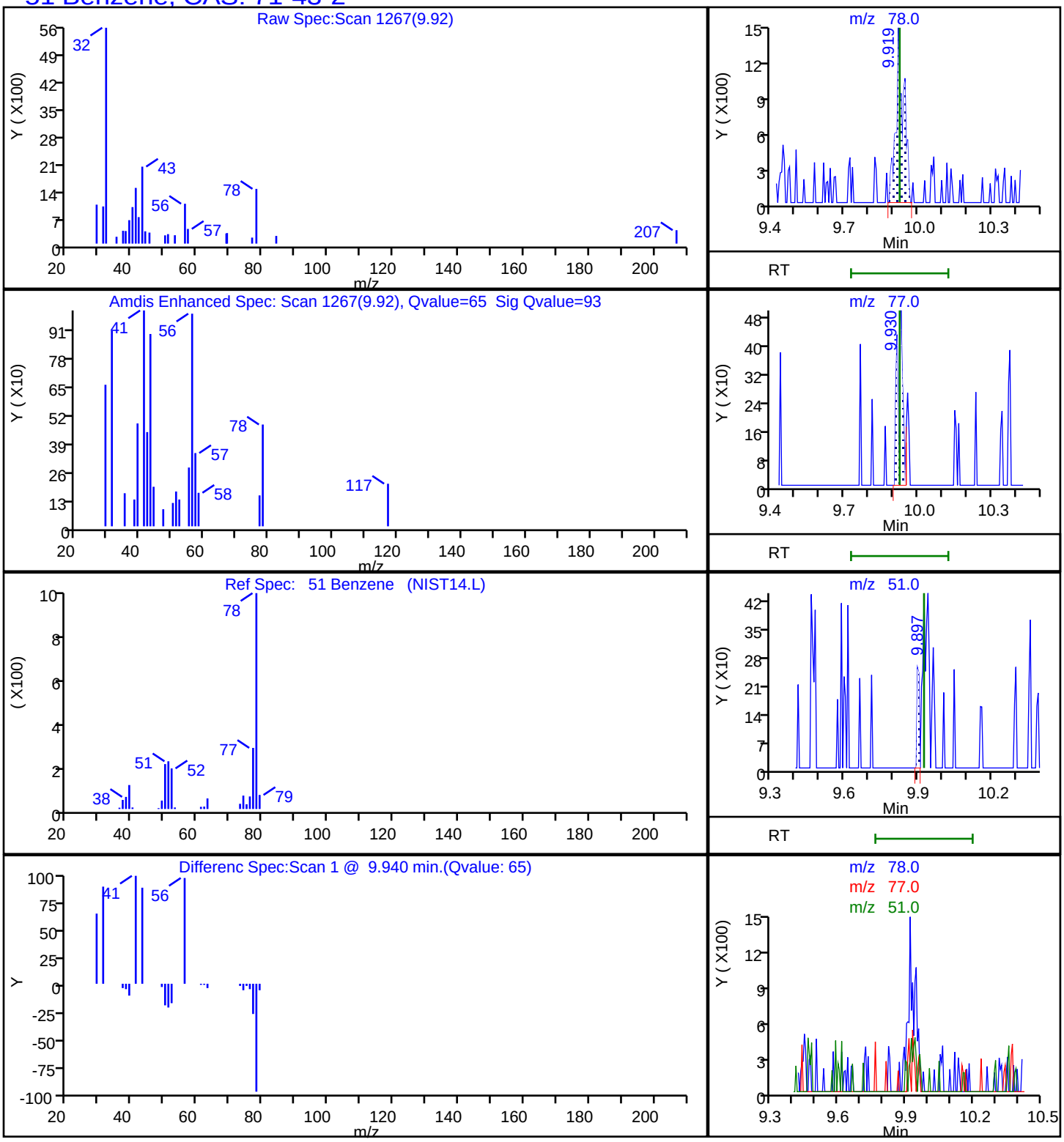
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	4.19	90.38

Report Date: 06-Sep-2020 07:12:04 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P201R.D		
Injection Date:	06-Sep-2020 05:18:30	Instrument ID:	MR
Lims ID:	140-20195-A-16	Lab Sample ID:	140-20195-16
Client ID:	IA-118-A-29		
Operator ID:	HMT	ALS Bottle#:	1 Worklist Smp#: 25
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

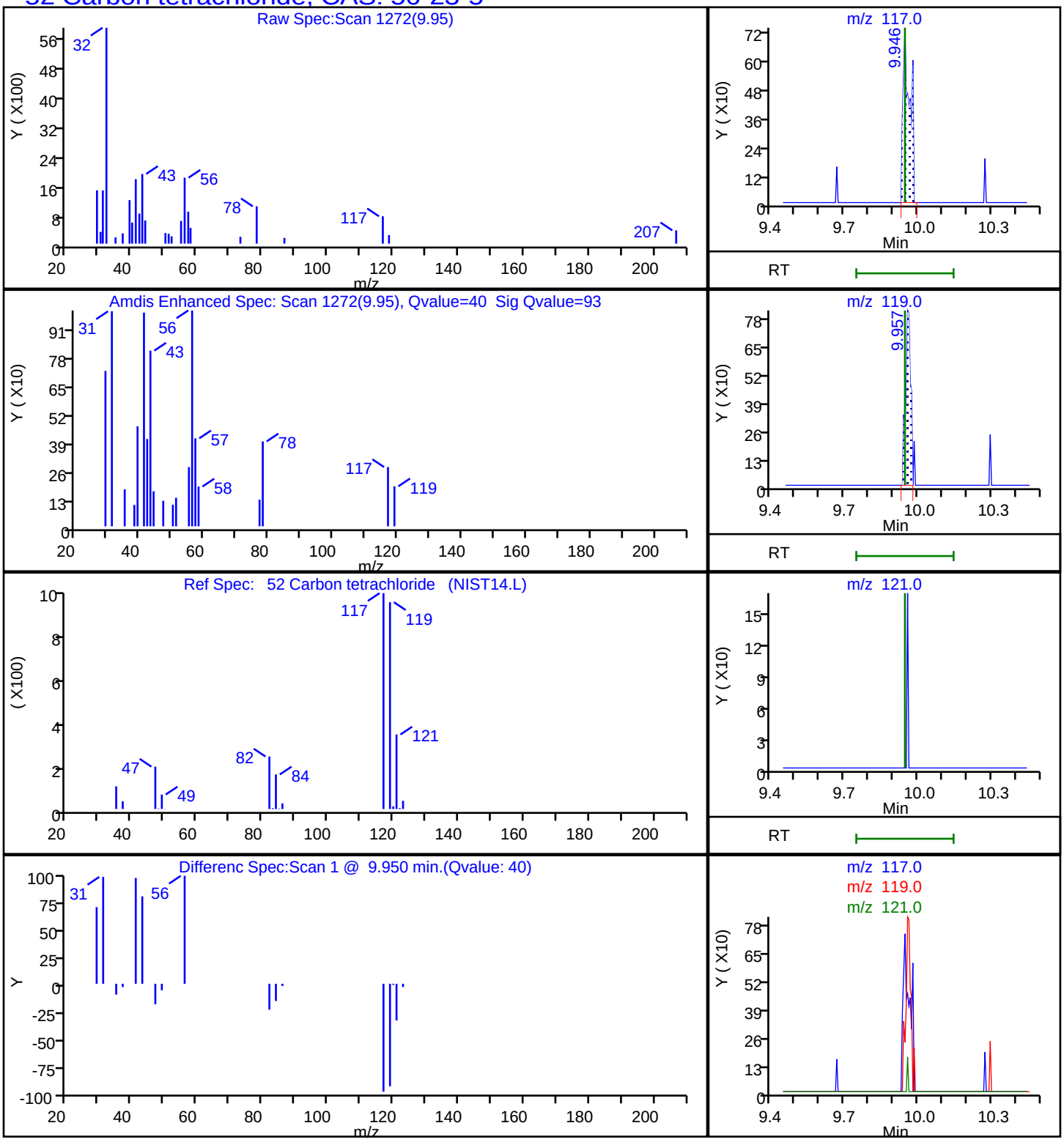
51 Benzene, CAS: 71-43-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P201R.D				
Injection Date:	06-Sep-2020 05:18:30	Instrument ID:	MR		
Lims ID:	140-20195-A-16	Lab Sample ID:	140-20195-16		
Client ID:	IA-118-A-29				
Operator ID:	HMT	ALS Bottle#:	1	Worklist Smp#:	25
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

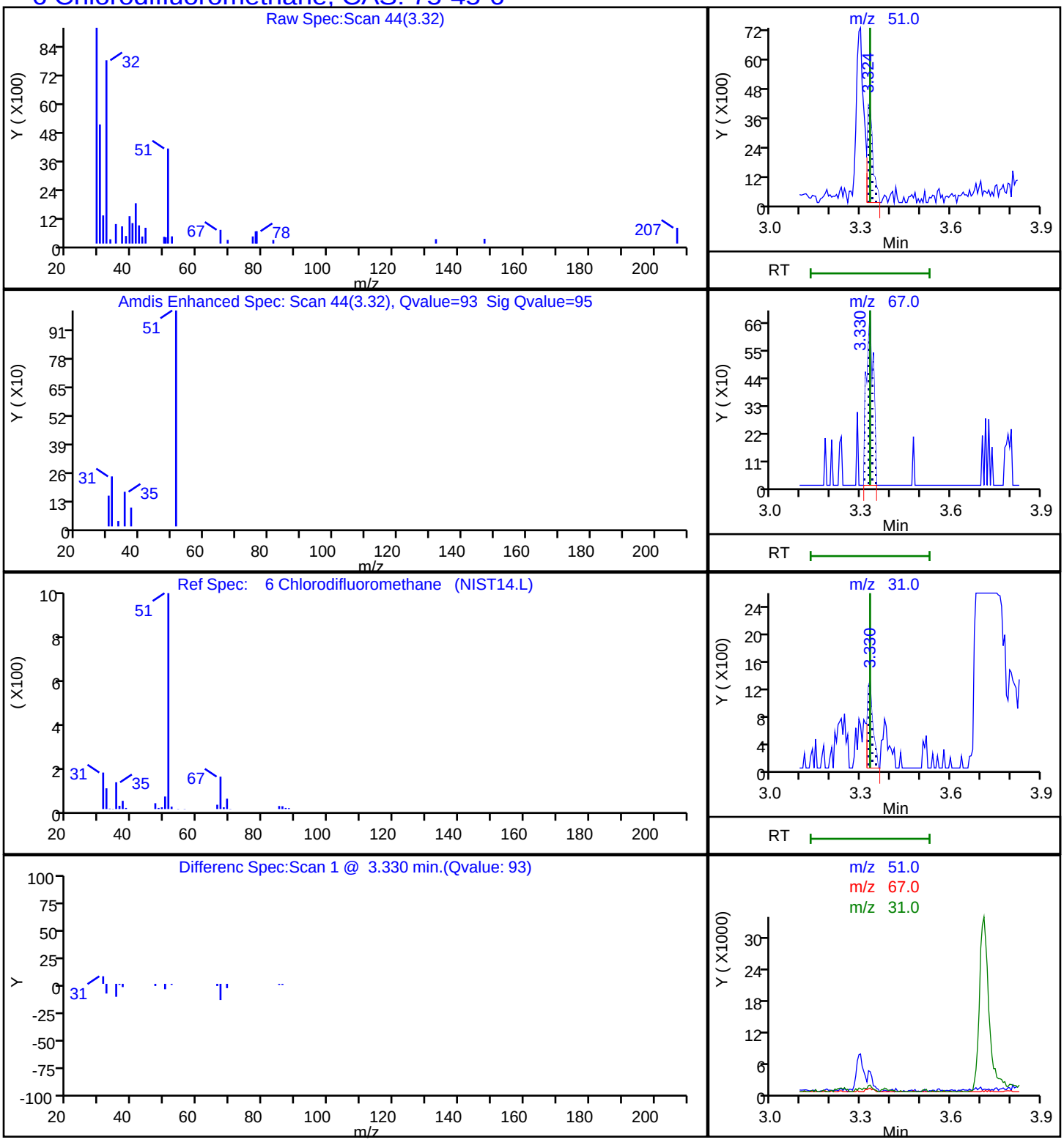
52 Carbon tetrachloride, CAS: 56-23-5



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P201R.D				
Injection Date:	06-Sep-2020 05:18:30	Instrument ID:	MR		
Lims ID:	140-20195-A-16	Lab Sample ID:	140-20195-16		
Client ID:	IA-118-A-29				
Operator ID:	HMT	ALS Bottle#:	1	Worklist Smp#:	25
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

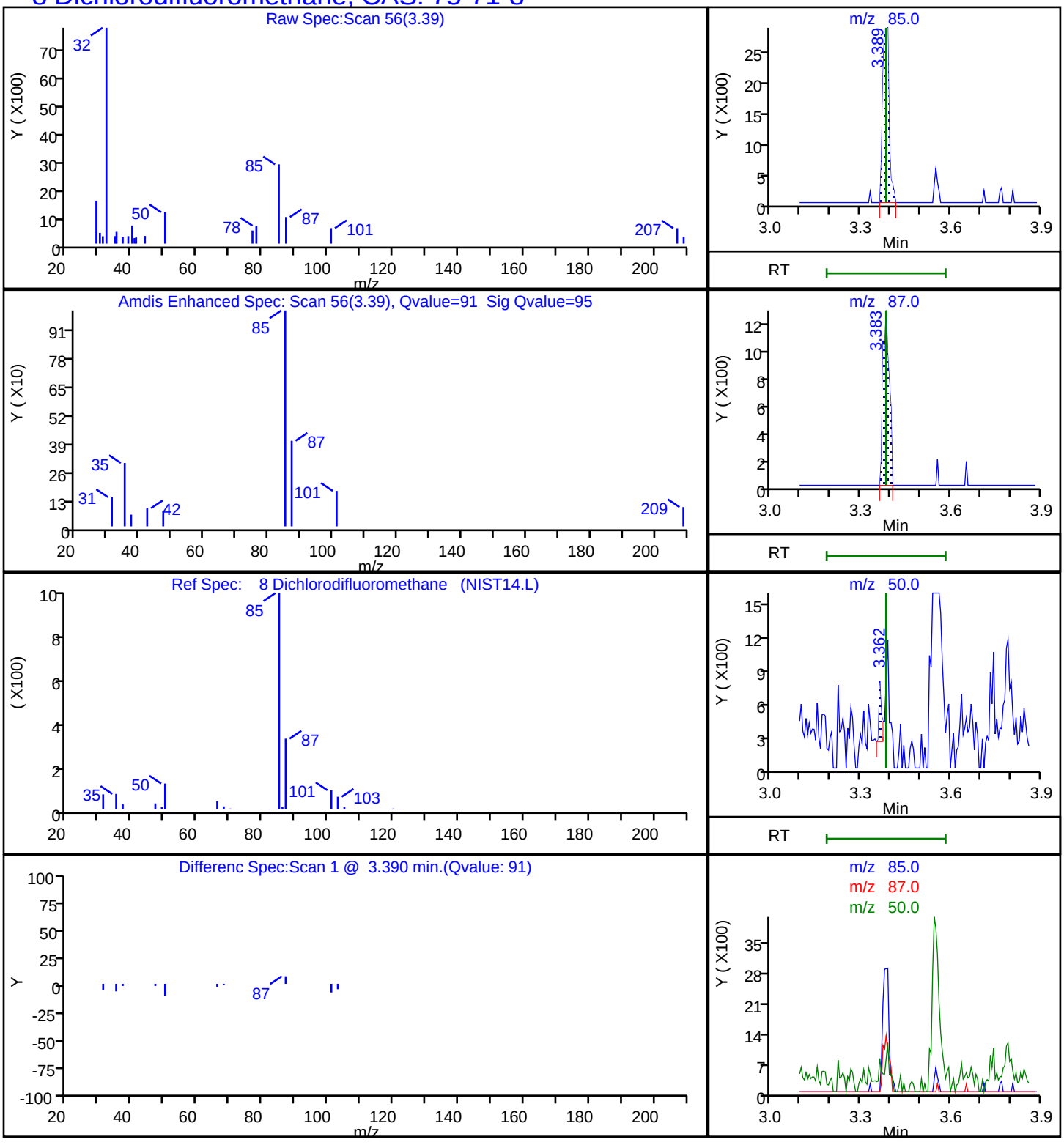
6 Chlorodifluoromethane, CAS: 75-45-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P201R.D		
Injection Date:	06-Sep-2020 05:18:30	Instrument ID:	MR
Lims ID:	140-20195-A-16	Lab Sample ID:	140-20195-16
Client ID:	IA-118-A-29		
Operator ID:	HMT	ALS Bottle#:	1 Worklist Smp#: 25
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

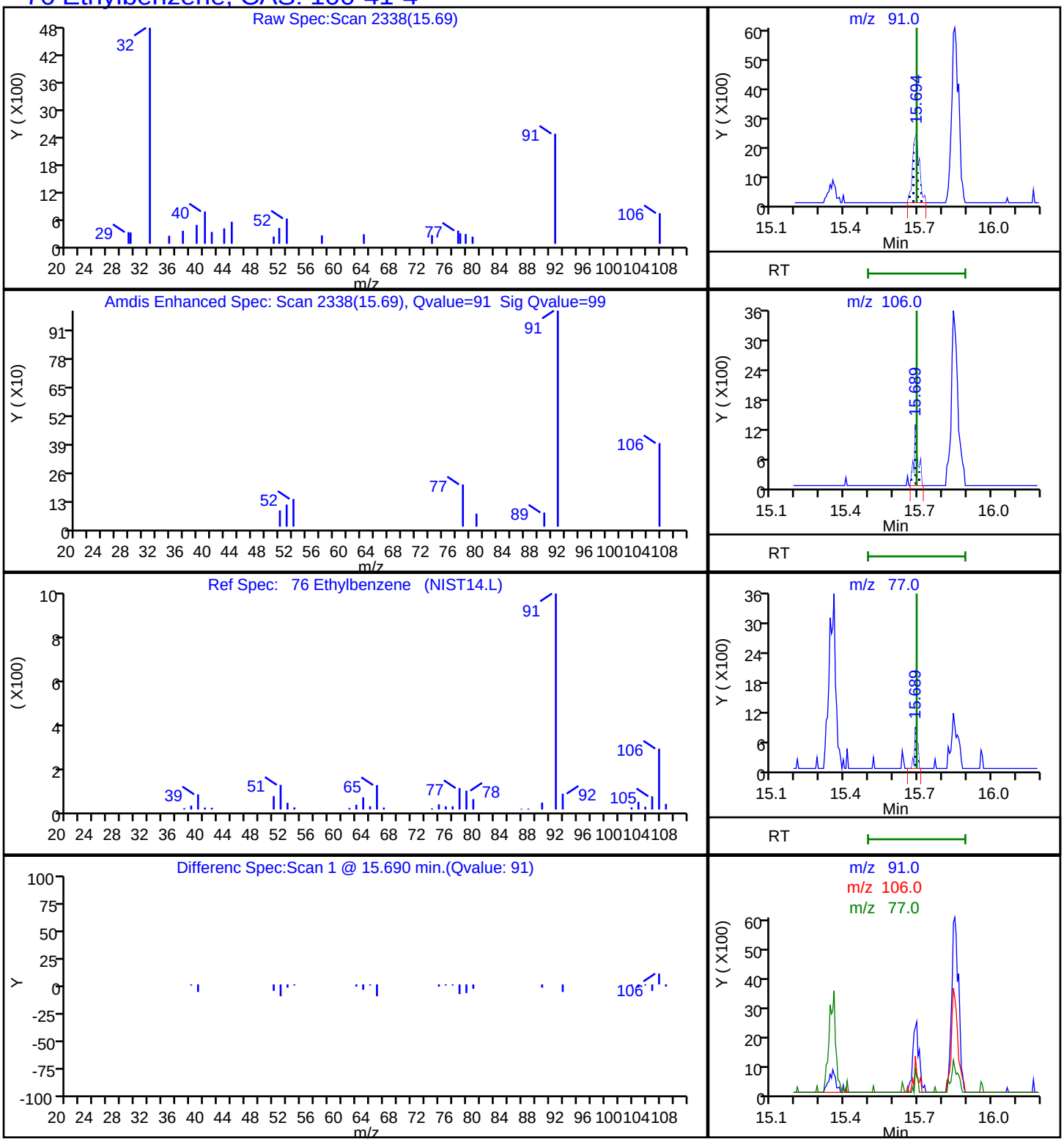
8 Dichlorodifluoromethane, CAS: 75-71-8



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P201R.D		
Injection Date:	06-Sep-2020 05:18:30	Instrument ID:	MR
Lims ID:	140-20195-A-16	Lab Sample ID:	140-20195-16
Client ID:	IA-118-A-29		
Operator ID:	HMT	ALS Bottle#:	1 Worklist Smp#: 25
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

76 Ethylbenzene, CAS: 100-41-4

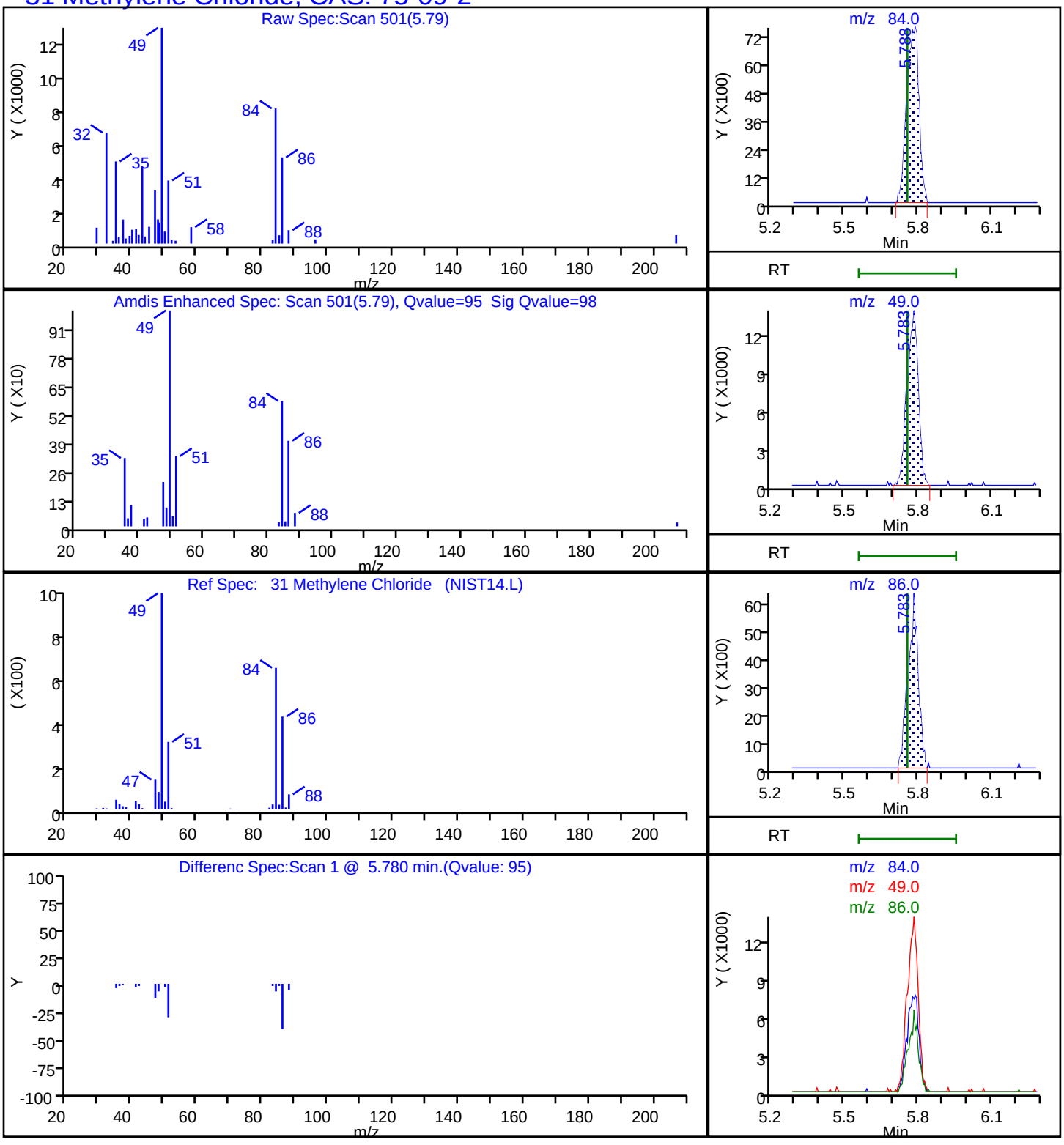


Report Date: 06-Sep-2020 07:12:04 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P201R.D				
Injection Date:	06-Sep-2020 05:18:30	Instrument ID:	MR		
Lims ID:	140-20195-A-16	Lab Sample ID:	140-20195-16		
Client ID:	IA-118-A-29				
Operator ID:	HMT	ALS Bottle#:	1	Worklist Smp#:	25
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

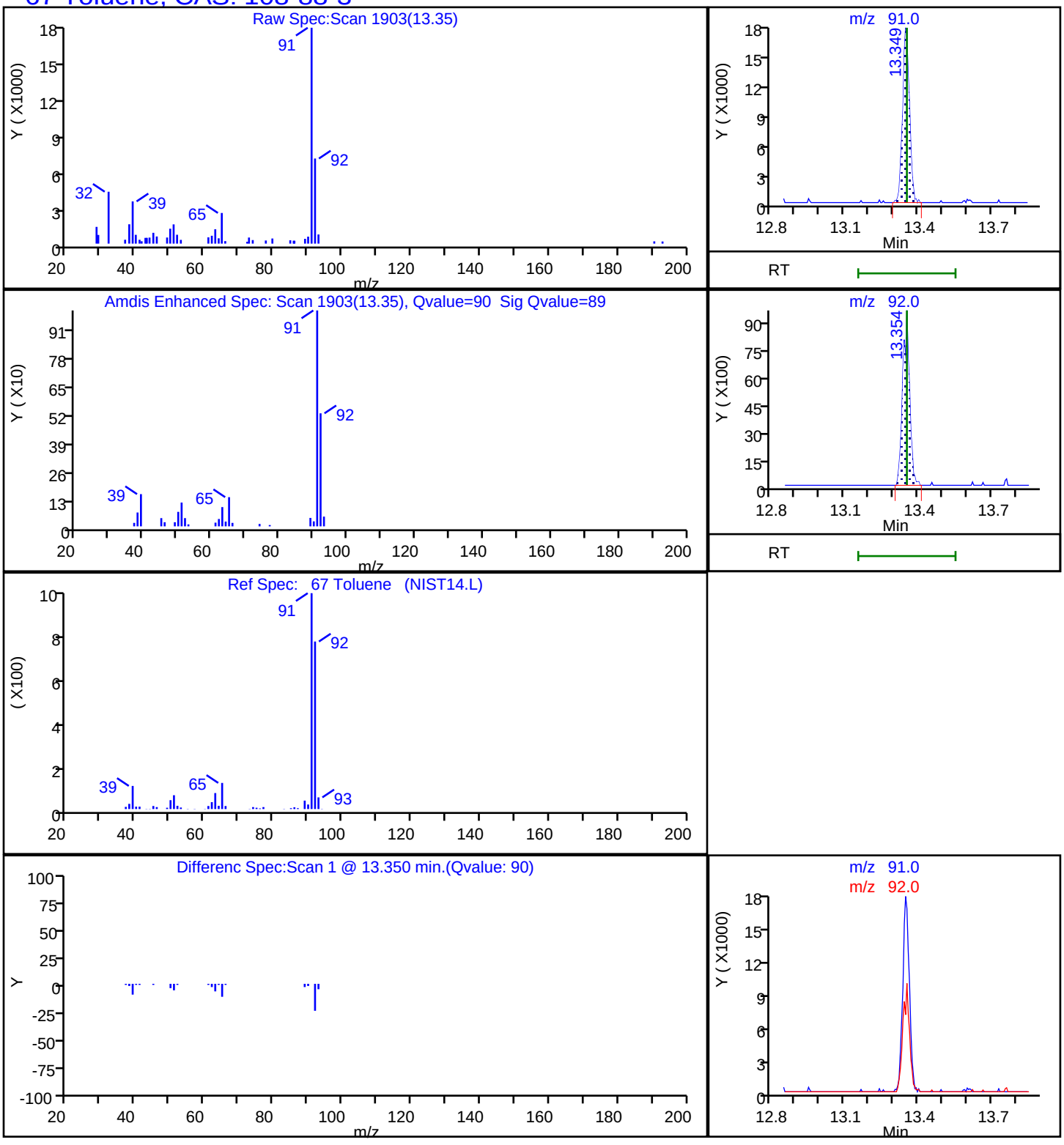
31 Methylene Chloride, CAS: 75-09-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P201R.D		
Injection Date:	06-Sep-2020 05:18:30	Instrument ID:	MR
Lims ID:	140-20195-A-16	Lab Sample ID:	140-20195-16
Client ID:	IA-118-A-29		
Operator ID:	HMT	ALS Bottle#:	1 Worklist Smp#: 25
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

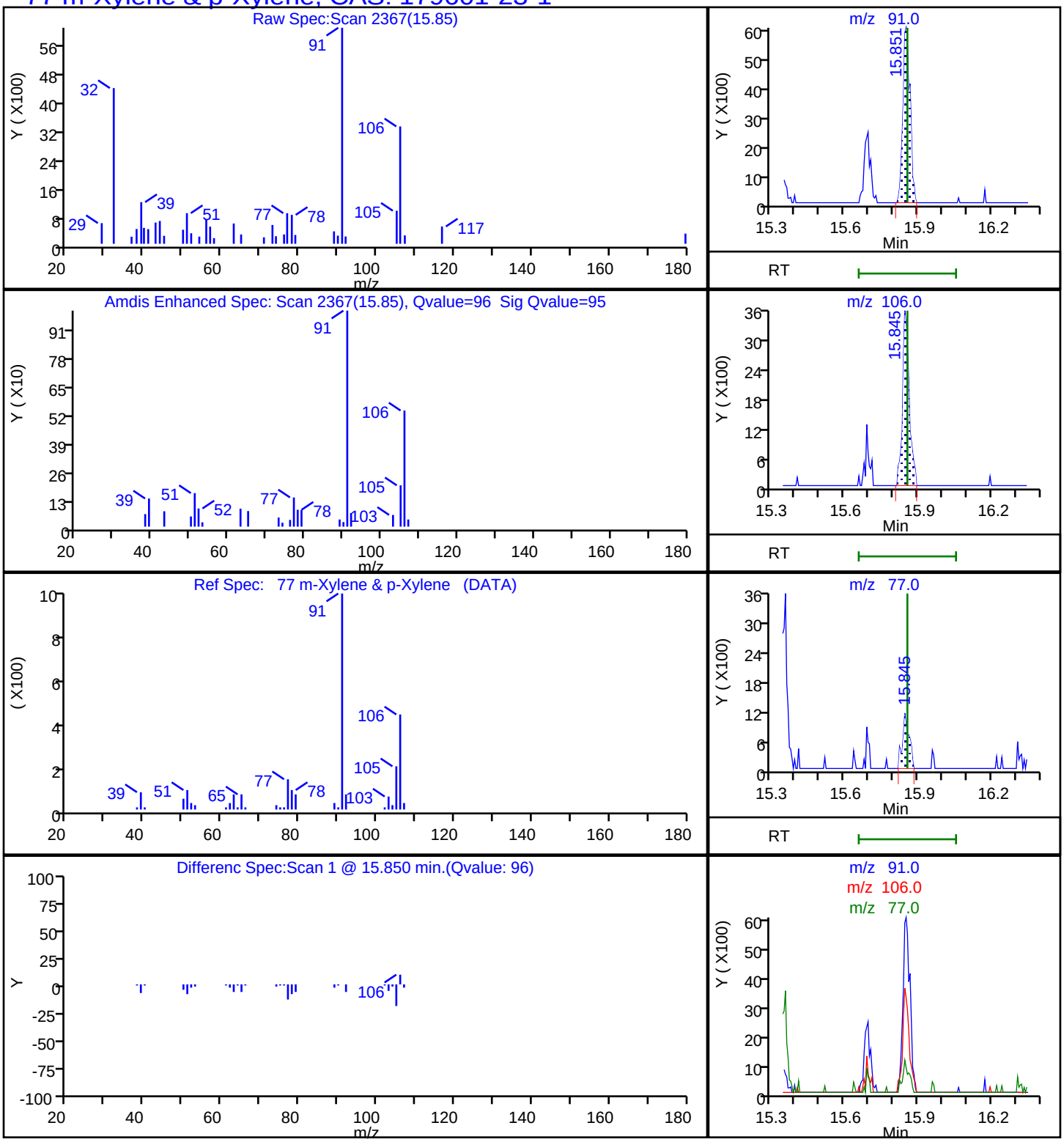
67 Toluene, CAS: 108-88-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P201R.D		
Injection Date:	06-Sep-2020 05:18:30	Instrument ID:	MR
Lims ID:	140-20195-A-16	Lab Sample ID:	140-20195-16
Client ID:	IA-118-A-29		
Operator ID:	HMT	ALS Bottle#:	1 Worklist Smp#: 25
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

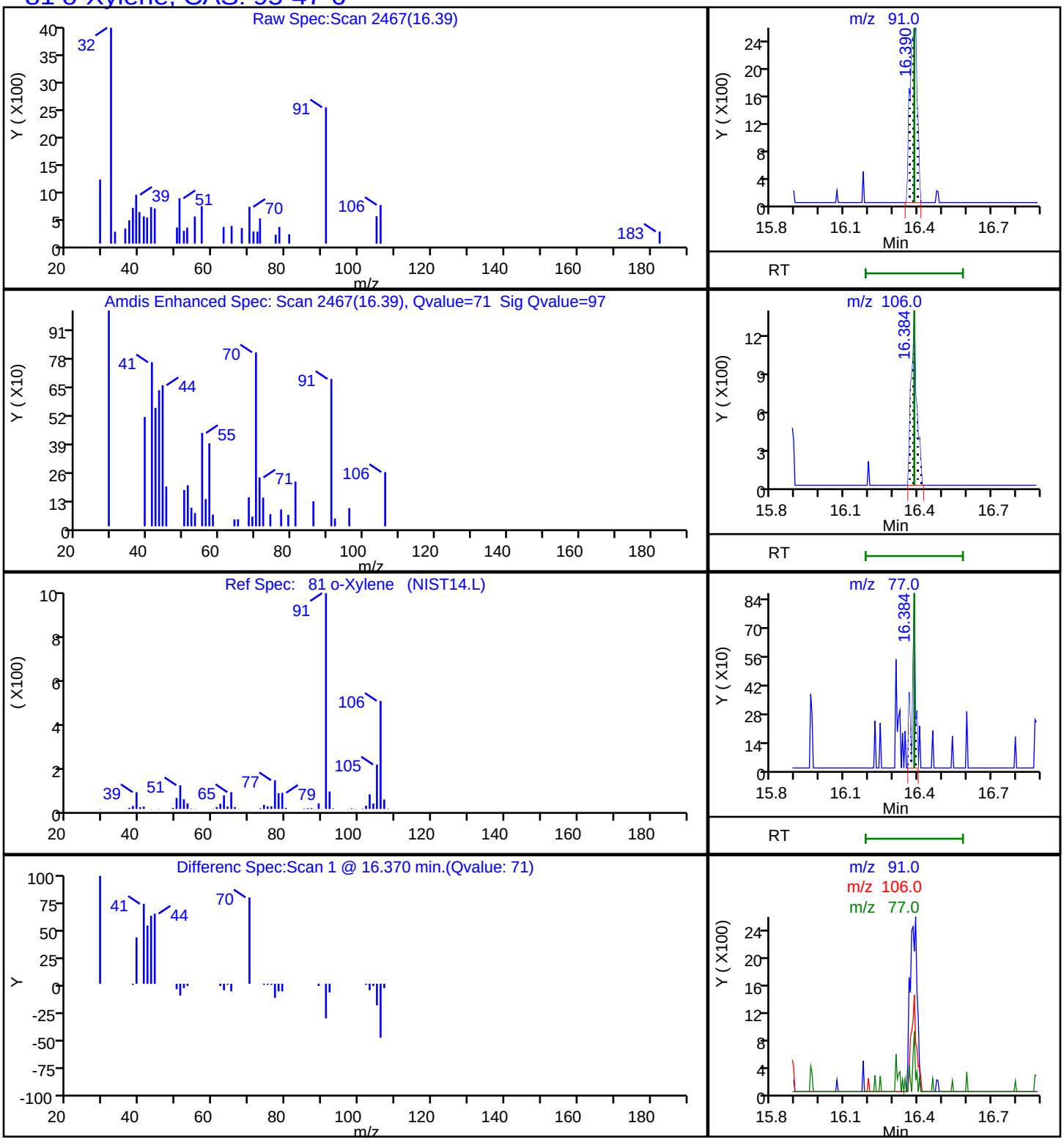
77 m-Xylene & p-Xylene, CAS: 179601-23-1



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P201R.D		
Injection Date:	06-Sep-2020 05:18:30	Instrument ID:	MR
Lims ID:	140-20195-A-16	Lab Sample ID:	140-20195-16
Client ID:	IA-118-A-29		
Operator ID:	HMT	ALS Bottle#:	1 Worklist Smp#: 25
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

81 o-Xylene, CAS: 95-47-6



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Client Sample ID: IA-081-A-29 Lab Sample ID: 140-20195-17

Matrix: Air Lab File ID: GI05P113.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 16:15

Sample wt/vol: 100(mL) Date Analyzed: 09/06/2020 02:17

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42481 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.074	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.047	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	0.31	J	0.40	0.11
67-66-3	Chloroform	119.38	ND		0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.40		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	0.79		0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.035
108-88-3	Toluene	92.14	29		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	ND		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND	*	0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	0.12	J	0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	3.3		0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	97		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Client Sample ID: IA-081-A-29 Lab Sample ID: 140-20195-17

Matrix: Air Lab File ID: GI05P113.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 16:15

Sample wt/vol: 100(mL) Date Analyzed: 09/06/2020 02:17

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42481 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.24	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.30	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	1.1	J	1.4	0.39
67-66-3	Chloroform	119.38	ND		2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.0		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	3.4		1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.24
108-88-3	Toluene	92.14	110		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	ND		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND	*	2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	0.57	J	2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	14		3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	97		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16506.b\GI05P113.D				
Lims ID:	140-20195-A-17				
Client ID:	IA-081-A-29				
Sample Type:	Client				
Inject. Date:	06-Sep-2020 02:17:30	ALS Bottle#:	13	Worklist Smp#:	20
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016506-020				
Misc. Info.:	140-20195-a-17				
Operator ID:	HMT	Instrument ID:	MG		
Method:	\\chromfs\Knoxville\ChromData\MG\20200904-16506.b\MG_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	06-Sep-2020 07:34:31	Calib Date:	02-Sep-2020 03:27:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1023				
First Level Reviewer: tajh		Date:	06-Sep-2020 07:32:32		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.806	8.811	-0.005	87	107463	4.80	
* 2 1,4-Difluorobenzene	114	10.990	10.995	-0.005	97	539058	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.730	15.730	0.000	92	565024	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.369	17.369	0.000	95	400786	4.52	
6 Chlorodifluoromethane	51	3.699	3.699	0.000	97	5946	0.0617	
8 Dichlorodifluoromethane	85	3.764	3.764	0.000	96	8680	0.0806	
50 Benzene	78	10.456	10.450	0.006	45	1651	0.0149	
52 Carbon tetrachloride	117	10.467	10.472	-0.005	1	645	0.009417	
67 Toluene	91	13.756	13.756	0.000	93	710453	5.70	
78 Ethylbenzene	91	16.064	16.064	0.000	97	25382	0.1585	
79 m-Xylene & p-Xylene	91	16.226	16.231	-0.005	95	66020	0.5210	
83 o-Xylene	91	16.754	16.754	0.000	97	18455	0.1439	
90 1,3,5-Trimethylbenzene	120	18.108	18.108	0.000	43	1088	0.0162	7a
95 1,2,4-Trimethylbenzene	105	18.550	18.544	0.006	93	3384	0.0230	
S 124 Xylenes, Total	100				0		0.6650	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection
Review Flags
a - User Assigned ID

Reagents:

40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

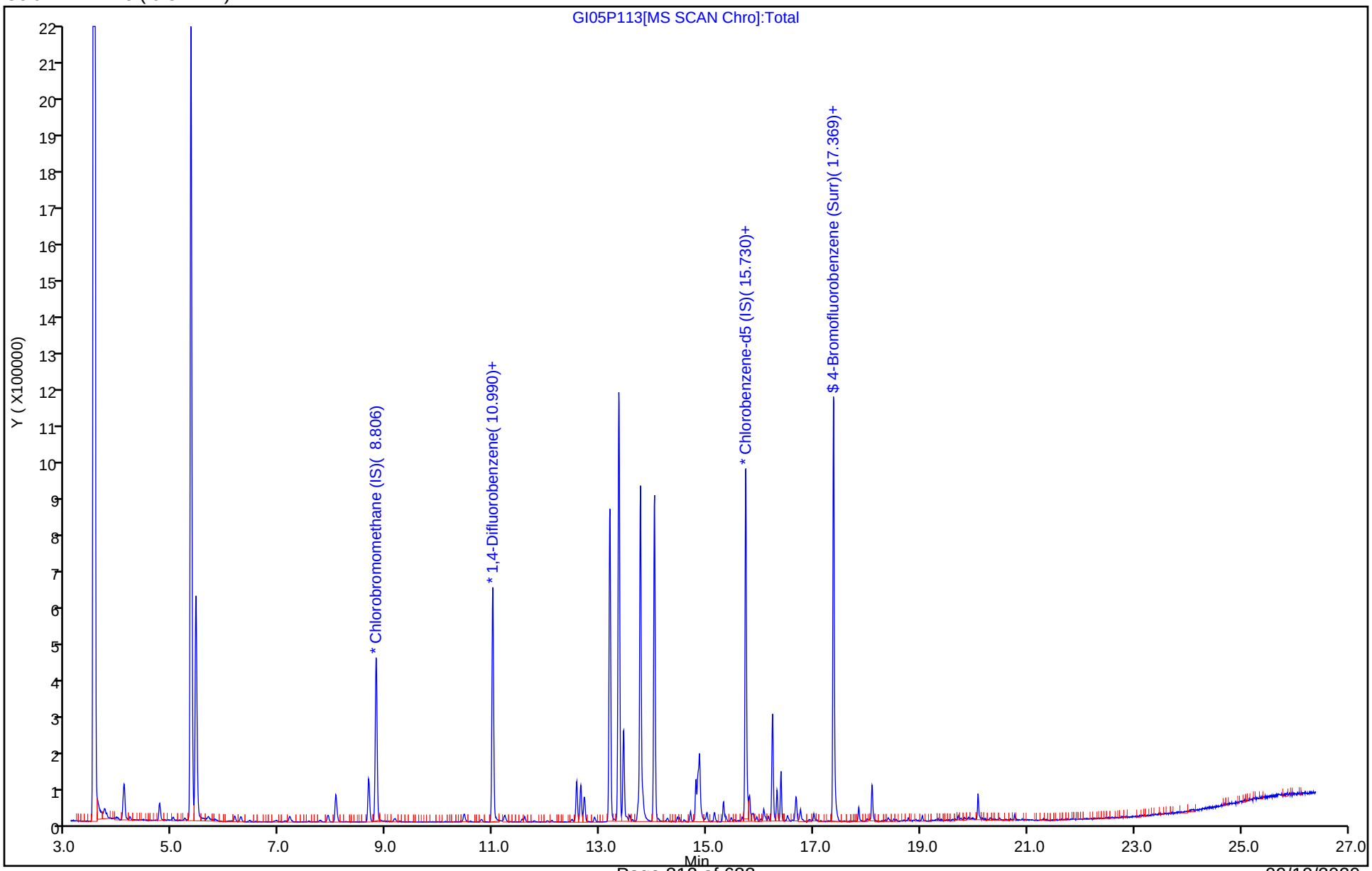
Report Date: 06-Sep-2020 07:34:53 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200904-16506.b\GI05P113.D

Injection Date:	06-Sep-2020 02:17:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	140-20195-A-17	Lab Sample ID:	140-20195-17	Worklist Smp#:	20
Client ID:	IA-081-A-29				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16506.b\GI05P113.D				
Lims ID:	140-20195-A-17				
Client ID:	IA-081-A-29				
Sample Type:	Client				
Inject. Date:	06-Sep-2020 02:17:30	ALS Bottle#:	13	Worklist Smp#:	20
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016506-020				
Misc. Info.:	140-20195-a-17				
Operator ID:	HMT	Instrument ID:	MG		
Method:	\\chromfs\Knoxville\ChromData\MG\20200904-16506.b\MG_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	06-Sep-2020 07:34:31	Calib Date:	02-Sep-2020 03:27:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1023				

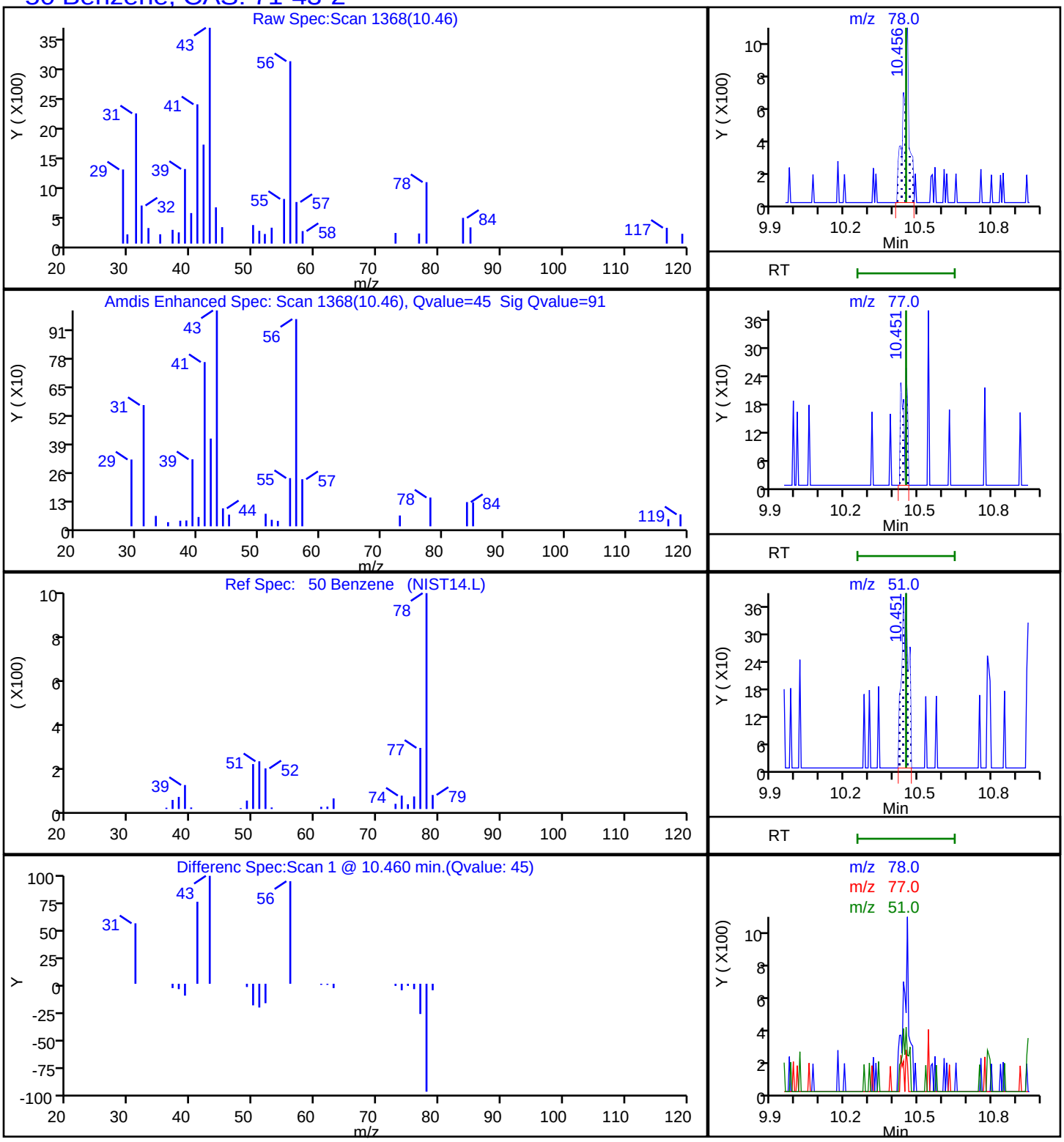
First Level Reviewer: tajh Date: 06-Sep-2020 07:32:32

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	4.52	97.42

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16506.b\GI05P113.D				
Injection Date:	06-Sep-2020 02:17:30	Instrument ID:	MG		
Lims ID:	140-20195-A-17	Lab Sample ID:	140-20195-17		
Client ID:	IA-081-A-29				
Operator ID:	HMT	ALS Bottle#:	13	Worklist Smp#:	20
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

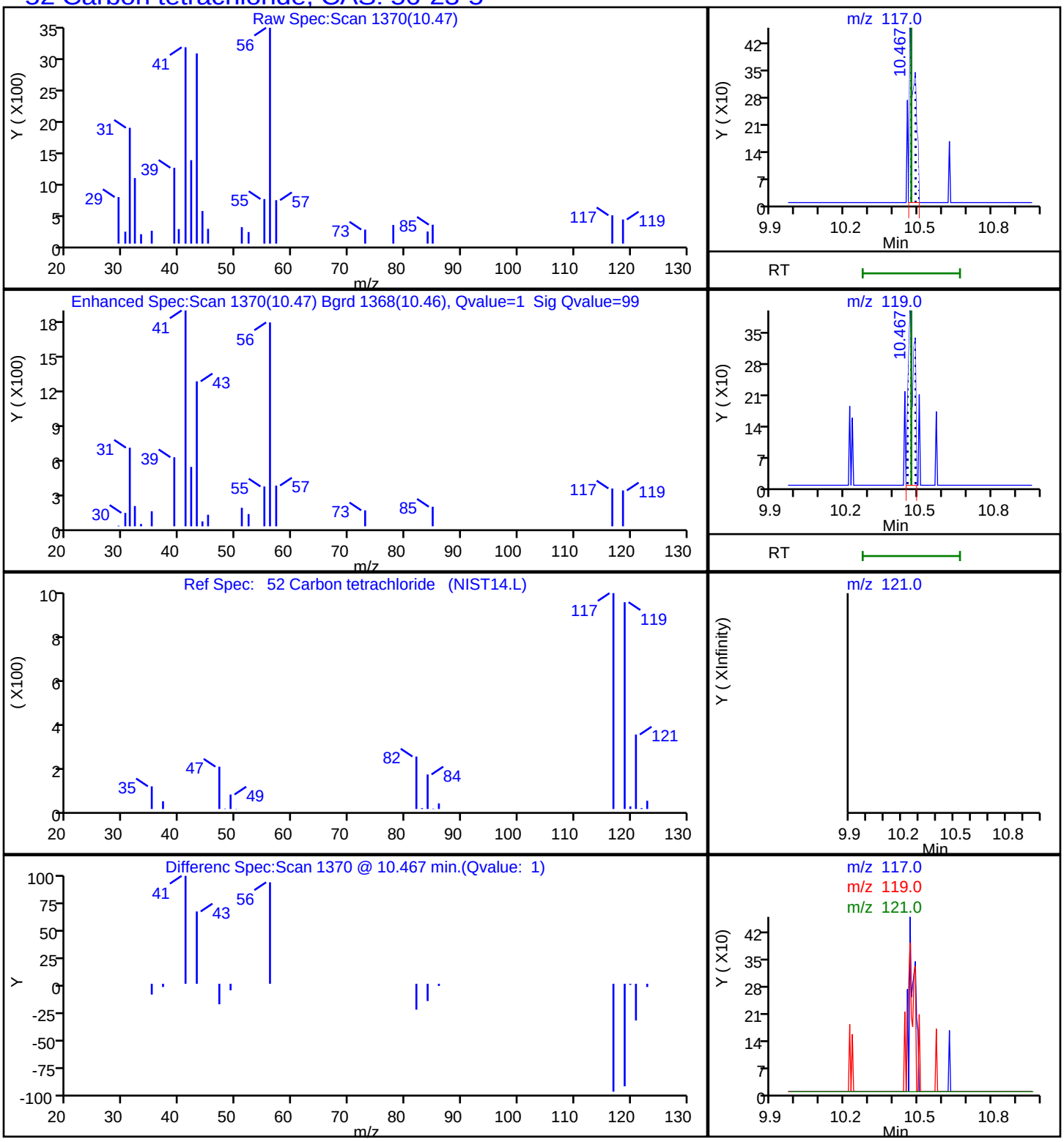
50 Benzene, CAS: 71-43-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16506.b\GI05P113.D				
Injection Date:	06-Sep-2020 02:17:30	Instrument ID:	MG		
Lims ID:	140-20195-A-17	Lab Sample ID:	140-20195-17		
Client ID:	IA-081-A-29				
Operator ID:	HMT	ALS Bottle#:	13	Worklist Smp#:	20
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

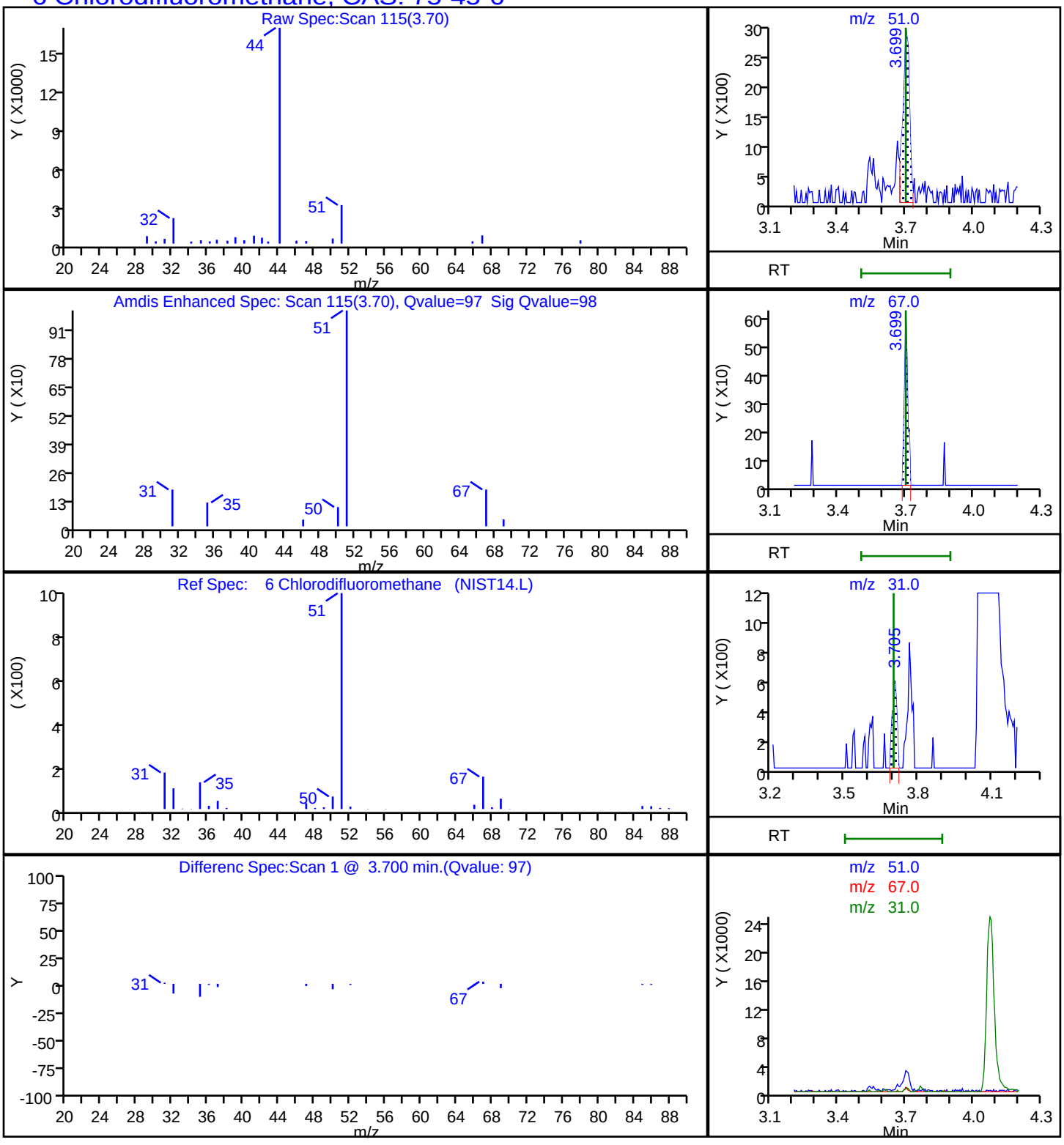
52 Carbon tetrachloride, CAS: 56-23-5



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16506.b\GI05P113.D				
Injection Date:	06-Sep-2020 02:17:30	Instrument ID:	MG		
Lims ID:	140-20195-A-17	Lab Sample ID:	140-20195-17		
Client ID:	IA-081-A-29				
Operator ID:	HMT	ALS Bottle#:	13	Worklist Smp#:	20
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

6 Chlorodifluoromethane, CAS: 75-45-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16506.b\GI05P113.D				
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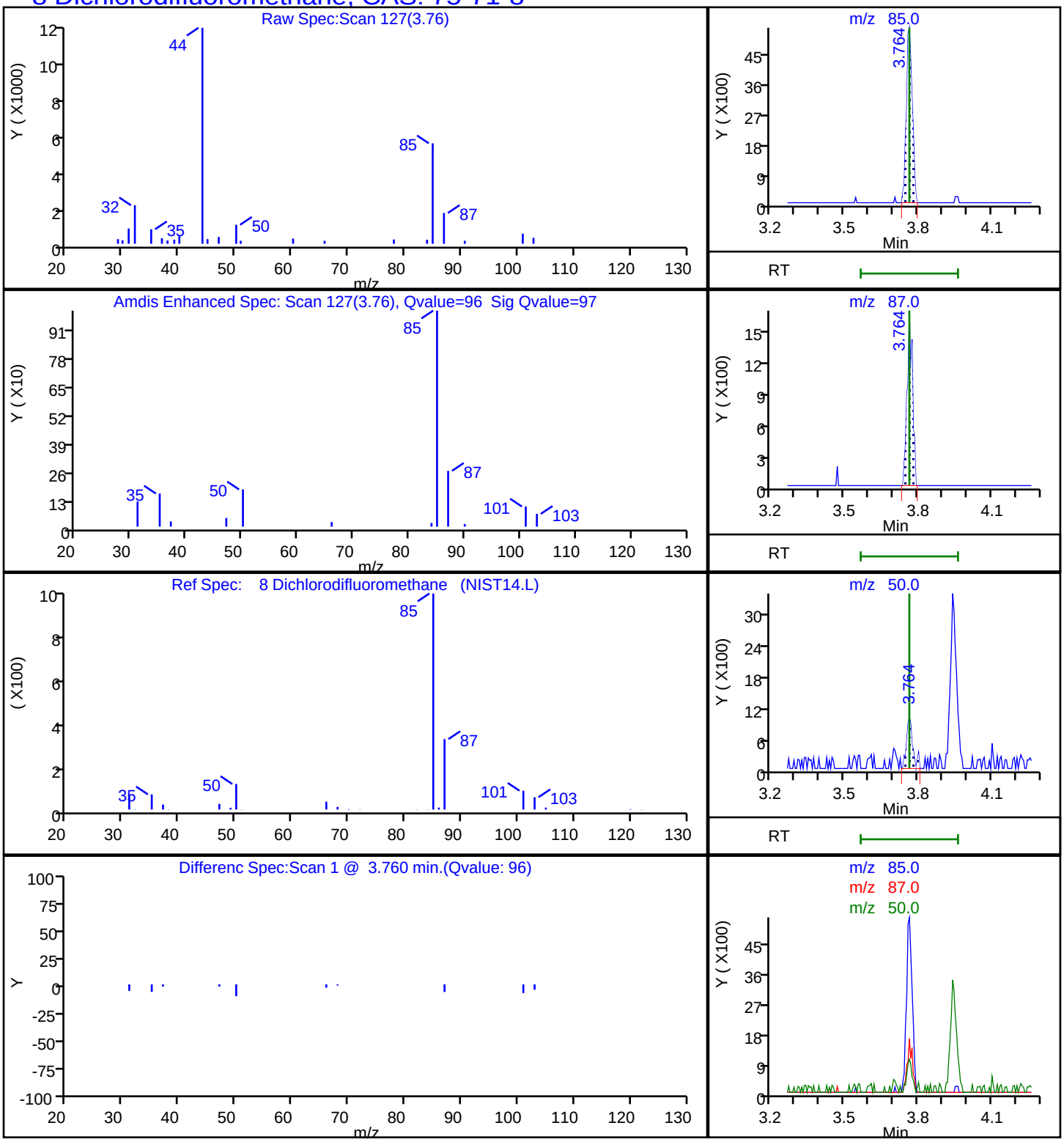
Lims ID:	140-20195-A-17	Lab Sample ID:	140-20195-17		
Client ID:	IA-081-A-29				
Operator ID:	HMT	ALS Bottle#:	13	Worklist Smp#:	20
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

8 Dichlorodifluoromethane, CAS: 75-71-8



Eurofins TestAmerica, Knoxville

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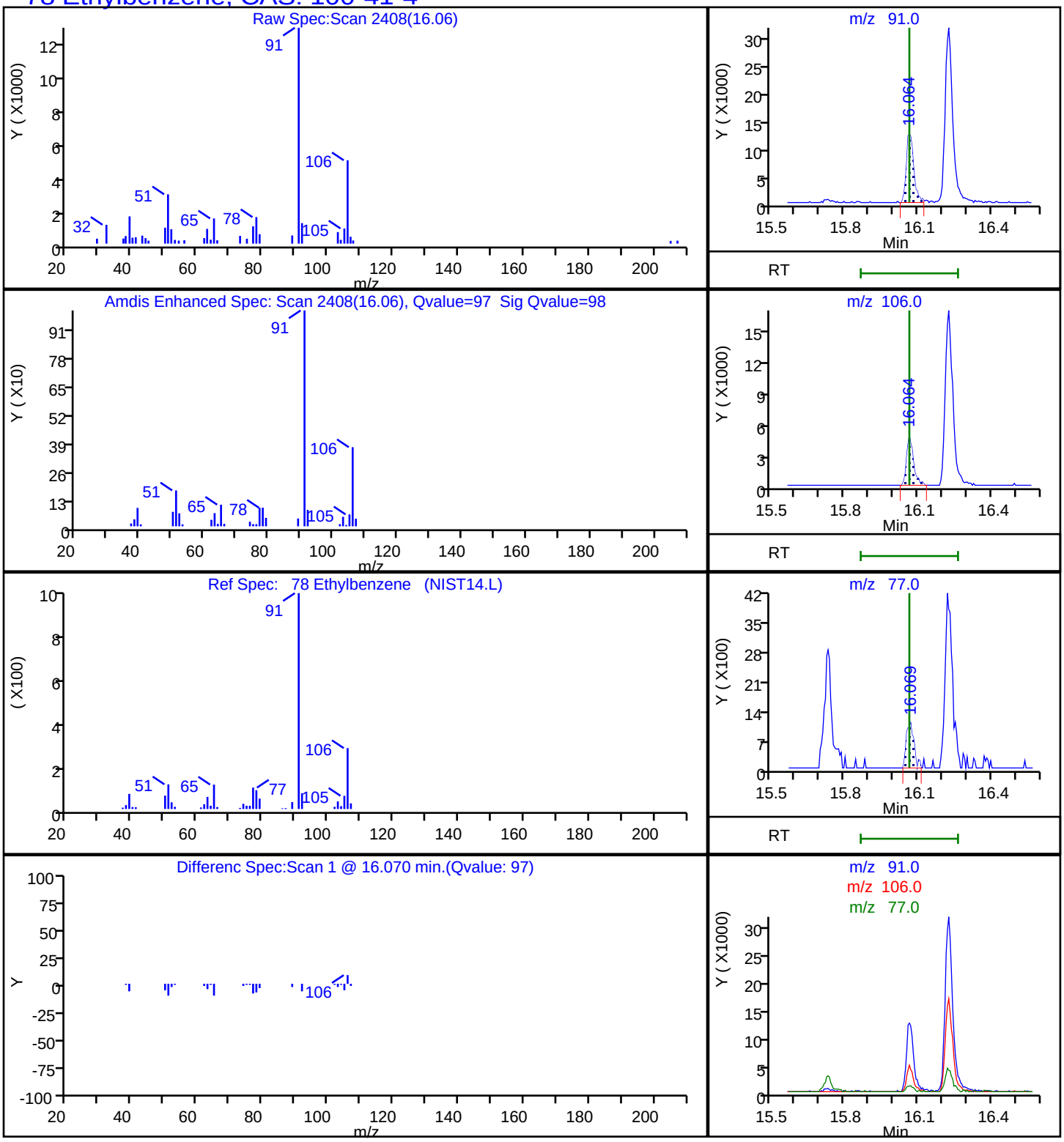
Lims ID:	140-20195-A-17	Lab Sample ID:	140-20195-17		
Client ID:	IA-081-A-29				
Operator ID:	HMT	ALS Bottle#:	13	Worklist Smp#:	20
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

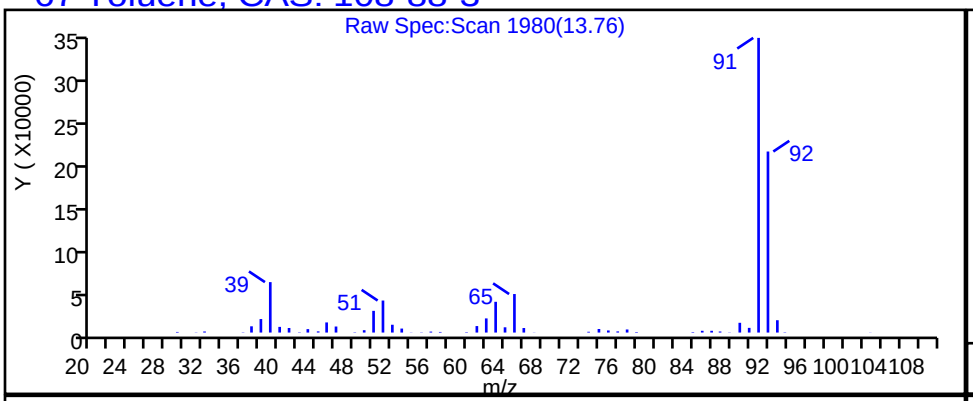
78 Ethylbenzene, CAS: 100-41-4

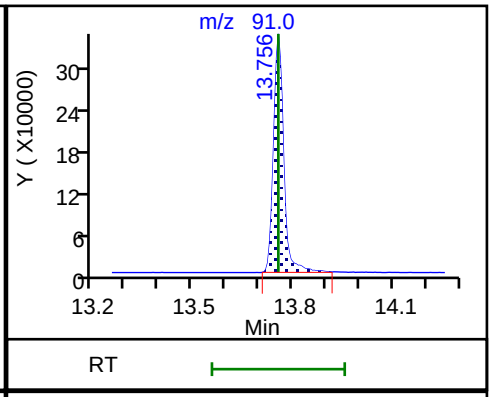


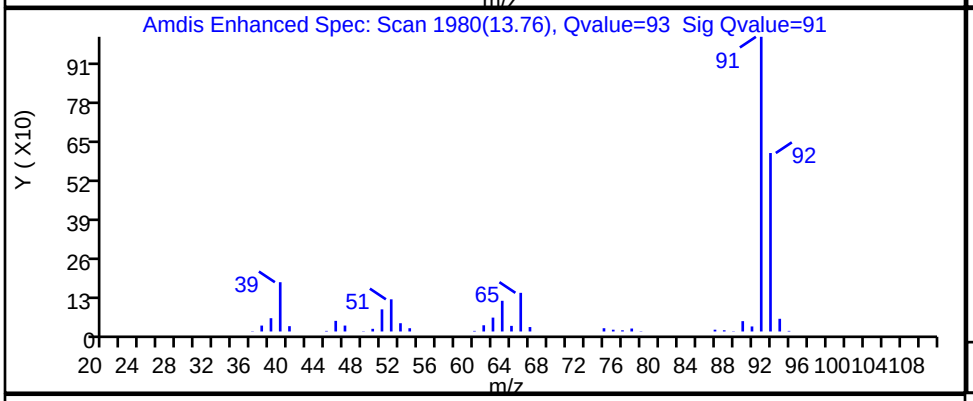
Eurofins TestAmerica, Knoxville

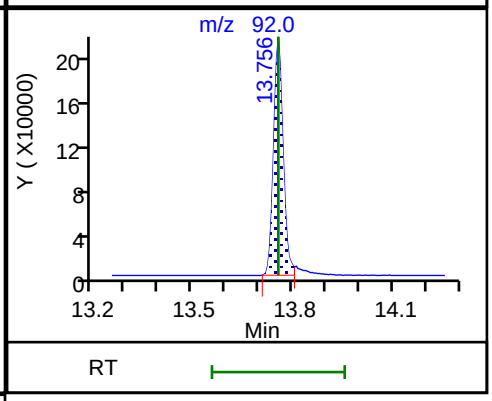
Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16506.b\GI05P113.D		
Injection Date:	06-Sep-2020 02:17:30	Instrument ID:	MG
Lims ID:	140-20195-A-17	Lab Sample ID:	140-20195-17
Client ID:	IA-081-A-29		
Operator ID:	HMT	ALS Bottle#:	13 Worklist Smp#: 20
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

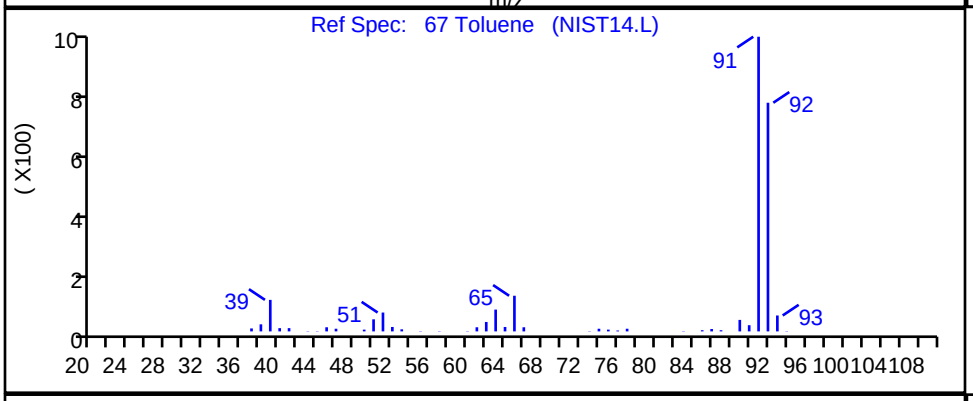
67 Toluene, CAS: 108-88-3

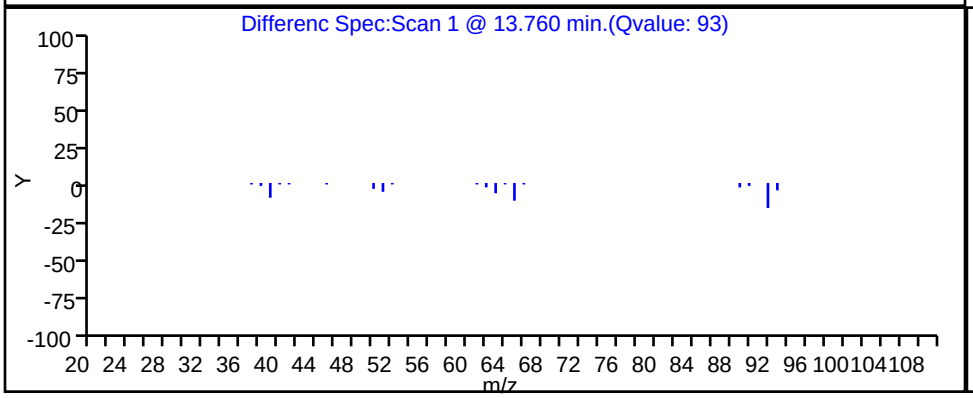


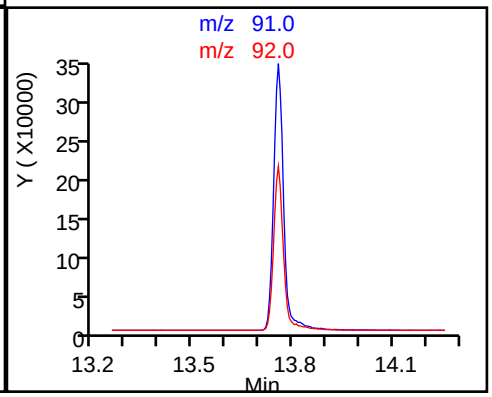










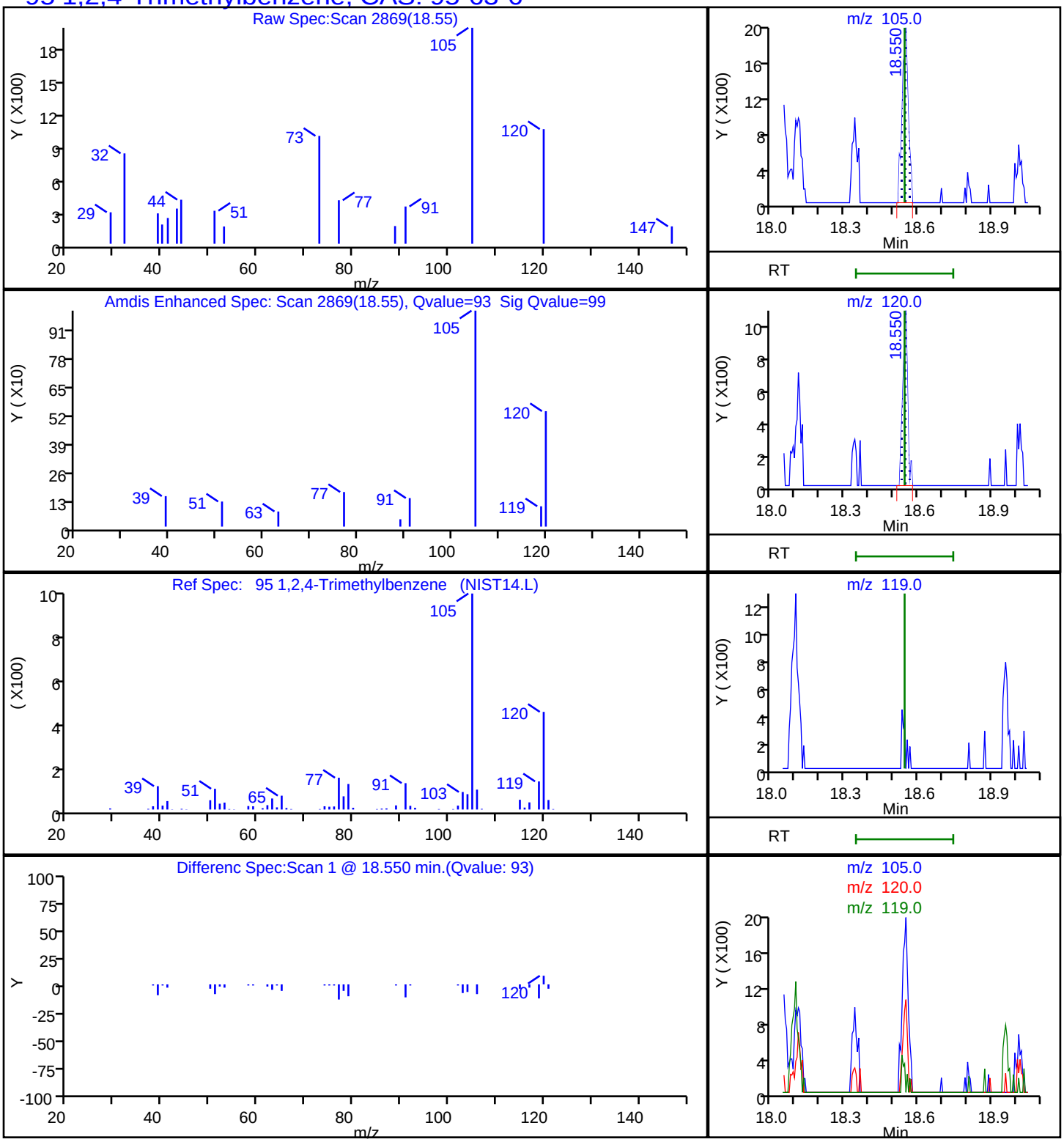


Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200904-16506.b\GI05P113.D

Injection Date:	06-Sep-2020 02:17:30	Instrument ID:	MG		
Lims ID:	140-20195-A-17	Lab Sample ID:	140-20195-17		
Client ID:	IA-081-A-29				
Operator ID:	HMT	ALS Bottle#:	13	Worklist Smp#:	20
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

95 1,2,4-Trimethylbenzene, CAS: 95-63-6



Eurofins TestAmerica, Knoxville

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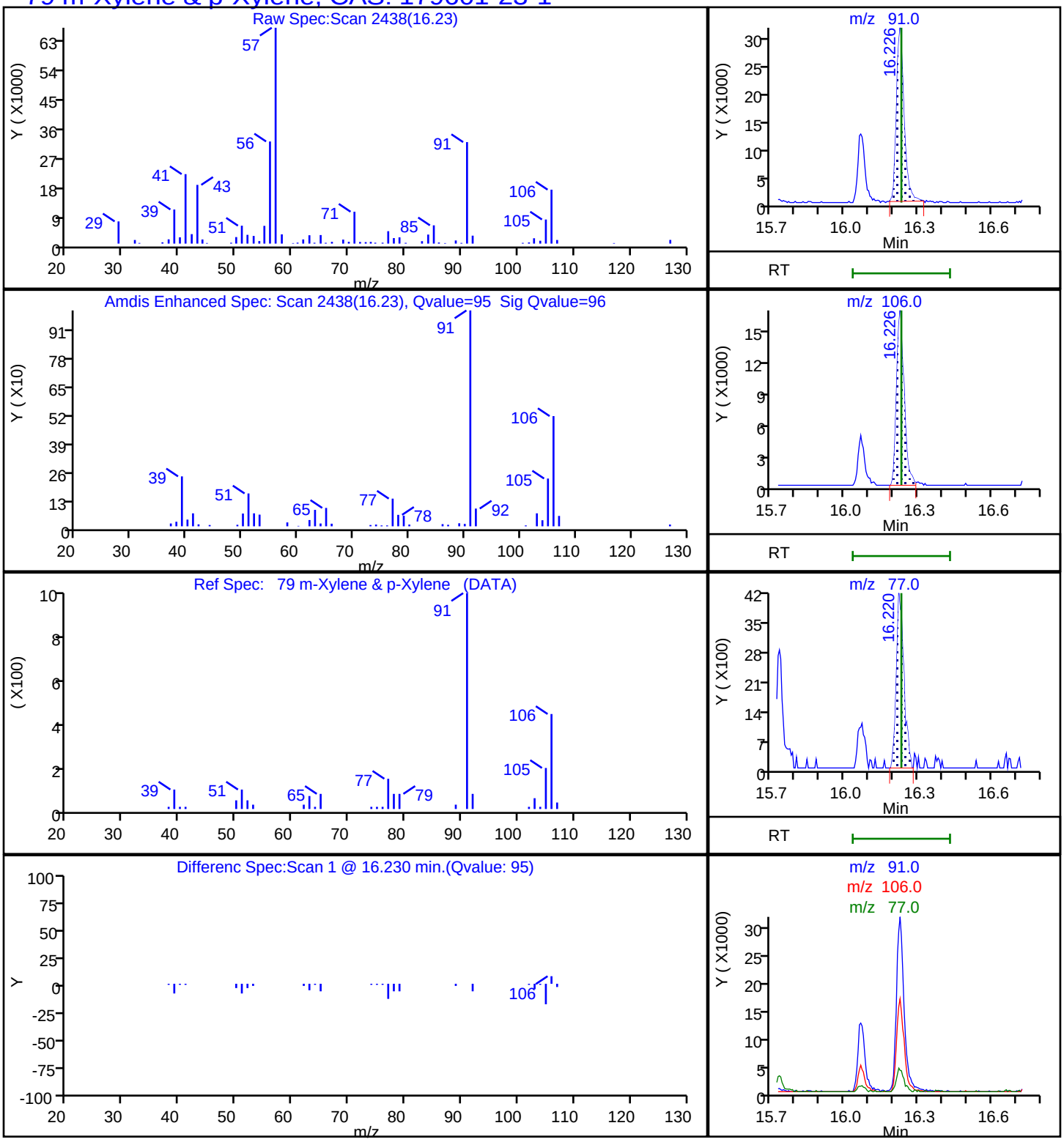
Lims ID:	140-20195-A-17	Lab Sample ID:	140-20195-17		
Client ID:	IA-081-A-29				
Operator ID:	HMT	ALS Bottle#:	13	Worklist Smp#:	20
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

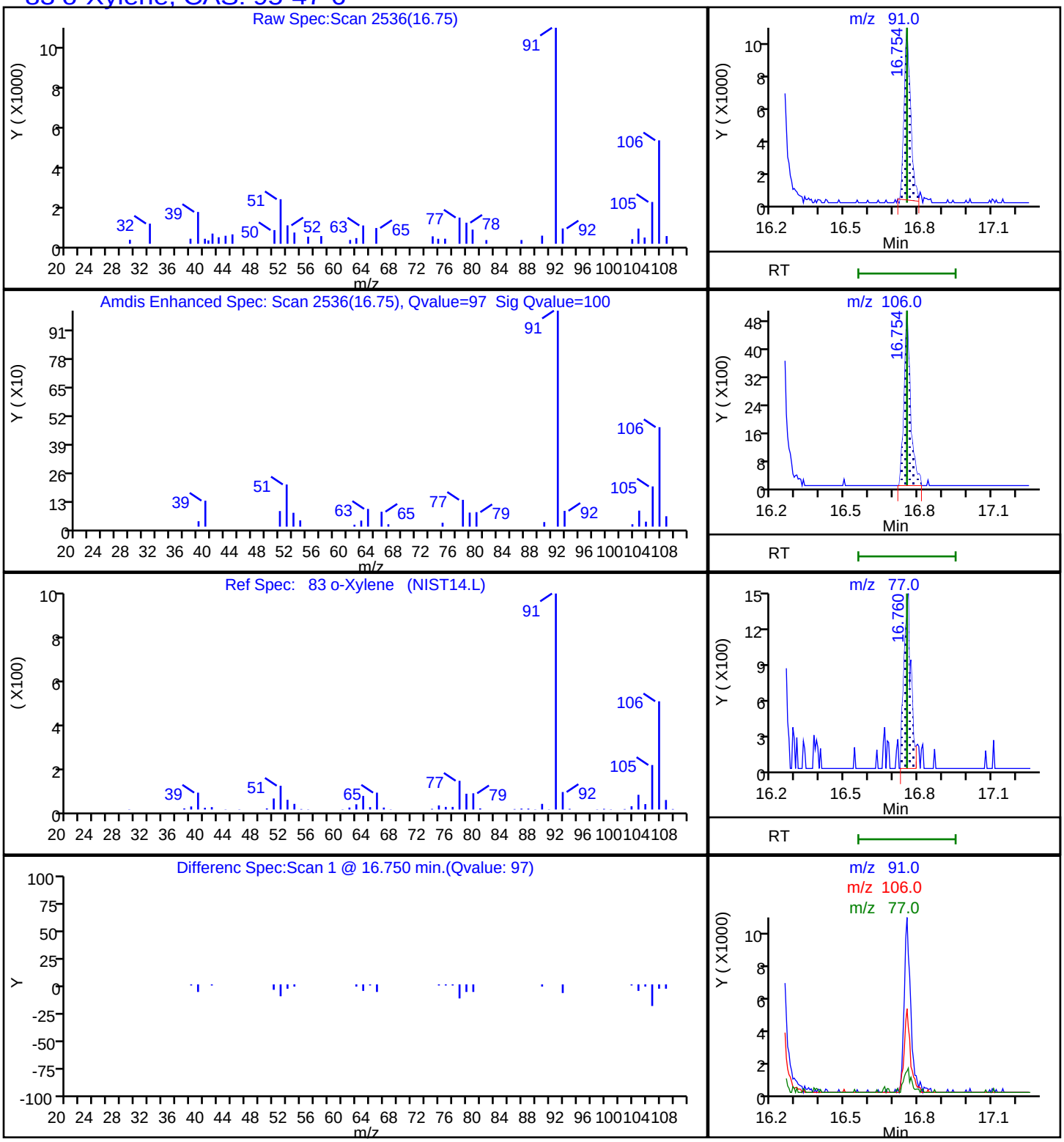
79 m-Xylene & p-Xylene, CAS: 179601-23-1



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16506.b\GI05P113.D				
Injection Date:	06-Sep-2020 02:17:30	Instrument ID:	MG		
Lims ID:	140-20195-A-17	Lab Sample ID:	140-20195-17		
Client ID:	IA-081-A-29				
Operator ID:	HMT	ALS Bottle#:	13	Worklist Smp#:	20
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

83 o-Xylene, CAS: 95-47-6



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Knoxville

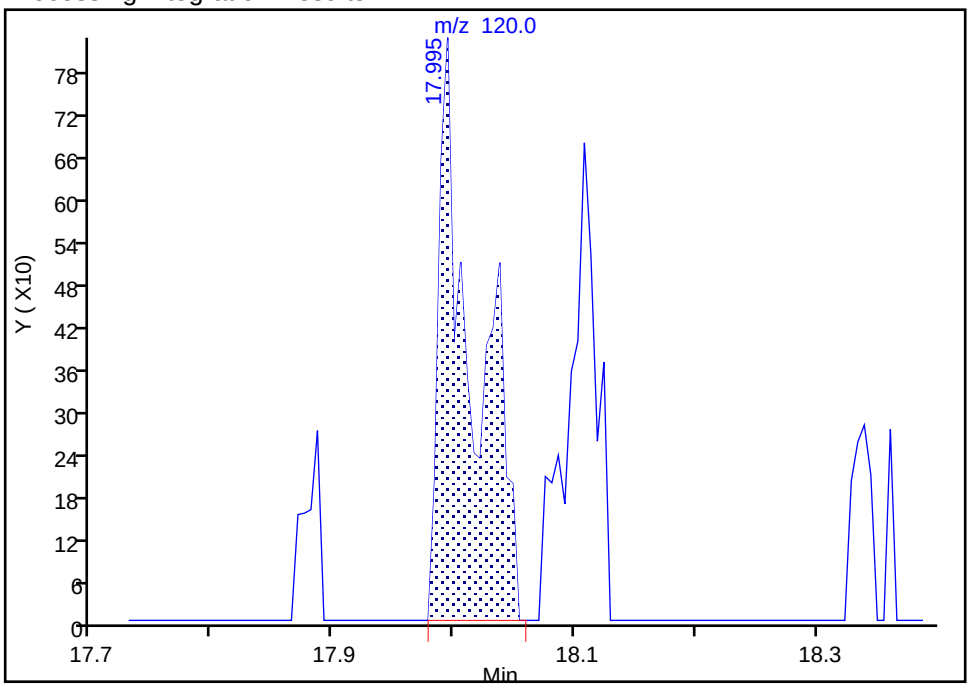
Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16506.b\GI05P113.D				
Injection Date:	06-Sep-2020 02:17:30	Instrument ID:	MG		
Lims ID:	140-20195-A-17	Lab Sample ID:	140-20195-17		
Client ID:	IA-081-A-29				
Operator ID:	HMT	ALS Bottle#:	13	Worklist Smp#:	20
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

90 1,3,5-Trimethylbenzene, CAS: 108-67-8

Signal: 1

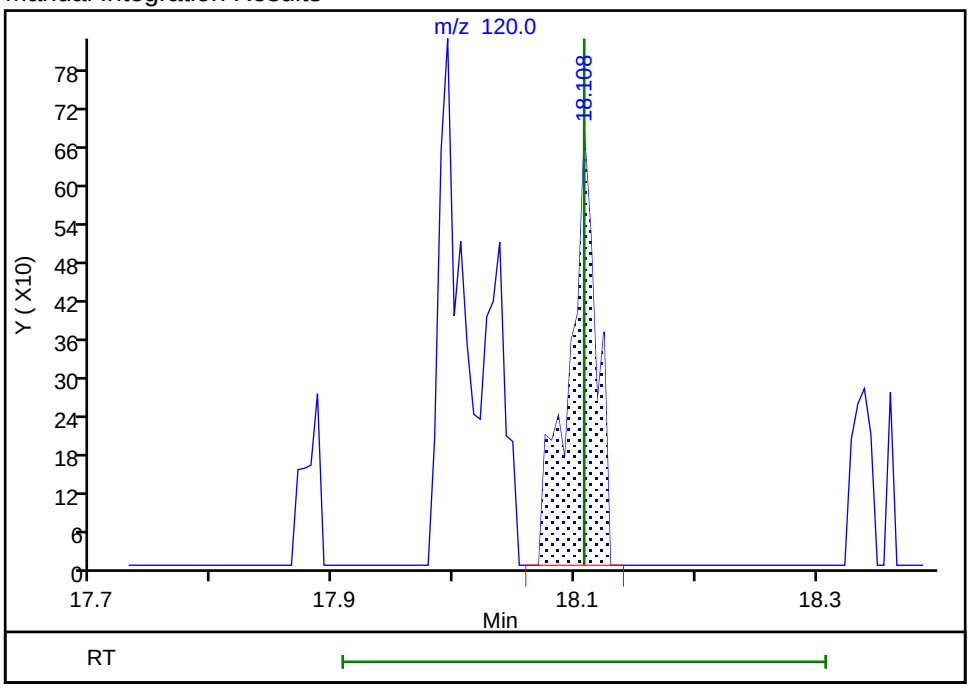
Processing Integration Results

RT: 17.99
Area: 1649
Amount: 0.024527
Amount Units: ppb v/v



Manual Integration Results

RT: 18.11
Area: 1088
Amount: 0.016183
Amount Units: ppb v/v



Reviewer: tajh, 06-Sep-2020 07:32:28

Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Client Sample ID: IA-100-B-29 Lab Sample ID: 140-20195-18

Matrix: Air Lab File ID: GI05P114.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 16:20

Sample wt/vol: 165(mL) Date Analyzed: 09/06/2020 03:04

Soil Aliquot Vol: Dilution Factor: 1.65

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42481 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	ND		0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.038	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	0.62		0.40	0.11
67-66-3	Chloroform	119.38	ND		0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.34	J	0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	0.18	J	0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	0.49		0.40	0.035
108-88-3	Toluene	92.14	4.1		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	0.11	J	0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND	*	0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.73	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	96		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Client Sample ID: IA-100-B-29 Lab Sample ID: 140-20195-18

Matrix: Air Lab File ID: GI05P114.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 16:20

Sample wt/vol: 165(mL) Date Analyzed: 09/06/2020 03:04

Soil Aliquot Vol: Dilution Factor: 1.65

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42481 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	ND		1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.24	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	2.2		1.4	0.39
67-66-3	Chloroform	119.38	ND		2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	1.7	J	2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	0.77	J	1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	3.3		2.7	0.24
108-88-3	Toluene	92.14	15		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	0.61	J	1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND	*	2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	3.2	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	96		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16506.b\GI05P114.D				
Lims ID:	140-20195-A-18				
Client ID:	IA-100-B-29				
Sample Type:	Client				
Inject. Date:	06-Sep-2020 03:04:30	ALS Bottle#:	14	Worklist Smp#:	21
Purge Vol:	500.000 mL	Dil. Factor:	1.6500		
Sample Info:	140-0016506-021				
Misc. Info.:	140-20195-a-18@1.65				
Operator ID:	HMT	Instrument ID:	MG		
Method:	\\chromfs\Knoxville\ChromData\MG\20200904-16506.b\MG_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	06-Sep-2020 07:34:31	Calib Date:	02-Sep-2020 03:27:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1023				
First Level Reviewer: tajh		Date:	06-Sep-2020 07:32:45		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.822	8.811	0.011	87	117891	4.80	
* 2 1,4-Difluorobenzene	114	11.000	10.995	0.005	97	630852	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.730	15.730	0.000	92	606486	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.374	17.369	0.005	96	423212	4.45	
6 Chlorodifluoromethane	51	3.710	3.699	0.011	95	13164	0.1246	
8 Dichlorodifluoromethane	85	3.769	3.764	0.005	96	8016	0.0679	
52 Carbon tetrachloride	117	10.477	10.472	0.005	36	615	0.007672	
58 Trichloroethene	130	11.701	11.707	-0.006	78	1284	0.0227	
67 Toluene	91	13.761	13.756	0.005	92	109731	0.8203	
73 Tetrachloroethene	129	14.905	14.905	-0.001	89	4907	0.0973	
78 Ethylbenzene	91	16.058	16.064	-0.006	97	6104	0.0355	
79 m-Xylene & p-Xylene	91	16.231	16.231	0.000	95	14107	0.1037	
83 o-Xylene	91	16.759	16.754	0.005	96	5791	0.0421	
S 124 Xylenes, Total	100				0		0.1458	

Reagents:

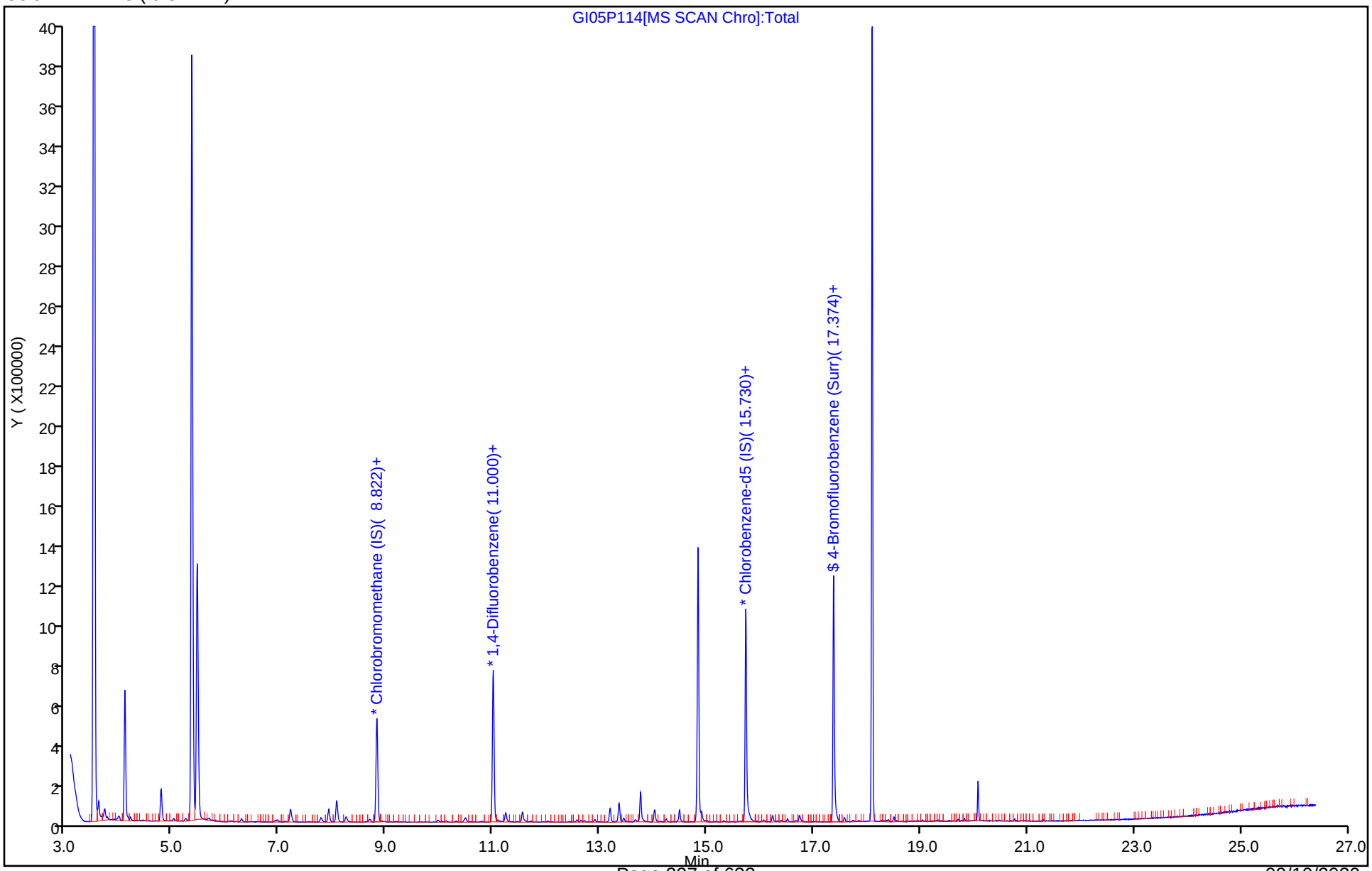
40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

Report Date: 06-Sep-2020 07:34:54 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16506.b\GI05P114.D				
Injection Date:	06-Sep-2020 03:04:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	140-20195-A-18	Lab Sample ID:	140-20195-18	Worklist Smp#:	21
Client ID:	IA-100-B-29				
Purge Vol:	500.000 mL	Dil. Factor:	1.6500	ALS Bottle#:	14
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

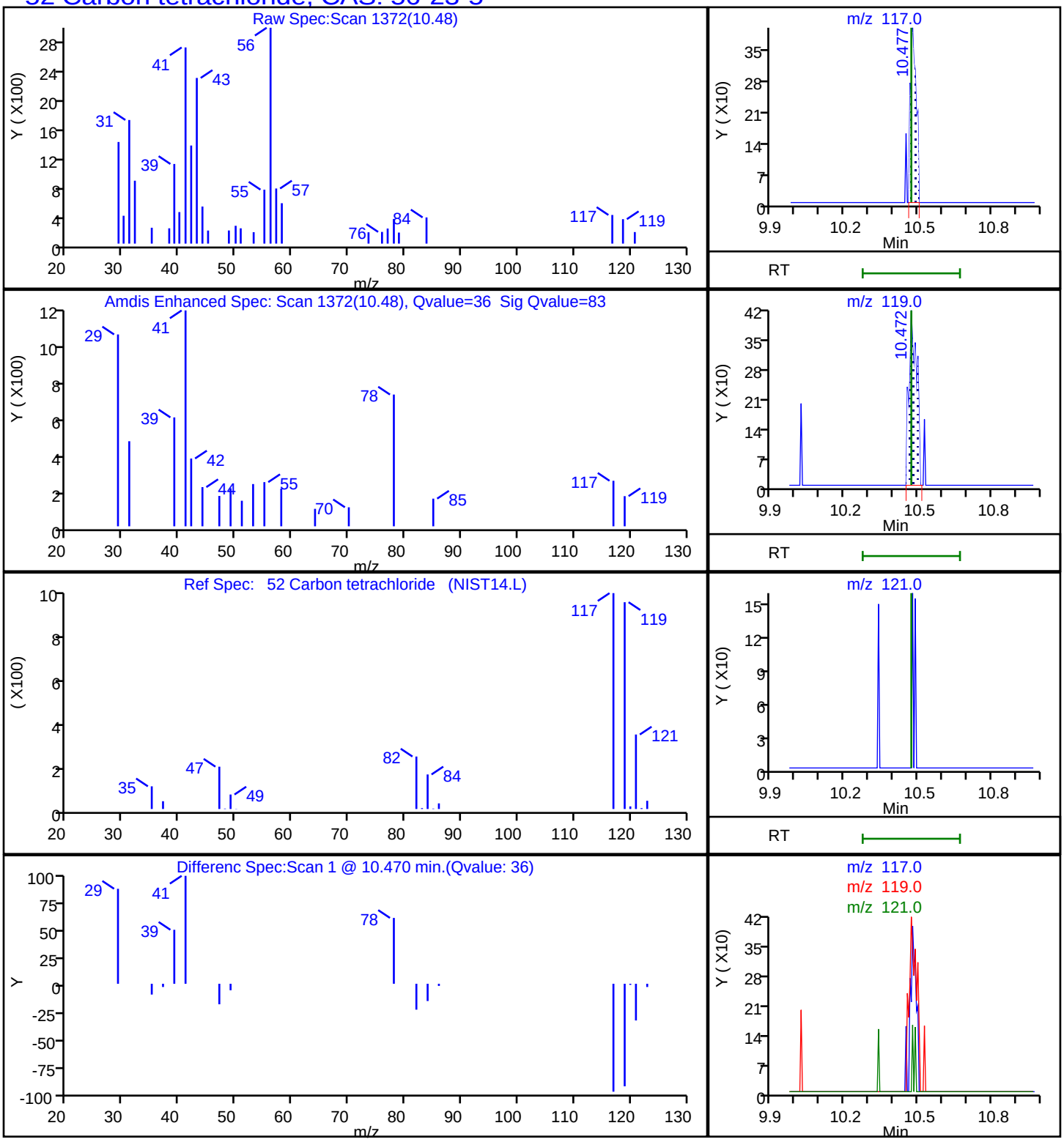
Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16506.b\GI05P114.D				
Lims ID:	140-20195-A-18				
Client ID:	IA-100-B-29				
Sample Type:	Client				
Inject. Date:	06-Sep-2020 03:04:30	ALS Bottle#:	14	Worklist Smp#:	21
Purge Vol:	500.000 mL	Dil. Factor:	1.6500		
Sample Info:	140-0016506-021				
Misc. Info.:	140-20195-a-18@1.65				
Operator ID:	HMT	Instrument ID:	MG		
Method:	\\chromfs\Knoxville\ChromData\MG\20200904-16506.b\MG_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	06-Sep-2020 07:34:31	Calib Date:	02-Sep-2020 03:27:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1023				
First Level Reviewer: tajh		Date:	06-Sep-2020 07:32:45		

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	4.45	95.84

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16506.b\GI05P114.D				
Injection Date:	06-Sep-2020 03:04:30	Instrument ID:	MG		
Lims ID:	140-20195-A-18	Lab Sample ID:	140-20195-18		
Client ID:	IA-100-B-29				
Operator ID:	HMT	ALS Bottle#:	14	Worklist Smp#:	21
Purge Vol:	500.000 mL	Dil. Factor:	1.6500		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

52 Carbon tetrachloride, CAS: 56-23-5

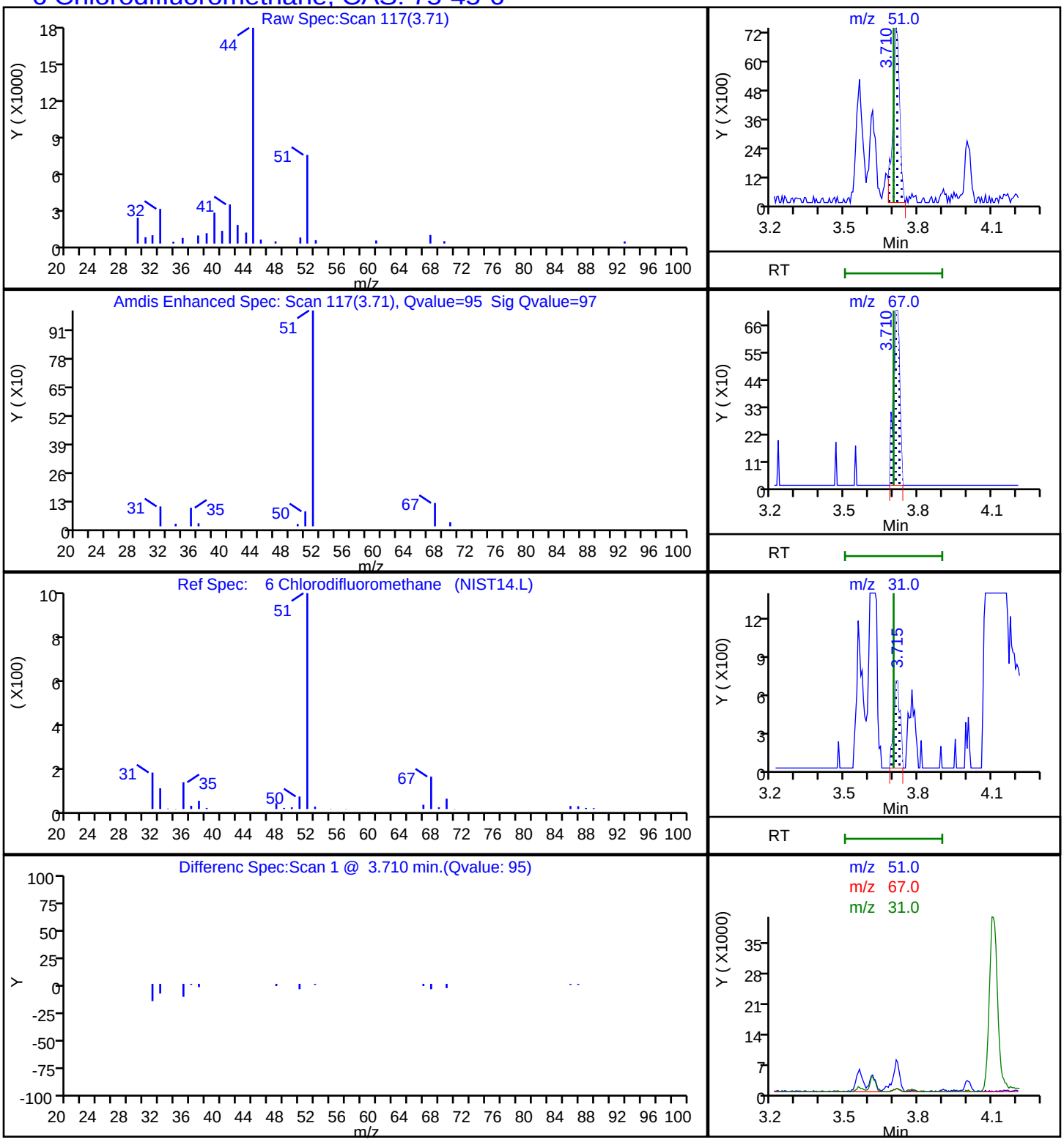


Report Date: 06-Sep-2020 07:34:54 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16506.b\GI05P114.D				
Injection Date:	06-Sep-2020 03:04:30	Instrument ID:	MG		
Lims ID:	140-20195-A-18	Lab Sample ID:	140-20195-18		
Client ID:	IA-100-B-29				
Operator ID:	HMT	ALS Bottle#:	14	Worklist Smp#:	21
Purge Vol:	500.000 mL	Dil. Factor:	1.6500		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

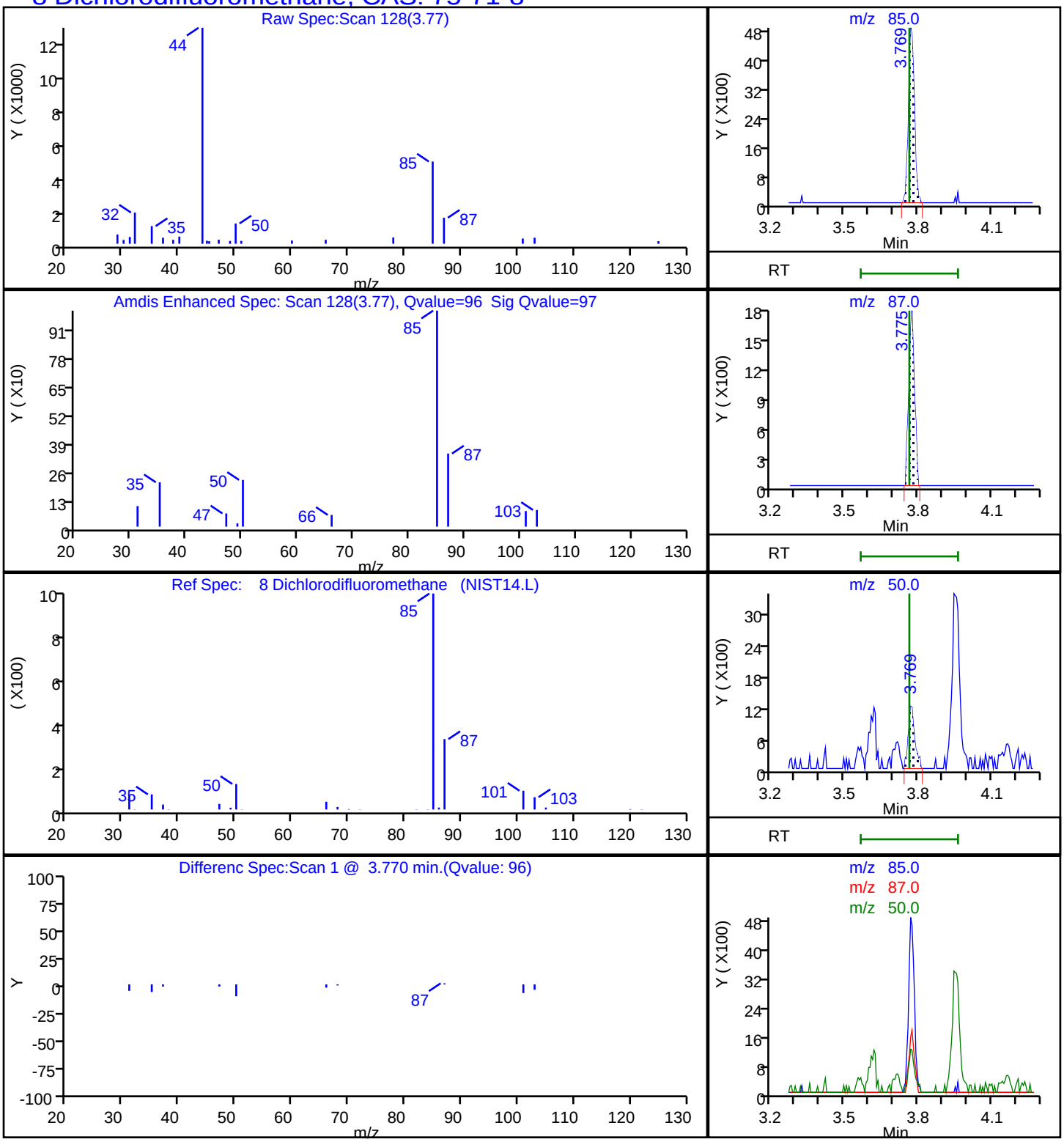
6 Chlorodifluoromethane, CAS: 75-45-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16506.b\GI05P114.D				
Injection Date:	06-Sep-2020 03:04:30	Instrument ID:	MG		
Lims ID:	140-20195-A-18	Lab Sample ID:	140-20195-18		
Client ID:	IA-100-B-29				
Operator ID:	HMT	ALS Bottle#:	14	Worklist Smp#:	21
Purge Vol:	500.000 mL	Dil. Factor:	1.6500		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

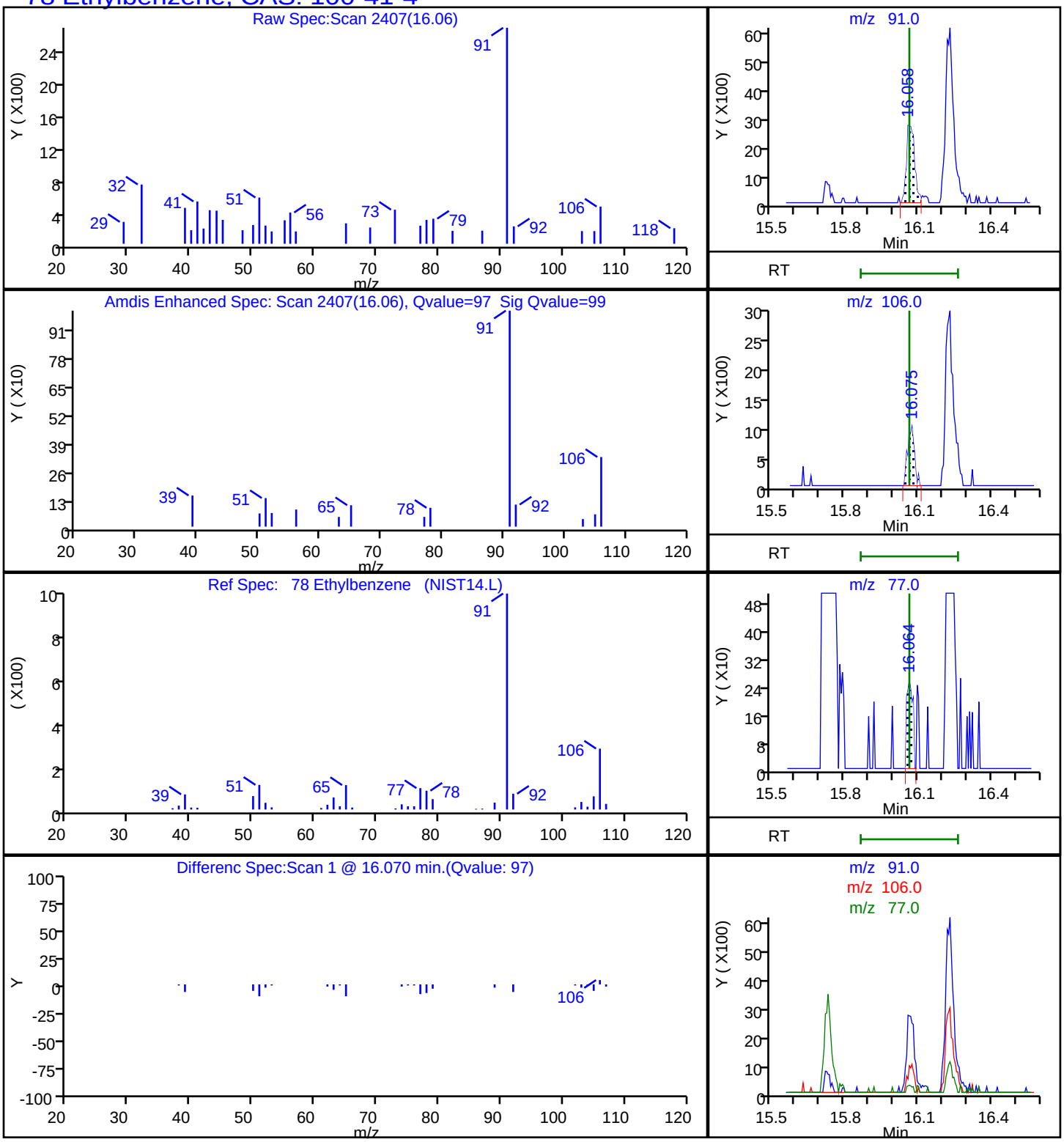
8 Dichlorodifluoromethane, CAS: 75-71-8



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16506.b\GI05P114.D				
Injection Date:	06-Sep-2020 03:04:30	Instrument ID:	MG		
Lims ID:	140-20195-A-18	Lab Sample ID:	140-20195-18		
Client ID:	IA-100-B-29				
Operator ID:	HMT	ALS Bottle#:	14	Worklist Smp#:	21
Purge Vol:	500.000 mL	Dil. Factor:	1.6500		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

78 Ethylbenzene, CAS: 100-41-4



Report Date: 06-Sep-2020 07:34:54 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200904-16506.b\GI05P114.D

Injection Date: 06-Sep-2020 03:04:30 Instrument ID: MG

Lims ID: 140-20195-A-18 Lab Sample ID: 140-20195-18

Client ID: IA-100-B-29

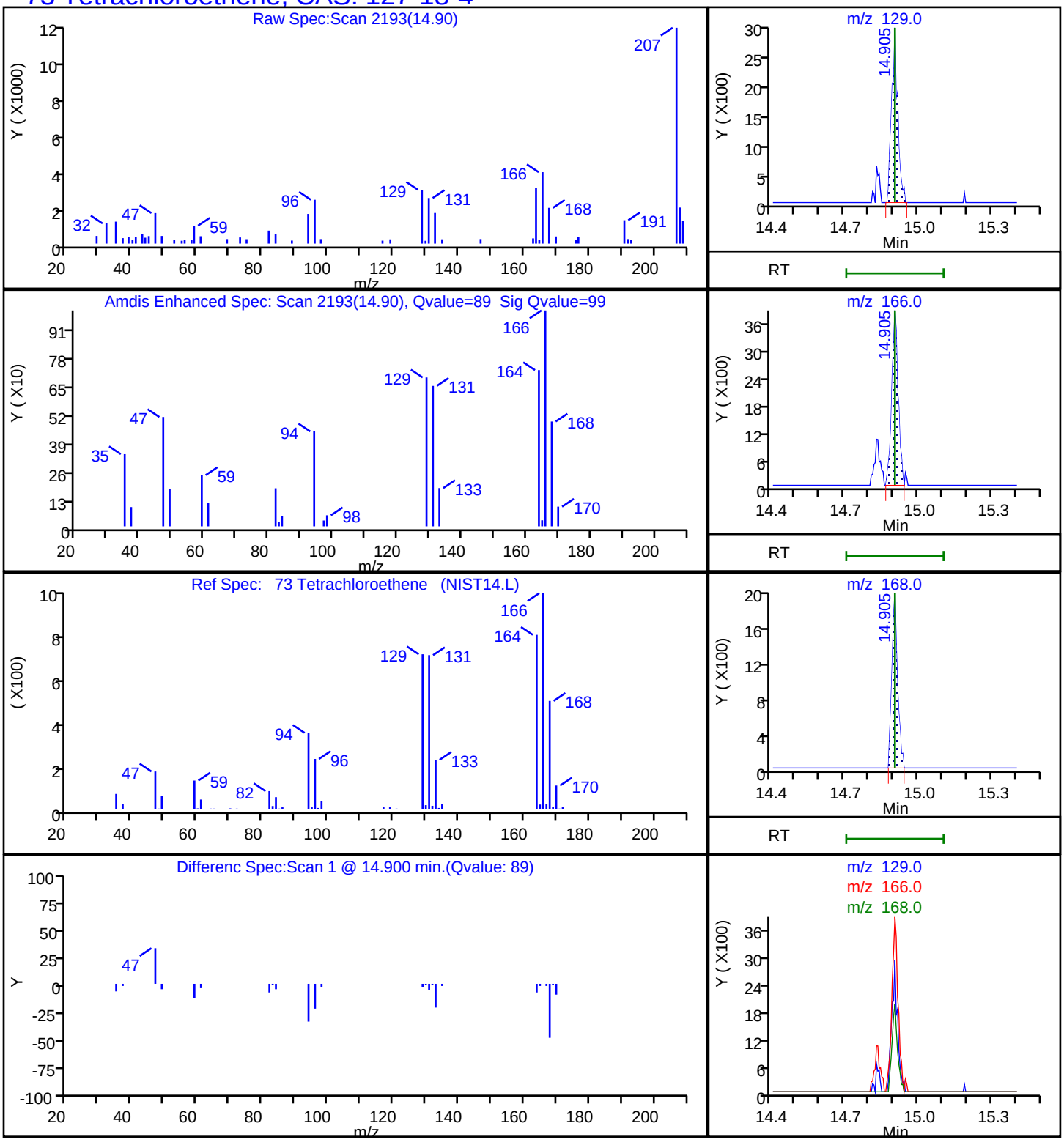
Operator ID: HMT ALS Bottle#: 14 Worklist Smp#: 21

Purge Vol: 500.000 mL Dil. Factor: 1.6500

Method: MG_TO15 Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm) Detector MS SCAN

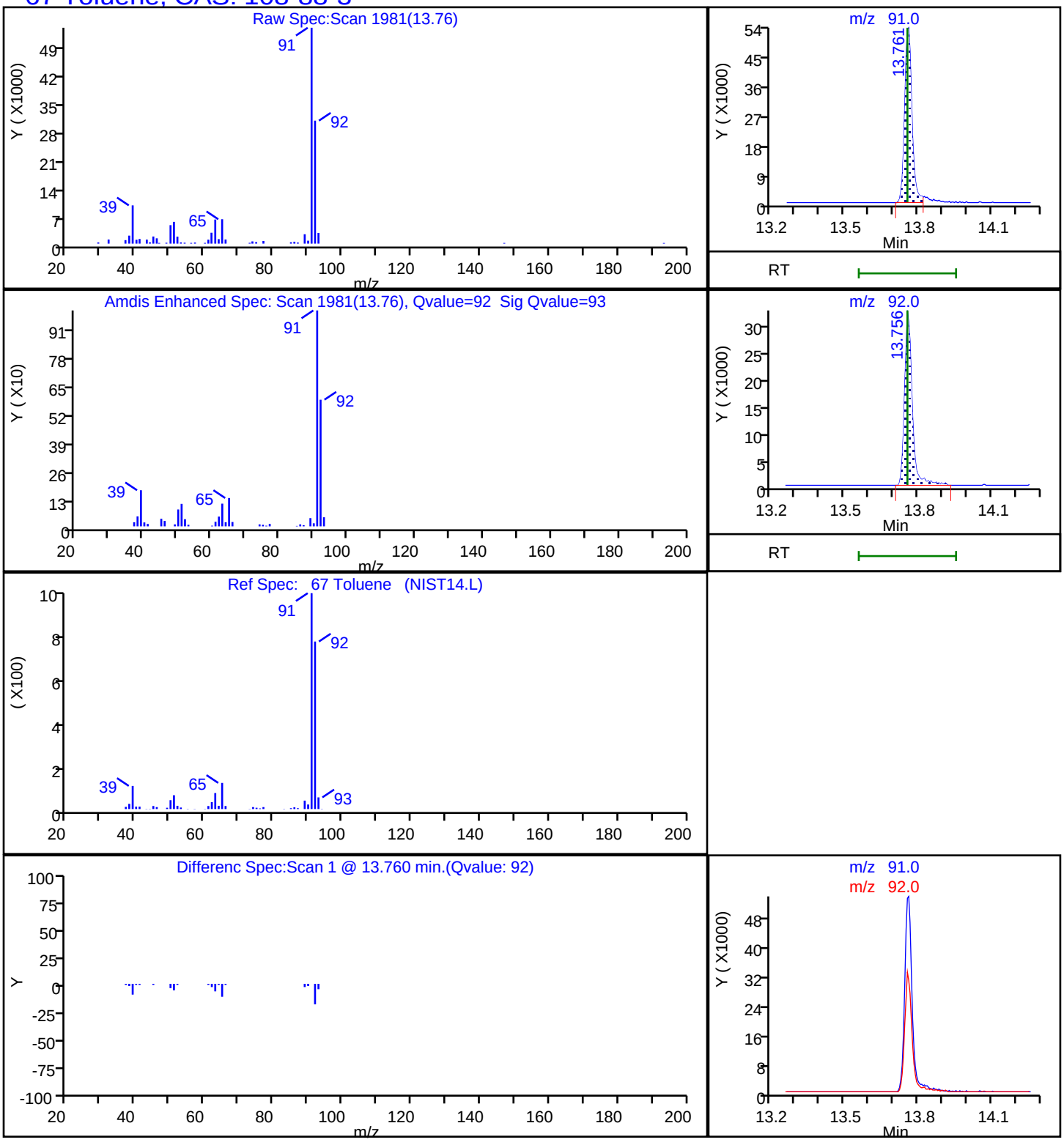
73 Tetrachloroethene, CAS: 127-18-4



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16506.b\GI05P114.D		
Injection Date:	06-Sep-2020 03:04:30	Instrument ID:	MG
Lims ID:	140-20195-A-18	Lab Sample ID:	140-20195-18
Client ID:	IA-100-B-29		
Operator ID:	HMT	ALS Bottle#:	14 Worklist Smp#: 21
Purge Vol:	500.000 mL	Dil. Factor:	1.6500
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

67 Toluene, CAS: 108-88-3

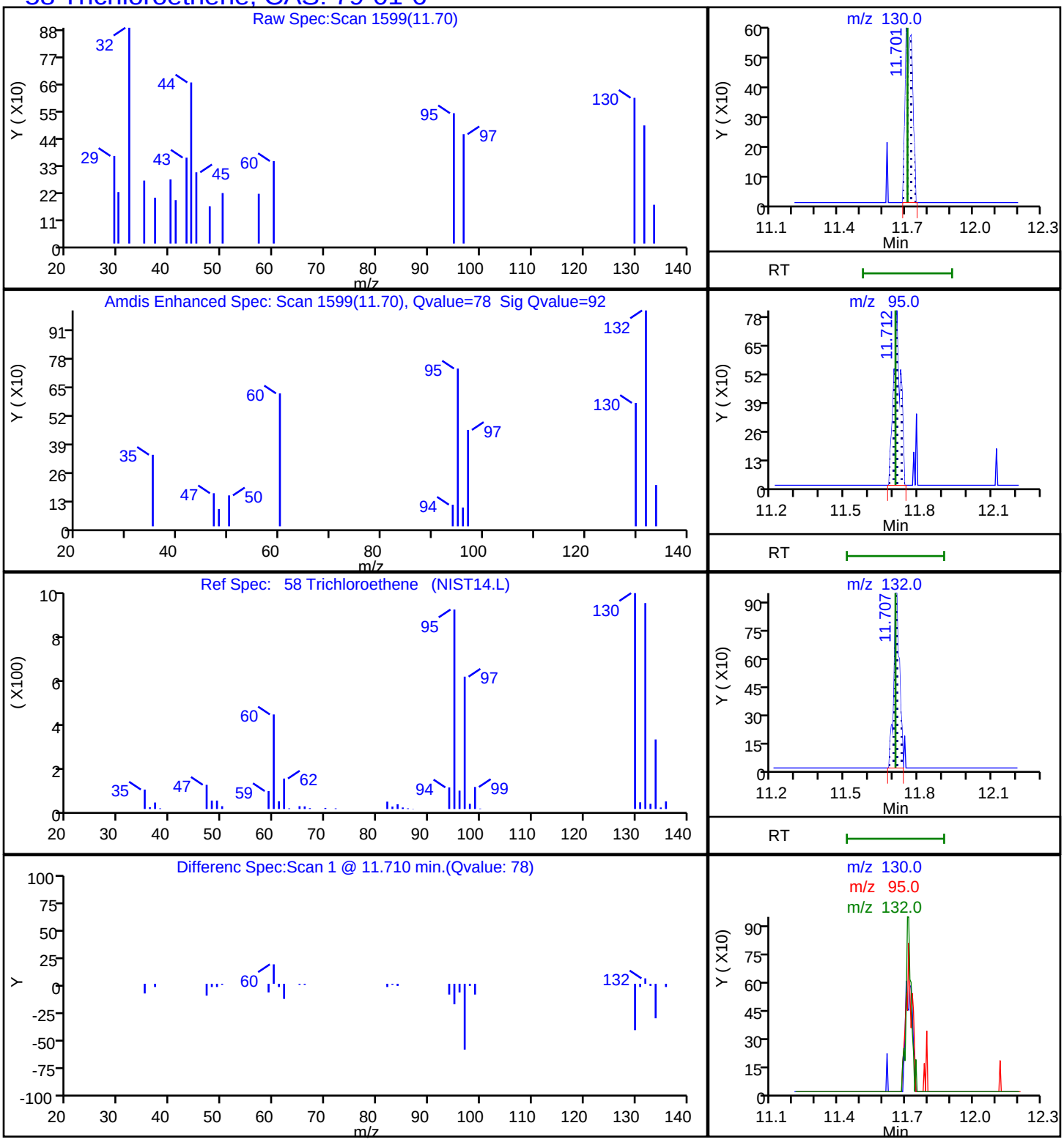


Report Date: 06-Sep-2020 07:34:54 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16506.b\GI05P114.D		
Injection Date:	06-Sep-2020 03:04:30	Instrument ID:	MG
Lims ID:	140-20195-A-18	Lab Sample ID:	140-20195-18
Client ID:	IA-100-B-29		
Operator ID:	HMT	ALS Bottle#:	14 Worklist Smp#: 21
Purge Vol:	500.000 mL	Dil. Factor:	1.6500
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

58 Trichloroethene, CAS: 79-01-6

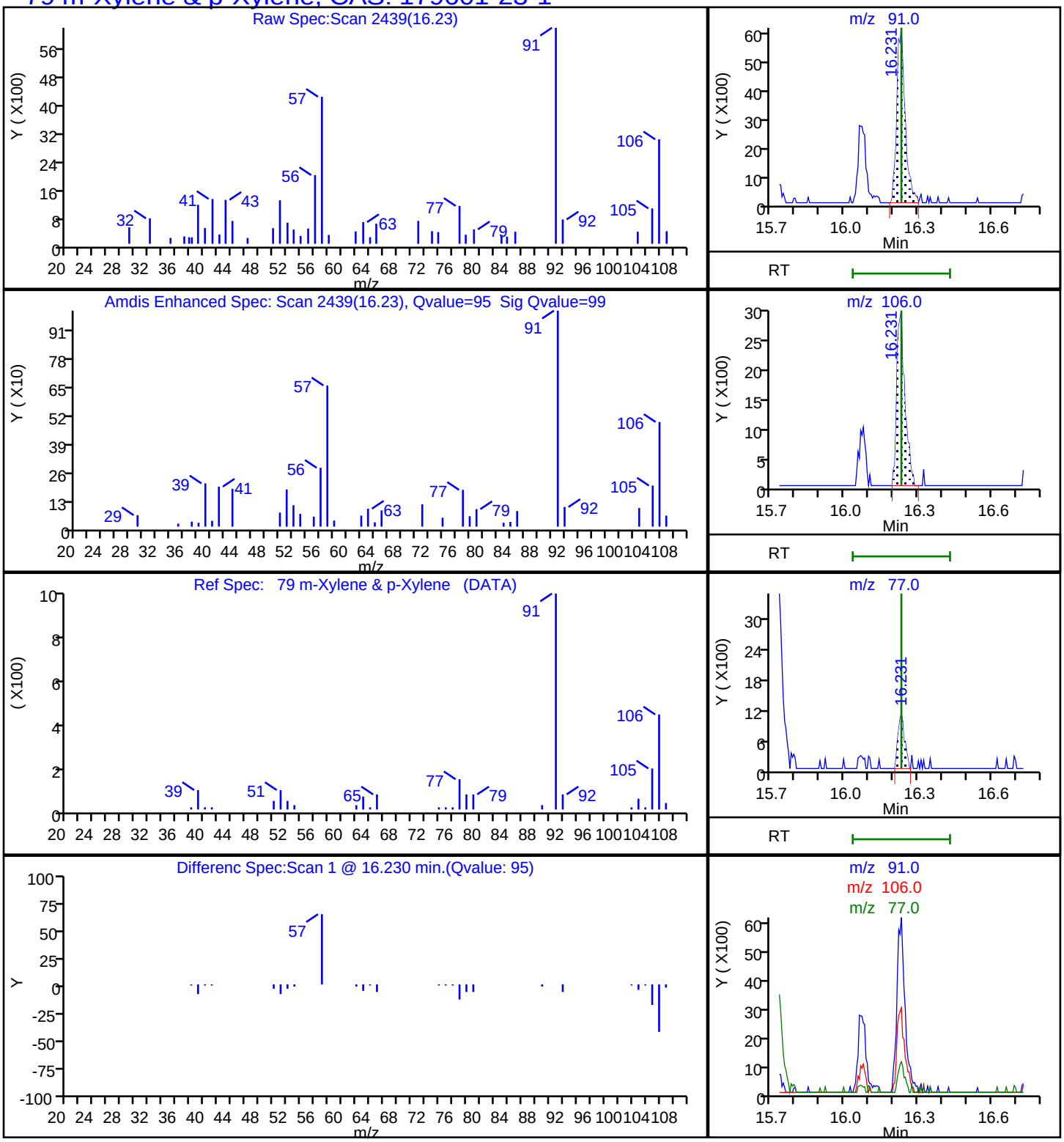


Report Date: 06-Sep-2020 07:34:54 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16506.b\GI05P114.D				
Injection Date:	06-Sep-2020 03:04:30	Instrument ID:	MG		
Lims ID:	140-20195-A-18	Lab Sample ID:	140-20195-18		
Client ID:	IA-100-B-29				
Operator ID:	HMT	ALS Bottle#:	14	Worklist Smp#:	21
Purge Vol:	500.000 mL	Dil. Factor:	1.6500		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

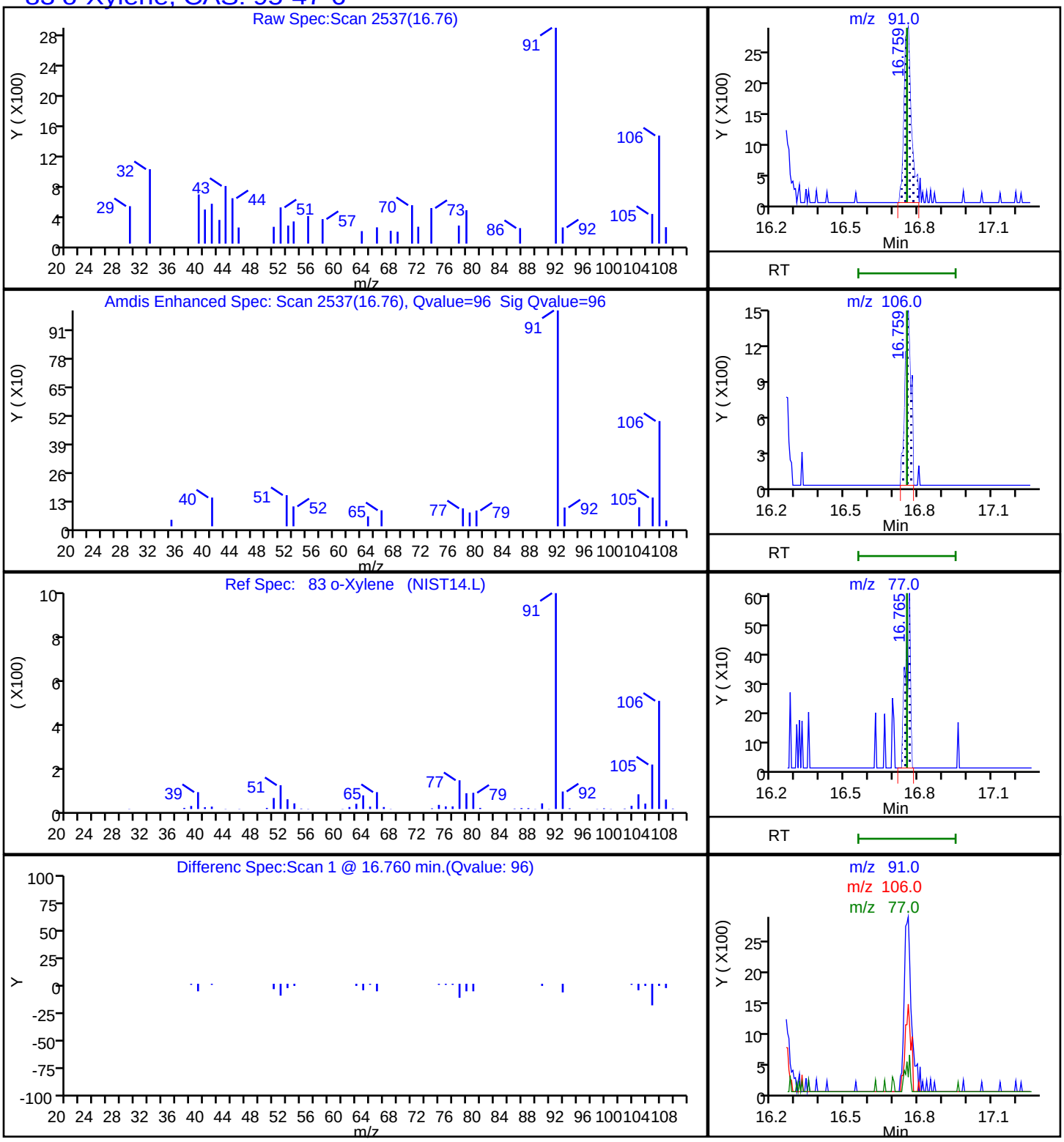
79 m-Xylene & p-Xylene, CAS: 179601-23-1



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16506.b\GI05P114.D				
Injection Date:	06-Sep-2020 03:04:30	Instrument ID:	MG		
Lims ID:	140-20195-A-18	Lab Sample ID:	140-20195-18		
Client ID:	IA-100-B-29				
Operator ID:	HMT	ALS Bottle#:	14	Worklist Smp#:	21
Purge Vol:	500.000 mL	Dil. Factor:	1.6500		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

83 o-Xylene, CAS: 95-47-6



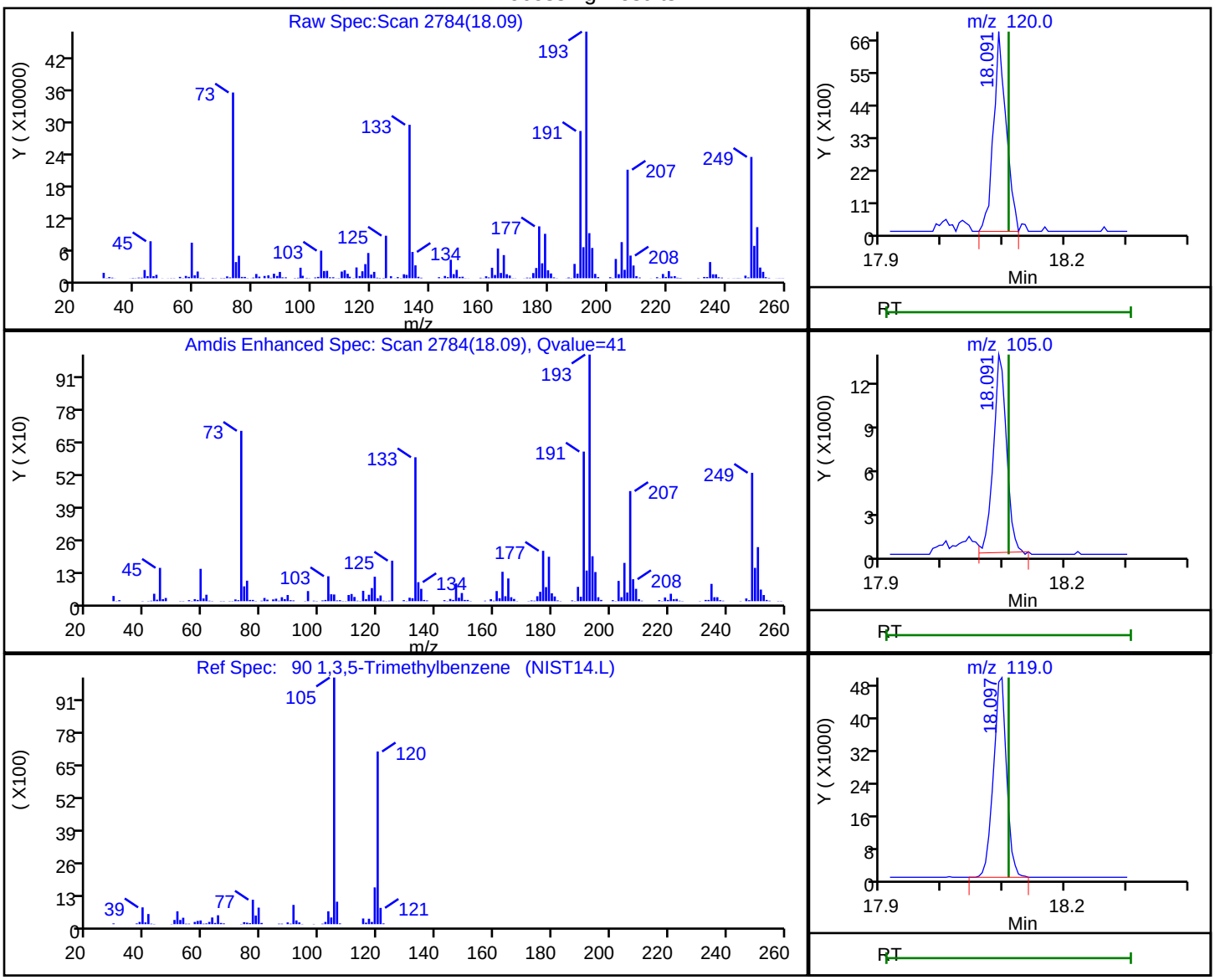
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16506.b\GI05P114.D				
Injection Date:	06-Sep-2020 03:04:30	Instrument ID:	MG		
Lims ID:	140-20195-A-18	Lab Sample ID:	140-20195-18		
Client ID:	IA-100-B-29				
Operator ID:	HMT	ALS Bottle#:	14	Worklist Smp#:	21
Purge Vol:	500.000 mL	Dil. Factor:	1.6500		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

90 1,3,5-Trimethylbenzene, CAS: 108-67-8

Processing Results



RT	Mass	Response	Amount
18.09	120.00	9818	0.136048
18.09	105.00	20624	
18.10	119.00	73287	

Reviewer: tajh, 06-Sep-2020 07:32:56

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Client Sample ID: IA-101-B-29 Lab Sample ID: 140-20195-19

Matrix: Air Lab File ID: GI05P115.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 16:22

Sample wt/vol: 100(mL) Date Analyzed: 09/06/2020 03:49

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42481 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.085	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.054	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	0.42		0.40	0.11
67-66-3	Chloroform	119.38	ND		0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.37	J	0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	0.10	J	0.40	0.065
75-09-2	Methylene Chloride	84.93	10		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.035
108-88-3	Toluene	92.14	3.6		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	ND		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND	*	0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.43	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	96		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Client Sample ID: IA-101-B-29 Lab Sample ID: 140-20195-19

Matrix: Air Lab File ID: GI05P115.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 16:22

Sample wt/vol: 100(mL) Date Analyzed: 09/06/2020 03:49

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42481 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.27	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.34	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	1.5		1.4	0.39
67-66-3	Chloroform	119.38	ND		2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	1.8	J	2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	0.43	J	1.7	0.28
75-09-2	Methylene Chloride	84.93	35		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.24
108-88-3	Toluene	92.14	13		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	ND		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND	*	2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	1.9	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	96		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200904-16506.b\GI05P115.D
Lims ID: 140-20195-A-19
Client ID: IA-101-B-29
Sample Type: Client
Inject. Date: 06-Sep-2020 03:49:30 ALS Bottle#: 15 Worklist Smp#: 22
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016506-022
Misc. Info.: 140-20195-a-19
Operator ID: HMT Instrument ID: MG

Method: \\chromfs\Knoxville\ChromData\MG\20200904-16506.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 06-Sep-2020 07:34:31 Calib Date: 02-Sep-2020 03:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1023

First Level Reviewer: tajh Date: 06-Sep-2020 07:33:09

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.811	8.811	0.000	88	114518	4.80	
* 2 1,4-Difluorobenzene	114	10.990	10.995	-0.005	98	603696	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.724	15.730	-0.006	93	566349	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.369	17.369	0.000	88	395047	4.45	
6 Chlorodifluoromethane	51	3.705	3.699	0.006	96	8576	0.0836	
8 Dichlorodifluoromethane	85	3.759	3.764	-0.005	97	8569	0.0747	
31 Methylene Chloride	84	6.271	6.271	0.000	87	57325	2.03	
50 Benzene	78	10.461	10.450	0.011	68	2119	0.0171	
52 Carbon tetrachloride	117	10.467	10.472	-0.005	43	821	0.0107	
67 Toluene	91	13.756	13.756	0.000	94	88796	0.7109	
78 Ethylbenzene	91	16.069	16.064	0.005	94	3207	0.0200	
79 m-Xylene & p-Xylene	91	16.226	16.231	-0.005	95	7884	0.0621	
83 o-Xylene	91	16.760	16.754	0.006	91	3154	0.0245	
S 124 Xylenes, Total	100				0		0.0866	

Reagents:

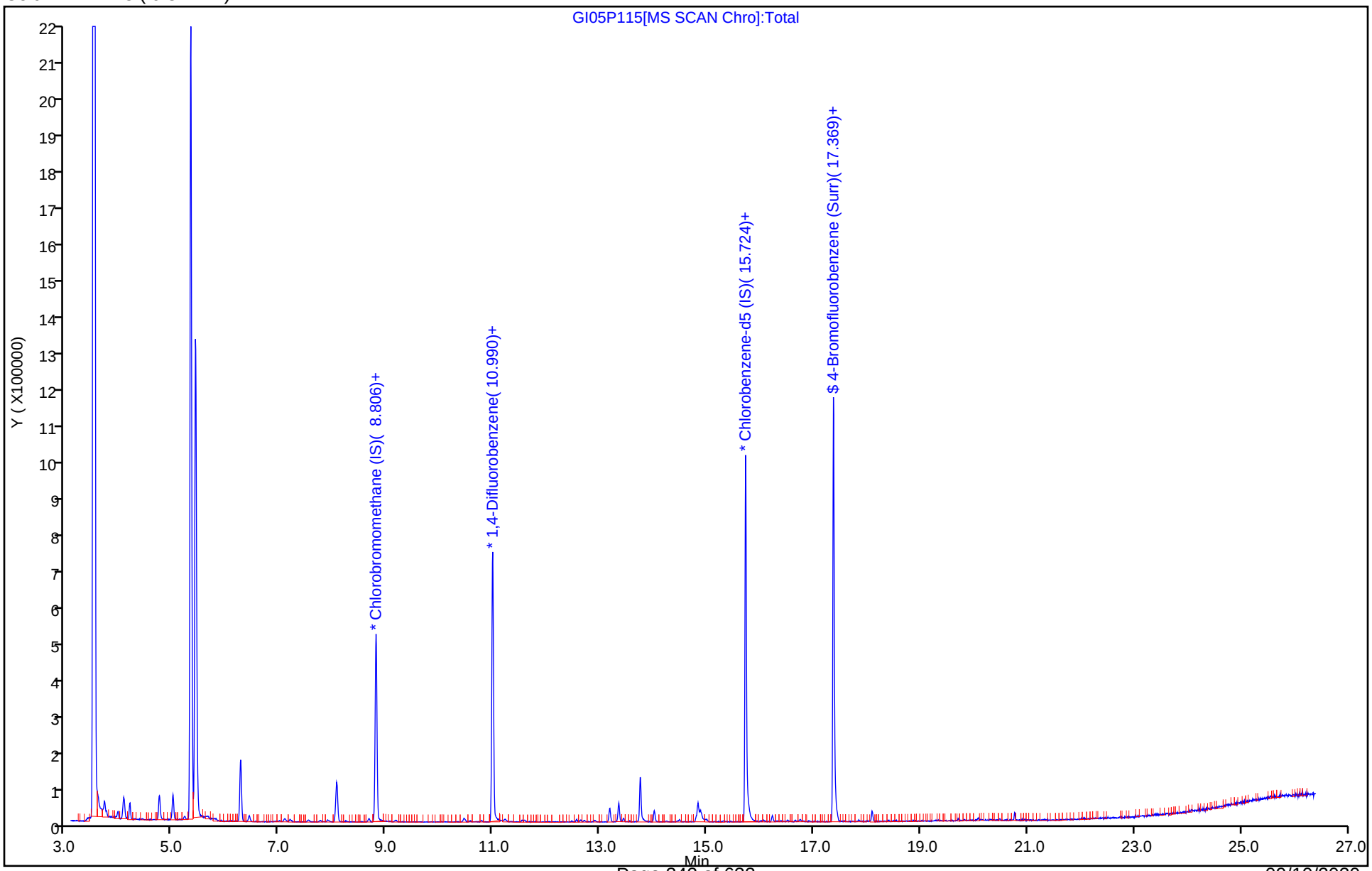
40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

Report Date: 06-Sep-2020 07:34:56 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16506.b\GI05P115.D				
Injection Date:	06-Sep-2020 03:49:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	140-20195-A-19	Lab Sample ID:	140-20195-19	Worklist Smp#:	22
Client ID:	IA-101-B-29				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16506.b\GI05P115.D				
Lims ID:	140-20195-A-19				
Client ID:	IA-101-B-29				
Sample Type:	Client				
Inject. Date:	06-Sep-2020 03:49:30	ALS Bottle#:	15	Worklist Smp#:	22
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016506-022				
Misc. Info.:	140-20195-a-19				
Operator ID:	HMT	Instrument ID:	MG		
Method:	\\chromfs\Knoxville\ChromData\MG\20200904-16506.b\MG_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	06-Sep-2020 07:34:31	Calib Date:	02-Sep-2020 03:27:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1023				

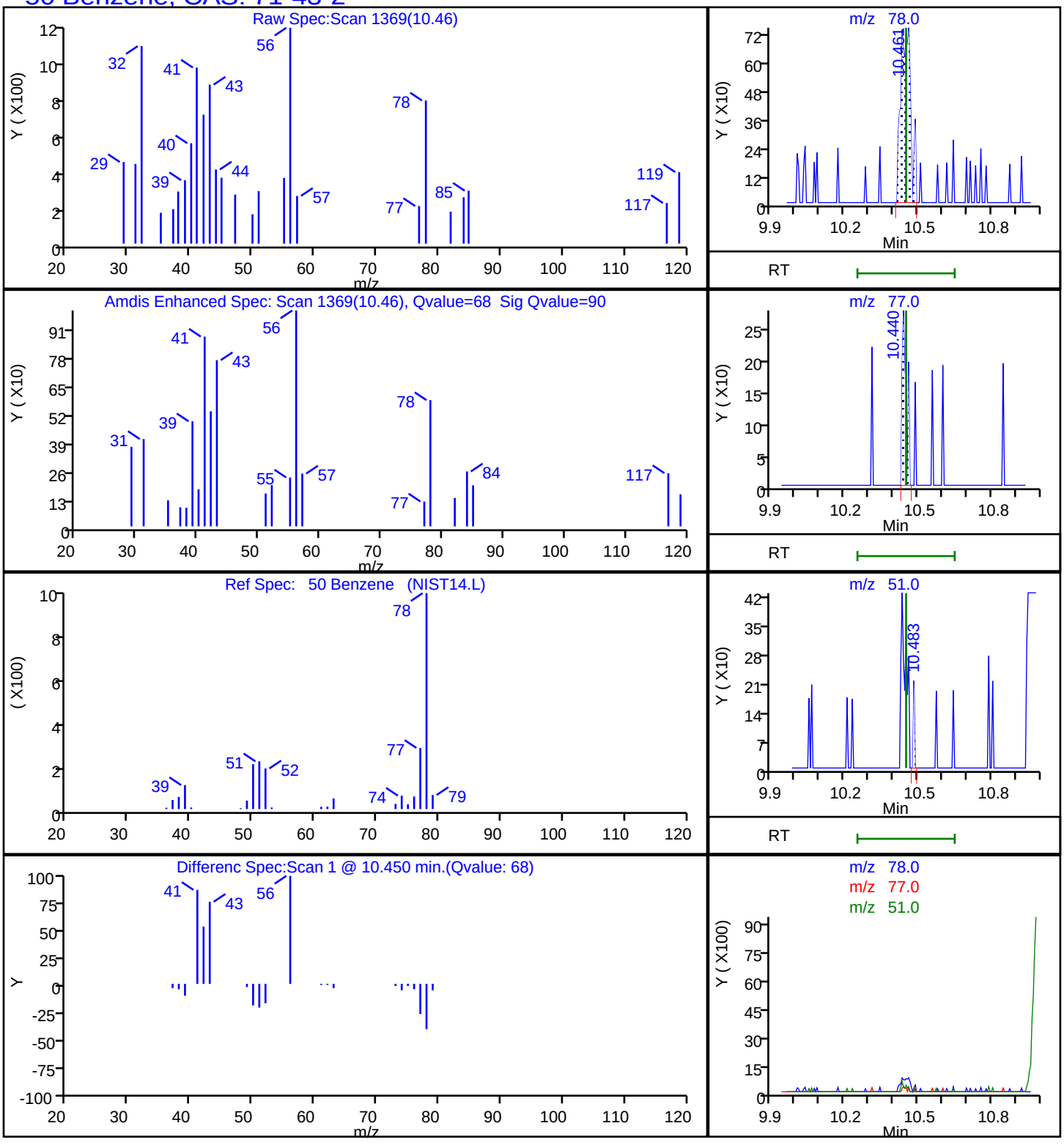
First Level Reviewer: tajh Date: 06-Sep-2020 07:33:09

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	4.45	95.80

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16506.b\GI05P115.D				
Injection Date:	06-Sep-2020 03:49:30	Instrument ID:	MG		
Lims ID:	140-20195-A-19	Lab Sample ID:	140-20195-19		
Client ID:	IA-101-B-29				
Operator ID:	HMT	ALS Bottle#:	15	Worklist Smp#:	22
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

50 Benzene, CAS: 71-43-2

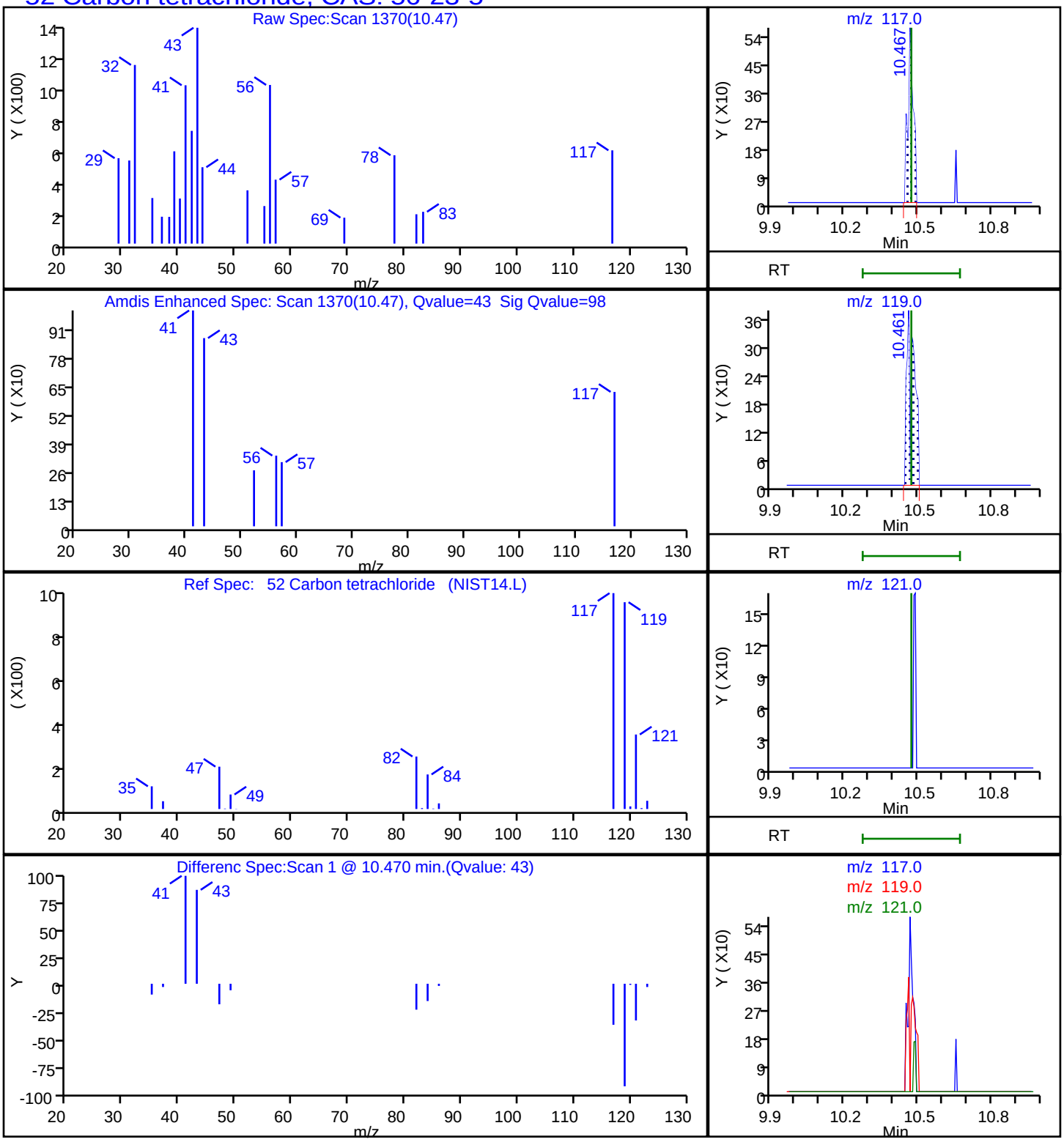


Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200904-16506.b\GI05P115.D

Injection Date:	06-Sep-2020 03:49:30	Instrument ID:	MG		
Lims ID:	140-20195-A-19	Lab Sample ID:	140-20195-19		
Client ID:	IA-101-B-29				
Operator ID:	HMT	ALS Bottle#:	15	Worklist Smp#:	22
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

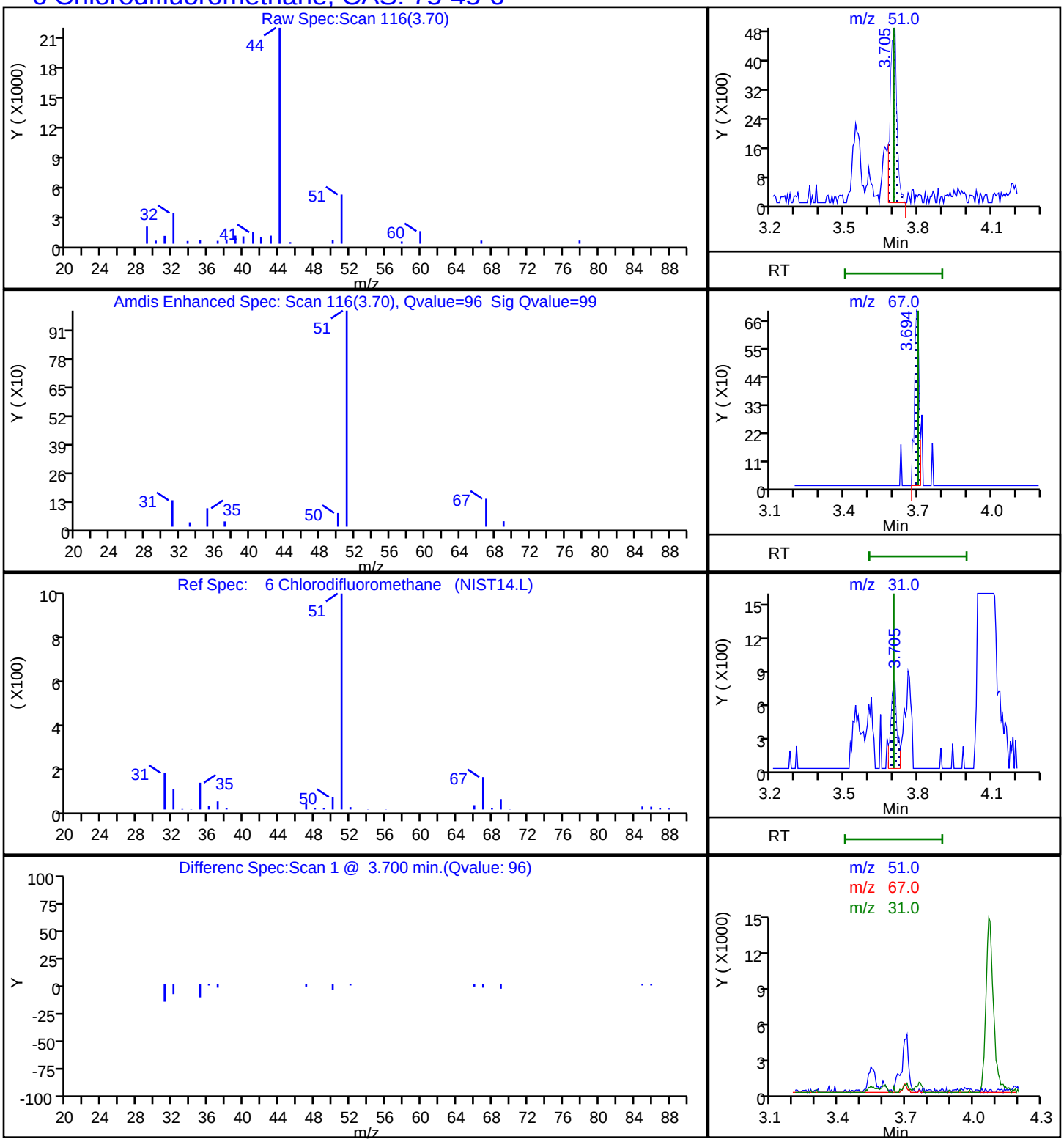
52 Carbon tetrachloride, CAS: 56-23-5



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16506.b\GI05P115.D				
Injection Date:	06-Sep-2020 03:49:30	Instrument ID:	MG		
Lims ID:	140-20195-A-19	Lab Sample ID:	140-20195-19		
Client ID:	IA-101-B-29				
Operator ID:	HMT	ALS Bottle#:	15	Worklist Smp#:	22
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

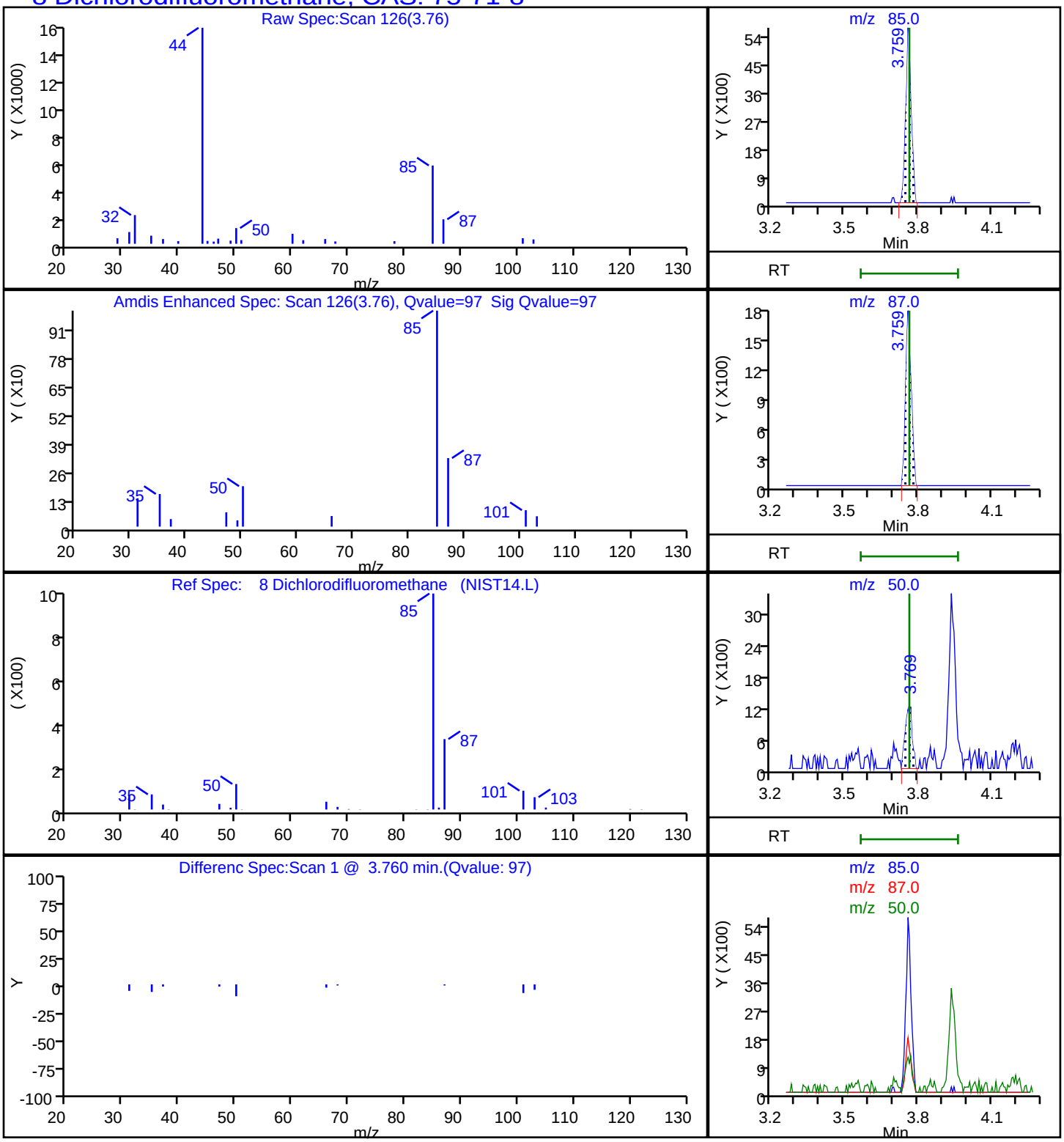
6 Chlorodifluoromethane, CAS: 75-45-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16506.b\GI05P115.D				
Injection Date:	06-Sep-2020 03:49:30	Instrument ID:	MG		
Lims ID:	140-20195-A-19	Lab Sample ID:	140-20195-19		
Client ID:	IA-101-B-29				
Operator ID:	HMT	ALS Bottle#:	15	Worklist Smp#:	22
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

8 Dichlorodifluoromethane, CAS: 75-71-8



Eurofins TestAmerica, Knoxville

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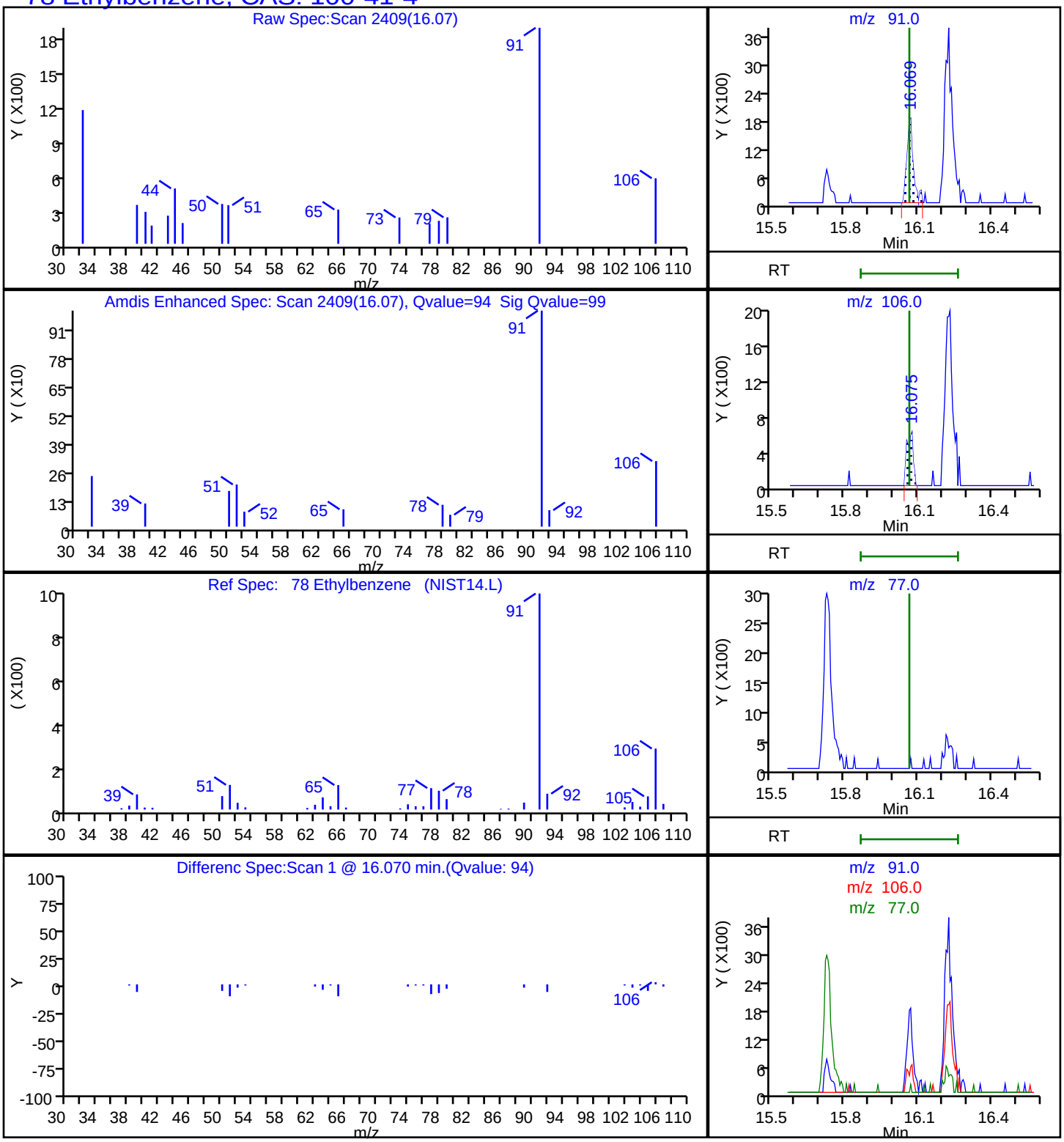
Injection Date:	06-Sep-2020 03:49:30	Instrument ID:	MG		
Lims ID:	140-20195-A-19	Lab Sample ID:	140-20195-19		
Client ID:	IA-101-B-29				
Operator ID:	HMT	ALS Bottle#:	15	Worklist Smp#:	22
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

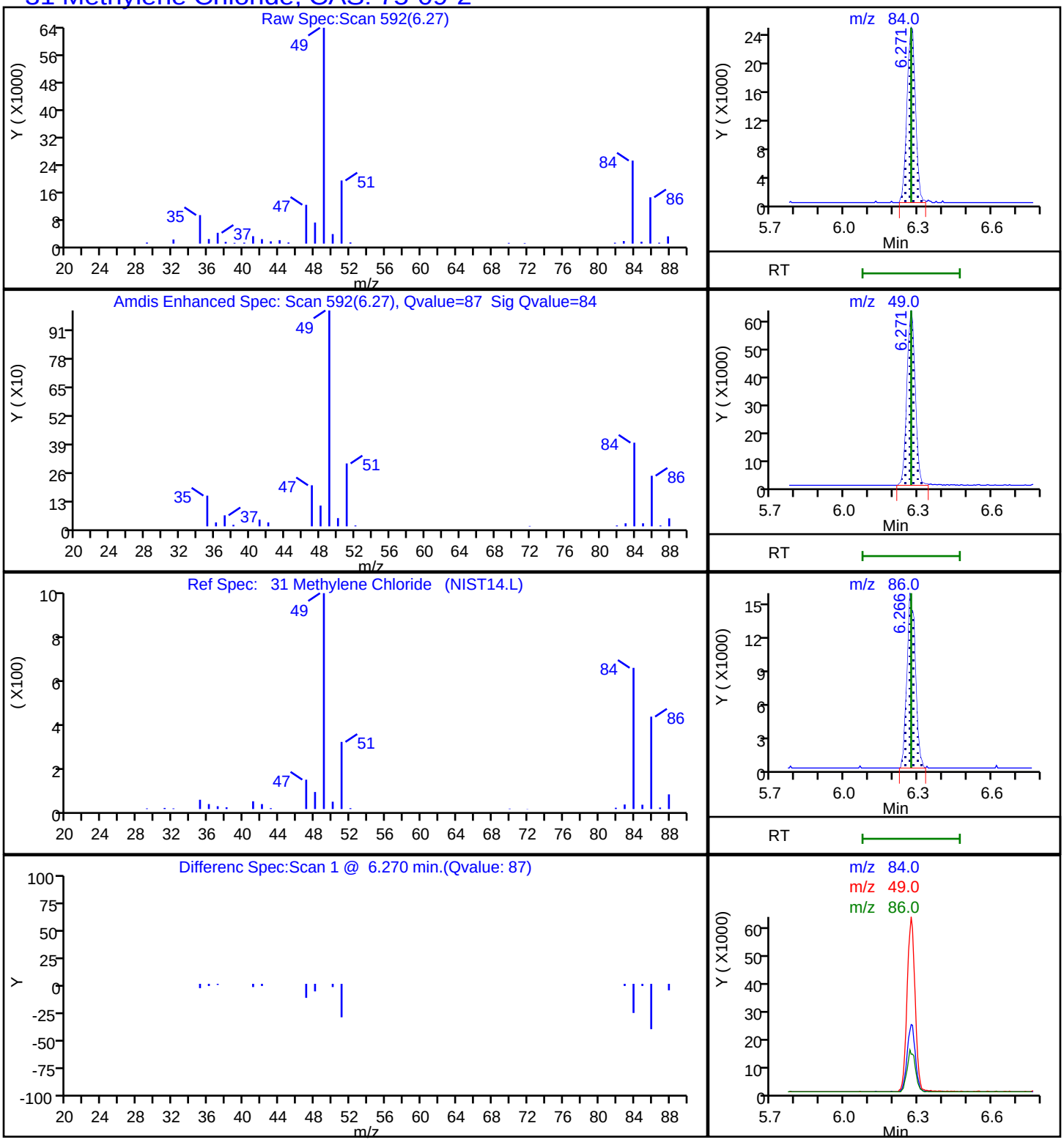
78 Ethylbenzene, CAS: 100-41-4



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16506.b\GI05P115.D				
Injection Date:	06-Sep-2020 03:49:30	Instrument ID:	MG		
Lims ID:	140-20195-A-19	Lab Sample ID:	140-20195-19		
Client ID:	IA-101-B-29				
Operator ID:	HMT	ALS Bottle#:	15	Worklist Smp#:	22
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

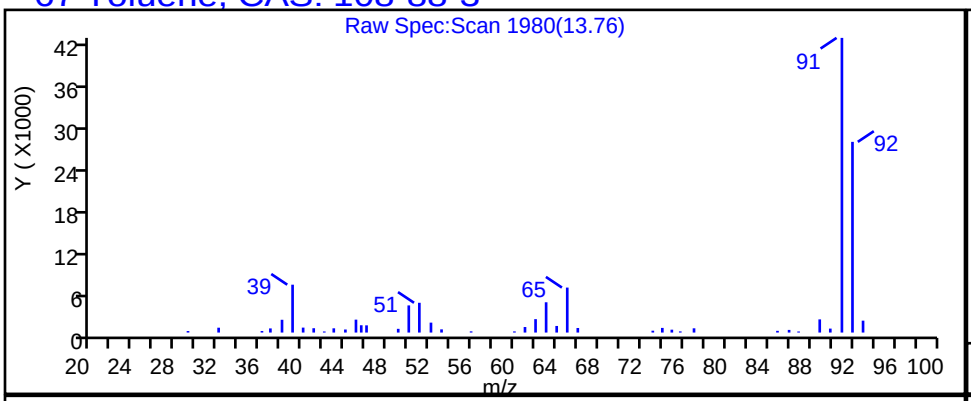
31 Methylene Chloride, CAS: 75-09-2

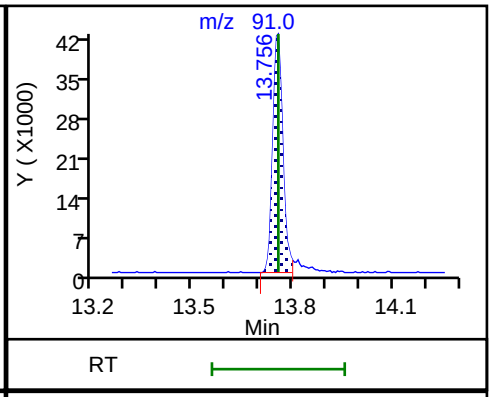


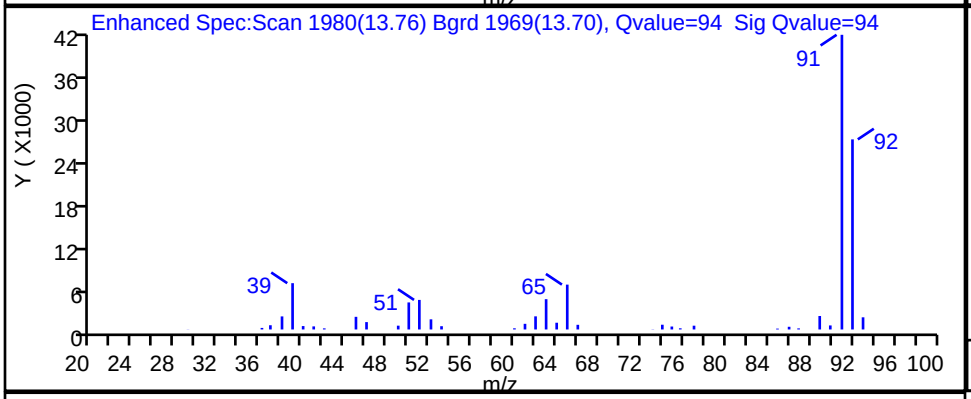
Eurofins TestAmerica, Knoxville

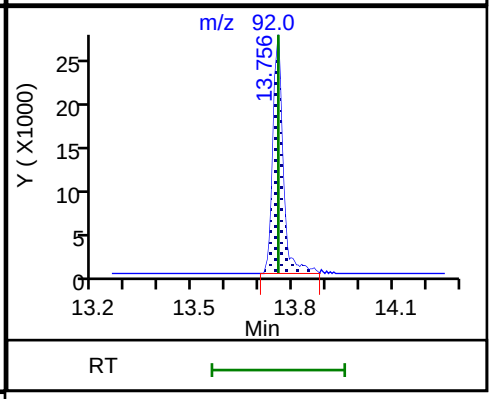
Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16506.b\GI05P115.D		
Injection Date:	06-Sep-2020 03:49:30	Instrument ID:	MG
Lims ID:	140-20195-A-19	Lab Sample ID:	140-20195-19
Client ID:	IA-101-B-29		
Operator ID:	HMT	ALS Bottle#:	15 Worklist Smp#: 22
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

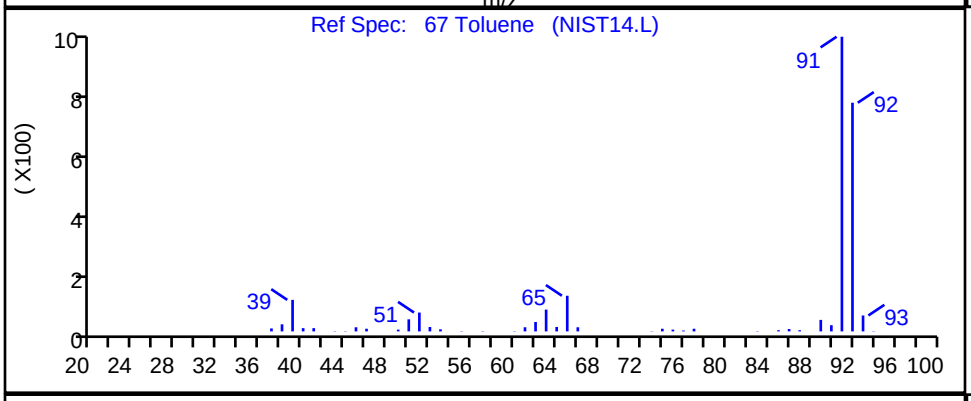
67 Toluene, CAS: 108-88-3

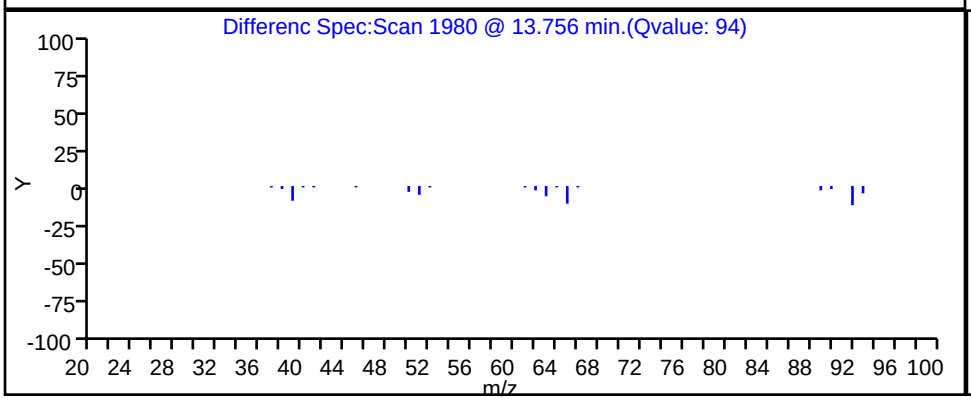


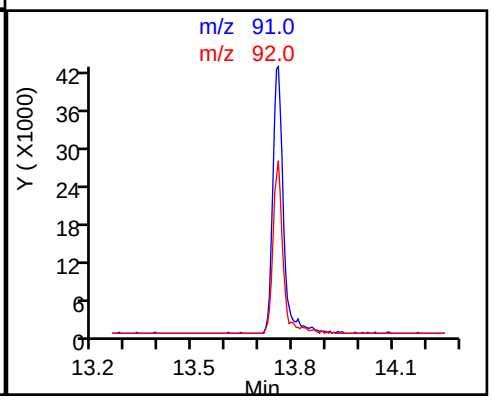








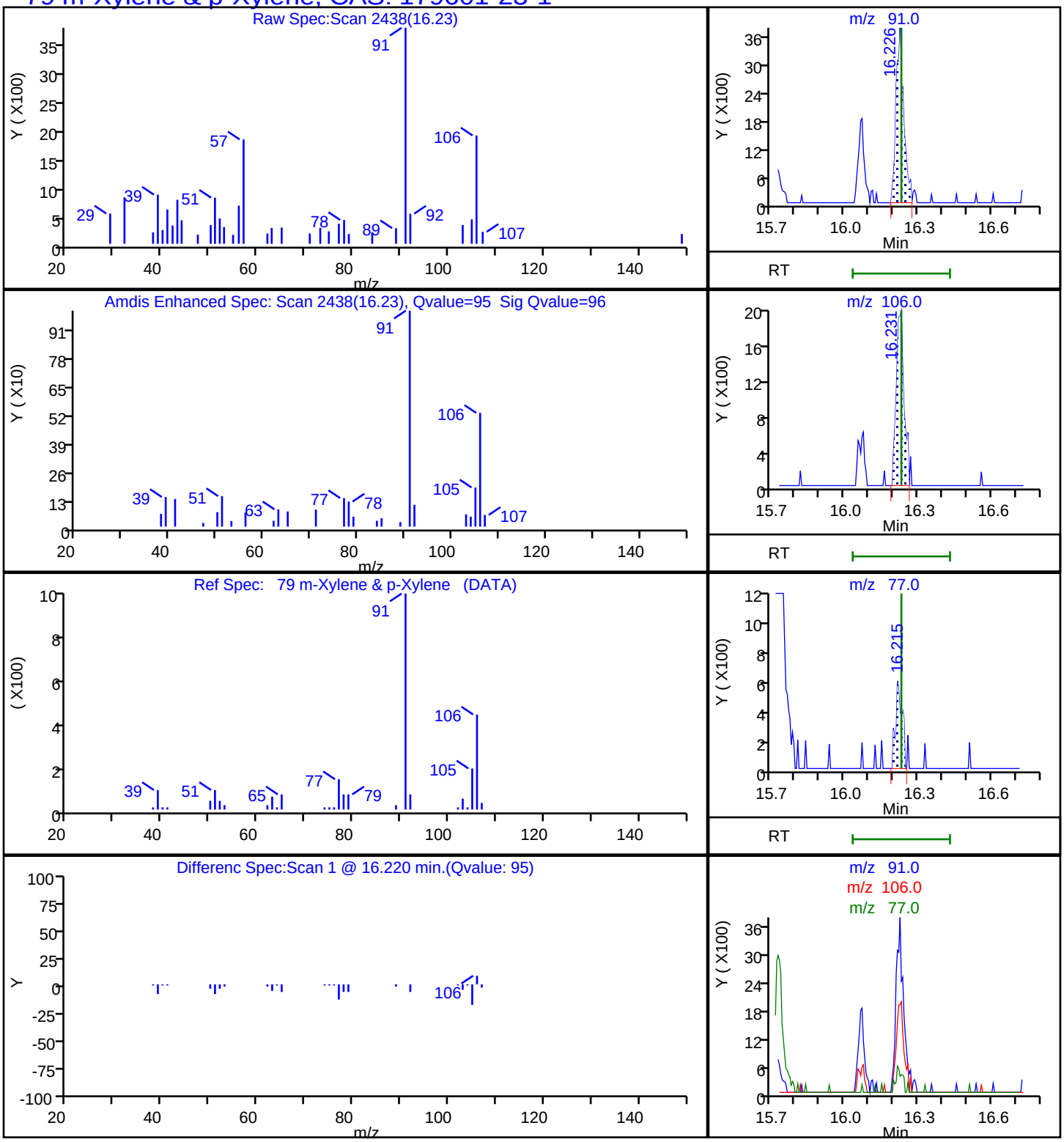




Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16506.b\GI05P115.D				
Injection Date:	06-Sep-2020 03:49:30	Instrument ID:	MG		
Lims ID:	140-20195-A-19	Lab Sample ID:	140-20195-19		
Client ID:	IA-101-B-29				
Operator ID:	HMT	ALS Bottle#:	15	Worklist Smp#:	22
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

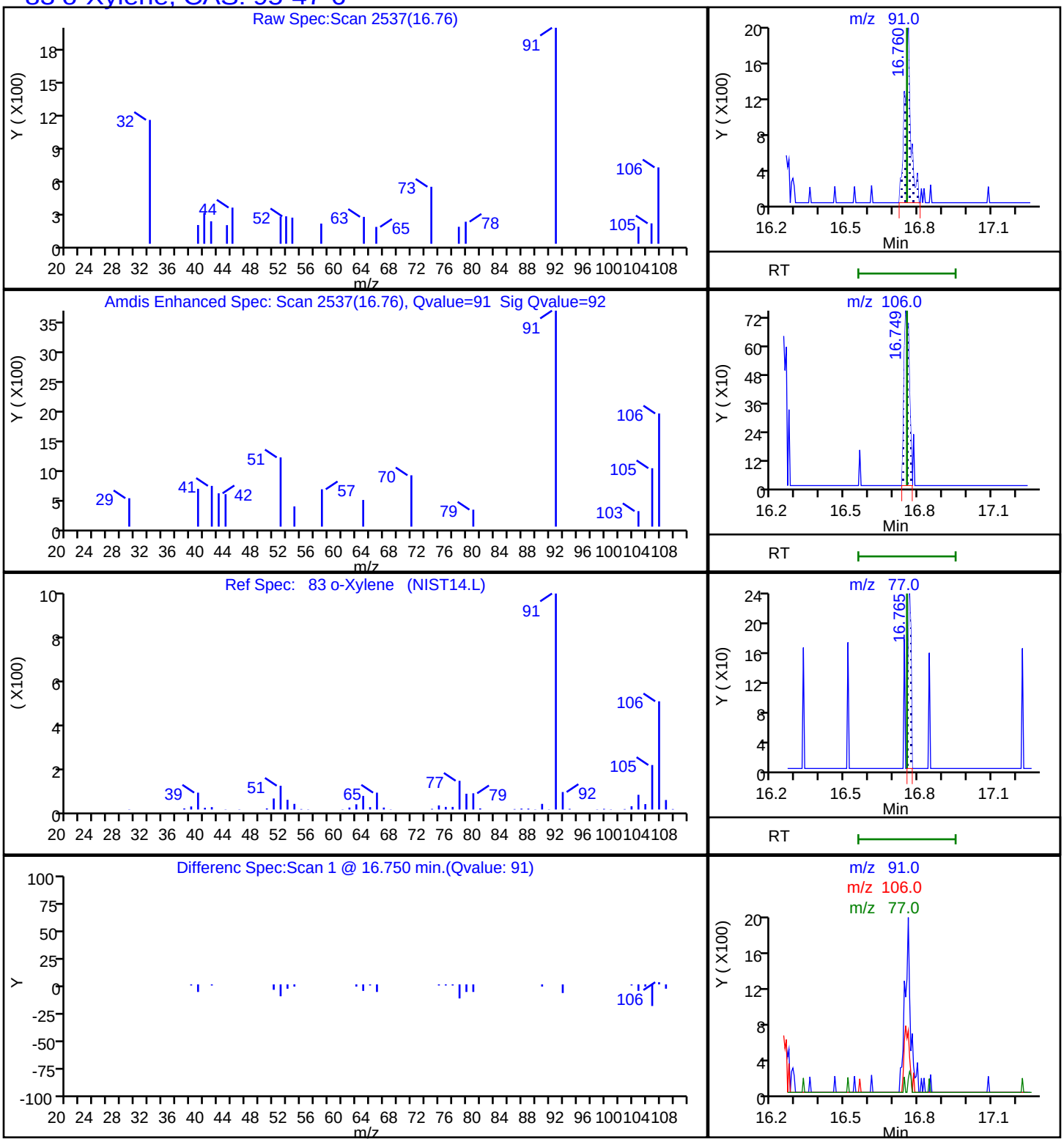
79 m-Xylene & p-Xylene, CAS: 179601-23-1



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16506.b\GI05P115.D				
Injection Date:	06-Sep-2020 03:49:30	Instrument ID:	MG		
Lims ID:	140-20195-A-19	Lab Sample ID:	140-20195-19		
Client ID:	IA-101-B-29				
Operator ID:	HMT	ALS Bottle#:	15	Worklist Smp#:	22
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

83 o-Xylene, CAS: 95-47-6



FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 140-42295/9	GI01IC01.D
Level 2	IC 140-42295/10	GI01IC02.D
Level 3	IC 140-42295/11	GI01IC03.D
Level 4	IC 140-42295/12	GI01IC04.D
Level 5	IC 140-42295/13	GI01IC05.D
Level 6	IC 140-42295/14	GI01IC06.D
Level 7	ICIS 140-42295/15	GI01IC07.D
Level 8	IC 140-42295/7	GI01IC08.D
Level 9	IC 140-42295/5	GI01IC09.D
Level 10	IC 140-42295/3	GI01IC10.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Chlorodifluoromethane	+++++ 4.2174	+++++ 3.9338	5.0807 4.6204	4.1800 4.4013	4.2893 3.6854	Ave		4.3010				9.8		30.0			
Propene	+++++ 2.1016	+++++ 1.9924	+++++ 2.2188	2.4122 2.0989	2.1914 1.7884	Ave		2.1148				9.2		30.0			
Dichlorodifluoromethane	+++++ 4.6221	+++++ 4.5171	5.1025 5.2936	5.0254 5.0487	4.6333 4.2256	Ave		4.8085				7.5		30.0			
Chloromethane	+++++ 0.8378	+++++ 0.7711	+++++ 0.9046	1.0496 0.8511	0.9048 0.7078	Ave		0.8610				12.7		30.0			
1,2-Dichloro-1,1,2,2-tetrafluoroethane	2.7419 2.4849	3.0305 2.6157	2.6182 3.1606	2.5493 3.1468	2.5986 2.4827	Ave		2.7429				9.8		30.0			
Vinyl chloride	2.2108 2.3591	3.0033 2.2051	2.6105 2.5785	2.2040 2.4712	2.3833 2.0097	Ave		2.4035				11.7		30.0			
1,3-Butadiene	+++++ 2.1302	+++++ 1.9721	+++++ 2.3036	2.1726 2.2136	2.2042 1.8343	Ave		2.1187				7.6		30.0			
Butane	+++++ 4.3488	+++++ 4.0253	4.6585 4.5089	4.6118 4.2262	4.5015 3.5538	Ave		4.3044				8.6		30.0			
Bromomethane	+++++ 1.3715	+++++ 1.3578	1.5650 1.6350	1.4697 1.5631	1.4210 1.2343	Ave		1.4522				9.1		30.0			
Chloroethane	+++++ 0.9275	+++++ 0.9381	1.2120 1.0916	0.9857 1.0523	0.9542 0.8144	Ave		0.9970				12.1		30.0			
Ethanol	+++++ 0.8956	+++++ 0.9494	+++++ 1.0644	0.8703 0.7979	1.0301 0.7479	Ave		0.9079				12.8		30.0			
Vinyl bromide	+++++ 1.1432	1.2751 1.1648	1.2369 1.4478	1.2077 1.3491	1.2537 1.0693	Ave		1.2386				9.1		30.0			
2-Methylbutane	+++++ 2.9599	+++++ 2.7561	+++++ 3.3238	2.9753 3.0693	2.9458 2.4296	Ave		2.9228				9.5		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Trichlorofluoromethane	3.9167 3.5393	4.1610 3.2865	4.1430 4.0916	3.5786 3.8541	3.5904 3.2131	Ave		3.7374				9.3		30.0			
Acrolein	+++++ 0.4569	+++++ 0.4173	+++++ 0.3780	+++++ 0.4417	0.5137 0.4710	Ave		0.4464				10.4		30.0			
Acetonitrile	+++++ 0.7945	+++++ 0.8380	+++++ 0.7024	+++++ 0.6506	1.0870 0.7195	Ave		0.7987				19.6		30.0			
Acetone	+++++ 0.9473	+++++ 0.8615	+++++ 0.6959	0.7948 0.6300	0.9823 0.6878	Ave		0.7999				17.0		30.0			
Isopropyl alcohol	+++++ 2.3768	+++++ 2.2904	+++++ 3.0620	2.2332 2.0902	2.6720 1.9961	Ave		2.3887				15.4		30.0			
Pentane	+++++ 0.2407	+++++ 0.2227	+++++ 0.2836	0.2386 0.2584	0.2444 0.2123	Ave		0.2430				9.6		30.0			
Ethyl ether	+++++ 1.8676	+++++ 1.8292	+++++ 1.5681	1.5565 1.5554	1.9511 1.6408	Ave		1.7098				9.8		30.0			
1,1-Dichloroethene	+++++ 1.1460	1.2138 1.1071	1.3220 1.2854	1.0888 1.2140	1.2249 1.0475	Ave		1.1833				7.8		30.0			
Acrylonitrile	+++++ 1.1577	+++++ 1.1526	+++++ 0.9121	1.0056 1.0241	1.2114 1.1792	Ave		1.0918				10.2		30.0			
tert-Butyl alcohol	+++++ 2.4598	+++++ 2.1786	+++++ 3.1532	2.3200 2.0921	2.6745 2.0080	Ave		2.4123				16.5		30.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	2.9739 2.5990	2.9936 2.5089	2.9993 2.8289	2.7308 2.7120	2.6787 2.3381	Ave		2.7363				8.0		30.0			
Methylene Chloride	+++++ 1.1888	+++++ 1.1040	+++++ 1.2681	+++++ 1.2031	1.2912 1.0471	Ave		1.1837				7.9		30.0			
3-Chloropropene	+++++ 2.0584	+++++ 1.8527	3.4211 2.1137	2.3717 2.1326	2.2916 +++++	Ave		2.3203				22.1		30.0			
Carbon disulfide	+++++ 3.9864	+++++ 3.6463	4.6626 4.2662	3.9658 3.9565	3.9101 3.4240	Ave		3.9773				9.4		30.0			
trans-1,2-Dichloroethene	+++++ 1.3276	1.4977 1.2596	1.6040 1.4777	1.2760 1.4233	1.4268 1.2441	Ave		1.3930				8.9		30.0			
2-Methylpentane	+++++ 5.3070	+++++ 4.9992	6.5041 5.4750	5.2908 5.3755	5.6347 4.8807	Ave		5.4334				9.1		30.0			
Methyl tert-butyl ether	+++++ 3.1393	+++++ 3.0946	+++++ 2.7875	2.3858 2.6178	3.2114 2.9473	Ave		2.8834				10.5		30.0			
1,1-Dichloroethane	+++++ 3.4115	3.7876 3.2158	3.9181 3.5051	3.4555 3.4303	3.4976 3.0350	Ave		3.4730				7.6		30.0			
Vinyl acetate	+++++ 4.8276	+++++ 5.0004	+++++ 3.9048	3.8303 4.2643	4.9123 5.0941	Ave		4.5477				11.8		30.0			
2-Butanone (MEK)	+++++ 0.6548	+++++ 0.6135	+++++ 0.5527	0.4972 0.4919	0.6747 0.5569	Ave		0.5774				12.6		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Hexane	+++++ 1.7503	+++++ 1.6732	2.0176 1.8319	1.8921 1.7798	1.8022 1.5922	Ave		1.7924				7.3		30.0			
cis-1,2-Dichloroethene	+++++ 1.4665	1.5582 1.3982	1.5881 1.5642	1.4357 1.4968	1.4885 1.3297	Ave		1.4807				5.7		30.0			
Ethyl acetate	+++++ 4.2053	+++++ 4.2696	+++++ 3.7315	+++++ 3.3697	4.2713 4.0410	Ave		3.9814				9.1		30.0			
Chloroform	3.6326 3.2428	3.8455 3.0621	4.0330 3.2724	3.2505 3.1262	3.3547 2.8423	Ave		3.3662				10.9		30.0			
Tetrahydrofuran	+++++ 2.1055	+++++ 2.1356	+++++ 1.9106	1.7359 1.7485	2.2340 2.1111	Ave		1.9973				10.0		30.0			
1,1,1-Trichloroethane	+++++ 3.1201	3.6579 2.9347	3.6746 3.3019	3.1348 3.2238	3.1883 2.9270	Ave		3.2403				8.4		30.0			
1,2-Dichloroethane	+++++ 0.5726	+++++ 0.4842	0.6275 0.6150	0.5495 0.5076	0.5324 0.4483	Ave		0.5421				11.5		30.0			
1-Butanol	+++++ 0.1665	+++++ 0.1260	+++++ 0.2219	+++++ 0.1221	0.1708 0.1138	Ave		0.1535				26.8		30.0			
Benzene	+++++ 1.0472	+++++ 0.8775	1.1251 1.1183	1.0176 0.9183	0.9768 0.8127	Ave		0.9867				11.4		30.0			
Cyclohexane	+++++ 0.1851	+++++ 0.1422	+++++ 0.1911	0.1843 0.1565	0.1713 0.1325	Ave		0.1661				13.8		30.0			
Carbon tetrachloride	0.6115 0.6342	0.7855 0.3732	0.6372 0.7687	0.6496 0.5332	0.6314 0.4745	Ave		0.6099				20.4		30.0			
2,3-Dimethylpentane	+++++ 0.2742	+++++ 0.2228	0.3087 0.2832	0.2513 0.2297	0.2718 0.1969	Ave		0.2548				14.4		30.0			
Thiophene	+++++ 0.6226	+++++ 0.5084	0.6481 0.6440	0.5323 0.5147	0.5936 0.4600	Ave		0.5655				12.5		30.0			
2,2,4-Trimethylpentane	+++++ 2.6529	+++++ 2.1576	2.5968 2.7357	2.5821 2.2056	2.4393 1.9434	Ave		2.4142				11.6		30.0			
Heptane	+++++ 0.4225	+++++ 0.3493	0.4467 0.4306	0.4137 0.3481	0.3833 0.3098	Ave		0.3880				12.5		30.0			
1,2-Dichloropropane	+++++ 0.4903	+++++ 0.4198	0.5242 0.4544	0.4420 0.4070	0.4670 0.3907	Ave		0.4494				9.9		30.0			
Trichloroethene	0.4268 0.4287	0.6851 0.3531	0.4447 0.4566	0.3977 0.3715	0.3907 0.3471	Ave		0.4302				22.6		30.0			
Dibromomethane	+++++ 0.4913	+++++ 0.3719	0.4798 0.4731	0.4427 0.3774	0.4069 0.3477	Ave		0.4239				13.0		30.0			
Bromodichloromethane	+++++ 0.7898	+++++ 0.6710	0.7786 0.8678	0.7548 0.6917	0.7246 0.6155	Ave		0.7367				10.7		30.0			
1,4-Dioxane	+++++ 0.0995	+++++ 0.1146	0.1383 0.1433	0.0983 0.0995	0.1218 0.1060	Ave		0.1151				15.5		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Methyl methacrylate	+++++ 0.6126	+++++ 0.5158	+++++ 0.5430	0.4167 0.4267	0.5480 0.4984	Ave		0.5088				13.6		30.0			
Methylcyclohexane	+++++ 0.7141	+++++ 0.5799	0.7102 0.7331	0.6975 0.6005	0.6391 0.5295	Ave		0.6505				11.5		30.0			
4-Methyl-2-pentanone (MIBK)	+++++ 0.9278	+++++ 0.8261	+++++ 1.0804	0.7409 0.6478	0.9390 0.8352	Ave		0.8567				16.5		30.0			
cis-1,3-Dichloropropene	+++++ 0.6560	+++++ 0.5378	0.6234 0.6358	0.6180 0.5649	0.5766 0.5208	Ave		0.5917				8.2		30.0			
trans-1,3-Dichloropropene	+++++ 0.5080	+++++ 0.4807	0.5744 0.5058	0.4699 0.4430	0.4959 0.4618	Ave		0.4924				8.1		30.0			
Toluene	+++++ 1.1362	+++++ 1.0313	1.2507 1.0326	0.9784 0.9458	1.1137 0.9804	Ave		1.0587				9.6		30.0			
1,1,2-Trichloroethane	+++++ 0.3651	+++++ 0.3332	0.3544 0.3478	0.3135 0.3004	0.3359 0.3042	Ave		0.3318				7.2		30.0			
2-Hexanone	+++++ 0.4283	+++++ 0.3609	+++++ 0.5255	0.3215 0.2913	0.4231 0.3950	Ave		0.3922				19.8		30.0			
Octane	+++++ 0.4065	+++++ 0.3682	0.4218 0.4332	0.3669 0.3485	0.4038 0.3377	Ave		0.3858				9.1		30.0			
C8 Range	+++++ 5.1496	+++++ 4.5413	+++++ 5.0824	4.9366 4.1728	4.8692 4.0260	Ave		4.6826				9.5		30.0			
Dibromochloromethane	+++++ 0.6038	+++++ 0.6015	0.6071 0.7470	0.5882 0.6071	0.6039 0.6314	Ave		0.6238				8.2		30.0			
1,2-Dibromoethane (EDB)	+++++ 0.6113	+++++ 0.5807	0.6903 0.6152	0.5414 0.5554	0.5986 0.5707	Ave		0.5955				7.8		30.0			
Tetrachloroethene	0.3922 0.3899	0.5714 0.3494	0.4232 0.4129	0.3811 0.3486	0.3633 0.3589	Ave		0.3991				16.5		30.0			
Chlorobenzene	+++++ 0.8917	+++++ 0.8359	0.9456 0.8804	0.8214 0.7793	0.8728 0.8230	Ave		0.8562				6.0		30.0			
Ethylbenzene	+++++ 1.4845	+++++ 1.3986	1.5812 1.3093	1.1895 1.1688	1.4349 1.3181	Ave		1.3606				10.4		30.0			
m-Xylene & p-Xylene	+++++ 1.1395	1.3560 1.0689	1.1696 1.0189	0.9045 0.9029	1.0775 1.0501	Ave		1.0764				12.9		30.0			
Nonane	+++++ 1.1178	+++++ 1.0412	1.1918 1.1156	0.9832 0.9695	1.0531 1.0220	Ave		1.0618				7.1		30.0			
Bromoform	+++++ 0.3530	0.4932 0.5262	0.4773 0.6766	0.4669 0.5829	0.4831 0.6638	Ave		0.5248				19.5		30.0			
Styrene	+++++ 0.8496	0.8564 0.8197	0.7693 0.8021	0.6128 0.7235	0.7599 0.8482	Ave		0.7824				10.0		30.0			
o-Xylene	+++++ 1.1834	+++++ 1.1099	1.2724 1.0625	0.9632 0.9188	1.1394 1.0648	Ave		1.0893				10.5		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
1,1,2,2-Tetrachloroethane	+++++ 0.9568	+++++ 0.8965	0.9614 0.9003	0.7850 0.7111	0.9017 0.8402	Ave		0.8691				9.9		30.0			
1,2,3-Trichloropropane	+++++ 0.2303	+++++ 0.2224	0.2139 0.2285	0.1808 0.1846	0.2198 0.2199	Ave		0.2125				9.0		30.0			
Isopropylbenzene	+++++ 1.5477	+++++ 1.4846	1.6346 1.4298	1.1749 1.2363	1.4395 1.5017	Ave		1.4311				10.8		30.0			
Propylbenzene	+++++ 0.4096	+++++ 0.3881	0.4490 0.3889	0.2983 0.3382	0.3607 0.4238	Ave		0.3821				12.7		30.0			
2-Chlorotoluene	+++++ 0.3740	+++++ 0.3672	0.3653 0.3802	0.3033 0.3491	0.3890 0.3999	Ave		0.3660				8.1		30.0			
4-Ethyltoluene	+++++ 1.5444	+++++ 1.4874	1.6377 1.4488	1.1082 1.2285	1.4027 1.5756	Ave		1.4292				12.6		30.0			
1,3,5-Trimethylbenzene	+++++ 0.6287	+++++ 0.5816	0.6485 0.5885	0.4212 0.4949	0.5763 0.6295	Ave		0.5712				13.5		30.0			
Alpha Methyl Styrene	+++++ 0.6091	+++++ 0.5921	+++++ 0.6036	0.4018 0.5445	0.5103 0.6897	Ave		0.5644				16.1		30.0			
Decane	+++++ 1.3958	+++++ 1.3245	1.4453 1.2935	1.1663 1.0979	1.3010 1.2736	Ave		1.2872				8.8		30.0			
tert-Butylbenzene	+++++ 1.3443	+++++ 1.3045	1.3391 1.3134	0.9248 1.1315	1.1828 1.5072	Ave		1.2560				13.9		30.0			
1,2,4-Trimethylbenzene	+++++ 1.3349	+++++ 1.2958	1.3725 1.3030	0.9005 1.0916	1.2317 1.4632	Ave		1.2492				14.2		30.0			
sec-Butylbenzene	+++++ 2.0106	+++++ 1.9451	2.0566 1.9618	1.4032 1.6599	1.7616 2.2768	Ave		1.8845				14.3		30.0			
1,3-Dichlorobenzene	0.7914 0.8744	1.0379 0.8623	0.9071 0.9390	0.7225 0.8650	0.7989 1.1012	Ave		0.8900				12.8		30.0			
Benzyl chloride	+++++ 1.1627	+++++ 1.2981	1.2725 1.2526	0.8444 1.0752	1.0888 1.4189	Ave		1.1766				15.0		30.0			
1,4-Dichlorobenzene	0.8212 0.8662	1.1563 0.8485	0.9244 0.9286	0.7311 0.8537	0.8219 1.0629	Ave		0.9015				13.9		30.0			
4-Isopropyltoluene	+++++ 1.5739	+++++ 1.5520	1.5326 1.5665	1.0593 1.3129	1.3776 1.6980	Ave		1.4591				13.8		30.0			
1,2,3-Trimethylbenzene	+++++ 1.3535	+++++ 1.3304	1.3699 1.3206	0.9147 1.0928	1.2244 1.3703	QuaF		1.0451	0.0196912						0.9950		0.9900
1,2-Dichlorobenzene	+++++ 0.8393	+++++ 0.8396	0.9032 0.9175	0.6871 0.8170	0.7522 1.0674	Ave		0.8529				13.4		30.0			
Indane	+++++ 1.2941	1.3808 1.2787	1.3052 1.2997	0.8717 1.1236	1.1373 1.5429	Ave		1.2482				15.1		30.0			
Indene	+++++ 1.1144	+++++ 1.1166	1.0943 1.1458	0.7537 0.9883	0.9911 1.3506	Ave		1.0694				15.9		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Butylbenzene	+++++ 1.7840	+++++ 1.7332	1.8906 1.7260	1.2003 1.4015	1.6122 1.8819	Ave		1.6537				14.6		30.0			
Undecane	+++++ 1.5657	+++++ 1.4831	1.6754 1.4503	1.1926 1.1849	1.4250 1.5159	Ave		1.4366				11.9		30.0			
1,2-Dibromo-3-Chloropropane	+++++ 0.3524	+++++ 0.4563	0.3665 0.5320	0.2980 0.4064	0.3669 0.5757	QuaF		0.3520	0.0136829						0.9930		0.9900
1,2,4,5-Tetramethylbenzene	+++++ 1.3759	+++++ 1.4754	1.5696 1.5953	0.8949 1.2219	1.2986 1.7205	QuaF		1.0880	0.0385563						0.9930		0.9900
Dodecane	+++++ 1.4953	+++++ 1.1035	+++++ 1.4579	1.0479 1.0511	1.3963 1.2270	Ave		1.2542				15.5		30.0			
1,2,4-Trichlorobenzene	+++++ 0.6689	+++++ 0.7087	0.8181 0.8251	0.5088 0.7325	0.6450 1.1015	Ave		0.7511				23.1		30.0			
Naphthalene	+++++ 1.5967	2.4276 1.7346	2.1874 1.9122	1.1790 1.4929	1.6126 2.1629	Ave		1.8118				21.8		30.0			
Hexachlorobutadiene	+++++ 0.6043	+++++ 0.6330	0.7229 0.7599	0.4569 0.7265	0.5378 +++++	Ave		0.6345				17.5		30.0			
1,2,3-Trichlorobenzene	+++++ 0.6619	+++++ 0.6779	0.8148 0.8166	0.4626 0.7112	0.6095 1.0297	Ave		0.7230				23.3		30.0			
2-Methylnaphthalene	+++++ 0.6920	+++++ 0.4527	+++++ 1.2986	+++++ 0.8133	0.7500 0.6688	Ave		0.7792				36.2		50.0			
1-Methylnaphthalene	+++++ 0.7883	+++++ 0.4816	+++++ 1.3389	0.6525 0.8306	0.8523 0.6090	Ave		0.7933				34.7		50.0			
4-Bromofluorobenzene (Surr)	0.7279 0.7634	0.7355 0.7715	0.7208 0.7607	0.7393 0.7936	0.7384 0.7811	Ave		0.7532				3.2		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 140-42295/9	GI01IC01.D
Level 2	IC 140-42295/10	GI01IC02.D
Level 3	IC 140-42295/11	GI01IC03.D
Level 4	IC 140-42295/12	GI01IC04.D
Level 5	IC 140-42295/13	GI01IC05.D
Level 6	IC 140-42295/14	GI01IC06.D
Level 7	ICIS 140-42295/15	GI01IC07.D
Level 8	IC 140-42295/7	GI01IC08.D
Level 9	IC 140-42295/5	GI01IC09.D
Level 10	IC 140-42295/3	GI01IC10.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
Chlorodifluoromethane	CBM	Ave	+++++ 126387	+++++ 254491	11226 595533	19940 1219560	48665 2051104	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Propene	CBM	Ave	+++++ 62980	+++++ 128895	+++++ 285979	11507 581585	24863 995335	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Dichlorodifluoromethane	CBM	Ave	+++++ 138515	+++++ 292225	11274 682291	23973 1398945	52568 2351785	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Chloromethane	CBM	Ave	+++++ 25107	+++++ 49882	+++++ 116599	5007 235833	10266 393942	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,2-Dichloro-1,1,2,2-tetrafluoroethane	CBM	Ave	1998 74466	3458 169218	5785 407375	12161 871962	29483 1381764	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Vinyl chloride	CBM	Ave	1611 70697	3427 142653	5768 332339	10514 684743	27040 1118505	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,3-Butadiene	CBM	Ave	+++++ 63838	+++++ 127581	+++++ 296910	10364 613368	25008 1020894	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Butane	CBM	Ave	+++++ 130324	+++++ 260407	10293 581152	22000 1171057	51072 1977905	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Bromomethane	CBM	Ave	+++++ 41102	+++++ 87843	3458 210733	7011 433116	16122 686953	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Chloroethane	CBM	Ave	+++++ 27795	+++++ 60690	2678 140702	4702 291588	10826 453281	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Ethanol	CBM	Ave	+++++ 134201	+++++ 307085	+++++ 685930	20757 1105422	58436 2081107	+++++ 5.00	+++++ 10.0	+++++ 20.0	0.800 40.0	2.00 80.0
Vinyl bromide	CBM	Ave	+++++ 34260	1455 75357	2733 186602	5761 373832	14224 595103	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Methylbutane	CBM	Ave	+++++ 88701	+++++ 178302	+++++ 428407	14193 850465	33422 1352213	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Trichlorofluoromethane	CBM	Ave	2854 106066	4748 212612	9154 527367	17071 1067934	40736 1788276	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
Acrolein	CBM	Ave	+++++ 13692	+++++ 26996	+++++ 48727	+++++ 122401	5828 262114	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
Acetonitrile	CBM	Ave	+++++ 23808	+++++ 54213	+++++ 90528	+++++ 180279	12333 400450	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
Acetone	CBM	Ave	+++++ 85167	+++++ 167195	+++++ 269068	11375 523707	33434 1148398	+++++ 3.00	+++++ 6.00	+++++ 12.0	0.480 24.0	1.20 48.0
Isopropyl alcohol	CBM	Ave	+++++ 213678	+++++ 444518	+++++ 1184009	31959 1737523	90947 3332728	+++++ 3.00	+++++ 6.00	+++++ 12.0	0.480 24.0	1.20 48.0
Pentane	CBM	Ave	+++++ 7214	+++++ 14405	+++++ 36548	1138 71611	2773 118178	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Ethyl ether	CBM	Ave	+++++ 55969	+++++ 118337	+++++ 202112	7425 431001	22137 913197	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,1-Dichloroethene	CBM	Ave	+++++ 34343	1385 71623	2921 165673	5194 336401	13897 583003	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Acrylonitrile	CBM	Ave	+++++ 34693	+++++ 74563	+++++ 117560	4797 283762	13744 656282	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
tert-Butyl alcohol	CBM	Ave	+++++ 73714	+++++ 140940	+++++ 406423	11067 579708	30344 1117573	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,1,2-Trichloro-1,2,2-trifluoroetha ne	CBM	Ave	2167 77887	3416 162311	6627 364620	13027 751469	30392 1301292	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Methylene Chloride	CBM	Ave	+++++ 35627	+++++ 71422	+++++ 163443	+++++ 333362	14649 582763	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
3-Chloropropene	CBM	Ave	+++++ 61687	+++++ 119860	7559 272432	11314 590936	26000 +++++	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
Carbon disulfide	CBM	Ave	+++++ 119464	+++++ 235894	10302 549880	18918 1096319	44363 1905658	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
trans-1,2-Dichloroethene	CBM	Ave	+++++ 39785	1709 81489	3544 190465	6087 394374	16188 692384	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Methylpentane	CBM	Ave	+++++ 159038	+++++ 323413	14371 705673	25239 1489517	63929 2716361	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Methyl tert-butyl ether	CBM	Ave	+++++ 94079	+++++ 200198	+++++ 359280	11381 725384	36435 1640351	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,1-Dichloroethane	CBM	Ave	+++++ 102235	4322 208044	8657 451772	16484 950498	39683 1689157	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Vinyl acetate	CBM	Ave	+++++ 144673	+++++ 323495	+++++ 503287	18272 1181597	55733 2835157	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
2-Butanone (MEK)	CBM	Ave	+++++ 19622	+++++ 39691	+++++ 71237	2372 136308	7655 309968	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Hexane	CBM	Ave	+++++ 52452	+++++ 108248	4458 236115	9026 493163	20447 886142	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
cis-1,2-Dichloroethene	CBM	Ave	+++++ 43948	1778 90453	3509 201607	6849 414738	16888 740051	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
Ethyl acetate	CBM	Ave	+++++ 126022	+++++ 276215	+++++ 480959	+++++ 933715	48461 2249047	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
Chloroform	CBM	Ave	2647 97178	4388 198099	8911 421785	15506 866236	38061 1581905	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Tetrahydrofuran	CBM	Ave	+++++ 63096	+++++ 138158	+++++ 246265	8281 484501	25346 1174961	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,1,1-Trichloroethane	CBM	Ave	+++++ 93502	4174 189856	8119 425590	14954 893295	36173 1629049	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2-Dichloroethane	DFBZ	Ave	+++++ 74570	+++++ 156222	6831 340796	11727 712592	29376 1309457	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1-Butanol	DFBZ	Ave	+++++ 21677	+++++ 40646	+++++ 122991	+++++ 171394	9421 332356	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
Benzene	DFBZ	Ave	+++++ 136368	+++++ 283155	12247 619691	21718 1289194	53895 2374147	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Cyclohexane	DFBZ	Ave	+++++ 24100	+++++ 45891	+++++ 105905	3934 219701	9450 386947	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Carbon tetrachloride	DFBZ	Ave	2115 82585	3137 120424	6936 425976	13863 748515	34839 1386144	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2,3-Dimethylpentane	DFBZ	Ave	+++++ 35713	+++++ 71885	3360 156938	5364 322420	14994 575076	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Thiophene	DFBZ	Ave	+++++ 81080	+++++ 164043	7055 356857	11360 722547	32749 1343789	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2,2,4-Trimethylpentane	DFBZ	Ave	+++++ 345476	+++++ 696193	28267 1515982	55108 3096308	134587 5676918	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Heptane	DFBZ	Ave	+++++ 55017	+++++ 112703	4863 238604	8829 488721	21146 905044	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2-Dichloropropane	DFBZ	Ave	+++++ 63849	+++++ 135449	5706 251789	9433 571342	25767 1141437	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Trichloroethene	DFBZ	Ave	1476 55829	2736 113938	4841 253014	8487 521549	21557 1014059	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Dibromomethane	DFBZ	Ave	+++++ 63978	+++++ 119998	5223 262180	9449 529820	22450 1015819	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Bromodichloromethane	DFBZ	Ave	+++++ 102850	+++++ 216520	8475 480892	16110 971037	39980 1797881	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,4-Dioxane	DFBZ	Ave	+++++ 12962	+++++ 36968	1505 79403	2097 139641	6721 309615	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Methyl methacrylate	DFBZ	Ave	+++++ 79777	+++++ 166422	+++++ 300901	8893 599074	30238 1456048	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Methylcyclohexane	DFBZ	Ave	+++++ 92997	+++++ 187114	7731 406216	14886 842977	35264 1546743	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
4-Methyl-2-pentanone (MIBK)	DFBZ	Ave	+++++ 120828	+++++ 266548	+++++ 598699	15812 909376	51809 2439624	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
cis-1,3-Dichloropropene	DFBZ	Ave	+++++ 85421	+++++ 173523	6786 352319	13190 793045	31812 1521326	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
trans-1,3-Dichloropropene	CBZd 5	Ave	+++++ 68823	+++++ 152113	6177 296890	10340 658647	27117 1383502	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Toluene	CBZd 5	Ave	+++++ 153919	+++++ 326329	13451 606087	21528 1406174	60905 2937051	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,1,2-Trichloroethane	CBZd 5	Ave	+++++ 49466	+++++ 105417	3811 204172	6897 446561	18372 911205	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Hexanone	CBZd 5	Ave	+++++ 58020	+++++ 114195	+++++ 308468	7073 433145	23138 1183432	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Octane	CBZd 5	Ave	+++++ 55073	+++++ 116497	4536 254271	8073 518088	22082 1011643	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
C8 Range	CBZd 5	Ave	+++++ 697619	+++++ 1436960	+++++ 2983142	108617 6203684	266284 12060880	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Dibromochloromethane	CBZd 5	Ave	+++++ 81803	+++++ 190331	6529 438464	12942 902612	33024 1891483	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2-Dibromoethane (EDB)	CBZd 5	Ave	+++++ 82810	+++++ 183756	7424 361106	11912 825710	32736 1709784	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Tetrachloroethene	CBZd 5	Ave	1279 52818	2500 110572	4551 242360	8385 518316	19868 1075236	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Chlorobenzene	CBZd 5	Ave	+++++ 120798	+++++ 264485	10169 516782	18072 1158553	47729 2465447	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Ethylbenzene	CBZd 5	Ave	+++++ 201106	+++++ 442535	17005 768480	26172 1737569	78472 3948553	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
m-Xylene & p-Xylene	CBZd 5	Ave	+++++ 308731	11865 676428	25157 1196112	39802 2684790	117852 6291833	+++++ 2.00	0.0800 4.00	0.160 8.00	0.320 16.0	0.800 32.0
Nonane	CBZd 5	Ave	+++++ 151433	+++++ 329467	12817 654836	21633 1441294	57593 3061549	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Bromoform	CBZd 5	Ave	+++++ 47825	2158 166485	5133 397152	10274 866530	26419 1988611	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Styrene	CBZd 5	Ave	+++++ 115089	3747 259361	8273 470774	13483 1075638	41558 2541086	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
o-Xylene	CBZd 5	Ave	+++++ 160310	+++++ 351197	13684 623631	21193 1365939	62312 3189901	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,1,2,2-Tetrachloroethane	CBZd 5	Ave	+++++ 129612	+++++ 283671	10339 528435	17273 1057194	49310 2516976	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2,3-Trichloropropane	CBZd 5	Ave	+++++ 31198	+++++ 70357	2300 134141	3979 274369	12020 658777	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Isopropylbenzene	CBZd 5	Ave	+++++ 209664	+++++ 469762	17579 839245	25851 1838036	78721 4498773	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Propylbenzene	CBZd 5	Ave	+++++ 55490	+++++ 122801	4829 228287	6564 502759	19728 1269531	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
2-Chlorotoluene	CBZd 5	Ave	+++++ 50660	+++++ 116178	3929 223185	6674 519001	21271 1197945	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
4-Ethyltoluene	CBZd 5	Ave	+++++ 209216	+++++ 470643	17613 850389	24383 1826353	76712 4720069	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,3,5-Trimethylbenzene	CBZd 5	Ave	+++++ 85164	+++++ 184043	6974 345419	9268 735810	31514 1885947	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Alpha Methyl Styrene	CBZd 5	Ave	+++++ 82510	+++++ 187336	+++++ 354303	8841 809517	27908 2066076	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Decane	CBZd 5	Ave	+++++ 189083	+++++ 419090	15543 759257	25661 1632200	71149 3815257	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
tert-Butylbenzene	CBZd 5	Ave	+++++ 182107	+++++ 412773	14401 770891	20349 1682234	64684 4515312	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2,4-Trimethylbenzene	CBZd 5	Ave	+++++ 180832	+++++ 410005	14761 764817	19813 1622836	67360 4383450	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
sec-Butylbenzene	CBZd 5	Ave	+++++ 272380	+++++ 615450	22118 1151509	30874 2467800	96336 6820666	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,3-Dichlorobenzene	CBZd 5	Ave	2581 118460	4541 272851	9755 551149	15896 1286011	43692 3298828	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Benzyl chloride	CBZd 5	Ave	+++++ 157512	+++++ 410741	13685 735219	18578 1598462	59541 4250505	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,4-Dichlorobenzene	CBZd 5	Ave	2678 117341	5059 268488	9941 545052	16086 1269190	44948 3184224	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
4-Isopropyltoluene	CBZd 5	Ave	+++++ 213219	+++++ 491082	16482 919460	23308 1951840	75338 5086898	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2,3-Trimethylbenzene	CBZd 5	QuaF	+++++ 183353	+++++ 420978	14733 775110	20125 1624627	66959 4105097	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2-Dichlorobenzene	CBZd 5	Ave	+++++ 113702	+++++ 265655	9714 538536	15119 1214657	41138 3197685	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Indane	CBZd 5	Ave	+++++ 175316	6041 404591	14037 762843	19180 1670413	62198 4622214	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Indene	CBZd 5	Ave	+++++ 150965	+++++ 353313	11769 672537	16584 1469257	54200 4046053	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Butylbenzene	CBZd 5	Ave	+++++ 241684	+++++ 548406	20333 1013104	26410 2083566	88169 5637666	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Undecane	CBZd 5	Ave	+++++ 212100	+++++ 469276	18018 851240	26240 1761528	77930 4541178	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2-Dibromo-3-Chloropropane	CBZd 5	QuaF	+++++ 47740	+++++ 144381	3942 312261	6556 604213	20067 1724558	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2,4,5-Tetramethylbenzene	CBZd 5	QuaF	+++++ 186389	+++++ 466848	16880 936361	19690 1816600	71014 5154231	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Dodecane	CBZd 5	Ave	+++++ 202565	+++++ 349178	+++++ 855739	23057 1562672	76360 3675886	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
1,2,4-Trichlorobenzene	CBZd5	Ave	+++++ 90620	+++++ 224232	8798 484290	11196 1089060	35272 3299699	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Naphthalene	CBZd5	Ave	+++++ 216311	10621 548866	23525 1122391	25941 2219533	88191 6479441	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Hexachlorobutadiene	CBZd5	Ave	+++++ 81866	+++++ 200284	7774 446054	10052 1080114	29410 +++++	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
1,2,3-Trichlorobenzene	CBZd5	Ave	+++++ 89666	+++++ 214504	8763 479297	10179 1057388	33331 3084852	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Methylnaphthalene	CBZd5	Ave	+++++ 93743	+++++ 143251	+++++ 762263	+++++ 1209161	41015 2003736	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
1-Methylnaphthalene	CBZd5	Ave	+++++ 106800	+++++ 152396	+++++ 785887	14358 1234833	46614 1824509	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
4-Bromofluorobenzene (Surr)	CBZd5	Ave	550738 479859	373260 566331	449593 517937	471736 684275	468432 678598	4.64 4.64	4.64 4.64	4.64 4.64	4.64 4.64	4.64 4.64

Curve Type Legend:

Ave = Average ISTD
QuaF = Quadratic ISTD forced zero

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 140-42295/9	GI01IC01.D
Level 2	IC 140-42295/10	GI01IC02.D
Level 3	IC 140-42295/11	GI01IC03.D
Level 4	IC 140-42295/12	GI01IC04.D
Level 5	IC 140-42295/13	GI01IC05.D
Level 6	IC 140-42295/14	GI01IC06.D
Level 7	ICIS 140-42295/15	GI01IC07.D
Level 8	IC 140-42295/7	GI01IC08.D
Level 9	IC 140-42295/5	GI01IC09.D
Level 10	IC 140-42295/3	GI01IC10.D

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
Chlorodifluoromethane	+++++	+++++	18.1						50			
Propene	+++++	+++++	+++++	14.1						50		
Dichlorodifluoromethane	+++++	+++++	6.1						50			
Chloromethane	+++++	+++++	+++++	21.9						50		
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.0						50					
Vinyl chloride	-8.0						50					
1,3-Butadiene	+++++	+++++	+++++	2.5						50		
Butane	+++++	+++++	8.2						50			
Bromomethane	+++++	+++++	7.8						50			
Chloroethane	+++++	+++++	21.6						50			
Ethanol	+++++	+++++	+++++	-4.1						50		
Vinyl bromide	+++++	2.9						50				
2-Methylbutane	+++++	+++++	+++++	1.8						50		
Trichlorofluoromethane	4.8						50					

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
Acrolein	+++++	+++++	+++++	+++++	15.1						50	
Acetonitrile	+++++	+++++	+++++	+++++	36.1						50	
Acetone	+++++	+++++	+++++	-0.6						80		
Isopropyl alcohol	+++++	+++++	+++++	-6.5						50		
Pentane	+++++	+++++	+++++	-1.8						50		
Ethyl ether	+++++	+++++	+++++	-9.0						50		
1,1-Dichloroethene	+++++	2.6						50				
Acrylonitrile	+++++	+++++	+++++	-7.9						50		
tert-Butyl alcohol	+++++	+++++	+++++	-3.8						50		
1,1,2-Trichloro-1,2,2-trifluoroethane	8.7						50					
Methylene Chloride	+++++	+++++	+++++	+++++	9.1						80	
3-Chloropropene	+++++	+++++	47.4	+++++					50			
Carbon disulfide	+++++	+++++	17.2						50			
trans-1,2-Dichloroethene	+++++	7.5						50				
2-Methylpentane	+++++	+++++	19.7						50			
Methyl tert-butyl ether	+++++	+++++	+++++	-17.3						50		
1,1-Dichloroethane	+++++	9.1						50				
Vinyl acetate	+++++	+++++	+++++	-15.8						50		
2-Butanone (MEK)	+++++	+++++	+++++	-13.9						50		
Hexane	+++++	+++++	12.6						50			
cis-1,2-Dichloroethene	+++++	5.2						50				

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
Ethyl acetate	+++++	+++++	+++++	+++++	7.3						50	
Chloroform	7.9						50					
Tetrahydrofuran	+++++	+++++	+++++	-13.1						50		
1,1,1-Trichloroethane	+++++	12.9						50				
1,2-Dichloroethane	+++++	+++++	15.8						50			
1-Butanol	+++++	+++++	+++++	+++++	11.2						50	
Benzene	+++++	+++++	14.0						50			
Cyclohexane	+++++	+++++	+++++	10.9						50		
Carbon tetrachloride	0.3						50					
2,3-Dimethylpentane	+++++	+++++	21.1						50			
Thiophene	+++++	+++++	14.6						50			
2,2,4-Trimethylpentane	+++++	+++++	7.6						50			
Heptane	+++++	+++++	15.1						50			
1,2-Dichloropropane	+++++	+++++	16.6						50			
Trichloroethene	-0.8						50					
Dibromomethane	+++++	+++++	13.2						50			
Bromodichloromethane	+++++	+++++	5.7						50			
1,4-Dioxane	+++++	+++++	20.1						50			
Methyl methacrylate	+++++	+++++	+++++	-18.1						50		
Methylcyclohexane	+++++	+++++	9.2						50			
4-Methyl-2-pentanone (MIBK)	+++++	+++++	+++++	-13.5						50		

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
cis-1,3-Dichloropropene	+++++	+++++	5.4						50			
trans-1,3-Dichloropropene	+++++	+++++	16.6						50			
Toluene	+++++	+++++	18.1						50			
1,1,2-Trichloroethane	+++++	+++++	6.8						50			
2-Hexanone	+++++	+++++	+++++	-18.0						50		
Octane	+++++	+++++	9.3						50			
Dibromochloromethane	+++++	+++++	-2.7						50			
1,2-Dibromoethane (EDB)	+++++	+++++	15.9						50			
Tetrachloroethene	-1.7						50					
Chlorobenzene	+++++	+++++	10.4						50			
Ethylbenzene	+++++	+++++	16.2						50			
m-Xylene & p-Xylene	+++++	26.0						50				
Nonane	+++++	+++++	12.2						50			
Bromoform	+++++	-6.0						50				
Styrene	+++++	9.5						50				
o-Xylene	+++++	+++++	16.8						50			
1,1,2,2-Tetrachloroethane	+++++	+++++	10.6						50			
1,2,3-Trichloropropane	+++++	+++++	0.6						50			
Isopropylbenzene	+++++	+++++	14.2						50			
Propylbenzene	+++++	+++++	17.5						50			
2-Chlorotoluene	+++++	+++++	-0.2						50			

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
4-Ethyltoluene	+++++	+++++	14.6						50			
1,3,5-Trimethylbenzene	+++++	+++++	13.5						50			
Alpha Methyl Styrene	+++++	+++++	+++++	-28.8						50		
Decane	+++++	+++++	12.3						50			
tert-Butylbenzene	+++++	+++++	6.6						50			
1,2,4-Trimethylbenzene	+++++	+++++	9.9						50			
sec-Butylbenzene	+++++	+++++	9.1						50			
1,3-Dichlorobenzene	-11.1						50					
Benzyl chloride	+++++	+++++	8.1						50			
1,4-Dichlorobenzene	-8.9						50					
4-Isopropyltoluene	+++++	+++++	5.0						50			
1,2,3-Trimethylbenzene	+++++	+++++	30.8						50			
1,2-Dichlorobenzene	+++++	+++++	5.9						50			
Indane	+++++	10.6						50				
Indene	+++++	+++++	2.3						50			
Butylbenzene	+++++	+++++	14.3						50			
Undecane	+++++	+++++	16.6						50			
1,2-Dibromo-3-Chloropropane	+++++	+++++	3.8						50			
1,2,4,5-Tetramethylbenzene	+++++	+++++	43.7						50			
Dodecane	+++++	+++++	+++++	-16.4						50		
1,2,4-Trichlorobenzene	+++++	+++++	8.9						50			

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
Naphthalene	+++++	34.0						80				
Hexachlorobutadiene	+++++	+++++	13.9	+++++					50			
1,2,3-Trichlorobenzene	+++++	+++++	12.7						50			
2-Methylnaphthalene	+++++	+++++	+++++	+++++	-3.8						80	
1-Methylnaphthalene	+++++	+++++	+++++	-17.7						80		

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC10.D
Lims ID: IC L10
Client ID:
Sample Type: IC Calib Level: 10
Inject. Date: 01-Sep-2020 18:07:30 ALS Bottle#: 1 Worklist Smp#: 3
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016453-003
Misc. Info.: 314600
Operator ID: AFB Instrument ID: MG
Sublist: chrom-MG_TO15*sub17

Method: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 02-Sep-2020 12:23:04 Calib Date: 02-Sep-2020 03:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1035

First Level Reviewer: tajh Date: 02-Sep-2020 07:24:43

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.817	8.812	0.005	86	166966	4.80	4.80	
* 2 1,4-Difluorobenzene	114	11.001	10.996	0.005	97	876347	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.735	15.730	0.005	91	898721	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.374	17.374	0.000	95	678598	4.64	4.81	
6 Chlorodifluoromethane	51	3.699	3.703	-0.004	97	2051104	16.0	13.7	
7 Propene	41	3.716	3.716	0.000	99	995335	16.0	13.5	
8 Dichlorodifluoromethane	85	3.764	3.765	-0.001	99	2351785	16.0	14.1	
9 Chloromethane	52	3.947	3.945	0.002	98	393942	16.0	13.2	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.953	3.951	0.002	93	1381764	16.0	14.5	
11 Acetaldehyde	44	4.093	4.096	-0.003	98	2392045	80.0	67.9	
12 Vinyl chloride	62	4.115	4.114	0.001	99	1118505	16.0	13.4	
14 Butadiene	54	4.201	4.201	0.000	67	1020894	16.0	13.9	
13 Butane	43	4.201	4.202	-0.001	86	1977905	16.0	13.2	
15 Bromomethane	94	4.519	4.521	-0.002	98	686953	16.0	13.6	
16 Chloroethane	64	4.659	4.658	0.001	91	453281	16.0	13.1	
17 Ethanol	31	4.756	4.759	-0.003	95	2081107	80.0	65.9	
18 Vinyl bromide	106	4.961	4.960	0.001	98	595103	16.0	13.8	
19 2-Methylbutane	43	5.010	5.010	0.000	93	1352213	16.0	13.3	
20 Trichlorofluoromethane	101	5.231	5.229	0.002	98	1788276	16.0	13.8	
21 Acrolein	56	5.236	5.235	0.001	92	262114	16.0	16.9	
22 Acetonitrile	40	5.301	5.301	0.000	99	400450	16.0	14.4	
23 Acetone	58	5.344	5.355	-0.011	99	1148398	48.0	41.3	
24 Pentane	72	5.447	5.448	-0.001	95	118178	16.0	14.0	
25 Isopropyl alcohol	45	5.441	5.451	-0.010	93	3332728	48.0	40.1	
26 Ethyl ether	31	5.608	5.619	-0.011	90	913197	16.0	15.4	
27 1,1-Dichloroethene	96	5.932	5.928	0.004	90	583003	16.0	14.2	
28 Acrylonitrile	53	6.034	6.032	0.002	77	656282	16.0	17.3	
30 2-Methyl-2-propanol	59	6.034	6.059	-0.025	96	1117573	16.0	13.3	
29 1,1,2-Trichloro-1,2,2-trifluoroe	101	6.110	6.107	0.003	92	1301292	16.0	13.7	
31 Methylene Chloride	84	6.277	6.273	0.004	88	582763	16.0	14.2	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.293	6.289	0.004	93	1056256	16.0	13.1	
33 Carbon disulfide	76	6.439	6.438	0.001	97	1905658	16.0	13.8	
34 trans-1,2-Dichloroethene	96	7.086	7.082	0.004	91	692384	16.0	14.3	
35 2-Methylpentane	43	7.102	7.101	0.001	97	2716361	16.0	14.4	
36 Methyl tert-butyl ether	73	7.210	7.230	-0.020	94	1640351	16.0	16.4	
37 1,1-Dichloroethane	63	7.506	7.499	0.007	98	1689157	16.0	14.0	
38 Vinyl acetate	43	7.609	7.607	0.002	100	2835157	16.0	17.9	
39 2-Butanone (MEK)	72	8.056	8.063	-0.007	96	309968	16.0	15.4	
40 Hexane	56	8.083	8.082	0.001	92	886142	16.0	14.2	
41 Isopropyl ether	45	8.240	8.246	-0.006	96	3357122	16.0	16.1	
42 cis-1,2-Dichloroethene	96	8.488	8.483	0.005	96	740051	16.0	14.4	
43 Ethyl acetate	43	8.671	8.676	-0.005	97	2249047	16.0	16.2	
44 Chloroform	83	8.833	8.825	0.008	93	1581905	16.0	13.5	
45 Tert-butyl ethyl ether	59	8.914	8.928	-0.014	96	2787393	16.0	16.0	
46 Tetrahydrofuran	42	9.227	9.244	-0.017	91	1174961	16.0	16.9	
47 1,1,1-Trichloroethane	97	9.857	9.851	0.006	94	1629049	16.0	14.5	
48 1,2-Dichloroethane	62	9.965	9.958	0.007	95	1309457	16.0	13.2	
51 n-Butanol	31	10.418	10.442	-0.024	82	332356	16.0	11.9	
50 Benzene	78	10.456	10.451	0.005	93	2374147	16.0	13.2	
49 Cyclohexane	69	10.461	10.455	0.006	79	386947	16.0	12.8	
52 Carbon tetrachloride	117	10.483	10.476	0.007	92	1386144	16.0	12.4	
53 2,3-Dimethylpentane	71	10.580	10.577	0.003	90	575076	16.0	12.4	
54 Thiophene	84	10.731	10.725	0.006	93	1343789	16.0	13.0	
55 Isooctane	57	11.222	11.219	0.003	98	5676918	16.0	12.9	
56 n-Heptane	71	11.599	11.594	0.005	94	905044	16.0	12.8	
57 1,2-Dichloropropane	63	11.675	11.669	0.006	88	1141437	16.0	13.9	
58 Trichloroethene	130	11.712	11.706	0.006	93	1014059	16.0	12.9	
59 Dibromomethane	93	11.793	11.791	0.002	94	1015819	16.0	13.1	
60 Dichlorobromomethane	83	11.939	11.936	0.003	95	1797881	16.0	13.4	
61 1,4-Dioxane	88	11.955	11.974	-0.019	91	309615	16.0	14.7	
62 Methyl methacrylate	41	12.036	12.038	-0.002	86	1456048	16.0	15.7	
63 Methylcyclohexane	83	12.484	12.480	0.004	86	1546743	16.0	13.0	
64 4-Methyl-2-pentanone (MIBK)	43	12.888	12.898	-0.010	98	2439624	16.0	15.6	
65 cis-1,3-Dichloropropene	75	12.942	12.938	0.004	97	1521326	16.0	14.1	
66 trans-1,3-Dichloropropene	75	13.638	13.632	0.006	92	1383502	16.0	15.0	
67 Toluene	91	13.762	13.759	0.003	92	2937051	16.0	14.8	
68 1,1,2-Trichloroethane	83	13.837	13.831	0.006	95	911205	16.0	14.7	
69 2-Hexanone	58	14.225	14.231	-0.006	91	1183432	16.0	16.1	
70 n-Octane	85	14.457	14.454	0.003	97	1011643	16.0	14.0	
71 Chlorodibromomethane	129	14.538	14.536	0.002	96	1891483	16.0	16.2	
72 Ethylene Dibromide	107	14.829	14.826	0.003	97	1709784	16.0	15.3	
73 Tetrachloroethene	129	14.910	14.904	0.006	93	1075236	16.0	14.4	
75 Chlorobenzene	112	15.784	15.779	0.005	91	2465447	16.0	15.4	
74 2,3-Dimethylheptane	43	15.805	15.801	0.004	93	4656713	16.0	13.6	
78 Ethylbenzene	91	16.069	16.068	0.001	98	3948553	16.0	15.5	
79 m-Xylene & p-Xylene	91	16.237	16.232	0.005	97	6291833	32.0	31.2	
80 n-Nonane	57	16.657	16.654	0.003	93	3061549	16.0	15.4	
81 Bromoform	173	16.679	16.676	0.003	95	1988611	16.0	20.2	
82 Styrene	104	16.700	16.695	0.005	96	2541086	16.0	17.3	
83 o-Xylene	91	16.760	16.757	0.003	98	3189901	16.0	15.6	
84 1,1,2,2-Tetrachloroethane	83	17.083	17.078	0.005	98	2516976	16.0	15.5	
85 1,2,3-Trichloropropane	110	17.240	17.237	0.003	93	658777	16.0	16.6	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
86 Isopropylbenzene	105	17.347	17.344	0.003	97	4498773	16.0	16.8	
87 N-Propylbenzene	120	17.887	17.887	0.000	99	1269531	16.0	17.7	
88 2-Chlorotoluene	126	17.935	17.930	0.005	97	1197945	16.0	17.5	
89 4-Ethyltoluene	105	18.038	18.038	0.000	98	4720069	16.0	17.6	
90 1,3,5-Trimethylbenzene	120	18.113	18.109	0.004	92	1885947	16.0	17.6	
92 Alpha Methyl Styrene	118	18.345	18.340	0.005	88	2066076	16.0	19.5	
93 n-Decane	57	18.404	18.401	0.003	88	3815257	16.0	15.8	
94 tert-Butylbenzene	119	18.539	18.533	0.006	93	4515312	16.0	19.2	
95 1,2,4-Trimethylbenzene	105	18.550	18.547	0.003	96	4383450	16.0	18.7	
96 sec-Butylbenzene	105	18.809	18.804	0.005	98	6820666	16.0	19.3	
97 1,3-Dichlorobenzene	146	18.820	18.815	0.005	97	3298828	16.0	19.8	
98 Benzyl chloride	91	18.895	18.891	0.004	98	4250505	16.0	19.3	
99 1,4-Dichlorobenzene	146	18.906	18.905	0.001	94	3184224	16.0	18.9	
100 4-Isopropyltoluene	119	18.971	18.965	0.006	96	5086898	16.0	18.6	
101 1,2,3-Trimethylbenzene	105	19.019	19.019	0.000	99	4105097	16.0	16.1	
102 Butylcyclohexane	83	19.078	19.074	0.004	88	3628135	16.0	15.9	
103 2,3-Dihydroindene	117	19.267	19.262	0.005	93	4622214	16.0	19.8	
104 1,2-Dichlorobenzene	146	19.267	19.262	0.005	81	3197685	16.0	20.0	
106 Indene	116	19.397	19.392	0.005	90	4046053	16.0	20.2	
105 n-Butylbenzene	91	19.397	19.398	-0.001	98	5637666	16.0	18.2	
107 Undecane	57	19.709	19.708	0.001	93	4541178	16.0	16.9	
108 1,2-Dibromo-3-Chloropropane	157	19.860	19.858	0.002	95	1724558	16.0	16.1	
109 1,2,4,5-Tetramethylbenzene	119	20.152	20.150	0.002	98	5154231	16.0	16.1	
110 Dodecane	57	20.766	20.765	0.001	94	3675886	16.0	15.7	
111 1,2,4-Trichlorobenzene	180	20.960	20.957	0.003	94	3299699	16.0	23.5	
112 Naphthalene	128	21.095	21.095	0.000	99	6479441	16.0	19.1	
113 Hexachlorobutadiene	225	21.305	21.304	0.001	96	3184218	16.0	26.8	
114 1,2,3-Trichlorobenzene	180	21.376	21.372	0.004	96	3084852	16.0	22.8	
115 2-Methylnaphthalene	142	22.147	22.144	0.003	99	2003736	16.0	13.7	
116 1-Methylnaphthalene	142	22.319	22.319	0.000	99	1824509	16.0	12.3	
A 122 C8 Range	1	14.508	(14.393-14.597)		0	12060880	16.0	13.8	
S 123 1,2-Dichloroethene, Total	1				0		32.0	28.7	
S 124 Xylenes, Total	100				0		48.0	46.9	

Reagents:

40L10DQP_00019	Amount Added: 200.00	Units: mL	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

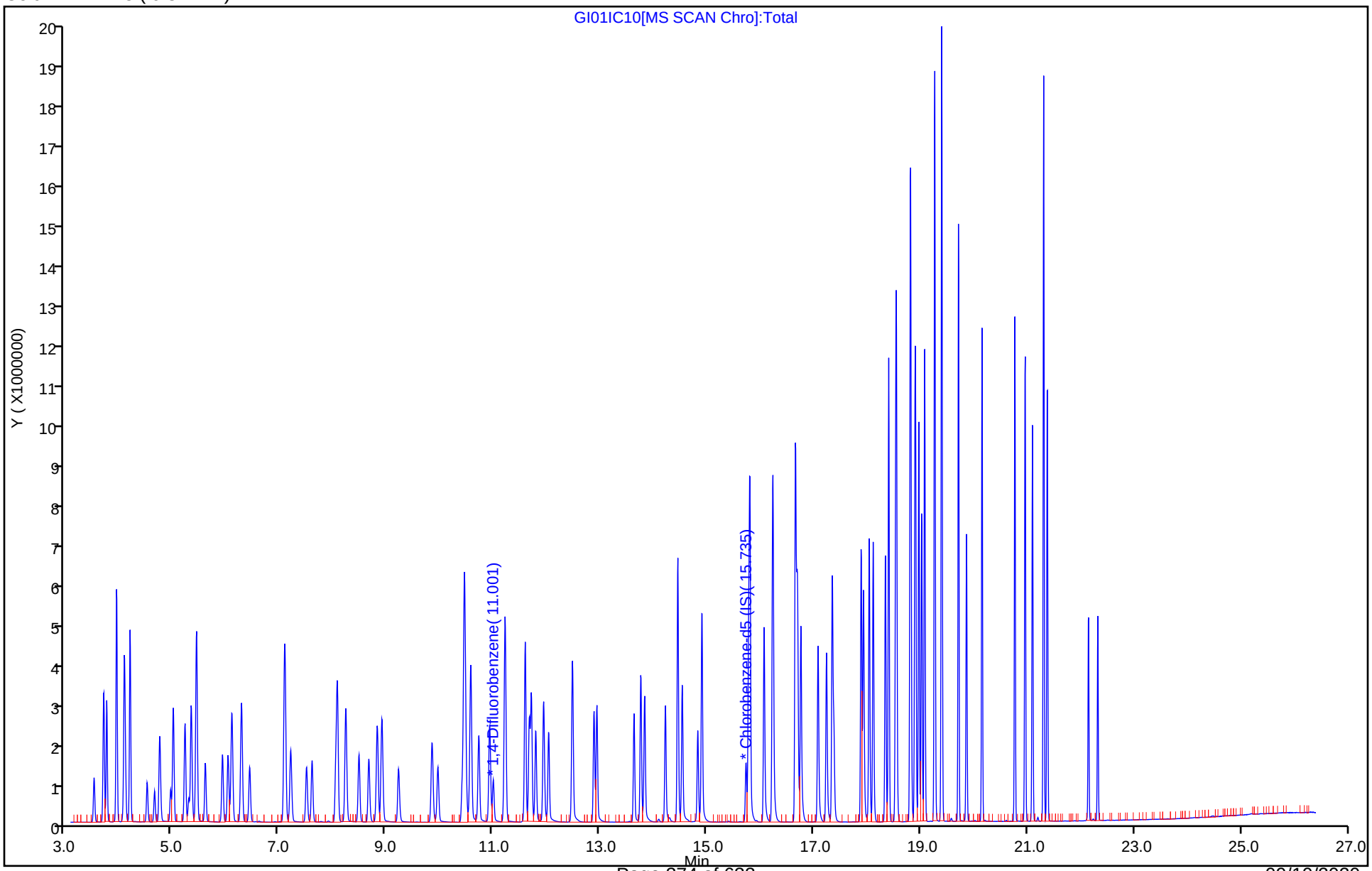
Report Date: 02-Sep-2020 12:23:05 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC10.D

Injection Date:	01-Sep-2020 18:07:30	Instrument ID:	MG	Operator ID:	AFB
Lims ID:	IC L10			Worklist Smp#:	3
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

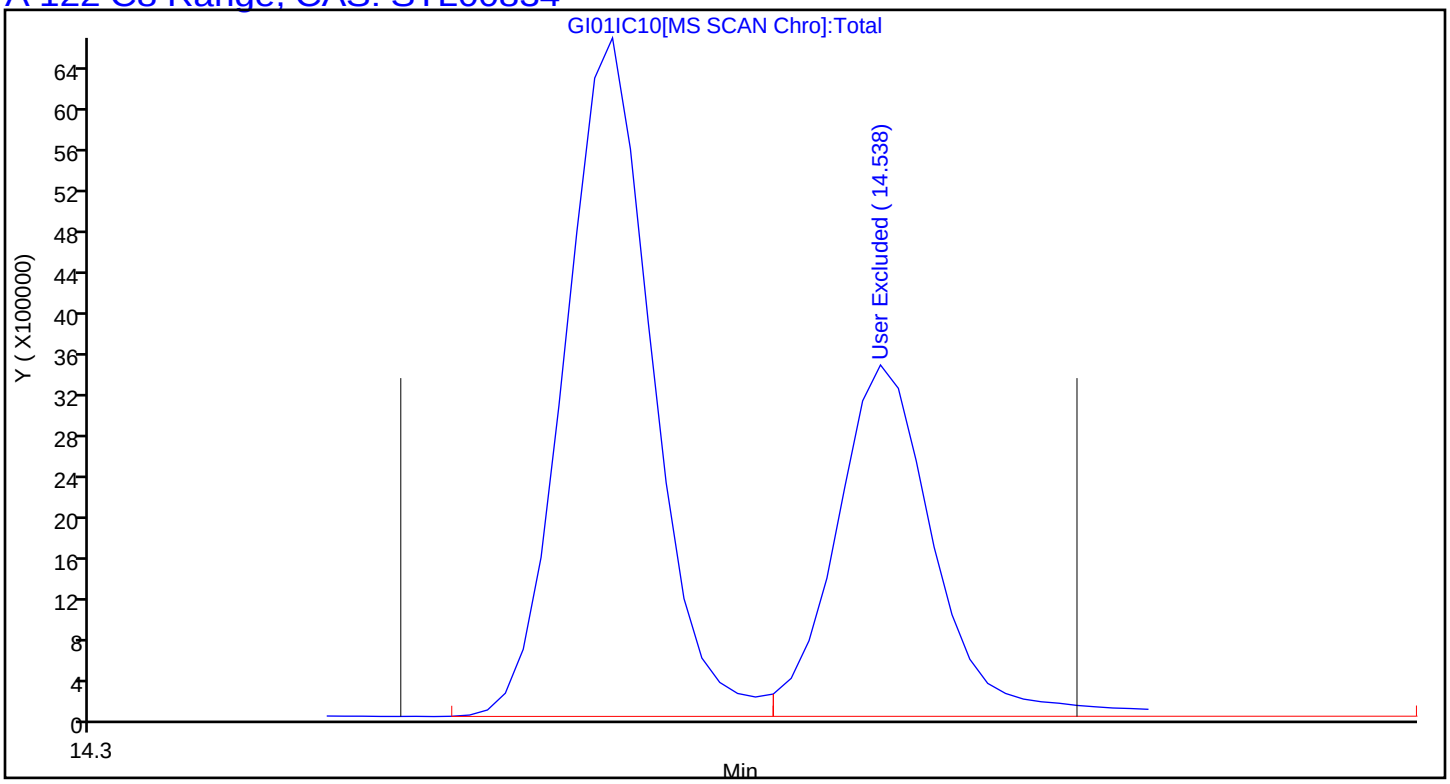


Report Date: 02-Sep-2020 12:23:05 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC10.D				
Injection Date:	01-Sep-2020 18:07:30	Instrument ID:	MG		
Lims ID:	IC L10				
Client ID:					
Operator ID:	AFB	ALS Bottle#:	1	Worklist Smp#:	3
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 122 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC09.D
Lims ID: IC L9
Client ID:
Sample Type: IC Calib Level: 9
Inject. Date: 01-Sep-2020 19:43:30 ALS Bottle#: 1 Worklist Smp#: 5
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016453-005
Misc. Info.: 314600
Operator ID: AFB Instrument ID: MG
Sublist: chrom-MG_TO15*sub17

Method: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 02-Sep-2020 12:23:12 Calib Date: 02-Sep-2020 03:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1035

First Level Reviewer: tajh Date: 02-Sep-2020 07:23:47

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.817	8.812	0.005	89	166255	4.80	4.80	
* 2 1,4-Difluorobenzene	114	11.001	10.996	0.005	98	842312	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.730	15.730	0.000	92	892014	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.374	17.374	0.000	94	684275	4.64	4.89	
6 Chlorodifluoromethane	51	3.705	3.703	0.002	97	1219560	8.00	8.19	
7 Propene	41	3.716	3.716	0.000	99	581585	8.00	7.94	
8 Dichlorodifluoromethane	85	3.764	3.765	-0.001	99	1398945	8.00	8.40	
9 Chloromethane	52	3.947	3.945	0.002	98	235833	8.00	7.91	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.953	3.951	0.002	92	871962	8.00	9.18	
11 Acetaldehyde	44	4.093	4.096	-0.003	95	1150692	40.0	32.8	
12 Vinyl chloride	62	4.115	4.114	0.001	98	684743	8.00	8.23	
14 Butadiene	54	4.201	4.201	0.000	67	613368	8.00	8.36	
13 Butane	43	4.201	4.202	-0.001	85	1171057	8.00	7.85	
15 Bromomethane	94	4.519	4.521	-0.002	99	433116	8.00	8.61	
16 Chloroethane	64	4.659	4.658	0.001	92	291588	8.00	8.44	
17 Ethanol	31	4.751	4.759	-0.008	94	1105422	40.0	35.2	
18 Vinyl bromide	106	4.961	4.960	0.001	98	373832	8.00	8.71	
19 2-Methylbutane	43	5.010	5.010	0.000	93	850465	8.00	8.40	
20 Trichlorofluoromethane	101	5.231	5.229	0.002	99	1067934	8.00	8.25	
21 Acrolein	56	5.231	5.235	-0.004	92	122401	8.00	7.92	
22 Acetonitrile	40	5.296	5.301	-0.005	100	180279	8.00	6.52	
23 Acetone	58	5.349	5.355	-0.006	99	523707	24.0	18.9	
25 Isopropyl alcohol	45	5.441	5.451	-0.010	99	1737523	24.0	21.0	
24 Pentane	72	5.447	5.448	-0.001	94	71611	8.00	8.51	
26 Ethyl ether	31	5.614	5.619	-0.005	90	431001	8.00	7.28	
27 1,1-Dichloroethene	96	5.932	5.928	0.004	90	336401	8.00	8.21	
30 2-Methyl-2-propanol	59	6.040	6.059	-0.019	96	579708	8.00	6.94	
28 Acrylonitrile	53	6.034	6.032	0.002	94	283762	8.00	7.50	
29 1,1,2-Trichloro-1,2,2-trifluoroe	101	6.104	6.107	-0.003	91	751469	8.00	7.93	
31 Methylene Chloride	84	6.277	6.273	0.004	89	333362	8.00	8.13	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.293	6.289	0.004	94	590936	8.00	7.35	
33 Carbon disulfide	76	6.439	6.438	0.001	97	1096319	8.00	7.96	
34 trans-1,2-Dichloroethene	96	7.086	7.082	0.004	91	394374	8.00	8.17	
35 2-Methylpentane	43	7.102	7.101	0.001	97	1489517	8.00	7.91	
36 Methyl tert-butyl ether	73	7.215	7.230	-0.015	92	725384	8.00	7.26	
37 1,1-Dichloroethane	63	7.501	7.499	0.002	98	950498	8.00	7.90	
38 Vinyl acetate	43	7.609	7.607	0.002	100	1181597	8.00	7.50	
39 2-Butanone (MEK)	72	8.051	8.063	-0.012	95	136308	8.00	6.82	
40 Hexane	56	8.083	8.082	0.001	93	493163	8.00	7.94	
41 Isopropyl ether	45	8.240	8.246	-0.006	95	1425530	8.00	6.89	
42 cis-1,2-Dichloroethene	96	8.482	8.483	-0.001	96	414738	8.00	8.09	
43 Ethyl acetate	43	8.671	8.676	-0.005	97	933715	8.00	6.77	
44 Chloroform	83	8.828	8.825	0.003	93	866236	8.00	7.43	
45 Tert-butyl ethyl ether	59	8.914	8.928	-0.014	96	1222689	8.00	7.04	
46 Tetrahydrofuran	42	9.232	9.244	-0.012	91	484501	8.00	7.00	
47 1,1,1-Trichloroethane	97	9.852	9.851	0.001	94	893295	8.00	7.96	
48 1,2-Dichloroethane	62	9.960	9.958	0.002	95	712592	8.00	7.49	
51 n-Butanol	31	10.418	10.442	-0.024	87	171394	8.00	6.36	
50 Benzene	78	10.456	10.451	0.005	93	1289194	8.00	7.45	
49 Cyclohexane	69	10.461	10.455	0.006	86	219701	8.00	7.54	
52 Carbon tetrachloride	117	10.478	10.476	0.002	94	748515	8.00	6.99	
53 2,3-Dimethylpentane	71	10.580	10.577	0.003	89	322420	8.00	7.21	
54 Thiophene	84	10.731	10.725	0.006	93	722547	8.00	7.28	
55 Isooctane	57	11.222	11.219	0.003	98	3096308	8.00	7.31	
56 n-Heptane	71	11.599	11.594	0.005	94	488721	8.00	7.18	
57 1,2-Dichloropropane	63	11.675	11.669	0.006	89	571342	8.00	7.24	
58 Trichloroethene	130	11.712	11.706	0.006	91	521549	8.00	6.91	
59 Dibromomethane	93	11.793	11.791	0.002	91	529820	8.00	7.12	
60 Dichlorobromomethane	83	11.939	11.936	0.003	95	971037	8.00	7.51	
61 1,4-Dioxane	88	11.955	11.974	-0.019	89	139641	8.00	6.91	
62 Methyl methacrylate	41	12.036	12.038	-0.002	86	599074	8.00	6.71	
63 Methylcyclohexane	83	12.484	12.480	0.004	86	842977	8.00	7.38	
64 4-Methyl-2-pentanone (MIBK)	43	12.888	12.898	-0.010	98	909376	8.00	6.05	
65 cis-1,3-Dichloropropene	75	12.942	12.938	0.004	96	793045	8.00	7.64	
66 trans-1,3-Dichloropropene	75	13.632	13.632	0.000	92	658647	8.00	7.20	
67 Toluene	91	13.762	13.759	0.003	92	1406174	8.00	7.15	
68 1,1,2-Trichloroethane	83	13.837	13.831	0.006	95	446561	8.00	7.24	
69 2-Hexanone	58	14.225	14.231	-0.006	92	433145	8.00	5.94	
70 n-Octane	85	14.457	14.454	0.003	97	518088	8.00	7.23	
71 Chlorodibromomethane	129	14.538	14.536	0.002	95	902612	8.00	7.79	
72 Ethylene Dibromide	107	14.829	14.826	0.003	98	825710	8.00	7.46	
73 Tetrachloroethene	129	14.905	14.904	0.001	92	518316	8.00	6.99	
75 Chlorobenzene	112	15.778	15.779	-0.001	91	1158553	8.00	7.28	
74 2,3-Dimethylheptane	43	15.805	15.801	0.004	93	2350533	8.00	6.90	
78 Ethylbenzene	91	16.070	16.068	0.002	99	1737569	8.00	6.87	
79 m-Xylene & p-Xylene	91	16.231	16.232	-0.001	98	2684790	16.0	13.4	
80 n-Nonane	57	16.657	16.654	0.003	93	1441294	8.00	7.30	
81 Bromoform	173	16.679	16.676	0.003	94	866530	8.00	8.89	
82 Styrene	104	16.695	16.695	0.000	97	1075638	8.00	7.40	
83 o-Xylene	91	16.760	16.757	0.003	98	1365939	8.00	6.75	
84 1,1,2,2-Tetrachloroethane	83	17.078	17.078	0.000	98	1057194	8.00	6.55	
85 1,2,3-Trichloropropane	110	17.240	17.237	0.003	93	274369	8.00	6.95	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
86 Isopropylbenzene	105	17.348	17.344	0.004	97	1838036	8.00	6.91	
87 N-Propylbenzene	120	17.887	17.887	0.000	98	502759	8.00	7.08	
88 2-Chlorotoluene	126	17.930	17.930	0.000	98	519001	8.00	7.63	
89 4-Ethyltoluene	105	18.038	18.038	0.000	98	1826353	8.00	6.88	
90 1,3,5-Trimethylbenzene	120	18.113	18.109	0.004	92	735810	8.00	6.93	
92 Alpha Methyl Styrene	118	18.340	18.340	0.000	86	809517	8.00	7.72	
93 n-Decane	57	18.404	18.401	0.003	88	1632200	8.00	6.82	
94 tert-Butylbenzene	119	18.534	18.533	0.001	97	1682234	8.00	7.21	
95 1,2,4-Trimethylbenzene	105	18.550	18.547	0.003	96	1622836	8.00	6.99	
96 sec-Butylbenzene	105	18.803	18.804	-0.001	99	2467800	8.00	7.05	
97 1,3-Dichlorobenzene	146	18.814	18.815	-0.001	97	1286011	8.00	7.78	
98 Benzyl chloride	91	18.890	18.891	-0.001	97	1598462	8.00	7.31	
99 1,4-Dichlorobenzene	146	18.906	18.905	0.001	96	1269190	8.00	7.58	
100 4-Isopropyltoluene	119	18.965	18.965	0.000	96	1951840	8.00	7.20	
101 1,2,3-Trimethylbenzene	105	19.019	19.019	0.000	99	1624627	8.00	7.35	
102 Butylcyclohexane	83	19.073	19.074	-0.001	86	1574993	8.00	6.94	
103 2,3-Dihydroindene	117	19.262	19.262	0.000	93	1670413	8.00	7.20	
104 1,2-Dichlorobenzene	146	19.262	19.262	0.000	83	1214657	8.00	7.66	
105 n-Butylbenzene	91	19.397	19.398	-0.001	98	2083566	8.00	6.78	
106 Indene	116	19.391	19.392	-0.001	90	1469257	8.00	7.39	
107 Undecane	57	19.709	19.708	0.001	94	1761528	8.00	6.60	
108 1,2-Dibromo-3-Chloropropane	157	19.860	19.858	0.002	94	604213	8.00	7.21	
109 1,2,4,5-Tetramethylbenzene	119	20.152	20.150	0.002	97	1816600	8.00	7.17	
110 Dodecane	57	20.766	20.765	0.001	93	1562672	8.00	6.70	
111 1,2,4-Trichlorobenzene	180	20.955	20.957	-0.002	94	1089060	8.00	7.80	
112 Naphthalene	128	21.095	21.095	0.000	99	2219533	8.00	6.59	
113 Hexachlorobutadiene	225	21.306	21.304	0.002	96	1080114	8.00	9.16	
114 1,2,3-Trichlorobenzene	180	21.370	21.372	-0.002	96	1057388	8.00	7.87	
115 2-Methylnaphthalene	142	22.147	22.144	0.003	99	1209161	8.00	8.35	
116 1-Methylnaphthalene	142	22.319	22.319	0.000	99	1234833	8.00	8.38	
A 122 C8 Range	1	14.505	(14.399-14.592)		0	6203684	8.00	7.13	
S 123 1,2-Dichloroethene, Total	1				0		16.0	16.3	
S 124 Xylenes, Total	100				0		24.0	20.2	

Reagents:

40L10DQP_00019	Amount Added: 100.00	Units: mL	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

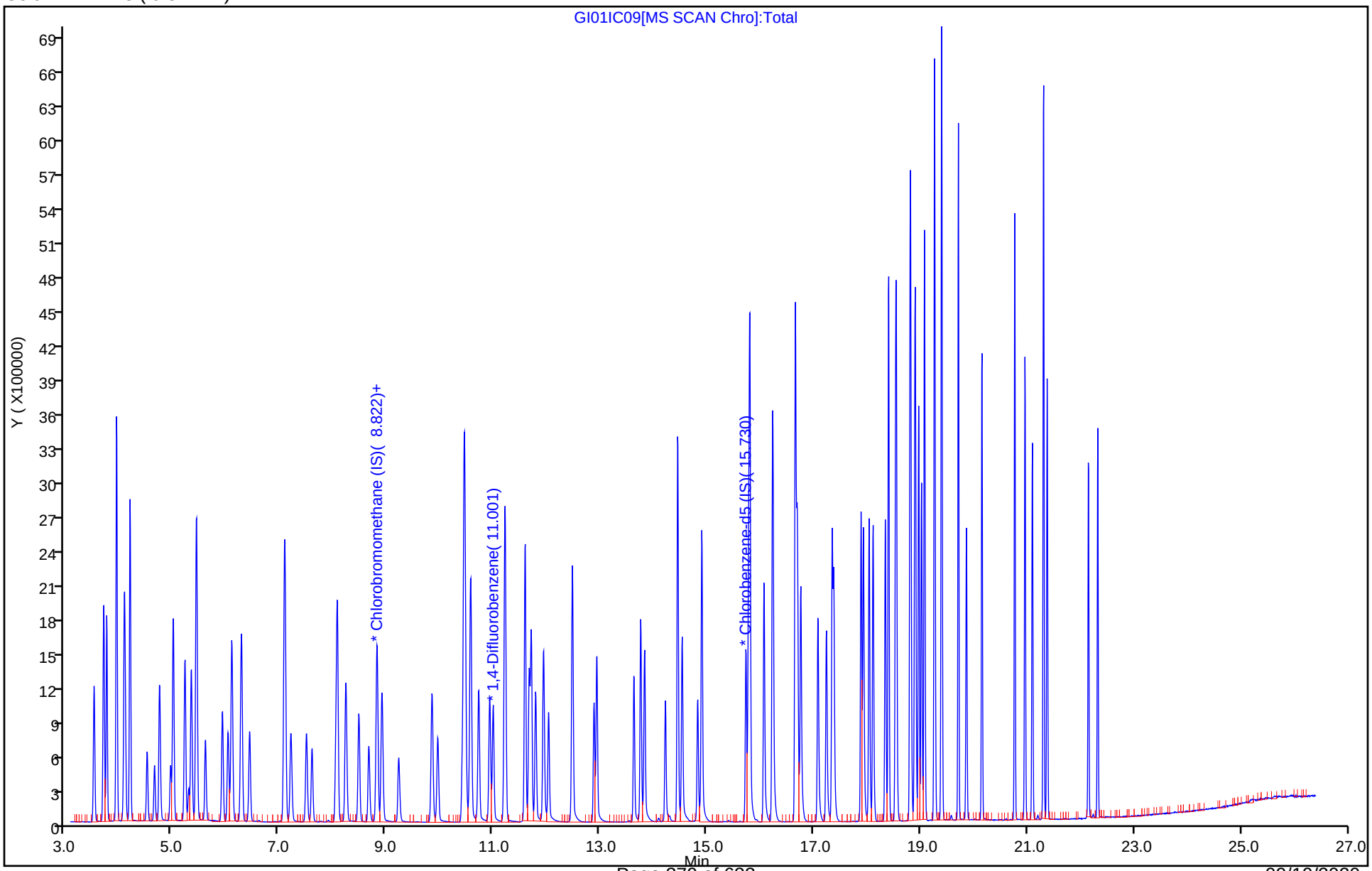
Report Date: 02-Sep-2020 12:23:13 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC09.D

Injection Date:	01-Sep-2020 19:43:30	Instrument ID:	MG	Operator ID:	AFB
Lims ID:	IC L9			Worklist Smp#:	5
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

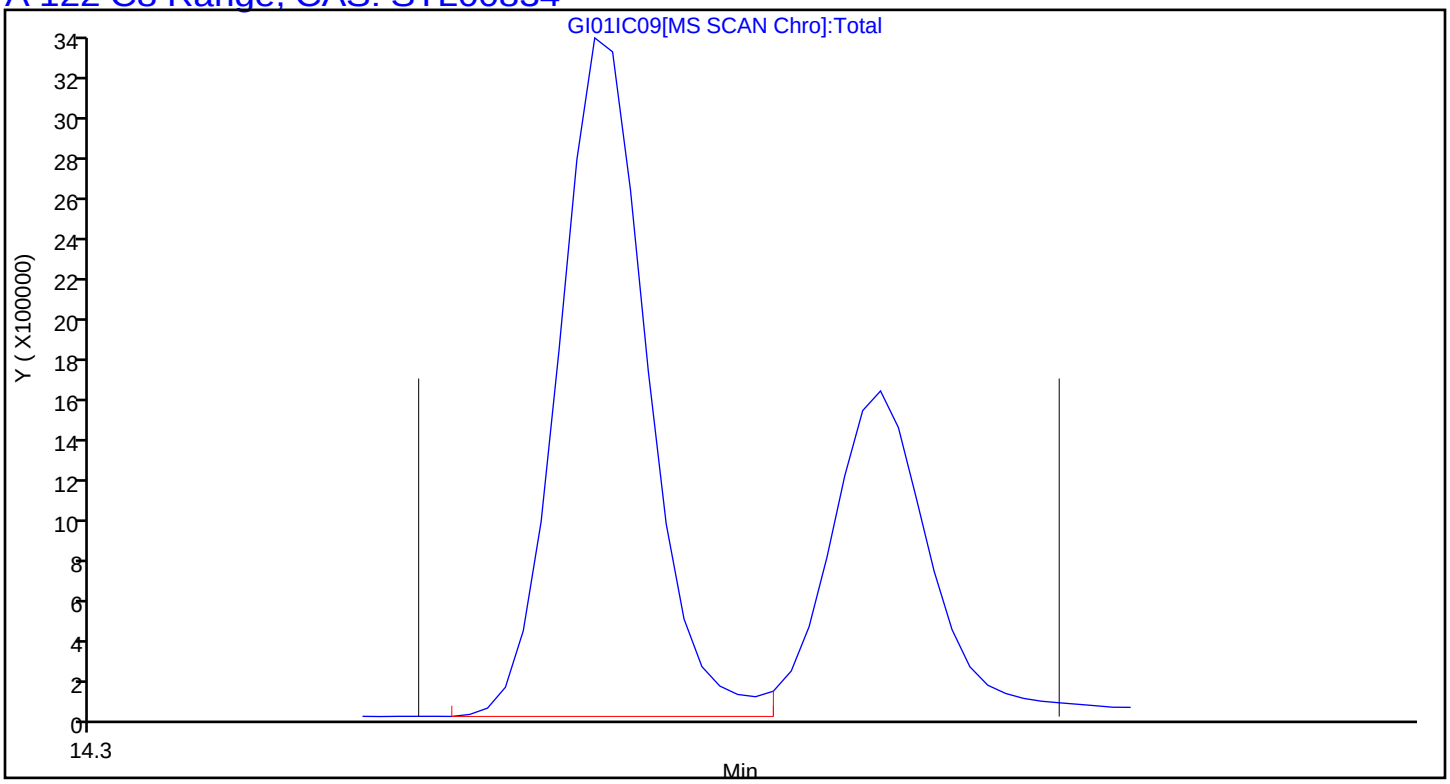


Report Date: 02-Sep-2020 12:23:13 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC09.D				
Injection Date:	01-Sep-2020 19:43:30	Instrument ID:	MG		
Lims ID:	IC L9				
Client ID:					
Operator ID:	AFB	ALS Bottle#:	1	Worklist Smp#:	5
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 122 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC08.D
Lims ID: IC L8
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 01-Sep-2020 21:19:30 ALS Bottle#: 2 Worklist Smp#: 7
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016453-007
Misc. Info.: 314607
Operator ID: AFB Instrument ID: MG
Sublist: chrom-MG_TO15*sub17

Method: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 02-Sep-2020 12:23:20 Calib Date: 02-Sep-2020 03:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1035

First Level Reviewer: barlozhetskayaa Date: 02-Sep-2020 10:52:47

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.811	8.812	-0.001	88	154669	4.80	4.80	
* 2 1,4-Difluorobenzene	114	10.995	10.996	-0.001	98	664974	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.730	15.730	0.000	92	704348	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.374	17.374	0.000	86	517937	4.64	4.69	
6 Chlorodifluoromethane	51	3.705	3.703	0.002	97	595533	4.00	4.30	
7 Propene	41	3.716	3.716	0.000	99	285979	4.00	4.20	
8 Dichlorodifluoromethane	85	3.764	3.765	-0.001	99	682291	4.00	4.40	
9 Chloromethane	52	3.942	3.945	-0.003	98	116599	4.00	4.20	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.953	3.951	0.002	93	407375	4.00	4.61	
11 Acetaldehyde	44	4.093	4.096	-0.003	98	461347	20.0	14.1	
12 Vinyl chloride	62	4.115	4.114	0.001	98	332339	4.00	4.29	
14 Butadiene	54	4.201	4.201	0.000	66	296910	4.00	4.35	
13 Butane	43	4.201	4.202	-0.001	86	581152	4.00	4.19	
15 Bromomethane	94	4.519	4.521	-0.002	99	210733	4.00	4.50	
16 Chloroethane	64	4.659	4.658	0.001	92	140702	4.00	4.38	
17 Ethanol	31	4.751	4.759	-0.008	94	685930	20.0	23.4	
18 Vinyl bromide	106	4.956	4.960	-0.004	98	186602	4.00	4.68	
19 2-Methylbutane	43	5.010	5.010	0.000	93	428407	4.00	4.55	
20 Trichlorofluoromethane	101	5.225	5.229	-0.004	98	527367	4.00	4.38	
21 Acrolein	56	5.231	5.235	-0.004	32	48727	4.00	3.39	
22 Acetonitrile	40	5.296	5.301	-0.005	100	90528	4.00	3.52	
23 Acetone	58	5.344	5.355	-0.011	99	269068	12.0	10.4	
25 Isopropyl alcohol	45	5.430	5.451	-0.021	95	1184009	12.0	15.4	
24 Pentane	72	5.447	5.448	-0.001	96	36548	4.00	4.67	
26 Ethyl ether	31	5.608	5.619	-0.011	89	202112	4.00	3.67	
27 1,1-Dichloroethene	96	5.926	5.928	-0.002	90	165673	4.00	4.35	
28 Acrylonitrile	53	6.029	6.032	-0.003	91	117560	4.00	3.34	
30 2-Methyl-2-propanol	59	6.034	6.059	-0.025	96	406423	4.00	5.23	
29 1,1,2-Trichloro-1,2,2-trifluoroe	101	6.104	6.107	-0.003	90	364620	4.00	4.14	
31 Methylene Chloride	84	6.272	6.273	-0.001	89	163443	4.00	4.29	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.288	6.289	-0.001	94	272432	4.00	3.64	
33 Carbon disulfide	76	6.439	6.438	0.001	97	549880	4.00	4.29	
34 trans-1,2-Dichloroethene	96	7.080	7.082	-0.002	91	190465	4.00	4.24	
35 2-Methylpentane	43	7.102	7.101	0.001	96	705673	4.00	4.03	
36 Methyl tert-butyl ether	73	7.215	7.230	-0.015	93	359280	4.00	3.87	
37 1,1-Dichloroethane	63	7.501	7.499	0.002	98	451772	4.00	4.04	
38 Vinyl acetate	43	7.603	7.607	-0.004	100	503287	4.00	3.43	
39 2-Butanone (MEK)	72	8.051	8.063	-0.012	95	71237	4.00	3.83	
40 Hexane	56	8.078	8.082	-0.004	91	236115	4.00	4.09	
41 Isopropyl ether	45	8.240	8.246	-0.006	96	731542	4.00	3.80	
42 cis-1,2-Dichloroethene	96	8.477	8.483	-0.006	96	201607	4.00	4.23	
43 Ethyl acetate	43	8.666	8.676	-0.010	97	480959	4.00	3.75	
44 Chloroform	83	8.828	8.825	0.003	93	421785	4.00	3.89	
45 Tert-butyl ethyl ether	59	8.914	8.928	-0.014	96	634982	4.00	3.93	
46 Tetrahydrofuran	42	9.232	9.244	-0.012	91	246265	4.00	3.83	
47 1,1,1-Trichloroethane	97	9.852	9.851	0.001	94	425590	4.00	4.08	
48 1,2-Dichloroethane	62	9.960	9.958	0.002	95	340796	4.00	4.54	
51 n-Butanol	31	10.424	10.442	-0.018	90	122991	4.00	5.78	
50 Benzene	78	10.451	10.451	0.000	95	619691	4.00	4.53	
49 Cyclohexane	69	10.451	10.455	-0.004	84	105905	4.00	4.60	
52 Carbon tetrachloride	117	10.478	10.476	0.002	93	425976	4.00	5.04	
53 2,3-Dimethylpentane	71	10.575	10.577	-0.002	90	156938	4.00	4.45	
54 Thiophene	84	10.726	10.725	0.001	95	356857	4.00	4.56	
55 Isooctane	57	11.216	11.219	-0.003	98	1515982	4.00	4.53	
56 n-Heptane	71	11.594	11.594	0.000	94	238604	4.00	4.44	
57 1,2-Dichloropropane	63	11.669	11.669	0.000	90	251789	4.00	4.04	
58 Trichloroethene	130	11.707	11.706	0.001	90	253014	4.00	4.25	
59 Dibromomethane	93	11.793	11.791	0.002	89	262180	4.00	4.46	
60 Dichlorobromomethane	83	11.939	11.936	0.003	95	480892	4.00	4.71	
61 1,4-Dioxane	88	11.961	11.974	-0.014	93	79403	4.00	4.98	
62 Methyl methacrylate	41	12.036	12.038	-0.002	86	300901	4.00	4.27	
63 Methylcyclohexane	83	12.478	12.480	-0.002	86	406216	4.00	4.51	
64 4-Methyl-2-pentanone (MIBK)	43	12.888	12.898	-0.010	98	598699	4.00	5.04	
65 cis-1,3-Dichloropropene	75	12.937	12.938	-0.001	97	352319	4.00	4.30	
66 trans-1,3-Dichloropropene	75	13.632	13.632	0.000	92	296890	4.00	4.11	
67 Toluene	91	13.762	13.759	0.003	92	606087	4.00	3.90	
68 1,1,2-Trichloroethane	83	13.832	13.831	0.001	95	204172	4.00	4.19	
69 2-Hexanone	58	14.220	14.231	-0.011	92	308468	4.00	5.36	
70 n-Octane	85	14.452	14.454	-0.002	97	254271	4.00	4.49	
71 Chlorodibromomethane	129	14.533	14.536	-0.003	95	438464	4.00	4.79	
72 Ethylene Dibromide	107	14.824	14.826	-0.002	97	361106	4.00	4.13	
73 Tetrachloroethene	129	14.905	14.904	0.001	91	242360	4.00	4.14	
75 Chlorobenzene	112	15.778	15.779	-0.001	90	516782	4.00	4.11	
74 2,3-Dimethylheptane	43	15.800	15.801	-0.001	92	1131139	4.00	4.21	
78 Ethylbenzene	91	16.069	16.068	0.001	99	768480	4.00	3.85	
79 m-Xylene & p-Xylene	91	16.231	16.232	-0.001	97	1196112	8.00	7.57	
80 n-Nonane	57	16.652	16.654	-0.002	93	654836	4.00	4.20	
81 Bromoform	173	16.679	16.676	0.003	93	397152	4.00	5.16	
82 Styrene	104	16.695	16.695	0.000	96	470774	4.00	4.10	
83 o-Xylene	91	16.754	16.757	-0.003	97	623631	4.00	3.90	
84 1,1,2,2-Tetrachloroethane	83	17.078	17.078	0.000	98	528435	4.00	4.14	
85 1,2,3-Trichloropropane	110	17.234	17.237	-0.003	93	134141	4.00	4.30	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
86 Isopropylbenzene	105	17.347	17.344	0.003	97	839245	4.00	4.00	
87 N-Propylbenzene	120	17.887	17.887	0.000	98	228287	4.00	4.07	
88 2-Chlorotoluene	126	17.930	17.930	0.000	98	223185	4.00	4.16	
89 4-Ethyltoluene	105	18.038	18.038	0.000	98	850389	4.00	4.05	
90 1,3,5-Trimethylbenzene	120	18.113	18.109	0.004	92	345419	4.00	4.12	
92 Alpha Methyl Styrene	118	18.340	18.340	0.000	86	354303	4.00	4.28	
93 n-Decane	57	18.399	18.401	-0.002	88	759257	4.00	4.02	
94 tert-Butylbenzene	119	18.534	18.533	0.001	92	770891	4.00	4.18	
95 1,2,4-Trimethylbenzene	105	18.550	18.547	0.003	96	764817	4.00	4.17	
96 sec-Butylbenzene	105	18.803	18.804	-0.001	98	1151509	4.00	4.16	
97 1,3-Dichlorobenzene	146	18.814	18.815	-0.001	97	551149	4.00	4.22	
98 Benzyl chloride	91	18.890	18.891	-0.001	97	735219	4.00	4.26	
99 1,4-Dichlorobenzene	146	18.906	18.905	0.001	94	545052	4.00	4.12	
100 4-Isopropyltoluene	119	18.965	18.965	0.000	96	919460	4.00	4.29	
101 1,2,3-Trimethylbenzene	105	19.019	19.019	0.000	99	775110	4.00	4.65	
102 Butylcyclohexane	83	19.073	19.074	-0.001	86	734092	4.00	4.10	
103 2,3-Dihydroindene	117	19.262	19.262	0.000	92	762843	4.00	4.16	
104 1,2-Dichlorobenzene	146	19.262	19.262	0.000	81	538536	4.00	4.30	
106 Indene	116	19.391	19.392	-0.001	89	672537	4.00	4.29	
105 n-Butylbenzene	91	19.397	19.398	-0.001	98	1013104	4.00	4.17	
107 Undecane	57	19.709	19.708	0.001	94	851240	4.00	4.04	
108 1,2-Dibromo-3-Chloropropane	157	19.860	19.858	0.002	93	312261	4.00	5.05	
109 1,2,4,5-Tetramethylbenzene	119	20.152	20.150	0.002	97	936361	4.00	4.98	
110 Dodecane	57	20.766	20.765	0.001	92	855739	4.00	4.65	
111 1,2,4-Trichlorobenzene	180	20.955	20.957	-0.002	94	484290	4.00	4.39	
112 Naphthalene	128	21.095	21.095	0.000	99	1122391	4.00	4.22	
113 Hexachlorobutadiene	225	21.305	21.304	0.001	94	446054	4.00	4.79	
114 1,2,3-Trichlorobenzene	180	21.370	21.372	-0.002	94	479297	4.00	4.52	
115 2-Methylnaphthalene	142	22.147	22.144	0.003	99	762263	4.00	6.67	
116 1-Methylnaphthalene	142	22.319	22.319	0.000	99	785887	4.00	6.75	
A 122 C8 Range	1	14.474	(14.388-14.560)		0	2983142	4.00	4.34	
S 123 1,2-Dichloroethene, Total	1				0		8.00	8.47	
S 124 Xylenes, Total	100				0		12.0	11.5	

Reagents:

40L8DQP_00018	Amount Added: 200.00	Units: mL	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

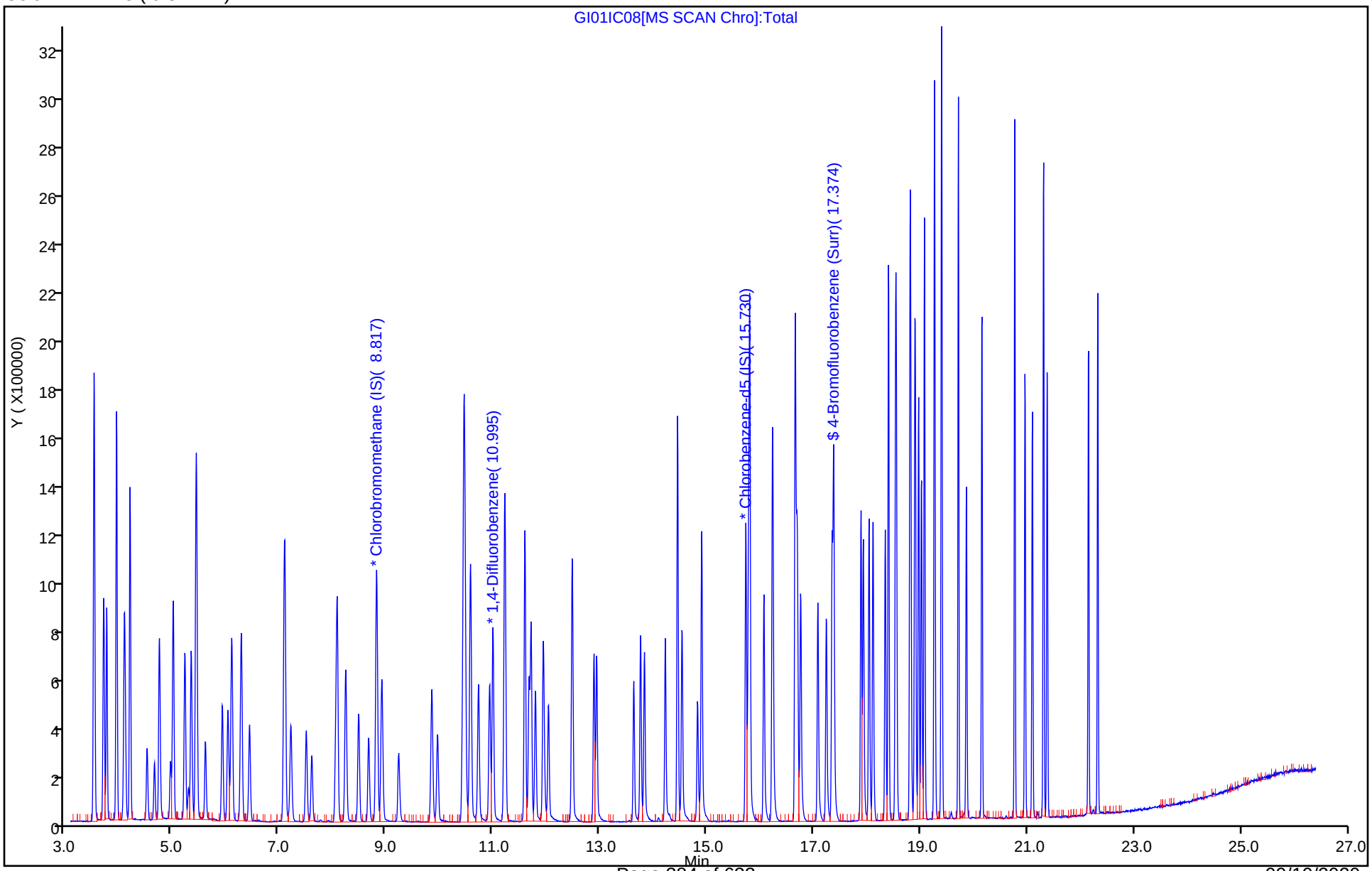
Report Date: 02-Sep-2020 12:23:21 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC08.D

Injection Date:	01-Sep-2020 21:19:30	Instrument ID:	MG	Operator ID:	AFB
Lims ID:	IC L8			Worklist Smp#:	7
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

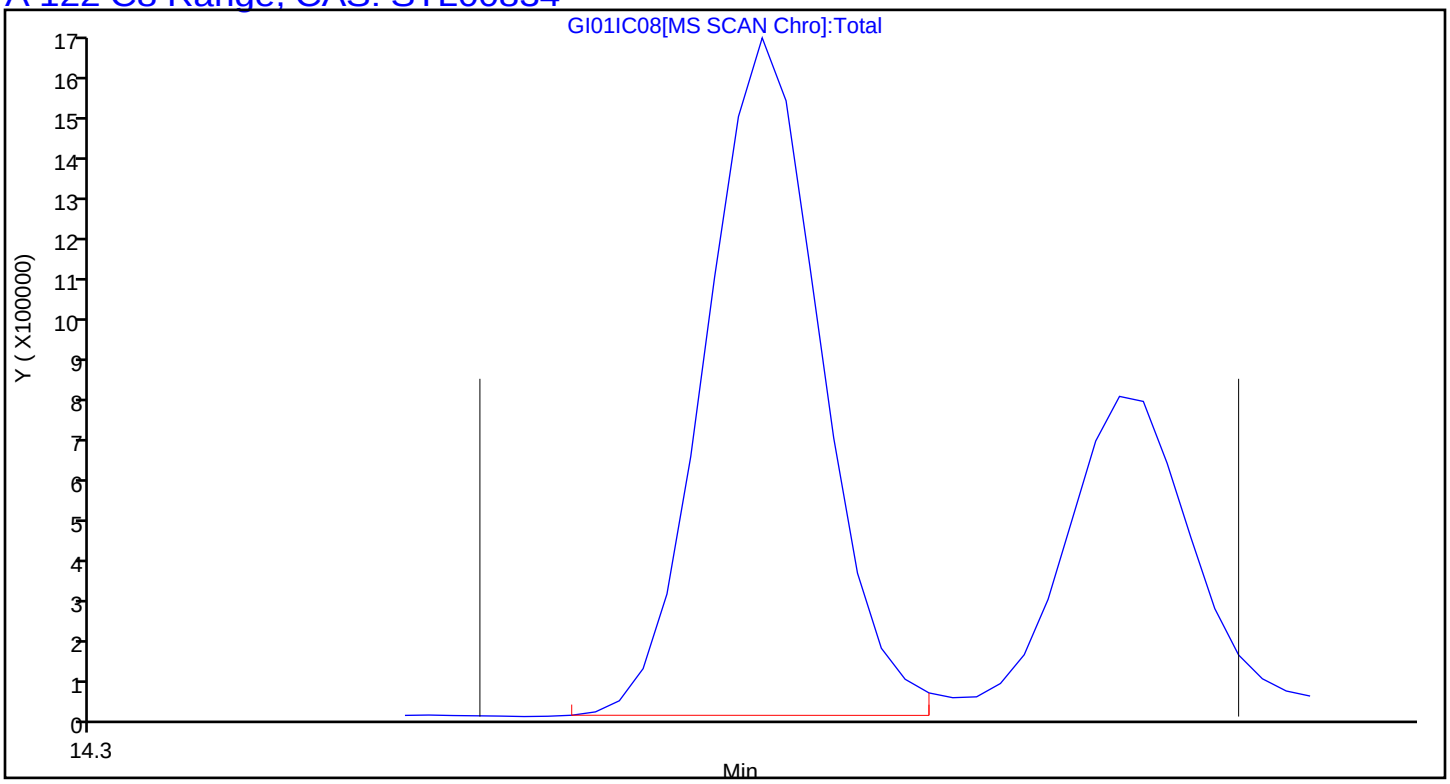


Report Date: 02-Sep-2020 12:23:21 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC08.D				
Injection Date:	01-Sep-2020 21:19:30	Instrument ID:	MG		
Lims ID:	IC L8				
Client ID:					
Operator ID:	AFB	ALS Bottle#:	2	Worklist Smp#:	7
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 122 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC01.D
Lims ID: IC L1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 01-Sep-2020 22:55:30 ALS Bottle#: 3 Worklist Smp#: 9
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016453-009
Misc. Info.: 314720
Operator ID: AFB Instrument ID: MG
Sublist: chrom-MG_TO15*sub17

Method: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 02-Sep-2020 12:23:28 Calib Date: 02-Sep-2020 03:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1035

First Level Reviewer: barlozhetskayaa Date: 02-Sep-2020 10:36:43

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.811	8.812	-0.001	90	174884	4.80	4.80	
* 2 1,4-Difluorobenzene	114	10.995	10.996	-0.001	98	830080	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.730	15.730	0.000	94	782665	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.374	17.374	0.000	82	550738	4.64	4.48	
6 Chlorodifluoromethane	51	3.705	3.703	0.002	78	3340	0.0200	0.0213	
7 Propene	41	3.715	3.716	-0.001	89	2496	0.0200	0.0324	
8 Dichlorodifluoromethane	85	3.764	3.765	-0.001	93	3603	0.0200	0.0206	
9 Chloromethane	52	3.942	3.945	-0.003	62	1142	0.0200	0.0364	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.947	3.951	-0.004	94	1998	0.0200	0.0200	
11 Acetaldehyde	44	4.093	4.096	-0.003	96	11229	0.1000	0.3043	
12 Vinyl chloride	62	4.109	4.114	-0.005	36	1611	0.0200	0.0184	
14 Butadiene	54	4.201	4.201	0.000	61	1667	0.0200	0.0216	
13 Butane	43	4.201	4.202	-0.001	88	4506	0.0200	0.0287	
15 Bromomethane	94	4.524	4.521	0.003	44	1045	0.0200	0.0198	
16 Chloroethane	64	4.648	4.658	-0.010	44	913	0.0200	0.0251	
17 Ethanol	31	4.767	4.759	0.008	94	4007	0.1000	0.1211	
18 Vinyl bromide	106	4.956	4.960	-0.004	44	1153	0.0200	0.0255	
19 2-Methylbutane	43	5.015	5.010	0.005	68	3421	0.0200	0.0321	
20 Trichlorofluoromethane	101	5.225	5.229	-0.004	70	2854	0.0200	0.0210	
23 Acetone	58	5.365	5.355	0.010	98	3541	0.0600	0.1215	
25 Isopropyl alcohol	45	5.473	5.451	0.022	90	6635	0.0600	0.0762	
29 1,1,2-Trichloro-1,2,2-trifluoroe	101	6.115	6.107	0.008	83	2167	0.0200	0.0217	
31 Methylene Chloride	84	6.271	6.273	-0.002	95	2122	0.0200	0.0492	
32 3-Chloro-1-propene	39	6.282	6.289	-0.007	49	2625	0.0200	0.0311	
33 Carbon disulfide	76	6.439	6.438	0.001	92	2949	0.0200	0.0204	
34 trans-1,2-Dichloroethene	96	7.075	7.082	-0.007	88	698	0.0200	0.0138	
35 2-Methylpentane	43	7.096	7.101	-0.005	90	4691	0.0200	0.0237	
36 Methyl tert-butyl ether	73	7.247	7.230	0.017	22	1484	0.0200	0.0141	
37 1,1-Dichloroethane	63	7.495	7.499	-0.004	95	3087	0.0200	0.0244	
38 Vinyl acetate	43	7.614	7.607	0.007	70	2709	0.0200	0.0163	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
39 2-Butanone (MEK)	72	8.072	8.063	0.009	86	677	0.0200	0.0322	
40 Hexane	56	8.089	8.082	0.007	78	1669	0.0200	0.0256	
42 cis-1,2-Dichloroethene	96	8.471	8.483	-0.012	57	1103	0.0200	0.0204	
43 Ethyl acetate	43	8.682	8.676	0.006	24	2501	0.0200	0.0172	
44 Chloroform	83	8.817	8.825	-0.008	27	2647	0.0200	0.0216	
45 Tert-butyl ethyl ether	59	8.957	8.928	0.029	78	2000	0.0200	0.0109	
47 1,1,1-Trichloroethane	97	9.847	9.851	-0.004	10	1560	0.0200	0.0132	
48 1,2-Dichloroethane	62	9.954	9.958	-0.004	47	1462	0.0200	0.0156	
49 Cyclohexane	69	10.456	10.455	0.001	84	762	0.0200	0.0265	
50 Benzene	78	10.445	10.451	-0.006	82	3804	0.0200	0.0223	
52 Carbon tetrachloride	117	10.477	10.476	0.001	80	2115	0.0200	0.0201	
53 2,3-Dimethylpentane	71	10.580	10.577	0.003	85	909	0.0200	0.0206	
54 Thiophene	84	10.726	10.725	0.001	35	2028	0.0200	0.0207	
55 Isooctane	57	11.222	11.219	0.003	94	9413	0.0200	0.0225	
56 n-Heptane	71	11.594	11.594	0.000	91	1488	0.0200	0.0222	
57 1,2-Dichloropropane	63	11.669	11.669	0.000	28	1596	0.0200	0.0205	
58 Trichloroethene	130	11.707	11.706	0.001	50	1476	0.0200	0.0198	
59 Dibromomethane	93	11.788	11.791	-0.003	59	1732	0.0200	0.0236	
60 Dichlorobromomethane	83	11.933	11.936	-0.003	92	2327	0.0200	0.0183	
62 Methyl methacrylate	41	12.030	12.038	-0.008	1	2118	0.0200	0.0241	
63 Methylcyclohexane	83	12.478	12.480	-0.002	85	2436	0.0200	0.0217	
64 4-Methyl-2-pentanone (MIBK)	43	12.920	12.898	0.022	45	2393	0.0200	0.0162	
65 cis-1,3-Dichloropropene	75	12.931	12.938	-0.007	37	1341	0.0200	0.0131	
66 trans-1,3-Dichloropropene	75	13.627	13.632	-0.005	1	1104	0.0200	0.0137	
67 Toluene	91	13.761	13.759	0.002	93	3107	0.0200	0.0180	
68 1,1,2-Trichloroethane	83	13.826	13.831	-0.005	1	869	0.0200	0.0161	
69 2-Hexanone	58	14.247	14.231	0.016	90	1070	0.0200	0.0167	
70 n-Octane	85	14.452	14.454	-0.002	96	1117	0.0200	0.0178	
71 Chlorodibromomethane	129	14.533	14.536	-0.004	91	1445	0.0200	0.0142	
72 Ethylene Dibromide	107	14.829	14.826	0.003	95	1375	0.0200	0.0142	
73 Tetrachloroethene	129	14.899	14.904	-0.005	70	1279	0.0200	0.0197	
75 Chlorobenzene	112	15.778	15.779	-0.001	88	2304	0.0200	0.0165	
74 2,3-Dimethylheptane	43	15.800	15.801	-0.001	95	5600	0.0200	0.0187	
78 Ethylbenzene	91	16.069	16.068	0.001	94	3031	0.0200	0.0137	
79 m-Xylene & p-Xylene	91	16.231	16.232	-0.001	96	5086	0.0400	0.0290	
80 n-Nonane	57	16.652	16.654	-0.002	90	3685	0.0200	0.0213	
81 Bromoform	173	16.679	16.676	0.003	40	1041	0.0200	0.0122	
82 Styrene	104	16.700	16.695	0.005	36	1656	0.0200	0.0130	
83 o-Xylene	91	16.754	16.757	-0.003	90	2884	0.0200	0.0162	
84 1,1,2,2-Tetrachloroethane	83	17.078	17.078	0.000	90	1786	0.0200	0.0126	
86 Isopropylbenzene	105	17.342	17.344	-0.002	1	1654	0.0200	0.007088	
87 N-Propylbenzene	120	17.887	17.887	0.000	96	405	0.0200	0.006501	
89 4-Ethyltoluene	105	18.043	18.038	0.005	91	2826	0.0200	0.0121	
90 1,3,5-Trimethylbenzene	120	18.108	18.109	-0.001	90	1238	0.0200	0.0133	
92 Alpha Methyl Styrene	118	18.340	18.340	0.000	35	793	0.0200	0.008616	
93 n-Decane	57	18.399	18.401	-0.002	92	3174	0.0200	0.0151	
94 tert-Butylbenzene	119	18.528	18.533	-0.005	69	2202	0.0200	0.0108	
95 1,2,4-Trimethylbenzene	105	18.544	18.547	-0.003	90	2764	0.0200	0.0136	
96 sec-Butylbenzene	105	18.803	18.804	-0.001	97	2858	0.0200	0.009301	
97 1,3-Dichlorobenzene	146	18.814	18.815	-0.001	81	2581	0.0200	0.0178	
98 Benzyl chloride	91	18.900	18.891	0.009	90	2494	0.0200	0.0130	
99 1,4-Dichlorobenzene	146	18.900	18.905	-0.005	85	2678	0.0200	0.0182	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
100 4-Isopropyltoluene	119	18.960	18.965	-0.005	26	1413	0.0200	0.005939	
101 1,2,3-Trimethylbenzene	105	19.019	19.019	0.000	55	1654	0.0200	0.009704	
102 Butylcyclohexane	83	19.073	19.074	-0.001	90	3132	0.0200	0.0157	
103 2,3-Dihydroindene	117	19.262	19.262	0.000	86	2515	0.0200	0.0124	
104 1,2-Dichlorobenzene	146	19.262	19.262	0.000	78	2148	0.0200	0.0154	
106 Indene	116	19.396	19.392	0.004	63	1715	0.0200	0.009836	
105 n-Butylbenzene	91	19.402	19.398	0.004	92	3050	0.0200	0.0113	
107 Undecane	57	19.704	19.708	-0.004	88	2975	0.0200	0.0127	
108 1,2-Dibromo-3-Chloropropane	157	19.855	19.858	-0.003	30	701	0.0200	0.0122	
109 1,2,4,5-Tetramethylbenzene	119	20.151	20.150	0.001	91	2896	0.0200	0.0163	
110 Dodecane	57	20.766	20.765	0.001	86	3368	0.0200	0.0165	
111 1,2,4-Trichlorobenzene	180	20.955	20.957	-0.002	85	2095	0.0200	0.0171	
112 Naphthalene	128	21.090	21.095	-0.005	97	4347	0.0200	0.0147	
113 Hexachlorobutadiene	225	21.305	21.304	0.001	85	1528	0.0200	0.0148	
114 1,2,3-Trichlorobenzene	180	21.375	21.372	0.003	89	1945	0.0200	0.0165	
115 2-Methylnaphthalene	142	22.147	22.144	0.003	92	2532	0.0200	0.0199	
116 1-Methylnaphthalene	142	22.319	22.319	0.000	96	3046	0.0200	0.0235	
A 122 C8 Range	1	14.454	(14.420-14.473)		0	21162	0.0200	0.0277	
S 123 1,2-Dichloroethene, Total	1				0		0.0400	0.0342	
S 124 Xylenes, Total	100				0		0.0600	0.0452	

Reagents:

40L1-3DQP_00031	Amount Added: 50.00	Units: mL	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

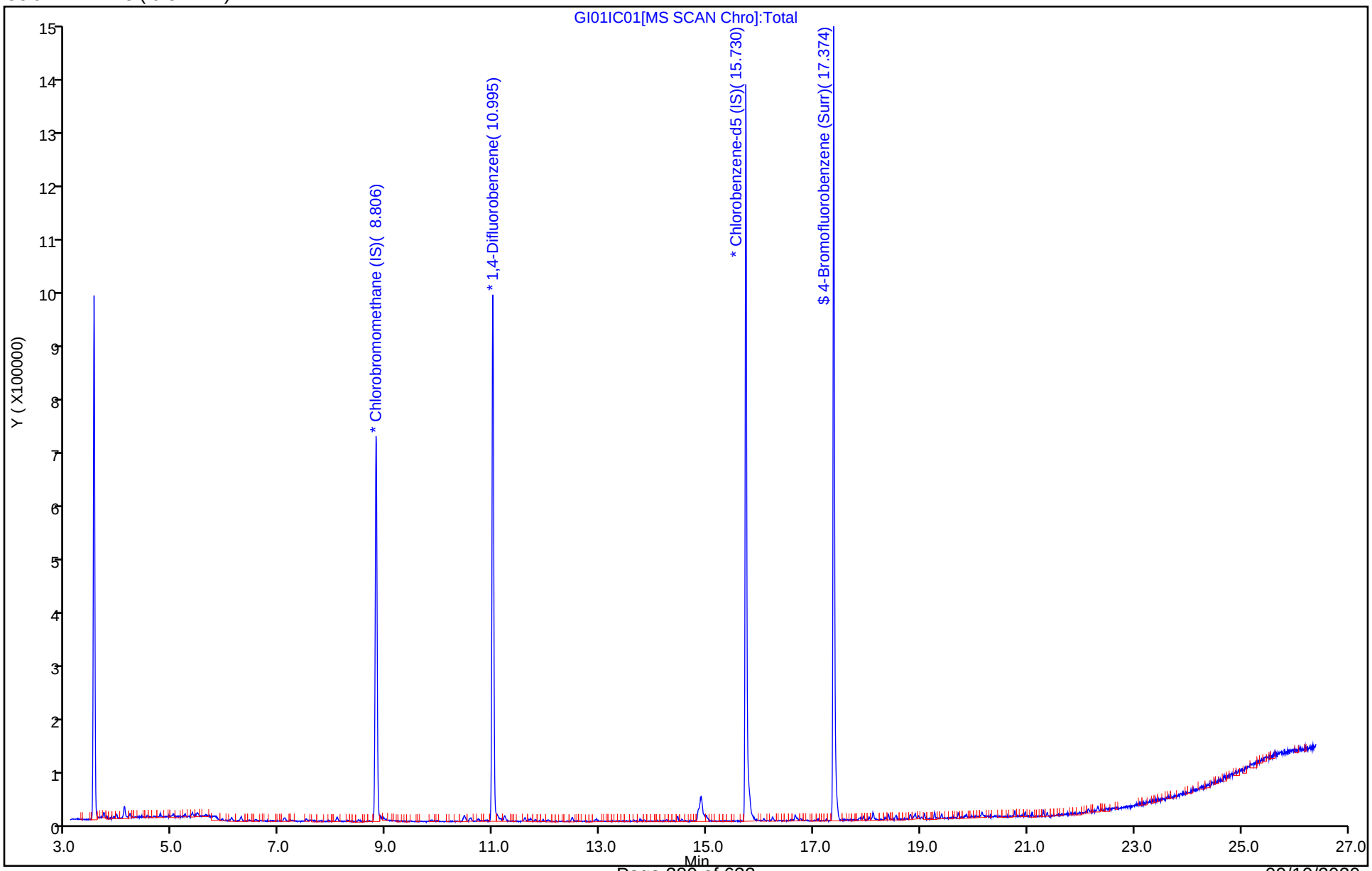
Report Date: 02-Sep-2020 12:23:28 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC01.D

Injection Date:	01-Sep-2020 22:55:30	Instrument ID:	MG	Operator ID:	AFB
Lims ID:	IC L1			Worklist Smp#:	9
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

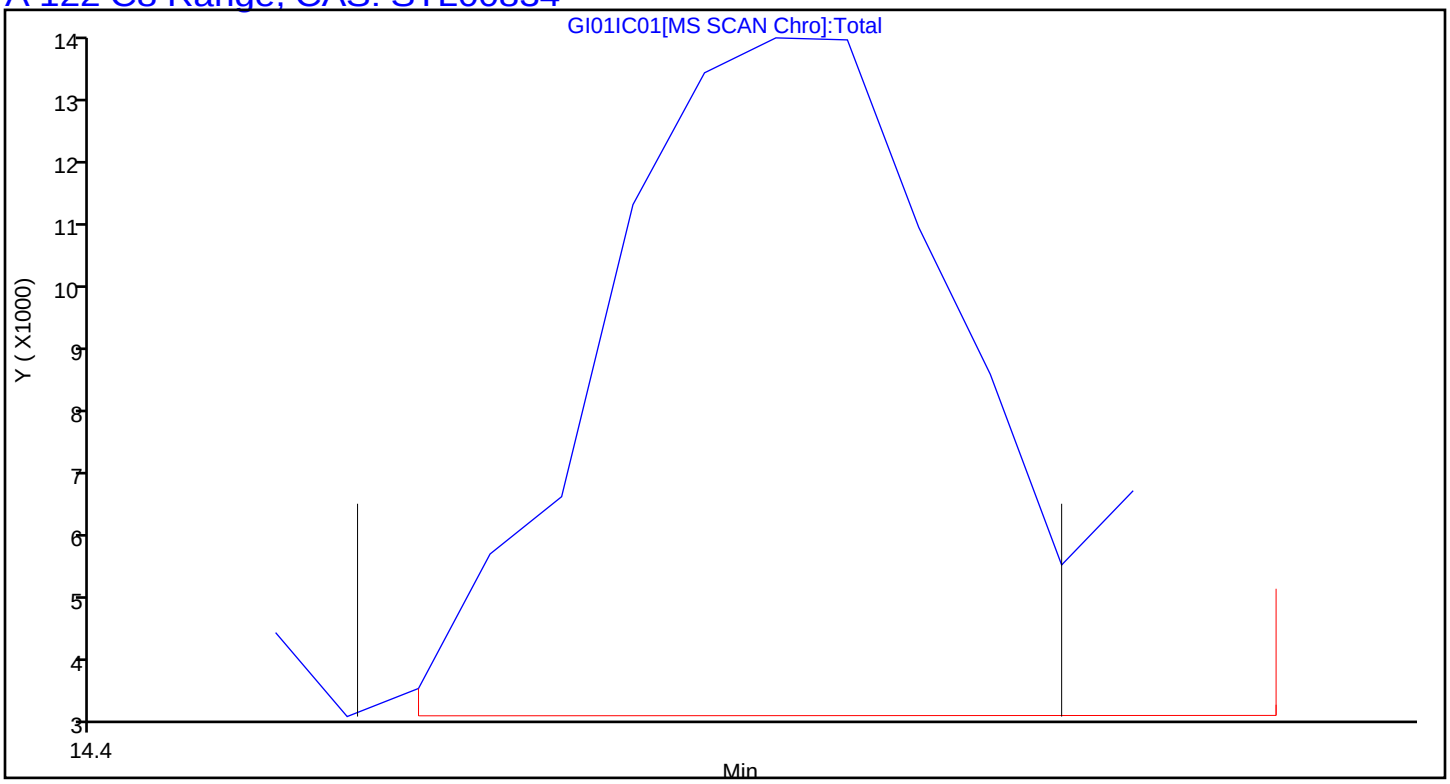


Report Date: 02-Sep-2020 12:23:29 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC01.D				
Injection Date:	01-Sep-2020 22:55:30	Instrument ID:	MG		
Lims ID:	IC L1				
Client ID:					
Operator ID:	AFB	ALS Bottle#:	3	Worklist Smp#:	9
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 122 C8 Range, CAS: STL00834



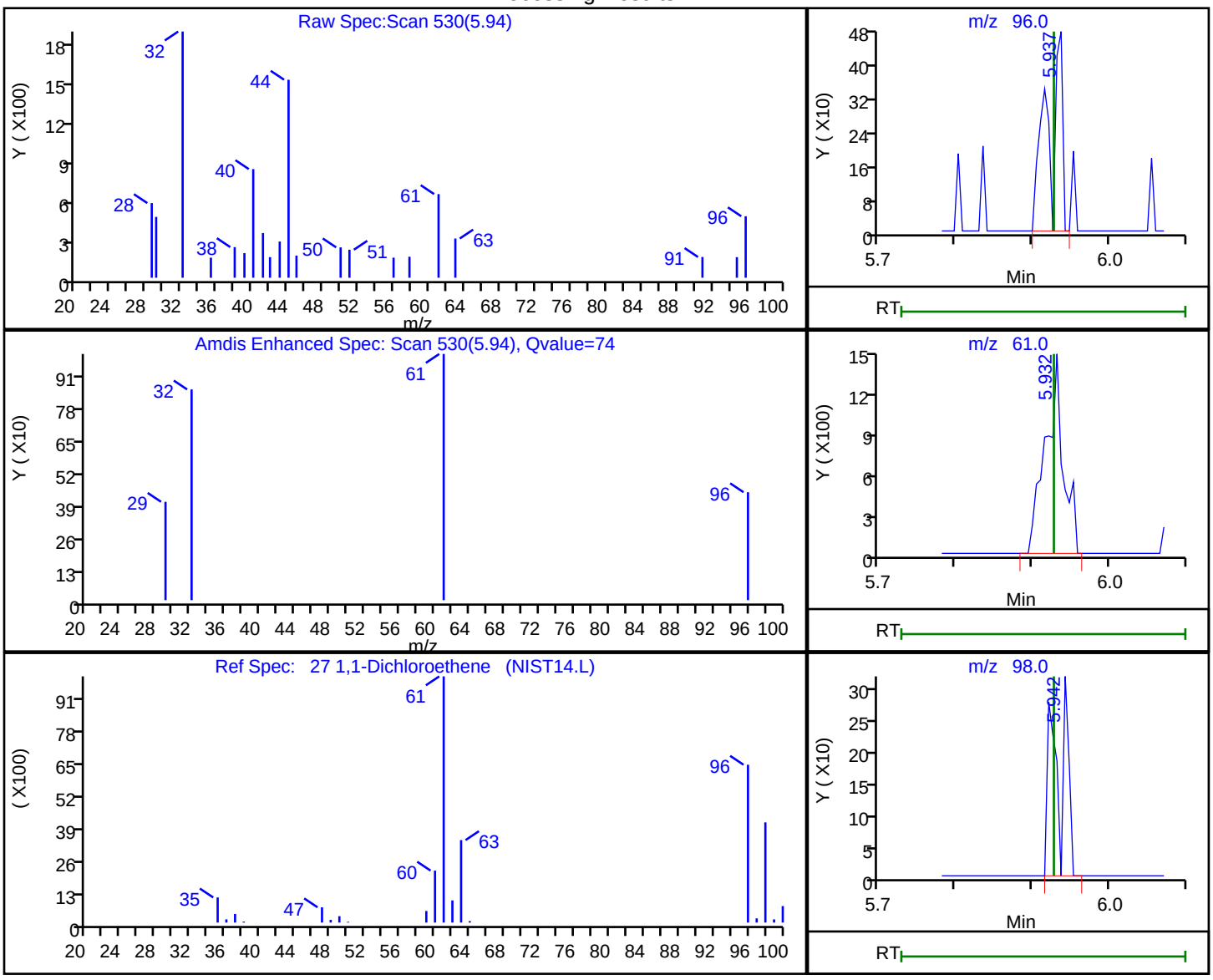
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC01.D				
Injection Date:	01-Sep-2020 22:55:30	Instrument ID:	MG		
Lims ID:	IC L1				
Client ID:					
Operator ID:	AFB	ALS Bottle#:	3	Worklist Smp#:	9
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

27 1,1-Dichloroethene, CAS: 75-35-4

Processing Results



RT	Mass	Response	Amount
5.94	96.00	615	0.014265
5.93	61.00	2311	
5.94	98.00	381	

Reviewer: barlozhetskayaa, 02-Sep-2020 10:49:58

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

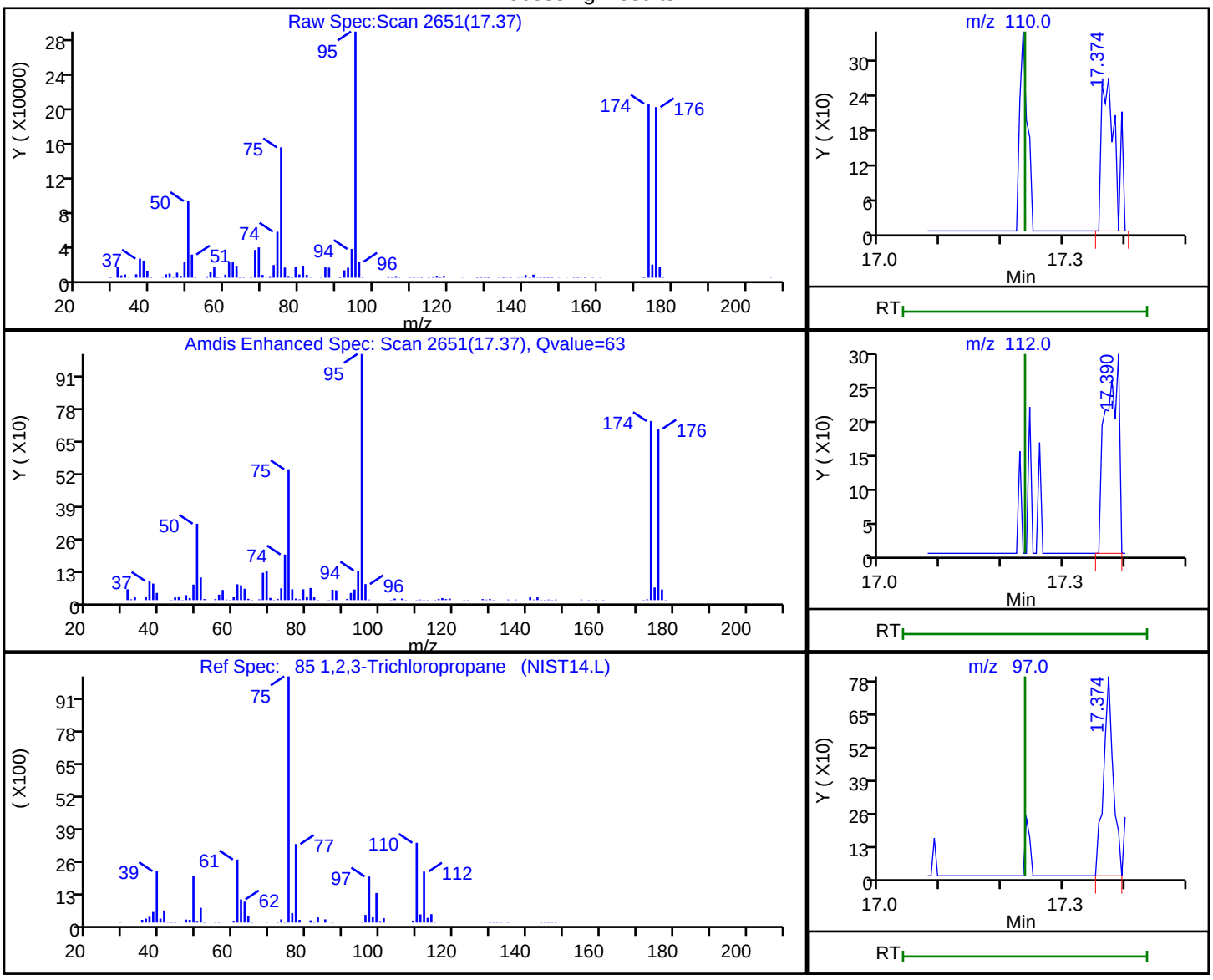
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC01.D				
Injection Date:	01-Sep-2020 22:55:30	Instrument ID:	MG		
Lims ID:	IC L1				
Client ID:					
Operator ID:	AFB	ALS Bottle#:	3	Worklist Smp#:	9
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

85 1,2,3-Trichloropropane, CAS: 96-18-4

Processing Results



RT	Mass	Response	Amount
17.37	110.00	424	0.012236
17.39	112.00	444	
17.37	97.00	876	

Reviewer: barlozhetskayaa, 02-Sep-2020 10:51:13

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

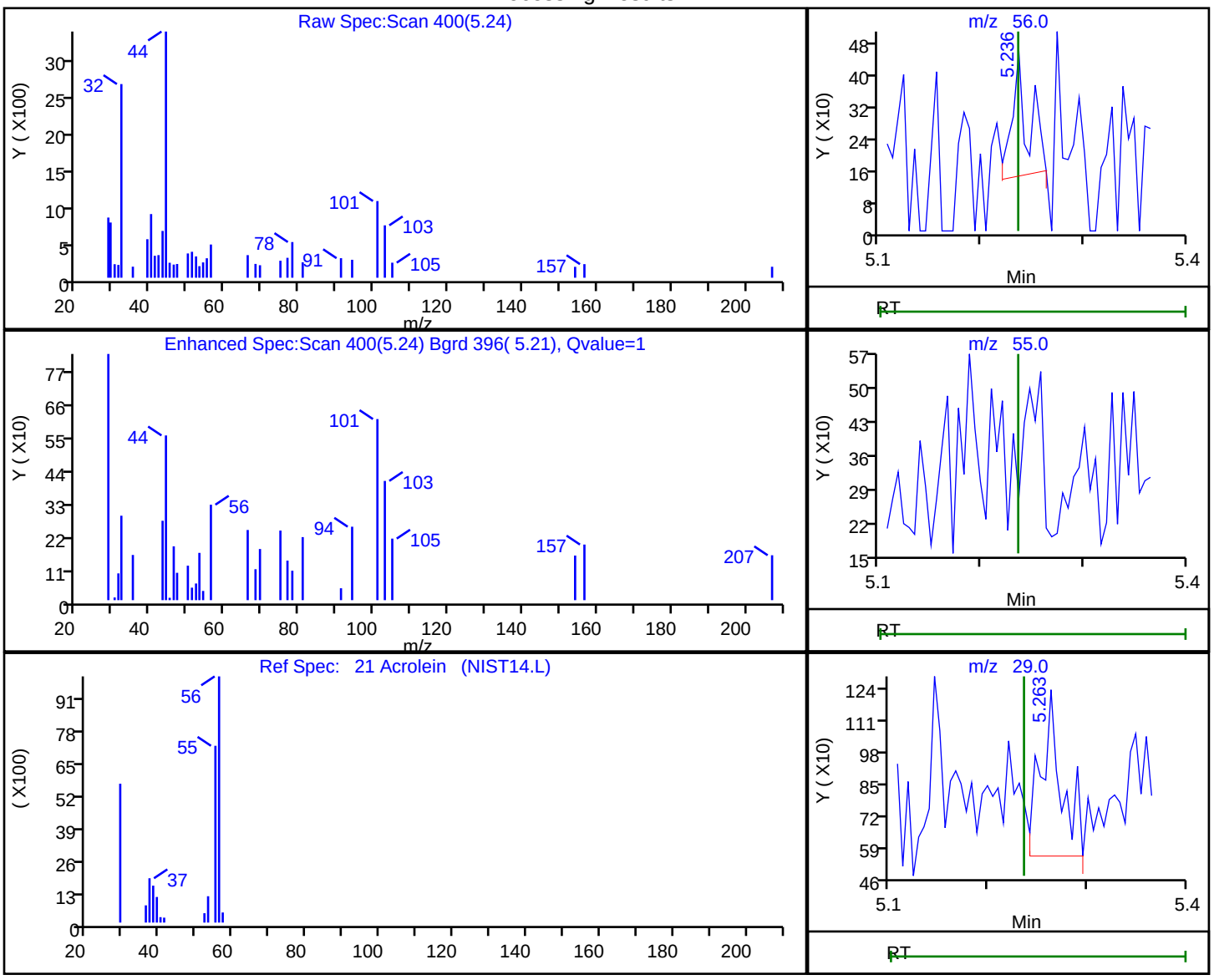
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC01.D				
Injection Date:	01-Sep-2020 22:55:30	Instrument ID:	MG		
Lims ID:	IC L1				
Client ID:					
Operator ID:	AFB	ALS Bottle#:	3	Worklist Smp#:	9
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

21 Acrolein, CAS: 107-02-8

Processing Results



RT	Mass	Response	Amount
5.24	56.00	344	0.021149
5.24	55.00	0	
5.26	29.00	991	

Reviewer: barlozhetskayaa, 02-Sep-2020 10:49:48

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

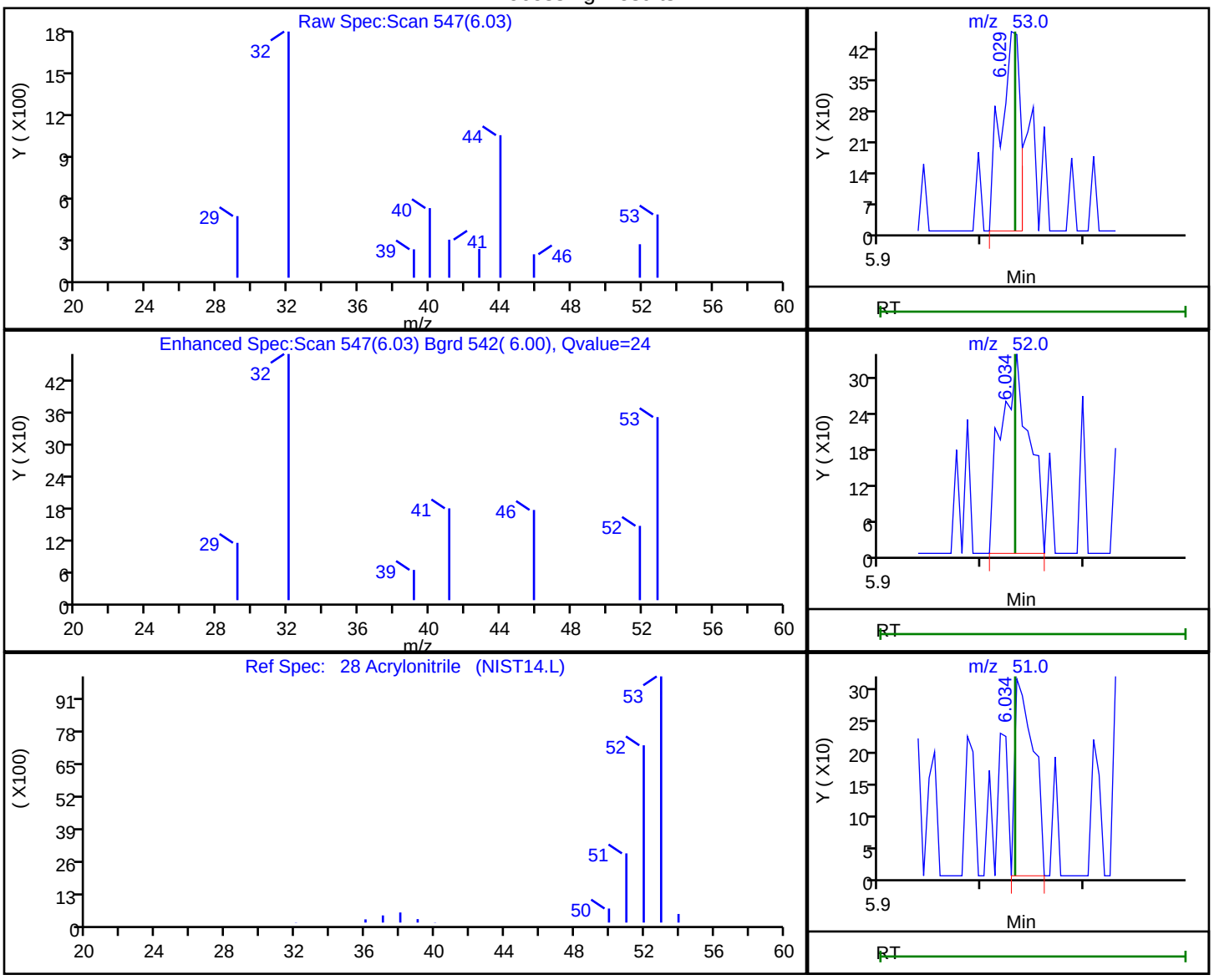
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC01.D				
Injection Date:	01-Sep-2020 22:55:30	Instrument ID:	MG		
Lims ID:	IC L1				
Client ID:					
Operator ID:	AFB	ALS Bottle#:	3	Worklist Smp#:	9
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

28 Acrylonitrile, CAS: 107-13-1

Processing Results



RT	Mass	Response	Amount
6.03	53.00	607	0.015259
6.03	52.00	646	
6.03	51.00	390	

Reviewer: barlozhetskayaa, 02-Sep-2020 10:50:01

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

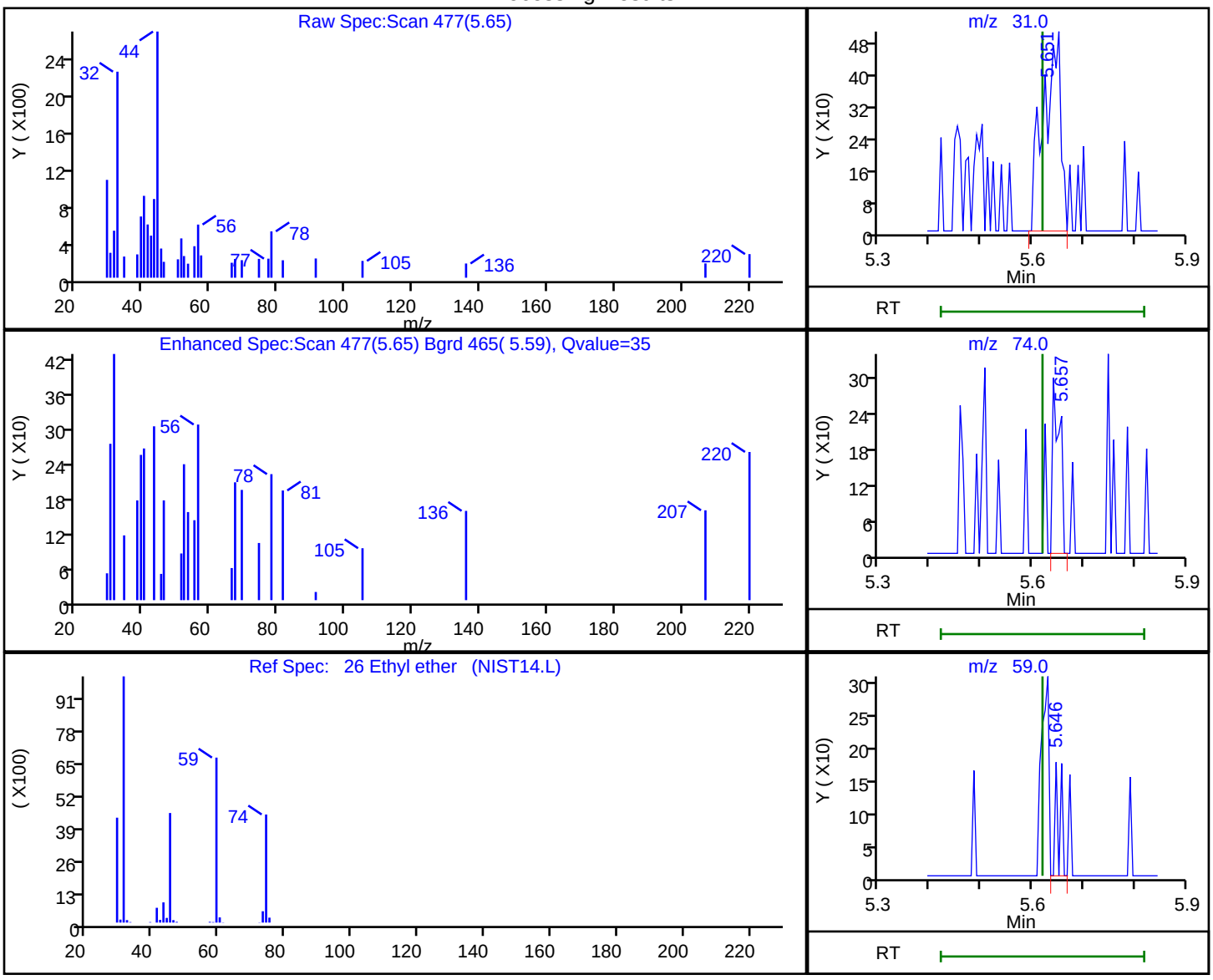
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC01.D
Injection Date: 01-Sep-2020 22:55:30 Instrument ID: MG
Lims ID: IC L1
Client ID:
Operator ID: AFB ALS Bottle#: 3 Worklist Smp#: 9
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Method: MG_TO15 Limit Group: MSA TO14A_15 Routine ICAL
Column: RTX-5 (0.32 mm) Detector MS SCAN

26 Ethyl ether, CAS: 60-29-7

Processing Results



RT	Mass	Response	Amount
5.65	31.00	1187	0.019054
5.66	74.00	298	
5.65	59.00	113	

Reviewer: barlozhetskayaa, 02-Sep-2020 10:49:54
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

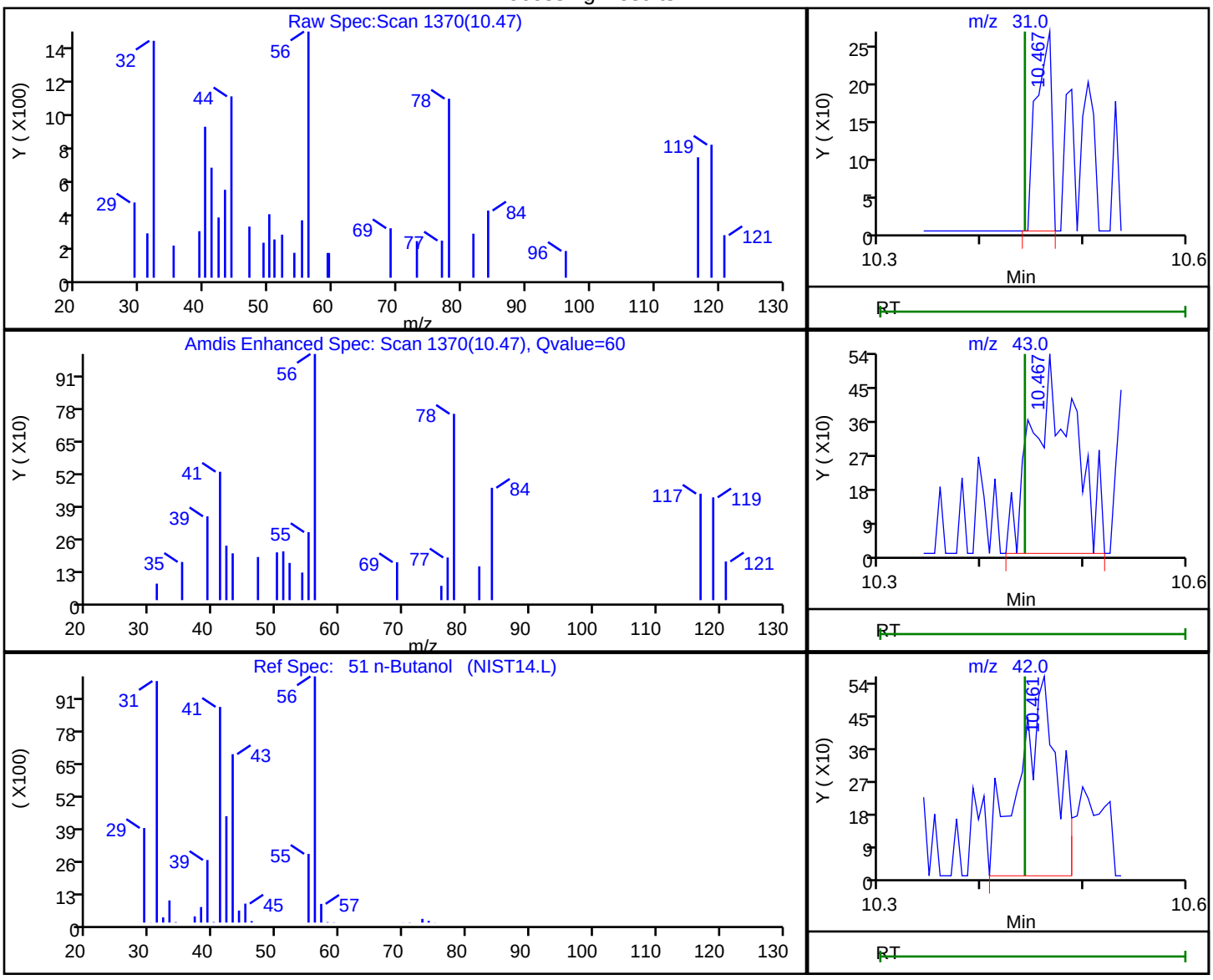
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC01.D				
Injection Date:	01-Sep-2020 22:55:30	Instrument ID:	MG		
Lims ID:	IC L1				
Client ID:					
Operator ID:	AFB	ALS Bottle#:	3	Worklist Smp#:	9
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

51 n-Butanol, CAS: 71-36-3

Processing Results



RT	Mass	Response	Amount
10.47	31.00	276	0.010397
10.47	43.00	1509	
10.46	42.00	1436	

Reviewer: barlozhetskayaa, 02-Sep-2020 10:51:01

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

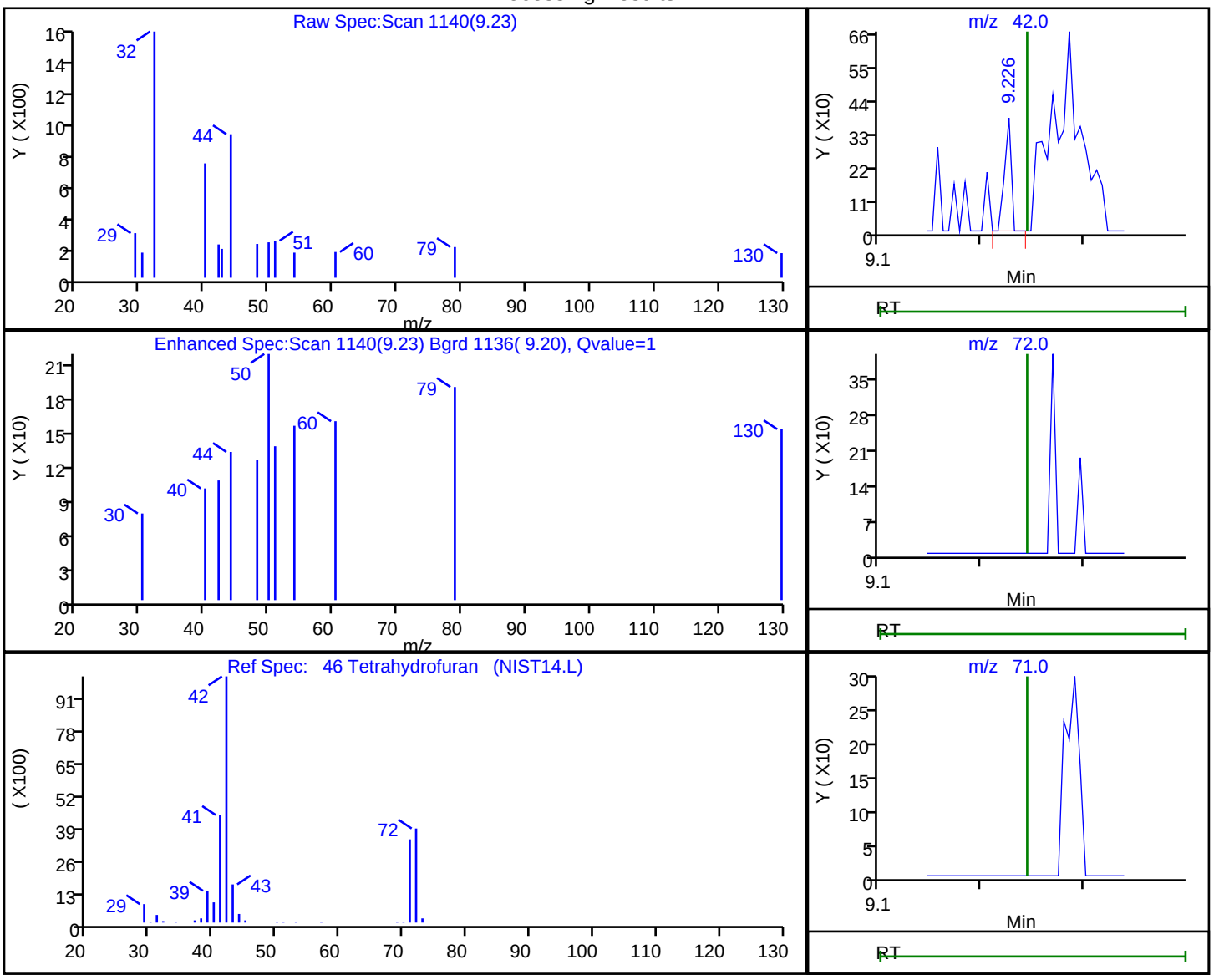
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC01.D				
Injection Date:	01-Sep-2020 22:55:30	Instrument ID:	MG		
Lims ID:	IC L1				
Client ID:					
Operator ID:	AFB	ALS Bottle#:	3	Worklist Smp#:	9
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

46 Tetrahydrofuran, CAS: 109-99-9

Processing Results



RT	Mass	Response	Amount
9.23	42.00	174	0.002391
9.24	72.00	0	
9.24	71.00	0	

Reviewer: barlozhetskayaa, 02-Sep-2020 10:50:56

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC02.D
Lims ID: IC L2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 01-Sep-2020 23:39:30 ALS Bottle#: 3 Worklist Smp#: 10
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016453-010
Misc. Info.: 314720
Operator ID: AFB Instrument ID: MG
Sublist: chrom-MG_TO15*sub17

Method: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 02-Sep-2020 12:23:36 Calib Date: 02-Sep-2020 03:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1035

First Level Reviewer: tajh Date: 02-Sep-2020 08:46:24

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.806	8.812	-0.006	89	136930	4.80	4.80	
* 2 1,4-Difluorobenzene	114	10.990	10.996	-0.006	98	479256	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.730	15.730	0.000	94	525013	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.374	17.374	0.000	89	373260	4.64	4.53	
6 Chlorodifluoromethane	51	3.694	3.703	-0.009	83	6128	0.0400	0.0499	
7 Propene	41	3.716	3.716	0.000	96	3806	0.0400	0.0631	
8 Dichlorodifluoromethane	85	3.759	3.765	-0.006	96	6618	0.0400	0.0482	
9 Chloromethane	52	3.942	3.945	-0.003	72	1377	0.0400	0.0561	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.942	3.951	-0.009	94	3458	0.0400	0.0442	
11 Acetaldehyde	44	4.098	4.096	0.002	99	18891	0.2000	0.6539	
12 Vinyl chloride	62	4.109	4.114	-0.005	31	3427	0.0400	0.0500	
14 Butadiene	54	4.201	4.201	0.000	65	3482	0.0400	0.0576	
13 Butane	43	4.201	4.202	-0.001	82	6880	0.0400	0.0560	
15 Bromomethane	94	4.519	4.521	-0.002	96	2081	0.0400	0.0502	
16 Chloroethane	64	4.648	4.658	-0.010	60	1311	0.0400	0.0461	
17 Ethanol	31	4.762	4.759	0.003	93	8488	0.2000	0.3277	
18 Vinyl bromide	106	4.961	4.960	0.001	68	1455	0.0400	0.0412	
19 2-Methylbutane	43	5.004	5.010	-0.006	84	5791	0.0400	0.0695	
20 Trichlorofluoromethane	101	5.225	5.229	-0.004	96	4748	0.0400	0.0445	
23 Acetone	58	5.371	5.355	0.016	99	8166	0.1200	0.3578	
24 Pentane	72	5.452	5.448	0.004	93	254	0.0400	0.0366	
25 Isopropyl alcohol	45	5.457	5.451	0.006	96	8322	0.1200	0.1221	
26 Ethyl ether	31	5.624	5.619	0.005	72	2911	0.0400	0.0597	
27 1,1-Dichloroethene	96	5.921	5.928	-0.007	72	1385	0.0400	0.0410	
28 Acrylonitrile	53	6.040	6.032	0.008	75	1630	0.0400	0.0523	
30 2-Methyl-2-propanol	59	6.083	6.059	0.024	88	4072	0.0400	0.0592	
29 1,1,2-Trichloro-1,2,2-trifluoroe	101	6.099	6.107	-0.008	83	3416	0.0400	0.0438	
31 Methylene Chloride	84	6.266	6.273	-0.007	85	2287	0.0400	0.0677	
32 3-Chloro-1-propene	39	6.293	6.289	0.004	75	4120	0.0400	0.0622	
33 Carbon disulfide	76	6.433	6.438	-0.005	95	5385	0.0400	0.0475	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
34 trans-1,2-Dichloroethene	96	7.070	7.082	-0.012	85	1709	0.0400	0.0430	
35 2-Methylpentane	43	7.097	7.101	-0.004	97	7961	0.0400	0.0514	
36 Methyl tert-butyl ether	73	7.253	7.230	0.023	79	4414	0.0400	0.0537	
37 1,1-Dichloroethane	63	7.485	7.499	-0.014	54	4322	0.0400	0.0436	
38 Vinyl acetate	43	7.603	7.607	-0.004	98	6339	0.0400	0.0489	
39 2-Butanone (MEK)	72	8.089	8.063	0.026	88	1172	0.0400	0.0712	
40 Hexane	56	8.078	8.082	-0.004	70	2714	0.0400	0.0531	
41 Isopropyl ether	45	8.272	8.246	0.026	92	8253	0.0400	0.0484	
42 cis-1,2-Dichloroethene	96	8.488	8.483	0.005	92	1778	0.0400	0.0421	
43 Ethyl acetate	43	8.682	8.676	0.006	95	6176	0.0400	0.0544	
44 Chloroform	83	8.822	8.825	-0.003	27	4388	0.0400	0.0457	
45 Tert-butyl ethyl ether	59	8.946	8.928	0.018	94	6153	0.0400	0.0430	
46 Tetrahydrofuran	42	9.275	9.244	0.031	60	3187	0.0400	0.0559	
47 1,1,1-Trichloroethane	97	9.847	9.851	-0.004	88	4174	0.0400	0.0452	
48 1,2-Dichloroethane	62	9.949	9.958	-0.009	91	2849	0.0400	0.0526	
51 n-Butanol	31	10.445	10.442	0.003	71	1601	0.0400	0.1045	
50 Benzene	78	10.445	10.451	-0.006	87	5876	0.0400	0.0596	
49 Cyclohexane	69	10.456	10.455	0.001	79	1000	0.0400	0.0603	
52 Carbon tetrachloride	117	10.472	10.476	-0.004	88	3137	0.0400	0.0515	
53 2,3-Dimethylpentane	71	10.580	10.577	0.003	90	1520	0.0400	0.0597	
54 Thiophene	84	10.720	10.725	-0.005	91	3236	0.0400	0.0573	
55 Isooctane	57	11.222	11.219	0.003	92	15246	0.0400	0.0633	
56 n-Heptane	71	11.588	11.594	-0.006	93	2377	0.0400	0.0614	
57 1,2-Dichloropropane	63	11.669	11.669	0.000	89	2570	0.0400	0.0573	
58 Trichloroethene	130	11.696	11.706	-0.010	85	2736	0.0400	0.0637	
59 Dibromomethane	93	11.788	11.791	-0.003	88	2434	0.0400	0.0575	
60 Dichlorobromomethane	83	11.939	11.936	0.003	91	4579	0.0400	0.0622	
61 1,4-Dioxane	88	11.993	11.974	0.019	58	941	0.0400	0.0818	
62 Methyl methacrylate	41	12.041	12.038	0.003	81	4500	0.0400	0.0886	
63 Methylcyclohexane	83	12.478	12.480	-0.002	89	3723	0.0400	0.0573	
64 4-Methyl-2-pentanone (MIBK)	43	12.899	12.898	0.001	68	5712	0.0400	0.0668	
65 cis-1,3-Dichloropropene	75	12.942	12.938	0.004	92	3325	0.0400	0.0563	
66 trans-1,3-Dichloropropene	75	13.627	13.632	-0.005	88	3357	0.0400	0.0623	
67 Toluene	91	13.751	13.759	-0.008	94	6411	0.0400	0.0554	
68 1,1,2-Trichloroethane	83	13.832	13.831	0.001	88	1724	0.0400	0.0475	
69 2-Hexanone	58	14.236	14.231	0.005	88	3160	0.0400	0.0737	
70 n-Octane	85	14.457	14.454	0.003	98	1972	0.0400	0.0467	
71 Chlorodibromomethane	129	14.538	14.536	0.002	93	3335	0.0400	0.0489	
72 Ethylene Dibromide	107	14.829	14.826	0.003	96	3248	0.0400	0.0499	
73 Tetrachloroethene	129	14.905	14.904	0.001	83	2500	0.0400	0.0573	
75 Chlorobenzene	112	15.784	15.779	0.005	93	5000	0.0400	0.0534	
74 2,3-Dimethylheptane	43	15.800	15.801	-0.001	90	9338	0.0400	0.0466	
78 Ethylbenzene	91	16.064	16.068	-0.004	97	7158	0.0400	0.0481	
79 m-Xylene & p-Xylene	91	16.231	16.232	-0.001	97	11865	0.0800	0.1008	
80 n-Nonane	57	16.657	16.654	0.003	94	6097	0.0400	0.0525	
81 Bromoform	173	16.668	16.676	-0.008	78	2158	0.0400	0.0376	
82 Styrene	104	16.690	16.695	-0.005	88	3747	0.0400	0.0438	
83 o-Xylene	91	16.765	16.757	0.008	96	6008	0.0400	0.0504	
84 1,1,2,2-Tetrachloroethane	83	17.078	17.078	0.000	95	5272	0.0400	0.0555	
85 1,2,3-Trichloropropane	110	17.240	17.237	0.003	92	1349	0.0400	0.0580	
86 Isopropylbenzene	105	17.342	17.344	-0.002	86	8674	0.0400	0.0554	
87 N-Propylbenzene	120	17.892	17.887	0.005	99	2286	0.0400	0.0547	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
88 2-Chlorotoluene	126	17.924	17.930	-0.006	95	2016	0.0400	0.0504	
89 4-Ethyltoluene	105	18.032	18.038	-0.006	98	8740	0.0400	0.0559	
90 1,3,5-Trimethylbenzene	120	18.108	18.109	-0.001	90	3362	0.0400	0.0538	
92 Alpha Methyl Styrene	118	18.345	18.340	0.005	75	3084	0.0400	0.0500	
93 n-Decane	57	18.404	18.401	0.003	84	7315	0.0400	0.0520	
94 tert-Butylbenzene	119	18.534	18.533	0.001	87	7547	0.0400	0.0549	
95 1,2,4-Trimethylbenzene	105	18.550	18.547	0.003	94	6713	0.0400	0.0491	
96 sec-Butylbenzene	105	18.803	18.804	-0.001	98	10835	0.0400	0.0526	
97 1,3-Dichlorobenzene	146	18.814	18.815	-0.001	90	4541	0.0400	0.0466	
99 1,4-Dichlorobenzene	146	18.906	18.905	0.001	89	5059	0.0400	0.0513	
98 Benzyl chloride	91	18.890	18.891	-0.001	97	7655	0.0400	0.0595	
100 4-Isopropyltoluene	119	18.965	18.965	0.000	95	8175	0.0400	0.0512	
101 1,2,3-Trimethylbenzene	105	19.019	19.019	0.000	94	6880	0.0400	0.0601	
102 Butylcyclohexane	83	19.073	19.074	-0.001	82	7078	0.0400	0.0530	
103 2,3-Dihydroindene	117	19.262	19.262	0.000	92	6041	0.0400	0.0442	
104 1,2-Dichlorobenzene	146	19.267	19.262	0.005	83	4702	0.0400	0.0504	
106 Indene	116	19.386	19.392	-0.006	76	5153	0.0400	0.0441	
105 n-Butylbenzene	91	19.402	19.398	0.004	95	9273	0.0400	0.0513	
107 Undecane	57	19.709	19.708	0.001	87	9041	0.0400	0.0575	
108 1,2-Dibromo-3-Chloropropane	157	19.849	19.858	-0.009	34	830	0.0400	0.0215	
109 1,2,4,5-Tetramethylbenzene	119	20.151	20.150	0.001	96	8612	0.0400	0.0722	
110 Dodecane	57	20.761	20.765	-0.004	88	10113	0.0400	0.0737	
111 1,2,4-Trichlorobenzene	180	20.960	20.957	0.003	89	4559	0.0400	0.0555	
112 Naphthalene	128	21.101	21.095	0.006	96	10621	0.0400	0.0536	
113 Hexachlorobutadiene	225	21.300	21.304	-0.004	88	3572	0.0400	0.0515	
114 1,2,3-Trichlorobenzene	180	21.370	21.372	-0.002	94	4616	0.0400	0.0584	
115 2-Methylnaphthalene	142	22.141	22.144	-0.003	95	6137	0.0400	0.0720	
116 1-Methylnaphthalene	142	22.319	22.319	0.000	96	6836	0.0400	0.0788	
A 122 C8 Range	1	14.447	(14.409-14.484)		0	34657	0.0400	0.0677	
S 123 1,2-Dichloroethene, Total	1				0		0.0800	0.0851	
S 124 Xylenes, Total	100				0		0.1200	0.1512	

Reagents:

40L1-3DQP_00031	Amount Added: 100.00	Units: mL	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

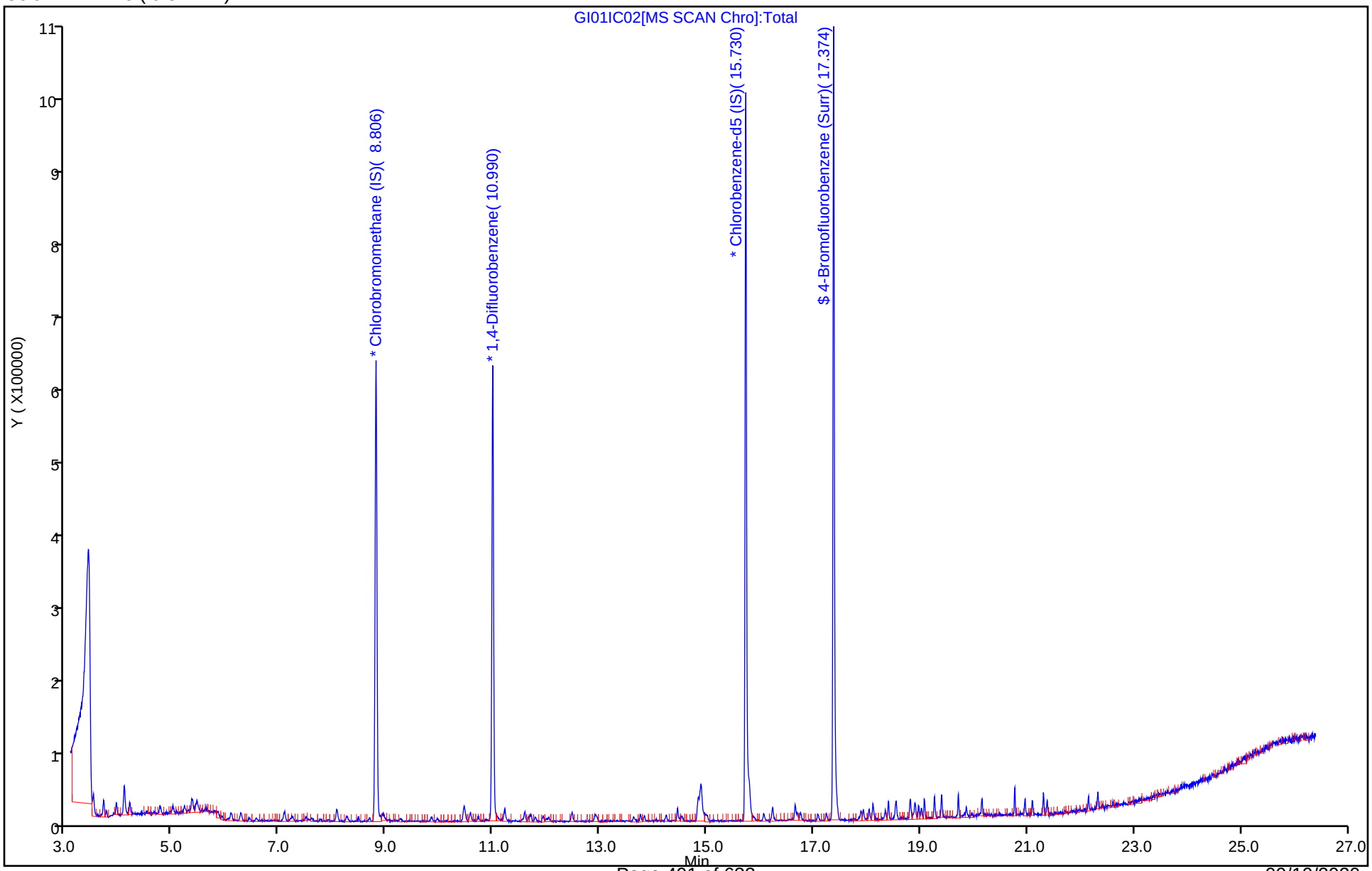
Report Date: 02-Sep-2020 12:23:37 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC02.D

Injection Date:	01-Sep-2020 23:39:30	Instrument ID:	MG	Operator ID:	AFB
Lims ID:	IC L2			Worklist Smp#:	10
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

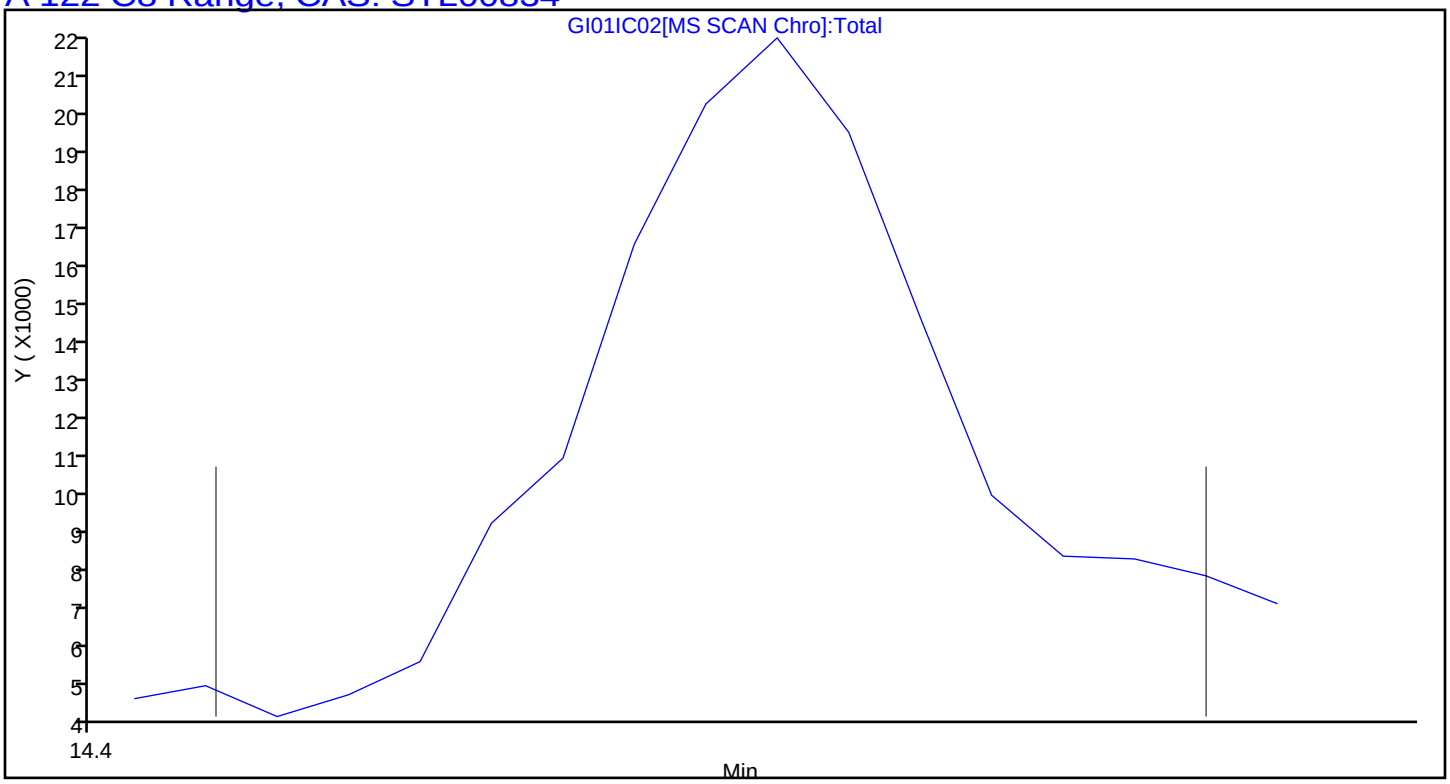


Report Date: 02-Sep-2020 12:23:37 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC02.D				
Injection Date:	01-Sep-2020 23:39:30	Instrument ID:	MG		
Lims ID:	IC L2				
Client ID:					
Operator ID:	AFB	ALS Bottle#:	3	Worklist Smp#:	10
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 122 C8 Range, CAS: STL00834



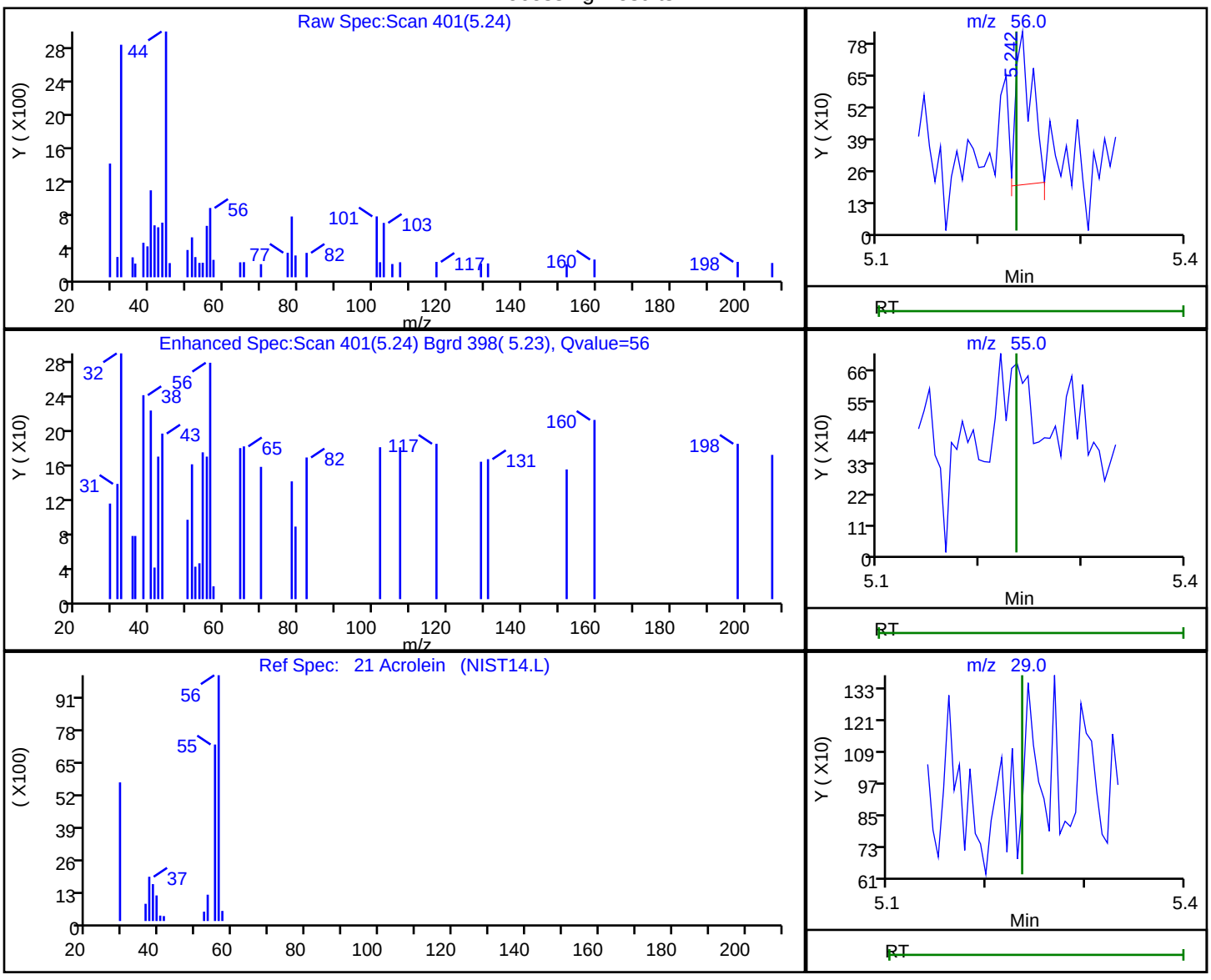
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC02.D				
Injection Date:	01-Sep-2020 23:39:30	Instrument ID:	MG		
Lims ID:	IC L2				
Client ID:					
Operator ID:	AFB	ALS Bottle#:	3	Worklist Smp#:	10
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

21 Acrolein, CAS: 107-02-8

Processing Results



RT	Mass	Response	Amount
5.24	56.00	680	0.053394
5.24	55.00	0	
5.24	29.00	0	

Reviewer: barlozhetskayaa, 02-Sep-2020 10:43:59

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC03.D
Lims ID: IC L3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 02-Sep-2020 00:24:30 ALS Bottle#: 3 Worklist Smp#: 11
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016453-011
Misc. Info.: 314720
Operator ID: AFB Instrument ID: MG
Sublist: chrom-MG_TO15*sub17

Method: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 02-Sep-2020 12:23:42 Calib Date: 02-Sep-2020 03:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1035

First Level Reviewer: barlozhetskayaa Date: 02-Sep-2020 10:38:00

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.811	8.812	-0.001	89	132571	4.80	4.80	
* 2 1,4-Difluorobenzene	114	10.995	10.996	-0.001	98	653131	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.730	15.730	0.000	93	645272	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.374	17.374	0.000	83	449593	4.64	4.44	
6 Chlorodifluoromethane	51	3.705	3.703	0.002	88	11226	0.0800	0.0945	
7 Propene	41	3.721	3.716	0.005	96	5751	0.0800	0.0985	
8 Dichlorodifluoromethane	85	3.764	3.765	-0.001	97	11274	0.0800	0.0849	
9 Chloromethane	52	3.942	3.945	-0.003	75	2873	0.0800	0.1208	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.953	3.951	0.002	92	5785	0.0800	0.0764	
11 Acetaldehyde	44	4.098	4.096	0.002	99	39777	0.4000	1.42	
12 Vinyl chloride	62	4.114	4.114	0.000	96	5768	0.0800	0.0869	
14 Butadiene	54	4.201	4.201	0.000	74	5655	0.0800	0.0966	
13 Butane	43	4.206	4.202	0.004	83	10293	0.0800	0.0866	
15 Bromomethane	94	4.524	4.521	0.003	94	3458	0.0800	0.0862	
16 Chloroethane	64	4.659	4.658	0.001	89	2678	0.0800	0.0973	
17 Ethanol	31	4.772	4.759	0.013	95	16047	0.4000	0.6399	
18 Vinyl bromide	106	4.961	4.960	0.001	97	2733	0.0800	0.0799	
19 2-Methylbutane	43	5.010	5.010	0.000	88	8464	0.0800	0.1048	
20 Trichlorofluoromethane	101	5.236	5.229	0.007	96	9154	0.0800	0.0887	
21 Acrolein	56	5.241	5.235	0.006	29	1960	0.0800	0.1590	
22 Acetonitrile	40	5.312	5.301	0.011	71	2884	0.0800	0.1307	
23 Acetone	58	5.355	5.355	0.000	100	16115	0.2400	0.7294	
24 Pentane	72	5.452	5.448	0.004	94	506	0.0800	0.0754	
25 Isopropyl alcohol	45	5.473	5.451	0.022	95	23180	0.2400	0.3514	
26 Ethyl ether	31	5.635	5.619	0.016	85	5547	0.0800	0.1175	
27 1,1-Dichloroethene	96	5.926	5.928	-0.002	88	2921	0.0800	0.0894	
28 Acrylonitrile	53	6.034	6.032	0.002	78	3178	0.0800	0.1054	
30 2-Methyl-2-propanol	59	6.083	6.059	0.024	96	7941	0.0800	0.1192	
29 1,1,2-Trichloro-1,2,2-trifluoroe	101	6.115	6.107	0.008	87	6627	0.0800	0.0877	
31 Methylene Chloride	84	6.266	6.273	-0.007	87	3527	0.0800	0.1079	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.288	6.289	-0.001	94	7559	0.0800	0.1180	
33 Carbon disulfide	76	6.439	6.438	0.001	94	10302	0.0800	0.0938	
34 trans-1,2-Dichloroethene	96	7.086	7.082	0.004	91	3544	0.0800	0.0921	
35 2-Methylpentane	43	7.107	7.101	0.006	96	14371	0.0800	0.0958	
36 Methyl tert-butyl ether	73	7.247	7.230	0.017	88	8506	0.0800	0.1068	
37 1,1-Dichloroethane	63	7.501	7.499	0.002	98	8657	0.0800	0.0903	
38 Vinyl acetate	43	7.609	7.607	0.002	99	12385	0.0800	0.0986	
40 Hexane	56	8.078	8.082	-0.004	66	4458	0.0800	0.0901	
39 2-Butanone (MEK)	72	8.078	8.063	0.015	86	2587	0.0800	0.1622	
41 Isopropyl ether	45	8.256	8.246	0.010	96	15835	0.0800	0.0959	
42 cis-1,2-Dichloroethene	96	8.482	8.483	-0.001	94	3509	0.0800	0.0858	
43 Ethyl acetate	43	8.682	8.676	0.006	95	12098	0.0800	0.1100	
44 Chloroform	83	8.827	8.825	0.002	92	8911	0.0800	0.0958	
45 Tert-butyl ethyl ether	59	8.935	8.928	0.007	96	13167	0.0800	0.0950	
46 Tetrahydrofuran	42	9.264	9.244	0.020	90	6568	0.0800	0.1191	
47 1,1,1-Trichloroethane	97	9.852	9.851	0.001	93	8119	0.0800	0.0907	
48 1,2-Dichloroethane	62	9.960	9.958	0.002	93	6831	0.0800	0.0926	
50 Benzene	78	10.450	10.451	-0.001	89	12247	0.0800	0.0912	
51 n-Butanol	31	10.477	10.442	0.035	65	2601	0.0800	0.1245	
49 Cyclohexane	69	10.450	10.455	-0.005	84	2208	0.0800	0.0977	
52 Carbon tetrachloride	117	10.477	10.476	0.001	92	6936	0.0800	0.0836	
53 2,3-Dimethylpentane	71	10.580	10.577	0.003	88	3360	0.0800	0.0969	
54 Thiophene	84	10.731	10.725	0.006	91	7055	0.0800	0.0917	
55 Isooctane	57	11.216	11.219	-0.003	98	28267	0.0800	0.0861	
56 n-Heptane	71	11.588	11.594	-0.006	93	4863	0.0800	0.0921	
57 1,2-Dichloropropane	63	11.658	11.669	-0.011	86	5706	0.0800	0.0933	
58 Trichloroethene	130	11.702	11.706	-0.004	86	4841	0.0800	0.0827	
59 Dibromomethane	93	11.793	11.791	0.002	86	5223	0.0800	0.0906	
60 Dichlorobromomethane	83	11.933	11.936	-0.003	92	8475	0.0800	0.0845	
61 1,4-Dioxane	88	11.987	11.974	0.013	79	1505	0.0800	0.0961	
62 Methyl methacrylate	41	12.047	12.038	0.009	84	7935	0.0800	0.1146	
63 Methylcyclohexane	83	12.483	12.480	0.003	87	7731	0.0800	0.0873	
64 4-Methyl-2-pentanone (MIBK)	43	12.909	12.898	0.011	97	12922	0.0800	0.1108	
65 cis-1,3-Dichloropropene	75	12.942	12.938	0.004	97	6786	0.0800	0.0843	
66 trans-1,3-Dichloropropene	75	13.632	13.632	0.000	94	6177	0.0800	0.0933	
67 Toluene	91	13.761	13.759	0.002	90	13451	0.0800	0.0945	
68 1,1,2-Trichloroethane	83	13.831	13.831	0.000	91	3811	0.0800	0.0854	
69 2-Hexanone	58	14.231	14.231	0.000	89	5186	0.0800	0.0984	
70 n-Octane	85	14.452	14.454	-0.002	97	4536	0.0800	0.0875	
71 Chlorodibromomethane	129	14.538	14.536	0.002	94	6529	0.0800	0.0779	
72 Ethylene Dibromide	107	14.824	14.826	-0.002	66	7424	0.0800	0.0927	
73 Tetrachloroethene	129	14.899	14.904	-0.005	86	4551	0.0800	0.0848	
75 Chlorobenzene	112	15.778	15.779	-0.001	92	10169	0.0800	0.0883	
74 2,3-Dimethylheptane	43	15.800	15.801	-0.001	91	22325	0.0800	0.0906	
78 Ethylbenzene	91	16.064	16.068	-0.004	98	17005	0.0800	0.0930	
79 m-Xylene & p-Xylene	91	16.236	16.232	0.004	96	25157	0.1600	0.1738	
80 n-Nonane	57	16.652	16.654	-0.002	92	12817	0.0800	0.0898	
81 Bromoform	173	16.673	16.676	-0.003	87	5133	0.0800	0.0728	
82 Styrene	104	16.695	16.695	0.000	96	8273	0.0800	0.0787	
83 o-Xylene	91	16.760	16.757	0.003	97	13684	0.0800	0.0934	
84 1,1,2,2-Tetrachloroethane	83	17.072	17.078	-0.006	96	10339	0.0800	0.0885	
85 1,2,3-Trichloropropane	110	17.234	17.237	-0.003	91	2300	0.0800	0.0805	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
86 Isopropylbenzene	105	17.342	17.344	-0.002	95	17579	0.0800	0.0914	
87 N-Propylbenzene	120	17.887	17.887	0.000	98	4829	0.0800	0.0940	
88 2-Chlorotoluene	126	17.935	17.930	0.005	96	3929	0.0800	0.0799	
89 4-Ethyltoluene	105	18.038	18.038	0.000	98	17613	0.0800	0.0917	
90 1,3,5-Trimethylbenzene	120	18.108	18.109	-0.001	92	6974	0.0800	0.0908	
92 Alpha Methyl Styrene	118	18.334	18.340	-0.006	83	6104	0.0800	0.0804	
93 n-Decane	57	18.399	18.401	-0.002	86	15543	0.0800	0.0898	
94 tert-Butylbenzene	119	18.528	18.533	-0.005	88	14401	0.0800	0.0853	
95 1,2,4-Trimethylbenzene	105	18.544	18.547	-0.003	93	14761	0.0800	0.0879	
96 sec-Butylbenzene	105	18.803	18.804	-0.001	98	22118	0.0800	0.0873	
97 1,3-Dichlorobenzene	146	18.814	18.815	-0.001	93	9755	0.0800	0.0815	
98 Benzyl chloride	91	18.890	18.891	-0.001	96	13685	0.0800	0.0865	
99 1,4-Dichlorobenzene	146	18.906	18.905	0.001	84	9941	0.0800	0.0820	
100 4-Isopropyltoluene	119	18.965	18.965	0.000	96	16482	0.0800	0.0840	
101 1,2,3-Trimethylbenzene	105	19.019	19.019	0.000	98	14733	0.0800	0.1047	
102 Butylcyclohexane	83	19.073	19.074	-0.001	86	14842	0.0800	0.0904	
103 2,3-Dihydroindene	117	19.262	19.262	0.000	91	14037	0.0800	0.0837	
104 1,2-Dichlorobenzene	146	19.262	19.262	0.000	79	9714	0.0800	0.0847	
106 Indene	116	19.391	19.392	-0.001	74	11769	0.0800	0.0819	
105 n-Butylbenzene	91	19.396	19.398	-0.002	96	20333	0.0800	0.0915	
107 Undecane	57	19.709	19.708	0.001	91	18018	0.0800	0.0933	
108 1,2-Dibromo-3-Chloropropane	157	19.860	19.858	0.002	78	3942	0.0800	0.0830	
109 1,2,4,5-Tetramethylbenzene	119	20.146	20.150	-0.004	95	16880	0.0800	0.1149	
110 Dodecane	57	20.766	20.765	0.001	90	22403	0.0800	0.1329	
111 1,2,4-Trichlorobenzene	180	20.955	20.957	-0.002	89	8798	0.0800	0.0871	
112 Naphthalene	128	21.095	21.095	0.000	98	23525	0.0800	0.0966	
113 Hexachlorobutadiene	225	21.305	21.304	0.001	88	7774	0.0800	0.0911	
114 1,2,3-Trichlorobenzene	180	21.370	21.372	-0.002	92	8763	0.0800	0.0902	
115 2-Methylnaphthalene	142	22.141	22.144	-0.003	98	12763	0.0800	0.1218	
116 1-Methylnaphthalene	142	22.319	22.319	0.000	99	14747	0.0800	0.1383	
A 122 C8 Range	1	14.452	(14.409-14.495)		0	66296	0.0800	0.1053	
S 123 1,2-Dichloroethene, Total	1				0		0.1600	0.1779	
S 124 Xylenes, Total	100				0		0.2400	0.2673	

Reagents:

40L1-3DQP_00031	Amount Added: 200.00	Units: mL	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

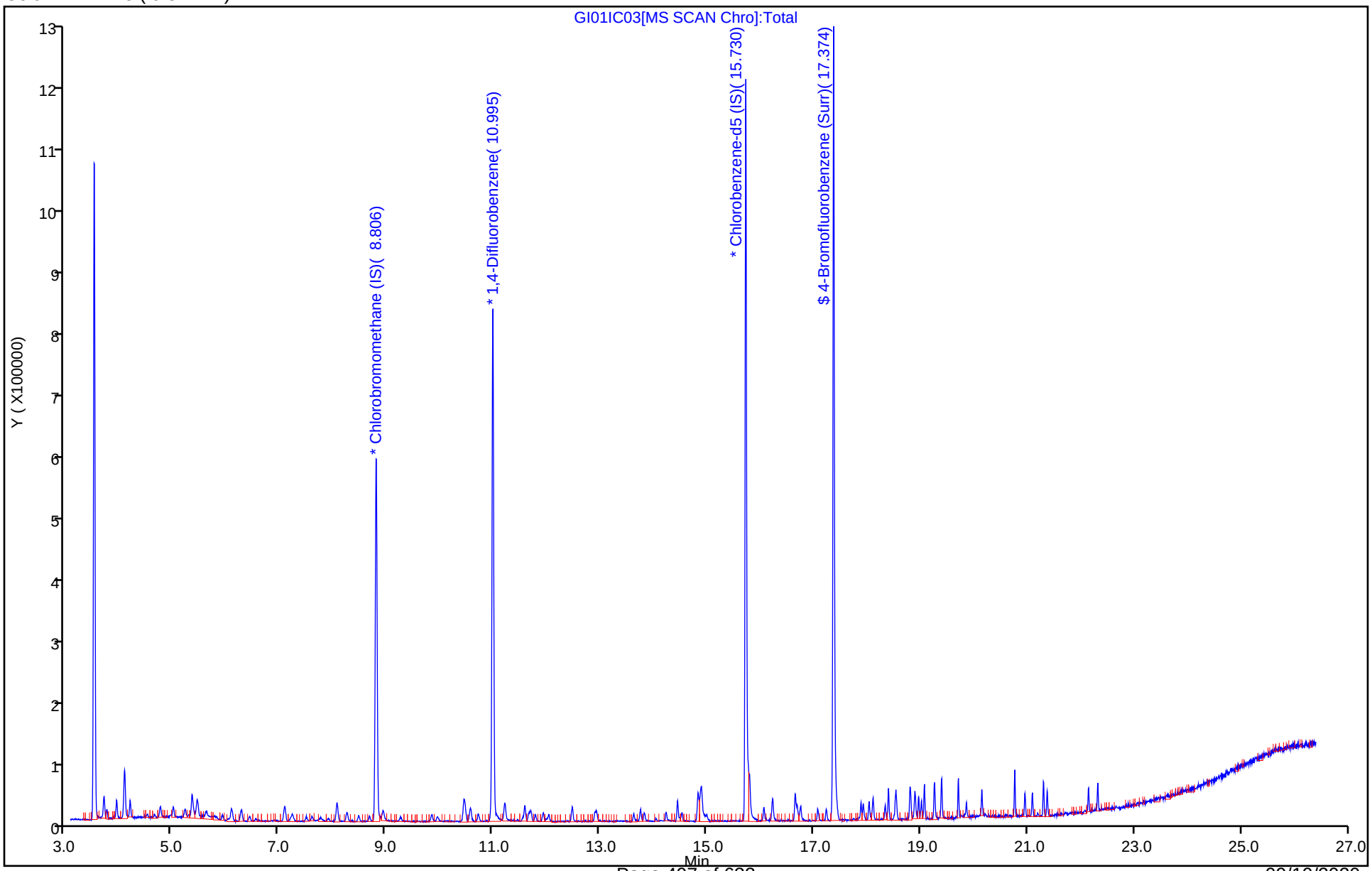
Report Date: 02-Sep-2020 12:23:43 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC03.D

Injection Date:	02-Sep-2020 00:24:30	Instrument ID:	MG	Operator ID:	AFB
Lims ID:	IC L3			Worklist Smp#:	11
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

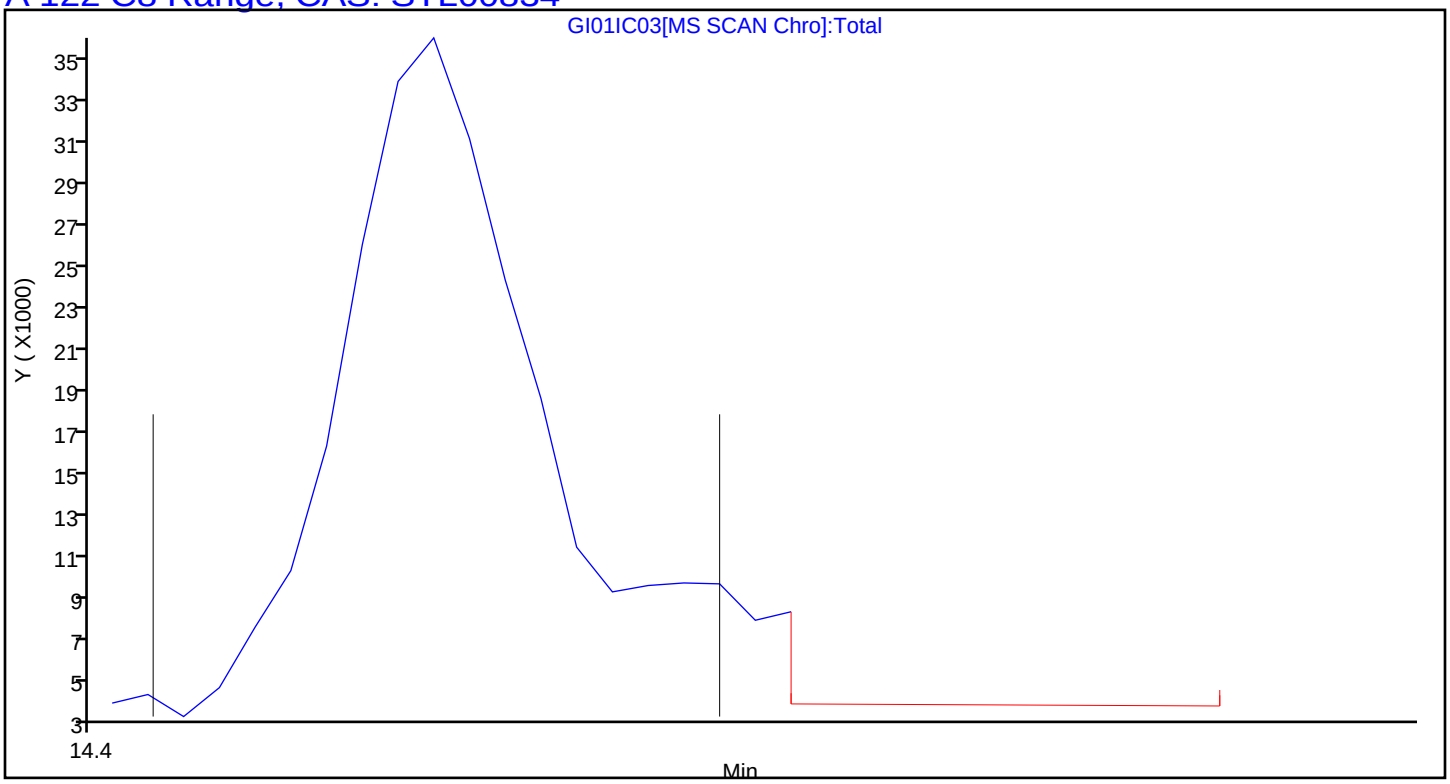


Report Date: 02-Sep-2020 12:23:43 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC03.D				
Injection Date:	02-Sep-2020 00:24:30	Instrument ID:	MG		
Lims ID:	IC L3				
Client ID:					
Operator ID:	AFB	ALS Bottle#:	3	Worklist Smp#:	11
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 122 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC04.D
Lims ID: IC L4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 02-Sep-2020 01:08:30 ALS Bottle#: 4 Worklist Smp#: 12
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016453-012
Misc. Info.: 314717
Operator ID: AFB Instrument ID: MG
Sublist: chrom-MG_TO15*sub17

Method: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 02-Sep-2020 12:23:49 Calib Date: 02-Sep-2020 03:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1035

First Level Reviewer: barlozhetskayaa Date: 02-Sep-2020 10:39:39

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.811	8.812	-0.001	89	143110	4.80	4.80	
* 2 1,4-Difluorobenzene	114	10.995	10.996	-0.001	98	640266	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.730	15.730	0.000	93	660078	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.374	17.374	0.000	82	471736	4.64	4.55	
6 Chlorodifluoromethane	51	3.699	3.703	-0.004	98	19940	0.1600	0.1555	
7 Propene	41	3.716	3.716	0.000	97	11507	0.1600	0.1825	
8 Dichlorodifluoromethane	85	3.764	3.765	-0.001	97	23973	0.1600	0.1672	
9 Chloromethane	52	3.947	3.945	0.002	70	5007	0.1600	0.1951	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.953	3.951	0.002	94	12161	0.1600	0.1487	
11 Acetaldehyde	44	4.104	4.096	0.008	98	28254	0.8000	0.9358	
12 Vinyl chloride	62	4.115	4.114	0.001	55	10514	0.1600	0.1467	
14 Butadiene	54	4.201	4.201	0.000	66	10364	0.1600	0.1641	
13 Butane	43	4.201	4.202	-0.001	85	22000	0.1600	0.1714	
15 Bromomethane	94	4.524	4.521	0.003	97	7011	0.1600	0.1619	
16 Chloroethane	64	4.659	4.658	0.001	81	4702	0.1600	0.1582	
17 Ethanol	31	4.778	4.759	0.019	95	20757	0.8000	0.7668	
18 Vinyl bromide	106	4.967	4.960	0.007	95	5761	0.1600	0.1560	
19 2-Methylbutane	43	5.015	5.010	0.005	93	14193	0.1600	0.1629	
20 Trichlorofluoromethane	101	5.231	5.229	0.002	97	17071	0.1600	0.1532	
21 Acrolein	56	5.236	5.235	0.001	27	2402	0.1600	0.1805	
22 Acetonitrile	40	5.312	5.301	0.011	92	3339	0.1600	0.1402	
23 Acetone	58	5.371	5.355	0.016	98	11375	0.4800	0.4769	
24 Pentane	72	5.452	5.448	0.004	95	1138	0.1600	0.1571	
25 Isopropyl alcohol	45	5.479	5.451	0.028	97	31959	0.4800	0.4488	
26 Ethyl ether	31	5.635	5.619	0.016	88	7425	0.1600	0.1457	
27 1,1-Dichloroethene	96	5.921	5.928	-0.007	89	5194	0.1600	0.1472	
28 Acrylonitrile	53	6.045	6.032	0.013	97	4797	0.1600	0.1474	
30 2-Methyl-2-propanol	59	6.099	6.059	0.040	86	11067	0.1600	0.1539	
29 1,1,2-Trichloro-1,2,2-trifluoroe	101	6.110	6.107	0.003	86	13027	0.1600	0.1597	
31 Methylene Chloride	84	6.277	6.273	0.004	89	6840	0.1600	0.1938	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.293	6.289	0.004	85	11314	0.1600	0.1635	
33 Carbon disulfide	76	6.439	6.438	0.001	96	18918	0.1600	0.1595	
34 trans-1,2-Dichloroethene	96	7.091	7.082	0.009	92	6087	0.1600	0.1466	
35 2-Methylpentane	43	7.102	7.101	0.001	95	25239	0.1600	0.1558	
36 Methyl tert-butyl ether	73	7.253	7.230	0.023	92	11381	0.1600	0.1324	
37 1,1-Dichloroethane	63	7.501	7.499	0.002	98	16484	0.1600	0.1592	
38 Vinyl acetate	43	7.609	7.607	0.002	100	18272	0.1600	0.1348	
39 2-Butanone (MEK)	72	8.067	8.063	0.004	84	2372	0.1600	0.1378	
40 Hexane	56	8.089	8.082	0.007	88	9026	0.1600	0.1689	
41 Isopropyl ether	45	8.261	8.249	0.012	95	22166	0.1600	0.1244	
42 cis-1,2-Dichloroethene	96	8.493	8.483	0.010	95	6849	0.1600	0.1551	
43 Ethyl acetate	43	8.698	8.676	0.022	97	14255	0.1600	0.1201	
44 Chloroform	83	8.833	8.825	0.008	28	15506	0.1600	0.1545	
45 Tert-butyl ethyl ether	59	8.941	8.928	0.013	96	18642	0.1600	0.1246	
46 Tetrahydrofuran	42	9.270	9.244	0.026	91	8281	0.1600	0.1391	
47 1,1,1-Trichloroethane	97	9.857	9.851	0.006	93	14954	0.1600	0.1548	
48 1,2-Dichloroethane	62	9.960	9.958	0.002	95	11727	0.1600	0.1622	
49 Cyclohexane	69	10.456	10.455	0.001	83	3934	0.1600	0.1775	
50 Benzene	78	10.456	10.451	0.005	92	21718	0.1600	0.1650	
52 Carbon tetrachloride	117	10.478	10.476	0.002	91	13863	0.1600	0.1704	
51 n-Butanol	31	10.478	10.442	0.036	66	3605	0.1600	0.1761	
53 2,3-Dimethylpentane	71	10.569	10.577	-0.008	91	5364	0.1600	0.1578	
54 Thiophene	84	10.720	10.725	-0.005	87	11360	0.1600	0.1506	
55 Isooctane	57	11.222	11.219	0.003	97	55108	0.1600	0.1711	
56 n-Heptane	71	11.599	11.594	0.005	94	8829	0.1600	0.1706	
57 1,2-Dichloropropane	63	11.669	11.669	0.000	88	9433	0.1600	0.1574	
58 Trichloroethene	130	11.707	11.706	0.001	88	8487	0.1600	0.1479	
59 Dibromomethane	93	11.793	11.791	0.002	89	9449	0.1600	0.1671	
60 Dichlorobromomethane	83	11.939	11.936	0.003	95	16110	0.1600	0.1639	
61 1,4-Dioxane	88	12.009	11.974	0.035	80	2097	0.1600	0.1365	
62 Methyl methacrylate	41	12.047	12.038	0.009	83	8893	0.1600	0.1310	
63 Methylcyclohexane	83	12.478	12.480	-0.002	85	14886	0.1600	0.1716	
64 4-Methyl-2-pentanone (MIBK)	43	12.904	12.898	0.006	96	15812	0.1600	0.1384	
65 cis-1,3-Dichloropropene	75	12.936	12.938	-0.002	97	13190	0.1600	0.1671	
66 trans-1,3-Dichloropropene	75	13.632	13.632	0.000	89	10340	0.1600	0.1527	
67 Toluene	91	13.762	13.759	0.003	90	21528	0.1600	0.1479	
68 1,1,2-Trichloroethane	83	13.832	13.831	0.001	96	6897	0.1600	0.1512	
69 2-Hexanone	58	14.241	14.231	0.010	91	7073	0.1600	0.1311	
70 n-Octane	85	14.457	14.454	0.003	97	8073	0.1600	0.1522	
71 Chlorodibromomethane	129	14.538	14.536	0.002	91	12942	0.1600	0.1509	
72 Ethylene Dibromide	107	14.824	14.826	-0.002	96	11912	0.1600	0.1455	
73 Tetrachloroethene	129	14.905	14.904	0.001	90	8385	0.1600	0.1528	
75 Chlorobenzene	112	15.778	15.779	-0.001	93	18072	0.1600	0.1535	
74 2,3-Dimethylheptane	43	15.800	15.801	-0.001	92	41603	0.1600	0.1651	
78 Ethylbenzene	91	16.069	16.068	0.001	98	26172	0.1600	0.1399	
79 m-Xylene & p-Xylene	91	16.231	16.232	-0.001	98	39802	0.3200	0.2689	
80 n-Nonane	57	16.657	16.654	0.003	94	21633	0.1600	0.1482	
81 Bromoform	173	16.673	16.676	-0.003	88	10274	0.1600	0.1424	
82 Styrene	104	16.690	16.695	-0.005	95	13483	0.1600	0.1253	
83 o-Xylene	91	16.754	16.757	-0.003	96	21193	0.1600	0.1415	
84 1,1,2,2-Tetrachloroethane	83	17.078	17.078	0.000	97	17273	0.1600	0.1445	
85 1,2,3-Trichloropropane	110	17.240	17.237	0.003	92	3979	0.1600	0.1362	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
86 Isopropylbenzene	105	17.342	17.344	-0.002	90	25851	0.1600	0.1314	
87 N-Propylbenzene	120	17.881	17.887	-0.006	98	6564	0.1600	0.1249	
88 2-Chlorotoluene	126	17.930	17.930	0.000	98	6674	0.1600	0.1326	
89 4-Ethyltoluene	105	18.038	18.038	0.000	98	24383	0.1600	0.1241	
90 1,3,5-Trimethylbenzene	120	18.108	18.109	-0.001	90	9268	0.1600	0.1180	
92 Alpha Methyl Styrene	118	18.340	18.340	0.000	87	8841	0.1600	0.1139	
93 n-Decane	57	18.399	18.401	-0.002	89	25661	0.1600	0.1450	
94 tert-Butylbenzene	119	18.534	18.533	0.001	90	20349	0.1600	0.1178	
95 1,2,4-Trimethylbenzene	105	18.545	18.547	-0.002	96	19813	0.1600	0.1153	
96 sec-Butylbenzene	105	18.803	18.804	-0.001	97	30874	0.1600	0.1191	
97 1,3-Dichlorobenzene	146	18.820	18.815	0.005	95	15896	0.1600	0.1299	
98 Benzyl chloride	91	18.890	18.891	-0.001	93	18578	0.1600	0.1148	
99 1,4-Dichlorobenzene	146	18.906	18.905	0.001	91	16086	0.1600	0.1298	
100 4-Isopropyltoluene	119	18.965	18.965	0.000	96	23308	0.1600	0.1162	
101 1,2,3-Trimethylbenzene	105	19.019	19.019	0.000	97	20125	0.1600	0.1397	
102 Butylcyclohexane	83	19.073	19.074	-0.001	86	24085	0.1600	0.1434	
103 2,3-Dihydroindene	117	19.262	19.262	0.000	90	19180	0.1600	0.1117	
104 1,2-Dichlorobenzene	146	19.256	19.262	-0.006	83	15119	0.1600	0.1289	
106 Indene	116	19.391	19.392	-0.001	89	16584	0.1600	0.1128	
105 n-Butylbenzene	91	19.397	19.398	-0.001	98	26410	0.1600	0.1161	
107 Undecane	57	19.704	19.708	-0.004	91	26240	0.1600	0.1328	
108 1,2-Dibromo-3-Chloropropane	157	19.860	19.858	0.002	82	6556	0.1600	0.1347	
109 1,2,4,5-Tetramethylbenzene	119	20.146	20.150	-0.004	96	19690	0.1600	0.1310	
110 Dodecane	57	20.766	20.765	0.001	89	23057	0.1600	0.1337	
111 1,2,4-Trichlorobenzene	180	20.960	20.957	0.003	92	11196	0.1600	0.1084	
112 Naphthalene	128	21.095	21.095	0.000	98	25941	0.1600	0.1041	
113 Hexachlorobutadiene	225	21.300	21.304	-0.004	88	10052	0.1600	0.1152	
114 1,2,3-Trichlorobenzene	180	21.376	21.372	0.004	92	10179	0.1600	0.1024	
115 2-Methylnaphthalene	142	22.141	22.144	-0.003	98	11539	0.1600	0.1077	
116 1-Methylnaphthalene	142	22.314	22.319	-0.005	98	14358	0.1600	0.1316	
A 122 C8 Range	1	14.452	(14.409-14.495)		0	108617	0.1600	0.1687	
S 123 1,2-Dichloroethene, Total	1				0		0.3200	0.3017	
S 124 Xylenes, Total	100				0		0.4800	0.4104	

Reagents:

40L5DQP_00020	Amount Added: 80.00	Units: mL	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

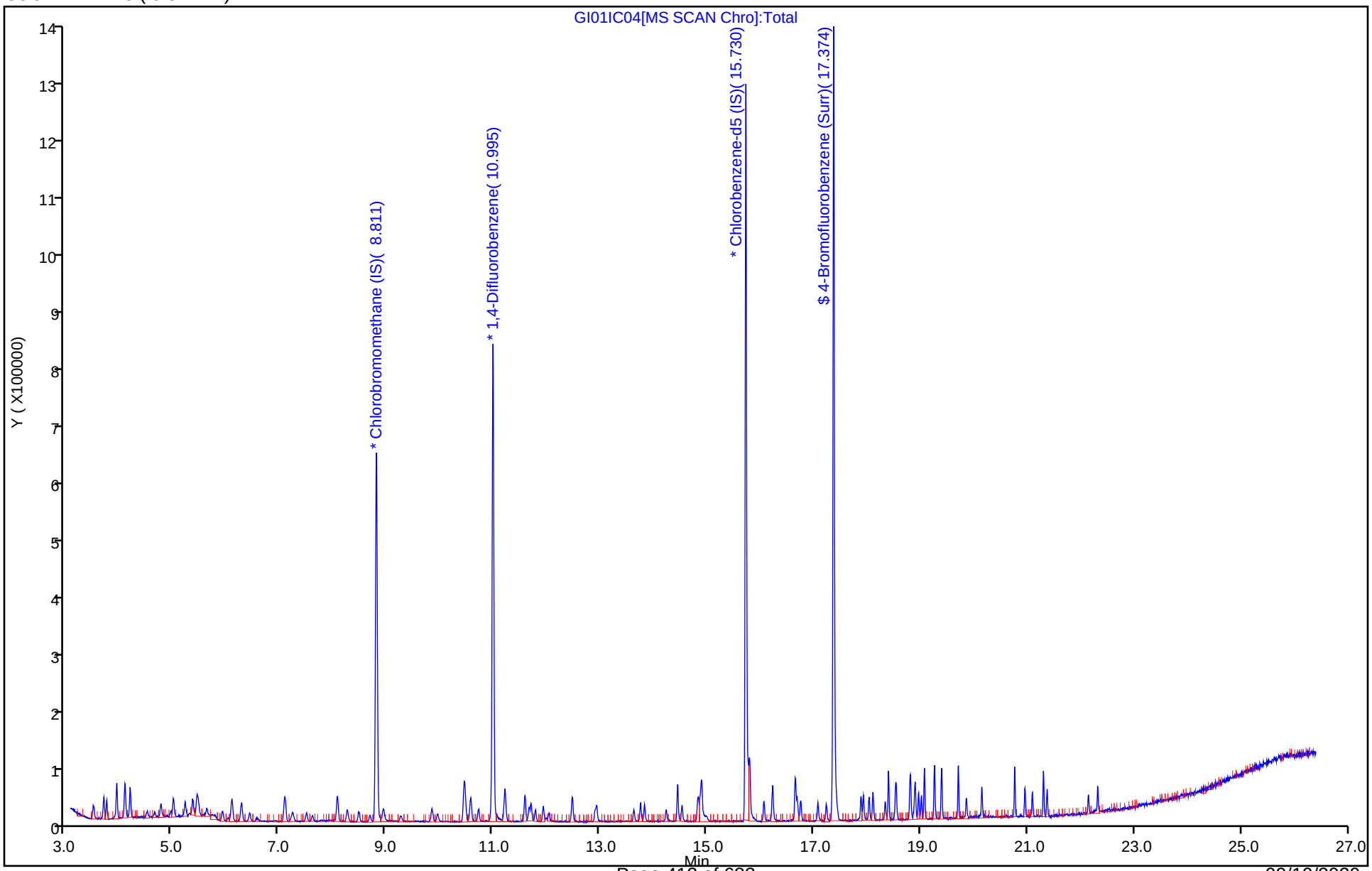
Report Date: 02-Sep-2020 12:23:50 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC04.D

Injection Date:	02-Sep-2020 01:08:30	Instrument ID:	MG	Operator ID:	AFB
Lims ID:	IC L4			Worklist Smp#:	12
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

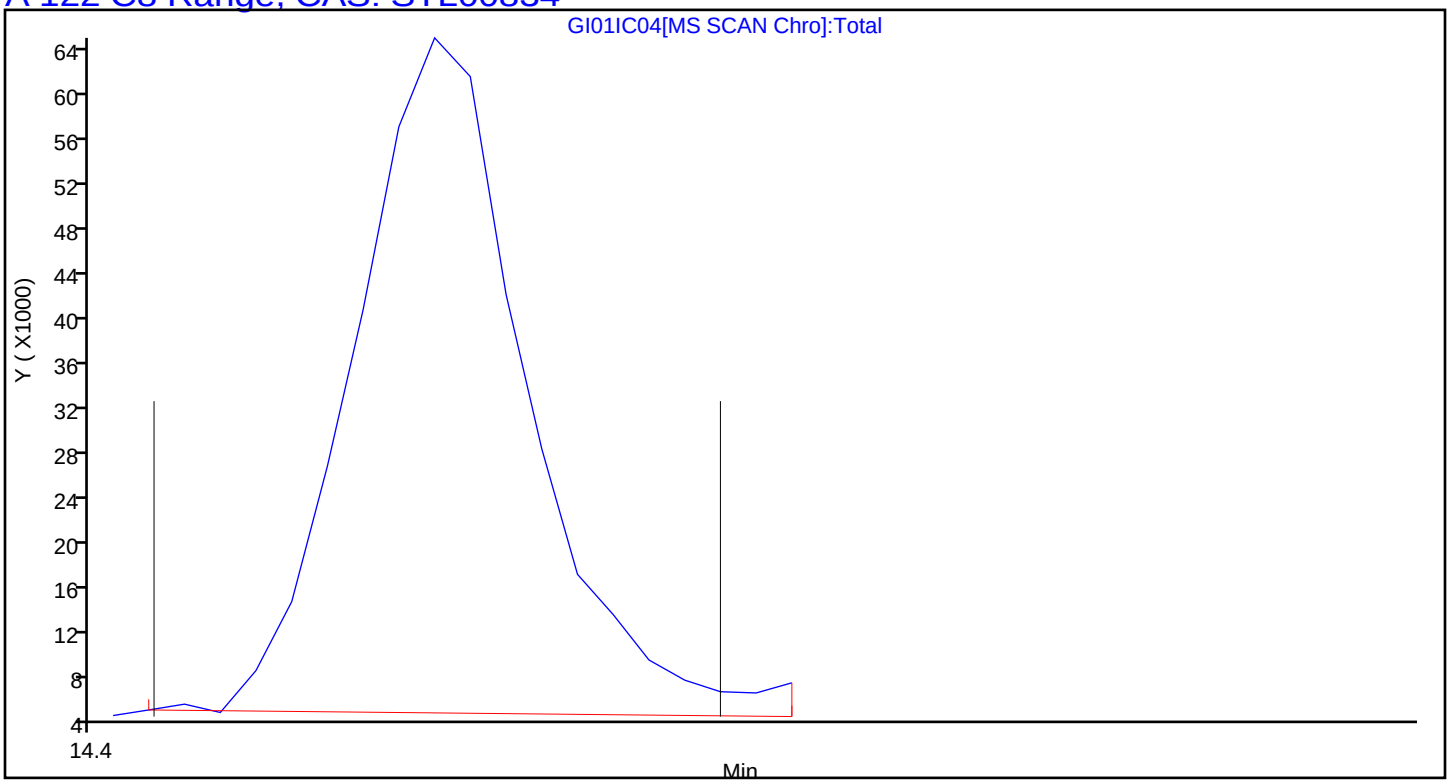


Report Date: 02-Sep-2020 12:23:50 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC04.D				
Injection Date:	02-Sep-2020 01:08:30	Instrument ID:	MG		
Lims ID:	IC L4				
Client ID:					
Operator ID:	AFB	ALS Bottle#:	4	Worklist Smp#:	12
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 122 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC05.D
Lims ID: IC L5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 02-Sep-2020 01:52:30 ALS Bottle#: 4 Worklist Smp#: 13
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016453-013
Misc. Info.: 314717
Operator ID: AFB Instrument ID: MG
Sublist: chrom-MG_TO15*sub17

Method: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 02-Sep-2020 12:23:56 Calib Date: 02-Sep-2020 03:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1035

First Level Reviewer: barlozhetskayaa Date: 02-Sep-2020 10:40:34

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.811	8.812	-0.001	89	136148	4.80	4.80	
* 2 1,4-Difluorobenzene	114	10.995	10.996	-0.001	98	662086	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.730	15.730	0.000	93	656245	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.374	17.374	0.000	83	468432	4.64	4.55	
6 Chlorodifluoromethane	51	3.705	3.703	0.002	98	48665	0.4000	0.3989	
7 Propene	41	3.716	3.716	0.000	97	24863	0.4000	0.4145	
8 Dichlorodifluoromethane	85	3.770	3.765	0.005	98	52568	0.4000	0.3854	
9 Chloromethane	52	3.953	3.945	0.008	67	10266	0.4000	0.4204	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.947	3.951	-0.004	94	29483	0.4000	0.3790	
11 Acetaldehyde	44	4.098	4.096	0.002	99	73859	2.00	2.57	
12 Vinyl chloride	62	4.120	4.114	0.006	99	27040	0.4000	0.3966	
14 Butadiene	54	4.206	4.201	0.005	66	25008	0.4000	0.4161	
13 Butane	43	4.206	4.202	0.004	85	51072	0.4000	0.4183	
15 Bromomethane	94	4.524	4.521	0.003	98	16122	0.4000	0.3914	
16 Chloroethane	64	4.665	4.658	0.007	88	10826	0.4000	0.3828	
17 Ethanol	31	4.756	4.759	-0.003	96	58436	2.00	2.27	
18 Vinyl bromide	106	4.961	4.960	0.001	97	14224	0.4000	0.4049	
19 2-Methylbutane	43	5.010	5.010	0.000	92	33422	0.4000	0.4031	
20 Trichlorofluoromethane	101	5.225	5.229	-0.004	97	40736	0.4000	0.3843	
21 Acrolein	56	5.242	5.235	0.007	32	5828	0.4000	0.4602	
22 Acetonitrile	40	5.301	5.301	0.000	99	12333	0.4000	0.5444	
23 Acetone	58	5.355	5.355	0.000	99	33434	1.20	1.47	
24 Pentane	72	5.452	5.448	0.004	80	2773	0.4000	0.4024	
25 Isopropyl alcohol	45	5.447	5.451	-0.004	77	90947	1.20	1.34	
26 Ethyl ether	31	5.619	5.619	0.000	91	22137	0.4000	0.4565	
27 1,1-Dichloroethene	96	5.932	5.928	0.004	88	13897	0.4000	0.4141	
28 Acrylonitrile	53	6.024	6.032	-0.008	94	13744	0.4000	0.4438	
30 2-Methyl-2-propanol	59	6.067	6.059	0.008	97	30344	0.4000	0.4435	
29 1,1,2-Trichloro-1,2,2-trifluoroe	101	6.104	6.107	-0.003	89	30392	0.4000	0.3916	
31 Methylene Chloride	84	6.272	6.273	-0.001	88	14649	0.4000	0.4363	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.288	6.289	-0.001	94	26000	0.4000	0.3951	
33 Carbon disulfide	76	6.439	6.438	0.001	96	44363	0.4000	0.3932	
34 trans-1,2-Dichloroethene	96	7.086	7.082	0.004	92	16188	0.4000	0.4097	
35 2-Methylpentane	43	7.102	7.101	0.001	96	63929	0.4000	0.4148	
36 Methyl tert-butyl ether	73	7.226	7.230	-0.004	90	36435	0.4000	0.4455	
37 1,1-Dichloroethane	63	7.501	7.499	0.002	98	39683	0.4000	0.4028	
38 Vinyl acetate	43	7.603	7.607	-0.004	100	55733	0.4000	0.4321	
39 2-Butanone (MEK)	72	8.056	8.063	-0.007	95	7655	0.4000	0.4674	
40 Hexane	56	8.078	8.082	-0.004	87	20447	0.4000	0.4022	
41 Isopropyl ether	45	8.245	8.248	-0.003	96	72295	0.4000	0.4264	
42 cis-1,2-Dichloroethene	96	8.482	8.483	-0.001	96	16888	0.4000	0.4021	
43 Ethyl acetate	43	8.677	8.676	0.001	97	48461	0.4000	0.4291	
44 Chloroform	83	8.822	8.825	-0.003	91	38061	0.4000	0.3986	
45 Tert-butyl ethyl ether	59	8.925	8.928	-0.003	97	60350	0.4000	0.4241	
46 Tetrahydrofuran	42	9.248	9.244	0.004	90	25346	0.4000	0.4474	
47 1,1,1-Trichloroethane	97	9.852	9.851	0.001	94	36173	0.4000	0.3936	
48 1,2-Dichloroethane	62	9.960	9.958	0.002	95	29376	0.4000	0.3928	
49 Cyclohexane	69	10.451	10.455	-0.004	82	9450	0.4000	0.4124	
50 Benzene	78	10.451	10.451	0.000	92	53895	0.4000	0.3960	
52 Carbon tetrachloride	117	10.472	10.476	-0.004	92	34839	0.4000	0.4141	
51 n-Butanol	31	10.451	10.442	0.009	66	9421	0.4000	0.4450	
53 2,3-Dimethylpentane	71	10.575	10.577	-0.002	91	14994	0.4000	0.4266	
54 Thiophene	84	10.720	10.725	-0.005	94	32749	0.4000	0.4199	
55 Isooctane	57	11.216	11.219	-0.003	98	134587	0.4000	0.4042	
56 n-Heptane	71	11.594	11.594	0.000	95	21146	0.4000	0.3951	
57 1,2-Dichloropropane	63	11.669	11.669	0.000	90	25767	0.4000	0.4157	
58 Trichloroethene	130	11.707	11.706	0.001	90	21557	0.4000	0.3633	
59 Dibromomethane	93	11.793	11.791	0.002	88	22450	0.4000	0.3840	
60 Dichlorobromomethane	83	11.934	11.936	-0.002	94	39980	0.4000	0.3934	
61 1,4-Dioxane	88	11.982	11.974	0.008	98	6721	0.4000	0.4232	
62 Methyl methacrylate	41	12.036	12.038	-0.002	84	30238	0.4000	0.4309	
63 Methylcyclohexane	83	12.484	12.480	0.004	86	35264	0.4000	0.3930	
64 4-Methyl-2-pentanone (MIBK)	43	12.899	12.898	0.001	96	51809	0.4000	0.4384	
65 cis-1,3-Dichloropropene	75	12.937	12.938	-0.001	95	31812	0.4000	0.3898	
66 trans-1,3-Dichloropropene	75	13.632	13.632	0.000	90	27117	0.4000	0.4028	
67 Toluene	91	13.756	13.759	-0.003	91	60905	0.4000	0.4208	
68 1,1,2-Trichloroethane	83	13.826	13.831	-0.005	95	18372	0.4000	0.4050	
69 2-Hexanone	58	14.231	14.231	0.000	91	23138	0.4000	0.4315	
70 n-Octane	85	14.452	14.454	-0.002	97	22082	0.4000	0.4186	
71 Chlorodibromomethane	129	14.538	14.536	0.002	93	33024	0.4000	0.3872	
72 Ethylene Dibromide	107	14.824	14.826	-0.002	98	32736	0.4000	0.4021	
73 Tetrachloroethene	129	14.899	14.904	-0.005	88	19868	0.4000	0.3641	
75 Chlorobenzene	112	15.778	15.779	-0.001	89	47729	0.4000	0.4077	
74 2,3-Dimethylheptane	43	15.800	15.801	-0.001	92	98500	0.4000	0.3932	
78 Ethylbenzene	91	16.069	16.068	0.001	99	78472	0.4000	0.4219	
79 m-Xylene & p-Xylene	91	16.231	16.232	-0.001	98	117852	0.8000	0.8008	
80 n-Nonane	57	16.657	16.654	0.003	92	57593	0.4000	0.3967	
81 Bromoform	173	16.673	16.676	-0.003	89	26419	0.4000	0.3682	
82 Styrene	104	16.695	16.695	0.000	96	41558	0.4000	0.3885	
83 o-Xylene	91	16.754	16.757	-0.003	97	62312	0.4000	0.4184	
84 1,1,2,2-Tetrachloroethane	83	17.078	17.078	0.000	97	49310	0.4000	0.4150	
85 1,2,3-Trichloropropane	110	17.234	17.237	-0.003	93	12020	0.4000	0.4137	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
86 Isopropylbenzene	105	17.342	17.344	-0.002	97	78721	0.4000	0.4023	
87 N-Propylbenzene	120	17.887	17.887	0.000	97	19728	0.4000	0.3777	
88 2-Chlorotoluene	126	17.924	17.930	-0.006	98	21271	0.4000	0.4251	
89 4-Ethyltoluene	105	18.038	18.038	0.000	98	76712	0.4000	0.3926	
90 1,3,5-Trimethylbenzene	120	18.108	18.109	-0.001	91	31514	0.4000	0.4036	
92 Alpha Methyl Styrene	118	18.340	18.340	0.000	83	27908	0.4000	0.3616	
93 n-Decane	57	18.399	18.401	-0.002	88	71149	0.4000	0.4043	
94 tert-Butylbenzene	119	18.534	18.533	0.001	89	64684	0.4000	0.3767	
95 1,2,4-Trimethylbenzene	105	18.545	18.547	-0.002	95	67360	0.4000	0.3944	
96 sec-Butylbenzene	105	18.803	18.804	-0.001	98	96336	0.4000	0.3739	
97 1,3-Dichlorobenzene	146	18.814	18.815	-0.001	95	43692	0.4000	0.3591	
98 Benzyl chloride	91	18.890	18.891	-0.001	95	59541	0.4000	0.3701	
99 1,4-Dichlorobenzene	146	18.906	18.905	0.001	91	44948	0.4000	0.3647	
100 4-Isopropyltoluene	119	18.965	18.965	0.000	96	75338	0.4000	0.3777	
101 1,2,3-Trimethylbenzene	105	19.019	19.019	0.000	98	66959	0.4000	0.4645	
102 Butylcyclohexane	83	19.073	19.074	-0.001	85	66421	0.4000	0.3978	
104 1,2-Dichlorobenzene	146	19.262	19.262	0.000	78	41138	0.4000	0.3528	
103 2,3-Dihydroindene	117	19.262	19.262	0.000	91	62198	0.4000	0.3645	
106 Indene	116	19.391	19.392	-0.001	93	54200	0.4000	0.3707	
105 n-Butylbenzene	91	19.397	19.398	-0.001	96	88169	0.4000	0.3900	
107 Undecane	57	19.709	19.708	0.001	92	77930	0.4000	0.3968	
108 1,2-Dibromo-3-Chloropropane	157	19.860	19.858	0.002	81	20067	0.4000	0.4105	
109 1,2,4,5-Tetramethylbenzene	119	20.152	20.150	0.002	95	71014	0.4000	0.4696	
110 Dodecane	57	20.766	20.765	0.001	89	76360	0.4000	0.4453	
111 1,2,4-Trichlorobenzene	180	20.955	20.957	-0.002	91	35272	0.4000	0.3435	
112 Naphthalene	128	21.095	21.095	0.000	98	88191	0.4000	0.3560	
113 Hexachlorobutadiene	225	21.305	21.304	0.001	88	29410	0.4000	0.3390	
114 1,2,3-Trichlorobenzene	180	21.376	21.372	0.004	93	33331	0.4000	0.3372	
115 2-Methylnaphthalene	142	22.147	22.144	0.003	98	41015	0.4000	0.3850	
116 1-Methylnaphthalene	142	22.319	22.319	0.000	99	46614	0.4000	0.4298	
A 122 C8 Range	1	14.449	(14.399-14.516)		0	266284	0.4000	0.4159	
S 123 1,2-Dichloroethene, Total	1				0		0.8000	0.8118	
S 124 Xylenes, Total	100				0		1.20	1.22	

Reagents:

40L5DQP_00020	Amount Added: 200.00	Units: mL	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

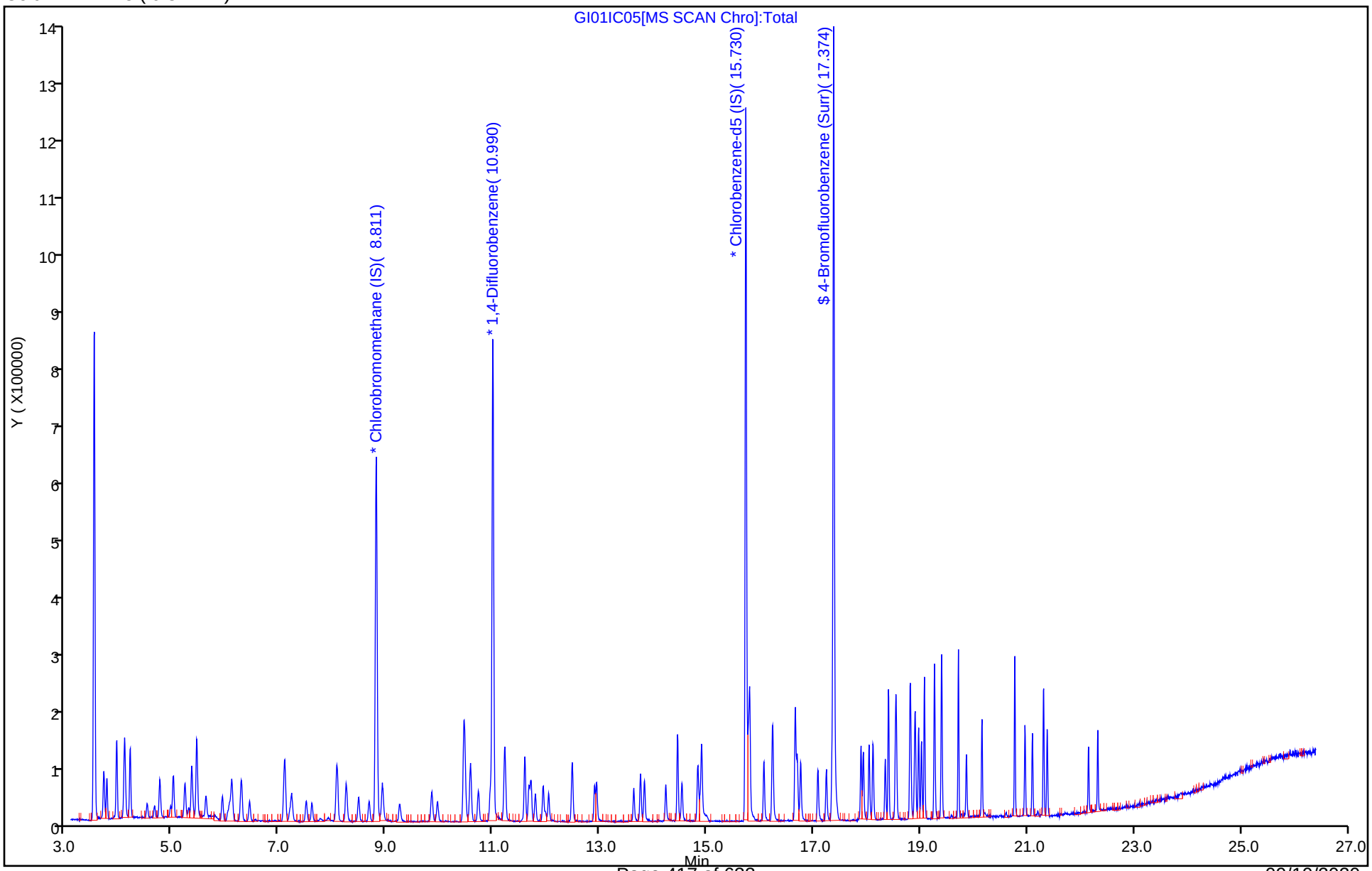
Report Date: 02-Sep-2020 12:23:57 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC05.D

Injection Date:	02-Sep-2020 01:52:30	Instrument ID:	MG	Operator ID:	AFB
Lims ID:	IC L5			Worklist Smp#:	13
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

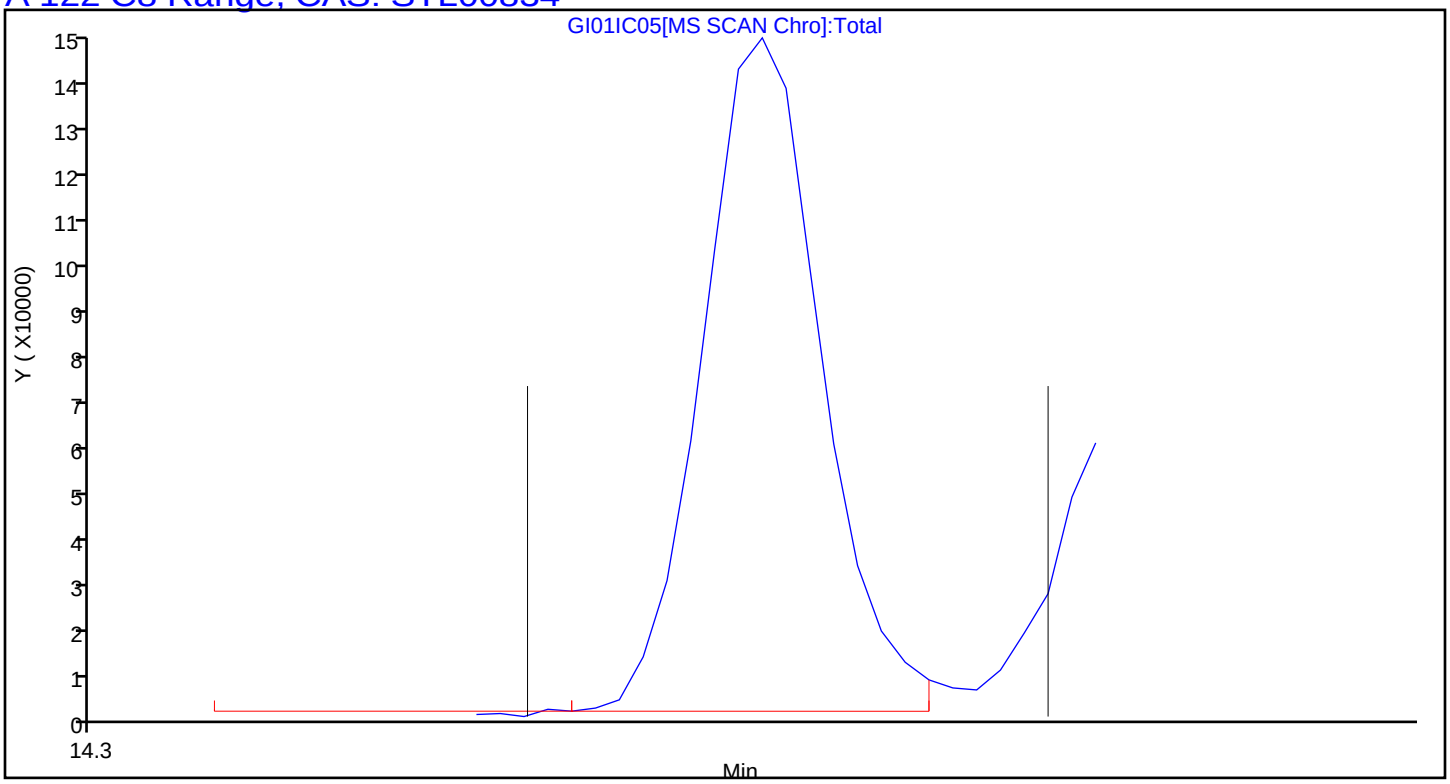


Report Date: 02-Sep-2020 12:23:57 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC05.D				
Injection Date:	02-Sep-2020 01:52:30	Instrument ID:	MG		
Lims ID:	IC L5				
Client ID:					
Operator ID:	AFB	ALS Bottle#:	4	Worklist Smp#:	13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 122 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC06.D
Lims ID: IC L6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 02-Sep-2020 02:38:30 ALS Bottle#: 5 Worklist Smp#: 14
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016453-014
Misc. Info.: 314716
Operator ID: AFB Instrument ID: MG
Sublist: chrom-MG_TO15*sub17

Method: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 02-Sep-2020 12:24:03 Calib Date: 02-Sep-2020 03:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1035

First Level Reviewer: barlozhetskayaa Date: 02-Sep-2020 10:41:18

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.811	8.812	-0.001	88	143845	4.80	4.80	
* 2 1,4-Difluorobenzene	114	10.995	10.996	-0.001	98	625077	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.730	15.730	0.000	93	650254	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.374	17.374	0.000	84	479859	4.64	4.70	
6 Chlorodifluoromethane	51	3.705	3.703	0.002	97	126387	1.00	0.9806	
7 Propene	41	3.710	3.716	-0.006	98	62980	1.00	0.99	
8 Dichlorodifluoromethane	85	3.764	3.765	-0.001	98	138515	1.00	0.9612	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.953	3.951	0.002	94	74466	1.00	0.9059	
9 Chloromethane	52	3.942	3.945	-0.003	79	25107	1.00	0.9731	
11 Acetaldehyde	44	4.093	4.096	-0.003	100	173325	5.00	5.71	
12 Vinyl chloride	62	4.114	4.114	0.000	98	70697	1.00	0.9815	
14 Butadiene	54	4.201	4.201	0.000	81	63838	1.00	1.01	
13 Butane	43	4.201	4.202	-0.001	87	130324	1.00	1.01	
15 Bromomethane	94	4.519	4.521	-0.002	97	41102	1.00	0.9445	
16 Chloroethane	64	4.659	4.658	0.001	86	27795	1.00	0.9303	
17 Ethanol	31	4.751	4.759	-0.008	96	134201	5.00	4.93	
18 Vinyl bromide	106	4.956	4.960	-0.004	97	34260	1.00	0.9230	
19 2-Methylbutane	43	5.004	5.010	-0.006	95	88701	1.00	1.01	
20 Trichlorofluoromethane	101	5.231	5.229	0.002	98	106066	1.00	0.9470	
21 Acrolein	56	5.236	5.235	0.001	33	13692	1.00	1.02	
22 Acetonitrile	40	5.295	5.301	-0.006	98	23808	1.00	0.99	
23 Acetone	58	5.349	5.355	-0.006	99	85167	3.00	3.55	
25 Isopropyl alcohol	45	5.435	5.451	-0.016	82	213678	3.00	2.99	
24 Pentane	72	5.441	5.448	-0.007	86	7214	1.00	0.99	
26 Ethyl ether	31	5.613	5.619	-0.006	90	55969	1.00	1.09	
27 1,1-Dichloroethene	96	5.926	5.928	-0.002	89	34343	1.00	0.9685	
28 Acrylonitrile	53	6.023	6.032	-0.009	95	34693	1.00	1.06	
30 2-Methyl-2-propanol	59	6.045	6.059	-0.014	94	73714	1.00	1.02	
29 1,1,2-Trichloro-1,2,2-trifluoroe	101	6.104	6.107	-0.003	89	77887	1.00	0.9498	
31 Methylene Chloride	84	6.271	6.273	-0.002	89	35627	1.00	1.00	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.287	6.289	-0.002	93	61687	1.00	0.8872	
33 Carbon disulfide	76	6.433	6.438	-0.005	97	119464	1.00	1.00	
34 trans-1,2-Dichloroethene	96	7.080	7.082	-0.002	90	39785	1.00	0.9531	
35 2-Methylpentane	43	7.102	7.101	0.001	96	159038	1.00	0.9767	
36 Methyl tert-butyl ether	73	7.220	7.230	-0.010	90	94079	1.00	1.09	
37 1,1-Dichloroethane	63	7.495	7.499	-0.004	99	102235	1.00	0.9823	
38 Vinyl acetate	43	7.603	7.607	-0.004	100	144673	1.00	1.06	
39 2-Butanone (MEK)	72	8.056	8.063	-0.007	95	19622	1.00	1.13	
40 Hexane	56	8.078	8.082	-0.004	93	52452	1.00	0.9765	
41 Isopropyl ether	45	8.240	8.248	-0.008	96	193913	1.00	1.08	
42 cis-1,2-Dichloroethene	96	8.482	8.483	-0.001	95	43948	1.00	0.99	
43 Ethyl acetate	43	8.666	8.676	-0.010	97	126022	1.00	1.06	
44 Chloroform	83	8.822	8.825	-0.003	93	97178	1.00	0.9633	
45 Tert-butyl ethyl ether	59	8.919	8.928	-0.009	96	158268	1.00	1.05	
46 Tetrahydrofuran	42	9.237	9.244	-0.007	90	63096	1.00	1.05	
47 1,1,1-Trichloroethane	97	9.852	9.851	0.001	94	93502	1.00	0.9629	
48 1,2-Dichloroethane	62	9.954	9.958	-0.004	94	74570	1.00	1.06	
49 Cyclohexane	69	10.450	10.455	-0.005	88	24100	1.00	1.11	
50 Benzene	78	10.450	10.451	-0.001	93	136368	1.00	1.06	
51 n-Butanol	31	10.440	10.442	-0.002	63	21677	1.00	1.08	
52 Carbon tetrachloride	117	10.472	10.476	-0.004	92	82585	1.00	1.04	
53 2,3-Dimethylpentane	71	10.574	10.577	-0.003	90	35713	1.00	1.08	
54 Thiophene	84	10.720	10.725	-0.005	93	81080	1.00	1.10	
55 Isooctane	57	11.216	11.219	-0.003	98	345476	1.00	1.10	
56 n-Heptane	71	11.594	11.594	0.000	94	55017	1.00	1.09	
57 1,2-Dichloropropane	63	11.669	11.669	0.000	89	63849	1.00	1.09	
58 Trichloroethene	130	11.701	11.706	-0.005	90	55829	1.00	1.00	
59 Dibromomethane	93	11.788	11.791	-0.003	86	63978	1.00	1.16	
60 Dichlorobromomethane	83	11.933	11.936	-0.003	95	102850	1.00	1.07	
61 1,4-Dioxane	88	11.966	11.974	-0.008	91	12962	1.00	0.8644	
62 Methyl methacrylate	41	12.030	12.038	-0.008	86	79777	1.00	1.20	
63 Methylcyclohexane	83	12.478	12.480	-0.002	86	92997	1.00	1.10	
64 4-Methyl-2-pentanone (MIBK)	43	12.893	12.898	-0.005	96	120828	1.00	1.08	
65 cis-1,3-Dichloropropene	75	12.936	12.938	-0.002	97	85421	1.00	1.11	
66 trans-1,3-Dichloropropene	75	13.632	13.632	0.000	91	68823	1.00	1.03	
67 Toluene	91	13.756	13.759	-0.003	92	153919	1.00	1.07	
68 1,1,2-Trichloroethane	83	13.826	13.831	-0.005	95	49466	1.00	1.10	
69 2-Hexanone	58	14.225	14.231	-0.006	91	58020	1.00	1.09	
70 n-Octane	85	14.452	14.454	-0.002	98	55073	1.00	1.05	
71 Chlorodibromomethane	129	14.532	14.536	-0.004	95	81803	1.00	0.9681	
72 Ethylene Dibromide	107	14.824	14.826	-0.002	99	82810	1.00	1.03	
73 Tetrachloroethene	129	14.904	14.904	0.000	90	52818	1.00	0.9769	
75 Chlorobenzene	112	15.778	15.779	-0.001	90	120798	1.00	1.04	
74 2,3-Dimethylheptane	43	15.800	15.801	-0.001	92	258919	1.00	1.04	
78 Ethylbenzene	91	16.064	16.068	-0.004	99	201106	1.00	1.09	
79 m-Xylene & p-Xylene	91	16.231	16.232	-0.001	97	308731	2.00	2.12	
80 n-Nonane	57	16.652	16.654	-0.002	94	151433	1.00	1.05	
81 Bromoform	173	16.679	16.676	0.003	89	47825	1.00	0.6727	
82 Styrene	104	16.695	16.695	0.000	96	115089	1.00	1.09	
83 o-Xylene	91	16.754	16.757	-0.003	97	160310	1.00	1.09	
84 1,1,2,2-Tetrachloroethane	83	17.078	17.078	0.000	97	129612	1.00	1.10	
85 1,2,3-Trichloropropane	110	17.234	17.237	-0.003	94	31198	1.00	1.08	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
86 Isopropylbenzene	105	17.342	17.344	-0.002	97	209664	1.00	1.08	
87 N-Propylbenzene	120	17.886	17.887	-0.001	98	55490	1.00	1.07	
88 2-Chlorotoluene	126	17.930	17.930	0.000	97	50660	1.00	1.02	
89 4-Ethyltoluene	105	18.037	18.038	-0.001	98	209216	1.00	1.08	
90 1,3,5-Trimethylbenzene	120	18.108	18.109	-0.001	92	85164	1.00	1.10	
92 Alpha Methyl Styrene	118	18.339	18.340	-0.001	85	82510	1.00	1.08	
93 n-Decane	57	18.399	18.401	-0.002	87	189083	1.00	1.08	
94 tert-Butylbenzene	119	18.534	18.533	0.001	90	182107	1.00	1.07	
95 1,2,4-Trimethylbenzene	105	18.544	18.547	-0.003	96	180832	1.00	1.07	
96 sec-Butylbenzene	105	18.803	18.804	-0.001	98	272380	1.00	1.07	
97 1,3-Dichlorobenzene	146	18.814	18.815	-0.001	96	118460	1.00	0.9825	
98 Benzyl chloride	91	18.889	18.891	-0.002	96	157512	1.00	0.9882	
99 1,4-Dichlorobenzene	146	18.900	18.905	-0.005	94	117341	1.00	0.9608	
100 4-Isopropyltoluene	119	18.965	18.965	0.000	96	213219	1.00	1.08	
101 1,2,3-Trimethylbenzene	105	19.013	19.019	-0.006	99	183353	1.00	1.26	
102 Butylcyclohexane	83	19.073	19.074	-0.001	86	179536	1.00	1.09	
103 2,3-Dihydroindene	117	19.262	19.262	0.000	92	175316	1.00	1.04	
104 1,2-Dichlorobenzene	146	19.262	19.262	0.000	77	113702	1.00	0.9840	
106 Indene	116	19.391	19.392	-0.001	88	150965	1.00	1.04	
105 n-Butylbenzene	91	19.396	19.398	-0.002	97	241684	1.00	1.08	
107 Undecane	57	19.709	19.708	0.001	91	212100	1.00	1.09	
108 1,2-Dibromo-3-Chloropropane	157	19.860	19.858	0.002	84	47740	1.00	0.9650	
109 1,2,4,5-Tetramethylbenzene	119	20.151	20.150	0.001	96	186389	1.00	1.21	
110 Dodecane	57	20.761	20.765	-0.004	90	202565	1.00	1.19	
111 1,2,4-Trichlorobenzene	180	20.955	20.957	-0.002	92	90620	1.00	0.8906	
112 Naphthalene	128	21.095	21.095	0.000	98	216311	1.00	0.8813	
113 Hexachlorobutadiene	225	21.305	21.304	0.001	90	81866	1.00	0.9525	
114 1,2,3-Trichlorobenzene	180	21.370	21.372	-0.002	93	89666	1.00	0.9154	
115 2-Methylnaphthalene	142	22.146	22.144	0.002	99	93743	1.00	0.8880	
116 1-Methylnaphthalene	142	22.319	22.319	0.000	99	106800	1.00	0.99	
A 122 C8 Range	1	14.439	(14.398-14.527)		0	697619	1.00	1.10	
S 123 1,2-Dichloroethene, Total	1				0		2.00	1.94	
S 124 Xylenes, Total	100				0		3.00	3.20	

Reagents:

40L6DQP_00019	Amount Added: 200.00	Units: mL	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

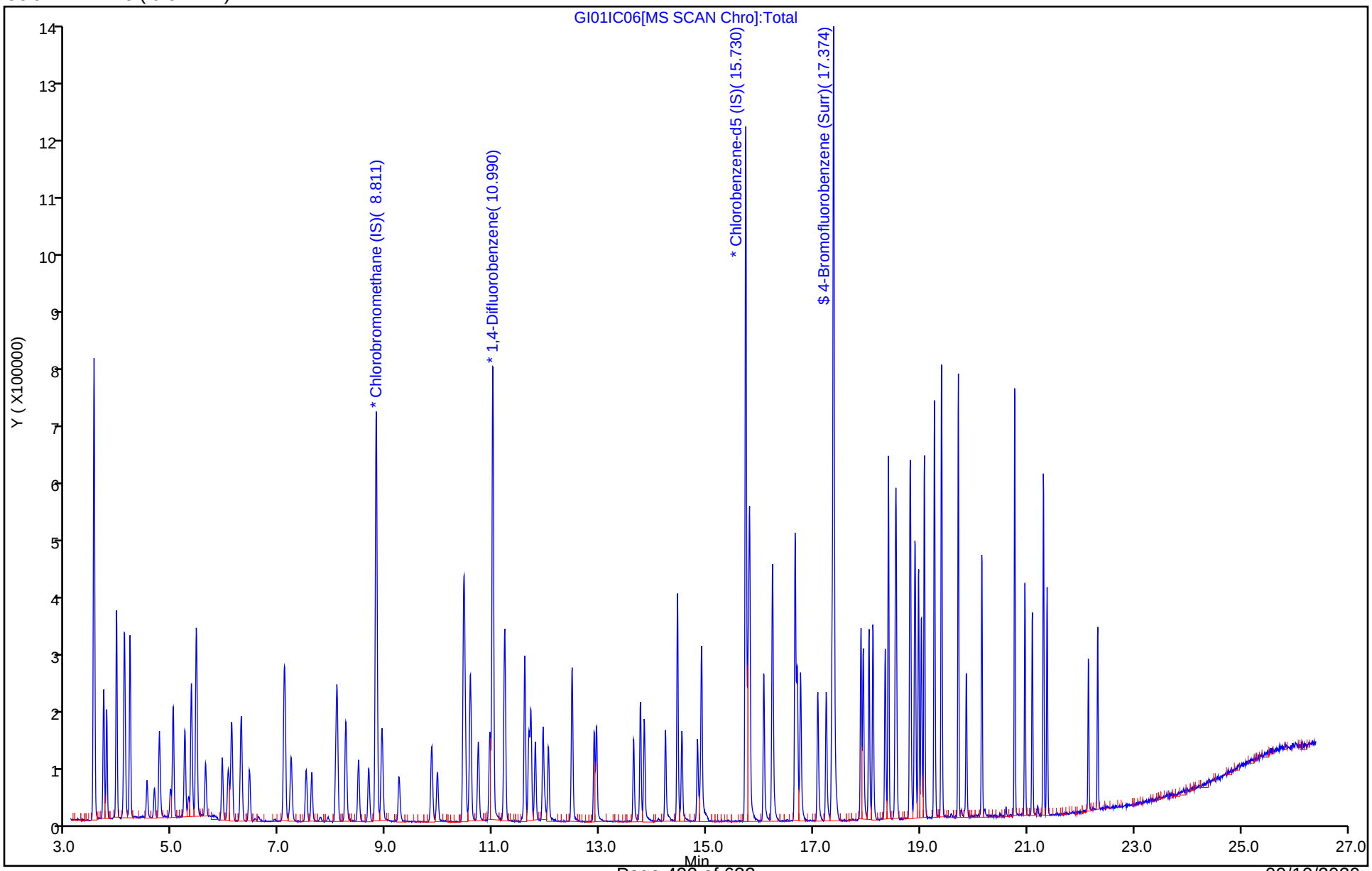
Report Date: 02-Sep-2020 12:24:04 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC06.D

Injection Date:	02-Sep-2020 02:38:30	Instrument ID:	MG	Operator ID:	AFB
Lims ID:	IC L6			Worklist Smp#:	14
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

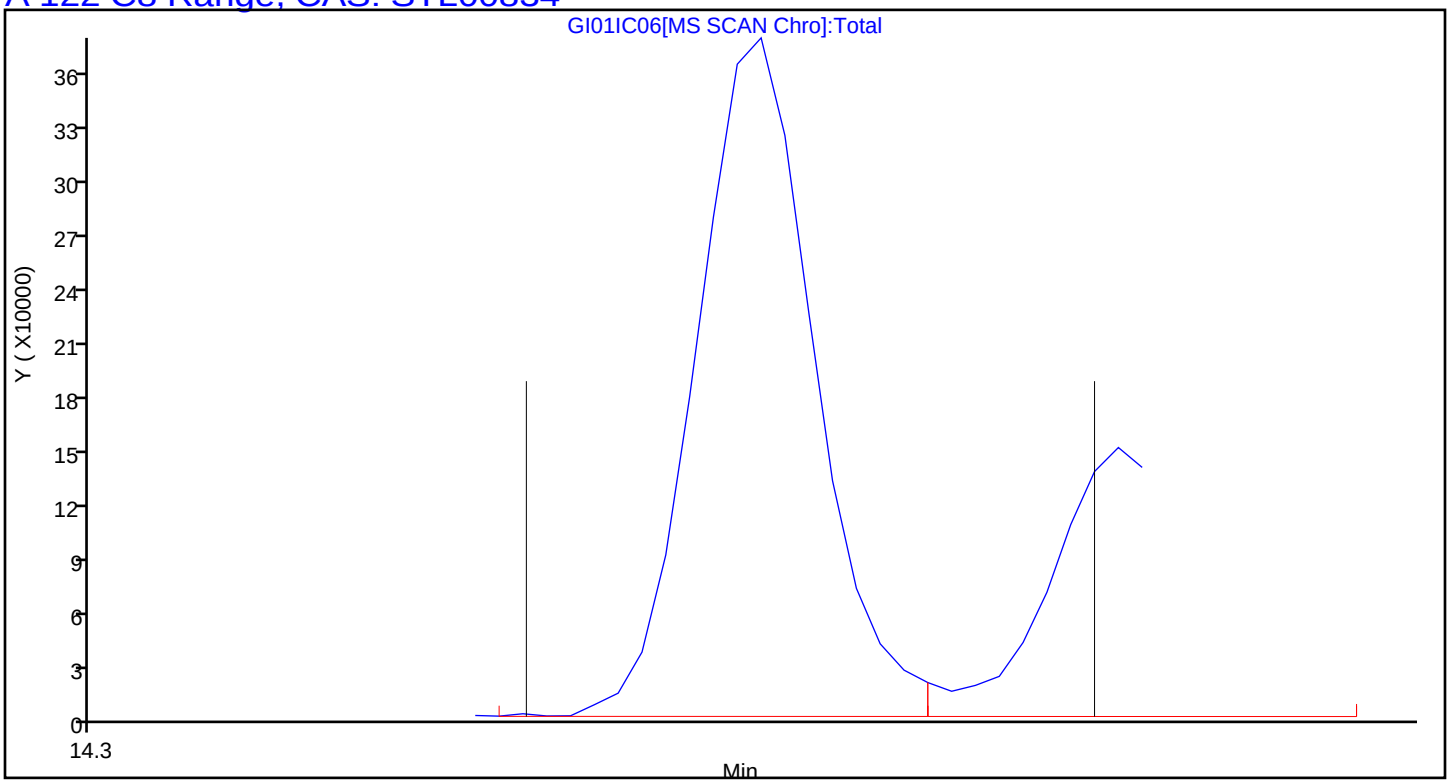


Report Date: 02-Sep-2020 12:24:04 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC06.D				
Injection Date:	02-Sep-2020 02:38:30	Instrument ID:	MG		
Lims ID:	IC L6				
Client ID:					
Operator ID:	AFB	ALS Bottle#:	5	Worklist Smp#:	14
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 122 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D
Lims ID: ICIS L7
Client ID:
Sample Type: ICIS Calib Level: 7
Inject. Date: 02-Sep-2020 03:27:30 ALS Bottle#: 6 Worklist Smp#: 15
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016453-015
Misc. Info.: 314608
Operator ID: AFB Instrument ID: MG
Sublist: chrom-MG_TO15*sub17

Method: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 02-Sep-2020 12:24:11 Calib Date: 02-Sep-2020 03:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1035

First Level Reviewer: tajh Date: 02-Sep-2020 07:22:50

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.811	8.812	-0.001	88	155264	4.80	4.80	
* 2 1,4-Difluorobenzene	114	10.995	10.996	-0.001	98	774405	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.730	15.730	0.000	93	759403	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.374	17.374	0.000	85	566331	4.64	4.75	
6 Chlorodifluoromethane	51	3.705	3.703	0.002	97	254491	2.00	1.83	
7 Propene	41	3.716	3.716	0.000	98	128895	2.00	1.88	
8 Dichlorodifluoromethane	85	3.770	3.765	0.005	99	292225	2.00	1.88	
9 Chloromethane	52	3.947	3.945	0.002	98	49882	2.00	1.79	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.953	3.951	0.002	93	169218	2.00	1.91	
11 Acetaldehyde	44	4.093	4.096	-0.003	98	336190	10.0	10.3	
12 Vinyl chloride	62	4.115	4.114	0.001	98	142653	2.00	1.83	
14 Butadiene	54	4.201	4.201	0.000	67	127581	2.00	1.86	
13 Butane	43	4.206	4.202	0.004	86	260407	2.00	1.87	
15 Bromomethane	94	4.519	4.521	-0.002	98	87843	2.00	1.87	
16 Chloroethane	64	4.659	4.658	0.001	88	60690	2.00	1.88	
17 Ethanol	31	4.751	4.759	-0.008	94	307085	10.0	10.5	
18 Vinyl bromide	106	4.961	4.960	0.001	98	75357	2.00	1.88	
19 2-Methylbutane	43	5.010	5.010	0.000	94	178302	2.00	1.89	
20 Trichlorofluoromethane	101	5.231	5.229	0.002	97	212612	2.00	1.76	
21 Acrolein	56	5.231	5.235	-0.004	34	26996	2.00	1.87	
22 Acetonitrile	40	5.296	5.301	-0.005	99	54213	2.00	2.10	
23 Acetone	58	5.349	5.355	-0.006	99	167195	6.00	6.46	
25 Isopropyl alcohol	45	5.436	5.451	-0.015	93	444518	6.00	5.75	
24 Pentane	72	5.447	5.448	-0.001	96	14405	2.00	1.83	
26 Ethyl ether	31	5.614	5.619	-0.005	90	118337	2.00	2.14	
27 1,1-Dichloroethene	96	5.932	5.928	0.004	90	71623	2.00	1.87	
28 Acrylonitrile	53	6.029	6.032	-0.003	96	74563	2.00	2.11	
30 2-Methyl-2-propanol	59	6.045	6.059	-0.014	96	140940	2.00	1.81	
29 1,1,2-Trichloro-1,2,2-trifluoroe	101	6.104	6.107	-0.003	89	162311	2.00	1.83	
31 Methylene Chloride	84	6.277	6.273	0.004	88	71422	2.00	1.87	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.288	6.289	-0.001	94	119860	2.00	1.60	
33 Carbon disulfide	76	6.439	6.438	0.001	97	235894	2.00	1.83	
34 trans-1,2-Dichloroethene	96	7.080	7.082	-0.002	89	81489	2.00	1.81	
35 2-Methylpentane	43	7.102	7.101	0.001	97	323413	2.00	1.84	
36 Methyl tert-butyl ether	73	7.215	7.230	-0.015	91	200198	2.00	2.15	
37 1,1-Dichloroethane	63	7.501	7.499	0.002	98	208044	2.00	1.85	
38 Vinyl acetate	43	7.603	7.607	-0.004	100	323495	2.00	2.20	
39 2-Butanone (MEK)	72	8.056	8.063	-0.007	95	39691	2.00	2.13	
40 Hexane	56	8.083	8.082	0.001	89	108248	2.00	1.87	
41 Isopropyl ether	45	8.240	8.248	-0.008	95	408213	2.00	2.11	
42 cis-1,2-Dichloroethene	96	8.488	8.483	0.005	96	90453	2.00	1.89	
43 Ethyl acetate	43	8.671	8.676	-0.005	97	276215	2.00	2.14	
44 Chloroform	83	8.822	8.825	-0.003	85	198099	2.00	1.82	
45 Tert-butyl ethyl ether	59	8.919	8.928	-0.009	96	344105	2.00	2.12	
46 Tetrahydrofuran	42	9.232	9.244	-0.012	91	138158	2.00	2.14	
47 1,1,1-Trichloroethane	97	9.847	9.851	-0.004	93	189856	2.00	1.81	
48 1,2-Dichloroethane	62	9.960	9.958	0.002	94	156222	2.00	1.79	
51 n-Butanol	31	10.429	10.442	-0.013	81	40646	2.00	1.64	
49 Cyclohexane	69	10.456	10.455	0.001	89	45891	2.00	1.71	
50 Benzene	78	10.451	10.451	0.000	96	283155	2.00	1.78	
52 Carbon tetrachloride	117	10.478	10.476	0.002	91	120424	2.00	1.22	
53 2,3-Dimethylpentane	71	10.575	10.577	-0.002	89	71885	2.00	1.75	
54 Thiophene	84	10.720	10.725	-0.005	93	164043	2.00	1.80	
55 Isooctane	57	11.216	11.219	-0.003	97	696193	2.00	1.79	
56 n-Heptane	71	11.594	11.594	0.000	95	112703	2.00	1.80	
57 1,2-Dichloropropane	63	11.669	11.669	0.000	89	135449	2.00	1.87	
58 Trichloroethene	130	11.712	11.706	0.006	90	113938	2.00	1.64	
59 Dibromomethane	93	11.788	11.791	-0.003	88	119998	2.00	1.75	
60 Dichlorobromomethane	83	11.934	11.936	-0.002	95	216520	2.00	1.82	
61 1,4-Dioxane	88	11.961	11.974	-0.013	87	36968	2.00	1.99	
62 Methyl methacrylate	41	12.036	12.038	-0.002	86	166422	2.00	2.03	
63 Methylcyclohexane	83	12.478	12.480	-0.002	86	187114	2.00	1.78	
64 4-Methyl-2-pentanone (MIBK)	43	12.888	12.898	-0.010	97	266548	2.00	1.93	
65 cis-1,3-Dichloropropene	75	12.937	12.938	-0.001	98	173523	2.00	1.82	
66 trans-1,3-Dichloropropene	75	13.632	13.632	0.000	91	152113	2.00	1.95	
67 Toluene	91	13.756	13.759	-0.003	92	326329	2.00	1.95	
68 1,1,2-Trichloroethane	83	13.832	13.831	0.001	94	105417	2.00	2.01	
69 2-Hexanone	58	14.225	14.231	-0.006	92	114195	2.00	1.84	
70 n-Octane	85	14.452	14.454	-0.002	98	116497	2.00	1.91	
71 Chlorodibromomethane	129	14.533	14.536	-0.003	95	190331	2.00	1.93	
72 Ethylene Dibromide	107	14.824	14.826	-0.002	96	183756	2.00	1.95	
73 Tetrachloroethene	129	14.905	14.904	0.001	91	110572	2.00	1.75	
75 Chlorobenzene	112	15.778	15.779	-0.001	90	264485	2.00	1.95	
74 2,3-Dimethylheptane	43	15.800	15.801	-0.001	92	547136	2.00	1.89	
78 Ethylbenzene	91	16.070	16.068	0.002	99	442535	2.00	2.06	
79 m-Xylene & p-Xylene	91	16.231	16.232	-0.001	97	676428	4.00	3.97	
80 n-Nonane	57	16.652	16.654	-0.002	94	329467	2.00	1.96	
81 Bromoform	173	16.679	16.676	0.003	92	166485	2.00	2.01	
82 Styrene	104	16.695	16.695	0.000	96	259361	2.00	2.10	
83 o-Xylene	91	16.754	16.757	-0.003	97	351197	2.00	2.04	
84 1,1,2,2-Tetrachloroethane	83	17.078	17.078	0.000	97	283671	2.00	2.06	
85 1,2,3-Trichloropropane	110	17.240	17.237	0.003	93	70357	2.00	2.09	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
86 Isopropylbenzene	105	17.347	17.344	0.003	97	469762	2.00	2.07	
87 N-Propylbenzene	120	17.887	17.887	0.000	98	122801	2.00	2.03	
88 2-Chlorotoluene	126	17.930	17.930	0.000	98	116178	2.00	2.01	
89 4-Ethyltoluene	105	18.038	18.038	0.000	99	470643	2.00	2.08	
90 1,3,5-Trimethylbenzene	120	18.108	18.109	-0.001	91	184043	2.00	2.04	
92 Alpha Methyl Styrene	118	18.340	18.340	0.000	84	187336	2.00	2.10	
93 n-Decane	57	18.399	18.401	-0.002	87	419090	2.00	2.06	
94 tert-Butylbenzene	119	18.534	18.533	0.001	91	412773	2.00	2.08	
95 1,2,4-Trimethylbenzene	105	18.550	18.547	0.003	96	410005	2.00	2.07	
96 sec-Butylbenzene	105	18.803	18.804	-0.001	98	615450	2.00	2.06	
97 1,3-Dichlorobenzene	146	18.814	18.815	-0.001	96	272851	2.00	1.94	
98 Benzyl chloride	91	18.890	18.891	-0.001	97	410741	2.00	2.21	
99 1,4-Dichlorobenzene	146	18.906	18.905	0.001	93	268488	2.00	1.88	
100 4-Isopropyltoluene	119	18.965	18.965	0.000	97	491082	2.00	2.13	
101 1,2,3-Trimethylbenzene	105	19.019	19.019	0.000	99	420978	2.00	2.43	
102 Butylcyclohexane	83	19.073	19.074	-0.001	86	390777	2.00	2.02	
103 2,3-Dihydroindene	117	19.262	19.262	0.000	92	404591	2.00	2.05	
104 1,2-Dichlorobenzene	146	19.262	19.262	0.000	78	265655	2.00	1.97	
106 Indene	116	19.391	19.392	-0.001	89	353313	2.00	2.09	
105 n-Butylbenzene	91	19.397	19.398	-0.001	98	548406	2.00	2.10	
107 Undecane	57	19.709	19.708	0.001	93	469276	2.00	2.06	
108 1,2-Dibromo-3-Chloropropane	157	19.860	19.859	0.001	96	144381	2.00	2.37	
109 1,2,4,5-Tetramethylbenzene	119	20.152	20.150	0.002	97	466848	2.00	2.49	
110 Dodecane	57	20.761	20.765	-0.004	90	349178	2.00	1.76	
111 1,2,4-Trichlorobenzene	180	20.955	20.957	-0.002	93	224232	2.00	1.89	
112 Naphthalene	128	21.095	21.095	0.000	98	548866	2.00	1.91	
113 Hexachlorobutadiene	225	21.305	21.304	0.001	92	200284	2.00	2.00	
114 1,2,3-Trichlorobenzene	180	21.370	21.372	-0.002	94	214504	2.00	1.88	
115 2-Methylnaphthalene	142	22.141	22.144	-0.003	98	143251	2.00	1.16	
116 1-Methylnaphthalene	142	22.319	22.319	0.000	99	152396	2.00	1.21	
A 122 C8 Range	1	14.449	(14.399-14.517)		0	1436960	2.00	1.94	
S 123 1,2-Dichloroethene, Total	1				0		4.00	3.70	
S 124 Xylenes, Total	100				0		6.00	6.01	

Reagents:

40L7DQP_00019	Amount Added: 200.00	Units: mL	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

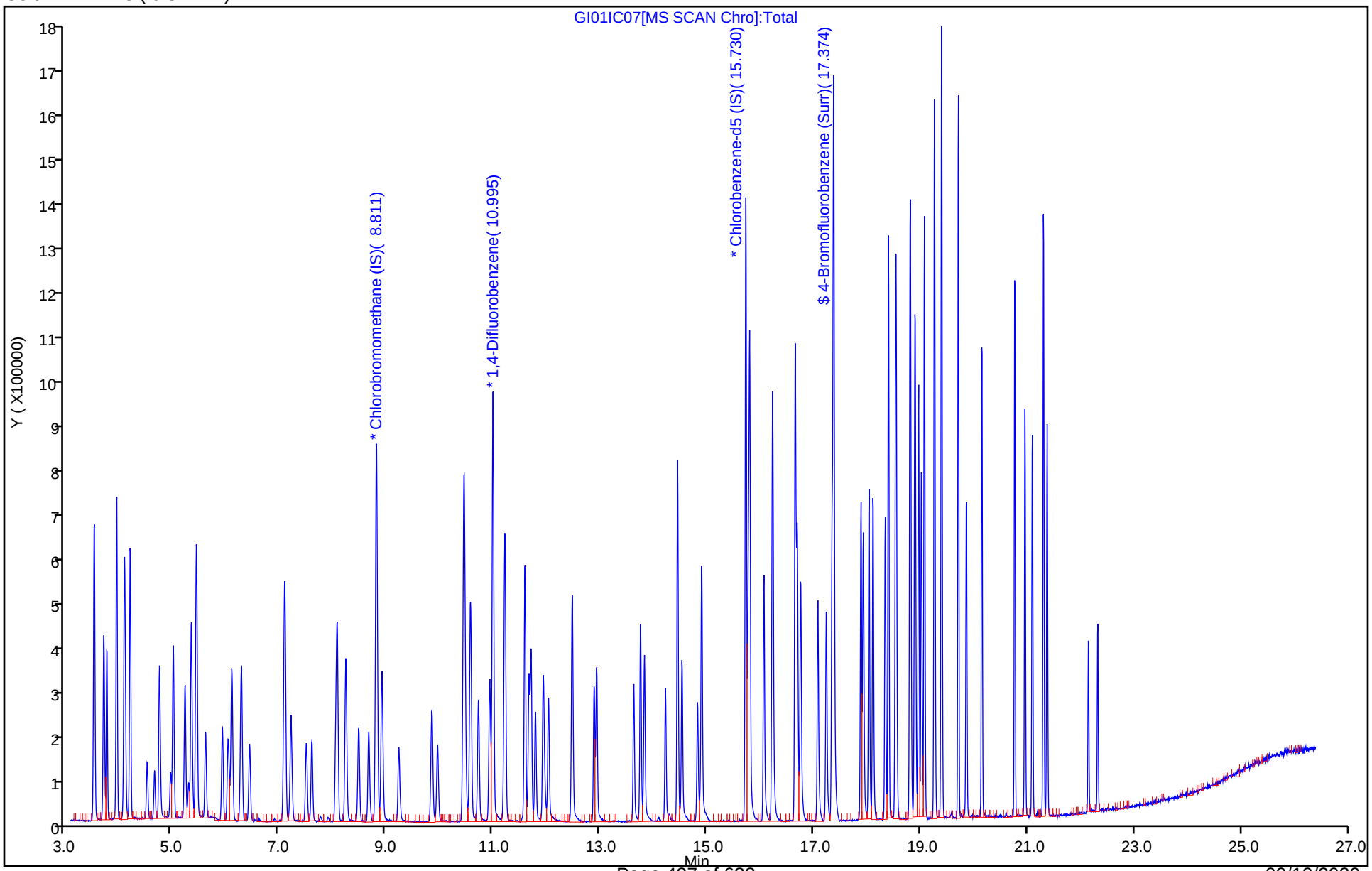
Report Date: 02-Sep-2020 12:24:12 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D

Injection Date:	02-Sep-2020 03:27:30	Instrument ID:	MG	Operator ID:	AFB
Lims ID:	ICIS L7			Worklist Smp#:	15
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

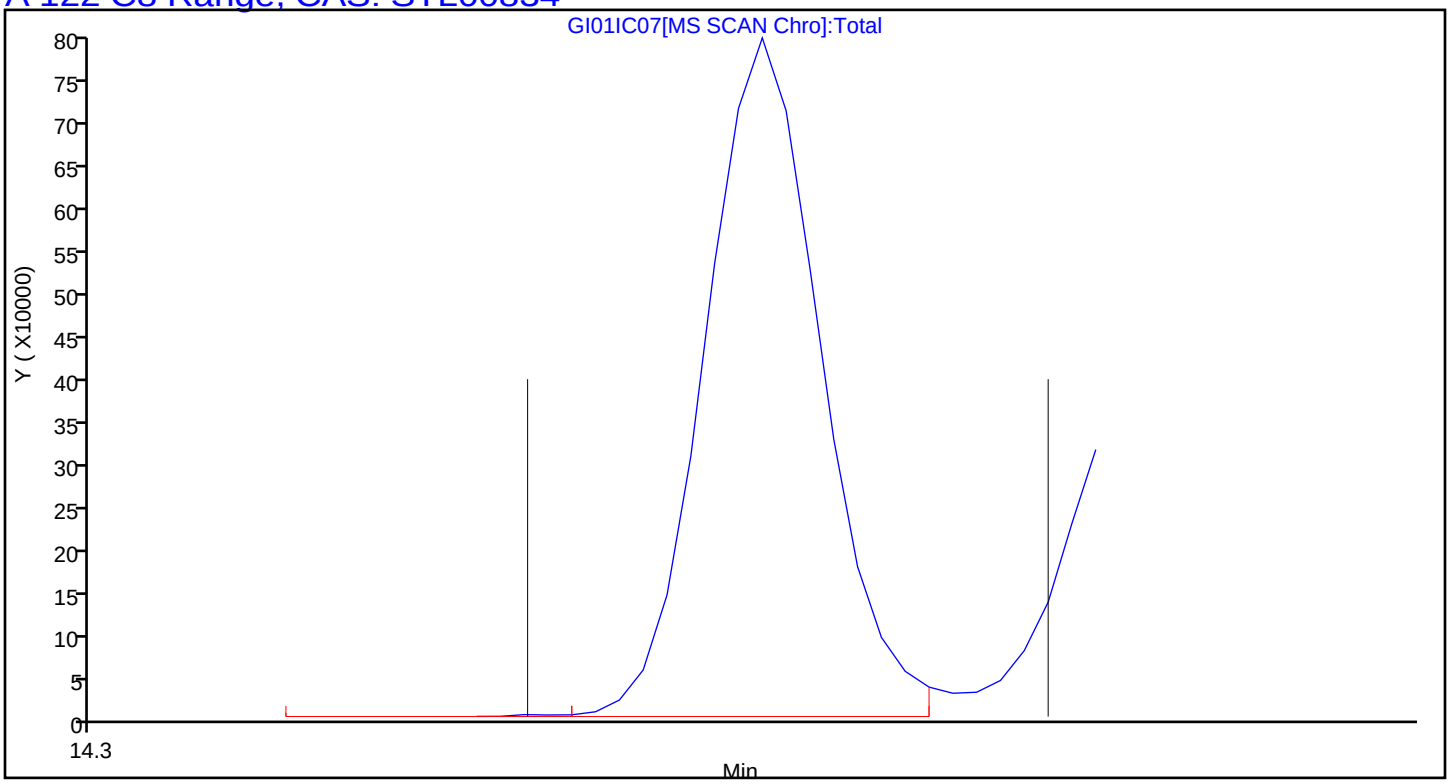


Report Date: 02-Sep-2020 12:24:12 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D				
Injection Date:	02-Sep-2020 03:27:30	Instrument ID:	MG		
Lims ID:	ICIS L7				
Client ID:					
Operator ID:	AFB	ALS Bottle#:	6	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 122 C8 Range, CAS: STL00834



FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1 Analy Batch No.: 42222

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2020 14:01 Calibration End Date: 08/29/2020 00:02 Calibration ID: 2588

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 140-42222/9	RH28IC01.D
Level 2	IC 140-42222/10	RH28IC02.D
Level 3	IC 140-42222/11	RH28IC03.D
Level 4	IC 140-42222/12	RH28IC04.D
Level 5	IC 140-42222/13	RH28IC05.D
Level 6	IC 140-42222/14	RH28IC06.D
Level 7	ICIS 140-42222/15	RH28IC07.D
Level 8	IC 140-42222/7	RH28IC08.D
Level 9	IC 140-42222/5	RH28IC09.D
Level 10	IC 140-42222/3	RH28IC10X.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Chlorodifluoromethane	+++++ 2.6107	+++++ 2.7021	3.2111 2.4612	2.8921 2.5686	2.5376 2.5100	Ave		2.6867				9.3		30.0			
Propene	+++++ 1.3377	+++++ 1.3956	+++++ 1.2227	+++++ 1.1436	1.2930 1.2580	Ave		1.2751				6.9		30.0			
Dichlorodifluoromethane	+++++ 2.1218	+++++ 2.3299	2.2530 2.0272	2.7264 1.0941	1.8744 1.7080	Ave		2.0169				24.0		30.0			
Chloromethane	+++++ 0.5202	+++++ 0.5116	+++++ 0.4425	0.5370 0.3959	0.4955 0.4360	Ave		0.4770				11.0		30.0			
1,2-Dichloro-1,1,2,2-tetrafluoroethane	+++++ 2.9556	+++++ 3.1185	3.4544 2.6564	3.3270 1.9204	2.7209 2.4653	Ave		2.8273				17.6		30.0			
Vinyl chloride	+++++ 1.7273	1.9789 1.7775	1.9488 1.4472	1.7168 1.3224	1.6350 1.4500	Lin1	0.0423	1.4404							0.9940		0.9900
1,3-Butadiene	+++++ 1.3346	+++++ 1.4072	+++++ 1.1716	1.3263 1.0425	1.2088 1.1264	Ave		1.2311				10.6		30.0			
Butane	+++++ 2.8578	+++++ 2.9598	+++++ 2.3471	2.9689 2.1336	2.6772 2.2726	Ave		2.6024				13.4		30.0			
Bromomethane	+++++ 1.7493	+++++ 1.7724	2.3301 1.5377	1.9003 1.3768	1.6820 1.4836	Lin2	0.0619	1.5496							0.9930		0.9900
Chloroethane	+++++ 0.7930	+++++ 0.8669	1.1070 0.7330	0.8834 0.6465	0.8172 0.7032	Lin2	0.0291	0.7344							0.9910		0.9900
Ethanol	+++++ 0.9083	+++++ 1.1465	1.3520 0.9252	0.8763 1.0506	0.9238 0.9145	Lin1	0.0876	0.9613							0.9930		0.9900
Vinyl bromide	+++++ 1.5352	+++++ 1.5943	2.1364 1.4075	1.7435 1.2824	1.4402 1.3939	Ave		1.5667				17.2		30.0			
2-Methylbutane	+++++ 2.0457	+++++ 2.0889	2.5536 1.7561	2.2915 1.5923	2.0892 1.7524	Ave		2.0212				15.6		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1 Analy Batch No.: 42222

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2020 14:01 Calibration End Date: 08/29/2020 00:02 Calibration ID: 2588

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Trichlorofluoromethane	+++++ 3.9263	4.5526 4.0016	4.7647 3.3893	4.1249 3.1571	3.9554 3.5072	Ave		3.9310				13.3		30.0			
Acrolein	+++++ 0.3342	+++++ 0.3698	+++++ 0.3807	+++++ 0.3405	0.4206 0.3989	Ave		0.3741				8.9		30.0			
Acetonitrile	+++++ 0.5218	+++++ 0.5928	+++++ 0.5367	+++++ 0.5152	0.5565 0.5738	Ave		0.5495				5.5		30.0			
Acetone	+++++ 0.8127	+++++ 0.7531	+++++ 0.6341	0.7132 0.7062	0.7734 0.6277	Ave		0.7172				9.6		30.0			
Pentane	+++++ 0.2352	+++++ 0.2488	+++++ 0.2357	+++++ 0.1973	0.2386 0.2230	Ave		0.2298				7.8		30.0			
Isopropyl alcohol	+++++ 1.8669	+++++ 2.1571	+++++ 1.9439	1.9930 1.6988	1.9338 1.8861	Ave		1.9256				7.2		30.0			
Ethyl ether	+++++ 1.7091	+++++ 1.7125	+++++ 1.5465	2.0445 1.3833	1.7290 1.5826	Ave		1.6725				12.3		30.0			
1,1-Dichloroethene	+++++ 1.3350	1.9399 1.3374	1.5655 1.3004	1.4989 1.1507	1.3336 1.3025	Ave		1.4182				16.2		30.0			
Acrylonitrile	+++++ 0.8189	+++++ 0.7775	+++++ 0.8468	0.7507 0.7754	0.8034 0.9257	Ave		0.8140				7.2		30.0			
tert-Butyl alcohol	+++++ 2.2882	+++++ 2.5656	+++++ 2.3857	2.6766 2.1426	2.3148 2.4255	Ave		2.3999				7.4		30.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	+++++ 2.9870	3.4885 3.0388	3.5493 2.9029	3.3221 2.5905	2.9463 2.9359	Ave		3.0846				10.0		30.0			
Methylene Chloride	+++++ 1.1693	+++++ 1.1403	+++++ 1.1240	1.3252 1.0360	1.2442 1.1484	Ave		1.1696				7.9		30.0			
3-Chloropropene	+++++ 1.3861	+++++ 1.2522	2.4529 1.2930	1.7850 1.1346	1.3930 1.3789	Lin2	0.0948	1.2347							0.9940		0.9900
Carbon disulfide	+++++ 3.7809	+++++ 3.6595	4.3860 3.5647	3.9759 3.1531	3.8159 3.6005	Ave		3.7421				9.5		30.0			
trans-1,2-Dichloroethene	+++++ 1.3446	+++++ 1.2740	1.5936 1.2677	1.2357 1.1653	1.2725 1.3665	Ave		1.3150				9.8		30.0			
2-Methylpentane	+++++ 3.0664	+++++ 3.0821	4.1716 2.8763	3.3877 2.6060	3.0351 3.0350	Ave		3.1575				14.7		30.0			
Methyl tert-butyl ether	+++++ 3.3024	+++++ 3.2507	+++++ 3.0594	3.6529 2.7228	3.2273 3.1566	Ave		3.1960				8.7		30.0			
1,1-Dichloroethane	+++++ 2.2465	+++++ 2.2234	2.6066 2.1279	2.6248 1.9158	2.3351 2.1842	Ave		2.2830				10.4		30.0			
Vinyl acetate	+++++ 3.3796	+++++ 3.5745	3.5064 3.5863	3.2953 3.2450	3.2326 3.9772	Ave		3.4746				7.1		30.0			
2-Butanone (MEK)	+++++ 0.6582	+++++ 0.6786	+++++ 0.6042	0.7318 0.5890	0.5994 0.6544	Ave		0.6451				8.0		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1 Analy Batch No.: 42222

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2020 14:01 Calibration End Date: 08/29/2020 00:02 Calibration ID: 2588

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Hexane	+++++ 0.9916	+++++ 0.9670	+++++ 0.9389	1.0579 0.8854	0.9660 0.9985	Ave		0.9722				5.5		30.0			
cis-1,2-Dichloroethene	+++++ 1.4151	1.8687 1.4034	1.9769 1.3567	1.6141 1.2253	1.4188 1.4000	Ave		1.5199				16.5		30.0			
Ethyl acetate	+++++ 3.3043	+++++ 3.4449	+++++ 3.2179	3.2448 2.9014	3.0505 3.4322	Ave		3.2280				6.1		30.0			
Chloroform	+++++ 2.8302	3.4065 2.8080	3.4563 2.6266	3.0176 2.3841	2.7318 2.7371	Ave		2.8887				12.2		30.0			
Tetrahydrofuran	+++++ 1.6540	+++++ 1.6863	1.7958 1.5310	1.8290 1.4025	1.7268 1.6005	Ave		1.6533				8.5		30.0			
1,1,1-Trichloroethane	+++++ 2.7253	+++++ 2.6891	3.0889 2.5963	3.1076 2.3440	2.8099 2.7095	Ave		2.7588				9.1		30.0			
1,2-Dichloroethane	+++++ 0.3129	0.3269 0.3151	0.3761 0.3025	0.3448 0.2790	0.2869 0.3375	Ave		0.3202				9.4		30.0			
1-Butanol	+++++ 0.1532	+++++ 0.1843	+++++ 0.1684	+++++ 0.1559	0.1705 0.1980	Ave		0.1717				9.9		30.0			
Cyclohexane	+++++ 0.1134	+++++ 0.1175	+++++ 0.1162	0.1299 0.1083	0.1109 0.1320	Ave		0.1183				7.8		30.0			
Benzene	+++++ 0.8098	+++++ 0.8066	0.9347 0.8056	0.8958 0.7460	0.8119 0.9019	Ave		0.8390				7.6		30.0			
Carbon tetrachloride	0.6680 0.5386	0.5496 0.3919	0.6184 0.5641	0.6065 0.3389	0.5810 0.5543	Ave		0.5411				18.7		30.0			
2,3-Dimethylpentane	+++++ 0.1693	+++++ 0.1780	0.2366 0.1701	0.1907 0.1592	0.1833 0.1852	Ave		0.1840				12.8		30.0			
Thiophene	0.5188 0.4569	0.5575 0.4727	0.5254 0.4550	0.4783 0.4180	0.4549 0.5011	Ave		0.4839				8.6		30.0			
2,2,4-Trimethylpentane	+++++ 1.2664	1.5195 1.2620	1.5640 1.2273	1.4197 1.1562	1.2339 1.3930	Ave		1.3380				10.6		30.0			
Heptane	+++++ 0.2710	+++++ 0.2631	+++++ 0.2624	0.2963 0.2501	0.2673 0.2952	Ave		0.2722				6.4		30.0			
1,2-Dichloropropane	+++++ 0.3177	+++++ 0.3066	0.3645 0.2952	0.3483 0.2774	0.3160 0.3298	Ave		0.3195				8.8		30.0			
Trichloroethene	0.4497 0.3926	0.5298 0.3879	0.4481 0.3687	0.4188 0.3827	0.3813 0.4108	Ave		0.4170				11.6		30.0			
Dibromomethane	+++++ 0.3725	+++++ 0.3485	0.4057 0.3337	0.3569 0.3152	0.3309 0.3921	Ave		0.3569				8.8		30.0			
Bromodichloromethane	+++++ 0.5806	0.6048 0.5864	0.6525 0.5848	0.6050 0.5363	0.6066 0.6685	Ave		0.6028				6.5		30.0			
1,4-Dioxane	+++++ 0.1193	+++++ 0.1472	+++++ 0.1364	0.1623 0.1262	0.1286 0.1438	Ave		0.1377				10.7		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1 Analy Batch No.: 42222

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2020 14:01 Calibration End Date: 08/29/2020 00:02 Calibration ID: 2588

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Methyl methacrylate	+++++ 0.3762	+++++ 0.3852	+++++ 0.3799	0.3616 0.3656	0.3544 0.4380	Ave		0.3801				7.3		30.0			
Methylcyclohexane	+++++ 0.4802	+++++ 0.4840	0.5216 0.4655	0.5248 0.4501	0.4901 0.5293	Ave		0.4932				5.9		30.0			
4-Methyl-2-pentanone (MIBK)	+++++ 0.7725	+++++ 0.7853	0.7472 0.7464	0.7384 0.7266	0.7651 0.8871	Ave		0.7711				6.6		30.0			
cis-1,3-Dichloropropene	+++++ 0.4190	0.4401 0.4418	0.4007 0.4344	0.4131 0.4161	0.3920 0.5123	Ave		0.4299				8.2		30.0			
trans-1,3-Dichloropropene	+++++ 0.4258	0.4704 0.4577	0.4391 0.4665	0.3729 0.4381	0.4085 0.5148	Ave		0.4438				9.1		30.0			
Toluene	1.5227 1.2166	1.4950 1.1968	1.4220 1.2049	1.2887 1.1262	1.2065 1.2431	Ave		1.2923				10.7		30.0			
1,1,2-Trichloroethane	+++++ 0.3841	0.4554 0.3772	0.4175 0.3814	0.3831 0.3370	0.3990 0.3844	Ave		0.3910				8.2		30.0			
2-Hexanone	+++++ 0.3988	+++++ 0.4064	+++++ 0.4116	0.3451 0.3796	0.3498 0.4469	Ave		0.3912				9.2		30.0			
C8 Range	+++++ 2.9679	+++++ 2.9908	+++++ 2.8076	3.1426 2.8844	2.9568 3.5063	Ave		3.0366				7.6		30.0			
Octane	+++++ 0.3405	+++++ 0.3568	0.4173 0.3457	0.3796 0.3306	0.3316 0.3795	Ave		0.3602				8.3		30.0			
Dibromochloromethane	0.7815 0.7039	0.9506 0.7884	0.8680 0.8169	0.7735 0.6994	0.7833 0.8665	Ave		0.8032				9.5		30.0			
1,2-Dibromoethane (EDB)	0.7695 0.6724	0.7671 0.6886	0.6946 0.6890	0.6792 0.6397	0.6444 0.7566	Ave		0.7001				6.9		30.0			
Tetrachloroethene	0.4610 0.4410	0.5741 0.4449	0.5821 0.4318	0.4698 0.3965	0.4838 0.4631	Ave		0.4748				12.5		30.0			
Chlorobenzene	+++++ 0.9237	1.1167 0.9513	1.1452 0.9260	0.9890 0.8674	0.9522 1.0344	Ave		0.9896				9.4		30.0			
Ethylbenzene	+++++ 1.5474	1.8237 1.5917	1.6932 1.5793	1.7106 1.4790	1.5485 1.7595	Ave		1.6370				7.0		30.0			
m-Xylene & p-Xylene	+++++ 1.1650	1.4009 1.2117	1.3095 1.2299	1.2166 1.1594	1.1245 1.4158	Ave		1.2481				8.4		30.0			
Nonane	+++++ 0.7139	0.7828 0.7333	0.7824 0.7708	0.7143 0.7329	0.6910 0.9372	Ave		0.7621				9.6		30.0			
Bromoform	+++++ 0.5881	+++++ 0.8951	0.8517 0.9880	0.8166 0.8099	0.7994 1.2274	Ave		0.8720				20.9		30.0			
Styrene	1.0335 0.8845	0.9510 0.9122	0.9533 0.9157	0.7994 0.8265	0.8445 0.9404	Ave		0.9061				7.7		30.0			
o-Xylene	1.4960 1.2289	1.4610 1.2425	1.3820 1.2551	1.2803 1.1235	1.1730 1.2844	Ave		1.2927				9.3		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1 Analy Batch No.: 42222

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2020 14:01 Calibration End Date: 08/29/2020 00:02 Calibration ID: 2588

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
1,1,2,2-Tetrachloroethane	+++++ 1.0569	1.1258 1.0810	1.0582 1.0709	1.0127 0.8626	1.0351 1.1717	Ave		1.0528				8.1		30.0			
1,2,3-Trichloropropane	+++++ 0.2703	+++++ 0.2851	0.3103 0.2824	0.3054 0.2539	0.2684 0.3047	Ave		0.2850				7.2		30.0			
Isopropylbenzene	+++++ 1.7794	2.0621 1.8117	1.9639 1.8078	1.7919 1.6382	1.7608 1.9665	Ave		1.8425				7.1		30.0			
Propylbenzene	+++++ 0.5297	0.5537 0.5354	0.5514 0.5431	0.5304 0.4982	0.5056 0.6091	Ave		0.5396				5.9		30.0			
2-Chlorotoluene	+++++ 0.4899	+++++ 0.4996	0.5244 0.4913	0.4923 0.4552	0.4929 0.5290	Ave		0.4968				4.6		30.0			
4-Ethyltoluene	1.9783 1.7908	1.9444 1.8488	1.8701 1.8736	1.7237 1.7256	1.7106 2.0878	Ave		1.8554				6.6		30.0			
1,3,5-Trimethylbenzene	0.8183 0.7768	0.9198 0.7933	0.8531 0.7968	0.8230 0.7077	0.7919 0.8664	Ave		0.8147				7.0		30.0			
Alpha Methyl Styrene	+++++ 0.7042	0.6979 0.7563	0.7015 0.7933	0.6041 0.7034	0.6763 0.9270	Ave		0.7293				12.4		30.0			
Decane	0.8780 0.9428	0.9411 0.9986	0.9429 1.0406	0.8645 0.9692	0.9119 1.2074	Ave		0.9697				10.2		30.0			
tert-Butylbenzene	2.0483 1.7167	1.8895 1.7502	1.7434 1.8038	1.6991 1.6353	1.6484 2.1972	Ave		1.8132				10.0		30.0			
1,2,4-Trimethylbenzene	1.3114 1.4930	1.5304 1.5670	1.5493 1.6179	1.4642 1.4653	1.4483 1.8995	Ave		1.5346				10.0		30.0			
sec-Butylbenzene	2.0774 2.2811	2.4783 2.3979	2.3657 2.5098	2.2577 2.3164	2.2150 3.1003	Ave		2.4000				11.5		30.0			
1,3-Dichlorobenzene	1.1715 1.1150	1.0596 1.1693	1.2256 1.1751	0.9666 1.1048	1.0669 1.5638	Ave		1.1618				13.7		30.0			
Benzyl chloride	+++++ 1.0678	+++++ 1.2909	1.0657 1.3483	0.9789 1.3285	0.9689 +++++	Ave		1.1499				14.5		30.0			
1,4-Dichlorobenzene	+++++ 1.0968	1.2433 1.1389	1.1419 1.1582	1.0527 1.0585	1.0058 1.4055	Ave		1.1446				10.5		30.0			
4-Isopropyltoluene	1.9776 1.9680	1.9472 2.0484	1.9781 2.0769	1.8973 1.8590	1.8917 2.3582	Ave		2.0002				7.1		30.0			
1,2,3-Trimethylbenzene	+++++ 1.5094	+++++ 1.5689	1.5858 1.6363	1.4419 1.4574	1.4603 1.7475	QuaF		1.3574	0.0238707						0.9980		0.9900
1,2-Dichlorobenzene	1.4030 1.1143	1.3072 1.1632	1.1104 1.1739	1.0866 1.0794	1.0926 1.5622	Ave		1.2093				13.5		30.0			
Indane	1.6506 1.5307	1.6808 1.6026	1.5876 1.6320	1.4412 1.4820	1.4669 2.0435	Ave		1.6118				10.7		30.0			
Indene	+++++ 1.2483	+++++ 1.3699	+++++ 1.4182	1.0599 1.1927	1.1302 1.7651	Ave		1.3120				18.0		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1 Analy Batch No.: 42222

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2020 14:01 Calibration End Date: 08/29/2020 00:02 Calibration ID: 2588

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Butylbenzene	+++++ 1.9203	+++++ 2.0602	1.8296 2.1045	1.6609 1.9023	1.7395 2.4978	Ave		1.9644				13.3		30.0			
Undecane	+++++ 1.1033	+++++ 1.1941	+++++ 1.2678	+++++ 1.1545	0.9439 1.5855	Ave		1.2082				17.7		30.0			
1,2-Dibromo-3-Chloropropane	+++++ 0.4915	+++++ 0.6600	0.4513 0.6724	0.4935 0.6041	0.5134 0.7710	Ave		0.5821				19.3		30.0			
1,2,4,5-Tetramethylbenzene	+++++ 1.8110	+++++ 1.9043	1.6911 1.9685	1.5337 1.7952	1.6140 2.4458	Ave		1.8455				15.3		30.0			
Dodecane	+++++ 0.9514	+++++ 1.1673	+++++ 1.2766	+++++ 1.1566	0.8186 +++++	Ave		1.0741				17.2		30.0			
1,2,4-Trichlorobenzene	1.1514 0.9610	0.9721 1.0561	0.8105 1.0666	0.7225 0.9662	0.8074 1.3675	Ave		0.9881				19.0		30.0			
Naphthalene	2.3112 1.8770	1.5627 2.1846	1.8704 2.1078	1.5305 1.7941	1.7672 2.2522	Ave		1.9258				14.4		30.0			
Hexachlorobutadiene	1.2118 1.0888	1.3758 1.1207	1.3250 1.0345	1.0426 0.8985	1.0677 1.2938	Ave		1.1459				13.2		30.0			
1,2,3-Trichlorobenzene	+++++ 0.9354	1.0893 1.0383	1.2290 0.9483	0.8446 0.7775	0.9291 0.9989	Ave		0.9767				13.7		30.0			
2-Methylnaphthalene	+++++ 0.6876	+++++ 1.2166	+++++ 1.5188	+++++ 1.5680	0.6373 +++++	Ave		1.1257				39.5		50.0			
1-Methylnaphthalene	+++++ 1.2225	+++++ 1.8713	1.6323 2.0880	1.0166 1.9880	1.3245 +++++	Ave		1.5919				25.9		50.0			
4-Bromofluorobenzene (Surr)	0.5970 0.6379	0.6102 0.6606	0.5988 0.7097	0.6120 0.6779	0.6321 0.6811	Ave		0.6418				6.1		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1 Analy Batch No.: 42222

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2020 14:01 Calibration End Date: 08/29/2020 00:02 Calibration ID: 2588

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 140-42222/9	RH28IC01.D
Level 2	IC 140-42222/10	RH28IC02.D
Level 3	IC 140-42222/11	RH28IC03.D
Level 4	IC 140-42222/12	RH28IC04.D
Level 5	IC 140-42222/13	RH28IC05.D
Level 6	IC 140-42222/14	RH28IC06.D
Level 7	ICIS 140-42222/15	RH28IC07.D
Level 8	IC 140-42222/7	RH28IC08.D
Level 9	IC 140-42222/5	RH28IC09.D
Level 10	IC 140-42222/3	RH28IC10X.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
Chlorodifluoromethane	CBM	Ave	+++++ 127298	+++++ 265191	12116 650155	22349 1304143	49801 2275714	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Propene	CBM	Ave	+++++ 65227	+++++ 136966	+++++ 322982	+++++ 580652	25376 1140577	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
Dichlorodifluoromethane	CBM	Ave	+++++ 103463	+++++ 228663	8501 535510	21069 555502	36786 1548541	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Chloromethane	CBM	Ave	+++++ 25367	+++++ 50211	+++++ 116889	4150 200994	9725 395335	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,2-Dichloro-1,1,2,2-tetrafluoroethane	CBM	Ave	+++++ 144116	+++++ 306061	13034 701732	25710 975066	53398 2235145	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Vinyl chloride	CBM	Lin1	+++++ 84224	4006 174448	7353 382291	13267 671429	32086 1314670	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,3-Butadiene	CBM	Ave	+++++ 65078	+++++ 138107	+++++ 309504	10249 529338	23722 1021294	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Butane	CBM	Ave	+++++ 139349	+++++ 290488	+++++ 620005	22943 1083279	52540 2060495	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Bromomethane	CBM	Lin2	+++++ 85297	+++++ 173948	8792 406202	14685 699062	33010 1345114	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Chloroethane	CBM	Lin2	+++++ 38665	+++++ 85082	4177 193624	6827 328258	16037 637533	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Ethanol	CBM	Lin1	+++++ 221455	+++++ 562595	25506 1222004	33858 2667054	90649 4145838	+++++ 5.00	+++++ 10.0	0.400 20.0	0.800 40.0	2.00 80.0
Vinyl bromide	CBM	Ave	+++++ 74856	+++++ 156474	8061 371798	13473 651128	28263 1263816	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Methylbutane	CBM	Ave	+++++ 99751	+++++ 205009	9635 463903	17708 808457	41000 1588785	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Trichlorofluoromethane	CBM	Ave	+++++ 191450	9216 392725	17978 895318	31876 1602992	77624 3179856	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1 Analy Batch No.: 42222

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2020 14:01 Calibration End Date: 08/29/2020 00:02 Calibration ID: 2588

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
Acrolein	CBM	Ave	+++++ 16296	+++++ 36292	+++++ 100565	+++++ 172897	8255 361684	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
Acetonitrile	CBM	Ave	+++++ 25442	+++++ 58184	+++++ 141775	+++++ 261561	10922 520199	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
Acetone	CBM	Ave	+++++ 118879	+++++ 221734	+++++ 502478	16535 1075673	45535 1707400	+++++ 3.00	+++++ 6.00	+++++ 12.0	0.480 24.0	1.20 48.0
Pentane	CBM	Ave	+++++ 11470	+++++ 24417	+++++ 62271	+++++ 100157	4682 202182	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
Isopropyl alcohol	CBM	Ave	+++++ 273089	+++++ 635105	+++++ 1540486	46204 2587659	113852 5130084	+++++ 3.00	+++++ 6.00	+++++ 12.0	0.480 24.0	1.20 48.0
Ethyl ether	CBM	Ave	+++++ 83338	+++++ 168072	+++++ 408518	15799 702368	33932 1434919	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,1-Dichloroethene	CBM	Ave	+++++ 65097	3927 131261	5907 343522	11583 584264	26172 1180876	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Acrylonitrile	CBM	Ave	+++++ 39929	+++++ 76309	+++++ 223695	5801 393674	15766 839327	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
tert-Butyl alcohol	CBM	Ave	+++++ 111576	+++++ 251800	+++++ 630225	20684 1087876	45427 2199065	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,1,2-Trichloro-1,2,2-trifluoroetha ne	CBM	Ave	+++++ 145650	7062 298238	13392 766832	25672 1315291	57821 2661840	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Methylene Chloride	CBM	Ave	+++++ 57015	+++++ 111917	+++++ 296909	10241 526013	24417 1041211	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
3-Chloropropene	CBM	Lin2	+++++ 67588	+++++ 122895	9255 341550	13794 576055	27338 1250194	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Carbon disulfide	CBM	Ave	+++++ 184361	+++++ 359151	16549 941650	30725 1600962	74887 3264452	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
trans-1,2-Dichloroethene	CBM	Ave	+++++ 65564	+++++ 125032	6013 334887	9549 591662	24973 1238959	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Methylpentane	CBM	Ave	+++++ 149522	+++++ 302486	15740 759801	26179 1323151	59564 2751716	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Methyl tert-butyl ether	CBM	Ave	+++++ 161027	+++++ 319038	+++++ 808171	28229 1382456	63335 2861968	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,1-Dichloroethane	CBM	Ave	+++++ 109543	+++++ 218207	9835 562108	20284 972743	45826 1980304	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Vinyl acetate	CBM	Ave	+++++ 164791	+++++ 350811	13230 947376	25465 1647589	63440 3605976	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Butanone (MEK)	CBM	Ave	+++++ 32092	+++++ 66602	+++++ 159615	5655 299060	11764 593341	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Hexane	CBM	Ave	+++++ 48352	+++++ 94902	+++++ 248032	8175 449542	18958 905328	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
cis-1,2-Dichloroethene	CBM	Ave	+++++ 69003	3783 137736	7459 358383	12473 622149	27844 1269311	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1 Analy Batch No.: 42222

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2020 14:01 Calibration End Date: 08/29/2020 00:02 Calibration ID: 2588

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
Ethyl acetate	CBM	Ave	+++++ 161118	+++++ 338095	+++++ 850049	25075 1473148	59867 3111841	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Chloroform	CBM	Ave	+++++ 138005	6896 275584	13041 693845	23319 1210475	53612 2481600	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Tetrahydrofuran	CBM	Ave	+++++ 80650	+++++ 165501	6776 404434	14134 712114	33889 1451125	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,1,1-Trichloroethane	CBM	Ave	+++++ 132887	+++++ 263917	11655 685853	24015 1190125	55145 2456565	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2-Dichloroethane	DFBZ	Ave	+++++ 74410	3317 151483	7149 377659	13273 669529	27571 1378531	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1-Butanol	DFBZ	Ave	+++++ 36431	+++++ 88621	+++++ 210201	+++++ 374149	16387 808642	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
Cyclohexane	DFBZ	Ave	+++++ 26969	+++++ 56508	+++++ 145010	5002 259931	10658 539211	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Benzene	DFBZ	Ave	+++++ 192558	+++++ 387828	17766 1005771	34483 1789877	78024 3684390	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Carbon tetrachloride	DFBZ	Ave	3577 128080	5576 188413	11755 704270	23349 813090	55838 2264347	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2,3-Dimethylpentane	DFBZ	Ave	+++++ 40258	+++++ 85591	4497 212342	7341 381971	17614 756504	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Thiophene	DFBZ	Ave	2778 108649	5656 227296	9987 568076	18414 1002834	43711 2047191	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2,2,4-Trimethylpentane	DFBZ	Ave	+++++ 301136	15416 606757	29729 1532236	54652 2774121	118580 5690429	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Heptane	DFBZ	Ave	+++++ 64445	+++++ 126478	+++++ 327659	11408 600087	25685 1206014	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,2-Dichloropropane	DFBZ	Ave	+++++ 75552	+++++ 147432	6928 368593	13409 665617	30367 1347228	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Trichloroethene	DFBZ	Ave	2408 93344	5375 186495	8518 460313	16123 918209	36639 1678146	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Dibromomethane	DFBZ	Ave	+++++ 88564	+++++ 167543	7712 416603	13741 756385	31799 1601897	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Bromodichloromethane	DFBZ	Ave	+++++ 138050	6136 281919	12403 730160	23290 1286733	58298 2730666	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,4-Dioxane	DFBZ	Ave	+++++ 28356	+++++ 70796	+++++ 170270	6249 302822	12357 587447	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Methyl methacrylate	DFBZ	Ave	+++++ 89454	+++++ 185193	+++++ 474303	13921 877144	34057 1789286	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Methylcyclohexane	DFBZ	Ave	+++++ 114174	+++++ 232691	9915 581197	20204 1079994	47102 2162335	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
4-Methyl-2-pentanone (MIBK)	DFBZ	Ave	+++++ 183690	+++++ 377560	14203 931901	28426 1743415	73528 3624018	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1 Analy Batch No.: 42222

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2020 14:01 Calibration End Date: 08/29/2020 00:02 Calibration ID: 2588

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
cis-1,3-Dichloropropene	DFBZ	Ave	+++++ 99621	4465 212426	7616 542319	15902 998372	37667 2092713	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
trans-1,3-Dichloropropene	CBZd 5	Ave	+++++ 81690	3725 178293	6617 458192	11410 892213	30968 1882319	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Toluene	CBZd 5	Ave	6500 233387	11839 466172	21430 1183470	39429 2293689	91467 4545670	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,1,2-Trichloroethane	CBZd 5	Ave	+++++ 73682	3606 146935	6292 374576	11721 686436	30249 1405700	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Hexanone	CBZd 5	Ave	+++++ 76512	+++++ 158306	+++++ 404266	10559 773120	26516 1634007	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
C8 Range	DFBZ	Ave	+++++ 705715	+++++ 1437970	+++++ 3505252	120977 6920701	284144 14323556	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Octane	CBZd 5	Ave	+++++ 65320	+++++ 138962	6289 339542	11613 673298	25142 1387808	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Dibromochloromethane	CBZd 5	Ave	3336 135038	7528 307102	13081 802340	23664 1424458	59382 3168351	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2-Dibromoethane (EDB)	CBZd 5	Ave	3285 128985	6075 268235	10468 676768	20780 1302791	48853 2766666	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Tetrachloroethene	CBZd 5	Ave	1968 84607	4546 173290	8773 424142	14375 807488	36680 1693538	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Chlorobenzene	CBZd 5	Ave	+++++ 177202	8843 370564	17259 909511	30260 1766662	72187 3782505	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Ethylbenzene	CBZd 5	Ave	+++++ 296847	14442 619977	25517 1551175	52336 3012093	117394 6434077	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
m-Xylene & p-Xylene	CBZd 5	Ave	+++++ 446971	22187 943918	39468 2416062	74443 4722635	170497 10354326	+++++ 2.00	0.0800 4.00	0.160 8.00	0.320 16.0	0.800 32.0
Nonane	CBZd 5	Ave	+++++ 136944	6199 285635	11791 757072	21853 1492619	52388 3426882	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Bromoform	CBZd 5	Ave	+++++ 112819	+++++ 348652	12835 970471	24984 1649540	60606 4488198	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Styrene	CBZd 5	Ave	4412 169678	7531 355324	14366 899378	24458 1683260	64024 3438805	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
o-Xylene	CBZd 5	Ave	6386 235739	11570 483966	20827 1232727	39171 2288199	88929 4696734	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,1,2,2-Tetrachloroethane	CBZd 5	Ave	+++++ 202741	8915 421084	15948 1051867	30983 1756745	78471 4284716	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2,3-Trichloropropane	CBZd 5	Ave	+++++ 51846	+++++ 111032	4676 277341	9345 517052	20345 1114033	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Isopropylbenzene	CBZd 5	Ave	+++++ 341357	16330 705690	29597 1775686	54823 3336387	133486 7190839	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Propylbenzene	CBZd 5	Ave	+++++ 101614	4385 208556	8310 533438	16229 1014657	38332 2227195	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1 Analy Batch No.: 42222

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2020 14:01 Calibration End Date: 08/29/2020 00:02 Calibration ID: 2588

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
2-Chlorotoluene	CBZd 5	Ave	+++++ 93983	+++++ 194607	7903 482530	15062 927008	37371 1934483	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
4-Ethyltoluene	CBZd 5	Ave	8445 343535	15398 720149	28183 1840276	52736 3514356	129680 7634335	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,3,5-Trimethylbenzene	CBZd 5	Ave	3493 149024	7284 309009	12856 782651	25181 1441235	60035 3168156	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Alpha Methyl Styrene	CBZd 5	Ave	+++++ 135090	5527 294594	10571 779234	18483 1432499	51272 3389797	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Decane	CBZd 5	Ave	3748 180855	7453 388959	14210 1022123	26449 1973903	69136 4415206	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
tert-Butylbenzene	CBZd 5	Ave	8744 329329	14963 681711	26273 1771724	51984 3330576	124968 8034487	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2,4-Trimethylbenzene	CBZd 5	Ave	5598 286404	12119 610351	23348 1589105	44796 2984296	109799 6945966	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
sec-Butylbenzene	CBZd 5	Ave	8868 437590	19626 934003	35652 2465129	69073 4717663	167919 11336996	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,3-Dichlorobenzene	CBZd 5	Ave	5001 213903	8391 455458	18470 1154226	29573 2250010	80880 5718247	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Benzyl chloride	CBZd 5	Ave	+++++ 204834	+++++ 502843	16061 1324267	29950 2705606	73450 +++++	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
1,4-Dichlorobenzene	CBZd 5	Ave	+++++ 210409	9846 443624	17209 1137617	32208 2155852	76253 5139306	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
4-Isopropyltoluene	CBZd 5	Ave	8442 377534	15420 797863	29811 2039984	58048 3785986	143416 8623233	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2,3-Trimethylbenzene	CBZd 5	QuaF	+++++ 289551	+++++ 611095	23899 1607154	44115 2968221	110706 6390147	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2-Dichlorobenzene	CBZd 5	Ave	5989 213760	10352 453097	16734 1152986	33245 2198253	82831 5712566	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Indane	CBZd 5	Ave	7046 293635	13310 624224	23925 1602979	44093 3018326	111206 7472425	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Indene	CBZd 5	Ave	+++++ 239465	+++++ 533579	+++++ 1393000	32427 2429019	85683 6454449	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Butylbenzene	CBZd 5	Ave	+++++ 368369	+++++ 802465	27573 2067016	50815 3874165	131876 9133646	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Undecane	CBZd 5	Ave	+++++ 211658	+++++ 465102	+++++ 1245231	+++++ 2351229	71560 5797790	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
1,2-Dibromo-3-Chloropropane	CBZd 5	Ave	+++++ 94295	+++++ 257066	6801 660392	15099 1230284	38919 2819167	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2,4,5-Tetramethylbenzene	CBZd 5	Ave	+++++ 347414	+++++ 741766	25485 1933526	46923 3656188	122363 8943677	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Dodecane	CBZd 5	Ave	+++++ 182504	+++++ 454692	+++++ 1253840	+++++ 2355654	62063 +++++	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 +++++

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1 Analy Batch No.: 42222

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2020 14:01 Calibration End Date: 08/29/2020 00:02 Calibration ID: 2588

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
1,2,4-Trichlorobenzene	CBZd5	Ave	4915 184352	7698 411351	12214 1047600	22105 1967788	61208 5000474	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Naphthalene	CBZd5	Ave	9866 360065	12375 850922	28187 2070294	46825 3653921	133974 8235513	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Hexachlorobutadiene	CBZd5	Ave	5173 208874	10895 436547	19968 1016101	31897 1829979	80947 4731090	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2,3-Trichlorobenzene	CBZd5	Ave	+++++ 179439	8626 404438	18521 931429	25842 1583400	70435 3652527	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Methylnaphthalene	CBZd5	Ave	+++++ 131911	+++++ 473896	+++++ 1491875	+++++ 3193576	48315 +++++	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 +++++
1-Methylnaphthalene	CBZd5	Ave	+++++ 234530	+++++ 728929	24600 2050918	31105 4049020	100421 +++++	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
4-Bromofluorobenzene (Surr)	CBZd5	Ave	591232 567801	560541 596993	523427 808580	543030 800804	555919 722319	4.64 4.64	4.64 4.64	4.64 4.64	4.64 4.64	4.64 4.64

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD
Lin2 = Linear 1/conc^2 ISTD
QuaF = Quadratic ISTD forced zero

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1 Analy Batch No.: 42222

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2020 14:01 Calibration End Date: 08/29/2020 00:02 Calibration ID: 2588

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 140-42222/9	RH28IC01.D
Level 2	IC 140-42222/10	RH28IC02.D
Level 3	IC 140-42222/11	RH28IC03.D
Level 4	IC 140-42222/12	RH28IC04.D
Level 5	IC 140-42222/13	RH28IC05.D
Level 6	IC 140-42222/14	RH28IC06.D
Level 7	ICIS 140-42222/15	RH28IC07.D
Level 8	IC 140-42222/7	RH28IC08.D
Level 9	IC 140-42222/5	RH28IC09.D
Level 10	IC 140-42222/3	RH28IC10X.D

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
Chlorodifluoromethane	+++++	+++++	19.5						50			
Propene	+++++	+++++	+++++	+++++	1.4						50	
Dichlorodifluoromethane	+++++	+++++	11.7						50			
Chloromethane	+++++	+++++	+++++	12.6						50		
1,2-Dichloro-1,1,2,2-tetrafluoroethane	+++++	+++++	22.2						50			
Vinyl chloride	+++++	-36.1						50				
1,3-Butadiene	+++++	+++++	+++++	7.7						50		
Butane	+++++	+++++	+++++	14.1						50		
Bromomethane	+++++	+++++	0.4						50			
Chloroethane	+++++	+++++	1.2						50			
Ethanol	+++++	+++++	17.8						50			
Vinyl bromide	+++++	+++++	36.4						50			
2-Methylbutane	+++++	+++++	26.3						50			
Trichlorofluoromethane	+++++	15.8						50				

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1 Analy Batch No.: 42222

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2020 14:01 Calibration End Date: 08/29/2020 00:02 Calibration ID: 2588

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
Acrolein	+++++	+++++	+++++	+++++	12.4						50	
Acetonitrile	+++++	+++++	+++++	+++++	1.3						50	
Acetone	+++++	+++++	+++++	-0.6						80		
Pentane	+++++	+++++	+++++	+++++	3.8						50	
Isopropyl alcohol	+++++	+++++	+++++	3.5						50		
Ethyl ether	+++++	+++++	+++++	22.2						50		
1,1-Dichloroethene	+++++	36.8						50				
Acrylonitrile	+++++	+++++	+++++	-7.8						50		
tert-Butyl alcohol	+++++	+++++	+++++	11.5						50		
1,1,2-Trichloro-1,2,2-trifluoroethane	+++++	13.1						50				
Methylene Chloride	+++++	+++++	+++++	13.3						80		
3-Chloropropene	+++++	+++++	2.7						50			
Carbon disulfide	+++++	+++++	17.2						50			
trans-1,2-Dichloroethene	+++++	+++++	21.2						50			
2-Methylpentane	+++++	+++++	32.1						50			
Methyl tert-butyl ether	+++++	+++++	+++++	14.3						50		
1,1-Dichloroethane	+++++	+++++	14.2						50			
Vinyl acetate	+++++	+++++	0.9						50			
2-Butanone (MEK)	+++++	+++++	+++++	13.4						50		
Hexane	+++++	+++++	+++++	8.8						50		
cis-1,2-Dichloroethene	+++++	23.0						50				

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1 Analy Batch No.: 42222

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2020 14:01 Calibration End Date: 08/29/2020 00:02 Calibration ID: 2588

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
Ethyl acetate	+++++	+++++	+++++	0.5						50		
Chloroform	+++++	17.9						50				
Tetrahydrofuran	+++++	+++++	8.6						50			
1,1,1-Trichloroethane	+++++	+++++	12.0						50			
1,2-Dichloroethane	+++++	2.1						50				
1-Butanol	+++++	+++++	+++++	+++++	-0.7						50	
Cyclohexane	+++++	+++++	+++++	9.8						50		
Benzene	+++++	+++++	11.4						50			
Carbon tetrachloride	23.4						50					
2,3-Dimethylpentane	+++++	+++++	28.5						50			
Thiophene	7.2						50					
2,2,4-Trimethylpentane	+++++	13.6						50				
Heptane	+++++	+++++	+++++	8.9						50		
1,2-Dichloropropane	+++++	+++++	14.1						50			
Trichloroethene	7.8						50					
Dibromomethane	+++++	+++++	13.7						50			
Bromodichloromethane	+++++	0.3						50				
1,4-Dioxane	+++++	+++++	+++++	17.9						50		
Methyl methacrylate	+++++	+++++	+++++	-4.9						50		
Methylcyclohexane	+++++	+++++	5.8						50			
4-Methyl-2-pentanone (MIBK)	+++++	+++++	-3.1						50			

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1 Analy Batch No.: 42222

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2020 14:01 Calibration End Date: 08/29/2020 00:02 Calibration ID: 2588

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
cis-1,3-Dichloropropene	+++++	2.4						50				
trans-1,3-Dichloropropene	+++++	6.0						50				
Toluene	17.8						50					
1,1,2-Trichloroethane	+++++	16.5						50				
2-Hexanone	+++++	+++++	+++++	-11.8						50		
Octane	+++++	+++++	15.9						50			
Dibromochloromethane	-2.7						50					
1,2-Dibromoethane (EDB)	9.9						50					
Tetrachloroethene	-2.9						50					
Chlorobenzene	+++++	12.8						50				
Ethylbenzene	+++++	11.4						50				
m-Xylene & p-Xylene	+++++	12.2						50				
Nonane	+++++	2.7						50				
Bromoform	+++++	+++++	-2.3						50			
Styrene	14.1						50					
o-Xylene	15.7						50					
1,1,2,2-Tetrachloroethane	+++++	6.9						50				
1,2,3-Trichloropropane	+++++	+++++	8.9						50			
Isopropylbenzene	+++++	11.9						50				
Propylbenzene	+++++	2.6						50				
2-Chlorotoluene	+++++	+++++	5.6						50			

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1 Analy Batch No.: 42222

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2020 14:01 Calibration End Date: 08/29/2020 00:02 Calibration ID: 2588

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
4-Ethyltoluene	6.6						50					
1,3,5-Trimethylbenzene	0.4						50					
Alpha Methyl Styrene	+++++	-4.3						50				
Decane	-9.5						50					
tert-Butylbenzene	13.0						50					
1,2,4-Trimethylbenzene	-14.5						50					
sec-Butylbenzene	-13.4						50					
1,3-Dichlorobenzene	0.8						50					
Benzyl chloride	+++++	+++++	-7.3	+++++					50			
1,4-Dichlorobenzene	+++++	8.6						50				
4-Isopropyltoluene	-1.1						50					
1,2,3-Trimethylbenzene	+++++	+++++	16.6						50			
1,2-Dichlorobenzene	16.0						50					
Indane	2.4						50					
Indene	+++++	+++++	+++++	-19.2						50		
Butylbenzene	+++++	+++++	-6.9						50			
Undecane	+++++	+++++	+++++	+++++	-21.9						50	
1,2-Dibromo-3-Chloropropane	+++++	+++++	-22.5						50			
1,2,4,5-Tetramethylbenzene	+++++	+++++	-8.4						50			
Dodecane	+++++	+++++	+++++	+++++ +++++	-23.8						50	
1,2,4-Trichlorobenzene	16.5						50					

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1 Analy Batch No.: 42222

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2020 14:01 Calibration End Date: 08/29/2020 00:02 Calibration ID: 2588

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
Naphthalene	20.0						80					
Hexachlorobutadiene	5.7						50					
1,2,3-Trichlorobenzene	+++++	11.5						50				
2-Methylnaphthalene	+++++	+++++	+++++	+++++ +++++	-43.4						80	
1-Methylnaphthalene	+++++	+++++	2.5	+++++					80			

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC10X.D
Lims ID: IC L10
Client ID:
Sample Type: IC Calib Level: 10
Inject. Date: 28-Aug-2020 14:01:30 ALS Bottle#: 15 Worklist Smp#: 3
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016425-003
Misc. Info.: 314600
Operator ID: HMT Instrument ID: MR
Sublist: chrom-MR_TO15*sub16

Method: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 31-Aug-2020 13:42:30 Calib Date: 29-Aug-2020 00:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1064

First Level Reviewer: barlozhetskayaa Date: 31-Aug-2020 13:34:14

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.301	8.283	0.018	97	271997	4.80	4.80	
* 2 1,4-Difluorobenzene	114	10.534	10.519	0.015	93	1225515	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.360	15.356	0.004	86	1097008	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.010	17.006	0.004	95	722319	4.64	4.92	
7 Propene	41	3.340	3.343	-0.003	98	1140577	16.0	15.8	
6 Chlorodifluoromethane	51	3.335	3.345	-0.010	99	2275714	16.0	14.9	
8 Dichlorodifluoromethane	85	3.389	3.390	-0.001	99	1548541	16.0	13.5	
9 Chloromethane	52	3.556	3.559	-0.003	97	395335	16.0	14.6	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.567	3.568	-0.001	93	2235145	16.0	14.0	
11 Acetaldehyde	44	3.707	3.709	-0.002	89	2901246	80.0	68.3	
12 Vinyl chloride	62	3.712	3.716	-0.004	99	1314670	16.0	16.1	
14 Butadiene	54	3.799	3.798	0.001	68	1021294	16.0	14.6	
13 Butane	43	3.799	3.799	0.000	86	2060495	16.0	14.0	
15 Bromomethane	94	4.095	4.094	0.001	98	1345114	16.0	15.3	
16 Chloroethane	64	4.225	4.221	0.004	89	637533	16.0	15.3	
17 Ethanol	31	4.359	4.345	0.014	99	4145838	80.0	76.0	
18 Vinyl bromide	106	4.510	4.502	0.008	96	1263816	16.0	14.2	
19 2-Methylbutane	43	4.548	4.547	0.001	94	1588785	16.0	13.9	
20 Trichlorofluoromethane	101	4.758	4.751	0.007	97	3179856	16.0	14.3	
21 Acrolein	56	4.775	4.775	0.000	93	361684	16.0	17.1	
22 Acetonitrile	40	4.856	4.841	0.015	99	520199	16.0	16.7	
23 Acetone	58	4.882	4.891	-0.009	99	1707400	48.0	42.0	
24 Pentane	72	4.963	4.960	0.003	97	202182	16.0	15.5	
25 Isopropyl alcohol	45	5.007	4.996	0.010	99	5130084	48.0	47.0	
26 Ethyl ether	31	5.131	5.143	-0.012	89	1434919	16.0	15.1	
27 1,1-Dichloroethene	96	5.438	5.430	0.008	97	1180876	16.0	14.7	
28 Acrylonitrile	53	5.557	5.548	0.009	94	839327	16.0	18.2	
29 2-Methyl-2-propanol	59	5.578	5.589	-0.011	96	2199065	16.0	16.2	
30 1,1,2-Trichloro-1,2,2-trifluoroe	101	5.610	5.603	0.007	96	2661840	16.0	15.2	
31 Methylene Chloride	84	5.783	5.768	0.015	97	1041211	16.0	15.7	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	5.794	5.782	0.012	97	1250194	16.0	17.8	
33 Carbon disulfide	76	5.929	5.921	0.008	98	3264452	16.0	15.4	
34 trans-1,2-Dichloroethene	96	6.576	6.561	0.015	95	1238959	16.0	16.6	
35 2-Methylpentane	43	6.586	6.579	0.007	95	2751716	16.0	15.4	
36 Methyl tert-butyl ether	73	6.694	6.716	-0.022	97	2861968	16.0	15.8	
37 1,1-Dichloroethane	63	6.996	6.977	0.019	99	1980304	16.0	15.3	
38 Vinyl acetate	43	7.104	7.100	0.004	99	3605976	16.0	18.3	
39 2-Butanone (MEK)	72	7.546	7.551	-0.005	97	593341	16.0	16.2	
40 Hexane	56	7.562	7.553	0.009	84	905328	16.0	16.4	
41 Isopropyl ether	45	7.724	7.736	-0.012	96	4258196	16.0	15.8	
42 cis-1,2-Dichloroethene	96	7.972	7.953	0.019	89	1269311	16.0	14.7	
43 Ethyl acetate	43	8.166	8.165	0.001	97	3111841	16.0	17.0	
44 Chloroform	83	8.323	8.300	0.023	94	2481600	16.0	15.2	
45 Tert-butyl ethyl ether	59	8.404	8.413	-0.009	98	3491851	16.0	15.8	
46 Tetrahydrofuran	42	8.700	8.722	-0.022	93	1451125	16.0	15.5	
47 1,1,1-Trichloroethane	97	9.337	9.320	0.017	95	2456565	16.0	15.7	
48 1,2-Dichloroethane	62	9.450	9.434	0.016	93	1378531	16.0	16.9	
50 Cyclohexane	69	9.941	9.928	0.013	86	539211	16.0	17.8	
51 Benzene	78	9.946	9.933	0.013	97	3684390	16.0	17.2	
49 n-Butanol	31	9.924	9.944	-0.020	80	808642	16.0	18.4	
52 Carbon tetrachloride	117	9.967	9.957	0.010	93	2264347	16.0	16.4	
53 2,3-Dimethylpentane	71	10.081	10.069	0.012	90	756504	16.0	16.1	
54 Thiophene	84	10.237	10.221	0.016	93	2047191	16.0	16.6	
55 Isooctane	57	10.755	10.745	0.010	96	5690429	16.0	16.7	
56 n-Heptane	71	11.154	11.139	0.015	96	1206014	16.0	17.4	
57 1,2-Dichloropropane	63	11.224	11.212	0.012	88	1347228	16.0	16.5	
58 Trichloroethene	130	11.262	11.251	0.011	96	1678146	16.0	15.8	
59 Dibromomethane	93	11.348	11.334	0.014	93	1601897	16.0	17.6	
60 Dichlorobromomethane	83	11.499	11.487	0.012	96	2730666	16.0	17.7	
61 1,4-Dioxane	88	11.510	11.532	-0.022	92	587447	16.0	16.7	
62 Methyl methacrylate	41	11.612	11.607	0.005	89	1789286	16.0	18.4	
63 Methylcyclohexane	83	12.054	12.043	0.011	93	2162335	16.0	17.2	
64 4-Methyl-2-pentanone (MIBK)	43	12.480	12.489	-0.009	99	3624018	16.0	18.4	
65 cis-1,3-Dichloropropene	75	12.534	12.528	0.006	97	2092713	16.0	19.1	
66 trans-1,3-Dichloropropene	75	13.251	13.241	0.010	95	1882319	16.0	18.6	
67 Toluene	91	13.370	13.360	0.010	92	4545670	16.0	15.4	
68 1,1,2-Trichloroethane	83	13.451	13.440	0.011	96	1405700	16.0	15.7	
69 2-Hexanone	58	13.845	13.853	-0.008	90	1634007	16.0	18.3	
70 n-Octane	85	14.082	14.077	0.005	93	1387808	16.0	16.9	
71 Chlorodibromomethane	129	14.157	14.148	0.009	97	3168351	16.0	17.3	
72 Ethylene Dibromide	107	14.449	14.441	0.008	96	2766666	16.0	17.3	
73 Tetrachloroethene	129	14.529	14.519	0.010	93	1693538	16.0	15.6	
74 Chlorobenzene	112	15.408	15.404	0.004	94	3782505	16.0	16.7	
75 2,3-Dimethylheptane	43	15.441	15.438	0.003	94	5035608	16.0	16.7	
76 Ethylbenzene	91	15.705	15.698	0.007	99	6434077	16.0	17.2	
77 m-Xylene & p-Xylene	91	15.867	15.863	0.004	98	10354326	32.0	36.3	
78 n-Nonane	57	16.304	16.296	0.008	92	3426882	16.0	19.7	
79 Bromoform	173	16.309	16.304	0.005	97	4488198	16.0	22.5	
80 Styrene	104	16.336	16.328	0.008	98	3438805	16.0	16.6	
81 o-Xylene	91	16.395	16.389	0.006	98	4696734	16.0	15.9	
82 1,1,2,2-Tetrachloroethane	83	16.719	16.715	0.004	98	4284716	16.0	17.8	
83 1,2,3-Trichloropropane	110	16.881	16.877	0.003	93	1114033	16.0	17.1	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	16.983	16.980	0.003	97	7190839	16.0	17.1	
85 N-Propylbenzene	120	17.533	17.529	0.004	99	2227195	16.0	18.1	
86 2-Chlorotoluene	126	17.576	17.572	0.004	98	1934483	16.0	17.0	
87 4-Ethyltoluene	105	17.689	17.688	0.001	98	7634335	16.0	18.0	
88 1,3,5-Trimethylbenzene	120	17.770	17.766	0.004	93	3168156	16.0	17.0	
89 Alpha Methyl Styrene	118	18.008	18.005	0.003	87	3389797	16.0	20.3	
90 n-Decane	57	18.078	18.075	0.003	87	4415206	16.0	19.9	
91 tert-Butylbenzene	119	18.207	18.202	0.005	92	8034487	16.0	19.4	
92 1,2,4-Trimethylbenzene	105	18.218	18.216	0.002	96	6945966	16.0	19.8	
93 sec-Butylbenzene	105	18.482	18.479	0.003	98	11336996	16.0	20.7	
94 1,3-Dichlorobenzene	146	18.493	18.489	0.004	97	5718247	16.0	21.5	
95 Benzyl chloride	91	18.574	18.568	0.006	98	6427866	16.0	24.5	
96 1,4-Dichlorobenzene	146	18.585	18.580	0.004	96	5139306	16.0	19.6	
97 4-Isopropyltoluene	119	18.655	18.648	0.007	97	8623233	16.0	18.9	
98 1,2,3-Trimethylbenzene	105	18.703	18.698	0.005	99	6390147	16.0	16.1	
99 Butylcyclohexane	83	18.762	18.757	0.005	91	5373889	16.0	18.0	
101 1,2-Dichlorobenzene	146	18.951	18.945	0.006	84	5712566	16.0	20.7	
100 2,3-Dihydroindene	117	18.951	18.947	0.004	92	7472425	16.0	20.3	
102 Indene	116	19.086	19.081	0.005	88	6454449	16.0	21.5	
103 n-Butylbenzene	91	19.091	19.092	-0.001	97	9133646	16.0	20.3	
104 Undecane	57	19.420	19.418	0.002	90	5797790	16.0	21.0	
105 1,2-Dibromo-3-Chloropropane	157	19.566	19.560	0.006	92	2819167	16.0	21.2	
106 1,2,4,5-Tetramethylbenzene	119	19.862	19.860	0.002	97	8943677	16.0	21.2	
107 Dodecane	57	20.483	20.478	0.005	91	6425914	16.0	26.2	
108 1,2,4-Trichlorobenzene	180	20.661	20.658	0.003	93	5000474	16.0	22.1	
109 Naphthalene	128	20.795	20.794	0.001	99	8235513	16.0	18.7	
110 Hexachlorobutadiene	225	21.016	21.014	0.002	94	4731090	16.0	18.1	
111 1,2,3-Trichlorobenzene	180	21.081	21.081	0.000	94	3652527	16.0	16.4	
112 2-Methylnaphthalene	142	21.825	21.825	0.000	98	8615424	16.0	33.5	e
113 1-Methylnaphthalene	142	21.960	21.957	0.003	98	8938615	16.0	24.6	e
A 116 C8 Range	1	14.069	(14.033-14.130)		0	14323556	16.0	18.5	
S 117 Xylenes, Total	100				0		48.0	52.2	
S 118 1,2-Dichloroethene, Total	1				0		32.0	31.4	

QC Flag Legend

Processing Flags

e - Potential Peak Saturated

Reagents:

40L10DQP_00019	Amount Added: 200.00	Units: mL	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

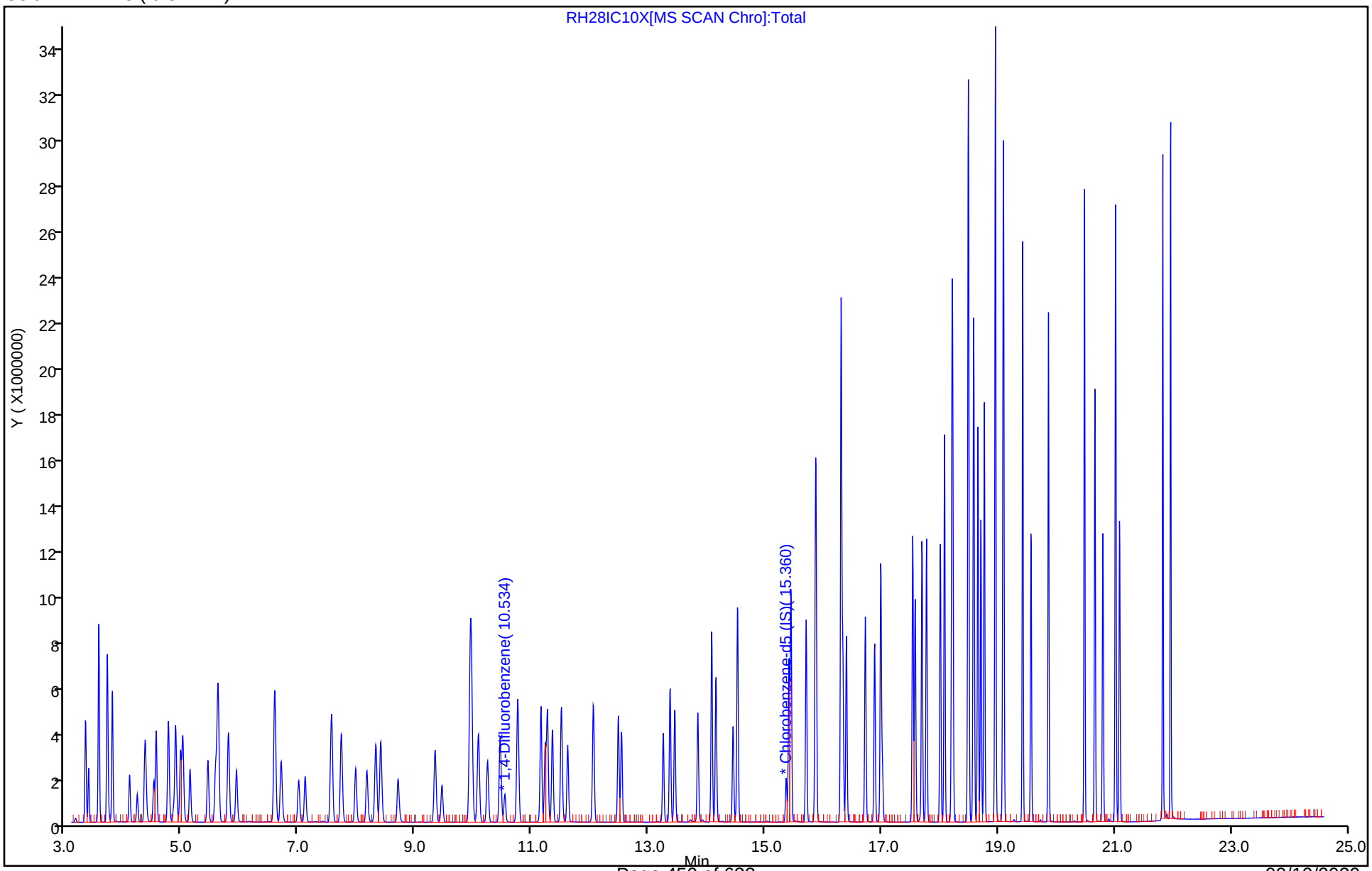
Report Date: 31-Aug-2020 13:42:31 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC10X.D

Injection Date:	28-Aug-2020 14:01:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	IC L10			Worklist Smp#:	3
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

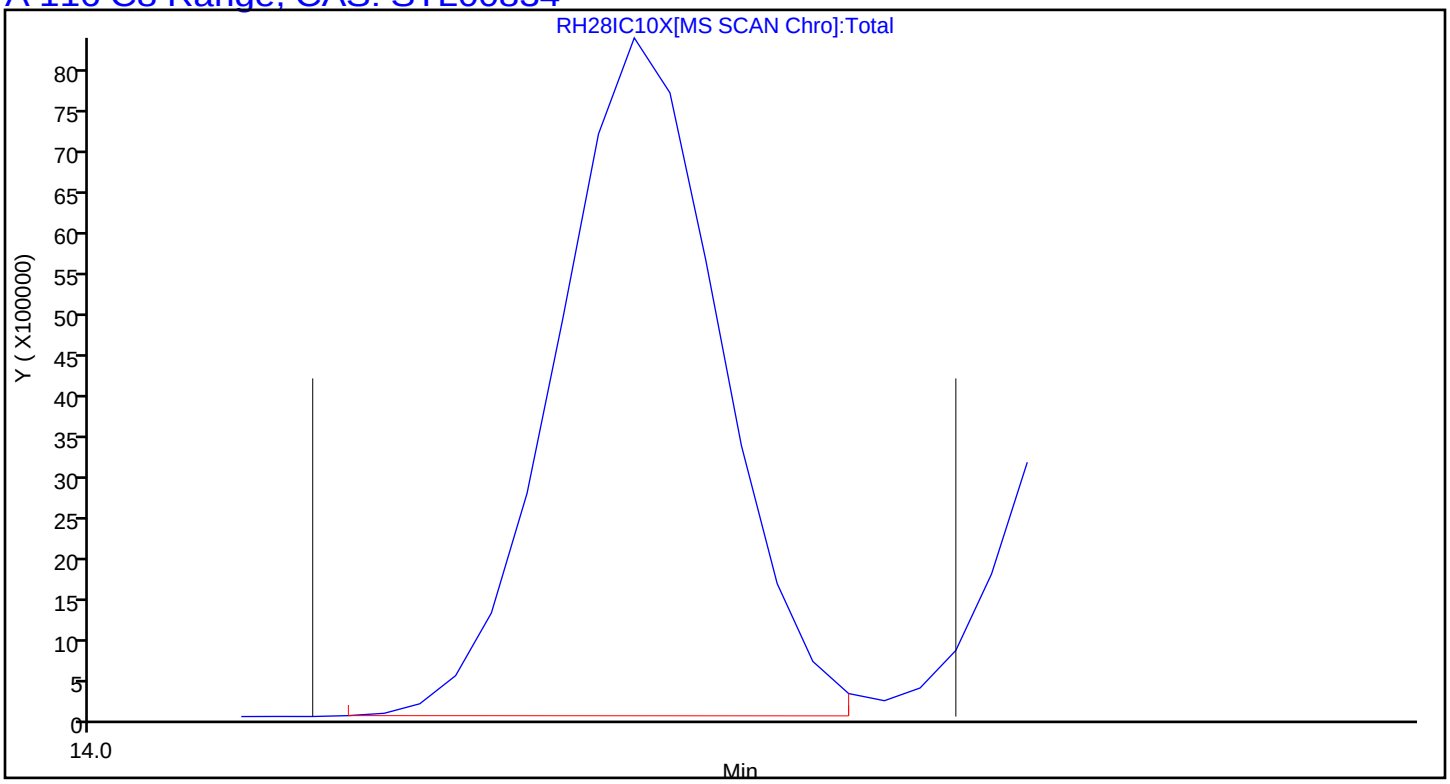


Report Date: 31-Aug-2020 13:42:31 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC10X.D				
Injection Date:	28-Aug-2020 14:01:30	Instrument ID:	MR		
Lims ID:	IC L10				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	15	Worklist Smp#:	3
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 116 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC09.D
Lims ID: IC L9
Client ID:
Sample Type: IC Calib Level: 9
Inject. Date: 28-Aug-2020 15:43:30 ALS Bottle#: 14 Worklist Smp#: 5
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016425-005
Misc. Info.: 314601
Operator ID: HMT Instrument ID: MR
Sublist: chrom-MR_TO15*sub16

Method: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 31-Aug-2020 13:42:37 Calib Date: 29-Aug-2020 00:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1064

First Level Reviewer: tajh Date: 29-Aug-2020 11:14:26

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.312	8.283	0.029	95	304641	4.80	4.80	
* 2 1,4-Difluorobenzene	114	10.539	10.519	0.020	94	1439630	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.360	15.356	0.004	87	1221971	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.010	17.006	0.004	97	800804	4.64	4.90	
6 Chlorodifluoromethane	51	3.346	3.345	0.001	99	1304143	8.00	7.65	
7 Propene	41	3.356	3.343	0.013	99	580652	8.00	7.18	
8 Dichlorodifluoromethane	85	3.405	3.390	0.015	98	555502	8.00	4.34	
9 Chloromethane	52	3.578	3.559	0.019	98	200994	8.00	6.64	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.588	3.568	0.020	93	975066	8.00	5.43	
11 Acetaldehyde	44	3.734	3.709	0.025	90	1810719	40.0	38.1	
12 Vinyl chloride	62	3.734	3.716	0.018	49	671429	8.00	7.32	
14 Butadiene	54	3.820	3.798	0.022	68	529338	8.00	6.77	
13 Butane	43	3.820	3.799	0.021	86	1083279	8.00	6.56	
15 Bromomethane	94	4.117	4.094	0.023	98	699062	8.00	7.07	
16 Chloroethane	64	4.246	4.221	0.025	88	328258	8.00	7.00	
17 Ethanol	31	4.386	4.345	0.041	99	2667054	40.0	43.6	
18 Vinyl bromide	106	4.532	4.502	0.030	96	651128	8.00	6.55	
19 2-Methylbutane	43	4.570	4.547	0.023	94	808457	8.00	6.30	
20 Trichlorofluoromethane	101	4.780	4.751	0.029	97	1602992	8.00	6.43	
21 Acrolein	56	4.802	4.775	0.027	93	172897	8.00	7.28	
22 Acetonitrile	40	4.877	4.841	0.036	99	261561	8.00	7.50	
23 Acetone	58	4.909	4.891	0.018	99	1075673	24.0	23.6	
24 Pentane	72	4.990	4.960	0.030	97	100157	8.00	6.87	
25 Isopropyl alcohol	45	5.028	4.996	0.032	98	2587659	24.0	21.2	
26 Ethyl ether	31	5.157	5.143	0.014	89	702368	8.00	6.62	
27 1,1-Dichloroethene	96	5.459	5.430	0.029	97	584264	8.00	6.49	
28 Acrylonitrile	53	5.578	5.548	0.030	94	393674	8.00	7.62	
29 2-Methyl-2-propanol	59	5.594	5.589	0.005	96	1087876	8.00	7.14	
30 1,1,2-Trichloro-1,2,2-trifluoroe	101	5.632	5.603	0.029	97	1315291	8.00	6.72	
31 Methylene Chloride	84	5.805	5.768	0.037	97	526013	8.00	7.09	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	5.815	5.782	0.033	97	576055	8.00	7.27	
33 Carbon disulfide	76	5.950	5.921	0.029	98	1600962	8.00	6.74	
34 trans-1,2-Dichloroethene	96	6.597	6.561	0.036	95	591662	8.00	7.09	
35 2-Methylpentane	43	6.608	6.579	0.029	94	1323151	8.00	6.60	
36 Methyl tert-butyl ether	73	6.721	6.716	0.005	97	1382456	8.00	6.82	
37 1,1-Dichloroethane	63	7.012	6.977	0.035	99	972743	8.00	6.71	
38 Vinyl acetate	43	7.126	7.100	0.026	99	1647589	8.00	7.47	
39 2-Butanone (MEK)	72	7.557	7.551	0.006	96	299060	8.00	7.30	
40 Hexane	56	7.579	7.553	0.026	82	449542	8.00	7.29	
41 Isopropyl ether	45	7.740	7.736	0.004	96	2073427	8.00	6.88	
42 cis-1,2-Dichloroethene	96	7.983	7.953	0.030	89	622149	8.00	6.45	
43 Ethyl acetate	43	8.177	8.165	0.012	97	1473148	8.00	7.19	
44 Chloroform	83	8.334	8.300	0.034	93	1210475	8.00	6.60	
45 Tert-butyl ethyl ether	59	8.420	8.413	0.007	97	1713465	8.00	6.92	
46 Tetrahydrofuran	42	8.716	8.722	-0.006	93	712114	8.00	6.79	
47 1,1,1-Trichloroethane	97	9.347	9.320	0.027	96	1190125	8.00	6.80	
48 1,2-Dichloroethane	62	9.461	9.434	0.027	93	669529	8.00	6.97	
49 n-Butanol	31	9.935	9.944	-0.009	74	374149	8.00	7.26	
50 Cyclohexane	69	9.946	9.928	0.018	86	259931	8.00	7.32	
51 Benzene	78	9.957	9.933	0.024	97	1789877	8.00	7.11	
52 Carbon tetrachloride	117	9.973	9.957	0.016	91	813090	8.00	5.01	
53 2,3-Dimethylpentane	71	10.086	10.069	0.017	90	381971	8.00	6.92	
54 Thiophene	84	10.243	10.221	0.021	93	1002834	8.00	6.91	
55 Isooctane	57	10.760	10.745	0.015	96	2774121	8.00	6.91	
56 n-Heptane	71	11.154	11.139	0.015	95	600087	8.00	7.35	
57 1,2-Dichloropropane	63	11.229	11.212	0.017	88	665617	8.00	6.95	
58 Trichloroethene	130	11.267	11.251	0.016	96	918209	8.00	7.34	
59 Dibromomethane	93	11.353	11.334	0.019	93	756385	8.00	7.07	
60 Dichlorobromomethane	83	11.504	11.487	0.017	97	1286733	8.00	7.12	
61 1,4-Dioxane	88	11.515	11.532	-0.017	91	302822	8.00	7.33	
62 Methyl methacrylate	41	11.612	11.607	0.005	90	877144	8.00	7.69	
63 Methylcyclohexane	83	12.054	12.043	0.011	94	1079994	8.00	7.30	
64 4-Methyl-2-pentanone (MIBK)	43	12.480	12.489	-0.009	99	1743415	8.00	7.54	
65 cis-1,3-Dichloropropene	75	12.540	12.528	0.012	96	998372	8.00	7.74	
66 trans-1,3-Dichloropropene	75	13.251	13.241	0.010	96	892213	8.00	7.90	
67 Toluene	91	13.370	13.360	0.010	92	2293689	8.00	6.97	
68 1,1,2-Trichloroethane	83	13.451	13.440	0.011	95	686436	8.00	6.90	
69 2-Hexanone	58	13.845	13.853	-0.008	90	773120	8.00	7.76	
70 n-Octane	85	14.082	14.077	0.005	93	673298	8.00	7.34	
71 Chlorodibromomethane	129	14.157	14.148	0.009	98	1424458	8.00	6.97	
72 Ethylene Dibromide	107	14.449	14.441	0.008	97	1302791	8.00	7.31	
73 Tetrachloroethene	129	14.524	14.519	0.005	93	807488	8.00	6.68	
74 Chlorobenzene	112	15.408	15.404	0.004	94	1766662	8.00	7.01	
75 2,3-Dimethylheptane	43	15.441	15.438	0.003	95	2338473	8.00	6.97	
76 Ethylbenzene	91	15.705	15.698	0.007	98	3012093	8.00	7.23	
77 m-Xylene & p-Xylene	91	15.867	15.863	0.004	98	4722635	16.0	14.9	
78 n-Nonane	57	16.298	16.296	0.002	93	1492619	8.00	7.69	
79 Bromoform	173	16.304	16.304	0.000	96	1649540	8.00	7.43	
80 Styrene	104	16.330	16.328	0.002	98	1683260	8.00	7.30	
81 o-Xylene	91	16.390	16.389	0.001	99	2288199	8.00	6.95	
82 1,1,2,2-Tetrachloroethane	83	16.719	16.715	0.004	98	1756745	8.00	6.55	
83 1,2,3-Trichloropropane	110	16.881	16.877	0.003	93	517052	8.00	7.13	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	16.983	16.980	0.003	96	3336387	8.00	7.11	
85 N-Propylbenzene	120	17.533	17.529	0.004	99	1014657	8.00	7.39	
86 2-Chlorotoluene	126	17.571	17.572	-0.001	97	927008	8.00	7.33	
87 4-Ethyltoluene	105	17.689	17.688	0.001	98	3514356	8.00	7.44	
88 1,3,5-Trimethylbenzene	120	17.770	17.766	0.004	93	1441235	8.00	6.95	
89 Alpha Methyl Styrene	118	18.002	18.005	-0.003	87	1432499	8.00	7.72	
90 n-Decane	57	18.078	18.075	0.003	88	1973903	8.00	8.00	
91 tert-Butylbenzene	119	18.202	18.202	0.000	93	3330576	8.00	7.22	
92 1,2,4-Trimethylbenzene	105	18.218	18.216	0.002	96	2984296	8.00	7.64	
93 sec-Butylbenzene	105	18.482	18.479	0.003	98	4717663	8.00	7.72	
94 1,3-Dichlorobenzene	146	18.487	18.489	-0.002	97	2250010	8.00	7.61	
95 Benzyl chloride	91	18.568	18.568	0.000	98	2705606	8.00	9.24	
96 1,4-Dichlorobenzene	146	18.579	18.580	-0.001	96	2155852	8.00	7.40	
97 4-Isopropyltoluene	119	18.649	18.648	0.001	97	3785986	8.00	7.43	
98 1,2,3-Trimethylbenzene	105	18.698	18.698	0.000	99	2968221	8.00	7.58	
99 Butylcyclohexane	83	18.757	18.757	0.000	93	2449016	8.00	7.35	
101 1,2-Dichlorobenzene	146	18.946	18.945	0.001	88	2198253	8.00	7.14	
100 2,3-Dihydroindene	117	18.951	18.947	0.004	93	3018326	8.00	7.36	
102 Indene	116	19.081	19.081	0.000	96	2429019	8.00	7.27	
103 n-Butylbenzene	91	19.091	19.092	-0.001	98	3874165	8.00	7.75	
104 Undecane	57	19.420	19.418	0.002	90	2351229	8.00	7.64	
105 1,2-Dibromo-3-Chloropropane	157	19.561	19.560	0.001	92	1230284	8.00	8.30	
106 1,2,4,5-Tetramethylbenzene	119	19.862	19.860	0.002	97	3656188	8.00	7.78	
107 Dodecane	57	20.477	20.478	-0.001	90	2355654	8.00	8.61	
108 1,2,4-Trichlorobenzene	180	20.661	20.658	0.003	93	1967788	8.00	7.82	
109 Naphthalene	128	20.795	20.794	0.001	99	3653921	8.00	7.45	
110 Hexachlorobutadiene	225	21.016	21.014	0.002	94	1829979	8.00	6.27	
111 1,2,3-Trichlorobenzene	180	21.081	21.081	0.000	94	1583400	8.00	6.37	
112 2-Methylnaphthalene	142	21.825	21.825	0.000	100	3193576	8.00	11.1	
113 1-Methylnaphthalene	142	21.955	21.957	-0.002	100	4049020	8.00	10.0	
A 116 C8 Range	1	14.069	(14.033-14.130)		0	6920701	8.00	7.60	
S 117 Xylenes, Total	100				0		24.0	21.8	
S 118 1,2-Dichloroethene, Total	1				0		16.0	13.5	

Reagents:

40L9DQP_00019	Amount Added: 200.00	Units: mL	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

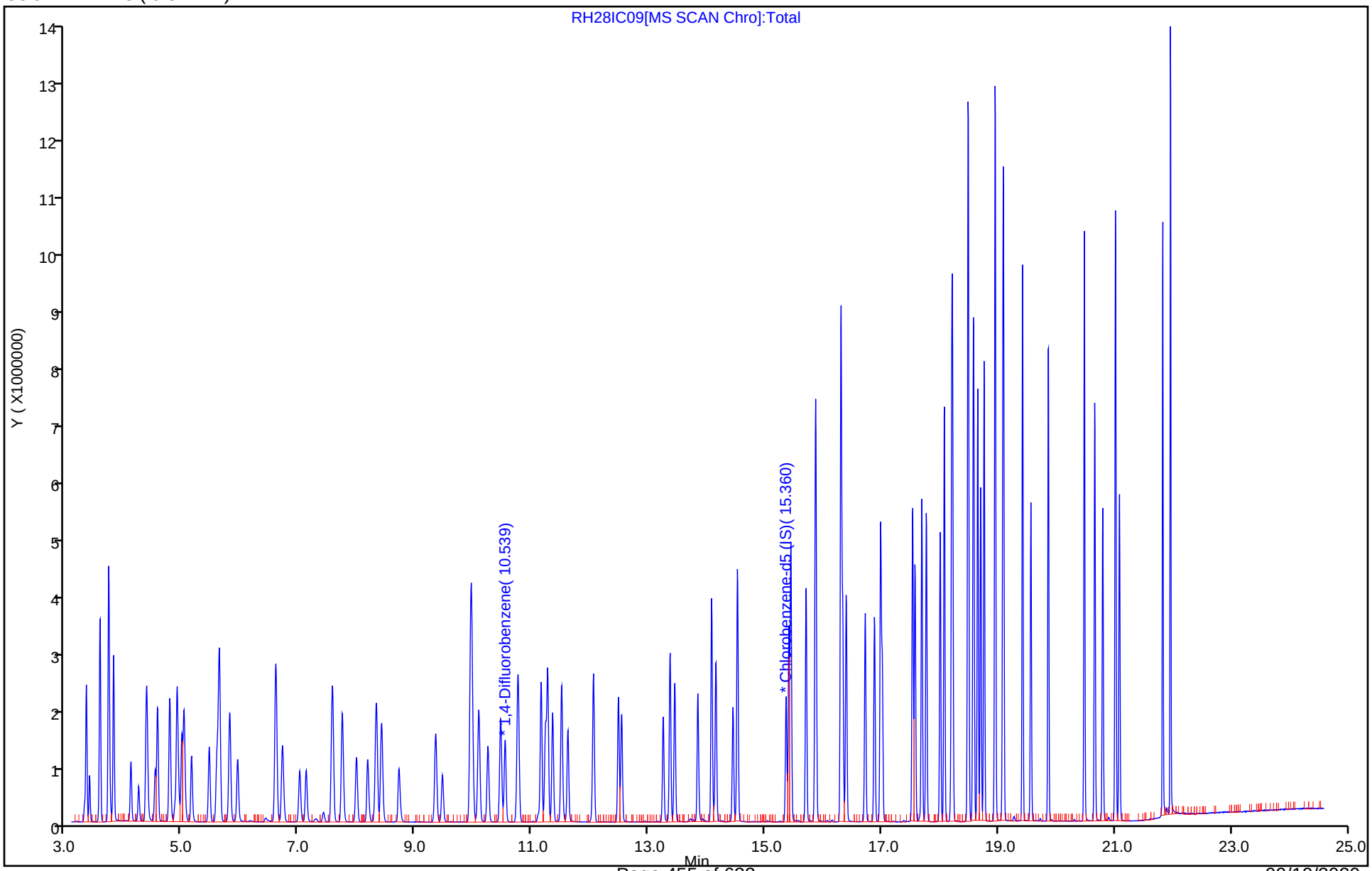
Report Date: 31-Aug-2020 13:42:38 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC09.D

Injection Date:	28-Aug-2020 15:43:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	IC L9			Worklist Smp#:	5
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

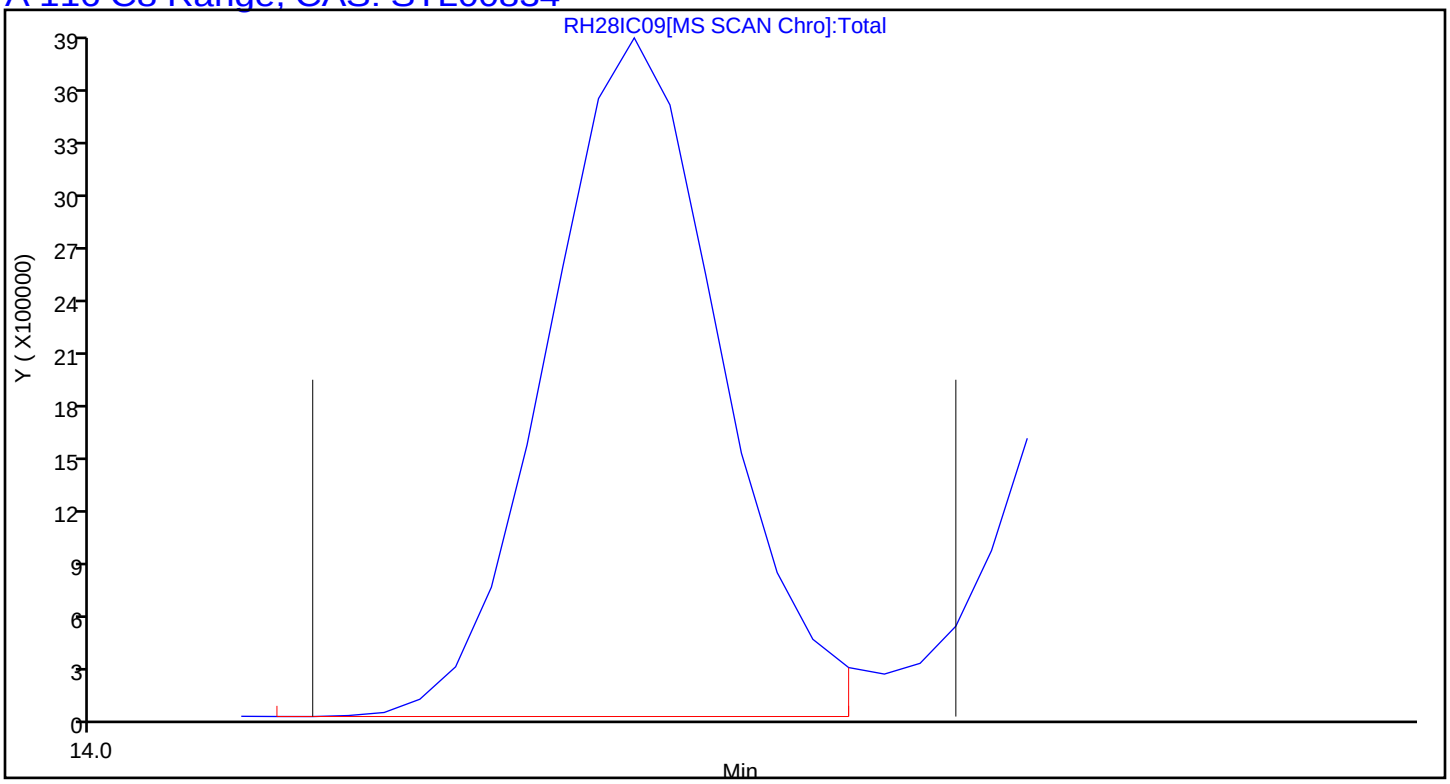


Report Date: 31-Aug-2020 13:42:38 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC09.D				
Injection Date:	28-Aug-2020 15:43:30	Instrument ID:	MR		
Lims ID:	IC L9				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	14	Worklist Smp#:	5
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 116 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC08.D
Lims ID: IC L8
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 28-Aug-2020 17:27:30 ALS Bottle#: 13 Worklist Smp#: 7
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016425-007
Misc. Info.: 314607
Operator ID: HMT Instrument ID: MR
Sublist: chrom-MR_TO15*sub16

Method: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 31-Aug-2020 13:42:47 Calib Date: 29-Aug-2020 00:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1064

First Level Reviewer: barlozhetskayaa Date: 31-Aug-2020 13:31:23

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.301	8.283	0.018	94	316995	4.80	4.80	
* 2 1,4-Difluorobenzene	114	10.528	10.519	0.009	94	1498166	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.360	15.356	0.004	87	1178651	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.010	17.006	0.004	96	808580	4.64	5.13	
6 Chlorodifluoromethane	51	3.340	3.345	-0.005	99	650155	4.00	3.66	
7 Propene	41	3.351	3.343	0.008	98	322982	4.00	3.84	
8 Dichlorodifluoromethane	85	3.400	3.390	0.010	99	535510	4.00	4.02	
9 Chloromethane	52	3.567	3.559	0.008	98	116889	4.00	3.71	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.577	3.568	0.009	90	701732	4.00	3.76	
11 Acetaldehyde	44	3.718	3.709	0.009	91	836062	20.0	16.9	
12 Vinyl chloride	62	3.723	3.716	0.007	100	382291	4.00	3.99	
14 Butadiene	54	3.809	3.798	0.011	68	309504	4.00	3.81	
13 Butane	43	3.809	3.799	0.010	86	620005	4.00	3.61	
15 Bromomethane	94	4.101	4.094	0.007	98	406202	4.00	3.93	
16 Chloroethane	64	4.235	4.221	0.014	89	193624	4.00	3.95	
17 Ethanol	31	4.359	4.345	0.014	99	1222004	20.0	19.2	
18 Vinyl bromide	106	4.516	4.502	0.014	97	371798	4.00	3.59	
19 2-Methylbutane	43	4.559	4.547	0.012	93	463903	4.00	3.48	
20 Trichlorofluoromethane	101	4.764	4.751	0.013	97	895318	4.00	3.45	
21 Acrolein	56	4.785	4.775	0.010	92	100565	4.00	4.07	
22 Acetonitrile	40	4.855	4.841	0.014	95	141775	4.00	3.91	
23 Acetone	58	4.893	4.891	0.002	98	502478	12.0	10.6	
24 Pentane	72	4.980	4.960	0.020	97	62271	4.00	4.10	
25 Isopropyl alcohol	45	5.001	4.996	0.005	98	1540486	12.0	12.1	
26 Ethyl ether	31	5.141	5.143	-0.002	89	408518	4.00	3.70	
27 1,1-Dichloroethene	96	5.443	5.430	0.013	97	343522	4.00	3.67	
28 Acrylonitrile	53	5.562	5.548	0.014	96	223695	4.00	4.16	
29 2-Methyl-2-propanol	59	5.578	5.589	-0.011	95	630225	4.00	3.98	
30 1,1,2-Trichloro-1,2,2-trifluoroe	101	5.621	5.603	0.018	96	766832	4.00	3.76	
31 Methylene Chloride	84	5.788	5.768	0.020	96	296909	4.00	3.84	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	5.799	5.782	0.017	96	341550	4.00	4.11	
33 Carbon disulfide	76	5.934	5.921	0.013	98	941650	4.00	3.81	
34 trans-1,2-Dichloroethene	96	6.581	6.561	0.020	93	334887	4.00	3.86	
35 2-Methylpentane	43	6.597	6.579	0.018	94	759801	4.00	3.64	
36 Methyl tert-butyl ether	73	6.705	6.716	-0.011	97	808171	4.00	3.83	
37 1,1-Dichloroethane	63	6.996	6.977	0.019	99	562108	4.00	3.73	
38 Vinyl acetate	43	7.109	7.100	0.009	99	947376	4.00	4.13	
39 2-Butanone (MEK)	72	7.546	7.551	-0.005	96	159615	4.00	3.75	
40 Hexane	56	7.573	7.553	0.020	87	248032	4.00	3.86	
41 Isopropyl ether	45	7.730	7.736	-0.006	96	1179432	4.00	3.76	
42 cis-1,2-Dichloroethene	96	7.972	7.953	0.019	88	358383	4.00	3.57	
43 Ethyl acetate	43	8.166	8.165	0.001	97	850049	4.00	3.99	
44 Chloroform	83	8.323	8.300	0.023	95	693845	4.00	3.64	
45 Tert-butyl ethyl ether	59	8.409	8.413	-0.004	97	979415	4.00	3.80	
46 Tetrahydrofuran	42	8.711	8.722	-0.011	94	404434	4.00	3.70	
47 1,1,1-Trichloroethane	97	9.337	9.320	0.017	95	685853	4.00	3.76	
48 1,2-Dichloroethane	62	9.450	9.434	0.016	93	377659	4.00	3.78	
49 n-Butanol	31	9.940	9.944	-0.004	73	210201	4.00	3.92	
50 Cyclohexane	69	9.946	9.928	0.018	86	145010	4.00	3.93	
51 Benzene	78	9.946	9.933	0.013	97	1005771	4.00	3.84	
52 Carbon tetrachloride	117	9.973	9.957	0.016	93	704270	4.00	4.17	
53 2,3-Dimethylpentane	71	10.081	10.069	0.012	90	212342	4.00	3.70	
54 Thiophene	84	10.232	10.221	0.011	93	568076	4.00	3.76	
55 Isooctane	57	10.755	10.745	0.010	96	1532236	4.00	3.67	
56 n-Heptane	71	11.148	11.139	0.009	95	327659	4.00	3.86	
57 1,2-Dichloropropane	63	11.224	11.212	0.012	88	368593	4.00	3.70	
58 Trichloroethene	130	11.262	11.251	0.011	96	460313	4.00	3.54	
59 Dibromomethane	93	11.348	11.334	0.014	93	416603	4.00	3.74	
60 Dichlorobromomethane	83	11.499	11.487	0.012	97	730160	4.00	3.88	
61 1,4-Dioxane	88	11.510	11.532	-0.022	91	170270	4.00	3.96	
62 Methyl methacrylate	41	11.612	11.607	0.005	90	474303	4.00	4.00	
63 Methylcyclohexane	83	12.054	12.043	0.011	94	581197	4.00	3.78	
64 4-Methyl-2-pentanone (MIBK)	43	12.480	12.489	-0.009	98	931901	4.00	3.87	
65 cis-1,3-Dichloropropene	75	12.534	12.528	0.006	96	542319	4.00	4.04	
66 trans-1,3-Dichloropropene	75	13.246	13.241	0.005	95	458192	4.00	4.20	
67 Toluene	91	13.365	13.360	0.005	92	1183470	4.00	3.73	
68 1,1,2-Trichloroethane	83	13.446	13.440	0.006	95	374576	4.00	3.90	
69 2-Hexanone	58	13.845	13.853	-0.008	90	404266	4.00	4.21	
70 n-Octane	85	14.082	14.077	0.005	93	339542	4.00	3.84	
71 Chlorodibromomethane	129	14.152	14.148	0.004	97	802340	4.00	4.07	
72 Ethylene Dibromide	107	14.443	14.441	0.002	96	676768	4.00	3.94	
73 Tetrachloroethene	129	14.524	14.519	0.005	93	424142	4.00	3.64	
74 Chlorobenzene	112	15.408	15.404	0.004	95	909511	4.00	3.74	
75 2,3-Dimethylheptane	43	15.441	15.438	0.003	95	1194978	4.00	3.69	
76 Ethylbenzene	91	15.700	15.698	0.002	98	1551175	4.00	3.86	
77 m-Xylene & p-Xylene	91	15.867	15.863	0.004	97	2416062	8.00	7.88	
78 n-Nonane	57	16.298	16.296	0.002	93	757072	4.00	4.05	
79 Bromoform	173	16.309	16.304	0.005	96	970471	4.00	4.53	
80 Styrene	104	16.330	16.328	0.002	98	899378	4.00	4.04	
81 o-Xylene	91	16.390	16.389	0.001	98	1232727	4.00	3.88	
82 1,1,2,2-Tetrachloroethane	83	16.713	16.715	-0.002	98	1051867	4.00	4.07	
83 1,2,3-Trichloropropane	110	16.875	16.877	-0.002	92	277341	4.00	3.96	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	16.983	16.980	0.003	97	1775686	4.00	3.92	
85 N-Propylbenzene	120	17.533	17.529	0.004	99	533438	4.00	4.03	
86 2-Chlorotoluene	126	17.576	17.572	0.004	97	482530	4.00	3.96	
87 4-Ethyltoluene	105	17.689	17.688	0.001	98	1840276	4.00	4.04	
88 1,3,5-Trimethylbenzene	120	17.770	17.766	0.004	93	782651	4.00	3.91	
89 Alpha Methyl Styrene	118	18.002	18.005	-0.003	88	779234	4.00	4.35	
90 n-Decane	57	18.078	18.075	0.003	87	1022123	4.00	4.29	
91 tert-Butylbenzene	119	18.202	18.202	0.000	94	1771724	4.00	3.98	
92 1,2,4-Trimethylbenzene	105	18.218	18.216	0.002	96	1589105	4.00	4.22	
93 sec-Butylbenzene	105	18.482	18.479	0.003	99	2465129	4.00	4.18	
94 1,3-Dichlorobenzene	146	18.487	18.489	-0.002	97	1154226	4.00	4.05	
95 Benzyl chloride	91	18.568	18.568	0.000	98	1324267	4.00	4.69	
96 1,4-Dichlorobenzene	146	18.579	18.580	-0.001	94	1137617	4.00	4.05	
97 4-Isopropyltoluene	119	18.649	18.648	0.001	97	2039984	4.00	4.15	
98 1,2,3-Trimethylbenzene	105	18.698	18.698	0.000	98	1607154	4.00	4.47	
99 Butylcyclohexane	83	18.757	18.757	0.000	92	1319539	4.00	4.11	
101 1,2-Dichlorobenzene	146	18.946	18.945	0.001	82	1152986	4.00	3.88	
100 2,3-Dihydroindene	117	18.946	18.947	-0.001	92	1602979	4.00	4.05	
102 Indene	116	19.081	19.081	0.000	93	1393000	4.00	4.32	
103 n-Butylbenzene	91	19.091	19.092	-0.001	97	2067016	4.00	4.29	
104 Undecane	57	19.420	19.418	0.002	91	1245231	4.00	4.20	
105 1,2-Dibromo-3-Chloropropane	157	19.560	19.560	0.000	91	660392	4.00	4.62	
106 1,2,4,5-Tetramethylbenzene	119	19.862	19.860	0.002	97	1933526	4.00	4.27	
107 Dodecane	57	20.477	20.478	-0.001	90	1253840	4.00	4.75	
108 1,2,4-Trichlorobenzene	180	20.655	20.658	-0.003	93	1047600	4.00	4.32	
109 Naphthalene	128	20.795	20.794	0.001	99	2070294	4.00	4.38	
110 Hexachlorobutadiene	225	21.011	21.014	-0.003	93	1016101	4.00	3.61	
111 1,2,3-Trichlorobenzene	180	21.081	21.081	0.000	95	931429	4.00	3.88	
112 2-Methylnaphthalene	142	21.825	21.825	0.000	100	1491875	4.00	5.40	
113 1-Methylnaphthalene	142	21.955	21.957	-0.002	99	2050918	4.00	5.25	
A 116 C8 Range	1	14.069	(14.033-14.130)		0	3505252	4.00	3.70	
S 117 Xylenes, Total	100				0		12.0	11.8	
S 118 1,2-Dichloroethene, Total	1				0		8.00	7.43	

Reagents:

40L8DQP_00018	Amount Added: 200.00	Units: mL	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

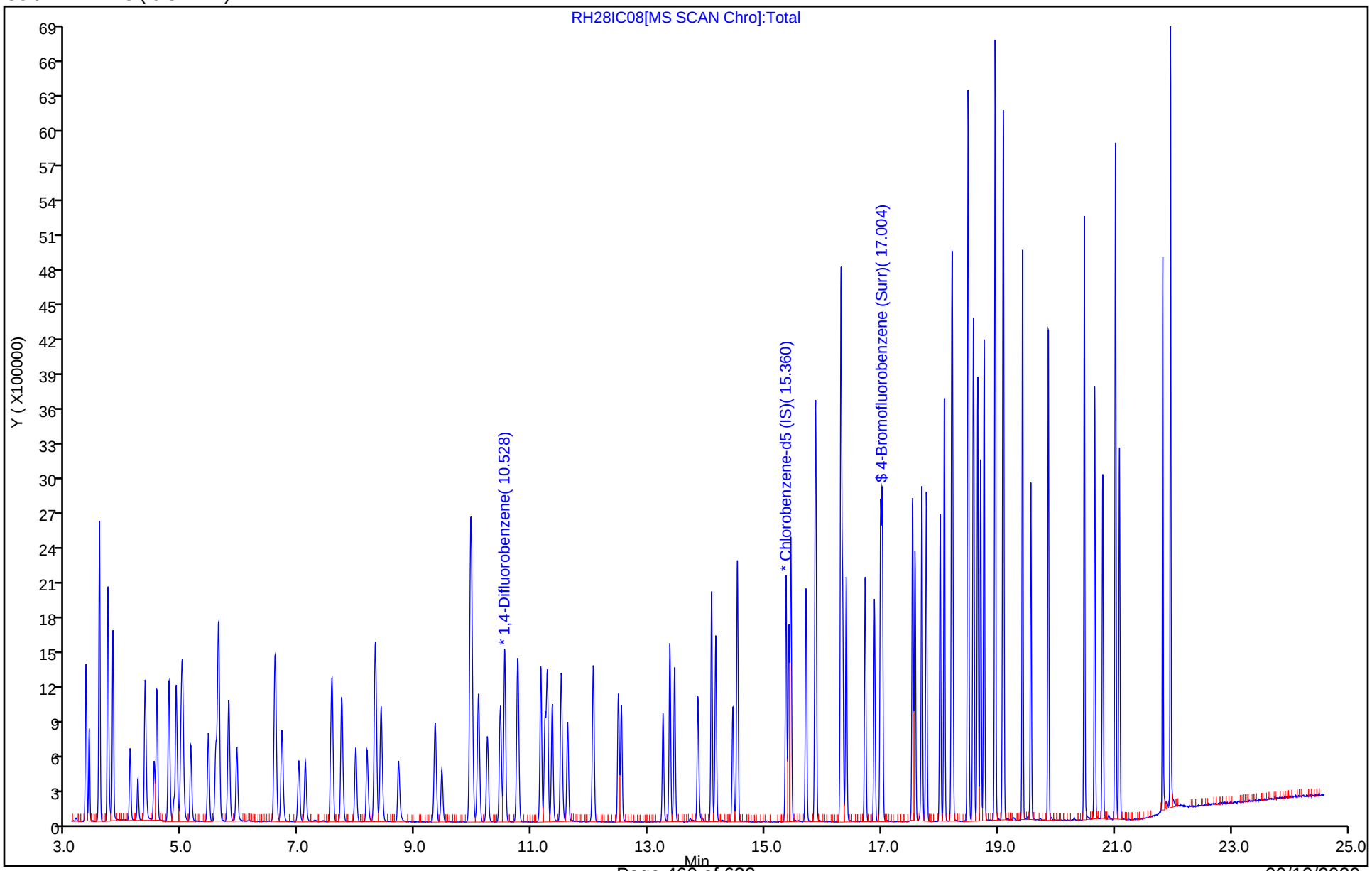
Report Date: 31-Aug-2020 13:42:48 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC08.D

Injection Date:	28-Aug-2020 17:27:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	IC L8			Worklist Smp#:	7
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

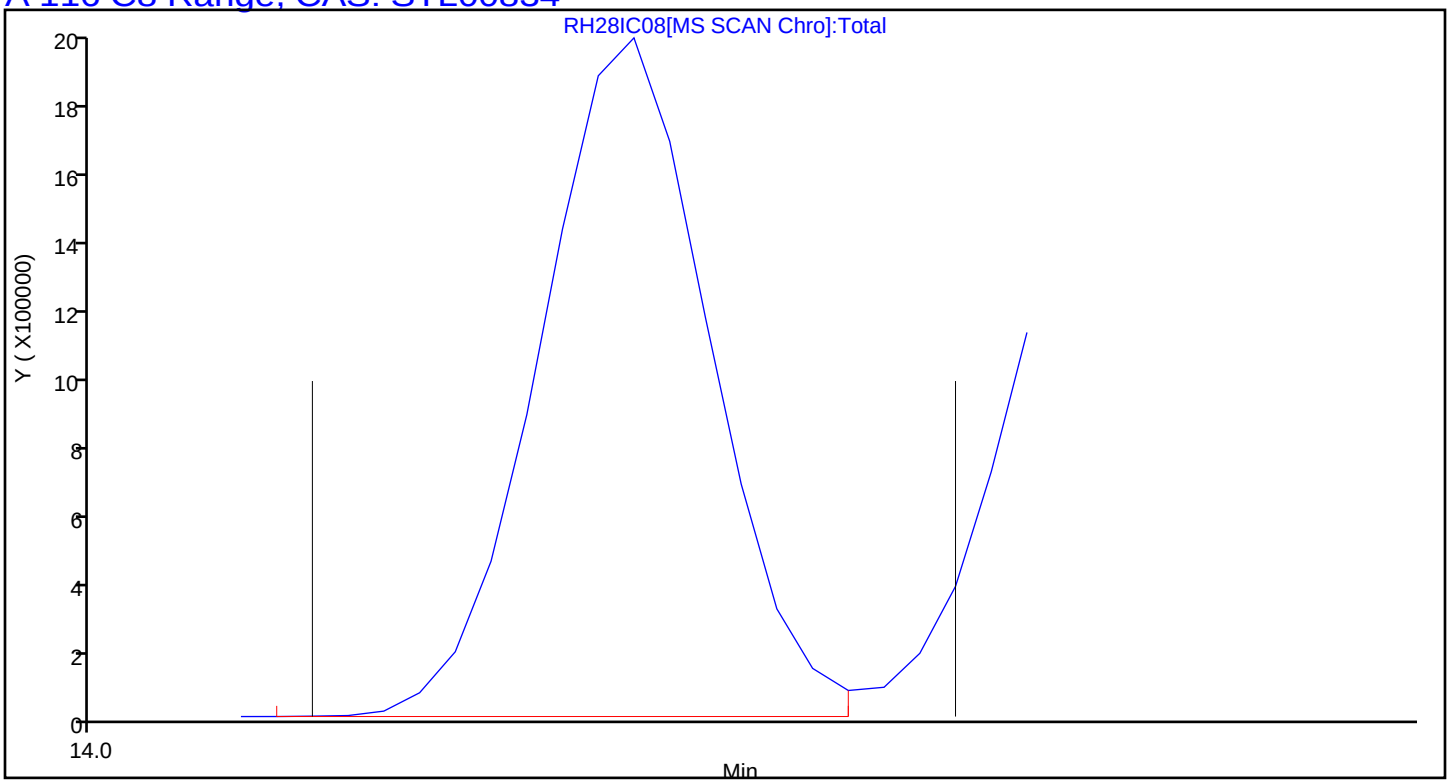


Report Date: 31-Aug-2020 13:42:48 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC08.D				
Injection Date:	28-Aug-2020 17:27:30	Instrument ID:	MR		
Lims ID:	IC L8				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	13	Worklist Smp#:	7
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 116 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC01.D
Lims ID: IC L1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 28-Aug-2020 19:11:30 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016425-009
Misc. Info.: 314720
Operator ID: HMT Instrument ID: MR
Sublist: chrom-MR_TO15*sub16

Method: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 31-Aug-2020 13:42:56 Calib Date: 29-Aug-2020 00:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1064

First Level Reviewer: barlozhetskayaa Date: 31-Aug-2020 13:08:56

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.274	8.283	-0.009	91	256577	4.80	4.80	
* 2 1,4-Difluorobenzene	114	10.512	10.519	-0.007	94	1285099	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.355	15.356	-0.001	87	1024513	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.005	17.006	-0.001	94	591232	4.64	4.32	
6 Chlorodifluoromethane	51	3.443	3.345	0.098	27	1595	0.0200	0.0111	
7 Propene	41	3.340	3.343	-0.003	77	1970	0.0200	0.0289	
8 Dichlorodifluoromethane	85	3.389	3.390	-0.001	73	4109	0.0200	0.0381	
9 Chloromethane	52	3.561	3.559	0.002	55	1359	0.0200	0.0533	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.567	3.568	-0.001	87	4700	0.0200	0.0311	
11 Acetaldehyde	44	3.712	3.709	0.003	99	9148	0.1000	0.2283	
12 Vinyl chloride	62	3.718	3.716	0.002	55	1998	0.0200	-0.003438	
14 Butadiene	54	3.788	3.798	-0.010	48	2023	0.0200	0.0307	
13 Butane	43	3.793	3.799	-0.006	68	4703	0.0200	0.0338	
15 Bromomethane	94	4.095	4.094	0.001	68	2610	0.0200	-0.008448	
16 Chloroethane	64	4.214	4.221	-0.007	17	1160	0.0200	-0.0101	
17 Ethanol	31	4.343	4.345	-0.002	50	2619	0.1000	-0.0402	
18 Vinyl bromide	106	4.500	4.502	-0.002	33	2462	0.0200	0.0294	
19 2-Methylbutane	43	4.554	4.547	0.007	57	5545	0.0200	0.0513	
20 Trichlorofluoromethane	101	4.742	4.751	-0.009	97	5184	0.0200	0.0247	
23 Acetone	58	4.915	4.891	0.024	94	6289	0.0600	0.1640	
24 Pentane	72	4.963	4.960	0.003	1	242	0.0200	0.0197	
25 Isopropyl alcohol	45	5.023	4.996	0.027	12	9554	0.0600	0.0928	
26 Ethyl ether	31	5.168	5.143	0.025	16	2453	0.0200	0.0274	
27 1,1-Dichloroethene	96	5.422	5.430	-0.008	64	2601	0.0200	0.0343	
29 2-Methyl-2-propanol	59	5.638	5.589	0.049	39	4623	0.0200	0.0360	
30 1,1,2-Trichloro-1,2,2-trifluoroe	101	5.594	5.603	-0.009	73	4730	0.0200	0.0287	
31 Methylene Chloride	84	5.767	5.768	-0.001	73	1911	0.0200	0.0306	
32 3-Chloro-1-propene	39	5.778	5.782	-0.004	67	2268	0.0200	-0.0424	
33 Carbon disulfide	76	5.918	5.921	-0.003	91	5486	0.0200	0.0274	
34 trans-1,2-Dichloroethene	96	6.549	6.561	-0.012	22	1585	0.0200	0.0225	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
35 2-Methylpentane	43	6.565	6.579	-0.014	52	5964	0.0200	0.0353	
36 Methyl tert-butyl ether	73	6.754	6.716	0.038	53	4926	0.0200	0.0288	
37 1,1-Dichloroethane	63	6.959	6.977	-0.018	25	3006	0.0200	0.0246	
38 Vinyl acetate	43	7.104	7.100	0.004	80	4967	0.0200	0.0267	
39 2-Butanone (MEK)	72	7.573	7.551	0.022	49	1146	0.0200	0.0332	
40 Hexane	56	7.525	7.553	-0.028	1	1269	0.0200	0.0244	
41 Isopropyl ether	45	7.767	7.736	0.031	80	6715	0.0200	0.0265	
42 cis-1,2-Dichloroethene	96	7.935	7.953	-0.018	17	2354	0.0200	0.0290	
44 Chloroform	83	8.280	8.300	-0.020	28	4796	0.0200	0.0311	
45 Tert-butyl ethyl ether	59	8.442	8.413	0.029	63	2362	0.0200	0.0113	
46 Tetrahydrofuran	42	8.770	8.722	0.048	78	2687	0.0200	0.0304	
47 1,1,1-Trichloroethane	97	9.315	9.320	-0.005	69	3631	0.0200	0.0246	
48 1,2-Dichloroethane	62	9.439	9.434	0.005	1	1746	0.0200	0.0204	
51 Benzene	78	9.930	9.933	-0.003	92	6905	0.0200	0.0307	
50 Cyclohexane	69	9.914	9.928	-0.014	69	714	0.0200	0.0225	
52 Carbon tetrachloride	117	9.951	9.957	-0.006	78	3577	0.0200	0.0247	
53 2,3-Dimethylpentane	71	10.048	10.069	-0.021	30	1232	0.0200	0.0250	
54 Thiophene	84	10.216	10.221	-0.005	38	2778	0.0200	0.0214	
55 Isooctane	57	10.739	10.745	-0.006	95	10422	0.0200	0.0291	
56 n-Heptane	71	11.127	11.139	-0.012	48	1981	0.0200	0.0272	
57 1,2-Dichloropropane	63	11.213	11.212	0.001	12	2346	0.0200	0.0274	
58 Trichloroethene	130	11.240	11.251	-0.011	62	2408	0.0200	0.0216	
59 Dibromomethane	93	11.321	11.334	-0.013	66	2776	0.0200	0.0290	
60 Dichlorobromomethane	83	11.472	11.487	-0.015	52	4050	0.0200	0.0251	
61 1,4-Dioxane	88	11.575	11.532	0.042	2	1099	0.0200	0.0298	
63 Methylcyclohexane	83	12.027	12.043	-0.016	73	3122	0.0200	0.0236	
64 4-Methyl-2-pentanone (MIBK)	43	12.513	12.489	0.024	52	5080	0.0200	0.0246	
65 cis-1,3-Dichloropropene	75	12.524	12.528	-0.004	57	2248	0.0200	0.0195	
66 trans-1,3-Dichloropropene	75	13.235	13.241	-0.006	45	2734	0.0200	0.0289	
67 Toluene	91	13.354	13.360	-0.006	92	6500	0.0200	0.0236	
68 1,1,2-Trichloroethane	83	13.435	13.440	-0.005	52	2167	0.0200	0.0260	
69 2-Hexanone	58	13.872	13.853	0.019	26	1395	0.0200	0.0167	
70 n-Octane	85	14.077	14.077	0.000	74	1984	0.0200	0.0258	
71 Chlorodibromomethane	129	14.147	14.148	-0.001	24	3336	0.0200	0.0195	
72 Ethylene Dibromide	107	14.432	14.441	-0.009	87	3285	0.0200	0.0220	
73 Tetrachloroethene	129	14.519	14.519	0.000	83	1968	0.0200	0.0194	
74 Chlorobenzene	112	15.408	15.404	0.004	1	5584	0.0200	0.0264	
75 2,3-Dimethylheptane	43	15.430	15.438	-0.008	55	7058	0.0200	0.0251	
76 Ethylbenzene	91	15.700	15.698	0.002	96	8765	0.0200	0.0251	
77 m-Xylene & p-Xylene	91	15.867	15.863	0.004	95	12973	0.0400	0.0487	
78 n-Nonane	57	16.293	16.296	-0.003	85	4291	0.0200	0.0264	
79 Bromoform	173	16.304	16.304	0.000	83	3237	0.0200	0.0174	
80 Styrene	104	16.320	16.328	-0.008	47	4412	0.0200	0.0228	
81 o-Xylene	91	16.390	16.389	0.001	96	6386	0.0200	0.0231	
82 1,1,2,2-Tetrachloroethane	83	16.719	16.715	0.004	92	5656	0.0200	0.0252	
83 1,2,3-Trichloropropane	110	16.881	16.877	0.004	95	1009	0.0200	0.0166	
84 Isopropylbenzene	105	16.983	16.980	0.003	86	9971	0.0200	0.0254	
85 N-Propylbenzene	120	17.533	17.529	0.004	96	1840	0.0200	0.0160	
86 2-Chlorotoluene	126	17.576	17.572	0.004	3	2860	0.0200	0.0270	
87 4-Ethyltoluene	105	17.689	17.688	0.001	92	8445	0.0200	0.0213	
88 1,3,5-Trimethylbenzene	120	17.760	17.766	-0.006	89	3493	0.0200	0.0201	
89 Alpha Methyl Styrene	118	18.018	18.005	0.013	43	2507	0.0200	0.0161	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
90 n-Decane	57	18.078	18.075	0.003	86	3748	0.0200	0.0181	
91 tert-Butylbenzene	119	18.202	18.202	0.000	94	8744	0.0200	0.0226	
92 1,2,4-Trimethylbenzene	105	18.218	18.216	0.002	70	5598	0.0200	0.0171	
93 sec-Butylbenzene	105	18.482	18.479	0.003	95	8868	0.0200	0.0173	
94 1,3-Dichlorobenzene	146	18.493	18.489	0.004	91	5001	0.0200	0.0202	
95 Benzyl chloride	91	18.574	18.568	0.006	93	6449	0.0200	0.0263	
96 1,4-Dichlorobenzene	146	18.579	18.580	-0.001	91	6409	0.0200	0.0262	
97 4-Isopropyltoluene	119	18.649	18.648	0.001	95	8442	0.0200	0.0198	
98 1,2,3-Trimethylbenzene	105	18.698	18.698	0.000	48	8213	0.0200	0.0283	
99 Butylcyclohexane	83	18.757	18.757	0.000	88	5864	0.0200	0.0210	
101 1,2-Dichlorobenzene	146	18.946	18.945	0.001	89	5989	0.0200	0.0232	
100 2,3-Dihydroindene	117	18.946	18.947	-0.001	93	7046	0.0200	0.0205	
102 Indene	116	19.081	19.081	0.000	80	5231	0.0200	0.0187	
103 n-Butylbenzene	91	19.097	19.092	0.005	93	9975	0.0200	0.0238	
104 Undecane	57	19.420	19.418	0.002	83	3583	0.0200	0.0139	
105 1,2-Dibromo-3-Chloropropane	157	19.561	19.560	0.001	87	3162	0.0200	0.0254	
106 1,2,4,5-Tetramethylbenzene	119	19.863	19.860	0.003	96	6728	0.0200	0.0171	
107 Dodecane	57	20.477	20.478	-0.001	39	2329	0.0200	0.0102	
108 1,2,4-Trichlorobenzene	180	20.661	20.658	0.003	88	4915	0.0200	0.0233	
109 Naphthalene	128	20.790	20.794	-0.004	97	9866	0.0200	0.0240	
110 Hexachlorobutadiene	225	21.011	21.014	-0.003	88	5173	0.0200	0.0211	
111 1,2,3-Trichlorobenzene	180	21.081	21.081	0.000	93	6234	0.0200	0.0299	
112 2-Methylnaphthalene	142	21.825	21.825	0.000	92	6613	0.0200	0.0275	
113 1-Methylnaphthalene	142	21.960	21.957	0.003	94	14583	0.0200	0.0429	
A 116 C8 Range	1	14.076	(14.039-14.104)		0	23790	0.0200	0.0293	
S 117 Xylenes, Total	100				0		0.0600	0.0718	
S 118 1,2-Dichloroethene, Total	1				0		0.0400	0.0515	

Reagents:

40L1-3DQP_00031	Amount Added: 50.00	Units: mL	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

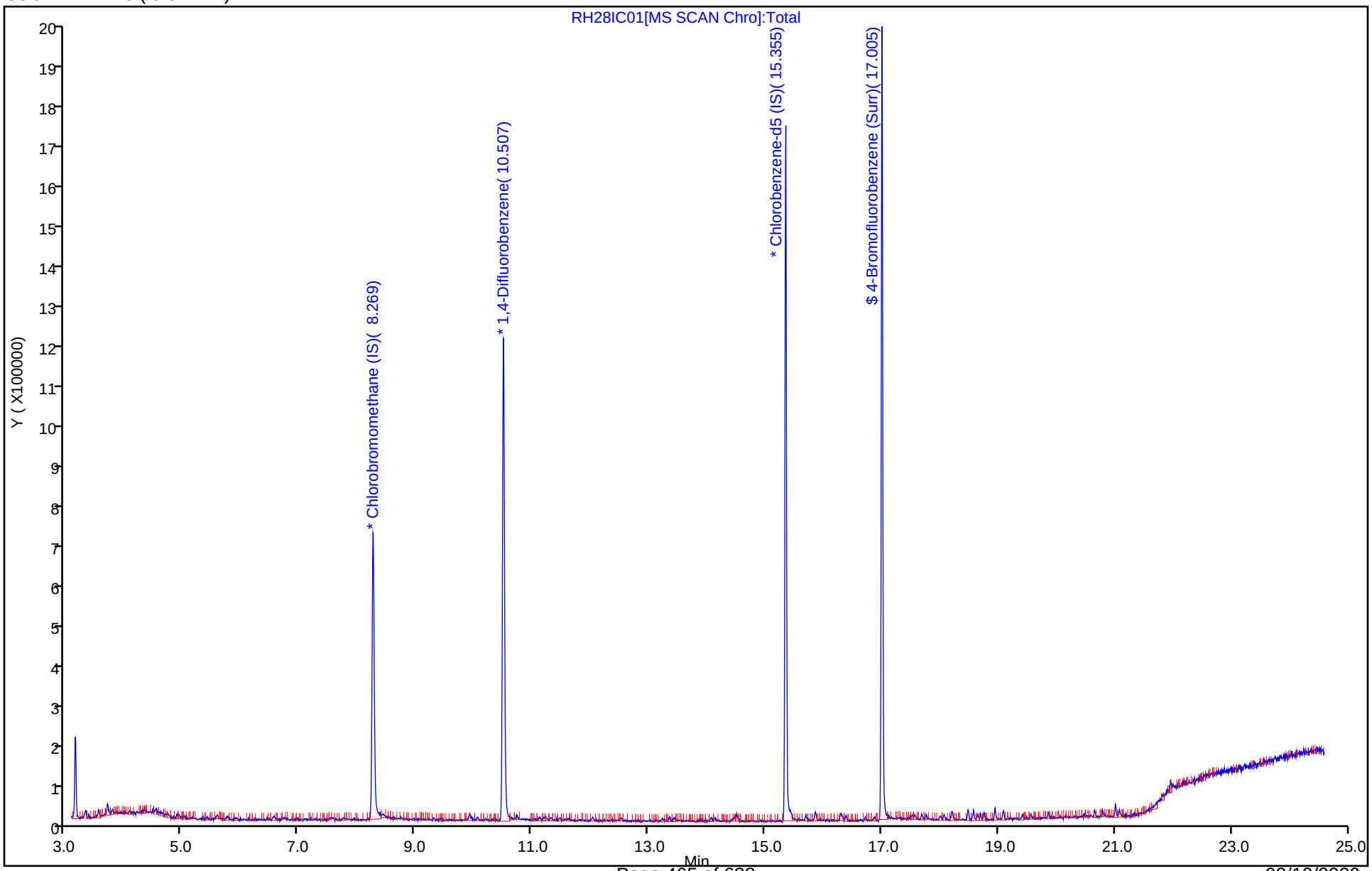
Report Date: 31-Aug-2020 13:42:57 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC01.D

Injection Date:	28-Aug-2020 19:11:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	IC L1			Worklist Smp#:	9
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

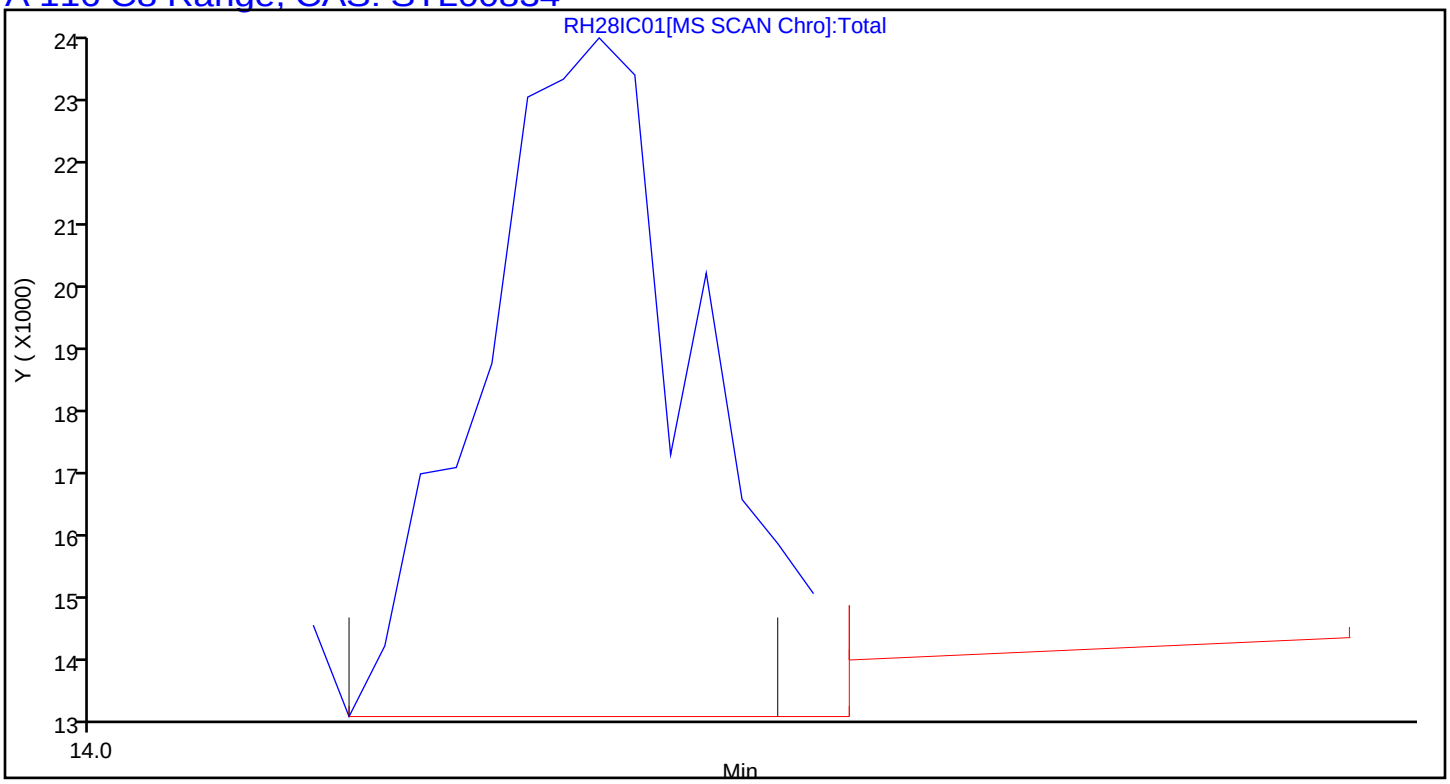


Report Date: 31-Aug-2020 13:42:57 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC01.D				
Injection Date:	28-Aug-2020 19:11:30	Instrument ID:	MR		
Lims ID:	IC L1				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 116 C8 Range, CAS: STL00834



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Knoxville

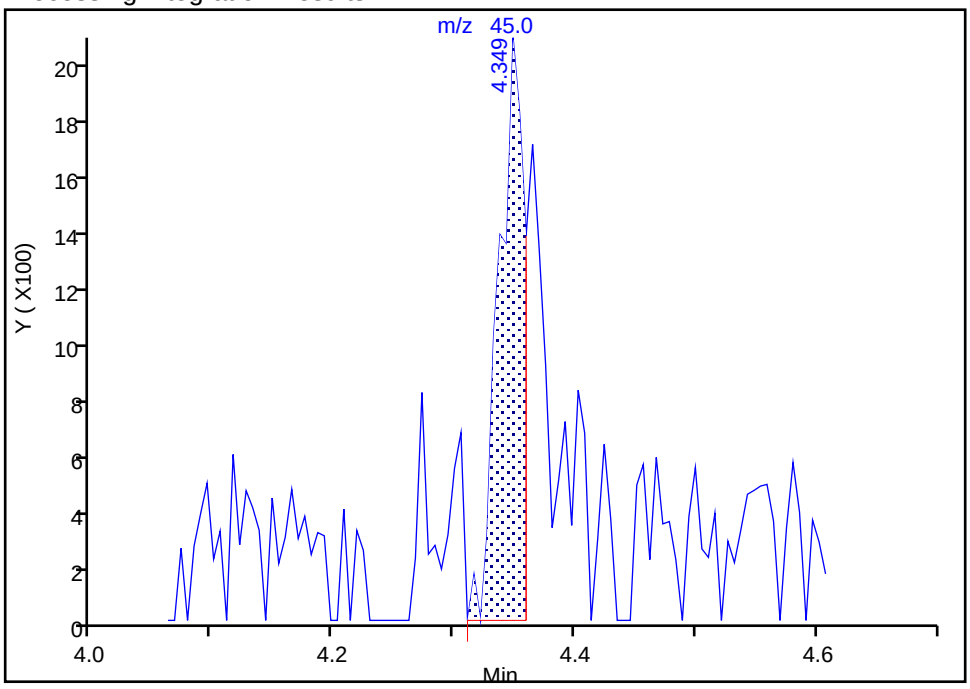
Data File:	\\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC01.D				
Injection Date:	28-Aug-2020 19:11:30	Instrument ID:	MR		
Lims ID:	IC L1				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

17 Ethanol, CAS: 64-17-5

Signal: 2

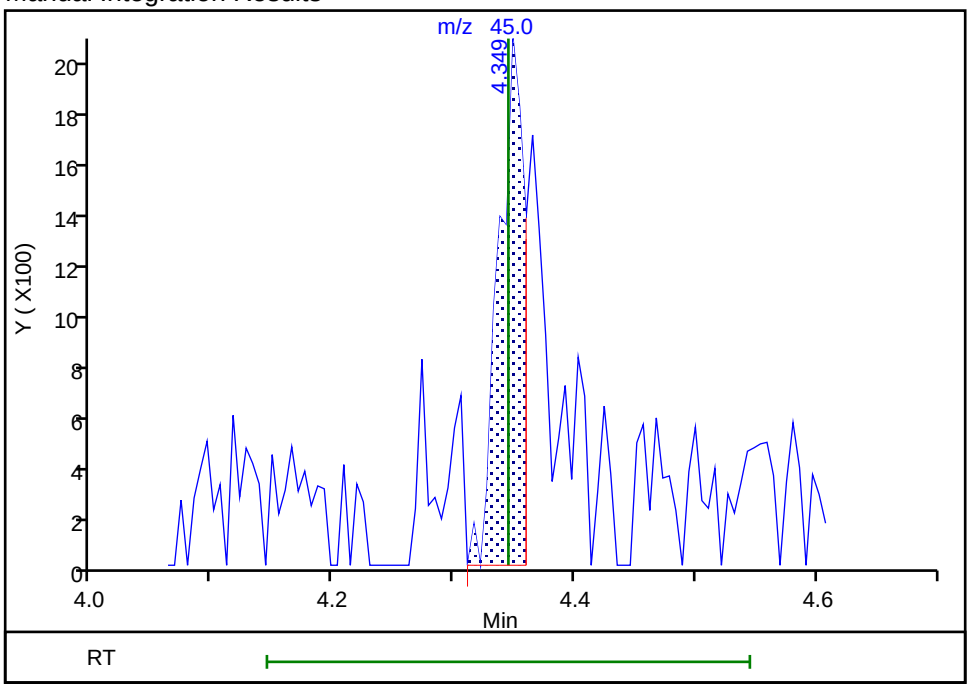
Processing Integration Results

RT: 4.35
Area: 2951
Amount: -0.040201
Amount Units: ppb v/v



Manual Integration Results

RT: 4.35
Area: 2951
Amount: -0.040201
Amount Units: ppb v/v



Reviewer: barlozhetskayaa, 31-Aug-2020 13:29:17

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

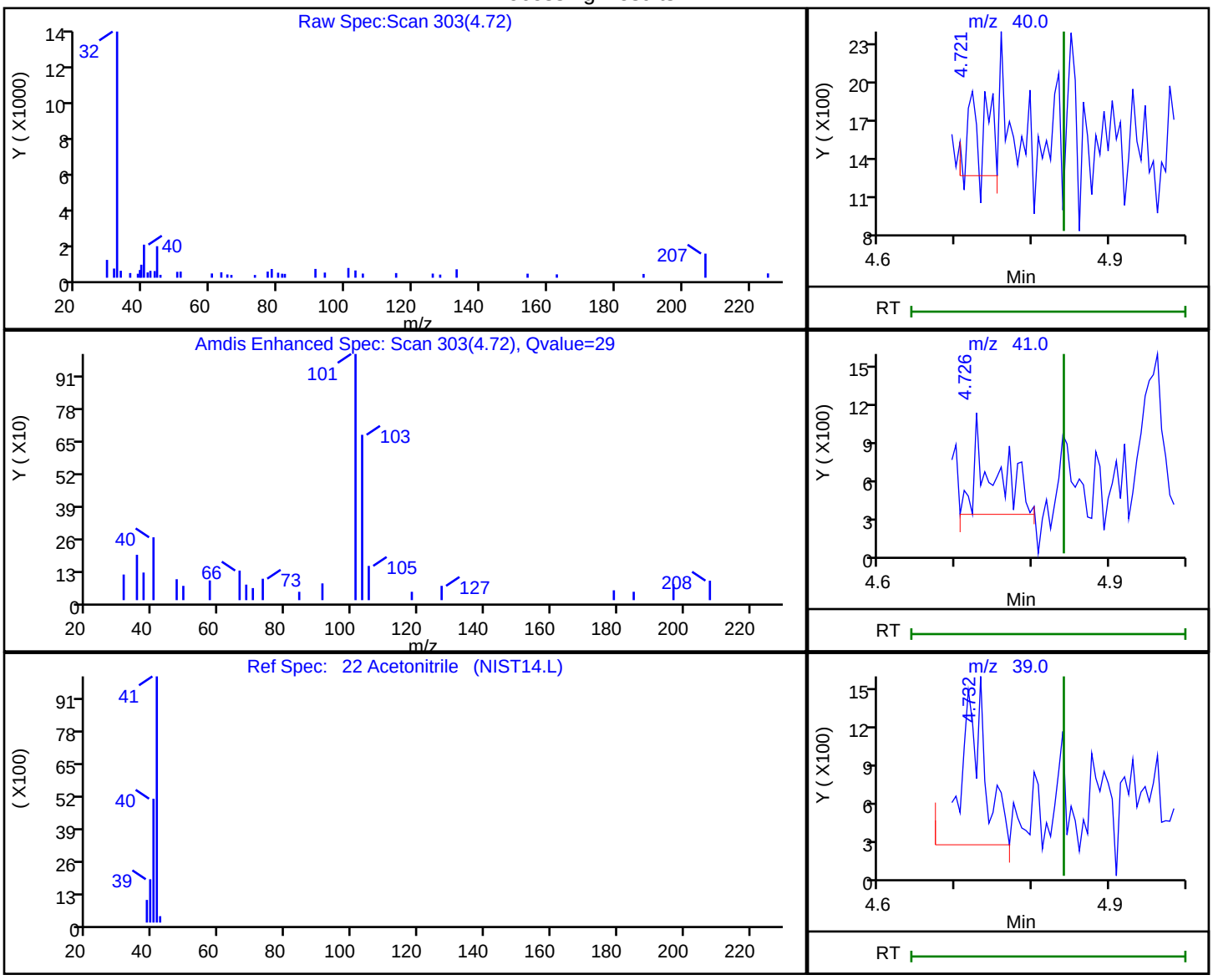
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC01.D
Injection Date: 28-Aug-2020 19:11:30 Instrument ID: MR
Lims ID: IC L1
Client ID:
Operator ID: HMT ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Method: MR_TO15 Limit Group: MSA TO14A_15 Routine ICAL
Column: RTX-5 (0.32 mm) Detector MS SCAN

22 Acetonitrile, CAS: 75-05-8

Processing Results



RT	Mass	Response	Amount
4.72	40.00	1023	0.034831
4.73	41.00	1425	
4.73	39.00	2917	

Reviewer: barlozhetskayaa, 31-Aug-2020 13:29:09
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

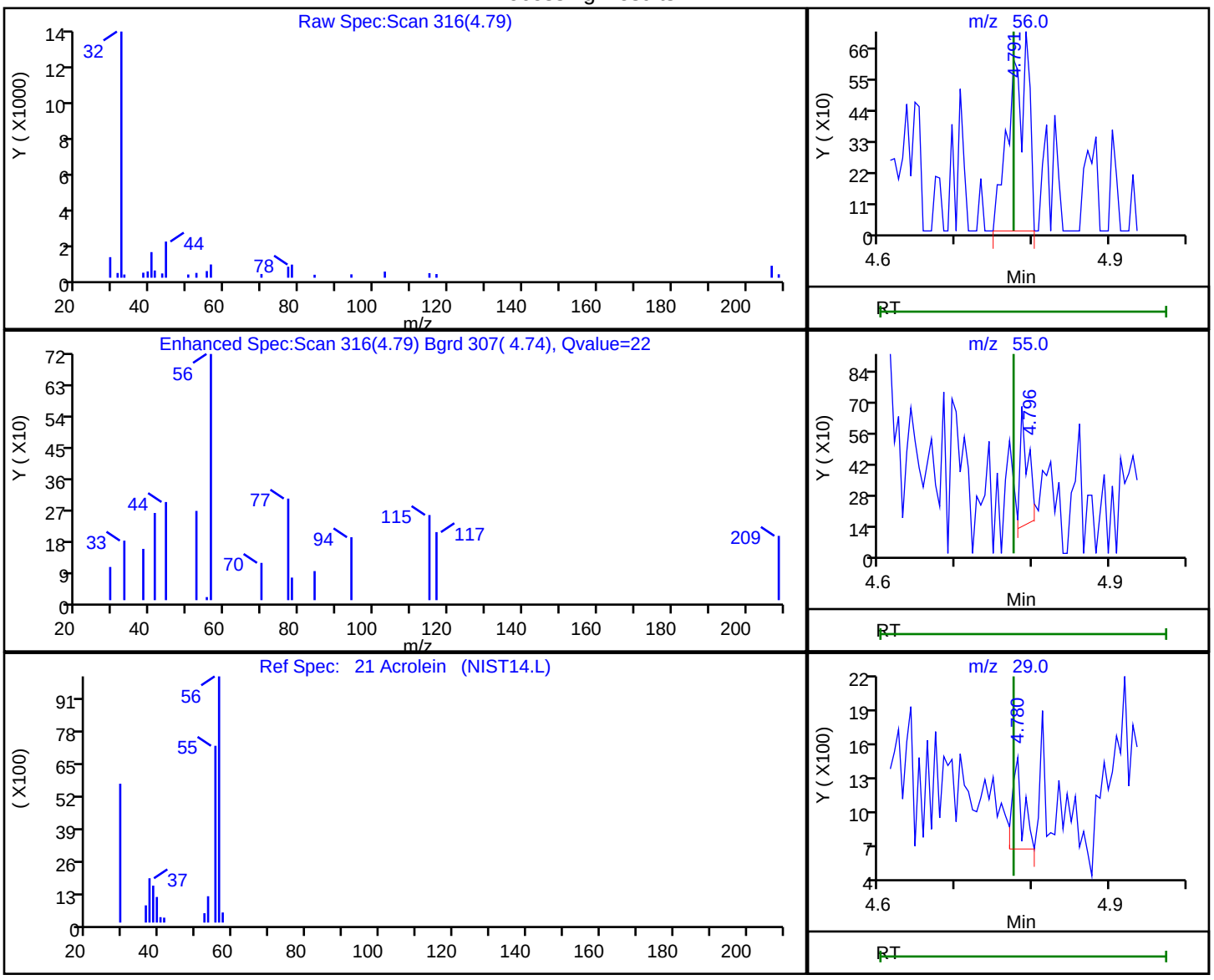
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC01.D				
Injection Date:	28-Aug-2020 19:11:30	Instrument ID:	MR		
Lims ID:	IC L1				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

21 Acrolein, CAS: 107-02-8

Processing Results



RT	Mass	Response	Amount
4.79	56.00	1206	0.060305
4.80	55.00	396	
4.78	29.00	733	

Reviewer: barlozhetskayaa, 31-Aug-2020 13:29:12

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

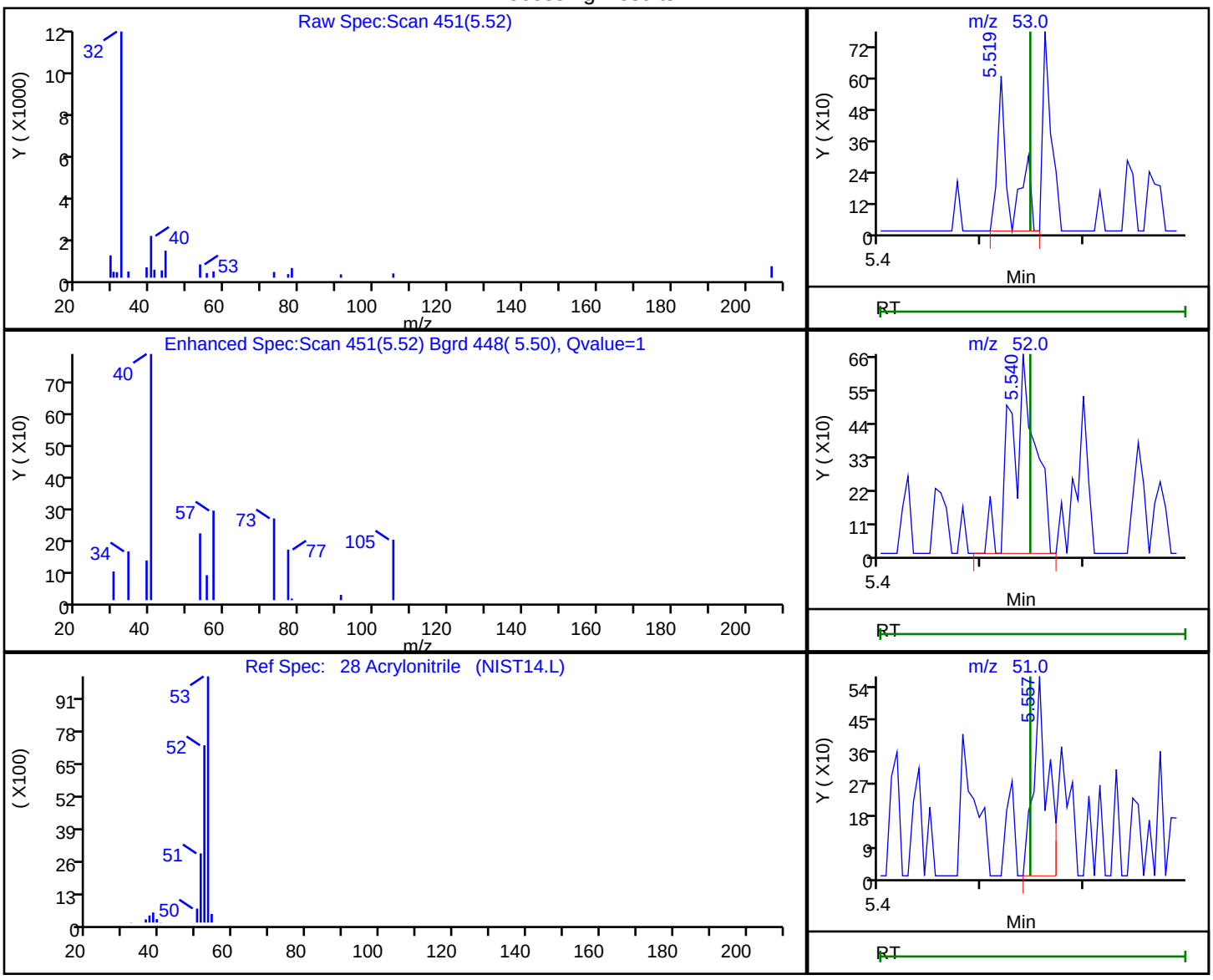
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC01.D				
Injection Date:	28-Aug-2020 19:11:30	Instrument ID:	MR		
Lims ID:	IC L1				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

28 Acrylonitrile, CAS: 107-13-1

Processing Results



RT	Mass	Response	Amount
5.52	53.00	505	0.011606
5.54	52.00	1098	
5.56	51.00	539	

Reviewer: barlozhetskayaa, 31-Aug-2020 13:29:05

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

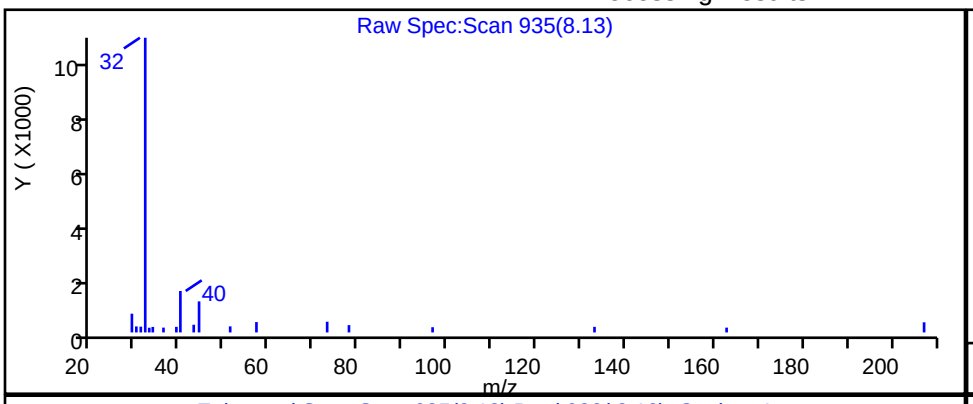
User Disabled Compound Report

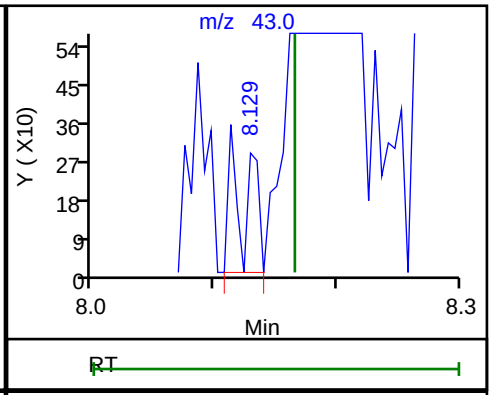
Eurofins TestAmerica, Knoxville

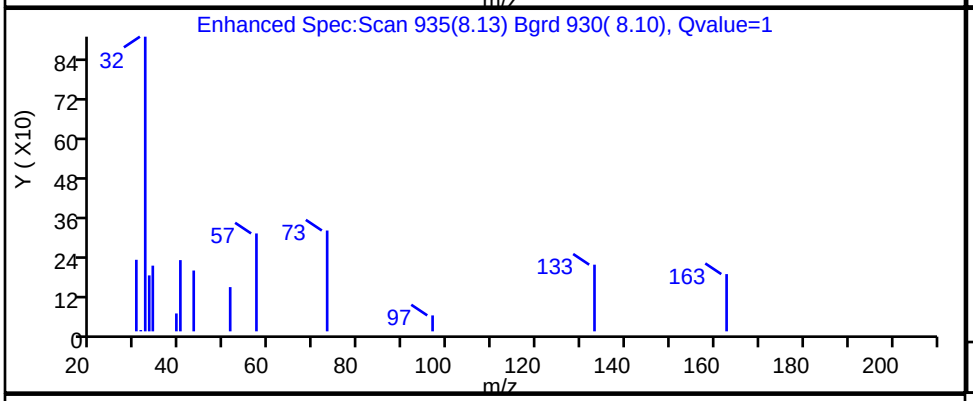
Data File:	\\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC01.D				
Injection Date:	28-Aug-2020 19:11:30	Instrument ID:	MR		
Lims ID:	IC L1				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

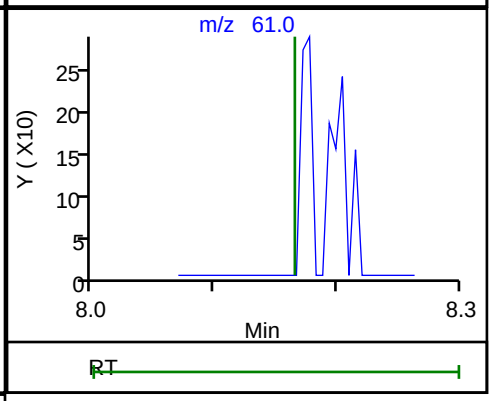
43 Ethyl acetate, CAS: 141-78-6

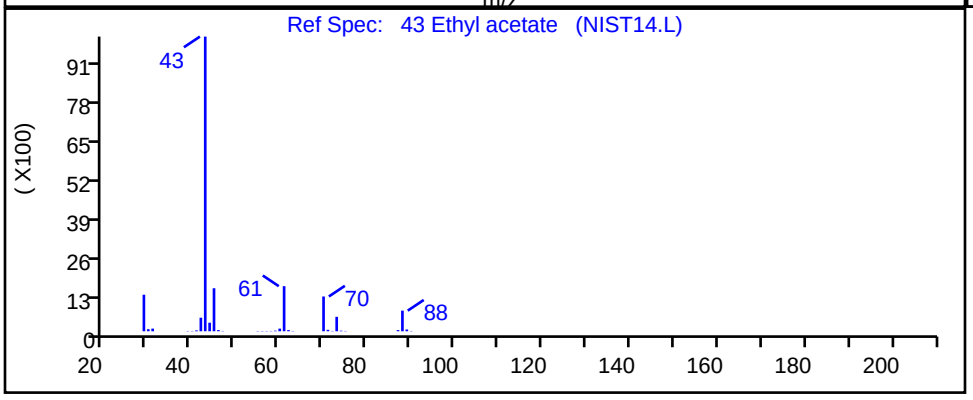
Processing Results











RT	Mass	Response	Amount
8.13	43.00	337	0.001953
8.16	61.00	0	

Reviewer: barlozhetskayaa, 31-Aug-2020 13:28:52

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

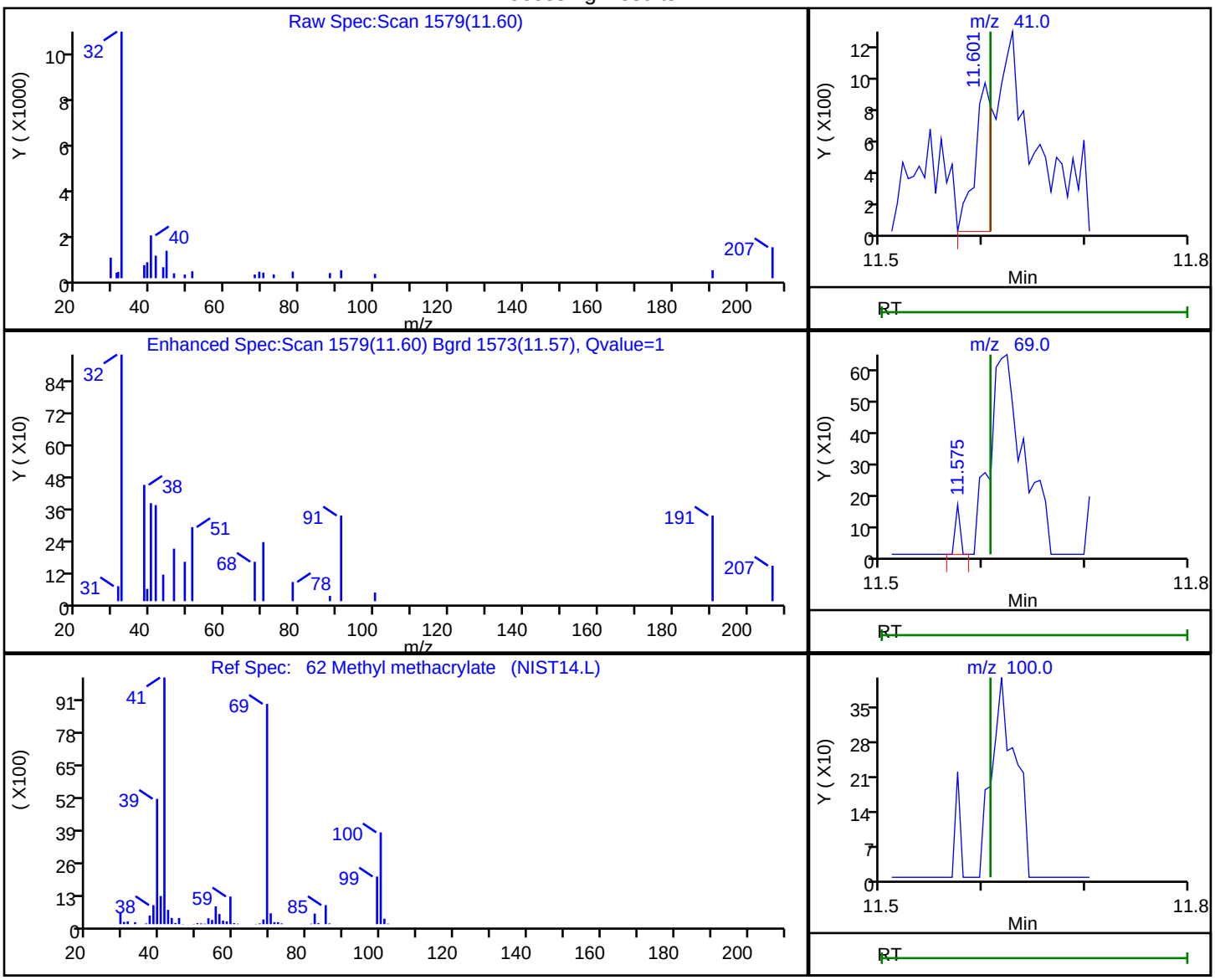
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC01.D				
Injection Date:	28-Aug-2020 19:11:30	Instrument ID:	MR		
Lims ID:	IC L1				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

62 Methyl methacrylate, CAS: 80-62-6

Processing Results



RT	Mass	Response	Amount
11.60	41.00	1030	0.010121
11.57	69.00	52	
11.61	100.00	0	

Reviewer: barlozhetskayaa, 31-Aug-2020 13:28:37

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

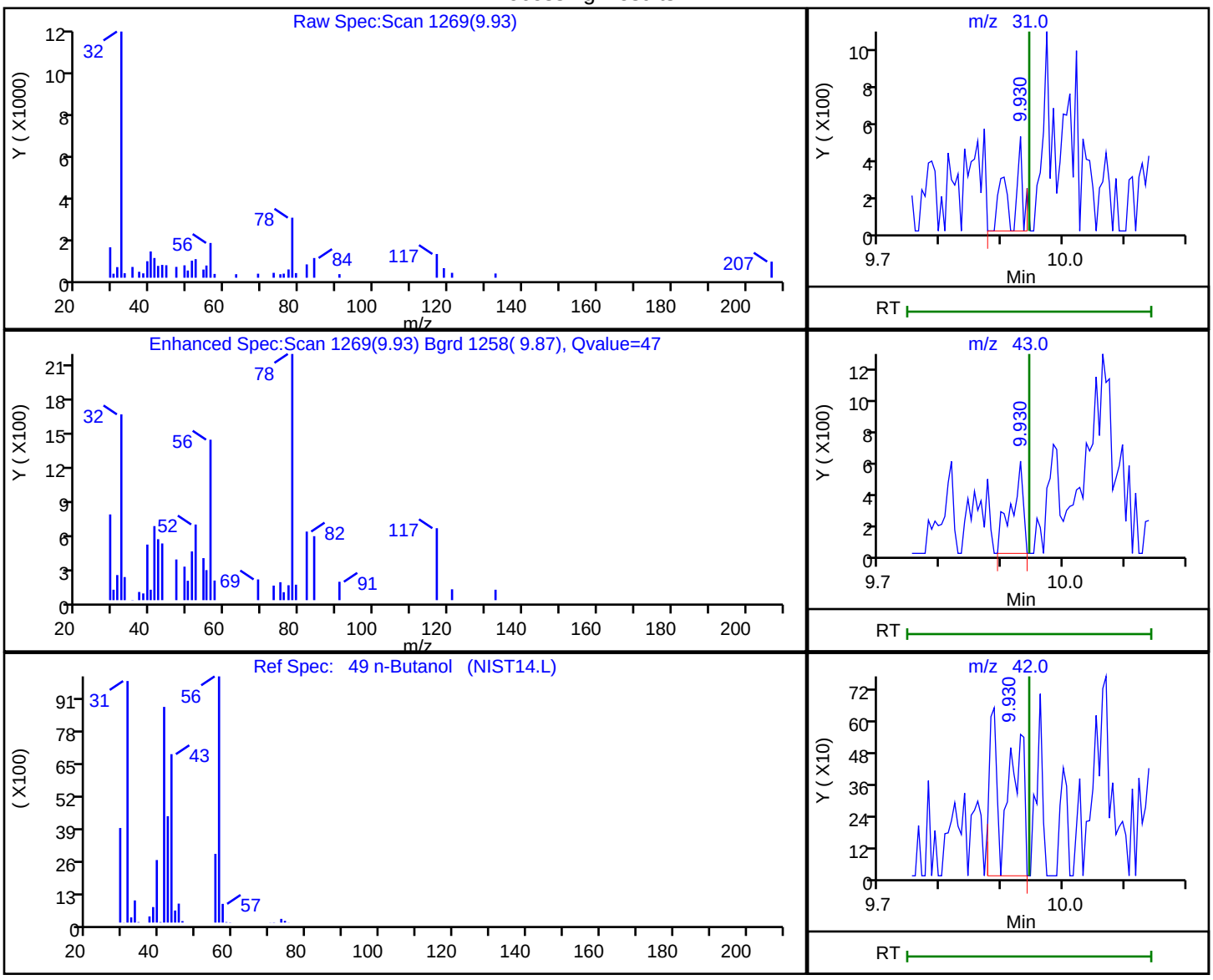
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC01.D				
Injection Date:	28-Aug-2020 19:11:30	Instrument ID:	MR		
Lims ID:	IC L1				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

49 n-Butanol, CAS: 71-36-3

Processing Results



RT	Mass	Response	Amount
9.93	31.00	602	0.013094
9.93	43.00	807	
9.93	42.00	1477	

Reviewer: barlozhetskayaa, 31-Aug-2020 13:28:43

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC02.D
Lims ID: IC L2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 28-Aug-2020 20:00:30 ALS Bottle#: 8 Worklist Smp#: 10
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016425-010
Misc. Info.: 314720
Operator ID: HMT Instrument ID: MR
Sublist: chrom-MR_TO15*sub16

Method: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 31-Aug-2020 13:43:06 Calib Date: 29-Aug-2020 00:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1064

First Level Reviewer: barlozhetskayaa Date: 31-Aug-2020 13:26:52

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.274	8.283	-0.009	91	242923	4.80	4.80	
* 2 1,4-Difluorobenzene	114	10.507	10.519	-0.012	94	1217481	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.354	15.356	-0.002	87	950287	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.004	17.006	-0.002	95	560541	4.64	4.41	
7 Propene	41	3.346	3.343	0.003	62	4536	0.0400	0.0703	
8 Dichlorodifluoromethane	85	3.383	3.390	-0.007	95	5805	0.0400	0.0569	
6 Chlorodifluoromethane	51	3.335	3.345	-0.010	79	7245	0.0400	0.0533	
9 Chloromethane	52	3.556	3.559	-0.003	63	1173	0.0400	0.0486	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.567	3.568	-0.001	91	6816	0.0400	0.0476	
11 Acetaldehyde	44	3.712	3.709	0.003	87	21562	0.2000	0.5684	
12 Vinyl chloride	62	3.712	3.716	-0.004	40	4006	0.0400	0.0256	
14 Butadiene	54	3.793	3.798	-0.005	76	3436	0.0400	0.0551	
13 Butane	43	3.799	3.799	0.000	78	7223	0.0400	0.0548	
15 Bromomethane	94	4.095	4.094	0.001	94	3968	0.0400	0.0106	
16 Chloroethane	64	4.225	4.221	0.004	57	2253	0.0400	0.0210	
17 Ethanol	31	4.354	4.345	0.009	94	11445	0.2000	0.1441	
18 Vinyl bromide	106	4.494	4.502	-0.008	79	4929	0.0400	0.0622	
19 2-Methylbutane	43	4.543	4.547	-0.004	81	5175	0.0400	0.0506	
20 Trichlorofluoromethane	101	4.753	4.751	0.002	96	9216	0.0400	0.0463	
21 Acrolein	56	4.785	4.775	0.010	13	895	0.0400	0.0473	
23 Acetone	58	4.909	4.891	0.018	95	10759	0.1200	0.2964	
24 Pentane	72	4.958	4.960	-0.002	58	571	0.0400	0.0491	
25 Isopropyl alcohol	45	5.012	4.996	0.016	93	14331	0.1200	0.1471	
26 Ethyl ether	31	5.168	5.143	0.025	63	4459	0.0400	0.0527	
27 1,1-Dichloroethene	96	5.438	5.430	0.008	52	3927	0.0400	0.0547	
28 Acrylonitrile	53	5.556	5.548	0.008	35	1291	0.0400	0.0313	
30 1,1,2-Trichloro-1,2,2-trifluoroe	101	5.600	5.603	-0.003	92	7062	0.0400	0.0452	
29 2-Methyl-2-propanol	59	5.621	5.589	0.032	54	6107	0.0400	0.0503	
31 Methylene Chloride	84	5.761	5.768	-0.007	91	3663	0.0400	0.0619	
32 3-Chloro-1-propene	39	5.772	5.782	-0.010	86	4644	0.0400	-0.002457	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
33 Carbon disulfide	76	5.918	5.921	-0.003	85	8355	0.0400	0.0441	
34 trans-1,2-Dichloroethene	96	6.554	6.561	-0.007	57	3278	0.0400	0.0493	
35 2-Methylpentane	43	6.570	6.579	-0.009	91	8673	0.0400	0.0543	
36 Methyl tert-butyl ether	73	6.759	6.716	0.043	83	8536	0.0400	0.0528	
37 1,1-Dichloroethane	63	6.975	6.977	-0.002	86	6489	0.0400	0.0562	
38 Vinyl acetate	43	7.099	7.100	-0.001	81	8425	0.0400	0.0479	
40 Hexane	56	7.546	7.553	-0.007	78	2294	0.0400	0.0466	
39 2-Butanone (MEK)	72	7.579	7.551	0.028	91	1803	0.0400	0.0552	
41 Isopropyl ether	45	7.757	7.736	0.021	92	12479	0.0400	0.0519	
42 cis-1,2-Dichloroethene	96	7.951	7.953	-0.002	37	3783	0.0400	0.0492	
43 Ethyl acetate	43	8.188	8.165	0.023	54	9658	0.0400	0.0591	
44 Chloroform	83	8.290	8.300	-0.010	29	6896	0.0400	0.0472	
45 Tert-butyl ethyl ether	59	8.447	8.413	0.034	92	9108	0.0400	0.0461	
46 Tetrahydrofuran	42	8.760	8.722	0.038	69	4252	0.0400	0.0508	
47 1,1,1-Trichloroethane	97	9.304	9.320	-0.016	93	7497	0.0400	0.0537	
48 1,2-Dichloroethane	62	9.412	9.434	-0.022	67	3317	0.0400	0.0408	
50 Cyclohexane	69	9.924	9.928	-0.004	63	1518	0.0400	0.0506	
51 Benzene	78	9.919	9.933	-0.014	95	11422	0.0400	0.0537	
49 n-Butanol	31	9.973	9.944	0.029	38	2037	0.0400	0.0468	
52 Carbon tetrachloride	117	9.951	9.957	-0.006	88	5576	0.0400	0.0406	
53 2,3-Dimethylpentane	71	10.064	10.069	-0.005	88	1791	0.0400	0.0384	
54 Thiophene	84	10.221	10.221	0.000	40	5656	0.0400	0.0461	
55 Isooctane	57	10.744	10.745	-0.001	89	15416	0.0400	0.0454	
56 n-Heptane	71	11.132	11.139	-0.007	91	3712	0.0400	0.0538	
57 1,2-Dichloropropane	63	11.197	11.212	-0.015	58	4573	0.0400	0.0564	
58 Trichloroethene	130	11.256	11.251	0.005	87	5375	0.0400	0.0508	
59 Dibromomethane	93	11.332	11.334	-0.002	82	4151	0.0400	0.0458	
60 Dichlorobromomethane	83	11.483	11.487	-0.004	96	6136	0.0400	0.0401	
61 1,4-Dioxane	88	11.564	11.532	0.032	25	786	0.0400	0.0225	
62 Methyl methacrylate	41	11.612	11.607	0.005	56	4834	0.0400	0.0501	
63 Methylcyclohexane	83	12.038	12.043	-0.005	86	5845	0.0400	0.0467	
64 4-Methyl-2-pentanone (MIBK)	43	12.518	12.489	0.029	84	9302	0.0400	0.0476	
65 cis-1,3-Dichloropropene	75	12.523	12.528	-0.005	87	4465	0.0400	0.0409	
66 trans-1,3-Dichloropropene	75	13.241	13.241	0.000	88	3725	0.0400	0.0424	
67 Toluene	91	13.359	13.360	-0.001	95	11839	0.0400	0.0463	
68 1,1,2-Trichloroethane	83	13.429	13.440	-0.011	90	3606	0.0400	0.0466	
69 2-Hexanone	58	13.871	13.853	0.018	88	3204	0.0400	0.0414	
70 n-Octane	85	14.076	14.077	-0.001	89	2725	0.0400	0.0382	
71 Chlorodibromomethane	129	14.141	14.148	-0.007	93	7528	0.0400	0.0473	
72 Ethylene Dibromide	107	14.438	14.441	-0.003	90	6075	0.0400	0.0438	
73 Tetrachloroethene	129	14.508	14.519	-0.011	71	4546	0.0400	0.0484	
74 Chlorobenzene	112	15.398	15.404	-0.006	88	8843	0.0400	0.0451	
75 2,3-Dimethylheptane	43	15.441	15.438	0.003	93	11551	0.0400	0.0443	
76 Ethylbenzene	91	15.694	15.698	-0.004	99	14442	0.0400	0.0446	
77 m-Xylene & p-Xylene	91	15.861	15.863	-0.002	92	22187	0.0800	0.0898	
78 n-Nonane	57	16.293	16.296	-0.003	92	6199	0.0400	0.0411	
79 Bromoform	173	16.303	16.304	-0.001	83	6787	0.0400	0.0393	
80 Styrene	104	16.325	16.328	-0.003	91	7531	0.0400	0.0420	
81 o-Xylene	91	16.384	16.389	-0.005	98	11570	0.0400	0.0452	
82 1,1,2,2-Tetrachloroethane	83	16.713	16.715	-0.002	97	8915	0.0400	0.0428	
83 1,2,3-Trichloropropane	110	16.875	16.877	-0.002	90	2480	0.0400	0.0439	
84 Isopropylbenzene	105	16.977	16.980	-0.003	89	16330	0.0400	0.0448	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
85 N-Propylbenzene	120	17.522	17.529	-0.007	97	4385	0.0400	0.0410	
86 2-Chlorotoluene	126	17.571	17.572	-0.001	96	4662	0.0400	0.0474	
87 4-Ethyltoluene	105	17.689	17.688	0.001	99	15398	0.0400	0.0419	
88 1,3,5-Trimethylbenzene	120	17.765	17.766	-0.001	95	7284	0.0400	0.0452	
89 Alpha Methyl Styrene	118	18.007	18.005	0.002	90	5527	0.0400	0.0383	
90 n-Decane	57	18.078	18.075	0.003	91	7453	0.0400	0.0388	
91 tert-Butylbenzene	119	18.202	18.202	0.000	95	14963	0.0400	0.0417	
92 1,2,4-Trimethylbenzene	105	18.218	18.216	0.002	94	12119	0.0400	0.0399	
93 sec-Butylbenzene	105	18.477	18.479	-0.002	97	19626	0.0400	0.0413	
94 1,3-Dichlorobenzene	146	18.487	18.489	-0.002	94	8391	0.0400	0.0365	
95 Benzyl chloride	91	18.563	18.568	-0.005	90	10562	0.0400	0.0464	
96 1,4-Dichlorobenzene	146	18.579	18.580	-0.001	94	9846	0.0400	0.0434	
97 4-Isopropyltoluene	119	18.649	18.648	0.001	96	15420	0.0400	0.0389	
98 1,2,3-Trimethylbenzene	105	18.703	18.698	0.005	97	13530	0.0400	0.0503	
99 Butylcyclohexane	83	18.752	18.757	-0.005	83	10259	0.0400	0.0396	
101 1,2-Dichlorobenzene	146	18.946	18.945	0.001	81	10352	0.0400	0.0432	
100 2,3-Dihydroindene	117	18.951	18.947	0.004	91	13310	0.0400	0.0417	
102 Indene	116	19.081	19.081	-0.001	85	9272	0.0400	0.0357	
103 n-Butylbenzene	91	19.097	19.092	0.005	98	13814	0.0400	0.0355	
104 Undecane	57	19.420	19.418	0.002	89	7653	0.0400	0.0320	
105 1,2-Dibromo-3-Chloropropane	157	19.560	19.560	0.000	85	4510	0.0400	0.0391	
106 1,2,4,5-Tetramethylbenzene	119	19.857	19.860	-0.003	97	13935	0.0400	0.0381	
107 Dodecane	57	20.483	20.478	0.005	84	4267	0.0400	0.0201	
108 1,2,4-Trichlorobenzene	180	20.655	20.658	-0.003	92	7698	0.0400	0.0394	
109 Naphthalene	128	20.795	20.794	0.001	98	12375	0.0400	0.0325	
110 Hexachlorobutadiene	225	21.016	21.014	0.002	90	10895	0.0400	0.0480	
111 1,2,3-Trichlorobenzene	180	21.081	21.081	0.000	94	8626	0.0400	0.0446	
112 2-Methylnaphthalene	142	21.831	21.826	0.005	95	6978	0.0400	0.0313	
113 1-Methylnaphthalene	142	21.960	21.957	0.003	94	15388	0.0400	0.0488	
A 116 C8 Range	1	14.066	(14.039-14.114)		0	34571	0.0400	0.0449	
S 117 Xylenes, Total	100				0		0.1200	0.1350	
S 118 1,2-Dichloroethene, Total	1				0		0.0800	0.0984	

Reagents:

40L1-3DQP_00031	Amount Added: 100.00	Units: mL	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

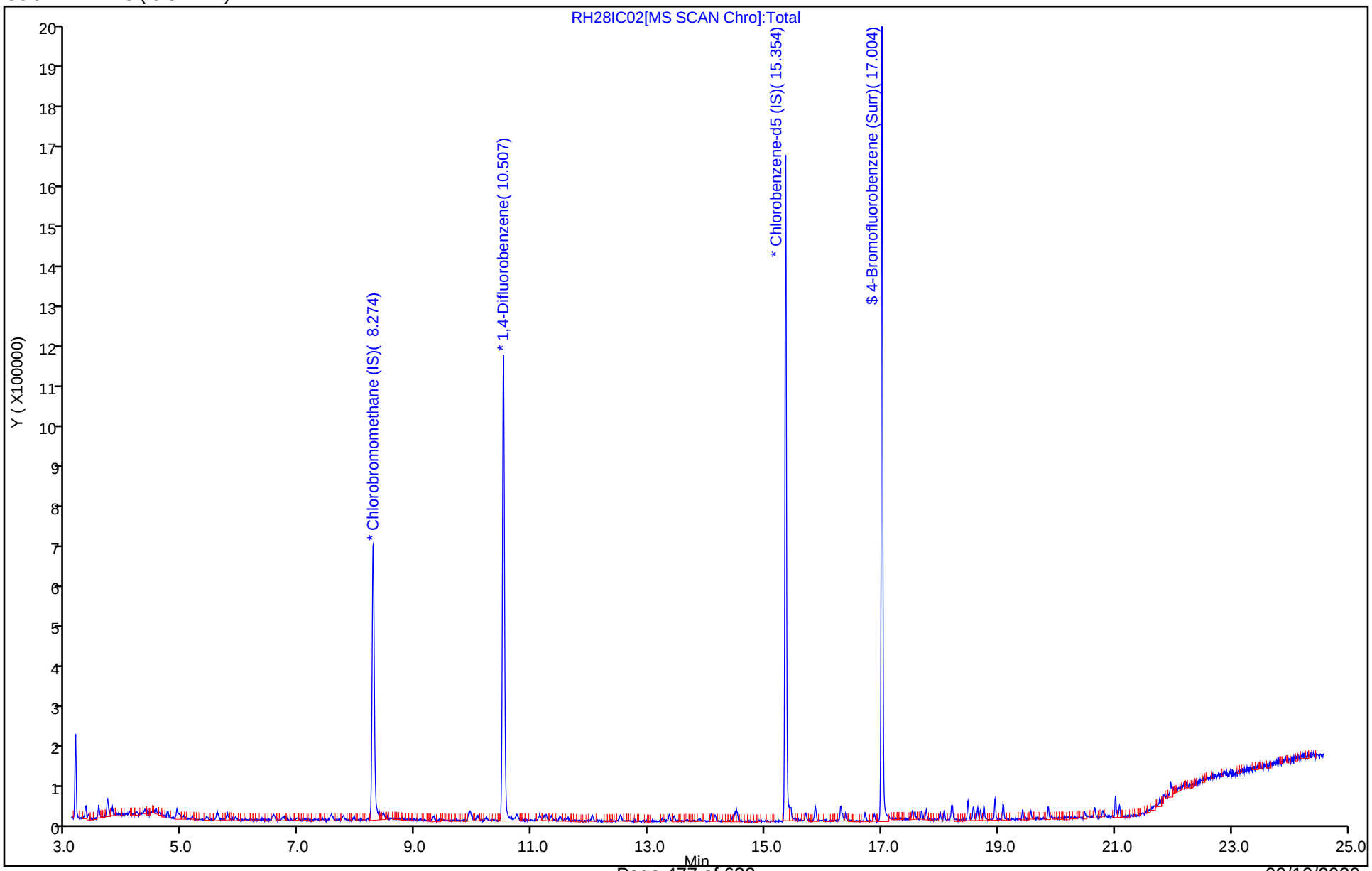
Report Date: 31-Aug-2020 13:43:07 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC02.D

Injection Date:	28-Aug-2020 20:00:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	IC L2			Worklist Smp#:	10
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

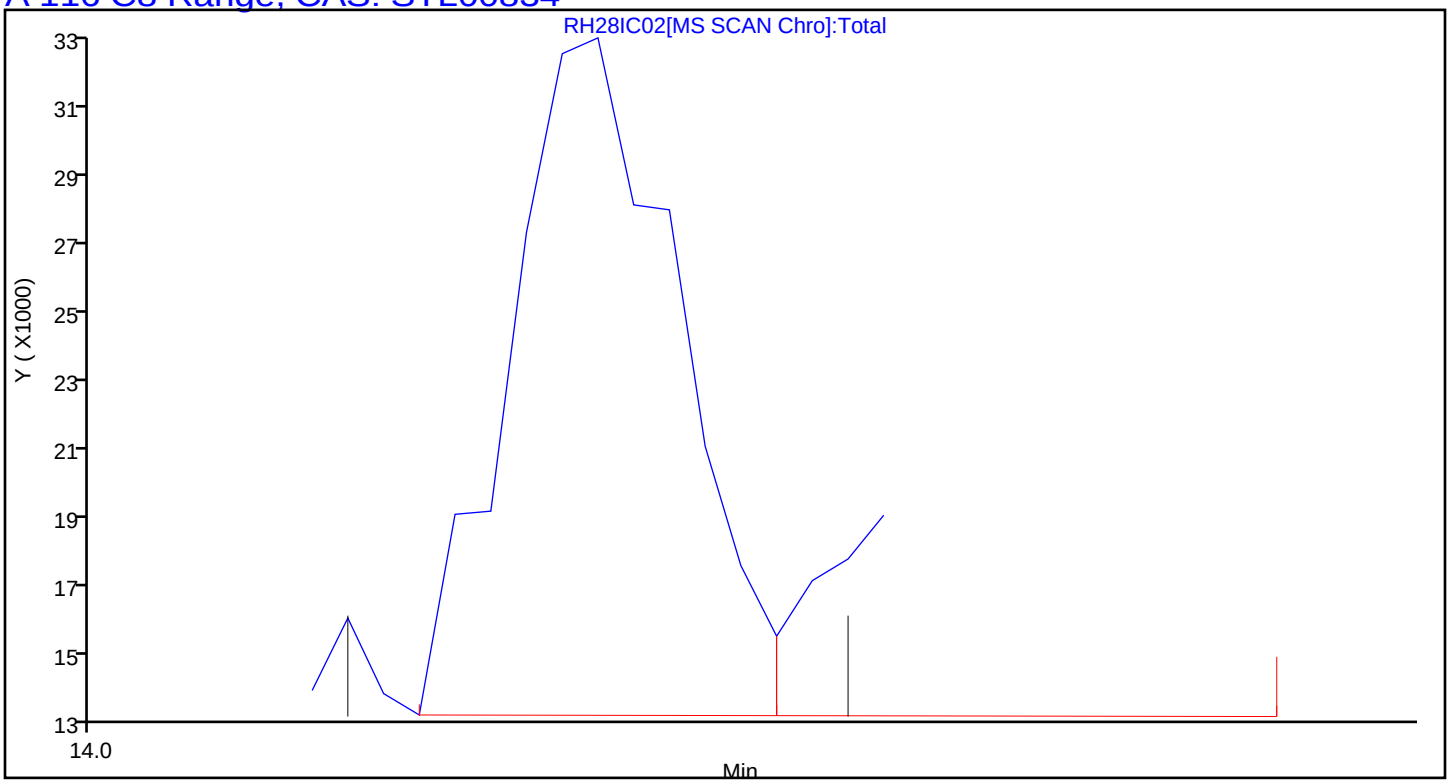


Report Date: 31-Aug-2020 13:43:07 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC02.D				
Injection Date:	28-Aug-2020 20:00:30	Instrument ID:	MR		
Lims ID:	IC L2				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	8	Worklist Smp#:	10
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 116 C8 Range, CAS: STL00834



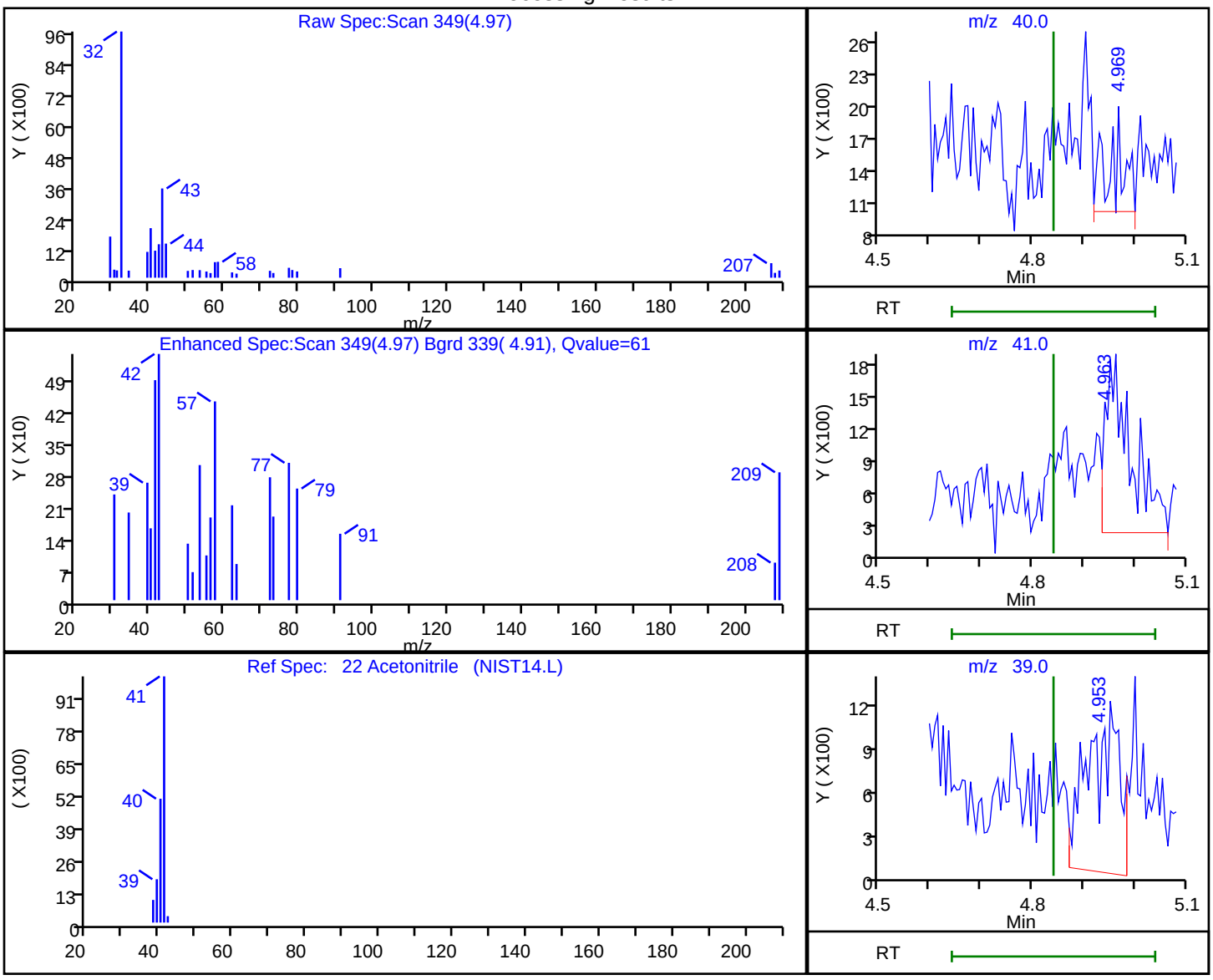
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC02.D				
Injection Date:	28-Aug-2020 20:00:30	Instrument ID:	MR		
Lims ID:	IC L2				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	8	Worklist Smp#:	10
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

22 Acetonitrile, CAS: 75-05-8

Processing Results



RT	Mass	Response	Amount
4.97	40.00	1897	0.068219
4.96	41.00	5632	
4.95	39.00	5052	

Reviewer: barlozhetskayaa, 31-Aug-2020 13:27:19

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC03.D
Lims ID: IC L3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 28-Aug-2020 20:50:30 ALS Bottle#: 8 Worklist Smp#: 11
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016425-011
Misc. Info.: 314720
Operator ID: HMT Instrument ID: MR
Sublist: chrom-MR_TO15*sub16

Method: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 31-Aug-2020 13:43:14 Calib Date: 29-Aug-2020 00:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1064

First Level Reviewer: barlozhetskayaa Date: 31-Aug-2020 13:26:36

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.269	8.283	-0.014	93	226389	4.80	4.80	
* 2 1,4-Difluorobenzene	114	10.507	10.519	-0.012	94	1140479	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.354	15.356	-0.002	87	904210	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.004	17.006	-0.002	95	523427	4.64	4.33	
6 Chlorodifluoromethane	51	3.329	3.345	-0.016	82	12116	0.0800	0.0956	
7 Propene	41	3.335	3.343	-0.008	69	5931	0.0800	0.0986	
8 Dichlorodifluoromethane	85	3.383	3.390	-0.007	95	8501	0.0800	0.0894	
9 Chloromethane	52	3.561	3.559	0.002	63	4722	0.0800	0.2099	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.561	3.568	-0.007	86	13034	0.0800	0.0977	
12 Vinyl chloride	62	3.712	3.716	-0.004	39	7353	0.0800	0.0788	
11 Acetaldehyde	44	3.701	3.709	-0.008	89	45155	0.4000	1.28	
14 Butadiene	54	3.788	3.798	-0.010	59	5995	0.0800	0.1033	
13 Butane	43	3.788	3.799	-0.011	87	13671	0.0800	0.1114	
15 Bromomethane	94	4.079	4.094	-0.015	87	8792	0.0800	0.0803	
16 Chloroethane	64	4.214	4.221	-0.007	89	4177	0.0800	0.0809	
17 Ethanol	31	4.338	4.345	-0.007	98	25506	0.4000	0.4714	
18 Vinyl bromide	106	4.494	4.502	-0.008	96	8061	0.0800	0.1091	
19 2-Methylbutane	43	4.543	4.547	-0.004	94	9635	0.0800	0.1011	
20 Trichlorofluoromethane	101	4.737	4.751	-0.014	96	17978	0.0800	0.0970	
21 Acrolein	56	4.774	4.775	-0.001	27	1436	0.0800	0.0814	
22 Acetonitrile	40	4.823	4.841	-0.018	58	4323	0.0800	0.1668	
23 Acetone	58	4.893	4.891	0.002	99	20997	0.2400	0.6207	
24 Pentane	72	4.936	4.960	-0.024	18	1467	0.0800	0.1354	
25 Isopropyl alcohol	45	4.990	4.996	-0.006	97	30563	0.2400	0.3365	
26 Ethyl ether	31	5.147	5.143	0.004	88	8883	0.0800	0.1126	
27 1,1-Dichloroethene	96	5.411	5.430	-0.019	96	5907	0.0800	0.0883	
28 Acrylonitrile	53	5.535	5.548	-0.013	50	3106	0.0800	0.0809	
30 1,1,2-Trichloro-1,2,2-trifluoroe	101	5.589	5.603	-0.014	91	13392	0.0800	0.0921	
29 2-Methyl-2-propanol	59	5.600	5.589	0.011	76	12907	0.0800	0.1140	
31 Methylene Chloride	84	5.751	5.768	-0.017	92	6055	0.0800	0.1098	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	5.767	5.782	-0.015	88	9255	0.0800	0.0822	
33 Carbon disulfide	76	5.907	5.921	-0.014	97	16549	0.0800	0.0938	
34 trans-1,2-Dichloroethene	96	6.554	6.561	-0.007	74	6013	0.0800	0.0970	
35 2-Methylpentane	43	6.570	6.579	-0.009	95	15740	0.0800	0.1057	
36 Methyl tert-butyl ether	73	6.727	6.716	0.011	95	14447	0.0800	0.0958	
37 1,1-Dichloroethane	63	6.969	6.977	-0.008	97	9835	0.0800	0.0913	
38 Vinyl acetate	43	7.104	7.100	0.004	99	13230	0.0800	0.0807	
40 Hexane	56	7.541	7.553	-0.012	74	4637	0.0800	0.1011	
39 2-Butanone (MEK)	72	7.546	7.551	-0.005	83	4135	0.0800	0.1359	
41 Isopropyl ether	45	7.746	7.736	0.010	96	20620	0.0800	0.0921	
42 cis-1,2-Dichloroethene	96	7.945	7.953	-0.008	85	7459	0.0800	0.1041	
43 Ethyl acetate	43	8.166	8.165	0.001	83	13590	0.0800	0.0893	
44 Chloroform	83	8.280	8.300	-0.020	29	13041	0.0800	0.0957	
45 Tert-butyl ethyl ether	59	8.425	8.413	0.012	95	16601	0.0800	0.0902	
46 Tetrahydrofuran	42	8.727	8.722	0.005	84	6776	0.0800	0.0869	
47 1,1,1-Trichloroethane	97	9.309	9.320	-0.011	94	11655	0.0800	0.0896	
48 1,2-Dichloroethane	62	9.423	9.434	-0.011	69	7149	0.0800	0.0940	
51 Benzene	78	9.930	9.933	-0.003	96	17766	0.0800	0.0891	
50 Cyclohexane	69	9.908	9.928	-0.020	68	2627	0.0800	0.0934	
52 Carbon tetrachloride	117	9.946	9.957	-0.011	90	11755	0.0800	0.0914	
49 n-Butanol	31	9.973	9.944	0.029	41	3452	0.0800	0.0846	
53 2,3-Dimethylpentane	71	10.064	10.069	-0.005	89	4497	0.0800	0.1028	
54 Thiophene	84	10.205	10.221	-0.016	91	9987	0.0800	0.0869	
55 Isooctane	57	10.733	10.745	-0.012	95	29729	0.0800	0.0935	
56 n-Heptane	71	11.132	11.139	-0.007	92	7132	0.0800	0.1103	
57 1,2-Dichloropropane	63	11.208	11.212	-0.004	78	6928	0.0800	0.0913	
58 Trichloroethene	130	11.240	11.251	-0.011	90	8518	0.0800	0.0860	
59 Dibromomethane	93	11.321	11.334	-0.013	93	7712	0.0800	0.0909	
60 Dichlorobromomethane	83	11.477	11.487	-0.010	94	12403	0.0800	0.0866	
61 1,4-Dioxane	88	11.553	11.532	0.021	58	2541	0.0800	0.0777	
62 Methyl methacrylate	41	11.601	11.607	-0.006	84	8554	0.0800	0.0947	
63 Methylcyclohexane	83	12.043	12.043	0.000	90	9915	0.0800	0.0846	
64 4-Methyl-2-pentanone (MIBK)	43	12.502	12.489	0.013	93	14203	0.0800	0.0775	
65 cis-1,3-Dichloropropene	75	12.529	12.528	0.001	84	7616	0.0800	0.0746	
66 trans-1,3-Dichloropropene	75	13.241	13.241	0.000	92	6617	0.0800	0.0792	
67 Toluene	91	13.354	13.360	-0.006	91	21430	0.0800	0.0880	
68 1,1,2-Trichloroethane	83	13.445	13.440	0.005	91	6292	0.0800	0.0854	
69 2-Hexanone	58	13.866	13.853	0.013	89	6915	0.0800	0.0938	
70 n-Octane	85	14.071	14.077	-0.006	90	6289	0.0800	0.0927	
71 Chlorodibromomethane	129	14.146	14.148	-0.002	90	13081	0.0800	0.0865	
72 Ethylene Dibromide	107	14.443	14.441	0.002	95	10468	0.0800	0.0794	
73 Tetrachloroethene	129	14.513	14.519	-0.006	92	8773	0.0800	0.0981	
74 Chlorobenzene	112	15.403	15.404	-0.001	95	17259	0.0800	0.0926	
75 2,3-Dimethylheptane	43	15.441	15.438	0.003	94	22122	0.0800	0.0891	
76 Ethylbenzene	91	15.694	15.698	-0.004	99	25517	0.0800	0.0827	
77 m-Xylene & p-Xylene	91	15.861	15.863	-0.002	97	39468	0.1600	0.1679	
78 n-Nonane	57	16.298	16.296	0.002	93	11791	0.0800	0.0821	
79 Bromoform	173	16.303	16.304	-0.001	85	12835	0.0800	0.0781	
80 Styrene	104	16.330	16.328	0.002	95	14366	0.0800	0.0842	
81 o-Xylene	91	16.390	16.389	0.001	99	20827	0.0800	0.0855	
82 1,1,2,2-Tetrachloroethane	83	16.719	16.715	0.004	98	15948	0.0800	0.0804	
83 1,2,3-Trichloropropane	110	16.875	16.877	-0.002	88	4676	0.0800	0.0871	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	16.977	16.980	-0.003	94	29597	0.0800	0.0853	
85 N-Propylbenzene	120	17.527	17.529	-0.002	99	8310	0.0800	0.0817	
86 2-Chlorotoluene	126	17.565	17.572	-0.007	95	7903	0.0800	0.0844	
87 4-Ethyltoluene	105	17.689	17.688	0.001	98	28183	0.0800	0.0806	
88 1,3,5-Trimethylbenzene	120	17.765	17.766	-0.001	93	12856	0.0800	0.0838	
89 Alpha Methyl Styrene	118	18.002	18.005	-0.003	85	10571	0.0800	0.0769	
90 n-Decane	57	18.072	18.075	-0.003	85	14210	0.0800	0.0778	
91 tert-Butylbenzene	119	18.202	18.202	0.000	95	26273	0.0800	0.0769	
92 1,2,4-Trimethylbenzene	105	18.218	18.216	0.002	93	23348	0.0800	0.0808	
93 sec-Butylbenzene	105	18.477	18.479	-0.003	98	35652	0.0800	0.0789	
94 1,3-Dichlorobenzene	146	18.487	18.489	-0.002	95	18470	0.0800	0.0844	
95 Benzyl chloride	91	18.563	18.568	-0.005	90	16061	0.0800	0.0741	
96 1,4-Dichlorobenzene	146	18.579	18.580	-0.001	95	17209	0.0800	0.0798	
97 4-Isopropyltoluene	119	18.649	18.648	0.001	97	29811	0.0800	0.0791	
98 1,2,3-Trimethylbenzene	105	18.692	18.698	-0.006	95	23899	0.0800	0.0933	
99 Butylcyclohexane	83	18.757	18.757	0.000	95	20292	0.0800	0.0823	
101 1,2-Dichlorobenzene	146	18.940	18.945	-0.005	84	16734	0.0800	0.0735	
100 2,3-Dihydroindene	117	18.946	18.947	-0.001	90	23925	0.0800	0.0788	
102 Indene	116	19.080	19.081	-0.001	87	17900	0.0800	0.0724	
103 n-Butylbenzene	91	19.091	19.092	-0.001	96	27573	0.0800	0.0745	
104 Undecane	57	19.420	19.418	0.002	87	14433	0.0800	0.0634	
105 1,2-Dibromo-3-Chloropropane	157	19.560	19.560	0.000	86	6801	0.0800	0.0620	
106 1,2,4,5-Tetramethylbenzene	119	19.857	19.860	-0.003	97	25485	0.0800	0.0733	
107 Dodecane	57	20.477	20.478	-0.001	90	12191	0.0800	0.0603	
108 1,2,4-Trichlorobenzene	180	20.660	20.658	0.002	92	12214	0.0800	0.0656	
109 Naphthalene	128	20.790	20.794	-0.004	98	28187	0.0800	0.0777	
110 Hexachlorobutadiene	225	21.016	21.014	0.002	94	19968	0.0800	0.0925	
111 1,2,3-Trichlorobenzene	180	21.081	21.081	0.000	91	18521	0.0800	0.1007	
112 2-Methylnaphthalene	142	21.825	21.826	-0.001	95	8700	0.0800	0.0410	
113 1-Methylnaphthalene	142	21.960	21.957	0.003	95	24600	0.0800	0.0820	
A 116 C8 Range	1	14.066	(14.039-14.125)		0	70355	0.0800	0.0975	
S 117 Xylenes, Total	100				0		0.2400	0.2534	
S 118 1,2-Dichloroethene, Total	1				0		0.1600	0.2010	

Reagents:

40L1-3DQP_00031	Amount Added: 200.00	Units: mL	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

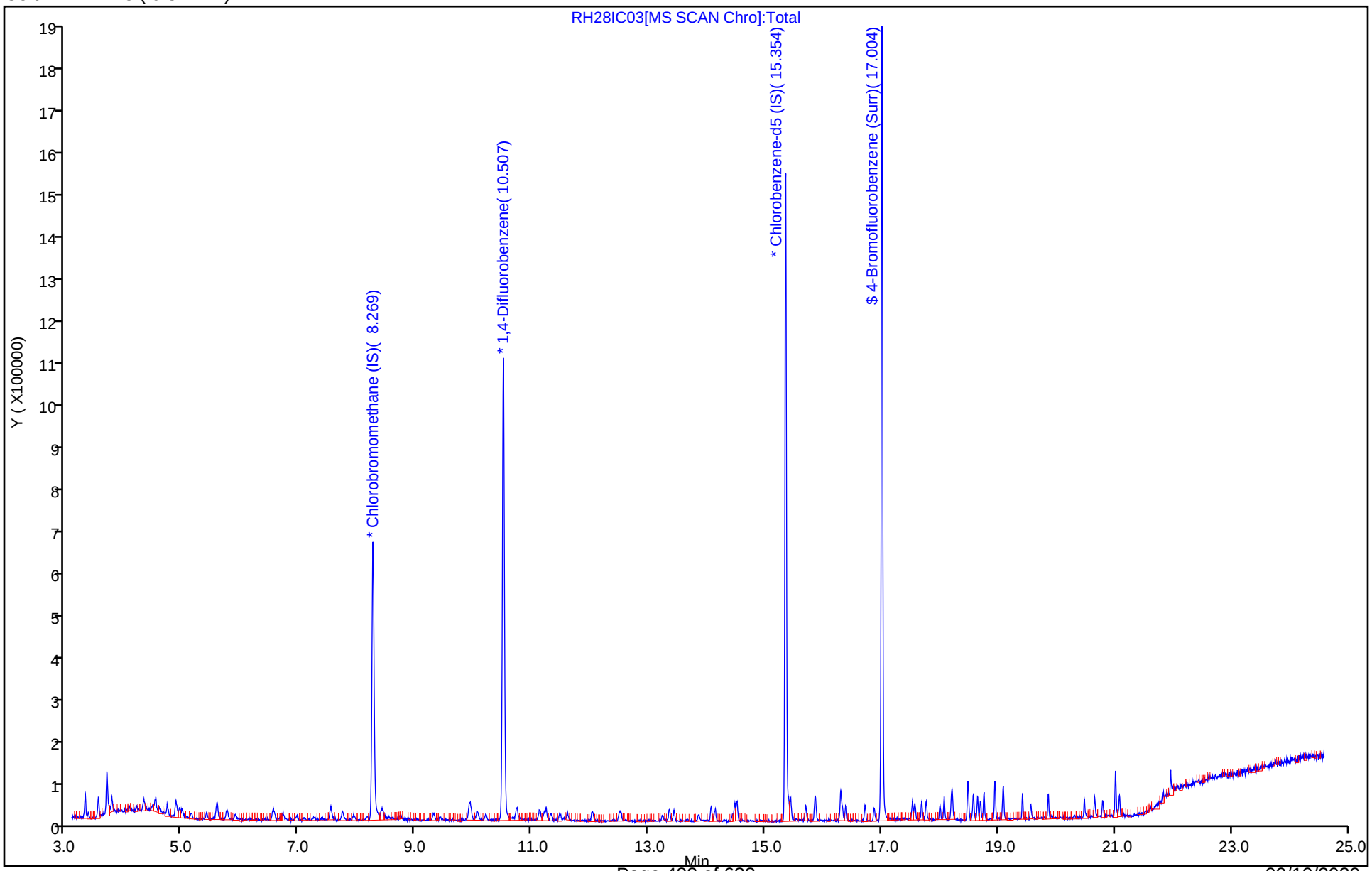
Report Date: 31-Aug-2020 13:43:15 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC03.D

Injection Date:	28-Aug-2020 20:50:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	IC L3			Worklist Smp#:	11
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

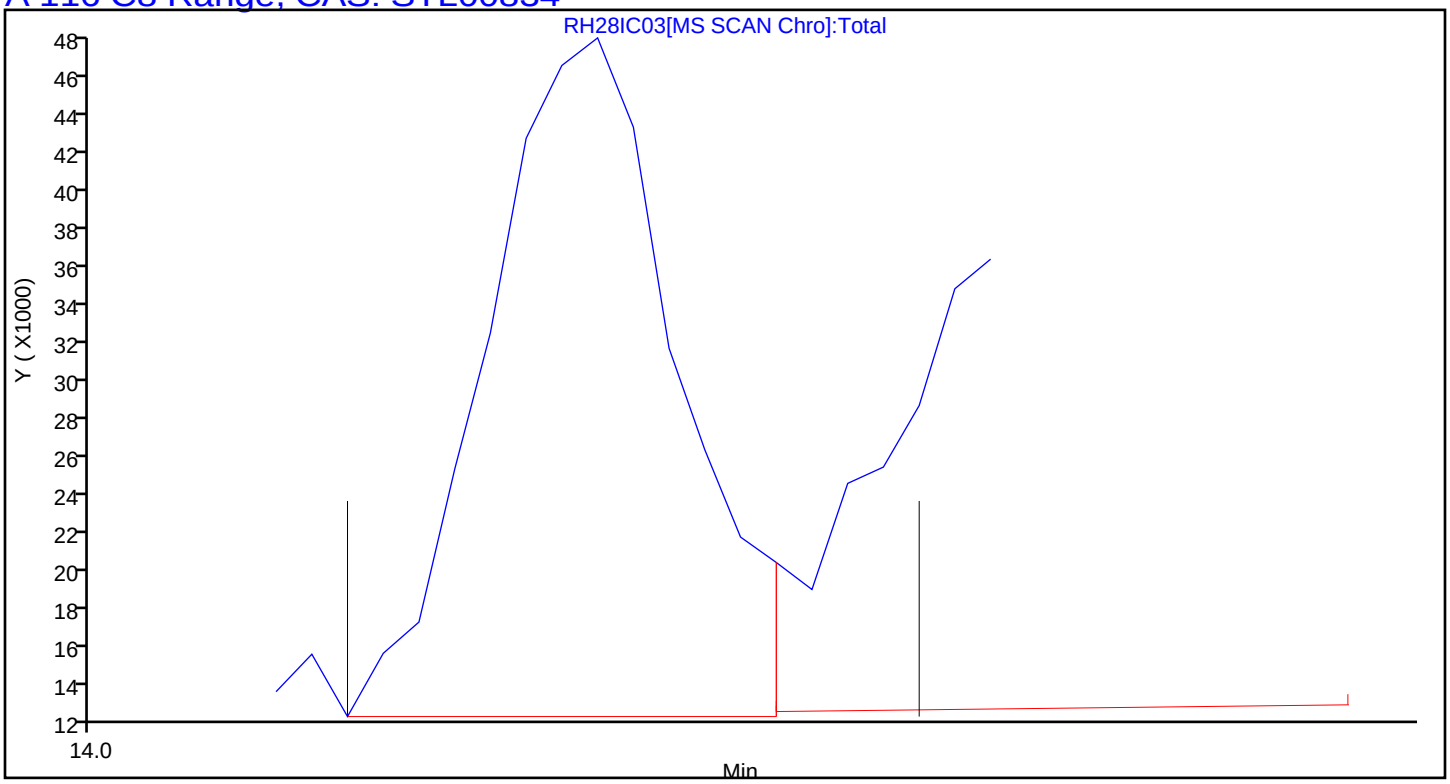
Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC03.D				
Injection Date:	28-Aug-2020 20:50:30	Instrument ID:	MR		
Lims ID:	IC L3				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	8	Worklist Smp#:	11
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 116 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC04.D
Lims ID: IC L4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 28-Aug-2020 21:38:30 ALS Bottle#: 9 Worklist Smp#: 12
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016425-012
Misc. Info.: 314717
Operator ID: HMT Instrument ID: MR
Sublist: chrom-MR_TO15*sub16

Method: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 31-Aug-2020 13:43:22 Calib Date: 29-Aug-2020 00:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1064

First Level Reviewer: barlozhetskayaa Date: 31-Aug-2020 13:20:36

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.280	8.283	-0.003	92	231832	4.80	4.80	
* 2 1,4-Difluorobenzene	114	10.517	10.519	-0.002	93	1154880	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.354	15.356	-0.002	87	917851	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.004	17.006	-0.002	94	543030	4.64	4.43	
6 Chlorodifluoromethane	51	3.340	3.345	-0.005	98	22349	0.1600	0.1722	
7 Propene	41	3.346	3.343	0.003	64	12382	0.1600	0.2011	
8 Dichlorodifluoromethane	85	3.399	3.390	0.009	97	21069	0.1600	0.2163	
9 Chloromethane	52	3.567	3.559	0.008	56	4150	0.1600	0.1801	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.572	3.568	0.004	88	25710	0.1600	0.1883	
11 Acetaldehyde	44	3.712	3.709	0.003	82	29061	0.8000	0.8027	
12 Vinyl chloride	62	3.718	3.716	0.002	50	13267	0.1600	0.1613	
14 Butadiene	54	3.804	3.798	0.006	64	10249	0.1600	0.1724	
13 Butane	43	3.804	3.799	0.005	87	22943	0.1600	0.1825	
15 Bromomethane	94	4.100	4.094	0.006	98	14685	0.1600	0.1563	
16 Chloroethane	64	4.219	4.221	-0.002	89	6827	0.1600	0.1528	
17 Ethanol	31	4.338	4.345	-0.007	97	33858	0.8000	0.6380	
18 Vinyl bromide	106	4.505	4.502	0.003	94	13473	0.1600	0.1781	
19 2-Methylbutane	43	4.548	4.547	0.001	94	17708	0.1600	0.1814	
20 Trichlorofluoromethane	101	4.753	4.751	0.002	96	31876	0.1600	0.1679	
21 Acrolein	56	4.785	4.775	0.010	53	3254	0.1600	0.1801	
22 Acetonitrile	40	4.834	4.841	-0.007	66	3234	0.1600	0.1219	
23 Acetone	58	4.899	4.891	0.008	99	16535	0.4800	0.4773	
24 Pentane	72	4.952	4.960	-0.008	56	946	0.1600	0.0852	
25 Isopropyl alcohol	45	5.001	4.996	0.005	91	46204	0.4800	0.4968	
26 Ethyl ether	31	5.152	5.143	0.009	87	15799	0.1600	0.1956	
27 1,1-Dichloroethene	96	5.432	5.430	0.002	96	11583	0.1600	0.1691	
28 Acrylonitrile	53	5.546	5.548	-0.002	81	5801	0.1600	0.1475	
30 1,1,2-Trichloro-1,2,2-trifluoroe	101	5.600	5.603	-0.003	93	25672	0.1600	0.1723	
29 2-Methyl-2-propanol	59	5.600	5.589	0.011	69	20684	0.1600	0.1784	
31 Methylene Chloride	84	5.767	5.768	-0.001	94	10241	0.1600	0.1813	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	5.783	5.782	0.001	91	13794	0.1600	0.1545	
33 Carbon disulfide	76	5.923	5.921	0.002	97	30725	0.1600	0.1700	
34 trans-1,2-Dichloroethene	96	6.559	6.561	-0.002	92	9549	0.1600	0.1503	
35 2-Methylpentane	43	6.581	6.579	0.002	91	26179	0.1600	0.1717	
36 Methyl tert-butyl ether	73	6.721	6.716	0.005	94	28229	0.1600	0.1829	
37 1,1-Dichloroethane	63	6.975	6.977	-0.002	98	20284	0.1600	0.1840	
38 Vinyl acetate	43	7.099	7.100	-0.001	99	25465	0.1600	0.1517	
40 Hexane	56	7.562	7.553	0.009	75	8175	0.1600	0.1741	
39 2-Butanone (MEK)	72	7.557	7.551	0.006	81	5655	0.1600	0.1815	
41 Isopropyl ether	45	7.746	7.736	0.010	97	41195	0.1600	0.1797	
42 cis-1,2-Dichloroethene	96	7.945	7.953	-0.008	89	12473	0.1600	0.1699	
43 Ethyl acetate	43	8.166	8.165	0.001	97	25075	0.1600	0.1608	
44 Chloroform	83	8.296	8.300	-0.004	32	23319	0.1600	0.1671	
45 Tert-butyl ethyl ether	59	8.414	8.413	0.001	97	32190	0.1600	0.1708	
46 Tetrahydrofuran	42	8.727	8.722	0.005	88	14134	0.1600	0.1770	
47 1,1,1-Trichloroethane	97	9.315	9.320	-0.005	92	24015	0.1600	0.1802	
48 1,2-Dichloroethane	62	9.434	9.434	0.000	94	13273	0.1600	0.1723	
50 Cyclohexane	69	9.930	9.928	0.002	69	5002	0.1600	0.1757	
51 Benzene	78	9.935	9.933	0.002	96	34483	0.1600	0.1708	
52 Carbon tetrachloride	117	9.957	9.957	0.000	91	23349	0.1600	0.1793	
49 n-Butanol	31	9.962	9.944	0.018	70	7645	0.1600	0.1850	
53 2,3-Dimethylpentane	71	10.075	10.069	0.006	90	7341	0.1600	0.1658	
54 Thiophene	84	10.221	10.221	0.000	93	18414	0.1600	0.1582	
55 Isooctane	57	10.744	10.745	-0.001	96	54652	0.1600	0.1698	
56 n-Heptane	71	11.143	11.139	0.004	96	11408	0.1600	0.1742	
57 1,2-Dichloropropane	63	11.208	11.212	-0.004	85	13409	0.1600	0.1745	
58 Trichloroethene	130	11.251	11.251	0.000	95	16123	0.1600	0.1607	
59 Dibromomethane	93	11.326	11.334	-0.008	89	13741	0.1600	0.1600	
60 Dichlorobromomethane	83	11.483	11.487	-0.004	96	23290	0.1600	0.1606	
61 1,4-Dioxane	88	11.542	11.532	0.010	82	6249	0.1600	0.1886	
62 Methyl methacrylate	41	11.607	11.607	0.000	87	13921	0.1600	0.1522	
63 Methylcyclohexane	83	12.043	12.043	0.000	90	20204	0.1600	0.1703	
64 4-Methyl-2-pentanone (MIBK)	43	12.491	12.489	0.002	96	28426	0.1600	0.1532	
65 cis-1,3-Dichloropropene	75	12.529	12.528	0.001	93	15902	0.1600	0.1537	
66 trans-1,3-Dichloropropene	75	13.235	13.241	-0.006	91	11410	0.1600	0.1345	
67 Toluene	91	13.365	13.360	0.005	92	39429	0.1600	0.1596	
68 1,1,2-Trichloroethane	83	13.440	13.440	0.000	93	11721	0.1600	0.1568	
69 2-Hexanone	58	13.861	13.853	0.008	91	10559	0.1600	0.1412	
70 n-Octane	85	14.082	14.077	0.005	93	11613	0.1600	0.1686	
71 Chlorodibromomethane	129	14.146	14.148	-0.002	95	23664	0.1600	0.1541	
72 Ethylene Dibromide	107	14.443	14.441	0.002	95	20780	0.1600	0.1552	
73 Tetrachloroethene	129	14.524	14.519	0.005	91	14375	0.1600	0.1583	
74 Chlorobenzene	112	15.403	15.404	-0.001	96	30260	0.1600	0.1599	
75 2,3-Dimethylheptane	43	15.441	15.438	0.003	95	41485	0.1600	0.1646	
76 Ethylbenzene	91	15.694	15.698	-0.004	99	52336	0.1600	0.1672	
77 m-Xylene & p-Xylene	91	15.856	15.863	-0.007	96	74443	0.3200	0.3119	
78 n-Nonane	57	16.293	16.296	-0.003	90	21853	0.1600	0.1500	
79 Bromoform	173	16.298	16.304	-0.006	84	24984	0.1600	0.1498	
80 Styrene	104	16.330	16.328	0.002	96	24458	0.1600	0.1412	
81 o-Xylene	91	16.390	16.389	0.001	97	39171	0.1600	0.1585	
82 1,1,2,2-Tetrachloroethane	83	16.713	16.715	-0.002	95	30983	0.1600	0.1539	
83 1,2,3-Trichloropropane	110	16.880	16.877	0.003	93	9345	0.1600	0.1715	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	16.977	16.980	-0.003	93	54823	0.1600	0.1556	
85 N-Propylbenzene	120	17.528	17.529	-0.001	99	16229	0.1600	0.1573	
86 2-Chlorotoluene	126	17.571	17.572	-0.001	96	15062	0.1600	0.1585	
87 4-Ethyltoluene	105	17.689	17.688	0.001	99	52736	0.1600	0.1486	
88 1,3,5-Trimethylbenzene	120	17.765	17.766	-0.001	93	25181	0.1600	0.1616	
89 Alpha Methyl Styrene	118	18.002	18.005	-0.003	85	18483	0.1600	0.1325	
90 n-Decane	57	18.078	18.075	0.003	88	26449	0.1600	0.1426	
91 tert-Butylbenzene	119	18.202	18.202	0.000	93	51984	0.1600	0.1499	
92 1,2,4-Trimethylbenzene	105	18.218	18.216	0.002	94	44796	0.1600	0.1527	
93 sec-Butylbenzene	105	18.477	18.479	-0.002	98	69073	0.1600	0.1505	
94 1,3-Dichlorobenzene	146	18.493	18.489	0.004	95	29573	0.1600	0.1331	
95 Benzyl chloride	91	18.568	18.568	0.000	98	29950	0.1600	0.1362	
96 1,4-Dichlorobenzene	146	18.579	18.580	-0.001	97	32208	0.1600	0.1472	
97 4-Isopropyltoluene	119	18.644	18.648	-0.004	98	58048	0.1600	0.1518	
98 1,2,3-Trimethylbenzene	105	18.698	18.698	0.000	97	44115	0.1600	0.1695	
99 Butylcyclohexane	83	18.757	18.757	0.000	92	36896	0.1600	0.1474	
101 1,2-Dichlorobenzene	146	18.940	18.945	-0.005	90	33245	0.1600	0.1438	
100 2,3-Dihydroindene	117	18.946	18.947	-0.001	93	44093	0.1600	0.1431	
102 Indene	116	19.075	19.081	-0.006	84	32427	0.1600	0.1292	
103 n-Butylbenzene	91	19.091	19.092	-0.001	96	50815	0.1600	0.1353	
104 Undecane	57	19.415	19.418	-0.003	88	26252	0.1600	0.1136	
105 1,2-Dibromo-3-Chloropropane	157	19.555	19.560	-0.005	88	15099	0.1600	0.1356	
106 1,2,4,5-Tetramethylbenzene	119	19.862	19.860	0.002	98	46923	0.1600	0.1330	
107 Dodecane	57	20.477	20.478	-0.001	90	18925	0.1600	0.0921	
108 1,2,4-Trichlorobenzene	180	20.660	20.658	0.002	92	22105	0.1600	0.1170	
109 Naphthalene	128	20.795	20.794	0.001	99	46825	0.1600	0.1272	
110 Hexachlorobutadiene	225	21.016	21.014	0.002	93	31897	0.1600	0.1456	
111 1,2,3-Trichlorobenzene	180	21.081	21.081	0.000	91	25842	0.1600	0.1384	
112 2-Methylnaphthalene	142	21.825	21.826	-0.001	98	15517	0.1600	0.0721	
113 1-Methylnaphthalene	142	21.960	21.957	0.003	97	31105	0.1600	0.1022	
A 116 C8 Range	1	14.066	(14.039-14.114)		0	120977	0.1600	0.1656	
S 117 Xylenes, Total	100				0		0.4800	0.4704	
S 118 1,2-Dichloroethene, Total	1				0		0.3200	0.3203	

Reagents:

40L5DQP_00020	Amount Added: 80.00	Units: mL	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

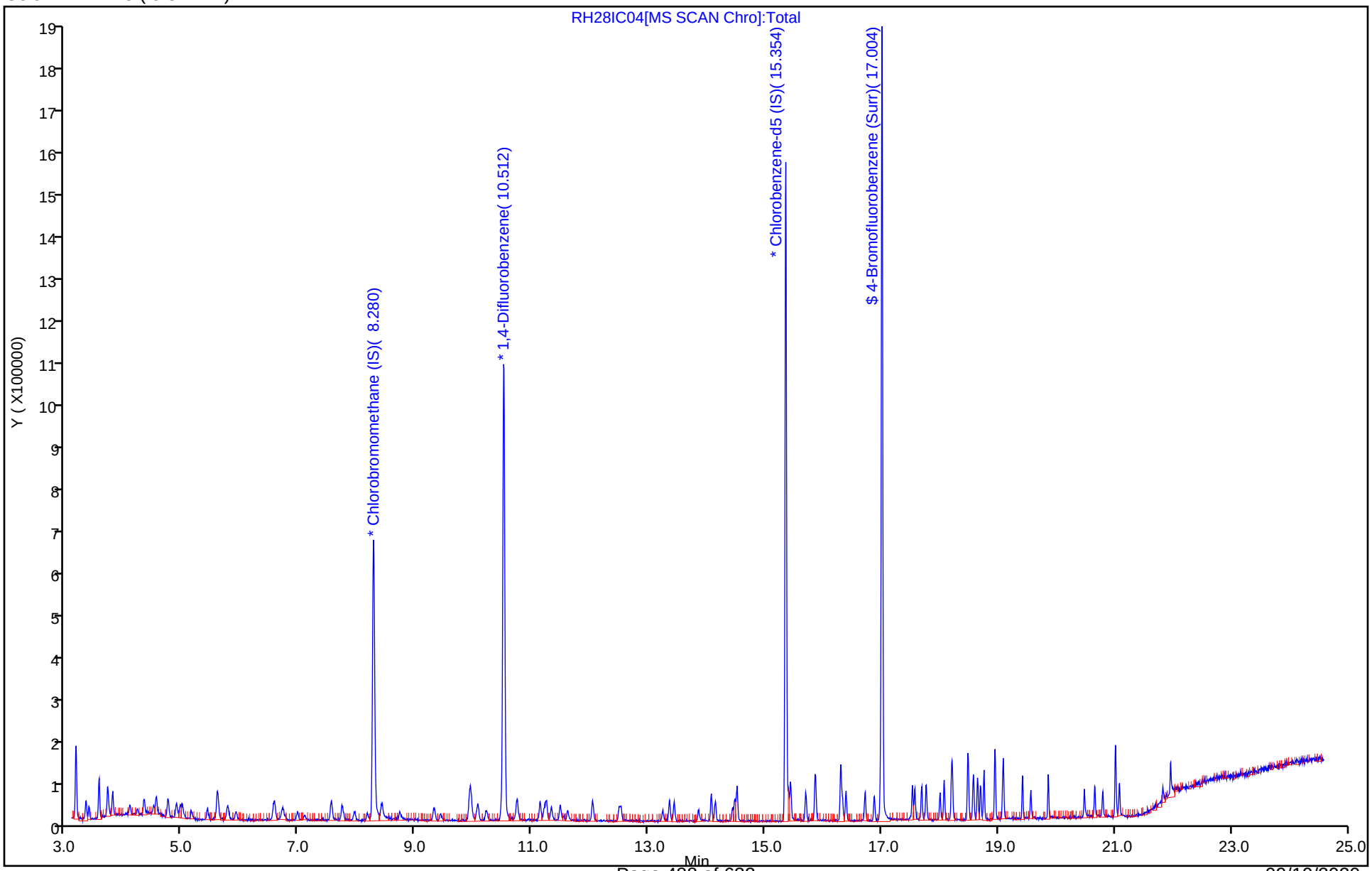
Report Date: 31-Aug-2020 13:43:23 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC04.D

Injection Date:	28-Aug-2020 21:38:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	IC L4			Worklist Smp#:	12
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

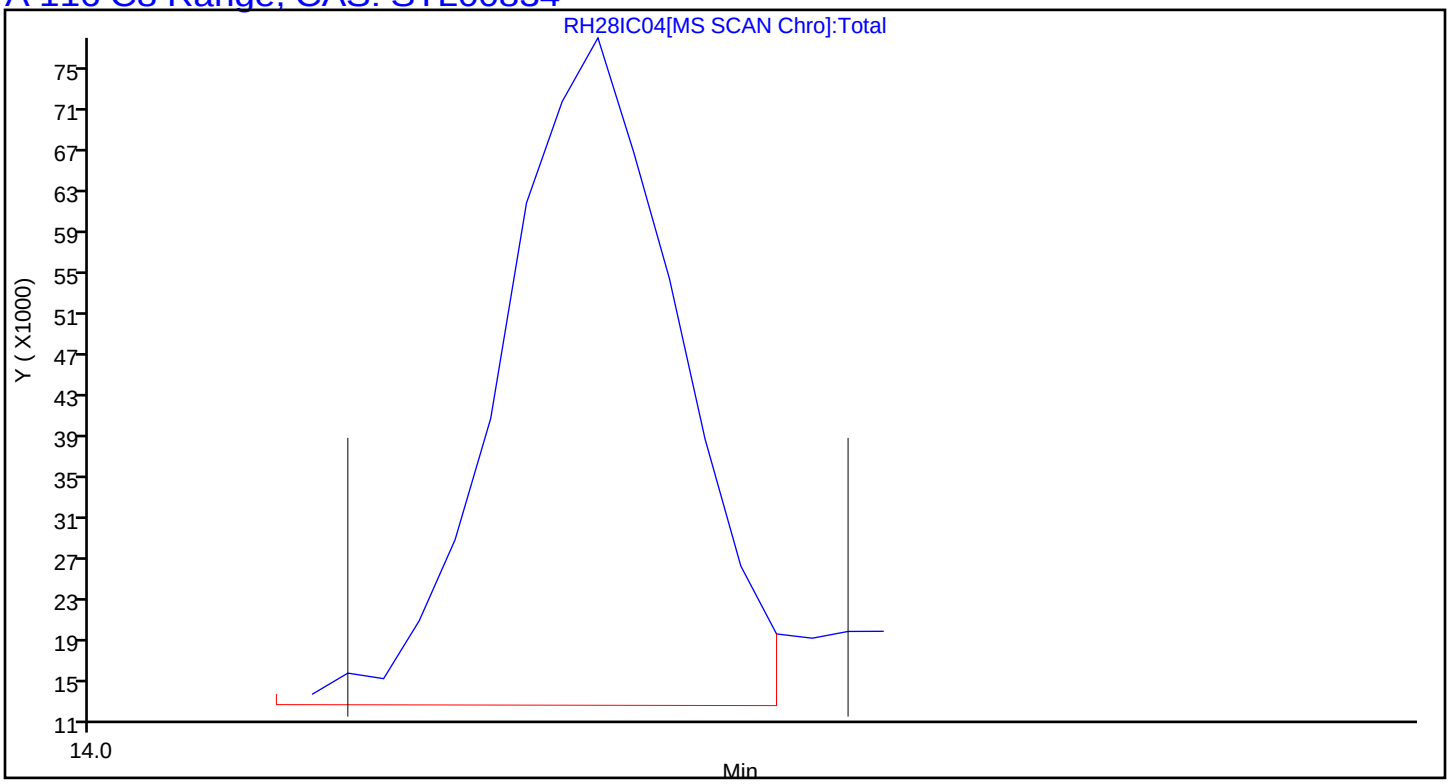


Report Date: 31-Aug-2020 13:43:23 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC04.D				
Injection Date:	28-Aug-2020 21:38:30	Instrument ID:	MR		
Lims ID:	IC L4				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	9	Worklist Smp#:	12
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 116 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC05.D
Lims ID: IC L5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 28-Aug-2020 22:26:30 ALS Bottle#: 10 Worklist Smp#: 13
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016425-013
Misc. Info.: 314717
Operator ID: HMT Instrument ID: MR
Sublist: chrom-MR_TO15*sub16

Method: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 31-Aug-2020 13:43:32 Calib Date: 29-Aug-2020 00:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1064

First Level Reviewer: barlozhetskayaa Date: 31-Aug-2020 13:16:49

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.274	8.283	-0.009	92	235500	4.80	4.80	
* 2 1,4-Difluorobenzene	114	10.512	10.519	-0.007	93	1153196	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.355	15.356	-0.001	87	909738	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.005	17.006	-0.001	95	555919	4.64	4.57	
6 Chlorodifluoromethane	51	3.330	3.345	-0.015	98	49801	0.4000	0.3778	
7 Propene	41	3.340	3.343	-0.003	96	25376	0.4000	0.4056	
8 Dichlorodifluoromethane	85	3.383	3.390	-0.007	98	36786	0.4000	0.3718	
9 Chloromethane	52	3.551	3.559	-0.008	69	9725	0.4000	0.4156	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.561	3.568	-0.007	88	53398	0.4000	0.3849	
11 Acetaldehyde	44	3.702	3.709	-0.007	90	77670	2.00	2.11	
12 Vinyl chloride	62	3.707	3.716	-0.009	55	32086	0.4000	0.4246	
14 Butadiene	54	3.793	3.798	-0.005	69	23722	0.4000	0.3928	
13 Butane	43	3.793	3.799	-0.006	88	52540	0.4000	0.4115	
15 Bromomethane	94	4.090	4.094	-0.004	96	33010	0.4000	0.3942	
16 Chloroethane	64	4.214	4.221	-0.007	86	16037	0.4000	0.4054	
17 Ethanol	31	4.322	4.345	-0.023	99	90649	2.00	1.83	
18 Vinyl bromide	106	4.494	4.502	-0.008	95	28263	0.4000	0.3677	
19 2-Methylbutane	43	4.537	4.547	-0.010	94	41000	0.4000	0.4135	
20 Trichlorofluoromethane	101	4.742	4.751	-0.009	95	77624	0.4000	0.4025	
21 Acrolein	56	4.759	4.775	-0.016	92	8255	0.4000	0.4497	
22 Acetonitrile	40	4.829	4.841	-0.012	94	10922	0.4000	0.4052	
23 Acetone	58	4.877	4.891	-0.014	99	45535	1.20	1.29	
24 Pentane	72	4.947	4.960	-0.013	95	4682	0.4000	0.4153	
25 Isopropyl alcohol	45	4.974	4.996	-0.022	95	113852	1.20	1.21	
26 Ethyl ether	31	5.136	5.143	-0.007	91	33932	0.4000	0.4135	
27 1,1-Dichloroethene	96	5.416	5.430	-0.014	96	26172	0.4000	0.3761	
28 Acrylonitrile	53	5.535	5.548	-0.013	94	15766	0.4000	0.3947	
29 2-Methyl-2-propanol	59	5.578	5.589	-0.011	82	45427	0.4000	0.3858	
30 1,1,2-Trichloro-1,2,2-trifluoroe	101	5.594	5.603	-0.009	95	57821	0.4000	0.3821	
31 Methylene Chloride	84	5.751	5.768	-0.017	94	24417	0.4000	0.4255	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	5.767	5.782	-0.015	96	27338	0.4000	0.3745	
33 Carbon disulfide	76	5.912	5.921	-0.009	97	74887	0.4000	0.4079	
34 trans-1,2-Dichloroethene	96	6.543	6.561	-0.018	91	24973	0.4000	0.3871	
35 2-Methylpentane	43	6.570	6.579	-0.009	93	59564	0.4000	0.3845	
36 Methyl tert-butyl ether	73	6.700	6.716	-0.016	96	63335	0.4000	0.4039	
37 1,1-Dichloroethane	63	6.964	6.977	-0.013	99	45826	0.4000	0.4091	
38 Vinyl acetate	43	7.088	7.100	-0.012	100	63440	0.4000	0.3721	
39 2-Butanone (MEK)	72	7.546	7.551	-0.005	93	11764	0.4000	0.3717	
40 Hexane	56	7.546	7.553	-0.007	88	18958	0.4000	0.3975	
41 Isopropyl ether	45	7.724	7.736	-0.012	95	89020	0.4000	0.3823	
42 cis-1,2-Dichloroethene	96	7.940	7.953	-0.013	91	27844	0.4000	0.3734	
43 Ethyl acetate	43	8.161	8.165	-0.004	97	59867	0.4000	0.3780	
44 Chloroform	83	8.291	8.300	-0.009	94	53612	0.4000	0.3783	
45 Tert-butyl ethyl ether	59	8.398	8.413	-0.015	97	76613	0.4000	0.4002	
46 Tetrahydrofuran	42	8.717	8.722	-0.005	94	33889	0.4000	0.4178	
47 1,1,1-Trichloroethane	97	9.315	9.320	-0.005	93	55145	0.4000	0.4074	
48 1,2-Dichloroethane	62	9.418	9.434	-0.016	93	27571	0.4000	0.3584	
50 Cyclohexane	69	9.930	9.928	0.002	71	10658	0.4000	0.3749	
51 Benzene	78	9.924	9.933	-0.009	94	78024	0.4000	0.3871	
52 Carbon tetrachloride	117	9.951	9.957	-0.006	93	55838	0.4000	0.4295	
49 n-Butanol	31	9.951	9.944	0.007	70	16387	0.4000	0.3972	
53 2,3-Dimethylpentane	71	10.059	10.069	-0.010	91	17614	0.4000	0.3984	
54 Thiophene	84	10.216	10.221	-0.005	91	43711	0.4000	0.3760	
55 Isooctane	57	10.739	10.745	-0.006	94	118580	0.4000	0.3689	
56 n-Heptane	71	11.132	11.139	-0.007	96	25685	0.4000	0.3927	
57 1,2-Dichloropropane	63	11.202	11.212	-0.010	87	30367	0.4000	0.3957	
58 Trichloroethene	130	11.246	11.251	-0.005	95	36639	0.4000	0.3657	
59 Dibromomethane	93	11.332	11.334	-0.002	90	31799	0.4000	0.3708	
60 Dichlorobromomethane	83	11.483	11.487	-0.004	94	58298	0.4000	0.4025	
61 1,4-Dioxane	88	11.526	11.532	-0.006	92	12357	0.4000	0.3736	
62 Methyl methacrylate	41	11.607	11.607	0.000	91	34057	0.4000	0.3729	
63 Methylcyclohexane	83	12.038	12.043	-0.005	92	47102	0.4000	0.3975	
64 4-Methyl-2-pentanone (MIBK)	43	12.480	12.489	-0.009	97	73528	0.4000	0.3969	
65 cis-1,3-Dichloropropene	75	12.518	12.528	-0.010	95	37667	0.4000	0.3647	
66 trans-1,3-Dichloropropene	75	13.235	13.241	-0.006	91	30968	0.4000	0.3682	
67 Toluene	91	13.354	13.360	-0.006	93	91467	0.4000	0.3735	
68 1,1,2-Trichloroethane	83	13.435	13.440	-0.005	95	30249	0.4000	0.4082	
69 2-Hexanone	58	13.850	13.853	-0.003	89	26516	0.4000	0.3577	
70 n-Octane	85	14.071	14.077	-0.006	95	25142	0.4000	0.3683	
71 Chlorodibromomethane	129	14.141	14.148	-0.007	96	59382	0.4000	0.3901	
72 Ethylene Dibromide	107	14.438	14.441	-0.003	96	48853	0.4000	0.3682	
73 Tetrachloroethene	129	14.519	14.519	0.000	93	36680	0.4000	0.4076	
74 Chlorobenzene	112	15.403	15.404	-0.001	93	72187	0.4000	0.3849	
75 2,3-Dimethylheptane	43	15.435	15.438	-0.003	94	99308	0.4000	0.3976	
76 Ethylbenzene	91	15.700	15.698	0.002	98	117394	0.4000	0.3784	
77 m-Xylene & p-Xylene	91	15.861	15.863	-0.002	96	170497	0.8000	0.7207	
78 n-Nonane	57	16.298	16.296	0.002	92	52388	0.4000	0.3627	
79 Bromoform	173	16.304	16.304	0.000	96	60606	0.4000	0.3667	
80 Styrene	104	16.331	16.328	0.003	96	64024	0.4000	0.3728	
81 o-Xylene	91	16.390	16.389	0.001	97	88929	0.4000	0.3630	
82 1,1,2,2-Tetrachloroethane	83	16.713	16.715	-0.002	97	78471	0.4000	0.3933	
83 1,2,3-Trichloropropane	110	16.875	16.877	-0.002	90	20345	0.4000	0.3766	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	16.978	16.980	-0.002	96	133486	0.4000	0.3823	
85 N-Propylbenzene	120	17.528	17.529	-0.001	99	38332	0.4000	0.3748	
86 2-Chlorotoluene	126	17.571	17.572	-0.001	97	37371	0.4000	0.3969	
87 4-Ethyltoluene	105	17.689	17.688	0.001	99	129680	0.4000	0.3688	
88 1,3,5-Trimethylbenzene	120	17.765	17.766	-0.001	94	60035	0.4000	0.3888	
89 Alpha Methyl Styrene	118	18.002	18.005	-0.003	91	51272	0.4000	0.3709	
90 n-Decane	57	18.072	18.075	-0.003	87	69136	0.4000	0.3762	
91 tert-Butylbenzene	119	18.202	18.202	0.000	95	124968	0.4000	0.3636	
92 1,2,4-Trimethylbenzene	105	18.212	18.216	-0.004	96	109799	0.4000	0.3775	
93 sec-Butylbenzene	105	18.477	18.479	-0.002	99	167919	0.4000	0.3692	
94 1,3-Dichlorobenzene	146	18.488	18.489	-0.001	96	80880	0.4000	0.3673	
95 Benzyl chloride	91	18.568	18.568	0.000	98	73450	0.4000	0.3370	
96 1,4-Dichlorobenzene	146	18.579	18.580	-0.001	95	76253	0.4000	0.3515	
97 4-Isopropyltoluene	119	18.644	18.648	-0.004	98	143416	0.4000	0.3783	
98 1,2,3-Trimethylbenzene	105	18.698	18.698	0.000	98	110706	0.4000	0.4271	
99 Butylcyclohexane	83	18.757	18.757	0.000	94	91598	0.4000	0.3693	
101 1,2-Dichlorobenzene	146	18.946	18.945	0.001	82	82831	0.4000	0.3614	
100 2,3-Dihydroindene	117	18.946	18.947	-0.001	93	111206	0.4000	0.3640	
102 Indene	116	19.081	19.081	0.000	88	85683	0.4000	0.3446	
103 n-Butylbenzene	91	19.091	19.092	-0.001	97	131876	0.4000	0.3542	
104 Undecane	57	19.415	19.418	-0.003	87	71560	0.4000	0.3125	
105 1,2-Dibromo-3-Chloropropane	157	19.561	19.560	0.001	87	38919	0.4000	0.3527	
106 1,2,4,5-Tetramethylbenzene	119	19.857	19.860	-0.003	99	122363	0.4000	0.3498	
107 Dodecane	57	20.477	20.478	-0.001	89	62063	0.4000	0.3049	
108 1,2,4-Trichlorobenzene	180	20.655	20.658	-0.003	92	61208	0.4000	0.3268	
109 Naphthalene	128	20.795	20.794	0.001	99	133974	0.4000	0.3671	
110 Hexachlorobutadiene	225	21.011	21.014	-0.003	93	80947	0.4000	0.3727	
111 1,2,3-Trichlorobenzene	180	21.081	21.081	0.000	94	70435	0.4000	0.3805	
112 2-Methylnaphthalene	142	21.825	21.826	-0.001	100	48315	0.4000	0.2265	
113 1-Methylnaphthalene	142	21.955	21.957	-0.002	97	100421	0.4000	0.3328	
A 116 C8 Range	1	14.061	(14.028-14.114)		0	284144	0.4000	0.3895	
S 117 Xylenes, Total	100				0		1.20	1.08	
S 118 1,2-Dichloroethene, Total	1				0		0.8000	0.7605	

Reagents:

40L5DQP_00020	Amount Added: 200.00	Units: mL	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

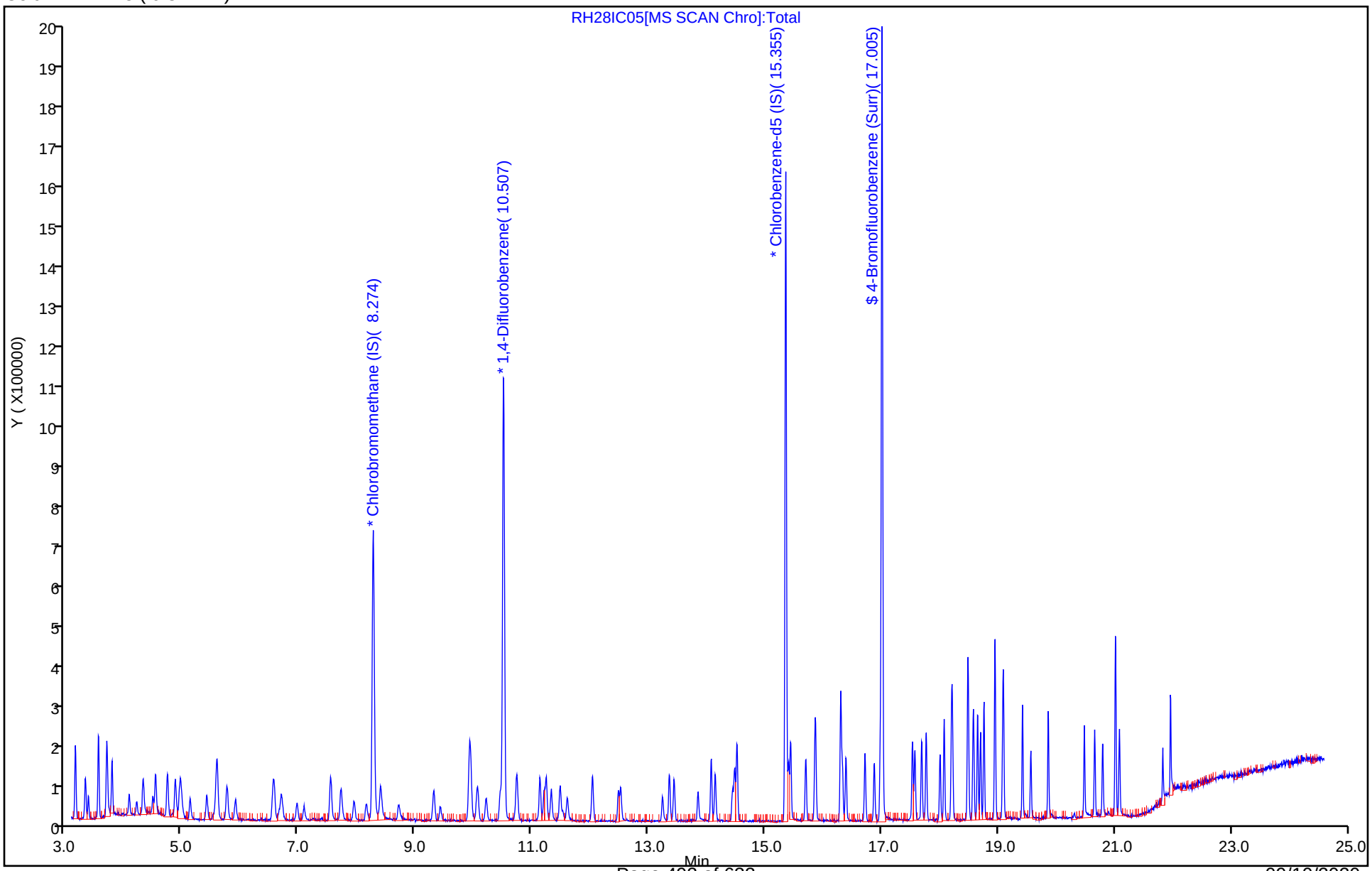
Report Date: 31-Aug-2020 13:43:35 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC05.D

Injection Date:	28-Aug-2020 22:26:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	IC L5			Worklist Smp#:	13
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

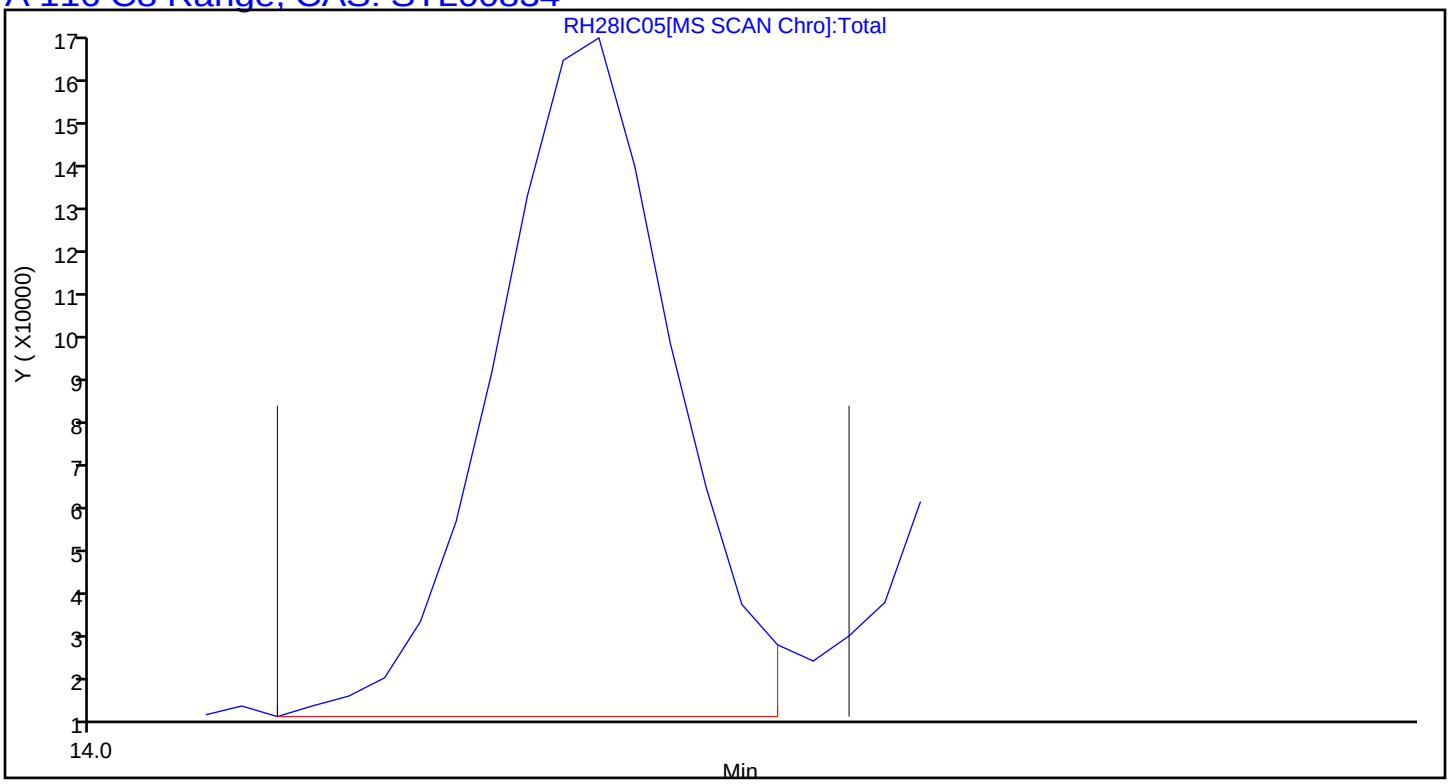


Report Date: 31-Aug-2020 13:43:35 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC05.D				
Injection Date:	28-Aug-2020 22:26:30	Instrument ID:	MR		
Lims ID:	IC L5				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	10	Worklist Smp#:	13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 116 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC06.D
Lims ID: IC L6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 28-Aug-2020 23:14:30 ALS Bottle#: 11 Worklist Smp#: 14
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016425-014
Misc. Info.: 314716
Operator ID: HMT Instrument ID: MR
Sublist: chrom-MR_TO15*sub16

Method: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 31-Aug-2020 13:43:42 Calib Date: 29-Aug-2020 00:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1064

First Level Reviewer: barlozhetskayaa Date: 31-Aug-2020 13:12:24

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.269	8.283	-0.014	94	234052	4.80	4.80	
* 2 1,4-Difluorobenzene	114	10.512	10.519	-0.007	94	1141373	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.354	15.356	-0.002	87	920801	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.004	17.006	-0.002	94	567801	4.64	4.61	
6 Chlorodifluoromethane	51	3.329	3.345	-0.016	99	127298	1.00	0.9717	
7 Propene	41	3.340	3.343	-0.003	97	65227	1.00	1.05	
8 Dichlorodifluoromethane	85	3.383	3.390	-0.007	98	103463	1.00	1.05	
9 Chloromethane	52	3.550	3.559	-0.009	67	25367	1.00	1.09	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.561	3.568	-0.007	88	144116	1.00	1.05	
11 Acetaldehyde	44	3.696	3.709	-0.013	89	218804	5.00	5.99	
12 Vinyl chloride	62	3.712	3.716	-0.004	99	84224	1.00	1.17	
14 Butadiene	54	3.793	3.798	-0.005	64	65078	1.00	1.08	
13 Butane	43	3.793	3.799	-0.006	87	139349	1.00	1.10	
15 Bromomethane	94	4.084	4.094	-0.010	97	85297	1.00	1.09	
16 Chloroethane	64	4.208	4.221	-0.013	88	38665	1.00	1.04	
17 Ethanol	31	4.322	4.345	-0.023	98	221455	5.00	4.63	
18 Vinyl bromide	106	4.489	4.502	-0.013	97	74856	1.00	0.9799	
19 2-Methylbutane	43	4.537	4.547	-0.010	94	99751	1.00	1.01	
20 Trichlorofluoromethane	101	4.742	4.751	-0.009	97	191450	1.00	1.00	
21 Acrolein	56	4.758	4.775	-0.017	91	16296	1.00	0.8933	
22 Acetonitrile	40	4.828	4.841	-0.013	95	25442	1.00	0.9496	
23 Acetone	58	4.866	4.891	-0.025	99	118879	3.00	3.40	
24 Pentane	72	4.953	4.960	-0.008	94	11470	1.00	1.02	
25 Isopropyl alcohol	45	4.963	4.996	-0.033	93	273089	3.00	2.91	
26 Ethyl ether	31	5.120	5.143	-0.023	88	83338	1.00	1.02	
27 1,1-Dichloroethene	96	5.422	5.430	-0.008	97	65097	1.00	0.9413	
28 Acrylonitrile	53	5.529	5.548	-0.019	95	39929	1.00	1.01	
29 2-Methyl-2-propanol	59	5.562	5.589	-0.027	95	111576	1.00	0.9535	
30 1,1,2-Trichloro-1,2,2-trifluoroe	101	5.594	5.603	-0.009	94	145650	1.00	0.9684	
31 Methylene Chloride	84	5.756	5.768	-0.012	98	57015	1.00	1.00	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	5.772	5.782	-0.010	95	67588	1.00	1.05	
33 Carbon disulfide	76	5.912	5.921	-0.009	97	184361	1.00	1.01	
34 trans-1,2-Dichloroethene	96	6.543	6.561	-0.018	94	65564	1.00	1.02	
35 2-Methylpentane	43	6.570	6.579	-0.009	95	149522	1.00	0.9712	
36 Methyl tert-butyl ether	73	6.689	6.716	-0.027	96	161027	1.00	1.03	
37 1,1-Dichloroethane	63	6.964	6.977	-0.013	99	109543	1.00	0.9840	
38 Vinyl acetate	43	7.082	7.100	-0.018	99	164791	1.00	0.9727	
40 Hexane	56	7.546	7.553	-0.007	79	48352	1.00	1.02	
39 2-Butanone (MEK)	72	7.530	7.551	-0.021	88	32092	1.00	1.02	
41 Isopropyl ether	45	7.708	7.736	-0.028	96	228003	1.00	0.9851	
42 cis-1,2-Dichloroethene	96	7.940	7.953	-0.013	88	69003	1.00	0.9311	
43 Ethyl acetate	43	8.145	8.165	-0.020	97	161118	1.00	1.02	
44 Chloroform	83	8.290	8.300	-0.010	94	138005	1.00	0.9798	
45 Tert-butyl ethyl ether	59	8.387	8.413	-0.026	97	191302	1.00	1.01	
46 Tetrahydrofuran	42	8.700	8.722	-0.022	95	80650	1.00	1.00	
47 1,1,1-Trichloroethane	97	9.310	9.320	-0.010	96	132887	1.00	0.9878	
48 1,2-Dichloroethane	62	9.423	9.434	-0.011	93	74410	1.00	0.9773	
51 Benzene	78	9.924	9.933	-0.009	95	192558	1.00	0.9652	
50 Cyclohexane	69	9.919	9.928	-0.009	74	26969	1.00	0.9585	
52 Carbon tetrachloride	117	9.951	9.957	-0.006	92	128080	1.00	1.00	
49 n-Butanol	31	9.930	9.944	-0.014	53	36431	1.00	0.8922	
53 2,3-Dimethylpentane	71	10.064	10.069	-0.005	90	40258	1.00	0.9199	
54 Thiophene	84	10.210	10.221	-0.011	93	108649	1.00	0.9443	
55 Isooctane	57	10.739	10.745	-0.006	96	301136	1.00	0.9465	
56 n-Heptane	71	11.132	11.139	-0.007	95	64445	1.00	1.00	
57 1,2-Dichloropropane	63	11.208	11.212	-0.004	90	75552	1.00	0.99	
58 Trichloroethene	130	11.240	11.251	-0.011	94	93344	1.00	0.9413	
59 Dibromomethane	93	11.326	11.334	-0.008	92	88564	1.00	1.04	
60 Dichlorobromomethane	83	11.483	11.487	-0.004	96	138050	1.00	0.9631	
61 1,4-Dioxane	88	11.515	11.532	-0.017	90	28356	1.00	0.8661	
62 Methyl methacrylate	41	11.601	11.607	-0.006	87	89454	1.00	0.9897	
63 Methylcyclohexane	83	12.033	12.043	-0.010	93	114174	1.00	0.9735	
64 4-Methyl-2-pentanone (MIBK)	43	12.469	12.489	-0.020	96	183690	1.00	1.00	
65 cis-1,3-Dichloropropene	75	12.523	12.528	-0.005	95	99621	1.00	0.9745	
66 trans-1,3-Dichloropropene	75	13.235	13.241	-0.006	93	81690	1.00	0.9596	
67 Toluene	91	13.354	13.360	-0.006	92	233387	1.00	0.9415	
68 1,1,2-Trichloroethane	83	13.435	13.440	-0.005	94	73682	1.00	0.9823	
69 2-Hexanone	58	13.839	13.853	-0.014	91	76512	1.00	1.02	
70 n-Octane	85	14.071	14.077	-0.006	94	65320	1.00	0.9453	
71 Chlorodibromomethane	129	14.141	14.148	-0.007	97	135038	1.00	0.8764	
72 Ethylene Dibromide	107	14.438	14.441	-0.003	96	128985	1.00	0.9604	
73 Tetrachloroethene	129	14.513	14.519	-0.006	92	84607	1.00	0.9289	
74 Chlorobenzene	112	15.398	15.404	-0.006	96	177202	1.00	0.9335	
75 2,3-Dimethylheptane	43	15.435	15.438	-0.003	94	241219	1.00	0.9541	
76 Ethylbenzene	91	15.694	15.698	-0.004	98	296847	1.00	0.9453	
77 m-Xylene & p-Xylene	91	15.861	15.863	-0.002	96	446971	2.00	1.87	
78 n-Nonane	57	16.293	16.296	-0.003	91	136944	1.00	0.9368	
79 Bromoform	173	16.303	16.304	-0.001	96	112819	1.00	0.6744	
80 Styrene	104	16.325	16.328	-0.003	97	169678	1.00	0.9762	
81 o-Xylene	91	16.384	16.389	-0.005	99	235739	1.00	0.9506	
82 1,1,2,2-Tetrachloroethane	83	16.713	16.715	-0.002	97	202741	1.00	1.00	
83 1,2,3-Trichloropropane	110	16.875	16.877	-0.002	92	51846	1.00	0.9482	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	16.977	16.980	-0.003	96	341357	1.00	0.9658	
85 N-Propylbenzene	120	17.528	17.529	-0.001	99	101614	1.00	0.9816	
86 2-Chlorotoluene	126	17.571	17.572	-0.001	97	93983	1.00	0.9861	
87 4-Ethyltoluene	105	17.684	17.688	-0.004	99	343535	1.00	0.9652	
88 1,3,5-Trimethylbenzene	120	17.765	17.766	-0.001	94	149024	1.00	0.9535	
89 Alpha Methyl Styrene	118	18.002	18.005	-0.003	87	135090	1.00	0.9655	
90 n-Decane	57	18.072	18.075	-0.003	87	180855	1.00	0.9722	
91 tert-Butylbenzene	119	18.202	18.202	0.000	95	329329	1.00	0.9468	
92 1,2,4-Trimethylbenzene	105	18.212	18.216	-0.004	95	286404	1.00	0.9729	
93 sec-Butylbenzene	105	18.477	18.479	-0.002	98	437590	1.00	0.9505	
94 1,3-Dichlorobenzene	146	18.487	18.489	-0.002	96	213903	1.00	0.9597	
95 Benzyl chloride	91	18.568	18.568	0.000	98	204834	1.00	0.9286	
96 1,4-Dichlorobenzene	146	18.579	18.580	-0.001	96	210409	1.00	0.9582	
97 4-Isopropyltoluene	119	18.644	18.648	-0.004	97	377534	1.00	0.9839	
98 1,2,3-Trimethylbenzene	105	18.698	18.698	0.000	98	289551	1.00	1.09	
99 Butylcyclohexane	83	18.757	18.757	0.000	94	249656	1.00	0.99	
101 1,2-Dichlorobenzene	146	18.946	18.945	0.001	82	213760	1.00	0.9215	
100 2,3-Dihydroindene	117	18.946	18.947	-0.001	92	293635	1.00	0.9497	
102 Indene	116	19.081	19.081	0.000	89	239465	1.00	0.9514	
103 n-Butylbenzene	91	19.091	19.092	-0.001	97	368369	1.00	0.9775	
104 Undecane	57	19.415	19.418	-0.003	90	211658	1.00	0.9132	
105 1,2-Dibromo-3-Chloropropane	157	19.560	19.560	0.000	90	94295	1.00	0.8444	
106 1,2,4,5-Tetramethylbenzene	119	19.857	19.860	-0.003	97	347414	1.00	0.9813	
107 Dodecane	57	20.477	20.478	-0.001	88	182504	1.00	0.8857	
108 1,2,4-Trichlorobenzene	180	20.655	20.658	-0.003	93	184352	1.00	0.9726	
109 Naphthalene	128	20.795	20.794	0.001	99	360065	1.00	0.9747	
110 Hexachlorobutadiene	225	21.011	21.014	-0.003	83	208874	1.00	0.9502	
111 1,2,3-Trichlorobenzene	180	21.081	21.081	0.000	94	179439	1.00	0.9577	
112 2-Methylnaphthalene	142	21.825	21.826	-0.001	99	131911	1.00	0.6109	
113 1-Methylnaphthalene	142	21.955	21.957	-0.002	99	234530	1.00	0.7680	
A 116 C8 Range	1	14.061	(14.028-14.125)		0	705715	1.00	0.9774	
S 117 Xylenes, Total	100				0		3.00	2.82	
S 118 1,2-Dichloroethene, Total	1				0		2.00	1.95	

Reagents:

40L6DQP_00019	Amount Added: 200.00	Units: mL	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

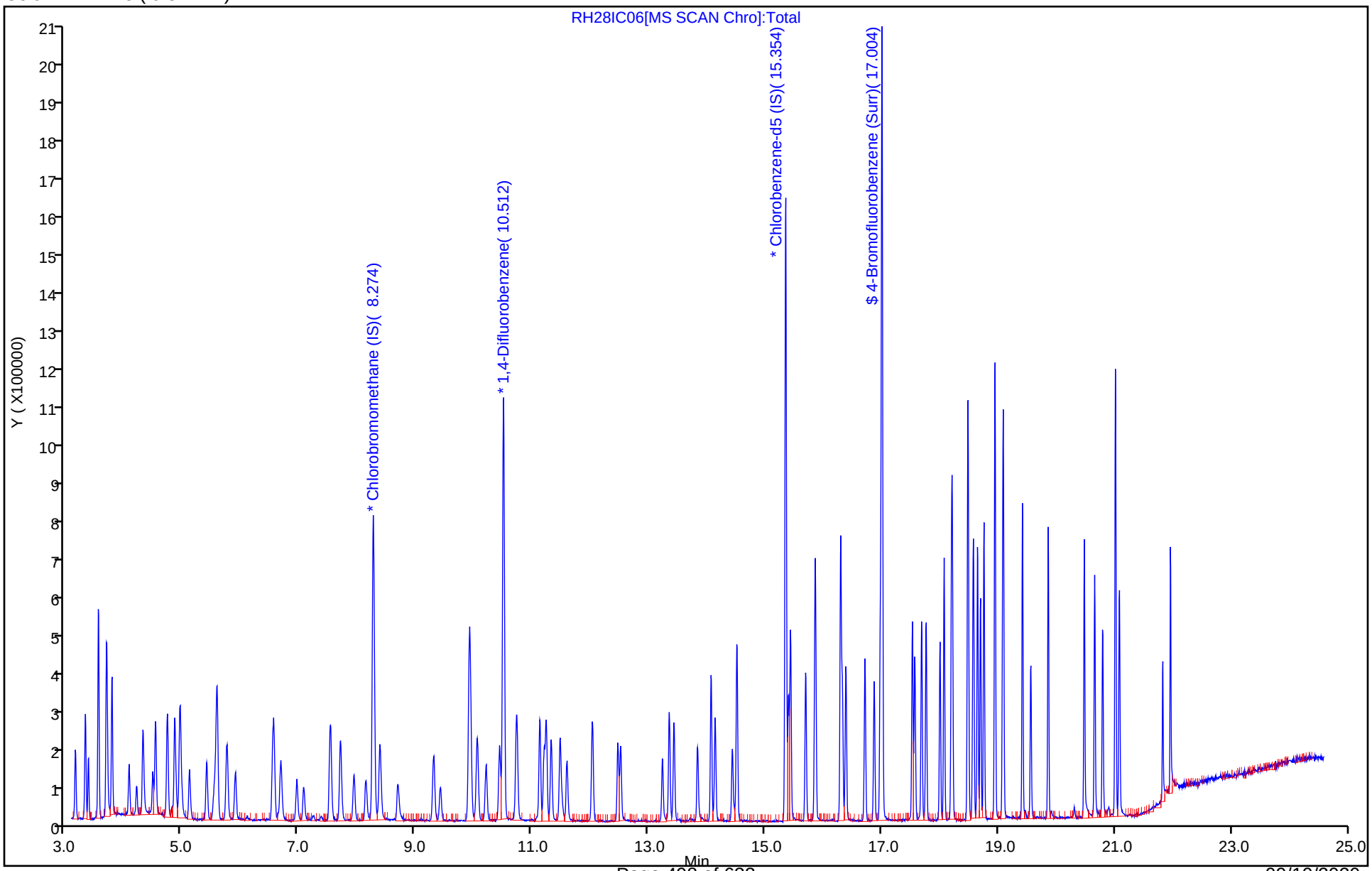
Report Date: 31-Aug-2020 13:43:44 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC06.D

Injection Date:	28-Aug-2020 23:14:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	IC L6			Worklist Smp#:	14
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

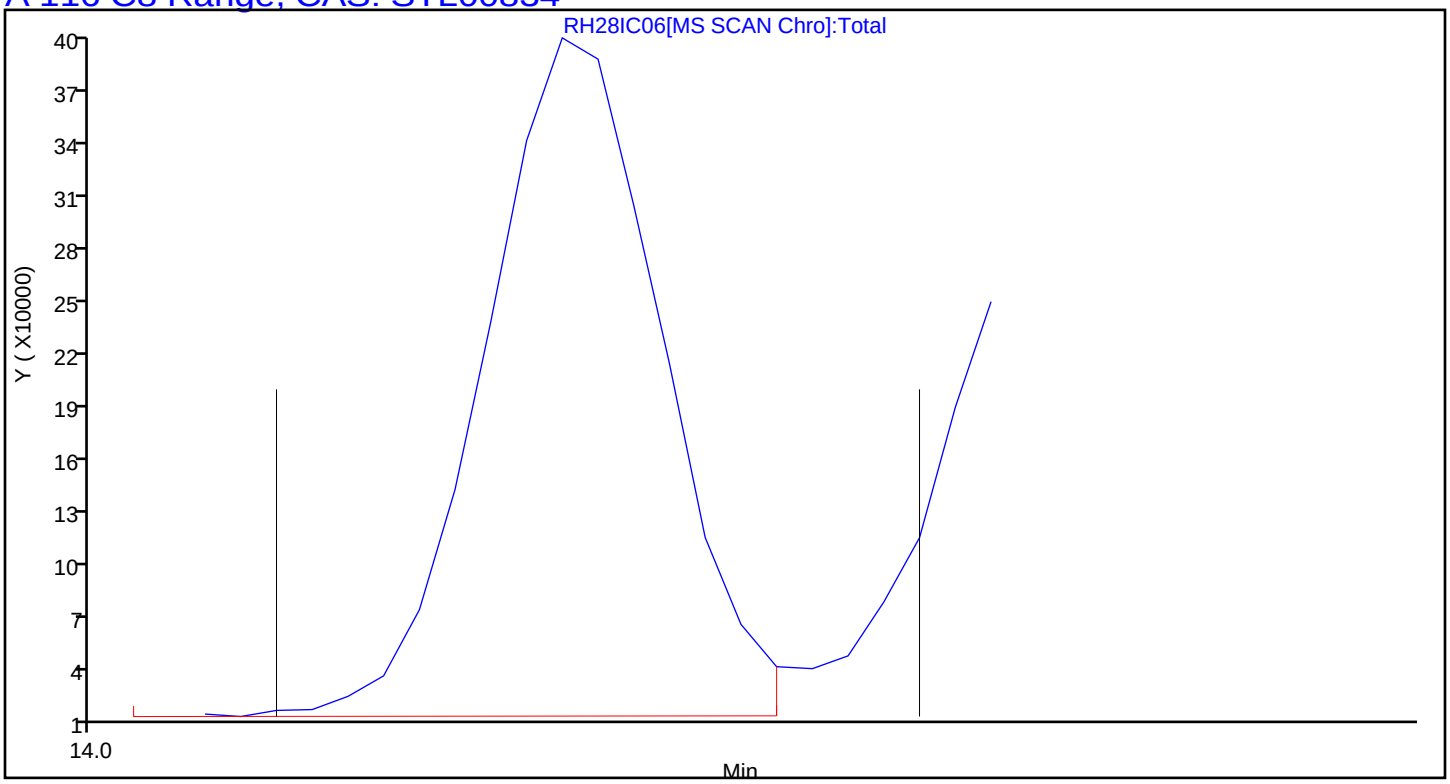


Report Date: 31-Aug-2020 13:43:44 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC06.D				
Injection Date:	28-Aug-2020 23:14:30	Instrument ID:	MR		
Lims ID:	IC L6				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	11	Worklist Smp#:	14
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 116 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC07.D
Lims ID: ICIS L7
Client ID:
Sample Type: ICIS Calib Level: 7
Inject. Date: 29-Aug-2020 00:02:30 ALS Bottle#: 12 Worklist Smp#: 15
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016425-015
Misc. Info.: 314608
Operator ID: HMT Instrument ID: MR
Sublist: chrom-MR_TO15*sub16

Method: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 31-Aug-2020 13:43:55 Calib Date: 29-Aug-2020 00:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1064

First Level Reviewer: tajh Date: 31-Aug-2020 09:21:14

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.280	8.283	-0.003	93	235543	4.80	4.80	
* 2 1,4-Difluorobenzene	114	10.518	10.519	-0.001	88	1153917	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.355	15.356	-0.001	82	934834	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.005	17.006	-0.001	94	596993	4.64	4.78	
6 Chlorodifluoromethane	51	3.324	3.345	-0.021	96	265191	2.00	2.01	
7 Propene	41	3.335	3.343	-0.008	89	136966	2.00	2.19	
8 Dichlorodifluoromethane	85	3.384	3.390	-0.006	98	228663	2.00	2.31	
9 Chloromethane	52	3.545	3.559	-0.014	69	50211	2.00	2.15	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.556	3.568	-0.012	88	306061	2.00	2.21	
11 Acetaldehyde	44	3.691	3.709	-0.018	89	403575	10.0	11.0	
12 Vinyl chloride	62	3.707	3.716	-0.009	76	174448	2.00	2.44	
14 Butadiene	54	3.788	3.798	-0.010	65	138107	2.00	2.29	
13 Butane	43	3.788	3.799	-0.011	87	290488	2.00	2.27	
15 Bromomethane	94	4.085	4.094	-0.009	98	173948	2.00	2.25	
16 Chloroethane	64	4.214	4.221	-0.007	89	85082	2.00	2.32	
17 Ethanol	31	4.327	4.345	-0.018	98	562595	10.0	11.8	
18 Vinyl bromide	106	4.489	4.502	-0.013	94	156474	2.00	2.04	
19 2-Methylbutane	43	4.532	4.547	-0.015	93	205009	2.00	2.07	
20 Trichlorofluoromethane	101	4.737	4.751	-0.014	95	392725	2.00	2.04	
21 Acrolein	56	4.748	4.775	-0.027	22	36292	2.00	1.98	
22 Acetonitrile	40	4.823	4.841	-0.018	93	58184	2.00	2.16	
23 Acetone	58	4.861	4.891	-0.030	55	221734	6.00	6.30	
24 Pentane	72	4.953	4.960	-0.007	80	24417	2.00	2.17	
25 Isopropyl alcohol	45	4.963	4.996	-0.033	90	635105	6.00	6.72	
26 Ethyl ether	31	5.114	5.143	-0.029	88	168072	2.00	2.05	
27 1,1-Dichloroethene	96	5.416	5.430	-0.014	96	131261	2.00	1.89	
28 Acrylonitrile	53	5.530	5.548	-0.018	51	76309	2.00	1.91	
29 2-Methyl-2-propanol	59	5.546	5.589	-0.043	95	251800	2.00	2.14	
30 1,1,2-Trichloro-1,2,2-trifluoroe	101	5.594	5.603	-0.009	95	298238	2.00	1.97	
31 Methylene Chloride	84	5.751	5.768	-0.017	95	111917	2.00	1.95	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	5.772	5.782	-0.010	90	122895	2.00	1.95	
33 Carbon disulfide	76	5.907	5.921	-0.014	97	359151	2.00	1.96	
34 trans-1,2-Dichloroethene	96	6.549	6.561	-0.012	90	125032	2.00	1.94	
35 2-Methylpentane	43	6.570	6.579	-0.009	93	302486	2.00	1.95	
36 Methyl tert-butyl ether	73	6.689	6.716	-0.027	96	319038	2.00	2.03	
37 1,1-Dichloroethane	63	6.964	6.977	-0.013	98	218207	2.00	1.95	
38 Vinyl acetate	43	7.083	7.100	-0.017	100	350811	2.00	2.06	
39 2-Butanone (MEK)	72	7.530	7.551	-0.021	88	66602	2.00	2.10	
40 Hexane	56	7.546	7.553	-0.007	81	94902	2.00	1.99	
41 Isopropyl ether	45	7.714	7.736	-0.022	94	463161	2.00	1.99	
42 cis-1,2-Dichloroethene	96	7.951	7.953	-0.002	87	137736	2.00	1.85	
43 Ethyl acetate	43	8.150	8.165	-0.015	96	338095	2.00	2.13	
44 Chloroform	83	8.291	8.300	-0.009	60	275584	2.00	1.94	
45 Tert-butyl ethyl ether	59	8.388	8.413	-0.025	97	381447	2.00	1.99	
46 Tetrahydrofuran	42	8.690	8.722	-0.032	93	165501	2.00	2.04	
47 1,1,1-Trichloroethane	97	9.315	9.320	-0.005	94	263917	2.00	1.95	
48 1,2-Dichloroethane	62	9.434	9.434	0.000	93	151483	2.00	1.97	
50 Cyclohexane	69	9.924	9.928	-0.004	74	56508	2.00	1.99	
51 Benzene	78	9.924	9.933	-0.009	94	387828	2.00	1.92	
49 n-Butanol	31	9.908	9.944	-0.036	63	88621	2.00	2.15	
52 Carbon tetrachloride	117	9.946	9.957	-0.011	74	188413	2.00	1.45	
53 2,3-Dimethylpentane	71	10.065	10.069	-0.004	90	85591	2.00	1.93	
54 Thiophene	84	10.216	10.221	-0.005	92	227296	2.00	1.95	
55 Isooctane	57	10.739	10.745	-0.006	96	606757	2.00	1.89	
56 n-Heptane	71	11.138	11.139	-0.001	94	126478	2.00	1.93	
57 1,2-Dichloropropane	63	11.208	11.212	-0.004	83	147432	2.00	1.92	
58 Trichloroethene	130	11.251	11.251	0.000	89	186495	2.00	1.86	
59 Dibromomethane	93	11.332	11.334	-0.002	89	167543	2.00	1.95	
60 Dichlorobromomethane	83	11.488	11.487	0.001	96	281919	2.00	1.95	
61 1,4-Dioxane	88	11.510	11.532	-0.022	88	70796	2.00	2.14	
62 Methyl methacrylate	41	11.596	11.607	-0.011	89	185193	2.00	2.03	
63 Methylcyclohexane	83	12.044	12.043	0.001	92	232691	2.00	1.96	
64 4-Methyl-2-pentanone (MIBK)	43	12.475	12.489	-0.014	98	377560	2.00	2.04	
65 cis-1,3-Dichloropropene	75	12.524	12.528	-0.004	94	212426	2.00	2.06	
66 trans-1,3-Dichloropropene	75	13.241	13.241	0.000	95	178293	2.00	2.06	
67 Toluene	91	13.359	13.360	-0.001	90	466172	2.00	1.85	
68 1,1,2-Trichloroethane	83	13.435	13.440	-0.005	93	146935	2.00	1.93	
69 2-Hexanone	58	13.839	13.853	-0.014	90	158306	2.00	2.08	
70 n-Octane	85	14.077	14.077	0.000	92	138962	2.00	1.98	
71 Chlorodibromomethane	129	14.147	14.148	-0.001	95	307102	2.00	1.96	
72 Ethylene Dibromide	107	14.438	14.441	-0.003	91	268235	2.00	1.97	
73 Tetrachloroethene	129	14.519	14.519	0.000	93	173290	2.00	1.87	
74 Chlorobenzene	112	15.403	15.404	-0.001	87	370564	2.00	1.92	
75 2,3-Dimethylheptane	43	15.435	15.438	-0.003	93	494682	2.00	1.93	
76 Ethylbenzene	91	15.700	15.698	0.002	98	619977	2.00	1.94	
77 m-Xylene & p-Xylene	91	15.861	15.863	-0.002	97	943918	4.00	3.88	
78 n-Nonane	57	16.293	16.296	-0.003	91	285635	2.00	1.92	
79 Bromoform	173	16.304	16.304	0.000	95	348652	2.00	2.05	
80 Styrene	104	16.325	16.328	-0.003	93	355324	2.00	2.01	
81 o-Xylene	91	16.390	16.389	0.001	75	483966	2.00	1.92	
82 1,1,2,2-Tetrachloroethane	83	16.713	16.715	-0.002	98	421084	2.00	2.05	
83 1,2,3-Trichloropropane	110	16.870	16.877	-0.007	89	111032	2.00	2.00	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	16.978	16.980	-0.002	96	705690	2.00	1.97	
85 N-Propylbenzene	120	17.528	17.529	-0.001	98	208556	2.00	1.98	
86 2-Chlorotoluene	126	17.571	17.572	-0.001	75	194607	2.00	2.01	
87 4-Ethyltoluene	105	17.684	17.688	-0.004	97	720149	2.00	1.99	
88 1,3,5-Trimethylbenzene	120	17.765	17.766	-0.001	93	309009	2.00	1.95	
89 Alpha Methyl Styrene	118	18.002	18.005	-0.003	84	294594	2.00	2.07	
90 n-Decane	57	18.072	18.075	-0.003	85	388959	2.00	2.06	
91 tert-Butylbenzene	119	18.202	18.202	0.000	88	681711	2.00	1.93	
92 1,2,4-Trimethylbenzene	105	18.213	18.216	-0.003	89	610351	2.00	2.04	
93 sec-Butylbenzene	105	18.477	18.479	-0.002	98	934003	2.00	2.00	
94 1,3-Dichlorobenzene	146	18.488	18.489	-0.001	86	455458	2.00	2.01	
95 Benzyl chloride	91	18.568	18.568	0.000	97	502843	2.00	2.25	
96 1,4-Dichlorobenzene	146	18.579	18.580	-0.001	95	443624	2.00	1.99	
97 4-Isopropyltoluene	119	18.644	18.648	-0.004	84	797863	2.00	2.05	
98 1,2,3-Trimethylbenzene	105	18.698	18.698	0.000	92	611095	2.00	2.22	
99 Butylcyclohexane	83	18.757	18.757	0.000	92	522472	2.00	2.05	
101 1,2-Dichlorobenzene	146	18.946	18.945	0.001	82	453097	2.00	1.92	
100 2,3-Dihydroindene	117	18.946	18.947	-0.001	88	624224	2.00	1.99	
102 Indene	116	19.081	19.081	0.000	84	533579	2.00	2.09	
103 n-Butylbenzene	91	19.091	19.092	-0.001	97	802465	2.00	2.10	
104 Undecane	57	19.415	19.418	-0.003	90	465102	2.00	1.98	
105 1,2-Dibromo-3-Chloropropane	157	19.561	19.560	0.001	90	257066	2.00	2.27	
106 1,2,4,5-Tetramethylbenzene	119	19.857	19.860	-0.003	96	741766	2.00	2.06	
107 Dodecane	57	20.477	20.478	-0.001	89	454692	2.00	2.17	
108 1,2,4-Trichlorobenzene	180	20.655	20.658	-0.003	93	411351	2.00	2.14	
109 Naphthalene	128	20.795	20.794	0.001	99	850922	2.00	2.27	
110 Hexachlorobutadiene	225	21.011	21.014	-0.003	83	436547	2.00	1.96	
111 1,2,3-Trichlorobenzene	180	21.081	21.081	0.000	93	404438	2.00	2.13	
112 2-Methylnaphthalene	142	21.825	21.826	-0.001	98	473896	2.00	2.16	
113 1-Methylnaphthalene	142	21.955	21.957	-0.002	99	728929	2.00	2.35	
A 116 C8 Range	1	14.066	(14.028-14.125)		0	1437970	2.00	1.97	
S 117 Xylenes, Total	100				0		6.00	5.81	
S 118 1,2-Dichloroethene, Total	1				0		4.00	3.78	

Reagents:

40L7DQP_00019	Amount Added: 200.00	Units: mL	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

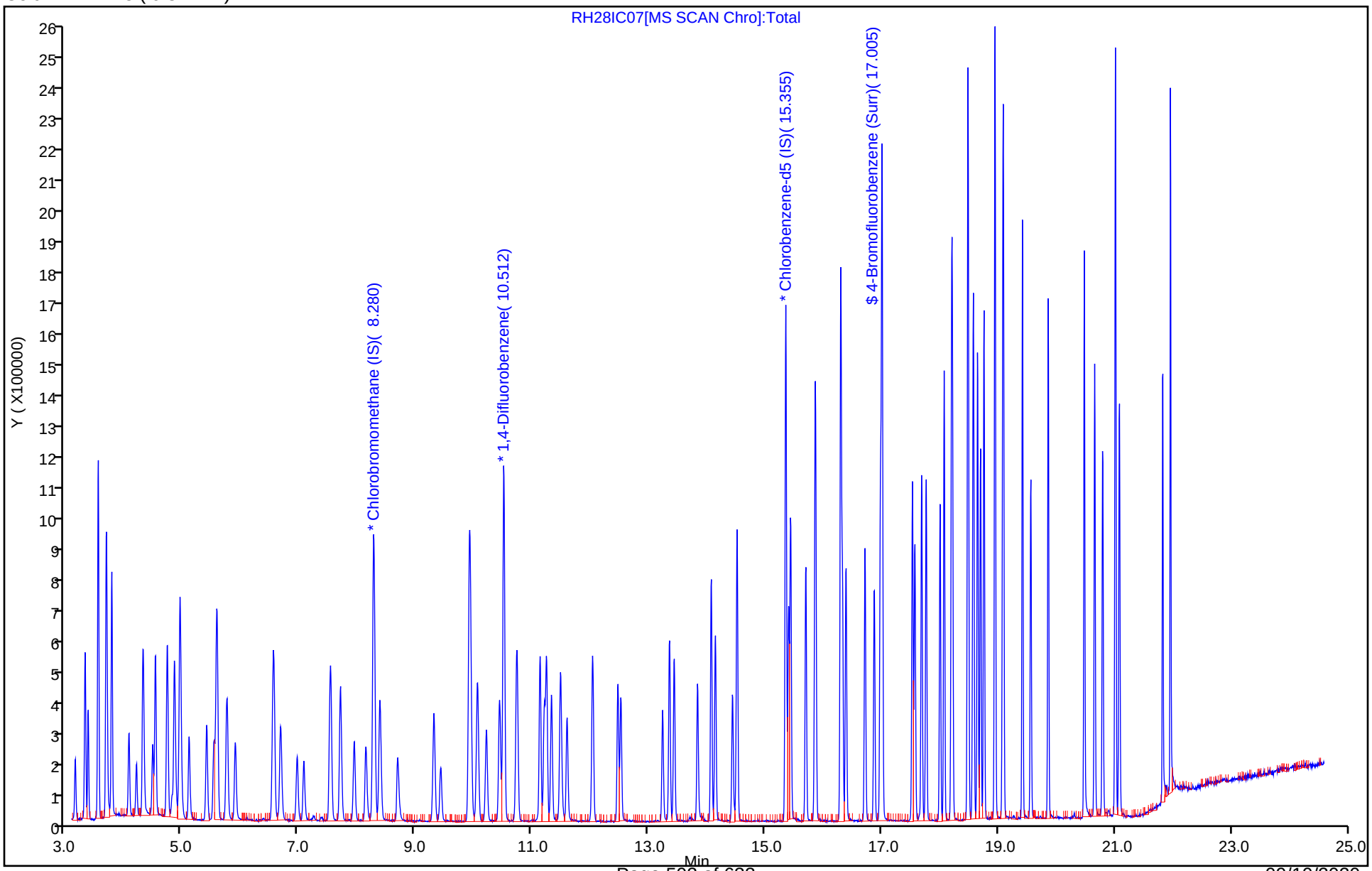
Report Date: 31-Aug-2020 13:43:56 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC07.D

Injection Date:	29-Aug-2020 00:02:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	ICIS L7			Worklist Smp#:	15
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

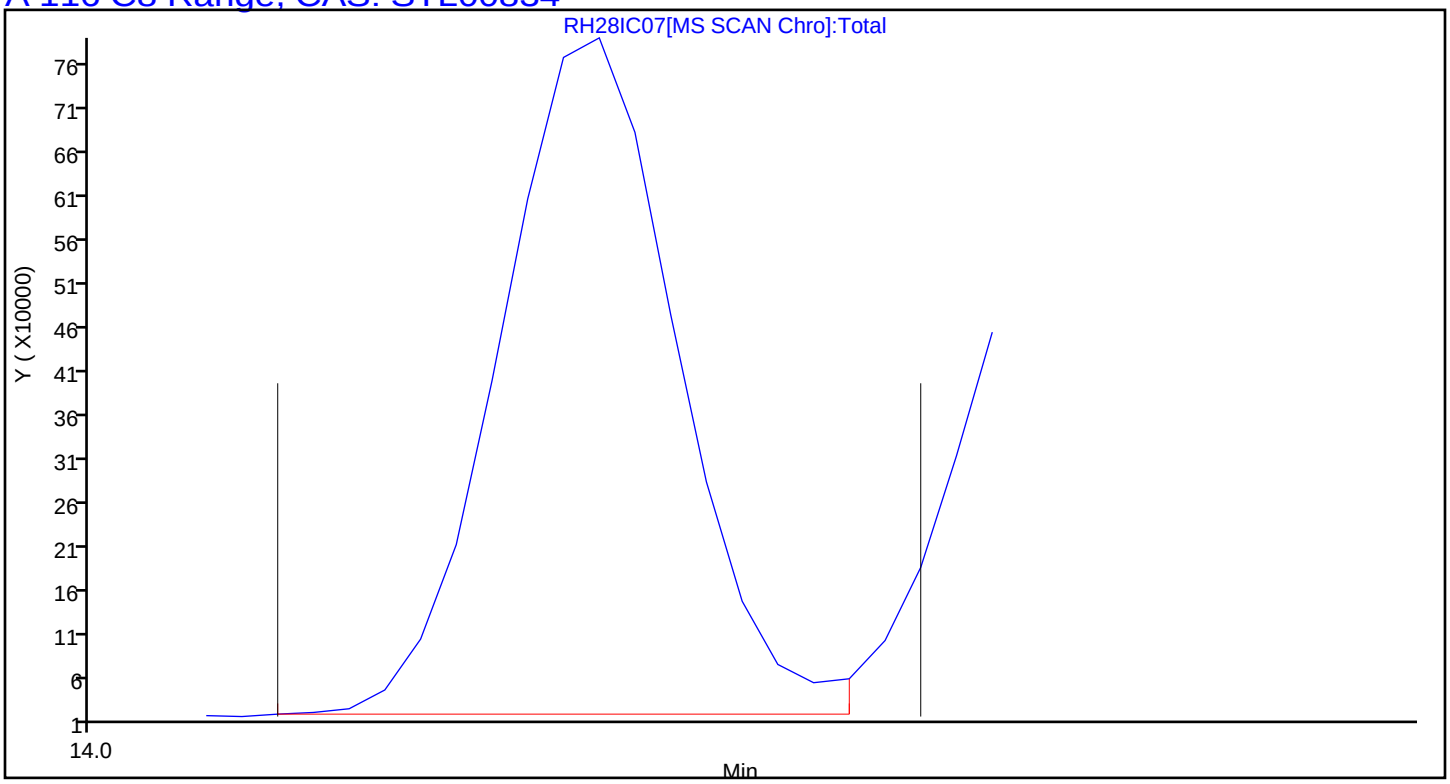


Report Date: 31-Aug-2020 13:43:56 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC07.D				
Injection Date:	29-Aug-2020 00:02:30	Instrument ID:	MR		
Lims ID:	ICIS L7				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	12	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 116 C8 Range, CAS: STL00834



FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Lab Sample ID: ICV 140-42295/22 Calibration Date: 09/02/2020 08:56

Instrument ID: MG Calib Start Date: 09/01/2020 18:07

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 09/02/2020 03:27

Lab File ID: GI01ICVR.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorodifluoromethane	Ave	4.301	3.929		4.57	5.00	-8.6	35.0
Propene	Ave	2.115	1.931		4.57	5.00	-8.7	35.0
Dichlorodifluoromethane	Ave	4.809	4.292		4.46	5.00	-10.7	35.0
Chloromethane	Ave	0.8610	0.7442		4.32	5.00	-13.6	35.0
1,2-Dichloro-1,1,2,2-tetrafluoroethane	Ave	2.743	2.277		4.15	5.00	-17.0	35.0
Acetaldehyde	Ave	1.013	0.8426		20.8	25.0	-16.8	35.0
Vinyl chloride	Ave	2.404	2.220		4.62	5.00	-7.6	35.0
1,3-Butadiene	Ave	2.119	1.970		4.65	5.00	-7.0	35.0
Butane	Ave	4.304	4.065		4.72	5.00	-5.6	35.0
Bromomethane	Ave	1.452	1.260		4.34	5.00	-13.2	35.0
Chloroethane	Ave	0.997	0.8957		4.49	5.00	-10.2	35.0
Ethanol	Ave	0.9079	0.6562		18.1	25.0	-27.7	35.0
Vinyl bromide	Ave	1.239	1.117		4.51	5.00	-9.8	35.0
2-Methylbutane	Ave	2.923	2.831		4.84	5.00	-3.1	35.0
Trichlorofluoromethane	Ave	3.737	3.130		4.19	5.00	-16.3	35.0
Acrolein	Ave	0.4464	0.4931		5.52	5.00	10.5	35.0
Acetonitrile	Ave	0.7987	0.6668		4.17	5.00	-16.5	35.0
Acetone	Ave	0.7999	0.8016		5.01	5.00	0.2	35.0
Isopropyl alcohol	Ave	2.389	2.423		5.07	5.00	1.5	35.0
Pentane	Ave	0.2430	0.2227		4.58	5.00	-8.4	35.0
Ethyl ether	Ave	1.710	1.790		5.23	5.00	4.7	35.0
1,1-Dichloroethene	Ave	1.183	1.025		4.33	5.00	-13.4	35.0
Acrylonitrile	Ave	1.092	1.075		4.92	5.00	-1.6	35.0
tert-Butyl alcohol	Ave	2.412	1.818		3.77	5.00	-24.6	35.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	2.736	2.359		4.31	5.00	-13.8	35.0
Methylene Chloride	Ave	1.184	1.067		4.51	5.00	-9.9	35.0
3-Chloropropene	Ave	2.320	1.903		4.10	5.00	-18.0	35.0
Carbon disulfide	Ave	3.977	3.544		4.46	5.00	-10.9	35.0
trans-1,2-Dichloroethene	Ave	1.393	1.226		4.40	5.00	-12.0	35.0
2-Methylpentane	Ave	5.433	4.474		4.12	5.00	-17.6	35.0
Methyl tert-butyl ether	Ave	2.883	2.736		4.74	5.00	-5.1	35.0
1,1-Dichloroethane	Ave	3.473	3.181		4.58	5.00	-8.4	35.0
Vinyl acetate	Ave	4.548	4.694		5.16	5.00	3.2	35.0
2-Butanone (MEK)	Ave	0.5774	0.5305		4.59	5.00	-8.1	35.0
Hexane	Ave	1.792	1.607		4.48	5.00	-10.3	35.0
Isopropyl ether	Ave	5.977	5.799		4.85	5.00	-3.0	35.0
cis-1,2-Dichloroethene	Ave	1.481	1.325		4.47	5.00	-10.5	35.0
Ethyl acetate	Ave	3.981	3.588		4.51	5.00	-9.9	35.0
Chloroform	Ave	3.366	2.934		4.36	5.00	-12.8	35.0
Tert-butyl ethyl ether	Ave	5.017	4.408		4.39	5.00	-12.1	35.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Lab Sample ID: ICV 140-42295/22 Calibration Date: 09/02/2020 08:56

Instrument ID: MG Calib Start Date: 09/01/2020 18:07

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 09/02/2020 03:27

Lab File ID: GI01ICVR.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Tetrahydrofuran	Ave	1.997	1.896		4.75	5.00	-5.1	35.0
1,1,1-Trichloroethane	Ave	3.240	2.865		4.42	5.00	-11.6	35.0
1,2-Dichloroethane	Ave	0.5421	0.4409		4.07	5.00	-18.7	35.0
1-Butanol	Ave	0.1535	0.1036		3.38	5.00	-32.5	35.0
Benzene	Ave	0.9867	0.8211		4.16	5.00	-16.8	35.0
Cyclohexane	Ave	0.1661	0.1347		4.05	5.00	-18.9	35.0
Carbon tetrachloride	Ave	0.6099	0.5409		4.43	5.00	-11.3	35.0
2,3-Dimethylpentane	Ave	0.2548	0.1966		3.86	5.00	-22.8	35.0
Thiophene	Ave	0.5655	0.4452		3.94	5.00	-21.3	35.0
2,2,4-Trimethylpentane	Ave	2.414	1.987		4.12	5.00	-17.7	35.0
Heptane	Ave	0.3880	0.3065		3.95	5.00	-21.0	35.0
1,2-Dichloropropane	Ave	0.4494	0.3788		4.21	5.00	-15.7	35.0
Trichloroethene	Ave	0.4302	0.3138		3.65	5.00	-27.0	35.0
Dibromomethane	Ave	0.4239	0.3454		4.07	5.00	-18.5	35.0
Bromodichloromethane	Ave	0.7367	0.6419		4.36	5.00	-12.9	35.0
1,4-Dioxane	Ave	0.1151	0.0858		3.73	5.00	-25.5	35.0
Methyl methacrylate	Ave	0.5088	0.4152		4.08	5.00	-18.4	35.0
Methylcyclohexane	Ave	0.6505	0.6281		4.83	5.00	-3.4	35.0
4-Methyl-2-pentanone (MIBK)	Ave	0.8567	0.6695		3.91	5.00	-21.9	35.0
cis-1,3-Dichloropropene	Ave	0.5917	0.5245		4.43	5.00	-11.3	35.0
trans-1,3-Dichloropropene	Ave	0.4924	0.4541		4.61	5.00	-7.8	35.0
Toluene	Ave	1.059	0.9715		4.59	5.00	-8.2	35.0
1,1,2-Trichloroethane	Ave	0.3318	0.2919		4.40	5.00	-12.0	35.0
2-Hexanone	Ave	0.3922	0.2950		3.76	5.00	-24.8	35.0
Octane	Ave	0.3858	0.3458		4.48	5.00	-10.4	35.0
Dibromochloromethane	Ave	0.6238	0.5958		4.78	5.00	-4.5	35.0
1,2-Dibromoethane (EDB)	Ave	0.5955	0.5271		4.43	5.00	-11.5	35.0
Tetrachloroethene	Ave	0.3991	0.3272		4.10	5.00	-18.0	35.0
Chlorobenzene	Ave	0.8562	0.7813		4.56	5.00	-8.8	35.0
2,3-Dimethylheptane	Ave	1.832	1.469		4.01	5.00	-19.8	35.0
Ethylbenzene	Ave	1.361	1.213		4.46	5.00	-10.8	35.0
m-Xylene & p-Xylene	Ave	1.076	0.9236		8.58	10.0	-14.2	35.0
Nonane	Ave	1.062	0.9751		4.59	5.00	-8.2	35.0
Bromoform	Ave	0.5248	0.5270		5.02	5.00	0.4	35.0
Styrene	Ave	0.7824	0.6733		4.30	5.00	-13.9	35.0
o-Xylene	Ave	1.089	0.9679		4.44	5.00	-11.1	35.0
1,1,2,2-Tetrachloroethane	Ave	0.8691	0.7611		4.38	5.00	-12.4	35.0
1,2,3-Trichloropropane	Ave	0.2125	0.1885		4.43	5.00	-11.3	35.0
Isopropylbenzene	Ave	1.431	1.289		4.50	5.00	-9.9	35.0
Propylbenzene	Ave	0.3821	0.3364		4.40	5.00	-12.0	35.0
2-Chlorotoluene	Ave	0.3660	0.3422		4.67	5.00	-6.5	35.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Lab Sample ID: ICV 140-42295/22 Calibration Date: 09/02/2020 08:56

Instrument ID: MG Calib Start Date: 09/01/2020 18:07

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 09/02/2020 03:27

Lab File ID: GI01ICVR.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Ethyltoluene	Ave	1.429	1.215		4.25	5.00	-15.0	35.0
1,3,5-Trimethylbenzene	Ave	0.5712	0.5698		4.99	5.00	-0.2	35.0
Alpha Methyl Styrene	Ave	0.5644	0.4904		4.34	5.00	-13.1	35.0
Decane	Ave	1.287	1.157		4.49	5.00	-10.1	35.0
tert-Butylbenzene	Ave	1.256	1.107		4.41	5.00	-11.8	35.0
1,2,4-Trimethylbenzene	Ave	1.249	1.123		4.49	5.00	-10.1	35.0
sec-Butylbenzene	Ave	1.884	1.651		4.38	5.00	-12.4	35.0
1,3-Dichlorobenzene	Ave	0.8900	0.7770		4.37	5.00	-12.7	35.0
Benzyl chloride	Ave	1.177	1.122		4.77	5.00	-4.6	35.0
1,4-Dichlorobenzene	Ave	0.9015	0.7590		4.21	5.00	-15.8	35.0
4-Isopropyltoluene	Ave	1.459	1.292		4.43	5.00	-11.4	35.0
1,2,3-Trimethylbenzene	QuaF		0.8283		3.85	5.00	-23.0	35.0
Butylcyclohexane	Ave	1.221	1.032		4.22	5.00	-15.5	35.0
1,2-Dichlorobenzene	Ave	0.8529	0.7455		4.37	5.00	-12.6	35.0
Indane	Ave	1.248	1.052		4.22	5.00	-15.7	35.0
Indene	Ave	1.069	0.7883		3.69	5.00	-26.3	35.0
Butylbenzene	Ave	1.654	1.495		4.52	5.00	-9.6	35.0
Undecane	Ave	1.437	1.263		4.40	5.00	-12.1	35.0
1,2-Dibromo-3-Chloropropane	QuaF		0.2886		3.87	5.00	-22.7	35.0
1,2,4,5-Tetramethylbenzene	QuaF		1.092		4.70	5.00	-5.9	35.0
Dodecane	Ave	1.254	1.200		4.79	5.00	-4.3	35.0
1,2,4-Trichlorobenzene	Ave	0.7511	0.6306		4.20	5.00	-16.0	35.0
Naphthalene	Ave	1.812	1.517		4.19	5.00	-16.3	35.0
Hexachlorobutadiene	Ave	0.6345	0.5377		4.24	5.00	-15.3	35.0
1,2,3-Trichlorobenzene	Ave	0.7230	0.6231		4.31	5.00	-13.8	35.0
2-Methylnaphthalene	Ave	0.7792	0.6437		4.13	5.00	-17.4	50.0
1-Methylnaphthalene	Ave	0.7933	0.6885		4.34	5.00	-13.2	50.0
4-Bromofluorobenzene (Surr)	Ave	0.7532	0.7643		11.8	11.6	1.5	35.0

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01ICVR.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 02-Sep-2020 08:56:30 ALS Bottle#: 7 Worklist Smp#: 22
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016453-022
Misc. Info.: S123 100ML 314619
Operator ID: AFB Instrument ID: MG
Sublist:

Method: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 02-Sep-2020 12:24:11 Calib Date: 02-Sep-2020 03:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1035

First Level Reviewer: barlozhetskayaa Date: 02-Sep-2020 10:29:43

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.811	8.811	0.000	87	147601	4.80	4.80	
* 2 1,4-Difluorobenzene	114	10.995	10.995	0.000	98	795164	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.730	15.730	0.000	94	773847	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.374	17.374	0.000	83	571756	4.64	4.71	
6 Chlorodifluoromethane	51	3.705	3.705	0.000	97	241643	2.00	1.83	
7 Propene	41	3.716	3.716	0.000	98	118767	2.00	1.83	
8 Dichlorodifluoromethane	85	3.764	3.770	-0.006	98	263975	2.00	1.79	
9 Chloromethane	52	3.947	3.947	0.000	72	45771	2.00	1.73	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.953	3.953	0.000	94	140044	2.00	1.66	
11 Acetaldehyde	44	4.098	4.093	0.005	100	259096	10.0	8.32	
12 Vinyl chloride	62	4.115	4.115	0.000	99	136539	2.00	1.85	
14 Butadiene	54	4.201	4.201	0.000	68	121148	2.00	1.86	
13 Butane	43	4.206	4.206	0.000	87	249996	2.00	1.89	
15 Bromomethane	94	4.519	4.519	0.000	98	77519	2.00	1.74	
16 Chloroethane	64	4.659	4.659	0.000	84	55088	2.00	1.80	
17 Ethanol	31	4.751	4.751	0.000	96	201798	10.0	7.23	
18 Vinyl bromide	106	4.961	4.961	0.000	96	68705	2.00	1.80	
19 2-Methylbutane	43	5.010	5.010	0.000	94	174113	2.00	1.94	
20 Trichlorofluoromethane	101	5.225	5.231	-0.006	98	192500	2.00	1.67	
21 Acrolein	56	5.231	5.231	0.000	36	30327	2.00	2.21	
22 Acetonitrile	40	5.295	5.296	-0.001	100	41007	2.00	1.67	
23 Acetone	58	5.355	5.349	0.006	99	49297	2.00	2.00	
25 Isopropyl alcohol	45	5.441	5.436	0.005	94	149039	2.00	2.03	
24 Pentane	72	5.446	5.447	-0.001	95	13694	2.00	1.83	
26 Ethyl ether	31	5.614	5.614	0.000	88	110080	2.00	2.09	
27 1,1-Dichloroethene	96	5.926	5.932	-0.006	89	63012	2.00	1.73	
28 Acrylonitrile	53	6.034	6.029	0.005	94	66087	2.00	1.97	
30 2-Methyl-2-propanol	59	6.040	6.045	-0.005	96	111815	2.00	1.51	
29 1,1,2-Trichloro-1,2,2-trifluoroe	101	6.104	6.104	0.000	89	145077	2.00	1.72	
31 Methylene Chloride	84	6.277	6.277	0.000	88	65615	2.00	1.80	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.288	6.288	0.000	94	117015	2.00	1.64	
33 Carbon disulfide	76	6.439	6.439	0.000	97	217959	2.00	1.78	
34 trans-1,2-Dichloroethene	96	7.086	7.080	0.006	90	75393	2.00	1.76	
35 2-Methylpentane	43	7.102	7.102	0.000	96	275179	2.00	1.65	
36 Methyl tert-butyl ether	73	7.221	7.215	0.006	92	168285	2.00	1.90	
37 1,1-Dichloroethane	63	7.501	7.501	0.000	98	195631	2.00	1.83	
38 Vinyl acetate	43	7.603	7.603	0.000	100	288713	2.00	2.06	
39 2-Butanone (MEK)	72	8.051	8.056	-0.005	95	32629	2.00	1.84	
40 Hexane	56	8.083	8.083	0.000	91	98855	2.00	1.79	
41 Isopropyl ether	45	8.240	8.240	0.000	95	356651	2.00	1.94	
42 cis-1,2-Dichloroethene	96	8.482	8.488	-0.006	94	81476	2.00	1.79	
43 Ethyl acetate	43	8.671	8.671	0.000	97	220650	2.00	1.80	
44 Chloroform	83	8.827	8.822	0.005	95	180444	2.00	1.74	
45 Tert-butyl ethyl ether	59	8.914	8.919	-0.005	96	271100	2.00	1.76	
46 Tetrahydrofuran	42	9.232	9.232	0.000	90	116632	2.00	1.90	
47 1,1,1-Trichloroethane	97	9.852	9.847	0.005	93	176228	2.00	1.77	
48 1,2-Dichloroethane	62	9.960	9.960	0.000	95	146090	2.00	1.63	
51 n-Butanol	31	10.434	10.429	0.005	71	34331	2.00	1.35	
50 Benzene	78	10.451	10.451	0.000	93	272043	2.00	1.66	
49 Cyclohexane	69	10.456	10.456	0.000	88	44638	2.00	1.62	
52 Carbon tetrachloride	117	10.478	10.478	0.000	92	179216	2.00	1.77	
53 2,3-Dimethylpentane	71	10.580	10.575	0.005	90	65148	2.00	1.54	
54 Thiophene	84	10.720	10.720	0.000	93	147498	2.00	1.57	
55 Isooctane	57	11.216	11.216	0.000	98	658344	2.00	1.65	
56 n-Heptane	71	11.594	11.594	0.000	94	101560	2.00	1.58	
57 1,2-Dichloropropane	63	11.675	11.669	0.006	88	125503	2.00	1.69	
58 Trichloroethene	130	11.712	11.712	0.000	89	103984	2.00	1.46	
59 Dibromomethane	93	11.788	11.788	0.000	87	114445	2.00	1.63	
60 Dichlorobromomethane	83	11.939	11.934	0.005	95	212678	2.00	1.74	
61 1,4-Dioxane	88	11.966	11.961	0.005	91	28433	2.00	1.49	
62 Methyl methacrylate	41	12.036	12.036	0.000	85	137568	2.00	1.63	
63 Methylcyclohexane	83	12.478	12.478	0.000	86	208092	2.00	1.93	
64 4-Methyl-2-pentanone (MIBK)	43	12.888	12.888	0.000	97	221805	2.00	1.56	
65 cis-1,3-Dichloropropene	75	12.936	12.937	-0.001	97	173786	2.00	1.77	
66 trans-1,3-Dichloropropene	75	13.632	13.632	0.000	91	146415	2.00	1.84	
67 Toluene	91	13.756	13.756	0.000	92	313239	2.00	1.84	
68 1,1,2-Trichloroethane	83	13.832	13.832	0.000	94	94123	2.00	1.76	
69 2-Hexanone	58	14.225	14.225	0.000	91	95107	2.00	1.50	
70 n-Octane	85	14.452	14.452	0.000	98	111511	2.00	1.79	
71 Chlorodibromomethane	129	14.538	14.533	0.005	94	192113	2.00	1.91	
72 Ethylene Dibromide	107	14.824	14.824	0.000	97	169944	2.00	1.77	
73 Tetrachloroethene	129	14.905	14.905	0.000	90	105515	2.00	1.64	
75 Chlorobenzene	112	15.778	15.778	0.000	90	251919	2.00	1.82	
74 2,3-Dimethylheptane	43	15.800	15.800	0.000	92	473562	2.00	1.60	
78 Ethylbenzene	91	16.069	16.070	-0.001	98	391211	2.00	1.78	
79 m-Xylene & p-Xylene	91	16.231	16.231	0.000	98	595631	4.00	3.43	
80 n-Nonane	57	16.652	16.652	0.000	93	314394	2.00	1.84	
81 Bromoform	173	16.679	16.679	0.000	90	169932	2.00	2.01	
82 Styrene	104	16.695	16.695	0.000	96	217105	2.00	1.72	
83 o-Xylene	91	16.754	16.754	0.000	97	312087	2.00	1.78	
84 1,1,2,2-Tetrachloroethane	83	17.078	17.078	0.000	97	245410	2.00	1.75	
85 1,2,3-Trichloropropane	110	17.234	17.240	-0.006	92	60775	2.00	1.77	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
86 Isopropylbenzene	105	17.342	17.347	-0.005	97	415722	2.00	1.80	
87 N-Propylbenzene	120	17.887	17.887	0.000	98	108476	2.00	1.76	
88 2-Chlorotoluene	126	17.930	17.930	0.000	98	110334	2.00	1.87	
89 4-Ethyltoluene	105	18.038	18.038	0.000	99	391682	2.00	1.70	
90 1,3,5-Trimethylbenzene	120	18.108	18.108	0.000	91	183721	2.00	2.00	
92 Alpha Methyl Styrene	118	18.340	18.340	0.000	84	158132	2.00	1.74	
93 n-Decane	57	18.399	18.399	0.000	87	372994	2.00	1.80	
94 tert-Butylbenzene	119	18.534	18.534	0.000	89	357090	2.00	1.76	
95 1,2,4-Trimethylbenzene	105	18.545	18.550	-0.005	96	361981	2.00	1.80	
96 sec-Butylbenzene	105	18.803	18.803	0.000	98	532479	2.00	1.75	
97 1,3-Dichlorobenzene	146	18.814	18.814	0.000	97	250519	2.00	1.75	
98 Benzyl chloride	91	18.890	18.890	0.000	96	361904	2.00	1.91	
99 1,4-Dichlorobenzene	146	18.900	18.906	-0.006	94	244726	2.00	1.68	
100 4-Isopropyltoluene	119	18.965	18.965	0.000	96	416724	2.00	1.77	
101 1,2,3-Trimethylbenzene	105	19.014	19.019	-0.005	99	267065	2.00	1.54	
102 Butylcyclohexane	83	19.073	19.073	0.000	85	332763	2.00	1.69	
103 2,3-Dihydroindene	117	19.262	19.262	0.000	92	339297	2.00	1.69	
104 1,2-Dichlorobenzene	146	19.262	19.262	0.000	80	240366	2.00	1.75	
106 Indene	116	19.391	19.391	0.000	92	254181	2.00	1.47	
105 n-Butylbenzene	91	19.397	19.397	0.000	98	482020	2.00	1.81	
107 Undecane	57	19.709	19.709	0.000	92	407210	2.00	1.76	
108 1,2-Dibromo-3-Chloropropane	157	19.860	19.860	0.000	86	93039	2.00	1.55	
109 1,2,4,5-Tetramethylbenzene	119	20.146	20.152	-0.006	97	352073	2.00	1.88	
110 Dodecane	57	20.766	20.761	0.005	91	387080	2.00	1.91	
111 1,2,4-Trichlorobenzene	180	20.955	20.955	0.000	93	203324	2.00	1.68	
112 Naphthalene	128	21.095	21.095	0.000	98	489225	2.00	1.67	
113 Hexachlorobutadiene	225	21.305	21.305	0.000	91	173369	2.00	1.69	
114 1,2,3-Trichlorobenzene	180	21.370	21.370	0.000	94	200917	2.00	1.72	
115 2-Methylnaphthalene	142	22.141	22.141	0.000	97	207554	2.00	1.65	
116 1-Methylnaphthalene	142	22.319	22.319	0.000	99	222006	2.00	1.74	
A 122 C8 Range	1	14.449	(14.399-14.517)		0	1388561	2.00	1.84	
S 123 1,2-Dichloroethene, Total	1				0		4.00	3.55	
S 124 Xylenes, Total	100				0		6.00	5.21	
T 136 2-Methylthiophene TIC	97	13.912	13.917	-0.006	97	242304	2.00	1.50	
T 137 3-Methylthiophene TIC	97	14.112	14.974	-0.863	95	245771	2.00	1.52	
T 154 2-Ethylthiophene TIC	97	16.172	17.374	-1.202	97	286980	2.00	1.78	
T 161 1,2,3,5-Tetramethylbenzene TIC	119	20.200	18.970	1.230	96	208289	2.00	1.29	
T 162 1,2,3,4-Tetramethylbenzene TIC	119	20.604	18.970	1.634	96	275647	2.00	1.71	
T 160 1,2-Dimethyl-4-Ethylbenzene TIC	119	19.763	19.865	-0.103	96	295157	2.00	1.83	
T 163 Benzo(b)thiophene TIC	134	21.198	23.310	-2.113	97	257697	2.00	1.60	

Reagents:

40CV101S_00123	Amount Added: 100.00	Units: mL	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

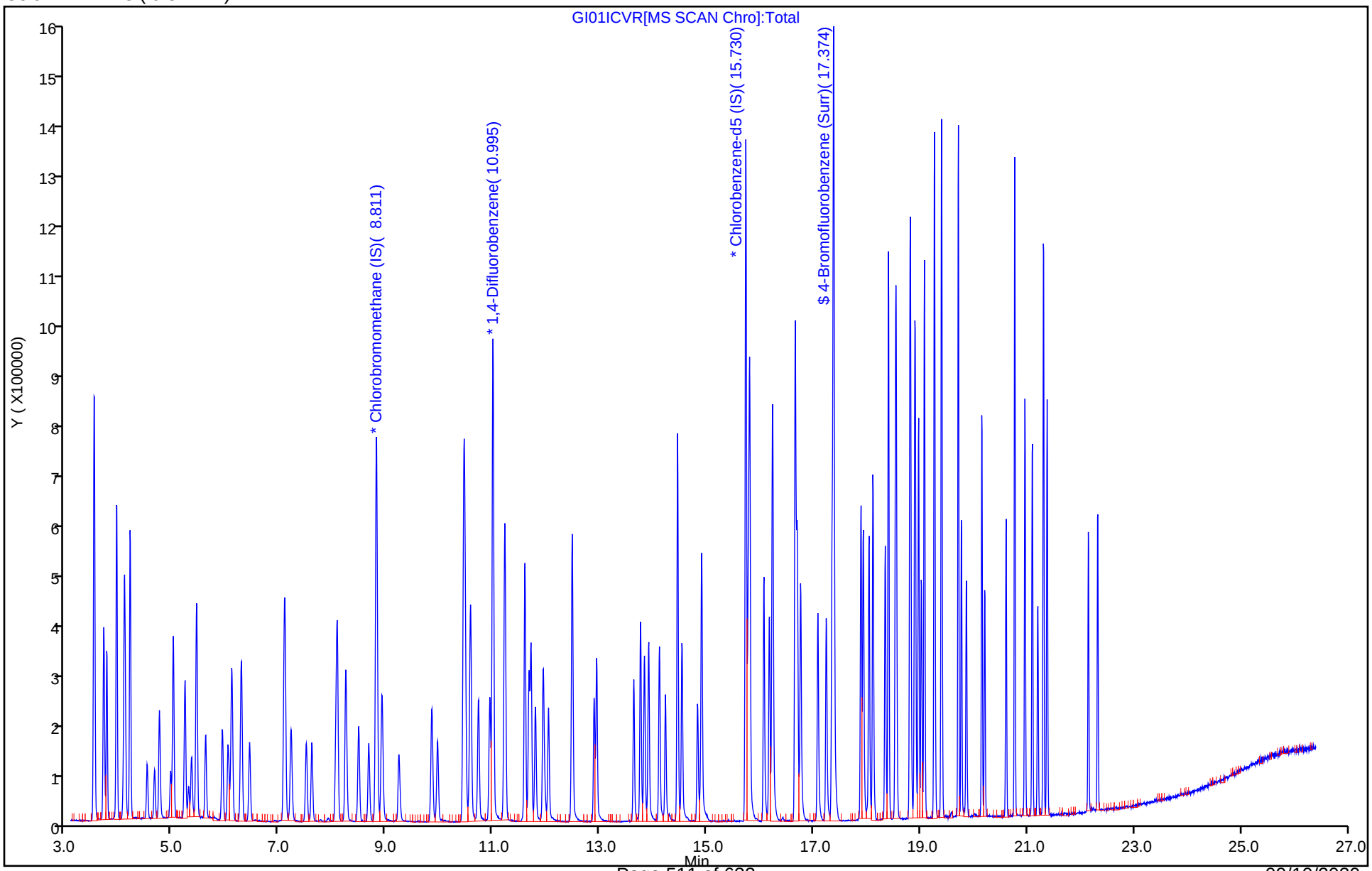
Report Date: 02-Sep-2020 12:35:07 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01ICVR.D

Injection Date:	02-Sep-2020 08:56:30	Instrument ID:	MG	Operator ID:	AFB
Lims ID:	ICV			Worklist Smp#:	22
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Lab Sample ID: CCVIS 140-42481/2 Calibration Date: 09/05/2020 11:32

Instrument ID: MG Calib Start Date: 09/01/2020 18:07

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 09/02/2020 03:27

Lab File ID: GLCSI05.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorodifluoromethane	Ave	4.301	3.677		1.71	2.00	-14.5	30.0
Propene	Ave	2.115	1.818		1.72	2.00	-14.0	30.0
Dichlorodifluoromethane	Ave	4.809	3.752		1.56	2.00	-22.0	30.0
1,2-Dichloro-1,1,2,2-tetrafluoroethane	Ave	2.743	2.128		1.55	2.00	-22.4	30.0
Chloromethane	Ave	0.8610	0.6847		1.59	2.00	-20.5	30.0
Acetaldehyde	Ave	1.013	0.7751		7.65	10.0	-23.5	30.0
Vinyl chloride	Ave	2.404	1.890		1.57	2.00	-21.4	30.0
1,3-Butadiene	Ave	2.119	1.735		1.64	2.00	-18.1	30.0
Butane	Ave	4.304	3.435		1.60	2.00	-20.2	30.0
Bromomethane	Ave	1.452	1.157		1.59	2.00	-20.3	30.0
Chloroethane	Ave	0.997	0.7848		1.57	2.00	-21.3	30.0
Ethanol	Ave	0.9079	0.5922		6.52	10.0	-34.8*	30.0
Vinyl bromide	Ave	1.239	1.091		1.76	2.00	-11.9	30.0
2-Methylbutane	Ave	2.923	2.456		1.68	2.00	-16.0	30.0
Trichlorofluoromethane	Ave	3.737	3.175		1.70	2.00	-15.0	30.0
Acrolein	Ave	0.4464	0.4805		2.15	2.00	7.6	30.0
Acetonitrile	Ave	0.7987	0.6167		1.54	2.00	-22.8	30.0
Acetone	Ave	0.7999	0.7941		1.99	2.00	-0.7	30.0
Isopropyl alcohol	Ave	2.389	2.425		2.03	2.00	1.5	30.0
Pentane	Ave	0.2430	0.1955		1.61	2.00	-19.5	30.0
Ethyl ether	Ave	1.710	1.585		1.85	2.00	-7.3	30.0
1,1-Dichloroethene	Ave	1.183	0.9246		1.56	2.00	-21.9	30.0
Acrylonitrile	Ave	1.092	0.9845		1.80	2.00	-9.8	30.0
tert-Butyl alcohol	Ave	2.412	1.731		1.43	2.00	-28.3	30.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	2.736	2.130		1.56	2.00	-22.2	30.0
Methylene Chloride	Ave	1.184	0.9176		1.55	2.00	-22.5	30.0
3-Chloropropene	Ave	2.320	1.698		1.46	2.00	-26.8	30.0
Carbon disulfide	Ave	3.977	2.953		1.49	2.00	-25.7	30.0
trans-1,2-Dichloroethene	Ave	1.393	1.096		1.57	2.00	-21.4	30.0
2-Methylpentane	Ave	5.433	3.968		1.46	2.00	-27.0	30.0
Methyl tert-butyl ether	Ave	2.883	2.280		1.58	2.00	-20.9	30.0
1,1-Dichloroethane	Ave	3.473	2.623		1.51	2.00	-24.5	30.0
Vinyl acetate	Ave	4.548	4.288		1.89	2.00	-5.7	30.0
2-Butanone (MEK)	Ave	0.5774	0.4318		1.50	2.00	-25.2	30.0
Hexane	Ave	1.792	1.369		1.53	2.00	-23.6	30.0
Isopropyl ether	Ave	5.977	5.078		1.70	2.00	-15.0	30.0
cis-1,2-Dichloroethene	Ave	1.481	1.235		1.67	2.00	-16.6	30.0
Ethyl acetate	Ave	3.981	3.178		1.60	2.00	-20.2	30.0
Chloroform	Ave	3.366	2.569		1.53	2.00	-23.7	30.0
Tert-butyl ethyl ether	Ave	5.017	3.686		1.47	2.00	-26.5	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Lab Sample ID: CCVIS 140-42481/2 Calibration Date: 09/05/2020 11:32

Instrument ID: MG Calib Start Date: 09/01/2020 18:07

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 09/02/2020 03:27

Lab File ID: GLCSI05.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Tetrahydrofuran	Ave	1.997	1.700		1.70	2.00	-14.9	30.0
1,1,1-Trichloroethane	Ave	3.240	2.619		1.62	2.00	-19.2	30.0
1,2-Dichloroethane	Ave	0.5421	0.4281		1.58	2.00	-21.0	30.0
1-Butanol	Ave	0.1535	0.1053		1.37	2.00	-31.4*	30.0
Benzene	Ave	0.9867	0.7612		1.54	2.00	-22.9	30.0
Cyclohexane	Ave	0.1661	0.1169		1.41	2.00	-29.6	30.0
Carbon tetrachloride	Ave	0.6099	0.5454		1.79	2.00	-10.6	30.0
2,3-Dimethylpentane	Ave	0.2548	0.1740		1.37	2.00	-31.7*	30.0
Thiophene	Ave	0.5655	0.4130		1.46	2.00	-27.0	30.0
2,2,4-Trimethylpentane	Ave	2.414	1.808		1.50	2.00	-25.1	30.0
Heptane	Ave	0.3880	0.2720		1.40	2.00	-29.9	30.0
1,2-Dichloropropane	Ave	0.4494	0.3353		1.49	2.00	-25.4	30.0
Trichloroethene	Ave	0.4302	0.3334		1.55	2.00	-22.5	30.0
Dibromomethane	Ave	0.4239	0.3225		1.52	2.00	-23.9	30.0
Bromodichloromethane	Ave	0.7367	0.5668		1.54	2.00	-23.1	30.0
1,4-Dioxane	Ave	0.1151	0.0728		1.26	2.00	-36.8*	30.0
Methyl methacrylate	Ave	0.5088	0.3917		1.54	2.00	-23.0	30.0
Methylcyclohexane	Ave	0.6505	0.5855		1.80	2.00	-10.0	30.0
4-Methyl-2-pentanone (MIBK)	Ave	0.8567	0.6661		1.55	2.00	-22.3	30.0
cis-1,3-Dichloropropene	Ave	0.5917	0.4546		1.54	2.00	-23.2	30.0
trans-1,3-Dichloropropene	Ave	0.4924	0.3709		1.51	2.00	-24.7	30.0
Toluene	Ave	1.059	0.8361		1.58	2.00	-21.0	30.0
1,1,2-Trichloroethane	Ave	0.3318	0.2390		1.44	2.00	-28.0	30.0
2-Hexanone	Ave	0.3922	0.2688		1.37	2.00	-31.5*	30.0
Octane	Ave	0.3858	0.2866		1.49	2.00	-25.7	30.0
Dibromochloromethane	Ave	0.6238	0.5583		1.79	2.00	-10.5	30.0
1,2-Dibromoethane (EDB)	Ave	0.5955	0.4768		1.60	2.00	-19.9	30.0
Tetrachloroethene	Ave	0.3991	0.3117		1.56	2.00	-21.9	30.0
Chlorobenzene	Ave	0.8562	0.7050		1.65	2.00	-17.7	30.0
2,3-Dimethylheptane	Ave	1.832	1.204		1.31	2.00	-34.3*	30.0
Ethylbenzene	Ave	1.361	1.083		1.59	2.00	-20.4	30.0
m-Xylene & p-Xylene	Ave	1.076	0.8374		3.11	4.00	-22.2	30.0
Nonane	Ave	1.062	0.7829		1.47	2.00	-26.3	30.0
Bromoform	Ave	0.5248	0.5710		2.18	2.00	8.8	30.0
Styrene	Ave	0.7824	0.6702		1.71	2.00	-14.3	30.0
o-Xylene	Ave	1.089	0.8620		1.58	2.00	-20.9	30.0
1,1,2,2-Tetrachloroethane	Ave	0.8691	0.6372		1.47	2.00	-26.7	30.0
1,2,3-Trichloropropane	Ave	0.2125	0.1771		1.67	2.00	-16.6	30.0
Isopropylbenzene	Ave	1.431	1.198		1.67	2.00	-16.3	30.0
Propylbenzene	Ave	0.3821	0.3359		1.76	2.00	-12.1	30.0
2-Chlorotoluene	Ave	0.3660	0.3406		1.86	2.00	-6.9	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Lab Sample ID: CCVIS 140-42481/2 Calibration Date: 09/05/2020 11:32

Instrument ID: MG Calib Start Date: 09/01/2020 18:07

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 09/02/2020 03:27

Lab File ID: GLCSI05.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Ethyltoluene	Ave	1.429	1.119		1.57	2.00	-21.7	30.0
1,3,5-Trimethylbenzene	Ave	0.5712	0.5647		1.98	2.00	-1.1	30.0
Alpha Methyl Styrene	Ave	0.5644	0.4897		1.74	2.00	-13.2	30.0
Decane	Ave	1.287	0.9584		1.49	2.00	-25.5	30.0
tert-Butylbenzene	Ave	1.256	1.081		1.72	2.00	-14.0	30.0
1,2,4-Trimethylbenzene	Ave	1.249	1.026		1.64	2.00	-17.8	30.0
sec-Butylbenzene	Ave	1.884	1.574		1.67	2.00	-16.5	30.0
1,3-Dichlorobenzene	Ave	0.8900	0.8616		1.94	2.00	-3.2	30.0
Benzyl chloride	Ave	1.177	0.9835		1.67	2.00	-16.4	30.0
1,4-Dichlorobenzene	Ave	0.9015	0.8528		1.89	2.00	-5.4	30.0
4-Isopropyltoluene	Ave	1.459	1.249		1.71	2.00	-14.4	30.0
1,2,3-Trimethylbenzene	QuaF		0.7411		1.38	2.00	-30.9*	30.0
Butylcyclohexane	Ave	1.221	0.8971		1.47	2.00	-26.5	30.0
1,2-Dichlorobenzene	Ave	0.8529	0.8229		1.93	2.00	-3.5	30.0
Indane	Ave	1.248	1.046		1.68	2.00	-16.2	30.0
Indene	Ave	1.069	0.7538		1.41	2.00	-29.5	30.0
Butylbenzene	Ave	1.654	1.344		1.63	2.00	-18.7	30.0
Undecane	Ave	1.437	1.069		1.49	2.00	-25.6	30.0
1,2-Dibromo-3-Chloropropane	QuaF		0.3317		1.76	2.00	-11.8	30.0
1,2,4,5-Tetramethylbenzene	QuaF		1.068		1.84	2.00	-7.8	30.0
Dodecane	Ave	1.254	1.068		1.70	2.00	-14.9	30.0
1,2,4-Trichlorobenzene	Ave	0.7511	0.7953		2.12	2.00	5.9	30.0
Naphthalene	Ave	1.812	1.600		1.77	2.00	-11.7	30.0
Hexachlorobutadiene	Ave	0.6345	0.7715		2.43	2.00	21.6	30.0
1,2,3-Trichlorobenzene	Ave	0.7230	0.7925		2.19	2.00	9.6	30.0
2-Methylnaphthalene	Ave	0.7792	0.7662		1.97	2.00	-1.7	50.0
1-Methylnaphthalene	Ave	0.7933	0.8215		2.07	2.00	3.6	50.0
4-Bromofluorobenzene (Surr)	Ave	0.7532	0.7556		4.65	4.64	0.3	30.0

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200904-16506.b\GLCSI05.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 05-Sep-2020 11:32:30 ALS Bottle#: 16 Worklist Smp#: 2
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016506-002
Misc. Info.: S123 100ML
Operator ID: HMT Instrument ID: MG
Sublist: chrom-MG_TO15*sub19

Method: \\chromfs\Knoxville\ChromData\MG\20200904-16506.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 07-Sep-2020 08:16:13 Calib Date: 02-Sep-2020 03:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1015

First Level Reviewer: tajh Date: 07-Sep-2020 08:16:13

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.811	8.811	0.000	88	124564	4.80	4.80	
* 2 1,4-Difluorobenzene	114	10.995	10.995	0.000	97	616523	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.730	15.730	0.000	91	638191	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.369	17.369	0.000	91	466150	4.64	4.65	
6 Chlorodifluoromethane	51	3.699	3.699	0.000	96	190822	2.00	1.71	
7 Propene	41	3.715	3.715	0.000	99	94343	2.00	1.72	
8 Dichlorodifluoromethane	85	3.764	3.764	0.000	98	194751	2.00	1.56	
9 Chloromethane	52	3.947	3.947	0.000	97	35535	2.00	1.59	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.947	3.947	0.000	95	110427	2.00	1.55	
11 Acetaldehyde	44	4.093	4.093	0.000	97	201135	10.0	7.65	
12 Vinyl chloride	62	4.114	4.114	0.000	98	98107	2.00	1.57	
13 Butane	43	4.201	4.201	0.000	85	178272	2.00	1.60	
14 Butadiene	54	4.201	4.201	0.000	65	90071	2.00	1.64	
15 Bromomethane	94	4.519	4.519	0.000	97	60057	2.00	1.59	
16 Chloroethane	64	4.659	4.659	0.000	85	40735	2.00	1.57	
17 Ethanol	31	4.751	4.751	0.000	96	153668	10.0	6.52	
18 Vinyl bromide	106	4.956	4.956	0.000	97	56650	2.00	1.76	
19 2-Methylbutane	43	5.010	5.010	0.000	93	127493	2.00	1.68	
20 Trichlorofluoromethane	101	5.225	5.225	0.000	98	164804	2.00	1.70	
21 Acrolein	56	5.236	5.236	0.000	35	24939	2.00	2.15	
22 Acetonitrile	40	5.295	5.295	0.000	100	32006	2.00	1.54	
23 Acetone	58	5.349	5.349	0.000	99	41215	2.00	1.99	
25 Isopropyl alcohol	45	5.441	5.441	0.000	43	125857	2.00	2.03	
24 Pentane	72	5.446	5.446	0.000	94	10145	2.00	1.61	
26 Ethyl ether	31	5.614	5.614	0.000	88	82248	2.00	1.85	
27 1,1-Dichloroethene	96	5.932	5.932	0.000	90	47986	2.00	1.56	
28 Acrylonitrile	53	6.029	6.029	0.000	92	51099	2.00	1.80	
30 2-Methyl-2-propanol	59	6.045	6.045	0.000	96	89823	2.00	1.43	
29 1,1,2-Trichloro-1,2,2-trifluoroe	101	6.104	6.104	0.000	92	110558	2.00	1.56	
31 Methylene Chloride	84	6.271	6.271	0.000	87	47624	2.00	1.55	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.288	6.288	0.000	93	88124	2.00	1.46	
33 Carbon disulfide	76	6.439	6.439	0.000	96	153281	2.00	1.49	
34 trans-1,2-Dichloroethene	96	7.080	7.080	0.000	91	56859	2.00	1.57	
35 2-Methylpentane	43	7.102	7.102	0.000	97	205935	2.00	1.46	
36 Methyl tert-butyl ether	73	7.215	7.215	0.000	89	118322	2.00	1.58	
37 1,1-Dichloroethane	63	7.501	7.501	0.000	98	136160	2.00	1.51	
38 Vinyl acetate	43	7.603	7.603	0.000	100	222552	2.00	1.89	
39 2-Butanone (MEK)	72	8.051	8.051	0.000	94	22410	2.00	1.50	
40 Hexane	56	8.072	8.072	0.000	91	71057	2.00	1.53	
41 Isopropyl ether	45	8.240	8.240	0.000	96	263542	2.00	1.70	
42 cis-1,2-Dichloroethene	96	8.482	8.482	0.000	98	64123	2.00	1.67	
43 Ethyl acetate	43	8.671	8.671	0.000	97	164927	2.00	1.60	
44 Chloroform	83	8.822	8.822	0.000	93	133354	2.00	1.53	
45 Tert-butyl ethyl ether	59	8.914	8.914	0.000	96	191329	2.00	1.47	
46 Tetrahydrofuran	42	9.232	9.232	0.000	90	88248	2.00	1.70	
47 1,1,1-Trichloroethane	97	9.847	9.847	0.000	93	135954	2.00	1.62	
48 1,2-Dichloroethane	62	9.960	9.960	0.000	94	109981	2.00	1.58	
51 n-Butanol	31	10.434	10.434	0.000	64	27056	2.00	1.37	
50 Benzene	78	10.450	10.450	0.000	93	195536	2.00	1.54	
49 Cyclohexane	69	10.450	10.450	0.000	82	30031	2.00	1.41	
52 Carbon tetrachloride	117	10.472	10.472	0.000	92	140096	2.00	1.79	
53 2,3-Dimethylpentane	71	10.575	10.575	0.000	91	44696	2.00	1.37	
54 Thiophene	84	10.720	10.720	0.000	93	106084	2.00	1.46	
55 Isooctane	57	11.216	11.216	0.000	97	464481	2.00	1.50	
56 n-Heptane	71	11.594	11.594	0.000	95	69860	2.00	1.40	
57 1,2-Dichloropropane	63	11.664	11.664	0.000	88	86144	2.00	1.49	
58 Trichloroethene	130	11.707	11.707	0.000	92	85638	2.00	1.55	
59 Dibromomethane	93	11.788	11.788	0.000	96	82851	2.00	1.52	
60 Dichlorobromomethane	83	11.933	11.933	0.000	95	145595	2.00	1.54	
61 1,4-Dioxane	88	11.966	11.966	0.000	90	18705	2.00	1.26	
62 Methyl methacrylate	41	12.036	12.036	0.000	85	100626	2.00	1.54	
63 Methylcyclohexane	83	12.478	12.478	0.000	86	150407	2.00	1.80	
64 4-Methyl-2-pentanone (MIBK)	43	12.888	12.888	0.000	97	171099	2.00	1.55	
65 cis-1,3-Dichloropropene	75	12.936	12.936	0.000	96	116784	2.00	1.54	
66 trans-1,3-Dichloropropene	75	13.632	13.632	0.000	92	98633	2.00	1.51	
67 Toluene	91	13.756	13.756	0.000	93	222339	2.00	1.58	
68 1,1,2-Trichloroethane	83	13.826	13.826	0.000	96	63549	2.00	1.44	
69 2-Hexanone	58	14.220	14.220	0.000	90	71473	2.00	1.37	
70 n-Octane	85	14.452	14.452	0.000	98	76213	2.00	1.49	
71 Chlorodibromomethane	129	14.533	14.533	0.000	95	148457	2.00	1.79	
72 Ethylene Dibromide	107	14.824	14.824	0.000	98	126787	2.00	1.60	
73 Tetrachloroethene	129	14.905	14.905	0.000	92	82897	2.00	1.56	
75 Chlorobenzene	112	15.778	15.778	0.000	92	187474	2.00	1.65	
74 2,3-Dimethylheptane	43	15.800	15.800	0.000	92	320187	2.00	1.31	
78 Ethylbenzene	91	16.064	16.064	0.000	98	287999	2.00	1.59	
79 m-Xylene & p-Xylene	91	16.231	16.231	0.000	96	445330	4.00	3.11	
80 n-Nonane	57	16.652	16.652	0.000	94	208173	2.00	1.47	
81 Bromoform	173	16.679	16.679	0.000	94	151842	2.00	2.18	
82 Styrene	104	16.689	16.689	0.000	96	178221	2.00	1.71	
83 o-Xylene	91	16.754	16.754	0.000	94	229218	2.00	1.58	
84 1,1,2,2-Tetrachloroethane	83	17.078	17.078	0.000	98	169441	2.00	1.47	
85 1,2,3-Trichloropropane	110	17.234	17.234	0.000	91	47103	2.00	1.67	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
86 Isopropylbenzene	105	17.342	17.342	0.000	97	318589	2.00	1.67	
87 N-Propylbenzene	120	17.887	17.887	0.000	99	89318	2.00	1.76	
88 2-Chlorotoluene	126	17.930	17.930	0.000	98	90582	2.00	1.86	
89 4-Ethyltoluene	105	18.032	18.032	0.000	98	297626	2.00	1.57	
90 1,3,5-Trimethylbenzene	120	18.108	18.108	0.000	93	150153	2.00	1.98	
92 Alpha Methyl Styrene	118	18.340	18.340	0.000	89	130206	2.00	1.74	
93 n-Decane	57	18.399	18.399	0.000	87	254850	2.00	1.49	
94 tert-Butylbenzene	119	18.528	18.528	0.000	92	287355	2.00	1.72	
95 1,2,4-Trimethylbenzene	105	18.544	18.544	0.000	95	272951	2.00	1.64	
96 sec-Butylbenzene	105	18.798	18.798	0.000	98	418666	2.00	1.67	
97 1,3-Dichlorobenzene	146	18.814	18.814	0.000	96	229108	2.00	1.94	
98 Benzyl chloride	91	18.890	18.890	0.000	97	261516	2.00	1.67	
99 1,4-Dichlorobenzene	146	18.900	18.900	0.000	93	226761	2.00	1.89	
100 4-Isopropyltoluene	119	18.960	18.960	0.000	96	332231	2.00	1.71	
101 1,2,3-Trimethylbenzene	105	19.014	19.014	0.000	98	197064	2.00	1.38	
102 Butylcyclohexane	83	19.073	19.073	0.000	86	238563	2.00	1.47	
103 2,3-Dihydroindene	117	19.262	19.262	0.000	93	278152	2.00	1.68	
104 1,2-Dichlorobenzene	146	19.262	19.262	0.000	86	218827	2.00	1.93	
106 Indene	116	19.391	19.391	0.000	88	200434	2.00	1.41	
105 n-Butylbenzene	91	19.396	19.396	0.000	97	357440	2.00	1.63	
107 Undecane	57	19.704	19.704	0.000	92	284375	2.00	1.49	
108 1,2-Dibromo-3-Chloropropane	157	19.860	19.860	0.000	91	88203	2.00	1.76	
109 1,2,4,5-Tetramethylbenzene	119	20.146	20.146	0.000	98	284034	2.00	1.84	
110 Dodecane	57	20.761	20.761	0.000	90	283965	2.00	1.70	
111 1,2,4-Trichlorobenzene	180	20.955	20.955	0.000	93	211475	2.00	2.12	
112 Naphthalene	128	21.090	21.090	0.000	99	425466	2.00	1.77	
113 Hexachlorobutadiene	225	21.300	21.300	0.000	95	205165	2.00	2.43	
114 1,2,3-Trichlorobenzene	180	21.370	21.370	0.000	95	210730	2.00	2.19	
115 2-Methylnaphthalene	142	22.141	22.141	0.000	99	203751	2.00	1.97	
116 1-Methylnaphthalene	142	22.314	22.314	0.000	99	218467	2.00	2.07	
A 122 C8 Range	1	14.474	(14.393-14.554)		0	951980	2.00	1.53	
S 123 1,2-Dichloroethene, Total	1				0		4.00	3.24	
S 124 Xylenes, Total	100				0		6.00	4.69	
T 136 2-Methylthiophene TIC	97	13.907	13.907	0.000	97	178511	2.00	1.34	
T 137 3-Methylthiophene TIC	97	14.112	14.112	0.000	96	170413	2.00	1.28	
T 154 2-Ethylthiophene TIC	97	16.166	16.166	0.000	95	207628	2.00	1.56	
T 160 1,2-Dimethyl-4-Ethylbenzene TIC	119	19.763	19.763	0.000	95	236273	2.00	1.78	
T 163 Benzo(b)thiophene TIC	134	21.192	21.192	0.000	94	228082	2.00	1.72	

Reagents:

40CV101S_00123	Amount Added: 100.00	Units: ml	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

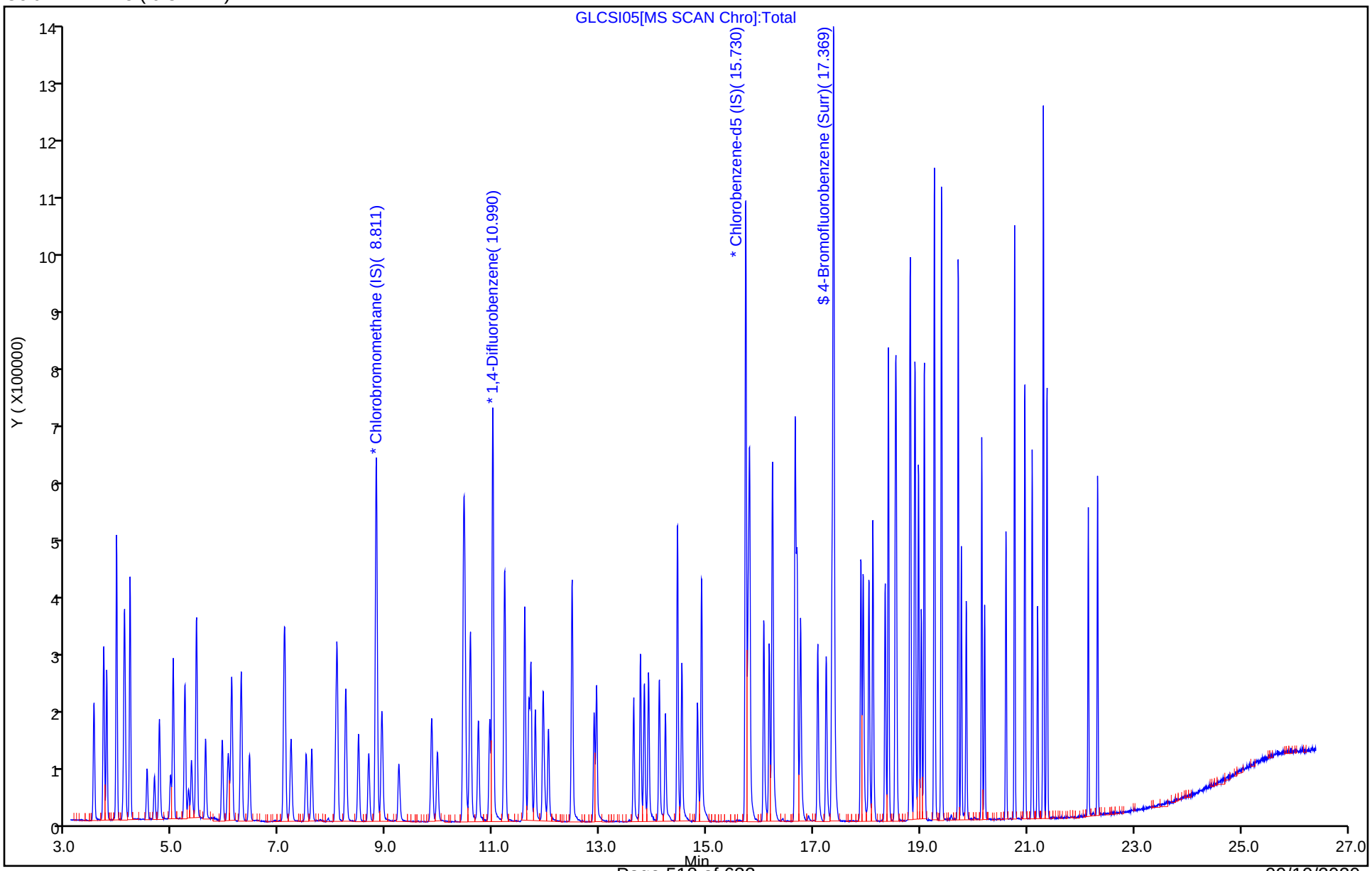
Report Date: 07-Sep-2020 08:16:14 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200904-16506.b\GLCSI05.D

Injection Date:	05-Sep-2020 11:32:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	CCVIS			Worklist Smp#:	2
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Lab Sample ID: ICV 140-42222/17 Calibration Date: 08/29/2020 01:37

Instrument ID: MR Calib Start Date: 08/28/2020 14:01

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 08/29/2020 00:02

Lab File ID: RH28ICV.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorodifluoromethane	Ave	2.687	2.484		1.85	2.00	-7.5	35.0
Propene	Ave	1.275	1.235		1.94	2.00	-3.2	35.0
Dichlorodifluoromethane	Ave	2.017	2.359		2.34	2.00	17.0	35.0
Chloromethane	Ave	0.4770	0.4754		1.99	2.00	-0.3	35.0
1,2-Dichloro-1,1,2,2-tetrafluoroethane	Ave	2.827	2.985		2.11	2.00	5.6	35.0
Acetaldehyde	Ave	0.7496	0.6490		8.66	10.0	-13.4	35.0
Vinyl chloride	Lin1		1.580		2.16	2.00	8.2	35.0
1,3-Butadiene	Ave	1.231	1.231		2.00	2.00	-0.0	35.0
Butane	Ave	2.602	2.572		1.98	2.00	-1.2	35.0
Bromomethane	Lin2		1.570		1.99	2.00	-0.7	35.0
Chloroethane	Lin2		0.7885		2.11	2.00	5.4	35.0
Ethanol	Lin1		0.7559		7.77	10.0	-22.3	35.0
Vinyl bromide	Ave	1.567	1.624		2.07	2.00	3.6	35.0
2-Methylbutane	Ave	2.021	2.058		2.04	2.00	1.8	35.0
Trichlorofluoromethane	Ave	3.931	3.865		1.97	2.00	-1.7	35.0
Acrolein	Ave	0.3741	0.4728		2.53	2.00	26.4	35.0
Acetonitrile	Ave	0.5495	0.5537		2.02	2.00	0.8	35.0
Acetone	Ave	0.7172	0.7376		2.06	2.00	2.8	35.0
Pentane	Ave	0.2298	0.2437		2.12	2.00	6.1	35.0
Isopropyl alcohol	Ave	1.926	2.371		2.46	2.00	23.1	35.0
Ethyl ether	Ave	1.673	1.735		2.07	2.00	3.7	35.0
1,1-Dichloroethene	Ave	1.418	1.349		1.90	2.00	-4.9	35.0
Acrylonitrile	Ave	0.8140	0.8759		2.15	2.00	7.6	35.0
tert-Butyl alcohol	Ave	2.400	2.413		2.01	2.00	0.5	35.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	3.085	3.077		2.00	2.00	-0.2	35.0
Methylene Chloride	Ave	1.170	1.138		1.95	2.00	-2.7	35.0
3-Chloropropene	Lin2		1.378		2.16	2.00	7.8	35.0
Carbon disulfide	Ave	3.742	3.651		1.95	2.00	-2.4	35.0
trans-1,2-Dichloroethene	Ave	1.315	1.276		1.94	2.00	-3.0	35.0
2-Methylpentane	Ave	3.158	2.759		1.75	2.00	-12.6	35.0
Methyl tert-butyl ether	Ave	3.196	3.228		2.02	2.00	1.0	35.0
1,1-Dichloroethane	Ave	2.283	2.271		1.99	2.00	-0.5	35.0
Vinyl acetate	Ave	3.475	3.789		2.18	2.00	9.0	35.0
2-Butanone (MEK)	Ave	0.6451	0.6316		1.96	2.00	-2.1	35.0
Hexane	Ave	0.9722	0.9753		2.01	2.00	0.3	35.0
Isopropyl ether	Ave	4.747	4.890		2.06	2.00	3.0	35.0
cis-1,2-Dichloroethene	Ave	1.520	1.426		1.88	2.00	-6.2	35.0
Ethyl acetate	Ave	3.228	3.239		2.01	2.00	0.3	35.0
Chloroform	Ave	2.889	2.748		1.90	2.00	-4.9	35.0
Tert-butyl ethyl ether	Ave	3.902	3.641		1.87	2.00	-6.7	35.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Lab Sample ID: ICV 140-42222/17 Calibration Date: 08/29/2020 01:37

Instrument ID: MR Calib Start Date: 08/28/2020 14:01

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 08/29/2020 00:02

Lab File ID: RH28ICV.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Tetrahydrofuran	Ave	1.653	1.650		2.00	2.00	-0.2	35.0
1,1,1-Trichloroethane	Ave	2.759	2.761		2.00	2.00	0.0	35.0
1,2-Dichloroethane	Ave	0.3202	0.3215		2.01	2.00	0.4	35.0
1-Butanol	Ave	0.1717	0.1713		1.99	2.00	-0.3	35.0
Benzene	Ave	0.8390	0.8229		1.96	2.00	-1.9	35.0
Cyclohexane	Ave	0.1183	0.1168		1.97	2.00	-1.3	35.0
Carbon tetrachloride	Ave	0.5411	0.6089		2.25	2.00	12.5	35.0
2,3-Dimethylpentane	Ave	0.1840	0.1692		1.84	2.00	-8.0	35.0
Thiophene	Ave	0.4839	0.4513		1.87	2.00	-6.7	35.0
2,2,4-Trimethylpentane	Ave	1.338	1.302		1.95	2.00	-2.7	35.0
Heptane	Ave	0.2722	0.2639		1.94	2.00	-3.0	35.0
1,2-Dichloropropane	Ave	0.3195	0.3101		1.94	2.00	-2.9	35.0
Trichloroethene	Ave	0.4170	0.3849		1.85	2.00	-7.7	35.0
Dibromomethane	Ave	0.3569	0.3535		1.98	2.00	-1.0	35.0
Bromodichloromethane	Ave	0.6028	0.6116		2.03	2.00	1.4	35.0
1,4-Dioxane	Ave	0.1377	0.1261		1.83	2.00	-8.4	35.0
Methyl methacrylate	Ave	0.3801	0.3834		2.02	2.00	0.9	35.0
Methylcyclohexane	Ave	0.4932	0.5851		2.37	2.00	18.6	35.0
4-Methyl-2-pentanone (MIBK)	Ave	0.7711	0.7637		1.98	2.00	-1.0	35.0
cis-1,3-Dichloropropene	Ave	0.4299	0.4423		2.06	2.00	2.9	35.0
trans-1,3-Dichloropropene	Ave	0.4438	0.4803		2.16	2.00	8.2	35.0
Toluene	Ave	1.292	1.218		1.89	2.00	-5.7	35.0
1,1,2-Trichloroethane	Ave	0.3910	0.3890		1.99	2.00	-0.5	35.0
2-Hexanone	Ave	0.3912	0.4204		2.15	2.00	7.5	35.0
Octane	Ave	0.3602	0.3608		2.00	2.00	0.2	35.0
Dibromochloromethane	Ave	0.8032	0.8549		2.13	2.00	6.4	35.0
1,2-Dibromoethane (EDB)	Ave	0.7001	0.7224		2.06	2.00	3.2	35.0
Tetrachloroethene	Ave	0.4748	0.4456		1.88	2.00	-6.2	35.0
Chlorobenzene	Ave	0.9896	0.9948		2.01	2.00	0.5	35.0
2,3-Dimethylheptane	Ave	1.318	1.166		1.77	2.00	-11.5	35.0
Ethylbenzene	Ave	1.637	1.652		2.02	2.00	0.9	35.0
m-Xylene & p-Xylene	Ave	1.248	1.278		4.10	4.00	2.4	35.0
Nonane	Ave	0.7621	0.7750		2.03	2.00	1.7	35.0
Bromoform	Ave	0.8720	1.037		2.38	2.00	18.9	35.0
Styrene	Ave	0.9061	0.9563		2.11	2.00	5.5	35.0
o-Xylene	Ave	1.293	1.280		1.98	2.00	-1.0	35.0
1,1,2,2-Tetrachloroethane	Ave	1.053	1.117		2.12	2.00	6.1	35.0
1,2,3-Trichloropropane	Ave	0.2850	0.3045		2.14	2.00	6.8	35.0
Isopropylbenzene	Ave	1.842	1.910		2.07	2.00	3.7	35.0
Propylbenzene	Ave	0.5396	0.5666		2.10	2.00	5.0	35.0
2-Chlorotoluene	Ave	0.4968	0.5371		2.16	2.00	8.1	35.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Lab Sample ID: ICV 140-42222/17 Calibration Date: 08/29/2020 01:37

Instrument ID: MR Calib Start Date: 08/28/2020 14:01

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 08/29/2020 00:02

Lab File ID: RH28ICV.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Ethyltoluene	Ave	1.855	1.821		1.96	2.00	-1.9	35.0
1,3,5-Trimethylbenzene	Ave	0.8147	0.9497		2.33	2.00	16.6	35.0
Alpha Methyl Styrene	Ave	0.7293	0.7766		2.13	2.00	6.5	35.0
Decane	Ave	0.9697	1.033		2.13	2.00	6.5	35.0
tert-Butylbenzene	Ave	1.813	1.861		2.05	2.00	2.7	35.0
1,2,4-Trimethylbenzene	Ave	1.535	1.656		2.16	2.00	7.9	35.0
sec-Butylbenzene	Ave	2.400	2.508		2.09	2.00	4.5	35.0
1,3-Dichlorobenzene	Ave	1.162	1.258		2.17	2.00	8.3	35.0
Benzyl chloride	Ave	1.150	1.413		2.46	2.00	22.8	35.0
1,4-Dichlorobenzene	Ave	1.145	1.219		2.13	2.00	6.5	35.0
4-Isopropyltoluene	Ave	2.000	2.128		2.13	2.00	6.4	35.0
1,2,3-Trimethylbenzene	QuaF		1.187		1.70	2.00	-15.1	35.0
Butylcyclohexane	Ave	1.309	1.301		1.99	2.00	-0.6	35.0
1,2-Dichlorobenzene	Ave	1.209	1.253		2.07	2.00	3.6	35.0
Indane	Ave	1.612	1.612		2.00	2.00	0.0	35.0
Indene	Ave	1.312	1.182		1.80	2.00	-9.9	35.0
Butylbenzene	Ave	1.964	2.211		2.25	2.00	12.6	35.0
Undecane	Ave	1.208	1.232		2.04	2.00	2.0	35.0
1,2-Dibromo-3-Chloropropane	Ave	0.5821	0.5712		1.96	2.00	-1.9	35.0
1,2,4,5-Tetramethylbenzene	Ave	1.845	1.845		2.00	2.00	-0.0	35.0
Dodecane	Ave	1.074	1.209		2.25	2.00	12.6	35.0
1,2,4-Trichlorobenzene	Ave	0.9881	1.226		2.48	2.00	24.1	35.0
Naphthalene	Ave	1.926	2.444		2.54	2.00	26.9	35.0
Hexachlorobutadiene	Ave	1.146	1.185		2.07	2.00	3.4	35.0
1,2,3-Trichlorobenzene	Ave	0.9767	1.167		2.39	2.00	19.5	35.0
2-Methylnaphthalene	Ave	1.126	1.160		2.06	2.00	3.1	50.0
1-Methylnaphthalene	Ave	1.592	1.752		2.20	2.00	10.0	50.0
4-Bromofluorobenzene (Surr)	Ave	0.6418	0.6745		4.88	4.64	5.1	35.0

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28ICV.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 29-Aug-2020 01:37:30 ALS Bottle#: 5 Worklist Smp#: 17
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016425-017
Misc. Info.: S123 80ML
Operator ID: HMT Instrument ID: MR
Sublist:

Method: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 31-Aug-2020 13:45:04 Calib Date: 29-Aug-2020 00:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1064

First Level Reviewer: tajh Date: 29-Aug-2020 09:14:41

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.285	8.283	0.002	92	241131	4.80	4.80	
* 2 1,4-Difluorobenzene	114	10.517	10.519	-0.002	93	1181864	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.354	15.356	-0.002	87	954759	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.004	17.004	-0.002	95	622523	4.64	4.88	
7 Propene	41	3.346	3.344	0.003	99	124045	2.00	1.94	
6 Chlorodifluoromethane	51	3.335	3.346	-0.010	99	249560	2.00	1.85	
8 Dichlorodifluoromethane	85	3.394	3.390	0.004	97	237013	2.00	2.34	
9 Chloromethane	52	3.561	3.560	0.002	60	47762	2.00	1.99	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.567	3.568	-0.001	89	299895	2.00	2.11	
11 Acetaldehyde	44	3.701	3.709	-0.008	88	326049	10.0	8.66	
12 Vinyl chloride	62	3.718	3.716	0.002	100	158721	2.00	2.16	
14 Butadiene	54	3.799	3.798	0.001	67	123656	2.00	2.00	
13 Butane	43	3.799	3.799	0.000	87	258432	2.00	1.98	
15 Bromomethane	94	4.095	4.095	0.001	98	157708	2.00	1.99	
16 Chloroethane	64	4.219	4.222	-0.002	86	79226	2.00	2.11	
17 Ethanol	31	4.332	4.346	-0.013	98	379727	10.0	7.77	
18 Vinyl bromide	106	4.500	4.503	-0.002	96	163146	2.00	2.07	
19 2-Methylbutane	43	4.543	4.548	-0.004	94	206751	2.00	2.04	
20 Trichlorofluoromethane	101	4.748	4.752	-0.003	97	388344	2.00	1.97	
21 Acrolein	56	4.764	4.775	-0.011	93	47501	2.00	2.53	
22 Acetonitrile	40	4.828	4.842	-0.013	98	55631	2.00	2.02	
23 Acetone	58	4.877	4.891	-0.014	98	74107	2.00	2.06	
24 Pentane	72	4.953	4.961	-0.008	96	24487	2.00	2.12	
25 Isopropyl alcohol	45	4.974	4.997	-0.022	93	238170	2.00	2.46	
26 Ethyl ether	31	5.125	5.144	-0.018	89	174301	2.00	2.07	
27 1,1-Dichloroethene	96	5.422	5.431	-0.008	98	135565	2.00	1.90	
28 Acrylonitrile	53	5.535	5.549	-0.013	64	88000	2.00	2.15	
29 2-Methyl-2-propanol	59	5.546	5.590	-0.043	95	242393	2.00	2.01	
30 1,1,2-Trichloro-1,2,2-trifluoroe	101	5.600	5.604	-0.003	96	309171	2.00	2.00	
31 Methylene Chloride	84	5.761	5.769	-0.007	97	114311	2.00	1.95	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	5.778	5.783	-0.004	96	138447	2.00	2.16	
33 Carbon disulfide	76	5.918	5.922	-0.003	96	366852	2.00	1.95	
34 trans-1,2-Dichloroethene	96	6.559	6.562	-0.002	91	128183	2.00	1.94	
35 2-Methylpentane	43	6.576	6.580	-0.003	94	277183	2.00	1.75	
36 Methyl tert-butyl ether	73	6.694	6.717	-0.022	97	324315	2.00	2.02	
37 1,1-Dichloroethane	63	6.969	6.979	-0.008	99	228143	2.00	1.99	
38 Vinyl acetate	43	7.088	7.101	-0.012	99	380643	2.00	2.18	
39 2-Butanone (MEK)	72	7.530	7.553	-0.021	96	63454	2.00	1.96	
40 Hexane	56	7.546	7.554	-0.007	86	97991	2.00	2.01	
41 Isopropyl ether	45	7.719	7.737	-0.017	96	491273	2.00	2.06	
42 cis-1,2-Dichloroethene	96	7.956	7.955	0.003	89	143243	2.00	1.88	
43 Ethyl acetate	43	8.150	8.167	-0.015	97	325448	2.00	2.01	
44 Chloroform	83	8.296	8.301	-0.004	94	276145	2.00	1.90	
45 Tert-butyl ethyl ether	59	8.393	8.415	-0.020	97	365827	2.00	1.87	
46 Tetrahydrofuran	42	8.700	8.723	-0.022	93	165773	2.00	2.00	
47 1,1,1-Trichloroethane	97	9.320	9.322	0.000	94	277395	2.00	2.00	
48 1,2-Dichloroethane	62	9.434	9.433	0.000	93	158315	2.00	2.01	
50 Cyclohexane	69	9.930	9.927	0.002	78	57496	2.00	1.97	
51 Benzene	78	9.930	9.932	-0.003	97	405223	2.00	1.96	
49 n-Butanol	31	9.919	9.943	-0.025	72	84335	2.00	1.99	
52 Carbon tetrachloride	117	9.957	9.956	0.000	91	299863	2.00	2.25	
53 2,3-Dimethylpentane	71	10.070	10.068	0.001	91	83343	2.00	1.84	
54 Thiophene	84	10.221	10.220	0.000	93	222252	2.00	1.87	
55 Isooctane	57	10.744	10.743	-0.001	97	641021	2.00	1.95	
56 n-Heptane	71	11.138	11.138	-0.001	95	129962	2.00	1.94	
57 1,2-Dichloropropane	63	11.208	11.211	-0.004	87	152714	2.00	1.94	
58 Trichloroethene	130	11.251	11.250	0.000	94	189520	2.00	1.85	
59 Dibromomethane	93	11.332	11.333	-0.002	92	174090	2.00	1.98	
60 Dichlorobromomethane	83	11.488	11.486	0.001	96	301162	2.00	2.03	
61 1,4-Dioxane	88	11.515	11.531	-0.017	90	62079	2.00	1.83	
62 Methyl methacrylate	41	11.601	11.605	-0.006	89	188818	2.00	2.02	
63 Methylcyclohexane	83	12.043	12.042	0.000	93	288114	2.00	2.37	
64 4-Methyl-2-pentanone (MIBK)	43	12.475	12.488	-0.014	98	376090	2.00	1.98	
65 cis-1,3-Dichloropropene	75	12.523	12.526	-0.005	96	217827	2.00	2.06	
66 trans-1,3-Dichloropropene	75	13.241	13.240	0.000	95	191086	2.00	2.16	
67 Toluene	91	13.359	13.359	-0.001	93	484726	2.00	1.89	
68 1,1,2-Trichloroethane	83	13.440	13.443	0.000	95	154763	2.00	1.99	
69 2-Hexanone	58	13.845	13.852	-0.008	91	167259	2.00	2.15	
70 n-Octane	85	14.076	14.075	-0.001	94	143551	2.00	2.00	
71 Chlorodibromomethane	129	14.147	14.146	-0.002	97	340085	2.00	2.13	
72 Ethylene Dibromide	107	14.443	14.439	0.002	96	287377	2.00	2.06	
73 Tetrachloroethene	129	14.519	14.518	0.000	91	177254	2.00	1.88	
74 Chlorobenzene	112	15.403	15.402	-0.001	95	395742	2.00	2.01	
75 2,3-Dimethylheptane	43	15.435	15.436	-0.003	95	463819	2.00	1.77	
76 Ethylbenzene	91	15.700	15.697	0.002	98	657207	2.00	2.02	
77 m-Xylene & p-Xylene	91	15.861	15.861	-0.002	97	1017200	4.00	4.10	
78 n-Nonane	57	16.298	16.294	0.002	92	308310	2.00	2.03	
79 Bromoform	173	16.303	16.302	-0.001	96	412504	2.00	2.38	
80 Styrene	104	16.325	16.327	-0.003	98	380440	2.00	2.11	
81 o-Xylene	91	16.390	16.387	0.001	99	509055	2.00	1.98	
82 1,1,2,2-Tetrachloroethane	83	16.713	16.714	-0.002	98	444270	2.00	2.12	
83 1,2,3-Trichloropropane	110	16.875	16.875	-0.002	91	121136	2.00	2.14	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	16.977	16.978	-0.003	96	759739	2.00	2.07	
85 N-Propylbenzene	120	17.528	17.527	-0.001	99	225401	2.00	2.10	
86 2-Chlorotoluene	126	17.571	17.570	-0.001	97	213683	2.00	2.16	
87 4-Ethyltoluene	105	17.689	17.686	0.001	98	724262	2.00	1.96	
88 1,3,5-Trimethylbenzene	120	17.765	17.764	-0.001	94	377792	2.00	2.33	
89 Alpha Methyl Styrene	118	18.002	18.003	-0.003	88	308951	2.00	2.13	
90 n-Decane	57	18.072	18.073	-0.003	87	410982	2.00	2.13	
91 tert-Butylbenzene	119	18.202	18.200	0.000	97	740520	2.00	2.05	
92 1,2,4-Trimethylbenzene	105	18.218	18.214	0.002	95	658838	2.00	2.16	
93 sec-Butylbenzene	105	18.477	18.477	-0.002	98	997657	2.00	2.09	
94 1,3-Dichlorobenzene	146	18.487	18.487	-0.002	96	500620	2.00	2.17	
95 Benzyl chloride	91	18.568	18.566	0.000	99	561941	2.00	2.46	
96 1,4-Dichlorobenzene	146	18.579	18.578	-0.001	97	485078	2.00	2.13	
97 4-Isopropyltoluene	119	18.649	18.646	0.001	97	846528	2.00	2.13	
98 1,2,3-Trimethylbenzene	105	18.698	18.696	0.000	98	472238	2.00	1.70	
99 Butylcyclohexane	83	18.757	18.755	0.000	93	517527	2.00	1.99	
101 1,2-Dichlorobenzene	146	18.946	18.943	0.001	85	498443	2.00	2.07	
100 2,3-Dihydroindene	117	18.946	18.945	-0.001	92	641244	2.00	2.00	
102 Indene	116	19.081	19.078	0.000	89	470149	2.00	1.80	
103 n-Butylbenzene	91	19.091	19.090	-0.001	97	879667	2.00	2.25	
104 Undecane	57	19.415	19.416	-0.003	89	490104	2.00	2.04	
105 1,2-Dibromo-3-Chloropropane	157	19.560	19.558	0.000	90	227242	2.00	1.96	
106 1,2,4,5-Tetramethylbenzene	119	19.857	19.858	-0.003	97	733833	2.00	2.00	
107 Dodecane	57	20.477	20.476	-0.001	89	480943	2.00	2.25	
108 1,2,4-Trichlorobenzene	180	20.655	20.656	-0.003	94	487920	2.00	2.48	
109 Naphthalene	128	20.795	20.792	0.001	99	972412	2.00	2.54	
110 Hexachlorobutadiene	225	21.011	21.011	-0.003	93	471504	2.00	2.07	
111 1,2,3-Trichlorobenzene	180	21.081	21.079	0.000	94	464154	2.00	2.39	
112 2-Methylnaphthalene	142	21.825	21.823	0.000	99	461517	2.00	2.06	
113 1-Methylnaphthalene	142	21.955	21.955	-0.002	99	696840	2.00	2.20	
A 116 C8 Range	1	14.071	(14.039-14.104)		0	1533351	2.00	2.05	
S 117 Xylenes, Total	100				0		6.00	6.08	
S 118 1,2-Dichloroethene, Total	1				0		4.00	3.82	
T 143 2-Methylthiophene TIC	97	13.516	13.435	0.081	97	396925	2.00	2.00	
T 142 3-Methylthiophene TIC	97	13.721	13.505	0.215	94	397031	2.00	2.00	
T 150 2-Ethylthiophene TIC	97	15.802	16.999	-1.197	97	485603	2.00	2.44	
T 153 1,2-Dimethyl-4-Ethylbenzene TIC	119	19.469	18.644	0.825	95	610940	2.00	3.07	
T 155 1,2,3,5-Tetramethylbenzene TIC	119	19.911	19.911	0.054	97	438440	2.00	2.20	a
T 156 1,2,3,4-Tetramethylbenzene TIC	119	20.305	20.305	-0.005	98	592364	2.00	2.98	a
T 157 Benzo(b)thiophene TIC	134	20.898	22.677	-1.779	91	476194	2.00	2.39	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

40CV101S_00123	Amount Added: 100.00	Units: mL	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

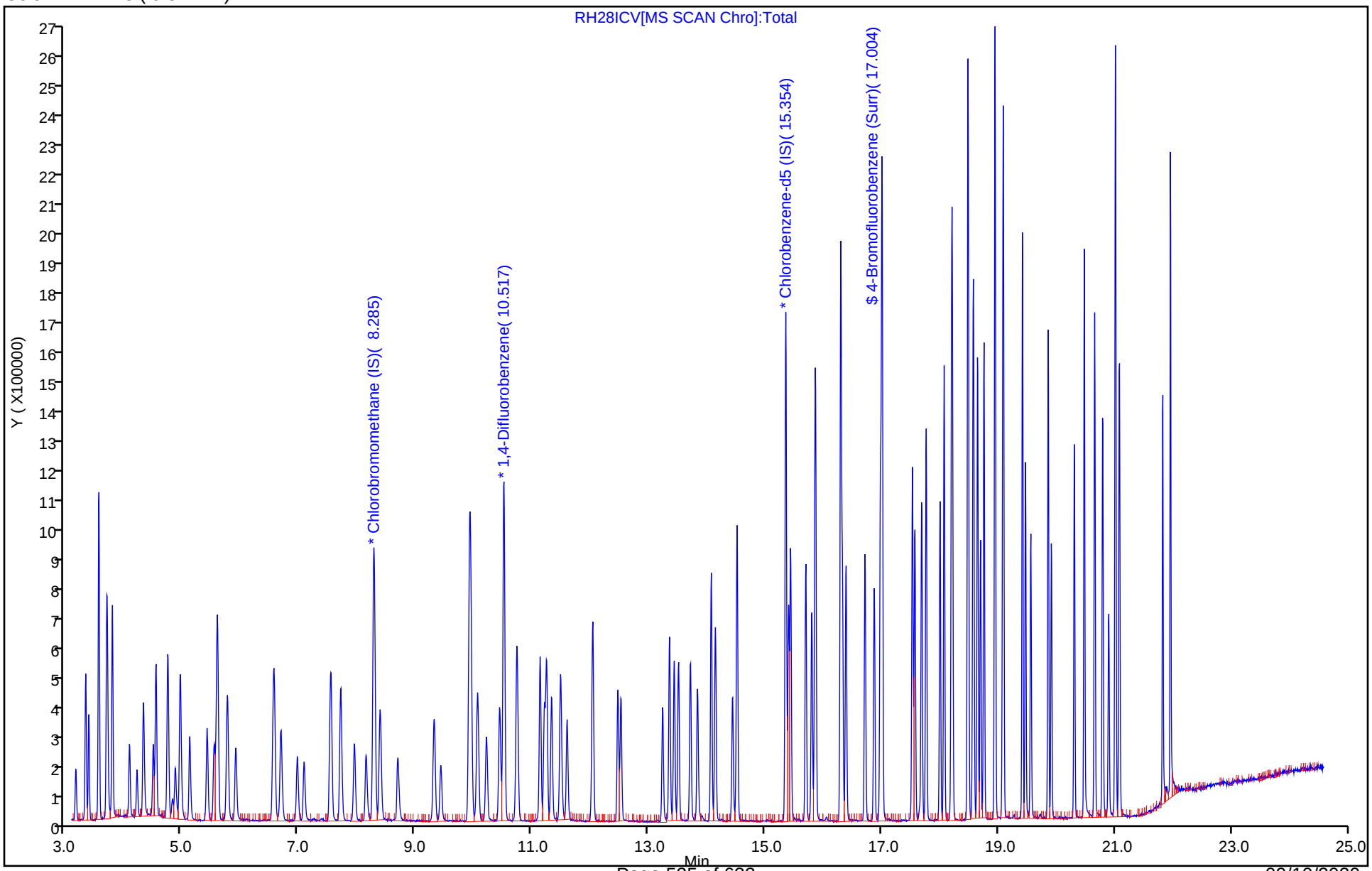
Report Date: 31-Aug-2020 13:45:06 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28ICV.D

Injection Date:	29-Aug-2020 01:37:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	ICV			Worklist Smp#:	17
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Lab Sample ID: CCVIS 140-42483/2 Calibration Date: 09/05/2020 08:28

Instrument ID: MR Calib Start Date: 08/28/2020 14:01

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 08/29/2020 00:02

Lab File ID: RCCVI05.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorodifluoromethane	Ave	2.687	2.419		1.44	1.60	-10.0	30.0
Propene	Ave	1.275	1.235		1.55	1.60	-3.2	30.0
Dichlorodifluoromethane	Ave	2.017	2.524		2.00	1.60	25.1	30.0
Chloromethane	Ave	0.4770	0.4440		1.49	1.60	-6.9	30.0
1,2-Dichloro-1,1,2,2-tetrafluoroethane	Ave	2.827	2.837		1.61	1.60	0.4	30.0
Acetaldehyde	Ave	0.7496	0.7224		7.71	8.00	-3.6	30.0
Vinyl chloride	Lin1		1.630		1.78	1.60	11.3	30.0
1,3-Butadiene	Ave	1.231	1.279		1.66	1.60	3.9	30.0
Butane	Ave	2.602	2.683		1.65	1.60	3.1	30.0
Bromomethane	Lin2		1.573		1.58	1.60	-1.0	30.0
Chloroethane	Lin2		0.7233		1.54	1.60	-4.0	30.0
Ethanol	Lin1		1.294		10.7	8.00	33.5*	30.0
Vinyl bromide	Ave	1.567	1.431		1.46	1.60	-8.7	30.0
2-Methylbutane	Ave	2.021	2.195		1.74	1.60	8.6	30.0
Trichlorofluoromethane	Ave	3.931	3.948		1.61	1.60	0.4	30.0
Acrolein	Ave	0.3741	0.4941		2.11	1.60	32.1*	30.0
Acetonitrile	Ave	0.5495	0.6094		1.77	1.60	10.9	30.0
Acetone	Ave	0.7172	0.6502		4.35	4.80	-9.3	30.0
Pentane	Ave	0.2298	0.2536		1.77	1.60	10.4	30.0
Isopropyl alcohol	Ave	1.926	2.422		6.04	4.80	25.8	30.0
Ethyl ether	Ave	1.673	2.059		1.97	1.60	23.1	30.0
1,1-Dichloroethene	Ave	1.418	1.269		1.43	1.60	-10.5	30.0
Acrylonitrile	Ave	0.8140	0.8230		1.62	1.60	1.1	30.0
tert-Butyl alcohol	Ave	2.400	2.664		1.78	1.60	11.0	30.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	3.085	2.885		1.50	1.60	-6.5	30.0
Methylene Chloride	Ave	1.170	1.084		1.48	1.60	-7.3	30.0
3-Chloropropene	Lin2		1.346		1.67	1.60	4.2	30.0
Carbon disulfide	Ave	3.742	3.525		1.51	1.60	-5.8	30.0
trans-1,2-Dichloroethene	Ave	1.315	1.227		1.49	1.60	-6.7	30.0
2-Methylpentane	Ave	3.158	3.069		1.56	1.60	-2.8	30.0
Methyl tert-butyl ether	Ave	3.196	3.092		1.55	1.60	-3.3	30.0
1,1-Dichloroethane	Ave	2.283	2.144		1.50	1.60	-6.1	30.0
Vinyl acetate	Ave	3.475	3.615		1.66	1.60	4.0	30.0
2-Butanone (MEK)	Ave	0.6451	0.5747		1.43	1.60	-10.9	30.0
Hexane	Ave	0.9722	0.9528		1.57	1.60	-2.0	30.0
Isopropyl ether	Ave	4.747	4.591		1.55	1.60	-3.3	30.0
cis-1,2-Dichloroethene	Ave	1.520	1.257		1.32	1.60	-17.3	30.0
Ethyl acetate	Ave	3.228	3.472		1.72	1.60	7.5	30.0
Chloroform	Ave	2.889	2.700		1.50	1.60	-6.5	30.0
Tert-butyl ethyl ether	Ave	3.902	3.712		1.52	1.60	-4.9	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Lab Sample ID: CCVIS 140-42483/2 Calibration Date: 09/05/2020 08:28

Instrument ID: MR Calib Start Date: 08/28/2020 14:01

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 08/29/2020 00:02

Lab File ID: RCCVI05.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Tetrahydrofuran	Ave	1.653	1.644		1.59	1.60	-0.6	30.0
1,1,1-Trichloroethane	Ave	2.759	2.613		1.52	1.60	-5.3	30.0
1,2-Dichloroethane	Ave	0.3202	0.3081		1.54	1.60	-3.8	30.0
1-Butanol	Ave	0.1717	0.2268		2.11	1.60	32.1*	30.0
Cyclohexane	Ave	0.1183	0.1124		1.52	1.60	-5.0	30.0
Benzene	Ave	0.8390	0.7604		1.45	1.60	-9.4	30.0
Carbon tetrachloride	Ave	0.5411	0.5860		1.73	1.60	8.3	30.0
2,3-Dimethylpentane	Ave	0.1840	0.1653		1.44	1.60	-10.2	30.0
Thiophene	Ave	0.4839	0.4319		1.43	1.60	-10.7	30.0
2,2,4-Trimethylpentane	Ave	1.338	1.198		1.43	1.60	-10.5	30.0
Heptane	Ave	0.2722	0.2375		1.40	1.60	-12.8	30.0
1,2-Dichloropropane	Ave	0.3195	0.2921		1.46	1.60	-8.6	30.0
Trichloroethene	Ave	0.4170	0.3638		1.40	1.60	-12.8	30.0
Dibromomethane	Ave	0.3569	0.3300		1.48	1.60	-7.6	30.0
Bromodichloromethane	Ave	0.6028	0.5712		1.52	1.60	-5.3	30.0
1,4-Dioxane	Ave	0.1377	0.1412		1.64	1.60	2.5	30.0
Methyl methacrylate	Ave	0.3801	0.3740		1.57	1.60	-1.6	30.0
Methylcyclohexane	Ave	0.4932	0.4406		1.43	1.60	-10.7	30.0
4-Methyl-2-pentanone (MIBK)	Ave	0.7711	0.7818		1.62	1.60	1.4	30.0
cis-1,3-Dichloropropene	Ave	0.4299	0.4055		1.51	1.60	-5.7	30.0
trans-1,3-Dichloropropene	Ave	0.4438	0.4213		1.52	1.60	-5.1	30.0
Toluene	Ave	1.292	1.078		1.33	1.60	-16.6	30.0
1,1,2-Trichloroethane	Ave	0.3910	0.3495		1.43	1.60	-10.6	30.0
2-Hexanone	Ave	0.3912	0.3523		1.44	1.60	-9.9	30.0
Octane	Ave	0.3602	0.3033		1.35	1.60	-15.8	30.0
Dibromochloromethane	Ave	0.8032	0.7418		1.48	1.60	-7.6	30.0
1,2-Dibromoethane (EDB)	Ave	0.7001	0.6270		1.43	1.60	-10.4	30.0
Tetrachloroethene	Ave	0.4748	0.4052		1.37	1.60	-14.7	30.0
Chlorobenzene	Ave	0.9896	0.8382		1.36	1.60	-15.3	30.0
2,3-Dimethylheptane	Ave	1.318	1.252		1.52	1.60	-5.0	30.0
Ethylbenzene	Ave	1.637	1.421		1.39	1.60	-13.2	30.0
m-Xylene & p-Xylene	Ave	1.248	1.066		2.73	3.20	-14.6	30.0
Nonane	Ave	0.7621	0.6467		1.36	1.60	-15.1	30.0
Bromoform	Ave	0.8720	0.7783		1.43	1.60	-10.8	30.0
Styrene	Ave	0.9061	0.8310		1.47	1.60	-8.3	30.0
o-Xylene	Ave	1.293	1.098		1.36	1.60	-15.1	30.0
1,1,2,2-Tetrachloroethane	Ave	1.053	0.9731		1.48	1.60	-7.6	30.0
1,2,3-Trichloropropane	Ave	0.2850	0.2675		1.50	1.60	-6.2	30.0
Isopropylbenzene	Ave	1.842	1.612		1.40	1.60	-12.5	30.0
Propylbenzene	Ave	0.5396	0.4883		1.45	1.60	-9.5	30.0
2-Chlorotoluene	Ave	0.4968	0.4510		1.45	1.60	-9.2	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Lab Sample ID: CCVIS 140-42483/2 Calibration Date: 09/05/2020 08:28

Instrument ID: MR Calib Start Date: 08/28/2020 14:01

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 08/29/2020 00:02

Lab File ID: RCCVI05.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Ethyltoluene	Ave	1.855	1.608		1.39	1.60	-13.3	30.0
1,3,5-Trimethylbenzene	Ave	0.8147	0.7131		1.40	1.60	-12.5	30.0
Alpha Methyl Styrene	Ave	0.7293	0.6596		1.45	1.60	-9.6	30.0
Decane	Ave	0.9697	0.8678		1.43	1.60	-10.5	30.0
tert-Butylbenzene	Ave	1.813	1.597		1.41	1.60	-11.9	30.0
1,2,4-Trimethylbenzene	Ave	1.535	1.346		1.40	1.60	-12.3	30.0
sec-Butylbenzene	Ave	2.400	2.079		1.39	1.60	-13.4	30.0
1,3-Dichlorobenzene	Ave	1.162	1.088		1.50	1.60	-6.4	30.0
Benzyl chloride	Ave	1.150	1.111		1.55	1.60	-3.3	30.0
1,4-Dichlorobenzene	Ave	1.145	1.063		1.49	1.60	-7.1	30.0
4-Isopropyltoluene	Ave	2.000	1.855		1.48	1.60	-7.3	30.0
1,2,3-Trimethylbenzene	QuaF		1.375		1.58	1.60	-1.4	30.0
Butylcyclohexane	Ave	1.309	1.160		1.42	1.60	-11.4	30.0
1,2-Dichlorobenzene	Ave	1.209	1.074		1.42	1.60	-11.2	30.0
Indane	Ave	1.612	1.405		1.39	1.60	-12.8	30.0
Indene	Ave	1.312	1.178		1.44	1.60	-10.2	30.0
Butylbenzene	Ave	1.964	1.725		1.41	1.60	-12.2	30.0
Undecane	Ave	1.208	1.016		1.35	1.60	-15.9	30.0
1,2-Dibromo-3-Chloropropane	Ave	0.5821	0.5319		1.46	1.60	-8.6	30.0
1,2,4,5-Tetramethylbenzene	Ave	1.845	1.681		1.46	1.60	-8.9	30.0
Dodecane	Ave	1.074	0.9086		1.35	1.60	-15.4	30.0
1,2,4-Trichlorobenzene	Ave	0.9881	0.9142		1.48	1.60	-7.5	30.0
Naphthalene	Ave	1.926	1.806		1.50	1.60	-6.2	30.0
Hexachlorobutadiene	Ave	1.146	0.9437		1.32	1.60	-17.6	30.0
1,2,3-Trichlorobenzene	Ave	0.9767	0.8716		1.43	1.60	-10.8	30.0
2-Methylnaphthalene	Ave	1.126	0.6477		0.921	1.60	-42.5	50.0
1-Methylnaphthalene	Ave	1.592	1.000		1.01	1.60	-37.2	50.0
4-Bromofluorobenzene (Surr)	Ave	0.6418	0.6372		4.61	4.64	-0.7	30.0

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RCCVI05.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 05-Sep-2020 08:28:30 ALS Bottle#: 16 Worklist Smp#: 2
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016496-006
Misc. Info.: P119 80ML
Operator ID: HMT Instrument ID: MR
Sublist: chrom-MR_TO15*sub16

Method: \\chromfs\Knoxville\ChromData\MR\20200904-16508.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 06-Sep-2020 07:11:26 Calib Date: 29-Aug-2020 00:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1023

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.274	8.274	0.000	95	138971	4.80	4.80	s
* 2 1,4-Difluorobenzene	114	10.512	10.512	0.000	94	675656	4.80	4.80	s
* 3 Chlorobenzene-d5 (IS)	117	15.349	15.349	0.000	88	548163	4.80	4.80	s
$ 4 4-Bromofluorobenzene (Surr)	95	16.999	16.999	0.000	93	337639	4.64	4.61	
6 Chlorodifluoromethane	51	3.329	3.329	0.000	98	112062	1.60	1.44	
7 Propene	41	3.335	3.335	0.000	99	57206	1.60	1.55	
8 Dichlorodifluoromethane	85	3.383	3.383	0.000	94	116919	1.60	2.00	
9 Chloromethane	52	3.556	3.556	0.000	59	20570	1.60	1.49	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.561	3.561	0.000	88	131440	1.60	1.61	
11 Acetaldehyde	44	3.696	3.696	0.000	84	167323	8.00	7.71	
12 Vinyl chloride	62	3.712	3.712	0.000	98	75487	1.60	1.78	
13 Butane	43	3.788	3.788	0.000	88	124308	1.60	1.65	
14 Butadiene	54	3.788	3.788	0.000	66	59258	1.60	1.66	
15 Bromomethane	94	4.079	4.079	0.000	95	72871	1.60	1.58	
16 Chloroethane	64	4.214	4.214	0.000	78	33508	1.60	1.54	
17 Ethanol	31	4.327	4.327	0.000	96	299825	8.00	10.7	
18 Vinyl bromide	106	4.489	4.489	0.000	94	66272	1.60	1.46	
19 2-Methylbutane	43	4.537	4.537	0.000	93	101698	1.60	1.74	
20 Trichlorofluoromethane	101	4.737	4.737	0.000	95	182864	1.60	1.61	
21 Acrolein	56	4.748	4.748	0.000	27	22889	1.60	2.11	
22 Acetonitrile	40	4.823	4.823	0.000	94	28228	1.60	1.77	
23 Acetone	58	4.866	4.866	0.000	99	90360	4.80	4.35	
24 Pentane	72	4.952	4.952	0.000	90	11749	1.60	1.77	
25 Isopropyl alcohol	45	4.963	4.963	0.000	97	336585	4.80	6.04	
26 Ethyl ether	31	5.120	5.120	0.000	83	95391	1.60	1.97	
27 1,1-Dichloroethene	96	5.416	5.416	0.000	97	58771	1.60	1.43	
28 Acrylonitrile	53	5.529	5.529	0.000	92	38123	1.60	1.62	
29 2-Methyl-2-propanol	59	5.546	5.546	0.000	95	123401	1.60	1.78	
30 1,1,2-Trichloro-1,2,2-trifluoroe	101	5.589	5.589	0.000	94	133639	1.60	1.50	
31 Methylene Chloride	84	5.756	5.756	0.000	95	50201	1.60	1.48	
32 3-Chloro-1-propene	39	5.767	5.767	0.000	94	62330	1.60	1.67	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
33 Carbon disulfide	76	5.912	5.912	0.000	94	163291	1.60	1.51	
34 trans-1,2-Dichloroethene	96	6.549	6.549	0.000	93	56824	1.60	1.49	
35 2-Methylpentane	43	6.570	6.570	0.000	94	142161	1.60	1.56	
36 Methyl tert-butyl ether	73	6.683	6.683	0.000	94	143210	1.60	1.55	
37 1,1-Dichloroethane	63	6.958	6.958	0.000	98	99317	1.60	1.50	
38 Vinyl acetate	43	7.082	7.082	0.000	99	167475	1.60	1.66	
39 2-Butanone (MEK)	72	7.525	7.525	0.000	96	26623	1.60	1.43	
40 Hexane	56	7.541	7.541	0.000	87	44136	1.60	1.57	
41 Isopropyl ether	45	7.708	7.708	0.000	94	212687	1.60	1.55	
42 cis-1,2-Dichloroethene	96	7.940	7.940	0.000	89	58227	1.60	1.32	
43 Ethyl acetate	43	8.150	8.150	0.000	96	160815	1.60	1.72	
44 Chloroform	83	8.285	8.285	0.000	93	125062	1.60	1.50	
45 Tert-butyl ethyl ether	59	8.382	8.382	0.000	97	171955	1.60	1.52	
46 Tetrahydrofuran	42	8.695	8.695	0.000	90	76133	1.60	1.59	
47 1,1,1-Trichloroethane	97	9.309	9.309	0.000	95	121044	1.60	1.52	
48 1,2-Dichloroethane	62	9.428	9.428	0.000	90	69394	1.60	1.54	
50 Cyclohexane	69	9.919	9.919	0.000	73	25312	1.60	1.52	
49 n-Butanol	31	9.919	9.919	0.000	58	51090	1.60	2.11	
51 Benzene	78	9.924	9.924	0.000	94	171246	1.60	1.45	
52 Carbon tetrachloride	117	9.946	9.946	0.000	88	131980	1.60	1.73	
53 2,3-Dimethylpentane	71	10.059	10.059	0.000	87	37219	1.60	1.44	
54 Thiophene	84	10.215	10.215	0.000	90	97271	1.60	1.43	
55 Isooctane	57	10.733	10.733	0.000	93	269767	1.60	1.43	
56 n-Heptane	71	11.132	11.132	0.000	95	53490	1.60	1.40	
57 1,2-Dichloropropane	63	11.202	11.202	0.000	85	65782	1.60	1.46	
58 Trichloroethene	130	11.240	11.240	0.000	95	81940	1.60	1.40	
59 Dibromomethane	93	11.326	11.326	0.000	89	74319	1.60	1.48	
60 Dichlorobromomethane	83	11.483	11.483	0.000	93	128635	1.60	1.52	
61 1,4-Dioxane	88	11.504	11.504	0.000	76	31800	1.60	1.64	
62 Methyl methacrylate	41	11.596	11.596	0.000	86	84228	1.60	1.57	
63 Methylcyclohexane	83	12.033	12.033	0.000	91	99225	1.60	1.43	
64 4-Methyl-2-pentanone (MIBK)	43	12.469	12.469	0.000	98	176084	1.60	1.62	
65 cis-1,3-Dichloropropene	75	12.518	12.518	0.000	95	91336	1.60	1.51	
66 trans-1,3-Dichloropropene	75	13.235	13.235	0.000	91	76986	1.60	1.52	
67 Toluene	91	13.354	13.354	0.000	93	196935	1.60	1.33	
68 1,1,2-Trichloroethane	83	13.435	13.435	0.000	94	63858	1.60	1.43	
69 2-Hexanone	58	13.834	13.834	0.000	88	64369	1.60	1.44	
70 n-Octane	85	14.071	14.071	0.000	91	55414	1.60	1.35	
71 Chlorodibromomethane	129	14.141	14.141	0.000	94	135541	1.60	1.48	
72 Ethylene Dibromide	107	14.432	14.432	0.000	95	114563	1.60	1.43	
73 Tetrachloroethene	129	14.519	14.519	0.000	90	74036	1.60	1.37	
74 Chlorobenzene	112	15.397	15.397	0.000	94	153148	1.60	1.36	
75 2,3-Dimethylheptane	43	15.435	15.435	0.000	92	228753	1.60	1.52	
76 Ethylbenzene	91	15.694	15.694	0.000	98	259647	1.60	1.39	
77 m-Xylene & p-Xylene	91	15.856	15.856	0.000	96	389429	3.20	2.73	
78 n-Nonane	57	16.293	16.293	0.000	90	118168	1.60	1.36	
79 Bromoform	173	16.298	16.298	0.000	95	142205	1.60	1.43	
80 Styrene	104	16.325	16.325	0.000	96	151835	1.60	1.47	
81 o-Xylene	91	16.384	16.384	0.000	99	200576	1.60	1.36	
82 1,1,2,2-Tetrachloroethane	83	16.713	16.713	0.000	97	177807	1.60	1.48	
83 1,2,3-Trichloropropane	110	16.864	16.864	0.000	89	48871	1.60	1.50	
84 Isopropylbenzene	105	16.977	16.977	0.000	95	294482	1.60	1.40	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
85 N-Propylbenzene	120	17.522	17.522	0.000	100	89231	1.60	1.45	
86 2-Chlorotoluene	126	17.565	17.565	0.000	96	82412	1.60	1.45	
87 4-Ethyltoluene	105	17.684	17.684	0.000	98	293823	1.60	1.39	
88 1,3,5-Trimethylbenzene	120	17.759	17.759	0.000	94	130295	1.60	1.40	
89 Alpha Methyl Styrene	118	17.997	17.997	0.000	91	120515	1.60	1.45	
90 n-Decane	57	18.067	18.067	0.000	84	158571	1.60	1.43	
91 tert-Butylbenzene	119	18.196	18.196	0.000	95	291764	1.60	1.41	
92 1,2,4-Trimethylbenzene	105	18.212	18.212	0.000	93	245985	1.60	1.40	
93 sec-Butylbenzene	105	18.477	18.477	0.000	99	379816	1.60	1.39	
94 1,3-Dichlorobenzene	146	18.482	18.482	0.000	95	198786	1.60	1.50	
95 Benzyl chloride	91	18.563	18.563	0.000	97	203086	1.60	1.55	
96 1,4-Dichlorobenzene	146	18.574	18.574	0.000	96	194234	1.60	1.49	
97 4-Isopropyltoluene	119	18.644	18.644	0.000	97	338973	1.60	1.48	
98 1,2,3-Trimethylbenzene	105	18.692	18.692	0.000	97	251313	1.60	1.58	
99 Butylcyclohexane	83	18.752	18.752	0.000	93	211928	1.60	1.42	
101 1,2-Dichlorobenzene	146	18.940	18.940	0.000	83	196180	1.60	1.42	
100 2,3-Dihydroindene	117	18.940	18.940	0.000	93	256738	1.60	1.39	
102 Indene	116	19.075	19.075	0.000	88	215329	1.60	1.44	
103 n-Butylbenzene	91	19.086	19.086	0.000	97	315254	1.60	1.41	
104 Undecane	57	19.415	19.415	0.000	86	185611	1.60	1.35	
105 1,2-Dibromo-3-Chloropropane	157	19.555	19.555	0.000	87	97186	1.60	1.46	
106 1,2,4,5-Tetramethylbenzene	119	19.857	19.857	0.000	98	307143	1.60	1.46	
107 Dodecane	57	20.472	20.472	0.000	85	166026	1.60	1.35	
108 1,2,4-Trichlorobenzene	180	20.655	20.655	0.000	93	167049	1.60	1.48	
109 Naphthalene	128	20.790	20.790	0.000	99	330030	1.60	1.50	
110 Hexachlorobutadiene	225	21.011	21.011	0.000	93	172438	1.60	1.32	
111 1,2,3-Trichlorobenzene	180	21.076	21.076	0.000	94	159262	1.60	1.43	
112 2-Methylnaphthalene	142	21.820	21.820	0.000	98	118352	1.60	0.9207	
113 1-Methylnaphthalene	142	21.955	21.955	0.000	99	182745	1.60	1.01	
A 116 C8 Range	1	14.060	(14.001-14.109)		0	655628	1.60	1.53	
S 117 Xylenes, Total	100				0		4.80	4.09	
S 118 1,2-Dichloroethene, Total	1				0		3.20	2.82	

QC Flag Legend

Processing Flags

s - Failed ISTD Recovery Test

Reagents:

40CV101P_00119	Amount Added: 80.00	Units: ml	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

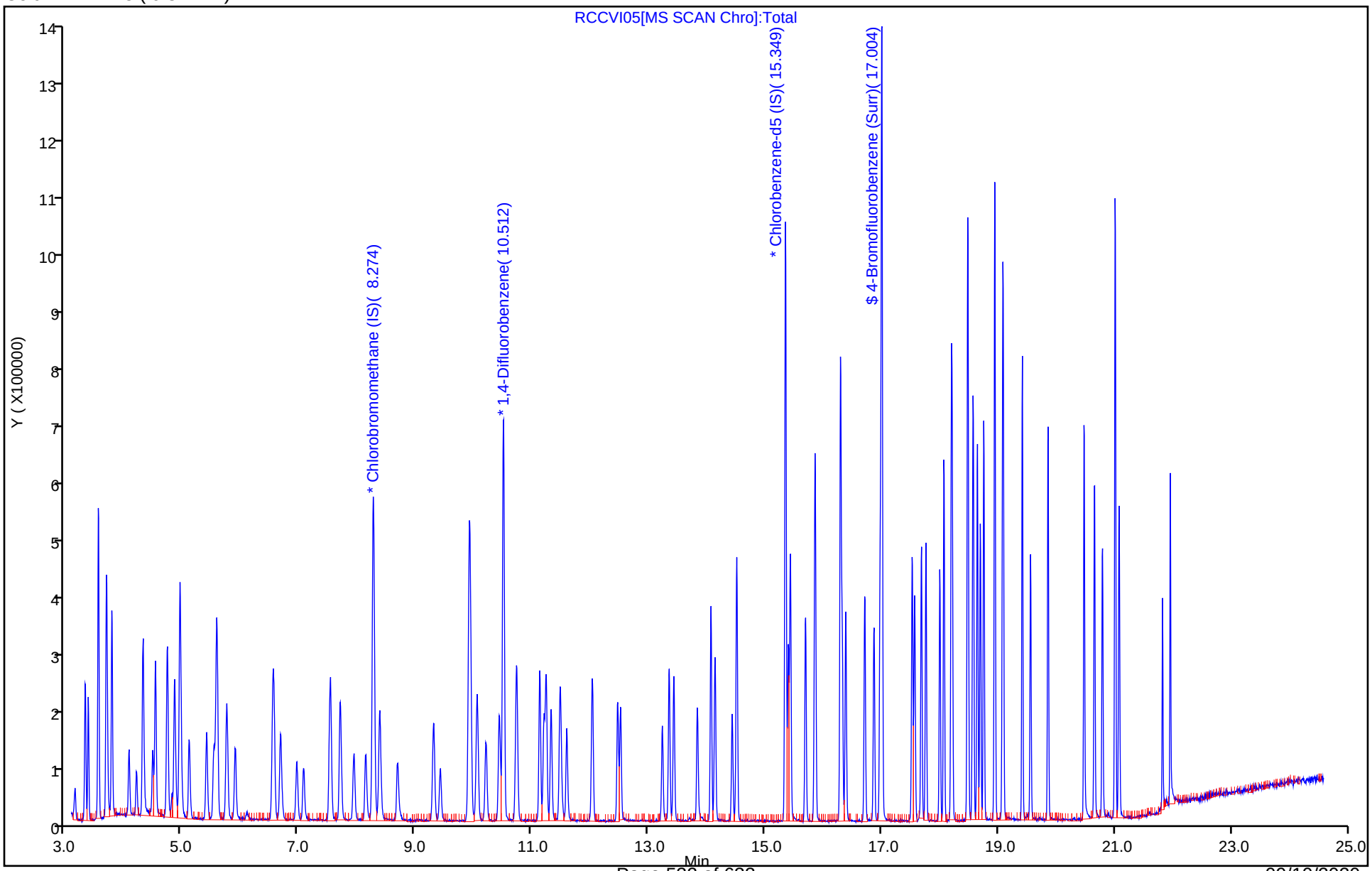
Report Date: 06-Sep-2020 07:11:27 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RCCVI05.D

Injection Date:	05-Sep-2020 08:28:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	CCVIS			Worklist Smp#:	2
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01BFB.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	01-Sep-2020 16:42:30	ALS Bottle#:	16	Worklist Smp#:	1
Injection Vol:	500.0 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016453-001				
Misc. Info.:	BFB				
Operator ID:	AFB	Instrument ID:	MG		
Method:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\MG_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	02-Sep-2020 13:24:52	Calib Date:	02-Sep-2020 03:27:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1046				
First Level Reviewer: barlozhetskayaa		Date:	02-Sep-2020 13:24:52		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
$ 5 BFB	95	5.025	5.025	0.000	0	331196	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

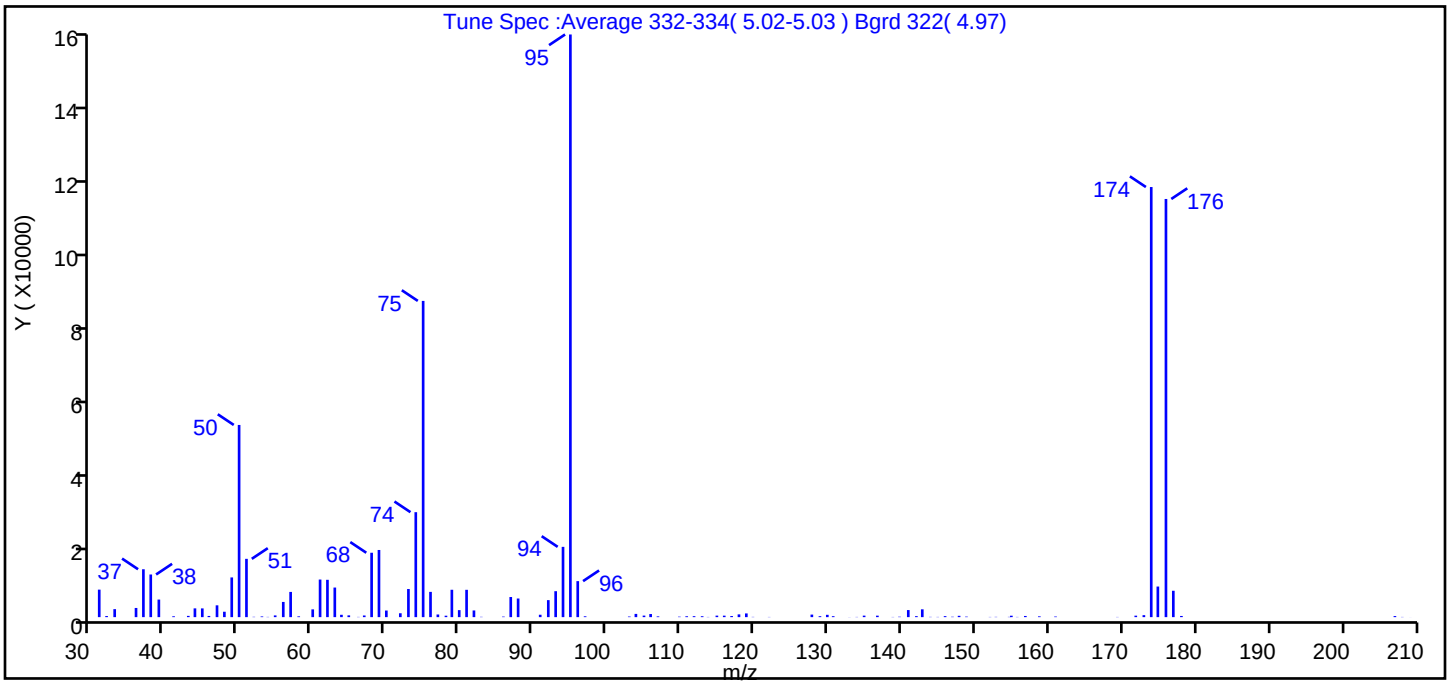
40MXBFB_00001 Amount Added: 40.00 Units: mL

MS Tune Report

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01BFB.D
Injection Date: 01-Sep-2020 16:42:30 Instrument ID: MG
Lims ID: BFB
Client ID:
Operator ID: AFB ALS Bottle#: 16 Worklist Smp#: 1
Injection Vol: 500.0 mL Dil. Factor: 1.0000
Method: MG_TO15 Limit Group: MSA TO14A_15 Routine ICAL
Tune Method: BFB Method 8260

$ 5 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	33.0
75	30 to 60% of m/z 95	54.3
96	5 to 9% of m/z 95	6.2
173	Less than 2% of m/z 174	0.3 (0.5)
174	50 to 120% of m/z 95	73.8
175	5 to 9% of m/z 174	5.3 (7.1)
176	Greater than 95% but less than 101% of m/z 174	71.8 (97.2)
177	5 to 9% of m/z 176	4.5 (6.3)

Data File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01BFB.D\MG_TO15.rslt\spectra.d
Injection Date: 01-Sep-2020 16:42:30
Spectrum: Tune Spec :Average 332-334(5.02-5.03) Bgrd 322(4.97)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 112

m/z	Y	m/z	Y	m/z	Y	m/z	Y
31.00	7094	64.00	607	97.00	217	141.00	1824
32.00	288	65.00	459	103.00	159	142.00	261
33.00	2064	66.00	60	104.00	836	143.00	2018
36.00	2368	67.00	427	105.00	400	144.00	69
37.00	12353	68.00	16608	106.00	799	145.00	58
38.00	10999	69.00	17320	107.00	192	146.00	259
39.00	4535	70.00	1704	110.00	124	147.00	103
41.00	221	72.00	1003	111.00	228	148.00	344
43.00	327	73.00	7253	112.00	247	149.00	136
44.00	2263	74.00	27072	113.00	233	152.00	54
45.00	2256	75.00	81560	114.00	51	153.00	72
46.00	307	76.00	6516	115.00	391	155.00	71
47.00	3048	77.00	684	116.00	382	155.00	369
48.00	1395	78.00	371	117.00	283	156.00	54
49.00	10242	79.00	7062	118.00	712	157.00	303
50.00	49568	80.00	1809	119.00	958	159.00	205
51.00	15036	81.00	7049	120.00	66	161.00	156
52.00	82	82.00	1725	122.00	51	169.00	51
53.00	180	83.00	79	128.00	659	172.00	381
54.00	61	86.00	140	129.00	240	173.00	510
55.00	444	87.00	5191	130.00	600	174.00	110928
56.00	3922	88.00	4807	131.00	243	175.00	7893
57.00	6505	91.00	619	133.00	25	176.00	107848
58.00	203	92.00	4387	134.00	56	177.00	6803
60.00	2003	93.00	6692	135.00	391	178.00	305
61.00	9698	94.00	18128	137.00	382	207.00	278
62.00	9630	95.00	150272	139.00	50	208.00	54
63.00	7632	96.00	9288	140.00	108	209.00	9

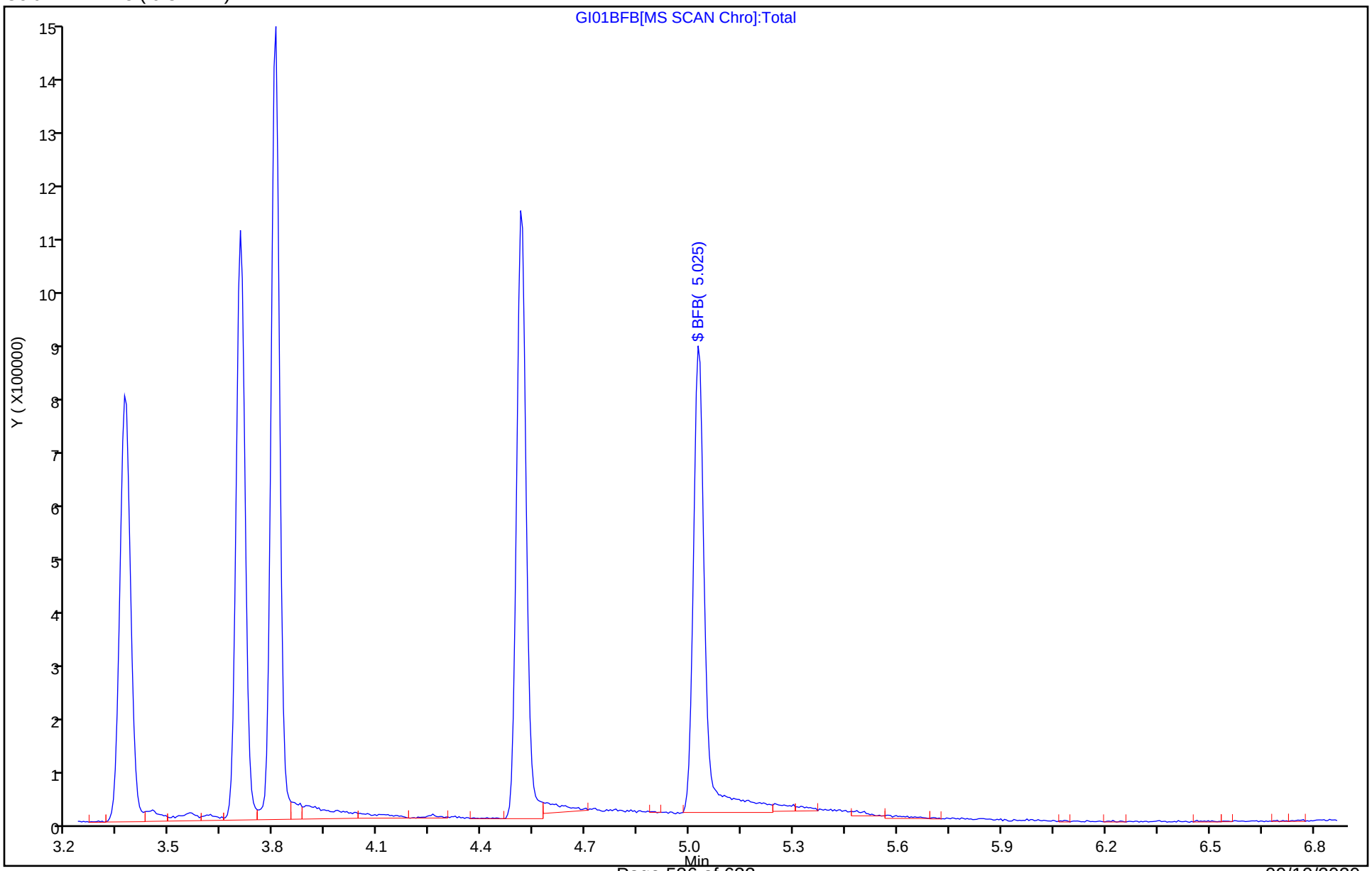
Report Date: 02-Sep-2020 13:24:52 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01BFB.D

Injection Date:	01-Sep-2020 16:42:30	Instrument ID:	MG	Operator ID:	AFB
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	500.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16506.b\GDNUI05S.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	05-Sep-2020 10:56:30	ALS Bottle#:	16	Worklist Smp#:	1
Injection Vol:	500.0 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016506-001				
Misc. Info.:	BFB				
Operator ID:	HMT	Instrument ID:	MG		
Method:	\\chromfs\Knoxville\ChromData\MG\20200904-16506.b\MG_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	06-Sep-2020 07:34:30	Calib Date:	02-Sep-2020 03:27:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1023				

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
$ 5 BFB	95	5.035	5.035	0.000	0	341930	NR	NR	8

QC Flag Legend

Processing Flags
NR - Missing Quant Standard
8 - Failed MS Tune Ratio Test

Reagents:

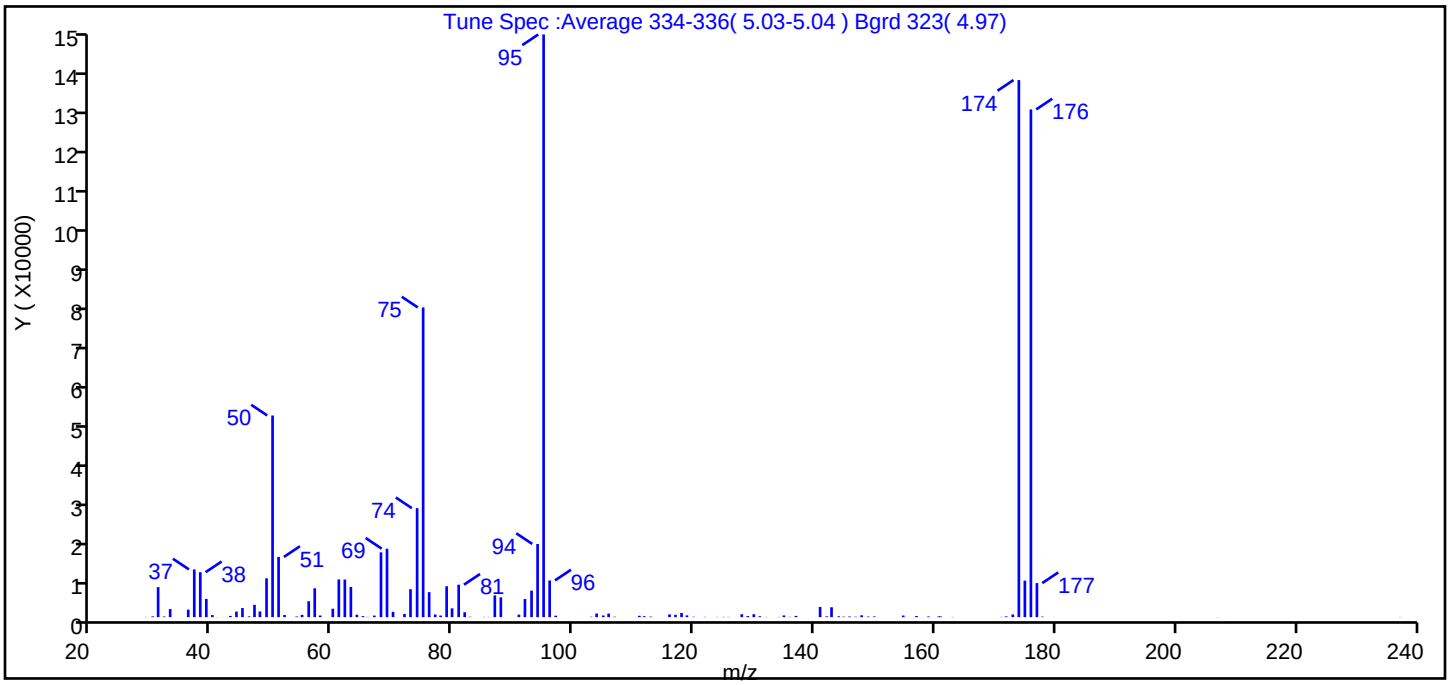
40MXBFB_00001 Amount Added: 40.00 Units: ml

MS Tune Report

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200904-16506.b\GDNUI05S.D
Injection Date: 05-Sep-2020 10:56:30 Instrument ID: MG
Lims ID: BFB
Client ID:
Operator ID: HMT ALS Bottle#: 16 Worklist Smp#: 1
Injection Vol: 500.0 mL Dil. Factor: 1.0000
Method: MG_TO15 Limit Group: MSA TO14A_15 Routine ICAL
Tune Method: BFB Method 8260

$ 5 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	34.6
75	30 to 60% of m/z 95	53.2
96	5 to 9% of m/z 95	6.3
173	Less than 2% of m/z 174	0.5 (0.5)
174	50 to 120% of m/z 95	92.2
175	5 to 9% of m/z 174	6.3 (6.8)
176	Greater than 95% but less than 101% of m/z 174	87.1 (94.5)*
177	5 to 9% of m/z 176	5.8 (6.7)

Data File: \\chromfs\Knoxville\ChromData\MG\20200904-16506.b\GDNUI05S.D\MG_TO15.rslt\spectra.d
Injection Date: 05-Sep-2020 10:56:30
Spectrum: Tune Spec :Average 334-336(5.03-5.04) Bgrd 323(4.97)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 114

m/z	Y	m/z	Y	m/z	Y	m/z	Y
29.00	48	62.00	9237	95.00	143168	141.00	2511
30.00	186	63.00	7422	96.00	9022	142.00	191
31.00	7381	64.00	600	97.00	361	143.00	2430
32.00	155	65.00	251	103.00	95	144.00	207
33.00	1990	66.00	55	104.00	887	145.00	114
36.00	1846	67.00	392	105.00	404	146.00	161
37.00	11726	68.00	15926	106.00	876	147.00	106
38.00	11051	69.00	16824	107.00	112	148.00	453
39.00	4477	70.00	1304	111.00	334	149.00	145
40.00	506	72.00	792	112.00	235	150.00	170
41.00	32	73.00	6858	113.00	137	155.00	395
42.00	8	74.00	26784	116.00	677	157.00	289
43.00	303	75.00	76096	117.00	571	159.00	163
44.00	1371	76.00	6145	118.00	1024	161.00	179
45.00	2232	77.00	660	119.00	433	161.00	182
46.00	181	78.00	391	120.00	98	163.00	50
47.00	3028	79.00	7597	122.00	69	171.00	58
48.00	1394	80.00	2159	124.00	51	172.00	190
49.00	9547	81.00	7980	125.00	56	173.00	655
50.00	49552	82.00	1203	126.00	57	174.00	131968
51.00	14798	83.00	96	128.00	710	175.00	8967
52.00	529	85.00	57	129.00	267	176.00	124760
54.00	155	86.00	50	130.00	714	177.00	8372
55.00	567	87.00	5347	131.00	227	178.00	127
56.00	3921	88.00	4869	132.00	51	207.00	35
57.00	7089	91.00	616	134.00	53	208.00	10
58.00	402	92.00	4453	135.00	417	237.00	50
60.00	2070	93.00	6525	136.00	60		
61.00	9273	94.00	17984	137.00	306		

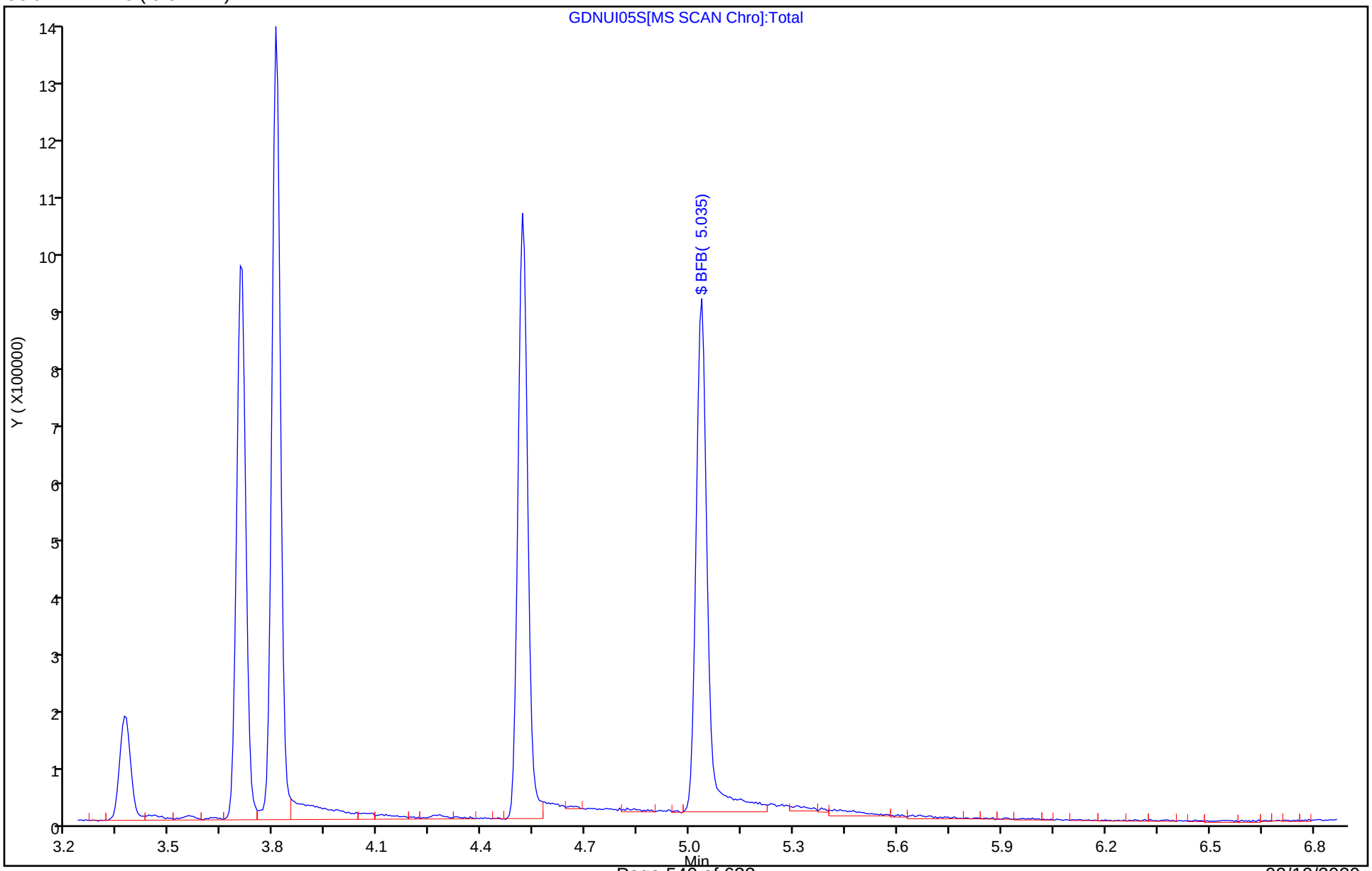
Report Date: 06-Sep-2020 07:34:30 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200904-16506.b\GDNUI05S.D

Injection Date:	05-Sep-2020 10:56:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	500.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH287BLK2.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	28-Aug-2020 12:43:30	ALS Bottle#:	16	Worklist Smp#:	1
Injection Vol:	500.0 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016373-064				
Misc. Info.:	BFB				
Operator ID:	HMT	Instrument ID:	MR		
Method:	\\chromfs\Knoxville\ChromData\MR\20200827-16425.b\MR_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	31-Aug-2020 09:23:26	Calib Date:	29-Aug-2020 00:02:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1014				
First Level Reviewer: tajh		Date:	28-Aug-2020 13:14:46		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
$ 5 BFB	95	17.005	17.005	0.000	0	668146	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

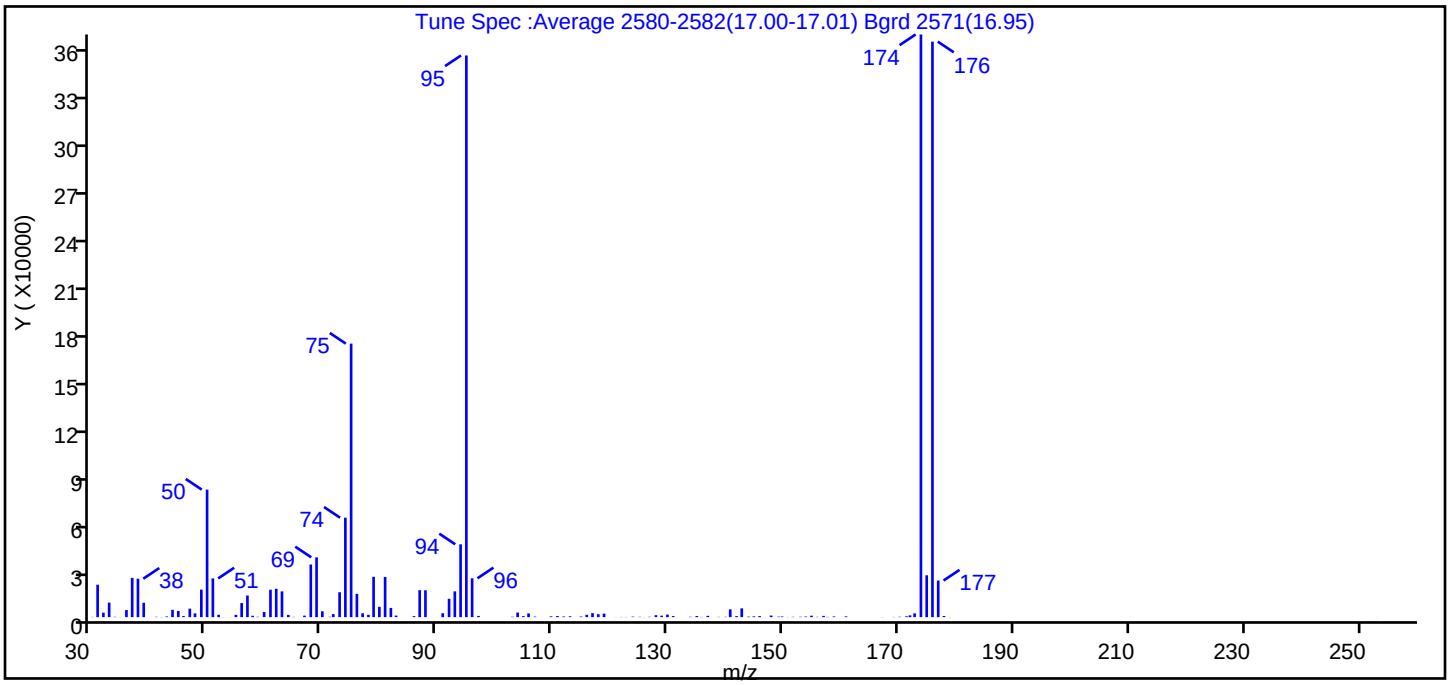
40MXBFB_00001 Amount Added: 40.00 Units: mL

MS Tune Report

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH287BLK2.D
Injection Date: 28-Aug-2020 12:43:30 Instrument ID: MR
Lims ID: BFB
Client ID:
Operator ID: HMT ALS Bottle#: 16 Worklist Smp#: 1
Injection Vol: 500.0 mL Dil. Factor: 1.0000
Method: MR_TO15 Limit Group: MSA TO14A_15 Routine ICAL
Tune Method: BFB Method 8260

$ 5 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	22.7
75	30 to 60% of m/z 95	48.7
96	5 to 9% of m/z 95	6.9
173	Less than 2% of m/z 174	0.7 (0.6)
174	50 to 120% of m/z 95	103.7
175	5 to 9% of m/z 174	7.5 (7.2)
176	Greater than 95% but less than 101% of m/z 174	102.5 (98.8)
177	5 to 9% of m/z 176	6.5 (6.4)

Data File: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH287BLK2.D\MR_TO15.rslt\spectra.d
Injection Date: 28-Aug-2020 12:43:30
Spectrum: Tune Spec :Average 2580-2582(17.00-17.01) Bgrd 2571(16.95)
Base Peak: 173.90
Minimum % Base Peak: 0
Number of Points: 126

m/z	Y	m/z	Y	m/z	Y	m/z	Y
30.00	126	63.00	16127	105.00	627	144.00	331
31.00	20288	64.00	1396	106.00	2312	145.00	499
32.00	2810	65.00	153	107.00	341	146.00	677
33.00	9071	67.00	946	110.00	500	147.00	29
34.00	217	68.00	32912	111.00	733	148.00	1002
35.00	68	69.00	37400	112.00	409	149.00	304
36.00	4434	70.00	3646	113.00	549	150.00	433
37.00	24536	71.00	235	115.00	386	151.00	66
38.00	24024	72.00	1898	116.00	1468	152.00	204
39.00	8979	73.00	15579	117.00	2537	153.00	255
41.00	218	74.00	62176	118.00	1840	154.00	376
42.00	82	75.00	171008	119.00	2192	155.00	907
43.00	422	76.00	14572	121.00	50	156.00	199
44.00	4583	77.00	2415	122.00	105	157.00	782
45.00	3883	78.00	1435	123.00	98	158.00	170
46.00	677	79.00	25200	124.00	319	159.00	455
47.00	5318	80.00	6465	125.00	204	161.00	489
48.00	2344	81.00	25112	126.00	72	167.00	70
49.00	17200	82.00	5760	127.00	217	169.00	139
50.00	79728	83.00	977	128.00	1216	170.00	250
51.00	24208	86.00	628	129.00	916	171.00	518
52.00	1465	87.00	16872	130.00	1609	172.00	1100
53.00	75	88.00	16792	131.00	674	173.00	2359
54.00	55	91.00	2429	134.00	248	174.00	364288
55.00	1428	92.00	11453	135.00	701	175.00	26184
56.00	8811	93.00	16129	136.00	133	176.00	359808
57.00	13509	94.00	45528	137.00	824	177.00	22888
58.00	865	95.00	351168	139.00	163	178.00	714
59.00	230	96.00	24288	140.00	193	179.00	80
60.00	3230	97.00	760	141.00	4866	253.00	30
61.00	17144	103.00	253	142.00	680		
62.00	17720	104.00	2887	143.00	5491		

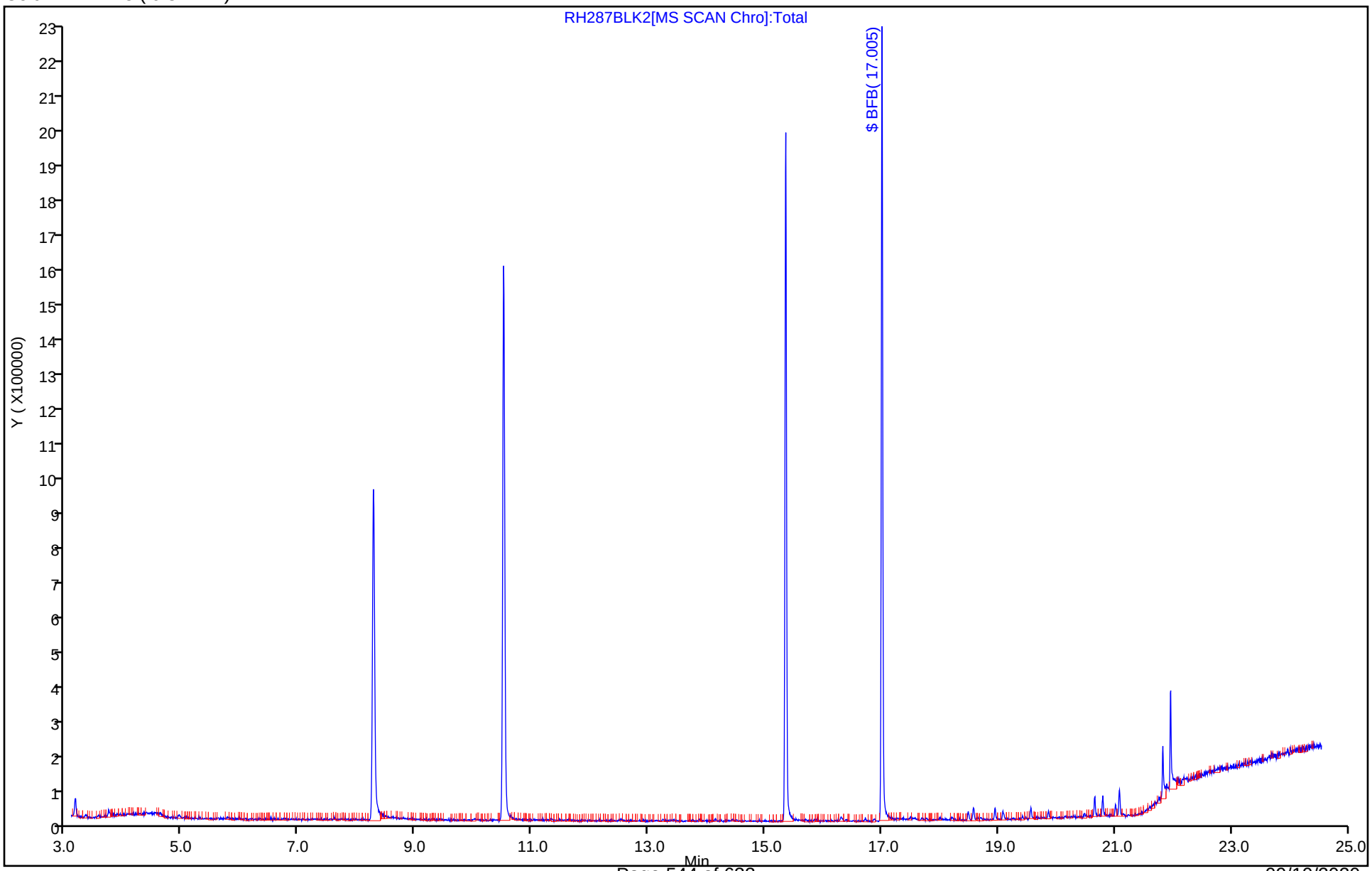
Report Date: 31-Aug-2020 09:23:26 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH287BLK2.D

Injection Date:	28-Aug-2020 12:43:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	500.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RBFBI05.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	05-Sep-2020 08:00:30	ALS Bottle#:	16	Worklist Smp#:	1
Injection Vol:	500.0 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016508-001				
Misc. Info.:	BFB				
Operator ID:	HMT	Instrument ID:	MR		
Method:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\MR_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	06-Sep-2020 07:11:24	Calib Date:	29-Aug-2020 00:02:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1023				

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
$ 5 BFB	95	5.952	5.952	0.000	0	210123	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

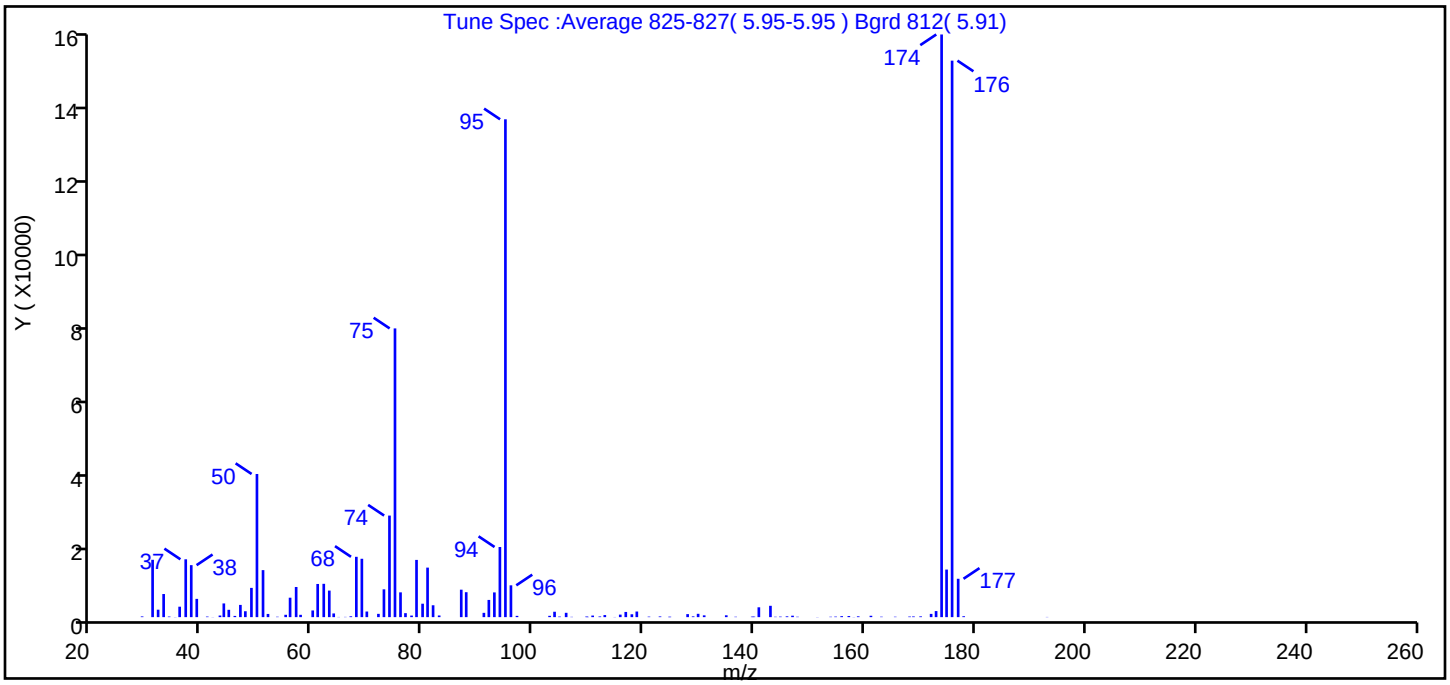
40MXBFB_00001 Amount Added: 40.00 Units: mL

MS Tune Report

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RBFBI05.D
Injection Date: 05-Sep-2020 08:00:30 Instrument ID: MR
Lims ID: BFB
Client ID:
Operator ID: HMT ALS Bottle#: 16 Worklist Smp#: 1
Injection Vol: 500.0 mL Dil. Factor: 1.0000
Method: MR_TO15 Limit Group: MSA TO14A_15 Routine ICAL
Tune Method: BFB Method 8260

$ 5 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	28.8
75	30 to 60% of m/z 95	58.0
96	5 to 9% of m/z 95	6.4
173	Less than 2% of m/z 174	1.2 (1.0)
174	50 to 120% of m/z 95	117.0
175	5 to 9% of m/z 174	9.6 (8.2)
176	Greater than 95% but less than 101% of m/z 174	111.8 (95.5)
177	5 to 9% of m/z 176	7.7 (6.9)

Data File: \\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RBFBI05.D\MR_TO15.rslt\spectra.d
Injection Date: 05-Sep-2020 08:00:30
Spectrum: Tune Spec :Average 825-827(5.95-5.95) Bgrd 812(5.91)
Base Peak: 173.90
Minimum % Base Peak: 0
Number of Points: 115

m/z	Y	m/z	Y	m/z	Y	m/z	Y
29.00	197	62.00	9131	97.00	349	143.00	3107
31.00	15710	63.00	7274	103.00	361	144.00	106
32.00	2040	64.00	1013	104.00	1478	145.00	146
33.00	6333	65.00	52	105.00	154	146.00	223
34.00	161	66.00	68	106.00	1186	147.00	396
35.00	39	67.00	232	107.00	81	148.00	110
36.00	2862	68.00	16528	110.00	165	151.00	40
37.00	15846	69.00	15991	110.00	83	154.00	111
38.00	14242	70.00	1541	111.00	433	155.00	150
39.00	5003	72.00	904	112.00	186	156.00	268
41.00	159	73.00	7623	113.00	566	157.00	303
42.00	34	74.00	27824	115.00	44	158.00	37
43.00	438	75.00	79096	116.00	688	159.00	222
44.00	3756	76.00	6791	117.00	1426	161.00	376
45.00	2010	77.00	1092	118.00	787	163.00	122
46.00	336	78.00	431	119.00	1539	166.00	115
47.00	3352	79.00	15678	121.00	142	168.00	164
48.00	1617	80.00	3681	123.00	193	169.00	190
49.00	8015	81.00	13569	125.00	84	170.00	211
50.00	39216	82.00	3254	125.00	104	172.00	891
51.00	12880	83.00	456	128.00	828	173.00	1663
52.00	878	87.00	7524	129.00	211	174.00	159616
54.00	113	88.00	6833	130.00	915	175.00	13033
55.00	645	91.00	1178	131.00	490	176.00	152448
56.00	5326	92.00	4718	135.00	505	177.00	10510
57.00	8261	93.00	6776	137.00	108	178.00	247
58.00	637	94.00	19216	140.00	141	193.00	54
60.00	1834	95.00	136384	140.00	146	253.00	1
61.00	9089	96.00	8716	141.00	2696		

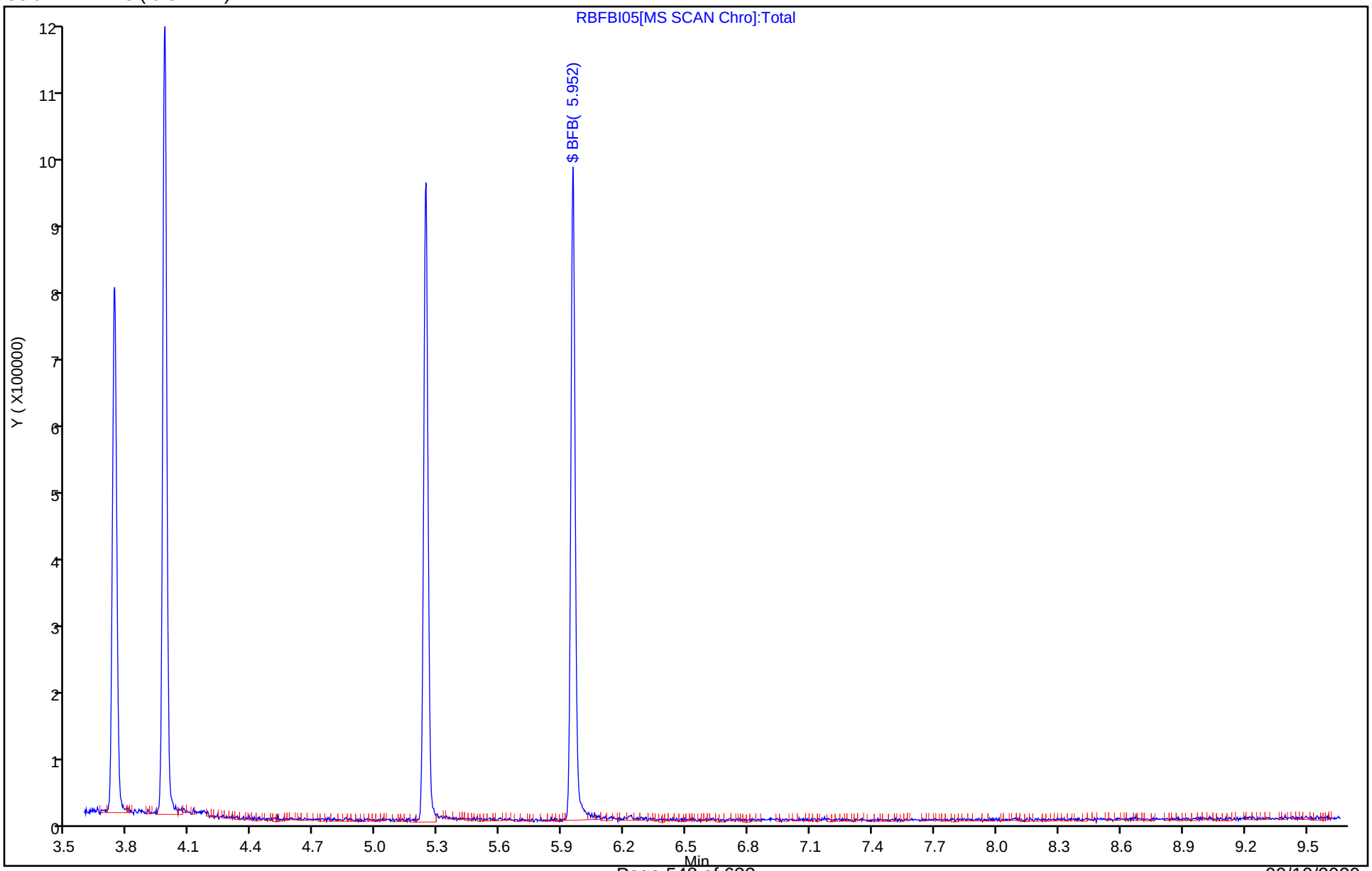
Report Date: 06-Sep-2020 07:11:25 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RBFBI05.D

Injection Date:	05-Sep-2020 08:00:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	500.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 140-42481/4

Matrix: Air Lab File ID: G500BI05.D

Analysis Method: TO 15 LL Date Collected:

Sample wt/vol: 500(mL) Date Analyzed: 09/05/2020 12:59

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42481 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	ND		0.080	0.0080
56-23-5	Carbon tetrachloride	153.81	ND		0.080	0.0070
75-45-6	Chlorodifluoromethane	86.47	ND		0.080	0.022
67-66-3	Chloroform	119.38	ND		0.080	0.0070
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.080	0.010
75-71-8	Dichlorodifluoromethane	120.91	ND		0.080	0.014
75-34-3	1,1-Dichloroethane	98.96	ND		0.080	0.0070
107-06-2	1,2-Dichloroethane	98.96	ND		0.080	0.010
75-35-4	1,1-Dichloroethene	96.94	ND		0.080	0.0080
100-41-4	Ethylbenzene	106.17	ND		0.080	0.013
75-09-2	Methylene Chloride	84.93	ND		0.40	0.39
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.40	0.052
91-20-3	Naphthalene	128.17	ND		0.040	0.040
127-18-4	Tetrachloroethene	165.83	ND		0.080	0.0070
108-88-3	Toluene	92.14	ND		0.12	0.078
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.080	0.0070
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.080	0.064
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.080	0.037
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.080	0.0070
79-01-6	Trichloroethene	131.39	ND		0.040	0.0060
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.080	0.036
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.080	0.020
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.080	0.022
75-01-4	Vinyl chloride	62.50	ND		0.040	0.026
1330-20-7	Xylenes, Total	106.17	ND		0.16	0.024

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	92		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 140-42481/4

Matrix: Air Lab File ID: G500BI05.D

Analysis Method: TO 15 LL Date Collected:

Sample wt/vol: 500(mL) Date Analyzed: 09/05/2020 12:59

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42481 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	ND		0.26	0.026
56-23-5	Carbon tetrachloride	153.81	ND		0.50	0.044
75-45-6	Chlorodifluoromethane	86.47	ND		0.28	0.078
67-66-3	Chloroform	119.38	ND		0.39	0.034
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.32	0.040
75-71-8	Dichlorodifluoromethane	120.91	ND		0.40	0.069
75-34-3	1,1-Dichloroethane	98.96	ND		0.32	0.028
107-06-2	1,2-Dichloroethane	98.96	ND		0.32	0.040
75-35-4	1,1-Dichloroethene	96.94	ND		0.32	0.032
100-41-4	Ethylbenzene	106.17	ND		0.35	0.056
75-09-2	Methylene Chloride	84.93	ND		1.4	1.4
1634-04-4	Methyl tert-butyl ether	88.15	ND		1.4	0.19
91-20-3	Naphthalene	128.17	ND		0.21	0.21
127-18-4	Tetrachloroethene	165.83	ND		0.54	0.047
108-88-3	Toluene	92.14	ND		0.45	0.29
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.32	0.028
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.59	0.47
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.44	0.20
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.44	0.038
79-01-6	Trichloroethene	131.39	ND		0.21	0.032
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.39	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.39	0.098
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.39	0.11
75-01-4	Vinyl chloride	62.50	ND		0.10	0.066
1330-20-7	Xylenes, Total	106.17	ND		0.69	0.10

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	92		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16506.b\G500BI05.D				
Lims ID:	MB				
Client ID:					
Sample Type:	MB				
Inject. Date:	05-Sep-2020 12:59:30	ALS Bottle#:	16	Worklist Smp#:	4
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016506-004				
Misc. Info.:	500ML BLK				
Operator ID:	HMT	Instrument ID:	MG		
Method:	\\chromfs\Knoxville\ChromData\MG\20200904-16506.b\MG_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	06-Sep-2020 07:34:31	Calib Date:	02-Sep-2020 03:27:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1023				
First Level Reviewer: tajh		Date:	05-Sep-2020 15:14:47		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.811	8.811	0.000	88	122815	4.80	4.80	
* 2 1,4-Difluorobenzene	114	10.995	10.995	0.000	97	628785	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.730	15.730	0.000	91	639792	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.369	17.369	0.000	94	430515	4.64	4.29	
46 Tetrahydrofuran	42	9.291	9.232	0.059	90	4180		0.0818	

Reagents:

40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

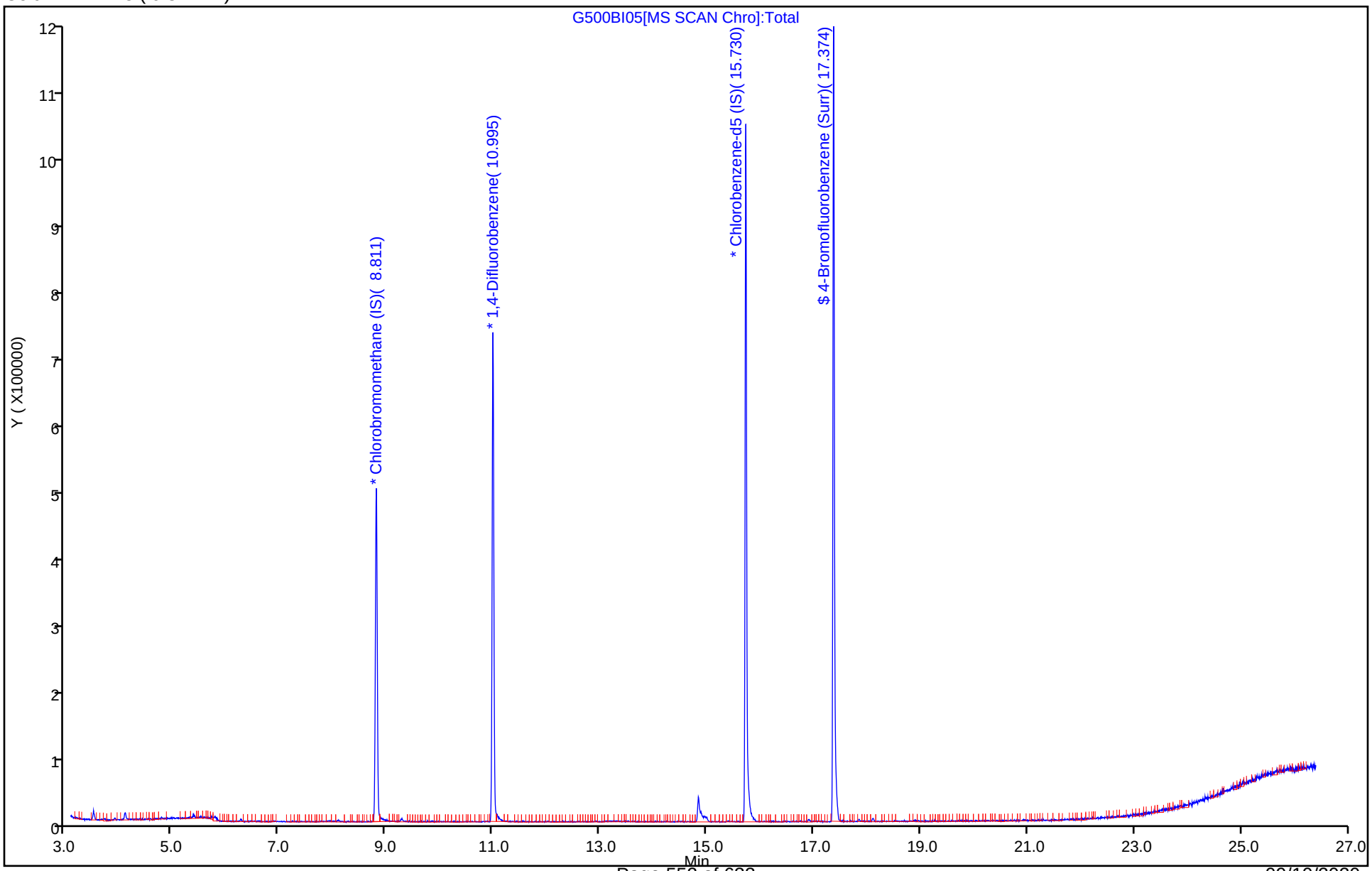
Report Date: 06-Sep-2020 07:34:36 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200904-16506.b\G500BI05.D

Injection Date:	05-Sep-2020 12:59:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	MB			Worklist Smp#:	4
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16506.b\G500BI05.D				
Lims ID:	MB				
Client ID:					
Sample Type:	MB				
Inject. Date:	05-Sep-2020 12:59:30	ALS Bottle#:	16	Worklist Smp#:	4
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016506-004				
Misc. Info.:	500ML BLK				
Operator ID:	HMT	Instrument ID:	MG		
Method:	\\chromfs\Knoxville\ChromData\MG\20200904-16506.b\MG_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	06-Sep-2020 07:34:31	Calib Date:	02-Sep-2020 03:27:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1023				
First Level Reviewer: tajh		Date:	05-Sep-2020 15:14:47		

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	4.29	92.42

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 140-42483/4

Matrix: Air Lab File ID: R500BI05.D

Analysis Method: TO 15 LL Date Collected:

Sample wt/vol: 500(mL) Date Analyzed: 09/05/2020 09:47

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42483 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	ND		0.080	0.0080
56-23-5	Carbon tetrachloride	153.81	ND		0.080	0.0070
75-45-6	Chlorodifluoromethane	86.47	ND		0.080	0.022
67-66-3	Chloroform	119.38	ND		0.080	0.0070
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.080	0.010
75-71-8	Dichlorodifluoromethane	120.91	ND		0.080	0.014
75-34-3	1,1-Dichloroethane	98.96	ND		0.080	0.0070
107-06-2	1,2-Dichloroethane	98.96	ND		0.080	0.010
75-35-4	1,1-Dichloroethene	96.94	ND		0.080	0.0080
100-41-4	Ethylbenzene	106.17	ND		0.080	0.013
75-09-2	Methylene Chloride	84.93	ND		0.40	0.39
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.40	0.052
91-20-3	Naphthalene	128.17	ND		0.040	0.040
127-18-4	Tetrachloroethene	165.83	ND		0.080	0.0070
108-88-3	Toluene	92.14	ND		0.12	0.078
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.080	0.0070
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.080	0.064
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.080	0.037
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.080	0.0070
79-01-6	Trichloroethene	131.39	ND		0.040	0.0060
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.080	0.036
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.080	0.020
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.080	0.022
75-01-4	Vinyl chloride	62.50	ND		0.040	0.026
1330-20-7	Xylenes, Total	106.17	ND		0.16	0.024

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	88		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 140-42483/4

Matrix: Air Lab File ID: R500BI05.D

Analysis Method: TO 15 LL Date Collected:

Sample wt/vol: 500(mL) Date Analyzed: 09/05/2020 09:47

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42483 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	ND		0.26	0.026
56-23-5	Carbon tetrachloride	153.81	ND		0.50	0.044
75-45-6	Chlorodifluoromethane	86.47	ND		0.28	0.078
67-66-3	Chloroform	119.38	ND		0.39	0.034
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.32	0.040
75-71-8	Dichlorodifluoromethane	120.91	ND		0.40	0.069
75-34-3	1,1-Dichloroethane	98.96	ND		0.32	0.028
107-06-2	1,2-Dichloroethane	98.96	ND		0.32	0.040
75-35-4	1,1-Dichloroethene	96.94	ND		0.32	0.032
100-41-4	Ethylbenzene	106.17	ND		0.35	0.056
75-09-2	Methylene Chloride	84.93	ND		1.4	1.4
1634-04-4	Methyl tert-butyl ether	88.15	ND		1.4	0.19
91-20-3	Naphthalene	128.17	ND		0.21	0.21
127-18-4	Tetrachloroethene	165.83	ND		0.54	0.047
108-88-3	Toluene	92.14	ND		0.45	0.29
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.32	0.028
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.59	0.47
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.44	0.20
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.44	0.038
79-01-6	Trichloroethene	131.39	ND		0.21	0.032
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.39	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.39	0.098
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.39	0.11
75-01-4	Vinyl chloride	62.50	ND		0.10	0.066
1330-20-7	Xylenes, Total	106.17	ND		0.69	0.10

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	88		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\R500BI05.D				
Lims ID:	MB				
Client ID:					
Sample Type:	MB				
Inject. Date:	05-Sep-2020 09:47:30	ALS Bottle#:	16	Worklist Smp#:	4
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016508-004				
Misc. Info.:	500ML BLK				
Operator ID:	HMT	Instrument ID:	MR		
Method:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\MR_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	06-Sep-2020 07:11:26	Calib Date:	29-Aug-2020 00:02:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1023				
First Level Reviewer: tajh		Date:	05-Sep-2020 12:44:37		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.263	8.274	-0.011	96	137464	4.80	4.80	
* 2 1,4-Difluorobenzene	114	10.507	10.512	-0.005	94	704230	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.349	15.349	0.000	88	562616	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	16.999	16.999	0.000	92	305932	4.64	4.07	

Reagents:

40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

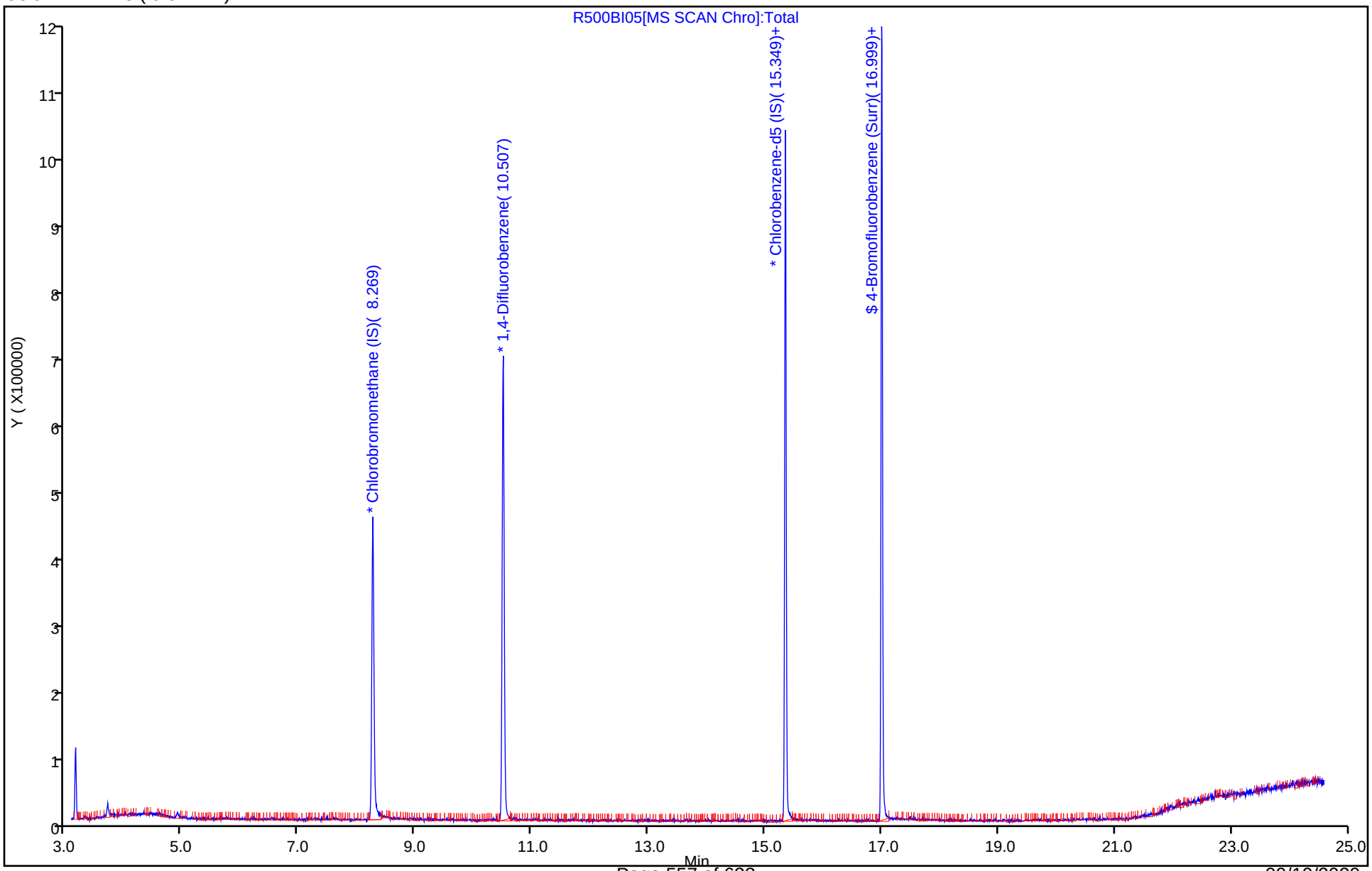
Report Date: 06-Sep-2020 07:11:30 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200904-16508.b\R500BI05.D

Injection Date:	05-Sep-2020 09:47:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	MB			Worklist Smp#:	4
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\R500BI05.D				
Lims ID:	MB				
Client ID:					
Sample Type:	MB				
Inject. Date:	05-Sep-2020 09:47:30	ALS Bottle#:	16	Worklist Smp#:	4
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016508-004				
Misc. Info.:	500ML BLK				
Operator ID:	HMT	Instrument ID:	MR		
Method:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\MR_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	06-Sep-2020 07:11:26	Calib Date:	29-Aug-2020 00:02:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1023				

First Level Reviewer: tajh Date: 05-Sep-2020 12:44:37

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	4.07	87.65

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 140-42481/1002

Matrix: Air Lab File ID: GLCSI05-LCS.d

Analysis Method: TO 15 LL Date Collected:

Sample wt/vol: 500(mL) Date Analyzed: 09/05/2020 11:32

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42481 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	1.54		0.080	0.0080
56-23-5	Carbon tetrachloride	153.81	1.79		0.080	0.0070
75-45-6	Chlorodifluoromethane	86.47	1.71		0.080	0.022
67-66-3	Chloroform	119.38	1.53		0.080	0.0070
156-59-2	cis-1,2-Dichloroethene	96.94	1.67		0.080	0.010
75-71-8	Dichlorodifluoromethane	120.91	1.56		0.080	0.014
75-34-3	1,1-Dichloroethane	98.96	1.51		0.080	0.0070
107-06-2	1,2-Dichloroethane	98.96	1.58		0.080	0.010
75-35-4	1,1-Dichloroethene	96.94	1.56		0.080	0.0080
100-41-4	Ethylbenzene	106.17	1.59		0.080	0.013
75-09-2	Methylene Chloride	84.93	1.55		0.40	0.39
1634-04-4	Methyl tert-butyl ether	88.15	1.58		0.40	0.052
91-20-3	Naphthalene	128.17	1.77		0.040	0.040
127-18-4	Tetrachloroethene	165.83	1.56		0.080	0.0070
108-88-3	Toluene	92.14	1.58		0.12	0.078
156-60-5	trans-1,2-Dichloroethene	96.94	1.57		0.080	0.0070
120-82-1	1,2,4-Trichlorobenzene	181.45	2.12		0.080	0.064
71-55-6	1,1,1-Trichloroethane	133.41	1.62		0.080	0.037
79-00-5	1,1,2-Trichloroethane	133.41	1.44		0.080	0.0070
79-01-6	Trichloroethene	131.39	1.55		0.040	0.0060
526-73-8	1,2,3-Trimethylbenzene	120.19	1.38		0.080	0.036
95-63-6	1,2,4-Trimethylbenzene	120.20	1.64		0.080	0.020
108-67-8	1,3,5-Trimethylbenzene	120.20	1.98		0.080	0.022
75-01-4	Vinyl chloride	62.50	1.57		0.040	0.026
1330-20-7	Xylenes, Total	106.17	4.69		0.16	0.024

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	100		60-140

Eurofins Environment Testing America
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200904-16506.b\GLCSI05-LCS.d
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 05-Sep-2020 11:32:30 ALS Bottle#: 16 Worklist Smp#: 1002
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016506-002
Misc. Info.: S123 100ML
Operator ID: HMT Instrument ID: MG

Method: \\chromfs\Knoxville\ChromData\MG\20200904-16506.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 07-Sep-2020 08:16:13 Calib Date: 02-Sep-2020 03:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1015

First Level Reviewer: tajh Date: 07-Sep-2020 08:16:13

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.811	8.811	0.000	88	124564	4.80	4.80	
* 2 1,4-Difluorobenzene	114	10.995	10.995	0.000	97	616523	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.730	15.730	0.000	91	638191	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.369	17.369	0.000	91	466150	4.64	4.65	
6 Chlorodifluoromethane	51	3.699	3.699	0.000	96	190822	2.00	1.71	
7 Propene	41	3.715	3.715	0.000	99	94343	2.00	1.72	
8 Dichlorodifluoromethane	85	3.764	3.764	0.000	98	194751	2.00	1.56	
9 Chloromethane	52	3.947	3.947	0.000	97	35535	2.00	1.59	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.947	3.947	0.000	95	110427	2.00	1.55	
11 Acetaldehyde	44	4.093	4.093	0.000	97	201135	10.0	7.65	
12 Vinyl chloride	62	4.114	4.114	0.000	98	98107	2.00	1.57	
13 Butane	43	4.201	4.201	0.000	85	178272	2.00	1.60	
14 Butadiene	54	4.201	4.201	0.000	65	90071	2.00	1.64	
15 Bromomethane	94	4.519	4.519	0.000	97	60057	2.00	1.59	
16 Chloroethane	64	4.659	4.659	0.000	85	40735	2.00	1.57	
17 Ethanol	31	4.751	4.751	0.000	96	153668	10.0	6.52	
18 Vinyl bromide	106	4.956	4.956	0.000	97	56650	2.00	1.76	
19 2-Methylbutane	43	5.010	5.010	0.000	93	127493	2.00	1.68	
20 Trichlorofluoromethane	101	5.225	5.225	0.000	98	164804	2.00	1.70	
21 Acrolein	56	5.236	5.236	0.000	35	24939	2.00	2.15	
22 Acetonitrile	40	5.295	5.295	0.000	100	32006	2.00	1.54	
23 Acetone	58	5.349	5.349	0.000	99	41215	2.00	1.99	
25 Isopropyl alcohol	45	5.441	5.441	0.000	43	125857	2.00	2.03	
24 Pentane	72	5.446	5.446	0.000	94	10145	2.00	1.61	
26 Ethyl ether	31	5.614	5.614	0.000	88	82248	2.00	1.85	
27 1,1-Dichloroethene	96	5.932	5.932	0.000	90	47986	2.00	1.56	
28 Acrylonitrile	53	6.029	6.029	0.000	92	51099	2.00	1.80	
30 2-Methyl-2-propanol	59	6.045	6.045	0.000	96	89823	2.00	1.43	
29 1,1,2-Trichloro-1,2,2-trifluoroe	101	6.104	6.104	0.000	92	110558	2.00	1.56	
31 Methylene Chloride	84	6.271	6.271	0.000	87	47624	2.00	1.55	
32 3-Chloro-1-propene	39	6.288	6.288	0.000	93	88124	2.00	1.46	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
33 Carbon disulfide	76	6.439	6.439	0.000	96	153281	2.00	1.49	
34 trans-1,2-Dichloroethene	96	7.080	7.080	0.000	91	56859	2.00	1.57	
35 2-Methylpentane	43	7.102	7.102	0.000	97	205935	2.00	1.46	
36 Methyl tert-butyl ether	73	7.215	7.215	0.000	89	118322	2.00	1.58	
37 1,1-Dichloroethane	63	7.501	7.501	0.000	98	136160	2.00	1.51	
38 Vinyl acetate	43	7.603	7.603	0.000	100	222552	2.00	1.89	
39 2-Butanone (MEK)	72	8.051	8.051	0.000	94	22410	2.00	1.50	
40 Hexane	56	8.072	8.072	0.000	91	71057	2.00	1.53	
41 Isopropyl ether	45	8.240	8.240	0.000	96	263542	2.00	1.70	
42 cis-1,2-Dichloroethene	96	8.482	8.482	0.000	98	64123	2.00	1.67	
43 Ethyl acetate	43	8.671	8.671	0.000	97	164927	2.00	1.60	
44 Chloroform	83	8.822	8.822	0.000	93	133354	2.00	1.53	
45 Tert-butyl ethyl ether	59	8.914	8.914	0.000	96	191329	2.00	1.47	
46 Tetrahydrofuran	42	9.232	9.232	0.000	90	88248	2.00	1.70	
47 1,1,1-Trichloroethane	97	9.847	9.847	0.000	93	135954	2.00	1.62	
48 1,2-Dichloroethane	62	9.960	9.960	0.000	94	109981	2.00	1.58	
51 n-Butanol	31	10.434	10.434	0.000	64	27056	2.00	1.37	
50 Benzene	78	10.450	10.450	0.000	93	195536	2.00	1.54	
49 Cyclohexane	69	10.450	10.450	0.000	82	30031	2.00	1.41	
52 Carbon tetrachloride	117	10.472	10.472	0.000	92	140096	2.00	1.79	
53 2,3-Dimethylpentane	71	10.575	10.575	0.000	91	44696	2.00	1.37	
54 Thiophene	84	10.720	10.720	0.000	93	106084	2.00	1.46	
55 Isooctane	57	11.216	11.216	0.000	97	464481	2.00	1.50	
56 n-Heptane	71	11.594	11.594	0.000	95	69860	2.00	1.40	
57 1,2-Dichloropropane	63	11.664	11.664	0.000	88	86144	2.00	1.49	
58 Trichloroethene	130	11.707	11.707	0.000	92	85638	2.00	1.55	
59 Dibromomethane	93	11.788	11.788	0.000	96	82851	2.00	1.52	
60 Dichlorobromomethane	83	11.933	11.933	0.000	95	145595	2.00	1.54	
61 1,4-Dioxane	88	11.966	11.966	0.000	90	18705	2.00	1.26	
62 Methyl methacrylate	41	12.036	12.036	0.000	85	100626	2.00	1.54	
63 Methylcyclohexane	83	12.478	12.478	0.000	86	150407	2.00	1.80	
64 4-Methyl-2-pentanone (MIBK)	43	12.888	12.888	0.000	97	171099	2.00	1.55	
65 cis-1,3-Dichloropropene	75	12.936	12.936	0.000	96	116784	2.00	1.54	
66 trans-1,3-Dichloropropene	75	13.632	13.632	0.000	92	98633	2.00	1.51	
67 Toluene	91	13.756	13.756	0.000	93	222339	2.00	1.58	
68 1,1,2-Trichloroethane	83	13.826	13.826	0.000	96	63549	2.00	1.44	
69 2-Hexanone	58	14.220	14.220	0.000	90	71473	2.00	1.37	
70 n-Octane	85	14.452	14.452	0.000	98	76213	2.00	1.49	
71 Chlorodibromomethane	129	14.533	14.533	0.000	95	148457	2.00	1.79	
72 Ethylene Dibromide	107	14.824	14.824	0.000	98	126787	2.00	1.60	
73 Tetrachloroethene	129	14.905	14.905	0.000	92	82897	2.00	1.56	
75 Chlorobenzene	112	15.778	15.778	0.000	92	187474	2.00	1.65	
74 2,3-Dimethylheptane	43	15.800	15.800	0.000	92	320187	2.00	1.31	
78 Ethylbenzene	91	16.064	16.064	0.000	98	287999	2.00	1.59	
79 m-Xylene & p-Xylene	91	16.231	16.231	0.000	96	445330	4.00	3.11	
80 n-Nonane	57	16.652	16.652	0.000	94	208173	2.00	1.47	
81 Bromoform	173	16.679	16.679	0.000	94	151842	2.00	2.18	
82 Styrene	104	16.689	16.689	0.000	96	178221	2.00	1.71	
83 o-Xylene	91	16.754	16.754	0.000	94	229218	2.00	1.58	
84 1,1,2,2-Tetrachloroethane	83	17.078	17.078	0.000	98	169441	2.00	1.47	
85 1,2,3-Trichloropropane	110	17.234	17.234	0.000	91	47103	2.00	1.67	
86 Isopropylbenzene	105	17.342	17.342	0.000	97	318589	2.00	1.67	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
87 N-Propylbenzene	120	17.887	17.887	0.000	99	89318	2.00	1.76	
88 2-Chlorotoluene	126	17.930	17.930	0.000	98	90582	2.00	1.86	
89 4-Ethyltoluene	105	18.032	18.032	0.000	98	297626	2.00	1.57	
90 1,3,5-Trimethylbenzene	120	18.108	18.108	0.000	93	150153	2.00	1.98	
92 Alpha Methyl Styrene	118	18.340	18.340	0.000	89	130206	2.00	1.74	
93 n-Decane	57	18.399	18.399	0.000	87	254850	2.00	1.49	
94 tert-Butylbenzene	119	18.528	18.528	0.000	92	287355	2.00	1.72	
95 1,2,4-Trimethylbenzene	105	18.544	18.544	0.000	95	272951	2.00	1.64	
96 sec-Butylbenzene	105	18.798	18.798	0.000	98	418666	2.00	1.67	
97 1,3-Dichlorobenzene	146	18.814	18.814	0.000	96	229108	2.00	1.94	
98 Benzyl chloride	91	18.890	18.890	0.000	97	261516	2.00	1.67	
99 1,4-Dichlorobenzene	146	18.900	18.900	0.000	93	226761	2.00	1.89	
100 4-Isopropyltoluene	119	18.960	18.960	0.000	96	332231	2.00	1.71	
101 1,2,3-Trimethylbenzene	105	19.014	19.014	0.000	98	197064	2.00	1.38	
102 Butylcyclohexane	83	19.073	19.073	0.000	86	238563	2.00	1.47	
103 2,3-Dihydroindene	117	19.262	19.262	0.000	93	278152	2.00	1.68	
104 1,2-Dichlorobenzene	146	19.262	19.262	0.000	86	218827	2.00	1.93	
106 Indene	116	19.391	19.391	0.000	88	200434	2.00	1.41	
105 n-Butylbenzene	91	19.396	19.396	0.000	97	357440	2.00	1.63	
107 Undecane	57	19.704	19.704	0.000	92	284375	2.00	1.49	
108 1,2-Dibromo-3-Chloropropane	157	19.860	19.860	0.000	91	88203	2.00	1.76	
109 1,2,4,5-Tetramethylbenzene	119	20.146	20.146	0.000	98	284034	2.00	1.84	
110 Dodecane	57	20.761	20.761	0.000	90	283965	2.00	1.70	
111 1,2,4-Trichlorobenzene	180	20.955	20.955	0.000	93	211475	2.00	2.12	
112 Naphthalene	128	21.090	21.090	0.000	99	425466	2.00	1.77	
113 Hexachlorobutadiene	225	21.300	21.300	0.000	95	205165	2.00	2.43	
114 1,2,3-Trichlorobenzene	180	21.370	21.370	0.000	95	210730	2.00	2.19	
115 2-Methylnaphthalene	142	22.141	22.141	0.000	99	203751	2.00	1.97	
116 1-Methylnaphthalene	142	22.314	22.314	0.000	99	218467	2.00	2.07	
A 122 C8 Range	1	14.474	(14.393-14.554)		0	951980	2.00	1.53	
S 123 1,2-Dichloroethene, Total	1				0		4.00	3.24	
S 124 Xylenes, Total	100				0		6.00	4.69	
T 136 2-Methylthiophene TIC	97	13.907	13.907	0.000	97	178511	2.00	1.34	
T 137 3-Methylthiophene TIC	97	14.112	14.112	0.000	96	170413	2.00	1.28	
T 154 2-Ethylthiophene TIC	97	16.166	16.166	0.000	95	207628	2.00	1.56	
T 160 1,2-Dimethyl-4-Ethylbenzene TIC	119	19.763	19.763	0.000	95	236273	2.00	1.78	
T 163 Benzo(b)thiophene TIC	134	21.192	21.192	0.000	94	228082	2.00	1.72	

Reagents:

40CV101S_00123	Amount Added: 100.00	Units: ml	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

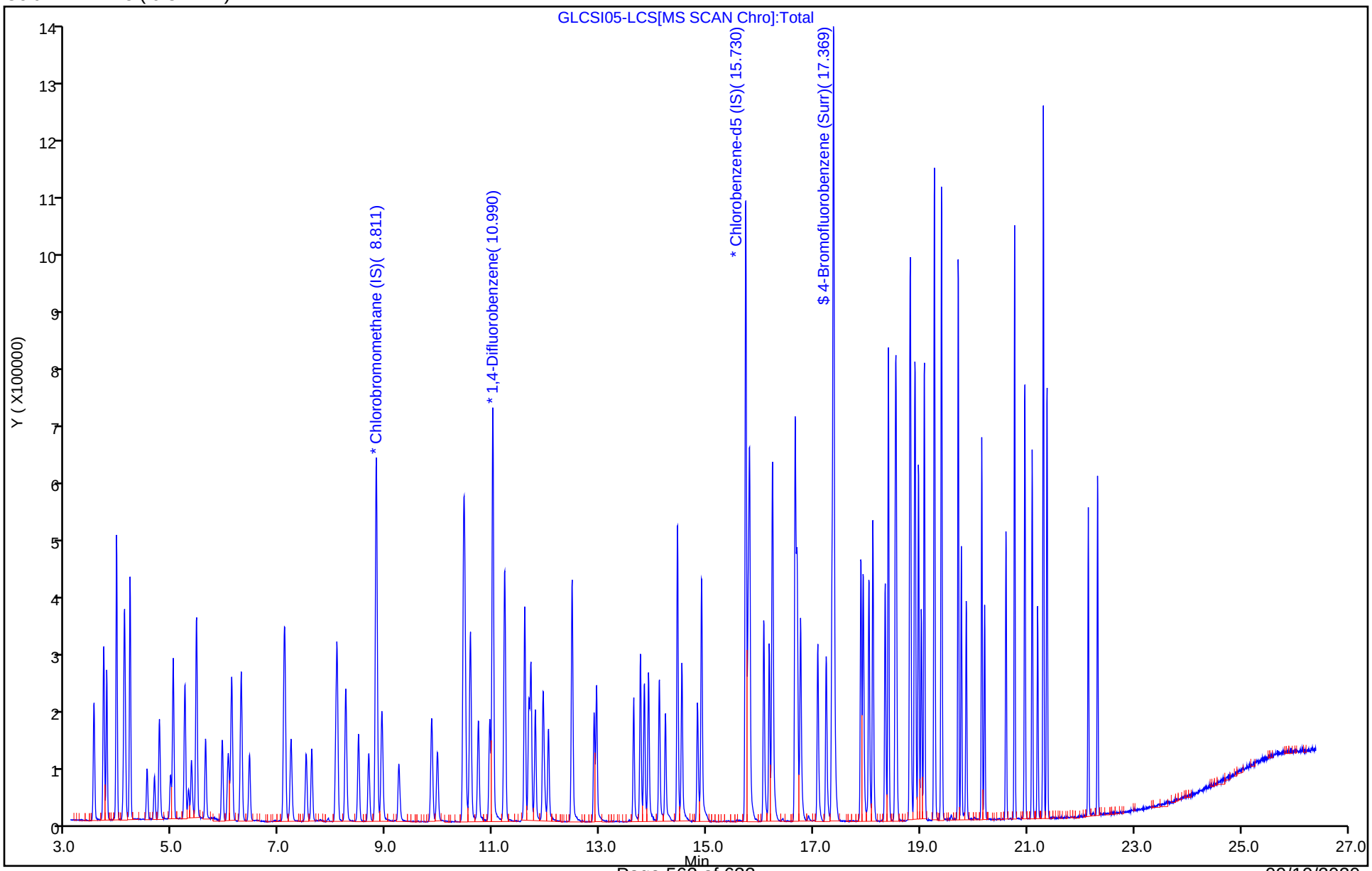
Report Date: 07-Sep-2020 08:16:16 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins Environment Testing America

Data File: \\chromfs\Knoxville\ChromData\MG\20200904-16506.b\GLCSI05-LCS.d

Injection Date:	05-Sep-2020 11:32:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	LCS			Worklist Smp#:	1002
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins Environment Testing America
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MG\20200904-16506.b\GLCSI05-LCS.d				
Lims ID:	LCS				
Client ID:					
Sample Type:	LCS				
Inject. Date:	05-Sep-2020 11:32:30	ALS Bottle#:	16	Worklist Smp#:	1002
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016506-002				
Misc. Info.:	S123 100ML				
Operator ID:	HMT	Instrument ID:	MG		
Method:	\\chromfs\Knoxville\ChromData\MG\20200904-16506.b\MG_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	07-Sep-2020 08:16:13	Calib Date:	02-Sep-2020 03:27:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1015				

First Level Reviewer: tajh Date: 07-Sep-2020 08:16:13

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	4.65	100.32

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 140-42483/1002

Matrix: Air Lab File ID: RCCVI05-LCS.d

Analysis Method: TO 15 LL Date Collected:

Sample wt/vol: 500(mL) Date Analyzed: 09/05/2020 08:28

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42483 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	1.45		0.080	0.0080
56-23-5	Carbon tetrachloride	153.81	1.73		0.080	0.0070
75-45-6	Chlorodifluoromethane	86.47	1.44		0.080	0.022
67-66-3	Chloroform	119.38	1.50		0.080	0.0070
156-59-2	cis-1,2-Dichloroethene	96.94	1.32		0.080	0.010
75-71-8	Dichlorodifluoromethane	120.91	2.00		0.080	0.014
75-34-3	1,1-Dichloroethane	98.96	1.50		0.080	0.0070
107-06-2	1,2-Dichloroethane	98.96	1.54		0.080	0.010
75-35-4	1,1-Dichloroethene	96.94	1.43		0.080	0.0080
100-41-4	Ethylbenzene	106.17	1.39		0.080	0.013
75-09-2	Methylene Chloride	84.93	1.48		0.40	0.39
1634-04-4	Methyl tert-butyl ether	88.15	1.55		0.40	0.052
91-20-3	Naphthalene	128.17	1.50		0.040	0.040
127-18-4	Tetrachloroethene	165.83	1.37		0.080	0.0070
108-88-3	Toluene	92.14	1.33		0.12	0.078
156-60-5	trans-1,2-Dichloroethene	96.94	1.49		0.080	0.0070
120-82-1	1,2,4-Trichlorobenzene	181.45	1.48		0.080	0.064
71-55-6	1,1,1-Trichloroethane	133.41	1.52		0.080	0.037
79-00-5	1,1,2-Trichloroethane	133.41	1.43		0.080	0.0070
79-01-6	Trichloroethene	131.39	1.40		0.040	0.0060
526-73-8	1,2,3-Trimethylbenzene	120.19	1.58		0.080	0.036
95-63-6	1,2,4-Trimethylbenzene	120.20	1.40		0.080	0.020
108-67-8	1,3,5-Trimethylbenzene	120.20	1.40		0.080	0.022
75-01-4	Vinyl chloride	62.50	1.78		0.040	0.026
1330-20-7	Xylenes, Total	106.17	4.09		0.16	0.024

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	99		60-140

Eurofins Environment Testing America
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RCCVI05-LCS.d
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 05-Sep-2020 08:28:30 ALS Bottle#: 16 Worklist Smp#: 1002
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016496-006
Misc. Info.: P119 80ML
Operator ID: HMT Instrument ID: MR

Method: \\chromfs\Knoxville\ChromData\MR\20200904-16508.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 06-Sep-2020 07:11:26 Calib Date: 29-Aug-2020 00:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1023

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.274	8.274	0.000	95	138971	4.80	4.80	
* 2 1,4-Difluorobenzene	114	10.512	10.512	0.000	94	675656	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.349	15.349	0.000	88	548163	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	16.999	16.999	0.000	93	337639	4.64	4.61	
6 Chlorodifluoromethane	51	3.329	3.329	0.000	98	112062	1.60	1.44	
7 Propene	41	3.335	3.335	0.000	99	57206	1.60	1.55	
8 Dichlorodifluoromethane	85	3.383	3.383	0.000	94	116919	1.60	2.00	
9 Chloromethane	52	3.556	3.556	0.000	59	20570	1.60	1.49	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.561	3.561	0.000	88	131440	1.60	1.61	
11 Acetaldehyde	44	3.696	3.696	0.000	84	167323	8.00	7.71	
12 Vinyl chloride	62	3.712	3.712	0.000	98	75487	1.60	1.78	
13 Butane	43	3.788	3.788	0.000	88	124308	1.60	1.65	
14 Butadiene	54	3.788	3.788	0.000	66	59258	1.60	1.66	
15 Bromomethane	94	4.079	4.079	0.000	95	72871	1.60	1.58	
16 Chloroethane	64	4.214	4.214	0.000	78	33508	1.60	1.54	
17 Ethanol	31	4.327	4.327	0.000	96	299825	8.00	10.7	
18 Vinyl bromide	106	4.489	4.489	0.000	94	66272	1.60	1.46	
19 2-Methylbutane	43	4.537	4.537	0.000	93	101698	1.60	1.74	
20 Trichlorofluoromethane	101	4.737	4.737	0.000	95	182864	1.60	1.61	
21 Acrolein	56	4.748	4.748	0.000	27	22889	1.60	2.11	
22 Acetonitrile	40	4.823	4.823	0.000	94	28228	1.60	1.77	
23 Acetone	58	4.866	4.866	0.000	99	90360	4.80	4.35	
24 Pentane	72	4.952	4.952	0.000	90	11749	1.60	1.77	
25 Isopropyl alcohol	45	4.963	4.963	0.000	97	336585	4.80	6.04	
26 Ethyl ether	31	5.120	5.120	0.000	83	95391	1.60	1.97	
27 1,1-Dichloroethene	96	5.416	5.416	0.000	97	58771	1.60	1.43	
28 Acrylonitrile	53	5.529	5.529	0.000	92	38123	1.60	1.62	
29 2-Methyl-2-propanol	59	5.546	5.546	0.000	95	123401	1.60	1.78	
30 1,1,2-Trichloro-1,2,2-trifluoroe	101	5.589	5.589	0.000	94	133639	1.60	1.50	
31 Methylene Chloride	84	5.756	5.756	0.000	95	50201	1.60	1.48	
32 3-Chloro-1-propene	39	5.767	5.767	0.000	94	62330	1.60	1.67	
33 Carbon disulfide	76	5.912	5.912	0.000	94	163291	1.60	1.51	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
34 trans-1,2-Dichloroethene	96	6.549	6.549	0.000	93	56824	1.60	1.49	
35 2-Methylpentane	43	6.570	6.570	0.000	94	142161	1.60	1.56	
36 Methyl tert-butyl ether	73	6.683	6.683	0.000	94	143210	1.60	1.55	
37 1,1-Dichloroethane	63	6.958	6.958	0.000	98	99317	1.60	1.50	
38 Vinyl acetate	43	7.082	7.082	0.000	99	167475	1.60	1.66	
39 2-Butanone (MEK)	72	7.525	7.525	0.000	96	26623	1.60	1.43	
40 Hexane	56	7.541	7.541	0.000	87	44136	1.60	1.57	
41 Isopropyl ether	45	7.708	7.708	0.000	94	212687	1.60	1.55	
42 cis-1,2-Dichloroethene	96	7.940	7.940	0.000	89	58227	1.60	1.32	
43 Ethyl acetate	43	8.150	8.150	0.000	96	160815	1.60	1.72	
44 Chloroform	83	8.285	8.285	0.000	93	125062	1.60	1.50	
45 Tert-butyl ethyl ether	59	8.382	8.382	0.000	97	171955	1.60	1.52	
46 Tetrahydrofuran	42	8.695	8.695	0.000	90	76133	1.60	1.59	
47 1,1,1-Trichloroethane	97	9.309	9.309	0.000	95	121044	1.60	1.52	
48 1,2-Dichloroethane	62	9.428	9.428	0.000	90	69394	1.60	1.54	
50 Cyclohexane	69	9.919	9.919	0.000	73	25312	1.60	1.52	
49 n-Butanol	31	9.919	9.919	0.000	58	51090	1.60	2.11	
51 Benzene	78	9.924	9.924	0.000	94	171246	1.60	1.45	
52 Carbon tetrachloride	117	9.946	9.946	0.000	88	131980	1.60	1.73	
53 2,3-Dimethylpentane	71	10.059	10.059	0.000	87	37219	1.60	1.44	
54 Thiophene	84	10.215	10.215	0.000	90	97271	1.60	1.43	
55 Isooctane	57	10.733	10.733	0.000	93	269767	1.60	1.43	
56 n-Heptane	71	11.132	11.132	0.000	95	53490	1.60	1.40	
57 1,2-Dichloropropane	63	11.202	11.202	0.000	85	65782	1.60	1.46	
58 Trichloroethene	130	11.240	11.240	0.000	95	81940	1.60	1.40	
59 Dibromomethane	93	11.326	11.326	0.000	89	74319	1.60	1.48	
60 Dichlorobromomethane	83	11.483	11.483	0.000	93	128635	1.60	1.52	
61 1,4-Dioxane	88	11.504	11.504	0.000	76	31800	1.60	1.64	
62 Methyl methacrylate	41	11.596	11.596	0.000	86	84228	1.60	1.57	
63 Methylcyclohexane	83	12.033	12.033	0.000	91	99225	1.60	1.43	
64 4-Methyl-2-pentanone (MIBK)	43	12.469	12.469	0.000	98	176084	1.60	1.62	
65 cis-1,3-Dichloropropene	75	12.518	12.518	0.000	95	91336	1.60	1.51	
66 trans-1,3-Dichloropropene	75	13.235	13.235	0.000	91	76986	1.60	1.52	
67 Toluene	91	13.354	13.354	0.000	93	196935	1.60	1.33	
68 1,1,2-Trichloroethane	83	13.435	13.435	0.000	94	63858	1.60	1.43	
69 2-Hexanone	58	13.834	13.834	0.000	88	64369	1.60	1.44	
70 n-Octane	85	14.071	14.071	0.000	91	55414	1.60	1.35	
71 Chlorodibromomethane	129	14.141	14.141	0.000	94	135541	1.60	1.48	
72 Ethylene Dibromide	107	14.432	14.432	0.000	95	114563	1.60	1.43	
73 Tetrachloroethene	129	14.519	14.519	0.000	90	74036	1.60	1.37	
74 Chlorobenzene	112	15.397	15.397	0.000	94	153148	1.60	1.36	
75 2,3-Dimethylheptane	43	15.435	15.435	0.000	92	228753	1.60	1.52	
76 Ethylbenzene	91	15.694	15.694	0.000	98	259647	1.60	1.39	
77 m-Xylene & p-Xylene	91	15.856	15.856	0.000	96	389429	3.20	2.73	
78 n-Nonane	57	16.293	16.293	0.000	90	118168	1.60	1.36	
79 Bromoform	173	16.298	16.298	0.000	95	142205	1.60	1.43	
80 Styrene	104	16.325	16.325	0.000	96	151835	1.60	1.47	
81 o-Xylene	91	16.384	16.384	0.000	99	200576	1.60	1.36	
82 1,1,2,2-Tetrachloroethane	83	16.713	16.713	0.000	97	177807	1.60	1.48	
83 1,2,3-Trichloropropane	110	16.864	16.864	0.000	89	48871	1.60	1.50	
84 Isopropylbenzene	105	16.977	16.977	0.000	95	294482	1.60	1.40	
85 N-Propylbenzene	120	17.522	17.522	0.000	100	89231	1.60	1.45	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
86 2-Chlorotoluene	126	17.565	17.565	0.000	96	82412	1.60	1.45	
87 4-Ethyltoluene	105	17.684	17.684	0.000	98	293823	1.60	1.39	
88 1,3,5-Trimethylbenzene	120	17.759	17.759	0.000	94	130295	1.60	1.40	
89 Alpha Methyl Styrene	118	17.997	17.997	0.000	91	120515	1.60	1.45	
90 n-Decane	57	18.067	18.067	0.000	84	158571	1.60	1.43	
91 tert-Butylbenzene	119	18.196	18.196	0.000	95	291764	1.60	1.41	
92 1,2,4-Trimethylbenzene	105	18.212	18.212	0.000	93	245985	1.60	1.40	
93 sec-Butylbenzene	105	18.477	18.477	0.000	99	379816	1.60	1.39	
94 1,3-Dichlorobenzene	146	18.482	18.482	0.000	95	198786	1.60	1.50	
95 Benzyl chloride	91	18.563	18.563	0.000	97	203086	1.60	1.55	
96 1,4-Dichlorobenzene	146	18.574	18.574	0.000	96	194234	1.60	1.49	
97 4-Isopropyltoluene	119	18.644	18.644	0.000	97	338973	1.60	1.48	
98 1,2,3-Trimethylbenzene	105	18.692	18.692	0.000	97	251313	1.60	1.58	
99 Butylcyclohexane	83	18.752	18.752	0.000	93	211928	1.60	1.42	
101 1,2-Dichlorobenzene	146	18.940	18.940	0.000	83	196180	1.60	1.42	
100 2,3-Dihydroindene	117	18.940	18.940	0.000	93	256738	1.60	1.39	
102 Indene	116	19.075	19.075	0.000	88	215329	1.60	1.44	
103 n-Butylbenzene	91	19.086	19.086	0.000	97	315254	1.60	1.41	
104 Undecane	57	19.415	19.415	0.000	86	185611	1.60	1.35	
105 1,2-Dibromo-3-Chloropropane	157	19.555	19.555	0.000	87	97186	1.60	1.46	
106 1,2,4,5-Tetramethylbenzene	119	19.857	19.857	0.000	98	307143	1.60	1.46	
107 Dodecane	57	20.472	20.472	0.000	85	166026	1.60	1.35	
108 1,2,4-Trichlorobenzene	180	20.655	20.655	0.000	93	167049	1.60	1.48	
109 Naphthalene	128	20.790	20.790	0.000	99	330030	1.60	1.50	
110 Hexachlorobutadiene	225	21.011	21.011	0.000	93	172438	1.60	1.32	
111 1,2,3-Trichlorobenzene	180	21.076	21.076	0.000	94	159262	1.60	1.43	
112 2-Methylnaphthalene	142	21.820	21.820	0.000	98	118352	1.60	0.9207	
113 1-Methylnaphthalene	142	21.955	21.955	0.000	99	182745	1.60	1.01	
A 116 C8 Range	1	14.060	(14.001-14.109)		0	655628	1.60	1.53	
S 117 Xylenes, Total	100				0		4.80	4.09	
S 118 1,2-Dichloroethene, Total	1				0		3.20	2.82	

Reagents:

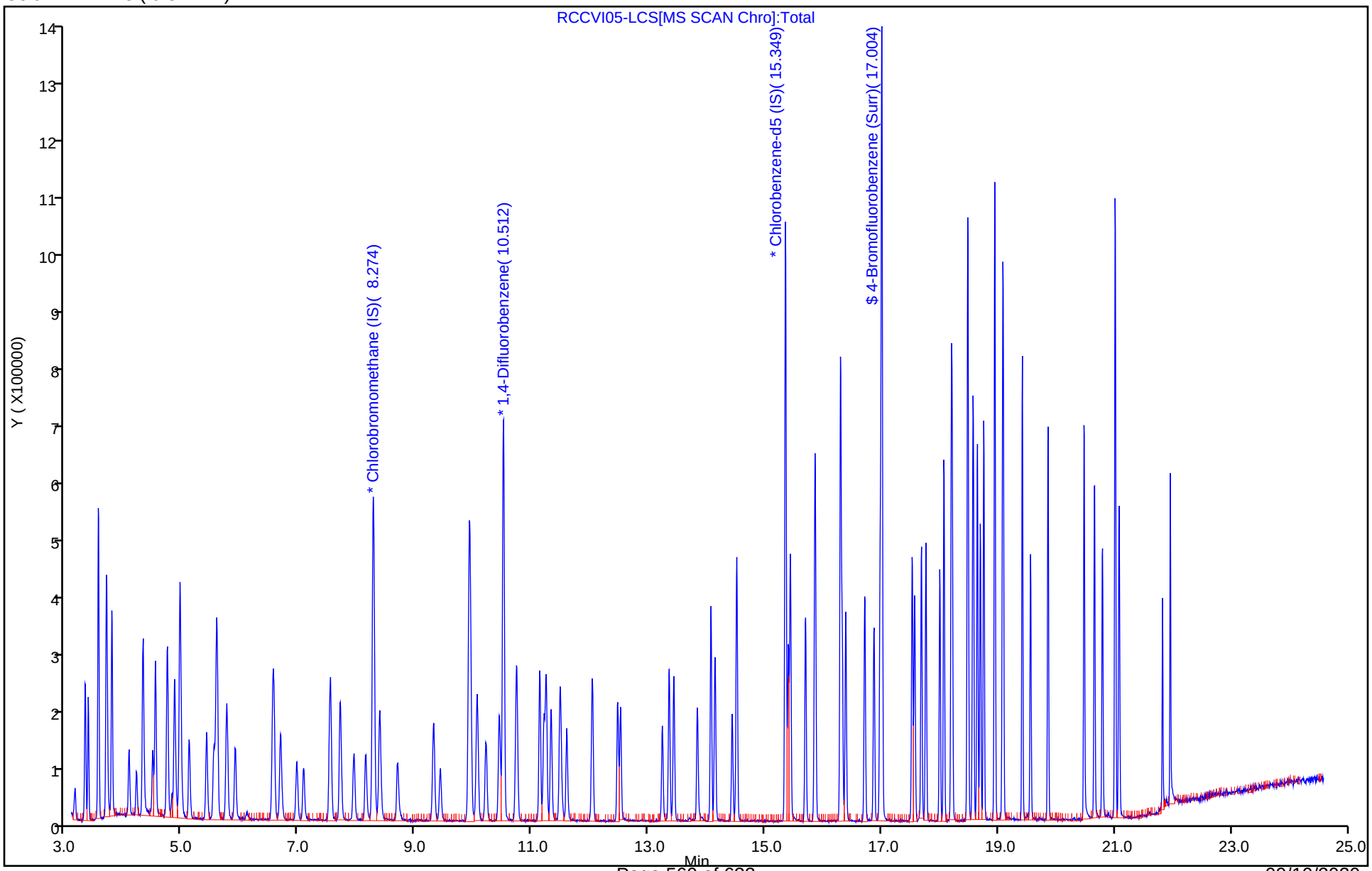
40CV101P_00119	Amount Added: 80.00	Units: ml	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

Report Date: 06-Sep-2020 07:11:28 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins Environment Testing America

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RCCVI05-LCS.d				
Injection Date:	05-Sep-2020 08:28:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	LCS			Worklist Smp#:	1002
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins Environment Testing America
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RCCVI05-LCS.d				
Lims ID:	LCS				
Client ID:					
Sample Type:	LCS				
Inject. Date:	05-Sep-2020 08:28:30	ALS Bottle#:	16	Worklist Smp#:	1002
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016496-006				
Misc. Info.:	P119 80ML				
Operator ID:	HMT	Instrument ID:	MR		
Method:	\\chromfs\Knoxville\ChromData\MR\20200904-16508.b\MR_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	06-Sep-2020 07:11:26	Calib Date:	29-Aug-2020 00:02:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1023				

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	4.61	99.29

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Instrument ID: MR Start Date: 08/28/2020 12:43

Analysis Batch Number: 42222 End Date: 08/29/2020 04:09

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 140-42222/1		08/28/2020 12:43	1	RH287BLK2.D	RTX-5 0.32(mm)
IC 140-42222/3		08/28/2020 14:01	1	RH28IC10X.D	RTX-5 0.32(mm)
IC 140-42222/5		08/28/2020 15:43	1	RH28IC09.D	RTX-5 0.32(mm)
IC 140-42222/7		08/28/2020 17:27	1	RH28IC08.D	RTX-5 0.32(mm)
IC 140-42222/9		08/28/2020 19:11	1	RH28IC01.D	RTX-5 0.32(mm)
IC 140-42222/10		08/28/2020 20:00	1	RH28IC02.D	RTX-5 0.32(mm)
140-19590-A-5 MDLV		08/28/2020 20:00	1		RTX-5 0.32(mm)
IC 140-42222/11		08/28/2020 20:50	1	RH28IC03.D	RTX-5 0.32(mm)
140-19590-A-6 MDLV		08/28/2020 20:50	1		RTX-5 0.32(mm)
IC 140-42222/12		08/28/2020 21:38	1	RH28IC04.D	RTX-5 0.32(mm)
140-19590-A-7 MDLV		08/28/2020 21:38	1		RTX-5 0.32(mm)
IC 140-42222/13		08/28/2020 22:26	1	RH28IC05.D	RTX-5 0.32(mm)
140-19590-A-8 MDLV		08/28/2020 22:26	1		RTX-5 0.32(mm)
IC 140-42222/14		08/28/2020 23:14	1	RH28IC06.D	RTX-5 0.32(mm)
ICIS 140-42222/15		08/29/2020 00:02	1	RH28IC07.D	RTX-5 0.32(mm)
ICV 140-42222/17		08/29/2020 01:37	1	RH28ICV.D	RTX-5 0.32(mm)
ZZZZZ		08/29/2020 04:09	1		RTX-5 0.32(mm)

Eurofins/TestAmerica Knoxville GC/MS Air - Initial Calibration Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 21 & KNOX-MS-0023, Rev 4

Analysis Date:	8/28/20	Instrument:	MR	Chrom WL #:	16425	TALS Batch & Event #	TO14/15: 2588 / 42222	DOD: 2591 / 42225	DOD5: 2589 42223	OHIO: 2590 / 42224

Chrom/Worklist Review	1st	Comments	2nd
1. Re-read each Limit Group [method editor-limit groups]	✓		na
2. Verify LODV in Chrom [method editor -> edit -> MDL]	✓		na
3. Are the reagents and init/final volumes correct and first level "unlock/clear"? (Verify reagents & amt. injected at each level) [WL Sample Reagents Tab vs. Entech]	✓		✓
4. Files linked properly to calibration levels? [Sample List- Lab ID vs. Info]	✓		✓
5. Did BFB meet tune criteria? [F8]	✓		✓
6. Were all standards injected within 24 hr of BFB? [F7]	✓		✓
7. High point checked for saturation and point removed if so? [Chrom]	✓		✓
8. If manual integrations performed, are they properly performed, correct, baseline clearly identified, and correct reason given? [Chrom]	✓		NA
9. RT for each IS ±20 sec avg. RT? [F6 IstdRec]	✓		✓
10. Area for each IS ± 40% avg. area? [F6 IstdRec]	✓		✓
11. Each analyte ± 0.06 RRT of avg. RRT? [F6 - RRT]	✓		✓
12. Elution order checked on isomeric pairs? [Chrom]			
• dichlorodifluoromethane / 1,2-dichlorotetrafluoroethane	✓		✓
• 2-methyl butane / acrolein	✓		✓
• trichlorofluoromethane / 1,1,2-trichlorotrifluoroethane	✓		✓
• vinyl acetate / hexane	✓		✓
• cis- and trans- isomers	✓		✓
• ethyl benzene / m/p-xylene / o-xylene	✓		✓
• n-propylbenzene/4-ethyl toluene/1,3,5-trimethylbenzene/1,2,4-trimethylbenzene/ sec-butylbenzene/1,2,3-trimethylbenzene			✓
• tert-butylbenzene/4-isopropyltoluene	✓		✓
• 1,3- , 1,4- , and 1,2-dichlorobenzene	✓		✓
• 1,2-dimethyl-4-ethylbenzene/1,2,4,5-, 1,2,3,5-, and 1,2,3,4-tetramethylbenzenes	✓	DN ICV	✓
• 1,2,4- and 1,2,3-trichlorobenzenes	✓		✓
• 2-, and 1-methylnaphthalene	✓		✓
13. "Range" analytes & internal standard RIC ID'd correctly, inspected for interferences & proper integration?	✓		✓

MLG Review	TO	DOD	OH	Comments	TO-	DOD	OH
14. Is %RSD for all target analytes ≤ 30%? (with up to 2 compounds with RSD ≤ 40%) 1& 2 methylnaphthalene ≤ 50% [F6 Σ]	✓	✓	✓		✓	✓	✓
15. Were at least 5 levels of each compound analyzed? [F6]	✓	✓	✓		✓	✓	✓
16. Is low level std at or <RL and are the remaining points consec.? [F6]	✓	✓	✓		✓	✓	✓
17. At least 6 consec. points used for quad curves; at least 5 consec. points for linear curves? (Note: Ohio does not allow quad) [F6]	✓	✓	✓		✓	✓	✓
18. If curves were used, is correlation coefficient ≥0.990? [F6]	✓	✓	✓		✓	✓	✓
19. Is the intercept less than the RL for each curve? [F6]	✓	✓			✓	✓	✓
20. For quadratic: is a tangent's slope to the curve entirely positive or negative and continuous. [Cntrl-C, details]	NS	na			✓	NA	na
21. Is low point RSE ≤ 50 %? [F6]	✓	✓	✓		✓	✓	✓
22. Is the second source analysis within limits? [F8 - icv]	✓	✓	✓		✓	✓	✓

Analyst/Date: 8/29/20

2nd Level Reviewer/Date: 8/31/20

TALS Review	TO	DOD	OH	Comments	TO	DOD	OH
23. Upload ICAL	✓				na	na	na
24. Graphics uploaded? [paperclip]	✓	✓	✓		✓	✓	✓
25. All points are in the most recent active calibration event? [Calibration Events –'Fix ICAL linkage' if needed]	✓	✓	✓		✓	✓	✓
26. Runs linked to BFB? [QC Links]	✓	✓	✓		✓	✓	✓
27. Run Checklist and acknowledge findings [F8]	✓	✓	✓		✓	✓	✓
28. If criteria not met, was a NCM generated?					NA		
29. After review in TALS, approve the method in TALS.	na	na	na		✓	✓	✓
30. After verifying TALS is correct, lock method in Chrom <resolve any error issues>	na	na	na		✓	✓	✓
31. Checklist & Entech report scanned, attached & assigned properly?	na	na	na		✓	✓	✓

Analyst/date: 8/29/20

Comments:

2nd Level Reviewer/date: 8/31/20 8/31/20

Comments:

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Instrument ID: MG Start Date: 09/01/2020 16:42

Analysis Batch Number: 42295 End Date: 09/02/2020 08:56

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 140-42295/1		09/01/2020 16:42	1	GI01BFB.D	RTX-5 0.32(mm)
IC 140-42295/3		09/01/2020 18:07	1	GI01IC10.D	RTX-5 0.32(mm)
IC 140-42295/5		09/01/2020 19:43	1	GI01IC09.D	RTX-5 0.32(mm)
IC 140-42295/7		09/01/2020 21:19	1	GI01IC08.D	RTX-5 0.32(mm)
IC 140-42295/9		09/01/2020 22:55	1	GI01IC01.D	RTX-5 0.32(mm)
IC 140-42295/10		09/01/2020 23:39	1	GI01IC02.D	RTX-5 0.32(mm)
140-19589-A-5 MDLV		09/01/2020 23:39	1		RTX-5 0.32(mm)
IC 140-42295/11		09/02/2020 00:24	1	GI01IC03.D	RTX-5 0.32(mm)
140-19589-A-6 MDLV		09/02/2020 00:24	1		RTX-5 0.32(mm)
IC 140-42295/12		09/02/2020 01:08	1	GI01IC04.D	RTX-5 0.32(mm)
140-19589-A-7 MDLV		09/02/2020 01:08	1		RTX-5 0.32(mm)
IC 140-42295/13		09/02/2020 01:52	1	GI01IC05.D	RTX-5 0.32(mm)
140-19589-A-8 MDLV		09/02/2020 01:52	1		RTX-5 0.32(mm)
IC 140-42295/14		09/02/2020 02:38	1	GI01IC06.D	RTX-5 0.32(mm)
ICIS 140-42295/15		09/02/2020 03:27	1	GI01IC07.D	RTX-5 0.32(mm)
ZZZZZ		09/02/2020 07:23	1		RTX-5 0.32(mm)
ZZZZZ		09/02/2020 08:08	1		RTX-5 0.32(mm)
ICV 140-42295/22		09/02/2020 08:56	1	GI01ICVR.D	RTX-5 0.32(mm)

Eurofins/TestAmerica Knoxville GC/MS Air - Initial Calibration Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 21 & KNOX-MS-0023, Rev 4

Analysis Date:	9/1/20	Instrument:	MG	Chrom WL #:	16453	TALS Batch & Event #	TO14/15: 2602 / 42295	DOD: 2603 42296
							DOD: 2605 / 42298	OHIO: 2604 / 42297

Chrom/Worklist Review	1st	Comments	2nd
1. Re-read each Limit Group [method editor-limit groups]	✓		na
2. Verify LODV in Chrom [method editor -> edit -> MDL]	✓		na
3. Are the reagents and init/final volumes correct and first level "unlock/clear"? (Verify reagents & amt. injected at each level) [WL Sample Reagents Tab vs. Entech]	✓		✓
4. Files linked properly to calibration levels? [Sample List- Lab ID vs. Info]	✓		✓
5. Did BFB meet tune criteria? [F8]	✓		✓
6. Were all standards injected within 24 hr of BFB? [F7]	✓		✓
7. High point checked for saturation and point removed if so? [Chrom]	✓		✓
8. If manual integrations performed, are they properly performed, correct, baseline clearly identified, and correct reason given? [Chrom]	✓		NA
9. RT for each IS ±20 sec avg. RT? [F6 IstdRec]	✓		✓
10. Area for each IS ± 40% avg. area? [F6 IstdRec]	✓		✓
11. Each analyte ± 0.06 RRT of avg. RRT? [F6 - RRT]	✓		✓
12. Elution order checked on isomeric pairs? [Chrom]			
• dichlorodifluoromethane / 1,2-dichlorotetrafluoroethane	✓		✓
• 2-methyl butane / acrolein	✓		✓
• trichlorofluoromethane / 1,1,2-trichlorotrifluoroethane	✓		✓
• vinyl acetate / hexane	✓		✓
• cis- and trans- isomers	✓		✓
• ethyl benzene / m/p-xylene / o-xylene	✓		✓
• n-propylbenzene/4-ethyl toluene/1,3,5-trimethylbenzene/1,2,4-trimethylbenzene/ sec-butylbenzene/1,2,3-trimethylbenzene	✓		✓
• tert-butylbenzene/4-isopropyltoluene	✓		✓
• 1,3- , 1,4- , and 1,2-dichlorobenzene	✓		✓
• 1,2-dimethyl-4-ethylbenzene/1,2,4,5-, 1,2,3,5-, and 1,2,3,4-tetramethylbenzenes	N	In ICV	✓
• 1,2,4- and 1,2,3-trichlorobenzenes	✓		✓
• 2-, and 1-methylnaphthalene	✓		✓
13. "Range" analytes & internal standard RIC ID'd correctly, inspected for interferences & proper integration?	✓		✓

MLG Review	TO	DOD	OH	Comments	TO-	DOD	OH
14. Is %RSD for all target analytes ≤ 30%? (with up to 2 compounds with RSD ≤ 40%) 1& 2 methylnaphthalene ≤ 50% [F6 Σ]	✓	✓	✓		✓	✓	✓
15. Were at least 5 levels of each compound analyzed? [F6]	✓	✓	✓		✓	✓	✓
16. Is low level std at or <RL and are the remaining points consec.? [F6]	✓	✓			✓	✓	✓
17. At least 6 consec. points used for quad curves; at least 5 consec. points for linear curves? (Note: Ohio does not allow quad) [F6]	✓	✓	✓		✓	✓	✓
18. If curves were used, is correlation coefficient ≥0.990? [F6]	✓	✓	✓		✓	✓	✓
19. Is the intercept less than the RL for each curve? [F6]	✓	✓	✓		✓	✓	✓
20. For quadratic: is a tangent's slope to the curve entirely positive or negative and continuous. [Cntrl-C, details]	✓	✓	na		✓	✓	na
21. Is low point RSE ≤ 50 %? [F6]	✓	✓	✓		✓	✓	✓
22. Is the second source analysis within limits? [F8 - icv]	✓	✓	✓		✓	✓	✓

Analyst/Date: ✓ 9/2/20 **2nd Level Reviewer/Date:** JB 9/2/20

TALS Review	TO	DOD	OH	Comments	TO	DOD	OH
23. Upload ICAL	✓				na	na	na
24. Graphics uploaded? [paperclip]	✓	✓	✓		✓	✓	✓
25. All points are in the most recent active calibration event? [Calibration Events – 'Fix ICAL linkage' if needed]	✓	✓	✓		✓	✓	✓
26. Runs linked to BFB? [QC Links]	✓	✓	✓		✓	✓	✓
27. Run Checklist and acknowledge findings [F8]	✓	✓	✓		✓	✓	✓
28. If criteria not met, was a NCM generated?	✓	✓	✓		NA →		
29. After review in TALS, approve the method in TALS.	na	na	na		✓	✓	✓
30. After verifying TALS is correct, lock method in Chrom <resolve any error issues>	na	na	na		✓	✓	✓
31. Checklist & Entech report scanned, attached & assigned properly?	na	na	na		✓	✓	✓

Analyst/date: ✓ 9/2/20 **2nd Level Reviewer/date:** JB 9/2/20

Comments: **Comments:**

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Instrument ID: MG Start Date: 09/05/2020 10:56

Analysis Batch Number: 42481 End Date: 09/06/2020 05:22

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 140-42481/1		09/05/2020 10:56	1	GDNUI05S.D	RTX-5 0.32(mm)
CCVIS 140-42481/2		09/05/2020 11:32	1	GLCSI05.D	RTX-5 0.32(mm)
LCS 140-42481/1002		09/05/2020 11:32	1	GLCSI05-LCS.d	RTX-5 0.32(mm)
MB 140-42481/4		09/05/2020 12:59	1	G500BI05.D	RTX-5 0.32(mm)
ZZZZZ		09/05/2020 13:49	1		RTX-5 0.32(mm)
ZZZZZ		09/05/2020 18:27	1		RTX-5 0.32(mm)
ZZZZZ		09/05/2020 19:15	24.76		RTX-5 0.32(mm)
ZZZZZ		09/05/2020 20:02	124.9		RTX-5 0.32(mm)
ZZZZZ		09/05/2020 20:49	5.71		RTX-5 0.32(mm)
ZZZZZ		09/05/2020 21:38	1		RTX-5 0.32(mm)
ZZZZZ		09/05/2020 22:25	1		RTX-5 0.32(mm)
ZZZZZ		09/05/2020 23:11	1		RTX-5 0.32(mm)
ZZZZZ		09/05/2020 23:57	1		RTX-5 0.32(mm)
ZZZZZ		09/06/2020 00:43	1		RTX-5 0.32(mm)
ZZZZZ		09/06/2020 01:32	8.37		RTX-5 0.32(mm)
140-20195-17	IA-081-A-29	09/06/2020 02:17	1	GI05P113.D	RTX-5 0.32(mm)
140-20195-18	IA-100-B-29	09/06/2020 03:04	1.65	GI05P114.D	RTX-5 0.32(mm)
140-20195-19	IA-101-B-29	09/06/2020 03:49	1	GI05P115.D	RTX-5 0.32(mm)
ZZZZZ		09/06/2020 04:32	1.36		RTX-5 0.32(mm)
ZZZZZ		09/06/2020 05:22	1		RTX-5 0.32(mm)

Eurofins/TestAmerica Knoxville GC/MS Air - Batch Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 21 & KNOX-MS-0023, Rev 4

			Routine	DOD	OHIO VAP
Instrument/Date	MG 9/5/20				
CCAL Chrom WL #	16506	CCAL Batch #	42481		
ICAL Chrom WL #	16453	ICAL Batch # / Event #	42298 / 2602	/	/

Chrom Review	1st	If No, why is data reportable?	2nd
1. Are the reagents & init/final volumes correct? (Verify reagents & amt. injected) [WL Sample Reagent Tab]	✓		na
2. Did BFB meet tune criteria? [F8]	✓	☑ [Failed TO-14A, but passes TO-15] 176 @ 94.5	
3. Was the CCAL compared to the most recent & correct ICAL (correct last ICal File batch #/start/end Cal date/time)? [F8]	✓	List Target analytes outside CCV limits: ethanol, butanol, 23DMPent 14DXN, 2hexa 23DMHept 123TMBz	
4. Elution order checked on isomeric pairs? [Chrom]			
• dichlorodifluoromethane / 1,2-dichlorotetrafluoroethane	✓		
• 2-methyl butane / acrolein	✓		
• trichlorofluoromethane / 1,1,2-trichlorotrifluoroethane	✓		
• vinyl acetate / hexane	✓		
• cis- and trans- isomers	✓		
• ethyl benzene / m/p-xylene / o-xylene	✓		
• n-propylbenzene/4-ethyl toluene/1,3,5-trimethylbenzene/1,2,4-trimethylbenzene/sec-butylbenzene/1,2,3-trimethylbenzene	✓		
• tert-butylbenzene/4-isopropyltoluene	✓		
• 1,3- , 1,4- , and 1,2-dichlorobenzene	✓		
• 1,2-dimethyl-4-ethylbenzene/1,2,4,5-, 1,2,3,5-, and 1,2,3,4-tetramethylbenzenes	✓		
• 1,2,4-trichlorobenzene/1,2,3-trichlorobenzene	✓		
• 2-, and 1-methylnaphthalene	✓		
5. "Range" analytes & internal standard RIC ID'd correctly, inspected for interferences & proper integration?	✓		
6. Has the RT been updated to the method?	✓		
Analyst/date GH 9/5/20		**2nd Level Reviewer/date**	
7. Has the vol injected been verified vs Entech & corrected if actual amount differs >5%? [WL Sample Info: init amt = sample amt; final amt = 500 mL]	✓		
8. Do the lab ID, Info 1 and Dilution Factor columns correlate in Chrom? [Sample List - Lab ID vs. Info 1 vs. Dilution]	✓		
9. Can dilution history verified? [Mgmt Report]	✓		
10. Are all analytes present in the system blank < RL? (<1/2 RL for DoD). *If no, list blank ID:*	✓	☐ Method Blank – Report, ND (NCM#_____) ☐ Method Blank – Report, 10X (NCM#_____)	
11. All runs - peaks ID'd correctly and false positives removed?	✓		
12. If manual integrations performed, are they properly performed, baseline clearly identified, and correct reason given?	✓		
13. IS/Surr within limits? *List samples and reason (e.g., 1 thru 5):* [Batch Results IS & SUR Tab] Sample ____ Reason ____ Sample ____ Reason ____	✓	☐ (1) Surrogate – Matrix (NCM#_____) ☐ (2) Surrogate – High, ND (NCM#_____) ☐ (3) ISTD – RA/RA Concurs (NCM#_____) ☐ (4) Surrogate –RX concur, Report both (NCM#_____) ☐ (5) ISTD – Matrix, DL required (NCM#_____)	
14. Samples outside calibration range scheduled for dilution?	✓	☐ ICAL – Range Exceeded; Minimum Dilution	
Chrom Review	1st	**If No, why is data reportable?**	2nd
15. For first analysis that is at a dilution, is highest target analyte >20% cal range? *List samples and reason:* Sample ____ Reason ____ Sample ____ Reason ____	✓	☐ (1) Reporting Limit – Dilution, Matrix (NCM#_____) ☐ (2) Reporting Limit – Dilution, Non-Target (NCM#_____) ☑ (3) Issues with initial collection volume; see DRC.	
16. RIC inspected for proper integration for TPH?	✓		
17. Obvious non-TPH peaks excluded?	✓		
18. Individual TPH peak area < octane high point area?	✓		
ALS Review	1st	**If No, why is data reportable?**	2nd

Eurofins/TestAmerica Knoxville GC/MS Air - Batch Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 21 & KNOX-MS-0023, Rev 4
Page 2 of 2

19. Graphics uploaded? [open one paperclip]	✓		
20. NCM generated if BFB failed TO-14A criteria, but passes TO-15?	✓	□ [Failed TO-14A, but passes TO-15] (NCM# 24976)	
21. Is the %D ≤ 30% for all target analytes? [≤ 50% for 1&2 methylnaphthalene] [Chrom-F8] [TALS-Sample Results Tab]	✓	□ CCV - %D - LCS criteria met (NCM# 24977) □ CCV - %D high - outside criteria, samples ND, Sample IDs Included (NCM#_____)	
22. Undiluted volume analyzed meets the method requirement (200 mL vs. 500 mL)?	✓		na
23. Project & sample special instructions verified?	✓		
24. If samples were Tedlar bags, was the 72 hr HT met? ** Narrate transfer to can.	✓	□ Air Analysis - Air Sample Transfer to Canister (NCM#___)	
25. Sample analyses done within analytical holding time?	✓	□ Holding Time – Received w/Insufficient Time (NCM#____) □ Holding Time – Receipt (NCM#_____)	
26. Did the LCS meet criteria (70-130% with a limited # allowed 60-140% (see table) provisional analyte limit 60-140% with a limited # allowed 50-150%, and no two consecutive MEs). [Sample Results Tab] Note: No LCS required for OH VAP.	✓	□ Marginal Exceedances - Within ME Limits and Random; Report (NCM# ___) 24978 □ LCS/LCSD - %R High (NCM#_____) 123 TMBz - Ok day before WL 16494	
27. Suffixes assigned properly (DL/RE)? [Sample List Tab]	✓		
28. Each job has QC created (BFB, CCV, LCS, MB)? [Sample List Tab]	✓		
29. Analytes over calibration range set to secondary [Conditions Review Tab]	✓		
30. Samples not reported set to 'Acceptable' or 'Rejected'? [Sample Results Tab]	✓		
31. DUP done per 20 samples and are all RPDs within limits? (for target analytes >5x RL, <25% RPD; no criteria for n-butanol) *(If DUP not reported - set to 'Acceptable' for each job)*	✓		
32. Samples linked to proper blank (200 mL or 500 mL)? [QC links]	✓	**500 mL blank ID:** 4 **200 mL blank ID:** 5	
33. Samples linked to job's BFB/CCV/LCS/MB? [QC Links]	✓		
34. Correct ICV linked to each MB? [QC Links]	✓		
35. Were all samples/QC analyzed within 24 hr of BFB? [F7]	✓		
36. If criteria were not met, was a NCM generated, and assigned to proper QC & samples? [Also see Conditions Review Tab]	✓		
37. Run Checklist and acknowledge findings [F8]	✓		
38. Runs set to 1st level review?	✓	Runs set to 2nd level review?	
39. QC checker run and items addressed?	-na-		
40. Checklist & Entech report scanned, attached & assigned properly?	-na-		

Analyst: [signature] **Date:** 9/6/20	**2nd Level Reviewer :** **Date:**
Comments:	**Comments:**
a acc. line 17	
Example Calculation: 20242-A-1 P6	
On-column ppbv x Final Vol (mL)/Entech Initial Vol (mL) x Canister Dilution Log DF	
6.071 x 40 x ~~24.76~~ 124.9 ~~1878.97~~ = 9478 9/6/2020	

MS017r48, 4/08/2020

Eurofins/TestAmerica Knoxville GC/MS Air - Batch Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 20 & KNOX-MS-0023, Rev 4

Instrument/Date	MG 9/5/20		Routine	DOD	OHIO VAP
CCAL Chrom WL #	16506	CCAL Batch #	42481		NA
ICAL Chrom WL #	16453	ICAL Batch # / Event #	42295/2602		42297/2604

Chrom Review	1st	If No, why is data reportable?	2nd
1. Are the reagents & init/final volumes correct? (Verify reagents & amt. injected) [WL Sample Reagent Tab]			na
2. Did BFB meet tune criteria? [F8]		□ [Failed TO-14A, but passes TO-15]	Y
3. Was the CCAL compared to the most recent & correct ICAL (correct last ICal File batch #/start/end Cal date/time)? [F8]		List Target analytes outside CCV limits: _____ _____ _____	N
4. Elution order checked on isomeric pairs? [Chrom]			
• dichlorodifluoromethane / 1,2-dichlorotetrafluoroethane			Y
• 2-methyl butane / acrolein			Y
• trichlorofluoromethane / 1,1,2-trichlorotrifluoroethane			Y
• vinyl acetate / hexane			Y
• cis- and trans- isomers			Y
• ethyl benzene / m/p-xylene / o-xylene			Y
• n-propylbenzene/4-ethyl toluene/1,3,5-trimethylbenzene/1,2,4-trimethylbenzene/sec-butylbenzene/1,2,3-trimethylbenzene			Y
• tert-butylbenzene/4-isopropyltoluene			Y
• 1,3- , 1,4- , and 1,2-dichlorobenzene			Y
• 1,2-dimethyl-4-ethylbenzene/1,2,4,5-, 1,2,3,5-, and 1,2,3,4-tetramethylbenzenes			NA
• 1,2,4-trichlorobenzene/1,2,3-trichlorobenzene			Y
• 2-, and 1-methylnaphthalene			Y
5. "Range" analytes & internal standard RIC ID'd correctly, inspected for interferences & proper integration?			Y
6. Has the RT been updated to the method?			Y
Analyst/date		**2nd Level Reviewer/date LL 9/6/20**	

7. Has the vol injected been verified vs Entech & corrected if actual amount differs >5%? [WL Sample Info: init amt = sample amt; final amt = 500 mL]			Y
8. Do the lab ID, Info 1 and Dilution Factor columns correlate in Chrom? [Sample List - Lab ID vs. Info 1 vs. Dilution]			Y
9. Can dilution history verified? [Mgmt Report]			Y
10. Are all analytes present in the system blank < RL**?** (<1/2 RL for DoD). *If no, list blank ID:*		□ Method Blank – Report, ND (NCM#_____) □ Method Blank – Report, 10X (NCM#_____)	Y
11. All runs - peaks ID'd correctly and false positives removed?			Y
12. If manual integrations performed, are they properly performed, baseline clearly identified, and correct reason given?			Y
13. IS/Surr within limits? *List samples and reason (e.g.,* 1 thru 5*):* [Batch Results IS & SUR Tab] Sample Reason Sample Reason _____ _____ _____ _____ _____ _____ _____ _____		□ (1) Surrogate – Matrix (NCM#_____) □ (2) Surrogate – High, ND (NCM#_____) □ (3) ISTD – RA/RA Concurs (NCM#_____) □ (4) Surrogate –RX concur, Report both (NCM#_____) □ (5) ISTD – Matrix, DL required (NCM#_____)	Y
14. Samples outside calibration range scheduled for dilution?		□ ICAL – Range Exceeded; Minimum Dilution	Y
Chrom Review	**1st**	**If No, why is data reportable?**	**2nd**
15. For first analysis that is at a dilution, is highest target analyte >20% cal range? *List samples and reason:* Sample Reason Sample Reason _____ _____ _____ _____ _____ _____ _____ _____		□ (1) Reporting Limit – Dilution, Matrix (NCM#_____) □ (2) Reporting Limit – Dilution, Non-Target (NCM#_____) □ (3) Issues with initial collection volume; see DRC.	Y
16. RIC inspected for proper integration for TPH?			Y
17. Obvious non-TPH peaks excluded?			Y
18. Individual TPH peak area < octane high point area?			Y

Eurofins/TestAmerica Knoxville GC/MS Air - Batch Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 20 & KNOX-MS-0023, Rev 4

TALS Review	**1st**	**If No, why is data reportable?**	**2nd**
19. Graphics uploaded? [open one paperclip]			**Y**
20. NCM generated if BFB failed TO-14A criteria, but passes TO-15?		□ [Failed TO-14A, but passes TO-15] (NCM#_____)	**Y**
21. Is the %D ≤ 30% for all target analytes? [≤ 50% for 1&2 methylnaphthalene] [Chrom-F8] [TALS-Sample Results Tab]		□ CCV - %D - LCS criteria met (NCM#_____) □ CCV - %D high - outside criteria, samples ND, Sample IDs Included (NCM#_____)	**Y**
22. Undiluted volume analyzed meets the method requirement (200 mL vs. 500 mL)?			**na**
23. Project & sample special instructions verified?			**Y**
24. If samples were Tedlar bags, was the 72 hr HT met? ** Narrate transfer to can.		□ Air Analysis - Air Sample Transfer to Canister (NCM#____)	**NA**
25. Sample analyses done within analytical holding time?		□ Holding Time – Received w/Insufficient Time (NCM#_____) □ Holding Time – Receipt (NCM#_____)	**Y**
26. Did the LCS meet criteria (70-130% with a limited # allowed 60-140% (see table) provisional analyte limit 60-140% with a limited # allowed 50-150%, and no two consecutive MEs). [Sample Results Tab] Note: No LCS required for OH VAP.		□ Marginal Exceedances - Within ME Limits and Random; Report (NCM# ___) □ LCS/LCSD - %R High (NCM#_____)	**Y**
27. Suffixes assigned properly (DL/RE)? [Sample List Tab]			**Y**
28. Each job has QC created (BFB, CCV, LCS, MB)? [Sample List Tab]			**Y**
29. Analytes over calibration range set to secondary [Conditions Review Tab]			**Y**
30. Samples not reported set to 'Acceptable' or 'Rejected'? [Sample Results Tab]			**Y**
31. DUP done per 20 samples and are all RPDs within limits? (for target analytes >5x RL, <25% RPD; no criteria for n-butanol) *(If DUP not reported - set to 'Acceptable' for each job)*			**Y**
32. Samples linked to proper blank (200 mL or 500 mL)? [QC links]		**500 mL blank ID: 4** **200 mL blank ID: 5**	**Y**
33. Samples linked to job's BFB/CCV/LCS/MB? [QC Links]			**Y**
34. Correct ICV linked to each MB? [QC Links]			**Y**
35. Were all samples/QC analyzed within 24 hr of BFB? [F7]			**Y**
36. If criteria were not met, was a NCM generated, and assigned to proper QC & samples? [Also see Conditions Review Tab]			**Y**
37. Run Checklist and acknowledge findings [F8]			**Y**
38. Runs set to 1st level review?		Runs set to 2nd level review?	**Y**
39. QC checker run and items addressed?	**-na-**		**Y**
40. Checklist & Entech report scanned, attached & assigned properly?	**-na-**		**Y**

Analyst:	**Date:**	**2nd Level Reviewer : LL**	**Date: 9/6/20**
Comments:		**Comments:**	
Example Calculation:			
On-column ppbv x Final Vol (mL)/Entech Initial Vol (mL) x Canister Dilution Log DF			

Number of target analytes in LCS	# marginal exceedances of LCS control limits allowed
>90	5
71 - 90	4
51 - 70	3
31 - 50	2
11 - 30	1
< 11	0

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Instrument ID: MR Start Date: 09/05/2020 08:00

Analysis Batch Number: 42483 End Date: 09/06/2020 06:28

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 140-42483/1		09/05/2020 08:00	1	RBFBI05.D	RTX-5 0.32(mm)
CCVIS 140-42483/2		09/05/2020 08:28	1	RCCVI05.D	RTX-5 0.32(mm)
LCS 140-42483/1002		09/05/2020 08:28	1	RCCVI05-LCS.d	RTX-5 0.32(mm)
MB 140-42483/4		09/05/2020 09:47	1	R500BI05.D	RTX-5 0.32(mm)
ZZZZZ		09/05/2020 10:36	1		RTX-5 0.32(mm)
ZZZZZ		09/05/2020 14:33	1.48		RTX-5 0.32(mm)
140-20195-1	IA-018-A-29	09/05/2020 15:23	1.49	RI05P102.D	RTX-5 0.32(mm)
140-20195-2	IA-DUP 3-A-29	09/05/2020 16:12	1	RI05P103.D	RTX-5 0.32(mm)
140-20195-3	IA-138-A-29	09/05/2020 17:01	1	RI05P104.D	RTX-5 0.32(mm)
140-20195-4	IA-174-A-29	09/05/2020 17:51	1	RI05P105.D	RTX-5 0.32(mm)
140-20195-5	IA-093-A-29	09/05/2020 18:41	1	RI05P106.D	RTX-5 0.32(mm)
140-20195-6	IA-015-A-29	09/05/2020 19:30	1	RI05P107.D	RTX-5 0.32(mm)
140-20195-7	IA-078-A-29	09/05/2020 20:22	1.45	RI05P108.D	RTX-5 0.32(mm)
140-20195-8	IA-076-A-29	09/05/2020 21:13	1	RI05P109.D	RTX-5 0.32(mm)
140-20195-9	IA-168-A-29	09/05/2020 22:03	1	RI05P110.D	RTX-5 0.32(mm)
140-20195-10	IA-DUP 4-A-29	09/05/2020 22:54	1.56	RI05P111.D	RTX-5 0.32(mm)
140-20195-11	IA-075-A-29	09/05/2020 23:43	1	RI05P112.D	RTX-5 0.32(mm)
140-20195-12	IA-021-A-29	09/06/2020 00:32	1.41	RI05P113.D	RTX-5 0.32(mm)
140-20195-13	IA-136-A-29	09/06/2020 01:20	1.56	RI05P114.D	RTX-5 0.32(mm)
140-20195-14	IA-117-A-29	09/06/2020 02:07	1	RI05P115.D	RTX-5 0.32(mm)
140-20195-15	IA-079-A-29	09/06/2020 02:55	1.45	RI05P116.D	RTX-5 0.32(mm)
ZZZZZ		09/06/2020 04:31	1		RTX-5 0.32(mm)
140-20195-16	IA-118-A-29	09/06/2020 05:18	1	RI05P201R.D	RTX-5 0.32(mm)
ZZZZZ		09/06/2020 06:28	1		RTX-5 0.32(mm)

Eurofins/TestAmerica Knoxville GC/MS Air - Batch Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 21 & KNOX-MS-0023, Rev 4

Instrument/Date	MR 9/5/20		Routine	DOD	OHIO VAP
CCAL Chrom WL #	16508	CCAL Batch #	42483		
ICAL Chrom WL #	16425	ICAL Batch # / Event #	42222 / 2588	/	/

Chrom Review	1st	If No, why is data reportable?	2nd
1. Are the reagents & init/final volumes correct? (Verify reagents & amt. injected) [WL Sample Reagent Tab]	✓		na
2. Did BFB meet tune criteria? [F8]	✓	□ [Failed TO-14A, but passes TO-15]	
3. Was the CCAL compared to the most recent & correct ICAL (correct last ICal File batch #/start/end Cal date/time)? [F8]	✓	List Target analytes outside CCV limits: Ethanol Acrolein, n-hex	
4. Elution order checked on isomeric pairs? [Chrom]			
• dichlorodifluoromethane / 1,2-dichlorotetrafluoroethane	✓		
• 2-methyl butane / acrolein	✓		
• trichlorofluoromethane / 1,1,2-trichlorotrifluoroethane	✓		
• vinyl acetate / hexane	✓		
• cis- and trans- isomers	✓		
• ethyl benzene / m/p-xylene / o-xylene	✓		
• n-propylbenzene/4-ethyl toluene/1,3,5-trimethylbenzene/1,2,4-trimethylbenzene/sec-butylbenzene/1,2,3-trimethylbenzene	✓		
• tert-butylbenzene/4-isopropyltoluene	✓		
• 1,3- , 1,4- , and 1,2-dichlorobenzene	✓		
• 1,2-dimethyl-4-ethylbenzene/1,2,4,5-, 1,2,3,5-, and 1,2,3,4-tetramethylbenzenes	NA		
• 1,2,4-trichlorobenzene/1,2,3-trichlorobenzene	✓		
• 2-, and 1-methylnaphthalene	✓		
5. "Range" analytes & internal standard RIC ID'd correctly, inspected for interferences & proper integration?	NC		
6. Has the RT been updated to the method?			
Analyst/date	9/5/20	**2nd Level Reviewer/date**	

7. Has the vol injected been verified vs Entech & corrected if actual amount differs >5%? [WL Sample Info: init amt = sample amt; final amt = 500 mL]	✓		
8. Do the lab ID, Info 1 and Dilution Factor columns correlate in Chrom? [Sample List - Lab ID vs. Info 1 vs. Dilution]	✓		
9. Can dilution history verified? [Mgmt Report]	✓		
10. Are all analytes present in the system blank < RL? (<1/2 RL for DoD). *If no, list blank ID:*	✓	□ Method Blank – Report, ND (NCM#_____) □ Method Blank – Report, 10X (NCM#_____)	
11. All runs - peaks ID'd correctly and false positives removed?	✓		
12. If manual integrations performed, are they properly performed, baseline clearly identified, and correct reason given?	✓		
13. IS/Surr within limits? *List samples and reason (e.g., 1 thru 5):* [Batch Results IS & SUR Tab] Sample Reason Sample Reason	✓	□ (1) Surrogate – Matrix (NCM#_____) □ (2) Surrogate – High, ND (NCM#_____) □ (3) ISTD – RA/RA Concurs (NCM#_____) □ (4) Surrogate –RX concur, Report both (NCM#_____) □ (5) ISTD – Matrix, DL required (NCM#_____)	
14. Samples outside calibration range scheduled for dilution?	✓	□ ICAL – Range Exceeded; Minimum Dilution	

Chrom Review	1st	If No, why is data reportable?	2nd
15. For first analysis that is at a dilution, is highest target analyte >20% cal range? *List samples and reason:* Sample Reason Sample Reason	✓	□ (1) Reporting Limit – Dilution, Matrix (NCM#_____) □ (2) Reporting Limit – Dilution, Non-Target (NCM#_____) □ (3) Issues with initial collection volume; see DRC.	
16. RIC inspected for proper integration for TPH?	NA		
17. Obvious non-TPH peaks excluded?	✓		
18. Individual TPH peak area < octane high point area?	✓		

TALS Review	1st	If No, why is data reportable?	2nd

Eurofins/TestAmerica Knoxville GC/MS Air - Batch Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 21 & KNOX-MS-0023, Rev 4

19. Graphics uploaded? [open one paperclip]	✓		
20. NCM generated if BFB failed TO-14A criteria, but passes TO-15?	✓	□ [Failed TO-14A, but passes TO-15] (NCM#)	
21. Is the %D ≤ 30% for all target analytes? [≤ 50% for 1&2 methylnaphthalene] [Chrom-F8] [TALS-Sample Results Tab]	✓	□ CCV - %D - LCS criteria met (NCM# 24975) □ CCV - %D high - outside criteria, samples ND, Sample IDs Included (NCM# Acetone)	
22. Undiluted volume analyzed meets the method requirement (200 mL vs. 500 mL)?	✓		na
23. Project & sample special instructions verified?	✓		
24. If samples were Tedlar bags, was the 72 hr HT met? ** Narrate transfer to can.	na	□ Air Analysis - Air Sample Transfer to Canister (NCM#___)	
25. Sample analyses done within analytical holding time?	✓	□ Holding Time – Received w/Insufficient Time (NCM#___) □ Holding Time – Receipt (NCM#___)	
26. Did the LCS meet criteria (70-130% with a limited # allowed 60-140% (see table) provisional analyte limit 60-140% with a limited # allowed 50-150%, and no two consecutive MEs). [Sample Results Tab] Note: No LCS required for OH VAP.	✓	□ Marginal Exceedances - Within ME Limits and Random; Report (NCM# ___) □ LCS/LCSD - %R High (NCM#___)	
27. Suffixes assigned properly (DL/RE)? [Sample List Tab]	✓		
28. Each job has QC created (BFB, CCV, LCS, MB)? [Sample List Tab]	✓		
29. Analytes over calibration range set to secondary [Conditions Review Tab]	✓		
30. Samples not reported set to 'Acceptable' or 'Rejected'? [Sample Results Tab]	✓		
31. DUP done per 20 samples and are all RPDs within limits? (for target analytes >5x RL, <25% RPD; no criteria for n-butanol) *(If DUP not reported - set to 'Acceptable' for each job)*	✓		
32. Samples linked to proper blank (200 mL or 500 mL)? [QC links]	✓	**500 mL blank ID:** 4 **200 mL blank ID:**	
33. Samples linked to job's BFB/CCV/LCS/MB? [QC Links]	✓		
34. Correct ICV linked to each MB? [QC Links]	✓		
35. Were all samples/QC analyzed within 24 hr of BFB? [F7]	✓		
36. If criteria were not met, was a NCM generated, and assigned to proper QC & samples? [Also see Conditions Review Tab]	✓		
37. Run Checklist and acknowledge findings [F8]	✓		
38. Runs set to 1st level review?	✓	Runs set to 2nd level review?	
39. QC checker run and items addressed?	-na-		
40. Checklist & Entech report scanned, attached & assigned properly?	-na-		

Analyst:	Date: 9/6/20	2nd Level Reviewer :	Date:
Comments:		Comments:	

Example Calculation: 20195-A-2 TLO

On-column ppbv x Final Vol (mL)/Entech Initial Vol (mL) x Canister Dilution Log DF

0.2167 X 100 X 1 = 1.09

Eurofins/TestAmerica Knoxville GC/MS Air - Batch Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 20 & KNOX-MS-0023, Rev 4

Instrument/Date	MR 9/5/20		Routine	DOD	OHIO VAP
CCAL Chrom WL #	16508	CCAL Batch #	42483		
ICAL Chrom WL #	16425	ICAL Batch # / Event #	42222/2588		

Chrom Review	1st	If No, why is data reportable?	2nd
1. Are the reagents & init/final volumes correct? (Verify reagents & amt. injected) [WL Sample Reagent Tab]			na
2. Did BFB meet tune criteria? [F8]		□ [Failed TO-14A, but passes TO-15]	Y
3. Was the CCAL compared to the most recent & correct ICAL (correct last ICal File batch #/start/end Cal date/time)? [F8]		List Target analytes outside CCV limits: _____ _____ _____	Y
4. Elution order checked on isomeric pairs? [Chrom]			
• dichlorodifluoromethane / 1,2-dichlorotetrafluoroethane			Y
• 2-methyl butane / acrolein			Y
• trichlorofluoromethane / 1,1,2-trichlorotrifluoroethane			Y
• vinyl acetate / hexane			Y
• cis- and trans- isomers			Y
• ethyl benzene / m/p-xylene / o-xylene			Y
• n-propylbenzene/4-ethyl toluene/1,3,5-trimethylbenzene/1,2,4-trimethylbenzene/sec-butylbenzene/1,2,3-trimethylbenzene			Y
• tert-butylbenzene/4-isopropyltoluene			Y
• 1,3- , 1,4- , and 1,2-dichlorobenzene			Y
• 1,2-dimethyl-4-ethylbenzene/1,2,4,5-, 1,2,3,5-, and 1,2,3,4-tetramethylbenzenes			NA
• 1,2,4-trichlorobenzene/1,2,3-trichlorobenzene			Y
• 2-, and 1-methylnaphthalene			Y
5. "Range" analytes & internal standard RIC ID'd correctly, inspected for interferences & proper integration?			NA
6. Has the RT been updated to the method?			Y
Analyst/date		**2nd Level Reviewer/date LL 9/7/20**	

7. Has the vol injected been verified vs Entech & corrected if actual amount differs >5%? [WL Sample Info: init amt = sample amt; final amt = 500 mL]			Y
8. Do the lab ID, Info 1 and Dilution Factor columns correlate in Chrom? [Sample List - Lab ID vs. Info 1 vs. Dilution]			Y
9. Can dilution history verified? [Mgmt Report]			Y
10. Are all analytes present in the system blank < RL**?** (<1/2 RL for DoD). *If no, list blank ID:*		□ Method Blank – Report, ND (NCM#_____) □ Method Blank – Report, 10X (NCM#_____)	Y
11. All runs - peaks ID'd correctly and false positives removed?			Y
12. If manual integrations performed, are they properly performed, baseline clearly identified, and correct reason given?			Y
13. IS/Surr within limits? *List samples and reason (e.g.,* 1 thru 5*):* [Batch Results IS & SUR Tab] Sample Reason Sample Reason _____ _____ _____ _____ _____ _____ _____ _____		□ (1) Surrogate – Matrix (NCM#_____) □ (2) Surrogate – High, ND (NCM#_____) □ (3) ISTD – RA/RA Concurs (NCM#_____) □ (4) Surrogate –RX concur, Report both (NCM#_____) □ (5) ISTD – Matrix, DL required (NCM#_____)	Y
14. Samples outside calibration range scheduled for dilution?		□ ICAL – Range Exceeded; Minimum Dilution	Y
Chrom Review	**1st**	**If No, why is data reportable?**	**2nd**
15. For first analysis that is at a dilution, is highest target analyte >20% cal range? *List samples and reason:* Sample Reason Sample Reason _____ _____ _____ _____ _____ _____ _____ _____		□ (1) Reporting Limit – Dilution, Matrix (NCM#_____) □ (2) Reporting Limit – Dilution, Non-Target (NCM#_____) □ (3) Issues with initial collection volume; see DRC.	Y
16. RIC inspected for proper integration for TPH?			NA
17. Obvious non-TPH peaks excluded?			NA
18. Individual TPH peak area < octane high point area?			NA

Eurofins/TestAmerica Knoxville GC/MS Air - Batch Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 20 & KNOX-MS-0023, Rev 4

TALS Review	**1st**	**If No, why is data reportable?**	**2nd**
19. Graphics uploaded? [open one paperclip]			**Y**
20. NCM generated if BFB failed TO-14A criteria, but passes TO-15?		□ [Failed TO-14A, but passes TO-15] (NCM#_____)	**NA**
21. Is the %D ≤ 30% for all target analytes? [≤ 50% for 1&2 methylnaphthalene] [Chrom-F8] [TALS-Sample Results Tab]		□ CCV - %D - LCS criteria met (NCM#_____) □ CCV - %D high - outside criteria, samples ND, Sample IDs Included (NCM#_____)	**Y**
22. Undiluted volume analyzed meets the method requirement (200 mL vs. 500 mL)?			**na**
23. Project & sample special instructions verified?			**Y**
24. If samples were Tedlar bags, was the 72 hr HT met? ** Narrate transfer to can.		□ Air Analysis - Air Sample Transfer to Canister (NCM#____)	**NA**
25. Sample analyses done within analytical holding time?		□ Holding Time – Received w/Insufficient Time (NCM#_____) □ Holding Time – Receipt (NCM#_____)	**Y**
26. Did the LCS meet criteria (70-130% with a limited # allowed 60-140% (see table) provisional analyte limit 60-140% with a limited # allowed 50-150%, and no two consecutive MEs). [Sample Results Tab] Note: No LCS required for OH VAP.		□ Marginal Exceedances - Within ME Limits and Random; Report (NCM# ___) □ LCS/LCSD - %R High (NCM#_____)	**Y**
27. Suffixes assigned properly (DL/RE)? [Sample List Tab]			**Y**
28. Each job has QC created (BFB, CCV, LCS, MB)? [Sample List Tab]			**Y**
29. Analytes over calibration range set to secondary [Conditions Review Tab]			**Y**
30. Samples not reported set to 'Acceptable' or 'Rejected'? [Sample Results Tab]			**Y**
31. DUP done per 20 samples and are all RPDs within limits? (for target analytes >5x RL, <25% RPD; no criteria for n-butanol) *(If DUP not reported - set to 'Acceptable' for each job)*		**LCSD**	**Y**
32. Samples linked to proper blank (200 mL or 500 mL)? [QC links]		**500 mL blank ID: ___4** **200 mL blank ID: ___NA____**	**Y**
33. Samples linked to job's BFB/CCV/LCS/MB? [QC Links]			**Y**
34. Correct ICV linked to each MB? [QC Links]			**Y**
35. Were all samples/QC analyzed within 24 hr of BFB? [F7]			**Y**
36. If criteria were not met, was a NCM generated, and assigned to proper QC & samples? [Also see Conditions Review Tab]			**Y**
37. Run Checklist and acknowledge findings [F8]			**Y**
38. Runs set to 1st level review?		Runs set to 2nd level review?	**Y**
39. QC checker run and items addressed?	**-na-**		**Y**
40. Checklist & Entech report scanned, attached & assigned properly?	**-na-**		**Y**

Number of target analytes in LCS | # marginal exceedances of LCS control limits allowed

Number of target analytes in LCS	# marginal exceedances of LCS control limits allowed
>90	5
71 - 90	4
51 - 70	3
31 - 50	2
11 - 30	1
< 11	0

Analyst:	**Date:**	**2nd Level Reviewer : LL**	**Date: 9/7/20**
Comments:		**Comments:**	
Example Calculation:			
On-column ppbv x Final Vol (mL)/Entech Initial Vol (mL) x Canister Dilution Log DF			

AIR - GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Knoxvill Job No.: 140-20195-1

SDG No.:

Batch Number: 42481 Batch Start Date: 09/05/20 10:56 Batch Analyst: Taj, Holly M

Batch Method: TO 15 LL Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	InitialPressure	FinalPressure	40CV101S 00123	40MXBFB 00001
BFB 140-42481/1		TO 15 LL		500 mL	500 mL	1	1		40 mL
CCVIS 140-42481/2		TO 15 LL		500 mL	500 mL	1	1	100 mL	
MB 140-42481/4		TO 15 LL		500 mL	500 mL	1	1		
140-20195-A-17	IA-081-A-29	TO 15 LL	T	100 mL	500 mL	1	1		
140-20195-A-18	IA-100-B-29	TO 15 LL	T	165 mL	500 mL	1	1		
140-20195-A-19	IA-101-B-29	TO 15 LL	T	100 mL	500 mL	1	1		
LCS 140-42481/1002		TO 15 LL		500 mL	500 mL	1	1	100 mL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	40MXISSUR 00001					
BFB 140-42481/1		TO 15 LL							
CCVIS 140-42481/2		TO 15 LL		40 mL					
MB 140-42481/4		TO 15 LL		40 mL					
140-20195-A-17	IA-081-A-29	TO 15 LL	T	40 mL					
140-20195-A-18	IA-100-B-29	TO 15 LL	T	40 mL					
140-20195-A-19	IA-101-B-29	TO 15 LL	T	40 mL					
LCS 140-42481/1002		TO 15 LL		40 mL					

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

AIR - GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Knoxvill Job No.: 140-20195-1

SDG No.:

Batch Number: 42483 Batch Start Date: 09/05/20 08:00 Batch Analyst: Taj, Holly M

Batch Method: TO 15 LL Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	InitialPressure	FinalPressure	40CV101P 00119	40MXBFB 00001
BFB 140-42483/1		TO 15 LL		500 mL	500 mL	1	1		40 mL
CCVIS 140-42483/2		TO 15 LL		500 mL	500 mL	1	1	80 mL	
MB 140-42483/4		TO 15 LL		500 mL	500 mL	1	1		
140-20195-A-1	IA-018-A-29	TO 15 LL	T	149 mL	500 mL	1	1		
140-20195-A-2	IA-DUP 3-A-29	TO 15 LL	T	100 mL	500 mL	1	1		
140-20195-A-3	IA-138-A-29	TO 15 LL	T	100 mL	500 mL	1	1		
140-20195-A-4	IA-174-A-29	TO 15 LL	T	100 mL	500 mL	1	1		
140-20195-A-5	IA-093-A-29	TO 15 LL	T	100 mL	500 mL	1	1		
140-20195-A-6	IA-015-A-29	TO 15 LL	T	100 mL	500 mL	1	1		
140-20195-A-7	IA-078-A-29	TO 15 LL	T	145 mL	500 mL	1	1		
140-20195-A-8	IA-076-A-29	TO 15 LL	T	100 mL	500 mL	1	1		
140-20195-A-9	IA-168-A-29	TO 15 LL	T	100 mL	500 mL	1	1		
140-20195-A-10	IA-DUP 4-A-29	TO 15 LL	T	156 mL	500 mL	1	1		
140-20195-A-11	IA-075-A-29	TO 15 LL	T	100 mL	500 mL	1	1		
140-20195-A-12	IA-021-A-29	TO 15 LL	T	141 mL	500 mL	1	1		
140-20195-A-13	IA-136-A-29	TO 15 LL	T	156 mL	500 mL	1	1		
140-20195-A-14	IA-117-A-29	TO 15 LL	T	100 mL	500 mL	1	1		
140-20195-A-15	IA-079-A-29	TO 15 LL	T	145 mL	500 mL	1	1		
140-20195-A-16	IA-118-A-29	TO 15 LL	T	100 mL	500 mL	1	1		
LCS 140-42483/1002		TO 15 LL		500 mL	500 mL	1	1	80 mL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	40MXISSUR 00001					
BFB 140-42483/1		TO 15 LL							
CCVIS 140-42483/2		TO 15 LL		40 mL					
MB 140-42483/4		TO 15 LL		40 mL					
140-20195-A-1	IA-018-A-29	TO 15 LL	T	40 mL					
140-20195-A-2	IA-DUP 3-A-29	TO 15 LL	T	40 mL					
140-20195-A-3	IA-138-A-29	TO 15 LL	T	40 mL					
140-20195-A-4	IA-174-A-29	TO 15 LL	T	40 mL					

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

AIR - GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Knoxvill Job No.: 140-20195-1

SDG No.:

Batch Number: 42483 Batch Start Date: 09/05/20 08:00 Batch Analyst: Taj, Holly M

Batch Method: TO 15 LL Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	40MXISSUR 00001					
140-20195-A-5	IA-093-A-29	TO 15 LL	T	40 mL					
140-20195-A-6	IA-015-A-29	TO 15 LL	T	40 mL					
140-20195-A-7	IA-078-A-29	TO 15 LL	T	40 mL					
140-20195-A-8	IA-076-A-29	TO 15 LL	T	40 mL					
140-20195-A-9	IA-168-A-29	TO 15 LL	T	40 mL					
140-20195-A-10	IA-DUP 4-A-29	TO 15 LL	T	40 mL					
140-20195-A-11	IA-075-A-29	TO 15 LL	T	40 mL					
140-20195-A-12	IA-021-A-29	TO 15 LL	T	40 mL					
140-20195-A-13	IA-136-A-29	TO 15 LL	T	40 mL					
140-20195-A-14	IA-117-A-29	TO 15 LL	T	40 mL					
140-20195-A-15	IA-079-A-29	TO 15 LL	T	40 mL					
140-20195-A-16	IA-118-A-29	TO 15 LL	T	40 mL					
LCS 140-42483/1002		TO 15 LL		40 mL					

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Summa Canister Dilution Worksheet

Client: Tetra Tech, Inc.
Project/Site: Middle River - MRC

Job No.: 140-20195-1

Lab Sample ID	Canister Volume (L)	Preadjusted Pressure ("Hg)	Preadjusted Pressure (atm)	Preadjusted Volume (L)	Adjusted Pressure (psig)	Adjusted Pressure (atm)	Adjusted Volume (L)	Initial Volume (mL)	Dilution Factor	Final Dilution Factor	Pressure Gauge ID	Date	Analyst Initals
140-20195-1	1	-8.4	0.72	0.72	1.1	1.07	1.07		1.49	1.49	G5	09/02/20 15:21	BRS
140-20195-7	1	-7.9	0.74	0.74	1.0	1.07	1.07		1.45	1.45	G5	09/02/20 15:24	BRS
140-20195-10	1	-9.5	0.68	0.68	1.0	1.07	1.07		1.56	1.56	G5	09/02/20 15:24	BRS
140-20195-12	1	-7.0	0.77	0.77	1.2	1.08	1.08		1.41	1.41	G5	09/02/20 15:51	BRS
140-20195-13	1	-9.5	0.68	0.68	1.0	1.07	1.07		1.56	1.56	G5	09/02/20 15:52	BRS
140-20195-15	1	-7.8	0.74	0.74	1.1	1.07	1.07		1.45	1.45	G5	09/02/20 15:52	BRS
140-20195-18	1	-10.5	0.65	0.65	1.0	1.07	1.07		1.65	1.65	G5	09/02/20 15:58	BRS

Formulae:

Preadjusted Volume (L) = (Preadjusted Pressure ("Hg) + 29.92 "Hg * Vol L) / 29.92 "Hg
Adjusted Volume (L) = (Adjusted Pressure (psig) + 14.7 psig * Vol L) / 14.7 psig
Dilution Factor = Adjusted Volume (L) / Preadjusted Volume (L)

Where:

29.92 "Hg = Standard atmospheric pressure in inches of Mercury (“Hg)
14.7 psig = Standard atmospheric pressure in pounds per square inch gauge (psig)

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19745-1

SDG No.:

Client Sample ID: 11712 Lab Sample ID: 140-19745-1

Matrix: Air Lab File ID: RG20LOT01.D

Analysis Method: TO-15 Date Collected: 07/17/2020 16:00

Sample wt/vol: 200(mL) Date Analyzed: 07/20/2020 16:36

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 41174 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	ND		0.20	
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.20	
79-00-5	1,1,2-Trichloroethane	ND		0.20	
76-13-1	1,1,2-Trichlorotrifluoroethane	ND		0.20	
75-34-3	1,1-Dichloroethane	ND		0.20	
75-35-4	1,1-Dichloroethene	ND		0.20	
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	
96-18-4	1,2,3-Trichloropropane	ND		0.50	
526-73-8	1,2,3-Trimethylbenzene	ND		0.20	
95-93-2	1,2,4,5-Tetramethylbenzene	ND		0.20	
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	
95-63-6	1,2,4-Trimethylbenzene	ND		0.20	
96-12-8	1,2-Dibromo-3-Chloropropane	ND		0.40	
106-93-4	1,2-Dibromoethane	ND		0.20	
95-50-1	1,2-Dichlorobenzene	ND		0.40	
107-06-2	1,2-Dichloroethane	ND		0.20	
78-87-5	1,2-Dichloropropane	ND		0.20	
76-14-2	1,2-Dichlorotetrafluoroethane	ND		0.20	
108-67-8	1,3,5-Trimethylbenzene	ND		0.20	
106-99-0	1,3-Butadiene	ND		0.40	
541-73-1	1,3-Dichlorobenzene	ND		0.20	
106-46-7	1,4-Dichlorobenzene	ND		0.20	
123-91-1	1,4-Dioxane	ND		0.40	
71-36-3	1-Butanol	ND		2.0	
90-12-0	1-Methylnaphthalene	ND		2.5	
540-84-1	2,2,4-Trimethylpentane	ND		0.40	
565-59-3	2,3-Dimethylpentane	ND		0.20	
78-93-3	2-Butanone	ND		1.0	
95-49-8	2-Chlorotoluene	ND		0.40	
591-78-6	2-Hexanone	ND		0.40	
78-78-4	2-Methylbutane	ND		0.50	
91-57-6	2-Methylnaphthalene	ND		2.5	
107-83-5	2-Methylpentane	ND		0.20	
107-05-1	3-Chloropropene	ND		0.20	
622-96-8	4-Ethyltoluene	ND		0.40	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		1.0	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19745-1

SDG No.:

Client Sample ID: 11712 Lab Sample ID: 140-19745-1

Matrix: Air Lab File ID: RG20LOT01.D

Analysis Method: TO-15 Date Collected: 07/17/2020 16:00

Sample wt/vol: 200(mL) Date Analyzed: 07/20/2020 16:36

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 41174 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
67-64-1	Acetone	ND		7.5	
75-05-8	Acetonitrile	ND		1.0	
107-02-8	Acrolein	ND		1.0	
107-13-1	Acrylonitrile	ND		2.0	
98-83-9	Alpha Methyl Styrene	ND		0.40	
71-43-2	Benzene	ND		0.20	
100-44-7	Benzyl chloride	ND		0.40	
75-27-4	Bromodichloromethane	ND		0.20	
75-25-2	Bromoform	ND		0.20	
74-83-9	Bromomethane	ND		0.20	
106-97-8	Butane	ND		1.0	
75-15-0	Carbon disulfide	ND		0.40	
56-23-5	Carbon tetrachloride	ND		0.20	
108-90-7	Chlorobenzene	ND		0.20	
75-45-6	Chlorodifluoromethane	ND		0.20	
75-00-3	Chloroethane	ND		0.20	
67-66-3	Chloroform	ND		0.20	
74-87-3	Chloromethane	ND		1.0	
156-59-2	cis-1,2-Dichloroethene	ND		0.20	
10061-01-5	cis-1,3-Dichloropropene	ND		0.40	
98-82-8	Cumene	ND		0.40	
110-82-7	Cyclohexane	ND		0.40	
124-48-1	Dibromochloromethane	ND		0.20	
74-95-3	Dibromomethane	ND		0.40	
75-71-8	Dichlorodifluoromethane	ND		0.20	
64-17-5	Ethanol	ND		5.0	
141-78-6	Ethyl acetate	ND		2.0	
60-29-7	Ethyl ether	ND		2.0	
100-41-4	Ethylbenzene	ND		0.20	
87-68-3	Hexachlorobutadiene	ND		1.0	
110-54-3	Hexane	ND		0.40	
496-11-7	Indane	ND		0.20	
95-13-6	Indene	ND		0.40	
67-63-0	Isopropyl alcohol	ND		1.2	
179601-23-1	m&p-Xylene	ND		0.20	
80-62-6	Methyl methacrylate	ND		0.40	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19745-1

SDG No.:

Client Sample ID: 11712 Lab Sample ID: 140-19745-1

Matrix: Air Lab File ID: RG20LOT01.D

Analysis Method: TO-15 Date Collected: 07/17/2020 16:00

Sample wt/vol: 200(mL) Date Analyzed: 07/20/2020 16:36

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 41174 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
1634-04-4	Methyl tert-butyl ether	ND		1.0	
108-87-2	Methylcyclohexane	ND		0.20	
75-09-2	Methylene Chloride	ND		1.0	
91-20-3	Naphthalene	ND		0.40	
104-51-8	n-Butylbenzene	ND		0.40	
124-18-5	n-Decane	ND		1.0	
112-40-3	n-Dodecane	ND		1.0	
142-82-5	n-Heptane	ND		0.40	
111-84-2	n-Nonane	ND		0.40	
111-65-9	n-Octane	ND		0.40	
103-65-1	N-Propylbenzene	ND		0.40	
1120-21-4	n-Undecane	ND		1.0	
95-47-6	o-Xylene	ND		0.20	
99-87-6	p-Cymene	ND		0.20	
109-66-0	Pentane	ND		2.5	
115-07-1	Propene	ND		2.5	
135-98-8	sec-Butylbenzene	ND		0.40	
100-42-5	Styrene	ND		0.20	
75-65-0	tert-Butanol	ND		1.0	
98-06-6	tert-Butylbenzene	ND		0.40	
127-18-4	Tetrachloroethene	ND		0.20	
109-99-9	Tetrahydrofuran	ND		1.0	
110-02-1	Thiophene	ND		0.20	
108-88-3	Toluene	ND		1.0	
156-60-5	trans-1,2-Dichloroethene	ND		0.20	
10061-02-6	trans-1,3-Dichloropropene	ND		0.20	
79-01-6	Trichloroethene	ND		0.20	
75-69-4	Trichlorofluoromethane	ND		0.20	
108-05-4	Vinyl acetate	ND		1.0	
593-60-2	Vinyl bromide	ND		0.20	
75-01-4	Vinyl chloride	ND		0.40	

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MR\20200717-16051.b\RG20LOT01.D
Lims ID: 140-19745-A-1
Client ID: 11712
Sample Type: Client
Inject. Date: 20-Jul-2020 16:36:30 ALS Bottle#: 1 Worklist Smp#: 4
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016012-004
Misc. Info.: 11712
Operator ID: HMT Instrument ID: MR

Method: \\chromfs\Knoxville\ChromData\MR\20200717-16051.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 21-Jul-2020 12:25:51 Calib Date: 14-May-2020 00:39:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MR\20200513-15465.b\RE13TEST.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1020

First Level Reviewer: khachitpongpanits Date: 21-Jul-2020 12:27:42

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.317	8.307	0.011	79	518332	4.00	
* 2 1,4-Difluorobenzene	114	10.555	10.544	0.011	92	3882357	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.381	15.381	0.000	83	3179125	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.031	17.031	0.000	94	1549435	3.61	
7 Propene	41	3.351	3.335	0.016	96	121022	-0.1587	7
20 Trichlorofluoromethane	101	4.769	4.748	0.021	35	8031	0.0121	
31 Methylene Chloride	84	5.804	5.767	0.037	89	159215	0.2607	
47 1,1,1-Trichloroethane	97	9.358	9.342	0.016	57	10081	0.0226	
67 Toluene	91	13.386	13.386	0.000	88	39570	0.0555	
112 2-Methylnaphthalene	142	21.847	21.836	0.011	7	8946	0.6506	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

40MXISSURP_00004 Amount Added: 40.00 Units: mL Run Reagent

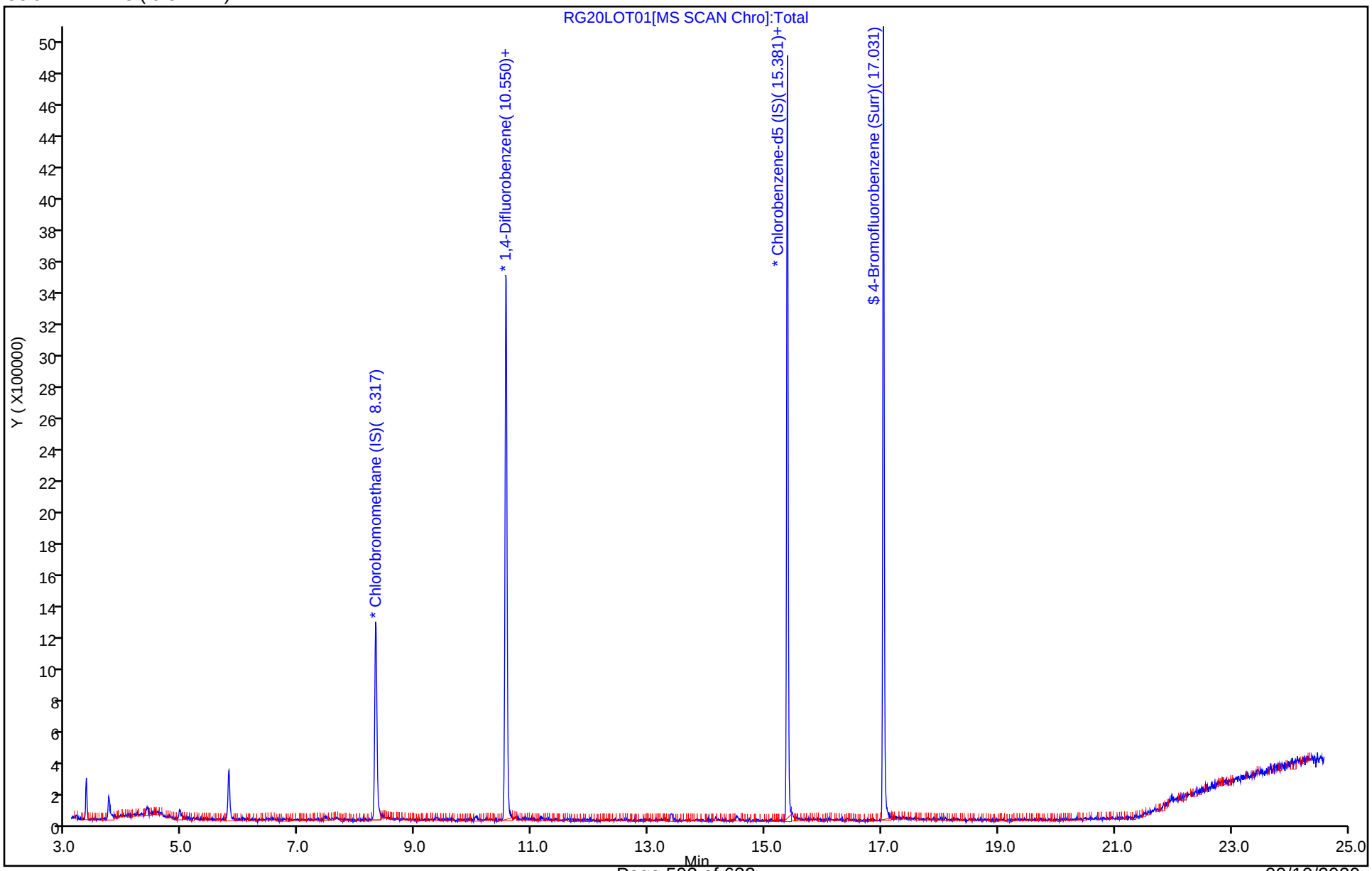
Report Date: 21-Jul-2020 12:27:42 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200717-16051.b\RG20LOT01.D

Injection Date:	20-Jul-2020 16:36:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	140-19745-A-1	Lab Sample ID:	140-19745-1	Worklist Smp#:	4
Client ID:	11712				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19747-1

SDG No.:

Client Sample ID: 11875 Lab Sample ID: 140-19747-4

Matrix: Air Lab File ID: R22LOT01.D

Analysis Method: TO-15 Date Collected: 07/17/2020 16:15

Sample wt/vol: 200(mL) Date Analyzed: 07/22/2020 14:17

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 41185 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	ND		0.20	
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.20	
79-00-5	1,1,2-Trichloroethane	ND		0.20	
76-13-1	1,1,2-Trichlorotrifluoroethane	ND		0.20	
75-34-3	1,1-Dichloroethane	ND		0.20	
75-35-4	1,1-Dichloroethene	ND		0.20	
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	
96-18-4	1,2,3-Trichloropropane	ND		0.50	
526-73-8	1,2,3-Trimethylbenzene	ND		0.20	
95-93-2	1,2,4,5-Tetramethylbenzene	ND		0.20	
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	
95-63-6	1,2,4-Trimethylbenzene	ND		0.20	
96-12-8	1,2-Dibromo-3-Chloropropane	ND		0.40	
106-93-4	1,2-Dibromoethane	ND		0.20	
95-50-1	1,2-Dichlorobenzene	ND		0.40	
107-06-2	1,2-Dichloroethane	ND		0.20	
78-87-5	1,2-Dichloropropane	ND		0.20	
76-14-2	1,2-Dichlorotetrafluoroethane	ND		0.20	
108-67-8	1,3,5-Trimethylbenzene	ND		0.20	
106-99-0	1,3-Butadiene	ND		0.40	
541-73-1	1,3-Dichlorobenzene	ND		0.20	
106-46-7	1,4-Dichlorobenzene	ND		0.20	
123-91-1	1,4-Dioxane	ND		0.40	
71-36-3	1-Butanol	ND		2.0	
90-12-0	1-Methylnaphthalene	ND		2.5	
540-84-1	2,2,4-Trimethylpentane	ND		0.40	
565-59-3	2,3-Dimethylpentane	ND		0.20	
78-93-3	2-Butanone	ND		1.0	
95-49-8	2-Chlorotoluene	ND		0.40	
591-78-6	2-Hexanone	ND		0.40	
78-78-4	2-Methylbutane	ND		0.50	
91-57-6	2-Methylnaphthalene	ND		2.5	
107-83-5	2-Methylpentane	ND		0.20	
107-05-1	3-Chloropropene	ND		0.20	
622-96-8	4-Ethyltoluene	ND		0.40	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		1.0	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19747-1

SDG No.:

Client Sample ID: 11875 Lab Sample ID: 140-19747-4

Matrix: Air Lab File ID: R22LOT01.D

Analysis Method: TO-15 Date Collected: 07/17/2020 16:15

Sample wt/vol: 200(mL) Date Analyzed: 07/22/2020 14:17

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 41185 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
67-64-1	Acetone	ND		7.5	
75-05-8	Acetonitrile	ND		1.0	
107-02-8	Acrolein	ND		1.0	
107-13-1	Acrylonitrile	ND		2.0	
98-83-9	Alpha Methyl Styrene	ND		0.40	
71-43-2	Benzene	ND		0.20	
100-44-7	Benzyl chloride	ND		0.40	
75-27-4	Bromodichloromethane	ND		0.20	
75-25-2	Bromoform	ND		0.20	
74-83-9	Bromomethane	ND		0.20	
106-97-8	Butane	ND		1.0	
75-15-0	Carbon disulfide	ND		0.40	
56-23-5	Carbon tetrachloride	ND		0.20	
108-90-7	Chlorobenzene	ND		0.20	
75-45-6	Chlorodifluoromethane	ND		0.20	
75-00-3	Chloroethane	ND		0.20	
67-66-3	Chloroform	ND		0.20	
74-87-3	Chloromethane	ND		1.0	
156-59-2	cis-1,2-Dichloroethene	ND		0.20	
10061-01-5	cis-1,3-Dichloropropene	ND		0.40	
98-82-8	Cumene	ND		0.40	
110-82-7	Cyclohexane	ND		0.40	
124-48-1	Dibromochloromethane	ND		0.20	
74-95-3	Dibromomethane	ND		0.40	
75-71-8	Dichlorodifluoromethane	ND		0.20	
64-17-5	Ethanol	ND		5.0	
141-78-6	Ethyl acetate	ND		2.0	
60-29-7	Ethyl ether	ND		2.0	
100-41-4	Ethylbenzene	ND		0.20	
87-68-3	Hexachlorobutadiene	ND		1.0	
110-54-3	Hexane	ND		0.40	
496-11-7	Indane	ND		0.20	
95-13-6	Indene	ND		0.40	
67-63-0	Isopropyl alcohol	ND		1.2	
179601-23-1	m&p-Xylene	ND		0.20	
80-62-6	Methyl methacrylate	ND		0.40	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19747-1

SDG No.:

Client Sample ID: 11875 Lab Sample ID: 140-19747-4

Matrix: Air Lab File ID: R22LOT01.D

Analysis Method: TO-15 Date Collected: 07/17/2020 16:15

Sample wt/vol: 200(mL) Date Analyzed: 07/22/2020 14:17

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 41185 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
1634-04-4	Methyl tert-butyl ether	ND		1.0	
108-87-2	Methylcyclohexane	ND		0.20	
75-09-2	Methylene Chloride	ND		1.0	
91-20-3	Naphthalene	ND		0.40	
104-51-8	n-Butylbenzene	ND		0.40	
124-18-5	n-Decane	ND		1.0	
112-40-3	n-Dodecane	ND		1.0	
142-82-5	n-Heptane	ND		0.40	
111-84-2	n-Nonane	ND		0.40	
111-65-9	n-Octane	ND		0.40	
103-65-1	N-Propylbenzene	ND		0.40	
1120-21-4	n-Undecane	ND		1.0	
95-47-6	o-Xylene	ND		0.20	
99-87-6	p-Cymene	ND		0.20	
109-66-0	Pentane	ND		2.5	
115-07-1	Propene	ND		2.5	
135-98-8	sec-Butylbenzene	ND		0.40	
100-42-5	Styrene	ND		0.20	
75-65-0	tert-Butanol	ND		1.0	
98-06-6	tert-Butylbenzene	ND		0.40	
127-18-4	Tetrachloroethene	ND		0.20	
109-99-9	Tetrahydrofuran	ND		1.0	
110-02-1	Thiophene	ND		0.20	
108-88-3	Toluene	ND		1.0	
156-60-5	trans-1,2-Dichloroethene	ND		0.20	
10061-02-6	trans-1,3-Dichloropropene	ND		0.20	
79-01-6	Trichloroethene	ND		0.20	
75-69-4	Trichlorofluoromethane	ND		0.20	
108-05-4	Vinyl acetate	ND		1.0	
593-60-2	Vinyl bromide	ND		0.20	
75-01-4	Vinyl chloride	ND		0.40	

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MR\20200721-16069.b\R22LOT01.D				
Lims ID:	140-19747-A-4				
Client ID:	11875				
Sample Type:	Client				
Inject. Date:	22-Jul-2020 14:17:30	ALS Bottle#:	1	Worklist Smp#:	4
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016069-004				
Misc. Info.:	11875				
Operator ID:	HMT	Instrument ID:	MR		
Method:	\\chromfs\Knoxville\ChromData\MR\20200721-16069.b\MR_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	23-Jul-2020 09:09:25	Calib Date:	14-May-2020 00:39:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MR\20200513-15465.b\RE13TEST.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1039				
First Level Reviewer: khachitpongpanits		Date:	23-Jul-2020 09:09:25		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.317	8.296	0.021	82	414444	4.00	
* 2 1,4-Difluorobenzene	114	10.550	10.539	0.011	93	3127290	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.381	15.381	0.000	84	2479454	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.026	17.026	0.000	95	1160077	3.47	
7 Propene	41	3.367	3.319	0.048	97	90494	-0.2189	7
31 Methylene Chloride	84	5.805	5.767	0.038	96	116999	0.1766	
40 Hexane	56	7.584	7.563	0.021	53	3384	0.0369	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

40MXISSURP_00004 Amount Added: 40.00 Units: mL Run Reagent

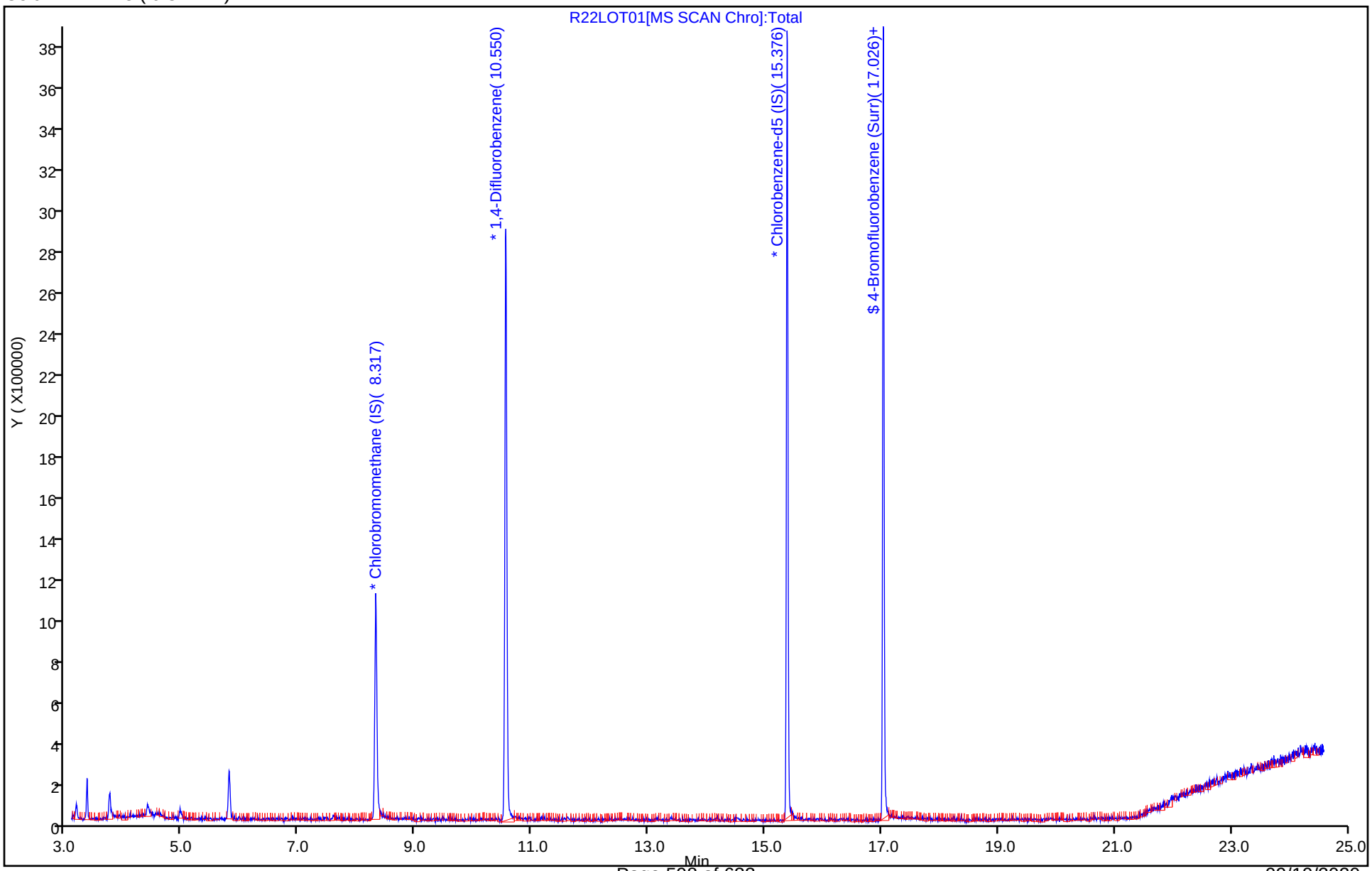
Report Date: 23-Jul-2020 09:09:26 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200721-16069.b\R22LOT01.D

Injection Date:	22-Jul-2020 14:17:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	140-19747-A-4	Lab Sample ID:	140-19747-4	Worklist Smp#:	4
Client ID:	11875				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



09/10/2020

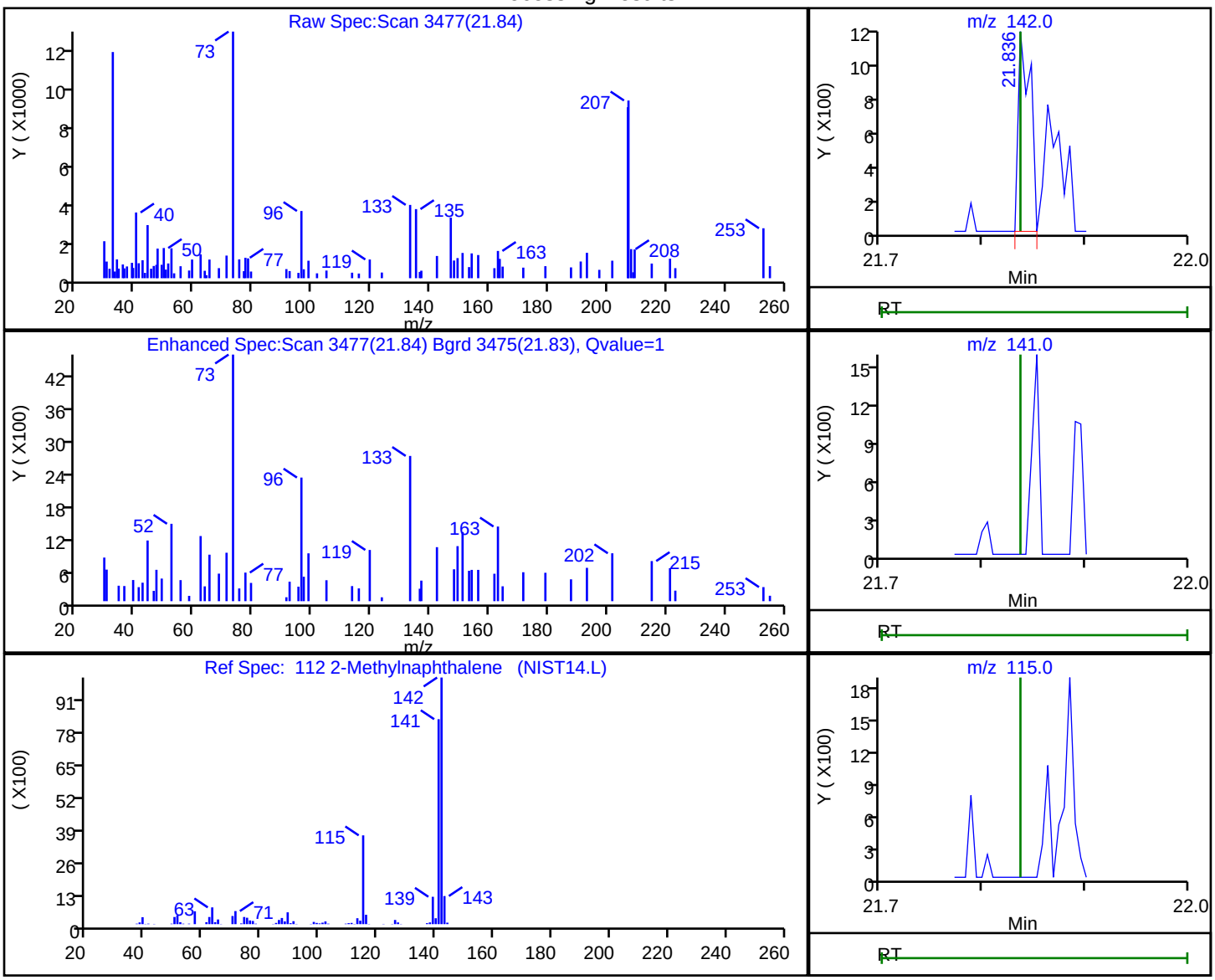
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200721-16069.b\R22LOT01.D				
Injection Date:	22-Jul-2020 14:17:30	Instrument ID:	MR		
Lims ID:	140-19747-A-4	Lab Sample ID:	140-19747-4		
Client ID:	11875				
Operator ID:	HMT	ALS Bottle#:	1	Worklist Smp#:	4
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

112 2-Methylnaphthalene, CAS: 91-57-6

Processing Results



RT	Mass	Response	Amount
21.84	142.00	925	0.646439
21.84	141.00	0	
21.84	115.00	0	

Reviewer: khachitpongpanits, 23-Jul-2020 09:09:22

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

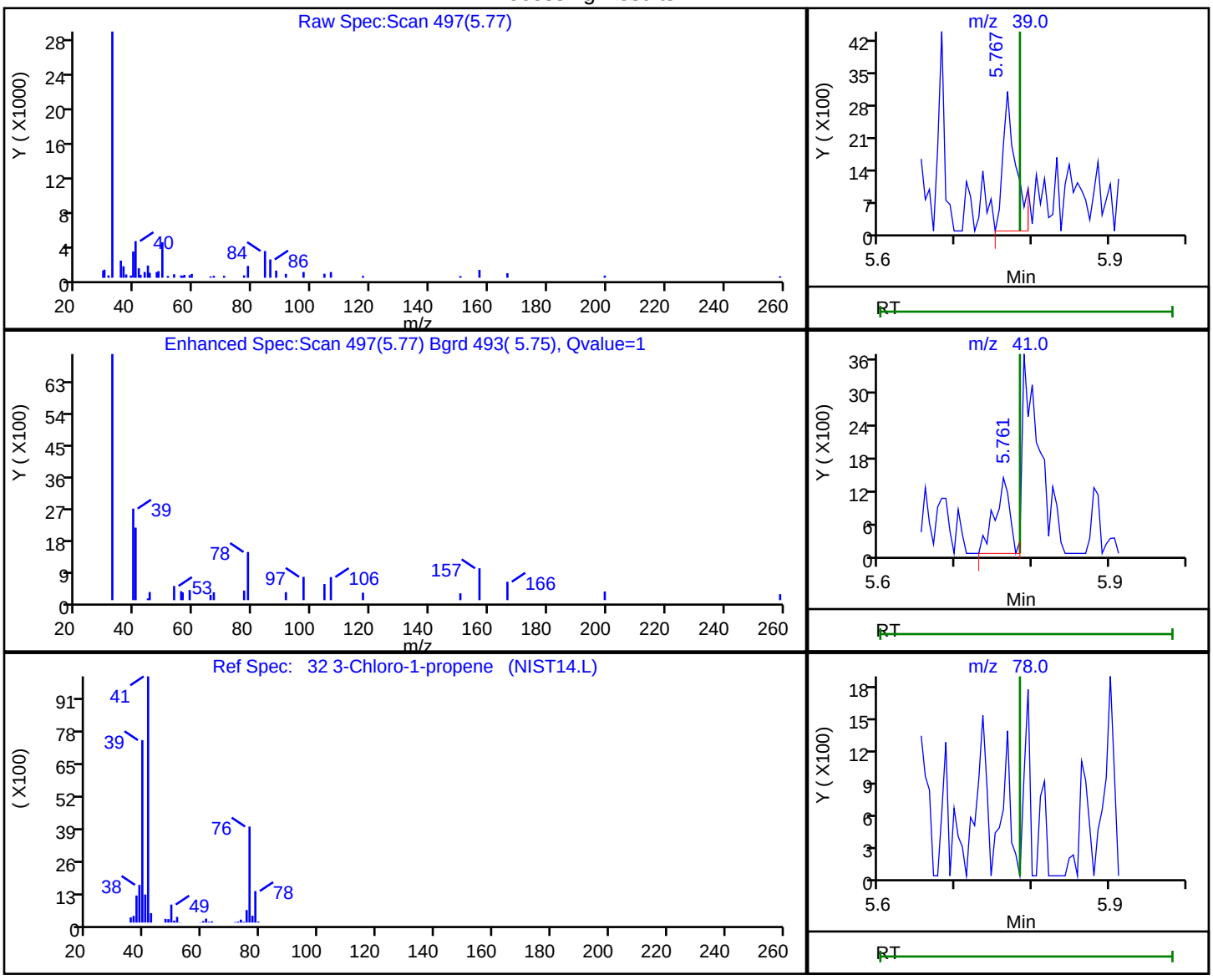
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200721-16069.b\R22LOT01.D				
Injection Date:	22-Jul-2020 14:17:30	Instrument ID:	MR		
Lims ID:	140-19747-A-4	Lab Sample ID:	140-19747-4		
Client ID:	11875				
Operator ID:	HMT	ALS Bottle#:	1	Worklist Smp#:	4
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

32 3-Chloro-1-propene, CAS: 107-05-1

Processing Results



RT	Mass	Response	Amount
5.77	39.00	3635	0.022876
5.76	41.00	1902	
5.78	78.00	0	

Reviewer: khachitpongpanits, 23-Jul-2020 09:08:58

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19776-1

SDG No.:

Client Sample ID: 10833 Lab Sample ID: 140-19776-13

Matrix: Air Lab File ID: RG22L19776.D

Analysis Method: TO-15 Date Collected: 07/21/2020 14:20

Sample wt/vol: 200(mL) Date Analyzed: 07/23/2020 05:56

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 41185 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	ND		0.20	
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.20	
79-00-5	1,1,2-Trichloroethane	ND		0.20	
76-13-1	1,1,2-Trichlorotrifluoroethane	ND		0.20	
75-34-3	1,1-Dichloroethane	ND		0.20	
75-35-4	1,1-Dichloroethene	ND		0.20	
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	
96-18-4	1,2,3-Trichloropropane	ND		0.50	
526-73-8	1,2,3-Trimethylbenzene	ND		0.20	
95-93-2	1,2,4,5-Tetramethylbenzene	ND		0.20	
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	
95-63-6	1,2,4-Trimethylbenzene	ND		0.20	
96-12-8	1,2-Dibromo-3-Chloropropane	ND		0.40	
106-93-4	1,2-Dibromoethane	ND		0.20	
95-50-1	1,2-Dichlorobenzene	ND		0.40	
107-06-2	1,2-Dichloroethane	ND		0.20	
78-87-5	1,2-Dichloropropane	ND		0.20	
76-14-2	1,2-Dichlorotetrafluoroethane	ND		0.20	
108-67-8	1,3,5-Trimethylbenzene	ND		0.20	
106-99-0	1,3-Butadiene	ND		0.40	
541-73-1	1,3-Dichlorobenzene	ND		0.20	
106-46-7	1,4-Dichlorobenzene	ND		0.20	
123-91-1	1,4-Dioxane	ND		0.40	
71-36-3	1-Butanol	ND		2.0	
90-12-0	1-Methylnaphthalene	ND		2.5	
540-84-1	2,2,4-Trimethylpentane	ND		0.40	
565-59-3	2,3-Dimethylpentane	ND		0.20	
78-93-3	2-Butanone	ND		1.0	
95-49-8	2-Chlorotoluene	ND		0.40	
591-78-6	2-Hexanone	ND		0.40	
78-78-4	2-Methylbutane	ND		0.50	
91-57-6	2-Methylnaphthalene	ND		2.5	
107-83-5	2-Methylpentane	ND		0.20	
107-05-1	3-Chloropropene	ND		0.20	
622-96-8	4-Ethyltoluene	ND		0.40	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		1.0	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19776-1

SDG No.:

Client Sample ID: 10833 Lab Sample ID: 140-19776-13

Matrix: Air Lab File ID: RG22L19776.D

Analysis Method: TO-15 Date Collected: 07/21/2020 14:20

Sample wt/vol: 200(mL) Date Analyzed: 07/23/2020 05:56

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 41185 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
67-64-1	Acetone	ND		7.5	
75-05-8	Acetonitrile	ND		1.0	
107-02-8	Acrolein	ND		1.0	
107-13-1	Acrylonitrile	ND		2.0	
98-83-9	Alpha Methyl Styrene	ND		0.40	
71-43-2	Benzene	ND		0.20	
100-44-7	Benzyl chloride	ND		0.40	
75-27-4	Bromodichloromethane	ND		0.20	
75-25-2	Bromoform	ND		0.20	
74-83-9	Bromomethane	ND		0.20	
106-97-8	Butane	ND		1.0	
75-15-0	Carbon disulfide	ND		0.40	
56-23-5	Carbon tetrachloride	ND		0.20	
108-90-7	Chlorobenzene	ND		0.20	
75-45-6	Chlorodifluoromethane	ND		0.20	
75-00-3	Chloroethane	ND		0.20	
67-66-3	Chloroform	ND		0.20	
74-87-3	Chloromethane	ND		1.0	
156-59-2	cis-1,2-Dichloroethene	ND		0.20	
10061-01-5	cis-1,3-Dichloropropene	ND		0.40	
98-82-8	Cumene	ND		0.40	
110-82-7	Cyclohexane	ND		0.40	
124-48-1	Dibromochloromethane	ND		0.20	
74-95-3	Dibromomethane	ND		0.40	
75-71-8	Dichlorodifluoromethane	ND		0.20	
64-17-5	Ethanol	ND		5.0	
141-78-6	Ethyl acetate	ND		2.0	
60-29-7	Ethyl ether	ND		2.0	
100-41-4	Ethylbenzene	ND		0.20	
87-68-3	Hexachlorobutadiene	ND		1.0	
110-54-3	Hexane	ND		0.40	
496-11-7	Indane	ND		0.20	
95-13-6	Indene	ND		0.40	
67-63-0	Isopropyl alcohol	ND		1.2	
179601-23-1	m&p-Xylene	ND		0.20	
80-62-6	Methyl methacrylate	ND		0.40	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19776-1

SDG No.:

Client Sample ID: 10833 Lab Sample ID: 140-19776-13

Matrix: Air Lab File ID: RG22L19776.D

Analysis Method: TO-15 Date Collected: 07/21/2020 14:20

Sample wt/vol: 200(mL) Date Analyzed: 07/23/2020 05:56

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 41185 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
1634-04-4	Methyl tert-butyl ether	ND		1.0	
108-87-2	Methylcyclohexane	ND		0.20	
75-09-2	Methylene Chloride	ND		1.0	
91-20-3	Naphthalene	ND		0.40	
104-51-8	n-Butylbenzene	ND		0.40	
124-18-5	n-Decane	ND		1.0	
112-40-3	n-Dodecane	ND		1.0	
142-82-5	n-Heptane	ND		0.40	
111-84-2	n-Nonane	ND		0.40	
111-65-9	n-Octane	ND		0.40	
103-65-1	N-Propylbenzene	ND		0.40	
1120-21-4	n-Undecane	ND		1.0	
95-47-6	o-Xylene	ND		0.20	
99-87-6	p-Cymene	ND		0.20	
109-66-0	Pentane	ND		2.5	
115-07-1	Propene	ND		2.5	
135-98-8	sec-Butylbenzene	ND		0.40	
100-42-5	Styrene	ND		0.20	
75-65-0	tert-Butanol	ND		1.0	
98-06-6	tert-Butylbenzene	ND		0.40	
127-18-4	Tetrachloroethene	ND		0.20	
109-99-9	Tetrahydrofuran	ND		1.0	
110-02-1	Thiophene	ND		0.20	
108-88-3	Toluene	ND		1.0	
156-60-5	trans-1,2-Dichloroethene	ND		0.20	
10061-02-6	trans-1,3-Dichloropropene	ND		0.20	
79-01-6	Trichloroethene	ND		0.20	
75-69-4	Trichlorofluoromethane	ND		0.20	
108-05-4	Vinyl acetate	ND		1.0	
593-60-2	Vinyl bromide	ND		0.20	
75-01-4	Vinyl chloride	ND		0.40	

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MR\20200721-16069.b\RG22L19776.D				
Lims ID:	140-19776-A-13				
Client ID:	10833				
Sample Type:	Client				
Inject. Date:	23-Jul-2020 05:56:30	ALS Bottle#:	3	Worklist Smp#:	25
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016069-025				
Misc. Info.:	10833				
Operator ID:	HMT	Instrument ID:	MR		
Method:	\\chromfs\Knoxville\ChromData\MR\20200721-16069.b\MR_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	23-Jul-2020 09:46:14	Calib Date:	14-May-2020 00:39:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MR\20200513-15465.b\RE13TEST.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1007				
First Level Reviewer: smelcerb		Date:	23-Jul-2020 09:46:14		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.290	8.296	-0.006	92	238584	4.00	
* 2 1,4-Difluorobenzene	114	10.534	10.539	-0.005	93	1877087	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.376	15.381	-0.005	84	1568506	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.026	17.020	0.000	93	756125	3.57	
7 Propene	41	3.335	3.317	0.016	94	67398	0.0362	7
17 Ethanol	31	4.338	4.313	0.022	88	55281	0.8471	
25 Isopropyl alcohol	45	4.904	4.960	-0.059	19	5102	0.0445	
31 Methylene Chloride	84	5.767	5.763	0.000	96	71221	0.2314	
67 Toluene	91	13.375	13.376	-0.006	97	27737	0.0789	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

40MXISSURP_00004 Amount Added: 40.00 Units: mL Run Reagent

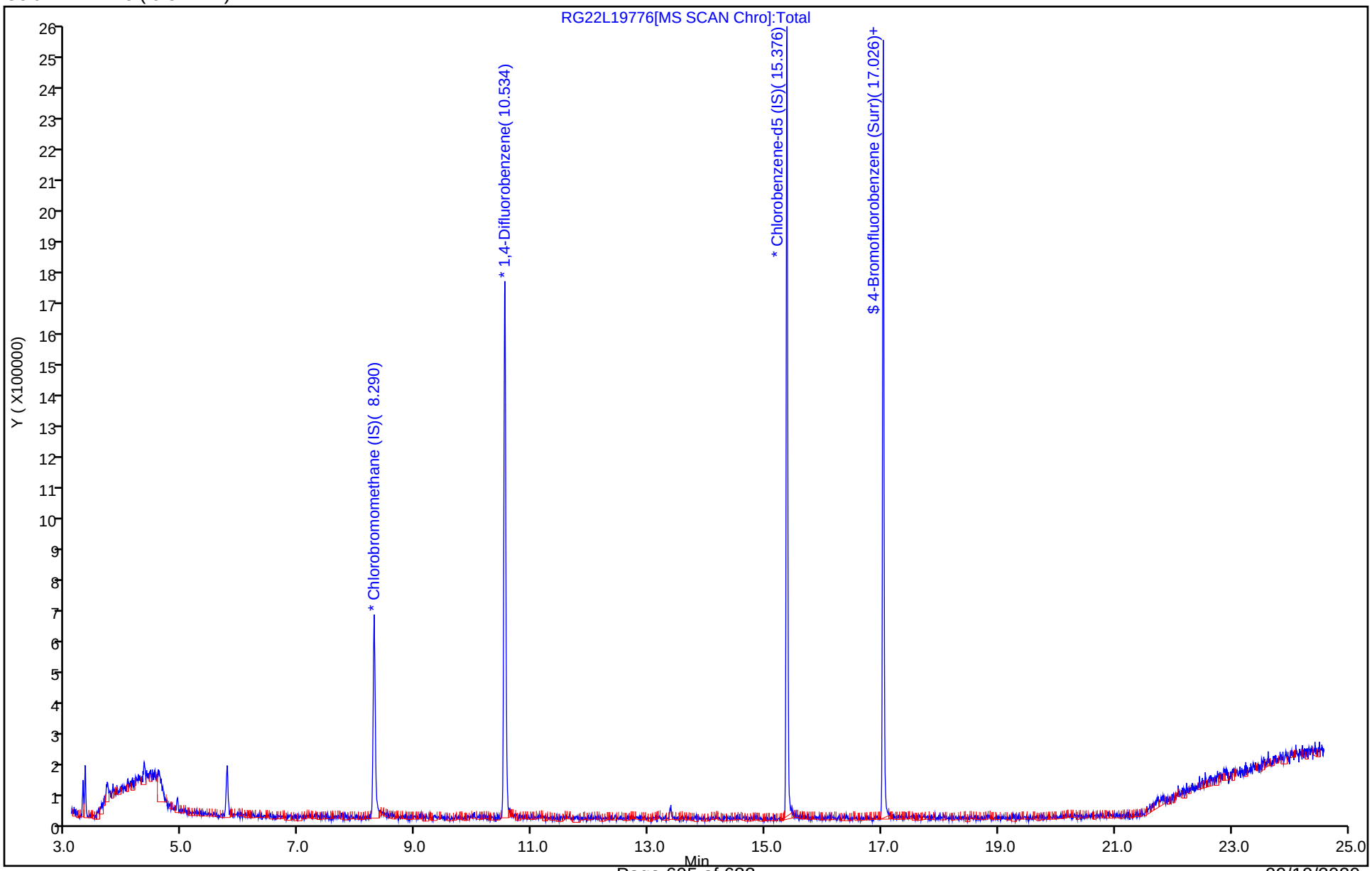
Report Date: 23-Jul-2020 09:46:53 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200721-16069.b\RG22L19776.D

Injection Date:	23-Jul-2020 05:56:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	140-19776-A-13	Lab Sample ID:	140-19776-13	Worklist Smp#:	25
Client ID:	10833				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



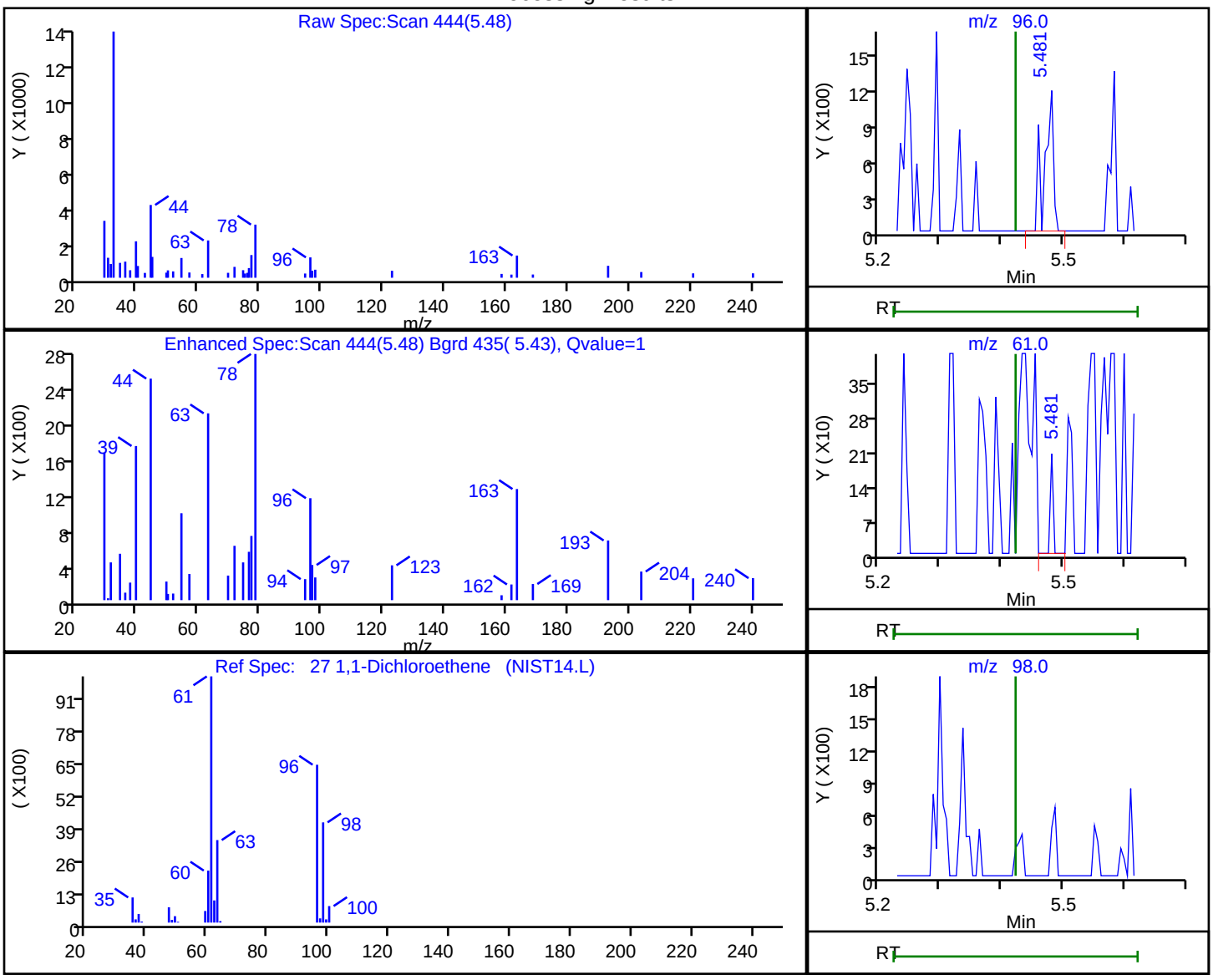
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200721-16069.b\RG22L19776.D				
Injection Date:	23-Jul-2020 05:56:30	Instrument ID:	MR		
Lims ID:	140-19776-A-13	Lab Sample ID:	140-19776-13		
Client ID:	10833				
Operator ID:	HMT	ALS Bottle#:	3	Worklist Smp#:	25
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

27 1,1-Dichloroethene, CAS: 75-35-4

Processing Results



RT	Mass	Response	Amount
5.48	96.00	1152	0.011902
5.48	61.00	66	
5.42	98.00	0	

Reviewer: smelcerb, 23-Jul-2020 09:41:12

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

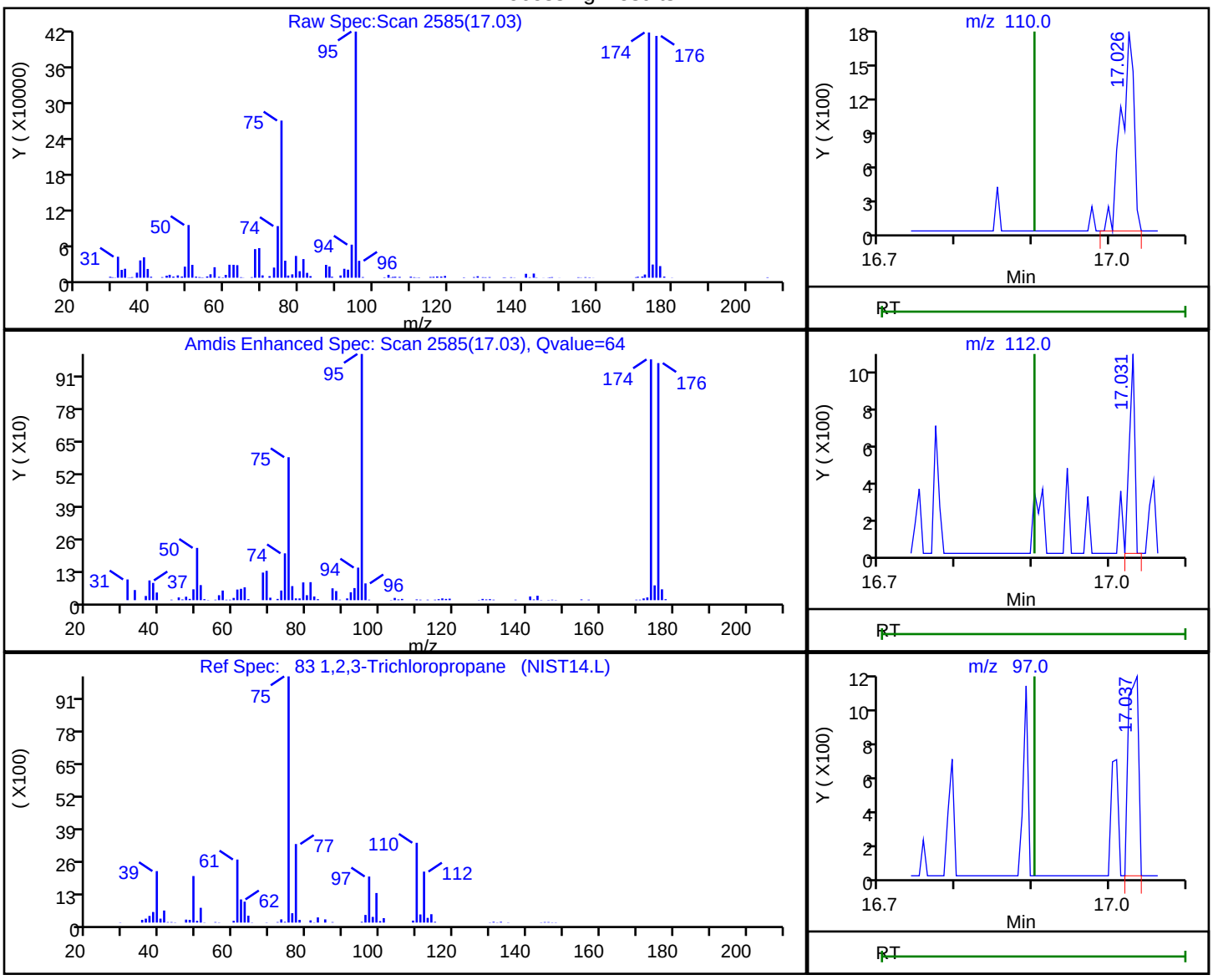
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200721-16069.b\RG22L19776.D				
Injection Date:	23-Jul-2020 05:56:30	Instrument ID:	MR		
Lims ID:	140-19776-A-13	Lab Sample ID:	140-19776-13		
Client ID:	10833				
Operator ID:	HMT	ALS Bottle#:	3	Worklist Smp#:	25
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

83 1,2,3-Trichloropropane, CAS: 96-18-4

Processing Results



RT	Mass	Response	Amount
17.03	110.00	2042	0.023144
17.03	112.00	523	
17.04	97.00	1108	

Reviewer: smelcerb, 23-Jul-2020 09:44:04

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

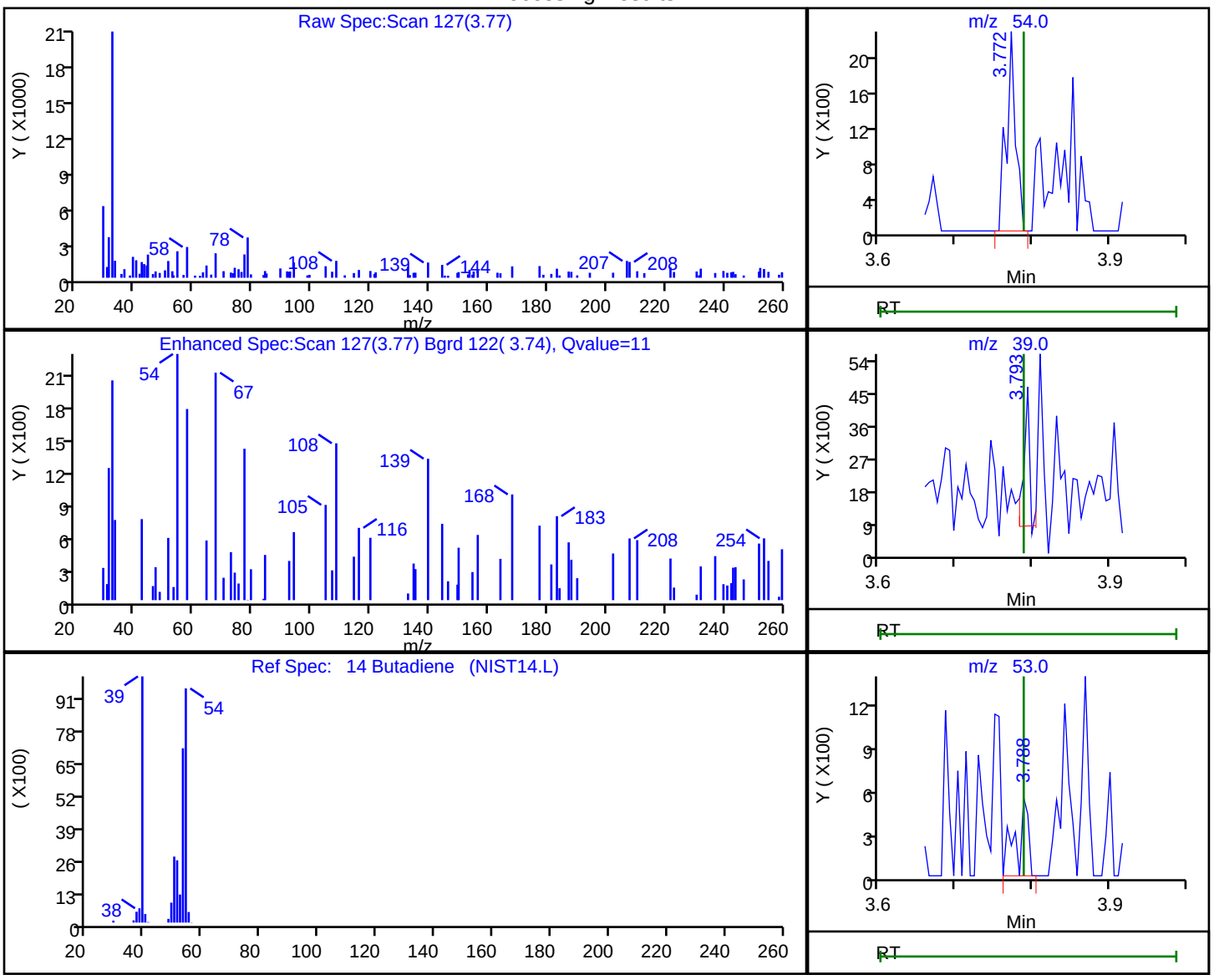
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200721-16069.b\RG22L19776.D				
Injection Date:	23-Jul-2020 05:56:30	Instrument ID:	MR		
Lims ID:	140-19776-A-13	Lab Sample ID:	140-19776-13		
Client ID:	10833				
Operator ID:	HMT	ALS Bottle#:	3	Worklist Smp#:	25
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

14 Butadiene, CAS: 106-99-0

Processing Results



RT	Mass	Response	Amount
3.77	54.00	1893	0.026634
3.79	39.00	2024	
3.79	53.00	565	

Reviewer: smelcerb, 23-Jul-2020 09:40:32

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

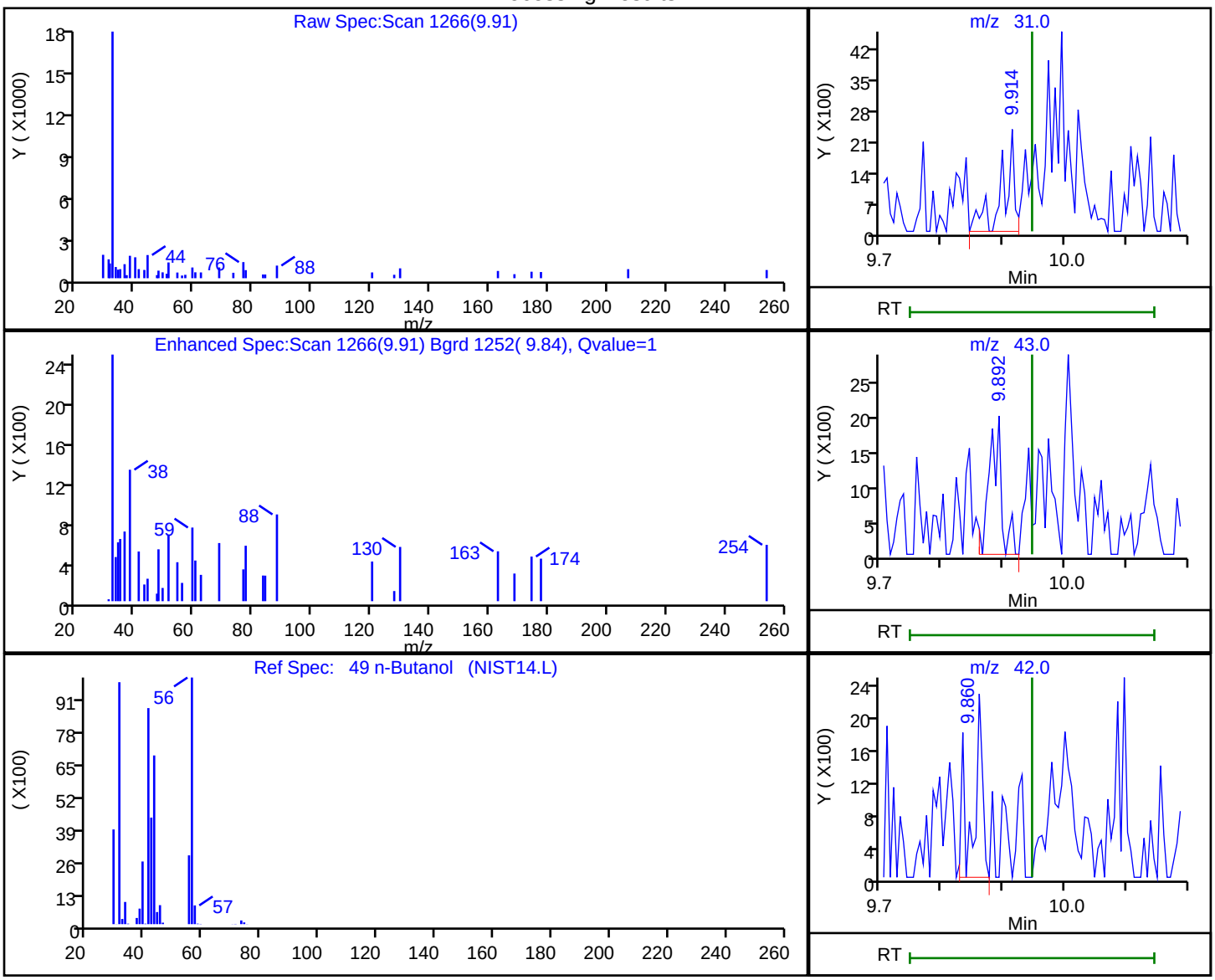
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200721-16069.b\RG22L19776.D				
Injection Date:	23-Jul-2020 05:56:30	Instrument ID:	MR		
Lims ID:	140-19776-A-13	Lab Sample ID:	140-19776-13		
Client ID:	10833				
Operator ID:	HMT	ALS Bottle#:	3	Worklist Smp#:	25
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

49 n-Butanol, CAS: 71-36-3

Processing Results



RT	Mass	Response	Amount
9.91	31.00	3051	0.046980
9.89	43.00	2650	
9.86	42.00	2290	

Reviewer: smelcerb, 23-Jul-2020 09:42:23

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

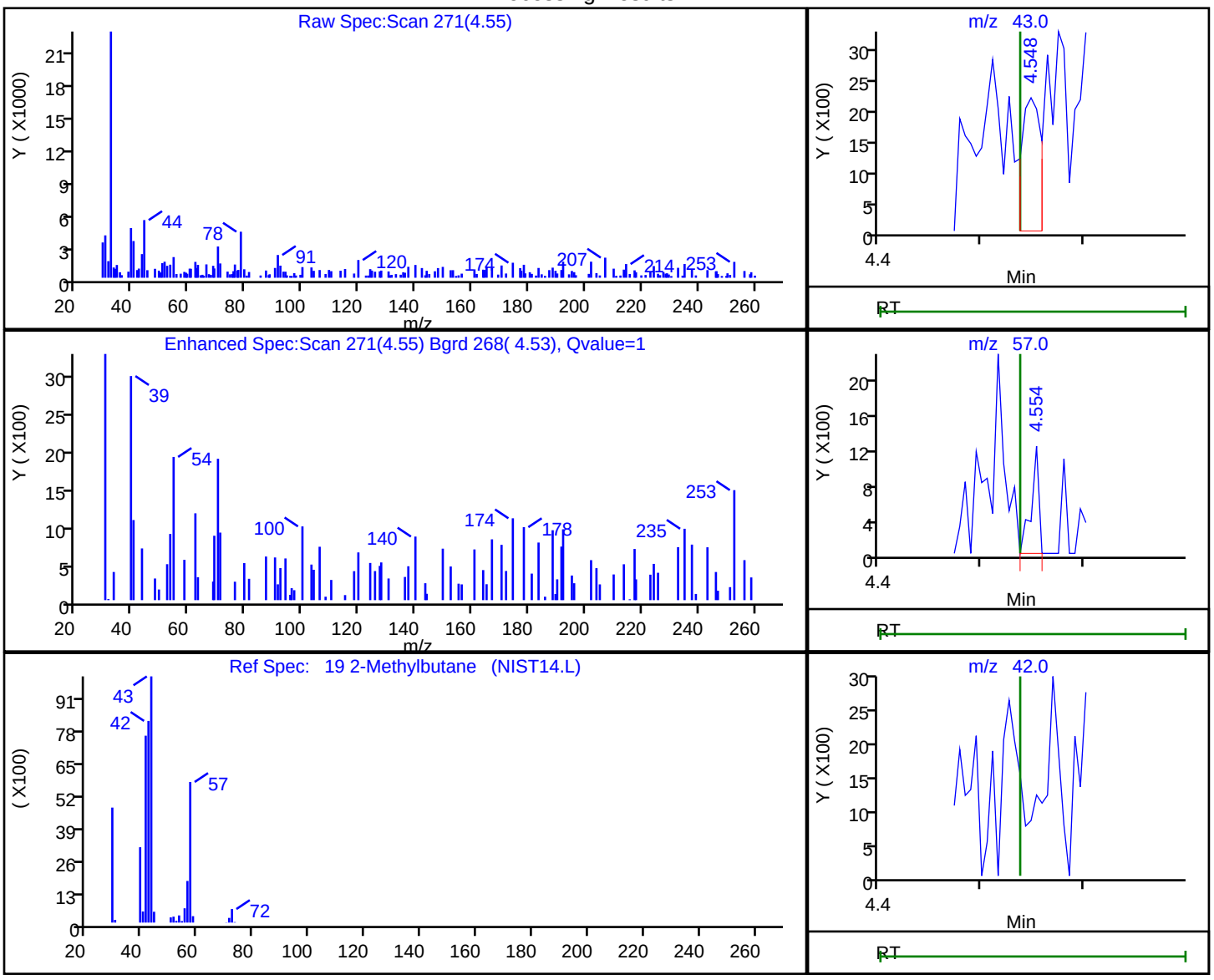
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200721-16069.b\RG22L19776.D				
Injection Date:	23-Jul-2020 05:56:30	Instrument ID:	MR		
Lims ID:	140-19776-A-13	Lab Sample ID:	140-19776-13		
Client ID:	10833				
Operator ID:	HMT	ALS Bottle#:	3	Worklist Smp#:	25
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

19 2-Methylbutane, CAS: 78-78-4

Processing Results



RT	Mass	Response	Amount
4.55	43.00	2812	0.022937
4.55	57.00	640	
4.54	42.00	0	

Reviewer: smelcerb, 23-Jul-2020 09:40:45

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

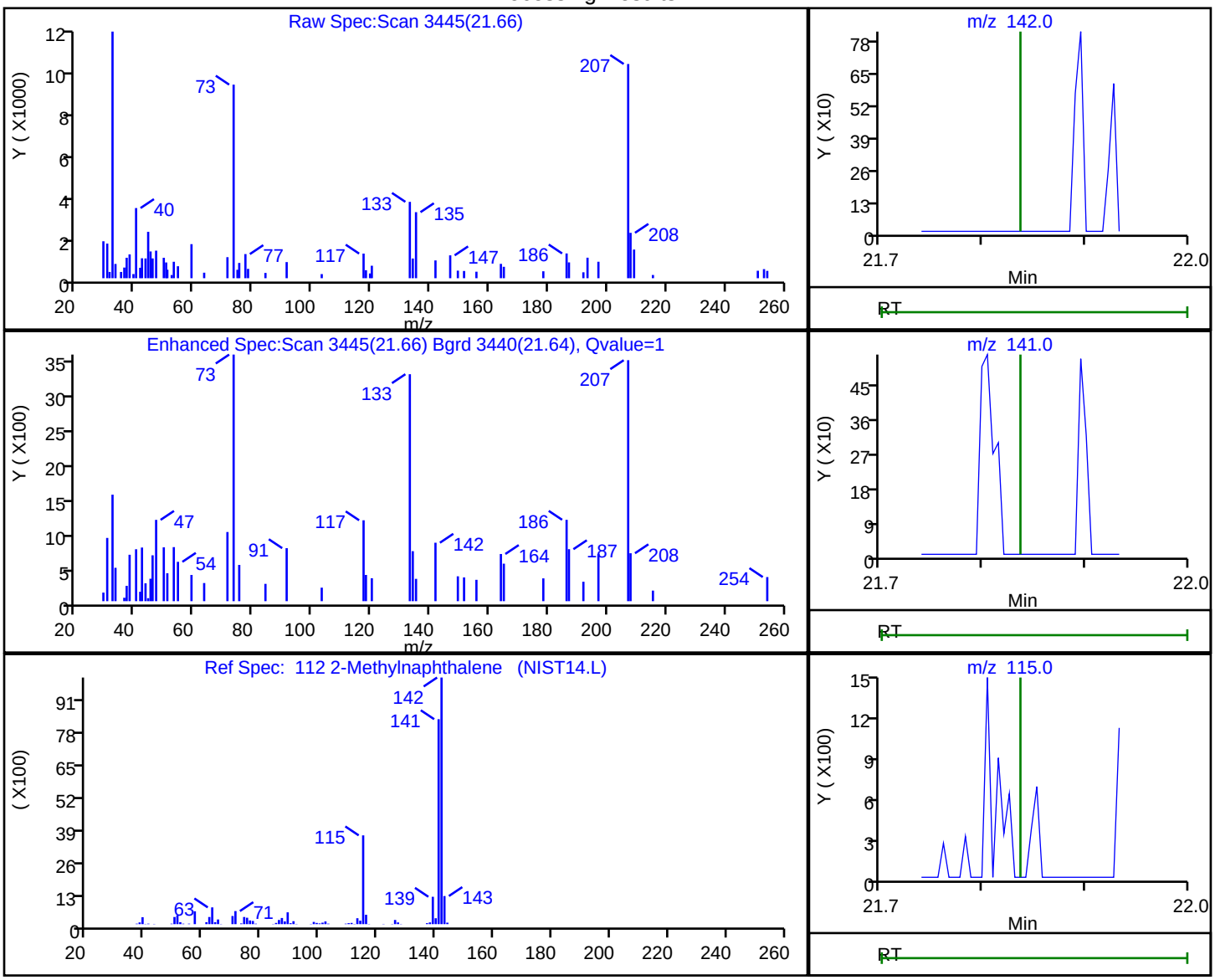
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200721-16069.b\RG22L19776.D				
Injection Date:	23-Jul-2020 05:56:30	Instrument ID:	MR		
Lims ID:	140-19776-A-13	Lab Sample ID:	140-19776-13		
Client ID:	10833				
Operator ID:	HMT	ALS Bottle#:	3	Worklist Smp#:	25
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

112 2-Methylnaphthalene, CAS: 91-57-6

Processing Results



RT	Mass	Response	Amount
21.66	142.00	325	0.646158
21.84	141.00	0	
21.84	115.00	0	

Reviewer: smelcerb, 23-Jul-2020 09:44:12

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

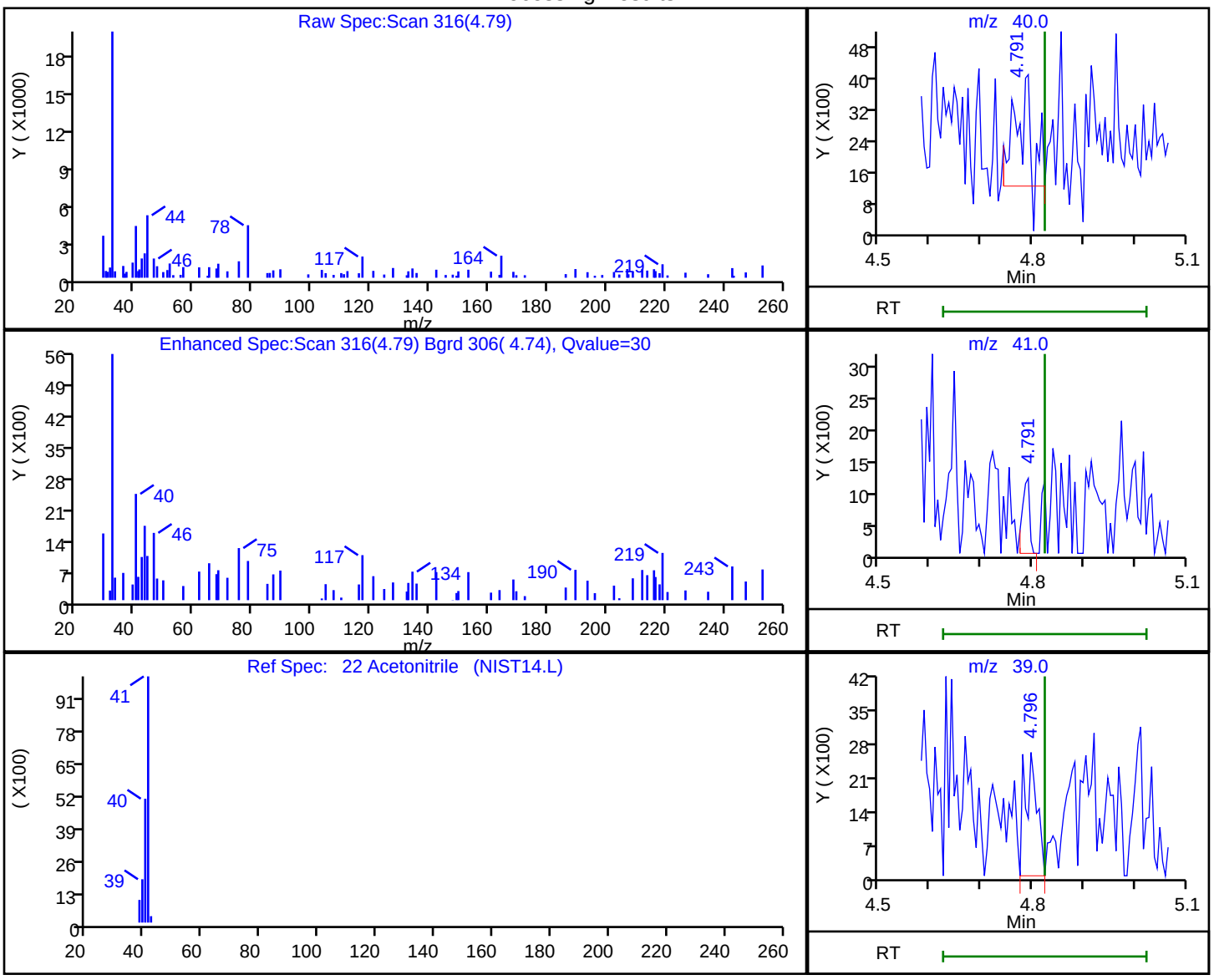
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200721-16069.b\RG22L19776.D				
Injection Date:	23-Jul-2020 05:56:30	Instrument ID:	MR		
Lims ID:	140-19776-A-13	Lab Sample ID:	140-19776-13		
Client ID:	10833				
Operator ID:	HMT	ALS Bottle#:	3	Worklist Smp#:	25
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

22 Acetonitrile, CAS: 75-05-8

Processing Results



RT	Mass	Response	Amount
4.79	40.00	6108	0.178363
4.79	41.00	1153	
4.80	39.00	4211	

Reviewer: smelcerb, 23-Jul-2020 09:40:53

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

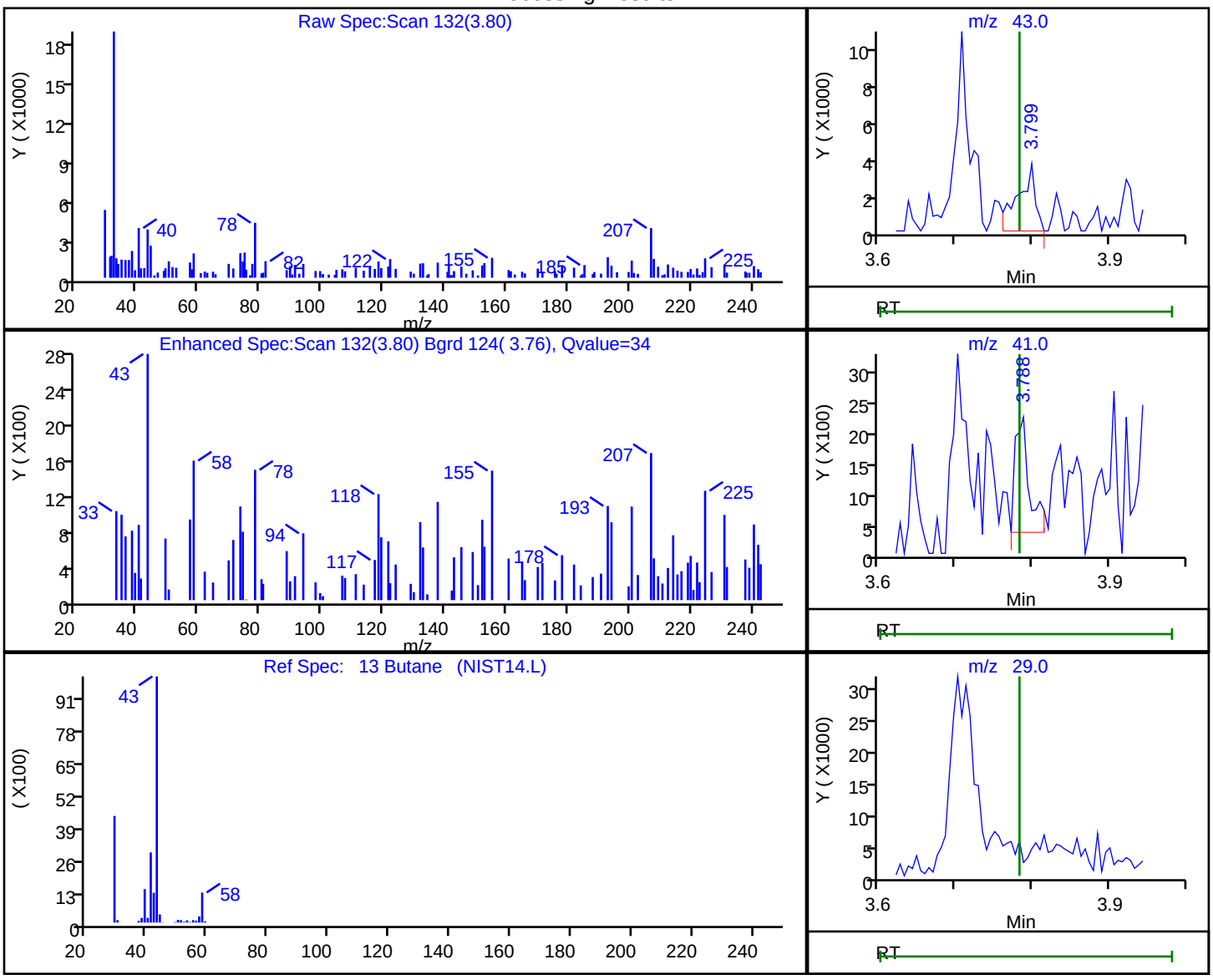
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200721-16069.b\RG22L19776.D				
Injection Date:	23-Jul-2020 05:56:30	Instrument ID:	MR		
Lims ID:	140-19776-A-13	Lab Sample ID:	140-19776-13		
Client ID:	10833				
Operator ID:	HMT	ALS Bottle#:	3	Worklist Smp#:	25
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

13 Butane, CAS: 106-97-8

Processing Results



RT	Mass	Response	Amount
3.80	43.00	5535	0.035544
3.79	41.00	2364	
3.78	29.00	0	

Reviewer: smelcerb, 23-Jul-2020 09:40:24

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

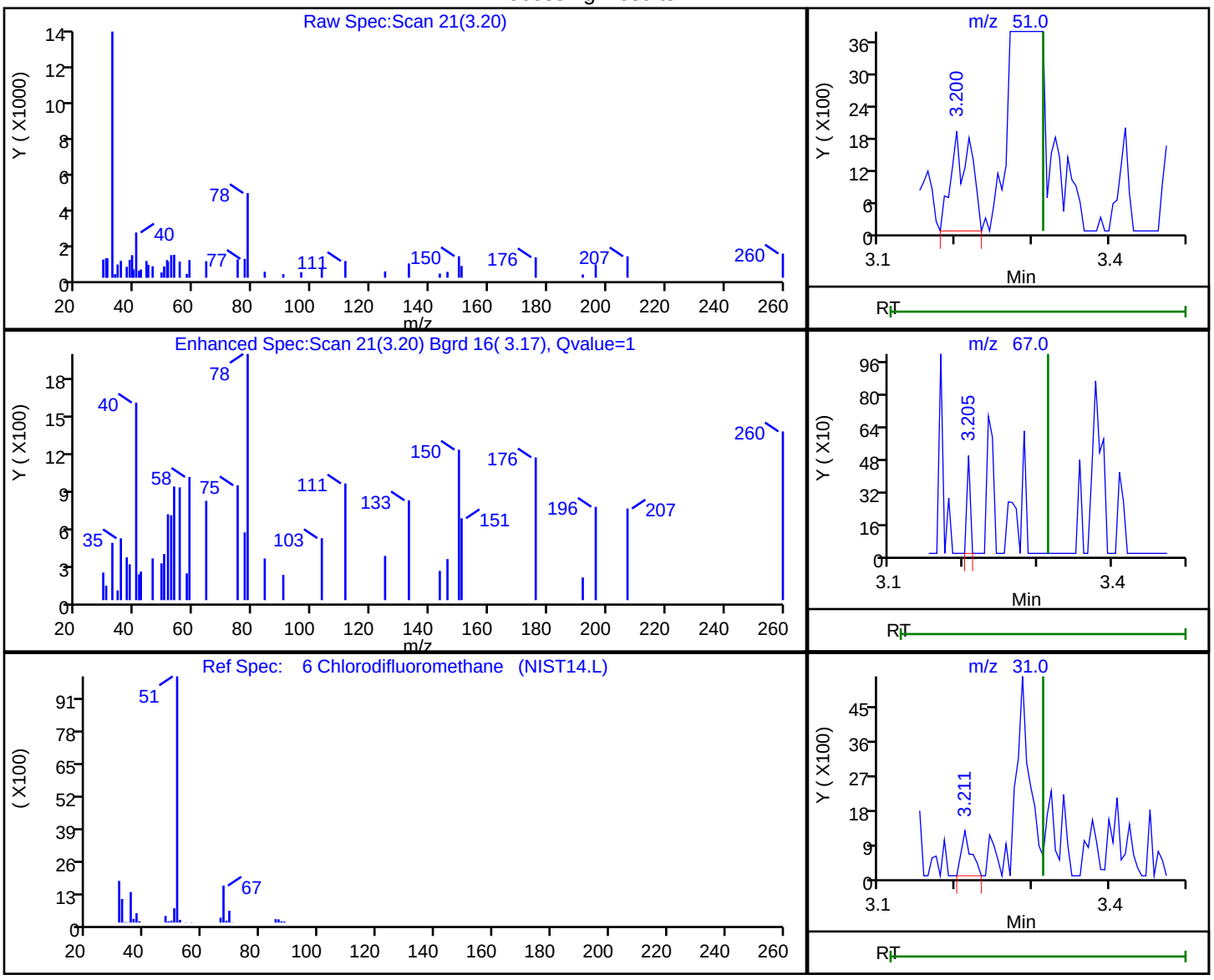
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200721-16069.b\RG22L19776.D				
Injection Date:	23-Jul-2020 05:56:30	Instrument ID:	MR		
Lims ID:	140-19776-A-13	Lab Sample ID:	140-19776-13		
Client ID:	10833				
Operator ID:	HMT	ALS Bottle#:	3	Worklist Smp#:	25
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

6 Chlorodifluoromethane, CAS: 75-45-6

Processing Results



RT	Mass	Response	Amount
3.20	51.00	3306	0.027372
3.21	67.00	158	
3.21	31.00	1039	

Reviewer: smelcerb, 23-Jul-2020 09:39:58

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

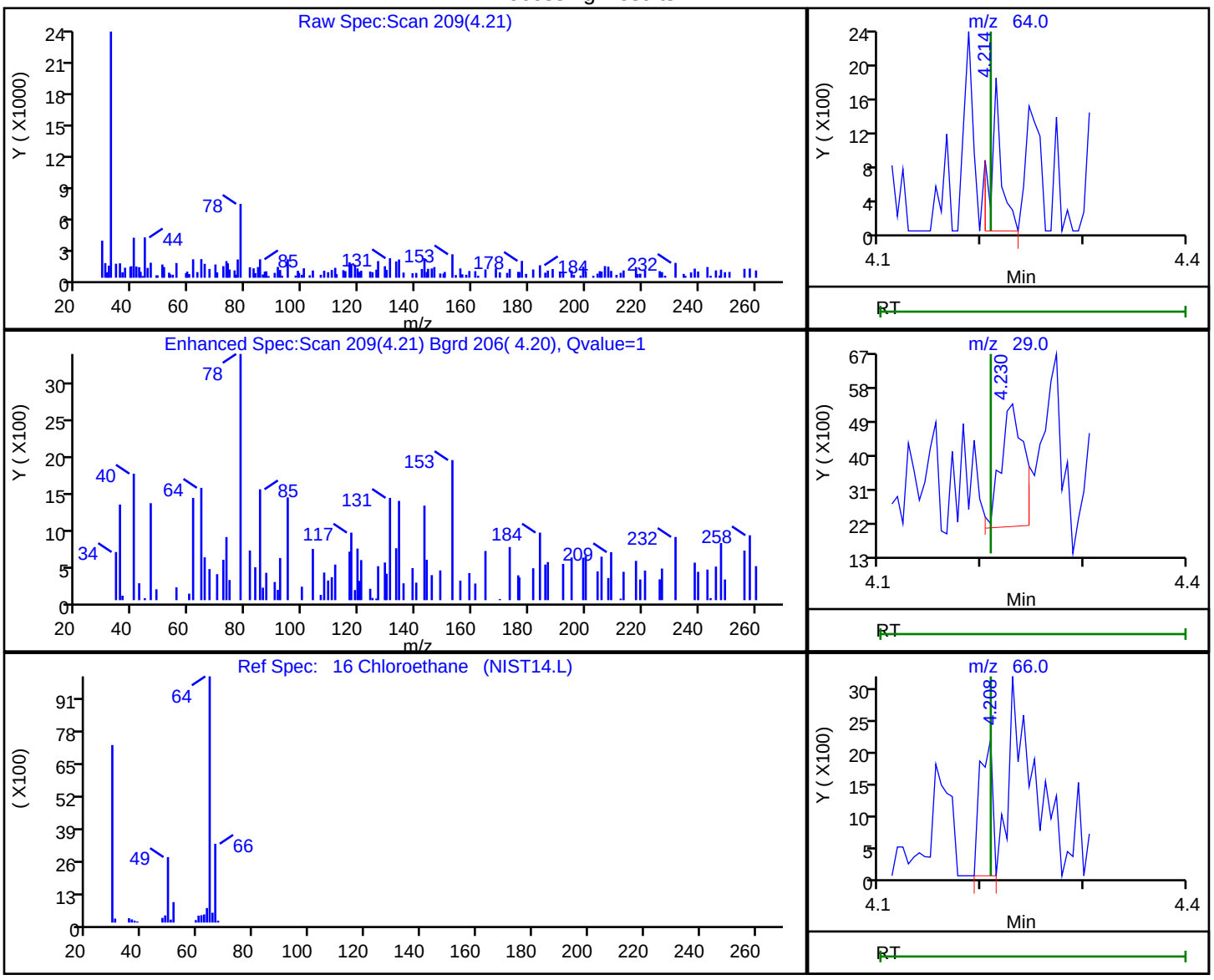
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200721-16069.b\RG22L19776.D				
Injection Date:	23-Jul-2020 05:56:30	Instrument ID:	MR		
Lims ID:	140-19776-A-13	Lab Sample ID:	140-19776-13		
Client ID:	10833				
Operator ID:	HMT	ALS Bottle#:	3	Worklist Smp#:	25
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

16 Chloroethane, CAS: 75-00-3

Processing Results



RT	Mass	Response	Amount
4.21	64.00	1276	0.023288
4.23	29.00	5090	
4.21	66.00	1819	

Reviewer: smelcerb, 23-Jul-2020 09:40:37

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

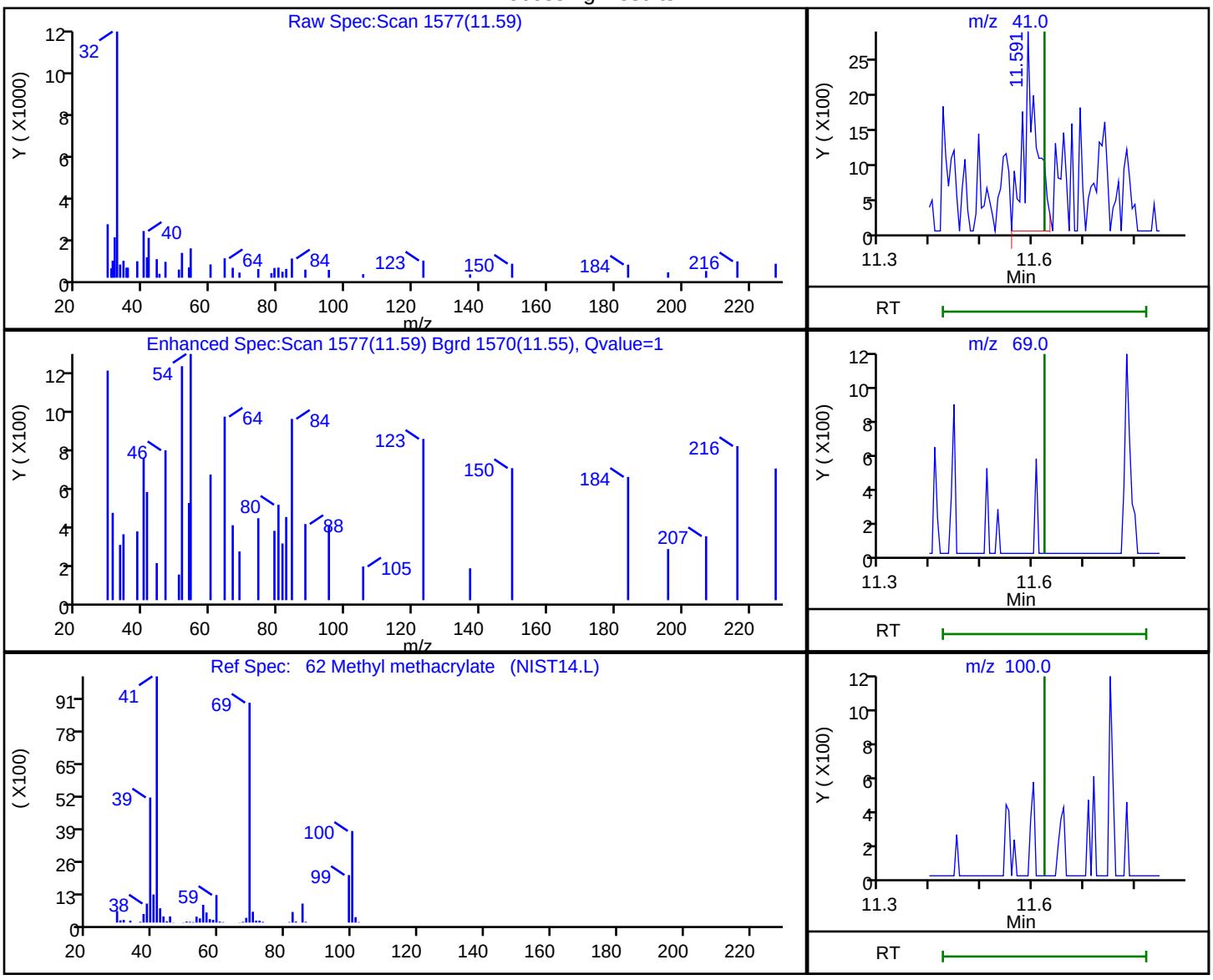
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200721-16069.b\RG22L19776.D				
Injection Date:	23-Jul-2020 05:56:30	Instrument ID:	MR		
Lims ID:	140-19776-A-13	Lab Sample ID:	140-19776-13		
Client ID:	10833				
Operator ID:	HMT	ALS Bottle#:	3	Worklist Smp#:	25
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

62 Methyl methacrylate, CAS: 80-62-6

Processing Results



RT	Mass	Response	Amount
11.59	41.00	4828	0.037852
11.62	69.00	0	
11.62	100.00	0	

Reviewer: smelcerb, 23-Jul-2020 09:43:49

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

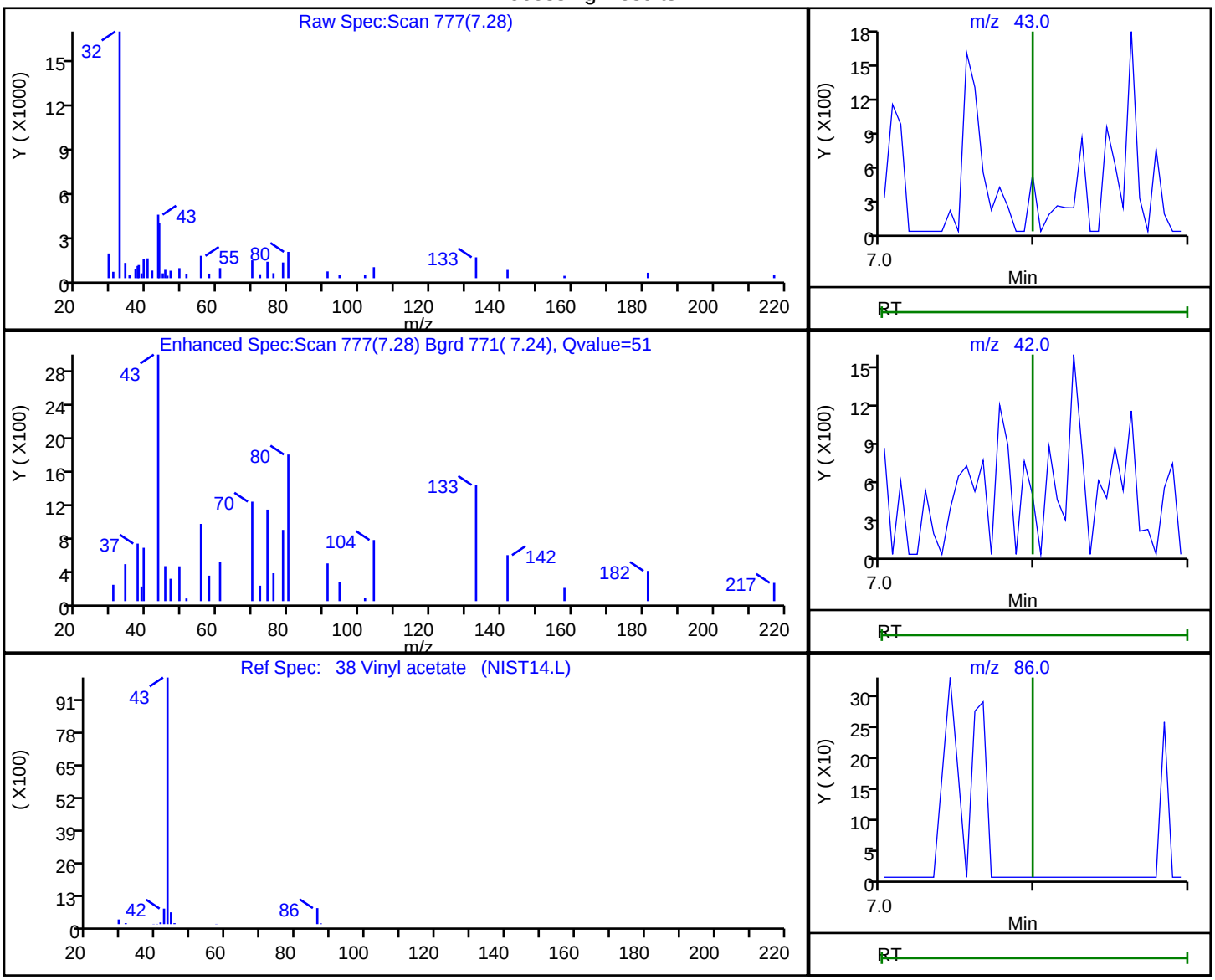
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200721-16069.b\RG22L19776.D				
Injection Date:	23-Jul-2020 05:56:30	Instrument ID:	MR		
Lims ID:	140-19776-A-13	Lab Sample ID:	140-19776-13		
Client ID:	10833				
Operator ID:	HMT	ALS Bottle#:	3	Worklist Smp#:	25
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

38 Vinyl acetate, CAS: 108-05-4

Processing Results



RT	Mass	Response	Amount
7.28	43.00	7320	0.034693
7.26	42.00	1882	
7.10	86.00	0	

Reviewer: smelcerb, 23-Jul-2020 09:41:20

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19793-1

SDG No.:

Client Sample ID: 11743 Lab Sample ID: 140-19793-1

Matrix: Air Lab File ID: GG23L19793.D

Analysis Method: TO-15 Date Collected: 07/22/2020 15:00

Sample wt/vol: 200(mL) Date Analyzed: 07/24/2020 05:43

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 41220 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	ND		0.20	
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.20	
79-00-5	1,1,2-Trichloroethane	ND		0.20	
76-13-1	1,1,2-Trichlorotrifluoroethane	ND		0.20	
75-34-3	1,1-Dichloroethane	ND		0.20	
75-35-4	1,1-Dichloroethene	ND		0.20	
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	
96-18-4	1,2,3-Trichloropropane	ND		0.50	
526-73-8	1,2,3-Trimethylbenzene	ND		0.20	
95-93-2	1,2,4,5-Tetramethylbenzene	ND		0.20	
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	
95-63-6	1,2,4-Trimethylbenzene	ND		0.20	
96-12-8	1,2-Dibromo-3-Chloropropane	ND		0.40	
106-93-4	1,2-Dibromoethane	ND		0.20	
95-50-1	1,2-Dichlorobenzene	ND		0.40	
107-06-2	1,2-Dichloroethane	ND		0.20	
78-87-5	1,2-Dichloropropane	ND		0.20	
76-14-2	1,2-Dichlorotetrafluoroethane	ND		0.20	
108-67-8	1,3,5-Trimethylbenzene	ND		0.20	
106-99-0	1,3-Butadiene	ND		0.40	
541-73-1	1,3-Dichlorobenzene	ND		0.20	
106-46-7	1,4-Dichlorobenzene	ND		0.20	
123-91-1	1,4-Dioxane	ND		0.40	
71-36-3	1-Butanol	ND		2.0	
90-12-0	1-Methylnaphthalene	ND		2.5	
540-84-1	2,2,4-Trimethylpentane	ND		0.40	
565-59-3	2,3-Dimethylpentane	ND		0.20	
78-93-3	2-Butanone	ND		1.0	
95-49-8	2-Chlorotoluene	ND		0.40	
591-78-6	2-Hexanone	ND		0.40	
78-78-4	2-Methylbutane	ND		0.50	
91-57-6	2-Methylnaphthalene	ND		2.5	
107-83-5	2-Methylpentane	ND		0.20	
107-05-1	3-Chloropropene	ND		0.20	
622-96-8	4-Ethyltoluene	ND		0.40	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		1.0	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19793-1

SDG No.:

Client Sample ID: 11743 Lab Sample ID: 140-19793-1

Matrix: Air Lab File ID: GG23L19793.D

Analysis Method: TO-15 Date Collected: 07/22/2020 15:00

Sample wt/vol: 200(mL) Date Analyzed: 07/24/2020 05:43

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 41220 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
67-64-1	Acetone	ND		7.5	
75-05-8	Acetonitrile	ND		1.0	
107-02-8	Acrolein	ND		1.0	
107-13-1	Acrylonitrile	ND		2.0	
98-83-9	Alpha Methyl Styrene	ND		0.40	
71-43-2	Benzene	ND		0.20	
100-44-7	Benzyl chloride	ND		0.40	
75-27-4	Bromodichloromethane	ND		0.20	
75-25-2	Bromoform	ND		0.20	
74-83-9	Bromomethane	ND		0.20	
106-97-8	Butane	ND		1.0	
75-15-0	Carbon disulfide	ND		0.40	
56-23-5	Carbon tetrachloride	ND		0.20	
108-90-7	Chlorobenzene	ND		0.20	
75-45-6	Chlorodifluoromethane	ND		0.20	
75-00-3	Chloroethane	ND		0.20	
67-66-3	Chloroform	ND		0.20	
74-87-3	Chloromethane	ND		1.0	
156-59-2	cis-1,2-Dichloroethene	ND		0.20	
10061-01-5	cis-1,3-Dichloropropene	ND		0.40	
98-82-8	Cumene	ND		0.40	
110-82-7	Cyclohexane	ND		0.40	
124-48-1	Dibromochloromethane	ND		0.20	
74-95-3	Dibromomethane	ND		0.40	
75-71-8	Dichlorodifluoromethane	ND		0.20	
64-17-5	Ethanol	ND	*	5.0	
141-78-6	Ethyl acetate	ND		2.0	
60-29-7	Ethyl ether	ND		2.0	
100-41-4	Ethylbenzene	ND		0.20	
87-68-3	Hexachlorobutadiene	ND		1.0	
110-54-3	Hexane	ND		0.40	
496-11-7	Indane	ND		0.20	
95-13-6	Indene	ND		0.40	
67-63-0	Isopropyl alcohol	ND		1.2	
179601-23-1	m&p-Xylene	ND		0.20	
80-62-6	Methyl methacrylate	ND		0.40	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19793-1

SDG No.:

Client Sample ID: 11743 Lab Sample ID: 140-19793-1

Matrix: Air Lab File ID: GG23L19793.D

Analysis Method: TO-15 Date Collected: 07/22/2020 15:00

Sample wt/vol: 200(mL) Date Analyzed: 07/24/2020 05:43

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 41220 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
1634-04-4	Methyl tert-butyl ether	ND		1.0	
108-87-2	Methylcyclohexane	ND		0.20	
75-09-2	Methylene Chloride	ND		1.0	
91-20-3	Naphthalene	ND		0.40	
104-51-8	n-Butylbenzene	ND		0.40	
124-18-5	n-Decane	ND		1.0	
112-40-3	n-Dodecane	ND		1.0	
142-82-5	n-Heptane	ND		0.40	
111-84-2	n-Nonane	ND		0.40	
111-65-9	n-Octane	ND		0.40	
103-65-1	N-Propylbenzene	ND		0.40	
1120-21-4	n-Undecane	ND		1.0	
95-47-6	o-Xylene	ND		0.20	
99-87-6	p-Cymene	ND		0.20	
109-66-0	Pentane	ND		2.5	
115-07-1	Propene	ND		2.5	
135-98-8	sec-Butylbenzene	ND		0.40	
100-42-5	Styrene	ND		0.20	
75-65-0	tert-Butanol	ND		1.0	
98-06-6	tert-Butylbenzene	ND		0.40	
127-18-4	Tetrachloroethene	ND		0.20	
109-99-9	Tetrahydrofuran	ND		1.0	
110-02-1	Thiophene	ND		0.20	
108-88-3	Toluene	ND		1.0	
156-60-5	trans-1,2-Dichloroethene	ND		0.20	
10061-02-6	trans-1,3-Dichloropropene	ND		0.20	
79-01-6	Trichloroethene	ND		0.20	
75-69-4	Trichlorofluoromethane	ND		0.20	
108-05-4	Vinyl acetate	ND		1.0	
593-60-2	Vinyl bromide	ND		0.20	
75-01-4	Vinyl chloride	ND		0.40	

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MG\20200722-16085.b\GG23L19793.D				
Lims ID:	140-19793-A-1				
Client ID:	11743				
Sample Type:	Client				
Inject. Date:	24-Jul-2020 05:43:30	ALS Bottle#:	16	Worklist Smp#:	28
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016085-028				
Misc. Info.:	11743				
Operator ID:	AFB	Instrument ID:	MG		
Method:	\\chromfs\Knoxville\ChromData\MG\20200722-16085.b\MG_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	24-Jul-2020 17:22:24	Calib Date:	15-Jul-2020 22:02:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1003				
First Level Reviewer: khachitpongpanits		Date:	24-Jul-2020 17:22:24		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.833	8.838	-0.005	93	139983	4.00	
* 2 1,4-Difluorobenzene	114	11.017	11.022	-0.005	97	1313377	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.746	15.751	-0.005	94	1133543	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.391	17.385	0.000	75	889525	3.86	
7 Propene	41	3.715	3.713	0.000	98	73632	-0.2392	7
17 Ethanol	31	4.805	4.775	0.027	98	47789	1.95	
23 Acetone	58	5.403	5.362	0.038	96	19569	0.6563	
25 Isopropyl alcohol	45	5.538	5.465	0.070	90	4724	0.0643	
31 Methylene Chloride	84	6.293	6.289	0.000	98	64589	0.1666	
47 1,1,1-Trichloroethane	97	9.863	9.873	-0.016	89	2479	0.0124	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

40MXISSURP_00004 Amount Added: 40.00 Units: mL Run Reagent

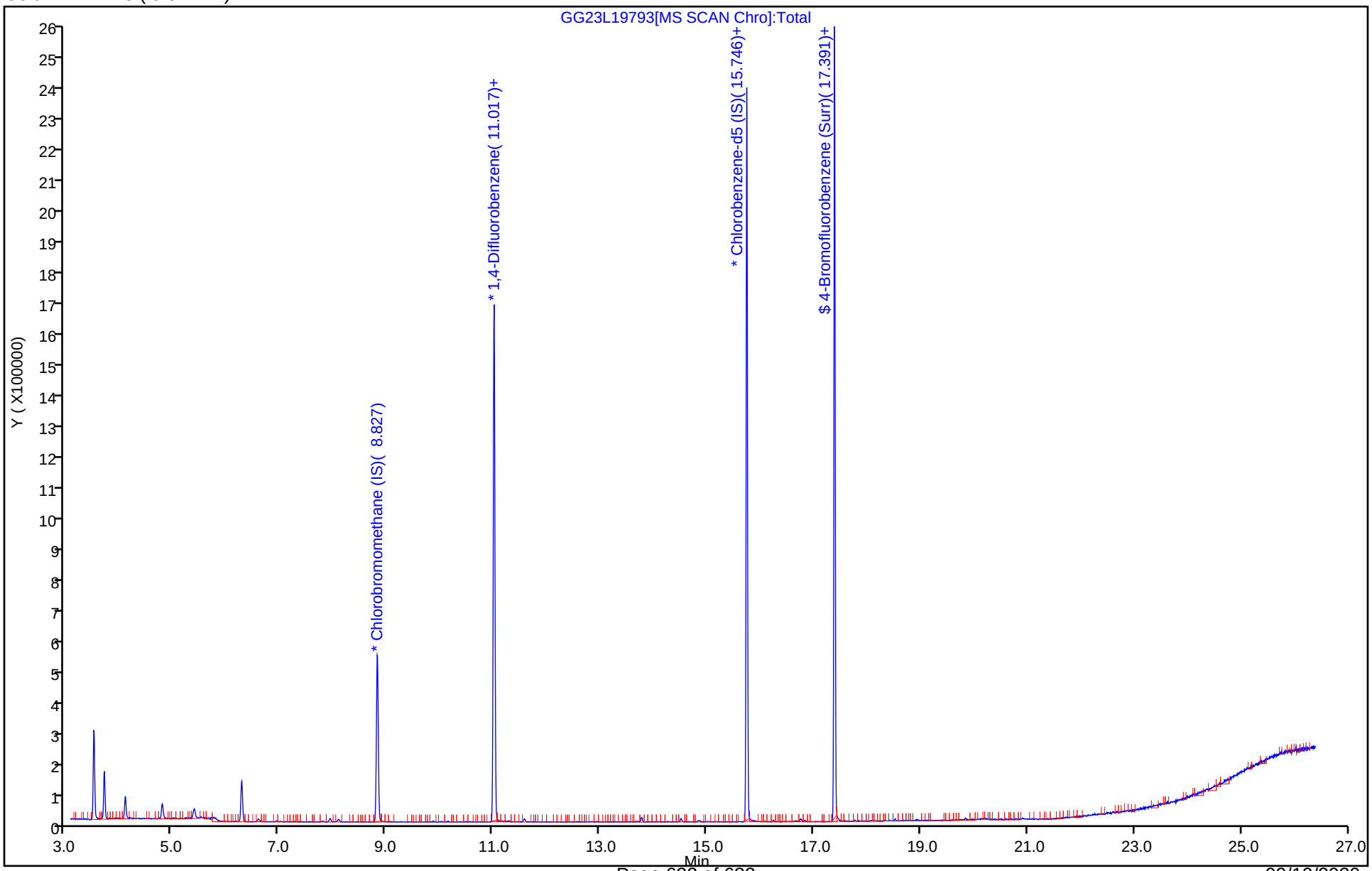
Report Date: 24-Jul-2020 17:22:24 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200722-16085.b\GG23L19793.D

Injection Date:	24-Jul-2020 05:43:30	Instrument ID:	MG	Operator ID:	AFB
Lims ID:	140-19793-A-1	Lab Sample ID:	140-19793-1	Worklist Smp#:	28
Client ID:	11743				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



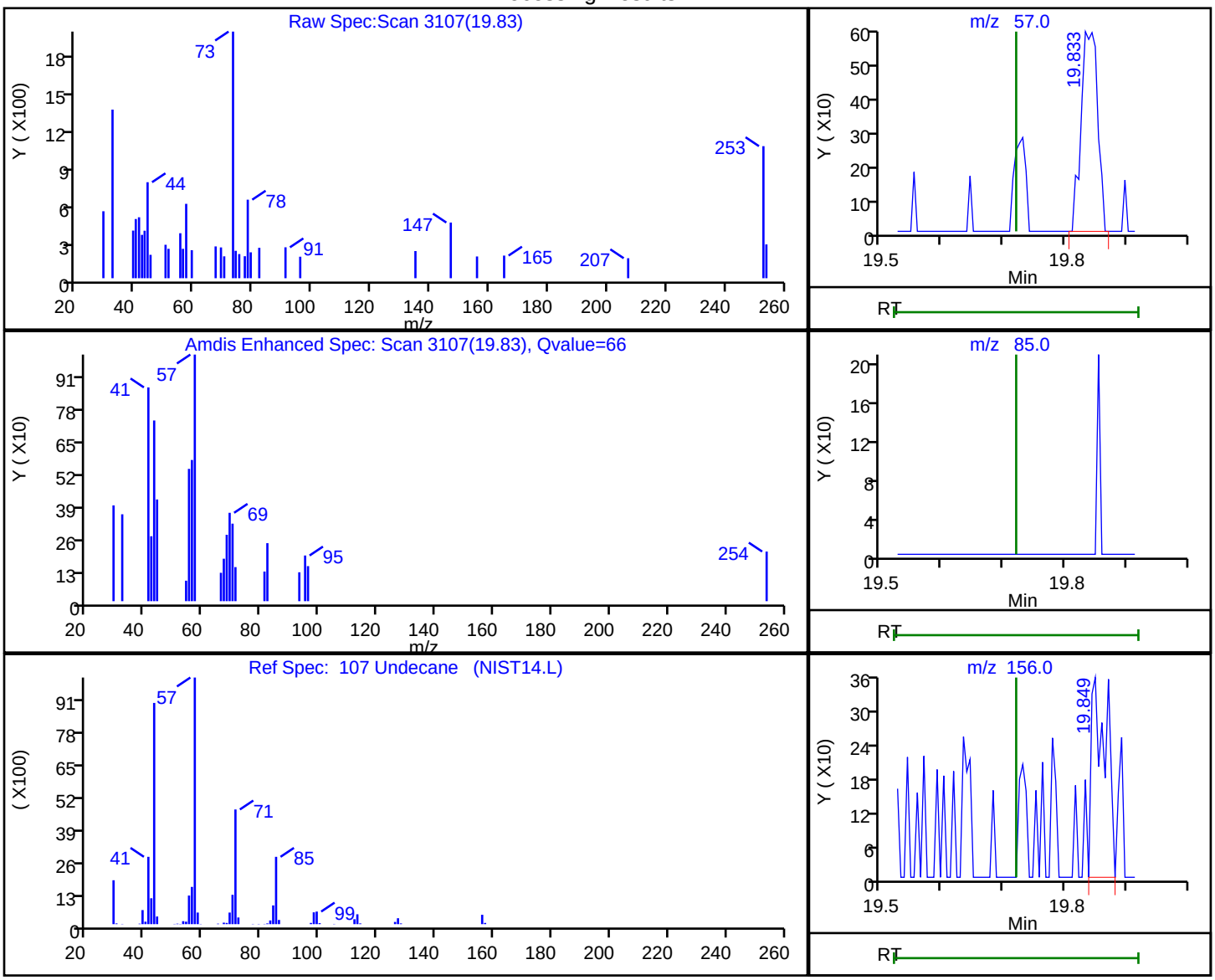
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200722-16085.b\GG23L19793.D				
Injection Date:	24-Jul-2020 05:43:30	Instrument ID:	MG		
Lims ID:	140-19793-A-1	Lab Sample ID:	140-19793-1		
Client ID:	11743				
Operator ID:	AFB	ALS Bottle#:	16	Worklist Smp#:	28
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

107 Undecane, CAS: 1120-21-4

Processing Results



RT	Mass	Response	Amount
19.83	57.00	1118	0.005004
19.72	85.00	0	
19.85	156.00	595	

Reviewer: khachitpongpanits, 24-Jul-2020 17:22:17

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19809-1

SDG No.:

Client Sample ID: 10335 Lab Sample ID: 140-19809-7

Matrix: Air Lab File ID: GG27L19809.D

Analysis Method: TO-15 Date Collected: 07/23/2020 16:30

Sample wt/vol: 200(mL) Date Analyzed: 07/27/2020 11:12

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 41299 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	ND		0.20	
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.20	
79-00-5	1,1,2-Trichloroethane	ND		0.20	
76-13-1	1,1,2-Trichlorotrifluoroethane	ND		0.20	
75-34-3	1,1-Dichloroethane	ND		0.20	
75-35-4	1,1-Dichloroethene	ND		0.20	
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	
96-18-4	1,2,3-Trichloropropane	ND		0.50	
526-73-8	1,2,3-Trimethylbenzene	ND		0.20	
95-93-2	1,2,4,5-Tetramethylbenzene	ND		0.20	
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	
95-63-6	1,2,4-Trimethylbenzene	ND		0.20	
96-12-8	1,2-Dibromo-3-Chloropropane	ND		0.40	
106-93-4	1,2-Dibromoethane	ND		0.20	
95-50-1	1,2-Dichlorobenzene	ND		0.40	
107-06-2	1,2-Dichloroethane	ND		0.20	
78-87-5	1,2-Dichloropropane	ND		0.20	
76-14-2	1,2-Dichlorotetrafluoroethane	ND		0.20	
108-67-8	1,3,5-Trimethylbenzene	ND		0.20	
106-99-0	1,3-Butadiene	ND		0.40	
541-73-1	1,3-Dichlorobenzene	ND		0.20	
106-46-7	1,4-Dichlorobenzene	ND		0.20	
123-91-1	1,4-Dioxane	ND		0.40	
71-36-3	1-Butanol	ND		2.0	
90-12-0	1-Methylnaphthalene	ND		2.5	
540-84-1	2,2,4-Trimethylpentane	ND		0.40	
565-59-3	2,3-Dimethylpentane	ND		0.20	
78-93-3	2-Butanone	ND		1.0	
95-49-8	2-Chlorotoluene	ND		0.40	
591-78-6	2-Hexanone	ND		0.40	
78-78-4	2-Methylbutane	ND		0.50	
91-57-6	2-Methylnaphthalene	ND		2.5	
107-83-5	2-Methylpentane	ND		0.20	
107-05-1	3-Chloropropene	ND		0.20	
622-96-8	4-Ethyltoluene	ND		0.40	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		1.0	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19809-1

SDG No.:

Client Sample ID: 10335 Lab Sample ID: 140-19809-7

Matrix: Air Lab File ID: GG27L19809.D

Analysis Method: TO-15 Date Collected: 07/23/2020 16:30

Sample wt/vol: 200(mL) Date Analyzed: 07/27/2020 11:12

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 41299 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
67-64-1	Acetone	ND		7.5	
75-05-8	Acetonitrile	ND		1.0	
107-02-8	Acrolein	ND		1.0	
107-13-1	Acrylonitrile	ND		2.0	
98-83-9	Alpha Methyl Styrene	ND		0.40	
71-43-2	Benzene	ND		0.20	
100-44-7	Benzyl chloride	ND		0.40	
75-27-4	Bromodichloromethane	ND		0.20	
75-25-2	Bromoform	ND		0.20	
74-83-9	Bromomethane	ND		0.20	
106-97-8	Butane	ND		1.0	
75-15-0	Carbon disulfide	ND		0.40	
56-23-5	Carbon tetrachloride	ND		0.20	
108-90-7	Chlorobenzene	ND		0.20	
75-45-6	Chlorodifluoromethane	ND		0.20	
75-00-3	Chloroethane	ND		0.20	
67-66-3	Chloroform	ND		0.20	
74-87-3	Chloromethane	ND		1.0	
156-59-2	cis-1,2-Dichloroethene	ND		0.20	
10061-01-5	cis-1,3-Dichloropropene	ND		0.40	
98-82-8	Cumene	ND		0.40	
110-82-7	Cyclohexane	ND		0.40	
124-48-1	Dibromochloromethane	ND		0.20	
74-95-3	Dibromomethane	ND		0.40	
75-71-8	Dichlorodifluoromethane	ND		0.20	
64-17-5	Ethanol	ND		5.0	
141-78-6	Ethyl acetate	ND		2.0	
60-29-7	Ethyl ether	ND		2.0	
100-41-4	Ethylbenzene	ND		0.20	
87-68-3	Hexachlorobutadiene	ND		1.0	
110-54-3	Hexane	ND		0.40	
496-11-7	Indane	ND		0.20	
95-13-6	Indene	ND		0.40	
67-63-0	Isopropyl alcohol	ND		1.2	
179601-23-1	m&p-Xylene	ND		0.20	
80-62-6	Methyl methacrylate	ND		0.40	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19809-1

SDG No.:

Client Sample ID: 10335 Lab Sample ID: 140-19809-7

Matrix: Air Lab File ID: GG27L19809.D

Analysis Method: TO-15 Date Collected: 07/23/2020 16:30

Sample wt/vol: 200(mL) Date Analyzed: 07/27/2020 11:12

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 41299 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
1634-04-4	Methyl tert-butyl ether	ND		1.0	
108-87-2	Methylcyclohexane	ND		0.20	
75-09-2	Methylene Chloride	ND		1.0	
91-20-3	Naphthalene	ND		0.40	
104-51-8	n-Butylbenzene	ND		0.40	
124-18-5	n-Decane	ND		1.0	
112-40-3	n-Dodecane	ND		1.0	
142-82-5	n-Heptane	ND		0.40	
111-84-2	n-Nonane	ND		0.40	
111-65-9	n-Octane	ND		0.40	
103-65-1	N-Propylbenzene	ND		0.40	
1120-21-4	n-Undecane	ND		1.0	
95-47-6	o-Xylene	ND		0.20	
99-87-6	p-Cymene	ND		0.20	
109-66-0	Pentane	ND		2.5	
115-07-1	Propene	ND		2.5	
135-98-8	sec-Butylbenzene	ND		0.40	
100-42-5	Styrene	ND		0.20	
75-65-0	tert-Butanol	ND		1.0	
98-06-6	tert-Butylbenzene	ND		0.40	
127-18-4	Tetrachloroethene	ND		0.20	
109-99-9	Tetrahydrofuran	ND		1.0	
110-02-1	Thiophene	ND		0.20	
108-88-3	Toluene	ND		1.0	
156-60-5	trans-1,2-Dichloroethene	ND		0.20	
10061-02-6	trans-1,3-Dichloropropene	ND		0.20	
79-01-6	Trichloroethene	ND		0.20	
75-69-4	Trichlorofluoromethane	ND		0.20	
108-05-4	Vinyl acetate	ND		1.0	
593-60-2	Vinyl bromide	ND		0.20	
75-01-4	Vinyl chloride	ND		0.40	

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200724-16113.b\GG27L19809.D
Lims ID: 140-19809-A-7
Client ID: 10335
Sample Type: Client
Inject. Date: 27-Jul-2020 11:12:30 ALS Bottle#: 16 Worklist Smp#: 6
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016113-006
Misc. Info.: 200ML10335
Operator ID: HMT Instrument ID: MG

Method: \\chromfs\Knoxville\ChromData\MG\20200724-16113.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 28-Jul-2020 10:38:18 Calib Date: 15-Jul-2020 22:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1057

First Level Reviewer: khachitpongpanits Date: 28-Jul-2020 10:38:59

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.833	8.838	-0.005	94	205468	4.00	
* 2 1,4-Difluorobenzene	114	11.017	11.022	-0.005	97	1872932	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.746	15.751	-0.005	94	1596319	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.391	17.385	0.000	76	1198813	3.69	
7 Propene	41	3.721	3.719	0.000	98	102178	-0.3058	7
47 1,1,1-Trichloroethane	97	9.874	9.868	0.000	96	14859	0.0504	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

40MXISSURP_00004 Amount Added: 40.00 Units: mL Run Reagent

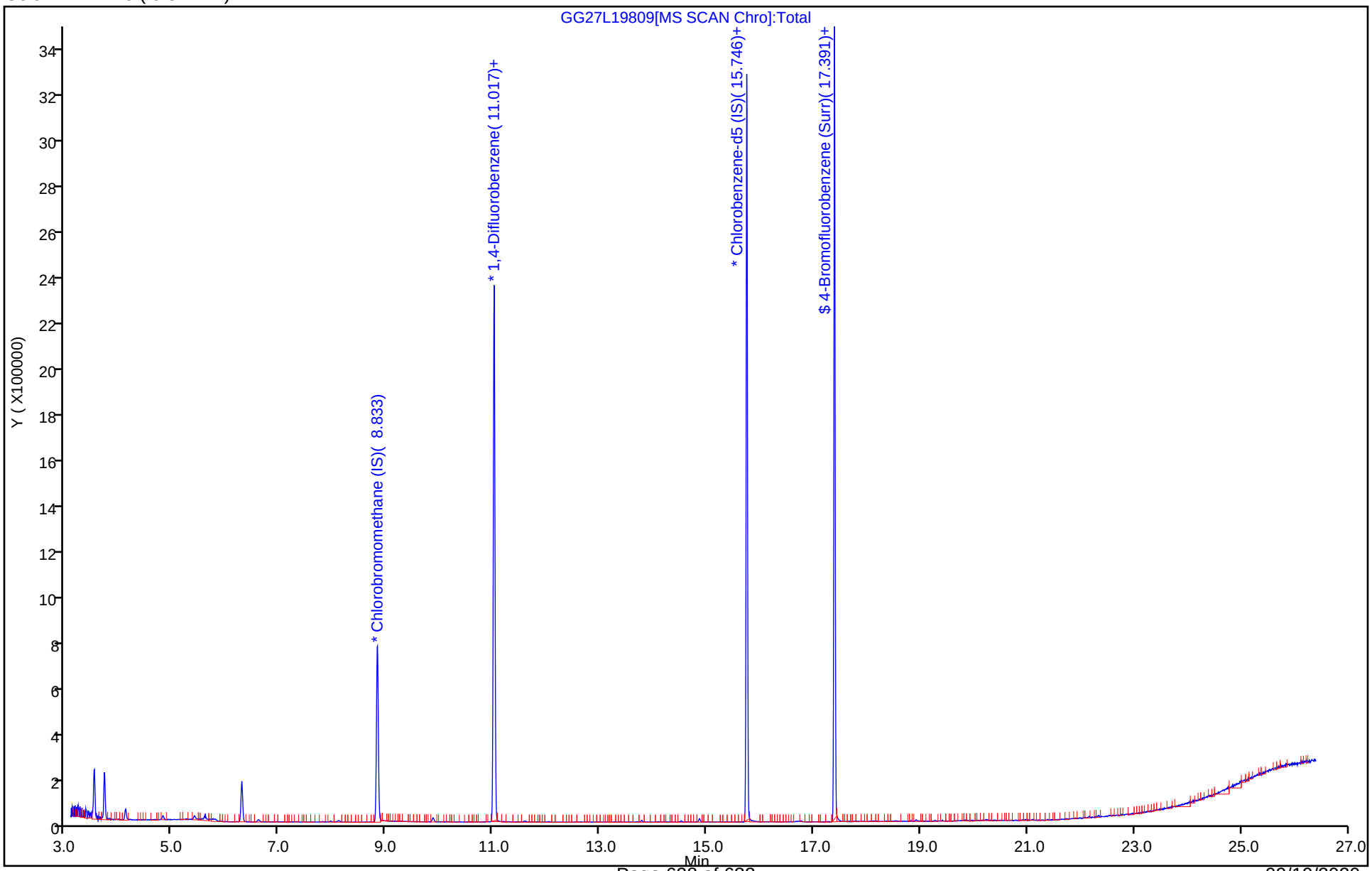
Report Date: 28-Jul-2020 10:39:00 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200724-16113.b\GG27L19809.D

Injection Date:	27-Jul-2020 11:12:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	140-19809-A-7	Lab Sample ID:	140-19809-7	Worklist Smp#:	6
Client ID:	10335				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Shipping and Receiving Documents

Baltimore #201

Eurofins TestAmerica, Knoxville
5815 Middlebrook Pike
Knoxville, TN 37921-5947
phone 865.291.3000 fax 865.584.4315

Canister Samples Chain of Custody Record

TestAmerica Laboratories, Inc. assumes no liability with respect to the collection and shipment of these samples.

140-20195 Chain of Custody

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact Information	**Client Project Manager:** Josh Mellis	**Samples Collected By:** Mellis / Boyer	COC No: 1 of 4 COCs
Company Name: Tetra Tech Inc	Phone: 410-279-2700		
Address: 10251 Centurion Blvd - Ste 200	Email: josh.mellis@tetratech.com		TALS Project #:
City/State/Zip: Germantown, MD 20874			For Lab Use Only:
Phone: 410-279-2700	Site Contact: Josh Mellis		Walk-in Client:
FAX:	Tel/Fax " "		Lab Sampling:
Project Name: MRC Indoor Air	**Analysis Turnaround Time**		Job / SDG No.:
Site/Location: Middle River Complex	Standard (Specific): ✓		(See below for Add'l Items)
P O # 112IC06388	Rush (Specifiy):		

Sample Identification	Sample Start Date	Time Start	Sample End Date	Time Stop	Canister Vacuum in Field, "Hg (Start)	Canister Vacuum in Field, "Hg (Stop)	Flow Controller ID	Canister ID	TO-14/15 (Standard / Low Level)	TO-15 SIM	EPA 3C	EPA 25C	ASTM D-1946	EPA 15/16	Other (Please specify in notes section)	Sample Type	Indoor Air/Ambient Air	Sub-Slab	Soil Gas	Soil Vapor Extraction (SVE)	Landfill Gas	Other (Please specify in notes section)	Sample Specific Notes:
IA-018-A-29	8/26/20	0738	8/26/20	1538	-30	-10	8556	34002427	X								X						
IA-DUP3-A-29		0000		0000	-30	-5	10856	34000268	X								X						
IA-138-A-29		0740		1540	-30	-3	7361	09787	X								X						
IA-174-A-29		0744		1544	-28	-3	09855	09632	X								X						
IA-093-A-29		0745		1545	-28	-4	11581	11592	X								X						
IA-015-A-29		0750		1550	-29	-5	09866	11806	X								X						
IA-078-A-29		0753		1553	-30	-7	8549	34002420	X								X						
IA-086-A-29		0754		1554	-30	-5	11816	11877	X								X						
IA-168-A-29		0756		1556	-30	-4	10691	11840	X								X						
IA-DUP4-A-29		0000	↓	0000	-29	0	7146	10924	X								X						

Temperature (Fahrenheit)	Interior	Ambient
Start		
Stop		

Pressure (inches of Hg)	Interior	Ambient
Start		
Stop		

Received @ ambient, 2 boxes
Fedex Pkg Custody seal intact
trk# 1713 7973 0234
" " 0370
KL 8/28/20

Special Instructions/QC Requirements & Comments:

Samples Shipped by:	Date / Time: 8/27/20 1230	**Samples Received by:**	1230
Samples Relinquished by:	Date / Time: 8/27/20 1700	**Received by:** ETA 8/28/20	1000
Relinquished by:	Date / Time:	**Received by:**	

4T
22 cans, 22 flows

Lab Use Only: **Shipper Name:** **Opened by:** **Condition:**

Baltimore #201

Eurofins TestAmerica, Knoxville
5815 Middlebrook Pike

Knoxville, TN 37921-5947
phone 865.291.3000 fax 865.584.4315

Canister Samples Chain of Custody Record

TestAmerica Laboratories, Inc. assumes no liability with respect to the collection and shipment of these samples.

eurofins | Environment Testing TestAmerica

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact Information		Client Project Manager: Josh Mullis	Samples Collected By: Mullis / Pryor	COC No: 4 of 4 COCs
Company Name: Tetra Tech Inc		Phone: 410-279-2700		TALS Project #:
Address: 20251 Century Blvd - Ste 200		Email: josh.mullis@tetratech.com		For Lab Use Only:
City/State/Zip: Germantown, MD 20874				Walk-in Client:
Phone: 410-279-2700		Site Contact: Josh Mullis		Lab Sampling:
FAX:		Tel/Fax: " "		
Project Name: MRC Indoor Air		Analysis Turnaround Time		Job / SDG No.:
Site/Location: Middle River Complex		Standard (Specific): ✓		(See below for Add'l Items)
PO# 112IC08388		Rush (Specifiy):		

Sample Identification	Sample Start Date	Time Start	Sample End Date	Time Stop	Canister Vacuum in Field, "Hg (Start)	Canister Vacuum in Field, "Hg (Stop)	Flow Controller ID	Canister ID	TO-14/15 (Standard / Low Level)	TO-15 SIM	EPA 3C	EPA 25C	ASTM D-1946	EPA 15/16	Other (Please specify in notes section)	Sample Type	Indoor Air/Ambient Air	Sub-Slab	Soil Gas	Soil Vapor Extraction (SVE)	Landfill Gas	Other (Please specify in notes section)	Sample Specific Notes:
IA-075A-29	8/26/20	0802	8/26/20	1602	-30	-5	10645	11858	X								X						
IA-021-A-29		0804		1604	-30	-8	7596	10758	X								X						
IA-136-A-29		0805		1605	-29	-9	8815	10736	X								X						
IA-117-A-29		0807		1607	-30	-4	09648	34001625	X								X						
IA-079-A-29		0809		1609	-30	-10	11500	34001971	X								X						
IA-118-A-29		0811		1611	-30	-3	11479	10739	X								X						
IA-081-A-29		0815		1615	-30	-4	6919	34000687	X								X						
IA-100-B-29		0820		1620	-30	-10	7066	11658	X								X						
IA-101-B-29		0822		1622	-30	-5	4769	34001187	X								X						

Temperature (Fahrenheit)			
Start	Interior	Ambient	
Stop			

Pressure (inches of Hg)			
Start	Interior	Ambient	
Stop			

Special Instructions/QC Requirements & Comments:

Samples Shipped by: Walt Pry	Date / Time: 8/27/20 1230	Samples Received by: [signature] 1230	
Samples Relinquished by: [signature]	Date / Time: 8/27/20 1700	Received by: [signature] ETA 8/28/20 1000	
Relinquished by:	Date / Time:	Received by:	
Lab Use Only: Shipper Name:	Opened by:	Condition:	

Form No. CA-C-WI-003, Rev. 2.23, dated 5/4/2020

EUROFINS/TESTAMERICA KNOXVILLE SAMPLE RECEIPT/CONDITION UPON RECEIPT ANOMALY CHECKLIST **Log In Number:** Loc: 140 **20195**

Review Items	Yes	No	NA	If No, what was the problem?
1. Are the shipping containers intact?	/			☐ **Containers, Broken**
2. Were ambient air containers received intact?			/	☑ Checked in lab
3. The coolers/containers custody seal if present, is it intact?	/			☐ Yes ☐ NA
4. Is the cooler temperature within limits? (> freezing temp. of water to 6 °C, VOST: 10°C) Thermometer ID :_____ Correction factor: _____			/	☐ **Cooler Out of Temp, Client Contacted, Proceed/Cancel** ☐ **Cooler Out of Temp, Same Day Receipt**
5. Were all of the sample containers received intact?	/			☐ **Containers, Broken**
6. Were samples received in appropriate containers?	/			☐ **Containers, Improper; Client Contacted; Proceed/Cancel**
7. Do sample container labels match COC? (IDs, Dates, Times)	/			☐ **COC & Samples Do Not Match** ☐ **COC Incorrect/Incomplete** ☐ **COC Not Received**
8. Were all of the samples listed on the COC received?	/			☐ **Sample Received, Not on COC** ☐ **Sample on COC, Not Received**
9. Is the date/time of sample collection noted?	/			☐ **COC; No Date/Time; Client Contacted**
10. Was the sampler identified on the COC?	/			☐ **Sampler Not Listed on COC**
11. Is the client and project name/# identified?	/			☐ **COC Incorrect/Incomplete**
12. Are tests/parameters listed for each sample?	/			☐ **COC No tests on COC**
13. Is the matrix of the samples noted?	/			☐ **COC Incorrect/Incomplete**
14. Was COC relinquished? (Signed/Dated/Timed)	/			☐ **COC Incorrect/Incomplete**
15. Were samples received within holding time?	/			☐ **Holding Time - Receipt**
16. Were samples received with correct chemical preservative (excluding Encore)?			/	☐ **pH Adjusted, pH Included (See box 16A)** ☐ **Incorrect Preservative**
17. Were VOA samples received without headspace?			/	☐ **Headspace (VOA only)**
18. Did you check for residual chlorine, if necessary? (e.g. 1613B, 1668) Chlorine test strip lot number: _____			/	☐ **Residual Chlorine**
19. For 1613B water samples is pH<9?			/	☐ If no, notify lab to adjust
20. For rad samples was sample activity info. Provided?			/	☐ Project missing info

Comments/Actions Taken

Labeling Verified by: **Date:**

pH test strip lot number:

	Box 16A: pH Preservation	Box 18A: Residual Chlorine
Preservative:		
Lot Number:		
Exp Date:		
Analyst:		
Date:		
Time:		

Project #: 14002945 PM Instructions: _____

Sample Receiving Associate: KC Date: 8/28/20

QA026R32.doc, 062719

TestAmerica Knoxville - Air Canister Initial Pressure Check

Gauge ID: G5
Date: 9/2/2020

Analyst	Sample ID	Asset #	Cleaning Job	Cert	Size (L)	Pressure @ Receipt (-in Hg or +psig)	Time	Comments
BRS	140-20195-a-1	34002427	19809	B	1	-8.4	15:17	1.1
BRS	140-20195-a-2	34000768	19793	B	1	-4.5	15:18	
BRS	140-20195-a-4	09632	19793	B	1	-3.5	15:19	
BRS	140-20195-a-3	09787	19776	B	1	-2.9	15:20	
BRS	140-20195-a-5	11592	19776	B	1	-4.8	15:21	
BRS	140-20195-a-6	11806	19793	B	1	-4.9	15:22	
BRS	140-20195-a-7	34002420	19747	B	1	-7.9	15:23	1.0
BRS	140-20195-a-8	11877	19747	B	1	-5.9	15:24	
BRS	140-20195-a-9	11840	19747	B	1	-4.2	15:25	
BRS	140-20195-a-10	10924	19747	B	1	-9.5	15:26	1.0
BRS	140-20195-a-11	11858	19747	B	1	-3.3	15:27	
BRS	140-20195-a-12	10758	19747	B	1	-7.0	15:28	1.2
BRS	140-20195-a-13	10736	19745	B	1	-9.5	15:29	1.0
BRS	140-20195-a-14	34001625	19747	B	1	0.0	15:30	
BRS	140-20195-a-15	34001971	19776	B	1	-7.8	15:31	1.1
BRS	140-20195-a-16	10739	19776	B	1	-2.8	15:32	
BRS	140-20195-a-17	34000687	19793	B	1	-3.3	15:33	
BRS	140-20195-a-18	11658	19747	B	1	-10.5	15:34	
BRS	140-20195-a-19	34001187	19776	B	1	-6.6	15:35	

□ Receiving –Air Can –Calve Open (NCM #_____)
□ Air - Can P -24 to -25 " - Flow Contr. Works (NCM#_____)
□ Air - Can P -24 to -25 " - Flow Contr. Faulty (NCM#_____)
□ Air - Can P Out -26" - Flow Contr. Works (NCM#_____)
□ Air - Can P Out -26" - Flow Contr. Faulty (NCM#_____)
□ Air - Can P Low -24 to -25 " - Grab Sample (NCM#_____)
□ Air - Can P Low -26 "- Grab Sample (NCM#_____)

APPENDIX D—DATA VALIDATION REPORTS

TETRA TECH

INTERNAL CORRESPONDENCE

TO: **S. BRENNER** **DATE:** **OCTOBER 12, 2020**

FROM: **LEIGH A. CIOFANI** **COPIES:** **DV FILE**

SUBJECT: **ORGANIC DATA VALIDATION – VOC**
LOCKHEED MARTIN CORPORATION (LMC) – MIDDLE RIVER COMPLEX (MRC)
SAMPLE DELIVERY GROUP (SDG) 140-20175-1

SAMPLES: 41 / Air / VOC

IA-001-C-29	IA-004-C-29	IA-060-C-29
IA-088-C-29	IA-102-C-29	IA-113-C-29
IA-126-C-29	IA-133-C-29	IA-141-C-29
IA-142-C-29	IA-144-C-29	IA-145-C-29
IA-146-C-29	IA-149-C-29	IA-150-C-29
IA-152-C-29	IA-153-C-29	IA-155-C-29
IA-BCK-1-29	IA-BCK-2-29	IA-BCK-3-29
IA-BCK-4-29	IA-DUP1-C-29	IA-DUP2-C-29
SV-001-C-29	SV-004-C-29	SV-060-C-29
SV-088-C-29	SV-102-C-29	SV-113-C-29
SV-126-C-29	SV-133-C-29	SV-141-C-29
SV-142-C-29	SV-149-C-29	SV-150-C-29
SV-152-C-29	SV-153-C-29	SV-155-C-29
SV-DUP1-C-29	SV-DUP2-C-29	

OVERVIEW

The sample set for LMC – MRC, SDG 140-20175-1, consists of forty-one (41) indoor air (IA) and soil vapor (SV) environmental samples. All samples were analyzed for select volatile organic compounds (VOCs). Four (4) field duplicate pairs are included in this SDG: IA-153-C-29 / IA-DUP1-C-29; IA-149-C-29 / IA-DUP2-C-29; SV-102-C-29 / SV-DUP1-C-29; and SV-153-C-29 / SV-DUP2-C-29.

The samples were collected by Tetra Tech on August 25, 2020 and analyzed by Eurofins TestAmerica. All analyses were conducted in accordance with EPA Method TO-15 analytical and reporting protocols.

The data contained in this SDG were validated with regard to the following parameters: data completeness, holding times, GC/MS tuning, initial/continuing calibrations, laboratory method blank results, surrogate spike recoveries, laboratory control sample results, internal standard areas, field duplicate precision, chromatographic resolution, compound identification, compound quantitation, and detection limits. Areas of concern are listed below.

MAJOR PROBLEMS

- None.

MINOR PROBLEMS

- The continuing calibration performed on 09/08/2020 at 15:52 on instrument MG had a percent difference (%D) for 1,2,3-trimethylbenzene that was greater than the 30% quality control limit. Sample SV-126-C-29 was associated with this calibration. The non-detected result for 1,2,3-trimethylbenzene was qualified as estimated (UJ) in the affected sample.

- The continuing calibration performed on 09/06/2020 at 17:12 on instrument MH had %Ds for carbon tetrachloride, 1,2,4-trimethylbenzene, 1,2,4-trichlorobenzene, and naphthalene that were greater than the 30% quality control limit. The following samples were associated with this calibration: IA-113-C-29, IA-088-C-29, IA-142-C-29, IA-155-C-29, IA-133-C-29, IA-153-C-29, IA-DUP1-C-29, IA-060-C-29, IA-152-C-29, IA-150-C-29, IA-145-C-29, and IA-146-C-29. Detected and non-detected results for these analytes were qualified as estimated (J and UJ, respectively) in the associated samples.

- The laboratory control sample (LCS) 140-42503/1002 had a percent recovery (%R) that was less than the laboratory quality control limits for 1,2,3-trimethylbenzene. Sample SV-126-C-29 was associated with this LCS. The non-detected result for 1,2,3-trimethylbenzene was qualified as estimated (UJ) in the associated sample.

- The LCS 140-42498/1009 had %Rs that were greater than the laboratory quality control limits for carbon tetrachloride and 1,2,4-trimethylbenzene. The following samples were associated with this LCS: IA-113-C-29, IA-088-C-29, IA-142-C-29, IA-155-C-29, IA-133-C-29, IA-153-C-29, IA-DUP1-C-29, IA-060-C-29, IA-152-C-29, IA-150-C-29, IA-145-C-29, and IA-146-C-29. Detected results for carbon tetrachloride and 1,2,4-trimethylbenzene were qualified as estimated (J) in the associated samples. No qualification was necessary for associated non-detected results.

- The laboratory noted that the results for chlorodifluoromethane for samples SV-113-C-29 SV-142-C-29 were calculated from peaks identified by the data system that exhibited chromatographic interference that could not be resolved. The laboratory suspects the results may be biased high. The results reported for chlorodifluoromethane in the affected samples were qualified as estimated (J).

- The field duplicate pair samples IA-153-C-29 / IA-DUP1-C-29 had a difference that was greater than quality control limit of 2x the reporting limit (RL) for trichloroethene. The detected and non-detected results for trichloroethene in samples IA-153-C-29 / IA-DUP1-C-29 were qualified as estimated (J and UJ, respectively).

- The field duplicate pair samples SV-153-C-29 / SV-DUP2-C-29 had a difference that was greater than the quality control limit of 2x the RL for methylene chloride. The detected and non-detected results for this analyte was qualified as estimated (J and UJ, respectively) in samples SV-153-C-29 and SV-DUP2-C-29.

- Detected results reported below the RL but above the method detection limit (MDL) were qualified as estimated (J).

NOTES

Twenty-five VOC target compounds were reported for the TO-15 analysis of the samples.

Non-detected results were reported to the MDL.

The following samples were analyzed at dilution factors greater than 1:

Sample	Dilution Factor
IA-004-C-29	1.77
IA-088-C-29	1.35
IA-113-C-29	1.33
IA-133-C-29	1.56
IA-146-C-29	1.48
IA-155-C-29	1.43
IA-BCK-2-29	2.29
IA-BCK-3-29	1.59
IA-BCK-4-29	1.52
IA-DUP2-C-29	1.4
SV-102-C-29	3.43
SV-126-C-29	12.39
SV-DUP1-C-29	3.6

1,1-Dichloroethane exceeded the instrument calibration range in samples SV-102-C-29 and SV-DUP1-C-29. These samples were reanalyzed, and the results from the reanalyses were selected for validation.

The GC/MS tunes performed on 09/03/2020 at 07:22 on instrument MG and 09/03/2020 at 09:43 on instrument MH had percent relative abundances for m/z 176 that were less than the ion abundance criteria listed on the forms. However, the laboratory case narrative indicates that the ion abundance criteria listed on the forms are for Method TO-14. The percent relative abundances for m/z 176 are within the limits for Method TO-15. Therefore, no action was necessary.

EXECUTIVE SUMMARY

Laboratory Performance: Some results were qualified due to calibration noncompliance. Several results were qualified due to LCS noncompliance. Two results were qualified due to chromatographic interference.

Other Factors Affecting Data Quality: Several results were qualified due to field duplicate imprecision. Results above the MDL but below the RL were qualified as estimated.

The data for these analyses were reviewed with reference to the USEPA "National Functional Guidelines for Organic Superfund Methods Data Review" (January 2017) and USEPA Method TO-15 analytical and reporting protocols. The text of this report has been formulated to address only those areas affecting data quality.

Leigh A. Ciofani

Tetra Tech, Inc.
Leigh A. Ciofani
Environmental Scientist/Data Validator

Joseph A. Samchuck

Tetra Tech, Inc.
Joseph A. Samchuck
Data Validation Manager

Attachments:
Appendix A – Qualified Analytical Results
Appendix B – Results as Reported by the Laboratory
Appendix C – Support Documentation

Appendix A

Qualified Analytical Results

Data Qualifier Definitions

The following definitions provide brief explanations of the validation qualifiers assigned to results in the data review process.

U	The analyte was analyzed for, but was not detected at a level greater than or equal to the level of the adjusted detection limit.
J	The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample (due either to the quality of the data generated because certain quality control criteria were not met, or the concentration of the analyte was below the reporting limit).
J+	The result is an estimated quantity, but the result may be biased high.
J-	The result is an estimated quantity, but the result may be biased low.
UJ	The analyte was analyzed for, but was not detected. The reported detection limit is approximate and may be inaccurate or imprecise.
NJ	The analyte has been “tentatively identified” or “presumptively” as present and the associated numerical value is the estimated concentration in the sample.
R	The sample result (detected) is unusable due to the quality of the data generated because certain criteria were not met. The analyte may or may not be present in the sample.
UR	The sample result (nondetected) is unusable due to the quality of the data generated because certain criteria were not met. The analyte may or may not be present in the sample.
X	The sample results (including non-detects) were affected by serious deficiencies in the ability to analyze the sample and meet published method and project quality control criteria. The presence or absence of the analyte cannot be substantiated by the data provided. Acceptance or rejection of the data should be decided by the project team, but exclusion of the data is recommended.

Qualifier Codes:

A = Lab Blank Contamination
B = Field Blank Contamination
C = Calibration Noncompliance (i.e., % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
C01 = GC/MS Tuning Noncompliance
D = MS/MSD Recovery Noncompliance
E = LCS/LCSD Recovery Noncompliance
F = Lab Duplicate Imprecision
G = Field Duplicate Imprecision
H = Holding Time Exceedance
I = ICP Serial Dilution Noncompliance
J = ICP PDS Recovery Noncompliance; MSA's $r < 0.995$
K = ICP Interference - includes ICS % R Noncompliance
L = Instrument Calibration Range Exceedance
M = Sample Preservation Noncompliance
N = Internal Standard Noncompliance
N01 = Internal Standard Recovery Noncompliance Dioxins
N02 = Recovery Standard Noncompliance Dioxins
N03 = Clean-up Standard Noncompliance Dioxins
O = Poor Instrument Performance (i.e., base-time drifting)
P = Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q = Other problems (can encompass a number of issues; i.e.chromatography,interferences, etc.)
R = Surrogates Recovery Noncompliance
S = Pesticide/PCB Resolution
T = % Breakdown Noncompliance for DDT and Endrin
U = RPD between columns/detectors >40% for positive results determined via GC/HPLC
V = Non-linear calibrations; correlation coefficient $r < 0.995$
W = EMPC result
X = Signal to noise response drop
Y = Percent solids <30%
Z = Uncertainty at 2 standard deviations is greater than sample activity
Z1 = Tentatively Identified Compound considered presumptively present
Z2 = Tentatively Identified Compound column bleed
Z3 = Tentatively Identified Compound aldol condensate
Z4 = Sample activity is less than the at uncertainty at 3 standard deviations and greater than the MDC
Z5 = Sample activity is less than the at uncertainty at 3 standard deviations and less than the MDC

PROJ_NO: 08388	NSAMPLE	IA-001-C-29			IA-004-C-29			IA-060-C-29			IA-088-C-29		
SDG: 140-20175-1	LAB_ID	140-20175-18			140-20175-19			140-20175-28			140-20175-22		
FRACTION: OV-M3	SAMP_DATE	8/25/2020			8/25/2020			8/25/2020			8/25/2020		
MEDIA: AIR	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/M3			UG/M3			UG/M3			UG/M3		
	PCT_SOLIDS												
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1-TRICHLOROETHANE		1	U		1	U		1	U		1	U	
1,1,2-TRICHLOROETHANE		0.19	U		0.19	U		0.19	U		0.19	U	
1,1-DICHLOROETHANE		0.14	U		0.14	U		0.14	U		0.14	U	
1,1-DICHLOROETHENE		0.16	U		0.16	U		0.16	U		0.16	U	
1,2,3-TRIMETHYLBENZENE		0.88	U		0.88	U		0.88	U		0.88	U	
1,2,4-TRICHLOROBENZENE		2.4	U		2.4	U		2.4	UJ	C	2.4	UJ	C
1,2,4-TRIMETHYLBENZENE		0.49	U		0.49	U		0.67	J	CEP	0.49	UJ	C
1,2-DICHLOROETHANE		0.2	U		0.2	U		0.2	U		0.2	U	
1,3,5-TRIMETHYLBENZENE		0.54	U		0.54	U		1.4	J	P	1.3	J	P
BENZENE		0.37	J	P	0.4	J	P	0.68	J	P	0.46	J	P
CARBON TETRACHLORIDE		0.7	J	P	0.51	J	P	0.69	J	CEP	0.56	J	CEP
CHLORODIFLUOROMETHANE		2.3			2.1			19			4.4		
CHLOROFORM		0.49	J	P	0.34	J	P	0.56	J	P	0.27	J	P
CIS-1,2-DICHLOROETHENE		0.2	U		0.2	U		0.2	U		0.2	U	
DICHLORODIFLUOROMETHANE		2.6			2.6			2.8			2.5		
ETHYLBENZENE		0.28	U		0.28	U		0.58	J	P	0.36	J	P
METHYL TERT-BUTYL ETHER		0.94	U		0.94	U		0.94	U		0.94	U	
METHYLENE CHLORIDE		6.8	U		8.3			6.8	U		6.8	U	
NAPHTHALENE		1	U		1	U		1	UJ	C	1	UJ	C
TETRACHLOROETHENE		0.24	U		0.24	U		0.24	U		0.24	U	
TOLUENE		2.3			3.2			5.2			4.5		
TOTAL XYLENES		1.5	J	P	1.3	J	P	3.3	J	P	1.9	J	P
TRANS-1,2-DICHLOROETHENE		0.14	U		0.14	U		0.14	U		0.14	U	
TRICHLOROETHENE		0.16	U		0.16	U		0.16	U		0.16	U	
VINYL CHLORIDE		0.33	U		0.33	U		0.33	U		0.33	U	

PROJ_NO: 08388	NSAMPLE	IA-102-C-29			IA-113-C-29			IA-126-C-29			IA-133-C-29		
SDG: 140-20175-1	LAB_ID	140-20175-20			140-20175-21			140-20175-37			140-20175-25		
FRACTION: OV-M3	SAMP_DATE	8/25/2020			8/25/2020			8/25/2020			8/25/2020		
MEDIA: AIR	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/M3			UG/M3			UG/M3			UG/M3		
	PCT_SOLIDS												
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1-TRICHLOROETHANE		1	U		1	J	P	1	U		1	U	
1,1,2-TRICHLOROETHANE		0.19	U		0.45	J	P	0.19	U		0.19	U	
1,1-DICHLOROETHANE		0.14	U		0.52	J	P	0.14	U		0.14	U	
1,1-DICHLOROETHENE		0.16	U		0.16	U		0.16	U		0.16	U	
1,2,3-TRIMETHYLBENZENE		0.88	U		0.88	U		0.88	U		0.88	U	
1,2,4-TRICHLOROBENZENE		2.4	U		2.4	UJ	C	2.4	U		2.4	UJ	C
1,2,4-TRIMETHYLBENZENE		0.49	U		0.75	J	CEP	1.7	J	P	0.49	UJ	C
1,2-DICHLOROETHANE		0.2	U		0.35	J	P	0.2	U		0.2	U	
1,3,5-TRIMETHYLBENZENE		1.3	J	P	1.8	J	P	0.54	U		1.3	J	P
BENZENE		0.51	J	P	0.56	J	P	0.58	J	P	0.54	J	P
CARBON TETRACHLORIDE		0.69	J	P	1	J	CEP	0.39	J	P	0.48	J	CEP
CHLORODIFLUOROMETHANE		6.5			4.7			5.9			9.4		
CHLOROFORM		0.33	J	P	0.66	J	P	0.63	J	P	0.34	J	P
CIS-1,2-DICHLOROETHENE		0.2	U		0.2	U		0.2	U		0.2	U	
DICHLORODIFLUOROMETHANE		2.9			3			2			2.3		
ETHYLBENZENE		0.35	J	P	0.67	J	P	1.4	J	P	0.38	J	P
METHYL TERT-BUTYL ETHER		0.94	U		0.94	U		0.94	U		0.94	U	
METHYLENE CHLORIDE		6.8	U		6.8	U		39			6.8	U	
NAPHTHALENE		1	U		1	UJ	C	1	U		1	UJ	C
TETRACHLOROETHENE		0.24	U		0.66	J	P	1.3	J	P	0.24	U	
TOLUENE		3.1			4.1			52			3.1		
TOTAL XYLENES		1.7	J	P	3	J	P	7.3			2.1	J	P
TRANS-1,2-DICHLOROETHENE		0.14	U		0.27	J	P	0.14	U		0.14	U	
TRICHLOROETHENE		0.16	U		0.27	J	P	2.1			0.16	U	
VINYL CHLORIDE		0.33	U		0.33	U		0.33	U		0.33	U	

PROJ_NO: 08388	NSAMPLE	IA-141-C-29			IA-142-C-29			IA-144-C-29			IA-145-C-29		
SDG: 140-20175-1	LAB_ID	140-20175-34			140-20175-23			140-20175-33			140-20175-31		
FRACTION: OV-M3	SAMP_DATE	8/25/2020			8/25/2020			8/25/2020			8/25/2020		
MEDIA: AIR	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/M3			UG/M3			UG/M3			UG/M3		
	PCT_SOLIDS												
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1-TRICHLOROETHANE		1	U		1	U		1	U		1	U	
1,1,2-TRICHLOROETHANE		0.19	U		0.19	U		0.19	U		0.19	U	
1,1-DICHLOROETHANE		0.14	U		0.14	U		0.14	U		0.14	U	
1,1-DICHLOROETHENE		0.16	U		0.16	U		0.16	U		0.16	U	
1,2,3-TRIMETHYLBENZENE		0.88	U		0.88	U		0.88	U		0.88	U	
1,2,4-TRICHLOROBENZENE		2.4	U		2.4	UJ	C	2.4	U		2.4	UJ	C
1,2,4-TRIMETHYLBENZENE		0.73	J	P	0.49	UJ	C	0.49	U		0.49	UJ	C
1,2-DICHLOROETHANE		0.2	U		0.2	U		0.2	U		0.2	U	
1,3,5-TRIMETHYLBENZENE		0.54	U		1.4	J	P	0.54	U		1.3	J	P
BENZENE		0.51	J	P	0.47	J	P	0.13	U		0.61	J	P
CARBON TETRACHLORIDE		0.33	J	P	0.77	J	CEP	0.22	U		0.57	J	CEP
CHLORODIFLUOROMETHANE		11			7.8			26			63		
CHLOROFORM		0.17	U		0.96	J	P	0.17	U		0.4	J	P
CIS-1,2-DICHLOROETHENE		0.2	U		0.2	U		0.2	U		0.2	U	
DICHLORODIFLUOROMETHANE		1.9	J	P	2.8			1.9	J	P	2.5		
ETHYLBENZENE		0.77	J	P	0.49	J	P	0.28	U		0.55	J	P
METHYL TERT-BUTYL ETHER		0.94	U		0.94	U		0.94	U		0.94	U	
METHYLENE CHLORIDE		6.8	U		6.8	U		6.8	U		6.8	U	
NAPHTHALENE		1	U		1	UJ	C	1	U		1	UJ	C
TETRACHLOROETHENE		0.24	U		0.24	U		0.24	U		0.24	U	
TOLUENE		5.9			4.2			1.5	U		3.2		
TOTAL XYLENES		4.3			2.7	J	P	0.52	U		2.7	J	P
TRANS-1,2-DICHLOROETHENE		0.14	U		0.14	U		0.14	U		0.14	U	
TRICHLOROETHENE		0.16	U		0.16	U		0.16	U		0.16	U	
VINYL CHLORIDE		0.33	U		0.33	U		0.33	U		0.33	U	

PROJ_NO: 08388	NSAMPLE	IA-146-C-29			IA-149-C-29			IA-150-C-29			IA-152-C-29		
SDG: 140-20175-1	LAB_ID	140-20175-32			140-20175-35			140-20175-30			140-20175-29		
FRACTION: OV-M3	SAMP_DATE	8/25/2020			8/25/2020			8/25/2020			8/25/2020		
MEDIA: AIR	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/M3			UG/M3			UG/M3			UG/M3		
	PCT_SOLIDS												
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1-TRICHLOROETHANE		1	U		1	U		1	U		1	U	
1,1,2-TRICHLOROETHANE		0.19	U		0.19	U		0.19	U		0.19	U	
1,1-DICHLOROETHANE		0.14	U		0.14	U		0.14	U		0.14	U	
1,1-DICHLOROETHENE		0.16	U		0.16	U		0.16	U		0.16	U	
1,2,3-TRIMETHYLBENZENE		0.88	U		0.88	U		0.88	U		0.88	U	
1,2,4-TRICHLOROBENZENE		2.4	UJ	C	2.4	U		2.4	UJ	C	2.4	UJ	C
1,2,4-TRIMETHYLBENZENE		0.53	J	CEP	1.4	J	P	0.51	J	CEP	1	J	CEP
1,2-DICHLOROETHANE		0.2	U		0.2	U		0.2	U		0.2	U	
1,3,5-TRIMETHYLBENZENE		1.4	J	P	0.54	U		1.4	J	P	1.5	J	P
BENZENE		0.59	J	P	0.58	J	P	0.62	J	P	0.66	J	P
CARBON TETRACHLORIDE		0.55	J	CEP	0.28	J	P	0.59	J	CEP	0.59	J	CEP
CHLORODIFLUOROMETHANE		65			6.2			65			38		
CHLOROFORM		0.44	J	P	0.52	J	P	0.4	J	P	0.67	J	P
CIS-1,2-DICHLOROETHENE		0.2	U		0.2	U		0.2	U		0.2	U	
DICHLORODIFLUOROMETHANE		2.6			1.9	J	P	2.8			2.7		
ETHYLBENZENE		0.56	J	P	1.3	J	P	0.61	J	P	0.67	J	P
METHYL TERT-BUTYL ETHER		0.94	U		0.94	U		0.94	U		0.94	U	
METHYLENE CHLORIDE		8.8			33			18			6.8	U	
NAPHTHALENE		1	UJ	C	1	U		1	UJ	C	1	UJ	C
TETRACHLOROETHENE		0.24	U		1	J	P	0.24	U		0.24	U	
TOLUENE		3			47			4.2			4.8		
TOTAL XYLENES		2.9	J	P	6.8			3.2	J	P	3.5		
TRANS-1,2-DICHLOROETHENE		0.14	U		0.14	U		0.14	U		0.14	U	
TRICHLOROETHENE		0.16	U		2.2			0.16	U		0.16	U	
VINYL CHLORIDE		0.33	U		0.33	U		0.33	U		0.33	U	

PROJ_NO: 08388	NSAMPLE	IA-153-C-29			IA-155-C-29			IA-BCK-1-29			IA-BCK-2-29		
SDG: 140-20175-1	LAB_ID	140-20175-26			140-20175-24			140-20175-38			140-20175-39		
FRACTION: OV-M3	SAMP_DATE	8/25/2020			8/25/2020			8/25/2020			8/25/2020		
MEDIA: AIR	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/M3			UG/M3			UG/M3			UG/M3		
	PCT_SOLIDS												
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1-TRICHLOROETHANE		1	U		1	U		1	U		1	U	
1,1,2-TRICHLOROETHANE		0.19	U		0.19	U		0.19	U		0.19	U	
1,1-DICHLOROETHANE		0.14	U		0.14	U		0.14	U		0.14	U	
1,1-DICHLOROETHENE		0.16	U		0.16	U		0.16	U		0.16	U	
1,2,3-TRIMETHYLBENZENE		0.88	U		0.88	U		0.88	U		0.88	U	
1,2,4-TRICHLOROBENZENE		2.4	UJ	C	2.4	UJ	C	2.4	U		2.4	U	
1,2,4-TRIMETHYLBENZENE		0.49	UJ	C	0.49	UJ	C	0.49	U		0.49	U	
1,2-DICHLOROETHANE		0.41	J	P	0.2	U		0.2	U		0.28	J	P
1,3,5-TRIMETHYLBENZENE		0.54	U		1.3	J	P	0.54	U		0.54	U	
BENZENE		0.45	J	P	0.58	J	P	0.23	J	P	0.27	J	P
CARBON TETRACHLORIDE		0.54	J	CEP	0.38	J	CEP	0.22	U		0.22	U	
CHLORODIFLUOROMETHANE		8.4			9.2			1.3	J	P	1.1	J	P
CHLOROFORM		0.29	J	P	0.46	J	P	0.17	U		0.17	U	
CIS-1,2-DICHLOROETHENE		0.2	U		0.2	U		0.2	U		0.2	U	
DICHLORODIFLUOROMETHANE		2.3			2.5			1.7	J	P	1.9	J	P
ETHYLBENZENE		0.38	J	P	0.42	J	P	0.28	U		0.28	U	
METHYL TERT-BUTYL ETHER		0.94	U		0.94	U		0.94	U		0.94	U	
METHYLENE CHLORIDE		6.8	U		6.8	U		6.8	U		21		
NAPHTHALENE		1	UJ	C	1	UJ	C	1	U		1	U	
TETRACHLOROETHENE		0.24	U		0.24	U		0.24	U		0.24	U	
TOLUENE		2.9			3.3			1.5	U		1.6	J	P
TOTAL XYLENES		1.8	J	P	2.1	J	P	0.99	J	P	1.1	J	P
TRANS-1,2-DICHLOROETHENE		0.14	U		0.14	U		0.14	U		0.14	U	
TRICHLOROETHENE		0.16	UJ	G	0.16	U		0.16	U		0.16	U	
VINYL CHLORIDE		0.33	U		0.33	U		0.33	U		0.33	U	

PROJ_NO: 08388	NSAMPLE	IA-BCK-3-29			IA-BCK-4-29			IA-DUP1-C-29			IA-DUP2-C-29		
SDG: 140-20175-1	LAB_ID	140-20175-40			140-20175-41			140-20175-27			140-20175-36		
FRACTION: OV-M3	SAMP_DATE	8/25/2020			8/25/2020			8/25/2020			8/25/2020		
MEDIA: AIR	QC_TYPE	NM			NM			FD			FD		
	UNITS	UG/M3			UG/M3			UG/M3			UG/M3		
	PCT_SOLIDS												
	DUP_OF							IA-153-C-29			IA-149-C-29		
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1-TRICHLOROETHANE		1	U		1	U		1	U		1	U	
1,1,2-TRICHLOROETHANE		0.19	U		0.19	U		0.19	U		0.19	U	
1,1-DICHLOROETHANE		0.14	U		0.14	U		0.14	U		0.14	U	
1,1-DICHLOROETHENE		0.16	U		0.16	U		0.16	U		0.16	U	
1,2,3-TRIMETHYLBENZENE		0.88	U		0.88	U		0.88	U		0.88	U	
1,2,4-TRICHLOROBENZENE		2.4	U		2.4	U		2.4	UJ	C	2.4	U	
1,2,4-TRIMETHYLBENZENE		0.53	J	P	0.49	U		0.52	J	CEP	1.9	J	P
1,2-DICHLOROETHANE		0.2	U		0.2	U		0.2	U		0.2	U	
1,3,5-TRIMETHYLBENZENE		0.54	U		0.54	U		1.4	J	P	0.55	J	P
BENZENE		0.23	J	P	0.43	J	P	0.6	J	P	0.55	J	P
CARBON TETRACHLORIDE		0.45	J	P	0.3	J	P	0.76	J	CEP	0.22	U	
CHLORODIFLUOROMETHANE		1.2	J	P	1.2	J	P	10			5.7		
CHLOROFORM		0.17	U		0.17	U		0.55	J	P	0.57	J	P
CIS-1,2-DICHLOROETHENE		1.2	J	P	0.2	U		0.2	U		0.2	U	
DICHLORODIFLUOROMETHANE		1.9	J	P	2.1			2.8			1.8	J	P
ETHYLBENZENE		0.28	U		0.28	U		0.56	J	P	1.5	J	P
METHYL TERT-BUTYL ETHER		0.94	U		0.94	U		0.94	U		0.94	U	
METHYLENE CHLORIDE		7.8			12			11			40		
NAPHTHALENE		1	U		1	U		1	UJ	C	1.3		
TETRACHLOROETHENE		0.24	U		0.24	U		0.24	U		0.94	J	P
TOLUENE		1.5	J	P	1.8	J	P	4.2			50		
TOTAL XYLENES		1.2	J	P	0.65	J	P	2.5	J	P	7.6		
TRANS-1,2-DICHLOROETHENE		0.14	U		0.14	U		0.14	U		0.14	U	
TRICHLOROETHENE		0.16	U		0.16	U		4.8	J	G	1.9		
VINYL CHLORIDE		0.33	U		0.33	U		0.33	U		0.33	U	

PROJ_NO: 08388	NSAMPLE	SV-001-C-29			SV-004-C-29			SV-060-C-29			SV-088-C-29		
SDG: 140-20175-1	LAB_ID	140-20175-1			140-20175-2			140-20175-12			140-20175-5		
FRACTION: OV-M3	SAMP_DATE	8/25/2020			8/25/2020			8/25/2020			8/25/2020		
MEDIA: AIR	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/M3			UG/M3			UG/M3			UG/M3		
	PCT_SOLIDS												
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1-TRICHLOROETHANE		1	U		2.5	U		8.1	J	P	1	U	
1,1,2-TRICHLOROETHANE		0.19	U		0.48	U		0.95	U		0.19	U	
1,1-DICHLOROETHANE		0.14	U		0.35	U		10			0.14	U	
1,1-DICHLOROETHENE		0.16	U		0.4	U		0.79	U		0.16	U	
1,2,3-TRIMETHYLBENZENE		0.88	U		2.2	U		4.4	U		0.88	U	
1,2,4-TRICHLOROBENZENE		2.4	U		5.9	U		12	U		2.4	U	
1,2,4-TRIMETHYLBENZENE		0.49	U		1.2	U		2.5	U		0.54	J	P
1,2-DICHLOROETHANE		0.2	U		0.51	U		1	U		0.2	U	
1,3,5-TRIMETHYLBENZENE		0.54	U		1.4	U		2.7	U		1.4	J	P
BENZENE		0.35	J	P	0.42	J	P	0.74	J	P	0.28	J	P
CARBON TETRACHLORIDE		0.49	J	P	0.61	J	P	1.1	U		0.58	J	P
CHLORODIFLUOROMETHANE		1.9			0.97	U		9.7			3.9		
CHLOROFORM		3.5			81			15			0.76	J	P
CIS-1,2-DICHLOROETHENE		19			42			24			5.4		
DICHLORODIFLUOROMETHANE		2.7			2.5	J	P	2.3	J	P	2.9		
ETHYLBENZENE		0.28	U		0.71	U		9.1			0.47	J	P
METHYL TERT-BUTYL ETHER		0.94	U		2.3	U		4.7	U		0.94	U	
METHYLENE CHLORIDE		6.8	U		17	U		34	U		6.8	U	
NAPHTHALENE		1	U		2.6	U		5.2	U		1	U	
TETRACHLOROETHENE		41			3.3	J	P	1.2	U		0.47	J	P
TOLUENE		1.5	U		3.7	U		7.3	U		1.5	J	P
TOTAL XYLENES		0.52	U		1.3	U		80			6.7		
TRANS-1,2-DICHLOROETHENE		9			3.2	J	P	1.2	J	P	0.37	J	P
TRICHLOROETHENE		230			300			480			42		
VINYL CHLORIDE		0.33	U		0.83	U		1.7	U		0.33	U	

PROJ_NO: 08388	NSAMPLE	SV-102-C-29			SV-102-C-29-DL			SV-113-C-29			SV-126-C-29		
SDG: 140-20175-1	LAB_ID	140-20175-3			140-20175-3			140-20175-4			140-20175-17		
FRACTION: OV-M3	SAMP_DATE	8/25/2020			8/25/2020			8/25/2020			8/25/2020		
MEDIA: AIR	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/M3			UG/M3			UG/M3			UG/M3		
	PCT_SOLIDS												
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1-TRICHLOROETHANE		2700						1.8	J	P	13	U	
1,1,2-TRICHLOROETHANE		3.3	U					0.19	U		2.4	U	
1,1-DICHLOROETHANE					5500			4.6			1.8	U	
1,1-DICHLOROETHENE		3600						1.6			220		
1,2,3-TRIMETHYLBENZENE		24	J	P				11			11	UJ	CE
1,2,4-TRICHLOROBENZENE		41	U					2.4	U		29	U	
1,2,4-TRIMETHYLBENZENE		20	J	P				7.7			6.1	U	
1,2-DICHLOROETHANE		3.5	U					0.2	U		2.5	U	
1,3,5-TRIMETHYLBENZENE		32	J	P				7.5			6.7	U	
BENZENE		8.3	J	P				0.21	J	P	230		
CARBON TETRACHLORIDE		4.3	J	P				0.51	J	P	2.7	U	
CHLORODIFLUOROMETHANE		6.7	U					5.6	J	Q	4.8	U	
CHLOROFORM		57						1.5	J	P	2.1	U	
CIS-1,2-DICHLOROETHENE		48						15			150		
DICHLORODIFLUOROMETHANE		5.9	U					2.9			4.3	U	
ETHYLBENZENE		460						0.53	J	P	16	J	P
METHYL TERT-BUTYL ETHER		16	U					0.94	U		12	U	
METHYLENE CHLORIDE		120	U					6.8	U		84	U	
NAPHTHALENE		300						1.3			13	U	
TETRACHLOROETHENE		4.1	U					0.36	J	P	2.9	U	
TOLUENE		29	J	P				1.5	J	P	27	J	P
TOTAL XYLENES		5800						5.7			55		
TRANS-1,2-DICHLOROETHENE		4.6	J	P				0.22	J	P	24		
TRICHLOROETHENE		1800						180			310		
VINYL CHLORIDE		6.7	J	P				0.33	U		790		

PROJ_NO: 08388	NSAMPLE	SV-133-C-29			SV-141-C-29			SV-142-C-29			SV-149-C-29		
SDG: 140-20175-1	LAB_ID	140-20175-9			140-20175-15			140-20175-7			140-20175-16		
FRACTION: OV-M3	SAMP_DATE	8/25/2020			8/25/2020			8/25/2020			8/25/2020		
MEDIA: AIR	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/M3			UG/M3			UG/M3			UG/M3		
	PCT_SOLIDS												
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1-TRICHLOROETHANE		1	U		1	U		2.1	J	P	1	U	
1,1,2-TRICHLOROETHANE		0.19	U		0.19	U		0.19	U		0.19	U	
1,1-DICHLOROETHANE		0.14	U		0.14	U		4.3			0.14	U	
1,1-DICHLOROETHENE		0.16	U		0.57	J	P	1.6			0.16	U	
1,2,3-TRIMETHYLBENZENE		0.88	U		0.88	U		0.88	U		0.88	U	
1,2,4-TRICHLOROBENZENE		2.4	U		2.4	U		2.4	U		2.4	U	
1,2,4-TRIMETHYLBENZENE		0.49	U		0.7	J	P	0.49	U		2.7		
1,2-DICHLOROETHANE		0.2	U		0.2	U		0.2	U		0.2	U	
1,3,5-TRIMETHYLBENZENE		1.2	J	P	0.54	U		1.3	J	P	1.6	J	P
BENZENE		0.51	J	P	0.61	J	P	0.24	J	P	0.43	J	P
CARBON TETRACHLORIDE		3.9			0.39	J	P	0.56	J	P	0.43	J	P
CHLORODIFLUOROMETHANE		9.1			12			3.3	J	Q	3.1		
CHLOROFORM		9.2			0.38	J	P	2.2			0.8	J	P
CIS-1,2-DICHLOROETHENE		0.2	U		1.7			0.2	U		0.58	J	P
DICHLORODIFLUOROMETHANE		2.7			2			2.4			1.9	J	P
ETHYLBENZENE		0.35	J	P	2			0.43	J	P	5.6		
METHYL TERT-BUTYL ETHER		0.94	U		0.94	U		0.94	U		0.94	U	
METHYLENE CHLORIDE		9.1			6.8	U		10			71		
NAPHTHALENE		1	U		1	U		1.2			1	U	
TETRACHLOROETHENE		4.3			0.27	J	P	1.1	J	P	2.8		
TOLUENE		5.7			4.5			6.4			44		
TOTAL XYLENES		2	J	P	12			3.7			28		
TRANS-1,2-DICHLOROETHENE		0.2	J	P	0.53	J	P	0.14	U		0.14	U	
TRICHLOROETHENE		210			34			11			11		
VINYL CHLORIDE		0.33	U		0.33	U		0.33	U		0.33	U	

PROJ_NO: 08388	NSAMPLE	SV-150-C-29			SV-152-C-29			SV-153-C-29			SV-155-C-29		
SDG: 140-20175-1	LAB_ID	140-20175-13			140-20175-14			140-20175-10			140-20175-8		
FRACTION: OV-M3	SAMP_DATE	8/25/2020			8/25/2020			8/25/2020			8/25/2020		
MEDIA: AIR	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/M3			UG/M3			UG/M3			UG/M3		
	PCT_SOLIDS												
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1-TRICHLOROETHANE		1	U		2.7	J	P	1	U		1	U	
1,1,2-TRICHLOROETHANE		0.19	U		0.38	U		0.19	U		0.19	U	
1,1-DICHLOROETHANE		0.14	U		0.28	U		0.14	U		0.14	U	
1,1-DICHLOROETHENE		0.16	U		0.32	U		0.16	U		0.16	U	
1,2,3-TRIMETHYLBENZENE		0.88	U		1.8	U		0.88	U		0.88	U	
1,2,4-TRICHLOROBENZENE		2.4	U		4.7	U		2.4	U		2.4	U	
1,2,4-TRIMETHYLBENZENE		1.3	J	P	0.98	U		0.75	J	P	0.49	U	
1,2-DICHLOROETHANE		0.2	U		0.4	U		0.2	U		0.2	U	
1,3,5-TRIMETHYLBENZENE		0.56	J	P	1.1	U		1.5	J	P	1.4	J	P
BENZENE		1	J	P	0.67	J	P	0.62	J	P	0.59	J	P
CARBON TETRACHLORIDE		0.36	J	P	0.44	U		5.6			8.7		
CHLORODIFLUOROMETHANE		67			34			6			7.3		
CHLOROFORM		0.42	J	P	1.8	J	P	0.55	J	P	0.45	J	P
CIS-1,2-DICHLOROETHENE		0.2	U		9.1			0.2	U		0.2	U	
DICHLORODIFLUOROMETHANE		2.3			1.9	J	P	2.6			2.6		
ETHYLBENZENE		5.5			0.56	U		0.38	J	P	0.53	J	P
METHYL TERT-BUTYL ETHER		0.94	U		1.9	U		0.94	U		0.94	U	
METHYLENE CHLORIDE		12			15			6.8	UJ	G	6.8	U	
NAPHTHALENE		1	U		2.1	U		1	U		1	U	
TETRACHLOROETHENE		0.24	U		0.47	U		0.47	J	P	0.51	J	P
TOLUENE		10			6.2			3			6.3		
TOTAL XYLENES		23			1	U		2.1	J	P	2.3	J	P
TRANS-1,2-DICHLOROETHENE		0.14	U		0.35	J	P	0.14	U		0.14	U	
TRICHLOROETHENE		0.16	U		180			1.6			1.1		
VINYL CHLORIDE		0.33	U		0.66	U		0.33	U		0.33	U	

PROJ_NO: 08388	NSAMPLE	SV-DUP1-C-29			SV-DUP1-C-29-DL			SV-DUP2-C-29		
SDG: 140-20175-1	LAB_ID	140-20175-6			140-20175-6			140-20175-11		
FRACTION: OV-M3	SAMP_DATE	8/25/2020			8/25/2020			8/25/2020		
MEDIA: AIR	QC_TYPE	FD			FD			FD		
	UNITS	UG/M3			UG/M3			UG/M3		
	PCT_SOLIDS									
	DUP_OF	SV-102-C-29			SV-102-C-29			SV-153-C-29		
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1-TRICHLOROETHANE		2600						1	U	
1,1,2-TRICHLOROETHANE		3.4	U					0.19	U	
1,1-DICHLOROETHANE					6000			0.14	U	
1,1-DICHLOROETHENE		3800						0.16	U	
1,2,3-TRIMETHYLBENZENE		23	J	P				0.88	U	
1,2,4-TRICHLOROBENZENE		43	U					2.4	U	
1,2,4-TRIMETHYLBENZENE		23	J	P				1.3	J	P
1,2-DICHLOROETHANE		3.6	U					0.2	U	
1,3,5-TRIMETHYLBENZENE		32	J	P				0.65	J	P
BENZENE		7.3	J	P				0.45	J	P
CARBON TETRACHLORIDE		4.4	J	P				1.6	J	P
CHLORODIFLUOROMETHANE		7	U					5.3		
CHLOROFORM		54						0.31	J	P
CIS-1,2-DICHLOROETHENE		70						0.2	U	
DICHLORODIFLUOROMETHANE		6.2	U					1.9	J	P
ETHYLBENZENE		480						0.65	J	P
METHYL TERT-BUTYL ETHER		17	U					0.94	U	
METHYLENE CHLORIDE		120	U					39	J	G
NAPHTHALENE		430						1	U	
TETRACHLOROETHENE		4.3	U					0.29	J	P
TOLUENE		26	U					7.4		
TOTAL XYLENES		5300						3.2	J	P
TRANS-1,2-DICHLOROETHENE		5.2	J	P				0.14	U	
TRICHLOROETHENE		1800						0.98	J	P
VINYL CHLORIDE		7.6	J	P				0.33	U	

Appendix B

Results as Reported by the Laboratory

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: IA-001-C-29 Lab Sample ID: 140-20175-18

Matrix: Air Lab File ID: HI05P101.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 16:11

Sample wt/vol: 100(mL) Date Analyzed: 09/05/2020 16:20

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42482 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.12	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.11	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	0.64		0.40	0.11
67-66-3	Chloroform	119.38	0.099	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.52		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	ND		0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.035
108-88-3	Toluene	92.14	0.61		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	ND		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.35	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	95		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: IA-001-C-29 Lab Sample ID: 140-20175-18

Matrix: Air Lab File ID: HI05P101.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 16:11

Sample wt/vol: 100(mL) Date Analyzed: 09/05/2020 16:20

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42482 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.37	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.70	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	2.3		1.4	0.39
67-66-3	Chloroform	119.38	0.49	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.6		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	ND		1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.24
108-88-3	Toluene	92.14	2.3		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	ND		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	1.5	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	95		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: IA-004-C-29 Lab Sample ID: 140-20175-19

Matrix: Air Lab File ID: HI05P102.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 16:14

Sample wt/vol: 177(mL) Date Analyzed: 09/05/2020 17:18

Soil Aliquot Vol: Dilution Factor: 1.77

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42482 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.13	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.081	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	0.59		0.40	0.11
67-66-3	Chloroform	119.38	0.070	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.53		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	ND		0.40	0.065
75-09-2	Methylene Chloride	84.93	2.4		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.035
108-88-3	Toluene	92.14	0.85		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	ND		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.30	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	83		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: IA-004-C-29 Lab Sample ID: 140-20175-19

Matrix: Air Lab File ID: HI05P102.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 16:14

Sample wt/vol: 177(mL) Date Analyzed: 09/05/2020 17:18

Soil Aliquot Vol: Dilution Factor: 1.77

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42482 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.40	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.51	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	2.1		1.4	0.39
67-66-3	Chloroform	119.38	0.34	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.6		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	ND		1.7	0.28
75-09-2	Methylene Chloride	84.93	8.3		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.24
108-88-3	Toluene	92.14	3.2		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	ND		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	1.3	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	83		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: IA-060-C-29 Lab Sample ID: 140-20175-28

Matrix: Air Lab File ID: HI07P111.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 16:35

Sample wt/vol: 100(mL) Date Analyzed: 09/07/2020 01:52

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42498 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.21	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.11	J *	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	5.5		0.40	0.11
67-66-3	Chloroform	119.38	0.11	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.56		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	0.13	J	0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.035
108-88-3	Toluene	92.14	1.4		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	ND		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	0.14	J *	0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	0.28	J	0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.77	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	99		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: IA-060-C-29 Lab Sample ID: 140-20175-28

Matrix: Air Lab File ID: HI07P111.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 16:35

Sample wt/vol: 100(mL) Date Analyzed: 09/07/2020 01:52

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42498 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.68	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.69	J *	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	19		1.4	0.39
67-66-3	Chloroform	119.38	0.56	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.8		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	0.58	J	1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.24
108-88-3	Toluene	92.14	5.2		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	ND		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	0.67	J *	2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	1.4	J	2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	3.3	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	99		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: IA-088-C-29 Lab Sample ID: 140-20175-22

Matrix: Air Lab File ID: HI07P105.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 16:24

Sample wt/vol: 135(mL) Date Analyzed: 09/06/2020 20:26

Soil Aliquot Vol: Dilution Factor: 1.35

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42498 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.15	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.089	J *	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	1.3		0.40	0.11
67-66-3	Chloroform	119.38	0.054	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.51		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	0.083	J	0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.035
108-88-3	Toluene	92.14	1.2		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	ND		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND	*	0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	0.26	J	0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.43	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	91		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: IA-088-C-29 Lab Sample ID: 140-20175-22

Matrix: Air Lab File ID: HI07P105.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 16:24

Sample wt/vol: 135(mL) Date Analyzed: 09/06/2020 20:26

Soil Aliquot Vol: Dilution Factor: 1.35

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42498 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.46	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.56	J *	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	4.4		1.4	0.39
67-66-3	Chloroform	119.38	0.27	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.5		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	0.36	J	1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.24
108-88-3	Toluene	92.14	4.5		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	ND		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	ND	*	2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	1.3	J	2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	1.9	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	91		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: IA-102-C-29 Lab Sample ID: 140-20175-20

Matrix: Air Lab File ID: HI05P103.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 16:22

Sample wt/vol: 100(mL) Date Analyzed: 09/05/2020 18:14

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42482 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.16	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.11	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	1.8		0.40	0.11
67-66-3	Chloroform	119.38	0.067	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.58		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	0.082	J	0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.035
108-88-3	Toluene	92.14	0.82		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	ND		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	0.26	J	0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.40	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	78		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: IA-102-C-29 Lab Sample ID: 140-20175-20

Matrix: Air Lab File ID: HI05P103.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 16:22

Sample wt/vol: 100(mL) Date Analyzed: 09/05/2020 18:14

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42482 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.51	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.69	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	6.5		1.4	0.39
67-66-3	Chloroform	119.38	0.33	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.9		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	0.35	J	1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.24
108-88-3	Toluene	92.14	3.1		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	ND		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	1.3	J	2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	1.7	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	78		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: IA-113-C-29 Lab Sample ID: 140-20175-21

Matrix: Air Lab File ID: HI07P104.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 16:23

Sample wt/vol: 133(mL) Date Analyzed: 09/06/2020 19:30

Soil Aliquot Vol: Dilution Factor: 1.33

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42498 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.18	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.16	J *	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	1.3		0.40	0.11
67-66-3	Chloroform	119.38	0.14	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.61		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	0.13	J	0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	0.088	J	0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	0.15	J	0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	0.097	J	0.40	0.035
108-88-3	Toluene	92.14	1.1		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	0.067	J	0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	0.19	J	0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	0.082	J	0.40	0.035
79-01-6	Trichloroethene	131.39	0.050	J	0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	0.15	J *	0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	0.36	J	0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.70	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	84		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: IA-113-C-29 Lab Sample ID: 140-20175-21

Matrix: Air Lab File ID: HI07P104.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 16:23

Sample wt/vol: 133(mL) Date Analyzed: 09/06/2020 19:30

Soil Aliquot Vol: Dilution Factor: 1.33

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42498 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.56	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	1.0	J *	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	4.7		1.4	0.39
67-66-3	Chloroform	119.38	0.66	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	3.0		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	0.52	J	1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	0.35	J	1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	0.67	J	1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	0.66	J	2.7	0.24
108-88-3	Toluene	92.14	4.1		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	0.27	J	1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	1.0	J	2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	0.45	J	2.2	0.19
79-01-6	Trichloroethene	131.39	0.27	J	1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	0.75	J *	2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	1.8	J	2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	3.0	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	84		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: IA-126-C-29 Lab Sample ID: 140-20175-37

Matrix: Air Lab File ID: GBI07P111.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 16:52

Sample wt/vol: 100(mL) Date Analyzed: 09/07/2020 21:40

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42500 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.18	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.062	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	1.7		0.40	0.11
67-66-3	Chloroform	119.38	0.13	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.40		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	0.32	J	0.40	0.065
75-09-2	Methylene Chloride	84.93	11		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	0.18	J	0.40	0.035
108-88-3	Toluene	92.14	14		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	0.39		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	0.35	J	0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	1.7		0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	98		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: IA-126-C-29 Lab Sample ID: 140-20175-37

Matrix: Air Lab File ID: GBI07P111.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 16:52

Sample wt/vol: 100(mL) Date Analyzed: 09/07/2020 21:40

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42500 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.58	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.39	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	5.9		1.4	0.39
67-66-3	Chloroform	119.38	0.63	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.0		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	1.4	J	1.7	0.28
75-09-2	Methylene Chloride	84.93	39		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	1.3	J	2.7	0.24
108-88-3	Toluene	92.14	52		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	2.1		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	1.7	J	2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	7.3		3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	98		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: IA-133-C-29 Lab Sample ID: 140-20175-25

Matrix: Air Lab File ID: HI07P108.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 16:31

Sample wt/vol: 156(mL) Date Analyzed: 09/06/2020 23:11

Soil Aliquot Vol: Dilution Factor: 1.56

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42498 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.17	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.076	J *	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	2.7		0.40	0.11
67-66-3	Chloroform	119.38	0.069	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.47		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	0.087	J	0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.035
108-88-3	Toluene	92.14	0.82		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	ND		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND	*	0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	0.27	J	0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.49	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	90		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: IA-133-C-29 Lab Sample ID: 140-20175-25

Matrix: Air Lab File ID: HI07P108.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 16:31

Sample wt/vol: 156(mL) Date Analyzed: 09/06/2020 23:11

Soil Aliquot Vol: Dilution Factor: 1.56

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42498 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.54	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.48	J *	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	9.4		1.4	0.39
67-66-3	Chloroform	119.38	0.34	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.3		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	0.38	J	1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.24
108-88-3	Toluene	92.14	3.1		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	ND		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	ND	*	2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	1.3	J	2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	2.1	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	90		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: IA-141-C-29 Lab Sample ID: 140-20175-34

Matrix: Air Lab File ID: GBI07P108.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 16:48

Sample wt/vol: 100(mL) Date Analyzed: 09/07/2020 19:25

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42500 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.16	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.052	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	3.2		0.40	0.11
67-66-3	Chloroform	119.38	ND		0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.38	J	0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	0.18	J	0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.035
108-88-3	Toluene	92.14	1.6		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	ND		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	0.15	J	0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.98		0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	103		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: IA-141-C-29 Lab Sample ID: 140-20175-34

Matrix: Air Lab File ID: GBI07P108.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 16:48

Sample wt/vol: 100(mL) Date Analyzed: 09/07/2020 19:25

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42500 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.51	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.33	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	11		1.4	0.39
67-66-3	Chloroform	119.38	ND		2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	1.9	J	2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	0.77	J	1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.24
108-88-3	Toluene	92.14	5.9		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	ND		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	0.73	J	2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	4.3		3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	103		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: IA-142-C-29 Lab Sample ID: 140-20175-23

Matrix: Air Lab File ID: HI07P106.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 16:25

Sample wt/vol: 100(mL) Date Analyzed: 09/06/2020 21:23

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42498 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.15	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.12	J *	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	2.2		0.40	0.11
67-66-3	Chloroform	119.38	0.20	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.57		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	0.11	J	0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.035
108-88-3	Toluene	92.14	1.1		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	ND		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND	*	0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	0.28	J	0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.62	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	84		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: IA-142-C-29 Lab Sample ID: 140-20175-23

Matrix: Air Lab File ID: HI07P106.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 16:25

Sample wt/vol: 100(mL) Date Analyzed: 09/06/2020 21:23

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42498 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.47	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.77	J *	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	7.8		1.4	0.39
67-66-3	Chloroform	119.38	0.96	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.8		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	0.49	J	1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.24
108-88-3	Toluene	92.14	4.2		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	ND		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	ND	*	2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	1.4	J	2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	2.7	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	84		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: IA-144-C-29 Lab Sample ID: 140-20175-33

Matrix: Air Lab File ID: GBI07P107.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 16:45

Sample wt/vol: 100(mL) Date Analyzed: 09/07/2020 18:39

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42500 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	ND		0.40	0.040
56-23-5	Carbon tetrachloride	153.81	ND		0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	7.4		0.40	0.11
67-66-3	Chloroform	119.38	ND		0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.38	J	0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	ND		0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.035
108-88-3	Toluene	92.14	ND		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	ND		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	ND		0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	96		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: IA-144-C-29 Lab Sample ID: 140-20175-33

Matrix: Air Lab File ID: GBI07P107.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 16:45

Sample wt/vol: 100(mL) Date Analyzed: 09/07/2020 18:39

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42500 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	ND		1.3	0.13
56-23-5	Carbon tetrachloride	153.81	ND		2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	26		1.4	0.39
67-66-3	Chloroform	119.38	ND		2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	1.9	J	2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	ND		1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.24
108-88-3	Toluene	92.14	ND		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	ND		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	ND		3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	96		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: IA-145-C-29 Lab Sample ID: 140-20175-31

Matrix: Air Lab File ID: HI07P114.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 16:42

Sample wt/vol: 100(mL) Date Analyzed: 09/07/2020 04:36

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42498 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.19	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.091	J *	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	18		0.40	0.11
67-66-3	Chloroform	119.38	0.082	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.51		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	0.13	J	0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.035
108-88-3	Toluene	92.14	0.85		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	ND		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND	*	0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	0.26	J	0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.63	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	91		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: IA-145-C-29 Lab Sample ID: 140-20175-31

Matrix: Air Lab File ID: HI07P114.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 16:42

Sample wt/vol: 100(mL) Date Analyzed: 09/07/2020 04:36

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42498 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.61	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.57	J *	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	63		1.4	0.39
67-66-3	Chloroform	119.38	0.40	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.5		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	0.55	J	1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.24
108-88-3	Toluene	92.14	3.2		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	ND		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	ND	*	2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	1.3	J	2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	2.7	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	91		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: IA-146-C-29 Lab Sample ID: 140-20175-32

Matrix: Air Lab File ID: HI07P115.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 16:43

Sample wt/vol: 148(mL) Date Analyzed: 09/07/2020 05:30

Soil Aliquot Vol: Dilution Factor: 1.48

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42498 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.19	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.088	J *	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	18		0.40	0.11
67-66-3	Chloroform	119.38	0.090	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.53		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	0.13	J	0.40	0.065
75-09-2	Methylene Chloride	84.93	2.5		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.035
108-88-3	Toluene	92.14	0.79		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	ND		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	0.11	J *	0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	0.28	J	0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.67	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	93		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: IA-146-C-29 Lab Sample ID: 140-20175-32

Matrix: Air Lab File ID: HI07P115.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 16:43

Sample wt/vol: 148(mL) Date Analyzed: 09/07/2020 05:30

Soil Aliquot Vol: Dilution Factor: 1.48

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42498 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.59	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.55	J *	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	65		1.4	0.39
67-66-3	Chloroform	119.38	0.44	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.6		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	0.56	J	1.7	0.28
75-09-2	Methylene Chloride	84.93	8.8		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.24
108-88-3	Toluene	92.14	3.0		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	ND		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	0.53	J *	2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	1.4	J	2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	2.9	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	93		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: IA-149-C-29 Lab Sample ID: 140-20175-35

Matrix: Air Lab File ID: GBI07P109.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 16:50

Sample wt/vol: 100(mL) Date Analyzed: 09/07/2020 20:13

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42500 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.18	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.045	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	1.7		0.40	0.11
67-66-3	Chloroform	119.38	0.11	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.38	J	0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	0.31	J	0.40	0.065
75-09-2	Methylene Chloride	84.93	9.6		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	0.15	J	0.40	0.035
108-88-3	Toluene	92.14	13		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	0.41		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	0.29	J	0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	1.6		0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	101		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: IA-149-C-29 Lab Sample ID: 140-20175-35

Matrix: Air Lab File ID: GBI07P109.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 16:50

Sample wt/vol: 100(mL) Date Analyzed: 09/07/2020 20:13

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42500 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.58	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.28	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	6.2		1.4	0.39
67-66-3	Chloroform	119.38	0.52	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	1.9	J	2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	1.3	J	1.7	0.28
75-09-2	Methylene Chloride	84.93	33		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	1.0	J	2.7	0.24
108-88-3	Toluene	92.14	47		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	2.2		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	1.4	J	2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	6.8		3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	101		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: IA-150-C-29 Lab Sample ID: 140-20175-30

Matrix: Air Lab File ID: HI07P113.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 16:40

Sample wt/vol: 100(mL) Date Analyzed: 09/07/2020 03:43

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42498 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.20	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.094	J *	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	18		0.40	0.11
67-66-3	Chloroform	119.38	0.082	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.56		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	0.14	J	0.40	0.065
75-09-2	Methylene Chloride	84.93	5.2		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.035
108-88-3	Toluene	92.14	1.1		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	ND		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	0.10	J *	0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	0.28	J	0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.73	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	87		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: IA-150-C-29 Lab Sample ID: 140-20175-30

Matrix: Air Lab File ID: HI07P113.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 16:40

Sample wt/vol: 100(mL) Date Analyzed: 09/07/2020 03:43

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42498 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.62	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.59	J *	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	65		1.4	0.39
67-66-3	Chloroform	119.38	0.40	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.8		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	0.61	J	1.7	0.28
75-09-2	Methylene Chloride	84.93	18		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.24
108-88-3	Toluene	92.14	4.2		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	ND		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	0.51	J *	2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	1.4	J	2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	3.2	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	87		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: IA-152-C-29 Lab Sample ID: 140-20175-29

Matrix: Air Lab File ID: HI07P112.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 16:38

Sample wt/vol: 100(mL) Date Analyzed: 09/07/2020 02:48

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42498 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.21	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.093	J *	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	11		0.40	0.11
67-66-3	Chloroform	119.38	0.14	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.55		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	0.15	J	0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.035
108-88-3	Toluene	92.14	1.3		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	ND		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	0.21	J *	0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	0.30	J	0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.81		0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	106		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: IA-152-C-29 Lab Sample ID: 140-20175-29

Matrix: Air Lab File ID: HI07P112.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 16:38

Sample wt/vol: 100(mL) Date Analyzed: 09/07/2020 02:48

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42498 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.66	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.59	J *	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	38		1.4	0.39
67-66-3	Chloroform	119.38	0.67	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.7		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	0.67	J	1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.24
108-88-3	Toluene	92.14	4.8		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	ND		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	1.0	J *	2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	1.5	J	2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	3.5		3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	106		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: IA-153-C-29 Lab Sample ID: 140-20175-26

Matrix: Air Lab File ID: HI07P109.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 16:32

Sample wt/vol: 100(mL) Date Analyzed: 09/07/2020 00:04

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42498 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.14	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.086	J *	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	2.4		0.40	0.11
67-66-3	Chloroform	119.38	0.060	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.47		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	0.10	J	0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	0.086	J	0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.035
108-88-3	Toluene	92.14	0.77		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	ND		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND	*	0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.42	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	89		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: IA-153-C-29 Lab Sample ID: 140-20175-26

Matrix: Air Lab File ID: HI07P109.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 16:32

Sample wt/vol: 100(mL) Date Analyzed: 09/07/2020 00:04

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42498 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.45	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.54	J *	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	8.4		1.4	0.39
67-66-3	Chloroform	119.38	0.29	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.3		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	0.41	J	1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	0.38	J	1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.24
108-88-3	Toluene	92.14	2.9		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	ND		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	ND	*	2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	1.8	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	89		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: IA-155-C-29 Lab Sample ID: 140-20175-24

Matrix: Air Lab File ID: HI07P107.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 16:28

Sample wt/vol: 143(mL) Date Analyzed: 09/06/2020 22:17

Soil Aliquot Vol: Dilution Factor: 1.43

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42498 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.18	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.060	J *	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	2.6		0.40	0.11
67-66-3	Chloroform	119.38	0.094	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.50		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	0.097	J	0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.035
108-88-3	Toluene	92.14	0.87		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	ND		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND	*	0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	0.26	J	0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.49	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	96		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: IA-155-C-29 Lab Sample ID: 140-20175-24

Matrix: Air Lab File ID: HI07P107.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 16:28

Sample wt/vol: 143(mL) Date Analyzed: 09/06/2020 22:17

Soil Aliquot Vol: Dilution Factor: 1.43

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42498 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.58	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.38	J *	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	9.2		1.4	0.39
67-66-3	Chloroform	119.38	0.46	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.5		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	0.42	J	1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.24
108-88-3	Toluene	92.14	3.3		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	ND		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	ND	*	2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	1.3	J	2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	2.1	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	96		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: IA-BCK-1-29 Lab Sample ID: 140-20175-38

Matrix: Air Lab File ID: GBI07P112.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 16:03

Sample wt/vol: 100(mL) Date Analyzed: 09/07/2020 22:24

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42500 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.073	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	ND		0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	0.35	J	0.40	0.11
67-66-3	Chloroform	119.38	ND		0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.35	J	0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	ND		0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.035
108-88-3	Toluene	92.14	ND		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	ND		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.23	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	101		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: IA-BCK-1-29 Lab Sample ID: 140-20175-38

Matrix: Air Lab File ID: GBI07P112.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 16:03

Sample wt/vol: 100(mL) Date Analyzed: 09/07/2020 22:24

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42500 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.23	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	ND		2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	1.3	J	1.4	0.39
67-66-3	Chloroform	119.38	ND		2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	1.7	J	2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	ND		1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.24
108-88-3	Toluene	92.14	ND		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	ND		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	0.99	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	101		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: IA-BCK-2-29 Lab Sample ID: 140-20175-39

Matrix: Air Lab File ID: GBI07P113.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 16:07

Sample wt/vol: 229(mL) Date Analyzed: 09/07/2020 23:09

Soil Aliquot Vol: Dilution Factor: 2.29

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42500 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.084	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	ND		0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	0.31	J	0.40	0.11
67-66-3	Chloroform	119.38	ND		0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.38	J	0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	0.068	J	0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	ND		0.40	0.065
75-09-2	Methylene Chloride	84.93	6.1		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.035
108-88-3	Toluene	92.14	0.42	J	0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	ND		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.24	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	101		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: IA-BCK-2-29 Lab Sample ID: 140-20175-39

Matrix: Air Lab File ID: GBI07P113.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 16:07

Sample wt/vol: 229(mL) Date Analyzed: 09/07/2020 23:09

Soil Aliquot Vol: Dilution Factor: 2.29

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42500 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.27	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	ND		2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	1.1	J	1.4	0.39
67-66-3	Chloroform	119.38	ND		2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	1.9	J	2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	0.28	J	1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	ND		1.7	0.28
75-09-2	Methylene Chloride	84.93	21		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.24
108-88-3	Toluene	92.14	1.6	J	2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	ND		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	1.1	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	101		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: IA-BCK-3-29 Lab Sample ID: 140-20175-40

Matrix: Air Lab File ID: GBI07P114.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 15:52

Sample wt/vol: 159(mL) Date Analyzed: 09/07/2020 23:56

Soil Aliquot Vol: Dilution Factor: 1.59

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42500 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.071	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.072	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	0.34	J	0.40	0.11
67-66-3	Chloroform	119.38	ND		0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	0.31	J	0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.39	J	0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	ND		0.40	0.065
75-09-2	Methylene Chloride	84.93	2.2		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.035
108-88-3	Toluene	92.14	0.41	J	0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	ND		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	0.11	J	0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.27	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	100		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: IA-BCK-3-29 Lab Sample ID: 140-20175-40

Matrix: Air Lab File ID: GBI07P114.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 15:52

Sample wt/vol: 159(mL) Date Analyzed: 09/07/2020 23:56

Soil Aliquot Vol: Dilution Factor: 1.59

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42500 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.23	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.45	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	1.2	J	1.4	0.39
67-66-3	Chloroform	119.38	ND		2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	1.2	J	1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	1.9	J	2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	ND		1.7	0.28
75-09-2	Methylene Chloride	84.93	7.8		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.24
108-88-3	Toluene	92.14	1.5	J	2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	ND		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	0.53	J	2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	1.2	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	100		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: IA-BCK-4-29 Lab Sample ID: 140-20175-41

Matrix: Air Lab File ID: GBI07P115.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 15:57

Sample wt/vol: 152(mL) Date Analyzed: 09/08/2020 00:42

Soil Aliquot Vol: Dilution Factor: 1.52

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42500 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.14	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.048	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	0.35	J	0.40	0.11
67-66-3	Chloroform	119.38	ND		0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.42		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	ND		0.40	0.065
75-09-2	Methylene Chloride	84.93	3.6		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.035
108-88-3	Toluene	92.14	0.49	J	0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	ND		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.15	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	101		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: IA-BCK-4-29 Lab Sample ID: 140-20175-41

Matrix: Air Lab File ID: GBI07P115.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 15:57

Sample wt/vol: 152(mL) Date Analyzed: 09/08/2020 00:42

Soil Aliquot Vol: Dilution Factor: 1.52

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42500 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.43	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.30	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	1.2	J	1.4	0.39
67-66-3	Chloroform	119.38	ND		2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.1		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	ND		1.7	0.28
75-09-2	Methylene Chloride	84.93	12		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.24
108-88-3	Toluene	92.14	1.8	J	2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	ND		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	0.65	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	101		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: IA-DUP1-C-29 Lab Sample ID: 140-20175-27

Matrix: Air Lab File ID: HI07P110.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 00:00

Sample wt/vol: 100(mL) Date Analyzed: 09/07/2020 00:57

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42498 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.19	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.12	J *	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	2.9		0.40	0.11
67-66-3	Chloroform	119.38	0.11	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.57		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	0.13	J	0.40	0.065
75-09-2	Methylene Chloride	84.93	3.2		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.035
108-88-3	Toluene	92.14	1.1		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	0.89		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	0.11	J *	0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	0.28	J	0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.58	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	95		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: IA-DUP1-C-29 Lab Sample ID: 140-20175-27

Matrix: Air Lab File ID: HI07P110.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 00:00

Sample wt/vol: 100(mL) Date Analyzed: 09/07/2020 00:57

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42498 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.60	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.76	J *	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	10		1.4	0.39
67-66-3	Chloroform	119.38	0.55	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.8		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	0.56	J	1.7	0.28
75-09-2	Methylene Chloride	84.93	11		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.24
108-88-3	Toluene	92.14	4.2		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	4.8		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	0.52	J *	2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	1.4	J	2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	2.5	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	95		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: IA-DUP2-C-29 Lab Sample ID: 140-20175-36

Matrix: Air Lab File ID: GBI07P110.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 00:00

Sample wt/vol: 140(mL) Date Analyzed: 09/07/2020 20:56

Soil Aliquot Vol: Dilution Factor: 1.4

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42500 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.17	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	ND		0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	1.6		0.40	0.11
67-66-3	Chloroform	119.38	0.12	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.36	J	0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	0.35	J	0.40	0.065
75-09-2	Methylene Chloride	84.93	11		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	0.24		0.20	0.20
127-18-4	Tetrachloroethene	165.83	0.14	J	0.40	0.035
108-88-3	Toluene	92.14	13		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	0.36		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	0.38	J	0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	0.11	J	0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	1.8		0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	99		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: IA-DUP2-C-29 Lab Sample ID: 140-20175-36

Matrix: Air Lab File ID: GBI07P110.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 00:00

Sample wt/vol: 140(mL) Date Analyzed: 09/07/2020 20:56

Soil Aliquot Vol: Dilution Factor: 1.4

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42500 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.55	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	ND		2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	5.7		1.4	0.39
67-66-3	Chloroform	119.38	0.57	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	1.8	J	2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	1.5	J	1.7	0.28
75-09-2	Methylene Chloride	84.93	40		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	1.3		1.0	1.0
127-18-4	Tetrachloroethene	165.83	0.94	J	2.7	0.24
108-88-3	Toluene	92.14	50		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	1.9		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	1.9	J	2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	0.55	J	2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	7.6		3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	99		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: SV-001-C-29 Lab Sample ID: 140-20175-1

Matrix: Air Lab File ID: HI03P110.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 10:08

Sample wt/vol: 100(mL) Date Analyzed: 09/03/2020 22:20

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42399 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.11	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.078	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	0.53		0.40	0.11
67-66-3	Chloroform	119.38	0.72		0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	4.8		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.54		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	ND		0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	6.1		0.40	0.035
108-88-3	Toluene	92.14	ND		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	2.3		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	43		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	ND		0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	91		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: SV-001-C-29 Lab Sample ID: 140-20175-1

Matrix: Air Lab File ID: HI03P110.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 10:08

Sample wt/vol: 100(mL) Date Analyzed: 09/03/2020 22:20

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42399 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.35	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.49	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	1.9		1.4	0.39
67-66-3	Chloroform	119.38	3.5		2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	19		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.7		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	ND		1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	41		2.7	0.24
108-88-3	Toluene	92.14	ND		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	9.0		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	230		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	ND		3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	91		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: SV-004-C-29 Lab Sample ID: 140-20175-2

Matrix: Air Lab File ID: HI03P111.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 10:12

Sample wt/vol: 40(mL) Date Analyzed: 09/03/2020 23:13

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42399 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.13	J	1.0	0.10
56-23-5	Carbon tetrachloride	153.81	0.097	J	1.0	0.088
75-45-6	Chlorodifluoromethane	86.47	ND		1.0	0.28
67-66-3	Chloroform	119.38	17		1.0	0.088
156-59-2	cis-1,2-Dichloroethene	96.94	11		1.0	0.13
75-71-8	Dichlorodifluoromethane	120.91	0.50	J	1.0	0.18
75-34-3	1,1-Dichloroethane	98.96	ND		1.0	0.088
107-06-2	1,2-Dichloroethane	98.96	ND		1.0	0.13
75-35-4	1,1-Dichloroethene	96.94	ND		1.0	0.10
100-41-4	Ethylbenzene	106.17	ND		1.0	0.16
75-09-2	Methylene Chloride	84.93	ND		5.0	4.9
1634-04-4	Methyl tert-butyl ether	88.15	ND		5.0	0.65
91-20-3	Naphthalene	128.17	ND		0.50	0.50
127-18-4	Tetrachloroethene	165.83	0.49	J	1.0	0.088
108-88-3	Toluene	92.14	ND		1.5	0.98
156-60-5	trans-1,2-Dichloroethene	96.94	0.81	J	1.0	0.088
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		1.0	0.80
71-55-6	1,1,1-Trichloroethane	133.41	ND		1.0	0.46
79-00-5	1,1,2-Trichloroethane	133.41	ND		1.0	0.088
79-01-6	Trichloroethene	131.39	56		0.50	0.075
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		1.0	0.45
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		1.0	0.25
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		1.0	0.28
75-01-4	Vinyl chloride	62.50	ND		0.50	0.33
1330-20-7	Xylenes, Total	106.17	ND		2.0	0.30

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	97		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: SV-004-C-29 Lab Sample ID: 140-20175-2

Matrix: Air Lab File ID: HI03P111.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 10:12

Sample wt/vol: 40(mL) Date Analyzed: 09/03/2020 23:13

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42399 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.42	J	3.2	0.32
56-23-5	Carbon tetrachloride	153.81	0.61	J	6.3	0.55
75-45-6	Chlorodifluoromethane	86.47	ND		3.5	0.97
67-66-3	Chloroform	119.38	81		4.9	0.43
156-59-2	cis-1,2-Dichloroethene	96.94	42		4.0	0.50
75-71-8	Dichlorodifluoromethane	120.91	2.5	J	4.9	0.87
75-34-3	1,1-Dichloroethane	98.96	ND		4.0	0.35
107-06-2	1,2-Dichloroethane	98.96	ND		4.0	0.51
75-35-4	1,1-Dichloroethene	96.94	ND		4.0	0.40
100-41-4	Ethylbenzene	106.17	ND		4.3	0.71
75-09-2	Methylene Chloride	84.93	ND		17	17
1634-04-4	Methyl tert-butyl ether	88.15	ND		18	2.3
91-20-3	Naphthalene	128.17	ND		2.6	2.6
127-18-4	Tetrachloroethene	165.83	3.3	J	6.8	0.59
108-88-3	Toluene	92.14	ND		5.7	3.7
156-60-5	trans-1,2-Dichloroethene	96.94	3.2	J	4.0	0.35
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		7.4	5.9
71-55-6	1,1,1-Trichloroethane	133.41	ND		5.5	2.5
79-00-5	1,1,2-Trichloroethane	133.41	ND		5.5	0.48
79-01-6	Trichloroethene	131.39	300		2.7	0.40
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		4.9	2.2
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		4.9	1.2
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		4.9	1.4
75-01-4	Vinyl chloride	62.50	ND		1.3	0.83
1330-20-7	Xylenes, Total	106.17	ND		8.7	1.3

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	97		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: SV-060-C-29 Lab Sample ID: 140-20175-12

Matrix: Air Lab File ID: GI03P111.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 10:41

Sample wt/vol: 20(mL) Date Analyzed: 09/03/2020 22:15

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42409 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.23	J	2.0	0.20
56-23-5	Carbon tetrachloride	153.81	ND		2.0	0.18
75-45-6	Chlorodifluoromethane	86.47	2.7		2.0	0.55
67-66-3	Chloroform	119.38	3.0		2.0	0.18
156-59-2	cis-1,2-Dichloroethene	96.94	5.9		2.0	0.25
75-71-8	Dichlorodifluoromethane	120.91	0.47	J	2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	2.5		2.0	0.18
107-06-2	1,2-Dichloroethane	98.96	ND		2.0	0.25
75-35-4	1,1-Dichloroethene	96.94	ND		2.0	0.20
100-41-4	Ethylbenzene	106.17	2.1		2.0	0.33
75-09-2	Methylene Chloride	84.93	ND		10	9.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		10	1.3
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.0	0.18
108-88-3	Toluene	92.14	ND		3.0	2.0
156-60-5	trans-1,2-Dichloroethene	96.94	0.30	J	2.0	0.18
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		2.0	1.6
71-55-6	1,1,1-Trichloroethane	133.41	1.5	J	2.0	0.93
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.0	0.18
79-01-6	Trichloroethene	131.39	89		1.0	0.15
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.90
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		2.0	0.50
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.55
75-01-4	Vinyl chloride	62.50	ND		1.0	0.65
1330-20-7	Xylenes, Total	106.17	18		4.0	0.60

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	102		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: SV-060-C-29 Lab Sample ID: 140-20175-12

Matrix: Air Lab File ID: GI03P111.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 10:41

Sample wt/vol: 20(mL) Date Analyzed: 09/03/2020 22:15

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42409 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.74	J	6.4	0.64
56-23-5	Carbon tetrachloride	153.81	ND		13	1.1
75-45-6	Chlorodifluoromethane	86.47	9.7		7.1	1.9
67-66-3	Chloroform	119.38	15		9.8	0.85
156-59-2	cis-1,2-Dichloroethene	96.94	24		7.9	0.99
75-71-8	Dichlorodifluoromethane	120.91	2.3	J	9.9	1.7
75-34-3	1,1-Dichloroethane	98.96	10		8.1	0.71
107-06-2	1,2-Dichloroethane	98.96	ND		8.1	1.0
75-35-4	1,1-Dichloroethene	96.94	ND		7.9	0.79
100-41-4	Ethylbenzene	106.17	9.1		8.7	1.4
75-09-2	Methylene Chloride	84.93	ND		35	34
1634-04-4	Methyl tert-butyl ether	88.15	ND		36	4.7
91-20-3	Naphthalene	128.17	ND		5.2	5.2
127-18-4	Tetrachloroethene	165.83	ND		14	1.2
108-88-3	Toluene	92.14	ND		11	7.3
156-60-5	trans-1,2-Dichloroethene	96.94	1.2	J	7.9	0.69
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		15	12
71-55-6	1,1,1-Trichloroethane	133.41	8.1	J	11	5.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		11	0.95
79-01-6	Trichloroethene	131.39	480		5.4	0.81
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		9.8	4.4
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		9.8	2.5
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		9.8	2.7
75-01-4	Vinyl chloride	62.50	ND		2.6	1.7
1330-20-7	Xylenes, Total	106.17	80		17	2.6

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	102		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: SV-088-C-29 Lab Sample ID: 140-20175-5

Matrix: Air Lab File ID: HI03P114.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 10:22

Sample wt/vol: 100(mL) Date Analyzed: 09/04/2020 01:58

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42399 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.089	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.092	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	1.1		0.40	0.11
67-66-3	Chloroform	119.38	0.15	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	1.4		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.58		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	0.11	J	0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	0.070	J	0.40	0.035
108-88-3	Toluene	92.14	0.40	J	0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	0.092	J	0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	7.9		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	0.11	J	0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	0.28	J	0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	1.6		0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	85		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: SV-088-C-29 Lab Sample ID: 140-20175-5

Matrix: Air Lab File ID: HI03P114.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 10:22

Sample wt/vol: 100(mL) Date Analyzed: 09/04/2020 01:58

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42399 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.28	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.58	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	3.9		1.4	0.39
67-66-3	Chloroform	119.38	0.76	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	5.4		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.9		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	0.47	J	1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	0.47	J	2.7	0.24
108-88-3	Toluene	92.14	1.5	J	2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	0.37	J	1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	42		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	0.54	J	2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	1.4	J	2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	6.7		3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	85		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: SV-102-C-29 Lab Sample ID: 140-20175-3

Matrix: Air Lab File ID: HI03P112.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 10:17

Sample wt/vol: 20(mL) Date Analyzed: 09/04/2020 00:08

Soil Aliquot Vol: Dilution Factor: 3.43

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42399 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	2.6	J	6.9	0.69
56-23-5	Carbon tetrachloride	153.81	0.68	J	6.9	0.60
75-45-6	Chlorodifluoromethane	86.47	ND		6.9	1.9
67-66-3	Chloroform	119.38	12		6.9	0.60
156-59-2	cis-1,2-Dichloroethene	96.94	12		6.9	0.86
75-71-8	Dichlorodifluoromethane	120.91	ND		6.9	1.2
75-34-3	*1,1-Dichloroethane*	*98.96*	*2000*	*E*	*6.9*	*0.60*
107-06-2	1,2-Dichloroethane	98.96	ND		6.9	0.86
75-35-4	1,1-Dichloroethene	96.94	910		6.9	0.69
100-41-4	Ethylbenzene	106.17	110		6.9	1.1
75-09-2	Methylene Chloride	84.93	ND		34	33
1634-04-4	Methyl tert-butyl ether	88.15	ND		34	4.5
91-20-3	Naphthalene	128.17	57		3.4	3.4
127-18-4	Tetrachloroethene	165.83	ND		6.9	0.60
108-88-3	Toluene	92.14	7.6	J	10	6.7
156-60-5	trans-1,2-Dichloroethene	96.94	1.2	J	6.9	0.60
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		6.9	5.5
71-55-6	1,1,1-Trichloroethane	133.41	500		6.9	3.2
79-00-5	1,1,2-Trichloroethane	133.41	ND		6.9	0.60
79-01-6	Trichloroethene	131.39	330		3.4	0.51
526-73-8	1,2,3-Trimethylbenzene	120.19	4.9	J	6.9	3.1
95-63-6	1,2,4-Trimethylbenzene	120.20	4.1	J	6.9	1.7
108-67-8	1,3,5-Trimethylbenzene	120.20	6.5	J	6.9	1.9
75-01-4	Vinyl chloride	62.50	2.6	J	3.4	2.2
1330-20-7	Xylenes, Total	106.17	1300		14	2.1

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	112		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: SV-102-C-29 Lab Sample ID: 140-20175-3

Matrix: Air Lab File ID: HI03P112.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 10:17

Sample wt/vol: 20(mL) Date Analyzed: 09/04/2020 00:08

Soil Aliquot Vol: Dilution Factor: 3.43

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42399 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	8.3	J	22	2.2
56-23-5	Carbon tetrachloride	153.81	4.3	J	43	3.8
75-45-6	Chlorodifluoromethane	86.47	ND		24	6.7
67-66-3	Chloroform	119.38	57		33	2.9
156-59-2	cis-1,2-Dichloroethene	96.94	48		27	3.4
75-71-8	Dichlorodifluoromethane	120.91	ND		34	5.9
75-34-3	*1,1-Dichloroethane*	*98.96*	*8200*	*E*	*28*	*2.4*
107-06-2	1,2-Dichloroethane	98.96	ND		28	3.5
75-35-4	1,1-Dichloroethene	96.94	3600		27	2.7
100-41-4	Ethylbenzene	106.17	460		30	4.8
75-09-2	Methylene Chloride	84.93	ND		120	120
1634-04-4	Methyl tert-butyl ether	88.15	ND		120	16
91-20-3	Naphthalene	128.17	300		18	18
127-18-4	Tetrachloroethene	165.83	ND		47	4.1
108-88-3	Toluene	92.14	29	J	39	25
156-60-5	trans-1,2-Dichloroethene	96.94	4.6	J	27	2.4
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		51	41
71-55-6	1,1,1-Trichloroethane	133.41	2700		37	17
79-00-5	1,1,2-Trichloroethane	133.41	ND		37	3.3
79-01-6	Trichloroethene	131.39	1800		18	2.8
526-73-8	1,2,3-Trimethylbenzene	120.19	24	J	34	15
95-63-6	1,2,4-Trimethylbenzene	120.20	20	J	34	8.4
108-67-8	1,3,5-Trimethylbenzene	120.20	32	J	34	9.3
75-01-4	Vinyl chloride	62.50	6.7	J	8.8	5.7
1330-20-7	Xylenes, Total	106.17	5800		60	8.9

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	112		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: SV-102-C-29 DL Lab Sample ID: 140-20175-3 DL

Matrix: Air Lab File ID: GI08P102.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 10:17

Sample wt/vol: 11(mL) Date Analyzed: 09/08/2020 18:03

Soil Aliquot Vol: Dilution Factor: 3.43

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42503 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
75-34-3	1,1-Dichloroethane	98.96	1400		12	1.1

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	101		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: SV-102-C-29 DL Lab Sample ID: 140-20175-3 DL

Matrix: Air Lab File ID: GI08P102.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 10:17

Sample wt/vol: 11(mL) Date Analyzed: 09/08/2020 18:03

Soil Aliquot Vol: Dilution Factor: 3.43

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42503 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
75-34-3	1,1-Dichloroethane	98.96	5500		50	4.4

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	101		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: SV-113-C-29 Lab Sample ID: 140-20175-4

Matrix: Air Lab File ID: HI03P113.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 10:20

Sample wt/vol: 100(mL) Date Analyzed: 09/04/2020 01:04

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42399 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.067	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.081	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	1.6	CI	0.40	0.11
67-66-3	Chloroform	119.38	0.31	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	3.7		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.58		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	1.1		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	0.41		0.40	0.040
100-41-4	Ethylbenzene	106.17	0.12	J	0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	0.25		0.20	0.20
127-18-4	Tetrachloroethene	165.83	0.053	J	0.40	0.035
108-88-3	Toluene	92.14	0.40	J	0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	0.055	J	0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	0.33	J	0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	33		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	2.3		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	1.6		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	1.5		0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	1.3		0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	95		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: SV-113-C-29 Lab Sample ID: 140-20175-4

Matrix: Air Lab File ID: HI03P113.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 10:20

Sample wt/vol: 100(mL) Date Analyzed: 09/04/2020 01:04

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42399 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.21	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.51	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	5.6	CI	1.4	0.39
67-66-3	Chloroform	119.38	1.5	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	15		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.9		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	4.6		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	1.6		1.6	0.16
100-41-4	Ethylbenzene	106.17	0.53	J	1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	1.3		1.0	1.0
127-18-4	Tetrachloroethene	165.83	0.36	J	2.7	0.24
108-88-3	Toluene	92.14	1.5	J	2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	0.22	J	1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	1.8	J	2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	180		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	11		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	7.7		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	7.5		2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	5.7		3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	95		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: SV-126-C-29 Lab Sample ID: 140-20175-17

Matrix: Air Lab File ID: GI08P104R.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 10:56

Sample wt/vol: 100(mL) Date Analyzed: 09/09/2020 07:56

Soil Aliquot Vol: Dilution Factor: 12.39

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42503 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	71		5.0	0.50
56-23-5	Carbon tetrachloride	153.81	ND		5.0	0.43
75-45-6	Chlorodifluoromethane	86.47	ND		5.0	1.4
67-66-3	Chloroform	119.38	ND		5.0	0.43
156-59-2	cis-1,2-Dichloroethene	96.94	37		5.0	0.62
75-71-8	Dichlorodifluoromethane	120.91	ND		5.0	0.87
75-34-3	1,1-Dichloroethane	98.96	ND		5.0	0.43
107-06-2	1,2-Dichloroethane	98.96	ND		5.0	0.62
75-35-4	1,1-Dichloroethene	96.94	55		5.0	0.50
100-41-4	Ethylbenzene	106.17	3.7	J	5.0	0.81
75-09-2	Methylene Chloride	84.93	ND		25	24
1634-04-4	Methyl tert-butyl ether	88.15	ND		25	3.2
91-20-3	Naphthalene	128.17	ND		2.5	2.5
127-18-4	Tetrachloroethene	165.83	ND		5.0	0.43
108-88-3	Toluene	92.14	7.1	J	7.4	4.8
156-60-5	trans-1,2-Dichloroethene	96.94	6.0		5.0	0.43
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		5.0	4.0
71-55-6	1,1,1-Trichloroethane	133.41	ND		5.0	2.3
79-00-5	1,1,2-Trichloroethane	133.41	ND		5.0	0.43
79-01-6	Trichloroethene	131.39	58		2.5	0.37
526-73-8	1,2,3-Trimethylbenzene	120.19	ND	*	5.0	2.2
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		5.0	1.2
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		5.0	1.4
75-01-4	Vinyl chloride	62.50	310		2.5	1.6
1330-20-7	Xylenes, Total	106.17	13		9.9	1.5

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	101		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: SV-126-C-29 Lab Sample ID: 140-20175-17

Matrix: Air Lab File ID: GI08P104R.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 10:56

Sample wt/vol: 100(mL) Date Analyzed: 09/09/2020 07:56

Soil Aliquot Vol: Dilution Factor: 12.39

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42503 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	230		16	1.6
56-23-5	Carbon tetrachloride	153.81	ND		31	2.7
75-45-6	Chlorodifluoromethane	86.47	ND		18	4.8
67-66-3	Chloroform	119.38	ND		24	2.1
156-59-2	cis-1,2-Dichloroethene	96.94	150		20	2.5
75-71-8	Dichlorodifluoromethane	120.91	ND		25	4.3
75-34-3	1,1-Dichloroethane	98.96	ND		20	1.8
107-06-2	1,2-Dichloroethane	98.96	ND		20	2.5
75-35-4	1,1-Dichloroethene	96.94	220		20	2.0
100-41-4	Ethylbenzene	106.17	16	J	22	3.5
75-09-2	Methylene Chloride	84.93	ND		86	84
1634-04-4	Methyl tert-butyl ether	88.15	ND		89	12
91-20-3	Naphthalene	128.17	ND		13	13
127-18-4	Tetrachloroethene	165.83	ND		34	2.9
108-88-3	Toluene	92.14	27	J	28	18
156-60-5	trans-1,2-Dichloroethene	96.94	24		20	1.7
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		37	29
71-55-6	1,1,1-Trichloroethane	133.41	ND		27	13
79-00-5	1,1,2-Trichloroethane	133.41	ND		27	2.4
79-01-6	Trichloroethene	131.39	310		13	2.0
526-73-8	1,2,3-Trimethylbenzene	120.19	ND	*	24	11
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		24	6.1
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		24	6.7
75-01-4	Vinyl chloride	62.50	790		6.3	4.1
1330-20-7	Xylenes, Total	106.17	55		43	6.5

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	101		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: SV-133-C-29 Lab Sample ID: 140-20175-9

Matrix: Air Lab File ID: HI03P202.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 10:35

Sample wt/vol: 100(mL) Date Analyzed: 09/04/2020 06:35

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42399 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.16	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.62		0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	2.6		0.40	0.11
67-66-3	Chloroform	119.38	1.9		0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.54		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	0.081	J	0.40	0.065
75-09-2	Methylene Chloride	84.93	2.6		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	0.64		0.40	0.035
108-88-3	Toluene	92.14	1.5		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	0.050	J	0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	40		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	0.25	J	0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.47	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	87		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: SV-133-C-29 Lab Sample ID: 140-20175-9

Matrix: Air Lab File ID: HI03P202.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 10:35

Sample wt/vol: 100(mL) Date Analyzed: 09/04/2020 06:35

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42399 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.51	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	3.9		2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	9.1		1.4	0.39
67-66-3	Chloroform	119.38	9.2		2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.7		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	0.35	J	1.7	0.28
75-09-2	Methylene Chloride	84.93	9.1		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	4.3		2.7	0.24
108-88-3	Toluene	92.14	5.7		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	0.20	J	1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	210		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	1.2	J	2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	2.0	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	87		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: SV-141-C-29 Lab Sample ID: 140-20175-15

Matrix: Air Lab File ID: GI03P113.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 10:50

Sample wt/vol: 100(mL) Date Analyzed: 09/03/2020 23:53

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42409 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.19	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.062	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	3.5		0.40	0.11
67-66-3	Chloroform	119.38	0.079	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	0.44		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.40		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	0.14	J	0.40	0.040
100-41-4	Ethylbenzene	106.17	0.47		0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	0.040	J	0.40	0.035
108-88-3	Toluene	92.14	1.2		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	0.13	J	0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	6.4		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	0.14	J	0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	2.7		0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	101		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: SV-141-C-29 Lab Sample ID: 140-20175-15

Matrix: Air Lab File ID: GI03P113.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 10:50

Sample wt/vol: 100(mL) Date Analyzed: 09/03/2020 23:53

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42409 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.61	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.39	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	12		1.4	0.39
67-66-3	Chloroform	119.38	0.38	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	1.7		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.0		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	0.57	J	1.6	0.16
100-41-4	Ethylbenzene	106.17	2.0		1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	0.27	J	2.7	0.24
108-88-3	Toluene	92.14	4.5		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	0.53	J	1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	34		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	0.70	J	2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	12		3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	101		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: SV-142-C-29 Lab Sample ID: 140-20175-7

Matrix: Air Lab File ID: HI03P116D.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 10:27

Sample wt/vol: 100(mL) Date Analyzed: 09/04/2020 04:41

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42399 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.075	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.089	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	0.93	CI	0.40	0.11
67-66-3	Chloroform	119.38	0.45		0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.49		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	1.1		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	0.40		0.40	0.040
100-41-4	Ethylbenzene	106.17	0.10	J	0.40	0.065
75-09-2	Methylene Chloride	84.93	3.0		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	0.23		0.20	0.20
127-18-4	Tetrachloroethene	165.83	0.16	J	0.40	0.035
108-88-3	Toluene	92.14	1.7		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	0.39	J	0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	2.0		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	0.27	J	0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.86		0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	96		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: SV-142-C-29 Lab Sample ID: 140-20175-7

Matrix: Air Lab File ID: HI03P116D.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 10:27

Sample wt/vol: 100(mL) Date Analyzed: 09/04/2020 04:41

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42399 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.24	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.56	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	3.3	CI	1.4	0.39
67-66-3	Chloroform	119.38	2.2		2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.4		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	4.3		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	1.6		1.6	0.16
100-41-4	Ethylbenzene	106.17	0.43	J	1.7	0.28
75-09-2	Methylene Chloride	84.93	10		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	1.2		1.0	1.0
127-18-4	Tetrachloroethene	165.83	1.1	J	2.7	0.24
108-88-3	Toluene	92.14	6.4		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	2.1	J	2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	11		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	1.3	J	2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	3.7		3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	96		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: SV-149-C-29 Lab Sample ID: 140-20175-16

Matrix: Air Lab File ID: GI03P114.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 10:53

Sample wt/vol: 100(mL) Date Analyzed: 09/04/2020 00:41

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42409 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.14	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.069	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	0.89		0.40	0.11
67-66-3	Chloroform	119.38	0.16	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	0.15	J	0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.39	J	0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	1.3		0.40	0.065
75-09-2	Methylene Chloride	84.93	21		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	0.41		0.40	0.035
108-88-3	Toluene	92.14	12		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	2.1		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	0.54		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	0.32	J	0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	6.5		0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	103		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: SV-149-C-29 Lab Sample ID: 140-20175-16

Matrix: Air Lab File ID: GI03P114.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 10:53

Sample wt/vol: 100(mL) Date Analyzed: 09/04/2020 00:41

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42409 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.43	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.43	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	3.1		1.4	0.39
67-66-3	Chloroform	119.38	0.80	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	0.58	J	1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	1.9	J	2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	5.6		1.7	0.28
75-09-2	Methylene Chloride	84.93	71		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	2.8		2.7	0.24
108-88-3	Toluene	92.14	44		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	11		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	2.7		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	1.6	J	2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	28		3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	103		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: SV-150-C-29 Lab Sample ID: 140-20175-13

Matrix: Air Lab File ID: GI03P116D.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 10:44

Sample wt/vol: 100(mL) Date Analyzed: 09/04/2020 02:51

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42409 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.31	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.057	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	19		0.40	0.11
67-66-3	Chloroform	119.38	0.086	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.47		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	1.3		0.40	0.065
75-09-2	Methylene Chloride	84.93	3.4		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.035
108-88-3	Toluene	92.14	2.7		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	ND		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	0.27	J	0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	0.11	J	0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	5.4		0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	115		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: SV-150-C-29 Lab Sample ID: 140-20175-13

Matrix: Air Lab File ID: GI03P116D.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 10:44

Sample wt/vol: 100(mL) Date Analyzed: 09/04/2020 02:51

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42409 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	1.0	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.36	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	67		1.4	0.39
67-66-3	Chloroform	119.38	0.42	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.3		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	5.5		1.7	0.28
75-09-2	Methylene Chloride	84.93	12		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.24
108-88-3	Toluene	92.14	10		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	ND		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	1.3	J	2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	0.56	J	2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	23		3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	115		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: SV-152-C-29 Lab Sample ID: 140-20175-14

Matrix: Air Lab File ID: GI03P112.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 10:47

Sample wt/vol: 50(mL) Date Analyzed: 09/03/2020 23:05

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42409 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.21	J	0.80	0.080
56-23-5	Carbon tetrachloride	153.81	ND		0.80	0.070
75-45-6	Chlorodifluoromethane	86.47	9.6		0.80	0.22
67-66-3	Chloroform	119.38	0.37	J	0.80	0.070
156-59-2	cis-1,2-Dichloroethene	96.94	2.3		0.80	0.10
75-71-8	Dichlorodifluoromethane	120.91	0.38	J	0.80	0.14
75-34-3	1,1-Dichloroethane	98.96	ND		0.80	0.070
107-06-2	1,2-Dichloroethane	98.96	ND		0.80	0.10
75-35-4	1,1-Dichloroethene	96.94	ND		0.80	0.080
100-41-4	Ethylbenzene	106.17	ND		0.80	0.13
75-09-2	Methylene Chloride	84.93	4.3		4.0	3.9
1634-04-4	Methyl tert-butyl ether	88.15	ND		4.0	0.52
91-20-3	Naphthalene	128.17	ND		0.40	0.40
127-18-4	Tetrachloroethene	165.83	ND		0.80	0.070
108-88-3	Toluene	92.14	1.7		1.2	0.78
156-60-5	trans-1,2-Dichloroethene	96.94	0.088	J	0.80	0.070
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.80	0.64
71-55-6	1,1,1-Trichloroethane	133.41	0.50	J	0.80	0.37
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.80	0.070
79-01-6	Trichloroethene	131.39	33		0.40	0.060
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.80	0.36
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.80	0.20
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.80	0.22
75-01-4	Vinyl chloride	62.50	ND		0.40	0.26
1330-20-7	Xylenes, Total	106.17	ND		1.6	0.24

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	100		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: SV-152-C-29 Lab Sample ID: 140-20175-14

Matrix: Air Lab File ID: GI03P112.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 10:47

Sample wt/vol: 50(mL) Date Analyzed: 09/03/2020 23:05

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42409 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.67	J	2.6	0.26
56-23-5	Carbon tetrachloride	153.81	ND		5.0	0.44
75-45-6	Chlorodifluoromethane	86.47	34		2.8	0.78
67-66-3	Chloroform	119.38	1.8	J	3.9	0.34
156-59-2	cis-1,2-Dichloroethene	96.94	9.1		3.2	0.40
75-71-8	Dichlorodifluoromethane	120.91	1.9	J	4.0	0.69
75-34-3	1,1-Dichloroethane	98.96	ND		3.2	0.28
107-06-2	1,2-Dichloroethane	98.96	ND		3.2	0.40
75-35-4	1,1-Dichloroethene	96.94	ND		3.2	0.32
100-41-4	Ethylbenzene	106.17	ND		3.5	0.56
75-09-2	Methylene Chloride	84.93	15		14	14
1634-04-4	Methyl tert-butyl ether	88.15	ND		14	1.9
91-20-3	Naphthalene	128.17	ND		2.1	2.1
127-18-4	Tetrachloroethene	165.83	ND		5.4	0.47
108-88-3	Toluene	92.14	6.2		4.5	2.9
156-60-5	trans-1,2-Dichloroethene	96.94	0.35	J	3.2	0.28
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		5.9	4.7
71-55-6	1,1,1-Trichloroethane	133.41	2.7	J	4.4	2.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		4.4	0.38
79-01-6	Trichloroethene	131.39	180		2.1	0.32
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		3.9	1.8
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		3.9	0.98
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		3.9	1.1
75-01-4	Vinyl chloride	62.50	ND		1.0	0.66
1330-20-7	Xylenes, Total	106.17	ND		6.9	1.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	100		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: SV-153-C-29 Lab Sample ID: 140-20175-10

Matrix: Air Lab File ID: HI03P203.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 10:37

Sample wt/vol: 100(mL) Date Analyzed: 09/04/2020 07:30

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42399 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.19	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.89		0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	1.7		0.40	0.11
67-66-3	Chloroform	119.38	0.11	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.52		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	0.087	J	0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	0.070	J	0.40	0.035
108-88-3	Toluene	92.14	0.79		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	0.29		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	0.15	J	0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	0.31	J	0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.49	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	96		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: SV-153-C-29 Lab Sample ID: 140-20175-10

Matrix: Air Lab File ID: HI03P203.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 10:37

Sample wt/vol: 100(mL) Date Analyzed: 09/04/2020 07:30

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42399 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.62	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	5.6		2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	6.0		1.4	0.39
67-66-3	Chloroform	119.38	0.55	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.6		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	0.38	J	1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	0.47	J	2.7	0.24
108-88-3	Toluene	92.14	3.0		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	1.6		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	0.75	J	2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	1.5	J	2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	2.1	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	96		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: SV-155-C-29 Lab Sample ID: 140-20175-8

Matrix: Air Lab File ID: HI03P201.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 10:32

Sample wt/vol: 100(mL) Date Analyzed: 09/04/2020 05:38

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42399 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.18	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	1.4		0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	2.1		0.40	0.11
67-66-3	Chloroform	119.38	0.093	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.52		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	0.12	J	0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	0.075	J	0.40	0.035
108-88-3	Toluene	92.14	1.7		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	0.21		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	0.28	J	0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.52	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	84		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: SV-155-C-29 Lab Sample ID: 140-20175-8

Matrix: Air Lab File ID: HI03P201.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 10:32

Sample wt/vol: 100(mL) Date Analyzed: 09/04/2020 05:38

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42399 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.59	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	8.7		2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	7.3		1.4	0.39
67-66-3	Chloroform	119.38	0.45	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.6		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	0.53	J	1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	0.51	J	2.7	0.24
108-88-3	Toluene	92.14	6.3		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	1.1		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	1.4	J	2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	2.3	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	84		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: SV-DUP1-C-29 Lab Sample ID: 140-20175-6

Matrix: Air Lab File ID: HI03P115.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 00:00

Sample wt/vol: 20(mL) Date Analyzed: 09/04/2020 02:50

Soil Aliquot Vol: Dilution Factor: 3.6

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42399 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	2.3	J	7.2	0.72
56-23-5	Carbon tetrachloride	153.81	0.69	J	7.2	0.63
75-45-6	Chlorodifluoromethane	86.47	ND		7.2	2.0
67-66-3	Chloroform	119.38	11		7.2	0.63
156-59-2	cis-1,2-Dichloroethene	96.94	18		7.2	0.90
75-71-8	Dichlorodifluoromethane	120.91	ND		7.2	1.3
75-34-3	*1,1-Dichloroethane*	*98.96*	*2100*	*E*	*7.2*	*0.63*
107-06-2	1,2-Dichloroethane	98.96	ND		7.2	0.90
75-35-4	1,1-Dichloroethene	96.94	960		7.2	0.72
100-41-4	Ethylbenzene	106.17	110		7.2	1.2
75-09-2	Methylene Chloride	84.93	ND		36	35
1634-04-4	Methyl tert-butyl ether	88.15	ND		36	4.7
91-20-3	Naphthalene	128.17	82		3.6	3.6
127-18-4	Tetrachloroethene	165.83	ND		7.2	0.63
108-88-3	Toluene	92.14	ND		11	7.0
156-60-5	trans-1,2-Dichloroethene	96.94	1.3	J	7.2	0.63
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		7.2	5.8
71-55-6	1,1,1-Trichloroethane	133.41	480		7.2	3.3
79-00-5	1,1,2-Trichloroethane	133.41	ND		7.2	0.63
79-01-6	Trichloroethene	131.39	330		3.6	0.54
526-73-8	1,2,3-Trimethylbenzene	120.19	4.7	J	7.2	3.2
95-63-6	1,2,4-Trimethylbenzene	120.20	4.6	J	7.2	1.8
108-67-8	1,3,5-Trimethylbenzene	120.20	6.5	J	7.2	2.0
75-01-4	Vinyl chloride	62.50	3.0	J	3.6	2.3
1330-20-7	Xylenes, Total	106.17	1200		14	2.2

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	108		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: SV-DUP1-C-29 Lab Sample ID: 140-20175-6

Matrix: Air Lab File ID: HI03P115.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 00:00

Sample wt/vol: 20(mL) Date Analyzed: 09/04/2020 02:50

Soil Aliquot Vol: Dilution Factor: 3.6

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42399 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	7.3	J	23	2.3
56-23-5	Carbon tetrachloride	153.81	4.4	J	45	4.0
75-45-6	Chlorodifluoromethane	86.47	ND		25	7.0
67-66-3	Chloroform	119.38	54		35	3.1
156-59-2	cis-1,2-Dichloroethene	96.94	70		29	3.6
75-71-8	Dichlorodifluoromethane	120.91	ND		36	6.2
75-34-3	*1,1-Dichloroethane*	*98.96*	*8300*	*E*	*29*	*2.5*
107-06-2	1,2-Dichloroethane	98.96	ND		29	3.6
75-35-4	1,1-Dichloroethene	96.94	3800		29	2.9
100-41-4	Ethylbenzene	106.17	480		31	5.1
75-09-2	Methylene Chloride	84.93	ND		130	120
1634-04-4	Methyl tert-butyl ether	88.15	ND		130	17
91-20-3	Naphthalene	128.17	430		19	19
127-18-4	Tetrachloroethene	165.83	ND		49	4.3
108-88-3	Toluene	92.14	ND		41	26
156-60-5	trans-1,2-Dichloroethene	96.94	5.2	J	29	2.5
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		53	43
71-55-6	1,1,1-Trichloroethane	133.41	2600		39	18
79-00-5	1,1,2-Trichloroethane	133.41	ND		39	3.4
79-01-6	Trichloroethene	131.39	1800		19	2.9
526-73-8	1,2,3-Trimethylbenzene	120.19	23	J	35	16
95-63-6	1,2,4-Trimethylbenzene	120.20	23	J	35	8.8
108-67-8	1,3,5-Trimethylbenzene	120.20	32	J	35	9.7
75-01-4	Vinyl chloride	62.50	7.6	J	9.2	6.0
1330-20-7	Xylenes, Total	106.17	5300		63	9.4

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	108		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: SV-DUP1-C-29 DL Lab Sample ID: 140-20175-6 DL

Matrix: Air Lab File ID: GI08P103.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 00:00

Sample wt/vol: 11(mL) Date Analyzed: 09/08/2020 18:49

Soil Aliquot Vol: Dilution Factor: 3.6

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42503 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
75-34-3	1,1-Dichloroethane	98.96	1500		13	1.1

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	98		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: SV-DUP1-C-29 DL Lab Sample ID: 140-20175-6 DL

Matrix: Air Lab File ID: GI08P103.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 00:00

Sample wt/vol: 11(mL) Date Analyzed: 09/08/2020 18:49

Soil Aliquot Vol: Dilution Factor: 3.6

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42503 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
75-34-3	1,1-Dichloroethane	98.96	6000		53	4.6

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	98		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: SV-DUP2-C-29 Lab Sample ID: 140-20175-11

Matrix: Air Lab File ID: GBI07P116.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 00:00

Sample wt/vol: 100(mL) Date Analyzed: 09/08/2020 01:28

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42500 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.14	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.25	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	1.5		0.40	0.11
67-66-3	Chloroform	119.38	0.063	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.38	J	0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	0.15	J	0.40	0.065
75-09-2	Methylene Chloride	84.93	11		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	0.042	J	0.40	0.035
108-88-3	Toluene	92.14	2.0		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	0.18	J	0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	0.25	J	0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	0.13	J	0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.73	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	99		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: SV-DUP2-C-29 Lab Sample ID: 140-20175-11

Matrix: Air Lab File ID: GBI07P116.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 00:00

Sample wt/vol: 100(mL) Date Analyzed: 09/08/2020 01:28

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42500 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.45	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	1.6	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	5.3		1.4	0.39
67-66-3	Chloroform	119.38	0.31	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	1.9	J	2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	0.65	J	1.7	0.28
75-09-2	Methylene Chloride	84.93	39		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	0.29	J	2.7	0.24
108-88-3	Toluene	92.14	7.4		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	0.98	J	1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	1.3	J	2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	0.65	J	2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	3.2	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	99		60-140

Appendix C

Support Documentation

Job Narrative
140-20175-1

Comments
No additional comments.

Receipt
The samples were received on 8/27/2020 10:00 AM; the samples arrived in good condition, and where required, properly preserved and on ice.

Air - GC/MS VOA
Methods 3005A, TO 15 LL, TO-14A, TO-15: EPA methods TO-14A and TO-15 specify the use of humidified "zero air" as the blank reagent for canister cleaning, instrument calibration and sample analysis. Ultra-high purity humidified nitrogen from a cryogenic reservoir is used in place of "zero air" by TestAmerica Knoxville.

Methods TO 15 LL, TO-15: Although the BFB is flagged as outside control limits for TO-14 on batch 140-42399, the results are within limits for TO-15, which is required for this project.

Method TO 15 LL: The continuing calibration verification (CCV) associated with batch 140-42498 recovered above the upper control limit for 1,2,4-Trichlorobenzene, 1,2,4-Trimethylbenzene, Carbon tetrachloride and Naphthalene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: (CCVIS 140-42498/9).

Method TO 15 LL: The laboratory control sample (LCS) for analytical batch 140-42498 recovered outside control limits for the following analytes: 1,2,4-Trimethylbenzene and Carbon tetrachloride. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method TO 15 LL: The continuing calibration verification (CCV) associated with batch 140-42503 exhibited % difference of > 30% for the following analyte(s) :1,2,3-Trimethylbenzene;however, the results were within the LCS acceptance limits. The EPA method requires that all target analytes in the continuing calibration verification standard be within 30% difference from the initial calibration. According to the laboratory standard operating procedure, the continuing calibration is acceptable if it meets the laboratory control sample acceptance criteria and is within marginal exceedance criteria.

Method TO 15 LL: The laboratory control sample (LCS) for analytical batch 140-42503 recovered outside control limits for the following analytes: 1,2,3-Trimethylbenzene. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Definitions/Glossary

Client: Tetra Tech, Inc. Job ID: 140-20175-1
Project/Site: Middle River - MRC

Qualifiers

Air - GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
CI	The peak identified by the data system exhibited chromatographic interference that could not be resolved. There is reason to suspect there may be a high bias.
E	Result exceeded calibration range.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Method Summary

Client: Tetra Tech, Inc.
Project/Site: Middle River - MRC

Job ID: 140-20175-1

Method	Method Description	Protocol	Laboratory
TO 15 LL	Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)	EPA	TAL KNX

Protocol References:

EPA = US Environmental Protection Agency

Laboratory References:

TAL KNX = Eurofins TestAmerica, Knoxville, 5815 Middlebrook Pike, Knoxville, TN 37921, TEL (865)291-3000

Sample Summary

Client: Tetra Tech, Inc.
Project/Site: Middle River - MRC

Job ID: 140-20175-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
140-20175-1	SV-001-C-29	Air	08/25/20 10:08	08/27/20 10:00	Air Canister (1-Liter) #34000238
140-20175-2	SV-004-C-29	Air	08/25/20 10:12	08/27/20 10:00	Air Canister (1-Liter) #09798
140-20175-3	SV-102-C-29	Air	08/25/20 10:17	08/27/20 10:00	Air Canister (1-Liter) #09642
140-20175-4	SV-113-C-29	Air	08/25/20 10:20	08/27/20 10:00	Air Canister (1-Liter) #10337
140-20175-5	SV-088-C-29	Air	08/25/20 10:22	08/27/20 10:00	Air Canister (1-Liter) #11753
140-20175-6	SV-DUP1-C-29	Air	08/25/20 00:00	08/27/20 10:00	Air Canister (1-Liter) #09669
140-20175-7	SV-142-C-29	Air	08/25/20 10:27	08/27/20 10:00	Air Canister (1-Liter) #11615
140-20175-8	SV-155-C-29	Air	08/25/20 10:32	08/27/20 10:00	Air Canister (1-Liter) #34000625
140-20175-9	SV-133-C-29	Air	08/25/20 10:35	08/27/20 10:00	Air Canister (1-Liter) #10780
140-20175-10	SV-153-C-29	Air	08/25/20 10:37	08/27/20 10:00	Air Canister (1-Liter) #10760
140-20175-11	SV-DUP2-C-29	Air	08/25/20 00:00	08/27/20 10:00	Air Canister (1-Liter) #34002453
140-20175-12	SV-060-C-29	Air	08/25/20 10:41	08/27/20 10:00	Air Canister (1-Liter) #09644
140-20175-13	SV-150-C-29	Air	08/25/20 10:44	08/27/20 10:00	Air Canister (1-Liter) #11284
140-20175-14	SV-152-C-29	Air	08/25/20 10:47	08/27/20 10:00	Air Canister (1-Liter) #34001075
140-20175-15	SV-141-C-29	Air	08/25/20 10:50	08/27/20 10:00	Air Canister (1-Liter) #11126
140-20175-16	SV-149-C-29	Air	08/25/20 10:53	08/27/20 10:00	Air Canister (1-Liter) #34000628
140-20175-17	SV-126-C-29	Air	08/25/20 10:56	08/27/20 10:00	Air Canister (1-Liter) #11693
140-20175-18	IA-001-C-29	Air	08/25/20 16:11	08/27/20 10:00	Air Canister (1-Liter) #34002391
140-20175-19	IA-004-C-29	Air	08/25/20 16:14	08/27/20 10:00	Air Canister (1-Liter) #10833
140-20175-20	IA-102-C-29	Air	08/25/20 16:22	08/27/20 10:00	Air Canister (1-Liter) #34000642
140-20175-21	IA-113-C-29	Air	08/25/20 16:23	08/27/20 10:00	Air Canister (1-Liter) #34000684
140-20175-22	IA-088-C-29	Air	08/25/20 16:24	08/27/20 10:00	Air Canister (1-Liter) #11710
140-20175-23	IA-142-C-29	Air	08/25/20 16:25	08/27/20 10:00	Air Canister (1-Liter) #34002471
140-20175-24	IA-155-C-29	Air	08/25/20 16:28	08/27/20 10:00	Air Canister (1-Liter) #10492
140-20175-25	IA-133-C-29	Air	08/25/20 16:31	08/27/20 10:00	Air Canister (1-Liter) #11665
140-20175-26	IA-153-C-29	Air	08/25/20 16:32	08/27/20 10:00	Air Canister (1-Liter) #10335
140-20175-27	IA-DUP1-C-29	Air	08/25/20 00:00	08/27/20 10:00	Air Canister (1-Liter) #10333
140-20175-28	IA-060-C-29	Air	08/25/20 16:35	08/27/20 10:00	Air Canister (1-Liter) #11875
140-20175-29	IA-152-C-29	Air	08/25/20 16:38	08/27/20 10:00	Air Canister (1-Liter) #11804
140-20175-30	IA-150-C-29	Air	08/25/20 16:40	08/27/20 10:00	Air Canister (1-Liter) #11842
140-20175-31	IA-145-C-29	Air	08/25/20 16:42	08/27/20 10:00	Air Canister (1-Liter) #34001137
140-20175-32	IA-146-C-29	Air	08/25/20 16:43	08/27/20 10:00	Air Canister (1-Liter) #11573
140-20175-33	IA-144-C-29	Air	08/25/20 16:45	08/27/20 10:00	Air Canister (1-Liter) #11721
140-20175-34	IA-141-C-29	Air	08/25/20 16:48	08/27/20 10:00	Air Canister (1-Liter) #11743
140-20175-35	IA-149-C-29	Air	08/25/20 16:50	08/27/20 10:00	Air Canister (1-Liter) #11572
140-20175-36	IA-DUP2-C-29	Air	08/25/20 00:00	08/27/20 10:00	Air Canister (1-Liter) #34002485
140-20175-37	IA-126-C-29	Air	08/25/20 16:52	08/27/20 10:00	Air Canister (1-Liter) #09661
140-20175-38	IA-BCK-1-29	Air	08/25/20 16:03	08/27/20 10:00	Air Canister (1-Liter) #11141
140-20175-39	IA-BCK-2-29	Air	08/25/20 16:07	08/27/20 10:00	Air Canister (1-Liter) #11671
140-20175-40	IA-BCK-3-29	Air	08/25/20 15:52	08/27/20 10:00	Air Canister (1-Liter) #10980
140-20175-41	IA-BCK-4-29	Air	08/25/20 15:57	08/27/20 10:00	Air Canister (1-Liter) #34001650

Baltimore #201

Canister Samples Chain of Custody Record

Eurofins TestAmerica, Knoxville
5815 Middlebrook Pike
Knoxville, TN 37921-5947
phone 865.291.3000 fax 865.584.4315

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TestAmerica Laboratories, Inc. assumes no liability with respect to the collection and shipment of these samples.

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact Information	**Client Project Manager:** Josh Mullis	**Samples Collected By:** Josh Mullis/ Walt Pyatt	COC No: 1 of 6 COCs
Company Name: Tetra Tech Inc	Phone: 410-279-2700		
Address: 10251 Century Blvd Ste. 200	Email: josh.mullis@tetratech.com		TALS Project #:
City/State/Zip Lacrosse, MD, 20878			For Lab Use Only:
Phone: 410-279-2700	Site Contact: Josh Mullis		Walk-in Client:
FAX: —	Tel/Fax 410-279-2700		
Project Name: MRC Indoor Air / Soil Vapor	Analysis Turnaround Time		
Site/Location: Middle River Complex	Standard (Specific): ✓		
P O # 112E09388	Rush (Specifiy):		

140-20175 Chain of Custody

Sample Identification	Sample Start Date	Time Start	Sample End Date	Time Stop	Canister Vacuum in Field, "Hg (Start)	Canister Vacuum in Field, "Hg (Stop)	Flow Controller ID	Canister ID	TO-14/15 (Standard / Low Level)	TO-15 SIM	EPA 3C	EPA 25C	ASTM D-1946	EPA 15/16	Other (Please specify in notes section)	Sa	Ind	Sul	Sol	Sol	Lar	Otr	Sample Specific Notes:
SV-001-C-29	8/25/2020	0908	8/25/2020	1008	-30	-3	09659	34000238	K									K					
SV-004-C-29		0912		1012	-30	-4	10448	09798	K									K					
SV-102-C-29		0917		1017	-30	-4	10436	09642	K									K					
SV-113-C-29		0920		1020	-30	-3	10145	10337	K									K					
SV-088-C-29		0922		1022	-30	-2	11936	11753	K									K					
SV-DUP1-C-29		0000		0000	-30	-3	7255	09669	K									K					
SV-142-C-29		0927		1027	-30	-4	10662	11615	K									K					
SV-155-C-29		0932		1032	-30	-4	7625	34000625	K									K					
SV-133-C-29		0935		1035	-30	-3	10140	10780	K									K					
SV-153-C-29	✓	0937	✓	1037	-30	-3	~~11 SAM 12~~	~~34 SAM 2153~~	K									K					FLOW 10665 / CAN 10760

Temperature (Fahrenheit)		
	Interior	Ambient
Start		
Stop		

Pressure (inches of Hg)		
	Interior	Ambient
Start		
Stop		

CUSTODY SEAL INTACT
RECEIVED AMBIENT AT 21.0 / CT 21.0°C
BKD 8-27-20
4 ANALYSES FED X# 7713 2897 978 PD
42 CANS / 42 FLOWS

Special Instructions/QC Requirements & Comments: MRC Indoor Air / Soil Vapor Bi-Annual Sampling

Samples Shipped by:	**Date / Time:** 8/26/2020 1200	**Samples Received by:**	
Samples Relinquished by:	**Date / Time:** 8/26/20 1700	**Received by:** Fed Ex	8-20-20 10:00
Relinquished by:	**Date / Time:**	**Received by:**	
Lab Use Only: **Shipper Name:**	**Opened by:**	**Condition:**	

Baltimore #201

Eurofins TestAmerica, Knoxville
5815 Middlebrook Pike
Knoxville, TN 37921-5947
phone 865.291.3000 fax 865.584.4315

Canister Samples Chain of Custody Record

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TestAmerica Laboratories, Inc. assumes no liability with respect to the collection and shipment of these samples.

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact Information	**Client Project Manager:** Josh Mullis	**Samples Collected By:** Josh Mullis / Walt Pryor	COC No: 2 of 6 COCs
Company Name: TETRA TECH INC	Phone: 410-279-2700		
Address: 10251 Century Blvd Ste. 200	Email: josh.mullis@tetratech.com		TALS Project #:
City/State/Zip: Germantown, MD, 20874			**For Lab Use Only:** Walk-in Client:
Phone: 410-279-2700	**Site Contact:** Josh Mullis		Lab Sampling:
FAX: —	Tel/Fax: 410-279-2700		
Project Name: MRC Indoor Air / Soil Vapor	**Analysis Turnaround Time**		Job / SDG No.:
Site/Location: Middle River Complex	Standard (Specific): —		(See below for Add'l Items)
PO# 1122C08388	Rush (Specifiy):		

Sample Identification	Sample Start Date	Time Start	Sample End Date	Time Stop	Canister Vacuum in Field, "Hg (Start)	Canister Vacuum in Field, "Hg (Stop)	Flow Controller ID	Canister ID	TO-14/15 (Standard / Low Level)	TO-15 SIM	EPA 3C	EPA 25C	ASTM D-1946	EPA 15/16	Other (Please specify in notes section)	Sample Type	Indoor Air/Ambient Air	Sub-Slab	Soil Gas	Soil Vapor Extraction (SVE)	Landfill Gas	Other (Please specify in notes section)	Sample Specific Notes:
SV-OUP2-C-29	8/25/2020	0000	8/26/2020	0000	-30	-4	11272	3400245 3	X									X					
SV-060-C-29		0941		1041	-27	-2	11477	09644	X									X					
SV-150-C-29		0944		1044	-30	-4	7654	11284	X									X					
SV-152-C-29		0947		1047	-30	-4	11977	34001075	X									X					
SV-141-C-29		0950		1050	-30	-3	11511	11126	X									X					
SV-149-C-29		0953		1053	-30	-5	10158	34000628	X									X					
SV-126-C-29	↓	0956	↓	1056	-30	-4	11976	11693	X									X					
				8/25/2020																			

Temperature (Fahrenheit)			
Start	Interior	Ambient	
Stop			

Pressure (inches of Hg)			
Start	Interior	Ambient	
Stop			

Special Instructions/QC Requirements & Comments: MRC Indoor Air / Soil Vapor Bi-Annual Sampling

Samples Shipped by:	**Date / Time:** 8/26/2020 1200	**Samples Received by:**
Samples Relinquished by:	**Date / Time:** 8/26/20 1700	**Received by:** Thomas FTA-KVX 8-27-20 10:00
Relinquished by:	**Date / Time:**	**Received by:**
Lab Use Only: **Shipper Name:**	**Opened by:**	**Condition:**

09/08/2020

Baltimore #201

Eurofins TestAmerica, Knoxville
5815 Middlebrook Pike
Knoxville, TN 37921-5947
phone 865.291.3000 fax 865.584.4315

Canister Samples Chain of Custody Record

TestAmerica Laboratories, Inc. assumes no liability with respect to the collection and shipment of these samples.

eurofins | Environment Testing TestAmerica

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact Information	**Client Project Manager:** Josh Mullis	**Samples Collected By:** Josh Mullis/ Walt Pryor	COC No: 3 of 6 COCs
Company Name: TETRA TECH INC	Phone: 410-279-2700		TALS Project #:
Address: 10251 Century Blvd Ste. 200	Email: josh.mullis@tetratech.com		For Lab Use Only:
City/State/Zip: Germantown, MD, 20874			Walk-in Client:
Phone: 410-279-2700	Site Contact: Josh Mullis		Lab Sampling:
FAX: —	Tel/Fax 410-279-2700		Job / SDG No.:
Project Name: MRC Indoor Air / Soil Vapor	Analysis Turnaround Time		(See below for Add'l Items)
Site/Location: Middle River Complex	Standard (Specific): —		
PO # 112EC08388	Rush (Specifiy):		

Sample Identification	Sample Start Date	Time Start	Sample End Date	Time Stop	Canister Vacuum in Field, "Hg (Start)	Canister Vacuum in Field, "Hg (Stop)	Flow Controller ID	Canister ID	TO-14/15 (Standard / Low Level)	TO-15 SIM	EPA 3C	EPA 25C	ASTM D-1946	EPA 16/16	Other (Please specify in notes section)	Sample Type	Indoor Air/Ambient Air	Sub-Slab	Soil Gas	Soil Vapor Extraction (SVE)	Landfill Gas	Other (Please specify in notes section)	Sample Specific Notes:
IA-001-C-29	8/25/2020	0811	8/25/2020	1611	-30	-3	7635	340-23911	K								K						
IA-004-E-29		0814		1614	-30	-14	8563	10833	K								K						
IA-102-C-29		0822		1622	-30	-4	7588	3100642	K								K						
IA-113-C-29		0823		1623	-30	-7	8749	3100684	K								K						
IA-088-C-29		0824		1624	-30	-8	8607	11710	K								K						
IA-142-C-29		0825		1625	-28	-10	10450	3400 2421	K								K						
IA-155-C-29		0828		1628	-27	-8	8634	10492	K								K						
IA-133-C-29		0831		1631	-30	-11	8464	11665	K								K						
IA-153-C-29		0832		1632	-30	-4	0825	10335	K								K						
IA-Dup1-C-29		0000		0000	-30	-4	09846	10333	K								K						

Temperature (Fahrenheit)	Interior	Ambient
Start		
Stop		

Pressure (inches of Hg)	Interior	Ambient
Start		
Stop		

Special Instructions/QC Requirements & Comments: MRC Indoor Air / Soil Vapor Bi-Annual Sampling

Samples Shipped by:	**Date / Time:** 8/26/2020 1200	**Samples Received by:**
Samples Relinquished by:	**Date / Time:** 8/26/20 1700	**Received by:** FEDEX 8.27.20 10:00
Relinquished by:	**Date / Time:**	**Received by:**
Lab Use Only: **Shipper Name:**	**Opened by:**	**Condition:**

09/03/2020

Baltimore #201

Eurofins TestAmerica, Knoxville
5815 Middlebrook Pike

Knoxville, TN 37921-5947
phone 865.291.3000 fax 865.584.4315

Canister Samples Chain of Custody Record

TestAmerica Laboratories, Inc. assumes no liability with respect to the collection and shipment of these samples.

eurofins | Environment Testing TestAmerica

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact Information	Client Project Manager: Josh Mullis	Samples Collected By: Josh Mullis/ Walt Pryor	COC No: 4 of 6 COCs
Company Name: TETRA TECH INC	Phone: 410-279-2700		TALS Project #:
Address: 20251 Century Blvd Ste. 200	Email: josh.mullis@tetratech.com		For Lab Use Only:
City/State/Zip Germantown, MD, 20874			Walk-in Client:
Phone: 410-279-2700	Site Contact: Josh Mullis		Lab Sampling:
FAX: —	Tel/Fax 410-279-2700		
Project Name: MRC Indoor Air / Soil Vapor	Analysis Turnaround Time		Job / SDG No.:
Site/Location: Middle River Complex	Standard (Specific): —		(See below for Add'l Items)
PO# 112EC08388	Rush (Specifiy):		

Sample Identification	Sample Start Date	Time Start	Sample End Date	Time Stop	Canister Vacuum in Field, "Hg (Start)	Canister Vacuum in Field, "Hg (Stop)	Flow Controller ID	Canister ID	TO-14/15 (Standard / Low Level)	TO-15 SIM	EPA 3C	EPA 25C	ASTM D-1946	EPA 15/16	Other (Please specify in notes section)	Sample Type	Indoor Air/Ambient Air	Sub-Slab	Soil Gas	Soil Vapor Extraction (SVE)	Landfill Gas	Other (Please specify in notes section)	Sample Specific Notes:
IA-060-C-29	8/25/2020	0835	8/25/2020	1635	-29	-5	11937	11875	X								X						
IA-152-C-29		0838		1638	-30	-4	8653	11804	X								X						
IA-150-C-29		0840		1640	-30	-3	7184	11842	X								X						
IA-145-C-29		0842		1642	-29	-1	11528	34001137	X								X						
IA-146-C-29		0843		1643	-29	-8	09655	11573	X								X						
IA-144-C-29		0845		1645	-30	-8	10870	11721	X								X						
IA-141-C-29		0848		1648	-30	-7	7617	11743	X								X						
IA-149-C-29		0850		1650	-30	-6	7107	11572	X								X						
IA-DUP2-C-29		0000		0000	-30	-8	09657	34002485	X								X						
IA-126-C-29		0852		1652	-30	-7	7590	09661	X								X						

Temperature (Fahrenheit)			
Start	Interior	Ambient	
Stop			

Pressure (inches of Hg)			
Start	Interior	Ambient	
Stop			

Special Instructions/QC Requirements & Comments: MRC Indoor Air / Soil Vapor Bi-Annual Sampling

Samples Shipped by: [signature]	Date / Time: 8/26/2020 1200	Samples Received by: [signature]
Samples Relinquished by: [signature]	Date / Time: 8/26/20 1200	Received by: [signature] ETA KNX 8-27-20 10:00
Relinquished by:	Date / Time:	Received by:
Lab Use Only: Shipper Name:	Opened by:	Condition:

Form No. CA-C-WI-003, Rev. 2.23, dated 5/4/2020

09/10/2020

Baltimore #201

Eurofins TestAmerica, Knoxville
5815 Middlebrook Pike
Knoxville, TN 37921-5947
phone 865.291.3000 fax 865.584.4315

Canister Samples Chain of Custody Record

TestAmerica Laboratories, Inc. assumes no liability with respect to the collection and shipment of these samples.

eurofins | Environment Testing TestAmerica

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact Information	**Client Project Manager:** Josh Mullis	**Samples Collected By:** Josh Mullis/ Walt Pyar
Company Name: FETRA TECH INC	Phone: 410-329-2700	COC No: 5 of 6 COCs
Address: 20251 Century Blvd Ste. 200	Email: josh.mullis@fetratech.com	TALS Project #:
City/State/Zip Germantown, MD, 20874		For Lab Use Only: Walk-in Client: Lab Sampling:
Phone: 410-329-2700	**Site Contact:** Josh Mullis	Job / SDG No.:
FAX: —	**Tel/Fax** 410-329-2700	(See below for Add'l Items)
Project Name: MDE Indoor Air / Soil Vapor	**Analysis Turnaround Time**	
Site/Location: Middle River Complex	Standard (Specific): —	
P O # 1128208388	Rush (Specifiy):	

Sample Identification	Sample Start Date	Time Start	Sample End Date	Time Stop	Canister Vacuum in Field, "Hg (Start)	Canister Vacuum in Field, "Hg (Stop)	Flow Controller ID	Canister ID	TO-14/15 (Standard / Low Level)	TO-15 SIM	EPA 3C	EPA 25C	ASTM D-1946	EPA 15/16	Other (Please specify in notes section)	Sample Type	Indoor Air/Ambient Air	Sub-Slab	Soil Gas	Soil Vapor Extraction (SVE)	Landfill Gas	Other (Please specify in notes section)	Sample Specific Notes:
IA-BCK-1-29	8/25/2020	0803	8/25/2020	1603	-30	-5	8780	11141	X								X						Outdoor Background Samples
IA-BCK-2-29		0807		1607	-30	-16	8727	11671	X								X						
IA-BCK-3-29		0752		1552	-23	-2	11308	10980	X								X						
IA-BCK-4-29		0757		1557	-30	-7	8689	3400650	X								X						

8/26/2020

Temperature (Fahrenheit)		
	Interior	Ambient
Start		
Stop		

Pressure (inches of Hg)		
	Interior	Ambient
Start		
Stop		

Special Instructions/QC Requirements & Comments: MDE Indoor Air / Soil Vapor Bi-Annual Sampling

Samples Shipped by:	**Date / Time:** 8/26/2020 1200	**Samples Received by:**
Samples Relinquished by:	**Date / Time:** 8/28/20 1700	**Received by:** FETA KWX 8-27-20 10:00
Relinquished by:	**Date / Time:**	**Received by:**
Lab Use Only: **Shipper Name:**	**Opened by:**	**Condition:**

Form No. CA-C-WI-003, Rev. 2.23, dated 5/4/2020

3H00077 1

09/10/2020

Loc: 140
20175

EUROFINS/TESTAMERICA KNOXVILLE SAMPLE RECEIPT/CONDITION UPON RECEIPT ANOMALY CHECKLIST **Log In Number:**

Review Items	Yes	No	NA	If No, what was the problem?	Comments/Actions Taken
1. Are the shipping containers intact?	✓			☐ **Containers, Broken**	
2. Were ambient air containers received intact?			✓	☑ Checked in lab	
3. The coolers/containers custody seal if present, is it intact?	✓			☐ Yes ☐ NA	
4. Is the cooler temperature within limits? (> freezing temp. of water to 6 °C, VOST: 10°C) Thermometer ID :_____ Correction factor: _____			✓	☐ **Cooler Out of Temp, Client Contacted, Proceed/Cancel** ☐ **Cooler Out of Temp, Same Day Receipt**	
5. Were all of the sample containers received intact?	✓			☐ **Containers, Broken**	
6. Were samples received in appropriate containers?	✓			☐ **Containers, Improper; Client Contacted; Proceed/Cancel**	
7. Do sample container labels match COC? (IDs, Dates, Times)	✓			☐ **COC & Samples Do Not Match** ☐ **COC Incorrect/Incomplete** ☐ **COC Not Received**	
8. Were all of the samples listed on the COC received?	✓			☐ **Sample Received, Not on COC** ☐ **Sample on COC, Not Received**	
9. Is the date/time of sample collection noted?	✓			☐ **COC; No Date/Time; Client Contacted**	
10. Was the sampler identified on the COC?	✓			☐ **Sampler Not Listed on COC**	
11. Is the client and project name/# identified?	✓			☐ **COC Incorrect/Incomplete**	
12. Are tests/parameters listed for each sample?	✓			☐ **COC No tests on COC**	
13. Is the matrix of the samples noted?	✓			☐ **COC Incorrect/Incomplete**	
14. Was COC relinquished? (Signed/Dated/Timed)	✓			☐ **COC Incorrect/Incomplete**	
15. Were samples received within holding time?	✓			☐ **Holding Time - Receipt**	
16. Were samples received with correct chemical preservative (excluding Encore)?			✓	☐ **pH Adjusted, pH Included (See box 16A)** ☐ **Incorrect Preservative**	
17. Were VOA samples received without headspace?			✓	☐ **Headspace (VOA only)**	
18. Did you check for residual chlorine, if necessary? (e.g. 1613B, 1668) Chlorine test strip lot number:_____			✓	☐ **Residual Chlorine**	
19. For 1613B water samples is pH<9?			✓	☐ If no, notify lab to adjust	
20. For rad samples was sample activity info. Provided?			✓	☐ Project missing info	

Labeling Verified by: **Date:**

pH test strip lot number:

	Box 16A: pH Preservation	Box 18A: Residual Chlorine
Preservative:		
Lot Number:		
Exp Date:		
Analyst:		
Date:		
Time:		

Project #: 14002945 PM Instructions: _____

Sample Receiving Associate: _____ Date: 8-27-20

QA026R32.doc, 062719

09/10/2020

FIELD DUPLICATE PRECISION

ORIGINAL ID	DUP ID	FRACTION	ANALYTE	ORIGINAL	DUPLICATE	RL	RPD	RPD > 50%	ORIGINAL SAMPLE CONC >RL	DUPLICATE SAMPLE CONC >RL	DIFFERENCE >2XRL
IA-153-C-29	IA-DUP1-C-29	OV-M3	1,2,4-TRIMETHYLBENZENE	0.49 UJ	0.52 J	2	5.94	FALSE	FALSE	FALSE	FALSE
IA-153-C-29	IA-DUP1-C-29	OV-M3	1,2-DICHLOROETHANE	0.41 J	0.2 U	1.6	~~68.85~~	~~TRUE~~	FALSE	FALSE	FALSE
IA-153-C-29	IA-DUP1-C-29	OV-M3	1,3,5-TRIMETHYLBENZENE	0.54 U	1.4 J	2	~~88.66~~	~~TRUE~~	FALSE	FALSE	FALSE
IA-153-C-29	IA-DUP1-C-29	OV-M3	BENZENE	0.45 J	0.6 J	1.3	28.57	FALSE	FALSE	FALSE	FALSE
IA-153-C-29	IA-DUP1-C-29	OV-M3	CARBON TETRACHLORIDE	0.54 J	0.76 J	2.5	33.85	FALSE	FALSE	FALSE	FALSE
IA-153-C-29	IA-DUP1-C-29	OV-M3	CHLORODIFLUOROMETHANE	8.4	10	1.4	17.39	FALSE	TRUE	TRUE	FALSE
IA-153-C-29	IA-DUP1-C-29	OV-M3	CHLOROFORM	0.29 J	0.55 J	2	~~61.90~~	~~TRUE~~	FALSE	FALSE	FALSE
IA-153-C-29	IA-DUP1-C-29	OV-M3	DICHLORODIFLUOROMETHANE	2.3	2.8	2	19.61	FALSE	TRUE	TRUE	FALSE
IA-153-C-29	IA-DUP1-C-29	OV-M3	ETHYLBENZENE	0.38 J	0.56 J	1.7	38.30	FALSE	FALSE	FALSE	FALSE
IA-153-C-29	IA-DUP1-C-29	OV-M3	METHYLENE CHLORIDE	6.8 U	11	6.9	47.19	FALSE	FALSE	TRUE	FALSE
IA-153-C-29	IA-DUP1-C-29	OV-M3	TOLUENE	2.9	4.2	2.3	36.62	FALSE	TRUE	TRUE	FALSE
IA-153-C-29	IA-DUP1-C-29	OV-M3	TOTAL XYLENES	1.8 J	2.5 J	3.5	32.56	FALSE	FALSE	FALSE	FALSE
IA-153-C-29	IA-DUP1-C-29	OV-M3	TRICHLOROETHENE	0.16 U	4.8	1.1	~~187.10~~	~~TRUE~~	FALSE	TRUE	TRUE

FIELD DUPLICATE PRECISION

ORIGINAL ID	DUP ID	FRACTION	ANALYTE	ORIGINAL	DUPLICATE	RL	RPD	RPD > 50%	ORIGINAL SAMPLE CONC >RL	DUPLICATE SAMPLE CONC >RL	DIFFERENCE >2XRL
IA-149-C-29	IA-DUP2-C-29	OV-M3	1,2,4-TRIMETHYLBENZENE	1.4 J	1.9 J	2	30.30	FALSE	FALSE	FALSE	FALSE
IA-149-C-29	IA-DUP2-C-29	OV-M3	1,3,5-TRIMETHYLBENZENE	0.54 U	0.55 J	2	1.83	FALSE	FALSE	FALSE	FALSE
IA-149-C-29	IA-DUP2-C-29	OV-M3	BENZENE	0.58 J	0.55 J	1.3	5.31	FALSE	FALSE	FALSE	FALSE
IA-149-C-29	IA-DUP2-C-29	OV-M3	CARBON TETRACHLORIDE	0.28 J	0.22 U	2.5	24.00	FALSE	FALSE	FALSE	FALSE
IA-149-C-29	IA-DUP2-C-29	OV-M3	CHLORODIFLUOROMETHANE	6.2	5.7	1.4	8.40	FALSE	TRUE	TRUE	FALSE
IA-149-C-29	IA-DUP2-C-29	OV-M3	CHLOROFORM	0.52 J	0.57 J	2	9.17	FALSE	FALSE	FALSE	FALSE
IA-149-C-29	IA-DUP2-C-29	OV-M3	DICHLORODIFLUOROMETHANE	1.9 J	1.8 J	2	5.41	FALSE	FALSE	FALSE	FALSE
IA-149-C-29	IA-DUP2-C-29	OV-M3	ETHYLBENZENE	1.3 J	1.5 J	1.7	14.29	FALSE	FALSE	FALSE	FALSE
IA-149-C-29	IA-DUP2-C-29	OV-M3	METHYLENE CHLORIDE	33	40	6.9	19.18	FALSE	TRUE	TRUE	FALSE
IA-149-C-29	IA-DUP2-C-29	OV-M3	NAPHTHALENE	1 U	1.3	1	26.09	FALSE	FALSE	TRUE	FALSE
IA-149-C-29	IA-DUP2-C-29	OV-M3	TETRACHLOROETHENE	1 J	0.94 J	2.7	6.19	FALSE	FALSE	FALSE	FALSE
IA-149-C-29	IA-DUP2-C-29	OV-M3	TOLUENE	47	50	2.3	6.19	FALSE	TRUE	TRUE	FALSE
IA-149-C-29	IA-DUP2-C-29	OV-M3	TOTAL XYLENES	6.8	7.6	3.5	11.11	FALSE	TRUE	TRUE	FALSE
IA-149-C-29	IA-DUP2-C-29	OV-M3	TRICHLOROETHENE	2.2	1.9	1.1	14.63	FALSE	TRUE	TRUE	FALSE

FIELD DUPLICATE PRECISION

ORIGINAL ID	DUP ID	FRACTION	ANALYTE	ORIGINAL	DUPLICATE	RL	RPD	RPD > 50%	ORIGINAL SAMPLE CONC >RL	DUPLICATE SAMPLE CONC >RL	DIFFERENCE >2XRL
SV-102-C-29	SV-DUP1-C-29	OV-M3	1,1,1-TRICHLOROETHANE	2700	2600	39	3.77	FALSE	TRUE	TRUE	~~TRUE~~
SV-102-C-29-DL	SV-DUP1-C-29-DL	OV-M3	1,1-DICHLOROETHANE	5500	6000	53	8.70	FALSE	TRUE	TRUE	~~TRUE~~
SV-102-C-29	SV-DUP1-C-29	OV-M3	1,1-DICHLOROETHENE	3600	3800	29	5.41	FALSE	TRUE	TRUE	~~TRUE~~
SV-102-C-29	SV-DUP1-C-29	OV-M3	1,2,3-TRIMETHYLBENZENE	24 J	23 J	35	4.26	FALSE	FALSE	FALSE	FALSE
SV-102-C-29	SV-DUP1-C-29	OV-M3	1,2,4-TRIMETHYLBENZENE	20 J	23 J	35	13.95	FALSE	FALSE	FALSE	FALSE
SV-102-C-29	SV-DUP1-C-29	OV-M3	1,3,5-TRIMETHYLBENZENE	32 J	32 J	35	0.00	FALSE	FALSE	FALSE	FALSE
SV-102-C-29	SV-DUP1-C-29	OV-M3	BENZENE	8.3 J	7.3 J	23	12.82	FALSE	FALSE	FALSE	FALSE
SV-102-C-29	SV-DUP1-C-29	OV-M3	CARBON TETRACHLORIDE	4.3 J	4.4 J	45	2.30	FALSE	FALSE	FALSE	FALSE
SV-102-C-29	SV-DUP1-C-29	OV-M3	CHLOROFORM	57	54	35	5.41	FALSE	TRUE	TRUE	FALSE
SV-102-C-29	SV-DUP1-C-29	OV-M3	CIS-1,2-DICHLOROETHENE	48	70	29	37.29	FALSE	TRUE	TRUE	FALSE
SV-102-C-29	SV-DUP1-C-29	OV-M3	ETHYLBENZENE	460	480	31	4.26	FALSE	TRUE	TRUE	FALSE
SV-102-C-29	SV-DUP1-C-29	OV-M3	NAPHTHALENE	300	430	19	35.62	FALSE	TRUE	TRUE	~~TRUE~~
SV-102-C-29	SV-DUP1-C-29	OV-M3	TOLUENE	29 J	26 U	41	10.91	FALSE	FALSE	FALSE	FALSE
SV-102-C-29	SV-DUP1-C-29	OV-M3	TOTAL XYLENES	5800	5300	63	9.01	FALSE	TRUE	TRUE	~~TRUE~~
SV-102-C-29	SV-DUP1-C-29	OV-M3	TRANS-1,2-DICHLOROETHENE	4.6 J	5.2 J	29	12.24	FALSE	FALSE	FALSE	FALSE
SV-102-C-29	SV-DUP1-C-29	OV-M3	TRICHLOROETHENE	1800	1800	19	0.00	FALSE	TRUE	TRUE	FALSE
SV-102-C-29	SV-DUP1-C-29	OV-M3	VINYL CHLORIDE	6.7 J	7.6 J	9.2	12.59	FALSE	FALSE	FALSE	FALSE

FIELD DUPLICATE PRECISION

ORIGINAL ID	DUP ID	FRACTION	ANALYTE	ORIGINAL	DUPLICATE	RL	RPD	RPD > 50%	ORIGINAL SAMPLE CONC >RL	DUPLICATE SAMPLE CONC >RL	DIFFERENCE >2XRL
SV-153-C-29	SV-DUP2-C-29	OV-M3	1,2,4-TRIMETHYLBENZENE	0.75 J	1.3 J	2	53.66	TRUE	FALSE	FALSE	FALSE
SV-153-C-29	SV-DUP2-C-29	OV-M3	1,3,5-TRIMETHYLBENZENE	1.5 J	0.65 J	2	79.07	TRUE	FALSE	FALSE	FALSE
SV-153-C-29	SV-DUP2-C-29	OV-M3	BENZENE	0.62 J	0.45 J	1.3	31.78	FALSE	FALSE	FALSE	FALSE
SV-153-C-29	SV-DUP2-C-29	OV-M3	CARBON TETRACHLORIDE	5.6	1.6 J	2.5	111.11	TRUE	TRUE	FALSE	FALSE
SV-153-C-29	SV-DUP2-C-29	OV-M3	CHLORODIFLUOROMETHANE	6	5.3	1.4	12.39	FALSE	TRUE	TRUE	FALSE
SV-153-C-29	SV-DUP2-C-29	OV-M3	CHLOROFORM	0.55 J	0.31 J	2	55.81	TRUE	FALSE	FALSE	FALSE
SV-153-C-29	SV-DUP2-C-29	OV-M3	DICHLORODIFLUOROMETHANE	2.6	1.9 J	2	31.11	FALSE	TRUE	FALSE	FALSE
SV-153-C-29	SV-DUP2-C-29	OV-M3	ETHYLBENZENE	0.38 J	0.65 J	1.7	52.43	TRUE	FALSE	FALSE	FALSE
SV-153-C-29	SV-DUP2-C-29	OV-M3	METHYLENE CHLORIDE	6.8 U	39	6.9	140.61	TRUE	FALSE	TRUE	TRUE
SV-153-C-29	SV-DUP2-C-29	OV-M3	TETRACHLOROETHENE	0.47 J	0.29 J	2.7	47.37	FALSE	FALSE	FALSE	FALSE
SV-153-C-29	SV-DUP2-C-29	OV-M3	TOLUENE	3	7.4	2.3	84.62	TRUE	TRUE	TRUE	FALSE
SV-153-C-29	SV-DUP2-C-29	OV-M3	TOTAL XYLENES	2.1 J	3.2 J	3.5	41.51	FALSE	FALSE	FALSE	FALSE
SV-153-C-29	SV-DUP2-C-29	OV-M3	TRICHLOROETHENE	1.6	0.98 J	1.1	48.06	FALSE	TRUE	FALSE	FALSE

Method TO15 Low Level

Volatile Organic Compounds - Low level (GC/MS) by Method TO 15

FORM II
AIR - GC/MS VOA SURROGATE RECOVERY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Matrix: Air Level: Low

GC Column (1): RTX-5 ID: 0.32(mm)

Client Sample ID	Lab Sample ID	BFB #
SV-001-C-29	140-20175-1	91
SV-004-C-29	140-20175-2	97
SV-102-C-29	140-20175-3	112
SV-102-C-29 DL	140-20175-3 DL	101
SV-113-C-29	140-20175-4	95
SV-088-C-29	140-20175-5	85
SV-DUP1-C-29	140-20175-6	108
SV-DUP1-C-29 DL	140-20175-6 DL	98
SV-142-C-29	140-20175-7	96
SV-155-C-29	140-20175-8	84
SV-133-C-29	140-20175-9	87
SV-153-C-29	140-20175-10	96
SV-DUP2-C-29	140-20175-11	99
SV-060-C-29	140-20175-12	102
SV-150-C-29	140-20175-13	115
SV-152-C-29	140-20175-14	100
SV-141-C-29	140-20175-15	101
SV-149-C-29	140-20175-16	103
SV-126-C-29	140-20175-17	101
IA-001-C-29	140-20175-18	95
IA-004-C-29	140-20175-19	83
IA-102-C-29	140-20175-20	78
IA-113-C-29	140-20175-21	84
IA-088-C-29	140-20175-22	91
IA-142-C-29	140-20175-23	84
IA-155-C-29	140-20175-24	96
IA-133-C-29	140-20175-25	90
IA-153-C-29	140-20175-26	89
IA-DUP1-C-29	140-20175-27	95
IA-060-C-29	140-20175-28	99
IA-152-C-29	140-20175-29	106
IA-150-C-29	140-20175-30	87
IA-145-C-29	140-20175-31	91
IA-146-C-29	140-20175-32	93
IA-144-C-29	140-20175-33	96

	QC LIMITS
BFB = 4-Bromofluorobenzene (Surr)	60-140

Column to be used to flag recovery values

FORM II TO 15 LL

FORM II
AIR - GC/MS VOA SURROGATE RECOVERY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Matrix: Air Level: Low

GC Column (1): RTX-5 ID: 0.32(mm)

Client Sample ID	Lab Sample ID	BFB #
IA-141-C-29	140-20175-34	103
IA-149-C-29	140-20175-35	101
IA-DUP2-C-29	140-20175-36	99
IA-126-C-29	140-20175-37	98
IA-BCK-1-29	140-20175-38	101
IA-BCK-2-29	140-20175-39	101
IA-BCK-3-29	140-20175-40	100
IA-BCK-4-29	140-20175-41	101
	MB 140-42399/4	78
	MB 140-42409/8	99
	MB 140-42482/5	90
	MB 140-42498/4	75
	MB 140-42500/4	97
	MB 140-42503/5	98
	LCS 140-42399/1002	111
	LCS 140-42409/1002	108
	LCS 140-42482/1003	111
	LCS 140-42498/1009	112
	LCS 140-42500/1002	102
	LCS 140-42503/1002	104

	QC LIMITS
BFB = 4-Bromofluorobenzene (Surr)	60-140

Column to be used to flag recovery values

FORM II TO 15 LL

FORM IV
AIR - GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Lab File ID: I03L20237X.D Lab Sample ID: MB 140-42409/8

Matrix: Air Heated Purge:(Y/N) N

Instrument ID: MG Date Analyzed: 09/03/2020 11:52

GC Column: RTX-5 ID: 0.32(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 140-42409/1002	GCCVI03-LCS.d	09/03/2020 07:55
SV-060-C-29	140-20175-12	GI03P111.D	09/03/2020 22:15
SV-152-C-29	140-20175-14	GI03P112.D	09/03/2020 23:05
SV-141-C-29	140-20175-15	GI03P113.D	09/03/2020 23:53
SV-149-C-29	140-20175-16	GI03P114.D	09/04/2020 00:41
SV-150-C-29	140-20175-13	GI03P116D.D	09/04/2020 02:51

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 140-42409/8

Matrix: Air Lab File ID: I03L20237X.D

Analysis Method: TO 15 LL Date Collected:

Sample wt/vol: 500(mL) Date Analyzed: 09/03/2020 11:52

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42409 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	ND		0.080	0.0080
56-23-5	Carbon tetrachloride	153.81	ND		0.080	0.0070
75-45-6	Chlorodifluoromethane	86.47	ND		0.080	0.022
67-66-3	Chloroform	119.38	ND		0.080	0.0070
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.080	0.010
75-71-8	Dichlorodifluoromethane	120.91	ND		0.080	0.014
75-34-3	1,1-Dichloroethane	98.96	ND		0.080	0.0070
107-06-2	1,2-Dichloroethane	98.96	ND		0.080	0.010
75-35-4	1,1-Dichloroethene	96.94	ND		0.080	0.0080
100-41-4	Ethylbenzene	106.17	ND		0.080	0.013
75-09-2	Methylene Chloride	84.93	ND		0.40	0.39
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.40	0.052
91-20-3	Naphthalene	128.17	ND		0.040	0.040
127-18-4	Tetrachloroethene	165.83	ND		0.080	0.0070
108-88-3	Toluene	92.14	ND		0.12	0.078
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.080	0.0070
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.080	0.064
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.080	0.037
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.080	0.0070
79-01-6	Trichloroethene	131.39	ND		0.040	0.0060
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.080	0.036
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.080	0.020
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.080	0.022
75-01-4	Vinyl chloride	62.50	ND		0.040	0.026
1330-20-7	Xylenes, Total	106.17	ND		0.16	0.024

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	99		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 140-42409/8

Matrix: Air Lab File ID: I03L20237X.D

Analysis Method: TO 15 LL Date Collected:

Sample wt/vol: 500(mL) Date Analyzed: 09/03/2020 11:52

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42409 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	ND		0.26	0.026
56-23-5	Carbon tetrachloride	153.81	ND		0.50	0.044
75-45-6	Chlorodifluoromethane	86.47	ND		0.28	0.078
67-66-3	Chloroform	119.38	ND		0.39	0.034
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.32	0.040
75-71-8	Dichlorodifluoromethane	120.91	ND		0.40	0.069
75-34-3	1,1-Dichloroethane	98.96	ND		0.32	0.028
107-06-2	1,2-Dichloroethane	98.96	ND		0.32	0.040
75-35-4	1,1-Dichloroethene	96.94	ND		0.32	0.032
100-41-4	Ethylbenzene	106.17	ND		0.35	0.056
75-09-2	Methylene Chloride	84.93	ND		1.4	1.4
1634-04-4	Methyl tert-butyl ether	88.15	ND		1.4	0.19
91-20-3	Naphthalene	128.17	ND		0.21	0.21
127-18-4	Tetrachloroethene	165.83	ND		0.54	0.047
108-88-3	Toluene	92.14	ND		0.45	0.29
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.32	0.028
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.59	0.47
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.44	0.20
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.44	0.038
79-01-6	Trichloroethene	131.39	ND		0.21	0.032
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.39	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.39	0.098
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.39	0.11
75-01-4	Vinyl chloride	62.50	ND		0.10	0.066
1330-20-7	Xylenes, Total	106.17	ND		0.69	0.10

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	99		60-140

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Matrix: Air Level: Low Lab File ID: GCCVI03-LCS.d

Lab ID: LCS 140-42409/1002 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Benzene	1.60	1.56	97	70-130	
Carbon tetrachloride	1.60	1.64	103	70-130	
Chlorodifluoromethane	1.60	1.48	92	60-140	
Chloroform	1.60	1.43	89	70-130	
cis-1,2-Dichloroethene	1.60	1.51	94	70-130	
Dichlorodifluoromethane	1.60	1.33	83	60-140	
1,1-Dichloroethane	1.60	1.52	95	70-130	
1,2-Dichloroethane	1.60	1.56	98	70-130	
1,1-Dichloroethene	1.60	1.31	82	70-130	
Ethylbenzene	1.60	1.48	92	70-130	
Methylene Chloride	1.60	1.45	91	70-130	
Methyl tert-butyl ether	1.60	1.51	94	60-140	
Naphthalene	1.60	1.34	84	60-140	
Tetrachloroethene	1.60	1.27	80	70-130	
Toluene	1.60	1.45	90	70-130	
trans-1,2-Dichloroethene	1.60	1.38	86	70-130	
1,2,4-Trichlorobenzene	1.60	1.28	80	60-140	
1,1,1-Trichloroethane	1.60	1.41	88	70-130	
1,1,2-Trichloroethane	1.60	1.42	89	70-130	
Trichloroethene	1.60	1.33	83	70-130	
1,2,3-Trimethylbenzene	1.60	1.27	79	70-130	
1,2,4-Trimethylbenzene	1.60	1.45	91	70-130	
1,3,5-Trimethylbenzene	1.60	1.59	100	70-130	
Vinyl chloride	1.60	1.51	94	70-130	
Xylenes, Total	4.80	4.37	91	70-130	

Column to be used to flag recovery and RPD values

FORM III TO 15 LL

FORM IV
AIR - GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Lab File ID: G500BI07.D Lab Sample ID: MB 140-42500/4

Matrix: Air Heated Purge:(Y/N) N

Instrument ID: MG Date Analyzed: 09/07/2020 10:21

GC Column: RTX-5 ID: 0.32(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 140-42500/1002	GCCVI07-LCS.d	09/07/2020 08:06
IA-144-C-29	140-20175-33	GBI07P107.D	09/07/2020 18:39
IA-141-C-29	140-20175-34	GBI07P108.D	09/07/2020 19:25
IA-149-C-29	140-20175-35	GBI07P109.D	09/07/2020 20:13
IA-DUP2-C-29	140-20175-36	GBI07P110.D	09/07/2020 20:56
IA-126-C-29	140-20175-37	GBI07P111.D	09/07/2020 21:40
IA-BCK-1-29	140-20175-38	GBI07P112.D	09/07/2020 22:24
IA-BCK-2-29	140-20175-39	GBI07P113.D	09/07/2020 23:09
IA-BCK-3-29	140-20175-40	GBI07P114.D	09/07/2020 23:56
IA-BCK-4-29	140-20175-41	GBI07P115.D	09/08/2020 00:42
SV-DUP2-C-29	140-20175-11	GBI07P116.D	09/08/2020 01:28

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 140-42500/4

Matrix: Air Lab File ID: G500BI07.D

Analysis Method: TO 15 LL Date Collected:

Sample wt/vol: 500(mL) Date Analyzed: 09/07/2020 10:21

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42500 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	ND		0.080	0.0080
56-23-5	Carbon tetrachloride	153.81	ND		0.080	0.0070
75-45-6	Chlorodifluoromethane	86.47	ND		0.080	0.022
67-66-3	Chloroform	119.38	ND		0.080	0.0070
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.080	0.010
75-71-8	Dichlorodifluoromethane	120.91	ND		0.080	0.014
75-34-3	1,1-Dichloroethane	98.96	ND		0.080	0.0070
107-06-2	1,2-Dichloroethane	98.96	ND		0.080	0.010
75-35-4	1,1-Dichloroethene	96.94	ND		0.080	0.0080
100-41-4	Ethylbenzene	106.17	ND		0.080	0.013
75-09-2	Methylene Chloride	84.93	ND		0.40	0.39
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.40	0.052
91-20-3	Naphthalene	128.17	ND		0.040	0.040
127-18-4	Tetrachloroethene	165.83	ND		0.080	0.0070
108-88-3	Toluene	92.14	ND		0.12	0.078
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.080	0.0070
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.080	0.064
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.080	0.037
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.080	0.0070
79-01-6	Trichloroethene	131.39	ND		0.040	0.0060
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.080	0.036
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.080	0.020
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.080	0.022
75-01-4	Vinyl chloride	62.50	ND		0.040	0.026
1330-20-7	Xylenes, Total	106.17	ND		0.16	0.024

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	97		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 140-42500/4

Matrix: Air Lab File ID: G500BI07.D

Analysis Method: TO 15 LL Date Collected:

Sample wt/vol: 500(mL) Date Analyzed: 09/07/2020 10:21

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42500 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	ND		0.26	0.026
56-23-5	Carbon tetrachloride	153.81	ND		0.50	0.044
75-45-6	Chlorodifluoromethane	86.47	ND		0.28	0.078
67-66-3	Chloroform	119.38	ND		0.39	0.034
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.32	0.040
75-71-8	Dichlorodifluoromethane	120.91	ND		0.40	0.069
75-34-3	1,1-Dichloroethane	98.96	ND		0.32	0.028
107-06-2	1,2-Dichloroethane	98.96	ND		0.32	0.040
75-35-4	1,1-Dichloroethene	96.94	ND		0.32	0.032
100-41-4	Ethylbenzene	106.17	ND		0.35	0.056
75-09-2	Methylene Chloride	84.93	ND		1.4	1.4
1634-04-4	Methyl tert-butyl ether	88.15	ND		1.4	0.19
91-20-3	Naphthalene	128.17	ND		0.21	0.21
127-18-4	Tetrachloroethene	165.83	ND		0.54	0.047
108-88-3	Toluene	92.14	ND		0.45	0.29
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.32	0.028
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.59	0.47
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.44	0.20
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.44	0.038
79-01-6	Trichloroethene	131.39	ND		0.21	0.032
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.39	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.39	0.098
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.39	0.11
75-01-4	Vinyl chloride	62.50	ND		0.10	0.066
1330-20-7	Xylenes, Total	106.17	ND		0.69	0.10

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	97		60-140

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Matrix: Air Level: Low Lab File ID: GCCVI07-LCS.d

Lab ID: LCS 140-42500/1002 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Benzene	1.60	1.36	85	70-130	
Carbon tetrachloride	1.60	1.37	86	70-130	
Chlorodifluoromethane	1.60	1.55	97	60-140	
Chloroform	1.60	1.46	91	70-130	
cis-1,2-Dichloroethene	1.60	1.47	92	70-130	
Dichlorodifluoromethane	1.60	1.43	90	60-140	
1,1-Dichloroethane	1.60	1.56	97	70-130	
1,2-Dichloroethane	1.60	1.41	88	70-130	
1,1-Dichloroethene	1.60	1.43	89	70-130	
Ethylbenzene	1.60	1.49	93	70-130	
Methylene Chloride	1.60	1.48	92	70-130	
Methyl tert-butyl ether	1.60	1.77	111	60-140	
Naphthalene	1.60	1.52	95	60-140	
Tetrachloroethene	1.60	1.24	77	70-130	
Toluene	1.60	1.47	92	70-130	
trans-1,2-Dichloroethene	1.60	1.42	89	70-130	
1,2,4-Trichlorobenzene	1.60	1.57	98	60-140	
1,1,1-Trichloroethane	1.60	1.48	93	70-130	
1,1,2-Trichloroethane	1.60	1.48	92	70-130	
Trichloroethene	1.60	1.20	75	70-130	
1,2,3-Trimethylbenzene	1.60	1.82	114	70-130	
1,2,4-Trimethylbenzene	1.60	1.52	95	70-130	
1,3,5-Trimethylbenzene	1.60	1.53	96	70-130	
Vinyl chloride	1.60	1.55	97	70-130	
Xylenes, Total	4.80	4.36	91	70-130	

Column to be used to flag recovery and RPD values

FORM III TO 15 LL

FORM IV
AIR - GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Lab File ID: G500BI08.D Lab Sample ID: MB 140-42503/5

Matrix: Air Heated Purge:(Y/N) N

Instrument ID: MG Date Analyzed: 09/08/2020 17:16

GC Column: RTX-5 ID: 0.32(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 140-42503/1002	GCCVI08Z-LCS.d	09/08/2020 15:52
SV-102-C-29 DL	140-20175-3 DL	GI08P102.D	09/08/2020 18:03
SV-DUP1-C-29 DL	140-20175-6 DL	GI08P103.D	09/08/2020 18:49
SV-126-C-29	140-20175-17	GI08P104R.D	09/09/2020 07:56

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 140-42503/5

Matrix: Air Lab File ID: G500BI08.D

Analysis Method: TO 15 LL Date Collected:

Sample wt/vol: 500(mL) Date Analyzed: 09/08/2020 17:16

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42503 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	ND		0.080	0.0080
56-23-5	Carbon tetrachloride	153.81	ND		0.080	0.0070
75-45-6	Chlorodifluoromethane	86.47	ND		0.080	0.022
67-66-3	Chloroform	119.38	ND		0.080	0.0070
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.080	0.010
75-71-8	Dichlorodifluoromethane	120.91	ND		0.080	0.014
75-34-3	1,1-Dichloroethane	98.96	ND		0.080	0.0070
107-06-2	1,2-Dichloroethane	98.96	ND		0.080	0.010
75-35-4	1,1-Dichloroethene	96.94	ND		0.080	0.0080
100-41-4	Ethylbenzene	106.17	ND		0.080	0.013
75-09-2	Methylene Chloride	84.93	ND		0.40	0.39
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.40	0.052
91-20-3	Naphthalene	128.17	ND		0.040	0.040
127-18-4	Tetrachloroethene	165.83	ND		0.080	0.0070
108-88-3	Toluene	92.14	ND		0.12	0.078
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.080	0.0070
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.080	0.064
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.080	0.037
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.080	0.0070
79-01-6	Trichloroethene	131.39	ND		0.040	0.0060
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.080	0.036
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.080	0.020
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.080	0.022
75-01-4	Vinyl chloride	62.50	ND		0.040	0.026
1330-20-7	Xylenes, Total	106.17	ND		0.16	0.024

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	98		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 140-42503/5

Matrix: Air Lab File ID: G500BI08.D

Analysis Method: TO 15 LL Date Collected:

Sample wt/vol: 500(mL) Date Analyzed: 09/08/2020 17:16

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42503 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	ND		0.26	0.026
56-23-5	Carbon tetrachloride	153.81	ND		0.50	0.044
75-45-6	Chlorodifluoromethane	86.47	ND		0.28	0.078
67-66-3	Chloroform	119.38	ND		0.39	0.034
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.32	0.040
75-71-8	Dichlorodifluoromethane	120.91	ND		0.40	0.069
75-34-3	1,1-Dichloroethane	98.96	ND		0.32	0.028
107-06-2	1,2-Dichloroethane	98.96	ND		0.32	0.040
75-35-4	1,1-Dichloroethene	96.94	ND		0.32	0.032
100-41-4	Ethylbenzene	106.17	ND		0.35	0.056
75-09-2	Methylene Chloride	84.93	ND		1.4	1.4
1634-04-4	Methyl tert-butyl ether	88.15	ND		1.4	0.19
91-20-3	Naphthalene	128.17	ND		0.21	0.21
127-18-4	Tetrachloroethene	165.83	ND		0.54	0.047
108-88-3	Toluene	92.14	ND		0.45	0.29
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.32	0.028
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.59	0.47
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.44	0.20
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.44	0.038
79-01-6	Trichloroethene	131.39	ND		0.21	0.032
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.39	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.39	0.098
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.39	0.11
75-01-4	Vinyl chloride	62.50	ND		0.10	0.066
1330-20-7	Xylenes, Total	106.17	ND		0.69	0.10

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	98		60-140

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Matrix: Air Level: Low Lab File ID: GCCVI08Z-LCS.d

Lab ID: LCS 140-42503/1002 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Benzene	1.60	1.41	88	70-130	
Carbon tetrachloride	1.60	1.51	95	70-130	
Chlorodifluoromethane	1.60	1.73	108	60-140	
Chloroform	1.60	1.49	93	70-130	
cis-1,2-Dichloroethene	1.60	1.49	93	70-130	
Dichlorodifluoromethane	1.60	1.48	92	60-140	
1,1-Dichloroethane	1.60	1.65	103	70-130	
1,2-Dichloroethane	1.60	1.46	91	70-130	
1,1-Dichloroethene	1.60	1.54	96	70-130	
Ethylbenzene	1.60	1.39	87	70-130	
Methylene Chloride	1.60	1.54	96	70-130	
Methyl tert-butyl ether	1.60	1.52	95	60-140	
Naphthalene	1.60	1.17	73	60-140	
Tetrachloroethene	1.60	1.24	77	70-130	
Toluene	1.60	1.37	85	70-130	
trans-1,2-Dichloroethene	1.60	1.44	90	70-130	
1,2,4-Trichlorobenzene	1.60	1.13	71	60-140	
1,1,1-Trichloroethane	1.60	1.45	91	70-130	
1,1,2-Trichloroethane	1.60	1.36	85	70-130	
Trichloroethene	1.60	1.26	79	70-130	
1,2,3-Trimethylbenzene	1.60	1.09	68	70-130	*
1,2,4-Trimethylbenzene	1.60	1.26	78	70-130	
1,3,5-Trimethylbenzene	1.60	1.46	91	70-130	
Vinyl chloride	1.60	1.73	108	70-130	
Xylenes, Total	4.80	4.10	85	70-130	

Column to be used to flag recovery and RPD values

FORM III TO 15 LL

FORM IV
AIR - GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Lab File ID: H500BI03.D Lab Sample ID: MB 140-42399/4

Matrix: Air Heated Purge:(Y/N) N

Instrument ID: MH Date Analyzed: 09/03/2020 12:59

GC Column: RTX-5 ID: 0.32(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 140-42399/1002	HCCVI03-LCS.d	09/03/2020 10:16
SV-001-C-29	140-20175-1	HI03P110.D	09/03/2020 22:20
SV-004-C-29	140-20175-2	HI03P111.D	09/03/2020 23:13
SV-102-C-29	140-20175-3	HI03P112.D	09/04/2020 00:08
SV-113-C-29	140-20175-4	HI03P113.D	09/04/2020 01:04
SV-088-C-29	140-20175-5	HI03P114.D	09/04/2020 01:58
SV-DUP1-C-29	140-20175-6	HI03P115.D	09/04/2020 02:50
SV-142-C-29	140-20175-7	HI03P116D.D	09/04/2020 04:41
SV-155-C-29	140-20175-8	HI03P201.D	09/04/2020 05:38
SV-133-C-29	140-20175-9	HI03P202.D	09/04/2020 06:35
SV-153-C-29	140-20175-10	HI03P203.D	09/04/2020 07:30

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 140-42399/4

Matrix: Air Lab File ID: H500BI03.D

Analysis Method: TO 15 LL Date Collected:

Sample wt/vol: 500(mL) Date Analyzed: 09/03/2020 12:59

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42399 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	ND		0.080	0.0080
56-23-5	Carbon tetrachloride	153.81	ND		0.080	0.0070
75-45-6	Chlorodifluoromethane	86.47	ND		0.080	0.022
67-66-3	Chloroform	119.38	ND		0.080	0.0070
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.080	0.010
75-71-8	Dichlorodifluoromethane	120.91	ND		0.080	0.014
75-34-3	1,1-Dichloroethane	98.96	ND		0.080	0.0070
107-06-2	1,2-Dichloroethane	98.96	ND		0.080	0.010
75-35-4	1,1-Dichloroethene	96.94	ND		0.080	0.0080
100-41-4	Ethylbenzene	106.17	ND		0.080	0.013
75-09-2	Methylene Chloride	84.93	ND		0.40	0.39
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.40	0.052
91-20-3	Naphthalene	128.17	ND		0.040	0.040
127-18-4	Tetrachloroethene	165.83	ND		0.080	0.0070
108-88-3	Toluene	92.14	ND		0.12	0.078
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.080	0.0070
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.080	0.064
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.080	0.037
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.080	0.0070
79-01-6	Trichloroethene	131.39	ND		0.040	0.0060
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.080	0.036
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.080	0.020
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.080	0.022
75-01-4	Vinyl chloride	62.50	ND		0.040	0.026
1330-20-7	Xylenes, Total	106.17	ND		0.16	0.024

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	78		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 140-42399/4

Matrix: Air Lab File ID: H500BI03.D

Analysis Method: TO 15 LL Date Collected:

Sample wt/vol: 500(mL) Date Analyzed: 09/03/2020 12:59

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42399 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	ND		0.26	0.026
56-23-5	Carbon tetrachloride	153.81	ND		0.50	0.044
75-45-6	Chlorodifluoromethane	86.47	ND		0.28	0.078
67-66-3	Chloroform	119.38	ND		0.39	0.034
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.32	0.040
75-71-8	Dichlorodifluoromethane	120.91	ND		0.40	0.069
75-34-3	1,1-Dichloroethane	98.96	ND		0.32	0.028
107-06-2	1,2-Dichloroethane	98.96	ND		0.32	0.040
75-35-4	1,1-Dichloroethene	96.94	ND		0.32	0.032
100-41-4	Ethylbenzene	106.17	ND		0.35	0.056
75-09-2	Methylene Chloride	84.93	ND		1.4	1.4
1634-04-4	Methyl tert-butyl ether	88.15	ND		1.4	0.19
91-20-3	Naphthalene	128.17	ND		0.21	0.21
127-18-4	Tetrachloroethene	165.83	ND		0.54	0.047
108-88-3	Toluene	92.14	ND		0.45	0.29
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.32	0.028
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.59	0.47
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.44	0.20
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.44	0.038
79-01-6	Trichloroethene	131.39	ND		0.21	0.032
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.39	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.39	0.098
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.39	0.11
75-01-4	Vinyl chloride	62.50	ND		0.10	0.066
1330-20-7	Xylenes, Total	106.17	ND		0.69	0.10

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	78		60-140

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Matrix: Air Level: Low Lab File ID: HCCVI03-LCS.d

Lab ID: LCS 140-42399/1002 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Benzene	1.60	1.56	97	70-130	
Carbon tetrachloride	1.60	1.92	120	70-130	
Chlorodifluoromethane	1.60	1.57	98	60-140	
Chloroform	1.60	1.56	98	70-130	
cis-1,2-Dichloroethene	1.60	1.35	84	70-130	
Dichlorodifluoromethane	1.60	1.66	104	60-140	
1,1-Dichloroethane	1.60	1.49	93	70-130	
1,2-Dichloroethane	1.60	1.53	96	70-130	
1,1-Dichloroethene	1.60	1.34	84	70-130	
Ethylbenzene	1.60	1.44	90	70-130	
Methylene Chloride	1.60	1.62	101	70-130	
Methyl tert-butyl ether	1.60	1.32	83	60-140	
Naphthalene	1.60	1.34	83	60-140	
Tetrachloroethene	1.60	1.46	92	70-130	
Toluene	1.60	1.50	94	70-130	
trans-1,2-Dichloroethene	1.60	1.49	93	70-130	
1,2,4-Trichlorobenzene	1.60	1.41	88	60-140	
1,1,1-Trichloroethane	1.60	1.53	96	70-130	
1,1,2-Trichloroethane	1.60	1.56	97	70-130	
Trichloroethene	1.60	1.48	93	70-130	
1,2,3-Trimethylbenzene	1.60	1.83	114	70-130	
1,2,4-Trimethylbenzene	1.60	1.75	109	70-130	
1,3,5-Trimethylbenzene	1.60	1.44	90	70-130	
Vinyl chloride	1.60	1.36	85	70-130	
Xylenes, Total	4.80	4.57	95	70-130	

Column to be used to flag recovery and RPD values

FORM III TO 15 LL

FORM IV
AIR - GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Lab File ID: H500BI05RN.D Lab Sample ID: MB 140-42482/5

Matrix: Air Heated Purge:(Y/N) N

Instrument ID: MH Date Analyzed: 09/05/2020 15:25

GC Column: RTX-5 ID: 0.32(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 140-42482/1003	HCCVI05A-LCS.d	09/05/2020 12:41
IA-001-C-29	140-20175-18	HI05P101.D	09/05/2020 16:20
IA-004-C-29	140-20175-19	HI05P102.D	09/05/2020 17:18
IA-102-C-29	140-20175-20	HI05P103.D	09/05/2020 18:14

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 140-42482/5

Matrix: Air Lab File ID: H500BI05RN.D

Analysis Method: TO 15 LL Date Collected:

Sample wt/vol: 500(mL) Date Analyzed: 09/05/2020 15:25

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42482 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	ND		0.080	0.0080
56-23-5	Carbon tetrachloride	153.81	ND		0.080	0.0070
75-45-6	Chlorodifluoromethane	86.47	ND		0.080	0.022
67-66-3	Chloroform	119.38	ND		0.080	0.0070
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.080	0.010
75-71-8	Dichlorodifluoromethane	120.91	ND		0.080	0.014
75-34-3	1,1-Dichloroethane	98.96	ND		0.080	0.0070
107-06-2	1,2-Dichloroethane	98.96	ND		0.080	0.010
75-35-4	1,1-Dichloroethene	96.94	ND		0.080	0.0080
100-41-4	Ethylbenzene	106.17	ND		0.080	0.013
75-09-2	Methylene Chloride	84.93	ND		0.40	0.39
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.40	0.052
91-20-3	Naphthalene	128.17	ND		0.040	0.040
127-18-4	Tetrachloroethene	165.83	ND		0.080	0.0070
108-88-3	Toluene	92.14	ND		0.12	0.078
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.080	0.0070
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.080	0.064
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.080	0.037
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.080	0.0070
79-01-6	Trichloroethene	131.39	ND		0.040	0.0060
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.080	0.036
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.080	0.020
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.080	0.022
75-01-4	Vinyl chloride	62.50	ND		0.040	0.026
1330-20-7	Xylenes, Total	106.17	ND		0.16	0.024

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	90		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 140-42482/5

Matrix: Air Lab File ID: H500BI05RN.D

Analysis Method: TO 15 LL Date Collected:

Sample wt/vol: 500(mL) Date Analyzed: 09/05/2020 15:25

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42482 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	ND		0.26	0.026
56-23-5	Carbon tetrachloride	153.81	ND		0.50	0.044
75-45-6	Chlorodifluoromethane	86.47	ND		0.28	0.078
67-66-3	Chloroform	119.38	ND		0.39	0.034
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.32	0.040
75-71-8	Dichlorodifluoromethane	120.91	ND		0.40	0.069
75-34-3	1,1-Dichloroethane	98.96	ND		0.32	0.028
107-06-2	1,2-Dichloroethane	98.96	ND		0.32	0.040
75-35-4	1,1-Dichloroethene	96.94	ND		0.32	0.032
100-41-4	Ethylbenzene	106.17	ND		0.35	0.056
75-09-2	Methylene Chloride	84.93	ND		1.4	1.4
1634-04-4	Methyl tert-butyl ether	88.15	ND		1.4	0.19
91-20-3	Naphthalene	128.17	ND		0.21	0.21
127-18-4	Tetrachloroethene	165.83	ND		0.54	0.047
108-88-3	Toluene	92.14	ND		0.45	0.29
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.32	0.028
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.59	0.47
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.44	0.20
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.44	0.038
79-01-6	Trichloroethene	131.39	ND		0.21	0.032
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.39	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.39	0.098
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.39	0.11
75-01-4	Vinyl chloride	62.50	ND		0.10	0.066
1330-20-7	Xylenes, Total	106.17	ND		0.69	0.10

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	90		60-140

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Matrix: Air Level: Low Lab File ID: HCCVI05A-LCS.d

Lab ID: LCS 140-42482/1003 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Benzene	1.60	1.44	90	70-130	
Carbon tetrachloride	1.60	1.90	119	70-130	
Chlorodifluoromethane	1.60	1.56	97	60-140	
Chloroform	1.60	1.52	95	70-130	
cis-1,2-Dichloroethene	1.60	1.21	76	70-130	
Dichlorodifluoromethane	1.60	1.64	102	60-140	
1,1-Dichloroethane	1.60	1.41	88	70-130	
1,2-Dichloroethane	1.60	1.42	89	70-130	
1,1-Dichloroethene	1.60	1.16	73	70-130	
Ethylbenzene	1.60	1.28	80	70-130	
Methylene Chloride	1.60	1.57	98	70-130	
Methyl tert-butyl ether	1.60	1.20	75	60-140	
Naphthalene	1.60	1.37	86	60-140	
Tetrachloroethene	1.60	1.43	89	70-130	
Toluene	1.60	1.36	85	70-130	
trans-1,2-Dichloroethene	1.60	1.39	87	70-130	
1,2,4-Trichlorobenzene	1.60	1.49	93	60-140	
1,1,1-Trichloroethane	1.60	1.50	94	70-130	
1,1,2-Trichloroethane	1.60	1.51	94	70-130	
Trichloroethene	1.60	1.39	87	70-130	
1,2,3-Trimethylbenzene	1.60	1.85	116	70-130	
1,2,4-Trimethylbenzene	1.60	1.77	110	70-130	
1,3,5-Trimethylbenzene	1.60	1.44	90	70-130	
Vinyl chloride	1.60	1.28	80	70-130	
Xylenes, Total	4.80	4.10	85	70-130	

Column to be used to flag recovery and RPD values

FORM III TO 15 LL

FORM IV
AIR - GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Lab File ID: HB500I06.D Lab Sample ID: MB 140-42498/4

Matrix: Air Heated Purge:(Y/N) N

Instrument ID: MH Date Analyzed: 09/06/2020 18:36

GC Column: RTX-5 ID: 0.32(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 140-42498/1009	HCCVH06b-LCS.d	09/06/2020 17:12
IA-113-C-29	140-20175-21	HI07P104.D	09/06/2020 19:30
IA-088-C-29	140-20175-22	HI07P105.D	09/06/2020 20:26
IA-142-C-29	140-20175-23	HI07P106.D	09/06/2020 21:23
IA-155-C-29	140-20175-24	HI07P107.D	09/06/2020 22:17
IA-133-C-29	140-20175-25	HI07P108.D	09/06/2020 23:11
IA-153-C-29	140-20175-26	HI07P109.D	09/07/2020 00:04
IA-DUP1-C-29	140-20175-27	HI07P110.D	09/07/2020 00:57
IA-060-C-29	140-20175-28	HI07P111.D	09/07/2020 01:52
IA-152-C-29	140-20175-29	HI07P112.D	09/07/2020 02:48
IA-150-C-29	140-20175-30	HI07P113.D	09/07/2020 03:43
IA-145-C-29	140-20175-31	HI07P114.D	09/07/2020 04:36
IA-146-C-29	140-20175-32	HI07P115.D	09/07/2020 05:30

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 140-42498/4

Matrix: Air Lab File ID: HB500I06.D

Analysis Method: TO 15 LL Date Collected:

Sample wt/vol: 500(mL) Date Analyzed: 09/06/2020 18:36

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42498 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	ND		0.080	0.0080
56-23-5	Carbon tetrachloride	153.81	ND		0.080	0.0070
75-45-6	Chlorodifluoromethane	86.47	ND		0.080	0.022
67-66-3	Chloroform	119.38	ND		0.080	0.0070
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.080	0.010
75-71-8	Dichlorodifluoromethane	120.91	ND		0.080	0.014
75-34-3	1,1-Dichloroethane	98.96	ND		0.080	0.0070
107-06-2	1,2-Dichloroethane	98.96	ND		0.080	0.010
75-35-4	1,1-Dichloroethene	96.94	ND		0.080	0.0080
100-41-4	Ethylbenzene	106.17	ND		0.080	0.013
75-09-2	Methylene Chloride	84.93	ND		0.40	0.39
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.40	0.052
91-20-3	Naphthalene	128.17	ND		0.040	0.040
127-18-4	Tetrachloroethene	165.83	ND		0.080	0.0070
108-88-3	Toluene	92.14	ND		0.12	0.078
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.080	0.0070
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.080	0.064
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.080	0.037
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.080	0.0070
79-01-6	Trichloroethene	131.39	ND		0.040	0.0060
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.080	0.036
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.080	0.020
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.080	0.022
75-01-4	Vinyl chloride	62.50	ND		0.040	0.026
1330-20-7	Xylenes, Total	106.17	ND		0.16	0.024

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	75		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 140-42498/4

Matrix: Air Lab File ID: HB500I06.D

Analysis Method: TO 15 LL Date Collected:

Sample wt/vol: 500(mL) Date Analyzed: 09/06/2020 18:36

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42498 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	ND		0.26	0.026
56-23-5	Carbon tetrachloride	153.81	ND		0.50	0.044
75-45-6	Chlorodifluoromethane	86.47	ND		0.28	0.078
67-66-3	Chloroform	119.38	ND		0.39	0.034
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.32	0.040
75-71-8	Dichlorodifluoromethane	120.91	ND		0.40	0.069
75-34-3	1,1-Dichloroethane	98.96	ND		0.32	0.028
107-06-2	1,2-Dichloroethane	98.96	ND		0.32	0.040
75-35-4	1,1-Dichloroethene	96.94	ND		0.32	0.032
100-41-4	Ethylbenzene	106.17	ND		0.35	0.056
75-09-2	Methylene Chloride	84.93	ND		1.4	1.4
1634-04-4	Methyl tert-butyl ether	88.15	ND		1.4	0.19
91-20-3	Naphthalene	128.17	ND		0.21	0.21
127-18-4	Tetrachloroethene	165.83	ND		0.54	0.047
108-88-3	Toluene	92.14	ND		0.45	0.29
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.32	0.028
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.59	0.47
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.44	0.20
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.44	0.038
79-01-6	Trichloroethene	131.39	ND		0.21	0.032
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.39	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.39	0.098
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.39	0.11
75-01-4	Vinyl chloride	62.50	ND		0.10	0.066
1330-20-7	Xylenes, Total	106.17	ND		0.69	0.10

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	75		60-140

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Matrix: Air Level: Low Lab File ID: HCCVH06b-LCS.d

Lab ID: LCS 140-42498/1009 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Benzene	1.60	1.72	107	70-130	
Carbon tetrachloride	1.60	2.29	143	70-130	*
Chlorodifluoromethane	1.60	1.72	108	60-140	
Chloroform	1.60	1.72	107	70-130	
cis-1,2-Dichloroethene	1.60	1.63	102	70-130	
Dichlorodifluoromethane	1.60	1.85	116	60-140	
1,1-Dichloroethane	1.60	1.70	106	70-130	
1,2-Dichloroethane	1.60	1.79	112	70-130	
1,1-Dichloroethene	1.60	1.64	103	70-130	
Ethylbenzene	1.60	1.69	106	70-130	
Methylene Chloride	1.60	1.64	103	70-130	
Methyl tert-butyl ether	1.60	1.59	100	60-140	
Naphthalene	1.60	2.18	136	60-140	
Tetrachloroethene	1.60	1.73	108	70-130	
Toluene	1.60	1.74	109	70-130	
trans-1,2-Dichloroethene	1.60	1.67	105	70-130	
1,2,4-Trichlorobenzene	1.60	2.18	136	60-140	
1,1,1-Trichloroethane	1.60	1.68	105	70-130	
1,1,2-Trichloroethane	1.60	1.75	110	70-130	
Trichloroethene	1.60	1.71	107	70-130	
1,2,3-Trimethylbenzene	1.60	1.58	99	70-130	
1,2,4-Trimethylbenzene	1.60	2.12	132	70-130	*
1,3,5-Trimethylbenzene	1.60	2.02	126	70-130	
Vinyl chloride	1.60	1.66	104	70-130	
Xylenes, Total	4.80	5.51	115	70-130	

Column to be used to flag recovery and RPD values

FORM III TO 15 LL

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Lab File ID: GI01BFB.D BFB Injection Date: 09/01/2020

Instrument ID: MG BFB Injection Time: 16:42

Analysis Batch No.: 42295

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	33.0	
75	30.0 - 60.0 % of mass 95	54.3	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.2	
173	Less than 2.0 % of mass 174	0.3	(0.5) 1
174	Greater than 50% of mass 95	73.8	
175	5.0 - 9.0 % of mass 174	5.3	(7.1) 1
176	95.0 - 101.0 % of mass 174	71.8	(97.2) 1
177	5.0 - 9.0 % of mass 176	4.5	(6.3) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 140-42295/3	GI01IC10.D	09/01/2020	18:07
	IC 140-42295/5	GI01IC09.D	09/01/2020	19:43
	IC 140-42295/7	GI01IC08.D	09/01/2020	21:19
	IC 140-42295/9	GI01IC01.D	09/01/2020	22:55
	IC 140-42295/10	GI01IC02.D	09/01/2020	23:39
	IC 140-42295/11	GI01IC03.D	09/02/2020	0:24
	IC 140-42295/12	GI01IC04.D	09/02/2020	1:08
	IC 140-42295/13	GI01IC05.D	09/02/2020	1:52
	IC 140-42295/14	GI01IC06.D	09/02/2020	2:38
	ICIS 140-42295/15	GI01IC07.D	09/02/2020	3:27
	ICV 140-42295/22	GI01ICVR.D	09/02/2020	8:56

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 140-42295/9	GI01IC01.D
Level 2	IC 140-42295/10	GI01IC02.D
Level 3	IC 140-42295/11	GI01IC03.D
Level 4	IC 140-42295/12	GI01IC04.D
Level 5	IC 140-42295/13	GI01IC05.D
Level 6	IC 140-42295/14	GI01IC06.D
Level 7	ICIS 140-42295/15	GI01IC07.D
Level 8	IC 140-42295/7	GI01IC08.D
Level 9	IC 140-42295/5	GI01IC09.D
Level 10	IC 140-42295/3	GI01IC10.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Chlorodifluoromethane	+++++ 4.2174	+++++ 3.9338	5.0807 4.6204	4.1800 4.4013	4.2893 3.6854	Ave		4.3010				9.8		30.0			
Propene	+++++ 2.1016	+++++ 1.9924	+++++ 2.2188	2.4122 2.0989	2.1914 1.7884	Ave		2.1148				9.2		30.0			
Dichlorodifluoromethane	+++++ 4.6221	+++++ 4.5171	5.1025 5.2936	5.0254 5.0487	4.6333 4.2256	Ave		4.8085				7.5		30.0			
Chloromethane	+++++ 0.8378	+++++ 0.7711	+++++ 0.9046	1.0496 0.8511	0.9048 0.7078	Ave		0.8610				12.7		30.0			
1,2-Dichloro-1,1,2,2-tetrafluoroethane	2.7419 2.4849	3.0305 2.6157	2.6182 3.1606	2.5493 3.1468	2.5986 2.4827	Ave		2.7429				9.8		30.0			
Vinyl chloride	2.2108 2.3591	3.0033 2.2051	2.6105 2.5785	2.2040 2.4712	2.3833 2.0097	Ave		2.4035				11.7		30.0			
1,3-Butadiene	+++++ 2.1302	+++++ 1.9721	+++++ 2.3036	2.1726 2.2136	2.2042 1.8343	Ave		2.1187				7.6		30.0			
Butane	+++++ 4.3488	+++++ 4.0253	4.6585 4.5089	4.6118 4.2262	4.5015 3.5538	Ave		4.3044				8.6		30.0			
Bromomethane	+++++ 1.3715	+++++ 1.3578	1.5650 1.6350	1.4697 1.5631	1.4210 1.2343	Ave		1.4522				9.1		30.0			
Chloroethane	+++++ 0.9275	+++++ 0.9381	1.2120 1.0916	0.9857 1.0523	0.9542 0.8144	Ave		0.9970				12.1		30.0			
Ethanol	+++++ 0.8956	+++++ 0.9494	+++++ 1.0644	0.8703 0.7979	1.0301 0.7479	Ave		0.9079				12.8		30.0			
Vinyl bromide	+++++ 1.1432	1.2751 1.1648	1.2369 1.4478	1.2077 1.3491	1.2537 1.0693	Ave		1.2386				9.1		30.0			
2-Methylbutane	+++++ 2.9599	+++++ 2.7561	+++++ 3.3238	2.9753 3.0693	2.9458 2.4296	Ave		2.9228				9.5		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Trichlorofluoromethane	3.9167 3.5393	4.1610 3.2865	4.1430 4.0916	3.5786 3.8541	3.5904 3.2131	Ave		3.7374				9.3		30.0			
Acrolein	+++++ 0.4569	+++++ 0.4173	+++++ 0.3780	+++++ 0.4417	0.5137 0.4710	Ave		0.4464				10.4		30.0			
Acetonitrile	+++++ 0.7945	+++++ 0.8380	+++++ 0.7024	+++++ 0.6506	1.0870 0.7195	Ave		0.7987				19.6		30.0			
Acetone	+++++ 0.9473	+++++ 0.8615	+++++ 0.6959	0.7948 0.6300	0.9823 0.6878	Ave		0.7999				17.0		30.0			
Isopropyl alcohol	+++++ 2.3768	+++++ 2.2904	+++++ 3.0620	2.2332 2.0902	2.6720 1.9961	Ave		2.3887				15.4		30.0			
Pentane	+++++ 0.2407	+++++ 0.2227	+++++ 0.2836	0.2386 0.2584	0.2444 0.2123	Ave		0.2430				9.6		30.0			
Ethyl ether	+++++ 1.8676	+++++ 1.8292	+++++ 1.5681	1.5565 1.5554	1.9511 1.6408	Ave		1.7098				9.8		30.0			
1,1-Dichloroethene	+++++ 1.1460	1.2138 1.1071	1.3220 1.2854	1.0888 1.2140	1.2249 1.0475	Ave		1.1833				7.8		30.0			
Acrylonitrile	+++++ 1.1577	+++++ 1.1526	+++++ 0.9121	1.0056 1.0241	1.2114 1.1792	Ave		1.0918				10.2		30.0			
tert-Butyl alcohol	+++++ 2.4598	+++++ 2.1786	+++++ 3.1532	2.3200 2.0921	2.6745 2.0080	Ave		2.4123				16.5		30.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	2.9739 2.5990	2.9936 2.5089	2.9993 2.8289	2.7308 2.7120	2.6787 2.3381	Ave		2.7363				8.0		30.0			
Methylene Chloride	+++++ 1.1888	+++++ 1.1040	+++++ 1.2681	+++++ 1.2031	1.2912 1.0471	Ave		1.1837				7.9		30.0			
3-Chloropropene	+++++ 2.0584	+++++ 1.8527	3.4211 2.1137	2.3717 2.1326	2.2916 +++++	Ave		2.3203				22.1		30.0			
Carbon disulfide	+++++ 3.9864	+++++ 3.6463	4.6626 4.2662	3.9658 3.9565	3.9101 3.4240	Ave		3.9773				9.4		30.0			
trans-1,2-Dichloroethene	+++++ 1.3276	1.4977 1.2596	1.6040 1.4777	1.2760 1.4233	1.4268 1.2441	Ave		1.3930				8.9		30.0			
2-Methylpentane	+++++ 5.3070	+++++ 4.9992	6.5041 5.4750	5.2908 5.3755	5.6347 4.8807	Ave		5.4334				9.1		30.0			
Methyl tert-butyl ether	+++++ 3.1393	+++++ 3.0946	+++++ 2.7875	2.3858 2.6178	3.2114 2.9473	Ave		2.8834				10.5		30.0			
1,1-Dichloroethane	+++++ 3.4115	3.7876 3.2158	3.9181 3.5051	3.4555 3.4303	3.4976 3.0350	Ave		3.4730				7.6		30.0			
Vinyl acetate	+++++ 4.8276	+++++ 5.0004	+++++ 3.9048	3.8303 4.2643	4.9123 5.0941	Ave		4.5477				11.8		30.0			
2-Butanone (MEK)	+++++ 0.6548	+++++ 0.6135	+++++ 0.5527	0.4972 0.4919	0.6747 0.5569	Ave		0.5774				12.6		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Hexane	+++++ 1.7503	+++++ 1.6732	2.0176 1.8319	1.8921 1.7798	1.8022 1.5922	Ave		1.7924				7.3		30.0			
cis-1,2-Dichloroethene	+++++ 1.4665	1.5582 1.3982	1.5881 1.5642	1.4357 1.4968	1.4885 1.3297	Ave		1.4807				5.7		30.0			
Ethyl acetate	+++++ 4.2053	+++++ 4.2696	+++++ 3.7315	+++++ 3.3697	4.2713 4.0410	Ave		3.9814				9.1		30.0			
Chloroform	3.6326 3.2428	3.8455 3.0621	4.0330 3.2724	3.2505 3.1262	3.3547 2.8423	Ave		3.3662				10.9		30.0			
Tetrahydrofuran	+++++ 2.1055	+++++ 2.1356	+++++ 1.9106	1.7359 1.7485	2.2340 2.1111	Ave		1.9973				10.0		30.0			
1,1,1-Trichloroethane	+++++ 3.1201	3.6579 2.9347	3.6746 3.3019	3.1348 3.2238	3.1883 2.9270	Ave		3.2403				8.4		30.0			
1,2-Dichloroethane	+++++ 0.5726	+++++ 0.4842	0.6275 0.6150	0.5495 0.5076	0.5324 0.4483	Ave		0.5421				11.5		30.0			
1-Butanol	+++++ 0.1665	+++++ 0.1260	+++++ 0.2219	+++++ 0.1221	0.1708 0.1138	Ave		0.1535				26.8		30.0			
Benzene	+++++ 1.0472	+++++ 0.8775	1.1251 1.1183	1.0176 0.9183	0.9768 0.8127	Ave		0.9867				11.4		30.0			
Cyclohexane	+++++ 0.1851	+++++ 0.1422	+++++ 0.1911	0.1843 0.1565	0.1713 0.1325	Ave		0.1661				13.8		30.0			
Carbon tetrachloride	0.6115 0.6342	0.7855 0.3732	0.6372 0.7687	0.6496 0.5332	0.6314 0.4745	Ave		0.6099				20.4		30.0			
2,3-Dimethylpentane	+++++ 0.2742	+++++ 0.2228	0.3087 0.2832	0.2513 0.2297	0.2718 0.1969	Ave		0.2548				14.4		30.0			
Thiophene	+++++ 0.6226	+++++ 0.5084	0.6481 0.6440	0.5323 0.5147	0.5936 0.4600	Ave		0.5655				12.5		30.0			
2,2,4-Trimethylpentane	+++++ 2.6529	+++++ 2.1576	2.5968 2.7357	2.5821 2.2056	2.4393 1.9434	Ave		2.4142				11.6		30.0			
Heptane	+++++ 0.4225	+++++ 0.3493	0.4467 0.4306	0.4137 0.3481	0.3833 0.3098	Ave		0.3880				12.5		30.0			
1,2-Dichloropropane	+++++ 0.4903	+++++ 0.4198	0.5242 0.4544	0.4420 0.4070	0.4670 0.3907	Ave		0.4494				9.9		30.0			
Trichloroethene	0.4268 0.4287	0.6851 0.3531	0.4447 0.4566	0.3977 0.3715	0.3907 0.3471	Ave		0.4302				22.6		30.0			
Dibromomethane	+++++ 0.4913	+++++ 0.3719	0.4798 0.4731	0.4427 0.3774	0.4069 0.3477	Ave		0.4239				13.0		30.0			
Bromodichloromethane	+++++ 0.7898	+++++ 0.6710	0.7786 0.8678	0.7548 0.6917	0.7246 0.6155	Ave		0.7367				10.7		30.0			
1,4-Dioxane	+++++ 0.0995	+++++ 0.1146	0.1383 0.1433	0.0983 0.0995	0.1218 0.1060	Ave		0.1151				15.5		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Methyl methacrylate	+++++ 0.6126	+++++ 0.5158	+++++ 0.5430	0.4167 0.4267	0.5480 0.4984	Ave		0.5088				13.6		30.0			
Methylcyclohexane	+++++ 0.7141	+++++ 0.5799	0.7102 0.7331	0.6975 0.6005	0.6391 0.5295	Ave		0.6505				11.5		30.0			
4-Methyl-2-pentanone (MIBK)	+++++ 0.9278	+++++ 0.8261	+++++ 1.0804	0.7409 0.6478	0.9390 0.8352	Ave		0.8567				16.5		30.0			
cis-1,3-Dichloropropene	+++++ 0.6560	+++++ 0.5378	0.6234 0.6358	0.6180 0.5649	0.5766 0.5208	Ave		0.5917				8.2		30.0			
trans-1,3-Dichloropropene	+++++ 0.5080	+++++ 0.4807	0.5744 0.5058	0.4699 0.4430	0.4959 0.4618	Ave		0.4924				8.1		30.0			
Toluene	+++++ 1.1362	+++++ 1.0313	1.2507 1.0326	0.9784 0.9458	1.1137 0.9804	Ave		1.0587				9.6		30.0			
1,1,2-Trichloroethane	+++++ 0.3651	+++++ 0.3332	0.3544 0.3478	0.3135 0.3004	0.3359 0.3042	Ave		0.3318				7.2		30.0			
2-Hexanone	+++++ 0.4283	+++++ 0.3609	+++++ 0.5255	0.3215 0.2913	0.4231 0.3950	Ave		0.3922				19.8		30.0			
Octane	+++++ 0.4065	+++++ 0.3682	0.4218 0.4332	0.3669 0.3485	0.4038 0.3377	Ave		0.3858				9.1		30.0			
C8 Range	+++++ 5.1496	+++++ 4.5413	+++++ 5.0824	4.9366 4.1728	4.8692 4.0260	Ave		4.6826				9.5		30.0			
Dibromochloromethane	+++++ 0.6038	+++++ 0.6015	0.6071 0.7470	0.5882 0.6071	0.6039 0.6314	Ave		0.6238				8.2		30.0			
1,2-Dibromoethane (EDB)	+++++ 0.6113	+++++ 0.5807	0.6903 0.6152	0.5414 0.5554	0.5986 0.5707	Ave		0.5955				7.8		30.0			
Tetrachloroethene	0.3922 0.3899	0.5714 0.3494	0.4232 0.4129	0.3811 0.3486	0.3633 0.3589	Ave		0.3991				16.5		30.0			
Chlorobenzene	+++++ 0.8917	+++++ 0.8359	0.9456 0.8804	0.8214 0.7793	0.8728 0.8230	Ave		0.8562				6.0		30.0			
Ethylbenzene	+++++ 1.4845	+++++ 1.3986	1.5812 1.3093	1.1895 1.1688	1.4349 1.3181	Ave		1.3606				10.4		30.0			
m-Xylene & p-Xylene	+++++ 1.1395	1.3560 1.0689	1.1696 1.0189	0.9045 0.9029	1.0775 1.0501	Ave		1.0764				12.9		30.0			
Nonane	+++++ 1.1178	+++++ 1.0412	1.1918 1.1156	0.9832 0.9695	1.0531 1.0220	Ave		1.0618				7.1		30.0			
Bromoform	+++++ 0.3530	0.4932 0.5262	0.4773 0.6766	0.4669 0.5829	0.4831 0.6638	Ave		0.5248				19.5		30.0			
Styrene	+++++ 0.8496	0.8564 0.8197	0.7693 0.8021	0.6128 0.7235	0.7599 0.8482	Ave		0.7824				10.0		30.0			
o-Xylene	+++++ 1.1834	+++++ 1.1099	1.2724 1.0625	0.9632 0.9188	1.1394 1.0648	Ave		1.0893				10.5		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
1,1,2,2-Tetrachloroethane	+++++ 0.9568	+++++ 0.8965	0.9614 0.9003	0.7850 0.7111	0.9017 0.8402	Ave		0.8691				9.9		30.0			
1,2,3-Trichloropropane	+++++ 0.2303	+++++ 0.2224	0.2139 0.2285	0.1808 0.1846	0.2198 0.2199	Ave		0.2125				9.0		30.0			
Isopropylbenzene	+++++ 1.5477	+++++ 1.4846	1.6346 1.4298	1.1749 1.2363	1.4395 1.5017	Ave		1.4311				10.8		30.0			
Propylbenzene	+++++ 0.4096	+++++ 0.3881	0.4490 0.3889	0.2983 0.3382	0.3607 0.4238	Ave		0.3821				12.7		30.0			
2-Chlorotoluene	+++++ 0.3740	+++++ 0.3672	0.3653 0.3802	0.3033 0.3491	0.3890 0.3999	Ave		0.3660				8.1		30.0			
4-Ethyltoluene	+++++ 1.5444	+++++ 1.4874	1.6377 1.4488	1.1082 1.2285	1.4027 1.5756	Ave		1.4292				12.6		30.0			
1,3,5-Trimethylbenzene	+++++ 0.6287	+++++ 0.5816	0.6485 0.5885	0.4212 0.4949	0.5763 0.6295	Ave		0.5712				13.5		30.0			
Alpha Methyl Styrene	+++++ 0.6091	+++++ 0.5921	+++++ 0.6036	0.4018 0.5445	0.5103 0.6897	Ave		0.5644				16.1		30.0			
Decane	+++++ 1.3958	+++++ 1.3245	1.4453 1.2935	1.1663 1.0979	1.3010 1.2736	Ave		1.2872				8.8		30.0			
tert-Butylbenzene	+++++ 1.3443	+++++ 1.3045	1.3391 1.3134	0.9248 1.1315	1.1828 1.5072	Ave		1.2560				13.9		30.0			
1,2,4-Trimethylbenzene	+++++ 1.3349	+++++ 1.2958	1.3725 1.3030	0.9005 1.0916	1.2317 1.4632	Ave		1.2492				14.2		30.0			
sec-Butylbenzene	+++++ 2.0106	+++++ 1.9451	2.0566 1.9618	1.4032 1.6599	1.7616 2.2768	Ave		1.8845				14.3		30.0			
1,3-Dichlorobenzene	0.7914 0.8744	1.0379 0.8623	0.9071 0.9390	0.7225 0.8650	0.7989 1.1012	Ave		0.8900				12.8		30.0			
Benzyl chloride	+++++ 1.1627	+++++ 1.2981	1.2725 1.2526	0.8444 1.0752	1.0888 1.4189	Ave		1.1766				15.0		30.0			
1,4-Dichlorobenzene	0.8212 0.8662	1.1563 0.8485	0.9244 0.9286	0.7311 0.8537	0.8219 1.0629	Ave		0.9015				13.9		30.0			
4-Isopropyltoluene	+++++ 1.5739	+++++ 1.5520	1.5326 1.5665	1.0593 1.3129	1.3776 1.6980	Ave		1.4591				13.8		30.0			
1,2,3-Trimethylbenzene	+++++ 1.3535	+++++ 1.3304	1.3699 1.3206	0.9147 1.0928	1.2244 1.3703	QuaF		1.0451	0.0196912						0.9950		0.9900
1,2-Dichlorobenzene	+++++ 0.8393	+++++ 0.8396	0.9032 0.9175	0.6871 0.8170	0.7522 1.0674	Ave		0.8529				13.4		30.0			
Indane	+++++ 1.2941	1.3808 1.2787	1.3052 1.2997	0.8717 1.1236	1.1373 1.5429	Ave		1.2482				15.1		30.0			
Indene	+++++ 1.1144	+++++ 1.1166	1.0943 1.1458	0.7537 0.9883	0.9911 1.3506	Ave		1.0694				15.9		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Butylbenzene	+++++ 1.7840	+++++ 1.7332	1.8906 1.7260	1.2003 1.4015	1.6122 1.8819	Ave		1.6537				14.6		30.0			
Undecane	+++++ 1.5657	+++++ 1.4831	1.6754 1.4503	1.1926 1.1849	1.4250 1.5159	Ave		1.4366				11.9		30.0			
1,2-Dibromo-3-Chloropropane	+++++ 0.3524	+++++ 0.4563	0.3665 0.5320	0.2980 0.4064	0.3669 0.5757	QuaF		0.3520	0.0136829						0.9930		0.9900
1,2,4,5-Tetramethylbenzene	+++++ 1.3759	+++++ 1.4754	1.5696 1.5953	0.8949 1.2219	1.2986 1.7205	QuaF		1.0880	0.0385563						0.9930		0.9900
Dodecane	+++++ 1.4953	+++++ 1.1035	+++++ 1.4579	1.0479 1.0511	1.3963 1.2270	Ave		1.2542				15.5		30.0			
1,2,4-Trichlorobenzene	+++++ 0.6689	+++++ 0.7087	0.8181 0.8251	0.5088 0.7325	0.6450 1.1015	Ave		0.7511				23.1		30.0			
Naphthalene	+++++ 1.5967	2.4276 1.7346	2.1874 1.9122	1.1790 1.4929	1.6126 2.1629	Ave		1.8118				21.8		30.0			
Hexachlorobutadiene	+++++ 0.6043	+++++ 0.6330	0.7229 0.7599	0.4569 0.7265	0.5378 +++++	Ave		0.6345				17.5		30.0			
1,2,3-Trichlorobenzene	+++++ 0.6619	+++++ 0.6779	0.8148 0.8166	0.4626 0.7112	0.6095 1.0297	Ave		0.7230				23.3		30.0			
2-Methylnaphthalene	+++++ 0.6920	+++++ 0.4527	+++++ 1.2986	+++++ 0.8133	0.7500 0.6688	Ave		0.7792				36.2		50.0			
1-Methylnaphthalene	+++++ 0.7883	+++++ 0.4816	+++++ 1.3389	0.6525 0.8306	0.8523 0.6090	Ave		0.7933				34.7		50.0			
4-Bromofluorobenzene (Surr)	0.7279 0.7634	0.7355 0.7715	0.7208 0.7607	0.7393 0.7936	0.7384 0.7811	Ave		0.7532				3.2		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 140-42295/9	GI01IC01.D
Level 2	IC 140-42295/10	GI01IC02.D
Level 3	IC 140-42295/11	GI01IC03.D
Level 4	IC 140-42295/12	GI01IC04.D
Level 5	IC 140-42295/13	GI01IC05.D
Level 6	IC 140-42295/14	GI01IC06.D
Level 7	ICIS 140-42295/15	GI01IC07.D
Level 8	IC 140-42295/7	GI01IC08.D
Level 9	IC 140-42295/5	GI01IC09.D
Level 10	IC 140-42295/3	GI01IC10.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
Chlorodifluoromethane	CBM	Ave	+++++ 126387	+++++ 254491	11226 595533	19940 1219560	48665 2051104	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Propene	CBM	Ave	+++++ 62980	+++++ 128895	+++++ 285979	11507 581585	24863 995335	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Dichlorodifluoromethane	CBM	Ave	+++++ 138515	+++++ 292225	11274 682291	23973 1398945	52568 2351785	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Chloromethane	CBM	Ave	+++++ 25107	+++++ 49882	+++++ 116599	5007 235833	10266 393942	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,2-Dichloro-1,1,2,2-tetrafluoroethane	CBM	Ave	1998 74466	3458 169218	5785 407375	12161 871962	29483 1381764	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Vinyl chloride	CBM	Ave	1611 70697	3427 142653	5768 332339	10514 684743	27040 1118505	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,3-Butadiene	CBM	Ave	+++++ 63838	+++++ 127581	+++++ 296910	10364 613368	25008 1020894	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Butane	CBM	Ave	+++++ 130324	+++++ 260407	10293 581152	22000 1171057	51072 1977905	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Bromomethane	CBM	Ave	+++++ 41102	+++++ 87843	3458 210733	7011 433116	16122 686953	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Chloroethane	CBM	Ave	+++++ 27795	+++++ 60690	2678 140702	4702 291588	10826 453281	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Ethanol	CBM	Ave	+++++ 134201	+++++ 307085	+++++ 685930	20757 1105422	58436 2081107	+++++ 5.00	+++++ 10.0	+++++ 20.0	0.800 40.0	2.00 80.0
Vinyl bromide	CBM	Ave	+++++ 34260	1455 75357	2733 186602	5761 373832	14224 595103	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Methylbutane	CBM	Ave	+++++ 88701	+++++ 178302	+++++ 428407	14193 850465	33422 1352213	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Trichlorofluoromethane	CBM	Ave	2854 106066	4748 212612	9154 527367	17071 1067934	40736 1788276	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
Acrolein	CBM	Ave	+++++ 13692	+++++ 26996	+++++ 48727	+++++ 122401	5828 262114	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
Acetonitrile	CBM	Ave	+++++ 23808	+++++ 54213	+++++ 90528	+++++ 180279	12333 400450	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
Acetone	CBM	Ave	+++++ 85167	+++++ 167195	+++++ 269068	11375 523707	33434 1148398	+++++ 3.00	+++++ 6.00	+++++ 12.0	0.480 24.0	1.20 48.0
Isopropyl alcohol	CBM	Ave	+++++ 213678	+++++ 444518	+++++ 1184009	31959 1737523	90947 3332728	+++++ 3.00	+++++ 6.00	+++++ 12.0	0.480 24.0	1.20 48.0
Pentane	CBM	Ave	+++++ 7214	+++++ 14405	+++++ 36548	1138 71611	2773 118178	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Ethyl ether	CBM	Ave	+++++ 55969	+++++ 118337	+++++ 202112	7425 431001	22137 913197	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,1-Dichloroethene	CBM	Ave	+++++ 34343	1385 71623	2921 165673	5194 336401	13897 583003	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Acrylonitrile	CBM	Ave	+++++ 34693	+++++ 74563	+++++ 117560	4797 283762	13744 656282	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
tert-Butyl alcohol	CBM	Ave	+++++ 73714	+++++ 140940	+++++ 406423	11067 579708	30344 1117573	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,1,2-Trichloro-1,2,2-trifluoroetha ne	CBM	Ave	2167 77887	3416 162311	6627 364620	13027 751469	30392 1301292	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Methylene Chloride	CBM	Ave	+++++ 35627	+++++ 71422	+++++ 163443	+++++ 333362	14649 582763	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
3-Chloropropene	CBM	Ave	+++++ 61687	+++++ 119860	7559 272432	11314 590936	26000 +++++	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
Carbon disulfide	CBM	Ave	+++++ 119464	+++++ 235894	10302 549880	18918 1096319	44363 1905658	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
trans-1,2-Dichloroethene	CBM	Ave	+++++ 39785	1709 81489	3544 190465	6087 394374	16188 692384	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Methylpentane	CBM	Ave	+++++ 159038	+++++ 323413	14371 705673	25239 1489517	63929 2716361	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Methyl tert-butyl ether	CBM	Ave	+++++ 94079	+++++ 200198	+++++ 359280	11381 725384	36435 1640351	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,1-Dichloroethane	CBM	Ave	+++++ 102235	4322 208044	8657 451772	16484 950498	39683 1689157	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Vinyl acetate	CBM	Ave	+++++ 144673	+++++ 323495	+++++ 503287	18272 1181597	55733 2835157	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
2-Butanone (MEK)	CBM	Ave	+++++ 19622	+++++ 39691	+++++ 71237	2372 136308	7655 309968	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Hexane	CBM	Ave	+++++ 52452	+++++ 108248	4458 236115	9026 493163	20447 886142	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
cis-1,2-Dichloroethene	CBM	Ave	+++++ 43948	1778 90453	3509 201607	6849 414738	16888 740051	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
Ethyl acetate	CBM	Ave	+++++ 126022	+++++ 276215	+++++ 480959	+++++ 933715	48461 2249047	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
Chloroform	CBM	Ave	2647 97178	4388 198099	8911 421785	15506 866236	38061 1581905	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Tetrahydrofuran	CBM	Ave	+++++ 63096	+++++ 138158	+++++ 246265	8281 484501	25346 1174961	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,1,1-Trichloroethane	CBM	Ave	+++++ 93502	4174 189856	8119 425590	14954 893295	36173 1629049	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2-Dichloroethane	DFBZ	Ave	+++++ 74570	+++++ 156222	6831 340796	11727 712592	29376 1309457	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1-Butanol	DFBZ	Ave	+++++ 21677	+++++ 40646	+++++ 122991	+++++ 171394	9421 332356	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
Benzene	DFBZ	Ave	+++++ 136368	+++++ 283155	12247 619691	21718 1289194	53895 2374147	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Cyclohexane	DFBZ	Ave	+++++ 24100	+++++ 45891	+++++ 105905	3934 219701	9450 386947	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Carbon tetrachloride	DFBZ	Ave	2115 82585	3137 120424	6936 425976	13863 748515	34839 1386144	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2,3-Dimethylpentane	DFBZ	Ave	+++++ 35713	+++++ 71885	3360 156938	5364 322420	14994 575076	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Thiophene	DFBZ	Ave	+++++ 81080	+++++ 164043	7055 356857	11360 722547	32749 1343789	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2,2,4-Trimethylpentane	DFBZ	Ave	+++++ 345476	+++++ 696193	28267 1515982	55108 3096308	134587 5676918	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Heptane	DFBZ	Ave	+++++ 55017	+++++ 112703	4863 238604	8829 488721	21146 905044	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2-Dichloropropane	DFBZ	Ave	+++++ 63849	+++++ 135449	5706 251789	9433 571342	25767 1141437	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Trichloroethene	DFBZ	Ave	1476 55829	2736 113938	4841 253014	8487 521549	21557 1014059	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Dibromomethane	DFBZ	Ave	+++++ 63978	+++++ 119998	5223 262180	9449 529820	22450 1015819	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Bromodichloromethane	DFBZ	Ave	+++++ 102850	+++++ 216520	8475 480892	16110 971037	39980 1797881	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,4-Dioxane	DFBZ	Ave	+++++ 12962	+++++ 36968	1505 79403	2097 139641	6721 309615	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Methyl methacrylate	DFBZ	Ave	+++++ 79777	+++++ 166422	+++++ 300901	8893 599074	30238 1456048	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Methylcyclohexane	DFBZ	Ave	+++++ 92997	+++++ 187114	7731 406216	14886 842977	35264 1546743	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
4-Methyl-2-pentanone (MIBK)	DFBZ	Ave	+++++ 120828	+++++ 266548	+++++ 598699	15812 909376	51809 2439624	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
cis-1,3-Dichloropropene	DFBZ	Ave	+++++ 85421	+++++ 173523	6786 352319	13190 793045	31812 1521326	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
trans-1,3-Dichloropropene	CBZd 5	Ave	+++++ 68823	+++++ 152113	6177 296890	10340 658647	27117 1383502	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Toluene	CBZd 5	Ave	+++++ 153919	+++++ 326329	13451 606087	21528 1406174	60905 2937051	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,1,2-Trichloroethane	CBZd 5	Ave	+++++ 49466	+++++ 105417	3811 204172	6897 446561	18372 911205	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Hexanone	CBZd 5	Ave	+++++ 58020	+++++ 114195	+++++ 308468	7073 433145	23138 1183432	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Octane	CBZd 5	Ave	+++++ 55073	+++++ 116497	4536 254271	8073 518088	22082 1011643	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
C8 Range	CBZd 5	Ave	+++++ 697619	+++++ 1436960	+++++ 2983142	108617 6203684	266284 12060880	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Dibromochloromethane	CBZd 5	Ave	+++++ 81803	+++++ 190331	6529 438464	12942 902612	33024 1891483	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2-Dibromoethane (EDB)	CBZd 5	Ave	+++++ 82810	+++++ 183756	7424 361106	11912 825710	32736 1709784	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Tetrachloroethene	CBZd 5	Ave	1279 52818	2500 110572	4551 242360	8385 518316	19868 1075236	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Chlorobenzene	CBZd 5	Ave	+++++ 120798	+++++ 264485	10169 516782	18072 1158553	47729 2465447	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Ethylbenzene	CBZd 5	Ave	+++++ 201106	+++++ 442535	17005 768480	26172 1737569	78472 3948553	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
m-Xylene & p-Xylene	CBZd 5	Ave	+++++ 308731	11865 676428	25157 1196112	39802 2684790	117852 6291833	+++++ 2.00	0.0800 4.00	0.160 8.00	0.320 16.0	0.800 32.0
Nonane	CBZd 5	Ave	+++++ 151433	+++++ 329467	12817 654836	21633 1441294	57593 3061549	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Bromoform	CBZd 5	Ave	+++++ 47825	2158 166485	5133 397152	10274 866530	26419 1988611	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Styrene	CBZd 5	Ave	+++++ 115089	3747 259361	8273 470774	13483 1075638	41558 2541086	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
o-Xylene	CBZd 5	Ave	+++++ 160310	+++++ 351197	13684 623631	21193 1365939	62312 3189901	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,1,2,2-Tetrachloroethane	CBZd 5	Ave	+++++ 129612	+++++ 283671	10339 528435	17273 1057194	49310 2516976	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2,3-Trichloropropane	CBZd 5	Ave	+++++ 31198	+++++ 70357	2300 134141	3979 274369	12020 658777	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Isopropylbenzene	CBZd 5	Ave	+++++ 209664	+++++ 469762	17579 839245	25851 1838036	78721 4498773	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Propylbenzene	CBZd 5	Ave	+++++ 55490	+++++ 122801	4829 228287	6564 502759	19728 1269531	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
2-Chlorotoluene	CBZd 5	Ave	+++++ 50660	+++++ 116178	3929 223185	6674 519001	21271 1197945	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
4-Ethyltoluene	CBZd 5	Ave	+++++ 209216	+++++ 470643	17613 850389	24383 1826353	76712 4720069	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,3,5-Trimethylbenzene	CBZd 5	Ave	+++++ 85164	+++++ 184043	6974 345419	9268 735810	31514 1885947	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Alpha Methyl Styrene	CBZd 5	Ave	+++++ 82510	+++++ 187336	+++++ 354303	8841 809517	27908 2066076	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Decane	CBZd 5	Ave	+++++ 189083	+++++ 419090	15543 759257	25661 1632200	71149 3815257	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
tert-Butylbenzene	CBZd 5	Ave	+++++ 182107	+++++ 412773	14401 770891	20349 1682234	64684 4515312	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2,4-Trimethylbenzene	CBZd 5	Ave	+++++ 180832	+++++ 410005	14761 764817	19813 1622836	67360 4383450	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
sec-Butylbenzene	CBZd 5	Ave	+++++ 272380	+++++ 615450	22118 1151509	30874 2467800	96336 6820666	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,3-Dichlorobenzene	CBZd 5	Ave	2581 118460	4541 272851	9755 551149	15896 1286011	43692 3298828	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Benzyl chloride	CBZd 5	Ave	+++++ 157512	+++++ 410741	13685 735219	18578 1598462	59541 4250505	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,4-Dichlorobenzene	CBZd 5	Ave	2678 117341	5059 268488	9941 545052	16086 1269190	44948 3184224	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
4-Isopropyltoluene	CBZd 5	Ave	+++++ 213219	+++++ 491082	16482 919460	23308 1951840	75338 5086898	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2,3-Trimethylbenzene	CBZd 5	QuaF	+++++ 183353	+++++ 420978	14733 775110	20125 1624627	66959 4105097	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2-Dichlorobenzene	CBZd 5	Ave	+++++ 113702	+++++ 265655	9714 538536	15119 1214657	41138 3197685	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Indane	CBZd 5	Ave	+++++ 175316	6041 404591	14037 762843	19180 1670413	62198 4622214	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Indene	CBZd 5	Ave	+++++ 150965	+++++ 353313	11769 672537	16584 1469257	54200 4046053	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Butylbenzene	CBZd 5	Ave	+++++ 241684	+++++ 548406	20333 1013104	26410 2083566	88169 5637666	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Undecane	CBZd 5	Ave	+++++ 212100	+++++ 469276	18018 851240	26240 1761528	77930 4541178	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2-Dibromo-3-Chloropropane	CBZd 5	QuaF	+++++ 47740	+++++ 144381	3942 312261	6556 604213	20067 1724558	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2,4,5-Tetramethylbenzene	CBZd 5	QuaF	+++++ 186389	+++++ 466848	16880 936361	19690 1816600	71014 5154231	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Dodecane	CBZd 5	Ave	+++++ 202565	+++++ 349178	+++++ 855739	23057 1562672	76360 3675886	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
1,2,4-Trichlorobenzene	CBZd5	Ave	+++++ 90620	+++++ 224232	8798 484290	11196 1089060	35272 3299699	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Naphthalene	CBZd5	Ave	+++++ 216311	10621 548866	23525 1122391	25941 2219533	88191 6479441	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Hexachlorobutadiene	CBZd5	Ave	+++++ 81866	+++++ 200284	7774 446054	10052 1080114	29410 +++++	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
1,2,3-Trichlorobenzene	CBZd5	Ave	+++++ 89666	+++++ 214504	8763 479297	10179 1057388	33331 3084852	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Methylnaphthalene	CBZd5	Ave	+++++ 93743	+++++ 143251	+++++ 762263	+++++ 1209161	41015 2003736	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
1-Methylnaphthalene	CBZd5	Ave	+++++ 106800	+++++ 152396	+++++ 785887	14358 1234833	46614 1824509	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
4-Bromofluorobenzene (Surr)	CBZd5	Ave	550738 479859	373260 566331	449593 517937	471736 684275	468432 678598	4.64 4.64	4.64 4.64	4.64 4.64	4.64 4.64	4.64 4.64

Curve Type Legend:

Ave = Average ISTD
QuaF = Quadratic ISTD forced zero

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 140-42295/9	GI01IC01.D
Level 2	IC 140-42295/10	GI01IC02.D
Level 3	IC 140-42295/11	GI01IC03.D
Level 4	IC 140-42295/12	GI01IC04.D
Level 5	IC 140-42295/13	GI01IC05.D
Level 6	IC 140-42295/14	GI01IC06.D
Level 7	ICIS 140-42295/15	GI01IC07.D
Level 8	IC 140-42295/7	GI01IC08.D
Level 9	IC 140-42295/5	GI01IC09.D
Level 10	IC 140-42295/3	GI01IC10.D

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
Chlorodifluoromethane	+++++	+++++	18.1						50			
Propene	+++++	+++++	+++++	14.1						50		
Dichlorodifluoromethane	+++++	+++++	6.1						50			
Chloromethane	+++++	+++++	+++++	21.9						50		
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.0						50					
Vinyl chloride	-8.0						50					
1,3-Butadiene	+++++	+++++	+++++	2.5						50		
Butane	+++++	+++++	8.2						50			
Bromomethane	+++++	+++++	7.8						50			
Chloroethane	+++++	+++++	21.6						50			
Ethanol	+++++	+++++	+++++	-4.1						50		
Vinyl bromide	+++++	2.9						50				
2-Methylbutane	+++++	+++++	+++++	1.8						50		
Trichlorofluoromethane	4.8						50					

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
Acrolein	+++++	+++++	+++++	+++++	15.1						50	
Acetonitrile	+++++	+++++	+++++	+++++	36.1						50	
Acetone	+++++	+++++	+++++	-0.6						80		
Isopropyl alcohol	+++++	+++++	+++++	-6.5						50		
Pentane	+++++	+++++	+++++	-1.8						50		
Ethyl ether	+++++	+++++	+++++	-9.0						50		
1,1-Dichloroethene	+++++	2.6						50				
Acrylonitrile	+++++	+++++	+++++	-7.9						50		
tert-Butyl alcohol	+++++	+++++	+++++	-3.8						50		
1,1,2-Trichloro-1,2,2-trifluoroethane	8.7						50					
Methylene Chloride	+++++	+++++	+++++	+++++	9.1						80	
3-Chloropropene	+++++	+++++	47.4	+++++					50			
Carbon disulfide	+++++	+++++	17.2						50			
trans-1,2-Dichloroethene	+++++	7.5						50				
2-Methylpentane	+++++	+++++	19.7						50			
Methyl tert-butyl ether	+++++	+++++	+++++	-17.3						50		
1,1-Dichloroethane	+++++	9.1						50				
Vinyl acetate	+++++	+++++	+++++	-15.8						50		
2-Butanone (MEK)	+++++	+++++	+++++	-13.9						50		
Hexane	+++++	+++++	12.6						50			
cis-1,2-Dichloroethene	+++++	5.2						50				

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
Ethyl acetate	+++++	+++++	+++++	+++++	7.3						50	
Chloroform	7.9						50					
Tetrahydrofuran	+++++	+++++	+++++	-13.1						50		
1,1,1-Trichloroethane	+++++	12.9						50				
1,2-Dichloroethane	+++++	+++++	15.8						50			
1-Butanol	+++++	+++++	+++++	+++++	11.2						50	
Benzene	+++++	+++++	14.0						50			
Cyclohexane	+++++	+++++	+++++	10.9						50		
Carbon tetrachloride	0.3						50					
2,3-Dimethylpentane	+++++	+++++	21.1						50			
Thiophene	+++++	+++++	14.6						50			
2,2,4-Trimethylpentane	+++++	+++++	7.6						50			
Heptane	+++++	+++++	15.1						50			
1,2-Dichloropropane	+++++	+++++	16.6						50			
Trichloroethene	-0.8						50					
Dibromomethane	+++++	+++++	13.2						50			
Bromodichloromethane	+++++	+++++	5.7						50			
1,4-Dioxane	+++++	+++++	20.1						50			
Methyl methacrylate	+++++	+++++	+++++	-18.1						50		
Methylcyclohexane	+++++	+++++	9.2						50			
4-Methyl-2-pentanone (MIBK)	+++++	+++++	+++++	-13.5						50		

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
cis-1,3-Dichloropropene	+++++	+++++	5.4						50			
trans-1,3-Dichloropropene	+++++	+++++	16.6						50			
Toluene	+++++	+++++	18.1						50			
1,1,2-Trichloroethane	+++++	+++++	6.8						50			
2-Hexanone	+++++	+++++	+++++	-18.0						50		
Octane	+++++	+++++	9.3						50			
Dibromochloromethane	+++++	+++++	-2.7						50			
1,2-Dibromoethane (EDB)	+++++	+++++	15.9						50			
Tetrachloroethene	-1.7						50					
Chlorobenzene	+++++	+++++	10.4						50			
Ethylbenzene	+++++	+++++	16.2						50			
m-Xylene & p-Xylene	+++++	26.0						50				
Nonane	+++++	+++++	12.2						50			
Bromoform	+++++	-6.0						50				
Styrene	+++++	9.5						50				
o-Xylene	+++++	+++++	16.8						50			
1,1,2,2-Tetrachloroethane	+++++	+++++	10.6						50			
1,2,3-Trichloropropane	+++++	+++++	0.6						50			
Isopropylbenzene	+++++	+++++	14.2						50			
Propylbenzene	+++++	+++++	17.5						50			
2-Chlorotoluene	+++++	+++++	-0.2						50			

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
4-Ethyltoluene	+++++	+++++	14.6						50			
1,3,5-Trimethylbenzene	+++++	+++++	13.5						50			
Alpha Methyl Styrene	+++++	+++++	+++++	-28.8						50		
Decane	+++++	+++++	12.3						50			
tert-Butylbenzene	+++++	+++++	6.6						50			
1,2,4-Trimethylbenzene	+++++	+++++	9.9						50			
sec-Butylbenzene	+++++	+++++	9.1						50			
1,3-Dichlorobenzene	-11.1						50					
Benzyl chloride	+++++	+++++	8.1						50			
1,4-Dichlorobenzene	-8.9						50					
4-Isopropyltoluene	+++++	+++++	5.0						50			
1,2,3-Trimethylbenzene	+++++	+++++	30.8						50			
1,2-Dichlorobenzene	+++++	+++++	5.9						50			
Indane	+++++	10.6						50				
Indene	+++++	+++++	2.3						50			
Butylbenzene	+++++	+++++	14.3						50			
Undecane	+++++	+++++	16.6						50			
1,2-Dibromo-3-Chloropropane	+++++	+++++	3.8						50			
1,2,4,5-Tetramethylbenzene	+++++	+++++	43.7						50			
Dodecane	+++++	+++++	+++++	-16.4						50		
1,2,4-Trichlorobenzene	+++++	+++++	8.9						50			

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
Naphthalene	+++++	34.0						80				
Hexachlorobutadiene	+++++	+++++	13.9	+++++					50			
1,2,3-Trichlorobenzene	+++++	+++++	12.7						50			
2-Methylnaphthalene	+++++	+++++	+++++	+++++	-3.8						80	
1-Methylnaphthalene	+++++	+++++	+++++	-17.7						80		

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Lab Sample ID: ICV 140-42295/22 Calibration Date: 09/02/2020 08:56

Instrument ID: MG Calib Start Date: 09/01/2020 18:07

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 09/02/2020 03:27

Lab File ID: GI01ICVR.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorodifluoromethane	Ave	4.301	3.929		4.57	5.00	-8.6	35.0
Propene	Ave	2.115	1.931		4.57	5.00	-8.7	35.0
Dichlorodifluoromethane	Ave	4.809	4.292		4.46	5.00	-10.7	35.0
Chloromethane	Ave	0.8610	0.7442		4.32	5.00	-13.6	35.0
1,2-Dichloro-1,1,2,2-tetrafluoroethane	Ave	2.743	2.277		4.15	5.00	-17.0	35.0
Acetaldehyde	Ave	1.013	0.8426		20.8	25.0	-16.8	35.0
Vinyl chloride	Ave	2.404	2.220		4.62	5.00	-7.6	35.0
1,3-Butadiene	Ave	2.119	1.970		4.65	5.00	-7.0	35.0
Butane	Ave	4.304	4.065		4.72	5.00	-5.6	35.0
Bromomethane	Ave	1.452	1.260		4.34	5.00	-13.2	35.0
Chloroethane	Ave	0.997	0.8957		4.49	5.00	-10.2	35.0
Ethanol	Ave	0.9079	0.6562		18.1	25.0	-27.7	35.0
Vinyl bromide	Ave	1.239	1.117		4.51	5.00	-9.8	35.0
2-Methylbutane	Ave	2.923	2.831		4.84	5.00	-3.1	35.0
Trichlorofluoromethane	Ave	3.737	3.130		4.19	5.00	-16.3	35.0
Acrolein	Ave	0.4464	0.4931		5.52	5.00	10.5	35.0
Acetonitrile	Ave	0.7987	0.6668		4.17	5.00	-16.5	35.0
Acetone	Ave	0.7999	0.8016		5.01	5.00	0.2	35.0
Isopropyl alcohol	Ave	2.389	2.423		5.07	5.00	1.5	35.0
Pentane	Ave	0.2430	0.2227		4.58	5.00	-8.4	35.0
Ethyl ether	Ave	1.710	1.790		5.23	5.00	4.7	35.0
1,1-Dichloroethene	Ave	1.183	1.025		4.33	5.00	-13.4	35.0
Acrylonitrile	Ave	1.092	1.075		4.92	5.00	-1.6	35.0
tert-Butyl alcohol	Ave	2.412	1.818		3.77	5.00	-24.6	35.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	2.736	2.359		4.31	5.00	-13.8	35.0
Methylene Chloride	Ave	1.184	1.067		4.51	5.00	-9.9	35.0
3-Chloropropene	Ave	2.320	1.903		4.10	5.00	-18.0	35.0
Carbon disulfide	Ave	3.977	3.544		4.46	5.00	-10.9	35.0
trans-1,2-Dichloroethene	Ave	1.393	1.226		4.40	5.00	-12.0	35.0
2-Methylpentane	Ave	5.433	4.474		4.12	5.00	-17.6	35.0
Methyl tert-butyl ether	Ave	2.883	2.736		4.74	5.00	-5.1	35.0
1,1-Dichloroethane	Ave	3.473	3.181		4.58	5.00	-8.4	35.0
Vinyl acetate	Ave	4.548	4.694		5.16	5.00	3.2	35.0
2-Butanone (MEK)	Ave	0.5774	0.5305		4.59	5.00	-8.1	35.0
Hexane	Ave	1.792	1.607		4.48	5.00	-10.3	35.0
Isopropyl ether	Ave	5.977	5.799		4.85	5.00	-3.0	35.0
cis-1,2-Dichloroethene	Ave	1.481	1.325		4.47	5.00	-10.5	35.0
Ethyl acetate	Ave	3.981	3.588		4.51	5.00	-9.9	35.0
Chloroform	Ave	3.366	2.934		4.36	5.00	-12.8	35.0
Tert-butyl ethyl ether	Ave	5.017	4.408		4.39	5.00	-12.1	35.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Lab Sample ID: ICV 140-42295/22 Calibration Date: 09/02/2020 08:56

Instrument ID: MG Calib Start Date: 09/01/2020 18:07

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 09/02/2020 03:27

Lab File ID: GI01ICVR.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Tetrahydrofuran	Ave	1.997	1.896		4.75	5.00	-5.1	35.0
1,1,1-Trichloroethane	Ave	3.240	2.865		4.42	5.00	-11.6	35.0
1,2-Dichloroethane	Ave	0.5421	0.4409		4.07	5.00	-18.7	35.0
1-Butanol	Ave	0.1535	0.1036		3.38	5.00	-32.5	35.0
Benzene	Ave	0.9867	0.8211		4.16	5.00	-16.8	35.0
Cyclohexane	Ave	0.1661	0.1347		4.05	5.00	-18.9	35.0
Carbon tetrachloride	Ave	0.6099	0.5409		4.43	5.00	-11.3	35.0
2,3-Dimethylpentane	Ave	0.2548	0.1966		3.86	5.00	-22.8	35.0
Thiophene	Ave	0.5655	0.4452		3.94	5.00	-21.3	35.0
2,2,4-Trimethylpentane	Ave	2.414	1.987		4.12	5.00	-17.7	35.0
Heptane	Ave	0.3880	0.3065		3.95	5.00	-21.0	35.0
1,2-Dichloropropane	Ave	0.4494	0.3788		4.21	5.00	-15.7	35.0
Trichloroethene	Ave	0.4302	0.3138		3.65	5.00	-27.0	35.0
Dibromomethane	Ave	0.4239	0.3454		4.07	5.00	-18.5	35.0
Bromodichloromethane	Ave	0.7367	0.6419		4.36	5.00	-12.9	35.0
1,4-Dioxane	Ave	0.1151	0.0858		3.73	5.00	-25.5	35.0
Methyl methacrylate	Ave	0.5088	0.4152		4.08	5.00	-18.4	35.0
Methylcyclohexane	Ave	0.6505	0.6281		4.83	5.00	-3.4	35.0
4-Methyl-2-pentanone (MIBK)	Ave	0.8567	0.6695		3.91	5.00	-21.9	35.0
cis-1,3-Dichloropropene	Ave	0.5917	0.5245		4.43	5.00	-11.3	35.0
trans-1,3-Dichloropropene	Ave	0.4924	0.4541		4.61	5.00	-7.8	35.0
Toluene	Ave	1.059	0.9715		4.59	5.00	-8.2	35.0
1,1,2-Trichloroethane	Ave	0.3318	0.2919		4.40	5.00	-12.0	35.0
2-Hexanone	Ave	0.3922	0.2950		3.76	5.00	-24.8	35.0
Octane	Ave	0.3858	0.3458		4.48	5.00	-10.4	35.0
Dibromochloromethane	Ave	0.6238	0.5958		4.78	5.00	-4.5	35.0
1,2-Dibromoethane (EDB)	Ave	0.5955	0.5271		4.43	5.00	-11.5	35.0
Tetrachloroethene	Ave	0.3991	0.3272		4.10	5.00	-18.0	35.0
Chlorobenzene	Ave	0.8562	0.7813		4.56	5.00	-8.8	35.0
2,3-Dimethylheptane	Ave	1.832	1.469		4.01	5.00	-19.8	35.0
Ethylbenzene	Ave	1.361	1.213		4.46	5.00	-10.8	35.0
m-Xylene & p-Xylene	Ave	1.076	0.9236		8.58	10.0	-14.2	35.0
Nonane	Ave	1.062	0.9751		4.59	5.00	-8.2	35.0
Bromoform	Ave	0.5248	0.5270		5.02	5.00	0.4	35.0
Styrene	Ave	0.7824	0.6733		4.30	5.00	-13.9	35.0
o-Xylene	Ave	1.089	0.9679		4.44	5.00	-11.1	35.0
1,1,2,2-Tetrachloroethane	Ave	0.8691	0.7611		4.38	5.00	-12.4	35.0
1,2,3-Trichloropropane	Ave	0.2125	0.1885		4.43	5.00	-11.3	35.0
Isopropylbenzene	Ave	1.431	1.289		4.50	5.00	-9.9	35.0
Propylbenzene	Ave	0.3821	0.3364		4.40	5.00	-12.0	35.0
2-Chlorotoluene	Ave	0.3660	0.3422		4.67	5.00	-6.5	35.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Lab Sample ID: ICV 140-42295/22 Calibration Date: 09/02/2020 08:56

Instrument ID: MG Calib Start Date: 09/01/2020 18:07

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 09/02/2020 03:27

Lab File ID: GI01ICVR.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Ethyltoluene	Ave	1.429	1.215		4.25	5.00	-15.0	35.0
1,3,5-Trimethylbenzene	Ave	0.5712	0.5698		4.99	5.00	-0.2	35.0
Alpha Methyl Styrene	Ave	0.5644	0.4904		4.34	5.00	-13.1	35.0
Decane	Ave	1.287	1.157		4.49	5.00	-10.1	35.0
tert-Butylbenzene	Ave	1.256	1.107		4.41	5.00	-11.8	35.0
1,2,4-Trimethylbenzene	Ave	1.249	1.123		4.49	5.00	-10.1	35.0
sec-Butylbenzene	Ave	1.884	1.651		4.38	5.00	-12.4	35.0
1,3-Dichlorobenzene	Ave	0.8900	0.7770		4.37	5.00	-12.7	35.0
Benzyl chloride	Ave	1.177	1.122		4.77	5.00	-4.6	35.0
1,4-Dichlorobenzene	Ave	0.9015	0.7590		4.21	5.00	-15.8	35.0
4-Isopropyltoluene	Ave	1.459	1.292		4.43	5.00	-11.4	35.0
1,2,3-Trimethylbenzene	QuaF		0.8283		3.85	5.00	-23.0	35.0
Butylcyclohexane	Ave	1.221	1.032		4.22	5.00	-15.5	35.0
1,2-Dichlorobenzene	Ave	0.8529	0.7455		4.37	5.00	-12.6	35.0
Indane	Ave	1.248	1.052		4.22	5.00	-15.7	35.0
Indene	Ave	1.069	0.7883		3.69	5.00	-26.3	35.0
Butylbenzene	Ave	1.654	1.495		4.52	5.00	-9.6	35.0
Undecane	Ave	1.437	1.263		4.40	5.00	-12.1	35.0
1,2-Dibromo-3-Chloropropane	QuaF		0.2886		3.87	5.00	-22.7	35.0
1,2,4,5-Tetramethylbenzene	QuaF		1.092		4.70	5.00	-5.9	35.0
Dodecane	Ave	1.254	1.200		4.79	5.00	-4.3	35.0
1,2,4-Trichlorobenzene	Ave	0.7511	0.6306		4.20	5.00	-16.0	35.0
Naphthalene	Ave	1.812	1.517		4.19	5.00	-16.3	35.0
Hexachlorobutadiene	Ave	0.6345	0.5377		4.24	5.00	-15.3	35.0
1,2,3-Trichlorobenzene	Ave	0.7230	0.6231		4.31	5.00	-13.8	35.0
2-Methylnaphthalene	Ave	0.7792	0.6437		4.13	5.00	-17.4	50.0
1-Methylnaphthalene	Ave	0.7933	0.6885		4.34	5.00	-13.2	50.0
4-Bromofluorobenzene (Surr)	Ave	0.7532	0.7643		11.8	11.6	1.5	35.0

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Lab File ID: GBFBI03.D BFB Injection Date: 09/03/2020

Instrument ID: MG BFB Injection Time: 07:22

Analysis Batch No.: 42409

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	37.2	
75	30.0 - 60.0 % of mass 95	56.7	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.5	
173	Less than 2.0 % of mass 174	0.4	(0.7) 1
174	Greater than 50% of mass 95	67.1	
175	5.0 - 9.0 % of mass 174	4.5	(6.7) 1
176	95.0 - 101.0 % of mass 174	62.9	(93.8) 1 *
177	5.0 - 9.0 % of mass 176	4.3	(6.9) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 140-42409/2	GCCVI03.D	09/03/2020	7:55
	LCS 140-42409/1002	GCCVI03-LCS.d	09/03/2020	7:55
	MB 140-42409/8	I03L20237X.D	09/03/2020	11:52
SV-060-C-29	140-20175-12	GI03P111.D	09/03/2020	22:15
SV-152-C-29	140-20175-14	GI03P112.D	09/03/2020	23:05
SV-141-C-29	140-20175-15	GI03P113.D	09/03/2020	23:53
SV-149-C-29	140-20175-16	GI03P114.D	09/04/2020	0:41
SV-150-C-29	140-20175-13	GI03P116D.D	09/04/2020	2:51

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Lab Sample ID: CCVIS 140-42409/2 Calibration Date: 09/03/2020 07:55

Instrument ID: MG Calib Start Date: 09/01/2020 18:07

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 09/02/2020 03:27

Lab File ID: GCCVI03.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorodifluoromethane	Ave	4.301	3.971		1.48	1.60	-7.7	30.0
Propene	Ave	2.115	1.990		1.51	1.60	-5.9	30.0
Dichlorodifluoromethane	Ave	4.809	3.993		1.33	1.60	-17.0	30.0
1,2-Dichloro-1,1,2,2-tetrafluoroethane	Ave	2.743	2.134		1.24	1.60	-22.2	30.0
Chloromethane	Ave	0.8610	0.8146		1.51	1.60	-5.4	30.0
Acetaldehyde	Ave	1.013	0.8753		6.92	8.00	-13.6	30.0
Vinyl chloride	Ave	2.404	2.268		1.51	1.60	-5.7	30.0
1,3-Butadiene	Ave	2.119	2.014		1.52	1.60	-4.9	30.0
Butane	Ave	4.304	4.427		1.65	1.60	2.8	30.0
Bromomethane	Ave	1.452	1.268		1.40	1.60	-12.7	30.0
Chloroethane	Ave	0.997	0.9565		1.54	1.60	-4.1	30.0
Ethanol	Ave	0.9079	0.8085		7.12	8.00	-11.0	30.0
Vinyl bromide	Ave	1.239	1.163		1.50	1.60	-6.1	30.0
2-Methylbutane	Ave	2.923	3.339		1.83	1.60	14.2	30.0
Trichlorofluoromethane	Ave	3.737	3.291		1.41	1.60	-11.9	30.0
Acrolein	Ave	0.4464	0.5495		1.97	1.60	23.1	30.0
Acetonitrile	Ave	0.7987	0.7958		1.59	1.60	-0.4	30.0
Acetone	Ave	0.7999	0.9070		1.81	1.60	13.4	30.0
Isopropyl alcohol	Ave	2.389	2.891		1.94	1.60	21.0	30.0
Pentane	Ave	0.2430	0.2474		1.63	1.60	1.8	30.0
Ethyl ether	Ave	1.710	2.203		2.06	1.60	28.9	30.0
1,1-Dichloroethene	Ave	1.183	0.9719		1.31	1.60	-17.9	30.0
Acrylonitrile	Ave	1.092	1.150		1.69	1.60	5.4	30.0
tert-Butyl alcohol	Ave	2.412	2.045		1.36	1.60	-15.2	30.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	2.736	2.315		1.35	1.60	-15.4	30.0
Methylene Chloride	Ave	1.184	1.074		1.45	1.60	-9.3	30.0
3-Chloropropene	Ave	2.320	2.021		1.39	1.60	-12.9	30.0
Carbon disulfide	Ave	3.977	3.624		1.46	1.60	-8.9	30.0
trans-1,2-Dichloroethene	Ave	1.393	1.202		1.38	1.60	-13.7	30.0
2-Methylpentane	Ave	5.433	4.819		1.42	1.60	-11.3	30.0
Methyl tert-butyl ether	Ave	2.883	2.714		1.51	1.60	-5.9	30.0
1,1-Dichloroethane	Ave	3.473	3.299		1.52	1.60	-5.0	30.0
Vinyl acetate	Ave	4.548	5.060		1.78	1.60	11.3	30.0
2-Butanone (MEK)	Ave	0.5774	0.5468		1.52	1.60	-5.3	30.0
Hexane	Ave	1.792	1.656		1.48	1.60	-7.6	30.0
Isopropyl ether	Ave	5.977	6.097		1.63	1.60	2.0	30.0
cis-1,2-Dichloroethene	Ave	1.481	1.394		1.51	1.60	-5.9	30.0
Ethyl acetate	Ave	3.981	3.807		1.53	1.60	-4.4	30.0
Chloroform	Ave	3.366	3.012		1.43	1.60	-10.5	30.0
Tert-butyl ethyl ether	Ave	5.017	4.451		1.42	1.60	-11.3	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Lab Sample ID: CCVIS 140-42409/2 Calibration Date: 09/03/2020 07:55

Instrument ID: MG Calib Start Date: 09/01/2020 18:07

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 09/02/2020 03:27

Lab File ID: GCCVI03.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Tetrahydrofuran	Ave	1.997	2.083		1.67	1.60	4.3	30.0
1,1,1-Trichloroethane	Ave	3.240	2.858		1.41	1.60	-11.8	30.0
1,2-Dichloroethane	Ave	0.5421	0.5300		1.56	1.60	-2.2	30.0
1-Butanol	Ave	0.1535	0.1433		1.49	1.60	-6.7	30.0
Benzene	Ave	0.9867	0.9609		1.56	1.60	-2.6	30.0
Cyclohexane	Ave	0.1661	0.1564		1.51	1.60	-5.9	30.0
Carbon tetrachloride	Ave	0.6099	0.6262		1.64	1.60	2.7	30.0
2,3-Dimethylpentane	Ave	0.2548	0.2251		1.41	1.60	-11.7	30.0
Thiophene	Ave	0.5655	0.5261		1.49	1.60	-7.0	30.0
2,2,4-Trimethylpentane	Ave	2.414	2.381		1.58	1.60	-1.4	30.0
Heptane	Ave	0.3880	0.3564		1.47	1.60	-8.2	30.0
1,2-Dichloropropane	Ave	0.4494	0.4240		1.51	1.60	-5.6	30.0
Trichloroethene	Ave	0.4302	0.3568		1.33	1.60	-17.1	30.0
Dibromomethane	Ave	0.4239	0.3887		1.47	1.60	-8.3	30.0
Bromodichloromethane	Ave	0.7367	0.7053		1.53	1.60	-4.3	30.0
1,4-Dioxane	Ave	0.1151	0.1005		1.40	1.60	-12.7	30.0
Methyl methacrylate	Ave	0.5088	0.5359		1.69	1.60	5.3	30.0
Methylcyclohexane	Ave	0.6505	0.7350		1.81	1.60	13.0	30.0
4-Methyl-2-pentanone (MIBK)	Ave	0.8567	0.8220		1.54	1.60	-4.0	30.0
cis-1,3-Dichloropropene	Ave	0.5917	0.5572		1.51	1.60	-5.8	30.0
trans-1,3-Dichloropropene	Ave	0.4924	0.4511		1.47	1.60	-8.4	30.0
Toluene	Ave	1.059	0.9580		1.45	1.60	-9.5	30.0
1,1,2-Trichloroethane	Ave	0.3318	0.2944		1.42	1.60	-11.3	30.0
2-Hexanone	Ave	0.3922	0.3276		1.34	1.60	-16.5	30.0
Octane	Ave	0.3858	0.3461		1.44	1.60	-10.3	30.0
Dibromochloromethane	Ave	0.6238	0.5763		1.48	1.60	-7.6	30.0
1,2-Dibromoethane (EDB)	Ave	0.5955	0.5263		1.41	1.60	-11.6	30.0
Tetrachloroethene	Ave	0.3991	0.3180		1.27	1.60	-20.3	30.0
Chlorobenzene	Ave	0.8562	0.7479		1.40	1.60	-12.7	30.0
2,3-Dimethylheptane	Ave	1.832	1.534		1.34	1.60	-16.3	30.0
Ethylbenzene	Ave	1.361	1.258		1.48	1.60	-7.5	30.0
m-Xylene & p-Xylene	Ave	1.076	0.9716		2.89	3.20	-9.7	30.0
Nonane	Ave	1.062	0.9763		1.47	1.60	-8.0	30.0
Bromoform	Ave	0.5248	0.4673		1.42	1.60	-11.0	30.0
Styrene	Ave	0.7824	0.7204		1.47	1.60	-7.9	30.0
o-Xylene	Ave	1.089	1.010		1.48	1.60	-7.3	30.0
1,1,2,2-Tetrachloroethane	Ave	0.8691	0.7989		1.47	1.60	-8.1	30.0
1,2,3-Trichloropropane	Ave	0.2125	0.1902		1.43	1.60	-10.5	30.0
Isopropylbenzene	Ave	1.431	1.288		1.44	1.60	-10.0	30.0
Propylbenzene	Ave	0.3821	0.3351		1.40	1.60	-12.3	30.0
2-Chlorotoluene	Ave	0.3660	0.3292		1.44	1.60	-10.0	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Lab Sample ID: CCVIS 140-42409/2 Calibration Date: 09/03/2020 07:55

Instrument ID: MG Calib Start Date: 09/01/2020 18:07

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 09/02/2020 03:27

Lab File ID: GCCVI03.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Ethyltoluene	Ave	1.429	1.211		1.36	1.60	-15.3	30.0
1,3,5-Trimethylbenzene	Ave	0.5712	0.5688		1.59	1.60	-0.4	30.0
Alpha Methyl Styrene	Ave	0.5644	0.5017		1.42	1.60	-11.1	30.0
Decane	Ave	1.287	1.197		1.49	1.60	-7.0	30.0
tert-Butylbenzene	Ave	1.256	1.103		1.41	1.60	-12.2	30.0
1,2,4-Trimethylbenzene	Ave	1.249	1.133		1.45	1.60	-9.3	30.0
sec-Butylbenzene	Ave	1.884	1.688		1.43	1.60	-10.4	30.0
1,3-Dichlorobenzene	Ave	0.8900	0.7526		1.35	1.60	-15.4	30.0
Benzyl chloride	Ave	1.177	1.190		1.62	1.60	1.1	30.0
1,4-Dichlorobenzene	Ave	0.9015	0.7554		1.34	1.60	-16.2	30.0
4-Isopropyltoluene	Ave	1.459	1.332		1.46	1.60	-8.7	30.0
1,2,3-Trimethylbenzene	QuaF		0.8479		1.27	1.60	-20.8	30.0
Butylcyclohexane	Ave	1.221	1.078		1.41	1.60	-11.7	30.0
1,2-Dichlorobenzene	Ave	0.8529	0.7363		1.38	1.60	-13.7	30.0
Indane	Ave	1.248	1.058		1.36	1.60	-15.3	30.0
Indene	Ave	1.069	0.7968		1.19	1.60	-25.5	30.0
Butylbenzene	Ave	1.654	1.587		1.54	1.60	-4.0	30.0
Undecane	Ave	1.437	1.359		1.51	1.60	-5.4	30.0
1,2-Dibromo-3-Chloropropane	QuaF		0.2948		1.28	1.60	-20.2	30.0
1,2,4,5-Tetramethylbenzene	QuaF		1.099		1.53	1.60	-4.2	30.0
Dodecane	Ave	1.254	1.304		1.66	1.60	4.0	30.0
1,2,4-Trichlorobenzene	Ave	0.7511	0.6032		1.28	1.60	-19.7	30.0
Naphthalene	Ave	1.812	1.522		1.34	1.60	-16.0	30.0
Hexachlorobutadiene	Ave	0.6345	0.5023		1.27	1.60	-20.8	30.0
1,2,3-Trichlorobenzene	Ave	0.7230	0.6046		1.34	1.60	-16.4	30.0
2-Methylnaphthalene	Ave	0.7792	0.6517		1.34	1.60	-16.4	50.0
1-Methylnaphthalene	Ave	0.7933	0.7360		1.48	1.60	-7.2	50.0
4-Bromofluorobenzene (Surr)	Ave	0.7532	0.8115		5.00	4.64	7.7	30.0

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Lab File ID: GBFBI07.D BFB Injection Date: 09/07/2020

Instrument ID: MG BFB Injection Time: 07:32

Analysis Batch No.: 42500

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	38.4	
75	30.0 - 60.0 % of mass 95	55.1	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.3	
173	Less than 2.0 % of mass 174	0.4	(0.5) 1
174	Greater than 50% of mass 95	71.4	
175	5.0 - 9.0 % of mass 174	4.9	(6.9) 1
176	95.0 - 101.0 % of mass 174	68.0	(95.2) 1
177	5.0 - 9.0 % of mass 176	4.4	(6.4) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 140-42500/2	GCCVI07.D	09/07/2020	8:06
	LCS 140-42500/1002	GCCVI07-LCS.d	09/07/2020	8:06
	MB 140-42500/4	G500BI07.D	09/07/2020	10:21
IA-144-C-29	140-20175-33	GBI07P107.D	09/07/2020	18:39
IA-141-C-29	140-20175-34	GBI07P108.D	09/07/2020	19:25
IA-149-C-29	140-20175-35	GBI07P109.D	09/07/2020	20:13
IA-DUP2-C-29	140-20175-36	GBI07P110.D	09/07/2020	20:56
IA-126-C-29	140-20175-37	GBI07P111.D	09/07/2020	21:40
IA-BCK-1-29	140-20175-38	GBI07P112.D	09/07/2020	22:24
IA-BCK-2-29	140-20175-39	GBI07P113.D	09/07/2020	23:09
IA-BCK-3-29	140-20175-40	GBI07P114.D	09/07/2020	23:56
IA-BCK-4-29	140-20175-41	GBI07P115.D	09/08/2020	0:42
SV-DUP2-C-29	140-20175-11	GBI07P116.D	09/08/2020	1:28

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Lab Sample ID: CCVIS 140-42500/2 Calibration Date: 09/07/2020 08:06

Instrument ID: MG Calib Start Date: 09/01/2020 18:07

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 09/02/2020 03:27

Lab File ID: GCCVI07.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorodifluoromethane	Ave	4.301	4.160		1.55	1.60	-3.3	30.0
Propene	Ave	2.115	2.152		1.63	1.60	1.7	30.0
Dichlorodifluoromethane	Ave	4.809	4.309		1.43	1.60	-10.4	30.0
Chloromethane	Ave	0.8610	0.8590		1.60	1.60	-0.2	30.0
1,2-Dichloro-1,1,2,2-tetrafluoroethane	Ave	2.743	2.288		1.33	1.60	-16.6	30.0
Acetaldehyde	Ave	1.013	1.142		9.02	8.00	12.8	30.0
Vinyl chloride	Ave	2.404	2.325		1.55	1.60	-3.2	30.0
1,3-Butadiene	Ave	2.119	2.281		1.72	1.60	7.6	30.0
Butane	Ave	4.304	4.705		1.75	1.60	9.3	30.0
Bromomethane	Ave	1.452	1.255		1.38	1.60	-13.5	30.0
Chloroethane	Ave	0.997	0.9242		1.48	1.60	-7.3	30.0
Ethanol	Ave	0.9079	1.163		10.3	8.00	28.1	30.0
Vinyl bromide	Ave	1.239	1.098		1.42	1.60	-11.4	30.0
2-Methylbutane	Ave	2.923	3.463		1.90	1.60	18.5	30.0
Trichlorofluoromethane	Ave	3.737	3.365		1.44	1.60	-10.0	30.0
Acrolein	Ave	0.4464	0.6917		2.48	1.60	54.9*	30.0
Acetonitrile	Ave	0.7987	1.002		2.01	1.60	25.5	30.0
Acetone	Ave	0.7999	0.8544		5.13	4.80	6.8	30.0
Isopropyl alcohol	Ave	2.389	2.892		5.81	4.80	21.1	30.0
Pentane	Ave	0.2430	0.2258		1.49	1.60	-7.1	30.0
Ethyl ether	Ave	1.710	2.501		2.34	1.60	46.3*	30.0
1,1-Dichloroethene	Ave	1.183	1.054		1.43	1.60	-10.9	30.0
Acrylonitrile	Ave	1.092	1.369		2.01	1.60	25.4	30.0
tert-Butyl alcohol	Ave	2.412	2.339		1.55	1.60	-3.0	30.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	2.736	2.318		1.36	1.60	-15.3	30.0
Methylene Chloride	Ave	1.184	1.092		1.48	1.60	-7.8	30.0
3-Chloropropene	Ave	2.320	2.211		1.52	1.60	-4.7	30.0
Carbon disulfide	Ave	3.977	3.535		1.42	1.60	-11.1	30.0
trans-1,2-Dichloroethene	Ave	1.393	1.234		1.42	1.60	-11.4	30.0
2-Methylpentane	Ave	5.433	5.627		1.66	1.60	3.6	30.0
Methyl tert-butyl ether	Ave	2.883	3.189		1.77	1.60	10.6	30.0
1,1-Dichloroethane	Ave	3.473	3.385		1.56	1.60	-2.5	30.0
Vinyl acetate	Ave	4.548	5.912		2.08	1.60	30.0	30.0
2-Butanone (MEK)	Ave	0.5774	0.6199		1.72	1.60	7.4	30.0
Hexane	Ave	1.792	1.753		1.56	1.60	-2.2	30.0
Isopropyl ether	Ave	5.977	7.498		2.01	1.60	25.4	30.0
cis-1,2-Dichloroethene	Ave	1.481	1.362		1.47	1.60	-8.0	30.0
Ethyl acetate	Ave	3.981	5.152		2.07	1.60	29.4	30.0
Chloroform	Ave	3.366	3.069		1.46	1.60	-8.8	30.0
Tert-butyl ethyl ether	Ave	5.017	5.797		1.85	1.60	15.5	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Lab Sample ID: CCVIS 140-42500/2 Calibration Date: 09/07/2020 08:06

Instrument ID: MG Calib Start Date: 09/01/2020 18:07

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 09/02/2020 03:27

Lab File ID: GCCVI07.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Tetrahydrofuran	Ave	1.997	2.535		2.03	1.60	26.9	30.0
1,1,1-Trichloroethane	Ave	3.240	2.998		1.48	1.60	-7.5	30.0
1,2-Dichloroethane	Ave	0.5421	0.4761		1.41	1.60	-12.2	30.0
1-Butanol	Ave	0.1535	0.1383		1.44	1.60	-9.9	30.0
Benzene	Ave	0.9867	0.8368		1.36	1.60	-15.2	30.0
Cyclohexane	Ave	0.1661	0.1410		1.36	1.60	-15.1	30.0
Carbon tetrachloride	Ave	0.6099	0.5222		1.37	1.60	-14.4	30.0
2,3-Dimethylpentane	Ave	0.2548	0.2134		1.34	1.60	-16.3	30.0
Thiophene	Ave	0.5655	0.4769		1.35	1.60	-15.7	30.0
2,2,4-Trimethylpentane	Ave	2.414	2.171		1.44	1.60	-10.1	30.0
Heptane	Ave	0.3880	0.3314		1.37	1.60	-14.6	30.0
1,2-Dichloropropane	Ave	0.4494	0.4093		1.46	1.60	-8.9	30.0
Trichloroethene	Ave	0.4302	0.3231		1.20	1.60	-24.9	30.0
Dibromomethane	Ave	0.4239	0.3410		1.29	1.60	-19.6	30.0
Bromodichloromethane	Ave	0.7367	0.6628		1.44	1.60	-10.0	30.0
1,4-Dioxane	Ave	0.1151	0.0897		1.25	1.60	-22.1	30.0
Methyl methacrylate	Ave	0.5088	0.5746		1.81	1.60	12.9	30.0
Methylcyclohexane	Ave	0.6505	0.5325		1.31	1.60	-18.1	30.0
4-Methyl-2-pentanone (MIBK)	Ave	0.8567	0.9722		1.82	1.60	13.5	30.0
cis-1,3-Dichloropropene	Ave	0.5917	0.4975		1.35	1.60	-15.9	30.0
trans-1,3-Dichloropropene	Ave	0.4924	0.4506		1.46	1.60	-8.5	30.0
Toluene	Ave	1.059	0.9713		1.47	1.60	-8.3	30.0
1,1,2-Trichloroethane	Ave	0.3318	0.3068		1.48	1.60	-7.5	30.0
2-Hexanone	Ave	0.3922	0.3969		1.62	1.60	1.2	30.0
Octane	Ave	0.3858	0.3299		1.37	1.60	-14.5	30.0
Dibromochloromethane	Ave	0.6238	0.5630		1.44	1.60	-9.7	30.0
1,2-Dibromoethane (EDB)	Ave	0.5955	0.5252		1.41	1.60	-11.8	30.0
Tetrachloroethene	Ave	0.3991	0.3085		1.24	1.60	-22.7	30.0
Chlorobenzene	Ave	0.8562	0.7391		1.38	1.60	-13.7	30.0
2,3-Dimethylheptane	Ave	1.832	1.806		1.58	1.60	-1.5	30.0
Ethylbenzene	Ave	1.361	1.266		1.49	1.60	-6.9	30.0
m-Xylene & p-Xylene	Ave	1.076	0.9725		2.89	3.20	-9.7	30.0
Nonane	Ave	1.062	1.019		1.54	1.60	-4.0	30.0
Bromoform	Ave	0.5248	0.4985		1.52	1.60	-5.0	30.0
Styrene	Ave	0.7824	0.7565		1.55	1.60	-3.3	30.0
o-Xylene	Ave	1.089	0.999		1.47	1.60	-8.3	30.0
1,1,2,2-Tetrachloroethane	Ave	0.8691	0.8431		1.55	1.60	-3.0	30.0
1,2,3-Trichloropropane	Ave	0.2125	0.2023		1.52	1.60	-4.8	30.0
Isopropylbenzene	Ave	1.431	1.324		1.48	1.60	-7.5	30.0
Propylbenzene	Ave	0.3821	0.3596		1.51	1.60	-5.9	30.0
2-Chlorotoluene	Ave	0.3660	0.3341		1.46	1.60	-8.7	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Lab Sample ID: CCVIS 140-42500/2 Calibration Date: 09/07/2020 08:06

Instrument ID: MG Calib Start Date: 09/01/2020 18:07

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 09/02/2020 03:27

Lab File ID: GCCVI07.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Ethyltoluene	Ave	1.429	1.356		1.52	1.60	-5.1	30.0
1,3,5-Trimethylbenzene	Ave	0.5712	0.5469		1.53	1.60	-4.3	30.0
Alpha Methyl Styrene	Ave	0.5644	0.5654		1.60	1.60	0.2	30.0
Decane	Ave	1.287	1.305		1.62	1.60	1.4	30.0
tert-Butylbenzene	Ave	1.256	1.200		1.53	1.60	-4.4	30.0
1,2,4-Trimethylbenzene	Ave	1.249	1.185		1.52	1.60	-5.2	30.0
sec-Butylbenzene	Ave	1.884	1.816		1.54	1.60	-3.6	30.0
1,3-Dichlorobenzene	Ave	0.8900	0.7967		1.43	1.60	-10.5	30.0
Benzyl chloride	Ave	1.177	1.225		1.67	1.60	4.1	30.0
1,4-Dichlorobenzene	Ave	0.9015	0.8023		1.42	1.60	-11.0	30.0
4-Isopropyltoluene	Ave	1.459	1.470		1.61	1.60	0.7	30.0
1,2,3-Trimethylbenzene	QuaF		1.227		1.82	1.60	13.5	30.0
Butylcyclohexane	Ave	1.221	1.152		1.51	1.60	-5.7	30.0
1,2-Dichlorobenzene	Ave	0.8529	0.8002		1.50	1.60	-6.2	30.0
Indane	Ave	1.248	1.188		1.52	1.60	-4.8	30.0
Indene	Ave	1.069	1.075		1.61	1.60	0.5	30.0
Butylbenzene	Ave	1.654	1.652		1.60	1.60	-0.1	30.0
Undecane	Ave	1.437	1.487		1.66	1.60	3.5	30.0
1,2-Dibromo-3-Chloropropane	QuaF		0.4674		1.97	1.60	23.3	30.0
1,2,4,5-Tetramethylbenzene	QuaF		1.406		1.93	1.60	20.9	30.0
Dodecane	Ave	1.254	1.560		1.99	1.60	24.4	30.0
1,2,4-Trichlorobenzene	Ave	0.7511	0.7358		1.57	1.60	-2.0	30.0
Naphthalene	Ave	1.812	1.718		1.52	1.60	-5.2	30.0
Hexachlorobutadiene	Ave	0.6345	0.7020		1.77	1.60	10.7	30.0
1,2,3-Trichlorobenzene	Ave	0.7230	0.7245		1.60	1.60	0.2	30.0
2-Methylnaphthalene	Ave	0.7792	0.8096		1.66	1.60	3.9	50.0
1-Methylnaphthalene	Ave	0.7933	0.9068		1.83	1.60	14.3	50.0
4-Bromofluorobenzene (Surr)	Ave	0.7532	0.7673		4.73	4.64	1.9	30.0

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Lab File ID: GBFBI08Z.D BFB Injection Date: 09/08/2020

Instrument ID: MG BFB Injection Time: 14:50

Analysis Batch No.: 42503

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	39.4	
75	30.0 - 60.0 % of mass 95	57.1	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.4	
173	Less than 2.0 % of mass 174	0.5	(0.7) 1
174	Greater than 50% of mass 95	68.9	
175	5.0 - 9.0 % of mass 174	4.7	(6.8) 1
176	95.0 - 101.0 % of mass 174	67.9	(98.5) 1
177	5.0 - 9.0 % of mass 176	4.6	(6.8) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 140-42503/2	GCCVI08Z.D	09/08/2020	15:52
	LCS 140-42503/1002	GCCVI08Z-LCS.	09/08/2020	15:52
	MB 140-42503/5	G500BI08.D	09/08/2020	17:16
SV-102-C-29 DL	140-20175-3 DL	GI08P102.D	09/08/2020	18:03
SV-DUP1-C-29 DL	140-20175-6 DL	GI08P103.D	09/08/2020	18:49
SV-126-C-29	140-20175-17	GI08P104R.D	09/09/2020	7:56

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Lab Sample ID: CCVIS 140-42503/2 Calibration Date: 09/08/2020 15:52

Instrument ID: MG Calib Start Date: 09/01/2020 18:07

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 09/02/2020 03:27

Lab File ID: GCCVI08Z.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorodifluoromethane	Ave	4.301	4.660		1.73	1.60	8.4	30.0
Propene	Ave	2.115	2.251		1.70	1.60	6.4	30.0
Dichlorodifluoromethane	Ave	4.809	4.437		1.48	1.60	-7.7	30.0
Chloromethane	Ave	0.8610	0.9690		1.80	1.60	12.5	30.0
1,2-Dichloro-1,1,2,2-tetrafluoroethane	Ave	2.743	2.370		1.38	1.60	-13.6	30.0
Acetaldehyde	Ave	1.013	0.9793		7.74	8.00	-3.3	30.0
Vinyl chloride	Ave	2.404	2.601		1.73	1.60	8.2	30.0
1,3-Butadiene	Ave	2.119	2.538		1.92	1.60	19.8	30.0
Butane	Ave	4.304	5.403		2.01	1.60	25.5	30.0
Bromomethane	Ave	1.452	1.393		1.54	1.60	-4.0	30.0
Chloroethane	Ave	0.997	1.078		1.73	1.60	8.1	30.0
Ethanol	Ave	0.9079	0.9203		8.11	8.00	1.4	30.0
Vinyl bromide	Ave	1.239	1.240		1.60	1.60	0.1	30.0
2-Methylbutane	Ave	2.923	4.127		2.26	1.60	41.2*	30.0
Trichlorofluoromethane	Ave	3.737	3.635		1.56	1.60	-2.7	30.0
Acrolein	Ave	0.4464	0.7566		2.71	1.60	69.5*	30.0
Acetonitrile	Ave	0.7987	0.9470		1.90	1.60	18.6	30.0
Acetone	Ave	0.7999	0.8371		1.67	1.60	4.6	30.0
Isopropyl alcohol	Ave	2.389	4.008		2.68	1.60	67.8*	30.0
Pentane	Ave	0.2430	0.2564		1.69	1.60	5.5	30.0
Ethyl ether	Ave	1.710	2.538		2.37	1.60	48.4*	30.0
1,1-Dichloroethene	Ave	1.183	1.139		1.54	1.60	-3.8	30.0
Acrylonitrile	Ave	1.092	1.355		1.99	1.60	24.1	30.0
tert-Butyl alcohol	Ave	2.412	2.757		1.83	1.60	14.3	30.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	2.736	2.480		1.45	1.60	-9.4	30.0
Methylene Chloride	Ave	1.184	1.141		1.54	1.60	-3.6	30.0
3-Chloropropene	Ave	2.320	2.286		1.58	1.60	-1.5	30.0
Carbon disulfide	Ave	3.977	3.826		1.54	1.60	-3.8	30.0
trans-1,2-Dichloroethene	Ave	1.393	1.255		1.44	1.60	-9.9	30.0
2-Methylpentane	Ave	5.433	5.558		1.64	1.60	2.3	30.0
Methyl tert-butyl ether	Ave	2.883	2.746		1.52	1.60	-4.8	30.0
1,1-Dichloroethane	Ave	3.473	3.571		1.65	1.60	2.8	30.0
Vinyl acetate	Ave	4.548	5.485		1.93	1.60	20.6	30.0
2-Butanone (MEK)	Ave	0.5774	0.5047		1.40	1.60	-12.6	30.0
Hexane	Ave	1.792	1.837		1.64	1.60	2.5	30.0
Isopropyl ether	Ave	5.977	6.502		1.74	1.60	8.8	30.0
cis-1,2-Dichloroethene	Ave	1.481	1.376		1.49	1.60	-7.1	30.0
Ethyl acetate	Ave	3.981	3.754		1.51	1.60	-5.7	30.0
Chloroform	Ave	3.366	3.143		1.49	1.60	-6.6	30.0
Tert-butyl ethyl ether	Ave	5.017	4.491		1.43	1.60	-10.5	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Lab Sample ID: CCVIS 140-42503/2 Calibration Date: 09/08/2020 15:52

Instrument ID: MG Calib Start Date: 09/01/2020 18:07

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 09/02/2020 03:27

Lab File ID: GCCVI08Z.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Tetrahydrofuran	Ave	1.997	2.257		1.81	1.60	13.0	30.0
1,1,1-Trichloroethane	Ave	3.240	2.933		1.45	1.60	-9.5	30.0
1,2-Dichloroethane	Ave	0.5421	0.4958		1.46	1.60	-8.5	30.0
1-Butanol	Ave	0.1535	0.1925		2.01	1.60	25.4	30.0
Benzene	Ave	0.9867	0.8682		1.41	1.60	-12.0	30.0
Cyclohexane	Ave	0.1661	0.1517		1.46	1.60	-8.7	30.0
Carbon tetrachloride	Ave	0.6099	0.5775		1.51	1.60	-5.3	30.0
2,3-Dimethylpentane	Ave	0.2548	0.2258		1.42	1.60	-11.4	30.0
Thiophene	Ave	0.5655	0.4913		1.39	1.60	-13.1	30.0
2,2,4-Trimethylpentane	Ave	2.414	2.458		1.63	1.60	1.8	30.0
Heptane	Ave	0.3880	0.3683		1.52	1.60	-5.1	30.0
1,2-Dichloropropane	Ave	0.4494	0.4276		1.52	1.60	-4.9	30.0
Trichloroethene	Ave	0.4302	0.3391		1.26	1.60	-21.2	30.0
Dibromomethane	Ave	0.4239	0.3702		1.40	1.60	-12.7	30.0
Bromodichloromethane	Ave	0.7367	0.6819		1.48	1.60	-7.4	30.0
1,4-Dioxane	Ave	0.1151	0.0850		1.18	1.60	-26.2	30.0
Methyl methacrylate	Ave	0.5088	0.4786		1.51	1.60	-5.9	30.0
Methylcyclohexane	Ave	0.6505	0.7027		1.73	1.60	8.0	30.0
4-Methyl-2-pentanone (MIBK)	Ave	0.8567	0.9404		1.76	1.60	9.8	30.0
cis-1,3-Dichloropropene	Ave	0.5917	0.5272		1.43	1.60	-10.9	30.0
trans-1,3-Dichloropropene	Ave	0.4924	0.4286		1.39	1.60	-13.0	30.0
Toluene	Ave	1.059	0.9047		1.37	1.60	-14.5	30.0
1,1,2-Trichloroethane	Ave	0.3318	0.2815		1.36	1.60	-15.2	30.0
2-Hexanone	Ave	0.3922	0.4111		1.68	1.60	4.8	30.0
Octane	Ave	0.3858	0.3366		1.40	1.60	-12.8	30.0
Dibromochloromethane	Ave	0.6238	0.5356		1.37	1.60	-14.1	30.0
1,2-Dibromoethane (EDB)	Ave	0.5955	0.4728		1.27	1.60	-20.6	30.0
Tetrachloroethene	Ave	0.3991	0.3090		1.24	1.60	-22.6	30.0
Chlorobenzene	Ave	0.8562	0.7283		1.36	1.60	-14.9	30.0
2,3-Dimethylheptane	Ave	1.832	1.647		1.44	1.60	-10.1	30.0
Ethylbenzene	Ave	1.361	1.182		1.39	1.60	-13.1	30.0
m-Xylene & p-Xylene	Ave	1.076	0.9181		2.73	3.20	-14.7	30.0
Nonane	Ave	1.062	1.001		1.51	1.60	-5.7	30.0
Bromoform	Ave	0.5248	0.4385		1.34	1.60	-16.4	30.0
Styrene	Ave	0.7824	0.7032		1.44	1.60	-10.1	30.0
o-Xylene	Ave	1.089	0.9336		1.37	1.60	-14.3	30.0
1,1,2,2-Tetrachloroethane	Ave	0.8691	0.7703		1.42	1.60	-11.4	30.0
1,2,3-Trichloropropane	Ave	0.2125	0.1785		1.34	1.60	-16.0	30.0
Isopropylbenzene	Ave	1.431	1.233		1.38	1.60	-13.9	30.0
Propylbenzene	Ave	0.3821	0.3183		1.33	1.60	-16.7	30.0
2-Chlorotoluene	Ave	0.3660	0.3254		1.42	1.60	-11.1	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Lab Sample ID: CCVIS 140-42503/2 Calibration Date: 09/08/2020 15:52

Instrument ID: MG Calib Start Date: 09/01/2020 18:07

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 09/02/2020 03:27

Lab File ID: GCCVI08Z.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Ethyltoluene	Ave	1.429	1.131		1.27	1.60	-20.8	30.0
1,3,5-Trimethylbenzene	Ave	0.5712	0.5197		1.46	1.60	-9.0	30.0
Alpha Methyl Styrene	Ave	0.5644	0.4834		1.37	1.60	-14.4	30.0
Decane	Ave	1.287	1.216		1.51	1.60	-5.5	30.0
tert-Butylbenzene	Ave	1.256	0.9771		1.24	1.60	-22.2	30.0
1,2,4-Trimethylbenzene	Ave	1.249	0.9803		1.26	1.60	-21.5	30.0
sec-Butylbenzene	Ave	1.884	1.500		1.27	1.60	-20.4	30.0
1,3-Dichlorobenzene	Ave	0.8900	0.6658		1.20	1.60	-25.2	30.0
Benzyl chloride	Ave	1.177	1.006		1.37	1.60	-14.5	30.0
1,4-Dichlorobenzene	Ave	0.9015	0.6719		1.19	1.60	-25.5	30.0
4-Isopropyltoluene	Ave	1.459	1.108		1.22	1.60	-24.1	30.0
1,2,3-Trimethylbenzene	QuaF		0.7290		1.09	1.60	-31.7*	30.0
Butylcyclohexane	Ave	1.221	1.016		1.33	1.60	-16.8	30.0
Indane	Ave	1.248	0.9549		1.22	1.60	-23.5	30.0
1,2-Dichlorobenzene	Ave	0.8529	0.6594		1.24	1.60	-22.7	30.0
Indene	Ave	1.069	0.7312		1.09	1.60	-31.6*	30.0
Butylbenzene	Ave	1.654	1.329		1.29	1.60	-19.7	30.0
Undecane	Ave	1.437	1.257		1.40	1.60	-12.5	30.0
1,2-Dibromo-3-Chloropropane	QuaF		0.2527		1.10	1.60	-31.2*	30.0
1,2,4,5-Tetramethylbenzene	QuaF		0.9358		1.31	1.60	-17.8	30.0
Dodecane	Ave	1.254	1.153		1.47	1.60	-8.1	30.0
1,2,4-Trichlorobenzene	Ave	0.7511	0.5314		1.13	1.60	-29.2	30.0
Naphthalene	Ave	1.812	1.327		1.17	1.60	-26.8	30.0
Hexachlorobutadiene	Ave	0.6345	0.4730		1.19	1.60	-25.4	30.0
1,2,3-Trichlorobenzene	Ave	0.7230	0.5211		1.15	1.60	-27.9	30.0
2-Methylnaphthalene	Ave	0.7792	0.7539		1.55	1.60	-3.3	50.0
1-Methylnaphthalene	Ave	0.7933	0.7903		1.59	1.60	-0.4	50.0
4-Bromofluorobenzene (Surr)	Ave	0.7532	0.7870		4.85	4.64	4.5	30.0

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Lab File ID: HBFBH29.D BFB Injection Date: 08/29/2020

Instrument ID: MH BFB Injection Time: 10:00

Analysis Batch No.: 42290

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	23.2	
75	30.0 - 60.0 % of mass 95	49.8	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.8	
173	Less than 2.0 % of mass 174	0.6	(0.7) 1
174	Greater than 50% of mass 95	89.4	
175	5.0 - 9.0 % of mass 174	6.5	(7.3) 1
176	95.0 - 101.0 % of mass 174	87.1	(97.4) 1
177	5.0 - 9.0 % of mass 176	5.7	(6.5) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 140-42290/3	HH29IC10.D	08/29/2020	12:34
	IC 140-42290/5	HH29IC09.D	08/29/2020	14:25
	IC 140-42290/7	HH29IC08.D	08/29/2020	16:25
	IC 140-42290/9	HH29IC01.D	08/29/2020	18:16
	IC 140-42290/10	HH29IC02.D	08/29/2020	19:13
	IC 140-42290/11	HH29IC03.D	08/29/2020	20:11
	IC 140-42290/12	HH29IC04.D	08/29/2020	21:03
	IC 140-42290/13	HH29IC05.D	08/29/2020	21:58
	IC 140-42290/14	HH29IC06.D	08/29/2020	22:57
	ICIS 140-42290/15	HH29IC07.D	08/29/2020	23:57
	ICV 140-42290/18	HH29LCS.D	08/30/2020	2:47

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1 Analy Batch No.: 42290

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/29/2020 12:34 Calibration End Date: 08/29/2020 23:57 Calibration ID: 2592

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 140-42290/9	HH29IC01.D
Level 2	IC 140-42290/10	HH29IC02.D
Level 3	IC 140-42290/11	HH29IC03.D
Level 4	IC 140-42290/12	HH29IC04.D
Level 5	IC 140-42290/13	HH29IC05.D
Level 6	IC 140-42290/14	HH29IC06.D
Level 7	ICIS 140-42290/15	HH29IC07.D
Level 8	IC 140-42290/7	HH29IC08.D
Level 9	IC 140-42290/5	HH29IC09.D
Level 10	IC 140-42290/3	HH29IC10.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Chlorodifluoromethane	+++++ 2.7055	+++++ 2.6133	3.4173 2.4773	2.8362 2.3638	2.7135 2.3014	Ave		2.6785				13.1		30.0			
Propene	+++++ 1.2455	+++++ 1.1794	+++++ 1.1222	+++++ 1.0487	1.2046 1.0659	Ave		1.1444				6.9		30.0			
Dichlorodifluoromethane	+++++ 3.7367	+++++ 3.7564	4.2037 3.5581	3.9703 2.7867	3.7783 3.2382	Ave		3.6285				12.2		30.0			
Chloromethane	+++++ 0.5127	+++++ 0.5118	+++++ 0.4596	0.5380 0.4000	0.5470 0.3674	Ave		0.4766				14.7		30.0			
1,2-Dichloro-1,1,2,2-tetrafluoroethane	+++++ 2.9877	+++++ 2.7959	3.2885 2.7391	3.2420 2.4960	3.0064 2.6296	Ave		2.8982				9.8		30.0			
Vinyl chloride	1.7873 1.6144	1.8695 1.5602	1.9103 1.4490	1.6595 1.2848	1.6154 1.2032	Ave		1.5954				14.6		30.0			
Butane	+++++ 2.3867	+++++ 2.4155	+++++ 2.1618	2.3074 1.9057	2.4206 1.6706	Ave		2.1812				13.3		30.0			
1,3-Butadiene	+++++ 1.1774	+++++ 1.1465	+++++ 1.0761	1.2028 0.9453	1.1764 0.8821	Ave		1.0867				11.6		30.0			
Bromomethane	+++++ 1.5739	+++++ 1.5439	2.0317 1.4379	1.5846 1.2654	1.6586 1.2286	Ave		1.5406				16.3		30.0			
Chloroethane	+++++ 0.6907	+++++ 0.6738	0.9193 0.6224	0.7437 0.5388	0.7005 0.5001	Ave		0.6737				19.2		30.0			
Ethanol	+++++ 0.7845	+++++ 0.9095	+++++ 0.7809	0.7532 0.8165	0.8148 0.5491	Ave		0.7726				14.3		30.0			
Vinyl bromide	+++++ 1.2798	1.3352 1.2694	1.4263 1.2825	1.2693 1.1540	1.3043 1.2354	Ave		1.2840				5.7		30.0			
2-Methylbutane	+++++ 1.6662	1.8377 1.6690	1.9496 1.6417	1.7086 1.4854	1.6132 1.5623	Ave		1.6815				8.3		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1 Analy Batch No.: 42290

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/29/2020 12:34 Calibration End Date: 08/29/2020 23:57 Calibration ID: 2592

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Trichlorofluoromethane	+++++ 3.4997	+++++ 3.4683	4.1168 3.3912	3.6804 3.1171	3.6481 3.3569	Ave		3.5348				8.3		30.0			
Acrolein	+++++ 0.3293	+++++ 0.3359	0.4055 0.4067	0.4056 0.3724	0.3317 0.3998	Lin1	-0.005	0.3879							0.9970		0.9900
Acetonitrile	+++++ 0.6616	+++++ 0.7202	+++++ 0.6820	0.6370 0.6220	0.7799 0.6271	Ave		0.6757				8.5		30.0			
Acetone	+++++ 0.8548	+++++ 0.7750	+++++ 0.6482	+++++ 0.7691	0.8359 0.5956	Ave		0.7464				13.9		30.0			
Pentane	+++++ 0.1775	+++++ 0.1759	0.1172 0.1687	0.1468 0.1515	0.1590 0.1568	Ave		0.1567				12.4		30.0			
Isopropyl alcohol	2.0200 1.7223	1.7659 1.9942	1.7685 1.9544	1.7938 1.8109	1.7172 1.8953	Ave		1.8442				6.1		30.0			
Ethyl ether	+++++ 1.5445	1.6582 1.6027	1.4358 1.6309	1.5079 1.4897	1.4064 1.5818	Ave		1.5398				5.6		30.0			
1,1-Dichloroethene	+++++ 1.1304	1.2419 1.1553	1.1621 1.2092	1.1867 1.1118	1.0808 1.1941	Ave		1.1636				4.3		30.0			
Acrylonitrile	+++++ 1.0013	1.0778 1.0766	0.9669 1.0679	1.0503 0.9586	0.9959 1.0166	Ave		1.0235				4.5		30.0			
tert-Butyl alcohol	+++++ 1.7110	1.8603 1.9553	1.9674 2.0796	1.8294 1.9515	1.6805 2.0862	Ave		1.9024				7.6		30.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	+++++ 2.9548	3.2652 2.9270	3.4016 2.8617	3.0642 2.5989	3.1091 2.8034	Ave		2.9984				8.1		30.0			
Methylene Chloride	+++++ 1.1853	+++++ 1.1753	+++++ 1.1585	1.2554 1.0871	1.2838 1.0915	Ave		1.1767				6.3		30.0			
3-Chloropropene	+++++ 1.0940	+++++ 1.1188	1.3944 1.1878	1.2931 1.1146	1.1655 1.2774	Ave		1.2057				8.8		30.0			
Carbon disulfide	+++++ 3.7487	4.1379 3.8002	4.0389 3.7839	3.7726 3.3931	3.7879 3.5723	Ave		3.7817				5.8		30.0			
trans-1,2-Dichloroethene	+++++ 1.2025	1.2337 1.2302	1.2296 1.2714	1.2008 1.1522	1.1882 1.2283	Ave		1.2152				2.8		30.0			
2-Methylpentane	+++++ 2.9073	+++++ 3.0918	2.5445 3.1447	2.8000 2.8906	2.7099 3.0978	Ave		2.8983				7.2		30.0			
Methyl tert-butyl ether	+++++ 2.4539	+++++ 2.6104	+++++ 2.8096	2.3468 2.6114	2.2261 2.8991	Ave		2.5653				9.4		30.0			
1,1-Dichloroethane	+++++ 2.3589	+++++ 2.4022	2.6392 2.3824	2.5463 2.1792	2.4463 2.3517	Ave		2.4133				5.7		30.0			
Vinyl acetate	+++++ 2.8453	+++++ 3.1704	+++++ 3.5025	2.6214 3.2862	2.5279 3.7316	Ave		3.0979				14.6		30.0			
2-Butanone (MEK)	+++++ 0.6082	+++++ 0.5881	+++++ 0.5856	0.5879 0.5694	0.5982 0.5777	Ave		0.5879				2.2		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1 Analy Batch No.: 42290

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/29/2020 12:34 Calibration End Date: 08/29/2020 23:57 Calibration ID: 2592

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Hexane	+++++ 1.0080	0.9773 1.0550	1.0130 1.0448	0.9838 0.9870	0.9509 1.0318	Ave		1.0057				3.4		30.0			
cis-1,2-Dichloroethene	+++++ 1.2006	1.3116 1.2181	1.2071 1.2852	1.1877 1.1989	1.1672 1.2990	Ave		1.2306				4.3		30.0			
Ethyl acetate	+++++ 2.9537	3.2426 3.0946	3.0860 3.2045	3.0580 2.9864	2.8380 3.2849	Ave		3.0832				4.7		30.0			
Chloroform	+++++ 2.8096	3.2252 2.8206	3.2462 2.8108	2.9724 2.5718	2.9615 2.8168	Ave		2.9150				7.4		30.0			
Tetrahydrofuran	+++++ 1.4066	1.3660 1.5320	1.3295 1.5894	1.3844 1.4788	1.3361 1.6073	Ave		1.4478				7.4		30.0			
1,1,1-Trichloroethane	+++++ 2.5370	2.7730 2.5666	2.8490 2.6074	2.6261 2.4100	2.6714 2.7422	Ave		2.6425				5.1		30.0			
1,2-Dichloroethane	+++++ 0.4161	0.5015 0.4090	0.4638 0.4108	0.4474 0.3989	0.4303 0.4502	Ave		0.4365				7.5		30.0			
1-Butanol	+++++ 0.1165	+++++ 0.1336	+++++ 0.1377	+++++ 0.1423	0.1277 0.1580	Ave		0.1360				10.3		30.0			
Cyclohexane	+++++ 0.1198	+++++ 0.1249	+++++ 0.1277	0.1004 0.1227	0.1139 0.1347	Ave		0.1206				9.1		30.0			
Benzene	+++++ 0.8717	+++++ 0.8688	0.9571 0.8628	0.8914 0.8210	0.8833 0.8951	Ave		0.8814				4.3		30.0			
Carbon tetrachloride	0.5108 0.5438	0.5330 0.4095	0.5691 0.6501	0.5793 0.4135	0.6039 0.6426	Ave		0.5456				15.3		30.0			
2,3-Dimethylpentane	+++++ 0.1708	+++++ 0.1774	0.1466 0.1831	0.1419 0.1757	0.1521 0.1876	Ave		0.1669				10.5		30.0			
Thiophene	+++++ 0.4580	+++++ 0.4695	0.4528 0.4902	0.4129 0.4728	0.4335 0.5188	Ave		0.4636				7.1		30.0			
2,2,4-Trimethylpentane	+++++ 1.3767	1.2986 1.4447	1.2613 1.4999	1.1363 1.4507	1.2859 1.5790	Ave		1.3703				10.0		30.0			
Heptane	+++++ 0.2507	+++++ 0.2627	+++++ 0.2778	0.1771 0.2716	0.2236 0.2949	Ave		0.2512				15.8		30.0			
1,2-Dichloropropane	+++++ 0.3611	0.3921 0.3664	0.4016 0.3701	0.3866 0.3598	0.3648 0.3925	Ave		0.3772				4.2		30.0			
Trichloroethene	0.4333 0.3724	0.4130 0.3723	0.3957 0.3910	0.3650 0.4321	0.3607 0.4274	Ave		0.3963				7.2		30.0			
Dibromomethane	+++++ 0.4361	+++++ 0.3943	+++++ 0.4009	0.4554 0.3985	0.4038 0.4475	Ave		0.4195				6.2		30.0			
Bromodichloromethane	0.6294 0.5862	0.5994 0.6091	0.6386 0.6497	0.5894 0.6277	0.5998 0.7176	Ave		0.6247				6.3		30.0			
1,4-Dioxane	+++++ 0.1088	+++++ 0.1402	+++++ 0.1440	0.0949 0.1381	0.1070 0.1457	Ave		0.1255				16.9		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1 Analy Batch No.: 42290

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/29/2020 12:34 Calibration End Date: 08/29/2020 23:57 Calibration ID: 2592

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Methyl methacrylate	+++++ 0.4015	+++++ 0.4210	0.4173 0.4469	0.3162 0.4328	0.3641 0.4756	Ave		0.4094				12.2		30.0			
Methylcyclohexane	+++++ 0.4388	+++++ 0.4675	0.3567 0.5019	0.3227 0.4863	0.3660 0.5253	Lin1	-0.026	0.5093							0.9980		0.9900
4-Methyl-2-pentanone (MIBK)	+++++ 0.7878	0.8746 0.8200	0.7030 0.8472	0.6829 0.8431	0.6160 0.9050	Ave		0.7866				12.4		30.0			
cis-1,3-Dichloropropene	0.4198 0.4295	0.3993 0.4424	0.3681 0.4700	0.3727 0.4805	0.3526 0.5444	Ave		0.4279				13.8		30.0			
trans-1,3-Dichloropropene	+++++ 0.4260	0.4080 0.4418	0.3705 0.4908	0.3941 0.5133	0.3133 0.5954	Ave		0.4392				19.1		30.0			
Toluene	+++++ 1.2601	1.2066 1.3006	1.2235 1.3441	1.0657 1.3045	1.0583 1.3667	Ave		1.2367				9.0		30.0			
1,1,2-Trichloroethane	+++++ 0.4421	+++++ 0.4441	0.4803 0.4351	0.4483 0.4076	0.4571 0.4404	Ave		0.4444				4.6		30.0			
2-Hexanone	+++++ 0.3858	+++++ 0.4326	+++++ 0.4558	0.2776 0.4485	0.2517 0.5036	Ave		0.3937				24.1		30.0			
Octane	+++++ 0.3553	+++++ 0.3811	+++++ 0.3933	0.2316 0.3675	0.2819 0.4047	Ave		0.3450				18.6		30.0			
C8 Range	+++++ 3.1573	+++++ 3.2462	+++++ 3.2801	+++++ 3.2149	2.7086 3.5763	Ave		3.1972				8.8		30.0			
Dibromochloromethane	0.6546 0.6509	0.6558 0.7687	0.6791 0.8540	0.6591 0.7744	0.6935 0.9490	Ave		0.7339				13.9		30.0			
1,2-Dibromoethane (EDB)	0.7544 0.6217	0.6964 0.6241	0.5894 0.6594	0.6677 0.6710	0.5662 0.8020	Ave		0.6652				10.8		30.0			
Tetrachloroethene	0.5714 0.4879	0.5262 0.4977	0.5628 0.5126	0.4947 0.4884	0.4911 0.5510	Ave		0.5184				6.3		30.0			
Chlorobenzene	+++++ 0.9716	+++++ 0.9844	1.0329 0.9914	1.0019 0.9321	1.0223 1.0762	Ave		1.0016				4.3		30.0			
Ethylbenzene	1.5785 1.4962	1.4684 1.5829	1.3909 1.6686	1.1901 1.5737	1.2383 1.7796	Ave		1.4967				12.2		30.0			
m-Xylene & p-Xylene	1.1967 1.1962	1.0298 1.2777	1.0159 1.3281	0.9436 1.2680	1.0880 1.4862	Ave		1.1830				14.0		30.0			
Nonane	+++++ 0.8542	+++++ 0.9145	+++++ 0.9462	0.5962 0.9084	0.7075 1.0313	Ave		0.8512				17.6		30.0			
Bromoform	0.4185 0.3621	0.3850 0.6034	0.3917 0.7563	0.4488 +++++	0.4598 +++++	QuaF		0.3745	0.0961863						0.9980		0.9900
Styrene	+++++ 0.7392	+++++ 0.8288	0.5299 0.9084	0.5286 0.8821	0.6138 +++++	Ave		0.7187				22.6		30.0			
o-Xylene	+++++ 1.2464	1.1840 1.3067	1.1076 1.3521	1.0587 1.2666	1.1918 1.4374	Ave		1.2390				9.6		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1 Analy Batch No.: 42290

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/29/2020 12:34 Calibration End Date: 08/29/2020 23:57 Calibration ID: 2592

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
1,1,2,2-Tetrachloroethane	+++++ 1.0743	+++++ 1.0946	1.1993 1.0639	1.2054 0.8526	1.1482 1.1332	Ave		1.0964				10.2		30.0			
1,2,3-Trichloropropane	+++++ 0.2413	0.2644 0.2435	0.2540 0.2439	0.2567 0.2233	0.2427 0.2640	Ave		0.2482				5.2		30.0			
Isopropylbenzene	+++++ 1.5898	1.6136 1.7042	1.1288 1.7866	1.2884 1.6697	1.3313 1.9874	Ave		1.5667				17.2		30.0			
Propylbenzene	+++++ 0.4042	+++++ 0.4452	+++++ 0.4665	0.3276 0.4339	0.3240 0.5387	Ave		0.4200				18.2		30.0			
2-Chlorotoluene	+++++ 0.3810	+++++ 0.4108	+++++ 0.4223	0.3547 0.3849	0.3872 0.4701	Ave		0.4016				9.3		30.0			
4-Ethyltoluene	+++++ 1.4865	+++++ 1.6384	+++++ 1.7505	1.1820 1.5660	1.4387 1.9506	Ave		1.5732				15.5		30.0			
1,3,5-Trimethylbenzene	+++++ 0.6401	+++++ 0.7166	0.4384 0.7256	0.5526 0.6505	0.6648 0.8121	Lin1	-0.036	0.7537							0.9910		0.9900
Alpha Methyl Styrene	+++++ 0.5198	+++++ 0.6458	+++++ 0.6857	0.4073 0.6079	0.3977 +++++	Ave		0.5440				22.5		30.0			
Decane	+++++ 1.1794	+++++ 1.2671	+++++ 1.2589	+++++ 1.1749	1.2088 1.3795	Ave		1.2448				6.1		30.0			
tert-Butylbenzene	+++++ 1.5059	+++++ 1.6813	+++++ 1.6720	1.2811 1.5401	1.5547 1.9269	Ave		1.5946				12.4		30.0			
1,2,4-Trimethylbenzene	+++++ 1.4308	+++++ 1.5594	0.9977 1.5184	1.2515 1.3957	1.5472 1.7572	Ave		1.4322				15.9		30.0			
sec-Butylbenzene	+++++ 2.0544	+++++ 2.2913	+++++ 2.2519	1.7213 2.0088	1.9453 2.5087	Ave		2.1117				12.3		30.0			
1,3-Dichlorobenzene	+++++ 0.6744	+++++ 0.7630	0.5723 0.7869	0.6757 0.7537	0.6956 1.0262	Ave		0.7435				17.8		30.0			
Benzyl chloride	+++++ 0.5965	+++++ 0.8377	+++++ 0.8757	0.5101 0.8718	0.5402 +++++	Lin1	-0.096	0.8755							0.9950		0.9900
1,4-Dichlorobenzene	+++++ 0.5451	0.4496 0.6379	0.3789 0.6959	0.4954 0.6868	0.4983 +++++	Ave		0.5485				21.0		30.0			
4-Isopropyltoluene	+++++ 1.8294	+++++ 2.0580	0.9462 1.9698	1.3130 1.6893	1.7718 2.0975	Ave		1.7094				23.2		30.0			
1,2,3-Trimethylbenzene	+++++ 1.4294	+++++ 1.5408	0.9821 1.4515	1.2191 1.2701	1.5076 1.6067	Ave		1.3759				15.0		30.0			
Indane	+++++ 1.1354	+++++ 1.2527	0.7558 1.2305	1.0301 1.1346	1.1008 1.4807	Ave		1.1401				18.1		30.0			
1,2-Dichlorobenzene	0.9523 0.7714	0.7900 0.8237	0.6887 0.7936	0.8221 0.7418	0.8326 0.9898	Ave		0.8206				11.0		30.0			
Butylbenzene	+++++ 1.9322	+++++ 2.1536	+++++ 1.9888	1.4314 1.7204	1.9128 2.0980	Ave		1.8910				13.0		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1 Analy Batch No.: 42290

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/29/2020 12:34 Calibration End Date: 08/29/2020 23:57 Calibration ID: 2592

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Indene	+++++ 0.9711	+++++ 1.0654	+++++ 0.9911	0.8038 0.8419	0.9727 1.1970	Ave		0.9776				13.5		30.0			
Undecane	+++++ 1.3782	+++++ 1.5245	+++++ 1.4385	+++++ 1.3412	1.2044 1.6345	Ave		1.4202				10.5		30.0			
1,2-Dibromo-3-Chloropropane	+++++ 0.3687	+++++ 0.5347	0.2516 0.5090	0.3511 0.4216	0.3755 0.5438	Ave		0.4195				24.5		30.0			
1,2,4,5-Tetramethylbenzene	+++++ 1.5935	+++++ 1.8239	0.5811 1.8233	1.0074 1.6457	1.1795 +++++	Lin1	-0.108	1.7348							0.9960		0.9900
Dodecane	+++++ 1.0696	+++++ 1.0645	+++++ 1.0349	+++++ 1.2145	0.6204 +++++	Ave		1.0008				22.4		30.0			
1,2,4-Trichlorobenzene	+++++ 0.3142	+++++ 0.3577	0.1451 0.4022	0.2191 0.4125	0.2199 +++++	Lin1	-0.032	0.4028							0.9940		0.9900
Naphthalene	0.9418 0.9413	0.5365 1.0963	0.3423 1.1573	0.6009 1.0956	0.5838 +++++	QuaF		1.1293	-0.003652						0.9980		0.9900
Hexachlorobutadiene	+++++ 0.8071	+++++ 0.7669	0.8537 0.6872	0.9582 0.6153	0.8167 0.7764	Ave		0.7852				13.2		30.0			
1,2,3-Trichlorobenzene	+++++ 0.4407	+++++ 0.4530	+++++ 0.4697	0.3501 0.4927	0.3083 0.7127	Ave		0.4610				28.1		30.0			
2-Methylnaphthalene	+++++ 0.0479	+++++ 0.0574	+++++ 0.0895	+++++ 0.2206	+++++ 0.4797	Ave		0.1790				01.5	*	50.0			
1-Methylnaphthalene	+++++ 0.0870	+++++ 0.0863	+++++ 0.1078	+++++ 0.2461	+++++ 0.5059	Ave		0.2066				87.1	*	50.0			
4-Bromofluorobenzene (Surr)	0.4842 0.5620	0.4989 0.5844	0.4590 0.6018	0.5397 0.6213	0.5523 0.6736	Ave		0.5577				11.8		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1 Analy Batch No.: 42290

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/29/2020 12:34 Calibration End Date: 08/29/2020 23:57 Calibration ID: 2592

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 140-42290/9	HH29IC01.D
Level 2	IC 140-42290/10	HH29IC02.D
Level 3	IC 140-42290/11	HH29IC03.D
Level 4	IC 140-42290/12	HH29IC04.D
Level 5	IC 140-42290/13	HH29IC05.D
Level 6	IC 140-42290/14	HH29IC06.D
Level 7	ICIS 140-42290/15	HH29IC07.D
Level 8	IC 140-42290/7	HH29IC08.D
Level 9	IC 140-42290/5	HH29IC09.D
Level 10	IC 140-42290/3	HH29IC10.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
Chlorodifluoromethane	CBM	Ave	+++++ 71178	+++++ 135250	6531 291670	11434 564270	26384 1170804	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Propene	CBM	Ave	+++++ 32766	+++++ 61039	+++++ 132120	+++++ 250332	11713 542250	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
Dichlorodifluoromethane	CBM	Ave	+++++ 98306	+++++ 194412	8034 418915	16006 665212	36737 1647380	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Chloromethane	CBM	Ave	+++++ 13487	+++++ 26488	+++++ 54109	2169 95475	5319 186886	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,2-Dichloro-1,1,2,2-tetrafluoroethane	CBM	Ave	+++++ 78601	+++++ 144701	6285 322487	13070 595826	29232 1337769	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Vinyl chloride	CBM	Ave	932 42471	1823 80749	3651 170593	6690 306691	15707 612100	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Butane	CBM	Ave	+++++ 62791	+++++ 125013	+++++ 254521	9302 454922	23536 849872	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,3-Butadiene	CBM	Ave	+++++ 30976	+++++ 59336	+++++ 126693	4849 225651	11438 448776	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Bromomethane	CBM	Ave	+++++ 41408	+++++ 79903	3883 169287	6388 302073	16127 625059	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Chloroethane	CBM	Ave	+++++ 18172	+++++ 34873	1757 73280	2998 128615	6811 254400	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Ethanol	CBM	Ave	+++++ 103194	+++++ 235349	+++++ 459695	15182 974505	39613 1396709	+++++ 5.00	+++++ 10.0	+++++ 20.0	0.800 40.0	2.00 80.0
Vinyl bromide	CBM	Ave	+++++ 33670	1302 65698	2726 150998	5117 275481	12682 628508	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Methylbutane	CBM	Ave	+++++ 43836	1792 86376	3726 193291	6888 354580	15686 794816	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Trichlorofluoromethane	CBM	Ave	+++++ 92071	+++++ 179500	7868 399259	14837 744095	35471 1707786	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1 Analy Batch No.: 42290

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/29/2020 12:34 Calibration End Date: 08/29/2020 23:57 Calibration ID: 2592

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
Acrolein	CBM	Lin1	+++++ 8663	+++++ 17382	775 47885	1635 88893	3225 203402	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Acetonitrile	CBM	Ave	+++++ 17405	+++++ 37274	+++++ 80296	2568 148489	7583 319051	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Acetone	CBM	Ave	+++++ 67466	+++++ 120332	+++++ 228958	+++++ 550794	24383 908970	+++++ 3.00	+++++ 6.00	+++++ 12.0	+++++ 24.0	1.20 48.0
Pentane	CBM	Ave	+++++ 4670	+++++ 9103	224 19860	592 36172	1546 79750	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Isopropyl alcohol	CBM	Ave	3160 135930	5166 309623	10140 690311	21694 1296845	50090 2892621	0.0600 3.00	0.120 6.00	0.240 12.0	0.480 24.0	1.20 48.0
Ethyl ether	CBM	Ave	+++++ 40634	1617 82949	2744 192018	6079 355621	13675 804708	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,1-Dichloroethene	CBM	Ave	+++++ 29740	1211 59790	2221 142360	4784 265390	10509 607494	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Acrylonitrile	CBM	Ave	+++++ 26342	1051 55721	1848 125727	4234 228821	9683 517174	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
tert-Butyl alcohol	CBM	Ave	+++++ 45014	1814 101194	3760 244846	7375 465853	16340 1061322	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,1,2-Trichloro-1,2,2-trifluoroetha ne	CBM	Ave	+++++ 77735	3184 151488	6501 336927	12353 620382	30231 1426183	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Methylene Chloride	CBM	Ave	+++++ 31182	+++++ 60826	+++++ 136401	5061 259505	12483 555280	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
3-Chloropropene	CBM	Ave	+++++ 28782	+++++ 57903	2665 139845	5213 266061	11332 649836	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Carbon disulfide	CBM	Ave	+++++ 98622	4035 196676	7719 445503	15209 809975	36831 1817383	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
trans-1,2-Dichloroethene	CBM	Ave	+++++ 31637	1203 63666	2350 149694	4841 275057	11553 624883	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Methylpentane	CBM	Ave	+++++ 76485	+++++ 160016	4863 370246	11288 690025	26349 1575951	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Methyl tert-butyl ether	CBM	Ave	+++++ 64559	+++++ 135102	+++++ 330791	9461 623376	21645 1474857	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,1-Dichloroethane	CBM	Ave	+++++ 62058	+++++ 124325	5044 280496	10265 520203	23786 1196411	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Vinyl acetate	CBM	Ave	+++++ 74856	+++++ 164085	+++++ 412364	10568 784451	24579 1898417	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
2-Butanone (MEK)	CBM	Ave	+++++ 16000	+++++ 30439	+++++ 68948	2370 135925	5816 293914	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Hexane	CBM	Ave	+++++ 26520	953 54603	1936 123014	3966 235600	9246 524911	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
cis-1,2-Dichloroethene	CBM	Ave	+++++ 31585	1279 63040	2307 151318	4788 286195	11349 660849	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1 Analy Batch No.: 42290

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/29/2020 12:34 Calibration End Date: 08/29/2020 23:57 Calibration ID: 2592

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
Ethyl acetate	CBM	Ave	+++++ 77708	3162 160162	5898 377279	12328 712888	27595 1671126	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Chloroform	CBM	Ave	+++++ 73917	3145 145980	6204 330924	11983 613922	28795 1433018	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Tetrahydrofuran	CBM	Ave	+++++ 37004	1332 79287	2541 187127	5581 352999	12991 817677	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,1,1-Trichloroethane	CBM	Ave	+++++ 66743	2704 132832	5445 306983	10587 575307	25975 1395034	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2-Dichloroethane	DFBZ	Ave	+++++ 47284	2085 93346	3781 213048	7312 401489	17988 963858	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1-Butanol	DFBZ	Ave	+++++ 13235	+++++ 30500	+++++ 71434	+++++ 143170	5338 338272	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
Cyclohexane	DFBZ	Ave	+++++ 13610	+++++ 28513	+++++ 66211	1641 123486	4760 288406	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Benzene	DFBZ	Ave	+++++ 99057	+++++ 198272	7802 447438	14569 826207	36921 1916459	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Carbon tetrachloride	DFBZ	Ave	1133 61795	2216 93449	4639 337106	9468 416169	25244 1375702	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2,3-Dimethylpentane	DFBZ	Ave	+++++ 19407	+++++ 40490	1195 94974	2320 176820	6357 401567	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Thiophene	DFBZ	Ave	+++++ 52043	+++++ 107154	3691 254231	6749 475836	18120 1110676	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2,2,4-Trimethylpentane	DFBZ	Ave	+++++ 156443	5399 329728	10282 777814	18572 1459914	53753 3380543	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Heptane	DFBZ	Ave	+++++ 28489	+++++ 59951	+++++ 144047	2894 273309	9346 631336	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,2-Dichloropropane	DFBZ	Ave	+++++ 41034	1630 83631	3274 191949	6318 362074	15250 840266	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Trichloroethene	DFBZ	Ave	961 42319	1717 84978	3226 202744	5965 434833	15077 915128	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Dibromomethane	DFBZ	Ave	+++++ 49560	+++++ 89996	+++++ 207883	7443 401008	16878 958099	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Bromodichloromethane	DFBZ	Ave	1396 66609	2492 139005	5206 336939	9634 631688	25071 1536417	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,4-Dioxane	DFBZ	Ave	+++++ 12361	+++++ 32004	+++++ 74690	1551 138998	4471 311891	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Methyl methacrylate	DFBZ	Ave	+++++ 45630	+++++ 96083	3402 231736	5168 435605	15220 1018216	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Methylcyclohexane	DFBZ	Lin1	+++++ 49859	+++++ 106694	2908 260282	5275 489358	15301 1124722	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
4-Methyl-2-pentanone (MIBK)	DFBZ	Ave	+++++ 89525	3636 187155	5731 439352	11162 848466	25748 1937646	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1 Analy Batch No.: 42290

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/29/2020 12:34 Calibration End Date: 08/29/2020 23:57 Calibration ID: 2592

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
cis-1,3-Dichloropropene	DFBZ	Ave	931 48811	1660 100971	3001 243759	6091 483570	14738 1165499	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
trans-1,3-Dichloropropene	CBZd 5	Ave	+++++ 35446	1225 73899	2144 194299	4654 409325	8657 1033921	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Toluene	CBZd 5	Ave	+++++ 104851	3623 217553	7081 532092	12584 1040202	29243 2373066	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,1,2-Trichloroethane	CBZd 5	Ave	+++++ 36787	+++++ 74295	2780 172251	5294 324985	12630 764760	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Hexanone	CBZd 5	Ave	+++++ 32100	+++++ 72367	+++++ 180452	3278 357602	6955 874521	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Octane	CBZd 5	Ave	+++++ 29562	+++++ 63752	+++++ 155695	2735 293032	7788 702692	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
C8 Range	DFBZ	Ave	+++++ 358784	+++++ 740857	+++++ 1701005	+++++ 3235392	113223 7656734	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
Dibromochloromethane	CBZd 5	Ave	1062 54160	1969 128589	3930 338056	7783 617460	19161 1647856	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2-Dibromoethane (EDB)	CBZd 5	Ave	1224 51730	2091 104398	3411 261015	7884 535038	15646 1392569	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Tetrachloroethene	CBZd 5	Ave	927 40597	1580 83258	3257 202921	5841 389413	13570 956734	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Chlorobenzene	CBZd 5	Ave	+++++ 80847	+++++ 164669	5978 392452	11831 743269	28248 1868757	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Ethylbenzene	CBZd 5	Ave	2561 124500	4409 264773	8050 660533	14053 1254862	34216 3089994	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
m-Xylene & p-Xylene	CBZd 5	Ave	3883 199075	6184 427470	11759 1051498	22284 2022188	60126 5161120	0.0400 2.00	0.0800 4.00	0.160 8.00	0.320 16.0	0.800 32.0
Nonane	CBZd 5	Ave	+++++ 71082	+++++ 152966	+++++ 374564	7040 724315	19548 1790733	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Bromoform	CBZd 5	QuaF	679 30128	1156 100938	2267 299387	5299 +++++	12706 +++++	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 +++++	0.400 +++++
Styrene	CBZd 5	Ave	+++++ 61513	+++++ 138635	3067 359605	6242 703366	16959 +++++	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
o-Xylene	CBZd 5	Ave	+++++ 103713	3555 218585	6410 535239	12502 1010000	32930 2495830	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,1,2,2-Tetrachloroethane	CBZd 5	Ave	+++++ 89392	+++++ 183101	6941 421162	14234 679869	31726 1967574	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2,3-Trichloropropane	CBZd 5	Ave	+++++ 20078	794 40738	1470 96559	3031 178026	6706 458317	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Isopropylbenzene	CBZd 5	Ave	+++++ 132293	4845 285073	6533 707258	15214 1331394	36786 3450814	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Propylbenzene	CBZd 5	Ave	+++++ 33634	+++++ 74473	+++++ 184674	3868 345970	8952 935298	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1 Analy Batch No.: 42290

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/29/2020 12:34 Calibration End Date: 08/29/2020 23:57 Calibration ID: 2592

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
2-Chlorotoluene	CBZd 5	Ave	+++++ 31701	+++++ 68725	+++++ 167167	4189 306918	10698 816298	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
4-Ethyltoluene	CBZd 5	Ave	+++++ 123694	+++++ 274063	+++++ 692968	13957 1248739	39753 3386928	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,3,5-Trimethylbenzene	CBZd 5	Lin1	+++++ 53265	+++++ 119868	2537 287240	6525 518722	18369 1410023	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Alpha Methyl Styrene	CBZd 5	Ave	+++++ 43249	+++++ 108031	+++++ 271429	4809 484735	10989 +++++	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 +++++
Decane	CBZd 5	Ave	+++++ 98138	+++++ 211962	+++++ 498369	+++++ 936873	33400 2395266	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
tert-Butylbenzene	CBZd 5	Ave	+++++ 125306	+++++ 281235	+++++ 661899	15128 1228047	42959 3345761	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,2,4-Trimethylbenzene	CBZd 5	Ave	+++++ 119057	+++++ 260842	5774 601094	14778 1112935	42752 3051181	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
sec-Butylbenzene	CBZd 5	Ave	+++++ 170946	+++++ 383279	+++++ 891452	20326 1601820	53752 4356098	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,3-Dichlorobenzene	CBZd 5	Ave	+++++ 56119	+++++ 127639	3312 311522	7979 600990	19220 1781787	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Benzyl chloride	CBZd 5	Lin1	+++++ 49639	+++++ 140127	+++++ 346656	6023 695153	14926 +++++	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 +++++
1,4-Dichlorobenzene	CBZd 5	Ave	+++++ 45361	1350 106707	2193 275478	5850 547614	13769 +++++	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
4-Isopropyltoluene	CBZd 5	Ave	+++++ 152230	+++++ 344253	5476 779777	15504 1347034	48957 3642103	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2,3-Trimethylbenzene	CBZd 5	Ave	+++++ 118943	+++++ 257743	5684 574609	14395 1012757	41656 2789911	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Indane	CBZd 5	Ave	+++++ 94480	+++++ 209539	4374 487092	12164 904716	30416 2571055	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2-Dichlorobenzene	CBZd 5	Ave	1545 64192	2372 137779	3986 314163	9708 591518	23005 1718635	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Butylbenzene	CBZd 5	Ave	+++++ 160783	+++++ 360249	+++++ 787301	16902 1371797	52853 3642930	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Indene	CBZd 5	Ave	+++++ 80808	+++++ 178212	+++++ 392352	9491 671298	26876 2078384	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Undecane	CBZd 5	Ave	+++++ 114678	+++++ 255017	+++++ 569435	+++++ 1069442	33280 2838035	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
1,2-Dibromo-3-Chloropropane	CBZd 5	Ave	+++++ 30683	+++++ 89447	1456 201489	4146 336214	10376 944276	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2,4,5-Tetramethylbenzene	CBZd 5	Lin1	+++++ 132594	+++++ 305087	3363 721787	11896 1312226	32591 +++++	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
Dodecane	CBZd 5	Ave	+++++ 88999	+++++ 178065	+++++ 409669	+++++ 968430	17141 +++++	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 +++++

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1 Analy Batch No.: 42290

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/29/2020 12:34 Calibration End Date: 08/29/2020 23:57 Calibration ID: 2592

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
1,2,4-Trichlorobenzene	CBZd 5	Lin1	+++++ 26147	+++++ 59828	840 159208	2587 328959	6075 +++++	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
Naphthalene	CBZd 5	QuaF	1528 78327	1611 183378	1981 458116	7096 873625	16130 +++++	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
Hexachlorobutadiene	CBZd 5	Ave	+++++ 67162	+++++ 128278	4941 272041	11315 490625	22566 1348081	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2,3-Trichlorobenzene	CBZd 5	Ave	+++++ 36670	+++++ 75774	+++++ 185934	4134 392883	8519 1237502	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
2-Methylnaphthalene	CBZd 5	Ave	+++++ 3986	+++++ 9604	+++++ 35445	+++++ 175877	+++++ 832938	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	+++++ 16.0
1-Methylnaphthalene	CBZd 5	Ave	+++++ 7239	+++++ 14439	+++++ 42682	+++++ 196232	+++++ 878408	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	+++++ 16.0
4-Bromofluorobenzene (Surr)	CBZd 5	Ave	182238 216986	173759 226803	154059 276345	184823 287349	177016 339176	4.64 4.64	4.64 4.64	4.64 4.64	4.64 4.64	4.64 4.64

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD
QuaF = Quadratic ISTD forced zero

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1 Analy Batch No.: 42290

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/29/2020 12:34 Calibration End Date: 08/29/2020 23:57 Calibration ID: 2592

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 140-42290/9	HH29IC01.D
Level 2	IC 140-42290/10	HH29IC02.D
Level 3	IC 140-42290/11	HH29IC03.D
Level 4	IC 140-42290/12	HH29IC04.D
Level 5	IC 140-42290/13	HH29IC05.D
Level 6	IC 140-42290/14	HH29IC06.D
Level 7	ICIS 140-42290/15	HH29IC07.D
Level 8	IC 140-42290/7	HH29IC08.D
Level 9	IC 140-42290/5	HH29IC09.D
Level 10	IC 140-42290/3	HH29IC10.D

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
Chlorodifluoromethane	+++++	+++++	27.6						50			
Propene	+++++	+++++	+++++	+++++	5.3						50	
Dichlorodifluoromethane	+++++	+++++	15.9						50			
Chloromethane	+++++	+++++	+++++	12.9						50		
1,2-Dichloro-1,1,2,2-tetrafluoroethane	+++++	+++++	13.5						50			
Vinyl chloride	12.0						50					
Butane	+++++	+++++	+++++	5.8						50		
1,3-Butadiene	+++++	+++++	+++++	10.7						50		
Bromomethane	+++++	+++++	31.9						50			
Chloroethane	+++++	+++++	36.5						50			
Ethanol	+++++	+++++	+++++	-2.5						50		
Vinyl bromide	+++++	4.0						50				
2-Methylbutane	+++++	9.3						50				
Trichlorofluoromethane	+++++	+++++	16.5						50			

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1 Analy Batch No.: 42290

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/29/2020 12:34 Calibration End Date: 08/29/2020 23:57 Calibration ID: 2592

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
Acrolein	+++++	+++++	20.7						50			
Acetonitrile	+++++	+++++	+++++	-5.7						50		
Acetone	+++++	+++++	+++++	+++++	12.0						80	
Pentane	+++++	+++++	-25.2						50			
Isopropyl alcohol	9.5						50					
Ethyl ether	+++++	7.7						50				
1,1-Dichloroethene	+++++	6.7						50				
Acrylonitrile	+++++	5.3						50				
tert-Butyl alcohol	+++++	-2.2						50				
1,1,2-Trichloro-1,2,2-trifluoroethane	+++++	8.9						50				
Methylene Chloride	+++++	+++++	+++++	6.7						80		
3-Chloropropene	+++++	+++++	15.7						50			
Carbon disulfide	+++++	9.4						50				
trans-1,2-Dichloroethene	+++++	1.5						50				
2-Methylpentane	+++++	+++++	-12.2						50			
Methyl tert-butyl ether	+++++	+++++	+++++	-8.5						50		
1,1-Dichloroethane	+++++	+++++	9.4						50			
Vinyl acetate	+++++	+++++	+++++	-15.4						50		
2-Butanone (MEK)	+++++	+++++	+++++	0.0						50		
Hexane	+++++	-2.8						50				
cis-1,2-Dichloroethene	+++++	6.6						50				

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1 Analy Batch No.: 42290

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/29/2020 12:34 Calibration End Date: 08/29/2020 23:57 Calibration ID: 2592

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
Ethyl acetate	+++++	5.2						50				
Chloroform	+++++	10.6						50				
Tetrahydrofuran	+++++	-5.7						50				
1,1,1-Trichloroethane	+++++	4.9						50				
1,2-Dichloroethane	+++++	14.9						50				
1-Butanol	+++++	+++++	+++++	+++++	-6.1						50	
Cyclohexane	+++++	+++++	+++++	-16.7						50		
Benzene	+++++	+++++	8.6						50			
Carbon tetrachloride	-6.4						50					
2,3-Dimethylpentane	+++++	+++++	-12.2						50			
Thiophene	+++++	+++++	-2.3						50			
2,2,4-Trimethylpentane	+++++	-5.2						50				
Heptane	+++++	+++++	+++++	-29.5						50		
1,2-Dichloropropane	+++++	3.9						50				
Trichloroethene	9.3						50					
Dibromomethane	+++++	+++++	+++++	8.6						50		
Bromodichloromethane	0.8						50					
1,4-Dioxane	+++++	+++++	+++++	-24.4						50		
Methyl methacrylate	+++++	+++++	1.9						50			
Methylcyclohexane	+++++	+++++	34.5						50			
4-Methyl-2-pentanone (MIBK)	+++++	11.2						50				

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1 Analy Batch No.: 42290

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/29/2020 12:34 Calibration End Date: 08/29/2020 23:57 Calibration ID: 2592

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
cis-1,3-Dichloropropene	-1.9						50					
trans-1,3-Dichloropropene	+++++	-7.1						50				
Toluene	+++++	-2.4						50				
1,1,2-Trichloroethane	+++++	+++++	8.1						50			
2-Hexanone	+++++	+++++	+++++	-29.5						50		
Octane	+++++	+++++	+++++	-32.9						50		
Dibromochloromethane	-10.8						50					
1,2-Dibromoethane (EDB)	13.4						50					
Tetrachloroethene	10.2						50					
Chlorobenzene	+++++	+++++	3.1						50			
Ethylbenzene	5.5						50					
m-Xylene & p-Xylene	1.2						50					
Nonane	+++++	+++++	+++++	-30.0						50		
Bromoform	11.1		+++++	+++++			50					
Styrene	+++++	+++++	-26.3	+++++					50			
o-Xylene	+++++	-4.4						50				
1,1,2,2-Tetrachloroethane	+++++	+++++	9.4						50			
1,2,3-Trichloropropane	+++++	6.5						50				
Isopropylbenzene	+++++	3.0						50				
Propylbenzene	+++++	+++++	+++++	-22.0						50		
2-Chlorotoluene	+++++	+++++	+++++	-11.7						50		

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1 Analy Batch No.: 42290

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/29/2020 12:34 Calibration End Date: 08/29/2020 23:57 Calibration ID: 2592

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
4-Ethyltoluene	+++++	+++++	+++++	-24.9						50		
1,3,5-Trimethylbenzene	+++++	+++++	17.5						50			
Alpha Methyl Styrene	+++++	+++++	+++++	-25.1 +++++						50		
Decane	+++++	+++++	+++++	+++++	-2.9						50	
tert-Butylbenzene	+++++	+++++	+++++	-19.7						50		
1,2,4-Trimethylbenzene	+++++	+++++	-30.3						50			
sec-Butylbenzene	+++++	+++++	+++++	-18.5						50		
1,3-Dichlorobenzene	+++++	+++++	-23.0						50			
Benzyl chloride	+++++	+++++	+++++	26.9 +++++						50		
1,4-Dichlorobenzene	+++++	-18.0		+++++				50				
4-Isopropyltoluene	+++++	+++++	-44.6						50			
1,2,3-Trimethylbenzene	+++++	+++++	-28.6						50			
Indane	+++++	+++++	-33.7						50			
1,2-Dichlorobenzene	16.0						50					
Butylbenzene	+++++	+++++	+++++	-24.3						50		
Indene	+++++	+++++	+++++	-17.8						50		
Undecane	+++++	+++++	+++++	+++++	-15.2						50	
1,2-Dibromo-3-Chloropropane	+++++	+++++	-40.0						50			
1,2,4,5-Tetramethylbenzene	+++++	+++++	11.1	+++++					50			
Dodecane	+++++	+++++	+++++	+++++ +++++	-38.0						50	
1,2,4-Trichlorobenzene	+++++	+++++	36.5	+++++					50			

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1 Analy Batch No.: 42290

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/29/2020 12:34 Calibration End Date: 08/29/2020 23:57 Calibration ID: 2592

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
Naphthalene	-16.6			+++++			80					
Hexachlorobutadiene	+++++	+++++	8.7						50			
1,2,3-Trichlorobenzene	+++++	+++++	+++++	-24.1						50		
2-Methylnaphthalene	+++++	+++++	+++++	+++++	+++++	-73.2						80
1-Methylnaphthalene	+++++	+++++	+++++	+++++	+++++	-57.9						80

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Lab Sample ID: ICV 140-42290/18 Calibration Date: 08/30/2020 02:47

Instrument ID: MH Calib Start Date: 08/29/2020 12:34

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 08/29/2020 23:57

Lab File ID: HH29LCS.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorodifluoromethane	Ave	2.679	2.781		1.66	1.60	3.8	35.0
Propene	Ave	1.144	1.209		1.69	1.60	5.7	35.0
Dichlorodifluoromethane	Ave	3.629	3.949		1.74	1.60	8.8	35.0
1,2-Dichloro-1,1,2,2-tetrafluoroethane	Ave	2.898	3.181		1.76	1.60	9.8	35.0
Chloromethane	Ave	0.4766	0.5581		1.87	1.60	17.1	35.0
Acetaldehyde	Ave	0.7072	0.6771		7.66	8.00	-4.3	35.0
Vinyl chloride	Ave	1.595	1.723		1.73	1.60	8.0	35.0
1,3-Butadiene	Ave	1.087	1.239		1.82	1.60	14.0	35.0
Butane	Ave	2.181	2.591		1.90	1.60	18.8	35.0
Bromomethane	Ave	1.541	1.577		1.64	1.60	2.3	35.0
Chloroethane	Ave	0.6737	0.7027		1.67	1.60	4.3	35.0
Ethanol	Ave	0.7726	0.6660		6.90	8.00	-13.8	35.0
Vinyl bromide	Ave	1.284	1.389		1.73	1.60	8.2	35.0
2-Methylbutane	Ave	1.682	1.767		1.68	1.60	5.1	35.0
Trichlorofluoromethane	Ave	3.535	3.518		1.59	1.60	-0.5	35.0
Acrolein	Lin1		0.5141		2.13	1.60	33.3	35.0
Acetonitrile	Ave	0.6757	0.6832		1.62	1.60	1.1	35.0
Acetone	Ave	0.7464	0.7233		1.55	1.60	-3.1	35.0
Isopropyl alcohol	Ave	1.844	2.328		2.02	1.60	26.2	35.0
Pentane	Ave	0.1567	0.1785		1.82	1.60	13.9	35.0
Ethyl ether	Ave	1.540	1.709		1.78	1.60	11.0	35.0
1,1-Dichloroethene	Ave	1.164	1.183		1.63	1.60	1.7	35.0
tert-Butyl alcohol	Ave	1.902	1.992		1.68	1.60	4.7	35.0
Acrylonitrile	Ave	1.024	1.111		1.74	1.60	8.5	35.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	2.998	2.997		1.60	1.60	-0.0	35.0
Methylene Chloride	Ave	1.177	1.198		1.63	1.60	1.8	35.0
3-Chloropropene	Ave	1.206	1.136		1.51	1.60	-5.7	35.0
Carbon disulfide	Ave	3.782	3.778		1.60	1.60	-0.1	35.0
trans-1,2-Dichloroethene	Ave	1.215	1.218		1.60	1.60	0.2	35.0
2-Methylpentane	Ave	2.898	2.851		1.57	1.60	-1.6	35.0
Methyl tert-butyl ether	Ave	2.565	2.642		1.65	1.60	3.0	35.0
1,1-Dichloroethane	Ave	2.413	2.475		1.64	1.60	2.6	35.0
Vinyl acetate	Ave	3.098	3.333		1.72	1.60	7.6	35.0
2-Butanone (MEK)	Ave	0.5879	0.5954		1.62	1.60	1.3	35.0
Hexane	Ave	1.006	1.052		1.67	1.60	4.6	35.0
Isopropyl ether	Ave	4.280	4.770		1.78	1.60	11.4	35.0
cis-1,2-Dichloroethene	Ave	1.231	1.265		1.64	1.60	2.8	35.0
Ethyl acetate	Ave	3.083	3.081		1.60	1.60	-0.0	35.0
Chloroform	Ave	2.915	2.895		1.59	1.60	-0.7	35.0
Tert-butyl ethyl ether	Ave	3.282	3.254		1.59	1.60	-0.8	35.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Lab Sample ID: ICV 140-42290/18 Calibration Date: 08/30/2020 02:47

Instrument ID: MH Calib Start Date: 08/29/2020 12:34

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 08/29/2020 23:57

Lab File ID: HH29LCS.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Tetrahydrofuran	Ave	1.448	1.528		1.69	1.60	5.6	35.0
1,1,1-Trichloroethane	Ave	2.643	2.587		1.57	1.60	-2.1	35.0
1,2-Dichloroethane	Ave	0.4365	0.4354		1.60	1.60	-0.2	35.0
1-Butanol	Ave	0.1360	0.1382		1.63	1.60	1.6	35.0
Benzene	Ave	0.8814	0.9188		1.67	1.60	4.2	35.0
Cyclohexane	Ave	0.1206	0.1297		1.72	1.60	7.5	35.0
Carbon tetrachloride	Ave	0.5456	0.6384		1.87	1.60	17.0	35.0
2,3-Dimethylpentane	Ave	0.1669	0.1743		1.67	1.60	4.4	35.0
Thiophene	Ave	0.4636	0.4730		1.63	1.60	2.0	35.0
2,2,4-Trimethylpentane	Ave	1.370	1.504		1.76	1.60	9.8	35.0
Heptane	Ave	0.2512	0.2656		1.69	1.60	5.7	35.0
1,2-Dichloropropane	Ave	0.3772	0.3845		1.63	1.60	1.9	35.0
Trichloroethene	Ave	0.3963	0.3943		1.59	1.60	-0.5	35.0
Dibromomethane	Ave	0.4195	0.4223		1.61	1.60	0.7	35.0
Bromodichloromethane	Ave	0.6247	0.6504		1.67	1.60	4.1	35.0
1,4-Dioxane	Ave	0.1255	0.1251		1.59	1.60	-0.3	35.0
Methyl methacrylate	Ave	0.4094	0.4316		1.69	1.60	5.4	35.0
Methylcyclohexane	Lin1		0.5858		1.89	1.60	18.2	35.0
4-Methyl-2-pentanone (MIBK)	Ave	0.7866	0.8536		1.74	1.60	8.5	35.0
cis-1,3-Dichloropropene	Ave	0.4279	0.4697		1.76	1.60	9.8	35.0
trans-1,3-Dichloropropene	Ave	0.4392	0.4863		1.77	1.60	10.7	35.0
Toluene	Ave	1.237	1.342		1.74	1.60	8.5	35.0
1,1,2-Trichloroethane	Ave	0.4444	0.4511		1.62	1.60	1.5	35.0
2-Hexanone	Ave	0.3937	0.4569		1.86	1.60	16.1	35.0
Octane	Ave	0.3450	0.3910		1.81	1.60	13.3	35.0
Dibromochloromethane	Ave	0.7339	0.8331		1.82	1.60	13.5	35.0
1,2-Dibromoethane (EDB)	Ave	0.6652	0.6699		1.61	1.60	0.7	35.0
Tetrachloroethene	Ave	0.5184	0.5192		1.60	1.60	0.2	35.0
2,3-Dimethylheptane	Ave	1.593	1.483		1.49	1.60	-6.9	35.0
Chlorobenzene	Ave	1.002	1.035		1.65	1.60	3.4	35.0
Ethylbenzene	Ave	1.497	1.654		1.77	1.60	10.5	35.0
m-Xylene & p-Xylene	Ave	1.183	1.376		3.72	3.20	16.3	35.0
Nonane	Ave	0.8512	0.9355		1.76	1.60	9.9	35.0
Bromoform	QuaF		0.6859		1.95	1.60	22.0	35.0
Styrene	Ave	0.7187	0.8674		1.93	1.60	20.7	35.0
o-Xylene	Ave	1.239	1.336		1.73	1.60	7.8	35.0
1,1,2,2-Tetrachloroethane	Ave	1.096	1.119		1.63	1.60	2.0	35.0
1,2,3-Trichloropropane	Ave	0.2482	0.2462		1.59	1.60	-0.8	35.0
Isopropylbenzene	Ave	1.567	1.722		1.76	1.60	9.9	35.0
Propylbenzene	Ave	0.4200	0.4545		1.73	1.60	8.2	35.0
2-Chlorotoluene	Ave	0.4016	0.4289		1.71	1.60	6.8	35.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Lab Sample ID: ICV 140-42290/18 Calibration Date: 08/30/2020 02:47

Instrument ID: MH Calib Start Date: 08/29/2020 12:34

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 08/29/2020 23:57

Lab File ID: HH29LCS.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Ethyltoluene	Ave	1.573	1.665		1.69	1.60	5.9	35.0
1,3,5-Trimethylbenzene	Lin1		0.8605		1.87	1.60	17.1	35.0
Alpha Methyl Styrene	Ave	0.5440	0.6760		1.99	1.60	24.3	35.0
Decane	Ave	1.245	1.320		1.70	1.60	6.1	35.0
tert-Butylbenzene	Ave	1.595	1.750		1.76	1.60	9.7	35.0
1,2,4-Trimethylbenzene	Ave	1.432	1.673		1.87	1.60	16.8	35.0
sec-Butylbenzene	Ave	2.112	2.401		1.82	1.60	13.7	35.0
1,3-Dichlorobenzene	Ave	0.7435	0.8347		1.80	1.60	12.3	35.0
Benzyl chloride	Lin1		0.9537		1.85	1.60	15.8	35.0
1,4-Dichlorobenzene	Ave	0.5485	0.7042		2.05	1.60	28.4	35.0
4-Isopropyltoluene	Ave	1.709	2.102		1.97	1.60	23.0	35.0
1,2,3-Trimethylbenzene	Ave	1.376	1.210		1.41	1.60	-12.1	35.0
Butylcyclohexane	Ave	1.183	1.247		1.69	1.60	5.4	35.0
Indane	Ave	1.140	1.323		1.86	1.60	16.0	35.0
1,2-Dichlorobenzene	Ave	0.8206	0.9347		1.82	1.60	13.9	35.0
Butylbenzene	Ave	1.891	2.293		1.94	1.60	21.3	35.0
Indene	Ave	0.9776	1.023		1.67	1.60	4.7	35.0
Undecane	Ave	1.420	1.561		1.76	1.60	9.9	35.0
1,2-Dibromo-3-Chloropropane	Ave	0.4195	0.4561		1.74	1.60	8.7	35.0
1,2,4,5-Tetramethylbenzene	Lin1		1.729		1.66	1.60	3.5	35.0
Dodecane	Ave	1.001	1.263		2.02	1.60	26.2	35.0
1,2,4-Trichlorobenzene	Lin1		0.4891		2.02	1.60	26.5	35.0
Naphthalene	QuaF		1.439		2.05	1.60	28.3	35.0
Hexachlorobutadiene	Ave	0.7852	0.9322		1.90	1.60	18.7	35.0
1,2,3-Trichlorobenzene	Ave	0.4610	0.6220		2.16	1.60	34.9	35.0
2-Methylnaphthalene	Ave	0.1790	0.0996		0.890	1.60	-44.4	50.0
1-Methylnaphthalene	Ave	0.2066	0.1558		1.21	1.60	-24.6	50.0
4-Bromofluorobenzene (Surr)	Ave	0.5577	0.5614		4.67	4.64	0.7	35.0

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Lab File ID: HBFBI03.D BFB Injection Date: 09/03/2020

Instrument ID: MH BFB Injection Time: 09:43

Analysis Batch No.: 42399

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	22.4	
75	30.0 - 60.0 % of mass 95	47.7	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.6	
173	Less than 2.0 % of mass 174	0.7	(0.8) 1
174	Greater than 50% of mass 95	83.6	
175	5.0 - 9.0 % of mass 174	5.9	(7.1) 1
176	95.0 - 101.0 % of mass 174	79.2	(94.7) 1 *
177	5.0 - 9.0 % of mass 176	5.2	(6.6) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 140-42399/2	HCCVI03.D	09/03/2020	10:16
	LCS 140-42399/1002	HCCVI03-LCS.d	09/03/2020	10:16
	MB 140-42399/4	H500BI03.D	09/03/2020	12:59
SV-001-C-29	140-20175-1	HI03P110.D	09/03/2020	22:20
SV-004-C-29	140-20175-2	HI03P111.D	09/03/2020	23:13
SV-102-C-29	140-20175-3	HI03P112.D	09/04/2020	0:08
SV-113-C-29	140-20175-4	HI03P113.D	09/04/2020	1:04
SV-088-C-29	140-20175-5	HI03P114.D	09/04/2020	1:58
SV-DUP1-C-29	140-20175-6	HI03P115.D	09/04/2020	2:50
SV-142-C-29	140-20175-7	HI03P116D.D	09/04/2020	4:41
SV-155-C-29	140-20175-8	HI03P201.D	09/04/2020	5:38
SV-133-C-29	140-20175-9	HI03P202.D	09/04/2020	6:35
SV-153-C-29	140-20175-10	HI03P203.D	09/04/2020	7:30

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Lab Sample ID: CCVIS 140-42399/2 Calibration Date: 09/03/2020 10:16

Instrument ID: MH Calib Start Date: 08/29/2020 12:34

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 08/29/2020 23:57

Lab File ID: HCCVI03.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorodifluoromethane	Ave	2.679	2.635		1.57	1.60	-1.6	30.0
Propene	Ave	1.144	1.039		1.45	1.60	-9.2	30.0
Dichlorodifluoromethane	Ave	3.629	3.771		1.66	1.60	3.9	30.0
Chloromethane	Ave	0.4766	0.4602		1.54	1.60	-3.5	30.0
1,2-Dichloro-1,1,2,2-tetrafluoroethane	Ave	2.898	2.654		1.47	1.60	-8.4	30.0
Acetaldehyde	Ave	0.7072	0.6447		7.29	8.00	-8.8	30.0
Vinyl chloride	Ave	1.595	1.358		1.36	1.60	-14.9	30.0
Butane	Ave	2.181	2.165		1.59	1.60	-0.8	30.0
1,3-Butadiene	Ave	1.087	0.9843		1.45	1.60	-9.4	30.0
Bromomethane	Ave	1.541	1.431		1.49	1.60	-7.1	30.0
Chloroethane	Ave	0.6737	0.6108		1.45	1.60	-9.3	30.0
Ethanol	Ave	0.7726	0.7610		7.88	8.00	-1.5	30.0
Vinyl bromide	Ave	1.284	1.179		1.47	1.60	-8.2	30.0
2-Methylbutane	Ave	1.682	1.531		1.46	1.60	-8.9	30.0
Trichlorofluoromethane	Ave	3.535	3.511		1.59	1.60	-0.7	30.0
Acrolein	Lin1		0.3302		1.37	1.60	-14.1	30.0
Acetonitrile	Ave	0.6757	0.6875		1.63	1.60	1.7	30.0
Acetone	Ave	0.7464	0.6123		3.94	4.80	-18.0	30.0
Isopropyl alcohol	Ave	1.844	1.492		3.88	4.80	-19.1	30.0
Pentane	Ave	0.1567	0.1601		1.63	1.60	2.2	30.0
Ethyl ether	Ave	1.540	1.307		1.36	1.60	-15.1	30.0
1,1-Dichloroethene	Ave	1.164	0.9724		1.34	1.60	-16.4	30.0
tert-Butyl alcohol	Ave	1.902	1.418		1.19	1.60	-25.5	30.0
Acrylonitrile	Ave	1.024	0.999		1.56	1.60	-2.4	30.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	2.998	2.937		1.57	1.60	-2.0	30.0
Methylene Chloride	Ave	1.177	1.192		1.62	1.60	1.3	30.0
3-Chloropropene	Ave	1.206	0.9817		1.30	1.60	-18.6	30.0
Carbon disulfide	Ave	3.782	3.630		1.54	1.60	-4.0	30.0
trans-1,2-Dichloroethene	Ave	1.215	1.133		1.49	1.60	-6.7	30.0
2-Methylpentane	Ave	2.898	2.669		1.47	1.60	-7.9	30.0
Methyl tert-butyl ether	Ave	2.565	2.118		1.32	1.60	-17.4	30.0
1,1-Dichloroethane	Ave	2.413	2.250		1.49	1.60	-6.8	30.0
Vinyl acetate	Ave	3.098	2.030		1.05	1.60	-34.5*	30.0
2-Butanone (MEK)	Ave	0.5879	0.4952		1.35	1.60	-15.8	30.0
Hexane	Ave	1.006	0.9910		1.58	1.60	-1.5	30.0
Isopropyl ether	Ave	4.280	3.776		1.41	1.60	-11.8	30.0
cis-1,2-Dichloroethene	Ave	1.231	1.039		1.35	1.60	-15.6	30.0
Ethyl acetate	Ave	3.083	2.714		1.41	1.60	-12.0	30.0
Chloroform	Ave	2.915	2.842		1.56	1.60	-2.5	30.0
Tert-butyl ethyl ether	Ave	3.282	2.801		1.37	1.60	-14.7	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Lab Sample ID: CCVIS 140-42399/2 Calibration Date: 09/03/2020 10:16

Instrument ID: MH Calib Start Date: 08/29/2020 12:34

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 08/29/2020 23:57

Lab File ID: HCCVI03.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Tetrahydrofuran	Ave	1.448	1.235		1.37	1.60	-14.7	30.0
1,1,1-Trichloroethane	Ave	2.643	2.534		1.53	1.60	-4.1	30.0
1,2-Dichloroethane	Ave	0.4365	0.4185		1.53	1.60	-4.1	30.0
1-Butanol	Ave	0.1360	0.0892		1.05	1.60	-34.4*	30.0
Cyclohexane	Ave	0.1206	0.1152		1.53	1.60	-4.4	30.0
Benzene	Ave	0.8814	0.8566		1.56	1.60	-2.8	30.0
Carbon tetrachloride	Ave	0.5456	0.6556		1.92	1.60	20.2	30.0
2,3-Dimethylpentane	Ave	0.1669	0.1600		1.53	1.60	-4.1	30.0
Thiophene	Ave	0.4636	0.4435		1.53	1.60	-4.3	30.0
2,2,4-Trimethylpentane	Ave	1.370	1.333		1.56	1.60	-2.7	30.0
Heptane	Ave	0.2512	0.2405		1.53	1.60	-4.3	30.0
1,2-Dichloropropane	Ave	0.3772	0.3593		1.52	1.60	-4.7	30.0
Trichloroethene	Ave	0.3963	0.3674		1.48	1.60	-7.3	30.0
Dibromomethane	Ave	0.4195	0.4164		1.59	1.60	-0.7	30.0
Bromodichloromethane	Ave	0.6247	0.6455		1.65	1.60	3.3	30.0
1,4-Dioxane	Ave	0.1255	0.0971		1.24	1.60	-22.6	30.0
Methyl methacrylate	Ave	0.4094	0.3789		1.48	1.60	-7.5	30.0
Methylcyclohexane	Lin1		0.4116		1.34	1.60	-16.0	30.0
4-Methyl-2-pentanone (MIBK)	Ave	0.7866	0.7635		1.55	1.60	-2.9	30.0
cis-1,3-Dichloropropene	Ave	0.4279	0.4218		1.58	1.60	-1.4	30.0
trans-1,3-Dichloropropene	Ave	0.4392	0.4085		1.49	1.60	-7.0	30.0
Toluene	Ave	1.237	1.163		1.50	1.60	-6.0	30.0
1,1,2-Trichloroethane	Ave	0.4444	0.4321		1.56	1.60	-2.8	30.0
2-Hexanone	Ave	0.3937	0.3577		1.45	1.60	-9.1	30.0
Octane	Ave	0.3450	0.3364		1.56	1.60	-2.5	30.0
Dibromochloromethane	Ave	0.7339	0.7941		1.73	1.60	8.2	30.0
1,2-Dibromoethane (EDB)	Ave	0.6652	0.6198		1.49	1.60	-6.8	30.0
Tetrachloroethene	Ave	0.5184	0.4744		1.46	1.60	-8.5	30.0
2,3-Dimethylheptane	Ave	1.593	1.485		1.49	1.60	-6.8	30.0
Chlorobenzene	Ave	1.002	0.9408		1.50	1.60	-6.1	30.0
Ethylbenzene	Ave	1.497	1.350		1.44	1.60	-9.8	30.0
m-Xylene & p-Xylene	Ave	1.183	1.129		3.05	3.20	-4.5	30.0
Nonane	Ave	0.8512	0.8038		1.51	1.60	-5.6	30.0
Bromoform	QuaF		0.6710		1.92	1.60	20.0	30.0
Styrene	Ave	0.7187	0.6756		1.50	1.60	-6.0	30.0
o-Xylene	Ave	1.239	1.175		1.52	1.60	-5.1	30.0
1,1,2,2-Tetrachloroethane	Ave	1.096	1.107		1.62	1.60	0.9	30.0
1,2,3-Trichloropropane	Ave	0.2482	0.2437		1.57	1.60	-1.8	30.0
Isopropylbenzene	Ave	1.567	1.512		1.54	1.60	-3.5	30.0
Propylbenzene	Ave	0.4200	0.4048		1.54	1.60	-3.6	30.0
2-Chlorotoluene	Ave	0.4016	0.3663		1.46	1.60	-8.8	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Lab Sample ID: CCVIS 140-42399/2 Calibration Date: 09/03/2020 10:16

Instrument ID: MH Calib Start Date: 08/29/2020 12:34

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 08/29/2020 23:57

Lab File ID: HCCVI03.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Ethyltoluene	Ave	1.573	1.542		1.57	1.60	-2.0	30.0
1,3,5-Trimethylbenzene	Lin1		0.6557		1.44	1.60	-10.0	30.0
Alpha Methyl Styrene	Ave	0.5440	0.4797		1.41	1.60	-11.8	30.0
Decane	Ave	1.245	1.213		1.56	1.60	-2.5	30.0
tert-Butylbenzene	Ave	1.595	1.622		1.63	1.60	1.7	30.0
1,2,4-Trimethylbenzene	Ave	1.432	1.563		1.75	1.60	9.1	30.0
sec-Butylbenzene	Ave	2.112	2.200		1.67	1.60	4.2	30.0
1,3-Dichlorobenzene	Ave	0.7435	0.7441		1.60	1.60	0.0	30.0
Benzyl chloride	Lin1		0.6967		1.38	1.60	-13.6	30.0
1,4-Dichlorobenzene	Ave	0.5485	0.6036		1.76	1.60	10.0	30.0
4-Isopropyltoluene	Ave	1.709	1.937		1.81	1.60	13.3	30.0
1,2,3-Trimethylbenzene	Ave	1.376	1.575		1.83	1.60	14.5	30.0
Butylcyclohexane	Ave	1.183	1.278		1.73	1.60	8.0	30.0
1,2-Dichlorobenzene	Ave	0.8206	0.8713		1.70	1.60	6.2	30.0
Indane	Ave	1.140	1.261		1.77	1.60	10.6	30.0
Butylbenzene	Ave	1.891	2.122		1.80	1.60	12.2	30.0
Indene	Ave	0.9776	1.046		1.71	1.60	7.0	30.0
Undecane	Ave	1.420	1.439		1.62	1.60	1.3	30.0
1,2-Dibromo-3-Chloropropane	Ave	0.4195	0.5081		1.94	1.60	21.1	30.0
1,2,4,5-Tetramethylbenzene	Lin1		1.607		1.54	1.60	-3.5	30.0
Dodecane	Ave	1.001	1.048		1.68	1.60	4.8	30.0
1,2,4-Trichlorobenzene	Lin1		0.3352		1.41	1.60	-11.8	30.0
Naphthalene	QuaF		0.9384		1.34	1.60	-16.5	30.0
Hexachlorobutadiene	Ave	0.7852	0.9300		1.90	1.60	18.4	30.0
1,2,3-Trichlorobenzene	Ave	0.4610	0.4308		1.50	1.60	-6.6	30.0
2-Methylnaphthalene	Ave	0.1790	0.0399		0.357	1.60	-77.7*	50.0
1-Methylnaphthalene	Ave	0.2066	0.0780		0.604	1.60	-62.3*	50.0
4-Bromofluorobenzene (Surr)	Ave	0.5577	0.6170		5.13	4.64	10.6	30.0

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Lab File ID: HDNUI05X.D BFB Injection Date: 09/05/2020

Instrument ID: MH BFB Injection Time: 11:09

Analysis Batch No.: 42482

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	23.0	
75	30.0 - 60.0 % of mass 95	47.5	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.8	
173	Less than 2.0 % of mass 174	0.9	(1.0) 1
174	Greater than 50% of mass 95	89.5	
175	5.0 - 9.0 % of mass 174	6.4	(7.1) 1
176	95.0 - 101.0 % of mass 174	86.5	(96.7) 1
177	5.0 - 9.0 % of mass 176	5.7	(6.6) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 140-42482/3	HCCVI05A.D	09/05/2020	12:41
	LCS 140-42482/1003	HCCVI05A-LCS.	09/05/2020	12:41
	MB 140-42482/5	H500BI05RN.D	09/05/2020	15:25
IA-001-C-29	140-20175-18	HI05P101.D	09/05/2020	16:20
IA-004-C-29	140-20175-19	HI05P102.D	09/05/2020	17:18
IA-102-C-29	140-20175-20	HI05P103.D	09/05/2020	18:14

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Lab Sample ID: CCVIS 140-42482/3 Calibration Date: 09/05/2020 12:41

Instrument ID: MH Calib Start Date: 08/29/2020 12:34

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 08/29/2020 23:57

Lab File ID: HCCVI05A.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorodifluoromethane	Ave	2.679	2.604		1.56	1.60	-2.8	30.0
Propene	Ave	1.144	0.9392		1.31	1.60	-17.9	30.0
Dichlorodifluoromethane	Ave	3.629	3.715		1.64	1.60	2.4	30.0
Chloromethane	Ave	0.4766	0.4426		1.49	1.60	-7.1	30.0
1,2-Dichloro-1,1,2,2-tetrafluoroethane	Ave	2.898	2.622		1.45	1.60	-9.5	30.0
Acetaldehyde	Ave	0.7072	0.5915		6.69	8.00	-16.4	30.0
Vinyl chloride	Ave	1.595	1.277		1.28	1.60	-19.9	30.0
1,3-Butadiene	Ave	1.087	0.8863		1.31	1.60	-18.4	30.0
Butane	Ave	2.181	2.017		1.48	1.60	-7.5	30.0
Bromomethane	Ave	1.541	1.325		1.38	1.60	-14.0	30.0
Chloroethane	Ave	0.6737	0.5393		1.28	1.60	-19.9	30.0
Ethanol	Ave	0.7726	0.7009		7.26	8.00	-9.3	30.0
Vinyl bromide	Ave	1.284	1.052		1.31	1.60	-18.1	30.0
2-Methylbutane	Ave	1.682	1.385		1.32	1.60	-17.7	30.0
Trichlorofluoromethane	Ave	3.535	3.602		1.63	1.60	1.9	30.0
Acrolein	Lin1		0.2741		1.14	1.60	-28.5	30.0
Acetonitrile	Ave	0.6757	0.6354		1.50	1.60	-6.0	30.0
Acetone	Ave	0.7464	0.5887		3.79	4.80	-21.1	30.0
Isopropyl alcohol	Ave	1.844	1.405		3.66	4.80	-23.8	30.0
Pentane	Ave	0.1567	0.1515		1.55	1.60	-3.3	30.0
Ethyl ether	Ave	1.540	1.148		1.19	1.60	-25.4	30.0
1,1-Dichloroethene	Ave	1.164	0.8450		1.16	1.60	-27.4	30.0
tert-Butyl alcohol	Ave	1.902	1.301		1.09	1.60	-31.6*	30.0
Acrylonitrile	Ave	1.024	0.9294		1.45	1.60	-9.2	30.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	2.998	2.951		1.57	1.60	-1.6	30.0
Methylene Chloride	Ave	1.177	1.157		1.57	1.60	-1.7	30.0
3-Chloropropene	Ave	1.206	0.8759		1.16	1.60	-27.4	30.0
Carbon disulfide	Ave	3.782	3.509		1.48	1.60	-7.2	30.0
trans-1,2-Dichloroethene	Ave	1.215	1.052		1.39	1.60	-13.4	30.0
2-Methylpentane	Ave	2.898	2.440		1.35	1.60	-15.8	30.0
Methyl tert-butyl ether	Ave	2.565	1.924		1.20	1.60	-25.0	30.0
1,1-Dichloroethane	Ave	2.413	2.133		1.41	1.60	-11.6	30.0
Vinyl acetate	Ave	3.098	1.887		0.975	1.60	-39.1*	30.0
2-Butanone (MEK)	Ave	0.5879	0.4629		1.26	1.60	-21.3	30.0
Hexane	Ave	1.006	0.9560		1.52	1.60	-4.9	30.0
Isopropyl ether	Ave	4.280	3.422		1.28	1.60	-20.1	30.0
cis-1,2-Dichloroethene	Ave	1.231	0.9294		1.21	1.60	-24.5	30.0
Ethyl acetate	Ave	3.083	2.529		1.31	1.60	-18.0	30.0
Chloroform	Ave	2.915	2.767		1.52	1.60	-5.1	30.0
Tert-butyl ethyl ether	Ave	3.282	2.537		1.24	1.60	-22.7	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Lab Sample ID: CCVIS 140-42482/3 Calibration Date: 09/05/2020 12:41

Instrument ID: MH Calib Start Date: 08/29/2020 12:34

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 08/29/2020 23:57

Lab File ID: HCCVI05A.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Tetrahydrofuran	Ave	1.448	1.105		1.22	1.60	-23.7	30.0
1,1,1-Trichloroethane	Ave	2.643	2.481		1.50	1.60	-6.1	30.0
1,2-Dichloroethane	Ave	0.4365	0.3870		1.42	1.60	-11.3	30.0
1-Butanol	Ave	0.1360	0.0784		0.923	1.60	-42.3*	30.0
Benzene	Ave	0.8814	0.7916		1.44	1.60	-10.2	30.0
Cyclohexane	Ave	0.1206	0.1010		1.34	1.60	-16.2	30.0
Carbon tetrachloride	Ave	0.5456	0.6475		1.90	1.60	18.7	30.0
2,3-Dimethylpentane	Ave	0.1669	0.1407		1.35	1.60	-15.7	30.0
Thiophene	Ave	0.4636	0.3940		1.36	1.60	-15.0	30.0
2,2,4-Trimethylpentane	Ave	1.370	1.177		1.37	1.60	-14.1	30.0
Heptane	Ave	0.2512	0.2046		1.30	1.60	-18.6	30.0
1,2-Dichloropropane	Ave	0.3772	0.3238		1.37	1.60	-14.2	30.0
Trichloroethene	Ave	0.3963	0.3449		1.39	1.60	-13.0	30.0
Dibromomethane	Ave	0.4195	0.3866		1.47	1.60	-7.8	30.0
Bromodichloromethane	Ave	0.6247	0.6099		1.56	1.60	-2.4	30.0
1,4-Dioxane	Ave	0.1255	0.0830		1.06	1.60	-33.9*	30.0
Methyl methacrylate	Ave	0.4094	0.3478		1.36	1.60	-15.0	30.0
Methylcyclohexane	Lin1		0.3632		1.19	1.60	-25.5	30.0
4-Methyl-2-pentanone (MIBK)	Ave	0.7866	0.7001		1.42	1.60	-11.0	30.0
cis-1,3-Dichloropropene	Ave	0.4279	0.3735		1.40	1.60	-12.7	30.0
trans-1,3-Dichloropropene	Ave	0.4392	0.3634		1.32	1.60	-17.3	30.0
Toluene	Ave	1.237	1.049		1.36	1.60	-15.2	30.0
1,1,2-Trichloroethane	Ave	0.4444	0.4188		1.51	1.60	-5.8	30.0
2-Hexanone	Ave	0.3937	0.3384		1.38	1.60	-14.0	30.0
Octane	Ave	0.3450	0.3156		1.46	1.60	-8.5	30.0
Dibromochloromethane	Ave	0.7339	0.7748		1.69	1.60	5.6	30.0
1,2-Dibromoethane (EDB)	Ave	0.6652	0.5807		1.40	1.60	-12.7	30.0
Tetrachloroethene	Ave	0.5184	0.4639		1.43	1.60	-10.5	30.0
2,3-Dimethylheptane	Ave	1.593	1.413		1.42	1.60	-11.3	30.0
Chlorobenzene	Ave	1.002	0.9059		1.45	1.60	-9.6	30.0
Ethylbenzene	Ave	1.497	1.196		1.28	1.60	-20.1	30.0
m-Xylene & p-Xylene	Ave	1.183	1.039		2.81	3.20	-12.2	30.0
Nonane	Ave	0.8512	0.7387		1.39	1.60	-13.2	30.0
Bromoform	QuaF		0.6251		1.82	1.60	13.8	30.0
Styrene	Ave	0.7187	0.5742		1.28	1.60	-20.1	30.0
o-Xylene	Ave	1.239	0.995		1.29	1.60	-19.7	30.0
1,1,2,2-Tetrachloroethane	Ave	1.096	1.003		1.46	1.60	-8.5	30.0
1,2,3-Trichloropropane	Ave	0.2482	0.2205		1.42	1.60	-11.2	30.0
Isopropylbenzene	Ave	1.567	1.250		1.28	1.60	-20.2	30.0
Propylbenzene	Ave	0.4200	0.3247		1.24	1.60	-22.7	30.0
2-Chlorotoluene	Ave	0.4016	0.3261		1.30	1.60	-18.8	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Lab Sample ID: CCVIS 140-42482/3 Calibration Date: 09/05/2020 12:41

Instrument ID: MH Calib Start Date: 08/29/2020 12:34

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 08/29/2020 23:57

Lab File ID: HCCVI05A.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Ethyltoluene	Ave	1.573	1.449		1.47	1.60	-7.9	30.0
1,3,5-Trimethylbenzene	Lin1		0.6561		1.44	1.60	-10.0	30.0
Alpha Methyl Styrene	Ave	0.5440	0.4520		1.33	1.60	-16.9	30.0
Decane	Ave	1.245	1.211		1.56	1.60	-2.7	30.0
tert-Butylbenzene	Ave	1.595	1.655		1.66	1.60	3.8	30.0
1,2,4-Trimethylbenzene	Ave	1.432	1.581		1.77	1.60	10.4	30.0
sec-Butylbenzene	Ave	2.112	2.186		1.66	1.60	3.5	30.0
1,3-Dichlorobenzene	Ave	0.7435	0.7729		1.66	1.60	4.0	30.0
Benzyl chloride	Lin1		0.7012		1.39	1.60	-13.1	30.0
1,4-Dichlorobenzene	Ave	0.5485	0.6244		1.82	1.60	13.8	30.0
4-Isopropyltoluene	Ave	1.709	2.023		1.89	1.60	18.3	30.0
1,2,3-Trimethylbenzene	Ave	1.376	1.593		1.85	1.60	15.8	30.0
Butylcyclohexane	Ave	1.183	1.215		1.64	1.60	2.7	30.0
1,2-Dichlorobenzene	Ave	0.8206	0.8834		1.72	1.60	7.7	30.0
Indane	Ave	1.140	1.231		1.73	1.60	7.9	30.0
Butylbenzene	Ave	1.891	2.193		1.86	1.60	16.0	30.0
Indene	Ave	0.9776	1.042		1.71	1.60	6.6	30.0
Undecane	Ave	1.420	1.463		1.65	1.60	3.0	30.0
1,2-Dibromo-3-Chloropropane	Ave	0.4195	0.5475		2.09	1.60	30.5*	30.0
1,2,4,5-Tetramethylbenzene	Lin1		1.679		1.61	1.60	0.7	30.0
Dodecane	Ave	1.001	1.122		1.79	1.60	12.1	30.0
1,2,4-Trichlorobenzene	Lin1		0.3553		1.49	1.60	-6.8	30.0
Naphthalene	QuaF		0.9662		1.37	1.60	-14.1	30.0
Hexachlorobutadiene	Ave	0.7852	0.9617		1.96	1.60	22.5	30.0
1,2,3-Trichlorobenzene	Ave	0.4610	0.4437		1.54	1.60	-3.8	30.0
2-Methylnaphthalene	Ave	0.1790	0.0392		0.351	1.60	-78.1*	50.0
1-Methylnaphthalene	Ave	0.2066	0.0745		0.577	1.60	-63.9*	50.0
4-Bromofluorobenzene (Surr)	Ave	0.5577	0.6172		5.14	4.64	10.7	30.0

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Lab File ID: HBFBH06a.D BFB Injection Date: 09/06/2020

Instrument ID: MH BFB Injection Time: 15:49

Analysis Batch No.: 42498

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	24.3	
75	30.0 - 60.0 % of mass 95	48.3	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.7	
173	Less than 2.0 % of mass 174	0.8	(0.9) 1
174	Greater than 50% of mass 95	84.7	
175	5.0 - 9.0 % of mass 174	5.9	(6.9) 1
176	95.0 - 101.0 % of mass 174	82.0	(96.9) 1
177	5.0 - 9.0 % of mass 176	5.6	(6.8) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 140-42498/9	HCCVH06b.D	09/06/2020	17:12
	LCS 140-42498/1009	HCCVH06b-LCS.	09/06/2020	17:12
	MB 140-42498/4	HB500I06.D	09/06/2020	18:36
IA-113-C-29	140-20175-21	HI07P104.D	09/06/2020	19:30
IA-088-C-29	140-20175-22	HI07P105.D	09/06/2020	20:26
IA-142-C-29	140-20175-23	HI07P106.D	09/06/2020	21:23
IA-155-C-29	140-20175-24	HI07P107.D	09/06/2020	22:17
IA-133-C-29	140-20175-25	HI07P108.D	09/06/2020	23:11
IA-153-C-29	140-20175-26	HI07P109.D	09/07/2020	0:04
IA-DUP1-C-29	140-20175-27	HI07P110.D	09/07/2020	0:57
IA-060-C-29	140-20175-28	HI07P111.D	09/07/2020	1:52
IA-152-C-29	140-20175-29	HI07P112.D	09/07/2020	2:48
IA-150-C-29	140-20175-30	HI07P113.D	09/07/2020	3:43
IA-145-C-29	140-20175-31	HI07P114.D	09/07/2020	4:36
IA-146-C-29	140-20175-32	HI07P115.D	09/07/2020	5:30

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Lab Sample ID: CCVIS 140-42498/9 Calibration Date: 09/06/2020 17:12

Instrument ID: MH Calib Start Date: 08/29/2020 12:34

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 08/29/2020 23:57

Lab File ID: HCCVH06b.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorodifluoromethane	Ave	2.679	2.887		1.72	1.60	7.8	30.0
Propene	Ave	1.144	1.215		1.70	1.60	6.2	30.0
Dichlorodifluoromethane	Ave	3.629	4.198		1.85	1.60	15.7	30.0
Chloromethane	Ave	0.4766	0.5114		1.72	1.60	7.3	30.0
1,2-Dichloro-1,1,2,2-tetrafluoroethane	Ave	2.898	3.114		1.72	1.60	7.5	30.0
Acetaldehyde	Ave	0.7072	0.6190		7.00	8.00	-12.5	30.0
Vinyl chloride	Ave	1.595	1.653		1.66	1.60	3.6	30.0
1,3-Butadiene	Ave	1.087	1.215		1.79	1.60	11.8	30.0
Butane	Ave	2.181	2.522		1.85	1.60	15.6	30.0
Bromomethane	Ave	1.541	1.593		1.65	1.60	3.4	30.0
Chloroethane	Ave	0.6737	0.6653		1.58	1.60	-1.2	30.0
Ethanol	Ave	0.7726	0.6114		6.33	8.00	-20.9	30.0
Vinyl bromide	Ave	1.284	1.476		1.84	1.60	15.0	30.0
2-Methylbutane	Ave	1.682	1.777		1.69	1.60	5.7	30.0
Trichlorofluoromethane	Ave	3.535	4.161		1.88	1.60	17.7	30.0
Acrolein	Lin1		0.5108		2.12	1.60	32.5*	30.0
Acetonitrile	Ave	0.6757	0.6573		1.56	1.60	-2.7	30.0
Acetone	Ave	0.7464	0.6410		1.37	1.60	-14.1	30.0
Isopropyl alcohol	Ave	1.844	2.125		1.84	1.60	15.2	30.0
Pentane	Ave	0.1567	0.1711		1.75	1.60	9.2	30.0
Ethyl ether	Ave	1.540	1.615		1.68	1.60	4.9	30.0
1,1-Dichloroethene	Ave	1.164	1.196		1.64	1.60	2.8	30.0
tert-Butyl alcohol	Ave	1.902	1.837		1.55	1.60	-3.4	30.0
Acrylonitrile	Ave	1.024	1.100		1.72	1.60	7.5	30.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	2.998	3.241		1.73	1.60	8.1	30.0
Methylene Chloride	Ave	1.177	1.207		1.64	1.60	2.5	30.0
3-Chloropropene	Ave	1.206	1.219		1.62	1.60	1.1	30.0
Carbon disulfide	Ave	3.782	3.817		1.61	1.60	0.9	30.0
trans-1,2-Dichloroethene	Ave	1.215	1.271		1.67	1.60	4.6	30.0
2-Methylpentane	Ave	2.898	2.755		1.52	1.60	-4.9	30.0
Methyl tert-butyl ether	Ave	2.565	2.555		1.59	1.60	-0.4	30.0
1,1-Dichloroethane	Ave	2.413	2.561		1.70	1.60	6.1	30.0
Vinyl acetate	Ave	3.098	2.940		1.52	1.60	-5.1	30.0
2-Butanone (MEK)	Ave	0.5879	0.5502		1.50	1.60	-6.4	30.0
Hexane	Ave	1.006	1.051		1.67	1.60	4.5	30.0
Isopropyl ether	Ave	4.280	4.464		1.67	1.60	4.3	30.0
cis-1,2-Dichloroethene	Ave	1.231	1.253		1.63	1.60	1.8	30.0
Ethyl acetate	Ave	3.083	3.030		1.57	1.60	-1.7	30.0
Chloroform	Ave	2.915	3.125		1.72	1.60	7.2	30.0
Tert-butyl ethyl ether	Ave	3.282	3.059		1.49	1.60	-6.8	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Lab Sample ID: CCVIS 140-42498/9 Calibration Date: 09/06/2020 17:12

Instrument ID: MH Calib Start Date: 08/29/2020 12:34

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 08/29/2020 23:57

Lab File ID: HCCVH06b.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Tetrahydrofuran	Ave	1.448	1.410		1.56	1.60	-2.6	30.0
1,1,1-Trichloroethane	Ave	2.643	2.771		1.68	1.60	4.9	30.0
1,2-Dichloroethane	Ave	0.4365	0.4875		1.79	1.60	11.7	30.0
1-Butanol	Ave	0.1360	0.1096		1.29	1.60	-19.4	30.0
Cyclohexane	Ave	0.1206	0.1284		1.70	1.60	6.5	30.0
Benzene	Ave	0.8814	0.9453		1.72	1.60	7.3	30.0
Carbon tetrachloride	Ave	0.5456	0.7811		2.29	1.60	43.2*	30.0
2,3-Dimethylpentane	Ave	0.1669	0.1724		1.65	1.60	3.3	30.0
Thiophene	Ave	0.4636	0.4709		1.63	1.60	1.6	30.0
2,2,4-Trimethylpentane	Ave	1.370	1.489		1.74	1.60	8.7	30.0
Heptane	Ave	0.2512	0.2591		1.65	1.60	3.2	30.0
1,2-Dichloropropane	Ave	0.3772	0.3934		1.67	1.60	4.3	30.0
Trichloroethene	Ave	0.3963	0.4246		1.71	1.60	7.1	30.0
Dibromomethane	Ave	0.4195	0.4619		1.76	1.60	10.1	30.0
Bromodichloromethane	Ave	0.6247	0.7216		1.85	1.60	15.5	30.0
1,4-Dioxane	Ave	0.1255	0.1137		1.45	1.60	-9.4	30.0
Methyl methacrylate	Ave	0.4094	0.4276		1.67	1.60	4.4	30.0
Methylcyclohexane	Lin1		0.5711		1.85	1.60	15.4	30.0
4-Methyl-2-pentanone (MIBK)	Ave	0.7866	0.8582		1.75	1.60	9.1	30.0
cis-1,3-Dichloropropene	Ave	0.4279	0.4884		1.83	1.60	14.1	30.0
trans-1,3-Dichloropropene	Ave	0.4392	0.4936		1.80	1.60	12.4	30.0
Toluene	Ave	1.237	1.348		1.74	1.60	9.0	30.0
1,1,2-Trichloroethane	Ave	0.4444	0.4874		1.75	1.60	9.7	30.0
2-Hexanone	Ave	0.3937	0.4828		1.96	1.60	22.6	30.0
Octane	Ave	0.3450	0.3975		1.84	1.60	15.2	30.0
Dibromochloromethane	Ave	0.7339	0.9665		2.11	1.60	31.7*	30.0
1,2-Dibromoethane (EDB)	Ave	0.6652	0.7293		1.75	1.60	9.6	30.0
Tetrachloroethene	Ave	0.5184	0.5591		1.73	1.60	7.9	30.0
2,3-Dimethylheptane	Ave	1.593	1.485		1.49	1.60	-6.8	30.0
Chlorobenzene	Ave	1.002	1.096		1.75	1.60	9.5	30.0
Ethylbenzene	Ave	1.497	1.579		1.69	1.60	5.5	30.0
m-Xylene & p-Xylene	Ave	1.183	1.404		3.80	3.20	18.7	30.0
Nonane	Ave	0.8512	0.9212		1.73	1.60	8.2	30.0
Styrene	Ave	0.7187	0.8615		1.92	1.60	19.9	30.0
Bromoform	QuaF		0.8250		2.24	1.60	39.9*	30.0
o-Xylene	Ave	1.239	1.324		1.71	1.60	6.9	30.0
1,1,2,2-Tetrachloroethane	Ave	1.096	1.221		1.78	1.60	11.4	30.0
1,2,3-Trichloropropane	Ave	0.2482	0.2817		1.82	1.60	13.5	30.0
Isopropylbenzene	Ave	1.567	1.777		1.81	1.60	13.4	30.0
Propylbenzene	Ave	0.4200	0.4719		1.80	1.60	12.3	30.0
2-Chlorotoluene	Ave	0.4016	0.4495		1.79	1.60	11.9	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Lab Sample ID: CCVIS 140-42498/9 Calibration Date: 09/06/2020 17:12

Instrument ID: MH Calib Start Date: 08/29/2020 12:34

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 08/29/2020 23:57

Lab File ID: HCCVH06b.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Ethyltoluene	Ave	1.573	1.759		1.79	1.60	11.8	30.0
1,3,5-Trimethylbenzene	Lin1		0.9296		2.02	1.60	26.3	30.0
Alpha Methyl Styrene	Ave	0.5440	0.7128		2.10	1.60	31.0*	30.0
Decane	Ave	1.245	1.374		1.77	1.60	10.4	30.0
tert-Butylbenzene	Ave	1.595	1.991		2.00	1.60	24.9	30.0
1,2,4-Trimethylbenzene	Ave	1.432	1.894		2.12	1.60	32.2*	30.0
sec-Butylbenzene	Ave	2.112	2.660		2.02	1.60	25.9	30.0
1,3-Dichlorobenzene	Ave	0.7435	0.9720		2.09	1.60	30.7*	30.0
Benzyl chloride	Lin1		1.104		2.13	1.60	32.9*	30.0
1,4-Dichlorobenzene	Ave	0.5485	0.8276		2.41	1.60	50.9*	30.0
4-Isopropyltoluene	Ave	1.709	2.380		2.23	1.60	39.2*	30.0
1,2,3-Trimethylbenzene	Ave	1.376	1.356		1.58	1.60	-1.5	30.0
Butylcyclohexane	Ave	1.183	1.286		1.74	1.60	8.7	30.0
1,2-Dichlorobenzene	Ave	0.8206	1.055		2.06	1.60	28.6	30.0
Indane	Ave	1.140	1.448		2.03	1.60	27.0	30.0
Butylbenzene	Ave	1.891	2.586		2.19	1.60	36.7*	30.0
Indene	Ave	0.9776	1.197		1.96	1.60	22.4	30.0
Undecane	Ave	1.420	1.690		1.90	1.60	19.0	30.0
1,2-Dibromo-3-Chloropropane	Ave	0.4195	0.5702		2.17	1.60	35.9*	30.0
1,2,4,5-Tetramethylbenzene	Lin1		1.973		1.88	1.60	17.6	30.0
Dodecane	Ave	1.001	1.468		2.35	1.60	46.7*	30.0
1,2,4-Trichlorobenzene	Lin1		0.5283		2.18	1.60	36.2*	30.0
Naphthalene	QuaF		1.529		2.18	1.60	36.3*	30.0
Hexachlorobutadiene	Ave	0.7852	1.056		2.15	1.60	34.5*	30.0
1,2,3-Trichlorobenzene	Ave	0.4610	0.6350		2.20	1.60	37.7*	30.0
2-Methylnaphthalene	Ave	0.1790	0.0785		0.701	1.60	-56.2*	50.0
1-Methylnaphthalene	Ave	0.2066	0.1681		1.30	1.60	-18.7	50.0
4-Bromofluorobenzene (Surr)	Ave	0.5577	0.6256		5.21	4.64	12.2	30.0

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Sample No.: ICIS 140-42295/15 Date Analyzed: 09/02/2020 03:27

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm)

Lab File ID (Standard): GI01IC07.D Heated Purge: (Y/N) N

Calibration ID: 2602

		CBM		DFBZ		CBZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		155264	8.81	774405	11.00	759403	15.73
UPPER LIMIT		217370	9.14	1084167	11.33	1063164	16.06
LOWER LIMIT		93158	8.48	464643	10.67	455642	15.40
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 140-42295/22		147601	8.81	795164	11.00	773847	15.73

CBM = Chlorobromomethane (IS)
DFBZ = 1,4-Difluorobenzene
CBZd5 = Chlorobenzene-d5 (IS)

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO 15 LL

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Sample No.: CCVIS 140-42409/2 Date Analyzed: 09/03/2020 07:55

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm)

Lab File ID (Standard): GCCVI03.D Heated Purge: (Y/N) N

Calibration ID: 2602

		CBM		DFBZ		CBZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		123190	8.81	577691	11.00	619386	15.73
UPPER LIMIT		172466	9.14	808767	11.33	867140	16.06
LOWER LIMIT		73914	8.48	346615	10.67	371632	15.40
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 140-42409/1002		123190	8.81	577691	11.00	619386	15.73
MB 140-42409/8		126458	8.81	674635	11.00	648613	15.73
140-20175-12	SV-060-C-29	105140	8.81	579099	10.99	550873	15.73
140-20175-14	SV-152-C-29	100553	8.81	552080	11.00	529665	15.73
140-20175-15	SV-141-C-29	105409	8.81	592140	10.99	562261	15.73
140-20175-16	SV-149-C-29	107317	8.81	600962	10.99	568970	15.72
140-20175-13	SV-150-C-29	122983	8.81	689449	11.00	719081	15.73

CBM = Chlorobromomethane (IS)
DFBZ = 1,4-Difluorobenzene
CBZd5 = Chlorobenzene-d5 (IS)

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO 15 LL

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Sample No.: CCVIS 140-42500/2 Date Analyzed: 09/07/2020 08:06

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm)

Lab File ID (Standard): GCCVI07.D Heated Purge: (Y/N) N

Calibration ID: 2602

		CBM		DFBZ		CBZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		111190	8.81	599538	11.00	593917	15.73
UPPER LIMIT		155666	9.14	839353	11.33	831484	16.06
LOWER LIMIT		66714	8.48	359723	10.67	356350	15.40
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 140-42500/1002		111190	8.81	599538	11.00	593917	15.73
MB 140-42500/4		111064	8.81	569575	10.99	557368	15.73
140-20175-33	IA-144-C-29	106151	8.81	586385	10.99	570501	15.73
140-20175-34	IA-141-C-29	105842	8.81	582821	10.99	560836	15.72
140-20175-35	IA-149-C-29	107478	8.81	567029	10.99	554939	15.73
140-20175-36	IA-DUP2-C-29	108291	8.82	591254	11.00	579156	15.72
140-20175-37	IA-126-C-29	105788	8.81	596448	10.99	584242	15.72
140-20175-38	IA-BCK-1-29	105198	8.80	596948	10.98	571257	15.72
140-20175-39	IA-BCK-2-29	108441	8.81	606996	10.99	576944	15.72
140-20175-40	IA-BCK-3-29	104188	8.81	561438	10.99	569586	15.73
140-20175-41	IA-BCK-4-29	100244	8.81	551622	10.99	520267	15.72
140-20175-11	SV-DUP2-C-29	105624	8.81	577580	11.00	546269	15.72

CBM = Chlorobromomethane (IS)
DFBZ = 1,4-Difluorobenzene
CBZd5 = Chlorobenzene-d5 (IS)

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO 15 LL

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Sample No.: CCVIS 140-42503/2 Date Analyzed: 09/08/2020 15:52

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm)

Lab File ID (Standard): GCCVI08Z.D Heated Purge: (Y/N) N

Calibration ID: 2602

		CBM		DFBZ		CBZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		85639	8.81	429335	10.99	458464	15.72
UPPER LIMIT		119895	9.14	601069	11.32	641850	16.05
LOWER LIMIT		51383	8.48	257601	10.66	275078	15.39
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 140-42503/1002		85639	8.81	429335	10.99	458464	15.72
MB 140-42503/5		92424	8.81	511454	10.99	492844	15.73
140-20175-3 DL	SV-102-C-29 DL	72039	8.81	335564	11.00	339613	15.72
140-20175-6 DL	SV-DUP1-C-29 DL	89902	8.81	481249	10.99	466074	15.72
140-20175-17	SV-126-C-29	78300	8.81	366946	10.99	398277	15.72

CBM = Chlorobromomethane (IS)
DFBZ = 1,4-Difluorobenzene
CBZd5 = Chlorobenzene-d5 (IS)

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO 15 LL

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Sample No.: ICIS 140-42290/15 Date Analyzed: 08/29/2020 23:57

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm)

Lab File ID (Standard): HH29IC07.D Heated Purge: (Y/N) N

Calibration ID: 2592

		CBM		DFBZ		CBZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		124211	9.44	547740	11.60	401461	16.26
UPPER LIMIT		173895	9.77	766836	11.93	562045	16.59
LOWER LIMIT		74527	9.11	328644	11.27	240877	15.93
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 140-42290/18		125635	9.43	541139	11.59	407551	16.26

CBM = Chlorobromomethane (IS)
DFBZ = 1,4-Difluorobenzene
CBZd5 = Chlorobenzene-d5 (IS)

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO 15 LL

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Sample No.: CCVIS 140-42399/2 Date Analyzed: 09/03/2020 10:16

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm)

Lab File ID (Standard): HCCVI03.D Heated Purge: (Y/N) N

Calibration ID: 2592

		CBM		DFBZ		CBZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		102360	9.44	437376	11.59	328807	16.26
UPPER LIMIT		143304	9.77	612326	11.92	460330	16.59
LOWER LIMIT		61416	9.11	262426	11.26	197284	15.93
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 140-42399/1002		102360	9.44	437376	11.59	328807	16.26
MB 140-42399/4		109088	9.43	445803	11.59	307157	16.26
140-20175-1	SV-001-C-29	102877	9.43	406737	11.59	264723	16.26
140-20175-2	SV-004-C-29	100071	9.43	389816	11.59	261316	16.26
140-20175-3	SV-102-C-29	94451	9.43	375223	11.59	255415	16.26
140-20175-4	SV-113-C-29	113176	9.43	446569	11.59	282466	16.26
140-20175-5	SV-088-C-29	96953	9.43	389257	11.59	254913	16.26
140-20175-6	SV-DUP1-C-29	105447	9.43	409892	11.59	313538	16.26
140-20175-7	SV-142-C-29	113516	9.43	459567	11.59	293565	16.26
140-20175-8	SV-155-C-29	106055	9.43	433788	11.59	309342	16.26
140-20175-9	SV-133-C-29	102150	9.43	421804	11.59	304872	16.26
140-20175-10	SV-153-C-29	106027	9.43	420740	11.59	310339	16.26

CBM = Chlorobromomethane (IS)
DFBZ = 1,4-Difluorobenzene
CBZd5 = Chlorobenzene-d5 (IS)

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO 15 LL

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Sample No.: CCVIS 140-42482/3 Date Analyzed: 09/05/2020 12:41

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm)

Lab File ID (Standard): HCCVI05A.D Heated Purge: (Y/N) N

Calibration ID: 2592

		CBM		DFBZ		CBZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		96483	9.44	419421	11.59	298882	16.26
UPPER LIMIT		135076	9.77	587189	11.92	418435	16.59
LOWER LIMIT		57890	9.11	251653	11.26	179329	15.93
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 140-42482/1003		96483	9.44	419421	11.59	298882	16.26
MB 140-42482/5		106353	9.43	381351	11.59	254972	16.26
140-20175-18	IA-001-C-29	90837	9.43	363248	11.59	242567	16.26
140-20175-19	IA-004-C-29	91115	9.43	368208	11.59	261236	16.26
140-20175-20	IA-102-C-29	85391	9.43	342569	11.60	279069	16.26

CBM = Chlorobromomethane (IS)
DFBZ = 1,4-Difluorobenzene
CBZd5 = Chlorobenzene-d5 (IS)

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO 15 LL

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Sample No.: CCVIS 140-42498/9 Date Analyzed: 09/06/2020 17:12

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm)

Lab File ID (Standard): HCCVH06b.D Heated Purge: (Y/N) N

Calibration ID: 2592

		CBM		DFBZ		CBZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		122536	9.43	491945	11.59	362338	16.26
UPPER LIMIT		171550	9.76	688723	11.92	507273	16.59
LOWER LIMIT		73522	9.10	295167	11.26	217403	15.93
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 140-42498/1009		122536	9.43	491945	11.59	362338	16.26
MB 140-42498/4		100504	9.43	421238	11.59	248813	16.26
140-20175-21	IA-113-C-29	96857	9.43	404330	11.59	264517	16.26
140-20175-22	IA-088-C-29	106797	9.44	431186	11.59	292750	16.26
140-20175-23	IA-142-C-29	96074	9.43	382955	11.59	292544	16.26
140-20175-24	IA-155-C-29	105613	9.43	386630	11.59	313320	16.26
140-20175-25	IA-133-C-29	105562	9.43	383858	11.59	284256	16.26
140-20175-26	IA-153-C-29	99987	9.43	388940	11.59	262723	16.26
140-20175-27	IA-DUP1-C-29	99189	9.43	347780	11.59	267383	16.26
140-20175-28	IA-060-C-29	92287	9.44	364744	11.59	265631	16.26
140-20175-29	IA-152-C-29	99489	9.44	402246	11.59	302959	16.26
140-20175-30	IA-150-C-29	100616	9.44	398071	11.59	282692	16.26
140-20175-31	IA-145-C-29	106815	9.43	429409	11.59	299473	16.26
140-20175-32	IA-146-C-29	98293	9.44	374024	11.59	293987	16.26

CBM = Chlorobromomethane (IS)
DFBZ = 1,4-Difluorobenzene
CBZd5 = Chlorobenzene-d5 (IS)

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO 15 LL

LOCKHEED MARTIN CORPORATION (LMC) - MIDDLE RIVER COMPLEX (MRC)
SDG 140-20175-1

SAMPLE IDENTIFICATION	IA-DUP1-C-29		
COMPOUND	TRICHLOROETHENE	MW=	131.39
		GAS CONSTANT =	24.45
COMPOUND AREA	5131		
INTERNAL STANDARD AMOUNT (ppbv)	4.8		
CALIBRATION VOLUME (mL)	500		
DILUTION FACTOR	1		
INTERNAL STANDARD AREA	347780		
AVERAGE RRF	0.3963		
SAMPLE VOLUME (mL)	100		

0.8935	ppbv
4.80	µg/m³

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: IA-DUP1-C-29 Lab Sample ID: 140-20175-27

Matrix: Air Lab File ID: HI07P110.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 00:00

Sample wt/vol: 100(mL) Date Analyzed: 09/07/2020 00:57

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42498 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.19	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.12	J *	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	2.9		0.40	0.11
67-66-3	Chloroform	119.38	0.11	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.57		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	0.13	J	0.40	0.065
75-09-2	Methylene Chloride	84.93	3.2		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.035
108-88-3	Toluene	92.14	1.1		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	0.89		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	0.11	J *	0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	0.28	J	0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.58	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	95		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1

SDG No.:

Client Sample ID: IA-DUP1-C-29 Lab Sample ID: 140-20175-27

Matrix: Air Lab File ID: HI07P110.D

Analysis Method: TO 15 LL Date Collected: 08/25/2020 00:00

Sample wt/vol: 100(mL) Date Analyzed: 09/07/2020 00:57

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42498 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.60	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.76	J *	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	10		1.4	0.39
67-66-3	Chloroform	119.38	0.55	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.8		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	0.56	J	1.7	0.28
75-09-2	Methylene Chloride	84.93	11		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.24
108-88-3	Toluene	92.14	4.2		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	4.8		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	0.52	J *	2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	1.4	J	2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	2.5	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	95		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\HI07P110.D				
Lims ID:	140-20175-A-27				
Client ID:	IA-DUP1-C-29				
Sample Type:	Client				
Inject. Date:	07-Sep-2020 00:57:30	ALS Bottle#:	10	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016514-015				
Misc. Info.:	140-20175-a-27				
Operator ID:	HMT	Instrument ID:	MH		
Method:	\\chromfs\Knoxville\ChromData\MH\20200904-16514.b\MH_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	07-Sep-2020 07:43:45	Calib Date:	29-Aug-2020 23:57:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1015				
First Level Reviewer: tajh		Date:	07-Sep-2020 07:42:22		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.431	9.431	0.000	96	99189	4.80	
* 2 1,4-Difluorobenzene	114	11.591	11.591	0.000	95	347780	4.80	
* 3 Chlorobenzene-d5 (IS)	117	16.258	16.258	0.000	88	267383	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.876	17.876	0.000	91	137553	4.43	
6 Chlorodifluoromethane	51	3.916	3.916	0.000	96	31579	0.5705	
8 Dichlorodifluoromethane	85	3.983	3.983	0.000	99	8559	0.1141	
31 Methylene Chloride	84	6.764	6.764	0.000	96	15605	0.6418	
44 Chloroform	83	9.436	9.436	0.000	28	1349	0.0224	
51 Benzene	78	11.064	11.074	-0.010	74	2408	0.0377	
52 Carbon tetrachloride	117	11.090	11.095	-0.005	89	950	0.0240	
58 Trichloroethene	130	12.294	12.294	0.000	93	5131	0.1787	
67 Toluene	91	14.310	14.310	0.000	90	15224	0.2210	
73 Tetrachloroethene	129	15.426	15.436	-0.010	1	198	0.006857	
76 Ethylbenzene	91	16.584	16.584	0.000	92	2143	0.0257	
77 m-Xylene & p-Xylene	91	16.739	16.744	-0.005	94	5003	0.0759	
81 o-Xylene	91	17.266	17.266	0.000	96	2827	0.0410	
88 1,3,5-Trimethylbenzene	120	18.563	18.563	0.000	87	388	0.0567	
92 1,2,4-Trimethylbenzene	105	18.987	18.987	0.000	91	1688	0.0212	
S 116 Xylenes, Total	100				0		0.1169	

Reagents:

40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20175-1 Analy Batch No.: 42290

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/29/2020 12:34 Calibration End Date: 08/29/2020 23:57 Calibration ID: 2592

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Hexane	+++++ 1.0080	0.9773 1.0550	1.0130 1.0448	0.9838 0.9870	0.9509 1.0318	Ave		1.0057				3.4		30.0			
cis-1,2-Dichloroethene	+++++ 1.2006	1.3116 1.2181	1.2071 1.2852	1.1877 1.1989	1.1672 1.2990	Ave		1.2306				4.3		30.0			
Ethyl acetate	+++++ 2.9537	3.2426 3.0946	3.0860 3.2045	3.0580 2.9864	2.8380 3.2849	Ave		3.0832				4.7		30.0			
Chloroform	+++++ 2.8096	3.2252 2.8206	3.2462 2.8108	2.9724 2.5718	2.9615 2.8168	Ave		2.9150				7.4		30.0			
Tetrahydrofuran	+++++ 1.4066	1.3660 1.5320	1.3295 1.5894	1.3844 1.4788	1.3361 1.6073	Ave		1.4478				7.4		30.0			
1,1,1-Trichloroethane	+++++ 2.5370	2.7730 2.5666	2.8490 2.6074	2.6261 2.4100	2.6714 2.7422	Ave		2.6425				5.1		30.0			
1,2-Dichloroethane	+++++ 0.4161	0.5015 0.4090	0.4638 0.4108	0.4474 0.3989	0.4303 0.4502	Ave		0.4365				7.5		30.0			
1-Butanol	+++++ 0.1165	+++++ 0.1336	+++++ 0.1377	+++++ 0.1423	0.1277 0.1580	Ave		0.1360				10.3		30.0			
Cyclohexane	+++++ 0.1198	+++++ 0.1249	+++++ 0.1277	0.1004 0.1227	0.1139 0.1347	Ave		0.1206				9.1		30.0			
Benzene	+++++ 0.8717	+++++ 0.8688	0.9571 0.8628	0.8914 0.8210	0.8833 0.8951	Ave		0.8814				4.3		30.0			
Carbon tetrachloride	0.5108 0.5438	0.5330 0.4095	0.5691 0.6501	0.5793 0.4135	0.6039 0.6426	Ave		0.5456				15.3		30.0			
2,3-Dimethylpentane	+++++ 0.1708	+++++ 0.1774	0.1466 0.1831	0.1419 0.1757	0.1521 0.1876	Ave		0.1669				10.5		30.0			
Thiophene	+++++ 0.4580	+++++ 0.4695	0.4528 0.4902	0.4129 0.4728	0.4335 0.5188	Ave		0.4636				7.1		30.0			
2,2,4-Trimethylpentane	+++++ 1.3767	1.2986 1.4447	1.2613 1.4999	1.1363 1.4507	1.2859 1.5790	Ave		1.3703				10.0		30.0			
Heptane	+++++ 0.2507	+++++ 0.2627	+++++ 0.2778	0.1771 0.2716	0.2236 0.2949	Ave		0.2512				15.8		30.0			
1,2-Dichloropropane	+++++ 0.3611	0.3921 0.3664	0.4016 0.3701	0.3866 0.3598	0.3648 0.3925	Ave		0.3772				4.2		30.0			
Trichloroethene	0.4333 0.3724	0.4130 0.3723	0.3957 0.3910	0.3650 0.4321	0.3607 0.4274	Ave		0.3963				7.2		30.0			
Dibromomethane	+++++ 0.4361	+++++ 0.3943	+++++ 0.4009	0.4554 0.3985	0.4038 0.4475	Ave		0.4195				6.2		30.0			
Bromodichloromethane	0.6294 0.5862	0.5994 0.6091	0.6386 0.6497	0.5894 0.6277	0.5998 0.7176	Ave		0.6247				6.3		30.0			
1,4-Dioxane	+++++ 0.1088	+++++ 0.1402	+++++ 0.1440	0.0949 0.1381	0.1070 0.1457	Ave		0.1255				16.9		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

TETRA TECH

INTERNAL CORRESPONDENCE

TO: **S. BRENNER** **DATE:** **OCTOBER 14, 2020**

FROM: **LEIGH A. CIOFANI** **COPIES:** **DV FILE**

SUBJECT: **ORGANIC DATA VALIDATION – VOC**
LOCKHEED MARTIN CORPORATION (LMC) – MIDDLE RIVER COMPLEX (MRC)
SAMPLE DELIVERY GROUP (SDG) 140-20194-1

SAMPLES: 20 / Air / VOC

SV-015-A-29	SV-075-A-29	SV-076-A-29
SV-078-A-29	SV-079-A-29	SV-100-B-29
SV-101-B-29	SV-116-A-29	SV-118-A-29
SV-136-A-29	SV-138-A-29	SV-139-A-29
SV-168-A-29	SV-171-A-29	SV-172-A-29
SV-173-A-29	SV-174-A-29	SV-177-A-29
SV-DUP 3-A-29	SV-DUP 4-A-29	

OVERVIEW

The sample set for LMC – MRC, SDG 140-20194-1, consists of twenty (20) soil vapor (SV) environmental samples. All samples were analyzed for select volatile organic compounds (VOCs). Two (2) field duplicate pairs are included in this SDG: SV-116-A-29 / SV-DUP 3-A-29 and SV-168-A-29 / SV-DUP 4-A-29.

The samples were collected by Tetra Tech on August 26, 2020 and analyzed by Eurofins TestAmerica. All analyses were conducted in accordance with EPA Method TO-15 analytical and reporting protocols.

The data contained in this SDG were validated with regard to the following parameters: data completeness, holding times, GC/MS tuning, initial/continuing calibrations, laboratory method blank results, surrogate spike recoveries, laboratory control sample results, internal standard areas, field duplicate precision, chromatographic resolution, compound identification, compound quantitation, and detection limits. Areas of concern are listed below.

MAJOR PROBLEMS

- None.

MINOR PROBLEMS

- The continuing calibration performed on 09/08/2020 at 15:52 on instrument MG had a percent difference (%D) for 1,2,3-trimethylbenzene that was greater than the 30% quality control limit. The following samples were associated with this calibration: SV-139-A-29, SV-172-A-29, SV-116-A-29, SV-DUP 3-A-29, SV-138-A-29, SV-173-A-29, SV-171-A-29, SV-177-A-29, and SV-118-A-29. The detected and non-detected results for 1,2,3-trimethylbenzene were qualified as estimated (J and UJ, respectively) in the affected samples.

- The continuing calibration performed on 09/08/2020 at 13:10 on instrument MH had %Ds for 1,2,4-trichlorobenzene and naphthalene that were greater than the 30% quality control limit. The following samples were associated with this calibration: SV-015-A-29, SV-078-A-29, SV-076-A-29, SV-DUP 4-A-29, SV-075-A-29, SV-136-A-29, SV-101-B-29, SV-100-B-29, SV-079-A-29, and SV-168-A-29. Detected and non-detected results for these analytes were qualified as estimated (J and UJ, respectively) in the associated samples.

- The continuing calibration performed on 09/09/2020 at 11:27 on instrument MR had a %D that was greater than the 30% quality control limit for dichlorodifluoromethane. Sample SV-174-A-29 was associated with this calibration. The non-detected result for dichlorodifluoromethane was qualified as estimated (UJ) in the affected sample.

- The laboratory control sample (LCS) 140-42503/1002 had a percent recovery (%R) that was less than the laboratory quality control limits for 1,2,3-trimethylbenzene. The following samples were associated with this LCS: SV-139-A-29, SV-172-A-29, SV-116-A-29, SV-DUP 3-A-29, SV-138-A-29, SV-173-A-29, SV-171-A-29, SV-177-A-29, and SV-118-A-29. The detected and non-detected results for 1,2,3-trimethylbenzene were qualified as estimated (J and UJ, respectively) in the associated samples.

- The field duplicate pair samples SV-168-A-29 / SV-DUP 4-A-29 had a relative percent difference (RPD) that was greater than the 50% quality control limit for trichloroethene. The detected results for trichloroethene were qualified as estimated (J) in samples SV-168-A-29 and SV-DUP 4-A-29.

- Detected results reported below the reporting limit (RL) but above the method detection limit (MDL) were qualified as estimated (J).

NOTES

Twenty-five VOC target compounds were reported for the TO-15 analysis of the samples.

Non-detected results were reported to the MDL.

The following samples were analyzed at dilution factors greater than 1:

Sample	Dilution Factor
SV-171-A-29	3.03
SV-173-A-29	9.23
SV-174-A-29	120

Trichloroethene exceeded the instrument calibration range in sample SV-118-A-29. This sample was reanalyzed, and the trichloroethene result from the reanalysis was selected for validation.

The GC/MS tune performed on 09/09/2020 at 10:50 on instrument MR had a percent relative abundance for m/z 75 that was greater than the ion abundance criterion listed on the form. However, the laboratory case narrative indicates that the ion abundance criteria listed on the forms are for Method TO-14. The percent relative abundance for m/z 75 is within the limits for Method TO-15. Therefore, no action was necessary.

The LCS 140-45042/1002 had a %R that was greater than the laboratory quality control limits for 1,2,4-trichlorobenzene. The following samples were associated with this LCS: SV-015-A-29, SV-078-A-29, SV-076-A-29, SV-DUP 4-A-29, SV-075-A-29, SV-136-A-29, SV-101-B-29, SV-100-B-29, SV-079-A-29, and SV-168-A-29. No qualification was necessary because associated results for 1,2,4-trichlorobenzene were non-detected.

EXECUTIVE SUMMARY

Laboratory Performance: Some results were qualified due to calibration noncompliance. Several results were qualified due to LCS noncompliance.

Other Factors Affecting Data Quality: Two results were qualified due to field duplicate imprecision. Results above the MDL but below the RL were qualified as estimated.

The data for these analyses were reviewed with reference to the USEPA "National Functional Guidelines for Organic Superfund Methods Data Review" (January 2017) and USEPA Method TO-15 analytical and reporting protocols. The text of this report has been formulated to address only those areas affecting data quality.

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Environmental Scientist/Data Validator

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Attachments:
Appendix A – Qualified Analytical Results
Appendix B – Results as Reported by the Laboratory
Appendix C – Support Documentation

Appendix A

Qualified Analytical Results

Data Qualifier Definitions

The following definitions provide brief explanations of the validation qualifiers assigned to results in the data review process.

U	The analyte was analyzed for, but was not detected at a level greater than or equal to the level of the adjusted detection limit.
J	The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample (due either to the quality of the data generated because certain quality control criteria were not met, or the concentration of the analyte was below the reporting limit).
J+	The result is an estimated quantity, but the result may be biased high.
J-	The result is an estimated quantity, but the result may be biased low.
UJ	The analyte was analyzed for, but was not detected. The reported detection limit is approximate and may be inaccurate or imprecise.
NJ	The analyte has been “tentatively identified” or “presumptively” as present and the associated numerical value is the estimated concentration in the sample.
R	The sample result (detected) is unusable due to the quality of the data generated because certain criteria were not met. The analyte may or may not be present in the sample.
UR	The sample result (nondetected) is unusable due to the quality of the data generated because certain criteria were not met. The analyte may or may not be present in the sample.
X	The sample results (including non-detects) were affected by serious deficiencies in the ability to analyze the sample and meet published method and project quality control criteria. The presence or absence of the analyte cannot be substantiated by the data provided. Acceptance or rejection of the data should be decided by the project team, but exclusion of the data is recommended.

Qualifier Codes:

A = Lab Blank Contamination
B = Field Blank Contamination
C = Calibration Noncompliance (i.e., % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
C01 = GC/MS Tuning Noncompliance
D = MS/MSD Recovery Noncompliance
E = LCS/LCSD Recovery Noncompliance
F = Lab Duplicate Imprecision
G = Field Duplicate Imprecision
H = Holding Time Exceedance
I = ICP Serial Dilution Noncompliance
J = ICP PDS Recovery Noncompliance; MSA's $r < 0.995$
K = ICP Interference - includes ICS % R Noncompliance
L = Instrument Calibration Range Exceedance
M = Sample Preservation Noncompliance
N = Internal Standard Noncompliance
N01 = Internal Standard Recovery Noncompliance Dioxins
N02 = Recovery Standard Noncompliance Dioxins
N03 = Clean-up Standard Noncompliance Dioxins
O = Poor Instrument Performance (i.e., base-time drifting)
P = Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q = Other problems (can encompass a number of issues; i.e.chromatography,interferences, etc.)
R = Surrogates Recovery Noncompliance
S = Pesticide/PCB Resolution
T = % Breakdown Noncompliance for DDT and Endrin
U = RPD between columns/detectors >40% for positive results determined via GC/HPLC
V = Non-linear calibrations; correlation coefficient $r < 0.995$
W = EMPC result
X = Signal to noise response drop
Y = Percent solids <30%
Z = Uncertainty at 2 standard deviations is greater than sample activity
Z1 = Tentatively Identified Compound considered presumptively present
Z2 = Tentatively Identified Compound column bleed
Z3 = Tentatively Identified Compound aldol condensate
Z4 = Sample activity is less than the at uncertainty at 3 standard deviations and greater than the MDC
Z5 = Sample activity is less than the at uncertainty at 3 standard deviations and less than the MDC

PROJ_NO: 08388	NSAMPLE	SV-015-A-29			SV-075-A-29			SV-076-A-29			SV-078-A-29		
SDG: 140-20194-1	LAB_ID	140-20194-9			140-20194-14			140-20194-11			140-20194-10		
FRACTION: OV-M3	SAMP_DATE	8/26/2020			8/26/2020			8/26/2020			8/26/2020		
MEDIA: AIR	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/M3			UG/M3			UG/M3			UG/M3		
	PCT_SOLIDS												
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1-TRICHLOROETHANE		9.9			1	U		2.1	J	P	2.9		
1,1,2-TRICHLOROETHANE		0.19	U		0.19	U		0.19	U		0.19	U	
1,1-DICHLOROETHANE		9			0.14	U		0.14	U		0.14	U	
1,1-DICHLOROETHENE		28			0.16	U		0.16	U		0.16	U	
1,2,3-TRIMETHYLBENZENE		0.88	U		3.6			7			0.88	U	
1,2,4-TRICHLOROBENZENE		2.4	UJ	C	2.4	UJ	C	2.4	UJ	C	2.4	UJ	C
1,2,4-TRIMETHYLBENZENE		0.67	J	P	10			5.4			0.72	J	P
1,2-DICHLOROETHANE		0.2	U		0.2	U		0.2	U		0.2	U	
1,3,5-TRIMETHYLBENZENE		1.5	J	P	5.7			8.3			1.4	J	P
BENZENE		2.7			0.18	J	P	0.37	J	P	0.31	J	P
CARBON TETRACHLORIDE		0.56	J	P	0.54	J	P	0.53	J	P	0.47	J	P
CHLORODIFLUOROMETHANE		1.1	J	P	8.2			1	J	P	1.3	J	P
CHLOROFORM		0.93	J	P	0.38	J	P	0.25	J	P	0.98	J	P
CIS-1,2-DICHLOROETHENE		3.6			0.2	U		0.2	U		0.2	U	
DICHLORODIFLUOROMETHANE		2.4			2.6			2.6			5		
ETHYLBENZENE		5.8			0.49	J	P	0.28	U		0.28	U	
METHYL TERT-BUTYL ETHER		0.94	U		0.94	U		0.94	U		0.94	U	
METHYLENE CHLORIDE		6.8	U		6.8	U		6.8	U		6.8	U	
NAPHTHALENE		1	UJ	C	10	J	C	1	UJ	C	1	UJ	C
TETRACHLOROETHENE		0.52	J	P	0.89	J	P	1.3	J	P	2.9		
TOLUENE		2	J	P	7.4			1.5	U		1.5	U	
TOTAL XYLENES		12			3.2	J	P	1.6	J	P	1.4	J	P
TRANS-1,2-DICHLOROETHENE		2.4			0.14	U		0.14	U		0.14	U	
TRICHLOROETHENE		28			2.8			4.8			27		
VINYL CHLORIDE		0.33	U		0.33	U		0.33	U		0.33	U	

PROJ_NO: 08388	NSAMPLE	SV-079-A-29			SV-100-B-29			SV-101-B-29			SV-116-A-29		
SDG: 140-20194-1	LAB_ID	140-20194-18			140-20194-17			140-20194-16			140-20194-2		
FRACTION: OV-M3	SAMP_DATE	8/26/2020			8/26/2020			8/26/2020			8/26/2020		
MEDIA: AIR	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/M3			UG/M3			UG/M3			UG/M3		
	PCT_SOLIDS												
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1-TRICHLOROETHANE		2.3			3.2			220			1	U	
1,1,2-TRICHLOROETHANE		0.19	U		0.19	U		0.19	U		0.19	U	
1,1-DICHLOROETHANE		0.14	U		0.14	U		0.14	U		0.14	U	
1,1-DICHLOROETHENE		0.16	U		0.16	U		0.16	U		0.8	J	P
1,2,3-TRIMETHYLBENZENE		0.88	U		0.88	U		5.3			0.88	UJ	CE
1,2,4-TRICHLOROBENZENE		2.4	UJ	C	2.4	UJ	C	2.4	UJ	C	2.4	U	
1,2,4-TRIMETHYLBENZENE		1.4	J	P	0.49	U		15			0.49	U	
1,2-DICHLOROETHANE		0.2	U		0.2	U		0.2	U		0.2	U	
1,3,5-TRIMETHYLBENZENE		1.9	J	P	1.2	J	P	5.7			0.54	U	
BENZENE		0.42	J	P	0.13	U		0.19	J	P	0.36	J	P
CARBON TETRACHLORIDE		0.48	J	P	42			6.8			0.37	J	P
CHLORODIFLUOROMETHANE		2.2			1.5			3			1.4	J	P
CHLOROFORM		0.74	J	P	6.8			0.87	J	P	3.9		
CIS-1,2-DICHLOROETHENE		0.2	U		0.2	U		0.2	U		0.2	U	
DICHLORODIFLUOROMETHANE		2.8			5.1			6			2.3		
ETHYLBENZENE		1.7	J	P	0.28	U		0.28	U		0.28	U	
METHYL TERT-BUTYL ETHER		0.94	U		0.94	U		0.94	U		0.94	U	
METHYLENE CHLORIDE		30			6.8	U		6.8	U		8		
NAPHTHALENE		1	UJ	C	1	UJ	C	2.9	J	C	1	U	
TETRACHLOROETHENE		13			5.4			73			0.24	U	
TOLUENE		2.7			1.5	U		1.7	J	P	1.5	U	
TOTAL XYLENES		7.2			0.52	U		1.7	J	P	0.52	U	
TRANS-1,2-DICHLOROETHENE		0.32	J	P	0.14	U		0.14	U		0.14	U	
TRICHLOROETHENE		130			31			160			7.6		
VINYL CHLORIDE		0.33	U		0.33	U		0.33	U		0.33	U	

PROJ_NO: 08388	NSAMPLE	SV-118-A-29			SV-118-A-29-DL			SV-136-A-29			SV-138-A-29		
SDG: 140-20194-1	LAB_ID	140-20194-20			140-20194-20			140-20194-15			140-20194-4		
FRACTION: OV-M3	SAMP_DATE	8/26/2020			8/26/2020			8/26/2020			8/26/2020		
MEDIA: AIR	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/M3			UG/M3			UG/M3			UG/M3		
	PCT_SOLIDS												
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1-TRICHLOROETHANE		3.9						5	U		1	U	
1,1,2-TRICHLOROETHANE		0.19	U					0.95	U		0.19	U	
1,1-DICHLOROETHANE		9.7						0.71	U		3.7		
1,1-DICHLOROETHENE		72						0.79	U		16		
1,2,3-TRIMETHYLBENZENE		3.4	J	CE				4.4	U		0.88	UJ	CE
1,2,4-TRICHLOROBENZENE		2.4	U					12	UJ	C	2.4	U	
1,2,4-TRIMETHYLBENZENE		6.7						2.5	U		0.49	U	
1,2-DICHLOROETHANE		0.2	U					1	U		0.21	J	P
1,3,5-TRIMETHYLBENZENE		5						2.7	U		0.54	U	
BENZENE		0.23	J	P				2.6	J	P	0.38	J	P
CARBON TETRACHLORIDE		0.38	J	P				1.1	U		0.34	J	P
CHLORODIFLUOROMETHANE		0.39	U					1.9	U		1.4		
CHLOROFORM		1.7	J	P				1.8	J	P	0.94	J	P
CIS-1,2-DICHLOROETHENE		40						1.8	J	P	11		
DICHLORODIFLUOROMETHANE		2.1						2.2	J	P	2.1		
ETHYLBENZENE		6.6						1.4	U		0.28	U	
METHYL TERT-BUTYL ETHER		0.94	U					4.7	U		0.94	U	
METHYLENE CHLORIDE		6.8	U					34	U		6.8	U	
NAPHTHALENE		1	U					5.2	UJ	C	1	U	
TETRACHLOROETHENE		0.24	U					1.2	U		1.3	J	P
TOLUENE		1.5	J	P				7.3	U		1.5	U	
TOTAL XYLENES		61						2.6	U		0.52	U	
TRANS-1,2-DICHLOROETHENE		3.2						0.69	U		0.39	J	P
TRICHLOROETHENE					650			480			140		
VINYL CHLORIDE		0.69						1.7	U		0.33	U	

PROJ_NO: 08388	NSAMPLE	SV-139-A-29			SV-168-A-29			SV-171-A-29			SV-172-A-29		
SDG: 140-20194-1	LAB_ID	140-20194-19			140-20194-12			140-20194-6			140-20194-1		
FRACTION: OV-M3	SAMP_DATE	8/26/2020			8/26/2020			8/26/2020			8/26/2020		
MEDIA: AIR	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/M3			UG/M3			UG/M3			UG/M3		
	PCT_SOLIDS												
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1-TRICHLOROETHANE		1	U		9.7			24	U		4		
1,1,2-TRICHLOROETHANE		0.19	U		0.19	U		4.5	U		0.19	U	
1,1-DICHLOROETHANE		0.14	U		0.73	J	P	10	J	P	0.39	J	P
1,1-DICHLOROETHENE		0.16	U		28			320			0.16	U	
1,2,3-TRIMETHYLBENZENE		6.5	J	CE	0.88	U		21	UJ	CE	0.88	UJ	CE
1,2,4-TRICHLOROBENZENE		2.4	U		2.4	UJ	C	55	U		2.4	U	
1,2,4-TRIMETHYLBENZENE		7.5			0.49	U		11	U		1.1	J	P
1,2-DICHLOROETHANE		0.2	U		0.2	U		4.7	U		0.2	U	
1,3,5-TRIMETHYLBENZENE		6.5			0.54	U		13	U		0.54	U	
BENZENE		0.27	J	P	0.18	J	P	3	U		0.35	J	P
CARBON TETRACHLORIDE		0.57	J	P	0.62	J	P	5.1	U		0.36	J	P
CHLORODIFLUOROMETHANE		1.8			1.7			9.1	U		2		
CHLOROFORM		0.17	U		2.8			4	U		1.3	J	P
CIS-1,2-DICHLOROETHENE		0.2	U		0.29	J	P	49			0.62	J	P
DICHLORODIFLUOROMETHANE		2.3			2.5			8.1	U		2.6		
ETHYLBENZENE		4.1			0.28	U		6.6	U		0.66	J	P
METHYL TERT-BUTYL ETHER		0.94	U		0.94	U		22	U		0.94	U	
METHYLENE CHLORIDE		26			20			160	U		6.8	U	
NAPHTHALENE		4.1			1	UJ	C	24	U		1	U	
TETRACHLOROETHENE		4.6			0.32	J	P	5.5	U		2.6	J	P
TOLUENE		3.6			1.5	U		34	U		3.6		
TOTAL XYLENES		42			0.52	U		12	U		3.3	J	P
TRANS-1,2-DICHLOROETHENE		0.14	U		0.14	U		3.2	U		0.14	U	
TRICHLOROETHENE		1.6			34	J	G	2800			59		
VINYL CHLORIDE		0.33	U		0.33	U		7.7	U		0.33	U	

PROJ_NO: 08388	NSAMPLE	SV-173-A-29			SV-174-A-29			SV-177-A-29			SV-DUP 3-A-29		
SDG: 140-20194-1	LAB_ID	140-20194-5			140-20194-7			140-20194-8			140-20194-3		
FRACTION: OV-M3	SAMP_DATE	8/26/2020			8/26/2020			8/26/2020			8/26/2020		
MEDIA: AIR	QC_TYPE	NM			NM			NM			FD		
	UNITS	UG/M3			UG/M3			UG/M3			UG/M3		
	PCT_SOLIDS												
	DUP_OF										SV-116-A-29		
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1-TRICHLOROETHANE		67	U		610	U		1.5			1	U	
1,1,2-TRICHLOROETHANE		13	U		110	U		0.13	U		0.19	U	
1,1-DICHLOROETHANE		58	J	P	630	J	P	0.53	J	P	0.14	U	
1,1-DICHLOROETHENE		1000			23000			0.11	U		0.65	J	P
1,2,3-TRIMETHYLBENZENE		58	UJ	CE	530	U		0.59	UJ	CE	0.88	UJ	CE
1,2,4-TRICHLOROBENZENE		160	U		1400	U		1.6	U		2.4	U	
1,2,4-TRIMETHYLBENZENE		32	U		290	U		1.4			0.49	U	
1,2-DICHLOROETHANE		13	U		120	U		0.13	U		0.2	U	
1,3,5-TRIMETHYLBENZENE		36	U		320	U		0.36	U		0.54	U	
BENZENE		8.4	U		77	U		0.62	J	P	0.35	J	P
CARBON TETRACHLORIDE		15	U		130	U		0.26	J	P	0.35	J	P
CHLORODIFLUOROMETHANE		26	U		230	U		1.5			1.2	J	P
CHLOROFORM		11	U		100	J	P	3.7			3.5		
CIS-1,2-DICHLOROETHENE		260			1800			0.13	U		0.2	U	
DICHLORODIFLUOROMETHANE		23	U		210	UJ	C	2			2.1		
ETHYLBENZENE		19	U		170	U		0.65	J	P	0.28	U	
METHYL TERT-BUTYL ETHER		62	U		560	U		0.62	U		0.94	U	
METHYLENE CHLORIDE		450	U		4100	U		4.5	U		6.8	U	
NAPHTHALENE		69	U		630	U		0.7	U		1	U	
TETRACHLOROETHENE		16	U		140	U		1.4	J	P	0.33	J	P
TOLUENE		97	U		880	U		3.3			1.5	U	
TOTAL XYLENES		34	U		310	U		3.4			0.52	U	
TRANS-1,2-DICHLOROETHENE		9.1	U		200	J	P	0.093	U		0.14	U	
TRICHLOROETHENE		7600			140000			110			6.5		
VINYL CHLORIDE		22	U		200	U		0.22	U		0.33	U	

PROJ_NO: 08388	NSAMPLE	SV-DUP 4-A-29		
SDG: 140-20194-1	LAB_ID	140-20194-13		
FRACTION: OV-M3	SAMP_DATE	8/26/2020		
MEDIA: AIR	QC_TYPE	FD		
	UNITS	UG/M3		
	PCT_SOLIDS			
	DUP_OF	SV-168-A-29		
PARAMETER		RESULT	VQL	QLCD
1,1,1-TRICHLOROETHANE		11		
1,1,2-TRICHLOROETHANE		0.19	U	
1,1-DICHLOROETHANE		0.77	J	P
1,1-DICHLOROETHENE		35		
1,2,3-TRIMETHYLBENZENE		0.88	U	
1,2,4-TRICHLOROBENZENE		2.4	UJ	C
1,2,4-TRIMETHYLBENZENE		0.71	J	P
1,2-DICHLOROETHANE		0.2	U	
1,3,5-TRIMETHYLBENZENE		1.4	J	P
BENZENE		0.55	J	P
CARBON TETRACHLORIDE		0.74	J	P
CHLORODIFLUOROMETHANE		1.8		
CHLOROFORM		3.2		
CIS-1,2-DICHLOROETHENE		0.42	J	P
DICHLORODIFLUOROMETHANE		2.5		
ETHYLBENZENE		0.28	U	
METHYL TERT-BUTYL ETHER		0.94	U	
METHYLENE CHLORIDE		19		
NAPHTHALENE		1	UJ	C
TETRACHLOROETHENE		0.49	J	P
TOLUENE		1.8	J	P
TOTAL XYLENES		1.2	J	P
TRANS-1,2-DICHLOROETHENE		0.21	J	P
TRICHLOROETHENE		180	J	G
VINYL CHLORIDE		0.33	U	

Appendix B

Results as Reported by the Laboratory

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: SV-015-A-29 Lab Sample ID: 140-20194-9

Matrix: Air Lab File ID: HI08P107.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 10:12

Sample wt/vol: 100(mL) Date Analyzed: 09/08/2020 22:04

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42504 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.86		0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.090	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	0.31	J	0.40	0.11
67-66-3	Chloroform	119.38	0.19	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	0.91		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.49		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	2.2		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	7.1		0.40	0.040
100-41-4	Ethylbenzene	106.17	1.3		0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	0.077	J	0.40	0.035
108-88-3	Toluene	92.14	0.54	J	0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	0.59		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND	*	0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	1.8		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	5.1		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	0.14	J	0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	0.30	J	0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	2.8		0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	91		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: SV-015-A-29 Lab Sample ID: 140-20194-9

Matrix: Air Lab File ID: HI08P107.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 10:12

Sample wt/vol: 100(mL) Date Analyzed: 09/08/2020 22:04

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42504 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	2.7		1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.56	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	1.1	J	1.4	0.39
67-66-3	Chloroform	119.38	0.93	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	3.6		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.4		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	9.0		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	28		1.6	0.16
100-41-4	Ethylbenzene	106.17	5.8		1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	0.52	J	2.7	0.24
108-88-3	Toluene	92.14	2.0	J	2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	2.4		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND	*	3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	9.9		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	28		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	0.67	J	2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	1.5	J	2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	12		3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	91		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: SV-075-A-29 Lab Sample ID: 140-20194-14

Matrix: Air Lab File ID: HI08P112.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 10:24

Sample wt/vol: 100(mL) Date Analyzed: 09/09/2020 02:36

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42504 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.056	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.085	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	2.3		0.40	0.11
67-66-3	Chloroform	119.38	0.079	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.53		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	0.11	J	0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	2.0		0.20	0.20
127-18-4	Tetrachloroethene	165.83	0.13	J	0.40	0.035
108-88-3	Toluene	92.14	2.0		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND	*	0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	0.52		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	0.72		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	2.0		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	1.1		0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.73	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	94		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: SV-075-A-29 Lab Sample ID: 140-20194-14

Matrix: Air Lab File ID: HI08P112.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 10:24

Sample wt/vol: 100(mL) Date Analyzed: 09/09/2020 02:36

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42504 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.18	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.54	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	8.2		1.4	0.39
67-66-3	Chloroform	119.38	0.38	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.6		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	0.49	J	1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	10		1.0	1.0
127-18-4	Tetrachloroethene	165.83	0.89	J	2.7	0.24
108-88-3	Toluene	92.14	7.4		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND	*	3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	2.8		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	3.6		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	10		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	5.7		2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	3.2	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	94		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: SV-076-A-29 Lab Sample ID: 140-20194-11

Matrix: Air Lab File ID: HI08P109.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 10:18

Sample wt/vol: 100(mL) Date Analyzed: 09/08/2020 23:55

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42504 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.12	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.085	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	0.28	J	0.40	0.11
67-66-3	Chloroform	119.38	0.051	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.52		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	ND		0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	0.19	J	0.40	0.035
108-88-3	Toluene	92.14	ND		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND	*	0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	0.39	J	0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	0.89		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	1.4		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	1.1		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	1.7		0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.37	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	91		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: SV-076-A-29 Lab Sample ID: 140-20194-11

Matrix: Air Lab File ID: HI08P109.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 10:18

Sample wt/vol: 100(mL) Date Analyzed: 09/08/2020 23:55

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42504 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.37	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.53	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	1.0	J	1.4	0.39
67-66-3	Chloroform	119.38	0.25	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.6		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	ND		1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	1.3	J	2.7	0.24
108-88-3	Toluene	92.14	ND		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND	*	3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	2.1	J	2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	4.8		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	7.0		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	5.4		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	8.3		2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	1.6	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	91		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: SV-078-A-29 Lab Sample ID: 140-20194-10

Matrix: Air Lab File ID: HI08P108.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 10:16

Sample wt/vol: 100(mL) Date Analyzed: 09/08/2020 23:00

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42504 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.097	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.075	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	0.36	J	0.40	0.11
67-66-3	Chloroform	119.38	0.20	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	1.0		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	ND		0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	0.42		0.40	0.035
108-88-3	Toluene	92.14	ND		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND	*	0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	0.54		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	5.0		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	0.15	J	0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	0.29	J	0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.32	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	92		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: SV-078-A-29 Lab Sample ID: 140-20194-10

Matrix: Air Lab File ID: HI08P108.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 10:16

Sample wt/vol: 100(mL) Date Analyzed: 09/08/2020 23:00

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42504 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.31	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.47	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	1.3	J	1.4	0.39
67-66-3	Chloroform	119.38	0.98	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	5.0		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	ND		1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	2.9		2.7	0.24
108-88-3	Toluene	92.14	ND		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND	*	3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	2.9		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	27		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	0.72	J	2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	1.4	J	2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	1.4	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	92		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: SV-079-A-29 Lab Sample ID: 140-20194-18

Matrix: Air Lab File ID: HI08P116.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 10:35

Sample wt/vol: 100(mL) Date Analyzed: 09/09/2020 07:09

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42504 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.13	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.076	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	0.62		0.40	0.11
67-66-3	Chloroform	119.38	0.15	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.56		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	0.39	J	0.40	0.065
75-09-2	Methylene Chloride	84.93	8.5		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	2.0		0.40	0.035
108-88-3	Toluene	92.14	0.72		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	0.080	J	0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND	*	0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	0.41		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	25		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	0.28	J	0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	0.39	J	0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	1.7		0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	91		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: SV-079-A-29 Lab Sample ID: 140-20194-18

Matrix: Air Lab File ID: HI08P116.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 10:35

Sample wt/vol: 100(mL) Date Analyzed: 09/09/2020 07:09

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42504 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.42	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.48	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	2.2		1.4	0.39
67-66-3	Chloroform	119.38	0.74	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.8		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	1.7	J	1.7	0.28
75-09-2	Methylene Chloride	84.93	30		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	13		2.7	0.24
108-88-3	Toluene	92.14	2.7		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	0.32	J	1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND	*	3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	2.3		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	130		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	1.4	J	2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	1.9	J	2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	7.2		3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	91		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: SV-100-B-29 Lab Sample ID: 140-20194-17

Matrix: Air Lab File ID: HI08P115.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 10:30

Sample wt/vol: 100(mL) Date Analyzed: 09/09/2020 05:22

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42504 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	ND		0.40	0.040
56-23-5	Carbon tetrachloride	153.81	6.6		0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	0.43		0.40	0.11
67-66-3	Chloroform	119.38	1.4		0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	1.0		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	ND		0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	0.80		0.40	0.035
108-88-3	Toluene	92.14	ND		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND	*	0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	0.58		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	5.8		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	0.25	J	0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	ND		0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	82		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: SV-100-B-29 Lab Sample ID: 140-20194-17

Matrix: Air Lab File ID: HI08P115.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 10:30

Sample wt/vol: 100(mL) Date Analyzed: 09/09/2020 05:22

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42504 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	ND		1.3	0.13
56-23-5	Carbon tetrachloride	153.81	42		2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	1.5		1.4	0.39
67-66-3	Chloroform	119.38	6.8		2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	5.1		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	ND		1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	5.4		2.7	0.24
108-88-3	Toluene	92.14	ND		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND	*	3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	3.2		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	31		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	1.2	J	2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	ND		3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	82		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: SV-101-B-29 Lab Sample ID: 140-20194-16

Matrix: Air Lab File ID: HI08P114.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 10:27

Sample wt/vol: 100(mL) Date Analyzed: 09/09/2020 04:29

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42504 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.060	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	1.1		0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	0.86		0.40	0.11
67-66-3	Chloroform	119.38	0.18	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	1.2		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	ND		0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	0.55		0.20	0.20
127-18-4	Tetrachloroethene	165.83	11		0.40	0.035
108-88-3	Toluene	92.14	0.44	J	0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND	*	0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	41		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	29		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	1.1		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	3.0		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	1.2		0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.39	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	89		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: SV-101-B-29 Lab Sample ID: 140-20194-16

Matrix: Air Lab File ID: HI08P114.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 10:27

Sample wt/vol: 100(mL) Date Analyzed: 09/09/2020 04:29

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42504 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.19	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	6.8		2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	3.0		1.4	0.39
67-66-3	Chloroform	119.38	0.87	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	6.0		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	ND		1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	2.9		1.0	1.0
127-18-4	Tetrachloroethene	165.83	73		2.7	0.24
108-88-3	Toluene	92.14	1.7	J	2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND	*	3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	220		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	160		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	5.3		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	15		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	5.7		2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	1.7	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	89		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: SV-116-A-29 Lab Sample ID: 140-20194-2

Matrix: Air Lab File ID: GI08P111.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 09:58

Sample wt/vol: 100(mL) Date Analyzed: 09/09/2020 01:43

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42503 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.11	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.059	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	0.39	J	0.40	0.11
67-66-3	Chloroform	119.38	0.79		0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.47		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	0.20	J	0.40	0.040
100-41-4	Ethylbenzene	106.17	ND		0.40	0.065
75-09-2	Methylene Chloride	84.93	2.3		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.035
108-88-3	Toluene	92.14	ND		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	1.4		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND	*	0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	ND		0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	102		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: SV-116-A-29 Lab Sample ID: 140-20194-2

Matrix: Air Lab File ID: GI08P111.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 09:58

Sample wt/vol: 100(mL) Date Analyzed: 09/09/2020 01:43

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42503 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.36	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.37	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	1.4	J	1.4	0.39
67-66-3	Chloroform	119.38	3.9		2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.3		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	0.80	J	1.6	0.16
100-41-4	Ethylbenzene	106.17	ND		1.7	0.28
75-09-2	Methylene Chloride	84.93	8.0		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.24
108-88-3	Toluene	92.14	ND		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	7.6		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND	*	2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	ND		3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	102		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: SV-118-A-29 Lab Sample ID: 140-20194-20

Matrix: Air Lab File ID: GI08P109R.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 10:41

Sample wt/vol: 100(mL) Date Analyzed: 09/09/2020 10:14

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42503 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.071	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.061	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	ND		0.40	0.11
67-66-3	Chloroform	119.38	0.35	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	10		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.43		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	2.4		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	18		0.40	0.040
100-41-4	Ethylbenzene	106.17	1.5		0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.035
108-88-3	Toluene	92.14	0.39	J	0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	0.81		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	0.72		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	*Trichloroethene*	*131.39*	*97*	*E*	*0.20*	*0.030*
526-73-8	1,2,3-Trimethylbenzene	120.19	0.69	*	0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	1.4		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	1.0		0.40	0.11
75-01-4	Vinyl chloride	62.50	0.27		0.20	0.13
1330-20-7	Xylenes, Total	106.17	14		0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	99		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: SV-118-A-29 Lab Sample ID: 140-20194-20

Matrix: Air Lab File ID: GI08P109R.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 10:41

Sample wt/vol: 100(mL) Date Analyzed: 09/09/2020 10:14

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42503 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.23	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.38	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	ND		1.4	0.39
67-66-3	Chloroform	119.38	1.7	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	40		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.1		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	9.7		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	72		1.6	0.16
100-41-4	Ethylbenzene	106.17	6.6		1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.24
108-88-3	Toluene	92.14	1.5	J	2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	3.2		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	3.9		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	*Trichloroethene*	*131.39*	*520*	*E*	*1.1*	*0.16*
526-73-8	1,2,3-Trimethylbenzene	120.19	3.4	*	2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	6.7		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	5.0		2.0	0.54
75-01-4	Vinyl chloride	62.50	0.69		0.51	0.33
1330-20-7	Xylenes, Total	106.17	61		3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	99		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: SV-118-A-29 DL Lab Sample ID: 140-20194-20 DL

Matrix: Air Lab File ID: RI09P101.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 10:41

Sample wt/vol: 50(mL) Date Analyzed: 09/09/2020 14:44

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42515 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
79-01-6	Trichloroethene	131.39	120		0.40	0.060

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	97		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: SV-118-A-29 DL Lab Sample ID: 140-20194-20 DL

Matrix: Air Lab File ID: RI09P101.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 10:41

Sample wt/vol: 50(mL) Date Analyzed: 09/09/2020 14:44

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42515 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
79-01-6	Trichloroethene	131.39	650		2.1	0.32

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	97		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: SV-136-A-29 Lab Sample ID: 140-20194-15

Matrix: Air Lab File ID: HI08P113.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 10:26

Sample wt/vol: 20(mL) Date Analyzed: 09/09/2020 03:32

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42504 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.81	J	2.0	0.20
56-23-5	Carbon tetrachloride	153.81	ND		2.0	0.18
75-45-6	Chlorodifluoromethane	86.47	ND		2.0	0.55
67-66-3	Chloroform	119.38	0.37	J	2.0	0.18
156-59-2	cis-1,2-Dichloroethene	96.94	0.45	J	2.0	0.25
75-71-8	Dichlorodifluoromethane	120.91	0.45	J	2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		2.0	0.18
107-06-2	1,2-Dichloroethane	98.96	ND		2.0	0.25
75-35-4	1,1-Dichloroethene	96.94	ND		2.0	0.20
100-41-4	Ethylbenzene	106.17	ND		2.0	0.33
75-09-2	Methylene Chloride	84.93	ND		10	9.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		10	1.3
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.0	0.18
108-88-3	Toluene	92.14	ND		3.0	2.0
156-60-5	trans-1,2-Dichloroethene	96.94	ND		2.0	0.18
120-82-1	1,2,4-Trichlorobenzene	181.45	ND	*	2.0	1.6
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.0	0.93
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.0	0.18
79-01-6	Trichloroethene	131.39	89		1.0	0.15
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.90
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		2.0	0.50
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.55
75-01-4	Vinyl chloride	62.50	ND		1.0	0.65
1330-20-7	Xylenes, Total	106.17	ND		4.0	0.60

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	94		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: SV-136-A-29 Lab Sample ID: 140-20194-15

Matrix: Air Lab File ID: HI08P113.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 10:26

Sample wt/vol: 20(mL) Date Analyzed: 09/09/2020 03:32

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42504 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	2.6	J	6.4	0.64
56-23-5	Carbon tetrachloride	153.81	ND		13	1.1
75-45-6	Chlorodifluoromethane	86.47	ND		7.1	1.9
67-66-3	Chloroform	119.38	1.8	J	9.8	0.85
156-59-2	cis-1,2-Dichloroethene	96.94	1.8	J	7.9	0.99
75-71-8	Dichlorodifluoromethane	120.91	2.2	J	9.9	1.7
75-34-3	1,1-Dichloroethane	98.96	ND		8.1	0.71
107-06-2	1,2-Dichloroethane	98.96	ND		8.1	1.0
75-35-4	1,1-Dichloroethene	96.94	ND		7.9	0.79
100-41-4	Ethylbenzene	106.17	ND		8.7	1.4
75-09-2	Methylene Chloride	84.93	ND		35	34
1634-04-4	Methyl tert-butyl ether	88.15	ND		36	4.7
91-20-3	Naphthalene	128.17	ND		5.2	5.2
127-18-4	Tetrachloroethene	165.83	ND		14	1.2
108-88-3	Toluene	92.14	ND		11	7.3
156-60-5	trans-1,2-Dichloroethene	96.94	ND		7.9	0.69
120-82-1	1,2,4-Trichlorobenzene	181.45	ND	*	15	12
71-55-6	1,1,1-Trichloroethane	133.41	ND		11	5.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		11	0.95
79-01-6	Trichloroethene	131.39	480		5.4	0.81
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		9.8	4.4
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		9.8	2.5
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		9.8	2.7
75-01-4	Vinyl chloride	62.50	ND		2.6	1.7
1330-20-7	Xylenes, Total	106.17	ND		17	2.6

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	94		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: SV-138-A-29 Lab Sample ID: 140-20194-4

Matrix: Air Lab File ID: GI08P113.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 10:03

Sample wt/vol: 100(mL) Date Analyzed: 09/09/2020 03:15

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42503 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.12	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.054	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	0.40		0.40	0.11
67-66-3	Chloroform	119.38	0.19	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	2.9		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.42		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	0.90		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	0.051	J	0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	4.2		0.40	0.040
100-41-4	Ethylbenzene	106.17	ND		0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	0.19	J	0.40	0.035
108-88-3	Toluene	92.14	ND		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	0.10	J	0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	26		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND	*	0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	ND		0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	98		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: SV-138-A-29 Lab Sample ID: 140-20194-4

Matrix: Air Lab File ID: GI08P113.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 10:03

Sample wt/vol: 100(mL) Date Analyzed: 09/09/2020 03:15

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42503 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.38	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.34	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	1.4		1.4	0.39
67-66-3	Chloroform	119.38	0.94	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	11		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.1		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	3.7		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	0.21	J	1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	16		1.6	0.16
100-41-4	Ethylbenzene	106.17	ND		1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	1.3	J	2.7	0.24
108-88-3	Toluene	92.14	ND		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	0.39	J	1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	140		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND	*	2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	ND		3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	98		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: SV-139-A-29 Lab Sample ID: 140-20194-19

Matrix: Air Lab File ID: GI08P108.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 10:38

Sample wt/vol: 100(mL) Date Analyzed: 09/08/2020 23:24

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42503 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.085	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.090	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	0.51		0.40	0.11
67-66-3	Chloroform	119.38	ND		0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.47		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	0.95		0.40	0.065
75-09-2	Methylene Chloride	84.93	7.4		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	0.78		0.20	0.20
127-18-4	Tetrachloroethene	165.83	0.68		0.40	0.035
108-88-3	Toluene	92.14	0.96		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	0.29		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	1.3	*	0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	1.5		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	1.3		0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	9.7		0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	101		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: SV-139-A-29 Lab Sample ID: 140-20194-19

Matrix: Air Lab File ID: GI08P108.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 10:38

Sample wt/vol: 100(mL) Date Analyzed: 09/08/2020 23:24

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42503 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.27	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.57	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	1.8		1.4	0.39
67-66-3	Chloroform	119.38	ND		2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.3		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	4.1		1.7	0.28
75-09-2	Methylene Chloride	84.93	26		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	4.1		1.0	1.0
127-18-4	Tetrachloroethene	165.83	4.6		2.7	0.24
108-88-3	Toluene	92.14	3.6		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	1.6		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	6.5	*	2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	7.5		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	6.5		2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	42		3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	101		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: SV-168-A-29 Lab Sample ID: 140-20194-12

Matrix: Air Lab File ID: HI08P110R.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 10:20

Sample wt/vol: 100(mL) Date Analyzed: 09/09/2020 08:03

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42504 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.055	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.098	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	0.48		0.40	0.11
67-66-3	Chloroform	119.38	0.58		0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	0.072	J	0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.51		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	0.18	J	0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	7.2		0.40	0.040
100-41-4	Ethylbenzene	106.17	ND		0.40	0.065
75-09-2	Methylene Chloride	84.93	5.7		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	0.047	J	0.40	0.035
108-88-3	Toluene	92.14	ND		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND	*	0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	1.8		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	6.4		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	ND		0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	88		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: SV-168-A-29 Lab Sample ID: 140-20194-12

Matrix: Air Lab File ID: HI08P110R.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 10:20

Sample wt/vol: 100(mL) Date Analyzed: 09/09/2020 08:03

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42504 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.18	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.62	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	1.7		1.4	0.39
67-66-3	Chloroform	119.38	2.8		2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	0.29	J	1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.5		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	0.73	J	1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	28		1.6	0.16
100-41-4	Ethylbenzene	106.17	ND		1.7	0.28
75-09-2	Methylene Chloride	84.93	20		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	0.32	J	2.7	0.24
108-88-3	Toluene	92.14	ND		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND	*	3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	9.7		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	34		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	ND		3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	88		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: SV-171-A-29 Lab Sample ID: 140-20194-6

Matrix: Air Lab File ID: GI08P115.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 10:06

Sample wt/vol: 13(mL) Date Analyzed: 09/09/2020 04:44

Soil Aliquot Vol: Dilution Factor: 3.03

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42503 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	ND		9.3	0.93
56-23-5	Carbon tetrachloride	153.81	ND		9.3	0.82
75-45-6	Chlorodifluoromethane	86.47	ND		9.3	2.6
67-66-3	Chloroform	119.38	ND		9.3	0.82
156-59-2	cis-1,2-Dichloroethene	96.94	12		9.3	1.2
75-71-8	Dichlorodifluoromethane	120.91	ND		9.3	1.6
75-34-3	1,1-Dichloroethane	98.96	2.6	J	9.3	0.82
107-06-2	1,2-Dichloroethane	98.96	ND		9.3	1.2
75-35-4	1,1-Dichloroethene	96.94	79		9.3	0.93
100-41-4	Ethylbenzene	106.17	ND		9.3	1.5
75-09-2	Methylene Chloride	84.93	ND		47	45
1634-04-4	Methyl tert-butyl ether	88.15	ND		47	6.1
91-20-3	Naphthalene	128.17	ND		4.7	4.7
127-18-4	Tetrachloroethene	165.83	ND		9.3	0.82
108-88-3	Toluene	92.14	ND		14	9.1
156-60-5	trans-1,2-Dichloroethene	96.94	ND		9.3	0.82
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		9.3	7.5
71-55-6	1,1,1-Trichloroethane	133.41	ND		9.3	4.3
79-00-5	1,1,2-Trichloroethane	133.41	ND		9.3	0.82
79-01-6	Trichloroethene	131.39	510		4.7	0.70
526-73-8	1,2,3-Trimethylbenzene	120.19	ND	*	9.3	4.2
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		9.3	2.3
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		9.3	2.6
75-01-4	Vinyl chloride	62.50	ND		4.7	3.0
1330-20-7	Xylenes, Total	106.17	ND		19	2.8

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	98		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: SV-171-A-29 Lab Sample ID: 140-20194-6

Matrix: Air Lab File ID: GI08P115.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 10:06

Sample wt/vol: 13(mL) Date Analyzed: 09/09/2020 04:44

Soil Aliquot Vol: Dilution Factor: 3.03

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42503 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	ND		30	3.0
56-23-5	Carbon tetrachloride	153.81	ND		59	5.1
75-45-6	Chlorodifluoromethane	86.47	ND		33	9.1
67-66-3	Chloroform	119.38	ND		46	4.0
156-59-2	cis-1,2-Dichloroethene	96.94	49		37	4.6
75-71-8	Dichlorodifluoromethane	120.91	ND		46	8.1
75-34-3	1,1-Dichloroethane	98.96	10	J	38	3.3
107-06-2	1,2-Dichloroethane	98.96	ND		38	4.7
75-35-4	1,1-Dichloroethene	96.94	320		37	3.7
100-41-4	Ethylbenzene	106.17	ND		40	6.6
75-09-2	Methylene Chloride	84.93	ND		160	160
1634-04-4	Methyl tert-butyl ether	88.15	ND		170	22
91-20-3	Naphthalene	128.17	ND		24	24
127-18-4	Tetrachloroethene	165.83	ND		63	5.5
108-88-3	Toluene	92.14	ND		53	34
156-60-5	trans-1,2-Dichloroethene	96.94	ND		37	3.2
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		69	55
71-55-6	1,1,1-Trichloroethane	133.41	ND		51	24
79-00-5	1,1,2-Trichloroethane	133.41	ND		51	4.5
79-01-6	Trichloroethene	131.39	2800		25	3.8
526-73-8	1,2,3-Trimethylbenzene	120.19	ND	*	46	21
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		46	11
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		46	13
75-01-4	Vinyl chloride	62.50	ND		12	7.7
1330-20-7	Xylenes, Total	106.17	ND		81	12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	98		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: SV-172-A-29 Lab Sample ID: 140-20194-1

Matrix: Air Lab File ID: GI08P110.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 10:02

Sample wt/vol: 100(mL) Date Analyzed: 09/09/2020 00:58

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42503 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.11	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.057	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	0.57		0.40	0.11
67-66-3	Chloroform	119.38	0.27	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	0.16	J	0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.53		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	0.097	J	0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	0.15	J	0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	0.38	J	0.40	0.035
108-88-3	Toluene	92.14	0.96		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	0.73		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	11		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND	*	0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	0.23	J	0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.77	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	100		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: SV-172-A-29 Lab Sample ID: 140-20194-1

Matrix: Air Lab File ID: GI08P110.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 10:02

Sample wt/vol: 100(mL) Date Analyzed: 09/09/2020 00:58

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42503 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.35	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.36	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	2.0		1.4	0.39
67-66-3	Chloroform	119.38	1.3	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	0.62	J	1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.6		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	0.39	J	1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	0.66	J	1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	2.6	J	2.7	0.24
108-88-3	Toluene	92.14	3.6		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	4.0		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	59		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND	*	2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	1.1	J	2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	3.3	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	100		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: SV-173-A-29 Lab Sample ID: 140-20194-5

Matrix: Air Lab File ID: GI08P114.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 10:04

Sample wt/vol: 14(mL) Date Analyzed: 09/09/2020 04:00

Soil Aliquot Vol: Dilution Factor: 9.23

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42503 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	ND		26	2.6
56-23-5	Carbon tetrachloride	153.81	ND		26	2.3
75-45-6	Chlorodifluoromethane	86.47	ND		26	7.3
67-66-3	Chloroform	119.38	ND		26	2.3
156-59-2	cis-1,2-Dichloroethene	96.94	66		26	3.3
75-71-8	Dichlorodifluoromethane	120.91	ND		26	4.6
75-34-3	1,1-Dichloroethane	98.96	14	J	26	2.3
107-06-2	1,2-Dichloroethane	98.96	ND		26	3.3
75-35-4	1,1-Dichloroethene	96.94	260		26	2.6
100-41-4	Ethylbenzene	106.17	ND		26	4.3
75-09-2	Methylene Chloride	84.93	ND		130	130
1634-04-4	Methyl tert-butyl ether	88.15	ND		130	17
91-20-3	Naphthalene	128.17	ND		13	13
127-18-4	Tetrachloroethene	165.83	ND		26	2.3
108-88-3	Toluene	92.14	ND		40	26
156-60-5	trans-1,2-Dichloroethene	96.94	ND		26	2.3
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		26	21
71-55-6	1,1,1-Trichloroethane	133.41	ND		26	12
79-00-5	1,1,2-Trichloroethane	133.41	ND		26	2.3
79-01-6	Trichloroethene	131.39	1400		13	2.0
526-73-8	1,2,3-Trimethylbenzene	120.19	ND	*	26	12
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		26	6.6
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		26	7.3
75-01-4	Vinyl chloride	62.50	ND		13	8.6
1330-20-7	Xylenes, Total	106.17	ND		53	7.9

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	95		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: SV-173-A-29 Lab Sample ID: 140-20194-5

Matrix: Air Lab File ID: GI08P114.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 10:04

Sample wt/vol: 14(mL) Date Analyzed: 09/09/2020 04:00

Soil Aliquot Vol: Dilution Factor: 9.23

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42503 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	ND		84	8.4
56-23-5	Carbon tetrachloride	153.81	ND		170	15
75-45-6	Chlorodifluoromethane	86.47	ND		93	26
67-66-3	Chloroform	119.38	ND		130	11
156-59-2	cis-1,2-Dichloroethene	96.94	260		100	13
75-71-8	Dichlorodifluoromethane	120.91	ND		130	23
75-34-3	1,1-Dichloroethane	98.96	58	J	110	9.3
107-06-2	1,2-Dichloroethane	98.96	ND		110	13
75-35-4	1,1-Dichloroethene	96.94	1000		100	10
100-41-4	Ethylbenzene	106.17	ND		110	19
75-09-2	Methylene Chloride	84.93	ND		460	450
1634-04-4	Methyl tert-butyl ether	88.15	ND		480	62
91-20-3	Naphthalene	128.17	ND		69	69
127-18-4	Tetrachloroethene	165.83	ND		180	16
108-88-3	Toluene	92.14	ND		150	97
156-60-5	trans-1,2-Dichloroethene	96.94	ND		100	9.1
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		200	160
71-55-6	1,1,1-Trichloroethane	133.41	ND		140	67
79-00-5	1,1,2-Trichloroethane	133.41	ND		140	13
79-01-6	Trichloroethene	131.39	7600		71	11
526-73-8	1,2,3-Trimethylbenzene	120.19	ND	*	130	58
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		130	32
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		130	36
75-01-4	Vinyl chloride	62.50	ND		34	22
1330-20-7	Xylenes, Total	106.17	ND		230	34

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	95		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: SV-174-A-29 Lab Sample ID: 140-20194-7

Matrix: Air Lab File ID: RI09P202R.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 10:07

Sample wt/vol: 20(mL) Date Analyzed: 09/10/2020 08:00

Soil Aliquot Vol: Dilution Factor: 120

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42515 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	ND		240	24
56-23-5	Carbon tetrachloride	153.81	ND		240	21
75-45-6	Chlorodifluoromethane	86.47	ND		240	66
67-66-3	Chloroform	119.38	21	J	240	21
156-59-2	cis-1,2-Dichloroethene	96.94	460		240	30
75-71-8	Dichlorodifluoromethane	120.91	ND		240	42
75-34-3	1,1-Dichloroethane	98.96	150	J	240	21
107-06-2	1,2-Dichloroethane	98.96	ND		240	30
75-35-4	1,1-Dichloroethene	96.94	5800		240	24
100-41-4	Ethylbenzene	106.17	ND		240	39
75-09-2	Methylene Chloride	84.93	ND		1200	1200
1634-04-4	Methyl tert-butyl ether	88.15	ND		1200	160
91-20-3	Naphthalene	128.17	ND		120	120
127-18-4	Tetrachloroethene	165.83	ND		240	21
108-88-3	Toluene	92.14	ND		360	230
156-60-5	trans-1,2-Dichloroethene	96.94	50	J	240	21
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		240	190
71-55-6	1,1,1-Trichloroethane	133.41	ND		240	110
79-00-5	1,1,2-Trichloroethane	133.41	ND		240	21
79-01-6	Trichloroethene	131.39	25000		120	18
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		240	110
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		240	60
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		240	66
75-01-4	Vinyl chloride	62.50	ND		120	78
1330-20-7	Xylenes, Total	106.17	ND		480	72

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	92		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: SV-174-A-29 Lab Sample ID: 140-20194-7

Matrix: Air Lab File ID: RI09P202R.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 10:07

Sample wt/vol: 20(mL) Date Analyzed: 09/10/2020 08:00

Soil Aliquot Vol: Dilution Factor: 120

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42515 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	ND		770	77
56-23-5	Carbon tetrachloride	153.81	ND		1500	130
75-45-6	Chlorodifluoromethane	86.47	ND		850	230
67-66-3	Chloroform	119.38	100	J	1200	100
156-59-2	cis-1,2-Dichloroethene	96.94	1800		950	120
75-71-8	Dichlorodifluoromethane	120.91	ND		1200	210
75-34-3	1,1-Dichloroethane	98.96	630	J	970	85
107-06-2	1,2-Dichloroethane	98.96	ND		970	120
75-35-4	1,1-Dichloroethene	96.94	23000		950	95
100-41-4	Ethylbenzene	106.17	ND		1000	170
75-09-2	Methylene Chloride	84.93	ND		4200	4100
1634-04-4	Methyl tert-butyl ether	88.15	ND		4300	560
91-20-3	Naphthalene	128.17	ND		630	630
127-18-4	Tetrachloroethene	165.83	ND		1600	140
108-88-3	Toluene	92.14	ND		1400	880
156-60-5	trans-1,2-Dichloroethene	96.94	200	J	950	83
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		1800	1400
71-55-6	1,1,1-Trichloroethane	133.41	ND		1300	610
79-00-5	1,1,2-Trichloroethane	133.41	ND		1300	110
79-01-6	Trichloroethene	131.39	140000		640	97
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		1200	530
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		1200	290
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		1200	320
75-01-4	Vinyl chloride	62.50	ND		310	200
1330-20-7	Xylenes, Total	106.17	ND		2100	310

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	92		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: SV-177-A-29 Lab Sample ID: 140-20194-8

Matrix: Air Lab File ID: GI08P107R.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 10:08

Sample wt/vol: 150(mL) Date Analyzed: 09/09/2020 09:26

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42503 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.19	J	0.27	0.027
56-23-5	Carbon tetrachloride	153.81	0.041	J	0.27	0.023
75-45-6	Chlorodifluoromethane	86.47	0.42		0.27	0.073
67-66-3	Chloroform	119.38	0.76		0.27	0.023
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.27	0.033
75-71-8	Dichlorodifluoromethane	120.91	0.41		0.27	0.047
75-34-3	1,1-Dichloroethane	98.96	0.13	J	0.27	0.023
107-06-2	1,2-Dichloroethane	98.96	ND		0.27	0.033
75-35-4	1,1-Dichloroethene	96.94	ND		0.27	0.027
100-41-4	Ethylbenzene	106.17	0.15	J	0.27	0.043
75-09-2	Methylene Chloride	84.93	ND		1.3	1.3
1634-04-4	Methyl tert-butyl ether	88.15	ND		1.3	0.17
91-20-3	Naphthalene	128.17	ND		0.13	0.13
127-18-4	Tetrachloroethene	165.83	0.21	J	0.27	0.023
108-88-3	Toluene	92.14	0.89		0.40	0.26
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.27	0.023
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.27	0.21
71-55-6	1,1,1-Trichloroethane	133.41	0.28		0.27	0.12
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.27	0.023
79-01-6	Trichloroethene	131.39	21		0.13	0.020
526-73-8	1,2,3-Trimethylbenzene	120.19	ND	*	0.27	0.12
95-63-6	1,2,4-Trimethylbenzene	120.20	0.27		0.27	0.067
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.27	0.073
75-01-4	Vinyl chloride	62.50	ND		0.13	0.087
1330-20-7	Xylenes, Total	106.17	0.79		0.53	0.080

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	102		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: SV-177-A-29 Lab Sample ID: 140-20194-8

Matrix: Air Lab File ID: GI08P107R.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 10:08

Sample wt/vol: 150(mL) Date Analyzed: 09/09/2020 09:26

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42503 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.62	J	0.85	0.085
56-23-5	Carbon tetrachloride	153.81	0.26	J	1.7	0.15
75-45-6	Chlorodifluoromethane	86.47	1.5		0.94	0.26
67-66-3	Chloroform	119.38	3.7		1.3	0.11
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.1	0.13
75-71-8	Dichlorodifluoromethane	120.91	2.0		1.3	0.23
75-34-3	1,1-Dichloroethane	98.96	0.53	J	1.1	0.094
107-06-2	1,2-Dichloroethane	98.96	ND		1.1	0.13
75-35-4	1,1-Dichloroethene	96.94	ND		1.1	0.11
100-41-4	Ethylbenzene	106.17	0.65	J	1.2	0.19
75-09-2	Methylene Chloride	84.93	ND		4.6	4.5
1634-04-4	Methyl tert-butyl ether	88.15	ND		4.8	0.62
91-20-3	Naphthalene	128.17	ND		0.70	0.70
127-18-4	Tetrachloroethene	165.83	1.4	J	1.8	0.16
108-88-3	Toluene	92.14	3.3		1.5	0.98
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.1	0.093
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		2.0	1.6
71-55-6	1,1,1-Trichloroethane	133.41	1.5		1.5	0.67
79-00-5	1,1,2-Trichloroethane	133.41	ND		1.5	0.13
79-01-6	Trichloroethene	131.39	110		0.72	0.11
526-73-8	1,2,3-Trimethylbenzene	120.19	ND	*	1.3	0.59
95-63-6	1,2,4-Trimethylbenzene	120.20	1.4		1.3	0.33
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		1.3	0.36
75-01-4	Vinyl chloride	62.50	ND		0.34	0.22
1330-20-7	Xylenes, Total	106.17	3.4		2.3	0.35

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	102		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: SV-DUP 3-A-29 Lab Sample ID: 140-20194-3

Matrix: Air Lab File ID: GI08P112.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 00:00

Sample wt/vol: 100(mL) Date Analyzed: 09/09/2020 02:29

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42503 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.11	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.056	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	0.34	J	0.40	0.11
67-66-3	Chloroform	119.38	0.72		0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.42		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	0.16	J	0.40	0.040
100-41-4	Ethylbenzene	106.17	ND		0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	0.049	J	0.40	0.035
108-88-3	Toluene	92.14	ND		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	1.2		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND	*	0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	ND		0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	98		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: SV-DUP 3-A-29 Lab Sample ID: 140-20194-3

Matrix: Air Lab File ID: GI08P112.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 00:00

Sample wt/vol: 100(mL) Date Analyzed: 09/09/2020 02:29

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42503 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.35	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.35	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	1.2	J	1.4	0.39
67-66-3	Chloroform	119.38	3.5		2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.1		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	0.65	J	1.6	0.16
100-41-4	Ethylbenzene	106.17	ND		1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	0.33	J	2.7	0.24
108-88-3	Toluene	92.14	ND		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	6.5		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND	*	2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	ND		3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	98		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: SV-DUP 4-A-29 Lab Sample ID: 140-20194-13

Matrix: Air Lab File ID: HI08P111.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 00:00

Sample wt/vol: 100(mL) Date Analyzed: 09/09/2020 01:42

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42504 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.17	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.12	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	0.50		0.40	0.11
67-66-3	Chloroform	119.38	0.66		0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	0.11	J	0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.50		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	0.19	J	0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	8.7		0.40	0.040
100-41-4	Ethylbenzene	106.17	ND		0.40	0.065
75-09-2	Methylene Chloride	84.93	5.3		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	0.072	J	0.40	0.035
108-88-3	Toluene	92.14	0.48	J	0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	0.053	J	0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND	*	0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	1.9		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	34		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	0.15	J	0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	0.28	J	0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.28	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	91		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: SV-DUP 4-A-29 Lab Sample ID: 140-20194-13

Matrix: Air Lab File ID: HI08P111.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 00:00

Sample wt/vol: 100(mL) Date Analyzed: 09/09/2020 01:42

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42504 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.55	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.74	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	1.8		1.4	0.39
67-66-3	Chloroform	119.38	3.2		2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	0.42	J	1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.5		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	0.77	J	1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	35		1.6	0.16
100-41-4	Ethylbenzene	106.17	ND		1.7	0.28
75-09-2	Methylene Chloride	84.93	19		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	0.49	J	2.7	0.24
108-88-3	Toluene	92.14	1.8	J	2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	0.21	J	1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND	*	3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	11		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	180		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	0.71	J	2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	1.4	J	2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	1.2	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	91		60-140

Appendix C

Support Documentation

Job Narrative
140-20194-1

Comments
No additional comments.

Receipt
The samples were received on 8/28/2020 10:00 AM; the samples arrived in good condition, and where required, properly preserved and on ice.

Air - GC/MS VOA
Methods 3005A, TO 15 LL, TO-14A, TO-15: EPA methods TO-14A and TO-15 specify the use of humidified "zero air" as the blank reagent for canister cleaning, instrument calibration and sample analysis. Ultra-high purity humidified nitrogen from a cryogenic reservoir is used in place of "zero air" by TestAmerica Knoxville.

Method TO 15 LL: The continuing calibration verification (CCV) associated with batch 140-42503 exhibited % difference of > 30% for the following analyte(s) :1,2,3-Trimethylbenzene;however, the results were within the LCS acceptance limits. The EPA method requires that all target analytes in the continuing calibration verification standard be within 30% difference from the initial calibration. According to the laboratory standard operating procedure, the continuing calibration is acceptable if it meets the laboratory control sample acceptance criteria and is within marginal exceedance criteria.

Method TO 15 LL: The continuing calibration verification (CCV) associated with batch 140-42504 exhibited % difference of > 30% for the following analyte(s) Naphthalene; however, the results were within the LCS acceptance limits. The EPA method requires that all target analytes in the continuing calibration verification standard be within 30% difference from the initial calibration. According to the laboratory standard operating procedure, the continuing calibration is acceptable if it meets the laboratory control sample acceptance criteria.

Method TO 15 LL: The continuing calibration verification (CCV) associated with batch 140-42504 recovered above the upper control limit for 1,2,4-Trichlorobenzene, 1,4-Dichlorobenzene and Hexachlorobutadiene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method TO 15 LL: The laboratory control sample (LCS) for analytical batch 140-42504 recovered outside control limits for the following analytes: 1,2,4-Trichlorobenzene, 1,4-Dichlorobenzene and Hexachlorobutadiene. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Methods TO 15 LL, TO-15: Although the BFB is flagged as outside control limits for TO-14 on batch 140-42515, the results are within limits for TO-15, which is required for this project.

Method TO 15 LL: The continuing calibration verification (CCV) associated with batch 140-42515 exhibited % difference of > 30% for the following analyte(s) Dichlorodifluoromethane; however, the results were within the LCS acceptance limits. The EPA method requires that all target analytes in the continuing calibration verification standard be within 30% difference from the initial calibration. According to the laboratory standard operating procedure, the continuing calibration is acceptable if it meets the laboratory control sample acceptance criteria.

Method TO 15 LL: The following analyte(s) recovered outside control limits for the LCS associated with analytical batch 140-42503: 1,2,3-Trimethylbenzene. This is not indicative of a systematic control problem because these were random marginal exceedances. Qualified results have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Qualifiers

Air - GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
E	Result exceeded calibration range.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Method Summary

Client: Tetra Tech, Inc.
Project/Site: Middle River - MRC

Job ID: 140-20194-1

Method	Method Description	Protocol	Laboratory
TO 15 LL	Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)	EPA	TAL KNX

Protocol References:

EPA = US Environmental Protection Agency

Laboratory References:

TAL KNX = Eurofins TestAmerica, Knoxville, 5815 Middlebrook Pike, Knoxville, TN 37921, TEL (865)291-3000

Sample Summary

Client: Tetra Tech, Inc.
Project/Site: Middle River - MRC

Job ID: 140-20194-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
140-20194-1	SV-172-A-29	Air	08/26/20 10:02	08/28/20 10:00	Air Canister (1-Liter) #11720
140-20194-2	SV-116-A-29	Air	08/26/20 09:58	08/28/20 10:00	Air Canister (1-Liter) #34002449
140-20194-3	SV-DUP 3-A-29	Air	08/26/20 00:00	08/28/20 10:00	Air Canister (1-Liter) #34002455
140-20194-4	SV-138-A-29	Air	08/26/20 10:03	08/28/20 10:00	Air Canister (1-Liter) #10753
140-20194-5	SV-173-A-29	Air	08/26/20 10:04	08/28/20 10:00	Air Canister (1-Liter) #34002475
140-20194-6	SV-171-A-29	Air	08/26/20 10:06	08/28/20 10:00	Air Canister (1-Liter) #11848
140-20194-7	SV-174-A-29	Air	08/26/20 10:07	08/28/20 10:00	Air Canister (1-Liter) #11751, Air Canister (6-Liter) #9003
140-20194-8	SV-177-A-29	Air	08/26/20 10:08	08/28/20 10:00	Air Canister (1-Liter) #11111
140-20194-9	SV-015-A-29	Air	08/26/20 10:12	08/28/20 10:00	Air Canister (1-Liter) #34002488
140-20194-10	SV-078-A-29	Air	08/26/20 10:16	08/28/20 10:00	Air Canister (1-Liter) #10960
140-20194-11	SV-076-A-29	Air	08/26/20 10:18	08/28/20 10:00	Air Canister (1-Liter) #11830
140-20194-12	SV-168-A-29	Air	08/26/20 10:20	08/28/20 10:00	Air Canister (1-Liter) #34000763
140-20194-13	SV-DUP 4-A-29	Air	08/26/20 00:00	08/28/20 10:00	Air Canister (1-Liter) #34002412
140-20194-14	SV-075-A-29	Air	08/26/20 10:24	08/28/20 10:00	Air Canister (1-Liter) #34000730
140-20194-15	SV-136-A-29	Air	08/26/20 10:26	08/28/20 10:00	Air Canister (1-Liter) #09789
140-20194-16	SV-101-B-29	Air	08/26/20 10:27	08/28/20 10:00	Air Canister (1-Liter) #34002478
140-20194-17	SV-100-B-29	Air	08/26/20 10:30	08/28/20 10:00	Air Canister (1-Liter) #11672
140-20194-18	SV-079-A-29	Air	08/26/20 10:35	08/28/20 10:00	Air Canister (1-Liter) #34002185
140-20194-19	SV-139-A-29	Air	08/26/20 10:38	08/28/20 10:00	Air Canister (1-Liter) #34000662
140-20194-20	SV-118-A-29	Air	08/26/20 10:41	08/28/20 10:00	Air Canister (1-Liter) #34002461

Eurofins TestAmerica, Knoxville
5815 Middlebrook Pike
Knoxville, TN 37921-5947
phone 865.291.3000 fax 865.584.4315

Baltimore #201

Canister Samples Chain of Custody Record

TestAmerica Laboratories, Inc. assumes no liability with respect to the collection and shipment of these samples.

140-20194 Chain of Custody

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact Information	**Client Project Manager:** Josh Mullis	**Samples Collected By:** Josh Mullis/ Walt Pyar	COC No: 1 of 4 COCs
Company Name: TETRA TECH INC	Phone: 410-279-2700		TALS Project #:
Address: 10251 Century Blvd Ste. 200	Email: josh.mullis@tetratech.com		For Lab Use Only:
City/State/Zip Germantown, MD, 20874			Walk-in Client:
Phone: 410-279-2700	Site Contact: Josh Mullis		Lab Sampling:
FAX: —	Tel/Fax 410-279-2700		
Project Name: MRC Indoor Air / Soil Vapor	**Analysis Turnaround Time**		Job / SDG No.:
Site/Location: Middle Run Complex	Standard (Specific): ✓		(See below for Add'l Items)
P O # 1128C09388	Rush (Specifiy):		

Sample Identification	Sample Start Date	Time Start	Sample End Date	Time Stop	Canister Vacuum in Field, "Hg (Start)	Canister Vacuum in Field, "Hg (Stop)	Flow Controller ID	Canister ID	TO-14/15 (Standard / Low Level)	TO-15 SIM	EPA 3C	EPA 25C	ASTM D-1946	EPA 15/16	Other (Please specify in notes section)	Sample Type	Indoor Air/Ambient Air	Sub-Slab	Soil Gas	Soil Vapor Extraction (SVE)	Landfill Gas	Other (Please specify in notes section)	Sample Specific Notes:
SV-172-A-29	8/26/20	0840	8/26/20	1002	-30	0	10056	11720	X									R					
SV-116-A-29		0843		0958	-30	0	11894	3400 2449	X									R					
SV-DUP3-A-29		0000		0000	-28	0	11314	3400 2455	X									R					
SV-138-A-29		0848		1003	-26	+2	11260	10753	X									R					
SV-173-A-29		0850		1004	-30	0	7269	3400 2475	X									R					
SV-171-A-29		0852		1006	-30	-1	10446	11848	X									R					
SV-174-A-29		0854		1007	-30	0	11759	11751	X									R					
SV-177-A-29		0857		1008	-30	0	7259	11111	X									R					
SV-015-A-29		0903		1012	-30	-1	11924	3400 2488	X									R					
SV-078-A-29	✓	0908	✓	1016	-29	-2	11648	10960	X									R					

Temperature (Fahrenheit)	Interior	Ambient
Start		
Stop		

Pressure (inches of Hg)	Interior	Ambient
Start		
Stop		

Received @ ambient, 2 boxes
Fedex po, Custody seal intact
trk# 7713 7973 0430
7972 9951

Special Instructions/QC Requirements & Comments: MRC Indoor Air / Soil Vapor Bi-Annual Sampling KW 8/28/20

Samples Shipped by:	Date / Time: 8/27/20 1230	Samples Received by:	1230
Samples Relinquished by:	Date / Time: 8/27/20 1700	Received by: ETA 8/28/20	1000
Relinquished by:	Date / Time:	Received by:	

4T
20 cans, 20 flows

Lab Use Only: Shipper Name: Opened by: Condition:

Form No. CA-C-WI-003, Rev. 2.23, dated 5/4/2020

09/11/2020

Baltimore #201

Eurofins TestAmerica, Knoxville
5815 Middlebrook Pike

Knoxville, TN 37921-5947
phone 865.291.3000 fax 865.584.4315

Canister Samples Chain of Custody Record

TestAmerica Laboratories, Inc. assumes no liability with respect to the collection and shipment of these samples.

eurofins | Environment Testing TestAmerica

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact Information	**Client Project Manager:** Josh Mullis	**Samples Collected By:** Josh Mullis/ Walt Pryor	COC No: 2 of 4 COCs
Company Name: TETRA TECH INC	Phone: 410-279-2700		TALS Project #:
Address: 20251 Century Blvd Ste. 200	Email: josh.mullis@tetratech.com		**For Lab Use Only:**
City/State/Zip Germantown, MD, 20878			Walk-in Client:
Phone: 410-279-2700	Site Contact: Josh Mullis		Lab Sampling:
FAX: —	Tel/Fax 410-279-2700		
Project Name: MRC Indoor Air / Soil Vapor	**Analysis Turnaround Time**		Job / SDG No.:
Site/Location: Middle River Complex	Standard (Specific): —		(See below for Add'l Items)
PO # 112EC09388	Rush (Specifiy):		

Sample Identification	Sample Start Date	Time Start	Sample End Date	Time Stop	Canister Vacuum in Field, "Hg (Start)	Canister Vacuum in Field, "Hg (Stop)	Flow Controller ID	Canister ID	TO-14/15 (Standard / Low Level)	TO-15 SIM	EPA 3C	EPA 25C	ASTM D-1946	EPA 15/16	Other (Please specify in notes section)	Sample Type	Indoor Air/Ambient Air	Sub-Slab	Soil Gas	Soil Vapor Extraction (SVE)	Landfill Gas	Other (Please specify in notes section)	Sample Specific Notes:
SV-076-A-29	8/26/20	0912	8/26/20	1018	-30	0	~~7837~~ 7367	11830	X									X					Time = 1018, flow 7367
SV-168-A-29	↓	0916	↓	1020	-30	-2	7640	34000763	X									X					
SV-DUP4-A-29		0000		0000	-30	-3	8137	34002412	X									X					
SV-075-A-29		0920		1024	-30	-2	10301	34000730	X									X					
SV-136-A-29		0924		1026	-28	-3	10874	09789	X									X					
SV-101-B-29		0927		1027	-25	0	11582	34002178	X									X					
SV-100-B-29		0930		1030	+23	0	7491	11672	X									X					* regulator cracked
SV-079-A-29		0935		1035	-30	-3	7192	34002185	X									X					34002185
SV-139-A-29		0938		1038	-30	-5	11273	34000662	X									X					
SV-118-A-29	↓	0941	↓	1041	-28	-4	7437	34002461	X									X					

Temperature (Fahrenheit)			
Start	Interior	Ambient	
Stop			

Pressure (inches of Hg)			
Start	Interior	Ambient	
Stop			

Special Instructions/QC Requirements & Comments: MRC Indoor Air / Soil Vapor Bi-Annual Sampling

Samples Shipped by: Walt Pryor	**Date / Time:** 8/27/20 1230	**Samples Received by:** [signature] 1230	
Samples Relinquished by: [signature]	**Date / Time:** 8/27/20 1700	**Received by:** [signature] ETA 8/28/20 1000	
Relinquished by:	**Date / Time:**	**Received by:**	
Lab Use Only: **Shipper Name:**	**Opened by:**	**Condition:**	

Form No. CA-C-WI-003, Rev. 2.23, dated 5/4/2020

Loc: 140

EUROFINS/TESTAMERICA KNOXVILLE SAMPLE RECEIPT/CONDITION UPON RECEIPT ANOMALY CHECKLIST **Log In Number: 20194**

Review Items	Yes	No	NA	If No, what was the problem?
1. Are the shipping containers intact?	/			☐ **Containers, Broken**
2. Were ambient air containers received intact?			/	☑ Checked in lab
3. The coolers/containers custody seal if present, is it intact?	/			☐ Yes ☐ NA
4. Is the cooler temperature within limits? (> freezing temp. of water to 6 °C, VOST: 10°C) Thermometer ID :_____ Correction factor: _____			/	☐ **Cooler Out of Temp, Client Contacted, Proceed/Cancel** ☐ **Cooler Out of Temp, Same Day Receipt**
5. Were all of the sample containers received intact?	/			☐ **Containers, Broken**
6. Were samples received in appropriate containers?	/			☐ **Containers, Improper; Client Contacted; Proceed/Cancel**
7. Do sample container labels match COC? (IDs, Dates, Times)	/			☐ **COC & Samples Do Not Match** ☐ **COC Incorrect/Incomplete** ☐ **COC Not Received**
8. Were all of the samples listed on the COC received?	/			☐ **Sample Received, Not on COC** ☐ **Sample on COC, Not Received**
9. Is the date/time of sample collection noted?	/			☐ **COC; No Date/Time; Client Contacted**
10. Was the sampler identified on the COC?	/			☐ **Sampler Not Listed on COC**
11. Is the client and project name/# identified?	/			☐ **COC Incorrect/Incomplete**
12. Are tests/parameters listed for each sample?	/			☐ **COC No tests on COC**
13. Is the matrix of the samples noted?	/			☐ **COC Incorrect/Incomplete**
14. Was COC relinquished? (Signed/Dated/Timed)	/			☐ **COC Incorrect/Incomplete**
15. Were samples received within holding time?	/			☐ **Holding Time - Receipt**
16. Were samples received with correct chemical preservative (excluding Encore)?			/	☐ **pH Adjusted, pH Included (See box 16A)** ☐ **Incorrect Preservative**
17. Were VOA samples received without headspace?			/	☐ **Headspace (VOA only)**
18. Did you check for residual chlorine, if necessary? (e.g. 1613B, 1668) Chlorine test strip lot number:_____			/	☐ **Residual Chlorine**
19. For 1613B water samples is pH<9?			/	☐ If no, notify lab to adjust
20. For rad samples was sample activity info. Provided?			/	☐ Project missing info

Comments/Actions Taken

Labeling Verified by: **Date:**

pH test strip lot number:

	Box 16A: pH Preservation	Box 18A: Residual Chlorine
Preservative:		
Lot Number:		
Exp Date:		
Analyst:		
Date:		
Time:		

Project #: 1400295 PM Instructions: _____

Sample Receiving Associate: KL Date: 8/28/20

QA026R32.doc, 062719

TestAmerica Knoxville - Air Canister Initial Pressure Check

Gauge ID: G5
Date: 9/2/2020

Analyst	Sample ID	Asset #	Cleaning Job	Cert	Size (L)	Pressure @ Receipt (-in Hg or +psig)	Time	Comments
BRS	140-20194-a-1	11720	19809	B	1	0.0	12:02	
BRS	140-20194-a-2	34002449	19827	B	1	0.0	12:03	
BRS	140-20194-a-3	34002455	19827	B	1	0.0	12:04	
BRS	140-20194-a-4	10753	19809	B	1	0.0	12:05	
BRS	140-20194-a-5	34002475	19827	B	1	0.0	12:06	
BRS	140-20194-a-6	11848	19838	B	1	0.0	12:07	
BRS	140-20194-a-7	11751	19809	B	1	0.0	12:08	
BRS	140-20194-a-8	11111	19822	B	1	0.0	12:09	
BRS	140-20194-a-9	34002488	19827	B	1	-1.1	12:10	
BRS	140-20194-a-10	10960	19822	B	1	-1.6	12:11	
BRS	140-20194-a-11	11830	19822	B	1	-1.7	13:01	
BRS	140-20194-a-12	34000763	19838	B	1	-2.0	13:02	
BRS	140-20194-a-13	34002412	19827	B	1	-2.4	13:03	
BRS	140-20194-a-14	34000730	19827	B	1	-2.0	13:04	
BRS	140-20194-a-15	09789	19838	B	1	-3.0	13:05	
BRS	140-20194-a-16	34002478	19838	B	1	-3.5	13:06	
BRS	140-20194-a-17	11672	19809	B	1	-2.4	13:07	
BRS	140-20194-a-18	34002185	19827	B	1	-3.5	13:08	
BRS	140-20194-a-19	34000662	19838	B	1	-3.3	13:09	
BRS	140-20194-a-20	34002461	19827	B	1	-3.5	13:10	

□ Receiving –Air Can –Calve Open (NCM #_____)
□ Air - Can P -24 to -25 " - Flow Contr. Works (NCM#_____)
□ Air - Can P -24 to -25 " - Flow Contr. Faulty (NCM#_____)
□ Air - Can P Out -26" - Flow Contr. Works (NCM#_____)
□ Air - Can P Out -26" - Flow Contr. Faulty (NCM#_____)
□ Air - Can P Low -24 to -25 " - Grab Sample (NCM#_____)
□ Air - Can P Low -26 "- Grab Sample (NCM#_____)

FIELD DUPLICATE PRECISION

ORIGINAL ID	DUP ID	FRACTION	ANALYTE	ORIGINAL	DUPLICATE	RL	RL1	RL2	RPD	RPD > 50%	ORIGINAL SAMPLE CONC >RL	DUPLICATE SAMPLE CONC >RL	DIFFERENCE >2XRL
SV-116-A-29	SV-DUP 3-A-29	OV-M3	1,1-DICHLOROETHENE	0.8 J	0.65 J	1.6	1.6	1.6	20.69	FALSE	FALSE	FALSE	FALSE
SV-116-A-29	SV-DUP 3-A-29	OV-M3	BENZENE	0.36 J	0.35 J	1.3	1.3	1.3	2.82	FALSE	FALSE	FALSE	FALSE
SV-116-A-29	SV-DUP 3-A-29	OV-M3	CARBON TETRACHLORIDE	0.37 J	0.35 J	2.5	2.5	2.5	5.56	FALSE	FALSE	FALSE	FALSE
SV-116-A-29	SV-DUP 3-A-29	OV-M3	CHLORODIFLUOROMETHANE	1.4 J	1.2 J	1.4	1.4	1.4	15.38	FALSE	FALSE	FALSE	FALSE
SV-116-A-29	SV-DUP 3-A-29	OV-M3	CHLOROFORM	3.9	3.5	2	2	2	10.81	FALSE	TRUE	TRUE	FALSE
SV-116-A-29	SV-DUP 3-A-29	OV-M3	DICHLORODIFLUOROMETHANE	2.3	2.1	2	2	2	9.09	FALSE	TRUE	TRUE	FALSE
SV-116-A-29	SV-DUP 3-A-29	OV-M3	METHYLENE CHLORIDE	8	6.8 U	6.9	6.9	6.9	16.22	FALSE	TRUE	FALSE	FALSE
SV-116-A-29	SV-DUP 3-A-29	OV-M3	TETRACHLOROETHENE	0.24 U	0.33 J	2.7	2.7	2.7	31.58	FALSE	FALSE	FALSE	FALSE
SV-116-A-29	SV-DUP 3-A-29	OV-M3	TRICHLOROETHENE	7.6	6.5	1.1	1.1	1.1	15.60	FALSE	TRUE	TRUE	FALSE

FIELD DUPLICATE PRECISION

ORIGINAL ID	DUP ID	FRACTION	ANALYTE	ORIGINAL	DUPLICATE	RL	RL1	RL2	RPD	RPD > 50%	ORIGINAL SAMPLE CONC >RL	DUPLICATE SAMPLE CONC >RL	DIFFERENCE >2XRL
SV-168-A-29	SV-DUP 4-A-29	OV-M3	1,1,1-TRICHLOROETHANE	9.7	11	2.2	2.2	2.2	12.56	FALSE	TRUE	TRUE	FALSE
SV-168-A-29	SV-DUP 4-A-29	OV-M3	1,1-DICHLOROETHANE	0.73 J	0.77 J	1.6	1.6	1.6	5.33	FALSE	FALSE	FALSE	FALSE
SV-168-A-29	SV-DUP 4-A-29	OV-M3	1,1-DICHLOROETHENE	28	35	1.6	1.6	1.6	22.22	FALSE	TRUE	TRUE	~~TRUE~~
SV-168-A-29	SV-DUP 4-A-29	OV-M3	1,2,4-TRIMETHYLBENZENE	0.49 U	0.71 J	2	2	2	36.67	FALSE	FALSE	FALSE	FALSE
SV-168-A-29	SV-DUP 4-A-29	OV-M3	1,3,5-TRIMETHYLBENZENE	0.54 U	1.4 J	2	2	2	~~88.66~~	~~TRUE~~	FALSE	FALSE	FALSE
SV-168-A-29	SV-DUP 4-A-29	OV-M3	BENZENE	0.18 J	0.55 J	1.3	1.3	1.3	~~101.37~~	~~TRUE~~	FALSE	FALSE	FALSE
SV-168-A-29	SV-DUP 4-A-29	OV-M3	CARBON TETRACHLORIDE	0.62 J	0.74 J	2.5	2.5	2.5	17.65	FALSE	FALSE	FALSE	FALSE
SV-168-A-29	SV-DUP 4-A-29	OV-M3	CHLORODIFLUOROMETHANE	1.7	1.8	1.4	1.4	1.4	5.71	FALSE	TRUE	TRUE	FALSE
SV-168-A-29	SV-DUP 4-A-29	OV-M3	CHLOROFORM	2.8	3.2	2	2	2	13.33	FALSE	TRUE	TRUE	FALSE
SV-168-A-29	SV-DUP 4-A-29	OV-M3	CIS-1,2-DICHLOROETHENE	0.29 J	0.42 J	1.6	1.6	1.6	36.62	FALSE	FALSE	FALSE	FALSE
SV-168-A-29	SV-DUP 4-A-29	OV-M3	DICHLORODIFLUOROMETHANE	2.5	2.5	2	2	2	0.00	FALSE	TRUE	TRUE	FALSE
SV-168-A-29	SV-DUP 4-A-29	OV-M3	METHYLENE CHLORIDE	20	19	6.9	6.9	6.9	5.13	FALSE	TRUE	TRUE	FALSE
SV-168-A-29	SV-DUP 4-A-29	OV-M3	TETRACHLOROETHENE	0.32 J	0.49 J	2.7	2.7	2.7	41.98	FALSE	FALSE	FALSE	FALSE
SV-168-A-29	SV-DUP 4-A-29	OV-M3	TOLUENE	1.5 U	1.8 J	2.3	2.3	2.3	18.18	FALSE	FALSE	FALSE	FALSE
SV-168-A-29	SV-DUP 4-A-29	OV-M3	TOTAL XYLENES	0.52 U	1.2 J	3.5	3.5	3.5	~~78.87~~	~~TRUE~~	FALSE	FALSE	FALSE
SV-168-A-29	SV-DUP 4-A-29	OV-M3	TRANS-1,2-DICHLOROETHENE	0.14 U	0.21 J	1.6	1.6	1.6	40.00	FALSE	FALSE	FALSE	FALSE
SV-168-A-29	SV-DUP 4-A-29	OV-M3	TRICHLOROETHENE	34	180	1.1	1.1	1.1	136.45	TRUE	TRUE	TRUE	~~TRUE~~

Method TO15 Low Level

Volatile Organic Compounds - Low level (GC/MS) by Method TO 15

FORM II
AIR - GC/MS VOA SURROGATE RECOVERY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Matrix: Air Level: Low

GC Column (1): RTX-5 ID: 0.32(mm)

Client Sample ID	Lab Sample ID	BFB #
SV-172-A-29	140-20194-1	100
SV-116-A-29	140-20194-2	102
SV-DUP 3-A-29	140-20194-3	98
SV-138-A-29	140-20194-4	98
SV-173-A-29	140-20194-5	95
SV-171-A-29	140-20194-6	98
SV-174-A-29	140-20194-7	92
SV-177-A-29	140-20194-8	102
SV-015-A-29	140-20194-9	91
SV-078-A-29	140-20194-10	92
SV-076-A-29	140-20194-11	91
SV-168-A-29	140-20194-12	88
SV-DUP 4-A-29	140-20194-13	91
SV-075-A-29	140-20194-14	94
SV-136-A-29	140-20194-15	94
SV-101-B-29	140-20194-16	89
SV-100-B-29	140-20194-17	82
SV-079-A-29	140-20194-18	91
SV-139-A-29	140-20194-19	101
SV-118-A-29	140-20194-20	99
SV-118-A-29 DL	140-20194-20 DL	97
	MB 140-42503/5	98
	MB 140-42504/4	70
	MB 140-42515/4	100
	LCS 140-42503/1002	104
	LCS 140-42504/1002	107
	LCS 140-42515/1002	105

	QC LIMITS
BFB = 4-Bromofluorobenzene (Surr)	60-140

Column to be used to flag recovery values

FORM II TO 15 LL

FORM IV
AIR - GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Lab File ID: G500BI08.D Lab Sample ID: MB 140-42503/5

Matrix: Air Heated Purge:(Y/N) N

Instrument ID: MG Date Analyzed: 09/08/2020 17:16

GC Column: RTX-5 ID: 0.32(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 140-42503/1002	GCCVI08Z-LCS.d	09/08/2020 15:52
SV-139-A-29	140-20194-19	GI08P108.D	09/08/2020 23:24
SV-172-A-29	140-20194-1	GI08P110.D	09/09/2020 00:58
SV-116-A-29	140-20194-2	GI08P111.D	09/09/2020 01:43
SV-DUP 3-A-29	140-20194-3	GI08P112.D	09/09/2020 02:29
SV-138-A-29	140-20194-4	GI08P113.D	09/09/2020 03:15
SV-173-A-29	140-20194-5	GI08P114.D	09/09/2020 04:00
SV-171-A-29	140-20194-6	GI08P115.D	09/09/2020 04:44
SV-177-A-29	140-20194-8	GI08P107R.D	09/09/2020 09:26
SV-118-A-29	140-20194-20	GI08P109R.D	09/09/2020 10:14

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 140-42503/5

Matrix: Air Lab File ID: G500BI08.D

Analysis Method: TO 15 LL Date Collected:

Sample wt/vol: 500(mL) Date Analyzed: 09/08/2020 17:16

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42503 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	ND		0.080	0.0080
56-23-5	Carbon tetrachloride	153.81	ND		0.080	0.0070
75-45-6	Chlorodifluoromethane	86.47	ND		0.080	0.022
67-66-3	Chloroform	119.38	ND		0.080	0.0070
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.080	0.010
75-71-8	Dichlorodifluoromethane	120.91	ND		0.080	0.014
75-34-3	1,1-Dichloroethane	98.96	ND		0.080	0.0070
107-06-2	1,2-Dichloroethane	98.96	ND		0.080	0.010
75-35-4	1,1-Dichloroethene	96.94	ND		0.080	0.0080
100-41-4	Ethylbenzene	106.17	ND		0.080	0.013
75-09-2	Methylene Chloride	84.93	ND		0.40	0.39
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.40	0.052
91-20-3	Naphthalene	128.17	ND		0.040	0.040
127-18-4	Tetrachloroethene	165.83	ND		0.080	0.0070
108-88-3	Toluene	92.14	ND		0.12	0.078
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.080	0.0070
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.080	0.064
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.080	0.037
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.080	0.0070
79-01-6	Trichloroethene	131.39	ND		0.040	0.0060
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.080	0.036
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.080	0.020
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.080	0.022
75-01-4	Vinyl chloride	62.50	ND		0.040	0.026
1330-20-7	Xylenes, Total	106.17	ND		0.16	0.024

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	98		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 140-42503/5

Matrix: Air Lab File ID: G500BI08.D

Analysis Method: TO 15 LL Date Collected:

Sample wt/vol: 500(mL) Date Analyzed: 09/08/2020 17:16

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42503 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	ND		0.26	0.026
56-23-5	Carbon tetrachloride	153.81	ND		0.50	0.044
75-45-6	Chlorodifluoromethane	86.47	ND		0.28	0.078
67-66-3	Chloroform	119.38	ND		0.39	0.034
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.32	0.040
75-71-8	Dichlorodifluoromethane	120.91	ND		0.40	0.069
75-34-3	1,1-Dichloroethane	98.96	ND		0.32	0.028
107-06-2	1,2-Dichloroethane	98.96	ND		0.32	0.040
75-35-4	1,1-Dichloroethene	96.94	ND		0.32	0.032
100-41-4	Ethylbenzene	106.17	ND		0.35	0.056
75-09-2	Methylene Chloride	84.93	ND		1.4	1.4
1634-04-4	Methyl tert-butyl ether	88.15	ND		1.4	0.19
91-20-3	Naphthalene	128.17	ND		0.21	0.21
127-18-4	Tetrachloroethene	165.83	ND		0.54	0.047
108-88-3	Toluene	92.14	ND		0.45	0.29
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.32	0.028
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.59	0.47
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.44	0.20
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.44	0.038
79-01-6	Trichloroethene	131.39	ND		0.21	0.032
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.39	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.39	0.098
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.39	0.11
75-01-4	Vinyl chloride	62.50	ND		0.10	0.066
1330-20-7	Xylenes, Total	106.17	ND		0.69	0.10

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	98		60-140

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Matrix: Air Level: Low Lab File ID: GCCVI08Z-LCS.d

Lab ID: LCS 140-42503/1002 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Benzene	1.60	1.41	88	70-130	
Carbon tetrachloride	1.60	1.51	95	70-130	
Chlorodifluoromethane	1.60	1.73	108	60-140	
Chloroform	1.60	1.49	93	70-130	
cis-1,2-Dichloroethene	1.60	1.49	93	70-130	
Dichlorodifluoromethane	1.60	1.48	92	60-140	
1,1-Dichloroethane	1.60	1.65	103	70-130	
1,2-Dichloroethane	1.60	1.46	91	70-130	
1,1-Dichloroethene	1.60	1.54	96	70-130	
Ethylbenzene	1.60	1.39	87	70-130	
Methylene Chloride	1.60	1.54	96	70-130	
Methyl tert-butyl ether	1.60	1.52	95	60-140	
Naphthalene	1.60	1.17	73	60-140	
Tetrachloroethene	1.60	1.24	77	70-130	
Toluene	1.60	1.37	85	70-130	
trans-1,2-Dichloroethene	1.60	1.44	90	70-130	
1,2,4-Trichlorobenzene	1.60	1.13	71	60-140	
1,1,1-Trichloroethane	1.60	1.45	91	70-130	
1,1,2-Trichloroethane	1.60	1.36	85	70-130	
Trichloroethene	1.60	1.26	79	70-130	
1,2,3-Trimethylbenzene	1.60	1.09	68	70-130	*
1,2,4-Trimethylbenzene	1.60	1.26	78	70-130	
1,3,5-Trimethylbenzene	1.60	1.46	91	70-130	
Vinyl chloride	1.60	1.73	108	70-130	
Xylenes, Total	4.80	4.10	85	70-130	

Column to be used to flag recovery and RPD values

FORM III TO 15 LL

FORM IV
AIR - GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Lab File ID: H500BI08.D Lab Sample ID: MB 140-42504/4

Matrix: Air Heated Purge:(Y/N) N

Instrument ID: MH Date Analyzed: 09/08/2020 15:46

GC Column: RTX-5 ID: 0.32(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 140-42504/1002	HCCV08B-LCS.d	09/08/2020 13:10
SV-015-A-29	140-20194-9	HI08P107.D	09/08/2020 22:04
SV-078-A-29	140-20194-10	HI08P108.D	09/08/2020 23:00
SV-076-A-29	140-20194-11	HI08P109.D	09/08/2020 23:55
SV-DUP 4-A-29	140-20194-13	HI08P111.D	09/09/2020 01:42
SV-075-A-29	140-20194-14	HI08P112.D	09/09/2020 02:36
SV-136-A-29	140-20194-15	HI08P113.D	09/09/2020 03:32
SV-101-B-29	140-20194-16	HI08P114.D	09/09/2020 04:29
SV-100-B-29	140-20194-17	HI08P115.D	09/09/2020 05:22
SV-079-A-29	140-20194-18	HI08P116.D	09/09/2020 07:09
SV-168-A-29	140-20194-12	HI08P110R.D	09/09/2020 08:03

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 140-42504/4

Matrix: Air Lab File ID: H500BI08.D

Analysis Method: TO 15 LL Date Collected:

Sample wt/vol: 500(mL) Date Analyzed: 09/08/2020 15:46

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42504 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	ND		0.080	0.0080
56-23-5	Carbon tetrachloride	153.81	ND		0.080	0.0070
75-45-6	Chlorodifluoromethane	86.47	ND		0.080	0.022
67-66-3	Chloroform	119.38	ND		0.080	0.0070
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.080	0.010
75-71-8	Dichlorodifluoromethane	120.91	ND		0.080	0.014
75-34-3	1,1-Dichloroethane	98.96	ND		0.080	0.0070
107-06-2	1,2-Dichloroethane	98.96	ND		0.080	0.010
75-35-4	1,1-Dichloroethene	96.94	ND		0.080	0.0080
100-41-4	Ethylbenzene	106.17	ND		0.080	0.013
75-09-2	Methylene Chloride	84.93	ND		0.40	0.39
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.40	0.052
91-20-3	Naphthalene	128.17	ND		0.040	0.040
127-18-4	Tetrachloroethene	165.83	ND		0.080	0.0070
108-88-3	Toluene	92.14	ND		0.12	0.078
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.080	0.0070
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.080	0.064
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.080	0.037
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.080	0.0070
79-01-6	Trichloroethene	131.39	ND		0.040	0.0060
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.080	0.036
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.080	0.020
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.080	0.022
75-01-4	Vinyl chloride	62.50	ND		0.040	0.026
1330-20-7	Xylenes, Total	106.17	ND		0.16	0.024

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	70		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 140-42504/4

Matrix: Air Lab File ID: H500BI08.D

Analysis Method: TO 15 LL Date Collected:

Sample wt/vol: 500(mL) Date Analyzed: 09/08/2020 15:46

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42504 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	ND		0.26	0.026
56-23-5	Carbon tetrachloride	153.81	ND		0.50	0.044
75-45-6	Chlorodifluoromethane	86.47	ND		0.28	0.078
67-66-3	Chloroform	119.38	ND		0.39	0.034
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.32	0.040
75-71-8	Dichlorodifluoromethane	120.91	ND		0.40	0.069
75-34-3	1,1-Dichloroethane	98.96	ND		0.32	0.028
107-06-2	1,2-Dichloroethane	98.96	ND		0.32	0.040
75-35-4	1,1-Dichloroethene	96.94	ND		0.32	0.032
100-41-4	Ethylbenzene	106.17	ND		0.35	0.056
75-09-2	Methylene Chloride	84.93	ND		1.4	1.4
1634-04-4	Methyl tert-butyl ether	88.15	ND		1.4	0.19
91-20-3	Naphthalene	128.17	ND		0.21	0.21
127-18-4	Tetrachloroethene	165.83	ND		0.54	0.047
108-88-3	Toluene	92.14	ND		0.45	0.29
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.32	0.028
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.59	0.47
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.44	0.20
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.44	0.038
79-01-6	Trichloroethene	131.39	ND		0.21	0.032
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.39	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.39	0.098
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.39	0.11
75-01-4	Vinyl chloride	62.50	ND		0.10	0.066
1330-20-7	Xylenes, Total	106.17	ND		0.69	0.10

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	70		60-140

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Matrix: Air Level: Low Lab File ID: HCCV08B-LCS.d

Lab ID: LCS 140-42504/1002 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Benzene	1.60	1.55	97	70-130	
Carbon tetrachloride	1.60	2.06	129	70-130	
Chlorodifluoromethane	1.60	1.49	93	60-140	
Chloroform	1.60	1.54	96	70-130	
cis-1,2-Dichloroethene	1.60	1.58	99	70-130	
Dichlorodifluoromethane	1.60	1.64	102	60-140	
1,1-Dichloroethane	1.60	1.53	96	70-130	
1,2-Dichloroethane	1.60	1.58	99	70-130	
1,1-Dichloroethene	1.60	1.55	97	70-130	
Ethylbenzene	1.60	1.53	96	70-130	
Methylene Chloride	1.60	1.52	95	70-130	
Methyl tert-butyl ether	1.60	1.44	90	60-140	
Naphthalene	1.60	2.13	133	60-140	
Tetrachloroethene	1.60	1.63	102	70-130	
Toluene	1.60	1.59	100	70-130	
trans-1,2-Dichloroethene	1.60	1.60	100	70-130	
1,2,4-Trichlorobenzene	1.60	2.46	154	60-140	*
1,1,1-Trichloroethane	1.60	1.57	98	70-130	
1,1,2-Trichloroethane	1.60	1.56	98	70-130	
Trichloroethene	1.60	1.65	103	70-130	
1,2,3-Trimethylbenzene	1.60	1.41	88	70-130	
1,2,4-Trimethylbenzene	1.60	1.92	120	70-130	
1,3,5-Trimethylbenzene	1.60	1.91	119	70-130	
Vinyl chloride	1.60	1.51	94	70-130	
Xylenes, Total	4.80	4.96	103	70-130	

Column to be used to flag recovery and RPD values

FORM III TO 15 LL

FORM IV
AIR - GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Lab File ID: R500BI09.D Lab Sample ID: MB 140-42515/4

Matrix: Air Heated Purge:(Y/N) N

Instrument ID: MR Date Analyzed: 09/09/2020 13:56

GC Column: RTX-5 ID: 0.32(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 140-42515/1002	RCCVI09-LCS.d	09/09/2020 11:27
SV-118-A-29 DL	140-20194-20 DL	RI09P101.D	09/09/2020 14:44
SV-174-A-29	140-20194-7	RI09P202R.D	09/10/2020 08:00

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 140-42515/4

Matrix: Air Lab File ID: R500BI09.D

Analysis Method: TO 15 LL Date Collected:

Sample wt/vol: 500(mL) Date Analyzed: 09/09/2020 13:56

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42515 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	ND		0.080	0.0080
56-23-5	Carbon tetrachloride	153.81	ND		0.080	0.0070
75-45-6	Chlorodifluoromethane	86.47	ND		0.080	0.022
67-66-3	Chloroform	119.38	ND		0.080	0.0070
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.080	0.010
75-71-8	Dichlorodifluoromethane	120.91	ND		0.080	0.014
75-34-3	1,1-Dichloroethane	98.96	ND		0.080	0.0070
107-06-2	1,2-Dichloroethane	98.96	ND		0.080	0.010
75-35-4	1,1-Dichloroethene	96.94	ND		0.080	0.0080
100-41-4	Ethylbenzene	106.17	ND		0.080	0.013
75-09-2	Methylene Chloride	84.93	ND		0.40	0.39
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.40	0.052
91-20-3	Naphthalene	128.17	ND		0.040	0.040
127-18-4	Tetrachloroethene	165.83	ND		0.080	0.0070
108-88-3	Toluene	92.14	ND		0.12	0.078
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.080	0.0070
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.080	0.064
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.080	0.037
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.080	0.0070
79-01-6	Trichloroethene	131.39	ND		0.040	0.0060
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.080	0.036
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.080	0.020
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.080	0.022
75-01-4	Vinyl chloride	62.50	ND		0.040	0.026
1330-20-7	Xylenes, Total	106.17	ND		0.16	0.024

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	100		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 140-42515/4

Matrix: Air Lab File ID: R500BI09.D

Analysis Method: TO 15 LL Date Collected:

Sample wt/vol: 500(mL) Date Analyzed: 09/09/2020 13:56

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42515 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	ND		0.26	0.026
56-23-5	Carbon tetrachloride	153.81	ND		0.50	0.044
75-45-6	Chlorodifluoromethane	86.47	ND		0.28	0.078
67-66-3	Chloroform	119.38	ND		0.39	0.034
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.32	0.040
75-71-8	Dichlorodifluoromethane	120.91	ND		0.40	0.069
75-34-3	1,1-Dichloroethane	98.96	ND		0.32	0.028
107-06-2	1,2-Dichloroethane	98.96	ND		0.32	0.040
75-35-4	1,1-Dichloroethene	96.94	ND		0.32	0.032
100-41-4	Ethylbenzene	106.17	ND		0.35	0.056
75-09-2	Methylene Chloride	84.93	ND		1.4	1.4
1634-04-4	Methyl tert-butyl ether	88.15	ND		1.4	0.19
91-20-3	Naphthalene	128.17	ND		0.21	0.21
127-18-4	Tetrachloroethene	165.83	ND		0.54	0.047
108-88-3	Toluene	92.14	ND		0.45	0.29
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.32	0.028
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.59	0.47
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.44	0.20
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.44	0.038
79-01-6	Trichloroethene	131.39	ND		0.21	0.032
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.39	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.39	0.098
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.39	0.11
75-01-4	Vinyl chloride	62.50	ND		0.10	0.066
1330-20-7	Xylenes, Total	106.17	ND		0.69	0.10

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	100		60-140

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Matrix: Air Level: Low Lab File ID: RCCVI09-LCS.d

Lab ID: LCS 140-42515/1002 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Benzene	1.60	1.64	103	70-130	
Carbon tetrachloride	1.60	1.80	112	70-130	
Chlorodifluoromethane	1.60	1.77	110	60-140	
Chloroform	1.60	1.68	105	70-130	
cis-1,2-Dichloroethene	1.60	1.36	85	70-130	
Dichlorodifluoromethane	1.60	2.09	131	60-140	
1,1-Dichloroethane	1.60	1.82	114	70-130	
1,2-Dichloroethane	1.60	1.93	121	70-130	
1,1-Dichloroethene	1.60	1.45	90	70-130	
Ethylbenzene	1.60	1.48	93	70-130	
Methylene Chloride	1.60	1.68	105	70-130	
Methyl tert-butyl ether	1.60	1.79	112	60-140	
Naphthalene	1.60	1.51	95	60-140	
Tetrachloroethene	1.60	1.34	84	70-130	
Toluene	1.60	1.41	88	70-130	
trans-1,2-Dichloroethene	1.60	1.55	97	70-130	
1,2,4-Trichlorobenzene	1.60	1.44	90	60-140	
1,1,1-Trichloroethane	1.60	1.67	105	70-130	
1,1,2-Trichloroethane	1.60	1.46	91	70-130	
Trichloroethene	1.60	1.43	89	70-130	
1,2,3-Trimethylbenzene	1.60	1.66	104	70-130	
1,2,4-Trimethylbenzene	1.60	1.54	96	70-130	
1,3,5-Trimethylbenzene	1.60	1.44	90	70-130	
Vinyl chloride	1.60	1.96	123	70-130	
Xylenes, Total	4.80	4.47	93	70-130	

Column to be used to flag recovery and RPD values

FORM III TO 15 LL

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Lab File ID: GI01BFB.D BFB Injection Date: 09/01/2020

Instrument ID: MG BFB Injection Time: 16:42

Analysis Batch No.: 42295

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	33.0	
75	30.0 - 60.0 % of mass 95	54.3	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.2	
173	Less than 2.0 % of mass 174	0.3	(0.5) 1
174	Greater than 50% of mass 95	73.8	
175	5.0 - 9.0 % of mass 174	5.3	(7.1) 1
176	95.0 - 101.0 % of mass 174	71.8	(97.2) 1
177	5.0 - 9.0 % of mass 176	4.5	(6.3) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 140-42295/3	GI01IC10.D	09/01/2020	18:07
	IC 140-42295/5	GI01IC09.D	09/01/2020	19:43
	IC 140-42295/7	GI01IC08.D	09/01/2020	21:19
	IC 140-42295/9	GI01IC01.D	09/01/2020	22:55
	IC 140-42295/10	GI01IC02.D	09/01/2020	23:39
	IC 140-42295/11	GI01IC03.D	09/02/2020	0:24
	IC 140-42295/12	GI01IC04.D	09/02/2020	1:08
	IC 140-42295/13	GI01IC05.D	09/02/2020	1:52
	IC 140-42295/14	GI01IC06.D	09/02/2020	2:38
	ICIS 140-42295/15	GI01IC07.D	09/02/2020	3:27
	ICV 140-42295/22	GI01ICVR.D	09/02/2020	8:56

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 140-42295/9	GI01IC01.D
Level 2	IC 140-42295/10	GI01IC02.D
Level 3	IC 140-42295/11	GI01IC03.D
Level 4	IC 140-42295/12	GI01IC04.D
Level 5	IC 140-42295/13	GI01IC05.D
Level 6	IC 140-42295/14	GI01IC06.D
Level 7	ICIS 140-42295/15	GI01IC07.D
Level 8	IC 140-42295/7	GI01IC08.D
Level 9	IC 140-42295/5	GI01IC09.D
Level 10	IC 140-42295/3	GI01IC10.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Chlorodifluoromethane	+++++ 4.2174	+++++ 3.9338	5.0807 4.6204	4.1800 4.4013	4.2893 3.6854	Ave		4.3010				9.8		30.0			
Propene	+++++ 2.1016	+++++ 1.9924	+++++ 2.2188	2.4122 2.0989	2.1914 1.7884	Ave		2.1148				9.2		30.0			
Dichlorodifluoromethane	+++++ 4.6221	+++++ 4.5171	5.1025 5.2936	5.0254 5.0487	4.6333 4.2256	Ave		4.8085				7.5		30.0			
Chloromethane	+++++ 0.8378	+++++ 0.7711	+++++ 0.9046	1.0496 0.8511	0.9048 0.7078	Ave		0.8610				12.7		30.0			
1,2-Dichloro-1,1,2,2-tetrafluoroethane	2.7419 2.4849	3.0305 2.6157	2.6182 3.1606	2.5493 3.1468	2.5986 2.4827	Ave		2.7429				9.8		30.0			
Vinyl chloride	2.2108 2.3591	3.0033 2.2051	2.6105 2.5785	2.2040 2.4712	2.3833 2.0097	Ave		2.4035				11.7		30.0			
1,3-Butadiene	+++++ 2.1302	+++++ 1.9721	+++++ 2.3036	2.1726 2.2136	2.2042 1.8343	Ave		2.1187				7.6		30.0			
Butane	+++++ 4.3488	+++++ 4.0253	4.6585 4.5089	4.6118 4.2262	4.5015 3.5538	Ave		4.3044				8.6		30.0			
Bromomethane	+++++ 1.3715	+++++ 1.3578	1.5650 1.6350	1.4697 1.5631	1.4210 1.2343	Ave		1.4522				9.1		30.0			
Chloroethane	+++++ 0.9275	+++++ 0.9381	1.2120 1.0916	0.9857 1.0523	0.9542 0.8144	Ave		0.9970				12.1		30.0			
Ethanol	+++++ 0.8956	+++++ 0.9494	+++++ 1.0644	0.8703 0.7979	1.0301 0.7479	Ave		0.9079				12.8		30.0			
Vinyl bromide	+++++ 1.1432	1.2751 1.1648	1.2369 1.4478	1.2077 1.3491	1.2537 1.0693	Ave		1.2386				9.1		30.0			
2-Methylbutane	+++++ 2.9599	+++++ 2.7561	+++++ 3.3238	2.9753 3.0693	2.9458 2.4296	Ave		2.9228				9.5		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Trichlorofluoromethane	3.9167 3.5393	4.1610 3.2865	4.1430 4.0916	3.5786 3.8541	3.5904 3.2131	Ave		3.7374				9.3		30.0			
Acrolein	+++++ 0.4569	+++++ 0.4173	+++++ 0.3780	+++++ 0.4417	0.5137 0.4710	Ave		0.4464				10.4		30.0			
Acetonitrile	+++++ 0.7945	+++++ 0.8380	+++++ 0.7024	+++++ 0.6506	1.0870 0.7195	Ave		0.7987				19.6		30.0			
Acetone	+++++ 0.9473	+++++ 0.8615	+++++ 0.6959	0.7948 0.6300	0.9823 0.6878	Ave		0.7999				17.0		30.0			
Isopropyl alcohol	+++++ 2.3768	+++++ 2.2904	+++++ 3.0620	2.2332 2.0902	2.6720 1.9961	Ave		2.3887				15.4		30.0			
Pentane	+++++ 0.2407	+++++ 0.2227	+++++ 0.2836	0.2386 0.2584	0.2444 0.2123	Ave		0.2430				9.6		30.0			
Ethyl ether	+++++ 1.8676	+++++ 1.8292	+++++ 1.5681	1.5565 1.5554	1.9511 1.6408	Ave		1.7098				9.8		30.0			
1,1-Dichloroethene	+++++ 1.1460	1.2138 1.1071	1.3220 1.2854	1.0888 1.2140	1.2249 1.0475	Ave		1.1833				7.8		30.0			
Acrylonitrile	+++++ 1.1577	+++++ 1.1526	+++++ 0.9121	1.0056 1.0241	1.2114 1.1792	Ave		1.0918				10.2		30.0			
tert-Butyl alcohol	+++++ 2.4598	+++++ 2.1786	+++++ 3.1532	2.3200 2.0921	2.6745 2.0080	Ave		2.4123				16.5		30.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	2.9739 2.5990	2.9936 2.5089	2.9993 2.8289	2.7308 2.7120	2.6787 2.3381	Ave		2.7363				8.0		30.0			
Methylene Chloride	+++++ 1.1888	+++++ 1.1040	+++++ 1.2681	+++++ 1.2031	1.2912 1.0471	Ave		1.1837				7.9		30.0			
3-Chloropropene	+++++ 2.0584	+++++ 1.8527	3.4211 2.1137	2.3717 2.1326	2.2916 +++++	Ave		2.3203				22.1		30.0			
Carbon disulfide	+++++ 3.9864	+++++ 3.6463	4.6626 4.2662	3.9658 3.9565	3.9101 3.4240	Ave		3.9773				9.4		30.0			
trans-1,2-Dichloroethene	+++++ 1.3276	1.4977 1.2596	1.6040 1.4777	1.2760 1.4233	1.4268 1.2441	Ave		1.3930				8.9		30.0			
2-Methylpentane	+++++ 5.3070	+++++ 4.9992	6.5041 5.4750	5.2908 5.3755	5.6347 4.8807	Ave		5.4334				9.1		30.0			
Methyl tert-butyl ether	+++++ 3.1393	+++++ 3.0946	+++++ 2.7875	2.3858 2.6178	3.2114 2.9473	Ave		2.8834				10.5		30.0			
1,1-Dichloroethane	+++++ 3.4115	3.7876 3.2158	3.9181 3.5051	3.4555 3.4303	3.4976 3.0350	Ave		3.4730				7.6		30.0			
Vinyl acetate	+++++ 4.8276	+++++ 5.0004	+++++ 3.9048	3.8303 4.2643	4.9123 5.0941	Ave		4.5477				11.8		30.0			
2-Butanone (MEK)	+++++ 0.6548	+++++ 0.6135	+++++ 0.5527	0.4972 0.4919	0.6747 0.5569	Ave		0.5774				12.6		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Hexane	+++++ 1.7503	+++++ 1.6732	2.0176 1.8319	1.8921 1.7798	1.8022 1.5922	Ave		1.7924				7.3		30.0			
cis-1,2-Dichloroethene	+++++ 1.4665	1.5582 1.3982	1.5881 1.5642	1.4357 1.4968	1.4885 1.3297	Ave		1.4807				5.7		30.0			
Ethyl acetate	+++++ 4.2053	+++++ 4.2696	+++++ 3.7315	+++++ 3.3697	4.2713 4.0410	Ave		3.9814				9.1		30.0			
Chloroform	3.6326 3.2428	3.8455 3.0621	4.0330 3.2724	3.2505 3.1262	3.3547 2.8423	Ave		3.3662				10.9		30.0			
Tetrahydrofuran	+++++ 2.1055	+++++ 2.1356	+++++ 1.9106	1.7359 1.7485	2.2340 2.1111	Ave		1.9973				10.0		30.0			
1,1,1-Trichloroethane	+++++ 3.1201	3.6579 2.9347	3.6746 3.3019	3.1348 3.2238	3.1883 2.9270	Ave		3.2403				8.4		30.0			
1,2-Dichloroethane	+++++ 0.5726	+++++ 0.4842	0.6275 0.6150	0.5495 0.5076	0.5324 0.4483	Ave		0.5421				11.5		30.0			
1-Butanol	+++++ 0.1665	+++++ 0.1260	+++++ 0.2219	+++++ 0.1221	0.1708 0.1138	Ave		0.1535				26.8		30.0			
Benzene	+++++ 1.0472	+++++ 0.8775	1.1251 1.1183	1.0176 0.9183	0.9768 0.8127	Ave		0.9867				11.4		30.0			
Cyclohexane	+++++ 0.1851	+++++ 0.1422	+++++ 0.1911	0.1843 0.1565	0.1713 0.1325	Ave		0.1661				13.8		30.0			
Carbon tetrachloride	0.6115 0.6342	0.7855 0.3732	0.6372 0.7687	0.6496 0.5332	0.6314 0.4745	Ave		0.6099				20.4		30.0			
2,3-Dimethylpentane	+++++ 0.2742	+++++ 0.2228	0.3087 0.2832	0.2513 0.2297	0.2718 0.1969	Ave		0.2548				14.4		30.0			
Thiophene	+++++ 0.6226	+++++ 0.5084	0.6481 0.6440	0.5323 0.5147	0.5936 0.4600	Ave		0.5655				12.5		30.0			
2,2,4-Trimethylpentane	+++++ 2.6529	+++++ 2.1576	2.5968 2.7357	2.5821 2.2056	2.4393 1.9434	Ave		2.4142				11.6		30.0			
Heptane	+++++ 0.4225	+++++ 0.3493	0.4467 0.4306	0.4137 0.3481	0.3833 0.3098	Ave		0.3880				12.5		30.0			
1,2-Dichloropropane	+++++ 0.4903	+++++ 0.4198	0.5242 0.4544	0.4420 0.4070	0.4670 0.3907	Ave		0.4494				9.9		30.0			
Trichloroethene	0.4268 0.4287	0.6851 0.3531	0.4447 0.4566	0.3977 0.3715	0.3907 0.3471	Ave		0.4302				22.6		30.0			
Dibromomethane	+++++ 0.4913	+++++ 0.3719	0.4798 0.4731	0.4427 0.3774	0.4069 0.3477	Ave		0.4239				13.0		30.0			
Bromodichloromethane	+++++ 0.7898	+++++ 0.6710	0.7786 0.8678	0.7548 0.6917	0.7246 0.6155	Ave		0.7367				10.7		30.0			
1,4-Dioxane	+++++ 0.0995	+++++ 0.1146	0.1383 0.1433	0.0983 0.0995	0.1218 0.1060	Ave		0.1151				15.5		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Methyl methacrylate	+++++ 0.6126	+++++ 0.5158	+++++ 0.5430	0.4167 0.4267	0.5480 0.4984	Ave		0.5088				13.6		30.0			
Methylcyclohexane	+++++ 0.7141	+++++ 0.5799	0.7102 0.7331	0.6975 0.6005	0.6391 0.5295	Ave		0.6505				11.5		30.0			
4-Methyl-2-pentanone (MIBK)	+++++ 0.9278	+++++ 0.8261	+++++ 1.0804	0.7409 0.6478	0.9390 0.8352	Ave		0.8567				16.5		30.0			
cis-1,3-Dichloropropene	+++++ 0.6560	+++++ 0.5378	0.6234 0.6358	0.6180 0.5649	0.5766 0.5208	Ave		0.5917				8.2		30.0			
trans-1,3-Dichloropropene	+++++ 0.5080	+++++ 0.4807	0.5744 0.5058	0.4699 0.4430	0.4959 0.4618	Ave		0.4924				8.1		30.0			
Toluene	+++++ 1.1362	+++++ 1.0313	1.2507 1.0326	0.9784 0.9458	1.1137 0.9804	Ave		1.0587				9.6		30.0			
1,1,2-Trichloroethane	+++++ 0.3651	+++++ 0.3332	0.3544 0.3478	0.3135 0.3004	0.3359 0.3042	Ave		0.3318				7.2		30.0			
2-Hexanone	+++++ 0.4283	+++++ 0.3609	+++++ 0.5255	0.3215 0.2913	0.4231 0.3950	Ave		0.3922				19.8		30.0			
Octane	+++++ 0.4065	+++++ 0.3682	0.4218 0.4332	0.3669 0.3485	0.4038 0.3377	Ave		0.3858				9.1		30.0			
C8 Range	+++++ 5.1496	+++++ 4.5413	+++++ 5.0824	4.9366 4.1728	4.8692 4.0260	Ave		4.6826				9.5		30.0			
Dibromochloromethane	+++++ 0.6038	+++++ 0.6015	0.6071 0.7470	0.5882 0.6071	0.6039 0.6314	Ave		0.6238				8.2		30.0			
1,2-Dibromoethane (EDB)	+++++ 0.6113	+++++ 0.5807	0.6903 0.6152	0.5414 0.5554	0.5986 0.5707	Ave		0.5955				7.8		30.0			
Tetrachloroethene	0.3922 0.3899	0.5714 0.3494	0.4232 0.4129	0.3811 0.3486	0.3633 0.3589	Ave		0.3991				16.5		30.0			
Chlorobenzene	+++++ 0.8917	+++++ 0.8359	0.9456 0.8804	0.8214 0.7793	0.8728 0.8230	Ave		0.8562				6.0		30.0			
Ethylbenzene	+++++ 1.4845	+++++ 1.3986	1.5812 1.3093	1.1895 1.1688	1.4349 1.3181	Ave		1.3606				10.4		30.0			
m-Xylene & p-Xylene	+++++ 1.1395	1.3560 1.0689	1.1696 1.0189	0.9045 0.9029	1.0775 1.0501	Ave		1.0764				12.9		30.0			
Nonane	+++++ 1.1178	+++++ 1.0412	1.1918 1.1156	0.9832 0.9695	1.0531 1.0220	Ave		1.0618				7.1		30.0			
Bromoform	+++++ 0.3530	0.4932 0.5262	0.4773 0.6766	0.4669 0.5829	0.4831 0.6638	Ave		0.5248				19.5		30.0			
Styrene	+++++ 0.8496	0.8564 0.8197	0.7693 0.8021	0.6128 0.7235	0.7599 0.8482	Ave		0.7824				10.0		30.0			
o-Xylene	+++++ 1.1834	+++++ 1.1099	1.2724 1.0625	0.9632 0.9188	1.1394 1.0648	Ave		1.0893				10.5		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
1,1,2,2-Tetrachloroethane	+++++ 0.9568	+++++ 0.8965	0.9614 0.9003	0.7850 0.7111	0.9017 0.8402	Ave		0.8691				9.9		30.0			
1,2,3-Trichloropropane	+++++ 0.2303	+++++ 0.2224	0.2139 0.2285	0.1808 0.1846	0.2198 0.2199	Ave		0.2125				9.0		30.0			
Isopropylbenzene	+++++ 1.5477	+++++ 1.4846	1.6346 1.4298	1.1749 1.2363	1.4395 1.5017	Ave		1.4311				10.8		30.0			
Propylbenzene	+++++ 0.4096	+++++ 0.3881	0.4490 0.3889	0.2983 0.3382	0.3607 0.4238	Ave		0.3821				12.7		30.0			
2-Chlorotoluene	+++++ 0.3740	+++++ 0.3672	0.3653 0.3802	0.3033 0.3491	0.3890 0.3999	Ave		0.3660				8.1		30.0			
4-Ethyltoluene	+++++ 1.5444	+++++ 1.4874	1.6377 1.4488	1.1082 1.2285	1.4027 1.5756	Ave		1.4292				12.6		30.0			
1,3,5-Trimethylbenzene	+++++ 0.6287	+++++ 0.5816	0.6485 0.5885	0.4212 0.4949	0.5763 0.6295	Ave		0.5712				13.5		30.0			
Alpha Methyl Styrene	+++++ 0.6091	+++++ 0.5921	+++++ 0.6036	0.4018 0.5445	0.5103 0.6897	Ave		0.5644				16.1		30.0			
Decane	+++++ 1.3958	+++++ 1.3245	1.4453 1.2935	1.1663 1.0979	1.3010 1.2736	Ave		1.2872				8.8		30.0			
tert-Butylbenzene	+++++ 1.3443	+++++ 1.3045	1.3391 1.3134	0.9248 1.1315	1.1828 1.5072	Ave		1.2560				13.9		30.0			
1,2,4-Trimethylbenzene	+++++ 1.3349	+++++ 1.2958	1.3725 1.3030	0.9005 1.0916	1.2317 1.4632	Ave		1.2492				14.2		30.0			
sec-Butylbenzene	+++++ 2.0106	+++++ 1.9451	2.0566 1.9618	1.4032 1.6599	1.7616 2.2768	Ave		1.8845				14.3		30.0			
1,3-Dichlorobenzene	0.7914 0.8744	1.0379 0.8623	0.9071 0.9390	0.7225 0.8650	0.7989 1.1012	Ave		0.8900				12.8		30.0			
Benzyl chloride	+++++ 1.1627	+++++ 1.2981	1.2725 1.2526	0.8444 1.0752	1.0888 1.4189	Ave		1.1766				15.0		30.0			
1,4-Dichlorobenzene	0.8212 0.8662	1.1563 0.8485	0.9244 0.9286	0.7311 0.8537	0.8219 1.0629	Ave		0.9015				13.9		30.0			
4-Isopropyltoluene	+++++ 1.5739	+++++ 1.5520	1.5326 1.5665	1.0593 1.3129	1.3776 1.6980	Ave		1.4591				13.8		30.0			
1,2,3-Trimethylbenzene	+++++ 1.3535	+++++ 1.3304	1.3699 1.3206	0.9147 1.0928	1.2244 1.3703	QuaF		1.0451	0.0196912						0.9950		0.9900
1,2-Dichlorobenzene	+++++ 0.8393	+++++ 0.8396	0.9032 0.9175	0.6871 0.8170	0.7522 1.0674	Ave		0.8529				13.4		30.0			
Indane	+++++ 1.2941	1.3808 1.2787	1.3052 1.2997	0.8717 1.1236	1.1373 1.5429	Ave		1.2482				15.1		30.0			
Indene	+++++ 1.1144	+++++ 1.1166	1.0943 1.1458	0.7537 0.9883	0.9911 1.3506	Ave		1.0694				15.9		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Butylbenzene	+++++ 1.7840	+++++ 1.7332	1.8906 1.7260	1.2003 1.4015	1.6122 1.8819	Ave		1.6537				14.6		30.0			
Undecane	+++++ 1.5657	+++++ 1.4831	1.6754 1.4503	1.1926 1.1849	1.4250 1.5159	Ave		1.4366				11.9		30.0			
1,2-Dibromo-3-Chloropropane	+++++ 0.3524	+++++ 0.4563	0.3665 0.5320	0.2980 0.4064	0.3669 0.5757	QuaF		0.3520	0.0136829						0.9930		0.9900
1,2,4,5-Tetramethylbenzene	+++++ 1.3759	+++++ 1.4754	1.5696 1.5953	0.8949 1.2219	1.2986 1.7205	QuaF		1.0880	0.0385563						0.9930		0.9900
Dodecane	+++++ 1.4953	+++++ 1.1035	+++++ 1.4579	1.0479 1.0511	1.3963 1.2270	Ave		1.2542				15.5		30.0			
1,2,4-Trichlorobenzene	+++++ 0.6689	+++++ 0.7087	0.8181 0.8251	0.5088 0.7325	0.6450 1.1015	Ave		0.7511				23.1		30.0			
Naphthalene	+++++ 1.5967	2.4276 1.7346	2.1874 1.9122	1.1790 1.4929	1.6126 2.1629	Ave		1.8118				21.8		30.0			
Hexachlorobutadiene	+++++ 0.6043	+++++ 0.6330	0.7229 0.7599	0.4569 0.7265	0.5378 +++++	Ave		0.6345				17.5		30.0			
1,2,3-Trichlorobenzene	+++++ 0.6619	+++++ 0.6779	0.8148 0.8166	0.4626 0.7112	0.6095 1.0297	Ave		0.7230				23.3		30.0			
2-Methylnaphthalene	+++++ 0.6920	+++++ 0.4527	+++++ 1.2986	+++++ 0.8133	0.7500 0.6688	Ave		0.7792				36.2		50.0			
1-Methylnaphthalene	+++++ 0.7883	+++++ 0.4816	+++++ 1.3389	0.6525 0.8306	0.8523 0.6090	Ave		0.7933				34.7		50.0			
4-Bromofluorobenzene (Surr)	0.7279 0.7634	0.7355 0.7715	0.7208 0.7607	0.7393 0.7936	0.7384 0.7811	Ave		0.7532				3.2		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 140-42295/9	GI01IC01.D
Level 2	IC 140-42295/10	GI01IC02.D
Level 3	IC 140-42295/11	GI01IC03.D
Level 4	IC 140-42295/12	GI01IC04.D
Level 5	IC 140-42295/13	GI01IC05.D
Level 6	IC 140-42295/14	GI01IC06.D
Level 7	ICIS 140-42295/15	GI01IC07.D
Level 8	IC 140-42295/7	GI01IC08.D
Level 9	IC 140-42295/5	GI01IC09.D
Level 10	IC 140-42295/3	GI01IC10.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
Chlorodifluoromethane	CBM	Ave	+++++ 126387	+++++ 254491	11226 595533	19940 1219560	48665 2051104	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Propene	CBM	Ave	+++++ 62980	+++++ 128895	+++++ 285979	11507 581585	24863 995335	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Dichlorodifluoromethane	CBM	Ave	+++++ 138515	+++++ 292225	11274 682291	23973 1398945	52568 2351785	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Chloromethane	CBM	Ave	+++++ 25107	+++++ 49882	+++++ 116599	5007 235833	10266 393942	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,2-Dichloro-1,1,2,2-tetrafluoroethane	CBM	Ave	1998 74466	3458 169218	5785 407375	12161 871962	29483 1381764	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Vinyl chloride	CBM	Ave	1611 70697	3427 142653	5768 332339	10514 684743	27040 1118505	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,3-Butadiene	CBM	Ave	+++++ 63838	+++++ 127581	+++++ 296910	10364 613368	25008 1020894	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Butane	CBM	Ave	+++++ 130324	+++++ 260407	10293 581152	22000 1171057	51072 1977905	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Bromomethane	CBM	Ave	+++++ 41102	+++++ 87843	3458 210733	7011 433116	16122 686953	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Chloroethane	CBM	Ave	+++++ 27795	+++++ 60690	2678 140702	4702 291588	10826 453281	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Ethanol	CBM	Ave	+++++ 134201	+++++ 307085	+++++ 685930	20757 1105422	58436 2081107	+++++ 5.00	+++++ 10.0	+++++ 20.0	0.800 40.0	2.00 80.0
Vinyl bromide	CBM	Ave	+++++ 34260	1455 75357	2733 186602	5761 373832	14224 595103	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Methylbutane	CBM	Ave	+++++ 88701	+++++ 178302	+++++ 428407	14193 850465	33422 1352213	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Trichlorofluoromethane	CBM	Ave	2854 106066	4748 212612	9154 527367	17071 1067934	40736 1788276	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
Acrolein	CBM	Ave	+++++ 13692	+++++ 26996	+++++ 48727	+++++ 122401	5828 262114	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
Acetonitrile	CBM	Ave	+++++ 23808	+++++ 54213	+++++ 90528	+++++ 180279	12333 400450	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
Acetone	CBM	Ave	+++++ 85167	+++++ 167195	+++++ 269068	11375 523707	33434 1148398	+++++ 3.00	+++++ 6.00	+++++ 12.0	0.480 24.0	1.20 48.0
Isopropyl alcohol	CBM	Ave	+++++ 213678	+++++ 444518	+++++ 1184009	31959 1737523	90947 3332728	+++++ 3.00	+++++ 6.00	+++++ 12.0	0.480 24.0	1.20 48.0
Pentane	CBM	Ave	+++++ 7214	+++++ 14405	+++++ 36548	1138 71611	2773 118178	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Ethyl ether	CBM	Ave	+++++ 55969	+++++ 118337	+++++ 202112	7425 431001	22137 913197	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,1-Dichloroethene	CBM	Ave	+++++ 34343	1385 71623	2921 165673	5194 336401	13897 583003	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Acrylonitrile	CBM	Ave	+++++ 34693	+++++ 74563	+++++ 117560	4797 283762	13744 656282	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
tert-Butyl alcohol	CBM	Ave	+++++ 73714	+++++ 140940	+++++ 406423	11067 579708	30344 1117573	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,1,2-Trichloro-1,2,2-trifluoroetha ne	CBM	Ave	2167 77887	3416 162311	6627 364620	13027 751469	30392 1301292	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Methylene Chloride	CBM	Ave	+++++ 35627	+++++ 71422	+++++ 163443	+++++ 333362	14649 582763	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
3-Chloropropene	CBM	Ave	+++++ 61687	+++++ 119860	7559 272432	11314 590936	26000 +++++	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
Carbon disulfide	CBM	Ave	+++++ 119464	+++++ 235894	10302 549880	18918 1096319	44363 1905658	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
trans-1,2-Dichloroethene	CBM	Ave	+++++ 39785	1709 81489	3544 190465	6087 394374	16188 692384	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Methylpentane	CBM	Ave	+++++ 159038	+++++ 323413	14371 705673	25239 1489517	63929 2716361	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Methyl tert-butyl ether	CBM	Ave	+++++ 94079	+++++ 200198	+++++ 359280	11381 725384	36435 1640351	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,1-Dichloroethane	CBM	Ave	+++++ 102235	4322 208044	8657 451772	16484 950498	39683 1689157	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Vinyl acetate	CBM	Ave	+++++ 144673	+++++ 323495	+++++ 503287	18272 1181597	55733 2835157	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
2-Butanone (MEK)	CBM	Ave	+++++ 19622	+++++ 39691	+++++ 71237	2372 136308	7655 309968	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Hexane	CBM	Ave	+++++ 52452	+++++ 108248	4458 236115	9026 493163	20447 886142	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
cis-1,2-Dichloroethene	CBM	Ave	+++++ 43948	1778 90453	3509 201607	6849 414738	16888 740051	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
Ethyl acetate	CBM	Ave	+++++ 126022	+++++ 276215	+++++ 480959	+++++ 933715	48461 2249047	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
Chloroform	CBM	Ave	2647 97178	4388 198099	8911 421785	15506 866236	38061 1581905	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Tetrahydrofuran	CBM	Ave	+++++ 63096	+++++ 138158	+++++ 246265	8281 484501	25346 1174961	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,1,1-Trichloroethane	CBM	Ave	+++++ 93502	4174 189856	8119 425590	14954 893295	36173 1629049	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2-Dichloroethane	DFBZ	Ave	+++++ 74570	+++++ 156222	6831 340796	11727 712592	29376 1309457	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1-Butanol	DFBZ	Ave	+++++ 21677	+++++ 40646	+++++ 122991	+++++ 171394	9421 332356	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
Benzene	DFBZ	Ave	+++++ 136368	+++++ 283155	12247 619691	21718 1289194	53895 2374147	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Cyclohexane	DFBZ	Ave	+++++ 24100	+++++ 45891	+++++ 105905	3934 219701	9450 386947	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Carbon tetrachloride	DFBZ	Ave	2115 82585	3137 120424	6936 425976	13863 748515	34839 1386144	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2,3-Dimethylpentane	DFBZ	Ave	+++++ 35713	+++++ 71885	3360 156938	5364 322420	14994 575076	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Thiophene	DFBZ	Ave	+++++ 81080	+++++ 164043	7055 356857	11360 722547	32749 1343789	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2,2,4-Trimethylpentane	DFBZ	Ave	+++++ 345476	+++++ 696193	28267 1515982	55108 3096308	134587 5676918	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Heptane	DFBZ	Ave	+++++ 55017	+++++ 112703	4863 238604	8829 488721	21146 905044	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2-Dichloropropane	DFBZ	Ave	+++++ 63849	+++++ 135449	5706 251789	9433 571342	25767 1141437	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Trichloroethene	DFBZ	Ave	1476 55829	2736 113938	4841 253014	8487 521549	21557 1014059	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Dibromomethane	DFBZ	Ave	+++++ 63978	+++++ 119998	5223 262180	9449 529820	22450 1015819	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Bromodichloromethane	DFBZ	Ave	+++++ 102850	+++++ 216520	8475 480892	16110 971037	39980 1797881	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,4-Dioxane	DFBZ	Ave	+++++ 12962	+++++ 36968	1505 79403	2097 139641	6721 309615	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Methyl methacrylate	DFBZ	Ave	+++++ 79777	+++++ 166422	+++++ 300901	8893 599074	30238 1456048	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Methylcyclohexane	DFBZ	Ave	+++++ 92997	+++++ 187114	7731 406216	14886 842977	35264 1546743	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
4-Methyl-2-pentanone (MIBK)	DFBZ	Ave	+++++ 120828	+++++ 266548	+++++ 598699	15812 909376	51809 2439624	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
cis-1,3-Dichloropropene	DFBZ	Ave	+++++ 85421	+++++ 173523	6786 352319	13190 793045	31812 1521326	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
trans-1,3-Dichloropropene	CBZd 5	Ave	+++++ 68823	+++++ 152113	6177 296890	10340 658647	27117 1383502	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Toluene	CBZd 5	Ave	+++++ 153919	+++++ 326329	13451 606087	21528 1406174	60905 2937051	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,1,2-Trichloroethane	CBZd 5	Ave	+++++ 49466	+++++ 105417	3811 204172	6897 446561	18372 911205	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Hexanone	CBZd 5	Ave	+++++ 58020	+++++ 114195	+++++ 308468	7073 433145	23138 1183432	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Octane	CBZd 5	Ave	+++++ 55073	+++++ 116497	4536 254271	8073 518088	22082 1011643	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
C8 Range	CBZd 5	Ave	+++++ 697619	+++++ 1436960	+++++ 2983142	108617 6203684	266284 12060880	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Dibromochloromethane	CBZd 5	Ave	+++++ 81803	+++++ 190331	6529 438464	12942 902612	33024 1891483	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2-Dibromoethane (EDB)	CBZd 5	Ave	+++++ 82810	+++++ 183756	7424 361106	11912 825710	32736 1709784	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Tetrachloroethene	CBZd 5	Ave	1279 52818	2500 110572	4551 242360	8385 518316	19868 1075236	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Chlorobenzene	CBZd 5	Ave	+++++ 120798	+++++ 264485	10169 516782	18072 1158553	47729 2465447	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Ethylbenzene	CBZd 5	Ave	+++++ 201106	+++++ 442535	17005 768480	26172 1737569	78472 3948553	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
m-Xylene & p-Xylene	CBZd 5	Ave	+++++ 308731	11865 676428	25157 1196112	39802 2684790	117852 6291833	+++++ 2.00	0.0800 4.00	0.160 8.00	0.320 16.0	0.800 32.0
Nonane	CBZd 5	Ave	+++++ 151433	+++++ 329467	12817 654836	21633 1441294	57593 3061549	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Bromoform	CBZd 5	Ave	+++++ 47825	2158 166485	5133 397152	10274 866530	26419 1988611	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Styrene	CBZd 5	Ave	+++++ 115089	3747 259361	8273 470774	13483 1075638	41558 2541086	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
o-Xylene	CBZd 5	Ave	+++++ 160310	+++++ 351197	13684 623631	21193 1365939	62312 3189901	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,1,2,2-Tetrachloroethane	CBZd 5	Ave	+++++ 129612	+++++ 283671	10339 528435	17273 1057194	49310 2516976	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2,3-Trichloropropane	CBZd 5	Ave	+++++ 31198	+++++ 70357	2300 134141	3979 274369	12020 658777	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Isopropylbenzene	CBZd 5	Ave	+++++ 209664	+++++ 469762	17579 839245	25851 1838036	78721 4498773	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Propylbenzene	CBZd 5	Ave	+++++ 55490	+++++ 122801	4829 228287	6564 502759	19728 1269531	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
2-Chlorotoluene	CBZd 5	Ave	+++++ 50660	+++++ 116178	3929 223185	6674 519001	21271 1197945	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
4-Ethyltoluene	CBZd 5	Ave	+++++ 209216	+++++ 470643	17613 850389	24383 1826353	76712 4720069	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,3,5-Trimethylbenzene	CBZd 5	Ave	+++++ 85164	+++++ 184043	6974 345419	9268 735810	31514 1885947	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Alpha Methyl Styrene	CBZd 5	Ave	+++++ 82510	+++++ 187336	+++++ 354303	8841 809517	27908 2066076	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Decane	CBZd 5	Ave	+++++ 189083	+++++ 419090	15543 759257	25661 1632200	71149 3815257	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
tert-Butylbenzene	CBZd 5	Ave	+++++ 182107	+++++ 412773	14401 770891	20349 1682234	64684 4515312	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2,4-Trimethylbenzene	CBZd 5	Ave	+++++ 180832	+++++ 410005	14761 764817	19813 1622836	67360 4383450	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
sec-Butylbenzene	CBZd 5	Ave	+++++ 272380	+++++ 615450	22118 1151509	30874 2467800	96336 6820666	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,3-Dichlorobenzene	CBZd 5	Ave	2581 118460	4541 272851	9755 551149	15896 1286011	43692 3298828	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Benzyl chloride	CBZd 5	Ave	+++++ 157512	+++++ 410741	13685 735219	18578 1598462	59541 4250505	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,4-Dichlorobenzene	CBZd 5	Ave	2678 117341	5059 268488	9941 545052	16086 1269190	44948 3184224	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
4-Isopropyltoluene	CBZd 5	Ave	+++++ 213219	+++++ 491082	16482 919460	23308 1951840	75338 5086898	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2,3-Trimethylbenzene	CBZd 5	QuaF	+++++ 183353	+++++ 420978	14733 775110	20125 1624627	66959 4105097	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2-Dichlorobenzene	CBZd 5	Ave	+++++ 113702	+++++ 265655	9714 538536	15119 1214657	41138 3197685	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Indane	CBZd 5	Ave	+++++ 175316	6041 404591	14037 762843	19180 1670413	62198 4622214	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Indene	CBZd 5	Ave	+++++ 150965	+++++ 353313	11769 672537	16584 1469257	54200 4046053	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Butylbenzene	CBZd 5	Ave	+++++ 241684	+++++ 548406	20333 1013104	26410 2083566	88169 5637666	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Undecane	CBZd 5	Ave	+++++ 212100	+++++ 469276	18018 851240	26240 1761528	77930 4541178	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2-Dibromo-3-Chloropropane	CBZd 5	QuaF	+++++ 47740	+++++ 144381	3942 312261	6556 604213	20067 1724558	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2,4,5-Tetramethylbenzene	CBZd 5	QuaF	+++++ 186389	+++++ 466848	16880 936361	19690 1816600	71014 5154231	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Dodecane	CBZd 5	Ave	+++++ 202565	+++++ 349178	+++++ 855739	23057 1562672	76360 3675886	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
1,2,4-Trichlorobenzene	CBZd5	Ave	+++++ 90620	+++++ 224232	8798 484290	11196 1089060	35272 3299699	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Naphthalene	CBZd5	Ave	+++++ 216311	10621 548866	23525 1122391	25941 2219533	88191 6479441	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Hexachlorobutadiene	CBZd5	Ave	+++++ 81866	+++++ 200284	7774 446054	10052 1080114	29410 +++++	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
1,2,3-Trichlorobenzene	CBZd5	Ave	+++++ 89666	+++++ 214504	8763 479297	10179 1057388	33331 3084852	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Methylnaphthalene	CBZd5	Ave	+++++ 93743	+++++ 143251	+++++ 762263	+++++ 1209161	41015 2003736	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
1-Methylnaphthalene	CBZd5	Ave	+++++ 106800	+++++ 152396	+++++ 785887	14358 1234833	46614 1824509	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
4-Bromofluorobenzene (Surr)	CBZd5	Ave	550738 479859	373260 566331	449593 517937	471736 684275	468432 678598	4.64 4.64	4.64 4.64	4.64 4.64	4.64 4.64	4.64 4.64

Curve Type Legend:

Ave = Average ISTD
QuaF = Quadratic ISTD forced zero

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 140-42295/9	GI01IC01.D
Level 2	IC 140-42295/10	GI01IC02.D
Level 3	IC 140-42295/11	GI01IC03.D
Level 4	IC 140-42295/12	GI01IC04.D
Level 5	IC 140-42295/13	GI01IC05.D
Level 6	IC 140-42295/14	GI01IC06.D
Level 7	ICIS 140-42295/15	GI01IC07.D
Level 8	IC 140-42295/7	GI01IC08.D
Level 9	IC 140-42295/5	GI01IC09.D
Level 10	IC 140-42295/3	GI01IC10.D

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
Chlorodifluoromethane	+++++	+++++	18.1						50			
Propene	+++++	+++++	+++++	14.1						50		
Dichlorodifluoromethane	+++++	+++++	6.1						50			
Chloromethane	+++++	+++++	+++++	21.9						50		
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.0						50					
Vinyl chloride	-8.0						50					
1,3-Butadiene	+++++	+++++	+++++	2.5						50		
Butane	+++++	+++++	8.2						50			
Bromomethane	+++++	+++++	7.8						50			
Chloroethane	+++++	+++++	21.6						50			
Ethanol	+++++	+++++	+++++	-4.1						50		
Vinyl bromide	+++++	2.9						50				
2-Methylbutane	+++++	+++++	+++++	1.8						50		
Trichlorofluoromethane	4.8						50					

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
Acrolein	+++++	+++++	+++++	+++++	15.1						50	
Acetonitrile	+++++	+++++	+++++	+++++	36.1						50	
Acetone	+++++	+++++	+++++	-0.6						80		
Isopropyl alcohol	+++++	+++++	+++++	-6.5						50		
Pentane	+++++	+++++	+++++	-1.8						50		
Ethyl ether	+++++	+++++	+++++	-9.0						50		
1,1-Dichloroethene	+++++	2.6						50				
Acrylonitrile	+++++	+++++	+++++	-7.9						50		
tert-Butyl alcohol	+++++	+++++	+++++	-3.8						50		
1,1,2-Trichloro-1,2,2-trifluoroethane	8.7						50					
Methylene Chloride	+++++	+++++	+++++	+++++	9.1						80	
3-Chloropropene	+++++	+++++	47.4	+++++					50			
Carbon disulfide	+++++	+++++	17.2						50			
trans-1,2-Dichloroethene	+++++	7.5						50				
2-Methylpentane	+++++	+++++	19.7						50			
Methyl tert-butyl ether	+++++	+++++	+++++	-17.3						50		
1,1-Dichloroethane	+++++	9.1						50				
Vinyl acetate	+++++	+++++	+++++	-15.8						50		
2-Butanone (MEK)	+++++	+++++	+++++	-13.9						50		
Hexane	+++++	+++++	12.6						50			
cis-1,2-Dichloroethene	+++++	5.2						50				

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
Ethyl acetate	+++++	+++++	+++++	+++++	7.3						50	
Chloroform	7.9						50					
Tetrahydrofuran	+++++	+++++	+++++	-13.1						50		
1,1,1-Trichloroethane	+++++	12.9						50				
1,2-Dichloroethane	+++++	+++++	15.8						50			
1-Butanol	+++++	+++++	+++++	+++++	11.2						50	
Benzene	+++++	+++++	14.0						50			
Cyclohexane	+++++	+++++	+++++	10.9						50		
Carbon tetrachloride	0.3						50					
2,3-Dimethylpentane	+++++	+++++	21.1						50			
Thiophene	+++++	+++++	14.6						50			
2,2,4-Trimethylpentane	+++++	+++++	7.6						50			
Heptane	+++++	+++++	15.1						50			
1,2-Dichloropropane	+++++	+++++	16.6						50			
Trichloroethene	-0.8						50					
Dibromomethane	+++++	+++++	13.2						50			
Bromodichloromethane	+++++	+++++	5.7						50			
1,4-Dioxane	+++++	+++++	20.1						50			
Methyl methacrylate	+++++	+++++	+++++	-18.1						50		
Methylcyclohexane	+++++	+++++	9.2						50			
4-Methyl-2-pentanone (MIBK)	+++++	+++++	+++++	-13.5						50		

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
cis-1,3-Dichloropropene	+++++	+++++	5.4						50			
trans-1,3-Dichloropropene	+++++	+++++	16.6						50			
Toluene	+++++	+++++	18.1						50			
1,1,2-Trichloroethane	+++++	+++++	6.8						50			
2-Hexanone	+++++	+++++	+++++	-18.0						50		
Octane	+++++	+++++	9.3						50			
Dibromochloromethane	+++++	+++++	-2.7						50			
1,2-Dibromoethane (EDB)	+++++	+++++	15.9						50			
Tetrachloroethene	-1.7						50					
Chlorobenzene	+++++	+++++	10.4						50			
Ethylbenzene	+++++	+++++	16.2						50			
m-Xylene & p-Xylene	+++++	26.0						50				
Nonane	+++++	+++++	12.2						50			
Bromoform	+++++	-6.0						50				
Styrene	+++++	9.5						50				
o-Xylene	+++++	+++++	16.8						50			
1,1,2,2-Tetrachloroethane	+++++	+++++	10.6						50			
1,2,3-Trichloropropane	+++++	+++++	0.6						50			
Isopropylbenzene	+++++	+++++	14.2						50			
Propylbenzene	+++++	+++++	17.5						50			
2-Chlorotoluene	+++++	+++++	-0.2						50			

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
4-Ethyltoluene	+++++	+++++	14.6						50			
1,3,5-Trimethylbenzene	+++++	+++++	13.5						50			
Alpha Methyl Styrene	+++++	+++++	+++++	-28.8						50		
Decane	+++++	+++++	12.3						50			
tert-Butylbenzene	+++++	+++++	6.6						50			
1,2,4-Trimethylbenzene	+++++	+++++	9.9						50			
sec-Butylbenzene	+++++	+++++	9.1						50			
1,3-Dichlorobenzene	-11.1						50					
Benzyl chloride	+++++	+++++	8.1						50			
1,4-Dichlorobenzene	-8.9						50					
4-Isopropyltoluene	+++++	+++++	5.0						50			
1,2,3-Trimethylbenzene	+++++	+++++	30.8						50			
1,2-Dichlorobenzene	+++++	+++++	5.9						50			
Indane	+++++	10.6						50				
Indene	+++++	+++++	2.3						50			
Butylbenzene	+++++	+++++	14.3						50			
Undecane	+++++	+++++	16.6						50			
1,2-Dibromo-3-Chloropropane	+++++	+++++	3.8						50			
1,2,4,5-Tetramethylbenzene	+++++	+++++	43.7						50			
Dodecane	+++++	+++++	+++++	-16.4						50		
1,2,4-Trichlorobenzene	+++++	+++++	8.9						50			

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
Naphthalene	+++++	34.0						80				
Hexachlorobutadiene	+++++	+++++	13.9	+++++					50			
1,2,3-Trichlorobenzene	+++++	+++++	12.7						50			
2-Methylnaphthalene	+++++	+++++	+++++	+++++	-3.8						80	
1-Methylnaphthalene	+++++	+++++	+++++	-17.7						80		

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Lab Sample ID: ICV 140-42295/22 Calibration Date: 09/02/2020 08:56

Instrument ID: MG Calib Start Date: 09/01/2020 18:07

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 09/02/2020 03:27

Lab File ID: GI01ICVR.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorodifluoromethane	Ave	4.301	3.929		4.57	5.00	-8.6	35.0
Propene	Ave	2.115	1.931		4.57	5.00	-8.7	35.0
Dichlorodifluoromethane	Ave	4.809	4.292		4.46	5.00	-10.7	35.0
Chloromethane	Ave	0.8610	0.7442		4.32	5.00	-13.6	35.0
1,2-Dichloro-1,1,2,2-tetrafluoroethane	Ave	2.743	2.277		4.15	5.00	-17.0	35.0
Acetaldehyde	Ave	1.013	0.8426		20.8	25.0	-16.8	35.0
Vinyl chloride	Ave	2.404	2.220		4.62	5.00	-7.6	35.0
1,3-Butadiene	Ave	2.119	1.970		4.65	5.00	-7.0	35.0
Butane	Ave	4.304	4.065		4.72	5.00	-5.6	35.0
Bromomethane	Ave	1.452	1.260		4.34	5.00	-13.2	35.0
Chloroethane	Ave	0.997	0.8957		4.49	5.00	-10.2	35.0
Ethanol	Ave	0.9079	0.6562		18.1	25.0	-27.7	35.0
Vinyl bromide	Ave	1.239	1.117		4.51	5.00	-9.8	35.0
2-Methylbutane	Ave	2.923	2.831		4.84	5.00	-3.1	35.0
Trichlorofluoromethane	Ave	3.737	3.130		4.19	5.00	-16.3	35.0
Acrolein	Ave	0.4464	0.4931		5.52	5.00	10.5	35.0
Acetonitrile	Ave	0.7987	0.6668		4.17	5.00	-16.5	35.0
Acetone	Ave	0.7999	0.8016		5.01	5.00	0.2	35.0
Isopropyl alcohol	Ave	2.389	2.423		5.07	5.00	1.5	35.0
Pentane	Ave	0.2430	0.2227		4.58	5.00	-8.4	35.0
Ethyl ether	Ave	1.710	1.790		5.23	5.00	4.7	35.0
1,1-Dichloroethene	Ave	1.183	1.025		4.33	5.00	-13.4	35.0
Acrylonitrile	Ave	1.092	1.075		4.92	5.00	-1.6	35.0
tert-Butyl alcohol	Ave	2.412	1.818		3.77	5.00	-24.6	35.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	2.736	2.359		4.31	5.00	-13.8	35.0
Methylene Chloride	Ave	1.184	1.067		4.51	5.00	-9.9	35.0
3-Chloropropene	Ave	2.320	1.903		4.10	5.00	-18.0	35.0
Carbon disulfide	Ave	3.977	3.544		4.46	5.00	-10.9	35.0
trans-1,2-Dichloroethene	Ave	1.393	1.226		4.40	5.00	-12.0	35.0
2-Methylpentane	Ave	5.433	4.474		4.12	5.00	-17.6	35.0
Methyl tert-butyl ether	Ave	2.883	2.736		4.74	5.00	-5.1	35.0
1,1-Dichloroethane	Ave	3.473	3.181		4.58	5.00	-8.4	35.0
Vinyl acetate	Ave	4.548	4.694		5.16	5.00	3.2	35.0
2-Butanone (MEK)	Ave	0.5774	0.5305		4.59	5.00	-8.1	35.0
Hexane	Ave	1.792	1.607		4.48	5.00	-10.3	35.0
Isopropyl ether	Ave	5.977	5.799		4.85	5.00	-3.0	35.0
cis-1,2-Dichloroethene	Ave	1.481	1.325		4.47	5.00	-10.5	35.0
Ethyl acetate	Ave	3.981	3.588		4.51	5.00	-9.9	35.0
Chloroform	Ave	3.366	2.934		4.36	5.00	-12.8	35.0
Tert-butyl ethyl ether	Ave	5.017	4.408		4.39	5.00	-12.1	35.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Lab Sample ID: ICV 140-42295/22 Calibration Date: 09/02/2020 08:56

Instrument ID: MG Calib Start Date: 09/01/2020 18:07

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 09/02/2020 03:27

Lab File ID: GI01ICVR.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Tetrahydrofuran	Ave	1.997	1.896		4.75	5.00	-5.1	35.0
1,1,1-Trichloroethane	Ave	3.240	2.865		4.42	5.00	-11.6	35.0
1,2-Dichloroethane	Ave	0.5421	0.4409		4.07	5.00	-18.7	35.0
1-Butanol	Ave	0.1535	0.1036		3.38	5.00	-32.5	35.0
Benzene	Ave	0.9867	0.8211		4.16	5.00	-16.8	35.0
Cyclohexane	Ave	0.1661	0.1347		4.05	5.00	-18.9	35.0
Carbon tetrachloride	Ave	0.6099	0.5409		4.43	5.00	-11.3	35.0
2,3-Dimethylpentane	Ave	0.2548	0.1966		3.86	5.00	-22.8	35.0
Thiophene	Ave	0.5655	0.4452		3.94	5.00	-21.3	35.0
2,2,4-Trimethylpentane	Ave	2.414	1.987		4.12	5.00	-17.7	35.0
Heptane	Ave	0.3880	0.3065		3.95	5.00	-21.0	35.0
1,2-Dichloropropane	Ave	0.4494	0.3788		4.21	5.00	-15.7	35.0
Trichloroethene	Ave	0.4302	0.3138		3.65	5.00	-27.0	35.0
Dibromomethane	Ave	0.4239	0.3454		4.07	5.00	-18.5	35.0
Bromodichloromethane	Ave	0.7367	0.6419		4.36	5.00	-12.9	35.0
1,4-Dioxane	Ave	0.1151	0.0858		3.73	5.00	-25.5	35.0
Methyl methacrylate	Ave	0.5088	0.4152		4.08	5.00	-18.4	35.0
Methylcyclohexane	Ave	0.6505	0.6281		4.83	5.00	-3.4	35.0
4-Methyl-2-pentanone (MIBK)	Ave	0.8567	0.6695		3.91	5.00	-21.9	35.0
cis-1,3-Dichloropropene	Ave	0.5917	0.5245		4.43	5.00	-11.3	35.0
trans-1,3-Dichloropropene	Ave	0.4924	0.4541		4.61	5.00	-7.8	35.0
Toluene	Ave	1.059	0.9715		4.59	5.00	-8.2	35.0
1,1,2-Trichloroethane	Ave	0.3318	0.2919		4.40	5.00	-12.0	35.0
2-Hexanone	Ave	0.3922	0.2950		3.76	5.00	-24.8	35.0
Octane	Ave	0.3858	0.3458		4.48	5.00	-10.4	35.0
Dibromochloromethane	Ave	0.6238	0.5958		4.78	5.00	-4.5	35.0
1,2-Dibromoethane (EDB)	Ave	0.5955	0.5271		4.43	5.00	-11.5	35.0
Tetrachloroethene	Ave	0.3991	0.3272		4.10	5.00	-18.0	35.0
Chlorobenzene	Ave	0.8562	0.7813		4.56	5.00	-8.8	35.0
2,3-Dimethylheptane	Ave	1.832	1.469		4.01	5.00	-19.8	35.0
Ethylbenzene	Ave	1.361	1.213		4.46	5.00	-10.8	35.0
m-Xylene & p-Xylene	Ave	1.076	0.9236		8.58	10.0	-14.2	35.0
Nonane	Ave	1.062	0.9751		4.59	5.00	-8.2	35.0
Bromoform	Ave	0.5248	0.5270		5.02	5.00	0.4	35.0
Styrene	Ave	0.7824	0.6733		4.30	5.00	-13.9	35.0
o-Xylene	Ave	1.089	0.9679		4.44	5.00	-11.1	35.0
1,1,2,2-Tetrachloroethane	Ave	0.8691	0.7611		4.38	5.00	-12.4	35.0
1,2,3-Trichloropropane	Ave	0.2125	0.1885		4.43	5.00	-11.3	35.0
Isopropylbenzene	Ave	1.431	1.289		4.50	5.00	-9.9	35.0
Propylbenzene	Ave	0.3821	0.3364		4.40	5.00	-12.0	35.0
2-Chlorotoluene	Ave	0.3660	0.3422		4.67	5.00	-6.5	35.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Lab Sample ID: ICV 140-42295/22 Calibration Date: 09/02/2020 08:56

Instrument ID: MG Calib Start Date: 09/01/2020 18:07

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 09/02/2020 03:27

Lab File ID: GI01ICVR.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Ethyltoluene	Ave	1.429	1.215		4.25	5.00	-15.0	35.0
1,3,5-Trimethylbenzene	Ave	0.5712	0.5698		4.99	5.00	-0.2	35.0
Alpha Methyl Styrene	Ave	0.5644	0.4904		4.34	5.00	-13.1	35.0
Decane	Ave	1.287	1.157		4.49	5.00	-10.1	35.0
tert-Butylbenzene	Ave	1.256	1.107		4.41	5.00	-11.8	35.0
1,2,4-Trimethylbenzene	Ave	1.249	1.123		4.49	5.00	-10.1	35.0
sec-Butylbenzene	Ave	1.884	1.651		4.38	5.00	-12.4	35.0
1,3-Dichlorobenzene	Ave	0.8900	0.7770		4.37	5.00	-12.7	35.0
Benzyl chloride	Ave	1.177	1.122		4.77	5.00	-4.6	35.0
1,4-Dichlorobenzene	Ave	0.9015	0.7590		4.21	5.00	-15.8	35.0
4-Isopropyltoluene	Ave	1.459	1.292		4.43	5.00	-11.4	35.0
1,2,3-Trimethylbenzene	QuaF		0.8283		3.85	5.00	-23.0	35.0
Butylcyclohexane	Ave	1.221	1.032		4.22	5.00	-15.5	35.0
1,2-Dichlorobenzene	Ave	0.8529	0.7455		4.37	5.00	-12.6	35.0
Indane	Ave	1.248	1.052		4.22	5.00	-15.7	35.0
Indene	Ave	1.069	0.7883		3.69	5.00	-26.3	35.0
Butylbenzene	Ave	1.654	1.495		4.52	5.00	-9.6	35.0
Undecane	Ave	1.437	1.263		4.40	5.00	-12.1	35.0
1,2-Dibromo-3-Chloropropane	QuaF		0.2886		3.87	5.00	-22.7	35.0
1,2,4,5-Tetramethylbenzene	QuaF		1.092		4.70	5.00	-5.9	35.0
Dodecane	Ave	1.254	1.200		4.79	5.00	-4.3	35.0
1,2,4-Trichlorobenzene	Ave	0.7511	0.6306		4.20	5.00	-16.0	35.0
Naphthalene	Ave	1.812	1.517		4.19	5.00	-16.3	35.0
Hexachlorobutadiene	Ave	0.6345	0.5377		4.24	5.00	-15.3	35.0
1,2,3-Trichlorobenzene	Ave	0.7230	0.6231		4.31	5.00	-13.8	35.0
2-Methylnaphthalene	Ave	0.7792	0.6437		4.13	5.00	-17.4	50.0
1-Methylnaphthalene	Ave	0.7933	0.6885		4.34	5.00	-13.2	50.0
4-Bromofluorobenzene (Surr)	Ave	0.7532	0.7643		11.8	11.6	1.5	35.0

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Lab File ID: GBFBI08Z.D BFB Injection Date: 09/08/2020

Instrument ID: MG BFB Injection Time: 14:50

Analysis Batch No.: 42503

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	39.4	
75	30.0 - 60.0 % of mass 95	57.1	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.4	
173	Less than 2.0 % of mass 174	0.5	(0.7) 1
174	Greater than 50% of mass 95	68.9	
175	5.0 - 9.0 % of mass 174	4.7	(6.8) 1
176	95.0 - 101.0 % of mass 174	67.9	(98.5) 1
177	5.0 - 9.0 % of mass 176	4.6	(6.8) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 140-42503/2	GCCVI08Z.D	09/08/2020	15:52
	LCS 140-42503/1002	GCCVI08Z-LCS.	09/08/2020	15:52
	MB 140-42503/5	G500BI08.D	09/08/2020	17:16
SV-139-A-29	140-20194-19	GI08P108.D	09/08/2020	23:24
SV-172-A-29	140-20194-1	GI08P110.D	09/09/2020	0:58
SV-116-A-29	140-20194-2	GI08P111.D	09/09/2020	1:43
SV-DUP 3-A-29	140-20194-3	GI08P112.D	09/09/2020	2:29
SV-138-A-29	140-20194-4	GI08P113.D	09/09/2020	3:15
SV-173-A-29	140-20194-5	GI08P114.D	09/09/2020	4:00
SV-171-A-29	140-20194-6	GI08P115.D	09/09/2020	4:44
SV-177-A-29	140-20194-8	GI08P107R.D	09/09/2020	9:26
SV-118-A-29	140-20194-20	GI08P109R.D	09/09/2020	10:14

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Lab Sample ID: CCVIS 140-42503/2 Calibration Date: 09/08/2020 15:52

Instrument ID: MG Calib Start Date: 09/01/2020 18:07

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 09/02/2020 03:27

Lab File ID: GCCVI08Z.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorodifluoromethane	Ave	4.301	4.660		1.73	1.60	8.4	30.0
Propene	Ave	2.115	2.251		1.70	1.60	6.4	30.0
Dichlorodifluoromethane	Ave	4.809	4.437		1.48	1.60	-7.7	30.0
Chloromethane	Ave	0.8610	0.9690		1.80	1.60	12.5	30.0
1,2-Dichloro-1,1,2,2-tetrafluoroethane	Ave	2.743	2.370		1.38	1.60	-13.6	30.0
Acetaldehyde	Ave	1.013	0.9793		7.74	8.00	-3.3	30.0
Vinyl chloride	Ave	2.404	2.601		1.73	1.60	8.2	30.0
1,3-Butadiene	Ave	2.119	2.538		1.92	1.60	19.8	30.0
Butane	Ave	4.304	5.403		2.01	1.60	25.5	30.0
Bromomethane	Ave	1.452	1.393		1.54	1.60	-4.0	30.0
Chloroethane	Ave	0.997	1.078		1.73	1.60	8.1	30.0
Ethanol	Ave	0.9079	0.9203		8.11	8.00	1.4	30.0
Vinyl bromide	Ave	1.239	1.240		1.60	1.60	0.1	30.0
2-Methylbutane	Ave	2.923	4.127		2.26	1.60	41.2*	30.0
Trichlorofluoromethane	Ave	3.737	3.635		1.56	1.60	-2.7	30.0
Acrolein	Ave	0.4464	0.7566		2.71	1.60	69.5*	30.0
Acetonitrile	Ave	0.7987	0.9470		1.90	1.60	18.6	30.0
Acetone	Ave	0.7999	0.8371		1.67	1.60	4.6	30.0
Isopropyl alcohol	Ave	2.389	4.008		2.68	1.60	67.8*	30.0
Pentane	Ave	0.2430	0.2564		1.69	1.60	5.5	30.0
Ethyl ether	Ave	1.710	2.538		2.37	1.60	48.4*	30.0
1,1-Dichloroethene	Ave	1.183	1.139		1.54	1.60	-3.8	30.0
Acrylonitrile	Ave	1.092	1.355		1.99	1.60	24.1	30.0
tert-Butyl alcohol	Ave	2.412	2.757		1.83	1.60	14.3	30.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	2.736	2.480		1.45	1.60	-9.4	30.0
Methylene Chloride	Ave	1.184	1.141		1.54	1.60	-3.6	30.0
3-Chloropropene	Ave	2.320	2.286		1.58	1.60	-1.5	30.0
Carbon disulfide	Ave	3.977	3.826		1.54	1.60	-3.8	30.0
trans-1,2-Dichloroethene	Ave	1.393	1.255		1.44	1.60	-9.9	30.0
2-Methylpentane	Ave	5.433	5.558		1.64	1.60	2.3	30.0
Methyl tert-butyl ether	Ave	2.883	2.746		1.52	1.60	-4.8	30.0
1,1-Dichloroethane	Ave	3.473	3.571		1.65	1.60	2.8	30.0
Vinyl acetate	Ave	4.548	5.485		1.93	1.60	20.6	30.0
2-Butanone (MEK)	Ave	0.5774	0.5047		1.40	1.60	-12.6	30.0
Hexane	Ave	1.792	1.837		1.64	1.60	2.5	30.0
Isopropyl ether	Ave	5.977	6.502		1.74	1.60	8.8	30.0
cis-1,2-Dichloroethene	Ave	1.481	1.376		1.49	1.60	-7.1	30.0
Ethyl acetate	Ave	3.981	3.754		1.51	1.60	-5.7	30.0
Chloroform	Ave	3.366	3.143		1.49	1.60	-6.6	30.0
Tert-butyl ethyl ether	Ave	5.017	4.491		1.43	1.60	-10.5	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Lab Sample ID: CCVIS 140-42503/2 Calibration Date: 09/08/2020 15:52

Instrument ID: MG Calib Start Date: 09/01/2020 18:07

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 09/02/2020 03:27

Lab File ID: GCCVI08Z.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Tetrahydrofuran	Ave	1.997	2.257		1.81	1.60	13.0	30.0
1,1,1-Trichloroethane	Ave	3.240	2.933		1.45	1.60	-9.5	30.0
1,2-Dichloroethane	Ave	0.5421	0.4958		1.46	1.60	-8.5	30.0
1-Butanol	Ave	0.1535	0.1925		2.01	1.60	25.4	30.0
Benzene	Ave	0.9867	0.8682		1.41	1.60	-12.0	30.0
Cyclohexane	Ave	0.1661	0.1517		1.46	1.60	-8.7	30.0
Carbon tetrachloride	Ave	0.6099	0.5775		1.51	1.60	-5.3	30.0
2,3-Dimethylpentane	Ave	0.2548	0.2258		1.42	1.60	-11.4	30.0
Thiophene	Ave	0.5655	0.4913		1.39	1.60	-13.1	30.0
2,2,4-Trimethylpentane	Ave	2.414	2.458		1.63	1.60	1.8	30.0
Heptane	Ave	0.3880	0.3683		1.52	1.60	-5.1	30.0
1,2-Dichloropropane	Ave	0.4494	0.4276		1.52	1.60	-4.9	30.0
Trichloroethene	Ave	0.4302	0.3391		1.26	1.60	-21.2	30.0
Dibromomethane	Ave	0.4239	0.3702		1.40	1.60	-12.7	30.0
Bromodichloromethane	Ave	0.7367	0.6819		1.48	1.60	-7.4	30.0
1,4-Dioxane	Ave	0.1151	0.0850		1.18	1.60	-26.2	30.0
Methyl methacrylate	Ave	0.5088	0.4786		1.51	1.60	-5.9	30.0
Methylcyclohexane	Ave	0.6505	0.7027		1.73	1.60	8.0	30.0
4-Methyl-2-pentanone (MIBK)	Ave	0.8567	0.9404		1.76	1.60	9.8	30.0
cis-1,3-Dichloropropene	Ave	0.5917	0.5272		1.43	1.60	-10.9	30.0
trans-1,3-Dichloropropene	Ave	0.4924	0.4286		1.39	1.60	-13.0	30.0
Toluene	Ave	1.059	0.9047		1.37	1.60	-14.5	30.0
1,1,2-Trichloroethane	Ave	0.3318	0.2815		1.36	1.60	-15.2	30.0
2-Hexanone	Ave	0.3922	0.4111		1.68	1.60	4.8	30.0
Octane	Ave	0.3858	0.3366		1.40	1.60	-12.8	30.0
Dibromochloromethane	Ave	0.6238	0.5356		1.37	1.60	-14.1	30.0
1,2-Dibromoethane (EDB)	Ave	0.5955	0.4728		1.27	1.60	-20.6	30.0
Tetrachloroethene	Ave	0.3991	0.3090		1.24	1.60	-22.6	30.0
Chlorobenzene	Ave	0.8562	0.7283		1.36	1.60	-14.9	30.0
2,3-Dimethylheptane	Ave	1.832	1.647		1.44	1.60	-10.1	30.0
Ethylbenzene	Ave	1.361	1.182		1.39	1.60	-13.1	30.0
m-Xylene & p-Xylene	Ave	1.076	0.9181		2.73	3.20	-14.7	30.0
Nonane	Ave	1.062	1.001		1.51	1.60	-5.7	30.0
Bromoform	Ave	0.5248	0.4385		1.34	1.60	-16.4	30.0
Styrene	Ave	0.7824	0.7032		1.44	1.60	-10.1	30.0
o-Xylene	Ave	1.089	0.9336		1.37	1.60	-14.3	30.0
1,1,2,2-Tetrachloroethane	Ave	0.8691	0.7703		1.42	1.60	-11.4	30.0
1,2,3-Trichloropropane	Ave	0.2125	0.1785		1.34	1.60	-16.0	30.0
Isopropylbenzene	Ave	1.431	1.233		1.38	1.60	-13.9	30.0
Propylbenzene	Ave	0.3821	0.3183		1.33	1.60	-16.7	30.0
2-Chlorotoluene	Ave	0.3660	0.3254		1.42	1.60	-11.1	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Lab Sample ID: CCVIS 140-42503/2 Calibration Date: 09/08/2020 15:52

Instrument ID: MG Calib Start Date: 09/01/2020 18:07

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 09/02/2020 03:27

Lab File ID: GCCVI08Z.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Ethyltoluene	Ave	1.429	1.131		1.27	1.60	-20.8	30.0
1,3,5-Trimethylbenzene	Ave	0.5712	0.5197		1.46	1.60	-9.0	30.0
Alpha Methyl Styrene	Ave	0.5644	0.4834		1.37	1.60	-14.4	30.0
Decane	Ave	1.287	1.216		1.51	1.60	-5.5	30.0
tert-Butylbenzene	Ave	1.256	0.9771		1.24	1.60	-22.2	30.0
1,2,4-Trimethylbenzene	Ave	1.249	0.9803		1.26	1.60	-21.5	30.0
sec-Butylbenzene	Ave	1.884	1.500		1.27	1.60	-20.4	30.0
1,3-Dichlorobenzene	Ave	0.8900	0.6658		1.20	1.60	-25.2	30.0
Benzyl chloride	Ave	1.177	1.006		1.37	1.60	-14.5	30.0
1,4-Dichlorobenzene	Ave	0.9015	0.6719		1.19	1.60	-25.5	30.0
4-Isopropyltoluene	Ave	1.459	1.108		1.22	1.60	-24.1	30.0
1,2,3-Trimethylbenzene	QuaF		0.7290		1.09	1.60	-31.7*	30.0
Butylcyclohexane	Ave	1.221	1.016		1.33	1.60	-16.8	30.0
Indane	Ave	1.248	0.9549		1.22	1.60	-23.5	30.0
1,2-Dichlorobenzene	Ave	0.8529	0.6594		1.24	1.60	-22.7	30.0
Indene	Ave	1.069	0.7312		1.09	1.60	-31.6*	30.0
Butylbenzene	Ave	1.654	1.329		1.29	1.60	-19.7	30.0
Undecane	Ave	1.437	1.257		1.40	1.60	-12.5	30.0
1,2-Dibromo-3-Chloropropane	QuaF		0.2527		1.10	1.60	-31.2*	30.0
1,2,4,5-Tetramethylbenzene	QuaF		0.9358		1.31	1.60	-17.8	30.0
Dodecane	Ave	1.254	1.153		1.47	1.60	-8.1	30.0
1,2,4-Trichlorobenzene	Ave	0.7511	0.5314		1.13	1.60	-29.2	30.0
Naphthalene	Ave	1.812	1.327		1.17	1.60	-26.8	30.0
Hexachlorobutadiene	Ave	0.6345	0.4730		1.19	1.60	-25.4	30.0
1,2,3-Trichlorobenzene	Ave	0.7230	0.5211		1.15	1.60	-27.9	30.0
2-Methylnaphthalene	Ave	0.7792	0.7539		1.55	1.60	-3.3	50.0
1-Methylnaphthalene	Ave	0.7933	0.7903		1.59	1.60	-0.4	50.0
4-Bromofluorobenzene (Surr)	Ave	0.7532	0.7870		4.85	4.64	4.5	30.0

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Lab File ID: HBFBH29.D BFB Injection Date: 08/29/2020

Instrument ID: MH BFB Injection Time: 10:00

Analysis Batch No.: 42290

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	23.2	
75	30.0 - 60.0 % of mass 95	49.8	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.8	
173	Less than 2.0 % of mass 174	0.6	(0.7) 1
174	Greater than 50% of mass 95	89.4	
175	5.0 - 9.0 % of mass 174	6.5	(7.3) 1
176	95.0 - 101.0 % of mass 174	87.1	(97.4) 1
177	5.0 - 9.0 % of mass 176	5.7	(6.5) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 140-42290/3	HH29IC10.D	08/29/2020	12:34
	IC 140-42290/5	HH29IC09.D	08/29/2020	14:25
	IC 140-42290/7	HH29IC08.D	08/29/2020	16:25
	IC 140-42290/9	HH29IC01.D	08/29/2020	18:16
	IC 140-42290/10	HH29IC02.D	08/29/2020	19:13
	IC 140-42290/11	HH29IC03.D	08/29/2020	20:11
	IC 140-42290/12	HH29IC04.D	08/29/2020	21:03
	IC 140-42290/13	HH29IC05.D	08/29/2020	21:58
	IC 140-42290/14	HH29IC06.D	08/29/2020	22:57
	ICIS 140-42290/15	HH29IC07.D	08/29/2020	23:57
	ICV 140-42290/18	HH29LCS.D	08/30/2020	2:47

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42290

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/29/2020 12:34 Calibration End Date: 08/29/2020 23:57 Calibration ID: 2592

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 140-42290/9	HH29IC01.D
Level 2	IC 140-42290/10	HH29IC02.D
Level 3	IC 140-42290/11	HH29IC03.D
Level 4	IC 140-42290/12	HH29IC04.D
Level 5	IC 140-42290/13	HH29IC05.D
Level 6	IC 140-42290/14	HH29IC06.D
Level 7	ICIS 140-42290/15	HH29IC07.D
Level 8	IC 140-42290/7	HH29IC08.D
Level 9	IC 140-42290/5	HH29IC09.D
Level 10	IC 140-42290/3	HH29IC10.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Chlorodifluoromethane	+++++ 2.7055	+++++ 2.6133	3.4173 2.4773	2.8362 2.3638	2.7135 2.3014	Ave		2.6785				13.1		30.0			
Propene	+++++ 1.2455	+++++ 1.1794	+++++ 1.1222	+++++ 1.0487	1.2046 1.0659	Ave		1.1444				6.9		30.0			
Dichlorodifluoromethane	+++++ 3.7367	+++++ 3.7564	4.2037 3.5581	3.9703 2.7867	3.7783 3.2382	Ave		3.6285				12.2		30.0			
Chloromethane	+++++ 0.5127	+++++ 0.5118	+++++ 0.4596	0.5380 0.4000	0.5470 0.3674	Ave		0.4766				14.7		30.0			
1,2-Dichloro-1,1,2,2-tetrafluoroethane	+++++ 2.9877	+++++ 2.7959	3.2885 2.7391	3.2420 2.4960	3.0064 2.6296	Ave		2.8982				9.8		30.0			
Vinyl chloride	1.7873 1.6144	1.8695 1.5602	1.9103 1.4490	1.6595 1.2848	1.6154 1.2032	Ave		1.5954				14.6		30.0			
Butane	+++++ 2.3867	+++++ 2.4155	+++++ 2.1618	2.3074 1.9057	2.4206 1.6706	Ave		2.1812				13.3		30.0			
1,3-Butadiene	+++++ 1.1774	+++++ 1.1465	+++++ 1.0761	1.2028 0.9453	1.1764 0.8821	Ave		1.0867				11.6		30.0			
Bromomethane	+++++ 1.5739	+++++ 1.5439	2.0317 1.4379	1.5846 1.2654	1.6586 1.2286	Ave		1.5406				16.3		30.0			
Chloroethane	+++++ 0.6907	+++++ 0.6738	0.9193 0.6224	0.7437 0.5388	0.7005 0.5001	Ave		0.6737				19.2		30.0			
Ethanol	+++++ 0.7845	+++++ 0.9095	+++++ 0.7809	0.7532 0.8165	0.8148 0.5491	Ave		0.7726				14.3		30.0			
Vinyl bromide	+++++ 1.2798	1.3352 1.2694	1.4263 1.2825	1.2693 1.1540	1.3043 1.2354	Ave		1.2840				5.7		30.0			
2-Methylbutane	+++++ 1.6662	1.8377 1.6690	1.9496 1.6417	1.7086 1.4854	1.6132 1.5623	Ave		1.6815				8.3		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42290

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/29/2020 12:34 Calibration End Date: 08/29/2020 23:57 Calibration ID: 2592

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Trichlorofluoromethane	+++++ 3.4997	+++++ 3.4683	4.1168 3.3912	3.6804 3.1171	3.6481 3.3569	Ave		3.5348				8.3		30.0			
Acrolein	+++++ 0.3293	+++++ 0.3359	0.4055 0.4067	0.4056 0.3724	0.3317 0.3998	Lin1	-0.005	0.3879							0.9970		0.9900
Acetonitrile	+++++ 0.6616	+++++ 0.7202	+++++ 0.6820	0.6370 0.6220	0.7799 0.6271	Ave		0.6757				8.5		30.0			
Acetone	+++++ 0.8548	+++++ 0.7750	+++++ 0.6482	+++++ 0.7691	0.8359 0.5956	Ave		0.7464				13.9		30.0			
Pentane	+++++ 0.1775	+++++ 0.1759	0.1172 0.1687	0.1468 0.1515	0.1590 0.1568	Ave		0.1567				12.4		30.0			
Isopropyl alcohol	2.0200 1.7223	1.7659 1.9942	1.7685 1.9544	1.7938 1.8109	1.7172 1.8953	Ave		1.8442				6.1		30.0			
Ethyl ether	+++++ 1.5445	1.6582 1.6027	1.4358 1.6309	1.5079 1.4897	1.4064 1.5818	Ave		1.5398				5.6		30.0			
1,1-Dichloroethene	+++++ 1.1304	1.2419 1.1553	1.1621 1.2092	1.1867 1.1118	1.0808 1.1941	Ave		1.1636				4.3		30.0			
Acrylonitrile	+++++ 1.0013	1.0778 1.0766	0.9669 1.0679	1.0503 0.9586	0.9959 1.0166	Ave		1.0235				4.5		30.0			
tert-Butyl alcohol	+++++ 1.7110	1.8603 1.9553	1.9674 2.0796	1.8294 1.9515	1.6805 2.0862	Ave		1.9024				7.6		30.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	+++++ 2.9548	3.2652 2.9270	3.4016 2.8617	3.0642 2.5989	3.1091 2.8034	Ave		2.9984				8.1		30.0			
Methylene Chloride	+++++ 1.1853	+++++ 1.1753	+++++ 1.1585	1.2554 1.0871	1.2838 1.0915	Ave		1.1767				6.3		30.0			
3-Chloropropene	+++++ 1.0940	+++++ 1.1188	1.3944 1.1878	1.2931 1.1146	1.1655 1.2774	Ave		1.2057				8.8		30.0			
Carbon disulfide	+++++ 3.7487	4.1379 3.8002	4.0389 3.7839	3.7726 3.3931	3.7879 3.5723	Ave		3.7817				5.8		30.0			
trans-1,2-Dichloroethene	+++++ 1.2025	1.2337 1.2302	1.2296 1.2714	1.2008 1.1522	1.1882 1.2283	Ave		1.2152				2.8		30.0			
2-Methylpentane	+++++ 2.9073	+++++ 3.0918	2.5445 3.1447	2.8000 2.8906	2.7099 3.0978	Ave		2.8983				7.2		30.0			
Methyl tert-butyl ether	+++++ 2.4539	+++++ 2.6104	+++++ 2.8096	2.3468 2.6114	2.2261 2.8991	Ave		2.5653				9.4		30.0			
1,1-Dichloroethane	+++++ 2.3589	+++++ 2.4022	2.6392 2.3824	2.5463 2.1792	2.4463 2.3517	Ave		2.4133				5.7		30.0			
Vinyl acetate	+++++ 2.8453	+++++ 3.1704	+++++ 3.5025	2.6214 3.2862	2.5279 3.7316	Ave		3.0979				14.6		30.0			
2-Butanone (MEK)	+++++ 0.6082	+++++ 0.5881	+++++ 0.5856	0.5879 0.5694	0.5982 0.5777	Ave		0.5879				2.2		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42290

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/29/2020 12:34 Calibration End Date: 08/29/2020 23:57 Calibration ID: 2592

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Hexane	+++++ 1.0080	0.9773 1.0550	1.0130 1.0448	0.9838 0.9870	0.9509 1.0318	Ave		1.0057				3.4		30.0			
cis-1,2-Dichloroethene	+++++ 1.2006	1.3116 1.2181	1.2071 1.2852	1.1877 1.1989	1.1672 1.2990	Ave		1.2306				4.3		30.0			
Ethyl acetate	+++++ 2.9537	3.2426 3.0946	3.0860 3.2045	3.0580 2.9864	2.8380 3.2849	Ave		3.0832				4.7		30.0			
Chloroform	+++++ 2.8096	3.2252 2.8206	3.2462 2.8108	2.9724 2.5718	2.9615 2.8168	Ave		2.9150				7.4		30.0			
Tetrahydrofuran	+++++ 1.4066	1.3660 1.5320	1.3295 1.5894	1.3844 1.4788	1.3361 1.6073	Ave		1.4478				7.4		30.0			
1,1,1-Trichloroethane	+++++ 2.5370	2.7730 2.5666	2.8490 2.6074	2.6261 2.4100	2.6714 2.7422	Ave		2.6425				5.1		30.0			
1,2-Dichloroethane	+++++ 0.4161	0.5015 0.4090	0.4638 0.4108	0.4474 0.3989	0.4303 0.4502	Ave		0.4365				7.5		30.0			
1-Butanol	+++++ 0.1165	+++++ 0.1336	+++++ 0.1377	+++++ 0.1423	0.1277 0.1580	Ave		0.1360				10.3		30.0			
Cyclohexane	+++++ 0.1198	+++++ 0.1249	+++++ 0.1277	0.1004 0.1227	0.1139 0.1347	Ave		0.1206				9.1		30.0			
Benzene	+++++ 0.8717	+++++ 0.8688	0.9571 0.8628	0.8914 0.8210	0.8833 0.8951	Ave		0.8814				4.3		30.0			
Carbon tetrachloride	0.5108 0.5438	0.5330 0.4095	0.5691 0.6501	0.5793 0.4135	0.6039 0.6426	Ave		0.5456				15.3		30.0			
2,3-Dimethylpentane	+++++ 0.1708	+++++ 0.1774	0.1466 0.1831	0.1419 0.1757	0.1521 0.1876	Ave		0.1669				10.5		30.0			
Thiophene	+++++ 0.4580	+++++ 0.4695	0.4528 0.4902	0.4129 0.4728	0.4335 0.5188	Ave		0.4636				7.1		30.0			
2,2,4-Trimethylpentane	+++++ 1.3767	1.2986 1.4447	1.2613 1.4999	1.1363 1.4507	1.2859 1.5790	Ave		1.3703				10.0		30.0			
Heptane	+++++ 0.2507	+++++ 0.2627	+++++ 0.2778	0.1771 0.2716	0.2236 0.2949	Ave		0.2512				15.8		30.0			
1,2-Dichloropropane	+++++ 0.3611	0.3921 0.3664	0.4016 0.3701	0.3866 0.3598	0.3648 0.3925	Ave		0.3772				4.2		30.0			
Trichloroethene	0.4333 0.3724	0.4130 0.3723	0.3957 0.3910	0.3650 0.4321	0.3607 0.4274	Ave		0.3963				7.2		30.0			
Dibromomethane	+++++ 0.4361	+++++ 0.3943	+++++ 0.4009	0.4554 0.3985	0.4038 0.4475	Ave		0.4195				6.2		30.0			
Bromodichloromethane	0.6294 0.5862	0.5994 0.6091	0.6386 0.6497	0.5894 0.6277	0.5998 0.7176	Ave		0.6247				6.3		30.0			
1,4-Dioxane	+++++ 0.1088	+++++ 0.1402	+++++ 0.1440	0.0949 0.1381	0.1070 0.1457	Ave		0.1255				16.9		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42290

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/29/2020 12:34 Calibration End Date: 08/29/2020 23:57 Calibration ID: 2592

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Methyl methacrylate	+++++ 0.4015	+++++ 0.4210	0.4173 0.4469	0.3162 0.4328	0.3641 0.4756	Ave		0.4094				12.2		30.0			
Methylcyclohexane	+++++ 0.4388	+++++ 0.4675	0.3567 0.5019	0.3227 0.4863	0.3660 0.5253	Lin1	-0.026	0.5093							0.9980		0.9900
4-Methyl-2-pentanone (MIBK)	+++++ 0.7878	0.8746 0.8200	0.7030 0.8472	0.6829 0.8431	0.6160 0.9050	Ave		0.7866				12.4		30.0			
cis-1,3-Dichloropropene	0.4198 0.4295	0.3993 0.4424	0.3681 0.4700	0.3727 0.4805	0.3526 0.5444	Ave		0.4279				13.8		30.0			
trans-1,3-Dichloropropene	+++++ 0.4260	0.4080 0.4418	0.3705 0.4908	0.3941 0.5133	0.3133 0.5954	Ave		0.4392				19.1		30.0			
Toluene	+++++ 1.2601	1.2066 1.3006	1.2235 1.3441	1.0657 1.3045	1.0583 1.3667	Ave		1.2367				9.0		30.0			
1,1,2-Trichloroethane	+++++ 0.4421	+++++ 0.4441	0.4803 0.4351	0.4483 0.4076	0.4571 0.4404	Ave		0.4444				4.6		30.0			
2-Hexanone	+++++ 0.3858	+++++ 0.4326	+++++ 0.4558	0.2776 0.4485	0.2517 0.5036	Ave		0.3937				24.1		30.0			
Octane	+++++ 0.3553	+++++ 0.3811	+++++ 0.3933	0.2316 0.3675	0.2819 0.4047	Ave		0.3450				18.6		30.0			
C8 Range	+++++ 3.1573	+++++ 3.2462	+++++ 3.2801	+++++ 3.2149	2.7086 3.5763	Ave		3.1972				8.8		30.0			
Dibromochloromethane	0.6546 0.6509	0.6558 0.7687	0.6791 0.8540	0.6591 0.7744	0.6935 0.9490	Ave		0.7339				13.9		30.0			
1,2-Dibromoethane (EDB)	0.7544 0.6217	0.6964 0.6241	0.5894 0.6594	0.6677 0.6710	0.5662 0.8020	Ave		0.6652				10.8		30.0			
Tetrachloroethene	0.5714 0.4879	0.5262 0.4977	0.5628 0.5126	0.4947 0.4884	0.4911 0.5510	Ave		0.5184				6.3		30.0			
Chlorobenzene	+++++ 0.9716	+++++ 0.9844	1.0329 0.9914	1.0019 0.9321	1.0223 1.0762	Ave		1.0016				4.3		30.0			
Ethylbenzene	1.5785 1.4962	1.4684 1.5829	1.3909 1.6686	1.1901 1.5737	1.2383 1.7796	Ave		1.4967				12.2		30.0			
m-Xylene & p-Xylene	1.1967 1.1962	1.0298 1.2777	1.0159 1.3281	0.9436 1.2680	1.0880 1.4862	Ave		1.1830				14.0		30.0			
Nonane	+++++ 0.8542	+++++ 0.9145	+++++ 0.9462	0.5962 0.9084	0.7075 1.0313	Ave		0.8512				17.6		30.0			
Bromoform	0.4185 0.3621	0.3850 0.6034	0.3917 0.7563	0.4488 +++++	0.4598 +++++	QuaF		0.3745	0.0961863						0.9980		0.9900
Styrene	+++++ 0.7392	+++++ 0.8288	0.5299 0.9084	0.5286 0.8821	0.6138 +++++	Ave		0.7187				22.6		30.0			
o-Xylene	+++++ 1.2464	1.1840 1.3067	1.1076 1.3521	1.0587 1.2666	1.1918 1.4374	Ave		1.2390				9.6		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42290

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/29/2020 12:34 Calibration End Date: 08/29/2020 23:57 Calibration ID: 2592

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
1,1,2,2-Tetrachloroethane	+++++ 1.0743	+++++ 1.0946	1.1993 1.0639	1.2054 0.8526	1.1482 1.1332	Ave		1.0964				10.2		30.0			
1,2,3-Trichloropropane	+++++ 0.2413	0.2644 0.2435	0.2540 0.2439	0.2567 0.2233	0.2427 0.2640	Ave		0.2482				5.2		30.0			
Isopropylbenzene	+++++ 1.5898	1.6136 1.7042	1.1288 1.7866	1.2884 1.6697	1.3313 1.9874	Ave		1.5667				17.2		30.0			
Propylbenzene	+++++ 0.4042	+++++ 0.4452	+++++ 0.4665	0.3276 0.4339	0.3240 0.5387	Ave		0.4200				18.2		30.0			
2-Chlorotoluene	+++++ 0.3810	+++++ 0.4108	+++++ 0.4223	0.3547 0.3849	0.3872 0.4701	Ave		0.4016				9.3		30.0			
4-Ethyltoluene	+++++ 1.4865	+++++ 1.6384	+++++ 1.7505	1.1820 1.5660	1.4387 1.9506	Ave		1.5732				15.5		30.0			
1,3,5-Trimethylbenzene	+++++ 0.6401	+++++ 0.7166	0.4384 0.7256	0.5526 0.6505	0.6648 0.8121	Lin1	-0.036	0.7537							0.9910		0.9900
Alpha Methyl Styrene	+++++ 0.5198	+++++ 0.6458	+++++ 0.6857	0.4073 0.6079	0.3977 +++++	Ave		0.5440				22.5		30.0			
Decane	+++++ 1.1794	+++++ 1.2671	+++++ 1.2589	+++++ 1.1749	1.2088 1.3795	Ave		1.2448				6.1		30.0			
tert-Butylbenzene	+++++ 1.5059	+++++ 1.6813	+++++ 1.6720	1.2811 1.5401	1.5547 1.9269	Ave		1.5946				12.4		30.0			
1,2,4-Trimethylbenzene	+++++ 1.4308	+++++ 1.5594	0.9977 1.5184	1.2515 1.3957	1.5472 1.7572	Ave		1.4322				15.9		30.0			
sec-Butylbenzene	+++++ 2.0544	+++++ 2.2913	+++++ 2.2519	1.7213 2.0088	1.9453 2.5087	Ave		2.1117				12.3		30.0			
1,3-Dichlorobenzene	+++++ 0.6744	+++++ 0.7630	0.5723 0.7869	0.6757 0.7537	0.6956 1.0262	Ave		0.7435				17.8		30.0			
Benzyl chloride	+++++ 0.5965	+++++ 0.8377	+++++ 0.8757	0.5101 0.8718	0.5402 +++++	Lin1	-0.096	0.8755							0.9950		0.9900
1,4-Dichlorobenzene	+++++ 0.5451	0.4496 0.6379	0.3789 0.6959	0.4954 0.6868	0.4983 +++++	Ave		0.5485				21.0		30.0			
4-Isopropyltoluene	+++++ 1.8294	+++++ 2.0580	0.9462 1.9698	1.3130 1.6893	1.7718 2.0975	Ave		1.7094				23.2		30.0			
1,2,3-Trimethylbenzene	+++++ 1.4294	+++++ 1.5408	0.9821 1.4515	1.2191 1.2701	1.5076 1.6067	Ave		1.3759				15.0		30.0			
Indane	+++++ 1.1354	+++++ 1.2527	0.7558 1.2305	1.0301 1.1346	1.1008 1.4807	Ave		1.1401				18.1		30.0			
1,2-Dichlorobenzene	0.9523 0.7714	0.7900 0.8237	0.6887 0.7936	0.8221 0.7418	0.8326 0.9898	Ave		0.8206				11.0		30.0			
Butylbenzene	+++++ 1.9322	+++++ 2.1536	+++++ 1.9888	1.4314 1.7204	1.9128 2.0980	Ave		1.8910				13.0		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42290

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/29/2020 12:34 Calibration End Date: 08/29/2020 23:57 Calibration ID: 2592

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Indene	+++++ 0.9711	+++++ 1.0654	+++++ 0.9911	0.8038 0.8419	0.9727 1.1970	Ave		0.9776				13.5		30.0			
Undecane	+++++ 1.3782	+++++ 1.5245	+++++ 1.4385	+++++ 1.3412	1.2044 1.6345	Ave		1.4202				10.5		30.0			
1,2-Dibromo-3-Chloropropane	+++++ 0.3687	+++++ 0.5347	0.2516 0.5090	0.3511 0.4216	0.3755 0.5438	Ave		0.4195				24.5		30.0			
1,2,4,5-Tetramethylbenzene	+++++ 1.5935	+++++ 1.8239	0.5811 1.8233	1.0074 1.6457	1.1795 +++++	Lin1	-0.108	1.7348							0.9960		0.9900
Dodecane	+++++ 1.0696	+++++ 1.0645	+++++ 1.0349	+++++ 1.2145	0.6204 +++++	Ave		1.0008				22.4		30.0			
1,2,4-Trichlorobenzene	+++++ 0.3142	+++++ 0.3577	0.1451 0.4022	0.2191 0.4125	0.2199 +++++	Lin1	-0.032	0.4028							0.9940		0.9900
Naphthalene	0.9418 0.9413	0.5365 1.0963	0.3423 1.1573	0.6009 1.0956	0.5838 +++++	QuaF		1.1293	-0.003652						0.9980		0.9900
Hexachlorobutadiene	+++++ 0.8071	+++++ 0.7669	0.8537 0.6872	0.9582 0.6153	0.8167 0.7764	Ave		0.7852				13.2		30.0			
1,2,3-Trichlorobenzene	+++++ 0.4407	+++++ 0.4530	+++++ 0.4697	0.3501 0.4927	0.3083 0.7127	Ave		0.4610				28.1		30.0			
2-Methylnaphthalene	+++++ 0.0479	+++++ 0.0574	+++++ 0.0895	+++++ 0.2206	+++++ 0.4797	Ave		0.1790				101.5	*	50.0			
1-Methylnaphthalene	+++++ 0.0870	+++++ 0.0863	+++++ 0.1078	+++++ 0.2461	+++++ 0.5059	Ave		0.2066				87.1	*	50.0			
4-Bromofluorobenzene (Surr)	0.4842 0.5620	0.4989 0.5844	0.4590 0.6018	0.5397 0.6213	0.5523 0.6736	Ave		0.5577				11.8		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42290

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/29/2020 12:34 Calibration End Date: 08/29/2020 23:57 Calibration ID: 2592

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 140-42290/9	HH29IC01.D
Level 2	IC 140-42290/10	HH29IC02.D
Level 3	IC 140-42290/11	HH29IC03.D
Level 4	IC 140-42290/12	HH29IC04.D
Level 5	IC 140-42290/13	HH29IC05.D
Level 6	IC 140-42290/14	HH29IC06.D
Level 7	ICIS 140-42290/15	HH29IC07.D
Level 8	IC 140-42290/7	HH29IC08.D
Level 9	IC 140-42290/5	HH29IC09.D
Level 10	IC 140-42290/3	HH29IC10.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
Chlorodifluoromethane	CBM	Ave	+++++ 71178	+++++ 135250	6531 291670	11434 564270	26384 1170804	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Propene	CBM	Ave	+++++ 32766	+++++ 61039	+++++ 132120	+++++ 250332	11713 542250	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
Dichlorodifluoromethane	CBM	Ave	+++++ 98306	+++++ 194412	8034 418915	16006 665212	36737 1647380	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Chloromethane	CBM	Ave	+++++ 13487	+++++ 26488	+++++ 54109	2169 95475	5319 186886	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,2-Dichloro-1,1,2,2-tetrafluoroethane	CBM	Ave	+++++ 78601	+++++ 144701	6285 322487	13070 595826	29232 1337769	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Vinyl chloride	CBM	Ave	932 42471	1823 80749	3651 170593	6690 306691	15707 612100	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Butane	CBM	Ave	+++++ 62791	+++++ 125013	+++++ 254521	9302 454922	23536 849872	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,3-Butadiene	CBM	Ave	+++++ 30976	+++++ 59336	+++++ 126693	4849 225651	11438 448776	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Bromomethane	CBM	Ave	+++++ 41408	+++++ 79903	3883 169287	6388 302073	16127 625059	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Chloroethane	CBM	Ave	+++++ 18172	+++++ 34873	1757 73280	2998 128615	6811 254400	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Ethanol	CBM	Ave	+++++ 103194	+++++ 235349	+++++ 459695	15182 974505	39613 1396709	+++++ 5.00	+++++ 10.0	+++++ 20.0	0.800 40.0	2.00 80.0
Vinyl bromide	CBM	Ave	+++++ 33670	1302 65698	2726 150998	5117 275481	12682 628508	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Methylbutane	CBM	Ave	+++++ 43836	1792 86376	3726 193291	6888 354580	15686 794816	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Trichlorofluoromethane	CBM	Ave	+++++ 92071	+++++ 179500	7868 399259	14837 744095	35471 1707786	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42290

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/29/2020 12:34 Calibration End Date: 08/29/2020 23:57 Calibration ID: 2592

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
Acrolein	CBM	Lin1	+++++ 8663	+++++ 17382	775 47885	1635 88893	3225 203402	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Acetonitrile	CBM	Ave	+++++ 17405	+++++ 37274	+++++ 80296	2568 148489	7583 319051	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Acetone	CBM	Ave	+++++ 67466	+++++ 120332	+++++ 228958	+++++ 550794	24383 908970	+++++ 3.00	+++++ 6.00	+++++ 12.0	+++++ 24.0	1.20 48.0
Pentane	CBM	Ave	+++++ 4670	+++++ 9103	224 19860	592 36172	1546 79750	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Isopropyl alcohol	CBM	Ave	3160 135930	5166 309623	10140 690311	21694 1296845	50090 2892621	0.0600 3.00	0.120 6.00	0.240 12.0	0.480 24.0	1.20 48.0
Ethyl ether	CBM	Ave	+++++ 40634	1617 82949	2744 192018	6079 355621	13675 804708	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,1-Dichloroethene	CBM	Ave	+++++ 29740	1211 59790	2221 142360	4784 265390	10509 607494	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Acrylonitrile	CBM	Ave	+++++ 26342	1051 55721	1848 125727	4234 228821	9683 517174	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
tert-Butyl alcohol	CBM	Ave	+++++ 45014	1814 101194	3760 244846	7375 465853	16340 1061322	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,1,2-Trichloro-1,2,2-trifluoroetha ne	CBM	Ave	+++++ 77735	3184 151488	6501 336927	12353 620382	30231 1426183	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Methylene Chloride	CBM	Ave	+++++ 31182	+++++ 60826	+++++ 136401	5061 259505	12483 555280	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
3-Chloropropene	CBM	Ave	+++++ 28782	+++++ 57903	2665 139845	5213 266061	11332 649836	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Carbon disulfide	CBM	Ave	+++++ 98622	4035 196676	7719 445503	15209 809975	36831 1817383	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
trans-1,2-Dichloroethene	CBM	Ave	+++++ 31637	1203 63666	2350 149694	4841 275057	11553 624883	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Methylpentane	CBM	Ave	+++++ 76485	+++++ 160016	4863 370246	11288 690025	26349 1575951	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Methyl tert-butyl ether	CBM	Ave	+++++ 64559	+++++ 135102	+++++ 330791	9461 623376	21645 1474857	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,1-Dichloroethane	CBM	Ave	+++++ 62058	+++++ 124325	5044 280496	10265 520203	23786 1196411	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Vinyl acetate	CBM	Ave	+++++ 74856	+++++ 164085	+++++ 412364	10568 784451	24579 1898417	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
2-Butanone (MEK)	CBM	Ave	+++++ 16000	+++++ 30439	+++++ 68948	2370 135925	5816 293914	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Hexane	CBM	Ave	+++++ 26520	953 54603	1936 123014	3966 235600	9246 524911	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
cis-1,2-Dichloroethene	CBM	Ave	+++++ 31585	1279 63040	2307 151318	4788 286195	11349 660849	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42290

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/29/2020 12:34 Calibration End Date: 08/29/2020 23:57 Calibration ID: 2592

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
Ethyl acetate	CBM	Ave	+++++ 77708	3162 160162	5898 377279	12328 712888	27595 1671126	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Chloroform	CBM	Ave	+++++ 73917	3145 145980	6204 330924	11983 613922	28795 1433018	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Tetrahydrofuran	CBM	Ave	+++++ 37004	1332 79287	2541 187127	5581 352999	12991 817677	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,1,1-Trichloroethane	CBM	Ave	+++++ 66743	2704 132832	5445 306983	10587 575307	25975 1395034	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2-Dichloroethane	DFBZ	Ave	+++++ 47284	2085 93346	3781 213048	7312 401489	17988 963858	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1-Butanol	DFBZ	Ave	+++++ 13235	+++++ 30500	+++++ 71434	+++++ 143170	5338 338272	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
Cyclohexane	DFBZ	Ave	+++++ 13610	+++++ 28513	+++++ 66211	1641 123486	4760 288406	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Benzene	DFBZ	Ave	+++++ 99057	+++++ 198272	7802 447438	14569 826207	36921 1916459	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Carbon tetrachloride	DFBZ	Ave	1133 61795	2216 93449	4639 337106	9468 416169	25244 1375702	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2,3-Dimethylpentane	DFBZ	Ave	+++++ 19407	+++++ 40490	1195 94974	2320 176820	6357 401567	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Thiophene	DFBZ	Ave	+++++ 52043	+++++ 107154	3691 254231	6749 475836	18120 1110676	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2,2,4-Trimethylpentane	DFBZ	Ave	+++++ 156443	5399 329728	10282 777814	18572 1459914	53753 3380543	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Heptane	DFBZ	Ave	+++++ 28489	+++++ 59951	+++++ 144047	2894 273309	9346 631336	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,2-Dichloropropane	DFBZ	Ave	+++++ 41034	1630 83631	3274 191949	6318 362074	15250 840266	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Trichloroethene	DFBZ	Ave	961 42319	1717 84978	3226 202744	5965 434833	15077 915128	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Dibromomethane	DFBZ	Ave	+++++ 49560	+++++ 89996	+++++ 207883	7443 401008	16878 958099	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Bromodichloromethane	DFBZ	Ave	1396 66609	2492 139005	5206 336939	9634 631688	25071 1536417	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,4-Dioxane	DFBZ	Ave	+++++ 12361	+++++ 32004	+++++ 74690	1551 138998	4471 311891	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Methyl methacrylate	DFBZ	Ave	+++++ 45630	+++++ 96083	3402 231736	5168 435605	15220 1018216	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Methylcyclohexane	DFBZ	Lin1	+++++ 49859	+++++ 106694	2908 260282	5275 489358	15301 1124722	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
4-Methyl-2-pentanone (MIBK)	DFBZ	Ave	+++++ 89525	3636 187155	5731 439352	11162 848466	25748 1937646	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42290

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/29/2020 12:34 Calibration End Date: 08/29/2020 23:57 Calibration ID: 2592

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
cis-1,3-Dichloropropene	DFBZ	Ave	931 48811	1660 100971	3001 243759	6091 483570	14738 1165499	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
trans-1,3-Dichloropropene	CBZd 5	Ave	+++++ 35446	1225 73899	2144 194299	4654 409325	8657 1033921	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Toluene	CBZd 5	Ave	+++++ 104851	3623 217553	7081 532092	12584 1040202	29243 2373066	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,1,2-Trichloroethane	CBZd 5	Ave	+++++ 36787	+++++ 74295	2780 172251	5294 324985	12630 764760	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Hexanone	CBZd 5	Ave	+++++ 32100	+++++ 72367	+++++ 180452	3278 357602	6955 874521	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Octane	CBZd 5	Ave	+++++ 29562	+++++ 63752	+++++ 155695	2735 293032	7788 702692	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
C8 Range	DFBZ	Ave	+++++ 358784	+++++ 740857	+++++ 1701005	+++++ 3235392	113223 7656734	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
Dibromochloromethane	CBZd 5	Ave	1062 54160	1969 128589	3930 338056	7783 617460	19161 1647856	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2-Dibromoethane (EDB)	CBZd 5	Ave	1224 51730	2091 104398	3411 261015	7884 535038	15646 1392569	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Tetrachloroethene	CBZd 5	Ave	927 40597	1580 83258	3257 202921	5841 389413	13570 956734	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Chlorobenzene	CBZd 5	Ave	+++++ 80847	+++++ 164669	5978 392452	11831 743269	28248 1868757	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Ethylbenzene	CBZd 5	Ave	2561 124500	4409 264773	8050 660533	14053 1254862	34216 3089994	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
m-Xylene & p-Xylene	CBZd 5	Ave	3883 199075	6184 427470	11759 1051498	22284 2022188	60126 5161120	0.0400 2.00	0.0800 4.00	0.160 8.00	0.320 16.0	0.800 32.0
Nonane	CBZd 5	Ave	+++++ 71082	+++++ 152966	+++++ 374564	7040 724315	19548 1790733	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Bromoform	CBZd 5	QuaF	679 30128	1156 100938	2267 299387	5299 +++++	12706 +++++	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 +++++	0.400 +++++
Styrene	CBZd 5	Ave	+++++ 61513	+++++ 138635	3067 359605	6242 703366	16959 +++++	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
o-Xylene	CBZd 5	Ave	+++++ 103713	3555 218585	6410 535239	12502 1010000	32930 2495830	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,1,2,2-Tetrachloroethane	CBZd 5	Ave	+++++ 89392	+++++ 183101	6941 421162	14234 679869	31726 1967574	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2,3-Trichloropropane	CBZd 5	Ave	+++++ 20078	794 40738	1470 96559	3031 178026	6706 458317	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Isopropylbenzene	CBZd 5	Ave	+++++ 132293	4845 285073	6533 707258	15214 1331394	36786 3450814	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Propylbenzene	CBZd 5	Ave	+++++ 33634	+++++ 74473	+++++ 184674	3868 345970	8952 935298	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42290

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/29/2020 12:34 Calibration End Date: 08/29/2020 23:57 Calibration ID: 2592

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
2-Chlorotoluene	CBZd 5	Ave	+++++ 31701	+++++ 68725	+++++ 167167	4189 306918	10698 816298	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
4-Ethyltoluene	CBZd 5	Ave	+++++ 123694	+++++ 274063	+++++ 692968	13957 1248739	39753 3386928	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,3,5-Trimethylbenzene	CBZd 5	Lin1	+++++ 53265	+++++ 119868	2537 287240	6525 518722	18369 1410023	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Alpha Methyl Styrene	CBZd 5	Ave	+++++ 43249	+++++ 108031	+++++ 271429	4809 484735	10989 +++++	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 +++++
Decane	CBZd 5	Ave	+++++ 98138	+++++ 211962	+++++ 498369	+++++ 936873	33400 2395266	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
tert-Butylbenzene	CBZd 5	Ave	+++++ 125306	+++++ 281235	+++++ 661899	15128 1228047	42959 3345761	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,2,4-Trimethylbenzene	CBZd 5	Ave	+++++ 119057	+++++ 260842	5774 601094	14778 1112935	42752 3051181	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
sec-Butylbenzene	CBZd 5	Ave	+++++ 170946	+++++ 383279	+++++ 891452	20326 1601820	53752 4356098	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,3-Dichlorobenzene	CBZd 5	Ave	+++++ 56119	+++++ 127639	3312 311522	7979 600990	19220 1781787	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Benzyl chloride	CBZd 5	Lin1	+++++ 49639	+++++ 140127	+++++ 346656	6023 695153	14926 +++++	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 +++++
1,4-Dichlorobenzene	CBZd 5	Ave	+++++ 45361	1350 106707	2193 275478	5850 547614	13769 +++++	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
4-Isopropyltoluene	CBZd 5	Ave	+++++ 152230	+++++ 344253	5476 779777	15504 1347034	48957 3642103	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2,3-Trimethylbenzene	CBZd 5	Ave	+++++ 118943	+++++ 257743	5684 574609	14395 1012757	41656 2789911	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Indane	CBZd 5	Ave	+++++ 94480	+++++ 209539	4374 487092	12164 904716	30416 2571055	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2-Dichlorobenzene	CBZd 5	Ave	1545 64192	2372 137779	3986 314163	9708 591518	23005 1718635	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Butylbenzene	CBZd 5	Ave	+++++ 160783	+++++ 360249	+++++ 787301	16902 1371797	52853 3642930	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Indene	CBZd 5	Ave	+++++ 80808	+++++ 178212	+++++ 392352	9491 671298	26876 2078384	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Undecane	CBZd 5	Ave	+++++ 114678	+++++ 255017	+++++ 569435	+++++ 1069442	33280 2838035	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
1,2-Dibromo-3-Chloropropane	CBZd 5	Ave	+++++ 30683	+++++ 89447	1456 201489	4146 336214	10376 944276	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2,4,5-Tetramethylbenzene	CBZd 5	Lin1	+++++ 132594	+++++ 305087	3363 721787	11896 1312226	32591 +++++	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
Dodecane	CBZd 5	Ave	+++++ 88999	+++++ 178065	+++++ 409669	+++++ 968430	17141 +++++	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 +++++

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42290

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/29/2020 12:34 Calibration End Date: 08/29/2020 23:57 Calibration ID: 2592

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
1,2,4-Trichlorobenzene	CBZd 5	Lin1	+++++ 26147	+++++ 59828	840 159208	2587 328959	6075 +++++	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
Naphthalene	CBZd 5	QuaF	1528 78327	1611 183378	1981 458116	7096 873625	16130 +++++	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
Hexachlorobutadiene	CBZd 5	Ave	+++++ 67162	+++++ 128278	4941 272041	11315 490625	22566 1348081	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2,3-Trichlorobenzene	CBZd 5	Ave	+++++ 36670	+++++ 75774	+++++ 185934	4134 392883	8519 1237502	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
2-Methylnaphthalene	CBZd 5	Ave	+++++ 3986	+++++ 9604	+++++ 35445	+++++ 175877	+++++ 832938	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	+++++ 16.0
1-Methylnaphthalene	CBZd 5	Ave	+++++ 7239	+++++ 14439	+++++ 42682	+++++ 196232	+++++ 878408	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	+++++ 16.0
4-Bromofluorobenzene (Surr)	CBZd 5	Ave	182238 216986	173759 226803	154059 276345	184823 287349	177016 339176	4.64 4.64	4.64 4.64	4.64 4.64	4.64 4.64	4.64 4.64

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD
QuaF = Quadratic ISTD forced zero

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42290

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/29/2020 12:34 Calibration End Date: 08/29/2020 23:57 Calibration ID: 2592

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 140-42290/9	HH29IC01.D
Level 2	IC 140-42290/10	HH29IC02.D
Level 3	IC 140-42290/11	HH29IC03.D
Level 4	IC 140-42290/12	HH29IC04.D
Level 5	IC 140-42290/13	HH29IC05.D
Level 6	IC 140-42290/14	HH29IC06.D
Level 7	ICIS 140-42290/15	HH29IC07.D
Level 8	IC 140-42290/7	HH29IC08.D
Level 9	IC 140-42290/5	HH29IC09.D
Level 10	IC 140-42290/3	HH29IC10.D

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
Chlorodifluoromethane	+++++	+++++	27.6						50			
Propene	+++++	+++++	+++++	+++++	5.3						50	
Dichlorodifluoromethane	+++++	+++++	15.9						50			
Chloromethane	+++++	+++++	+++++	12.9						50		
1,2-Dichloro-1,1,2,2-tetrafluoroethane	+++++	+++++	13.5						50			
Vinyl chloride	12.0						50					
Butane	+++++	+++++	+++++	5.8						50		
1,3-Butadiene	+++++	+++++	+++++	10.7						50		
Bromomethane	+++++	+++++	31.9						50			
Chloroethane	+++++	+++++	36.5						50			
Ethanol	+++++	+++++	+++++	-2.5						50		
Vinyl bromide	+++++	4.0						50				
2-Methylbutane	+++++	9.3						50				
Trichlorofluoromethane	+++++	+++++	16.5						50			

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42290

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/29/2020 12:34 Calibration End Date: 08/29/2020 23:57 Calibration ID: 2592

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
Acrolein	+++++	+++++	20.7						50			
Acetonitrile	+++++	+++++	+++++	-5.7						50		
Acetone	+++++	+++++	+++++	+++++	12.0						80	
Pentane	+++++	+++++	-25.2						50			
Isopropyl alcohol	9.5						50					
Ethyl ether	+++++	7.7						50				
1,1-Dichloroethene	+++++	6.7						50				
Acrylonitrile	+++++	5.3						50				
tert-Butyl alcohol	+++++	-2.2						50				
1,1,2-Trichloro-1,2,2-trifluoroethane	+++++	8.9						50				
Methylene Chloride	+++++	+++++	+++++	6.7						80		
3-Chloropropene	+++++	+++++	15.7						50			
Carbon disulfide	+++++	9.4						50				
trans-1,2-Dichloroethene	+++++	1.5						50				
2-Methylpentane	+++++	+++++	-12.2						50			
Methyl tert-butyl ether	+++++	+++++	+++++	-8.5						50		
1,1-Dichloroethane	+++++	+++++	9.4						50			
Vinyl acetate	+++++	+++++	+++++	-15.4						50		
2-Butanone (MEK)	+++++	+++++	+++++	0.0						50		
Hexane	+++++	-2.8						50				
cis-1,2-Dichloroethene	+++++	6.6						50				

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42290

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/29/2020 12:34 Calibration End Date: 08/29/2020 23:57 Calibration ID: 2592

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
Ethyl acetate	+++++	5.2						50				
Chloroform	+++++	10.6						50				
Tetrahydrofuran	+++++	-5.7						50				
1,1,1-Trichloroethane	+++++	4.9						50				
1,2-Dichloroethane	+++++	14.9						50				
1-Butanol	+++++	+++++	+++++	+++++	-6.1						50	
Cyclohexane	+++++	+++++	+++++	-16.7						50		
Benzene	+++++	+++++	8.6						50			
Carbon tetrachloride	-6.4						50					
2,3-Dimethylpentane	+++++	+++++	-12.2						50			
Thiophene	+++++	+++++	-2.3						50			
2,2,4-Trimethylpentane	+++++	-5.2						50				
Heptane	+++++	+++++	+++++	-29.5						50		
1,2-Dichloropropane	+++++	3.9						50				
Trichloroethene	9.3						50					
Dibromomethane	+++++	+++++	+++++	8.6						50		
Bromodichloromethane	0.8						50					
1,4-Dioxane	+++++	+++++	+++++	-24.4						50		
Methyl methacrylate	+++++	+++++	1.9						50			
Methylcyclohexane	+++++	+++++	34.5						50			
4-Methyl-2-pentanone (MIBK)	+++++	11.2						50				

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42290

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/29/2020 12:34 Calibration End Date: 08/29/2020 23:57 Calibration ID: 2592

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
cis-1,3-Dichloropropene	-1.9						50					
trans-1,3-Dichloropropene	+++++	-7.1						50				
Toluene	+++++	-2.4						50				
1,1,2-Trichloroethane	+++++	+++++	8.1						50			
2-Hexanone	+++++	+++++	+++++	-29.5						50		
Octane	+++++	+++++	+++++	-32.9						50		
Dibromochloromethane	-10.8						50					
1,2-Dibromoethane (EDB)	13.4						50					
Tetrachloroethene	10.2						50					
Chlorobenzene	+++++	+++++	3.1						50			
Ethylbenzene	5.5						50					
m-Xylene & p-Xylene	1.2						50					
Nonane	+++++	+++++	+++++	-30.0						50		
Bromoform	11.1		+++++	+++++			50					
Styrene	+++++	+++++	-26.3	+++++					50			
o-Xylene	+++++	-4.4						50				
1,1,2,2-Tetrachloroethane	+++++	+++++	9.4						50			
1,2,3-Trichloropropane	+++++	6.5						50				
Isopropylbenzene	+++++	3.0						50				
Propylbenzene	+++++	+++++	+++++	-22.0						50		
2-Chlorotoluene	+++++	+++++	+++++	-11.7						50		

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42290

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/29/2020 12:34 Calibration End Date: 08/29/2020 23:57 Calibration ID: 2592

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
4-Ethyltoluene	+++++	+++++	+++++	-24.9						50		
1,3,5-Trimethylbenzene	+++++	+++++	17.5						50			
Alpha Methyl Styrene	+++++	+++++	+++++	-25.1 +++++						50		
Decane	+++++	+++++	+++++	+++++	-2.9						50	
tert-Butylbenzene	+++++	+++++	+++++	-19.7						50		
1,2,4-Trimethylbenzene	+++++	+++++	-30.3						50			
sec-Butylbenzene	+++++	+++++	+++++	-18.5						50		
1,3-Dichlorobenzene	+++++	+++++	-23.0						50			
Benzyl chloride	+++++	+++++	+++++	26.9 +++++						50		
1,4-Dichlorobenzene	+++++	-18.0		+++++				50				
4-Isopropyltoluene	+++++	+++++	-44.6						50			
1,2,3-Trimethylbenzene	+++++	+++++	-28.6						50			
Indane	+++++	+++++	-33.7						50			
1,2-Dichlorobenzene	16.0						50					
Butylbenzene	+++++	+++++	+++++	-24.3						50		
Indene	+++++	+++++	+++++	-17.8						50		
Undecane	+++++	+++++	+++++	+++++	-15.2						50	
1,2-Dibromo-3-Chloropropane	+++++	+++++	-40.0						50			
1,2,4,5-Tetramethylbenzene	+++++	+++++	11.1	+++++					50			
Dodecane	+++++	+++++	+++++	+++++ +++++	-38.0						50	
1,2,4-Trichlorobenzene	+++++	+++++	36.5	+++++					50			

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42290

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/29/2020 12:34 Calibration End Date: 08/29/2020 23:57 Calibration ID: 2592

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
Naphthalene	-16.6			+++++			80					
Hexachlorobutadiene	+++++	+++++	8.7						50			
1,2,3-Trichlorobenzene	+++++	+++++	+++++	-24.1						50		
2-Methylnaphthalene	+++++	+++++	+++++	+++++	+++++	-73.2						80
1-Methylnaphthalene	+++++	+++++	+++++	+++++	+++++	-57.9						80

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Lab Sample ID: ICV 140-42290/18 Calibration Date: 08/30/2020 02:47

Instrument ID: MH Calib Start Date: 08/29/2020 12:34

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 08/29/2020 23:57

Lab File ID: HH29LCS.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorodifluoromethane	Ave	2.679	2.781		1.66	1.60	3.8	35.0
Propene	Ave	1.144	1.209		1.69	1.60	5.7	35.0
Dichlorodifluoromethane	Ave	3.629	3.949		1.74	1.60	8.8	35.0
1,2-Dichloro-1,1,2,2-tetrafluoroethane	Ave	2.898	3.181		1.76	1.60	9.8	35.0
Chloromethane	Ave	0.4766	0.5581		1.87	1.60	17.1	35.0
Acetaldehyde	Ave	0.7072	0.6771		7.66	8.00	-4.3	35.0
Vinyl chloride	Ave	1.595	1.723		1.73	1.60	8.0	35.0
1,3-Butadiene	Ave	1.087	1.239		1.82	1.60	14.0	35.0
Butane	Ave	2.181	2.591		1.90	1.60	18.8	35.0
Bromomethane	Ave	1.541	1.577		1.64	1.60	2.3	35.0
Chloroethane	Ave	0.6737	0.7027		1.67	1.60	4.3	35.0
Ethanol	Ave	0.7726	0.6660		6.90	8.00	-13.8	35.0
Vinyl bromide	Ave	1.284	1.389		1.73	1.60	8.2	35.0
2-Methylbutane	Ave	1.682	1.767		1.68	1.60	5.1	35.0
Trichlorofluoromethane	Ave	3.535	3.518		1.59	1.60	-0.5	35.0
Acrolein	Lin1		0.5141		2.13	1.60	33.3	35.0
Acetonitrile	Ave	0.6757	0.6832		1.62	1.60	1.1	35.0
Acetone	Ave	0.7464	0.7233		1.55	1.60	-3.1	35.0
Isopropyl alcohol	Ave	1.844	2.328		2.02	1.60	26.2	35.0
Pentane	Ave	0.1567	0.1785		1.82	1.60	13.9	35.0
Ethyl ether	Ave	1.540	1.709		1.78	1.60	11.0	35.0
1,1-Dichloroethene	Ave	1.164	1.183		1.63	1.60	1.7	35.0
tert-Butyl alcohol	Ave	1.902	1.992		1.68	1.60	4.7	35.0
Acrylonitrile	Ave	1.024	1.111		1.74	1.60	8.5	35.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	2.998	2.997		1.60	1.60	-0.0	35.0
Methylene Chloride	Ave	1.177	1.198		1.63	1.60	1.8	35.0
3-Chloropropene	Ave	1.206	1.136		1.51	1.60	-5.7	35.0
Carbon disulfide	Ave	3.782	3.778		1.60	1.60	-0.1	35.0
trans-1,2-Dichloroethene	Ave	1.215	1.218		1.60	1.60	0.2	35.0
2-Methylpentane	Ave	2.898	2.851		1.57	1.60	-1.6	35.0
Methyl tert-butyl ether	Ave	2.565	2.642		1.65	1.60	3.0	35.0
1,1-Dichloroethane	Ave	2.413	2.475		1.64	1.60	2.6	35.0
Vinyl acetate	Ave	3.098	3.333		1.72	1.60	7.6	35.0
2-Butanone (MEK)	Ave	0.5879	0.5954		1.62	1.60	1.3	35.0
Hexane	Ave	1.006	1.052		1.67	1.60	4.6	35.0
Isopropyl ether	Ave	4.280	4.770		1.78	1.60	11.4	35.0
cis-1,2-Dichloroethene	Ave	1.231	1.265		1.64	1.60	2.8	35.0
Ethyl acetate	Ave	3.083	3.081		1.60	1.60	-0.0	35.0
Chloroform	Ave	2.915	2.895		1.59	1.60	-0.7	35.0
Tert-butyl ethyl ether	Ave	3.282	3.254		1.59	1.60	-0.8	35.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Lab Sample ID: ICV 140-42290/18 Calibration Date: 08/30/2020 02:47

Instrument ID: MH Calib Start Date: 08/29/2020 12:34

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 08/29/2020 23:57

Lab File ID: HH29LCS.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Tetrahydrofuran	Ave	1.448	1.528		1.69	1.60	5.6	35.0
1,1,1-Trichloroethane	Ave	2.643	2.587		1.57	1.60	-2.1	35.0
1,2-Dichloroethane	Ave	0.4365	0.4354		1.60	1.60	-0.2	35.0
1-Butanol	Ave	0.1360	0.1382		1.63	1.60	1.6	35.0
Benzene	Ave	0.8814	0.9188		1.67	1.60	4.2	35.0
Cyclohexane	Ave	0.1206	0.1297		1.72	1.60	7.5	35.0
Carbon tetrachloride	Ave	0.5456	0.6384		1.87	1.60	17.0	35.0
2,3-Dimethylpentane	Ave	0.1669	0.1743		1.67	1.60	4.4	35.0
Thiophene	Ave	0.4636	0.4730		1.63	1.60	2.0	35.0
2,2,4-Trimethylpentane	Ave	1.370	1.504		1.76	1.60	9.8	35.0
Heptane	Ave	0.2512	0.2656		1.69	1.60	5.7	35.0
1,2-Dichloropropane	Ave	0.3772	0.3845		1.63	1.60	1.9	35.0
Trichloroethene	Ave	0.3963	0.3943		1.59	1.60	-0.5	35.0
Dibromomethane	Ave	0.4195	0.4223		1.61	1.60	0.7	35.0
Bromodichloromethane	Ave	0.6247	0.6504		1.67	1.60	4.1	35.0
1,4-Dioxane	Ave	0.1255	0.1251		1.59	1.60	-0.3	35.0
Methyl methacrylate	Ave	0.4094	0.4316		1.69	1.60	5.4	35.0
Methylcyclohexane	Lin1		0.5858		1.89	1.60	18.2	35.0
4-Methyl-2-pentanone (MIBK)	Ave	0.7866	0.8536		1.74	1.60	8.5	35.0
cis-1,3-Dichloropropene	Ave	0.4279	0.4697		1.76	1.60	9.8	35.0
trans-1,3-Dichloropropene	Ave	0.4392	0.4863		1.77	1.60	10.7	35.0
Toluene	Ave	1.237	1.342		1.74	1.60	8.5	35.0
1,1,2-Trichloroethane	Ave	0.4444	0.4511		1.62	1.60	1.5	35.0
2-Hexanone	Ave	0.3937	0.4569		1.86	1.60	16.1	35.0
Octane	Ave	0.3450	0.3910		1.81	1.60	13.3	35.0
Dibromochloromethane	Ave	0.7339	0.8331		1.82	1.60	13.5	35.0
1,2-Dibromoethane (EDB)	Ave	0.6652	0.6699		1.61	1.60	0.7	35.0
Tetrachloroethene	Ave	0.5184	0.5192		1.60	1.60	0.2	35.0
2,3-Dimethylheptane	Ave	1.593	1.483		1.49	1.60	-6.9	35.0
Chlorobenzene	Ave	1.002	1.035		1.65	1.60	3.4	35.0
Ethylbenzene	Ave	1.497	1.654		1.77	1.60	10.5	35.0
m-Xylene & p-Xylene	Ave	1.183	1.376		3.72	3.20	16.3	35.0
Nonane	Ave	0.8512	0.9355		1.76	1.60	9.9	35.0
Bromoform	QuaF		0.6859		1.95	1.60	22.0	35.0
Styrene	Ave	0.7187	0.8674		1.93	1.60	20.7	35.0
o-Xylene	Ave	1.239	1.336		1.73	1.60	7.8	35.0
1,1,2,2-Tetrachloroethane	Ave	1.096	1.119		1.63	1.60	2.0	35.0
1,2,3-Trichloropropane	Ave	0.2482	0.2462		1.59	1.60	-0.8	35.0
Isopropylbenzene	Ave	1.567	1.722		1.76	1.60	9.9	35.0
Propylbenzene	Ave	0.4200	0.4545		1.73	1.60	8.2	35.0
2-Chlorotoluene	Ave	0.4016	0.4289		1.71	1.60	6.8	35.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Lab Sample ID: ICV 140-42290/18 Calibration Date: 08/30/2020 02:47

Instrument ID: MH Calib Start Date: 08/29/2020 12:34

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 08/29/2020 23:57

Lab File ID: HH29LCS.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Ethyltoluene	Ave	1.573	1.665		1.69	1.60	5.9	35.0
1,3,5-Trimethylbenzene	Lin1		0.8605		1.87	1.60	17.1	35.0
Alpha Methyl Styrene	Ave	0.5440	0.6760		1.99	1.60	24.3	35.0
Decane	Ave	1.245	1.320		1.70	1.60	6.1	35.0
tert-Butylbenzene	Ave	1.595	1.750		1.76	1.60	9.7	35.0
1,2,4-Trimethylbenzene	Ave	1.432	1.673		1.87	1.60	16.8	35.0
sec-Butylbenzene	Ave	2.112	2.401		1.82	1.60	13.7	35.0
1,3-Dichlorobenzene	Ave	0.7435	0.8347		1.80	1.60	12.3	35.0
Benzyl chloride	Lin1		0.9537		1.85	1.60	15.8	35.0
1,4-Dichlorobenzene	Ave	0.5485	0.7042		2.05	1.60	28.4	35.0
4-Isopropyltoluene	Ave	1.709	2.102		1.97	1.60	23.0	35.0
1,2,3-Trimethylbenzene	Ave	1.376	1.210		1.41	1.60	-12.1	35.0
Butylcyclohexane	Ave	1.183	1.247		1.69	1.60	5.4	35.0
Indane	Ave	1.140	1.323		1.86	1.60	16.0	35.0
1,2-Dichlorobenzene	Ave	0.8206	0.9347		1.82	1.60	13.9	35.0
Butylbenzene	Ave	1.891	2.293		1.94	1.60	21.3	35.0
Indene	Ave	0.9776	1.023		1.67	1.60	4.7	35.0
Undecane	Ave	1.420	1.561		1.76	1.60	9.9	35.0
1,2-Dibromo-3-Chloropropane	Ave	0.4195	0.4561		1.74	1.60	8.7	35.0
1,2,4,5-Tetramethylbenzene	Lin1		1.729		1.66	1.60	3.5	35.0
Dodecane	Ave	1.001	1.263		2.02	1.60	26.2	35.0
1,2,4-Trichlorobenzene	Lin1		0.4891		2.02	1.60	26.5	35.0
Naphthalene	QuaF		1.439		2.05	1.60	28.3	35.0
Hexachlorobutadiene	Ave	0.7852	0.9322		1.90	1.60	18.7	35.0
1,2,3-Trichlorobenzene	Ave	0.4610	0.6220		2.16	1.60	34.9	35.0
2-Methylnaphthalene	Ave	0.1790	0.0996		0.890	1.60	-44.4	50.0
1-Methylnaphthalene	Ave	0.2066	0.1558		1.21	1.60	-24.6	50.0
4-Bromofluorobenzene (Surr)	Ave	0.5577	0.5614		4.67	4.64	0.7	35.0

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Lab File ID: HBFBI08B.D BFB Injection Date: 09/08/2020

Instrument ID: MH BFB Injection Time: 12:40

Analysis Batch No.: 42504

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	21.2	
75	30.0 - 60.0 % of mass 95	46.7	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.9	
173	Less than 2.0 % of mass 174	0.7	(0.8) 1
174	Greater than 50% of mass 95	94.3	
175	5.0 - 9.0 % of mass 174	6.6	(7.0) 1
176	95.0 - 101.0 % of mass 174	90.8	(96.3) 1
177	5.0 - 9.0 % of mass 176	5.9	(6.5) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 140-42504/2	HCCV08B.D	09/08/2020	13:10
	LCS 140-42504/1002	HCCV08B-LCS.d	09/08/2020	13:10
	MB 140-42504/4	H500BI08.D	09/08/2020	15:46
SV-015-A-29	140-20194-9	HI08P107.D	09/08/2020	22:04
SV-078-A-29	140-20194-10	HI08P108.D	09/08/2020	23:00
SV-076-A-29	140-20194-11	HI08P109.D	09/08/2020	23:55
SV-DUP 4-A-29	140-20194-13	HI08P111.D	09/09/2020	1:42
SV-075-A-29	140-20194-14	HI08P112.D	09/09/2020	2:36
SV-136-A-29	140-20194-15	HI08P113.D	09/09/2020	3:32
SV-101-B-29	140-20194-16	HI08P114.D	09/09/2020	4:29
SV-100-B-29	140-20194-17	HI08P115.D	09/09/2020	5:22
SV-079-A-29	140-20194-18	HI08P116.D	09/09/2020	7:09
SV-168-A-29	140-20194-12	HI08P110R.D	09/09/2020	8:03

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Lab Sample ID: CCVIS 140-42504/2 Calibration Date: 09/08/2020 13:10

Instrument ID: MH Calib Start Date: 08/29/2020 12:34

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 08/29/2020 23:57

Lab File ID: HCCV08B.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorodifluoromethane	Ave	2.679	2.494		1.49	1.60	-6.9	30.0
Propene	Ave	1.144	1.026		1.43	1.60	-10.4	30.0
Dichlorodifluoromethane	Ave	3.629	3.710		1.64	1.60	2.3	30.0
1,2-Dichloro-1,1,2,2-tetrafluoroethane	Ave	2.898	3.041		1.68	1.60	4.9	30.0
Chloromethane	Ave	0.4766	0.4787		1.61	1.60	0.4	30.0
Acetaldehyde	Ave	0.7072	0.6114		6.92	8.00	-13.5	30.0
Vinyl chloride	Ave	1.595	1.505		1.51	1.60	-5.6	30.0
Butane	Ave	2.181	2.166		1.59	1.60	-0.7	30.0
1,3-Butadiene	Ave	1.087	1.046		1.54	1.60	-3.7	30.0
Bromomethane	Ave	1.541	1.470		1.53	1.60	-4.6	30.0
Chloroethane	Ave	0.6737	0.6004		1.43	1.60	-10.9	30.0
Ethanol	Ave	0.7726	0.4996		5.17	8.00	-35.3*	30.0
Vinyl bromide	Ave	1.284	1.329		1.66	1.60	3.5	30.0
2-Methylbutane	Ave	1.682	1.562		1.49	1.60	-7.1	30.0
Trichlorofluoromethane	Ave	3.535	3.596		1.63	1.60	1.7	30.0
Acrolein	Lin1		0.4251		1.77	1.60	10.4	30.0
Acetonitrile	Ave	0.6757	0.5928		1.40	1.60	-12.3	30.0
Acetone	Ave	0.7464	0.8312		1.78	1.60	11.4	30.0
Isopropyl alcohol	Ave	1.844	1.863		1.62	1.60	1.0	30.0
Pentane	Ave	0.1567	0.1654		1.69	1.60	5.5	30.0
Ethyl ether	Ave	1.540	1.372		1.43	1.60	-10.9	30.0
1,1-Dichloroethene	Ave	1.164	1.128		1.55	1.60	-3.1	30.0
tert-Butyl alcohol	Ave	1.902	1.592		1.34	1.60	-16.3	30.0
Acrylonitrile	Ave	1.024	1.043		1.63	1.60	1.9	30.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	2.998	3.035		1.62	1.60	1.2	30.0
Methylene Chloride	Ave	1.177	1.121		1.52	1.60	-4.7	30.0
3-Chloropropene	Ave	1.206	1.030		1.37	1.60	-14.6	30.0
Carbon disulfide	Ave	3.782	3.490		1.48	1.60	-7.7	30.0
trans-1,2-Dichloroethene	Ave	1.215	1.213		1.60	1.60	-0.2	30.0
2-Methylpentane	Ave	2.898	2.534		1.40	1.60	-12.6	30.0
Methyl tert-butyl ether	Ave	2.565	2.312		1.44	1.60	-9.9	30.0
1,1-Dichloroethane	Ave	2.413	2.309		1.53	1.60	-4.3	30.0
Vinyl acetate	Ave	3.098	2.396		1.24	1.60	-22.6	30.0
2-Butanone (MEK)	Ave	0.5879	0.5277		1.44	1.60	-10.2	30.0
Hexane	Ave	1.006	0.9742		1.55	1.60	-3.1	30.0
Isopropyl ether	Ave	4.280	4.171		1.56	1.60	-2.5	30.0
cis-1,2-Dichloroethene	Ave	1.231	1.218		1.58	1.60	-1.0	30.0
Ethyl acetate	Ave	3.083	2.723		1.41	1.60	-11.7	30.0
Chloroform	Ave	2.915	2.801		1.54	1.60	-3.9	30.0
Tert-butyl ethyl ether	Ave	3.282	2.790		1.36	1.60	-15.0	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Lab Sample ID: CCVIS 140-42504/2 Calibration Date: 09/08/2020 13:10

Instrument ID: MH Calib Start Date: 08/29/2020 12:34

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 08/29/2020 23:57

Lab File ID: HCCV08B.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Tetrahydrofuran	Ave	1.448	1.345		1.49	1.60	-7.1	30.0
1,1,1-Trichloroethane	Ave	2.643	2.588		1.57	1.60	-2.1	30.0
1,2-Dichloroethane	Ave	0.4365	0.4305		1.58	1.60	-1.4	30.0
1-Butanol	Ave	0.1360	0.1031		1.21	1.60	-24.2	30.0
Benzene	Ave	0.8814	0.8558		1.55	1.60	-2.9	30.0
Cyclohexane	Ave	0.1206	0.1161		1.54	1.60	-3.7	30.0
Carbon tetrachloride	Ave	0.5456	0.7034		2.06	1.60	28.9	30.0
2,3-Dimethylpentane	Ave	0.1669	0.1615		1.55	1.60	-3.3	30.0
Thiophene	Ave	0.4636	0.4451		1.54	1.60	-4.0	30.0
2,2,4-Trimethylpentane	Ave	1.370	1.385		1.62	1.60	1.1	30.0
Heptane	Ave	0.2512	0.2428		1.55	1.60	-3.3	30.0
1,2-Dichloropropane	Ave	0.3772	0.3522		1.49	1.60	-6.6	30.0
Trichloroethene	Ave	0.3963	0.4098		1.65	1.60	3.4	30.0
Dibromomethane	Ave	0.4195	0.4163		1.59	1.60	-0.8	30.0
Bromodichloromethane	Ave	0.6247	0.6359		1.63	1.60	1.8	30.0
1,4-Dioxane	Ave	0.1255	0.1109		1.41	1.60	-11.6	30.0
Methyl methacrylate	Ave	0.4094	0.3710		1.45	1.60	-9.4	30.0
Methylcyclohexane	Lin1		0.5368		1.74	1.60	8.6	30.0
4-Methyl-2-pentanone (MIBK)	Ave	0.7866	0.7615		1.55	1.60	-3.2	30.0
cis-1,3-Dichloropropene	Ave	0.4279	0.4245		1.59	1.60	-0.8	30.0
trans-1,3-Dichloropropene	Ave	0.4392	0.4125		1.50	1.60	-6.1	30.0
Toluene	Ave	1.237	1.231		1.59	1.60	-0.4	30.0
1,1,2-Trichloroethane	Ave	0.4444	0.4333		1.56	1.60	-2.5	30.0
2-Hexanone	Ave	0.3937	0.4108		1.67	1.60	4.4	30.0
Octane	Ave	0.3450	0.3771		1.75	1.60	9.3	30.0
Dibromochloromethane	Ave	0.7339	0.8630		1.88	1.60	17.6	30.0
1,2-Dibromoethane (EDB)	Ave	0.6652	0.6618		1.59	1.60	-0.5	30.0
Tetrachloroethene	Ave	0.5184	0.5276		1.63	1.60	1.8	30.0
2,3-Dimethylheptane	Ave	1.593	1.340		1.35	1.60	-15.9	30.0
Chlorobenzene	Ave	1.002	1.018		1.63	1.60	1.7	30.0
Ethylbenzene	Ave	1.497	1.431		1.53	1.60	-4.4	30.0
m-Xylene & p-Xylene	Ave	1.183	1.266		3.42	3.20	7.0	30.0
Nonane	Ave	0.8512	0.8376		1.57	1.60	-1.6	30.0
Styrene	Ave	0.7187	0.7708		1.72	1.60	7.3	30.0
Bromoform	QuaF		0.7387		2.06	1.60	28.9	30.0
o-Xylene	Ave	1.239	1.192		1.54	1.60	-3.8	30.0
1,1,2,2-Tetrachloroethane	Ave	1.096	1.080		1.58	1.60	-1.5	30.0
1,2,3-Trichloropropane	Ave	0.2482	0.2523		1.63	1.60	1.6	30.0
Isopropylbenzene	Ave	1.567	1.637		1.67	1.60	4.5	30.0
Propylbenzene	Ave	0.4200	0.4472		1.70	1.60	6.5	30.0
2-Chlorotoluene	Ave	0.4016	0.4096		1.63	1.60	2.0	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Lab Sample ID: CCVIS 140-42504/2 Calibration Date: 09/08/2020 13:10

Instrument ID: MH Calib Start Date: 08/29/2020 12:34

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 08/29/2020 23:57

Lab File ID: HCCV08B.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Ethyltoluene	Ave	1.573	1.618		1.65	1.60	2.8	30.0
1,3,5-Trimethylbenzene	Lin1		0.8754		1.91	1.60	19.1	30.0
Alpha Methyl Styrene	Ave	0.5440	0.6072		1.79	1.60	11.6	30.0
Decane	Ave	1.245	1.248		1.60	1.60	0.3	30.0
tert-Butylbenzene	Ave	1.595	1.866		1.87	1.60	17.0	30.0
1,2,4-Trimethylbenzene	Ave	1.432	1.722		1.92	1.60	20.2	30.0
sec-Butylbenzene	Ave	2.112	2.456		1.86	1.60	16.3	30.0
1,3-Dichlorobenzene	Ave	0.7435	0.8795		1.89	1.60	18.3	30.0
Benzyl chloride	Lin1		0.8956		1.75	1.60	9.1	30.0
1,4-Dichlorobenzene	Ave	0.5485	0.7470		2.18	1.60	36.2*	30.0
4-Isopropyltoluene	Ave	1.709	2.267		2.12	1.60	32.6*	30.0
1,2,3-Trimethylbenzene	Ave	1.376	1.213		1.41	1.60	-11.8	30.0
Butylcyclohexane	Ave	1.183	1.146		1.55	1.60	-3.1	30.0
Indane	Ave	1.140	1.302		1.83	1.60	14.2	30.0
1,2-Dichlorobenzene	Ave	0.8206	0.9774		1.91	1.60	19.1	30.0
Butylbenzene	Ave	1.891	2.345		1.98	1.60	24.0	30.0
Indene	Ave	0.9776	1.012		1.66	1.60	3.5	30.0
Undecane	Ave	1.420	1.549		1.75	1.60	9.1	30.0
1,2-Dibromo-3-Chloropropane	Ave	0.4195	0.5281		2.01	1.60	25.9	30.0
1,2,4,5-Tetramethylbenzene	Lin1		1.863		1.78	1.60	11.3	30.0
Dodecane	Ave	1.001	1.397		2.23	1.60	39.6*	30.0
1,2,4-Trichlorobenzene	Lin1		0.5988		2.46	1.60	53.7*	30.0
Naphthalene	QuaF		1.496		2.13	1.60	33.4*	30.0
Hexachlorobutadiene	Ave	0.7852	1.183		2.41	1.60	50.7*	30.0
1,2,3-Trichlorobenzene	Ave	0.4610	0.7010		2.43	1.60	52.1*	30.0
2-Methylnaphthalene	Ave	0.1790	0.1237		1.11	1.60	-30.9	50.0
1-Methylnaphthalene	Ave	0.2066	0.2265		1.75	1.60	9.6	50.0
4-Bromofluorobenzene (Surr)	Ave	0.5577	0.5972		4.97	4.64	7.1	30.0

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Lab File ID: RH287BLK2.D BFB Injection Date: 08/28/2020

Instrument ID: MR BFB Injection Time: 12:43

Analysis Batch No.: 42222

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	22.7	
75	30.0 - 60.0 % of mass 95	48.7	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.9	
173	Less than 2.0 % of mass 174	0.7	(0.6) 1
174	Greater than 50% of mass 95	103.7	
175	5.0 - 9.0 % of mass 174	7.5	(7.2) 1
176	95.0 - 101.0 % of mass 174	102.5	(98.8) 1
177	5.0 - 9.0 % of mass 176	6.5	(6.4) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 140-42222/3	RH28IC10X.D	08/28/2020	14:01
	IC 140-42222/5	RH28IC09.D	08/28/2020	15:43
	IC 140-42222/7	RH28IC08.D	08/28/2020	17:27
	IC 140-42222/9	RH28IC01.D	08/28/2020	19:11
	IC 140-42222/10	RH28IC02.D	08/28/2020	20:00
	IC 140-42222/11	RH28IC03.D	08/28/2020	20:50
	IC 140-42222/12	RH28IC04.D	08/28/2020	21:38
	IC 140-42222/13	RH28IC05.D	08/28/2020	22:26
	IC 140-42222/14	RH28IC06.D	08/28/2020	23:14
	ICIS 140-42222/15	RH28IC07.D	08/29/2020	0:02
	ICV 140-42222/17	RH28ICV.D	08/29/2020	1:37

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42222

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2020 14:01 Calibration End Date: 08/29/2020 00:02 Calibration ID: 2588

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 140-42222/9	RH28IC01.D
Level 2	IC 140-42222/10	RH28IC02.D
Level 3	IC 140-42222/11	RH28IC03.D
Level 4	IC 140-42222/12	RH28IC04.D
Level 5	IC 140-42222/13	RH28IC05.D
Level 6	IC 140-42222/14	RH28IC06.D
Level 7	ICIS 140-42222/15	RH28IC07.D
Level 8	IC 140-42222/7	RH28IC08.D
Level 9	IC 140-42222/5	RH28IC09.D
Level 10	IC 140-42222/3	RH28IC10X.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Chlorodifluoromethane	+++++ 2.6107	+++++ 2.7021	3.2111 2.4612	2.8921 2.5686	2.5376 2.5100	Ave		2.6867				9.3		30.0			
Propene	+++++ 1.3377	+++++ 1.3956	+++++ 1.2227	+++++ 1.1436	1.2930 1.2580	Ave		1.2751				6.9		30.0			
Dichlorodifluoromethane	+++++ 2.1218	+++++ 2.3299	2.2530 2.0272	2.7264 1.0941	1.8744 1.7080	Ave		2.0169				24.0		30.0			
Chloromethane	+++++ 0.5202	+++++ 0.5116	+++++ 0.4425	0.5370 0.3959	0.4955 0.4360	Ave		0.4770				11.0		30.0			
1,2-Dichloro-1,1,2,2-tetrafluoroethane	+++++ 2.9556	+++++ 3.1185	3.4544 2.6564	3.3270 1.9204	2.7209 2.4653	Ave		2.8273				17.6		30.0			
Vinyl chloride	+++++ 1.7273	1.9789 1.7775	1.9488 1.4472	1.7168 1.3224	1.6350 1.4500	Lin1	0.0423	1.4404							0.9940		0.9900
1,3-Butadiene	+++++ 1.3346	+++++ 1.4072	+++++ 1.1716	1.3263 1.0425	1.2088 1.1264	Ave		1.2311				10.6		30.0			
Butane	+++++ 2.8578	+++++ 2.9598	+++++ 2.3471	2.9689 2.1336	2.6772 2.2726	Ave		2.6024				13.4		30.0			
Bromomethane	+++++ 1.7493	+++++ 1.7724	2.3301 1.5377	1.9003 1.3768	1.6820 1.4836	Lin2	0.0619	1.5496							0.9930		0.9900
Chloroethane	+++++ 0.7930	+++++ 0.8669	1.1070 0.7330	0.8834 0.6465	0.8172 0.7032	Lin2	0.0291	0.7344							0.9910		0.9900
Ethanol	+++++ 0.9083	+++++ 1.1465	1.3520 0.9252	0.8763 1.0506	0.9238 0.9145	Lin1	0.0876	0.9613							0.9930		0.9900
Vinyl bromide	+++++ 1.5352	+++++ 1.5943	2.1364 1.4075	1.7435 1.2824	1.4402 1.3939	Ave		1.5667				17.2		30.0			
2-Methylbutane	+++++ 2.0457	+++++ 2.0889	2.5536 1.7561	2.2915 1.5923	2.0892 1.7524	Ave		2.0212				15.6		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42222

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2020 14:01 Calibration End Date: 08/29/2020 00:02 Calibration ID: 2588

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Trichlorofluoromethane	+++++ 3.9263	4.5526 4.0016	4.7647 3.3893	4.1249 3.1571	3.9554 3.5072	Ave		3.9310				13.3		30.0			
Acrolein	+++++ 0.3342	+++++ 0.3698	+++++ 0.3807	+++++ 0.3405	0.4206 0.3989	Ave		0.3741				8.9		30.0			
Acetonitrile	+++++ 0.5218	+++++ 0.5928	+++++ 0.5367	+++++ 0.5152	0.5565 0.5738	Ave		0.5495				5.5		30.0			
Acetone	+++++ 0.8127	+++++ 0.7531	+++++ 0.6341	0.7132 0.7062	0.7734 0.6277	Ave		0.7172				9.6		30.0			
Pentane	+++++ 0.2352	+++++ 0.2488	+++++ 0.2357	+++++ 0.1973	0.2386 0.2230	Ave		0.2298				7.8		30.0			
Isopropyl alcohol	+++++ 1.8669	+++++ 2.1571	+++++ 1.9439	1.9930 1.6988	1.9338 1.8861	Ave		1.9256				7.2		30.0			
Ethyl ether	+++++ 1.7091	+++++ 1.7125	+++++ 1.5465	2.0445 1.3833	1.7290 1.5826	Ave		1.6725				12.3		30.0			
1,1-Dichloroethene	+++++ 1.3350	1.9399 1.3374	1.5655 1.3004	1.4989 1.1507	1.3336 1.3025	Ave		1.4182				16.2		30.0			
Acrylonitrile	+++++ 0.8189	+++++ 0.7775	+++++ 0.8468	0.7507 0.7754	0.8034 0.9257	Ave		0.8140				7.2		30.0			
tert-Butyl alcohol	+++++ 2.2882	+++++ 2.5656	+++++ 2.3857	2.6766 2.1426	2.3148 2.4255	Ave		2.3999				7.4		30.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	+++++ 2.9870	3.4885 3.0388	3.5493 2.9029	3.3221 2.5905	2.9463 2.9359	Ave		3.0846				10.0		30.0			
Methylene Chloride	+++++ 1.1693	+++++ 1.1403	+++++ 1.1240	1.3252 1.0360	1.2442 1.1484	Ave		1.1696				7.9		30.0			
3-Chloropropene	+++++ 1.3861	+++++ 1.2522	2.4529 1.2930	1.7850 1.1346	1.3930 1.3789	Lin2	0.0948	1.2347							0.9940		0.9900
Carbon disulfide	+++++ 3.7809	+++++ 3.6595	4.3860 3.5647	3.9759 3.1531	3.8159 3.6005	Ave		3.7421				9.5		30.0			
trans-1,2-Dichloroethene	+++++ 1.3446	+++++ 1.2740	1.5936 1.2677	1.2357 1.1653	1.2725 1.3665	Ave		1.3150				9.8		30.0			
2-Methylpentane	+++++ 3.0664	+++++ 3.0821	4.1716 2.8763	3.3877 2.6060	3.0351 3.0350	Ave		3.1575				14.7		30.0			
Methyl tert-butyl ether	+++++ 3.3024	+++++ 3.2507	+++++ 3.0594	3.6529 2.7228	3.2273 3.1566	Ave		3.1960				8.7		30.0			
1,1-Dichloroethane	+++++ 2.2465	+++++ 2.2234	2.6066 2.1279	2.6248 1.9158	2.3351 2.1842	Ave		2.2830				10.4		30.0			
Vinyl acetate	+++++ 3.3796	+++++ 3.5745	3.5064 3.5863	3.2953 3.2450	3.2326 3.9772	Ave		3.4746				7.1		30.0			
2-Butanone (MEK)	+++++ 0.6582	+++++ 0.6786	+++++ 0.6042	0.7318 0.5890	0.5994 0.6544	Ave		0.6451				8.0		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42222

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2020 14:01 Calibration End Date: 08/29/2020 00:02 Calibration ID: 2588

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Hexane	+++++ 0.9916	+++++ 0.9670	+++++ 0.9389	1.0579 0.8854	0.9660 0.9985	Ave		0.9722				5.5		30.0			
cis-1,2-Dichloroethene	+++++ 1.4151	1.8687 1.4034	1.9769 1.3567	1.6141 1.2253	1.4188 1.4000	Ave		1.5199				16.5		30.0			
Ethyl acetate	+++++ 3.3043	+++++ 3.4449	+++++ 3.2179	3.2448 2.9014	3.0505 3.4322	Ave		3.2280				6.1		30.0			
Chloroform	+++++ 2.8302	3.4065 2.8080	3.4563 2.6266	3.0176 2.3841	2.7318 2.7371	Ave		2.8887				12.2		30.0			
Tetrahydrofuran	+++++ 1.6540	+++++ 1.6863	1.7958 1.5310	1.8290 1.4025	1.7268 1.6005	Ave		1.6533				8.5		30.0			
1,1,1-Trichloroethane	+++++ 2.7253	+++++ 2.6891	3.0889 2.5963	3.1076 2.3440	2.8099 2.7095	Ave		2.7588				9.1		30.0			
1,2-Dichloroethane	+++++ 0.3129	0.3269 0.3151	0.3761 0.3025	0.3448 0.2790	0.2869 0.3375	Ave		0.3202				9.4		30.0			
1-Butanol	+++++ 0.1532	+++++ 0.1843	+++++ 0.1684	+++++ 0.1559	0.1705 0.1980	Ave		0.1717				9.9		30.0			
Cyclohexane	+++++ 0.1134	+++++ 0.1175	+++++ 0.1162	0.1299 0.1083	0.1109 0.1320	Ave		0.1183				7.8		30.0			
Benzene	+++++ 0.8098	+++++ 0.8066	0.9347 0.8056	0.8958 0.7460	0.8119 0.9019	Ave		0.8390				7.6		30.0			
Carbon tetrachloride	0.6680 0.5386	0.5496 0.3919	0.6184 0.5641	0.6065 0.3389	0.5810 0.5543	Ave		0.5411				18.7		30.0			
2,3-Dimethylpentane	+++++ 0.1693	+++++ 0.1780	0.2366 0.1701	0.1907 0.1592	0.1833 0.1852	Ave		0.1840				12.8		30.0			
Thiophene	0.5188 0.4569	0.5575 0.4727	0.5254 0.4550	0.4783 0.4180	0.4549 0.5011	Ave		0.4839				8.6		30.0			
2,2,4-Trimethylpentane	+++++ 1.2664	1.5195 1.2620	1.5640 1.2273	1.4197 1.1562	1.2339 1.3930	Ave		1.3380				10.6		30.0			
Heptane	+++++ 0.2710	+++++ 0.2631	+++++ 0.2624	0.2963 0.2501	0.2673 0.2952	Ave		0.2722				6.4		30.0			
1,2-Dichloropropane	+++++ 0.3177	+++++ 0.3066	0.3645 0.2952	0.3483 0.2774	0.3160 0.3298	Ave		0.3195				8.8		30.0			
Trichloroethene	0.4497 0.3926	0.5298 0.3879	0.4481 0.3687	0.4188 0.3827	0.3813 0.4108	Ave		0.4170				11.6		30.0			
Dibromomethane	+++++ 0.3725	+++++ 0.3485	0.4057 0.3337	0.3569 0.3152	0.3309 0.3921	Ave		0.3569				8.8		30.0			
Bromodichloromethane	+++++ 0.5806	0.6048 0.5864	0.6525 0.5848	0.6050 0.5363	0.6066 0.6685	Ave		0.6028				6.5		30.0			
1,4-Dioxane	+++++ 0.1193	+++++ 0.1472	+++++ 0.1364	0.1623 0.1262	0.1286 0.1438	Ave		0.1377				10.7		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42222

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2020 14:01 Calibration End Date: 08/29/2020 00:02 Calibration ID: 2588

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Methyl methacrylate	+++++ 0.3762	+++++ 0.3852	+++++ 0.3799	0.3616 0.3656	0.3544 0.4380	Ave		0.3801				7.3		30.0			
Methylcyclohexane	+++++ 0.4802	+++++ 0.4840	0.5216 0.4655	0.5248 0.4501	0.4901 0.5293	Ave		0.4932				5.9		30.0			
4-Methyl-2-pentanone (MIBK)	+++++ 0.7725	+++++ 0.7853	0.7472 0.7464	0.7384 0.7266	0.7651 0.8871	Ave		0.7711				6.6		30.0			
cis-1,3-Dichloropropene	+++++ 0.4190	0.4401 0.4418	0.4007 0.4344	0.4131 0.4161	0.3920 0.5123	Ave		0.4299				8.2		30.0			
trans-1,3-Dichloropropene	+++++ 0.4258	0.4704 0.4577	0.4391 0.4665	0.3729 0.4381	0.4085 0.5148	Ave		0.4438				9.1		30.0			
Toluene	1.5227 1.2166	1.4950 1.1968	1.4220 1.2049	1.2887 1.1262	1.2065 1.2431	Ave		1.2923				10.7		30.0			
1,1,2-Trichloroethane	+++++ 0.3841	0.4554 0.3772	0.4175 0.3814	0.3831 0.3370	0.3990 0.3844	Ave		0.3910				8.2		30.0			
2-Hexanone	+++++ 0.3988	+++++ 0.4064	+++++ 0.4116	0.3451 0.3796	0.3498 0.4469	Ave		0.3912				9.2		30.0			
C8 Range	+++++ 2.9679	+++++ 2.9908	+++++ 2.8076	3.1426 2.8844	2.9568 3.5063	Ave		3.0366				7.6		30.0			
Octane	+++++ 0.3405	+++++ 0.3568	0.4173 0.3457	0.3796 0.3306	0.3316 0.3795	Ave		0.3602				8.3		30.0			
Dibromochloromethane	0.7815 0.7039	0.9506 0.7884	0.8680 0.8169	0.7735 0.6994	0.7833 0.8665	Ave		0.8032				9.5		30.0			
1,2-Dibromoethane (EDB)	0.7695 0.6724	0.7671 0.6886	0.6946 0.6890	0.6792 0.6397	0.6444 0.7566	Ave		0.7001				6.9		30.0			
Tetrachloroethene	0.4610 0.4410	0.5741 0.4449	0.5821 0.4318	0.4698 0.3965	0.4838 0.4631	Ave		0.4748				12.5		30.0			
Chlorobenzene	+++++ 0.9237	1.1167 0.9513	1.1452 0.9260	0.9890 0.8674	0.9522 1.0344	Ave		0.9896				9.4		30.0			
Ethylbenzene	+++++ 1.5474	1.8237 1.5917	1.6932 1.5793	1.7106 1.4790	1.5485 1.7595	Ave		1.6370				7.0		30.0			
m-Xylene & p-Xylene	+++++ 1.1650	1.4009 1.2117	1.3095 1.2299	1.2166 1.1594	1.1245 1.4158	Ave		1.2481				8.4		30.0			
Nonane	+++++ 0.7139	0.7828 0.7333	0.7824 0.7708	0.7143 0.7329	0.6910 0.9372	Ave		0.7621				9.6		30.0			
Bromoform	+++++ 0.5881	+++++ 0.8951	0.8517 0.9880	0.8166 0.8099	0.7994 1.2274	Ave		0.8720				20.9		30.0			
Styrene	1.0335 0.8845	0.9510 0.9122	0.9533 0.9157	0.7994 0.8265	0.8445 0.9404	Ave		0.9061				7.7		30.0			
o-Xylene	1.4960 1.2289	1.4610 1.2425	1.3820 1.2551	1.2803 1.1235	1.1730 1.2844	Ave		1.2927				9.3		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42222

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2020 14:01 Calibration End Date: 08/29/2020 00:02 Calibration ID: 2588

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
1,1,2,2-Tetrachloroethane	+++++ 1.0569	1.1258 1.0810	1.0582 1.0709	1.0127 0.8626	1.0351 1.1717	Ave		1.0528				8.1		30.0			
1,2,3-Trichloropropane	+++++ 0.2703	+++++ 0.2851	0.3103 0.2824	0.3054 0.2539	0.2684 0.3047	Ave		0.2850				7.2		30.0			
Isopropylbenzene	+++++ 1.7794	2.0621 1.8117	1.9639 1.8078	1.7919 1.6382	1.7608 1.9665	Ave		1.8425				7.1		30.0			
Propylbenzene	+++++ 0.5297	0.5537 0.5354	0.5514 0.5431	0.5304 0.4982	0.5056 0.6091	Ave		0.5396				5.9		30.0			
2-Chlorotoluene	+++++ 0.4899	+++++ 0.4996	0.5244 0.4913	0.4923 0.4552	0.4929 0.5290	Ave		0.4968				4.6		30.0			
4-Ethyltoluene	1.9783 1.7908	1.9444 1.8488	1.8701 1.8736	1.7237 1.7256	1.7106 2.0878	Ave		1.8554				6.6		30.0			
1,3,5-Trimethylbenzene	0.8183 0.7768	0.9198 0.7933	0.8531 0.7968	0.8230 0.7077	0.7919 0.8664	Ave		0.8147				7.0		30.0			
Alpha Methyl Styrene	+++++ 0.7042	0.6979 0.7563	0.7015 0.7933	0.6041 0.7034	0.6763 0.9270	Ave		0.7293				12.4		30.0			
Decane	0.8780 0.9428	0.9411 0.9986	0.9429 1.0406	0.8645 0.9692	0.9119 1.2074	Ave		0.9697				10.2		30.0			
tert-Butylbenzene	2.0483 1.7167	1.8895 1.7502	1.7434 1.8038	1.6991 1.6353	1.6484 2.1972	Ave		1.8132				10.0		30.0			
1,2,4-Trimethylbenzene	1.3114 1.4930	1.5304 1.5670	1.5493 1.6179	1.4642 1.4653	1.4483 1.8995	Ave		1.5346				10.0		30.0			
sec-Butylbenzene	2.0774 2.2811	2.4783 2.3979	2.3657 2.5098	2.2577 2.3164	2.2150 3.1003	Ave		2.4000				11.5		30.0			
1,3-Dichlorobenzene	1.1715 1.1150	1.0596 1.1693	1.2256 1.1751	0.9666 1.1048	1.0669 1.5638	Ave		1.1618				13.7		30.0			
Benzyl chloride	+++++ 1.0678	+++++ 1.2909	1.0657 1.3483	0.9789 1.3285	0.9689 +++++	Ave		1.1499				14.5		30.0			
1,4-Dichlorobenzene	+++++ 1.0968	1.2433 1.1389	1.1419 1.1582	1.0527 1.0585	1.0058 1.4055	Ave		1.1446				10.5		30.0			
4-Isopropyltoluene	1.9776 1.9680	1.9472 2.0484	1.9781 2.0769	1.8973 1.8590	1.8917 2.3582	Ave		2.0002				7.1		30.0			
1,2,3-Trimethylbenzene	+++++ 1.5094	+++++ 1.5689	1.5858 1.6363	1.4419 1.4574	1.4603 1.7475	QuaF		1.3574	0.0238707						0.9980		0.9900
1,2-Dichlorobenzene	1.4030 1.1143	1.3072 1.1632	1.1104 1.1739	1.0866 1.0794	1.0926 1.5622	Ave		1.2093				13.5		30.0			
Indane	1.6506 1.5307	1.6808 1.6026	1.5876 1.6320	1.4412 1.4820	1.4669 2.0435	Ave		1.6118				10.7		30.0			
Indene	+++++ 1.2483	+++++ 1.3699	+++++ 1.4182	1.0599 1.1927	1.1302 1.7651	Ave		1.3120				18.0		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42222

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2020 14:01 Calibration End Date: 08/29/2020 00:02 Calibration ID: 2588

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Butylbenzene	+++++ 1.9203	+++++ 2.0602	1.8296 2.1045	1.6609 1.9023	1.7395 2.4978	Ave		1.9644				13.3		30.0			
Undecane	+++++ 1.1033	+++++ 1.1941	+++++ 1.2678	+++++ 1.1545	0.9439 1.5855	Ave		1.2082				17.7		30.0			
1,2-Dibromo-3-Chloropropane	+++++ 0.4915	+++++ 0.6600	0.4513 0.6724	0.4935 0.6041	0.5134 0.7710	Ave		0.5821				19.3		30.0			
1,2,4,5-Tetramethylbenzene	+++++ 1.8110	+++++ 1.9043	1.6911 1.9685	1.5337 1.7952	1.6140 2.4458	Ave		1.8455				15.3		30.0			
Dodecane	+++++ 0.9514	+++++ 1.1673	+++++ 1.2766	+++++ 1.1566	0.8186 +++++	Ave		1.0741				17.2		30.0			
1,2,4-Trichlorobenzene	1.1514 0.9610	0.9721 1.0561	0.8105 1.0666	0.7225 0.9662	0.8074 1.3675	Ave		0.9881				19.0		30.0			
Naphthalene	2.3112 1.8770	1.5627 2.1846	1.8704 2.1078	1.5305 1.7941	1.7672 2.2522	Ave		1.9258				14.4		30.0			
Hexachlorobutadiene	1.2118 1.0888	1.3758 1.1207	1.3250 1.0345	1.0426 0.8985	1.0677 1.2938	Ave		1.1459				13.2		30.0			
1,2,3-Trichlorobenzene	+++++ 0.9354	1.0893 1.0383	1.2290 0.9483	0.8446 0.7775	0.9291 0.9989	Ave		0.9767				13.7		30.0			
2-Methylnaphthalene	+++++ 0.6876	+++++ 1.2166	+++++ 1.5188	+++++ 1.5680	0.6373 +++++	Ave		1.1257				39.5		50.0			
1-Methylnaphthalene	+++++ 1.2225	+++++ 1.8713	1.6323 2.0880	1.0166 1.9880	1.3245 +++++	Ave		1.5919				25.9		50.0			
4-Bromofluorobenzene (Surr)	0.5970 0.6379	0.6102 0.6606	0.5988 0.7097	0.6120 0.6779	0.6321 0.6811	Ave		0.6418				6.1		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42222

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2020 14:01 Calibration End Date: 08/29/2020 00:02 Calibration ID: 2588

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 140-42222/9	RH28IC01.D
Level 2	IC 140-42222/10	RH28IC02.D
Level 3	IC 140-42222/11	RH28IC03.D
Level 4	IC 140-42222/12	RH28IC04.D
Level 5	IC 140-42222/13	RH28IC05.D
Level 6	IC 140-42222/14	RH28IC06.D
Level 7	ICIS 140-42222/15	RH28IC07.D
Level 8	IC 140-42222/7	RH28IC08.D
Level 9	IC 140-42222/5	RH28IC09.D
Level 10	IC 140-42222/3	RH28IC10X.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
Chlorodifluoromethane	CBM	Ave	+++++	+++++	12116	22349	49801	+++++	+++++	0.0800	0.160	0.400
			127298	265191	650155	1304143	2275714	1.00	2.00	4.00	8.00	16.0
Propene	CBM	Ave	+++++	+++++	+++++	+++++	25376	+++++	+++++	+++++	+++++	0.400
			65227	136966	322982	580652	1140577	1.00	2.00	4.00	8.00	16.0
Dichlorodifluoromethane	CBM	Ave	+++++	+++++	8501	21069	36786	+++++	+++++	0.0800	0.160	0.400
			103463	228663	535510	555502	1548541	1.00	2.00	4.00	8.00	16.0
Chloromethane	CBM	Ave	+++++	+++++	+++++	4150	9725	+++++	+++++	+++++	0.160	0.400
			25367	50211	116889	200994	395335	1.00	2.00	4.00	8.00	16.0
1,2-Dichloro-1,1,2,2-tetrafluoroeth ane	CBM	Ave	+++++	+++++	13034	25710	53398	+++++	+++++	0.0800	0.160	0.400
			144116	306061	701732	975066	2235145	1.00	2.00	4.00	8.00	16.0
Vinyl chloride	CBM	Lin1	+++++	4006	7353	13267	32086	+++++	0.0400	0.0800	0.160	0.400
			84224	174448	382291	671429	1314670	1.00	2.00	4.00	8.00	16.0
1,3-Butadiene	CBM	Ave	+++++	+++++	+++++	10249	23722	+++++	+++++	+++++	0.160	0.400
			65078	138107	309504	529338	1021294	1.00	2.00	4.00	8.00	16.0
Butane	CBM	Ave	+++++	+++++	+++++	22943	52540	+++++	+++++	+++++	0.160	0.400
			139349	290488	620005	1083279	2060495	1.00	2.00	4.00	8.00	16.0
Bromomethane	CBM	Lin2	+++++	+++++	8792	14685	33010	+++++	+++++	0.0800	0.160	0.400
			85297	173948	406202	699062	1345114	1.00	2.00	4.00	8.00	16.0
Chloroethane	CBM	Lin2	+++++	+++++	4177	6827	16037	+++++	+++++	0.0800	0.160	0.400
			38665	85082	193624	328258	637533	1.00	2.00	4.00	8.00	16.0
Ethanol	CBM	Lin1	+++++	+++++	25506	33858	90649	+++++	+++++	0.400	0.800	2.00
			221455	562595	1222004	2667054	4145838	5.00	10.0	20.0	40.0	80.0
Vinyl bromide	CBM	Ave	+++++	+++++	8061	13473	28263	+++++	+++++	0.0800	0.160	0.400
			74856	156474	371798	651128	1263816	1.00	2.00	4.00	8.00	16.0
2-Methylbutane	CBM	Ave	+++++	+++++	9635	17708	41000	+++++	+++++	0.0800	0.160	0.400
			99751	205009	463903	808457	1588785	1.00	2.00	4.00	8.00	16.0
Trichlorofluoromethane	CBM	Ave	+++++	9216	17978	31876	77624	+++++	0.0400	0.0800	0.160	0.400
			191450	392725	895318	1602992	3179856	1.00	2.00	4.00	8.00	16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42222

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2020 14:01 Calibration End Date: 08/29/2020 00:02 Calibration ID: 2588

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
Acrolein	CBM	Ave	+++++ 16296	+++++ 36292	+++++ 100565	+++++ 172897	8255 361684	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
Acetonitrile	CBM	Ave	+++++ 25442	+++++ 58184	+++++ 141775	+++++ 261561	10922 520199	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
Acetone	CBM	Ave	+++++ 118879	+++++ 221734	+++++ 502478	16535 1075673	45535 1707400	+++++ 3.00	+++++ 6.00	+++++ 12.0	0.480 24.0	1.20 48.0
Pentane	CBM	Ave	+++++ 11470	+++++ 24417	+++++ 62271	+++++ 100157	4682 202182	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
Isopropyl alcohol	CBM	Ave	+++++ 273089	+++++ 635105	+++++ 1540486	46204 2587659	113852 5130084	+++++ 3.00	+++++ 6.00	+++++ 12.0	0.480 24.0	1.20 48.0
Ethyl ether	CBM	Ave	+++++ 83338	+++++ 168072	+++++ 408518	15799 702368	33932 1434919	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,1-Dichloroethene	CBM	Ave	+++++ 65097	3927 131261	5907 343522	11583 584264	26172 1180876	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Acrylonitrile	CBM	Ave	+++++ 39929	+++++ 76309	+++++ 223695	5801 393674	15766 839327	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
tert-Butyl alcohol	CBM	Ave	+++++ 111576	+++++ 251800	+++++ 630225	20684 1087876	45427 2199065	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,1,2-Trichloro-1,2,2-trifluoroetha ne	CBM	Ave	+++++ 145650	7062 298238	13392 766832	25672 1315291	57821 2661840	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Methylene Chloride	CBM	Ave	+++++ 57015	+++++ 111917	+++++ 296909	10241 526013	24417 1041211	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
3-Chloropropene	CBM	Lin2	+++++ 67588	+++++ 122895	9255 341550	13794 576055	27338 1250194	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Carbon disulfide	CBM	Ave	+++++ 184361	+++++ 359151	16549 941650	30725 1600962	74887 3264452	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
trans-1,2-Dichloroethene	CBM	Ave	+++++ 65564	+++++ 125032	6013 334887	9549 591662	24973 1238959	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Methylpentane	CBM	Ave	+++++ 149522	+++++ 302486	15740 759801	26179 1323151	59564 2751716	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Methyl tert-butyl ether	CBM	Ave	+++++ 161027	+++++ 319038	+++++ 808171	28229 1382456	63335 2861968	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,1-Dichloroethane	CBM	Ave	+++++ 109543	+++++ 218207	9835 562108	20284 972743	45826 1980304	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Vinyl acetate	CBM	Ave	+++++ 164791	+++++ 350811	13230 947376	25465 1647589	63440 3605976	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Butanone (MEK)	CBM	Ave	+++++ 32092	+++++ 66602	+++++ 159615	5655 299060	11764 593341	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Hexane	CBM	Ave	+++++ 48352	+++++ 94902	+++++ 248032	8175 449542	18958 905328	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
cis-1,2-Dichloroethene	CBM	Ave	+++++ 69003	3783 137736	7459 358383	12473 622149	27844 1269311	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42222

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2020 14:01 Calibration End Date: 08/29/2020 00:02 Calibration ID: 2588

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
Ethyl acetate	CBM	Ave	+++++ 161118	+++++ 338095	+++++ 850049	25075 1473148	59867 3111841	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Chloroform	CBM	Ave	+++++ 138005	6896 275584	13041 693845	23319 1210475	53612 2481600	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Tetrahydrofuran	CBM	Ave	+++++ 80650	+++++ 165501	6776 404434	14134 712114	33889 1451125	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,1,1-Trichloroethane	CBM	Ave	+++++ 132887	+++++ 263917	11655 685853	24015 1190125	55145 2456565	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2-Dichloroethane	DFBZ	Ave	+++++ 74410	3317 151483	7149 377659	13273 669529	27571 1378531	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1-Butanol	DFBZ	Ave	+++++ 36431	+++++ 88621	+++++ 210201	+++++ 374149	16387 808642	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
Cyclohexane	DFBZ	Ave	+++++ 26969	+++++ 56508	+++++ 145010	5002 259931	10658 539211	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Benzene	DFBZ	Ave	+++++ 192558	+++++ 387828	17766 1005771	34483 1789877	78024 3684390	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Carbon tetrachloride	DFBZ	Ave	3577 128080	5576 188413	11755 704270	23349 813090	55838 2264347	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2,3-Dimethylpentane	DFBZ	Ave	+++++ 40258	+++++ 85591	4497 212342	7341 381971	17614 756504	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Thiophene	DFBZ	Ave	2778 108649	5656 227296	9987 568076	18414 1002834	43711 2047191	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2,2,4-Trimethylpentane	DFBZ	Ave	+++++ 301136	15416 606757	29729 1532236	54652 2774121	118580 5690429	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Heptane	DFBZ	Ave	+++++ 64445	+++++ 126478	+++++ 327659	11408 600087	25685 1206014	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,2-Dichloropropane	DFBZ	Ave	+++++ 75552	+++++ 147432	6928 368593	13409 665617	30367 1347228	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Trichloroethene	DFBZ	Ave	2408 93344	5375 186495	8518 460313	16123 918209	36639 1678146	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Dibromomethane	DFBZ	Ave	+++++ 88564	+++++ 167543	7712 416603	13741 756385	31799 1601897	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Bromodichloromethane	DFBZ	Ave	+++++ 138050	6136 281919	12403 730160	23290 1286733	58298 2730666	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,4-Dioxane	DFBZ	Ave	+++++ 28356	+++++ 70796	+++++ 170270	6249 302822	12357 587447	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Methyl methacrylate	DFBZ	Ave	+++++ 89454	+++++ 185193	+++++ 474303	13921 877144	34057 1789286	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Methylcyclohexane	DFBZ	Ave	+++++ 114174	+++++ 232691	9915 581197	20204 1079994	47102 2162335	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
4-Methyl-2-pentanone (MIBK)	DFBZ	Ave	+++++ 183690	+++++ 377560	14203 931901	28426 1743415	73528 3624018	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42222

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2020 14:01 Calibration End Date: 08/29/2020 00:02 Calibration ID: 2588

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
cis-1,3-Dichloropropene	DFBZ	Ave	+++++ 99621	4465 212426	7616 542319	15902 998372	37667 2092713	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
trans-1,3-Dichloropropene	CBZd 5	Ave	+++++ 81690	3725 178293	6617 458192	11410 892213	30968 1882319	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Toluene	CBZd 5	Ave	6500 233387	11839 466172	21430 1183470	39429 2293689	91467 4545670	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,1,2-Trichloroethane	CBZd 5	Ave	+++++ 73682	3606 146935	6292 374576	11721 686436	30249 1405700	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Hexanone	CBZd 5	Ave	+++++ 76512	+++++ 158306	+++++ 404266	10559 773120	26516 1634007	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
C8 Range	DFBZ	Ave	+++++ 705715	+++++ 1437970	+++++ 3505252	120977 6920701	284144 14323556	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Octane	CBZd 5	Ave	+++++ 65320	+++++ 138962	6289 339542	11613 673298	25142 1387808	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Dibromochloromethane	CBZd 5	Ave	3336 135038	7528 307102	13081 802340	23664 1424458	59382 3168351	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2-Dibromoethane (EDB)	CBZd 5	Ave	3285 128985	6075 268235	10468 676768	20780 1302791	48853 2766666	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Tetrachloroethene	CBZd 5	Ave	1968 84607	4546 173290	8773 424142	14375 807488	36680 1693538	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Chlorobenzene	CBZd 5	Ave	+++++ 177202	8843 370564	17259 909511	30260 1766662	72187 3782505	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Ethylbenzene	CBZd 5	Ave	+++++ 296847	14442 619977	25517 1551175	52336 3012093	117394 6434077	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
m-Xylene & p-Xylene	CBZd 5	Ave	+++++ 446971	22187 943918	39468 2416062	74443 4722635	170497 10354326	+++++ 2.00	0.0800 4.00	0.160 8.00	0.320 16.0	0.800 32.0
Nonane	CBZd 5	Ave	+++++ 136944	6199 285635	11791 757072	21853 1492619	52388 3426882	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Bromoform	CBZd 5	Ave	+++++ 112819	+++++ 348652	12835 970471	24984 1649540	60606 4488198	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Styrene	CBZd 5	Ave	4412 169678	7531 355324	14366 899378	24458 1683260	64024 3438805	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
o-Xylene	CBZd 5	Ave	6386 235739	11570 483966	20827 1232727	39171 2288199	88929 4696734	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,1,2,2-Tetrachloroethane	CBZd 5	Ave	+++++ 202741	8915 421084	15948 1051867	30983 1756745	78471 4284716	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2,3-Trichloropropane	CBZd 5	Ave	+++++ 51846	+++++ 111032	4676 277341	9345 517052	20345 1114033	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Isopropylbenzene	CBZd 5	Ave	+++++ 341357	16330 705690	29597 1775686	54823 3336387	133486 7190839	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Propylbenzene	CBZd 5	Ave	+++++ 101614	4385 208556	8310 533438	16229 1014657	38332 2227195	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42222

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2020 14:01 Calibration End Date: 08/29/2020 00:02 Calibration ID: 2588

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
2-Chlorotoluene	CBZd 5	Ave	+++++ 93983	+++++ 194607	7903 482530	15062 927008	37371 1934483	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
4-Ethyltoluene	CBZd 5	Ave	8445 343535	15398 720149	28183 1840276	52736 3514356	129680 7634335	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,3,5-Trimethylbenzene	CBZd 5	Ave	3493 149024	7284 309009	12856 782651	25181 1441235	60035 3168156	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Alpha Methyl Styrene	CBZd 5	Ave	+++++ 135090	5527 294594	10571 779234	18483 1432499	51272 3389797	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Decane	CBZd 5	Ave	3748 180855	7453 388959	14210 1022123	26449 1973903	69136 4415206	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
tert-Butylbenzene	CBZd 5	Ave	8744 329329	14963 681711	26273 1771724	51984 3330576	124968 8034487	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2,4-Trimethylbenzene	CBZd 5	Ave	5598 286404	12119 610351	23348 1589105	44796 2984296	109799 6945966	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
sec-Butylbenzene	CBZd 5	Ave	8868 437590	19626 934003	35652 2465129	69073 4717663	167919 11336996	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,3-Dichlorobenzene	CBZd 5	Ave	5001 213903	8391 455458	18470 1154226	29573 2250010	80880 5718247	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Benzyl chloride	CBZd 5	Ave	+++++ 204834	+++++ 502843	16061 1324267	29950 2705606	73450 +++++	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
1,4-Dichlorobenzene	CBZd 5	Ave	+++++ 210409	9846 443624	17209 1137617	32208 2155852	76253 5139306	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
4-Isopropyltoluene	CBZd 5	Ave	8442 377534	15420 797863	29811 2039984	58048 3785986	143416 8623233	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2,3-Trimethylbenzene	CBZd 5	QuaF	+++++ 289551	+++++ 611095	23899 1607154	44115 2968221	110706 6390147	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2-Dichlorobenzene	CBZd 5	Ave	5989 213760	10352 453097	16734 1152986	33245 2198253	82831 5712566	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Indane	CBZd 5	Ave	7046 293635	13310 624224	23925 1602979	44093 3018326	111206 7472425	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Indene	CBZd 5	Ave	+++++ 239465	+++++ 533579	+++++ 1393000	32427 2429019	85683 6454449	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Butylbenzene	CBZd 5	Ave	+++++ 368369	+++++ 802465	27573 2067016	50815 3874165	131876 9133646	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Undecane	CBZd 5	Ave	+++++ 211658	+++++ 465102	+++++ 1245231	+++++ 2351229	71560 5797790	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
1,2-Dibromo-3-Chloropropane	CBZd 5	Ave	+++++ 94295	+++++ 257066	6801 660392	15099 1230284	38919 2819167	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2,4,5-Tetramethylbenzene	CBZd 5	Ave	+++++ 347414	+++++ 741766	25485 1933526	46923 3656188	122363 8943677	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Dodecane	CBZd 5	Ave	+++++ 182504	+++++ 454692	+++++ 1253840	+++++ 2355654	62063 +++++	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 +++++

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42222

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2020 14:01 Calibration End Date: 08/29/2020 00:02 Calibration ID: 2588

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
1,2,4-Trichlorobenzene	CBZd5	Ave	4915 184352	7698 411351	12214 1047600	22105 1967788	61208 5000474	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Naphthalene	CBZd5	Ave	9866 360065	12375 850922	28187 2070294	46825 3653921	133974 8235513	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Hexachlorobutadiene	CBZd5	Ave	5173 208874	10895 436547	19968 1016101	31897 1829979	80947 4731090	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2,3-Trichlorobenzene	CBZd5	Ave	+++++ 179439	8626 404438	18521 931429	25842 1583400	70435 3652527	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Methylnaphthalene	CBZd5	Ave	+++++ 131911	+++++ 473896	+++++ 1491875	+++++ 3193576	48315 +++++	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 +++++
1-Methylnaphthalene	CBZd5	Ave	+++++ 234530	+++++ 728929	24600 2050918	31105 4049020	100421 +++++	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
4-Bromofluorobenzene (Surr)	CBZd5	Ave	591232 567801	560541 596993	523427 808580	543030 800804	555919 722319	4.64 4.64	4.64 4.64	4.64 4.64	4.64 4.64	4.64 4.64

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD
Lin2 = Linear 1/conc^2 ISTD
QuaF = Quadratic ISTD forced zero

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42222

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2020 14:01 Calibration End Date: 08/29/2020 00:02 Calibration ID: 2588

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 140-42222/9	RH28IC01.D
Level 2	IC 140-42222/10	RH28IC02.D
Level 3	IC 140-42222/11	RH28IC03.D
Level 4	IC 140-42222/12	RH28IC04.D
Level 5	IC 140-42222/13	RH28IC05.D
Level 6	IC 140-42222/14	RH28IC06.D
Level 7	ICIS 140-42222/15	RH28IC07.D
Level 8	IC 140-42222/7	RH28IC08.D
Level 9	IC 140-42222/5	RH28IC09.D
Level 10	IC 140-42222/3	RH28IC10X.D

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
Chlorodifluoromethane	+++++	+++++	19.5						50			
Propene	+++++	+++++	+++++	+++++	1.4						50	
Dichlorodifluoromethane	+++++	+++++	11.7						50			
Chloromethane	+++++	+++++	+++++	12.6						50		
1,2-Dichloro-1,1,2,2-tetrafluoroethane	+++++	+++++	22.2						50			
Vinyl chloride	+++++	-36.1						50				
1,3-Butadiene	+++++	+++++	+++++	7.7						50		
Butane	+++++	+++++	+++++	14.1						50		
Bromomethane	+++++	+++++	0.4						50			
Chloroethane	+++++	+++++	1.2						50			
Ethanol	+++++	+++++	17.8						50			
Vinyl bromide	+++++	+++++	36.4						50			
2-Methylbutane	+++++	+++++	26.3						50			
Trichlorofluoromethane	+++++	15.8						50				

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42222

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2020 14:01 Calibration End Date: 08/29/2020 00:02 Calibration ID: 2588

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
Acrolein	+++++	+++++	+++++	+++++	12.4						50	
Acetonitrile	+++++	+++++	+++++	+++++	1.3						50	
Acetone	+++++	+++++	+++++	-0.6						80		
Pentane	+++++	+++++	+++++	+++++	3.8						50	
Isopropyl alcohol	+++++	+++++	+++++	3.5						50		
Ethyl ether	+++++	+++++	+++++	22.2						50		
1,1-Dichloroethene	+++++	36.8						50				
Acrylonitrile	+++++	+++++	+++++	-7.8						50		
tert-Butyl alcohol	+++++	+++++	+++++	11.5						50		
1,1,2-Trichloro-1,2,2-trifluoroethane	+++++	13.1						50				
Methylene Chloride	+++++	+++++	+++++	13.3						80		
3-Chloropropene	+++++	+++++	2.7						50			
Carbon disulfide	+++++	+++++	17.2						50			
trans-1,2-Dichloroethene	+++++	+++++	21.2						50			
2-Methylpentane	+++++	+++++	32.1						50			
Methyl tert-butyl ether	+++++	+++++	+++++	14.3						50		
1,1-Dichloroethane	+++++	+++++	14.2						50			
Vinyl acetate	+++++	+++++	0.9						50			
2-Butanone (MEK)	+++++	+++++	+++++	13.4						50		
Hexane	+++++	+++++	+++++	8.8						50		
cis-1,2-Dichloroethene	+++++	23.0						50				

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42222

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2020 14:01 Calibration End Date: 08/29/2020 00:02 Calibration ID: 2588

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
Ethyl acetate	+++++	+++++	+++++	0.5						50		
Chloroform	+++++	17.9						50				
Tetrahydrofuran	+++++	+++++	8.6						50			
1,1,1-Trichloroethane	+++++	+++++	12.0						50			
1,2-Dichloroethane	+++++	2.1						50				
1-Butanol	+++++	+++++	+++++	+++++	-0.7						50	
Cyclohexane	+++++	+++++	+++++	9.8						50		
Benzene	+++++	+++++	11.4						50			
Carbon tetrachloride	23.4						50					
2,3-Dimethylpentane	+++++	+++++	28.5						50			
Thiophene	7.2						50					
2,2,4-Trimethylpentane	+++++	13.6						50				
Heptane	+++++	+++++	+++++	8.9						50		
1,2-Dichloropropane	+++++	+++++	14.1						50			
Trichloroethene	7.8						50					
Dibromomethane	+++++	+++++	13.7						50			
Bromodichloromethane	+++++	0.3						50				
1,4-Dioxane	+++++	+++++	+++++	17.9						50		
Methyl methacrylate	+++++	+++++	+++++	-4.9						50		
Methylcyclohexane	+++++	+++++	5.8						50			
4-Methyl-2-pentanone (MIBK)	+++++	+++++	-3.1						50			

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42222

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2020 14:01 Calibration End Date: 08/29/2020 00:02 Calibration ID: 2588

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
cis-1,3-Dichloropropene	+++++	2.4						50				
trans-1,3-Dichloropropene	+++++	6.0						50				
Toluene	17.8						50					
1,1,2-Trichloroethane	+++++	16.5						50				
2-Hexanone	+++++	+++++	+++++	-11.8						50		
Octane	+++++	+++++	15.9						50			
Dibromochloromethane	-2.7						50					
1,2-Dibromoethane (EDB)	9.9						50					
Tetrachloroethene	-2.9						50					
Chlorobenzene	+++++	12.8						50				
Ethylbenzene	+++++	11.4						50				
m-Xylene & p-Xylene	+++++	12.2						50				
Nonane	+++++	2.7						50				
Bromoform	+++++	+++++	-2.3						50			
Styrene	14.1						50					
o-Xylene	15.7						50					
1,1,2,2-Tetrachloroethane	+++++	6.9						50				
1,2,3-Trichloropropane	+++++	+++++	8.9						50			
Isopropylbenzene	+++++	11.9						50				
Propylbenzene	+++++	2.6						50				
2-Chlorotoluene	+++++	+++++	5.6						50			

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42222

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2020 14:01 Calibration End Date: 08/29/2020 00:02 Calibration ID: 2588

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
4-Ethyltoluene	6.6						50					
1,3,5-Trimethylbenzene	0.4						50					
Alpha Methyl Styrene	+++++	-4.3						50				
Decane	-9.5						50					
tert-Butylbenzene	13.0						50					
1,2,4-Trimethylbenzene	-14.5						50					
sec-Butylbenzene	-13.4						50					
1,3-Dichlorobenzene	0.8						50					
Benzyl chloride	+++++	+++++	-7.3	+++++					50			
1,4-Dichlorobenzene	+++++	8.6						50				
4-Isopropyltoluene	-1.1						50					
1,2,3-Trimethylbenzene	+++++	+++++	16.6						50			
1,2-Dichlorobenzene	16.0						50					
Indane	2.4						50					
Indene	+++++	+++++	+++++	-19.2						50		
Butylbenzene	+++++	+++++	-6.9						50			
Undecane	+++++	+++++	+++++	+++++	-21.9						50	
1,2-Dibromo-3-Chloropropane	+++++	+++++	-22.5						50			
1,2,4,5-Tetramethylbenzene	+++++	+++++	-8.4						50			
Dodecane	+++++	+++++	+++++	+++++ +++++	-23.8						50	
1,2,4-Trichlorobenzene	16.5						50					

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42222

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2020 14:01 Calibration End Date: 08/29/2020 00:02 Calibration ID: 2588

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
Naphthalene	20.0						80					
Hexachlorobutadiene	5.7						50					
1,2,3-Trichlorobenzene	+++++	11.5						50				
2-Methylnaphthalene	+++++	+++++	+++++	+++++ +++++	-43.4						80	
1-Methylnaphthalene	+++++	+++++	2.5	+++++					80			

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Lab Sample ID: ICV 140-42222/17 Calibration Date: 08/29/2020 01:37

Instrument ID: MR Calib Start Date: 08/28/2020 14:01

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 08/29/2020 00:02

Lab File ID: RH28ICV.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorodifluoromethane	Ave	2.687	2.484		1.85	2.00	-7.5	35.0
Propene	Ave	1.275	1.235		1.94	2.00	-3.2	35.0
Dichlorodifluoromethane	Ave	2.017	2.359		2.34	2.00	17.0	35.0
Chloromethane	Ave	0.4770	0.4754		1.99	2.00	-0.3	35.0
1,2-Dichloro-1,1,2,2-tetrafluoroethane	Ave	2.827	2.985		2.11	2.00	5.6	35.0
Acetaldehyde	Ave	0.7496	0.6490		8.66	10.0	-13.4	35.0
Vinyl chloride	Lin1		1.580		2.16	2.00	8.2	35.0
1,3-Butadiene	Ave	1.231	1.231		2.00	2.00	-0.0	35.0
Butane	Ave	2.602	2.572		1.98	2.00	-1.2	35.0
Bromomethane	Lin2		1.570		1.99	2.00	-0.7	35.0
Chloroethane	Lin2		0.7885		2.11	2.00	5.4	35.0
Ethanol	Lin1		0.7559		7.77	10.0	-22.3	35.0
Vinyl bromide	Ave	1.567	1.624		2.07	2.00	3.6	35.0
2-Methylbutane	Ave	2.021	2.058		2.04	2.00	1.8	35.0
Trichlorofluoromethane	Ave	3.931	3.865		1.97	2.00	-1.7	35.0
Acrolein	Ave	0.3741	0.4728		2.53	2.00	26.4	35.0
Acetonitrile	Ave	0.5495	0.5537		2.02	2.00	0.8	35.0
Acetone	Ave	0.7172	0.7376		2.06	2.00	2.8	35.0
Pentane	Ave	0.2298	0.2437		2.12	2.00	6.1	35.0
Isopropyl alcohol	Ave	1.926	2.371		2.46	2.00	23.1	35.0
Ethyl ether	Ave	1.673	1.735		2.07	2.00	3.7	35.0
1,1-Dichloroethene	Ave	1.418	1.349		1.90	2.00	-4.9	35.0
Acrylonitrile	Ave	0.8140	0.8759		2.15	2.00	7.6	35.0
tert-Butyl alcohol	Ave	2.400	2.413		2.01	2.00	0.5	35.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	3.085	3.077		2.00	2.00	-0.2	35.0
Methylene Chloride	Ave	1.170	1.138		1.95	2.00	-2.7	35.0
3-Chloropropene	Lin2		1.378		2.16	2.00	7.8	35.0
Carbon disulfide	Ave	3.742	3.651		1.95	2.00	-2.4	35.0
trans-1,2-Dichloroethene	Ave	1.315	1.276		1.94	2.00	-3.0	35.0
2-Methylpentane	Ave	3.158	2.759		1.75	2.00	-12.6	35.0
Methyl tert-butyl ether	Ave	3.196	3.228		2.02	2.00	1.0	35.0
1,1-Dichloroethane	Ave	2.283	2.271		1.99	2.00	-0.5	35.0
Vinyl acetate	Ave	3.475	3.789		2.18	2.00	9.0	35.0
2-Butanone (MEK)	Ave	0.6451	0.6316		1.96	2.00	-2.1	35.0
Hexane	Ave	0.9722	0.9753		2.01	2.00	0.3	35.0
Isopropyl ether	Ave	4.747	4.890		2.06	2.00	3.0	35.0
cis-1,2-Dichloroethene	Ave	1.520	1.426		1.88	2.00	-6.2	35.0
Ethyl acetate	Ave	3.228	3.239		2.01	2.00	0.3	35.0
Chloroform	Ave	2.889	2.748		1.90	2.00	-4.9	35.0
Tert-butyl ethyl ether	Ave	3.902	3.641		1.87	2.00	-6.7	35.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Lab Sample ID: ICV 140-42222/17 Calibration Date: 08/29/2020 01:37

Instrument ID: MR Calib Start Date: 08/28/2020 14:01

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 08/29/2020 00:02

Lab File ID: RH28ICV.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Tetrahydrofuran	Ave	1.653	1.650		2.00	2.00	-0.2	35.0
1,1,1-Trichloroethane	Ave	2.759	2.761		2.00	2.00	0.0	35.0
1,2-Dichloroethane	Ave	0.3202	0.3215		2.01	2.00	0.4	35.0
1-Butanol	Ave	0.1717	0.1713		1.99	2.00	-0.3	35.0
Benzene	Ave	0.8390	0.8229		1.96	2.00	-1.9	35.0
Cyclohexane	Ave	0.1183	0.1168		1.97	2.00	-1.3	35.0
Carbon tetrachloride	Ave	0.5411	0.6089		2.25	2.00	12.5	35.0
2,3-Dimethylpentane	Ave	0.1840	0.1692		1.84	2.00	-8.0	35.0
Thiophene	Ave	0.4839	0.4513		1.87	2.00	-6.7	35.0
2,2,4-Trimethylpentane	Ave	1.338	1.302		1.95	2.00	-2.7	35.0
Heptane	Ave	0.2722	0.2639		1.94	2.00	-3.0	35.0
1,2-Dichloropropane	Ave	0.3195	0.3101		1.94	2.00	-2.9	35.0
Trichloroethene	Ave	0.4170	0.3849		1.85	2.00	-7.7	35.0
Dibromomethane	Ave	0.3569	0.3535		1.98	2.00	-1.0	35.0
Bromodichloromethane	Ave	0.6028	0.6116		2.03	2.00	1.4	35.0
1,4-Dioxane	Ave	0.1377	0.1261		1.83	2.00	-8.4	35.0
Methyl methacrylate	Ave	0.3801	0.3834		2.02	2.00	0.9	35.0
Methylcyclohexane	Ave	0.4932	0.5851		2.37	2.00	18.6	35.0
4-Methyl-2-pentanone (MIBK)	Ave	0.7711	0.7637		1.98	2.00	-1.0	35.0
cis-1,3-Dichloropropene	Ave	0.4299	0.4423		2.06	2.00	2.9	35.0
trans-1,3-Dichloropropene	Ave	0.4438	0.4803		2.16	2.00	8.2	35.0
Toluene	Ave	1.292	1.218		1.89	2.00	-5.7	35.0
1,1,2-Trichloroethane	Ave	0.3910	0.3890		1.99	2.00	-0.5	35.0
2-Hexanone	Ave	0.3912	0.4204		2.15	2.00	7.5	35.0
Octane	Ave	0.3602	0.3608		2.00	2.00	0.2	35.0
Dibromochloromethane	Ave	0.8032	0.8549		2.13	2.00	6.4	35.0
1,2-Dibromoethane (EDB)	Ave	0.7001	0.7224		2.06	2.00	3.2	35.0
Tetrachloroethene	Ave	0.4748	0.4456		1.88	2.00	-6.2	35.0
Chlorobenzene	Ave	0.9896	0.9948		2.01	2.00	0.5	35.0
2,3-Dimethylheptane	Ave	1.318	1.166		1.77	2.00	-11.5	35.0
Ethylbenzene	Ave	1.637	1.652		2.02	2.00	0.9	35.0
m-Xylene & p-Xylene	Ave	1.248	1.278		4.10	4.00	2.4	35.0
Nonane	Ave	0.7621	0.7750		2.03	2.00	1.7	35.0
Bromoform	Ave	0.8720	1.037		2.38	2.00	18.9	35.0
Styrene	Ave	0.9061	0.9563		2.11	2.00	5.5	35.0
o-Xylene	Ave	1.293	1.280		1.98	2.00	-1.0	35.0
1,1,2,2-Tetrachloroethane	Ave	1.053	1.117		2.12	2.00	6.1	35.0
1,2,3-Trichloropropane	Ave	0.2850	0.3045		2.14	2.00	6.8	35.0
Isopropylbenzene	Ave	1.842	1.910		2.07	2.00	3.7	35.0
Propylbenzene	Ave	0.5396	0.5666		2.10	2.00	5.0	35.0
2-Chlorotoluene	Ave	0.4968	0.5371		2.16	2.00	8.1	35.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Lab Sample ID: ICV 140-42222/17 Calibration Date: 08/29/2020 01:37

Instrument ID: MR Calib Start Date: 08/28/2020 14:01

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 08/29/2020 00:02

Lab File ID: RH28ICV.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Ethyltoluene	Ave	1.855	1.821		1.96	2.00	-1.9	35.0
1,3,5-Trimethylbenzene	Ave	0.8147	0.9497		2.33	2.00	16.6	35.0
Alpha Methyl Styrene	Ave	0.7293	0.7766		2.13	2.00	6.5	35.0
Decane	Ave	0.9697	1.033		2.13	2.00	6.5	35.0
tert-Butylbenzene	Ave	1.813	1.861		2.05	2.00	2.7	35.0
1,2,4-Trimethylbenzene	Ave	1.535	1.656		2.16	2.00	7.9	35.0
sec-Butylbenzene	Ave	2.400	2.508		2.09	2.00	4.5	35.0
1,3-Dichlorobenzene	Ave	1.162	1.258		2.17	2.00	8.3	35.0
Benzyl chloride	Ave	1.150	1.413		2.46	2.00	22.8	35.0
1,4-Dichlorobenzene	Ave	1.145	1.219		2.13	2.00	6.5	35.0
4-Isopropyltoluene	Ave	2.000	2.128		2.13	2.00	6.4	35.0
1,2,3-Trimethylbenzene	QuaF		1.187		1.70	2.00	-15.1	35.0
Butylcyclohexane	Ave	1.309	1.301		1.99	2.00	-0.6	35.0
1,2-Dichlorobenzene	Ave	1.209	1.253		2.07	2.00	3.6	35.0
Indane	Ave	1.612	1.612		2.00	2.00	0.0	35.0
Indene	Ave	1.312	1.182		1.80	2.00	-9.9	35.0
Butylbenzene	Ave	1.964	2.211		2.25	2.00	12.6	35.0
Undecane	Ave	1.208	1.232		2.04	2.00	2.0	35.0
1,2-Dibromo-3-Chloropropane	Ave	0.5821	0.5712		1.96	2.00	-1.9	35.0
1,2,4,5-Tetramethylbenzene	Ave	1.845	1.845		2.00	2.00	-0.0	35.0
Dodecane	Ave	1.074	1.209		2.25	2.00	12.6	35.0
1,2,4-Trichlorobenzene	Ave	0.9881	1.226		2.48	2.00	24.1	35.0
Naphthalene	Ave	1.926	2.444		2.54	2.00	26.9	35.0
Hexachlorobutadiene	Ave	1.146	1.185		2.07	2.00	3.4	35.0
1,2,3-Trichlorobenzene	Ave	0.9767	1.167		2.39	2.00	19.5	35.0
2-Methylnaphthalene	Ave	1.126	1.160		2.06	2.00	3.1	50.0
1-Methylnaphthalene	Ave	1.592	1.752		2.20	2.00	10.0	50.0
4-Bromofluorobenzene (Surr)	Ave	0.6418	0.6745		4.88	4.64	5.1	35.0

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Lab File ID: RBFBI09.D BFB Injection Date: 09/09/2020

Instrument ID: MR BFB Injection Time: 10:50

Analysis Batch No.: 42515

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	35.2	
75	30.0 - 60.0 % of mass 95	61.9	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	5.9	
173	Less than 2.0 % of mass 174	0.8	(0.7) 1
174	Greater than 50% of mass 95	104.1	
175	5.0 - 9.0 % of mass 174	7.5	(7.2) 1
176	95.0 - 101.0 % of mass 174	100.0	(96.1) 1
177	5.0 - 9.0 % of mass 176	7.1	(7.1) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 140-42515/2	RCCVI09.D	09/09/2020	11:27
	LCS 140-42515/1002	RCCVI09-LCS.d	09/09/2020	11:27
	MB 140-42515/4	R500BI09.D	09/09/2020	13:56
SV-118-A-29 DL	140-20194-20 DL	RI09P101.D	09/09/2020	14:44
SV-174-A-29	140-20194-7	RI09P202R.D	09/10/2020	8:00

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Lab Sample ID: CCVIS 140-42515/2 Calibration Date: 09/09/2020 11:27

Instrument ID: MR Calib Start Date: 08/28/2020 14:01

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 08/29/2020 00:02

Lab File ID: RCCVI09.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorodifluoromethane	Ave	2.687	2.965		1.77	1.60	10.4	30.0
Propene	Ave	1.275	1.582		1.99	1.60	24.1	30.0
Dichlorodifluoromethane	Ave	2.017	2.635		2.09	1.60	30.6*	30.0
Chloromethane	Ave	0.4770	0.5364		1.80	1.60	12.5	30.0
1,2-Dichloro-1,1,2,2-tetrafluoroethane	Ave	2.827	2.738		1.55	1.60	-3.2	30.0
Acetaldehyde	Ave	0.7496	0.9085		9.70	8.00	21.2	30.0
Vinyl chloride	Lin1		1.795		1.96	1.60	22.8	30.0
Butane	Ave	2.602	3.390		2.08	1.60	30.2*	30.0
1,3-Butadiene	Ave	1.231	1.518		1.97	1.60	23.3	30.0
Bromomethane	Lin2		1.797		1.82	1.60	13.5	30.0
Chloroethane	Lin2		0.9015		1.92	1.60	20.3	30.0
Ethanol	Lin1		1.673		13.8	8.00	72.9*	30.0
Vinyl bromide	Ave	1.567	1.574		1.61	1.60	0.5	30.0
2-Methylbutane	Ave	2.021	2.548		2.02	1.60	26.1	30.0
Trichlorofluoromethane	Ave	3.931	4.373		1.78	1.60	11.3	30.0
Acrolein	Ave	0.3741	0.5784		2.47	1.60	54.6*	30.0
Acetonitrile	Ave	0.5495	0.7104		2.07	1.60	29.3	30.0
Acetone	Ave	0.7172	0.7569		5.07	4.80	5.5	30.0
Pentane	Ave	0.2298	0.2706		1.88	1.60	17.8	30.0
Isopropyl alcohol	Ave	1.926	2.977		7.42	4.80	54.6*	30.0
Ethyl ether	Ave	1.673	2.471		2.36	1.60	47.8*	30.0
1,1-Dichloroethene	Ave	1.418	1.283		1.45	1.60	-9.6	30.0
Acrylonitrile	Ave	0.8140	0.9632		1.89	1.60	18.3	30.0
tert-Butyl alcohol	Ave	2.400	3.121		2.08	1.60	30.0	30.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	3.085	2.915		1.51	1.60	-5.5	30.0
Methylene Chloride	Ave	1.170	1.229		1.68	1.60	5.1	30.0
3-Chloropropene	Lin2		1.727		2.16	1.60	35.0*	30.0
Carbon disulfide	Ave	3.742	3.856		1.65	1.60	3.0	30.0
trans-1,2-Dichloroethene	Ave	1.315	1.272		1.55	1.60	-3.2	30.0
2-Methylpentane	Ave	3.158	3.909		1.98	1.60	23.8	30.0
Methyl tert-butyl ether	Ave	3.196	3.576		1.79	1.60	11.9	30.0
1,1-Dichloroethane	Ave	2.283	2.592		1.82	1.60	13.5	30.0
Vinyl acetate	Ave	3.475	4.496		2.07	1.60	29.4	30.0
2-Butanone (MEK)	Ave	0.6451	0.6450		1.60	1.60	-0.0	30.0
Hexane	Ave	0.9722	1.175		1.93	1.60	20.9	30.0
Isopropyl ether	Ave	4.747	5.897		1.99	1.60	24.2	30.0
cis-1,2-Dichloroethene	Ave	1.520	1.296		1.36	1.60	-14.8	30.0
Ethyl acetate	Ave	3.228	4.262		2.11	1.60	32.0*	30.0
Chloroform	Ave	2.889	3.024		1.68	1.60	4.7	30.0
Tert-butyl ethyl ether	Ave	3.902	4.470		1.83	1.60	14.6	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Lab Sample ID: CCVIS 140-42515/2 Calibration Date: 09/09/2020 11:27

Instrument ID: MR Calib Start Date: 08/28/2020 14:01

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 08/29/2020 00:02

Lab File ID: RCCVI09.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Tetrahydrofuran	Ave	1.653	2.121		2.05	1.60	28.3	30.0
1,1,1-Trichloroethane	Ave	2.759	2.884		1.67	1.60	4.5	30.0
1,2-Dichloroethane	Ave	0.3202	0.3868		1.93	1.60	20.8	30.0
1-Butanol	Ave	0.1717	0.2745		2.56	1.60	59.9*	30.0
Cyclohexane	Ave	0.1183	0.1248		1.69	1.60	5.5	30.0
Benzene	Ave	0.8390	0.8623		1.64	1.60	2.8	30.0
Carbon tetrachloride	Ave	0.5411	0.6077		1.80	1.60	12.3	30.0
2,3-Dimethylpentane	Ave	0.1840	0.1845		1.60	1.60	0.2	30.0
Thiophene	Ave	0.4839	0.4636		1.53	1.60	-4.2	30.0
2,2,4-Trimethylpentane	Ave	1.338	1.489		1.78	1.60	11.3	30.0
Heptane	Ave	0.2722	0.2779		1.63	1.60	2.1	30.0
1,2-Dichloropropane	Ave	0.3195	0.3549		1.78	1.60	11.1	30.0
Trichloroethene	Ave	0.4170	0.3730		1.43	1.60	-10.6	30.0
Dibromomethane	Ave	0.3569	0.3573		1.60	1.60	0.1	30.0
Bromodichloromethane	Ave	0.6028	0.6681		1.77	1.60	10.8	30.0
1,4-Dioxane	Ave	0.1377	0.1624		1.89	1.60	17.9	30.0
Methyl methacrylate	Ave	0.3801	0.4861		2.05	1.60	27.9	30.0
Methylcyclohexane	Ave	0.4932	0.4928		1.60	1.60	-0.0	30.0
4-Methyl-2-pentanone (MIBK)	Ave	0.7711	1.015		2.11	1.60	31.6*	30.0
cis-1,3-Dichloropropene	Ave	0.4299	0.4748		1.77	1.60	10.4	30.0
trans-1,3-Dichloropropene	Ave	0.4438	0.4380		1.58	1.60	-1.3	30.0
Toluene	Ave	1.292	1.139		1.41	1.60	-11.8	30.0
1,1,2-Trichloroethane	Ave	0.3910	0.3570		1.46	1.60	-8.7	30.0
2-Hexanone	Ave	0.3912	0.4517		1.85	1.60	15.5	30.0
Octane	Ave	0.3602	0.3258		1.45	1.60	-9.5	30.0
Dibromochloromethane	Ave	0.8032	0.7264		1.45	1.60	-9.6	30.0
1,2-Dibromoethane (EDB)	Ave	0.7001	0.6472		1.48	1.60	-7.6	30.0
Tetrachloroethene	Ave	0.4748	0.3970		1.34	1.60	-16.4	30.0
Chlorobenzene	Ave	0.9896	0.8834		1.43	1.60	-10.7	30.0
2,3-Dimethylheptane	Ave	1.318	1.587		1.93	1.60	20.4	30.0
Ethylbenzene	Ave	1.637	1.515		1.48	1.60	-7.5	30.0
m-Xylene & p-Xylene	Ave	1.248	1.165		2.99	3.20	-6.7	30.0
Nonane	Ave	0.7621	0.7942		1.67	1.60	4.2	30.0
Bromoform	Ave	0.8720	0.7576		1.39	1.60	-13.1	30.0
Styrene	Ave	0.9061	0.8761		1.55	1.60	-3.3	30.0
o-Xylene	Ave	1.293	1.195		1.48	1.60	-7.6	30.0
1,1,2,2-Tetrachloroethane	Ave	1.053	1.048		1.59	1.60	-0.5	30.0
1,2,3-Trichloropropane	Ave	0.2850	0.2644		1.48	1.60	-7.3	30.0
Isopropylbenzene	Ave	1.842	1.711		1.49	1.60	-7.1	30.0
Propylbenzene	Ave	0.5396	0.4984		1.48	1.60	-7.6	30.0
2-Chlorotoluene	Ave	0.4968	0.4679		1.51	1.60	-5.8	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Lab Sample ID: CCVIS 140-42515/2 Calibration Date: 09/09/2020 11:27

Instrument ID: MR Calib Start Date: 08/28/2020 14:01

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 08/29/2020 00:02

Lab File ID: RCCVI09.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Ethyltoluene	Ave	1.855	1.687		1.45	1.60	-9.1	30.0
1,3,5-Trimethylbenzene	Ave	0.8147	0.7356		1.44	1.60	-9.7	30.0
Alpha Methyl Styrene	Ave	0.7293	0.6781		1.49	1.60	-7.0	30.0
Decane	Ave	0.9697	1.046		1.73	1.60	7.9	30.0
tert-Butylbenzene	Ave	1.813	1.664		1.47	1.60	-8.2	30.0
1,2,4-Trimethylbenzene	Ave	1.535	1.479		1.54	1.60	-3.6	30.0
sec-Butylbenzene	Ave	2.400	2.257		1.50	1.60	-6.0	30.0
1,3-Dichlorobenzene	Ave	1.162	1.093		1.51	1.60	-5.9	30.0
Benzyl chloride	Ave	1.150	1.182		1.65	1.60	2.8	30.0
1,4-Dichlorobenzene	Ave	1.145	1.072		1.50	1.60	-6.4	30.0
4-Isopropyltoluene	Ave	2.000	1.924		1.54	1.60	-3.8	30.0
1,2,3-Trimethylbenzene	QuaF		1.451		1.66	1.60	3.8	30.0
Butylcyclohexane	Ave	1.309	1.275		1.56	1.60	-2.5	30.0
1,2-Dichlorobenzene	Ave	1.209	1.081		1.43	1.60	-10.6	30.0
Indane	Ave	1.612	1.441		1.43	1.60	-10.6	30.0
Indene	Ave	1.312	1.244		1.52	1.60	-5.2	30.0
Butylbenzene	Ave	1.964	1.964		1.60	1.60	0.0	30.0
Undecane	Ave	1.208	1.234		1.63	1.60	2.1	30.0
1,2-Dibromo-3-Chloropropane	Ave	0.5821	0.5333		1.47	1.60	-8.4	30.0
1,2,4,5-Tetramethylbenzene	Ave	1.845	1.730		1.50	1.60	-6.2	30.0
Dodecane	Ave	1.074	1.124		1.67	1.60	4.7	30.0
1,2,4-Trichlorobenzene	Ave	0.9881	0.8879		1.44	1.60	-10.1	30.0
Naphthalene	Ave	1.926	1.820		1.51	1.60	-5.5	30.0
Hexachlorobutadiene	Ave	1.146	0.8636		1.21	1.60	-24.6	30.0
1,2,3-Trichlorobenzene	Ave	0.9767	0.8714		1.43	1.60	-10.8	30.0
2-Methylnaphthalene	Ave	1.126	1.206		1.71	1.60	7.1	50.0
1-Methylnaphthalene	Ave	1.592	1.796		1.81	1.60	12.8	50.0
4-Bromofluorobenzene (Surr)	Ave	0.6418	0.6756		4.88	4.64	5.3	30.0

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Sample No.: ICIS 140-42295/15 Date Analyzed: 09/02/2020 03:27

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm)

Lab File ID (Standard): GI01IC07.D Heated Purge: (Y/N) N

Calibration ID: 2602

		CBM		DFBZ		CBZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		155264	8.81	774405	11.00	759403	15.73
UPPER LIMIT		217370	9.14	1084167	11.33	1063164	16.06
LOWER LIMIT		93158	8.48	464643	10.67	455642	15.40
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 140-42295/22		147601	8.81	795164	11.00	773847	15.73

CBM = Chlorobromomethane (IS)
DFBZ = 1,4-Difluorobenzene
CBZd5 = Chlorobenzene-d5 (IS)

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO 15 LL

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Sample No.: CCVIS 140-42503/2 Date Analyzed: 09/08/2020 15:52

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm)

Lab File ID (Standard): GCCVI08Z.D Heated Purge: (Y/N) N

Calibration ID: 2602

		CBM		DFBZ		CBZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		85639	8.81	429335	10.99	458464	15.72
UPPER LIMIT		119895	9.14	601069	11.32	641850	16.05
LOWER LIMIT		51383	8.48	257601	10.66	275078	15.39
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 140-42503/1002		85639	8.81	429335	10.99	458464	15.72
MB 140-42503/5		92424	8.81	511454	10.99	492844	15.73
140-20194-19	SV-139-A-29	86582	8.81	410202	11.00	454862	15.72
140-20194-1	SV-172-A-29	103554	8.81	587760	10.99	579950	15.72
140-20194-2	SV-116-A-29	90743	8.81	464093	10.99	507405	15.72
140-20194-3	SV-DUP 3-A-29	97654	8.81	530751	10.99	523970	15.72
140-20194-4	SV-138-A-29	92444	8.81	515832	10.99	518977	15.72
140-20194-5	SV-173-A-29	90182	8.80	484422	10.98	489767	15.72
140-20194-6	SV-171-A-29	82512	8.80	463975	10.99	458155	15.72
140-20194-8	SV-177-A-29	83742	8.80	463696	10.99	454893	15.72
140-20194-20	SV-118-A-29	86015	8.81	482523	10.99	462676	15.72

CBM = Chlorobromomethane (IS)
DFBZ = 1,4-Difluorobenzene
CBZd5 = Chlorobenzene-d5 (IS)

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO 15 LL

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Sample No.: ICIS 140-42290/15 Date Analyzed: 08/29/2020 23:57

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm)

Lab File ID (Standard): HH29IC07.D Heated Purge: (Y/N) N

Calibration ID: 2592

		CBM		DFBZ		CBZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		124211	9.44	547740	11.60	401461	16.26
UPPER LIMIT		173895	9.77	766836	11.93	562045	16.59
LOWER LIMIT		74527	9.11	328644	11.27	240877	15.93
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 140-42290/18		125635	9.43	541139	11.59	407551	16.26

CBM = Chlorobromomethane (IS)
DFBZ = 1,4-Difluorobenzene
CBZd5 = Chlorobenzene-d5 (IS)

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO 15 LL

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Sample No.: CCVIS 140-42504/2 Date Analyzed: 09/08/2020 13:10

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm)

Lab File ID (Standard): HCCV08B.D Heated Purge: (Y/N) N

Calibration ID: 2592

		CBM		DFBZ		CBZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		277460	9.43	1172334	11.59	835308	16.26
UPPER LIMIT		388444	9.76	1641268	11.92	1169431	16.59
LOWER LIMIT		166476	9.10	703400	11.26	501185	15.93
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 140-42504/1002		277460	9.43	1172334	11.59	835308	16.26
MB 140-42504/4		225364	9.43	984804	11.59	583162	16.26
140-20194-9	SV-015-A-29	233829	9.45	929539	11.60	611367	16.26
140-20194-10	SV-078-A-29	224248	9.43	895355	11.59	594581	16.26
140-20194-11	SV-076-A-29	215583	9.43	858322	11.59	604862	16.26
140-20194-13	SV-DUP 4-A-29	228740	9.43	837467	11.59	632871	16.26
140-20194-14	SV-075-A-29	210055	9.43	837649	11.59	587721	16.26
140-20194-15	SV-136-A-29	237690	9.43	933516	11.59	673440	16.26
140-20194-16	SV-101-B-29	218037	9.44	867833	11.59	634435	16.26
140-20194-17	SV-100-B-29	202296	9.44	787120	11.60	520637	16.26
140-20194-18	SV-079-A-29	204275	9.43	796569	11.59	582729	16.26
140-20194-12	SV-168-A-29	233954	9.43	936484	11.59	573740	16.26

CBM = Chlorobromomethane (IS)
DFBZ = 1,4-Difluorobenzene
CBZd5 = Chlorobenzene-d5 (IS)

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO 15 LL

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Sample No.: ICIS 140-42222/15 Date Analyzed: 08/29/2020 00:02

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm)

Lab File ID (Standard): RH28IC07.D Heated Purge: (Y/N) N

Calibration ID: 2588

		CBM		DFBZ		CBZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		235543	8.28	1153917	10.52	934834	15.36
UPPER LIMIT		329760	8.61	1615484	10.85	1308768	15.69
LOWER LIMIT		141326	7.95	692350	10.19	560900	15.03
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 140-42222/17		241131	8.29	1181864	10.52	954759	15.35

CBM = Chlorobromomethane (IS)
DFBZ = 1,4-Difluorobenzene
CBZd5 = Chlorobenzene-d5 (IS)

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO 15 LL

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Sample No.: CCVIS 140-42515/2 Date Analyzed: 09/09/2020 11:27

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm)

Lab File ID (Standard): RCCVI09.D Heated Purge: (Y/N) N

Calibration ID: 2588

		CBM		DFBZ		CBZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		123371	8.27	593621	10.51	504150	15.35
UPPER LIMIT		172719	8.60	831069	10.84	705810	15.68
LOWER LIMIT		74023	7.94	356173	10.18	302490	15.02
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 140-42515/1002		123371	8.27	593621	10.51	504150	15.35
MB 140-42515/4		135548	8.27	676979	10.50	529837	15.35
140-20194-20 DL	SV-118-A-29 DL	116898	8.27	601573	10.51	477691	15.34
140-20194-7	SV-174-A-29	151241	8.26	770861	10.50	588539	15.34

CBM = Chlorobromomethane (IS)
DFBZ = 1,4-Difluorobenzene
CBZd5 = Chlorobenzene-d5 (IS)

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO 15 LL

LOCKHEED MARTIN CORPORATION (LMC) - MIDDLE RIVER COMPLEX (MRC)
SDG 140-20194-1

SAMPLE IDENTIFICATION	SV-101-B-29		
COMPOUND	TRICHLOROETHENE	MW=	131.39
		GAS CONSTANT =	24.45
COMPOUND AREA	418144		
INTERNAL STANDARD AMOUNT (ppbv)	4.8		
CALIBRATION VOLUME (mL)	500		
DILUTION FACTOR	1		
INTERNAL STANDARD AREA	867833		
AVERAGE RRF	0.3963		
SAMPLE VOLUME (mL)	100		

29.1794 ppbv
156.81 µg/m³

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: SV-101-B-29 Lab Sample ID: 140-20194-16

Matrix: Air Lab File ID: HI08P114.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 10:27

Sample wt/vol: 100(mL) Date Analyzed: 09/09/2020 04:29

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42504 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.060	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	1.1		0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	0.86		0.40	0.11
67-66-3	Chloroform	119.38	0.18	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	1.2		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	ND		0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	0.55		0.20	0.20
127-18-4	Tetrachloroethene	165.83	11		0.40	0.035
108-88-3	Toluene	92.14	0.44	J	0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND	*	0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	41		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	29		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	1.1		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	3.0		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	1.2		0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.39	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	89		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1

SDG No.:

Client Sample ID: SV-101-B-29 Lab Sample ID: 140-20194-16

Matrix: Air Lab File ID: HI08P114.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 10:27

Sample wt/vol: 100 (mL) Date Analyzed: 09/09/2020 04:29

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32 (mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42504 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.19	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	6.8		2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	3.0		1.4	0.39
67-66-3	Chloroform	119.38	0.87	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	6.0		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	ND		1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	2.9		1.0	1.0
127-18-4	Tetrachloroethene	165.83	73		2.7	0.24
108-88-3	Toluene	92.14	1.7	J	2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND	*	3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	220		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	160		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	5.3		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	15		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	5.7		2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	1.7	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	89		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\HI08P114.D				
Lims ID:	140-20194-A-16				
Client ID:	SV-101-B-29				
Sample Type:	Client				
Inject. Date:	09-Sep-2020 04:29:30	ALS Bottle#:	14	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016520-018				
Misc. Info.:	140-20194-a-16				
Operator ID:	HMT	Instrument ID:	MH		
Method:	\\chromfs\Knoxville\ChromData\MH\20200904-16520.b\MH_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	10-Sep-2020 10:35:05	Calib Date:	29-Aug-2020 23:57:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MH\20200829-16451.b\HH29IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1028				
First Level Reviewer: khachitpongpanits		Date:	10-Sep-2020 10:35:24		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.436	9.431	0.005	95	218037	4.80	
* 2 1,4-Difluorobenzene	114	11.591	11.591	0.000	95	867833	4.80	
* 3 Chlorobenzene-d5 (IS)	117	16.258	16.258	0.000	87	634435	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.876	17.876	0.000	94	304180	4.13	
6 Chlorodifluoromethane	51	3.916	3.916	0.000	96	20927	0.1720	M
8 Dichlorodifluoromethane	85	3.983	3.988	-0.005	100	39957	0.2424	
44 Chloroform	83	9.441	9.436	0.005	28	4724	0.0357	
47 1,1,1-Trichloroethane	97	10.490	10.490	0.000	97	986479	8.22	
51 Benzene	78	11.064	11.069	-0.005	64	1925	0.0121	
52 Carbon tetrachloride	117	11.090	11.095	-0.005	98	21311	0.2161	
58 Trichloroethene	130	12.299	12.294	0.005	96	418144	5.84	
67 Toluene	91	14.310	14.310	0.000	90	14463	0.0885	
73 Tetrachloroethene	129	15.436	15.441	0.000	95	147379	2.15	
77 m-Xylene & p-Xylene	91	16.734	16.739	-0.005	94	5337	0.0341	
81 o-Xylene	91	17.266	17.266	0.000	93	7158	0.0437	
88 1,3,5-Trimethylbenzene	120	18.563	18.568	0.000	92	18441	0.2326	
92 1,2,4-Trimethylbenzene	105	18.992	18.993	0.005	99	112208	0.5927	
98 1,2,3-Trimethylbenzene	105	19.452	19.453	0.005	97	38926	0.2140	
109 Naphthalene	128	21.556	21.556	0.000	98	16446	0.1102	
S 116 Xylenes, Total	100				0		0.0778	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20194-1 Analy Batch No.: 42290

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/29/2020 12:34 Calibration End Date: 08/29/2020 23:57 Calibration ID: 2592

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Hexane	+++++ 1.0080	0.9773 1.0550	1.0130 1.0448	0.9838 0.9870	0.9509 1.0318	Ave		1.0057				3.4		30.0			
cis-1,2-Dichloroethene	+++++ 1.2006	1.3116 1.2181	1.2071 1.2852	1.1877 1.1989	1.1672 1.2990	Ave		1.2306				4.3		30.0			
Ethyl acetate	+++++ 2.9537	3.2426 3.0946	3.0860 3.2045	3.0580 2.9864	2.8380 3.2849	Ave		3.0832				4.7		30.0			
Chloroform	+++++ 2.8096	3.2252 2.8206	3.2462 2.8108	2.9724 2.5718	2.9615 2.8168	Ave		2.9150				7.4		30.0			
Tetrahydrofuran	+++++ 1.4066	1.3660 1.5320	1.3295 1.5894	1.3844 1.4788	1.3361 1.6073	Ave		1.4478				7.4		30.0			
1,1,1-Trichloroethane	+++++ 2.5370	2.7730 2.5666	2.8490 2.6074	2.6261 2.4100	2.6714 2.7422	Ave		2.6425				5.1		30.0			
1,2-Dichloroethane	+++++ 0.4161	0.5015 0.4090	0.4638 0.4108	0.4474 0.3989	0.4303 0.4502	Ave		0.4365				7.5		30.0			
1-Butanol	+++++ 0.1165	+++++ 0.1336	+++++ 0.1377	+++++ 0.1423	0.1277 0.1580	Ave		0.1360				10.3		30.0			
Cyclohexane	+++++ 0.1198	+++++ 0.1249	+++++ 0.1277	0.1004 0.1227	0.1139 0.1347	Ave		0.1206				9.1		30.0			
Benzene	+++++ 0.8717	+++++ 0.8688	0.9571 0.8628	0.8914 0.8210	0.8833 0.8951	Ave		0.8814				4.3		30.0			
Carbon tetrachloride	0.5108 0.5438	0.5330 0.4095	0.5691 0.6501	0.5793 0.4135	0.6039 0.6426	Ave		0.5456				15.3		30.0			
2,3-Dimethylpentane	+++++ 0.1708	+++++ 0.1774	0.1466 0.1831	0.1419 0.1757	0.1521 0.1876	Ave		0.1669				10.5		30.0			
Thiophene	+++++ 0.4580	+++++ 0.4695	0.4528 0.4902	0.4129 0.4728	0.4335 0.5188	Ave		0.4636				7.1		30.0			
2,2,4-Trimethylpentane	+++++ 1.3767	1.2986 1.4447	1.2613 1.4999	1.1363 1.4507	1.2859 1.5790	Ave		1.3703				10.0		30.0			
Heptane	+++++ 0.2507	+++++ 0.2627	+++++ 0.2778	0.1771 0.2716	0.2236 0.2949	Ave		0.2512				15.8		30.0			
1,2-Dichloropropane	+++++ 0.3611	0.3921 0.3664	0.4016 0.3701	0.3866 0.3598	0.3648 0.3925	Ave		0.3772				4.2		30.0			
Trichloroethene	0.4333 0.3724	0.4130 0.3723	0.3957 0.3910	0.3650 0.4321	0.3607 0.4274	Ave		0.3963				7.2		30.0			
Dibromomethane	+++++ 0.4361	+++++ 0.3943	+++++ 0.4009	0.4554 0.3985	0.4038 0.4475	Ave		0.4195				6.2		30.0			
Bromodichloromethane	0.6294 0.5862	0.5994 0.6091	0.6386 0.6497	0.5894 0.6277	0.5998 0.7176	Ave		0.6247				6.3		30.0			
1,4-Dioxane	+++++ 0.1088	+++++ 0.1402	+++++ 0.1440	0.0949 0.1381	0.1070 0.1457	Ave		0.1255				16.9		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

TETRA TECH

INTERNAL CORRESPONDENCE

TO: **S. BRENNER** **DATE:** **OCTOBER 14, 2020**

FROM: **LEIGH A. CIOFANI** **COPIES:** **DV FILE**

SUBJECT: **ORGANIC DATA VALIDATION – VOC**
LOCKHEED MARTIN CORPORATION (LMC) – MIDDLE RIVER COMPLEX (MRC)
SAMPLE DELIVERY GROUP (SDG) 140-20195-1

SAMPLES: 19 / Air / VOC

IA-015-A-29	IA-018-A-29	IA-021-A-29
IA-075-A-29	IA-076-A-29	IA-078-A-29
IA-079-A-29	IA-081-A-29	IA-093-A-29
IA-100-B-29	IA-101-B-29	IA-117-A-29
IA-118-A-29	IA-136-A-29	IA-138-A-29
IA-168-A-29	IA-174-A-29	IA-DUP 3-A-29
IA-DUP 4-A-29		

OVERVIEW

The sample set for LMC – MRC, SDG 140-20195-1, consists of nineteen (19) indoor air (IA) environmental samples. All samples were analyzed for select volatile organic compounds (VOCs). Two (2) field duplicate pairs are included in this SDG: IA-018-A-29 / IA-DUP 3-A-29 and IA-168-A-29 / IA-DUP 4-A-29.

The samples were collected by Tetra Tech on August 26, 2020, and analyzed by Eurofins TestAmerica. All analyses were conducted in accordance with EPA Method TO-15 analytical and reporting protocols.

The data contained in this SDG were validated with regard to the following parameters: data completeness, holding times, GC/MS tuning, initial/continuing calibrations, laboratory method blank results, surrogate spike recoveries, laboratory control sample results, internal standard areas, field duplicate precision, chromatographic resolution, compound identification, compound quantitation, and detection limits. Areas of concern are listed below.

MAJOR PROBLEMS

- None.

MINOR PROBLEMS

- The continuing calibration performed on 09/05/2020 at 11:32 on instrument MG had a percent difference (%D) for 1,2,3-trimethylbenzene that was greater than the 30% quality control limit. Samples IA-081-A-29, IA-100-B-29, and IA-101-B-29 were associated with this calibration. The non-detected results for 1,2,3-trimethylbenzene was qualified as estimated (UJ) in the affected samples.

- The laboratory control sample (LCS) 140-42481/1002 had a percent recovery (%R) that was less than the laboratory quality control limits for 1,2,3-trimethylbenzene. Samples IA-081-A-29, IA-100-B-29, and IA-101-B-29 were associated with this LCS. The non-detected results for 1,2,3-trimethylbenzene was qualified as estimated (UJ) in the associated samples.

- The field duplicate pair samples IA-168-A-29 / IA-DUP 4-A-29 had a difference that was greater than the quality control limit of 2x the reporting limit (RL) for trichloroethene. The detected and non-detected results for trichloroethene were qualified as estimated (J and UJ, respectively) in samples IA-168-A-29 and IA-DUP 4-A-29.

- Detected results reported below the RL but above the method detection limit (MDL) were qualified as estimated (J).

NOTES

Twenty-five VOC target compounds were reported for the TO-15 analysis of the samples.

Non-detected results were reported to the MDL.

The following samples were analyzed at dilution factors greater than 1:

Sample	Dilution Factor
IA-018-A-29	1.49
IA-021-A-29	1.41
IA-078-A-29	1.45
IA-079-A-29	1.45
IA-100-B-29	1.65
IA-136-A-29	1.56
IA-DUP 4-A-29	1.56

The GC/MS tune performed on 09/05/2020 at 10:56 on instrument MG had a percent relative abundance for m/z 176 that were less than the ion abundance criteria listed on the form. However, the laboratory case narrative indicates that the ion abundance criteria listed on the forms are for Method TO-14. The percent relative abundance for m/z 176 is within the limits for Method TO-15. Therefore, no action was necessary.

EXECUTIVE SUMMARY

Laboratory Performance: Some results were qualified due to calibration noncompliance. Several results were qualified due to LCS noncompliance.

Other Factors Affecting Data Quality: One analyte (TCE) was qualified due to field duplicate imprecision. Results above the MDL but below the RL were qualified as estimated.

The data for these analyses were reviewed with reference to the USEPA “National Functional Guidelines for Organic Superfund Methods Data Review” (January 2017) and USEPA Method TO-15 analytical and reporting protocols. The text of this report has been formulated to address only those areas affecting data quality.

Leigh A. Ciofani

Tetra Tech, Inc.
Leigh A. Ciofani
Environmental Scientist/Data Validator

Joseph A. Samchuck

Tetra Tech, Inc.
Joseph A. Samchuck
Data Validation Manager

Attachments:
Appendix A – Qualified Analytical Results
Appendix B – Results as Reported by the Laboratory
Appendix C – Support Documentation

Appendix A

Qualified Analytical Results

Data Qualifier Definitions

The following definitions provide brief explanations of the validation qualifiers assigned to results in the data review process.

U	The analyte was analyzed for, but was not detected at a level greater than or equal to the level of the adjusted detection limit.
J	The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample (due either to the quality of the data generated because certain quality control criteria were not met, or the concentration of the analyte was below the reporting limit).
J+	The result is an estimated quantity, but the result may be biased high.
J-	The result is an estimated quantity, but the result may be biased low.
UJ	The analyte was analyzed for, but was not detected. The reported detection limit is approximate and may be inaccurate or imprecise.
NJ	The analyte has been “tentatively identified” or “presumptively” as present and the associated numerical value is the estimated concentration in the sample.
R	The sample result (detected) is unusable due to the quality of the data generated because certain criteria were not met. The analyte may or may not be present in the sample.
UR	The sample result (nondetected) is unusable due to the quality of the data generated because certain criteria were not met. The analyte may or may not be present in the sample.
X	The sample results (including non-detects) were affected by serious deficiencies in the ability to analyze the sample and meet published method and project quality control criteria. The presence or absence of the analyte cannot be substantiated by the data provided. Acceptance or rejection of the data should be decided by the project team, but exclusion of the data is recommended.

Qualifier Codes:

A = Lab Blank Contamination
B = Field Blank Contamination
C = Calibration Noncompliance (i.e., % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
C01 = GC/MS Tuning Noncompliance
D = MS/MSD Recovery Noncompliance
E = LCS/LCSD Recovery Noncompliance
F = Lab Duplicate Imprecision
G = Field Duplicate Imprecision
H = Holding Time Exceedance
I = ICP Serial Dilution Noncompliance
J = ICP PDS Recovery Noncompliance; MSA's $r < 0.995$
K = ICP Interference - includes ICS % R Noncompliance
L = Instrument Calibration Range Exceedance
M = Sample Preservation Noncompliance
N = Internal Standard Noncompliance
N01 = Internal Standard Recovery Noncompliance Dioxins
N02 = Recovery Standard Noncompliance Dioxins
N03 = Clean-up Standard Noncompliance Dioxins
O = Poor Instrument Performance (i.e., base-time drifting)
P = Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q = Other problems (can encompass a number of issues; i.e.chromatography,interferences, etc.)
R = Surrogates Recovery Noncompliance
S = Pesticide/PCB Resolution
T = % Breakdown Noncompliance for DDT and Endrin
U = RPD between columns/detectors >40% for positive results determined via GC/HPLC
V = Non-linear calibrations; correlation coefficient $r < 0.995$
W = EMPC result
X = Signal to noise response drop
Y = Percent solids <30%
Z = Uncertainty at 2 standard deviations is greater than sample activity
Z1 = Tentatively Identified Compound considered presumptively present
Z2 = Tentatively Identified Compound column bleed
Z3 = Tentatively Identified Compound aldol condensate
Z4 = Sample activity is less than the at uncertainty at 3 standard deviations and greater than the MDC
Z5 = Sample activity is less than the at uncertainty at 3 standard deviations and less than the MDC

PROJ_NO: 08388	NSAMPLE	IA-015-A-29			IA-018-A-29			IA-021-A-29			IA-075-A-29		
SDG: 140-20195-1	LAB_ID	140-20195-6			140-20195-1			140-20195-12			140-20195-11		
FRACTION: OV-M3	SAMP_DATE	8/26/2020			8/26/2020			8/26/2020			8/26/2020		
MEDIA: AIR	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/M3			UG/M3			UG/M3			UG/M3		
	PCT_SOLIDS												
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1-TRICHLOROETHANE		1	U		1	U		1	U		1	U	
1,1,2-TRICHLOROETHANE		0.19	U		0.19	U		0.19	U		0.19	U	
1,1-DICHLOROETHANE		0.14	U		0.14	U		0.14	U		0.14	U	
1,1-DICHLOROETHENE		0.16	U		1.2	J	P	0.16	U		0.16	U	
1,2,3-TRIMETHYLBENZENE		0.88	U		0.88	U		0.88	U		0.88	U	
1,2,4-TRICHLOROBENZENE		2.4	U		2.4	U		2.4	U		2.4	U	
1,2,4-TRIMETHYLBENZENE		0.49	U		0.49	U		0.49	U		0.52	J	P
1,2-DICHLOROETHANE		0.2	U		0.2	U		0.2	U		0.2	U	
1,3,5-TRIMETHYLBENZENE		1.1	J	P	0.54	U		0.54	U		0.54	U	
BENZENE		0.25	J	P	0.51	J	P	0.26	J	P	0.41	J	P
CARBON TETRACHLORIDE		0.36	J	P	0.55	J	P	0.56	J	P	0.49	J	P
CHLORODIFLUOROMETHANE		1.2	J	P	1.2	J	P	1.2	J	P	3.4		
CHLOROFORM		0.53	J	P	19			0.17	U		0.2	J	P
CIS-1,2-DICHLOROETHENE		0.2	U		0.49	J	P	0.2	U		0.2	U	
DICHLORODIFLUOROMETHANE		2			1.7	J	P	2.2			1.9	J	P
ETHYLBENZENE		0.31	J	P	0.28	U		0.72	J	P	4.1		
METHYL TERT-BUTYL ETHER		0.94	U		0.94	U		0.94	U		0.94	U	
METHYLENE CHLORIDE		6.8	U		6.8	U		6.8	U		6.8		
NAPHTHALENE		1	U		1.2			1	U		1	U	
TETRACHLOROETHENE		0.24	U		0.24	U		0.24	U		0.24	U	
TOLUENE		1.7	J	P	1.5	U		18			200		
TOTAL XYLENES		1.2	J	P	0.52	U		2.7	J	P	17		
TRANS-1,2-DICHLOROETHENE		0.14	U		0.14	U		0.14	U		0.14	U	
TRICHLOROETHENE		0.16	U		5.8			0.16	U		0.16	U	
VINYL CHLORIDE		0.33	U		0.33	U		0.33	U		0.33	U	

PROJ_NO: 08388	NSAMPLE	IA-076-A-29			IA-078-A-29			IA-079-A-29			IA-081-A-29		
SDG: 140-20195-1	LAB_ID	140-20195-8			140-20195-7			140-20195-15			140-20195-17		
FRACTION: OV-M3	SAMP_DATE	8/26/2020			8/26/2020			8/26/2020			8/26/2020		
MEDIA: AIR	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/M3			UG/M3			UG/M3			UG/M3		
	PCT_SOLIDS												
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1-TRICHLOROETHANE		1	U		1	U		1	U		1	U	
1,1,2-TRICHLOROETHANE		0.19	U		0.19	U		0.19	U		0.19	U	
1,1-DICHLOROETHANE		0.14	U		0.14	U		0.14	U		0.14	U	
1,1-DICHLOROETHENE		0.16	U		0.16	U		0.16	U		0.16	U	
1,2,3-TRIMETHYLBENZENE		0.88	U		0.88	U		0.88	U		0.88	UJ	CE
1,2,4-TRICHLOROBENZENE		2.4	U		2.4	U		2.4	U		2.4	U	
1,2,4-TRIMETHYLBENZENE		0.49	U		0.49	U		0.49	U		0.57	J	P
1,2-DICHLOROETHANE		0.2	U		0.2	U		0.2	U		0.2	U	
1,3,5-TRIMETHYLBENZENE		0.54	U		0.54	U		0.54	U		0.54	U	
BENZENE		0.13	U		0.33	J	P	0.21	J	P	0.24	J	P
CARBON TETRACHLORIDE		0.52	J	P	0.47	J	P	0.45	J	P	0.3	J	P
CHLORODIFLUOROMETHANE		1.1	J	P	1.8			1.1	J	P	1.1	J	P
CHLOROFORM		0.48	J	P	0.17	U		0.17	U		0.17	U	
CIS-1,2-DICHLOROETHENE		0.2	U		0.2	U		0.2	U		0.2	U	
DICHLORODIFLUOROMETHANE		1.7	J	P	1.9	J	P	1.8	J	P	2		
ETHYLBENZENE		0.37	J	P	0.41	J	P	0.59	J	P	3.4		
METHYL TERT-BUTYL ETHER		0.94	U		0.94	U		0.94	U		0.94	U	
METHYLENE CHLORIDE		6.8	U		6.8	U		6.8	U		6.8	U	
NAPHTHALENE		1	U		1	U		1	U		1	U	
TETRACHLOROETHENE		0.24	U		0.24	U		0.24	U		0.24	U	
TOLUENE		13			7			6.7			110		
TOTAL XYLENES		2	J	P	2	J	P	3	J	P	14		
TRANS-1,2-DICHLOROETHENE		0.14	U		0.14	U		0.14	U		0.14	U	
TRICHLOROETHENE		0.16	U		0.16	U		0.16	U		0.16	U	
VINYL CHLORIDE		0.33	U		0.33	U		0.33	U		0.33	U	

PROJ_NO: 08388	NSAMPLE	IA-093-A-29			IA-100-B-29			IA-101-B-29			IA-117-A-29		
SDG: 140-20195-1	LAB_ID	140-20195-5			140-20195-18			140-20195-19			140-20195-14		
FRACTION: OV-M3	SAMP_DATE	8/26/2020			8/26/2020			8/26/2020			8/26/2020		
MEDIA: AIR	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/M3			UG/M3			UG/M3			UG/M3		
	PCT_SOLIDS												
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1-TRICHLOROETHANE		1	U		1	U		1	U		1	U	
1,1,2-TRICHLOROETHANE		0.19	U		0.19	U		0.19	U		0.19	U	
1,1-DICHLOROETHANE		0.14	U		0.14	U		0.14	U		0.14	U	
1,1-DICHLOROETHENE		0.98	J	P	0.16	U		0.16	U		0.16	U	
1,2,3-TRIMETHYLBENZENE		0.88	U		0.88	UJ	CE	0.88	UJ	CE	0.88	U	
1,2,4-TRICHLOROBENZENE		2.4	U		2.4	U		2.4	U		2.4	U	
1,2,4-TRIMETHYLBENZENE		0.49	U		0.49	U		0.49	U		0.49	U	
1,2-DICHLOROETHANE		0.2	U		0.2	U		0.2	U		0.2	U	
1,3,5-TRIMETHYLBENZENE		0.54	U		0.54	U		0.54	U		0.54	U	
BENZENE		0.36	J	P	0.13	U		0.27	J	P	0.13	J	P
CARBON TETRACHLORIDE		0.33	J	P	0.24	J	P	0.34	J	P	0.44	J	P
CHLORODIFLUOROMETHANE		1.2	J	P	2.2			1.5			1.4	J	P
CHLOROFORM		0.53	J	P	0.17	U		0.17	U		0.17	U	
CIS-1,2-DICHLOROETHENE		0.2	U		0.2	U		0.2	U		0.48	J	P
DICHLORODIFLUOROMETHANE		2			1.7	J	P	1.8	J	P	1.9	J	P
ETHYLBENZENE		0.41	J	P	0.77	J	P	0.43	J	P	0.63	J	P
METHYL TERT-BUTYL ETHER		0.94	U		0.94	U		0.94	U		0.94	U	
METHYLENE CHLORIDE		6.8	U		6.8	U		35			80		
NAPHTHALENE		1	U		1	U		1	U		1	U	
TETRACHLOROETHENE		0.24	U		3.3			0.24	U		0.24	U	
TOLUENE		1.5	J	P	15			13			9.5		
TOTAL XYLENES		0.52	U		3.2	J	P	1.9	J	P	2.9	J	P
TRANS-1,2-DICHLOROETHENE		0.14	U		0.14	U		0.14	U		0.14	U	
TRICHLOROETHENE		4.4			0.61	J	P	0.16	U		4.7		
VINYL CHLORIDE		0.33	U		0.33	U		0.33	U		0.33	U	

PROJ_NO: 08388	NSAMPLE	IA-118-A-29			IA-136-A-29			IA-138-A-29			IA-168-A-29		
SDG: 140-20195-1	LAB_ID	140-20195-16			140-20195-13			140-20195-3			140-20195-9		
FRACTION: OV-M3	SAMP_DATE	8/26/2020			8/26/2020			8/26/2020			8/26/2020		
MEDIA: AIR	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/M3			UG/M3			UG/M3			UG/M3		
	PCT_SOLIDS												
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1-TRICHLOROETHANE		1	U		1	U		1	U		1	U	
1,1,2-TRICHLOROETHANE		0.19	U		0.19	U		0.19	U		0.19	U	
1,1-DICHLOROETHANE		0.14	U		0.14	U		0.14	U		0.14	U	
1,1-DICHLOROETHENE		0.16	U		0.16	U		1.1	J	P	0.16	U	
1,2,3-TRIMETHYLBENZENE		0.88	U		0.88	U		0.88	U		0.88	U	
1,2,4-TRICHLOROBENZENE		2.4	U		2.4	U		2.4	U		2.4	U	
1,2,4-TRIMETHYLBENZENE		0.49	U		0.49	U		0.49	U		0.49	U	
1,2-DICHLOROETHANE		0.2	U		0.2	U		0.2	U		0.2	U	
1,3,5-TRIMETHYLBENZENE		0.54	U		0.54	U		0.54	U		0.54	U	
BENZENE		0.41	J	P	0.15	J	P	0.42	J	P	0.31	J	P
CARBON TETRACHLORIDE		0.61	J	P	0.52	J	P	0.58	J	P	0.31	J	P
CHLORODIFLUOROMETHANE		1.2	J	P	1.1	J	P	1.4	J	P	1.3	J	P
CHLOROFORM		0.17	U		0.17	U		0.62	J	P	0.17	U	
CIS-1,2-DICHLOROETHENE		0.2	U		0.2	U		0.2	U		0.2	U	
DICHLORODIFLUOROMETHANE		1.8	J	P	1.7	J	P	2.1			2.1		
ETHYLBENZENE		0.54	J	P	0.42	J	P	0.28	U		0.33	J	P
METHYL TERT-BUTYL ETHER		0.94	U		0.94	U		0.94	U		0.94	U	
METHYLENE CHLORIDE		14			6.8	U		6.8	U		6.8	U	
NAPHTHALENE		1	U		1	U		1	U		1	U	
TETRACHLOROETHENE		0.24	U		0.24	U		0.24	U		0.24	U	
TOLUENE		4.5			9.5			1.5	U		9.8		
TOTAL XYLENES		2.8	J	P	1.8	J	P	0.52	U		1.4	J	P
TRANS-1,2-DICHLOROETHENE		0.14	U		0.14	U		0.14	U		0.14	U	
TRICHLOROETHENE		0.16	U		0.16	U		7.7			0.16	UJ	G
VINYL CHLORIDE		0.33	U		0.33	U		0.33	U		0.33	U	

PROJ_NO: 08388	NSAMPLE	IA-174-A-29			IA-DUP 3-A-29			IA-DUP 4-A-29		
SDG: 140-20195-1	LAB_ID	140-20195-4			140-20195-2			140-20195-10		
FRACTION: OV-M3	SAMP_DATE	8/26/2020			8/26/2020			8/26/2020		
MEDIA: AIR	QC_TYPE	NM			FD			FD		
	UNITS	UG/M3			UG/M3			UG/M3		
	PCT_SOLIDS									
	DUP_OF				IA-018-A-29			IA-168-A-29		
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1-TRICHLOROETHANE		1	U		1	U		1	U	
1,1,2-TRICHLOROETHANE		0.19	U		0.19	U		0.19	U	
1,1-DICHLOROETHANE		0.14	U		0.14	U		0.14	U	
1,1-DICHLOROETHENE		0.73	J	P	1.2	J	P	0.16	U	
1,2,3-TRIMETHYLBENZENE		0.88	U		0.88	U		0.88	U	
1,2,4-TRICHLOROBENZENE		2.4	U		2.4	U		2.4	U	
1,2,4-TRIMETHYLBENZENE		0.49	U		0.49	U		0.49	U	
1,2-DICHLOROETHANE		0.2	U		0.2	U		0.2	U	
1,3,5-TRIMETHYLBENZENE		0.54	U		0.54	U		0.54	U	
BENZENE		0.41	J	P	0.43	J	P	0.43	J	P
CARBON TETRACHLORIDE		0.22	U		0.4	J	P	0.37	J	P
CHLORODIFLUOROMETHANE		1.2	J	P	1.1	J	P	1.6		
CHLOROFORM		0.3	J	P	20			0.17	U	
CIS-1,2-DICHLOROETHENE		0.2	U		0.2	U		0.33	J	P
DICHLORODIFLUOROMETHANE		2.1			1.7	J	P	1.7	J	P
ETHYLBENZENE		0.28	U		0.28	U		0.33	J	P
METHYL TERT-BUTYL ETHER		0.94	U		0.94	U		0.94	U	
METHYLENE CHLORIDE		7.6			6.8	U		6.8	U	
NAPHTHALENE		1	U		2.6			1	U	
TETRACHLOROETHENE		0.61	J	P	0.24	U		0.48	J	P
TOLUENE		1.6	J	P	1.7	J	P	9.8		
TOTAL XYLENES		1	J	P	0.52	U		1.5	J	P
TRANS-1,2-DICHLOROETHENE		0.14	U		0.14	U		0.14	U	
TRICHLOROETHENE		6.4			5.8			2.4	J	G
VINYL CHLORIDE		0.33	U		0.33	U		0.33	U	

Appendix B

Results as Reported by the Laboratory

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Client Sample ID: IA-015-A-29 Lab Sample ID: 140-20195-6

Matrix: Air Lab File ID: RI05P107.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 15:50

Sample wt/vol: 100(mL) Date Analyzed: 09/05/2020 19:30

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42483 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.079	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.058	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	0.34	J	0.40	0.11
67-66-3	Chloroform	119.38	0.11	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.41		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	0.072	J	0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.035
108-88-3	Toluene	92.14	0.46	J	0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	ND		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	0.22	J	0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.28	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	90		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Client Sample ID: IA-015-A-29 Lab Sample ID: 140-20195-6

Matrix: Air Lab File ID: RI05P107.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 15:50

Sample wt/vol: 100(mL) Date Analyzed: 09/05/2020 19:30

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42483 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.25	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.36	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	1.2	J	1.4	0.39
67-66-3	Chloroform	119.38	0.53	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.0		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	0.31	J	1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.24
108-88-3	Toluene	92.14	1.7	J	2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	ND		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	1.1	J	2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	1.2	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	90		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Client Sample ID: IA-018-A-29 Lab Sample ID: 140-20195-1

Matrix: Air Lab File ID: RI05P102.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 15:38

Sample wt/vol: 149(mL) Date Analyzed: 09/05/2020 15:23

Soil Aliquot Vol: Dilution Factor: 1.49

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42483 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.16	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.087	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	0.33	J	0.40	0.11
67-66-3	Chloroform	119.38	3.9		0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	0.12	J	0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.34	J	0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	0.31	J	0.40	0.040
100-41-4	Ethylbenzene	106.17	ND		0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	0.23		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.035
108-88-3	Toluene	92.14	ND		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	1.1		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	ND		0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	90		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Client Sample ID: IA-018-A-29 Lab Sample ID: 140-20195-1

Matrix: Air Lab File ID: RI05P102.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 15:38

Sample wt/vol: 149(mL) Date Analyzed: 09/05/2020 15:23

Soil Aliquot Vol: Dilution Factor: 1.49

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42483 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.51	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.55	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	1.2	J	1.4	0.39
67-66-3	Chloroform	119.38	19		2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	0.49	J	1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	1.7	J	2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	1.2	J	1.6	0.16
100-41-4	Ethylbenzene	106.17	ND		1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	1.2		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.24
108-88-3	Toluene	92.14	ND		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	5.8		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	ND		3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	90		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Client Sample ID: IA-021-A-29 Lab Sample ID: 140-20195-12

Matrix: Air Lab File ID: RI05P113.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 16:04

Sample wt/vol: 141(mL) Date Analyzed: 09/06/2020 00:32

Soil Aliquot Vol: Dilution Factor: 1.41

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42483 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.082	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.088	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	0.33	J	0.40	0.11
67-66-3	Chloroform	119.38	ND		0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.44		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	0.16	J	0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.035
108-88-3	Toluene	92.14	4.7		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	ND		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.63	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	92		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Client Sample ID: IA-021-A-29 Lab Sample ID: 140-20195-12

Matrix: Air Lab File ID: RI05P113.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 16:04

Sample wt/vol: 141(mL) Date Analyzed: 09/06/2020 00:32

Soil Aliquot Vol: Dilution Factor: 1.41

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42483 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.26	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.56	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	1.2	J	1.4	0.39
67-66-3	Chloroform	119.38	ND		2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.2		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	0.72	J	1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.24
108-88-3	Toluene	92.14	18		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	ND		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	2.7	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	92		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Client Sample ID: IA-075-A-29 Lab Sample ID: 140-20195-11

Matrix: Air Lab File ID: RI05P112.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 16:02

Sample wt/vol: 100(mL) Date Analyzed: 09/05/2020 23:43

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42483 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.13	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.078	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	0.97		0.40	0.11
67-66-3	Chloroform	119.38	0.041	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.39	J	0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	0.94		0.40	0.065
75-09-2	Methylene Chloride	84.93	2.0		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.035
108-88-3	Toluene	92.14	54		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	ND		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	0.11	J	0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	3.8		0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	92		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Client Sample ID: IA-075-A-29 Lab Sample ID: 140-20195-11

Matrix: Air Lab File ID: RI05P112.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 16:02

Sample wt/vol: 100(mL) Date Analyzed: 09/05/2020 23:43

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42483 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.41	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.49	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	3.4		1.4	0.39
67-66-3	Chloroform	119.38	0.20	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	1.9	J	2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	4.1		1.7	0.28
75-09-2	Methylene Chloride	84.93	6.8		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.24
108-88-3	Toluene	92.14	200		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	ND		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	0.52	J	2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	17		3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	92		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Client Sample ID: IA-076-A-29 Lab Sample ID: 140-20195-8

Matrix: Air Lab File ID: RI05P109.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 15:54

Sample wt/vol: 100(mL) Date Analyzed: 09/05/2020 21:13

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42483 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	ND		0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.082	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	0.30	J	0.40	0.11
67-66-3	Chloroform	119.38	0.098	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.35	J	0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	0.086	J	0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.035
108-88-3	Toluene	92.14	3.4		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	ND		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.46	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	90		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Client Sample ID: IA-076-A-29 Lab Sample ID: 140-20195-8

Matrix: Air Lab File ID: RI05P109.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 15:54

Sample wt/vol: 100(mL) Date Analyzed: 09/05/2020 21:13

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42483 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	ND		1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.52	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	1.1	J	1.4	0.39
67-66-3	Chloroform	119.38	0.48	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	1.7	J	2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	0.37	J	1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.24
108-88-3	Toluene	92.14	13		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	ND		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	2.0	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	90		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Client Sample ID: IA-078-A-29 Lab Sample ID: 140-20195-7

Matrix: Air Lab File ID: RI05P108.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 15:53

Sample wt/vol: 145(mL) Date Analyzed: 09/05/2020 20:22

Soil Aliquot Vol: Dilution Factor: 1.45

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42483 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.10	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.075	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	0.50		0.40	0.11
67-66-3	Chloroform	119.38	ND		0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.39	J	0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	0.094	J	0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.035
108-88-3	Toluene	92.14	1.9		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	ND		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.46	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	91		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Client Sample ID: IA-078-A-29 Lab Sample ID: 140-20195-7

Matrix: Air Lab File ID: RI05P108.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 15:53

Sample wt/vol: 145(mL) Date Analyzed: 09/05/2020 20:22

Soil Aliquot Vol: Dilution Factor: 1.45

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42483 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.33	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.47	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	1.8		1.4	0.39
67-66-3	Chloroform	119.38	ND		2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	1.9	J	2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	0.41	J	1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.24
108-88-3	Toluene	92.14	7.0		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	ND		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	2.0	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	91		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Client Sample ID: IA-079-A-29 Lab Sample ID: 140-20195-15

Matrix: Air Lab File ID: RI05P116.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 16:09

Sample wt/vol: 145(mL) Date Analyzed: 09/06/2020 02:55

Soil Aliquot Vol: Dilution Factor: 1.45

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42483 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.065	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.072	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	0.30	J	0.40	0.11
67-66-3	Chloroform	119.38	ND		0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.37	J	0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	0.14	J	0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.035
108-88-3	Toluene	92.14	1.8		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	ND		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.68	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	89		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Client Sample ID: IA-079-A-29 Lab Sample ID: 140-20195-15

Matrix: Air Lab File ID: RI05P116.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 16:09

Sample wt/vol: 145(mL) Date Analyzed: 09/06/2020 02:55

Soil Aliquot Vol: Dilution Factor: 1.45

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42483 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.21	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.45	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	1.1	J	1.4	0.39
67-66-3	Chloroform	119.38	ND		2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	1.8	J	2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	0.59	J	1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.24
108-88-3	Toluene	92.14	6.7		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	ND		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	3.0	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	89		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Client Sample ID: IA-081-A-29 Lab Sample ID: 140-20195-17

Matrix: Air Lab File ID: GI05P113.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 16:15

Sample wt/vol: 100(mL) Date Analyzed: 09/06/2020 02:17

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42481 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.074	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.047	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	0.31	J	0.40	0.11
67-66-3	Chloroform	119.38	ND		0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.40		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	0.79		0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.035
108-88-3	Toluene	92.14	29		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	ND		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND	*	0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	0.12	J	0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	3.3		0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	97		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Client Sample ID: IA-081-A-29 Lab Sample ID: 140-20195-17

Matrix: Air Lab File ID: GI05P113.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 16:15

Sample wt/vol: 100(mL) Date Analyzed: 09/06/2020 02:17

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42481 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.24	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.30	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	1.1	J	1.4	0.39
67-66-3	Chloroform	119.38	ND		2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.0		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	3.4		1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.24
108-88-3	Toluene	92.14	110		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	ND		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND	*	2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	0.57	J	2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	14		3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	97		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Client Sample ID: IA-093-A-29 Lab Sample ID: 140-20195-5

Matrix: Air Lab File ID: RI05P106.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 15:45

Sample wt/vol: 100(mL) Date Analyzed: 09/05/2020 18:41

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42483 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.11	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.052	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	0.34	J	0.40	0.11
67-66-3	Chloroform	119.38	0.11	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.41		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	0.25	J	0.40	0.040
100-41-4	Ethylbenzene	106.17	0.095	J	0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.035
108-88-3	Toluene	92.14	0.39	J	0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	0.82		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	ND		0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	90		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Client Sample ID: IA-093-A-29 Lab Sample ID: 140-20195-5

Matrix: Air Lab File ID: RI05P106.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 15:45

Sample wt/vol: 100(mL) Date Analyzed: 09/05/2020 18:41

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42483 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.36	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.33	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	1.2	J	1.4	0.39
67-66-3	Chloroform	119.38	0.53	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.0		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	0.98	J	1.6	0.16
100-41-4	Ethylbenzene	106.17	0.41	J	1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.24
108-88-3	Toluene	92.14	1.5	J	2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	4.4		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	ND		3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	90		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Client Sample ID: IA-100-B-29 Lab Sample ID: 140-20195-18

Matrix: Air Lab File ID: GI05P114.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 16:20

Sample wt/vol: 165(mL) Date Analyzed: 09/06/2020 03:04

Soil Aliquot Vol: Dilution Factor: 1.65

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42481 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	ND		0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.038	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	0.62		0.40	0.11
67-66-3	Chloroform	119.38	ND		0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.34	J	0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	0.18	J	0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	0.49		0.40	0.035
108-88-3	Toluene	92.14	4.1		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	0.11	J	0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND	*	0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.73	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	96		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Client Sample ID: IA-100-B-29 Lab Sample ID: 140-20195-18

Matrix: Air Lab File ID: GI05P114.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 16:20

Sample wt/vol: 165(mL) Date Analyzed: 09/06/2020 03:04

Soil Aliquot Vol: Dilution Factor: 1.65

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42481 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	ND		1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.24	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	2.2		1.4	0.39
67-66-3	Chloroform	119.38	ND		2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	1.7	J	2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	0.77	J	1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	3.3		2.7	0.24
108-88-3	Toluene	92.14	15		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	0.61	J	1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND	*	2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	3.2	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	96		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Client Sample ID: IA-101-B-29 Lab Sample ID: 140-20195-19

Matrix: Air Lab File ID: GI05P115.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 16:22

Sample wt/vol: 100(mL) Date Analyzed: 09/06/2020 03:49

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42481 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.085	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.054	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	0.42		0.40	0.11
67-66-3	Chloroform	119.38	ND		0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.37	J	0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	0.10	J	0.40	0.065
75-09-2	Methylene Chloride	84.93	10		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.035
108-88-3	Toluene	92.14	3.6		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	ND		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND	*	0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.43	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	96		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Client Sample ID: IA-101-B-29 Lab Sample ID: 140-20195-19

Matrix: Air Lab File ID: GI05P115.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 16:22

Sample wt/vol: 100(mL) Date Analyzed: 09/06/2020 03:49

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42481 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.27	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.34	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	1.5		1.4	0.39
67-66-3	Chloroform	119.38	ND		2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	1.8	J	2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	0.43	J	1.7	0.28
75-09-2	Methylene Chloride	84.93	35		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.24
108-88-3	Toluene	92.14	13		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	ND		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND	*	2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	1.9	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	96		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Client Sample ID: IA-117-A-29 Lab Sample ID: 140-20195-14

Matrix: Air Lab File ID: RI05P115.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 16:07

Sample wt/vol: 100(mL) Date Analyzed: 09/06/2020 02:07

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42483 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.040	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.070	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	0.38	J	0.40	0.11
67-66-3	Chloroform	119.38	ND		0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	0.12	J	0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.38	J	0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	0.15	J	0.40	0.065
75-09-2	Methylene Chloride	84.93	23		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.035
108-88-3	Toluene	92.14	2.5		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	0.87		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.67	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	91		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Client Sample ID: IA-117-A-29 Lab Sample ID: 140-20195-14

Matrix: Air Lab File ID: RI05P115.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 16:07

Sample wt/vol: 100(mL) Date Analyzed: 09/06/2020 02:07

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42483 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.13	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.44	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	1.4	J	1.4	0.39
67-66-3	Chloroform	119.38	ND		2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	0.48	J	1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	1.9	J	2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	0.63	J	1.7	0.28
75-09-2	Methylene Chloride	84.93	80		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.24
108-88-3	Toluene	92.14	9.5		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	4.7		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	2.9	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	91		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Client Sample ID: IA-118-A-29 Lab Sample ID: 140-20195-16

Matrix: Air Lab File ID: RI05P201R.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 16:11

Sample wt/vol: 100(mL) Date Analyzed: 09/06/2020 05:18

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42483 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.13	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.097	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	0.34	J	0.40	0.11
67-66-3	Chloroform	119.38	ND		0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.37	J	0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	0.12	J	0.40	0.065
75-09-2	Methylene Chloride	84.93	3.9		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.035
108-88-3	Toluene	92.14	1.2		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	ND		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.64	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	90		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Client Sample ID: IA-118-A-29 Lab Sample ID: 140-20195-16

Matrix: Air Lab File ID: RI05P201R.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 16:11

Sample wt/vol: 100(mL) Date Analyzed: 09/06/2020 05:18

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42483 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.41	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.61	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	1.2	J	1.4	0.39
67-66-3	Chloroform	119.38	ND		2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	1.8	J	2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	0.54	J	1.7	0.28
75-09-2	Methylene Chloride	84.93	14		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.24
108-88-3	Toluene	92.14	4.5		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	ND		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	2.8	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	90		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Client Sample ID: IA-136-A-29 Lab Sample ID: 140-20195-13

Matrix: Air Lab File ID: RI05P114.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 16:05

Sample wt/vol: 156(mL) Date Analyzed: 09/06/2020 01:20

Soil Aliquot Vol: Dilution Factor: 1.56

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42483 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.045	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.083	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	0.30	J	0.40	0.11
67-66-3	Chloroform	119.38	ND		0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.35	J	0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	0.096	J	0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.035
108-88-3	Toluene	92.14	2.5		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	ND		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.41	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	91		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Client Sample ID: IA-136-A-29 Lab Sample ID: 140-20195-13

Matrix: Air Lab File ID: RI05P114.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 16:05

Sample wt/vol: 156(mL) Date Analyzed: 09/06/2020 01:20

Soil Aliquot Vol: Dilution Factor: 1.56

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42483 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.15	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.52	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	1.1	J	1.4	0.39
67-66-3	Chloroform	119.38	ND		2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	1.7	J	2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	0.42	J	1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.24
108-88-3	Toluene	92.14	9.5		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	ND		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	1.8	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	91		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Client Sample ID: IA-138-A-29 Lab Sample ID: 140-20195-3

Matrix: Air Lab File ID: RI05P104.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 15:40

Sample wt/vol: 100(mL) Date Analyzed: 09/05/2020 17:01

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42483 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.13	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.093	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	0.39	J	0.40	0.11
67-66-3	Chloroform	119.38	0.13	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.42		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	0.27	J	0.40	0.040
100-41-4	Ethylbenzene	106.17	ND		0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.035
108-88-3	Toluene	92.14	ND		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	1.4		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	ND		0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	90		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Client Sample ID: IA-138-A-29 Lab Sample ID: 140-20195-3

Matrix: Air Lab File ID: RI05P104.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 15:40

Sample wt/vol: 100(mL) Date Analyzed: 09/05/2020 17:01

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42483 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.42	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.58	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	1.4	J	1.4	0.39
67-66-3	Chloroform	119.38	0.62	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.1		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	1.1	J	1.6	0.16
100-41-4	Ethylbenzene	106.17	ND		1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.24
108-88-3	Toluene	92.14	ND		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	7.7		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	ND		3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	90		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Client Sample ID: IA-168-A-29 Lab Sample ID: 140-20195-9

Matrix: Air Lab File ID: RI05P110.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 15:56

Sample wt/vol: 100(mL) Date Analyzed: 09/05/2020 22:03

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42483 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.096	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.049	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	0.38	J	0.40	0.11
67-66-3	Chloroform	119.38	ND		0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.42		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	0.077	J	0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.035
108-88-3	Toluene	92.14	2.6		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	ND		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.33	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	91		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Client Sample ID: IA-168-A-29 Lab Sample ID: 140-20195-9

Matrix: Air Lab File ID: RI05P110.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 15:56

Sample wt/vol: 100(mL) Date Analyzed: 09/05/2020 22:03

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42483 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.31	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.31	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	1.3	J	1.4	0.39
67-66-3	Chloroform	119.38	ND		2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.1		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	0.33	J	1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.24
108-88-3	Toluene	92.14	9.8		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	ND		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	1.4	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	91		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Client Sample ID: IA-174-A-29 Lab Sample ID: 140-20195-4

Matrix: Air Lab File ID: RI05P105.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 15:44

Sample wt/vol: 100(mL) Date Analyzed: 09/05/2020 17:51

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42483 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.13	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	ND		0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	0.34	J	0.40	0.11
67-66-3	Chloroform	119.38	0.062	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.43		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	0.18	J	0.40	0.040
100-41-4	Ethylbenzene	106.17	ND		0.40	0.065
75-09-2	Methylene Chloride	84.93	2.2		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	0.090	J	0.40	0.035
108-88-3	Toluene	92.14	0.42	J	0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	1.2		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.24	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	91		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Client Sample ID: IA-174-A-29 Lab Sample ID: 140-20195-4

Matrix: Air Lab File ID: RI05P105.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 15:44

Sample wt/vol: 100(mL) Date Analyzed: 09/05/2020 17:51

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42483 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.41	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	ND		2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	1.2	J	1.4	0.39
67-66-3	Chloroform	119.38	0.30	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.1		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	0.73	J	1.6	0.16
100-41-4	Ethylbenzene	106.17	ND		1.7	0.28
75-09-2	Methylene Chloride	84.93	7.6		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	0.61	J	2.7	0.24
108-88-3	Toluene	92.14	1.6	J	2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	6.4		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	1.0	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	91		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Client Sample ID: IA-DUP 3-A-29 Lab Sample ID: 140-20195-2

Matrix: Air Lab File ID: RI05P103.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 00:00

Sample wt/vol: 100(mL) Date Analyzed: 09/05/2020 16:12

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42483 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.13	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.064	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	0.32	J	0.40	0.11
67-66-3	Chloroform	119.38	4.1		0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.35	J	0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	0.31	J	0.40	0.040
100-41-4	Ethylbenzene	106.17	ND		0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	0.49		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.035
108-88-3	Toluene	92.14	0.46	J	0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	1.1		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	ND		0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	90		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Client Sample ID: IA-DUP 3-A-29 Lab Sample ID: 140-20195-2

Matrix: Air Lab File ID: RI05P103.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 00:00

Sample wt/vol: 100(mL) Date Analyzed: 09/05/2020 16:12

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42483 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.43	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.40	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	1.1	J	1.4	0.39
67-66-3	Chloroform	119.38	20		2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	1.7	J	2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	1.2	J	1.6	0.16
100-41-4	Ethylbenzene	106.17	ND		1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	2.6		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.24
108-88-3	Toluene	92.14	1.7	J	2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	5.8		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	ND		3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	90		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Client Sample ID: IA-DUP 4-A-29 Lab Sample ID: 140-20195-10

Matrix: Air Lab File ID: RI05P111.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 00:00

Sample wt/vol: 156(mL) Date Analyzed: 09/05/2020 22:54

Soil Aliquot Vol: Dilution Factor: 1.56

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42483 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.14	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.059	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	0.44		0.40	0.11
67-66-3	Chloroform	119.38	ND		0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	0.083	J	0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.34	J	0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	0.075	J	0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	0.071	J	0.40	0.035
108-88-3	Toluene	92.14	2.6		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	0.45		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.34	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	92		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Client Sample ID: IA-DUP 4-A-29 Lab Sample ID: 140-20195-10

Matrix: Air Lab File ID: RI05P111.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 00:00

Sample wt/vol: 156(mL) Date Analyzed: 09/05/2020 22:54

Soil Aliquot Vol: Dilution Factor: 1.56

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42483 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.43	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.37	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	1.6		1.4	0.39
67-66-3	Chloroform	119.38	ND		2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	0.33	J	1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	1.7	J	2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	0.33	J	1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	0.48	J	2.7	0.24
108-88-3	Toluene	92.14	9.8		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	2.4		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	1.5	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	92		60-140

Appendix C

Support Documentation

Comments
No additional comments.

Receipt
The samples were received on 8/28/2020 10:00 AM; the samples arrived in good condition, and where required, properly preserved and on ice.

Air - GC/MS VOA
Methods 3005A, TO 15 LL, TO-14A, TO-15: EPA methods TO-14A and TO-15 specify the use of humidified "zero air" as the blank reagent for canister cleaning, instrument calibration and sample analysis. Ultra-high purity humidified nitrogen from a cryogenic reservoir is used in place of "zero air" by TestAmerica Knoxville.

Methods TO 15 LL, TO-15: Although the BFB is flagged as outside control limits for TO-14 on batch 140-42481, the results are within limits for TO-15, which is required for this project.

Methods TO 15 LL, TO-15: The continuing calibration verification (CCV) associated with batch 140-42481 exhibited % difference of > 30% for the following analyte(s) 1,2,3-Trimethylbenzene and 1,4-dioxane; however, the results were within the LCS acceptance limits. The EPA method requires that all target analytes in the continuing calibration verification standard be within 30% difference from the initial calibration. According to the laboratory standard operating procedure, the continuing calibration is acceptable if it meets the laboratory control sample acceptance criteria.

Method TO 15 LL: The following analyte(s) recovered outside control limits for the LCS associated with analytical batch 140-42481: 1,2,3-Trimethylbenzene. This is not indicative of a systematic control problem because these were random marginal exceedances. Qualified results have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Qualifiers

Air - GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Method Summary

Client: Tetra Tech, Inc.
Project/Site: Middle River - MRC

Job ID: 140-20195-1

Method	Method Description	Protocol	Laboratory
TO 15 LL	Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)	EPA	TAL KNX

Protocol References:

EPA = US Environmental Protection Agency

Laboratory References:

TAL KNX = Eurofins TestAmerica, Knoxville, 5815 Middlebrook Pike, Knoxville, TN 37921, TEL (865)291-3000

Sample Summary

Client: Tetra Tech, Inc.
Project/Site: Middle River - MRC

Job ID: 140-20195-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
140-20195-1	IA-018-A-29	Air	08/26/20 15:38	08/29/20 09:54	Air Canister (1-Liter) #34002427
140-20195-2	IA-DUP 3-A-29	Air	08/26/20 00:00	08/29/20 09:54	Air Canister (1-Liter) #34000768
140-20195-3	IA-138-A-29	Air	08/26/20 15:40	08/29/20 09:54	Air Canister (1-Liter) #09787
140-20195-4	IA-174-A-29	Air	08/26/20 15:44	08/29/20 09:54	Air Canister (1-Liter) #09632
140-20195-5	IA-093-A-29	Air	08/26/20 15:45	08/29/20 09:54	Air Canister (1-Liter) #11592
140-20195-6	IA-015-A-29	Air	08/26/20 15:50	08/29/20 09:54	Air Canister (1-Liter) #11806
140-20195-7	IA-078-A-29	Air	08/26/20 15:53	08/29/20 09:54	Air Canister (1-Liter) #34002420
140-20195-8	IA-076-A-29	Air	08/26/20 15:54	08/29/20 09:54	Air Canister (1-Liter) #11877
140-20195-9	IA-168-A-29	Air	08/26/20 15:56	08/29/20 09:54	Air Canister (1-Liter) #11840
140-20195-10	IA-DUP 4-A-29	Air	08/26/20 00:00	08/29/20 09:54	Air Canister (1-Liter) #10924
140-20195-11	IA-075-A-29	Air	08/26/20 16:02	08/29/20 09:54	Air Canister (1-Liter) #11858
140-20195-12	IA-021-A-29	Air	08/26/20 16:04	08/29/20 09:54	Air Canister (1-Liter) #10758
140-20195-13	IA-136-A-29	Air	08/26/20 16:05	08/29/20 09:54	Air Canister (1-Liter) #10736
140-20195-14	IA-117-A-29	Air	08/26/20 16:07	08/29/20 09:54	Air Canister (1-Liter) #34001625
140-20195-15	IA-079-A-29	Air	08/26/20 16:09	08/29/20 09:54	Air Canister (1-Liter) #34001971
140-20195-16	IA-118-A-29	Air	08/26/20 16:11	08/29/20 09:54	Air Canister (1-Liter) #10739
140-20195-17	IA-081-A-29	Air	08/26/20 16:15	08/29/20 09:54	Air Canister (1-Liter) #34000687
140-20195-18	IA-100-B-29	Air	08/26/20 16:20	08/29/20 09:54	Air Canister (1-Liter) #11658
140-20195-19	IA-101-B-29	Air	08/26/20 16:22	08/29/20 09:54	Air Canister (1-Liter) #34001187

Eurofins TestAmerica, Knoxville
5815 Middlebrook Pike

Knoxville, TN 37921-5947
phone 865.291.3000 fax 865.584.4315

Baltimore #201

Canister Samples Chain of Custody Record

TestAmerica Laboratories, Inc. assumes no liability with respect to the collection and shipment of these samples.

140-20195 Chain of Custody

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact Information	**Client Project Manager:** Josh Mullis	**Samples Collected By:** Mullis / Pryor	COC No: 4
Company Name: Tetra Tech Inc	Phone: 410-279-2700		3 of 4 COCs
Address: 20251 Century Blvd. Ste 200	Email: josh.mullis@tetratech.com		TALS Project #:
City/State/Zip: Germantown, MD 20874			For Lab Use Only:
Phone: 410-279-2700	Site Contact: Josh Mullis		Walk-in Client:
FAX:	Tel/Fax: " "		Lab Sampling:
Project Name: MRC Indoor Air	Analysis Turnaround Time		
Site/Location: Middle River Complex	Standard (Specific): ✓		Job / SDG No.:
P O # 112IC08388	Rush (Specifiy):		(See below for Add'l Items)

Sample Identification	Sample Start Date	Time Start	Sample End Date	Time Stop	Canister Vacuum in Field, "Hg (Start)	Canister Vacuum in Field, "Hg (Stop)	Flow Controller ID	Canister ID	TO-14/15 (Standard / Low Level)	TO-15 SIM	EPA 3C	EPA 25C	ASTM D-1946	EPA 15/16	Other (Please specify in notes section)	Sample Type	Indoor Air/Ambient Air	Sub-Slab	Soil Gas	Soil Vapor Extraction (SVE)	Landfill Gas	Other (Please specify in notes section)	Sample Specific Notes:
IA-018-A-29	8/26/20	0738	8/26/20	1538	-30	-10	8556	34002427	X								X						
IA-DUP3-A-29	↓	0000	↓	0000	-30	-5	10856	34000268	X								X						
IA-138-A-29	↓	0740	↓	1540	-30	-3	7361	09787	X								X						
IA-174-A-29	↓	0744	↓	1544	-28	-3	09855	09632	X								X						
IA-093-A-29	↓	0745	↓	1545	-28	-4	11581	11592	X								X						
IA-015-A-29	↓	0750	↓	1550	-29	-5	09866	11806	X								X						
IA-078-A-29	↓	0753	↓	1553	-30	-7	8549	34002420	X								X						
IA-076-A-29	↓	0754	↓	1554	-30	-5	11816	11877	X								X						
IA-168-A-29	↓	0756	↓	1556	-30	-4	10691	11840	X								X						
IA-DUP4-A-29	↓	0000	↓	0000	-29	0	7146	10924	X								X						

Temperature (Fahrenheit)			
Start	Interior	Ambient	
Stop			

Pressure (inches of Hg)			
Start	Interior	Ambient	
Stop			

Received @ ambient, 2 boxes
Fedex Po, Custody seal intact
trk# 7713 7973 0234
" " 0370
KW 8/28/20

Special Instructions/QC Requirements & Comments:

Samples Shipped by: [signature]	Date / Time: 8/27/20 1230	Samples Received by: [signature] 1230	4T
Samples Relinquished by: [signature]	Date / Time: 8/27/20 1700	Received by: [signature] ETA 8/28/20 1000	22 cams, 22 flows
Relinquished by:	Date / Time:	Received by:	
Lab Use Only: Shipper Name:	Opened by:	Condition:	

Form No. CA-C-WI-003, Rev. 2.23, dated 5/4/2020

Baltimore #201

Eurofins TestAmerica, Knoxville
5815 Middlebrook Pike

Knoxville, TN 37921-5947
phone 865.291.3000 fax 865.584.4315

Canister Samples Chain of Custody Record

TestAmerica Laboratories, Inc. assumes no liability with respect to the collection and shipment of these samples.

eurofins | Environment Testing TestAmerica

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact Information		Client Project Manager: Josh Mullis	Samples Collected By: Mullis / Pryor	COC No: 4 of 4 COCs
Company Name: Tetra Tech Inc		Phone: 410-279-2700		TALS Project #:
Address: 20251 Century Blvd - Ste 200		Email: josh.mullis@tetratech.com		For Lab Use Only:
City/State/Zip: Germantown, MD 20874				Walk-in Client:
Phone: 410-279-2700		Site Contact: Josh Mullis		Lab Sampling:
FAX:		Tel/Fax: " "		
Project Name: MRC Indoor Air		Analysis Turnaround Time		Job / SDG No.:
Site/Location: Middle River Complex		Standard (Specific): ✓		(See below for Add'l Items)
P O # 112IC08388		Rush (Specifiy):		

Sample Identification	Sample Start Date	Time Start	Sample End Date	Time Stop	Canister Vacuum in Field, "Hg (Start)	Canister Vacuum in Field, "Hg (Stop)	Flow Controller ID	Canister ID	TO-14/15 (Standard / Low Level)	TO-15 SIM	EPA 3C	EPA 25C	ASTM D-1946	EPA 15/16	Other (Please specify in notes section)	Sample Type	Indoor Air/Ambient Air	Sub-Slab	Soil Gas	Soil Vapor Extraction (SVE)	Landfill Gas	Other (Please specify in notes section)	Sample Specific Notes:
IA-075A-29	8/26/20	0802	8/26/20	1602	-30	-5	10645	11858	X								X						
IA-021-A-29		0804		1604	-30	-8	7596	10758	X								X						
IA-136-A-29		0805		1605	-29	-9	8815	10736	X								X						
IA-117-A-29		0807		1607	-30	-4	09648	34001625	X								X						
IA-079-A-29		0809		1609	-30	-10	11500	34001971	X								X						
IA-118-A-29		0811		1611	-30	-3	11479	10739	X								X						
IA-081-A-29		0815		1615	-30	-4	6919	34000687	X								X						
IA-100-B-29		0820		1620	-30	-10	7066	11658	X								X						
IA-101-B-29		0822		1622	-30	-5	4769	34001187	X								X						

Temperature (Fahrenheit)			
Start	Interior	Ambient	
Stop			

Pressure (inches of Hg)			
Start	Interior	Ambient	
Stop			

Special Instructions/QC Requirements & Comments:

Samples Shipped by: Walt Pry	Date / Time: 8/27/20 1230	Samples Received by: [signature] 1230	
Samples Relinquished by: [signature]	Date / Time: 8/27/20 1700	Received by: [signature] ETA 8/28/20 1000	
Relinquished by:	Date / Time:	Received by:	
Lab Use Only: Shipper Name:	Opened by:	Condition:	

Form No. CA-C-WI-003, Rev. 2.23, dated 5/4/2020

EUROFINS/TESTAMERICA KNOXVILLE SAMPLE RECEIPT/CONDITION UPON RECEIPT ANOMALY CHECKLIST **Log In Number:** Loc: 140 **20195**

Review Items	Yes	No	NA	If No, what was the problem?
1. Are the shipping containers intact?	/			☐ **Containers, Broken**
2. Were ambient air containers received intact?			/	☑ Checked in lab
3. The coolers/containers custody seal if present, is it intact?	/			☐ Yes ☐ NA
4. Is the cooler temperature within limits? (> freezing temp. of water to 6 °C, VOST: 10°C) Thermometer ID :_____ Correction factor: _____			/	☐ **Cooler Out of Temp, Client Contacted, Proceed/Cancel** ☐ **Cooler Out of Temp, Same Day Receipt**
5. Were all of the sample containers received intact?	/			☐ **Containers, Broken**
6. Were samples received in appropriate containers?	/			☐ **Containers, Improper; Client Contacted; Proceed/Cancel**
7. Do sample container labels match COC? (IDs, Dates, Times)	/			☐ **COC & Samples Do Not Match** ☐ **COC Incorrect/Incomplete** ☐ **COC Not Received**
8. Were all of the samples listed on the COC received?	/			☐ **Sample Received, Not on COC** ☐ **Sample on COC, Not Received**
9. Is the date/time of sample collection noted?	/			☐ **COC; No Date/Time; Client Contacted**
10. Was the sampler identified on the COC?	/			☐ **Sampler Not Listed on COC**
11. Is the client and project name/# identified?	/			☐ **COC Incorrect/Incomplete**
12. Are tests/parameters listed for each sample?	/			☐ **COC No tests on COC**
13. Is the matrix of the samples noted?	/			☐ **COC Incorrect/Incomplete**
14. Was COC relinquished? (Signed/Dated/Timed)	/			☐ **COC Incorrect/Incomplete**
15. Were samples received within holding time?	/			☐ **Holding Time - Receipt**
16. Were samples received with correct chemical preservative (excluding Encore)?			/	☐ **pH Adjusted, pH Included (See box 16A)** ☐ **Incorrect Preservative**
17. Were VOA samples received without headspace?			/	☐ **Headspace (VOA only)**
18. Did you check for residual chlorine, if necessary? (e.g. 1613B, 1668) Chlorine test strip lot number: _____			/	☐ **Residual Chlorine**
19. For 1613B water samples is pH<9?			/	☐ If no, notify lab to adjust
20. For rad samples was sample activity info. Provided?			/	☐ Project missing info

Comments/Actions Taken

Labeling Verified by: **Date:**

pH test strip lot number:

	Box 16A: pH Preservation	Box 18A: Residual Chlorine
Preservative:		
Lot Number:		
Exp Date:		
Analyst:		
Date:		
Time:		

Project #: 14002945 PM Instructions: _____

Sample Receiving Associate: KC Date: 8/28/20

QA026R32.doc, 062719

09/10/2020

FIELD DUPLICATE PRECISION

ORIGINAL ID	DUP ID	FRACTION	ANALYTE	ORIGINAL	DUPLICATE	RL	RL1	RL2	RPD	RPD > 50%	ORIGINAL SAMPLE CONC >RL	DUPLICATE SAMPLE CONC >RL	DIFFERENCE >2XRL
IA-018-A-29	IA-DUP 3-A-29	OV-M3	1,1-DICHLOROETHENE	1.2 J	1.2 J	1.6	1.6	1.6	0.00	FALSE	FALSE	FALSE	FALSE
IA-018-A-29	IA-DUP 3-A-29	OV-M3	BENZENE	0.51 J	0.43 J	1.3	1.3	1.3	17.02	FALSE	FALSE	FALSE	FALSE
IA-018-A-29	IA-DUP 3-A-29	OV-M3	CARBON TETRACHLORIDE	0.55 J	0.4 J	2.5	2.5	2.5	31.58	FALSE	FALSE	FALSE	FALSE
IA-018-A-29	IA-DUP 3-A-29	OV-M3	CHLORODIFLUOROMETHANE	1.2 J	1.1 J	1.4	1.4	1.4	8.70	FALSE	FALSE	FALSE	FALSE
IA-018-A-29	IA-DUP 3-A-29	OV-M3	CHLOROFORM	19	20	2	2	2	5.13	FALSE	TRUE	TRUE	FALSE
IA-018-A-29	IA-DUP 3-A-29	OV-M3	CIS-1,2-DICHLOROETHENE	0.49 J	0.2 U	1.6	1.6	1.6	~~84.86~~	~~TRUE~~	FALSE	FALSE	FALSE
IA-018-A-29	IA-DUP 3-A-29	OV-M3	DICHLORODIFLUOROMETHANE	1.7 J	1.7 J	2	2	2	0.00	FALSE	FALSE	FALSE	FALSE
IA-018-A-29	IA-DUP 3-A-29	OV-M3	NAPHTHALENE	1.2	2.6	1	1	1	73.68	TRUE	TRUE	TRUE	FALSE
IA-018-A-29	IA-DUP 3-A-29	OV-M3	TOLUENE	1.5 U	1.7 J	2.3	2.3	2.3	12.50	FALSE	FALSE	FALSE	FALSE
IA-018-A-29	IA-DUP 3-A-29	OV-M3	TRICHLOROETHENE	5.8	5.8	1.1	1.1	1.1	0.00	FALSE	TRUE	TRUE	FALSE

FIELD DUPLICATE PRECISION

ORIGINAL ID	DUP ID	FRACTION	ANALYTE	ORIGINAL	DUPLICATE	RL	RL1	RL2	RPD	RPD > 50%	ORIGINAL SAMPLE CONC >RL	DUPLICATE SAMPLE CONC >RL	DIFFERENCE >2XRL
IA-168-A-29	IA-DUP 4-A-29	OV-M3	BENZENE	0.31 J	0.43 J	1.3	1.3	1.3	32.43	FALSE	FALSE	FALSE	FALSE
IA-168-A-29	IA-DUP 4-A-29	OV-M3	CARBON TETRACHLORIDE	0.31 J	0.37 J	2.5	2.5	2.5	17.65	FALSE	FALSE	FALSE	FALSE
IA-168-A-29	IA-DUP 4-A-29	OV-M3	CHLORODIFLUOROMETHANE	1.3 J	1.6	1.4	1.4	1.4	20.69	FALSE	FALSE	TRUE	FALSE
IA-168-A-29	IA-DUP 4-A-29	OV-M3	CIS-1,2-DICHLOROETHENE	0.2 U	0.33 J	1.6	1.6	1.6	49.06	FALSE	FALSE	FALSE	FALSE
IA-168-A-29	IA-DUP 4-A-29	OV-M3	DICHLORODIFLUOROMETHANE	2.1	1.7 J	2	2	2	21.05	FALSE	TRUE	FALSE	FALSE
IA-168-A-29	IA-DUP 4-A-29	OV-M3	ETHYLBENZENE	0.33 J	0.33 J	1.7	1.7	1.7	0.00	FALSE	FALSE	FALSE	FALSE
IA-168-A-29	IA-DUP 4-A-29	OV-M3	TETRACHLOROETHENE	0.24 U	0.48 J	2.7	2.7	2.7	~~66.67~~	~~TRUE~~	FALSE	FALSE	FALSE
IA-168-A-29	IA-DUP 4-A-29	OV-M3	TOLUENE	9.8	9.8	2.3	2.3	2.3	0.00	FALSE	TRUE	TRUE	FALSE
IA-168-A-29	IA-DUP 4-A-29	OV-M3	TOTAL XYLENES	1.4 J	1.5 J	3.5	3.5	3.5	6.90	FALSE	FALSE	FALSE	FALSE
IA-168-A-29	IA-DUP 4-A-29	OV-M3	TRICHLOROETHENE	0.16 U	2.4	1.1	1.1	1.1	~~175.00~~	~~TRUE~~	FALSE	TRUE	TRUE

Method TO15 Low Level

Volatile Organic Compounds - Low level (GC/MS) by Method TO 15

FORM II
AIR - GC/MS VOA SURROGATE RECOVERY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Matrix: Air Level: Low

GC Column (1): RTX-5 ID: 0.32(mm)

Client Sample ID	Lab Sample ID	BFB #
IA-018-A-29	140-20195-1	90
IA-DUP 3-A-29	140-20195-2	90
IA-138-A-29	140-20195-3	90
IA-174-A-29	140-20195-4	91
IA-093-A-29	140-20195-5	90
IA-015-A-29	140-20195-6	90
IA-078-A-29	140-20195-7	91
IA-076-A-29	140-20195-8	90
IA-168-A-29	140-20195-9	91
IA-DUP 4-A-29	140-20195-10	92
IA-075-A-29	140-20195-11	92
IA-021-A-29	140-20195-12	92
IA-136-A-29	140-20195-13	91
IA-117-A-29	140-20195-14	91
IA-079-A-29	140-20195-15	89
IA-118-A-29	140-20195-16	90
IA-081-A-29	140-20195-17	97
IA-100-B-29	140-20195-18	96
IA-101-B-29	140-20195-19	96
	MB 140-42481/4	92
	MB 140-42483/4	88
	LCS 140-42481/1002	100
	LCS 140-42483/1002	99

	QC LIMITS
BFB = 4-Bromofluorobenzene (Surr)	60-140

Column to be used to flag recovery values

FORM II TO 15 LL

FORM IV
AIR - GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Lab File ID: G500BI05.D Lab Sample ID: MB 140-42481/4

Matrix: Air Heated Purge:(Y/N) N

Instrument ID: MG Date Analyzed: 09/05/2020 12:59

GC Column: RTX-5 ID: 0.32(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 140-42481/1002	GLCSI05-LCS.d	09/05/2020 11:32
IA-081-A-29	140-20195-17	GI05P113.D	09/06/2020 02:17
IA-100-B-29	140-20195-18	GI05P114.D	09/06/2020 03:04
IA-101-B-29	140-20195-19	GI05P115.D	09/06/2020 03:49

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 140-42481/4

Matrix: Air Lab File ID: G500BI05.D

Analysis Method: TO 15 LL Date Collected:

Sample wt/vol: 500(mL) Date Analyzed: 09/05/2020 12:59

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42481 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	ND		0.080	0.0080
56-23-5	Carbon tetrachloride	153.81	ND		0.080	0.0070
75-45-6	Chlorodifluoromethane	86.47	ND		0.080	0.022
67-66-3	Chloroform	119.38	ND		0.080	0.0070
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.080	0.010
75-71-8	Dichlorodifluoromethane	120.91	ND		0.080	0.014
75-34-3	1,1-Dichloroethane	98.96	ND		0.080	0.0070
107-06-2	1,2-Dichloroethane	98.96	ND		0.080	0.010
75-35-4	1,1-Dichloroethene	96.94	ND		0.080	0.0080
100-41-4	Ethylbenzene	106.17	ND		0.080	0.013
75-09-2	Methylene Chloride	84.93	ND		0.40	0.39
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.40	0.052
91-20-3	Naphthalene	128.17	ND		0.040	0.040
127-18-4	Tetrachloroethene	165.83	ND		0.080	0.0070
108-88-3	Toluene	92.14	ND		0.12	0.078
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.080	0.0070
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.080	0.064
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.080	0.037
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.080	0.0070
79-01-6	Trichloroethene	131.39	ND		0.040	0.0060
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.080	0.036
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.080	0.020
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.080	0.022
75-01-4	Vinyl chloride	62.50	ND		0.040	0.026
1330-20-7	Xylenes, Total	106.17	ND		0.16	0.024

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	92		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 140-42481/4

Matrix: Air Lab File ID: G500BI05.D

Analysis Method: TO 15 LL Date Collected:

Sample wt/vol: 500(mL) Date Analyzed: 09/05/2020 12:59

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42481 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	ND		0.26	0.026
56-23-5	Carbon tetrachloride	153.81	ND		0.50	0.044
75-45-6	Chlorodifluoromethane	86.47	ND		0.28	0.078
67-66-3	Chloroform	119.38	ND		0.39	0.034
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.32	0.040
75-71-8	Dichlorodifluoromethane	120.91	ND		0.40	0.069
75-34-3	1,1-Dichloroethane	98.96	ND		0.32	0.028
107-06-2	1,2-Dichloroethane	98.96	ND		0.32	0.040
75-35-4	1,1-Dichloroethene	96.94	ND		0.32	0.032
100-41-4	Ethylbenzene	106.17	ND		0.35	0.056
75-09-2	Methylene Chloride	84.93	ND		1.4	1.4
1634-04-4	Methyl tert-butyl ether	88.15	ND		1.4	0.19
91-20-3	Naphthalene	128.17	ND		0.21	0.21
127-18-4	Tetrachloroethene	165.83	ND		0.54	0.047
108-88-3	Toluene	92.14	ND		0.45	0.29
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.32	0.028
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.59	0.47
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.44	0.20
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.44	0.038
79-01-6	Trichloroethene	131.39	ND		0.21	0.032
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.39	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.39	0.098
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.39	0.11
75-01-4	Vinyl chloride	62.50	ND		0.10	0.066
1330-20-7	Xylenes, Total	106.17	ND		0.69	0.10

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	92		60-140

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Matrix: Air Level: Low Lab File ID: GLCSI05-LCS.d

Lab ID: LCS 140-42481/1002 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Benzene	2.00	1.54	77	70-130	
Carbon tetrachloride	2.00	1.79	89	70-130	
Chlorodifluoromethane	2.00	1.71	85	60-140	
Chloroform	2.00	1.53	76	70-130	
cis-1,2-Dichloroethene	2.00	1.67	83	70-130	
Dichlorodifluoromethane	2.00	1.56	78	60-140	
1,1-Dichloroethane	2.00	1.51	76	70-130	
1,2-Dichloroethane	2.00	1.58	79	70-130	
1,1-Dichloroethene	2.00	1.56	78	70-130	
Ethylbenzene	2.00	1.59	80	70-130	
Methylene Chloride	2.00	1.55	78	70-130	
Methyl tert-butyl ether	2.00	1.58	79	60-140	
Naphthalene	2.00	1.77	88	60-140	
Tetrachloroethene	2.00	1.56	78	70-130	
Toluene	2.00	1.58	79	70-130	
trans-1,2-Dichloroethene	2.00	1.57	79	70-130	
1,2,4-Trichlorobenzene	2.00	2.12	106	60-140	
1,1,1-Trichloroethane	2.00	1.62	81	70-130	
1,1,2-Trichloroethane	2.00	1.44	72	70-130	
Trichloroethene	2.00	1.55	77	70-130	
1,2,3-Trimethylbenzene	2.00	1.38	69	70-130	*
1,2,4-Trimethylbenzene	2.00	1.64	82	70-130	
1,3,5-Trimethylbenzene	2.00	1.98	99	70-130	
Vinyl chloride	2.00	1.57	79	70-130	
Xylenes, Total	6.00	4.69	78	70-130	

Column to be used to flag recovery and RPD values

FORM III TO 15 LL

FORM IV
AIR - GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Lab File ID: R500BI05.D Lab Sample ID: MB 140-42483/4

Matrix: Air Heated Purge:(Y/N) N

Instrument ID: MR Date Analyzed: 09/05/2020 09:47

GC Column: RTX-5 ID: 0.32(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 140-42483/1002	RCCVI05-LCS.d	09/05/2020 08:28
IA-018-A-29	140-20195-1	RI05P102.D	09/05/2020 15:23
IA-DUP 3-A-29	140-20195-2	RI05P103.D	09/05/2020 16:12
IA-138-A-29	140-20195-3	RI05P104.D	09/05/2020 17:01
IA-174-A-29	140-20195-4	RI05P105.D	09/05/2020 17:51
IA-093-A-29	140-20195-5	RI05P106.D	09/05/2020 18:41
IA-015-A-29	140-20195-6	RI05P107.D	09/05/2020 19:30
IA-078-A-29	140-20195-7	RI05P108.D	09/05/2020 20:22
IA-076-A-29	140-20195-8	RI05P109.D	09/05/2020 21:13
IA-168-A-29	140-20195-9	RI05P110.D	09/05/2020 22:03
IA-DUP 4-A-29	140-20195-10	RI05P111.D	09/05/2020 22:54
IA-075-A-29	140-20195-11	RI05P112.D	09/05/2020 23:43
IA-021-A-29	140-20195-12	RI05P113.D	09/06/2020 00:32
IA-136-A-29	140-20195-13	RI05P114.D	09/06/2020 01:20
IA-117-A-29	140-20195-14	RI05P115.D	09/06/2020 02:07
IA-079-A-29	140-20195-15	RI05P116.D	09/06/2020 02:55
IA-118-A-29	140-20195-16	RI05P201R.D	09/06/2020 05:18

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 140-42483/4

Matrix: Air Lab File ID: R500BI05.D

Analysis Method: TO 15 LL Date Collected:

Sample wt/vol: 500(mL) Date Analyzed: 09/05/2020 09:47

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42483 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	ND		0.080	0.0080
56-23-5	Carbon tetrachloride	153.81	ND		0.080	0.0070
75-45-6	Chlorodifluoromethane	86.47	ND		0.080	0.022
67-66-3	Chloroform	119.38	ND		0.080	0.0070
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.080	0.010
75-71-8	Dichlorodifluoromethane	120.91	ND		0.080	0.014
75-34-3	1,1-Dichloroethane	98.96	ND		0.080	0.0070
107-06-2	1,2-Dichloroethane	98.96	ND		0.080	0.010
75-35-4	1,1-Dichloroethene	96.94	ND		0.080	0.0080
100-41-4	Ethylbenzene	106.17	ND		0.080	0.013
75-09-2	Methylene Chloride	84.93	ND		0.40	0.39
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.40	0.052
91-20-3	Naphthalene	128.17	ND		0.040	0.040
127-18-4	Tetrachloroethene	165.83	ND		0.080	0.0070
108-88-3	Toluene	92.14	ND		0.12	0.078
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.080	0.0070
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.080	0.064
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.080	0.037
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.080	0.0070
79-01-6	Trichloroethene	131.39	ND		0.040	0.0060
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.080	0.036
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.080	0.020
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.080	0.022
75-01-4	Vinyl chloride	62.50	ND		0.040	0.026
1330-20-7	Xylenes, Total	106.17	ND		0.16	0.024

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	88		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 140-42483/4

Matrix: Air Lab File ID: R500BI05.D

Analysis Method: TO 15 LL Date Collected:

Sample wt/vol: 500(mL) Date Analyzed: 09/05/2020 09:47

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42483 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	ND		0.26	0.026
56-23-5	Carbon tetrachloride	153.81	ND		0.50	0.044
75-45-6	Chlorodifluoromethane	86.47	ND		0.28	0.078
67-66-3	Chloroform	119.38	ND		0.39	0.034
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.32	0.040
75-71-8	Dichlorodifluoromethane	120.91	ND		0.40	0.069
75-34-3	1,1-Dichloroethane	98.96	ND		0.32	0.028
107-06-2	1,2-Dichloroethane	98.96	ND		0.32	0.040
75-35-4	1,1-Dichloroethene	96.94	ND		0.32	0.032
100-41-4	Ethylbenzene	106.17	ND		0.35	0.056
75-09-2	Methylene Chloride	84.93	ND		1.4	1.4
1634-04-4	Methyl tert-butyl ether	88.15	ND		1.4	0.19
91-20-3	Naphthalene	128.17	ND		0.21	0.21
127-18-4	Tetrachloroethene	165.83	ND		0.54	0.047
108-88-3	Toluene	92.14	ND		0.45	0.29
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.32	0.028
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.59	0.47
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.44	0.20
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.44	0.038
79-01-6	Trichloroethene	131.39	ND		0.21	0.032
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.39	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.39	0.098
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.39	0.11
75-01-4	Vinyl chloride	62.50	ND		0.10	0.066
1330-20-7	Xylenes, Total	106.17	ND		0.69	0.10

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	88		60-140

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Matrix: Air Level: Low Lab File ID: RCCVI05-LCS.d

Lab ID: LCS 140-42483/1002 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Benzene	1.60	1.45	91	70-130	
Carbon tetrachloride	1.60	1.73	108	70-130	
Chlorodifluoromethane	1.60	1.44	90	60-140	
Chloroform	1.60	1.50	93	70-130	
cis-1,2-Dichloroethene	1.60	1.32	83	70-130	
Dichlorodifluoromethane	1.60	2.00	125	60-140	
1,1-Dichloroethane	1.60	1.50	94	70-130	
1,2-Dichloroethane	1.60	1.54	96	70-130	
1,1-Dichloroethene	1.60	1.43	89	70-130	
Ethylbenzene	1.60	1.39	87	70-130	
Methylene Chloride	1.60	1.48	93	70-130	
Methyl tert-butyl ether	1.60	1.55	97	60-140	
Naphthalene	1.60	1.50	94	60-140	
Tetrachloroethene	1.60	1.37	85	70-130	
Toluene	1.60	1.33	83	70-130	
trans-1,2-Dichloroethene	1.60	1.49	93	70-130	
1,2,4-Trichlorobenzene	1.60	1.48	93	60-140	
1,1,1-Trichloroethane	1.60	1.52	95	70-130	
1,1,2-Trichloroethane	1.60	1.43	89	70-130	
Trichloroethene	1.60	1.40	87	70-130	
1,2,3-Trimethylbenzene	1.60	1.58	99	70-130	
1,2,4-Trimethylbenzene	1.60	1.40	88	70-130	
1,3,5-Trimethylbenzene	1.60	1.40	88	70-130	
Vinyl chloride	1.60	1.78	111	70-130	
Xylenes, Total	4.80	4.09	85	70-130	

Column to be used to flag recovery and RPD values

FORM III TO 15 LL

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Lab File ID: GI01BFB.D BFB Injection Date: 09/01/2020

Instrument ID: MG BFB Injection Time: 16:42

Analysis Batch No.: 42295

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	33.0	
75	30.0 - 60.0 % of mass 95	54.3	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.2	
173	Less than 2.0 % of mass 174	0.3	(0.5) 1
174	Greater than 50% of mass 95	73.8	
175	5.0 - 9.0 % of mass 174	5.3	(7.1) 1
176	95.0 - 101.0 % of mass 174	71.8	(97.2) 1
177	5.0 - 9.0 % of mass 176	4.5	(6.3) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 140-42295/3	GI01IC10.D	09/01/2020	18:07
	IC 140-42295/5	GI01IC09.D	09/01/2020	19:43
	IC 140-42295/7	GI01IC08.D	09/01/2020	21:19
	IC 140-42295/9	GI01IC01.D	09/01/2020	22:55
	IC 140-42295/10	GI01IC02.D	09/01/2020	23:39
	IC 140-42295/11	GI01IC03.D	09/02/2020	0:24
	IC 140-42295/12	GI01IC04.D	09/02/2020	1:08
	IC 140-42295/13	GI01IC05.D	09/02/2020	1:52
	IC 140-42295/14	GI01IC06.D	09/02/2020	2:38
	ICIS 140-42295/15	GI01IC07.D	09/02/2020	3:27
	ICV 140-42295/22	GI01ICVR.D	09/02/2020	8:56

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 140-42295/9	GI01IC01.D
Level 2	IC 140-42295/10	GI01IC02.D
Level 3	IC 140-42295/11	GI01IC03.D
Level 4	IC 140-42295/12	GI01IC04.D
Level 5	IC 140-42295/13	GI01IC05.D
Level 6	IC 140-42295/14	GI01IC06.D
Level 7	ICIS 140-42295/15	GI01IC07.D
Level 8	IC 140-42295/7	GI01IC08.D
Level 9	IC 140-42295/5	GI01IC09.D
Level 10	IC 140-42295/3	GI01IC10.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Chlorodifluoromethane	+++++ 4.2174	+++++ 3.9338	5.0807 4.6204	4.1800 4.4013	4.2893 3.6854	Ave		4.3010				9.8		30.0			
Propene	+++++ 2.1016	+++++ 1.9924	+++++ 2.2188	2.4122 2.0989	2.1914 1.7884	Ave		2.1148				9.2		30.0			
Dichlorodifluoromethane	+++++ 4.6221	+++++ 4.5171	5.1025 5.2936	5.0254 5.0487	4.6333 4.2256	Ave		4.8085				7.5		30.0			
Chloromethane	+++++ 0.8378	+++++ 0.7711	+++++ 0.9046	1.0496 0.8511	0.9048 0.7078	Ave		0.8610				12.7		30.0			
1,2-Dichloro-1,1,2,2-tetrafluoroethane	2.7419 2.4849	3.0305 2.6157	2.6182 3.1606	2.5493 3.1468	2.5986 2.4827	Ave		2.7429				9.8		30.0			
Vinyl chloride	2.2108 2.3591	3.0033 2.2051	2.6105 2.5785	2.2040 2.4712	2.3833 2.0097	Ave		2.4035				11.7		30.0			
1,3-Butadiene	+++++ 2.1302	+++++ 1.9721	+++++ 2.3036	2.1726 2.2136	2.2042 1.8343	Ave		2.1187				7.6		30.0			
Butane	+++++ 4.3488	+++++ 4.0253	4.6585 4.5089	4.6118 4.2262	4.5015 3.5538	Ave		4.3044				8.6		30.0			
Bromomethane	+++++ 1.3715	+++++ 1.3578	1.5650 1.6350	1.4697 1.5631	1.4210 1.2343	Ave		1.4522				9.1		30.0			
Chloroethane	+++++ 0.9275	+++++ 0.9381	1.2120 1.0916	0.9857 1.0523	0.9542 0.8144	Ave		0.9970				12.1		30.0			
Ethanol	+++++ 0.8956	+++++ 0.9494	+++++ 1.0644	0.8703 0.7979	1.0301 0.7479	Ave		0.9079				12.8		30.0			
Vinyl bromide	+++++ 1.1432	1.2751 1.1648	1.2369 1.4478	1.2077 1.3491	1.2537 1.0693	Ave		1.2386				9.1		30.0			
2-Methylbutane	+++++ 2.9599	+++++ 2.7561	+++++ 3.3238	2.9753 3.0693	2.9458 2.4296	Ave		2.9228				9.5		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Trichlorofluoromethane	3.9167 3.5393	4.1610 3.2865	4.1430 4.0916	3.5786 3.8541	3.5904 3.2131	Ave		3.7374				9.3		30.0			
Acrolein	+++++ 0.4569	+++++ 0.4173	+++++ 0.3780	+++++ 0.4417	0.5137 0.4710	Ave		0.4464				10.4		30.0			
Acetonitrile	+++++ 0.7945	+++++ 0.8380	+++++ 0.7024	+++++ 0.6506	1.0870 0.7195	Ave		0.7987				19.6		30.0			
Acetone	+++++ 0.9473	+++++ 0.8615	+++++ 0.6959	0.7948 0.6300	0.9823 0.6878	Ave		0.7999				17.0		30.0			
Isopropyl alcohol	+++++ 2.3768	+++++ 2.2904	+++++ 3.0620	2.2332 2.0902	2.6720 1.9961	Ave		2.3887				15.4		30.0			
Pentane	+++++ 0.2407	+++++ 0.2227	+++++ 0.2836	0.2386 0.2584	0.2444 0.2123	Ave		0.2430				9.6		30.0			
Ethyl ether	+++++ 1.8676	+++++ 1.8292	+++++ 1.5681	1.5565 1.5554	1.9511 1.6408	Ave		1.7098				9.8		30.0			
1,1-Dichloroethene	+++++ 1.1460	1.2138 1.1071	1.3220 1.2854	1.0888 1.2140	1.2249 1.0475	Ave		1.1833				7.8		30.0			
Acrylonitrile	+++++ 1.1577	+++++ 1.1526	+++++ 0.9121	1.0056 1.0241	1.2114 1.1792	Ave		1.0918				10.2		30.0			
tert-Butyl alcohol	+++++ 2.4598	+++++ 2.1786	+++++ 3.1532	2.3200 2.0921	2.6745 2.0080	Ave		2.4123				16.5		30.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	2.9739 2.5990	2.9936 2.5089	2.9993 2.8289	2.7308 2.7120	2.6787 2.3381	Ave		2.7363				8.0		30.0			
Methylene Chloride	+++++ 1.1888	+++++ 1.1040	+++++ 1.2681	+++++ 1.2031	1.2912 1.0471	Ave		1.1837				7.9		30.0			
3-Chloropropene	+++++ 2.0584	+++++ 1.8527	3.4211 2.1137	2.3717 2.1326	2.2916 +++++	Ave		2.3203				22.1		30.0			
Carbon disulfide	+++++ 3.9864	+++++ 3.6463	4.6626 4.2662	3.9658 3.9565	3.9101 3.4240	Ave		3.9773				9.4		30.0			
trans-1,2-Dichloroethene	+++++ 1.3276	1.4977 1.2596	1.6040 1.4777	1.2760 1.4233	1.4268 1.2441	Ave		1.3930				8.9		30.0			
2-Methylpentane	+++++ 5.3070	+++++ 4.9992	6.5041 5.4750	5.2908 5.3755	5.6347 4.8807	Ave		5.4334				9.1		30.0			
Methyl tert-butyl ether	+++++ 3.1393	+++++ 3.0946	+++++ 2.7875	2.3858 2.6178	3.2114 2.9473	Ave		2.8834				10.5		30.0			
1,1-Dichloroethane	+++++ 3.4115	3.7876 3.2158	3.9181 3.5051	3.4555 3.4303	3.4976 3.0350	Ave		3.4730				7.6		30.0			
Vinyl acetate	+++++ 4.8276	+++++ 5.0004	+++++ 3.9048	3.8303 4.2643	4.9123 5.0941	Ave		4.5477				11.8		30.0			
2-Butanone (MEK)	+++++ 0.6548	+++++ 0.6135	+++++ 0.5527	0.4972 0.4919	0.6747 0.5569	Ave		0.5774				12.6		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Hexane	+++++ 1.7503	+++++ 1.6732	2.0176 1.8319	1.8921 1.7798	1.8022 1.5922	Ave		1.7924				7.3		30.0			
cis-1,2-Dichloroethene	+++++ 1.4665	1.5582 1.3982	1.5881 1.5642	1.4357 1.4968	1.4885 1.3297	Ave		1.4807				5.7		30.0			
Ethyl acetate	+++++ 4.2053	+++++ 4.2696	+++++ 3.7315	+++++ 3.3697	4.2713 4.0410	Ave		3.9814				9.1		30.0			
Chloroform	3.6326 3.2428	3.8455 3.0621	4.0330 3.2724	3.2505 3.1262	3.3547 2.8423	Ave		3.3662				10.9		30.0			
Tetrahydrofuran	+++++ 2.1055	+++++ 2.1356	+++++ 1.9106	1.7359 1.7485	2.2340 2.1111	Ave		1.9973				10.0		30.0			
1,1,1-Trichloroethane	+++++ 3.1201	3.6579 2.9347	3.6746 3.3019	3.1348 3.2238	3.1883 2.9270	Ave		3.2403				8.4		30.0			
1,2-Dichloroethane	+++++ 0.5726	+++++ 0.4842	0.6275 0.6150	0.5495 0.5076	0.5324 0.4483	Ave		0.5421				11.5		30.0			
1-Butanol	+++++ 0.1665	+++++ 0.1260	+++++ 0.2219	+++++ 0.1221	0.1708 0.1138	Ave		0.1535				26.8		30.0			
Benzene	+++++ 1.0472	+++++ 0.8775	1.1251 1.1183	1.0176 0.9183	0.9768 0.8127	Ave		0.9867				11.4		30.0			
Cyclohexane	+++++ 0.1851	+++++ 0.1422	+++++ 0.1911	0.1843 0.1565	0.1713 0.1325	Ave		0.1661				13.8		30.0			
Carbon tetrachloride	0.6115 0.6342	0.7855 0.3732	0.6372 0.7687	0.6496 0.5332	0.6314 0.4745	Ave		0.6099				20.4		30.0			
2,3-Dimethylpentane	+++++ 0.2742	+++++ 0.2228	0.3087 0.2832	0.2513 0.2297	0.2718 0.1969	Ave		0.2548				14.4		30.0			
Thiophene	+++++ 0.6226	+++++ 0.5084	0.6481 0.6440	0.5323 0.5147	0.5936 0.4600	Ave		0.5655				12.5		30.0			
2,2,4-Trimethylpentane	+++++ 2.6529	+++++ 2.1576	2.5968 2.7357	2.5821 2.2056	2.4393 1.9434	Ave		2.4142				11.6		30.0			
Heptane	+++++ 0.4225	+++++ 0.3493	0.4467 0.4306	0.4137 0.3481	0.3833 0.3098	Ave		0.3880				12.5		30.0			
1,2-Dichloropropane	+++++ 0.4903	+++++ 0.4198	0.5242 0.4544	0.4420 0.4070	0.4670 0.3907	Ave		0.4494				9.9		30.0			
Trichloroethene	0.4268 0.4287	0.6851 0.3531	0.4447 0.4566	0.3977 0.3715	0.3907 0.3471	Ave		0.4302				22.6		30.0			
Dibromomethane	+++++ 0.4913	+++++ 0.3719	0.4798 0.4731	0.4427 0.3774	0.4069 0.3477	Ave		0.4239				13.0		30.0			
Bromodichloromethane	+++++ 0.7898	+++++ 0.6710	0.7786 0.8678	0.7548 0.6917	0.7246 0.6155	Ave		0.7367				10.7		30.0			
1,4-Dioxane	+++++ 0.0995	+++++ 0.1146	0.1383 0.1433	0.0983 0.0995	0.1218 0.1060	Ave		0.1151				15.5		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Methyl methacrylate	+++++ 0.6126	+++++ 0.5158	+++++ 0.5430	0.4167 0.4267	0.5480 0.4984	Ave		0.5088				13.6		30.0			
Methylcyclohexane	+++++ 0.7141	+++++ 0.5799	0.7102 0.7331	0.6975 0.6005	0.6391 0.5295	Ave		0.6505				11.5		30.0			
4-Methyl-2-pentanone (MIBK)	+++++ 0.9278	+++++ 0.8261	+++++ 1.0804	0.7409 0.6478	0.9390 0.8352	Ave		0.8567				16.5		30.0			
cis-1,3-Dichloropropene	+++++ 0.6560	+++++ 0.5378	0.6234 0.6358	0.6180 0.5649	0.5766 0.5208	Ave		0.5917				8.2		30.0			
trans-1,3-Dichloropropene	+++++ 0.5080	+++++ 0.4807	0.5744 0.5058	0.4699 0.4430	0.4959 0.4618	Ave		0.4924				8.1		30.0			
Toluene	+++++ 1.1362	+++++ 1.0313	1.2507 1.0326	0.9784 0.9458	1.1137 0.9804	Ave		1.0587				9.6		30.0			
1,1,2-Trichloroethane	+++++ 0.3651	+++++ 0.3332	0.3544 0.3478	0.3135 0.3004	0.3359 0.3042	Ave		0.3318				7.2		30.0			
2-Hexanone	+++++ 0.4283	+++++ 0.3609	+++++ 0.5255	0.3215 0.2913	0.4231 0.3950	Ave		0.3922				19.8		30.0			
Octane	+++++ 0.4065	+++++ 0.3682	0.4218 0.4332	0.3669 0.3485	0.4038 0.3377	Ave		0.3858				9.1		30.0			
C8 Range	+++++ 5.1496	+++++ 4.5413	+++++ 5.0824	4.9366 4.1728	4.8692 4.0260	Ave		4.6826				9.5		30.0			
Dibromochloromethane	+++++ 0.6038	+++++ 0.6015	0.6071 0.7470	0.5882 0.6071	0.6039 0.6314	Ave		0.6238				8.2		30.0			
1,2-Dibromoethane (EDB)	+++++ 0.6113	+++++ 0.5807	0.6903 0.6152	0.5414 0.5554	0.5986 0.5707	Ave		0.5955				7.8		30.0			
Tetrachloroethene	0.3922 0.3899	0.5714 0.3494	0.4232 0.4129	0.3811 0.3486	0.3633 0.3589	Ave		0.3991				16.5		30.0			
Chlorobenzene	+++++ 0.8917	+++++ 0.8359	0.9456 0.8804	0.8214 0.7793	0.8728 0.8230	Ave		0.8562				6.0		30.0			
Ethylbenzene	+++++ 1.4845	+++++ 1.3986	1.5812 1.3093	1.1895 1.1688	1.4349 1.3181	Ave		1.3606				10.4		30.0			
m-Xylene & p-Xylene	+++++ 1.1395	1.3560 1.0689	1.1696 1.0189	0.9045 0.9029	1.0775 1.0501	Ave		1.0764				12.9		30.0			
Nonane	+++++ 1.1178	+++++ 1.0412	1.1918 1.1156	0.9832 0.9695	1.0531 1.0220	Ave		1.0618				7.1		30.0			
Bromoform	+++++ 0.3530	0.4932 0.5262	0.4773 0.6766	0.4669 0.5829	0.4831 0.6638	Ave		0.5248				19.5		30.0			
Styrene	+++++ 0.8496	0.8564 0.8197	0.7693 0.8021	0.6128 0.7235	0.7599 0.8482	Ave		0.7824				10.0		30.0			
o-Xylene	+++++ 1.1834	+++++ 1.1099	1.2724 1.0625	0.9632 0.9188	1.1394 1.0648	Ave		1.0893				10.5		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
1,1,2,2-Tetrachloroethane	+++++ 0.9568	+++++ 0.8965	0.9614 0.9003	0.7850 0.7111	0.9017 0.8402	Ave		0.8691				9.9		30.0			
1,2,3-Trichloropropane	+++++ 0.2303	+++++ 0.2224	0.2139 0.2285	0.1808 0.1846	0.2198 0.2199	Ave		0.2125				9.0		30.0			
Isopropylbenzene	+++++ 1.5477	+++++ 1.4846	1.6346 1.4298	1.1749 1.2363	1.4395 1.5017	Ave		1.4311				10.8		30.0			
Propylbenzene	+++++ 0.4096	+++++ 0.3881	0.4490 0.3889	0.2983 0.3382	0.3607 0.4238	Ave		0.3821				12.7		30.0			
2-Chlorotoluene	+++++ 0.3740	+++++ 0.3672	0.3653 0.3802	0.3033 0.3491	0.3890 0.3999	Ave		0.3660				8.1		30.0			
4-Ethyltoluene	+++++ 1.5444	+++++ 1.4874	1.6377 1.4488	1.1082 1.2285	1.4027 1.5756	Ave		1.4292				12.6		30.0			
1,3,5-Trimethylbenzene	+++++ 0.6287	+++++ 0.5816	0.6485 0.5885	0.4212 0.4949	0.5763 0.6295	Ave		0.5712				13.5		30.0			
Alpha Methyl Styrene	+++++ 0.6091	+++++ 0.5921	+++++ 0.6036	0.4018 0.5445	0.5103 0.6897	Ave		0.5644				16.1		30.0			
Decane	+++++ 1.3958	+++++ 1.3245	1.4453 1.2935	1.1663 1.0979	1.3010 1.2736	Ave		1.2872				8.8		30.0			
tert-Butylbenzene	+++++ 1.3443	+++++ 1.3045	1.3391 1.3134	0.9248 1.1315	1.1828 1.5072	Ave		1.2560				13.9		30.0			
1,2,4-Trimethylbenzene	+++++ 1.3349	+++++ 1.2958	1.3725 1.3030	0.9005 1.0916	1.2317 1.4632	Ave		1.2492				14.2		30.0			
sec-Butylbenzene	+++++ 2.0106	+++++ 1.9451	2.0566 1.9618	1.4032 1.6599	1.7616 2.2768	Ave		1.8845				14.3		30.0			
1,3-Dichlorobenzene	0.7914 0.8744	1.0379 0.8623	0.9071 0.9390	0.7225 0.8650	0.7989 1.1012	Ave		0.8900				12.8		30.0			
Benzyl chloride	+++++ 1.1627	+++++ 1.2981	1.2725 1.2526	0.8444 1.0752	1.0888 1.4189	Ave		1.1766				15.0		30.0			
1,4-Dichlorobenzene	0.8212 0.8662	1.1563 0.8485	0.9244 0.9286	0.7311 0.8537	0.8219 1.0629	Ave		0.9015				13.9		30.0			
4-Isopropyltoluene	+++++ 1.5739	+++++ 1.5520	1.5326 1.5665	1.0593 1.3129	1.3776 1.6980	Ave		1.4591				13.8		30.0			
1,2,3-Trimethylbenzene	+++++ 1.3535	+++++ 1.3304	1.3699 1.3206	0.9147 1.0928	1.2244 1.3703	QuaF		1.0451	0.0196912						0.9950		0.9900
1,2-Dichlorobenzene	+++++ 0.8393	+++++ 0.8396	0.9032 0.9175	0.6871 0.8170	0.7522 1.0674	Ave		0.8529				13.4		30.0			
Indane	+++++ 1.2941	1.3808 1.2787	1.3052 1.2997	0.8717 1.1236	1.1373 1.5429	Ave		1.2482				15.1		30.0			
Indene	+++++ 1.1144	+++++ 1.1166	1.0943 1.1458	0.7537 0.9883	0.9911 1.3506	Ave		1.0694				15.9		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Butylbenzene	+++++ 1.7840	+++++ 1.7332	1.8906 1.7260	1.2003 1.4015	1.6122 1.8819	Ave		1.6537				14.6		30.0			
Undecane	+++++ 1.5657	+++++ 1.4831	1.6754 1.4503	1.1926 1.1849	1.4250 1.5159	Ave		1.4366				11.9		30.0			
1,2-Dibromo-3-Chloropropane	+++++ 0.3524	+++++ 0.4563	0.3665 0.5320	0.2980 0.4064	0.3669 0.5757	QuaF		0.3520	0.0136829						0.9930		0.9900
1,2,4,5-Tetramethylbenzene	+++++ 1.3759	+++++ 1.4754	1.5696 1.5953	0.8949 1.2219	1.2986 1.7205	QuaF		1.0880	0.0385563						0.9930		0.9900
Dodecane	+++++ 1.4953	+++++ 1.1035	+++++ 1.4579	1.0479 1.0511	1.3963 1.2270	Ave		1.2542				15.5		30.0			
1,2,4-Trichlorobenzene	+++++ 0.6689	+++++ 0.7087	0.8181 0.8251	0.5088 0.7325	0.6450 1.1015	Ave		0.7511				23.1		30.0			
Naphthalene	+++++ 1.5967	2.4276 1.7346	2.1874 1.9122	1.1790 1.4929	1.6126 2.1629	Ave		1.8118				21.8		30.0			
Hexachlorobutadiene	+++++ 0.6043	+++++ 0.6330	0.7229 0.7599	0.4569 0.7265	0.5378 +++++	Ave		0.6345				17.5		30.0			
1,2,3-Trichlorobenzene	+++++ 0.6619	+++++ 0.6779	0.8148 0.8166	0.4626 0.7112	0.6095 1.0297	Ave		0.7230				23.3		30.0			
2-Methylnaphthalene	+++++ 0.6920	+++++ 0.4527	+++++ 1.2986	+++++ 0.8133	0.7500 0.6688	Ave		0.7792				36.2		50.0			
1-Methylnaphthalene	+++++ 0.7883	+++++ 0.4816	+++++ 1.3389	0.6525 0.8306	0.8523 0.6090	Ave		0.7933				34.7		50.0			
4-Bromofluorobenzene (Surr)	0.7279 0.7634	0.7355 0.7715	0.7208 0.7607	0.7393 0.7936	0.7384 0.7811	Ave		0.7532				3.2		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 140-42295/9	GI01IC01.D
Level 2	IC 140-42295/10	GI01IC02.D
Level 3	IC 140-42295/11	GI01IC03.D
Level 4	IC 140-42295/12	GI01IC04.D
Level 5	IC 140-42295/13	GI01IC05.D
Level 6	IC 140-42295/14	GI01IC06.D
Level 7	ICIS 140-42295/15	GI01IC07.D
Level 8	IC 140-42295/7	GI01IC08.D
Level 9	IC 140-42295/5	GI01IC09.D
Level 10	IC 140-42295/3	GI01IC10.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
Chlorodifluoromethane	CBM	Ave	+++++ 126387	+++++ 254491	11226 595533	19940 1219560	48665 2051104	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Propene	CBM	Ave	+++++ 62980	+++++ 128895	+++++ 285979	11507 581585	24863 995335	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Dichlorodifluoromethane	CBM	Ave	+++++ 138515	+++++ 292225	11274 682291	23973 1398945	52568 2351785	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Chloromethane	CBM	Ave	+++++ 25107	+++++ 49882	+++++ 116599	5007 235833	10266 393942	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,2-Dichloro-1,1,2,2-tetrafluoroethane	CBM	Ave	1998 74466	3458 169218	5785 407375	12161 871962	29483 1381764	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Vinyl chloride	CBM	Ave	1611 70697	3427 142653	5768 332339	10514 684743	27040 1118505	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,3-Butadiene	CBM	Ave	+++++ 63838	+++++ 127581	+++++ 296910	10364 613368	25008 1020894	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Butane	CBM	Ave	+++++ 130324	+++++ 260407	10293 581152	22000 1171057	51072 1977905	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Bromomethane	CBM	Ave	+++++ 41102	+++++ 87843	3458 210733	7011 433116	16122 686953	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Chloroethane	CBM	Ave	+++++ 27795	+++++ 60690	2678 140702	4702 291588	10826 453281	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Ethanol	CBM	Ave	+++++ 134201	+++++ 307085	+++++ 685930	20757 1105422	58436 2081107	+++++ 5.00	+++++ 10.0	+++++ 20.0	0.800 40.0	2.00 80.0
Vinyl bromide	CBM	Ave	+++++ 34260	1455 75357	2733 186602	5761 373832	14224 595103	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Methylbutane	CBM	Ave	+++++ 88701	+++++ 178302	+++++ 428407	14193 850465	33422 1352213	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Trichlorofluoromethane	CBM	Ave	2854 106066	4748 212612	9154 527367	17071 1067934	40736 1788276	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
Acrolein	CBM	Ave	+++++ 13692	+++++ 26996	+++++ 48727	+++++ 122401	5828 262114	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
Acetonitrile	CBM	Ave	+++++ 23808	+++++ 54213	+++++ 90528	+++++ 180279	12333 400450	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
Acetone	CBM	Ave	+++++ 85167	+++++ 167195	+++++ 269068	11375 523707	33434 1148398	+++++ 3.00	+++++ 6.00	+++++ 12.0	0.480 24.0	1.20 48.0
Isopropyl alcohol	CBM	Ave	+++++ 213678	+++++ 444518	+++++ 1184009	31959 1737523	90947 3332728	+++++ 3.00	+++++ 6.00	+++++ 12.0	0.480 24.0	1.20 48.0
Pentane	CBM	Ave	+++++ 7214	+++++ 14405	+++++ 36548	1138 71611	2773 118178	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Ethyl ether	CBM	Ave	+++++ 55969	+++++ 118337	+++++ 202112	7425 431001	22137 913197	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,1-Dichloroethene	CBM	Ave	+++++ 34343	1385 71623	2921 165673	5194 336401	13897 583003	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Acrylonitrile	CBM	Ave	+++++ 34693	+++++ 74563	+++++ 117560	4797 283762	13744 656282	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
tert-Butyl alcohol	CBM	Ave	+++++ 73714	+++++ 140940	+++++ 406423	11067 579708	30344 1117573	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,1,2-Trichloro-1,2,2-trifluoroetha ne	CBM	Ave	2167 77887	3416 162311	6627 364620	13027 751469	30392 1301292	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Methylene Chloride	CBM	Ave	+++++ 35627	+++++ 71422	+++++ 163443	+++++ 333362	14649 582763	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
3-Chloropropene	CBM	Ave	+++++ 61687	+++++ 119860	7559 272432	11314 590936	26000 +++++	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
Carbon disulfide	CBM	Ave	+++++ 119464	+++++ 235894	10302 549880	18918 1096319	44363 1905658	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
trans-1,2-Dichloroethene	CBM	Ave	+++++ 39785	1709 81489	3544 190465	6087 394374	16188 692384	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Methylpentane	CBM	Ave	+++++ 159038	+++++ 323413	14371 705673	25239 1489517	63929 2716361	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Methyl tert-butyl ether	CBM	Ave	+++++ 94079	+++++ 200198	+++++ 359280	11381 725384	36435 1640351	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,1-Dichloroethane	CBM	Ave	+++++ 102235	4322 208044	8657 451772	16484 950498	39683 1689157	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Vinyl acetate	CBM	Ave	+++++ 144673	+++++ 323495	+++++ 503287	18272 1181597	55733 2835157	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
2-Butanone (MEK)	CBM	Ave	+++++ 19622	+++++ 39691	+++++ 71237	2372 136308	7655 309968	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Hexane	CBM	Ave	+++++ 52452	+++++ 108248	4458 236115	9026 493163	20447 886142	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
cis-1,2-Dichloroethene	CBM	Ave	+++++ 43948	1778 90453	3509 201607	6849 414738	16888 740051	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
Ethyl acetate	CBM	Ave	+++++ 126022	+++++ 276215	+++++ 480959	+++++ 933715	48461 2249047	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
Chloroform	CBM	Ave	2647 97178	4388 198099	8911 421785	15506 866236	38061 1581905	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Tetrahydrofuran	CBM	Ave	+++++ 63096	+++++ 138158	+++++ 246265	8281 484501	25346 1174961	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,1,1-Trichloroethane	CBM	Ave	+++++ 93502	4174 189856	8119 425590	14954 893295	36173 1629049	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2-Dichloroethane	DFBZ	Ave	+++++ 74570	+++++ 156222	6831 340796	11727 712592	29376 1309457	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1-Butanol	DFBZ	Ave	+++++ 21677	+++++ 40646	+++++ 122991	+++++ 171394	9421 332356	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
Benzene	DFBZ	Ave	+++++ 136368	+++++ 283155	12247 619691	21718 1289194	53895 2374147	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Cyclohexane	DFBZ	Ave	+++++ 24100	+++++ 45891	+++++ 105905	3934 219701	9450 386947	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Carbon tetrachloride	DFBZ	Ave	2115 82585	3137 120424	6936 425976	13863 748515	34839 1386144	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2,3-Dimethylpentane	DFBZ	Ave	+++++ 35713	+++++ 71885	3360 156938	5364 322420	14994 575076	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Thiophene	DFBZ	Ave	+++++ 81080	+++++ 164043	7055 356857	11360 722547	32749 1343789	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2,2,4-Trimethylpentane	DFBZ	Ave	+++++ 345476	+++++ 696193	28267 1515982	55108 3096308	134587 5676918	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Heptane	DFBZ	Ave	+++++ 55017	+++++ 112703	4863 238604	8829 488721	21146 905044	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2-Dichloropropane	DFBZ	Ave	+++++ 63849	+++++ 135449	5706 251789	9433 571342	25767 1141437	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Trichloroethene	DFBZ	Ave	1476 55829	2736 113938	4841 253014	8487 521549	21557 1014059	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Dibromomethane	DFBZ	Ave	+++++ 63978	+++++ 119998	5223 262180	9449 529820	22450 1015819	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Bromodichloromethane	DFBZ	Ave	+++++ 102850	+++++ 216520	8475 480892	16110 971037	39980 1797881	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,4-Dioxane	DFBZ	Ave	+++++ 12962	+++++ 36968	1505 79403	2097 139641	6721 309615	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Methyl methacrylate	DFBZ	Ave	+++++ 79777	+++++ 166422	+++++ 300901	8893 599074	30238 1456048	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Methylcyclohexane	DFBZ	Ave	+++++ 92997	+++++ 187114	7731 406216	14886 842977	35264 1546743	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
4-Methyl-2-pentanone (MIBK)	DFBZ	Ave	+++++ 120828	+++++ 266548	+++++ 598699	15812 909376	51809 2439624	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
cis-1,3-Dichloropropene	DFBZ	Ave	+++++	+++++	6786	13190	31812	+++++	+++++	0.0800	0.160	0.400
			85421	173523	352319	793045	1521326	1.00	2.00	4.00	8.00	16.0
trans-1,3-Dichloropropene	CBZd 5	Ave	+++++	+++++	6177	10340	27117	+++++	+++++	0.0800	0.160	0.400
			68823	152113	296890	658647	1383502	1.00	2.00	4.00	8.00	16.0
Toluene	CBZd 5	Ave	+++++	+++++	13451	21528	60905	+++++	+++++	0.0800	0.160	0.400
			153919	326329	606087	1406174	2937051	1.00	2.00	4.00	8.00	16.0
1,1,2-Trichloroethane	CBZd 5	Ave	+++++	+++++	3811	6897	18372	+++++	+++++	0.0800	0.160	0.400
			49466	105417	204172	446561	911205	1.00	2.00	4.00	8.00	16.0
2-Hexanone	CBZd 5	Ave	+++++	+++++	+++++	7073	23138	+++++	+++++	+++++	0.160	0.400
			58020	114195	308468	433145	1183432	1.00	2.00	4.00	8.00	16.0
Octane	CBZd 5	Ave	+++++	+++++	4536	8073	22082	+++++	+++++	0.0800	0.160	0.400
			55073	116497	254271	518088	1011643	1.00	2.00	4.00	8.00	16.0
C8 Range	CBZd 5	Ave	+++++	+++++	+++++	108617	266284	+++++	+++++	+++++	0.160	0.400
			697619	1436960	2983142	6203684	12060880	1.00	2.00	4.00	8.00	16.0
Dibromochloromethane	CBZd 5	Ave	+++++	+++++	6529	12942	33024	+++++	+++++	0.0800	0.160	0.400
			81803	190331	438464	902612	1891483	1.00	2.00	4.00	8.00	16.0
1,2-Dibromoethane (EDB)	CBZd 5	Ave	+++++	+++++	7424	11912	32736	+++++	+++++	0.0800	0.160	0.400
			82810	183756	361106	825710	1709784	1.00	2.00	4.00	8.00	16.0
Tetrachloroethene	CBZd 5	Ave	1279	2500	4551	8385	19868	0.0200	0.0400	0.0800	0.160	0.400
			52818	110572	242360	518316	1075236	1.00	2.00	4.00	8.00	16.0
Chlorobenzene	CBZd 5	Ave	+++++	+++++	10169	18072	47729	+++++	+++++	0.0800	0.160	0.400
			120798	264485	516782	1158553	2465447	1.00	2.00	4.00	8.00	16.0
Ethylbenzene	CBZd 5	Ave	+++++	+++++	17005	26172	78472	+++++	+++++	0.0800	0.160	0.400
			201106	442535	768480	1737569	3948553	1.00	2.00	4.00	8.00	16.0
m-Xylene & p-Xylene	CBZd 5	Ave	+++++	11865	25157	39802	117852	+++++	0.0800	0.160	0.320	0.800
			308731	676428	1196112	2684790	6291833	2.00	4.00	8.00	16.0	32.0
Nonane	CBZd 5	Ave	+++++	+++++	12817	21633	57593	+++++	+++++	0.0800	0.160	0.400
			151433	329467	654836	1441294	3061549	1.00	2.00	4.00	8.00	16.0
Bromoform	CBZd 5	Ave	+++++	2158	5133	10274	26419	+++++	0.0400	0.0800	0.160	0.400
			47825	166485	397152	866530	1988611	1.00	2.00	4.00	8.00	16.0
Styrene	CBZd 5	Ave	+++++	3747	8273	13483	41558	+++++	0.0400	0.0800	0.160	0.400
			115089	259361	470774	1075638	2541086	1.00	2.00	4.00	8.00	16.0
o-Xylene	CBZd 5	Ave	+++++	+++++	13684	21193	62312	+++++	+++++	0.0800	0.160	0.400
			160310	351197	623631	1365939	3189901	1.00	2.00	4.00	8.00	16.0
1,1,2,2-Tetrachloroethane	CBZd 5	Ave	+++++	+++++	10339	17273	49310	+++++	+++++	0.0800	0.160	0.400
			129612	283671	528435	1057194	2516976	1.00	2.00	4.00	8.00	16.0
1,2,3-Trichloropropane	CBZd 5	Ave	+++++	+++++	2300	3979	12020	+++++	+++++	0.0800	0.160	0.400
			31198	70357	134141	274369	658777	1.00	2.00	4.00	8.00	16.0
Isopropylbenzene	CBZd 5	Ave	+++++	+++++	17579	25851	78721	+++++	+++++	0.0800	0.160	0.400
			209664	469762	839245	1838036	4498773	1.00	2.00	4.00	8.00	16.0
Propylbenzene	CBZd 5	Ave	+++++	+++++	4829	6564	19728	+++++	+++++	0.0800	0.160	0.400
			55490	122801	228287	502759	1269531	1.00	2.00	4.00	8.00	16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
2-Chlorotoluene	CBZd 5	Ave	+++++ 50660	+++++ 116178	3929 223185	6674 519001	21271 1197945	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
4-Ethyltoluene	CBZd 5	Ave	+++++ 209216	+++++ 470643	17613 850389	24383 1826353	76712 4720069	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,3,5-Trimethylbenzene	CBZd 5	Ave	+++++ 85164	+++++ 184043	6974 345419	9268 735810	31514 1885947	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Alpha Methyl Styrene	CBZd 5	Ave	+++++ 82510	+++++ 187336	+++++ 354303	8841 809517	27908 2066076	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Decane	CBZd 5	Ave	+++++ 189083	+++++ 419090	15543 759257	25661 1632200	71149 3815257	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
tert-Butylbenzene	CBZd 5	Ave	+++++ 182107	+++++ 412773	14401 770891	20349 1682234	64684 4515312	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2,4-Trimethylbenzene	CBZd 5	Ave	+++++ 180832	+++++ 410005	14761 764817	19813 1622836	67360 4383450	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
sec-Butylbenzene	CBZd 5	Ave	+++++ 272380	+++++ 615450	22118 1151509	30874 2467800	96336 6820666	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,3-Dichlorobenzene	CBZd 5	Ave	2581 118460	4541 272851	9755 551149	15896 1286011	43692 3298828	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Benzyl chloride	CBZd 5	Ave	+++++ 157512	+++++ 410741	13685 735219	18578 1598462	59541 4250505	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,4-Dichlorobenzene	CBZd 5	Ave	2678 117341	5059 268488	9941 545052	16086 1269190	44948 3184224	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
4-Isopropyltoluene	CBZd 5	Ave	+++++ 213219	+++++ 491082	16482 919460	23308 1951840	75338 5086898	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2,3-Trimethylbenzene	CBZd 5	QuaF	+++++ 183353	+++++ 420978	14733 775110	20125 1624627	66959 4105097	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2-Dichlorobenzene	CBZd 5	Ave	+++++ 113702	+++++ 265655	9714 538536	15119 1214657	41138 3197685	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Indane	CBZd 5	Ave	+++++ 175316	6041 404591	14037 762843	19180 1670413	62198 4622214	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Indene	CBZd 5	Ave	+++++ 150965	+++++ 353313	11769 672537	16584 1469257	54200 4046053	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Butylbenzene	CBZd 5	Ave	+++++ 241684	+++++ 548406	20333 1013104	26410 2083566	88169 5637666	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Undecane	CBZd 5	Ave	+++++ 212100	+++++ 469276	18018 851240	26240 1761528	77930 4541178	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2-Dibromo-3-Chloropropane	CBZd 5	QuaF	+++++ 47740	+++++ 144381	3942 312261	6556 604213	20067 1724558	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2,4,5-Tetramethylbenzene	CBZd 5	QuaF	+++++ 186389	+++++ 466848	16880 936361	19690 1816600	71014 5154231	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Dodecane	CBZd 5	Ave	+++++ 202565	+++++ 349178	+++++ 855739	23057 1562672	76360 3675886	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
1,2,4-Trichlorobenzene	CBZd5	Ave	+++++ 90620	+++++ 224232	8798 484290	11196 1089060	35272 3299699	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Naphthalene	CBZd5	Ave	+++++ 216311	10621 548866	23525 1122391	25941 2219533	88191 6479441	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Hexachlorobutadiene	CBZd5	Ave	+++++ 81866	+++++ 200284	7774 446054	10052 1080114	29410 +++++	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
1,2,3-Trichlorobenzene	CBZd5	Ave	+++++ 89666	+++++ 214504	8763 479297	10179 1057388	33331 3084852	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Methylnaphthalene	CBZd5	Ave	+++++ 93743	+++++ 143251	+++++ 762263	+++++ 1209161	41015 2003736	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
1-Methylnaphthalene	CBZd5	Ave	+++++ 106800	+++++ 152396	+++++ 785887	14358 1234833	46614 1824509	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
4-Bromofluorobenzene (Surr)	CBZd5	Ave	550738 479859	373260 566331	449593 517937	471736 684275	468432 678598	4.64 4.64	4.64 4.64	4.64 4.64	4.64 4.64	4.64 4.64

Curve Type Legend:

Ave = Average ISTD
QuaF = Quadratic ISTD forced zero

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 140-42295/9	GI01IC01.D
Level 2	IC 140-42295/10	GI01IC02.D
Level 3	IC 140-42295/11	GI01IC03.D
Level 4	IC 140-42295/12	GI01IC04.D
Level 5	IC 140-42295/13	GI01IC05.D
Level 6	IC 140-42295/14	GI01IC06.D
Level 7	ICIS 140-42295/15	GI01IC07.D
Level 8	IC 140-42295/7	GI01IC08.D
Level 9	IC 140-42295/5	GI01IC09.D
Level 10	IC 140-42295/3	GI01IC10.D

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
Chlorodifluoromethane	+++++	+++++	18.1						50			
Propene	+++++	+++++	+++++	14.1						50		
Dichlorodifluoromethane	+++++	+++++	6.1						50			
Chloromethane	+++++	+++++	+++++	21.9						50		
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.0						50					
Vinyl chloride	-8.0						50					
1,3-Butadiene	+++++	+++++	+++++	2.5						50		
Butane	+++++	+++++	8.2						50			
Bromomethane	+++++	+++++	7.8						50			
Chloroethane	+++++	+++++	21.6						50			
Ethanol	+++++	+++++	+++++	-4.1						50		
Vinyl bromide	+++++	2.9						50				
2-Methylbutane	+++++	+++++	+++++	1.8						50		
Trichlorofluoromethane	4.8						50					

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
Acrolein	+++++	+++++	+++++	+++++	15.1						50	
Acetonitrile	+++++	+++++	+++++	+++++	36.1						50	
Acetone	+++++	+++++	+++++	-0.6						80		
Isopropyl alcohol	+++++	+++++	+++++	-6.5						50		
Pentane	+++++	+++++	+++++	-1.8						50		
Ethyl ether	+++++	+++++	+++++	-9.0						50		
1,1-Dichloroethene	+++++	2.6						50				
Acrylonitrile	+++++	+++++	+++++	-7.9						50		
tert-Butyl alcohol	+++++	+++++	+++++	-3.8						50		
1,1,2-Trichloro-1,2,2-trifluoroethane	8.7						50					
Methylene Chloride	+++++	+++++	+++++	+++++	9.1						80	
3-Chloropropene	+++++	+++++	47.4	+++++					50			
Carbon disulfide	+++++	+++++	17.2						50			
trans-1,2-Dichloroethene	+++++	7.5						50				
2-Methylpentane	+++++	+++++	19.7						50			
Methyl tert-butyl ether	+++++	+++++	+++++	-17.3						50		
1,1-Dichloroethane	+++++	9.1						50				
Vinyl acetate	+++++	+++++	+++++	-15.8						50		
2-Butanone (MEK)	+++++	+++++	+++++	-13.9						50		
Hexane	+++++	+++++	12.6						50			
cis-1,2-Dichloroethene	+++++	5.2						50				

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
Ethyl acetate	+++++	+++++	+++++	+++++	7.3						50	
Chloroform	7.9						50					
Tetrahydrofuran	+++++	+++++	+++++	-13.1						50		
1,1,1-Trichloroethane	+++++	12.9						50				
1,2-Dichloroethane	+++++	+++++	15.8						50			
1-Butanol	+++++	+++++	+++++	+++++	11.2						50	
Benzene	+++++	+++++	14.0						50			
Cyclohexane	+++++	+++++	+++++	10.9						50		
Carbon tetrachloride	0.3						50					
2,3-Dimethylpentane	+++++	+++++	21.1						50			
Thiophene	+++++	+++++	14.6						50			
2,2,4-Trimethylpentane	+++++	+++++	7.6						50			
Heptane	+++++	+++++	15.1						50			
1,2-Dichloropropane	+++++	+++++	16.6						50			
Trichloroethene	-0.8						50					
Dibromomethane	+++++	+++++	13.2						50			
Bromodichloromethane	+++++	+++++	5.7						50			
1,4-Dioxane	+++++	+++++	20.1						50			
Methyl methacrylate	+++++	+++++	+++++	-18.1						50		
Methylcyclohexane	+++++	+++++	9.2						50			
4-Methyl-2-pentanone (MIBK)	+++++	+++++	+++++	-13.5						50		

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
cis-1,3-Dichloropropene	+++++	+++++	5.4						50			
trans-1,3-Dichloropropene	+++++	+++++	16.6						50			
Toluene	+++++	+++++	18.1						50			
1,1,2-Trichloroethane	+++++	+++++	6.8						50			
2-Hexanone	+++++	+++++	+++++	-18.0						50		
Octane	+++++	+++++	9.3						50			
Dibromochloromethane	+++++	+++++	-2.7						50			
1,2-Dibromoethane (EDB)	+++++	+++++	15.9						50			
Tetrachloroethene	-1.7						50					
Chlorobenzene	+++++	+++++	10.4						50			
Ethylbenzene	+++++	+++++	16.2						50			
m-Xylene & p-Xylene	+++++	26.0						50				
Nonane	+++++	+++++	12.2						50			
Bromoform	+++++	-6.0						50				
Styrene	+++++	9.5						50				
o-Xylene	+++++	+++++	16.8						50			
1,1,2,2-Tetrachloroethane	+++++	+++++	10.6						50			
1,2,3-Trichloropropane	+++++	+++++	0.6						50			
Isopropylbenzene	+++++	+++++	14.2						50			
Propylbenzene	+++++	+++++	17.5						50			
2-Chlorotoluene	+++++	+++++	-0.2						50			

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
4-Ethyltoluene	+++++	+++++	14.6						50			
1,3,5-Trimethylbenzene	+++++	+++++	13.5						50			
Alpha Methyl Styrene	+++++	+++++	+++++	-28.8						50		
Decane	+++++	+++++	12.3						50			
tert-Butylbenzene	+++++	+++++	6.6						50			
1,2,4-Trimethylbenzene	+++++	+++++	9.9						50			
sec-Butylbenzene	+++++	+++++	9.1						50			
1,3-Dichlorobenzene	-11.1						50					
Benzyl chloride	+++++	+++++	8.1						50			
1,4-Dichlorobenzene	-8.9						50					
4-Isopropyltoluene	+++++	+++++	5.0						50			
1,2,3-Trimethylbenzene	+++++	+++++	30.8						50			
1,2-Dichlorobenzene	+++++	+++++	5.9						50			
Indane	+++++	10.6						50				
Indene	+++++	+++++	2.3						50			
Butylbenzene	+++++	+++++	14.3						50			
Undecane	+++++	+++++	16.6						50			
1,2-Dibromo-3-Chloropropane	+++++	+++++	3.8						50			
1,2,4,5-Tetramethylbenzene	+++++	+++++	43.7						50			
Dodecane	+++++	+++++	+++++	-16.4						50		
1,2,4-Trichlorobenzene	+++++	+++++	8.9						50			

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1 Analy Batch No.: 42295

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/01/2020 18:07 Calibration End Date: 09/02/2020 03:27 Calibration ID: 2602

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
Naphthalene	+++++	34.0						80				
Hexachlorobutadiene	+++++	+++++	13.9	+++++					50			
1,2,3-Trichlorobenzene	+++++	+++++	12.7						50			
2-Methylnaphthalene	+++++	+++++	+++++	+++++	-3.8						80	
1-Methylnaphthalene	+++++	+++++	+++++	-17.7						80		

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Lab Sample ID: ICV 140-42295/22 Calibration Date: 09/02/2020 08:56

Instrument ID: MG Calib Start Date: 09/01/2020 18:07

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 09/02/2020 03:27

Lab File ID: GI01ICVR.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorodifluoromethane	Ave	4.301	3.929		4.57	5.00	-8.6	35.0
Propene	Ave	2.115	1.931		4.57	5.00	-8.7	35.0
Dichlorodifluoromethane	Ave	4.809	4.292		4.46	5.00	-10.7	35.0
Chloromethane	Ave	0.8610	0.7442		4.32	5.00	-13.6	35.0
1,2-Dichloro-1,1,2,2-tetrafluoroethane	Ave	2.743	2.277		4.15	5.00	-17.0	35.0
Acetaldehyde	Ave	1.013	0.8426		20.8	25.0	-16.8	35.0
Vinyl chloride	Ave	2.404	2.220		4.62	5.00	-7.6	35.0
1,3-Butadiene	Ave	2.119	1.970		4.65	5.00	-7.0	35.0
Butane	Ave	4.304	4.065		4.72	5.00	-5.6	35.0
Bromomethane	Ave	1.452	1.260		4.34	5.00	-13.2	35.0
Chloroethane	Ave	0.997	0.8957		4.49	5.00	-10.2	35.0
Ethanol	Ave	0.9079	0.6562		18.1	25.0	-27.7	35.0
Vinyl bromide	Ave	1.239	1.117		4.51	5.00	-9.8	35.0
2-Methylbutane	Ave	2.923	2.831		4.84	5.00	-3.1	35.0
Trichlorofluoromethane	Ave	3.737	3.130		4.19	5.00	-16.3	35.0
Acrolein	Ave	0.4464	0.4931		5.52	5.00	10.5	35.0
Acetonitrile	Ave	0.7987	0.6668		4.17	5.00	-16.5	35.0
Acetone	Ave	0.7999	0.8016		5.01	5.00	0.2	35.0
Isopropyl alcohol	Ave	2.389	2.423		5.07	5.00	1.5	35.0
Pentane	Ave	0.2430	0.2227		4.58	5.00	-8.4	35.0
Ethyl ether	Ave	1.710	1.790		5.23	5.00	4.7	35.0
1,1-Dichloroethene	Ave	1.183	1.025		4.33	5.00	-13.4	35.0
Acrylonitrile	Ave	1.092	1.075		4.92	5.00	-1.6	35.0
tert-Butyl alcohol	Ave	2.412	1.818		3.77	5.00	-24.6	35.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	2.736	2.359		4.31	5.00	-13.8	35.0
Methylene Chloride	Ave	1.184	1.067		4.51	5.00	-9.9	35.0
3-Chloropropene	Ave	2.320	1.903		4.10	5.00	-18.0	35.0
Carbon disulfide	Ave	3.977	3.544		4.46	5.00	-10.9	35.0
trans-1,2-Dichloroethene	Ave	1.393	1.226		4.40	5.00	-12.0	35.0
2-Methylpentane	Ave	5.433	4.474		4.12	5.00	-17.6	35.0
Methyl tert-butyl ether	Ave	2.883	2.736		4.74	5.00	-5.1	35.0
1,1-Dichloroethane	Ave	3.473	3.181		4.58	5.00	-8.4	35.0
Vinyl acetate	Ave	4.548	4.694		5.16	5.00	3.2	35.0
2-Butanone (MEK)	Ave	0.5774	0.5305		4.59	5.00	-8.1	35.0
Hexane	Ave	1.792	1.607		4.48	5.00	-10.3	35.0
Isopropyl ether	Ave	5.977	5.799		4.85	5.00	-3.0	35.0
cis-1,2-Dichloroethene	Ave	1.481	1.325		4.47	5.00	-10.5	35.0
Ethyl acetate	Ave	3.981	3.588		4.51	5.00	-9.9	35.0
Chloroform	Ave	3.366	2.934		4.36	5.00	-12.8	35.0
Tert-butyl ethyl ether	Ave	5.017	4.408		4.39	5.00	-12.1	35.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Lab Sample ID: ICV 140-42295/22 Calibration Date: 09/02/2020 08:56

Instrument ID: MG Calib Start Date: 09/01/2020 18:07

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 09/02/2020 03:27

Lab File ID: GI01ICVR.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Tetrahydrofuran	Ave	1.997	1.896		4.75	5.00	-5.1	35.0
1,1,1-Trichloroethane	Ave	3.240	2.865		4.42	5.00	-11.6	35.0
1,2-Dichloroethane	Ave	0.5421	0.4409		4.07	5.00	-18.7	35.0
1-Butanol	Ave	0.1535	0.1036		3.38	5.00	-32.5	35.0
Benzene	Ave	0.9867	0.8211		4.16	5.00	-16.8	35.0
Cyclohexane	Ave	0.1661	0.1347		4.05	5.00	-18.9	35.0
Carbon tetrachloride	Ave	0.6099	0.5409		4.43	5.00	-11.3	35.0
2,3-Dimethylpentane	Ave	0.2548	0.1966		3.86	5.00	-22.8	35.0
Thiophene	Ave	0.5655	0.4452		3.94	5.00	-21.3	35.0
2,2,4-Trimethylpentane	Ave	2.414	1.987		4.12	5.00	-17.7	35.0
Heptane	Ave	0.3880	0.3065		3.95	5.00	-21.0	35.0
1,2-Dichloropropane	Ave	0.4494	0.3788		4.21	5.00	-15.7	35.0
Trichloroethene	Ave	0.4302	0.3138		3.65	5.00	-27.0	35.0
Dibromomethane	Ave	0.4239	0.3454		4.07	5.00	-18.5	35.0
Bromodichloromethane	Ave	0.7367	0.6419		4.36	5.00	-12.9	35.0
1,4-Dioxane	Ave	0.1151	0.0858		3.73	5.00	-25.5	35.0
Methyl methacrylate	Ave	0.5088	0.4152		4.08	5.00	-18.4	35.0
Methylcyclohexane	Ave	0.6505	0.6281		4.83	5.00	-3.4	35.0
4-Methyl-2-pentanone (MIBK)	Ave	0.8567	0.6695		3.91	5.00	-21.9	35.0
cis-1,3-Dichloropropene	Ave	0.5917	0.5245		4.43	5.00	-11.3	35.0
trans-1,3-Dichloropropene	Ave	0.4924	0.4541		4.61	5.00	-7.8	35.0
Toluene	Ave	1.059	0.9715		4.59	5.00	-8.2	35.0
1,1,2-Trichloroethane	Ave	0.3318	0.2919		4.40	5.00	-12.0	35.0
2-Hexanone	Ave	0.3922	0.2950		3.76	5.00	-24.8	35.0
Octane	Ave	0.3858	0.3458		4.48	5.00	-10.4	35.0
Dibromochloromethane	Ave	0.6238	0.5958		4.78	5.00	-4.5	35.0
1,2-Dibromoethane (EDB)	Ave	0.5955	0.5271		4.43	5.00	-11.5	35.0
Tetrachloroethene	Ave	0.3991	0.3272		4.10	5.00	-18.0	35.0
Chlorobenzene	Ave	0.8562	0.7813		4.56	5.00	-8.8	35.0
2,3-Dimethylheptane	Ave	1.832	1.469		4.01	5.00	-19.8	35.0
Ethylbenzene	Ave	1.361	1.213		4.46	5.00	-10.8	35.0
m-Xylene & p-Xylene	Ave	1.076	0.9236		8.58	10.0	-14.2	35.0
Nonane	Ave	1.062	0.9751		4.59	5.00	-8.2	35.0
Bromoform	Ave	0.5248	0.5270		5.02	5.00	0.4	35.0
Styrene	Ave	0.7824	0.6733		4.30	5.00	-13.9	35.0
o-Xylene	Ave	1.089	0.9679		4.44	5.00	-11.1	35.0
1,1,2,2-Tetrachloroethane	Ave	0.8691	0.7611		4.38	5.00	-12.4	35.0
1,2,3-Trichloropropane	Ave	0.2125	0.1885		4.43	5.00	-11.3	35.0
Isopropylbenzene	Ave	1.431	1.289		4.50	5.00	-9.9	35.0
Propylbenzene	Ave	0.3821	0.3364		4.40	5.00	-12.0	35.0
2-Chlorotoluene	Ave	0.3660	0.3422		4.67	5.00	-6.5	35.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Lab Sample ID: ICV 140-42295/22 Calibration Date: 09/02/2020 08:56

Instrument ID: MG Calib Start Date: 09/01/2020 18:07

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 09/02/2020 03:27

Lab File ID: GI01ICVR.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Ethyltoluene	Ave	1.429	1.215		4.25	5.00	-15.0	35.0
1,3,5-Trimethylbenzene	Ave	0.5712	0.5698		4.99	5.00	-0.2	35.0
Alpha Methyl Styrene	Ave	0.5644	0.4904		4.34	5.00	-13.1	35.0
Decane	Ave	1.287	1.157		4.49	5.00	-10.1	35.0
tert-Butylbenzene	Ave	1.256	1.107		4.41	5.00	-11.8	35.0
1,2,4-Trimethylbenzene	Ave	1.249	1.123		4.49	5.00	-10.1	35.0
sec-Butylbenzene	Ave	1.884	1.651		4.38	5.00	-12.4	35.0
1,3-Dichlorobenzene	Ave	0.8900	0.7770		4.37	5.00	-12.7	35.0
Benzyl chloride	Ave	1.177	1.122		4.77	5.00	-4.6	35.0
1,4-Dichlorobenzene	Ave	0.9015	0.7590		4.21	5.00	-15.8	35.0
4-Isopropyltoluene	Ave	1.459	1.292		4.43	5.00	-11.4	35.0
1,2,3-Trimethylbenzene	QuaF		0.8283		3.85	5.00	-23.0	35.0
Butylcyclohexane	Ave	1.221	1.032		4.22	5.00	-15.5	35.0
1,2-Dichlorobenzene	Ave	0.8529	0.7455		4.37	5.00	-12.6	35.0
Indane	Ave	1.248	1.052		4.22	5.00	-15.7	35.0
Indene	Ave	1.069	0.7883		3.69	5.00	-26.3	35.0
Butylbenzene	Ave	1.654	1.495		4.52	5.00	-9.6	35.0
Undecane	Ave	1.437	1.263		4.40	5.00	-12.1	35.0
1,2-Dibromo-3-Chloropropane	QuaF		0.2886		3.87	5.00	-22.7	35.0
1,2,4,5-Tetramethylbenzene	QuaF		1.092		4.70	5.00	-5.9	35.0
Dodecane	Ave	1.254	1.200		4.79	5.00	-4.3	35.0
1,2,4-Trichlorobenzene	Ave	0.7511	0.6306		4.20	5.00	-16.0	35.0
Naphthalene	Ave	1.812	1.517		4.19	5.00	-16.3	35.0
Hexachlorobutadiene	Ave	0.6345	0.5377		4.24	5.00	-15.3	35.0
1,2,3-Trichlorobenzene	Ave	0.7230	0.6231		4.31	5.00	-13.8	35.0
2-Methylnaphthalene	Ave	0.7792	0.6437		4.13	5.00	-17.4	50.0
1-Methylnaphthalene	Ave	0.7933	0.6885		4.34	5.00	-13.2	50.0
4-Bromofluorobenzene (Surr)	Ave	0.7532	0.7643		11.8	11.6	1.5	35.0

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Lab File ID: GDNUI05S.D BFB Injection Date: 09/05/2020

Instrument ID: MG BFB Injection Time: 10:56

Analysis Batch No.: 42481

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE		
50	15.0 - 40.0 % of mass 95	34.6		
75	30.0 - 60.0 % of mass 95	53.2		
95	Base Peak, 100% relative abundance	100.0		
96	5.0 - 9.0 % of mass 95	6.3		
173	Less than 2.0 % of mass 174	0.5	(0.5) 1	
174	Greater than 50% of mass 95	92.2		
175	5.0 - 9.0 % of mass 174	6.3	(6.8) 1	
176	95.0 - 101.0 % of mass 174	87.1	(94.5) 1	*
177	5.0 - 9.0 % of mass 176	5.8	(6.7) 2	

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 140-42481/2	GLCSI05.D	09/05/2020	11:32
	LCS 140-42481/1002	GLCSI05-LCS.d	09/05/2020	11:32
	MB 140-42481/4	G500BI05.D	09/05/2020	12:59
IA-081-A-29	140-20195-17	GI05P113.D	09/06/2020	2:17
IA-100-B-29	140-20195-18	GI05P114.D	09/06/2020	3:04
IA-101-B-29	140-20195-19	GI05P115.D	09/06/2020	3:49

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Lab Sample ID: CCVIS 140-42481/2 Calibration Date: 09/05/2020 11:32

Instrument ID: MG Calib Start Date: 09/01/2020 18:07

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 09/02/2020 03:27

Lab File ID: GLCSI05.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorodifluoromethane	Ave	4.301	3.677		1.71	2.00	-14.5	30.0
Propene	Ave	2.115	1.818		1.72	2.00	-14.0	30.0
Dichlorodifluoromethane	Ave	4.809	3.752		1.56	2.00	-22.0	30.0
1,2-Dichloro-1,1,2,2-tetrafluoroethane	Ave	2.743	2.128		1.55	2.00	-22.4	30.0
Chloromethane	Ave	0.8610	0.6847		1.59	2.00	-20.5	30.0
Acetaldehyde	Ave	1.013	0.7751		7.65	10.0	-23.5	30.0
Vinyl chloride	Ave	2.404	1.890		1.57	2.00	-21.4	30.0
1,3-Butadiene	Ave	2.119	1.735		1.64	2.00	-18.1	30.0
Butane	Ave	4.304	3.435		1.60	2.00	-20.2	30.0
Bromomethane	Ave	1.452	1.157		1.59	2.00	-20.3	30.0
Chloroethane	Ave	0.997	0.7848		1.57	2.00	-21.3	30.0
Ethanol	Ave	0.9079	0.5922		6.52	10.0	-34.8*	30.0
Vinyl bromide	Ave	1.239	1.091		1.76	2.00	-11.9	30.0
2-Methylbutane	Ave	2.923	2.456		1.68	2.00	-16.0	30.0
Trichlorofluoromethane	Ave	3.737	3.175		1.70	2.00	-15.0	30.0
Acrolein	Ave	0.4464	0.4805		2.15	2.00	7.6	30.0
Acetonitrile	Ave	0.7987	0.6167		1.54	2.00	-22.8	30.0
Acetone	Ave	0.7999	0.7941		1.99	2.00	-0.7	30.0
Isopropyl alcohol	Ave	2.389	2.425		2.03	2.00	1.5	30.0
Pentane	Ave	0.2430	0.1955		1.61	2.00	-19.5	30.0
Ethyl ether	Ave	1.710	1.585		1.85	2.00	-7.3	30.0
1,1-Dichloroethene	Ave	1.183	0.9246		1.56	2.00	-21.9	30.0
Acrylonitrile	Ave	1.092	0.9845		1.80	2.00	-9.8	30.0
tert-Butyl alcohol	Ave	2.412	1.731		1.43	2.00	-28.3	30.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	2.736	2.130		1.56	2.00	-22.2	30.0
Methylene Chloride	Ave	1.184	0.9176		1.55	2.00	-22.5	30.0
3-Chloropropene	Ave	2.320	1.698		1.46	2.00	-26.8	30.0
Carbon disulfide	Ave	3.977	2.953		1.49	2.00	-25.7	30.0
trans-1,2-Dichloroethene	Ave	1.393	1.096		1.57	2.00	-21.4	30.0
2-Methylpentane	Ave	5.433	3.968		1.46	2.00	-27.0	30.0
Methyl tert-butyl ether	Ave	2.883	2.280		1.58	2.00	-20.9	30.0
1,1-Dichloroethane	Ave	3.473	2.623		1.51	2.00	-24.5	30.0
Vinyl acetate	Ave	4.548	4.288		1.89	2.00	-5.7	30.0
2-Butanone (MEK)	Ave	0.5774	0.4318		1.50	2.00	-25.2	30.0
Hexane	Ave	1.792	1.369		1.53	2.00	-23.6	30.0
Isopropyl ether	Ave	5.977	5.078		1.70	2.00	-15.0	30.0
cis-1,2-Dichloroethene	Ave	1.481	1.235		1.67	2.00	-16.6	30.0
Ethyl acetate	Ave	3.981	3.178		1.60	2.00	-20.2	30.0
Chloroform	Ave	3.366	2.569		1.53	2.00	-23.7	30.0
Tert-butyl ethyl ether	Ave	5.017	3.686		1.47	2.00	-26.5	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Lab Sample ID: CCVIS 140-42481/2 Calibration Date: 09/05/2020 11:32

Instrument ID: MG Calib Start Date: 09/01/2020 18:07

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 09/02/2020 03:27

Lab File ID: GLCSI05.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Tetrahydrofuran	Ave	1.997	1.700		1.70	2.00	-14.9	30.0
1,1,1-Trichloroethane	Ave	3.240	2.619		1.62	2.00	-19.2	30.0
1,2-Dichloroethane	Ave	0.5421	0.4281		1.58	2.00	-21.0	30.0
1-Butanol	Ave	0.1535	0.1053		1.37	2.00	-31.4*	30.0
Benzene	Ave	0.9867	0.7612		1.54	2.00	-22.9	30.0
Cyclohexane	Ave	0.1661	0.1169		1.41	2.00	-29.6	30.0
Carbon tetrachloride	Ave	0.6099	0.5454		1.79	2.00	-10.6	30.0
2,3-Dimethylpentane	Ave	0.2548	0.1740		1.37	2.00	-31.7*	30.0
Thiophene	Ave	0.5655	0.4130		1.46	2.00	-27.0	30.0
2,2,4-Trimethylpentane	Ave	2.414	1.808		1.50	2.00	-25.1	30.0
Heptane	Ave	0.3880	0.2720		1.40	2.00	-29.9	30.0
1,2-Dichloropropane	Ave	0.4494	0.3353		1.49	2.00	-25.4	30.0
Trichloroethene	Ave	0.4302	0.3334		1.55	2.00	-22.5	30.0
Dibromomethane	Ave	0.4239	0.3225		1.52	2.00	-23.9	30.0
Bromodichloromethane	Ave	0.7367	0.5668		1.54	2.00	-23.1	30.0
1,4-Dioxane	Ave	0.1151	0.0728		1.26	2.00	-36.8*	30.0
Methyl methacrylate	Ave	0.5088	0.3917		1.54	2.00	-23.0	30.0
Methylcyclohexane	Ave	0.6505	0.5855		1.80	2.00	-10.0	30.0
4-Methyl-2-pentanone (MIBK)	Ave	0.8567	0.6661		1.55	2.00	-22.3	30.0
cis-1,3-Dichloropropene	Ave	0.5917	0.4546		1.54	2.00	-23.2	30.0
trans-1,3-Dichloropropene	Ave	0.4924	0.3709		1.51	2.00	-24.7	30.0
Toluene	Ave	1.059	0.8361		1.58	2.00	-21.0	30.0
1,1,2-Trichloroethane	Ave	0.3318	0.2390		1.44	2.00	-28.0	30.0
2-Hexanone	Ave	0.3922	0.2688		1.37	2.00	-31.5*	30.0
Octane	Ave	0.3858	0.2866		1.49	2.00	-25.7	30.0
Dibromochloromethane	Ave	0.6238	0.5583		1.79	2.00	-10.5	30.0
1,2-Dibromoethane (EDB)	Ave	0.5955	0.4768		1.60	2.00	-19.9	30.0
Tetrachloroethene	Ave	0.3991	0.3117		1.56	2.00	-21.9	30.0
Chlorobenzene	Ave	0.8562	0.7050		1.65	2.00	-17.7	30.0
2,3-Dimethylheptane	Ave	1.832	1.204		1.31	2.00	-34.3*	30.0
Ethylbenzene	Ave	1.361	1.083		1.59	2.00	-20.4	30.0
m-Xylene & p-Xylene	Ave	1.076	0.8374		3.11	4.00	-22.2	30.0
Nonane	Ave	1.062	0.7829		1.47	2.00	-26.3	30.0
Bromoform	Ave	0.5248	0.5710		2.18	2.00	8.8	30.0
Styrene	Ave	0.7824	0.6702		1.71	2.00	-14.3	30.0
o-Xylene	Ave	1.089	0.8620		1.58	2.00	-20.9	30.0
1,1,2,2-Tetrachloroethane	Ave	0.8691	0.6372		1.47	2.00	-26.7	30.0
1,2,3-Trichloropropane	Ave	0.2125	0.1771		1.67	2.00	-16.6	30.0
Isopropylbenzene	Ave	1.431	1.198		1.67	2.00	-16.3	30.0
Propylbenzene	Ave	0.3821	0.3359		1.76	2.00	-12.1	30.0
2-Chlorotoluene	Ave	0.3660	0.3406		1.86	2.00	-6.9	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Lab Sample ID: CCVIS 140-42481/2 Calibration Date: 09/05/2020 11:32

Instrument ID: MG Calib Start Date: 09/01/2020 18:07

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 09/02/2020 03:27

Lab File ID: GLCSI05.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Ethyltoluene	Ave	1.429	1.119		1.57	2.00	-21.7	30.0
1,3,5-Trimethylbenzene	Ave	0.5712	0.5647		1.98	2.00	-1.1	30.0
Alpha Methyl Styrene	Ave	0.5644	0.4897		1.74	2.00	-13.2	30.0
Decane	Ave	1.287	0.9584		1.49	2.00	-25.5	30.0
tert-Butylbenzene	Ave	1.256	1.081		1.72	2.00	-14.0	30.0
1,2,4-Trimethylbenzene	Ave	1.249	1.026		1.64	2.00	-17.8	30.0
sec-Butylbenzene	Ave	1.884	1.574		1.67	2.00	-16.5	30.0
1,3-Dichlorobenzene	Ave	0.8900	0.8616		1.94	2.00	-3.2	30.0
Benzyl chloride	Ave	1.177	0.9835		1.67	2.00	-16.4	30.0
1,4-Dichlorobenzene	Ave	0.9015	0.8528		1.89	2.00	-5.4	30.0
4-Isopropyltoluene	Ave	1.459	1.249		1.71	2.00	-14.4	30.0
1,2,3-Trimethylbenzene	QuaF		0.7411		1.38	2.00	-30.9*	30.0
Butylcyclohexane	Ave	1.221	0.8971		1.47	2.00	-26.5	30.0
1,2-Dichlorobenzene	Ave	0.8529	0.8229		1.93	2.00	-3.5	30.0
Indane	Ave	1.248	1.046		1.68	2.00	-16.2	30.0
Indene	Ave	1.069	0.7538		1.41	2.00	-29.5	30.0
Butylbenzene	Ave	1.654	1.344		1.63	2.00	-18.7	30.0
Undecane	Ave	1.437	1.069		1.49	2.00	-25.6	30.0
1,2-Dibromo-3-Chloropropane	QuaF		0.3317		1.76	2.00	-11.8	30.0
1,2,4,5-Tetramethylbenzene	QuaF		1.068		1.84	2.00	-7.8	30.0
Dodecane	Ave	1.254	1.068		1.70	2.00	-14.9	30.0
1,2,4-Trichlorobenzene	Ave	0.7511	0.7953		2.12	2.00	5.9	30.0
Naphthalene	Ave	1.812	1.600		1.77	2.00	-11.7	30.0
Hexachlorobutadiene	Ave	0.6345	0.7715		2.43	2.00	21.6	30.0
1,2,3-Trichlorobenzene	Ave	0.7230	0.7925		2.19	2.00	9.6	30.0
2-Methylnaphthalene	Ave	0.7792	0.7662		1.97	2.00	-1.7	50.0
1-Methylnaphthalene	Ave	0.7933	0.8215		2.07	2.00	3.6	50.0
4-Bromofluorobenzene (Surr)	Ave	0.7532	0.7556		4.65	4.64	0.3	30.0

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Lab File ID: RH287BLK2.D BFB Injection Date: 08/28/2020

Instrument ID: MR BFB Injection Time: 12:43

Analysis Batch No.: 42222

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	22.7	
75	30.0 - 60.0 % of mass 95	48.7	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.9	
173	Less than 2.0 % of mass 174	0.7	(0.6) 1
174	Greater than 50% of mass 95	103.7	
175	5.0 - 9.0 % of mass 174	7.5	(7.2) 1
176	95.0 - 101.0 % of mass 174	102.5	(98.8) 1
177	5.0 - 9.0 % of mass 176	6.5	(6.4) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 140-42222/3	RH28IC10X.D	08/28/2020	14:01
	IC 140-42222/5	RH28IC09.D	08/28/2020	15:43
	IC 140-42222/7	RH28IC08.D	08/28/2020	17:27
	IC 140-42222/9	RH28IC01.D	08/28/2020	19:11
	IC 140-42222/10	RH28IC02.D	08/28/2020	20:00
	IC 140-42222/11	RH28IC03.D	08/28/2020	20:50
	IC 140-42222/12	RH28IC04.D	08/28/2020	21:38
	IC 140-42222/13	RH28IC05.D	08/28/2020	22:26
	IC 140-42222/14	RH28IC06.D	08/28/2020	23:14
	ICIS 140-42222/15	RH28IC07.D	08/29/2020	0:02
	ICV 140-42222/17	RH28ICV.D	08/29/2020	1:37

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1 Analy Batch No.: 42222

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2020 14:01 Calibration End Date: 08/29/2020 00:02 Calibration ID: 2588

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 140-42222/9	RH28IC01.D
Level 2	IC 140-42222/10	RH28IC02.D
Level 3	IC 140-42222/11	RH28IC03.D
Level 4	IC 140-42222/12	RH28IC04.D
Level 5	IC 140-42222/13	RH28IC05.D
Level 6	IC 140-42222/14	RH28IC06.D
Level 7	ICIS 140-42222/15	RH28IC07.D
Level 8	IC 140-42222/7	RH28IC08.D
Level 9	IC 140-42222/5	RH28IC09.D
Level 10	IC 140-42222/3	RH28IC10X.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Chlorodifluoromethane	+++++ 2.6107	+++++ 2.7021	3.2111 2.4612	2.8921 2.5686	2.5376 2.5100	Ave		2.6867				9.3		30.0			
Propene	+++++ 1.3377	+++++ 1.3956	+++++ 1.2227	+++++ 1.1436	1.2930 1.2580	Ave		1.2751				6.9		30.0			
Dichlorodifluoromethane	+++++ 2.1218	+++++ 2.3299	2.2530 2.0272	2.7264 1.0941	1.8744 1.7080	Ave		2.0169				24.0		30.0			
Chloromethane	+++++ 0.5202	+++++ 0.5116	+++++ 0.4425	0.5370 0.3959	0.4955 0.4360	Ave		0.4770				11.0		30.0			
1,2-Dichloro-1,1,2,2-tetrafluoroethane	+++++ 2.9556	+++++ 3.1185	3.4544 2.6564	3.3270 1.9204	2.7209 2.4653	Ave		2.8273				17.6		30.0			
Vinyl chloride	+++++ 1.7273	1.9789 1.7775	1.9488 1.4472	1.7168 1.3224	1.6350 1.4500	Lin1	0.0423	1.4404							0.9940		0.9900
1,3-Butadiene	+++++ 1.3346	+++++ 1.4072	+++++ 1.1716	1.3263 1.0425	1.2088 1.1264	Ave		1.2311				10.6		30.0			
Butane	+++++ 2.8578	+++++ 2.9598	+++++ 2.3471	2.9689 2.1336	2.6772 2.2726	Ave		2.6024				13.4		30.0			
Bromomethane	+++++ 1.7493	+++++ 1.7724	2.3301 1.5377	1.9003 1.3768	1.6820 1.4836	Lin2	0.0619	1.5496							0.9930		0.9900
Chloroethane	+++++ 0.7930	+++++ 0.8669	1.1070 0.7330	0.8834 0.6465	0.8172 0.7032	Lin2	0.0291	0.7344							0.9910		0.9900
Ethanol	+++++ 0.9083	+++++ 1.1465	1.3520 0.9252	0.8763 1.0506	0.9238 0.9145	Lin1	0.0876	0.9613							0.9930		0.9900
Vinyl bromide	+++++ 1.5352	+++++ 1.5943	2.1364 1.4075	1.7435 1.2824	1.4402 1.3939	Ave		1.5667				17.2		30.0			
2-Methylbutane	+++++ 2.0457	+++++ 2.0889	2.5536 1.7561	2.2915 1.5923	2.0892 1.7524	Ave		2.0212				15.6		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1 Analy Batch No.: 42222

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2020 14:01 Calibration End Date: 08/29/2020 00:02 Calibration ID: 2588

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Trichlorofluoromethane	+++++ 3.9263	4.5526 4.0016	4.7647 3.3893	4.1249 3.1571	3.9554 3.5072	Ave		3.9310				13.3		30.0			
Acrolein	+++++ 0.3342	+++++ 0.3698	+++++ 0.3807	+++++ 0.3405	0.4206 0.3989	Ave		0.3741				8.9		30.0			
Acetonitrile	+++++ 0.5218	+++++ 0.5928	+++++ 0.5367	+++++ 0.5152	0.5565 0.5738	Ave		0.5495				5.5		30.0			
Acetone	+++++ 0.8127	+++++ 0.7531	+++++ 0.6341	0.7132 0.7062	0.7734 0.6277	Ave		0.7172				9.6		30.0			
Pentane	+++++ 0.2352	+++++ 0.2488	+++++ 0.2357	+++++ 0.1973	0.2386 0.2230	Ave		0.2298				7.8		30.0			
Isopropyl alcohol	+++++ 1.8669	+++++ 2.1571	+++++ 1.9439	1.9930 1.6988	1.9338 1.8861	Ave		1.9256				7.2		30.0			
Ethyl ether	+++++ 1.7091	+++++ 1.7125	+++++ 1.5465	2.0445 1.3833	1.7290 1.5826	Ave		1.6725				12.3		30.0			
1,1-Dichloroethene	+++++ 1.3350	1.9399 1.3374	1.5655 1.3004	1.4989 1.1507	1.3336 1.3025	Ave		1.4182				16.2		30.0			
Acrylonitrile	+++++ 0.8189	+++++ 0.7775	+++++ 0.8468	0.7507 0.7754	0.8034 0.9257	Ave		0.8140				7.2		30.0			
tert-Butyl alcohol	+++++ 2.2882	+++++ 2.5656	+++++ 2.3857	2.6766 2.1426	2.3148 2.4255	Ave		2.3999				7.4		30.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	+++++ 2.9870	3.4885 3.0388	3.5493 2.9029	3.3221 2.5905	2.9463 2.9359	Ave		3.0846				10.0		30.0			
Methylene Chloride	+++++ 1.1693	+++++ 1.1403	+++++ 1.1240	1.3252 1.0360	1.2442 1.1484	Ave		1.1696				7.9		30.0			
3-Chloropropene	+++++ 1.3861	+++++ 1.2522	2.4529 1.2930	1.7850 1.1346	1.3930 1.3789	Lin2	0.0948	1.2347							0.9940		0.9900
Carbon disulfide	+++++ 3.7809	+++++ 3.6595	4.3860 3.5647	3.9759 3.1531	3.8159 3.6005	Ave		3.7421				9.5		30.0			
trans-1,2-Dichloroethene	+++++ 1.3446	+++++ 1.2740	1.5936 1.2677	1.2357 1.1653	1.2725 1.3665	Ave		1.3150				9.8		30.0			
2-Methylpentane	+++++ 3.0664	+++++ 3.0821	4.1716 2.8763	3.3877 2.6060	3.0351 3.0350	Ave		3.1575				14.7		30.0			
Methyl tert-butyl ether	+++++ 3.3024	+++++ 3.2507	+++++ 3.0594	3.6529 2.7228	3.2273 3.1566	Ave		3.1960				8.7		30.0			
1,1-Dichloroethane	+++++ 2.2465	+++++ 2.2234	2.6066 2.1279	2.6248 1.9158	2.3351 2.1842	Ave		2.2830				10.4		30.0			
Vinyl acetate	+++++ 3.3796	+++++ 3.5745	3.5064 3.5863	3.2953 3.2450	3.2326 3.9772	Ave		3.4746				7.1		30.0			
2-Butanone (MEK)	+++++ 0.6582	+++++ 0.6786	+++++ 0.6042	0.7318 0.5890	0.5994 0.6544	Ave		0.6451				8.0		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1 Analy Batch No.: 42222

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2020 14:01 Calibration End Date: 08/29/2020 00:02 Calibration ID: 2588

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Hexane	+++++ 0.9916	+++++ 0.9670	+++++ 0.9389	1.0579 0.8854	0.9660 0.9985	Ave		0.9722				5.5		30.0			
cis-1,2-Dichloroethene	+++++ 1.4151	1.8687 1.4034	1.9769 1.3567	1.6141 1.2253	1.4188 1.4000	Ave		1.5199				16.5		30.0			
Ethyl acetate	+++++ 3.3043	+++++ 3.4449	+++++ 3.2179	3.2448 2.9014	3.0505 3.4322	Ave		3.2280				6.1		30.0			
Chloroform	+++++ 2.8302	3.4065 2.8080	3.4563 2.6266	3.0176 2.3841	2.7318 2.7371	Ave		2.8887				12.2		30.0			
Tetrahydrofuran	+++++ 1.6540	+++++ 1.6863	1.7958 1.5310	1.8290 1.4025	1.7268 1.6005	Ave		1.6533				8.5		30.0			
1,1,1-Trichloroethane	+++++ 2.7253	+++++ 2.6891	3.0889 2.5963	3.1076 2.3440	2.8099 2.7095	Ave		2.7588				9.1		30.0			
1,2-Dichloroethane	+++++ 0.3129	0.3269 0.3151	0.3761 0.3025	0.3448 0.2790	0.2869 0.3375	Ave		0.3202				9.4		30.0			
1-Butanol	+++++ 0.1532	+++++ 0.1843	+++++ 0.1684	+++++ 0.1559	0.1705 0.1980	Ave		0.1717				9.9		30.0			
Cyclohexane	+++++ 0.1134	+++++ 0.1175	+++++ 0.1162	0.1299 0.1083	0.1109 0.1320	Ave		0.1183				7.8		30.0			
Benzene	+++++ 0.8098	+++++ 0.8066	0.9347 0.8056	0.8958 0.7460	0.8119 0.9019	Ave		0.8390				7.6		30.0			
Carbon tetrachloride	0.6680 0.5386	0.5496 0.3919	0.6184 0.5641	0.6065 0.3389	0.5810 0.5543	Ave		0.5411				18.7		30.0			
2,3-Dimethylpentane	+++++ 0.1693	+++++ 0.1780	0.2366 0.1701	0.1907 0.1592	0.1833 0.1852	Ave		0.1840				12.8		30.0			
Thiophene	0.5188 0.4569	0.5575 0.4727	0.5254 0.4550	0.4783 0.4180	0.4549 0.5011	Ave		0.4839				8.6		30.0			
2,2,4-Trimethylpentane	+++++ 1.2664	1.5195 1.2620	1.5640 1.2273	1.4197 1.1562	1.2339 1.3930	Ave		1.3380				10.6		30.0			
Heptane	+++++ 0.2710	+++++ 0.2631	+++++ 0.2624	0.2963 0.2501	0.2673 0.2952	Ave		0.2722				6.4		30.0			
1,2-Dichloropropane	+++++ 0.3177	+++++ 0.3066	0.3645 0.2952	0.3483 0.2774	0.3160 0.3298	Ave		0.3195				8.8		30.0			
Trichloroethene	0.4497 0.3926	0.5298 0.3879	0.4481 0.3687	0.4188 0.3827	0.3813 0.4108	Ave		0.4170				11.6		30.0			
Dibromomethane	+++++ 0.3725	+++++ 0.3485	0.4057 0.3337	0.3569 0.3152	0.3309 0.3921	Ave		0.3569				8.8		30.0			
Bromodichloromethane	+++++ 0.5806	0.6048 0.5864	0.6525 0.5848	0.6050 0.5363	0.6066 0.6685	Ave		0.6028				6.5		30.0			
1,4-Dioxane	+++++ 0.1193	+++++ 0.1472	+++++ 0.1364	0.1623 0.1262	0.1286 0.1438	Ave		0.1377				10.7		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1 Analy Batch No.: 42222

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2020 14:01 Calibration End Date: 08/29/2020 00:02 Calibration ID: 2588

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Methyl methacrylate	+++++ 0.3762	+++++ 0.3852	+++++ 0.3799	0.3616 0.3656	0.3544 0.4380	Ave		0.3801				7.3		30.0			
Methylcyclohexane	+++++ 0.4802	+++++ 0.4840	0.5216 0.4655	0.5248 0.4501	0.4901 0.5293	Ave		0.4932				5.9		30.0			
4-Methyl-2-pentanone (MIBK)	+++++ 0.7725	+++++ 0.7853	0.7472 0.7464	0.7384 0.7266	0.7651 0.8871	Ave		0.7711				6.6		30.0			
cis-1,3-Dichloropropene	+++++ 0.4190	0.4401 0.4418	0.4007 0.4344	0.4131 0.4161	0.3920 0.5123	Ave		0.4299				8.2		30.0			
trans-1,3-Dichloropropene	+++++ 0.4258	0.4704 0.4577	0.4391 0.4665	0.3729 0.4381	0.4085 0.5148	Ave		0.4438				9.1		30.0			
Toluene	1.5227 1.2166	1.4950 1.1968	1.4220 1.2049	1.2887 1.1262	1.2065 1.2431	Ave		1.2923				10.7		30.0			
1,1,2-Trichloroethane	+++++ 0.3841	0.4554 0.3772	0.4175 0.3814	0.3831 0.3370	0.3990 0.3844	Ave		0.3910				8.2		30.0			
2-Hexanone	+++++ 0.3988	+++++ 0.4064	+++++ 0.4116	0.3451 0.3796	0.3498 0.4469	Ave		0.3912				9.2		30.0			
C8 Range	+++++ 2.9679	+++++ 2.9908	+++++ 2.8076	3.1426 2.8844	2.9568 3.5063	Ave		3.0366				7.6		30.0			
Octane	+++++ 0.3405	+++++ 0.3568	0.4173 0.3457	0.3796 0.3306	0.3316 0.3795	Ave		0.3602				8.3		30.0			
Dibromochloromethane	0.7815 0.7039	0.9506 0.7884	0.8680 0.8169	0.7735 0.6994	0.7833 0.8665	Ave		0.8032				9.5		30.0			
1,2-Dibromoethane (EDB)	0.7695 0.6724	0.7671 0.6886	0.6946 0.6890	0.6792 0.6397	0.6444 0.7566	Ave		0.7001				6.9		30.0			
Tetrachloroethene	0.4610 0.4410	0.5741 0.4449	0.5821 0.4318	0.4698 0.3965	0.4838 0.4631	Ave		0.4748				12.5		30.0			
Chlorobenzene	+++++ 0.9237	1.1167 0.9513	1.1452 0.9260	0.9890 0.8674	0.9522 1.0344	Ave		0.9896				9.4		30.0			
Ethylbenzene	+++++ 1.5474	1.8237 1.5917	1.6932 1.5793	1.7106 1.4790	1.5485 1.7595	Ave		1.6370				7.0		30.0			
m-Xylene & p-Xylene	+++++ 1.1650	1.4009 1.2117	1.3095 1.2299	1.2166 1.1594	1.1245 1.4158	Ave		1.2481				8.4		30.0			
Nonane	+++++ 0.7139	0.7828 0.7333	0.7824 0.7708	0.7143 0.7329	0.6910 0.9372	Ave		0.7621				9.6		30.0			
Bromoform	+++++ 0.5881	+++++ 0.8951	0.8517 0.9880	0.8166 0.8099	0.7994 1.2274	Ave		0.8720				20.9		30.0			
Styrene	1.0335 0.8845	0.9510 0.9122	0.9533 0.9157	0.7994 0.8265	0.8445 0.9404	Ave		0.9061				7.7		30.0			
o-Xylene	1.4960 1.2289	1.4610 1.2425	1.3820 1.2551	1.2803 1.1235	1.1730 1.2844	Ave		1.2927				9.3		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1 Analy Batch No.: 42222

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2020 14:01 Calibration End Date: 08/29/2020 00:02 Calibration ID: 2588

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
1,1,2,2-Tetrachloroethane	+++++ 1.0569	1.1258 1.0810	1.0582 1.0709	1.0127 0.8626	1.0351 1.1717	Ave		1.0528				8.1		30.0			
1,2,3-Trichloropropane	+++++ 0.2703	+++++ 0.2851	0.3103 0.2824	0.3054 0.2539	0.2684 0.3047	Ave		0.2850				7.2		30.0			
Isopropylbenzene	+++++ 1.7794	2.0621 1.8117	1.9639 1.8078	1.7919 1.6382	1.7608 1.9665	Ave		1.8425				7.1		30.0			
Propylbenzene	+++++ 0.5297	0.5537 0.5354	0.5514 0.5431	0.5304 0.4982	0.5056 0.6091	Ave		0.5396				5.9		30.0			
2-Chlorotoluene	+++++ 0.4899	+++++ 0.4996	0.5244 0.4913	0.4923 0.4552	0.4929 0.5290	Ave		0.4968				4.6		30.0			
4-Ethyltoluene	1.9783 1.7908	1.9444 1.8488	1.8701 1.8736	1.7237 1.7256	1.7106 2.0878	Ave		1.8554				6.6		30.0			
1,3,5-Trimethylbenzene	0.8183 0.7768	0.9198 0.7933	0.8531 0.7968	0.8230 0.7077	0.7919 0.8664	Ave		0.8147				7.0		30.0			
Alpha Methyl Styrene	+++++ 0.7042	0.6979 0.7563	0.7015 0.7933	0.6041 0.7034	0.6763 0.9270	Ave		0.7293				12.4		30.0			
Decane	0.8780 0.9428	0.9411 0.9986	0.9429 1.0406	0.8645 0.9692	0.9119 1.2074	Ave		0.9697				10.2		30.0			
tert-Butylbenzene	2.0483 1.7167	1.8895 1.7502	1.7434 1.8038	1.6991 1.6353	1.6484 2.1972	Ave		1.8132				10.0		30.0			
1,2,4-Trimethylbenzene	1.3114 1.4930	1.5304 1.5670	1.5493 1.6179	1.4642 1.4653	1.4483 1.8995	Ave		1.5346				10.0		30.0			
sec-Butylbenzene	2.0774 2.2811	2.4783 2.3979	2.3657 2.5098	2.2577 2.3164	2.2150 3.1003	Ave		2.4000				11.5		30.0			
1,3-Dichlorobenzene	1.1715 1.1150	1.0596 1.1693	1.2256 1.1751	0.9666 1.1048	1.0669 1.5638	Ave		1.1618				13.7		30.0			
Benzyl chloride	+++++ 1.0678	+++++ 1.2909	1.0657 1.3483	0.9789 1.3285	0.9689 +++++	Ave		1.1499				14.5		30.0			
1,4-Dichlorobenzene	+++++ 1.0968	1.2433 1.1389	1.1419 1.1582	1.0527 1.0585	1.0058 1.4055	Ave		1.1446				10.5		30.0			
4-Isopropyltoluene	1.9776 1.9680	1.9472 2.0484	1.9781 2.0769	1.8973 1.8590	1.8917 2.3582	Ave		2.0002				7.1		30.0			
1,2,3-Trimethylbenzene	+++++ 1.5094	+++++ 1.5689	1.5858 1.6363	1.4419 1.4574	1.4603 1.7475	QuaF		1.3574	0.0238707						0.9980		0.9900
1,2-Dichlorobenzene	1.4030 1.1143	1.3072 1.1632	1.1104 1.1739	1.0866 1.0794	1.0926 1.5622	Ave		1.2093				13.5		30.0			
Indane	1.6506 1.5307	1.6808 1.6026	1.5876 1.6320	1.4412 1.4820	1.4669 2.0435	Ave		1.6118				10.7		30.0			
Indene	+++++ 1.2483	+++++ 1.3699	+++++ 1.4182	1.0599 1.1927	1.1302 1.7651	Ave		1.3120				18.0		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1 Analy Batch No.: 42222

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2020 14:01 Calibration End Date: 08/29/2020 00:02 Calibration ID: 2588

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Butylbenzene	+++++ 1.9203	+++++ 2.0602	1.8296 2.1045	1.6609 1.9023	1.7395 2.4978	Ave		1.9644				13.3		30.0			
Undecane	+++++ 1.1033	+++++ 1.1941	+++++ 1.2678	+++++ 1.1545	0.9439 1.5855	Ave		1.2082				17.7		30.0			
1,2-Dibromo-3-Chloropropane	+++++ 0.4915	+++++ 0.6600	0.4513 0.6724	0.4935 0.6041	0.5134 0.7710	Ave		0.5821				19.3		30.0			
1,2,4,5-Tetramethylbenzene	+++++ 1.8110	+++++ 1.9043	1.6911 1.9685	1.5337 1.7952	1.6140 2.4458	Ave		1.8455				15.3		30.0			
Dodecane	+++++ 0.9514	+++++ 1.1673	+++++ 1.2766	+++++ 1.1566	0.8186 +++++	Ave		1.0741				17.2		30.0			
1,2,4-Trichlorobenzene	1.1514 0.9610	0.9721 1.0561	0.8105 1.0666	0.7225 0.9662	0.8074 1.3675	Ave		0.9881				19.0		30.0			
Naphthalene	2.3112 1.8770	1.5627 2.1846	1.8704 2.1078	1.5305 1.7941	1.7672 2.2522	Ave		1.9258				14.4		30.0			
Hexachlorobutadiene	1.2118 1.0888	1.3758 1.1207	1.3250 1.0345	1.0426 0.8985	1.0677 1.2938	Ave		1.1459				13.2		30.0			
1,2,3-Trichlorobenzene	+++++ 0.9354	1.0893 1.0383	1.2290 0.9483	0.8446 0.7775	0.9291 0.9989	Ave		0.9767				13.7		30.0			
2-Methylnaphthalene	+++++ 0.6876	+++++ 1.2166	+++++ 1.5188	+++++ 1.5680	0.6373 +++++	Ave		1.1257				39.5		50.0			
1-Methylnaphthalene	+++++ 1.2225	+++++ 1.8713	1.6323 2.0880	1.0166 1.9880	1.3245 +++++	Ave		1.5919				25.9		50.0			
4-Bromofluorobenzene (Surr)	0.5970 0.6379	0.6102 0.6606	0.5988 0.7097	0.6120 0.6779	0.6321 0.6811	Ave		0.6418				6.1		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1 Analy Batch No.: 42222

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2020 14:01 Calibration End Date: 08/29/2020 00:02 Calibration ID: 2588

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 140-42222/9	RH28IC01.D
Level 2	IC 140-42222/10	RH28IC02.D
Level 3	IC 140-42222/11	RH28IC03.D
Level 4	IC 140-42222/12	RH28IC04.D
Level 5	IC 140-42222/13	RH28IC05.D
Level 6	IC 140-42222/14	RH28IC06.D
Level 7	ICIS 140-42222/15	RH28IC07.D
Level 8	IC 140-42222/7	RH28IC08.D
Level 9	IC 140-42222/5	RH28IC09.D
Level 10	IC 140-42222/3	RH28IC10X.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
Chlorodifluoromethane	CBM	Ave	+++++ 127298	+++++ 265191	12116 650155	22349 1304143	49801 2275714	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Propene	CBM	Ave	+++++ 65227	+++++ 136966	+++++ 322982	+++++ 580652	25376 1140577	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
Dichlorodifluoromethane	CBM	Ave	+++++ 103463	+++++ 228663	8501 535510	21069 555502	36786 1548541	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Chloromethane	CBM	Ave	+++++ 25367	+++++ 50211	+++++ 116889	4150 200994	9725 395335	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,2-Dichloro-1,1,2,2-tetrafluoroethane	CBM	Ave	+++++ 144116	+++++ 306061	13034 701732	25710 975066	53398 2235145	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Vinyl chloride	CBM	Lin1	+++++ 84224	4006 174448	7353 382291	13267 671429	32086 1314670	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,3-Butadiene	CBM	Ave	+++++ 65078	+++++ 138107	+++++ 309504	10249 529338	23722 1021294	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Butane	CBM	Ave	+++++ 139349	+++++ 290488	+++++ 620005	22943 1083279	52540 2060495	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Bromomethane	CBM	Lin2	+++++ 85297	+++++ 173948	8792 406202	14685 699062	33010 1345114	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Chloroethane	CBM	Lin2	+++++ 38665	+++++ 85082	4177 193624	6827 328258	16037 637533	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Ethanol	CBM	Lin1	+++++ 221455	+++++ 562595	25506 1222004	33858 2667054	90649 4145838	+++++ 5.00	+++++ 10.0	0.400 20.0	0.800 40.0	2.00 80.0
Vinyl bromide	CBM	Ave	+++++ 74856	+++++ 156474	8061 371798	13473 651128	28263 1263816	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Methylbutane	CBM	Ave	+++++ 99751	+++++ 205009	9635 463903	17708 808457	41000 1588785	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Trichlorofluoromethane	CBM	Ave	+++++ 191450	9216 392725	17978 895318	31876 1602992	77624 3179856	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1 Analy Batch No.: 42222

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2020 14:01 Calibration End Date: 08/29/2020 00:02 Calibration ID: 2588

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
Acrolein	CBM	Ave	+++++ 16296	+++++ 36292	+++++ 100565	+++++ 172897	8255 361684	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
Acetonitrile	CBM	Ave	+++++ 25442	+++++ 58184	+++++ 141775	+++++ 261561	10922 520199	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
Acetone	CBM	Ave	+++++ 118879	+++++ 221734	+++++ 502478	16535 1075673	45535 1707400	+++++ 3.00	+++++ 6.00	+++++ 12.0	0.480 24.0	1.20 48.0
Pentane	CBM	Ave	+++++ 11470	+++++ 24417	+++++ 62271	+++++ 100157	4682 202182	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
Isopropyl alcohol	CBM	Ave	+++++ 273089	+++++ 635105	+++++ 1540486	46204 2587659	113852 5130084	+++++ 3.00	+++++ 6.00	+++++ 12.0	0.480 24.0	1.20 48.0
Ethyl ether	CBM	Ave	+++++ 83338	+++++ 168072	+++++ 408518	15799 702368	33932 1434919	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,1-Dichloroethene	CBM	Ave	+++++ 65097	3927 131261	5907 343522	11583 584264	26172 1180876	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Acrylonitrile	CBM	Ave	+++++ 39929	+++++ 76309	+++++ 223695	5801 393674	15766 839327	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
tert-Butyl alcohol	CBM	Ave	+++++ 111576	+++++ 251800	+++++ 630225	20684 1087876	45427 2199065	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,1,2-Trichloro-1,2,2-trifluoroetha ne	CBM	Ave	+++++ 145650	7062 298238	13392 766832	25672 1315291	57821 2661840	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Methylene Chloride	CBM	Ave	+++++ 57015	+++++ 111917	+++++ 296909	10241 526013	24417 1041211	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
3-Chloropropene	CBM	Lin2	+++++ 67588	+++++ 122895	9255 341550	13794 576055	27338 1250194	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Carbon disulfide	CBM	Ave	+++++ 184361	+++++ 359151	16549 941650	30725 1600962	74887 3264452	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
trans-1,2-Dichloroethene	CBM	Ave	+++++ 65564	+++++ 125032	6013 334887	9549 591662	24973 1238959	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Methylpentane	CBM	Ave	+++++ 149522	+++++ 302486	15740 759801	26179 1323151	59564 2751716	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Methyl tert-butyl ether	CBM	Ave	+++++ 161027	+++++ 319038	+++++ 808171	28229 1382456	63335 2861968	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,1-Dichloroethane	CBM	Ave	+++++ 109543	+++++ 218207	9835 562108	20284 972743	45826 1980304	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Vinyl acetate	CBM	Ave	+++++ 164791	+++++ 350811	13230 947376	25465 1647589	63440 3605976	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Butanone (MEK)	CBM	Ave	+++++ 32092	+++++ 66602	+++++ 159615	5655 299060	11764 593341	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Hexane	CBM	Ave	+++++ 48352	+++++ 94902	+++++ 248032	8175 449542	18958 905328	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
cis-1,2-Dichloroethene	CBM	Ave	+++++ 69003	3783 137736	7459 358383	12473 622149	27844 1269311	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1 Analy Batch No.: 42222

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2020 14:01 Calibration End Date: 08/29/2020 00:02 Calibration ID: 2588

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
Ethyl acetate	CBM	Ave	+++++ 161118	+++++ 338095	+++++ 850049	25075 1473148	59867 3111841	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Chloroform	CBM	Ave	+++++ 138005	6896 275584	13041 693845	23319 1210475	53612 2481600	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Tetrahydrofuran	CBM	Ave	+++++ 80650	+++++ 165501	6776 404434	14134 712114	33889 1451125	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,1,1-Trichloroethane	CBM	Ave	+++++ 132887	+++++ 263917	11655 685853	24015 1190125	55145 2456565	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2-Dichloroethane	DFBZ	Ave	+++++ 74410	3317 151483	7149 377659	13273 669529	27571 1378531	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1-Butanol	DFBZ	Ave	+++++ 36431	+++++ 88621	+++++ 210201	+++++ 374149	16387 808642	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
Cyclohexane	DFBZ	Ave	+++++ 26969	+++++ 56508	+++++ 145010	5002 259931	10658 539211	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Benzene	DFBZ	Ave	+++++ 192558	+++++ 387828	17766 1005771	34483 1789877	78024 3684390	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Carbon tetrachloride	DFBZ	Ave	3577 128080	5576 188413	11755 704270	23349 813090	55838 2264347	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2,3-Dimethylpentane	DFBZ	Ave	+++++ 40258	+++++ 85591	4497 212342	7341 381971	17614 756504	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Thiophene	DFBZ	Ave	2778 108649	5656 227296	9987 568076	18414 1002834	43711 2047191	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2,2,4-Trimethylpentane	DFBZ	Ave	+++++ 301136	15416 606757	29729 1532236	54652 2774121	118580 5690429	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Heptane	DFBZ	Ave	+++++ 64445	+++++ 126478	+++++ 327659	11408 600087	25685 1206014	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,2-Dichloropropane	DFBZ	Ave	+++++ 75552	+++++ 147432	6928 368593	13409 665617	30367 1347228	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Trichloroethene	DFBZ	Ave	2408 93344	5375 186495	8518 460313	16123 918209	36639 1678146	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Dibromomethane	DFBZ	Ave	+++++ 88564	+++++ 167543	7712 416603	13741 756385	31799 1601897	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Bromodichloromethane	DFBZ	Ave	+++++ 138050	6136 281919	12403 730160	23290 1286733	58298 2730666	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,4-Dioxane	DFBZ	Ave	+++++ 28356	+++++ 70796	+++++ 170270	6249 302822	12357 587447	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Methyl methacrylate	DFBZ	Ave	+++++ 89454	+++++ 185193	+++++ 474303	13921 877144	34057 1789286	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Methylcyclohexane	DFBZ	Ave	+++++ 114174	+++++ 232691	9915 581197	20204 1079994	47102 2162335	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
4-Methyl-2-pentanone (MIBK)	DFBZ	Ave	+++++ 183690	+++++ 377560	14203 931901	28426 1743415	73528 3624018	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1 Analy Batch No.: 42222

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2020 14:01 Calibration End Date: 08/29/2020 00:02 Calibration ID: 2588

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
cis-1,3-Dichloropropene	DFBZ	Ave	+++++ 99621	4465 212426	7616 542319	15902 998372	37667 2092713	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
trans-1,3-Dichloropropene	CBZd 5	Ave	+++++ 81690	3725 178293	6617 458192	11410 892213	30968 1882319	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Toluene	CBZd 5	Ave	6500 233387	11839 466172	21430 1183470	39429 2293689	91467 4545670	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,1,2-Trichloroethane	CBZd 5	Ave	+++++ 73682	3606 146935	6292 374576	11721 686436	30249 1405700	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Hexanone	CBZd 5	Ave	+++++ 76512	+++++ 158306	+++++ 404266	10559 773120	26516 1634007	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
C8 Range	DFBZ	Ave	+++++ 705715	+++++ 1437970	+++++ 3505252	120977 6920701	284144 14323556	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Octane	CBZd 5	Ave	+++++ 65320	+++++ 138962	6289 339542	11613 673298	25142 1387808	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Dibromochloromethane	CBZd 5	Ave	3336 135038	7528 307102	13081 802340	23664 1424458	59382 3168351	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2-Dibromoethane (EDB)	CBZd 5	Ave	3285 128985	6075 268235	10468 676768	20780 1302791	48853 2766666	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Tetrachloroethene	CBZd 5	Ave	1968 84607	4546 173290	8773 424142	14375 807488	36680 1693538	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Chlorobenzene	CBZd 5	Ave	+++++ 177202	8843 370564	17259 909511	30260 1766662	72187 3782505	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Ethylbenzene	CBZd 5	Ave	+++++ 296847	14442 619977	25517 1551175	52336 3012093	117394 6434077	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
m-Xylene & p-Xylene	CBZd 5	Ave	+++++ 446971	22187 943918	39468 2416062	74443 4722635	170497 10354326	+++++ 2.00	0.0800 4.00	0.160 8.00	0.320 16.0	0.800 32.0
Nonane	CBZd 5	Ave	+++++ 136944	6199 285635	11791 757072	21853 1492619	52388 3426882	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Bromoform	CBZd 5	Ave	+++++ 112819	+++++ 348652	12835 970471	24984 1649540	60606 4488198	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Styrene	CBZd 5	Ave	4412 169678	7531 355324	14366 899378	24458 1683260	64024 3438805	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
o-Xylene	CBZd 5	Ave	6386 235739	11570 483966	20827 1232727	39171 2288199	88929 4696734	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,1,2,2-Tetrachloroethane	CBZd 5	Ave	+++++ 202741	8915 421084	15948 1051867	30983 1756745	78471 4284716	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2,3-Trichloropropane	CBZd 5	Ave	+++++ 51846	+++++ 111032	4676 277341	9345 517052	20345 1114033	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Isopropylbenzene	CBZd 5	Ave	+++++ 341357	16330 705690	29597 1775686	54823 3336387	133486 7190839	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Propylbenzene	CBZd 5	Ave	+++++ 101614	4385 208556	8310 533438	16229 1014657	38332 2227195	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1 Analy Batch No.: 42222

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2020 14:01 Calibration End Date: 08/29/2020 00:02 Calibration ID: 2588

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
2-Chlorotoluene	CBZd 5	Ave	+++++ 93983	+++++ 194607	7903 482530	15062 927008	37371 1934483	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
4-Ethyltoluene	CBZd 5	Ave	8445 343535	15398 720149	28183 1840276	52736 3514356	129680 7634335	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,3,5-Trimethylbenzene	CBZd 5	Ave	3493 149024	7284 309009	12856 782651	25181 1441235	60035 3168156	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Alpha Methyl Styrene	CBZd 5	Ave	+++++ 135090	5527 294594	10571 779234	18483 1432499	51272 3389797	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Decane	CBZd 5	Ave	3748 180855	7453 388959	14210 1022123	26449 1973903	69136 4415206	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
tert-Butylbenzene	CBZd 5	Ave	8744 329329	14963 681711	26273 1771724	51984 3330576	124968 8034487	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2,4-Trimethylbenzene	CBZd 5	Ave	5598 286404	12119 610351	23348 1589105	44796 2984296	109799 6945966	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
sec-Butylbenzene	CBZd 5	Ave	8868 437590	19626 934003	35652 2465129	69073 4717663	167919 11336996	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,3-Dichlorobenzene	CBZd 5	Ave	5001 213903	8391 455458	18470 1154226	29573 2250010	80880 5718247	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Benzyl chloride	CBZd 5	Ave	+++++ 204834	+++++ 502843	16061 1324267	29950 2705606	73450 +++++	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
1,4-Dichlorobenzene	CBZd 5	Ave	+++++ 210409	9846 443624	17209 1137617	32208 2155852	76253 5139306	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
4-Isopropyltoluene	CBZd 5	Ave	8442 377534	15420 797863	29811 2039984	58048 3785986	143416 8623233	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2,3-Trimethylbenzene	CBZd 5	QuaF	+++++ 289551	+++++ 611095	23899 1607154	44115 2968221	110706 6390147	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2-Dichlorobenzene	CBZd 5	Ave	5989 213760	10352 453097	16734 1152986	33245 2198253	82831 5712566	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Indane	CBZd 5	Ave	7046 293635	13310 624224	23925 1602979	44093 3018326	111206 7472425	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Indene	CBZd 5	Ave	+++++ 239465	+++++ 533579	+++++ 1393000	32427 2429019	85683 6454449	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Butylbenzene	CBZd 5	Ave	+++++ 368369	+++++ 802465	27573 2067016	50815 3874165	131876 9133646	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Undecane	CBZd 5	Ave	+++++ 211658	+++++ 465102	+++++ 1245231	+++++ 2351229	71560 5797790	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
1,2-Dibromo-3-Chloropropane	CBZd 5	Ave	+++++ 94295	+++++ 257066	6801 660392	15099 1230284	38919 2819167	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2,4,5-Tetramethylbenzene	CBZd 5	Ave	+++++ 347414	+++++ 741766	25485 1933526	46923 3656188	122363 8943677	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Dodecane	CBZd 5	Ave	+++++ 182504	+++++ 454692	+++++ 1253840	+++++ 2355654	62063 +++++	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 +++++

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1 Analy Batch No.: 42222

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2020 14:01 Calibration End Date: 08/29/2020 00:02 Calibration ID: 2588

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
1,2,4-Trichlorobenzene	CBZd5	Ave	4915 184352	7698 411351	12214 1047600	22105 1967788	61208 5000474	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Naphthalene	CBZd5	Ave	9866 360065	12375 850922	28187 2070294	46825 3653921	133974 8235513	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Hexachlorobutadiene	CBZd5	Ave	5173 208874	10895 436547	19968 1016101	31897 1829979	80947 4731090	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2,3-Trichlorobenzene	CBZd5	Ave	+++++ 179439	8626 404438	18521 931429	25842 1583400	70435 3652527	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Methylnaphthalene	CBZd5	Ave	+++++ 131911	+++++ 473896	+++++ 1491875	+++++ 3193576	48315 +++++	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 +++++
1-Methylnaphthalene	CBZd5	Ave	+++++ 234530	+++++ 728929	24600 2050918	31105 4049020	100421 +++++	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
4-Bromofluorobenzene (Surr)	CBZd5	Ave	591232 567801	560541 596993	523427 808580	543030 800804	555919 722319	4.64 4.64	4.64 4.64	4.64 4.64	4.64 4.64	4.64 4.64

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD
Lin2 = Linear 1/conc^2 ISTD
QuaF = Quadratic ISTD forced zero

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1 Analy Batch No.: 42222

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2020 14:01 Calibration End Date: 08/29/2020 00:02 Calibration ID: 2588

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 140-42222/9	RH28IC01.D
Level 2	IC 140-42222/10	RH28IC02.D
Level 3	IC 140-42222/11	RH28IC03.D
Level 4	IC 140-42222/12	RH28IC04.D
Level 5	IC 140-42222/13	RH28IC05.D
Level 6	IC 140-42222/14	RH28IC06.D
Level 7	ICIS 140-42222/15	RH28IC07.D
Level 8	IC 140-42222/7	RH28IC08.D
Level 9	IC 140-42222/5	RH28IC09.D
Level 10	IC 140-42222/3	RH28IC10X.D

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
Chlorodifluoromethane	+++++	+++++	19.5						50			
Propene	+++++	+++++	+++++	+++++	1.4						50	
Dichlorodifluoromethane	+++++	+++++	11.7						50			
Chloromethane	+++++	+++++	+++++	12.6						50		
1,2-Dichloro-1,1,2,2-tetrafluoroethane	+++++	+++++	22.2						50			
Vinyl chloride	+++++	-36.1						50				
1,3-Butadiene	+++++	+++++	+++++	7.7						50		
Butane	+++++	+++++	+++++	14.1						50		
Bromomethane	+++++	+++++	0.4						50			
Chloroethane	+++++	+++++	1.2						50			
Ethanol	+++++	+++++	17.8						50			
Vinyl bromide	+++++	+++++	36.4						50			
2-Methylbutane	+++++	+++++	26.3						50			
Trichlorofluoromethane	+++++	15.8						50				

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1 Analy Batch No.: 42222

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2020 14:01 Calibration End Date: 08/29/2020 00:02 Calibration ID: 2588

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
Acrolein	+++++	+++++	+++++	+++++	12.4						50	
Acetonitrile	+++++	+++++	+++++	+++++	1.3						50	
Acetone	+++++	+++++	+++++	-0.6						80		
Pentane	+++++	+++++	+++++	+++++	3.8						50	
Isopropyl alcohol	+++++	+++++	+++++	3.5						50		
Ethyl ether	+++++	+++++	+++++	22.2						50		
1,1-Dichloroethene	+++++	36.8						50				
Acrylonitrile	+++++	+++++	+++++	-7.8						50		
tert-Butyl alcohol	+++++	+++++	+++++	11.5						50		
1,1,2-Trichloro-1,2,2-trifluoroethane	+++++	13.1						50				
Methylene Chloride	+++++	+++++	+++++	13.3						80		
3-Chloropropene	+++++	+++++	2.7						50			
Carbon disulfide	+++++	+++++	17.2						50			
trans-1,2-Dichloroethene	+++++	+++++	21.2						50			
2-Methylpentane	+++++	+++++	32.1						50			
Methyl tert-butyl ether	+++++	+++++	+++++	14.3						50		
1,1-Dichloroethane	+++++	+++++	14.2						50			
Vinyl acetate	+++++	+++++	0.9						50			
2-Butanone (MEK)	+++++	+++++	+++++	13.4						50		
Hexane	+++++	+++++	+++++	8.8						50		
cis-1,2-Dichloroethene	+++++	23.0						50				

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1 Analy Batch No.: 42222

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2020 14:01 Calibration End Date: 08/29/2020 00:02 Calibration ID: 2588

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
Ethyl acetate	+++++	+++++	+++++	0.5						50		
Chloroform	+++++	17.9						50				
Tetrahydrofuran	+++++	+++++	8.6						50			
1,1,1-Trichloroethane	+++++	+++++	12.0						50			
1,2-Dichloroethane	+++++	2.1						50				
1-Butanol	+++++	+++++	+++++	+++++	-0.7						50	
Cyclohexane	+++++	+++++	+++++	9.8						50		
Benzene	+++++	+++++	11.4						50			
Carbon tetrachloride	23.4						50					
2,3-Dimethylpentane	+++++	+++++	28.5						50			
Thiophene	7.2						50					
2,2,4-Trimethylpentane	+++++	13.6						50				
Heptane	+++++	+++++	+++++	8.9						50		
1,2-Dichloropropane	+++++	+++++	14.1						50			
Trichloroethene	7.8						50					
Dibromomethane	+++++	+++++	13.7						50			
Bromodichloromethane	+++++	0.3						50				
1,4-Dioxane	+++++	+++++	+++++	17.9						50		
Methyl methacrylate	+++++	+++++	+++++	-4.9						50		
Methylcyclohexane	+++++	+++++	5.8						50			
4-Methyl-2-pentanone (MIBK)	+++++	+++++	-3.1						50			

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1 Analy Batch No.: 42222

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2020 14:01 Calibration End Date: 08/29/2020 00:02 Calibration ID: 2588

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
cis-1,3-Dichloropropene	+++++	2.4						50				
trans-1,3-Dichloropropene	+++++	6.0						50				
Toluene	17.8						50					
1,1,2-Trichloroethane	+++++	16.5						50				
2-Hexanone	+++++	+++++	+++++	-11.8						50		
Octane	+++++	+++++	15.9						50			
Dibromochloromethane	-2.7						50					
1,2-Dibromoethane (EDB)	9.9						50					
Tetrachloroethene	-2.9						50					
Chlorobenzene	+++++	12.8						50				
Ethylbenzene	+++++	11.4						50				
m-Xylene & p-Xylene	+++++	12.2						50				
Nonane	+++++	2.7						50				
Bromoform	+++++	+++++	-2.3						50			
Styrene	14.1						50					
o-Xylene	15.7						50					
1,1,2,2-Tetrachloroethane	+++++	6.9						50				
1,2,3-Trichloropropane	+++++	+++++	8.9						50			
Isopropylbenzene	+++++	11.9						50				
Propylbenzene	+++++	2.6						50				
2-Chlorotoluene	+++++	+++++	5.6						50			

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1 Analy Batch No.: 42222

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2020 14:01 Calibration End Date: 08/29/2020 00:02 Calibration ID: 2588

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
4-Ethyltoluene	6.6						50					
1,3,5-Trimethylbenzene	0.4						50					
Alpha Methyl Styrene	+++++	-4.3						50				
Decane	-9.5						50					
tert-Butylbenzene	13.0						50					
1,2,4-Trimethylbenzene	-14.5						50					
sec-Butylbenzene	-13.4						50					
1,3-Dichlorobenzene	0.8						50					
Benzyl chloride	+++++	+++++	-7.3	+++++					50			
1,4-Dichlorobenzene	+++++	8.6						50				
4-Isopropyltoluene	-1.1						50					
1,2,3-Trimethylbenzene	+++++	+++++	16.6						50			
1,2-Dichlorobenzene	16.0						50					
Indane	2.4						50					
Indene	+++++	+++++	+++++	-19.2						50		
Butylbenzene	+++++	+++++	-6.9						50			
Undecane	+++++	+++++	+++++	+++++	-21.9						50	
1,2-Dibromo-3-Chloropropane	+++++	+++++	-22.5						50			
1,2,4,5-Tetramethylbenzene	+++++	+++++	-8.4						50			
Dodecane	+++++	+++++	+++++	+++++ +++++	-23.8						50	
1,2,4-Trichlorobenzene	16.5						50					

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1 Analy Batch No.: 42222

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2020 14:01 Calibration End Date: 08/29/2020 00:02 Calibration ID: 2588

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
Naphthalene	20.0						80					
Hexachlorobutadiene	5.7						50					
1,2,3-Trichlorobenzene	+++++	11.5						50				
2-Methylnaphthalene	+++++	+++++	+++++	+++++ +++++	-43.4						80	
1-Methylnaphthalene	+++++	+++++	2.5	+++++					80			

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Lab Sample ID: ICV 140-42222/17 Calibration Date: 08/29/2020 01:37

Instrument ID: MR Calib Start Date: 08/28/2020 14:01

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 08/29/2020 00:02

Lab File ID: RH28ICV.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorodifluoromethane	Ave	2.687	2.484		1.85	2.00	-7.5	35.0
Propene	Ave	1.275	1.235		1.94	2.00	-3.2	35.0
Dichlorodifluoromethane	Ave	2.017	2.359		2.34	2.00	17.0	35.0
Chloromethane	Ave	0.4770	0.4754		1.99	2.00	-0.3	35.0
1,2-Dichloro-1,1,2,2-tetrafluoroethane	Ave	2.827	2.985		2.11	2.00	5.6	35.0
Acetaldehyde	Ave	0.7496	0.6490		8.66	10.0	-13.4	35.0
Vinyl chloride	Lin1		1.580		2.16	2.00	8.2	35.0
1,3-Butadiene	Ave	1.231	1.231		2.00	2.00	-0.0	35.0
Butane	Ave	2.602	2.572		1.98	2.00	-1.2	35.0
Bromomethane	Lin2		1.570		1.99	2.00	-0.7	35.0
Chloroethane	Lin2		0.7885		2.11	2.00	5.4	35.0
Ethanol	Lin1		0.7559		7.77	10.0	-22.3	35.0
Vinyl bromide	Ave	1.567	1.624		2.07	2.00	3.6	35.0
2-Methylbutane	Ave	2.021	2.058		2.04	2.00	1.8	35.0
Trichlorofluoromethane	Ave	3.931	3.865		1.97	2.00	-1.7	35.0
Acrolein	Ave	0.3741	0.4728		2.53	2.00	26.4	35.0
Acetonitrile	Ave	0.5495	0.5537		2.02	2.00	0.8	35.0
Acetone	Ave	0.7172	0.7376		2.06	2.00	2.8	35.0
Pentane	Ave	0.2298	0.2437		2.12	2.00	6.1	35.0
Isopropyl alcohol	Ave	1.926	2.371		2.46	2.00	23.1	35.0
Ethyl ether	Ave	1.673	1.735		2.07	2.00	3.7	35.0
1,1-Dichloroethene	Ave	1.418	1.349		1.90	2.00	-4.9	35.0
Acrylonitrile	Ave	0.8140	0.8759		2.15	2.00	7.6	35.0
tert-Butyl alcohol	Ave	2.400	2.413		2.01	2.00	0.5	35.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	3.085	3.077		2.00	2.00	-0.2	35.0
Methylene Chloride	Ave	1.170	1.138		1.95	2.00	-2.7	35.0
3-Chloropropene	Lin2		1.378		2.16	2.00	7.8	35.0
Carbon disulfide	Ave	3.742	3.651		1.95	2.00	-2.4	35.0
trans-1,2-Dichloroethene	Ave	1.315	1.276		1.94	2.00	-3.0	35.0
2-Methylpentane	Ave	3.158	2.759		1.75	2.00	-12.6	35.0
Methyl tert-butyl ether	Ave	3.196	3.228		2.02	2.00	1.0	35.0
1,1-Dichloroethane	Ave	2.283	2.271		1.99	2.00	-0.5	35.0
Vinyl acetate	Ave	3.475	3.789		2.18	2.00	9.0	35.0
2-Butanone (MEK)	Ave	0.6451	0.6316		1.96	2.00	-2.1	35.0
Hexane	Ave	0.9722	0.9753		2.01	2.00	0.3	35.0
Isopropyl ether	Ave	4.747	4.890		2.06	2.00	3.0	35.0
cis-1,2-Dichloroethene	Ave	1.520	1.426		1.88	2.00	-6.2	35.0
Ethyl acetate	Ave	3.228	3.239		2.01	2.00	0.3	35.0
Chloroform	Ave	2.889	2.748		1.90	2.00	-4.9	35.0
Tert-butyl ethyl ether	Ave	3.902	3.641		1.87	2.00	-6.7	35.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Lab Sample ID: ICV 140-42222/17 Calibration Date: 08/29/2020 01:37

Instrument ID: MR Calib Start Date: 08/28/2020 14:01

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 08/29/2020 00:02

Lab File ID: RH28ICV.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Tetrahydrofuran	Ave	1.653	1.650		2.00	2.00	-0.2	35.0
1,1,1-Trichloroethane	Ave	2.759	2.761		2.00	2.00	0.0	35.0
1,2-Dichloroethane	Ave	0.3202	0.3215		2.01	2.00	0.4	35.0
1-Butanol	Ave	0.1717	0.1713		1.99	2.00	-0.3	35.0
Benzene	Ave	0.8390	0.8229		1.96	2.00	-1.9	35.0
Cyclohexane	Ave	0.1183	0.1168		1.97	2.00	-1.3	35.0
Carbon tetrachloride	Ave	0.5411	0.6089		2.25	2.00	12.5	35.0
2,3-Dimethylpentane	Ave	0.1840	0.1692		1.84	2.00	-8.0	35.0
Thiophene	Ave	0.4839	0.4513		1.87	2.00	-6.7	35.0
2,2,4-Trimethylpentane	Ave	1.338	1.302		1.95	2.00	-2.7	35.0
Heptane	Ave	0.2722	0.2639		1.94	2.00	-3.0	35.0
1,2-Dichloropropane	Ave	0.3195	0.3101		1.94	2.00	-2.9	35.0
Trichloroethene	Ave	0.4170	0.3849		1.85	2.00	-7.7	35.0
Dibromomethane	Ave	0.3569	0.3535		1.98	2.00	-1.0	35.0
Bromodichloromethane	Ave	0.6028	0.6116		2.03	2.00	1.4	35.0
1,4-Dioxane	Ave	0.1377	0.1261		1.83	2.00	-8.4	35.0
Methyl methacrylate	Ave	0.3801	0.3834		2.02	2.00	0.9	35.0
Methylcyclohexane	Ave	0.4932	0.5851		2.37	2.00	18.6	35.0
4-Methyl-2-pentanone (MIBK)	Ave	0.7711	0.7637		1.98	2.00	-1.0	35.0
cis-1,3-Dichloropropene	Ave	0.4299	0.4423		2.06	2.00	2.9	35.0
trans-1,3-Dichloropropene	Ave	0.4438	0.4803		2.16	2.00	8.2	35.0
Toluene	Ave	1.292	1.218		1.89	2.00	-5.7	35.0
1,1,2-Trichloroethane	Ave	0.3910	0.3890		1.99	2.00	-0.5	35.0
2-Hexanone	Ave	0.3912	0.4204		2.15	2.00	7.5	35.0
Octane	Ave	0.3602	0.3608		2.00	2.00	0.2	35.0
Dibromochloromethane	Ave	0.8032	0.8549		2.13	2.00	6.4	35.0
1,2-Dibromoethane (EDB)	Ave	0.7001	0.7224		2.06	2.00	3.2	35.0
Tetrachloroethene	Ave	0.4748	0.4456		1.88	2.00	-6.2	35.0
Chlorobenzene	Ave	0.9896	0.9948		2.01	2.00	0.5	35.0
2,3-Dimethylheptane	Ave	1.318	1.166		1.77	2.00	-11.5	35.0
Ethylbenzene	Ave	1.637	1.652		2.02	2.00	0.9	35.0
m-Xylene & p-Xylene	Ave	1.248	1.278		4.10	4.00	2.4	35.0
Nonane	Ave	0.7621	0.7750		2.03	2.00	1.7	35.0
Bromoform	Ave	0.8720	1.037		2.38	2.00	18.9	35.0
Styrene	Ave	0.9061	0.9563		2.11	2.00	5.5	35.0
o-Xylene	Ave	1.293	1.280		1.98	2.00	-1.0	35.0
1,1,2,2-Tetrachloroethane	Ave	1.053	1.117		2.12	2.00	6.1	35.0
1,2,3-Trichloropropane	Ave	0.2850	0.3045		2.14	2.00	6.8	35.0
Isopropylbenzene	Ave	1.842	1.910		2.07	2.00	3.7	35.0
Propylbenzene	Ave	0.5396	0.5666		2.10	2.00	5.0	35.0
2-Chlorotoluene	Ave	0.4968	0.5371		2.16	2.00	8.1	35.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Lab Sample ID: ICV 140-42222/17 Calibration Date: 08/29/2020 01:37

Instrument ID: MR Calib Start Date: 08/28/2020 14:01

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 08/29/2020 00:02

Lab File ID: RH28ICV.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Ethyltoluene	Ave	1.855	1.821		1.96	2.00	-1.9	35.0
1,3,5-Trimethylbenzene	Ave	0.8147	0.9497		2.33	2.00	16.6	35.0
Alpha Methyl Styrene	Ave	0.7293	0.7766		2.13	2.00	6.5	35.0
Decane	Ave	0.9697	1.033		2.13	2.00	6.5	35.0
tert-Butylbenzene	Ave	1.813	1.861		2.05	2.00	2.7	35.0
1,2,4-Trimethylbenzene	Ave	1.535	1.656		2.16	2.00	7.9	35.0
sec-Butylbenzene	Ave	2.400	2.508		2.09	2.00	4.5	35.0
1,3-Dichlorobenzene	Ave	1.162	1.258		2.17	2.00	8.3	35.0
Benzyl chloride	Ave	1.150	1.413		2.46	2.00	22.8	35.0
1,4-Dichlorobenzene	Ave	1.145	1.219		2.13	2.00	6.5	35.0
4-Isopropyltoluene	Ave	2.000	2.128		2.13	2.00	6.4	35.0
1,2,3-Trimethylbenzene	QuaF		1.187		1.70	2.00	-15.1	35.0
Butylcyclohexane	Ave	1.309	1.301		1.99	2.00	-0.6	35.0
1,2-Dichlorobenzene	Ave	1.209	1.253		2.07	2.00	3.6	35.0
Indane	Ave	1.612	1.612		2.00	2.00	0.0	35.0
Indene	Ave	1.312	1.182		1.80	2.00	-9.9	35.0
Butylbenzene	Ave	1.964	2.211		2.25	2.00	12.6	35.0
Undecane	Ave	1.208	1.232		2.04	2.00	2.0	35.0
1,2-Dibromo-3-Chloropropane	Ave	0.5821	0.5712		1.96	2.00	-1.9	35.0
1,2,4,5-Tetramethylbenzene	Ave	1.845	1.845		2.00	2.00	-0.0	35.0
Dodecane	Ave	1.074	1.209		2.25	2.00	12.6	35.0
1,2,4-Trichlorobenzene	Ave	0.9881	1.226		2.48	2.00	24.1	35.0
Naphthalene	Ave	1.926	2.444		2.54	2.00	26.9	35.0
Hexachlorobutadiene	Ave	1.146	1.185		2.07	2.00	3.4	35.0
1,2,3-Trichlorobenzene	Ave	0.9767	1.167		2.39	2.00	19.5	35.0
2-Methylnaphthalene	Ave	1.126	1.160		2.06	2.00	3.1	50.0
1-Methylnaphthalene	Ave	1.592	1.752		2.20	2.00	10.0	50.0
4-Bromofluorobenzene (Surr)	Ave	0.6418	0.6745		4.88	4.64	5.1	35.0

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Lab File ID: RBFBI05.D BFB Injection Date: 09/05/2020

Instrument ID: MR BFB Injection Time: 08:00

Analysis Batch No.: 42483

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	28.8	
75	30.0 - 60.0 % of mass 95	58.0	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.4	
173	Less than 2.0 % of mass 174	1.2	(1.0) 1
174	Greater than 50% of mass 95	117.0	
175	5.0 - 9.0 % of mass 174	9.6	(8.2) 1
176	95.0 - 101.0 % of mass 174	111.8	(95.5) 1
177	5.0 - 9.0 % of mass 176	7.7	(6.9) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 140-42483/2	RCCVI05.D	09/05/2020	8:28
	LCS 140-42483/1002	RCCVI05-LCS.d	09/05/2020	8:28
	MB 140-42483/4	R500BI05.D	09/05/2020	9:47
IA-018-A-29	140-20195-1	RI05P102.D	09/05/2020	15:23
IA-DUP 3-A-29	140-20195-2	RI05P103.D	09/05/2020	16:12
IA-138-A-29	140-20195-3	RI05P104.D	09/05/2020	17:01
IA-174-A-29	140-20195-4	RI05P105.D	09/05/2020	17:51
IA-093-A-29	140-20195-5	RI05P106.D	09/05/2020	18:41
IA-015-A-29	140-20195-6	RI05P107.D	09/05/2020	19:30
IA-078-A-29	140-20195-7	RI05P108.D	09/05/2020	20:22
IA-076-A-29	140-20195-8	RI05P109.D	09/05/2020	21:13
IA-168-A-29	140-20195-9	RI05P110.D	09/05/2020	22:03
IA-DUP 4-A-29	140-20195-10	RI05P111.D	09/05/2020	22:54
IA-075-A-29	140-20195-11	RI05P112.D	09/05/2020	23:43
IA-021-A-29	140-20195-12	RI05P113.D	09/06/2020	0:32
IA-136-A-29	140-20195-13	RI05P114.D	09/06/2020	1:20
IA-117-A-29	140-20195-14	RI05P115.D	09/06/2020	2:07
IA-079-A-29	140-20195-15	RI05P116.D	09/06/2020	2:55
IA-118-A-29	140-20195-16	RI05P201R.D	09/06/2020	5:18

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Lab Sample ID: CCVIS 140-42483/2 Calibration Date: 09/05/2020 08:28

Instrument ID: MR Calib Start Date: 08/28/2020 14:01

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 08/29/2020 00:02

Lab File ID: RCCVI05.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorodifluoromethane	Ave	2.687	2.419		1.44	1.60	-10.0	30.0
Propene	Ave	1.275	1.235		1.55	1.60	-3.2	30.0
Dichlorodifluoromethane	Ave	2.017	2.524		2.00	1.60	25.1	30.0
Chloromethane	Ave	0.4770	0.4440		1.49	1.60	-6.9	30.0
1,2-Dichloro-1,1,2,2-tetrafluoroethane	Ave	2.827	2.837		1.61	1.60	0.4	30.0
Acetaldehyde	Ave	0.7496	0.7224		7.71	8.00	-3.6	30.0
Vinyl chloride	Lin1		1.630		1.78	1.60	11.3	30.0
1,3-Butadiene	Ave	1.231	1.279		1.66	1.60	3.9	30.0
Butane	Ave	2.602	2.683		1.65	1.60	3.1	30.0
Bromomethane	Lin2		1.573		1.58	1.60	-1.0	30.0
Chloroethane	Lin2		0.7233		1.54	1.60	-4.0	30.0
Ethanol	Lin1		1.294		10.7	8.00	33.5*	30.0
Vinyl bromide	Ave	1.567	1.431		1.46	1.60	-8.7	30.0
2-Methylbutane	Ave	2.021	2.195		1.74	1.60	8.6	30.0
Trichlorofluoromethane	Ave	3.931	3.948		1.61	1.60	0.4	30.0
Acrolein	Ave	0.3741	0.4941		2.11	1.60	32.1*	30.0
Acetonitrile	Ave	0.5495	0.6094		1.77	1.60	10.9	30.0
Acetone	Ave	0.7172	0.6502		4.35	4.80	-9.3	30.0
Pentane	Ave	0.2298	0.2536		1.77	1.60	10.4	30.0
Isopropyl alcohol	Ave	1.926	2.422		6.04	4.80	25.8	30.0
Ethyl ether	Ave	1.673	2.059		1.97	1.60	23.1	30.0
1,1-Dichloroethene	Ave	1.418	1.269		1.43	1.60	-10.5	30.0
Acrylonitrile	Ave	0.8140	0.8230		1.62	1.60	1.1	30.0
tert-Butyl alcohol	Ave	2.400	2.664		1.78	1.60	11.0	30.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	3.085	2.885		1.50	1.60	-6.5	30.0
Methylene Chloride	Ave	1.170	1.084		1.48	1.60	-7.3	30.0
3-Chloropropene	Lin2		1.346		1.67	1.60	4.2	30.0
Carbon disulfide	Ave	3.742	3.525		1.51	1.60	-5.8	30.0
trans-1,2-Dichloroethene	Ave	1.315	1.227		1.49	1.60	-6.7	30.0
2-Methylpentane	Ave	3.158	3.069		1.56	1.60	-2.8	30.0
Methyl tert-butyl ether	Ave	3.196	3.092		1.55	1.60	-3.3	30.0
1,1-Dichloroethane	Ave	2.283	2.144		1.50	1.60	-6.1	30.0
Vinyl acetate	Ave	3.475	3.615		1.66	1.60	4.0	30.0
2-Butanone (MEK)	Ave	0.6451	0.5747		1.43	1.60	-10.9	30.0
Hexane	Ave	0.9722	0.9528		1.57	1.60	-2.0	30.0
Isopropyl ether	Ave	4.747	4.591		1.55	1.60	-3.3	30.0
cis-1,2-Dichloroethene	Ave	1.520	1.257		1.32	1.60	-17.3	30.0
Ethyl acetate	Ave	3.228	3.472		1.72	1.60	7.5	30.0
Chloroform	Ave	2.889	2.700		1.50	1.60	-6.5	30.0
Tert-butyl ethyl ether	Ave	3.902	3.712		1.52	1.60	-4.9	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Lab Sample ID: CCVIS 140-42483/2 Calibration Date: 09/05/2020 08:28

Instrument ID: MR Calib Start Date: 08/28/2020 14:01

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 08/29/2020 00:02

Lab File ID: RCCVI05.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Tetrahydrofuran	Ave	1.653	1.644		1.59	1.60	-0.6	30.0
1,1,1-Trichloroethane	Ave	2.759	2.613		1.52	1.60	-5.3	30.0
1,2-Dichloroethane	Ave	0.3202	0.3081		1.54	1.60	-3.8	30.0
1-Butanol	Ave	0.1717	0.2268		2.11	1.60	32.1*	30.0
Cyclohexane	Ave	0.1183	0.1124		1.52	1.60	-5.0	30.0
Benzene	Ave	0.8390	0.7604		1.45	1.60	-9.4	30.0
Carbon tetrachloride	Ave	0.5411	0.5860		1.73	1.60	8.3	30.0
2,3-Dimethylpentane	Ave	0.1840	0.1653		1.44	1.60	-10.2	30.0
Thiophene	Ave	0.4839	0.4319		1.43	1.60	-10.7	30.0
2,2,4-Trimethylpentane	Ave	1.338	1.198		1.43	1.60	-10.5	30.0
Heptane	Ave	0.2722	0.2375		1.40	1.60	-12.8	30.0
1,2-Dichloropropane	Ave	0.3195	0.2921		1.46	1.60	-8.6	30.0
Trichloroethene	Ave	0.4170	0.3638		1.40	1.60	-12.8	30.0
Dibromomethane	Ave	0.3569	0.3300		1.48	1.60	-7.6	30.0
Bromodichloromethane	Ave	0.6028	0.5712		1.52	1.60	-5.3	30.0
1,4-Dioxane	Ave	0.1377	0.1412		1.64	1.60	2.5	30.0
Methyl methacrylate	Ave	0.3801	0.3740		1.57	1.60	-1.6	30.0
Methylcyclohexane	Ave	0.4932	0.4406		1.43	1.60	-10.7	30.0
4-Methyl-2-pentanone (MIBK)	Ave	0.7711	0.7818		1.62	1.60	1.4	30.0
cis-1,3-Dichloropropene	Ave	0.4299	0.4055		1.51	1.60	-5.7	30.0
trans-1,3-Dichloropropene	Ave	0.4438	0.4213		1.52	1.60	-5.1	30.0
Toluene	Ave	1.292	1.078		1.33	1.60	-16.6	30.0
1,1,2-Trichloroethane	Ave	0.3910	0.3495		1.43	1.60	-10.6	30.0
2-Hexanone	Ave	0.3912	0.3523		1.44	1.60	-9.9	30.0
Octane	Ave	0.3602	0.3033		1.35	1.60	-15.8	30.0
Dibromochloromethane	Ave	0.8032	0.7418		1.48	1.60	-7.6	30.0
1,2-Dibromoethane (EDB)	Ave	0.7001	0.6270		1.43	1.60	-10.4	30.0
Tetrachloroethene	Ave	0.4748	0.4052		1.37	1.60	-14.7	30.0
Chlorobenzene	Ave	0.9896	0.8382		1.36	1.60	-15.3	30.0
2,3-Dimethylheptane	Ave	1.318	1.252		1.52	1.60	-5.0	30.0
Ethylbenzene	Ave	1.637	1.421		1.39	1.60	-13.2	30.0
m-Xylene & p-Xylene	Ave	1.248	1.066		2.73	3.20	-14.6	30.0
Nonane	Ave	0.7621	0.6467		1.36	1.60	-15.1	30.0
Bromoform	Ave	0.8720	0.7783		1.43	1.60	-10.8	30.0
Styrene	Ave	0.9061	0.8310		1.47	1.60	-8.3	30.0
o-Xylene	Ave	1.293	1.098		1.36	1.60	-15.1	30.0
1,1,2,2-Tetrachloroethane	Ave	1.053	0.9731		1.48	1.60	-7.6	30.0
1,2,3-Trichloropropane	Ave	0.2850	0.2675		1.50	1.60	-6.2	30.0
Isopropylbenzene	Ave	1.842	1.612		1.40	1.60	-12.5	30.0
Propylbenzene	Ave	0.5396	0.4883		1.45	1.60	-9.5	30.0
2-Chlorotoluene	Ave	0.4968	0.4510		1.45	1.60	-9.2	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Lab Sample ID: CCVIS 140-42483/2 Calibration Date: 09/05/2020 08:28

Instrument ID: MR Calib Start Date: 08/28/2020 14:01

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 08/29/2020 00:02

Lab File ID: RCCVI05.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Ethyltoluene	Ave	1.855	1.608		1.39	1.60	-13.3	30.0
1,3,5-Trimethylbenzene	Ave	0.8147	0.7131		1.40	1.60	-12.5	30.0
Alpha Methyl Styrene	Ave	0.7293	0.6596		1.45	1.60	-9.6	30.0
Decane	Ave	0.9697	0.8678		1.43	1.60	-10.5	30.0
tert-Butylbenzene	Ave	1.813	1.597		1.41	1.60	-11.9	30.0
1,2,4-Trimethylbenzene	Ave	1.535	1.346		1.40	1.60	-12.3	30.0
sec-Butylbenzene	Ave	2.400	2.079		1.39	1.60	-13.4	30.0
1,3-Dichlorobenzene	Ave	1.162	1.088		1.50	1.60	-6.4	30.0
Benzyl chloride	Ave	1.150	1.111		1.55	1.60	-3.3	30.0
1,4-Dichlorobenzene	Ave	1.145	1.063		1.49	1.60	-7.1	30.0
4-Isopropyltoluene	Ave	2.000	1.855		1.48	1.60	-7.3	30.0
1,2,3-Trimethylbenzene	QuaF		1.375		1.58	1.60	-1.4	30.0
Butylcyclohexane	Ave	1.309	1.160		1.42	1.60	-11.4	30.0
1,2-Dichlorobenzene	Ave	1.209	1.074		1.42	1.60	-11.2	30.0
Indane	Ave	1.612	1.405		1.39	1.60	-12.8	30.0
Indene	Ave	1.312	1.178		1.44	1.60	-10.2	30.0
Butylbenzene	Ave	1.964	1.725		1.41	1.60	-12.2	30.0
Undecane	Ave	1.208	1.016		1.35	1.60	-15.9	30.0
1,2-Dibromo-3-Chloropropane	Ave	0.5821	0.5319		1.46	1.60	-8.6	30.0
1,2,4,5-Tetramethylbenzene	Ave	1.845	1.681		1.46	1.60	-8.9	30.0
Dodecane	Ave	1.074	0.9086		1.35	1.60	-15.4	30.0
1,2,4-Trichlorobenzene	Ave	0.9881	0.9142		1.48	1.60	-7.5	30.0
Naphthalene	Ave	1.926	1.806		1.50	1.60	-6.2	30.0
Hexachlorobutadiene	Ave	1.146	0.9437		1.32	1.60	-17.6	30.0
1,2,3-Trichlorobenzene	Ave	0.9767	0.8716		1.43	1.60	-10.8	30.0
2-Methylnaphthalene	Ave	1.126	0.6477		0.921	1.60	-42.5	50.0
1-Methylnaphthalene	Ave	1.592	1.000		1.01	1.60	-37.2	50.0
4-Bromofluorobenzene (Surr)	Ave	0.6418	0.6372		4.61	4.64	-0.7	30.0

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Sample No.: ICIS 140-42295/15 Date Analyzed: 09/02/2020 03:27

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm)

Lab File ID (Standard): GI01IC07.D Heated Purge: (Y/N) N

Calibration ID: 2602

		CBM		DFBZ		CBZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		155264	8.81	774405	11.00	759403	15.73
UPPER LIMIT		217370	9.14	1084167	11.33	1063164	16.06
LOWER LIMIT		93158	8.48	464643	10.67	455642	15.40
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 140-42295/22		147601	8.81	795164	11.00	773847	15.73

CBM = Chlorobromomethane (IS)
DFBZ = 1,4-Difluorobenzene
CBZd5 = Chlorobenzene-d5 (IS)

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO 15 LL

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Sample No.: CCVIS 140-42481/2 Date Analyzed: 09/05/2020 11:32

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm)

Lab File ID (Standard): GLCSI05.D Heated Purge: (Y/N) N

Calibration ID: 2602

		CBM		DFBZ		CBZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		124564	8.81	616523	11.00	638191	15.73
UPPER LIMIT		174390	9.14	863132	11.33	893467	16.06
LOWER LIMIT		74738	8.48	369914	10.67	382915	15.40
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 140-42481/1002		124564	8.81	616523	11.00	638191	15.73
MB 140-42481/4		122815	8.81	628785	11.00	639792	15.73
140-20195-17	IA-081-A-29	107463	8.81	539058	10.99	565024	15.73
140-20195-18	IA-100-B-29	117891	8.82	630852	11.00	606486	15.73
140-20195-19	IA-101-B-29	114518	8.81	603696	10.99	566349	15.72

CBM = Chlorobromomethane (IS)
DFBZ = 1,4-Difluorobenzene
CBZd5 = Chlorobenzene-d5 (IS)

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO 15 LL

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Sample No.: ICIS 140-42222/15 Date Analyzed: 08/29/2020 00:02

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm)

Lab File ID (Standard): RH28IC07.D Heated Purge: (Y/N) N

Calibration ID: 2588

		CBM		DFBZ		CBZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		235543	8.28	1153917	10.52	934834	15.36
UPPER LIMIT		329760	8.61	1615484	10.85	1308768	15.69
LOWER LIMIT		141326	7.95	692350	10.19	560900	15.03
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 140-42222/17		241131	8.29	1181864	10.52	954759	15.35

CBM = Chlorobromomethane (IS)
DFBZ = 1,4-Difluorobenzene
CBZd5 = Chlorobenzene-d5 (IS)

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO 15 LL

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Sample No.: CCVIS 140-42483/2 Date Analyzed: 09/05/2020 08:28

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm)

Lab File ID (Standard): RCCVI05.D Heated Purge: (Y/N) N

Calibration ID: 2588

		CBM		DFBZ		CBZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		138971	8.27	675656	10.51	548163	15.35
UPPER LIMIT		194559	8.60	945918	10.84	767428	15.68
LOWER LIMIT		83383	7.94	405394	10.18	328898	15.02
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 140-42483/1002		138971	8.27	675656	10.51	548163	15.35
MB 140-42483/4		137464	8.26	704230	10.51	562616	15.35
140-20195-1	IA-018-A-29	142488	8.27	690411	10.51	545335	15.35
140-20195-2	IA-DUP 3-A-29	141948	8.28	668760	10.51	526086	15.35
140-20195-3	IA-138-A-29	133220	8.27	653842	10.51	516172	15.35
140-20195-4	IA-174-A-29	134846	8.29	652657	10.52	511185	15.35
140-20195-5	IA-093-A-29	132296	8.28	639048	10.52	479222	15.35
140-20195-6	IA-015-A-29	135896	8.29	636148	10.52	492742	15.35
140-20195-7	IA-078-A-29	141348	8.29	667030	10.51	520905	15.35
140-20195-8	IA-076-A-29	139497	8.30	625841	10.52	490797	15.35
140-20195-9	IA-168-A-29	141988	8.29	641407	10.51	506013	15.35
140-20195-10	IA-DUP 4-A-29	140683	8.30	639276	10.51	496411	15.35
140-20195-11	IA-075-A-29	141067	8.32	661658	10.53	526300	15.35
140-20195-12	IA-021-A-29	143499	8.28	664938	10.51	515854	15.35
140-20195-13	IA-136-A-29	145585	8.28	680058	10.51	539351	15.35
140-20195-14	IA-117-A-29	139794	8.27	666342	10.50	535053	15.35
140-20195-15	IA-079-A-29	137279	8.27	641931	10.50	515232	15.35
140-20195-16	IA-118-A-29	135275	8.29	632484	10.51	510854	15.35

CBM = Chlorobromomethane (IS)
DFBZ = 1,4-Difluorobenzene
CBZd5 = Chlorobenzene-d5 (IS)

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO 15 LL

LOCKHEED MARTIN CORPORATION (LMC) - MIDDLE RIVER COMPLEX (MRC)
SDG 140-20195-1

SAMPLE IDENTIFICATION	IA-138-A-29		
COMPOUND	TRICHLOROETHENE	MW =	131.39
		GAS CONSTANT =	24.45
COMPOUND AREA	16181		
INTERNAL STANDARD AMOUNT (ppbv)	4.8		
CALIBRATION VOLUME (mL)	500		
DILUTION FACTOR	1		
INTERNAL STANDARD AREA	653842		
AVERAGE RRF	0.417		
SAMPLE VOLUME (mL)	100		

1.4243	ppbv
7.65	µg/m³

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Client Sample ID: IA-138-A-29 Lab Sample ID: 140-20195-3

Matrix: Air Lab File ID: RI05P104.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 15:40

Sample wt/vol: 100(mL) Date Analyzed: 09/05/2020 17:01

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42483 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.13	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.093	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	0.39	J	0.40	0.11
67-66-3	Chloroform	119.38	0.13	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.42		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	0.27	J	0.40	0.040
100-41-4	Ethylbenzene	106.17	ND		0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.035
108-88-3	Toluene	92.14	ND		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	1.4		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	ND		0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	90		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1

SDG No.:

Client Sample ID: IA-138-A-29 Lab Sample ID: 140-20195-3

Matrix: Air Lab File ID: RI05P104.D

Analysis Method: TO 15 LL Date Collected: 08/26/2020 15:40

Sample wt/vol: 100(mL) Date Analyzed: 09/05/2020 17:01

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42483 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.42	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.58	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	1.4	J	1.4	0.39
67-66-3	Chloroform	119.38	0.62	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.1		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	1.1	J	1.6	0.16
100-41-4	Ethylbenzene	106.17	ND		1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.24
108-88-3	Toluene	92.14	ND		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	7.7		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	ND		3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	90		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MR\20200904-16508.b\RI05P104.D
Lims ID: 140-20195-A-3
Client ID: IA-138-A-29
Sample Type: Client
Inject. Date: 05-Sep-2020 17:01:30 ALS Bottle#: 4 Worklist Smp#: 10
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016508-010
Misc. Info.: 140-20195-a-3
Operator ID: HMT Instrument ID: MR

Method: \\chromfs\Knoxville\ChromData\MR\20200904-16508.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 06-Sep-2020 07:11:26 Calib Date: 29-Aug-2020 00:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MR\20200827-16425.b\RH28IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1023

First Level Reviewer: tajh Date: 06-Sep-2020 07:04:02

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.274	8.274	0.000	96	133220	4.80	
* 2 1,4-Difluorobenzene	114	10.507	10.512	-0.005	94	653842	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.349	15.349	0.000	88	516172	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	16.999	16.999	0.000	92	288193	4.18	
6 Chlorodifluoromethane	51	3.340	3.329	0.011	94	5822	0.0781	
8 Dichlorodifluoromethane	85	3.400	3.383	0.017	93	4671	0.0834	
27 1,1-Dichloroethene	96	5.427	5.416	0.011	75	2150	0.0546	
44 Chloroform	83	8.274	8.285	-0.011	28	2032	0.0253	
51 Benzene	78	9.919	9.924	-0.005	1	2994	0.0262	
52 Carbon tetrachloride	117	9.951	9.946	0.005	32	1367	0.0185	
58 Trichloroethene	130	11.235	11.240	-0.005	91	16181	0.2848	
67 Toluene	91	13.359	13.354	0.005	91	9898	0.0712	

Reagents:

40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20195-1 Analy Batch No.: 42222

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/28/2020 14:01 Calibration End Date: 08/29/2020 00:02 Calibration ID: 2588

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Hexane	+++++ 0.9916	+++++ 0.9670	+++++ 0.9389	1.0579 0.8854	0.9660 0.9985	Ave		0.9722				5.5		30.0			
cis-1,2-Dichloroethene	+++++ 1.4151	1.8687 1.4034	1.9769 1.3567	1.6141 1.2253	1.4188 1.4000	Ave		1.5199				16.5		30.0			
Ethyl acetate	+++++ 3.3043	+++++ 3.4449	+++++ 3.2179	3.2448 2.9014	3.0505 3.4322	Ave		3.2280				6.1		30.0			
Chloroform	+++++ 2.8302	3.4065 2.8080	3.4563 2.6266	3.0176 2.3841	2.7318 2.7371	Ave		2.8887				12.2		30.0			
Tetrahydrofuran	+++++ 1.6540	+++++ 1.6863	1.7958 1.5310	1.8290 1.4025	1.7268 1.6005	Ave		1.6533				8.5		30.0			
1,1,1-Trichloroethane	+++++ 2.7253	+++++ 2.6891	3.0889 2.5963	3.1076 2.3440	2.8099 2.7095	Ave		2.7588				9.1		30.0			
1,2-Dichloroethane	+++++ 0.3129	0.3269 0.3151	0.3761 0.3025	0.3448 0.2790	0.2869 0.3375	Ave		0.3202				9.4		30.0			
1-Butanol	+++++ 0.1532	+++++ 0.1843	+++++ 0.1684	+++++ 0.1559	0.1705 0.1980	Ave		0.1717				9.9		30.0			
Cyclohexane	+++++ 0.1134	+++++ 0.1175	+++++ 0.1162	0.1299 0.1083	0.1109 0.1320	Ave		0.1183				7.8		30.0			
Benzene	+++++ 0.8098	+++++ 0.8066	0.9347 0.8056	0.8958 0.7460	0.8119 0.9019	Ave		0.8390				7.6		30.0			
Carbon tetrachloride	0.6680 0.5386	0.5496 0.3919	0.6184 0.5641	0.6065 0.3389	0.5810 0.5543	Ave		0.5411				18.7		30.0			
2,3-Dimethylpentane	+++++ 0.1693	+++++ 0.1780	0.2366 0.1701	0.1907 0.1592	0.1833 0.1852	Ave		0.1840				12.8		30.0			
Thiophene	0.5188 0.4569	0.5575 0.4727	0.5254 0.4550	0.4783 0.4180	0.4549 0.5011	Ave		0.4839				8.6		30.0			
2,2,4-Trimethylpentane	+++++ 1.2664	1.5195 1.2620	1.5640 1.2273	1.4197 1.1562	1.2339 1.3930	Ave		1.3380				10.6		30.0			
Heptane	+++++ 0.2710	+++++ 0.2631	+++++ 0.2624	0.2963 0.2501	0.2673 0.2952	Ave		0.2722				6.4		30.0			
1,2-Dichloropropane	+++++ 0.3177	+++++ 0.3066	0.3645 0.2952	0.3483 0.2774	0.3160 0.3298	Ave		0.3195				8.8		30.0			
Trichloroethene	0.4497 0.3926	0.5298 0.3879	0.4481 0.3687	0.4188 0.3827	0.3813 0.4108	Ave		0.4170				11.6		30.0			
Dibromomethane	+++++ 0.3725	+++++ 0.3485	0.4057 0.3337	0.3569 0.3152	0.3309 0.3921	Ave		0.3569				8.8		30.0			
Bromodichloromethane	+++++ 0.5806	0.6048 0.5864	0.6525 0.5848	0.6050 0.5363	0.6066 0.6685	Ave		0.6028				6.5		30.0			
1,4-Dioxane	+++++ 0.1193	+++++ 0.1472	+++++ 0.1364	0.1623 0.1262	0.1286 0.1438	Ave		0.1377				10.7		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

APPENDIX E—REMEDIAL ACTION PROGRESS REPORT #36: APRIL 1, 2020 THROUGH SEPTEMBER 30, 2020, SUB-SLAB-DEPRESSURIZATION SYSTEMS, BUILDINGS A AND C, LOCKHEED MARTIN MIDDLE RIVER COMPLEX

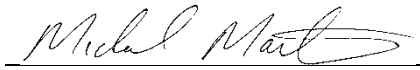
REMEDIAL ACTION PROGRESS REPORT #36
APRIL 1—SEPTEMBER 30, 2020
SUB-SLAB DEPRESSURIZATION SYSTEMS
BUILDINGS A AND C
LOCKHEED MARTIN MIDDLE RIVER COMPLEX
2323 EASTERN BOULEVARD
MIDDLE RIVER, MARYLAND

Prepared for:
Lockheed Martin Corporation

Prepared by:
Tetra Tech, Inc.

March 2021

Revision:



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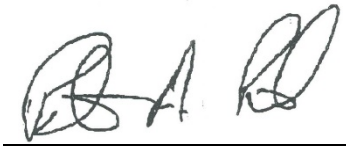

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ACRONYMS

%	percent
°F	degrees Fahrenheit
$\mu g/m^3$	micrograms per cubic meter
GAC	granular activated-carbon
HEPA	high-efficiency particulate air
HP	horsepower
lbs/day	pounds per day
MDE	Maryland Department of the Environment
OM&M	operation, maintenance, and monitoring
PVC	polyvinyl chloride
PPZ	potassium permanganate-impregnated zeolite
SCFM	standard cubic feet per minute
S&S	S&S Technologies, Inc.
SSD	sub-slab depressurization
TestAmerica	TestAmerica Laboratories, Inc.
TO-15	Toxic Organic Method 15
TCE	trichloroethene
VMP	vapor monitoring point
VOC	volatile organic compound
WC	water column

SECTION 1
INTRODUCTION

1.1 SITE LOCATION AND BACKGROUND INFORMATION

This report documents the monitoring activities completed from April 1 to September 30, 2020 [the 49th and 50th quarters of operation] for the sub-slab depressurization systems operating in the Building A lay-up room (former plating shop), eastern area, and basement, and the Building C basement of the Lockheed Martin Corporation Middle River Complex in Middle River, Maryland. The locations of the systems' influence are shown on Figure 1. These remedial systems control (by creating a vacuum) and remove volatile organic compounds from sub-slab vapor, thus preventing their migration into indoor air. The systems are operated in accordance with the operation, maintenance, and monitoring manuals for the Building A and Building C systems (Tetra Tech, Inc., 2019a and 2019b, respectively).

1.2 DESCRIPTION OF SUB-SLAB DEPRESSURIZATION SYSTEMS

1.2.1 Building A System

The sub-slab depressurization system in Building A includes the following soil vapor extraction points (see Figure 2):

- Two (2) horizontal soil vapor extraction laterals in the lay-up room (North and South)
- Two (2) laterals in the basement (Basement North and Basement South)
- Six (6) vertical soil vapor extraction points (SSD-34-A, SSD-35-A, SSD-36-A, SSD-37-A, SSD-38-A, and SSD-39-A)
- Extraction piping connected to basement sump HRS-5 (through December 2019)

The soil vapor extraction points serve as conduits for drawing vapor from beneath the building slab, thus mitigating vapor intrusion into indoor air. Previously the system's extraction piping was also connected to basement sump HRS-5; the connection was removed and the sump abandoned in December 2019 by filling it with concrete. The sump abandonment and post-abandonment

monitoring results were documented in a separate report submitted in April 2020 (Tetra Tech, 2020).

Sub-slab vapors are pulled through the extraction points, vapor-extraction manifold, and "pre-blower" moisture separator using a single 10-horsepower regenerative blower. The blower is mounted on a skid along with the pre-blower moisture separator, a heat exchanger, filters, and vacuum, pressure, temperature, and flow gauges (collectively referred to as the "blower skid"). A spare 10-horsepower blower of the same model is kept at the site in case it is needed. The extracted vapors are cooled as they are pushed through the heat exchanger. Following the heat exchanger, the vapors enter the post-blower moisture separator where entrained condensate droplets are removed to reduce saturation and pressure buildup in the vapor-phase carbon drums. The extracted vapors are then treated to remove volatile organic compounds (VOCs) using four 400-pound granular activated-carbon (GAC) drums, in two-by-two configuration (two parallel trains of two drums in series)[1]. Vapors are discharged to the atmosphere via an exhaust stack that extends above the roof of the building. Figure 3 shows the process and instrumentation diagram for the Building A sub-slab depressurization system.

The Building A system is also equipped with drains for each of the granular activated-carbon drums, for each of the three pipe sumps (PS-1-A [near SSD-37-A], PS-2-A [near SSD-34-A], and PS-3-A [in the basement]), and for the one exhaust stack sump. The pipe sumps are installed at low points to allow accumulation and manual drainage of condensation in the pipe. In addition, two freestanding drains adjacent to the south side of the system's equipment skid are available for use in winter months to drain condensate in the vapor entering the two trains of granular activated-carbon drums.

Six IQAir® GC™ Series-GC VOC indoor-air filters also operate in the basement of Building A near vapor monitoring points (VMPs) 093-A, 093-A-X, and 138-A, in response to elevated trichloroethene (TCE) concentrations in the indoor air. The filters were installed south of the sub-

[1] Originally, vapor treatment consisted of one train of two 400-pound carbon drums; the two-by-two configuration was completed in February 2017 to decrease pressure, increase flow of the system, and better capture VOCs; details are in Section 2.4.

slab depressurization system extraction laterals in January 2015 (designated AF-N, AF-M, and AF-S) and May 2017 (designated AF-NX, AF-MX, and AF-SX), and are continuously operated to filter 300 standard cubic feet per minute (SCFM) of air each. Each filter consists of a high-efficiency particulate air pre-filter, a granular activated-carbon filter, and a post-filter sleeve (collectively referred to as "filter elements"). The pre-filter (GC™ HyperHEPA® Pre-Filter H11 [S]) weighs three pounds; it removes coarse, fine, and ultra-fine dust particles and protects subsequent filters. The granular activated-carbon filter (GC VOC filter cartridge set) removes volatile organic compounds from indoor air; it is comprised of four granular activated-carbon cartridges, collectively weighing nine pounds. The post-filter sleeve (GC™ post-filter sleeve set) is placed over the granular activated-carbon cartridges and removes any remaining fine and ultra-fine particulate matter.

1.2.2 Building C System

The sub-slab depressurization system in the Building C basement consists of 11 vertical soil vapor extraction points: two in the southern-basement area (SSD-21-C and SSD-23-C) and nine in the mid-basement area (SSD-26-C, SSD-27-C, SSD-28-C, SSD-29-C, SSD-30-C, SSD-31-C, SSD-32-C, SSD-33-C, and SSD-34-C); see Figure 4. These extraction points serve as conduits for drawing vapor from beneath the building slab, thus creating a vacuum under the floor slab preventing vapor intrusion into indoor air. The vapors are pulled through the extraction points using a single 7.5-horsepower regenerative blower that is mounted on a skid along with a moisture separator, heat exchanger, filters, and vacuum, pressure, temperature, and flow gauges (collectively referred to as the "blower skid"). A spare 7.5-horsepower blower of the same model is kept at the site in case it is needed. Following extraction, the vapors enter the first moisture separator (MS-1) where entrained condensate droplets are removed to reduce fouling of the vapor lines and saturation of the granular activated-carbon. The extracted vapors are cooled as they are pushed through the heat exchanger; any remaining extracted condensate droplets are removed via a second moisture separator (MS-2) [separate from the blower skid] before being treated. The vapors are treated by passing through two 400-pound granular activated-carbon drums and one 600-pound potassium permanganate-impregnated zeolite drum (to remove residual vinyl chloride), in-series, before being discharged to the atmosphere via an exhaust stack that extends above the roof of the building (Figure 5).

The Building C system is also equipped with drains for each granular activated-carbon and potassium permanganate-impregnated zeolite drum, for each of the five pipe sumps (PS-1 [near SSD-25-C and column N35, PS-2 [near SSD-30-C and column N26], PS-3 [near SSD-27-C and column O20], PS-4 [near SSD-32-C and column R19], and PS-5 [near SSD-29-C and column V12]), and for the one exhaust stack sump. The sumps are installed at low points to allow drainage of condensation in the pipe.

SECTION 2
SITE ACTIVITIES

2.1 BIWEEKLY SYSTEM CHECKS

Biweekly system checks were conducted to monitor the performance of the sub-slab depressurization (SSD) systems and to make necessary adjustments to optimize effectiveness. System checks were conducted between April 1 and September 30, 2020 on the dates listed below.

- April 1, 2020
- April 14, 2020
- April 28, 2020
- May 13, 2020
- May 28, 2020
- June 9, 2020
- June 25, 2020
- July 7-8, 2020
- July 23, 2020
- August 5, 2020
- August 18, 2020
- September 2, 2020
- September 15, 2020
- September 28, 2020

System checks were conducted in accordance with the latest operation, maintenance, and monitoring (OM&M) manuals (Tetra Tech, Inc. [Tetra Tech], 2019a and 2019b), and included biweekly onsite general system monitoring and vacuum influence monitoring; twice-weekly remote dial in-system checks; three times per week (Monday, Wednesday, and Friday) remote checks of system video cameras; and any necessary adjustments to extraction laterals and wells. Biweekly system checks forms are in Appendix A.

2.1.1 General System Monitoring

During the biweekly system checks, gauge readings on the blower skid were checked, and the vacuum and velocity at each extraction lateral/well were measured. The condition of system components was also checked, and moisture separators/sumps were emptied as necessary. The following specific tasks were performed:

1. Recorded:
    a. vacuum at pre-air filter
    b. vacuum at post-air filter
    c. pressure at post-blower
    d. temperature at post-blower
    e. temperature at post-heat exchanger
    f. system flow
    g. time counter display
    h. vacuum from each extraction lateral/well
    i. velocity from each extraction lateral/well
    j. vacuum from each vapor monitoring point (VMP)
2. Checked the following for damage, leaks, and/or signs of heat stress:
    a. system components
    b. granular activated-carbon (GAC) drums
    c. potassium permanganate-impregnated zeolite (PPZ) drum (Building C only)
    d. GAC and PPZ fittings and flexible hoses
3. Checked the following for condensate, and drained, as necessary:
    a. moisture separators
    b. pipe sumps
    c. exhaust stack sumps
    d. GAC and PPZ drains
4. Confirmed that zip-ties on the GAC- and PPZ-drum cam locks were present and secure
5. Confirmed that the ambient air valve was closed
6. Confirmed that the vacuum relief valve was closed
7. Noted any adjustments to extraction laterals/wells
8. Checked that flow, pressure, and vacuum gauges fell to zero, and that temperature gauges fell, when systems were turned off

9. Checked the former HRS-5 sump and surrounding area in the Building A basement for signs of water infiltration.

10. Checked each of the Building A basement IQAir® GC™ Series-GC indoor air filters to:
    a. verify filter was on
    b. verify fan was running
    c. check control panel for filter-life status
    d. document any signs of tampering

2.1.2 Vacuum Influence Monitoring

The objective for the SSD systems is to maintain a vacuum of at least 0.01 inches water column (WC) in the targeted areas. The vacuum influence (differential sub-slab vapor vacuum versus indoor air) at sub-slab VMPs was monitored using a dual[2]-port manometer (Fieldpiece Instruments, Inc. model SDMN5). This instrument was used to identify sub-slab-air short-circuiting or other problems (indicated by a significant drop in vacuum at one or more VMPs), and to determine each system's area of influence. Short-circuiting was not identified at the Building A or Building C SSD systems during this reporting period. Figures 6 through 9 show induced vacuum over time; Figures 10 through 13 show induced vacuum influence contours on plan views using induced vacuum readings from September 15, 2020 for Building A and September 28, 2020 for Building C.

Vacuum influence in the Building A target areas consistently[3] exceeded the vacuum influence objective (0.01 inches WC) during the reporting period at the following monitoring points:

- At eight of eight VMPs in the layup room (SSD-1-A, SSD-12-A-X, SSD-11-A-X, SSD-13-A-X, SSD-2-A-X, 15-A-X, SSD-16-A-X, and SSD-3-A-X) with vacuums ranging from 0.03 to 4.51 inches WC (see Figure 10)
- At three of four of the VMPs in the Building A basement (SSD-20-A, SSD-21-A, and SSD-22-A) with vacuums ranging from 0.01 to 2.65 inches WC (see Figure 10)
- At 10 of 15 VMPs in the eastern area of Building A (165-A, 166-A, 167-A, 117-A, 136-

[2] Only one port is used for monitoring vacuum influence; the second port is used to measure static pressure.

[3] Exceeded vacuum monitoring objective of 0.01 inches water column at more than half of the biweekly system checks completed.

A-S, 136-A, 160-A, 161-A, 162-A, 163-A) with vacuums ranging from 0.01 to 2.88 inches WC (see Figure 11).

- At the two VMPs in the western area of Building A (168-A and 188-A) with vacuums ranging from 0.01 to 0.71 inches WC.

Induced vacuum has not been consistently observed at 79-A, 119-A, 121-B, or 136-A-N. The lack of induced vacuum at 119-A and 121-B might possibly be due to the greater distance to the nearest extraction point. The reason for the lack of vacuum influence at the remaining locations (79-A and 136-A-N) is not clear but could be related to subsurface preferential pathways and heterogeneity. It should be noted that VMPs 163-A, 168-A, and 188-A, which were not accessible in the previous reporting period(s), were accessible and monitored during this reporting period.

Vacuum influence in the Building C target areas consistently exceeded the vacuum influence objective (0.01 inches WC) during the reporting period in the following monitoring points:

- At five of seven VMPs in the southern-basement area (001-C, SSD-2-C, SSD-3-C, SSD-4-C, and SSD-24-C) with vacuums ranging from 0.01 to 2.19 inches WC (see Figure 12)
- At 16 of 20 VMPs in the mid-basement area (060-C, 113-C, 126-C, 127-C, 133-C, 135-C, 141-C, 149-C, 150-C, 151-C, 152-C, 153-C, 154-C, 155-C, 156-C, and 157-C,) with vacuums ranging from 0.01 to 5.57 inches WC (see Figure 13)

The reason for the lack of vacuum influence at 050-C, 111-C, 158-C, and 159-C is not clear but could be related to subsurface preferential pathways and heterogeneity.

Vacuum Summary

Induced vacuum measurements indicate that the systems are performing as designed. The sub-slab vapor extraction laterals in the Building A lay-up room induce a vacuum influence over an approximately 5,700-square foot area, and in this reporting period consistently encompass all eight VMPs that had elevated volatile organic compound (VOC) concentrations before system start-up. The extraction laterals in the Building A basement induce a vacuum influence over an approximately 2,600-square foot area, and consistently encompass three of four VMPs that measure the system's induced vacuum in the basement (Figure 10). The vertical extraction points in the eastern area of Building A induce a vacuum influence over an approximately 8,900-square foot area, and in this reporting period consistently encompass 10 of 15 VMPs (Figure 11). In the western area of Building A, extraction point SSD-39A is inducing vacuum at the two nearby VMPs

and the area of induced vacuum is approximately 1,100-square feet (Figure 11).

In Building C, the sub-slab vapor extraction points in the southern-basement area induce a vacuum influence over an approximately 3,900-square foot area, with five of seven accessible VMPs showing consistent influence in the reporting period (Figure 12). Extraction points in the mid-basement area induce a vacuum influence over an approximately 33,000-square foot area, with 16 of 20 VMPs showing consistent influence in the reporting period (Figure 13).

2.1.3 Adjustments to Extraction Points

The throttling valve at extraction point SSD-36-A was opened slightly in April 2020 to increase the extraction flow and induce vacuum at nearby VMP 162-A. Since the installation of three extraction points and VMPs in the area near VMP 136-A in 2016, induced vacuum at VMP 162-A and this area in general has not been consistent, possibly due to the known significant concrete masses in the subsurface nearby. The change in the flow adjustment at extraction point SSD-36-A achieved the goal of inducing vacuum in the area; vacuum readings during the reporting period ranging from 0.01 to 0.21 inches WC were measured at VMP 162-A during each biweekly check.

2.2 VAPOR SAMPLING

Grab vapor samples were collected monthly at Building A and every other month at Building C during the reporting period. Samples were collected from each SSD system at the influent, mid-GAC (between lead and lag vessels), and effluent positions of the treatment drums. Samples were collected from the Building A SSD system on April 14, May 13, June 25, July 23, August 18, and September 28, 2020. Samples were collected from the Building C SSD system on May 13, July 23, and September 28, 2020. Samples were collected directly from each sampling port using the following steps:

- A piece of Teflon® tubing was connected to the sampling port.
- A clean, one-liter Summa® canister under vacuum was connected to the tubing, and the canister valve was opened until the canister gauge reached zero or stopped falling (approximately one minute).
- For the Building A mid-GAC samples, the two sample ports were connected using Teflon® tubing with a "T" fitting to connect to the canister.

Samples were labeled A-INFLUENT, A-MID-GAC, A-EFFLUENT, C-INFLUENT, C-MID-GAC, and C-EFFLUENT and shipped to TestAmerica Laboratories, Inc. (TestAmerica) in Knoxville, Tennessee. TestAmerica is accredited through the National Environmental Laboratory Accreditation Program and United States Department of Defense Environmental Laboratory Accreditation Program for VOC analysis by United States Environmental Protection Agency Toxic Organic Method 15 (TO-15).

Laboratory results are summarized in Tables 1 through 6; analytical reports are in Appendix B. During this reporting period, total influent VOC concentrations in Building A ranged from 941 micrograms per cubic meter ($\mu g/m^3$) (September 2020) to 1,994 $\mu g/m^3$ (July 2020), while VOC influent concentrations in Building C ranged from 47 $\mu g/m^3$ (September 2020) to 139 $\mu g/m^3$ (July 2020). Influent concentrations have been consistent at both systems over the past three years with minor fluctuations. Average influent VOC concentrations in Building A were approximately 7% higher than those observed during the previous reporting period (October 1, 2019 to March 31, 2020); average influent concentrations for the Building C system were approximately 19% higher. Influent concentrations have been consistent at both systems over the past three years with minor fluctuations.

2.3 QUARTERLY SYSTEM CHECKS

Quarterly system checks were completed on June 29 and September 15, 2020. Quarterly system checks included the following tasks:

1. Inspected the condition of the:
    a. system components
    b. system piping
    c. pre-blower air filter and intake (ambient) air filter; replacing filter(s) as necessary
    d. GAC and PPZ drums
    e. GAC and PPZ drum sample ports
    f. VMP well lids, bolts, and sample tubing
2. Checked that the Building A system shuts down, the control panel alarm lights illuminate, and the auto-dialer activates upon alarms for:
    a. high temperature – post-blower
    b. high temperature – post-heat exchanger
    c. high-water level – moisture separator

d. high pressure
e. low vacuum

3. Checked that the Building C system shuts down, the control panel alarm lights illuminate, and the auto-dialer activates upon alarms for:
    a. high temperature – post-blower
    b. high temperature – post-heat exchanger
    c. high-water level – MS-1
    d. high-water level – MS-2
    e. high pressure
    f. low vacuum
4. Checked vacuum relief valves for proper operation
5. Recorded amperage draw on blowers
6. Checked that auto-dialers activate when power is turned off
7. Checked auto-dialer batteries and replaced, as necessary
8. Confirmed that a fire extinguisher with up to date inspection record is next to each system
9. Vacuumed the underside of the heat exchanger
10. Cleaned the systems and areas around the systems

During the June 2020 quarterly check, the Building C post-blower temperature switch and pressure gauge were found to not be working properly; both were replaced on July 23, 2020. In addition, the Building A SSDS blower motor starter overload switch was replaced on August 5, 2020 and the flow meter was replaced on August 18, 2020. No issues were identified for Building A or Building C SSD systems during the quarterly system check on September 15, 2020. Both systems are running within the normal operating parameters. Quarterly system checks forms are in Appendix A.

2.4 NON-ROUTINE SYSTEM MAINTENANCE

2.4.1 Non-Routine Maintenance

The following non-routine system maintenance was completed during the reporting period:

- The Building C post-blower temperature switch and pressure gauge were replaced on July 23, 2020.
- The Building A SSDS blower motor starter overload switch was replaced on August 5, 2020.

The combined volume of condensate drained from the Building A SSD system during the reporting period (mainly in April 2020) was 26 gallons. The water was transferred to 55-gallon drums temporarily staged in the in the designated drum storage area at the Building C SSD system pending proper off-site disposal. At the Building C SSD system, there was no condensate that required draining during the reporting system.

2.5 GAC AND PPZ CHANGE-OUTS

GAC change-outs were not conducted during the reporting period. The Building C PPZ drum was also not changed out during the reporting period.

2.6 SYSTEM SHUTDOWNS

2.6.1 Operator-Controlled Shutdowns

Both systems were briefly turned off during each biweekly system check to: (1) confirm that flow, pressure, temperature, and vacuum gauges fall to zero (thereby indicating proper operation), and (2) check and drain (as necessary) condensate accumulation in the moisture separators and sumps. Both systems were also briefly turned off during the quarterly system checks to test proper operation of the fail-safe alarms. In addition, the Building A and Building C SSD systems were shut down (with advance notification to the facility) for semi-annual sub-slab vapor and indoor air sampling events on the following days:

- August 25-26, 2020: The Building A system was shut down for an estimated 31.4 hours for the semi-annual sub-slab vapor and indoor air sampling event.
- August 24-25, 2020: The Building C system was shut down for an estimated 33.7 hours for a sub-slab and indoor air sampling event.

2.6.2 Alarms and Other Shutdowns

The following alarms and other shutdowns occurred during the reporting period:

- The Building A SSDS was down on April 6, 11, and 30, 2020 for 1.0, 7.7, and 17.3 hours, respectively, due to power outages. The system was restarted when power was restored.
- The Building A SSDS was down for 46.6 hours from July 6 to July 8, 2020 due to a low-vacuum alarm this indicated the blower shut off, likely because of a power surge. During troubleshooting, the operator found several fuses blown and some damaged wiring in the blower motor. The system was restarted on July 8, 2020, after completing the repairs.

- The Building A SSDS was down for 13.9 hours on July 26, 2020 due to a high temperature alarm; the operator responded that day and restarted the system after inspecting it. The system was down for another 20.6 hours from July 26 to July 27, 2020 due to second high temperature alarm. The operator did a thorough cleaning of the heat exchanger and restarted the system. A replacement overload switch was also installed.

- The Building C SSDS was down on April 6, 2020 for 1.5 hours, April 30, 2020 for 17.3 hours, July 3, 2020 for 14.1 hours due power outages. The system was restarted when power was restored.

2.6.3 System Uptime

During this reporting period, the Building A and Building C SSD systems were operational for approximately 4,230 hours (97%) and 4,301 hours (98%), respectively. Downtime does not include the brief shutdown periods for biweekly and quarterly system checks.

2.7 REMEDIATION SUMMARY

2.7.1 Building A System

Continuous operation of the SSD system in the Building A lay-up room (former plating shop) began on March 31, 2008; the SSD system was expanded on October 22, 2010 to include the basement, and on April 13, 2016 to include select areas on the eastern side of the building. A third-phase expansion was completed on July 6, 2017 to address areas along the western side of Building A (near VMP 168-A) and basement sump HRS-5 near column D26. On February 7, 2017 the GAC drums were modified to add a second parallel treatment train (with two 400-pound GAC drums in series) to increase flow and decrease pressure on the new blower. Continuous vapor monitoring of basement indoor air identified basement sump HRS-5 as a significant VOC source for indoor air contamination, therefore the sump was covered, and vapor extraction piping was installed under the cover in June 2017. Subsequently, basement sump HRS-5 was abandoned by filling with concrete and associated extraction piping was removed in December 2019 to remove exposure pathways of water and vapor contaminated with VOCs. Building A extraction points are open to allow a combined airflow rate of approximately 300 SCFM. Each extraction point operates at an airflow rate of 10–100 SCFM; the system vacuum and flows are adjusted to maintain a vacuum of 0.01 inches water column (WC) or greater at each vapor monitoring point within areas where elevated concentrations of VOCs are in sub-slab soil.

Since system startup on March 31, 2008 to September 28, 2020, total influent VOC concentrations have decreased more than 98%, from 94,310 $\mu g/m^3$ to 940 $\mu g/m^3$. The addition of the basement extraction laterals in October 2010 did not appear to change influent concentrations. The system expansion in April 2016 including a higher-flow 10-horsepower blower and five new vertical extraction points resulted in an increase in Building A influent system concentration for approximately one month. The system expansion in July 2017 resulted in a slight increase in the result for the sample collected on July 6, 2017 immediately following the expansion. The two main chemicals of concern in Building A are 1,1,1-trichloroethane and trichloroethene (see Table 1). VOC trends for the Building A system are shown in Tables 1 through 3 and on Figure 14. The influent concentrations have decreased but remain above screening levels.

VOC mass removal rates (based on influent concentrations) in Building A ranged from 0.02 to 0.05 pounds per day (lbs/day) during this reporting period. The total VOC mass removed was approximately 6.6 pounds; total VOC removal since system startup in March 2008 is approximately 212 pounds. VOC mass removal rates are lower than the levels (20 lbs/day VOCs) that require Maryland Department of Environment (MDE) permitting.

2.7.2 Building C System

Continuous operation of the SSD system in the southern-basement area of Building C began on March 31, 2008; the system was expanded to the mid-basement area in May 2013. Extraction points were installed at locations that maximized vacuum influence (based on startup tests). The total flow rate of the Building C system is approximately 150 SCFM. Extraction well SSD-23-C in the southern-basement area was shut off after the expansion to promote higher flow rates from the new wells installed in the mid-basement area. Vacuum influence in the southern-basement area was maintained by the operation of well SSD-21-C only until February 21, 2017, when SSD-23-C was re-opened and SSD-21-C was closed. SSD-21-C was re-opened and SSD-23-C was closed again on October 12, 2018. Vacuum influence and flow rates in the mid-basement area have increased and stabilized since system expansion. On November 7, 2013, mid-basement wells SSD-27-C and SSD-32-C flow rates were reduced to promote higher flow rates from other extraction wells in the mid-basement area. In April 2016, flows at mid-basement extraction points SSD-26-C and SSD-30-C were also reduced to promote high flows from other extraction points. These efforts have been performed to attempt to improve vacuum influence and VOC mass removal in

the northern extraction points.

From system startup on March 31, 2008 to April 8, 2013, and before the system expansion, total influent VOCs had decreased by 99%, from 31,170 µg/m^3 to 117 µg/m^3. VOC concentrations increased to 3,100 µg/m^3 after the system was expanded but have since decreased to 47 µg/m^3 (a 98% decrease). Trichloroethene is the primary chemical of concern in Building C (see Table 4). VOC trends for the Building C system are shown in Tables 4 through 6 and on Figure 15.

Mass removal rates for VOCs in Building C during this reporting period ranged from 0.018 to 0.052 pounds per month, for a total mass of approximately 0.21 pounds. Total VOC removal since system startup in March 2008 is approximately 12.8 pounds. Building C VOC removal rates are lower than levels requiring MDE permitting (20 lbs/day VOCs, 20 pounds per year vinyl chloride).

2.7.3 Indoor Air Filters in Building A

Six IQAir® GC™ Series-GC indoor air filters operate in the basement of Building A near VMPs 093-A, 093-A-X, and 138-A (south of the SSD system extraction trenches). These filters were inspected every two weeks. The high-efficiency particulate air (HEPA) pre-filters, GAC cartridges, and post-filter sleeves were replaced on June 29 and September 15, 2020. The spent filter elements were placed in a dedicated 55–gallon drum in the designated drum storage area at the Building C SSD system pending proper off-site disposal. This waste drum was inspected during the biweekly system checks to ensure it was properly labeled and in good condition.

SECTION 3
CONCLUSIONS AND RECOMMENDATIONS

3.1 SYSTEM PERFORMANCE

Induced vacuum measurements indicate that the sub-slab depressurization systems are performing as designed. Soil vapor extraction points in the Building A lay-up room induce a vacuum influence over an approximately 5,700-square foot area, and consistently encompass all eight VMPs vapor monitoring points that had elevated volatile organic compound concentrations before system startup. In the Building A basement, the soil vapor extraction points induce a vacuum influence over an approximately 2,600-square foot area that encompasses three of four vapor monitoring points installed to measure the system-induced vacuum in the basement (Figure 10). The soil vapor extraction points in the eastern area of Building A induce a vacuum influence over an approximately 8,900-square foot area, and consistently encompass 10 of 15 VMPs used to measure the system-induced vacuum in that area (Figure 11). Extraction point SSD-39A in the western area of Building A is inducing vacuum at two nearby VMPs; the area of induced vacuum is approximately 1,100-square feet (Figure 10).

In the southern-basement area of Building C, the soil vapor extraction points induce a vacuum influence over an approximately 3,900-square foot area, with five of seven accessible vapor monitoring points showing influence (Figure 12). The soil vapor extraction points in the mid-basement area of Building C induce a vacuum influence over an estimated 33,000-square foot area, with 16 of 20 vapor monitoring points showing influence (Figure 13).

The sub-slab depressurization systems have removed volatile organic compound mass and have treated emissions with granular activated-carbon (both buildings) and potassium permanganate-impregnated zeolite (Building C only). A summary of the granular activated-carbon drums used during the lifespan of each system follows:

	Number of granular-activated-carbon drums used	
	200-pound drums	400-pound drums
Building A	23	20
Building C	17	6

The 600-pound potassium permanganate-impregnated zeolite drum in Building C has not been changed out since its installation in April 2013. The drum counts listed above do not include the granular activated-carbon drums currently attached to each system, or the potassium permanganate-impregnated zeolite drum currently attached to the Building C system.

The Building A system has used approximately 60 pounds of granular activated-carbon per pound of volatiles removed, while the Building C system has used approximately 460 pounds of granular activated-carbon per pound of volatiles removed. Note that the removal efficiency of granular activated-carbon is reduced as vapor concentrations decrease. Although influent concentrations of volatile organic compounds for both systems have decreased significantly since startup (March 31, 2008), concentration fluctuations have occurred over time (see Figures 14 and 15).

3.2 CONTINUED MONITORING

The Building A and Building C systems will continue to operate during the next semi-annual reporting period (October 1, 2020 through March 31, 2021) so that mitigation of vapor migration in both buildings is maintained. Operation, maintenance, and monitoring activities conducted during the next reporting period will include biweekly system checks, quarterly system checks, remote camera and phone checks at least three times per week, system maintenance, bimonthly (every other month) vapor sampling in Building A, and vapor sampling every four months at the Building C system. This is a change from the current sampling frequency and will begin in December 2020. Granular activated-carbon change-outs are scheduled for October 2020; additional change-outs, if needed, will occur when the concentration of the sample collected following the lead granular activated-carbon vessel(s) reaches 50% of the influent concentration, or as determined based on removal measured in the lag vessel or change-out history and laboratory result trends (especially trichloroethene adsorption effectiveness trends). Change-out of the potassium permanganate-impregnated zeolite drum is not expected during the next reporting period. The next remedial action progress report will be issued in April 2021.

3.3 FUTURE PLANS

We will continue to analyze vacuum influence and concentrations to optimize operation of the Building A and Building C sub-slab depressurization systems as we have done since system start-up.

A decrease in vapor sampling frequency to every two months for the Building A SSDS and every four months for the Building C SSDS starts in December 2020. We will continue to look for ways to reduce SSDS operating, maintenance and monitoring costs. If either SSDS is off for more than 48 hours for any reason, we will consider sampling the system influent upon the restart to evaluate for any rebound in VOC concentrations.

The Building C system continues to operate with low influent VOC concentrations below 100 $\mu g/m^3$ in total and well below screening levels for TCE and other individual VOCs. It may be worth considering a greater focus on any remaining "hot-spot" areas and extraction points while shutting down other extraction points and testing rebound to determine if portions of the Building C basement subsurface will not rebound above screening levels as the start of a phased-approach to shut off the entire Building C system. We can discuss specifics of which extraction points to focus extraction and which to shut off when requested.

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SECTION 4
REFERENCES

Tetra Tech, Inc. (Tetra Tech), 2017. *Construction Report Sub-Slab Depressurization-System Third-Phase Expansion—Building A, Lockheed Martin Middle River Complex, 2323 Eastern Boulevard, Middle River, Maryland*. August.

Tetra Tech, Inc. (Tetra Tech), 2019a. *Operation, Maintenance, and Monitoring Manual, Sub-Slab-Depressurization System Building A, Lockheed Martin Middle River Complex, 2323 Eastern Boulevard, Middle River, Maryland*. April.

Tetra Tech, Inc. (Tetra Tech), 2019b. *Operation and Maintenance Manual: Sub-Slab Depressurization System—Building C, Lockheed Martin Middle River Complex, 2323 Eastern Boulevard, Middle River, Maryland*. April.

Tetra Tech, Inc. (Tetra Tech), 2020. *HRS-5 Sump Abandonment Report, Building A, Lockheed Martin Middle River Complex, 2323 Eastern Boulevard, Middle River, Maryland*. April. Draft.

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FIGURES

Figure 1 SSD System Locations

Figure 2 Building A SSD System Layout

Figure 3 Building A SSD System Process and Instrumentation Diagram

Figure 4 Building C SSD System Layout

Figure 5 Building C SSD System Process and Instrumentation Diagram

Figure 6 Induced Vacuum–September 2018 to September 2020–Building A SSD System–Lay-up Room and Basement

Figure 7 Induced Vacuum– September 2018 to September 2020–Building A SSD System–Eastern Area

Figure 8 Induced Vacuum– September 2018 to September 2020–Building C SSD System–Southern-Basement Area

Figure 9 Induced Vacuum– September 2018 to September 2020–Building C SSD System–Mid-Basement Area

Figure 10 Influence of Soil Vapor Extraction Points–Building A Lay-up Room and Basement

Figure 11 Influence of Soil Vapor Extraction Points–Building A Eastern Area

Figure 12 Influence of Soil Vapor Extraction Points–Building C Southern-Basement Area

Figure 13 Influence of Soil Vapor Extraction Points–Building C Mid-Basement Area

Figure 14 Building A Influent VOC Concentrations

Figure 15 Building C Influent VOC Concentrations

TABLES

Table 1 Building A Influent Concentrations (µg/m^3)

Table 2 Building A Mid-GAC Concentrations (µg/m^3)

Table 3 Building A Effluent Concentrations (µg/m^3)

Table 4 Building C Influent Concentrations (µg/m^3)

Table 5 Building C Mid-GAC Concentrations (µg/m^3)

Table 6 Building C Effluent Concentrations (µg/m^3)

APPENDICES

Appendix A—Biweekly and Quarterly System Check Forms

Appendix B—Analytical Reports for System Samples

APPENDIX A—BIWEEKLY AND QUARTERLY SYSTEM CHECK FORMS

APPENDIX B—ANALYTICAL REPORTS FOR SYSTEM SAMPLES

FIGURES

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Figure 3 Building A SSD System Process and Instrumentation Diagram

Figure 4 Building C SSD System Layout

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Figure 7 Induced Vacuum–September 2018 to September 2020–Building A SSD System–Eastern Area

Figure 8 Induced Vacuum–September 2018 to September 2020–Building C SSD System–Southern-Basement Area

Figure 9 Induced Vacuum– September 2018 to September 2020–Building C SSD System–Mid-Basement Area

Figure 10 Influence of Soil Vapor Extraction Points–Building A Lay-up Room and Basement

Figure 11 Influence of Soil Vapor Extraction Points–Building A Eastern Area

Figure 12 Influence of Soil Vapor Extraction Points–Building C Southern-Basement Area

Figure 13 Influence of Soil Vapor Extraction Points–Building C Mid-Basement Area

Figure 14 Building A Influent VOC Concentrations

Figure 15 Building C Influent VOC Concentrations

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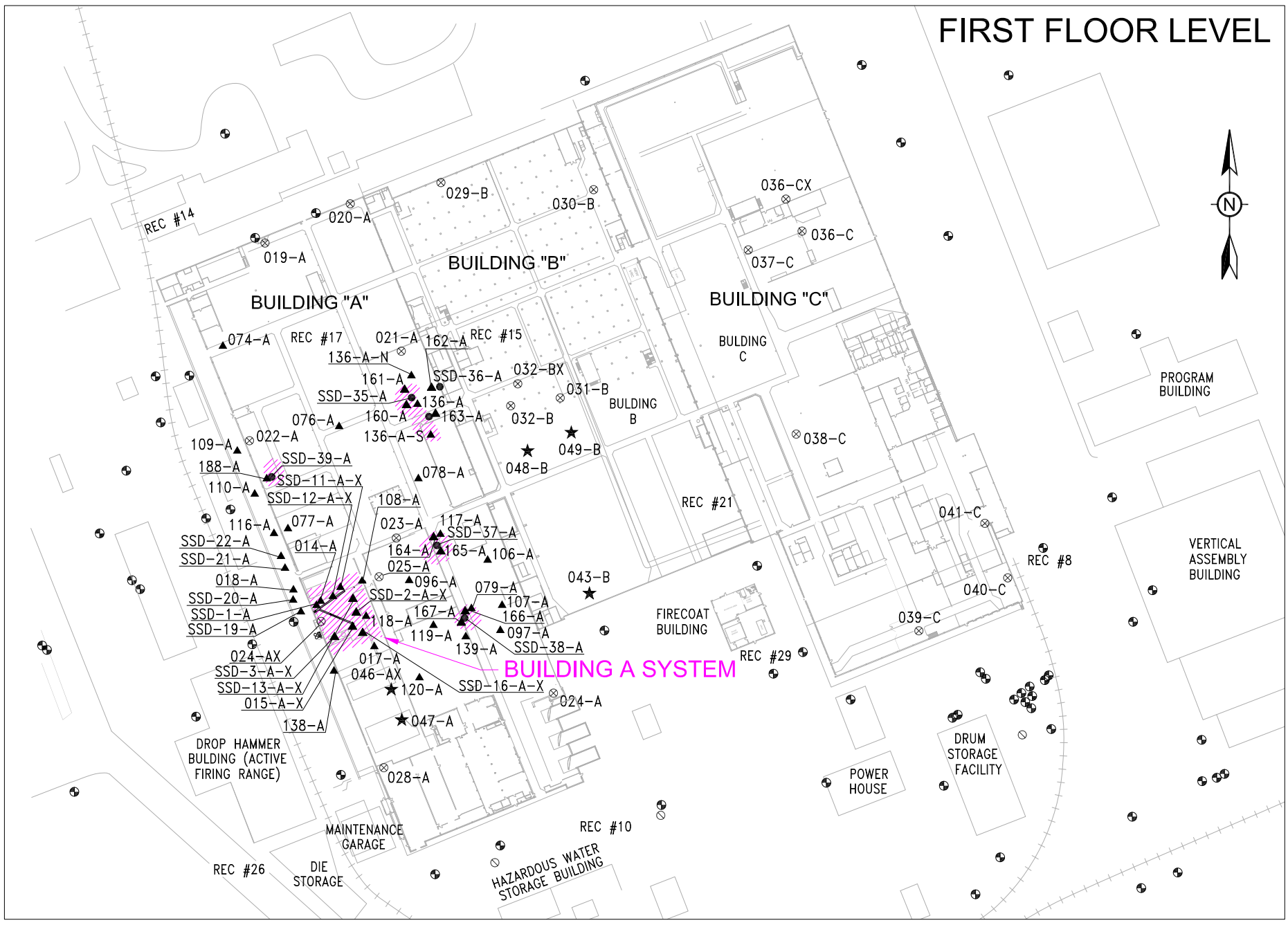
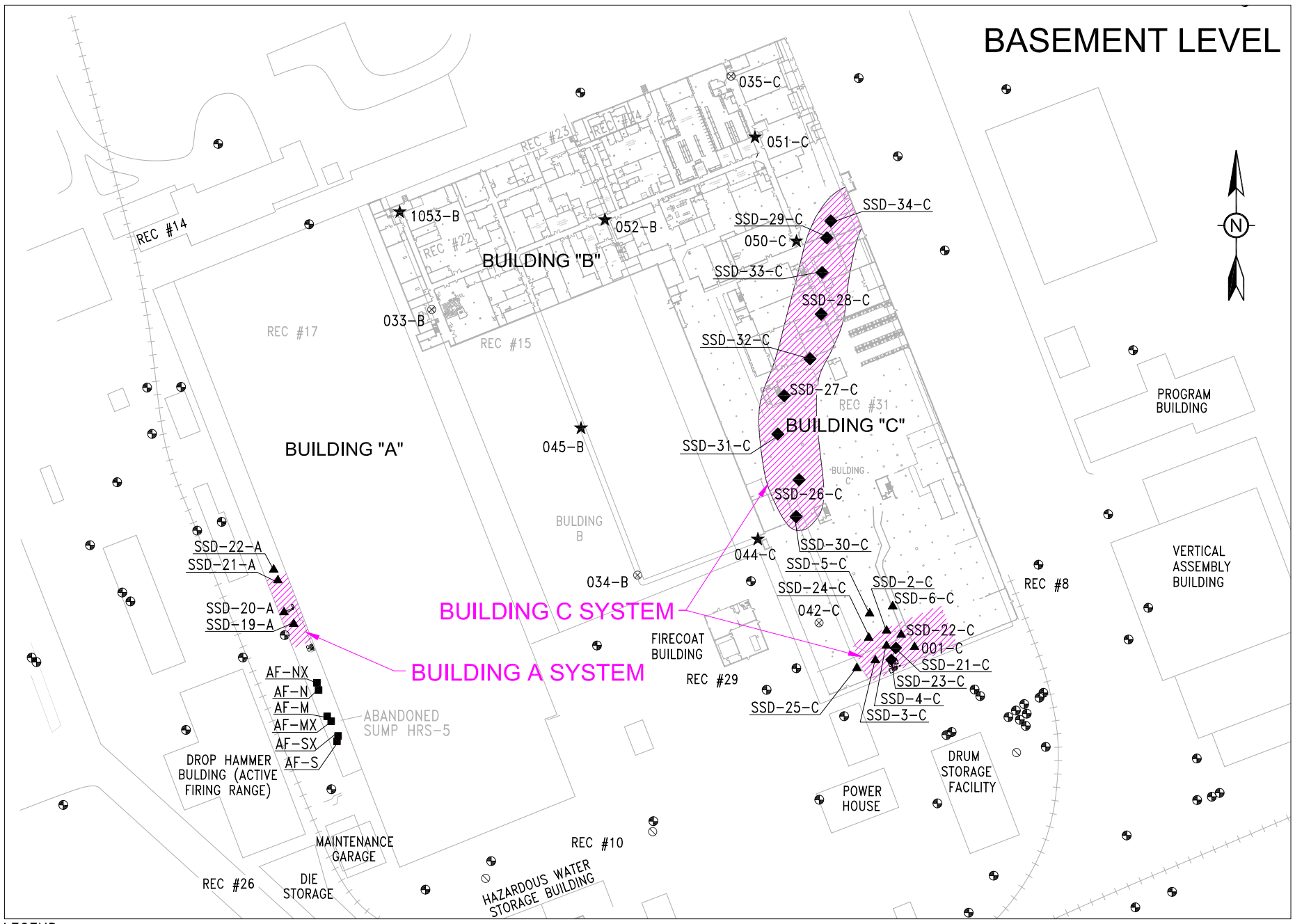
FIRST FLOOR LEVEL



BASEMENT LEVEL



LEGEND

- GROUNDWATER MONITORING WELL
- SUB-SLAB VAPOR MONITORING POINT
- TARGET OF OPPORTUNITY
- INDOOR AIR SAMPLE
- ABANDONED WELL BORING
- SUB-SLAB VAPOR EXTRACTION POINT
- PROPOSED SUB-SLAB VAPOR EXTRACTION POINT
- INDOOR AIR FILTER
- SSD SUB-SLAB DEPRESSURIZATION
- APPROXIMATE AREA OF SSD SYSTEM INFLUENCE

0 200 400

SCALE IN FEET

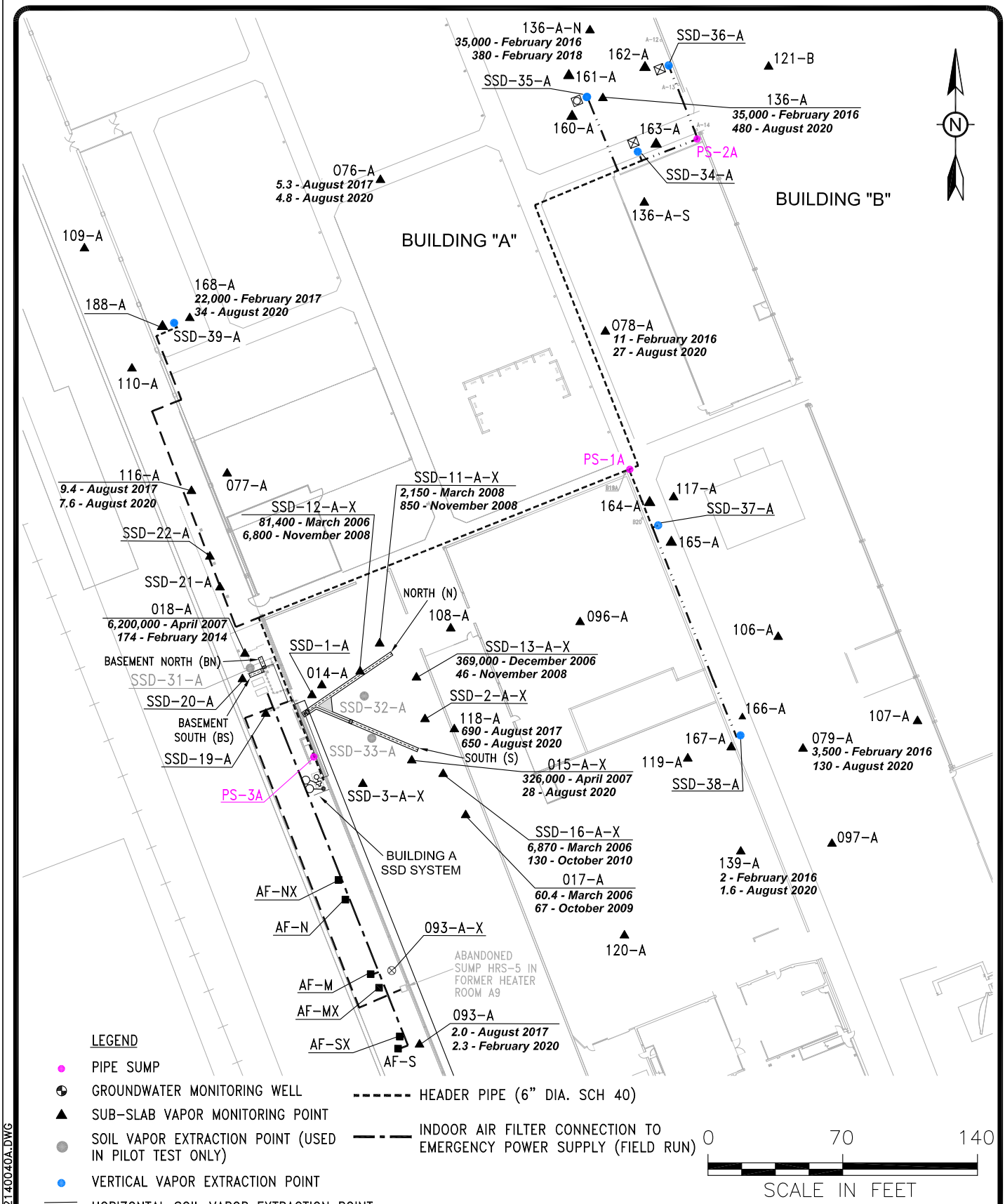
TITLE: SSD SYSTEM LOCATIONS

LOCATION: LMC Middle River Complex
Middle River, Maryland

TETRA TECH

APPROVED	PR
DRAFTED	CP
PROJECT#	117-0512140
DATE	4-23-20

FIGURE 1



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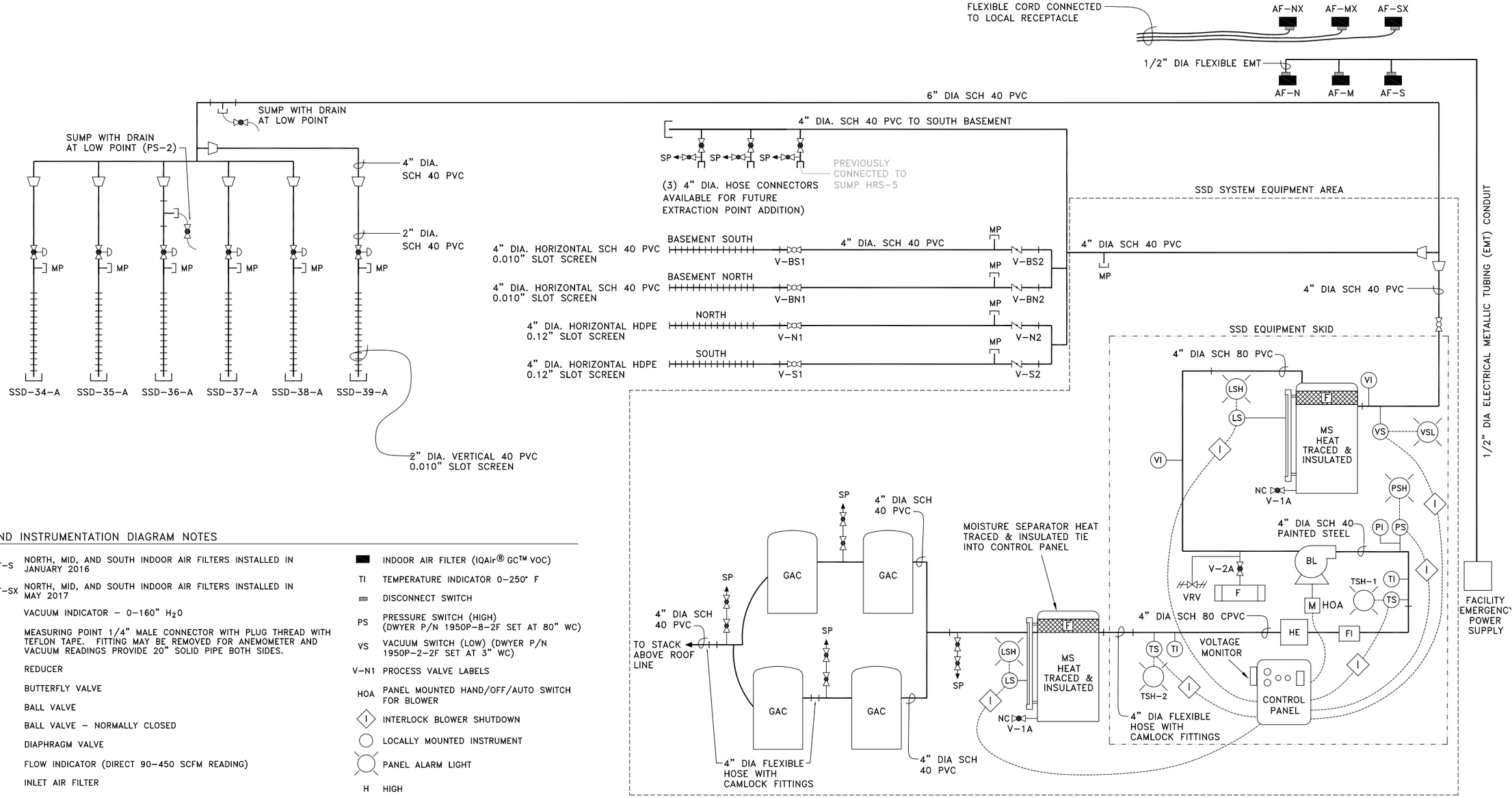
TITLE: BUILDING A SSD SYSTEM LAYOUT

LOCATION: LMC Middle River Complex
Middle River, Maryland

TETRA TECH

APPROVED	PR
DRAFTED	CP
PROJECT#	117-0512140
DATE	10-16-20

FIGURE 2



PROCESS AND INSTRUMENTATION DIAGRAM NOTES

AF-N, AF-M, AF-S	NORTH, MID, AND SOUTH INDOOR AIR FILTERS INSTALLED IN JANUARY 2016
AF-NX, AF-MX, AF-SX	NORTH, MID, AND SOUTH INDOOR AIR FILTERS INSTALLED IN MAY 2017
VI	VACUUM INDICATOR – 0–160" H_2O
MP	MEASURING POINT 1/4" MALE CONNECTOR WITH PLUG THREAD WITH TEFLON TAPE. FITTING MAY BE REMOVED FOR ANEMOMETER AND VACUUM READINGS PROVIDE 20" SOLID PIPE BOTH SIDES.
	REDUCER
	BUTTERFLY VALVE
	BALL VALVE
	BALL VALVE – NORMALLY CLOSED
	DIAPHRAGM VALVE
FI	FLOW INDICATOR (DIRECT 90–450 SCFM READING)
F	INLET AIR FILTER
HE	HEAT EXCHANGER (XCHANGER AA-400)
MS	MOISTURE SEPARATOR (GASHO GX-100DL) WITH 40 GALLON CAPACITY, SLIGHT TUBE, REMOVABLE TOP, DRAIN VALVE
LS	LEVEL SWITCH
LSH	LEVEL SWITCH HIGH
VRV	VACUUM RELIEF VALVE – 2" (SET AT 81.6" WC)
SP	SAMPLE PORT 1/4" DIAMETER
BL	AMETEK®, ROTRON® 909BB72W 10 HP MOTOR, 300 SCFM @ 75" H_2O
PI	PRESSURE INDICATOR 0–160" H_2O
TS	TEMPERATURE SWITCH (ASHCROFT P/N T424-T05-030-XFS-150-260; TSH-1 SET AT 220° F AND TSH-2 SET AT 115° F)
GAC	GRANULAR ACTIVATED CARBON VAPOR TREATMENT (SIEMENS VENT SCRUB®, VSC400, VOCARB® 48C)
	INDOOR AIR FILTER (IQAir® GC™ VOC)
TI	TEMPERATURE INDICATOR 0–250° F
	DISCONNECT SWITCH
PS	PRESSURE SWITCH (HIGH) (DWYER P/N 1950P-8-2F SET AT 80" WC)
VS	VACUUM SWITCH (LOW) (DWYER P/N 1950P-2-2F SET AT 3" WC)
V-N1	PROCESS VALVE LABELS
HOA	PANEL MOUNTED HAND/OFF/AUTO SWITCH FOR BLOWER
I	INTERLOCK BLOWER SHUTDOWN
	LOCALLY MOUNTED INSTRUMENT
	PANEL ALARM LIGHT
H	HIGH
L	LOW
SSD	SUB-SLAB DEPRESSUIZATION
M	MOTOR
EMT	ELECTRICAL METALLIC TUBING

TITLE: BUILDING A SSD SYSTEM
PROCESS AND INSTRUMENTATION DIAGRAM

LOCATION: LMC Middle River Complex
Middle River, Maryland

TETRA TECH

APPROVED	PR
DRAFTED	CP
PROJECT#	117-0512140
DATE	4-23-20

FIGURE 3

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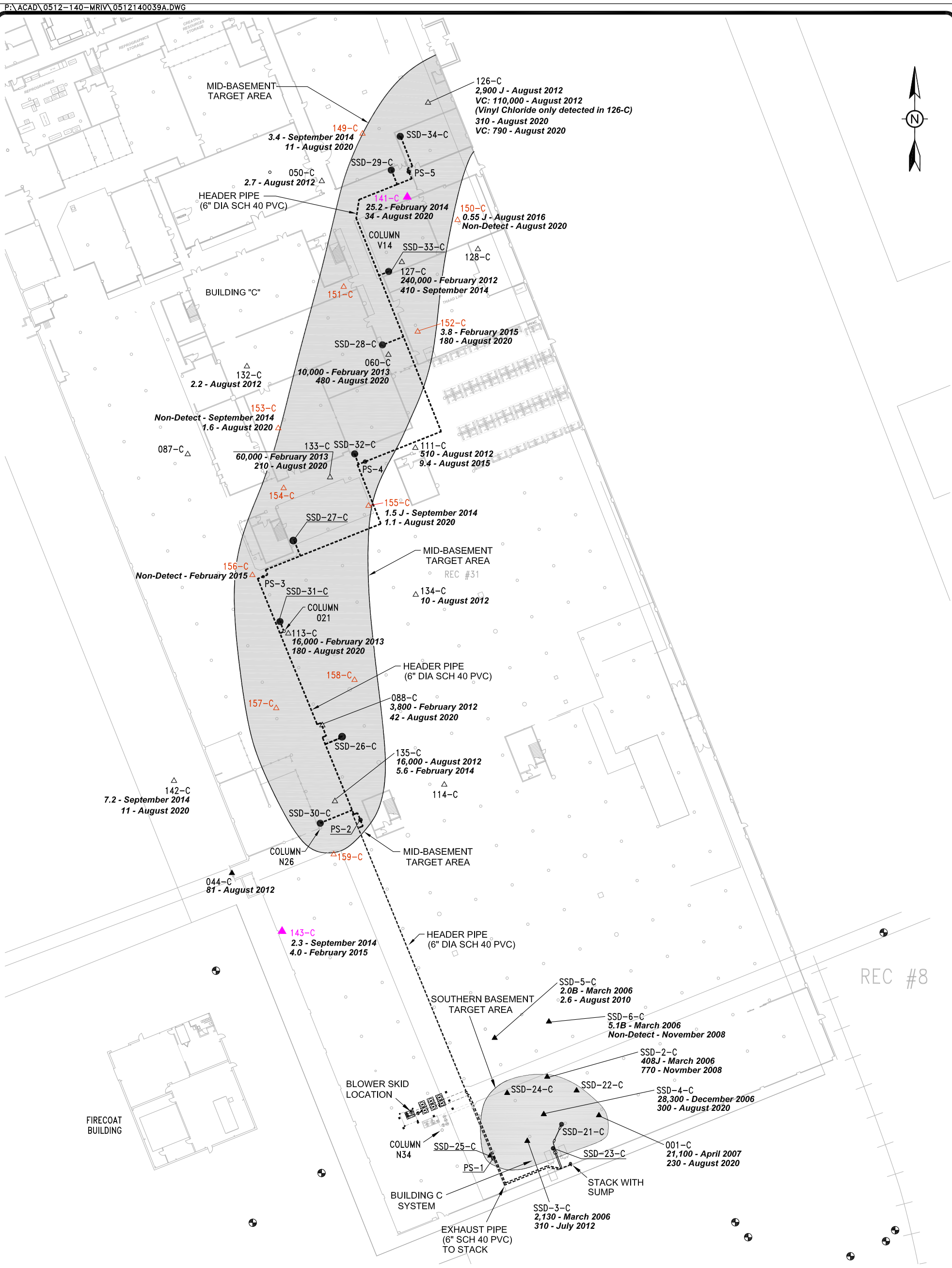

LEGEND

- GROUNDWATER MONITORING WELL
- SUB-SLAB VAPOR MONITORING POINT
- SUB-SLAB VAPOR MONITORING POINT INSTALLED JANUARY 2010
- SUB-SLAB VAPOR MONITORING POINT INSTALLED FEBRUARY 2013
- SUB-SLAB VAPOR MONITORING POINT INSTALLED AUGUST 2014
- SOIL VAPOR EXTRACTION POINT
- SUMP

21,100 HIGHEST SUB-SLAB TCE CONCENTRATION ($\mu g/m^3$) PRE-SSD SYSTEM AND MOST RECENT TCE CONCENTRATION POST-SSD SYSTEM OPERATION

---- HEADER PIPE (2", 3" OR 6" DIA. SCH 40)

SSD SUB-SLAB DEPRESSURIZATION

J ESTIMATED CONCENTRATION

B DETECTED IN LAB BLANK

TCE TRICHLOROETHENE

VC VINYL CHLORIDE

DL DILUTION ANALYSIS

TITLE: BUILDING C SSD SYSTEM LAYOUT

LOCATION: LMC Middle River Complex
Middle River, Maryland

TETRA TECH

APPROVED	PR
DRAFTED	CP
PROJECT#	117-0512140
DATE	10-16-20

FIGURE 4

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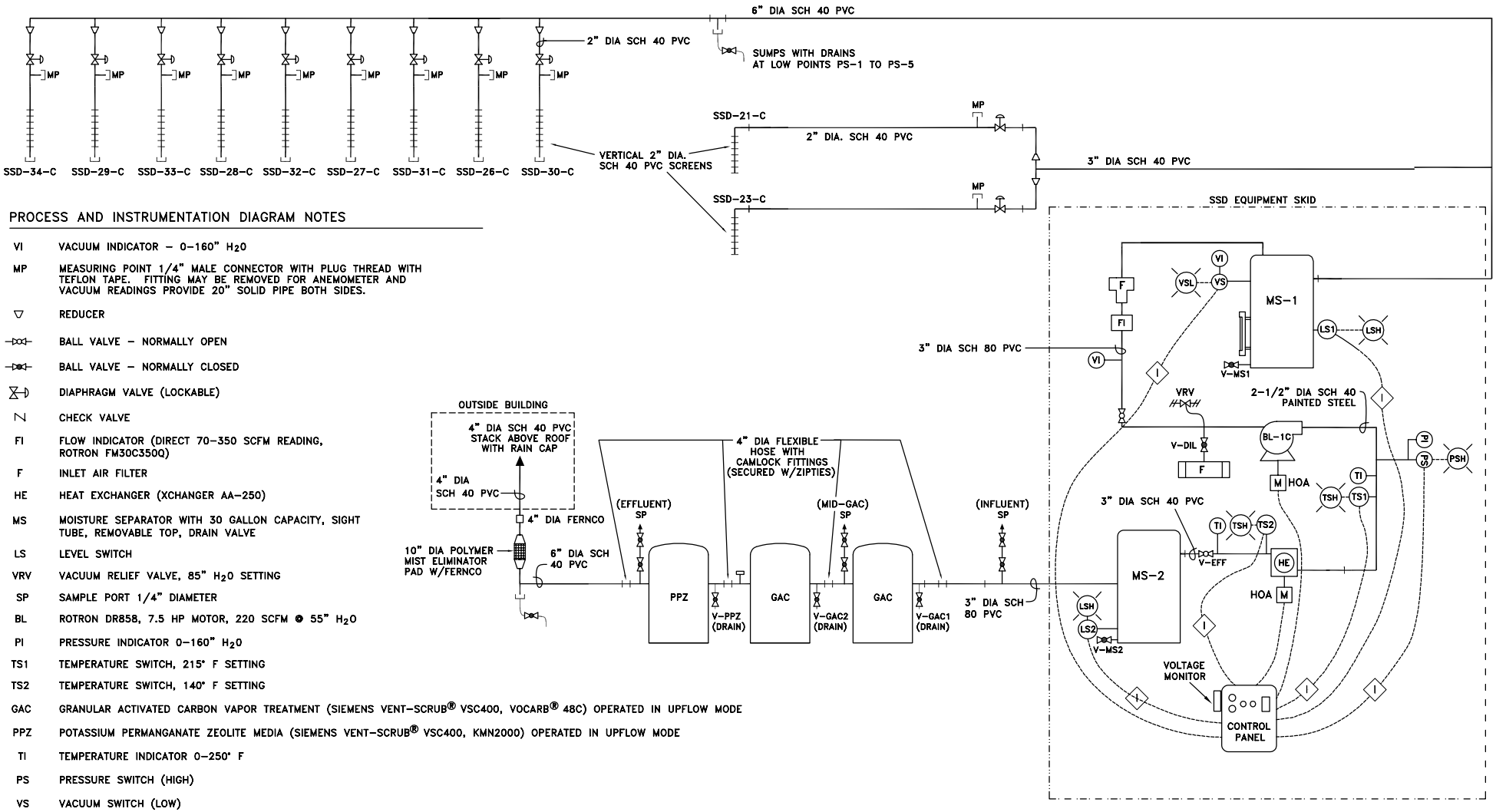


PROCESS AND INSTRUMENTATION DIAGRAM NOTES

VI	VACUUM INDICATOR – 0–160" H_2O
MP	MEASURING POINT 1/4" MALE CONNECTOR WITH PLUG THREAD WITH TEFLON TAPE. FITTING MAY BE REMOVED FOR ANEMOMETER AND VACUUM READINGS PROVIDE 20" SOLID PIPE BOTH SIDES.
▽	REDUCER
—⋈—	BALL VALVE – NORMALLY OPEN
—⋈—	BALL VALVE – NORMALLY CLOSED
⧖	DIAPHRAGM VALVE (LOCKABLE)
⩘	CHECK VALVE
FI	FLOW INDICATOR (DIRECT 70–350 SCFM READING, ROTRON FM30C350Q)
F	INLET AIR FILTER
HE	HEAT EXCHANGER (XCHANGER AA-250)
MS	MOISTURE SEPARATOR WITH 30 GALLON CAPACITY, SIGHT TUBE, REMOVABLE TOP, DRAIN VALVE
LS	LEVEL SWITCH
VRV	VACUUM RELIEF VALVE, 85" H_2O SETTING
SP	SAMPLE PORT 1/4" DIAMETER
BL	ROTRON DR858, 7.5 HP MOTOR, 220 SCFM @ 55" H_2O
PI	PRESSURE INDICATOR 0–160" H_2O
TS1	TEMPERATURE SWITCH, 215° F SETTING
TS2	TEMPERATURE SWITCH, 140° F SETTING
GAC	GRANULAR ACTIVATED CARBON VAPOR TREATMENT (SIEMENS VENT-SCRUB® VSC400, VOCARB® 48C) OPERATED IN UPFLOW MODE
PPZ	POTASSIUM PERMANGANATE ZEOLITE MEDIA (SIEMENS VENT-SCRUB® VSC400, KMN2000) OPERATED IN UPFLOW MODE
TI	TEMPERATURE INDICATOR 0–250° F
PS	PRESSURE SWITCH (HIGH)
VS	VACUUM SWITCH (LOW)
V-MS1	PROCESS VALVE LABELS
HOA	PANEL MOUNTED HAND/OFF/AUTO SWITCH
◇ I	INTERLOCK BLOWER SHUTDOWN
○	LOCALLY MOUNTED INSTRUMENT
⊙	PANEL ALARM LIGHT
H	HIGH
L	LOW
M	MOTOR
⊤	TAP PLUG
SSD	SUB-SLAB DEPRESSURIZATION

TITLE:

BUILDING C SSD SYSTEM PROCESS AND INSTRUMENTATION DIAGRAM

LOCATION:

Middle River, Maryland

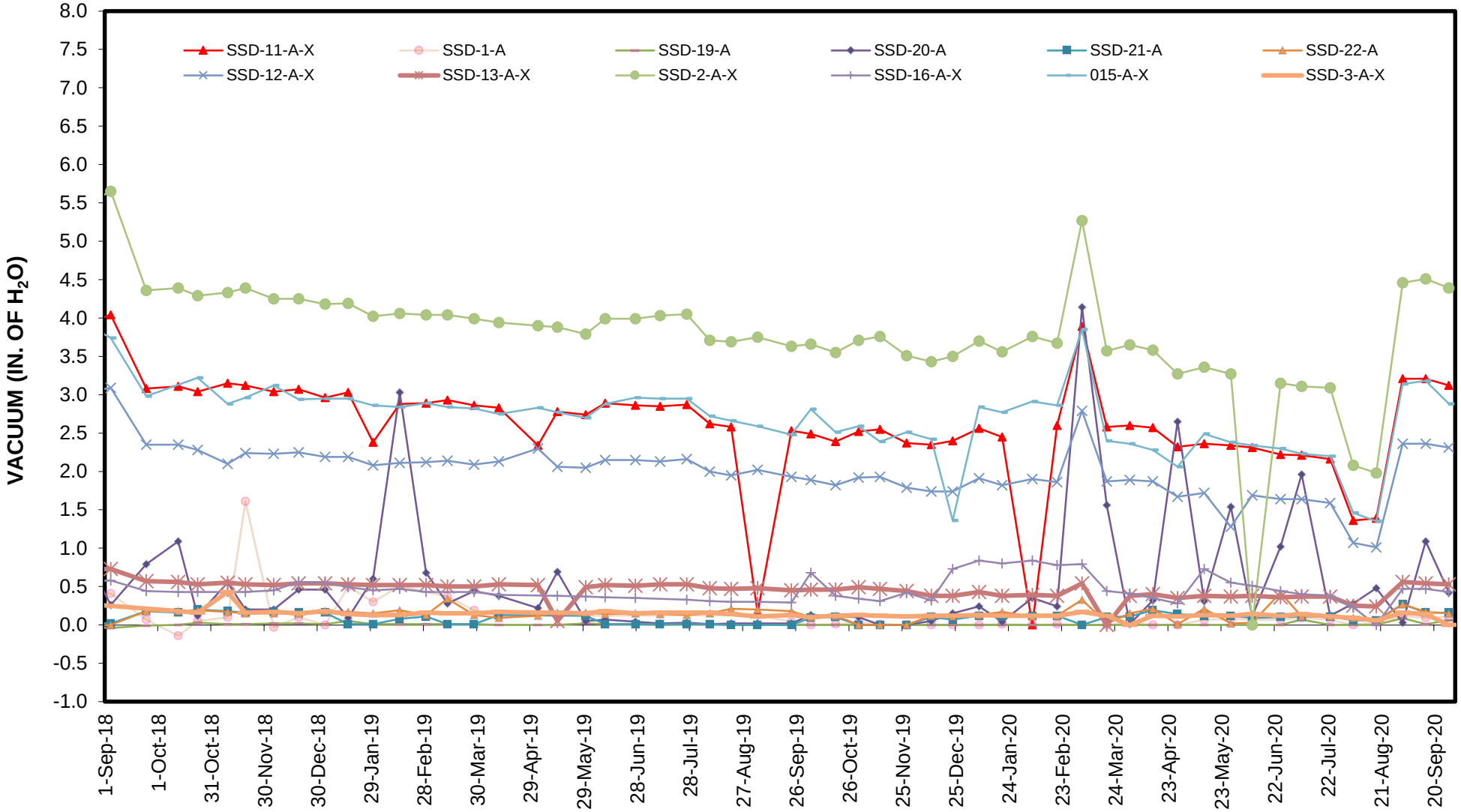
TETRA TECH

APPROVED	PR
DRAFTED	CP
PROJECT#	117-0507533
DATE	8-9-18

FIGURE

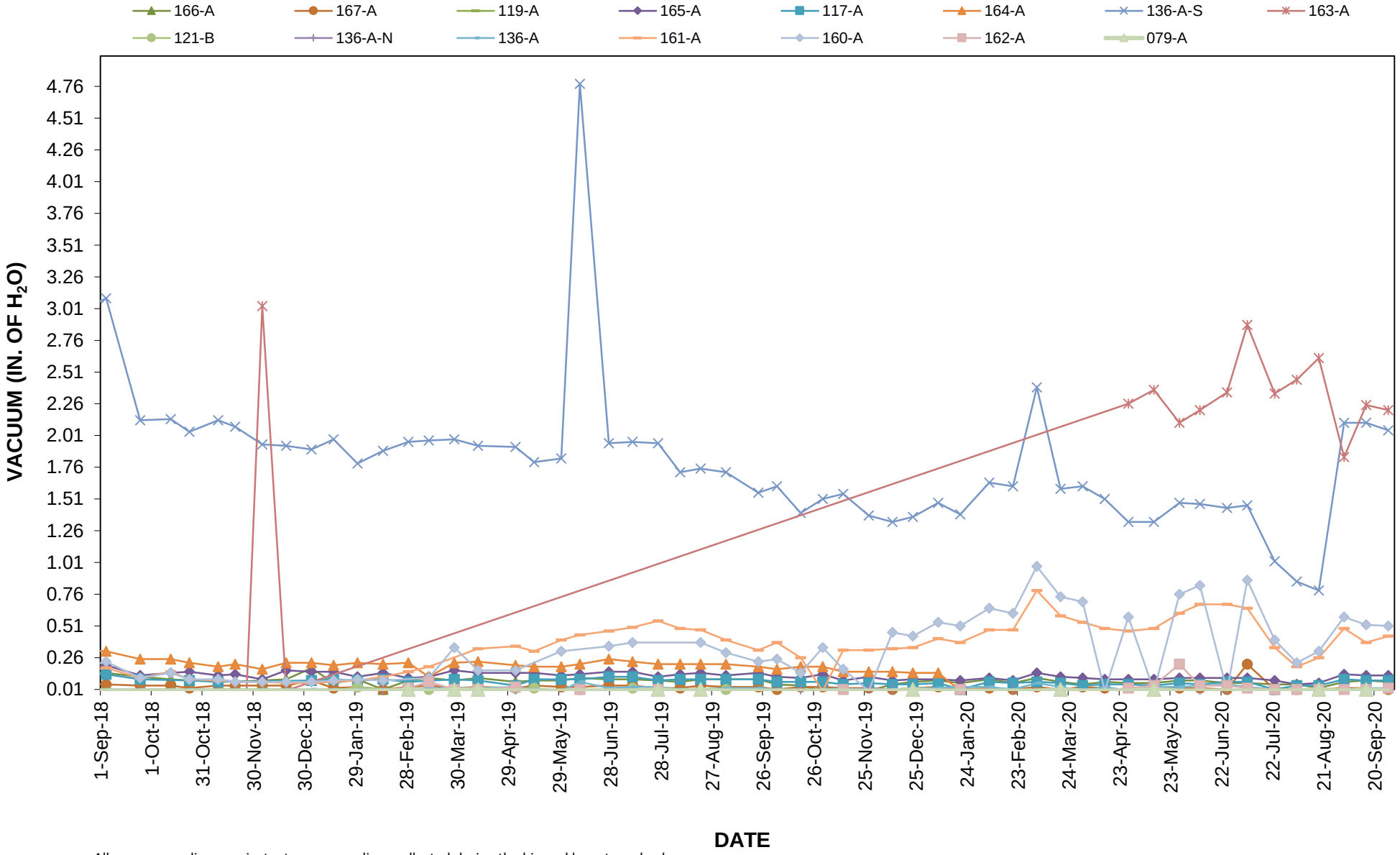
5

FIGURE 6
INDUCED VACUUM
SEPTEMBER 2018 TO SEPTEMBER 2020
BUILDING A SSD SYSTEM - LAY-UP ROOM AND BASEMENT



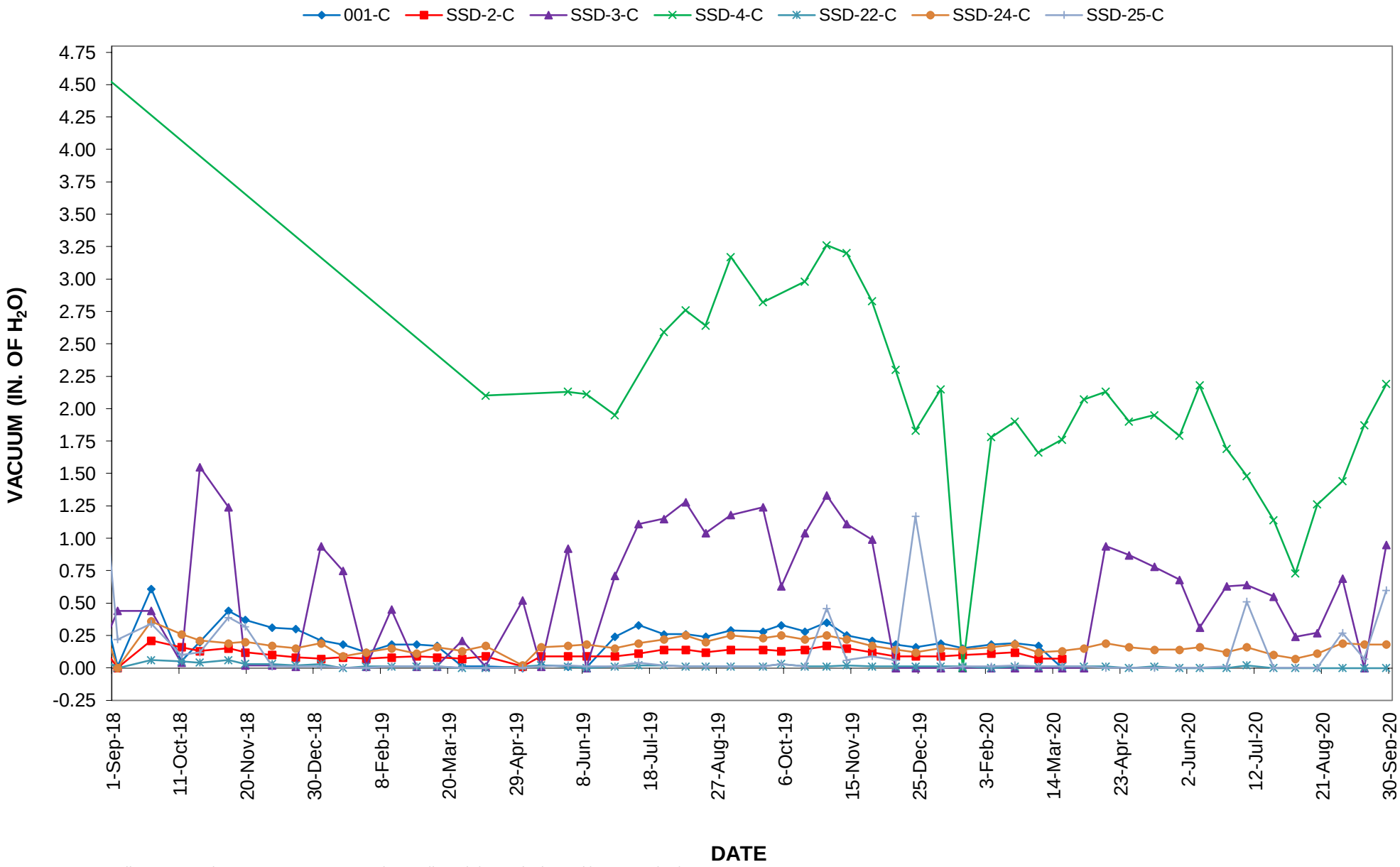
All vacuum readings are instantaneous readings collected during the bi-weekly system checks.
Only the past two years of vacuum data are depicted above.
Increase in vacuum influence beginning April 4, 2016 a result of the installation and operation of the larger blower skid associated with the second-phase expansion.
** NOTE: As of May 18, 2015, all vacuum readings for SSD-11-A, SSD-12-A, SSD-13-A, 015-A, SSD-16-A, SSD-2-A, and SSD-3-A were taken from the SSD-11-A-X, SSD-12-A-X, SSD-13-A-X, 015-A-X, SSD-16-A-X, SSD-2-A-X, and SSD-3-A-X VMPs respectively. **

FIGURE 7
INDUCED VACUUM
SEPTEMBER 2018 TO SEPTEMBER 2020
BUILDING A SSD SYSTEM - EASTERN AREA



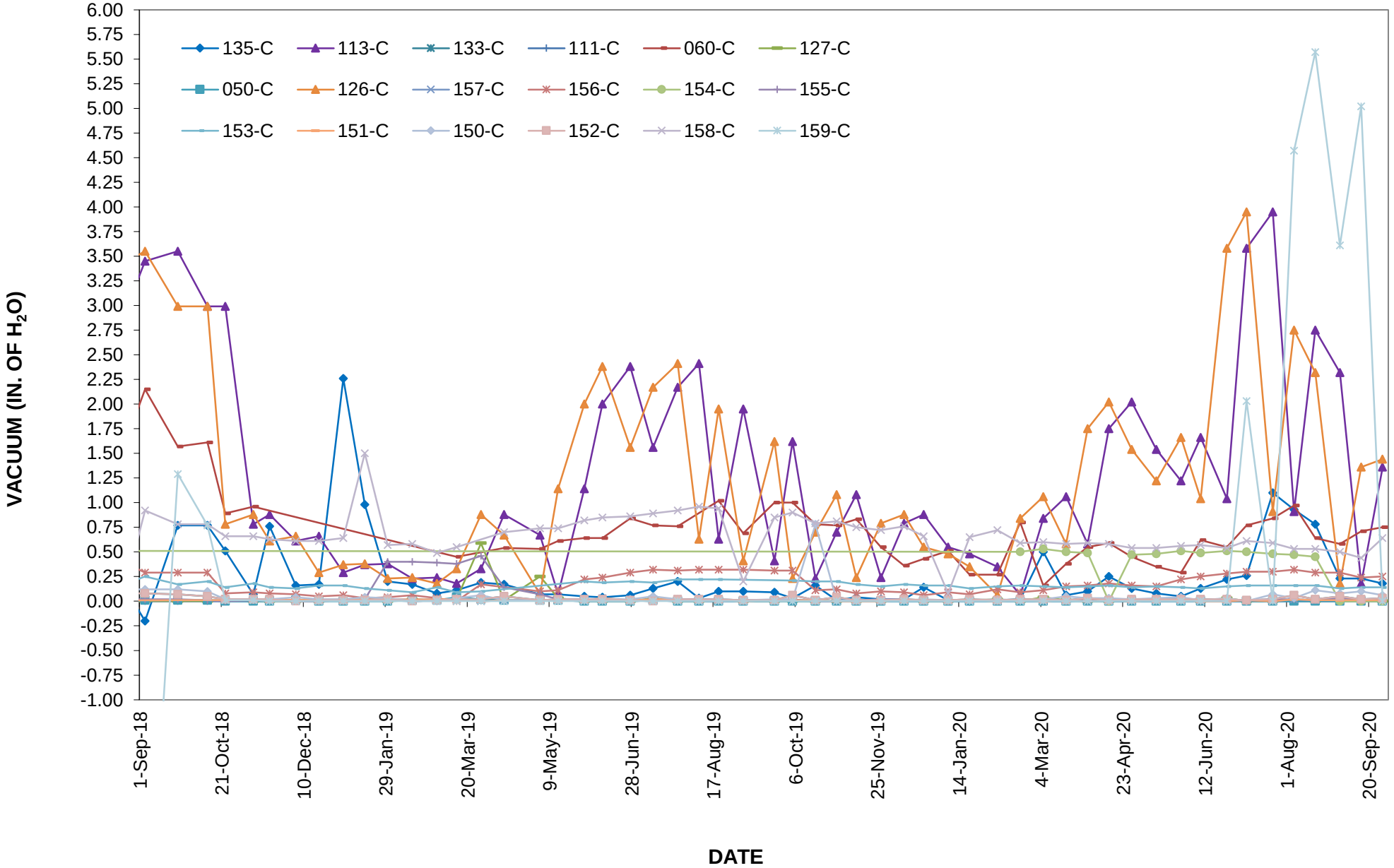
All vacuum readings are instantaneous readings collected during the bi-weekly system checks.
VMPs we included in bi-weekly system checks upon start-up of the second-phase expansion on April 13, 2016.
Vapor monitoring point 163-A was not accessible for monitoring from early 2019 to March 2020.

FIGURE 8
INDUCED VACUUM
SEPTEMBER 2018 TO SEPTEMBER 2020
BUILDING C SSD SYSTEM - SOUTHERN BASEMENT AREA

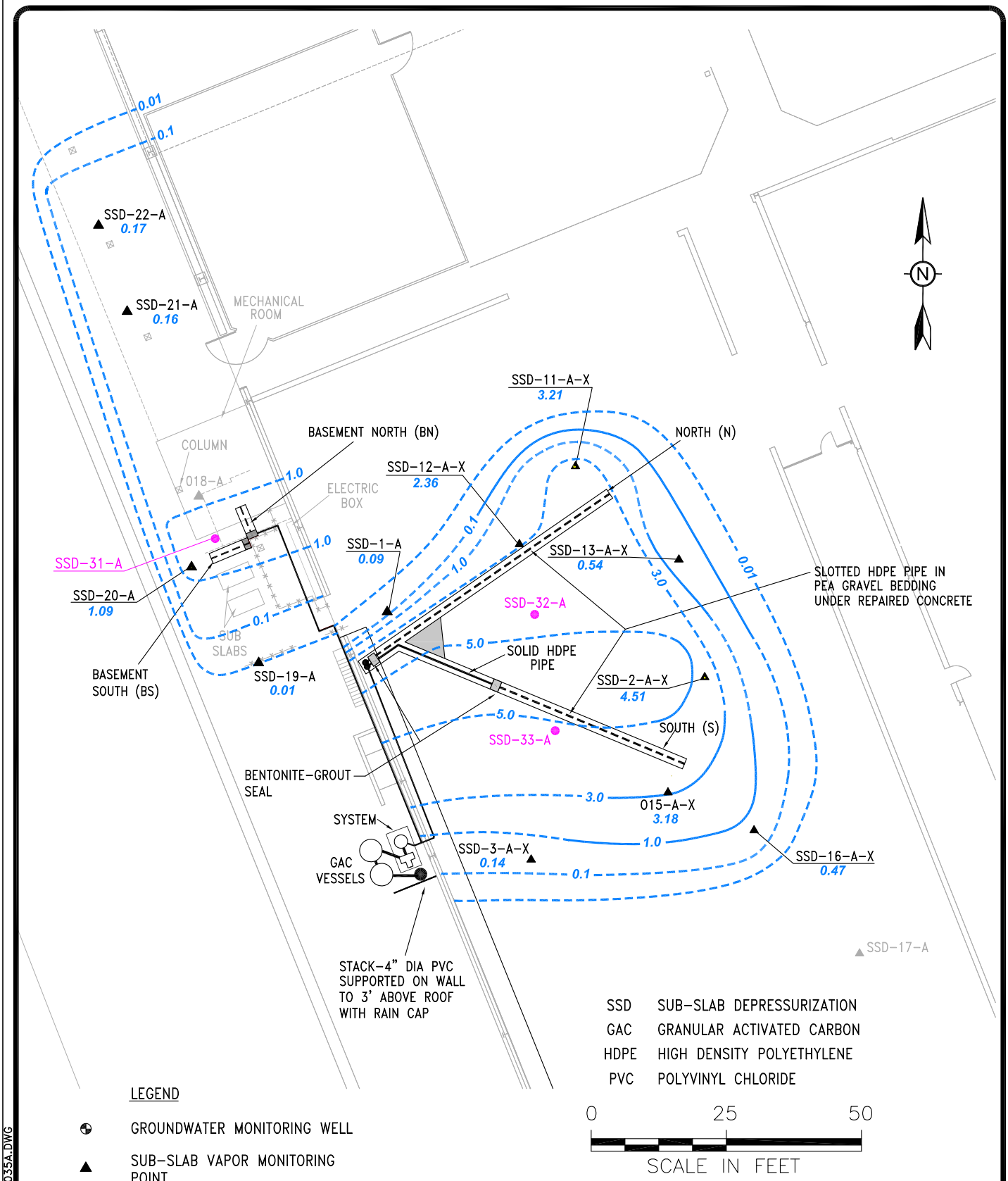


All vacuum readings are instantaneous readings collected during the bi-weekly system checks.
Only the past two years of vacuum data are depicted above.

FIGURE 9
INDUCED VACUUM
SEPTEMBER 2018 TO SEPTEMBER 2020
BUILDING C SSD SYSTEM - MID-BASEMENT AREA



All vacuum readings are instantaneous readings collected during the bi-weekly system checks.
Sub-slab vapor monitoring points routinely monitored beginning May 1, 2013 following second-phase system expansion in the middle basement area of Building C.



SSD	SUB-SLAB DEPRESSURIZATION
GAC	GRANULAR ACTIVATED CARBON
HDPE	HIGH DENSITY POLYETHYLENE
PVC	POLYVINYL CHLORIDE

0 25 50

SCALE IN FEET

LEGEND

- GROUNDWATER MONITORING WELL
- SUB-SLAB VAPOR MONITORING POINT
- SOIL VAPOR EXTRACTION POINT (USED IN PILOT TEST ONLY)
- 0.14 INCHES OF H_2O INDUCED VACUUM MEASURED ON 9/15/2020
- INFERRED EQUAL VACUUM INFLUENCE
- HORIZONTAL SOIL VAPOR EXTRACTION POINT

TITLE: INFLUENCE OF SOIL VAPOR EXTRACTION POINTS BUILDING A LAY-UP ROOM AND BASEMENT

LOCATION: LMC Middle River Complex
Middle River, Maryland

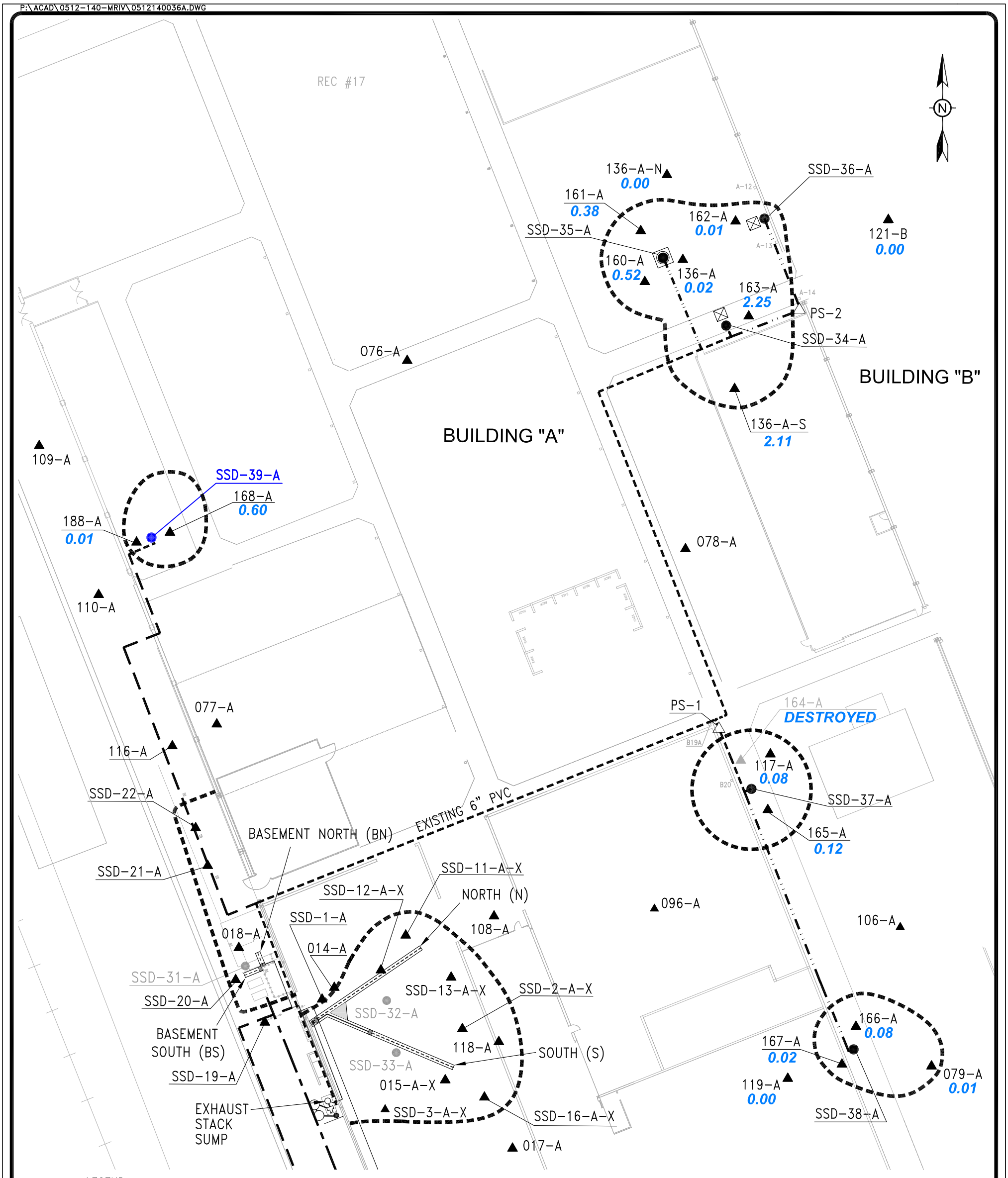
TETRA TECH

APPROVED	PR
DRAFTED	CP
PROJECT#	117-0512140
DATE	10-16-20

FIGURE 10

P:\ACAD\0512-140-MRIV\0512140035A.DWG

P:\ACAD\0512-140-MRIV\0512140036A.DWG



LEGEND

- SUB-SLAB VAPOR MONITORING POINT
- VERTICAL SOIL VAPOR EXTRACTION POINT
- NEW SUB-SLAB VAPOR EXTRACTION POINT
- SUB-SLAB VAPOR EXTRACTION POINT (USED IN PREVIOUS PILOT TEST)
- INDOOR AIR SAMPLING POINT
- APPROXIMATE EXISTING INFLUENCE AREA
- INDOOR AIR FILTER
- SSD SYSTEM BLOWER SKID
- SOIL VAPOR EXTRACTION POINT PIPING (2" DIA. SCH 40)
- SOIL VAPOR EXTRACTION POINT PIPING (4" DIA. SCH 40)
- HEADER PIPE (6" DIA. SCH 40)
- INDOOR AIR FILTER CONNECTION TO EMERGENCY POWER SUPPLY (FIELD RUN)
- PIPE SUMP
- STEEL PIPE SLEEVE (4" DIA.)
- PIPE BOLLARD (2" DIA.)
- SSD SUB-SLAB DEPRESSURIZATION
- EXISTING HORIZONTAL SOIL VAPOR EXTRACTION POINT
- 0.69 INCHES OF H_2O INDUCED VACUUM MEASURED ON 9/15/2020
- N/A NOT ACCESSIBLE

NOTE:

PIPE HANGERS PLACED NEXT TO EXISTING SUPPORT BRACKETS FOR STEEL PIPING IN CEILING APPROX. 6-12 FT APART.

0 40 80

SCALE IN FEET

TITLE: INFLUENCE OF SOIL VAPOR EXTRACTION POINTS BUILDING A EASTERN AREA

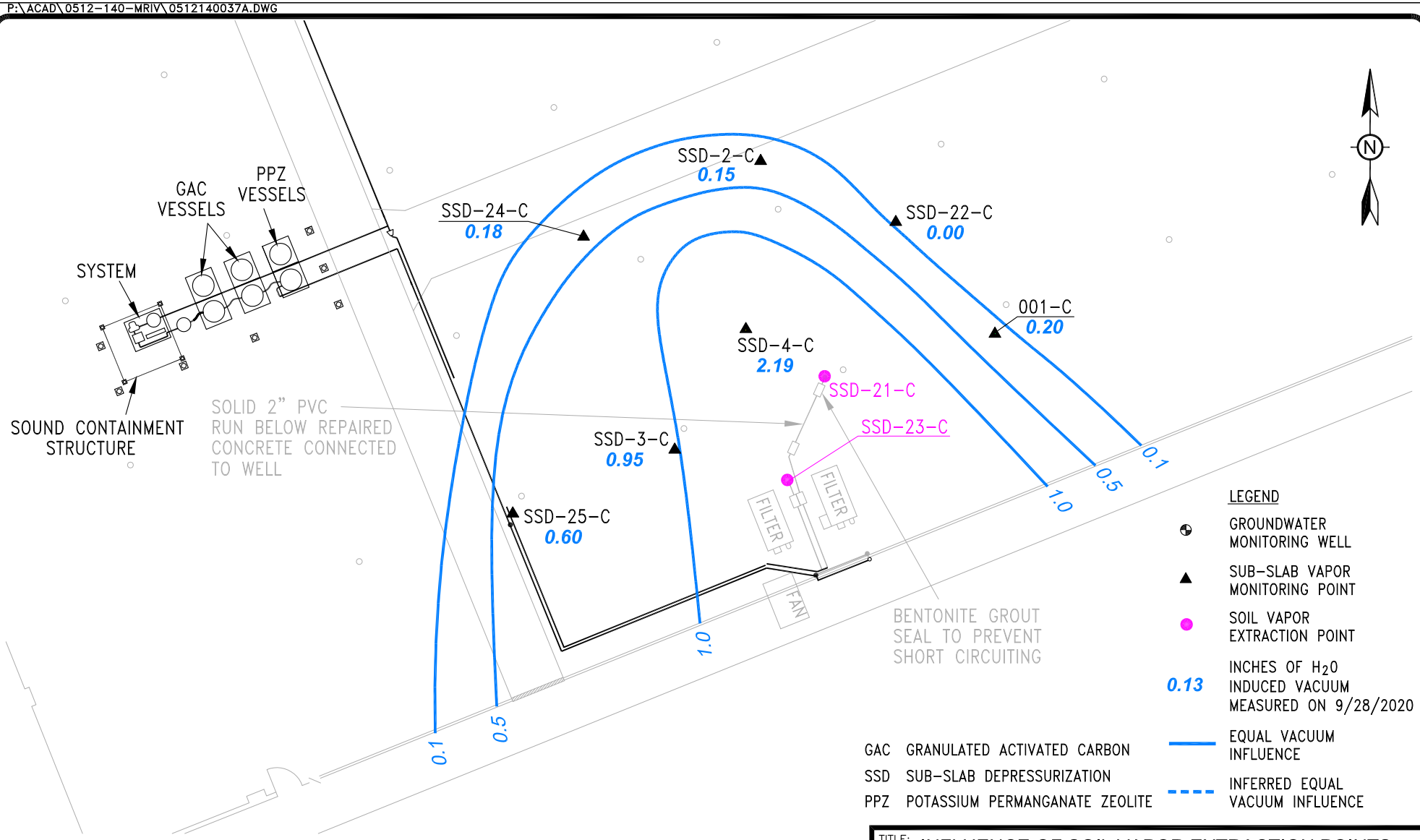
LOCATION: LMC Middle River Complex, Middle River, Maryland

TETRA TECH

APPROVED	PR
DRAFTED	CP
PROJECT#	117-0512140
DATE	10-16-20

FIGURE 11

P:\ACAD\0512-140-MRIV\0512140037A.DWG



0 20 40

SCALE IN FEET

* COVERED ON 9/28/2020. AVERAGE FOR OCTOBER 2019 TO MARCH 2020 IS 0.22 IN. H_2O.

TITLE: INFLUENCE OF SOIL VAPOR EXTRACTION POINTS BUILDING C - SOUTHERN BASEMENT AREA

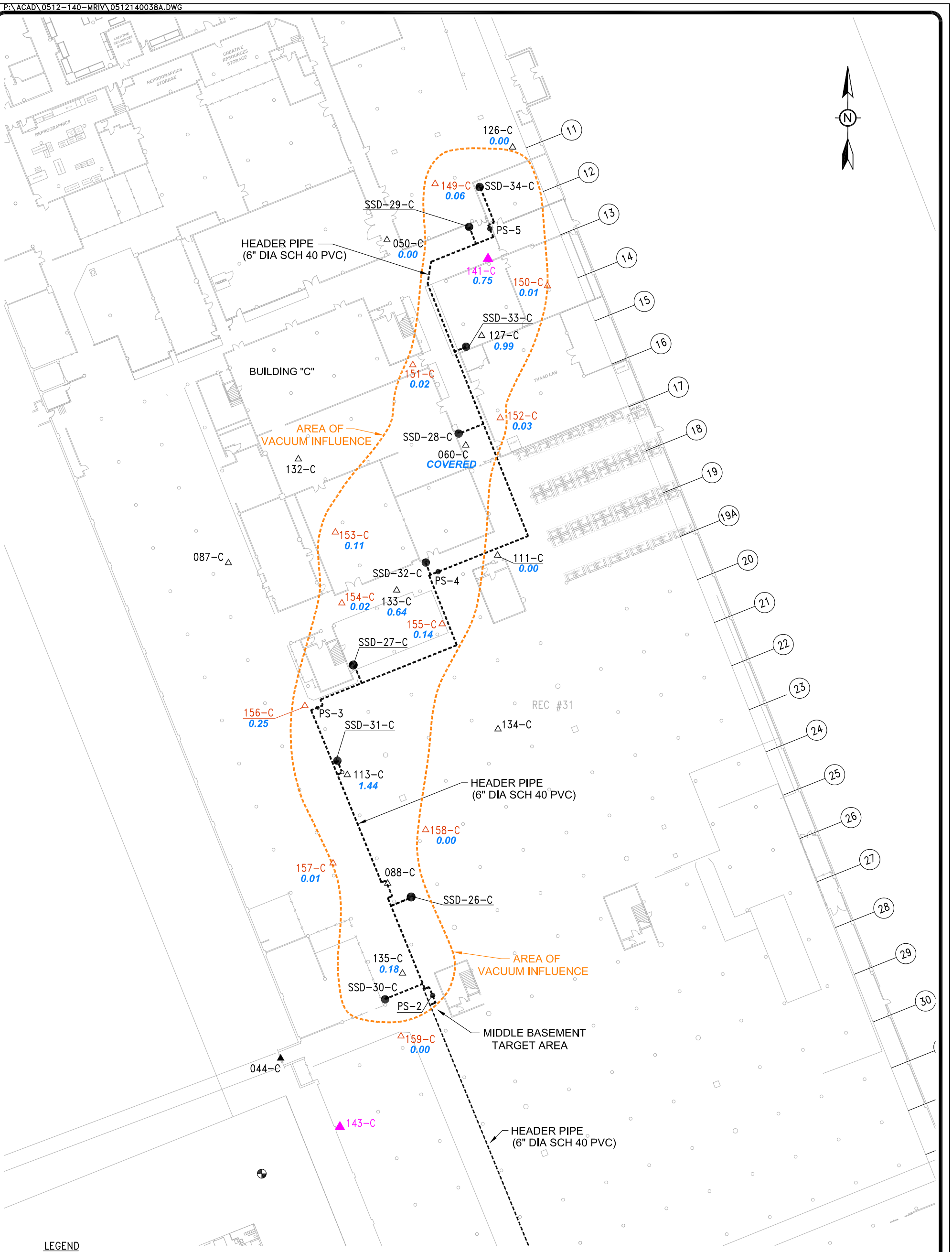
LOCATION: LMC MIddle River Complex
MIddle River, Maryland

TETRA TECH

APPROVED	PR
DRAFTED	CP
PROJECT#	117-0512140
DATE	10-16-20

FIGURE 12

P:\ACAD\0512-140-MRIV\0512140038A.DWG



LEGEND

- GROUNDWATER MONITORING WELL
- SUB-SLAB VAPOR MONITORING POINT
- SUB-SLAB VAPOR MONITORING POINT INSTALLED JANUARY 2010
- SUB-SLAB VAPOR MONITORING POINT INSTALLED FEBRUARY 2013
- SUB-SLAB VAPOR MONITORING POINT INSTALLED AUGUST 2014
- SOIL VAPOR EXTRACTION POINT
- SUMP

NOTE:
088-C HAS BEEN REMOVED FROM MONITORING.

- AREA OF VACUUM INFLUENCE (> 0.01 INCHES OF H_2O)
- HEADER PIPE (2", 3" OR 6" DIA. SCH 40)
- SSD SUB-SLAB DEPRESSURIZATION
- 0.11 INCHES OF H_2O INDUCED VACUUM MEASURED ON 9/28/2020

0 50 100
SCALE IN FEET

TITLE: INFLUENCE OF SOIL VAPOR EXTRACTION POINTS BUILDING C MID-BASEMENT AREA

LOCATION: LMC Middle River Complex
Middle River, Maryland

TETRA TECH

APPROVED	PR
DRAFTED	CP
PROJECT#	117-0512140
DATE	10-16-20

FIGURE 13

FIGURE 14

BUILDING A INFLUENT VOC CONCENTRATIONS

SSD System, Middle River Complex, Middle River, Maryland

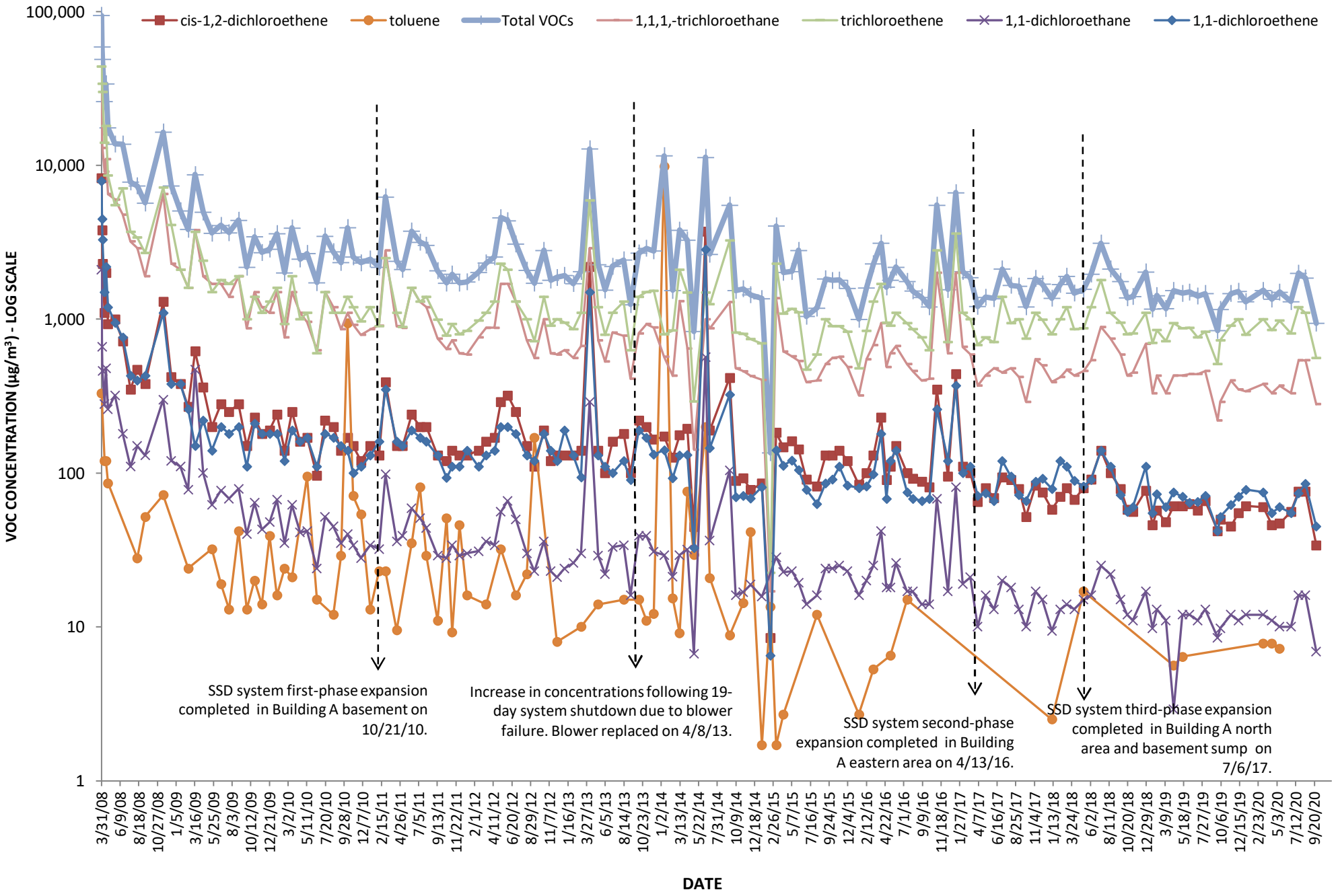
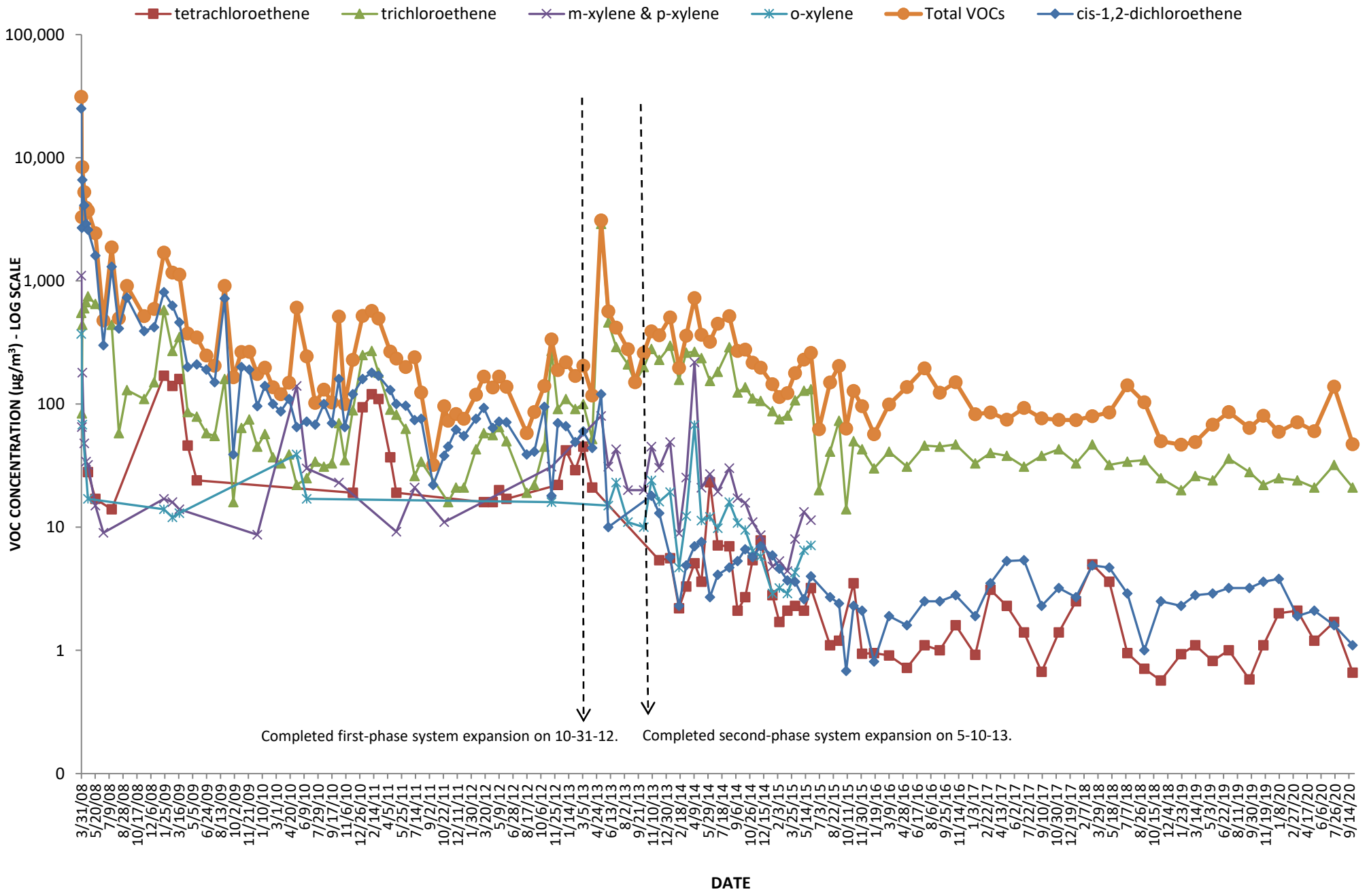


FIGURE 15

BUILDING C INFLUENT VOC CONCENTRATIONS

SSD System, Middle River Complex, Middle River, Maryland



TABLES

Table 1 Building A Influent Concentrations (µg/m^3)

Table 2 Building A Mid-GAC Concentrations (µg/m^3)

Table 3 Building A Effluent Concentrations (µg/m^3)

Table 4 Building C Influent Concentrations (µg/m^3)

Table 5 Building C Mid-GAC Concentrations (µg/m^3)

Table 6 Building C Effluent Concentrations (µg/m^3)

TABLE 1

Building A Influent Concentrations (µg/m^3)

LABORATORY DATA SUMMARY

SSD System OM&M, Middle River Complex, Middle River, Maryland

Samples analyzed by EPA Method TO-15

Date	FLOW (scfm)	benzene	carbon tetrachloride	chlorodifluoromethane	chloroform	cis-1,2-dichloroethene	dichlorodifluoromethane	1,1-dichloroethane	1,2-dichloroethane	1,1-dichloroethene	ethylbenzene	methylene chloride	naphthalene	tetrachloroethene	toluene	trans-1,2-dichloroethene	1,1,1,-trichloroethane	trichloroethene	trichlorofluoromethane	1,2,3-trimethylbenzene	1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	vinyl chloride	total xylenes	m-xylene & p-xylene	o-xylene	Total VOCs	Mass (lbs./day)	Mass (lbs. removed in period)
3/31/08	NA	ND	ND	N/A	ND	8,300	ND	2,100	ND	7,900	300	ND	ND	ND	330	ND	30,000	44,000	ND	ND	ND	ND	ND	N/A	1,100	280	94,310	1.190	3.570
4/2/08	140	ND	ND	N/A	ND	3,800	ND	660	ND	4,500	ND	ND	ND	ND	ND	ND	16,000	34,000	ND	ND	ND	ND	ND	N/A	ND	ND	58,960	0.740	1.480
4/4/08	140	ND	ND	N/A	ND	2,300	ND	460	ND	3,300	ND	ND	ND	ND	ND	ND	13,000	30,000	ND	ND	ND	ND	ND	N/A	ND	ND	49,060	0.620	4.340
4/11/08	140	ND	ND	N/A	ND	1,100	ND	280	ND	1,500	ND	ND	ND	ND	120	ND	9,100	14,000	ND	ND	ND	ND	ND	N/A	ND	ND	26,100	0.330	1.980
4/17/08	112	ND	ND	N/A	ND	2,000	ND	480	ND	2,200	ND	ND	ND	ND	120	ND	11,000	18,000	ND	ND	ND	ND	ND	N/A	110	ND	33,910	0.340	2.380
4/24/08	84	ND	ND	N/A	ND	930	ND	260	ND	1,200	ND	ND	ND	ND	86	ND	6,500	8,600	ND	ND	ND	ND	ND	N/A	ND	ND	17,576	0.130	3.510
5/21/08	84	ND	ND	N/A	ND	1,000	ND	320	ND	950	ND	ND	ND	ND	ND	ND	6,000	5,500	ND	ND	ND	ND	ND	N/A	ND	ND	13,770	0.100	3.100
6/19/08	70	180	ND	N/A	ND	720	ND	180	ND	760	ND	ND	ND	ND	ND	ND	4,800	7,100	ND	ND	ND	ND	ND	N/A	ND	ND	13,740	0.090	2.700
7/18/08	84	ND	ND	N/A	ND	350	ND	110	ND	430	ND	ND	ND	ND	ND	ND	3,200	3,700	ND	ND	ND	ND	ND	N/A	ND	ND	7,790	0.060	1.860
8/12/08	56	ND	ND	N/A	ND	470	ND	150	ND	400	ND	ND	ND	ND	28	ND	2,900	3,400	ND	ND	ND	ND	ND	N/A	ND	ND	7,348	0.040	1.240
9/11/08	80	ND	ND	N/A	ND	380	ND	130	ND	430	ND	17	ND	70	52	ND	1,900	2,700	32	ND	ND	ND	ND	N/A	ND	ND	5,711	0.040	2.440
11/18/08	84	ND	ND	N/A	ND	1,300	ND	300	ND	1,100	ND	ND	ND	ND	72	ND	6,500	7,200	ND	ND	ND	ND	ND	N/A	ND	ND	16,472	0.105	3.142
12/18/08	84	ND	ND	N/A	ND	420	ND	120	ND	380	ND	ND	ND	ND	ND	ND	2,300	4,100	ND	ND	ND	ND	ND	N/A	53	ND	7,373	0.056	1.724
1/22/09	84	ND	ND	N/A	ND	380	ND	110	ND	380	ND	ND	ND	ND	ND	ND	2,100	2,100	ND	ND	ND	ND	ND	N/A	ND	ND	5,070	0.038	1.185
2/20/09	84	ND	ND	N/A	ND	270	ND	78	ND	260	ND	ND	ND	ND	24	ND	1,600	1,600	ND	ND	ND	ND	ND	N/A	ND	ND	3,832	0.029	0.809
3/18/09	28	ND	ND	N/A	ND	620	ND	470	ND	150	ND	ND	ND	ND	ND	ND	3,800	3,700	ND	ND	ND	ND	ND	N/A	ND	ND	8,740	0.063	1.946
4/17/09	56	ND	ND	N/A	ND	360	ND	100	ND	220	ND	ND	ND	ND	ND	ND	1,900	2,400	ND	ND	ND	ND	ND	N/A	ND	ND	4,980	0.056	1.677
5/20/09	NA	ND	ND	N/A	ND	200	ND	62	ND	140	ND	ND	ND	ND	32	ND	1,700	1,500	ND	ND	ND	ND	ND	N/A	ND	ND	3,634	0.041	1.264
6/23/09	134	ND	ND	N/A	ND	280	ND	77	ND	200	ND	ND	ND	ND	19	ND	1,700	1,800	ND	ND	ND	ND	ND	N/A	ND	ND	4,076	0.049	1.471
7/23/09	129	ND	ND	N/A	ND	250	ND	68	ND	180	ND	27	ND	ND	13	ND	1,400	1,700	14	ND	ND	ND	ND	N/A	ND	ND	3,652	0.044	1.352
8/28/09	NA	ND	ND	N/A	ND	280	ND	79	ND	200	ND	ND	ND	ND	42	ND	1,900	1,900	ND	ND	ND	ND	ND	N/A	ND	ND	4,401	0.051	1.568
9/28/09	125	ND	ND	N/A	ND	150	ND	40	ND	110	ND	ND	ND	ND	13	ND	870	1,000	ND	ND	ND	ND	ND	N/A	ND	ND	2,183	0.025	0.735
10/27/09	NA	ND	ND	N/A	ND	230	ND	64	ND	210	ND	ND	ND	ND	20	ND	1,500	1,400	ND	ND	ND	ND	ND	N/A	9.7	ND	3,434	0.026	0.803
11/24/09	130	ND	ND	N/A	ND	180	ND	43	ND	180	ND	ND	ND	ND	14	ND	1,200	1,100	ND	ND	ND	ND	ND	N/A	ND	ND	2,717	0.032	0.960
12/23/09	132	ND	ND	N/A	ND	190	ND	48	ND	180	ND	ND	ND	ND	39	ND	1,100	1,300	ND	ND	ND	ND	ND	N/A	ND	ND	2,857	0.035	1.074
1/19/10	130	ND	ND	N/A	ND	240	ND	67	ND	180	ND	ND	ND	ND	16	ND	1,500	1,600	ND	ND	ND	ND	ND	N/A	ND	ND	3,603	0.042	1.304
2/17/10	130	ND	ND	N/A	ND	140	ND	35	ND	120	ND	ND	ND	ND	24	ND	760	930	ND	ND	ND	ND	ND	N/A	ND	ND	2,009	0.023	0.657
3/17/10	120	ND	ND	N/A	ND	250	ND	62	ND	190	ND	ND	ND	ND	21	ND	1,500	1,900	ND	ND	ND	ND	ND	N/A	ND	ND	3,923	0.042	1.302
4/16/10	120	ND	ND	N/A	ND	160	ND	41	ND	160	ND	ND	ND	ND	ND	ND	1,100	1,000	ND	ND	ND	ND	ND	N/A	ND	ND	2,461	0.027	0.796
5/13/10	119	ND	ND	N/A	ND	170	ND	42	ND	170	19	ND	ND	ND	95	ND	960	1,100	ND	ND	18	ND	ND	N/A	75	23	2,672	0.029	0.886
6/18/10	110	ND	ND	N/A	ND	96	ND	24	ND	110	12	ND	ND	ND	15	ND	630	600	12	ND	130	28	ND	N/A	50	26	1,733	0.017	0.514
7/19/10	110	ND	ND	N/A	ND	220	ND	52	ND	180	ND	ND	ND	ND	ND	ND	1,500	1,500	ND	ND	24	ND	ND	N/A	ND	ND	3,476	0.034	1.066
8/19/10	110	ND	ND	N/A	ND	200	ND	45	ND	170	ND	ND	ND	ND	12	ND	1,200	1,100	16	ND	ND	ND	ND	N/A	ND	ND	2,743	0.027	0.841
9/17/10	108	ND	ND	N/A	ND	140	ND	35	ND	150	ND	ND	ND	ND	29	ND	860	1,100	20	ND	ND	ND	ND	N/A	ND	ND	2,334	0.023	0.680
10/12/10	100	ND	ND	N/A	ND	170	ND	40	ND	140	ND	ND	ND	ND	940	ND	1,100	1,400	20	ND	ND	ND	ND	N/A	89	33	3,932	0.035	1.060
11/2/10	138	ND	ND	N/A	ND	150	ND	34	ND	100	ND	ND	ND	ND	71	ND	920	1,200	53	ND	ND	ND	ND	N/A	14	ND	2,542	0.032	0.946
12/1/10	138	ND	ND	N/A	ND	120	ND	28	ND	110	42	ND	ND	ND	54	ND	790	970	13	ND	ND	ND	ND	N/A	170	31	2,328	0.029	0.866
1/5/11	133	ND	ND	N/A	ND	150	ND	34	ND	130	14	ND	ND	ND	13	ND	860	1,200	ND	ND	ND	ND	ND	N/A	47	10	2,458	0.029	0.882
2/7/11	130	ND	ND	N/A	ND	130	ND	32	ND	160	ND	ND	ND	ND	23	ND	910	900	ND	ND	ND	ND	ND	N/A	29	ND	2,184	0.026	0.766
3/3/11	130	ND	ND	N/A	ND	390	ND	98	ND	350	19	ND	ND	ND	23	ND	2,800	2,500	ND	ND	ND	ND	ND	N/A	61	ND	6,241	0.073	2.188
4/14/11	125	ND	ND	N/A	ND	150	ND	36	ND	160	ND	30	ND	ND	10	ND	900	1,100	ND	ND	ND	ND	ND	N/A	ND	ND	2,386	0.027	0.804
5/6/11	130	ND	ND	N/A	ND	150	ND	39	ND	150	ND	ND	ND	ND	ND	ND	880	890	ND	ND	ND	ND	ND	N/A	ND	ND	2,109	0.025	0.764
6/9/11	150	ND	ND	N/A	ND	240	ND	59	ND	190	ND	ND	ND	ND	35	ND	1,600	1,600	20	ND	ND	ND	ND	N/A	ND	ND	3,744	0.050	1.515
7/11/11	128	ND	ND	N/A	ND	200	ND	51	ND	170	ND	40	ND	ND	81	ND	1,300	1,300	ND	ND	ND	ND	ND	N/A	26	ND	3,168	0.036	1.094
8/3/11	160	ND	ND	N/A	ND	200	ND	44	ND	160	ND	ND	ND	ND	29	ND	1,200	1,400	ND	ND	ND	ND	ND	N/A	ND	ND	3,033	0.044	1.309
9/15/11	160	12	ND	N/A	ND	130	ND	29	ND	130	ND	ND	ND	ND	11	ND	750	990	12	ND	ND	ND	ND	N/A	ND	ND	2,064	0.030	0.891
10/18/11	160	8.3	ND	N/A	ND	120	ND	28	ND	93	ND	ND	ND	ND	51	ND	640	780	ND	ND	ND	ND	ND	N/A	ND	ND	1,720	0.025	0.767
11/8/11	165	10	ND	N/A	ND	140	ND	34	ND	110	ND	ND	ND	ND	9.2	ND	730	930	ND	ND	ND	ND	ND	N/A	ND	ND	1,963	0.029	0.874
12/6/11	160	7.3	ND	N/A	ND	130	ND	29	ND	110	ND	ND	ND	ND	46	ND	600	800	ND	ND	ND	ND	ND	N/A	ND	ND	1,722	0.025	0.768
1/3/12	165	ND	ND	N/A	ND	130	ND	30	ND	140	ND	ND	ND	ND	16	ND	590	840	ND	ND	ND	ND	ND	N/A	ND	ND	1,746	0.026	0.803
2/16/12	160	ND	ND	N/A	ND	140	ND	31	ND	110	ND	ND	ND	ND	ND	ND	760	980	ND	ND	ND	ND	ND	N/A	ND	ND	2,021	0.029	0.843
3/15/12	160	ND	ND	N/A	ND	160	ND	36	ND	130	ND	ND	ND	ND	14	ND	880	1,100	ND	ND	ND	ND	ND	N/A	ND	ND	2,320	0.033	1.034
4/16/12	158	ND	ND	N/A	ND	170	ND	34	ND	140	ND	ND	ND	ND	ND	ND	880	1,300	ND	ND	ND	ND	ND	N/A	20	ND	2,544	0.036	1.084
5/9/12	159	ND	ND	N/A	ND	290	ND	56	ND	200	ND	ND	ND	ND	32	ND	1,700	2,300	ND	ND	ND	ND	ND	N/A	ND	ND	4,578	0.065	2.029
6/4/12	159	ND	ND	N/A	ND	320	ND	66	ND	200	ND	ND	ND	ND	ND	ND	1,700	2,100	ND	ND	ND	ND	ND	N/A	ND	ND	4,386	0.063	1.881
7/5/12	162	ND	ND	N/A	ND	250	ND	50	ND	180	ND	ND	ND	ND	16	ND	1,300	1,300	ND	ND	ND	ND	ND	N/A	ND	ND	3,096	0.045	1.398
8/15/12	164	ND	ND	N/A	ND	150	ND	30	ND	130	ND	ND	ND	ND	22	ND	730	1,000	17	ND	ND	ND	ND	N/A	ND	ND	2,079	0.031	0.950
9/12/12	165	ND	ND	N/A	ND	110	ND	23	ND	120	ND	ND	ND	ND	170	ND	560	720	ND	ND	ND	ND	ND	N/A	11	ND	1,714	0.025	0.763
10/18/12	160	ND	ND	N/A	ND	190	ND	36	ND	180	ND	ND	ND	ND	ND	ND	1,000	1,400	ND	ND	ND	ND	ND	N/A	ND	ND	2,806	0.040	1.251
11/13/12	161	ND	ND	N/A	ND	120	ND	23	ND	140	ND	ND	ND	ND	ND	ND	600	910	ND	ND	ND	ND	ND	N/A	ND	ND	1,793	0.026	0.779
12/6/12	160	ND	ND	N/A	ND	130	ND	21	ND	120	ND	ND	ND	ND	8	ND	590	1,000	ND	ND	ND	ND	ND	N/A	ND	ND	1,869	0.027	0.833

TABLE 1

Building A Influent Concentrations (µg/m^3)

LABORATORY DATA SUMMARY

SSD System OM&M, Middle River Complex, Middle River, Maryland

Samples analyzed by EPA Method TO-15

Date	FLOW (scfm)	benzene	carbon tetrachloride	chlorodifluoromethane	chloroform	cis-1,2-dichloroethene	dichlorodifluoromethane	1,1-dichloroethane	1,2-dichloroethane	1,1-dichloroethene	ethylbenzene	methylene chloride	naphthalene	tetrachloroethene	toluene	trans-1,2-dichloroethene	1,1,1,-trichloroethane	trichloroethene	trichlorofluoromethane	1,2,3-trimethylbenzene	1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	vinyl chloride	total xylenes	m-xylene & p-xylene	o-xylene	Total VOCs	Mass (lbs./day)	Mass (lbs. removed in period)
1/4/13	160	ND	ND	N/A	ND	130	ND	24	ND	190	ND	ND	ND	ND	ND	ND	630	950	ND	ND	ND	ND	ND	N/A	ND	ND	1,924	0.028	0.858
2/6/13	160	ND	ND	N/A	ND	130	ND	26	ND	130	ND	ND	ND	ND	ND	ND	560	860	ND	ND	ND	ND	ND	N/A	ND	ND	1,706	0.025	0.687
3/7/13	160	ND	ND	N/A	ND	140	ND	30	ND	94	ND	ND	ND	ND	10	ND	670	1,100	ND	ND	ND	ND	ND	N/A	ND	ND	2,044	0.029	0.911
4/8/13	150	ND	ND	N/A	ND	2,200	ND	290	ND	1,500	ND	ND	ND	ND	ND	ND	2,900	5,900	ND	ND	ND	ND	ND	N/A	ND	ND	12,790	0.172	5.174
5/10/13	150	ND	ND	N/A	ND	140	11	29	ND	130	ND	ND	ND	ND	14	ND	730	1,200	17	ND	ND	ND	ND	N/A	ND	ND	2,271	0.031	0.949
6/5/13	155	ND	ND	N/A	ND	100	ND	22	ND	110	ND	ND	ND	ND	ND	ND	530	790	ND	ND	ND	ND	ND	N/A	ND	ND	1,552	0.022	0.649
7/3/13	159	ND	ND	N/A	ND	160	ND	33	ND	100	ND	ND	ND	ND	ND	ND	820	1,100	ND	ND	ND	ND	ND	N/A	ND	ND	2,213	0.032	0.981
8/14/13	160	ND	ND	N/A	ND	180	ND	34	ND	120	ND	ND	ND	ND	15	ND	780	1,300	ND	ND	ND	ND	ND	N/A	ND	ND	2,429	0.035	1.083
9/9/13	160	ND	ND	N/A	ND	100	ND	16	ND	90	ND	ND	ND	ND	ND	ND	410	630	ND	ND	ND	ND	ND	N/A	ND	ND	1,246	0.018	0.538
10/10/13	160	ND	ND	N/A	ND	220	ND	39	ND	190	ND	ND	ND	ND	15	ND	810	1,400	16	ND	ND	ND	ND	N/A	ND	ND	2,690	0.039	1.199
11/7/13	160	ND	ND	N/A	ND	200	ND	39	ND	170	ND	ND	ND	ND	11	ND	930	1,500	41	ND	ND	ND	ND	N/A	ND	ND	2,891	0.042	1.247
12/5/13	160	0.94	ND	N/A	21.2	165	ND	30.7	ND	132	ND	4.4	ND	ND	12.2	2.5	883	1,530	N/A	ND	ND	ND	ND	N/A	ND	ND	2,782	0.040	1.240
1/13/14	160	ND	ND	6.5	11.6	173	2.2	29.3	ND	141	1.8	3.3	4.9	ND	####	ND	570	795	N/A	ND	1.9	ND	ND	N/A	4.3	1.7	11,567	0.166	5.157
2/14/14	153	ND	ND	2.4	7.4	126	ND	21.2	ND	92.7	ND	2.1	ND	ND	15.3	ND	429	843	N/A	ND	ND	ND	ND	N/A	ND	ND	1,539	0.021	0.593
3/12/14	160	ND	ND	2.4	ND	176	2.0	29.3	36.4	130	ND	ND	ND	3.6	9.1	ND	1,310	2,100	N/A	ND	ND	ND	ND	N/A	3.0	ND	3,802	0.055	1.695
4/10/14	160	81.7	ND	ND	ND	194	ND	31.8	ND	131	120	ND	ND	ND	75.7	ND	646	1,490	N/A	ND	ND	ND	ND	N/A	387	109	3,266	0.047	1.361
5/5/14	150	4.8	ND	8.8	3.9	44.7	4.1	6.7	ND	32.6	6.5	202	2.3 J	1.2	29.5	ND	142	292	N/A	2.8	11.5	3.0	ND	N/A	24.3	9.3	832	0.011	0.280
6/18/14	155	1,040	ND	30.3	136	3,710	ND	565	ND	2,840	ND	138	### J	ND	199	51.7	1,000 J	1,490	N/A	ND	17.6 J	ND	ND	N/A	25.6 J	ND	11,278	0.157	6.907
7/3/14	158	45.1	ND	ND	8.4 J	189	ND	36.5	81.2	145	ND	ND	ND	ND	20.8 J	ND	871	1,250	N/A	ND	ND	ND	ND	N/A	ND	ND	2,647	0.038	0.563
9/16/14	150	51.1	1.1	1.0 J	54.0	416	4.7	104	ND	323	ND	0.67 J	ND	2.3	8.8	8.1	1,290	3,250	N/A	ND	2.3	0.83 J	1.5	N/A	1.5 J	1.1 J	5,522	0.074	5.578
10/9/14	152	46.6	ND	ND	ND	89.0	ND	16.1	ND	69.8	ND	17.3 J	ND	ND	ND	ND	480	819	N/A	ND	ND	ND	ND	N/A	ND	ND	1,538	0.021	0.483
11/6/14	135	38.2	ND	ND	ND	92.4	ND	16.8 J	ND	71.0	ND	23.9 J	ND	59.4	14.3 J	ND	459	803	N/A	ND	ND	ND	ND	N/A	ND	ND	1,578	0.019	0.536
12/4/14	120	34.3	ND	ND	11.8	77.6	ND	18.8	ND	68.6	ND	19.4 J	ND	ND	41.5 J	ND	428	741	N/A	ND	ND	ND	ND	N/A	ND	ND	1,441	0.016	0.435
1/15/15	50	64.8	ND	ND	6.8	85.6	4.4	15.7	ND	81.0	ND	2.0 J	ND	2.0	1.7	1.3	404	695	N/A	ND	ND	ND	ND	N/A	0.90 J	ND	1,365	0.006	0.257
2/16/15	50	1.5	ND	3.7	ND	8.5	ND	ND	ND	6.5	1.9 J	46.9	4.1 J	ND	13.5	ND	17.0	22.4	N/A	ND	ND	ND	ND	N/A	6.5	2.7 J	135	0.001	0.019
3/10/15	110	0.54	2.9	1.4	2.4	183	1.6	28.3	ND	141	1.1 J	1.4 J	1.2 J	ND	1.7	ND	1,370	2,300	N/A	ND	ND	ND	ND	N/A	4.1	1.3 J	4,042	0.040	0.878
4/6/15	115	0.73	0.78 J	2.1	7.1	147	2.2	22.7	ND	112	ND	3.5 J	2.7 J	0.87 J	2.7	ND	617	1,090	N/A	ND	1.3 J	ND	ND	N/A	2.7 J	0.99 J	2,016	0.021	0.562
5/8/15	110	ND	ND	ND	ND	161	ND	23.0 J	ND	121	ND	ND	ND	ND	ND	ND	573	1,170	N/A	ND	ND	ND	ND	N/A	ND	ND	2,048	0.020	0.647
6/2/15	125	ND	ND	ND	ND	143	ND	19.4 J	33.4	105	133	ND	ND	ND	ND	ND	536	1,110	N/A	ND	ND	ND	ND	N/A	582	142	2,804	0.031	0.787
7/1/15	80	ND	ND	ND	ND	91	ND	14.0	ND	78	ND	ND	ND	ND	ND	ND	390	470	N/A	ND	ND	ND	ND	ND	N/A	N/A	1,043	0.007	0.217
8/10/15	140	12.0	ND	1.3 J	2.4 J	82	2.9 J	16.0	ND	63	ND	ND	ND	ND	12.0	1.4 J	400	590	N/A	ND	ND	ND	ND	ND	N/A	N/A	1,183	0.015	0.595
9/11/15	140	72	ND	2.7 J	1.8 J	130	ND	24	ND	86	ND	ND	ND	ND	ND	1.9 J	510	1,000	N/A	ND	ND	ND	ND	ND	N/A	N/A	1,828	0.023	0.736
10/7/15	145	78	ND	1.5 J	ND	130	ND	24	ND	91	ND	ND	ND	ND	ND	2.0 J	560	900	N/A	ND	ND	ND	ND	ND	N/A	N/A	1,787	0.023	0.605
11/2/15	145	43	ND	3.2 J	1.9 J	140	3.6 J	25	ND	110	ND	ND	ND	ND	ND	2.5 J	570	900	N/A	ND	ND	ND	ND	ND	N/A	N/A	1,799	0.023	0.609
12/3/15	145	34	ND	3.2 J	1.4 J	120	3.2 J	23	ND	83	ND	ND	ND	ND	ND	1.8 J	490	830	N/A	ND	ND	ND	ND	ND	N/A	N/A	1,590	0.021	0.642
1/15/16	140	9.2	ND	1.1 J	2.0	84	2.1	16	ND	80	ND	3.0 J	ND	ND	2.7	1.5 J	320	480 DL	N/A	ND	ND	ND	ND	ND	N/A	N/A	1,002	0.013	0.541
2/12/16	140	2.6	ND	1.0 J	1.0 J	100	2.4	20	0.60 J	82	ND	ND	ND	ND	ND	1.6	550 EB	840 E	N/A	ND	ND	ND	ND	ND	N/A	N/A	1,601	0.020	0.564
3/9/16	130	36	0.49 J	7.9	1.5 J	130	2.4	25	0.70 J	98	ND	2.8 J	ND	0.64 J	5.3	2.0	680 E	1,300 E	N/A	ND	ND	ND	0.42 J	ND	N/A	N/A	2,293	0.027	0.696
4/7/16	288	28	ND	ND	ND	230	ND	42	ND	180	ND	ND	ND	ND	ND	ND	940	1,700	N/A	ND	ND	ND	ND	ND	N/A	N/A	3,120	0.081	2.340
4/27/16	250	ND	ND	ND	ND	90	ND	18	ND	68	ND	ND	ND	ND	ND	ND	490	950	N/A	ND	ND	ND	ND	ND	N/A	N/A	1,616	0.036	0.726
5/12/16	248	ND	ND	19	2.0 J	110	3.5 J	18	ND	120	ND	9.0	ND	ND	6.5	ND	600 B	910	N/A	ND	ND	ND	ND	ND	N/A	N/A	1,798	0.040	0.601
6/2/16	259	31	ND	63	ND	150	ND	26	ND	140	ND	ND	ND	ND	ND	3.6 J	670	1,100	N/A	ND	ND	ND	ND	ND	N/A	N/A	2,184	0.051	1.066
7/14/16	252	65	ND	ND	ND	100	ND	17	ND	75	ND	36	ND	ND	15	ND	510	940	N/A	ND	ND	ND	ND	ND	N/A	N/A	1,758	0.040	1.671
8/4/16	260	20	ND	ND	ND	92	ND	17	ND	68	ND	ND	ND	ND	ND	ND	460	860	N/A	ND	8.2 J	ND	ND	ND	N/A	N/A	1,525	0.036	0.748
9/7/16	260	38	ND	1.5 J	1.2 J	88	2.3 J	14	ND	66	ND	15	ND	ND	ND	1.8 J	400	760	N/A	ND	ND	ND	ND	ND	N/A	N/A	1,388	0.032	1.102
10/5/16	270	ND	ND	1.7	ND	81	ND	14	ND	68	ND	ND	ND	ND	ND	ND	410	630	N/A	ND	ND	ND	ND	ND	N/A	N/A	1,205	0.029	0.818
11/3/16	216	ND	ND	ND	ND	350	ND	68	ND	260	ND	49 J	ND	ND	ND	ND	2,000	2,800	N/A	ND	ND	ND	ND	ND	N/A	N/A	5,527	0.107	3.109
12/14/16	225	11	ND	2 J	ND	95	3.1 J	17	ND	120	ND	ND	ND	ND	ND	2.5 J	600	710	N/A	ND	ND	ND	ND	ND	N/A	N/A	1,561	0.032	1.293
1/13/17	195	17	ND	ND	8.4 J	440	ND	81	ND	370	ND	130	ND	ND	ND	9.3 J	2,000	3,600	N/A	ND	ND	ND	ND	ND	N/A	N/A	6,656	0.117	3.496
2/8/17	200	33	ND	ND	6	110	3.7 J	19	ND	100	ND	ND	ND	ND	ND	2.1 J	660	1,100 E	N/A	ND	ND	ND	ND	5.9 J	N/A	N/A	2,040	0.037	0.952
3/8/17	360	21	ND	ND	2 J	100	3.3 J	21	ND	110	ND	ND	ND	8.5 J	ND	2.2 J	590	1,000	N/A	ND	ND	ND	ND	6.9 J	N/A	N/A	1,865	0.060	1.688
4/5/17	355	15	ND	ND	1.3 J	65	ND	10	ND	71	ND	ND	ND	ND	ND	ND	370	680	N/A	ND	ND	ND	ND	ND	N/A	N/A	1,212	0.039	1.082
5/5/17	360	31	ND	1.6 J	ND	80	ND	16	ND	74	ND	ND	ND	ND	ND	ND	430	760	N/A	ND	ND	ND	ND	ND	N/A	N/A	1,393	0.045	1.351
6/5/17	355	10	ND	ND	3.4 J	69	ND	13	ND	66	ND	13 JB	ND	ND	ND	ND	480	710	N/A	ND	ND	ND	ND	ND	N/A	N/A	1,364	0.043	1.348
7/6/17	345	25	ND	7.2 J	ND	94	ND	20	ND	120	ND	ND	ND	ND	ND	4.6 J	450	1,400	N/A	ND	ND	ND	ND	ND	N/A	N/A	2,121	0.066	2.037
8/8/17	350	5 J	ND	4.9 J	ND	90	ND	18	ND	95	ND	28 JB	ND	ND	ND	ND	480	940	N/A	ND	ND	ND	ND	ND	N/A	N/A	1,661	0.052	1.723
9/7/17	345	35	ND	ND	2	79	ND	13	ND	72	ND	16 J	ND	ND	ND	ND	420	1,000	N/A	ND	ND	ND	ND	ND	N/A	N/A	1,637	0.051	1.521
10/4/17	350	22	ND	2.5 J	ND	52	ND	10	ND	66	ND	14 J	ND	ND	ND	ND	290	750	N/A	ND	ND	ND	ND	ND	N/A	N/A	1,207	0.038	1.024
11/8/17	355	4 J	ND	ND	ND	83	ND	17	ND	88	ND	ND	ND	ND	ND	ND	550	1,100	N/A	ND	ND	ND	ND	ND	N/A	N/A	1,842	0.059	2.055
12/4/17	360	16	ND	1.5 J	ND	75	3.4 J	15	ND	92	ND	ND	ND	ND	ND	ND	500 B	990	N/A	ND	ND	ND	ND	ND	N/A	N/A	1,693	0.055	1.423

TABLE 1

Building A Influent Concentrations (µg/m^3)

LABORATORY DATA SUMMARY

SSD System OM&M, Middle River Complex, Middle River, Maryland

Samples analyzed by EPA Method TO-15

Date	FLOW (scfm)	benzene	carbon tetrachloride	chlorodifluoromethane	chloroform	cis-1,2-dichloroethene	dichlorodifluoromethane	1,1-dichloroethane	1,2-dichloroethane	1,1-dichloroethene	ethylbenzene	methylene chloride	naphthalene	tetrachloroethene	toluene	trans-1,2-dichloroethene	1,1,1,-trichloroethane	trichloroethene	trichlorofluoromethane	1,2,3-trimethylbenzene	1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	vinyl chloride	total xylenes	m-xylene & p-xylene	o-xylene	Total VOCs	Mass (lbs./day)	Mass (lbs. removed in period)
1/9/18	360	16	0.50 J	1.7	1.2 J	58	2.0	9	ND	79	0.59 J	ND	ND	0.55 J	2.5	1.1 J	390	800 E	N/A	ND	ND	ND	ND	4.1	N/A	N/A	1,367	0.044	1.590
2/9/18	360	16	ND	32	ND	70	3.6 J	13	ND	120	ND	14 J	ND	ND	ND	ND	420	1,000	N/A	ND	ND	ND	ND	ND	N/A	N/A	1,689	0.055	1.692
3/6/18	360	22	ND	2.1 J	ND	80	3.6 J	14	ND	110	ND	ND	ND	ND	ND	ND	470	1,200	N/A	ND	ND	ND	ND	ND	N/A	N/A	1,902	0.061	1.537
4/3/18	360	10	ND	ND	ND	67	ND	13	ND	89	ND	12 J	ND	ND	ND	ND	430	860	N/A	ND	ND	ND	ND	ND	N/A	N/A	1,481	0.048	1.340
5/8/18	350	12	ND	15	1.8 J	80	3.1 J	15	ND	82	ND	7.6 JB	ND	2.90 J	####	1.5 J	460	870	N/A	ND	ND	ND	ND	ND	N/A	N/A	1,568	0.049	1.725
6/5/18	320	12	ND	1.8 J	9.4	91	3.5 J	16	ND	90	ND	ND	ND	ND	ND	1.8 J	540	1,200	N/A	ND	ND	ND	ND	ND	N/A	N/A	1,966	0.056	1.581
7/12/18	290	66	ND	4 J	19 J	140	ND	25	ND	140	ND	40	ND	ND	ND	ND	890 B	1,800	N/A	ND	ND	ND	ND	ND	N/A	N/A	3,124	0.081	3.010
8/17/18	300	35	ND	3.6 J	8.2 J	100	ND	22	ND	110	ND	ND	ND	ND	ND	ND	750	1,100	N/A	ND	ND	ND	ND	ND	N/A	N/A	2,129	0.057	2.064
9/24/18	345	14	ND	3.5 J	18	79	ND	15	ND	72	ND	13 JB	ND	ND	ND	ND	590 B	950	N/A	ND	5.80 J	ND	ND	ND	N/A	N/A	1,760	0.055	2.072
10/19/18	340	5.9 J	ND	ND	3.9 J	58	ND	12	ND	56	ND	12 J	ND	ND	ND	ND	430 B	800	N/A	ND	ND	ND	ND	ND	N/A	N/A	1,378	0.042	1.052
11/9/18	355	11	ND	ND	3.7 J	56	4.10	11	ND	60	ND	ND	ND	ND	ND	ND	450	810	N/A	ND	ND	ND	ND	ND	N/A	N/A	1,406	0.045	0.941
12/28/18	360	6.3	ND	2.7 J	3.7 J	77	ND	17	ND	110	ND	18 JB	ND	ND	ND	ND	690	1,100	N/A	ND	ND	ND	ND	ND	N/A	N/A	2,025	0.065	3.207
1/22/19	330	11	ND	ND	2.1 J	46	ND	10	ND	55	ND	12 J	ND	ND	ND	ND	330	700	N/A	ND	ND	ND	ND	ND	N/A	N/A	1,166	0.035	0.864
2/7/19	325	3.0 J	ND	ND	2.3 J	57	ND	13	ND	73	ND	ND	ND	ND	ND	ND	430	850	N/A	ND	ND	ND	ND	ND	N/A	N/A	1,428	0.042	0.667
3/13/19	360	4.4 J	ND	ND	ND	48	ND	11	ND	60	ND	ND	ND	ND	ND	ND	330	720	N/A	ND	ND	ND	ND	ND	N/A	N/A	1,173	0.038	1.290
4/11/19	340	6.6	ND	1.1 J	3.6	61	1.4 J	2.9	ND	75	ND	2.8 J	ND	0.74 J	5.6	1.3 J	430	940 E	N/A	ND	ND	ND	0.47 J	2.8 J	N/A	N/A	1,535	0.047	1.359
5/14/19	350	9.1	ND	1.1 J	3.1	61	2.3	12	0.54 J	70	ND	5.7 J	ND	0.56 J	6.4	1.2 J	430	870 E	N/A	ND	ND	ND	ND	2.2 J	N/A	N/A	1,475	0.046	1.530
6/10/19	325	19	ND	7.1	13	63	2.2 J	12	ND	64	ND	ND	ND	ND	ND	1.3 J	440	880	N/A	ND	ND	ND	ND	ND	N/A	N/A	1,502	0.044	1.183
7/11/19	350	58	ND	ND	1.6 J	57	2.9 J	11	ND	65	ND	14 J	ND	ND	ND	1.4 J	440	760	N/A	ND	ND	ND	ND	ND	N/A	N/A	1,411	0.044	1.375
8/8/19	315	2.9 J	ND	ND	1.5 J	66	2.8 J	13	ND	71	ND	21 JB	ND	ND	ND	1.6 J	460	830	N/A	ND	ND	ND	ND	ND	N/A	N/A	1,470	0.042	1.164
9/23/19	315	1.2 J	ND	ND	0.87 J	42	2.4 J	8.5	ND	42	ND	16 JB	ND	ND	ND	1.2 J	220	510	N/A	ND	ND	ND	ND	ND	N/A	N/A	844	0.024	1.098
10/4/19	315	4.8 J	ND	ND	ND	50	2.3 J	9.8	ND	52	ND	19 JB	ND	ND	ND	ND	290	730	N/A	ND	ND	ND	ND	ND	N/A	N/A	1,158	0.033	0.360
11/12/19	315	12.0	ND	ND	2.4 J	45	3.1 J	12	ND	62	ND	23 JB	ND	ND	ND	1.30 J	400	910	N/A	ND	ND	ND	ND	ND	N/A	N/A	1,471	0.042	1.622
12/11/19	315	4.9 J	ND	ND	0.86 J	55	2.2 J	11	ND	70	ND	21 JB	ND	ND	ND	1.4 J	350	1,000	N/A	ND	ND	ND	ND	ND	N/A	N/A	1,516	0.043	1.244
1/7/20	315	12	ND	1.8 J	2.5 J	61	2.7 J	12	ND	78	ND	ND	ND	ND	ND	1.5 J	340	790	N/A	ND	ND	ND	ND	ND	N/A	N/A	1,302	0.037	0.994
3/13/20	290	1.3 J	ND	ND	1.6 J	60	2.5 J	12	ND	75	ND	ND	ND	ND	7.8 J	1.3 J	380	1,000	N/A	ND	ND	ND	ND	ND	N/A	N/A	1,542	0.040	2.649
4/14/20	290	21	ND	ND	1.0 J	46	2.9 J	11	ND	55	ND	ND	ND	23	7.8 J	2.2 J	330	850	N/A	ND	ND	ND	ND	ND	N/A	N/A	1,350	0.035	1.125
5/13/20	290	24	ND	ND	2.3 J	47	2.5 J	10	ND	60	ND	ND	ND	ND	7.2 J	1.0 J	370	980	N/A	ND	ND	ND	ND	ND	N/A	N/A	1,504	0.039	1.136
6/25/20	210	23	ND	ND	1.3 J	56	2.0 J	10	ND	55	ND	14 JB	ND	1.0 J	ND	1.4 J	330	810	N/A	ND	ND	ND	ND *	ND	N/A	N/A	1,304	0.025	1.057
7/23/20	270	43	ND	3.1 J	7.4 J	76	3.6 J	16	ND	74	ND	28 J	ND	1.4 J	ND	1.7 J	540	1,200	N/A	ND	ND	ND	ND	ND	N/A	N/A	1,994	0.048	1.354
8/18/20	200	23	ND	1.6 J	4.3 J	76	2.3 J	16	ND	85	ND	ND	ND	ND	ND	2.0 J	540	1,100	N/A	ND	ND	ND	ND	ND	N/A	N/A	1,850	0.033	0.864
9/28/20	320	6.8	ND	ND	4.0 J	34	2.0 J	6.9	0.85 J	45	ND	ND	ND	ND	ND	1.2 J	280	560	N/A	ND	ND	ND	ND	ND	N/A	N/A	941	0.027	1.108

Notes:

µg/m^3 - micrograms per cubic meter
B - compound was found in the blank and sample
DL - dilution analysis
E - results exceeded calibration range
EPA - United States Environmental Protection Agency
GAC - granular activated-carbon
J - result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value
lbs./day - pounds per day
N/A - not applicable (samples not analyzed for compound)
ND - non-detect (below detection limit)
OM&M - operation, maintenance, and monitoring
scfm - standard cubic feet per minute
SSD - sub-slab depressurization
TO-15 - Toxic Organic Method 15
VOCs - volatile organic compounds

Completed first-phase system expansion (to Building A basement) on October 22, 2010.
Completed second-phase system expansion (to eastern area) on April 13, 2016.
Increase in concentrations following 19-day system shutdown due to blower failure. Blower was replaced on 4/8/13.
Samples not collected in May 2014 and August 2014 as system was shut down due to firewater line break.
Samples analyzed from 4/2/08 to 11/7/13 and from 7/1/15 to present analyzed by TestAmerica, Inc. of Knoxville, TN.
Samples analyzed from 12/5/13 to 6/2/15 analyzed by Pace Analytical Services, Inc. of Minneapolis, MN.

TABLE 2

Building A Mid-GAC Concentrations (µg/m^3)

LABORATORY DATA SUMMARY

SSD System OM&M, Middle River Complex, Middle River, Maryland

Samples analyzed by EPA Method TO-15

Date	benzene	carbon tetrachloride	chlorodifluoromethane	chloroform	cis-1,2-dichloroethene	dichlorodifluoromethane	1,1-dichloroethane	1,2-dichloroethane	1,1-dichloroethene	ethylbenzene	methylene chloride	naphthalene	tetrachloroethene	toluene	trans-1,2-dichloroethene	1,1,1,-trichloroethane	trichloroethene	trichlorofluoromethane	1,2,3-trimethylbenzene	1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	vinyl chloride	total xylenes	m-xylene & p-xylene	o-xylene	Total VOCs	Mass (lbs./day)
4/2/08	6.9	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	6.9	0.0000
4/24/08	ND	ND	N/A	ND	810	ND	240	ND	2,200	ND	ND	ND	ND	ND	ND	2,100	ND	ND	ND	ND	ND	ND	N/A	ND	ND	5,350	0.0400
5/21/08	ND	ND	N/A	ND	280	ND	100	ND	740	ND	ND	ND	ND	ND	ND	410	11	ND	ND	ND	ND	ND	N/A	ND	ND	1,541	0.0100
6/19/08	110	ND	N/A	ND	2,300	ND	830	ND	2,200	ND	53	ND	ND	ND	ND	1,200	ND	ND	ND	ND	ND	ND	N/A	ND	ND	6,693	0.0400
7/18/08	ND	ND	N/A	ND	60	ND	27	ND	270	ND	ND	ND	ND	ND	ND	100	ND	ND	ND	ND	ND	ND	N/A	ND	ND	457	0.0030
8/12/08	ND	ND	N/A	15	60	ND	130	ND	400	ND	ND	ND	ND	ND	ND	1,500	30	16	ND	ND	ND	ND	N/A	ND	ND	2,151	0.0100
9/11/08	ND	ND	N/A	15	ND	ND	170	ND	520	ND	ND	ND	ND	ND	ND	890	53	30	ND	ND	ND	ND	N/A	ND	ND	1,678	0.0100
11/18/08	ND	ND	N/A	ND	ND	ND	60	ND	97	ND	ND	ND	ND	ND	ND	150	180	ND	ND	ND	ND	ND	N/A	ND	ND	487	0.0031
12/18/08	ND	ND	N/A	ND	98	ND	38	ND	330	ND	ND	ND	ND	ND	ND	51	18	ND	ND	ND	ND	ND	N/A	ND	ND	535	0.0040
1/22/09	ND	ND	N/A	ND	42	ND	19	ND	490	ND	ND	ND	ND	ND	ND	25	12	11	ND	ND	ND	ND	N/A	ND	ND	599	0.0045
2/20/09	ND	ND	N/A	ND	220	ND	91	ND	310	ND	ND	ND	ND	ND	ND	380	68	ND	ND	ND	ND	ND	N/A	ND	ND	1,069	0.0081
3/18/09	ND	ND	N/A	ND	210	ND	69	ND	280	ND	ND	ND	ND	ND	ND	1,900	190	ND	ND	ND	ND	ND	N/A	ND	ND	2,649	0.0067
4/17/09	ND	ND	N/A	ND	ND	ND	ND	ND	140	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	140	0.0016
5/20/09	ND	ND	N/A	ND	110	ND	42	ND	140	ND	ND	ND	ND	ND	ND	200	ND	ND	ND	ND	ND	ND	N/A	ND	ND	492	0.0055
6/23/09	ND	ND	N/A	ND	66	ND	130	ND	320	ND	ND	ND	ND	ND	ND	82	ND	18	ND	ND	ND	ND	N/A	ND	ND	616	0.0074
7/23/09	ND	ND	N/A	ND	250	ND	88	ND	210	ND	ND	ND	ND	ND	ND	890	ND	12	ND	ND	ND	ND	N/A	ND	ND	1,450	0.0173
8/28/09	ND	ND	N/A	ND	330	ND	130	ND	290	ND	ND	ND	ND	ND	ND	1,100	ND	14	ND	ND	ND	ND	N/A	ND	ND	1,864	0.0214
9/28/09	ND	ND	N/A	ND	130	ND	38	ND	110	ND	ND	ND	ND	ND	ND	580	ND	ND	ND	ND	ND	ND	N/A	ND	ND	858	0.0096
10/27/09	ND	ND	N/A	ND	170	ND	94	ND	260	ND	ND	ND	ND	ND	ND	180	35	ND	ND	ND	ND	ND	N/A	ND	ND	739	0.0086
11/24/09	ND	ND	N/A	ND	250	ND	84	ND	210	ND	ND	ND	ND	ND	ND	710	ND	ND	ND	ND	ND	ND	N/A	ND	ND	1,254	0.0150
12/23/09	ND	ND	N/A	ND	28	ND	30	ND	180	ND	ND	ND	ND	ND	ND	19	29	ND	ND	ND	ND	ND	N/A	ND	ND	286	0.0035
1/19/10	ND	ND	N/A	ND	190	ND	100	ND	260	ND	ND	ND	ND	ND	ND	16	ND	ND	ND	ND	ND	ND	N/A	ND	ND	566	0.0066
2/17/10	ND	ND	N/A	ND	ND	ND	100	ND	110	ND	ND	ND	ND	ND	ND	16	ND	ND	ND	ND	ND	ND	N/A	ND	ND	226	0.0026
3/17/10	ND	ND	N/A	ND	ND	ND	ND	ND	19	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	19	0.0000
4/16/10	ND	ND	N/A	ND	260	ND	89	ND	200	ND	ND	ND	ND	ND	ND	600	14	ND	ND	ND	ND	ND	N/A	ND	ND	1,163	0.0125
5/13/10	13	ND	N/A	ND	260	ND	61	ND	180	15	ND	ND	ND	67	ND	1,300	ND	13	ND	12	ND	ND	N/A	55	16	1,992	0.0213
6/18/10	ND	ND	N/A	ND	20	ND	ND	ND	19	ND	ND	ND	ND	ND	ND	18	ND	ND	ND	76	16	ND	N/A	25	14	188	0.0019
7/19/10	ND	ND	N/A	ND	74	ND	24	ND	89	ND	ND	ND	ND	ND	ND	87	ND	ND	ND	11	ND	ND	N/A	ND	ND	285	0.0028
8/19/10	ND	ND	N/A	ND	210	ND	55	ND	210	ND	ND	ND	ND	ND	ND	720	ND	13	ND	ND	ND	ND	N/A	ND	ND	1,208	0.0120
9/17/10	ND	ND	N/A	ND	330	ND	110	ND	310	ND	ND	ND	ND	ND	ND	430	ND	24	ND	ND	ND	ND	N/A	ND	ND	1,204	0.0117
10/12/10	ND	ND	N/A	ND	400	ND	81	ND	170	ND	ND	ND	ND	32	ND	1,000	49	17	ND	ND	ND	ND	N/A	ND	ND	1,749	0.0157
11/2/10	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	0.00	0.0000
12/1/10	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	14	ND	ND	ND	ND	ND	N/A	ND	ND	14	0.0002
1/5/11	ND	ND	N/A	ND	ND	ND	ND	ND	24	ND	ND	ND	ND	ND	ND	20	11	ND	ND	ND	ND	ND	N/A	ND	ND	55	0.0007
2/7/11	ND	ND	N/A	ND	13	ND	9	ND	95	ND	ND	ND	ND	ND	ND	53	12	20	ND	ND	ND	ND	N/A	ND	ND	202	0.0024
3/3/11	ND	ND	N/A	ND	15	ND	8	ND	120	ND	ND	ND	ND	66	ND	44	16	13	ND	ND	ND	ND	N/A	18	ND	300	0.0035
4/14/11	ND	ND	N/A	ND	110	ND	40	ND	310	ND	25	ND	ND	ND	ND	48	ND	13	ND	ND	ND	ND	N/A	ND	ND	546	0.0061
5/6/11	ND	ND	N/A	ND	150	ND	51	ND	240	ND	ND	ND	ND	ND	ND	70	34	ND	ND	ND	ND	ND	N/A	ND	ND	545	0.0064
6/9/11	14	ND	N/A	23	760	ND	190	ND	340	ND	ND	ND	ND	26	ND	440	51	20	ND	ND	ND	ND	N/A	ND	ND	1,864	0.0251
7/11/11	11	ND	N/A	ND	320	ND	92	ND	220	ND	21	ND	ND	67	ND	320	16	ND	ND	ND	ND	ND	N/A	29	10	1,106	0.0127
8/3/11	ND	ND	N/A	ND	320	ND	60	ND	170	ND	ND	ND	ND	ND	ND	110	ND	ND	ND	ND	ND	ND	N/A	ND	ND	660	0.0095
9/15/11	ND	ND	N/A	ND	170	ND	35	ND	140	ND	ND	ND	ND	ND	ND	200	ND	ND	ND	ND	ND	ND	N/A	ND	ND	545	0.0078
10/18/11	ND	ND	N/A	ND	110	ND	27	ND	80	ND	ND	ND	ND	22	ND	200	ND	ND	ND	ND	ND	ND	N/A	ND	ND	439	0.0063
11/8/11	ND	ND	N/A	ND	130	ND	33	ND	110	ND	ND	ND	ND	ND	ND	330	ND	ND	ND	ND	ND	ND	N/A	ND	ND	603	0.0089
12/6/11	ND	ND	N/A	ND	140	ND	36	ND	140	ND	ND	ND	ND	ND	ND	310	ND	ND	ND	ND	ND	ND	N/A	ND	ND	626	0.0090
1/3/12	ND	ND	N/A	ND	71	ND	19	ND	82	ND	ND	ND	ND	ND	ND	200	ND	ND	ND	ND	ND	ND	N/A	ND	ND	372	0.0055
2/16/12	ND	ND	N/A	ND	120	ND	26	ND	130	ND	ND	ND	ND	ND	ND	430	11	ND	ND	ND	ND	ND	N/A	ND	ND	717	0.0103
3/15/12	ND	ND	N/A	ND	190	ND	37	ND	210	ND	ND	ND	ND	ND	ND	480	38	ND	ND	ND	ND	ND	N/A	ND	ND	955	0.0137
4/16/12	ND	ND	N/A	ND	260	ND	48	ND	200	ND	ND	ND	ND	ND	ND	640	34	ND	ND	ND	ND	ND	N/A	ND	ND	1,182	0.0168
5/9/12	ND	ND	N/A	ND	140	ND	26	ND	140	ND	ND	ND	ND	ND	ND	76	14	ND	ND	ND	ND	ND	N/A	ND	ND	396	0.0057
6/4/12	ND	ND	N/A	ND	170	ND	35	ND	170	ND	ND	ND	ND	ND	ND	120	63	ND	ND	ND	ND	ND	N/A	ND	ND	558	0.0080
7/5/12	ND	ND	N/A	ND	320	ND	74	ND	260	ND	19	ND	ND	ND	ND	210	26	12	ND	ND	ND	ND	N/A	ND	ND	921	0.0134
8/15/12	ND	ND	N/A	ND	240	ND	40	ND	130	ND	ND	ND	ND	10	ND	420	20	13	ND	ND	ND	ND	N/A	ND	ND	873	0.0129
9/12/12	ND	ND	N/A	ND	180	ND	43	ND	140	ND	ND	ND	ND	14	ND	34	13	13	ND	ND	ND	ND	N/A	ND	ND	437	0.0065
10/18/12	ND	ND	N/A	ND	160	ND	29	ND	95	ND	ND	ND	ND	ND	ND	25	28	ND	ND	ND	ND	ND	N/A	ND	ND	337	0.0048
11/13/12	ND	ND	N/A	ND	89	ND	16	ND	94	ND	ND	ND	ND	ND	ND	20	21	ND	ND	ND	ND	ND	N/A	ND	ND	240	0.0035
12/6/12	ND	ND	N/A	ND	86	ND	14	ND	92	ND	ND	ND	ND	ND	ND	26	20	ND	ND	ND	ND	ND	N/A	ND	ND	238	0.0034
1/4/13	ND	ND	N/A	ND	97	ND	21	ND	130	ND	ND	ND	ND	ND	ND	88	15	ND	ND	ND	ND	ND	N/A	ND	ND	351	0.0050
2/6/13	ND	ND	N/A	ND	120	ND	32	ND	120	ND	ND	ND	ND	ND	ND	180	19	ND	ND	ND	ND	ND	N/A	ND	ND	471	0.0068
3/7/13	ND	ND	N/A	ND	180	ND	46	ND	150	ND	ND	ND	ND	ND	ND	150	37	ND	ND	ND	ND	ND	N/A	ND	ND	563	0.0081
4/8/13	ND	ND	N/A	ND	66	ND	15	ND	46	ND	ND	ND	ND	ND	ND	43	92	ND	ND	ND	ND	ND	N/A	ND	ND	262	0.0035
5/10/13	ND	ND	N/A	ND	380	ND	73	ND	210	ND	ND	ND	ND	ND	ND	170	31	16	ND	ND	ND	ND	N/A	ND	ND	880	0.0119
6/5/13	ND	ND	N/A	ND	210	ND	33	ND	160	ND	ND	ND	23	ND	ND	460	15	ND	ND	ND	ND	ND	N/A	ND	ND	901	0.0126

TABLE 2

Building A Mid-GAC Concentrations (µg/m^3)

LABORATORY DATA SUMMARY

SSD System OM&M, Middle River Complex, Middle River, Maryland

Samples analyzed by EPA Method TO-15

Date	benzene	carbon tetrachloride	chlorodifluoromethane	chloroform	cis-1,2-dichloroethene	dichlorodifluoromethane	1,1-dichloroethane	1,2-dichloroethane	1,1-dichloroethene	ethylbenzene	methylene chloride	naphthalene	tetrachloroethene	toluene	trans-1,2-dichloroethene	1,1,1,-trichloroethane	trichloroethene	trichlorofluoromethane	1,2,3-trimethylbenzene	1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	vinyl chloride	total xylenes	m-xylene & p-xylene	o-xylene	Total VOCs	Mass (lbs./day)
7/3/13	21	ND	N/A	ND	330	ND	78	ND	200	ND	ND	ND	ND	ND	ND	38	42	ND	ND	ND	ND	ND	N/A	ND	ND	709	0.0101
8/14/13	50	ND	N/A	ND	390	ND	59	ND	120	ND	20	ND	ND	7.3	ND	63	66	11	ND	ND	ND	ND	N/A	ND	ND	786	0.0113
9/9/13	17	ND	N/A	ND	180	ND	23	ND	110	ND	ND	ND	ND	ND	ND	50	21	ND	ND	ND	ND	ND	N/A	ND	ND	401	0.0058
10/10/13	29	ND	N/A	ND	190	ND	33	ND	120	ND	ND	ND	ND	9.9	ND	170	32	ND	ND	ND	ND	ND	N/A	ND	ND	584	0.0084
11/7/13	38	ND	N/A	ND	260	ND	48	ND	95	ND	ND	ND	ND	ND	ND	38	39	ND	ND	ND	ND	ND	N/A	ND	ND	518	0.0075
12/5/13	31.8	ND	ND	ND	107	2.9	18.8	ND	51.6	ND	6.0	5.9	ND	4.7	ND	34.1	43.5	N/A	ND	3.2	ND	ND	N/A	ND	ND	310	0.0045
1/13/14	ND	ND	3.9	1.6	162	2.2	22.4	ND	113.0	1.9	2.3	4.7	42.1	64.0	ND	19.3	4.9	N/A	ND	3.7	1.7	ND	N/A	7.4	2.5	460	0.0066
2/14/14	55.1	ND	3.1	3.1	189	2.8	31.0	ND	166	ND	ND	ND	ND	ND	2.5	64.8	54.9	N/A	ND	ND	ND	ND	N/A	ND	ND	572	0.0079
3/12/14	24.5	ND	4.5	ND	154	2.2	24.5	ND	134	ND	28.1	ND	ND	3.4	ND	38.5	47.5	N/A	ND	ND	ND	ND	N/A	ND	ND	461	0.0066
4/10/14	40.8	ND	ND	ND	270	ND	51.4	ND	267	66.2	ND	ND	ND	45.2	ND	65.6	74.8	N/A	ND	ND	ND	ND	N/A	215	59.5	1,156	0.0166
5/5/14	53.4	ND	1.4	10.5	406	3.1	63.8	ND	253	ND	0.96 J	3.6 J	ND	3.0	5.7	47.8	48.9	N/A	ND	ND	ND	ND	N/A	0.94 J	ND	902	0.0122
6/5/14	2.3	ND	9.6	ND	113	3.0	14.3	ND	165	ND	167	1.8 J	23.1	60.4	ND	63.5	24.5	N/A	ND	1.9	ND	ND	N/A	1.8 J	1.9	653	0.0091
7/3/14	7.6 J	ND	ND	ND	286	ND	47.4	16.8	344	ND	ND	ND	ND	11.7 J	ND	178	25.4	N/A	ND	ND	ND	ND	N/A	ND	ND	917	0.0130
9/16/14	ND	ND	1.9	3.6	294	3.0	53.9	ND	179	0.40 J	ND	ND	0.88 J	4.6	ND	76	43.6	N/A	ND	2.4	0.71 J	ND	N/A	1.2 J	ND	665	0.0090
10/9/14	ND	ND	ND	10.4	361	ND	57.5	ND	157	ND	ND	ND	ND	4.4 J	4.7 J	130	17.9	N/A	ND	ND	ND	ND	N/A	ND	ND	743	0.0102
11/6/14	ND	ND	ND	ND	172	ND	25.7	ND	62.2	ND	9.7 J	ND	16.7	6.1 J	3.7 J	98.6	26.2	N/A	ND	ND	ND	ND	N/A	ND	ND	421	0.0051
12/4/14	1.0	ND	ND	7.0	111	3.0	17.3	ND	45.7	ND	3.5 J	4.0 J	5.8	3.1	2.2 J	109.0	25.2	N/A	ND	ND	ND	ND	N/A	ND	ND	338	0.0036
1/15/15	5.9	ND	ND	ND	7.7 J	30.6	ND	ND	5.2 J	ND	ND	ND	10.4	10.9	ND	54.3	49.0	N/A	ND	8.2 J	ND	ND	N/A	6.8 J	7.5 J	197	0.0009
2/9/15	6.5	ND	ND	1.5	18.7	ND	3.1	ND	15.9	ND	ND	ND	ND	0.70 J	ND	17.1	2.6	N/A	ND	ND	ND	ND	N/A	ND	ND	66	0.0003
3/10/15	21.5	ND	2.8	6.9	73.5	2.3	13.1	ND	70.1	ND	ND	3.1 J	ND	2.0	0.79 J	97.3	87.9	N/A	ND	ND	ND	ND	N/A	1.8 J	ND	383	0.0038
4/6/15	29.7	ND	3.1	14.1	173	3.0	27.5	ND	194	ND	ND	3.3 J	ND	4.6	ND	133	102	N/A	ND	1.3 J	ND	0.41 J	N/A	ND	ND	689	0.0071
5/8/15	13.4	ND	ND	17.0	216	ND	37.5	ND	193	ND	ND	ND	ND	ND	ND	96.2	63.3	N/A	ND	ND	ND	ND	N/A	ND	ND	636	0.0063
6/2/15	44.7	ND	3.0	15.9	238	ND	36.1	10.4	128	7.4	3.9 J	4.6	ND	2.7	3.9	179	74.1	N/A	ND	0.99 J	ND	ND	N/A	32.9	8.5	794	0.0089
7/1/15	3.9	ND	1.5	7.7	140	ND	21.0	ND	74	ND	ND	ND	ND	3.0	2.1	260	43.0	N/A	ND	ND	ND	ND	ND	N/A	N/A	556	0.0040
8/10/15	3.7	ND	ND	7.3	150	2.4	28.0	ND	90	ND	ND	ND	ND	8.4	2.8	180	54.0	N/A	ND	ND	ND	ND	ND	N/A	N/A	527	0.0066
9/11/15	2.2	ND	1.9	10	300	2.8	41	0.66 J	140	ND	5.2	ND	ND	3.3	5.1	390	120	N/A	ND	1.3 J	ND	0.48 J	1.3 J	N/A	N/A	1,025	0.0129
10/7/15	1.5	ND	1.8	8.6	220	2.0	33	ND	98	ND	2.8 J	ND	ND	3.6	3.5	310	71	N/A	ND	ND	3.3	ND	ND	N/A	N/A	759	0.0099
11/2/15	0.58 J	ND	3.0	8.4	210	3.3	33	ND	98	ND	2.9 J	ND	ND	ND	3.0	330	30	N/A	ND	ND	ND	0.45 J	ND	N/A	N/A	723	0.0094
12/3/15	ND	ND	1.5	4.8	110	2.2	20	ND	65	ND	2.3 J	ND	ND	ND	1.4 J	97	4.5	N/A	ND	ND	ND	ND	ND	N/A	N/A	309	0.0040
1/15/16	0.58 J	ND	1.9	4.1	110	2.1	25	ND	95	ND	4.0	ND	ND	3.8	1.6	180	31	N/A	ND	ND	ND	ND	ND	N/A	N/A	459	0.0058
2/12/16	ND	ND	2.5	2.2	62	2.6	15	ND	58	ND	3.6	ND	ND	ND	1.0 J	160 B	28	N/A	ND	ND	ND	ND	ND	N/A	N/A	335	0.0042
3/9/16	0.61 J	ND	6.5	3.0	130	2.0	25	ND	100	ND	2.5 J	ND	ND	4.0	1.9	120	3.8	N/A	ND	ND	ND	ND	ND	N/A	N/A	399	0.0047
4/7/16	ND	ND	ND	ND	650	ND	90	ND	290	ND	ND	ND	ND	ND	ND	2,700	530	N/A	ND	ND	ND	ND	ND	N/A	N/A	4,260	0.1103
4/27/16	14	ND	1.8	4.2	210	2.8	17	0.64 J	71	ND	ND	ND	ND	4.9	2.8	250	17	N/A	ND	ND	ND	0.50 J	ND	N/A	N/A	597	0.0134
5/12/16	13	ND	13	4.4 J	190	ND	17	ND	130	ND	17 J	ND	ND	ND	3.8 J	690 B	20	N/A	ND	ND	ND	ND	ND	N/A	N/A	1,098	0.0245
6/2/16	2.6	ND	85	1.1 J	64	2.4	5.6	ND	29	ND	2.2 J	ND	ND	3.1	1.0 J	34	1.6	N/A	ND	ND	ND	0.39 J	1.8 J	N/A	N/A	234	0.0054
7/14/16	3.5	ND	2.5	2.6	170	2.7	18	0.41 J	88	ND	47	ND	ND	5.1	2.8	170	1.7	N/A	ND	1.4 J	ND	ND	2.5 J	N/A	N/A	518	0.0117
8/4/16	2.1	ND	1.5	2.6	160	2.3	25	0.65 J	96	ND	2.3 J	ND	ND	2.6	240	14	N/A	1.7 J	7.5	1.7 J	ND	1.8 J	N/A	N/A	562	0.0131
9/7/16	5.8	0.58 J	1.6	2.8	160	2.8	22	1.1 J	77	ND	3.6	ND	1.7 J	ND	2.9	480 DL	1.1	N/A	ND	1.2 J	ND	0.40 J	1.8 J	N/A	N/A	766	0.0179
10/5/16	11	0.69 J	1.6	4.1	220	2.2	30	1.5 J	100	ND	2.8 J	ND	ND	3	3.5	890 DL	67	N/A	ND	ND	ND	ND	ND	N/A	N/A	1,337	0.0325
11/3/16	42	3.1	3.5	12.0	510 DL	2.9	390	6.3 J	350 E	1 J	13 J	ND	ND	5.6	7.8	4,300 DL	84	N/A	ND	0.8 J	ND	1.2	3.6	N/A	N/A	5,737	0.1114
12/14/16	ND	0.65 J	ND	1.6 J	170	2.6	26	1.0 J	140	ND	6.7	ND	ND	ND	2.8	850 E	110	N/A	ND	ND	ND	0.5 J	ND	N/A	N/A	1,312	0.0265
1/13/17	ND	ND	1.2 J	1.5 J	120	2.5	30	ND	160	ND	8.5	ND	ND	6.3	1.8	610 E	6	N/A	ND	ND	ND	1.2	1.2 J	N/A	N/A	950	0.0166
2/8/17	140	ND	1.1 J	0.7 J	36	1.0 J	9	ND	41	5.6	ND	ND	ND	13.0	0.7 J	190	3	N/A	2.9	6.8	2.4	ND	28	N/A	N/A	481	0.0086
3/8/17	ND	ND	1.3 J	0.7 J	37	2.7	11	ND	61	1.2 J	2.4 J	ND	ND	2.5	0.8 J	160	1 J	N/A	ND	2.3	ND	ND	7.5	N/A	N/A	291	0.0094
4/5/17	1.9	ND	1.0 J	0.5 J	27	2.1	5	ND	47	1.1 J	2.5 J	ND	ND	3.5	0.6 J	43	1 J	N/A	ND	1.7 J	0.8 J	ND	7.5	N/A	N/A	146	0.0046
5/5/17	2.2	ND	1.4 J	0.4 J	38	2.7	6	ND	47	0.7 J	2.6 J	ND	ND	3.2	0.9 J	22	0 J	N/A	ND	0.8 J	ND	ND	3.6	N/A	N/A	132	0.0043
6/5/17	1.2 J	ND	2.4	1.4 J	74	2.6	14	ND	63	ND	4.0 B	ND	ND	ND	1.4 J	100	2	N/A	ND	ND	ND	ND	1.8	N/A	N/A	267	0.0085
7/6/17	ND	ND	3.8	1.1 J	67	2.4	10	ND	76	1.1 B	3.3 J	ND	ND	4.8	1.3 J	57 B	1 J	N/A	ND	ND	ND	ND	3.4 J	N/A	N/A	232	0.0072
8/8/17	ND	ND	2.1	2.8	100	2.1	22	0.42 J	130	ND	9.2 B	ND	ND	ND	1.9	120	1	N/A	ND	ND	ND	0.39 J	ND	N/A	N/A	392	0.0123
9/7/17	1.9	ND	1.3 J	2.6	89	2.1	16	0.40 J	72	ND	13.0	ND	ND	2.9	1.8	180	1 J	N/A	ND	ND	ND	ND	ND	N/A	N/A	384	0.0119
10/4/17	0.89 J	ND	2.4 J	2.3 J	75	2.5 J	14	ND	77	ND	8.3	ND	ND	ND	1.7 J	280	1 J	N/A	ND	ND	ND	ND	ND	N/A	N/A	465	0.0146
11/8/17	1.2 J	ND	1.6	2.6	70	3.2	18	ND	59	ND	3.3 J	ND	ND	ND	1.3 J	310	ND	N/A	ND	ND	ND	ND	ND	N/A	N/A	470	0.0150
12/4/17	46	ND	1.4	3.9	95	1.8 J	28	0.57 J	100	0.89 J	2.7 J	ND	ND	4	1.6	740 EB	ND	N/A	ND	ND	ND	ND	2.2 J	N/A	N/A	1,028	0.0333
1/9/18	51	ND	1.6	1.9 J	61	2.0 J	13	ND	84	0.64 J	2.3 J	ND	ND	ND	1.2 J	320	ND	N/A	ND	ND	ND	ND	3.4 J	N/A	N/A	542	0.0175
2/9/18	ND	ND	45	3.0 J	110	3.5 J	26	ND	190	ND	14 J	ND	ND	ND	2.4 J	750	ND	N/A	ND	ND	ND	ND	11 J	N/A	N/A	1,155	0.0374
3/8/18	0.48 J	ND	1.2 J	1.3 J	77	2.5	12	ND	98	ND	3.1 J	ND	32	ND	1.5 J	230	ND	N/A	ND	ND	ND	ND	12 J	N/A	N/A	471	0.0152
4/3/18	0.40 J	0.7 J	1.2 J	2.4	130	2.5	21	1.1 J	120	ND	2.8 J	ND	ND	ND	2.4 J	700	0.6 J	N/A	ND	ND	ND	ND	13 J	N/A	N/A	998	0.0323
5/8/18	0.93 J	ND	2.1	0.9 J	77	2.9	6	0.44 J	59	ND	3.0 J	ND	1 J	9	1.6 J	90	1.5 J	N/A	ND	ND	ND	ND	0.6 J	N/A	N/A	256	0.0081
6/5/18	0.53 J	ND	1.9	2.6	130	2.4	23	ND	150	ND	2.8 J	ND	ND	ND	2.5	320	9.7	N/A	ND	ND	ND	0.48 J	1.6 J	N/A	N/A	647	0.0186
7/12/18	0.43 J	ND	3.4	2.6	74	1.9 J	10	ND	80	ND	39.0	ND	3	1.8	85 B	4.7	N/A	ND	ND	ND	ND	0.39 J	0.6 J	N/A	N/A	307	0.0080
8/17/18	0.45 J	ND	2.9	10.0	120	3.2	26	0.94 J	120	ND	2.7 J	ND	ND	ND	2.6	180	8.6	N/A	ND	ND	ND	ND	2.0 J	N/A	N/A	479	0.0129

TABLE 2

Building A Mid-GAC Concentrations (µg/m^3)

LABORATORY DATA SUMMARY

SSD System OM&M, Middle River Complex, Middle River, Maryland

Samples analyzed by EPA Method TO-15

Date	benzene	carbon tetrachloride	chlorodifluoromethane	chloroform	cis-1,2-dichloroethene	dichlorodifluoromethane	1,1-dichloroethane	1,2-dichloroethane	1,1-dichloroethene	ethylbenzene	methylene chloride	naphthalene	tetrachloroethene	toluene	trans-1,2-dichloroethene	1,1,1,-trichloroethane	trichloroethene	trichlorofluoromethane	1,2,3-trimethylbenzene	1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	vinyl chloride	total xylenes	m-xylene & p-xylene	o-xylene	Total VOCs	Mass (lbs./day)
9/11/18	0.45 J	ND	3.3	24.0	160	2.8	45	1.3 J	150	ND	3.9 B	ND	ND	3	3.1	500 EB	28	N/A	ND	ND	ND	ND	1.2 J	N/A	N/A	926	0.0287
10/19/18	0.56 J	ND	1.5	5.8	100	2.7	26	ND	86	ND	5.3	ND	ND	ND	2.1	160 B	1.0	N/A	ND	ND	ND	ND	ND	N/A	N/A	391	0.0119
11/14/18	ND	ND	1.2 J	5.5	65	2.2	14	ND	49	ND	2.5 J	ND	ND	ND	1.3 J	130	ND	N/A	ND	ND	ND	ND	ND	N/A	N/A	271	0.0086
12/28/18	0.7 J	ND	1.4 J	7.4	73	2.6	16	0.48 J	84	ND	5.8 JB	ND	ND	ND	1.4 J	170	ND	N/A	ND	ND	ND	ND	ND	N/A	N/A	363	0.0117
1/22/19	ND	ND	1.8 CI	5.7	60	1.6 J	14	ND	77	ND	2.6 J	ND	ND	ND	1.2 J	200	ND	N/A	ND	ND	ND	ND	ND	N/A	N/A	364	0.0108
2/7/19	ND	ND	1.5	3.2	40	1.2 J	8.2	ND	54	ND	4.1 J	ND	ND	ND	0.9 J	91	1.6	N/A	ND	ND	ND	ND	ND	N/A	N/A	206	0.0060
3/13/19	0.54 J	ND	2.2 CI	2.6	43	1.5 J	8.1	ND	63	ND	2.4 J	ND	ND	ND	1.1 J	80	ND	N/A	ND	ND	ND	ND	ND	N/A	N/A	204	0.0066
4/11/19	0.42 J	ND	1.1 J	3.6	74	1.5 J	14	ND	110	ND	3.2 J	ND	ND	ND	2.0	130	ND	N/A	ND	ND	ND	0.51	0.56 J	N/A	N/A	341	0.0104
5/14/19	1.8	ND	1.4	3.8	100	2.4	17	0.65 J	78	ND	3.4 J	ND	ND	2.2	2.0	280	ND	N/A	ND	ND	ND	ND	ND	N/A	N/A	493	0.0155
6/10/19	0.84 J	0.24 J	10	3.4	77	2.7	13	0.92 J	59	ND	4.6 J	ND	ND	ND	1.4 J	470 E	1.3	N/A	ND	ND	ND	ND	ND	N/A	N/A	644	0.0188
7/11/19	55	0.44 J	1.8	2.6	67	3.0	13	0.77 J	65	0.54 J	6.5 J	ND	2.3 J	7.3	1.5 J	420	3.9	N/A	ND	ND	ND	ND	2.3 J	N/A	N/A	653	0.0205
8/8/19	27	0.33 J	1.9	2.6	80	2.7	15	0.71 J	70	0.54 J	4.4 JB	ND	ND	2.6	1.7	480 E	0.4 J	N/A	ND	ND	ND	ND	2.4 J	N/A	N/A	692	0.0196
9/23/19	1.9	0.31 J	1.7	2.0	130	1.8 J	15	0.56 J	86	ND	5.5 JB	ND	ND	ND	1.6	460 E	10	N/A	ND	ND	ND	ND	ND	N/A	N/A	716	0.0203
10/4/19	3.3	ND	0.83 J	1.1 J	49	2.1 J	9.1	0.79 J	68	ND	9.5 JB	ND	ND	3.3 J	1.4 J	360	20	N/A	ND	ND	ND	ND	ND	N/A	N/A	528	0.0150
11/12/19	0.48 J	ND	1.00 J	3.0	63	2.0	15.0	0.40 J	58	ND	17.0 B	ND	ND	ND	1.3 J	120	1.4	N/A	ND	ND	ND	ND	ND	N/A	N/A	283	0.0080
12/11/19	0.46 J	ND	0.85 J	1.2 J	39	2.0	6.1	ND	39	ND	5.4 JB	ND	ND	ND	0.82 J	57	ND	N/A	ND	ND	ND	ND	ND	N/A	N/A	152	0.0043
1/7/20	0.56 J	ND	2.5	1.6 J	53	2.9	9.1	0.21 J	59	ND	3.1 J	ND	ND	ND	1.1 J	79	ND	N/A	ND	ND	ND	ND	ND	N/A	N/A	212	0.0060
3/13/20	26	0.35 J	ND	1.0 J	34	2.4	6.6	0.23 J	59	0.45 J	41	ND	ND	4.4	0.83 J	56	1.5	N/A	ND	ND	ND	ND	2.0 J	N/A	N/A	236	0.0061
4/14/20	0.66 J	ND	1.4 J	1.4 J	52	1.2 J	12.0	ND	83	ND	2.8 J	ND	ND	ND	1.6	86	0.30 J	N/A	ND	ND	ND	ND	1.2 J	N/A	N/A	244	0.0063
5/13/20	2.2	ND	1.6	2.0	69	2.1	15	0.42 J	98	ND	2.8 J	ND	ND	ND	1.6	140	1.2	N/A	ND	ND	ND	0.34 J*	ND	N/A	N/A	336	0.0088
6/25/20	6.6	ND	1.3 J	2.8	110	1.5 J	17	0.55 J	81	ND	19 B	ND	ND	1.6 J	2.2	350	9.0	N/A	ND	ND	ND	ND *	ND	N/A	N/A	603	0.0114
7/23/20	5.4	ND	3.1	3.7	120	3.6	20	0.93 J	86	0.30 J	19	ND	2.6 J	1.5 J	2.3	670 E	1.3	N/A	ND	ND	ND	0.38 J	1.3 J	N/A	N/A	941	0.0228
8/18/20	2.6	0.68 J	3.0	5.8	130	2.8	27	1.5 J	100	ND	ND	ND	ND	1.5 J	2.3	1,500 E	1.1	N/A	ND	ND	ND	ND	ND	N/A	N/A	1,778	0.0320
9/28/20	0.80 J	0.44 J	0.70 J	0.92 J	11	1.7 J	1.4 J	0.45 J	6.2	0.29 J	ND	ND	ND	1.7 J	0.14 J	110	24	N/A	ND	ND	ND	ND	0.83 J	N/A	N/A	161	0.0046

Notes:

µg/m^3 - micrograms per cubic meter
B - compound was found in the blank and sample
DL - dilution analysis
E - results exceeded calibration range
EPA - United States Environmental Protection Agency
GAC - granular activated-carbon
J - result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value
lbs./day - pounds per day
N/A - not applicable (samples not analyzed for compound)
ND - non-detect (below detection limit)
OM&M - operation, maintenance, and monitoring
CL - result suspected to be biased high due to chromatographic interference
scfm - standard cubic feet per minute
SSD - sub-slab depressurization
TO-15 - Toxic Organic Method 15
VOCs - volatile organic compounds
* - LCS or LCSD is outside acceptance limits

Samples not collected in May 2014 and August 2014 as system was shut down due to firewater line break.
Samples analyzed from 4/2/08 to 11/7/13 and from 7/1/15 to present analyzed by TestAmerica, Inc. of Knoxville, TN.
Samples analyzed from 12/5/13 to 6/2/15 analyzed by Pace Analytical Services, Inc. of Minneapolis, MN.

TABLE 3

Building A Effluent Concentrations (µg/m^3)

LABORATORY DATA SUMMARY

SSD System OM&M, Middle River Complex, Middle River, Maryland

Samples analyzed by EPA Method TO-15

Date	benzene	carbon tetrachloride	chlorodifluoromethane	chloroform	cis-1,2-dichloroethene	dichlorodifluoromethane	1,1-dichloroethane	1,2-dichloroethane	1,1-dichloroethene	ethylbenzene	methylene chloride	naphthalene	tetrachloroethene	toluene	trans-1,2-dichloroethene	1,1,1,-trichloroethane	trichloroethene	trichlorofluoromethane	1,2,3-trimethylbenzene	1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	vinyl chloride	total xylenes	m-xylene & p-xylene	o-xylene	Total VOCs	Mass (lbs./day)
3/31/08	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	ND	N/A	ND	ND	0.0	0.000
4/2/08	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	ND	N/A	ND	ND	0.0	0.000
4/4/08	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	110	N/A	ND	ND	110	0.001
4/11/08	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	ND	N/A	ND	ND	0.0	0.000
4/17/08	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	ND	N/A	ND	ND	0.0	0.000
4/24/08	ND	ND	N/A	ND	30	ND	13	ND	470	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	ND	N/A	ND	ND	513	0.004
5/21/08	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	ND	N/A	ND	ND	0.00	0.000
6/19/08	76	ND	N/A	ND	67	ND	65	ND	2,200	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	ND	N/A	ND	ND	2,408	0.015
8/1/08	ND	ND	N/A	ND	14	ND	15	ND	300	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	ND	N/A	ND	ND	329	0.005
8/12/08	ND	ND	N/A	ND	55	ND	42	ND	310	ND	19	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	ND	N/A	ND	ND	426	0.005
9/11/08	ND	ND	N/A	ND	ND	ND	ND	ND	46	ND	18	ND	ND	ND	ND	11	ND	ND	N/A	ND	ND	ND	N/A	ND	ND	75	0.001
11/18/08	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	61	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	ND	N/A	ND	ND	61	0.000
12/18/08	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	ND	N/A	ND	ND	0.0	0.000
1/22/09	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	ND	N/A	ND	ND	0.0	0.000
2/20/09	ND	ND	N/A	ND	10	ND	ND	ND	110	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	ND	N/A	ND	ND	120	0.000
3/18/09	ND	ND	N/A	ND	ND	ND	ND	ND	14	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	ND	N/A	ND	ND	14	0.000
4/17/09	ND	ND	N/A	ND	64	ND	20	ND	53	ND	ND	ND	ND	ND	ND	26	ND	ND	N/A	ND	ND	ND	N/A	ND	ND	163	0.001
5/20/09	ND	ND	N/A	ND	9.9	ND	ND	ND	46	ND	ND	ND	ND	ND	ND	38	ND	ND	N/A	ND	ND	ND	N/A	ND	ND	94	0.000
6/23/09	ND	ND	N/A	ND	11.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	44	ND	ND	N/A	ND	ND	ND	N/A	ND	ND	55	0.000
7/23/09	ND	ND	N/A	ND	ND	ND	21	ND	190	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	ND	N/A	ND	ND	211	0.002
8/28/09	ND	ND	N/A	ND	52	ND	29	ND	46	ND	ND	ND	ND	7.7	ND	250	ND	ND	N/A	ND	ND	ND	N/A	ND	ND	385	0.003
9/28/09	ND	ND	N/A	ND	27	ND	19	ND	100	ND	ND	ND	ND	ND	ND	93	ND	ND	N/A	ND	ND	ND	N/A	ND	ND	239	0.002
10/27/09	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	40	ND	24	ND	ND	N/A	ND	ND	ND	N/A	ND	ND	64	0.001
11/24/09	ND	ND	N/A	ND	ND	ND	ND	ND	53	ND	ND	ND	ND	ND	ND	21	ND	ND	N/A	ND	ND	ND	N/A	ND	ND	74	0.001
12/23/09	ND	ND	N/A	ND	21	ND	10	ND	11	ND	ND	ND	ND	8.8	ND	190	16	ND	N/A	ND	ND	ND	N/A	ND	ND	257	0.003
1/19/10	ND	ND	N/A	ND	27	ND	10	ND	18	ND	ND	ND	ND	ND	ND	200	ND	ND	N/A	ND	ND	ND	N/A	ND	ND	255	0.003
2/17/10	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	ND	N/A	ND	ND	0.0	0.000
3/17/10	ND	ND	N/A	ND	11	ND	ND	ND	20	ND	ND	ND	ND	ND	ND	17	11	ND	N/A	ND	ND	ND	N/A	ND	ND	59	0.001
4/16/10	ND	ND	N/A	ND	12	ND	9.4	ND	330	ND	ND	ND	ND	ND	ND	27	31	ND	N/A	ND	ND	ND	N/A	ND	ND	409	0.004
5/13/10	7.2	ND	N/A	ND	250	ND	57.0	ND	160	19	ND	ND	ND	58	ND	1,100	24	12	N/A	33	ND	ND	N/A	77	24	1,821	0.019
6/18/10	ND	ND	N/A	ND	ND	ND	ND	ND	90	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	62	13	ND	N/A	16	9.3	190	0.002
7/19/10	ND	ND	N/A	ND	8.7	ND	ND	ND	100	ND	ND	ND	ND	ND	ND	40	16	ND	N/A	ND	ND	ND	N/A	ND	ND	165	0.002
8/19/10	ND	ND	N/A	ND	90	ND	47	ND	270	ND	ND	ND	ND	ND	ND	41	ND	15	N/A	ND	ND	ND	N/A	ND	ND	463	0.005
9/17/10	ND	ND	N/A	ND	88	ND	39	ND	260	ND	ND	ND	ND	ND	ND	120	ND	ND	N/A	ND	ND	ND	N/A	ND	ND	507	0.000
10/12/10	ND	ND	N/A	ND	81	ND	10	ND	58	ND	ND	ND	ND	16	ND	360	30	17	N/A	ND	ND	ND	N/A	ND	ND	572	0.010
11/2/10	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	ND	N/A	ND	ND	0.0	0.000
12/1/10	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	14.0	ND	ND	N/A	ND	ND	ND	N/A	ND	ND	14	0.000
1/5/11	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	ND	N/A	ND	ND	0.0	0.000
2/7/11	ND	ND	N/A	ND	ND	ND	ND	ND	24	ND	ND	ND	ND	ND	ND	ND	14	21	N/A	ND	ND	ND	N/A	ND	ND	59	0.000
3/3/11	120	ND	N/A	ND	ND	ND	ND	ND	25	ND	ND	ND	ND	58	ND	ND	ND	19	N/A	ND	ND	ND	N/A	23	ND	245	0.000
4/14/11	ND	ND	N/A	ND	ND	ND	ND	ND	110	ND	23	ND	ND	55	ND	ND	ND	ND	N/A	ND	ND	ND	N/A	11	ND	199	0.000
5/6/11	ND	ND	N/A	ND	8.8	ND	ND	ND	170	ND	ND	ND	ND	ND	ND	21	19	ND	N/A	ND	ND	ND	N/A	ND	ND	219	0.000
6/9/11	ND	ND	N/A	ND	59.0	ND	91	ND	580	ND	ND	ND	ND	30	ND	34	ND	19	N/A	ND	ND	ND	N/A	ND	ND	813	0.010
7/11/11	ND	ND	N/A	ND	ND	ND	ND	ND	ND	13	21	ND	ND	100	ND	26	ND	ND	N/A	ND	ND	ND	N/A	43	17	220	0.000
8/3/11	ND	ND	N/A	ND	ND	ND	ND	ND	19	ND	ND	ND	ND	11	ND	20	ND	ND	N/A	ND	ND	ND	N/A	ND	ND	50	0.000
9/15/11	ND	ND	N/A	ND	100	ND	41	ND	150	ND	ND	ND	ND	ND	ND	12	ND	ND	N/A	ND	ND	ND	N/A	ND	ND	303	0.000
10/18/11	ND	ND	N/A	ND	130	ND	35	ND	77	ND	ND	ND	ND	25	ND	ND	ND	ND	N/A	ND	ND	ND	N/A	ND	ND	267	0.000
11/8/11	ND	ND	N/A	ND	150	ND	39	ND	95	ND	ND	ND	ND	ND	ND	15	ND	ND	N/A	ND	ND	ND	N/A	ND	ND	299	0.004
12/6/11	ND	ND	N/A	ND	150	ND	37	ND	110	ND	ND	ND	ND	ND	ND	16	ND	ND	N/A	ND	ND	ND	N/A	ND	ND	313	0.005
1/3/12	ND	ND	N/A	ND	56	ND	15	ND	67	ND	ND	ND	ND	ND	ND	20	11	ND	N/A	ND	ND	ND	N/A	ND	ND	169	0.003
2/16/12	ND	ND	N/A	ND	85	ND	24	ND	100	ND	ND	ND	ND	ND	ND	52	ND	ND	N/A	ND	ND	ND	N/A	ND	ND	261	0.004
3/15/12	ND	ND	N/A	ND	82	ND	19	ND	100	ND	ND	ND	ND	ND	ND	45	ND	ND	N/A	ND	ND	ND	N/A	ND	ND	246	0.004
4/16/12	ND	ND	N/A	ND	180	ND	44	ND	240	ND	ND	ND	ND	ND	ND	140	12	ND	N/A	ND	ND	ND	N/A	ND	ND	616	0.009
5/9/12	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	ND	N/A	ND	ND	0.0	0.000
6/4/12	ND	ND	N/A	ND	ND	ND	ND	ND	12	9.6	ND	ND	ND	9.1	ND	ND	18	ND	N/A	ND	ND	ND	N/A	42	12	103	0.001

TABLE 3

Building A Effluent Concentrations (µg/m^3)

LABORATORY DATA SUMMARY

SSD System OM&M, Middle River Complex, Middle River, Maryland

Samples analyzed by EPA Method TO-15

Date	benzene	carbon tetrachloride	chlorodifluoromethane	chloroform	cis-1,2-dichloroethene	dichlorodifluoromethane	1,1-dichloroethane	1,2-dichloroethane	1,1-dichloroethene	ethylbenzene	methylene chloride	naphthalene	tetrachloroethene	toluene	trans-1,2-dichloroethene	1,1,1,-trichloroethane	trichloroethene	trichlorofluoromethane	1,2,3-trimethylbenzene	1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	vinyl chloride	total xylenes	m-xylene & p-xylene	o-xylene	Total VOCs	Mass (lbs./day)
7/5/12	ND	ND	N/A	ND	ND	ND	ND	ND	87	ND	ND	ND	ND	26	ND	ND	ND	ND	N/A	ND	ND	ND	N/A	ND	ND	113	0.002
8/15/12	ND	ND	N/A	ND	130	ND	38	ND	210	ND	ND	ND	ND	8.7	ND	ND	ND	ND	N/A	ND	ND	ND	N/A	ND	ND	387	0.006
9/12/12	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	13	ND	ND	ND	ND	N/A	ND	ND	ND	N/A	ND	ND	13	0.000
10/18/12	ND	ND	N/A	ND	ND	ND	ND	ND	9.8	ND	ND	ND	ND	ND	ND	ND	13	ND	N/A	ND	ND	ND	N/A	ND	ND	23	0.000
11/13/12	ND	ND	N/A	ND	ND	ND	ND	ND	48	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	ND	N/A	ND	ND	48	0.001
12/6/12	ND	ND	N/A	ND	8.8	ND	ND	ND	63	ND	ND	ND	ND	ND	ND	ND	13	ND	N/A	ND	ND	ND	N/A	ND	ND	85	0.001
1/4/13	ND	ND	N/A	ND	33	ND	12	ND	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	ND	N/A	ND	ND	145	0.002
2/6/13	ND	ND	N/A	ND	77	ND	28	ND	150	ND	ND	ND	ND	ND	ND	ND	11	ND	N/A	ND	ND	ND	N/A	ND	ND	266	0.004
3/7/13	ND	ND	N/A	ND	130	ND	40	ND	140	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	ND	N/A	ND	ND	310	0.004
4/8/13	ND	ND	N/A	ND	56	ND	16	ND	55	ND	ND	ND	ND	ND	ND	ND	42	ND	N/A	ND	ND	ND	N/A	ND	ND	169	0.002
5/10/13	ND	ND	N/A	ND	180	ND	38	ND	190	ND	ND	ND	ND	ND	ND	12	16	ND	N/A	ND	ND	ND	N/A	ND	ND	436	0.006
6/5/13	ND	ND	N/A	ND	86	ND	21	ND	110	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	ND	N/A	ND	ND	217	0.003
7/3/13	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	ND	N/A	ND	ND	0.0	0.000
8/14/13	ND	ND	N/A	ND	8.2	ND	ND	ND	52	ND	17	ND	ND	ND	ND	ND	16	ND	N/A	ND	ND	ND	N/A	ND	ND	93	0.001
9/9/13	ND	ND	N/A	ND	15	ND	ND	ND	180	ND	ND	ND	ND	ND	ND	ND	ND	12	N/A	ND	ND	ND	N/A	ND	ND	207	0.003
10/10/13	ND	ND	N/A	ND	270	ND	66	ND	190	ND	ND	ND	ND	11	ND	ND	13	15	N/A	ND	ND	ND	N/A	ND	ND	565	0.008
11/7/13	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	ND	N/A	ND	ND	0.0	0.000
12/5/13	0.97	ND	856	ND	1.9	ND	3.0	ND	14.8	ND	105	ND	1.6	3.0	ND	ND	1.8	N/A	12	ND	ND	ND	N/A	ND	ND	1,000	0.014
1/13/14	1.7	ND	12.5	ND	6.4	2.3	5.9	ND	31.3	1.9	1.8	5.7	ND	22.2	ND	ND	ND	N/A	1.4	4.0	ND	ND	N/A	5.8	2.2	105	0.002
2/14/14	0.65	ND	1.7	ND	42.6	2.1	26	ND	111	ND	ND	ND	ND	4.0	ND	2.4	10	N/A	ND	ND	ND	ND	N/A	ND	ND	200	0.003
3/12/14	2.0	ND	13.3	ND	ND	2.3	ND	ND	ND	3.5	35.2	ND	2.6	36.5	ND	ND	1.2	N/A	ND	3.0	ND	ND	N/A	7.7	2.9	110	0.002
4/10/14	2.8	ND	ND	ND	82.9	ND	15.1	ND	97	49.4	48.3	ND	ND	64.9	ND	ND	62.1	N/A	ND	7.2	ND	ND	N/A	154	45.1	629	0.009
5/5/14	0.9	ND	1.4	ND	98.7	2.8	16.8	ND	139	ND	0.88 J	3.1 J	ND	2.5	1.8	1.4 J	ND	N/A	ND	ND	ND	ND	N/A	1.4 J	ND	271	0.004
6/5/14	2.3	ND	3.2	ND	2.9	3.4	ND	ND	ND	ND	19.6	2.6 J	21.9	3.1	ND	6.1	7.1	N/A	ND	2.0	ND	ND	N/A	1.7 J	1.9	78	0.001
7/3/14	5.0 J	ND J	3.5 J	ND	4.1 J	ND	ND	ND	8.6	6.8 J	ND	6.8 J	ND	7.2	ND	ND	ND	N/A	ND	7.3 J	6.5 J	ND	N/A	8.8 J	7.4 J	72	0.001
9/16/14	0.42 J	ND	ND	ND	6.5	3.3	3.5	ND	209	ND	1.4 J	4.5	0.89 J	58.2	ND	8.7	19.4	N/A	0.79 J	2.0	0.75 J	ND	N/A	1.2 J	0.86 J	321	0.004
10/9/14	1.7	ND	4.2	ND	75.9	ND	37.2	ND	409	ND	2.5 J	7.1 J	ND	4.4	2.6 J	8.5	7.2	N/A	ND	ND	ND	ND	N/A	ND	ND	560	0.008
11/6/14	1.3	ND	ND	ND	177	2.0	44.2	ND	151	ND	6.0	5.7	4.1	3.4	3.7	6.3	7.8	N/A	ND	ND	ND	0.5	N/A	5.3 J	3.2 J	422	0.005
12/4/14	1.2	ND	ND	ND	147	3.4	33.9	ND	71.1	ND	2.4 J	4.0 J	5.3 J	3.0	3.3	6.0	8.2	N/A	ND	ND	ND	ND	N/A	ND	3.5	292	0.003
1/15/15	1.9	ND	ND	3.9	161	7.4	30.1	ND	55.3	ND	1.9 J	1.2 J	1.7	2.2	2.1	10.0	10.0	N/A	ND	0.91 J	ND	ND	N/A	1.5 J	ND	291	0.001
2/9/15	1.0 J	ND	ND	3.8	123	ND	19.1	ND	47.8	ND	ND	ND	ND	0.93 J	1.8	5.9	ND	N/A	ND	ND	ND	ND	N/A	ND	ND	203	0.001
3/10/15	0.59	ND	2.1	8.0	195	1.6 J	27.9	ND	79.2	ND	0.59 J	ND	ND	0.74 J	ND	31.6	11.4	N/A	ND	ND	ND	ND	N/A	ND	ND	359	0.004
4/6/15	2.0	0.75 J	6.9	1.6	44.3	3.1	4.4	0.43 J	18.5	ND	161	ND	ND	19.5	ND	3.9	3.1	N/A	ND	1.2 J	ND	ND	N/A	2.1 J	0.96 J	274	0.003
5/8/15	1.4	ND	2.5	4.3	139	2.7 J	12.6	ND	87.6	4.6 J	4.6 J	4.2 J	13.3	12.3	ND	9.9	10.3	N/A	11.3	16.3	5.9 J	ND	N/A	9.2 J	4.00 J	356	0.004
6/2/15	4.5	ND	3.9	4.3	120	ND	12.6	0.77	130	3.7	5.1 J	4.4	ND	2.6	1.7	12.6	12.3	N/A	ND	1.0 J	ND	ND	N/A	16.1	4.40	340	0.004
7/1/15	ND	ND	1.6	5.4	94	2.0	17.0	ND	120	ND	ND	ND	ND	ND	1.7	14.0	7.7	N/A	ND	ND	ND	ND	ND	N/A	N/A	263	0.002
8/24/15	4.6	ND	2.0	ND	1.3 J	2.3	ND	ND	0.61 J	0.61 J	7.5	ND	0.66 J	3.7	ND	3.7	0.60 J	N/A	ND	0.80 J	ND	ND	2.8 J	N/A	N/A	31	0.000
9/11/15	3.8	ND	2.0	0.40 J	11	2.3	1.1 J	ND	4.7	ND	4.3	ND	ND	ND	ND	21	19	N/A	ND	0.95 J	ND	ND	ND	N/A	N/A	71	0.001
10/7/15	4.6	ND	2.1	ND	9.1	2.1	1.2 J	ND	30	ND	3.0 J	ND	ND	4.3	ND	18	16	N/A	ND	ND	3.7	ND	1.7 J	N/A	N/A	96	0.001
11/2/15	2.2	ND	3.2	ND	2.3	3.2	3.0	ND	80	0.60 J	3.9	ND	ND	ND	ND	1.9 J	1.1	N/A	ND	ND	ND	0.38 J	2.3 J	N/A	N/A	104	0.001
12/3/15	1.7	ND	4.9	0.43 J	12	2.3	6.2	ND	76	ND	5.0	ND	ND	2.6	ND	0.75 J	ND	N/A	ND	ND	ND	ND	ND	N/A	N/A	112	0.001
1/15/16	2.2	ND	2.0	1.5 J	37	2.3	14	ND	73	ND	2.4 J	ND	ND	2.9	0.96 J	6.3	8.4	N/A	ND	ND	ND	ND	ND	N/A	N/A	153	0.002
2/12/16	0.4 J	ND	1.6	3.5 J	74	3.9	24	ND	81	ND	ND	ND	ND	ND	1.8	10 B	15	N/A	ND	ND	1.0 J	ND	ND	N/A	N/A	216	0.003
3/9/16	1.8	ND	5.1	8.9	200	2.0	45	ND	130	ND	2.6 J	ND	ND	4.4	3.3	2.5	0.50 J	N/A	ND	ND	ND	ND	ND	N/A	N/A	406	0.005
4/7/16	ND	ND	ND	41 J	670	ND	230	ND	530	ND	ND	ND	ND	ND	ND	4,000	ND	N/A	ND	ND	ND	ND	ND	N/A	N/A	5,471	0.142
4/27/16	1.5	ND	1.9	ND	ND	2.5	0.40 J	ND	3.4	ND	ND	ND	0.64 J	ND	ND	3.7	0.45 J	N/A	ND	ND	ND	ND	ND	N/A	N/A	14	0.000
5/12/16	1.5 J	ND	18	7.5	140	3.7 J	44	ND	210	ND	17	ND	ND	6.3	ND	780 B	ND	N/A	ND	ND	ND	ND	ND	N/A	N/A	1,228	0.027
6/2/16	0.47 J	ND	13	0.61 J	46	ND	4.0	ND	8.1	0.66 J	ND	ND	ND	3.8	0.63 J	110	18	N/A	ND	ND	ND	ND	1.9 J	N/A	N/A	207	0.005
7/14/16	1.1 J	ND	2.3	1.1 J	73	3.1	12	ND	120	0.59 J	37	ND	ND	6.4	1.4 J	110	18	N/A	ND	1.5 J	ND	0.44 J	2.3 J	N/A	N/A	390	0.009
8/4/16	0.77 J	ND	1.8	2.3	150	3.4	23	ND	120	0.85 J	3.3 J	ND	3.2	2.9	2.7	95	22	N/A	4.1	18	3.8	ND	3 J	N/A	N/A	460	0.011
9/7/16	0.68 J	ND	1.6	3.5	200	2.6	35	ND	110	ND	4.8	ND	ND	ND	3.5	100	9.1	N/A	ND	1.1 J	ND	ND	ND	N/A	N/A	472	0.011
10/5/16	4.0	ND	1.7	3.4	77	2.1	40	ND	110	ND	3.5	ND	ND	ND	1.5 J	850	9.8	N/A	ND	ND	ND	ND	ND	N/A	N/A	1,103	0.027
11/3/16	ND	1.2 J	3.3	4.5	51	3.1	68	ND	120	ND	11	ND	ND	ND	ND	1600 DL	ND	N/A	ND	ND	ND	1.3	ND	N/A	N/A	1,863	0.036
12/14/16	ND	ND	1.4 J	1.4 J	89	2.7	25	ND	120	ND	4.1	ND	ND	ND	1.5 J	660 E	1.8	N/A	ND	ND	ND	0.46 J	ND	N/A	N/A	907	0.018

TABLE 3

Building A Effluent Concentrations (µg/m^3)

LABORATORY DATA SUMMARY

SSD System OM&M, Middle River Complex, Middle River, Maryland

Samples analyzed by EPA Method TO-15

Date	benzene	carbon tetrachloride	chlorodifluoromethane	chloroform	cis-1,2-dichloroethene	dichlorodifluoromethane	1,1-dichloroethane	1,2-dichloroethane	1,1-dichloroethene	ethylbenzene	methylene chloride	naphthalene	tetrachloroethene	toluene	trans-1,2-dichloroethene	1,1,1,-trichloroethane	trichloroethene	trichlorofluoromethane	1,2,3-trimethylbenzene	1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	vinyl chloride	total xylenes	m-xylene & p-xylene	o-xylene	Total VOCs	Mass (lbs./day)
1/13/17	ND	ND	N/A	N/A	N/A	N/A	N/A	ND	N/A	ND	5.2	ND	1 J	7.4	N/A	0.97 J	N/A	N/A	ND	ND	ND	N/A	2.3 J	N/A	N/A	17	0.000
2/8/17	0.39 J	ND	1.4	0.42	37	N/A	7	ND	N/A	0.67 J	2.3 J	ND	ND	2.5	N/A	75	18	N/A	ND	1.0 J	ND	N/A	3.2 J	N/A	N/A	149	0.003
3/8/17	ND	ND	1.3 J	0.84 J	33	N/A	15	ND	71	0.80 J	2.4 J	ND	ND	3.7	0.58 J	260	4.6	N/A	ND	ND	ND	0.42 J	4.8	N/A	N/A	398	0.013
4/5/17	ND	ND	1.3 J	0.96 J	63	N/A	5.5	ND	33	0.79 J	ND	ND	ND	3.0	0.88 J	150	27	N/A	ND	ND	ND	ND	4.8	N/A	N/A	290	0.009
5/5/17	0.37 J	ND	1.5	1.0 J	83	2.5	8.7	ND	49	1.00 J	2.4 J	ND	ND	2.9	1.2 J	180	36	N/A	ND	0.64 J	ND	ND	5.5	N/A	N/A	376	0.012
6/5/17	ND	ND	3.5	1.2 J	67	2.8	13	ND	90	0.66 J	2.9 JB	ND	ND	ND	1.3 J	150	26	N/A	ND	ND	ND	ND	2.1 J	N/A	N/A	360	0.012
7/6/17	0.44 J	ND	3.5	1.2 J	96	2.3	14	ND	78	1.3 J	3.7 JB	ND	0.79 J	5.3	1.9	180 B	150	N/A	ND	ND	ND	0.89	4.1	N/A	N/A	543	0.017
8/8/17	ND	ND	1.9	1.1 J	84	2.1	14	ND	95	ND	4.5 B	ND	ND	ND	1.7	110	16	N/A	ND	ND	ND	0.48 J	ND	N/A	N/A	331	0.010
9/7/17	0.93 J	ND	1.4	1.8 J	130	2.1	19	ND	110	0.81 J	15	ND	1.0 J	6.8	2.5	200	34	N/A	ND	1.0 J	ND	0.45 J	2.6	N/A	N/A	529	0.016
10/4/17	ND	ND	1.8	2.2	120	2.6	22	ND	100	ND	3.3 J	ND	ND	4.0	2.2	190	25	N/A	ND	0.71 J	ND	ND	2.9	N/A	N/A	477	0.015
11/8/17	22	ND	0.78 J	ND	23	ND	2.4	ND	8.1	ND	3.2 J	ND	ND	ND	ND	75	10	N/A	ND	ND	ND	ND	ND	N/A	N/A	144	0.005
12/4/17	11	ND	1.9	1.1 J	42	2.5	6.6	ND	25	0.85 J	2.5 J	ND	ND	ND	0.65 J	140 B	29	N/A	ND	ND	ND	0.38 J	1.2 J	N/A	N/A	265	0.009
1/9/18	2.1	1.0 J	1.8	1.9	25	2.4	15	ND	79	ND	3.0 J	ND	ND	ND	0.54 J	300	7.6	N/A	ND	ND	ND	ND	2.4 J	N/A	N/A	442	0.014
2/9/18	9.4	0.83 J	46	1.8 J	27	4.2	18	ND	110	1.4 J	5.2	ND	ND	8.1	0.65 J	220	1.4	N/A	ND	ND	ND	0.40 J	7.2	N/A	N/A	462	0.015
3/8/18	5.0	0.49 J	1.2	1.3 J	33	2.2	10	ND	81	ND	2.5 J	ND	3.3	ND	0.78 J	120	8.5	N/A	ND	ND	ND	ND	ND	N/A	N/A	269	0.009
4/3/18	5.2	1.2 J	1.3 J	2.6	73	2.9	25	ND	140	ND	3.0 J	ND	ND	3	1.50 J	470 E	1.6	N/A	ND	ND	ND	ND	ND	N/A	N/A	730	0.024
5/8/18	11	ND	1.6 J	1.2	63	2.9	8	ND	59	1.0 J	2.5 J	ND	1 J	25	1.40 J	89	12.0	N/A	ND	1.0 J	ND	ND	6.0	N/A	N/A	285	0.009
6/5/18	0.7 J	ND	ND	1.5 J	81	2.6	11	ND	85	ND	4.7	ND	3	ND	1.60	140	13.0	N/A	ND	ND	ND	0.44 J	ND	N/A	N/A	344	0.010
7/12/18	11	ND	5.1	1.6 J	120	1.6 J	10	ND	82	ND	8.7	ND	ND	5.3	2.40	150 B	71.0	N/A	ND	2.2	ND	0.43 J	3.0	N/A	N/A	474	0.012
8/17/18	11	ND	3.0	2.1	150	3.5	17	0.5 J	130	1.4 J	3.2 J	ND	ND	12	2.80	200	62.0	N/A	ND	ND	ND	ND	6.6	N/A	N/A	605	0.016
9/11/18	5.3	ND	3.9	2.9	150	3.2	25	0.7 J	150	1.3 J	3.5 B	ND	ND	6.8	2.90	190 B	40.0	N/A	0.93 J	8.8	2.3	ND	3.2	N/A	N/A	601	0.019
10/19/18	1.1 J	ND	0.56 J	ND	11	ND	1.0 J	ND	3.6	ND	6.5	ND	ND	ND	ND	25 B	12.0	N/A	ND	0.77 J	ND	ND	ND	N/A	N/A	62	0.002
11/9/18	1.1 J	ND	1.3 J	ND	8.1	2.7	0.8 J	ND	4.4	ND	11.0	ND	ND	3.2	ND	16	9.5	N/A	ND	1.5 J	ND	ND	ND	N/A	N/A	60	0.002
12/28/18	1.5	ND	1.3 J	2.5	18	2.3	11	ND	58	ND	4.9 JB	ND	1.9 J	ND	0.47 J	54	15.0	N/A	ND	ND	ND	ND	ND	N/A	N/A	171	0.006
1/21/19	1.1 J	ND	1.8 CI	3.8	23	1.6 J	14	ND	64	ND	3.2 J	ND	ND	ND	0.72 J	110	5.5	N/A	ND	ND	ND	ND	ND	N/A	N/A	229	0.007
2/7/19	1.0 J	ND	1.9	3.7	31	1.2 J	13	ND	64	ND	5.2 J	ND	ND	ND	0.83 J	110	5.2	N/A	ND	ND	ND	ND	ND	N/A	N/A	237	0.007
3/13/19	0.78 J	ND	1.8	2.0	23	1.3 J	6.0	ND	39	ND	2.3 J	ND	ND	ND	0.63 J	39	1.3	N/A	ND	ND	ND	ND	ND	N/A	N/A	117	0.004
4/11/19	0.83 J	ND	1.6	2.2	34	2.2	6.5	ND	50	ND	5.9 J	ND	ND	4.6	ND	25	12.0	N/A	ND	ND	ND	ND	2.9 J	N/A	N/A	148	0.005
5/14/19	2.8	ND	1.3 J	0.5 J	6.6	2.5	1.2 J	ND	11	ND	12	ND	ND	3.1	ND	6.7	5.3	N/A	ND	ND	ND	ND	ND	N/A	N/A	53	0.002
6/10/19	3.6	ND	2.1	2.6	50	2.3	8.7	ND	77	0.42 J	3.5 J	ND	ND	4.7	1.2 J	30	6.4	N/A	ND	0.54 J	ND	ND	2.3 J	N/A	N/A	195	0.006
7/11/19	4.3	ND	1.9	4.7	120	3.0	20	0.33 J	99	0.71 J	10	ND	0.27 J	5.2	2.5	110	51	N/A	ND	1.1 J	ND	ND	5.0	N/A	N/A	439	0.014
8/8/19	6.5	ND	2.5	4.8	140	3.0	22	0.40 J	100	0.40 J	6.6 JB	ND	ND	ND	2.9	120	44	N/A	ND	ND	ND	ND	1.8 J	N/A	N/A	455	0.013
9/23/19	4.7	ND	1.3 J	4.2	160	1.3 J	21	0.40 J	120	0.53 J	8.3 B	ND	0.41 J	2.1 J	3.0	140	65	N/A	ND	1.1 J	ND	0.37 J	4.1	N/A	N/A	538	0.015
10/4/19	2.0	ND	0.92 J	2.7	100	1.3 J	13	0.51 J	69	0.36 J	6.4 JB	ND	ND	1.7 J	1.9	120	33	N/A	ND	0.58 J	ND	ND	1.5 J	N/A	N/A	355	0.010
11/12/19	1.0 J	0.37 J	1.7	2.7	6.4	2.4	1.1 J	ND	3.8	ND	6.3 JB	ND	ND	2.1 J	ND	24	7.4	N/A	ND	ND	ND	0.42 J	ND	N/A	N/A	60	0.002
12/11/19	0.54 J	ND	0.99 J	ND	6.7	1.7 J	1.2 J	ND	13	ND	5.5 JB	ND	ND	2.3	ND	17	7.2	N/A	ND	ND	ND	ND	0.69 J	N/A	N/A	57	0.002
1/7/20	0.45 J	ND	2.6	0.23 J	8.1	2.9	2.1	ND	23	ND	4.6 J	ND	ND	3.1	0.17 J	16	7.2	N/A	ND	ND	ND	ND	0.83 J	N/A	N/A	71	0.002
3/13/20	0.90 J	ND	1.3 J	0.52 J	22	2.5	4.7	ND	60	0.42 J	3.7 J	ND	ND	6.9	0.56 J	32	18	N/A	ND	0.57 J	ND	0.34 J	2.4 J	N/A	N/A	157	0.004
4/14/20	0.69 J	ND	1.5	0.47 J	23	1.3 J	5.6	ND	64	0.29 J	ND	ND	1.10 J	4.3	0.62 J	24	12	N/A	ND	ND	ND	0.47 J	1.6 J	N/A	N/A	141	0.004
5/13/20	0.55 J	ND	1.7	0.98 J	36	2.3	8.8	ND	110	ND	3.0 J	ND	ND	4.4	0.92 J	30	11	N/A	ND	ND	ND	0.36 J*	0.83 J	N/A	N/A	211	0.005
6/25/20	2.3	ND	ND	1.4 J	86	1.6 J	15	ND	120	ND	19 B	3.8	ND	3.6	1.9	48	26	N/A	ND	ND	ND	ND *	1.2 J	N/A	N/A	330	0.006
7/23/20	0.52 J	ND	2.9	2.0	97	3.0	23	ND	140	1.1 J	22	ND	1.3 J	1.5 J	2.1	56	14	N/A	ND	ND	ND	ND	0.74 J	N/A	N/A	367	0.009
8/18/20	0.49 J	ND	3.1	3.2	140	2.3	37	ND	130	0.33 J	ND	ND	ND	6.4	3.3	71	21	N/A	ND	0.65 J	ND	ND	2.0 J	N/A	N/A	421	0.008
9/28/20	0.46 J	0.50 J	0.92 J	6.0	140	1.8 J	28	ND	88	0.48 J	ND	ND	ND	7.0	2.9	1600 E	25	N/A	ND	0.55 J	ND	ND	2.4 J	N/A	N/A	1,904	0.055

Notes:

µg/m^3 - micrograms per cubic meter

B - compound was found in the blank and sample

E - results exceeded calibration range

EPA - United States Environmental Protection Agency

CL - result suspected to be biased high due to chromatographic interference

J - result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value

lbs./day - pounds per day

N/A - not applicable (samples not analyzed for compound)

ND - non-detect (below detection limit)

OM&M - operation, maintenance, and monitoring

SSD - sub-slab depressurization

TO-15 - Toxic Organic Method 15

VOCs - volatile organic compounds

* - LCS or LCSD is outside acceptance limits

The chlorodifluoromethane and 1,2,3-trimethylbenzene concentrations reported in the 12/5/2013 sample were reported as tentatively identified compounds and were converted from 238 ppbv and 2.3. ppbv, respectively.

Samples not collected in May 2014 and August 2014 as system was shut down due to firewater line break.

Samples analyzed from 4/2/08 to 11/7/13 and from 7/1/15 to present analyzed by TestAmerica, Inc. of Knoxville, TN.

Samples analyzed from 12/5/13 to 6/2/15 analyzed by Pace Analytical Services, Inc. of Minneapolis, MN.

TABLE 4

Building C Influent Concentrations (µg/m^3)

LABORATORY DATA SUMMARY

SSD System OM&M, Middle River Complex, Middle River, Maryland

Samples analyzed by EPA Method TO-15

Date	FLOW (scfm)	benzene	carbon tetrachloride	chlorodifluoromethane	chloroform	chloromethane	cis-1,2-dichloroethene	dichlorodifluoromethane	1,1-dichloroethane	1,2-Dichloroethane	1,1-dichloroethene	ethylbenzene	methylene chloride	naphthalene	tetrachloroethene	toluene	trans-1,2-dichloroethene	1,1,1,-trichloroethane	trichloroethene	1,1,2-trichloro-1,2,2-trifluoroethane	1,2,3-trimethylbenzene	1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	vinyl chloride	total xylenes	m-xylene & p-xylene	o-xylene	Total VOCs	Mass (lbs./day)	Mass (lbs. removed in period)
3/31/08	55	ND	ND	N/A	ND	ND	25,000	ND	ND	ND	ND	320	ND	ND	ND	ND	ND	ND	550	ND	N/A	990	740	2,100	N/A	1,100	##	31,170	0.1500	0.450
4/2/08	57	ND	ND	N/A	ND	ND	2,700	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	84	ND	N/A	63	56	320	N/A	65	ND	3,288	0.0200	0.040
4/4/08	60	ND	ND	N/A	ND	ND	6,600	ND	ND	ND	32	44	ND	ND	ND	ND	ND	ND	440	ND	N/A	180	170	690	N/A	180	68	8,404	0.0500	0.350
4/11/08	65	ND	ND	N/A	ND	ND	4,100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	600	ND	N/A	73	61	370	N/A	48	ND	5,252	0.0300	0.180
4/17/08	60	ND	ND	N/A	ND	ND	2,900	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	670	ND	N/A	69	55	190	N/A	34	ND	3,918	0.0200	0.140
4/24/08	63	ND	ND	N/A	ND	ND	2,600	ND	ND	ND	ND	ND	ND	ND	28	ND	ND	ND	750	ND	N/A	85	70	130	N/A	32	17	3,712	0.0200	0.540
5/21/08	60	ND	ND	N/A	ND	ND	1,600	ND	ND	ND	ND	ND	ND	ND	17	ND	ND	ND	650	ND	N/A	65	51	41	N/A	15	ND	2,439	0.0100	0.310
6/19/08	60	7.4	ND	N/A	ND	ND	300	ND	ND	ND	ND	ND	ND	ND	ND	110	ND	ND	ND	ND	N/A	23	19	8	N/A	9	ND	476	0.0030	0.090
7/18/08	54	ND	ND	N/A	ND	ND	1,300	ND	ND	ND	ND	ND	ND	ND	14	ND	ND	ND	440	ND	N/A	45	36	35	N/A	ND	ND	1,870	0.0090	0.279
8/13/08	60	ND	ND	N/A	16	ND	410	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	58	ND	N/A	ND	ND	13	N/A	ND	ND	497	0.0030	0.093
9/11/08	60	ND	ND	N/A	ND	ND	730	ND	ND	ND	ND	ND	18	ND	ND	ND	ND	13	130	ND	N/A	ND	ND	20	N/A	ND	ND	911	0.0050	0.305
11/12/08	62	ND	ND	N/A	ND	ND	390	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	110	ND	N/A	ND	ND	17	N/A	ND	ND	517	0.0029	0.086
12/18/08	66	ND	ND	N/A	ND	ND	420	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	150	ND	N/A	ND	ND	22	N/A	ND	ND	592	0.0035	0.105
1/22/09	67	ND	ND	N/A	ND	ND	810	ND	ND	ND	ND	ND	ND	ND	170	ND	ND	ND	580	ND	N/A	37	29	38	N/A	17	14	1,695	0.0102	0.306
2/21/09	65	ND	ND	N/A	ND	ND	630	ND	ND	ND	ND	ND	ND	ND	140	ND	ND	ND	270	ND	N/A	39	34	25	N/A	16	12	1,166	0.0068	0.204
3/18/09	66	ND	ND	N/A	ND	ND	460	ND	ND	ND	ND	ND	ND	ND	160	ND	ND	ND	350	ND	N/A	62	51	16	N/A	14	13	1,126	0.0067	0.200
4/17/09	66	ND	ND	N/A	ND	ND	200	ND	ND	ND	ND	ND	ND	ND	46	ND	ND	ND	86	ND	N/A	19	16	6.1	N/A	ND	ND	373	0.0022	0.066
5/20/09	64	ND	ND	N/A	ND	ND	210	ND	ND	ND	ND	ND	ND	ND	24	ND	ND	ND	79	ND	N/A	14	14	5.7	N/A	ND	ND	347	0.0020	0.060
6/23/09	56	ND	ND	N/A	ND	ND	190	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	58	ND	N/A	ND	ND	ND	N/A	ND	ND	248	0.0012	0.037
7/23/09	60	ND	ND	N/A	ND	ND	150	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	55	ND	N/A	ND	ND	ND	N/A	ND	ND	205	0.0011	0.033
8/28/09	NA	ND	ND	N/A	ND	ND	720	ND	ND	ND	ND	ND	17	ND	ND	ND	ND	ND	160	ND	N/A	ND	ND	13	N/A	ND	ND	910	0.0049	0.147
9/28/09	NA	ND	ND	N/A	ND	ND	39	ND	ND	ND	ND	ND	110	ND	ND	ND	ND	ND	16	ND	N/A	ND	ND	ND	N/A	ND	ND	165	0.0009	0.027
10/27/09	60	ND	ND	N/A	ND	ND	200	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	64	ND	N/A	ND	ND	ND	N/A	ND	ND	264	0.0014	0.043
11/24/09	60	ND	ND	N/A	ND	ND	190	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	75	ND	N/A	ND	ND	ND	N/A	ND	ND	265	0.0000	0.000
12/23/09	65	ND	ND	N/A	ND	ND	96	ND	ND	ND	ND	ND	ND	ND	ND	26	ND	ND	45	ND	N/A	ND	ND	ND	N/A	8.7	ND	176	0.0010	0.031
1/19/10	65	ND	ND	N/A	ND	ND	140	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	57	ND	N/A	ND	ND	ND	N/A	ND	ND	197	0.0012	0.035
2/17/10	68	ND	ND	N/A	ND	ND	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	37	ND	N/A	ND	ND	ND	N/A	ND	ND	137	0.0008	0.025
3/17/10	65	ND	ND	N/A	ND	ND	87	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	33	ND	N/A	ND	ND	ND	N/A	ND	ND	120	0.0007	0.021
4/16/10	65	ND	ND	N/A	ND	ND	110	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	39	ND	N/A	ND	ND	ND	N/A	ND	ND	149	0.0009	0.026
5/13/10	68	58	ND	N/A	ND	ND	65	ND	ND	ND	ND	38	ND	ND	ND	220	ND	ND	22	ND	N/A	25	ND	ND	N/A	140	39	607	0.0037	0.111
6/18/10	66	ND	ND	N/A	ND	ND	72	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	25	ND	N/A	83	17	ND	N/A	30	17	244	0.0014	0.043
7/19/10	60	ND	ND	N/A	ND	ND	68	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	34	ND	N/A	ND	ND	ND	N/A	ND	ND	102	0.0006	0.017
8/19/10	61	ND	ND	N/A	ND	ND	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	31	ND	N/A	ND	ND	ND	N/A	ND	ND	131	0.0007	0.022
9/17/10	63	ND	ND	N/A	ND	ND	70	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	33	ND	N/A	ND	ND	ND	N/A	ND	ND	103	0.0006	0.018
10/12/10	60	10	ND	N/A	ND	ND	160	ND	ND	ND	ND	11	ND	ND	ND	130	ND	###	70	ND	N/A	ND	ND	ND	N/A	23	ND	514	0.0028	0.083
11/2/10	65	ND	ND	N/A	ND	ND	65	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	35	ND	N/A	ND	ND	ND	N/A	ND	ND	100	0.0006	0.018
12/1/10	65	ND	ND	N/A	ND	ND	120	ND	ND	ND	ND	ND	ND	ND	19	ND	ND	ND	89	ND	N/A	ND	ND	ND	N/A	ND	ND	228	0.0013	0.040
1/5/11	68	ND	ND	N/A	ND	ND	160	ND	ND	ND	ND	ND	ND	ND	94	7.7	ND	ND	250	ND	N/A	ND	ND	9	N/A	ND	ND	520	0.0032	0.095
2/7/11	70	ND	ND	N/A	ND	ND	180	ND	ND	ND	ND	ND	ND	ND	120	ND	ND	ND	270	ND	N/A	ND	ND	ND	N/A	ND	ND	570	0.0036	0.108
3/3/11	69	ND	ND	N/A	ND	ND	170	ND	ND	ND	ND	ND	ND	ND	110	34	ND	ND	180	ND	N/A	ND	ND	ND	N/A	ND	ND	494	0.0031	0.092
4/14/11	65	ND	ND	N/A	ND	ND	130	ND	ND	ND	ND	ND	ND	ND	37	10	ND	ND	90	ND	N/A	ND	ND	ND	N/A	ND	ND	267	0.0016	0.047
5/6/11	70	8	ND	N/A	ND	ND	100	ND	ND	ND	ND	16	ND	ND	19	ND	ND	ND	82	ND	N/A	ND	ND	ND	N/A	9	ND	234	0.0015	0.046
6/9/11	55	26	ND	N/A	ND	ND	97	ND	ND	ND	ND	ND	ND	ND	ND	14	ND	ND	63	ND	N/A	ND	ND	ND	N/A	ND	ND	200	0.0010	0.030
7/11/11	51	20	ND	N/A	ND	ND	74	ND	ND	ND	ND	ND	37	ND	ND	62	ND	ND	26	ND	N/A	ND	ND	ND	N/A	21	ND	240	0.0011	0.033
8/3/11	50	14	ND	N/A	ND	ND	76	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	34	ND	N/A	ND	ND	ND	N/A	ND	ND	124	0.0006	0.017
9/15/11	48	10	ND	N/A	ND	ND	22	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	ND	N/A	ND	ND	32	0.0001	0.004
10/25/11	55	ND	ND	N/A	ND	ND	38	ND	ND	ND	ND	ND	27	ND	ND	20	ND	ND	ND	ND	N/A	ND	ND	ND	N/A	11	ND	96	0.0005	0.015
11/8/11	55	12	ND	N/A	ND	ND	45	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	16	ND	N/A	ND	ND	ND	N/A	ND	ND	73	0.0004	0.011
12/6/11	55	ND	ND	N/A	ND	ND	62	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	21	ND	N/A	ND	ND	ND	N/A	ND	ND	83	0.0004	0.013
1/3/12	50	ND	ND	N/A	ND	ND	55	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	21	ND	N/A	ND	ND	ND	N/A	ND	ND	76	0.0003	0.011
2/16/12	54	ND	ND	N/A	ND	ND	76	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	43	ND	N/A	ND	ND	ND	N/A	ND	ND	119	0.0006	0.017
3/15/12	55	ND	ND	N/A	ND	ND	93	ND	ND	ND	ND	ND	ND	ND	16	ND	ND	ND	58	ND	N/A	ND	ND	ND	N/A	ND	ND	167	0.0008	0.026
4/16/12	54	ND	ND	N/A	ND	ND	64	ND	ND	ND	ND	ND	ND	ND	16	ND	ND	ND	56	ND	N/A	ND	ND	ND	N/A	ND	ND	136	0.0007	0.020
5/9/12	51	ND	ND	N/A	ND	ND	72	ND	ND	ND	ND	ND	ND	ND	20	9.8	ND	ND	65	ND	N/A	ND	ND	ND	N/A	ND	ND	167	0.0008	0.024
6/4/12	52	ND	ND	N/A	ND	ND	71	ND	ND	ND	ND	ND	ND	ND	17	ND	ND	ND	50	ND	N/A	ND	ND	ND	N/A	ND	ND	138	0.0006	0.003

TABLE 4

Building C Influent Concentrations (µg/m^3)

LABORATORY DATA SUMMARY

SSD System OM&M, Middle River Complex, Middle River, Maryland

Samples analyzed by EPA Method TO-15

Date	FLOW (scfm)	benzene	carbon tetrachloride	chlorodifluoromethane	chloroform	chloromethane	cis-1,2-dichloroethene	dichlorodifluoromethane	1,1-dichloroethane	1,2-Dichloroethane	1,1-dichloroethene	ethylbenzene	methylene chloride	naphthalene	tetrachloroethene	toluene	trans-1,2-dichloroethene	1,1,1,-trichloroethane	trichloroethene	1,1,2-trichloro-1,2,2-trifluoroethane	1,2,3-trimethylbenzene	1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	vinyl chloride	total xylenes	m-xylene & p-xylene	o-xylene	Total VOCs	Mass (lbs./day)	Mass (lbs. removed in period)
8/16/12	49	ND	ND	N/A	ND	ND	39	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	19	ND	N/A	ND	ND	ND	N/A	ND	ND	58	0.0003	0.008
9/12/12	30	ND	ND	N/A	ND	ND	41	ND	ND	ND	ND	ND	ND	ND	ND	23	ND	ND	22	ND	N/A	ND	ND	ND	N/A	ND	ND	86	0.0002	0.007
10/18/12	65	ND	ND	N/A	ND	ND	95	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	45	ND	N/A	ND	ND	ND	N/A	ND	ND	140	0.0008	0.025
11/13/12	61	ND	ND	N/A	ND	ND	18	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	270	ND	N/A	ND	ND	ND	N/A	31	16	335	0.0018	0.055
12/6/12	62	ND	ND	N/A	ND	ND	70	ND	ND	ND	ND	ND	ND	ND	22	ND	ND	ND	91	ND	N/A	ND	ND	5.3	N/A	ND	ND	188	0.0010	0.033
1/4/13	56	ND	ND	N/A	ND	ND	66	ND	ND	ND	ND	ND	ND	ND	42	ND	ND	ND	110	ND	N/A	ND	ND	ND	N/A	ND	ND	218	0.0011	0.034
2/6/13	60	ND	ND	N/A	ND	ND	49	ND	ND	ND	ND	ND	ND	ND	29	ND	ND	ND	91	ND	N/A	ND	ND	ND	N/A	ND	ND	169	0.0009	0.026
3/7/13	57	ND	ND	N/A	ND	ND	60	ND	ND	ND	ND	ND	ND	ND	45	ND	ND	ND	100	ND	N/A	ND	ND	ND	N/A	ND	ND	205	0.0011	0.033
4/8/13	57	ND	ND	N/A	ND	ND	44	ND	ND	ND	ND	ND	ND	ND	21	ND	ND	ND	52	ND	N/A	ND	ND	ND	N/A	ND	ND	117	0.0006	0.018
5/10/13	112	ND	ND	N/A	ND	ND	120	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2,900	ND	N/A	ND	ND	ND	N/A	80	ND	3,100	0.0312	0.968
6/5/13	161	ND	ND	N/A	ND	ND	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	460	50	N/A	ND	ND	ND	N/A	31	15	566	0.0082	0.246
7/3/13	182	12	ND	N/A	ND	12	ND	ND	ND	ND	ND	9.4	ND	ND	ND	ND	ND	ND	290	16	N/A	11	ND	ND	N/A	43	23	416	0.0068	0.211
8/14/13	180	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	20	ND	ND	ND	ND	ND	210	18	N/A	ND	ND	ND	N/A	20	11	279	0.0045	0.140
9/9/13	182	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	150	ND	N/A	ND	ND	ND	N/A	ND	ND	150	0.0025	0.074
10/10/13	190	14	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	200	16	N/A	ND	ND	ND	N/A	20	10	260	0.0044	0.138
11/7/13	160	13	ND	N/A	ND	ND	18	ND	ND	ND	ND	9.8	ND	ND	ND	ND	ND	ND	280	ND	N/A	ND	ND	ND	N/A	45	24	390	0.0056	0.168
12/5/13	154	6.3	ND	ND	ND	N/A	13	6.6	ND	ND	ND	7.3	4.1	33.9	5.4	4.0	ND	ND	228	N/A	ND	4.8	2.4	ND	N/A	30.4	##	362	0.0050	0.155
1/13/14	175	13.7	ND	4.7	ND	N/A	5.7	ND	ND	ND	ND	10.3	3.4	22.6	5.6	49.6	ND	ND	298	N/A	5.5	17.8	ND	ND	N/A	49.1	##	505	0.0079	0.246
2/14/14	168	1.8	ND	4.5	ND	N/A	2.3	2.2	ND	ND	ND	2.1	ND	5.3	2.2	2.7	ND	ND	157	N/A	ND	2.8	ND	ND	N/A	8.9	4.7	197	0.0030	0.083
3/12/14	175	9.1	ND	3.0	3.2	N/A	4.9	2.2	ND	ND	ND	5.9	ND	11.5	3.3	6.0	ND	ND	261.0	N/A	1.6	6.0	3.0	ND	N/A	25.3	##	358	0.0056	0.175
4/10/14	168	10	ND	7.1	ND	N/A	7.0	ND	ND	ND	ND	67	ND	12.1	5.1	50.7	ND	6.6	266	N/A	ND	6.9	ND	ND	N/A	218	##	724	0.0109	0.317
5/5/14	182	11.8	1.2	5.8	1.5 J	N/A	7.6	2.9	ND	ND	ND	4.7	1.2 J	12.7	3.6	30.6	ND	ND	236	N/A	2.1	6.8	3.5	ND	N/A	20.9	##	364	0.0060	0.149
6/5/14	180	12.8	ND	ND	2.7	N/A	2.7	2.1	ND	ND	ND	4.1	24.5	13.1	23.1	11.6	ND	ND	154	N/A	6.1	18	6.1	ND	N/A	27	##	320	0.0052	0.160
7/3/14	182	14.4	0.77 J	11.2	5.6	N/A	4.1	1.4 J	ND	ND	0.88 J	6.3	147	16.9	7.1	5.7	0.81 J	ND	183	N/A	2.8	7.3	4.7	ND	N/A	19.4	9.8	449	0.0073	0.206
8/13/14	166	10.8	1.7	N/A	66.2	1.5	4.7	ND	7.6	ND	4.8	7.5	ND	20.6	7.0	5.0	ND	33.6	289	N/A	N/A	7.8	3.9	ND	N/A	30.2	##	518	0.0077	0.317
9/12/14	175	8.0	1.1	5.6	ND	N/A	5.3	2.9	7.0	ND	ND	2.9	0.76 J	31.2	2.1	3.4	ND	37.9	124	N/A	2.1	5.4	2.1	ND	N/A	17.2	##	270	0.0042	0.127
10/9/14	174	6.6	1.2	10.1	0.98	N/A	6.6	2.0	6.1	2.7	3.0	3.2	2.1 J	13.3	2.7	5.1	0.71 J	38.6	137	N/A	2.6	4.7	2.0	ND	N/A	15.8	9.5	277	0.0043	0.117
11/5/14	175	5.2	ND	7.5	ND	N/A	5.7	2.3	3.5	ND	ND	3.2 J	6.0	10.5	5.4	4.3	ND	22.6	111	N/A	3.5 J	5.4	3.2 J	ND	N/A	11.0 J	6.4	217	0.0034	0.092
12/4/14	168	5.3	ND	8.1	1.3	N/A	7.0	2.8	1.9	ND	ND	3.2 J	3.3 J	8.7	7.8	5.0	1.6 J	9.1	106	N/A	3.6 J	4.7	3.7 J	ND	N/A	8.6	5.8	198	0.0030	0.086
1/15/15	175	6.2	ND	8.3	1.7	N/A	5.9	3.1	ND	ND	ND	1.2 J	2.5 J	3.1 J	2.8	3.1	ND	3.0	87.5	N/A	1.2 J	5.5	2.0	ND	N/A	4.8	2.9	145	0.0023	0.096
2/9/15	170	5.6	ND	3.8	0.94	N/A	4.6	ND	ND	ND	ND	1.3 J	0.61 J	2.3 J	1.7	3.7	ND	ND	75.3	N/A	ND	3.8	1.7	ND	N/A	5.3	3.2	114	0.0017	0.043
3/10/15	182	5.0	2.8	4.0	0.82	N/A	3.7	1.5 J	ND	ND	ND	1.3 J	0.62 J	3.0 J	2.1	2.5	ND	0.94 J	80.5	N/A	0.97 J	4.0	1.7	ND	N/A	4.4	2.9	123	0.0020	0.058
4/6/15	175	6.5	1.1	4.6	1.2	N/A	3.6	1.8	2.0	ND	1.1 J	2.0	ND	6.1	2.3	2.3	ND	14.6	107	N/A	1.5 J	5.8	2.4	ND	N/A	8.0	4.3	178	0.0028	0.076
5/8/15	175	6.1	ND	10.4	ND	N/A	2.6	2.3 J	1.7 J	ND	ND	5.3 J	4.0 J	7.8 J	2.1 J	5.2	ND	14	128	N/A	5.1 J	10	5.3 J	ND	N/A	13.3 J	6.5 J	230	0.0036	0.116
6/2/15	170	7.4	1.2	8.3	1.0	N/A	4.0	ND	4.9	ND	ND	2.5	6.3	14.4	3.2	4.3	ND	32.1	132	N/A	3.7	11.1	4.9	ND	N/A	11.4	7.1	260	0.0040	0.099
7/1/15	175	3.2	ND	6.6	4.9	N/A	ND	ND	3.2	ND	ND	ND	ND	ND	ND	2.5	ND	22	20	N/A	ND	ND	ND	ND	ND	N/A	N/A	62	0.0010	0.028
8/10/15	175	5.1	2.1 J	15	0.74 J	N/A	2.7	2.4	5.9	ND	2.0	1.3 J	ND	ND	1.1 J	15.0	ND	45	41	N/A	ND	2.0	0.84 J	ND	7.5	N/A	N/A	150	0.0024	0.094
9/11/15	175	8.0	1.3 J	12	1.1 J	N/A	2.4	2.3	7.7	ND	2.8	2.0	8.7	ND	1.2 J	6.2	ND	58	73	N/A	1.1 J	3.5	1.3 J	ND	11	N/A	N/A	204	0.0032	0.102
10/7/15	175	5.5	ND	3.3	ND	N/A	0.68 J	2.1	2.0	ND	1.0 J	0.60 J	3.4 J	ND	ND	8.7	ND	18	14	N/A	ND	1.2 J	ND	ND	2.6 J	N/A	N/A	63	0.0010	0.026
11/2/15	182	5.1	0.73 J	8.6	0.93 J	N/A	2.3	3.2	3.7	ND	1.4 J	1.2 J	3.4 J	ND	3.5	3.0	ND	32	50	N/A	ND	2.1	0.94 J	ND	5.6	N/A	N/A	128	0.0021	0.054
12/3/15	182	4.5	0.59 J	14	0.51 J	N/A	2.1	2.4	1.5 J	ND	0.54 J	0.61 J	2.4 J	ND	0.94 J	3.9	ND	14	43	N/A	ND	1.9 J	ND	ND	3.2 J	N/A	N/A	96	0.0016	0.049
1/15/16	188	4.4	ND	4.8	0.43 J	N/A	0.81 J	2.0	0.27 J	ND	ND	ND	2.4 J	ND	0.95 J	5.0	ND	2.4	30	N/A	ND	1.3 J	ND	ND	2.1 J	N/A	N/A	57	0.0010	0.041
3/9/16	182	6.4	0.64 J	12	0.88 J	N/A	1.9	2.3	0.69 J	ND	0.31 J	0.80 J	3.3 J	ND	0.91 J	10	ND	11	41	N/A	ND	2.6	0.86 J	ND	3.8	N/A	N/A	99	0.0016	0.088
5/12/16	182	2.9	0.50 J	6.6	1.0 J	N/A	1.6	2.9	0.44 J	ND	0.48 J	1.1 J	2.8 J	ND	0.72 J	73	ND	5.4 B	31	N/A	ND	1.6 J	ND	ND	5.2	N/A	N/A	137	0.0022	0.144
7/14/16	180	8.0	1.2 J	13	2.4	N/A	2.5	2.7	11	ND	5.5	1.3 J	4.2	ND	1.1 J	6.2	ND	76 B	46	N/A	1.2 J	4.4	1.5 J	ND	6.5	N/A	N/A	195	0.0031	0.198
9/7/16	182	8.6	0.52 J	4.0	2.5	N/A	2.5	2.4	4.2	ND	1.9	1.4 J	5.3	ND	1.0 J	3.2	ND	29	45	N/A	0.93 J	3.5	1.5 J	ND	6.2	N/A	N/A	124	0.0020	0.111
11/3/16	185	9.8	0.80 J	22.0	2.7	N/A	2.8	3.0	1.7	ND	0.76 J	1.9	13.0	ND	1.6 J	14	ND	13	47	N/A	1.2 J	4.3 J	1.4 J	ND	9.1	N/A	N/A	150	0.0025	0.142
1/12/17	185	2.0	ND	6.3	0.78 J	N/A	1.9	1.9 J	ND	ND	ND	0.90 J	6.2	ND	0.92 J	20	ND	1.4 J	33	N/A	ND	2.0	0.91 J	ND	4.5	N/A	N/A	83	0.0014	0.096
3/8/17	185	3.1	0.58 J	4.8	0.59 J	N/A	3.5	2.7	0.31 J	ND	ND	2.2	3.3 J	ND	3.1	6.2	ND	1.3 J	40	N/A	ND	1.8 J	ND	ND	12	N/A	N/A	85	0.0014	0.078
5/5/17	185	4.9	0.59 J	1.6	1.1 J	N/A	5.3	2.1	0.36 J	ND	ND	0.90 J	2.6 J	ND	2.3 J	4.1	0.41 J	1.4 J	38	N/A	ND	2.7	1.0 J	ND	5.3	N/A	N/A	75	0.0012	0.072
7/6/17	180	6.1	0.76 J	15	2.9	N/A	5.4	1.9 J	0.42 J	ND	ND	1.9	5.4	2.0	1.4 J	7.1	ND	1.1 JB	31	N/A	ND	2.5	0.91 J	ND	7.0	N/A	N/A	93	0.0015	0.093
9/7/17	175	6.5	0.90 J	2.7	1.5 J	N/A	2.3	1.8 J	ND	ND	ND	0.91 J	5.9	ND	0.7 J	5.6	ND	1.1 J	38	N/A	ND	3.5	1.5 J	ND	3.7	N/A	N/A	77	0.0012	0.076
11/8/17	185	4.8	0.55 J	4.1	1.0 J	N/A	3.2	2.2	ND	ND	ND	ND	5.0	ND	1.4 J	2.8	ND	0.66 J	43	N/A	ND	2.2	0.9 J	ND	2.5 J	N/A	N/A	74	0.0012	0.076

TABLE 4

Building C Influent Concentrations (µg/m^3)

LABORATORY DATA SUMMARY

SSD System OM&M, Middle River Complex, Middle River, Maryland

Samples analyzed by EPA Method TO-15

Date	FLOW (scfm)	benzene	carbon tetrachloride	chlorodifluoromethane	chloroform	chloromethane	cis-1,2-dichloroethene	dichlorodifluoromethane	1,1-dichloroethane	1,2-Dichloroethane	1,1-dichloroethene	ethylbenzene	methylene chloride	naphthalene	tetrachloroethene	toluene	trans-1,2-dichloroethene	1,1,1,-trichloroethane	trichloroethene	1,1,2-trichloro-1,2,2-trifluoroethane	1,2,3-trimethylbenzene	1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	vinyl chloride	total xylenes	m-xylene & p-xylene	o-xylene	Total VOCs	Mass (lbs./day)	Mass (lbs. removed in period)
1/9/18	180	6.4	0.60 J	11	ND	N/A	2.7	2.2	ND	ND	ND	0.74 J	ND	ND	2.5 J	4.2	ND	1.7 J	33	N/A	ND	2.6	1.0 J	0.54	4.8 J	N/A	N/A	74	0.0012	0.074
3/8/18	180	1.1 J	0.57 J	4.5	0.63 J	N/A	4.9	2.0	ND	ND	ND	0.70 J	2.5 J	ND	5.0 J	2.8	ND	0.44 J	47	N/A	ND	2.6	1.0 J	0.54	3.3 J	N/A	N/A	80	0.0013	0.075
5/8/18	170	3.5 J	0.56 J	3.4	2.4	N/A	4.7	2.5	ND	ND	ND	1.0 J	2.8 J	ND	3.6	17.0	ND	0.49 J	32	N/A	ND	4.0	1.6 J	ND	5.9 J	N/A	N/A	85	0.0013	0.080
7/12/18	150	4.9	0.68 J	6.4	5.5	N/A	2.9	1.7 J	ND	ND	ND	0.79 J	65	ND	1.0 J	8.3	ND	1.5 JB	34	N/A	ND	3.8	1.4 J	ND	4.1	N/A	N/A	142	0.0019	0.124
9/11/18	155	3.2	0.55 J	7.8	1.1 J	N/A	1.0 J	2.9	ND	ND	ND	23	3.2 JB	ND	0.7 J	6.2	ND	0.47 JB	35	N/A	1.2 J	9.3	2.4 J	ND	5.2	N/A	N/A	103	0.0014	0.088
11/9/18	155	2.0	ND	3.8	ND	N/A	2.5	2.5	ND	ND	ND	0.86 J	2.8 J	ND	0.6 J	2.7	ND	ND	25	N/A	ND	3.9	1.3 J	ND	1.9 J	N/A	N/A	50	0.0007	0.041
1/21/19	155	1.6	ND	3.0 CI	ND	N/A	2.3	1.5 J	ND	ND	ND	0.88 J	3.2 J	ND	0.9 J	5.0	ND	ND	20	N/A	ND	2.7	0.9 J	ND	4.7	N/A	N/A	47	0.0006	0.047
3/13/19	140	4.9	0.48 J	2.3 CI	ND	N/A	2.8	1.5 J	ND	ND	ND	ND	2.7 J	ND	1.1 J	2.7	ND	0.68 J	26	N/A	ND	1.9 J	0.75 J	ND	1.2 J	N/A	N/A	49	0.0006	0.031
5/14/19	140	8.7	ND	3.4	0.43 J	N/A	2.9	2.6	ND	ND	ND	0.75 J	3.8 J	ND	0.82 J	9.4	ND	ND	24	N/A	0.94 J	4.8	2.1	ND	3.3 J	N/A	N/A	68	0.0009	0.053
7/11/19	140	10	0.61 J	5.3	1.0 J	N/A	3.2	2.7	ND	ND	ND	0.66 J	9.9	ND	1.0 J	6.1	0.36 J	ND	36	N/A	ND	4.4	1.9 J	ND	3.0 J	N/A	N/A	86	0.0011	0.063
9/23/19	140	7.2	0.44 J	4.0	0.95 J	N/A	3.2	1.4 J	ND	ND	0.28 J	0.49 J	6.3 JB	ND	0.58 J	2.8	0.38 J	ND	28	N/A	ND	3.7	1.6 J	ND	2.6 J	N/A	N/A	64	0.0008	0.059
11/12/19	150	5.8	0.60 J	25 CI	0.42 J	N/A	3.6	3.0	ND	ND	ND	ND	10 B	ND	1.1 J	4.5	ND	ND	22	N/A	ND	1.9 J	1.0 J	ND	1.3 J	N/A	N/A	80	0.0011	0.054
1/7/20	140	7.5	0.38 J	3.5	0.45 J	N/A	3.8	2.6	ND	ND	ND	0.40 J	3.1 J	ND	2.0 J	5.4	ND	ND	25	N/A	ND	2.2	1.0 J	ND	2.0 J	N/A	N/A	59	0.0007	0.042
3/13/20	140	7.5	0.47 J	2.5	0.26 J	N/A	1.9	2.2	ND	### J	ND	0.61 J	9.6	ND	2.1 J	8.7	0.16 J	ND	24	N/A	ND	4.2	1.8 J	0.83	3.9	N/A	N/A	71	0.0009	0.059
5/13/20	140	4.7	0.51 J	17	0.53 J	N/A	2.1	2.1	ND	ND	ND	0.30 J	ND	ND	1.2 J	6.0	ND	ND	21	N/A	ND	1.7 J	1.6 J	ND *	1.4 J	N/A	N/A	60	0.0008	0.046
7/23/20	140	5.4	0.62 J	22	1.4 J	N/A	1.6	3.2	ND	ND	ND	0.70 J	42	ND	1.7 J	17	0.42 J	ND	32	N/A	1.1 J	4.1	1.8 J	ND	3.6	N/A	N/A	139	0.0017	0.124
9/28/20	140	5.4	0.44 J	2.2	0.47 J	N/A	1.1 J	1.9 J	ND	ND	ND	0.48 J	ND	ND	0.66 J	6.7	0.79 J	ND	21	N/A	ND	2.5	1.2 J	ND	2.3 J	N/A	N/A	47	0.0006	0.040

Notes:

µg/m^3 - micrograms per cubic meter

B - compound was found in the blank and sample

EPA - United States Environmental Protection Agency

lbs. - pounds

lbs./day - pounds per day

J - result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value

N/A - not applicable (samples not analyzed for compound)

ND - non-detect (below detection limit)

OM&M - operation, maintenance, and monitoring

scfm - standard cubic feet per minute

SSD - sub-slab depressurization

TO-15 - Toxic Organic Method 15

VOCs - volatile organic compounds

* - LCS or LCSD is outside acceptance limits

CL - result suspected to be biased high due to chromatographic interference

Sampling not conducted in July 2012 due to system shutdown test.
Completed first-phase system expansion on October 31, 2012.
Completed second-phase system expansion on May 10, 2013.

Samples analyzed from 4/2/08 to 11/7/13 and from 7/1/15 to present analyzed by TestAmerica, Inc. of Knoxville, TN.
Samples analyzed from 12/5/13 to 6/2/15 analyzed by Pace Analytical Services, Inc. of Minneapolis, MN.

TABLE 5

Building C Mid-GAC Concentrations (µg/m^3)

LABORATORY DATA SUMMARY

SSD System OM&M, Middle River Complex, Middle River, Maryland

Samples analyzed by EPA Method TO-15

Date	benzene	carbon tetrachloride	chlorodifluoromethane	chloroform	cis-1,2-dichloroethene	dichlorodifluoromethane	1,1-dichloroethane	1,2-dichloroethane	1,1-dichloroethene	ethylbenzene	methylene chloride	naphthalene	tetrachloroethene	toluene	trans-1,2-dichloroethene	1,2,4-Trichlorobenzene	1,1,1,-trichloroethane	trichloroethene	1,1,2-trichloro-1,2,2-trifluoroethane	1,2,3-trimethylbenzene	1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	vinyl chloride	total xylenes	m-xylene & p-xylene	o-xylene	Total VOCs	Mass (lbs./day)
4/2/08	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	720	N/A	ND	ND	720	0.004
4/24/08	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	230	N/A	ND	ND	230	0.001
5/21/08	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	50	N/A	ND	ND	50	0.000
6/19/08	28	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	51	N/A	ND	ND	79	0.000
7/18/08	ND	ND	N/A	ND	150	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	40	N/A	ND	ND	190	0.001
8/13/08	ND	ND	N/A	ND	750	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	15	N/A	ND	ND	765	0.004
9/11/08	ND	ND	N/A	ND	13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10	N/A	ND	ND	23	0.000
11/12/08	ND	ND	N/A	ND	160	ND	ND	ND	ND	ND	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	17	N/A	ND	ND	227	0.001
12/18/08	ND	ND	N/A	ND	180	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	25	N/A	ND	ND	205	0.001
1/22/09	ND	ND	N/A	ND	13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	35	N/A	ND	ND	48	0.000
2/20/09	ND	ND	N/A	ND	14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	15	N/A	ND	ND	29	0.000
3/18/09	ND	ND	N/A	ND	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	19	N/A	ND	ND	119	0.001
4/17/09	ND	ND	N/A	ND	340	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.1	N/A	ND	ND	347	0.002
5/20/09	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	0.0	0.000
6/23/09	ND	ND	N/A	ND	70	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.2	N/A	ND	ND	75	0.000
7/23/09	ND	ND	N/A	ND	360	ND	ND	ND	ND	ND	21	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	381	0.002
8/28/09	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	20	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	20	0.000
9/28/09	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	0.0	0.000
10/27/09	ND	ND	N/A	ND	13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	13	0.000
11/24/09	ND	ND	N/A	ND	23	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	23	0.000
12/23/09	ND	ND	N/A	ND	23	ND	ND	ND	ND	ND	ND	ND	13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	36	0.000
1/19/10	ND	ND	N/A	ND	21	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	21	0.000
2/17/10	ND	ND	N/A	ND	23	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	23	0.000
3/17/10	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	0.0	0.000
4/16/10	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	0.0	0.000
5/13/10	15	ND	N/A	ND	9.6	ND	ND	ND	ND	9.8	ND	ND	ND	51	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	36	10	131	0.001
6/18/10	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	79	16	ND	N/A	26	15	136	0.001
7/19/10	11	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	11	0.000
8/19/10	ND	ND	N/A	ND	15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	15	0.000
9/17/10	35	ND	N/A	ND	26	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	61	0.000
10/12/10	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	12	ND	ND	24	ND	ND	ND	ND	ND	ND	N/A	ND	ND	36	0.000
11/2/10	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	12	ND	ND	N/A	ND	ND	12	0.000
12/1/10	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	0.0	0.000
1/5/11	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	9	N/A	ND	ND	9.0	0.000
2/7/11	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	0.0	0.000
3/3/11	ND	ND	N/A	ND	20	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	20	0.000
4/14/11	ND	ND	N/A	ND	180	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	180	0.000
5/6/11	ND	ND	N/A	ND	ND	ND	ND	ND	ND	11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	11	0.000
6/9/11	32	ND	N/A	ND	17	ND	ND	ND	ND	ND	ND	ND	13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	62	0.000
7/11/11	29	ND	N/A	ND	160	ND	ND	ND	ND	ND	28	ND	ND	74	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	24	8.9	324	0.000
8/3/11	25	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	25	0.000
9/15/11	22	ND	N/A	ND	12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	34	0.000
10/25/11	16	ND	N/A	ND	19	ND	ND	ND	ND	ND	24	ND	ND	20	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	13	ND	92	0.000
11/8/11	16	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	16	0.000
12/6/11	8.4	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	8.4	0.000
1/3/12	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	0.00	0.000
2/16/12	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	0.00	0.000
3/15/12	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	0.00	0.000
4/16/12	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	0.00	0.000
5/9/12	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	0.00	0.000
6/4/12	ND	ND	N/A	ND	ND	ND	ND	ND	ND	8.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	8.7	0.000
8/15/12	ND	ND	N/A	ND	28	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	28	0.000
9/12/12	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	19	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	19	0.000
10/18/12	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	0.0	0.000
11/13/12	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	0.0	0.000
12/6/12	ND	ND	N/A	ND	9.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	57	ND	ND	ND	ND	ND	N/A	ND	ND	66	0.000

TABLE 5

Building C Mid-GAC Concentrations (µg/m^3)

LABORATORY DATA SUMMARY

SSD System OM&M, Middle River Complex, Middle River, Maryland

Samples analyzed by EPA Method TO-15

Date	benzene	carbon tetrachloride	chlorodifluoromethane	chloroform	cis-1,2-dichloroethene	dichlorodifluoromethane	1,1-dichloroethane	1,2-dichloroethane	1,1-dichloroethene	ethylbenzene	methylene chloride	naphthalene	tetrachloroethene	toluene	trans-1,2-dichloroethene	1,2,4-Trichlorobenzene	1,1,1,-trichloroethane	trichloroethene	1,1,2-trichloro-1,2,2-trifluoroethane	1,2,3-trimethylbenzene	1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	vinyl chloride	total xylenes	m-xylene & p-xylene	o-xylene	Total VOCs	Mass (lbs./day)
1/4/13	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	21	ND	ND	ND	ND	ND	N/A	ND	ND	21	0.000
2/6/13	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	24	ND	ND	ND	ND	ND	N/A	ND	ND	24	0.000
3/7/13	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	19	ND	ND	ND	ND	ND	N/A	ND	ND	19	0.000
4/8/13	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	19	ND	ND	ND	ND	ND	N/A	ND	ND	19	0.000
5/10/13	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	87	ND	ND	ND	ND	ND	N/A	ND	ND	87	0.001
6/5/13	ND	ND	N/A	ND	28	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	19	ND	ND	ND	ND	N/A	ND	ND	47	0.001
7/3/13	ND	ND	N/A	ND	34	ND	ND	ND	ND	ND	21	ND	ND	ND	ND	ND	ND	14	ND	ND	ND	ND	ND	N/A	ND	ND	69	0.001
8/14/13	9.9	ND	N/A	ND	17	ND	ND	ND	ND	ND	17	ND	ND	ND	ND	ND	ND	12	ND	ND	ND	ND	ND	N/A	ND	ND	56	0.001
9/9/13	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	0.0	0.000
10/10/13	11	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	11	0.000
11/7/13	11	ND	N/A	ND	9.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	11	ND	ND	N/A	ND	ND	31	0.000
12/5/13	10.9	ND	N/A	ND	7.4	8.6	ND	ND	ND	ND	6.4	ND	ND	2.5	ND	ND	ND	10.7	N/A	ND	ND	ND	ND	N/A	ND	ND	47	0.001
1/13/14	8.3	ND	4.2	ND	11.0	2.2	ND	ND	ND	1.7	2.4	4.8	ND	21.3	ND	ND	3.0	124	N/A	ND	2.7	ND	ND	N/A	5.8	2.4	194	0.003
2/14/14	5.8	ND	6.1	ND	5.7	2.0	ND	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	256	N/A	ND	ND	ND	ND	N/A	ND	ND	278	0.004
3/12/14	13.5	ND	3.7	ND	10.5	2.4	ND	ND	ND	3.7	ND	ND	18.2	12.5	ND	ND	ND	5.6	N/A	5.9	15.3	4.4	ND	N/A	17.1	7.6	120	0.002
4/10/14	7.8	ND	8.2	ND	14.6	ND	ND	ND	ND	84.3	ND	ND	ND	64.8	ND	ND	9.6	18.6	N/A	ND	ND	ND	ND	N/A	263	73.6	545	0.008
5/5/14	9.6	ND	6.1	1.3 J	11.7	2.9	ND	ND	ND	ND	1.4 J	3.4 J	ND	1.6	0.90 J	ND	ND	0.86 J	N/A	ND	0.88 J	ND	ND	N/A	0.85 J	ND	41	0.001
6/5/14	8.5	ND	2.6	ND	5.9	2.6	ND	ND	ND	ND	20.6	2.3 J	9.6	1.3 J	ND	ND	ND	ND	N/A	2.0	2.6	ND	ND	N/A	1.9 J	2.2	62	0.001
7/3/14	10.2	0.64 J	12.3	5.1	5.8	1.8	ND	ND	ND	1.4 J	9.7	4.1 J	ND	1.4	0.79 J	ND	ND	3.4	N/A	ND	1.6 J	1.5 J	ND	N/A	1.9 J	1.6	63	0.001
8/13/14	11.4	1.8	N/A	60.1	5.8	1.6 J	5.1	0.69 J	ND	6.0	1.3 J	5.0 J	2.6	10.8	ND	5.4	4.4	20.1	N/A	N/A	14.4	6.3	ND	N/A	18.7	6.4	188	0.003
9/12/14	7.4	2.1	5.9	31.4	5.4	2.4	9.4	ND	ND	0.41 J	1.1 J	ND	0.62 J	1.3	ND	ND	25.3	50.2	N/A	ND	ND	ND	ND	N/A	0.96 J	ND	144	0.002
10/9/14	10.8	ND	11.9	0.90	ND	2.2	1.2 J	ND	ND	ND	1.4 J	4.0 J	ND	1.5	ND	ND	ND	2.2	N/A	ND	ND	ND	ND	N/A	0.87 J	ND	37	0.001
11/5/14	4.9	1.1	8.5	7.3	6.0	2.3	4.7	ND	ND	ND	5.9	5.4	4.2	1.3	ND	ND	15.7	2.8	N/A	ND	ND	ND	ND	N/A	ND	ND	70	0.001
12/4/14	4.9	1.2	7.4	4.9	6.2	3.0	2.9	ND	ND	ND	4.4J	4.0 J	6.0	2.9 J	ND	ND	19.3	ND	N/A	ND	3.1 J	ND	ND	N/A	ND	ND	66	0.001
1/15/15	8.1	ND	8.4	1.8	5.9	3.8	ND	ND	ND	0.74 J	1.7 J	1.0 J	1.7	2.2	ND	ND	9.4	2.9	N/A	ND	0.95 J	ND	ND	N/A	2.4 J	0.80 J	52	0.001
2/9/15	5.9	ND	3.8	1.1	5.7	ND	ND	ND	ND	ND	ND	ND	ND	1.0 J	ND	ND	5.5	6.5	N/A	ND	0.87 J	ND	ND	N/A	1.1 J	ND	31	0.000
3/10/15	1.9	2.7	4.2	ND	3.9	1.9	ND	ND	ND	ND	ND	1.1 J	ND	0.84 J	ND	ND	3.1	4.6	N/A	ND	0.80 J	ND	ND	N/A	0.71 J	ND	26	0.000
4/6/15	2.0	1.1	4.6	1.5	6.0	2.3	1.8	0.71	0.95 J	0.70 J	4.7 J	2.1 J	ND	3.8	ND	ND	9.8	10.6	N/A	ND	1.4 J	0.60 J	ND	N/A	2.6 J	1.2 J	58	0.001
5/8/15	4.2	ND	11.3	ND	3.8	1.7 J	1.5 J	ND	ND	ND	2.1 J	1.8 J	ND	0.79 J	ND	ND	9.2	12.5	N/A	ND	1.4 J	ND	ND	N/A	ND	ND	50	0.001
6/2/15	5.8	ND	6.8	0.82	2.8	2.8	1.6	ND	ND	0.76 J	4.2 J	5.6	ND	1.9	ND	ND	6.0	10.6	N/A	1.1 J	2.5	1.1 J	ND	N/A	2.1 J	1.1 J	58	0.001
7/1/15	ND	ND	7.9	7.9	2.1	ND	9.2	ND	3.5	ND	5.5	ND	ND	ND	ND	ND	13.0	7.4	N/A	ND	ND	ND	ND	ND	N/A	N/A	57	0.001
8/10/15	5.2	ND	17	2.4	1.7	2.8	3.9	ND	1.6	ND	8.2	ND	ND	9.1	ND	ND	5.2	2.9	N/A	ND	ND	ND	ND	1.2 J	N/A	N/A	61	0.001
9/11/15	10	0.74 J	11	3.6	3.9	2.5	8.6	ND	3.2	0.62 J	11	ND	ND	2.8	ND	ND	16	5.9	N/A	ND	1.5 J	ND	ND	3.0 J	N/A	N/A	84	0.001
10/7/15	9.5	1.2 J	5.0	1.9 J	2.3	2.2	7.1	ND	2.7	ND	5.1	ND	ND	3.5	ND	ND	33	0.79 J	N/A	ND	ND	1.8 J	ND	ND	N/A	N/A	76	0.001
11/2/15	5.2	2.2 J	8.5	1.9	3.1	3.1	7.5	ND	2.6	0.83 J	3.8	ND	ND	ND	ND	ND	69	ND	N/A	ND	ND	ND	ND	2.7 J	N/A	N/A	110	0.002
12/3/15	5.8	0.50 J	18	0.71 J	1.6	2.6	2.0	ND	0.76 J	ND	3.0 J	ND	ND	ND	ND	ND	18	ND	N/A	ND	ND	ND	ND	ND	N/A	N/A	53	0.001
1/15/16	2.0	ND	5.4	ND	1.0 J	2.1	0.60 J	ND	0.32 J	ND	2.4 J	ND	ND	ND	ND	ND	7.7	1.0 J	N/A	ND	ND	0.83 J	ND	ND	N/A	N/A	23	0.000
3/9/16	4.8	ND	11	0.38 J	1.2 J	2.4	0.46 J	ND	ND	ND	3.5 J	ND	ND	3.8	ND	ND	7.0	ND	N/A	ND	ND	ND	ND	ND	N/A	N/A	35	0.001
5/12/16	3.6	ND	6.8	0.44 J	1.2 J	3.5	0.46 J	ND	0.51 J	ND	ND	ND	0.54 J	3.9	ND	ND	6.0 B	ND	N/A	ND	0.81 J	ND	ND	ND	N/A	N/A	28	0.000
7/14/16	9.3	0.55 J	9.9	1.4 J	3.4	2.7	3.3	ND	2.7	ND	6.3	ND	1.4 J	ND	ND	ND	11 B	ND	N/A	ND	1.6 J	ND	ND	0.52 J	N/A	N/A	54	0.001
9/7/16	12	0.65 J	3.5	1.5 J	2.7	2.0	7.0	ND	2.7	ND	4.7	ND	1.1 J	ND	ND	ND	16	3.2	N/A	ND	1.1 J	ND	ND	ND	N/A	N/A	58	0.001
11/3/16	11	0.58 J	20.0	1.9	3.1	3.3	6.2	ND	1.9	0.8 J	13.0	ND	ND	9.1	ND	ND	17	0.7 J	N/A	ND	1.1 J	ND	ND	4.0	N/A	N/A	94	0.002
1/12/17	5.8	ND	5.8	0.56 J	1.2 J	2.0	0.8 J	ND	ND	ND	5.5	ND	ND	11	ND	ND	4.4	ND	N/A	ND	ND	ND	ND	2.7 J	N/A	N/A	40	0.001
3/8/17	5.3	ND	4.4	0.66 J	1.7	2.6	0.69 J	ND	ND	0.66 J	2.4 J	ND	70	4.4	ND	ND	5.3	0.55 J	N/A	ND	ND	ND	ND	3.8	N/A	N/A	102	0.002
5/5/17	6.3	ND	1.7	0.68 J	2.3	1.7 J	0.46 J	ND	ND	0.71 J	3.2 J	ND	ND	ND	ND	ND	4.6	ND	N/A	ND	0.69 J	ND	ND	3.9	N/A	N/A	26	0.000
7/6/17	8.4	ND	18	1.0 J	5.7	2.3	0.49 J	ND	ND	1.60 J	5.9	ND	2.2 J	6.2	0.47 B	ND	5.6	0.68	N/A	ND	0.79 J	ND	ND	4.3	N/A	N/A	64	0.001
9/7/17	11	ND	3.1	1.5 J	6.9	2.0	0.38 J	ND	0.31 J	0.64 J	9.2	ND	ND	5.0	0.43 J	ND	5.8	4.2	N/A	ND	1.0 J	ND	ND	ND	N/A	N/A	51	0.001
11/8/17	17	ND	3.5	0.84 J	1.7	2.0	ND	ND	ND	ND	3.3 J	ND	ND	ND	ND	ND	3.4	3.9	N/A	ND	2.0 J	ND	ND	ND	N/A	N/A	38	0.001
1/9/18	4.2	ND	9.6	ND	ND	2.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.71 J	3.9	N/A	ND	ND	ND	ND	3.0 J	N/A	N/A	24	0.000
3/8/18	8.9	ND	4.7	ND	ND	2.2	ND	ND	ND	ND	3.0 J	ND	ND	2.7	ND	ND	1.5 J	1.9	N/A	ND	1.1 J	ND	ND	2.0 J	N/A	N/A	28	0.000
5/8/18	0.6	ND	4.2	1.1 J	5.1	2.8	ND	ND	ND	0.73 J	3.7 J	ND	1.0 J	17.0	ND	ND	3.1	ND	N/A	ND	0.9 J	ND	ND	4.3	N/A	N/A	45	0.001
7/12/18	13	ND	7.0	1.1 J	7.0	1.6 J	ND	ND	ND	ND	8.0	ND	1.2 J	4.0	0.50 J	ND	4.0 B	ND	N/A	ND	1.7 J	ND	ND	2.6 J	N/A	N/A	52	0.001
9/11/18	13	ND	6.2	ND	6.5	2.9	ND	ND	0.30 J	0.62 J	3.6 B	ND	ND	4.9	0.44 J	ND	7.2 B	ND	N/A	0.87 J	7.3	1.8 J	ND	2.2 J	N/A	N/A	58	0.001
11/9/18	10	ND	2.9	3.5	1.7	2.6	ND	ND	ND	ND	3.5 J	ND	ND	ND	ND	ND	2.6	ND	N/A	ND	2.4	ND	ND	ND	N/A	N/A	29	0.000

TABLE 5

Building C Mid-GAC Concentrations (µg/m^3)

LABORATORY DATA SUMMARY

SSD System OM&M, Middle River Complex, Middle River, Maryland

Samples analyzed by EPA Method TO-15

Date	benzene	carbon tetrachloride	chlorodifluoromethane	chloroform	cis-1,2-dichloroethene	dichlorodifluoromethane	1,1-dichloroethane	1,2-dichloroethane	1,1-dichloroethene	ethylbenzene	methylene chloride	naphthalene	tetrachloroethene	toluene	trans-1,2-dichloroethene	1,2,4-Trichlorobenzene	1,1,1,-trichloroethane	trichloroethene	1,1,2-trichloro-1,2,2-trifluoroethane	1,2,3-trimethylbenzene	1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	vinyl chloride	total xylenes	m-xylene & p-xylene	o-xylene	Total VOCs	Mass (lbs./day)
1/21/19	7.8	ND	3.3 CI	1.6 J	0.92 J	1.4 J	ND	ND	ND	ND	3.8 J	ND	ND	ND	ND	ND	1.5 J	ND	N/A	ND	1.2 J	ND	ND	ND	N/A	N/A	22	0.000
3/13/19	7.3	ND	3.1 CI	1.0 J	0.83 J	1.3 J	ND	ND	ND	ND	3.0 J	ND	ND	ND	ND	ND	1.0 J	ND	N/A	ND	ND	ND	ND	ND	N/A	N/A	18	0.000
5/14/19	10	ND	3.2	1.1 J	2.8	2.8	ND	ND	ND	ND	3.1 J	ND	ND	5.1	ND	ND	2.3	ND	N/A	ND	0.74 J	ND	ND	2.0 J	N/A	N/A	33	0.000
7/11/19	19	0.29 J	6.6	0.92 J	5.6	2.8	ND	ND	ND	0.4 J	6.9	ND	ND	3.1	0.4 J	ND	3.6	0.20 J	N/A	ND	1.3 J	ND	ND	2.5 J	N/A	N/A	54	0.001
9/23/19	14	0.27 J	4.8	0.56 J	4.6	1.6 J	ND	ND	0.21 J	0.33 J	6.2 JB	ND	2.4 J	ND	0.46 J	ND	3.3	15	N/A	ND	1.1 J	ND	ND	2.5 J	N/A	N/A	57	0.001
11/12/19	14	0.60 J	25 CI	0.40 J	0.45 J	3.3	ND	ND	ND	ND	9.6 B	ND	0.81 J	3.1	ND	ND	ND	5.9	N/A	ND	ND	ND	ND	ND	N/A	N/A	63	0.001
1/7/20	15	0.39 J	4.2	0.47 J	0.88 J	2.8	ND	ND	ND	0.58 J	3.4 J	ND	1.5 J	4.1	ND	ND	ND	8.5	N/A	ND	ND	ND	ND	3.3 J	N/A	N/A	45	0.001
3/13/20	20	0.68 J	2.5	0.36 J	2.3	2.4	ND	ND	ND	0.53 J	3.3 J	ND	2.5 J	6.3	0.23 J	ND	ND	26	N/A	ND	0.58 J	ND	ND	2.7 J	N/A	N/A	70	0.001
5/13/20	9.3	0.51 J	18	0.51 J	1.4 J	2.3	ND	ND	ND	ND	3.2 J	ND	1.1 J	4.9	ND	ND	ND	17	N/A	ND	ND	ND	ND *	1.1 J	N/A	N/A	59	0.001
7/23/20	16	0.55 J	21	1.3 J	1.4 J	2.9	ND	ND	ND	4.7	26	ND	1.6 J	25	0.30 J	ND	ND	25	N/A	3.5	10	22	ND	25	N/A	N/A	186	0.002
9/28/20	8.8	0.49 J	2.7	0.53 J	0.96 J	2.5	ND	ND	ND	0.43 J	ND	ND	0.63 J	5.4	0.59 J	ND	ND	18	ND	ND	0.57 J	ND	ND	1.9 J	N/A	N/A	44	0.001

Notes:

µg/m^3 - micrograms per cubic meter

B - compound was found in the blank and sample

EPA - United States Environmental Protection Agency

GAC - granular activated carbon

CL - result suspected to be biased high due to chromatographic interference

J - result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value

lbs./day - pounds per day

N/A - not applicable (samples not analyzed for compound)

ND - non-detect (below detection limit)

OM&M - operation, maintenance, and monitoring

SSD - sub-slab depressurization

TO-15 - Toxic Organic Method 15

VOCs - volatile organic compounds

* - LCS or LCSD is outside acceptance limits

Sampling not conducted in July 2012 due to shutdown test.

November 2012 sample collected while four new extraction wells installed in October 2012 were operating (November 5-26, 2012). Wells temporarily closed until May 16, 2013.

Samples analyzed from 4/2/08 to 11/7/13 and from 7/1/15 to present analyzed by TestAmerica, Inc. of Knoxville, TN.

Samples analyzed from 12/5/13 to 6/2/15 analyzed by Pace Analytical Services, Inc. of Minneapolis, MN.

TABLE 6

Building C Effluent Concentrations (µg/m^3)

LABORATORY DATA SUMMARY

SSD System OM&M, Middle River Complex, Middle River, Maryland

Samples analyzed by EPA Method TO-15

Date	benzene	carbon tetrachloride	chlorodifluoromethane	chloroform	cis-1,2-dichloroethene	dichlorodifluoromethane	1,1-dichloroethane	1,2-dichloroethane	1,1-dichloroethene	ethylbenzene	methylene chloride	methyl-tert-butyl ether	naphthalene	tetrachloroethene	toluene	trans-1,2-dichloroethene	1,2,4-trichlorobenzene	1,1,1-trichloroethane	1,1,2-trichloroethane	trichloroethene	1,2,3-trimethylbenzene	1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	vinyl chloride	total xylenes	m-xylene & p-xylene	o-xylene	Total VOCs	Mass (lbs./day)
3/31/08	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	ND	N/A	ND	ND	0	0.000
4/2/08	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	170	N/A	ND	ND	170	0.001
4/4/08	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	360	N/A	ND	ND	360	0.002
4/11/08	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	25	N/A	ND	ND	550	N/A	ND	ND	575	0.003
4/17/08	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	100	N/A	ND	ND	100	0.001
4/24/08	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	260	N/A	ND	ND	260	0.001
5/23/08	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	52	N/A	ND	ND	52	0.000
6/19/08	51	ND	N/A	ND	ND	ND	ND	ND	ND	ND	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	54	N/A	ND	ND	155	0.001
7/18/08	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	29	N/A	ND	ND	29	0.000
8/13/08	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	10	ND	16	N/A	ND	ND	26	0.000
9/11/08	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	63	ND	ND	ND	28	ND	ND	ND	ND	ND	N/A	ND	ND	6.1	N/A	ND	ND	97	0.001
11/12/08	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	47	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	16	N/A	ND	ND	63	0.000
12/18/08	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	31	N/A	ND	ND	31	0.000
2/4/09	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	29	N/A	ND	ND	29	0.000
2/20/09	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	6.8	N/A	ND	ND	6.8	0.000
3/18/09	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	26	N/A	ND	ND	26	0.000
4/17/09	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	8.9	N/A	ND	ND	8.9	0.000
5/20/09	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	ND	N/A	ND	ND	0.0	0.000
6/23/09	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	5.5	N/A	9.4	ND	15	0.000
7/23/09	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	29	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	ND	N/A	ND	ND	29	0.000
8/28/09	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	ND	N/A	ND	ND	0.0	0.000
9/28/09	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	ND	N/A	ND	ND	0.0	0.000
10/27/09	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	ND	N/A	ND	ND	0.0	0.000
11/24/09	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	ND	N/A	ND	ND	0.0	0.000
12/23/09	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10	ND	ND	ND	ND	ND	N/A	ND	ND	ND	N/A	ND	ND	10	0.000
1/19/10	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	ND	N/A	ND	ND	0.0	0.000
2/17/10	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	ND	N/A	ND	ND	0.0	0.000
3/17/10	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	ND	N/A	ND	ND	0.0	0.000
4/16/10	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	ND	N/A	ND	ND	0.0	0.000
5/13/10	36	ND	N/A	ND	ND	ND	ND	ND	ND	24	31	ND	ND	ND	140	ND	ND	ND	ND	ND	N/A	17	ND	ND	N/A	89	25	362	0.002
6/18/10	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	68	16	ND	N/A	28	16	128	0.001
7/19/10	10	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	ND	N/A	ND	ND	10	0.000
8/19/10	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	ND	N/A	ND	ND	0.0	0.000
9/17/10	13	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	ND	N/A	ND	ND	13	0.000
10/12/10	ND	ND	N/A	ND	21	ND	ND	ND	ND	ND	ND	ND	ND	ND	42	ND	ND	110	ND	25	N/A	ND	ND	ND	N/A	ND	ND	198	0.001
11/2/10	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	ND	N/A	ND	ND	0.0	0.000
12/1/10	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	24	ND	ND	N/A	ND	ND	ND	N/A	ND	ND	24	0.000
1/5/11	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	12	N/A	ND	ND	12	0.000
2/7/11	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	5	N/A	ND	ND	5.3	0.000
3/3/11	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	ND	N/A	ND	ND	0.0	0.000
4/14/11	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	13	ND	ND	ND	ND	ND	N/A	ND	ND	ND	N/A	ND	ND	13	0.000
5/6/11	ND	ND	N/A	ND	ND	ND	ND	ND	ND	11	ND	ND	ND	ND	ND	ND	ND	ND	ND	15	N/A	ND	ND	ND	N/A	ND	ND	26	0.000
6/9/11	8.4	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.9	ND	ND	ND	ND	ND	N/A	ND	ND	ND	N/A	ND	ND	17	0.000
7/11/11	9.5	ND	N/A	ND	ND	ND	ND	ND	ND	ND	75	ND	ND	ND	61	ND	ND	ND	ND	ND	N/A	ND	ND	ND	N/A	21	ND	167	0.001
8/3/11	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	21	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	ND	N/A	ND	ND	21	0.000
9/15/11	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	ND	N/A	ND	ND	0.0	0.000
10/25/11	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	23	ND	ND	ND	21	ND	ND	ND	ND	ND	N/A	ND	ND	ND	N/A	11	ND	55	0.000
11/8/11	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	ND	N/A	ND	ND	0.0	0.000
12/6/11	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	ND	N/A	ND	ND	0.0	0.000
1/3/12	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	ND	N/A	ND	ND	0.0	0.000
2/16/12	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	ND	N/A	ND	ND	0.0	0.000
3/15/12	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	ND	N/A	ND	ND	0.0	0.000
4/16/12	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	ND	N/A	ND	ND	0.0	0.000
5/9/12	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	ND	N/A	ND	ND	0.0	0.000
6/4/12	ND	ND	N/A	ND	ND	ND	ND	ND	ND	15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	ND	N/A	8.4	ND	23	0.000
8/15/12	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	ND	N/A	ND	ND	0.0	0.000
9/12/12	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	22	ND	ND	ND	ND	ND	N/A	ND	ND	ND	N/A	ND	ND	22	0.000
10/18/12	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	ND	N/A	ND	ND	0.0	0.000
11/13/12	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	ND	N/A	ND	ND	0.0	0.000
12/6/12	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	ND	N/A	ND	ND	0.0	0.000

TABLE 6

Building C Effluent Concentrations (µg/m^3)

LABORATORY DATA SUMMARY

SSD System OM&M, Middle River Complex, Middle River, Maryland

Samples analyzed by EPA Method TO-15

Date	benzene	carbon tetrachloride	chlorodifluoromethane	chloroform	cis-1,2-dichloroethene	dichlorodifluoromethane	1,1-dichloroethane	1,2-dichloroethane	1,1-dichloroethene	ethylbenzene	methylene chloride	methyl-tert-butyl ether	naphthalene	tetrachloroethene	toluene	trans-1,2-dichloroethene	1,2,4-trichlorobenzene	1,1,1-trichloroethane	1,1,2-trichloroethane	trichloroethene	1,2,3-trimethylbenzene	1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	vinyl chloride	total xylenes	m-xylene & p-xylene	o-xylene	Total VOCs	Mass (lbs./day)
1/4/13	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	ND	N/A	ND	ND	0.0	0.000
2/6/13	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	5.3	N/A	ND	ND	5.3	0.000
3/7/13	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	ND	N/A	ND	ND	0.0	0.000
4/8/13	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	ND	N/A	ND	ND	0.0	0.000
5/10/13	9.9	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	34	N/A	ND	ND	ND	N/A	ND	ND	44	0.000
6/5/13	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	ND	N/A	ND	ND	0.0	0.000
7/3/13	6.4	ND	N/A	ND	ND	ND	ND	ND	ND	ND	29	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	ND	N/A	ND	ND	35	0.001
8/14/13	5.8	ND	N/A	ND	ND	ND	ND	ND	ND	ND	17	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	ND	N/A	ND	ND	23	0.000
9/9/13	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	ND	N/A	ND	ND	0.0	0.000
10/10/13	11	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	ND	N/A	ND	ND	11	0.000
11/7/13	10	ND	N/A	ND	ND	ND	ND	ND	ND	ND	20	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	ND	ND	ND	N/A	ND	ND	30	0.000
12/5/13	9.3	ND	ND	ND	2.1	9.2	ND	ND	ND	ND	13.9	ND	ND	ND	3.5	ND	ND	ND	ND	3.7	ND	4.9	2.3	ND	N/A	ND	ND	49	0.001
1/13/14	4.8	ND	4.3	1.6	8.2	ND	ND	ND	ND	ND	2.3	ND	4.8	ND	26.3	ND	ND	ND	ND	3.8	1.7	7.3	ND	ND	N/A	3.6	ND	69	0.001
2/14/14	6.6	3.3	10.6	3.8	7.0	4.5	2.5	2.4	2.4	2.9	1.3	2.1	3.0	4.5	4.0	2.3	3.3	3.6	3.1	5.7	8.7	6.1	4.3	ND	N/A	3.4	2.8	104	0.002
3/12/14	6.9	ND	2.5	ND	ND	2.2	ND	ND	ND	ND	13.7	ND	ND	ND	3.2	ND	ND	ND	ND	1.9	0.94	5.1	2.3	ND	N/A	ND	ND	39	0.001
4/10/14	6.2	ND	ND	ND	ND	ND	ND	ND	ND	110	ND	ND	ND	ND	95.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A	330	91.7	633	0.010
5/5/14	6.0	ND	6.8	ND	2.3	3.2	ND	ND	ND	ND	1.4 J	ND	4.0 J	ND	3.4	ND	ND	ND	ND	ND	1.4 J	7.2	3.5	ND	N/A	1.2 J	ND	40	0.001
6/5/14	5.7	ND	2.9	ND	2.5	2.9	ND	ND	ND	ND	20	ND	2.3 J	21.1	2.3	ND	ND	ND	ND	ND	3.1	7.5	3.5	ND	N/A	1.5 J	1.8	77	0.001
7/3/14	10.6	ND	10.6	1.6	4.2	1.1 J	ND	ND	ND	4.3	5.8 J	ND	2.4 J	20.5	4.2	ND	ND	ND	ND	1.6	1.9	9.7	5.4	ND	N/A	7.4	1.8	93	0.002
8/13/14	6.1	ND	N/A	31.1	4.5	ND	2.1 J	ND	ND	ND	ND	ND	1.8 J	ND	3.0	ND	ND	ND	ND	ND	N/A	8.3	4.4	ND	N/A	3.4 J	2.0 J	67	0.001
9/12/14	4.0	0.89 J	5.9	59.4	3.8	3.6	7.3	ND	3.9	ND	0.80 J	ND	1.6 J	0.62 J	2.2	ND	ND	3.9	ND	6.7	1.4 J	8.0	ND	ND	N/A	0.95 J	ND	115	0.002
10/9/14	6.2	ND	10.9	2.1	ND	ND	2.0	ND	ND	ND	2.3 J	ND	4.0 J	ND	2.3	ND	ND	ND	ND	ND	2.1	6.3	2.9	ND	N/A	ND	ND	41	0.001
11/5/14	4.2	ND	9.0	9.0	2.2	2.6	4.7	ND	ND	ND	6.4	ND	5.9	4.5	2.2	ND	ND	2.1	ND	1.9	3.6 J	6.1	3.9 J	ND	N/A	ND	3.2 J	72	0.001
12/4/14	3.8	ND	7.8	8.0	3.0 J	3.1	3.7	ND	ND	ND	5.9	ND	4.3	5.7	3.3	ND	ND	7.3	ND	ND	3.7 J	5.8	4.2	ND	N/A	ND	ND	70	0.001
1/15/15	11.5	ND	8.4	4.3	4.2	2.9	1.2 J	ND	ND	ND	4.2 J	ND	1.0 J	1.9	4.0	ND	ND	13.0	ND	0.93	1.5 J	8.4	4.0	ND	N/A	1.5 J	ND	73	0.001
2/9/15	7.4	ND	3.2	1.8	2.0 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.1	ND	ND	6.3	ND	ND	1.1 J	6.7	3.0	ND	N/A	ND	ND	34	0.001
3/10/15	2.9	2.8	3.7	0.86	1.1 J	1.7 J	ND	ND	ND	ND	ND	ND	0.99 J	ND	2.1	ND	ND	2.8	ND	ND	1.0 J	4.5	2.1	ND	N/A	0.94 J	ND	27	0.000
4/6/15	10.7	0.79 J	5.1	2.10	3.6	2.7	1.0 J	ND	ND	0.79 J	8.1	ND	ND	ND	2.8	ND	ND	7.8	ND	0.87 J	1.8	8.2	3.9	ND	N/A	1.6 J	ND	62	0.001
5/8/15	5.4	ND	17.9	ND	1.4 J	ND	0.68 J	ND	ND	ND	ND	ND	ND	ND	1.4 J	ND	ND	3.4	ND	ND J	ND	5.2	2.4 J	ND	N/A	ND	ND	38	0.001
6/2/15	13.6	ND	6.1	0.99	1.7	ND	1.1 J	ND	ND	ND	6.4	ND	5.4	ND	3.5	ND	ND	4.4	ND	1.10	2.2	10.2	5.9	ND	N/A	ND	ND	63	0.001
7/1/15	ND	ND	9.7	ND	ND	ND	2.0	ND	2.0	ND	ND	ND	ND	ND	2.5	ND	ND	5.2	ND	ND	ND	ND	ND	ND	ND	N/A	N/A	21	0.000
8/10/15	7.2	ND	15.0	ND	ND	2.4	ND	ND	ND	ND	8.1	ND	ND	ND	15.0	ND	ND	1.4 J	ND	2.4	ND	3.0	1.3 J	ND	ND	N/A	N/A	56	0.001
9/11/15	11	ND	9.0	ND	ND	2.6	0.98 J	ND	1.4 J	ND	6.4	ND	ND	ND	4.1	ND	ND	1.5 J	ND	2.6	1.6 J	5.9	2.5	ND	2.0 J	N/A	N/A	52	0.001
10/7/15	11	ND	3.8	0.90 J	ND	2.1	3.9	ND	1.1 J	ND	4.2	ND	ND	ND	6.2	ND	ND	1.2 J	ND	1.4	ND	2.4	1.1 J	ND	1.2 J	N/A	N/A	41	0.001
11/2/15	9.7	0.48 J	10	4.0	1.5 J	3.6	12	ND	3.2	0.63 J	3.8	ND	ND	2.2 J	2.9	ND	ND	15	ND	ND	ND	2.7	1.3 J	ND	ND	N/A	N/A	73	0.001
12/3/15	5.9	ND	19	1.4 J	0.68 J	2.5	3.3	ND	0.88 J	ND	2.5 J	ND	ND	ND	3.2	ND	ND	9.4	ND	ND	ND	3.0	1.0 J	ND	ND	N/A	N/A	53	0.001
1/15/16	9.4	ND	5.5	0.54 J	ND	2.3	1.2 J	ND	0.48 J	ND	2.7 J	ND	ND	ND	5.0	ND	ND	6.7	ND	ND	1.1 J	4.3	1.7 J	ND	ND	N/A	N/A	41	0.001
3/9/16	5.6	ND	11	0.57 J	0.59 J	2.1	0.97 J	ND	ND	ND	5.4	ND	ND	ND	6.1	ND	ND	7.3	ND	ND	ND	3.3	1.2 J	ND	ND	N/A	N/A	44	0.001
5/12/16	3.9	ND	6.8	0.46 J	0.49 J	3.5	0.51 J	ND	ND	ND	4.0	ND	ND	ND	8.3	ND	ND	7.2 B	ND	ND	ND	2.9	1.1 J	ND	ND	N/A	N/A	39	0.001
7/14/16	10	ND	11	1.1 J	1.2 J	3.3	1.4 J	ND	1.0 J	0.90 J	7.4	ND	ND	ND	5.8	ND	ND	13 B	ND	ND	1.7 J	6.7	2.4	ND	2.4 J	N/A	N/A	69	0.001
9/7/16	7.5	ND	3.5	1.2 J	2.3	2.1	6.1	ND	2.5	ND	4.3	ND	ND	ND	2.7	ND	ND	13	ND	6.9	1.2 J	4.7	1.8 J	ND	ND	N/A	N/A	60	0.001
11/3/16	8.1	ND	17	ND	ND	3.3	1.4	ND	1.3	1.2	23	ND	ND	ND	15	ND	ND	ND	ND	ND	1.3 J	5.2	1.8 J	ND	5.5	N/A	N/A	84	0.001
1/12/17	5.2	ND	5.9	0.50 J	ND	2.0	2.0	ND	0.5 J	1.0 J	12	ND	ND	ND	21	ND	ND	ND	ND	ND	0.9 J	3.2	1.4 J	ND	4.8	N/A	N/A	60	0.001
3/8/17	5.0	ND	4.4	0.61 J	0.5 J	2.8	1.7	ND	0.36 J	1.1 J	2.9 J	ND	ND	ND	7.9	ND	ND	0.72 J	ND	ND	ND	2.7	1.0 J	ND	1.4	N/A	N/A	33	0.001
5/5/17	5.5	ND	1.7	0.67 J	0.6 J	2.0	1.0 J	ND	0.30 J	0.72 J	2.5 J	ND	ND	ND	3.4	ND	ND	1.1 J	ND	ND	0.94 J	3.8	1.5 J	ND	3.6	N/A	N/A	29	0.000
7/6/17	6.3	ND	14	0.92 J	0.9 J	2.1	0.75 J	ND	ND	1.2 J	4.6	ND	ND	0.64 J	6.4	ND	ND	2.0 JB	ND	0.4 J	0.84 J	3.7	1.4 J	ND	3.5	N/A	N/A	50	0.001
9/7/17	6.8	ND	3.2	0.83 J	2.3	2.1	0.49 J	ND	0.40 J	0.76 J	6.3	ND	ND	ND	7.2	ND	ND	3.8	ND	8.1	1.8 J	4.3	1.9 J	ND	1.3 J	N/A	N/A	52	0.001
11/8/17	6.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.1 J	ND	ND	ND	2.6	ND	ND	0.89 J	ND	6.4	ND	3.0	1.3 J	ND	ND	N/A	N/A	24	0.000
1/9/18	5.4	ND	9.8	ND	ND	2.7	ND	ND	ND	0.76 J	4.1 J	ND	ND	ND	3.6	ND	ND	1.9 J	ND	7.4	ND	3.0	1.3 J	ND	ND	N/A	N/A	40	0.001
3/8/18	5.1	ND	4.6	ND	ND	2.0	ND	ND	ND	0.70 J	3.3 J	ND	ND	ND	4.5	ND	ND	0.39 J	ND	3.3	ND	4.8	2.1	ND	2.6 J	N/A	N/A	33	0.001
5/8/18	6.2	ND	3.7	2.2	0.8 J	2.7	0.3 J	ND	ND	1.10 J	ND	ND	ND	ND	23.0	ND	ND	ND	ND	ND	1.0 J	5.4	2.4	ND	5.9	N/A	N/A	55	0.001
7/12/18	9.4	ND	6.7	1.2 J	2.0	1.5 J	0.3 J	ND	ND	0.72 J	8.5	ND	ND	1.3 J	7.8	ND	ND	ND	ND	ND	1.1 J	7.1	2.8	ND	3.1 J	N/A	N/A	53	0.001
9/11/18	8.5	ND	5.6	2.0	3.1	3.1	0.3 J	ND	ND	0.93 J	3.4 JB	ND	ND	ND	8.2	ND	ND	0.6 JB	ND	ND	1.7 J	14.0	4.7	ND	2.6 J	N/A	N/A	59	0.001
11/9/18	6.5	ND	3.0	2.7	1.8	2.7	ND	ND	ND	ND	3.1 J	ND	ND	ND	3.3	ND	ND	1.0 J	ND	ND	0.9 J	5.7	2.1	ND	ND	N/A	N/A	33	0.000

TABLE 6

Building C Effluent Concentrations (µg/m^3)

LABORATORY DATA SUMMARY

SSD System OM&M, Middle River Complex, Middle River, Maryland

Samples analyzed by EPA Method TO-15

Date	benzene	carbon tetrachloride	chlorodifluoromethane	chloroform	cis-1,2-dichloroethene	dichlorodifluoromethane	1,1-dichloroethane	1,2-dichloroethane	1,1-dichloroethene	ethylbenzene	methylene chloride	methyl-tert-butyl ether	naphthalene	tetrachloroethene	toluene	trans-1,2-dichloroethene	1,2,4-trichlorobenzene	1,1,1-trichloroethane	1,1,2-trichloroethane	trichloroethene	1,2,3-trimethylbenzene	1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	vinyl chloride	total xylenes	m-xylene & p-xylene	o-xylene	Total VOCs	Mass (lbs./day)
1/21/19	5.7	ND	2.7	1.7 J	0.8 J	1.4 J	ND	ND	ND	ND	3.5 J	ND	ND	ND	ND	ND	ND	0.64 J	ND	ND	ND	3.8	1.4 J	ND	ND	N/A	N/A	22	0.000
3/13/19	5.3	ND	3.6 CI	1.5 J	0.7 J	1.4 J	ND	ND	ND	ND	2.8 J	ND	ND	ND	2.4	ND	ND	0.65 J	ND	0.83 J	ND	3.2	1.3 J	ND	ND	N/A	N/A	24	0.000
5/14/19	5.9	ND	3.0	2.4	0.7 J	2.7	ND	ND	ND	ND	3.0 J	ND	ND	ND	5.9	ND	ND	1.3 J	ND	ND	ND	3.4	1.5 J	ND	1.8 J	N/A	N/A	32	0.000
7/11/19	17	ND	5.6	2.4	0.8 J	2.5	ND	ND	ND	0.51 J	4.0 J	ND	ND	ND	7.6	ND	ND	1.8 J	ND	ND	1.4 J	7.9	3.7	ND	2.2 J	N/A	N/A	57	0.001
9/23/19	9.7	ND	5.0	1.2 J	1.9 J	1.5 J	ND	ND	0.21 J	0.52 J	5.4 JB	ND	ND	ND	3.3	ND	ND	3.1	ND	13	ND	4.5	2.7	ND	3.0 J	N/A	N/A	55	0.001
11/12/19	7.3	ND	43 CI	ND	ND	2.9	ND	ND	ND	ND	6.5 JB	ND	ND	ND	4.6	ND	ND	ND	ND	1.4	ND	1.7 J	1.3 J	ND	0.69 J	N/A	N/A	69	0.001
1/7/20	12	ND	5.1	ND	ND	2.5	ND	ND	ND	0.48 J	3.7 J	ND	ND	ND	6.9	ND	ND	ND	ND	0.88 J	ND	4.1	2.1	ND	1.9 J	N/A	N/A	40	0.000
3/13/20	12	ND	3.0	ND	ND	2.2	ND	ND	ND	0.59 J	3.2 J	ND	ND	ND	9.9	ND	ND	ND	ND	0.16 J	0.92 J	4.9	2.3	ND	2.6 J	N/A	N/A	42	0.001
5/13/20	6.8	ND	16	0.49 J	3.0	2.4	ND	ND	ND	ND	4.8 J	ND	ND	ND	5.4	0.25 J	ND	ND	ND	0.78 J	ND	2.6	2.3	ND *	0.78 J	N/A	N/A	46	0.001
7/23/20	8.9	ND	19	1.5 J	5.3	3.2	ND	ND	ND	0.50 J	30	ND	ND	0.25 J	6.1	0.64 J	ND	2.3	ND	0.90 J	1.5 J	6.0	3.2	ND	2.0 J	N/A	N/A	91	0.001
9/28/20	5.3	0.46 J	2.8	0.84 J	2.0	2.8	ND	ND	ND	0.44 J	ND	ND	ND	ND	7.5	0.48 J	ND	4.8	ND	ND	0.98 J	3.6	1.9 J	ND	2.0 J	N/A	N/A	36	0.000

Notes:

µg/m^3 - micrograms per cubic meter

B - compound was found in the blank and sample

EPA - United States Environmental Protection Agency

lbs./day - pounds per day

CL - result suspected to be biased high due to chromatographic interference

J - result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value

N/A - not applicable (samples not analyzed for compound)

ND - non-detect (below detection limit)

OM&M - operation, maintenance, and monitoring

SSD - sub-slab depressurization

TO-15 - Toxic Organic Method 15

VOCs - volatile organic compounds

* - LCS or LCSD is outside acceptance limits

Sampling not conducted in July 2012 due to system shutdown test.

November 2012 sample collected after the potassium permanganate zeolite (PPZ) unit. PPZ unit was taken offline prior to the December 2012 sample.

Samples analyzed from 4/2/08 to 11/7/13 and from 7/1/15 to present analyzed by TestAmerica, Inc. of Knoxville, TN.

Samples analyzed from 12/5/13 to 6/2/15 analyzed by Pace Analytical Services, Inc. of Minneapolis, MN.

APPENDICES

Appendix A—Biweekly and Quarterly System Check Forms

Appendix B—Analytical Reports for System Samples

APPENDIX A—BIWEEKLY AND QUARTERLY SYSTEM CHECK FORMS

DAILY ACTIVITY LOG

Project:	Client:
SSD System O&M	Lockheed Martin Corporation
Location:	**Date:**
Middle River Complex, Middle River, Maryland	4/1/20

Time	Description of Activities
8:20	Arrive on site
8:25	Retrieve keys from security office
8:35	Start Bldg C system check
10:00	Bldg C checks complete
10:05	Return keys to security office.
10:10	Bldg A system checks start
11:00	Meet with Mike Smith from S+S
12:00	Resume Bldg A checks.
12:30	Checks + system drain complete
12:40	Picture Tour
1:00	Picture Tour complete offsite

Personnel On Site:	Description of Activities:
Andrew Smith	Systemchecks
	meet S+S
	system Drain
	Picture Tour
Mike Smith	Sump inspect

Field Rep. Signature: A. J. Smith **Date:** 4/1/20

SSD SYSTEM CHECK - BUILDING A

LMC Middle River Complex, Middle River, Maryland

Date: 4/1/20 Time: 10:10 Personnel: AS

1. Was the system running upon arrival?
   (YES) NO
2. Were there any alarm conditions upon arrival?
   YES (NO)

Comment: _____

3. Is the blower vacuum relief valve open?
   YES (NO)
4. Is the dilution valve open?
   YES (NO) % Open: _____
5. Are there any leaks or damage to system hoses?
   YES (NO)
6. Is there any damage to system components?
   YES (NO)
7. Are all locks and zip-ties secure?
   (YES) NO

Basement A

Flow meter = 13,926

8. Was there a GAC change out?
   YES (NO)
9. How many GAC units are at this location?
   NEW 0 SPENT 0
10. Do these fall to zero when system is turned off?
    Flow Gauge (YES) NO
    Pressure Gauge (YES) NO
    Vacuum Gauges (YES) NO
11. Do the temp. gauges fall when system is turned off?
    (YES) NO
12. Does the heat-exchanger have dust on the underside?
    (YES) NO
13. Was the underside of the heat-exchanger vacuumed?
    (YES) NO Brushed
13. Was the system running upon departure?
    (YES) NO
14. What is the amperage draw on the blower?
    Black: 19.18 Red: 18.95 White: 19.86

GENERAL SYSTEM MONITORING

Vacuum pre-Filter (in. H_2O)	Vacuum post-Filter (in. H_2O)	Diff Pressure of Filter* (in. H_2O)	Temp post-Blower (°F)	Temp post-HE (°F)	Pressure (in. H_2O)	Flow (scfm)	Time Counter Display (hours)
19	30	11	144	114	25	290	32948.1

* Clean or change filter if differential pressure increases by 10 in. H_2O

EXTRACTION POINT VACUUM AND VELOCITY MONITORING

Location	Vacuum (in. H_2O)	Velocity (ft/min)	Flow (scfm)	Contains H_2O?	Vacuum/Flow Adjustment	Comments
North	-2.62	922	80.5 *	X		
South	-4.80	738	64.4 *	X		
Basement North	-18.48	2228	193.8 *	X		
Basement South	-1.25	1487	129.8 *	X		
Basement HRS5						
SSD-34-A	-19.58	683	14.9 **	X		
SSD-35-A	-18.48	941	20.5 **	X		
SSD-36-A	-0.35	421	9.2 **	X		
SSD-37-A	-3.31	839	18.3 **	X		
SSD-38-A	-16.66	1278	27.8 **	X		
SSD-39-A	-19.58	750	16.4 **	X		

* Flow = Velocity x 0.0873; ** Flow = Velocity x 0.0218

VMP VACUUM MONITORING

VMP	Vacuum	Comments	VMP	Vacuum	Comments
166-A	-0.05		160-A	-0.70	
079-A	0.00		SSD-1-A	-0.03	
167-A	-0.03		SSD-12-A-X	-1.39	
119-A	0.00		SSD-11-A-X	-2.60	
165-A	-0.10		SSD-13-A-X	-0.38	
117-A	-0.04		SSD-2-A-X	-3.65	
164-A	Destroyed		015-A-X	-2.36	
136-A-S	-1.61		SSD-16-A-X	-0.41	
163-A	covered		SSD-3-A-X	covered	
121-B	0.00		SSD-22-A	-0.15	
162-A	0.00		SSD-21-A	-0.11	
136-A-N	0.00		SSD-20-A	-0.01	
136-A	covered		SSD-19-A	0.00	
161-A	-0.54		168-A	covered	
			188-A	covered	

SSD SYSTEM CHECK - BUILDING A

LMC Middle River Complex, Middle River, Maryland

MONTHLY VAPOR SAMPLING				
Location	A-INFLUENT	A-MID GAC	A-EFFLUENT	Comments
Time		N/A		
Summa Canister ID				
Flow Contr. ID				
Start Vacuum (in. Hg)				
Stop Vacuum (in. Hg)				

SYSTEM CONDENSATE MONITORING					
Location	Contains Water?	Water Drained?	Volume Drained	Drain Valve Closed?	Comments
Moisture Separator 1	Yes | No	Yes | No	5	Yes | No	
Moisture Separator 2	Yes | No	Yes | No	N/A	Yes | No	
Exhaust Stack Sump	Yes | No	Yes | No	2	Yes | No	No water
PS-1-A	Yes | No	Yes | No	N/A	Yes | No	
PS-2-A	Yes | No	Yes | No		Yes | No	
PS-3-A	Yes | No	Yes | No		Yes | No	
PS-4-A	Yes | No	Yes | No		Yes | No	
	Yes | No	Yes | No		Yes | No	
Drain stacks	Yes | No	Yes | No	12	Yes | No	7 gallons total

INDOOR AIR FILTER MONITORING				
	AF-N/NX	AF-M/MX	AF-S/SX	Comments
Was the power on upon arrival?	Yes | No	Yes | No	Yes | No	
Was the fan running upon arrival?	Yes | No	Yes | No	Yes | No	
Fan speed/airflow setting (#/cfm)	6/300	6/300	6/300	
Is there damage to unit or signs of tampering?	Yes | No	Yes | No	Yes | No	
Is the "do not turn off filter" warning sign in place?	Yes | No	Yes | No	Yes | No	
Life status color of the Pre-Filter (F-1)?	GN | OR | RD	GN | OR | RD	GN | OR | RD	
Life status color of the GAC Filter (F-2)?	GN | OR | RD	GN | OR | RD	GN | OR | RD	
Life status color of the Post-Filter (F-3)?	GN | OR | RD	GN | OR | RD	GN | OR | RD	
Was the Pre-Filter (F-1) replaced?	Yes | No	Yes | No	Yes | No	
Was the GAC Filter (F-2) replaced?	Yes | No	Yes | No	Yes | No	
Was the Post-Filter (F-3) replaced?	Yes | No	Yes | No	Yes | No	

MAINTENANCE RECORD		
Issue Requiring Maintenance	Maintenance Conducted	Issue Status
	N/A	OPEN CLOSED
		OPEN CLOSED
		OPEN CLOSED

ADDITIONAL COMMENTS:

No issues

PERSONNEL SIGNATURE: [signature] **DATE:** 4/1/20

DAILY ACTIVITY LOG

Project:	Client:
SSD System O&M	Lockheed Martin Corporation
Location:	**Date:**
Middle River Complex, Middle River, Maryland	4/7/20

Time	Description of Activities
8:30	Arrive on site
8:35	HRS5 Monitoring
	Flow meter check 23,853 gallons
	Bldg A system Drain 5 gallons
9:15	off site

Personnel On Site:	Description of Activities:
Andrea Smith	System Drain
	HRS5 Monitor
	Flow meter check

Field Rep. Signature: [signature] Date: 4/7/20

DAILY ACTIVITY LOG

Project:	Client:
SSD System O&M	Lockheed Martin Corporation
Location:	**Date:**
Middle River Complex, Middle River, Maryland	4/14/2020

Time	Description of Activities
8:00	Arrive on Site
8:10	Begin Bldg A Checks
9:50	Bldg A system checks System Drain and GAC samples complete
9:55	Retrieve keys from security office
10:00	Start Bldg C checks
11:05	Bldg C checks complete
11:10	Return Keys to the security office
11:20	off site

Personnel On Site:	Description of Activities:
Andrew Smith	System Checks

Field Rep. Signature: A. S. Smith Date: 4/14/2020

SSD SYSTEM CHECK - BUILDING A

LMC Middle River Complex, Middle River, Maryland

Date: 4/14/23 Time: 8:10am Personnel: AS

1. Was the system running upon arrival?
   (YES) NO
2. Were there any alarm conditions upon arrival?
   YES (NO)

Comment: _____

3. Is the blower vacuum relief valve open?
   (YES) NO
4. Is the dilution valve open?
   (YES) NO % Open: _____
5. Are there any leaks or damage to system hoses?
   YES (NO)
6. Is there any damage to system components?
   YES (NO)
7. Are all locks and zip-ties secure?
   (YES) NO
8. Was there a GAC change out?
   YES (NO)
9. How many GAC units are at this location?
   NEW 0 SPENT 0
10. Do these fall to zero when system is turned off?
    Flow Gauge (YES) NO
    Pressure Gauge (YES) NO
    Vacuum Gauges (YES) NO
11. Do the temp. gauges fall when system is turned off?
    (YES) NO
12. Does the heat-exchanger have dust on the underside?
    (YES) NO
13. Was the underside of the heat-exchanger vacuumed?
    (YES) NO Brushed
13. Was the system running upon departure?
    (YES) NO
14. What is the amperage draw on the blower?
    Black: 17.86 Red: 19.02 White: 19.92

GENERAL SYSTEM MONITORING

Vacuum pre-Filter (in. H_2O)	Vacuum post-Filter (in. H_2O)	Diff Pressure of Filter* (in. H_2O)	Temp post-Blower (°F)	Temp post-HE (°F)	Pressure (in. H_2O)	Flow (scfm)	Time Counter Display (hours)
18	30	12	150	118	25	290	33249.2

* Clean or change filter if differential pressure increases by 10 in. H_2O

EXTRACTION POINT VACUUM AND VELOCITY MONITORING

Location	Vacuum (in. H_2O)	Velocity (ft/min)	Flow (scfm)	Contains H_2O?	Vacuum/Flow Adjustment	Comments
North	-3.47	1517	132 *	X		
South	-4.71	1305	113.8 *	X		
Basement North	-18.05	979	85.5 *	X		
Basement South	-1.34	1390	121.3 *	X		
Basement HRS5			*			
SSD-34-A	-19.35	1180	25.7 **	X		
SSD-35-A	-15.89	920	20.1 **	X		
SSD-36-A	-0.42	442	9.6 **	X	open -> -3.15	1667
SSD-37-A	-7.24	1520	33.1 **	X		
SSD-38-A	-16.24	1230	26.8 **	X		
SSD-39-A	-17.28	927	20.2 **	X		

* Flow = Velocity x 0.0873; ** Flow = Velocity x 0.0218

VMP VACUUM MONITORING

VMP	Vacuum	Comments	VMP	Vacuum	Comments
166-A	-0.07		160-A	Covered	
079-A	0.00		SSD-1-A	Covered	
167-A	-0.02		SSD-12-A-X	-1.87	
119-A	0.00		SSD-11-A-X	-2.57	
165-A	-0.09		SSD-13-A-X	-0.40	
117-A	-0.05		SSD-2-A-X	-3.58	
164-A	Destroyed		015-A-X	-2.28	
136-A-S	-1.51		SSD-16-A-X	-0.35	
163-A	covered		SSD-3-A-X	-0.12	
121-B	0.00		SSD-22-A	-0.21	
162-A	0.00 -> 0.00		SSD-21-A	-0.19	
136-A-N	-0.00		SSD-20-A	-0.32	
136-A	-0.03		SSD-19-A	0.00	
161-A	-0.49		168-A	Covered	
			188-A		

SSD SYSTEM CHECK - BUILDING A

LMC Middle River Complex, Middle River, Maryland

MONTHLY VAPOR SAMPLING				
Location	A-INFLUENT	A-MID GAC	A-EFFLUENT	Comments
Time	9:45-9:46	9:40-9:41	9:34-9:35	
Summa Canister ID	11107	10781	09577	
Flow Contr. ID	10936	11114	10766	
Start Vacuum (in. Hg)	-30	-29	-29	
Stop Vacuum (in. Hg)	-4	-4	-4	

SYSTEM CONDENSATE MONITORING					
Location	Contains Water?	Water Drained?	Volume Drained	Drain Valve Closed?	Comments
Moisture Separator 1	(Yes) | No	(Yes) | No	Trace 0.1	(Yes) | No	
Moisture Separator 2	Yes | (No)	Yes | (No)	N/A	(Yes) | No	
Exhaust Stack Sump	Yes | (No)	Yes | (No)	|	(Yes) | (No)	
PS-1-A	Yes | (No)	Yes | (No)	|	(Yes) | No	
PS-2-A	Yes | (No)	Yes | (No)	|	(Yes) | No	
PS-3-A	Yes | (No)	Yes | (No)	|	(Yes) | No	
PS-4-A	Yes | (No)	Yes | (No)	V	(Yes) | No	
~~(illegible)~~	~~Yes | No~~	~~Yes | No~~		~~Yes | No~~	
Drain stacks	(Yes) | No	(Yes) | No	0.4	(Yes) | No	Total 0.5

INDOOR AIR FILTER MONITORING				
	AF-N/NX	AF-M/MX	AF-S/SX	Comments
Was the power on upon arrival?	(Yes) | No	(Yes) | No	(Yes) | No	
Was the fan running upon arrival?	(Yes) | No	(Yes) | No	(Yes) | No	
Fan speed/airflow setting (#/cfm)	6/300	6/300	6/300	
Is there damage to unit or signs of tampering?	Yes | (No)	Yes | (No)	Yes | (No)	
Is the "do not turn off filter" warning sign in place?	(Yes) | No	(Yes) | No	(Yes) | No	
Life status color of the Pre-Filter (F-1)?	(GN) | OR | RD	(GN) | OR | RD	(GN) | OR | RD	
Life status color of the GAC Filter (F-2)?	(GN) | OR | RD	(GN) | OR | RD	(GN) | OR | RD	
Life status color of the Post-Filter (F-3)?	(GN) | OR | RD	(GN) | OR | RD	(GN) | OR | RD	
Was the Pre-Filter (F-1) replaced?	(Yes) | (No)	Yes | (No)	Yes | (No)	
Was the GAC Filter (F-2) replaced?	Yes | (No)	Yes | (No)	Yes | (No)	
Was the Post-Filter (F-3) replaced?	Yes | (No)	Yes | (No)	Yes | (No)	

MAINTENANCE RECORD		
Issue Requiring Maintenance	Maintenance Conducted	Issue Status
	N/A	OPEN CLOSED
		OPEN CLOSED
		OPEN CLOSED

ADDITIONAL COMMENTS:

Flow meter basement A = 29,518

PERSONNEL SIGNATURE: John J. Smith **DATE:** 4/14/20

DAILY ACTIVITY LOG

Project:	Client:
SSD System O&M	Lockheed Martin Corporation
Location:	**Date:**
Middle River Complex, Middle River, Maryland	4/28/23

Time	Description of Activities
8:00	Arrive on site
8:15	Basement Building A work HRSS repair
9:15	SSD Building A system check
10:35	Building A checks complete
10:40	Retrieve keys from security office
10:55	Start Building C system checks
11:55	Building C checks complete
2:00	Return keys -
12:05	Offsite

Personnel On Site:	Description of Activities:
Andrew Smith	System checks
	HRSS leak sealing
Peter Rich	HRSS leak sealing

Field Rep. Signature: Andrew J. Smith **Date:** 4/28/23

SSD SYSTEM CHECK - BUILDING A

LMC Middle River Complex, Middle River, Maryland

Date: 4/28/20 **Time:** 9:15 **Personnel:** AS

1. **Was the system running upon arrival?** (YES) NO
2. **Were there any alarm conditions upon arrival?** YES (NO)

Comment: _____

3. **Is the blower vacuum relief valve open?** YES (NO)
4. **Is the dilution valve open?** YES (NO) % Open: _____
5. **Are there any leaks or damage to system hoses?** YES (NO)
6. **Is there any damage to system components?** YES (NO)
7. **Are all locks and zip-ties secure?** (YES) NO
8. **Was there a GAC change out?** YES (NO)
9. **How many GAC units are at this location?** NEW 0 SPENT 0
10. **Do these fall to zero when system is turned off?**
    - Flow Gauge (YES) NO
    - Pressure Gauge (YES) NO
    - Vacuum Gauges (YES) NO
11. **Do the temp. gauges fall when system is turned off?** (YES) NO
12. **Does the heat-exchanger have dust on the underside?** (YES) NO
13. **Was the underside of the heat-exchanger vacuumed?** (YES) NO Brushed
13. **Was the system running upon departure?** (YES) NO
14. **What is the amperage draw on the blower?** Black: 18.04 Red: 19.28 White: 19.89

GENERAL SYSTEM MONITORING

Vacuum pre-Filter (in. H_2O)	Vacuum post-Filter (in. H_2O)	Diff Pressure of Filter* (in. H_2O)	Temp post-Blower (°F)	Temp post-HE (°F)	Pressure (in. H_2O)	Flow (scfm)	Time Counter Display (hours)
-18	-28	10	146	116	76	790	33586.0

* Clean or change filter if differential pressure increases by 10 in. H_2O

EXTRACTION POINT VACUUM AND VELOCITY MONITORING

Location	Vacuum (in. H_2O)	Velocity (ft/min)	Flow (scfm)	Contains H_2O?	Vacuum/Flow Adjustment	Comments
North	-2.88	761	66.4 *	X		
South	-4.30	1153	100.7 *	X		
Basement North	-16.10	2577	255.8 *	X		
Basement South	-1.68	1395	121.8 *	X		
Basement HRS5						
SSD-34-A	-16.88	878	19.1 **	X		
SSD-35-A	-15.77	977	21.3 **	X		
SSD-36-A	-3.35	1780	38.8 **	X		
SSD-37-A	-2.87	773	16.9 **	X		
SSD-38-A	-14.54	1071	23.3 **	X		
SSD-39-A	-17.08	548	11.9 **	X		

* Flow = Velocity x 0.0873; ** Flow = Velocity x 0.0218

VMP VACUUM MONITORING

VMP	Vacuum	Comments	VMP	Vacuum	Comments
166-A	-0.06		160-A	-0.58	
079-A	0.00		SSD-1-A	0.00	
167-A	-0.00		SSD-12-A-X	-1.67	
119-A	0.00		SSD-11-A-X	-2.32	
165-A	-0.09		SSD-13-A-X	-0.35	
117-A	-0.05		SSD-2-A-X	-3.27	
164-A	Destroyed		015-A-X	-2.06	
136-A-S	-1.33		SSD-16-A-X	-0.78	
163-A	-2.26		SSD-3-A-X	-0.11	
121-B	0.00		SSD-22-A	-0.01	
162-A	-0.02		SSD-21-A	-0.14	
136-A-N	0.00		SSD-20-A	-2.65	
136-A	Covered		SSD-19-A	-0.00	
161-A	-6.47		168-A		
			188-A	Covered	

SSD SYSTEM CHECK - BUILDING A

LMC Middle River Complex, Middle River, Maryland

MONTHLY VAPOR SAMPLING				
Location	A-INFLUENT	A-MID GAC	A-EFFLUENT	Comments
Time				
Summa Canister ID		N/A		
Flow Contr. ID				
Start Vacuum (in. Hg)				
Stop Vacuum (in. Hg)				

SYSTEM CONDENSATE MONITORING					
Location	Contains Water?	Water Drained?	Volume Drained	Drain Valve Closed?	Comments
Moisture Separator 1	(Yes) | No	(Yes) | No	13	(Yes) | No	
Moisture Separator 2	Yes | (No)	Yes | (No)	N/A	(Yes) | No	
Exhaust Stack Sump	Yes | (No)	Yes | (No)	|	(Yes) | No	
PS-1-A	Yes | (No)	Yes | (No)	|	(Yes) | No	
PS-2-A	Yes | (No)	Yes | (No)	|	(Yes) | No	
PS-3-A	Yes | (No)	Yes | (No)	|	(Yes) | No	
PS-4-A	Yes | (No)	Yes | (No)	|	(Yes) | No	
~~[illegible]~~	~~Yes | No~~	~~Yes | No~~	V	~~Yes | No~~	
Drain stacks	(Yes) | No	(Yes) | No	2	(Yes) | No	15 total

INDOOR AIR FILTER MONITORING				
	AF-N/NX	AF-M/MX	AF-S/SX	Comments
Was the power on upon arrival?	(Yes) | No	(Yes) | No	(Yes) | No	
Was the fan running upon arrival?	(Yes) | No	(Yes) | No	(Yes) | No	
Fan speed/airflow setting (#/cfm)	6/300	6/300	6/300	
Is there damage to unit or signs of tampering?	Yes | (No)	Yes | (No)	Yes | (No)	
Is the "do not turn off filter" warning sign in place?	(Yes) | No	(Yes) | No	(Yes) | No	
Life status color of the Pre-Filter (F-1)?	(GN) | OR | RD	(GN) | OR | RD	(GN) | OR | RD	
Life status color of the GAC Filter (F-2)?	(GN) | OR | RD	(GN) | OR | RD	(GN) | OR | RD	
Life status color of the Post-Filter (F-3)?	(GN) | OR | RD	(GN) | OR | RD	(GN) | OR | RD	
Was the Pre-Filter (F-1) replaced?	Yes | (No)	Yes | (No)	Yes | (No)	
Was the GAC Filter (F-2) replaced?	Yes | (No)	Yes | (No)	Yes | (No)	
Was the Post-Filter (F-3) replaced?	Yes | (No)	Yes | (No)	Yes | (No)	

MAINTENANCE RECORD		
Issue Requiring Maintenance	Maintenance Conducted	Issue Status
	N/A	OPEN CLOSED
		OPEN CLOSED
		OPEN CLOSED

ADDITIONAL COMMENTS:

@ 9:00am

Flow meters = 46,778
= 5677
= 30.7 / 3.2

PERSONNEL SIGNATURE: [signature] **DATE:** 4/28/20

DAILY ACTIVITY LOG

Project:	Client:
SSD System O&M	Lockheed Martin Corporation
Location:	**Date:**
Middle River Complex, Middle River, Maryland	5/1/20

Time	Description of Activities
8:30	Arrive on site
	Checked on systems and HRSS
9:00	off site

Personnel On Site:	Description of Activities:
Andrew Smith	Checks after power outage

Field Rep. Signature: C. J. Smith Date: 5/1/20

DAILY ACTIVITY LOG

Project:	Client:
SSD System O&M	Lockheed Martin Corporation
Location:	**Date:**
Middle River Complex, Middle River, Maryland	5/13/2020

Time	Description of Activities
8:00am	Arrive on site
8:20am	Begin Building A checks
10:15am	Building A complete
	System check GAC Samples
	HRSS work / sealing
	water meter checks
	System drain ~5gallons
10:20	Retrieve keys from security
10:25	Start Building C checks
11:40	Buiding C complete
	System checks
	GAC Samples
11:50	Return keys
12:00	off site

Personnel On Site:	Description of Activities:
Andrew Smith	system checks

Field Rep. Signature: Andrew J. Smith **Date:** 5/13/2020

SSD SYSTEM CHECK - BUILDING A

LMC Middle River Complex, Middle River, Maryland

Date: 5/13/20 Time: 8:20 Personnel: AS

1. Was the system running upon arrival?
   (YES) NO
2. Were there any alarm conditions upon arrival?
   YES (NO)
   Comment: _____
3. Is the blower vacuum relief valve open?
   (YES) NO
4. Is the dilution valve open?
   YES (NO) % Open: _____
5. Are there any leaks or damage to system hoses?
   YES (NO)
6. Is there any damage to system components?
   YES (NO)
7. Are all locks and zip-ties secure?
   (YES) NO
8. Was there a GAC change out?
   YES (NO)
9. How many GAC units are at this location?
   NEW 0 SPENT 0
10. Do these fall to zero when system is turned off?
    Flow Gauge (YES) NO
    Pressure Gauge (YES) NO
    Vacuum Gauges (YES) NO
11. Do the temp. gauges fall when system is turned off?
    (YES) NO
12. Does the heat-exchanger have dust on the underside?
    (YES) NO
13. Was the underside of the heat-exchanger vacuumed?
    (YES) NO Brushed
13. Was the system running upon departure?
    (YES) NO
14. What is the amperage draw on the blower?
    Black: 17.70 Red: 19.10 White: 19.94

GENERAL SYSTEM MONITORING

Vacuum pre-Filter (in. H_2O)	Vacuum post-Filter (in. H_2O)	Diff Pressure of Filter* (in. H_2O)	Temp post-Blower (°F)	Temp post-HE (°F)	Pressure (in. H_2O)	Flow (scfm)	Time Counter Display (hours)
16	22	6	142	110	26	290	33932.4

* Clean or change filter if differential pressure increases by 10 in. H_2O

EXTRACTION POINT VACUUM AND VELOCITY MONITORING

Location	Vacuum (in. H_2O)	Velocity (ft/min)	Flow (scfm)	Contains H_2O?	Vacuum/Flow Adjustment	Comments
North	-2.94	1455	127.0 *	X		
South	-4.40	908	79.3 *	X		
Basement North	-16.33	1625	141.9 *	X		
Basement South	-1.18	1379	120.4 *	X		
~~Basement HRS5~~			*			
SSD-34-A	-17.18	796	17.4 **	X		
SSD-35-A	-15.96	1064	23.2 **	X		
SSD-36-A	-3.39	1952	42.6 **	X		
SSD-37-A	-2.91	774	16.9 **	X		
SSD-38-A	-14.92	1202	26.2 **	X		
SSD-39-A	-17.50	499	10.9 **	X		

* Flow = Velocity x 0.0873; ** Flow = Velocity x 0.0218

VMP VACUUM MONITORING

VMP	Vacuum	Comments	VMP	Vacuum	Comments
166-A	-0.06		160-A	covered	
079-A	-0.01		SSD-1-A	-0.07	
167-A	-0.02		SSD-12-A-X	-1.72	
119-A	0.00		SSD-11-A-X	-2.36	
165-A	-0.09		SSD-13-A-X	-0.38	
117-A	-0.04		SSD-2-A-X	-3.36	
164-A	Destroyed		015-A-X	-2.49	
136-A-S	-1.33		SSD-16-A-X	-0.73	
163-A	-2.37		SSD-3-A-X	-0.13	
121-B	0.00		SSD-22-A	-0.21	
162-A	-0.04		SSD-21-A	-0.12	
136-A-N	-0.01		SSD-20-A	-0.31	
136-A	-0.03		SSD-19-A	-0.03	
161-A	-0.49		168-A	Covered	
			188-A	Covered	

SSD SYSTEM CHECK - BUILDING A

LMC Middle River Complex, Middle River, Maryland

MONTHLY VAPOR SAMPLING				
Location	A-INFLUENT	A-MID GAC	A-EFFLUENT	Comments
Time	9:41-9:42	9:35-9:36	9:30-9:31	
Summa Canister ID	11713	34002418	10980	
Flow Contr. ID	09899	10104	10766	
Start Vacuum (in. Hg)	-27	-30	-30	
Stop Vacuum (in. Hg)	-4	-4	-4	

SYSTEM CONDENSATE MONITORING					
Location	Contains Water?	Water Drained?	Volume Drained	Drain Valve Closed?	Comments
Moisture Separator 1	(Yes) | No	(Yes) | No	2.5	(Yes) | No	
Moisture Separator 2	Yes | (No)	Yes | (No)	N/A	(Yes) | No	
Exhaust Stack Sump	Yes | (No)	Yes | (No)		(Yes) | No	
PS-1-A	Yes | (No)	Yes | (No)		(Yes) | No	
PS-2-A	Yes | (No)	Yes | (No)		(Yes) | No	
PS-3-A	Yes | (No)	Yes | (No)		(Yes) | No	
PS-4-A	Yes | (No)	Yes | (No)	↓	(Yes) | No	
~~	~~Yes | No~~	~~Yes | No~~	~~~~~~~~~~	~~Yes | No~~	
Drain stacks	(Yes) | No	(Yes) | No	2.5	(Yes) | No	

INDOOR AIR FILTER MONITORING				
	AF-N/NX	AF-M/MX	AF-S/SX	Comments
Was the power on upon arrival?	(Yes) | No	(Yes) | No	(Yes) | No	
Was the fan running upon arrival?	(Yes) | No	(Yes) | No	(Yes) | No	
Fan speed/airflow setting (#/cfm)	6/3003	6/3006	6/3006	
Is there damage to unit or signs of tampering?	Yes | (No)	Yes | (No)	Yes | (No)	
Is the "do not turn off filter" warning sign in place?	(Yes) | No	(Yes) | No	(Yes) | No	
Life status color of the Pre-Filter (F-1)?	(GN) | OR | RD	(GN) | OR | RD	(GN) | OR | RD	
Life status color of the GAC Filter (F-2)?	(GN) | OR | RD	(GN) | OR | RD	(GN) | OR | RD	
Life status color of the Post-Filter (F-3)?	(GN) | OR | RD	(GN) | OR | RD	(GN) | OR | RD	
Was the Pre-Filter (F-1) replaced?	Yes | (No)	Yes | (No)	Yes | (No)	
Was the GAC Filter (F-2) replaced?	Yes | (No)	Yes | (No)	Yes | (No)	
Was the Post-Filter (F-3) replaced?	Yes | (No)	Yes | (No)	Yes | (No)	

MAINTENANCE RECORD		
Issue Requiring Maintenance	Maintenance Conducted	Issue Status
	N/A	OPEN CLOSED
		OPEN CLOSED
		OPEN CLOSED

ADDITIONAL COMMENTS:

Flow meters Basement A
N - 74985
Mid - 4502
S - 3.4 / 30.9

PERSONNEL SIGNATURE: Adam S. Smith **DATE:** 5/13/20

DAILY ACTIVITY LOG

Project:	Client:
SSD System O&M	Lockheed Martin Corporation
Location:	**Date:**
Middle River Complex, Middle River, Maryland	5/28/20

Time	Description of Activities
8:30am	Arrive on site
8:40am	Begin Building A system checks.
11:30am	Building A system checks complete
	Flow meter in basement is broken
	attempted to fix it.
	Need a new one
11:35	Retrieve keys from security
11:40	Start Building C checks
12:40	Building C system checks complete
12:45	Return keys to security
1:00	off site

Personnel On Site:	Description of Activities:
Andrew Smith	System checks

Field Rep. Signature: A. J. Smith **Date:** 5/28/20

SSD SYSTEM CHECK - BUILDING A

LMC Middle River Complex, Middle River, Maryland

Date: 5/28/20 Time: 8:40am Personnel: AS

1. Was the system running upon arrival?
   (YES) NO
2. Were there any alarm conditions upon arrival?
   YES (NO)
   Comment: _____
3. Is the blower vacuum relief valve open?
   YES (NO)
4. Is the dilution valve open?
   YES (NO) % Open: _____
5. Are there any leaks or damage to system hoses?
   YES (NO)
6. Is there any damage to system components?
   YES (NO)
7. Are all locks and zip-ties secure?
   (YES) NO
8. Was there a GAC change out?
   YES (NO)
9. How many GAC units are at this location?
   NEW 6 SPENT 0
10. Do these fall to zero when system is turned off?
    Flow Gauge (YES) NO
    Pressure Gauge (YES) NO
    Vacuum Gauges (YES) NO
11. Do the temp. gauges fall when system is turned off?
    (YES) NO
12. Does the heat-exchanger have dust on the underside?
    (YES) NO
13. Was the underside of the heat-exchanger vacuumed?
    (YES) NO Brushed
13. Was the system running upon departure?
    (YES) NO
14. What is the amperage draw on the blower?
    Black: 18.94 Red: 18.50 White: 19.50

GENERAL SYSTEM MONITORING

Vacuum pre-Filter (in. H_2O)	Vacuum post-Filter (in. H_2O)	Diff Pressure of Filter* (in. H_2O)	Temp post-Blower (°F)	Temp post-HE (°F)	Pressure (in. H_2O)	Flow (scfm)	Time Counter Display (hours)
18	22	4	164	134	25	290	342.92.5

* Clean or change filter if differential pressure increases by 10 in. H_2O

EXTRACTION POINT VACUUM AND VELOCITY MONITORING

Location	Vacuum (in. H_2O)	Velocity (ft/min)	Flow (scfm)	Contains H_2O?	Vacuum/Flow Adjustment	Comments
North	-2.86	821	71.7 *	X		
South	-4.25	710	62.0 *	X		
Basement North	-15.75	847	73.9 *	X		
Basement South	-1.17	1446	176.2 *	X		
Basement HRS5			*			
SSD-34-A	-16.53	1094	23.8 **	X		
SSD-35-A	-15.57	965	21.0 **	X		
SSD-36-A	-3.33	1874	40.9 **	X		
SSD-37-A	-3.17	793	17.3 **	X		
SSD-38-A	-14.51	1255	27.4 **	X		
SSD-39-A	76.78	1495	32.6 **	X		

* Flow = Velocity x 0.0873; ** Flow = Velocity x 0.0218

VMP VACUUM MONITORING

VMP	Vacuum	Comments	VMP	Vacuum	Comments
166-A	-0.08		160-A	-0.76	
079-A	0.00		SSD-1-A	-0.08	
167-A	-0.02		SSD-12-A-X	-4.28	
119-A	0.00		SSD-11-A-X	[illegible]	-2.34
165-A	-0.10		SSD-13-A-X	[illegible]	-0.37
117-A	-0.06		SSD-2-A-X	[illegible]	-3.27
164-A	Destroyed		015-A-X	-2.38	
136-A-S	-1.48		SSD-16-A-X	-0.55	
163-A	2.11		SSD-3-A-X	-8.12	
121-B	0.00		SSD-22-A	-0.02	
162-A	-0.21		SSD-21-A	-0.12	
136-A-N	-0.00		SSD-20-A	-1.54	
136-A	-0.03		SSD-19-A	0.00	
161-A	-0.61		168-A		
			188-A	Covered	

SSD SYSTEM CHECK - BUILDING A

LMC Middle River Complex, Middle River, Maryland

MONTHLY VAPOR SAMPLING				
Location	A-INFLUENT	A-MID GAC	A-EFFLUENT	Comments
Time				
Summa Canister ID				
Flow Contr. ID		N/A		
Start Vacuum (in. Hg)				
Stop Vacuum (in. Hg)				

SYSTEM CONDENSATE MONITORING					
Location	Contains Water?	Water Drained?	Volume Drained	Drain Valve Closed?	Comments
Moisture Separator 1	Yes | (No)	Yes | (No)	N/A	(Yes) | No	
Moisture Separator 2	Yes | (No)	Yes | (No)		(Yes) | No	
Exhaust Stack Sump	Yes | (No)	Yes | (No)		(Yes) | No	
PS-1-A	Yes | (No)	Yes | (No)		(Yes) | No	
PS-2-A	Yes | (No)	Yes | (No)		(Yes) | No	
PS-3-A	Yes | (No)	Yes | (No)		(Yes) | No	
PS-4-A	Yes | (No)	Yes | (No)		(Yes) | No	
~~Yes | No~~	~~Yes | No~~	~~Yes | No~~		~~Yes | No~~	
Drain stacks	(Yes) | No	(Yes) | No	Trace	(Yes) | No	

INDOOR AIR FILTER MONITORING				
	AF-N/NX	AF-M/MX	AF-S/SX	Comments
Was the power on upon arrival?	(Yes) | No	(Yes) | No	(Yes) | No	
Was the fan running upon arrival?	(Yes) | No	(Yes) | No	(Yes) | No	
Fan speed/airflow setting (#/cfm)	6/300	6/300"	6/300	
Is there damage to unit or signs of tampering?	Yes | (No)	Yes | (No)	Yes | (No)	
Is the "do not turn off filter" warning sign in place?	(Yes) | No	(Yes) | No	(Yes) | No	
Life status color of the Pre-Filter (F-1)?	(GN) | OR | RD	(GN) | OR | RD	(GN) | OR | RD	
Life status color of the GAC Filter (F-2)?	(GN) | OR | RD	(GN) | OR | RD	(GN) | OR | RD	
Life status color of the Post-Filter (F-3)?	(GN) | OR | RD	(GN) | OR | RD	(GN) | OR | RD	
Was the Pre-Filter (F-1) replaced?	Yes | (No)	Yes | (No)	Yes | (No)	
Was the GAC Filter (F-2) replaced?	Yes | (No)	Yes | (No)	Yes | (No)	
Was the Post-Filter (F-3) replaced?	Yes | (No)	Yes | (No)	Yes | (No)	

MAINTENANCE RECORD			
Issue Requiring Maintenance	Maintenance Conducted	Issue Status	
		OPEN	CLOSED
	N/A	OPEN	CLOSED
		OPEN	CLOSED

ADDITIONAL COMMENTS:

Basement A Flow meters:
North - 74985
Mid - 4616
South - 3.4 / 30.9

PERSONNEL SIGNATURE: John J. Smith **DATE:** 5/28/20

DAILY ACTIVITY LOG

Project:	Client:
SSD System O&M	Lockheed Martin Corporation
Location:	**Date:**
Middle River Complex, Middle River, Maryland	6/9/2020

Time	Description of Activities
8:25	Arrive on site
8:30	Start Building A system checks
10:00	Building A checks complete
10:10	Retrieve Keys from security
10:15	Start Building C systen Checks
11:15	Building C checks complete
11:20	Return keys to security
11:30	off site

Personnel On Site:	Description of Activities:
Andrew Smith	Systen checks

Field Rep. Signature: [signature] **Date:** 6/9/2020

SSD SYSTEM CHECK - BUILDING A

LMC Middle River Complex, Middle River, Maryland

Date: 6/9/2020 Time: 8:30am Personnel: AS

1. Was the system running upon arrival?
   (YES) NO
2. Were there any alarm conditions upon arrival?
   YES (NO)

Comment: _____

3. Is the blower vacuum relief valve open?
   YES (NO)
4. Is the dilution valve open?
   YES (NO) % Open: _____
5. Are there any leaks or damage to system hoses?
   YES (NO)
6. Is there any damage to system components?
   YES (NO)
7. Are all locks and zip-ties secure?
   (YES) NO
8. Was there a GAC change out?
   YES (NO)
9. How many GAC units are at this location?
   NEW 0 SPENT 0
10. Do these fall to zero when system is turned off?
    Flow Gauge (YES) NO
    Pressure Gauge (YES) NO
    Vacuum Gauges (YES) NO
11. Do the temp. gauges fall when system is turned off?
    (YES) NO
12. Does the heat-exchanger have dust on the underside?
    (YES) NO
13. Was the underside of the heat-exchanger vacuumed?
    (YES) NO Brushed
13. Was the system running upon departure?
    (YES) NO
14. What is the amperage draw on the blower?
    Black: 17.71 Red: 18.93 White: 19.73

GENERAL SYSTEM MONITORING

Vacuum pre-Filter (in. H_2O)	Vacuum post-Filter (in. H_2O)	Diff Pressure of Filter* (in. H_2O)	Temp post-Blower (°F)	Temp post-HE (°F)	Pressure (in. H_2O)	Flow (scfm)	Time Counter Display (hours)
18	22	4	166	138	25	280	34580.4

* Clean or change filter if differential pressure increases by 10 in. H_2O

EXTRACTION POINT VACUUM AND VELOCITY MONITORING

Location	Vacuum (in. H_2O)	Velocity (ft/min)	Flow (scfm)	Contains H_2O?	Vacuum/Flow Adjustment	Comments
North	-2.77	1078	94.1 *	X		
South	-4.14	1376	120.1 *	X		
Basement North	-15.42	747	65.2 *	X		
Basement South	-1.13	1372	119.8 *	X		
Basement HRS5			*			
SSD-34-A	-14.98	496	10.8 **	X		
SSD-35-A	~~-15.26~~	867	18.9 **	X		
SSD-36-A	-3.28	1814	59.5 **	X		
SSD-37-A	-3.17	731	15.9 **	X		
SSD-38-A	-14.33	994	21.7 **	X		
SSD-39-A	-16.26	815	17.8 **	X		

* Flow = Velocity x 0.0873; ** Flow = Velocity x 0.0218

VMP VACUUM MONITORING

VMP	Vacuum	Comments	VMP	Vacuum	Comments
166-A	-0.08		160-A	-0.83	
079-A	0.00		SSD-1-A	-0.07	
167-A	-0.02		SSD-12-A-X	-1.69	
119-A	0.00		SSD-11-A-X	-2.31	
165-A	-0.10		SSD-13-A-X	-0.38	
117-A	-0.05		SSD-2-A-X	covered	
164-A	Destroyed		015-A-X	-2.34	
136-A-S	-1.47		SSD-16-A-X	-0.51	
163-A	-2.21		SSD-3-A-X	-0.14	
121-B	0.00		SSD-22-A	-0.03	
162-A	-0.04		SSD-21-A	-0.09	
136-A-N	-0.01		SSD-20-A	-0.11	
136-A	-0.04		SSD-19-A	-0.00	
161-A	-0.68		168-A	Covered	
			188-A		

SSD SYSTEM CHECK - BUILDING A

LMC Middle River Complex, Middle River, Maryland

MONTHLY VAPOR SAMPLING				
Location	A-INFLUENT	A-MID GAC	A-EFFLUENT	Comments
Time				
Summa Canister ID				
Flow Contr. ID		N/A		
Start Vacuum (in. Hg)				
Stop Vacuum (in. Hg)				

SYSTEM CONDENSATE MONITORING					
Location	Contains Water?	Water Drained?	Volume Drained	Drain Valve Closed?	Comments
Moisture Separator 1	Yes | (No)	Yes | (No)	N/A	(Yes) | No	
Moisture Separator 2	Yes | No	Yes | No		Yes | No	
Exhaust Stack Sump	Yes | No	Yes | No		Yes | No	
PS-1-A	Yes | No	Yes | No		Yes | No	
PS-2-A	Yes | No	Yes | No		Yes | No	
PS-3-A	Yes | No	Yes | No		Yes | No	
PS-4-A	Yes | No	Yes | No		Yes | No	
~~___~~	~~Yes | No~~	~~Yes | No~~		~~Yes | No~~	
Drain stacks	Yes | No	Yes | No		Yes | No	

INDOOR AIR FILTER MONITORING				
	AF-N/NX	AF-M/MX	AF-S/SX	Comments
Was the power on upon arrival?	(Yes) | No	(Yes) | No	(Yes) | No	
Was the fan running upon arrival?	(Yes) | No	(Yes) | No	(Yes) | No	
Fan speed/airflow setting (#/cfm)	6/300	6/300	6/300	
Is there damage to unit or signs of tampering?	Yes | (No)	Yes | (No)	Yes | (No)	
Is the "do not turn off filter" warning sign in place?	(Yes) | No	(Yes) | No	(Yes) | No	
Life status color of the Pre-Filter (F-1)?	(GN) | OR | RD	(GN) | OR | RD	(GN) | OR | RD	
Life status color of the GAC Filter (F-2)?	(GN) | OR | RD	(GN) | OR | RD	(GN) | OR | RD	
Life status color of the Post-Filter (F-3)?	(GN) | OR | RD	(GN) | OR | RD	(GN) | OR | RD	
Was the Pre-Filter (F-1) replaced?	Yes | (No)	Yes | (No)	Yes | (No)	
Was the GAC Filter (F-2) replaced?	Yes | (No)	Yes | (No)	Yes | (No)	
Was the Post-Filter (F-3) replaced?	Yes | (No)	Yes | (No)	Yes | (No)	

MAINTENANCE RECORD		
Issue Requiring Maintenance	Maintenance Conducted	Issue Status
		OPEN CLOSED
	N/A	OPEN CLOSED
		OPEN CLOSED

ADDITIONAL COMMENTS:

Flow meters

North - 74985 Broken
Middle - 1578
South - 3.4 / 30.9

PERSONNEL SIGNATURE: Adam S. Scott **DATE:** 6/9/2020

DAILY ACTIVITY LOG

Project:	Client:
SSD System O&M	Lockheed Martin Corporation
Location:	**Date:**
Middle River Complex, Middle River, Maryland	6/25/2020

Time	Description of Activities
8:00am	Arrive on site
8:10am	Start Building A system checks
10:00am	Building A checks and GAC samples complete.
10:05am	Retrieve keys from security office
10:10am	Start Building C system checks
11:25am	Building C system checks complete
11:30am	Return keys to security office
11:45am	offsite

Personnel On Site:	Description of Activities:
~~System Checks~~ S	
Andrew Smith	System checks

Field Rep. Signature: Andrew J. Smith **Date:** 6/25/2020

SSD SYSTEM CHECK - BUILDING A

LMC Middle River Complex, Middle River, Maryland

Date: 6/25/2020 Time: 8:10 Personnel: AS

1. Was the system running upon arrival? (YES) NO
2. Were there any alarm conditions upon arrival? YES (NO)

Comment: _____

3. Is the blower vacuum relief valve open? YES (NO)
4. Is the dilution valve open? YES (NO) % Open: _____
5. Are there any leaks or damage to system hoses? YES (NO)
6. Is there any damage to system components? YES (NO)
7. Are all locks and zip-ties secure? (YES) NO
8. Was there a GAC change out? YES (NO)
9. How many GAC units are at this location? NEW 0 SPENT 0
10. Do these fall to zero when system is turned off?
    Flow Gauge (YES) NO
    Pressure Gauge (YES) NO
    Vacuum Gauges (YES) NO
11. Do the temp. gauges fall when system is turned off? (YES) NO
12. Does the heat-exchanger have dust on the underside? (YES) NO
13. Was the underside of the heat-exchanger vacuumed? (YES) NO Busted
13. Was the system running upon departure? (YES) NO
14. What is the amperage draw on the blower?
    Black: 19.14 Red: 18.75 White: 19.74

GENERAL SYSTEM MONITORING

Vacuum pre-Filter (in. H_2O)	Vacuum post-Filter (in. H_2O)	Diff Pressure of Filter* (in. H_2O)	Temp post-Blower (°F)	Temp post-HE (°F)	Pressure (in. H_2O)	Flow (scfm)	Time Counter Display (hours)
16	22	6	174	146	24	210	3463.9

* Clean or change filter if differential pressure increases by 10 in. H_2O

EXTRACTION POINT VACUUM AND VELOCITY MONITORING

Location	Vacuum (in. H_2O)	Velocity (ft/min)	Flow (scfm)	Contains H_2O?	Vacuum/Flow Adjustment	Comments
North	-2.67	903	78.8 *	X		
South	-4.04	1385	120.9 *	X		
Basement North	-14.78	430	37.5 *	X		
Basement South	-1.17	1545	134.9 *	X		
Basement HRS5			*			
SSD-34-A	-15.46	382	8.3 **	X		
SSD-35-A	-14.64	906	19.8 **	X		
SSD-36-A	-3.22	1773	38.7 **	X		
SSD-37-A	-3.05	700	15.3 **	X		
SSD-38-A	-13.88	901	19.6 **	X		
SSD-39-A	-15.67	336	7.3 **	X		

* Flow = Velocity x 0.0873; ** Flow = Velocity x 0.0218

VMP VACUUM MONITORING

VMP	Vacuum	Comments	VMP	Vacuum	Comments
166-A	-0.06		160-A	Covered	
079-A	0.00		SSD-1-A	-0.37	
167-A	-0.01		SSD-12-A-X	-1.64	
119-A	0.00		SSD-11-A-X	-2.22	
165-A	-0.10		SSD-13-A-X	-0.36	
117-A	-0.07		SSD-2-A-X	~~-0.09~~ -3.13	
164-A	Destroyed		015-A-X	-2.30	
136-A-S	-1.44		SSD-16-A-X	-0.44	
163-A	-2.35		SSD-3-A-X	-0.12	
121-B	0.00		SSD-22-A	-0.42	
162-A	-0.04		SSD-21-A	-0.10	
136-A-N	-0.01		SSD-20-A	-1.02	
136-A	-0.05		SSD-19-A	0.00	
161-A	-0.68		168-A	-0.71	
			188-A	-0.01	

SSD SYSTEM CHECK - BUILDING A

LMC Middle River Complex, Middle River, Maryland

MONTHLY VAPOR SAMPLING				
Location	~~A-EFFLUENT~~ A-Effluent	A-MID GAC	~~A-EFFLUENT~~ A-influent	Comments
Time	9:36-9:37	9:42-9:43	9:29-9:50	
Summa Canister ID	3400 2205	10333	3400 1625	
Flow Contr. ID	10102	11594	10614	
Start Vacuum (in. Hg)	-30	-29	-29	
Stop Vacuum (in. Hg)	-4	-4	-4	

SYSTEM CONDENSATE MONITORING					
Location	Contains Water?	Water Drained?	Volume Drained	Drain Valve Closed?	Comments
Moisture Separator 1	Yes | (No)	Yes | (No)	N/A	(Yes) | No	
Moisture Separator 2	Yes | (No)	Yes | (No)		(Yes) | No	
Exhaust Stack Sump	Yes | (No)	Yes | (No)		(Yes) | No	
PS-1-A	Yes | (No)	Yes | (No)		(Yes) | No	
PS-2-A	Yes | (No)	Yes | (No)		(Yes) | No	
PS-3-A	Yes | (No)	Yes | (No)		(Yes) | No	
PS-4-A	Yes | (No)	Yes | (No)		(Yes) | No	
	Yes | No	Yes | No		Yes | No	
Drain stacks	Yes | (No)	Yes | (No)		(Yes) | No	

INDOOR AIR FILTER MONITORING				
	AF-N/NX	AF-M/MX	AF-S/SX	Comments
Was the power on upon arrival?	(Yes) | No	(Yes) | No	(Yes) | No	
Was the fan running upon arrival?	(Yes) | No	(Yes) | No	(Yes) | No	
Fan speed/airflow setting (#/cfm)	6/300	6/300	6/300	
Is there damage to unit or signs of tampering?	Yes | (No)	Yes | (No)	Yes | (No)	
Is the "do not turn off filter" warning sign in place?	(Yes) | No	(Yes) | No	(Yes) | No	
Life status color of the Pre-Filter (F-1)?	(GN) | OR | RD	(GN) | OR | RD	(GN) | OR | RD	
Life status color of the GAC Filter (F-2)?	(GN) | OR | RD	(GN) | OR | RD	(GN) | OR | RD	
Life status color of the Post-Filter (F-3)?	(GN) | OR | RD	(GN) | OR | RD	(GN) | OR | RD	
Was the Pre-Filter (F-1) replaced?	Yes | (No)	Yes | (No)	Yes | (No)	
Was the GAC Filter (F-2) replaced?	Yes | (No)	Yes | (No)	Yes | (No)	
Was the Post-Filter (F-3) replaced?	Yes | (No)	Yes | (No)	Yes | (No)	

MAINTENANCE RECORD			
Issue Requiring Maintenance	Maintenance Conducted	Issue Status	
	N/A	OPEN	CLOSED
		OPEN	CLOSED
		OPEN	CLOSED

ADDITIONAL COMMENTS:

Water Meters

North = 74,983

Mid = 1216

South = 3.4 / 30.9

PERSONNEL SIGNATURE: Alan S. Swift **DATE:** 6/25/2020

DAILY ACTIVITY LOG

Project:	Client:
SSD System O&M	Lockheed Martin Corporation
Location:	**Date:**
Middle River Complex, Middle River, Maryland	7/7/2020

Time	Description of Activities
1:00pm	Arrive on site
1:05pm	Retreve Keys from security
1:15pm	Start Building C system checks
2:20pm	Building C checks complete
2:25pm	Return keys to ~~Building~~ Security
2:35pm	Meet Mike Smith to work on Building A System repairs
4:30pm	Repairs unsuccessful off-site
	7/8/2020
12:00pm	Arrive on site Build A Meet Dave for system Repairs
12:05pm	Start Repair work
1:50pm	Building A system back up and running
2:00pm	Start Building A system checks
3:15pm	Checks complete
3:30pm	off site.

Personnel On Site:	Description of Activities:
Andrew Smith	System checks
Mike Smith	System Repairs
Dave Seaman	System Repairs

Field Rep. Signature: Andrew J. Smith **Date:** 7/8/2020

SSD SYSTEM CHECK - BUILDING A

LMC Middle River Complex, Middle River, Maryland

Date: 7/8/2000 **Time:** 12:30pm **Personnel:** AS

1. **Was the system running upon arrival?** YES (NO)
2. **Were there any alarm conditions upon arrival?** (YES) NO
   Comment: Low vaccum - See Comments
3. **Is the blower vacuum relief valve open?** YES (NO)
4. **Is the dilution valve open?** YES (NO) % Open: _____
5. **Are there any leaks or damage to system hoses?** YES (NO)
6. **Is there any damage to system components?** YES (NO)
7. **Are all locks and zip-ties secure?** (YES) NO
8. **Was there a GAC change out?** YES (NO)
9. **How many GAC units are at this location?** NEW 0 SPENT 0
10. **Do these fall to zero when system is turned off?**
    Flow Gauge (YES) NO
    Pressure Gauge (YES) NO
    Vacuum Gauges (YES) NO
11. **Do the temp. gauges fall when system is turned off?** (YES) NO
12. **Does the heat-exchanger have dust on the underside?** (YES) NO
13. **Was the underside of the heat-exchanger vacuumed?** (YES) NO Brushed
13. **Was the system running upon departure?** (YES) NO
14. **What is the amperage draw on the blower?**
    Black: 19.18 Red: 18.70 White: 19.78

restart @ 13:50

GENERAL SYSTEM MONITORING

Vacuum pre-Filter (in. H_2O)	Vacuum post-Filter (in. H_2O)	Diff Pressure of Filter* (in. H_2O)	Temp post-Blower (°F)	Temp post-HE (°F)	Pressure (in. H_2O)	Flow (scfm)	Time Counter Display (hours)
18	22	4	180	120	21	270	35189.5

* Clean or change filter if differential pressure increases by 10 in. H_2O

EXTRACTION POINT VACUUM AND VELOCITY MONITORING

Location	Vacuum (in. H_2O)	Velocity (ft/min)	Flow (scfm)	Contains H_2O?	Vacuum/Flow Adjustment	Comments
North	-2.65	949	82.8 *	X		
South	-3.99	1549	135.2 *	X		
Basement North	-14.57	1019	89.0 *	X		
Basement South	-1.07	1405	122.7 *	X		
~~Basement HBS3~~			*			
SSD-34-A	-15.06	707	15.4 **	X		
SSD-35-A	-14.31	758	16.5 **	X		
SSD-36-A	-3.31	1738	37.9 **	X		
SSD-37-A	-3.03	767	16.7 **	X		
SSD-38-A	-13.21	903	19.7 **	X		
SSD-39-A	-15.21	769	16.8 **	X		

* Flow = Velocity x 0.0873; ** Flow = Velocity x 0.0218

VMP VACUUM MONITORING

	VMP	Vacuum	Comments	VMP	Vacuum	Comments
	166-A	-0.06		160-A	-0.87	
	079-A	-0.00		SSD-1-A	-0.09	
*	167-A	0.21		SSD-12-A-X	-1.64	
	119-A	Stuck		SSD-11-A-X	-2.21	
*	165-A	-0.10		SSD-13-A-X	-0.37	
	117-A	-0.07		SSD-2-A-X	-3.11	
*	164-A	Destroyed		015-A-X	-2.23	
	136-A-S	-1.46		SSD-16-A-X	-0.40	
*	163-A	2.88		SSD-3-A-X	-0.14	
	121-B	0.00		SSD-22-A	-0.11	
	162-A	0.07		SSD-21-A	-0.11	
	136-A-N	0.00		SSD-20-A	-1.96	
	136-A	-0.03		SSD-19-A	-0.07	
	161-A	-0.65		168-A	-0.68	
				188-A	-0.02	

SSD SYSTEM CHECK - BUILDING A

LMC Middle River Complex, Middle River, Maryland

MONTHLY VAPOR SAMPLING				
Location	A-INFLUENT	A-MID GAC	A-EFFLUENT	Comments
Time		N/A		
Summa Canister ID				
Flow Contr. ID				
Start Vacuum (in. Hg)				
Stop Vacuum (in. Hg)				

SYSTEM CONDENSATE MONITORING					
Location	Contains Water?	Water Drained?	Volume Drained	Drain Valve Closed?	Comments
Moisture Separator 1	Yes | (No)	Yes | (No)	N/A	(Yes) | No	
Moisture Separator 2	Yes | (No)	Yes | (No)		(Yes) | No	
Exhaust Stack Sump	Yes | (No)	Yes | (No)		(Yes) | No	
PS-1-A	Yes | (No)	Yes | (No)		(Yes) | No	
PS-2-A	Yes | (No)	Yes | (No)		(Yes) | No	
PS-3-A	Yes | (No)	Yes | (No)		(Yes) | No	
PS-4-A	Yes | (No)	Yes | (No)		(Yes) | No	
~~	~~Yes~~ | No	~~Yes~~ | No		~~Yes~~ | ~~No~~	
Drain stacks	Yes | (No)	Yes | (No)	V	(Yes) | No	

INDOOR AIR FILTER MONITORING				
	AF-N/NX	AF-M/MX	AF-S/SX	Comments
Was the power on upon arrival?	(Yes) | No	(Yes) | No	(Yes) | No	
Was the fan running upon arrival?	(Yes) | No	(Yes) | No	(Yes) | No	
Fan speed/airflow setting (#/cfm)	6/300	6/300	6/300	
Is there damage to unit or signs of tampering?	Yes | (No)	Yes | (No)	Yes | (No)	
Is the "do not turn off filter" warning sign in place?	(Yes) | No	(Yes) | No	(Yes) | No	
Life status color of the Pre-Filter (F-1)?	(GN) | OR | RD	(GN) | OR | RD	(GN) | OR | RD	
Life status color of the GAC Filter (F-2)?	(GN) | OR | RD	(GN) | OR | RD	(GN) | OR | RD	
Life status color of the Post-Filter (F-3)?	(GN) | OR | RD	(GN) | OR | RD	(GN) | OR | RD	
Was the Pre-Filter (F-1) replaced?	Yes | (No)	Yes | (No)	Yes | (No)	
Was the GAC Filter (F-2) replaced?	Yes | (No)	Yes | (No)	Yes | (No)	
Was the Post-Filter (F-3) replaced?	Yes | (No)	Yes | (No)	Yes | (No)	

MAINTENANCE RECORD		
Issue Requiring Maintenance	Maintenance Conducted	Issue Status
Electrical Failures		OPEN (CLOSED)
		OPEN CLOSED
		OPEN CLOSED

ADDITIONAL COMMENTS:

water Meters

North = ~~[illegible]~~ 74,985

Mid = 1685

South = 3.5 / 31.0

Building A System was down for 46 hours due to a Power surge that fried some electrical components

PERSONNEL SIGNATURE: Aaron J. Scott **DATE:** 7/8/2020

DAILY ACTIVITY LOG

Project:	Client:
SSD System O&M	Lockheed Martin Corporation
Location:	**Date:** 7/23/2020
Middle River Complex, Middle River, Maryland	

Time	Description of Activities
9:00	Arrive on site
9:30	Collect waste characterization samples from HRS 6/7
9:55	Start Building A system checks
11:25	Building A system checks complete
11:30	Retrieve keys from security office
11:35	Start Building C system checks
13:45	System C checks complete
13:50	Return keys
14:00	offsite

Personnel On Site:	Description of Activities:
Andrew Smith	System checks and samples

Field Rep. Signature: A. S. Smith **Date:** 7/23/2020

SSD SYSTEM CHECK - BUILDING A

LMC Middle River Complex, Middle River, Maryland

Date: 7/23/20 Time: 9:55am Personnel: AS

1. Was the system running upon arrival?
   (YES) NO
2. Were there any alarm conditions upon arrival?
   YES (NO)

Comment: _____

3. Is the blower vacuum relief valve open?
   YES (NO)
4. Is the dilution valve open?
   YES (NO) % Open: _____
5. Are there any leaks or damage to system hoses?
   YES (NO)
6. Is there any damage to system components?
   YES (NO)
7. Are all locks and zip-ties secure?
   (YES) NO
8. Was there a GAC change out?
   YES (NO)
9. How many GAC units are at this location?
   NEW 0 SPENT 0
10. Do these fall to zero when system is turned off?
    Flow Gauge (YES) NO
    Pressure Gauge (YES) NO
    Vacuum Gauges (YES) NO
11. Do the temp. gauges fall when system is turned off?
    (YES) NO
12. Does the heat-exchanger have dust on the underside?
    (YES) NO
13. Was the underside of the heat-exchanger vacuumed?
    (YES) NO Brushed
13. Was the system running upon departure?
    (YES) NO
14. What is the amperage draw on the blower?
    Black: 17.83 Red: 18.99 White: 0

GENERAL SYSTEM MONITORING

Vacuum pre-Filter (in. H_2O)	Vacuum post-Filter (in. H_2O)	Diff Pressure of Filter* (in. H_2O)	Temp post-Blower (°F)	Temp post-HE (°F)	Pressure (in. H_2O)	Flow (scfm)	Time Counter Display (hours)
16	22	6	180	116	20	270	35545.5

* Clean or change filter if differential pressure increases by 10 in. H_2O

EXTRACTION POINT VACUUM AND VELOCITY MONITORING

Location	Vacuum (in. H_2O)	Velocity (ft/min)	Flow (scfm)	Contains H_2O?	Vacuum/Flow Adjustment	Comments
North	-2.78	888	77.5 *	X		
South	-4.09	1459	127.4 *	X		
Basement North	-14.03	670	58.5 *	X		
Basement South	-1.04	1373	119.9 *	X		
Basement HRS5			*			
SSD-34-A	-14.77	903	19.7 **	X		
SSD-35-A	-14.71	798	17.4 **	X		
SSD-36-A	-3.27	1856	40.5 **	X		
SSD-37-A	-3.00	624	21.0 **	X		
SSD-38-A	-13.18	907	19.8 **	X		
SSD-39-A	-15.13	952	20.8 **	X		

* Flow = Velocity x 0.0873; ** Flow = Velocity x 0.0218

VMP VACUUM MONITORING

VMP	Vacuum	Comments	VMP	Vacuum	Comments
166-A	-0.05		160-A	-0.40	
079-A	0.00		SSD-1-A	-0.07	
167-A	-0.01		SSD-12-A-X	-1.59	
119-A	0.00		SSD-11-A-X	-2.16	
165-A	-0.08		SSD-13-A-X	-0.37	
117-A	-0.01		SSD-2-A-X	-3.09	
164-A			015-A-X	-2.20	
136-A-S	-1.02		SSD-16-A-X	-0.38	
163-A	2.54		SSD-3-A-X	-0.11	
121-B	0.00		SSD-22-A	-0.11	
162-A	-0.01		SSD-21-A	-0.11	
136-A-N	-0.00		SSD-20-A	-0.12	
136-A	-0.01		SSD-19-A	0.00	
161-A	0.00	-0.34	168-A	-0.62	
			188-A	0.00	

SSD SYSTEM CHECK - BUILDING A

LMC Middle River Complex, Middle River, Maryland

MONTHLY VAPOR SAMPLING				
Location	A-INFLUENT	A-MID GAC	A-EFFLUENT	Comments
Time	11:16-11:17	11:09-11:10	11:03-11:04	
Summa Canister ID 34000796	~~18416~~	~~[illegible]~~	~~18416~~	34000634
Flow Contr. ID	10104	10936	10614	
Start Vacuum (in. Hg)	-30	-30	-30	
Stop Vacuum (in. Hg)	-4	-4	-4	

34000669

SYSTEM CONDENSATE MONITORING					
Location	Contains Water?	Water Drained?	Volume Drained	Drain Valve Closed?	Comments
Moisture Separator 1	Yes | (No)	Yes | (No)	N/A	(Yes) | No	
Moisture Separator 2	Yes | (No)	Yes | (No)		(Yes) | No	
Exhaust Stack Sump	Yes | (No)	Yes | (No)		(Yes) | No	
PS-1-A	Yes | (No)	Yes | (No)		(Yes) | No	
PS-2-A	Yes | (No)	Yes | (No)		(Yes) | No	
PS-3-A	Yes | (No)	Yes | (No)		(Yes) | No	
PS-4-A	Yes | (No)	Yes | (No)		(Yes) | No	
~~[illegible]~~	~~Yes | No~~	~~Yes | No~~		~~Yes | No~~	
Drain stacks	Yes | (No)	Yes | (No)	V	(Yes) | No	

INDOOR AIR FILTER MONITORING				
	AF-N/NX	AF-M/MX	AF-S/SX	Comments
Was the power on upon arrival?	(Yes) | No	(Yes) | No	(Yes) | No	
Was the fan running upon arrival?	(Yes) | No	(Yes) | No	(Yes) | No	
Fan speed/airflow setting (#/cfm)	6/300	6/300	6/300	
Is there damage to unit or signs of tampering?	Yes | (No)	Yes | (No)	Yes | (No)	
Is the "do not turn off filter" warning sign in place?	(Yes) | No	(Yes) | No	(Yes) | No	
Life status color of the Pre-Filter (F-1)?	(GN) | OR | RD	(GN) | OR | RD	(GN) | OR | RD	
Life status color of the GAC Filter (F-2)?	(GN) | OR | RD	(GN) | OR | RD	(GN) | OR | RD	
Life status color of the Post-Filter (F-3)?	(GN) | OR | RD	(GN) | OR | RD	(GN) | OR | RD	
Was the Pre-Filter (F-1) replaced?	Yes | (No)	Yes | (No)	Yes | (No)	
Was the GAC Filter (F-2) replaced?	Yes | (No)	Yes | (No)	Yes | (No)	
Was the Post-Filter (F-3) replaced?	Yes | (No)	Yes | (No)	Yes | (No)	

MAINTENANCE RECORD		
Issue Requiring Maintenance	Maintenance Conducted	Issue Status
	N/A	OPEN CLOSED
		OPEN CLOSED
		OPEN CLOSED

ADDITIONAL COMMENTS:

Water meters

North — 74985

Mid — 9176

South — 3.5 / 31.0

PERSONNEL SIGNATURE: [signature] **DATE:** 7/23/20

DAILY ACTIVITY LOG

Project:	Client:
SSD System O&M	Lockheed Martin Corporation
Location:	**Date:**
Middle River Complex, Middle River, Maryland	8/5/2020

Time	Description of Activities
7:40	Arrive on site with Dave Seaman
9:00	Start Bldg A system checks → Repair overload switch @ A
10:00	Bldg A Checks complete
10:10	Retrieve keys from security
10:45	start Bldg C system checks
11:55	Bldg C checks complete
12:00	Return keys
12:10	off site

Personnel On Site:	Description of Activities:
Andrew Smith	System checks
Dave Seaman	overload switch install

Field Rep. Signature: A. Smith **Date:** 8/5/2020

SSD SYSTEM CHECK - BUILDING A

LMC Middle River Complex, Middle River, Maryland

Date: 8/5/2020 Time: 9:00 Personnel: AS

1. Was the system running upon arrival? (YES) NO
2. Were there any alarm conditions upon arrival? YES (NO)
   Comment: _____
3. Is the blower vacuum relief valve open? YES (NO)
4. Is the dilution valve open? YES (NO) % Open: _____
5. Are there any leaks or damage to system hoses? YES (NO)
6. Is there any damage to system components? YES (NO)
7. Are all locks and zip-ties secure? (YES) NO
8. Was there a GAC change out? YES (NO)
9. How many GAC units are at this location? NEW 0 SPENT 0
10. Do these fall to zero when system is turned off?
    Flow Gauge (YES) NO
    Pressure Gauge (YES) NO
    Vacuum Gauges (YES) NO
11. Do the temp. gauges fall when system is turned off? (YES) NO
12. Does the heat-exchanger have dust on the underside? (YES) NO
13. Was the underside of the heat-exchanger vacuumed? (YES) NO Brushed
13. Was the system running upon departure? (YES) NO
14. What is the amperage draw on the blower?
    Black: 18.97 Red: 20.5 White: 20.5

GENERAL SYSTEM MONITORING

Vacuum pre-Filter (in. H_2O)	Vacuum post-Filter (in. H_2O)	Diff Pressure of Filter* (in. H_2O)	Temp post-Blower (°F)	Temp post-HE (°F)	Pressure (in. H_2O)	Flow (scfm)	Time Counter Display (hours)
10	10	0	212	110	10	200	35822.6

* Clean or change filter if differential pressure increases by 10 in. H_2O

EXTRACTION POINT VACUUM AND VELOCITY MONITORING

Location	Vacuum (in. H_2O)	Velocity (ft/min)	Flow (scfm)	Contains H_2O?	Vacuum/Flow Adjustment	Comments
North	-1.69	600	52.4 *	X		
South	-2.58	452	39.5 *	X		
Basement North	-8.56	440	38.4 *	X		
Basement South	-0.69	974	85.0 *	X		
Basement HRS5			*			
SSD-34-A	-9.01	508	11.1 **	X		
SSD-35-A	-8.92	548	11.9 **	X		
SSD-36-A	-2.18	1324	28.9 **	X		
SSD-37-A	-1.97	539	11.8 **	X		
SSD-38-A	-8.10	687	15.0 **	X		
SSD-39-A	-8.95	566	12.3 **	X		

* Flow = Velocity x 0.0873; ** Flow = Velocity x 0.0218

VMP VACUUM MONITORING

VMP	Vacuum	Comments	VMP	Vacuum	Comments
166-A	-0.05		160-A	-0.22	
079-A	0.00		SSD-1-A	Covered	
167-A	-0.01		SSD-12-A-X	-1.07	
119-A	0.00		SSD-11-A-X	-1.36	
165-A	-0.05		SSD-13-A-X	-0.25	
117-A	-0.04		SSD-2-A-X	-2.08	
164-A	Destroyed	Abandoned	015-A-X	-1.46	
136-A-S	-0.86		SSD-16-A-X	-0.23	
163-A	2.45		SSD-3-A-X	-0.09	
121-B	0.00		SSD-22-A	-0.09	
162-A	-0.01		SSD-21-A	-0.06	
136-A-N	0.00		SSD-20-A	-0.28	
136-A	0.00		SSD-19-A	0.00	
161-A	-0.19		168-A	-0.37	
			188-A	-0.01	

SSD SYSTEM CHECK - BUILDING A

LMC Middle River Complex, Middle River, Maryland

MONTHLY VAPOR SAMPLING				
Location	A-INFLUENT	A-MID GAC	A-EFFLUENT	Comments
Time				
Summa Canister ID		N/A		
Flow Contr. ID				
Start Vacuum (in. Hg)				
Stop Vacuum (in. Hg)				

SYSTEM CONDENSATE MONITORING					
Location	Contains Water?	Water Drained?	Volume Drained	Drain Valve Closed?	Comments
Moisture Separator 1	Yes | (No)	Yes | (No)	N/A	(Yes) | No	
Moisture Separator 2	Yes | (No)	Yes | (No)		(Yes) | No	
Exhaust Stack Sump	Yes | (No)	Yes | (No)		(Yes) | No	
PS-1-A	Yes | (No)	Yes | (No)		(Yes) | No	
PS-2-A	Yes | (No)	Yes | (No)		(Yes) | No	
PS-3-A	Yes | (No)	Yes | (No)		(Yes) | No	
PS-4-A	Yes | (No)	Yes | (No)		(Yes) | No	
~~———~~	~~Yes | No~~	~~Yes | No~~		~~Yes | No~~	
Drain stacks	Yes | (No)	Yes | (No)	V	(Yes) | No	

INDOOR AIR FILTER MONITORING				
	AF-N/NX	AF-M/MX	AF-S/SX	Comments
Was the power on upon arrival?	(Yes) | No	(Yes) | No	(Yes) | No	
Was the fan running upon arrival?	(Yes) | No	(Yes) | No	(Yes) | No	
Fan speed/airflow setting (#/cfm)	6/300	6/300	6/300	
Is there damage to unit or signs of tampering?	Yes | (No)	Yes | (No)	Yes | (No)	
Is the "do not turn off filter" warning sign in place?	(Yes) | No	(Yes) | No	(Yes) | No	
Life status color of the Pre-Filter (F-1)?	(GN) | OR | RD	(GN) | OR | RD	(GN) | OR | RD	
Life status color of the GAC Filter (F-2)?	(GN) | OR | RD	(GN) | OR | RD	(GN) | OR | RD	
Life status color of the Post-Filter (F-3)?	(GN) | OR | RD	(GN) | OR | RD	(GN) | OR | RD	
Was the Pre-Filter (F-1) replaced?	Yes | (No)	Yes | (No)	Yes | (No)	
Was the GAC Filter (F-2) replaced?	Yes | (No)	Yes | (No)	Yes | (No)	
Was the Post-Filter (F-3) replaced?	Yes | (No)	Yes | (No)	Yes | (No)	

MAINTENANCE RECORD			
Issue Requiring Maintenance	Maintenance Conducted	Issue Status	
		OPEN	CLOSED
	N/A	OPEN	CLOSED
		OPEN	CLOSED

ADDITIONAL COMMENTS:

Overload switch replaced

PERSONNEL SIGNATURE: John J. Smith **DATE:** 8/5/2020

DAILY ACTIVITY LOG

Project:	Client:
SSD System O&M	Lockheed Martin Corporation
Location:	**Date:**
Middle River Complex, Middle River, Maryland	8/18/2020

Time	Description of Activities
8:00	Arrive on site
	Help Dave with Meter install
8:50	Start Building A system checks
11:20	Building A checks complete
	Flow meter installed
	Heat exchanger cleaned @ Bldg A
11:25	Retrieve keys from security office
11:35	Bldg C system checks
12:40	Bldg C checks complete
12:45	Return keys
12:50	Offsite

Personnel On Site:	Description of Activities:
8/18/2020	
Andrew Smith	system checks
Dave Seaman	Meter install

Field Rep. Signature: A. S. Smith	Date: 8/18/2020

SSD SYSTEM CHECK - BUILDING A

LMC Middle River Complex, Middle River, Maryland

Date: 8/18/2026 **Time:** 8:50 **Personnel:** AS

1. **Was the system running upon arrival?** (YES) NO
2. **Were there any alarm conditions upon arrival?** YES (NO)

Comment: _____

3. **Is the blower vacuum relief valve open?** YES (NO)
4. **Is the dilution valve open?** YES (NO) % Open: _____
5. **Are there any leaks or damage to system hoses?** YES (NO)
6. **Is there any damage to system components?** YES (NO)
7. **Are all locks and zip-ties secure?** (YES) NO
8. **Was there a GAC change out?** YES (NO)
9. **How many GAC units are at this location?** NEW (0) SPENT (0)
10. **Do these fall to zero when system is turned off?**
    - Flow Gauge (YES) NO
    - Pressure Gauge (YES) NO
    - Vacuum Gauges (YES) NO
11. **Do the temp. gauges fall when system is turned off?** (YES) NO
12. **Does the heat-exchanger have dust on the underside?** (YES) NO
13. **Was the underside of the heat-exchanger vacuumed?** (YES) NO Brushed
13. **Was the system running upon departure?** (YES) NO
14. **What is the amperage draw on the blower?** Black: 18.86 Red: 19.8 White: 20.5

GENERAL SYSTEM MONITORING

Vacuum pre-Filter (in. H_2O)	Vacuum post-Filter (in. H_2O)	Diff Pressure of Filter* (in. H_2O)	Temp post-Blower (°F)	Temp post-HE (°F)	Pressure (in. H_2O)	Flow (scfm)	Time Counter Display (hours)
-10	~10	0	212	106	10	200	3613.3.9

* Clean or change filter if differential pressure increases by 10 in. H_2O

EXTRACTION POINT VACUUM AND VELOCITY MONITORING

Location	Vacuum (in. H_2O)	Velocity (ft/min)	Flow (scfm)	Contains H_2O?	Vacuum/Flow Adjustment	Comments
North	-1.62	708	61.8 *	X		
South	-2.49	499	43.8 *	X		
Basement North	-8.11	949	82.8 *	X		
Basement South	-0.63	939	82.0 *	X		
Basement HRS5	~		*			
SSD-34-A	-8.57	625	13.6 **	X		
SSD-35-A	-8.45	575	12.5 **	X		
SSD-36-A	-1.99	1199	26.1 **	X		
SSD-37-A	-1.91	536	11.7 **	X		
SSD-38-A	-7.74	664	14.5 **	X		
SSD-39-A	-8.47	614	13.4 **	X		

* Flow = Velocity x 0.0873; ** Flow = Velocity x 0.0218

VMP VACUUM MONITORING

VMP	Vacuum	Comments	VMP	Vacuum	Comments
166-A	-0.02		160-A	-0.31	
079-A	-0.01		SSD-1-A	-0.04	
167-A	-0.01		SSD-12-A-X	-1.01	
119-A	0.00		SSD-11-A-X	-1.39	
165-A	-0.06		SSD-13-A-X	-0.24	
117-A	-0.04		SSD-2-A-X	-1.98	
164-A	Abandoned		015-A-X	-1.35	
136-A-S	-0.79		SSD-16-A-X	Covered	
163-A	2.62		SSD-3-A-X	-0.06	
121-B	0.00		SSD-22-A	-0.05	
162-A	-0.01		SSD-21-A	-0.06	
136-A-N	0.00		SSD-20-A	0.48	
136-A	0.00		SSD-19-A	0.00	
161-A	-0.26		168-A	-0.37	
			188-A	0.00	

-0.31

SSD SYSTEM CHECK - BUILDING A

LMC Middle River Complex, Middle River, Maryland

MONTHLY VAPOR SAMPLING				
Location	A-INFLUENT	A-MID GAC	A-EFFLUENT	Comments
Time	11:09-11:10	11:05-11:06	11:02-11:03	
Summa Canister ID	10497	09802	11280	
Flow Contr. ID	10614	10936	10104	
Start Vacuum (in. Hg)	-29	-30	-30	
Stop Vacuum (in. Hg)	-4	-4	-4	

SYSTEM CONDENSATE MONITORING					
Location	Contains Water?	Water Drained?	Volume Drained	Drain Valve Closed?	Comments
Moisture Separator 1	Yes | (No)	Yes | (No)	N/A	(Yes) | No	
Moisture Separator 2	Yes | No	Yes | No		Yes | No	
Exhaust Stack Sump	Yes | No	Yes | No		Yes | No	
PS-1-A	Yes | No	Yes | No		Yes | No	
PS-2-A	Yes | No	Yes | No		Yes | No	
PS-3-A	Yes | No	Yes | No		Yes | No	
PS-4-A	Yes | No	Yes | No		Yes | No	
~~	~~Yes | No~~	~~Yes | No~~		~~Yes | No~~	
Drain stacks	Yes | (No)	Yes | (No)	V	(Yes) | No	

INDOOR AIR FILTER MONITORING				
	AF-N/NX	AF-M/MX	AF-S/SX	Comments
Was the power on upon arrival?	(Yes) | No	(Yes) | No	(Yes) | No	
Was the fan running upon arrival?	(Yes) | No	(Yes) | No	(Yes) | No	
Fan speed/airflow setting (#/cfm)	6/300	6/300	6/300	
Is there damage to unit or signs of tampering?	Yes | (No)	Yes | (No)	Yes | (No)	
Is the "do not turn off filter" warning sign in place?	(Yes) | No	(Yes) | No	(Yes) | No	
Life status color of the Pre-Filter (F-1)?	(GN) | OR | RD	(GN) | OR | RD	(GN) | OR | RD	
Life status color of the GAC Filter (F-2)?	(GN) | OR | RD	(GN) | OR | RD	(GN) | OR | RD	
Life status color of the Post-Filter (F-3)?	(GN) | OR | RD	(GN) | OR | RD	(GN) | OR | RD	
Was the Pre-Filter (F-1) replaced?	Yes | (No)	Yes | (No)	Yes | (No)	
Was the GAC Filter (F-2) replaced?	Yes | (No)	Yes | (No)	Yes | (No)	
Was the Post-Filter (F-3) replaced?	Yes | (No)	Yes | (No)	Yes | (No)	

MAINTENANCE RECORD		
Issue Requiring Maintenance	Maintenance Conducted	Issue Status
	N/A	OPEN CLOSED
		OPEN CLOSED
		OPEN CLOSED

ADDITIONAL COMMENTS:

Flow Meters

North start 135 -> 189 @ 9:58

Mid 5001

South 31.3 / 3.8

Heat Exchanger Cleaned

PERSONNEL SIGNATURE: Aaron S. Smith **DATE:** 8/18/2020

DAILY ACTIVITY LOG

Project:	Client:
SSD System O&M	Lockheed Martin Corporation
Location:	**Date:**
Middle River Complex, Middle River, Maryland	9/15/2020

Time	Description of Activities
7:00	Arrive on site and meet Dave
7:15	Start Bldg C Quarterly check
7:50	Bldg C Quarterly check complete
8:00	Start Bldg A Quarterly check
9:00	Bldg A Quarterly complete Dave off site
9:05	Start Bldg A system checks
10:00	Bldg A checks complete
10:05	Retrieve keys from security
10:05	Stat Bldg C system checks
11:00	Bldg C checks complete
11:15	Return keys to security
11:35	off site

Personnel On Site:	Description of Activities:
Andrew Smith	Quarterly and weekly system checks
[redacted]	[redacted]
Dave Seaman	Quarterly checks

Field Rep. Signature: [signature] **Date:** 9/15/20

SSD SYSTEM CHECK - BUILDING A

LMC Middle River Complex, Middle River, Maryland

Date: 9/15/20 Time: 9:05 Personnel: AS

1. Was the system running upon arrival? (YES) NO
2. Were there any alarm conditions upon arrival? YES (NO)

Comment: _____

3. Is the blower vacuum relief valve open? YES (NO)
4. Is the dilution valve open? YES (NO) % Open: _____
5. Are there any leaks or damage to system hoses? YES (NO)
6. Is there any damage to system components? YES (NO)
7. Are all locks and zip-ties secure? (YES) NO
8. Was there a GAC change out? YES (NO)
9. How many GAC units are at this location? NEW (8) SPENT (0)
10. Do these fall to zero when system is turned off?
    - Flow Gauge (YES) NO
    - Pressure Gauge (YES) NO
    - Vacuum Gauges (YES) NO
11. Do the temp. gauges fall when system is turned off? (YES) NO
12. Does the heat-exchanger have dust on the underside? (YES) NO
13. Was the underside of the heat-exchanger vacuumed? (YES) NO Brushed
13. Was the system running upon departure? (YES) NO
14. What is the amperage draw on the blower? Black: 16.70 Red: 14.67 White: 15.51

GENERAL SYSTEM MONITORING

Vacuum pre-Filter (in. H_2O)	Vacuum post-Filter (in. H_2O)	Diff Pressure of Filter* (in. H_2O)	Temp post-Blower (°F)	Temp post-HE (°F)	Pressure (in. H_2O)	Flow (scfm)	Time Counter Display (hours)
24	28	4	140	90	34	340	36773.6

* Clean or change filter if differential pressure increases by 10 in. H_2O

EXTRACTION POINT VACUUM AND VELOCITY MONITORING

Location	Vacuum (in. H_2O)	Velocity (ft/min)	Flow (scfm)	Contains H_2O?	Vacuum/Flow Adjustment	Comments
North	~~-0.08~~ -22.20	996	87 *	X		
South	-1.66	1650	144.0 *	X		
Basement North	-4.19	1544	134.8 *	X		
Basement South	-5.89	914	79.8 *	X		
~~Basement HRS6~~						
SSD-34-A	~~-0.09~~ -23.60	831	18.1 **	X		
SSD-35-A	-23.3	470	10.2 **	X		
SSD-36-A	-4.94	2102	45.8 **	X		
SSD-37-A	-4.22	899	19.6 **	X		
SSD-38-A	-21.3	1022	22.3 **	X		
SSD-39-A	-23.4	538	11.7 **	X		

* Flow = Velocity x 0.0873; ** Flow = Velocity x 0.0218

VMP VACUUM MONITORING

VMP	Vacuum	Comments	VMP	Vacuum	Comments
166-A	-0.08		160-A	-0.52	
079-A	-0.01		SSD-1-A	-0.09	
167-A	-0.02		SSD-12-A-X	-2.36	
119-A	0.00		SSD-11-A-X	-3.21	
165-A	-0.12		SSD-13-A-X	-3.54	
117-A	-0.08		SSD-2-A-X	-4.51	
164-A	Abandoned		015-A-X	-3.18	
136-A-S	-2.11		SSD-16-A-X	-0.47	
163-A	2.25		SSD-3-A-X	-0.14	
121-B	0.06		SSD-22-A	-0.17	
162-A	-0.01		SSD-21-A	-0.16	
136-A-N	0.00		SSD-20-A	-1.09	
136-A	-0.02		SSD-19-A	-0.01	
161-A	-0.38		168-A	-0.66	
			188-A	-0.01	

SSD SYSTEM CHECK - BUILDING A

LMC Middle River Complex, Middle River, Maryland

MONTHLY VAPOR SAMPLING				
Location	A-INFLUENT	A-MID GAC	A-EFFLUENT	Comments
Time		N/A		
Summa Canister ID				
Flow Contr. ID				
Start Vacuum (in. Hg)				
Stop Vacuum (in. Hg)				

SYSTEM CONDENSATE MONITORING					
Location	Contains Water?	Water Drained?	Volume Drained	Drain Valve Closed?	Comments
Moisture Separator 1	Yes | (No)	Yes | (No)	N/A	(Yes) | No	
Moisture Separator 2	Yes | No	Yes | No		Yes | No	
Exhaust Stack Sump	Yes | No	Yes | No		Yes | No	
PS-1-A	Yes | No	Yes | No		Yes | No	
PS-2-A	Yes | No	Yes | No		Yes | No	
PS-3-A	Yes | No	Yes | No		Yes | No	
PS-4-A	Yes | No	Yes | No		Yes | No	
	Yes | No	Yes | No	V	Yes | No	
Drain stacks	Yes | No	Yes | No		Yes | No	

INDOOR AIR FILTER MONITORING				
	AF-N/NX	AF-M/MX	AF-S/SX	Comments
Was the power on upon arrival?	(Yes) | No	(Yes) | No	(Yes) | No	
Was the fan running upon arrival?	(Yes) | No	(Yes) | No	(Yes) | No	
Fan speed/airflow setting (#/cfm)	6/300	6/300	6/300	
Is there damage to unit or signs of tampering?	Yes | (No)	Yes | (No)	Yes | (No)	
Is the "do not turn off filter" warning sign in place?	(Yes) | No	(Yes) | No	(Yes) | No	
Life status color of the Pre-Filter (F-1)?	(GN) | OR | RD	(GN) | OR | RD	(GN) | OR | RD	
Life status color of the GAC Filter (F-2)?	(GN) | OR | RD	(GN) | OR | RD	(GN) | OR | RD	
Life status color of the Post-Filter (F-3)?	(GN) | OR | RD	(GN) | OR | RD	(GN) | OR | RD	
Was the Pre-Filter (F-1) replaced?	(Yes) | No	(Yes) | No	(Yes) | No	
Was the GAC Filter (F-2) replaced?	(Yes) | No	(Yes) | No	(Yes) | No	
Was the Post-Filter (F-3) replaced?	(Yes) | No	(Yes) | No	(Yes) | No	

MAINTENANCE RECORD		
Issue Requiring Maintenance	Maintenance Conducted	Issue Status
	N/A	OPEN CLOSED
		OPEN CLOSED
		OPEN CLOSED

ADDITIONAL COMMENTS:

Flow Meter Readings

North = 39,427

Mid = 345.0

South = 31.3 / 3.8

PERSONNEL SIGNATURE: Adam S. Sot **DATE:** 9/15/20

DAILY ACTIVITY LOG

Project:	Client:
SSD System O&M	Lockheed Martin Corporation
Location:	**Date:**
Middle River Complex, Middle River, Maryland	9/28/2020

Time	Description of Activities
9:20	Arrive on site
9:30	Retrieve keys from security office
9:45	Start Building C system checks
11:10	Building C checks complete
11:30	Start Building A system checks
12:55	Building A checks complete
1:10	Return keys to security &
1:15	off site

Personnel On Site:	Description of Activities:
Andrew Smith	System Checks

Field Rep. Signature: Andrew J. Smith Date: 9/28/2020

SSD SYSTEM CHECK - BUILDING A

LMC Middle River Complex, Middle River, Maryland

Date: 9/28/2020 **Time:** 11:30 **Personnel:** AS

1. **Was the system running upon arrival?** (YES) NO
2. **Were there any alarm conditions upon arrival?** YES (NO)

Comment: _____

3. **Is the blower vacuum relief valve open?** YES (NO)
4. **Is the dilution valve open?** YES (NO) % Open: _____
5. **Are there any leaks or damage to system hoses?** YES (NO)
6. **Is there any damage to system components?** YES (NO)
7. **Are all locks and zip-ties secure?** (YES) NO
8. **Was there a GAC change out?** YES (NO)
9. **How many GAC units are at this location?** NEW 0 SPENT 0
10. **Do these fall to zero when system is turned off?**
    - Flow Gauge (YES) NO
    - Pressure Gauge (YES) NO
    - Vacuum Gauges (YES) NO
11. **Do the temp. gauges fall when system is turned off?** (YES) NO
12. **Does the heat-exchanger have dust on the underside?** (YES) NO
13. **Was the underside of the heat-exchanger vacuumed?** (YES) NO Brushed
13. **Was the system running upon departure?** (YES) NO
14. **What is the amperage draw on the blower?** Black: 15.80 Red: 16.07 White: 16.81

GENERAL SYSTEM MONITORING

Vacuum pre-Filter (in. H_2O)	Vacuum post-Filter (in. H_2O)	Diff Pressure of Filter* (in. H_2O)	Temp post-Blower (°F)	Temp post-HE (°F)	Pressure (in. H_2O)	Flow (scfm)	Time Counter Display (hours)
24	26	2	146	102	32	320	37088.1

* Clean or change filter if differential pressure increases by 10 in. H_2O

EXTRACTION POINT VACUUM AND VELOCITY MONITORING

Location	Vacuum (in. H_2O)	Velocity (ft/min)	Flow (scfm)	Contains H_2O?	Vacuum/Flow Adjustment	Comments
North	-3.79	924	80.7 *	X		
South	-5.73	766	66.9 *	X		
Basement North	-21.3	1022	89.2 *	X		
Basement South	-1.66	1698	141.3 *	X		
Basement HRS5						
SSD-34-A	-22.30	669	14.6 **	X		
SSD-35-A	-22.30	718	15.7 **	X		
SSD-36-A	-4.90	2131	46.5 **	X		
SSD-37-A	-4.10	894	19.5 **	X		
SSD-38-A	-20.60	1728	37.7 **	X		
SSD-39-A	-22.80	1073	23.4 **	X		

* Flow = Velocity x 0.0873; ** Flow = Velocity x 0.0218

VMP VACUUM MONITORING

VMP	Vacuum	Comments	VMP	Vacuum	Comments
166-A	-0.07		160-A	-0.51	
079-A	0.00		SSD-1-A	-0.11	
167-A	-0.01		SSD-12-A-X	-2.31	
119-A	0.00		SSD-11-A-X	-3.12	
165-A	-0.12		SSD-13-A-X	-0.53	
117-A	-0.08		SSD-2-A-X	-4.39	
164-A	Abandoned		015-A-X	-2.88	
136-A-S	-2.05		SSD-16-A-X	-0.43	
163-A	2.21		SSD-3-A-X	Covered	
121-B	0.00		SSD-22-A	-0.15	
162-A	-0.02		SSD-21-A	-0.16	
136-A-N	0.00		SSD-20-A	-0.42	
136-A	-0.02		SSD-19-A	-0.06	
161-A	-0.43		168-A	-3.63	
			188-A	-0.02	

SSD SYSTEM CHECK - BUILDING A

LMC Middle River Complex, Middle River, Maryland

MONTHLY VAPOR SAMPLING				
Location	A-INFLUENT	A-MID GAC	A-EFFLUENT	Comments
Time	11:55-11:56	11:49-11:50	11:44-11:45	
Summa Canister ID	34000734	34001974	09744	
Flow Contr. ID	10104	10936	11594	
Start Vacuum (in. Hg)	-30	-30	-28	
Stop Vacuum (in. Hg)	-4	-4	-4	

SYSTEM CONDENSATE MONITORING					
Location	Contains Water?	Water Drained?	Volume Drained	Drain Valve Closed?	Comments
Moisture Separator 1	Yes | (No)	(Yes) | No	N/A	(Yes) | No	
Moisture Separator 2	Yes | (No)	(Yes) | No		(Yes) | No	
Exhaust Stack Sump	Yes | (No)	(Yes) | No		(Yes) | No	
PS-1-A	Yes | (No)	(Yes) | No		(Yes) | No	
PS-2-A	Yes | (No)	(Yes) | No		(Yes) | No	
PS-3-A	Yes | (No)	(Yes) | No		(Yes) | No	
PS-4-A	Yes | (No)	(Yes) | No		(Yes) | No	
~~[illegible]~~	~~Yes | No~~	~~Yes | No~~		Yes | No	
Drain stacks	Yes | (No)	(Yes) | No	V	(Yes) | No	

INDOOR AIR FILTER MONITORING				
	AF-N/NX	AF-M/MX	AF-S/SX	Comments
Was the power on upon arrival?	(Yes) | No	(Yes) | No	(Yes) | No	
Was the fan running upon arrival?	(Yes) | No	(Yes) | No	(Yes) | No	
Fan speed/airflow setting (#/cfm)	6/300	6/300	6/300	
Is there damage to unit or signs of tampering?	Yes | (No)	Yes | (No)	Yes | (No)	
Is the "do not turn off filter" warning sign in place?	(Yes) | No	(Yes) | No	(Yes) | No	
Life status color of the Pre-Filter (F-1)?	(GN) | OR | RD	(GN) | OR | RD	(GN) | OR | RD	
Life status color of the GAC Filter (F-2)?	(GN) | OR | RD	(GN) | OR | RD	(GN) | OR | RD	
Life status color of the Post-Filter (F-3)?	(GN) | OR | RD	(GN) | OR | RD	(GN) | OR | RD	
Was the Pre-Filter (F-1) replaced?	Yes | (No)	Yes | (No)	Yes | (No)	
Was the GAC Filter (F-2) replaced?	Yes | (No)	Yes | (No)	Yes | (No)	
Was the Post-Filter (F-3) replaced?	Yes | (No)	Yes | (No)	Yes | (No)	

MAINTENANCE RECORD		
Issue Requiring Maintenance	Maintenance Conducted	Issue Status
		OPEN CLOSED
	N/A	OPEN CLOSED
		OPEN CLOSED

ADDITIONAL COMMENTS:

Water level Checks @ 12:05

North = 70,572

Mid = 553.8

South = 3.8 / 31.3

HRS 7 = Over flow

PERSONNEL SIGNATURE: [signature] **DATE:** 9/28/20

SSD SYSTEM CHECK - BUILDING C

LMC Middle River Complex, Middle River, Maryland

Date: 4/1/20 Time: 8:35 Personnel: AS

1. Was the system running upon arrival? (YES) NO
2. Were there any alarm conditions upon arrival? YES (NO)
   Comment: _____
3. Is the blower vacuum relief valve open? YES (NO)
4. Is the dilution valve open? YES (NO) % Open: _____
5. Are there any leaks or damage to system hoses? YES (NO)
6. Is there any damage to system components? YES (NO)
7. Are all locks and zip-ties secure? (YES) NO
8. Was there a GAC or PPZ change out? YES (NO) Comment: _____
9. How many GAC and PPZ units are at this location?
   GAC: NEW 3 SPENT 0
   PPZ: NEW 1 SPENT 3
11. Do these fall to zero when system is turned off?
   Flow Gauge (YES) NO
   Pressure Gauge (YES) NO
   Vacuum Gauges (YES) NO
12. Do the temp. gauges fall when system is turned off? (YES) NO
13. Was the system running upon departure? (YES) NO
14. What is the amperage draw on the blower?
   Black: 13.81 Orange: 12.91 Yellow: 12.97

GENERAL SYSTEM MONITORING

Vacuum pre-Filter (in. H_2O)	Vacuum post-Filter (in. H_2O)	Diff Pressure of Filter* (in. H_2O)	Temp post-Blower (°F)	Temp post-HE (°F)	Pressure (in. H_2O)	Flow (scfm)	Time Counter Display (hours)
60	64	4	180	110	0	~~140~~ 140	57852.2

* Replace filter if >25 in. H_2O

EXTRACTION POINT VACUUM AND VELOCITY MONITORING

Location	Vacuum (in. H_2O)	Velocity (ft/min)	Flow* (scfm)	Contains H_2O?	Vacuum/Flow Adjustment	Comments
SSD-21-C	-46.8	1550	33.8	X		
SSD-23-C						
SSD-30-C	-2.62	156	3.4	X		
SSD-26-C	-6.96	535	11.7	X		
SSD-31-C	-6.75	593	12.9	X		
SSD-27-C	-1.56	1370	29.9	X		
SSD-32-C	-6.37	1262	27.5	X		
SSD-28-C	-1.98	1990	43.4	X		
SSD-33-C	-4.65	654	14.3	X		
SSD-29-C	-5.50	727	15.8	X		
SSD-34-C	-55.7	1436	31.3	X		

**Flow = Velocity x 0.0218

VMP VACUUM MONITORING

VMP	Vacuum	Comments	VMP	Vacuum	Comments
159-C	0.00		111-C	-0.01	
135-C	0.10		155-C	-0.15	
157-C	0.00		133-C	-0.59	
113-C	-1.75		154-C	-0.02	
156-C	-0.16		153-C	-0.10	
151-C	-0.01		158-C	0.00	
126-C	0.00		001-C	-0.17	
149-C	~~-0.00~~	-0.03	SSD-22-C	-0.01	
050-C	0.00		SSD-2-C	-0.09	
141-C	-0.55		SSD-4-C	-2.07	
127-C	-0.57		SSD-24-C	-0.15	
150-C	-0.01		SSD-3-C	covered	
152-C	-0.03		SSD-25-C	-0.01	
060-C	-0.49				

SSD SYSTEM CHECK - BUILDING C

LMC Middle River Complex, Middle River, Maryland

MONTHLY VAPOR SAMPLING				
Location	C-INFLUENT	C-MID GAC	C-EFFLUENT	Comments
Time				
Summa Canister ID				
Flow Contr. ID	N/A			
Start Vacuum (in. Hg)				
Stop Vacuum (in. Hg)				

SYSTEM CONDENSATE MONITORING					
Location	Contains Water?	Water Drained?	Volume Drained	Drain Valve Closed?	Comments
Moisture Separators					
MS-1	Yes | (No)	Yes | (No)	N/A	(Yes) | No	
MS-2	Yes | (No)	Yes | (No)		(Yes) | No	
Pipe Sumps					
PS-1	Yes | (No)	Yes | (No)		(Yes) | No	
PS-2	Yes | (No)	Yes | (No)		(Yes) | No	
PS-3	Yes | (No)	Yes | (No)		(Yes) | No	
PS-5	Yes | (No)	Yes | (No)		(Yes) | No	
System Sumps					
Exhaust Stack	Yes | (No)	Yes | (No)		(Yes) | No	
GAC and PPZ Drains					
Lead GAC	Yes | (No)	Yes | (No)		(Yes) | No	
Lag GAC	Yes | (No)	Yes | (No)	V	(Yes) | No	
PPZ	Yes | (No)	Yes | (No)		(Yes) | No	

13. How many empty drums are on-site? 2

14. How many Bldg. A water drums are on-site? PART FULL 1 FULL 1

15. How many Bldg. C water drums are on-site? PART FULL 0 FULL 1

16. How many filter drums are on-site? PART FULL 0 FULL 0

17. Are waste drums labeled and in good condition?

(YES) NO Comment: _____

18. Is the secondary containment pad in good condition?

(YES) NO Comment: _____

MAINTENANCE RECORD			
Issue Requiring Maintenance	Maintenance Conducted	Issue Status	
		OPEN	CLOSED
	N/A	OPEN	CLOSED
		OPEN	CLOSED

ADDITIONAL COMMENTS:

No issues

PERSONNEL SIGNATURE: Chris J. Smith **DATE:** 4/1/20

SSD SYSTEM CHECK - BUILDING C

LMC Middle River Complex, Middle River, Maryland

Date: 4/14/20 Time: 10:10 Personnel: AS

1. Was the system running upon arrival?
   (YES) NO
2. Were there any alarm conditions upon arrival?
   YES (NO)
   Comment: _____
3. Is the blower vacuum relief valve open?
   YES (NO)
4. Is the dilution valve open?
   YES (NO) % Open: _____
5. Are there any leaks or damage to system hoses?
   YES (NO)
6. Is there any damage to system components?
   YES (NO)
7. Are all locks and zip-ties secure?
   (YES) NO
8. Was there a GAC or PPZ change out?
   YES (NO) Comment: _____
9. How many GAC and PPZ units are at this location?
   GAC: NEW 3 SPENT 0
   PPZ: NEW 1 SPENT 0
11. Do these fall to zero when system is turned off?
    Flow Gauge (YES) NO
    Pressure Gauge (YES) NO
    Vacuum Gauges (YES) NO
12. Do the temp. gauges fall when system is turned off?
    (YES) NO
13. Was the system running upon departure?
    (YES) NO
14. What is the amperage draw on the blower?
    Black: 14.80 Orange: 12.90 Yellow: 13.12

GENERAL SYSTEM MONITORING

Vacuum pre-Filter (in. H_2O)	Vacuum post-Filter (in. H_2O)	Diff Pressure of Filter* (in. H_2O)	Temp post-Blower (°F)	Temp post-HE (°F)	Pressure (in. H_2O)	Flow (scfm)	Time Counter Display (hours)
60	64	4	180	110	0	140	5816 4.9

* Replace filter if >25 in. H_2O

EXTRACTION POINT VACUUM AND VELOCITY MONITORING

Location	Vacuum (in. H_2O)	Velocity (ft/min)	Flow* (scfm)	Contains H_2O?	Vacuum/Flow Adjustment	Comments
SSD-21-C	-48.3	1840	40.1	X		
SSD-23-C						
SSD-30-C	-7.10	143	3.1	X		
SSD-26-C	-7.28	368	8.0	X		
SSD-31-C	-7.45	646	14.1	X		
SSD-27-C	-1.59	1320	28.8	X		
SSD-32-C	-6.84	1144	24.9	X		
SSD-28-C	-1.07	2045	44.6	X		
SSD-33-C	-4.62	585	12.8	X		
SSD-29-C	-5.53	688	15.0	X		
SSD-34-C	-56.7	2437	53.1	X		

**Flow = Velocity x 0.0218

VMP VACUUM MONITORING

VMP	Vacuum	Comments	VMP	Vacuum	Comments
159-C	0.00		111-C	0.00	
135-C	0.25		155-C	-0.16	
157-C	-0.01		133-C	-0.58	
113-C	-2.02		154-C	-0.01	
156-C	-0.18		153-C	-0.08	
151-C	-0.03		158-C	0.00	
126-C	0.00		001-C	-0.22	
149-C	-0.03		SSD-22-C	-0.01	
050-C	0.00		SSD-2-C	-0.11	
141-C	-0.59		SSD-4-C	-2.13	
127-C	-0.58		SSD-24-C	-0.19	
150-C	-0.01		SSD-3-C	-0.94	
152-C	-0.01		SSD-25-C	0.00	
060-C	Covered				

SSD SYSTEM CHECK - BUILDING C

LMC Middle River Complex, Middle River, Maryland

MONTHLY VAPOR SAMPLING				
Location	C-INFLUENT	C-MID GAC	C-EFFLUENT	Comments
Time				
Summa Canister ID		N/A		
Flow Contr. ID				
Start Vacuum (in. Hg)				
Stop Vacuum (in. Hg)				

SYSTEM CONDENSATE MONITORING					
Location	Contains Water?	Water Drained?	Volume Drained	Drain Valve Closed?	Comments
Moisture Separators					
MS-1	Yes | (No)	Yes | (No)	N/A	(Yes) | No	
MS-2	Yes | (No)	Yes | (No)		(Yes) | No	
Pipe Sumps					
PS-1	Yes | (No)	Yes | (No)		(Yes) | No	
PS-2	Yes | (No)	Yes | (No)		(Yes) | No	
PS-3	Yes | (No)	Yes | (No)		(Yes) | No	
PS-5	Yes | (No)	Yes | (No)		(Yes) | No	
System Sumps					
Exhaust Stack	Yes | (No)	Yes | (No)		(Yes) | No	
GAC and PPZ Drains					
Lead GAC	Yes | (No)	Yes | (No)		(Yes) | No	
Lag GAC	Yes | (No)	Yes | (No)	V	(Yes) | No	
PPZ	Yes | (No)	Yes | (No)		(Yes) | No	

13. How many empty drums are on-site? 2
14. How many Bldg. A water drums are on-site? PART FULL 1 FULL 1
15. How many Bldg. C water drums are on-site? PART FULL 0 FULL 1
16. How many filter drums are on-site? PART FULL 0 FULL 0
17. Are waste drums labeled and in good condition?
(YES) NO Comment: _____
18. Is the secondary containment pad in good condition?
(YES) NO Comment: _____

MAINTENANCE RECORD		
Issue Requiring Maintenance	Maintenance Conducted	Issue Status
		OPEN CLOSED
N/A		OPEN CLOSED
		OPEN CLOSED

ADDITIONAL COMMENTS:

PERSONNEL SIGNATURE: Adam J. Smith DATE: 4/14/20

SSD SYSTEM CHECK - BUILDING C

LMC Middle River Complex, Middle River, Maryland

Date: 4/28/20 Time: 10:56 Personnel: AS

1. Was the system running upon arrival? (YES) NO
2. Were there any alarm conditions upon arrival? YES (NO)
   Comment: _____
3. Is the blower vacuum relief valve open? YES (NO)
4. Is the dilution valve open? YES (NO) % Open: _____
5. Are there any leaks or damage to system hoses? YES (NO)
6. Is there any damage to system components? YES (NO)
7. Are all locks and zip-ties secure? (YES) NO
8. Was there a GAC or PPZ change out? YES (NO) Comment: _____
9. How many GAC and PPZ units are at this location?
   GAC: NEW 3 SPENT 0
   PPZ: NEW 1 SPENT 0
11. Do these fall to zero when system is turned off?
   Flow Gauge (YES) NO
   Pressure Gauge (YES) NO
   Vacuum Gauges (YES) NO
12. Do the temp. gauges fall when system is turned off? (YES) NO
13. Was the system running upon departure? (YES) NO
14. What is the amperage draw on the blower?
   Black: 13.99 Orange: 13.14 Yellow: 12.90

GENERAL SYSTEM MONITORING

Vacuum pre-Filter (in. H_2O)	Vacuum post-Filter (in. H_2O)	Diff Pressure of Filter* (in. H_2O)	Temp post-Blower (°F)	Temp post-HE (°F)	Pressure (in. H_2O)	Flow (scfm)	Time Counter Display (hours)
64	66	2	180	110	0	240	5859.7

* Replace filter if >25 in. H_2O

EXTRACTION POINT VACUUM AND VELOCITY MONITORING

Location	Vacuum (in. H_2O)	Velocity (ft/min)	Flow* (scfm)	Contains H_2O?	Vacuum/Flow Adjustment	Comments
SSD-21-C	49.70	1345	29.3	X		
SSD-23-C						
SSD-30-C	-2.19	105	2.3	X		
SSD-26-C	-2.31	370	8.1	X		
SSD-31-C	-7.16	755	16.5	X		
SSD-27-C	-1.63	1365	29.8	X		
SSD-32-C	-7.16	1256	27.4	X		
SSD-28-C	-2.02	2065	45.0	X		
SSD-33-C	-4.04	481	10.5	X		
SSD-29-C	-5.52	675	14.7	X		
SSD-34-C	-58.1	2042	44.5	X		

**Flow = Velocity x 0.0218

VMP VACUUM MONITORING

VMP	Vacuum	Comments	VMP	Vacuum	Comments
159-C	0.00		111-C	0.00	
135-C	0.13		155-C	-0.14	
157-C	0.00		133-C	-0.54	
113-C	-1.54		154-C	-0.01	
156-C	-0.16		153-C	-0.10	
151-C	-0.01		158-C	0.00	
126-C	-0.01		001-C	-0.20	
149-C	-0.02		SSD-22-C	0.00	
050-C	0.00		SSD-2-C	-0.08	
141-C	-0.45		SSD-4-C	-1.90	
127-C	-0.36		SSD-24-C	-0.16	
150-C	-0.02		SSD-3-C	-0.87	
152-C	-0.02		SSD-25-C	0.00	
060-C	-0.47				

SSD SYSTEM CHECK - BUILDING C

LMC Middle River Complex, Middle River, Maryland

MONTHLY VAPOR SAMPLING				
Location	C-INFLUENT	C-MID GAC	C-EFFLUENT	Comments
Time				
Summa Canister ID				
Flow Contr. ID		N/A		
Start Vacuum (in. Hg)				
Stop Vacuum (in. Hg)				

SYSTEM CONDENSATE MONITORING					
Location	Contains Water?	Water Drained?	Volume Drained	Drain Valve Closed?	Comments
Moisture Separators					
MS-1	Yes | (No)	Yes | (No)	N/A	(Yes) | No	
MS-2	Yes | (No)	Yes | (No)		(Yes) | No	
Pipe Sumps					
PS-1	Yes | (No)	Yes | (No)		(Yes) | No	
PS-2	Yes | (No)	Yes | (No)		(Yes) | No	
PS-3	Yes | (No)	Yes | (No)		(Yes) | No	
PS-5	Yes | (No)	Yes | (No)		(Yes) | No	
System Sumps					
Exhaust Stack	Yes | (No)	Yes | (No)		(Yes) | No	
GAC and PPZ Drains					
Lead GAC	Yes | (No)	Yes | (No)		(Yes) | No	
Lag GAC	Yes | (No)	Yes | (No)		(Yes) | No	
PPZ	Yes | (No)	Yes | (No)		(Yes) | No	

13. How many empty drums are on-site? 2

14. How many Bldg. A water drums are on-site? PART FULL 0 FULL 2

15. How many Bldg. C water drums are on-site? PART FULL 0 FULL 1

16. How many filter drums are on-site? PART FULL 0 FULL 0

17. Are waste drums labeled and in good condition?

(YES) NO Comment: _____

18. Is the secondary containment pad in good condition?

(YES) NO Comment: _____

MAINTENANCE RECORD			
Issue Requiring Maintenance	Maintenance Conducted	Issue Status	
		OPEN	CLOSED
N/A		OPEN	CLOSED
		OPEN	CLOSED

ADDITIONAL COMMENTS:

PERSONNEL SIGNATURE: Adam J. Smith **DATE:** 4/28/20

SSD SYSTEM CHECK - BUILDING C

LMC Middle River Complex, Middle River, Maryland

Date: 5/13/20 Time: 10:25 Personnel: AS

1. Was the system running upon arrival?
   (YES) NO
2. Were there any alarm conditions upon arrival?
   YES (NO)
   Comment: _____
3. Is the blower vacuum relief valve open?
   YES (NO)
4. Is the dilution valve open?
   YES (NO) % Open: _____
5. Are there any leaks or damage to system hoses?
   YES (NO)
6. Is there any damage to system components?
   YES (NO)
7. Are all locks and zip-ties secure?
   (YES) NO
8. Was there a GAC or PPZ change out?
   YES (NO) Comment: _____
9. How many GAC and PPZ units are at this location?
   GAC: NEW 3 SPENT 0
   PPZ: NEW 1 SPENT 0
11. Do these fall to zero when system is turned off?
    Flow Gauge (YES) NO
    Pressure Gauge (YES) NO
    Vacuum Gauges (YES) NO
12. Do the temp. gauges fall when system is turned off?
    (YES) NO
13. Was the system running upon departure?
    (YES) NO
14. What is the amperage draw on the blower?
    Black: 13.78 Orange: 13.12 Yellow: 13.02

GENERAL SYSTEM MONITORING

Vacuum pre-Filter (in. H_2O)	Vacuum post-Filter (in. H_2O)	Diff Pressure of Filter* (in. H_2O)	Temp post-Blower (°F)	Temp post-HE (°F)	Pressure (in. H_2O)	Flow (scfm)	Time Counter Display (hours)
62	66	4	180	110	0	140	58843.5

* Replace filter if >25 in. H_2O

EXTRACTION POINT VACUUM AND VELOCITY MONITORING

Location	Vacuum (in. H_2O)	Velocity (ft/min)	Flow* (scfm)	Contains H_2O?	Vacuum/Flow Adjustment	Comments
SSD-21-C	-51.0	1451	31.6	X		
SSD-23-C	~					
SSD-30-C	-2.31	106	2.3	X		
SSD-26-C	-6.52	337	7.3	X		
SSD-31-C	-6.36	916	20.0	X		
SSD-27-C	-1.65	1381	30.1	X		
SSD-32-C	-7.92	1137	24.8	X		
SSD-28-C	-2.15	2103	45.8	X		
SSD-33-C	-4.93	457	10.0	X		
SSD-29-C	-5.36	702	15.3	X		
SSD-34-C	-37.90	1754	38.2	X		

**Flow = Velocity x 0.0218

VMP VACUUM MONITORING

VMP	Vacuum	Comments	VMP	Vacuum	Comments
159-C	0.00		111-C	0.00	
135-C	-0.08		155-C	-0.15	
157-C	-0.01		133-C	-0.54	
113-C	-1.27		154-C	-0.02	
156-C	-0.15		153-C	-0.90	
151-C	-0.03		158-C	0.00	
126-C	-0.02		001-C	-0.15	
149-C	-0.03		SSD-22-C	-0.01	
050-C	0.00		SSD-2-C	-0.08	
141-C	-0.35		SSD-4-C	-1.95	
127-C	-0.41		SSD-24-C	-0.14	
150-C	-0.02		SSD-3-C	-0.78	
152-C	-0.02		SSD-25-C	0.00	
060-C	-0.48				

SSD SYSTEM CHECK - BUILDING C

LMC Middle River Complex, Middle River, Maryland

MONTHLY VAPOR SAMPLING				
Location	**C-INFLUENT**	**C-MID GAC**	**C-EFFLUENT**	**Comments**
Time	11:40-11:41	11:36-11:37	11:32-11:33	
Summa Canister ID	11879	11665	11878	
Flow Contr. ID	10614	09958	11594	
Start Vacuum (in. Hg)	-30	-30	-30	
Stop Vacuum (in. Hg)	-4	-4	-4	

SYSTEM CONDENSATE MONITORING					
Location	**Contains Water?**	**Water Drained?**	**Volume Drained**	**Drain Valve Closed?**	**Comments**
Moisture Separators					
MS-1	Yes | (No)	Yes | (No)	N/A	(Yes) | No	
MS-2	Yes | (No)	Yes | (No)		(Yes) | No	
Pipe Sumps					
PS-1	Yes | (No)	Yes | (No)		(Yes) | No	
PS-2	Yes | (No)	Yes | (No)		(Yes) | No	
PS-3	Yes | (No)	Yes | (No)		(Yes) | No	
PS-5	Yes | (No)	Yes | (No)		(Yes) | No	
System Sumps					
Exhaust Stack	Yes | (No)	Yes | (No)		(Yes) | No	
GAC and PPZ Drains					
Lead GAC	Yes | (No)	Yes | (No)		(Yes) | No	
Lag GAC	Yes | (No)	Yes | (No)		(Yes) | No	
PPZ	Yes | (No)	Yes | (No)	V	(Yes) | No	

13. **How many empty drums are on-site?** |

14. **How many Bldg. A water drums are on-site?** PART FULL 1 FULL 0

15. **How many Bldg. C water drums are on-site?** PART FULL 0 FULL 1

16. **How many filter drums are on-site?** PART FULL 6 FULL 8

17. **Are waste drums labeled and in good condition?**
(YES) NO Comment: _____

18. **Is the secondary containment pad in good condition?**
(YES) NO Comment: _____

MAINTENANCE RECORD			
Issue Requiring Maintenance	**Maintenance Conducted**	**Issue Status**	
N/A		OPEN	CLOSED
		OPEN	CLOSED
		OPEN	CLOSED

ADDITIONAL COMMENTS:
Phone Batteries Replaced

PERSONNEL SIGNATURE: _____ **DATE:** 5/13/20

SSD SYSTEM CHECK - BUILDING C

LMC Middle River Complex, Middle River, Maryland

Date: 5/28/20 Time: 11:40am Personnel: AS

1. Was the system running upon arrival? (YES) NO
2. Were there any alarm conditions upon arrival? YES (NO)
Comment: _____
3. Is the blower vacuum relief valve open? (YES) NO
4. Is the dilution valve open? YES (NO) % Open: _____
5. Are there any leaks or damage to system hoses? YES (NO)
6. Is there any damage to system components? YES (NO)
7. Are all locks and zip-ties secure? (YES) NO
8. Was there a GAC or PPZ change out? YES (NO) Comment: _____
9. How many GAC and PPZ units are at this location?
GAC: NEW 3 SPENT 6
PPZ: NEW 1 SPENT 0
11. Do these fall to zero when system is turned off?
Flow Gauge (YES) NO
Pressure Gauge (YES) NO
Vacuum Gauges (YES) NO
12. Do the temp. gauges fall when system is turned off? (YES) NO
13. Was the system running upon departure? (YES) NO
14. What is the amperage draw on the blower?
Black: 13.54 Orange: 12.79 Yellow: 12.75

GENERAL SYSTEM MONITORING

Vacuum pre-Filter (in. H_2O)	Vacuum post-Filter (in. H_2O)	Diff Pressure of Filter* (in. H_2O)	Temp post-Blower (°F)	Temp post-HE (°F)	Pressure (in. H_2O)	Flow (scfm)	Time Counter Display (hours)
66	68	2	186	110	0	140	59204.6

* Replace filter if >25 in. H_2O

EXTRACTION POINT VACUUM AND VELOCITY MONITORING

Location	Vacuum (in. H_2O)	Velocity (ft/min)	Flow* (scfm)	Contains H_2O?	Vacuum/Flow Adjustment	Comments
SSD-21-C	54.60	1118	24.4	X		
SSD-23-C	~					
SSD-30-C	-2.25	130	2.8	X		
SSD-26-C	-9.55	219	4.8	X		
SSD-31-C	-9.38	1363	29.7	X		
SSD-27-C	-1.66	1455	33.7	X		
SSD-32-C	-8.78	1217	26.5	X		
SSD-28-C	-2.15	2209	48.2	X		
SSD-33-C	-4.15	444	9.7	X		
SSD-29-C	-5.86	565	12.3	X		
SSD-34-C	-59.20	1017	22.1	X		

**Flow = Velocity x 0.0218

VMP VACUUM MONITORING

VMP	Vacuum	Comments	VMP	Vacuum	Comments
159-C	0.00		111-C	0.00	
135-C	-0.05		155-C	-0.14	
157-C	-0.01		133-C	-0.56	
113-C	-1.66		154-C	-0.01	
156-C	-0.22		153-C	-0.38	
151-C	-0.03		158-C	0.00	
126-C	-0.01		001-C	-0.04	
149-C	-0.04		SSD-22-C	-0.07	
050-C	0.00		SSD-2-C	0.00	
141-C	-0.29		SSD-4-C	-1.79	
127-C	-0.49		SSD-24-C	-0.14	
150-C	-0.01		SSD-3-C	-0.68	
152-C	-0.02		SSD-25-C	0.00	
060-C	-0.51				

SSD SYSTEM CHECK - BUILDING C

LMC Middle River Complex, Middle River, Maryland

MONTHLY VAPOR SAMPLING				
Location	C-INFLUENT	C-MID GAC	C-EFFLUENT	Comments
Time				
Summa Canister ID				
Flow Contr. ID		N/A		
Start Vacuum (in. Hg)				
Stop Vacuum (in. Hg)				

SYSTEM CONDENSATE MONITORING					
Location	Contains Water?	Water Drained?	Volume Drained	Drain Valve Closed?	Comments
Moisture Separators					
MS-1	Yes | (No)	Yes | (No)	N/A	(Yes) | No	
MS-2	Yes | (No)	Yes | (No)		(Yes) | No	
Pipe Sumps					
PS-1	Yes | (No)	Yes | (No)		(Yes) | No	
PS-2	Yes | (No)	Yes | (No)		(Yes) | No	
PS-3	Yes | (No)	Yes | (No)		(Yes) | No	
PS-5	Yes | (No)	Yes | (No)		(Yes) | No	
System Sumps					
Exhaust Stack	Yes | (No)	Yes | (No)		(Yes) | No	
GAC and PPZ Drains					
Lead GAC	Yes | (No)	Yes | (No)		(Yes) | No	
Lag GAC	Yes | (No)	Yes | (No)		(Yes) | No	
PPZ	Yes | (No)	Yes | (No)		(Yes) | No	

13. How many empty drums are on-site? 1

14. How many Bldg. A water drums are on-site? PART FULL 1 FULL 0

15. How many Bldg. C water drums are on-site? PART FULL 0 FULL 1

16. How many filter drums are on-site? PART FULL 0 FULL 0

17. Are waste drums labeled and in good condition?

(YES) NO Comment: _____

18. Is the secondary containment pad in good condition?

(YES) NO Comment: _____

MAINTENANCE RECORD		
Issue Requiring Maintenance	Maintenance Conducted	Issue Status
	N/A	OPEN CLOSED
		OPEN CLOSED
		OPEN CLOSED

ADDITIONAL COMMENTS:

PERSONNEL SIGNATURE: Charles J. Smith **DATE:** 5/28/20

SSD SYSTEM CHECK - BUILDING C

LMC Middle River Complex, Middle River, Maryland

Date: 6/9/2020 Time: 10:15 Personnel: AS

1. Was the system running upon arrival? (YES) NO
2. Were there any alarm conditions upon arrival? YES (NO)
Comment: _____
3. Is the blower vacuum relief valve open? YES (NO)
4. Is the dilution valve open? YES (NO) % Open: _____
5. Are there any leaks or damage to system hoses? YES (NO)
6. Is there any damage to system components? YES (NO)
7. Are all locks and zip-ties secure? (YES) NO
8. Was there a GAC or PPZ change out? YES (NO) Comment: _____
9. How many GAC and PPZ units are at this location?
GAC: NEW 3 SPENT 0
PPZ: NEW 1 SPENT 0
11. Do these fall to zero when system is turned off?
Flow Gauge (YES) NO
Pressure Gauge (YES) NO
Vacuum Gauges (YES) NO
12. Do the temp. gauges fall when system is turned off? (YES) NO
13. Was the system running upon departure? (YES) NO
14. What is the amperage draw on the blower?
Black: 13.45 Orange: 12.81 Yellow: 12.71

GENERAL SYSTEM MONITORING

Vacuum pre-Filter (in. H_2O)	Vacuum post-Filter (in. H_2O)	Diff Pressure of Filter* (in. H_2O)	Temp post-Blower (°F)	Temp post-HE (°F)	Pressure (in. H_2O)	Flow (scfm)	Time Counter Display (hours)
64	08	4	190	110	0	140	5949.2

* Replace filter if >25 in. H_2O

EXTRACTION POINT VACUUM AND VELOCITY MONITORING

Location	Vacuum (in. H_2O)	Velocity (ft/min)	Flow* (scfm)	Contains H_2O?	Vacuum/Flow Adjustment	Comments
SSD-21-C	-55.40	1066	23.2	X		
~~SSD-23-C~~						
SSD-30-C	-2.30	102	2.2	X		
SSD-26-C	-10.64	229	5.0	X		
SSD-31-C	-10.52	592	12.9	X		
SSD-27-C	-1.65	1448	31.6	X		
SSD-32-C	-9.67	1281	27.9	X		
SSD-28-C	-2.15	2240	48.8	X		
SSD-33-C	-4.86	507	11.1	X		
SSD-29-C	-6.03	738	16.1	X		
SSD-34-C	-59.80	2144	46.7	X		

**Flow = Velocity x 0.0218

VMP VACUUM MONITORING

VMP	Vacuum	Comments	VMP	Vacuum	Comments
159-C	0.00		111-C	0.00	
135-C	-0.13		155-C	-0.13	
157-C	0.00		133-C	-0.57	
113-C	-1.04		154-C	-0.02	
156-C	-0.25		153-C	-0.06	
151-C	-0.03		158-C	0.00	
126-C	0.00		001-C	-0.22	
149-C	0.01		SSD-22-C	0.00	
050-C	0.00		SSD-2-C	-0.09	
141-C	-0.62		SSD-4-C	-2.88	
127-C	-0.51		SSD-24-C	-0.16	
150-C	-0.00		SSD-3-C	-0.31	
152-C	-0.02		SSD-25-C	0.00	
060-C	-0.49				

SSD SYSTEM CHECK - BUILDING C

LMC Middle River Complex, Middle River, Maryland

MONTHLY VAPOR SAMPLING				
Location	C-INFLUENT	C-MID GAC	C-EFFLUENT	Comments
Time				
Summa Canister ID		N/A		
Flow Contr. ID				
Start Vacuum (in. Hg)				
Stop Vacuum (in. Hg)				

SYSTEM CONDENSATE MONITORING					
Location	Contains Water?	Water Drained?	Volume Drained	Drain Valve Closed?	Comments
Moisture Separators					
MS-1	Yes | (No)	Yes | (No)	N/A	(Yes) | No	
MS-2	Yes | No	Yes | No		Yes | No	
Pipe Sumps					
PS-1	Yes | No	Yes | No		Yes | No	
PS-2	Yes | No	Yes | No		Yes | No	
PS-3	Yes | No	Yes | No		Yes | No	
PS-5	Yes | No	Yes | No		Yes | No	
System Sumps					
Exhaust Stack	Yes | No	Yes | No		Yes | No	
GAC and PPZ Drains					
Lead GAC	Yes | No	Yes | No		Yes | No	
Lag GAC	Yes | No	Yes | No	V	Yes | No	
PPZ	Yes | No	Yes | No		Yes | No	

13. How many empty drums are on-site? 1
14. How many Bldg. A water drums are on-site? PART FULL 1 FULL 0
15. How many Bldg. C water drums are on-site? PART FULL 0 FULL 1
16. How many filter drums are on-site? PART FULL 0 FULL 0
17. Are waste drums labeled and in good condition?
    (YES) NO Comment: _____
18. Is the secondary containment pad in good condition?
    (YES) NO Comment: _____

MAINTENANCE RECORD		
Issue Requiring Maintenance	Maintenance Conducted	Issue Status
	N/A	OPEN CLOSED
		OPEN CLOSED
		OPEN CLOSED

ADDITIONAL COMMENTS:

PERSONNEL SIGNATURE: _____ **DATE:** 6/9/2023

SSD SYSTEM CHECK - BUILDING C

LMC Middle River Complex, Middle River, Maryland

Date: 6/25/2020 **Time:** 10:10 **Personnel:** AS

1. Was the system running upon arrival? (YES) NO
2. Were there any alarm conditions upon arrival? YES (NO)
   Comment: _____
3. Is the blower vacuum relief valve open? YES (NO)
4. Is the dilution valve open? YES (NO) % Open: _____
5. Are there any leaks or damage to system hoses? YES (NO)
6. Is there any damage to system components? YES (NO)
7. Are all locks and zip-ties secure? (YES) NO
8. Was there a GAC or PPZ change out? YES (NO) Comment: _____
9. How many GAC and PPZ units are at this location?
   GAC: NEW 3 SPENT 0
   PPZ: NEW 1 SPENT 0
11. Do these fall to zero when system is turned off?
   Flow Gauge (YES) NO
   Pressure Gauge (YES) NO
   Vacuum Gauges (YES) NO
12. Do the temp. gauges fall when system is turned off? (YES) NO
13. Was the system running upon departure? (YES) NO
14. What is the amperage draw on the blower?
   Black: 13.60 Orange: 12.51 Yellow: 12.68

GENERAL SYSTEM MONITORING

Vacuum pre-Filter (in. H_2O)	Vacuum post-Filter (in. H_2O)	Diff Pressure of Filter* (in. H_2O)	Temp post-Blower (°F)	Temp post-HE (°F)	Pressure (in. H_2O)	Flow (scfm)	Time Counter Display (hours)
68	68	0	194	110	0	140	59875.0

* Replace filter if >25 in. H_2O

EXTRACTION POINT VACUUM AND VELOCITY MONITORING

Location	Vacuum (in. H_2O)	Velocity (ft/min)	Flow* (scfm)	Contains H_2O?	Vacuum/Flow Adjustment	Comments
SSD-21-C	-57.80	1083	23.6	X		
SSD-23-C						
SSD-30-C	-2.12	115	2.5	X		
SSD-26-C	-11.77	432	9.4	X		
SSD-31-C	-11.57	638	13.9	X		
SSD-27-C	-1.66	1470	32.0	X		
SSD-32-C	-11.13	1166	25.4	X		
SSD-28-C	-2.15	2266	49.4	X		
SSD-33-C	-4.02	497	10.8	X		
SSD-29-C	-6.25	724	15.8	X		
SSD-34-C	-61.0	1276	27.8	X		

**Flow = Velocity x 0.0218

VMP VACUUM MONITORING

VMP	Vacuum	Comments	VMP	Vacuum	Comments
159-C	0.00		111-C	0.00	
135-C	-0.22		155-C	-0.15	
157-C	0.00		133-C	-0.54	
113-C	[redacted]	-3.58	154-C	-0.01	
156-C	-0.28		153-C	-0.68	
151-C	-0.03		158-C	0.00	
126-C	-0.03		001-C	0.00	
149-C	[redacted]-003		SSD-22-C	0.00	
050-C	0.00		SSD-2-C	-0.07	
141-C	-0.55		SSD-4-C	-1.69	
127-C	-0.61		SSD-24-C	-0.12	
150-C	-0.01		SSD-3-C	-0.63	
152-C	-0.02		SSD-25-C	-0.01	
060-C	-0.51				

SSD SYSTEM CHECK - BUILDING C

LMC Middle River Complex, Middle River, Maryland

MONTHLY VAPOR SAMPLING				
Location	C-INFLUENT	C-MID GAC	C-EFFLUENT	Comments
Time				
Summa Canister ID		N/A		
Flow Contr. ID				
Start Vacuum (in. Hg)				
Stop Vacuum (in. Hg)				

SYSTEM CONDENSATE MONITORING					
Location	Contains Water?	Water Drained?	Volume Drained	Drain Valve Closed?	Comments
Moisture Separators					
MS-1	Yes | (No)	Yes | (No)	N/A	(Yes) | No	
MS-2	Yes | (No)	Yes | (No)		(Yes) | No	
Pipe Sumps					
PS-1	Yes | (No)	Yes | (No)		(Yes) | No	
PS-2	Yes | (No)	Yes | (No)		(Yes) | No	
PS-3	Yes | (No)	Yes | (No)		(Yes) | No	
PS-5	Yes | (No)	Yes | (No)		(Yes) | No	
System Sumps					
Exhaust Stack	Yes | (No)	Yes | (No)		(Yes) | No	
GAC and PPZ Drains					
Lead GAC	Yes | (No)	Yes | (No)		(Yes) | No	
Lag GAC	Yes | (No)	Yes | (No)	V	(Yes) | No	
PPZ	Yes | (No)	Yes | (No)		(Yes) | No	

13. How many empty drums are on-site? 1
14. How many Bldg. A water drums are on-site? PART FULL 1 FULL 0
15. How many Bldg. C water drums are on-site? PART FULL 0 FULL 8
16. How many filter drums are on-site? PART FULL 0 FULL 8
17. Are waste drums labeled and in good condition?
(YES) NO Comment: _____
18. Is the secondary containment pad in good condition?
(YES) NO Comment: _____

MAINTENANCE RECORD			
Issue Requiring Maintenance	Maintenance Conducted	Issue Status	
N/A		OPEN	CLOSED
		OPEN	CLOSED
		OPEN	CLOSED

ADDITIONAL COMMENTS:

PERSONNEL SIGNATURE: Adam S. Smith DATE: 6/25/2020

SSD SYSTEM CHECK - BUILDING C

LMC Middle River Complex, Middle River, Maryland

Date: 7/7/2020 **Time:** 1:15pm **Personnel:** AS

1. Was the system running upon arrival? (YES) NO
2. Were there any alarm conditions upon arrival? YES (NO)
   Comment: _____
3. Is the blower vacuum relief valve open? YES (NO)
4. Is the dilution valve open? YES (NO) % Open: _____
5. Are there any leaks or damage to system hoses? YES (NO)
6. Is there any damage to system components? YES (NO)
7. Are all locks and zip-ties secure? (YES) NO
8. Was there a GAC or PPZ change out? YES (NO) Comment: _____
9. How many GAC and PPZ units are at this location?
   GAC: NEW 3 SPENT 0
   PPZ: NEW 1 SPENT 0
11. Do these fall to zero when system is turned off?
    Flow Gauge (YES) NO
    Pressure Gauge (YES) NO
    Vacuum Gauges (YES) NO
12. Do the temp. gauges fall when system is turned off? (YES) NO
13. Was the system running upon departure? (YES) NO
14. What is the amperage draw on the blower?
    Black: 13.26 Orange: 12.93 Yellow: 12.87

GENERAL SYSTEM MONITORING

Vacuum pre-Filter (in. H_2O)	Vacuum post-Filter (in. H_2O)	Diff Pressure of Filter* (in. H_2O)	Temp post-Blower (°F)	Temp post-HE (°F)	Pressure (in. H_2O)	Flow (scfm)	Time Counter Display (hours)
70	72	2	200	110	0	140	6015.6

* Replace filter if >25 in. H_2O

Reeds Replaced

EXTRACTION POINT VACUUM AND VELOCITY MONITORING

Location	Vacuum (in. H_2O)	Velocity (ft/min)	Flow** (scfm)	Contains H_2O?	Vacuum/Flow Adjustment	Comments
SSD-21-C	-50.5	3128	68.2	X		
SSD-23-C						
SSD-30-C	-2.33	104	2.3	X		
SSD-26-C	-12.60	433	9.4	X		
SSD-31-C	-12.23	707	15.4	X		
SSD-27-C	-1.71	1545	33.7	X		
SSD-32-C	-12.54	1253	27.3	X		
SSD-28-C	-2.22	2270	49.5	X		
SSD-33-C	-4.48	508	11.1	X		
SSD-29-C	-6.46	671	14.6	X		
SSD-34-C	-63.90	2239	48.8	X		

**Flow = Velocity x 0.0218

VMP VACUUM MONITORING

VMP	Vacuum	Comments	VMP	Vacuum	Comments
★ 159-C	2.03		111-C	0.00	
135-C	-0.26		155-C	-0.16	
157-C	-0.01		133-C	-0.61	
113-C	-3.95		154-C	-0.02	
156-C	-0.30		153-C	-0.10	
151-C	-0.07		158-C	0.00	
126-C	0.00		001-C	-0.11	
149-C	-Covered		SSD-22-C	-0.02	
050-C	0.00		SSD-2-C	-0.06	
141-C	-0.77		SSD-4-C	-1.48	
127-C	-0.66		SSD-24-C	[redacted]	-0.16
150-C	-0.01		SSD-3-C	-0.64	
152-C	-0.01		SSD-25-C	-0.51	
060-C	-0.50				

SSD SYSTEM CHECK - BUILDING C

LMC Middle River Complex, Middle River, Maryland

MONTHLY VAPOR SAMPLING				
Location	C-INFLUENT	C-MID GAC	C-EFFLUENT	Comments
Time				
Summa Canister ID		N/A		
Flow Contr. ID				
Start Vacuum (in. Hg)				
Stop Vacuum (in. Hg)				

SYSTEM CONDENSATE MONITORING					
Location	Contains Water?	Water Drained?	Volume Drained	Drain Valve Closed?	Comments
Moisture Separators					
MS-1	Yes | (No)	Yes | (No)	NA	(Yes) | No	
MS-2	Yes | (No)	Yes | (No)		(Yes) | No	
Pipe Sumps					
PS-1	Yes | (No)	Yes | (No)		(Yes) | No	
PS-2	Yes | (No)	Yes | (No)		(Yes) | No	
PS-3	Yes | (No)	Yes | (No)		(Yes) | No	
PS-5	Yes | (No)	Yes | (No)		(Yes) | No	
System Sumps					
Exhaust Stack	Yes | (No)	Yes | (No)		(Yes) | No	
GAC and PPZ Drains					
Lead GAC	Yes | (No)	Yes | (No)		(Yes) | No	
Lag GAC	Yes | (No)	Yes | (No)		(Yes) | No	
PPZ	Yes | (No)	Yes | (No)		(Yes) | No	

13. How many empty drums are on-site? 1

14. How many Bldg. A water drums are on-site? PART FULL 1 FULL 0

15. How many Bldg. C water drums are on-site? PART FULL 0 FULL 0

16. How many filter drums are on-site? PART FULL 0 FULL 0

17. Are waste drums labeled and in good condition?
(YES) NO Comment: _____

18. Is the secondary containment pad in good condition?
(YES) NO Comment: _____

MAINTENANCE RECORD			
Issue Requiring Maintenance	Maintenance Conducted	Issue Status	
	N/A	OPEN	CLOSED
		OPEN	CLOSED
		OPEN	CLOSED

ADDITIONAL COMMENTS:

PERSONNEL SIGNATURE: John S. Scott DATE: 7/7/2020

SSD SYSTEM CHECK - BUILDING C

LMC Middle River Complex, Middle River, Maryland

Date: 7/23/26 Time: 11:35 Personnel: AS

1. Was the system running upon arrival? (YES) NO
2. Were there any alarm conditions upon arrival? YES (NO)
   Comment: _____
3. Is the blower vacuum relief valve open? YES (NO)
4. Is the dilution valve open? YES (NO) % Open: _____
5. Are there any leaks or damage to system hoses? YES (NO)
6. Is there any damage to system components? YES (NO)
7. Are all locks and zip-ties secure? (YES) NO
8. Was there a GAC or PPZ change out? YES (NO) Comment: _____
9. How many GAC and PPZ units are at this location?
   GAC: NEW 5 SPENT 0
   PPZ: NEW 1 SPENT 6
11. Do these fall to zero when system is turned off?
    Flow Gauge (YES) NO
    Pressure Gauge (YES) NO
    Vacuum Gauges (YES) NO
12. Do the temp. gauges fall when system is turned off? (YES) NO
13. Was the system running upon departure? (YES) NO
14. What is the amperage draw on the blower?
    Black: 12.78 Orange: 12.54 Yellow: 12.46

GENERAL SYSTEM MONITORING

Vacuum pre-Filter (in. H_2O)	Vacuum post-Filter (in. H_2O)	Diff Pressure of Filter* (in. H_2O)	Temp post-Blower (°F)	Temp post-HE (°F)	Pressure (in. H_2O)	Flow (scfm)	Time Counter Display (hours)
70	70	0	200	110	0	140	60533.6

* Replace filter if >25 in. H_2O

EXTRACTION POINT VACUUM AND VELOCITY MONITORING

Location	Vacuum (in. H_2O)	Velocity (ft/min)	Flow* (scfm)	Contains H_2O?	Vacuum/Flow Adjustment	Comments
SSD-21-C	-62.20	2920	63.7	X		
SSD-23-C	✓					
SSD-30-C	-2.10	113	2.5	X		Adjusted
SSD-26-C	-13.10	445	9.7	X		Adjusted
SSD-31-C	-12.32	740	16.1	X		
SSD-27-C	-1.57	1440	31.4	X		
SSD-32-C	-13.62	1294	28.2	X		
SSD-28-C	-1.94	2240	48.8	X		
SSD-33-C	-4.27	488	10.6	X		Adjusted
SSD-29-C	-6.27	685	14.9	X		Adjusted
SSD-34-C	-58.50	2588	56.4	X		

**Flow = Velocity x 0.0218

VMP VACUUM MONITORING

VMP	Vacuum	Comments	VMP	Vacuum	Comments
159-C	0.00		111-C	0.00	
135-C	-1.10		155-C	-0.16	
157-C	0.00		133-C	-0.59	
113-C	-0.91		154-C	-0.02	
156-C	-0.30		153-C	-0.09	
151-C	-0.02		158-C	0.00	
126-C	0.00		001-C	-0.09	
149-C	-0.07		SSD-22-C	0.00	
050-C	0.00		SSD-2-C	-0.04	
141-C	-0.84		SSD-4-C	-1.14	
127-C	-0.69		SSD-24-C	[illegible]	-0.10
150-C	-0.02		SSD-3-C	-0.55	
152-C	-0.02		SSD-25-C	0.00	
060-C	-0.48				

SSD SYSTEM CHECK - BUILDING C

LMC Middle River Complex, Middle River, Maryland

MONTHLY VAPOR SAMPLING				
Location	C-INFLUENT	C-MID GAC	C-EFFLUENT	Comments
Time	13:35-13:36	13:30-13:31	13:25-1326	
Summa Canister ID	34002459	7567	~~[illegible]~~	34000313
Flow Contr. ID	09958	11594	09899	
Start Vacuum (in. Hg)	-30	-29	-28	
Stop Vacuum (in. Hg)	-4	-4	-4	

SYSTEM CONDENSATE MONITORING					
Location	Contains Water?	Water Drained?	Volume Drained	Drain Valve Closed?	Comments
Moisture Separators					
MS-1	Yes | No	Yes | No	N/A	Yes | No	
MS-2	Yes | No	Yes | No		Yes | No	
Pipe Sumps					
PS-1	Yes | No	Yes | No		Yes | No	
PS-2	Yes | No	Yes | No		Yes | No	
PS-3	Yes | No	Yes | No		Yes | No	
PS-5	Yes | No	Yes | No		Yes | No	
System Sumps					
Exhaust Stack	Yes | No	Yes | No		Yes | No	
GAC and PPZ Drains					
Lead GAC	Yes | No	Yes | No		Yes | No	
Lag GAC	Yes | No	Yes | No		Yes | No	
PPZ	Yes | No	Yes | No		Yes | No	

13. How many empty drums are on-site? 1
14. How many Bldg. A water drums are on-site? PART FULL 1 FULL 0
15. How many Bldg. C water drums are on-site? PART FULL 0 FULL 0
16. How many filter drums are on-site? PART FULL 0 FULL 0
17. Are waste drums labeled and in good condition?
    YES NO Comment: _____
18. Is the secondary containment pad in good condition?
    YES NO Comment: _____

MAINTENANCE RECORD		
Issue Requiring Maintenance	Maintenance Conducted	Issue Status
		OPEN CLOSED
	N/A	OPEN CLOSED
		OPEN CLOSED

ADDITIONAL COMMENTS:

AE 34000634
M 34000669
AI 34001796

PERSONNEL SIGNATURE: [signature] **DATE:** 7/23/20

SSD SYSTEM CHECK - BUILDING C

LMC Middle River Complex, Middle River, Maryland

Date: 8/5/2020 Time: 10:45 Personnel: AS

1. Was the system running upon arrival?
   (YES) NO
2. Were there any alarm conditions upon arrival?
   YES (NO)
   Comment: _____
3. Is the blower vacuum relief valve open?
   YES (NO)
4. Is the dilution valve open?
   YES (NO) % Open: _____
5. Are there any leaks or damage to system hoses?
   YES (NO)
6. Is there any damage to system components?
   YES (NO)
7. Are all locks and zip-ties secure?
   (YES) NO
8. Was there a GAC or PPZ change out?
   YES (NO) Comment: _____
9. How many GAC and PPZ units are at this location?
   GAC: NEW 3 SPENT 0
   PPZ: NEW 1 SPENT 0
11. Do these fall to zero when system is turned off?
    Flow Gauge (YES) NO
    Pressure Gauge (YES) NO
    Vacuum Gauges (YES) NO
12. Do the temp. gauges fall when system is turned off?
    (YES) NO
13. Was the system running upon departure?
    (YES) NO
14. What is the amperage draw on the blower?
    Black: 13.48 Orange: 12.56 Yellow: 12.59

GENERAL SYSTEM MONITORING

Vacuum pre-Filter (in. H_2O)	Vacuum post-Filter (in. H_2O)	Diff Pressure of Filter* (in. H_2O)	Temp post-Blower (°F)	Temp post-HE (°F)	Pressure (in. H_2O)	Flow (scfm)	Time Counter Display (hours)
70	72	2	198	110	20	140	60844.7

* Replace filter if >25 in. H_2O

EXTRACTION POINT VACUUM AND VELOCITY MONITORING

Location	Vacuum (in. H_2O)	Velocity (ft/min)	Flow* (scfm)	Contains H_2O?	Vacuum/Flow Adjustment	Comments
SSD-21-C	-48.20	3081	67.2	X		
SSD-23-C						
SSD-30-C	-48.50	2323	50.6	X		
SSD-26-C	-43.90	2174	47.4	yes		
SSD-31-C	-12.57	1000	21.8	X		
SSD-27-C	-14.86	1039	22.7	X		
SSD-32-C	-1.60	1482	32.3	X		
SSD-28-C	-2.00	2299	50.1	X		
SSD-33-C	-7.81	794	17.3	X		
SSD-29-C	-10.06	1101	24.0	X		
SSD-34-C	-66.1	3536	77.1	X		

**Flow = Velocity x 0.0218

VMP VACUUM MONITORING

VMP	Vacuum	Comments	VMP	Vacuum	Comments
159-C	4.57		111-C	0.00	
135-C	-0.93		155-C	-0.16	
157-C	-0.02		133-C	-0.53	
113-C	-2.75		154-C	-0.01	
156-C	-0.32		153-C	-0.05	
151-C	-0.02		158-C	0.00	
126-C	-0.01		001-C	-0.10	
149-C	-0.03		SSD-22-C	0.00	
050-C	0.00		SSD-2-C	-0.04	
141-C	-0.97		SSD-4-C	-0.73	
127-C	-1.25		SSD-24-C	-0.07	
150-C	-0.02		SSD-3-C	-0.24	
152-C	-0.06		SSD-25-C	0.00	
060-C	-0.47				

SSD SYSTEM CHECK - BUILDING C

LMC Middle River Complex, Middle River, Maryland

MONTHLY VAPOR SAMPLING				
Location	C-INFLUENT	C-MID GAC	C-EFFLUENT	Comments
Time				
Summa Canister ID		N/A		
Flow Contr. ID				
Start Vacuum (in. Hg)				
Stop Vacuum (in. Hg)				

SYSTEM CONDENSATE MONITORING					
Location	Contains Water?	Water Drained?	Volume Drained	Drain Valve Closed?	Comments
Moisture Separators					
MS-1	Yes | (No)	Yes | (No)	N/A	(Yes) | No	
MS-2	Yes | (No)	Yes | (No)		(Yes) | No	
Pipe Sumps					
PS-1	Yes | (No)	Yes | (No)		(Yes) | No	
PS-2	Yes | (No)	Yes | (No)		(Yes) | No	
PS-3	Yes | (No)	Yes | (No)		(Yes) | No	
PS-5	Yes | (No)	Yes | (No)		(Yes) | No	
System Sumps					
Exhaust Stack	Yes | (No)	Yes | (No)		(Yes) | No	
GAC and PPZ Drains					
Lead GAC	Yes | (No)	Yes | (No)		(Yes) | No	
Lag GAC	Yes | (No)	Yes | (No)	V	(Yes) | No	
PPZ	Yes | (No)	Yes | (No)		(Yes) | No	

13. How many empty drums are on-site? (0)
14. How many Bldg. A water drums are on-site? PART FULL 1 FULL 0
15. How many Bldg. C water drums are on-site? PART FULL 0 FULL 0
16. How many filter drums are on-site? PART FULL 0 FULL 0
17. Are waste drums labeled and in good condition?
(YES) NO Comment: _____
18. Is the secondary containment pad in good condition?
(YES) NO Comment: _____

MAINTENANCE RECORD			
Issue Requiring Maintenance	Maintenance Conducted	Issue Status	
		OPEN	CLOSED
N/A		OPEN	CLOSED
		OPEN	CLOSED

ADDITIONAL COMMENTS:

Pressure Gauge replaced

PERSONNEL SIGNATURE: [signature] **DATE:** 8/5/20

SSD SYSTEM CHECK - BUILDING C

LMC Middle River Complex, Middle River, Maryland

Date: 8/18/20 **Time:** 11:35 **Personnel:** AS

1. **Was the system running upon arrival?** (YES) NO
2. **Were there any alarm conditions upon arrival?** YES (NO)
   Comment: _____
3. **Is the blower vacuum relief valve open?** YES (NO)
4. **Is the dilution valve open?** YES (NO) % Open: _____
5. **Are there any leaks or damage to system hoses?** YES (NO)
6. **Is there any damage to system components?** YES (NO)
7. **Are all locks and zip-ties secure?** (YES) NO
8. **Was there a GAC or PPZ change out?** YES (NO) Comment: _____
9. **How many GAC and PPZ units are at this location?**
   GAC: NEW 3 SPENT 0
   PPZ: NEW 1 SPENT 0
11. **Do these fall to zero when system is turned off?**
    Flow Gauge (YES) NO
    Pressure Gauge (YES) NO
    Vacuum Gauges (YES) NO
12. **Do the temp. gauges fall when system is turned off?** (YES) NO
13. **Was the system running upon departure?** (YES) NO
14. **What is the amperage draw on the blower?**
    Black: 13.35 Orange: 12.63 Yellow: 12.48

GENERAL SYSTEM MONITORING

Vacuum pre-Filter (in. H_2O)	Vacuum post-Filter (in. H_2O)	Diff Pressure of Filter* (in. H_2O)	Temp post-Blower (°F)	Temp post-HE (°F)	Pressure (in. H_2O)	Flow (scfm)	Time Counter Display (hours)
-68	-72	4	194	110	20	140	6115 7.5

* Replace filter if >25 in. H_2O

EXTRACTION POINT VACUUM AND VELOCITY MONITORING

Location	Vacuum (in. H_2O)	Velocity (ft/min)	Flow* (scfm)	Contains H_2O?	Vacuum/Flow Adjustment	Comments
SSD-21-C	-49.8	3125.0	68.1	Yes		
SSD-23-C						
SSD-30-C	-11.44	614	13.4	X		
SSD-26-C	-44.90	2143	46.7	Yes		
SSD-31-C	-12.53	904	19.7	X		
SSD-27-C	-1.60	1421	31.0	X		
SSD-32-C	-16.46	1043	22.7	X		
SSD-28-C	-1.92	2205	48.1	X		
SSD-33-C	-7.73	776	16.9	X		
SSD-29-C	-10.06	983	21.4	X		
SSD-34-C	-59.90	3337	72.7	X		

**Flow = Velocity x 0.0218

VMP VACUUM MONITORING

VMP	Vacuum	Comments	VMP	Vacuum	Comments
159-C	-5.57		111-C	0.00	
135-C	-0.78		155-C	-0.16	
157-C	-0.01		133-C	-0.53	
113-C	-2.32		154-C	-0.02	
156-C	-0.29		153-C	-0.07	
151-C	-0.03		158-C	0.00	
126-C	0.00		001-C	-0.12	
149-C	-0.11		SSD-22-C	0.00	
050-C	0.00		SSD-2-C	-0.07	
141-C	-0.64		SSD-4-C	-1.26	
127-C	-1.23		SSD-24-C	-0.11	
150-C	-0.01		SSD-3-C	-0.27	
152-C	-0.02		SSD-25-C	0.00	
060-C	-0.45				

SSD SYSTEM CHECK - BUILDING C

LMC Middle River Complex, Middle River, Maryland

MONTHLY VAPOR SAMPLING				
Location	C-INFLUENT	C-MID GAC	C-EFFLUENT	Comments
Time				
Summa Canister ID				
Flow Contr. ID		N/A		
Start Vacuum (in. Hg)				
Stop Vacuum (in. Hg)				

SYSTEM CONDENSATE MONITORING					
Location	Contains Water?	Water Drained?	Volume Drained	Drain Valve Closed?	Comments
Moisture Separators					
MS-1	Yes | (No)	Yes | (No)	N/A	(Yes) | No	
MS-2	Yes | No	Yes | No		Yes | No	
Pipe Sumps					
PS-1	Yes | No	Yes | No		Yes | No	
PS-2	Yes | No	Yes | No		Yes | No	
PS-3	Yes | No	Yes | No		Yes | No	
PS-5	Yes | No	Yes | No		Yes | No	
System Sumps					
Exhaust Stack	Yes | No	Yes | No		Yes | No	
GAC and PPZ Drains					
Lead GAC	Yes | No	Yes | No		Yes | No	
Lag GAC	Yes | No	Yes | No		Yes | No	
PPZ	Yes | No	Yes | No		Yes | No	

13. **How many empty drums are on-site?** 1

14. **How many Bldg. A water drums are on-site?** PART FULL 1 FULL 0

15. **How many Bldg. C water drums are on-site?** PART FULL 0 FULL 0

16. **How many filter drums are on-site?** PART FULL 0 FULL 0

17. **Are waste drums labeled and in good condition?**
(YES) NO Comment: _____

18. **Is the secondary containment pad in good condition?**
(YES) NO Comment: _____

MAINTENANCE RECORD			
Issue Requiring Maintenance	Maintenance Conducted	Issue Status	
	N/A	OPEN	CLOSED
		OPEN	CLOSED
		OPEN	CLOSED

ADDITIONAL COMMENTS:

N/A

PERSONNEL SIGNATURE: John J. Smith **DATE:** 8/18/20

SSD SYSTEM CHECK - BUILDING C

LMC Middle River Complex, Middle River, Maryland

Date: 9/15/20 Time: 10:15 Personnel: AS

1. Was the system running upon arrival? (YES) NO
2. Were there any alarm conditions upon arrival? YES (NO)
Comment: _____
3. Is the blower vacuum relief valve open? YES (NO)
4. Is the dilution valve open? YES (NO) % Open: _____
5. Are there any leaks or damage to system hoses? YES (NO)
6. Is there any damage to system components? YES (NO)
7. Are all locks and zip-ties secure? (YES) NO
8. Was there a GAC or PPZ change out? YES (NO) Comment: _____
9. How many GAC and PPZ units are at this location?
GAC: NEW 3 SPENT 0
PPZ: NEW 1 SPENT 0
11. Do these fall to zero when system is turned off?
Flow Gauge (YES) NO
Pressure Gauge (YES) NO
Vacuum Gauges (YES) NO
12. Do the temp. gauges fall when system is turned off? (YES) NO
13. Was the system running upon departure? (YES) NO
14. What is the amperage draw on the blower?
Black: 11.72 Orange: 12.83 Yellow: 11.85

GENERAL SYSTEM MONITORING

Vacuum pre-Filter (in. H_2O)	Vacuum post-Filter (in. H_2O)	Diff Pressure of Filter* (in. H_2O)	Temp post-Blower (°F)	Temp post-HE (°F)	Pressure (in. H_2O)	Flow (scfm)	Time Counter Display (hours)
66	72	6	186	110	-22	140	61792.5

* Replace filter if >25 in. H_2O

EXTRACTION POINT VACUUM AND VELOCITY MONITORING

Location	Vacuum (in. H_2O)	Velocity (ft/min)	Flow* (scfm)	Contains H_2O?	Vacuum/Flow Adjustment	Comments
SSD-21-C	-56.80	1346	48.7	X		
~~SSD-23-C~~						
SSD-30-C	-14.49	433	9.4	X		
SSD-26-C	-10.21	464	10.1	X		
SSD-31-C	-11.11	555	12.1	X		
SSD-27-C	-1.64	1308	28.5	X		
SSD-32-C	-18.99	1026	22.4	X		
SSD-28-C	-2.44	2068	45.1	X		
SSD-33-C	-8.88	834	18.2	X		
SSD-29-C	-10.00	919	20.0	X		
SSD-34-C	-60.50	1584	34.6	X		

**Flow = Velocity x 0.0218

VMP VACUUM MONITORING

VMP	Vacuum	Comments	VMP	Vacuum	Comments
159-C	5.02		111-C	0.00	
135-C	-0.23		155-C	-0.14	
157-C	-0.01		133-C	-0.44	
113-C	-0.36		154-C	-0.02	
156-C	-0.24		153-C	-0.07	
151-C	-0.03		158-C	0.00	
126-C	-0.01		001-C	-0.18	
149-C	-0.10		SSD-22-C	0.00	
050-C	0.00		SSD-2-C	-0.16	
141-C	-0.71		SSD-4-C	-1.87	
127-C	-1.09		SSD-24-C	-0.18	
150-C	-0.02		SSD-3-C	Covered	
152-C	-0.02		SSD-25-C	0.07	
060-C	Covered				

SSD SYSTEM CHECK - BUILDING C

LMC Middle River Complex, Middle River, Maryland

MONTHLY VAPOR SAMPLING				
Location	C-INFLUENT	C-MID GAC	C-EFFLUENT	Comments
Time				
Summa Canister ID				
Flow Contr. ID		N/A		
Start Vacuum (in. Hg)				
Stop Vacuum (in. Hg)				

SYSTEM CONDENSATE MONITORING					
Location	Contains Water?	Water Drained?	Volume Drained	Drain Valve Closed?	Comments
Moisture Separators					
MS-1	Yes | (No)	Yes | (No)	N/A	(Yes) | No	
MS-2	Yes | No	Yes | No		Yes | No	
Pipe Sumps					
PS-1	Yes | No	Yes | No		Yes | No	
PS-2	Yes | No	Yes | No		Yes | No	
PS-3	Yes | No	Yes | No		Yes | No	
PS-5	Yes | No	Yes | No		Yes | No	
System Sumps					
Exhaust Stack	Yes | No	Yes | No		Yes | No	
GAC and PPZ Drains					
Lead GAC	Yes | No	Yes | No		Yes | No	
Lag GAC	Yes | No	Yes | No		Yes | No	
PPZ	Yes | No	Yes | No		Yes | No	

13. How many empty drums are on-site? 1

14. How many Bldg. A water drums are on-site? PART FULL 1 FULL 0

15. How many Bldg. C water drums are on-site? PART FULL 0 FULL 0

16. How many filter drums are on-site? PART FULL 0 FULL 0

17. Are waste drums labeled and in good condition?

(YES) NO Comment: _____

18. Is the secondary containment pad in good condition?

(YES) NO Comment: _____

MAINTENANCE RECORD			
Issue Requiring Maintenance	Maintenance Conducted	Issue Status	
		OPEN	CLOSED
N/A		OPEN	CLOSED
		OPEN	CLOSED

ADDITIONAL COMMENTS:

PERSONNEL SIGNATURE: Adam S. Suit **DATE:** 9/15/22

SSD SYSTEM CHECK - BUILDING C

LMC Middle River Complex, Middle River, Maryland

Date: 9/28/20 **Time:** 9:45 **Personnel:** AS

1. Was the system running upon arrival? (YES) NO
2. Were there any alarm conditions upon arrival? YES (NO)
   Comment: _____
3. Is the blower vacuum relief valve open? YES (NO)
4. Is the dilution valve open? YES (NO) % Open: _____
5. Are there any leaks or damage to system hoses? YES (NO)
6. Is there any damage to system components? YES (NO)
7. Are all locks and zip-ties secure? (YES) NO
8. Was there a GAC or PPZ change out? YES (NO) Comment: _____
9. How many GAC and PPZ units are at this location?
   GAC: NEW 3 SPENT 0
   PPZ: NEW 1 SPENT 0
11. Do these fall to zero when system is turned off?
    Flow Gauge (YES) NO
    Pressure Gauge (YES) NO
    Vacuum Gauges (YES) NO
12. Do the temp. gauges fall when system is turned off? (YES) NO
13. Was the system running upon departure? (YES) NO
14. What is the amperage draw on the blower?
    Black: 13.46 Orange: 12.45 Yellow: 12.65

GENERAL SYSTEM MONITORING

Vacuum pre-Filter (in. H_2O)	Vacuum post-Filter (in. H_2O)	Diff Pressure of Filter* (in. H_2O)	Temp post-Blower (°F)	Temp post-HE (°F)	Pressure (in. H_2O)	Flow (scfm)	Time Counter Display (hours)
66	72	6	186	110	-20	140	62104.0

* Replace filter if >25 in. H_2O

EXTRACTION POINT VACUUM AND VELOCITY MONITORING

Location	Vacuum (in. H_2O)	Velocity (ft/min)	Flow* (scfm)	Contains H_2O?	Vacuum/Flow Adjustment	Comments
SSD-21-C	-54.60	1178	25.7	X		
SSD-23-C						
SSD-30-C	-12.58	322	7.0	X		
SSD-26-C	-9.83	280	6.1	X		
SSD-31-C	-10.16	1279	27.9	X		
SSD-27-C	-1.66	1370	29.9	X		
SSD-32-C	-20.5	1013	22.1	X		
SSD-28-C	-2.01	2217	48.3	X		
SSD-33-C	-11.66	573	12.5	X		
SSD-29-C	-9.54	930	20.3	X		
SSD-34-C	-59.50	1617	35.3	X		

**Flow = Velocity x 0.0218

VMP VACUUM MONITORING

VMP	Vacuum	Comments	VMP	Vacuum	Comments
159-C	0.00		111-C	0.00	
135-C	-0.18		155-C	-0.14	
157-C	-0.01		133-C	-0.64	
113-C	-1.44		154-C	-0.02	
156-C	-0.25		153-C	-0.11	
151-C	-0.02		158-C	0.00	
126-C	0.00		001-C	-0.20	
149-C	0.06		SSD-22-C	0.00	
050-C	0.00		SSD-2-C	-0.15	
141-C	-0.75		SSD-4-C	-2.19	
127-C	-0.99		SSD-24-C	-0.18	
150-C	-0.01		SSD-3-C	-0.95	
152-C	-0.03		SSD-25-C	-0.60	
060-C	covered				

SSD SYSTEM CHECK - BUILDING C

LMC Middle River Complex, Middle River, Maryland

MONTHLY VAPOR SAMPLING				
Location	C-INFLUENT	C-MID GAC	C-EFFLUENT	Comments
Time	10:12-10:13	10:05-10:06	10:00-10:01	
Summa Canister ID	11860	11889	04739	
Flow Contr. ID	10614	09859	09958	
Start Vacuum (in. Hg)	-29	-28	-30	
Stop Vacuum (in. Hg)	-4	-4	-4	

SYSTEM CONDENSATE MONITORING					
Location	Contains Water?	Water Drained?	Volume Drained	Drain Valve Closed?	Comments
Moisture Separators					
MS-1	Yes | (No)	Yes | (No)	N/A	(Yes) | No	
MS-2	Yes | (No)	Yes | (No)		(Yes) | No	
Pipe Sumps					
PS-1	Yes | (No)	Yes | (No)		(Yes) | No	
PS-2	Yes | (No)	Yes | (No)		(Yes) | No	
PS-3	Yes | (No)	Yes | (No)		(Yes) | No	
PS-5	Yes | (No)	Yes | (No)		(Yes) | No	
System Sumps					
Exhaust Stack	Yes | (No)	Yes | (No)		(Yes) | No	
GAC and PPZ Drains					
Lead GAC	Yes | (No)	Yes | (No)		(Yes) | No	
Lag GAC	Yes | (No)	Yes | (No)		(Yes) | No	
PPZ	Yes | (No)	Yes | (No)		(Yes) | No	

13. How many empty drums are on-site? 1

14. How many Bldg. A water drums are on-site? PART FULL 1 FULL 0

15. How many Bldg. C water drums are on-site? PART FULL 6 FULL 0

16. How many filter drums are on-site? PART FULL 0 FULL 0

17. Are waste drums labeled and in good condition?
(YES) NO Comment: _____

18. Is the secondary containment pad in good condition?
(YES) NO Comment: _____

MAINTENANCE RECORD			
Issue Requiring Maintenance	Maintenance Conducted	Issue Status	
	N/A	OPEN	CLOSED
		OPEN	CLOSED
		OPEN	CLOSED

ADDITIONAL COMMENTS:

N/A

PERSONNEL SIGNATURE: Adam S. Smith DATE: 9/28/20

QUARTERLY SSD SYSTEM CHECK - BUILDING A

LMC MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

Date: 6/29/2020 **Time:** 13:40pm **Quarter:** 2 **Personnel:** AS + Dave

GENERAL SYSTEM MONITORING

1. Are all system components in good condition?
   (YES) NO Comments: _____

2. Are there any leaks in the system pipes?
   YES (NO) Comments: _____

3. Does the demister media need cleaned or replaced?
   ~~YES~~ (NO) Comments: _____

4. Does the dilution valve air filter need replaced?
   (YES) ~~NO~~ Comments: 811038

5. Does the vacuum relief valve activate upon high vacuum?
   (YES) NO Comments: _____

6. What is the amperage draw on the blower?

Wire Color	Amperage
Black	19.10
White	18.47
Red	17.25

Comments: _____

7. Is the fire extinguisher located near the system?
   (YES) NO Comments: _____

8. Was the area around the system cleaned?
   (YES) NO Comments: _____

AUTO-DIALER AND ALARM SWITCH MONITORING

Zone	Alarm	Limit	Switch Functioning Properly		Auto-Dialer Call-Out Triggered		Comments
Zone 1	High Liquid Level	Full	(YES)	NO	(YES)	NO	
Zone 2	High Pressure	55" WC	(YES)	NO	(YES)	NO	
Zone 3	High Temperature 1	220 °F	(YES)	NO	(YES)	NO	
Zone 4	High Temperature 2	140 °F	(YES)	NO	(YES)	NO	
Zone 7	Low Vacuum	3" WC	(YES)	NO	(YES)	NO	

Do the Auto-Dialer Batteries Need Replaced? YES (NO)

QUARTERLY SSD SYSTEM CHECK - BUILDING A

LMC MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

GAC UNIT MONITORING

1. Are there any signs of corrosion and/or leaks in any of the GAC units?
   YES (NO) Comments: _____

2. Are the sample ports in good condition?
   (YES) NO Comments: _____

3. Are there any warn spots or holes in the flexible hoses?
   YES (NO) Comments: _____

VMP MONITORING

Vapor Pins

1. Are all secure covers in good condition?
   (YES) NO Comments: _____

2. Are all secure covers flush with the ground?
   (YES) NO Comments: _____

3. Are all vapor pins firmly installed in the concrete slab with little wiggle room?
   (YES) NO Comments: _____

4. Are all VMPs properly labeled?
   (YES) NO Comments: _____

Classic Vapor Monitoring Points

5. Are all well lids in good condition?
   (YES) NO Comments: _____

6. Do all well lids have the proper number of bolts?
   (YES) NO Comments: _____

7. Is the tubing inside the point in good condition?
   (YES) NO Comments: _____

8. Is the tubing capped?
   (YES) NO Comments: _____

INDOOR AIR FILTER MONITORING

QUARTERLY SSD SYSTEM CHECK - BUILDING C
LMC MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

Date: 6/29/2020 **Time:** 1:40pm **Quarter:** 2 **Personnel:** AS + Dave

GENERAL SYSTEM

Checked System Components? (YES) NO Comments: _____

Checked System Pipes for Leaks? (YES) NO Comments: _____

Visually Inspected Air Filter? (YES) NO Need Replaced? YES (NO)
(replace filter when ΔP = 2-3 in. Hg)

Visually Inspected Intake Air Filter? (YES) NO Need Replaced? YES (NO)

Checked Vacuum Relief Valve? (YES) NO Comments: _____

Measured and Recorded Amperage Draw on Blower? Yellow = 11.90 Orange = 12.90 Brown = 11.53

Are all components returned to system operating position? (YES) NO

Vacuumed dirt/dust from Heat Exchanger vent? (YES) NO

Cleaned System and Area Around System? (YES) NO Comments: _____

Checked that Fire Extinguisher Near System? (YES) NO

SYSTEM ALARM SWITCHES AND AUTO-DIALER

Checked Post-Blower Temp Switch? (YES) NO — switch is bad Did Auto-Dialer Indicate Zone 1 Alarm? (YES) NO
Limit: 215 °F

Checked Post-HEX Temp Switch? (YES) NO Did Auto-Dialer Indicate Zone 2 Alarm? (YES) NO
Limit: 140 °F

Checked MS-1 Water Level Switch? (YES) NO Did Auto-Dialer Indicate Zone 3 Alarm? (YES) NO

Checked MS-2 Water Level Switch? (YES) NO Did Auto-Dialer Indicate Zone 4 Alarm? (YES) NO

Checked High-Pressure Switch? Need new Gauge (YES) NO Did Auto-Dialer Indicate Zone 5 Alarm? (YES) NO
Limit: 60" WC

Checked Low-Vacuum Switch? (YES) NO Did Auto-Dialer Indicate Zone 6 Alarm? (YES) NO
Limit: 10" WC

Do the Auto-Dialer Batteries Need Replaced? YES (NO)

QUARTERLY SSD SYSTEM CHECK - BUILDING A
LMC MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

AF-N

Date of quarterly HEPA filter change: 6/29
Date of quarterly GAC filter change: ↓
Date of quarterly filter sleeve change: ↓
Was the filter housing cleaned? (YES) NO

AF-NX

Date of quarterly HEPA filter change: 6/29
Date of quarterly GAC filter change: ↓
Date of quarterly filter sleeve change: ↓
Was the filter housing cleaned? (YES) NO

AF-M

Date of quarterly HEPA filter change: 6/29
Date of quarterly GAC filter change: ↓
Date of quarterly filter sleeve change: ↓
Was the filter housing cleaned? (YES) NO

AF-MX

Date of quarterly HEPA filter change: 6/29
Date of quarterly GAC filter change: ↓
Date of quarterly filter sleeve change: ↓
Was the filter housing cleaned? (YES) NO

AF-S

Date of quarterly HEPA filter change: 6/29
Date of quarterly GAC filter change: ↓
Date of quarterly filter sleeve change: ↓
Was the filter housing cleaned? (YES) NO

AF-SX

Date of quarterly HEPA filter change: 6/29
Date of quarterly GAC filter change: ↓
Date of quarterly filter sleeve change: ↓
Was the filter housing cleaned? (YES) NO

Personnel's Signature: [signature] Date: 6/29/2020

GRANULAR ACTIVATED-CARBON (GAC) & POTASSIUM PERMANGANATE ZEOLITE (PPZ) UNITS

Checked GAC Units for Corrosion and Leaks? (YES) NO Comments: _____

Checked Condition of Sample Ports? (YES) NO Comments: _____

Number of used GAC/PPZ Units On-site: 0 / 0 Contain Non-Haz Waste Labels? (YES) NO

Number of Unused GAC/PPZ Units On-site: 0 / 0

VAPOR MONITORING POINTS (VMPs)

Checked Condition of Well Lids and Bolts? (YES) NO Comments: _____

Checked Condition of Tubing and Seal? (YES) NO Comments: _____

ADDITIONAL COMMENTS

Personnel's Signature: Adam J. Smith Date: 6/29/2020

QUARTERLY SSD SYSTEM CHECK - BUILDING A
LMC MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

Date: 9/15/20 **Time:** 8:00 **Quarter:** 3 **Personnel:** AS + DS

GENERAL SYSTEM MONITORING

1. Are all system components in good condition?
   (YES) NO Comments: _____

2. Are there any leaks in the system pipes?
   YES (NO) Comments: _____

3. Does the demister media need cleaned or replaced?
   YES (NO) Comments: _____

4. Does the dilution valve air filter need replaced?
   YES (NO) Comments: _____

5. Does the vacuum relief valve activate upon high vacuum?
   (YES) NO Comments: _____

6. What is the amperage draw on the blower?

Wire Color	Amperage
Black	16.70
Red	14.67
White	15.51

Comments: _____

7. Is the fire extinguisher located near the system?
   (YES) NO Comments: _____

8. Was the area around the system cleaned?
   (YES) NO Comments: _____

AUTO-DIALER AND ALARM SWITCH MONITORING

Zone	Alarm	Limit	Switch Functioning Properly		Auto-Dialer Call-Out Triggered		Comments
Zone 1	High Liquid Level	Full	(YES)	NO	(YES)	NO	
Zone 2	High Pressure	55" WC	(YES)	NO	(YES)	NO	
Zone 3	High Temperature 1	220 °F	(YES)	NO	(YES)	NO	
Zone 4	High Temperature 2	140 °F	(YES)	NO	(YES)	NO	
Zone 7	Low Vacuum	3" WC	(YES)	NO	(YES)	NO	

Do the Auto-Dialer Batteries Need Replaced? YES (NO)

QUARTERLY SSD SYSTEM CHECK - BUILDING A

LMC MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

GAC UNIT MONITORING

1. Are there any signs of corrosion and/or leaks in any of the GAC units?
   YES (NO) Comments: _____

2. Are the sample ports in good condition?
   (YES) NO Comments: _____

3. Are there any warn spots or holes in the flexible hoses?
   YES (NO) Comments: _____

VMP MONITORING

Vapor Pins

1. Are all secure covers in good condition?
   (YES) NO Comments: _____

2. Are all secure covers flush with the ground?
   (YES) NO Comments: _____

3. Are all vapor pins firmly installed in the concrete slab with little wiggle room?
   (YES) NO Comments: _____

4. Are all VMPs properly labeled?
   (YES) NO Comments: _____

Classic Vapor Monitoring Points

5. Are all well lids in good condition?
   (YES) NO Comments: _____

6. Do all well lids have the proper number of bolts?
   (YES) NO Comments: _____

7. Is the tubing inside the point in good condition?
   (YES) NO Comments: _____

8. Is the tubing capped?
   (YES) NO Comments: _____

INDOOR AIR FILTER MONITORING

AF-N

Date of quarterly HEPA filter change: 9/15
Date of quarterly GAC filter change: 9/15
Date of quarterly filter sleeve change: 9/15
Was the filter housing cleaned? (YES) NO

AF-NX

Date of quarterly HEPA filter change: 9/15
Date of quarterly GAC filter change: 9/15
Date of quarterly filter sleeve change: 9/15
Was the filter housing cleaned? (YES) NO

AF-M

Date of quarterly HEPA filter change: 9/15
Date of quarterly GAC filter change: 9/15
Date of quarterly filter sleeve change: 9/15
Was the filter housing cleaned? (YES) NO

AF-MX

Date of quarterly HEPA filter change: 9/15
Date of quarterly GAC filter change: 9/15
Date of quarterly filter sleeve change: 9/15
Was the filter housing cleaned? (YES) NO

AF-S

Date of quarterly HEPA filter change: 9/15
Date of quarterly GAC filter change: 9/15
Date of quarterly filter sleeve change: 9/15
Was the filter housing cleaned? (YES) NO

AF-SX

Date of quarterly HEPA filter change: 9/15
Date of quarterly GAC filter change: 9/15
Date of quarterly filter sleeve change: 9/15
Was the filter housing cleaned? (YES) NO

Personnel's Signature: A. S. Smith Date: 9/15/20

QUARTERLY SSD SYSTEM CHECK - BUILDING C

LMC MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

Date: 9/15/20 **Time:** 7:17 **Quarter:** 3 **Personnel:** AS + DS

GENERAL SYSTEM

Checked System Components? (YES) NO Comments: _____

Checked System Pipes for Leaks? (YES) NO Comments: _____

Visually Inspected Air Filter? (YES) NO Need Replaced? (YES) NO
(replace filter when ΔP = 2-3 in. Hg)

Visually Inspected Intake Air Filter? (YES) NO Need Replaced? YES (NO)

Checked Vacuum Relief Valve? (YES) NO Comments: _____

Measured and Recorded Amperage Draw on Blower? Yellow = 11.85 Orange = 12.83 Brown = 11.72

Are all components returned to system operating position? (YES) NO

Vacuumed dirt/dust from Heat Exchanger vent? (YES) NO

Cleaned System and Area Around System? (YES) NO Comments: _____

Checked that Fire Extinguisher Near System? (YES) NO

SYSTEM ALARM SWITCHES AND AUTO-DIALER

Checked Post-Blower Temp Switch? (YES) NO Did Auto-Dialer Indicate Zone 1 Alarm? (YES) NO
Limit: 215 °F

Checked Post-HEX Temp Switch? (YES) NO Did Auto-Dialer Indicate Zone 2 Alarm? (YES) NO
Limit: 140 °F

Checked MS-1 Water Level Switch? (YES) NO Did Auto-Dialer Indicate Zone 3 Alarm? (YES) NO

Checked MS-2 Water Level Switch? (YES) NO Did Auto-Dialer Indicate Zone 4 Alarm? (YES) NO

Checked High-Pressure Switch? (YES) NO Did Auto-Dialer Indicate Zone 5 Alarm? (YES) NO
Limit: 60" WC

Checked Low-Vacuum Switch? (YES) NO Did Auto-Dialer Indicate Zone 6 Alarm? (YES) NO
Limit: 10" WC

Do the Auto-Dialer Batteries Need Replaced? YES NO

GRANULAR ACTIVATED-CARBON (GAC) & POTASSIUM PERMANGANATE ZEOLITE (PPZ) UNITS

Checked GAC Units for Corrosion and Leaks? (YES) NO Comments: _____

Checked Condition of Sample Ports? (YES) NO Comments: _____

Number of used GAC/PPZ Units On-site: 0 / 0 Contain Non-Haz Waste Labels? (YES) NO

Number of Unused GAC/PPZ Units On-site: 3 / 1

VAPOR MONITORING POINTS (VMPs)

Checked Condition of Well Lids and Bolts? (YES) NO Comments: _____

Checked Condition of Tubing and Seal? (YES) NO Comments: _____

ADDITIONAL COMMENTS

_____

_____

Personnel's Signature: _____ Date: 9/15/20

APPENDIX B—ANALYTICAL REPORTS FOR SYSTEM SAMPLES

eurofins | Environment Testing TestAmerica

ANALYTICAL REPORT

Job Number: 140-18854-1

Job Description: LMMRC SSDS - Middle River

For:
Tetra Tech GEO
980 Awald Road
Suite 302
Annapolis, MD 21403

Attention: Peter Rich



Approved for release.
Jamie A McKinney
Senior Project Manager
4/29/2020 10:11 AM

Jamie A McKinney, Senior Project Manager
5815 Middlebrook Pike, Knoxville, TN, 37921
(865)291-3000
jamie.mckinney@testamericainc.com
04/29/2020

cc: Belssi Chang
Amy Thomson

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins TestAmerica Project Manager.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

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Definitions/Glossary

Client: Tetra Tech GEO
Job ID: 140-18854-1
Project/Site: LMMRC SSDS - Middle River

Qualifiers

Air - GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job Narrative
140-18854-1

Comments
No additional comments.

Receipt
The samples were received on 4/15/2020 9:20 AM; the samples arrived in good condition, properly preserved and, where required, on ice.

Air - GC/MS VOA
Methods TO 14A, TO 15 LL, TO-14A, TO-15: EPA methods TO-14A and TO-15 specify the use of humidified "zero air" as the blank reagent for canister cleaning, instrument calibration and sample analysis. Ultra-high purity humidified nitrogen from a cryogenic reservoir is used in place of "zero air" by Eurofins TestAmerica Knoxville.

Methods TO 15 LL, TO-15: Although the BFB is flagged as outside control limits for TO-14 on batch 140-39061, the results are within limits for TO-15, which is required for this project.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: Tetra Tech GEO
Job ID: 140-18854-1
Project/Site: LMMRC SSDS - Middle River

Client Sample ID: BLDG A - EFFLUENT
Lab Sample ID: 140-18854-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.22	J	0.40	0.040	ppb v/v	1		TO 15 LL	Total/NA
Chlorodifluoromethane	0.42		0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Chloroform	0.096	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	5.9		0.40	0.050	ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.25	J	0.40	0.070	ppb v/v	1		TO 15 LL	Total/NA
1,1-Dichloroethane	1.4		0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
1,1-Dichloroethene	16		0.40	0.040	ppb v/v	1		TO 15 LL	Total/NA
Ethylbenzene	0.066	J	0.40	0.065	ppb v/v	1		TO 15 LL	Total/NA
Tetrachloroethene	0.16	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Toluene	1.1		0.60	0.39	ppb v/v	1		TO 15 LL	Total/NA
trans-1,2-Dichloroethene	0.16	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
1,1,1-Trichloroethane	4.4		0.40	0.19	ppb v/v	1		TO 15 LL	Total/NA
Trichloroethene	2.3		0.20	0.030	ppb v/v	1		TO 15 LL	Total/NA
Vinyl chloride	0.19	J	0.20	0.13	ppb v/v	1		TO 15 LL	Total/NA
Xylenes, Total	0.37	J	0.80	0.12	ppb v/v	1		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.69	J	1.3	0.13	ug/m3	1		TO 15 LL	Total/NA
Chlorodifluoromethane	1.5		1.4	0.39	ug/m3	1		TO 15 LL	Total/NA
Chloroform	0.47	J	2.0	0.17	ug/m3	1		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	23		1.6	0.20	ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	1.3	J	2.0	0.35	ug/m3	1		TO 15 LL	Total/NA
1,1-Dichloroethane	5.6		1.6	0.14	ug/m3	1		TO 15 LL	Total/NA
1,1-Dichloroethene	64		1.6	0.16	ug/m3	1		TO 15 LL	Total/NA
Ethylbenzene	0.29	J	1.7	0.28	ug/m3	1		TO 15 LL	Total/NA
Tetrachloroethene	1.1	J	2.7	0.24	ug/m3	1		TO 15 LL	Total/NA
Toluene	4.3		2.3	1.5	ug/m3	1		TO 15 LL	Total/NA
trans-1,2-Dichloroethene	0.62	J	1.6	0.14	ug/m3	1		TO 15 LL	Total/NA
1,1,1-Trichloroethane	24		2.2	1.0	ug/m3	1		TO 15 LL	Total/NA
Trichloroethene	12		1.1	0.16	ug/m3	1		TO 15 LL	Total/NA
Vinyl chloride	0.47	J	0.51	0.33	ug/m3	1		TO 15 LL	Total/NA
Xylenes, Total	1.6	J	3.5	0.52	ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: BLDG A - MID GAC
Lab Sample ID: 140-18854-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.21	J	0.40	0.040	ppb v/v	1		TO 15 LL	Total/NA
Chlorodifluoromethane	0.39	J	0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Chloroform	0.29	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	13		0.40	0.050	ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.24	J	0.40	0.070	ppb v/v	1		TO 15 LL	Total/NA
1,1-Dichloroethane	3.0		0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
1,1-Dichloroethene	21		0.40	0.040	ppb v/v	1		TO 15 LL	Total/NA
Methylene Chloride	0.81	J	2.0	0.80	ppb v/v	1		TO 15 LL	Total/NA
trans-1,2-Dichloroethene	0.40		0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
1,1,1-Trichloroethane	16		0.40	0.19	ppb v/v	1		TO 15 LL	Total/NA
Trichloroethene	0.056	J	0.20	0.030	ppb v/v	1		TO 15 LL	Total/NA
Xylenes, Total	0.28	J	0.80	0.12	ppb v/v	1		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.66	J	1.3	0.13	ug/m3	1		TO 15 LL	Total/NA
Chlorodifluoromethane	1.4	J	1.4	0.39	ug/m3	1		TO 15 LL	Total/NA
Chloroform	1.4	J	2.0	0.17	ug/m3	1		TO 15 LL	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: BLDG A - MID GAC (Continued) — Lab Sample ID: 140-18854-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	52		1.6	0.20	ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	1.2	J	2.0	0.35	ug/m3	1		TO 15 LL	Total/NA
1,1-Dichloroethane	12		1.6	0.14	ug/m3	1		TO 15 LL	Total/NA
1,1-Dichloroethene	83		1.6	0.16	ug/m3	1		TO 15 LL	Total/NA
Methylene Chloride	2.8	J	6.9	2.8	ug/m3	1		TO 15 LL	Total/NA
trans-1,2-Dichloroethene	1.6		1.6	0.14	ug/m3	1		TO 15 LL	Total/NA
1,1,1-Trichloroethane	86		2.2	1.0	ug/m3	1		TO 15 LL	Total/NA
Trichloroethene	0.30	J	1.1	0.16	ug/m3	1		TO 15 LL	Total/NA
Xylenes, Total	1.2	J	3.5	0.52	ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: BLDG A - INFLUENT — Lab Sample ID: 140-18854-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	6.5		1.6	0.16	ppb v/v	1		TO 15 LL	Total/NA
Chloroform	0.21	J	1.6	0.14	ppb v/v	1		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	11		1.6	0.20	ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.60	J	1.6	0.28	ppb v/v	1		TO 15 LL	Total/NA
1,1-Dichloroethane	2.7		1.6	0.14	ppb v/v	1		TO 15 LL	Total/NA
1,1-Dichloroethene	14		1.6	0.16	ppb v/v	1		TO 15 LL	Total/NA
Tetrachloroethene	3.3		1.6	0.14	ppb v/v	1		TO 15 LL	Total/NA
Toluene	2.1	J	2.4	1.6	ppb v/v	1		TO 15 LL	Total/NA
trans-1,2-Dichloroethene	0.54	J	1.6	0.14	ppb v/v	1		TO 15 LL	Total/NA
1,1,1-Trichloroethane	60		1.6	0.74	ppb v/v	1		TO 15 LL	Total/NA
Trichloroethene	160		0.80	0.12	ppb v/v	1		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	21		5.1	0.51	ug/m3	1		TO 15 LL	Total/NA
Chloroform	1.0	J	7.8	0.68	ug/m3	1		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	46		6.3	0.79	ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.9	J	7.9	1.4	ug/m3	1		TO 15 LL	Total/NA
1,1-Dichloroethane	11		6.5	0.57	ug/m3	1		TO 15 LL	Total/NA
1,1-Dichloroethene	55		6.3	0.63	ug/m3	1		TO 15 LL	Total/NA
Tetrachloroethene	23		11	0.95	ug/m3	1		TO 15 LL	Total/NA
Toluene	7.8	J	9.0	5.9	ug/m3	1		TO 15 LL	Total/NA
trans-1,2-Dichloroethene	2.2	J	6.3	0.56	ug/m3	1		TO 15 LL	Total/NA
1,1,1-Trichloroethane	330		8.7	4.0	ug/m3	1		TO 15 LL	Total/NA
Trichloroethene	850		4.3	0.64	ug/m3	1		TO 15 LL	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: BLDG A - EFFLUENT
Lab Sample ID: 140-18854-1

Date Collected: 04/14/20 09:35
Matrix: Air
Date Received: 04/15/20 09:20
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.22**	**J**	0.40	0.040	ppb v/v			04/16/20 18:53	1
Carbon tetrachloride	ND		0.40	0.035	ppb v/v			04/16/20 18:53	1
Chlorodifluoromethane	**0.42**		0.40	0.11	ppb v/v			04/16/20 18:53	1
Chloroform	**0.096**	**J**	0.40	0.035	ppb v/v			04/16/20 18:53	1
cis-1,2-Dichloroethene	**5.9**		0.40	0.050	ppb v/v			04/16/20 18:53	1
Dichlorodifluoromethane	**0.25**	**J**	0.40	0.070	ppb v/v			04/16/20 18:53	1
1,1-Dichloroethane	**1.4**		0.40	0.035	ppb v/v			04/16/20 18:53	1
1,2-Dichloroethane	ND		0.40	0.050	ppb v/v			04/16/20 18:53	1
1,1-Dichloroethene	**16**		0.40	0.040	ppb v/v			04/16/20 18:53	1
Ethylbenzene	**0.066**	**J**	0.40	0.065	ppb v/v			04/16/20 18:53	1
Methylene Chloride	ND		2.0	0.80	ppb v/v			04/16/20 18:53	1
Methyl tert-butyl ether	ND		2.0	0.26	ppb v/v			04/16/20 18:53	1
Naphthalene	ND		0.20	0.20	ppb v/v			04/16/20 18:53	1
Tetrachloroethene	**0.16**	**J**	0.40	0.035	ppb v/v			04/16/20 18:53	1
Toluene	**1.1**		0.60	0.39	ppb v/v			04/16/20 18:53	1
trans-1,2-Dichloroethene	**0.16**	**J**	0.40	0.035	ppb v/v			04/16/20 18:53	1
1,2,4-Trichlorobenzene	ND		0.40	0.32	ppb v/v			04/16/20 18:53	1
1,1,1-Trichloroethane	**4.4**		0.40	0.19	ppb v/v			04/16/20 18:53	1
1,1,2-Trichloroethane	ND		0.40	0.035	ppb v/v			04/16/20 18:53	1
Trichloroethene	**2.3**		0.20	0.030	ppb v/v			04/16/20 18:53	1
1,2,3-Trimethylbenzene	ND		0.40	0.18	ppb v/v			04/16/20 18:53	1
1,2,4-Trimethylbenzene	ND		0.40	0.10	ppb v/v			04/16/20 18:53	1
1,3,5-Trimethylbenzene	ND		0.40	0.11	ppb v/v			04/16/20 18:53	1
Vinyl chloride	**0.19**	**J**	0.20	0.13	ppb v/v			04/16/20 18:53	1
Xylenes, Total	**0.37**	**J**	0.80	0.12	ppb v/v			04/16/20 18:53	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.69**	**J**	1.3	0.13	ug/m3			04/16/20 18:53	1
Carbon tetrachloride	ND		2.5	0.22	ug/m3			04/16/20 18:53	1
Chlorodifluoromethane	**1.5**		1.4	0.39	ug/m3			04/16/20 18:53	1
Chloroform	**0.47**	**J**	2.0	0.17	ug/m3			04/16/20 18:53	1
cis-1,2-Dichloroethene	**23**		1.6	0.20	ug/m3			04/16/20 18:53	1
Dichlorodifluoromethane	**1.3**	**J**	2.0	0.35	ug/m3			04/16/20 18:53	1
1,1-Dichloroethane	**5.6**		1.6	0.14	ug/m3			04/16/20 18:53	1
1,2-Dichloroethane	ND		1.6	0.20	ug/m3			04/16/20 18:53	1
1,1-Dichloroethene	**64**		1.6	0.16	ug/m3			04/16/20 18:53	1
Ethylbenzene	**0.29**	**J**	1.7	0.28	ug/m3			04/16/20 18:53	1
Methylene Chloride	ND		6.9	2.8	ug/m3			04/16/20 18:53	1
Methyl tert-butyl ether	ND		7.2	0.94	ug/m3			04/16/20 18:53	1
Naphthalene	ND		1.0	1.0	ug/m3			04/16/20 18:53	1
Tetrachloroethene	**1.1**	**J**	2.7	0.24	ug/m3			04/16/20 18:53	1
Toluene	**4.3**		2.3	1.5	ug/m3			04/16/20 18:53	1
trans-1,2-Dichloroethene	**0.62**	**J**	1.6	0.14	ug/m3			04/16/20 18:53	1
1,2,4-Trichlorobenzene	ND		3.0	2.4	ug/m3			04/16/20 18:53	1
1,1,1-Trichloroethane	**24**		2.2	1.0	ug/m3			04/16/20 18:53	1
1,1,2-Trichloroethane	ND		2.2	0.19	ug/m3			04/16/20 18:53	1
Trichloroethene	**12**		1.1	0.16	ug/m3			04/16/20 18:53	1
1,2,3-Trimethylbenzene	ND		2.0	0.88	ug/m3			04/16/20 18:53	1
1,2,4-Trimethylbenzene	ND		2.0	0.49	ug/m3			04/16/20 18:53	1

Client Sample ID: BLDG A - EFFLUENT
Lab Sample ID: 140-18854-1

Date Collected: 04/14/20 09:35
Matrix: Air
Date Received: 04/15/20 09:20
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		2.0	0.54	ug/m3			04/16/20 18:53	1
Vinyl chloride	**0.47**	**J**	0.51	0.33	ug/m3			04/16/20 18:53	1
Xylenes, Total	**1.6**	**J**	3.5	0.52	ug/m3			04/16/20 18:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*60 - 140*		*04/16/20 18:53*	*1*

Client Sample ID: BLDG A - MID GAC
Lab Sample ID: 140-18854-2

Date Collected: 04/14/20 09:41
Matrix: Air
Date Received: 04/15/20 09:20
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.21**	**J**	0.40	0.040	ppb v/v			04/16/20 19:40	1
Carbon tetrachloride	ND		0.40	0.035	ppb v/v			04/16/20 19:40	1
Chlorodifluoromethane	**0.39**	**J**	0.40	0.11	ppb v/v			04/16/20 19:40	1
Chloroform	**0.29**	**J**	0.40	0.035	ppb v/v			04/16/20 19:40	1
cis-1,2-Dichloroethene	**13**		0.40	0.050	ppb v/v			04/16/20 19:40	1
Dichlorodifluoromethane	**0.24**	**J**	0.40	0.070	ppb v/v			04/16/20 19:40	1
1,1-Dichloroethane	**3.0**		0.40	0.035	ppb v/v			04/16/20 19:40	1
1,2-Dichloroethane	ND		0.40	0.050	ppb v/v			04/16/20 19:40	1
1,1-Dichloroethene	**21**		0.40	0.040	ppb v/v			04/16/20 19:40	1
Ethylbenzene	ND		0.40	0.065	ppb v/v			04/16/20 19:40	1
Methylene Chloride	**0.81**	**J**	2.0	0.80	ppb v/v			04/16/20 19:40	1
Methyl tert-butyl ether	ND		2.0	0.26	ppb v/v			04/16/20 19:40	1
Naphthalene	ND		0.20	0.20	ppb v/v			04/16/20 19:40	1
Tetrachloroethene	ND		0.40	0.035	ppb v/v			04/16/20 19:40	1
Toluene	ND		0.60	0.39	ppb v/v			04/16/20 19:40	1
trans-1,2-Dichloroethene	**0.40**		0.40	0.035	ppb v/v			04/16/20 19:40	1
1,2,4-Trichlorobenzene	ND		0.40	0.32	ppb v/v			04/16/20 19:40	1
1,1,1-Trichloroethane	**16**		0.40	0.19	ppb v/v			04/16/20 19:40	1
1,1,2-Trichloroethane	ND		0.40	0.035	ppb v/v			04/16/20 19:40	1
Trichloroethene	**0.056**	**J**	0.20	0.030	ppb v/v			04/16/20 19:40	1
1,2,3-Trimethylbenzene	ND		0.40	0.18	ppb v/v			04/16/20 19:40	1
1,2,4-Trimethylbenzene	ND		0.40	0.10	ppb v/v			04/16/20 19:40	1
1,3,5-Trimethylbenzene	ND		0.40	0.11	ppb v/v			04/16/20 19:40	1
Vinyl chloride	ND		0.20	0.13	ppb v/v			04/16/20 19:40	1
Xylenes, Total	**0.28**	**J**	0.80	0.12	ppb v/v			04/16/20 19:40	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.66**	**J**	1.3	0.13	ug/m3			04/16/20 19:40	1
Carbon tetrachloride	ND		2.5	0.22	ug/m3			04/16/20 19:40	1
Chlorodifluoromethane	**1.4**	**J**	1.4	0.39	ug/m3			04/16/20 19:40	1
Chloroform	**1.4**	**J**	2.0	0.17	ug/m3			04/16/20 19:40	1
cis-1,2-Dichloroethene	**52**		1.6	0.20	ug/m3			04/16/20 19:40	1
Dichlorodifluoromethane	**1.2**	**J**	2.0	0.35	ug/m3			04/16/20 19:40	1
1,1-Dichloroethane	**12**		1.6	0.14	ug/m3			04/16/20 19:40	1
1,2-Dichloroethane	ND		1.6	0.20	ug/m3			04/16/20 19:40	1
1,1-Dichloroethene	**83**		1.6	0.16	ug/m3			04/16/20 19:40	1
Ethylbenzene	ND		1.7	0.28	ug/m3			04/16/20 19:40	1
Methylene Chloride	**2.8**	**J**	6.9	2.8	ug/m3			04/16/20 19:40	1
Methyl tert-butyl ether	ND		7.2	0.94	ug/m3			04/16/20 19:40	1
Naphthalene	ND		1.0	1.0	ug/m3			04/16/20 19:40	1
Tetrachloroethene	ND		2.7	0.24	ug/m3			04/16/20 19:40	1
Toluene	ND		2.3	1.5	ug/m3			04/16/20 19:40	1
trans-1,2-Dichloroethene	**1.6**		1.6	0.14	ug/m3			04/16/20 19:40	1
1,2,4-Trichlorobenzene	ND		3.0	2.4	ug/m3			04/16/20 19:40	1
1,1,1-Trichloroethane	**86**		2.2	1.0	ug/m3			04/16/20 19:40	1
1,1,2-Trichloroethane	ND		2.2	0.19	ug/m3			04/16/20 19:40	1
Trichloroethene	**0.30**	**J**	1.1	0.16	ug/m3			04/16/20 19:40	1
1,2,3-Trimethylbenzene	ND		2.0	0.88	ug/m3			04/16/20 19:40	1
1,2,4-Trimethylbenzene	ND		2.0	0.49	ug/m3			04/16/20 19:40	1

Client Sample ID: BLDG A - MID GAC
Lab Sample ID: 140-18854-2

Date Collected: 04/14/20 09:41
Matrix: Air
Date Received: 04/15/20 09:20
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		2.0	0.54	ug/m3			04/16/20 19:40	1
Vinyl chloride	ND		0.51	0.33	ug/m3			04/16/20 19:40	1
Xylenes, Total	**1.2**	**J**	3.5	0.52	ug/m3			04/16/20 19:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*87*		*60 - 140*		*04/16/20 19:40*	*1*

Client Sample ID: BLDG A - INFLUENT
Lab Sample ID: 140-18854-3

Date Collected: 04/14/20 09:46
Matrix: Air
Date Received: 04/15/20 09:20
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**6.5**		1.6	0.16	ppb v/v			04/16/20 20:28	1
Carbon tetrachloride	ND		1.6	0.14	ppb v/v			04/16/20 20:28	1
Chlorodifluoromethane	ND		1.6	0.44	ppb v/v			04/16/20 20:28	1
Chloroform	**0.21**	**J**	1.6	0.14	ppb v/v			04/16/20 20:28	1
cis-1,2-Dichloroethene	**11**		1.6	0.20	ppb v/v			04/16/20 20:28	1
Dichlorodifluoromethane	**0.60**	**J**	1.6	0.28	ppb v/v			04/16/20 20:28	1
1,1-Dichloroethane	**2.7**		1.6	0.14	ppb v/v			04/16/20 20:28	1
1,2-Dichloroethane	ND		1.6	0.20	ppb v/v			04/16/20 20:28	1
1,1-Dichloroethene	**14**		1.6	0.16	ppb v/v			04/16/20 20:28	1
Ethylbenzene	ND		1.6	0.26	ppb v/v			04/16/20 20:28	1
Methylene Chloride	ND		8.0	3.2	ppb v/v			04/16/20 20:28	1
Methyl tert-butyl ether	ND		8.0	1.0	ppb v/v			04/16/20 20:28	1
Naphthalene	ND		0.80	0.80	ppb v/v			04/16/20 20:28	1
Tetrachloroethene	**3.3**		1.6	0.14	ppb v/v			04/16/20 20:28	1
Toluene	**2.1**	**J**	2.4	1.6	ppb v/v			04/16/20 20:28	1
trans-1,2-Dichloroethene	**0.54**	**J**	1.6	0.14	ppb v/v			04/16/20 20:28	1
1,2,4-Trichlorobenzene	ND		1.6	1.3	ppb v/v			04/16/20 20:28	1
1,1,1-Trichloroethane	**60**		1.6	0.74	ppb v/v			04/16/20 20:28	1
1,1,2-Trichloroethane	ND		1.6	0.14	ppb v/v			04/16/20 20:28	1
Trichloroethene	**160**		0.80	0.12	ppb v/v			04/16/20 20:28	1
1,2,3-Trimethylbenzene	ND		1.6	0.72	ppb v/v			04/16/20 20:28	1
1,2,4-Trimethylbenzene	ND		1.6	0.40	ppb v/v			04/16/20 20:28	1
1,3,5-Trimethylbenzene	ND		1.6	0.44	ppb v/v			04/16/20 20:28	1
Vinyl chloride	ND		0.80	0.52	ppb v/v			04/16/20 20:28	1
Xylenes, Total	ND		3.2	0.48	ppb v/v			04/16/20 20:28	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**21**		5.1	0.51	ug/m3			04/16/20 20:28	1
Carbon tetrachloride	ND		10	0.88	ug/m3			04/16/20 20:28	1
Chlorodifluoromethane	ND		5.7	1.6	ug/m3			04/16/20 20:28	1
Chloroform	**1.0**	**J**	7.8	0.68	ug/m3			04/16/20 20:28	1
cis-1,2-Dichloroethene	**46**		6.3	0.79	ug/m3			04/16/20 20:28	1
Dichlorodifluoromethane	**2.9**	**J**	7.9	1.4	ug/m3			04/16/20 20:28	1
1,1-Dichloroethane	**11**		6.5	0.57	ug/m3			04/16/20 20:28	1
1,2-Dichloroethane	ND		6.5	0.81	ug/m3			04/16/20 20:28	1
1,1-Dichloroethene	**55**		6.3	0.63	ug/m3			04/16/20 20:28	1
Ethylbenzene	ND		6.9	1.1	ug/m3			04/16/20 20:28	1
Methylene Chloride	ND		28	11	ug/m3			04/16/20 20:28	1
Methyl tert-butyl ether	ND		29	3.7	ug/m3			04/16/20 20:28	1
Naphthalene	ND		4.2	4.2	ug/m3			04/16/20 20:28	1
Tetrachloroethene	**23**		11	0.95	ug/m3			04/16/20 20:28	1
Toluene	**7.8**	**J**	9.0	5.9	ug/m3			04/16/20 20:28	1
trans-1,2-Dichloroethene	**2.2**	**J**	6.3	0.56	ug/m3			04/16/20 20:28	1
1,2,4-Trichlorobenzene	ND		12	9.5	ug/m3			04/16/20 20:28	1
1,1,1-Trichloroethane	**330**		8.7	4.0	ug/m3			04/16/20 20:28	1
1,1,2-Trichloroethane	ND		8.7	0.76	ug/m3			04/16/20 20:28	1
Trichloroethene	**850**		4.3	0.64	ug/m3			04/16/20 20:28	1
1,2,3-Trimethylbenzene	ND		7.9	3.5	ug/m3			04/16/20 20:28	1
1,2,4-Trimethylbenzene	ND		7.9	2.0	ug/m3			04/16/20 20:28	1

Client: Tetra Tech GEO
Job ID: 140-18854-1
Project/Site: LMMRC SSDS - Middle River

Client Sample ID: BLDG A - INFLUENT
Lab Sample ID: 140-18854-3
Date Collected: 04/14/20 09:46
Matrix: Air
Date Received: 04/15/20 09:20
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		7.9	2.2	ug/m3			04/16/20 20:28	1
Vinyl chloride	ND		2.0	1.3	ug/m3			04/16/20 20:28	1
Xylenes, Total	ND		14	2.1	ug/m3			04/16/20 20:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*86*		*60 - 140*		*04/16/20 20:28*	*1*

Default Detection Limits

Client: Tetra Tech GEO
Job ID: 140-18854-1
Project/Site: LMMRC SSDS - Middle River

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	RL	MDL	Units
1,1,1-Trichloroethane	0.080	0.037	ppb v/v
1,1,1-Trichloroethane	0.44	0.20	ug/m3
1,1,2-Trichloroethane	0.080	0.0070	ppb v/v
1,1,2-Trichloroethane	0.44	0.038	ug/m3
1,1-Dichloroethane	0.080	0.0070	ppb v/v
1,1-Dichloroethane	0.32	0.028	ug/m3
1,1-Dichloroethene	0.080	0.0080	ppb v/v
1,1-Dichloroethene	0.32	0.032	ug/m3
1,2,3-Trimethylbenzene	0.080	0.036	ppb v/v
1,2,3-Trimethylbenzene	0.39	0.18	ug/m3
1,2,4-Trichlorobenzene	0.080	0.064	ppb v/v
1,2,4-Trichlorobenzene	0.59	0.47	ug/m3
1,2,4-Trimethylbenzene	0.080	0.020	ppb v/v
1,2,4-Trimethylbenzene	0.39	0.098	ug/m3
1,2-Dichloroethane	0.080	0.010	ppb v/v
1,2-Dichloroethane	0.32	0.040	ug/m3
1,3,5-Trimethylbenzene	0.080	0.022	ppb v/v
1,3,5-Trimethylbenzene	0.39	0.11	ug/m3
Benzene	0.080	0.0080	ppb v/v
Benzene	0.26	0.026	ug/m3
Carbon tetrachloride	0.080	0.0070	ppb v/v
Carbon tetrachloride	0.50	0.044	ug/m3
Chlorodifluoromethane	0.080	0.022	ppb v/v
Chlorodifluoromethane	0.28	0.078	ug/m3
Chloroform	0.080	0.0070	ppb v/v
Chloroform	0.39	0.034	ug/m3
cis-1,2-Dichloroethene	0.080	0.010	ppb v/v
cis-1,2-Dichloroethene	0.32	0.040	ug/m3
Dichlorodifluoromethane	0.080	0.014	ppb v/v
Dichlorodifluoromethane	0.40	0.069	ug/m3
Ethylbenzene	0.080	0.013	ppb v/v
Ethylbenzene	0.35	0.056	ug/m3
Methyl tert-butyl ether	0.40	0.052	ppb v/v
Methyl tert-butyl ether	1.4	0.19	ug/m3
Methylene Chloride	0.40	0.16	ppb v/v
Methylene Chloride	1.4	0.56	ug/m3
Naphthalene	0.040	0.040	ppb v/v
Naphthalene	0.21	0.21	ug/m3
Tetrachloroethene	0.080	0.0070	ppb v/v
Tetrachloroethene	0.54	0.047	ug/m3
Toluene	0.12	0.078	ppb v/v
Toluene	0.45	0.29	ug/m3
trans-1,2-Dichloroethene	0.080	0.0070	ppb v/v
trans-1,2-Dichloroethene	0.32	0.028	ug/m3
Trichloroethene	0.040	0.0060	ppb v/v
Trichloroethene	0.21	0.032	ug/m3
Vinyl chloride	0.040	0.026	ppb v/v
Vinyl chloride	0.10	0.066	ug/m3
Xylenes, Total	0.16	0.024	ppb v/v
Xylenes, Total	0.69	0.10	ug/m3

Surrogate Summary

Client: Tetra Tech GEO
Project/Site: LMMRC SSDS - Middle River

Job ID: 140-18854-1

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Matrix: Air **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)								
Lab Sample ID	Client Sample ID	BFB (60-140)								
140-18854-1	BLDG A - EFFLUENT	88								
140-18854-2	BLDG A - MID GAC	87								
140-18854-3	BLDG A - INFLUENT	86								
LCS 140-39061/1002	Lab Control Sample	93								
MB 140-39061/5	Method Blank	88								

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Lab Sample ID: MB 140-39061/5
Matrix: Air
Analysis Batch: 39061

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.080	0.0080	ppb v/v			04/16/20 11:51	1
Carbon tetrachloride	ND		0.080	0.0070	ppb v/v			04/16/20 11:51	1
Chlorodifluoromethane	ND		0.080	0.022	ppb v/v			04/16/20 11:51	1
Chloroform	ND		0.080	0.0070	ppb v/v			04/16/20 11:51	1
cis-1,2-Dichloroethene	ND		0.080	0.010	ppb v/v			04/16/20 11:51	1
Dichlorodifluoromethane	ND		0.080	0.014	ppb v/v			04/16/20 11:51	1
1,1-Dichloroethane	ND		0.080	0.0070	ppb v/v			04/16/20 11:51	1
1,2-Dichloroethane	ND		0.080	0.010	ppb v/v			04/16/20 11:51	1
1,1-Dichloroethene	ND		0.080	0.0080	ppb v/v			04/16/20 11:51	1
Ethylbenzene	ND		0.080	0.013	ppb v/v			04/16/20 11:51	1
Methylene Chloride	ND		0.40	0.16	ppb v/v			04/16/20 11:51	1
Methyl tert-butyl ether	ND		0.40	0.052	ppb v/v			04/16/20 11:51	1
Naphthalene	ND		0.040	0.040	ppb v/v			04/16/20 11:51	1
Tetrachloroethene	ND		0.080	0.0070	ppb v/v			04/16/20 11:51	1
Toluene	ND		0.12	0.078	ppb v/v			04/16/20 11:51	1
trans-1,2-Dichloroethene	ND		0.080	0.0070	ppb v/v			04/16/20 11:51	1
1,2,4-Trichlorobenzene	ND		0.080	0.064	ppb v/v			04/16/20 11:51	1
1,1,1-Trichloroethane	ND		0.080	0.037	ppb v/v			04/16/20 11:51	1
1,1,2-Trichloroethane	ND		0.080	0.0070	ppb v/v			04/16/20 11:51	1
Trichloroethene	ND		0.040	0.0060	ppb v/v			04/16/20 11:51	1
1,2,3-Trimethylbenzene	ND		0.080	0.036	ppb v/v			04/16/20 11:51	1
1,2,4-Trimethylbenzene	ND		0.080	0.020	ppb v/v			04/16/20 11:51	1
1,3,5-Trimethylbenzene	ND		0.080	0.022	ppb v/v			04/16/20 11:51	1
Vinyl chloride	ND		0.040	0.026	ppb v/v			04/16/20 11:51	1
Xylenes, Total	ND		0.16	0.024	ppb v/v			04/16/20 11:51	1

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.26	0.026	ug/m3			04/16/20 11:51	1
Carbon tetrachloride	ND		0.50	0.044	ug/m3			04/16/20 11:51	1
Chlorodifluoromethane	ND		0.28	0.078	ug/m3			04/16/20 11:51	1
Chloroform	ND		0.39	0.034	ug/m3			04/16/20 11:51	1
cis-1,2-Dichloroethene	ND		0.32	0.040	ug/m3			04/16/20 11:51	1
Dichlorodifluoromethane	ND		0.40	0.069	ug/m3			04/16/20 11:51	1
1,1-Dichloroethane	ND		0.32	0.028	ug/m3			04/16/20 11:51	1
1,2-Dichloroethane	ND		0.32	0.040	ug/m3			04/16/20 11:51	1
1,1-Dichloroethene	ND		0.32	0.032	ug/m3			04/16/20 11:51	1
Ethylbenzene	ND		0.35	0.056	ug/m3			04/16/20 11:51	1
Methylene Chloride	ND		1.4	0.56	ug/m3			04/16/20 11:51	1
Methyl tert-butyl ether	ND		1.4	0.19	ug/m3			04/16/20 11:51	1
Naphthalene	ND		0.21	0.21	ug/m3			04/16/20 11:51	1
Tetrachloroethene	ND		0.54	0.047	ug/m3			04/16/20 11:51	1
Toluene	ND		0.45	0.29	ug/m3			04/16/20 11:51	1
trans-1,2-Dichloroethene	ND		0.32	0.028	ug/m3			04/16/20 11:51	1
1,2,4-Trichlorobenzene	ND		0.59	0.47	ug/m3			04/16/20 11:51	1
1,1,1-Trichloroethane	ND		0.44	0.20	ug/m3			04/16/20 11:51	1
1,1,2-Trichloroethane	ND		0.44	0.038	ug/m3			04/16/20 11:51	1
Trichloroethene	ND		0.21	0.032	ug/m3			04/16/20 11:51	1
1,2,3-Trimethylbenzene	ND		0.39	0.18	ug/m3			04/16/20 11:51	1

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Lab Sample ID: MB 140-39061/5
Matrix: Air
Analysis Batch: 39061

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.39	0.098	ug/m3			04/16/20 11:51	1
1,3,5-Trimethylbenzene	ND		0.39	0.11	ug/m3			04/16/20 11:51	1
Vinyl chloride	ND		0.10	0.066	ug/m3			04/16/20 11:51	1
Xylenes, Total	ND		0.69	0.10	ug/m3			04/16/20 11:51	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*60 - 140*		*04/16/20 11:51*	*1*

Lab Sample ID: LCS 140-39061/1002
Matrix: Air
Analysis Batch: 39061

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	1.60	1.41		ppb v/v		88	70 - 130
Carbon tetrachloride	1.60	1.47		ppb v/v		92	70 - 130
Chlorodifluoromethane	1.60	1.67		ppb v/v		104	60 - 140
Chloroform	1.60	1.52		ppb v/v		95	70 - 130
cis-1,2-Dichloroethene	1.60	1.37		ppb v/v		86	70 - 130
Dichlorodifluoromethane	1.60	1.84		ppb v/v		115	60 - 140
1,1-Dichloroethane	1.60	1.53		ppb v/v		96	70 - 130
1,2-Dichloroethane	1.60	1.63		ppb v/v		102	70 - 130
1,1-Dichloroethene	1.60	1.29		ppb v/v		80	70 - 130
Ethylbenzene	1.60	1.29		ppb v/v		81	70 - 130
Methylene Chloride	1.60	1.47		ppb v/v		92	70 - 130
Methyl tert-butyl ether	1.60	1.47		ppb v/v		92	60 - 140
Naphthalene	1.60	1.44		ppb v/v		90	60 - 140
Tetrachloroethene	1.60	1.43		ppb v/v		90	70 - 130
Toluene	1.60	1.29		ppb v/v		81	70 - 130
trans-1,2-Dichloroethene	1.60	1.40		ppb v/v		87	70 - 130
1,2,4-Trichlorobenzene	1.60	1.49		ppb v/v		93	60 - 140
1,1,1-Trichloroethane	1.60	1.53		ppb v/v		96	70 - 130
1,1,2-Trichloroethane	1.60	1.37		ppb v/v		85	70 - 130
Trichloroethene	1.60	1.36		ppb v/v		85	70 - 130
1,2,3-Trimethylbenzene	1.60	1.20		ppb v/v		75	70 - 130
1,2,4-Trimethylbenzene	1.60	1.29		ppb v/v		81	70 - 130
1,3,5-Trimethylbenzene	1.60	1.28		ppb v/v		80	70 - 130
Vinyl chloride	1.60	1.38		ppb v/v		87	70 - 130
Xylenes, Total	4.80	3.88		ppb v/v		81	70 - 130

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	5.1	4.50		ug/m3		88	70 - 130
Carbon tetrachloride	10	9.23		ug/m3		92	70 - 130
Chlorodifluoromethane	5.7	5.91		ug/m3		104	60 - 140
Chloroform	7.8	7.44		ug/m3		95	70 - 130
cis-1,2-Dichloroethene	6.3	5.43		ug/m3		86	70 - 130
Dichlorodifluoromethane	7.9	9.12		ug/m3		115	60 - 140
1,1-Dichloroethane	6.5	6.19		ug/m3		96	70 - 130

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Lab Sample ID: LCS 140-39061/1002
Matrix: Air
Analysis Batch: 39061

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,2-Dichloroethane			6.5	6.60		ug/m3		102	70 - 130		
1,1-Dichloroethene			6.3	5.10		ug/m3		80	70 - 130		
Ethylbenzene			6.9	5.60		ug/m3		81	70 - 130		
Methylene Chloride			5.6	5.11		ug/m3		92	70 - 130		
Methyl tert-butyl ether			5.8	5.30		ug/m3		92	60 - 140		
Naphthalene			8.4	7.54		ug/m3		90	60 - 140		
Tetrachloroethene			11	9.73		ug/m3		90	70 - 130		
Toluene			6.0	4.87		ug/m3		81	70 - 130		
trans-1,2-Dichloroethene			6.3	5.54		ug/m3		87	70 - 130		
1,2,4-Trichlorobenzene			12	11.0		ug/m3		93	60 - 140		
1,1,1-Trichloroethane			8.7	8.35		ug/m3		96	70 - 130		
1,1,2-Trichloroethane			8.7	7.45		ug/m3		85	70 - 130		
Trichloroethene			8.6	7.29		ug/m3		85	70 - 130		
1,2,3-Trimethylbenzene			7.9	5.88		ug/m3		75	70 - 130		
1,2,4-Trimethylbenzene			7.9	6.34		ug/m3		81	70 - 130		
1,3,5-Trimethylbenzene			7.9	6.31		ug/m3		80	70 - 130		
Vinyl chloride			4.1	3.54		ug/m3		87	70 - 130		
Xylenes, Total			21	16.8		ug/m3		81	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*93*		*60 - 140*

QC Association Summary

Client: Tetra Tech GEO
Job ID: 140-18854-1
Project/Site: LMMRC SSDS - Middle River

Air - GC/MS VOA

Analysis Batch: 39061

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-18854-1	BLDG A - EFFLUENT	Total/NA	Air	TO 15 LL	
140-18854-2	BLDG A - MID GAC	Total/NA	Air	TO 15 LL	
140-18854-3	BLDG A - INFLUENT	Total/NA	Air	TO 15 LL	
MB 140-39061/5	Method Blank	Total/NA	Air	TO 15 LL	
LCS 140-39061/1002	Lab Control Sample	Total/NA	Air	TO 15 LL	

Lab Chronicle

Client: Tetra Tech GEO
Job ID: 140-18854-1
Project/Site: LMMRC SSDS - Middle River

Client Sample ID: BLDG A - EFFLUENT
Lab Sample ID: 140-18854-1
Date Collected: 04/14/20 09:35
Matrix: Air
Date Received: 04/15/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	100 mL	500 mL	39061	04/16/20 18:53	S1K	TAL KNX
	Instrument ID: MR									

Client Sample ID: BLDG A - MID GAC
Lab Sample ID: 140-18854-2
Date Collected: 04/14/20 09:41
Matrix: Air
Date Received: 04/15/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	100 mL	500 mL	39061	04/16/20 19:40	S1K	TAL KNX
	Instrument ID: MR									

Client Sample ID: BLDG A - INFLUENT
Lab Sample ID: 140-18854-3
Date Collected: 04/14/20 09:46
Matrix: Air
Date Received: 04/15/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	25 mL	500 mL	39061	04/16/20 20:28	S1K	TAL KNX
	Instrument ID: MR									

Client Sample ID: Method Blank
Lab Sample ID: MB 140-39061/5
Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	500 mL	500 mL	39061	04/16/20 11:51	S1K	TAL KNX
	Instrument ID: MR									

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 140-39061/1002
Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	500 mL	500 mL	39061	04/16/20 08:45	S1K	TAL KNX
	Instrument ID: MR									

Laboratory References:

TAL KNX = Eurofins TestAmerica, Knoxville, 5815 Middlebrook Pike, Knoxville, TN 37921, TEL (865)291-3000

Method Summary

Client: Tetra Tech GEO
Job ID: 140-18854-1
Project/Site: LMMRC SSDS - Middle River

Method	Method Description	Protocol	Laboratory
TO 15 LL	Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)	EPA	TAL KNX

Protocol References:

EPA = US Environmental Protection Agency

Laboratory References:

TAL KNX = Eurofins TestAmerica, Knoxville, 5815 Middlebrook Pike, Knoxville, TN 37921, TEL (865)291-3000

Sample Summary

Client: Tetra Tech GEO
Job ID: 140-18854-1
Project/Site: LMMRC SSDS - Middle River

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
140-18854-1	BLDG A - EFFLUENT	Air	04/14/20 09:35	04/15/20 09:20	Air Canister (1-Liter) #09577
140-18854-2	BLDG A - MID GAC	Air	04/14/20 09:41	04/15/20 09:20	Air Canister (1-Liter) #10781
140-18854-3	BLDG A - INFLUENT	Air	04/14/20 09:46	04/15/20 09:20	Air Canister (1-Liter) #11107

Method TO15 Low Level

Volatile Organic Compounds - Low level (GC/MS) by Method TO 15

FORM II
AIR - GC/MS VOA SURROGATE RECOVERY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-18854-1

SDG No.:

Matrix: Air Level: Low

GC Column (1): RTX-5 ID: 0.32(mm)

Client Sample ID	Lab Sample ID	BFB #
BLDG A - EFFLUENT	140-18854-1	88
BLDG A - MID GAC	140-18854-2	87
BLDG A - INFLUENT	140-18854-3	86
	MB 140-39061/5	88
	LCS 140-39061/1002	93

	QC LIMITS
BFB = 4-Bromofluorobenzene (Surr)	60-140

Column to be used to flag recovery values

FORM II TO 15 LL

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-18854-1

SDG No.:

Matrix: Air Level: Low Lab File ID: RCCVD16-LCS.d

Lab ID: LCS 140-39061/1002 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Benzene	1.60	1.41	88	70-130	
Carbon tetrachloride	1.60	1.47	92	70-130	
Chlorodifluoromethane	1.60	1.67	104	60-140	
Chloroform	1.60	1.52	95	70-130	
cis-1,2-Dichloroethene	1.60	1.37	86	70-130	
Dichlorodifluoromethane	1.60	1.84	115	60-140	
1,1-Dichloroethane	1.60	1.53	96	70-130	
1,2-Dichloroethane	1.60	1.63	102	70-130	
1,1-Dichloroethene	1.60	1.29	80	70-130	
Ethylbenzene	1.60	1.29	81	70-130	
Methylene Chloride	1.60	1.47	92	70-130	
Methyl tert-butyl ether	1.60	1.47	92	60-140	
Naphthalene	1.60	1.44	90	60-140	
Tetrachloroethene	1.60	1.43	90	70-130	
Toluene	1.60	1.29	81	70-130	
trans-1,2-Dichloroethene	1.60	1.40	87	70-130	
1,2,4-Trichlorobenzene	1.60	1.49	93	60-140	
1,1,1-Trichloroethane	1.60	1.53	96	70-130	
1,1,2-Trichloroethane	1.60	1.37	85	70-130	
Trichloroethene	1.60	1.36	85	70-130	
1,2,3-Trimethylbenzene	1.60	1.20	75	70-130	
1,2,4-Trimethylbenzene	1.60	1.29	81	70-130	
1,3,5-Trimethylbenzene	1.60	1.28	80	70-130	
Vinyl chloride	1.60	1.38	87	70-130	
Xylenes, Total	4.80	3.88	81	70-130	

Column to be used to flag recovery and RPD values

FORM III TO 15 LL

FORM IV
AIR - GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-18854-1

SDG No.:

Lab File ID: R500BD16.D Lab Sample ID: MB 140-39061/5

Matrix: Air Heated Purge:(Y/N) N

Instrument ID: MR Date Analyzed: 04/16/2020 11:51

GC Column: RTX-5 ID: 0.32(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 140-39061/1002	RCCVD16-LCS.d	04/16/2020 08:45
BLDG A - EFFLUENT	140-18854-1	RD16P108.D	04/16/2020 18:53
BLDG A - MID GAC	140-18854-2	RD16P109.D	04/16/2020 19:40
BLDG A - INFLUENT	140-18854-3	RD16P110.D	04/16/2020 20:28

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-18854-1

SDG No.:

Lab File ID: RBFBD09B.D BFB Injection Date: 04/09/2020

Instrument ID: MR BFB Injection Time: 14:08

Analysis Batch No.: 38980

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	26.6	
75	30.0 - 60.0 % of mass 95	52.7	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.2	
173	Less than 2.0 % of mass 174	0.8	(0.7) 1
174	50.0 - 120.00 % of mass 95	103.7	
175	5.0 - 9.0 % of mass 174	6.6	(6.3) 1
176	95.0 - 101.0 % of mass 174	102.2	(98.5) 1
177	5.0 - 9.0 % of mass 176	6.5	(6.3) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 140-38980/3	RD09IC01.D	04/09/2020	15:05
	IC 140-38980/4	RD09IC02.D	04/09/2020	15:53
	IC 140-38980/5	RD09IC03.D	04/09/2020	16:41
	IC 140-38980/6	RD09IC04.D	04/09/2020	17:31
	IC 140-38980/7	RD09IC05.D	04/09/2020	18:21
	IC 140-38980/8	RD09IC06.D	04/09/2020	19:10
	ICIS 140-38980/9	RD09IC07.D	04/09/2020	19:59
	IC 140-38980/11	RD09IC08.D	04/09/2020	21:34
	IC 140-38980/13	RD09IC09.D	04/09/2020	23:10
	IC 140-38980/15	RD09IC10.D	04/10/2020	0:47
	ICV 140-38980/17	RD09ICV.D	04/10/2020	2:27

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-18854-1

SDG No.:

Lab File ID: RBFBD16.D BFB Injection Date: 04/16/2020

Instrument ID: MR BFB Injection Time: 08:18

Analysis Batch No.: 39061

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE		
50	15.0 - 40.0 % of mass 95	30.7		
75	30.0 - 60.0 % of mass 95	58.7		
95	Base Peak, 100% relative abundance	100.0		
96	5.0 - 9.0 % of mass 95	6.2		
173	Less than 2.0 % of mass 174	1.7	(1.4) 1	
174	50.0 - 120.00 % of mass 95	118.2		
175	5.0 - 9.0 % of mass 174	8.4	(7.1) 1	
176	95.0 - 101.0 % of mass 174	109.9	(93.0) 1	*
177	5.0 - 9.0 % of mass 176	7.6	(6.9) 2	

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 140-39061/2	RCCVD16.D	04/16/2020	8:45
	LCS 140-39061/1002	RCCVD16-LCS.d	04/16/2020	8:45
	MB 140-39061/5	R500BD16.D	04/16/2020	11:51
BLDG A - EFFLUENT	140-18854-1	RD16P108.D	04/16/2020	18:53
BLDG A - MID GAC	140-18854-2	RD16P109.D	04/16/2020	19:40
BLDG A - INFLUENT	140-18854-3	RD16P110.D	04/16/2020	20:28

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-18854-1

SDG No.:

Sample No.: ICIS 140-38980/9 Date Analyzed: 04/09/2020 19:59

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm)

Lab File ID (Standard): RD09IC07.D Heated Purge: (Y/N) N

Calibration ID: 2392

		CBM		DFBZ		CBZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		196293	8.35	1370364	10.59	1081858	15.42
UPPER LIMIT		274810	8.68	1918510	10.92	1514601	15.75
LOWER LIMIT		117776	8.02	822218	10.26	649115	15.09
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 140-38980/17		193772	8.35	1380349	10.59	1077168	15.42

CBM = Chlorobromomethane (IS)
DFBZ = 1,4-Difluorobenzene
CBZd5 = Chlorobenzene-d5 (IS)

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO 15 LL

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-18854-1

SDG No.:

Sample No.: CCVIS 140-39061/2 Date Analyzed: 04/16/2020 08:45

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm)

Lab File ID (Standard): RCCVD16.D Heated Purge: (Y/N) N

Calibration ID: 2392

		CBM		DFBZ		CBZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		160642	8.35	1121901	10.58	921713	15.41
UPPER LIMIT		224899	8.68	1570661	10.91	1290398	15.74
LOWER LIMIT		96385	8.02	673141	10.25	553028	15.08
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 140-39061/1002		160642	8.35	1121901	10.58	921713	15.41
MB 140-39061/5		161998	8.34	1143221	10.58	899276	15.41
140-18854-1	BLDG A - EFFLUENT	144513	8.34	978631	10.58	772471	15.41
140-18854-2	BLDG A - MID GAC	139049	8.33	959244	10.58	765501	15.41
140-18854-3	BLDG A - INFLUENT	146075	8.34	976905	10.58	746707	15.41

CBM = Chlorobromomethane (IS)
DFBZ = 1,4-Difluorobenzene
CBZd5 = Chlorobenzene-d5 (IS)

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO 15 LL

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-18854-1

SDG No.:

Client Sample ID: BLDG A - EFFLUENT Lab Sample ID: 140-18854-1

Matrix: Air Lab File ID: RD16P108.D

Analysis Method: TO 15 LL Date Collected: 04/14/2020 09:35

Sample wt/vol: 100(mL) Date Analyzed: 04/16/2020 18:53

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 39061 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.22	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	ND		0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	0.42		0.40	0.11
67-66-3	Chloroform	119.38	0.096	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	5.9		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.25	J	0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	1.4		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	16		0.40	0.040
100-41-4	Ethylbenzene	106.17	0.066	J	0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	0.80
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	0.16	J	0.40	0.035
108-88-3	Toluene	92.14	1.1		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	0.16	J	0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	4.4		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	2.3		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.11
75-01-4	Vinyl chloride	62.50	0.19	J	0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.37	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	88		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-18854-1

SDG No.:

Client Sample ID: BLDG A - EFFLUENT Lab Sample ID: 140-18854-1

Matrix: Air Lab File ID: RD16P108.D

Analysis Method: TO 15 LL Date Collected: 04/14/2020 09:35

Sample wt/vol: 100(mL) Date Analyzed: 04/16/2020 18:53

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 39061 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.69	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	ND		2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	1.5		1.4	0.39
67-66-3	Chloroform	119.38	0.47	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	23		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	1.3	J	2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	5.6		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	64		1.6	0.16
100-41-4	Ethylbenzene	106.17	0.29	J	1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	2.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	1.1	J	2.7	0.24
108-88-3	Toluene	92.14	4.3		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	0.62	J	1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	24		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	12		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.54
75-01-4	Vinyl chloride	62.50	0.47	J	0.51	0.33
1330-20-7	Xylenes, Total	106.17	1.6	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	88		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MR\20200415-15214.b\RD16P108.D
Lims ID: 140-18854-A-1
Client ID: BLDG A - EFFLUENT
Sample Type: Client
Inject. Date: 16-Apr-2020 18:53:30 ALS Bottle#: 8 Worklist Smp#: 14
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0015214-014
Misc. Info.: 140-18854-a-1
Operator ID: HMT Instrument ID: MR

Method: \\chromfs\Knoxville\ChromData\MR\20200415-15214.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 17-Apr-2020 12:01:17 Calib Date: 10-Apr-2020 00:47:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MR\20200409-15180.b\RD09IC10.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1010

First Level Reviewer: khachitpongpanits Date: 17-Apr-2020 12:01:17

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.339	8.350	-0.011	96	144513	4.00	
* 2 1,4-Difluorobenzene	114	10.577	10.582	-0.005	94	978631	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.414	15.414	0.000	87	772471	4.00	
$ 4 4-Bromofluorobenzene (Surr	95	17.064	17.070	0.000	92	405353	3.54	
6 Chlorodifluoromethane	51	3.324	3.323	-0.006	39	8624	0.0849	
8 Dichlorodifluoromethane	85	3.378	3.382	-0.011	94	3854	0.0507	
12 Vinyl chloride	62	3.707	3.705	-0.005	32	3420	0.0371	
27 1,1-Dichloroethene	96	5.443	5.438	-0.006	96	220599	3.24	
34 trans-1,2-Dichloroethene	96	6.587	6.598	-0.017	36	1920	0.0311	
37 1,1-Dichloroethane	63	7.018	7.010	-0.005	98	29534	0.2791	
42 cis-1,2-Dichloroethene	96	8.005	8.010	-0.011	91	75144	1.18	
44 Chloroform	83	8.355	8.339	0.000	28	2473	0.0193	
47 1,1,1-Trichloroethane	97	9.374	9.384	-0.017	97	109638	0.8885	
51 Benzene	78	10.000	10.000	0.000	89	7909	0.0432	
58 Trichloroethene	130	11.310	11.321	-0.011	93	41802	0.4527	
67 Toluene	91	13.424	13.423	0.005	93	46744	0.2286	
73 Tetrachloroethene	129	14.578	14.583	0.000	43	2495	0.0317	
76 Ethylbenzene	91	15.748	15.759	-0.006	5	3600	0.0132	
77 m-Xylene & p-Xylene	91	15.915	15.926	-0.006	90	11672	0.0550	
81 o-Xylene	91	16.444	16.450	0.000	37	3957	0.0185	
S 117 Xylenes, Total	100				0		0.0735	

Reagents:

40MXISSURP_00004 Amount Added: 40.00 Units: mL Run Reagent

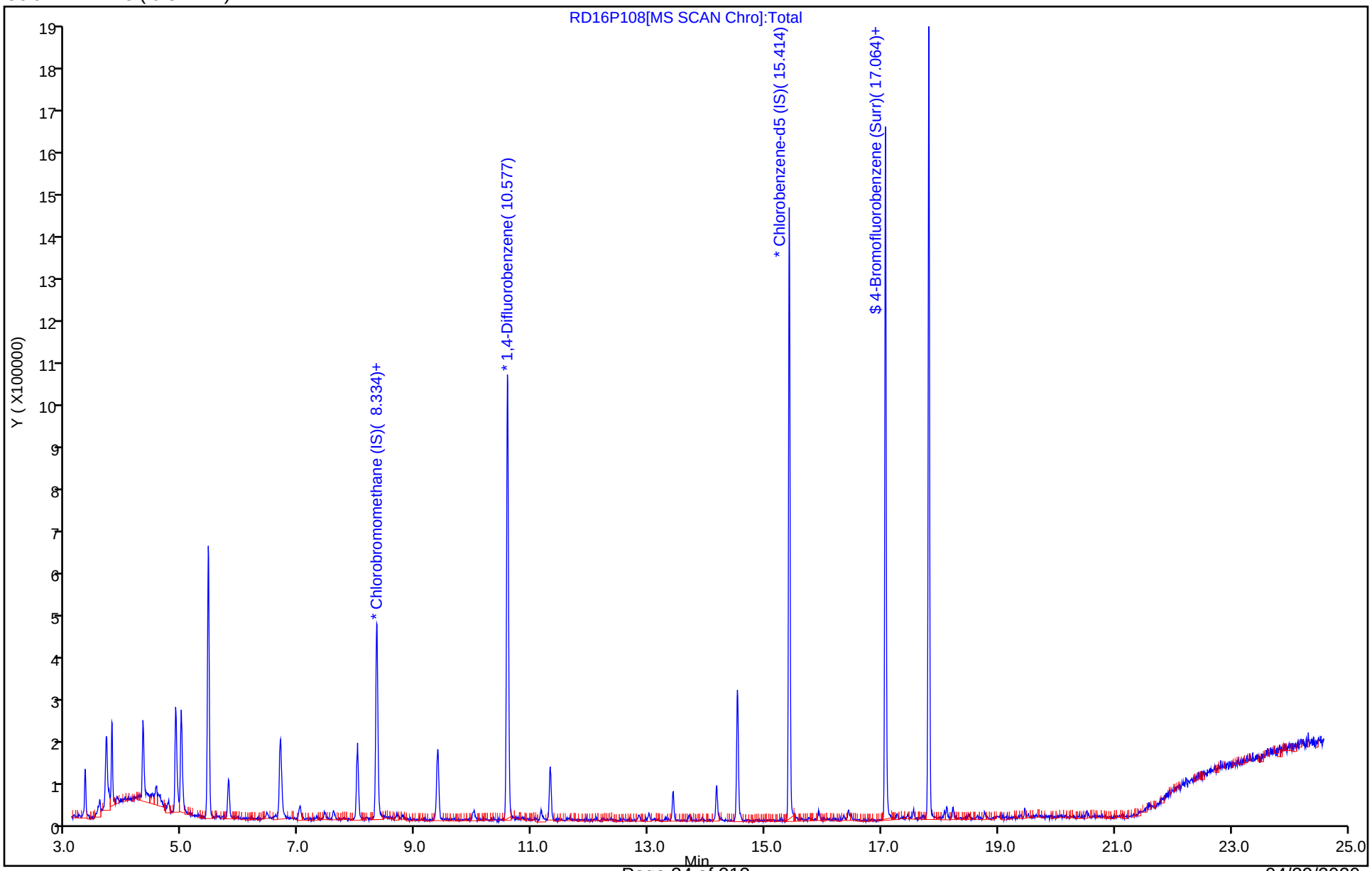
Report Date: 17-Apr-2020 12:01:17 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200415-15214.b\RD16P108.D

Injection Date:	16-Apr-2020 18:53:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	140-18854-A-1	Lab Sample ID:	140-18854-1	Worklist Smp#:	14
Client ID:	BLDG A - EFFLUENT				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MR\20200415-15214.b\RD16P108.D				
Lims ID:	140-18854-A-1				
Client ID:	BLDG A - EFFLUENT				
Sample Type:	Client				
Inject. Date:	16-Apr-2020 18:53:30	ALS Bottle#:	8	Worklist Smp#:	14
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0015214-014				
Misc. Info.:	140-18854-a-1				
Operator ID:	HMT	Instrument ID:	MR		
Method:	\\chromfs\Knoxville\ChromData\MR\20200415-15214.b\MR_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	17-Apr-2020 12:01:17	Calib Date:	10-Apr-2020 00:47:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MR\20200409-15180.b\RD09IC10.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1010				

First Level Reviewer: khachitpongpanits Date: 17-Apr-2020 12:01:17

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.00	3.54	88.50

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200415-15214.b\RD16P108.D

Injection Date: 16-Apr-2020 18:53:30 Instrument ID: MR

Lims ID: 140-18854-A-1 Lab Sample ID: 140-18854-1

Client ID: BLDG A - EFFLUENT

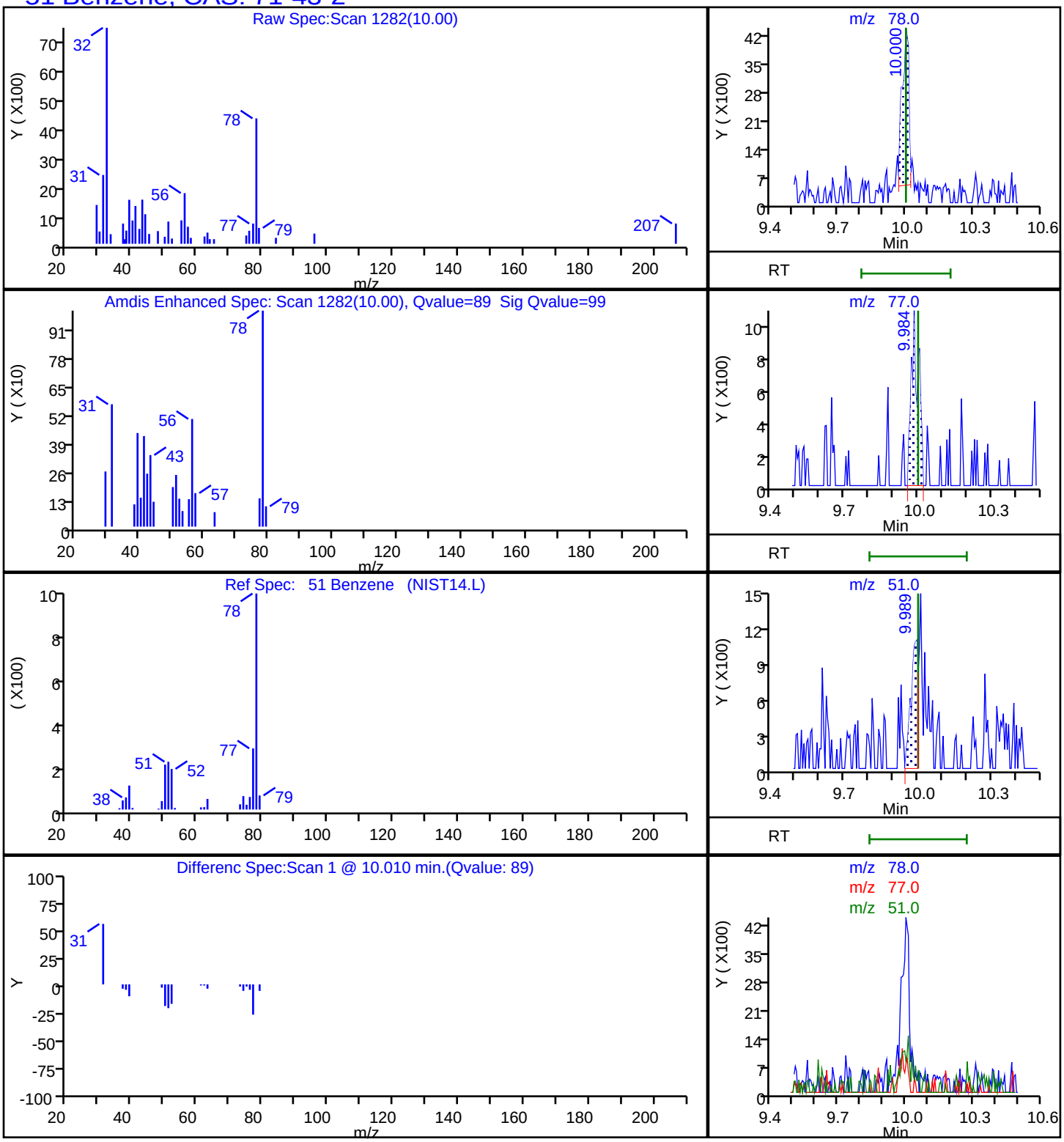
Operator ID: HMT ALS Bottle#: 8 Worklist Smp#: 14

Purge Vol: 500.000 mL Dil. Factor: 1.0000

Method: MR_TO15 Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm) Detector MS SCAN

51 Benzene, CAS: 71-43-2

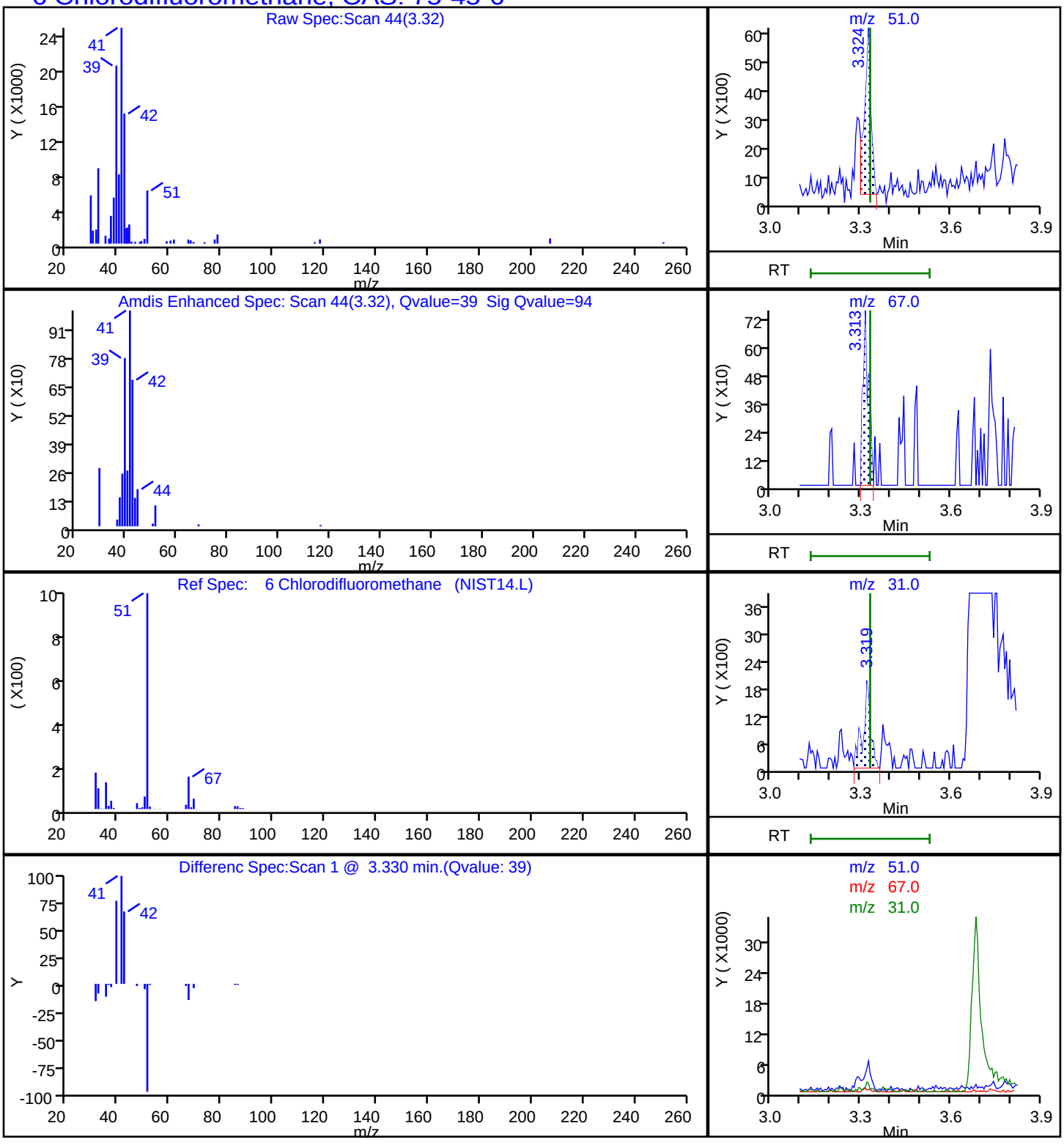


Report Date: 17-Apr-2020 12:01:17 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200415-15214.b\RD16P108.D		
Injection Date:	16-Apr-2020 18:53:30	Instrument ID:	MR
Lims ID:	140-18854-A-1	Lab Sample ID:	140-18854-1
Client ID:	BLDG A - EFFLUENT		
Operator ID:	HMT	ALS Bottle#:	8 Worklist Smp#: 14
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

6 Chlorodifluoromethane, CAS: 75-45-6

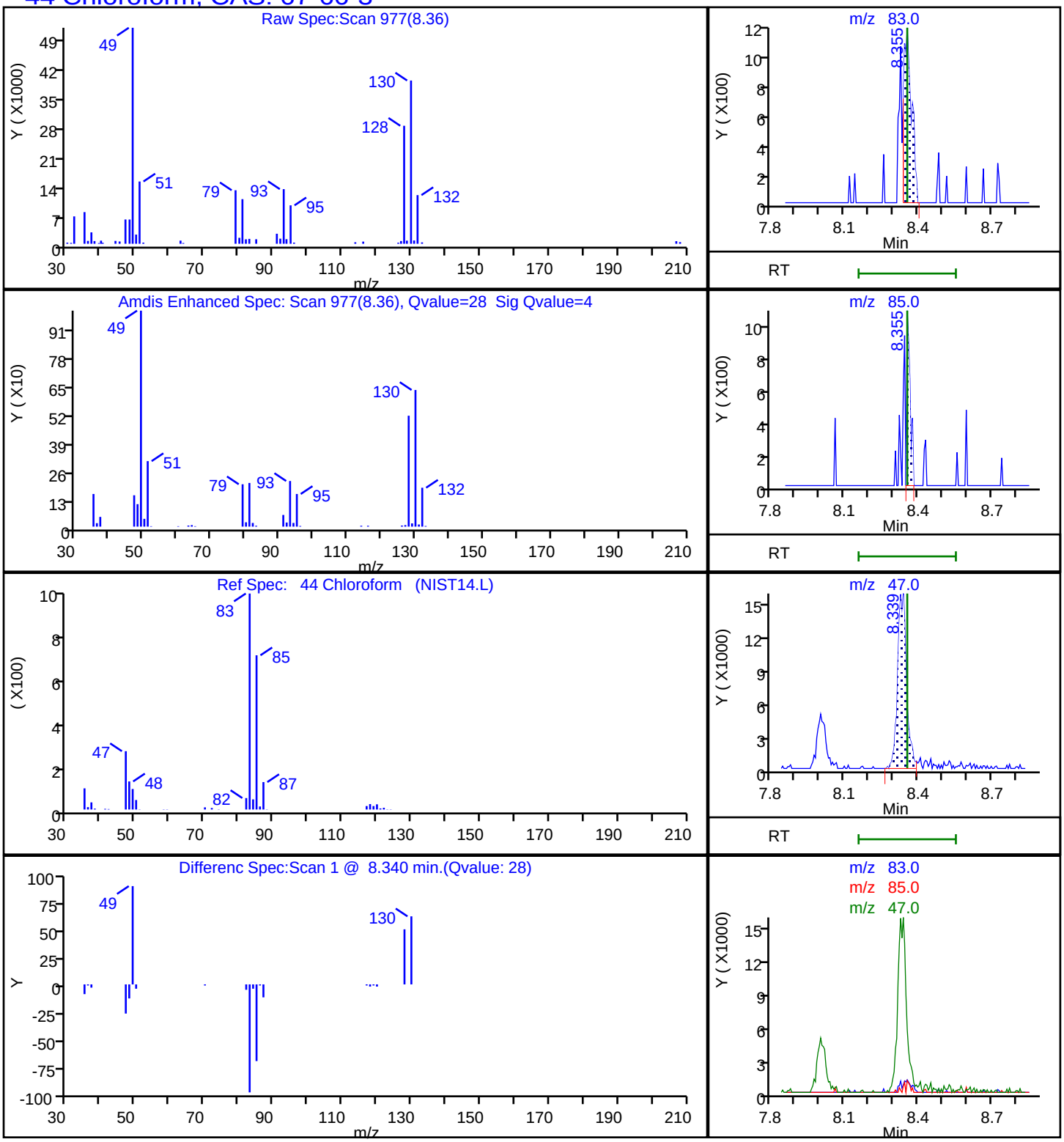


Report Date: 17-Apr-2020 12:01:17 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200415-15214.b\RD16P108.D		
Injection Date:	16-Apr-2020 18:53:30	Instrument ID:	MR
Lims ID:	140-18854-A-1	Lab Sample ID:	140-18854-1
Client ID:	BLDG A - EFFLUENT		
Operator ID:	HMT	ALS Bottle#:	8 Worklist Smp#: 14
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

44 Chloroform, CAS: 67-66-3

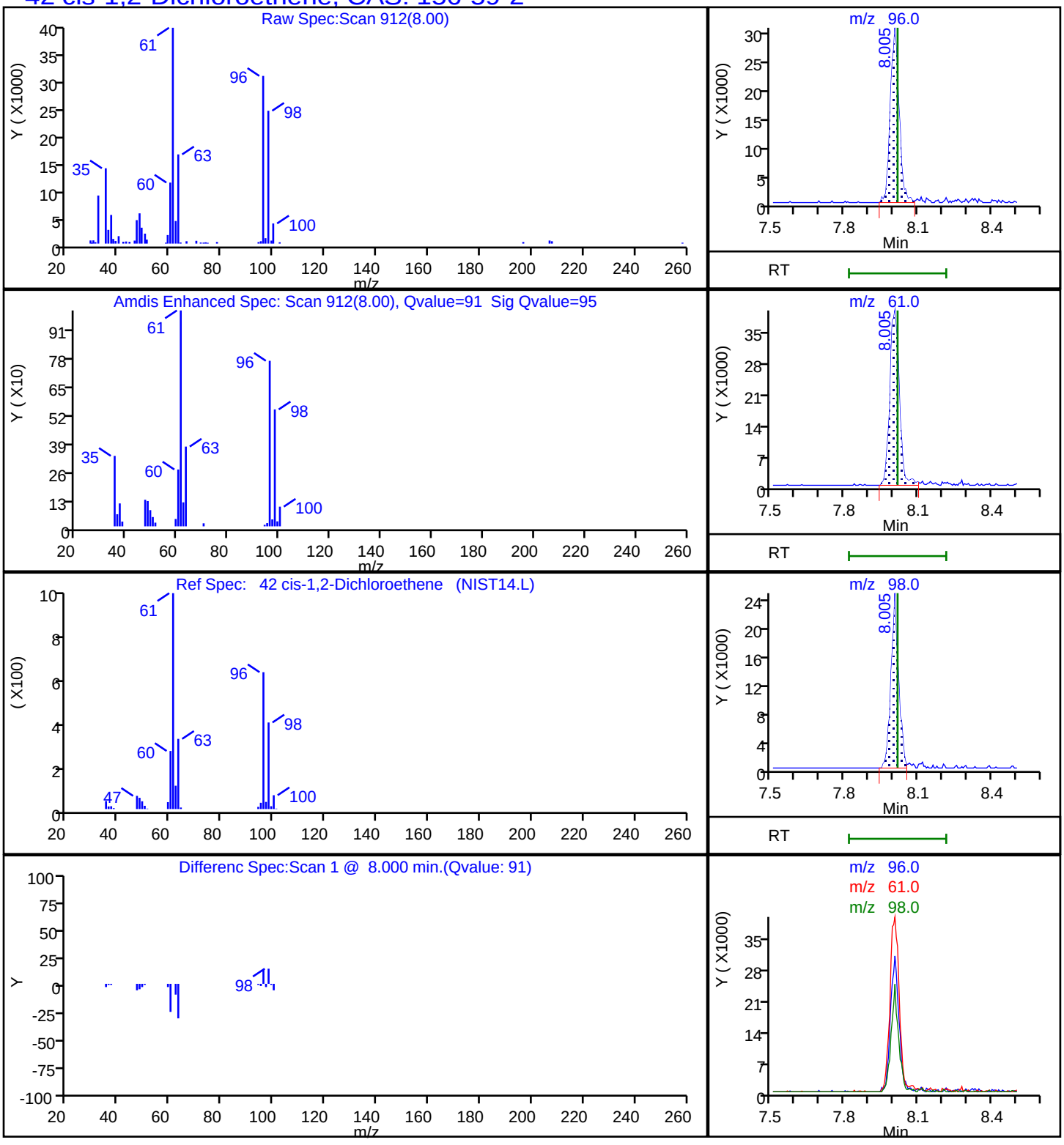


Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200415-15214.b\RD16P108.D

Injection Date:	16-Apr-2020 18:53:30	Instrument ID:	MR		
Lims ID:	140-18854-A-1	Lab Sample ID:	140-18854-1		
Client ID:	BLDG A - EFFLUENT				
Operator ID:	HMT	ALS Bottle#:	8	Worklist Smp#:	14
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

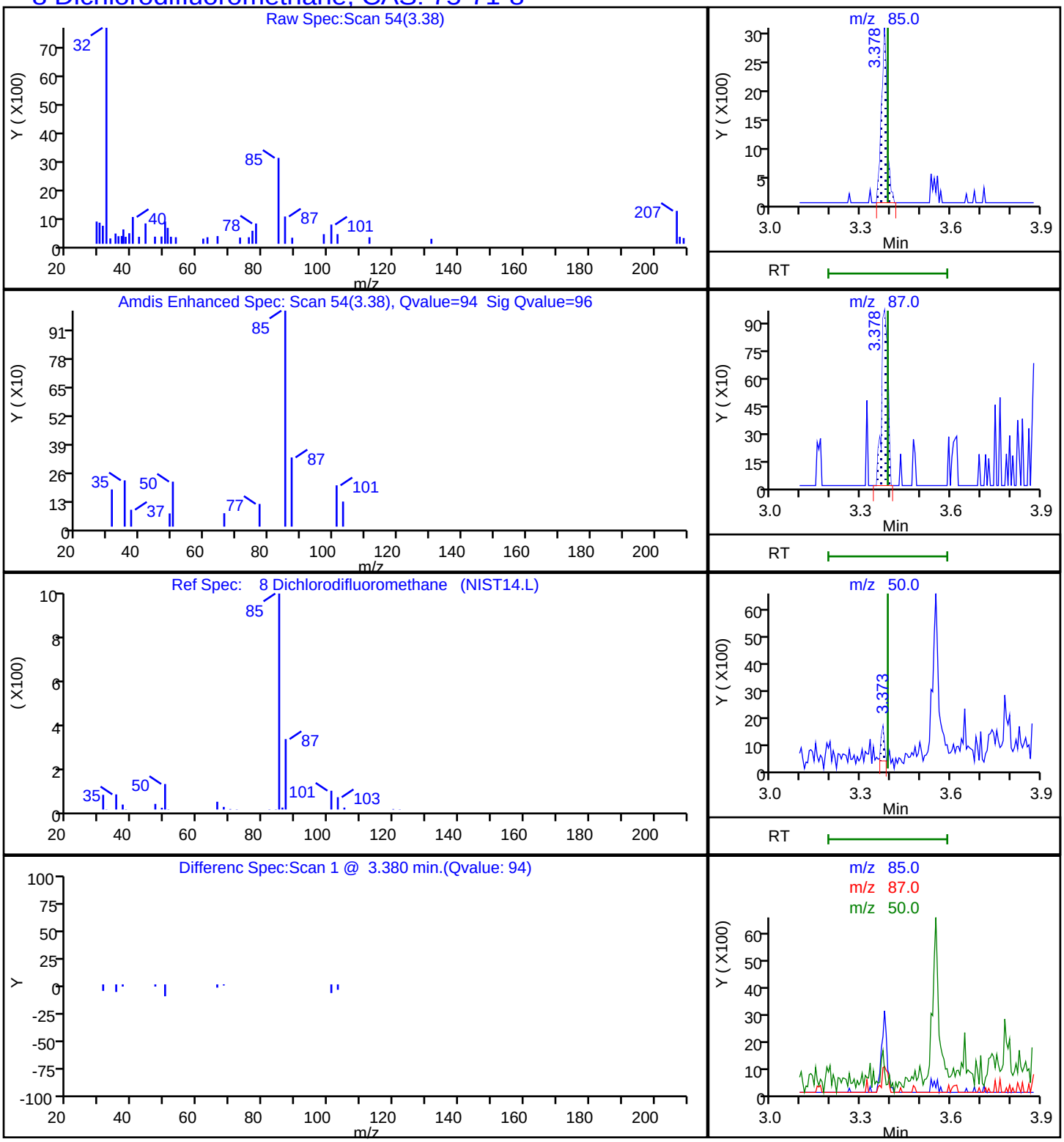
42 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200415-15214.b\RD16P108.D		
Injection Date:	16-Apr-2020 18:53:30	Instrument ID:	MR
Lims ID:	140-18854-A-1	Lab Sample ID:	140-18854-1
Client ID:	BLDG A - EFFLUENT		
Operator ID:	HMT	ALS Bottle#:	8 Worklist Smp#: 14
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

8 Dichlorodifluoromethane, CAS: 75-71-8



Report Date: 17-Apr-2020 12:01:17 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200415-15214.b\RD16P108.D

Injection Date: 16-Apr-2020 18:53:30 Instrument ID: MR

Lims ID: 140-18854-A-1 Lab Sample ID: 140-18854-1

Client ID: BLDG A - EFFLUENT

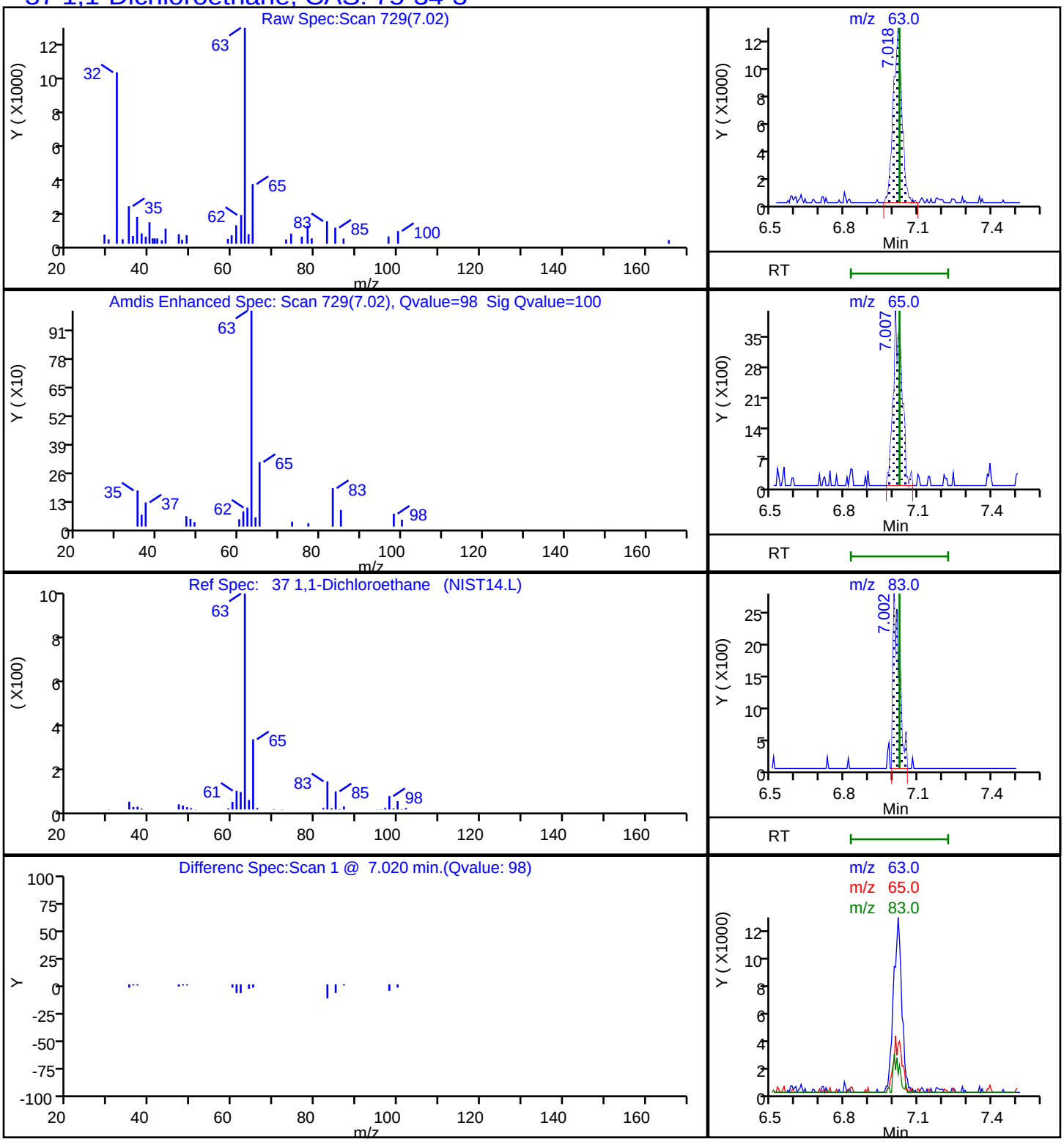
Operator ID: HMT ALS Bottle#: 8 Worklist Smp#: 14

Purge Vol: 500.000 mL Dil. Factor: 1.0000

Method: MR_TO15 Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm) Detector MS SCAN

37 1,1-Dichloroethane, CAS: 75-34-3

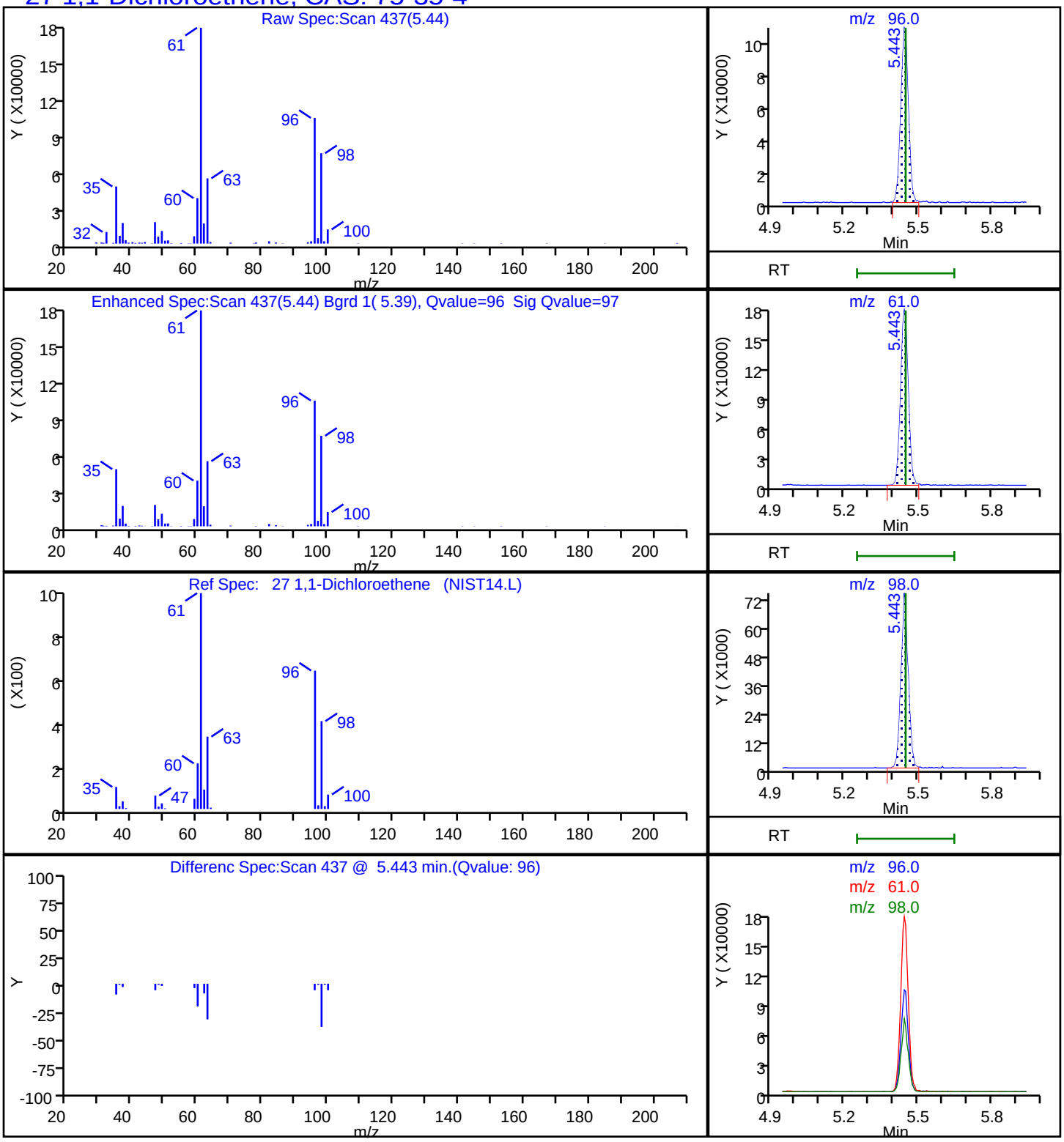


Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200415-15214.b\RD16P108.D

Injection Date:	16-Apr-2020 18:53:30	Instrument ID:	MR		
Lims ID:	140-18854-A-1	Lab Sample ID:	140-18854-1		
Client ID:	BLDG A - EFFLUENT				
Operator ID:	HMT	ALS Bottle#:	8	Worklist Smp#:	14
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

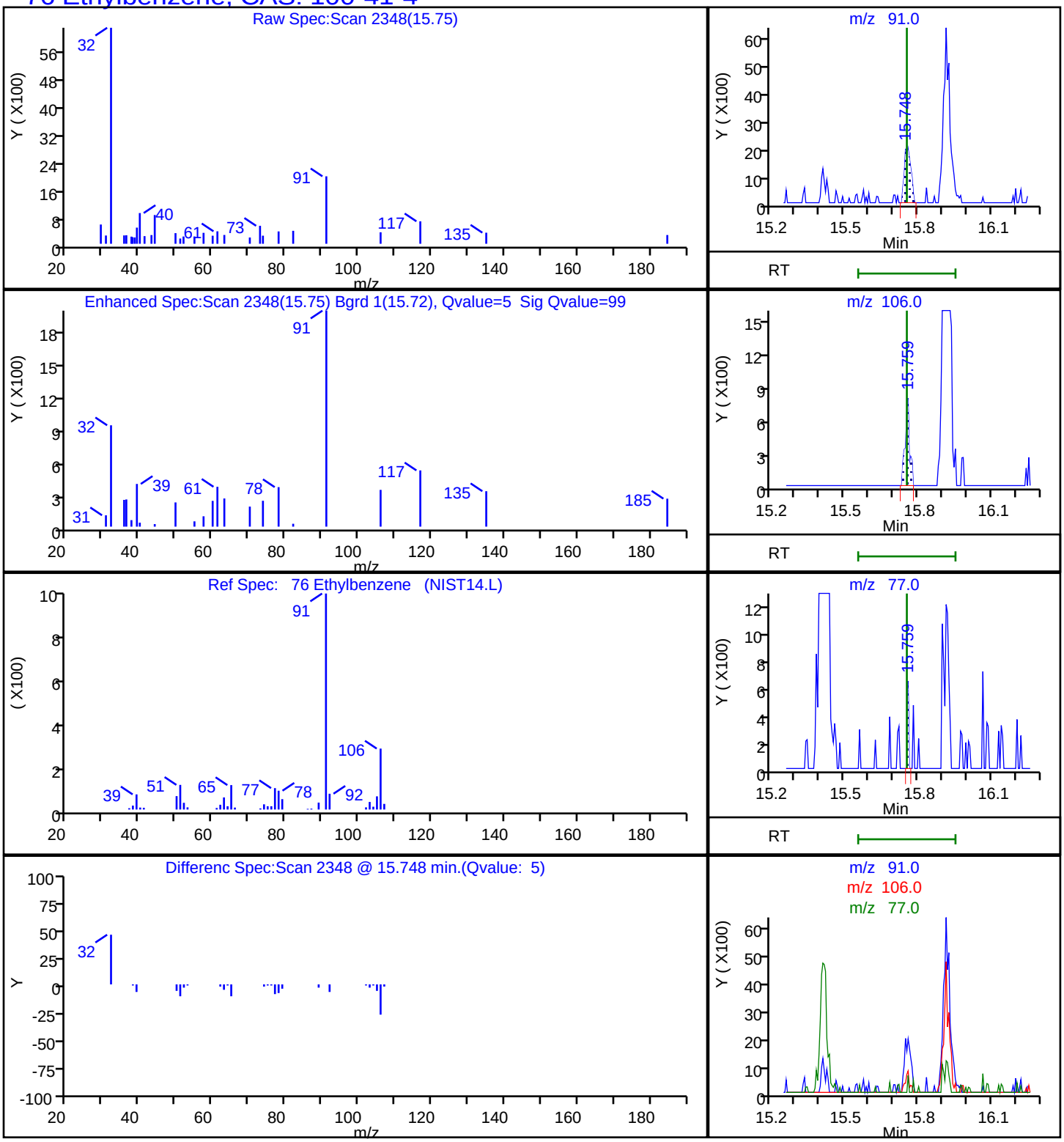
27 1,1-Dichloroethene, CAS: 75-35-4



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200415-15214.b\RD16P108.D		
Injection Date:	16-Apr-2020 18:53:30	Instrument ID:	MR
Lims ID:	140-18854-A-1	Lab Sample ID:	140-18854-1
Client ID:	BLDG A - EFFLUENT		
Operator ID:	HMT	ALS Bottle#:	8 Worklist Smp#: 14
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

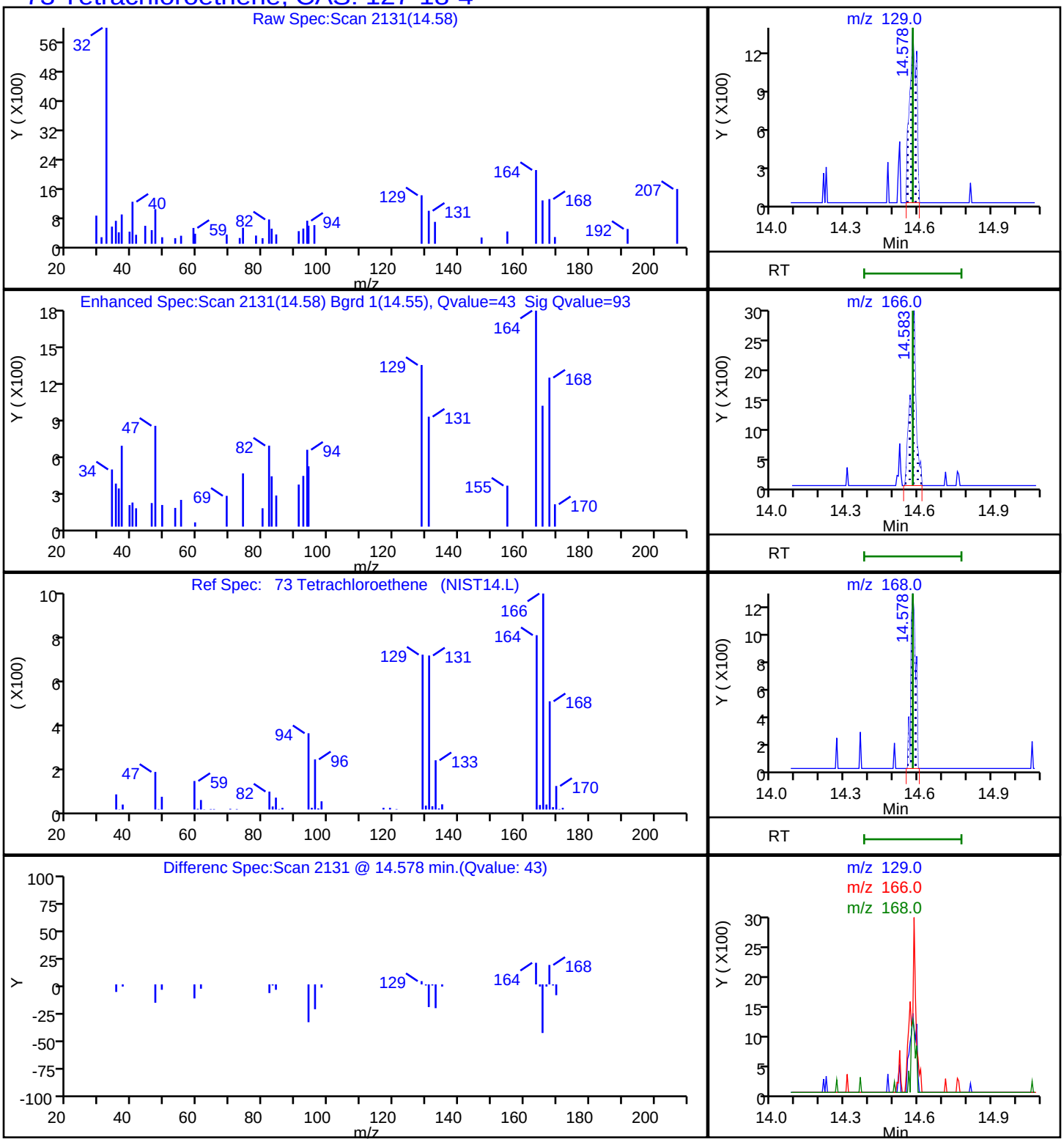
76 Ethylbenzene, CAS: 100-41-4



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200415-15214.b\RD16P108.D		
Injection Date:	16-Apr-2020 18:53:30	Instrument ID:	MR
Lims ID:	140-18854-A-1	Lab Sample ID:	140-18854-1
Client ID:	BLDG A - EFFLUENT		
Operator ID:	HMT	ALS Bottle#:	8 Worklist Smp#: 14
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

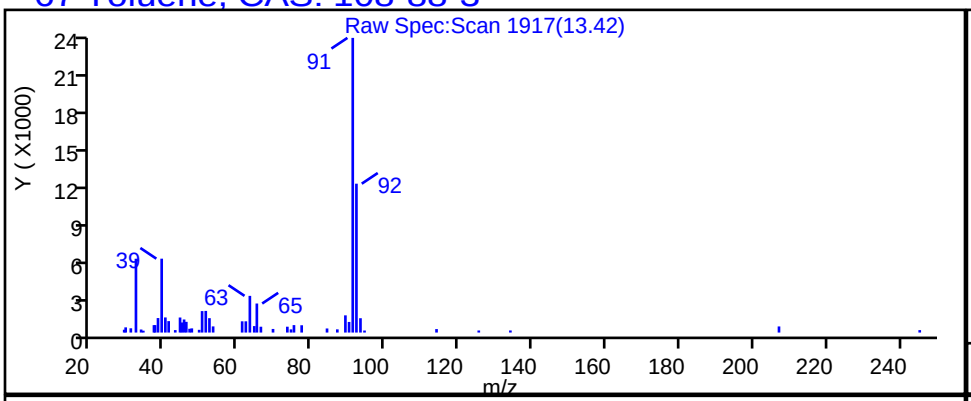
73 Tetrachloroethene, CAS: 127-18-4

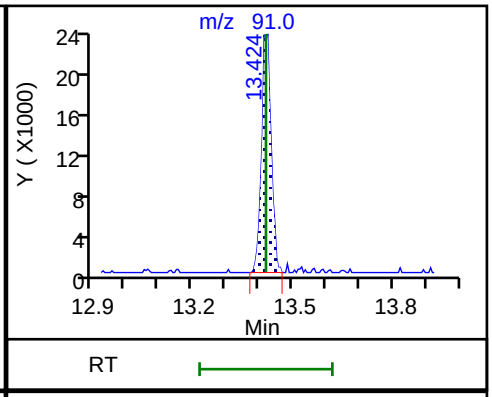


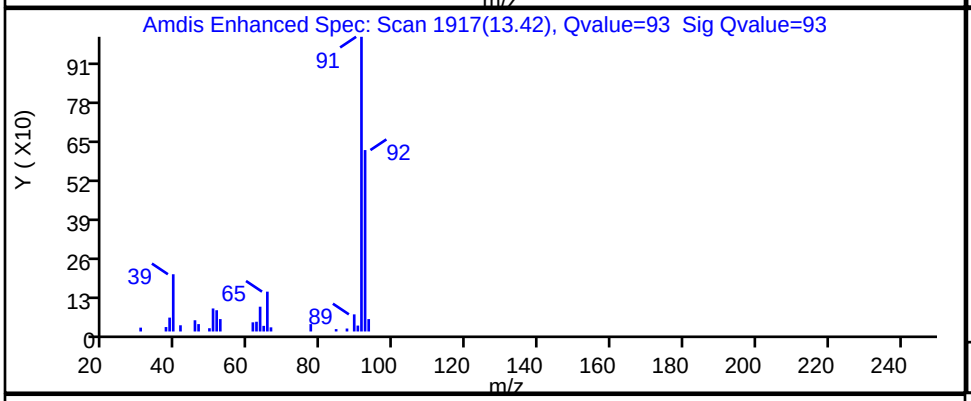
Eurofins TestAmerica, Knoxville

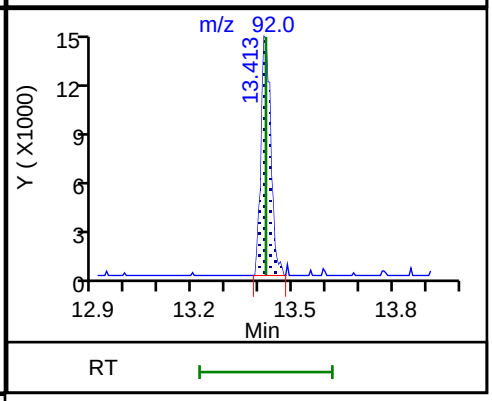
Data File:	\\chromfs\Knoxville\ChromData\MR\20200415-15214.b\RD16P108.D		
Injection Date:	16-Apr-2020 18:53:30	Instrument ID:	MR
Lims ID:	140-18854-A-1	Lab Sample ID:	140-18854-1
Client ID:	BLDG A - EFFLUENT		
Operator ID:	HMT	ALS Bottle#:	8 Worklist Smp#: 14
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

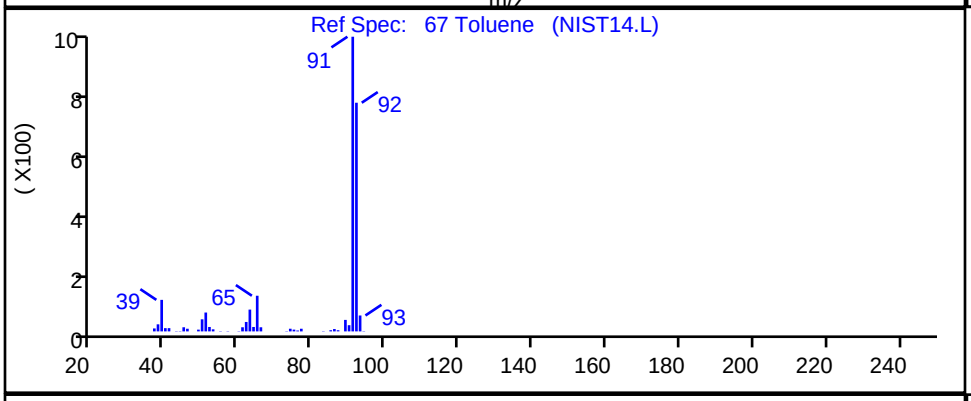
67 Toluene, CAS: 108-88-3

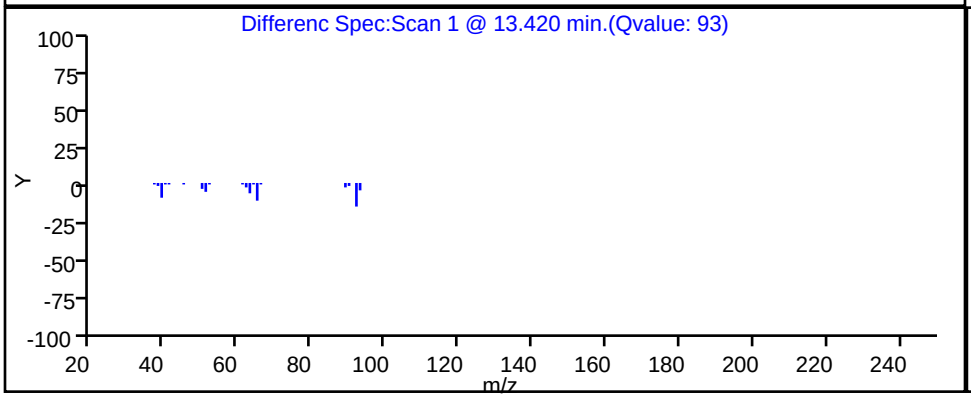


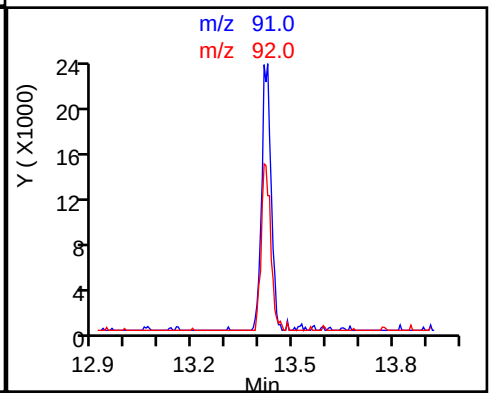








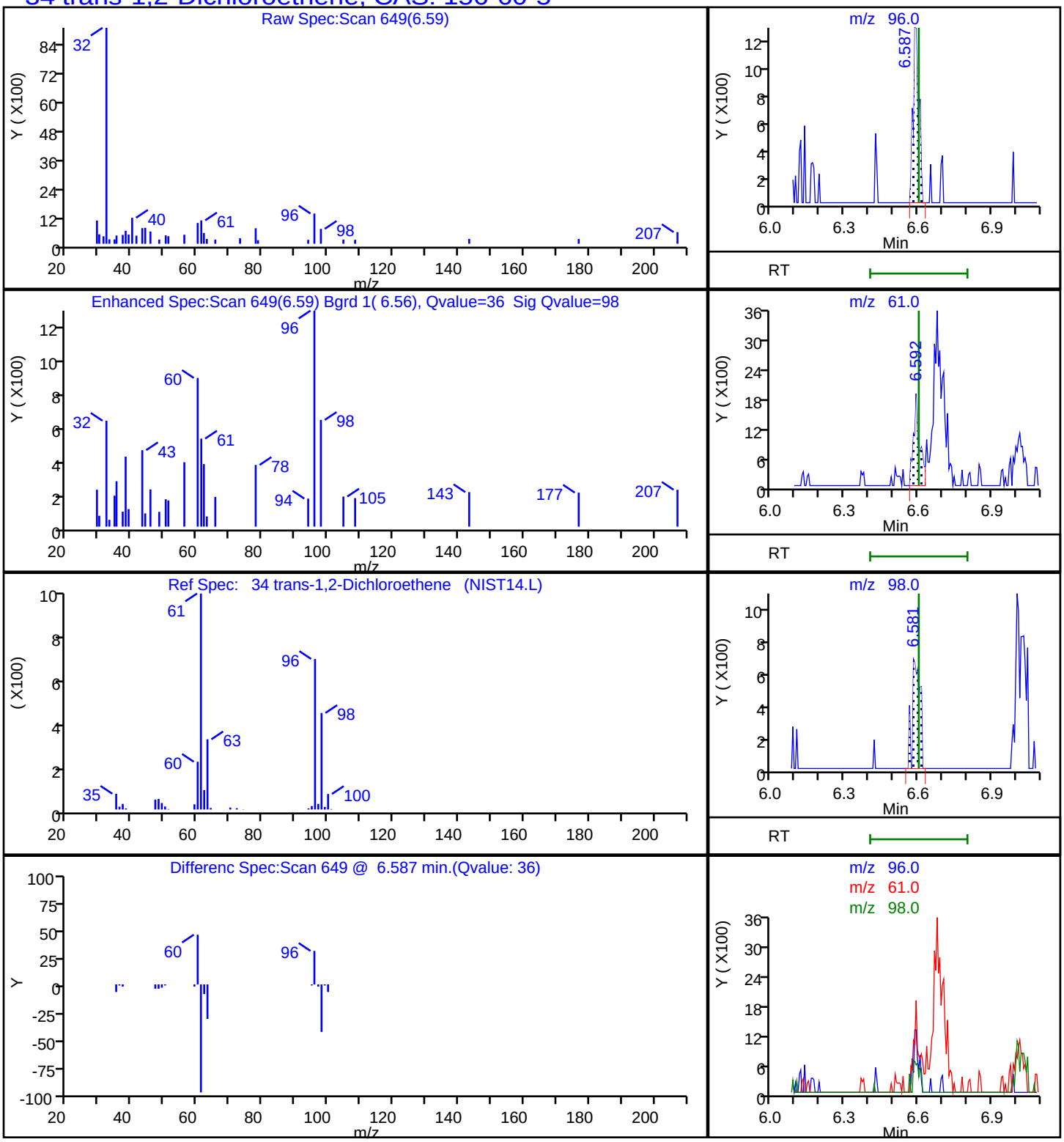




Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200415-15214.b\RD16P108.D		
Injection Date:	16-Apr-2020 18:53:30	Instrument ID:	MR
Lims ID:	140-18854-A-1	Lab Sample ID:	140-18854-1
Client ID:	BLDG A - EFFLUENT		
Operator ID:	HMT	ALS Bottle#:	8 Worklist Smp#: 14
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

34 trans-1,2-Dichloroethene, CAS: 156-60-5

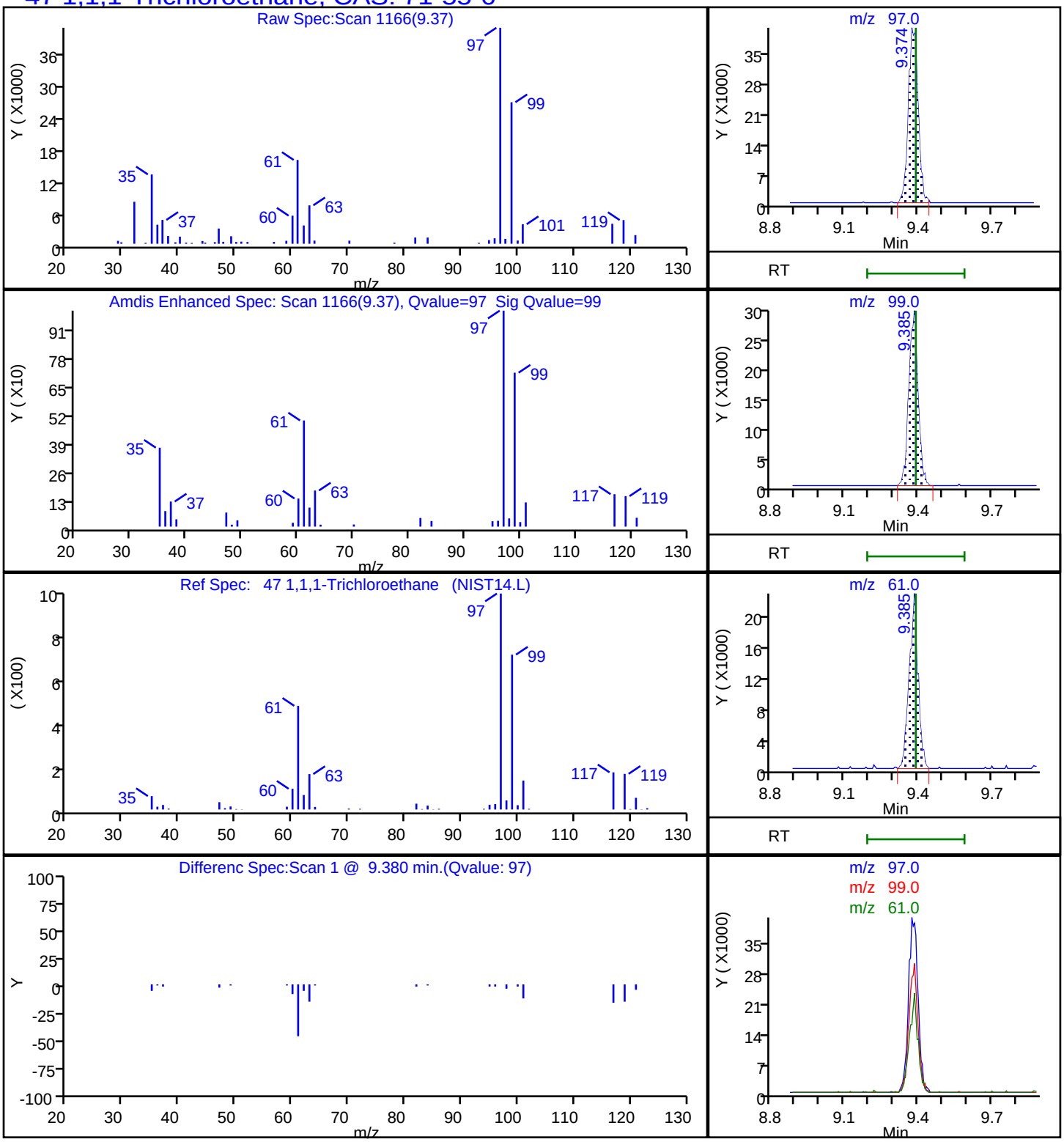


Report Date: 17-Apr-2020 12:01:17 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200415-15214.b\RD16P108.D				
Injection Date:	16-Apr-2020 18:53:30	Instrument ID:	MR		
Lims ID:	140-18854-A-1	Lab Sample ID:	140-18854-1		
Client ID:	BLDG A - EFFLUENT				
Operator ID:	HMT	ALS Bottle#:	8	Worklist Smp#:	14
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

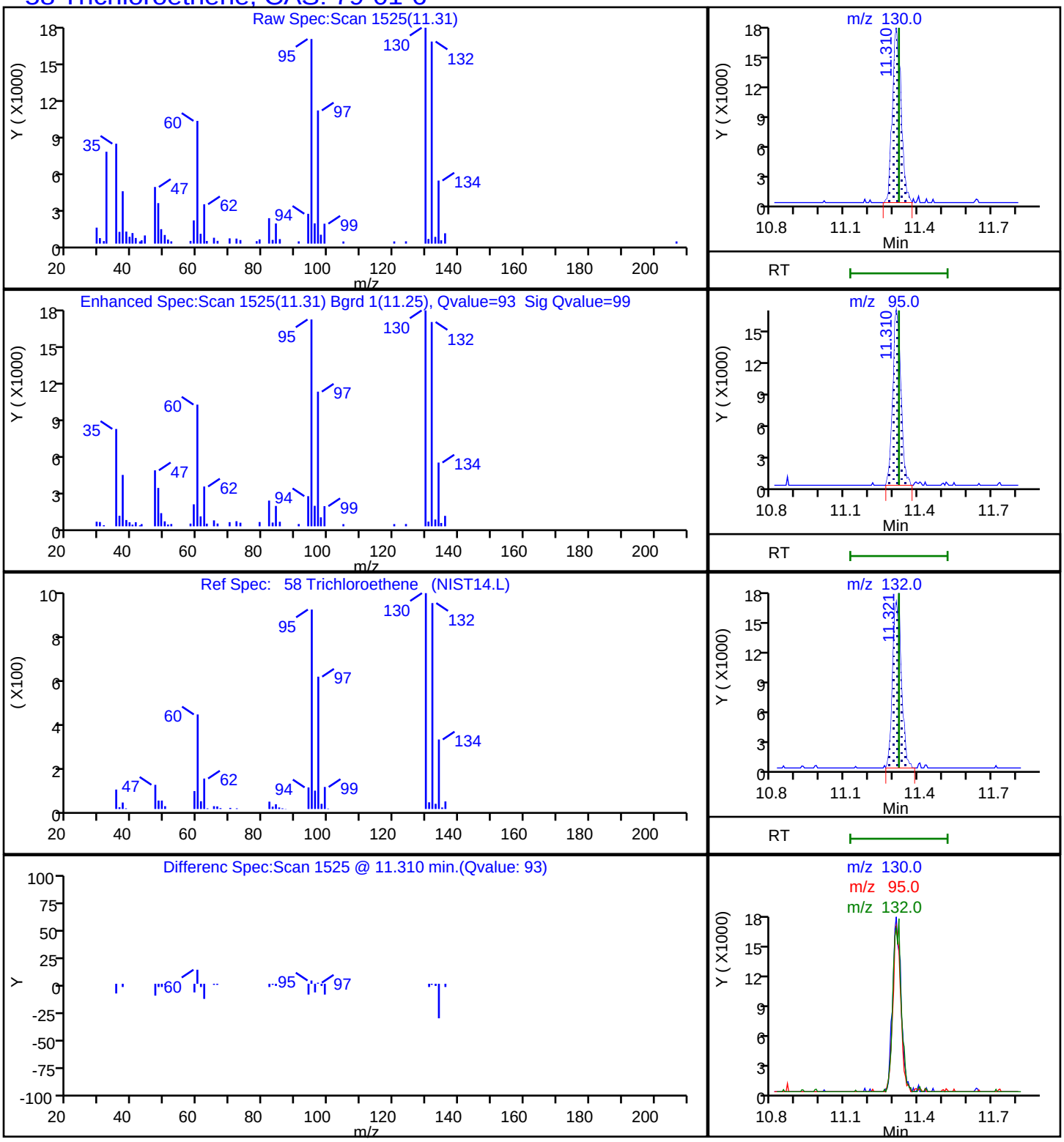
47 1,1,1-Trichloroethane, CAS: 71-55-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200415-15214.b\RD16P108.D		
Injection Date:	16-Apr-2020 18:53:30	Instrument ID:	MR
Lims ID:	140-18854-A-1	Lab Sample ID:	140-18854-1
Client ID:	BLDG A - EFFLUENT		
Operator ID:	HMT	ALS Bottle#:	8 Worklist Smp#: 14
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

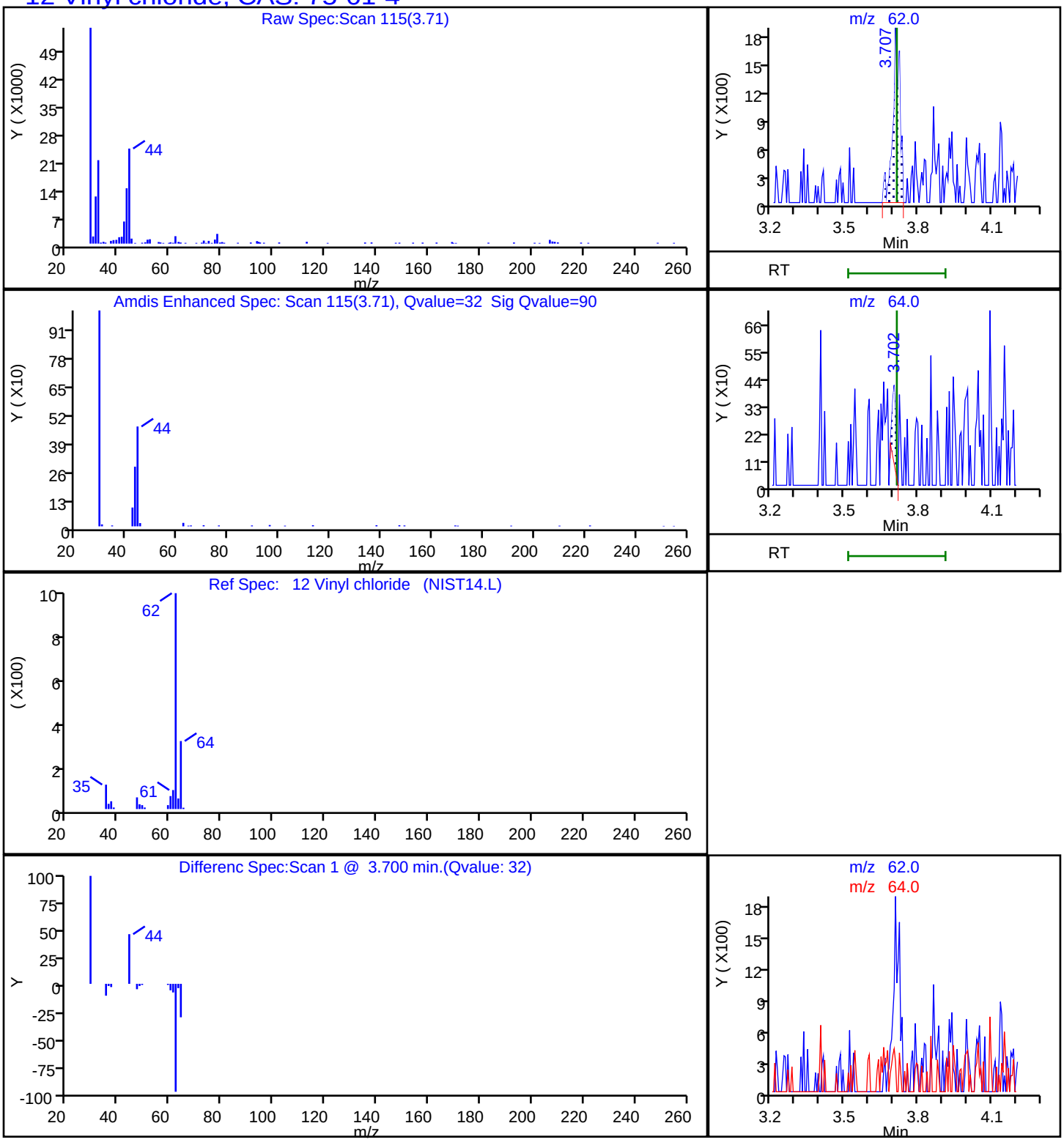
58 Trichloroethene, CAS: 79-01-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200415-15214.b\RD16P108.D		
Injection Date:	16-Apr-2020 18:53:30	Instrument ID:	MR
Lims ID:	140-18854-A-1	Lab Sample ID:	140-18854-1
Client ID:	BLDG A - EFFLUENT		
Operator ID:	HMT	ALS Bottle#:	8 Worklist Smp#: 14
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

12 Vinyl chloride, CAS: 75-01-4

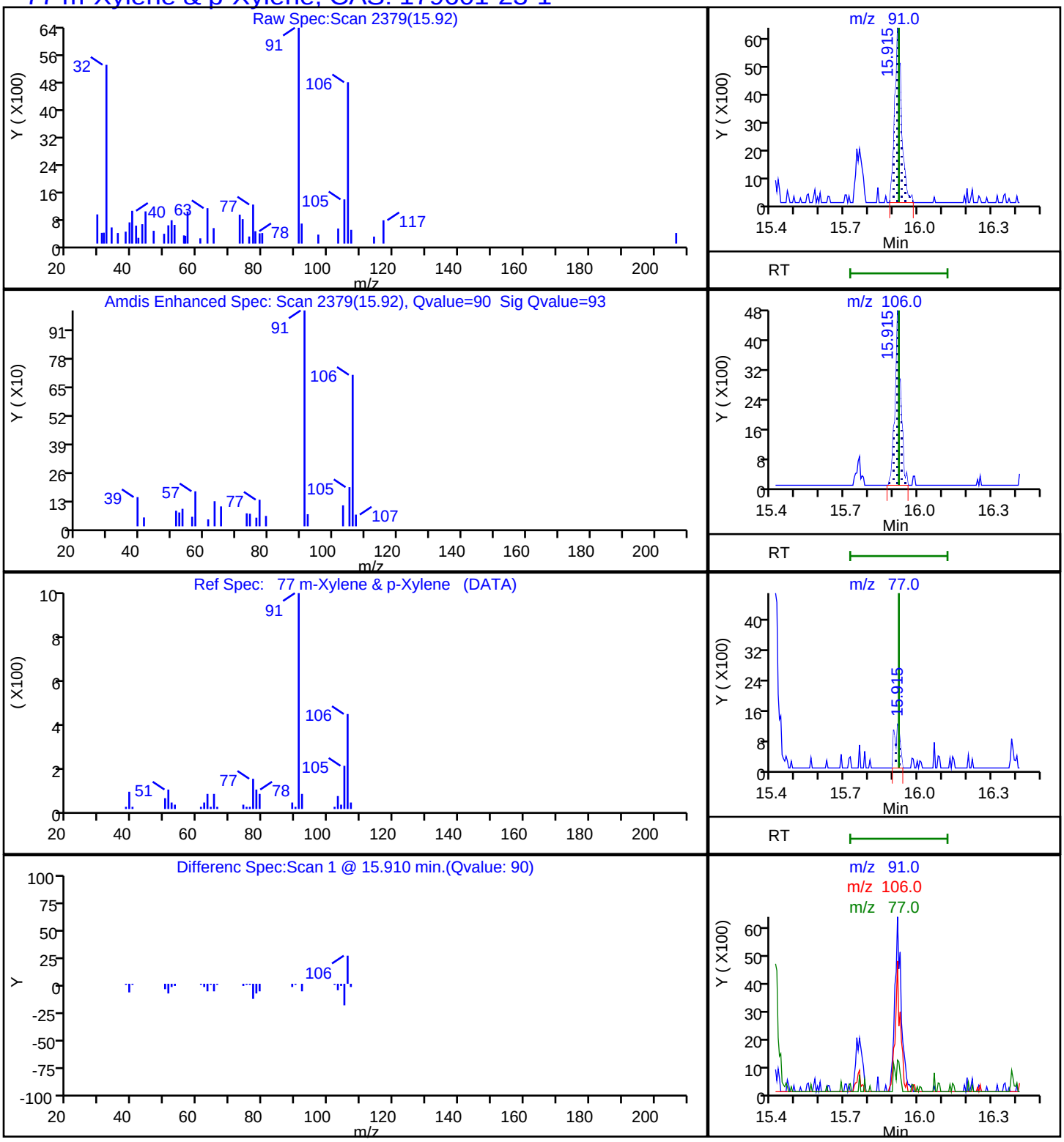


Report Date: 17-Apr-2020 12:01:18 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200415-15214.b\RD16P108.D				
Injection Date:	16-Apr-2020 18:53:30	Instrument ID:	MR		
Lims ID:	140-18854-A-1	Lab Sample ID:	140-18854-1		
Client ID:	BLDG A - EFFLUENT				
Operator ID:	HMT	ALS Bottle#:	8	Worklist Smp#:	14
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

77 m-Xylene & p-Xylene, CAS: 179601-23-1

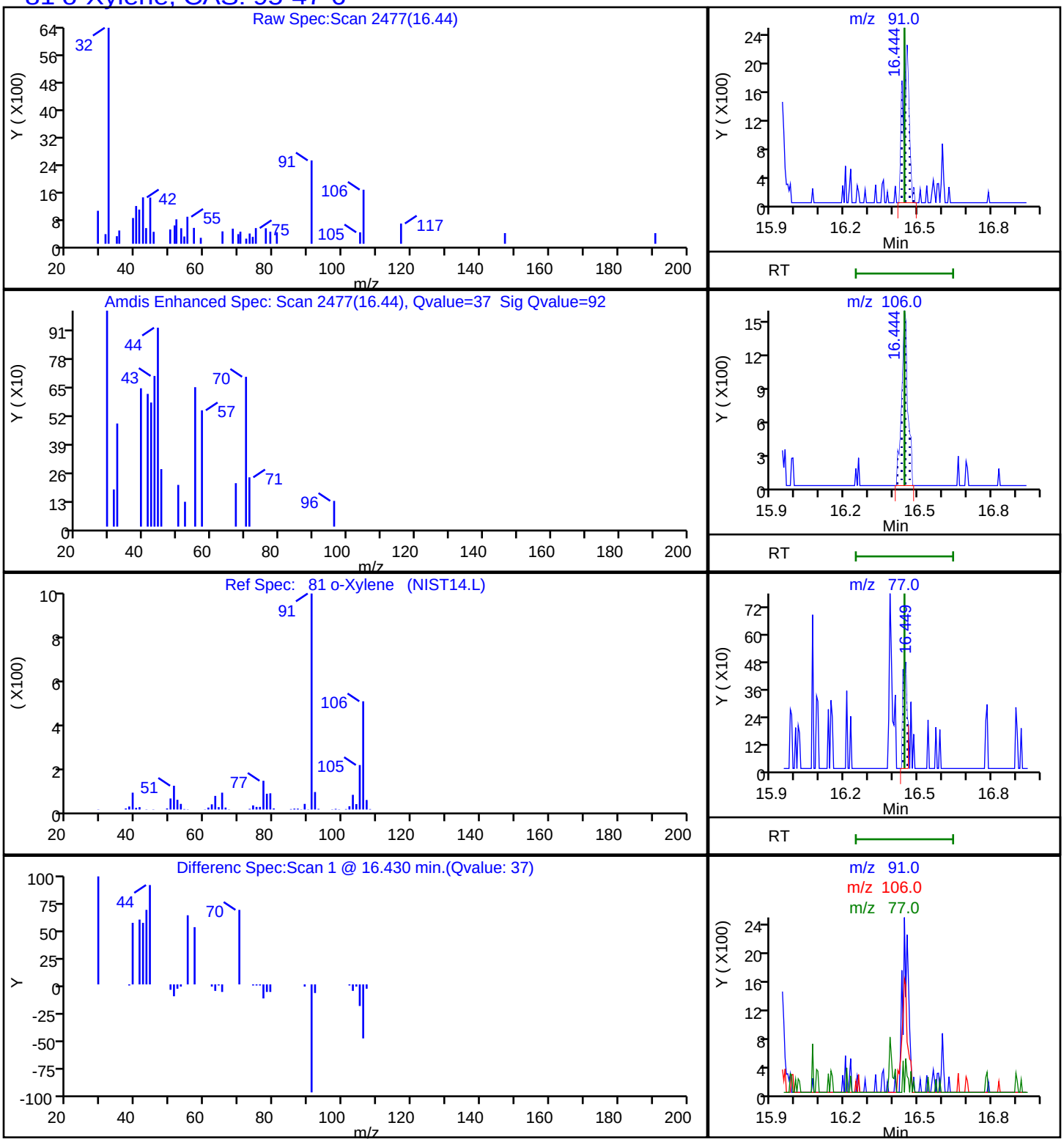


Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200415-15214.b\RD16P108.D

Injection Date:	16-Apr-2020 18:53:30	Instrument ID:	MR
Lims ID:	140-18854-A-1	Lab Sample ID:	140-18854-1
Client ID:	BLDG A - EFFLUENT		
Operator ID:	HMT	ALS Bottle#:	8 Worklist Smp#: 14
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

81 o-Xylene, CAS: 95-47-6



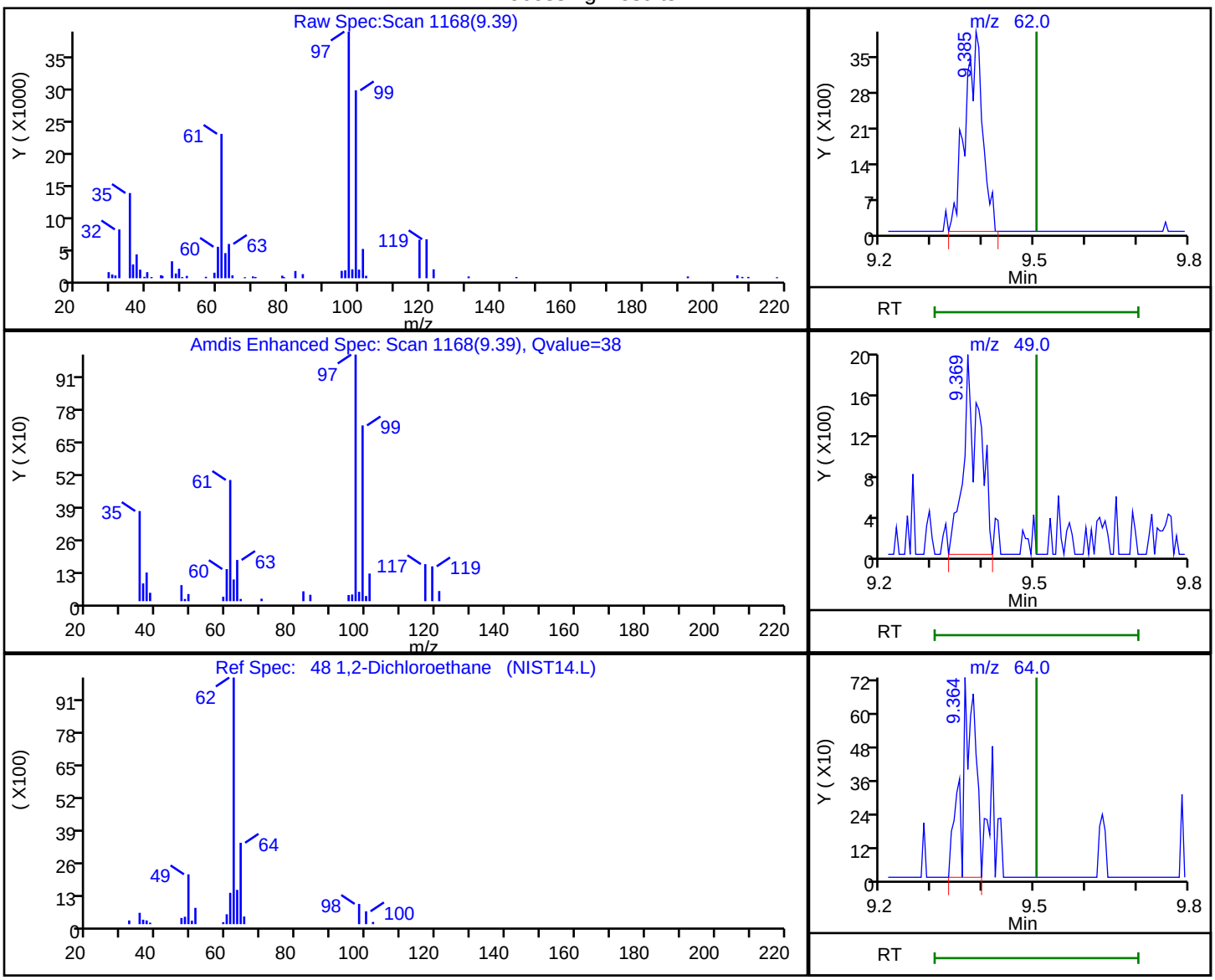
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200415-15214.b\RD16P108.D				
Injection Date:	16-Apr-2020 18:53:30	Instrument ID:	MR		
Lims ID:	140-18854-A-1	Lab Sample ID:	140-18854-1		
Client ID:	BLDG A - EFFLUENT				
Operator ID:	HMT	ALS Bottle#:	8	Worklist Smp#:	14
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

48 1,2-Dichloroethane, CAS: 107-06-2

Processing Results



RT	Mass	Response	Amount
9.39	62.00	9451	0.139810
9.37	49.00	4351	
9.36	64.00	1347	

Reviewer: khachitpongpanits, 17-Apr-2020 12:00:27

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

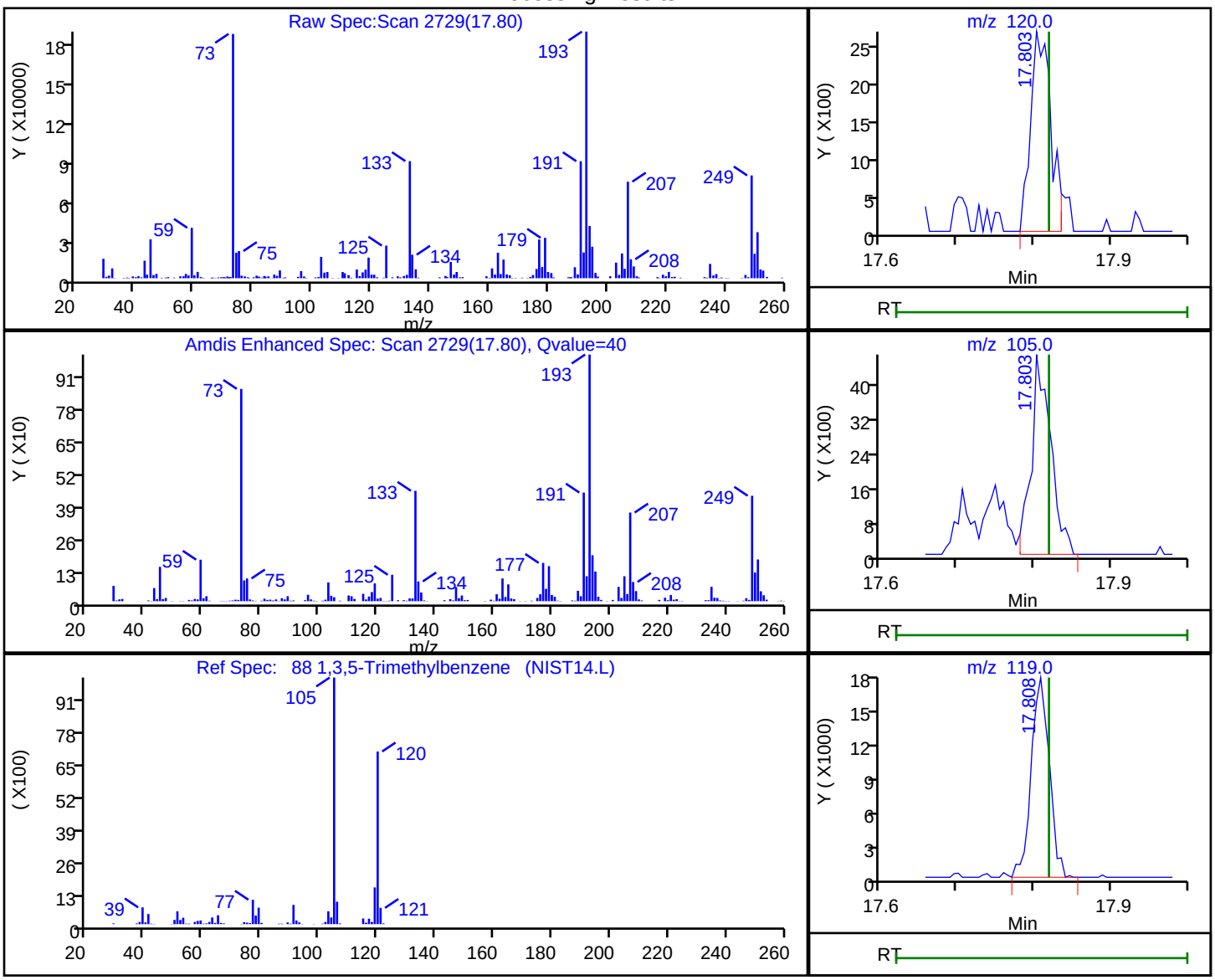
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200415-15214.b\RD16P108.D				
Injection Date:	16-Apr-2020 18:53:30	Instrument ID:	MR		
Lims ID:	140-18854-A-1	Lab Sample ID:	140-18854-1		
Client ID:	BLDG A - EFFLUENT				
Operator ID:	HMT	ALS Bottle#:	8	Worklist Smp#:	14
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

88 1,3,5-Trimethylbenzene, CAS: 108-67-8

Processing Results



RT	Mass	Response	Amount
17.80	120.00	4878	0.034444
17.80	105.00	8267	
17.81	119.00	28967	

Reviewer: khachitpongpanits, 17-Apr-2020 12:00:36

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-18854-1

SDG No.:

Client Sample ID: BLDG A - MID GAC Lab Sample ID: 140-18854-2

Matrix: Air Lab File ID: RD16P109.D

Analysis Method: TO 15 LL Date Collected: 04/14/2020 09:41

Sample wt/vol: 100(mL) Date Analyzed: 04/16/2020 19:40

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 39061 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.21	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	ND		0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	0.39	J	0.40	0.11
67-66-3	Chloroform	119.38	0.29	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	13		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.24	J	0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	3.0		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	21		0.40	0.040
100-41-4	Ethylbenzene	106.17	ND		0.40	0.065
75-09-2	Methylene Chloride	84.93	0.81	J	2.0	0.80
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.035
108-88-3	Toluene	92.14	ND		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	0.40		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	16		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	0.056	J	0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.28	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	87		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-18854-1

SDG No.:

Client Sample ID: BLDG A - MID GAC Lab Sample ID: 140-18854-2

Matrix: Air Lab File ID: RD16P109.D

Analysis Method: TO 15 LL Date Collected: 04/14/2020 09:41

Sample wt/vol: 100(mL) Date Analyzed: 04/16/2020 19:40

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 39061 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.66	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	ND		2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	1.4	J	1.4	0.39
67-66-3	Chloroform	119.38	1.4	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	52		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	1.2	J	2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	12		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	83		1.6	0.16
100-41-4	Ethylbenzene	106.17	ND		1.7	0.28
75-09-2	Methylene Chloride	84.93	2.8	J	6.9	2.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.24
108-88-3	Toluene	92.14	ND		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	1.6		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	86		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	0.30	J	1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	1.2	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	87		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MR\20200415-15214.b\RD16P109.D
Lims ID: 140-18854-A-2
Client ID: BLDG A - MID GAC
Sample Type: Client
Inject. Date: 16-Apr-2020 19:40:30 ALS Bottle#: 9 Worklist Smp#: 15
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0015214-015
Misc. Info.: 140-18854-a-2
Operator ID: HMT Instrument ID: MR

Method: \\chromfs\Knoxville\ChromData\MR\20200415-15214.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 17-Apr-2020 12:56:20 Calib Date: 10-Apr-2020 00:47:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MR\20200409-15180.b\RD09IC10.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1010

First Level Reviewer: khachitpongpanits Date: 17-Apr-2020 12:03:20

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.334	8.350	-0.016	96	139049	4.00	
* 2 1,4-Difluorobenzene	114	10.577	10.582	-0.005	94	959244	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.414	15.414	0.000	88	765501	4.00	
$ 4 4-Bromofluorobenzene (Surr	95	17.064	17.070	0.000	92	396085	3.49	
6 Chlorodifluoromethane	51	3.324	3.324	-0.006	38	7616	0.0779	M
8 Dichlorodifluoromethane	85	3.389	3.385	0.000	64	3559	0.0486	
27 1,1-Dichloroethene	96	5.443	5.442	-0.006	96	274414	4.19	
31 Methylene Chloride	84	5.794	5.788	-0.005	96	36318	0.1615	
34 trans-1,2-Dichloroethene	96	6.592	6.594	-0.011	50	4700	0.0791	
37 1,1-Dichloroethane	63	7.023	7.014	0.000	98	60707	0.5962	
42 cis-1,2-Dichloroethene	96	8.005	8.000	-0.011	93	160127	2.60	
44 Chloroform	83	8.350	8.339	-0.005	29	7228	0.0585	
47 1,1,1-Trichloroethane	97	9.380	9.384	-0.011	96	373500	3.15	
51 Benzene	78	10.000	10.000	0.000	85	7383	0.0411	
58 Trichloroethene	130	11.289	11.321	-0.032	1	1018	0.0112	
67 Toluene	91	13.413	13.423	-0.006	94	11510	0.0568	
77 m-Xylene & p-Xylene	91	15.915	15.926	-0.006	95	7839	0.0373	
81 o-Xylene	91	16.454	16.450	0.010	32	3798	0.0179	
S 117 Xylenes, Total	100				0		0.0552	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

40MXISSURP_00004 Amount Added: 40.00 Units: mL Run Reagent

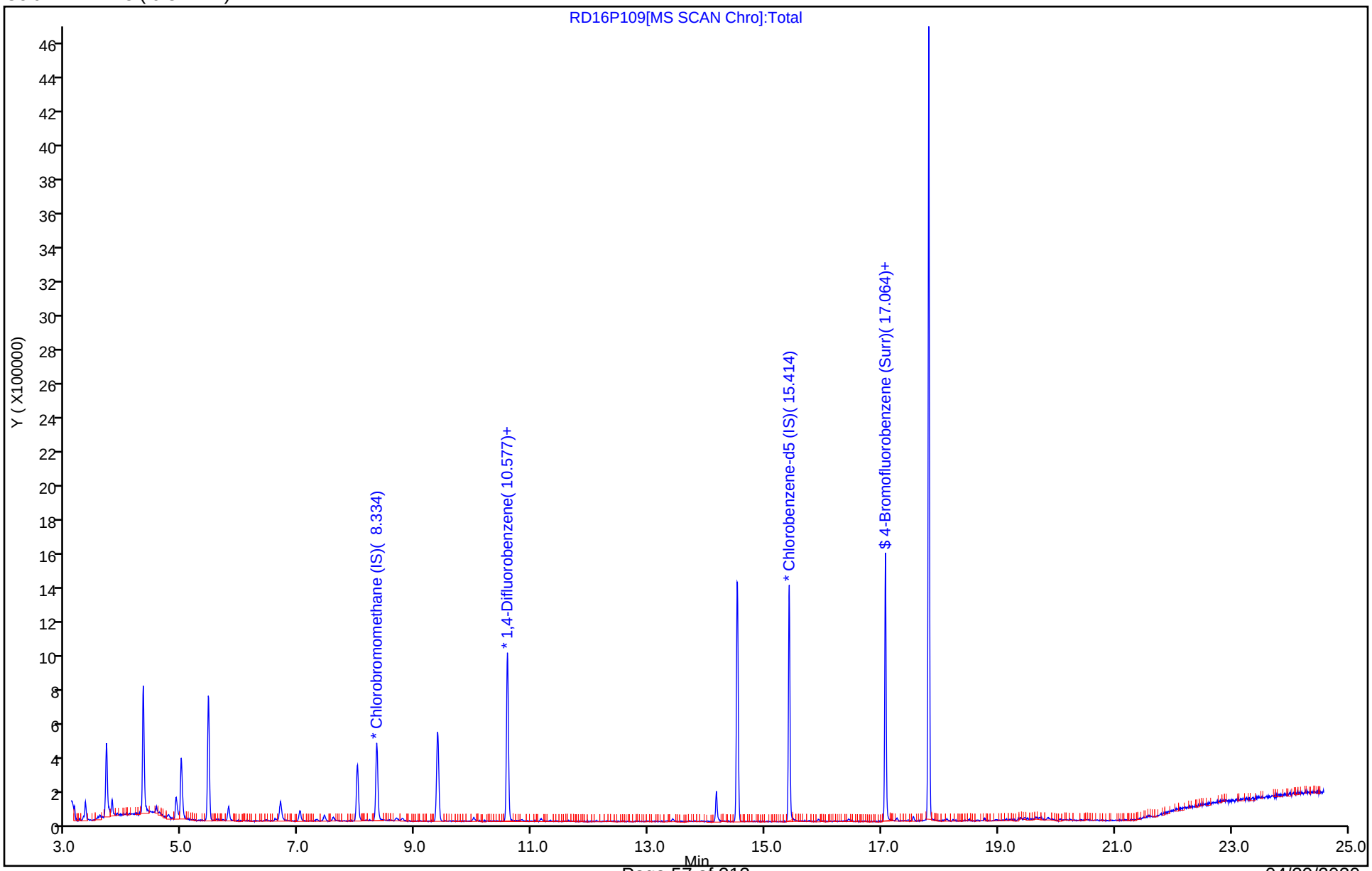
Report Date: 17-Apr-2020 12:56:21 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200415-15214.b\RD16P109.D

Injection Date:	16-Apr-2020 19:40:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	140-18854-A-2	Lab Sample ID:	140-18854-2	Worklist Smp#:	15
Client ID:	BLDG A - MID GAC				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MR\20200415-15214.b\RD16P109.D				
Lims ID:	140-18854-A-2				
Client ID:	BLDG A - MID GAC				
Sample Type:	Client				
Inject. Date:	16-Apr-2020 19:40:30	ALS Bottle#:	9	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0015214-015				
Misc. Info.:	140-18854-a-2				
Operator ID:	HMT	Instrument ID:	MR		
Method:	\\chromfs\Knoxville\ChromData\MR\20200415-15214.b\MR_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	17-Apr-2020 12:56:20	Calib Date:	10-Apr-2020 00:47:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MR\20200409-15180.b\RD09IC10.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1010				
First Level Reviewer: khachitpongpanits		Date:	17-Apr-2020 12:03:20		

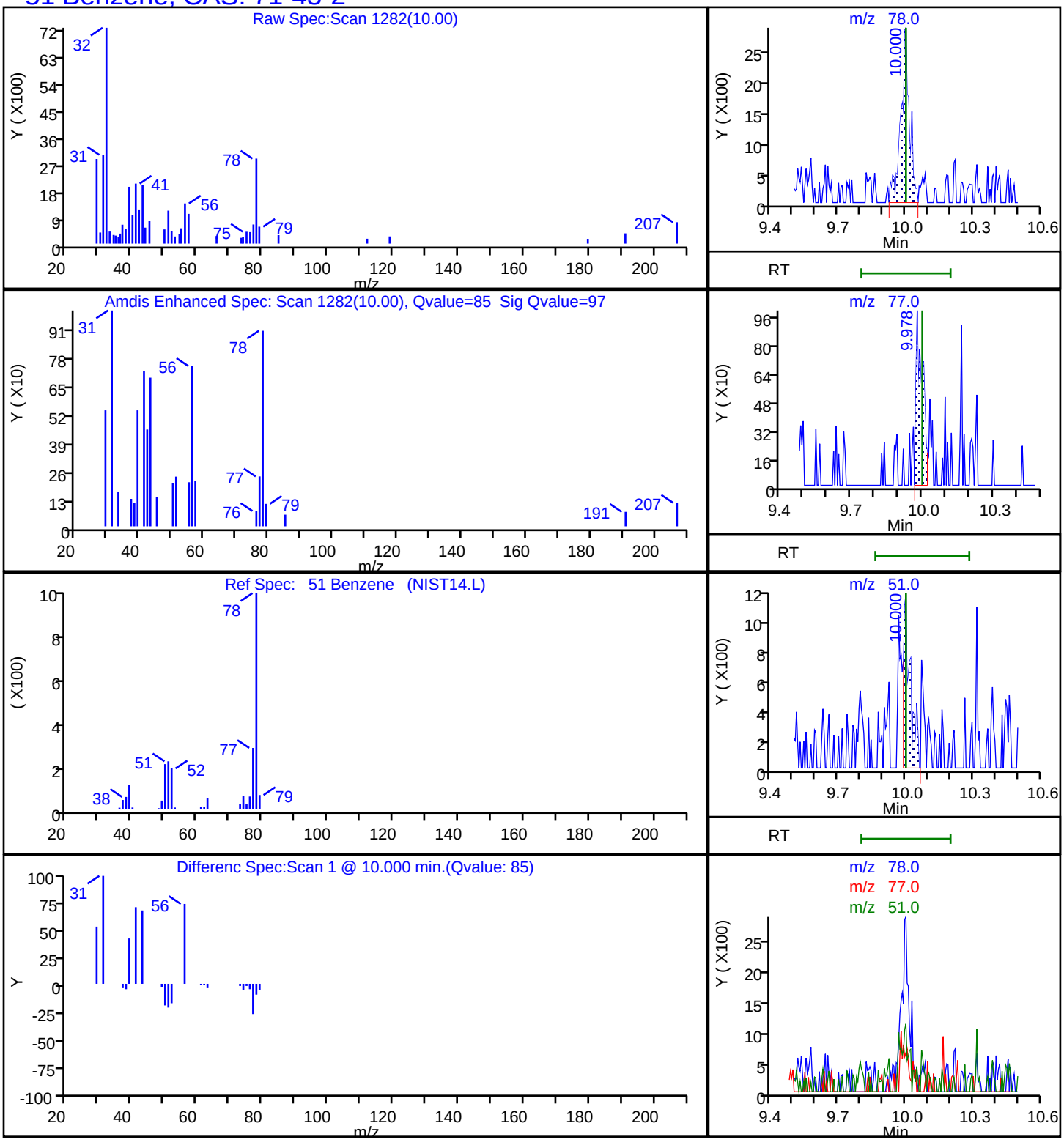
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.00	3.49	87.26

Report Date: 17-Apr-2020 12:56:21 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200415-15214.b\RD16P109.D				
Injection Date:	16-Apr-2020 19:40:30	Instrument ID:	MR		
Lims ID:	140-18854-A-2	Lab Sample ID:	140-18854-2		
Client ID:	BLDG A - MID GAC				
Operator ID:	HMT	ALS Bottle#:	9	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

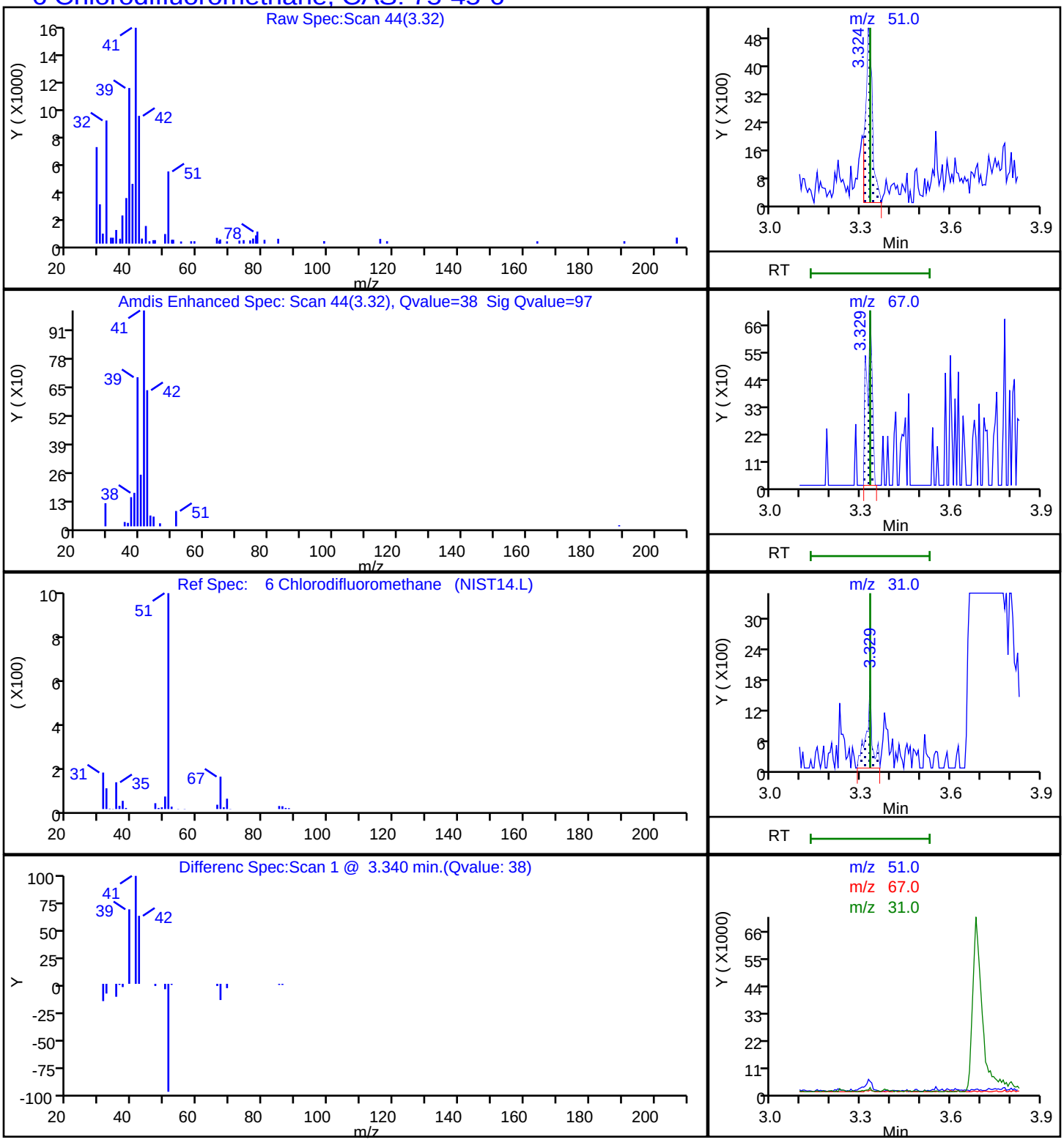
51 Benzene, CAS: 71-43-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200415-15214.b\RD16P109.D		
Injection Date:	16-Apr-2020 19:40:30	Instrument ID:	MR
Lims ID:	140-18854-A-2	Lab Sample ID:	140-18854-2
Client ID:	BLDG A - MID GAC		
Operator ID:	HMT	ALS Bottle#:	9 Worklist Smp#: 15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

6 Chlorodifluoromethane, CAS: 75-45-6

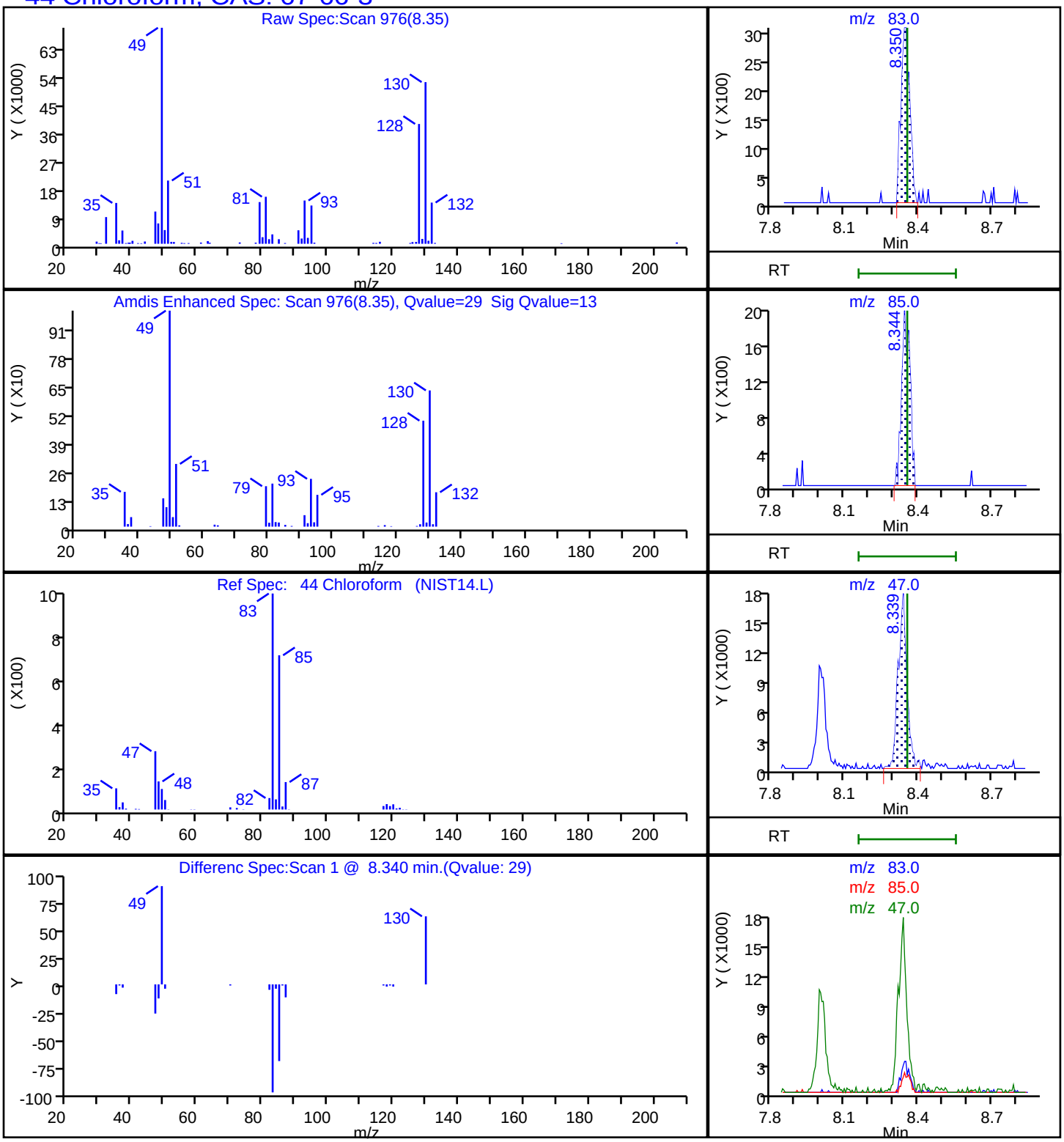


Report Date: 17-Apr-2020 12:56:21 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200415-15214.b\RD16P109.D		
Injection Date:	16-Apr-2020 19:40:30	Instrument ID:	MR
Lims ID:	140-18854-A-2	Lab Sample ID:	140-18854-2
Client ID:	BLDG A - MID GAC		
Operator ID:	HMT	ALS Bottle#:	9 Worklist Smp#: 15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

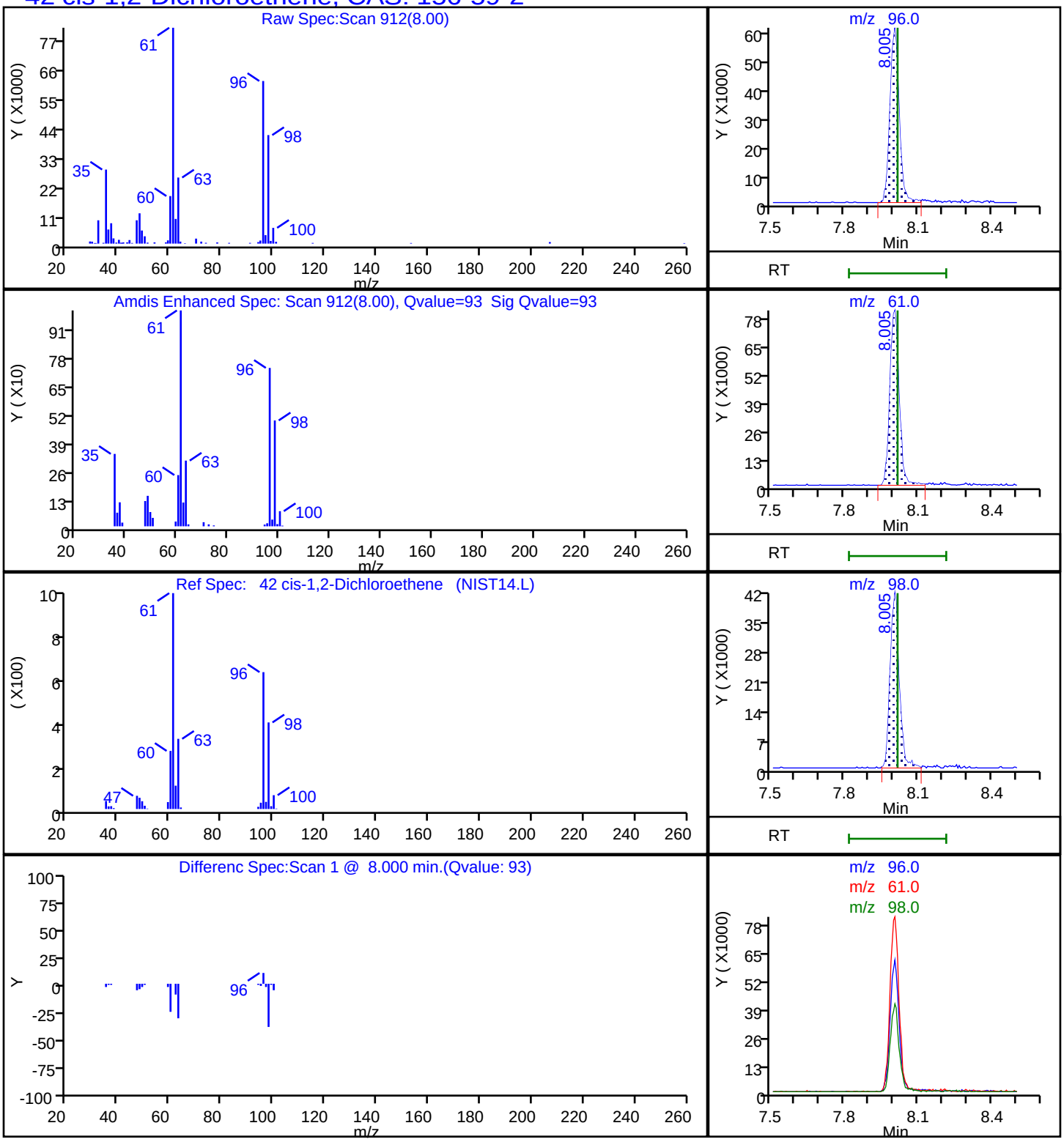
44 Chloroform, CAS: 67-66-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200415-15214.b\RD16P109.D		
Injection Date:	16-Apr-2020 19:40:30	Instrument ID:	MR
Lims ID:	140-18854-A-2	Lab Sample ID:	140-18854-2
Client ID:	BLDG A - MID GAC		
Operator ID:	HMT	ALS Bottle#:	9 Worklist Smp#: 15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

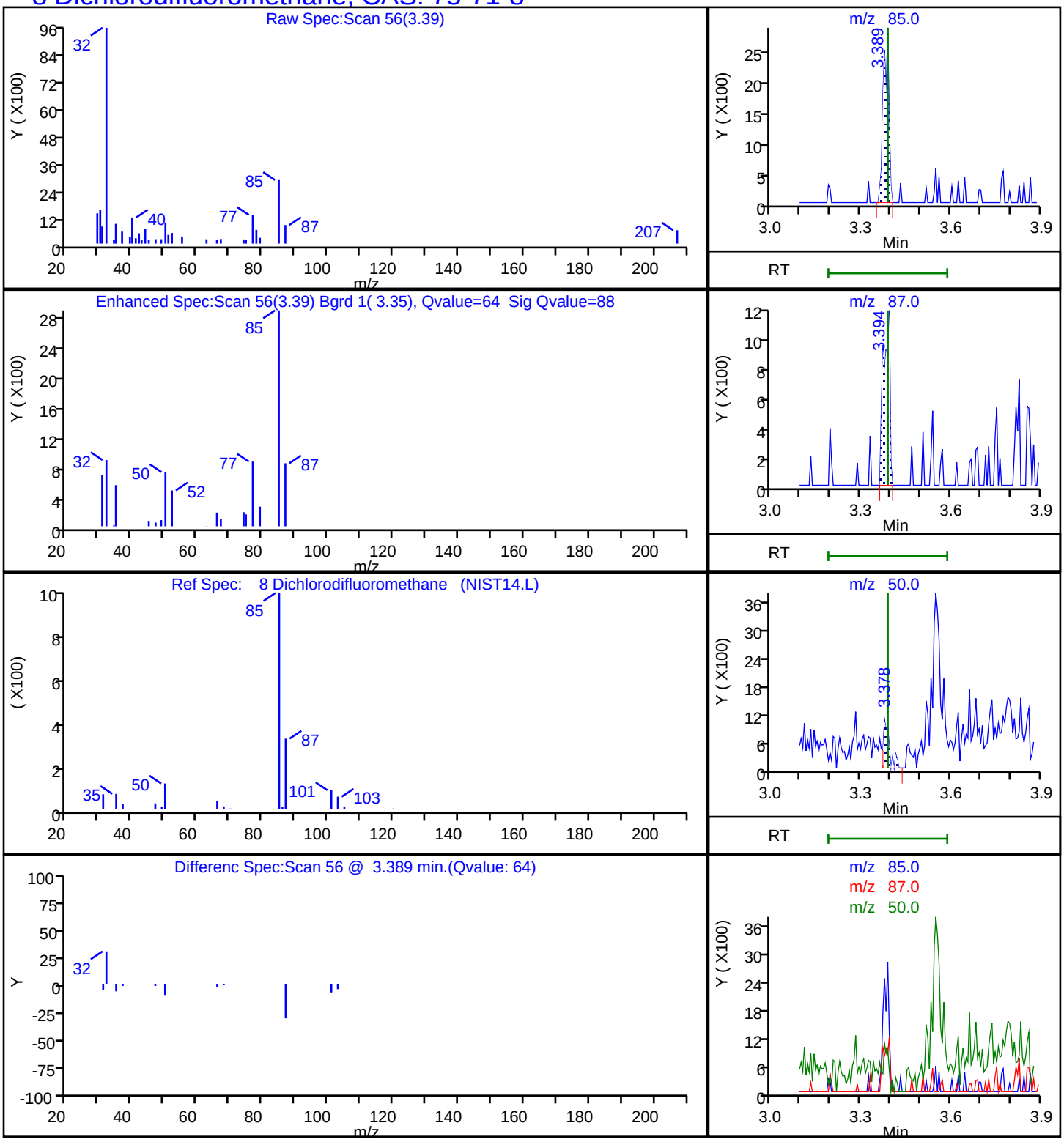
42 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200415-15214.b\RD16P109.D		
Injection Date:	16-Apr-2020 19:40:30	Instrument ID:	MR
Lims ID:	140-18854-A-2	Lab Sample ID:	140-18854-2
Client ID:	BLDG A - MID GAC		
Operator ID:	HMT	ALS Bottle#:	9 Worklist Smp#: 15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

8 Dichlorodifluoromethane, CAS: 75-71-8

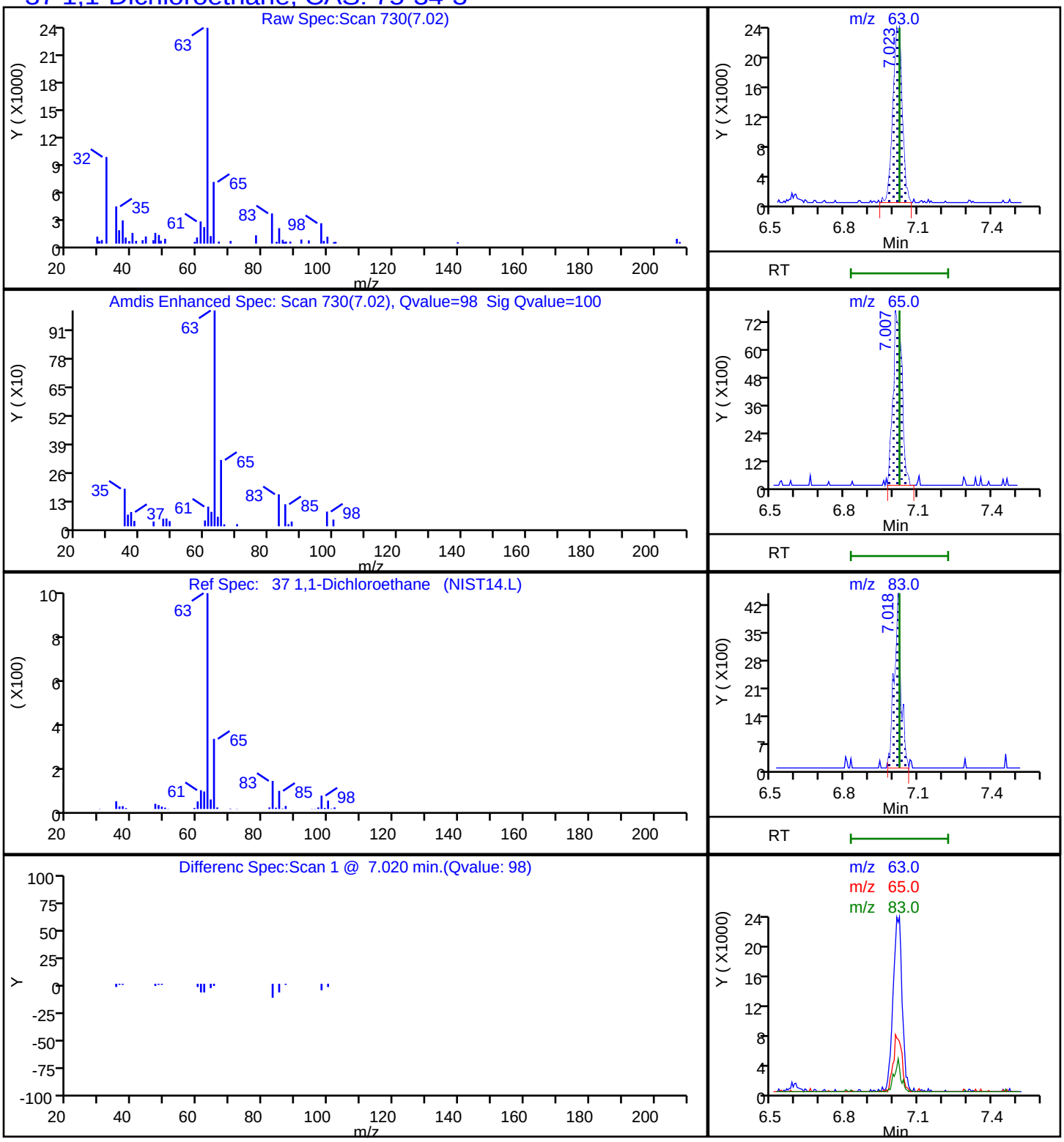


Report Date: 17-Apr-2020 12:56:21 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200415-15214.b\RD16P109.D		
Injection Date:	16-Apr-2020 19:40:30	Instrument ID:	MR
Lims ID:	140-18854-A-2	Lab Sample ID:	140-18854-2
Client ID:	BLDG A - MID GAC		
Operator ID:	HMT	ALS Bottle#:	9 Worklist Smp#: 15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

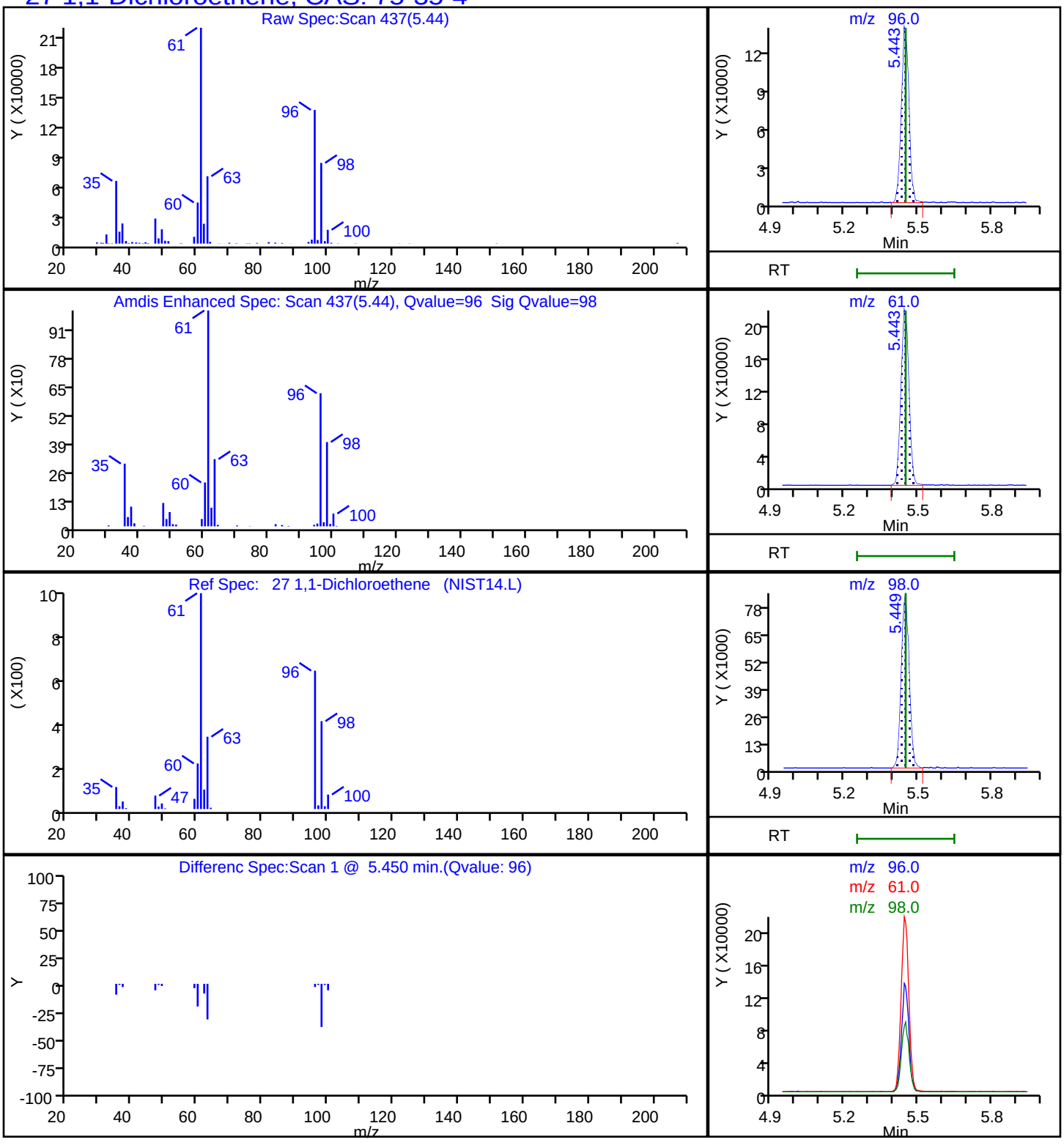
37 1,1-Dichloroethane, CAS: 75-34-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200415-15214.b\RD16P109.D		
Injection Date:	16-Apr-2020 19:40:30	Instrument ID:	MR
Lims ID:	140-18854-A-2	Lab Sample ID:	140-18854-2
Client ID:	BLDG A - MID GAC		
Operator ID:	HMT	ALS Bottle#:	9 Worklist Smp#: 15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

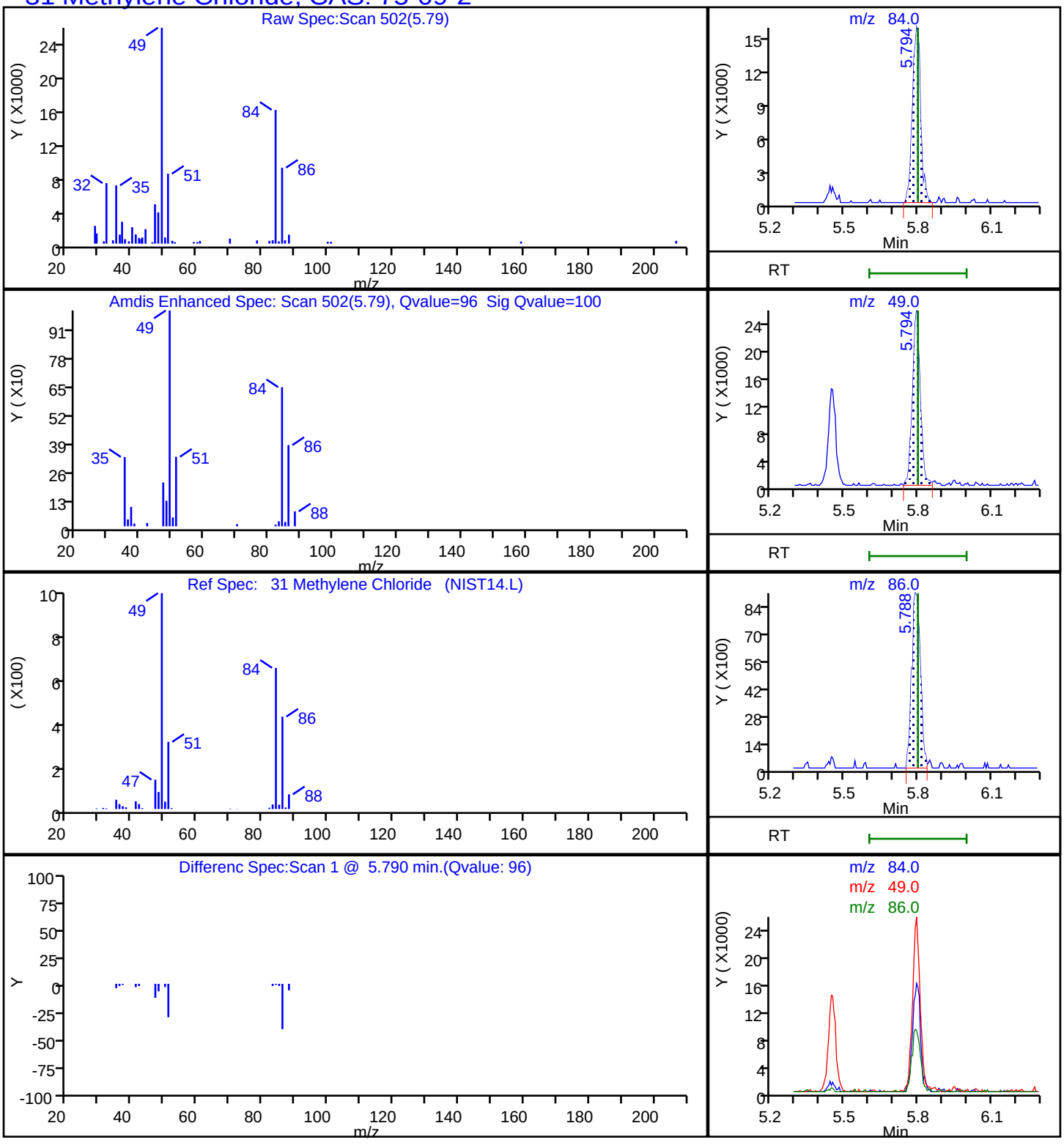
27 1,1-Dichloroethene, CAS: 75-35-4



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200415-15214.b\RD16P109.D		
Injection Date:	16-Apr-2020 19:40:30	Instrument ID:	MR
Lims ID:	140-18854-A-2	Lab Sample ID:	140-18854-2
Client ID:	BLDG A - MID GAC		
Operator ID:	HMT	ALS Bottle#:	9 Worklist Smp#: 15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

31 Methylene Chloride, CAS: 75-09-2

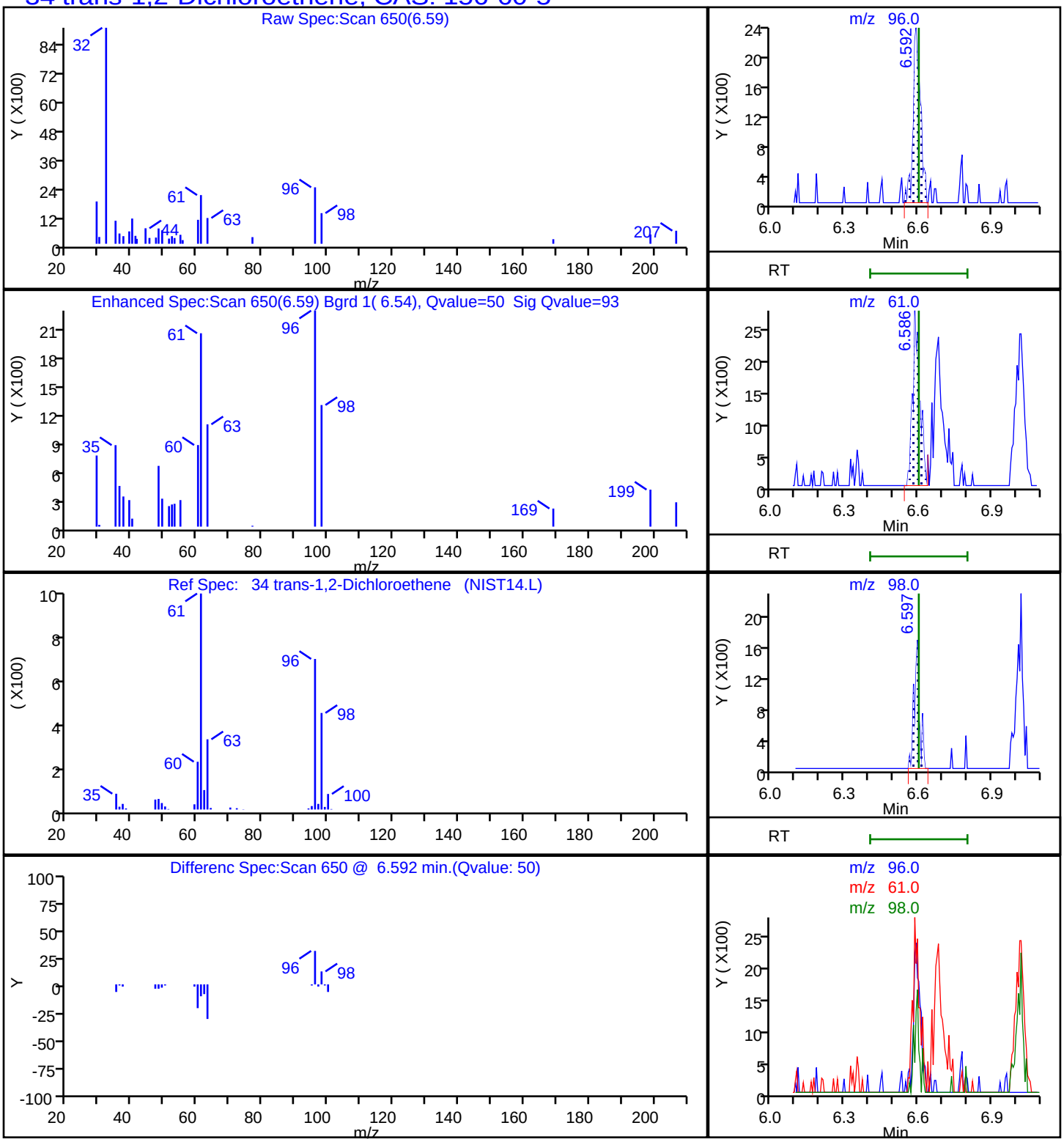


Report Date: 17-Apr-2020 12:56:21 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200415-15214.b\RD16P109.D				
Injection Date:	16-Apr-2020 19:40:30	Instrument ID:	MR		
Lims ID:	140-18854-A-2	Lab Sample ID:	140-18854-2		
Client ID:	BLDG A - MID GAC				
Operator ID:	HMT	ALS Bottle#:	9	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

34 trans-1,2-Dichloroethene, CAS: 156-60-5

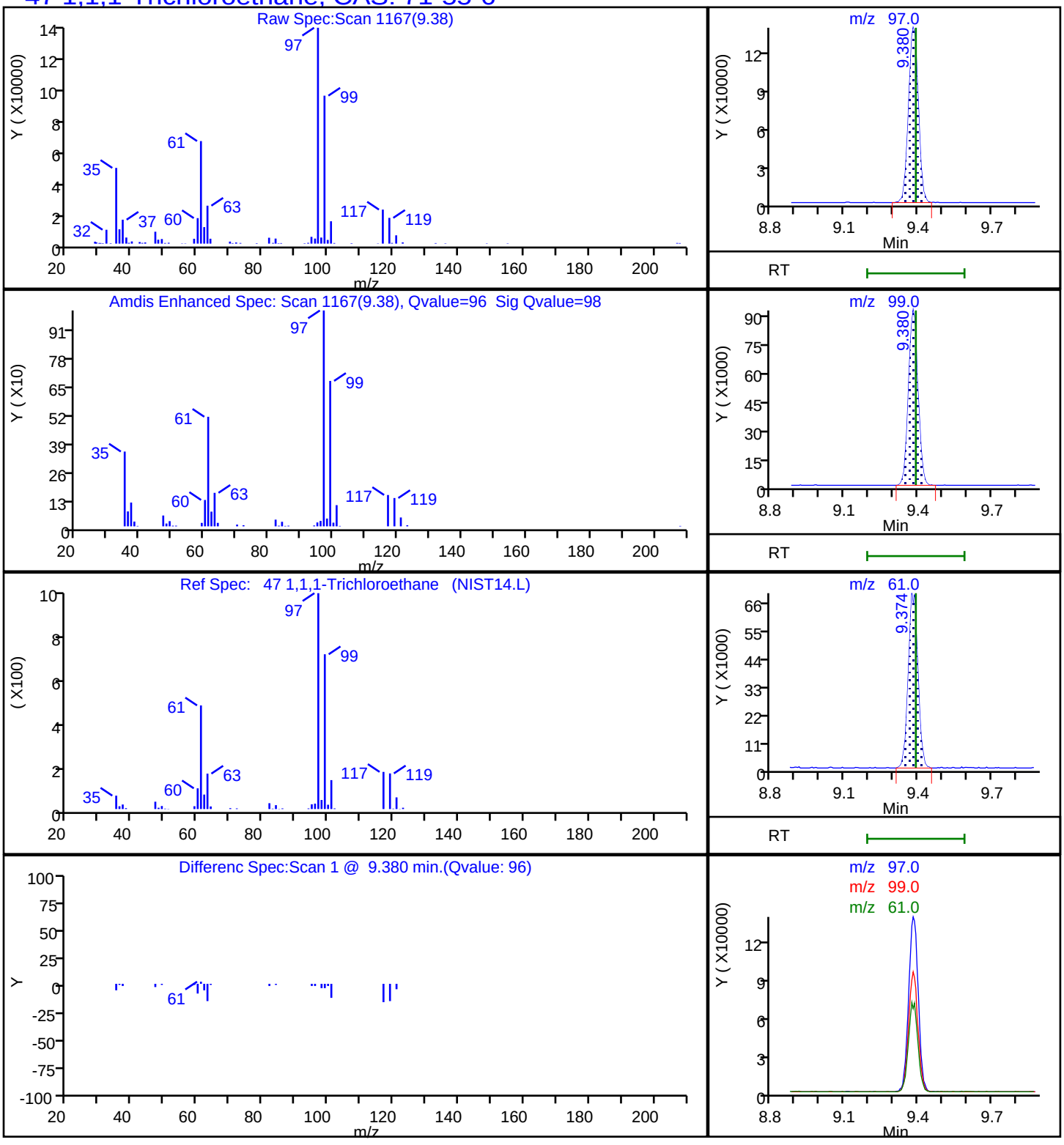


Report Date: 17-Apr-2020 12:56:21 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200415-15214.b\RD16P109.D				
Injection Date:	16-Apr-2020 19:40:30	Instrument ID:	MR		
Lims ID:	140-18854-A-2	Lab Sample ID:	140-18854-2		
Client ID:	BLDG A - MID GAC				
Operator ID:	HMT	ALS Bottle#:	9	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

47 1,1,1-Trichloroethane, CAS: 71-55-6



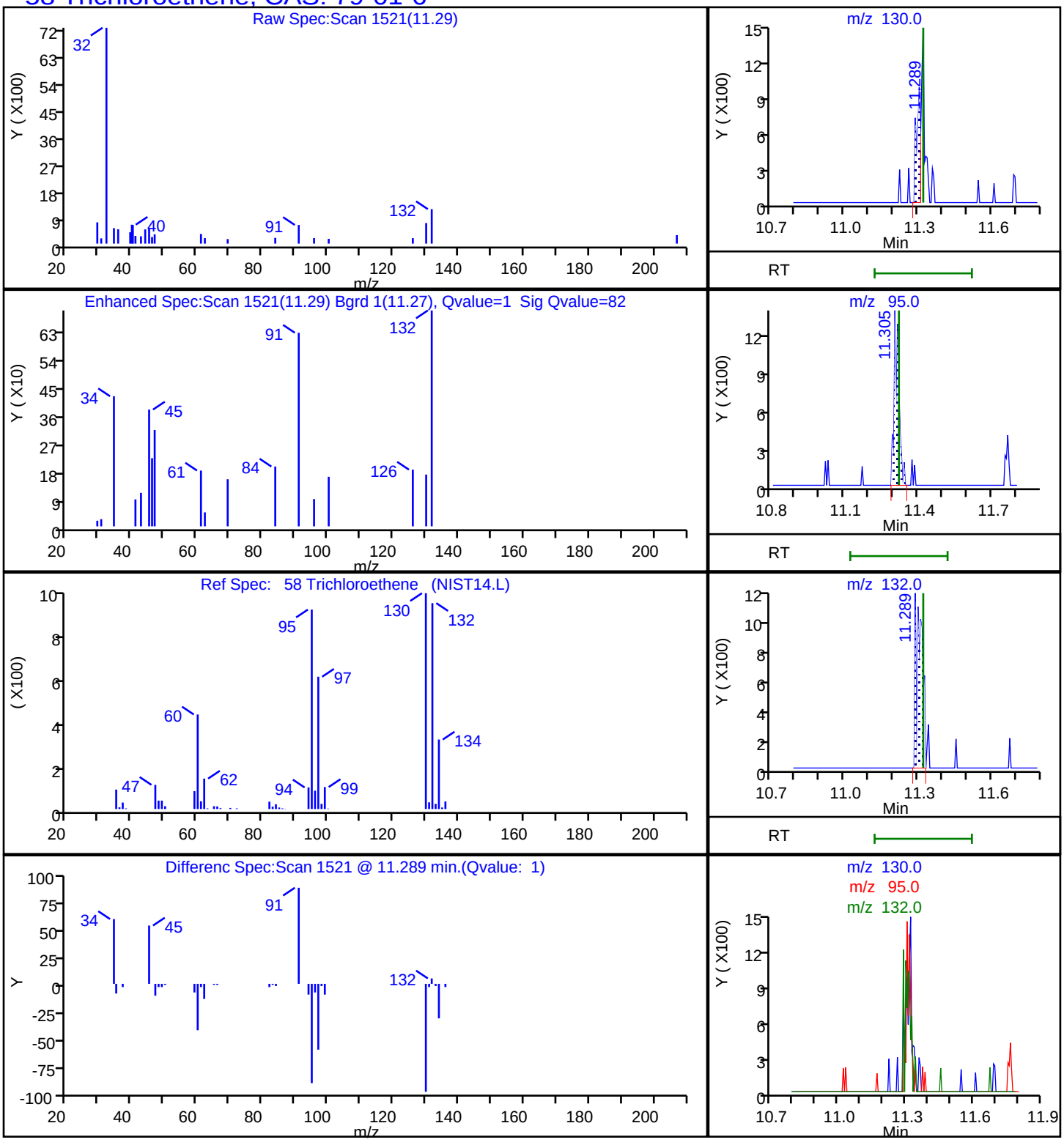
Report Date: 17-Apr-2020 12:56:21 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200415-15214.b\RD16P109.D

Injection Date:	16-Apr-2020 19:40:30	Instrument ID:	MR
Lims ID:	140-18854-A-2	Lab Sample ID:	140-18854-2
Client ID:	BLDG A - MID GAC		
Operator ID:	HMT	ALS Bottle#:	9 Worklist Smp#: 15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

58 Trichloroethene, CAS: 79-01-6

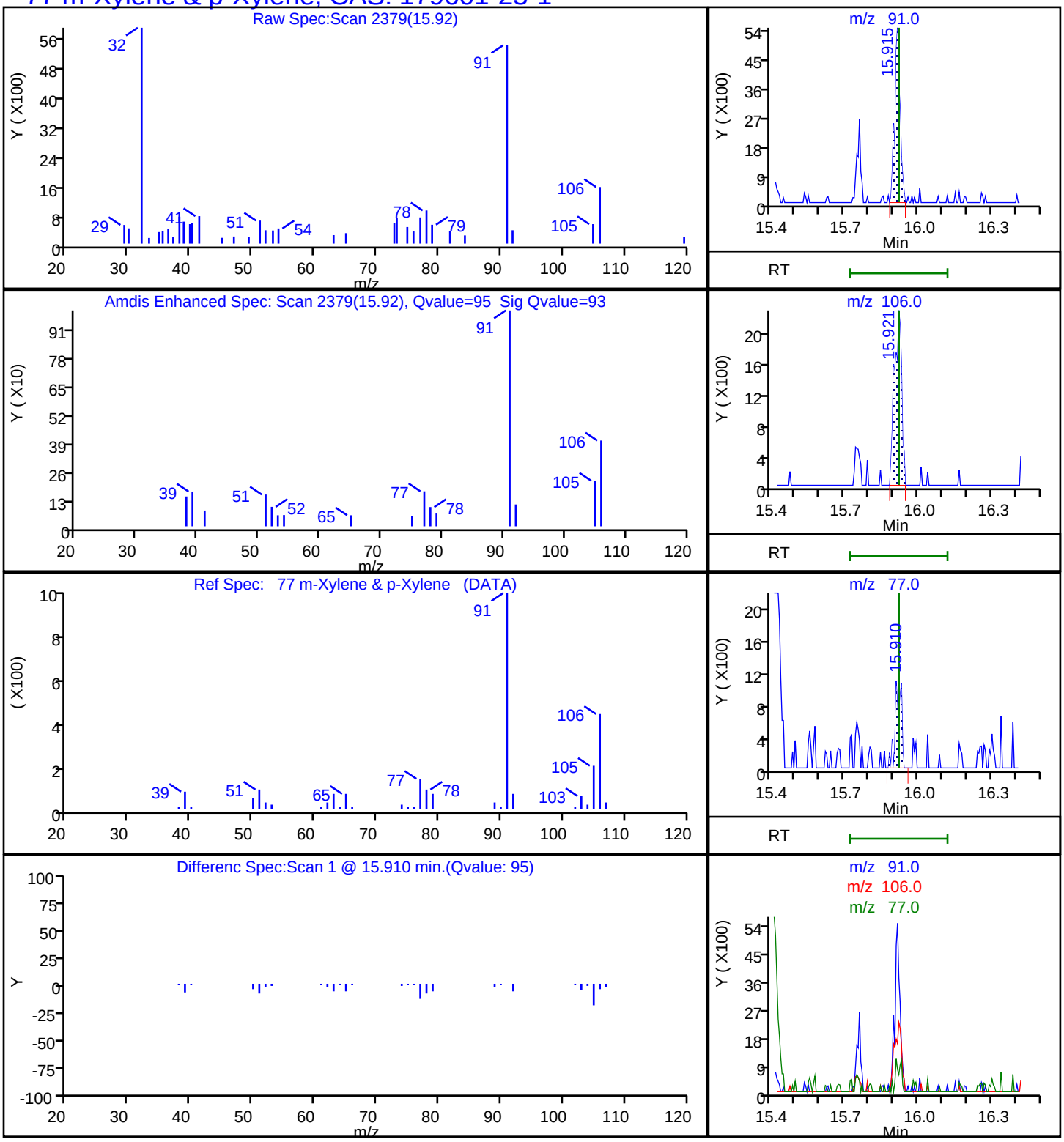


Report Date: 17-Apr-2020 12:56:21 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200415-15214.b\RD16P109.D				
Injection Date:	16-Apr-2020 19:40:30	Instrument ID:	MR		
Lims ID:	140-18854-A-2	Lab Sample ID:	140-18854-2		
Client ID:	BLDG A - MID GAC				
Operator ID:	HMT	ALS Bottle#:	9	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

77 m-Xylene & p-Xylene, CAS: 179601-23-1

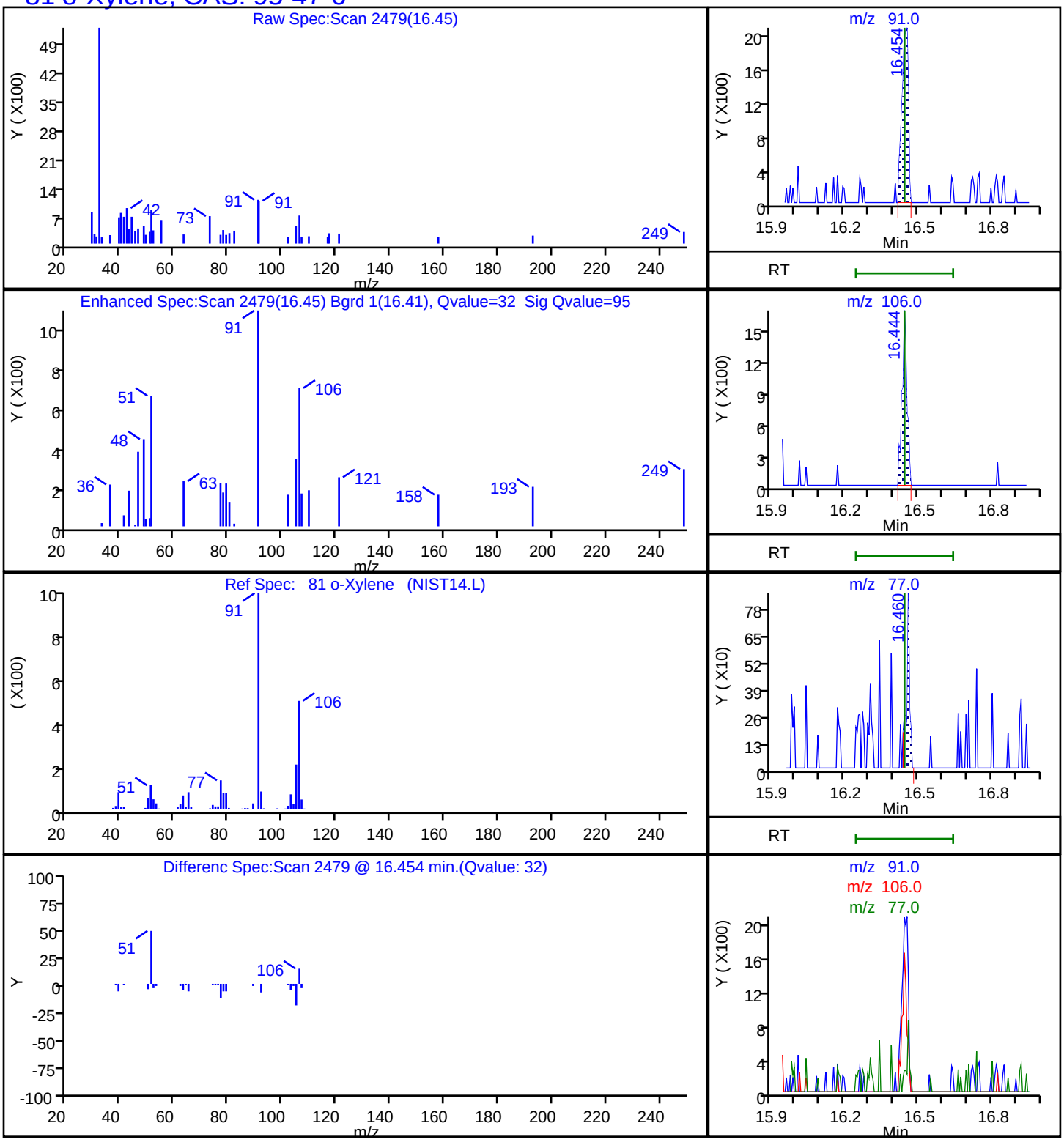


Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200415-15214.b\RD16P109.D

Injection Date:	16-Apr-2020 19:40:30	Instrument ID:	MR		
Lims ID:	140-18854-A-2	Lab Sample ID:	140-18854-2		
Client ID:	BLDG A - MID GAC				
Operator ID:	HMT	ALS Bottle#:	9	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

81 o-Xylene, CAS: 95-47-6



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Knoxville

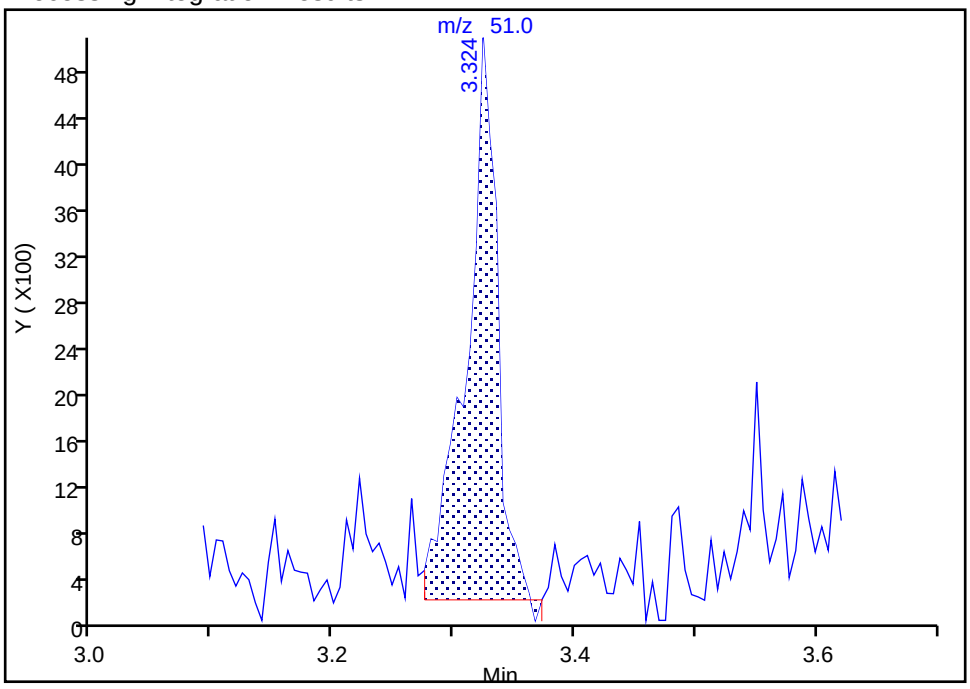
Data File:	\\chromfs\Knoxville\ChromData\MR\20200415-15214.b\RD16P109.D				
Injection Date:	16-Apr-2020 19:40:30	Instrument ID:	MR		
Lims ID:	140-18854-A-2	Lab Sample ID:	140-18854-2		
Client ID:	BLDG A - MID GAC				
Operator ID:	HMT	ALS Bottle#:	9	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

6 Chlorodifluoromethane, CAS: 75-45-6

Signal: 1

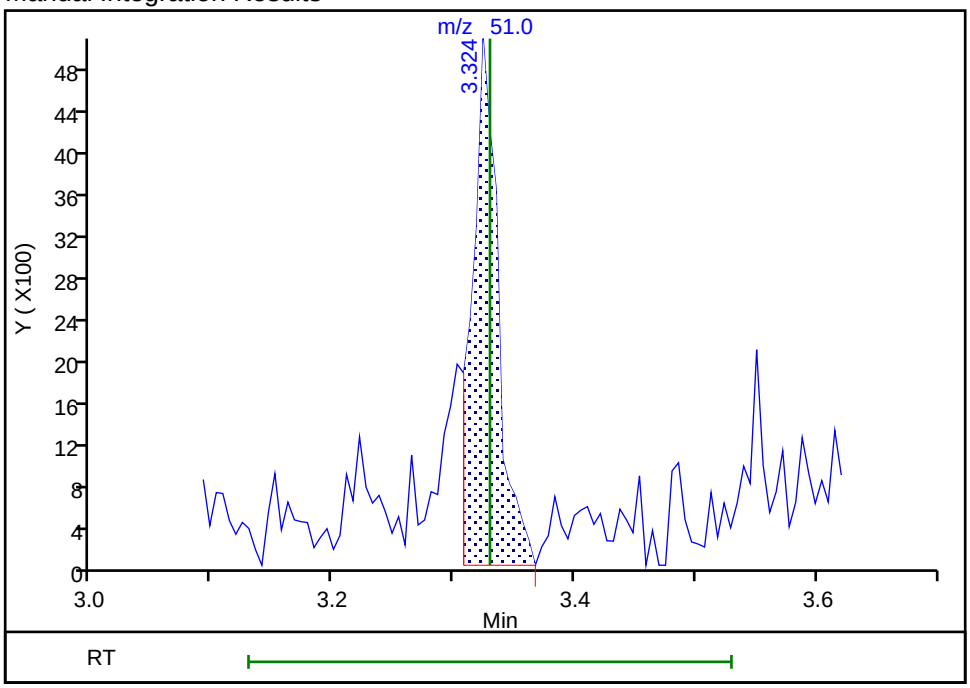
Processing Integration Results

RT: 3.32
Area: 8700
Amount: 0.088981
Amount Units: ppb v/v



Manual Integration Results

RT: 3.32
Area: 7616
Amount: 0.077894
Amount Units: ppb v/v



Reviewer: khachitpongpanits, 17-Apr-2020 12:56:14

Audit Action: Split an Integrated Peak Audit Reason: Split Peak

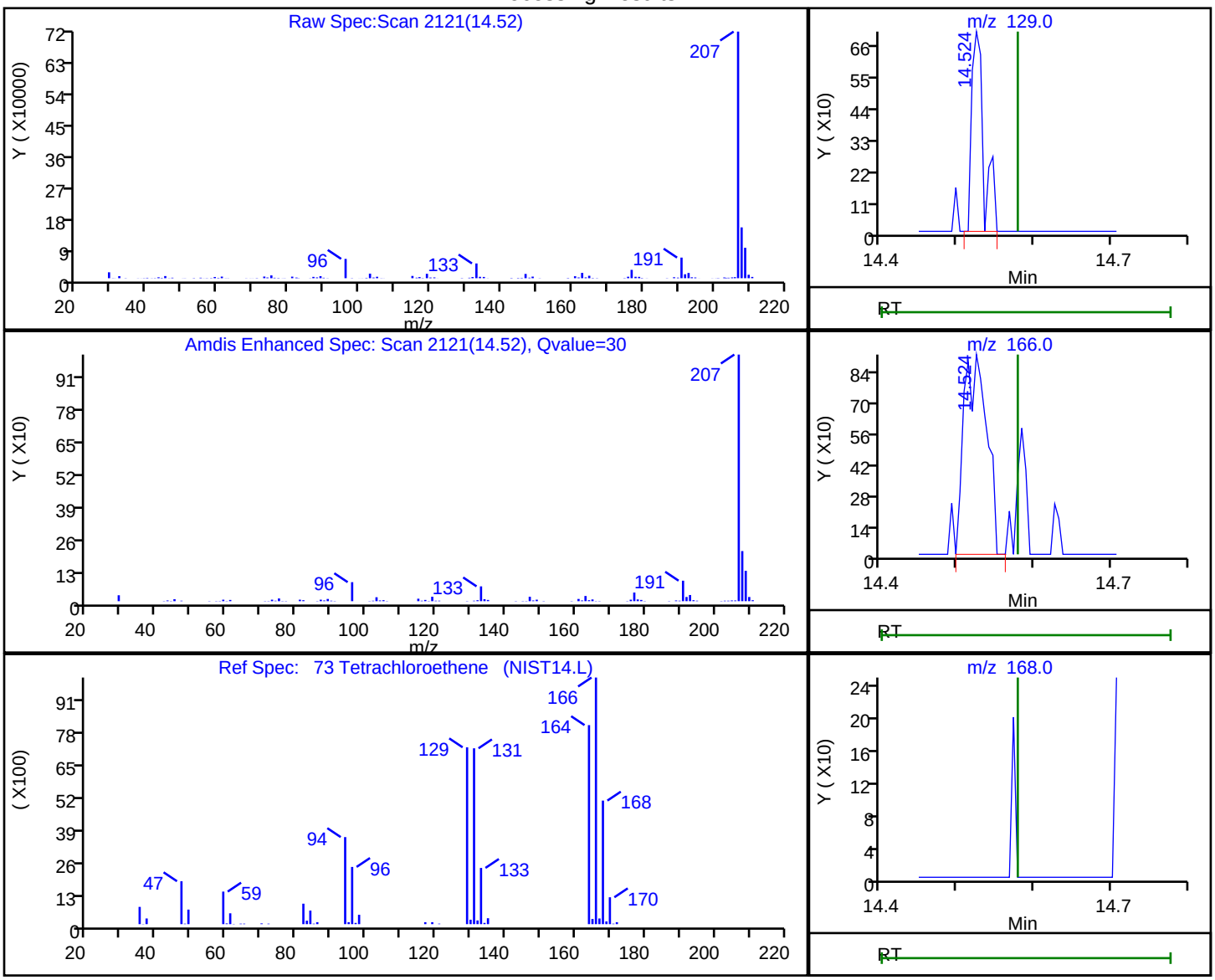
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200415-15214.b\RD16P109.D				
Injection Date:	16-Apr-2020 19:40:30	Instrument ID:	MR		
Lims ID:	140-18854-A-2	Lab Sample ID:	140-18854-2		
Client ID:	BLDG A - MID GAC				
Operator ID:	HMT	ALS Bottle#:	9	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

73 Tetrachloroethene, CAS: 127-18-4

Processing Results



RT	Mass	Response	Amount
14.52	129.00	770	0.009875
14.52	166.00	1894	
14.58	168.00	0	

Reviewer: khachitpongpanits, 17-Apr-2020 12:03:08

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

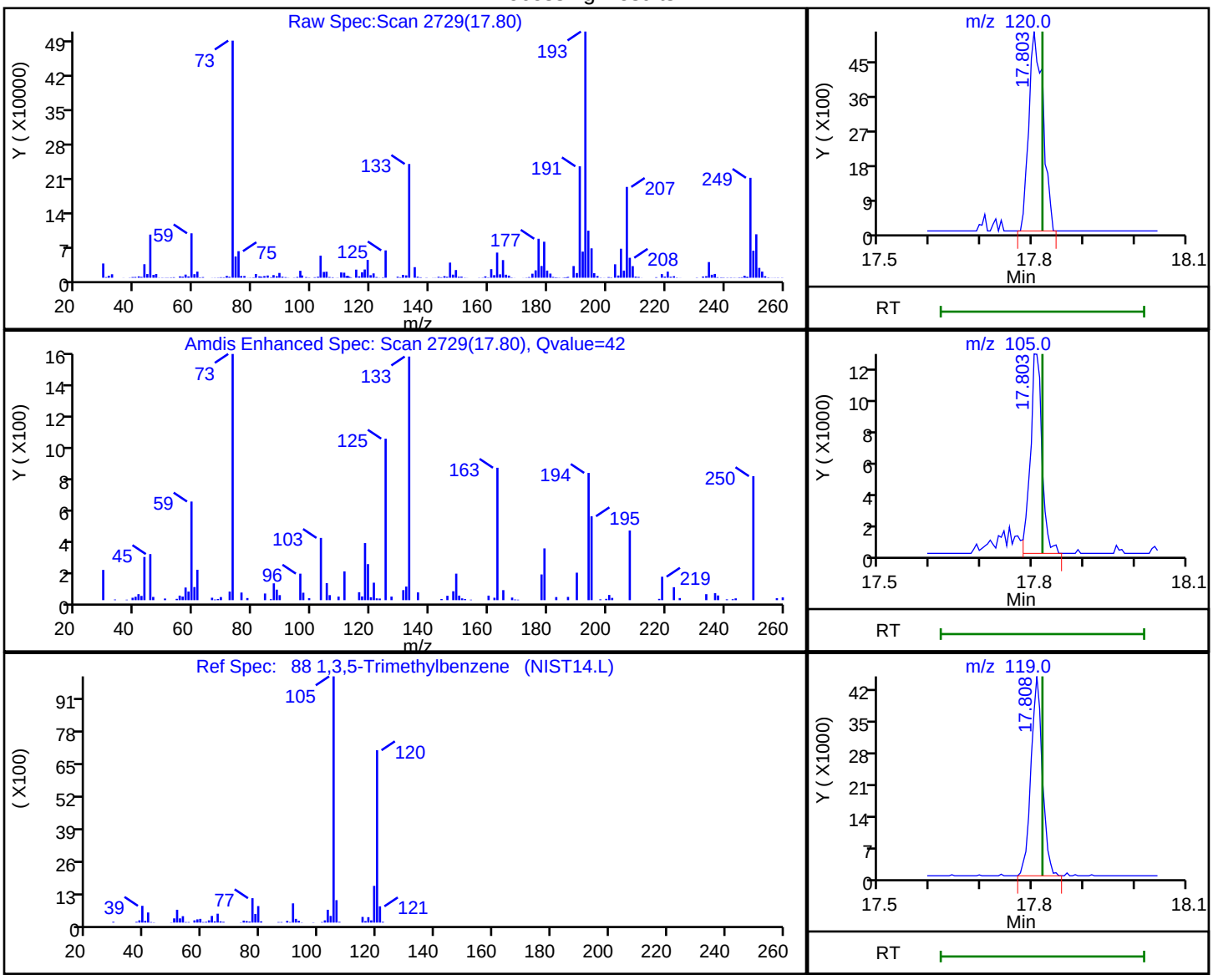
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200415-15214.b\RD16P109.D				
Injection Date:	16-Apr-2020 19:40:30	Instrument ID:	MR		
Lims ID:	140-18854-A-2	Lab Sample ID:	140-18854-2		
Client ID:	BLDG A - MID GAC				
Operator ID:	HMT	ALS Bottle#:	9	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

88 1,3,5-Trimethylbenzene, CAS: 108-67-8

Processing Results



RT	Mass	Response	Amount
17.80	120.00	10074	0.071781
17.80	105.00	19612	
17.81	119.00	69105	

Reviewer: khachitpongpanits, 17-Apr-2020 12:03:12

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-18854-1

SDG No.:

Client Sample ID: BLDG A - INFLUENT Lab Sample ID: 140-18854-3

Matrix: Air Lab File ID: RD16P110.D

Analysis Method: TO 15 LL Date Collected: 04/14/2020 09:46

Sample wt/vol: 25(mL) Date Analyzed: 04/16/2020 20:28

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 39061 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	6.5		1.6	0.16
56-23-5	Carbon tetrachloride	153.81	ND		1.6	0.14
75-45-6	Chlorodifluoromethane	86.47	ND		1.6	0.44
67-66-3	Chloroform	119.38	0.21	J	1.6	0.14
156-59-2	cis-1,2-Dichloroethene	96.94	11		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	0.60	J	1.6	0.28
75-34-3	1,1-Dichloroethane	98.96	2.7		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	14		1.6	0.16
100-41-4	Ethylbenzene	106.17	ND		1.6	0.26
75-09-2	Methylene Chloride	84.93	ND		8.0	3.2
1634-04-4	Methyl tert-butyl ether	88.15	ND		8.0	1.0
91-20-3	Naphthalene	128.17	ND		0.80	0.80
127-18-4	Tetrachloroethene	165.83	3.3		1.6	0.14
108-88-3	Toluene	92.14	2.1	J	2.4	1.6
156-60-5	trans-1,2-Dichloroethene	96.94	0.54	J	1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		1.6	1.3
71-55-6	1,1,1-Trichloroethane	133.41	60		1.6	0.74
79-00-5	1,1,2-Trichloroethane	133.41	ND		1.6	0.14
79-01-6	Trichloroethene	131.39	160		0.80	0.12
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		1.6	0.72
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		1.6	0.40
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		1.6	0.44
75-01-4	Vinyl chloride	62.50	ND		0.80	0.52
1330-20-7	Xylenes, Total	106.17	ND		3.2	0.48

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	86		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-18854-1

SDG No.:

Client Sample ID: BLDG A - INFLUENT Lab Sample ID: 140-18854-3

Matrix: Air Lab File ID: RD16P110.D

Analysis Method: TO 15 LL Date Collected: 04/14/2020 09:46

Sample wt/vol: 25(mL) Date Analyzed: 04/16/2020 20:28

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 39061 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	21		5.1	0.51
56-23-5	Carbon tetrachloride	153.81	ND		10	0.88
75-45-6	Chlorodifluoromethane	86.47	ND		5.7	1.6
67-66-3	Chloroform	119.38	1.0	J	7.8	0.68
156-59-2	cis-1,2-Dichloroethene	96.94	46		6.3	0.79
75-71-8	Dichlorodifluoromethane	120.91	2.9	J	7.9	1.4
75-34-3	1,1-Dichloroethane	98.96	11		6.5	0.57
107-06-2	1,2-Dichloroethane	98.96	ND		6.5	0.81
75-35-4	1,1-Dichloroethene	96.94	55		6.3	0.63
100-41-4	Ethylbenzene	106.17	ND		6.9	1.1
75-09-2	Methylene Chloride	84.93	ND		28	11
1634-04-4	Methyl tert-butyl ether	88.15	ND		29	3.7
91-20-3	Naphthalene	128.17	ND		4.2	4.2
127-18-4	Tetrachloroethene	165.83	23		11	0.95
108-88-3	Toluene	92.14	7.8	J	9.0	5.9
156-60-5	trans-1,2-Dichloroethene	96.94	2.2	J	6.3	0.56
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		12	9.5
71-55-6	1,1,1-Trichloroethane	133.41	330		8.7	4.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		8.7	0.76
79-01-6	Trichloroethene	131.39	850		4.3	0.64
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		7.9	3.5
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		7.9	2.0
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		7.9	2.2
75-01-4	Vinyl chloride	62.50	ND		2.0	1.3
1330-20-7	Xylenes, Total	106.17	ND		14	2.1

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	86		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MR\20200415-15214.b\RD16P110.D
Lims ID: 140-18854-A-3
Client ID: BLDG A - INFLUENT
Sample Type: Client
Inject. Date: 16-Apr-2020 20:28:30 ALS Bottle#: 10 Worklist Smp#: 16
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0015214-016
Misc. Info.: 140-18854-a-3
Operator ID: HMT Instrument ID: MR

Method: \\chromfs\Knoxville\ChromData\MR\20200415-15214.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 17-Apr-2020 12:08:36 Calib Date: 10-Apr-2020 00:47:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MR\20200409-15180.b\RD09IC10.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1010

First Level Reviewer: khachitpongpanits Date: 17-Apr-2020 12:08:36

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.339	8.350	-0.011	96	146075	4.00	
* 2 1,4-Difluorobenzene	114	10.582	10.582	0.000	94	976905	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.414	15.414	0.000	88	746707	4.00	
$ 4 4-Bromofluorobenzene (Surr	95	17.064	17.070	0.000	91	382091	3.45	
8 Dichlorodifluoromethane	85	3.389	3.382	0.000	69	2287	0.0298	
27 1,1-Dichloroethene	96	5.454	5.438	0.005	96	47800	0.6948	
34 trans-1,2-Dichloroethene	96	6.592	6.598	-0.011	17	1695	0.0272	
37 1,1-Dichloroethane	63	7.023	7.010	0.000	97	14690	0.1373	
42 cis-1,2-Dichloroethene	96	8.005	8.010	-0.011	93	37122	0.5747	
44 Chloroform	83	8.350	8.339	-0.005	28	1338	0.0103	
47 1,1,1-Trichloroethane	97	9.385	9.384	-0.006	95	374026	3.00	
51 Benzene	78	10.005	10.000	0.005	97	59761	0.3269	
58 Trichloroethene	130	11.316	11.321	-0.005	93	727826	7.90	
67 Toluene	91	13.429	13.423	0.010	96	20585	0.1042	
73 Tetrachloroethene	129	14.578	14.583	0.000	85	12666	0.1665	

Reagents:

40MXISSURP_00004 Amount Added: 40.00 Units: mL Run Reagent

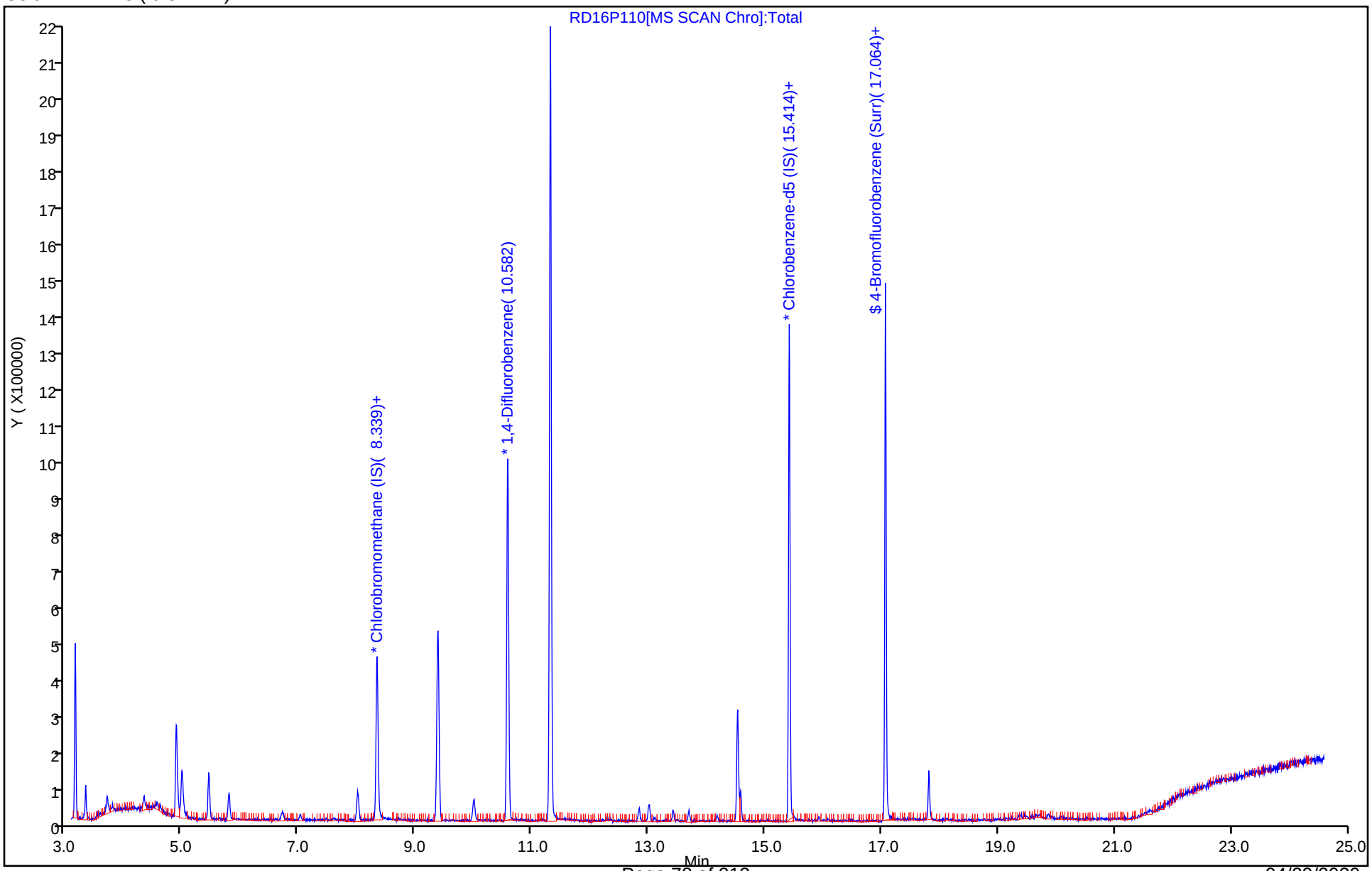
Report Date: 17-Apr-2020 12:08:37 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200415-15214.b\RD16P110.D

Injection Date:	16-Apr-2020 20:28:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	140-18854-A-3	Lab Sample ID:	140-18854-3	Worklist Smp#:	16
Client ID:	BLDG A - INFLUENT				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MR\20200415-15214.b\RD16P110.D				
Lims ID:	140-18854-A-3				
Client ID:	BLDG A - INFLUENT				
Sample Type:	Client				
Inject. Date:	16-Apr-2020 20:28:30	ALS Bottle#:	10	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0015214-016				
Misc. Info.:	140-18854-a-3				
Operator ID:	HMT	Instrument ID:	MR		
Method:	\\chromfs\Knoxville\ChromData\MR\20200415-15214.b\MR_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	17-Apr-2020 12:08:36	Calib Date:	10-Apr-2020 00:47:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MR\20200409-15180.b\RD09IC10.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1010				

First Level Reviewer: khachitpongpanits Date: 17-Apr-2020 12:08:36

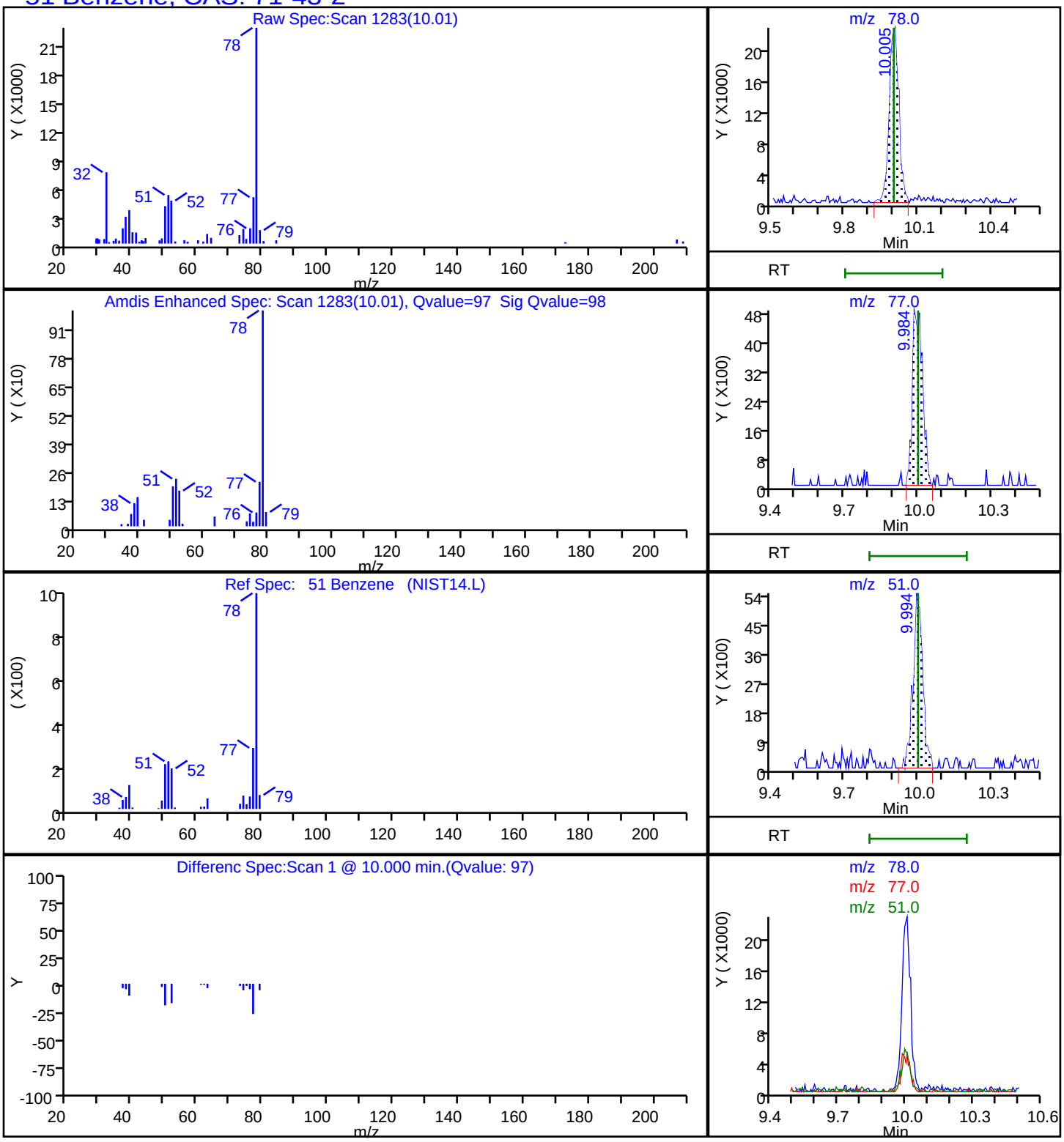
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.00	3.45	86.30

Report Date: 17-Apr-2020 12:08:37 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200415-15214.b\RD16P110.D				
Injection Date:	16-Apr-2020 20:28:30	Instrument ID:	MR		
Lims ID:	140-18854-A-3	Lab Sample ID:	140-18854-3		
Client ID:	BLDG A - INFLUENT				
Operator ID:	HMT	ALS Bottle#:	10	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

51 Benzene, CAS: 71-43-2

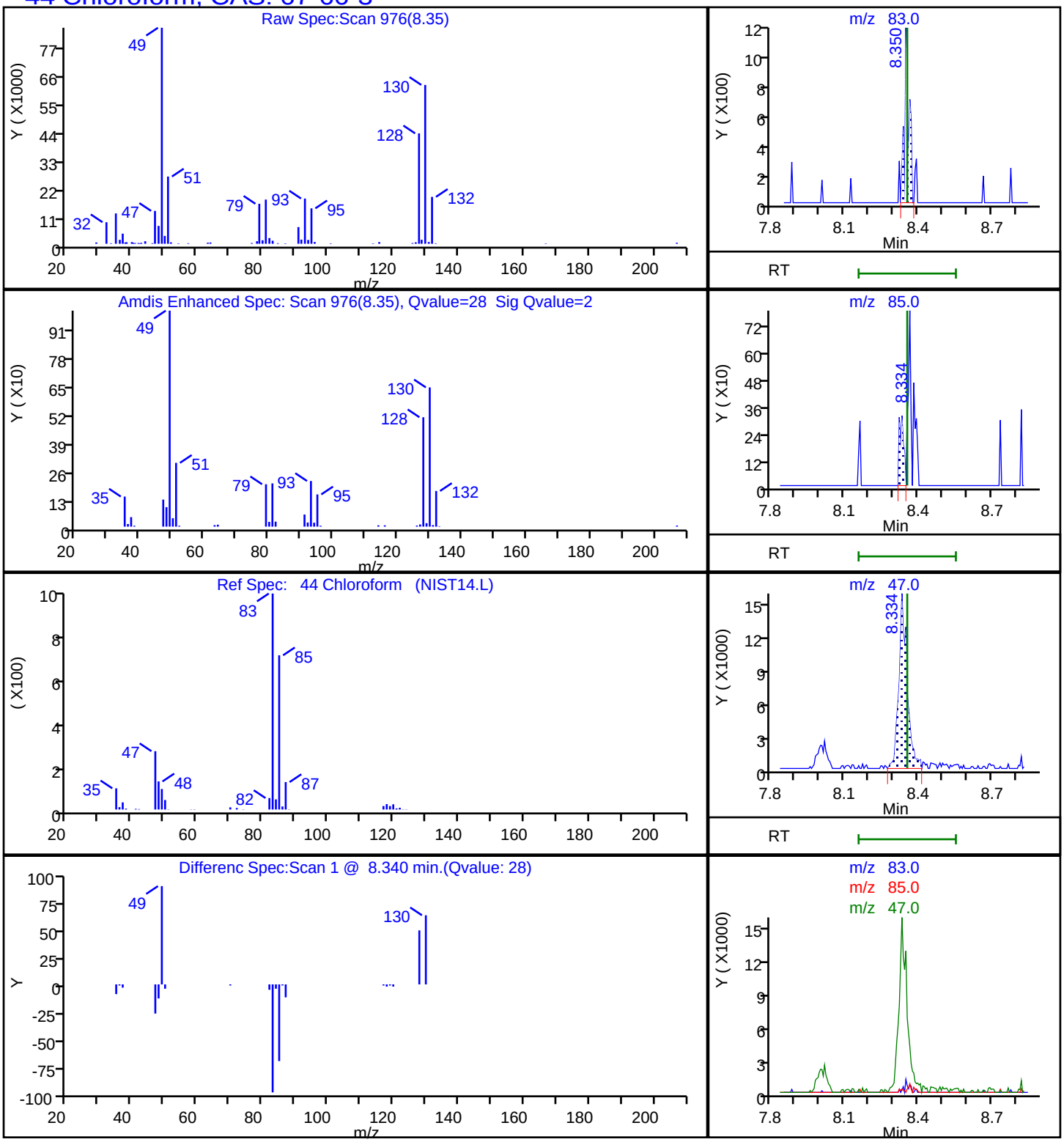


Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200415-15214.b\RD16P110.D

Injection Date:	16-Apr-2020 20:28:30	Instrument ID:	MR
Lims ID:	140-18854-A-3	Lab Sample ID:	140-18854-3
Client ID:	BLDG A - INFLUENT		
Operator ID:	HMT	ALS Bottle#:	10 Worklist Smp#: 16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

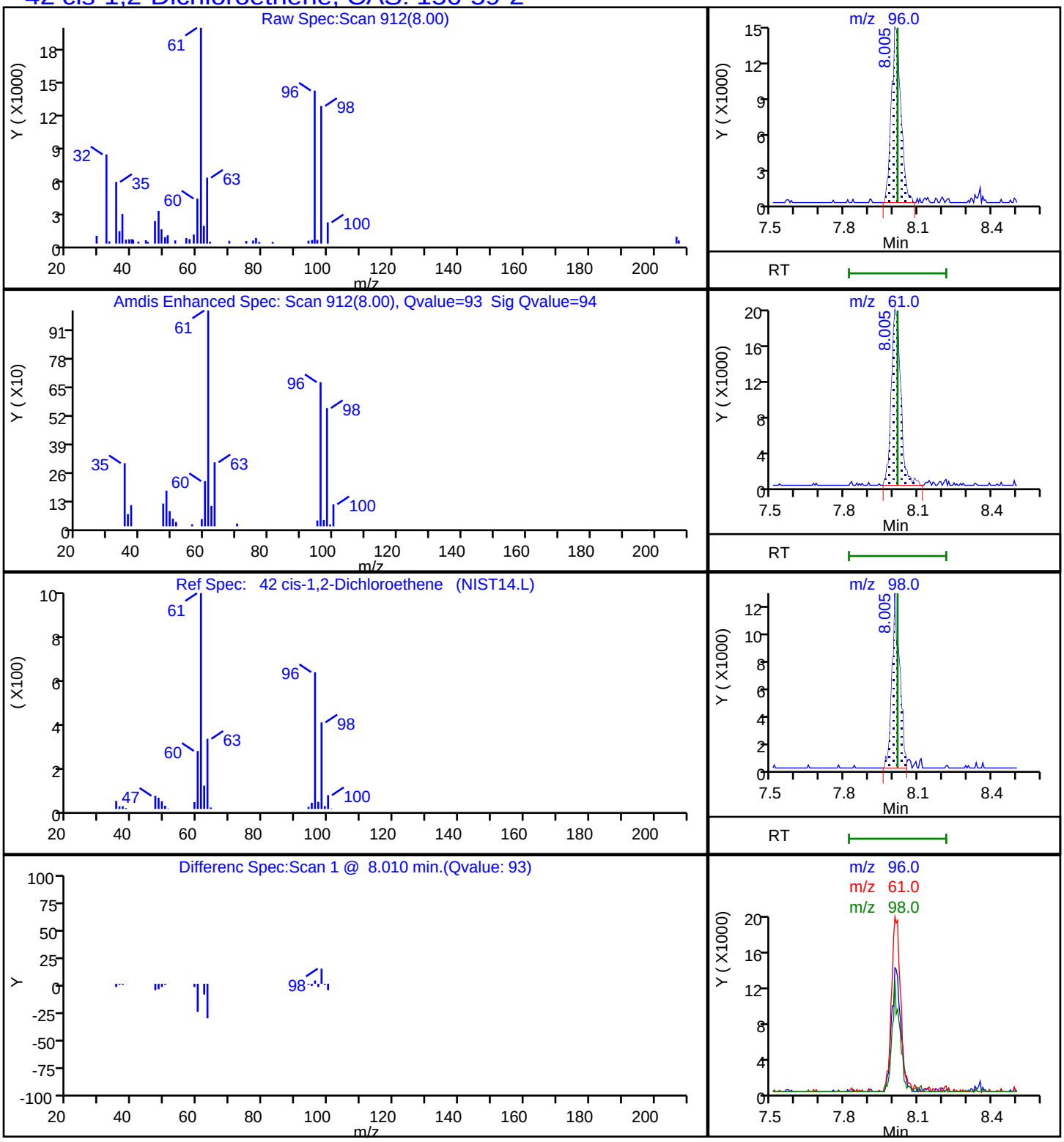
44 Chloroform, CAS: 67-66-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200415-15214.b\RD16P110.D		
Injection Date:	16-Apr-2020 20:28:30	Instrument ID:	MR
Lims ID:	140-18854-A-3	Lab Sample ID:	140-18854-3
Client ID:	BLDG A - INFLUENT		
Operator ID:	HMT	ALS Bottle#:	10 Worklist Smp#: 16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

42 cis-1,2-Dichloroethene, CAS: 156-59-2

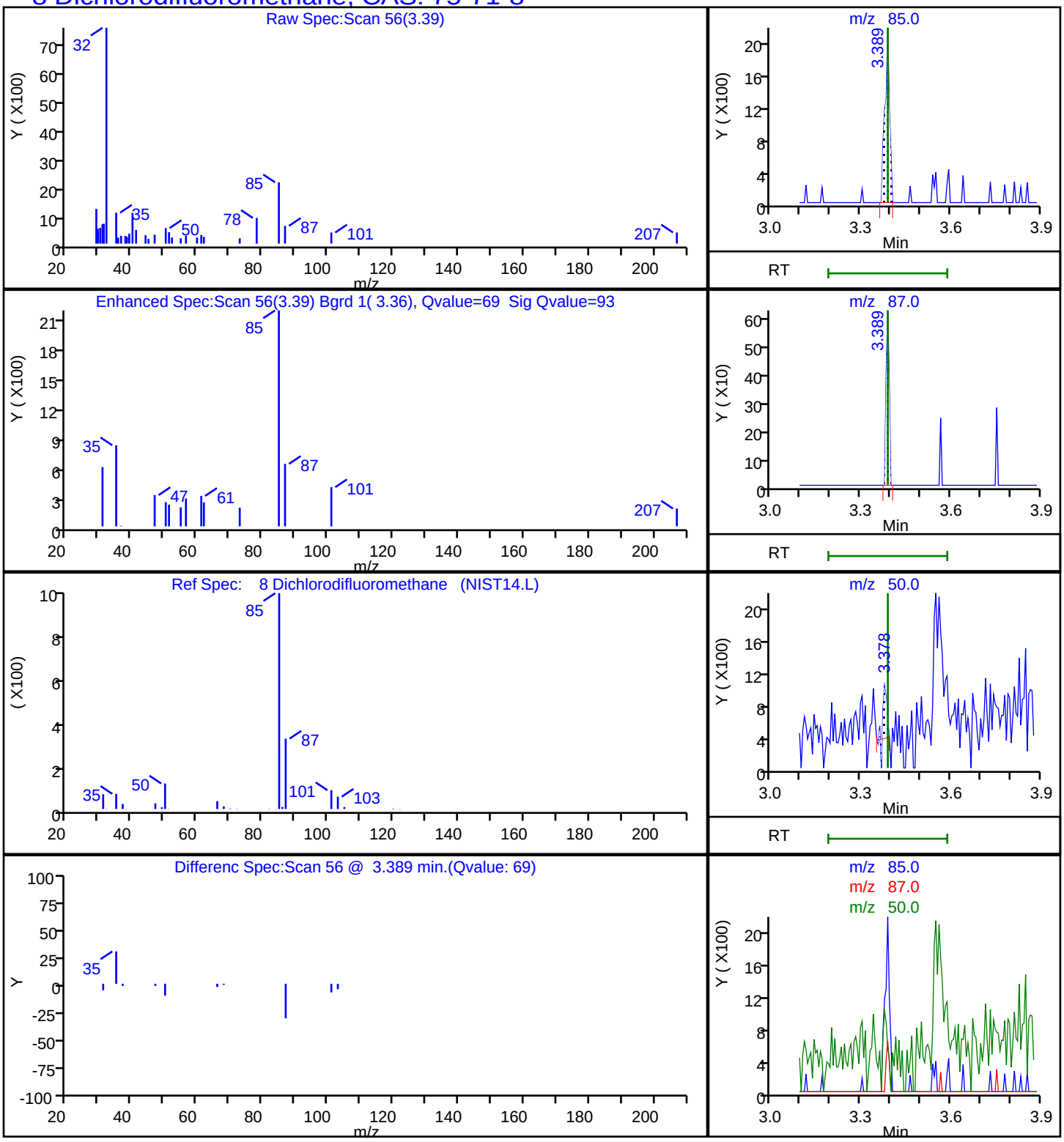


Report Date: 17-Apr-2020 12:08:37 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200415-15214.b\RD16P110.D				
Injection Date:	16-Apr-2020 20:28:30	Instrument ID:	MR		
Lims ID:	140-18854-A-3	Lab Sample ID:	140-18854-3		
Client ID:	BLDG A - INFLUENT				
Operator ID:	HMT	ALS Bottle#:	10	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

8 Dichlorodifluoromethane, CAS: 75-71-8

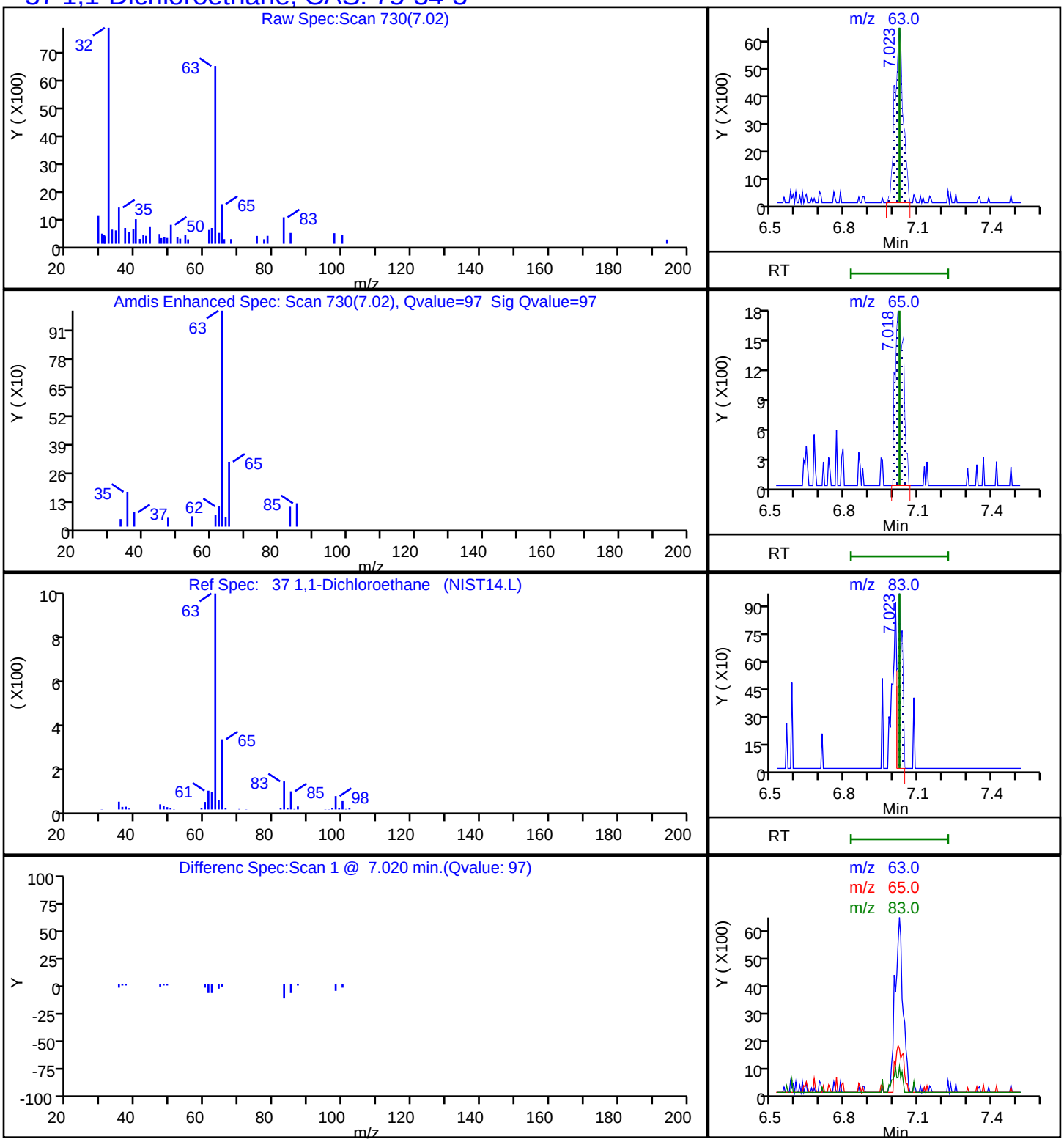


Report Date: 17-Apr-2020 12:08:37 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200415-15214.b\RD16P110.D		
Injection Date:	16-Apr-2020 20:28:30	Instrument ID:	MR
Lims ID:	140-18854-A-3	Lab Sample ID:	140-18854-3
Client ID:	BLDG A - INFLUENT		
Operator ID:	HMT	ALS Bottle#:	10 Worklist Smp#: 16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

37 1,1-Dichloroethane, CAS: 75-34-3

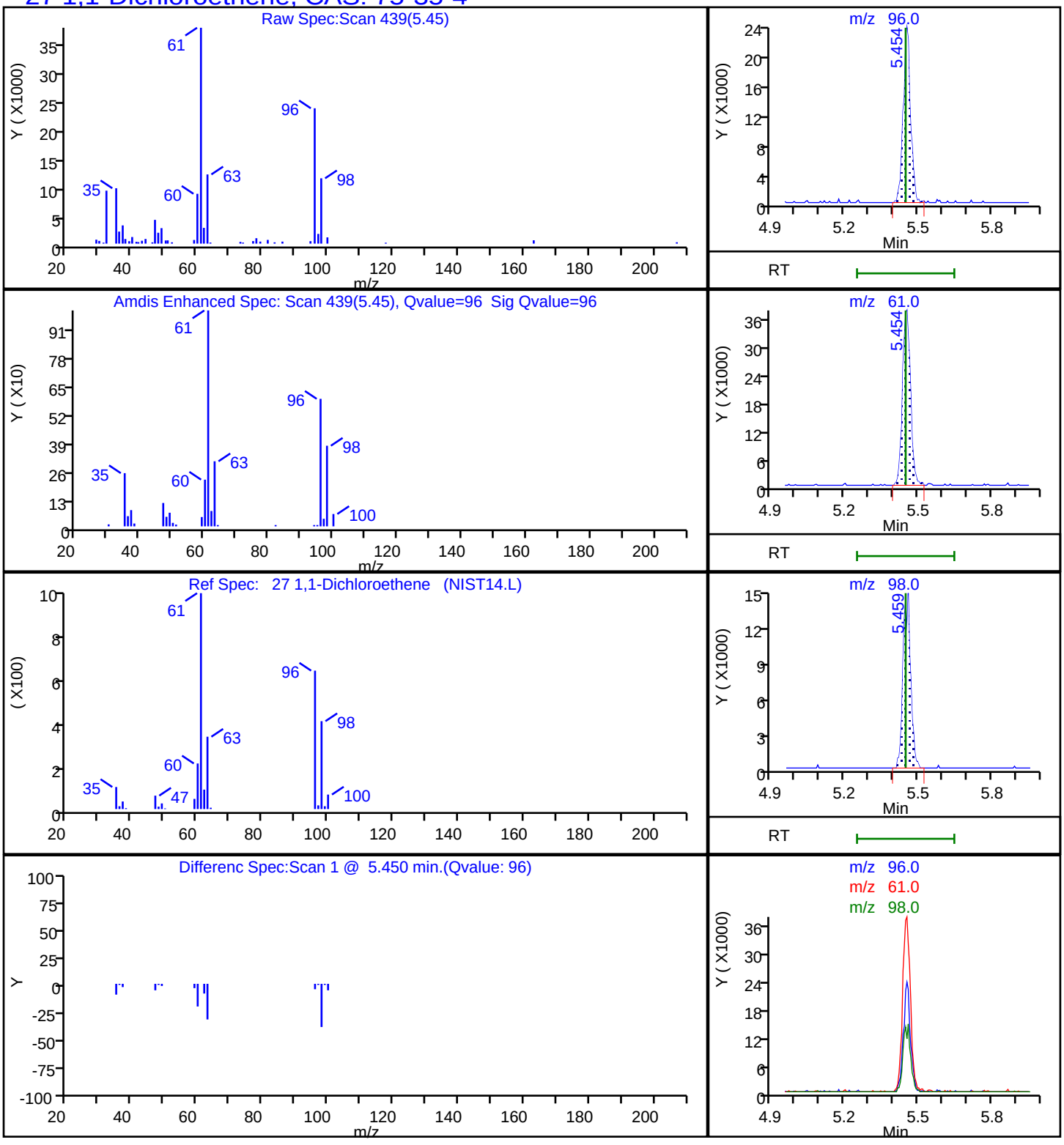


Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200415-15214.b\RD16P110.D

Injection Date:	16-Apr-2020 20:28:30	Instrument ID:	MR
Lims ID:	140-18854-A-3	Lab Sample ID:	140-18854-3
Client ID:	BLDG A - INFLUENT		
Operator ID:	HMT	ALS Bottle#:	10 Worklist Smp#: 16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

27 1,1-Dichloroethene, CAS: 75-35-4



Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200415-15214.b\RD16P110.D

Injection Date: 16-Apr-2020 20:28:30 Instrument ID: MR

Lims ID: 140-18854-A-3 Lab Sample ID: 140-18854-3

Client ID: BLDG A - INFLUENT

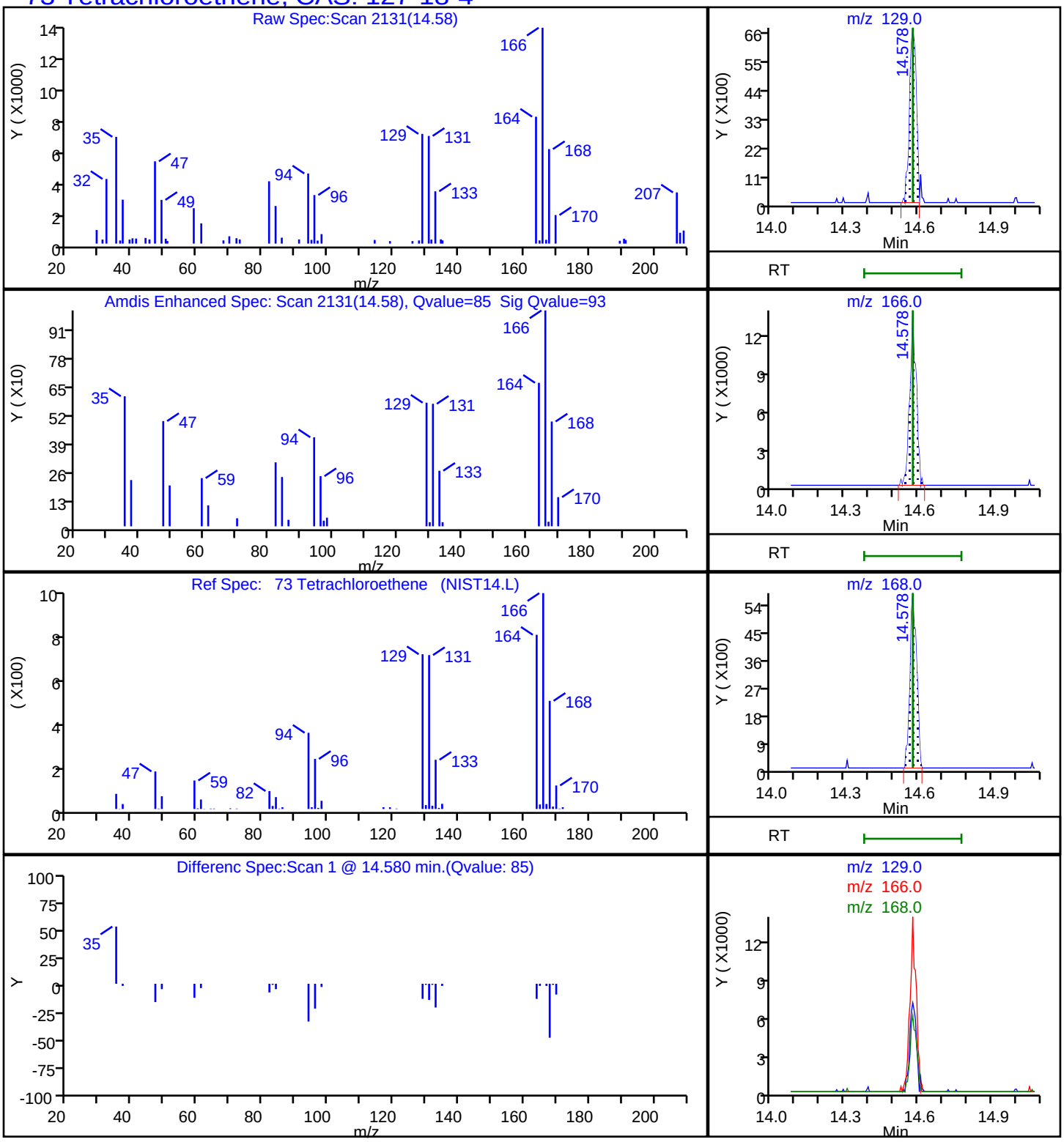
Operator ID: HMT ALS Bottle#: 10 Worklist Smp#: 16

Purge Vol: 500.000 mL Dil. Factor: 1.0000

Method: MR_TO15 Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm) Detector MS SCAN

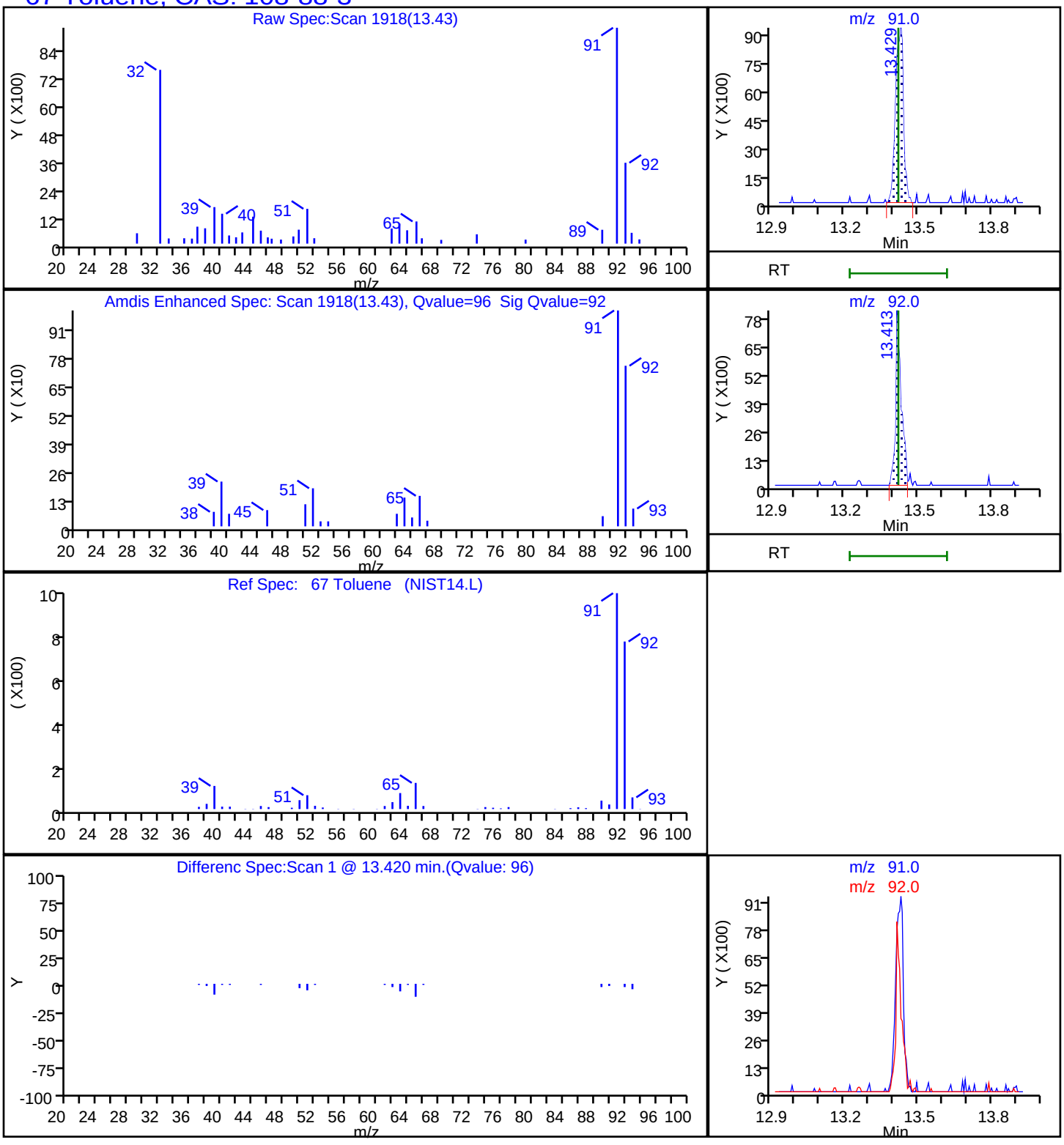
73 Tetrachloroethene, CAS: 127-18-4



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200415-15214.b\RD16P110.D		
Injection Date:	16-Apr-2020 20:28:30	Instrument ID:	MR
Lims ID:	140-18854-A-3	Lab Sample ID:	140-18854-3
Client ID:	BLDG A - INFLUENT		
Operator ID:	HMT	ALS Bottle#:	10 Worklist Smp#: 16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

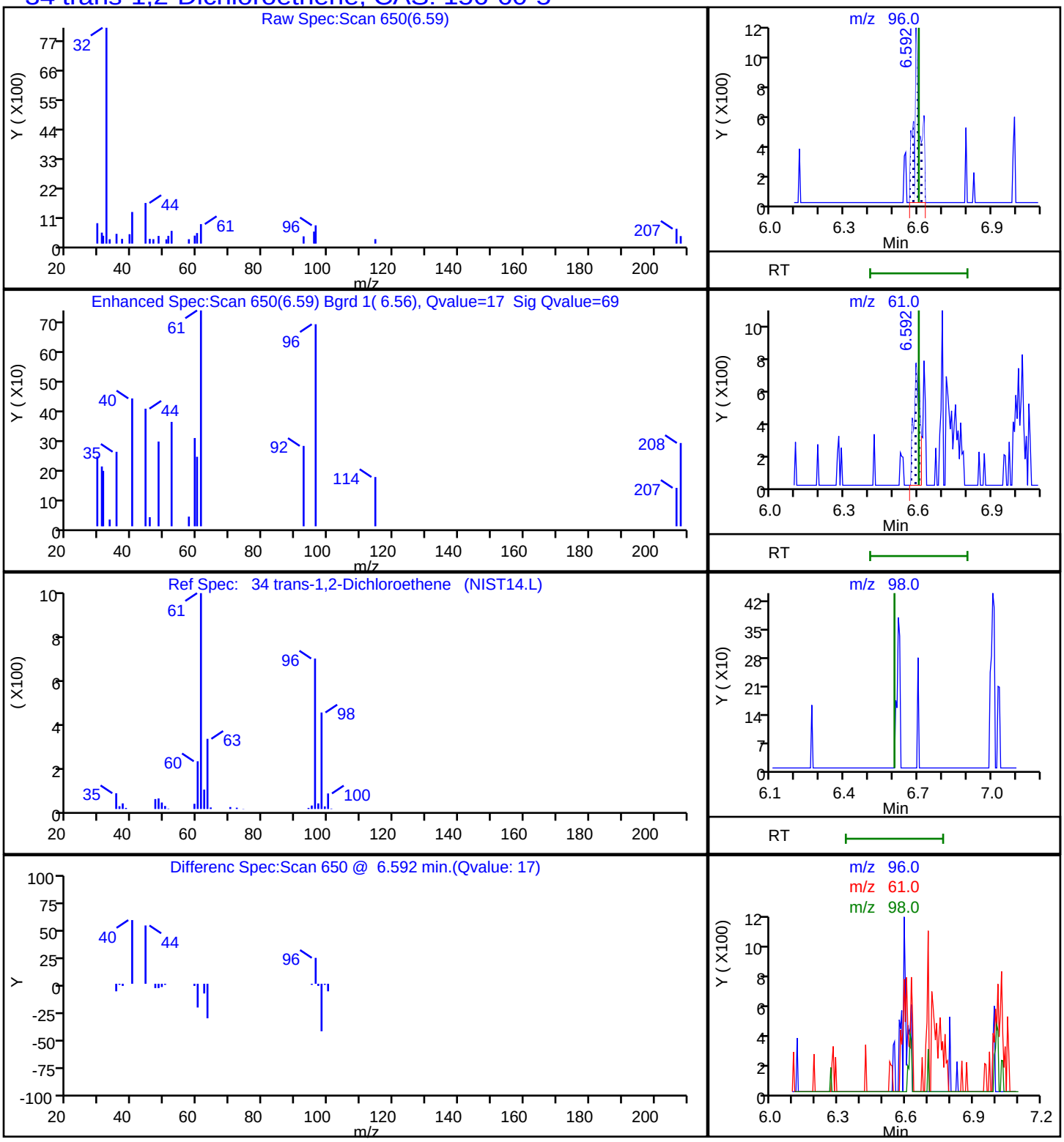
67 Toluene, CAS: 108-88-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200415-15214.b\RD16P110.D		
Injection Date:	16-Apr-2020 20:28:30	Instrument ID:	MR
Lims ID:	140-18854-A-3	Lab Sample ID:	140-18854-3
Client ID:	BLDG A - INFLUENT		
Operator ID:	HMT	ALS Bottle#:	10 Worklist Smp#: 16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

34 trans-1,2-Dichloroethene, CAS: 156-60-5

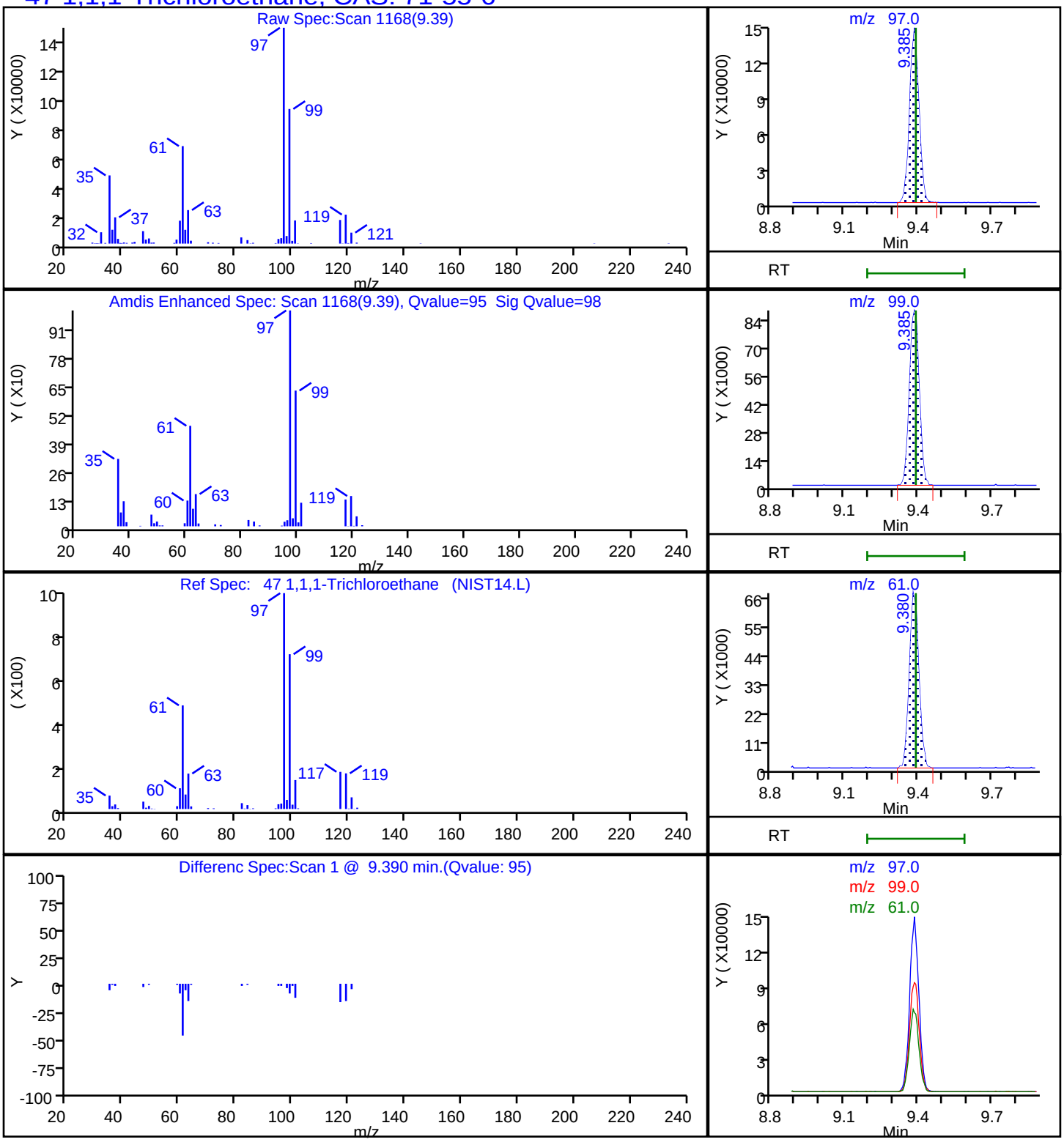


Report Date: 17-Apr-2020 12:08:37 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200415-15214.b\RD16P110.D				
Injection Date:	16-Apr-2020 20:28:30	Instrument ID:	MR		
Lims ID:	140-18854-A-3	Lab Sample ID:	140-18854-3		
Client ID:	BLDG A - INFLUENT				
Operator ID:	HMT	ALS Bottle#:	10	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

47 1,1,1-Trichloroethane, CAS: 71-55-6

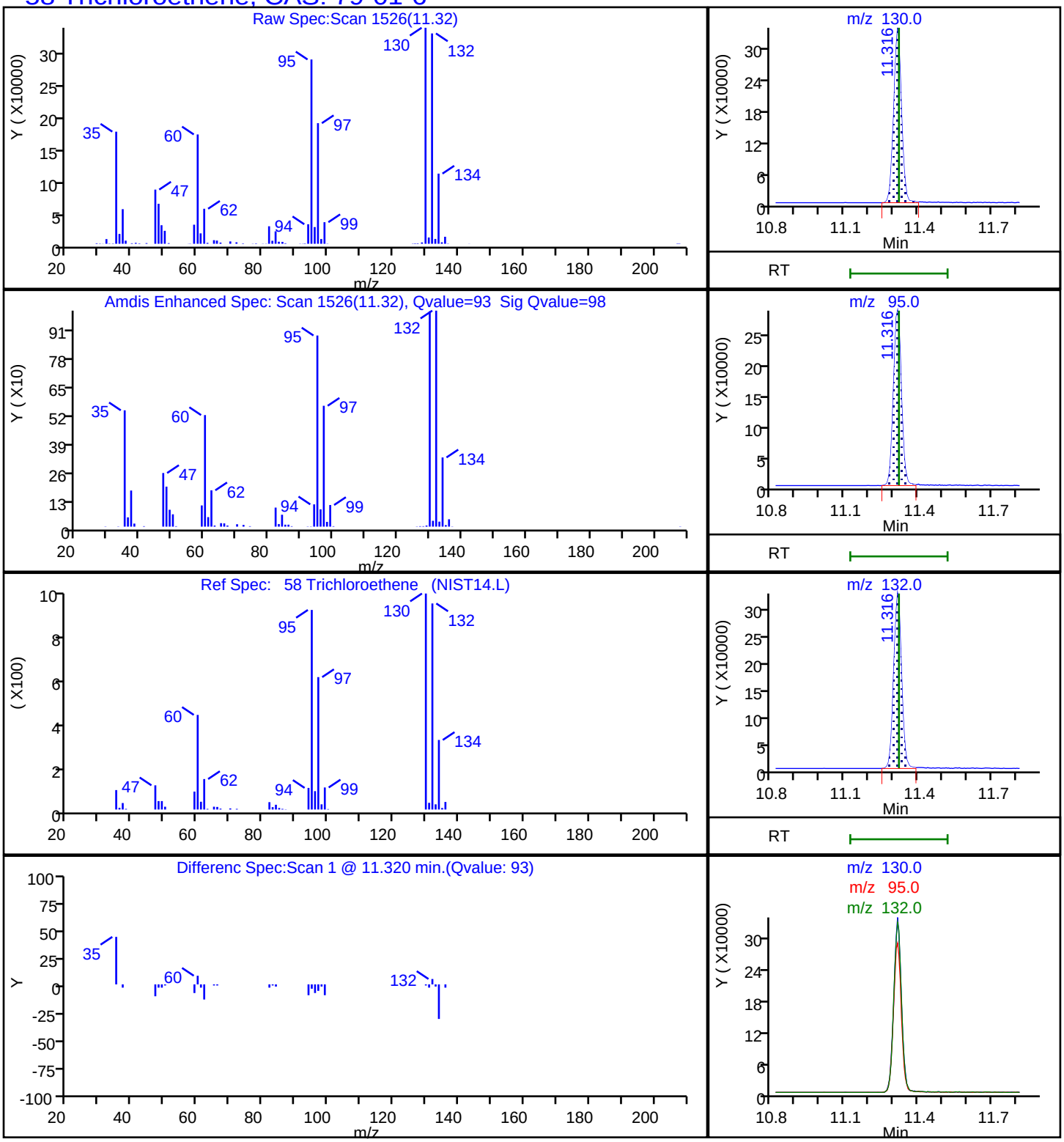


Report Date: 17-Apr-2020 12:08:37 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200415-15214.b\RD16P110.D		
Injection Date:	16-Apr-2020 20:28:30	Instrument ID:	MR
Lims ID:	140-18854-A-3	Lab Sample ID:	140-18854-3
Client ID:	BLDG A - INFLUENT		
Operator ID:	HMT	ALS Bottle#:	10 Worklist Smp#: 16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

58 Trichloroethene, CAS: 79-01-6



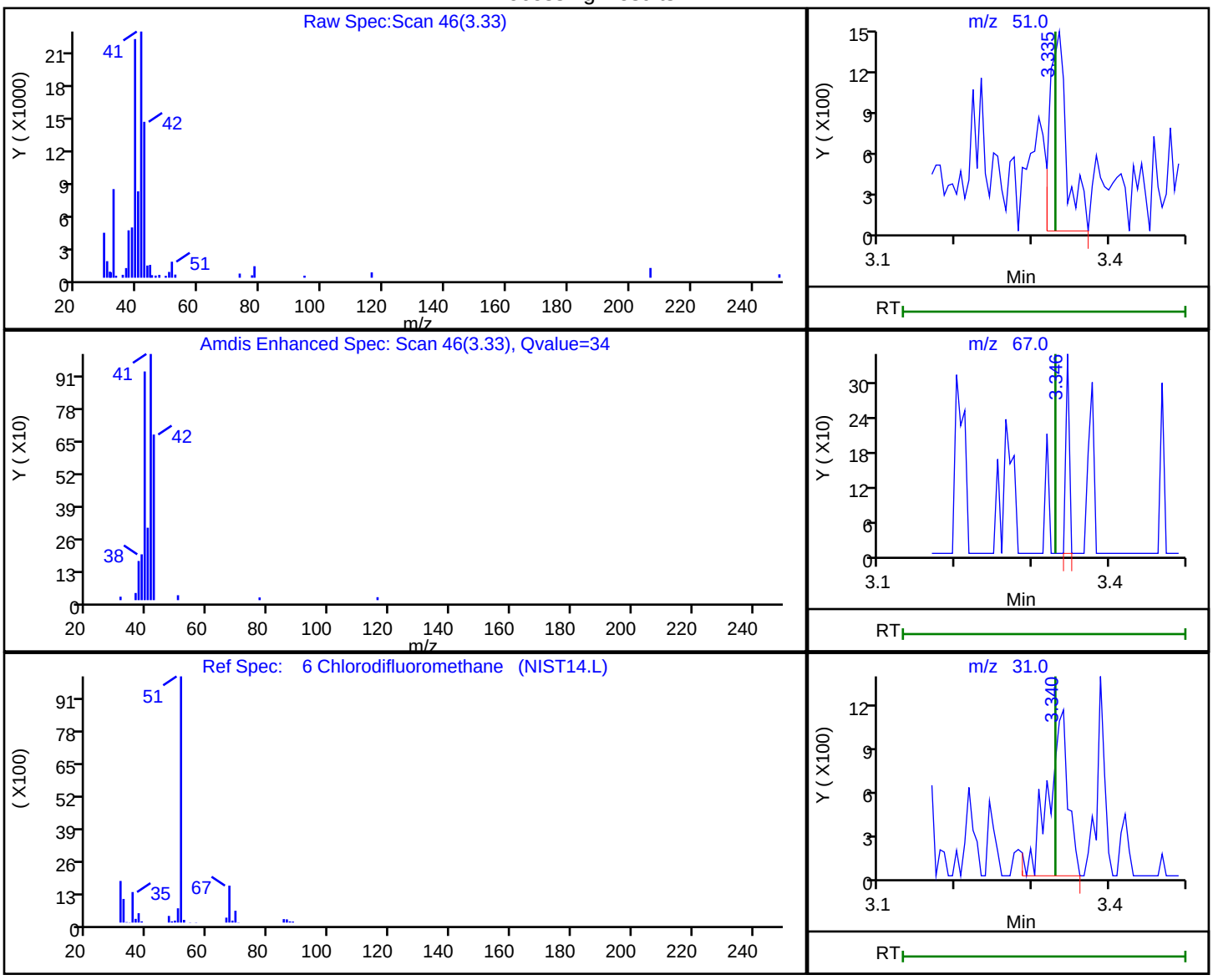
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200415-15214.b\RD16P110.D				
Injection Date:	16-Apr-2020 20:28:30	Instrument ID:	MR		
Lims ID:	140-18854-A-3	Lab Sample ID:	140-18854-3		
Client ID:	BLDG A - INFLUENT				
Operator ID:	HMT	ALS Bottle#:	10	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

6 Chlorodifluoromethane, CAS: 75-45-6

Processing Results



RT	Mass	Response	Amount
3.33	51.00	2285	0.022246
3.35	67.00	112	
3.34	31.00	2077	

Reviewer: khachitpongpanits, 17-Apr-2020 12:05:06

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-18854-1 Analy Batch No.: 38980

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/09/2020 15:05 Calibration End Date: 04/10/2020 00:47 Calibration ID: 2392

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 140-38980/3	RD09IC01.D
Level 2	IC 140-38980/4	RD09IC02.D
Level 3	IC 140-38980/5	RD09IC03.D
Level 4	IC 140-38980/6	RD09IC04.D
Level 5	IC 140-38980/7	RD09IC05.D
Level 6	IC 140-38980/8	RD09IC06.D
Level 7	ICIS 140-38980/9	RD09IC07.D
Level 8	IC 140-38980/11	RD09IC08.D
Level 9	IC 140-38980/13	RD09IC09.D
Level 10	IC 140-38980/15	RD09IC10.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Propene	+++++ 2.4787	+++++ 2.0480	+++++ 1.6408	+++++ 1.5134	+++++ 1.3454	Lin	1.5117	1.2649							0.9980		0.9900
Chlorodifluoromethane	+++++ 2.8170	+++++ 2.8146	3.2735 2.5681	2.9900 2.5154	2.7098 +++++	Ave		2.8126				9.2		30.0			
Dichlorodifluoromethane	2.4458 1.9215	2.3965 1.7818	2.6066 +++++	1.8436 +++++	1.7376 +++++	Ave		2.1048				17.3		30.0			
Chloromethane	+++++ 0.6671	+++++ 0.6435	+++++ 0.6097	0.5988 0.5432	0.7158 0.5524	Ave		0.6186				10.0		30.0			
1,2-Dichloro-1,1,2,2-tetrafluoroethane	+++++ 1.9265	+++++ 1.7525	3.3423 1.5383	1.8727 1.5991	2.0251 1.6109	Lin1	0.1247	1.5971							0.9980		0.9900
Vinyl chloride	3.5259 2.4595	2.5199 2.4393	2.8491 2.3260	2.4474 2.0458	2.4388 2.4958	Ave		2.5548				15.4		30.0			
1,3-Butadiene	+++++ 1.8569	+++++ 1.8216	2.2631 1.7674	1.7571 1.5662	1.9321 1.9021	Ave		1.8583				10.7		30.0			
Butane	+++++ 3.7630	+++++ 3.8421	4.7114 3.6834	4.1043 3.1902	3.8119 4.0719	Ave		3.8973				11.1		30.0			
Bromomethane	+++++ 2.7263	+++++ 2.6450	3.5116 2.5075	2.5643 2.1757	2.6219 2.6622	Ave		2.6768				14.1		30.0			
Chloroethane	+++++ 1.3189	+++++ 1.3091	1.3538 1.2253	1.1877 1.0719	1.3713 1.2454	Ave		1.2604				7.9		30.0			
Ethanol	+++++ 1.5662	+++++ 1.6376	1.7033 1.6514	1.5493 1.3569	1.5381 1.6889	Ave		1.5865				7.1		30.0			
Vinyl bromide	+++++ 2.6977	+++++ 2.7027	3.0349 2.5763	2.8051 2.2489	2.5868 2.8327	Ave		2.6856				8.6		30.0			
2-Methylbutane	+++++ 3.2444	+++++ 3.2785	4.1314 3.0671	3.2563 2.7367	3.2481 3.2199	Ave		3.2728				12.0		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-18854-1 Analy Batch No.: 38980

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/09/2020 15:05 Calibration End Date: 04/10/2020 00:47 Calibration ID: 2392

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Trichlorofluoromethane	+++++ 6.1166	+++++ 5.7685	6.5931 5.5554	5.5653 5.0356	5.6373 5.6130	Ave		5.7356				8.0		30.0			
Acrolein	+++++ 0.5316	+++++ 0.5037	+++++ 0.5662	0.5866 0.3683	0.6311 0.5596	Ave		0.5353				15.7		30.0			
Acetonitrile	+++++ 0.9665	+++++ 0.8638	+++++ 0.9248	+++++ 0.8368	0.6027 0.8953	Ave		0.8483				15.2		30.0			
Acetone	+++++ 1.2406	+++++ 1.0377	+++++ 1.0088	+++++ 0.8699	1.4960 0.8835	Ave		1.0894				22.0		30.0			
Pentane	+++++ 0.3716	+++++ 0.3351	+++++ 0.3545	0.3879 0.3361	0.3845 0.3543	Ave		0.3606				6.0		30.0			
Isopropyl alcohol	4.2987 2.7699	3.1134 2.9146	2.4576 2.8695	2.7619 2.8219	2.7247 2.7630	Ave		2.9495				17.0		30.0			
Ethyl ether	+++++ 2.2158	+++++ 2.2496	2.6529 2.2719	2.2523 2.2321	2.2188 2.4948	Ave		2.3235				6.9		30.0			
1,1-Dichloroethene	+++++ 1.7801	2.4675 1.7848	2.0095 1.7443	1.8945 1.6812	1.8131 1.7803	Ave		1.8839				12.6		30.0			
Acrylonitrile	+++++ 1.1659	+++++ 1.1046	+++++ 1.1782	1.1744 1.1816	0.9240 1.3717	Ave		1.1572				11.4		30.0			
tert-Butyl alcohol	+++++ 2.8352	+++++ 2.8796	3.1974 2.9243	2.9073 2.8030	2.8173 3.0135	Ave		2.9222				4.5		30.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	3.8930 3.9736	4.4107 3.9528	4.0857 4.0578	4.0265 3.9703	4.0246 4.2803	Ave		4.0675				3.9		30.0			
Methylene Chloride	+++++ 2.3480	+++++ 1.9284	+++++ 1.7572	+++++ 1.6094	3.5495 1.6815	Lin2	0.7930	1.5592							0.9990		0.9900
3-Chloropropene	+++++ 1.8440	+++++ 1.8527	2.2046 1.8191	2.0051 1.7236	1.8573 2.0296	Ave		1.9170				8.0		30.0			
Carbon disulfide	+++++ 5.0317	+++++ 4.9426	5.1901 4.7426	4.9633 4.6203	4.9247 4.9727	Ave		4.9235				3.5		30.0			
trans-1,2-Dichloroethene	+++++ 1.6285	+++++ 1.6955	1.7368 1.6663	1.7678 1.7050	1.5837 1.8824	Ave		1.7082				5.4		30.0			
2-Methylpentane	+++++ 4.2541	+++++ 4.1849	5.0100 4.0672	4.1514 4.1240	4.1326 4.3680	Ave		4.2865				7.2		30.0			
Methyl tert-butyl ether	+++++ 4.1263	+++++ 4.1560	+++++ 4.0395	4.5071 3.9534	4.1472 4.2305	Ave		4.1657				4.2		30.0			
1,1-Dichloroethane	+++++ 3.0158	+++++ 2.9114	3.1693 2.8725	2.9454 2.7276	2.8958 2.8946	Ave		2.9291				4.3		30.0			
Vinyl acetate	+++++ 5.0934	+++++ 4.9348	5.3029 5.0683	4.6261 4.8848	4.7026 5.3859	Ave		4.9999				5.3		30.0			
2-Butanone (MEK)	+++++ 0.8033	+++++ 0.7968	+++++ 0.8157	1.0886 0.7992	0.9818 0.8594	Ave		0.8778				13.0		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-18854-1 Analy Batch No.: 38980

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/09/2020 15:05 Calibration End Date: 04/10/2020 00:47 Calibration ID: 2392

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Hexane	+++++ 1.2236	+++++ 1.2253	+++++ 1.2109	1.3313 1.1943	1.1724 1.3496	Ave		1.2439				5.5		30.0			
cis-1,2-Dichloroethene	+++++ 1.7510	1.9972 1.7427	1.8095 1.7547	1.8034 1.7000	1.6051 1.7543	Ave		1.7686				5.9		30.0			
Ethyl acetate	+++++ 4.4318	+++++ 4.3658	4.3822 4.4730	4.4137 4.3219	4.2576 4.5480	Ave		4.3992				2.0		30.0			
Chloroform	+++++ 3.4075	3.9868 3.4875	3.4650 3.4826	3.6192 3.4692	3.4535 3.6098	Ave		3.5535				5.0		30.0			
Tetrahydrofuran	+++++ 2.1807	+++++ 2.1187	+++++ 2.1621	2.4481 2.0794	2.0614 2.1313	Ave		2.1688				6.0		30.0			
1,1,1-Trichloroethane	+++++ 3.3319	+++++ 3.3000	3.8218 3.2916	3.3881 3.2854	3.3989 3.5055	Ave		3.4154				5.3		30.0			
1,2-Dichloroethane	+++++ 0.2649	0.2969 0.2702	0.2855 0.2734	0.2635 0.2737	0.2536 0.3051	Ave		0.2763				6.0		30.0			
1-Butanol	+++++ 0.1528	+++++ 0.1521	+++++ 0.1473	0.1366 0.1578	0.1502 0.1630	Ave		0.1514				5.5		30.0			
Cyclohexane	+++++ 0.1016	+++++ 0.1054	0.1165 0.1107	0.1125 0.1191	0.0945 0.1282	Ave		0.1111				9.5		30.0			
Benzene	+++++ 0.6966	0.7649 0.7232	0.7082 0.7720	0.6758 0.8164	0.6908 0.8887	Ave		0.7485				9.3		30.0			
Carbon tetrachloride	0.3664 0.5121	0.4600 0.5304	0.5343 0.5443	0.4957 0.5742	0.3560 0.6743	Ave		0.5048				18.7		30.0			
2,3-Dimethylpentane	+++++ 0.1503	+++++ 0.1562	0.1789 0.1622	0.1467 0.1655	0.1598 0.1822	Ave		0.1627				7.7		30.0			
Thiophene	+++++ 0.3832	+++++ 0.4036	0.3890 0.4189	0.3681 0.4244	0.3758 0.4582	Ave		0.4027				7.5		30.0			
2,2,4-Trimethylpentane	+++++ 1.0716	+++++ 1.0986	1.0656 1.1412	1.0576 1.1851	1.0952 1.3261	Ave		1.1301				8.0		30.0			
Heptane	+++++ 0.2305	+++++ 0.2384	0.2523 0.2452	0.2104 0.2573	0.2298 0.2872	Ave		0.2439				9.4		30.0			
1,2-Dichloropropane	+++++ 0.2762	+++++ 0.2742	0.3612 0.2882	0.2693 0.2996	0.2723 0.3284	Ave		0.2962				11.1		30.0			
Trichloroethene	0.4003 0.3280	0.4286 0.3493	0.3644 0.3569	0.3584 0.4496	0.3284 0.4103	Ave		0.3774				11.2		30.0			
Dibromomethane	+++++ 0.3095	+++++ 0.3298	0.3306 0.3422	0.3020 0.3689	0.3104 0.4176	Ave		0.3389				11.3		30.0			
Bromodichloromethane	+++++ 0.5094	+++++ 0.5211	0.5256 0.5588	0.4515 0.5917	0.4728 0.6817	Ave		0.5391				13.5		30.0			
1,4-Dioxane	+++++ 0.0977	+++++ 0.1130	+++++ 0.1203	0.1220 0.1221	0.1078 0.1360	Ave		0.1170				10.4		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-18854-1 Analy Batch No.: 38980

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/09/2020 15:05 Calibration End Date: 04/10/2020 00:47 Calibration ID: 2392

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Methyl methacrylate	+++++ 0.3344	+++++ 0.3468	+++++ 0.3707	0.3478 0.3913	0.3285 0.4380	Ave		0.3654				10.6		30.0			
Methylcyclohexane	+++++ 0.4071	+++++ 0.4268	0.4257 0.4359	0.3933 0.4603	0.4053 0.5252	Ave		0.4349				9.6		30.0			
4-Methyl-2-pentanone (MIBK)	+++++ 0.6839	+++++ 0.7201	+++++ 0.7307	0.6809 0.7816	0.6927 0.8644	Ave		0.7363				9.0		30.0			
cis-1,3-Dichloropropene	+++++ 0.3781	0.4222 0.4031	0.2940 0.4238	0.3356 0.4399	0.3669 0.5052	Ave		0.3965				15.6		30.0			
trans-1,3-Dichloropropene	+++++ 0.3889	0.4293 0.4238	0.4060 0.4361	0.3416 0.4508	0.4110 0.5334	Ave		0.4245				12.2		30.0			
Toluene	+++++ 1.0101	+++++ 1.0514	1.0290 1.0676	0.9478 1.1247	0.9587 1.2807	Ave		1.0587				10.1		30.0			
1,1,2-Trichloroethane	+++++ 0.3198	+++++ 0.3377	0.3403 0.3541	0.3080 0.3570	0.3052 0.4125	Ave		0.3418				10.1		30.0			
2-Hexanone	+++++ 0.3242	+++++ 0.3378	+++++ 0.3436	0.3248 0.3794	0.2977 0.4462	Ave		0.3505				13.9		30.0			
C8 Range	+++++ 2.6690	+++++ 2.7204	+++++ 2.8524	2.9778 3.0612	2.6282 3.4843	Ave		2.9133				10.2		30.0			
Octane	+++++ 0.2907	+++++ 0.3277	0.2920 0.3249	0.3007 0.3565	0.2768 0.4064	Ave		0.3220				13.2		30.0			
Dibromochloromethane	+++++ 0.6868	+++++ 0.7264	0.6583 0.7653	0.5702 0.7867	0.6225 0.9637	Ave		0.7225				16.8		30.0			
1,2-Dibromoethane (EDB)	+++++ 0.5769	+++++ 0.5960	0.5116 0.6309	0.5207 0.6743	0.5313 0.7931	Ave		0.6043				15.7		30.0			
Tetrachloroethene	0.4118 0.3665	0.4182 0.3892	0.3573 0.4244	0.3609 0.4577	0.3826 0.5059	Ave		0.4075				11.6		30.0			
Chlorobenzene	+++++ 0.8362	+++++ 0.8812	0.8554 0.9355	0.8398 0.9876	0.8205 1.1130	Ave		0.9086				11.0		30.0			
Ethylbenzene	+++++ 1.2947	1.4861 1.3611	1.2392 1.4560	1.2454 1.6034	1.2387 1.8103	Ave		1.4150				13.8		30.0			
m-Xylene & p-Xylene	+++++ 0.9984	0.9557 1.0739	0.8783 1.2331	0.9338 1.3779	0.9337 1.4970	Ave		1.0980				20.1		30.0			
Nonane	+++++ 0.6000	+++++ 0.6547	0.6022 0.7567	0.5500 0.8121	0.5597 0.9337	Ave		0.6836				20.1		30.0			
Bromoform	+++++ 0.7529	+++++ 0.8806	0.5468 1.0135	0.5520 1.0004	0.5742 +++++	Ave		0.7600				27.4		30.0			
Styrene	+++++ 0.7446	+++++ 0.8452	0.5963 0.9648	0.7074 1.0678	0.7024 1.1415	Ave		0.8462				22.9		30.0			
o-Xylene	+++++ 0.9989	1.0440 1.0928	0.9966 1.1970	0.9657 1.3162	0.9414 1.4188	Ave		1.1079				15.1		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-18854-1 Analy Batch No.: 38980

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/09/2020 15:05 Calibration End Date: 04/10/2020 00:47 Calibration ID: 2392

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
1,1,2,2-Tetrachloroethane	+++++ 0.8867	0.8541 0.9434	0.7704 1.0071	0.8098 0.8179	0.8326 1.1655	Ave		0.8986				13.8		30.0			
1,2,3-Trichloropropane	+++++ 0.2222	+++++ 0.2476	0.2301 0.2684	0.1932 0.2798	0.2328 0.3183	Ave		0.2491				15.6		30.0			
Isopropylbenzene	+++++ 1.5073	1.6804 1.6458	1.4314 1.8155	1.4955 1.9378	1.5007 2.0742	Ave		1.6765				13.3		30.0			
Propylbenzene	+++++ 0.4318	+++++ 0.4693	0.3723 0.5222	0.4248 0.5651	0.3912 0.6279	Ave		0.4756				18.8		30.0			
2-Chlorotoluene	+++++ 0.4045	+++++ 0.4403	0.4024 0.4724	0.3750 0.5195	0.3910 0.5750	Ave		0.4475				15.7		30.0			
4-Ethyltoluene	+++++ 1.5426	+++++ 1.6225	1.3476 1.8562	1.3556 2.0831	1.3558 2.2322	Ave		1.6745				20.7		30.0			
1,3,5-Trimethylbenzene	+++++ 0.6518	0.7620 0.7022	0.5913 0.8046	0.6171 0.8786	0.6313 0.9612	Ave		0.7333				17.4		30.0			
Alpha Methyl Styrene	+++++ 0.5615	+++++ 0.6661	+++++ 0.7669	0.4460 0.8917	0.5609 0.9773	Ave		0.6958				27.7		30.0			
Decane	+++++ 0.7610	+++++ 0.8622	0.7202 1.0064	0.7450 1.1395	0.7250 +++++	Ave		0.8513				19.2		30.0			
tert-Butylbenzene	+++++ 1.3519	+++++ 1.5381	1.2508 1.7766	1.2949 1.9426	1.2645 +++++	Ave		1.4885				18.5		30.0			
1,2,4-Trimethylbenzene	+++++ 1.3117	1.2980 1.4909	1.1072 1.8027	1.2031 1.9252	1.2169 +++++	Ave		1.4195				21.0		30.0			
sec-Butylbenzene	+++++ 1.9621	+++++ 2.2423	1.9076 2.6539	1.8695 2.8054	1.8646 +++++	Ave		2.1865				18.1		30.0			
1,3-Dichlorobenzene	+++++ 0.8651	+++++ 1.0372	0.6954 1.2261	0.7413 +++++	0.8036 +++++	Ave		0.8948				22.5		30.0			
Benzyl chloride	1.0388 0.8577	0.7482 1.0680	0.6883 +++++	0.5874 +++++	0.7600 +++++	Ave		0.8212				21.7		30.0			
1,4-Dichlorobenzene	+++++ 0.8634	0.8907 0.9905	0.7738 1.1695	0.7424 1.2874	0.7844 +++++	Ave		0.9378				21.1		30.0			
4-Isopropyltoluene	+++++ 1.5980	+++++ 1.7787	1.4478 2.0495	1.3822 2.2243	1.4714 +++++	Ave		1.7074				19.0		30.0			
1,2,3-Trimethylbenzene	+++++ 1.3262	1.4124 1.5068	1.1094 1.7364	1.1217 1.8823	1.2069 2.0355	Ave		1.4820				22.7		30.0			
1,2-Dichlorobenzene	+++++ 0.8880	0.9031 1.0298	0.7552 1.2294	0.8000 1.3129	0.8356 +++++	Ave		0.9692				21.1		30.0			
Indane	+++++ 1.2824	1.2823 1.4641	1.1347 1.7367	1.1291 1.8256	1.1611 +++++	Ave		1.3770				19.8		30.0			
Indene	+++++ 1.0378	1.0106 1.2474	0.7495 +++++	0.8531 +++++	0.9042 +++++	Ave		0.9671				17.9		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-18854-1 Analy Batch No.: 38980

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/09/2020 15:05 Calibration End Date: 04/10/2020 00:47 Calibration ID: 2392

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Butylbenzene	+++++ 1.5871	+++++ 1.8509	1.2393 2.2652	1.2595 2.3956	1.4609 +++++	Ave		1.7226				27.0		30.0			
Undecane	+++++ 0.9076	1.1020 1.0981	0.6829 1.2760	0.6914 +++++	0.7794 +++++	Ave		0.9339				24.7		30.0			
1,2-Dibromo-3-Chloropropane	+++++ 0.5142	+++++ 0.5820	0.3573 0.6532	0.3679 0.6050	0.4118 +++++	Ave		0.4988				24.1		30.0			
1,2,4,5-Tetramethylbenzene	+++++ 1.4753	+++++ 1.6612	1.1602 1.9017	1.3002 2.0948	1.3172 +++++	Ave		1.5587				22.0		30.0			
Dodecane	+++++ 0.8356	+++++ 1.1341	+++++ 1.3674	+++++ 1.6394	0.6624 1.8246	Lin1	-0.702	1.7630							0.9900		0.9900
1,2,4-Trichlorobenzene	+++++ 0.7118	0.8397 0.8106	0.5104 0.9297	0.5252 1.0505	0.6076 +++++	Ave		0.7482				26.0		30.0			
Naphthalene	+++++ 1.5323	2.0699 1.7015	1.1142 1.6814	1.1275 1.7732	1.2655 2.0165	Ave		1.5869				22.5		30.0			
Hexachlorobutadiene	+++++ 0.8810	+++++ 0.9923	0.8521 1.1063	0.8098 1.2681	0.8506 +++++	Ave		0.9657				17.4		30.0			
1,2,3-Trichlorobenzene	+++++ 0.7969	+++++ 0.8929	0.5182 0.8915	0.5676 0.9143	0.6299 1.1486	Ave		0.7950				26.6		30.0			
2-Methylnaphthalene	+++++ 0.7352	+++++ 1.1925	+++++ 1.4939	+++++ 1.8519	0.4339 +++++	Lin	-1.209	1.9566							0.9930		0.9900
1-Methylnaphthalene	+++++ 1.9185	+++++ 2.3230	+++++ 2.5764	+++++ 2.8719	1.0418 +++++	Lin2	-0.721	2.7769							0.9970		0.9900
4-Bromofluorobenzene (Surr)	0.5301 0.5792	0.5419 0.5972	0.5405 0.6491	0.5445 0.6862	0.5630 0.6978	Ave		0.5929				10.6		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-18854-1 Analy Batch No.: 38980

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/09/2020 15:05 Calibration End Date: 04/10/2020 00:47 Calibration ID: 2392

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 140-38980/3	RD09IC01.D
Level 2	IC 140-38980/4	RD09IC02.D
Level 3	IC 140-38980/5	RD09IC03.D
Level 4	IC 140-38980/6	RD09IC04.D
Level 5	IC 140-38980/7	RD09IC05.D
Level 6	IC 140-38980/8	RD09IC06.D
Level 7	ICIS 140-38980/9	RD09IC07.D
Level 8	IC 140-38980/11	RD09IC08.D
Level 9	IC 140-38980/13	RD09IC09.D
Level 10	IC 140-38980/15	RD09IC10.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
Propene	CBM	Lin	+++++ 116872	+++++ 201000	+++++ 329308	+++++ 679362	+++++ 1262636	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	+++++ 16.0
Chlorodifluoromethane	CBM	Ave	+++++ 132822	+++++ 276242	11524 515417	21846 1129144	51228 +++++	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
Dichlorodifluoromethane	CBM	Ave	2072 90600	4388 174874	9176 +++++	13470 +++++	32848 +++++	0.0200 1.00	0.0400 2.00	0.0800 +++++	0.160 +++++	0.400 +++++
Chloromethane	CBM	Ave	+++++ 31456	+++++ 63156	+++++ 122364	4375 243844	13532 518383	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,2-Dichloro-1,1,2,2-tetrafluoroethane	CBM	Lin1	+++++ 90835	+++++ 171999	11766 308731	13683 717816	38284 1511775	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Vinyl chloride	CBM	Ave	2987 115968	4614 239408	10030 466828	17882 918340	46104 2342271	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,3-Butadiene	CBM	Ave	+++++ 87552	+++++ 178781	7967 354714	12838 703043	36526 1785028	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Butane	CBM	Ave	+++++ 177430	+++++ 377086	16586 739250	29988 1432051	72061 3821340	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Bromomethane	CBM	Ave	+++++ 128549	+++++ 259599	12362 503246	18736 976676	49566 2498361	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Chloroethane	CBM	Ave	+++++ 62188	+++++ 128479	4766 245913	8678 481162	25923 1168769	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Ethanol	CBM	Ave	+++++ 369228	+++++ 803642	29982 1657188	56598 3045454	145385 7924699	+++++ 5.00	+++++ 10.0	0.400 20.0	0.800 40.0	2.00 80.0
Vinyl bromide	CBM	Ave	+++++ 127199	+++++ 265264	10684 517068	20495 1009491	48902 2658402	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Methylbutane	CBM	Ave	+++++ 152976	+++++ 321776	14544 615568	23792 1228461	61403 3021732	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Trichlorofluoromethane	CBM	Ave	+++++ 288402	+++++ 566158	23210 1114962	40662 2260447	106570 5267659	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-18854-1 Analy Batch No.: 38980

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/09/2020 15:05 Calibration End Date: 04/10/2020 00:47 Calibration ID: 2392

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
Acrolein	CBM	Ave	+++++ 25063	+++++ 49433	+++++ 113626	4286 165308	11931 525205	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Acetonitrile	CBM	Ave	+++++ 45572	+++++ 84777	+++++ 185612	+++++ 375653	11393 840218	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
Acetone	CBM	Ave	+++++ 175489	+++++ 305531	+++++ 607405	+++++ 1171524	84844 2487529	+++++ 3.00	+++++ 6.00	+++++ 12.0	+++++ 24.0	1.20 48.0
Pentane	CBM	Ave	+++++ 17520	+++++ 32885	+++++ 71146	2834 150895	7269 332472	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Isopropyl alcohol	CBM	Ave	10925 391813	17102 858178	25955 1727736	60538 3800247	154525 7778987	0.0600 3.00	0.120 6.00	0.240 12.0	0.480 24.0	1.20 48.0
Ethyl ether	CBM	Ave	+++++ 104478	+++++ 220793	9339 455973	16456 1001951	41946 2341245	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,1-Dichloroethene	CBM	Ave	+++++ 83935	4518 175171	7074 350072	13842 754655	34276 1670718	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Acrylonitrile	CBM	Ave	+++++ 54972	+++++ 108410	+++++ 236464	8581 530412	17467 1287314	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
tert-Butyl alcohol	CBM	Ave	+++++ 133684	+++++ 282625	11256 586901	21242 1258265	53259 2828117	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,1,2-Trichloro-1,2,2-trifluoroetha ne	CBM	Ave	3298 187356	8076 387949	14383 814402	29419 1782253	76083 4016966	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Methylene Chloride	CBM	Lin2	+++++ 110709	+++++ 189270	+++++ 352662	+++++ 722461	67101 1578042	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
3-Chloropropene	CBM	Ave	+++++ 86947	+++++ 181836	7761 365096	14650 773700	35112 1904720	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Carbon disulfide	CBM	Ave	+++++ 237249	+++++ 485098	18271 951833	36264 2074014	93098 4666732	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
trans-1,2-Dichloroethene	CBM	Ave	+++++ 76783	+++++ 166412	6114 334417	12916 765354	29938 1766570	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Methylpentane	CBM	Ave	+++++ 200585	+++++ 410735	17637 816285	30332 1851252	78124 4099261	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Methyl tert-butyl ether	CBM	Ave	+++++ 194559	+++++ 407896	+++++ 810712	32931 1774644	78401 3970160	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,1-Dichloroethane	CBM	Ave	+++++ 142199	+++++ 285743	11157 576504	21520 1224391	54744 2716517	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Vinyl acetate	CBM	Ave	+++++ 240159	+++++ 484332	18668 1017203	33800 2192762	88899 5054537	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Butanone (MEK)	CBM	Ave	+++++ 37876	+++++ 78208	+++++ 163715	7954 358771	18561 806484	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Hexane	CBM	Ave	+++++ 57693	+++++ 120261	+++++ 243024	9727 536095	22163 1266569	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
cis-1,2-Dichloroethene	CBM	Ave	+++++ 82561	3657 171035	6370 352158	13176 763131	30343 1646392	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-18854-1 Analy Batch No.: 38980

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/09/2020 15:05 Calibration End Date: 04/10/2020 00:47 Calibration ID: 2392

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
Ethyl acetate	CBM	Ave	+++++ 208962	+++++ 428487	15427 897717	32248 1940061	80487 4268109	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Chloroform	CBM	Ave	+++++ 160664	7300 342288	12198 698955	26443 1557313	65286 3387713	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Tetrahydrofuran	CBM	Ave	+++++ 102820	+++++ 207944	+++++ 433937	17887 933426	38969 2000129	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,1,1-Trichloroethane	CBM	Ave	+++++ 157103	+++++ 323879	13454 660619	24755 1474806	64254 3289753	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2-Dichloroethane	DFBZ	Ave	+++++ 89259	3804 185124	7458 373294	13589 823223	33075 1850224	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1-Butanol	DFBZ	Ave	+++++ 51485	+++++ 104210	+++++ 201101	7046 474691	19588 988774	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Cyclohexane	DFBZ	Ave	+++++ 34219	+++++ 72252	3043 151163	5800 358101	12329 777262	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Benzene	DFBZ	Ave	+++++ 234699	9801 495518	18503 1053976	34858 2455515	90097 5389698	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Carbon tetrachloride	DFBZ	Ave	2236 172543	5894 363452	13959 743132	25568 1726959	46433 4089688	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2,3-Dimethylpentane	DFBZ	Ave	+++++ 50645	+++++ 107005	4673 221446	7565 497727	20844 1104858	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Thiophene	DFBZ	Ave	+++++ 129113	+++++ 276534	10164 571937	18985 1276526	49011 2779211	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2,2,4-Trimethylpentane	DFBZ	Ave	+++++ 361034	+++++ 752720	27841 1557999	54549 3564492	142844 8042858	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Heptane	DFBZ	Ave	+++++ 77660	+++++ 163329	6591 334720	10854 774012	29973 1741794	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2-Dichloropropane	DFBZ	Ave	+++++ 93061	+++++ 187862	9436 393513	13889 901118	35522 1991739	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Trichloroethene	DFBZ	Ave	2443 110510	5492 239306	9519 487334	18486 1352335	42836 2488525	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Dibromomethane	DFBZ	Ave	+++++ 104281	+++++ 225969	8638 467182	15574 1109670	40490 2532396	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Bromodichloromethane	DFBZ	Ave	+++++ 171631	+++++ 357070	13733 762966	23286 1779810	61665 4134260	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,4-Dioxane	DFBZ	Ave	+++++ 32921	+++++ 77416	+++++ 164186	6295 367338	14057 824561	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Methyl methacrylate	DFBZ	Ave	+++++ 112664	+++++ 237613	+++++ 506170	17941 1177077	42849 2656488	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Methylcyclohexane	DFBZ	Ave	+++++ 137157	+++++ 292456	11122 595083	20285 1384541	52863 3185234	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
4-Methyl-2-pentanone (MIBK)	DFBZ	Ave	+++++ 230425	+++++ 493406	+++++ 997632	35121 2350983	90347 5242663	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-18854-1 Analy Batch No.: 38980

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/09/2020 15:05 Calibration End Date: 04/10/2020 00:47 Calibration ID: 2392

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
cis-1,3-Dichloropropene	DFBZ	Ave	+++++ 127387	5410 276163	7682 578556	17307 1322978	47856 3063842	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
trans-1,3-Dichloropropene	CBZd 5	Ave	+++++ 104280	4480 229219	8422 481633	14056 1118268	42684 2640392	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Toluene	CBZd 5	Ave	+++++ 270838	+++++ 568746	21347 1179092	38994 2790129	99576 6339805	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,1,2-Trichloroethane	CBZd 5	Ave	+++++ 85756	+++++ 182659	7059 391127	12671 885739	31702 2042163	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Hexanone	CBZd 5	Ave	+++++ 86930	+++++ 182699	+++++ 379518	13365 941234	30917 2208848	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
C8 Range	DFBZ	Ave	+++++ 899241	+++++ 1863980	+++++ 3894387	153587 9207477	342794 21131636	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Octane	CBZd 5	Ave	+++++ 77944	+++++ 177249	6057 358852	12372 884481	28746 2011737	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Dibromochloromethane	CBZd 5	Ave	+++++ 184161	+++++ 392945	13656 845272	23460 1951581	64655 4770676	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2-Dibromoethane (EDB)	CBZd 5	Ave	+++++ 154698	+++++ 322375	10612 696803	21423 1672886	55181 3926119	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Tetrachloroethene	CBZd 5	Ave	2041 98262	4364 210505	7412 468781	14850 1135442	39741 2504610	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Chlorobenzene	CBZd 5	Ave	+++++ 224222	+++++ 476677	17745 1033212	34552 2449879	85219 5509692	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Ethylbenzene	CBZd 5	Ave	+++++ 347140	15508 736242	25706 1608065	51238 3977519	128652 8961802	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
m-Xylene & p-Xylene	CBZd 5	Ave	+++++ 535393	19946 1161853	36442 2723903	76841 6836363	193959 14821517	+++++ 2.00	0.0800 4.00	0.160 8.00	0.320 16.0	0.800 32.0
Nonane	CBZd 5	Ave	+++++ 160881	+++++ 354169	12493 835742	22628 2014499	58134 4622358	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Bromoform	CBZd 5	Ave	+++++ 201876	+++++ 476330	11343 1119335	22711 2481653	59637 +++++	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
Styrene	CBZd 5	Ave	+++++ 199648	+++++ 457208	12371 1065610	29103 2648998	72951 5650594	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
o-Xylene	CBZd 5	Ave	+++++ 267839	10894 591126	20675 1322107	39732 3265041	97778 7023713	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,1,2,2-Tetrachloroethane	CBZd 5	Ave	+++++ 237751	8913 510310	15982 1112291	33318 2028924	86479 5769793	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2,3-Trichloropropane	CBZd 5	Ave	+++++ 59579	+++++ 133949	4773 296463	7949 694206	24178 1575648	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Isopropylbenzene	CBZd 5	Ave	+++++ 404160	17535 890273	29695 2005178	61527 4807263	155866 10267791	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Propylbenzene	CBZd 5	Ave	+++++ 115772	+++++ 253872	7724 576717	17478 1401954	40636 3108270	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-18854-1 Analy Batch No.: 38980

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/09/2020 15:05 Calibration End Date: 04/10/2020 00:47 Calibration ID: 2392

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
2-Chlorotoluene	CBZd 5	Ave	+++++ 108451	+++++ 238191	8347 521717	15430 1288829	40608 2846324	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
4-Ethyltoluene	CBZd 5	Ave	+++++ 413625	+++++ 877657	27956 2050117	55775 5167573	140822 11050164	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,3,5-Trimethylbenzene	CBZd 5	Ave	+++++ 174782	7951 379825	12266 888669	25390 2179537	65573 4758349	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Alpha Methyl Styrene	CBZd 5	Ave	+++++ 150556	+++++ 360330	+++++ 847008	18349 2212002	58255 4837835	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Decane	CBZd 5	Ave	+++++ 204050	+++++ 466382	14940 1111488	30653 2826693	75302 +++++	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
tert-Butylbenzene	CBZd 5	Ave	+++++ 362499	+++++ 832010	25947 1962184	53275 4819022	131332 +++++	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
1,2,4-Trimethylbenzene	CBZd 5	Ave	+++++ 351697	13545 806491	22969 1990995	49500 4775988	126392 +++++	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
sec-Butylbenzene	CBZd 5	Ave	+++++ 526092	+++++ 1212903	39572 2931216	76918 6959397	193662 +++++	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
1,3-Dichlorobenzene	CBZd 5	Ave	+++++ 231973	+++++ 561074	14426 1354199	30499 +++++	83466 +++++	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 +++++	0.400 +++++
Benzyl chloride	CBZd 5	Ave	5149 229988	7808 577711	14279 +++++	24169 +++++	78931 +++++	0.0200 1.00	0.0400 2.00	0.0800 +++++	0.160 +++++	0.400 +++++
1,4-Dichlorobenzene	CBZd 5	Ave	+++++ 231510	9295 535810	16053 1291702	30544 3193668	81465 +++++	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
4-Isopropyltoluene	CBZd 5	Ave	+++++ 428480	+++++ 962151	30035 2263665	56868 5517991	152825 +++++	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
1,2,3-Trimethylbenzene	CBZd 5	Ave	+++++ 355604	14738 815075	23015 1917778	46150 4669620	125355 10076647	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2-Dichlorobenzene	CBZd 5	Ave	+++++ 238092	9424 557024	15667 1357875	32914 3256974	86783 +++++	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
Indane	CBZd 5	Ave	+++++ 343847	13381 791951	23540 1918118	46453 4528935	120597 +++++	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
Indene	CBZd 5	Ave	+++++ 278260	10546 674779	15549 +++++	35098 +++++	93916 +++++	+++++ 1.00	0.0400 2.00	0.0800 +++++	0.160 +++++	0.400 +++++
Butylbenzene	CBZd 5	Ave	+++++ 425548	+++++ 1001224	25708 2501832	51819 5942853	151730 +++++	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
Undecane	CBZd 5	Ave	+++++ 243366	11499 593968	14166 1409338	28445 +++++	80947 +++++	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 +++++	0.400 +++++
1,2-Dibromo-3-Chloropropane	CBZd 5	Ave	+++++ 137886	+++++ 314839	7413 721401	15136 1500885	42768 +++++	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
1,2,4,5-Tetramethylbenzene	CBZd 5	Ave	+++++ 395585	+++++ 898598	24069 2100386	53492 5196678	136805 +++++	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
Dodecane	CBZd 5	Lin1	+++++ 224043	+++++ 613454	+++++ 1510213	+++++ 4066824	68796 9032334	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-18854-1 Analy Batch No.: 38980

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/09/2020 15:05 Calibration End Date: 04/10/2020 00:47 Calibration ID: 2392

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
1,2,4-Trichlorobenzene	CBZd5	Ave	+++++ 190847	8762 438478	10589 1026817	21608 2606083	63105 +++++	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
Naphthalene	CBZd5	Ave	+++++ 410866	21600 920373	23113 1857108	46390 4398823	131438 9982269	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Hexachlorobutadiene	CBZd5	Ave	+++++ 236235	+++++ 536752	17676 1221906	33317 3145839	88344 +++++	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
1,2,3-Trichlorobenzene	CBZd5	Ave	+++++ 213663	+++++ 482977	10749 984632	23351 2268129	65421 5685931	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Methylnaphthalene	CBZd5	Lin	+++++ 197134	+++++ 645072	+++++ 1650099	+++++ 4594275	45070 +++++	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 +++++
1-Methylnaphthalene	CBZd5	Lin2	+++++ 514444	+++++ 1256640	+++++ 2845710	+++++ 7124918	108208 +++++	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 +++++
4-Bromofluorobenzene (Surr)	CBZd5	Ave	525487 621235	565507 646077	560605 716869	560007 851172	584739 863629	4.00 4.00	4.00 4.00	4.00 4.00	4.00 4.00	4.00 4.00

Curve Type Legend:

Ave = Average ISTD
Lin = Linear ISTD
Lin1 = Linear 1/conc ISTD
Lin2 = Linear 1/conc^2 ISTD

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-18854-1 Analy Batch No.: 38980

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/09/2020 15:05 Calibration End Date: 04/10/2020 00:47 Calibration ID: 2392

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 140-38980/3	RD09IC01.D
Level 2	IC 140-38980/4	RD09IC02.D
Level 3	IC 140-38980/5	RD09IC03.D
Level 4	IC 140-38980/6	RD09IC04.D
Level 5	IC 140-38980/7	RD09IC05.D
Level 6	IC 140-38980/8	RD09IC06.D
Level 7	ICIS 140-38980/9	RD09IC07.D
Level 8	IC 140-38980/11	RD09IC08.D
Level 9	IC 140-38980/13	RD09IC09.D
Level 10	IC 140-38980/15	RD09IC10.D

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
Propene	+++++	+++++	+++++	+++++	+++++	-23.6						50
Chlorodifluoromethane	+++++	+++++	16.4	+++++					50			
Dichlorodifluoromethane	16.2	+++++	+++++	+++++			50					
Chloromethane	+++++	+++++	+++++	-3.2						50		
1,2-Dichloro-1,1,2,2-tetrafluoroethane	+++++	+++++	11.7						50			
Vinyl chloride	38.0						50					
1,3-Butadiene	+++++	+++++	21.8						50			
Butane	+++++	+++++	20.9						50			
Bromomethane	+++++	+++++	31.2						50			
Chloroethane	+++++	+++++	7.4						50			
Ethanol	+++++	+++++	7.4						50			
Vinyl bromide	+++++	+++++	13.0						50			
2-Methylbutane	+++++	+++++	26.2						50			
Trichlorofluoromethane	+++++	+++++	15.0						50			

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-18854-1 Analy Batch No.: 38980

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/09/2020 15:05 Calibration End Date: 04/10/2020 00:47 Calibration ID: 2392

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
Acrolein	+++++	+++++	+++++	9.6						50		
Acetonitrile	+++++	+++++	+++++	+++++	-29.0						50	
Acetone	+++++	+++++	+++++	+++++	37.3						80	
Pentane	+++++	+++++	+++++	7.6						50		
Isopropyl alcohol	45.7						50					
Ethyl ether	+++++	+++++	14.2						50			
1,1-Dichloroethene	+++++	31.0						50				
Acrylonitrile	+++++	+++++	+++++	1.5						50		
tert-Butyl alcohol	+++++	+++++	9.4						50			
1,1,2-Trichloro-1,2,2-trifluoroethane	-4.3						50					
Methylene Chloride	+++++	+++++	+++++	+++++	0.5						80	
3-Chloropropene	+++++	+++++	15.0						50			
Carbon disulfide	+++++	+++++	5.4						50			
trans-1,2-Dichloroethene	+++++	+++++	1.7						50			
2-Methylpentane	+++++	+++++	16.9						50			
Methyl tert-butyl ether	+++++	+++++	+++++	8.2						50		
1,1-Dichloroethane	+++++	+++++	8.2						50			
Vinyl acetate	+++++	+++++	6.1						50			
2-Butanone (MEK)	+++++	+++++	+++++	24.0						50		
Hexane	+++++	+++++	+++++	7.0						50		
cis-1,2-Dichloroethene	+++++	12.9						50				

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-18854-1 Analy Batch No.: 38980

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/09/2020 15:05 Calibration End Date: 04/10/2020 00:47 Calibration ID: 2392

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
Ethyl acetate	+++++	+++++	-0.4						50			
Chloroform	+++++	12.2						50				
Tetrahydrofuran	+++++	+++++	+++++	12.9						50		
1,1,1-Trichloroethane	+++++	+++++	11.9						50			
1,2-Dichloroethane	+++++	7.4						50				
1-Butanol	+++++	+++++	+++++	-9.8						50		
Cyclohexane	+++++	+++++	4.9						50			
Benzene	+++++	2.2						50				
Carbon tetrachloride	-27.4						50					
2,3-Dimethylpentane	+++++	+++++	9.9						50			
Thiophene	+++++	+++++	-3.4						50			
2,2,4-Trimethylpentane	+++++	+++++	-5.7						50			
Heptane	+++++	+++++	3.4						50			
1,2-Dichloropropane	+++++	+++++	21.9						50			
Trichloroethene	6.1						50					
Dibromomethane	+++++	+++++	-2.4						50			
Bromodichloromethane	+++++	+++++	-2.5						50			
1,4-Dioxane	+++++	+++++	+++++	4.3						50		
Methyl methacrylate	+++++	+++++	+++++	-4.8						50		
Methylcyclohexane	+++++	+++++	-2.1						50			
4-Methyl-2-pentanone (MIBK)	+++++	+++++	+++++	-7.5						50		

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-18854-1 Analy Batch No.: 38980

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/09/2020 15:05 Calibration End Date: 04/10/2020 00:47 Calibration ID: 2392

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
cis-1,3-Dichloropropene	+++++	6.5						50				
trans-1,3-Dichloropropene	+++++	1.1						50				
Toluene	+++++	+++++	-2.8						50			
1,1,2-Trichloroethane	+++++	+++++	-0.5						50			
2-Hexanone	+++++	+++++	+++++	-7.3						50		
Octane	+++++	+++++	-9.3						50			
Dibromochloromethane	+++++	+++++	-8.9						50			
1,2-Dibromoethane (EDB)	+++++	+++++	-15.4						50			
Tetrachloroethene	1.1						50					
Chlorobenzene	+++++	+++++	-5.9						50			
Ethylbenzene	+++++	5.0						50				
m-Xylene & p-Xylene	+++++	-13.0						50				
Nonane	+++++	+++++	-11.9						50			
Bromoform	+++++	+++++	-28.1	+++++					50			
Styrene	+++++	+++++	-29.5						50			
o-Xylene	+++++	-5.8						50				
1,1,2,2-Tetrachloroethane	+++++	-4.9						50				
1,2,3-Trichloropropane	+++++	+++++	-7.6						50			
Isopropylbenzene	+++++	0.2						50				
Propylbenzene	+++++	+++++	-21.7						50			
2-Chlorotoluene	+++++	+++++	-10.1						50			

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-18854-1 Analy Batch No.: 38980

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/09/2020 15:05 Calibration End Date: 04/10/2020 00:47 Calibration ID: 2392

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
4-Ethyltoluene	+++++	+++++	-19.5						50			
1,3,5-Trimethylbenzene	+++++	3.9						50				
Alpha Methyl Styrene	+++++	+++++	+++++	-35.9						50		
Decane	+++++	+++++	-15.4	+++++					50			
tert-Butylbenzene	+++++	+++++	-16.0	+++++					50			
1,2,4-Trimethylbenzene	+++++	-8.6		+++++				50				
sec-Butylbenzene	+++++	+++++	-12.8	+++++					50			
1,3-Dichlorobenzene	+++++	+++++	-22.3 +++++	+++++					50			
Benzyl chloride	26.5	+++++	+++++	+++++			50					
1,4-Dichlorobenzene	+++++	-5.0		+++++				50				
4-Isopropyltoluene	+++++	+++++	-15.2	+++++					50			
1,2,3-Trimethylbenzene	+++++	-4.7						50				
1,2-Dichlorobenzene	+++++	-6.8		+++++				50				
Indane	+++++	-6.9		+++++				50				
Indene	+++++	4.5 +++++	+++++	+++++				50				
Butylbenzene	+++++	+++++	-28.1	+++++					50			
Undecane	+++++	18.0	+++++	+++++				50				
1,2-Dibromo-3-Chloropropane	+++++	+++++	-28.4	+++++					50			
1,2,4,5-Tetramethylbenzene	+++++	+++++	-25.6	+++++					50			
Dodecane	+++++	+++++	+++++	+++++	37.1						50	
1,2,4-Trichlorobenzene	+++++	12.2		+++++				50				

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-18854-1 Analy Batch No.: 38980

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/09/2020 15:05 Calibration End Date: 04/10/2020 00:47 Calibration ID: 2392

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
Naphthalene	+++++	30.4						80				
Hexachlorobutadiene	+++++	+++++	-11.8	+++++					50			
1,2,3-Trichlorobenzene	+++++	+++++	-34.8						50			
2-Methylnaphthalene	+++++	+++++	+++++	+++++ +++++	76.7						80	
1-Methylnaphthalene	+++++	+++++	+++++	+++++ +++++	2.4						80	

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MR\20200409-15180.b\RD09IC01.D
Lims ID: IC L1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 09-Apr-2020 15:05:30 ALS Bottle#: 1 Worklist Smp#: 3
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0015180-003
Misc. Info.: 285824
Operator ID: HMT Instrument ID: MR
Sublist: chrom-MR_TO15*sub16

Method: \\chromfs\Knoxville\ChromData\MR\20200409-15180.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 10-Apr-2020 13:42:18 Calib Date: 10-Apr-2020 00:47:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MR\20200409-15180.b\RD09IC10.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX0332

First Level Reviewer: tajh Date: 10-Apr-2020 08:04:12

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.344	8.356	-0.012	95	169433	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.593	10.595	-0.002	94	1220585	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.419	15.420	-0.001	87	991292	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr	95	17.069	17.069	0.000	94	525487	4.00	3.58	
7 Propene	41	3.340	3.323	0.017	98	40659	0.0200	-0.4362	
8 Dichlorodifluoromethane	85	3.394	3.381	0.013	45	2072	0.0200	0.0232	
6 Chlorodifluoromethane	51	3.340	3.332	0.008	36	3300	0.0200	0.0277	
9 Chloromethane	52	3.572	3.562	0.010	78	810	0.0200	0.0309	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.572	3.566	0.006	73	4336	0.0200	-0.0140	
11 Acetaldehyde	44	3.712	3.709	0.003	93	39865	0.1000	0.8433	
12 Vinyl chloride	62	3.729	3.722	0.007	34	2987	0.0200	0.0276	
13 Butane	43	3.804	3.802	0.002	43	2278	0.0200	0.0138	
14 Butadiene	54	3.804	3.802	0.002	50	2163	0.0200	0.0275	
15 Bromomethane	94	4.106	4.103	0.003	53	3292	0.0200	0.0290	
17 Ethanol	31	4.349	4.348	0.001	77	11008	0.1000	0.1638	
16 Chloroethane	64	4.246	4.239	0.007	51	1735	0.0200	0.0325	
18 Vinyl bromide	106	4.521	4.520	0.001	92	3448	0.0200	0.0303	
19 2-Methylbutane	43	4.575	4.565	0.010	41	4304	0.0200	0.0310	
21 Acrolein	56	4.796	4.794	0.002	27	2477	0.0200	0.1092	
20 Trichlorofluoromethane	101	4.775	4.773	0.002	93	6088	0.0200	0.0251	
23 Acetone	58	4.931	4.909	0.022	99	22543	0.0600	0.4885	
25 Isopropyl alcohol	45	5.023	5.009	0.014	5	10925	0.0600	0.0874	
22 Acetonitrile	40	4.753	4.861	-0.108	23	2608	0.0200	0.0726	
24 Pentane	72	4.985	4.987	-0.002	1	460	0.0200	0.0301	
26 Ethyl ether	31	5.195	5.168	0.027	42	3060	0.0200	0.0311	
27 1,1-Dichloroethene	96	5.460	5.463	-0.003	68	2357	0.0200	0.0295	
28 Acrylonitrile	53	5.578	5.580	-0.002	24	1142	0.0200	0.0233	
29 2-Methyl-2-propanol	59	5.654	5.605	0.049	1	3495	0.0200	0.0282	
30 1,1,2-Trichloro-1,2,2-trif	101	5.638	5.640	-0.002	67	3298	0.0200	0.0191	
31 Methylene Chloride	84	5.805	5.811	-0.006	97	37873	0.0200	0.0648	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	5.810	5.825	-0.015	17	2321	0.0200	0.0286	
33 Carbon disulfide	76	5.972	5.963	0.009	35	5466	0.0200	0.0262	
36 Methyl tert-butyl ether	73	6.759	6.756	0.003	1	265	0.0200	0.001502	
34 trans-1,2-Dichloroethene	96	6.624	6.614	0.010	33	2551	0.0200	0.0353	
35 2-Methylpentane	43	6.630	6.629	0.001	33	3247	0.0200	0.0179	
37 1,1-Dichloroethane	63	7.023	7.036	-0.013	47	3777	0.0200	0.0304	
38 Vinyl acetate	43	7.320	7.169	0.151	70	9532	0.0200	0.0450	
39 2-Butanone (MEK)	72	7.595	7.601	-0.006	1	142	0.0200	0.003819	
40 Hexane	56	7.595	7.615	-0.020	1	683	0.0200	0.0130	
41 Isopropyl ether	45	7.816	7.788	0.028	65	6680	0.0200	0.0246	
42 cis-1,2-Dichloroethene	96	8.032	8.024	0.008	1	987	0.0200	0.0132	
43 Ethyl acetate	43	8.188	8.220	-0.032	1	389	0.0200	0.002088	
44 Chloroform	83	8.355	8.368	-0.013	28	3752	0.0200	0.0249	
45 Tert-butyl ethyl ether	59	8.522	8.477	0.045	66	6178	0.0200	0.0308	
46 Tetrahydrofuran	42	8.738	8.771	-0.033	1	382	0.0200	0.004158	
47 1,1,1-Trichloroethane	97	9.380	9.397	-0.017	10	4037	0.0200	0.0279	
48 1,2-Dichloroethane	62	9.498	9.515	-0.017	1	547	0.0200	0.006488	
49 n-Butanol	31	10.129	10.017	0.112	26	309	0.0200	0.006688	
50 Cyclohexane	69	10.000	10.011	-0.011	1	756	0.0200	0.0223	
51 Benzene	78	10.011	10.012	-0.001	56	4259	0.0200	0.0186	
52 Carbon tetrachloride	117	10.027	10.035	-0.008	66	2236	0.0200	0.0145	
53 2,3-Dimethylpentane	71	10.135	10.141	-0.006	42	1154	0.0200	0.0232	
54 Thiophene	84	10.297	10.300	-0.003	1	2195	0.0200	0.0179	
55 Isooctane	57	10.814	10.812	0.002	77	9254	0.0200	0.0268	
56 n-Heptane	71	11.224	11.215	0.009	20	1609	0.0200	0.0216	
57 1,2-Dichloropropane	63	11.294	11.289	0.005	15	1479	0.0200	0.0164	
58 Trichloroethene	130	11.321	11.327	-0.006	38	2443	0.0200	0.0212	
59 Dibromomethane	93	11.407	11.412	-0.005	48	2917	0.0200	0.0282	
61 1,4-Dioxane	88	11.591	11.592	-0.001	1	50	0.0200	0.001401	
60 Dichlorobromomethane	83	11.558	11.563	-0.005	44	3142	0.0200	0.0191	
62 Methyl methacrylate	41	11.693	11.675	0.018	11	3685	0.0200	0.0331	
63 Methylcyclohexane	83	12.108	12.115	-0.007	48	2578	0.0200	0.0194	
64 4-Methyl-2-pentanone (MIBK	43	12.572	12.550	0.022	48	7120	0.0200	0.0317	
65 cis-1,3-Dichloropropene	75	12.604	12.601	0.003	12	2747	0.0200	0.0227	
66 trans-1,3-Dichloropropene	75	13.311	13.315	-0.004	36	3079	0.0200	0.0293	
67 Toluene	91	13.429	13.428	0.001	88	5860	0.0200	0.0223	
68 1,1,2-Trichloroethane	83	13.510	13.510	0.000	35	2045	0.0200	0.0241	
69 2-Hexanone	58	13.926	13.905	0.021	32	1471	0.0200	0.0169	
70 n-Octane	85	14.147	14.139	0.008	51	1254	0.0200	0.0157	
71 Chlorodibromomethane	129	14.211	14.215	-0.004	55	3276	0.0200	0.0183	
72 Ethylene Dibromide	107	14.519	14.511	0.008	62	3140	0.0200	0.0210	
73 Tetrachloroethene	129	14.583	14.586	-0.003	50	2041	0.0200	0.0202	
74 Chlorobenzene	112	15.479	15.471	0.008	1	4278	0.0200	0.0190	
75 2,3-Dimethylheptane	43	15.500	15.496	0.004	56	7818	0.0200	0.0248	
76 Ethylbenzene	91	15.759	15.762	-0.003	92	7795	0.0200	0.0222	
77 m-Xylene & p-Xylene	91	15.915	15.923	-0.008	86	9571	0.0400	0.0352	
78 n-Nonane	57	16.363	16.354	0.009	87	3318	0.0200	0.0196	
79 Bromoform	173	16.368	16.369	-0.001	62	2105	0.0200	0.0112	
80 Styrene	104	16.395	16.392	0.003	42	3341	0.0200	0.0159	
81 o-Xylene	91	16.460	16.451	0.009	23	6757	0.0200	0.0246	
82 1,1,2,2-Tetrachloroethane	83	16.784	16.779	0.005	28	4727	0.0200	0.0212	
83 1,2,3-Trichloropropane	110	17.069	16.950	0.119	61	579	0.0200	0.009381	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	17.042	17.040	0.002	86	9983	0.0200	0.0240	
85 N-Propylbenzene	120	17.598	17.591	0.007	63	2623	0.0200	0.0223	
86 2-Chlorotoluene	126	17.625	17.632	-0.007	1	2033	0.0200	0.0183	
87 4-Ethyltoluene	105	17.749	17.745	0.004	96	8311	0.0200	0.0200	
88 1,3,5-Trimethylbenzene	120	17.824	17.822	0.002	95	3675	0.0200	0.0202	
89 Alpha Methyl Styrene	118	18.051	18.057	-0.006	36	2397	0.0200	0.0139	
90 n-Decane	57	18.126	18.123	0.003	69	4377	0.0200	0.0207	
91 tert-Butylbenzene	119	18.256	18.257	-0.001	90	7643	0.0200	0.0207	
92 1,2,4-Trimethylbenzene	105	18.277	18.270	0.007	90	7651	0.0200	0.0217	
93 sec-Butylbenzene	105	18.531	18.531	0.000	97	11726	0.0200	0.0216	
94 1,3-Dichlorobenzene	146	18.552	18.546	0.006	60	4014	0.0200	0.0181	
95 Benzyl chloride	91	18.628	18.623	0.005	86	5149	0.0200	0.0253	
96 1,4-Dichlorobenzene	146	18.633	18.633	0.000	86	3901	0.0200	0.0168	
97 4-Isopropyltoluene	119	18.698	18.698	0.000	94	8491	0.0200	0.0201	
98 1,2,3-Trimethylbenzene	105	18.746	18.751	-0.005	55	6480	0.0200	0.0176	
99 Butylcyclohexane	83	18.806	18.807	-0.001	86	6152	0.0200	0.0203	
100 2,3-Dihydroindene	117	19.000	19.000	0.000	91	7533	0.0200	0.0221	
101 1,2-Dichlorobenzene	146	19.000	18.999	0.001	76	4568	0.0200	0.0190	
102 Indene	116	19.140	19.132	0.008	60	4630	0.0200	0.0193	
103 n-Butylbenzene	91	19.145	19.140	0.005	65	6797	0.0200	0.0159	
104 Undecane	57	19.464	19.460	0.004	85	5758	0.0200	0.0249	
106 1,2,4,5-Tetramethylbenzene	119	19.906	19.906	0.000	92	9329	0.0200	0.0242	
107 Dodecane	57	20.515	20.516	-0.001	35	2770	0.0200	0.4045	
108 1,2,4-Trichlorobenzene	180	20.698	20.703	-0.005	19	4011	0.0200	0.0216	
109 Naphthalene	128	20.849	20.842	0.007	92	7278	0.0200	0.0185	
110 Hexachlorobutadiene	225	21.060	21.060	0.000	88	8197	0.0200	0.0342	
111 1,2,3-Trichlorobenzene	180	21.124	21.129	-0.005	53	4423	0.0200	0.0225	
113 1-Methylnaphthalene	142	21.993	21.990	0.003	94	10965	0.0200	0.2755	
A 116 C8 Range	1	14.147	(14.125-14.168)		0	26128	0.0200	0.0294	
S 117 Xylenes, Total	100				0		0.0600	0.0598	
S 118 1,2-Dichloroethene, Total	1				0		0.0400	0.0484	

Reagents:

40L1-3DQP_00024	Amount Added: 50.00	Units: mL	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

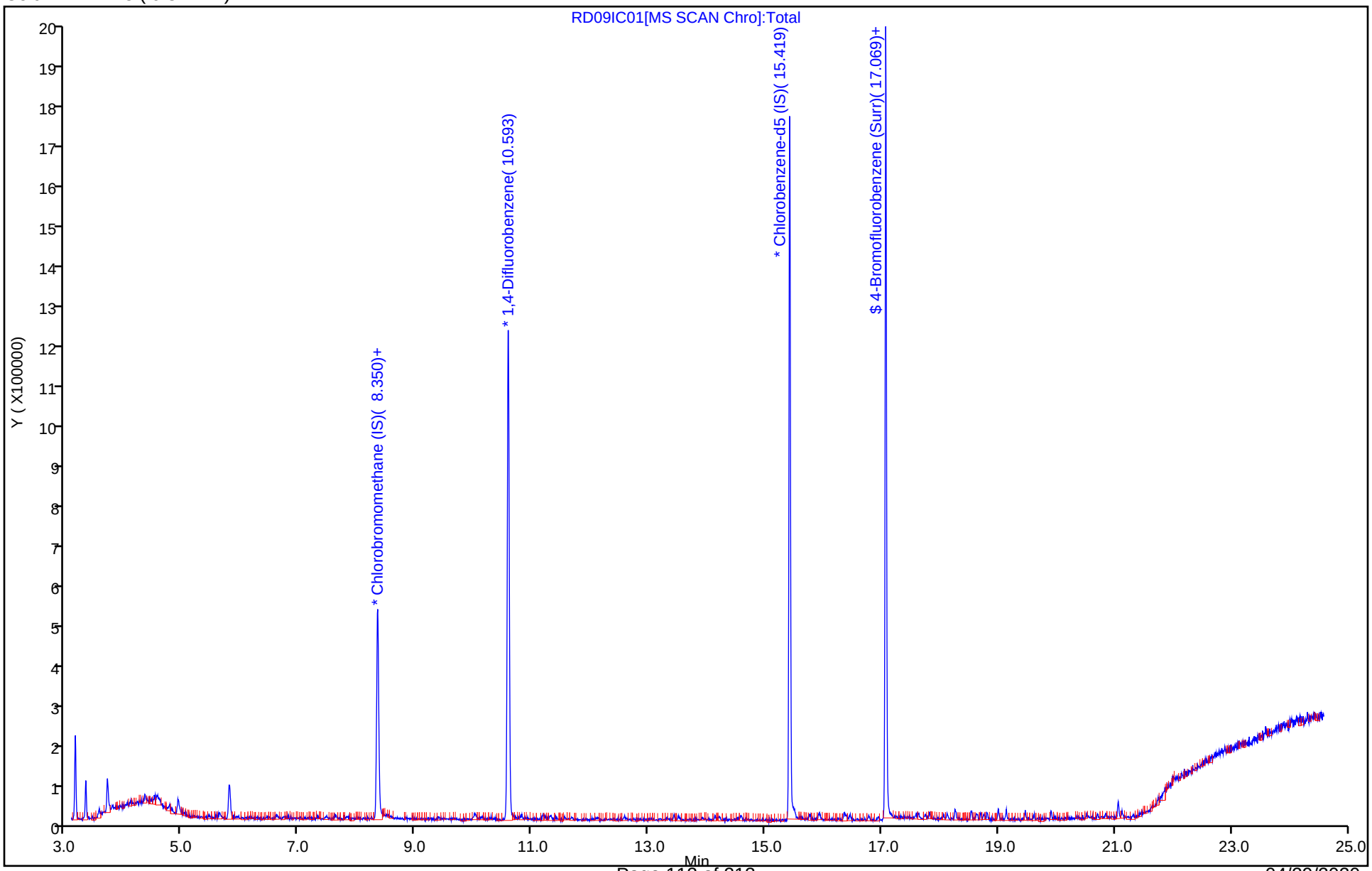
Report Date: 10-Apr-2020 13:42:18 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200409-15180.b\RD09IC01.D

Injection Date:	09-Apr-2020 15:05:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	IC L1			Worklist Smp#:	3
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

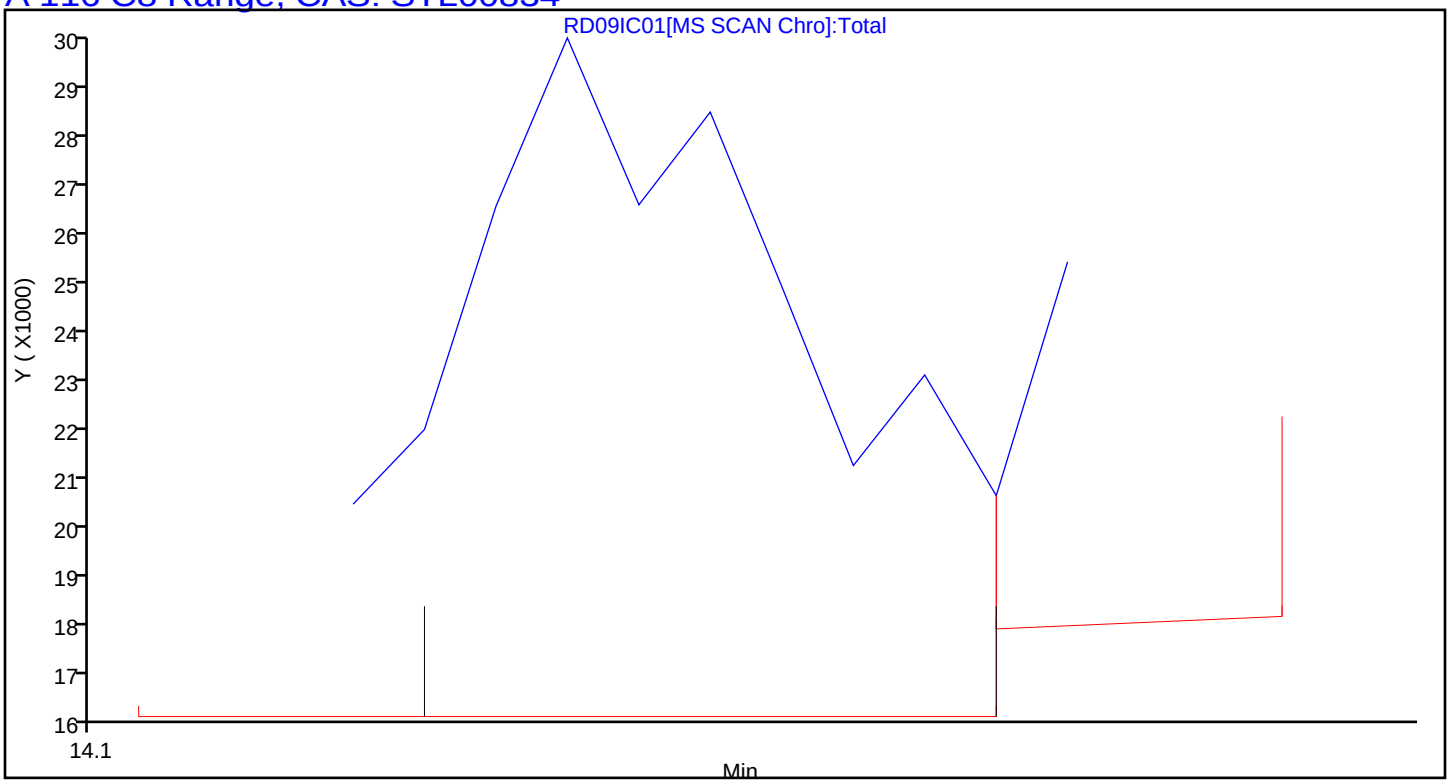


Report Date: 10-Apr-2020 13:42:19 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200409-15180.b\RD09IC01.D				
Injection Date:	09-Apr-2020 15:05:30	Instrument ID:	MR		
Lims ID:	IC L1				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	1	Worklist Smp#:	3
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 116 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MR\20200409-15180.b\RD09IC02.D
Lims ID: IC L2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 09-Apr-2020 15:53:30 ALS Bottle#: 1 Worklist Smp#: 4
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0015180-004
Misc. Info.: 285824
Operator ID: HMT Instrument ID: MR
Sublist: chrom-MR_TO15*sub16

Method: \\chromfs\Knoxville\ChromData\MR\20200409-15180.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 10-Apr-2020 13:42:22 Calib Date: 10-Apr-2020 00:47:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MR\20200409-15180.b\RD09IC10.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX0332

First Level Reviewer: tajh Date: 10-Apr-2020 08:15:38

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.371	8.356	0.015	94	183102	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.609	10.595	0.014	94	1281345	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.424	15.420	0.004	86	1043504	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr	95	17.069	17.069	0.000	95	565507	4.00	3.66	
7 Propene	41	3.362	3.323	0.039	94	46334	0.0400	-0.3949	
6 Chlorodifluoromethane	51	3.351	3.332	0.019	39	5231	0.0400	0.0406	
8 Dichlorodifluoromethane	85	3.410	3.381	0.029	92	4388	0.0400	0.0455	
9 Chloromethane	52	3.583	3.562	0.021	76	1493	0.0400	0.0527	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.583	3.566	0.017	90	5725	0.0400	0.000248	
11 Acetaldehyde	44	3.739	3.709	0.030	91	69095	0.2000	1.35	
12 Vinyl chloride	62	3.750	3.722	0.028	34	4614	0.0400	0.0395	
13 Butane	43	3.825	3.802	0.023	72	8304	0.0400	0.0465	
14 Butadiene	54	3.825	3.802	0.023	68	3249	0.0400	0.0382	
15 Bromomethane	94	4.127	4.103	0.024	88	5407	0.0400	0.0441	
16 Chloroethane	64	4.262	4.239	0.023	66	3202	0.0400	0.0555	
17 Ethanol	31	4.392	4.348	0.044	93	10013	0.2000	0.1379	
18 Vinyl bromide	106	4.543	4.520	0.023	94	4809	0.0400	0.0391	
19 2-Methylbutane	43	4.586	4.565	0.021	70	5202	0.0400	0.0347	
22 Acetonitrile	40	4.850	4.861	-0.011	35	2049	0.0400	0.0528	
20 Trichlorofluoromethane	101	4.807	4.773	0.034	78	9238	0.0400	0.0352	
21 Acrolein	56	4.823	4.794	0.029	43	3320	0.0400	0.1355	
23 Acetone	58	4.952	4.909	0.043	97	40212	0.1200	0.8063	
24 Pentane	72	5.012	4.987	0.025	7	1142	0.0400	0.0692	
25 Isopropyl alcohol	45	5.082	5.009	0.073	91	17102	0.1200	0.1267	
26 Ethyl ether	31	5.233	5.168	0.065	80	4222	0.0400	0.0397	
27 1,1-Dichloroethene	96	5.486	5.463	0.023	71	4518	0.0400	0.0524	
28 Acrylonitrile	53	5.605	5.580	0.025	39	2819	0.0400	0.0532	
30 1,1,2-Trichloro-1,2,2-trif	101	5.664	5.640	0.024	92	8076	0.0400	0.0434	
29 2-Methyl-2-propanol	59	5.697	5.605	0.092	52	5051	0.0400	0.0378	
31 Methylene Chloride	84	5.837	5.811	0.026	95	41855	0.0400	0.0778	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	5.858	5.825	0.033	45	4676	0.0400	0.0533	
33 Carbon disulfide	76	5.982	5.963	0.019	65	8960	0.0400	0.0398	
34 trans-1,2-Dichloroethene	96	6.629	6.614	0.015	66	2056	0.0400	0.0263	
35 2-Methylpentane	43	6.651	6.629	0.022	62	9088	0.0400	0.0463	
36 Methyl tert-butyl ether	73	6.845	6.756	0.089	69	10052	0.0400	0.0527	
37 1,1-Dichloroethane	63	7.072	7.036	0.036	21	6464	0.0400	0.0482	
38 Vinyl acetate	43	7.185	7.169	0.016	57	9908	0.0400	0.0433	
40 Hexane	56	7.649	7.615	0.034	61	1629	0.0400	0.0286	
39 2-Butanone (MEK)	72	7.665	7.601	0.064	95	4701	0.0400	0.1170	
41 Isopropyl ether	45	7.854	7.788	0.066	69	14071	0.0400	0.0480	
42 cis-1,2-Dichloroethene	96	8.032	8.024	0.007	69	3657	0.0400	0.0452	
43 Ethyl acetate	43	8.280	8.220	0.060	79	8976	0.0400	0.0446	
44 Chloroform	83	8.377	8.368	0.009	29	7300	0.0400	0.0449	
45 Tert-butyl ethyl ether	59	8.544	8.477	0.067	87	9104	0.0400	0.0420	
46 Tetrahydrofuran	42	8.803	8.771	0.032	1	956	0.0400	0.009629	
47 1,1,1-Trichloroethane	97	9.412	9.397	0.015	63	7002	0.0400	0.0448	
48 1,2-Dichloroethane	62	9.536	9.515	0.021	41	3804	0.0400	0.0430	
50 Cyclohexane	69	10.059	10.011	0.048	77	786	0.0400	0.0221	
51 Benzene	78	10.027	10.012	0.015	89	9801	0.0400	0.0409	
52 Carbon tetrachloride	117	10.059	10.035	0.024	66	5894	0.0400	0.0365	
49 n-Butanol	31	10.162	10.017	0.145	32	1420	0.0400	0.0293	
53 2,3-Dimethylpentane	71	10.162	10.141	0.021	53	2432	0.0400	0.0467	
54 Thiophene	84	10.323	10.300	0.023	25	4407	0.0400	0.0342	
55 Isooctane	57	10.819	10.812	0.007	81	16563	0.0400	0.0458	
56 n-Heptane	71	11.224	11.215	0.009	57	3406	0.0400	0.0436	
57 1,2-Dichloropropane	63	11.305	11.289	0.016	65	4485	0.0400	0.0473	
58 Trichloroethene	130	11.332	11.327	0.005	63	5492	0.0400	0.0454	
59 Dibromomethane	93	11.423	11.412	0.011	42	4656	0.0400	0.0429	
60 Dichlorobromomethane	83	11.569	11.563	0.006	84	6338	0.0400	0.0367	
61 1,4-Dioxane	88	11.666	11.592	0.074	2	1650	0.0400	0.0440	
62 Methyl methacrylate	41	11.693	11.675	0.018	45	2868	0.0400	0.0245	
63 Methylcyclohexane	83	12.130	12.115	0.015	91	6943	0.0400	0.0498	
64 4-Methyl-2-pentanone (MIBK	43	12.588	12.550	0.038	84	8164	0.0400	0.0346	
65 cis-1,3-Dichloropropene	75	12.615	12.601	0.014	89	5410	0.0400	0.0426	
66 trans-1,3-Dichloropropene	75	13.332	13.315	0.017	42	4480	0.0400	0.0405	
67 Toluene	91	13.435	13.428	0.007	95	10293	0.0400	0.0373	
68 1,1,2-Trichloroethane	83	13.521	13.510	0.011	92	4407	0.0400	0.0494	
69 2-Hexanone	58	13.888	13.905	-0.017	1	244	0.0400	0.002668	
70 n-Octane	85	14.136	14.139	-0.003	90	3341	0.0400	0.0398	
71 Chlorodibromomethane	129	14.222	14.215	0.007	88	5891	0.0400	0.0313	
72 Ethylene Dibromide	107	14.524	14.511	0.013	62	5463	0.0400	0.0347	
73 Tetrachloroethene	129	14.594	14.586	0.008	90	4364	0.0400	0.0411	
74 Chlorobenzene	112	15.478	15.471	0.007	83	9334	0.0400	0.0394	
75 2,3-Dimethylheptane	43	15.500	15.496	0.004	89	16120	0.0400	0.0485	
76 Ethylbenzene	91	15.770	15.762	0.008	94	15508	0.0400	0.0420	
77 m-Xylene & p-Xylene	91	15.921	15.923	-0.002	97	19946	0.0800	0.0696	
78 n-Nonane	57	16.357	16.354	0.003	91	6790	0.0400	0.0381	
79 Bromoform	173	16.374	16.369	0.005	93	5654	0.0400	0.0285	
80 Styrene	104	16.400	16.392	0.008	84	7374	0.0400	0.0334	
81 o-Xylene	91	16.460	16.451	0.009	94	10894	0.0400	0.0377	
82 1,1,2,2-Tetrachloroethane	83	16.789	16.779	0.010	93	8913	0.0400	0.0380	
84 Isopropylbenzene	105	17.042	17.040	0.002	89	17535	0.0400	0.0401	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
83 1,2,3-Trichloropropane	110	16.940	16.950	-0.010	87	3021	0.0400	0.0465	
85 N-Propylbenzene	120	17.598	17.591	0.007	97	5745	0.0400	0.0463	
86 2-Chlorotoluene	126	17.641	17.632	0.009	94	4651	0.0400	0.0398	
87 4-Ethyltoluene	105	17.749	17.745	0.004	96	13790	0.0400	0.0316	
88 1,3,5-Trimethylbenzene	120	17.829	17.822	0.007	94	7951	0.0400	0.0416	
89 Alpha Methyl Styrene	118	18.056	18.057	-0.001	88	5392	0.0400	0.0297	
90 n-Decane	57	18.126	18.123	0.003	80	8906	0.0400	0.0401	
91 tert-Butylbenzene	119	18.261	18.257	0.004	89	14922	0.0400	0.0384	
92 1,2,4-Trimethylbenzene	105	18.272	18.270	0.002	73	13545	0.0400	0.0366	
93 sec-Butylbenzene	105	18.530	18.531	-0.001	97	22213	0.0400	0.0389	
94 1,3-Dichlorobenzene	146	18.552	18.546	0.006	92	8896	0.0400	0.0381	
95 Benzyl chloride	91	18.617	18.623	-0.006	69	7808	0.0400	0.0364	
96 1,4-Dichlorobenzene	146	18.638	18.633	0.005	91	9295	0.0400	0.0380	
97 4-Isopropyltoluene	119	18.703	18.698	0.005	96	17644	0.0400	0.0396	
98 1,2,3-Trimethylbenzene	105	18.757	18.751	0.006	95	14738	0.0400	0.0381	
99 Butylcyclohexane	83	18.811	18.807	0.004	87	11146	0.0400	0.0349	
100 2,3-Dihydroindene	117	19.005	19.000	0.005	91	13381	0.0400	0.0372	
101 1,2-Dichlorobenzene	146	19.000	18.999	0.001	81	9424	0.0400	0.0373	
102 Indene	116	19.134	19.132	0.002	82	10546	0.0400	0.0418	
103 n-Butylbenzene	91	19.140	19.140	0.000	97	15841	0.0400	0.0352	
104 Undecane	57	19.458	19.460	-0.002	86	11499	0.0400	0.0472	
105 1,2-Dibromo-3-Chloropropan	157	19.614	19.611	0.003	87	5772	0.0400	0.0444	
106 1,2,4,5-Tetramethylbenzene	119	19.906	19.906	0.000	95	16088	0.0400	0.0396	
107 Dodecane	57	20.515	20.516	-0.001	83	9886	0.0400	0.4196	
108 1,2,4-Trichlorobenzene	180	20.704	20.703	0.001	89	8762	0.0400	0.0449	
109 Naphthalene	128	20.844	20.842	0.002	99	21600	0.0400	0.0522	
110 Hexachlorobutadiene	225	21.059	21.060	-0.001	91	16360	0.0400	0.0649	
111 1,2,3-Trichlorobenzene	180	21.130	21.129	0.001	92	13581	0.0400	0.0655	
112 2-Methylnaphthalene	142	21.858	21.856	0.002	92	11383	0.0400	0.6404	
113 1-Methylnaphthalene	142	21.992	21.990	0.002	97	26243	0.0400	0.2958	
A 116 C8 Range	1	14.146	(14.120-14.173)		0	45317	0.0400	0.0486	
S 117 Xylenes, Total	100				0		0.1200	0.1073	
S 118 1,2-Dichloroethene, Total	1				0		0.0800	0.0715	

Reagents:

40L1-3DQP_00024	Amount Added: 100.00	Units: mL	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

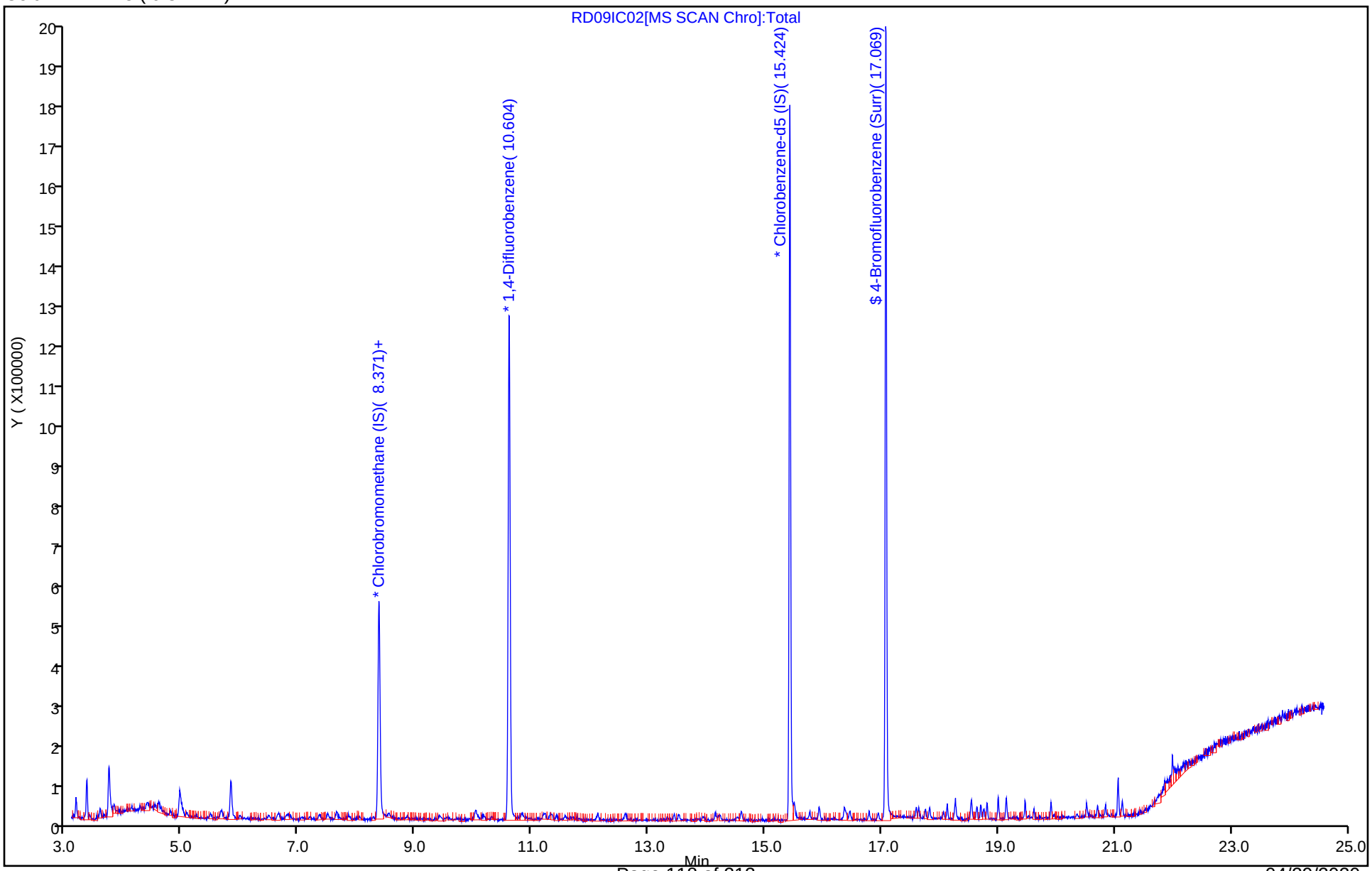
Report Date: 10-Apr-2020 13:42:23 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200409-15180.b\RD09IC02.D

Injection Date:	09-Apr-2020 15:53:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	IC L2			Worklist Smp#:	4
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

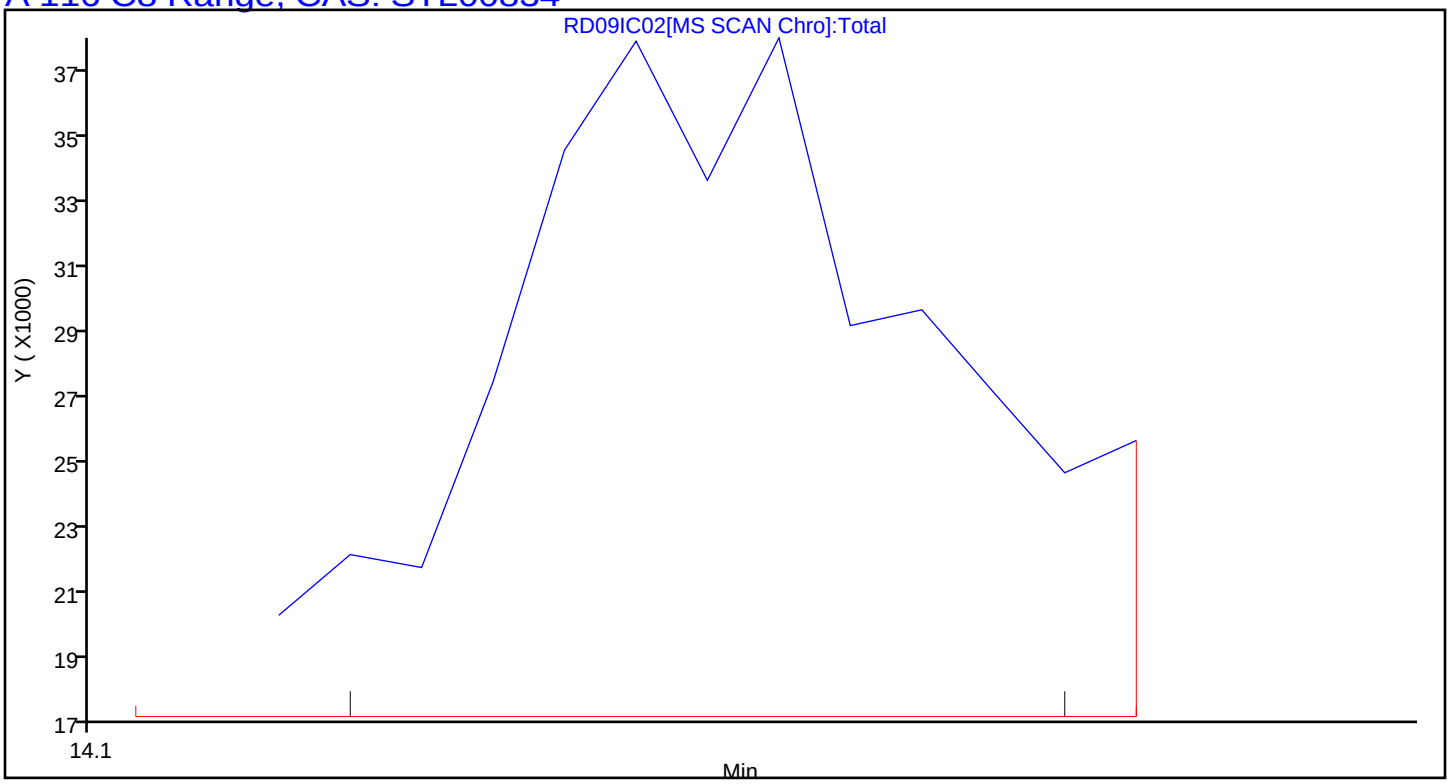


Report Date: 10-Apr-2020 13:42:23 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200409-15180.b\RD09IC02.D				
Injection Date:	09-Apr-2020 15:53:30	Instrument ID:	MR		
Lims ID:	IC L2				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	1	Worklist Smp#:	4
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 116 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MR\20200409-15180.b\RD09IC03.D
Lims ID: IC L3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 09-Apr-2020 16:41:30 ALS Bottle#: 1 Worklist Smp#: 5
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0015180-005
Misc. Info.: 285631
Operator ID: HMT Instrument ID: MR
Sublist: chrom-MR_TO15*sub16

Method: \\chromfs\Knoxville\ChromData\MR\20200409-15180.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 10-Apr-2020 13:42:27 Calib Date: 10-Apr-2020 00:47:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MR\20200409-15180.b\RD09IC10.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX0332

First Level Reviewer: tajh Date: 10-Apr-2020 08:19:00

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.350	8.356	-0.006	89	176018	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.588	10.595	-0.007	94	1306293	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.419	15.420	-0.001	85	1037237	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr	95	17.069	17.069	0.000	93	560605	4.00	3.65	
6 Chlorodifluoromethane	51	3.329	3.332	-0.003	46	11524	0.0800	0.0931	
7 Propene	41	3.340	3.323	0.017	96	53138	0.0800	-0.2405	
8 Dichlorodifluoromethane	85	3.383	3.381	0.002	78	9176	0.0800	0.0991	
9 Chloromethane	52	3.567	3.562	0.005	52	2974	0.0800	0.1092	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.561	3.566	-0.005	81	11766	0.0800	0.0894	
11 Acetaldehyde	44	3.707	3.709	-0.002	86	45761	0.4000	0.9318	
12 Vinyl chloride	62	3.712	3.722	-0.010	36	10030	0.0800	0.0892	
13 Butane	43	3.799	3.802	-0.003	86	16586	0.0800	0.0967	
14 Butadiene	54	3.799	3.802	-0.003	48	7967	0.0800	0.0974	
15 Bromomethane	94	4.101	4.103	-0.003	87	12362	0.0800	0.1049	
16 Chloroethane	64	4.241	4.239	0.002	78	4766	0.0800	0.0859	
17 Ethanol	31	4.343	4.348	-0.005	94	29982	0.4000	0.4295	
18 Vinyl bromide	106	4.510	4.520	-0.010	85	10684	0.0800	0.0904	
19 2-Methylbutane	43	4.559	4.565	-0.006	83	14544	0.0800	0.1010	
20 Trichlorofluoromethane	101	4.764	4.773	-0.009	91	23210	0.0800	0.0920	
21 Acrolein	56	4.807	4.794	0.013	14	3002	0.0800	0.1274	
22 Acetonitrile	40	4.872	4.861	0.011	51	4446	0.0800	0.1191	
23 Acetone	58	4.926	4.909	0.017	75	24499	0.2400	0.5110	
24 Pentane	72	4.979	4.987	-0.008	32	1733	0.0800	0.1092	
25 Isopropyl alcohol	45	5.001	5.009	-0.008	70	25955	0.2400	0.2000	
26 Ethyl ether	31	5.174	5.168	0.006	83	9339	0.0800	0.0913	
27 1,1-Dichloroethene	96	5.465	5.463	0.002	87	7074	0.0800	0.0853	
28 Acrylonitrile	53	5.578	5.580	-0.002	79	5113	0.0800	0.1004	
30 1,1,2-Trichloro-1,2,2-trif	101	5.637	5.640	-0.003	90	14383	0.0800	0.0804	
29 2-Methyl-2-propanol	59	5.610	5.605	0.005	84	11256	0.0800	0.0875	
31 Methylene Chloride	84	5.804	5.811	-0.007	95	41793	0.0800	0.1005	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	5.821	5.825	-0.004	44	7761	0.0800	0.0920	
33 Carbon disulfide	76	5.950	5.963	-0.013	89	18271	0.0800	0.0843	
34 trans-1,2-Dichloroethene	96	6.608	6.614	-0.006	85	6114	0.0800	0.0813	
35 2-Methylpentane	43	6.619	6.629	-0.010	87	17637	0.0800	0.0935	
36 Methyl tert-butyl ether	73	6.770	6.756	0.014	82	18437	0.0800	0.1006	
37 1,1-Dichloroethane	63	7.023	7.036	-0.013	78	11157	0.0800	0.0866	
38 Vinyl acetate	43	7.147	7.169	-0.022	93	18668	0.0800	0.0848	
40 Hexane	56	7.616	7.615	0.001	51	3928	0.0800	0.0718	
39 2-Butanone (MEK)	72	7.622	7.601	0.021	92	4237	0.0800	0.1097	
41 Isopropyl ether	45	7.789	7.788	0.001	90	25712	0.0800	0.0912	
42 cis-1,2-Dichloroethene	96	8.026	8.024	0.002	53	6370	0.0800	0.0818	
43 Ethyl acetate	43	8.236	8.220	0.016	83	15427	0.0800	0.0797	
44 Chloroform	83	8.366	8.368	-0.002	25	12198	0.0800	0.0780	
45 Tert-butyl ethyl ether	59	8.495	8.477	0.018	90	16952	0.0800	0.0814	
46 Tetrahydrofuran	42	8.813	8.771	0.042	88	7367	0.0800	0.0772	
47 1,1,1-Trichloroethane	97	9.396	9.397	-0.001	69	13454	0.0800	0.0895	
48 1,2-Dichloroethane	62	9.514	9.515	-0.001	71	7458	0.0800	0.0827	
51 Benzene	78	10.000	10.012	-0.012	74	18503	0.0800	0.0757	
50 Cyclohexane	69	9.994	10.011	-0.017	75	3043	0.0800	0.0839	
52 Carbon tetrachloride	117	10.043	10.035	0.008	79	13959	0.0800	0.0847	
49 n-Butanol	31	10.016	10.017	-0.001	52	1937	0.0800	0.0392	
53 2,3-Dimethylpentane	71	10.129	10.141	-0.012	73	4673	0.0800	0.0879	
54 Thiophene	84	10.291	10.300	-0.009	65	10164	0.0800	0.0773	
55 Isooctane	57	10.814	10.812	0.002	91	27841	0.0800	0.0754	
56 n-Heptane	71	11.213	11.215	-0.002	81	6591	0.0800	0.0828	
57 1,2-Dichloropropane	63	11.278	11.289	-0.011	70	9436	0.0800	0.0976	
58 Trichloroethene	130	11.326	11.327	-0.001	60	9519	0.0800	0.0772	
59 Dibromomethane	93	11.402	11.412	-0.010	73	8638	0.0800	0.0781	
60 Dichlorobromomethane	83	11.553	11.563	-0.010	78	13733	0.0800	0.0780	
61 1,4-Dioxane	88	11.612	11.592	0.020	56	3521	0.0800	0.0922	
62 Methyl methacrylate	41	11.671	11.675	-0.004	58	8303	0.0800	0.0696	
63 Methylcyclohexane	83	12.114	12.115	-0.001	81	11122	0.0800	0.0783	
64 4-Methyl-2-pentanone (MIBK	43	12.561	12.550	0.011	81	19724	0.0800	0.0820	
65 cis-1,3-Dichloropropene	75	12.599	12.601	-0.002	79	7682	0.0800	0.0593	
66 trans-1,3-Dichloropropene	75	13.316	13.315	0.001	77	8422	0.0800	0.0765	
67 Toluene	91	13.424	13.428	-0.004	84	21347	0.0800	0.0778	
68 1,1,2-Trichloroethane	83	13.505	13.510	-0.005	76	7059	0.0800	0.0796	
69 2-Hexanone	58	13.925	13.905	0.020	77	7110	0.0800	0.0782	
70 n-Octane	85	14.136	14.139	-0.003	87	6057	0.0800	0.0726	
71 Chlorodibromomethane	129	14.211	14.215	-0.004	75	13656	0.0800	0.0729	
72 Ethylene Dibromide	107	14.508	14.511	-0.003	65	10612	0.0800	0.0677	
73 Tetrachloroethene	129	14.583	14.586	-0.003	83	7412	0.0800	0.0702	
74 Chlorobenzene	112	15.468	15.471	-0.003	29	17745	0.0800	0.0753	
75 2,3-Dimethylheptane	43	15.489	15.496	-0.007	87	25277	0.0800	0.0765	
76 Ethylbenzene	91	15.764	15.762	0.002	88	25706	0.0800	0.0701	
77 m-Xylene & p-Xylene	91	15.926	15.923	0.003	93	36442	0.1600	0.1280	
78 n-Nonane	57	16.352	16.354	-0.002	85	12493	0.0800	0.0705	
79 Bromoform	173	16.363	16.369	-0.006	69	11343	0.0800	0.0576	
80 Styrene	104	16.390	16.392	-0.002	65	12371	0.0800	0.0564	
81 o-Xylene	91	16.444	16.451	-0.007	74	20675	0.0800	0.0720	
82 1,1,2,2-Tetrachloroethane	83	16.783	16.779	0.004	87	15982	0.0800	0.0686	
83 1,2,3-Trichloropropane	110	16.924	16.950	-0.026	45	4773	0.0800	0.0739	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	17.042	17.040	0.002	76	29695	0.0800	0.0683	
85 N-Propylbenzene	120	17.587	17.591	-0.004	88	7724	0.0800	0.0626	
86 2-Chlorotoluene	126	17.635	17.632	0.003	26	8347	0.0800	0.0719	
87 4-Ethyltoluene	105	17.749	17.745	0.004	90	27956	0.0800	0.0644	
88 1,3,5-Trimethylbenzene	120	17.819	17.822	-0.003	91	12266	0.0800	0.0645	
89 Alpha Methyl Styrene	118	18.056	18.057	-0.001	77	10342	0.0800	0.0573	
90 n-Decane	57	18.126	18.123	0.003	81	14940	0.0800	0.0677	
91 tert-Butylbenzene	119	18.255	18.257	-0.002	81	25947	0.0800	0.0672	
92 1,2,4-Trimethylbenzene	105	18.266	18.270	-0.004	85	22969	0.0800	0.0624	
93 sec-Butylbenzene	105	18.530	18.531	-0.001	91	39572	0.0800	0.0698	
94 1,3-Dichlorobenzene	146	18.547	18.546	0.001	78	14426	0.0800	0.0622	
95 Benzyl chloride	91	18.622	18.623	-0.001	77	14279	0.0800	0.0671	
96 1,4-Dichlorobenzene	146	18.633	18.633	0.000	87	16053	0.0800	0.0660	
97 4-Isopropyltoluene	119	18.698	18.698	0.000	75	30035	0.0800	0.0678	
98 1,2,3-Trimethylbenzene	105	18.746	18.751	-0.005	83	23015	0.0800	0.0599	
99 Butylcyclohexane	83	18.806	18.807	-0.001	83	18082	0.0800	0.0569	
101 1,2-Dichlorobenzene	146	18.994	18.999	-0.005	80	15667	0.0800	0.0623	
100 2,3-Dihydroindene	117	18.994	19.000	-0.006	88	23540	0.0800	0.0659	
102 Indene	116	19.134	19.132	0.002	73	15549	0.0800	0.0620	
103 n-Butylbenzene	91	19.140	19.140	0.000	92	25708	0.0800	0.0576	
104 Undecane	57	19.463	19.460	0.003	79	14166	0.0800	0.0585	
105 1,2-Dibromo-3-Chloropropan	157	19.609	19.611	-0.002	70	7413	0.0800	0.0573	
106 1,2,4,5-Tetramethylbenzene	119	19.906	19.906	0.000	88	24069	0.0800	0.0596	
107 Dodecane	57	20.515	20.516	-0.001	63	8146	0.0800	0.4159	
108 1,2,4-Trichlorobenzene	180	20.704	20.703	0.001	62	10589	0.0800	0.0546	
109 Naphthalene	128	20.838	20.842	-0.004	88	23113	0.0800	0.0562	
110 Hexachlorobutadiene	225	21.060	21.060	0.000	72	17676	0.0800	0.0706	
111 1,2,3-Trichlorobenzene	180	21.130	21.129	0.001	69	10749	0.0800	0.0521	
113 1-Methylnaphthalene	142	21.992	21.990	0.002	68	18038	0.0800	0.2846	
A 116 C8 Range	1	14.136	(14.103-14.168)		0	74766	0.0800	0.0786	
S 117 Xylenes, Total	100				0		0.2400	0.2000	
S 118 1,2-Dichloroethene, Total	1				0		0.1600	0.1632	

Reagents:

40L4DQP_00016	Amount Added: 100.00	Units: mL	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

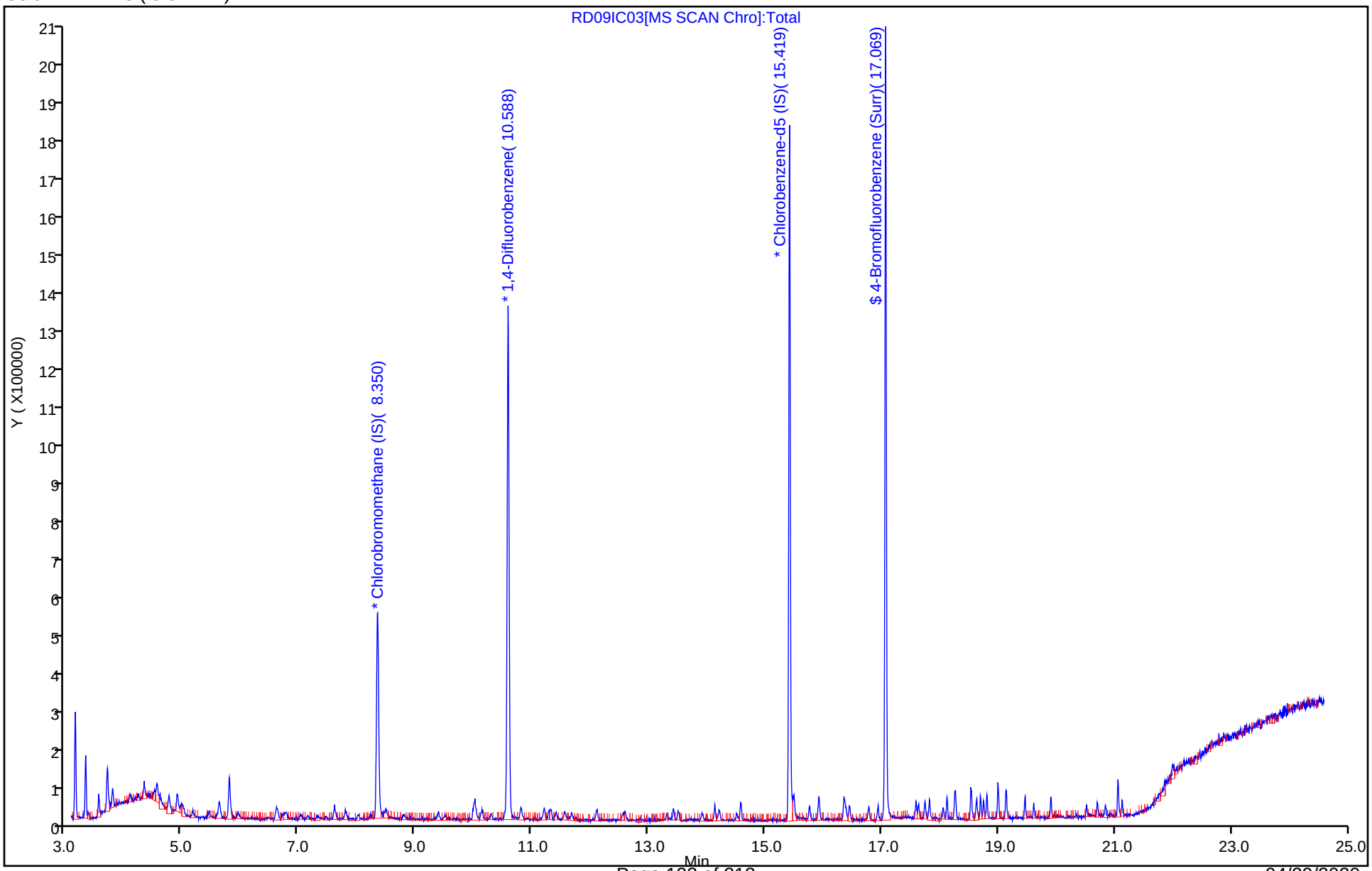
Report Date: 10-Apr-2020 13:42:28 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200409-15180.b\RD09IC03.D

Injection Date:	09-Apr-2020 16:41:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	IC L3			Worklist Smp#:	5
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

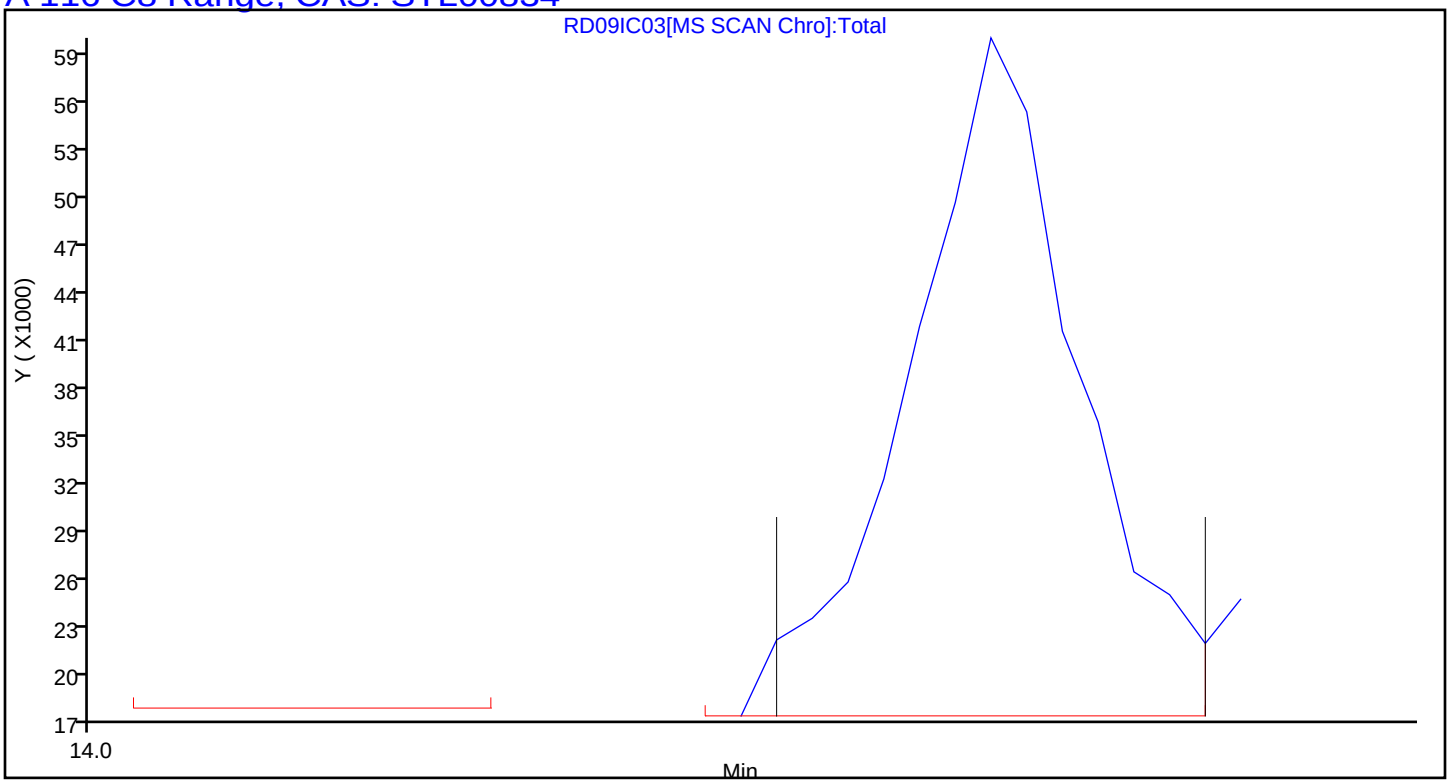


Report Date: 10-Apr-2020 13:42:28 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200409-15180.b\RD09IC03.D				
Injection Date:	09-Apr-2020 16:41:30	Instrument ID:	MR		
Lims ID:	IC L3				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	1	Worklist Smp#:	5
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 116 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MR\20200409-15180.b\RD09IC04.D
Lims ID: IC L4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 09-Apr-2020 17:31:30 ALS Bottle#: 2 Worklist Smp#: 6
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0015180-006
Misc. Info.: 285631
Operator ID: HMT Instrument ID: MR
Sublist: chrom-MR_TO15*sub16

Method: \\chromfs\Knoxville\ChromData\MR\20200409-15180.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 10-Apr-2020 13:42:32 Calib Date: 10-Apr-2020 00:47:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MR\20200409-15180.b\RD09IC10.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX0332

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.350	8.356	-0.006	93	182660	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.593	10.595	-0.002	93	1289432	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.419	15.420	-0.001	86	1028569	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr	95	17.069	17.069	0.000	94	560007	4.00	3.67	
6 Chlorodifluoromethane	51	3.335	3.332	0.003	61	21846	0.1600	0.1701	
7 Propene	41	3.340	3.323	0.017	94	53006	0.1600	-0.2774	
8 Dichlorodifluoromethane	85	3.389	3.381	0.008	98	13470	0.1600	0.1401	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.567	3.566	0.001	86	13683	0.1600	0.1096	
9 Chloromethane	52	3.561	3.562	-0.001	83	4375	0.1600	0.1549	
11 Acetaldehyde	44	3.712	3.709	0.003	91	96490	0.8000	1.89	
12 Vinyl chloride	62	3.723	3.722	0.001	43	17882	0.1600	0.1533	
13 Butane	43	3.799	3.802	-0.003	85	29988	0.1600	0.1685	
14 Butadiene	54	3.804	3.802	0.002	65	12838	0.1600	0.1513	
15 Bromomethane	94	4.106	4.103	0.003	97	18736	0.1600	0.1533	
16 Chloroethane	64	4.241	4.239	0.002	77	8678	0.1600	0.1508	
17 Ethanol	31	4.349	4.348	0.001	96	56598	0.8000	0.7812	
18 Vinyl bromide	106	4.521	4.520	0.001	95	20495	0.1600	0.1671	
19 2-Methylbutane	43	4.564	4.565	-0.001	90	23792	0.1600	0.1592	
20 Trichlorofluoromethane	101	4.769	4.773	-0.004	96	40662	0.1600	0.1552	
21 Acrolein	56	4.791	4.794	-0.003	31	4286	0.1600	0.1753	
22 Acetonitrile	40	4.996	4.861	0.135	70	4673	0.1600	0.1206	
23 Acetone	58	4.909	4.909	0.000	99	49772	0.4800	1.00	
24 Pentane	72	4.985	4.987	-0.002	93	2834	0.1600	0.1721	
25 Isopropyl alcohol	45	5.012	5.009	0.003	92	60538	0.4800	0.4495	
26 Ethyl ether	31	5.174	5.168	0.006	86	16456	0.1600	0.1551	
27 1,1-Dichloroethene	96	5.459	5.463	-0.004	94	13842	0.1600	0.1609	
28 Acrylonitrile	53	5.583	5.580	0.003	64	8581	0.1600	0.1624	
29 2-Methyl-2-propanol	59	5.605	5.605	0.000	83	21242	0.1600	0.1592	
30 1,1,2-Trichloro-1,2,2-trif	101	5.643	5.640	0.003	91	29419	0.1600	0.1584	
31 Methylene Chloride	84	5.805	5.811	-0.006	96	49191	0.1600	0.1823	
32 3-Chloro-1-propene	39	5.821	5.825	-0.004	90	14650	0.1600	0.1674	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
33 Carbon disulfide	76	5.956	5.963	-0.007	99	36264	0.1600	0.1613	
34 trans-1,2-Dichloroethene	96	6.603	6.614	-0.011	91	12916	0.1600	0.1656	
35 2-Methylpentane	43	6.635	6.629	0.006	95	30332	0.1600	0.1550	
36 Methyl tert-butyl ether	73	6.770	6.756	0.014	91	32931	0.1600	0.1731	
37 1,1-Dichloroethane	63	7.029	7.036	-0.007	98	21520	0.1600	0.1609	
38 Vinyl acetate	43	7.153	7.169	-0.016	99	33800	0.1600	0.1480	
40 Hexane	56	7.616	7.615	0.001	67	9727	0.1600	0.1712	
39 2-Butanone (MEK)	72	7.606	7.601	0.005	85	7954	0.1600	0.1984	
41 Isopropyl ether	45	7.794	7.788	0.006	96	45216	0.1600	0.1545	
42 cis-1,2-Dichloroethene	96	8.021	8.024	-0.003	87	13176	0.1600	0.1631	
43 Ethyl acetate	43	8.220	8.220	0.000	97	32248	0.1600	0.1605	
44 Chloroform	83	8.355	8.368	-0.013	30	26443	0.1600	0.1630	
45 Tert-butyl ethyl ether	59	8.479	8.477	0.002	95	34305	0.1600	0.1588	
46 Tetrahydrofuran	42	8.797	8.771	0.026	94	17887	0.1600	0.1806	
47 1,1,1-Trichloroethane	97	9.391	9.397	-0.007	96	24755	0.1600	0.1587	
48 1,2-Dichloroethane	62	9.509	9.515	-0.006	93	13589	0.1600	0.1526	
50 Cyclohexane	69	10.011	10.011	0.000	73	5800	0.1600	0.1620	
51 Benzene	78	10.011	10.012	-0.001	94	34858	0.1600	0.1445	
49 n-Butanol	31	10.000	10.017	-0.017	54	7046	0.1600	0.1444	
52 Carbon tetrachloride	117	10.027	10.035	-0.008	91	25568	0.1600	0.1571	
53 2,3-Dimethylpentane	71	10.129	10.141	-0.012	87	7565	0.1600	0.1442	
54 Thiophene	84	10.296	10.300	-0.004	93	18985	0.1600	0.1463	
55 Isooctane	57	10.809	10.812	-0.003	94	54549	0.1600	0.1497	
56 n-Heptane	71	11.219	11.215	0.003	96	10854	0.1600	0.1381	
57 1,2-Dichloropropane	63	11.289	11.289	0.000	72	13889	0.1600	0.1455	
58 Trichloroethene	130	11.332	11.327	0.005	92	18486	0.1600	0.1519	
59 Dibromomethane	93	11.407	11.412	-0.005	85	15574	0.1600	0.1426	
60 Dichlorobromomethane	83	11.558	11.563	-0.005	95	23286	0.1600	0.1340	
61 1,4-Dioxane	88	11.596	11.592	0.004	56	6295	0.1600	0.1669	
62 Methyl methacrylate	41	11.677	11.675	0.002	89	17941	0.1600	0.1523	
63 Methylcyclohexane	83	12.108	12.115	-0.007	90	20285	0.1600	0.1447	
64 4-Methyl-2-pentanone (MIBK	43	12.561	12.550	0.011	96	35121	0.1600	0.1480	
65 cis-1,3-Dichloropropene	75	12.599	12.601	-0.002	88	17307	0.1600	0.1354	
66 trans-1,3-Dichloropropene	75	13.316	13.315	0.001	87	14056	0.1600	0.1288	
67 Toluene	91	13.424	13.428	-0.004	91	38994	0.1600	0.1432	
68 1,1,2-Trichloroethane	83	13.505	13.510	-0.005	93	12671	0.1600	0.1442	
69 2-Hexanone	58	13.915	13.905	0.010	87	13365	0.1600	0.1483	
70 n-Octane	85	14.141	14.139	0.002	92	12372	0.1600	0.1494	
71 Chlorodibromomethane	129	14.211	14.215	-0.004	92	23460	0.1600	0.1263	
72 Ethylene Dibromide	107	14.508	14.511	-0.003	94	21423	0.1600	0.1379	
73 Tetrachloroethene	129	14.589	14.586	0.003	91	14850	0.1600	0.1417	
74 Chlorobenzene	112	15.468	15.471	-0.003	96	34552	0.1600	0.1479	
75 2,3-Dimethylheptane	43	15.500	15.496	0.004	92	48446	0.1600	0.1479	
76 Ethylbenzene	91	15.759	15.762	-0.003	98	51238	0.1600	0.1408	
77 m-Xylene & p-Xylene	91	15.921	15.923	-0.002	98	76841	0.3200	0.2722	
78 n-Nonane	57	16.352	16.354	-0.002	90	22628	0.1600	0.1287	
79 Bromoform	173	16.374	16.369	0.005	88	22711	0.1600	0.1162	
80 Styrene	104	16.395	16.392	0.003	97	29103	0.1600	0.1337	
81 o-Xylene	91	16.449	16.451	-0.002	95	39732	0.1600	0.1395	
82 1,1,2,2-Tetrachloroethane	83	16.778	16.779	-0.001	94	33318	0.1600	0.1442	
83 1,2,3-Trichloropropane	110	16.945	16.950	-0.005	93	7949	0.1600	0.1241	
84 Isopropylbenzene	105	17.042	17.040	0.002	90	61527	0.1600	0.1427	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
85 N-Propylbenzene	120	17.592	17.591	0.001	99	17478	0.1600	0.1429	
86 2-Chlorotoluene	126	17.635	17.632	0.003	96	15430	0.1600	0.1341	
87 4-Ethyltoluene	105	17.743	17.745	-0.002	97	55775	0.1600	0.1295	
88 1,3,5-Trimethylbenzene	120	17.824	17.822	0.002	93	25390	0.1600	0.1346	
89 Alpha Methyl Styrene	118	18.061	18.057	0.004	89	18349	0.1600	0.1026	
90 n-Decane	57	18.121	18.123	-0.002	89	30653	0.1600	0.1400	
91 tert-Butylbenzene	119	18.256	18.257	-0.001	92	53275	0.1600	0.1392	
92 1,2,4-Trimethylbenzene	105	18.272	18.270	0.002	92	49500	0.1600	0.1356	
93 sec-Butylbenzene	105	18.531	18.531	0.000	99	76918	0.1600	0.1368	
94 1,3-Dichlorobenzene	146	18.541	18.546	-0.005	94	30499	0.1600	0.1326	
95 Benzyl chloride	91	18.622	18.623	-0.001	89	24169	0.1600	0.1145	
96 1,4-Dichlorobenzene	146	18.628	18.633	-0.005	95	30544	0.1600	0.1267	
97 4-Isopropyltoluene	119	18.698	18.698	0.000	97	56868	0.1600	0.1295	
98 1,2,3-Trimethylbenzene	105	18.752	18.751	0.001	98	46150	0.1600	0.1211	
99 Butylcyclohexane	83	18.811	18.807	0.004	95	39085	0.1600	0.1241	
100 2,3-Dihydroindene	117	19.000	19.000	0.000	91	46453	0.1600	0.1312	
101 1,2-Dichlorobenzene	146	19.000	18.999	0.001	80	32914	0.1600	0.1321	
102 Indene	116	19.129	19.132	-0.003	96	35098	0.1600	0.1411	
103 n-Butylbenzene	91	19.140	19.140	0.000	99	51819	0.1600	0.1170	
104 Undecane	57	19.458	19.460	-0.002	84	28445	0.1600	0.1184	
105 1,2-Dibromo-3-Chloropropan	157	19.609	19.611	-0.002	89	15136	0.1600	0.1180	
106 1,2,4,5-Tetramethylbenzene	119	19.906	19.906	0.000	97	53492	0.1600	0.1335	
107 Dodecane	57	20.515	20.516	-0.001	82	19830	0.1600	0.4419	
108 1,2,4-Trichlorobenzene	180	20.704	20.703	0.001	91	21608	0.1600	0.1123	
109 Naphthalene	128	20.844	20.842	0.002	99	46390	0.1600	0.1137	
110 Hexachlorobutadiene	225	21.060	21.060	0.000	93	33317	0.1600	0.1342	
111 1,2,3-Trichlorobenzene	180	21.130	21.129	0.001	94	23351	0.1600	0.1142	
112 2-Methylnaphthalene	142	21.858	21.856	0.002	91	13698	0.1600	0.6454	
113 1-Methylnaphthalene	142	21.992	21.990	0.002	98	31669	0.1600	0.3039	
A 116 C8 Range	1	14.141	(14.103-14.179)		0	153587	0.1600	0.1635	
S 117 Xylenes, Total	100				0		0.4800	0.4116	
S 118 1,2-Dichloroethene, Total	1				0		0.3200	0.3287	

Reagents:

40L4DQP_00016	Amount Added: 200.00	Units: mL	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

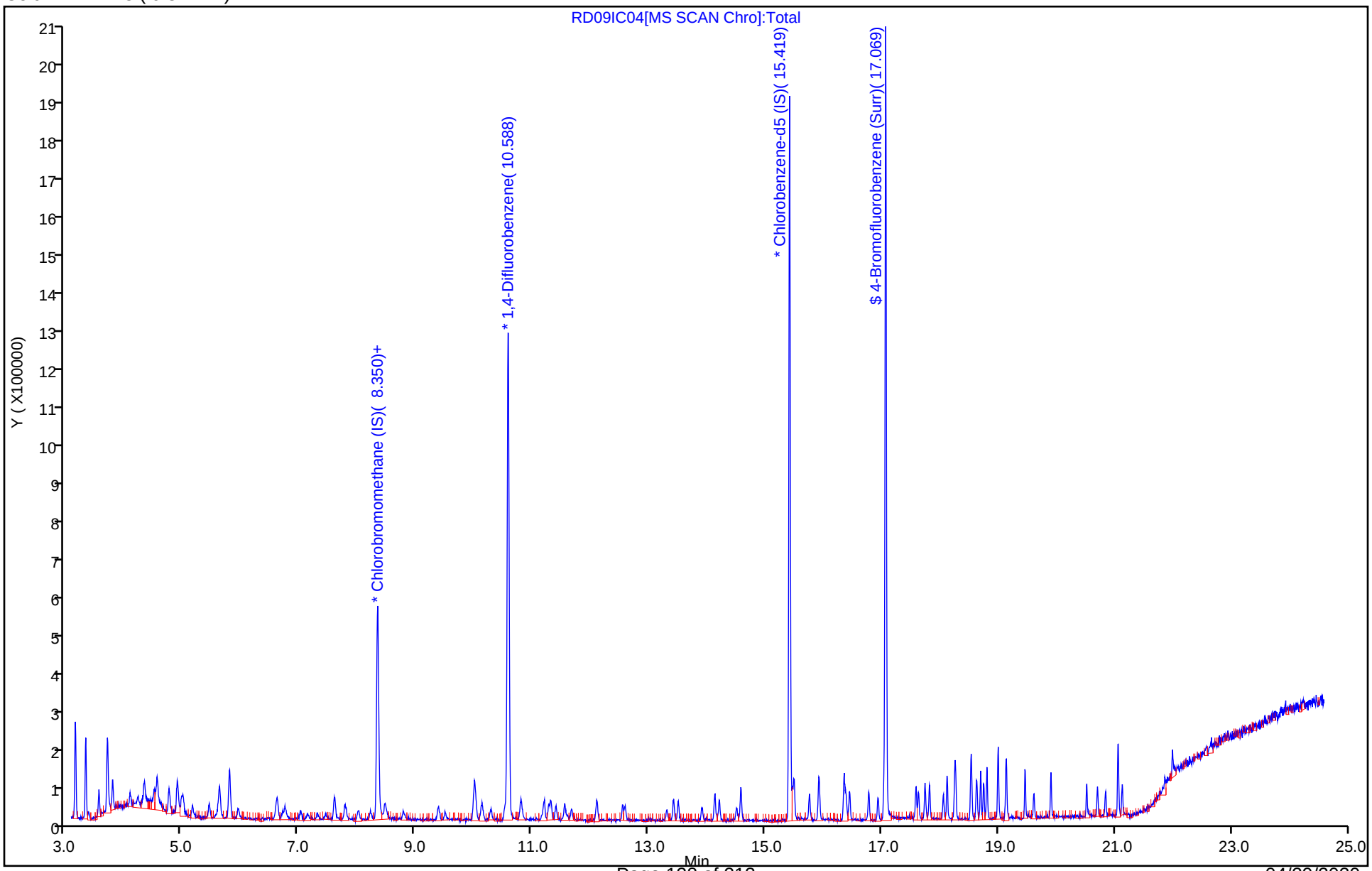
Report Date: 10-Apr-2020 13:42:33 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200409-15180.b\RD09IC04.D

Injection Date:	09-Apr-2020 17:31:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	IC L4			Worklist Smp#:	6
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

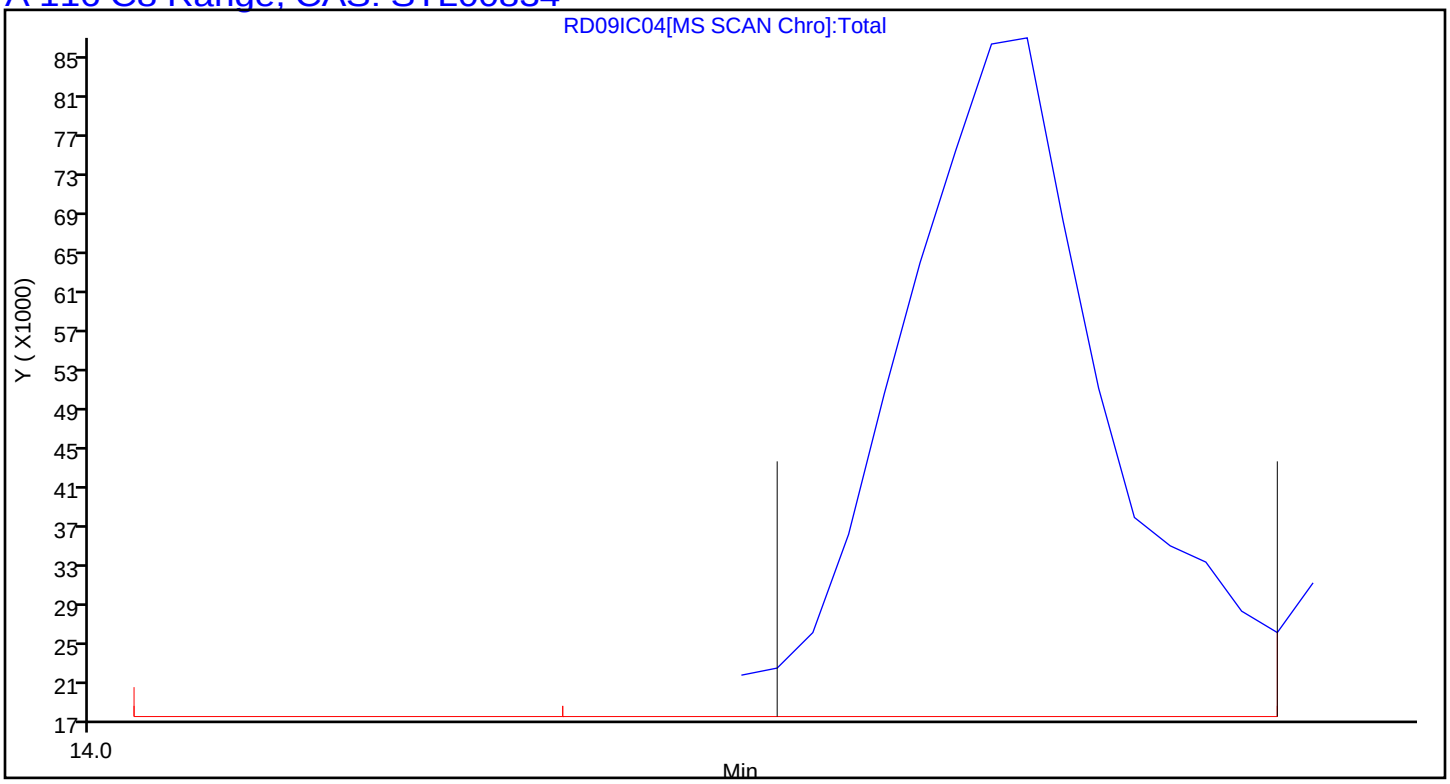


Report Date: 10-Apr-2020 13:42:33 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200409-15180.b\RD09IC04.D				
Injection Date:	09-Apr-2020 17:31:30	Instrument ID:	MR		
Lims ID:	IC L4				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	2	Worklist Smp#:	6
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 116 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MR\20200409-15180.b\RD09IC05.D
Lims ID: IC L5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 09-Apr-2020 18:21:30 ALS Bottle#: 3 Worklist Smp#: 7
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0015180-007
Misc. Info.: 285630
Operator ID: HMT Instrument ID: MR
Sublist: chrom-MR_TO15*sub16

Method: \\chromfs\Knoxville\ChromData\MR\20200409-15180.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 10-Apr-2020 13:42:37 Calib Date: 10-Apr-2020 00:47:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MR\20200409-15180.b\RD09IC10.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX0332

First Level Reviewer: khachitpongpanits Date: 10-Apr-2020 17:48:48

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.344	8.356	-0.012	93	189044	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.588	10.595	-0.007	93	1304288	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.419	15.420	-0.001	86	1038629	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr	95	17.069	17.069	0.000	95	584739	4.00	3.80	
6 Chlorodifluoromethane	51	3.330	3.332	-0.002	99	51228	0.4000	0.3854	
7 Propene	41	3.340	3.323	0.017	98	67575	0.4000	-0.0647	
8 Dichlorodifluoromethane	85	3.383	3.381	0.002	96	32848	0.4000	0.3302	
9 Chloromethane	52	3.561	3.562	-0.001	78	13532	0.4000	0.4628	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.567	3.566	0.001	88	38284	0.4000	0.4292	
11 Acetaldehyde	44	3.702	3.709	-0.007	89	136157	2.00	2.58	
12 Vinyl chloride	62	3.718	3.722	-0.004	97	46104	0.4000	0.3818	
13 Butane	43	3.799	3.802	-0.003	87	72061	0.4000	0.3912	
14 Butadiene	54	3.799	3.802	-0.003	68	36526	0.4000	0.4159	
15 Bromomethane	94	4.101	4.103	-0.002	97	49566	0.4000	0.3918	
16 Chloroethane	64	4.235	4.239	-0.004	84	25923	0.4000	0.4352	
17 Ethanol	31	4.338	4.348	-0.010	99	145385	2.00	1.94	
18 Vinyl bromide	106	4.516	4.520	-0.004	97	48902	0.4000	0.3853	
19 2-Methylbutane	43	4.559	4.565	-0.006	90	61403	0.4000	0.3970	
20 Trichlorofluoromethane	101	4.769	4.773	-0.004	96	106570	0.4000	0.3931	
21 Acrolein	56	4.791	4.794	-0.003	36	11931	0.4000	0.4716	
23 Acetone	58	4.899	4.909	-0.010	99	84844	1.20	1.65	
24 Pentane	72	4.980	4.987	-0.007	94	7269	0.4000	0.4266	
22 Acetonitrile	40	4.856	4.861	-0.005	94	11393	0.4000	0.2842	
25 Isopropyl alcohol	45	4.996	5.009	-0.013	94	154525	1.20	1.11	
26 Ethyl ether	31	5.163	5.168	-0.005	88	41946	0.4000	0.3820	
27 1,1-Dichloroethene	96	5.460	5.463	-0.003	96	34276	0.4000	0.3850	
28 Acrylonitrile	53	5.573	5.580	-0.007	83	17467	0.4000	0.3194	
29 2-Methyl-2-propanol	59	5.594	5.605	-0.011	96	53259	0.4000	0.3856	
30 1,1,2-Trichloro-1,2,2-trif	101	5.632	5.640	-0.008	94	76083	0.4000	0.3958	
31 Methylene Chloride	84	5.805	5.811	-0.006	97	67101	0.4000	0.4020	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	5.821	5.825	-0.004	95	35112	0.4000	0.3876	
33 Carbon disulfide	76	5.961	5.963	-0.002	98	93098	0.4000	0.4001	
34 trans-1,2-Dichloroethene	96	6.608	6.614	-0.006	98	29938	0.4000	0.3708	
35 2-Methylpentane	43	6.624	6.629	-0.005	95	78124	0.4000	0.3856	
36 Methyl tert-butyl ether	73	6.748	6.756	-0.008	96	78401	0.4000	0.3982	
37 1,1-Dichloroethane	63	7.023	7.036	-0.013	98	54744	0.4000	0.3955	
38 Vinyl acetate	43	7.147	7.169	-0.022	100	88899	0.4000	0.3762	
39 2-Butanone (MEK)	72	7.590	7.601	-0.011	97	18561	0.4000	0.4474	
40 Hexane	56	7.600	7.615	-0.015	87	22163	0.4000	0.3770	
41 Isopropyl ether	45	7.778	7.788	-0.010	96	114672	0.4000	0.3786	
42 cis-1,2-Dichloroethene	96	8.010	8.024	-0.014	89	30343	0.4000	0.3630	
43 Ethyl acetate	43	8.220	8.220	0.000	96	80487	0.4000	0.3871	
44 Chloroform	83	8.355	8.368	-0.013	41	65286	0.4000	0.3887	
45 Tert-butyl ethyl ether	59	8.458	8.477	-0.019	95	86468	0.4000	0.3868	
46 Tetrahydrofuran	42	8.776	8.771	0.005	88	38969	0.4000	0.3802	
47 1,1,1-Trichloroethane	97	9.396	9.397	-0.001	95	64254	0.4000	0.3981	
48 1,2-Dichloroethane	62	9.509	9.515	-0.006	91	33075	0.4000	0.3671	
49 n-Butanol	31	9.995	10.017	-0.022	61	19588	0.4000	0.3968	
50 Cyclohexane	69	10.005	10.011	-0.006	74	12329	0.4000	0.3405	
51 Benzene	78	10.005	10.012	-0.007	95	90097	0.4000	0.3691	
52 Carbon tetrachloride	117	10.027	10.035	-0.008	87	46433	0.4000	0.2821	
53 2,3-Dimethylpentane	71	10.140	10.141	-0.001	87	20844	0.4000	0.3929	
54 Thiophene	84	10.291	10.300	-0.009	92	49011	0.4000	0.3733	
55 Isooctane	57	10.803	10.812	-0.009	96	142844	0.4000	0.3876	
56 n-Heptane	71	11.208	11.215	-0.007	96	29973	0.4000	0.3769	
57 1,2-Dichloropropane	63	11.289	11.289	0.000	88	35522	0.4000	0.3678	
58 Trichloroethene	130	11.321	11.327	-0.006	92	42836	0.4000	0.3481	
59 Dibromomethane	93	11.407	11.412	-0.005	95	40490	0.4000	0.3664	
60 Dichlorobromomethane	83	11.564	11.563	0.001	93	61665	0.4000	0.3508	
61 1,4-Dioxane	88	11.585	11.592	-0.007	86	14057	0.4000	0.3685	
62 Methyl methacrylate	41	11.666	11.675	-0.009	88	42849	0.4000	0.3597	
63 Methylcyclohexane	83	12.114	12.115	-0.001	91	52863	0.4000	0.3727	
64 4-Methyl-2-pentanone (MIBK	43	12.545	12.550	-0.005	97	90347	0.4000	0.3763	
65 cis-1,3-Dichloropropene	75	12.594	12.601	-0.007	93	47856	0.4000	0.3701	
66 trans-1,3-Dichloropropene	75	13.305	13.315	-0.010	95	42684	0.4000	0.3872	
67 Toluene	91	13.424	13.428	-0.004	95	99576	0.4000	0.3622	
68 1,1,2-Trichloroethane	83	13.510	13.510	0.000	93	31702	0.4000	0.3572	
69 2-Hexanone	58	13.904	13.905	-0.001	87	30917	0.4000	0.3397	
70 n-Octane	85	14.141	14.139	0.002	96	28746	0.4000	0.3439	
71 Chlorodibromomethane	129	14.217	14.215	0.002	96	64655	0.4000	0.3446	
72 Ethylene Dibromide	107	14.503	14.511	-0.008	98	55181	0.4000	0.3516	
73 Tetrachloroethene	129	14.583	14.586	-0.003	90	39741	0.4000	0.3756	
74 Chlorobenzene	112	15.468	15.471	-0.003	96	85219	0.4000	0.3612	
75 2,3-Dimethylheptane	43	15.495	15.496	-0.001	93	121502	0.4000	0.3674	
76 Ethylbenzene	91	15.759	15.762	-0.003	98	128652	0.4000	0.3502	
77 m-Xylene & p-Xylene	91	15.921	15.923	-0.002	95	193959	0.8000	0.6803	
78 n-Nonane	57	16.352	16.354	-0.002	91	58134	0.4000	0.3275	
79 Bromoform	173	16.368	16.369	-0.001	93	59637	0.4000	0.3022	
80 Styrene	104	16.390	16.392	-0.002	96	72951	0.4000	0.3320	
81 o-Xylene	91	16.449	16.451	-0.002	99	97778	0.4000	0.3399	
82 1,1,2,2-Tetrachloroethane	83	16.773	16.779	-0.006	96	86479	0.4000	0.3706	
83 1,2,3-Trichloropropane	110	16.935	16.950	-0.016	92	24178	0.4000	0.3739	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	17.037	17.040	-0.003	95	155866	0.4000	0.3581	
85 N-Propylbenzene	120	17.587	17.591	-0.004	100	40636	0.4000	0.3291	
86 2-Chlorotoluene	126	17.630	17.632	-0.002	96	40608	0.4000	0.3495	
87 4-Ethyltoluene	105	17.743	17.745	-0.002	99	140822	0.4000	0.3239	
88 1,3,5-Trimethylbenzene	120	17.819	17.822	-0.003	94	65573	0.4000	0.3444	
89 Alpha Methyl Styrene	118	18.056	18.057	-0.001	88	58255	0.4000	0.3225	
90 n-Decane	57	18.121	18.123	-0.002	84	75302	0.4000	0.3407	
91 tert-Butylbenzene	119	18.256	18.257	-0.001	93	131332	0.4000	0.3398	
92 1,2,4-Trimethylbenzene	105	18.266	18.270	-0.004	94	126392	0.4000	0.3429	
93 sec-Butylbenzene	105	18.531	18.531	0.000	99	193662	0.4000	0.3411	
94 1,3-Dichlorobenzene	146	18.547	18.546	0.001	96	83466	0.4000	0.3592	
95 Benzyl chloride	91	18.622	18.623	-0.001	97	78931	0.4000	0.3702	
96 1,4-Dichlorobenzene	146	18.633	18.633	0.000	95	81465	0.4000	0.3346	
97 4-Isopropyltoluene	119	18.698	18.698	0.000	97	152825	0.4000	0.3447	
98 1,2,3-Trimethylbenzene	105	18.752	18.751	0.001	98	125355	0.4000	0.3258	
99 Butylcyclohexane	83	18.806	18.807	-0.001	93	105825	0.4000	0.3327	
100 2,3-Dihydroindene	117	19.000	19.000	0.000	93	120597	0.4000	0.3373	
101 1,2-Dichlorobenzene	146	19.000	18.999	0.001	79	86783	0.4000	0.3448	
102 Indene	116	19.129	19.132	-0.003	91	93916	0.4000	0.3740	
103 n-Butylbenzene	91	19.140	19.140	0.000	98	151730	0.4000	0.3392	
104 Undecane	57	19.458	19.460	-0.002	89	80947	0.4000	0.3338	
105 1,2-Dibromo-3-Chloropropan	157	19.609	19.611	-0.002	89	42768	0.4000	0.3302	
106 1,2,4,5-Tetramethylbenzene	119	19.906	19.906	0.000	98	136805	0.4000	0.3380	
107 Dodecane	57	20.515	20.516	-0.001	87	68796	0.4000	0.5484	
108 1,2,4-Trichlorobenzene	180	20.704	20.703	0.001	93	63105	0.4000	0.3248	
109 Naphthalene	128	20.844	20.842	0.002	99	131438	0.4000	0.3190	
110 Hexachlorobutadiene	225	21.060	21.060	0.000	92	88344	0.4000	0.3523	
111 1,2,3-Trichlorobenzene	180	21.124	21.129	-0.005	95	65421	0.4000	0.3169	
112 2-Methylnaphthalene	142	21.858	21.856	0.002	97	45070	0.4000	0.7068	
113 1-Methylnaphthalene	142	21.993	21.990	0.003	97	108208	0.4000	0.4096	
A 116 C8 Range	1	14.131	(14.093-14.190)		0	342794	0.4000	0.3609	
S 117 Xylenes, Total	100				0		1.20	1.02	
S 118 1,2-Dichloroethene, Total	1				0		0.8000	0.7338	

Reagents:

40L5DQP_00017	Amount Added: 200.00	Units: mL	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

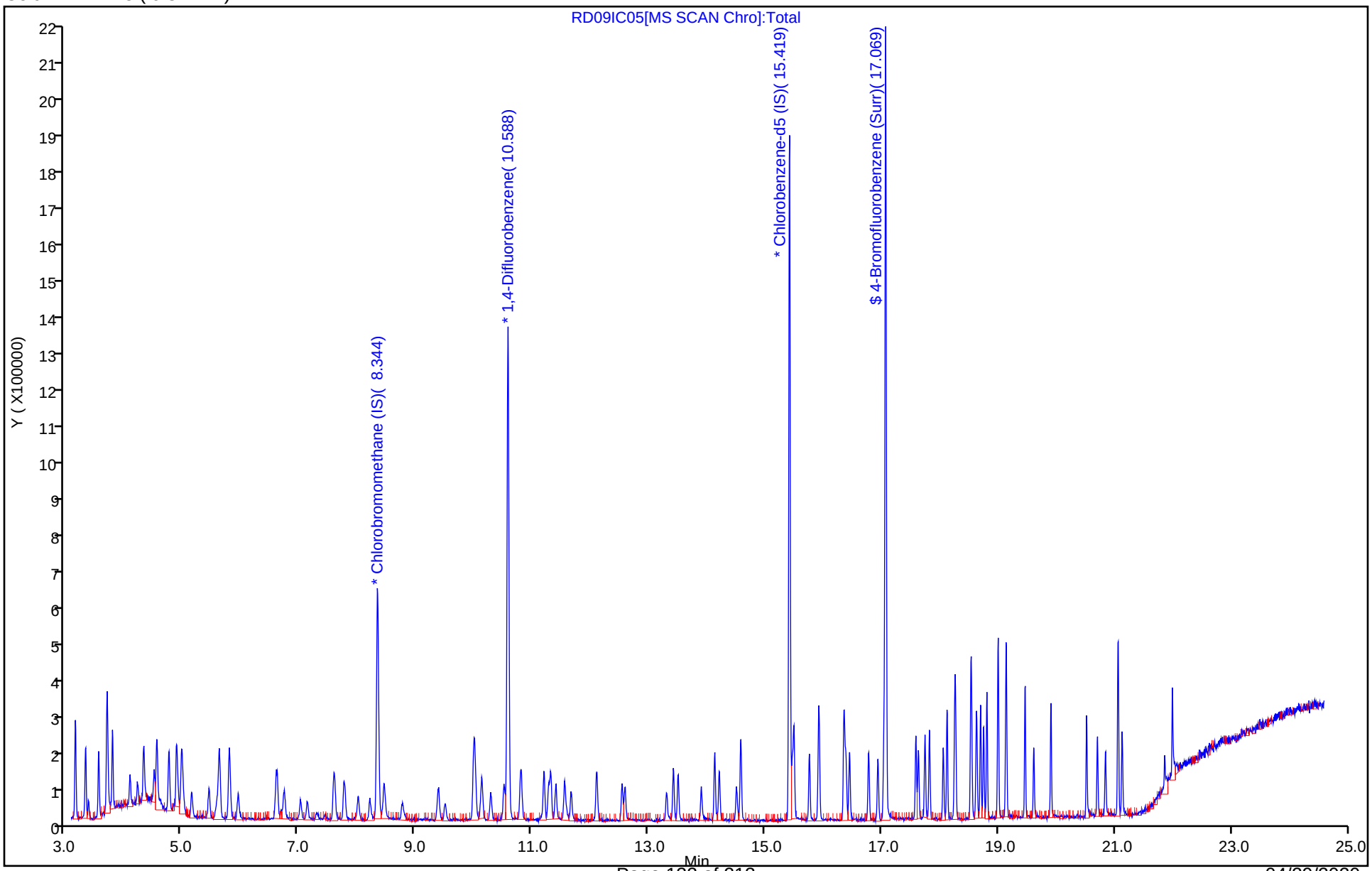
Report Date: 10-Apr-2020 13:42:38 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200409-15180.b\RD09IC05.D

Injection Date:	09-Apr-2020 18:21:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	IC L5			Worklist Smp#:	7
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

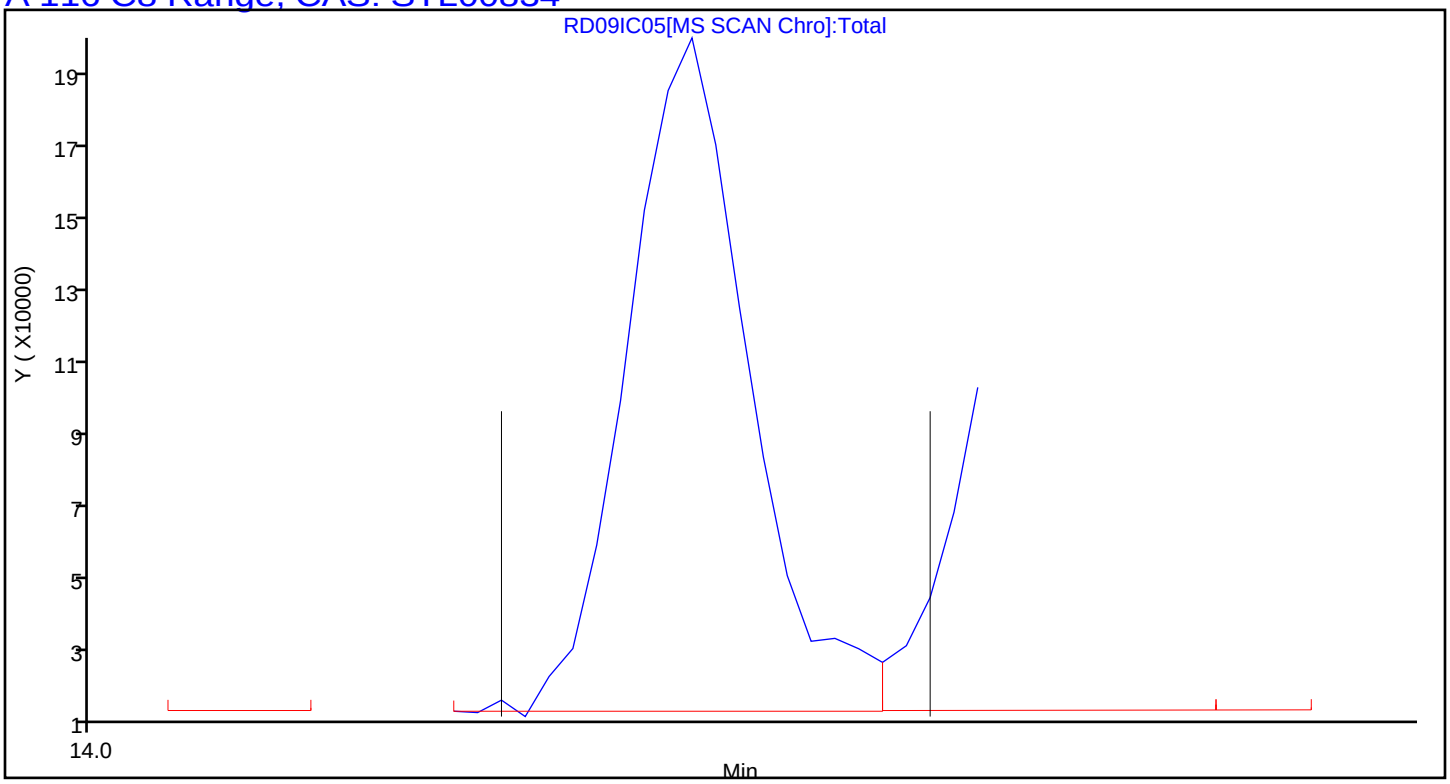
Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200409-15180.b\RD09IC05.D				
Injection Date:	09-Apr-2020 18:21:30	Instrument ID:	MR		
Lims ID:	IC L5				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	3	Worklist Smp#:	7
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 116 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MR\20200409-15180.b\RD09IC06.D
Lims ID: IC L6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 09-Apr-2020 19:10:30 ALS Bottle#: 4 Worklist Smp#: 8
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0015180-008
Misc. Info.: 285629
Operator ID: HMT Instrument ID: MR
Sublist: chrom-MR_TO15*sub16

Method: \\chromfs\Knoxville\ChromData\MR\20200409-15180.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 10-Apr-2020 13:42:42 Calib Date: 10-Apr-2020 00:47:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MR\20200409-15180.b\RD09IC10.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX0332

First Level Reviewer: khachitpongpanits Date: 10-Apr-2020 17:18:14

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.350	8.356	-0.006	93	188603	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.588	10.595	-0.007	94	1347694	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.419	15.420	-0.001	86	1072532	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr	95	17.069	17.069	0.000	94	621235	4.00	3.91	
6 Chlorodifluoromethane	51	3.329	3.332	-0.003	99	132822	1.00	1.00	
7 Propene	41	3.340	3.323	0.017	97	116872	1.00	0.7644	
8 Dichlorodifluoromethane	85	3.383	3.381	0.002	97	90600	1.00	0.9129	
9 Chloromethane	52	3.561	3.562	-0.001	85	31456	1.00	1.08	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.561	3.566	-0.005	84	90835	1.00	1.13	
11 Acetaldehyde	44	3.702	3.709	-0.007	89	298523	5.00	5.67	
12 Vinyl chloride	62	3.718	3.722	-0.004	100	115968	1.00	0.9627	
13 Butane	43	3.799	3.802	-0.003	86	177430	1.00	0.9656	
14 Butadiene	54	3.793	3.802	-0.009	68	87552	1.00	1.00	
15 Bromomethane	94	4.095	4.103	-0.008	97	128549	1.00	1.02	
16 Chloroethane	64	4.230	4.239	-0.009	83	62188	1.00	1.05	
17 Ethanol	31	4.332	4.348	-0.016	98	369228	5.00	4.94	
18 Vinyl bromide	106	4.510	4.520	-0.010	95	127199	1.00	1.00	
19 2-Methylbutane	43	4.559	4.565	-0.006	94	152976	1.00	0.99	
20 Trichlorofluoromethane	101	4.764	4.773	-0.009	96	288402	1.00	1.07	
21 Acrolein	56	4.780	4.794	-0.014	27	25063	1.00	0.99	
22 Acetonitrile	40	4.850	4.861	-0.011	91	45572	1.00	1.14	
23 Acetone	58	4.888	4.909	-0.021	99	175489	3.00	3.42	
24 Pentane	72	4.980	4.987	-0.007	80	17520	1.00	1.03	
25 Isopropyl alcohol	45	4.985	5.009	-0.024	82	391813	3.00	2.82	
26 Ethyl ether	31	5.147	5.168	-0.021	88	104478	1.00	0.9537	
27 1,1-Dichloroethene	96	5.454	5.463	-0.009	97	83935	1.00	0.9449	
28 Acrylonitrile	53	5.567	5.580	-0.013	63	54972	1.00	1.01	
29 2-Methyl-2-propanol	59	5.578	5.605	-0.027	93	133684	1.00	0.9702	
30 1,1,2-Trichloro-1,2,2-trif	101	5.627	5.640	-0.013	94	187356	1.00	0.9769	
31 Methylene Chloride	84	5.799	5.811	-0.012	95	110709	1.00	1.00	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	5.815	5.825	-0.010	87	86947	1.00	0.9619	
33 Carbon disulfide	76	5.956	5.963	-0.007	96	237249	1.00	1.02	
34 trans-1,2-Dichloroethene	96	6.603	6.614	-0.011	97	76783	1.00	0.9533	
35 2-Methylpentane	43	6.619	6.629	-0.010	95	200585	1.00	0.99	
36 Methyl tert-butyl ether	73	6.737	6.756	-0.019	96	194559	1.00	0.99	
37 1,1-Dichloroethane	63	7.023	7.036	-0.013	98	142199	1.00	1.03	
38 Vinyl acetate	43	7.136	7.169	-0.033	100	240159	1.00	1.02	
39 2-Butanone (MEK)	72	7.584	7.601	-0.017	97	37876	1.00	0.9151	
40 Hexane	56	7.611	7.615	-0.004	85	57693	1.00	0.9837	
41 Isopropyl ether	45	7.767	7.788	-0.021	96	298278	1.00	0.9872	
42 cis-1,2-Dichloroethene	96	8.010	8.024	-0.014	89	82561	1.00	0.99	
43 Ethyl acetate	43	8.210	8.220	-0.010	97	208962	1.00	1.01	
44 Chloroform	83	8.366	8.368	-0.002	93	160664	1.00	0.9589	
45 Tert-butyl ethyl ether	59	8.452	8.477	-0.025	95	221313	1.00	0.99	
46 Tetrahydrofuran	42	8.760	8.771	-0.011	93	102820	1.00	1.01	
47 1,1,1-Trichloroethane	97	9.396	9.397	-0.001	96	157103	1.00	0.9756	
48 1,2-Dichloroethane	62	9.509	9.515	-0.006	93	89259	1.00	0.9588	
49 n-Butanol	31	9.984	10.017	-0.033	87	51485	1.00	1.01	
50 Cyclohexane	69	10.005	10.011	-0.006	72	34219	1.00	0.9146	
51 Benzene	78	10.011	10.012	-0.001	96	234699	1.00	0.9306	
52 Carbon tetrachloride	117	10.027	10.035	-0.008	91	172543	1.00	1.01	
53 2,3-Dimethylpentane	71	10.140	10.141	-0.001	90	50645	1.00	0.9238	
54 Thiophene	84	10.291	10.300	-0.009	92	129113	1.00	0.9517	
55 Isooctane	57	10.803	10.812	-0.009	95	361034	1.00	0.9482	
56 n-Heptane	71	11.208	11.215	-0.007	96	77660	1.00	0.9451	
57 1,2-Dichloropropane	63	11.283	11.289	-0.006	88	93061	1.00	0.9326	
58 Trichloroethene	130	11.321	11.327	-0.006	95	110510	1.00	0.8690	
59 Dibromomethane	93	11.407	11.412	-0.005	91	104281	1.00	0.9133	
60 Dichlorobromomethane	83	11.558	11.563	-0.005	95	171631	1.00	0.9449	
61 1,4-Dioxane	88	11.585	11.592	-0.007	82	32921	1.00	0.8353	
62 Methyl methacrylate	41	11.671	11.675	-0.004	87	112664	1.00	0.9152	
63 Methylcyclohexane	83	12.114	12.115	-0.001	92	137157	1.00	0.9359	
64 4-Methyl-2-pentanone (MIBK	43	12.534	12.550	-0.016	98	230425	1.00	0.9288	
65 cis-1,3-Dichloropropene	75	12.599	12.601	-0.002	97	127387	1.00	0.9535	
66 trans-1,3-Dichloropropene	75	13.311	13.315	-0.004	93	104280	1.00	0.9161	
67 Toluene	91	13.429	13.428	0.001	93	270838	1.00	0.9540	
68 1,1,2-Trichloroethane	83	13.510	13.510	0.000	95	85756	1.00	0.9356	
69 2-Hexanone	58	13.904	13.905	-0.001	89	86930	1.00	0.9249	
70 n-Octane	85	14.136	14.139	-0.003	93	77944	1.00	0.9029	
71 Chlorodibromomethane	129	14.211	14.215	-0.004	97	184161	1.00	0.9506	
72 Ethylene Dibromide	107	14.508	14.511	-0.003	98	154698	1.00	0.9547	
73 Tetrachloroethene	129	14.583	14.586	-0.003	91	98262	1.00	0.8994	
74 Chlorobenzene	112	15.468	15.471	-0.003	96	224222	1.00	0.9203	
75 2,3-Dimethylheptane	43	15.495	15.496	-0.001	94	315356	1.00	0.9235	
76 Ethylbenzene	91	15.759	15.762	-0.003	98	347140	1.00	0.9150	
77 m-Xylene & p-Xylene	91	15.921	15.923	-0.002	96	535393	2.00	1.82	
78 n-Nonane	57	16.352	16.354	-0.002	90	160881	1.00	0.8777	
79 Bromoform	173	16.368	16.369	-0.001	94	201876	1.00	0.99	
80 Styrene	104	16.390	16.392	-0.002	98	199648	1.00	0.8799	
81 o-Xylene	91	16.449	16.451	-0.002	97	267839	1.00	0.9016	
82 1,1,2,2-Tetrachloroethane	83	16.778	16.779	-0.001	97	237751	1.00	0.9867	
83 1,2,3-Trichloropropane	110	16.934	16.950	-0.016	92	59579	1.00	0.8922	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	17.037	17.040	-0.003	95	404160	1.00	0.8991	
85 N-Propylbenzene	120	17.592	17.591	0.001	99	115772	1.00	0.9079	
86 2-Chlorotoluene	126	17.630	17.632	-0.002	96	108451	1.00	0.9038	
87 4-Ethyltoluene	105	17.743	17.745	-0.002	98	413625	1.00	0.9213	
88 1,3,5-Trimethylbenzene	120	17.819	17.822	-0.003	93	174782	1.00	0.8889	
89 Alpha Methyl Styrene	118	18.056	18.057	-0.001	88	150556	1.00	0.8070	
90 n-Decane	57	18.121	18.123	-0.002	85	204050	1.00	0.8939	
91 tert-Butylbenzene	119	18.256	18.257	-0.001	95	362499	1.00	0.9083	
92 1,2,4-Trimethylbenzene	105	18.272	18.270	0.002	95	351697	1.00	0.9240	
93 sec-Butylbenzene	105	18.531	18.531	0.000	98	526092	1.00	0.8974	
94 1,3-Dichlorobenzene	146	18.547	18.546	0.001	96	231973	1.00	0.9669	
95 Benzyl chloride	91	18.622	18.623	-0.001	98	229988	1.00	1.04	
96 1,4-Dichlorobenzene	146	18.633	18.633	0.000	95	231510	1.00	0.9207	
97 4-Isopropyltoluene	119	18.698	18.698	0.000	97	428480	1.00	0.9359	
98 1,2,3-Trimethylbenzene	105	18.746	18.751	-0.005	98	355604	1.00	0.8949	
99 Butylcyclohexane	83	18.806	18.807	-0.001	93	290775	1.00	0.8851	
100 2,3-Dihydroindene	117	19.000	19.000	0.000	91	343847	1.00	0.9313	
101 1,2-Dichlorobenzene	146	19.000	18.999	0.001	81	238092	1.00	0.9161	
102 Indene	116	19.129	19.132	-0.003	89	278260	1.00	1.07	
103 n-Butylbenzene	91	19.140	19.140	0.000	98	425548	1.00	0.9213	
104 Undecane	57	19.458	19.460	-0.002	88	243366	1.00	0.9719	
105 1,2-Dibromo-3-Chloropropan	157	19.614	19.611	0.003	89	137886	1.00	1.03	
106 1,2,4,5-Tetramethylbenzene	119	19.906	19.906	0.000	99	395585	1.00	0.9465	
107 Dodecane	57	20.515	20.516	-0.001	86	224043	1.00	0.8721	
108 1,2,4-Trichlorobenzene	180	20.704	20.703	0.001	94	190847	1.00	0.9513	
109 Naphthalene	128	20.844	20.842	0.002	99	410866	1.00	0.9656	
110 Hexachlorobutadiene	225	21.060	21.060	0.000	93	236235	1.00	0.9123	
111 1,2,3-Trichlorobenzene	180	21.130	21.129	0.001	95	213663	1.00	1.00	
112 2-Methylnaphthalene	142	21.858	21.856	0.002	98	197134	1.00	0.99	
113 1-Methylnaphthalene	142	21.987	21.990	-0.003	99	514444	1.00	0.9505	
A 116 C8 Range	1	14.131	(14.093-14.200)		0	899241	1.00	0.9161	
S 117 Xylenes, Total	100				0		3.00	2.72	
S 118 1,2-Dichloroethene, Total	1				0		2.00	1.94	

Reagents:

40L6DQP_00016	Amount Added: 200.00	Units: mL	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

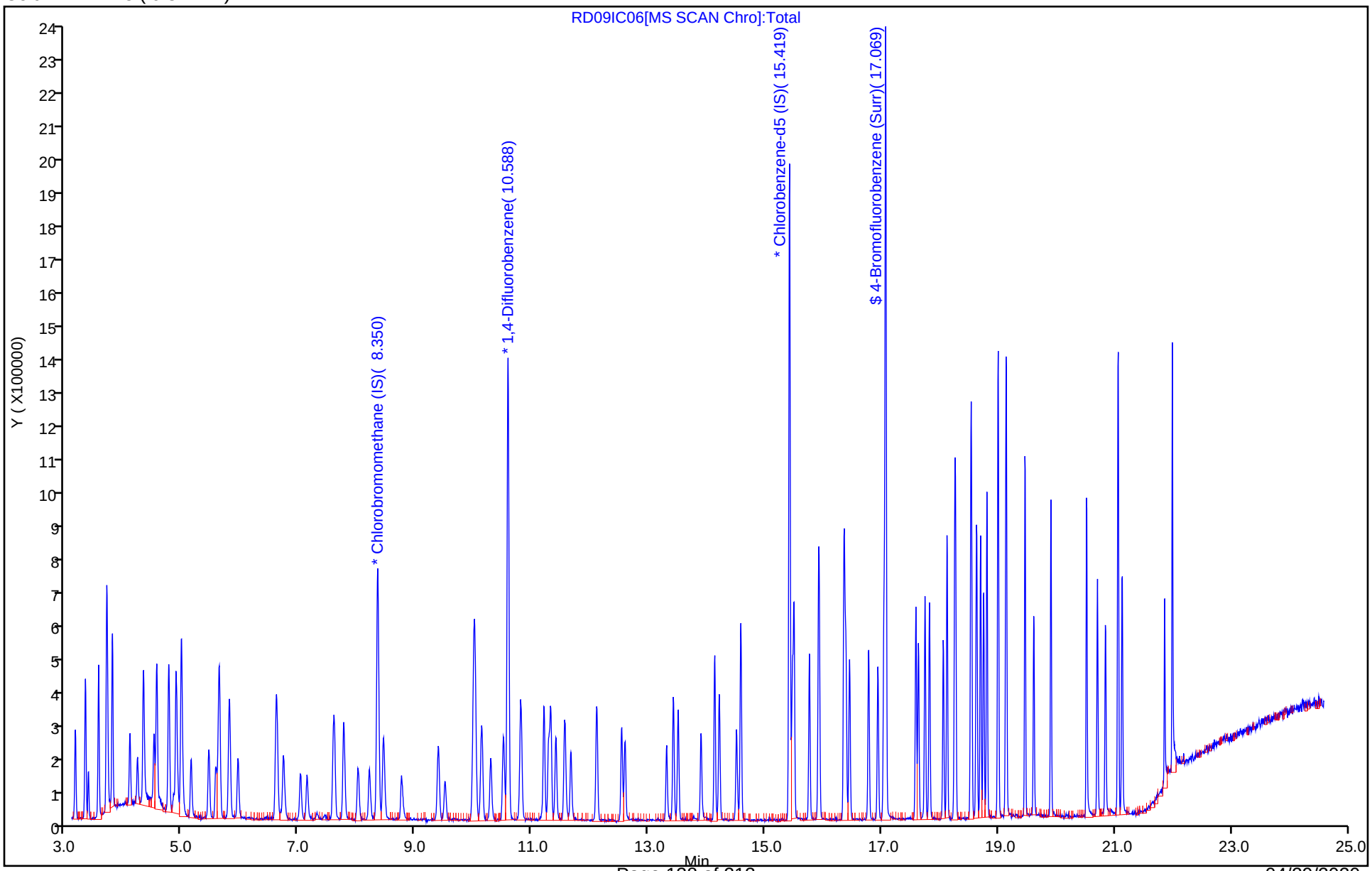
Report Date: 10-Apr-2020 13:42:43 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200409-15180.b\RD09IC06.D

Injection Date:	09-Apr-2020 19:10:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	IC L6			Worklist Smp#:	8
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

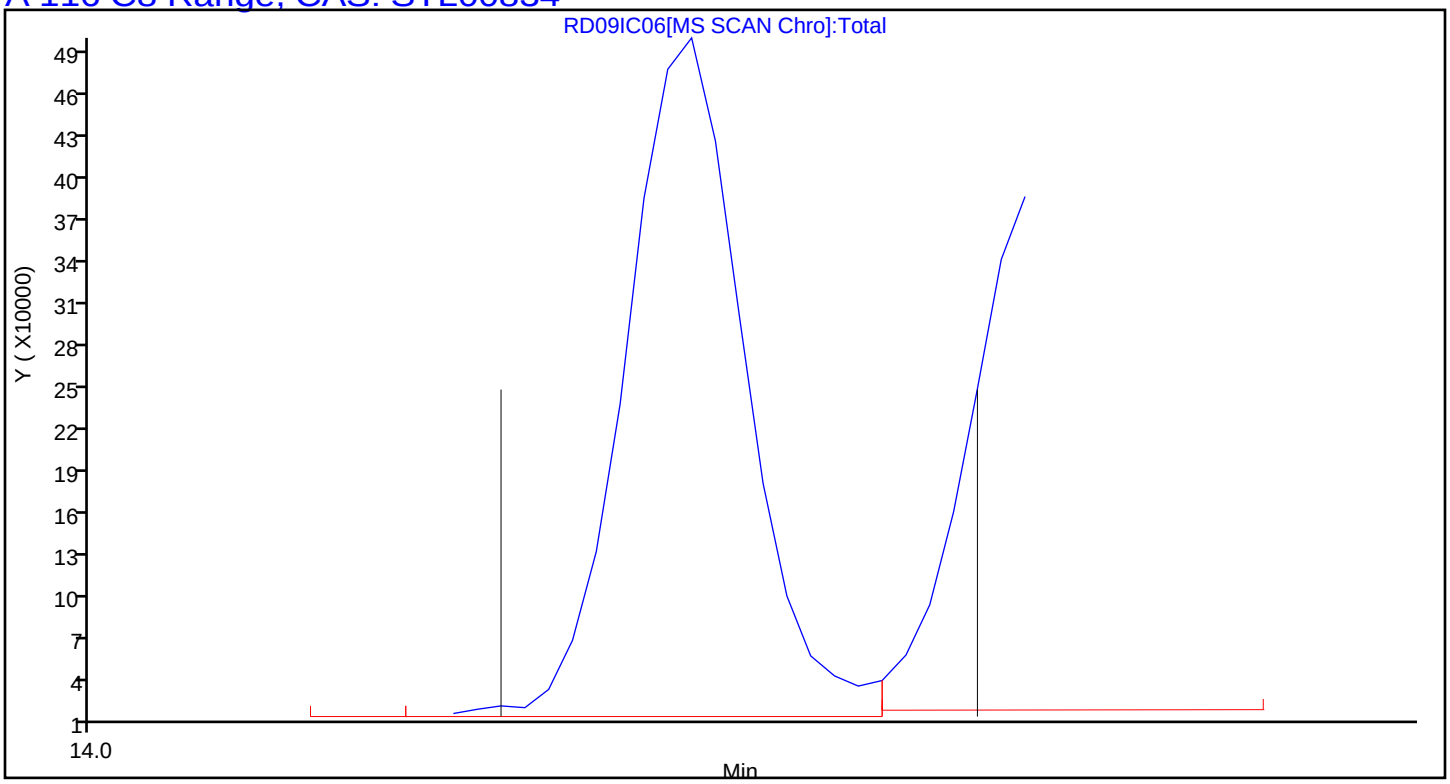


Report Date: 10-Apr-2020 13:42:43 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200409-15180.b\RD09IC06.D				
Injection Date:	09-Apr-2020 19:10:30	Instrument ID:	MR		
Lims ID:	IC L6				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	4	Worklist Smp#:	8
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 116 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MR\20200409-15180.b\RD09IC07.D
Lims ID: ICIS L7
Client ID:
Sample Type: ICIS Calib Level: 7
Inject. Date: 09-Apr-2020 19:59:30 ALS Bottle#: 5 Worklist Smp#: 9
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0015180-009
Misc. Info.: 285132
Operator ID: HMT Instrument ID: MR
Sublist: chrom-MR_TO15*sub16

Method: \\chromfs\Knoxville\ChromData\MR\20200409-15180.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 10-Apr-2020 13:42:46 Calib Date: 10-Apr-2020 00:47:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MR\20200409-15180.b\RD09IC10.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX0332

First Level Reviewer: tajh Date: 10-Apr-2020 13:34:39

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.350	8.356	-0.006	96	196293	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.588	10.595	-0.007	93	1370364	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.419	15.420	-0.001	86	1081858	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr	95	17.069	17.069	0.000	94	646077	4.00	4.03	
6 Chlorodifluoromethane	51	3.329	3.332	-0.003	99	276242	2.00	2.00	
7 Propene	41	3.340	3.323	0.017	98	201000	2.00	2.04	
8 Dichlorodifluoromethane	85	3.383	3.381	0.002	97	174874	2.00	1.69	
9 Chloromethane	52	3.556	3.562	-0.006	90	63156	2.00	2.08	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.561	3.566	-0.005	89	171999	2.00	2.12	
11 Acetaldehyde	44	3.702	3.709	-0.007	89	522802	10.0	9.55	
12 Vinyl chloride	62	3.718	3.722	-0.004	100	239408	2.00	1.91	
14 Butadiene	54	3.799	3.802	-0.003	70	178781	2.00	1.96	
13 Butane	43	3.799	3.802	-0.003	85	377086	2.00	1.97	
15 Bromomethane	94	4.095	4.103	-0.008	96	259599	2.00	1.98	
16 Chloroethane	64	4.230	4.239	-0.009	82	128479	2.00	2.08	
17 Ethanol	31	4.332	4.348	-0.016	97	803642	10.0	10.3	
18 Vinyl bromide	106	4.516	4.520	-0.004	97	265264	2.00	2.01	
19 2-Methylbutane	43	4.559	4.565	-0.006	92	321776	2.00	2.00	
20 Trichlorofluoromethane	101	4.764	4.773	-0.009	96	566158	2.00	2.01	
21 Acrolein	56	4.785	4.794	-0.009	91	49433	2.00	1.88	
22 Acetonitrile	40	4.850	4.861	-0.011	96	84777	2.00	2.04	
23 Acetone	58	4.893	4.909	-0.016	98	305531	6.00	5.71	
24 Pentane	72	4.985	4.987	-0.002	71	32885	2.00	1.86	
25 Isopropyl alcohol	45	4.985	5.009	-0.024	83	858178	6.00	5.93	
26 Ethyl ether	31	5.147	5.168	-0.021	88	220793	2.00	1.94	
27 1,1-Dichloroethene	96	5.454	5.463	-0.009	96	175171	2.00	1.89	
28 Acrylonitrile	53	5.567	5.580	-0.013	57	108410	2.00	1.91	
29 2-Methyl-2-propanol	59	5.573	5.605	-0.032	96	282625	2.00	1.97	
30 1,1,2-Trichloro-1,2,2-trif	101	5.632	5.640	-0.008	94	387949	2.00	1.94	
31 Methylene Chloride	84	5.799	5.811	-0.012	96	189270	2.00	1.97	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	5.821	5.825	-0.004	96	181836	2.00	1.93	
33 Carbon disulfide	76	5.956	5.963	-0.007	96	485098	2.00	2.01	
34 trans-1,2-Dichloroethene	96	6.603	6.614	-0.011	94	166412	2.00	1.99	
35 2-Methylpentane	43	6.619	6.629	-0.010	94	410735	2.00	1.95	
36 Methyl tert-butyl ether	73	6.732	6.756	-0.024	97	407896	2.00	2.00	
37 1,1-Dichloroethane	63	7.034	7.036	-0.002	98	285743	2.00	1.99	
38 Vinyl acetate	43	7.147	7.169	-0.022	99	484332	2.00	1.97	
39 2-Butanone (MEK)	72	7.579	7.601	-0.022	96	78208	2.00	1.82	
40 Hexane	56	7.611	7.615	-0.004	91	120261	2.00	1.97	
41 Isopropyl ether	45	7.767	7.788	-0.021	94	625641	2.00	1.99	
42 cis-1,2-Dichloroethene	96	8.015	8.024	-0.009	89	171035	2.00	1.97	
43 Ethyl acetate	43	8.204	8.220	-0.016	97	428487	2.00	1.98	
44 Chloroform	83	8.366	8.368	-0.002	94	342288	2.00	1.96	
45 Tert-butyl ethyl ether	59	8.452	8.477	-0.025	96	453160	2.00	1.95	
46 Tetrahydrofuran	42	8.760	8.771	-0.011	94	207944	2.00	1.95	
47 1,1,1-Trichloroethane	97	9.390	9.397	-0.007	98	323879	2.00	1.93	
48 1,2-Dichloroethane	62	9.509	9.515	-0.006	93	185124	2.00	1.96	
49 n-Butanol	31	9.973	10.017	-0.044	88	104210	2.00	2.01	
50 Cyclohexane	69	10.000	10.011	-0.011	74	72252	2.00	1.90	
51 Benzene	78	10.005	10.012	-0.007	95	495518	2.00	1.93	
52 Carbon tetrachloride	117	10.027	10.035	-0.008	90	363452	2.00	2.10	
53 2,3-Dimethylpentane	71	10.140	10.141	-0.001	89	107005	2.00	1.92	
54 Thiophene	84	10.296	10.300	-0.004	91	276534	2.00	2.00	
55 Isooctane	57	10.809	10.812	-0.003	95	752720	2.00	1.94	
56 n-Heptane	71	11.202	11.215	-0.013	96	163329	2.00	1.95	
57 1,2-Dichloropropane	63	11.283	11.289	-0.006	88	187862	2.00	1.85	
58 Trichloroethene	130	11.321	11.327	-0.006	95	239306	2.00	1.85	
59 Dibromomethane	93	11.407	11.412	-0.005	94	225969	2.00	1.95	
60 Dichlorobromomethane	83	11.558	11.563	-0.005	95	357070	2.00	1.93	
61 1,4-Dioxane	88	11.574	11.592	-0.018	88	77416	2.00	1.93	
62 Methyl methacrylate	41	11.666	11.675	-0.009	88	237613	2.00	1.90	
63 Methylcyclohexane	83	12.108	12.115	-0.007	91	292456	2.00	1.96	
64 4-Methyl-2-pentanone (MIBK	43	12.534	12.550	-0.016	97	493406	2.00	1.96	
65 cis-1,3-Dichloropropene	75	12.594	12.601	-0.007	95	276163	2.00	2.03	
66 trans-1,3-Dichloropropene	75	13.311	13.315	-0.004	95	229219	2.00	2.00	
67 Toluene	91	13.424	13.428	-0.004	94	568746	2.00	1.99	
68 1,1,2-Trichloroethane	83	13.505	13.510	-0.005	95	182659	2.00	1.98	
69 2-Hexanone	58	13.898	13.905	-0.007	88	182699	2.00	1.93	
70 n-Octane	85	14.136	14.139	-0.003	94	177249	2.00	2.04	
71 Chlorodibromomethane	129	14.211	14.215	-0.004	96	392945	2.00	2.01	
72 Ethylene Dibromide	107	14.508	14.511	-0.003	96	322375	2.00	1.97	
73 Tetrachloroethene	129	14.583	14.586	-0.003	92	210505	2.00	1.91	
74 Chlorobenzene	112	15.468	15.471	-0.003	96	476677	2.00	1.94	
75 2,3-Dimethylheptane	43	15.495	15.496	-0.001	94	653416	2.00	1.90	
76 Ethylbenzene	91	15.759	15.762	-0.003	97	736242	2.00	1.92	
77 m-Xylene & p-Xylene	91	15.926	15.923	0.003	96	1161853	4.00	3.91	
78 n-Nonane	57	16.352	16.354	-0.002	91	354169	2.00	1.92	
79 Bromoform	173	16.368	16.369	-0.001	94	476330	2.00	2.32	
80 Styrene	104	16.390	16.392	-0.002	97	457208	2.00	2.00	
81 o-Xylene	91	16.449	16.451	-0.002	99	591126	2.00	1.97	
82 1,1,2,2-Tetrachloroethane	83	16.778	16.779	-0.001	97	510310	2.00	2.10	
83 1,2,3-Trichloropropane	110	16.940	16.950	-0.010	93	133949	2.00	1.99	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	17.037	17.040	-0.003	94	890273	2.00	1.96	
85 N-Propylbenzene	120	17.587	17.591	-0.004	100	253872	2.00	1.97	
86 2-Chlorotoluene	126	17.630	17.632	-0.002	97	238191	2.00	1.97	
87 4-Ethyltoluene	105	17.743	17.745	-0.002	98	877657	2.00	1.94	
88 1,3,5-Trimethylbenzene	120	17.819	17.822	-0.003	93	379825	2.00	1.91	
89 Alpha Methyl Styrene	118	18.056	18.057	-0.001	89	360330	2.00	1.91	
90 n-Decane	57	18.121	18.123	-0.002	85	466382	2.00	2.03	
91 tert-Butylbenzene	119	18.256	18.257	-0.001	93	832010	2.00	2.07	
92 1,2,4-Trimethylbenzene	105	18.266	18.270	-0.004	95	806491	2.00	2.10	
93 sec-Butylbenzene	105	18.531	18.531	0.000	99	1212903	2.00	2.05	
94 1,3-Dichlorobenzene	146	18.541	18.546	-0.005	96	561074	2.00	2.32	
95 Benzyl chloride	91	18.622	18.623	-0.001	98	577711	2.00	2.60	
96 1,4-Dichlorobenzene	146	18.633	18.633	0.000	95	535810	2.00	2.11	
97 4-Isopropyltoluene	119	18.698	18.698	0.000	97	962151	2.00	2.08	
98 1,2,3-Trimethylbenzene	105	18.752	18.751	0.001	98	815075	2.00	2.03	
99 Butylcyclohexane	83	18.806	18.807	-0.001	94	671491	2.00	2.03	
100 2,3-Dihydroindene	117	19.000	19.000	0.000	93	791951	2.00	2.13	
101 1,2-Dichlorobenzene	146	19.000	18.999	0.001	84	557024	2.00	2.12	
102 Indene	116	19.134	19.132	0.002	89	674779	2.00	2.58	
103 n-Butylbenzene	91	19.140	19.140	0.000	98	1001224	2.00	2.15	
104 Undecane	57	19.463	19.460	0.003	90	593968	2.00	2.35	
105 1,2-Dibromo-3-Chloropropan	157	19.609	19.611	-0.002	90	314839	2.00	2.33	
106 1,2,4,5-Tetramethylbenzene	119	19.906	19.906	0.000	98	898598	2.00	2.13	
107 Dodecane	57	20.515	20.516	-0.001	88	613454	2.00	1.68	
108 1,2,4-Trichlorobenzene	180	20.704	20.703	0.001	94	438478	2.00	2.17	
109 Naphthalene	128	20.838	20.842	-0.004	99	920373	2.00	2.14	
110 Hexachlorobutadiene	225	21.060	21.060	0.000	93	536752	2.00	2.05	
111 1,2,3-Trichlorobenzene	180	21.130	21.129	0.001	94	482977	2.00	2.25	
112 2-Methylnaphthalene	142	21.858	21.856	0.002	100	645072	2.00	1.84	
113 1-Methylnaphthalene	142	21.987	21.990	-0.003	99	1256640	2.00	1.93	
A 116 C8 Range	1	14.136	(14.093-14.179)		0	1863980	2.00	1.87	
S 117 Xylenes, Total	100				0		6.00	5.89	
S 118 1,2-Dichloroethene, Total	1				0		4.00	3.96	

Reagents:

40L7DQP_00016	Amount Added: 200.00	Units: mL	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

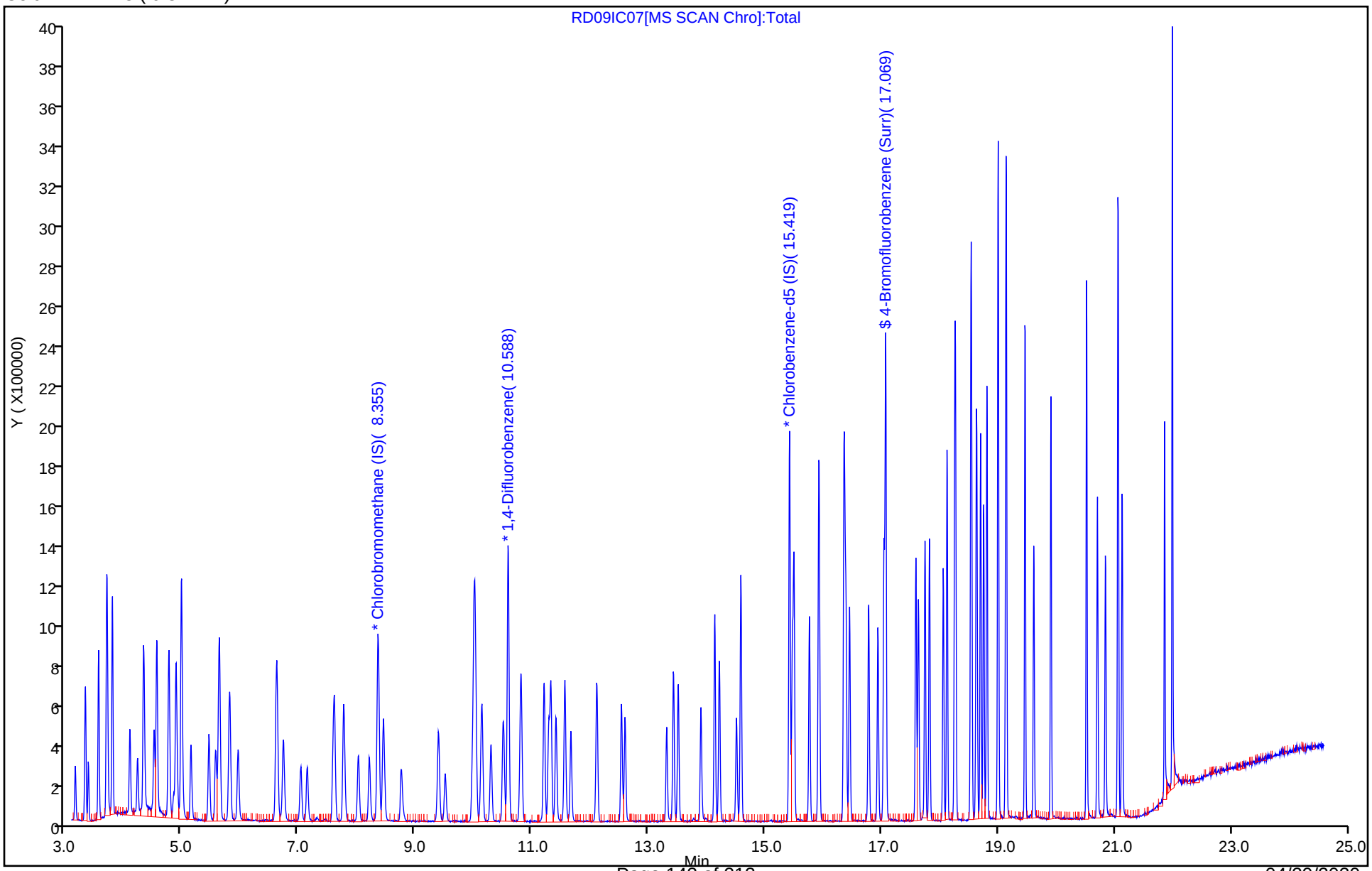
Report Date: 10-Apr-2020 13:42:47 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200409-15180.b\RD09IC07.D

Injection Date:	09-Apr-2020 19:59:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	ICIS L7			Worklist Smp#:	9
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

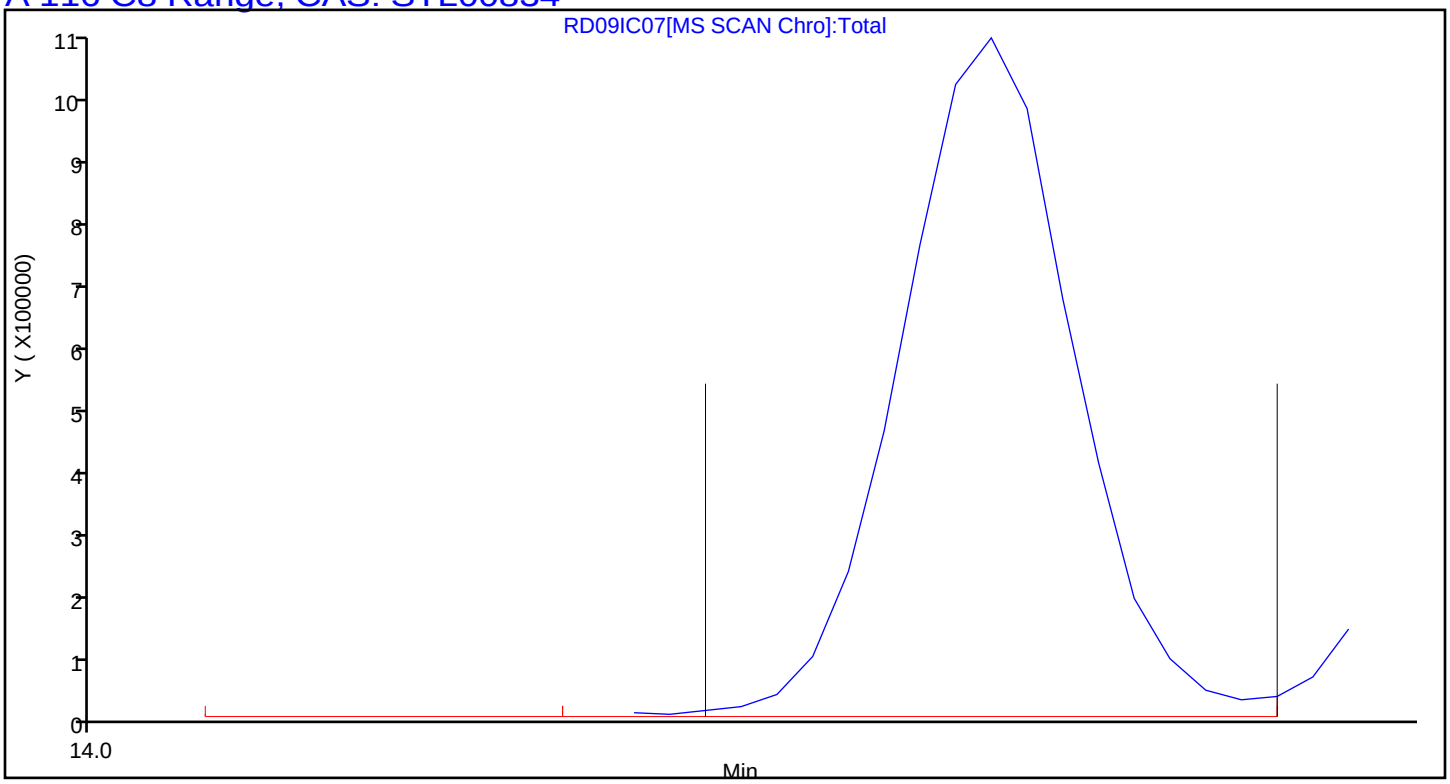


Report Date: 10-Apr-2020 13:42:47 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200409-15180.b\RD09IC07.D				
Injection Date:	09-Apr-2020 19:59:30	Instrument ID:	MR		
Lims ID:	ICIS L7				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	5	Worklist Smp#:	9
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 116 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MR\20200409-15180.b\RD09IC08.D
Lims ID: IC L8
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 09-Apr-2020 21:34:30 ALS Bottle#: 7 Worklist Smp#: 11
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0015180-011
Misc. Info.: 285131
Operator ID: HMT Instrument ID: MR
Sublist: chrom-MR_TO15*sub16

Method: \\chromfs\Knoxville\ChromData\MR\20200409-15180.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 10-Apr-2020 13:42:51 Calib Date: 10-Apr-2020 00:47:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MR\20200409-15180.b\RD09IC10.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX0332

First Level Reviewer: khachitpongpanits Date: 10-Apr-2020 17:49:30

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.361	8.356	0.005	96	200698	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.593	10.595	-0.002	93	1365281	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.419	15.420	-0.001	86	1104473	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr	95	17.069	17.069	0.000	94	716869	4.00	4.38	
6 Chlorodifluoromethane	51	3.324	3.332	-0.008	99	515417	4.00	3.65	
7 Propene	41	3.335	3.323	0.012	99	329308	4.00	3.99	
8 Dichlorodifluoromethane	85	3.383	3.381	0.002	98	284329	4.00	2.69	
9 Chloromethane	52	3.556	3.562	-0.006	98	122364	4.00	3.94	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.561	3.566	-0.005	88	308731	4.00	3.77	
11 Acetaldehyde	44	3.702	3.709	-0.007	88	1018130	20.0	18.2	
12 Vinyl chloride	62	3.718	3.722	-0.004	99	466828	4.00	3.64	
13 Butane	43	3.799	3.802	-0.003	86	739250	4.00	3.78	
14 Butadiene	54	3.799	3.802	-0.003	68	354714	4.00	3.80	
15 Bromomethane	94	4.095	4.103	-0.008	97	503246	4.00	3.75	
16 Chloroethane	64	4.230	4.239	-0.009	83	245913	4.00	3.89	
17 Ethanol	31	4.338	4.348	-0.010	97	1657188	20.0	20.8	
18 Vinyl bromide	106	4.516	4.520	-0.004	97	517068	4.00	3.84	
19 2-Methylbutane	43	4.559	4.565	-0.006	92	615568	4.00	3.75	
20 Trichlorofluoromethane	101	4.769	4.773	-0.004	96	1114962	4.00	3.87	
21 Acrolein	56	4.785	4.794	-0.009	93	113626	4.00	4.23	
22 Acetonitrile	40	4.861	4.861	0.000	95	185612	4.00	4.36	
23 Acetone	58	4.893	4.909	-0.016	99	607405	12.0	11.1	
24 Pentane	72	4.985	4.987	-0.002	96	71146	4.00	3.93	
25 Isopropyl alcohol	45	4.990	5.009	-0.019	94	1727736	12.0	11.7	
26 Ethyl ether	31	5.147	5.168	-0.021	88	455973	4.00	3.91	
27 1,1-Dichloroethene	96	5.460	5.463	-0.003	97	350072	4.00	3.70	
28 Acrylonitrile	53	5.573	5.580	-0.007	96	236464	4.00	4.07	
29 2-Methyl-2-propanol	59	5.567	5.605	-0.038	97	586901	4.00	4.00	
30 1,1,2-Trichloro-1,2,2-trif	101	5.637	5.640	-0.003	96	814402	4.00	3.99	
31 Methylene Chloride	84	5.810	5.811	-0.001	96	352662	4.00	4.00	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	5.821	5.825	-0.004	96	365096	4.00	3.80	
33 Carbon disulfide	76	5.961	5.963	-0.002	97	951833	4.00	3.85	
34 trans-1,2-Dichloroethene	96	6.613	6.614	-0.001	94	334417	4.00	3.90	
35 2-Methylpentane	43	6.624	6.629	-0.005	94	816285	4.00	3.80	
36 Methyl tert-butyl ether	73	6.732	6.756	-0.024	96	810712	4.00	3.88	
37 1,1-Dichloroethane	63	7.039	7.036	0.003	99	576504	4.00	3.92	
38 Vinyl acetate	43	7.147	7.169	-0.022	99	1017203	4.00	4.05	
39 2-Butanone (MEK)	72	7.584	7.601	-0.017	97	163715	4.00	3.72	
40 Hexane	56	7.611	7.615	-0.004	88	243024	4.00	3.89	
41 Isopropyl ether	45	7.767	7.788	-0.021	95	1255205	4.00	3.90	
42 cis-1,2-Dichloroethene	96	8.021	8.024	-0.003	89	352158	4.00	3.97	
43 Ethyl acetate	43	8.210	8.220	-0.010	97	897717	4.00	4.07	
44 Chloroform	83	8.371	8.368	0.003	93	698955	4.00	3.92	
45 Tert-butyl ethyl ether	59	8.452	8.477	-0.025	96	941509	4.00	3.97	
46 Tetrahydrofuran	42	8.749	8.771	-0.022	93	433937	4.00	3.99	
47 1,1,1-Trichloroethane	97	9.396	9.397	-0.001	96	660619	4.00	3.86	
48 1,2-Dichloroethane	62	9.520	9.515	0.005	92	373294	4.00	3.96	
49 n-Butanol	31	9.968	10.017	-0.049	89	201101	4.00	3.89	
50 Cyclohexane	69	10.005	10.011	-0.006	80	151163	4.00	3.99	
51 Benzene	78	10.016	10.012	0.004	97	1053976	4.00	4.13	
52 Carbon tetrachloride	117	10.032	10.035	-0.003	90	743132	4.00	4.31	
53 2,3-Dimethylpentane	71	10.140	10.141	-0.001	90	221446	4.00	3.99	
54 Thiophene	84	10.302	10.300	0.002	92	571937	4.00	4.16	
55 Isooctane	57	10.814	10.812	0.002	94	1557999	4.00	4.04	
56 n-Heptane	71	11.213	11.215	-0.002	97	334720	4.00	4.02	
57 1,2-Dichloropropane	63	11.283	11.289	-0.006	87	393513	4.00	3.89	
58 Trichloroethene	130	11.326	11.327	-0.001	95	487334	4.00	3.78	
59 Dibromomethane	93	11.413	11.412	0.001	93	467182	4.00	4.04	
60 Dichlorobromomethane	83	11.564	11.563	0.001	95	762966	4.00	4.15	
61 1,4-Dioxane	88	11.574	11.592	-0.018	41	164186	4.00	4.11	
62 Methyl methacrylate	41	11.666	11.675	-0.009	88	506170	4.00	4.06	
63 Methylcyclohexane	83	12.114	12.115	-0.001	91	595083	4.00	4.01	
64 4-Methyl-2-pentanone (MIBK	43	12.534	12.550	-0.016	97	997632	4.00	3.97	
65 cis-1,3-Dichloropropene	75	12.599	12.601	-0.002	95	578556	4.00	4.27	
66 trans-1,3-Dichloropropene	75	13.311	13.315	-0.004	95	481633	4.00	4.11	
67 Toluene	91	13.429	13.428	0.001	93	1179092	4.00	4.03	
68 1,1,2-Trichloroethane	83	13.510	13.510	0.000	94	391127	4.00	4.14	
69 2-Hexanone	58	13.899	13.905	-0.006	88	379518	4.00	3.92	
70 n-Octane	85	14.136	14.139	-0.003	94	358852	4.00	4.04	
71 Chlorodibromomethane	129	14.217	14.215	0.002	96	845272	4.00	4.24	
72 Ethylene Dibromide	107	14.508	14.511	-0.003	98	696803	4.00	4.18	
73 Tetrachloroethene	129	14.583	14.586	-0.003	92	468781	4.00	4.17	
74 Chlorobenzene	112	15.468	15.471	-0.003	95	1033212	4.00	4.12	
75 2,3-Dimethylheptane	43	15.495	15.496	-0.001	94	1444024	4.00	4.11	
76 Ethylbenzene	91	15.759	15.762	-0.003	98	1608065	4.00	4.12	
77 m-Xylene & p-Xylene	91	15.926	15.923	0.003	97	2723903	8.00	8.98	
78 n-Nonane	57	16.352	16.354	-0.002	92	835742	4.00	4.43	
79 Bromoform	173	16.368	16.369	-0.001	93	1119335	4.00	5.33	
80 Styrene	104	16.390	16.392	-0.002	97	1065610	4.00	4.56	
81 o-Xylene	91	16.449	16.451	-0.002	99	1322107	4.00	4.32	
82 1,1,2,2-Tetrachloroethane	83	16.773	16.779	-0.006	97	1112291	4.00	4.48	
83 1,2,3-Trichloropropane	110	16.940	16.950	-0.010	92	296463	4.00	4.31	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	17.037	17.040	-0.003	95	2005178	4.00	4.33	
85 N-Propylbenzene	120	17.587	17.591	-0.004	99	576717	4.00	4.39	
86 2-Chlorotoluene	126	17.630	17.632	-0.002	97	521717	4.00	4.22	
87 4-Ethyltoluene	105	17.743	17.745	-0.002	98	2050117	4.00	4.43	
88 1,3,5-Trimethylbenzene	120	17.819	17.822	-0.003	93	888669	4.00	4.39	
89 Alpha Methyl Styrene	118	18.056	18.057	-0.001	90	847008	4.00	4.41	
90 n-Decane	57	18.121	18.123	-0.002	86	1111488	4.00	4.73	
91 tert-Butylbenzene	119	18.256	18.257	-0.001	93	1962184	4.00	4.77	
92 1,2,4-Trimethylbenzene	105	18.266	18.270	-0.004	96	1990995	4.00	5.08	
93 sec-Butylbenzene	105	18.531	18.531	0.000	99	2931216	4.00	4.86	
94 1,3-Dichlorobenzene	146	18.541	18.546	-0.005	97	1354199	4.00	5.48	
95 Benzyl chloride	91	18.622	18.623	-0.001	97	1475987	4.00	6.51	
96 1,4-Dichlorobenzene	146	18.633	18.633	0.000	96	1291702	4.00	4.99	
97 4-Isopropyltoluene	119	18.698	18.698	0.000	96	2263665	4.00	4.80	
98 1,2,3-Trimethylbenzene	105	18.752	18.751	0.001	99	1917778	4.00	4.69	
99 Butylcyclohexane	83	18.806	18.807	-0.001	93	1594713	4.00	4.71	
100 2,3-Dihydroindene	117	19.000	19.000	0.000	93	1918118	4.00	5.04	
101 1,2-Dichlorobenzene	146	19.000	18.999	0.001	82	1357875	4.00	5.07	
102 Indene	116	19.129	19.132	-0.003	90	1659024	4.00	6.21	
103 n-Butylbenzene	91	19.140	19.140	0.000	99	2501832	4.00	5.26	
104 Undecane	57	19.458	19.460	-0.002	89	1409338	4.00	5.47	
105 1,2-Dibromo-3-Chloropropan	157	19.609	19.611	-0.002	90	721401	4.00	5.24	
106 1,2,4,5-Tetramethylbenzene	119	19.906	19.906	0.000	97	2100386	4.00	4.88	
107 Dodecane	57	20.515	20.516	-0.001	88	1510213	4.00	3.50	
108 1,2,4-Trichlorobenzene	180	20.704	20.703	0.001	93	1026817	4.00	4.97	
109 Naphthalene	128	20.839	20.842	-0.003	99	1857108	4.00	4.24	
110 Hexachlorobutadiene	225	21.060	21.060	0.000	94	1221906	4.00	4.58	
111 1,2,3-Trichlorobenzene	180	21.130	21.129	0.001	95	984632	4.00	4.49	
112 2-Methylnaphthalene	142	21.858	21.856	0.002	99	1650099	4.00	3.67	
113 1-Methylnaphthalene	142	21.987	21.990	-0.003	99	2845710	4.00	3.97	
A 116 C8 Range	1	14.135	(14.082-14.179)		0	3894387	4.00	3.92	
S 117 Xylenes, Total	100				0		12.0	13.3	
S 118 1,2-Dichloroethene, Total	1				0		8.00	7.87	

Reagents:

40L8DQP_00016	Amount Added: 200.00	Units: mL	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

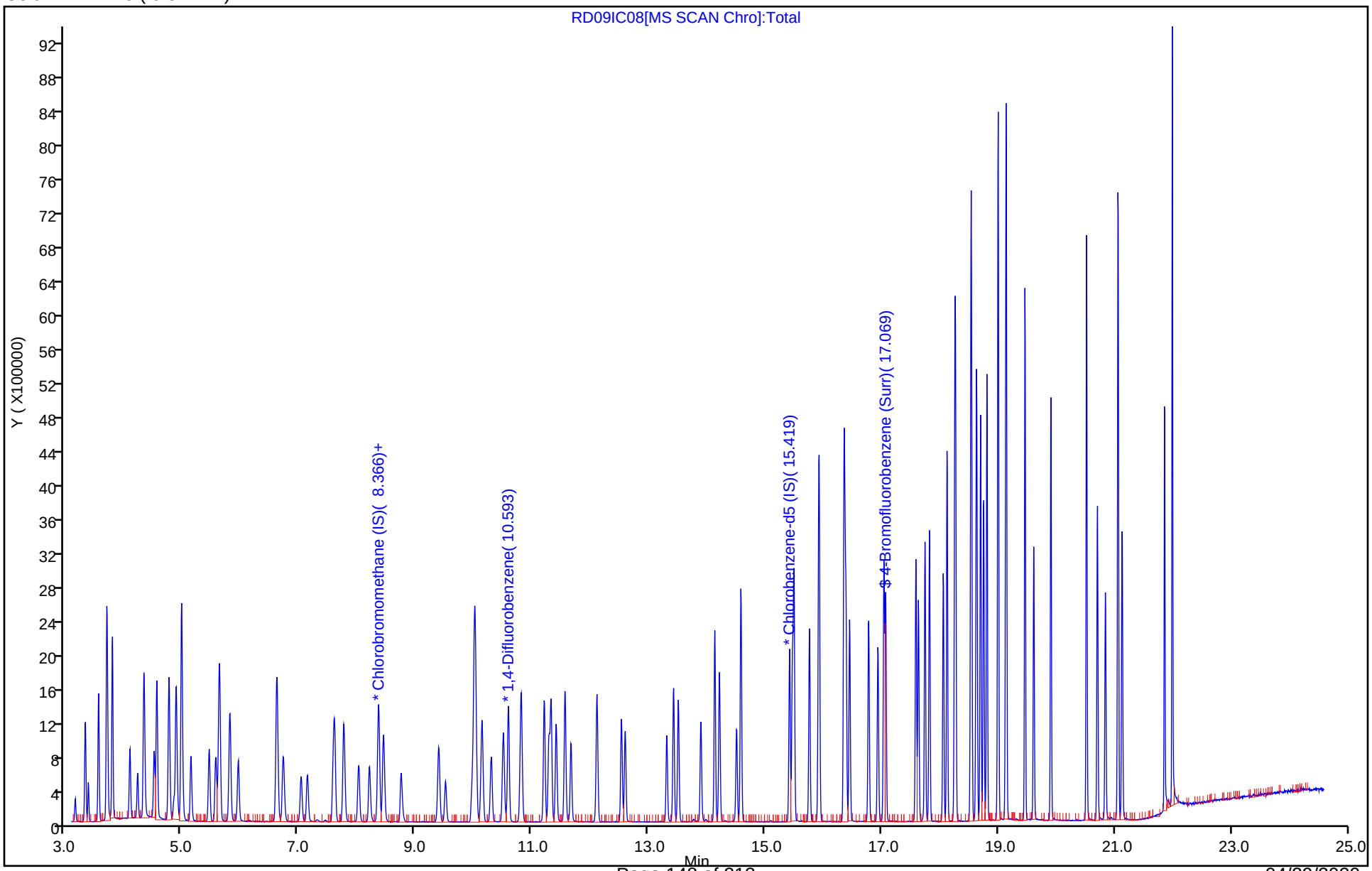
Report Date: 10-Apr-2020 13:42:53 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200409-15180.b\RD09IC08.D

Injection Date:	09-Apr-2020 21:34:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	IC L8			Worklist Smp#:	11
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

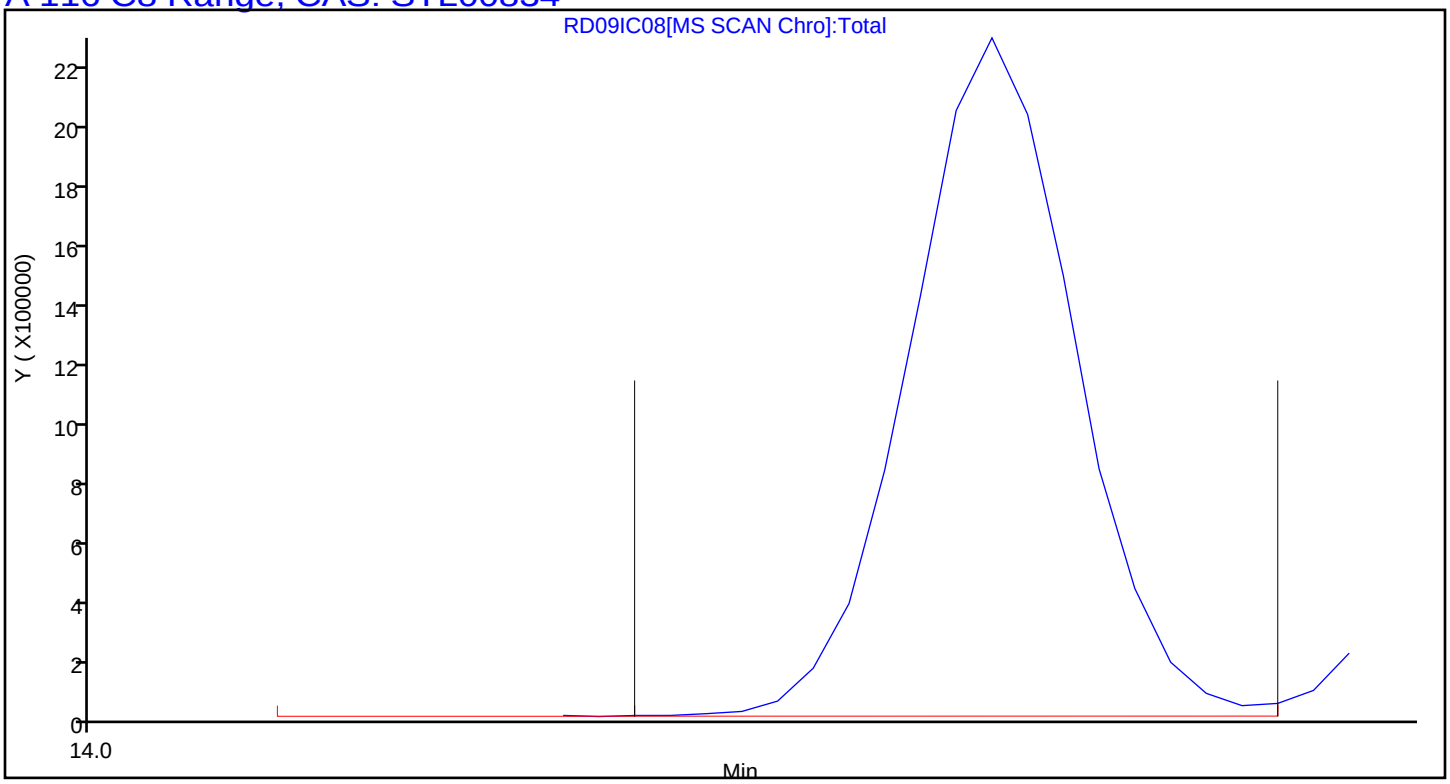


Report Date: 10-Apr-2020 13:42:53 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200409-15180.b\RD09IC08.D				
Injection Date:	09-Apr-2020 21:34:30	Instrument ID:	MR		
Lims ID:	IC L8				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	7	Worklist Smp#:	11
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 116 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MR\20200409-15180.b\RD09IC09.D
Lims ID: IC L9
Client ID:
Sample Type: IC Calib Level: 9
Inject. Date: 09-Apr-2020 23:10:30 ALS Bottle#: 7 Worklist Smp#: 13
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0015180-013
Misc. Info.: 285130
Operator ID: HMT Instrument ID: MR
Sublist: chrom-MR_TO15*sub16

Method: \\chromfs\Knoxville\ChromData\MR\20200409-15180.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 10-Apr-2020 13:42:56 Calib Date: 10-Apr-2020 00:47:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MR\20200409-15180.b\RD09IC10.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX0332

First Level Reviewer: khachitpongpanits Date: 10-Apr-2020 17:49:55

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.377	8.356	0.021	94	224446	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.609	10.595	0.014	93	1503894	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.425	15.420	0.005	86	1240374	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr	95	17.069	17.069	0.000	95	851172	4.00	4.63	
6 Chlorodifluoromethane	51	3.340	3.332	0.008	99	1129144	8.00	7.15	
7 Propene	41	3.346	3.323	0.023	98	679362	8.00	8.38	
8 Dichlorodifluoromethane	85	3.394	3.381	0.013	98	684194	8.00	5.79	
9 Chloromethane	52	3.567	3.562	0.005	98	243844	8.00	7.02	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.572	3.566	0.006	90	717816	8.00	7.93	
11 Acetaldehyde	44	3.718	3.709	0.009	88	1929345	40.0	30.8	
12 Vinyl chloride	62	3.728	3.722	0.006	100	918340	8.00	6.41	
13 Butane	43	3.809	3.802	0.007	85	1432051	8.00	6.55	
14 Butadiene	54	3.809	3.802	0.007	69	703043	8.00	6.74	
15 Bromomethane	94	4.111	4.103	0.008	97	976676	8.00	6.50	
16 Chloroethane	64	4.246	4.239	0.007	86	481162	8.00	6.80	
17 Ethanol	31	4.365	4.348	0.017	97	3045454	40.0	34.2	
18 Vinyl bromide	106	4.532	4.520	0.012	97	1009491	8.00	6.70	
19 2-Methylbutane	43	4.575	4.565	0.010	94	1228461	8.00	6.69	
20 Trichlorofluoromethane	101	4.785	4.773	0.012	96	2260447	8.00	7.02	
21 Acrolein	56	4.802	4.794	0.008	93	165308	8.00	5.50	
22 Acetonitrile	40	4.872	4.861	0.011	99	375653	8.00	7.89	
23 Acetone	58	4.915	4.909	0.006	99	1171524	24.0	19.2	
24 Pentane	72	5.001	4.987	0.014	96	150895	8.00	7.46	
25 Isopropyl alcohol	45	5.017	5.009	0.008	94	3800247	24.0	23.0	
26 Ethyl ether	31	5.163	5.168	-0.005	88	1001951	8.00	7.69	
27 1,1-Dichloroethene	96	5.476	5.463	0.013	97	754655	8.00	7.14	
29 2-Methyl-2-propanol	59	5.594	5.605	-0.011	96	1258265	8.00	7.67	
28 Acrylonitrile	53	5.594	5.580	0.014	94	530412	8.00	8.17	
30 1,1,2-Trichloro-1,2,2-trif	101	5.654	5.640	0.014	94	1782253	8.00	7.81	
31 Methylene Chloride	84	5.831	5.811	0.020	98	722461	8.00	7.75	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	5.842	5.825	0.017	97	773700	8.00	7.19	
33 Carbon disulfide	76	5.977	5.963	0.014	96	2074014	8.00	7.51	
34 trans-1,2-Dichloroethene	96	6.635	6.614	0.021	95	765354	8.00	7.98	
35 2-Methylpentane	43	6.646	6.629	0.017	94	1851252	8.00	7.70	
36 Methyl tert-butyl ether	73	6.743	6.756	-0.013	96	1774644	8.00	7.59	
37 1,1-Dichloroethane	63	7.056	7.036	0.020	99	1224391	8.00	7.45	
38 Vinyl acetate	43	7.163	7.169	-0.006	99	2192762	8.00	7.82	
39 2-Butanone (MEK)	72	7.606	7.601	0.005	97	358771	8.00	7.28	
40 Hexane	56	7.627	7.615	0.012	87	536095	8.00	7.68	
41 Isopropyl ether	45	7.784	7.788	-0.004	95	2771841	8.00	7.71	
42 cis-1,2-Dichloroethene	96	8.042	8.024	0.018	89	763131	8.00	7.69	
43 Ethyl acetate	43	8.226	8.220	0.006	97	1940061	8.00	7.86	
44 Chloroform	83	8.393	8.368	0.025	94	1557313	8.00	7.81	
45 Tert-butyl ethyl ether	59	8.468	8.477	-0.009	96	2117402	8.00	7.98	
46 Tetrahydrofuran	42	8.765	8.771	-0.006	93	933426	8.00	7.67	
47 1,1,1-Trichloroethane	97	9.412	9.397	0.015	96	1474806	8.00	7.70	
48 1,2-Dichloroethane	62	9.531	9.515	0.016	93	823223	8.00	7.92	
49 n-Butanol	31	9.984	10.017	-0.033	65	474691	8.00	8.34	
50 Cyclohexane	69	10.027	10.011	0.016	82	358101	8.00	8.58	
51 Benzene	78	10.027	10.012	0.015	96	2455515	8.00	8.73	
52 Carbon tetrachloride	117	10.048	10.035	0.013	92	1726959	8.00	9.10	
53 2,3-Dimethylpentane	71	10.156	10.141	0.015	89	497727	8.00	8.14	
54 Thiophene	84	10.313	10.300	0.013	92	1276526	8.00	8.43	
55 Isooctane	57	10.825	10.812	0.013	94	3564492	8.00	8.39	
56 n-Heptane	71	11.224	11.215	0.009	98	774012	8.00	8.44	
57 1,2-Dichloropropane	63	11.299	11.289	0.010	88	901118	8.00	8.09	
58 Trichloroethene	130	11.337	11.327	0.010	95	1352335	8.00	9.53	
59 Dibromomethane	93	11.423	11.412	0.011	94	1109670	8.00	8.71	
60 Dichlorobromomethane	83	11.574	11.563	0.011	95	1779810	8.00	8.78	
61 1,4-Dioxane	88	11.574	11.592	-0.018	42	367338	8.00	8.35	
62 Methyl methacrylate	41	11.677	11.675	0.002	89	1177077	8.00	8.57	
63 Methylcyclohexane	83	12.124	12.115	0.009	92	1384541	8.00	8.47	
64 4-Methyl-2-pentanone (MIBK	43	12.540	12.550	-0.010	98	2350983	8.00	8.49	
65 cis-1,3-Dichloropropene	75	12.604	12.601	0.003	96	1322978	8.00	8.87	
66 trans-1,3-Dichloropropene	75	13.321	13.315	0.006	95	1118268	8.00	8.49	
67 Toluene	91	13.435	13.428	0.007	94	2790129	8.00	8.50	
68 1,1,2-Trichloroethane	83	13.516	13.510	0.006	95	885739	8.00	8.36	
69 2-Hexanone	58	13.898	13.905	-0.007	89	941234	8.00	8.66	
70 n-Octane	85	14.141	14.139	0.002	94	884481	8.00	8.86	
71 Chlorodibromomethane	129	14.222	14.215	0.007	95	1951581	8.00	8.71	
72 Ethylene Dibromide	107	14.513	14.511	0.002	97	1672886	8.00	8.93	
73 Tetrachloroethene	129	14.589	14.586	0.003	92	1135442	8.00	8.99	
74 Chlorobenzene	112	15.473	15.471	0.002	95	2449879	8.00	8.69	
75 2,3-Dimethylheptane	43	15.500	15.496	0.004	94	3503179	8.00	8.87	
76 Ethylbenzene	91	15.764	15.762	0.002	98	3977519	8.00	9.07	
77 m-Xylene & p-Xylene	91	15.926	15.923	0.003	97	6836363	16.0	20.1	
78 n-Nonane	57	16.352	16.354	-0.002	91	2014499	8.00	9.50	
79 Bromoform	173	16.374	16.369	0.005	94	2481653	8.00	10.5	
80 Styrene	104	16.390	16.392	-0.002	98	2648998	8.00	10.1	
81 o-Xylene	91	16.454	16.451	0.003	99	3265041	8.00	9.50	
82 1,1,2,2-Tetrachloroethane	83	16.778	16.779	-0.001	98	2028924	8.00	7.28	
83 1,2,3-Trichloropropane	110	16.934	16.950	-0.016	92	694206	8.00	8.99	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	17.042	17.040	0.002	96	4807263	8.00	9.25	
85 N-Propylbenzene	120	17.592	17.591	0.001	99	1401954	8.00	9.51	
86 2-Chlorotoluene	126	17.630	17.632	-0.002	97	1288829	8.00	9.29	
87 4-Ethyltoluene	105	17.743	17.745	-0.002	98	5167573	8.00	9.95	
88 1,3,5-Trimethylbenzene	120	17.824	17.822	0.002	92	2179537	8.00	9.58	
89 Alpha Methyl Styrene	118	18.061	18.057	0.004	88	2212002	8.00	10.3	
90 n-Decane	57	18.126	18.123	0.003	87	2826693	8.00	10.7	
91 tert-Butylbenzene	119	18.256	18.257	-0.001	92	4819022	8.00	10.4	
92 1,2,4-Trimethylbenzene	105	18.272	18.270	0.002	95	4775988	8.00	10.9	
93 sec-Butylbenzene	105	18.531	18.531	0.000	98	6959397	8.00	10.3	
94 1,3-Dichlorobenzene	146	18.547	18.546	0.001	97	3348521	8.00	12.1	
95 Benzyl chloride	91	18.622	18.623	-0.001	97	3835202	8.00	15.1	
96 1,4-Dichlorobenzene	146	18.633	18.633	0.000	94	3193668	8.00	11.0	
97 4-Isopropyltoluene	119	18.698	18.698	0.000	96	5517991	8.00	10.4	
98 1,2,3-Trimethylbenzene	105	18.752	18.751	0.001	99	4669620	8.00	10.2	
99 Butylcyclohexane	83	18.806	18.807	-0.001	91	3798353	8.00	10.0	
100 2,3-Dihydroindene	117	19.000	19.000	0.000	91	4528935	8.00	10.6	
101 1,2-Dichlorobenzene	146	19.000	18.999	0.001	83	3256974	8.00	10.8	
102 Indene	116	19.129	19.132	-0.003	90	4098605	8.00	13.7	
103 n-Butylbenzene	91	19.140	19.140	0.000	98	5942853	8.00	11.1	
104 Undecane	57	19.458	19.460	-0.002	89	3583314	8.00	12.4	
105 1,2-Dibromo-3-Chloropropan	157	19.609	19.611	-0.002	91	1500885	8.00	9.70	
106 1,2,4,5-Tetramethylbenzene	119	19.906	19.906	0.000	97	5196678	8.00	10.8	
107 Dodecane	57	20.515	20.516	-0.001	87	4066824	8.00	7.84	
108 1,2,4-Trichlorobenzene	180	20.704	20.703	0.001	93	2606083	8.00	11.2	
109 Naphthalene	128	20.838	20.842	-0.004	99	4398823	8.00	8.94	
110 Hexachlorobutadiene	225	21.060	21.060	0.000	93	3145839	8.00	10.5	
111 1,2,3-Trichlorobenzene	180	21.130	21.129	0.001	95	2268129	8.00	9.20	
112 2-Methylnaphthalene	142	21.852	21.856	-0.004	99	4594275	8.00	8.19	
113 1-Methylnaphthalene	142	21.987	21.990	-0.003	98	7124918	8.00	8.53	
A 116 C8 Range	1	14.133	(14.098-14.195)		0	9207477	8.00	8.41	
S 117 Xylenes, Total	100				0		24.0	29.6	
S 118 1,2-Dichloroethene, Total	1				0		16.0	15.7	

Reagents:

40L9DQP_00016	Amount Added: 200.00	Units: mL	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

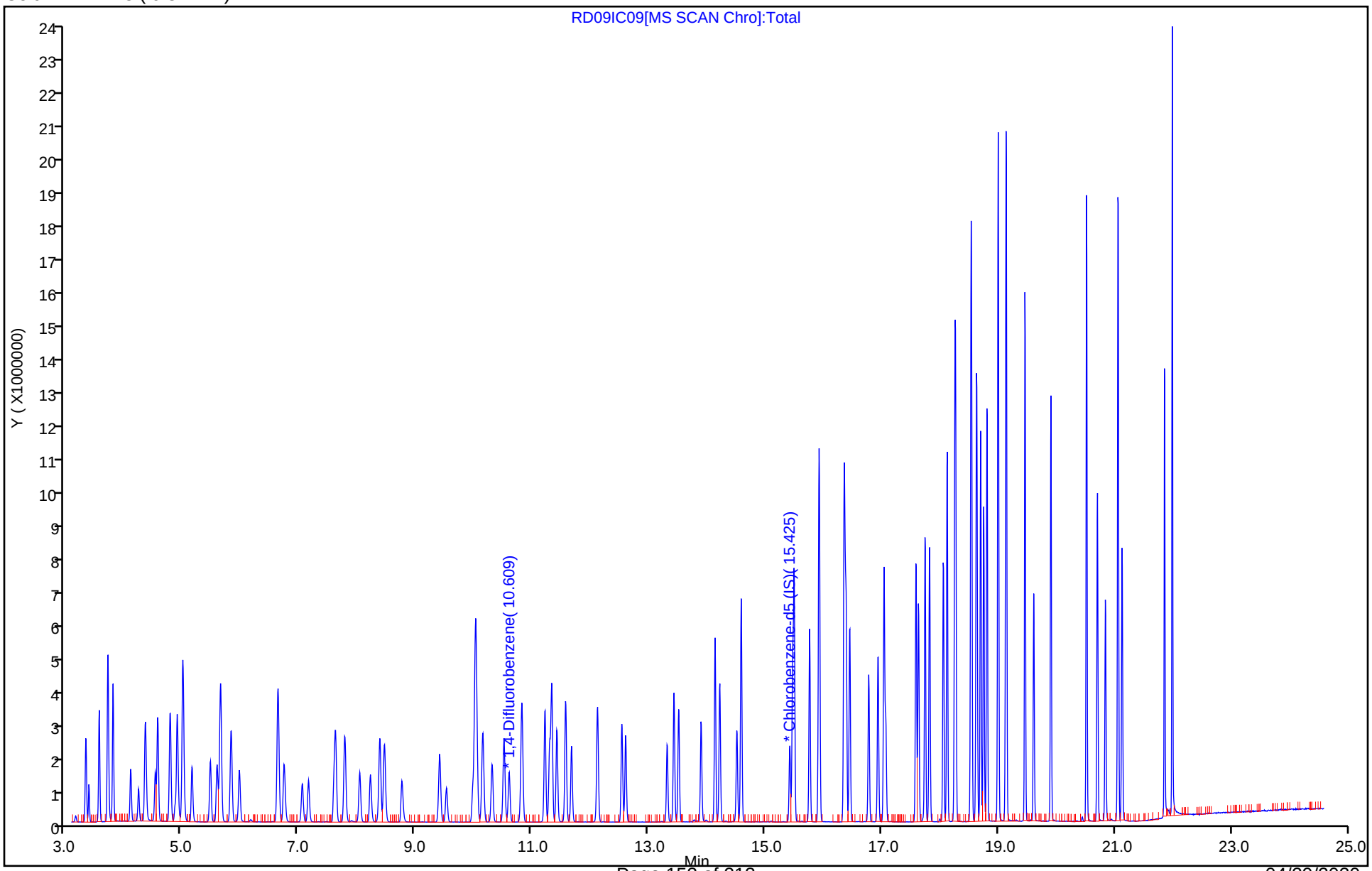
Report Date: 10-Apr-2020 13:42:57 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200409-15180.b\RD09IC09.D

Injection Date:	09-Apr-2020 23:10:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	IC L9			Worklist Smp#:	13
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

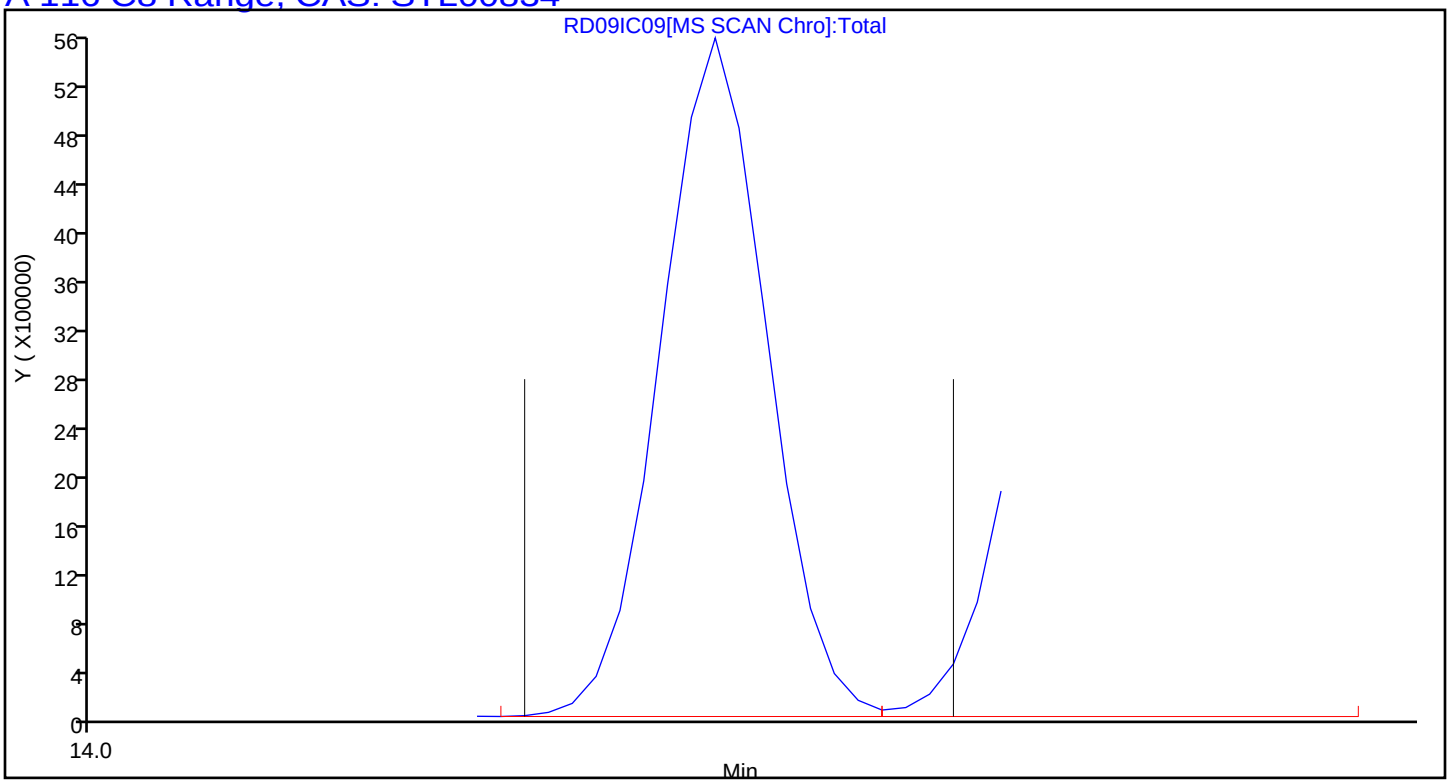


Report Date: 10-Apr-2020 13:42:58 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200409-15180.b\RD09IC09.D				
Injection Date:	09-Apr-2020 23:10:30	Instrument ID:	MR		
Lims ID:	IC L9				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	7	Worklist Smp#:	13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 116 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MR\20200409-15180.b\RD09IC10.D
Lims ID: IC L10
Client ID:
Sample Type: IC Calib Level: 10
Inject. Date: 10-Apr-2020 00:47:30 ALS Bottle#: 8 Worklist Smp#: 15
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0015180-015
Misc. Info.: 285129
Operator ID: HMT Instrument ID: MR
Sublist: chrom-MR_TO15*sub16

Method: \\chromfs\Knoxville\ChromData\MR\20200409-15180.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 10-Apr-2020 13:43:02 Calib Date: 10-Apr-2020 00:47:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MR\20200409-15180.b\RD09IC10.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX0332

First Level Reviewer: tajh Date: 10-Apr-2020 13:20:48

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.361	8.356	0.005	93	234617	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.598	10.595	0.003	94	1516220	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.419	15.420	-0.001	86	1237584	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr	95	17.069	17.069	0.000	95	863629	4.00	4.71	
6 Chlorodifluoromethane	51	3.313	3.332	-0.019	90	256356	16.0	1.55	
7 Propene	41	3.146	3.323	-0.177	98	1262636	16.0	15.8	
8 Dichlorodifluoromethane	85	3.308	3.381	-0.073	97	1350069	16.0	10.9	
9 Chloromethane	52	3.540	3.562	-0.022	98	518383	16.0	14.3	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.556	3.566	-0.010	91	1511775	16.0	16.1	
11 Acetaldehyde	44	3.696	3.709	-0.013	86	4925069	80.0	75.2	
12 Vinyl chloride	62	3.707	3.722	-0.015	100	2342271	16.0	15.6	
13 Butane	43	3.788	3.802	-0.014	84	3821340	16.0	16.7	
14 Butadiene	54	3.788	3.802	-0.014	70	1785028	16.0	16.4	
15 Bromomethane	94	4.090	4.103	-0.013	97	2498361	16.0	15.9	
16 Chloroethane	64	4.225	4.239	-0.014	80	1168769	16.0	15.8	
17 Ethanol	31	4.343	4.348	-0.005	97	7924699	80.0	85.2	
18 Vinyl bromide	106	4.510	4.520	-0.010	96	2658402	16.0	16.9	
19 2-Methylbutane	43	4.554	4.565	-0.011	91	3021732	16.0	15.7	
20 Trichlorofluoromethane	101	4.764	4.773	-0.009	96	5267659	16.0	15.7	
21 Acrolein	56	4.780	4.794	-0.014	90	525205	16.0	16.7	
22 Acetonitrile	40	4.856	4.861	-0.005	99	840218	16.0	16.9	
23 Acetone	58	4.888	4.909	-0.021	99	2487529	48.0	38.9	
24 Pentane	72	4.980	4.987	-0.007	96	332472	16.0	15.7	
25 Isopropyl alcohol	45	4.996	5.009	-0.013	98	7778987	48.0	45.0	
26 Ethyl ether	31	5.141	5.168	-0.027	88	2341245	16.0	17.2	
27 1,1-Dichloroethene	96	5.454	5.463	-0.009	98	1670718	16.0	15.1	
28 Acrylonitrile	53	5.578	5.580	-0.002	98	1287314	16.0	19.0	
29 2-Methyl-2-propanol	59	5.573	5.605	-0.032	96	2828117	16.0	16.5	
30 1,1,2-Trichloro-1,2,2-trif	101	5.632	5.640	-0.008	94	4016966	16.0	16.8	
31 Methylene Chloride	84	5.810	5.811	-0.001	98	1578042	16.0	16.7	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	5.815	5.825	-0.010	95	1904720	16.0	16.9	
33 Carbon disulfide	76	5.956	5.963	-0.007	96	4666732	16.0	16.2	
34 trans-1,2-Dichloroethene	96	6.613	6.614	-0.001	97	1766570	16.0	17.6	
35 2-Methylpentane	43	6.624	6.629	-0.005	94	4099261	16.0	16.3	
36 Methyl tert-butyl ether	73	6.721	6.756	-0.035	97	3970160	16.0	16.2	
37 1,1-Dichloroethane	63	7.039	7.036	0.003	99	2716517	16.0	15.8	
38 Vinyl acetate	43	7.147	7.169	-0.022	99	5054537	16.0	17.2	
39 2-Butanone (MEK)	72	7.584	7.601	-0.017	96	806484	16.0	15.7	
40 Hexane	56	7.611	7.615	-0.004	90	1266569	16.0	17.4	
41 Isopropyl ether	45	7.767	7.788	-0.021	95	6172450	16.0	16.4	
42 cis-1,2-Dichloroethene	96	8.026	8.024	0.002	91	1646392	16.0	15.9	
43 Ethyl acetate	43	8.210	8.220	-0.010	97	4268109	16.0	16.5	
44 Chloroform	83	8.377	8.368	0.009	94	3387713	16.0	16.3	
45 Tert-butyl ethyl ether	59	8.447	8.477	-0.030	96	4726502	16.0	17.0	
46 Tetrahydrofuran	42	8.749	8.771	-0.022	94	2000129	16.0	15.7	
47 1,1,1-Trichloroethane	97	9.401	9.397	0.004	97	3289753	16.0	16.4	
48 1,2-Dichloroethane	62	9.515	9.515	0.000	93	1850224	16.0	17.7	
49 n-Butanol	31	9.962	10.017	-0.055	82	988774	16.0	17.2	
50 Cyclohexane	69	10.005	10.011	-0.006	88	777262	16.0	18.5	
51 Benzene	78	10.011	10.012	-0.001	96	5389698	16.0	19.0	
52 Carbon tetrachloride	117	10.038	10.035	0.003	91	4089688	16.0	21.4	
53 2,3-Dimethylpentane	71	10.140	10.141	-0.001	89	1104858	16.0	17.9	
54 Thiophene	84	10.302	10.300	0.002	93	2779211	16.0	18.2	
55 Isooctane	57	10.809	10.812	-0.003	95	8042858	16.0	18.8	
56 n-Heptane	71	11.213	11.215	-0.002	97	1741794	16.0	18.8	
57 1,2-Dichloropropane	63	11.289	11.289	0.000	87	1991739	16.0	17.7	
58 Trichloroethene	130	11.332	11.327	0.005	95	2488525	16.0	17.4	
59 Dibromomethane	93	11.418	11.412	0.006	93	2532396	16.0	19.7	
60 Dichlorobromomethane	83	11.569	11.563	0.006	95	4134260	16.0	20.2	
61 1,4-Dioxane	88	11.564	11.592	-0.028	42	824561	16.0	18.6	
62 Methyl methacrylate	41	11.666	11.675	-0.009	88	2656488	16.0	19.2	
63 Methylcyclohexane	83	12.114	12.115	-0.001	92	3185234	16.0	19.3	
64 4-Methyl-2-pentanone (MIBK	43	12.534	12.550	-0.016	98	5242663	16.0	18.8	
65 cis-1,3-Dichloropropene	75	12.599	12.601	-0.002	96	3063842	16.0	20.4	
66 trans-1,3-Dichloropropene	75	13.316	13.315	0.001	94	2640392	16.0	20.1	
67 Toluene	91	13.429	13.428	0.001	94	6339805	16.0	19.4	
68 1,1,2-Trichloroethane	83	13.510	13.510	0.000	95	2042163	16.0	19.3	
69 2-Hexanone	58	13.893	13.905	-0.012	89	2208848	16.0	20.4	
70 n-Octane	85	14.141	14.139	0.002	92	2011737	16.0	20.2	
71 Chlorodibromomethane	129	14.217	14.215	0.002	96	4770676	16.0	21.3	
72 Ethylene Dibromide	107	14.513	14.511	0.002	97	3926119	16.0	21.0	
73 Tetrachloroethene	129	14.589	14.586	0.003	92	2504610	16.0	19.9	
74 Chlorobenzene	112	15.473	15.471	0.002	94	5509692	16.0	19.6	
75 2,3-Dimethylheptane	43	15.495	15.496	-0.001	93	7520279	16.0	19.1	
76 Ethylbenzene	91	15.764	15.762	0.002	99	8961802	16.0	20.5	
77 m-Xylene & p-Xylene	91	15.926	15.923	0.003	96	14821517	32.0	43.6	
78 n-Nonane	57	16.352	16.354	-0.002	90	4622358	16.0	21.9	
79 Bromoform	173	16.368	16.369	-0.001	96	7655452	16.0	32.6	
80 Styrene	104	16.390	16.392	-0.002	98	5650594	16.0	21.6	
81 o-Xylene	91	16.449	16.451	-0.002	99	7023713	16.0	20.5	
82 1,1,2,2-Tetrachloroethane	83	16.778	16.779	-0.001	98	5769793	16.0	20.8	
83 1,2,3-Trichloropropane	110	16.940	16.950	-0.010	92	1575648	16.0	20.4	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	17.042	17.040	0.002	97	10267791	16.0	19.8	
85 N-Propylbenzene	120	17.592	17.591	0.001	99	3108270	16.0	21.1	
86 2-Chlorotoluene	126	17.635	17.632	0.003	97	2846324	16.0	20.6	
87 4-Ethyltoluene	105	17.743	17.745	-0.002	97	11050164	16.0	21.3	
88 1,3,5-Trimethylbenzene	120	17.824	17.822	0.002	92	4758349	16.0	21.0	
89 Alpha Methyl Styrene	118	18.061	18.057	0.004	85	4837835	16.0	22.5	
90 n-Decane	57	18.126	18.123	0.003	87	6307748	16.0	23.9	
91 tert-Butylbenzene	119	18.261	18.257	0.004	92	11311441	16.0	24.6	
92 1,2,4-Trimethylbenzene	105	18.272	18.270	0.002	95	11061411	16.0	25.2	
93 sec-Butylbenzene	105	18.531	18.531	0.000	94	14510386	16.0	21.4	e
94 1,3-Dichlorobenzene	146	18.541	18.546	-0.005	96	8714016	16.0	31.5	
95 Benzyl chloride	91	18.628	18.623	0.005	97	8975698	16.0	35.3	
96 1,4-Dichlorobenzene	146	18.633	18.633	0.000	95	7850382	16.0	27.1	
97 4-Isopropyltoluene	119	18.698	18.698	0.000	94	12240538	16.0	23.2	e
98 1,2,3-Trimethylbenzene	105	18.752	18.751	0.001	98	10076647	16.0	22.0	
99 Butylcyclohexane	83	18.811	18.807	0.004	89	8217286	16.0	21.7	
100 2,3-Dihydroindene	117	19.000	19.000	0.000	93	11228039	16.0	26.4	e
101 1,2-Dichlorobenzene	146	19.000	18.999	0.001	87	8647912	16.0	28.8	
102 Indene	116	19.135	19.132	0.003	89	9874177	16.0	33.0	
103 n-Butylbenzene	91	19.135	19.140	-0.005	97	12976400	16.0	24.3	e
104 Undecane	57	19.464	19.460	0.004	88	8038838	16.0	27.8	
105 1,2-Dibromo-3-Chloropropan	157	19.614	19.611	0.003	91	4217504	16.0	27.3	
106 1,2,4,5-Tetramethylbenzene	119	19.906	19.906	0.000	96	11350807	16.0	23.5	e
107 Dodecane	57	20.520	20.516	0.004	87	9032334	16.0	17.0	
108 1,2,4-Trichlorobenzene	180	20.704	20.703	0.001	93	6574929	16.0	28.4	
109 Naphthalene	128	20.844	20.842	0.002	99	9982269	16.0	20.3	
110 Hexachlorobutadiene	225	21.060	21.060	0.000	94	9822766	16.0	32.9	e
111 1,2,3-Trichlorobenzene	180	21.130	21.129	0.001	94	5685931	16.0	23.1	
112 2-Methylnaphthalene	142	21.852	21.856	-0.004	93	9923398	16.0	17.0	e
A 116 C8 Range	1	14.136	(14.093-14.179)		0	21131636	16.0	19.1	
S 117 Xylenes, Total	100				0		48.0	64.1	
S 118 1,2-Dichloroethene, Total	1				0		32.0	33.5	

QC Flag Legend

Processing Flags

e - Potential Peak Saturated

Reagents:

40L10DQP_00016	Amount Added: 200.00	Units: mL	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

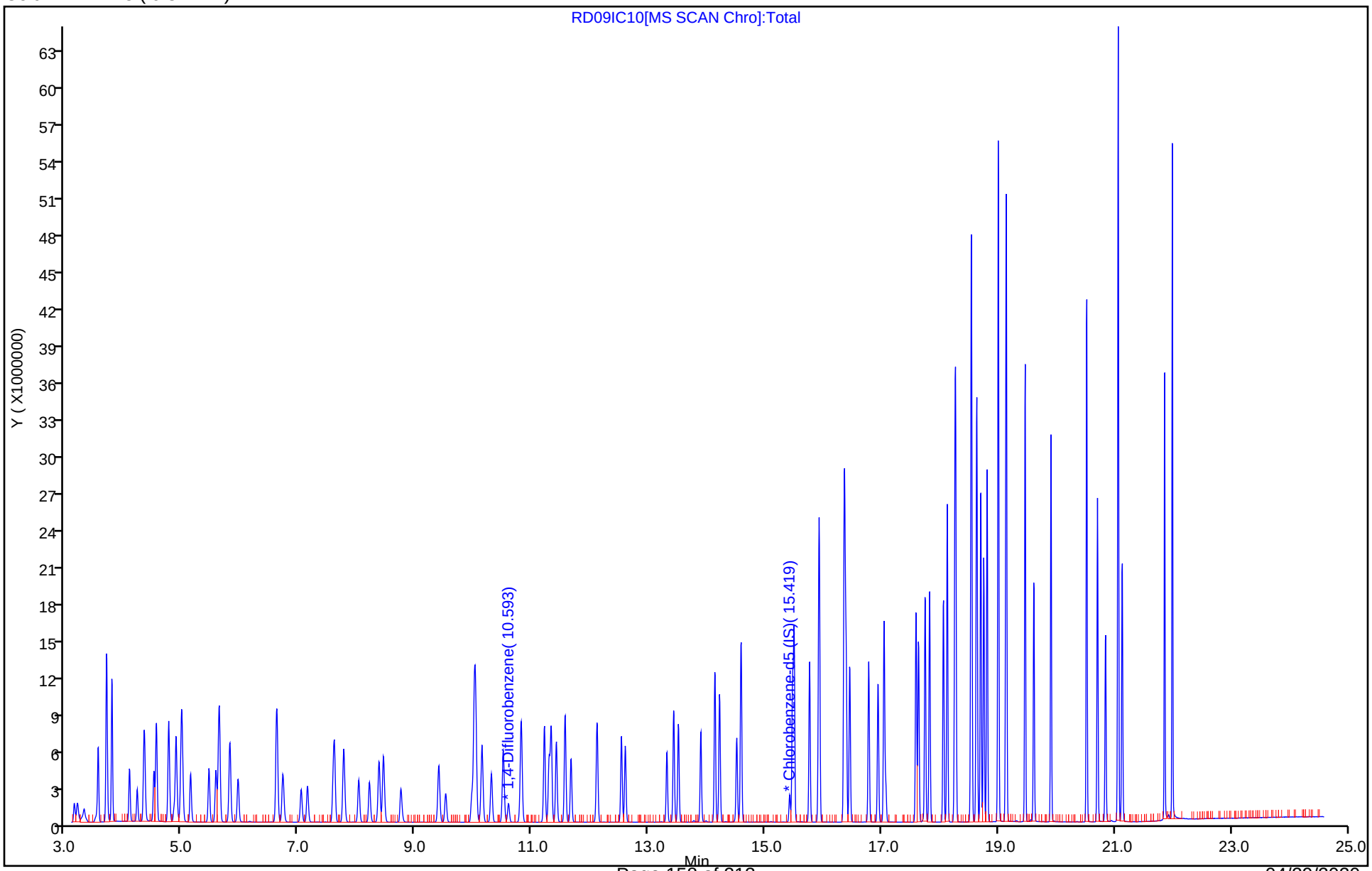
Report Date: 10-Apr-2020 13:43:03 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200409-15180.b\RD09IC10.D

Injection Date:	10-Apr-2020 00:47:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	IC L10			Worklist Smp#:	15
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

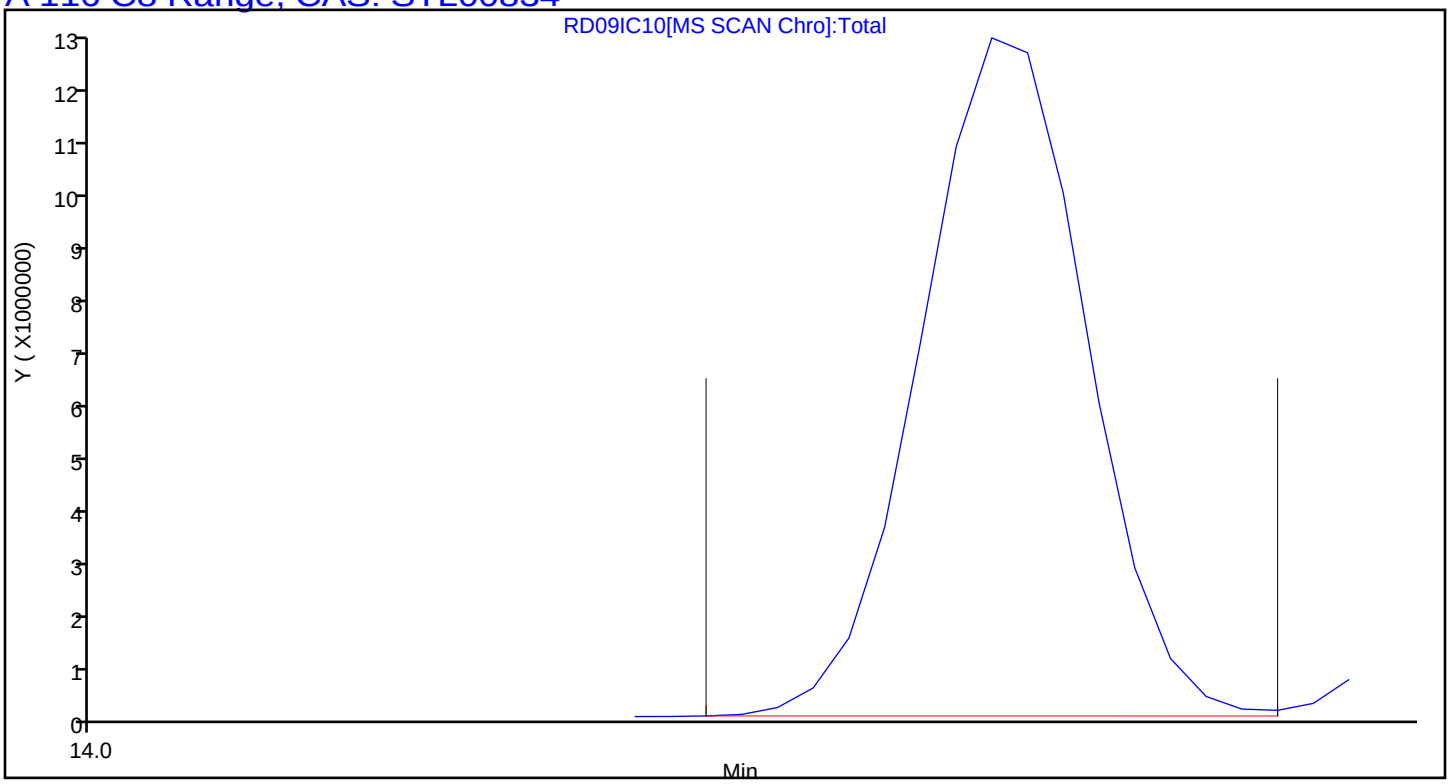


Report Date: 10-Apr-2020 13:43:03 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200409-15180.b\RD09IC10.D				
Injection Date:	10-Apr-2020 00:47:30	Instrument ID:	MR		
Lims ID:	IC L10				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	8	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 116 C8 Range, CAS: STL00834



FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-18854-1

SDG No.:

Lab Sample ID: ICV 140-38980/17 Calibration Date: 04/10/2020 02:27

Instrument ID: MR Calib Start Date: 04/09/2020 15:05

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 04/10/2020 00:47

Lab File ID: RD09ICV.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorodifluoromethane	Ave	2.813	3.105		1.10	1.00	10.4	35.0
Propene	Lin		2.735			1.00	-3.3	35.0
Dichlorodifluoromethane	Ave	2.105	2.827		1.34	1.00	34.3	35.0
Chloromethane	Ave	0.6186	0.6846		1.11	1.00	10.7	35.0
1,2-Dichloro-1,1,2,2-tetrafluoroethane	Lin1		3.732		2.26	1.00	125.8*	35.0
Acetaldehyde	Ave	1.116	0.9464		4.24	5.00	-15.2	35.0
Vinyl chloride	Ave	2.555	2.608		1.02	1.00	2.1	35.0
1,3-Butadiene	Ave	1.858	1.926		1.04	1.00	3.7	35.0
Butane	Ave	3.897	4.184		1.07	1.00	7.4	35.0
Bromomethane	Ave	2.677	2.840		1.06	1.00	6.1	35.0
Chloroethane	Ave	1.260	1.467		1.16	1.00	16.4	35.0
Ethanol	Ave	1.586	1.324		4.17	5.00	-16.5	35.0
Vinyl bromide	Ave	2.686	3.049		1.14	1.00	13.5	35.0
2-Methylbutane	Ave	3.273	3.589		1.10	1.00	9.7	35.0
Trichlorofluoromethane	Ave	5.736	6.235		1.09	1.00	8.7	35.0
Acrolein	Ave	0.5353	0.6988		1.31	1.00	30.6	35.0
Acetonitrile	Ave	0.8483	0.9283		1.09	1.00	9.4	35.0
Acetone	Ave	1.089	0.9947		0.913	1.00	-8.7	35.0
Pentane	Ave	0.3606	0.3886		1.08	1.00	7.8	35.0
Isopropyl alcohol	Ave	2.950	3.948		1.34	1.00	33.9	35.0
Ethyl ether	Ave	2.324	2.736		1.18	1.00	17.8	35.0
1,1-Dichloroethene	Ave	1.884	1.990		1.06	1.00	5.6	35.0
Acrylonitrile	Ave	1.157	1.204		1.04	1.00	4.1	35.0
tert-Butyl alcohol	Ave	2.922	3.207		1.10	1.00	9.7	35.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	4.068	4.430		1.09	1.00	8.9	35.0
Methylene Chloride	Lin2		2.523		1.11	1.00	11.0	35.0
3-Chloropropene	Ave	1.917	2.125		1.11	1.00	10.9	35.0
Carbon disulfide	Ave	4.924	5.161		1.05	1.00	4.8	35.0
trans-1,2-Dichloroethene	Ave	1.708	1.795		1.05	1.00	5.1	35.0
2-Methylpentane	Ave	4.287	4.227		0.986	1.00	-1.4	35.0
Methyl tert-butyl ether	Ave	4.166	4.596		1.10	1.00	10.3	35.0
1,1-Dichloroethane	Ave	2.929	3.128		1.07	1.00	6.8	35.0
Vinyl acetate	Ave	5.000	5.376		1.08	1.00	7.5	35.0
2-Butanone (MEK)	Ave	0.8778	0.7978		0.909	1.00	-9.1	35.0
Hexane	Ave	1.244	1.350		1.09	1.00	8.5	35.0
Isopropyl ether	Ave	6.408	7.077		1.10	1.00	10.4	35.0
cis-1,2-Dichloroethene	Ave	1.769	1.821		1.03	1.00	3.0	35.0
Ethyl acetate	Ave	4.399	4.720		1.07	1.00	7.3	35.0
Chloroform	Ave	3.553	3.848		1.08	1.00	8.3	35.0
Tert-butyl ethyl ether	Ave	4.730	4.733		1.00	1.00	0.0	35.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-18854-1

SDG No.:

Lab Sample ID: ICV 140-38980/17 Calibration Date: 04/10/2020 02:27

Instrument ID: MR Calib Start Date: 04/09/2020 15:05

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 04/10/2020 00:47

Lab File ID: RD09ICV.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Tetrahydrofuran	Ave	2.169	2.288		1.05	1.00	5.5	35.0
1,1,1-Trichloroethane	Ave	3.415	3.745		1.10	1.00	9.6	35.0
1,2-Dichloroethane	Ave	0.2763	0.2949		1.07	1.00	6.7	35.0
1-Butanol	Ave	0.1514	0.1642		1.08	1.00	8.5	35.0
Cyclohexane	Ave	0.1111	0.1158		1.04	1.00	4.3	35.0
Benzene	Ave	0.7485	0.7670		1.02	1.00	2.5	35.0
Carbon tetrachloride	Ave	0.5048	0.5320		1.05	1.00	5.4	35.0
2,3-Dimethylpentane	Ave	0.1627	0.1580		0.971	1.00	-2.9	35.0
Thiophene	Ave	0.4027	0.4110		1.02	1.00	2.1	35.0
2,2,4-Trimethylpentane	Ave	1.130	1.179		1.04	1.00	4.3	35.0
Heptane	Ave	0.2439	0.2466		1.01	1.00	1.1	35.0
1,2-Dichloropropane	Ave	0.2962	0.3058		1.03	1.00	3.3	35.0
Trichloroethene	Ave	0.3774	0.3600		0.954	1.00	-4.6	35.0
Dibromomethane	Ave	0.3389	0.3396		1.00	1.00	0.2	35.0
Bromodichloromethane	Ave	0.5391	0.5428		1.01	1.00	0.7	35.0
1,4-Dioxane	Ave	0.1170	0.1202		1.03	1.00	2.7	35.0
Methyl methacrylate	Ave	0.3654	0.3649		0.999	1.00	-0.1	35.0
Methylcyclohexane	Ave	0.4349	0.5351		1.23	1.00	23.0	35.0
4-Methyl-2-pentanone (MIBK)	Ave	0.7363	0.7647		1.04	1.00	3.8	35.0
cis-1,3-Dichloropropene	Ave	0.3965	0.4292		1.08	1.00	8.2	35.0
trans-1,3-Dichloropropene	Ave	0.4245	0.4577		1.08	1.00	7.8	35.0
Toluene	Ave	1.059	1.128		1.07	1.00	6.6	35.0
1,1,2-Trichloroethane	Ave	0.3418	0.3402		0.995	1.00	-0.5	35.0
2-Hexanone	Ave	0.3505	0.3778		1.08	1.00	7.8	35.0
Octane	Ave	0.3220	0.3431		1.07	1.00	6.6	35.0
Dibromochloromethane	Ave	0.7225	0.7123		0.986	1.00	-1.4	35.0
1,2-Dibromoethane (EDB)	Ave	0.6043	0.6261		1.04	1.00	3.6	35.0
Tetrachloroethene	Ave	0.4075	0.4283		1.05	1.00	5.1	35.0
Chlorobenzene	Ave	0.9086	0.9505		1.05	1.00	4.6	35.0
2,3-Dimethylheptane	Ave	1.274	1.202		0.944	1.00	-5.6	35.0
Ethylbenzene	Ave	1.415	1.461		1.03	1.00	3.3	35.0
m-Xylene & p-Xylene	Ave	1.098	1.168		2.13	2.00	6.4	35.0
Nonane	Ave	0.6836	0.6741		0.986	1.00	-1.4	35.0
Bromoform	Ave	0.7600	0.7034		0.925	1.00	-7.5	35.0
Styrene	Ave	0.8462	0.9149		1.08	1.00	8.1	35.0
o-Xylene	Ave	1.108	1.145		1.03	1.00	3.4	35.0
1,1,2,2-Tetrachloroethane	Ave	0.8986	0.9892		1.10	1.00	10.1	35.0
1,2,3-Trichloropropane	Ave	0.2491	0.2668		1.07	1.00	7.1	35.0
Isopropylbenzene	Ave	1.677	1.794		1.07	1.00	7.0	35.0
Propylbenzene	Ave	0.4756	0.5293		1.11	1.00	11.3	35.0
2-Chlorotoluene	Ave	0.4475	0.4808		1.07	1.00	7.4	35.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-18854-1

SDG No.:

Lab Sample ID: ICV 140-38980/17 Calibration Date: 04/10/2020 02:27

Instrument ID: MR Calib Start Date: 04/09/2020 15:05

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 04/10/2020 00:47

Lab File ID: RD09ICV.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Ethyltoluene	Ave	1.674	1.618		0.966	1.00	-3.4	35.0
1,3,5-Trimethylbenzene	Ave	0.7333	0.8675		1.18	1.00	18.3	35.0
Alpha Methyl Styrene	Ave	0.6958	0.7084		1.02	1.00	1.8	35.0
Decane	Ave	0.8513	0.9215		1.08	1.00	8.2	35.0
tert-Butylbenzene	Ave	1.488	1.604		1.08	1.00	7.8	35.0
1,2,4-Trimethylbenzene	Ave	1.419	1.525		1.07	1.00	7.5	35.0
sec-Butylbenzene	Ave	2.186	2.315		1.06	1.00	5.9	35.0
1,3-Dichlorobenzene	Ave	0.8948	1.050		1.17	1.00	17.3	35.0
Benzyl chloride	Ave	0.8212	1.093		1.33	1.00	33.1	35.0
1,4-Dichlorobenzene	Ave	0.9378	1.005		1.07	1.00	7.2	35.0
4-Isopropyltoluene	Ave	1.707	1.803		1.06	1.00	5.6	35.0
1,2,3-Trimethylbenzene	Ave	1.482	1.082		0.730	1.00	-27.0	35.0
Butylcyclohexane	Ave	1.225	1.191		0.972	1.00	-2.8	35.0
1,2-Dichlorobenzene	Ave	0.9692	1.074		1.11	1.00	10.9	35.0
Indane	Ave	1.377	1.470		1.07	1.00	6.7	35.0
Indene	Ave	0.9671	1.072		1.11	1.00	10.8	35.0
Butylbenzene	Ave	1.723	1.895		1.10	1.00	10.0	35.0
Undecane	Ave	0.9339	1.107		1.19	1.00	18.5	35.0
1,2-Dibromo-3-Chloropropane	Ave	0.4988	0.4391		0.880	1.00	-12.0	35.0
1,2,4,5-Tetramethylbenzene	Ave	1.559	1.658		1.06	1.00	6.4	35.0
Dodecane	Lin1		1.059		0.999	1.00	-0.1	35.0
1,2,4-Trichlorobenzene	Ave	0.7482	1.005		1.34	1.00	34.3	35.0
Naphthalene	Ave	1.587	2.067		1.30	1.00	30.3	35.0
Hexachlorobutadiene	Ave	0.9657	1.088		1.13	1.00	12.6	35.0
1,2,3-Trichlorobenzene	Ave	0.7950	1.068		1.34	1.00	34.4	35.0
2-Methylnaphthalene	Lin		1.292		1.28	1.00	27.8	50.0
1-Methylnaphthalene	Lin2		2.386		1.12	1.00	11.9	50.0
4-Bromofluorobenzene (Surr)	Ave	0.5929	0.5884		3.97	4.00	-0.8	35.0

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MR\20200409-15180.b\RD09ICV.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 10-Apr-2020 02:27:30 ALS Bottle#: 9 Worklist Smp#: 17
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0015180-017
Misc. Info.: S113
Operator ID: HMT Instrument ID: MR
Sublist:

Method: \\chromfs\Knoxville\ChromData\MR\20200409-15180.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 10-Apr-2020 13:43:02 Calib Date: 10-Apr-2020 00:47:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MR\20200409-15180.b\RD09IC10.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX0332

First Level Reviewer: khachitpongpanits Date: 10-Apr-2020 17:38:30

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.350	8.361	-0.011	95	193772	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.587	10.598	-0.011	94	1380349	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.419	15.419	0.000	87	1077168	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr	95	17.069	17.069	0.000	94	633828	4.00	3.97	
7 Propene	41	3.340	3.146	0.194	99	132508	1.00	0.9673	7
8 Dichlorodifluoromethane	85	3.389	3.308	0.081	97	136955	1.00	1.34	
6 Chlorodifluoromethane	51	3.329	3.313	0.016	99	150406	1.00	1.10	
9 Chloromethane	52	3.561	3.540	0.021	64	33163	1.00	1.11	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.567	3.556	0.011	86	180765	1.00	2.26	
11 Acetaldehyde	44	3.707	3.696	0.011	90	229222	5.00	4.24	
12 Vinyl chloride	62	3.718	3.707	0.011	100	126352	1.00	1.02	
13 Butane	43	3.798	3.788	0.010	87	202688	1.00	1.07	
14 Butadiene	54	3.798	3.788	0.010	67	93322	1.00	1.04	
15 Bromomethane	94	4.100	4.090	0.010	97	137581	1.00	1.06	
16 Chloroethane	64	4.230	4.225	0.005	83	71082	1.00	1.16	
17 Ethanol	31	4.332	4.343	-0.011	98	320781	5.00	4.17	
18 Vinyl bromide	106	4.516	4.510	0.006	96	147697	1.00	1.14	
19 2-Methylbutane	43	4.564	4.554	0.010	89	173883	1.00	1.10	
20 Trichlorofluoromethane	101	4.769	4.764	0.005	96	302042	1.00	1.09	
21 Acrolein	56	4.785	4.780	0.005	90	33853	1.00	1.31	
22 Acetonitrile	40	4.855	4.856	-0.001	98	44969	1.00	1.09	
23 Acetone	58	4.904	4.888	0.016	99	48188	1.00	0.9131	
24 Pentane	72	4.979	4.980	-0.001	96	18824	1.00	1.08	
25 Isopropyl alcohol	45	4.996	4.996	0.000	61	191255	1.00	1.34	
26 Ethyl ether	31	5.157	5.141	0.016	88	132544	1.00	1.18	
27 1,1-Dichloroethene	96	5.465	5.454	0.011	96	96399	1.00	1.06	
29 2-Methyl-2-propanol	59	5.589	5.573	0.016	95	155342	1.00	1.10	
28 Acrylonitrile	53	5.567	5.578	-0.011	98	58339	1.00	1.04	
30 1,1,2-Trichloro-1,2,2-trif	101	5.632	5.632	0.000	96	214582	1.00	1.09	
31 Methylene Chloride	84	5.804	5.810	-0.006	95	122237	1.00	1.11	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	5.826	5.815	0.011	95	102949	1.00	1.11	
33 Carbon disulfide	76	5.961	5.956	0.005	96	250018	1.00	1.05	
34 trans-1,2-Dichloroethene	96	6.608	6.613	-0.005	95	86935	1.00	1.05	
35 2-Methylpentane	43	6.624	6.624	0.000	94	204787	1.00	0.9862	
36 Methyl tert-butyl ether	73	6.737	6.721	0.016	96	222632	1.00	1.10	
37 1,1-Dichloroethane	63	7.034	7.039	-0.005	98	151553	1.00	1.07	
38 Vinyl acetate	43	7.142	7.147	-0.005	99	260415	1.00	1.08	
39 2-Butanone (MEK)	72	7.589	7.584	0.005	96	38648	1.00	0.9088	
40 Hexane	56	7.611	7.611	0.000	87	65402	1.00	1.09	
41 Isopropyl ether	45	7.773	7.767	0.006	95	342845	1.00	1.10	
42 cis-1,2-Dichloroethene	96	8.015	8.026	-0.011	92	88226	1.00	1.03	
43 Ethyl acetate	43	8.209	8.210	-0.001	97	228642	1.00	1.07	
44 Chloroform	83	8.366	8.377	-0.011	93	186417	1.00	1.08	
45 Tert-butyl ethyl ether	59	8.457	8.447	0.010	96	229271	1.00	1.00	
46 Tetrahydrofuran	42	8.759	8.749	0.010	91	110842	1.00	1.05	
47 1,1,1-Trichloroethane	97	9.396	9.401	-0.005	94	181413	1.00	1.10	
48 1,2-Dichloroethane	62	9.509	9.515	-0.006	92	101756	1.00	1.07	
49 n-Butanol	31	9.989	9.962	0.027	85	56675	1.00	1.08	
50 Cyclohexane	69	10.000	10.005	-0.005	76	39968	1.00	1.04	
51 Benzene	78	10.005	10.011	-0.006	95	264664	1.00	1.02	
52 Carbon tetrachloride	117	10.032	10.038	-0.006	90	183574	1.00	1.05	
53 2,3-Dimethylpentane	71	10.140	10.140	0.000	89	54529	1.00	0.9711	
54 Thiophene	84	10.296	10.302	-0.006	93	141831	1.00	1.02	
55 Isooctane	57	10.809	10.809	0.000	94	406947	1.00	1.04	
56 n-Heptane	71	11.208	11.213	-0.005	97	85111	1.00	1.01	
57 1,2-Dichloropropane	63	11.288	11.289	-0.001	88	105540	1.00	1.03	
58 Trichloroethene	130	11.321	11.332	-0.011	93	124239	1.00	0.9539	
59 Dibromomethane	93	11.407	11.418	-0.011	93	117174	1.00	1.00	
61 1,4-Dioxane	88	11.580	11.564	0.016	53	41462	1.00	1.03	
60 Dichlorobromomethane	83	11.558	11.569	-0.011	96	187299	1.00	1.01	
62 Methyl methacrylate	41	11.671	11.666	0.005	89	125929	1.00	1.00	
63 Methylcyclohexane	83	12.114	12.114	0.000	91	184642	1.00	1.23	
64 4-Methyl-2-pentanone (MIBK	43	12.534	12.534	0.000	97	263871	1.00	1.04	
65 cis-1,3-Dichloropropene	75	12.599	12.599	0.000	96	148114	1.00	1.08	
66 trans-1,3-Dichloropropene	75	13.311	13.316	-0.005	94	123246	1.00	1.08	
67 Toluene	91	13.429	13.429	0.000	93	303838	1.00	1.07	
68 1,1,2-Trichloroethane	83	13.505	13.510	-0.005	95	91617	1.00	1.00	
69 2-Hexanone	58	13.898	13.893	0.005	89	101724	1.00	1.08	
70 n-Octane	85	14.136	14.141	-0.005	94	92405	1.00	1.07	
71 Chlorodibromomethane	129	14.211	14.217	-0.006	96	191803	1.00	0.9858	
72 Ethylene Dibromide	107	14.513	14.513	0.000	98	168604	1.00	1.04	
73 Tetrachloroethene	129	14.583	14.589	-0.006	91	115323	1.00	1.05	
74 Chlorobenzene	112	15.468	15.473	-0.005	96	255974	1.00	1.05	
75 2,3-Dimethylheptane	43	15.495	15.495	0.000	93	323780	1.00	0.9441	
76 Ethylbenzene	91	15.759	15.764	-0.005	97	393462	1.00	1.03	
77 m-Xylene & p-Xylene	91	15.921	15.926	-0.005	97	629038	2.00	2.13	
78 n-Nonane	57	16.352	16.352	0.000	91	181519	1.00	0.9860	
79 Bromoform	173	16.368	16.368	0.000	93	189410	1.00	0.9254	
80 Styrene	104	16.390	16.390	0.000	97	246382	1.00	1.08	
81 o-Xylene	91	16.444	16.449	-0.005	98	308387	1.00	1.03	
82 1,1,2,2-Tetrachloroethane	83	16.778	16.778	0.000	98	266372	1.00	1.10	
83 1,2,3-Trichloropropane	110	16.934	16.940	-0.006	90	71849	1.00	1.07	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	17.037	17.042	-0.005	96	483002	1.00	1.07	
85 N-Propylbenzene	120	17.587	17.592	-0.005	99	142538	1.00	1.11	
86 2-Chlorotoluene	126	17.630	17.635	-0.005	97	129470	1.00	1.07	
87 4-Ethyltoluene	105	17.743	17.743	0.000	99	435711	1.00	0.9663	
88 1,3,5-Trimethylbenzene	120	17.819	17.824	-0.005	93	233618	1.00	1.18	
89 Alpha Methyl Styrene	118	18.056	18.061	-0.005	89	190757	1.00	1.02	
90 n-Decane	57	18.121	18.126	-0.005	85	248160	1.00	1.08	
91 tert-Butylbenzene	119	18.255	18.261	-0.006	95	432014	1.00	1.08	
92 1,2,4-Trimethylbenzene	105	18.266	18.272	-0.006	95	410741	1.00	1.07	
93 sec-Butylbenzene	105	18.530	18.531	-0.001	99	623385	1.00	1.06	
94 1,3-Dichlorobenzene	146	18.541	18.541	0.000	96	282712	1.00	1.17	
95 Benzyl chloride	91	18.622	18.628	-0.006	97	294264	1.00	1.33	
96 1,4-Dichlorobenzene	146	18.633	18.633	0.000	93	270643	1.00	1.07	
97 4-Isopropyltoluene	119	18.698	18.698	0.000	97	485419	1.00	1.06	
98 1,2,3-Trimethylbenzene	105	18.752	18.752	0.000	98	291416	1.00	0.7302	
99 Butylcyclohexane	83	18.805	18.811	-0.006	94	320622	1.00	0.9718	
100 2,3-Dihydroindene	117	19.000	19.000	0.000	92	395784	1.00	1.07	
101 1,2-Dichlorobenzene	146	19.000	19.000	0.000	82	289346	1.00	1.11	
102 Indene	116	19.129	19.135	-0.006	87	288641	1.00	1.11	
103 n-Butylbenzene	91	19.140	19.135	0.005	98	510362	1.00	1.10	
104 Undecane	57	19.458	19.464	-0.006	88	298086	1.00	1.19	
105 1,2-Dibromo-3-Chloropropan	157	19.609	19.614	-0.005	88	118254	1.00	0.8804	
106 1,2,4,5-Tetramethylbenzene	119	19.905	19.906	-0.001	98	446601	1.00	1.06	
107 Dodecane	57	20.515	20.520	-0.005	87	285217	1.00	1.00	
108 1,2,4-Trichlorobenzene	180	20.704	20.704	0.000	92	270651	1.00	1.34	
109 Naphthalene	128	20.838	20.844	-0.006	99	556752	1.00	1.30	
110 Hexachlorobutadiene	225	21.059	21.060	-0.001	93	292951	1.00	1.13	
111 1,2,3-Trichlorobenzene	180	21.124	21.130	-0.006	93	287705	1.00	1.34	
112 2-Methylnaphthalene	142	21.858	21.852	0.006	99	347807	1.00	1.28	
113 1-Methylnaphthalene	142	21.987	21.990	-0.003	98	642504	1.00	1.12	
A 116 C8 Range	1	14.131	(14.093-14.179)		0	1001760	1.00	1.00	
S 117 Xylenes, Total	100				0		3.00	3.16	
S 118 1,2-Dichloroethene, Total	1				0		2.00	2.08	
T 150 2-Ethylthiophene TIC	97	15.861	15.861	0.000	77	294605	1.00	1.09	
T 153 1,2-Dimethyl-4-Ethylbenzen	119	19.517	19.517	0.000	89	367942	1.00	1.37	
T 155 1,2,3,5-Tetramethylbenzene	119	19.959	19.954	0.005	95	264402	1.00	0.9818	
T 156 1,2,3,4-Tetramethylbenzene	119	20.353	20.348	0.005	99	362770	1.00	1.35	
T 157 Benzo(b)thiophene TIC	134	20.946	20.946	0.000	98	268117	1.00	1.00	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

40CV101S_00113	Amount Added: 50.00	Units: mL	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

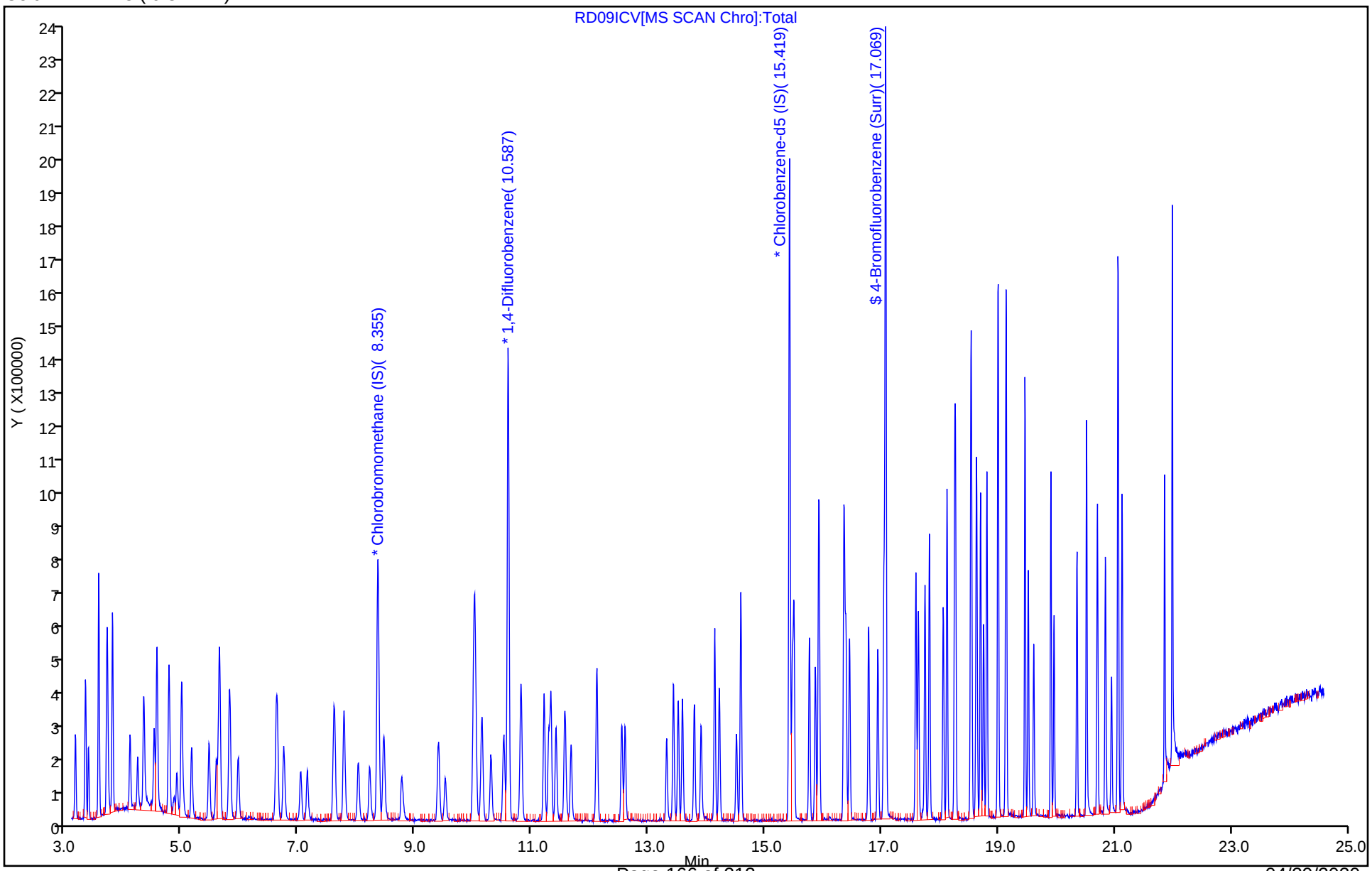
Report Date: 10-Apr-2020 13:43:10 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200409-15180.b\RD09ICV.D

Injection Date:	10-Apr-2020 02:27:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	ICV			Worklist Smp#:	17
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-18854-1

SDG No.:

Lab Sample ID: CCVIS 140-39061/2 Calibration Date: 04/16/2020 08:45

Instrument ID: MR Calib Start Date: 04/09/2020 15:05

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 04/10/2020 00:47

Lab File ID: RCCVD16.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorodifluoromethane	Ave	2.813	2.938		1.67	1.60	4.5	30.0
Propene	Lin		2.312		1.73	1.60	8.1	30.0
Dichlorodifluoromethane	Ave	2.105	2.427		1.84	1.60	15.3	30.0
Chloromethane	Ave	0.6186	0.6107		1.58	1.60	-1.3	30.0
1,2-Dichloro-1,1,2,2-tetrafluoroethane	Lin1		2.696		2.62	1.60	63.9*	30.0
Acetaldehyde	Ave	1.116	0.9904		7.10	8.00	-11.3	30.0
Vinyl chloride	Ave	2.555	2.211		1.38	1.60	-13.5	30.0
1,3-Butadiene	Ave	1.858	1.676		1.44	1.60	-9.8	30.0
Butane	Ave	3.897	3.896		1.60	1.60	-0.0	30.0
Bromomethane	Ave	2.677	2.305		1.38	1.60	-13.9	30.0
Chloroethane	Ave	1.260	1.103		1.40	1.60	-12.5	30.0
Ethanol	Ave	1.586	1.582		7.98	8.00	-0.3	30.0
Vinyl bromide	Ave	2.686	2.239		1.33	1.60	-16.6	30.0
2-Methylbutane	Ave	3.273	3.021		1.48	1.60	-7.7	30.0
Trichlorofluoromethane	Ave	5.736	5.417		1.51	1.60	-5.6	30.0
Acrolein	Ave	0.5353	0.6555		1.96	1.60	22.5	30.0
Acetonitrile	Ave	0.8483	0.8284		1.56	1.60	-2.3	30.0
Acetone	Ave	1.089	0.7861		3.46	4.80	-27.8	30.0
Isopropyl alcohol	Ave	2.950	2.759		4.49	4.80	-6.5	30.0
Pentane	Ave	0.3606	0.3316		1.47	1.60	-8.0	30.0
Ethyl ether	Ave	2.324	2.552		1.76	1.60	9.8	30.0
1,1-Dichloroethene	Ave	1.884	1.516		1.29	1.60	-19.5	30.0
Acrylonitrile	Ave	1.157	1.021		1.41	1.60	-11.7	30.0
tert-Butyl alcohol	Ave	2.922	2.725		1.49	1.60	-6.7	30.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	4.068	3.564		1.40	1.60	-12.4	30.0
Methylene Chloride	Lin2		1.928		1.47	1.60	-8.1	30.0
3-Chloropropene	Ave	1.917	1.929		1.61	1.60	0.6	30.0
Carbon disulfide	Ave	4.924	4.521		1.47	1.60	-8.2	30.0
trans-1,2-Dichloroethene	Ave	1.708	1.492		1.40	1.60	-12.7	30.0
2-Methylpentane	Ave	4.287	4.076		1.52	1.60	-4.9	30.0
Methyl tert-butyl ether	Ave	4.166	3.830		1.47	1.60	-8.1	30.0
1,1-Dichloroethane	Ave	2.929	2.800		1.53	1.60	-4.4	30.0
Vinyl acetate	Ave	5.000	4.889		1.56	1.60	-2.2	30.0
2-Butanone (MEK)	Ave	0.8778	0.6759		1.23	1.60	-23.0	30.0
Hexane	Ave	1.244	1.170		1.51	1.60	-5.9	30.0
Isopropyl ether	Ave	6.408	5.987		1.49	1.60	-6.6	30.0
cis-1,2-Dichloroethene	Ave	1.769	1.514		1.37	1.60	-14.4	30.0
Ethyl acetate	Ave	4.399	4.386		1.60	1.60	-0.3	30.0
Chloroform	Ave	3.553	3.386		1.52	1.60	-4.7	30.0
Tert-butyl ethyl ether	Ave	4.730	4.380		1.48	1.60	-7.4	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-18854-1

SDG No.:

Lab Sample ID: CCVIS 140-39061/2 Calibration Date: 04/16/2020 08:45

Instrument ID: MR Calib Start Date: 04/09/2020 15:05

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 04/10/2020 00:47

Lab File ID: RCCVD16.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Tetrahydrofuran	Ave	2.169	2.082		1.54	1.60	-4.0	30.0
1,1,1-Trichloroethane	Ave	3.415	3.266		1.53	1.60	-4.4	30.0
1,2-Dichloroethane	Ave	0.2763	0.2818		1.63	1.60	2.0	30.0
1-Butanol	Ave	0.1514	0.1663		1.76	1.60	9.8	30.0
Cyclohexane	Ave	0.1111	0.0967		1.39	1.60	-12.9	30.0
Benzene	Ave	0.7485	0.6584		1.41	1.60	-12.0	30.0
Carbon tetrachloride	Ave	0.5048	0.4627		1.47	1.60	-8.3	30.0
2,3-Dimethylpentane	Ave	0.1627	0.1476		1.45	1.60	-9.3	30.0
Thiophene	Ave	0.4027	0.3520		1.40	1.60	-12.6	30.0
2,2,4-Trimethylpentane	Ave	1.130	1.051		1.49	1.60	-7.0	30.0
Heptane	Ave	0.2439	0.2134		1.40	1.60	-12.5	30.0
1,2-Dichloropropane	Ave	0.2962	0.2597		1.40	1.60	-12.3	30.0
Trichloroethene	Ave	0.3774	0.3198		1.36	1.60	-15.3	30.0
Dibromomethane	Ave	0.3389	0.2951		1.39	1.60	-12.9	30.0
Bromodichloromethane	Ave	0.5391	0.5015		1.49	1.60	-7.0	30.0
1,4-Dioxane	Ave	0.1170	0.0959		1.31	1.60	-18.0	30.0
Methyl methacrylate	Ave	0.3654	0.3478		1.52	1.60	-4.8	30.0
Methylcyclohexane	Ave	0.4349	0.3612		1.33	1.60	-17.0	30.0
4-Methyl-2-pentanone (MIBK)	Ave	0.7363	0.6846		1.49	1.60	-7.0	30.0
cis-1,3-Dichloropropene	Ave	0.3965	0.3659		1.48	1.60	-7.7	30.0
trans-1,3-Dichloropropene	Ave	0.4245	0.3653		1.38	1.60	-13.9	30.0
Toluene	Ave	1.059	0.8543		1.29	1.60	-19.3	30.0
1,1,2-Trichloroethane	Ave	0.3418	0.2917		1.37	1.60	-14.7	30.0
2-Hexanone	Ave	0.3505	0.2885		1.32	1.60	-17.7	30.0
Octane	Ave	0.3220	0.2616		1.30	1.60	-18.8	30.0
Dibromochloromethane	Ave	0.7225	0.6457		1.43	1.60	-10.6	30.0
1,2-Dibromoethane (EDB)	Ave	0.6043	0.5000		1.32	1.60	-17.3	30.0
Tetrachloroethene	Ave	0.4075	0.3652		1.43	1.60	-10.4	30.0
Chlorobenzene	Ave	0.9086	0.7303		1.29	1.60	-19.6	30.0
2,3-Dimethylheptane	Ave	1.274	1.118		1.41	1.60	-12.2	30.0
Ethylbenzene	Ave	1.415	1.140		1.29	1.60	-19.4	30.0
m-Xylene & p-Xylene	Ave	1.098	0.8912		2.60	3.20	-18.8	30.0
Nonane	Ave	0.6836	0.5491		1.28	1.60	-19.7	30.0
Bromoform	Ave	0.7600	0.7360		1.55	1.60	-3.2	30.0
Styrene	Ave	0.8462	0.6792		1.28	1.60	-19.7	30.0
o-Xylene	Ave	1.108	0.8879		1.28	1.60	-19.9	30.0
1,1,2,2-Tetrachloroethane	Ave	0.8986	0.7920		1.41	1.60	-11.9	30.0
1,2,3-Trichloropropane	Ave	0.2491	0.2139		1.37	1.60	-14.1	30.0
Isopropylbenzene	Ave	1.677	1.356		1.29	1.60	-19.1	30.0
Propylbenzene	Ave	0.4756	0.4073		1.37	1.60	-14.4	30.0
2-Chlorotoluene	Ave	0.4475	0.3784		1.35	1.60	-15.4	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-18854-1

SDG No.:

Lab Sample ID: CCVIS 140-39061/2 Calibration Date: 04/16/2020 08:45

Instrument ID: MR Calib Start Date: 04/09/2020 15:05

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 04/10/2020 00:47

Lab File ID: RCCVD16.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Ethyltoluene	Ave	1.674	1.295		1.24	1.60	-22.6	30.0
1,3,5-Trimethylbenzene	Ave	0.7333	0.5886		1.28	1.60	-19.7	30.0
Alpha Methyl Styrene	Ave	0.6958	0.5452		1.25	1.60	-21.6	30.0
Decane	Ave	0.8513	0.7518		1.41	1.60	-11.7	30.0
tert-Butylbenzene	Ave	1.488	1.234		1.33	1.60	-17.1	30.0
1,2,4-Trimethylbenzene	Ave	1.419	1.144		1.29	1.60	-19.4	30.0
sec-Butylbenzene	Ave	2.186	1.747		1.28	1.60	-20.1	30.0
1,3-Dichlorobenzene	Ave	0.8948	0.8589		1.54	1.60	-4.0	30.0
Benzyl chloride	Ave	0.8212	0.8963		1.75	1.60	9.1	30.0
1,4-Dichlorobenzene	Ave	0.9378	0.8248		1.41	1.60	-12.0	30.0
4-Isopropyltoluene	Ave	1.707	1.401		1.31	1.60	-18.0	30.0
1,2,3-Trimethylbenzene	Ave	1.482	1.108		1.20	1.60	-25.2	30.0
Butylcyclohexane	Ave	1.225	0.9048		1.18	1.60	-26.2	30.0
1,2-Dichlorobenzene	Ave	0.9692	0.8532		1.41	1.60	-12.0	30.0
Indane	Ave	1.377	1.095		1.27	1.60	-20.5	30.0
Indene	Ave	0.9671	0.9381		1.55	1.60	-3.0	30.0
Butylbenzene	Ave	1.723	1.431		1.33	1.60	-16.9	30.0
Undecane	Ave	0.9339	0.8946		1.53	1.60	-4.2	30.0
1,2-Dibromo-3-Chloropropane	Ave	0.4988	0.4315		1.38	1.60	-13.5	30.0
1,2,4,5-Tetramethylbenzene	Ave	1.559	1.359		1.40	1.60	-12.8	30.0
Dodecane	Lin1		0.8877		1.20	1.60	-24.8	30.0
1,2,4-Trichlorobenzene	Ave	0.7482	0.6961		1.49	1.60	-7.0	30.0
Naphthalene	Ave	1.587	1.427		1.44	1.60	-10.1	30.0
Hexachlorobutadiene	Ave	0.9657	0.8950		1.48	1.60	-7.3	30.0
1,2,3-Trichlorobenzene	Ave	0.7950	0.7668		1.54	1.60	-3.5	30.0
2-Methylnaphthalene	Lin		0.7758		1.25	1.60	-21.7	50.0
1-Methylnaphthalene	Lin2		1.251		0.980	1.60	-38.7	50.0
4-Bromofluorobenzene (Surr)	Ave	0.5929	0.5493		3.71	4.00	-7.4	30.0

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MR\20200415-15214.b\RCCVD16.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 16-Apr-2020 08:45:30 ALS Bottle#: 16 Worklist Smp#: 2
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0015214-002
Misc. Info.: P111
Operator ID: HMT Instrument ID: MR
Sublist: chrom-MR_TO15*sub16

Method: \\chromfs\Knoxville\ChromData\MR\20200415-15214.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 17-Apr-2020 11:03:45 Calib Date: 10-Apr-2020 00:47:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MR\20200409-15180.b\RD09IC10.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1010

First Level Reviewer: khachitpongpanits Date: 17-Apr-2020 11:03:45

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.350	8.350	0.000	95	160642	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.582	10.582	0.000	94	1121901	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.414	15.414	0.000	87	921713	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr	95	17.064	17.064	0.000	92	506292	4.00	3.71	
6 Chlorodifluoromethane	51	3.330	3.330	0.000	99	188788	1.60	1.67	
7 Propene	41	3.340	3.340	0.000	97	148586	1.60	1.73	
8 Dichlorodifluoromethane	85	3.389	3.389	0.000	95	155924	1.60	1.84	
9 Chloromethane	52	3.556	3.556	0.000	74	39240	1.60	1.58	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.567	3.567	0.000	89	173206	1.60	2.62	
11 Acetaldehyde	44	3.702	3.702	0.000	85	318209	8.00	7.10	
12 Vinyl chloride	62	3.712	3.712	0.000	99	142040	1.60	1.38	
14 Butadiene	54	3.799	3.799	0.000	65	107697	1.60	1.44	
13 Butane	43	3.799	3.799	0.000	86	250375	1.60	1.60	
15 Bromomethane	94	4.095	4.095	0.000	97	148095	1.60	1.38	
16 Chloroethane	64	4.230	4.230	0.000	76	70899	1.60	1.40	
17 Ethanol	31	4.333	4.333	0.000	95	508289	8.00	7.98	
18 Vinyl bromide	106	4.511	4.511	0.000	96	143880	1.60	1.33	
19 2-Methylbutane	43	4.559	4.559	0.000	92	194118	1.60	1.48	
20 Trichlorofluoromethane	101	4.764	4.764	0.000	94	348082	1.60	1.51	
21 Acrolein	56	4.775	4.775	0.000	86	42119	1.60	1.96	
22 Acetonitrile	40	4.850	4.850	0.000	96	53231	1.60	1.56	
23 Acetone	58	4.893	4.893	0.000	100	151535	4.80	3.46	
25 Isopropyl alcohol	45	4.980	4.980	0.000	80	531809	4.80	4.49	
24 Pentane	72	4.980	4.980	0.000	77	21305	1.60	1.47	
26 Ethyl ether	31	5.147	5.147	0.000	83	163982	1.60	1.76	
27 1,1-Dichloroethene	96	5.449	5.449	0.000	95	97400	1.60	1.29	
28 Acrylonitrile	53	5.567	5.567	0.000	58	65637	1.60	1.41	
29 2-Methyl-2-propanol	59	5.567	5.567	0.000	95	175113	1.60	1.49	
30 1,1,2-Trichloro-1,2,2-trif	101	5.632	5.632	0.000	91	229042	1.60	1.40	
31 Methylene Chloride	84	5.799	5.799	0.000	95	123913	1.60	1.47	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	5.815	5.815	0.000	93	123981	1.60	1.61	
33 Carbon disulfide	76	5.950	5.950	0.000	92	290495	1.60	1.47	
34 trans-1,2-Dichloroethene	96	6.603	6.603	0.000	93	95875	1.60	1.40	
35 2-Methylpentane	43	6.619	6.619	0.000	93	261913	1.60	1.52	
36 Methyl tert-butyl ether	73	6.727	6.727	0.000	94	246094	1.60	1.47	
37 1,1-Dichloroethane	63	7.023	7.023	0.000	99	179948	1.60	1.53	
38 Vinyl acetate	43	7.137	7.137	0.000	99	314181	1.60	1.56	
39 2-Butanone (MEK)	72	7.584	7.584	0.000	96	43429	1.60	1.23	
40 Hexane	56	7.600	7.600	0.000	88	75207	1.60	1.51	
41 Isopropyl ether	45	7.768	7.768	0.000	94	384707	1.60	1.49	
42 cis-1,2-Dichloroethene	96	8.016	8.016	0.000	91	97304	1.60	1.37	
43 Ethyl acetate	43	8.204	8.204	0.000	96	281849	1.60	1.60	
44 Chloroform	83	8.355	8.355	0.000	90	217584	1.60	1.52	
45 Tert-butyl ethyl ether	59	8.442	8.442	0.000	96	281420	1.60	1.48	
46 Tetrahydrofuran	42	8.754	8.754	0.000	89	133801	1.60	1.54	
47 1,1,1-Trichloroethane	97	9.391	9.391	0.000	95	209845	1.60	1.53	
48 1,2-Dichloroethane	62	9.504	9.504	0.000	92	126453	1.60	1.63	
49 n-Butanol	31	9.968	9.968	0.000	84	74605	1.60	1.76	
50 Cyclohexane	69	9.995	9.995	0.000	74	43393	1.60	1.39	
51 Benzene	78	10.000	10.000	0.000	95	295461	1.60	1.41	
52 Carbon tetrachloride	117	10.022	10.022	0.000	88	207648	1.60	1.47	
53 2,3-Dimethylpentane	71	10.124	10.124	0.000	86	66219	1.60	1.45	
54 Thiophene	84	10.286	10.286	0.000	89	157965	1.60	1.40	
55 Isooctane	57	10.809	10.809	0.000	94	471480	1.60	1.49	
56 n-Heptane	71	11.202	11.202	0.000	96	95751	1.60	1.40	
57 1,2-Dichloropropane	63	11.283	11.283	0.000	87	116550	1.60	1.40	
58 Trichloroethene	130	11.321	11.321	0.000	94	143530	1.60	1.36	
59 Dibromomethane	93	11.402	11.402	0.000	92	132441	1.60	1.39	
60 Dichlorobromomethane	83	11.558	11.558	0.000	93	225050	1.60	1.49	
61 1,4-Dioxane	88	11.569	11.569	0.000	77	43056	1.60	1.31	
62 Methyl methacrylate	41	11.661	11.661	0.000	84	156084	1.60	1.52	
63 Methylcyclohexane	83	12.103	12.103	0.000	88	162077	1.60	1.33	
64 4-Methyl-2-pentanone (MIBK	43	12.529	12.529	0.000	97	307228	1.60	1.49	
65 cis-1,3-Dichloropropene	75	12.588	12.588	0.000	94	164220	1.60	1.48	
66 trans-1,3-Dichloropropene	75	13.305	13.305	0.000	91	134685	1.60	1.38	
67 Toluene	91	13.419	13.419	0.000	93	314969	1.60	1.29	
68 1,1,2-Trichloroethane	83	13.505	13.505	0.000	94	107550	1.60	1.37	
69 2-Hexanone	58	13.899	13.899	0.000	87	106382	1.60	1.32	
70 n-Octane	85	14.136	14.136	0.000	95	96442	1.60	1.30	
71 Chlorodibromomethane	129	14.211	14.211	0.000	94	238044	1.60	1.43	
72 Ethylene Dibromide	107	14.503	14.503	0.000	97	184340	1.60	1.32	
73 Tetrachloroethene	129	14.578	14.578	0.000	89	134637	1.60	1.43	
74 Chlorobenzene	112	15.462	15.462	0.000	95	269231	1.60	1.29	
75 2,3-Dimethylheptane	43	15.489	15.489	0.000	91	412329	1.60	1.41	
76 Ethylbenzene	91	15.754	15.754	0.000	98	420467	1.60	1.29	
77 m-Xylene & p-Xylene	91	15.921	15.921	0.000	97	657118	3.20	2.60	
78 n-Nonane	57	16.347	16.347	0.000	90	202425	1.60	1.28	
79 Bromoform	173	16.363	16.363	0.000	92	271352	1.60	1.55	
80 Styrene	104	16.385	16.385	0.000	96	250421	1.60	1.28	
81 o-Xylene	91	16.444	16.444	0.000	99	327344	1.60	1.28	
82 1,1,2,2-Tetrachloroethane	83	16.773	16.773	0.000	97	291987	1.60	1.41	
83 1,2,3-Trichloropropane	110	16.935	16.935	0.000	91	78850	1.60	1.37	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	17.037	17.037	0.000	96	499906	1.60	1.29	
85 N-Propylbenzene	120	17.587	17.587	0.000	99	150165	1.60	1.37	
86 2-Chlorotoluene	126	17.630	17.630	0.000	93	139520	1.60	1.35	
87 4-Ethyltoluene	105	17.738	17.738	0.000	98	477529	1.60	1.24	
88 1,3,5-Trimethylbenzene	120	17.819	17.819	0.000	94	217008	1.60	1.28	
89 Alpha Methyl Styrene	118	18.056	18.056	0.000	90	201023	1.60	1.25	
90 n-Decane	57	18.121	18.121	0.000	84	277177	1.60	1.41	
91 tert-Butylbenzene	119	18.256	18.256	0.000	95	454791	1.60	1.33	
92 1,2,4-Trimethylbenzene	105	18.266	18.266	0.000	95	421638	1.60	1.29	
93 sec-Butylbenzene	105	18.525	18.525	0.000	98	644272	1.60	1.28	
94 1,3-Dichlorobenzene	146	18.541	18.541	0.000	96	316664	1.60	1.54	
95 Benzyl chloride	91	18.617	18.617	0.000	98	330466	1.60	1.75	
96 1,4-Dichlorobenzene	146	18.628	18.628	0.000	96	304082	1.60	1.41	
97 4-Isopropyltoluene	119	18.692	18.692	0.000	96	516405	1.60	1.31	
98 1,2,3-Trimethylbenzene	105	18.746	18.746	0.000	97	408668	1.60	1.20	
99 Butylcyclohexane	83	18.806	18.806	0.000	90	333570	1.60	1.18	
100 2,3-Dihydroindene	117	18.994	18.994	0.000	92	403704	1.60	1.27	
101 1,2-Dichlorobenzene	146	18.994	18.994	0.000	84	314551	1.60	1.41	
102 Indene	116	19.129	19.129	0.000	88	345870	1.60	1.55	
103 n-Butylbenzene	91	19.135	19.135	0.000	98	527607	1.60	1.33	
104 Undecane	57	19.458	19.458	0.000	85	329827	1.60	1.53	
105 1,2-Dibromo-3-Chloropropan	157	19.609	19.609	0.000	86	159071	1.60	1.38	
106 1,2,4,5-Tetramethylbenzene	119	19.900	19.900	0.000	97	501085	1.60	1.40	
107 Dodecane	57	20.515	20.515	0.000	83	327262	1.60	1.20	
108 1,2,4-Trichlorobenzene	180	20.704	20.704	0.000	93	256634	1.60	1.49	
109 Naphthalene	128	20.839	20.839	0.000	99	526065	1.60	1.44	
110 Hexachlorobutadiene	225	21.054	21.054	0.000	93	329986	1.60	1.48	
111 1,2,3-Trichlorobenzene	180	21.124	21.124	0.000	94	282703	1.60	1.54	
112 2-Methylnaphthalene	142	21.852	21.852	0.000	99	286020	1.60	1.25	
113 1-Methylnaphthalene	142	21.987	21.987	0.000	99	461278	1.60	0.9804	
A 116 C8 Range	1	14.123	(14.087-14.184)		0	1178639	1.60	1.44	
S 117 Xylenes, Total	100				0		4.80	3.88	
S 118 1,2-Dichloroethene, Total	1				0		3.20	2.77	

Reagents:

40CV101P_00112	Amount Added: 80.00	Units: ml	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

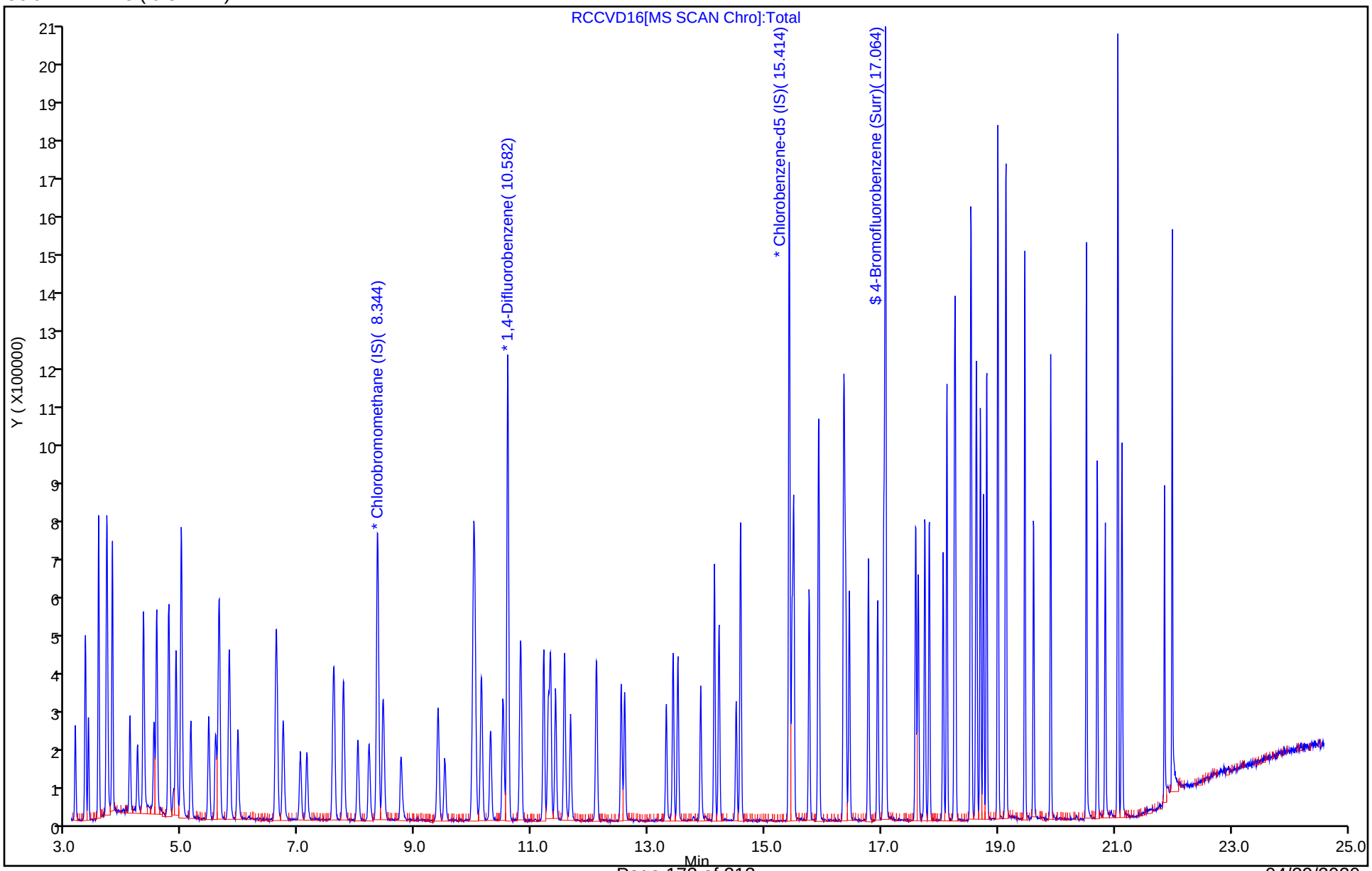
Report Date: 17-Apr-2020 11:03:46 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200415-15214.b\RCCVD16.D

Injection Date:	16-Apr-2020 08:45:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	CCVIS			Worklist Smp#:	2
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MR\20200409-15180.b\RBFBD09B.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	09-Apr-2020 14:08:30	ALS Bottle#:	16	Worklist Smp#:	1
Injection Vol:	500.0 mL	Dil. Factor:	1.0000		
Sample Info:					
Misc. Info.:	BFB				
Operator ID:	HMT	Instrument ID:	MR		
Method:	\\chromfs\Knoxville\ChromData\MR\20200409-15180.b\MR_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	10-Apr-2020 12:30:37	Calib Date:	10-Apr-2020 00:47:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MR\20200409-15180.b\RD09IC10.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX0332				

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
$ 5 BFB	95	6.001	6.001	0.000	0	392040	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

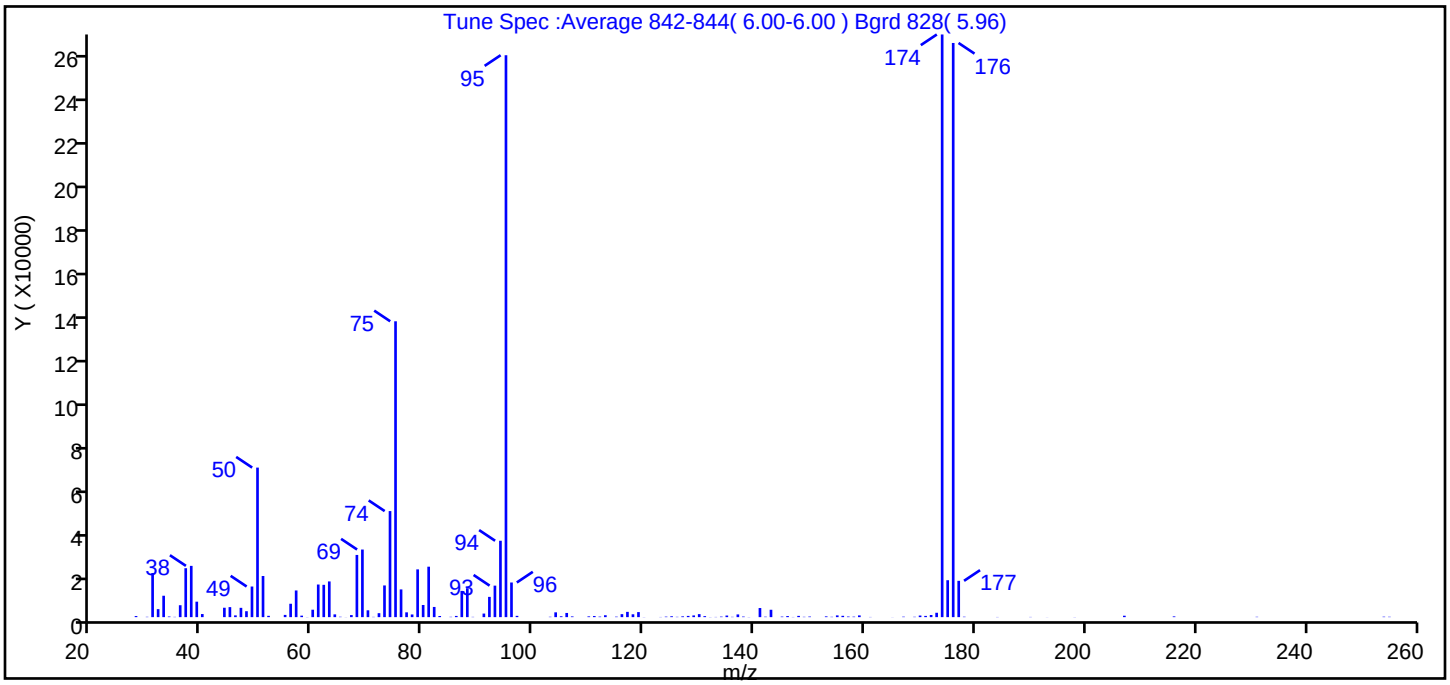
40MXSUR_00003 Amount Added: 40.00 Units: mL

MS Tune Report

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200409-15180.b\RBFBD09B.D
Injection Date: 09-Apr-2020 14:08:30 Instrument ID: MR
Lims ID: BFB
Client ID:
Operator ID: HMT ALS Bottle#: 16 Worklist Smp#: 1
Injection Vol: 500.0 mL Dil. Factor: 1.0000
Method: MR_TO15 Limit Group: MSA TO14A_15 Routine ICAL
Tune Method: BFB Method 8260

$ 5 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	26.6
75	30 to 60% of m/z 95	52.7
96	5 to 9% of m/z 95	6.2
173	Less than 2% of m/z 174	0.8 (0.7)
174	50 to 120% of m/z 95	103.7
175	5 to 9% of m/z 174	6.6 (6.3)
176	Greater than 95% but less than 101% of m/z 174	102.2 (98.5)
177	5 to 9% of m/z 176	6.5 (6.3)

Data File: \\chromfs\Knoxville\ChromData\MR\20200409-15180.b\RBFBD09B.D\MR_TO15.rslt\spectra.d
Injection Date: 09-Apr-2020 14:08:30
Spectrum: Tune Spec :Average 842-844(6.00-6.00) Bgrd 828(5.96)
Base Peak: 174.00
Minimum % Base Peak: 0
Number of Points: 132

m/z	Y	m/z	Y	m/z	Y	m/z	Y
28.00	508	67.00	946	107.00	328	147.00	77
30.00	152	68.00	28592	110.00	349	148.00	584
31.00	20280	69.00	31080	111.00	502	149.00	152
32.00	3676	70.00	3147	112.00	243	150.00	273
33.00	9838	71.00	122	113.00	873	153.00	357
34.00	282	72.00	1820	115.00	224	154.00	153
35.00	122	73.00	14570	116.00	1377	155.00	804
36.00	5479	74.00	48752	117.00	2425	156.00	607
37.00	22496	75.00	136000	118.00	1318	157.00	274
38.00	23568	76.00	12749	119.00	2320	158.00	224
39.00	7112	77.00	2212	120.00	56	159.00	796
40.00	1426	78.00	1232	123.00	83	161.00	87
44.00	4322	79.00	21960	124.00	234	165.00	39
45.00	4607	80.00	5588	125.00	404	167.00	211
46.00	812	81.00	23192	126.00	143	169.00	165
47.00	4278	82.00	4685	127.00	361	170.00	735
48.00	2730	83.00	528	128.00	569	171.00	571
49.00	14078	85.00	151	129.00	788	172.00	980
50.00	68744	86.00	557	130.00	1386	173.00	2008
51.00	18912	87.00	12065	131.00	464	174.00	267840
52.00	607	88.00	13288	132.00	62	175.00	16976
55.00	1029	89.00	123	133.00	95	176.00	263936
56.00	6150	91.00	1647	134.00	247	177.00	16696
57.00	12263	92.00	9316	135.00	733	178.00	192
58.00	687	93.00	14483	136.00	140	184.00	81
59.00	57	94.00	35112	137.00	1250	190.00	97
60.00	3417	95.00	258304	138.00	260	193.00	33
61.00	14996	96.00	15930	139.00	64	198.00	55
62.00	14857	97.00	592	141.00	4186	207.00	653
63.00	16416	103.00	169	142.00	206	216.00	341
64.00	1275	104.00	2210	143.00	3395	231.00	161
65.00	173	105.00	399	145.00	253	254.00	210
66.00	41	106.00	1923	146.00	497	255.00	173

m/z	Y	m/z	Y	m/z	Y	m/z	Y
28.00	508	67.00	946	107.00	328	147.00	77
30.00	152	68.00	28592	110.00	349	148.00	584
31.00	20280	69.00	31080	111.00	502	149.00	152
32.00	3676	70.00	3147	112.00	243	150.00	273
33.00	9838	71.00	122	113.00	873	153.00	357
34.00	282	72.00	1820	115.00	224	154.00	153
35.00	122	73.00	14570	116.00	1377	155.00	804
36.00	5479	74.00	48752	117.00	2425	156.00	607
37.00	22496	75.00	136000	118.00	1318	157.00	274
38.00	23568	76.00	12749	119.00	2320	158.00	224
39.00	7112	77.00	2212	120.00	56	159.00	796
40.00	1426	78.00	1232	123.00	83	161.00	87
44.00	4322	79.00	21960	124.00	234	165.00	39
45.00	4607	80.00	5588	125.00	404	167.00	211
46.00	812	81.00	23192	126.00	143	169.00	165
47.00	4278	82.00	4685	127.00	361	170.00	735
48.00	2730	83.00	528	128.00	569	171.00	571
49.00	14078	85.00	151	129.00	788	172.00	980
50.00	68744	86.00	557	130.00	1386	173.00	2008
51.00	18912	87.00	12065	131.00	464	174.00	267840
52.00	607	88.00	13288	132.00	62	175.00	16976
55.00	1029	89.00	123	133.00	95	176.00	263936
56.00	6150	91.00	1647	134.00	247	177.00	16696
57.00	12263	92.00	9316	135.00	733	178.00	192
58.00	687	93.00	14483	136.00	140	184.00	81
59.00	57	94.00	35112	137.00	1250	190.00	97
60.00	3417	95.00	258304	138.00	260	193.00	33
61.00	14996	96.00	15930	139.00	64	198.00	55
62.00	14857	97.00	592	141.00	4186	207.00	653
63.00	16416	103.00	169	142.00	206	216.00	341
64.00	1275	104.00	2210	143.00	3395	231.00	161
65.00	173	105.00	399	145.00	253	254.00	210
66.00	41	106.00	1923	146.00	497	255.00	173

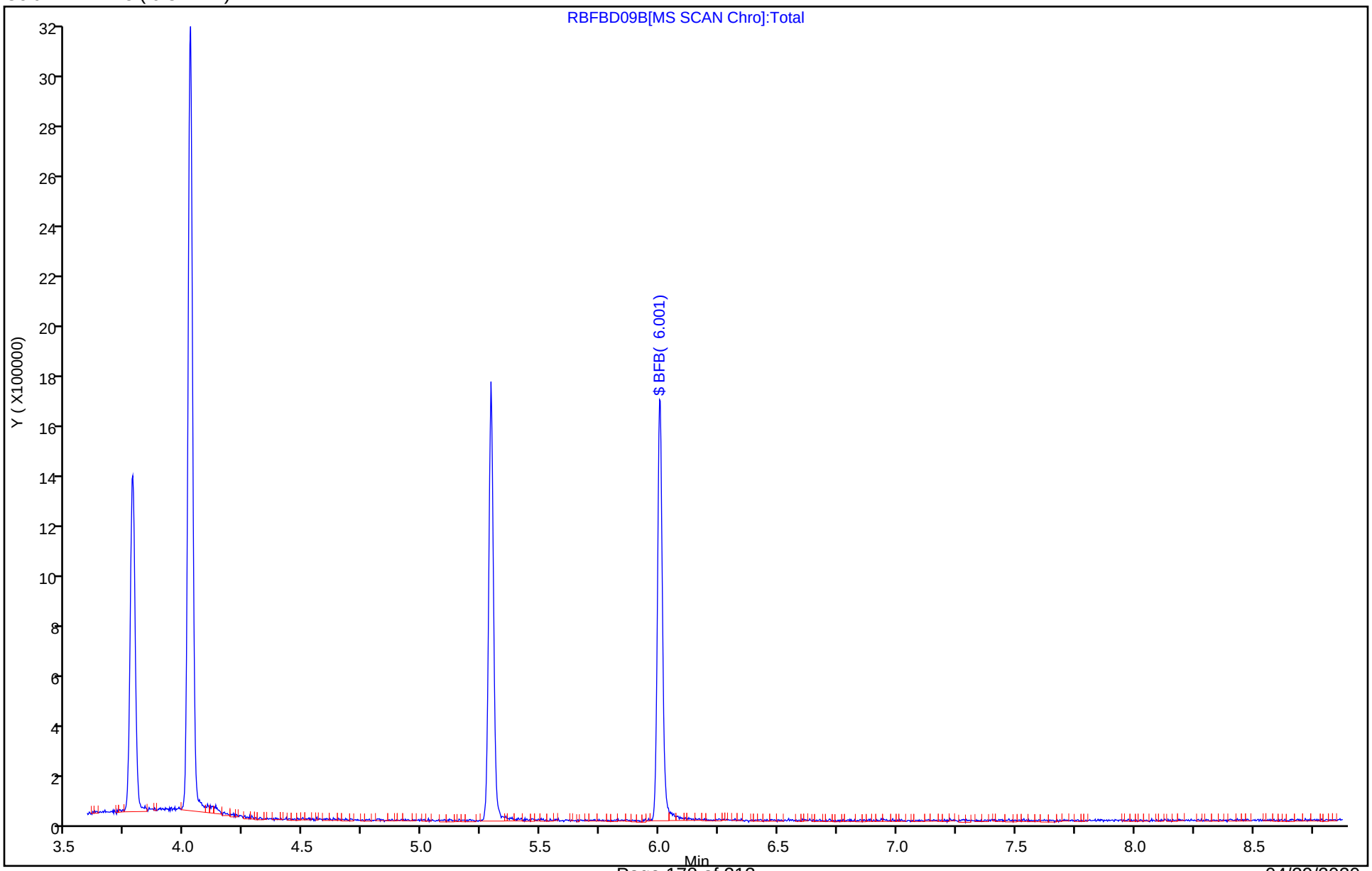
Report Date: 10-Apr-2020 12:30:38 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200409-15180.b\RBFBD09B.D

Injection Date:	09-Apr-2020 14:08:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	500.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MR\20200415-15214.b\RBFBD16.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	16-Apr-2020 08:18:30	ALS Bottle#:	16	Worklist Smp#:	1
Injection Vol:	500.0 mL	Dil. Factor:	1.0000		
Sample Info:	140-0015214-001				
Misc. Info.:	BFB				
Operator ID:	HMT	Instrument ID:	MR		
Method:	\\chromfs\Knoxville\ChromData\MR\20200415-15214.b\MR_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	17-Apr-2020 10:55:41	Calib Date:	10-Apr-2020 00:47:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MR\20200409-15180.b\RD09IC10.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1010				
First Level Reviewer: khachitpongpanits		Date:	17-Apr-2020 10:55:41		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
$ 5 BFB	95	6.001	6.001	0.000	0	337881	NR	NR	8

QC Flag Legend

Processing Flags
NR - Missing Quant Standard
8 - Failed MS Tune Ratio Test

Reagents:

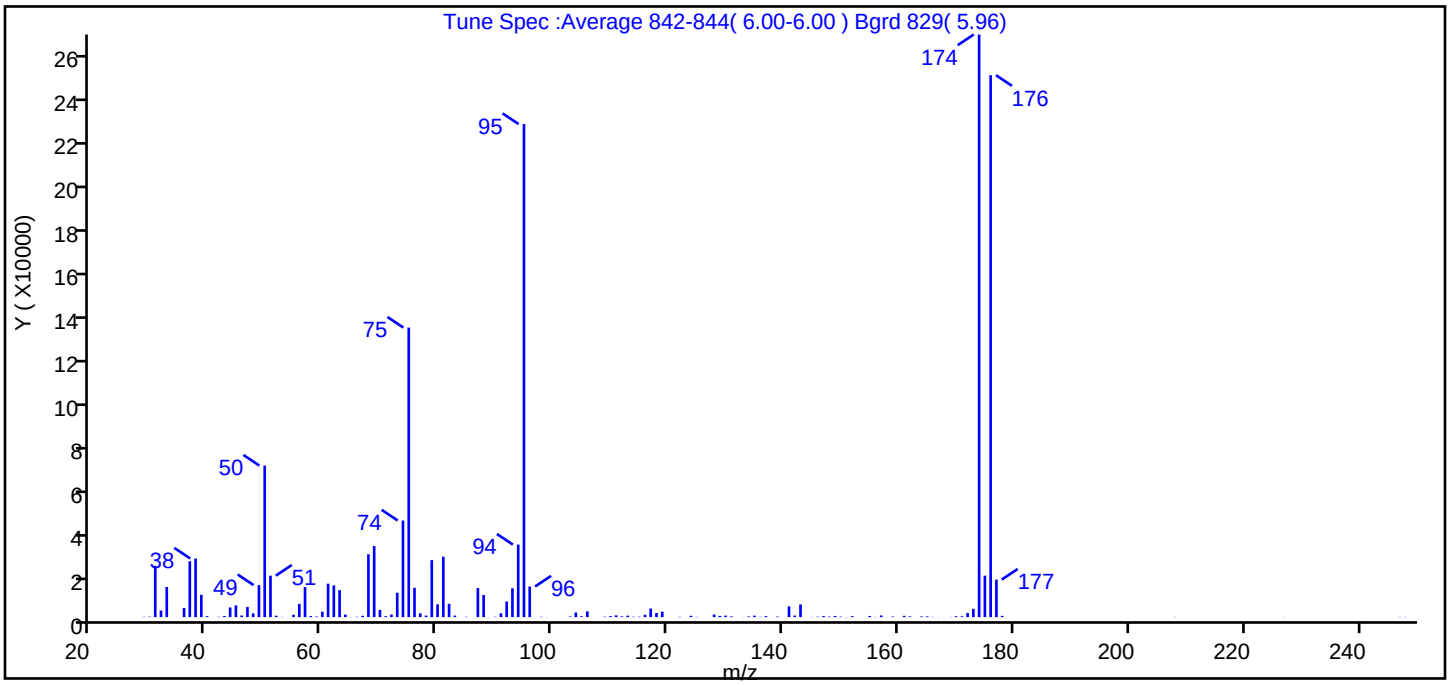
40MXSUR_00003 Amount Added: 40.00 Units: mL

MS Tune Report

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200415-15214.b\RBFBD16.D
Injection Date: 16-Apr-2020 08:18:30 Instrument ID: MR
Lims ID: BFB
Client ID:
Operator ID: HMT ALS Bottle#: 16 Worklist Smp#: 1
Injection Vol: 500.0 mL Dil. Factor: 1.0000
Method: MR_TO15 Limit Group: MSA TO14A_15 Routine ICAL
Tune Method: BFB Method 8260

$ 5 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	30.7
75	30 to 60% of m/z 95	58.7
96	5 to 9% of m/z 95	6.2
173	Less than 2% of m/z 174	1.7 (1.4)
174	50 to 120% of m/z 95	118.2
175	5 to 9% of m/z 174	8.4 (7.1)
176	Greater than 95% but less than 101% of m/z 174	109.9 (93.0)*
177	5 to 9% of m/z 176	7.6 (6.9)

Data File: \\chromfs\Knoxville\ChromData\MR\20200415-15214.b\RBFBD16.D\MR_TO15.rslt\spectra.d
Injection Date: 16-Apr-2020 08:18:30
Spectrum: Tune Spec :Average 842-844(6.00-6.00) Bgrd 829(5.96)
Base Peak: 174.00
Minimum % Base Peak: 0
Number of Points: 129

m/z	Y	m/z	Y	m/z	Y	m/z	Y
29.00	135	66.00	161	105.00	391	149.00	535
30.00	206	67.00	605	106.00	2568	150.00	231
31.00	22912	68.00	28080	109.00	212	151.00	67
32.00	2965	69.00	31744	110.00	470	152.00	445
33.00	13481	70.00	3233	111.00	803	155.00	521
36.00	4078	71.00	437	112.00	351	156.00	95
37.00	24968	72.00	1170	113.00	681	157.00	751
38.00	26168	73.00	10896	114.00	187	158.00	34
39.00	9960	74.00	43144	115.00	207	159.00	273
40.00	459	75.00	129240	116.00	1053	161.00	593
42.00	159	76.00	13098	117.00	3836	162.00	327
43.00	532	77.00	1722	118.00	1847	164.00	313
44.00	4318	78.00	719	119.00	2448	165.00	329
45.00	5249	79.00	25448	122.00	168	166.00	101
46.00	727	80.00	5736	124.00	607	167.00	53
47.00	4560	81.00	26984	125.00	126	168.00	40
48.00	1707	82.00	5943	128.00	1166	169.00	95
49.00	14291	83.00	699	129.00	556	170.00	405
50.00	67656	85.00	155	130.00	690	171.00	381
51.00	18512	87.00	12998	131.00	349	172.00	1860
52.00	656	88.00	9870	133.00	61	173.00	3732
53.00	101	89.00	53	134.00	316	174.00	260096
55.00	1083	90.00	165	135.00	672	175.00	18528
56.00	5924	91.00	1726	136.00	148	176.00	241920
57.00	13419	92.00	6968	137.00	466	177.00	16768
58.00	497	93.00	12879	139.00	273	178.00	595
59.00	272	94.00	32376	141.00	4810	208.00	99
60.00	2431	95.00	220096	142.00	710	227.00	65
61.00	14945	96.00	13656	143.00	5674	247.00	108
62.00	14178	98.00	155	145.00	94	248.00	121
63.00	12044	99.00	61	146.00	199		
64.00	1145	103.00	280	147.00	486		
65.00	63	104.00	2080	148.00	257		

m/z	Y	m/z	Y	m/z	Y	m/z	Y
29.00	135	66.00	161	105.00	391	149.00	535
30.00	206	67.00	605	106.00	2568	150.00	231
31.00	22912	68.00	28080	109.00	212	151.00	67
32.00	2965	69.00	31744	110.00	470	152.00	445
33.00	13481	70.00	3233	111.00	803	155.00	521
36.00	4078	71.00	437	112.00	351	156.00	95
37.00	24968	72.00	1170	113.00	681	157.00	751
38.00	26168	73.00	10896	114.00	187	158.00	34
39.00	9960	74.00	43144	115.00	207	159.00	273
40.00	459	75.00	129240	116.00	1053	161.00	593
42.00	159	76.00	13098	117.00	3836	162.00	327
43.00	532	77.00	1722	118.00	1847	164.00	313
44.00	4318	78.00	719	119.00	2448	165.00	329
45.00	5249	79.00	25448	122.00	168	166.00	101
46.00	727	80.00	5736	124.00	607	167.00	53
47.00	4560	81.00	26984	125.00	126	168.00	40
48.00	1707	82.00	5943	128.00	1166	169.00	95
49.00	14291	83.00	699	129.00	556	170.00	405
50.00	67656	85.00	155	130.00	690	171.00	381
51.00	18512	87.00	12998	131.00	349	172.00	1860
52.00	656	88.00	9870	133.00	61	173.00	3732
53.00	101	89.00	53	134.00	316	174.00	260096
55.00	1083	90.00	165	135.00	672	175.00	18528
56.00	5924	91.00	1726	136.00	148	176.00	241920
57.00	13419	92.00	6968	137.00	466	177.00	16768
58.00	497	93.00	12879	139.00	273	178.00	595
59.00	272	94.00	32376	141.00	4810	208.00	99
60.00	2431	95.00	220096	142.00	710	227.00	65
61.00	14945	96.00	13656	143.00	5674	247.00	108
62.00	14178	98.00	155	145.00	94	248.00	121
63.00	12044	99.00	61	146.00	199		
64.00	1145	103.00	280	147.00	486		
65.00	63	104.00	2080	148.00	257		

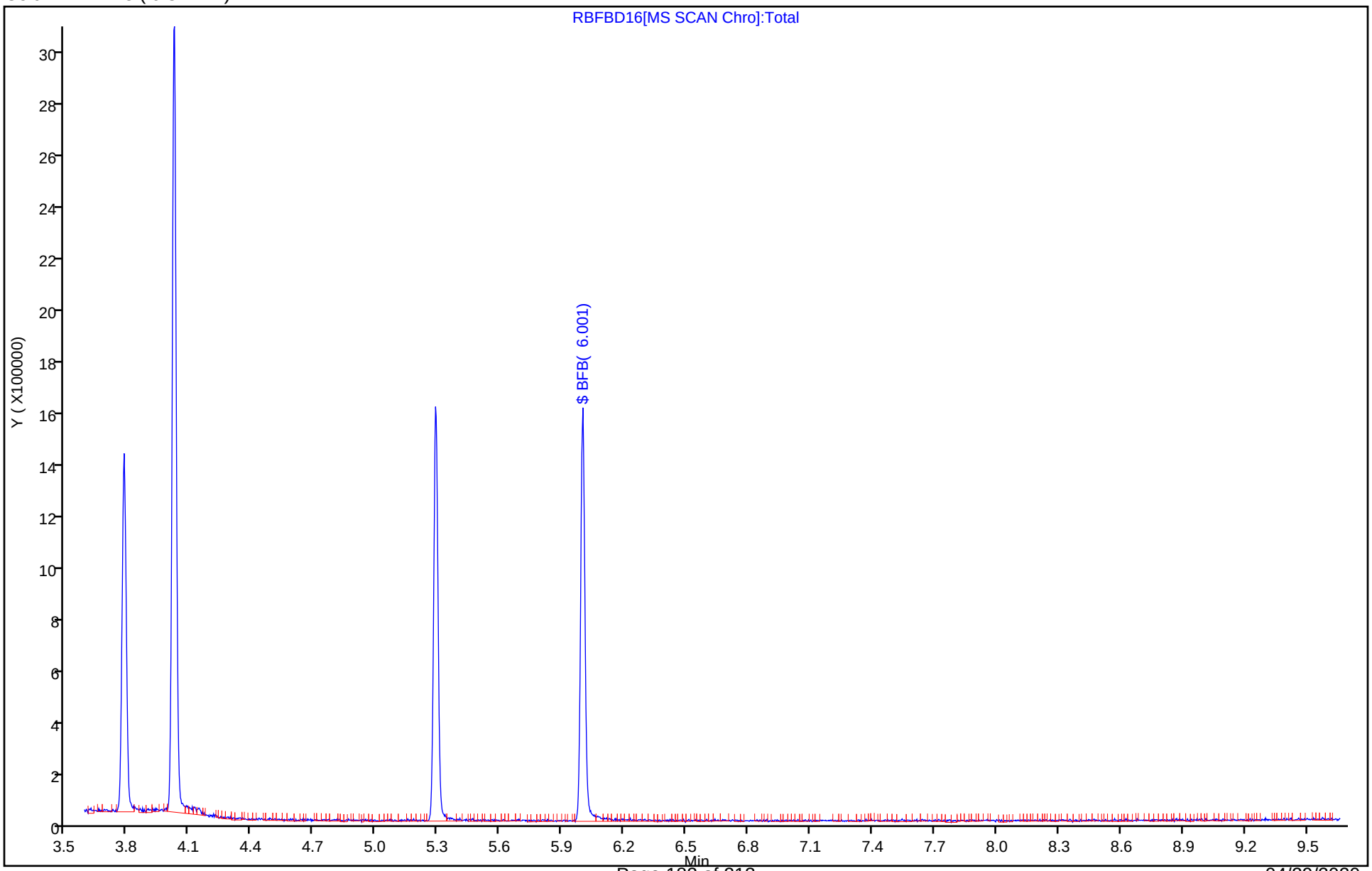
Report Date: 17-Apr-2020 10:55:42 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200415-15214.b\RBFBD16.D

Injection Date:	16-Apr-2020 08:18:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	500.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-18854-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 140-39061/5

Matrix: Air Lab File ID: R500BD16.D

Analysis Method: TO 15 LL Date Collected:

Sample wt/vol: 500(mL) Date Analyzed: 04/16/2020 11:51

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 39061 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	ND		0.080	0.0080
56-23-5	Carbon tetrachloride	153.81	ND		0.080	0.0070
75-45-6	Chlorodifluoromethane	86.47	ND		0.080	0.022
67-66-3	Chloroform	119.38	ND		0.080	0.0070
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.080	0.010
75-71-8	Dichlorodifluoromethane	120.91	ND		0.080	0.014
75-34-3	1,1-Dichloroethane	98.96	ND		0.080	0.0070
107-06-2	1,2-Dichloroethane	98.96	ND		0.080	0.010
75-35-4	1,1-Dichloroethene	96.94	ND		0.080	0.0080
100-41-4	Ethylbenzene	106.17	ND		0.080	0.013
75-09-2	Methylene Chloride	84.93	ND		0.40	0.16
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.40	0.052
91-20-3	Naphthalene	128.17	ND		0.040	0.040
127-18-4	Tetrachloroethene	165.83	ND		0.080	0.0070
108-88-3	Toluene	92.14	ND		0.12	0.078
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.080	0.0070
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.080	0.064
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.080	0.037
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.080	0.0070
79-01-6	Trichloroethene	131.39	ND		0.040	0.0060
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.080	0.036
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.080	0.020
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.080	0.022
75-01-4	Vinyl chloride	62.50	ND		0.040	0.026
1330-20-7	Xylenes, Total	106.17	ND		0.16	0.024

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	88		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-18854-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 140-39061/5

Matrix: Air Lab File ID: R500BD16.D

Analysis Method: TO 15 LL Date Collected:

Sample wt/vol: 500(mL) Date Analyzed: 04/16/2020 11:51

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 39061 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	ND		0.26	0.026
56-23-5	Carbon tetrachloride	153.81	ND		0.50	0.044
75-45-6	Chlorodifluoromethane	86.47	ND		0.28	0.078
67-66-3	Chloroform	119.38	ND		0.39	0.034
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.32	0.040
75-71-8	Dichlorodifluoromethane	120.91	ND		0.40	0.069
75-34-3	1,1-Dichloroethane	98.96	ND		0.32	0.028
107-06-2	1,2-Dichloroethane	98.96	ND		0.32	0.040
75-35-4	1,1-Dichloroethene	96.94	ND		0.32	0.032
100-41-4	Ethylbenzene	106.17	ND		0.35	0.056
75-09-2	Methylene Chloride	84.93	ND		1.4	0.56
1634-04-4	Methyl tert-butyl ether	88.15	ND		1.4	0.19
91-20-3	Naphthalene	128.17	ND		0.21	0.21
127-18-4	Tetrachloroethene	165.83	ND		0.54	0.047
108-88-3	Toluene	92.14	ND		0.45	0.29
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.32	0.028
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.59	0.47
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.44	0.20
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.44	0.038
79-01-6	Trichloroethene	131.39	ND		0.21	0.032
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.39	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.39	0.098
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.39	0.11
75-01-4	Vinyl chloride	62.50	ND		0.10	0.066
1330-20-7	Xylenes, Total	106.17	ND		0.69	0.10

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	88		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MR\20200415-15214.b\R500BD16.D
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 16-Apr-2020 11:51:30 ALS Bottle#: 16 Worklist Smp#: 5
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0015214-005
Misc. Info.: 500ML BLK
Operator ID: HMT Instrument ID: MR

Method: \\chromfs\Knoxville\ChromData\MR\20200415-15214.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 17-Apr-2020 11:06:45 Calib Date: 10-Apr-2020 00:47:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MR\20200409-15180.b\RD09IC10.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1010

First Level Reviewer: khachitpongpanits Date: 17-Apr-2020 11:06:45

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.339	8.350	-0.011	96	161998	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.577	10.582	-0.005	94	1143221	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.414	15.414	0.000	88	899276	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr	95	17.064	17.064	0.000	92	470115	4.00	3.53	
7 Propene	41	3.335	3.340	-0.005	98	23133		-0.7435	7

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

40MXISSURP_00004 Amount Added: 40.00 Units: mL Run Reagent

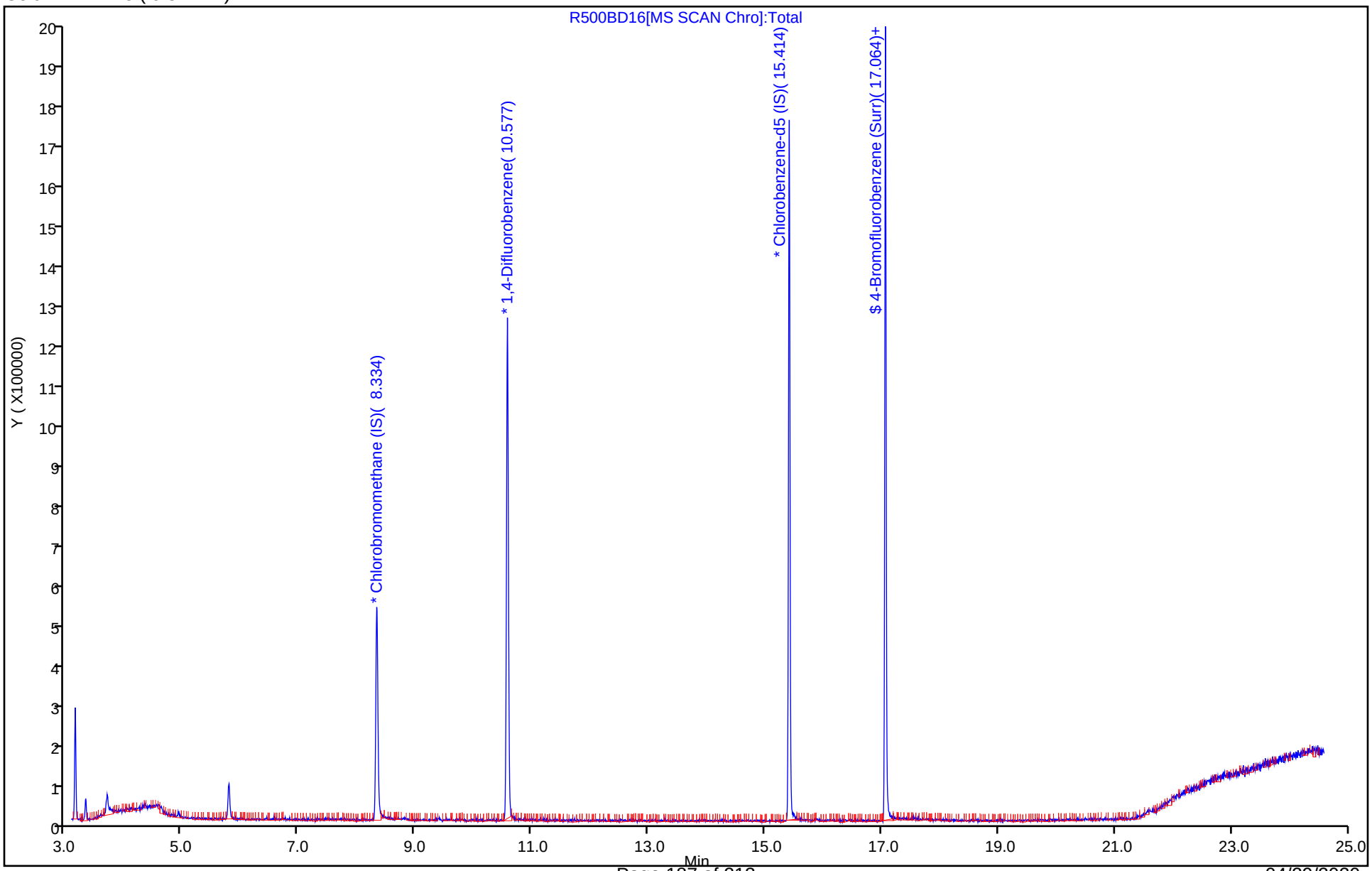
Report Date: 17-Apr-2020 11:06:45 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200415-15214.b\R500BD16.D

Injection Date:	16-Apr-2020 11:51:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	mb			Worklist Smp#:	5
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MR\20200415-15214.b\R500BD16.D				
Lims ID:	mb				
Client ID:					
Sample Type:	MB				
Inject. Date:	16-Apr-2020 11:51:30	ALS Bottle#:	16	Worklist Smp#:	5
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0015214-005				
Misc. Info.:	500ML BLK				
Operator ID:	HMT	Instrument ID:	MR		
Method:	\\chromfs\Knoxville\ChromData\MR\20200415-15214.b\MR_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	17-Apr-2020 11:06:45	Calib Date:	10-Apr-2020 00:47:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MR\20200409-15180.b\RD09IC10.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1010				

First Level Reviewer: khachitpongpanits Date: 17-Apr-2020 11:06:45

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.00	3.53	88.16

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-18854-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 140-39061/1002

Matrix: Air Lab File ID: RCCVD16-LCS.d

Analysis Method: TO 15 LL Date Collected:

Sample wt/vol: 500(mL) Date Analyzed: 04/16/2020 08:45

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 39061 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	1.41		0.080	0.0080
56-23-5	Carbon tetrachloride	153.81	1.47		0.080	0.0070
75-45-6	Chlorodifluoromethane	86.47	1.67		0.080	0.022
67-66-3	Chloroform	119.38	1.52		0.080	0.0070
156-59-2	cis-1,2-Dichloroethene	96.94	1.37		0.080	0.010
75-71-8	Dichlorodifluoromethane	120.91	1.84		0.080	0.014
75-34-3	1,1-Dichloroethane	98.96	1.53		0.080	0.0070
107-06-2	1,2-Dichloroethane	98.96	1.63		0.080	0.010
75-35-4	1,1-Dichloroethene	96.94	1.29		0.080	0.0080
100-41-4	Ethylbenzene	106.17	1.29		0.080	0.013
75-09-2	Methylene Chloride	84.93	1.47		0.40	0.16
1634-04-4	Methyl tert-butyl ether	88.15	1.47		0.40	0.052
91-20-3	Naphthalene	128.17	1.44		0.040	0.040
127-18-4	Tetrachloroethene	165.83	1.43		0.080	0.0070
108-88-3	Toluene	92.14	1.29		0.12	0.078
156-60-5	trans-1,2-Dichloroethene	96.94	1.40		0.080	0.0070
120-82-1	1,2,4-Trichlorobenzene	181.45	1.49		0.080	0.064
71-55-6	1,1,1-Trichloroethane	133.41	1.53		0.080	0.037
79-00-5	1,1,2-Trichloroethane	133.41	1.37		0.080	0.0070
79-01-6	Trichloroethene	131.39	1.36		0.040	0.0060
526-73-8	1,2,3-Trimethylbenzene	120.19	1.20		0.080	0.036
95-63-6	1,2,4-Trimethylbenzene	120.20	1.29		0.080	0.020
108-67-8	1,3,5-Trimethylbenzene	120.20	1.28		0.080	0.022
75-01-4	Vinyl chloride	62.50	1.38		0.040	0.026
1330-20-7	Xylenes, Total	106.17	3.88		0.16	0.024

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	93		60-140

TestAmerica Laboratories
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MR\20200415-15214.b\RCCVD16-LCS.d
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 16-Apr-2020 08:45:30 ALS Bottle#: 16 Worklist Smp#: 1002
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0015214-002
Misc. Info.: P111
Operator ID: HMT Instrument ID: MR

Method: \\chromfs\Knoxville\ChromData\MR\20200415-15214.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 17-Apr-2020 11:03:45 Calib Date: 10-Apr-2020 00:47:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MR\20200409-15180.b\RD09IC10.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1010

First Level Reviewer: khachitpongpanits Date: 17-Apr-2020 11:03:45

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.350	8.350	0.000	95	160642	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.582	10.582	0.000	94	1121901	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.414	15.414	0.000	87	921713	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr	95	17.064	17.064	0.000	92	506292	4.00	3.71	
6 Chlorodifluoromethane	51	3.330	3.330	0.000	99	188788	1.60	1.67	
7 Propene	41	3.340	3.340	0.000	97	148586	1.60	1.73	
8 Dichlorodifluoromethane	85	3.389	3.389	0.000	95	155924	1.60	1.84	
9 Chloromethane	52	3.556	3.556	0.000	74	39240	1.60	1.58	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.567	3.567	0.000	89	173206	1.60	2.62	
11 Acetaldehyde	44	3.702	3.702	0.000	85	318209	8.00	7.10	
12 Vinyl chloride	62	3.712	3.712	0.000	99	142040	1.60	1.38	
14 Butadiene	54	3.799	3.799	0.000	65	107697	1.60	1.44	
13 Butane	43	3.799	3.799	0.000	86	250375	1.60	1.60	
15 Bromomethane	94	4.095	4.095	0.000	97	148095	1.60	1.38	
16 Chloroethane	64	4.230	4.230	0.000	76	70899	1.60	1.40	
17 Ethanol	31	4.333	4.333	0.000	95	508289	8.00	7.98	
18 Vinyl bromide	106	4.511	4.511	0.000	96	143880	1.60	1.33	
19 2-Methylbutane	43	4.559	4.559	0.000	92	194118	1.60	1.48	
20 Trichlorofluoromethane	101	4.764	4.764	0.000	94	348082	1.60	1.51	
21 Acrolein	56	4.775	4.775	0.000	86	42119	1.60	1.96	
22 Acetonitrile	40	4.850	4.850	0.000	96	53231	1.60	1.56	
23 Acetone	58	4.893	4.893	0.000	100	151535	4.80	3.46	
25 Isopropyl alcohol	45	4.980	4.980	0.000	80	531809	4.80	4.49	
24 Pentane	72	4.980	4.980	0.000	77	21305	1.60	1.47	
26 Ethyl ether	31	5.147	5.147	0.000	83	163982	1.60	1.76	
27 1,1-Dichloroethene	96	5.449	5.449	0.000	95	97400	1.60	1.29	
28 Acrylonitrile	53	5.567	5.567	0.000	58	65637	1.60	1.41	
29 2-Methyl-2-propanol	59	5.567	5.567	0.000	95	175113	1.60	1.49	
30 1,1,2-Trichloro-1,2,2-trif	101	5.632	5.632	0.000	91	229042	1.60	1.40	
31 Methylene Chloride	84	5.799	5.799	0.000	95	123913	1.60	1.47	
32 3-Chloro-1-propene	39	5.815	5.815	0.000	93	123981	1.60	1.61	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
33 Carbon disulfide	76	5.950	5.950	0.000	92	290495	1.60	1.47	
34 trans-1,2-Dichloroethene	96	6.603	6.603	0.000	93	95875	1.60	1.40	
35 2-Methylpentane	43	6.619	6.619	0.000	93	261913	1.60	1.52	
36 Methyl tert-butyl ether	73	6.727	6.727	0.000	94	246094	1.60	1.47	
37 1,1-Dichloroethane	63	7.023	7.023	0.000	99	179948	1.60	1.53	
38 Vinyl acetate	43	7.137	7.137	0.000	99	314181	1.60	1.56	
39 2-Butanone (MEK)	72	7.584	7.584	0.000	96	43429	1.60	1.23	
40 Hexane	56	7.600	7.600	0.000	88	75207	1.60	1.51	
41 Isopropyl ether	45	7.768	7.768	0.000	94	384707	1.60	1.49	
42 cis-1,2-Dichloroethene	96	8.016	8.016	0.000	91	97304	1.60	1.37	
43 Ethyl acetate	43	8.204	8.204	0.000	96	281849	1.60	1.60	
44 Chloroform	83	8.355	8.355	0.000	90	217584	1.60	1.52	
45 Tert-butyl ethyl ether	59	8.442	8.442	0.000	96	281420	1.60	1.48	
46 Tetrahydrofuran	42	8.754	8.754	0.000	89	133801	1.60	1.54	
47 1,1,1-Trichloroethane	97	9.391	9.391	0.000	95	209845	1.60	1.53	
48 1,2-Dichloroethane	62	9.504	9.504	0.000	92	126453	1.60	1.63	
49 n-Butanol	31	9.968	9.968	0.000	84	74605	1.60	1.76	
50 Cyclohexane	69	9.995	9.995	0.000	74	43393	1.60	1.39	
51 Benzene	78	10.000	10.000	0.000	95	295461	1.60	1.41	
52 Carbon tetrachloride	117	10.022	10.022	0.000	88	207648	1.60	1.47	
53 2,3-Dimethylpentane	71	10.124	10.124	0.000	86	66219	1.60	1.45	
54 Thiophene	84	10.286	10.286	0.000	89	157965	1.60	1.40	
55 Isooctane	57	10.809	10.809	0.000	94	471480	1.60	1.49	
56 n-Heptane	71	11.202	11.202	0.000	96	95751	1.60	1.40	
57 1,2-Dichloropropane	63	11.283	11.283	0.000	87	116550	1.60	1.40	
58 Trichloroethene	130	11.321	11.321	0.000	94	143530	1.60	1.36	
59 Dibromomethane	93	11.402	11.402	0.000	92	132441	1.60	1.39	
60 Dichlorobromomethane	83	11.558	11.558	0.000	93	225050	1.60	1.49	
61 1,4-Dioxane	88	11.569	11.569	0.000	77	43056	1.60	1.31	
62 Methyl methacrylate	41	11.661	11.661	0.000	84	156084	1.60	1.52	
63 Methylcyclohexane	83	12.103	12.103	0.000	88	162077	1.60	1.33	
64 4-Methyl-2-pentanone (MIBK	43	12.529	12.529	0.000	97	307228	1.60	1.49	
65 cis-1,3-Dichloropropene	75	12.588	12.588	0.000	94	164220	1.60	1.48	
66 trans-1,3-Dichloropropene	75	13.305	13.305	0.000	91	134685	1.60	1.38	
67 Toluene	91	13.419	13.419	0.000	93	314969	1.60	1.29	
68 1,1,2-Trichloroethane	83	13.505	13.505	0.000	94	107550	1.60	1.37	
69 2-Hexanone	58	13.899	13.899	0.000	87	106382	1.60	1.32	
70 n-Octane	85	14.136	14.136	0.000	95	96442	1.60	1.30	
71 Chlorodibromomethane	129	14.211	14.211	0.000	94	238044	1.60	1.43	
72 Ethylene Dibromide	107	14.503	14.503	0.000	97	184340	1.60	1.32	
73 Tetrachloroethene	129	14.578	14.578	0.000	89	134637	1.60	1.43	
74 Chlorobenzene	112	15.462	15.462	0.000	95	269231	1.60	1.29	
75 2,3-Dimethylheptane	43	15.489	15.489	0.000	91	412329	1.60	1.41	
76 Ethylbenzene	91	15.754	15.754	0.000	98	420467	1.60	1.29	
77 m-Xylene & p-Xylene	91	15.921	15.921	0.000	97	657118	3.20	2.60	
78 n-Nonane	57	16.347	16.347	0.000	90	202425	1.60	1.28	
79 Bromoform	173	16.363	16.363	0.000	92	271352	1.60	1.55	
80 Styrene	104	16.385	16.385	0.000	96	250421	1.60	1.28	
81 o-Xylene	91	16.444	16.444	0.000	99	327344	1.60	1.28	
82 1,1,2,2-Tetrachloroethane	83	16.773	16.773	0.000	97	291987	1.60	1.41	
83 1,2,3-Trichloropropane	110	16.935	16.935	0.000	91	78850	1.60	1.37	
84 Isopropylbenzene	105	17.037	17.037	0.000	96	499906	1.60	1.29	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
85 N-Propylbenzene	120	17.587	17.587	0.000	99	150165	1.60	1.37	
86 2-Chlorotoluene	126	17.630	17.630	0.000	93	139520	1.60	1.35	
87 4-Ethyltoluene	105	17.738	17.738	0.000	98	477529	1.60	1.24	
88 1,3,5-Trimethylbenzene	120	17.819	17.819	0.000	94	217008	1.60	1.28	
89 Alpha Methyl Styrene	118	18.056	18.056	0.000	90	201023	1.60	1.25	
90 n-Decane	57	18.121	18.121	0.000	84	277177	1.60	1.41	
91 tert-Butylbenzene	119	18.256	18.256	0.000	95	454791	1.60	1.33	
92 1,2,4-Trimethylbenzene	105	18.266	18.266	0.000	95	421638	1.60	1.29	
93 sec-Butylbenzene	105	18.525	18.525	0.000	98	644272	1.60	1.28	
94 1,3-Dichlorobenzene	146	18.541	18.541	0.000	96	316664	1.60	1.54	
95 Benzyl chloride	91	18.617	18.617	0.000	98	330466	1.60	1.75	
96 1,4-Dichlorobenzene	146	18.628	18.628	0.000	96	304082	1.60	1.41	
97 4-Isopropyltoluene	119	18.692	18.692	0.000	96	516405	1.60	1.31	
98 1,2,3-Trimethylbenzene	105	18.746	18.746	0.000	97	408668	1.60	1.20	
99 Butylcyclohexane	83	18.806	18.806	0.000	90	333570	1.60	1.18	
100 2,3-Dihydroindene	117	18.994	18.994	0.000	92	403704	1.60	1.27	
101 1,2-Dichlorobenzene	146	18.994	18.994	0.000	84	314551	1.60	1.41	
102 Indene	116	19.129	19.129	0.000	88	345870	1.60	1.55	
103 n-Butylbenzene	91	19.135	19.135	0.000	98	527607	1.60	1.33	
104 Undecane	57	19.458	19.458	0.000	85	329827	1.60	1.53	
105 1,2-Dibromo-3-Chloropropan	157	19.609	19.609	0.000	86	159071	1.60	1.38	
106 1,2,4,5-Tetramethylbenzene	119	19.900	19.900	0.000	97	501085	1.60	1.40	
107 Dodecane	57	20.515	20.515	0.000	83	327262	1.60	1.20	
108 1,2,4-Trichlorobenzene	180	20.704	20.704	0.000	93	256634	1.60	1.49	
109 Naphthalene	128	20.839	20.839	0.000	99	526065	1.60	1.44	
110 Hexachlorobutadiene	225	21.054	21.054	0.000	93	329986	1.60	1.48	
111 1,2,3-Trichlorobenzene	180	21.124	21.124	0.000	94	282703	1.60	1.54	
112 2-Methylnaphthalene	142	21.852	21.852	0.000	99	286020	1.60	1.25	
113 1-Methylnaphthalene	142	21.987	21.987	0.000	99	461278	1.60	0.9804	
A 116 C8 Range	1	14.123	(14.087-14.184)		0	1178639	1.60	1.44	
S 117 Xylenes, Total	100				0		4.80	3.88	
S 118 1,2-Dichloroethene, Total	1				0		3.20	2.77	

Reagents:

40CV101P_00112	Amount Added: 80.00	Units: ml	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

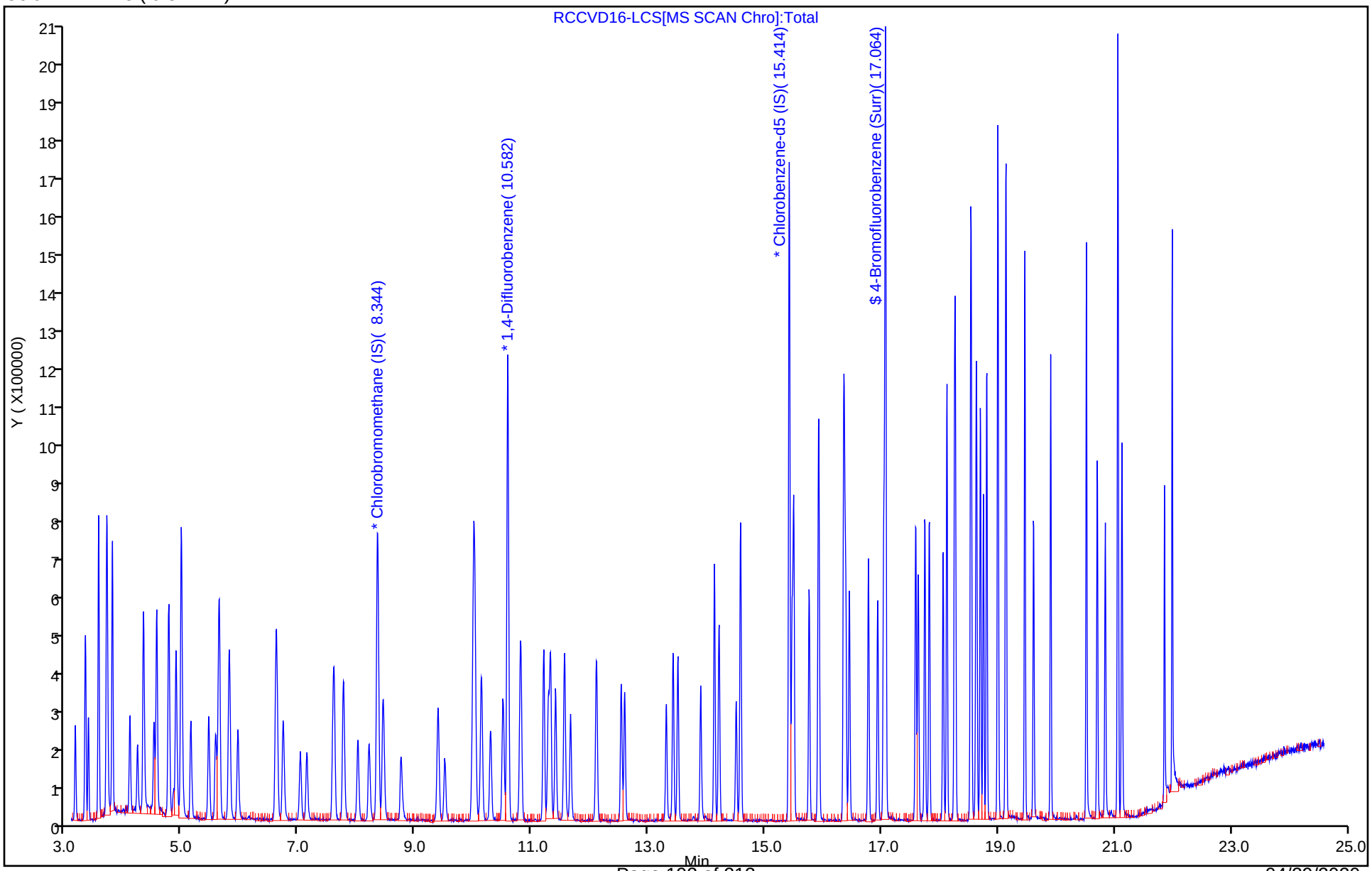
Report Date: 17-Apr-2020 11:03:49 Chrom Revision: 2.3 11-Mar-2020 18:53:20

TestAmerica Laboratories

Data File: \\chromfs\Knoxville\ChromData\MR\20200415-15214.b\RCCVD16-LCS.d

Injection Date:	16-Apr-2020 08:45:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	LCS			Worklist Smp#:	1002
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



TestAmerica Laboratories
Recovery Report

Data File: \\chromfs\Knoxville\ChromData\MR\20200415-15214.b\RCCVD16-LCS.d
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 16-Apr-2020 08:45:30 ALS Bottle#: 16 Worklist Smp#: 1002
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0015214-002
Misc. Info.: P111
Operator ID: HMT Instrument ID: MR

Method: \\chromfs\Knoxville\ChromData\MR\20200415-15214.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 17-Apr-2020 11:03:45 Calib Date: 10-Apr-2020 00:47:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MR\20200409-15180.b\RD09IC10.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1010

First Level Reviewer: khachitpongpanits Date: 17-Apr-2020 11:03:45

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.00	3.71	92.64

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-18854-1

SDG No.:

Instrument ID: MR Start Date: 04/09/2020 14:08

Analysis Batch Number: 38980 End Date: 04/10/2020 05:00

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 140-38980/1		04/09/2020 14:08	1	RBFBD09B.D	RTX-5 0.32(mm)
IC 140-38980/3		04/09/2020 15:05	1	RD09IC01.D	RTX-5 0.32(mm)
IC 140-38980/4		04/09/2020 15:53	1	RD09IC02.D	RTX-5 0.32(mm)
140-18737-A-1 MDLV		04/09/2020 15:53	1		RTX-5 0.32(mm)
ZZZZZ		04/09/2020 15:53	1		RTX-5 0.32(mm)
IC 140-38980/5		04/09/2020 16:41	1	RD09IC03.D	RTX-5 0.32(mm)
140-18737-A-2 MDLV		04/09/2020 16:41	1		RTX-5 0.32(mm)
ZZZZZ		04/09/2020 16:41	1		RTX-5 0.32(mm)
IC 140-38980/6		04/09/2020 17:31	1	RD09IC04.D	RTX-5 0.32(mm)
140-18737-A-3 MDLV		04/09/2020 17:31	1		RTX-5 0.32(mm)
ZZZZZ		04/09/2020 17:31	1		RTX-5 0.32(mm)
IC 140-38980/7		04/09/2020 18:21	1	RD09IC05.D	RTX-5 0.32(mm)
140-18737-A-4 MDLV		04/09/2020 18:21	1		RTX-5 0.32(mm)
ZZZZZ		04/09/2020 18:21	1		RTX-5 0.32(mm)
IC 140-38980/8		04/09/2020 19:10	1	RD09IC06.D	RTX-5 0.32(mm)
ICIS 140-38980/9		04/09/2020 19:59	1	RD09IC07.D	RTX-5 0.32(mm)
IC 140-38980/11		04/09/2020 21:34	1	RD09IC08.D	RTX-5 0.32(mm)
IC 140-38980/13		04/09/2020 23:10	1	RD09IC09.D	RTX-5 0.32(mm)
IC 140-38980/15		04/10/2020 00:47	1	RD09IC10.D	RTX-5 0.32(mm)
ICV 140-38980/17		04/10/2020 02:27	1	RD09ICV.D	RTX-5 0.32(mm)
ZZZZZ		04/10/2020 05:00	1		RTX-5 0.32(mm)

Eurofins/TestAmerica Knoxville GC/MS Air - Initial Calibration Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 21 & KNOX-MS-0023, Rev 4

Analysis Date:	4/9/20	Instrument:	MR	Chrom WL #:	15780	TALS Batch & Event #	TO14/15: 2394 38980	DODS: 2393/38981
							DOD: 2395/38983	OHIO: 2394/38982

Chrom/Worklist Review	1st	Comments	2nd
1. Re-read each Limit Group [method editor-limit groups]	✓		na
2. Verify LODV in Chrom [method editor -> edit -> MDL]	✓		na
3. Are the reagents and init/final volumes correct and first level "unlock/clear"? (Verify reagents & amt. injected at each level) [WL Sample Reagents Tab vs. Entech]	✓		
4. Files linked properly to calibration levels? [Sample List- Lab ID vs. Info]	✓		
5. Did BFB meet tune criteria? [F8]	✓		
6. Were all standards injected within 24 hr of BFB? [F7]	✓		
7. High point checked for saturation and point removed if so? [Chrom]	✓		
8. If manual integrations performed, are they properly performed, correct, baseline clearly identified, and correct reason given? [Chrom]	na		
9. RT for each IS ±20 sec avg. RT? [F6 IstdRec]	✓		
10. Area for each IS ± 40% avg. area? [F6 IstdRec]	✓		
11. Each analyte ± 0.06 RRT of avg. RRT? [F6 - RRT]	✓		
12. Elution order checked on isomeric pairs? [Chrom]			
• dichlorodifluoromethane / 1,2-dichlorotetrafluoroethane	✓		
• 2-methyl butane / acrolein	✓		
• trichlorofluoromethane / 1,1,2-trichlorotrifluoroethane	✓		
• vinyl acetate / hexane	✓		
• cis- and trans- isomers	✓		
• ethyl benzene / m/p-xylene / o-xylene	✓		
• n-propylbenzene/4-ethyl toluene/1,3,5-trimethylbenzene/1,2,4-trimethylbenzene/ sec-butylbenzene/1,2,3-trimethylbenzene	✓		
• tert-butylbenzene/4-isopropyltoluene	✓		
• 1,3-, 1,4-, and 1,2-dichlorobenzene	✓		
• 1,2-dimethyl-4-ethylbenzene/1,2,4,5-, 1,2,3,5-, and 1,2,3,4-tetramethylbenzenes	na	In ICV	
• 1,2,4- and 1,2,3-trichlorobenzenes	✓		
• 2-, and 1-methylnaphthalene	✓		
13. "Range" analytes & internal standard RIC ID'd correctly, inspected for interferences & proper integration?	✓		

MLG Review	TO	DOD	OH	Comments	TO-	DOD	OH
14. Is %RSD for all target analytes ≤ 30%? (with up to 2 compounds with RSD ≤ 40%) 1& 2 methylnaphthalene ≤ 50% [F6 Σ]	✓	✓	✓	MeCl, Dodec.			
15. Were at least 5 levels of each compound analyzed? [F6]	✓	✓	✓				
16. Is low level std at or <RL and are the remaining points consec.? [F6]	✓	✓	✓				
17. At least 6 consec. points used for quad curves; at least 5 consec. points for linear curves? (Note: Ohio does not allow quad) [F6]	✓	✓	✓				
18. If curves were used, is correlation coefficient ≥0.990? [F6]	✓	✓	✓				
19. Is the intercept less than the RL for each curve? [F6]	✓	✓	✓				
20. For quadratic: is a tangent's slope to the curve entirely positive or negative and continuous. [Cntrl-C, details]	✓	✓	na				na
21. Is low point RSE ≤ 50 %? [F6]	✓	✓	✓				
22. Is the second source analysis within limits? [F8 - icv]	✓	✓	✓				

Analyst/Date: 4/10/20 several ICV ↑ #10. IPA, #1°, #8 DNU DODS - MeCl, Dod. cmpds. **2nd Level Reviewer/Date:**

TALS Review	TO	DOD	OH	Comments	TO	DOD	OH
23. Upload ICAL	✓				na	na	na
24. Graphics uploaded? [paperclip]	✓	✓	✓				
25. All points are in the most recent active calibration event? [Calibration Events –'Fix ICAL linkage' if needed]	✓	✓	✓				
26. Runs linked to BFB? [QC Links]	✓	✓	✓				
27. Run Checklist and acknowledge findings [F8]	✓	✓	✓				
28. If criteria not met, was a NCM generated?	✓	✓	✓				
29. After review in TALS, approve the method in TALS.	na	na	na				
30. After verifying TALS is correct, lock method in Chrom <resolve any error issues>	na	na	na				
31. Checklist & Entech report scanned, attached & assigned properly?	na	na	na				

Analyst/date: 4/12/20 **2nd Level Reviewer/date:**

Comments: NCM ↑ ICV - 1,2 Dichloro 1,1,2,2 tetrafluoroethane. NCM -

Comments:

Eurofins/TestAmerica Knoxville GC/MS Air - Initial Calibration Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 20 & KNOX-MS-0023, Rev 4

Analysis Date:	4/9/20	Instrument:	MR	Chrom WL #:	15180	TALS Batch & Event #	TO14/15: 38980 /2392	DOD5: 38981/2393
							DOD: 38983 / 2394	OHIO: 38982/2394

Chrom/Worklist Review	1st	Comments	2nd
1. Re-read each Limit Group [method editor-limit groups]			na
2. Verify LODV in Chrom [method editor -> edit -> MDL]			na
3. Are the reagents and init/final volumes correct and first level "unlock/clear"? (Verify reagents & amt. injected at each level) [WL Sample Reagents Tab vs. Entech]			Y
4. Files linked properly to calibration levels? [Sample List- Lab ID vs. Info]			Y
5. Did BFB meet tune criteria? [F8]			Y
6. Were all standards injected within 24 hr of BFB? [F7]			Y
7. High point checked for saturation and point removed if so? [Chrom]			Y
8. If manual integrations performed, are they properly performed, correct, baseline clearly identified, and correct reason given? [Chrom]			NA
9. RT for each IS ±20 sec avg. RT? [F6 IstdRec]			Y
10. Area for each IS ± 40% avg. area? [F6 IstdRec]			Y
11. Each analyte ± 0.06 RRT of avg. RRT? [F6 - RRT]			Y
12. Elution order checked on isomeric pairs? [Chrom]			
• dichlorodifluoromethane / 1,2-dichlorotetrafluoroethane			Y
• 2-methyl butane / acrolein			Y
• trichlorofluoromethane / 1,1,2-trichlorotrifluoroethane			Y
• vinyl acetate / hexane			Y
• cis- and trans- isomers			Y
• ethyl benzene / m/p-xylene / o-xylene			Y
• n-propylbenzene/4-ethyl toluene/1,3,5-trimethylbenzene/1,2,4-trimethylbenzene/ sec-butylbenzene/1,2,3-trimethylbenzene			NA
• tert-butylbenzene/4-isopropyltoluene			Y
• 1,3- , 1,4- , and 1,2-dichlorobenzene			Y
• 1,2-dimethyl-4-ethylbenzene/1,2,4,5-, 1,2,3,5-, and 1,2,3,4-tetramethylbenzenes			Y
• 1,2,4- and 1,2,3-trichlorobenzenes			Y
• 2-, and 1-methylnaphthalene			Y
13. "Range" analytes & internal standard RIC ID'd correctly, inspected for interferences & proper integration?			Y

MLG Review	TO	DOD	OH	Comments	TO-	DOD	OH
14. Is %RSD for all target analytes ≤ 30%? (with up to 2 compounds with RSD ≤ 40%) 1& 2 methylnaphthalene ≤ 50% [F6 ∑]				mecl2 dodecane	Y	Y	Y
15. Were at least 5 levels of each compound analyzed? [F6]					Y	Y	Y
16. Is low level std at or <RL and are the remaining points consec.? [F6]					Y	Y	Y
17. At least 6 consec. points used for quad curves; at least 5 consec. points for linear curves? (Note: Ohio does not allow quad) [F6]					Y	Y	Y
18. If curves were used, is correlation coefficient ≥0.990? [F6]					Y	Y	Y
19. Is the intercept less than the RL for each curve? [F6]					Y	Y	Y
20. For quadratic: is a tangent's slope to the curve entirely positive or negative and continuous. [Cntrl-C, details]			na		NA	NA	na
21. Is low point RSE ≤ 50 %? [F6]					Y	Y	Y
22. Is the second source analysis within limits? [F8 - icv]					Y	Y	Y

Analyst/Date:	2nd Level Reviewer/Date: LL 4/13/20

TALS Review	TO	DOD	OH	Comments	TO	DOD	OH
23. Upload ICAL					na	na	na
24. Graphics uploaded? [paperclip]					Y	Y	Y
25. All points are in the most recent active calibration event? [Calibration Events –'Fix ICAL linkage' if needed]					Y	Y	Y
26. Runs linked to BFB? [QC Links]					Y	Y	Y
27. Run Checklist and acknowledge findings [F8]					Y	Y	Y
28. If criteria not met, was a NCM generated?				NCM 22629	Y	Y	Y
29. After review in TALS, approve the method in TALS.	na	na	na		Y	Y	Y
30. After verifying TALS is correct, lock method in Chrom <resolve any error issues>	na	na	na		Y	Y	Y
31. Checklist & Entech report scanned, attached & assigned properly?	na	na	na		Y	Y	Y

Analyst/date:	2nd Level Reviewer/date: LL 4/13/20
Comments:	Comments:

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-18854-1

SDG No.:

Instrument ID: MR Start Date: 04/16/2020 08:18

Analysis Batch Number: 39061 End Date: 04/17/2020 07:49

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 140-39061/1		04/16/2020 08:18	1	RBFBD16.D	RTX-5 0.32(mm)
CCVIS 140-39061/2		04/16/2020 08:45	1	RCCVD16.D	RTX-5 0.32(mm)
LCS 140-39061/1002		04/16/2020 08:45	1	RCCVD16-LCS.d	RTX-5 0.32(mm)
ZZZZZ		04/16/2020 09:58	1		RTX-5 0.32(mm)
MB 140-39061/5		04/16/2020 11:51	1	R500BD16.D	RTX-5 0.32(mm)
ZZZZZ		04/16/2020 12:45	1.41		RTX-5 0.32(mm)
ZZZZZ		04/16/2020 13:34	1		RTX-5 0.32(mm)
ZZZZZ		04/16/2020 14:29	1.69		RTX-5 0.32(mm)
ZZZZZ		04/16/2020 15:26	1.78		RTX-5 0.32(mm)
ZZZZZ		04/16/2020 16:21	2.09		RTX-5 0.32(mm)
ZZZZZ		04/16/2020 17:18	2.03		RTX-5 0.32(mm)
140-18854-1		04/16/2020 18:53	1	RD16P108.D	RTX-5 0.32(mm)
140-18854-2		04/16/2020 19:40	1	RD16P109.D	RTX-5 0.32(mm)
140-18854-3		04/16/2020 20:28	1	RD16P110.D	RTX-5 0.32(mm)
ZZZZZ		04/16/2020 21:42	1		RTX-5 0.32(mm)
ZZZZZ		04/16/2020 22:29	1		RTX-5 0.32(mm)
ZZZZZ		04/16/2020 23:18	1		RTX-5 0.32(mm)
ZZZZZ		04/17/2020 00:06	1		RTX-5 0.32(mm)
ZZZZZ		04/17/2020 00:53	1		RTX-5 0.32(mm)
ZZZZZ		04/17/2020 01:42	1		RTX-5 0.32(mm)
ZZZZZ		04/17/2020 07:49	1		RTX-5 0.32(mm)

Eurofins/TestAmerica Knoxville GC/MS Air - Batch Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 21 & KNOX-MS-0023, Rev 4

Instrument/Date	MR 4/16/20		Routine	DOD	OHIO VAP
CCAL Chrom WL #	15214	CCAL Batch #	39061		39109
ICAL Chrom WL #	15180	ICAL Batch # / Event #	38980 / 2392	/	38982 / 2394

Chrom Review	1st	If No, why is data reportable?	2nd
1. Are the reagents & init/final volumes correct? (Verify reagents & amt. injected) [WL Sample Reagent Tab]	✓		na
2. Did BFB meet tune criteria? [F8]	✓	☐ [Failed TO-14A, but passes TO-15]	
3. Was the CCAL compared to the most recent & correct ICAL (correct last ICal File batch #/start/end Cal date/time)? [F8]	✓	List Target analytes outside CCV limits: 1,2-Dichloro-1,1,2,2-tetrafluoroethane	
4. Elution order checked on isomeric pairs? [Chrom]			
• dichlorodifluoromethane / 1,2-dichlorotetrafluoroethane	✓		
• 2-methyl butane / acrolein	✓		
• trichlorofluoromethane / 1,1,2-trichlorotrifluoroethane	✓		
• vinyl acetate / hexane	✓		
• cis- and trans- isomers	✓		
• ethyl benzene / m/p-xylene / o-xylene	✓		
• n-propylbenzene/4-ethyl toluene/1,3,5-trimethylbenzene/1,2,4-trimethylbenzene/sec-butylbenzene/1,2,3-trimethylbenzene	✓		
• tert-butylbenzene/4-isopropyltoluene	✓		
• 1,3- , 1,4- , and 1,2-dichlorobenzene	✓		
• 1,2-dimethyl-4-ethylbenzene/1,2,4,5-, 1,2,3,5-, and 1,2,3,4-tetramethylbenzenes	NA		
• 1,2,4-trichlorobenzene/1,2,3-trichlorobenzene	✓		
• 2-, and 1-methylnaphthalene	✓		
5. "Range" analytes & internal standard RIC ID'd correctly, inspected for interferences & proper integration?	✓		
6. Has the RT been updated to the method?	✓		
Analyst/date Stephanie Kh 4/17/20		**2nd Level Reviewer/date**	

7. Has the vol injected been verified vs Entech & corrected if actual amount differs >5%? [WL Sample Info: init amt = sample amt; final amt = 500 mL]	✓		
8. Do the lab ID, Info 1 and Dilution Factor columns correlate in Chrom? [Sample List - Lab ID vs. Info 1 vs. Dilution]	✓		
9. Can dilution history verified? [Mgmt Report]	✓		
10. Are all analytes present in the system blank < RL? (<1/2 RL for DoD). *If no, list blank ID:*	✓	☐ Method Blank – Report, ND (NCM#_____) ☐ Method Blank – Report, 10X (NCM#_____)	
11. All runs - peaks ID'd correctly and false positives removed?	✓		
12. If manual integrations performed, are they properly performed, baseline clearly identified, and correct reason given?	✓		
13. IS/Surr within limits? *List samples and reason (e.g.,* 1 thru 5*):* [Batch Results IS & SUR Tab] Sample / Reason / Sample / Reason	✓	☐ (1) Surrogate – Matrix (NCM#_____) ☐ (2) Surrogate – High, ND (NCM#_____) ☐ (3) ISTD – RA/RA Concurs (NCM#_____) ☐ (4) Surrogate –RX concur, Report both (NCM#_____) ☐ (5) ISTD – Matrix, DL required (NCM#_____)	
14. Samples outside calibration range scheduled for dilution?	NA	☐ ICAL – Range Exceeded; Minimum Dilution	

Chrom Review	1st	If No, why is data reportable?	2nd
15. For first analysis that is at a dilution, is highest target analyte >20% cal range? *List samples and reason:* Sample / Reason / Sample / Reason 140-18856-3 / NT	✓	☐ (1) Reporting Limit – Dilution, Matrix (NCM#_____) ☑ (2) Reporting Limit – Dilution, Non-Target (NCM# 22689) ☐ (3) Issues with initial collection volume; see DRC.	
16. RIC inspected for proper integration for TPH?	✓		
17. Obvious non-TPH peaks excluded?	✓		
18. Individual TPH peak area < octane high point area?	✓		

Eurofins/TestAmerica Knoxville GC/MS Air - Batch Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 21 & KNOX-MS-0023, Rev 4

TALS Review	1st	If No, why is data reportable?	2nd
19. Graphics uploaded? [open one paperclip]	✓		
20. NCM generated if BFB failed TO-14A criteria, but passes TO-15?	✓	☑ [Failed TO-14A, but passes TO-15] (NCM# 22686)	
21. Is the %D ≤ 30% for all target analytes? [≤ 50% for 1&2 methylnaphthalene] [Chrom-F8] [TALS-Sample Results Tab]	✓	□ CCV - %D - LCS criteria met (NCM#_____) ☑ CCV - %D high - outside criteria, samples ND, Sample IDs Included (NCM# 22687)	
22. Undiluted volume analyzed meets the method requirement (200 mL vs. 500 mL)?	✓		na
23. Project & sample special instructions verified?	✓		
24. If samples were Tedlar bags, was the 72 hr HT met? ** Narrate transfer to can.	✓	□ Air Analysis - Air Sample Transfer to Canister (NCM#____)	
25. Sample analyses done within analytical holding time?	✓	□ Holding Time – Received w/Insufficient Time (NCM#_____) □ Holding Time – Receipt (NCM#_____)	
26. Did the LCS meet criteria (70-130% with a limited # allowed 60-140% (see table) provisional analyte limit 60-140% with a limited # allowed 50-150%, and no two consecutive MEs). [Sample Results Tab] Note: No LCS required for OH VAP.	✓	□ Marginal Exceedances - Within ME Limits and Random; Report (NCM# ___) ☑ LCS/LCSD - %R High (NCM# 22688)	
27. Suffixes assigned properly (DL/RE)? [Sample List Tab]	NA		
28. Each job has QC created (BFB, CCV, LCS, MB)? [Sample List Tab]	✓		
29. Analytes over calibration range set to secondary [Conditions Review Tab]	NA		
30. Samples not reported set to 'Acceptable' or 'Rejected'? [Sample Results Tab]	✓		
31. DUP done per 20 samples and are all RPDs within limits? (for target analytes >5x RL, <25% RPD; no criteria for n-butanol) *(If DUP not reported - set to 'Acceptable' for each job)*	NA		
32. Samples linked to proper blank (200 mL or 500 mL)? [QC links]	✓	**500 mL blank ID:** 140-39061/5, 140-39109/5 **200 mL blank ID:** 140-39061/18	
33. Samples linked to job's BFB/CCV/LCS/MB? [QC Links]	✓		
34. Correct ICV linked to each MB? [QC Links]	✓		
35. Were all samples/QC analyzed within 24 hr of BFB? [F7]	✓		
36. If criteria were not met, was a NCM generated, and assigned to proper QC & samples? [Also see Conditions Review Tab]	✓		
37. Run Checklist and acknowledge findings [F8]	✓		
38. Runs set to 1st level review?	✓	Runs set to 2nd level review?	
39. QC checker run and items addressed?	-na-		
40. Checklist & Entech report scanned, attached & assigned properly?	-na-		

Number of target analytes in LCS	# marginal exceedances of LCS control limits allowed
>90	5
71 - 90	4
51 - 70	3
31 - 50	2
11 - 30	1
< 11	0

Analyst: Sophawan Kh.	Date: 4/17/20	2nd Level Reviewer :	Date:
Comments:		**Comments:**	

Example Calculation: 140-18855-1 TCE

On-column ppbv x Final Vol (mL)/Entech Initial Vol (mL) x Canister Dilution Log DF

$5.431803 \times \frac{500}{20} \times 9.58 = 1301$

Eurofins/TestAmerica Knoxville GC/MS Air - Batch Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 20 & KNOX-MS-0023, Rev 4

Instrument/Date	MR 4/16/20		Routine	DOD	OHIO VAP
CCAL Chrom WL #	15214	CCAL Batch #	39061		39109
ICAL Chrom WL #	15180	ICAL Batch # / Event #	38980 /2392	/	38982/2394

Chrom Review	1st	If No, why is data reportable?	2nd
1. Are the reagents & init/final volumes correct? (Verify reagents & amt. injected) [WL Sample Reagent Tab]			na
2. Did BFB meet tune criteria? [F8]		□ [Failed TO-14A, but passes TO-15]	Y
3. Was the CCAL compared to the most recent & correct ICAL (correct last ICal File batch #/start/end Cal date/time)? [F8]		List Target analytes outside CCV limits: _____ _____ _____	Y
4. Elution order checked on isomeric pairs? [Chrom]			
• dichlorodifluoromethane / 1,2-dichlorotetrafluoroethane			Y
• 2-methyl butane / acrolein			Y
• trichlorofluoromethane / 1,1,2-trichlorotrifluoroethane			Y
• vinyl acetate / hexane			Y
• cis- and trans- isomers			Y
• ethyl benzene / m/p-xylene / o-xylene			Y
• n-propylbenzene/4-ethyl toluene/1,3,5-trimethylbenzene/1,2,4-trimethylbenzene/sec-butylbenzene/1,2,3-trimethylbenzene			Y
• tert-butylbenzene/4-isopropyltoluene			Y
• 1,3- , 1,4- , and 1,2-dichlorobenzene			Y
• 1,2-dimethyl-4-ethylbenzene/1,2,4,5-, 1,2,3,5-, and 1,2,3,4-tetramethylbenzenes			NA
• 1,2,4-trichlorobenzene/1,2,3-trichlorobenzene			Y
• 2-, and 1-methylnaphthalene			Y
5. "Range" analytes & internal standard RIC ID'd correctly, inspected for interferences & proper integration?			Y
6. Has the RT been updated to the method?			Y
Analyst/date		**2nd Level Reviewer/date LL 4/17/20**	

7. Has the vol injected been verified vs Entech & corrected if actual amount differs >5%? [WL Sample Info: init amt = sample amt; final amt = 500 mL]			Y
8. Do the lab ID, Info 1 and Dilution Factor columns correlate in Chrom? [Sample List - Lab ID vs. Info 1 vs. Dilution]			Y
9. Can dilution history verified? [Mgmt Report]			Y
10. Are all analytes present in the system blank < RL**?** (<1/2 RL for DoD). *If no, list blank ID:*		□ Method Blank – Report, ND (NCM#_____) □ Method Blank – Report, 10X (NCM#_____)	Y
11. All runs - peaks ID'd correctly and false positives removed?			Y
12. If manual integrations performed, are they properly performed, baseline clearly identified, and correct reason given?			Y
13. IS/Surr within limits? *List samples and reason (e.g.,* 1 thru 5*):* [Batch Results IS & SUR Tab] Sample Reason Sample Reason _____ _____ _____ _____ _____ _____ _____ _____		□ (1) Surrogate – Matrix (NCM#_____) □ (2) Surrogate – High, ND (NCM#_____) □ (3) ISTD – RA/RA Concurs (NCM#_____) □ (4) Surrogate –RX concur, Report both (NCM#_____) □ (5) ISTD – Matrix, DL required (NCM#_____)	Y
14. Samples outside calibration range scheduled for dilution?		□ ICAL – Range Exceeded; Minimum Dilution	Y
Chrom Review	**1st**	**If No, why is data reportable?**	**2nd**
15. For first analysis that is at a dilution, is highest target analyte >20% cal range? *List samples and reason:* Sample Reason Sample Reason _____ _____ _____ _____ _____ _____ _____ _____		□ (1) Reporting Limit – Dilution, Matrix (NCM#_____) □ (2) Reporting Limit – Dilution, Non-Target (NCM#_____) □ (3) Issues with initial collection volume; see DRC.	Y
16. RIC inspected for proper integration for TPH?			Y
17. Obvious non-TPH peaks excluded?			Y
18. Individual TPH peak area < octane high point area?			Y

Eurofins/TestAmerica Knoxville GC/MS Air - Batch Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 20 & KNOX-MS-0023, Rev 4

TALS Review	**1st**	**If No, why is data reportable?**	**2nd**
19. Graphics uploaded? [open one paperclip]			**Y**
20. NCM generated if BFB failed TO-14A criteria, but passes TO-15?		□ [Failed TO-14A, but passes TO-15] (NCM#_____)	**Y**
21. Is the %D ≤ 30% for all target analytes? [≤ 50% for 1&2 methylnaphthalene] [Chrom-F8] [TALS-Sample Results Tab]		□ CCV - %D - LCS criteria met (NCM#_____) □ CCV - %D high - outside criteria, samples ND, Sample IDs Included (NCM#_____)	**Y**
22. Undiluted volume analyzed meets the method requirement (200 mL vs. 500 mL)?			**na**
23. Project & sample special instructions verified?			**Y**
24. If samples were Tedlar bags, was the 72 hr HT met? ** Narrate transfer to can.		□ Air Analysis - Air Sample Transfer to Canister (NCM#____)	**NA**
25. Sample analyses done within analytical holding time?		□ Holding Time – Received w/Insufficient Time (NCM#_____) □ Holding Time – Receipt (NCM#_____)	**Y**
26. Did the LCS meet criteria (70-130% with a limited # allowed 60-140% (see table) provisional analyte limit 60-140% with a limited # allowed 50-150%, and no two consecutive MEs). [Sample Results Tab] Note: No LCS required for OH VAP.		□ Marginal Exceedances - Within ME Limits and Random; Report (NCM# ___) □ LCS/LCSD - %R High (NCM#_____)	**Y**
27. Suffixes assigned properly (DL/RE)? [Sample List Tab]			**NA**
28. Each job has QC created (BFB, CCV, LCS, MB)? [Sample List Tab]			**Y**
29. Analytes over calibration range set to secondary [Conditions Review Tab]			**NA**
30. Samples not reported set to 'Acceptable' or 'Rejected'? [Sample Results Tab]			**Y**
31. DUP done per 20 samples and are all RPDs within limits? (for target analytes >5x RL, <25% RPD; no criteria for n-butanol) *(If DUP not reported - set to 'Acceptable' for each job)*		**LCSD ok**	**Y**
32. Samples linked to proper blank (200 mL or 500 mL)? [QC links]		**500 mL blank ID: ___5_____** **200 mL blank ID: ___18_____**	**Y**
33. Samples linked to job's BFB/CCV/LCS/MB? [QC Links]			**Y**
34. Correct ICV linked to each MB? [QC Links]			**Y**
35. Were all samples/QC analyzed within 24 hr of BFB? [F7]			**Y**
36. If criteria were not met, was a NCM generated, and assigned to proper QC & samples? [Also see Conditions Review Tab]			**Y**
37. Run Checklist and acknowledge findings [F8]			**Y**
38. Runs set to 1st level review?		Runs set to 2nd level review?	**Y**
39. QC checker run and items addressed?	**-na-**		**Y**
40. Checklist & Entech report scanned, attached & assigned properly?	**-na-**		**Y**

Number of target analytes in LCS / # marginal exceedances of LCS control limits allowed

Number of target analytes in LCS	# marginal exceedances of LCS control limits allowed
>90	5
71 - 90	4
51 - 70	3
31 - 50	2
11 - 30	1
< 11	0

Analyst:	**Date:**	**2nd Level Reviewer : LL**	**Date: 4/17/20**
Comments:		**Comments:**	
Example Calculation:			
On-column ppbv x Final Vol (mL)/Entech Initial Vol (mL) x Canister Dilution Log DF			

AIR - GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Knoxvill Job No.: 140-18854-1

SDG No.:

Batch Number: 39061 Batch Start Date: 04/16/20 08:18 Batch Analyst: Khachitpongpanit, Suphawa

Batch Method: TO 15 LL Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	InitialPressure	FinalPressure	40CV101P 00112	40MXISSURP 00004
BFB 140-39061/1		TO 15 LL		500 mL	500 mL	1	1		
CCVIS 140-39061/2		TO 15 LL		500 mL	500 mL	1	1	80 mL	40 mL
MB 140-39061/5		TO 15 LL		500 mL	500 mL	1	1		40 mL
140-18854-A-1	BLDG A - EFFLUENT	TO 15 LL	T	100 mL	500 mL	1	1		40 mL
140-18854-A-2	BLDG A - MID GAC	TO 15 LL	T	100 mL	500 mL	1	1		40 mL
140-18854-A-3	BLDG A - INFLUENT	TO 15 LL	T	25 mL	500 mL	1	1		40 mL
LCS 140-39061/1002		TO 15 LL		500 mL	500 mL	1	1	80 mL	40 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	40MXSUR 00003					
BFB 140-39061/1		TO 15 LL		40 mL					
CCVIS 140-39061/2		TO 15 LL							
MB 140-39061/5		TO 15 LL							
140-18854-A-1	BLDG A - EFFLUENT	TO 15 LL	T						
140-18854-A-2	BLDG A - MID GAC	TO 15 LL	T						
140-18854-A-3	BLDG A - INFLUENT	TO 15 LL	T						
LCS 140-39061/1002		TO 15 LL							

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-18601-1

SDG No.:

Client Sample ID: 10746 Lab Sample ID: 140-18601-14

Matrix: Air Lab File ID: C20L18601.D

Analysis Method: TO 15 LL Date Collected: 03/17/2020 17:40

Sample wt/vol: 200(mL) Date Analyzed: 03/21/2020 02:57

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 38441 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	ND		0.20	
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.20	
79-00-5	1,1,2-Trichloroethane	ND		0.20	
76-13-1	1,1,2-Trichlorotrifluoroethane	ND		0.20	
75-34-3	1,1-Dichloroethane	ND		0.20	
75-35-4	1,1-Dichloroethene	ND		0.10	
87-61-6	1,2,3-Trichlorobenzene	ND	*	1.0	
96-18-4	1,2,3-Trichloropropane	ND		0.50	
526-73-8	1,2,3-Trimethylbenzene	ND		0.20	
95-93-2	1,2,4,5-Tetramethylbenzene	ND		0.20	
120-82-1	1,2,4-Trichlorobenzene	ND		0.20	
95-63-6	1,2,4-Trimethylbenzene	ND		0.20	
96-12-8	1,2-Dibromo-3-Chloropropane	ND		0.40	
106-93-4	1,2-Dibromoethane	ND		0.20	
95-50-1	1,2-Dichlorobenzene	ND		0.20	
107-06-2	1,2-Dichloroethane	ND		0.20	
78-87-5	1,2-Dichloropropane	ND		0.20	
76-14-2	1,2-Dichlorotetrafluoroethane	ND		0.20	
108-67-8	1,3,5-Trimethylbenzene	ND		0.20	
106-99-0	1,3-Butadine	ND		0.40	
541-73-1	1,3-Dichlorobenzene	ND		0.20	
106-46-7	1,4-Dichlorobenzene	ND		0.20	
123-91-1	1,4-Dioxane	ND		0.50	
71-36-3	1-Butanol	ND		2.0	
90-12-0	1-Methylnaphthalene	ND		2.5	
540-84-1	2,2,4-Trimethylpentane	ND		0.50	
565-59-3	2,3-Dimethylpentane	ND		0.20	
78-93-3	2-Butanone	ND		0.80	
95-49-8	2-Chlorotoluene	ND		0.40	
591-78-6	2-Hexanone	ND		0.50	
78-78-4	2-Methylbutane	ND		0.50	
91-57-6	2-Methylnaphthalene	ND		2.5	
107-83-5	2-Methylpentane	ND		0.20	
107-05-1	3-Chloroprene	ND		0.20	
622-96-8	4-Ethyltoluene	ND		0.40	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		0.50	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-18601-1

SDG No.:

Client Sample ID: 10746 Lab Sample ID: 140-18601-14

Matrix: Air Lab File ID: C20L18601.D

Analysis Method: TO 15 LL Date Collected: 03/17/2020 17:40

Sample wt/vol: 200(mL) Date Analyzed: 03/21/2020 02:57

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 38441 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
67-64-1	Acetone	ND		5.0	
75-05-8	Acetonitrile	ND		1.0	
107-02-8	Acrolein	ND		1.0	
107-13-1	Acrylonitrile	ND		2.0	
98-83-9	Alpha Methyl Styrene	ND		0.40	
71-43-2	Benzene	ND		0.20	
100-44-7	Benzyl chloride	ND		0.40	
75-27-4	Bromodichloromethane	ND		0.20	
75-25-2	Bromoform	ND		0.20	
74-83-9	Bromomethane	ND		0.20	
106-97-8	Butane	ND		0.40	
75-15-0	Carbon disulfide	ND		0.50	
56-23-5	Carbon tetrachloride	ND		0.080	
108-90-7	Chlorobenzene	ND		0.20	
75-45-6	Chlorodifluoromethane	ND		0.20	
75-00-3	Chloroethane	ND		0.20	
67-66-3	Chloroform	ND		0.20	
74-87-3	Chloromethane	ND		0.50	
156-59-2	cis-1,2-Dichloroethene	ND		0.10	
10061-01-5	cis-1,3-Dichloropropene	ND		0.20	
98-82-8	Cumene	ND		0.40	
110-82-7	Cyclohexane	ND		0.50	
124-48-1	Dibromochloromethane	ND		0.20	
74-95-3	Dibromomethane	ND		0.40	
75-71-8	Dichlorodifluoromethane	ND		0.20	
64-17-5	Ethanol	ND		5.0	
141-78-6	Ethyl acetate	ND		2.0	
60-29-7	Ethyl ether	ND		2.0	
100-41-4	Ethylbenzene	ND		0.20	
87-68-3	Hexachlorobutadiene	ND		0.20	
110-54-3	Hexane	ND		0.50	
496-11-7	Indane	ND		0.20	
95-13-6	Indene	ND		0.40	
67-63-0	Isopropyl alcohol	ND		2.0	
80-62-6	Methyl methacrylate	ND		0.50	
1634-04-4	Methyl tert-butyl ether	ND		0.40	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-18601-1

SDG No.:

Client Sample ID: 10746 Lab Sample ID: 140-18601-14

Matrix: Air Lab File ID: C20L18601.D

Analysis Method: TO 15 LL Date Collected: 03/17/2020 17:40

Sample wt/vol: 200(mL) Date Analyzed: 03/21/2020 02:57

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 38441 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
108-87-2	Methylcyclohexane	ND		0.20	
75-09-2	Methylene Chloride	ND		1.0	
179601-23-1	m-Xylene & p-Xylene	ND		0.20	
91-20-3	Naphthalene	ND	*	0.50	
104-51-8	n-Butylbenzene	ND		0.40	
124-18-5	n-Decane	ND		1.0	
112-40-3	n-Dodecane	ND		1.0	
142-82-5	n-Heptane	ND		0.50	
111-84-2	n-Nonane	ND		0.50	
111-65-9	n-Octane	ND		0.40	
103-65-1	N-Propylbenzene	ND	*	0.40	
95-47-6	o-Xylene	ND		0.20	
99-87-6	p-Cymene	ND	*	0.20	
109-66-0	Pentane	ND		1.0	
115-07-1	Propene	ND		2.5	
135-98-8	sec-Butylbenzene	ND		0.40	
100-42-5	Styrene	ND		0.20	
75-65-0	tert-Butanol	ND		0.80	
98-06-6	tert-Butylbenzene	ND		0.50	
127-18-4	Tetrachloroethene	ND		0.10	
109-99-9	Tetrahydrofuran	ND		1.0	
110-02-1	Thiophene	ND		0.20	
108-88-3	Toluene	ND		0.30	
156-60-5	trans-1,2-Dichloroethene	ND		0.20	
10061-02-6	trans-1,3-Dichloropropene	ND		0.20	
79-01-6	Trichloroethene	ND		0.090	
75-69-4	Trichlorofluoromethane	ND		0.20	
1120-21-4	Undecane	ND		1.0	
108-05-4	Vinyl acetate	ND		1.0	
593-60-2	Vinyl bromide	ND		0.20	
75-01-4	Vinyl chloride	ND		0.10	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TARGETED TENATIVELY IDENTIFIED COMPOUNDS

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-18601-1

SDG No.:

Client Sample ID: 10746 Lab Sample ID: 140-18601-14

Matrix: Air Lab File ID: C20L18601.D

Analysis Method: TO 15 LL Date Collected: 03/17/2020 17:40

Sample wt/vol: 200(mL) Date Analyzed: 03/21/2020 02:57

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 38441 Units: ppb v/v

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
488-23-3	1,2,3,4-Tetramethylbenzene TIC		ND		
527-53-7	1,2,3,5-Tetramethylbenzene TIC		ND		
934-80-5	1,2-Dimethyl-4-Ethylbenzene TIC		ND		
872-55-9	2-Ethylthiophene TIC		ND		
554-14-3	2-Methylthiophene TIC		ND		
616-44-4	3-Methylthiophene TIC		ND		
95-15-8	Benzo(b)thiophene TIC		ND		

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromna\Knoxville\ChromData\MG\20200318-14964.b\C20L18601.D				
Lims ID:	140-18601-A-14				
Client ID:	10746				
Sample Type:	Client				
Inject. Date:	21-Mar-2020 02:57:30	ALS Bottle#:	2	Worklist Smp#:	28
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0014964-028				
Misc. Info.:	10746				
Operator ID:	7126	Instrument ID:	MG		
Method:	\\chromna\Knoxville\ChromData\MG\20200318-14964.b\MG_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	23-Mar-2020 11:12:45	Calib Date:	13-Mar-2020 00:45:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Knoxville\ChromData\MG\20200312-14911.b\GC12IC10.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX0332				
First Level Reviewer: khachitpongpanits		Date:	23-Mar-2020 11:13:22		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.887	8.892	-0.005	92	301942	4.00	
* 2 1,4-Difluorobenzene	114	11.071	11.076	-0.005	95	2133476	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.789	15.794	-0.005	88	1889842	4.00	
$ 4 4-Bromofluorobenzene (Surr	95	17.428	17.428	0.000	85	1321136	3.91	
7 Propene	41	3.732	3.729	0.000	98	74400	0.1936	7
47 1,1,1-Trichloroethane	97	9.928	9.927	-0.005	98	6604	0.0251	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

40MXISSURP_00004 Amount Added: 40.00 Units: mL Run Reagent

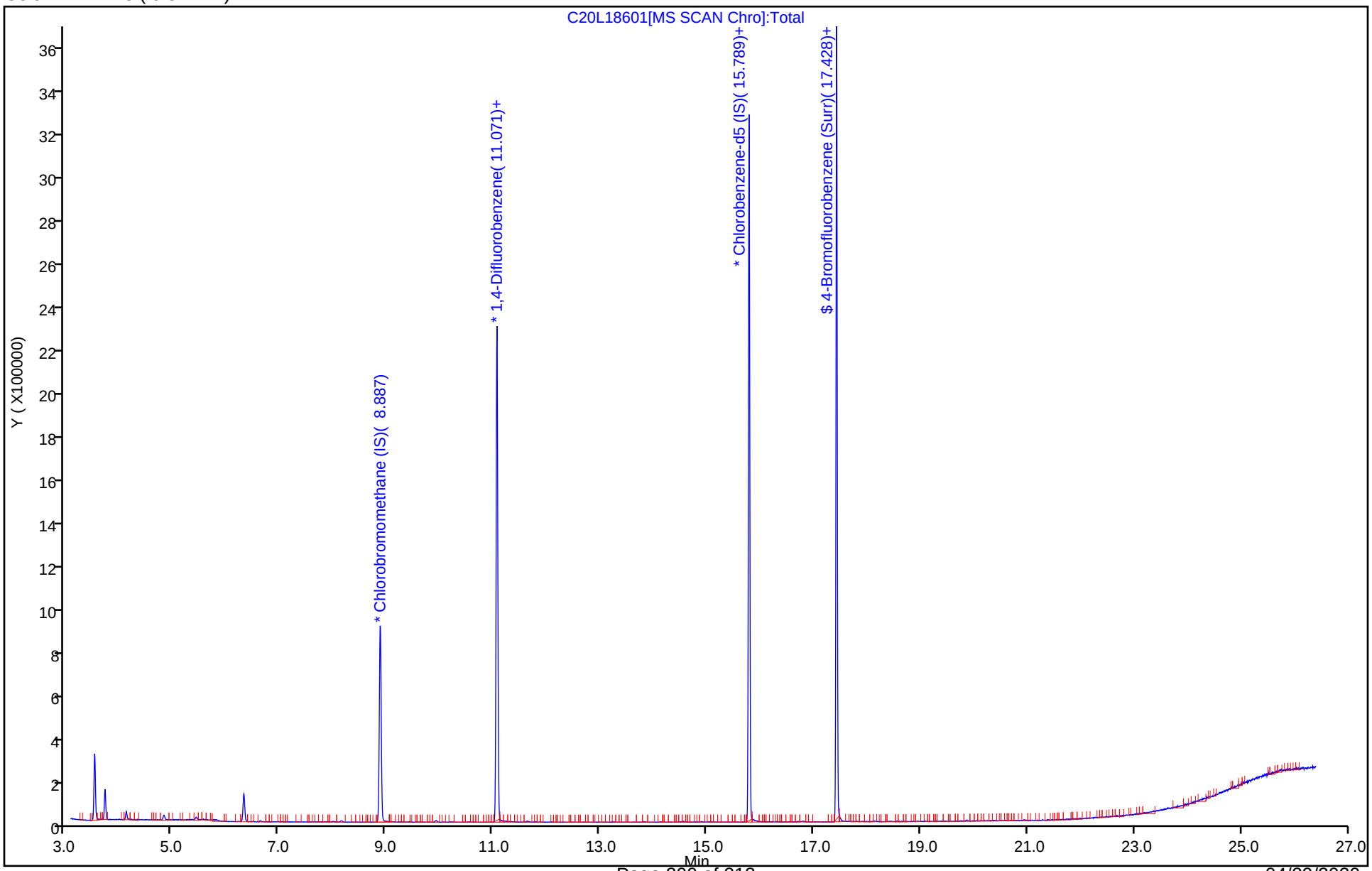
Report Date: 23-Mar-2020 11:13:22 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MG\20200318-14964.b\C20L18601.D

Injection Date:	21-Mar-2020 02:57:30	Instrument ID:	MG	Operator ID:	7126
Lims ID:	140-18601-A-14	Lab Sample ID:	140-18601-14	Worklist Smp#:	28
Client ID:	10746				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Shipping and Receiving Documents

Baltimore #201

Eurofins TestAmerica, Knoxville
5815 Middlebrook Pike
Knoxville, TN 37921
Phone 865-291-3000
Fax 865-584-4315

Canister Samples Chain of Custody Record

140-18854 Chain of Custody

TestAmerica Laboratories, Inc. assumes no liability with respect to the collection and shipment of these samples.

TestAmerica

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact Information	Client Project Manager: Peter Rich	Samples Collected By: Andrew Smith	COC No: 1 of 1 COCs
Company Name: Tetra Tech	Phone: 410-990-4607		
Address: 980 Awald Rd Suite 302	Email:		
City/State/Zip Annapolis, MD 21403			For Lab Use Only:
Phone: 410-990-4607	Site Contact:		Walk-in Client:
FAX:	Tel/Fax		Lab Sampling:
Project Name: Lockheed Martin MRC	Analysis Turnaround Time		Job / SDG No.:
Site/Location: Middle River	Standard (Specific): ✓		(See below for Add'l Items)
PO# 117-0512140	Rush (Specifiy):		

Sample Identification	Sample Start Date	Time Start	Sample End Date	Time Stop	Canister Vacuum in Field, "Hg (Start)	Canister Vacuum in Field, "Hg (Stop)	Flow Controller ID	Canister ID	TO-14/15 (Standard / Low Level)	TO-15 SIM	EPA 3C	EPA 25C	ASTM D-1946	EPA 15/16	Other (Please specify in notes section)	Sample Type	Indoor Air/Ambient Air	Sub-Slab	Soil Gas	Soil Vapor Extraction (SVE)	Landfill Gas	Other (Please specify in notes section)	Sample Specific Notes:
Bldg A - Effluent	4/14	9:34	4/14	9:35	-29	-4	10766	09577	X								X	[illegible]					
Bldg A - Mid GAC	4/14	9:40	4/14	9:41	-29	-4	11114	10781	X								X						
Bldg A - Influent	4/14	9:45	4/14	9:46	-30	-4	10936	11107	X								X						

Temperature (Fahrenheit)	Interior	Ambient
Start		
Stop	70°	60°

Pressure (inches of Hg)	Interior	Ambient
Start		
Stop		

Received @ ambient, 1 box, Fedex Po trk# 7702 3658 9616
Custody seal intact
KW 4/15/20

Special Instructions/QC Requirements & Comments:

Samples Shipped by:	Date / Time:	Samples Received by:	
Samples Relinquished by: [signature]	Date / Time: 4/14/20 3:00	Received by: [signature]	
Relinquished by: [signature]	Date / Time: 4/14/20 1700	Received by: [signature] ETA 4/15/20 0920	3 cans, 3 KR
Lab Use Only: Shipper Name:	Opened by:	Condition:	

Form No. CA-C-WI-003, Rev. 2.13, dated 4/10/2019

04/29/2020

Loc: 140

EUROFINS/TESTAMERICA KNOXVILLE SAMPLE RECEIPT/CONDITION UPON RECEIPT ANOMALY CHECKLIST **Log In Number:** **18854**

Review Items	Yes	No	NA	If No, what was the problem?
1. Are the shipping containers intact?	/			☐ **Containers, Broken**
2. Were ambient air containers received intact?			/	☑ Checked in lab
3. The coolers/containers custody seal if present, is it intact?	/			☐ Yes ☐ NA
4. Is the cooler temperature within limits? (> freezing temp. of water to 6 °C, VOST: 10°C) Thermometer ID :_____ Correction factor: _____			/	☐ **Cooler Out of Temp, Client Contacted, Proceed/Cancel** ☐ **Cooler Out of Temp, Same Day Receipt**
5. Were all of the sample containers received intact?	/			☐ **Containers, Broken**
6. Were samples received in appropriate containers?	/			☐ **Containers, Improper; Client Contacted; Proceed/Cancel**
7. Do sample container labels match COC? (IDs, Dates, Times)	/			☐ **COC & Samples Do Not Match** ☐ **COC Incorrect/Incomplete** ☐ **COC Not Received**
8. Were all of the samples listed on the COC received?	/			☐ **Sample Received, Not on COC** ☐ **Sample on COC, Not Received**
9. Is the date/time of sample collection noted?	/			☐ **COC; No Date/Time; Client Contacted**
10. Was the sampler identified on the COC?	/			☐ **Sampler Not Listed on COC**
11. Is the client and project name/# identified?	/			☐ **COC Incorrect/Incomplete**
12. Are tests/parameters listed for each sample?	/			☐ **COC No tests on COC**
13. Is the matrix of the samples noted?	/			☐ **COC Incorrect/Incomplete**
14. Was COC relinquished? (Signed/Dated/Timed)	/			☐ **COC Incorrect/Incomplete**
15. Were samples received within holding time?	/			☐ **Holding Time - Receipt**
16. Were samples received with correct chemical preservative (excluding Encore)?			/	☐ **pH Adjusted, pH Included (See box 16A)** ☐ **Incorrect Preservative**
17. Were VOA samples received without headspace?			/	☐ **Headspace (VOA only)**
18. Did you check for residual chlorine, if necessary? (e.g. 1613B, 1668) Chlorine test strip lot number:_____			/	☐ **Residual Chlorine**
19. For 1613B water samples is pH<9?			/	☐ If no, notify lab to adjust
20. For rad samples was sample activity info. Provided?			/	☐ Project missing info

Comments/Actions Taken

Labeling Verified by: **Date:**

pH test strip lot number:

Box 16A: pH Preservation	Box 18A: Residual Chlorine
Preservative:	
Lot Number:	
Exp Date:	
Analyst:	
Date:	
Time:	

Project #: 140002921 PM Instructions: _____

Sample Receiving Associate: Ken Wm Date: 4/15/20

QA026R32.doc, 062719

TestAmerica Knoxville - Air Canister Initial Pressure Check

Gauge ID: G5
Date: 4/15/2020

Analyst	Sample ID	Asset #	Cleaning Job	Cert	Size (L)	Pressure @ Receipt (-in Hg or +psig)	Time	Comments
BRS	140-18854-a-1	09577	18601	B	1	-1.9	10:32	
BRS	140-18854-a-2	10781	18601	B	1	-2.7	10:33	
BRS	140-18854-a-3	11107	18601	B	1	0.0	10:34	

□ Receiving –Air Can –Calve Open (NCM #_____)
□ Air - Can P -24 to -25 " - Flow Contr. Works (NCM#_____)
□ Air - Can P -24 to -25 " - Flow Contr. Faulty (NCM#_____)
□ Air - Can P Out -26" - Flow Contr. Works (NCM#_____)
□ Air - Can P Out -26" - Flow Contr. Faulty (NCM#_____)
□ Air - Can P Low -24 to -25 " - Grab Sample (NCM#_____)
□ Air - Can P Low -26 "- Grab Sample (NCM#_____)

ANALYTICAL REPORT

Job Number: 140-19093-1

Job Description: LMMRC SSDS - Middle River

For:
Tetra Tech GEO
980 Awald Road
Suite 302
Annapolis, MD 21403

Attention: Peter Rich



Approved for release.
Jamie A McKinney
Senior Project Manager
5/28/2020 9:47 AM

Jamie A McKinney, Senior Project Manager
5815 Middlebrook Pike, Knoxville, TN, 37921
(865)291-3000
jamie.mckinney@testamericainc.com
05/28/2020

cc: Belssi Chang
Amy Thomson

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins TestAmerica Project Manager.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

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Qualifiers

Air - GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job Narrative
140-19093-1

Comments
No additional comments.

Receipt
The samples were received on 5/14/2020 10:15 AM; the samples arrived in good condition, properly preserved and, where required, on ice.

Receipt Exceptions
The Field Sampler was not listed on the Chain of Custody.

Air - GC/MS VOA
Methods TO 15 LL, TO-14A, TO-14A Low, TO-15: Initial calibration verification (ICV 140-39100/17) associated with batch 140-39100 had internal standard recoveries above QC limits. There is no impact on the data; since all the analytes recovered well within limits.

Methods TO 15 LL, TO-15: EPA methods TO-14A and TO-15 specify the use of humidified "zero air" as the blank reagent for canister cleaning, instrument calibration and sample analysis. Ultra-high purity humidified nitrogen from a cryogenic reservoir is used in place of "zero air" by TestAmerica Knoxville.

Method TO 15 LL: The continuing calibration verification (CCV) associated with batch 140-39584 exhibited % difference of > 30% for the following analyte(s) 1,2,4-Trichlorobenzene, 1,2-Dichloro-1,1,2,2-tetrafluoroethane, Butadiene, Chloroethane, Naphthalene and Vinyl chloride; however, the results were within the LCS acceptance limits. The EPA method requires that all target analytes in the continuing calibration verification standard be within 30% difference from the initial calibration. According to the laboratory standard operating procedure, the continuing calibration is acceptable if it meets the laboratory control sample acceptance criteria.

Method TO 15 LL: The following analyte(s) recovered outside control limits for the LCS associated with analytical batch 140-39584: 1,2-Dichloro-1,1,2,2-tetrafluoroethane, Chloroethane and Vinyl chloride. This is not indicative of a systematic control problem because these were random marginal exceedances. Qualified results have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: Tetra Tech GEO
Job ID: 140-19093-1
Project/Site: LMMRC SSDS - Middle River

Client Sample ID: BLDG A INFLUENT
Lab Sample ID: 140-19093-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	7.4		1.6	0.16	ppb v/v	1		TO 15 LL	Total/NA
Chloroform	0.48	J	1.6	0.14	ppb v/v	1		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	12		1.6	0.20	ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.52	J	1.6	0.28	ppb v/v	1		TO 15 LL	Total/NA
1,1-Dichloroethane	2.6		1.6	0.14	ppb v/v	1		TO 15 LL	Total/NA
1,1-Dichloroethene	15		1.6	0.16	ppb v/v	1		TO 15 LL	Total/NA
Toluene	1.9	J	2.4	1.6	ppb v/v	1		TO 15 LL	Total/NA
trans-1,2-Dichloroethene	0.26	J	1.6	0.14	ppb v/v	1		TO 15 LL	Total/NA
1,1,1-Trichloroethane	68		1.6	0.74	ppb v/v	1		TO 15 LL	Total/NA
Trichloroethene	180		0.80	0.12	ppb v/v	1		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	24		5.1	0.51	ug/m3	1		TO 15 LL	Total/NA
Chloroform	2.3	J	7.8	0.68	ug/m3	1		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	47		6.3	0.79	ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.5	J	7.9	1.4	ug/m3	1		TO 15 LL	Total/NA
1,1-Dichloroethane	10		6.5	0.57	ug/m3	1		TO 15 LL	Total/NA
1,1-Dichloroethene	60		6.3	0.63	ug/m3	1		TO 15 LL	Total/NA
Toluene	7.2	J	9.0	5.9	ug/m3	1		TO 15 LL	Total/NA
trans-1,2-Dichloroethene	1.0	J	6.3	0.56	ug/m3	1		TO 15 LL	Total/NA
1,1,1-Trichloroethane	370		8.7	4.0	ug/m3	1		TO 15 LL	Total/NA
Trichloroethene	980		4.3	0.64	ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: BLDG A MID GAC
Lab Sample ID: 140-19093-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.70		0.40	0.040	ppb v/v	1		TO 15 LL	Total/NA
Chlorodifluoromethane	0.44		0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Chloroform	0.40		0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	17		0.40	0.050	ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.42		0.40	0.070	ppb v/v	1		TO 15 LL	Total/NA
1,1-Dichloroethane	3.7		0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
1,2-Dichloroethane	0.10	J	0.40	0.050	ppb v/v	1		TO 15 LL	Total/NA
1,1-Dichloroethene	25		0.40	0.040	ppb v/v	1		TO 15 LL	Total/NA
Methylene Chloride	0.81	J	2.0	0.80	ppb v/v	1		TO 15 LL	Total/NA
trans-1,2-Dichloroethene	0.40		0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
1,1,1-Trichloroethane	26		0.40	0.19	ppb v/v	1		TO 15 LL	Total/NA
Trichloroethene	0.22		0.20	0.030	ppb v/v	1		TO 15 LL	Total/NA
Vinyl chloride	0.13	J *	0.20	0.13	ppb v/v	1		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	2.2		1.3	0.13	ug/m3	1		TO 15 LL	Total/NA
Chlorodifluoromethane	1.6		1.4	0.39	ug/m3	1		TO 15 LL	Total/NA
Chloroform	2.0		2.0	0.17	ug/m3	1		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	69		1.6	0.20	ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.1		2.0	0.35	ug/m3	1		TO 15 LL	Total/NA
1,1-Dichloroethane	15		1.6	0.14	ug/m3	1		TO 15 LL	Total/NA
1,2-Dichloroethane	0.42	J	1.6	0.20	ug/m3	1		TO 15 LL	Total/NA
1,1-Dichloroethene	98		1.6	0.16	ug/m3	1		TO 15 LL	Total/NA
Methylene Chloride	2.8	J	6.9	2.8	ug/m3	1		TO 15 LL	Total/NA
trans-1,2-Dichloroethene	1.6		1.6	0.14	ug/m3	1		TO 15 LL	Total/NA
1,1,1-Trichloroethane	140		2.2	1.0	ug/m3	1		TO 15 LL	Total/NA
Trichloroethene	1.2		1.1	0.16	ug/m3	1		TO 15 LL	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: BLDG A MID GAC (Continued)
Lab Sample ID: 140-19093-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	0.34	J *	0.51	0.33	ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: BLDG A EFFLUENT
Lab Sample ID: 140-19093-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.17	J	0.40	0.040	ppb v/v	1		TO 15 LL	Total/NA
Chlorodifluoromethane	0.49		0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Chloroform	0.20	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	9.1		0.40	0.050	ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.47		0.40	0.070	ppb v/v	1		TO 15 LL	Total/NA
1,1-Dichloroethane	2.2		0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
1,1-Dichloroethene	27		0.40	0.040	ppb v/v	1		TO 15 LL	Total/NA
Methylene Chloride	0.87	J	2.0	0.80	ppb v/v	1		TO 15 LL	Total/NA
Toluene	1.2		0.60	0.39	ppb v/v	1		TO 15 LL	Total/NA
trans-1,2-Dichloroethene	0.23	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
1,1,1-Trichloroethane	5.5		0.40	0.19	ppb v/v	1		TO 15 LL	Total/NA
Trichloroethene	2.0		0.20	0.030	ppb v/v	1		TO 15 LL	Total/NA
Vinyl chloride	0.14	J *	0.20	0.13	ppb v/v	1		TO 15 LL	Total/NA
Xylenes, Total	0.19	J	0.80	0.12	ppb v/v	1		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.55	J	1.3	0.13	ug/m3	1		TO 15 LL	Total/NA
Chlorodifluoromethane	1.7		1.4	0.39	ug/m3	1		TO 15 LL	Total/NA
Chloroform	0.98	J	2.0	0.17	ug/m3	1		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	36		1.6	0.20	ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.3		2.0	0.35	ug/m3	1		TO 15 LL	Total/NA
1,1-Dichloroethane	8.8		1.6	0.14	ug/m3	1		TO 15 LL	Total/NA
1,1-Dichloroethene	110		1.6	0.16	ug/m3	1		TO 15 LL	Total/NA
Methylene Chloride	3.0	J	6.9	2.8	ug/m3	1		TO 15 LL	Total/NA
Toluene	4.4		2.3	1.5	ug/m3	1		TO 15 LL	Total/NA
trans-1,2-Dichloroethene	0.92	J	1.6	0.14	ug/m3	1		TO 15 LL	Total/NA
1,1,1-Trichloroethane	30		2.2	1.0	ug/m3	1		TO 15 LL	Total/NA
Trichloroethene	11		1.1	0.16	ug/m3	1		TO 15 LL	Total/NA
Vinyl chloride	0.36	J *	0.51	0.33	ug/m3	1		TO 15 LL	Total/NA
Xylenes, Total	0.83	J	3.5	0.52	ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: BLDG C INFLUENT
Lab Sample ID: 140-19093-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1.5		0.40	0.040	ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.081	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Chlorodifluoromethane	4.8		0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Chloroform	0.11	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	0.52		0.40	0.050	ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.43		0.40	0.070	ppb v/v	1		TO 15 LL	Total/NA
Ethylbenzene	0.068	J	0.40	0.065	ppb v/v	1		TO 15 LL	Total/NA
Tetrachloroethene	0.17	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Toluene	1.6		0.60	0.39	ppb v/v	1		TO 15 LL	Total/NA
Trichloroethene	4.0		0.20	0.030	ppb v/v	1		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	0.35	J	0.40	0.10	ppb v/v	1		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	0.32	J	0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Xylenes, Total	0.32	J	0.80	0.12	ppb v/v	1		TO 15 LL	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: BLDG C INFLUENT (Continued) — Lab Sample ID: 140-19093-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	4.7		1.3	0.13	ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.51	J	2.5	0.22	ug/m3	1		TO 15 LL	Total/NA
Chlorodifluoromethane	17		1.4	0.39	ug/m3	1		TO 15 LL	Total/NA
Chloroform	0.53	J	2.0	0.17	ug/m3	1		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	2.1		1.6	0.20	ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.1		2.0	0.35	ug/m3	1		TO 15 LL	Total/NA
Ethylbenzene	0.30	J	1.7	0.28	ug/m3	1		TO 15 LL	Total/NA
Tetrachloroethene	1.2	J	2.7	0.24	ug/m3	1		TO 15 LL	Total/NA
Toluene	6.0		2.3	1.5	ug/m3	1		TO 15 LL	Total/NA
Trichloroethene	21		1.1	0.16	ug/m3	1		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	1.7	J	2.0	0.49	ug/m3	1		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	1.6	J	2.0	0.54	ug/m3	1		TO 15 LL	Total/NA
Xylenes, Total	1.4	J	3.5	0.52	ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: BLDG C MID GAC — Lab Sample ID: 140-19093-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	2.9		0.40	0.040	ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.082	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Chlorodifluoromethane	5.2		0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Chloroform	0.10	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	0.36	J	0.40	0.050	ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.46		0.40	0.070	ppb v/v	1		TO 15 LL	Total/NA
Methylene Chloride	0.93	J	2.0	0.80	ppb v/v	1		TO 15 LL	Total/NA
Tetrachloroethene	0.16	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Toluene	1.3		0.60	0.39	ppb v/v	1		TO 15 LL	Total/NA
Trichloroethene	3.2		0.20	0.030	ppb v/v	1		TO 15 LL	Total/NA
Xylenes, Total	0.26	J	0.80	0.12	ppb v/v	1		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	9.3		1.3	0.13	ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.51	J	2.5	0.22	ug/m3	1		TO 15 LL	Total/NA
Chlorodifluoromethane	18		1.4	0.39	ug/m3	1		TO 15 LL	Total/NA
Chloroform	0.51	J	2.0	0.17	ug/m3	1		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	1.4	J	1.6	0.20	ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.3		2.0	0.35	ug/m3	1		TO 15 LL	Total/NA
Methylene Chloride	3.2	J	6.9	2.8	ug/m3	1		TO 15 LL	Total/NA
Tetrachloroethene	1.1	J	2.7	0.24	ug/m3	1		TO 15 LL	Total/NA
Toluene	4.9		2.3	1.5	ug/m3	1		TO 15 LL	Total/NA
Trichloroethene	17		1.1	0.16	ug/m3	1		TO 15 LL	Total/NA
Xylenes, Total	1.1	J	3.5	0.52	ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: BLDG C EFFLUENT — Lab Sample ID: 140-19093-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	2.1		0.40	0.040	ppb v/v	1		TO 15 LL	Total/NA
Chlorodifluoromethane	4.5		0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Chloroform	0.10	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	0.77		0.40	0.050	ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.49		0.40	0.070	ppb v/v	1		TO 15 LL	Total/NA
Methylene Chloride	1.4	J	2.0	0.80	ppb v/v	1		TO 15 LL	Total/NA
Toluene	1.4		0.60	0.39	ppb v/v	1		TO 15 LL	Total/NA
trans-1,2-Dichloroethene	0.063	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: BLDG C EFFLUENT (Continued)
Lab Sample ID: 140-19093-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	0.14	J	0.20	0.030	ppb v/v	1		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	0.53		0.40	0.10	ppb v/v	1		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	0.46		0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Xylenes, Total	0.18	J	0.80	0.12	ppb v/v	1		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	6.8		1.3	0.13	ug/m3	1		TO 15 LL	Total/NA
Chlorodifluoromethane	16		1.4	0.39	ug/m3	1		TO 15 LL	Total/NA
Chloroform	0.49	J	2.0	0.17	ug/m3	1		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	3.0		1.6	0.20	ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.4		2.0	0.35	ug/m3	1		TO 15 LL	Total/NA
Methylene Chloride	4.8	J	6.9	2.8	ug/m3	1		TO 15 LL	Total/NA
Toluene	5.4		2.3	1.5	ug/m3	1		TO 15 LL	Total/NA
trans-1,2-Dichloroethene	0.25	J	1.6	0.14	ug/m3	1		TO 15 LL	Total/NA
Trichloroethene	0.78	J	1.1	0.16	ug/m3	1		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	2.6		2.0	0.49	ug/m3	1		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	2.3		2.0	0.54	ug/m3	1		TO 15 LL	Total/NA
Xylenes, Total	0.78	J	3.5	0.52	ug/m3	1		TO 15 LL	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: BLDG A INFLUENT
Lab Sample ID: 140-19093-1

Date Collected: 05/13/20 09:42
Matrix: Air
Date Received: 05/14/20 17:16
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**7.4**		1.6	0.16	ppb v/v			05/15/20 14:25	1
Carbon tetrachloride	ND		1.6	0.14	ppb v/v			05/15/20 14:25	1
Chlorodifluoromethane	ND		1.6	0.44	ppb v/v			05/15/20 14:25	1
Chloroform	**0.48**	**J**	1.6	0.14	ppb v/v			05/15/20 14:25	1
cis-1,2-Dichloroethene	**12**		1.6	0.20	ppb v/v			05/15/20 14:25	1
Dichlorodifluoromethane	**0.52**	**J**	1.6	0.28	ppb v/v			05/15/20 14:25	1
1,1-Dichloroethane	**2.6**		1.6	0.14	ppb v/v			05/15/20 14:25	1
1,2-Dichloroethane	ND		1.6	0.20	ppb v/v			05/15/20 14:25	1
1,1-Dichloroethene	**15**		1.6	0.16	ppb v/v			05/15/20 14:25	1
Ethylbenzene	ND		1.6	0.26	ppb v/v			05/15/20 14:25	1
Methylene Chloride	ND		8.0	3.2	ppb v/v			05/15/20 14:25	1
Methyl tert-butyl ether	ND		8.0	1.0	ppb v/v			05/15/20 14:25	1
Naphthalene	ND		0.80	0.80	ppb v/v			05/15/20 14:25	1
Tetrachloroethene	ND		1.6	0.14	ppb v/v			05/15/20 14:25	1
Toluene	**1.9**	**J**	2.4	1.6	ppb v/v			05/15/20 14:25	1
trans-1,2-Dichloroethene	**0.26**	**J**	1.6	0.14	ppb v/v			05/15/20 14:25	1
1,2,4-Trichlorobenzene	ND		1.6	1.3	ppb v/v			05/15/20 14:25	1
1,1,1-Trichloroethane	**68**		1.6	0.74	ppb v/v			05/15/20 14:25	1
1,1,2-Trichloroethane	ND		1.6	0.14	ppb v/v			05/15/20 14:25	1
Trichloroethene	**180**		0.80	0.12	ppb v/v			05/15/20 14:25	1
1,2,3-Trimethylbenzene	ND		1.6	0.72	ppb v/v			05/15/20 14:25	1
1,2,4-Trimethylbenzene	ND		1.6	0.40	ppb v/v			05/15/20 14:25	1
1,3,5-Trimethylbenzene	ND		1.6	0.44	ppb v/v			05/15/20 14:25	1
Vinyl chloride	ND	*	0.80	0.52	ppb v/v			05/15/20 14:25	1
Xylenes, Total	ND		3.2	0.48	ppb v/v			05/15/20 14:25	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**24**		5.1	0.51	ug/m3			05/15/20 14:25	1
Carbon tetrachloride	ND		10	0.88	ug/m3			05/15/20 14:25	1
Chlorodifluoromethane	ND		5.7	1.6	ug/m3			05/15/20 14:25	1
Chloroform	**2.3**	**J**	7.8	0.68	ug/m3			05/15/20 14:25	1
cis-1,2-Dichloroethene	**47**		6.3	0.79	ug/m3			05/15/20 14:25	1
Dichlorodifluoromethane	**2.5**	**J**	7.9	1.4	ug/m3			05/15/20 14:25	1
1,1-Dichloroethane	**10**		6.5	0.57	ug/m3			05/15/20 14:25	1
1,2-Dichloroethane	ND		6.5	0.81	ug/m3			05/15/20 14:25	1
1,1-Dichloroethene	**60**		6.3	0.63	ug/m3			05/15/20 14:25	1
Ethylbenzene	ND		6.9	1.1	ug/m3			05/15/20 14:25	1
Methylene Chloride	ND		28	11	ug/m3			05/15/20 14:25	1
Methyl tert-butyl ether	ND		29	3.7	ug/m3			05/15/20 14:25	1
Naphthalene	ND		4.2	4.2	ug/m3			05/15/20 14:25	1
Tetrachloroethene	ND		11	0.95	ug/m3			05/15/20 14:25	1
Toluene	**7.2**	**J**	9.0	5.9	ug/m3			05/15/20 14:25	1
trans-1,2-Dichloroethene	**1.0**	**J**	6.3	0.56	ug/m3			05/15/20 14:25	1
1,2,4-Trichlorobenzene	ND		12	9.5	ug/m3			05/15/20 14:25	1
1,1,1-Trichloroethane	**370**		8.7	4.0	ug/m3			05/15/20 14:25	1
1,1,2-Trichloroethane	ND		8.7	0.76	ug/m3			05/15/20 14:25	1
Trichloroethene	**980**		4.3	0.64	ug/m3			05/15/20 14:25	1
1,2,3-Trimethylbenzene	ND		7.9	3.5	ug/m3			05/15/20 14:25	1
1,2,4-Trimethylbenzene	ND		7.9	2.0	ug/m3			05/15/20 14:25	1

Client: Tetra Tech GEO
Job ID: 140-19093-1
Project/Site: LMMRC SSDS - Middle River

Client Sample ID: BLDG A INFLUENT
Lab Sample ID: 140-19093-1
Date Collected: 05/13/20 09:42
Matrix: Air
Date Received: 05/14/20 17:16
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		7.9	2.2	ug/m3			05/15/20 14:25	1
Vinyl chloride	ND	*	2.0	1.3	ug/m3			05/15/20 14:25	1
Xylenes, Total	ND		14	2.1	ug/m3			05/15/20 14:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*60 - 140*		*05/15/20 14:25*	*1*

Client Sample ID: BLDG A MID GAC
Lab Sample ID: 140-19093-2

Date Collected: 05/13/20 09:36
Matrix: Air
Date Received: 05/14/20 17:16
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.70**		0.40	0.040	ppb v/v			05/15/20 15:18	1
Carbon tetrachloride	ND		0.40	0.035	ppb v/v			05/15/20 15:18	1
Chlorodifluoromethane	**0.44**		0.40	0.11	ppb v/v			05/15/20 15:18	1
Chloroform	**0.40**		0.40	0.035	ppb v/v			05/15/20 15:18	1
cis-1,2-Dichloroethene	**17**		0.40	0.050	ppb v/v			05/15/20 15:18	1
Dichlorodifluoromethane	**0.42**		0.40	0.070	ppb v/v			05/15/20 15:18	1
1,1-Dichloroethane	**3.7**		0.40	0.035	ppb v/v			05/15/20 15:18	1
1,2-Dichloroethane	**0.10**	**J**	0.40	0.050	ppb v/v			05/15/20 15:18	1
1,1-Dichloroethene	**25**		0.40	0.040	ppb v/v			05/15/20 15:18	1
Ethylbenzene	ND		0.40	0.065	ppb v/v			05/15/20 15:18	1
Methylene Chloride	**0.81**	**J**	2.0	0.80	ppb v/v			05/15/20 15:18	1
Methyl tert-butyl ether	ND		2.0	0.26	ppb v/v			05/15/20 15:18	1
Naphthalene	ND		0.20	0.20	ppb v/v			05/15/20 15:18	1
Tetrachloroethene	ND		0.40	0.035	ppb v/v			05/15/20 15:18	1
Toluene	ND		0.60	0.39	ppb v/v			05/15/20 15:18	1
trans-1,2-Dichloroethene	**0.40**		0.40	0.035	ppb v/v			05/15/20 15:18	1
1,2,4-Trichlorobenzene	ND		0.40	0.32	ppb v/v			05/15/20 15:18	1
1,1,1-Trichloroethane	**26**		0.40	0.19	ppb v/v			05/15/20 15:18	1
1,1,2-Trichloroethane	ND		0.40	0.035	ppb v/v			05/15/20 15:18	1
Trichloroethene	**0.22**		0.20	0.030	ppb v/v			05/15/20 15:18	1
1,2,3-Trimethylbenzene	ND		0.40	0.18	ppb v/v			05/15/20 15:18	1
1,2,4-Trimethylbenzene	ND		0.40	0.10	ppb v/v			05/15/20 15:18	1
1,3,5-Trimethylbenzene	ND		0.40	0.11	ppb v/v			05/15/20 15:18	1
Vinyl chloride	**0.13**	**J ***	0.20	0.13	ppb v/v			05/15/20 15:18	1
Xylenes, Total	ND		0.80	0.12	ppb v/v			05/15/20 15:18	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**2.2**		1.3	0.13	ug/m3			05/15/20 15:18	1
Carbon tetrachloride	ND		2.5	0.22	ug/m3			05/15/20 15:18	1
Chlorodifluoromethane	**1.6**		1.4	0.39	ug/m3			05/15/20 15:18	1
Chloroform	**2.0**		2.0	0.17	ug/m3			05/15/20 15:18	1
cis-1,2-Dichloroethene	**69**		1.6	0.20	ug/m3			05/15/20 15:18	1
Dichlorodifluoromethane	**2.1**		2.0	0.35	ug/m3			05/15/20 15:18	1
1,1-Dichloroethane	**15**		1.6	0.14	ug/m3			05/15/20 15:18	1
1,2-Dichloroethane	**0.42**	**J**	1.6	0.20	ug/m3			05/15/20 15:18	1
1,1-Dichloroethene	**98**		1.6	0.16	ug/m3			05/15/20 15:18	1
Ethylbenzene	ND		1.7	0.28	ug/m3			05/15/20 15:18	1
Methylene Chloride	**2.8**	**J**	6.9	2.8	ug/m3			05/15/20 15:18	1
Methyl tert-butyl ether	ND		7.2	0.94	ug/m3			05/15/20 15:18	1
Naphthalene	ND		1.0	1.0	ug/m3			05/15/20 15:18	1
Tetrachloroethene	ND		2.7	0.24	ug/m3			05/15/20 15:18	1
Toluene	ND		2.3	1.5	ug/m3			05/15/20 15:18	1
trans-1,2-Dichloroethene	**1.6**		1.6	0.14	ug/m3			05/15/20 15:18	1
1,2,4-Trichlorobenzene	ND		3.0	2.4	ug/m3			05/15/20 15:18	1
1,1,1-Trichloroethane	**140**		2.2	1.0	ug/m3			05/15/20 15:18	1
1,1,2-Trichloroethane	ND		2.2	0.19	ug/m3			05/15/20 15:18	1
Trichloroethene	**1.2**		1.1	0.16	ug/m3			05/15/20 15:18	1
1,2,3-Trimethylbenzene	ND		2.0	0.88	ug/m3			05/15/20 15:18	1
1,2,4-Trimethylbenzene	ND		2.0	0.49	ug/m3			05/15/20 15:18	1

Client Sample ID: BLDG A MID GAC
Lab Sample ID: 140-19093-2

Date Collected: 05/13/20 09:36
Matrix: Air
Date Received: 05/14/20 17:16
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		2.0	0.54	ug/m3			05/15/20 15:18	1
Vinyl chloride	**0.34**	**J ***	0.51	0.33	ug/m3			05/15/20 15:18	1
Xylenes, Total	ND		3.5	0.52	ug/m3			05/15/20 15:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*60 - 140*		*05/15/20 15:18*	*1*

Client Sample ID: BLDG A EFFLUENT
Lab Sample ID: 140-19093-3

Date Collected: 05/13/20 09:31
Matrix: Air
Date Received: 05/14/20 17:16
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.17**	**J**	0.40	0.040	ppb v/v			05/15/20 16:10	1
Carbon tetrachloride	ND		0.40	0.035	ppb v/v			05/15/20 16:10	1
Chlorodifluoromethane	**0.49**		0.40	0.11	ppb v/v			05/15/20 16:10	1
Chloroform	**0.20**	**J**	0.40	0.035	ppb v/v			05/15/20 16:10	1
cis-1,2-Dichloroethene	**9.1**		0.40	0.050	ppb v/v			05/15/20 16:10	1
Dichlorodifluoromethane	**0.47**		0.40	0.070	ppb v/v			05/15/20 16:10	1
1,1-Dichloroethane	**2.2**		0.40	0.035	ppb v/v			05/15/20 16:10	1
1,2-Dichloroethane	ND		0.40	0.050	ppb v/v			05/15/20 16:10	1
1,1-Dichloroethene	**27**		0.40	0.040	ppb v/v			05/15/20 16:10	1
Ethylbenzene	ND		0.40	0.065	ppb v/v			05/15/20 16:10	1
Methylene Chloride	**0.87**	**J**	2.0	0.80	ppb v/v			05/15/20 16:10	1
Methyl tert-butyl ether	ND		2.0	0.26	ppb v/v			05/15/20 16:10	1
Naphthalene	ND		0.20	0.20	ppb v/v			05/15/20 16:10	1
Tetrachloroethene	ND		0.40	0.035	ppb v/v			05/15/20 16:10	1
Toluene	**1.2**		0.60	0.39	ppb v/v			05/15/20 16:10	1
trans-1,2-Dichloroethene	**0.23**	**J**	0.40	0.035	ppb v/v			05/15/20 16:10	1
1,2,4-Trichlorobenzene	ND		0.40	0.32	ppb v/v			05/15/20 16:10	1
1,1,1-Trichloroethane	**5.5**		0.40	0.19	ppb v/v			05/15/20 16:10	1
1,1,2-Trichloroethane	ND		0.40	0.035	ppb v/v			05/15/20 16:10	1
Trichloroethene	**2.0**		0.20	0.030	ppb v/v			05/15/20 16:10	1
1,2,3-Trimethylbenzene	ND		0.40	0.18	ppb v/v			05/15/20 16:10	1
1,2,4-Trimethylbenzene	ND		0.40	0.10	ppb v/v			05/15/20 16:10	1
1,3,5-Trimethylbenzene	ND		0.40	0.11	ppb v/v			05/15/20 16:10	1
Vinyl chloride	**0.14**	**J ***	0.20	0.13	ppb v/v			05/15/20 16:10	1
Xylenes, Total	**0.19**	**J**	0.80	0.12	ppb v/v			05/15/20 16:10	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.55**	**J**	1.3	0.13	ug/m3			05/15/20 16:10	1
Carbon tetrachloride	ND		2.5	0.22	ug/m3			05/15/20 16:10	1
Chlorodifluoromethane	**1.7**		1.4	0.39	ug/m3			05/15/20 16:10	1
Chloroform	**0.98**	**J**	2.0	0.17	ug/m3			05/15/20 16:10	1
cis-1,2-Dichloroethene	**36**		1.6	0.20	ug/m3			05/15/20 16:10	1
Dichlorodifluoromethane	**2.3**		2.0	0.35	ug/m3			05/15/20 16:10	1
1,1-Dichloroethane	**8.8**		1.6	0.14	ug/m3			05/15/20 16:10	1
1,2-Dichloroethane	ND		1.6	0.20	ug/m3			05/15/20 16:10	1
1,1-Dichloroethene	**110**		1.6	0.16	ug/m3			05/15/20 16:10	1
Ethylbenzene	ND		1.7	0.28	ug/m3			05/15/20 16:10	1
Methylene Chloride	**3.0**	**J**	6.9	2.8	ug/m3			05/15/20 16:10	1
Methyl tert-butyl ether	ND		7.2	0.94	ug/m3			05/15/20 16:10	1
Naphthalene	ND		1.0	1.0	ug/m3			05/15/20 16:10	1
Tetrachloroethene	ND		2.7	0.24	ug/m3			05/15/20 16:10	1
Toluene	**4.4**		2.3	1.5	ug/m3			05/15/20 16:10	1
trans-1,2-Dichloroethene	**0.92**	**J**	1.6	0.14	ug/m3			05/15/20 16:10	1
1,2,4-Trichlorobenzene	ND		3.0	2.4	ug/m3			05/15/20 16:10	1
1,1,1-Trichloroethane	**30**		2.2	1.0	ug/m3			05/15/20 16:10	1
1,1,2-Trichloroethane	ND		2.2	0.19	ug/m3			05/15/20 16:10	1
Trichloroethene	**11**		1.1	0.16	ug/m3			05/15/20 16:10	1
1,2,3-Trimethylbenzene	ND		2.0	0.88	ug/m3			05/15/20 16:10	1
1,2,4-Trimethylbenzene	ND		2.0	0.49	ug/m3			05/15/20 16:10	1

Client Sample ID: BLDG A EFFLUENT
Lab Sample ID: 140-19093-3

Date Collected: 05/13/20 09:31
Matrix: Air
Date Received: 05/14/20 17:16
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		2.0	0.54	ug/m3			05/15/20 16:10	1
Vinyl chloride	**0.36**	**J ***	0.51	0.33	ug/m3			05/15/20 16:10	1
Xylenes, Total	**0.83**	**J**	3.5	0.52	ug/m3			05/15/20 16:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*60 - 140*		*05/15/20 16:10*	*1*

Client Sample ID: BLDG C INFLUENT
Lab Sample ID: 140-19093-4

Date Collected: 05/13/20 11:41
Matrix: Air
Date Received: 05/14/20 17:16
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**1.5**		0.40	0.040	ppb v/v			05/15/20 17:03	1
Carbon tetrachloride	**0.081**	**J**	0.40	0.035	ppb v/v			05/15/20 17:03	1
Chlorodifluoromethane	**4.8**		0.40	0.11	ppb v/v			05/15/20 17:03	1
Chloroform	**0.11**	**J**	0.40	0.035	ppb v/v			05/15/20 17:03	1
cis-1,2-Dichloroethene	**0.52**		0.40	0.050	ppb v/v			05/15/20 17:03	1
Dichlorodifluoromethane	**0.43**		0.40	0.070	ppb v/v			05/15/20 17:03	1
1,1-Dichloroethane	ND		0.40	0.035	ppb v/v			05/15/20 17:03	1
1,2-Dichloroethane	ND		0.40	0.050	ppb v/v			05/15/20 17:03	1
1,1-Dichloroethene	ND		0.40	0.040	ppb v/v			05/15/20 17:03	1
Ethylbenzene	**0.068**	**J**	0.40	0.065	ppb v/v			05/15/20 17:03	1
Methylene Chloride	ND		2.0	0.80	ppb v/v			05/15/20 17:03	1
Methyl tert-butyl ether	ND		2.0	0.26	ppb v/v			05/15/20 17:03	1
Naphthalene	ND		0.20	0.20	ppb v/v			05/15/20 17:03	1
Tetrachloroethene	**0.17**	**J**	0.40	0.035	ppb v/v			05/15/20 17:03	1
Toluene	**1.6**		0.60	0.39	ppb v/v			05/15/20 17:03	1
trans-1,2-Dichloroethene	ND		0.40	0.035	ppb v/v			05/15/20 17:03	1
1,2,4-Trichlorobenzene	ND		0.40	0.32	ppb v/v			05/15/20 17:03	1
1,1,1-Trichloroethane	ND		0.40	0.19	ppb v/v			05/15/20 17:03	1
1,1,2-Trichloroethane	ND		0.40	0.035	ppb v/v			05/15/20 17:03	1
Trichloroethene	**4.0**		0.20	0.030	ppb v/v			05/15/20 17:03	1
1,2,3-Trimethylbenzene	ND		0.40	0.18	ppb v/v			05/15/20 17:03	1
1,2,4-Trimethylbenzene	**0.35**	**J**	0.40	0.10	ppb v/v			05/15/20 17:03	1
1,3,5-Trimethylbenzene	**0.32**	**J**	0.40	0.11	ppb v/v			05/15/20 17:03	1
Vinyl chloride	ND	*	0.20	0.13	ppb v/v			05/15/20 17:03	1
Xylenes, Total	**0.32**	**J**	0.80	0.12	ppb v/v			05/15/20 17:03	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**4.7**		1.3	0.13	ug/m3			05/15/20 17:03	1
Carbon tetrachloride	**0.51**	**J**	2.5	0.22	ug/m3			05/15/20 17:03	1
Chlorodifluoromethane	**17**		1.4	0.39	ug/m3			05/15/20 17:03	1
Chloroform	**0.53**	**J**	2.0	0.17	ug/m3			05/15/20 17:03	1
cis-1,2-Dichloroethene	**2.1**		1.6	0.20	ug/m3			05/15/20 17:03	1
Dichlorodifluoromethane	**2.1**		2.0	0.35	ug/m3			05/15/20 17:03	1
1,1-Dichloroethane	ND		1.6	0.14	ug/m3			05/15/20 17:03	1
1,2-Dichloroethane	ND		1.6	0.20	ug/m3			05/15/20 17:03	1
1,1-Dichloroethene	ND		1.6	0.16	ug/m3			05/15/20 17:03	1
Ethylbenzene	**0.30**	**J**	1.7	0.28	ug/m3			05/15/20 17:03	1
Methylene Chloride	ND		6.9	2.8	ug/m3			05/15/20 17:03	1
Methyl tert-butyl ether	ND		7.2	0.94	ug/m3			05/15/20 17:03	1
Naphthalene	ND		1.0	1.0	ug/m3			05/15/20 17:03	1
Tetrachloroethene	**1.2**	**J**	2.7	0.24	ug/m3			05/15/20 17:03	1
Toluene	**6.0**		2.3	1.5	ug/m3			05/15/20 17:03	1
trans-1,2-Dichloroethene	ND		1.6	0.14	ug/m3			05/15/20 17:03	1
1,2,4-Trichlorobenzene	ND		3.0	2.4	ug/m3			05/15/20 17:03	1
1,1,1-Trichloroethane	ND		2.2	1.0	ug/m3			05/15/20 17:03	1
1,1,2-Trichloroethane	ND		2.2	0.19	ug/m3			05/15/20 17:03	1
Trichloroethene	**21**		1.1	0.16	ug/m3			05/15/20 17:03	1
1,2,3-Trimethylbenzene	ND		2.0	0.88	ug/m3			05/15/20 17:03	1
1,2,4-Trimethylbenzene	**1.7**	**J**	2.0	0.49	ug/m3			05/15/20 17:03	1

Client Sample ID: BLDG C INFLUENT
Lab Sample ID: 140-19093-4

Date Collected: 05/13/20 11:41
Matrix: Air
Date Received: 05/14/20 17:16
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	1.6	J	2.0	0.54	ug/m3			05/15/20 17:03	1
Vinyl chloride	ND	*	0.51	0.33	ug/m3			05/15/20 17:03	1
Xylenes, Total	1.4	J	3.5	0.52	ug/m3			05/15/20 17:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*60 - 140*		*05/15/20 17:03*	*1*

Client Sample ID: BLDG C MID GAC
Lab Sample ID: 140-19093-5

Date Collected: 05/13/20 11:37
Matrix: Air
Date Received: 05/14/20 17:16
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**2.9**		0.40	0.040	ppb v/v			05/15/20 17:57	1
Carbon tetrachloride	**0.082**	**J**	0.40	0.035	ppb v/v			05/15/20 17:57	1
Chlorodifluoromethane	**5.2**		0.40	0.11	ppb v/v			05/15/20 17:57	1
Chloroform	**0.10**	**J**	0.40	0.035	ppb v/v			05/15/20 17:57	1
cis-1,2-Dichloroethene	**0.36**	**J**	0.40	0.050	ppb v/v			05/15/20 17:57	1
Dichlorodifluoromethane	**0.46**		0.40	0.070	ppb v/v			05/15/20 17:57	1
1,1-Dichloroethane	ND		0.40	0.035	ppb v/v			05/15/20 17:57	1
1,2-Dichloroethane	ND		0.40	0.050	ppb v/v			05/15/20 17:57	1
1,1-Dichloroethene	ND		0.40	0.040	ppb v/v			05/15/20 17:57	1
Ethylbenzene	ND		0.40	0.065	ppb v/v			05/15/20 17:57	1
Methylene Chloride	**0.93**	**J**	2.0	0.80	ppb v/v			05/15/20 17:57	1
Methyl tert-butyl ether	ND		2.0	0.26	ppb v/v			05/15/20 17:57	1
Naphthalene	ND		0.20	0.20	ppb v/v			05/15/20 17:57	1
Tetrachloroethene	**0.16**	**J**	0.40	0.035	ppb v/v			05/15/20 17:57	1
Toluene	**1.3**		0.60	0.39	ppb v/v			05/15/20 17:57	1
trans-1,2-Dichloroethene	ND		0.40	0.035	ppb v/v			05/15/20 17:57	1
1,2,4-Trichlorobenzene	ND		0.40	0.32	ppb v/v			05/15/20 17:57	1
1,1,1-Trichloroethane	ND		0.40	0.19	ppb v/v			05/15/20 17:57	1
1,1,2-Trichloroethane	ND		0.40	0.035	ppb v/v			05/15/20 17:57	1
Trichloroethene	**3.2**		0.20	0.030	ppb v/v			05/15/20 17:57	1
1,2,3-Trimethylbenzene	ND		0.40	0.18	ppb v/v			05/15/20 17:57	1
1,2,4-Trimethylbenzene	ND		0.40	0.10	ppb v/v			05/15/20 17:57	1
1,3,5-Trimethylbenzene	ND		0.40	0.11	ppb v/v			05/15/20 17:57	1
Vinyl chloride	ND	*	0.20	0.13	ppb v/v			05/15/20 17:57	1
Xylenes, Total	**0.26**	**J**	0.80	0.12	ppb v/v			05/15/20 17:57	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**9.3**		1.3	0.13	ug/m3			05/15/20 17:57	1
Carbon tetrachloride	**0.51**	**J**	2.5	0.22	ug/m3			05/15/20 17:57	1
Chlorodifluoromethane	**18**		1.4	0.39	ug/m3			05/15/20 17:57	1
Chloroform	**0.51**	**J**	2.0	0.17	ug/m3			05/15/20 17:57	1
cis-1,2-Dichloroethene	**1.4**	**J**	1.6	0.20	ug/m3			05/15/20 17:57	1
Dichlorodifluoromethane	**2.3**		2.0	0.35	ug/m3			05/15/20 17:57	1
1,1-Dichloroethane	ND		1.6	0.14	ug/m3			05/15/20 17:57	1
1,2-Dichloroethane	ND		1.6	0.20	ug/m3			05/15/20 17:57	1
1,1-Dichloroethene	ND		1.6	0.16	ug/m3			05/15/20 17:57	1
Ethylbenzene	ND		1.7	0.28	ug/m3			05/15/20 17:57	1
Methylene Chloride	**3.2**	**J**	6.9	2.8	ug/m3			05/15/20 17:57	1
Methyl tert-butyl ether	ND		7.2	0.94	ug/m3			05/15/20 17:57	1
Naphthalene	ND		1.0	1.0	ug/m3			05/15/20 17:57	1
Tetrachloroethene	**1.1**	**J**	2.7	0.24	ug/m3			05/15/20 17:57	1
Toluene	**4.9**		2.3	1.5	ug/m3			05/15/20 17:57	1
trans-1,2-Dichloroethene	ND		1.6	0.14	ug/m3			05/15/20 17:57	1
1,2,4-Trichlorobenzene	ND		3.0	2.4	ug/m3			05/15/20 17:57	1
1,1,1-Trichloroethane	ND		2.2	1.0	ug/m3			05/15/20 17:57	1
1,1,2-Trichloroethane	ND		2.2	0.19	ug/m3			05/15/20 17:57	1
Trichloroethene	**17**		1.1	0.16	ug/m3			05/15/20 17:57	1
1,2,3-Trimethylbenzene	ND		2.0	0.88	ug/m3			05/15/20 17:57	1
1,2,4-Trimethylbenzene	ND		2.0	0.49	ug/m3			05/15/20 17:57	1

Client Sample ID: BLDG C MID GAC
Lab Sample ID: 140-19093-5

Date Collected: 05/13/20 11:37
Matrix: Air
Date Received: 05/14/20 17:16
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		2.0	0.54	ug/m3			05/15/20 17:57	1
Vinyl chloride	ND	*	0.51	0.33	ug/m3			05/15/20 17:57	1
Xylenes, Total	**1.1**	**J**	3.5	0.52	ug/m3			05/15/20 17:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*60 - 140*		*05/15/20 17:57*	*1*

Client Sample ID: BLDG C EFFLUENT
Lab Sample ID: 140-19093-6

Date Collected: 05/13/20 11:33
Matrix: Air
Date Received: 05/14/20 17:16
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**2.1**		0.40	0.040	ppb v/v			05/15/20 18:53	1
Carbon tetrachloride	ND		0.40	0.035	ppb v/v			05/15/20 18:53	1
Chlorodifluoromethane	**4.5**		0.40	0.11	ppb v/v			05/15/20 18:53	1
Chloroform	**0.10**	**J**	0.40	0.035	ppb v/v			05/15/20 18:53	1
cis-1,2-Dichloroethene	**0.77**		0.40	0.050	ppb v/v			05/15/20 18:53	1
Dichlorodifluoromethane	**0.49**		0.40	0.070	ppb v/v			05/15/20 18:53	1
1,1-Dichloroethane	ND		0.40	0.035	ppb v/v			05/15/20 18:53	1
1,2-Dichloroethane	ND		0.40	0.050	ppb v/v			05/15/20 18:53	1
1,1-Dichloroethene	ND		0.40	0.040	ppb v/v			05/15/20 18:53	1
Ethylbenzene	ND		0.40	0.065	ppb v/v			05/15/20 18:53	1
Methylene Chloride	**1.4**	**J**	2.0	0.80	ppb v/v			05/15/20 18:53	1
Methyl tert-butyl ether	ND		2.0	0.26	ppb v/v			05/15/20 18:53	1
Naphthalene	ND		0.20	0.20	ppb v/v			05/15/20 18:53	1
Tetrachloroethene	ND		0.40	0.035	ppb v/v			05/15/20 18:53	1
Toluene	**1.4**		0.60	0.39	ppb v/v			05/15/20 18:53	1
trans-1,2-Dichloroethene	**0.063**	**J**	0.40	0.035	ppb v/v			05/15/20 18:53	1
1,2,4-Trichlorobenzene	ND		0.40	0.32	ppb v/v			05/15/20 18:53	1
1,1,1-Trichloroethane	ND		0.40	0.19	ppb v/v			05/15/20 18:53	1
1,1,2-Trichloroethane	ND		0.40	0.035	ppb v/v			05/15/20 18:53	1
Trichloroethene	**0.14**	**J**	0.20	0.030	ppb v/v			05/15/20 18:53	1
1,2,3-Trimethylbenzene	ND		0.40	0.18	ppb v/v			05/15/20 18:53	1
1,2,4-Trimethylbenzene	**0.53**		0.40	0.10	ppb v/v			05/15/20 18:53	1
1,3,5-Trimethylbenzene	**0.46**		0.40	0.11	ppb v/v			05/15/20 18:53	1
Vinyl chloride	ND	*	0.20	0.13	ppb v/v			05/15/20 18:53	1
Xylenes, Total	**0.18**	**J**	0.80	0.12	ppb v/v			05/15/20 18:53	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**6.8**		1.3	0.13	ug/m3			05/15/20 18:53	1
Carbon tetrachloride	ND		2.5	0.22	ug/m3			05/15/20 18:53	1
Chlorodifluoromethane	**16**		1.4	0.39	ug/m3			05/15/20 18:53	1
Chloroform	**0.49**	**J**	2.0	0.17	ug/m3			05/15/20 18:53	1
cis-1,2-Dichloroethene	**3.0**		1.6	0.20	ug/m3			05/15/20 18:53	1
Dichlorodifluoromethane	**2.4**		2.0	0.35	ug/m3			05/15/20 18:53	1
1,1-Dichloroethane	ND		1.6	0.14	ug/m3			05/15/20 18:53	1
1,2-Dichloroethane	ND		1.6	0.20	ug/m3			05/15/20 18:53	1
1,1-Dichloroethene	ND		1.6	0.16	ug/m3			05/15/20 18:53	1
Ethylbenzene	ND		1.7	0.28	ug/m3			05/15/20 18:53	1
Methylene Chloride	**4.8**	**J**	6.9	2.8	ug/m3			05/15/20 18:53	1
Methyl tert-butyl ether	ND		7.2	0.94	ug/m3			05/15/20 18:53	1
Naphthalene	ND		1.0	1.0	ug/m3			05/15/20 18:53	1
Tetrachloroethene	ND		2.7	0.24	ug/m3			05/15/20 18:53	1
Toluene	**5.4**		2.3	1.5	ug/m3			05/15/20 18:53	1
trans-1,2-Dichloroethene	**0.25**	**J**	1.6	0.14	ug/m3			05/15/20 18:53	1
1,2,4-Trichlorobenzene	ND		3.0	2.4	ug/m3			05/15/20 18:53	1
1,1,1-Trichloroethane	ND		2.2	1.0	ug/m3			05/15/20 18:53	1
1,1,2-Trichloroethane	ND		2.2	0.19	ug/m3			05/15/20 18:53	1
Trichloroethene	**0.78**	**J**	1.1	0.16	ug/m3			05/15/20 18:53	1
1,2,3-Trimethylbenzene	ND		2.0	0.88	ug/m3			05/15/20 18:53	1
1,2,4-Trimethylbenzene	**2.6**		2.0	0.49	ug/m3			05/15/20 18:53	1

Client Sample ID: BLDG C EFFLUENT
Lab Sample ID: 140-19093-6

Date Collected: 05/13/20 11:33
Matrix: Air
Date Received: 05/14/20 17:16
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	**2.3**		2.0	0.54	ug/m3			05/15/20 18:53	1
Vinyl chloride	ND	*	0.51	0.33	ug/m3			05/15/20 18:53	1
Xylenes, Total	**0.78**	**J**	3.5	0.52	ug/m3			05/15/20 18:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*60 - 140*		*05/15/20 18:53*	*1*

Default Detection Limits

Client: Tetra Tech GEO
Job ID: 140-19093-1
Project/Site: LMMRC SSDS - Middle River

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	RL	MDL	Units
1,1,1-Trichloroethane	0.080	0.037	ppb v/v
1,1,1-Trichloroethane	0.44	0.20	ug/m3
1,1,2-Trichloroethane	0.080	0.0070	ppb v/v
1,1,2-Trichloroethane	0.44	0.038	ug/m3
1,1-Dichloroethane	0.080	0.0070	ppb v/v
1,1-Dichloroethane	0.32	0.028	ug/m3
1,1-Dichloroethene	0.080	0.0080	ppb v/v
1,1-Dichloroethene	0.32	0.032	ug/m3
1,2,3-Trimethylbenzene	0.080	0.036	ppb v/v
1,2,3-Trimethylbenzene	0.39	0.18	ug/m3
1,2,4-Trichlorobenzene	0.080	0.064	ppb v/v
1,2,4-Trichlorobenzene	0.59	0.47	ug/m3
1,2,4-Trimethylbenzene	0.080	0.020	ppb v/v
1,2,4-Trimethylbenzene	0.39	0.098	ug/m3
1,2-Dichloroethane	0.080	0.010	ppb v/v
1,2-Dichloroethane	0.32	0.040	ug/m3
1,3,5-Trimethylbenzene	0.080	0.022	ppb v/v
1,3,5-Trimethylbenzene	0.39	0.11	ug/m3
Benzene	0.080	0.0080	ppb v/v
Benzene	0.26	0.026	ug/m3
Carbon tetrachloride	0.080	0.0070	ppb v/v
Carbon tetrachloride	0.50	0.044	ug/m3
Chlorodifluoromethane	0.080	0.022	ppb v/v
Chlorodifluoromethane	0.28	0.078	ug/m3
Chloroform	0.080	0.0070	ppb v/v
Chloroform	0.39	0.034	ug/m3
cis-1,2-Dichloroethene	0.080	0.010	ppb v/v
cis-1,2-Dichloroethene	0.32	0.040	ug/m3
Dichlorodifluoromethane	0.080	0.014	ppb v/v
Dichlorodifluoromethane	0.40	0.069	ug/m3
Ethylbenzene	0.080	0.013	ppb v/v
Ethylbenzene	0.35	0.056	ug/m3
Methyl tert-butyl ether	0.40	0.052	ppb v/v
Methyl tert-butyl ether	1.4	0.19	ug/m3
Methylene Chloride	0.40	0.16	ppb v/v
Methylene Chloride	1.4	0.56	ug/m3
Naphthalene	0.040	0.040	ppb v/v
Naphthalene	0.21	0.21	ug/m3
Tetrachloroethene	0.080	0.0070	ppb v/v
Tetrachloroethene	0.54	0.047	ug/m3
Toluene	0.12	0.078	ppb v/v
Toluene	0.45	0.29	ug/m3
trans-1,2-Dichloroethene	0.080	0.0070	ppb v/v
trans-1,2-Dichloroethene	0.32	0.028	ug/m3
Trichloroethene	0.040	0.0060	ppb v/v
Trichloroethene	0.21	0.032	ug/m3
Vinyl chloride	0.040	0.026	ppb v/v
Vinyl chloride	0.10	0.066	ug/m3
Xylenes, Total	0.16	0.024	ppb v/v
Xylenes, Total	0.69	0.10	ug/m3

Surrogate Summary

Client: Tetra Tech GEO
Job ID: 140-19093-1
Project/Site: LMMRC SSDS - Middle River

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Matrix: Air **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)								
Lab Sample ID	Client Sample ID	BFB (60-140)								
140-19093-1	BLDG A INFLUENT	89								
140-19093-2	BLDG A MID GAC	92								
140-19093-3	BLDG A EFFLUENT	92								
140-19093-4	BLDG C INFLUENT	101								
140-19093-5	BLDG C MID GAC	94								
140-19093-6	BLDG C EFFLUENT	99								
LCS 140-39584/1007	Lab Control Sample	106								
MB 140-39584/4	Method Blank	92								

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Lab Sample ID: MB 140-39584/4
Matrix: Air
Analysis Batch: 39584

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.080	0.0080	ppb v/v			05/15/20 13:32	1
Carbon tetrachloride	ND		0.080	0.0070	ppb v/v			05/15/20 13:32	1
Chlorodifluoromethane	ND		0.080	0.022	ppb v/v			05/15/20 13:32	1
Chloroform	ND		0.080	0.0070	ppb v/v			05/15/20 13:32	1
cis-1,2-Dichloroethene	ND		0.080	0.010	ppb v/v			05/15/20 13:32	1
Dichlorodifluoromethane	ND		0.080	0.014	ppb v/v			05/15/20 13:32	1
1,1-Dichloroethane	ND		0.080	0.0070	ppb v/v			05/15/20 13:32	1
1,2-Dichloroethane	ND		0.080	0.010	ppb v/v			05/15/20 13:32	1
1,1-Dichloroethene	ND		0.080	0.0080	ppb v/v			05/15/20 13:32	1
Ethylbenzene	ND		0.080	0.013	ppb v/v			05/15/20 13:32	1
Methylene Chloride	ND		0.40	0.16	ppb v/v			05/15/20 13:32	1
Methyl tert-butyl ether	ND		0.40	0.052	ppb v/v			05/15/20 13:32	1
Naphthalene	ND		0.040	0.040	ppb v/v			05/15/20 13:32	1
Tetrachloroethene	ND		0.080	0.0070	ppb v/v			05/15/20 13:32	1
Toluene	ND		0.12	0.078	ppb v/v			05/15/20 13:32	1
trans-1,2-Dichloroethene	ND		0.080	0.0070	ppb v/v			05/15/20 13:32	1
1,2,4-Trichlorobenzene	ND		0.080	0.064	ppb v/v			05/15/20 13:32	1
1,1,1-Trichloroethane	ND		0.080	0.037	ppb v/v			05/15/20 13:32	1
1,1,2-Trichloroethane	ND		0.080	0.0070	ppb v/v			05/15/20 13:32	1
Trichloroethene	ND		0.040	0.0060	ppb v/v			05/15/20 13:32	1
1,2,3-Trimethylbenzene	ND		0.080	0.036	ppb v/v			05/15/20 13:32	1
1,2,4-Trimethylbenzene	ND		0.080	0.020	ppb v/v			05/15/20 13:32	1
1,3,5-Trimethylbenzene	ND		0.080	0.022	ppb v/v			05/15/20 13:32	1
Vinyl chloride	ND		0.040	0.026	ppb v/v			05/15/20 13:32	1
Xylenes, Total	ND		0.16	0.024	ppb v/v			05/15/20 13:32	1

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.26	0.026	ug/m3			05/15/20 13:32	1
Carbon tetrachloride	ND		0.50	0.044	ug/m3			05/15/20 13:32	1
Chlorodifluoromethane	ND		0.28	0.078	ug/m3			05/15/20 13:32	1
Chloroform	ND		0.39	0.034	ug/m3			05/15/20 13:32	1
cis-1,2-Dichloroethene	ND		0.32	0.040	ug/m3			05/15/20 13:32	1
Dichlorodifluoromethane	ND		0.40	0.069	ug/m3			05/15/20 13:32	1
1,1-Dichloroethane	ND		0.32	0.028	ug/m3			05/15/20 13:32	1
1,2-Dichloroethane	ND		0.32	0.040	ug/m3			05/15/20 13:32	1
1,1-Dichloroethene	ND		0.32	0.032	ug/m3			05/15/20 13:32	1
Ethylbenzene	ND		0.35	0.056	ug/m3			05/15/20 13:32	1
Methylene Chloride	ND		1.4	0.56	ug/m3			05/15/20 13:32	1
Methyl tert-butyl ether	ND		1.4	0.19	ug/m3			05/15/20 13:32	1
Naphthalene	ND		0.21	0.21	ug/m3			05/15/20 13:32	1
Tetrachloroethene	ND		0.54	0.047	ug/m3			05/15/20 13:32	1
Toluene	ND		0.45	0.29	ug/m3			05/15/20 13:32	1
trans-1,2-Dichloroethene	ND		0.32	0.028	ug/m3			05/15/20 13:32	1
1,2,4-Trichlorobenzene	ND		0.59	0.47	ug/m3			05/15/20 13:32	1
1,1,1-Trichloroethane	ND		0.44	0.20	ug/m3			05/15/20 13:32	1
1,1,2-Trichloroethane	ND		0.44	0.038	ug/m3			05/15/20 13:32	1
Trichloroethene	ND		0.21	0.032	ug/m3			05/15/20 13:32	1
1,2,3-Trimethylbenzene	ND		0.39	0.18	ug/m3			05/15/20 13:32	1

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Lab Sample ID: MB 140-39584/4
Matrix: Air
Analysis Batch: 39584

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.39	0.098	ug/m3			05/15/20 13:32	1
1,3,5-Trimethylbenzene	ND		0.39	0.11	ug/m3			05/15/20 13:32	1
Vinyl chloride	ND		0.10	0.066	ug/m3			05/15/20 13:32	1
Xylenes, Total	ND		0.69	0.10	ug/m3			05/15/20 13:32	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*60 - 140*		*05/15/20 13:32*	*1*

Lab Sample ID: LCS 140-39584/1007
Matrix: Air
Analysis Batch: 39584

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	1.60	1.71		ppb v/v		107	70 - 130
Carbon tetrachloride	1.60	1.88		ppb v/v		117	70 - 130
Chlorodifluoromethane	1.60	1.68		ppb v/v		105	60 - 140
Chloroform	1.60	1.82		ppb v/v		114	70 - 130
cis-1,2-Dichloroethene	1.60	1.63		ppb v/v		102	70 - 130
Dichlorodifluoromethane	1.60	1.92		ppb v/v		120	60 - 140
1,1-Dichloroethane	1.60	1.65		ppb v/v		103	70 - 130
1,2-Dichloroethane	1.60	1.77		ppb v/v		111	70 - 130
1,1-Dichloroethene	1.60	1.60		ppb v/v		100	70 - 130
Ethylbenzene	1.60	1.82		ppb v/v		114	70 - 130
Methylene Chloride	1.60	1.86		ppb v/v		116	70 - 130
Methyl tert-butyl ether	1.60	1.69		ppb v/v		106	60 - 140
Naphthalene	1.60	2.16		ppb v/v		135	60 - 140
Tetrachloroethene	1.60	1.72		ppb v/v		107	70 - 130
Toluene	1.60	1.73		ppb v/v		108	70 - 130
trans-1,2-Dichloroethene	1.60	1.65		ppb v/v		103	70 - 130
1,2,4-Trichlorobenzene	1.60	2.20		ppb v/v		138	60 - 140
1,1,1-Trichloroethane	1.60	1.75		ppb v/v		109	70 - 130
1,1,2-Trichloroethane	1.60	1.86		ppb v/v		116	70 - 130
Trichloroethene	1.60	1.70		ppb v/v		106	70 - 130
1,2,3-Trimethylbenzene	1.60	1.96		ppb v/v		123	70 - 130
1,2,4-Trimethylbenzene	1.60	1.99		ppb v/v		124	70 - 130
1,3,5-Trimethylbenzene	1.60	1.81		ppb v/v		113	70 - 130
Vinyl chloride	1.60	2.18	*	ppb v/v		136	70 - 130
Xylenes, Total	4.80	5.86		ppb v/v		122	70 - 130

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	5.1	5.45		ug/m3		107	70 - 130
Carbon tetrachloride	10	11.8		ug/m3		117	70 - 130
Chlorodifluoromethane	5.7	5.96		ug/m3		105	60 - 140
Chloroform	7.8	8.88		ug/m3		114	70 - 130
cis-1,2-Dichloroethene	6.3	6.48		ug/m3		102	70 - 130
Dichlorodifluoromethane	7.9	9.51		ug/m3		120	60 - 140
1,1-Dichloroethane	6.5	6.69		ug/m3		103	70 - 130

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Lab Sample ID: LCS 140-39584/1007
Matrix: Air
Analysis Batch: 39584

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,2-Dichloroethane			6.5	7.17		ug/m3		111	70 - 130		
1,1-Dichloroethene			6.3	6.36		ug/m3		100	70 - 130		
Ethylbenzene			6.9	7.91		ug/m3		114	70 - 130		
Methylene Chloride			5.6	6.45		ug/m3		116	70 - 130		
Methyl tert-butyl ether			5.8	6.10		ug/m3		106	60 - 140		
Naphthalene			8.4	11.3		ug/m3		135	60 - 140		
Tetrachloroethene			11	11.7		ug/m3		107	70 - 130		
Toluene			6.0	6.53		ug/m3		108	70 - 130		
trans-1,2-Dichloroethene			6.3	6.54		ug/m3		103	70 - 130		
1,2,4-Trichlorobenzene			12	16.3		ug/m3		138	60 - 140		
1,1,1-Trichloroethane			8.7	9.55		ug/m3		109	70 - 130		
1,1,2-Trichloroethane			8.7	10.2		ug/m3		116	70 - 130		
Trichloroethene			8.6	9.12		ug/m3		106	70 - 130		
1,2,3-Trimethylbenzene			7.9	9.66		ug/m3		123	70 - 130		
1,2,4-Trimethylbenzene			7.9	9.77		ug/m3		124	70 - 130		
1,3,5-Trimethylbenzene			7.9	8.92		ug/m3		113	70 - 130		
Vinyl chloride			4.1	5.56	*	ug/m3		136	70 - 130		
Xylenes, Total			21	25.4		ug/m3		122	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*106*		*60 - 140*

QC Association Summary

Client: Tetra Tech GEO
Job ID: 140-19093-1
Project/Site: LMMRC SSDS - Middle River

Air - GC/MS VOA

Analysis Batch: 39584

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-19093-1	BLDG A INFLUENT	Total/NA	Air	TO 15 LL	
140-19093-2	BLDG A MID GAC	Total/NA	Air	TO 15 LL	
140-19093-3	BLDG A EFFLUENT	Total/NA	Air	TO 15 LL	
140-19093-4	BLDG C INFLUENT	Total/NA	Air	TO 15 LL	
140-19093-5	BLDG C MID GAC	Total/NA	Air	TO 15 LL	
140-19093-6	BLDG C EFFLUENT	Total/NA	Air	TO 15 LL	
MB 140-39584/4	Method Blank	Total/NA	Air	TO 15 LL	
LCS 140-39584/1007	Lab Control Sample	Total/NA	Air	TO 15 LL	

Client Sample ID: BLDG A INFLUENT
Lab Sample ID: 140-19093-1
Date Collected: 05/13/20 09:42
Matrix: Air
Date Received: 05/14/20 17:16

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	25 mL	500 mL	39584	05/15/20 14:25	S1K	TAL KNX
	Instrument ID: MH									

Client Sample ID: BLDG A MID GAC
Lab Sample ID: 140-19093-2
Date Collected: 05/13/20 09:36
Matrix: Air
Date Received: 05/14/20 17:16

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	100 mL	500 mL	39584	05/15/20 15:18	S1K	TAL KNX
	Instrument ID: MH									

Client Sample ID: BLDG A EFFLUENT
Lab Sample ID: 140-19093-3
Date Collected: 05/13/20 09:31
Matrix: Air
Date Received: 05/14/20 17:16

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	100 mL	500 mL	39584	05/15/20 16:10	S1K	TAL KNX
	Instrument ID: MH									

Client Sample ID: BLDG C INFLUENT
Lab Sample ID: 140-19093-4
Date Collected: 05/13/20 11:41
Matrix: Air
Date Received: 05/14/20 17:16

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	100 mL	500 mL	39584	05/15/20 17:03	S1K	TAL KNX
	Instrument ID: MH									

Client Sample ID: BLDG C MID GAC
Lab Sample ID: 140-19093-5
Date Collected: 05/13/20 11:37
Matrix: Air
Date Received: 05/14/20 17:16

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	100 mL	500 mL	39584	05/15/20 17:57	S1K	TAL KNX
	Instrument ID: MH									

Client Sample ID: BLDG C EFFLUENT
Lab Sample ID: 140-19093-6
Date Collected: 05/13/20 11:33
Matrix: Air
Date Received: 05/14/20 17:16

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	100 mL	500 mL	39584	05/15/20 18:53	S1K	TAL KNX
	Instrument ID: MH									

Client Sample ID: Method Blank
Lab Sample ID: MB 140-39584/4

Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	500 mL	500 mL	39584	05/15/20 13:32	S1K	TAL KNX
	Instrument ID: MH									

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 140-39584/1007

Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	500 mL	500 mL	39584	05/15/20 11:16	S1K	TAL KNX
	Instrument ID: MH									

Laboratory References:

TAL KNX = Eurofins TestAmerica, Knoxville, 5815 Middlebrook Pike, Knoxville, TN 37921, TEL (865)291-3000

Method Summary

Client: Tetra Tech GEO
Job ID: 140-19093-1
Project/Site: LMMRC SSDS - Middle River

Method	Method Description	Protocol	Laboratory
TO 15 LL	Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)	EPA	TAL KNX

Protocol References:

EPA = US Environmental Protection Agency

Laboratory References:

TAL KNX = Eurofins TestAmerica, Knoxville, 5815 Middlebrook Pike, Knoxville, TN 37921, TEL (865)291-3000

Sample Summary

Client: Tetra Tech GEO
Job ID: 140-19093-1
Project/Site: LMMRC SSDS - Middle River

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
140-19093-1	BLDG A INFLUENT	Air	05/13/20 09:42	05/14/20 17:16	Air Canister (1-Liter) #11713
140-19093-2	BLDG A MID GAC	Air	05/13/20 09:36	05/14/20 17:16	Air Canister (1-Liter) #34002418
140-19093-3	BLDG A EFFLUENT	Air	05/13/20 09:31	05/14/20 17:16	Air Canister (1-Liter) #10980
140-19093-4	BLDG C INFLUENT	Air	05/13/20 11:41	05/14/20 17:16	Air Canister (1-Liter) #11879
140-19093-5	BLDG C MID GAC	Air	05/13/20 11:37	05/14/20 17:16	Air Canister (1-Liter) #11665
140-19093-6	BLDG C EFFLUENT	Air	05/13/20 11:33	05/14/20 17:16	Air Canister (1-Liter) #11828

Method TO15 Low Level

Volatile Organic Compounds - Low level (GC/MS) by Method TO 15

FORM II
AIR - GC/MS VOA SURROGATE RECOVERY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19093-1

SDG No.:

Matrix: Air Level: Low

GC Column (1): RTX-5 ID: 0.32(mm)

Client Sample ID	Lab Sample ID	BFB #
BLDG A INFLUENT	140-19093-1	89
BLDG A MID GAC	140-19093-2	92
BLDG A EFFLUENT	140-19093-3	92
BLDG C INFLUENT	140-19093-4	101
BLDG C MID GAC	140-19093-5	94
BLDG C EFFLUENT	140-19093-6	99
	MB 140-39584/4	92
	LCS 140-39584/1007	106

	QC LIMITS
BFB = 4-Bromofluorobenzene (Surr)	60-140

Column to be used to flag recovery values

FORM II TO 15 LL

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19093-1

SDG No.:

Matrix: Air Level: Low Lab File ID: HCCVE15A-LCS.d

Lab ID: LCS 140-39584/1007 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Benzene	1.60	1.71	107	70-130	
Carbon tetrachloride	1.60	1.88	117	70-130	
Chlorodifluoromethane	1.60	1.68	105	60-140	
Chloroform	1.60	1.82	114	70-130	
cis-1,2-Dichloroethene	1.60	1.63	102	70-130	
Dichlorodifluoromethane	1.60	1.92	120	60-140	
1,1-Dichloroethane	1.60	1.65	103	70-130	
1,2-Dichloroethane	1.60	1.77	111	70-130	
1,1-Dichloroethene	1.60	1.60	100	70-130	
Ethylbenzene	1.60	1.82	114	70-130	
Methylene Chloride	1.60	1.86	116	70-130	
Methyl tert-butyl ether	1.60	1.69	106	60-140	
Naphthalene	1.60	2.16	135	60-140	
Tetrachloroethene	1.60	1.72	107	70-130	
Toluene	1.60	1.73	108	70-130	
trans-1,2-Dichloroethene	1.60	1.65	103	70-130	
1,2,4-Trichlorobenzene	1.60	2.20	138	60-140	
1,1,1-Trichloroethane	1.60	1.75	109	70-130	
1,1,2-Trichloroethane	1.60	1.86	116	70-130	
Trichloroethene	1.60	1.70	106	70-130	
1,2,3-Trimethylbenzene	1.60	1.96	123	70-130	
1,2,4-Trimethylbenzene	1.60	1.99	124	70-130	
1,3,5-Trimethylbenzene	1.60	1.81	113	70-130	
Vinyl chloride	1.60	2.18	136	70-130	*
Xylenes, Total	4.80	5.86	122	70-130	

Column to be used to flag recovery and RPD values

FORM III TO 15 LL

FORM IV
AIR - GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19093-1

SDG No.:

Lab File ID: H500BE15.D Lab Sample ID: MB 140-39584/4

Matrix: Air Heated Purge:(Y/N) N

Instrument ID: MH Date Analyzed: 05/15/2020 13:32

GC Column: RTX-5 ID: 0.32(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 140-39584/1007	HCCVE15A-LCS.d	05/15/2020 11:16
BLDG A INFLUENT	140-19093-1	HE15P101.D	05/15/2020 14:25
BLDG A MID GAC	140-19093-2	HE15P102.D	05/15/2020 15:18
BLDG A EFFLUENT	140-19093-3	HE15P103.D	05/15/2020 16:10
BLDG C INFLUENT	140-19093-4	HE15P104.D	05/15/2020 17:03
BLDG C MID GAC	140-19093-5	HE15P105.D	05/15/2020 17:57
BLDG C EFFLUENT	140-19093-6	HE15P106.D	05/15/2020 18:53

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19093-1

SDG No.:

Lab File ID: HDNUD16X.D BFB Injection Date: 04/16/2020

Instrument ID: MH BFB Injection Time: 06:14

Analysis Batch No.: 39100

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	19.8	
75	30.0 - 60.0 % of mass 95	48.7	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.8	
173	Less than 2.0 % of mass 174	0.4	(0.5) 1
174	50.0 - 120.00 % of mass 95	82.4	
175	5.0 - 9.0 % of mass 174	5.7	(7.0) 1
176	95.0 - 101.0 % of mass 174	79.5	(96.5) 1
177	5.0 - 9.0 % of mass 176	5.1	(6.5) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 140-39100/3	HD16IC01.D	04/16/2020	8:03
	IC 140-39100/4	HD16IC02.D	04/16/2020	8:55
	IC 140-39100/5	HD16IC03.D	04/16/2020	9:47
	IC 140-39100/6	HD16IC04.D	04/16/2020	10:40
	IC 140-39100/7	HD16IC05.D	04/16/2020	11:33
	IC 140-39100/8	HD16IC06.D	04/16/2020	12:26
	ICIS 140-39100/9	HD16IC07.D	04/16/2020	13:19
	IC 140-39100/11	HD16IC08.D	04/16/2020	15:04
	IC 140-39100/13	HD16C09.D	04/16/2020	16:49
	IC 140-39100/15	HD16IC10.D	04/16/2020	18:34
	ICV 140-39100/17	HD16ICV.D	04/16/2020	20:21

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19093-1

SDG No.:

Lab File ID: HBFBE15A.D BFB Injection Date: 05/15/2020

Instrument ID: MH BFB Injection Time: 10:46

Analysis Batch No.: 39584

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	20.3	
75	30.0 - 60.0 % of mass 95	53.6	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.7	
173	Less than 2.0 % of mass 174	0.4	(0.5) 1
174	50.0 - 120.00 % of mass 95	81.8	
175	5.0 - 9.0 % of mass 174	5.6	(6.8) 1
176	95.0 - 101.0 % of mass 174	78.1	(95.5) 1
177	5.0 - 9.0 % of mass 176	5.0	(6.4) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 140-39584/7	HCCVE15A.D	05/15/2020	11:16
	LCS 140-39584/1007	HCCVE15A-LCS.	05/15/2020	11:16
	MB 140-39584/4	H500BE15.D	05/15/2020	13:32
BLDG A INFLUENT	140-19093-1	HE15P101.D	05/15/2020	14:25
BLDG A MID GAC	140-19093-2	HE15P102.D	05/15/2020	15:18
BLDG A EFFLUENT	140-19093-3	HE15P103.D	05/15/2020	16:10
BLDG C INFLUENT	140-19093-4	HE15P104.D	05/15/2020	17:03
BLDG C MID GAC	140-19093-5	HE15P105.D	05/15/2020	17:57
BLDG C EFFLUENT	140-19093-6	HE15P106.D	05/15/2020	18:53

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19093-1

SDG No.:

Sample No.: ICIS 140-39100/9 Date Analyzed: 04/16/2020 13:19

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm)

Lab File ID (Standard): HD16IC07.D Heated Purge: (Y/N) N

Calibration ID: 2402

		CBM		DFBZ		CBZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		238129	8.59	1621590	10.79	1350213	15.58
UPPER LIMIT		333381	8.92	2270226	11.12	1890298	15.91
LOWER LIMIT		142877	8.26	972954	10.46	810128	15.25
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 140-39100/17		348376*3	8.59	2365337*3	10.79	1913911*3	15.57

CBM = Chlorobromomethane (IS)
DFBZ = 1,4-Difluorobenzene
CBZd5 = Chlorobenzene-d5 (IS)

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO 15 LL

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19093-1

SDG No.:

Sample No.: CCVIS 140-39584/7 Date Analyzed: 05/15/2020 11:16

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm)

Lab File ID (Standard): HCCVE15A.D Heated Purge: (Y/N) N

Calibration ID: 2402

		CBM		DFBZ		CBZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		175280	8.58	1197070	10.78	957658	15.57
UPPER LIMIT		245392	8.91	1675898	11.11	1340721	15.90
LOWER LIMIT		105168	8.25	718242	10.45	574595	15.24
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 140-39584/1007		175280	8.58	1197070	10.78	957658	15.57
MB 140-39584/4		173180	8.58	1175745	10.78	877860	15.57
140-19093-1	BLDG A INFLUENT	151253	8.58	1010851	10.78	786809	15.57
140-19093-2	BLDG A MID GAC	151471	8.58	1007641	10.78	822948	15.57
140-19093-3	BLDG A EFFLUENT	149490	8.58	979739	10.78	791191	15.57
140-19093-4	BLDG C INFLUENT	155339	8.58	1031209	10.78	844514	15.57
140-19093-5	BLDG C MID GAC	166014	8.59	1107724	10.79	916294	15.57
140-19093-6	BLDG C EFFLUENT	177392	8.59	1196663	10.79	938120	15.57

CBM = Chlorobromomethane (IS)
DFBZ = 1,4-Difluorobenzene
CBZd5 = Chlorobenzene-d5 (IS)

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO 15 LL

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19093-1

SDG No.:

Client Sample ID: BLDG A INFLUENT Lab Sample ID: 140-19093-1

Matrix: Air Lab File ID: HE15P101.D

Analysis Method: TO 15 LL Date Collected: 05/13/2020 09:42

Sample wt/vol: 25(mL) Date Analyzed: 05/15/2020 14:25

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 39584 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	7.4		1.6	0.16
56-23-5	Carbon tetrachloride	153.81	ND		1.6	0.14
75-45-6	Chlorodifluoromethane	86.47	ND		1.6	0.44
67-66-3	Chloroform	119.38	0.48	J	1.6	0.14
156-59-2	cis-1,2-Dichloroethene	96.94	12		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	0.52	J	1.6	0.28
75-34-3	1,1-Dichloroethane	98.96	2.6		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	15		1.6	0.16
100-41-4	Ethylbenzene	106.17	ND		1.6	0.26
75-09-2	Methylene Chloride	84.93	ND		8.0	3.2
1634-04-4	Methyl tert-butyl ether	88.15	ND		8.0	1.0
91-20-3	Naphthalene	128.17	ND		0.80	0.80
127-18-4	Tetrachloroethene	165.83	ND		1.6	0.14
108-88-3	Toluene	92.14	1.9	J	2.4	1.6
156-60-5	trans-1,2-Dichloroethene	96.94	0.26	J	1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		1.6	1.3
71-55-6	1,1,1-Trichloroethane	133.41	68		1.6	0.74
79-00-5	1,1,2-Trichloroethane	133.41	ND		1.6	0.14
79-01-6	Trichloroethene	131.39	180		0.80	0.12
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		1.6	0.72
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		1.6	0.40
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		1.6	0.44
75-01-4	Vinyl chloride	62.50	ND	*	0.80	0.52
1330-20-7	Xylenes, Total	106.17	ND		3.2	0.48

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	89		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19093-1

SDG No.:

Client Sample ID: BLDG A INFLUENT Lab Sample ID: 140-19093-1

Matrix: Air Lab File ID: HE15P101.D

Analysis Method: TO 15 LL Date Collected: 05/13/2020 09:42

Sample wt/vol: 25(mL) Date Analyzed: 05/15/2020 14:25

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 39584 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	24		5.1	0.51
56-23-5	Carbon tetrachloride	153.81	ND		10	0.88
75-45-6	Chlorodifluoromethane	86.47	ND		5.7	1.6
67-66-3	Chloroform	119.38	2.3	J	7.8	0.68
156-59-2	cis-1,2-Dichloroethene	96.94	47		6.3	0.79
75-71-8	Dichlorodifluoromethane	120.91	2.5	J	7.9	1.4
75-34-3	1,1-Dichloroethane	98.96	10		6.5	0.57
107-06-2	1,2-Dichloroethane	98.96	ND		6.5	0.81
75-35-4	1,1-Dichloroethene	96.94	60		6.3	0.63
100-41-4	Ethylbenzene	106.17	ND		6.9	1.1
75-09-2	Methylene Chloride	84.93	ND		28	11
1634-04-4	Methyl tert-butyl ether	88.15	ND		29	3.7
91-20-3	Naphthalene	128.17	ND		4.2	4.2
127-18-4	Tetrachloroethene	165.83	ND		11	0.95
108-88-3	Toluene	92.14	7.2	J	9.0	5.9
156-60-5	trans-1,2-Dichloroethene	96.94	1.0	J	6.3	0.56
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		12	9.5
71-55-6	1,1,1-Trichloroethane	133.41	370		8.7	4.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		8.7	0.76
79-01-6	Trichloroethene	131.39	980		4.3	0.64
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		7.9	3.5
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		7.9	2.0
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		7.9	2.2
75-01-4	Vinyl chloride	62.50	ND	*	2.0	1.3
1330-20-7	Xylenes, Total	106.17	ND		14	2.1

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	89		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HE15P101.D
Lims ID: 140-19093-A-1
Client ID: BLDG A INFLUENT
Sample Type: Client
Inject. Date: 15-May-2020 14:25:30 ALS Bottle#: 1 Worklist Smp#: 5
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0015105-005
Misc. Info.: 140-19093-a-1
Operator ID: HMT Instrument ID: MH

Method: \\chromfs\Knoxville\ChromData\MH\20200513-15460.b\MH_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 18-May-2020 17:23:25 Calib Date: 16-Apr-2020 18:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC10.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1040

First Level Reviewer: khachitpongpanits Date: 18-May-2020 17:23:25

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.577	8.577	0.000	94	151253	4.00	
* 2 1,4-Difluorobenzene	114	10.784	10.784	0.000	95	1010851	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.570	15.570	0.000	90	786809	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.219	17.239	-0.020	89	471093	3.57	
6 Chlorodifluoromethane	51	3.543	3.543	0.000	37	2971	0.0186	
8 Dichlorodifluoromethane	85	3.600	3.600	0.000	98	6326	0.0258	
27 1,1-Dichloroethene	96	5.709	5.709	0.000	96	55329	0.7508	
34 trans-1,2-Dichloroethene	96	6.856	6.851	0.005	16	943	0.0130	
37 1,1-Dichloroethane	63	7.270	7.269	0.001	98	18694	0.1291	
42 cis-1,2-Dichloroethene	96	8.252	8.251	0.001	97	44933	0.5918	
44 Chloroform	83	8.593	8.592	0.001	28	4259	0.0238	
47 1,1,1-Trichloroethane	97	9.616	9.616	0.000	96	565561	3.40	
51 Benzene	78	10.226	10.216	0.006	97	80886	0.3679	
58 Trichloroethene	130	11.508	11.502	0.001	90	820578	9.13	
67 Toluene	91	13.580	13.585	-0.005	91	18138	0.0953	

Reagents:

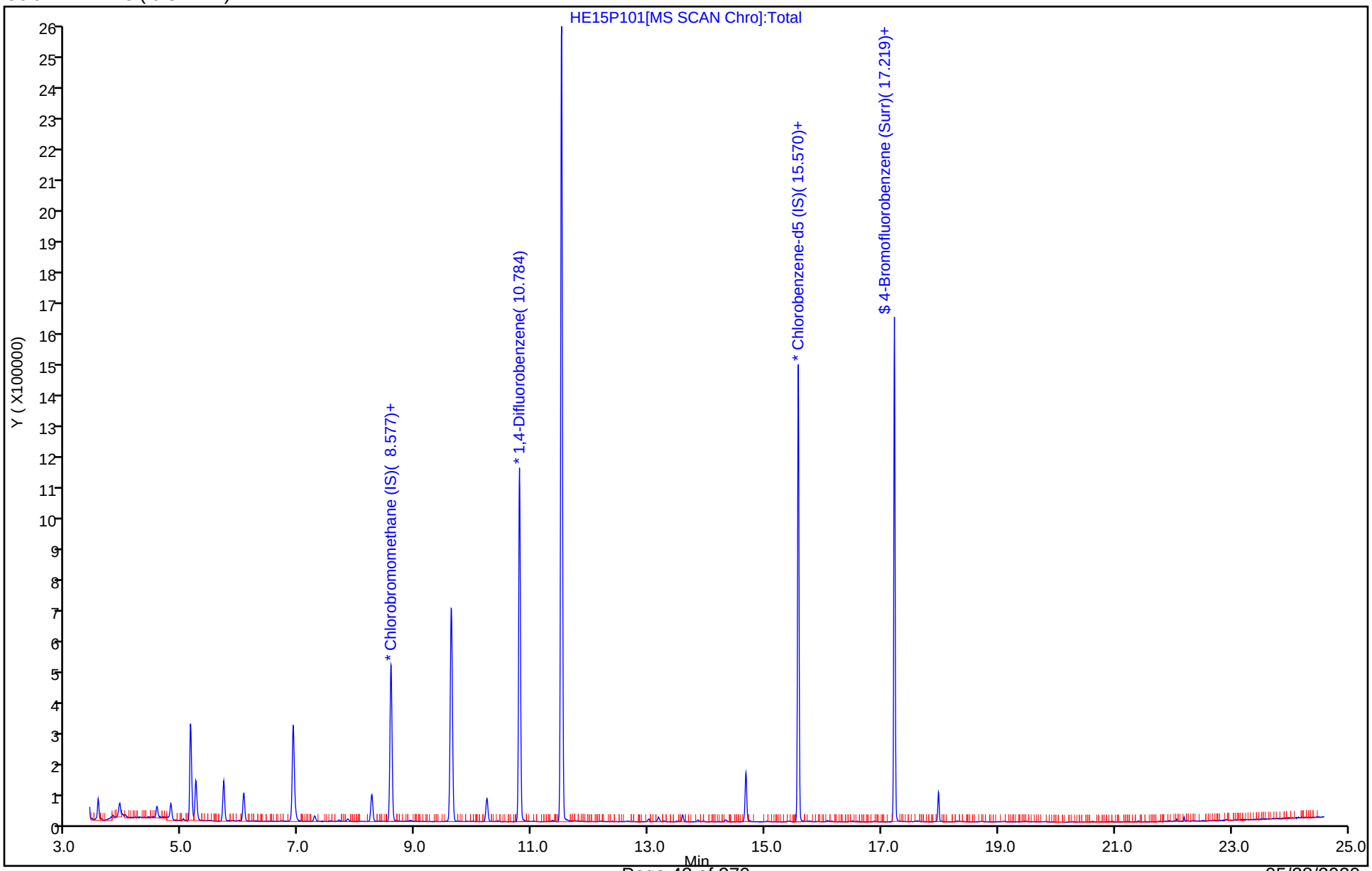
40MXISSURP_00004 Amount Added: 40.00 Units: mL Run Reagent

Report Date: 18-May-2020 17:23:25 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HE15P101.D				
Injection Date:	15-May-2020 14:25:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	140-19093-A-1	Lab Sample ID:	140-19093-1	Worklist Smp#:	5
Client ID:	BLDG A INFLUENT				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HE15P101.D				
Lims ID:	140-19093-A-1				
Client ID:	BLDG A INFLUENT				
Sample Type:	Client				
Inject. Date:	15-May-2020 14:25:30	ALS Bottle#:	1	Worklist Smp#:	5
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0015105-005				
Misc. Info.:	140-19093-a-1				
Operator ID:	HMT	Instrument ID:	MH		
Method:	\\chromfs\Knoxville\ChromData\MH\20200513-15460.b\MH_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	18-May-2020 17:23:25	Calib Date:	16-Apr-2020 18:34:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC10.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1040				

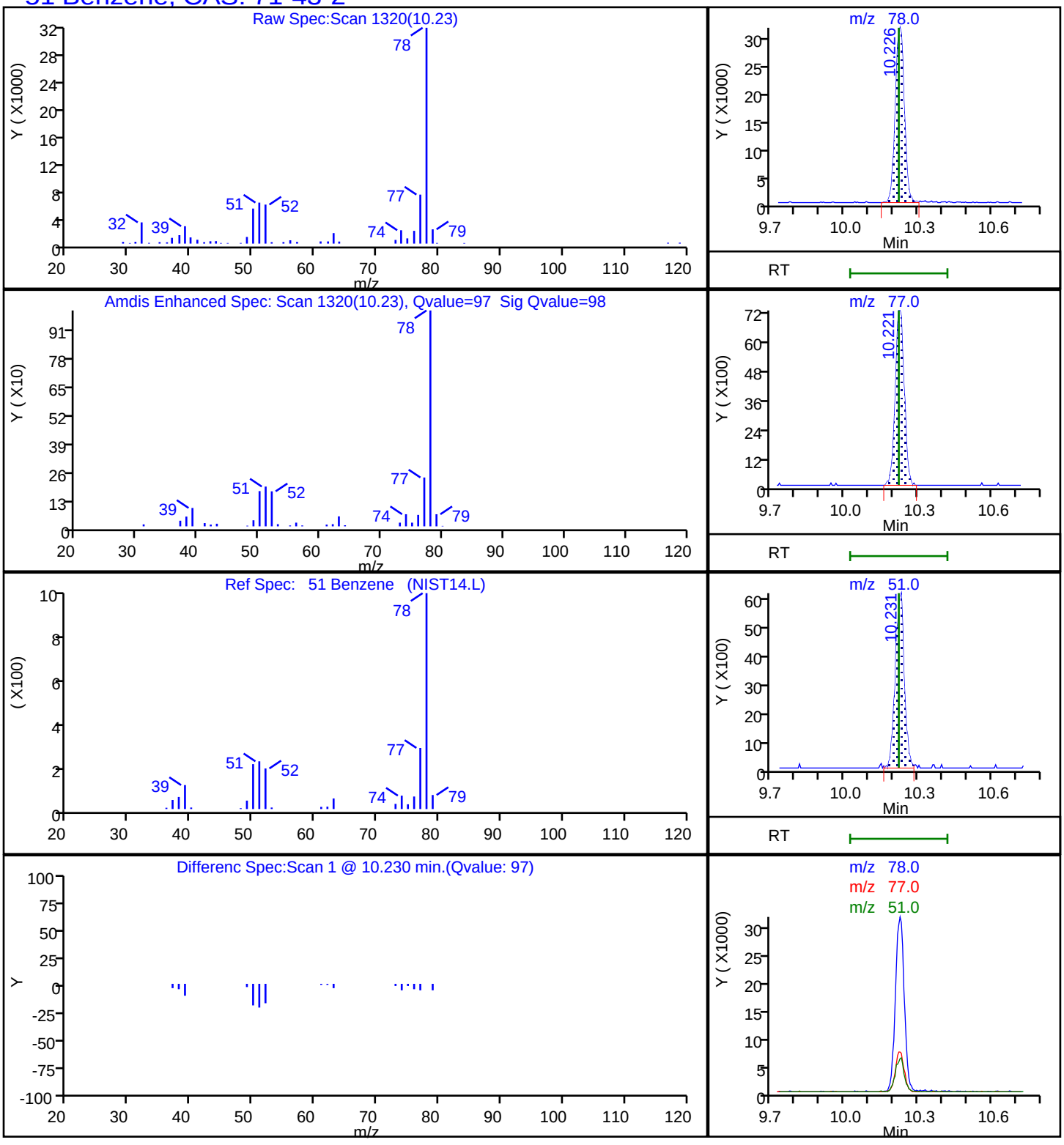
First Level Reviewer: khachitpongpanits Date: 18-May-2020 17:23:25

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.00	3.57	89.22

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HE15P101.D		
Injection Date:	15-May-2020 14:25:30	Instrument ID:	MH
Lims ID:	140-19093-A-1	Lab Sample ID:	140-19093-1
Client ID:	BLDG A INFLUENT		
Operator ID:	HMT	ALS Bottle#:	1 Worklist Smp#: 5
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

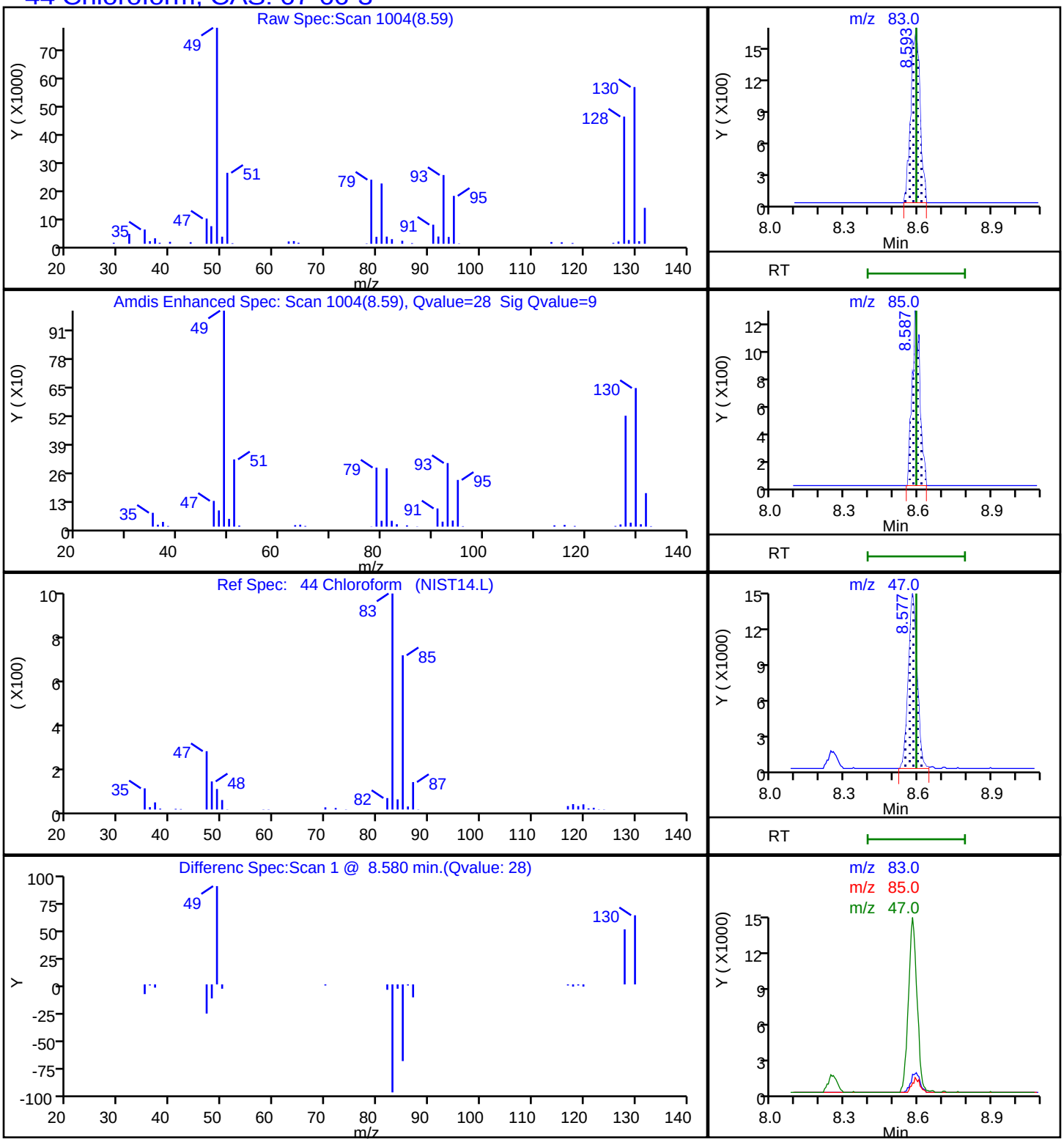
51 Benzene, CAS: 71-43-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HE15P101.D		
Injection Date:	15-May-2020 14:25:30	Instrument ID:	MH
Lims ID:	140-19093-A-1	Lab Sample ID:	140-19093-1
Client ID:	BLDG A INFLUENT		
Operator ID:	HMT	ALS Bottle#:	1 Worklist Smp#: 5
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

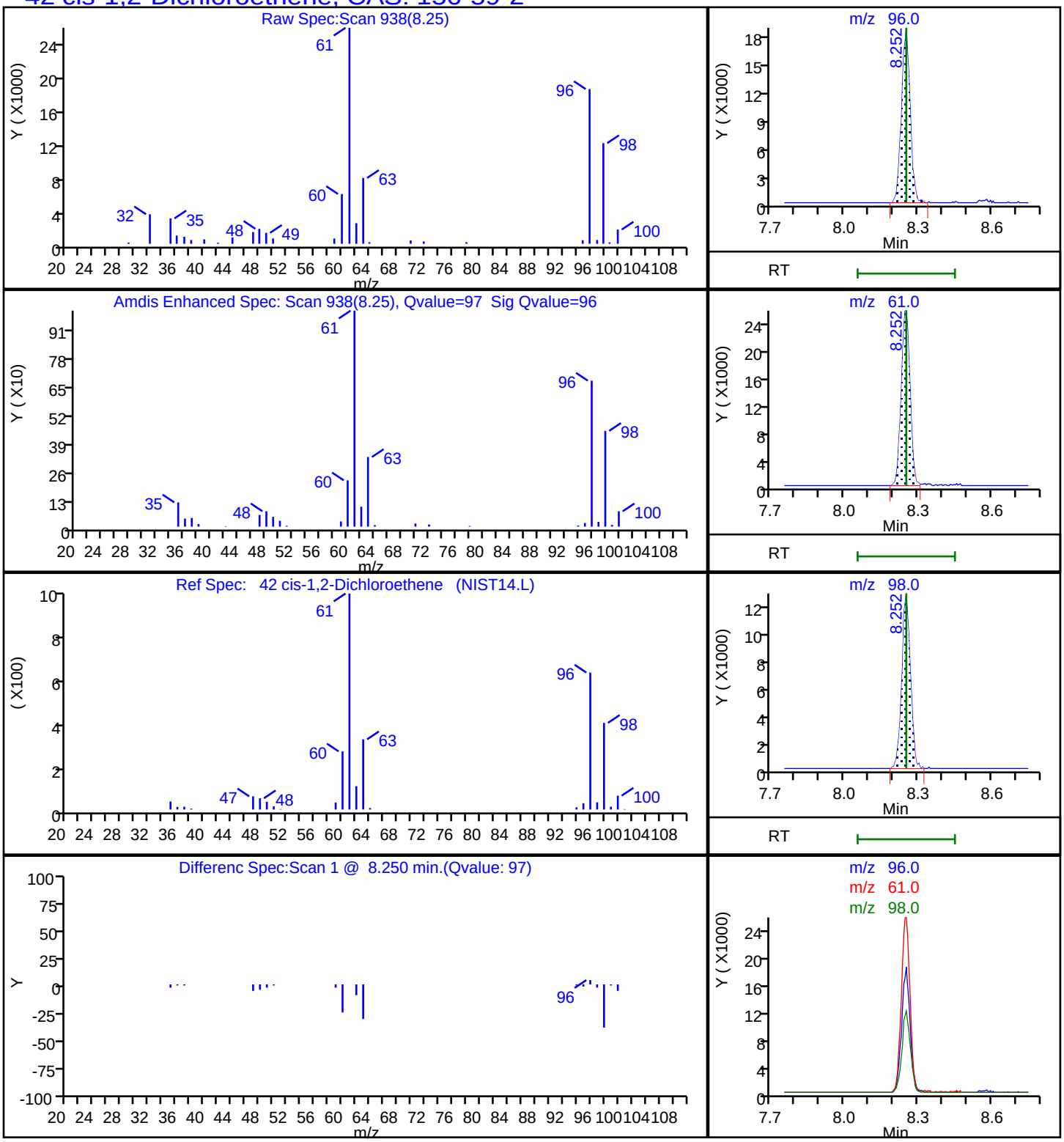
44 Chloroform, CAS: 67-66-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HE15P101.D		
Injection Date:	15-May-2020 14:25:30	Instrument ID:	MH
Lims ID:	140-19093-A-1	Lab Sample ID:	140-19093-1
Client ID:	BLDG A INFLUENT		
Operator ID:	HMT	ALS Bottle#:	1 Worklist Smp#: 5
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

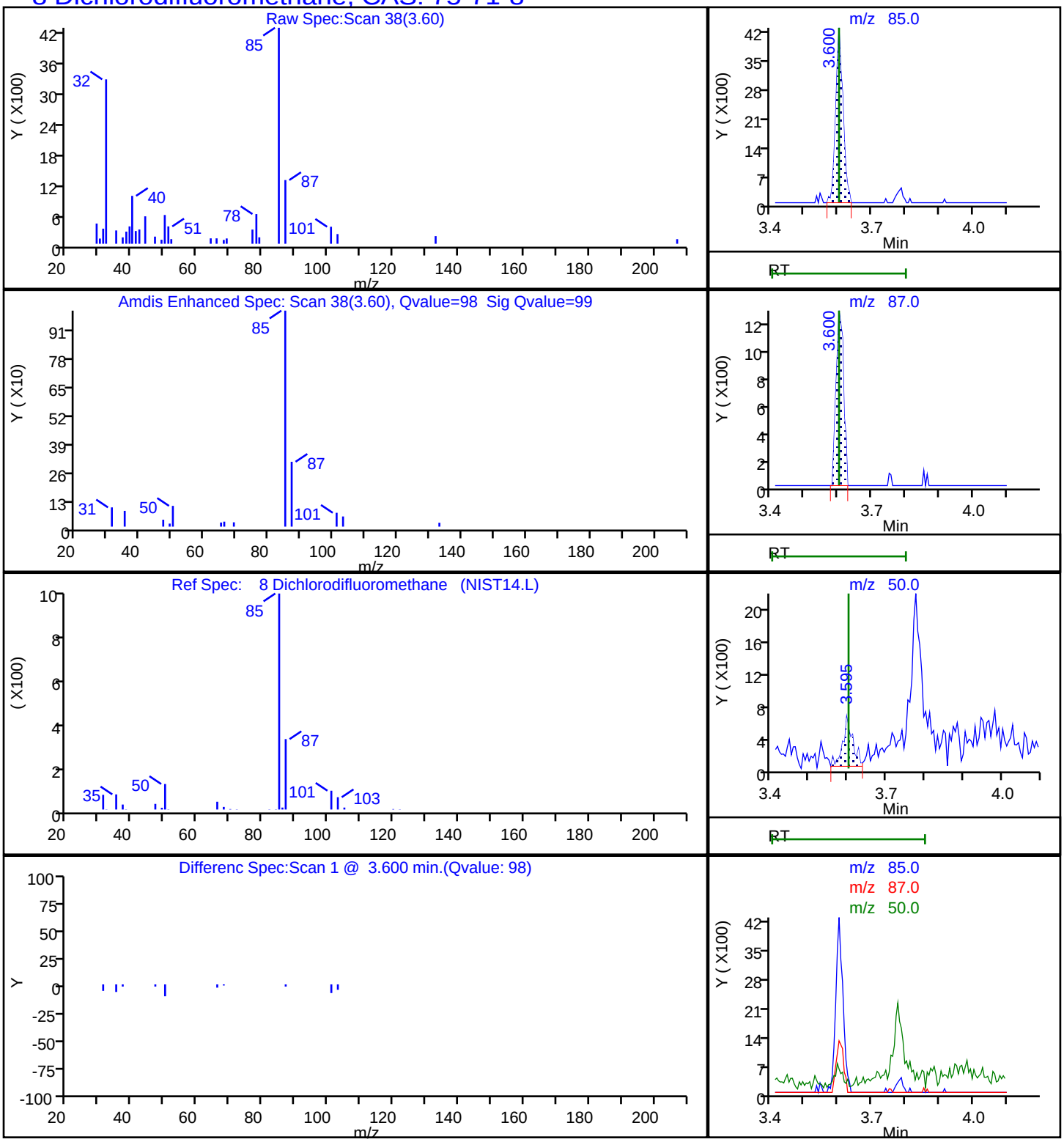
42 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HE15P101.D		
Injection Date:	15-May-2020 14:25:30	Instrument ID:	MH
Lims ID:	140-19093-A-1	Lab Sample ID:	140-19093-1
Client ID:	BLDG A INFLUENT		
Operator ID:	HMT	ALS Bottle#:	1 Worklist Smp#: 5
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

8 Dichlorodifluoromethane, CAS: 75-71-8



Eurofins TestAmerica, Knoxville

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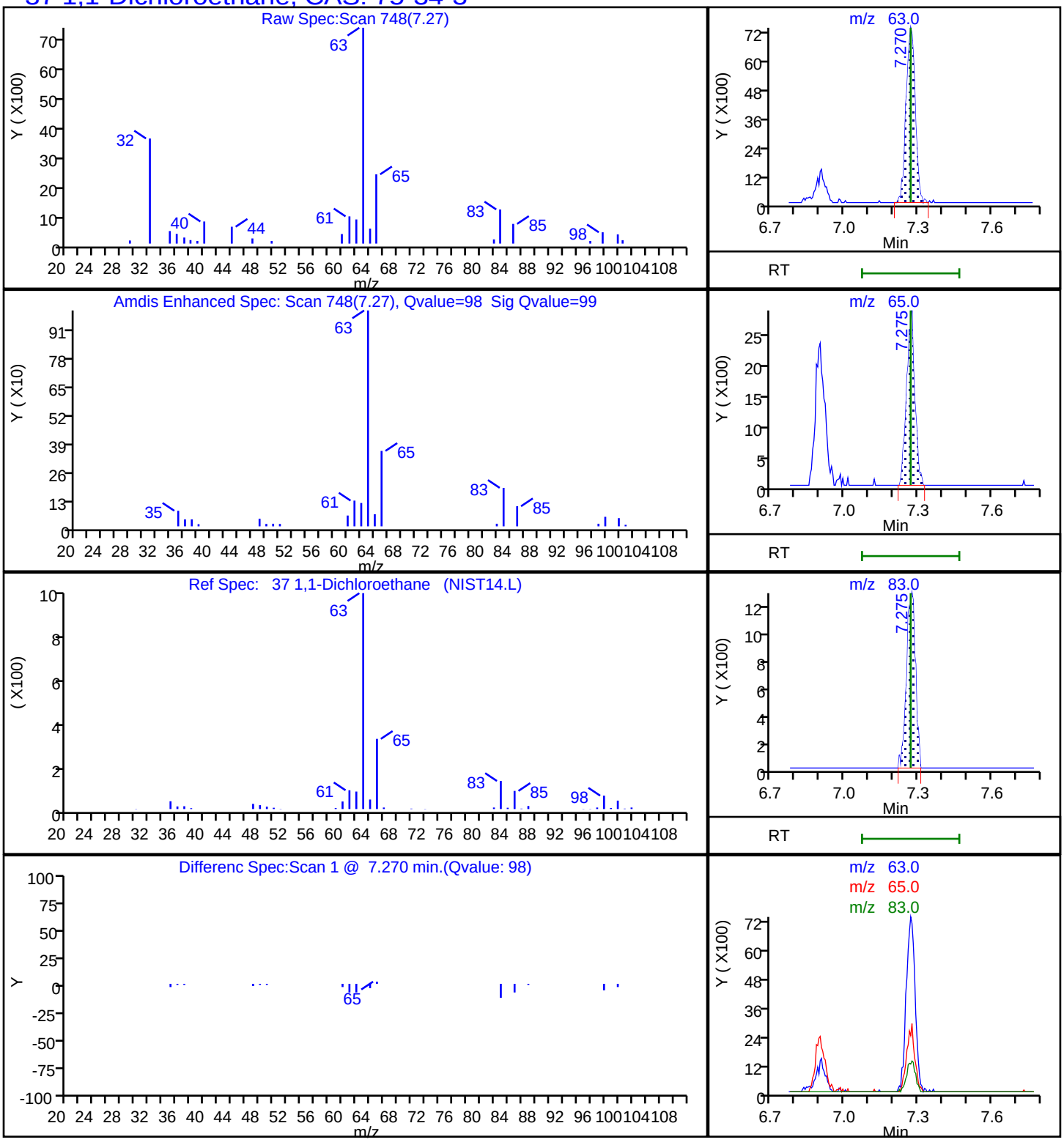
Injection Date:	15-May-2020 14:25:30	Instrument ID:	MH
Lims ID:	140-19093-A-1	Lab Sample ID:	140-19093-1
Client ID:	BLDG A INFLUENT		
Operator ID:	HMT	ALS Bottle#:	1 Worklist Smp#: 5
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

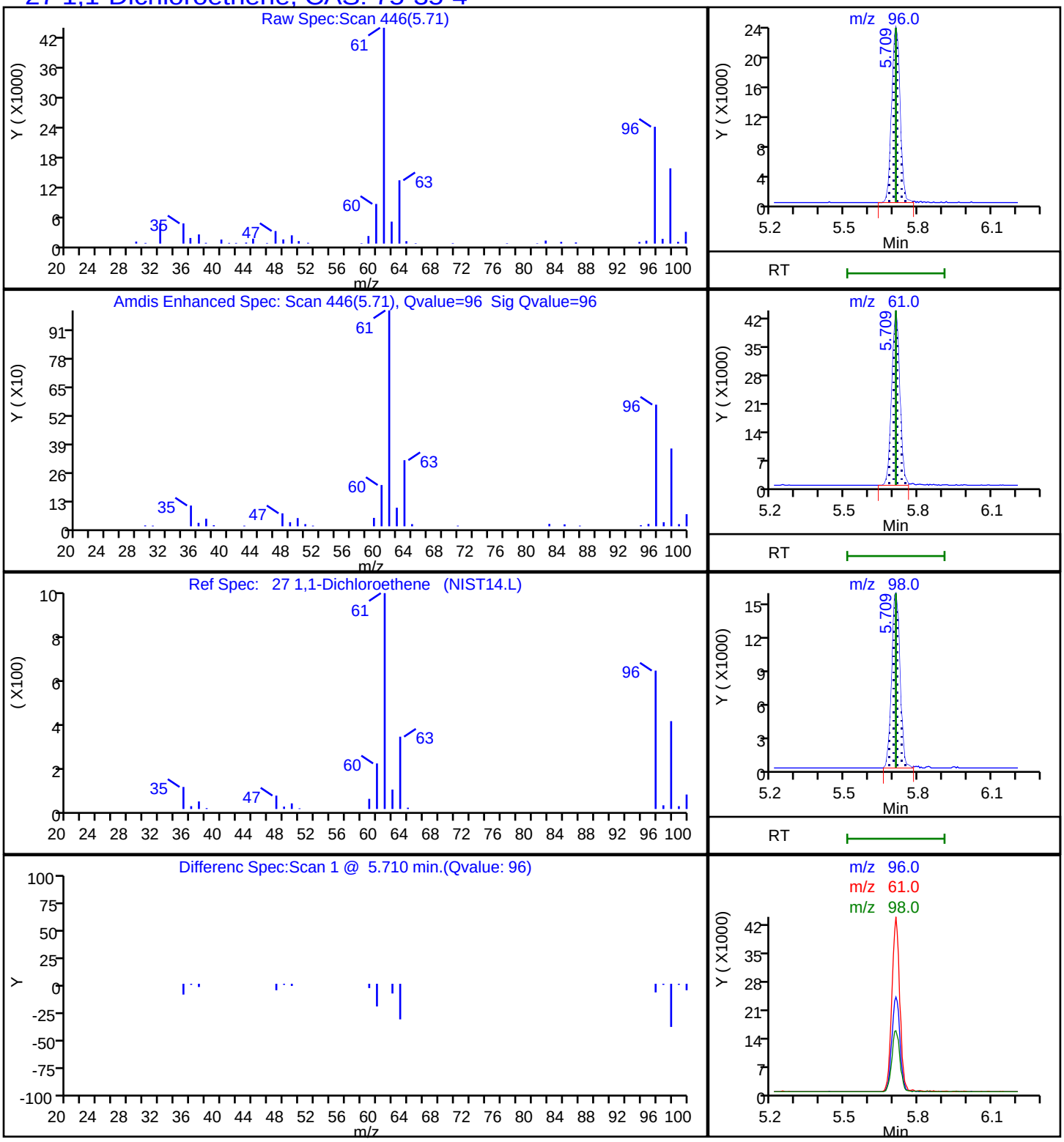
37 1,1-Dichloroethane, CAS: 75-34-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HE15P101.D		
Injection Date:	15-May-2020 14:25:30	Instrument ID:	MH
Lims ID:	140-19093-A-1	Lab Sample ID:	140-19093-1
Client ID:	BLDG A INFLUENT		
Operator ID:	HMT	ALS Bottle#:	1 Worklist Smp#: 5
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

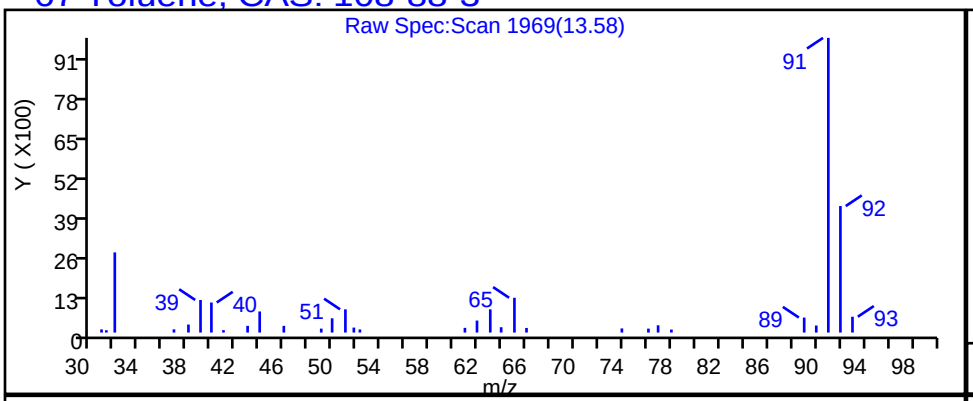
27 1,1-Dichloroethene, CAS: 75-35-4

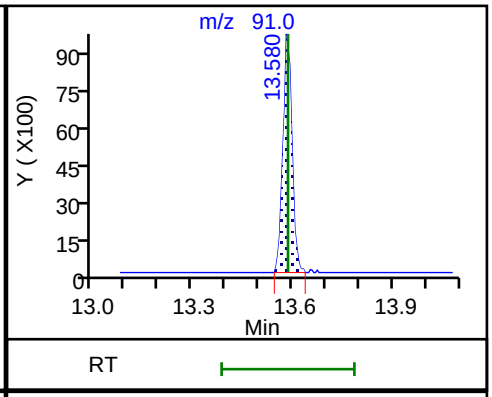


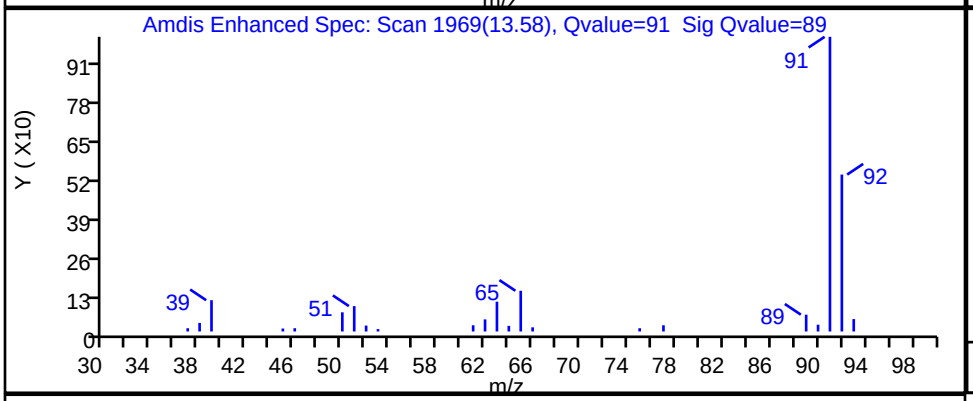
Eurofins TestAmerica, Knoxville

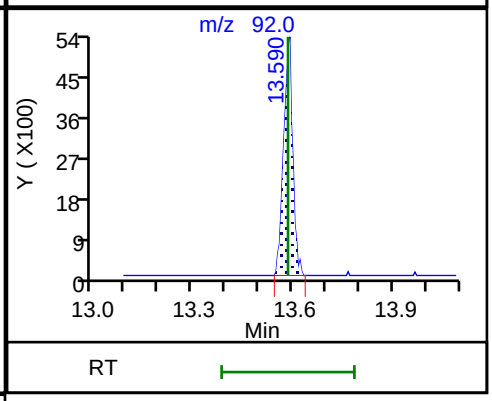
Data File:	\\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HE15P101.D		
Injection Date:	15-May-2020 14:25:30	Instrument ID:	MH
Lims ID:	140-19093-A-1	Lab Sample ID:	140-19093-1
Client ID:	BLDG A INFLUENT		
Operator ID:	HMT	ALS Bottle#:	1 Worklist Smp#: 5
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

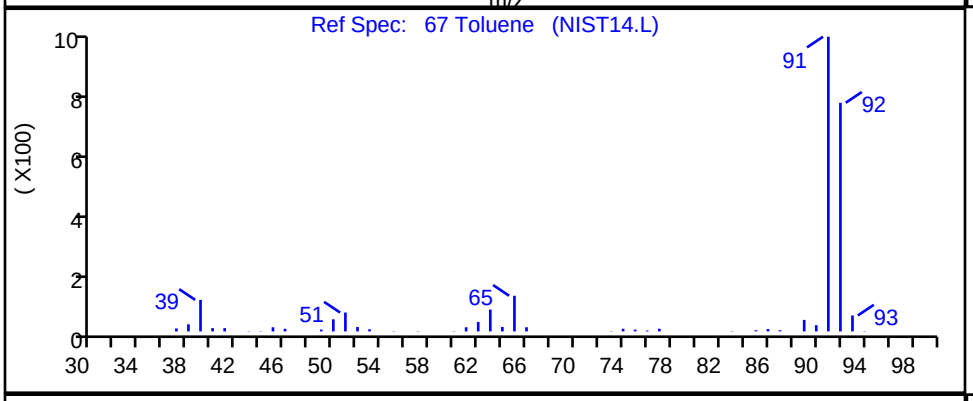
67 Toluene, CAS: 108-88-3

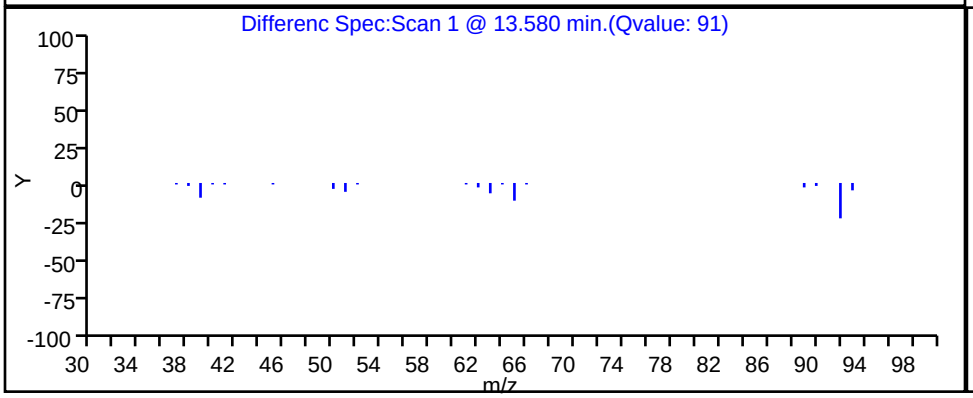


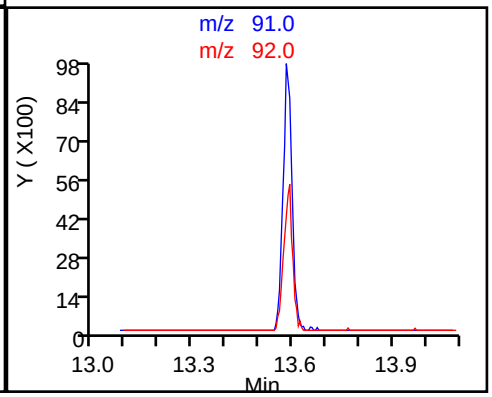








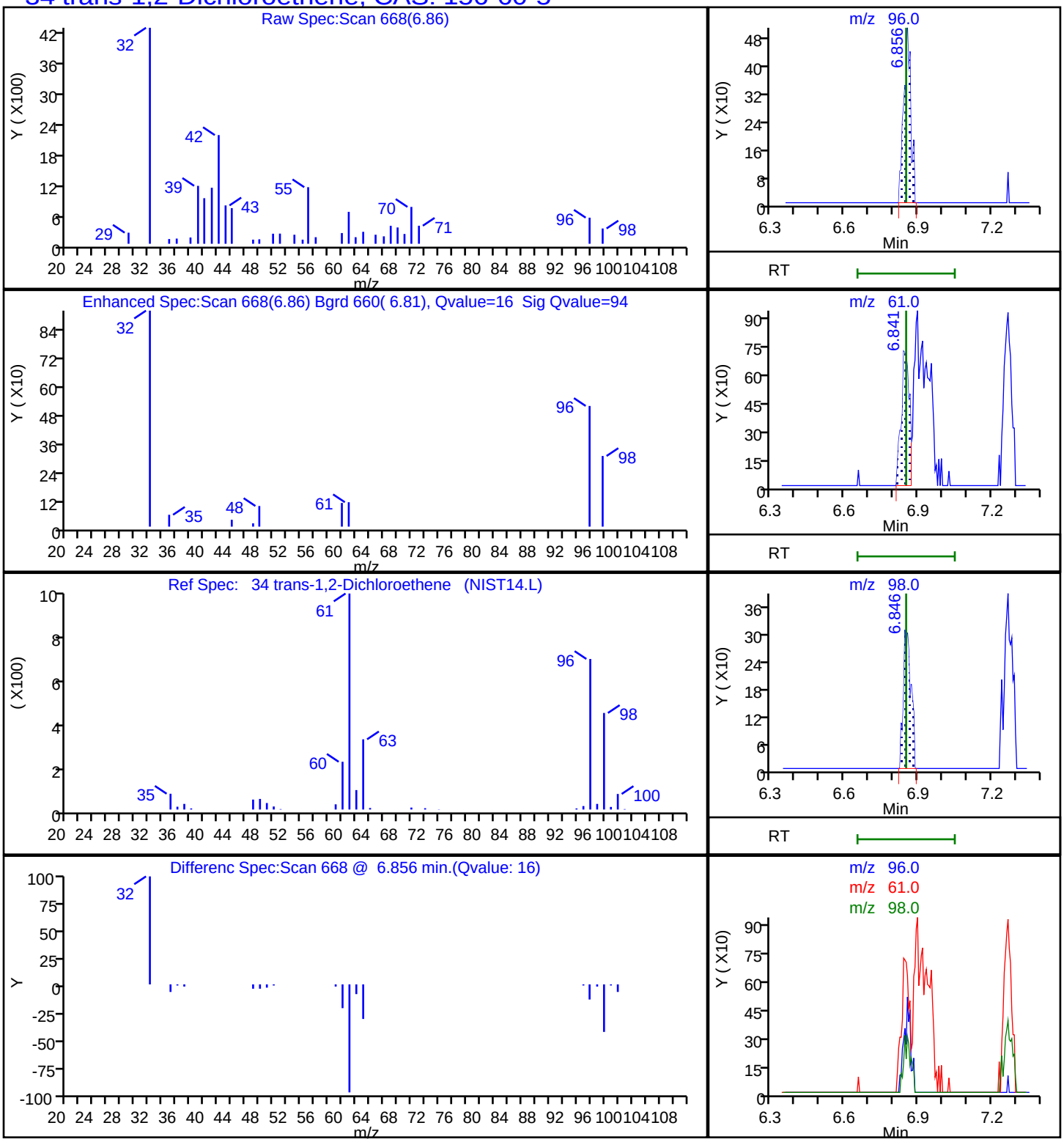




Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HE15P101.D		
Injection Date:	15-May-2020 14:25:30	Instrument ID:	MH
Lims ID:	140-19093-A-1	Lab Sample ID:	140-19093-1
Client ID:	BLDG A INFLUENT		
Operator ID:	HMT	ALS Bottle#:	1 Worklist Smp#: 5
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

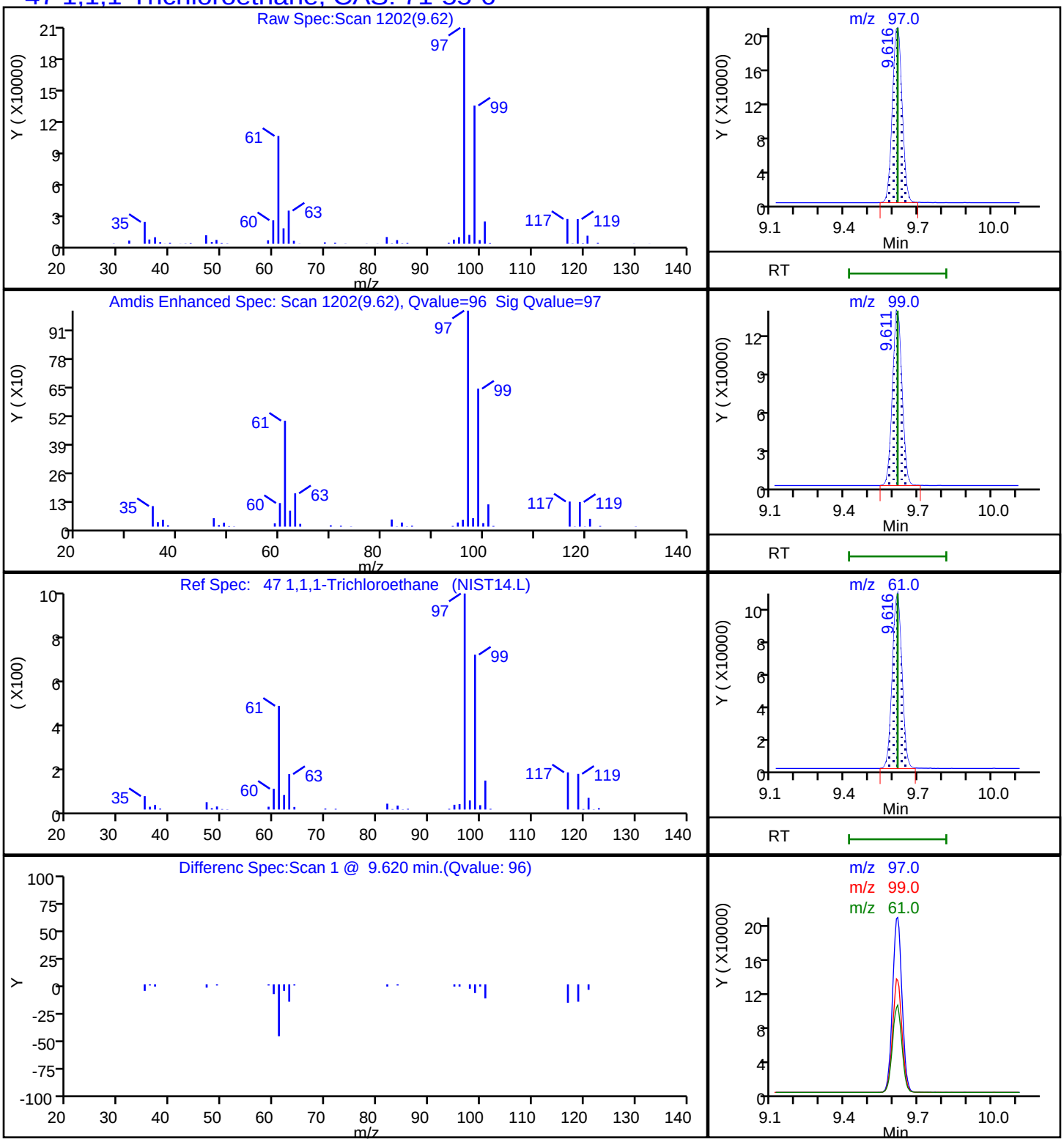
34 trans-1,2-Dichloroethene, CAS: 156-60-5



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HE15P101.D		
Injection Date:	15-May-2020 14:25:30	Instrument ID:	MH
Lims ID:	140-19093-A-1	Lab Sample ID:	140-19093-1
Client ID:	BLDG A INFLUENT		
Operator ID:	HMT	ALS Bottle#:	1 Worklist Smp#: 5
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

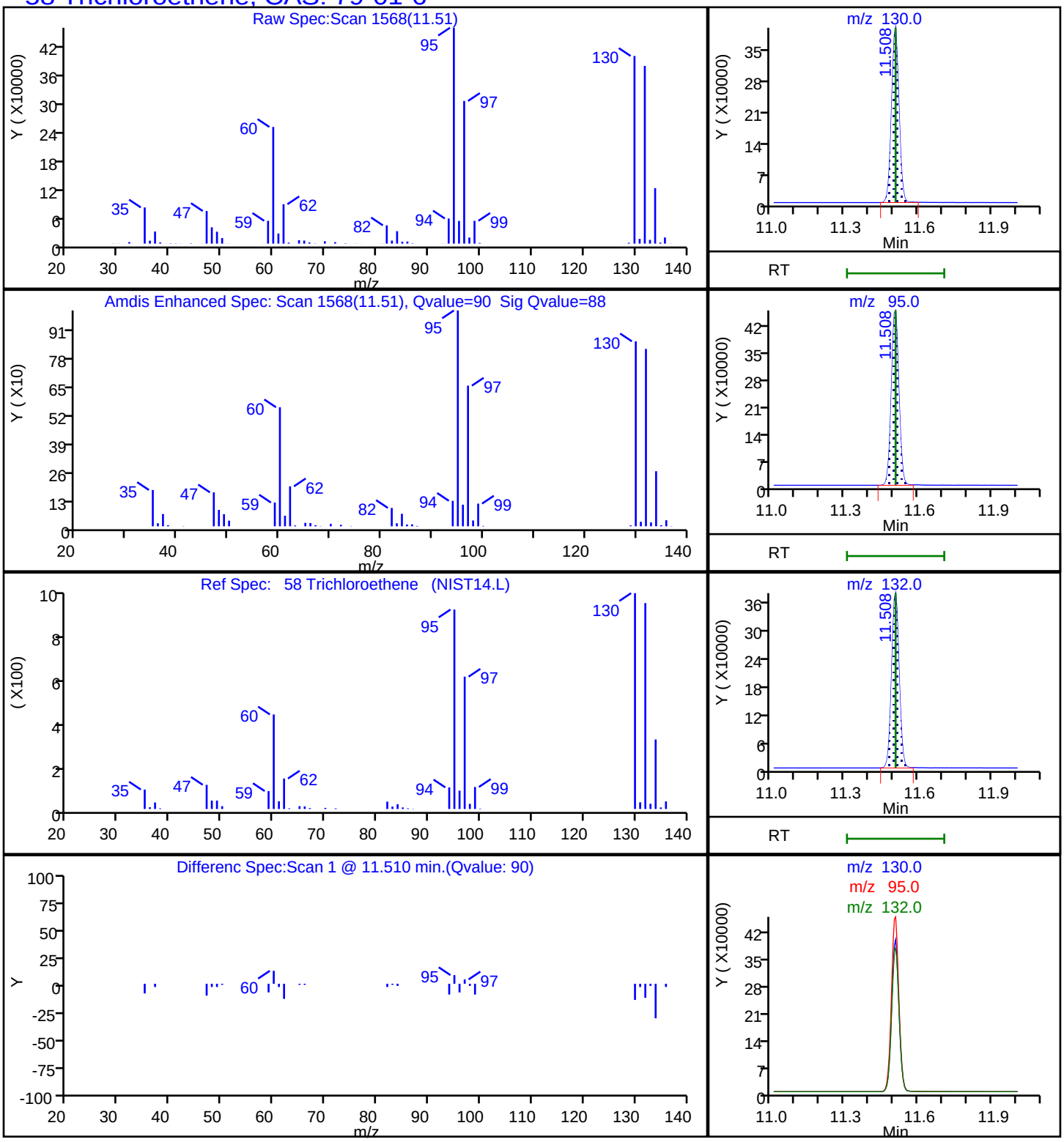
47 1,1,1-Trichloroethane, CAS: 71-55-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HE15P101.D		
Injection Date:	15-May-2020 14:25:30	Instrument ID:	MH
Lims ID:	140-19093-A-1	Lab Sample ID:	140-19093-1
Client ID:	BLDG A INFLUENT		
Operator ID:	HMT	ALS Bottle#:	1 Worklist Smp#: 5
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

58 Trichloroethene, CAS: 79-01-6



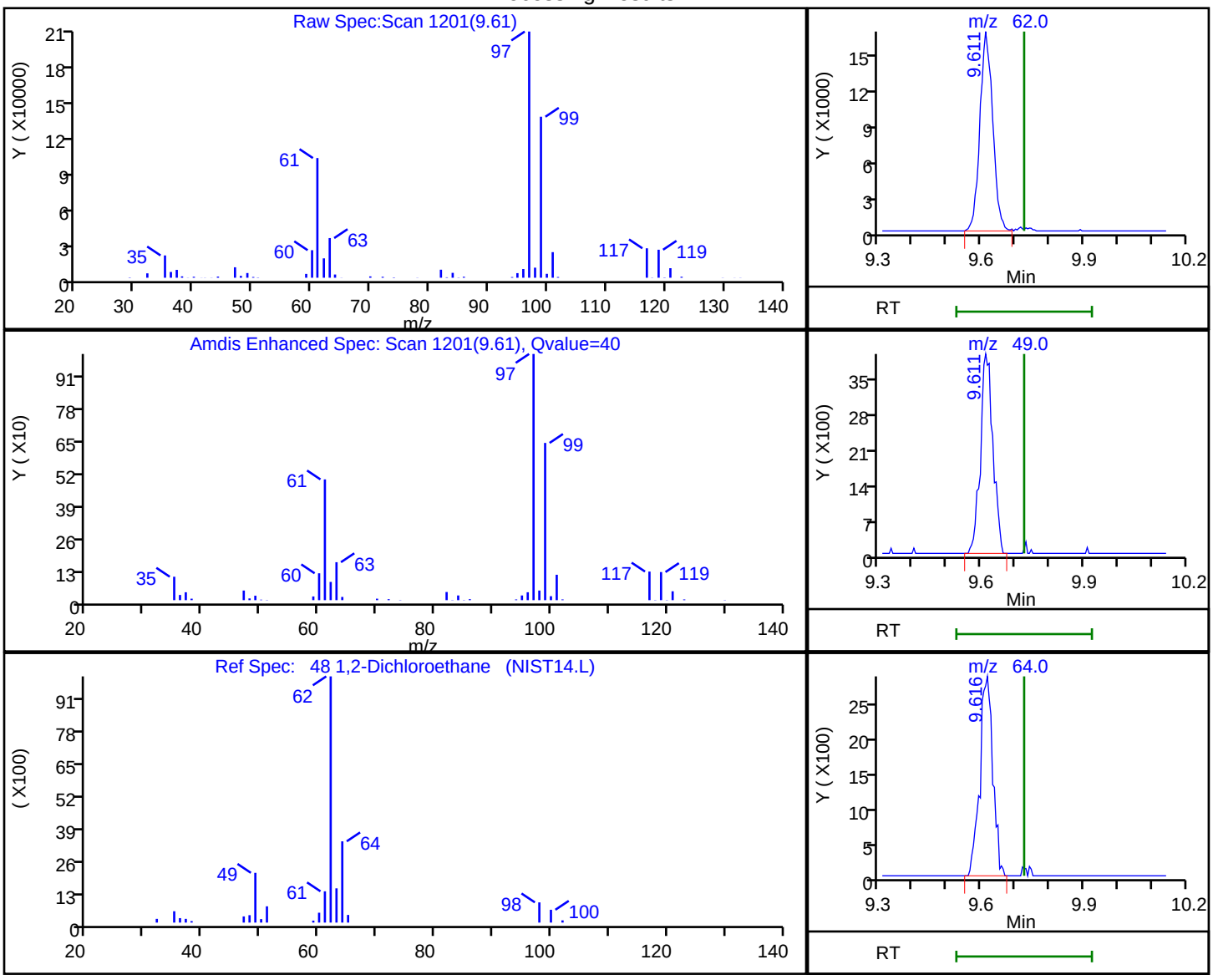
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HE15P101.D				
Injection Date:	15-May-2020 14:25:30	Instrument ID:	MH		
Lims ID:	140-19093-A-1	Lab Sample ID:	140-19093-1		
Client ID:	BLDG A INFLUENT				
Operator ID:	HMT	ALS Bottle#:	1	Worklist Smp#:	5
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

48 1,2-Dichloroethane, CAS: 107-06-2

Processing Results



RT	Mass	Response	Amount
9.61	62.00	42882	0.400772
9.61	49.00	10123	
9.62	64.00	7605	

Reviewer: khachitpongpanits, 18-May-2020 17:22:56

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

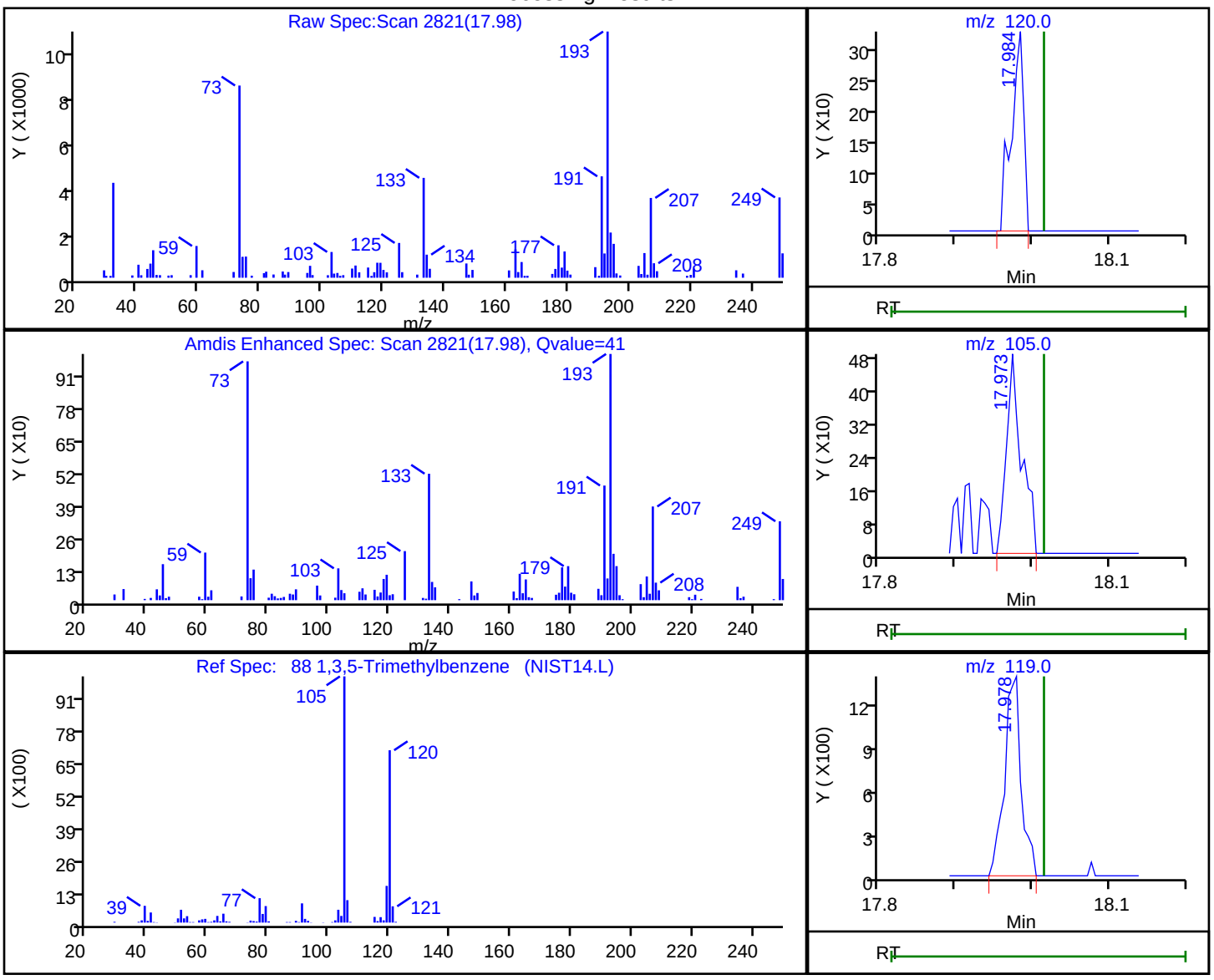
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HE15P101.D				
Injection Date:	15-May-2020 14:25:30	Instrument ID:	MH		
Lims ID:	140-19093-A-1	Lab Sample ID:	140-19093-1		
Client ID:	BLDG A INFLUENT				
Operator ID:	HMT	ALS Bottle#:	1	Worklist Smp#:	5
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

88 1,3,5-Trimethylbenzene, CAS: 108-67-8

Processing Results



RT	Mass	Response	Amount
17.98	120.00	368	0.029373
17.97	105.00	666	
17.98	119.00	2026	

Reviewer: khachitpongpanits, 18-May-2020 17:23:19

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19093-1

SDG No.:

Client Sample ID: BLDG A MID GAC Lab Sample ID: 140-19093-2

Matrix: Air Lab File ID: HE15P102.D

Analysis Method: TO 15 LL Date Collected: 05/13/2020 09:36

Sample wt/vol: 100(mL) Date Analyzed: 05/15/2020 15:18

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 39584 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.70		0.40	0.040
56-23-5	Carbon tetrachloride	153.81	ND		0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	0.44		0.40	0.11
67-66-3	Chloroform	119.38	0.40		0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	17		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.42		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	3.7		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	0.10	J	0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	25		0.40	0.040
100-41-4	Ethylbenzene	106.17	ND		0.40	0.065
75-09-2	Methylene Chloride	84.93	0.81	J	2.0	0.80
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.035
108-88-3	Toluene	92.14	ND		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	0.40		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	26		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	0.22		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.11
75-01-4	Vinyl chloride	62.50	0.13	J *	0.20	0.13
1330-20-7	Xylenes, Total	106.17	ND		0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	92		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19093-1

SDG No.:

Client Sample ID: BLDG A MID GAC Lab Sample ID: 140-19093-2

Matrix: Air Lab File ID: HE15P102.D

Analysis Method: TO 15 LL Date Collected: 05/13/2020 09:36

Sample wt/vol: 100(mL) Date Analyzed: 05/15/2020 15:18

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 39584 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	2.2		1.3	0.13
56-23-5	Carbon tetrachloride	153.81	ND		2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	1.6		1.4	0.39
67-66-3	Chloroform	119.38	2.0		2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	69		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.1		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	15		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	0.42	J	1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	98		1.6	0.16
100-41-4	Ethylbenzene	106.17	ND		1.7	0.28
75-09-2	Methylene Chloride	84.93	2.8	J	6.9	2.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.24
108-88-3	Toluene	92.14	ND		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	1.6		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	140		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	1.2		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.54
75-01-4	Vinyl chloride	62.50	0.34	J *	0.51	0.33
1330-20-7	Xylenes, Total	106.17	ND		3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	92		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HE15P102.D
Lims ID: 140-19093-A-2
Client ID: BLDG A MID GAC
Sample Type: Client
Inject. Date: 15-May-2020 15:18:30 ALS Bottle#: 2 Worklist Smp#: 8
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0015105-008
Misc. Info.: 140-19093-a-2
Operator ID: HMT Instrument ID: MH

Method: \\chromfs\Knoxville\ChromData\MH\20200513-15460.b\MH_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 18-May-2020 17:24:24 Calib Date: 16-Apr-2020 18:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC10.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1040

First Level Reviewer: khachitpongpanits Date: 18-May-2020 17:24:24

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.582	8.577	0.005	94	151471	4.00	
* 2 1,4-Difluorobenzene	114	10.784	10.784	0.000	96	1007641	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.570	15.570	0.000	90	822948	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.219	17.239	-0.020	88	507256	3.67	
6 Chlorodifluoromethane	51	3.543	3.543	0.000	51	14101	0.0882	
8 Dichlorodifluoromethane	85	3.605	3.600	0.005	99	20519	0.0835	
12 Vinyl chloride	62	3.936	3.941	-0.005	32	2338	0.0266	
27 1,1-Dichloroethene	96	5.709	5.709	0.000	96	363201	4.92	
31 Methylene Chloride	84	6.055	6.050	0.005	97	51767	0.1629	
34 trans-1,2-Dichloroethene	96	6.861	6.851	0.010	52	5808	0.0797	
37 1,1-Dichloroethane	63	7.275	7.269	0.006	99	107069	0.7381	
42 cis-1,2-Dichloroethene	96	8.251	8.251	0.000	96	263229	3.46	
44 Chloroform	83	8.593	8.592	0.001	30	14360	0.0803	
47 1,1,1-Trichloroethane	97	9.616	9.616	0.000	97	867985	5.21	
48 1,2-Dichloroethane	62	9.735	9.720	0.011	94	2230	0.0209	
51 Benzene	78	10.221	10.216	0.001	98	30584	0.1395	
58 Trichloroethene	130	11.502	11.502	-0.005	85	4004	0.0447	
67 Toluene	91	13.590	13.585	0.005	91	9710	0.0571	

Reagents:

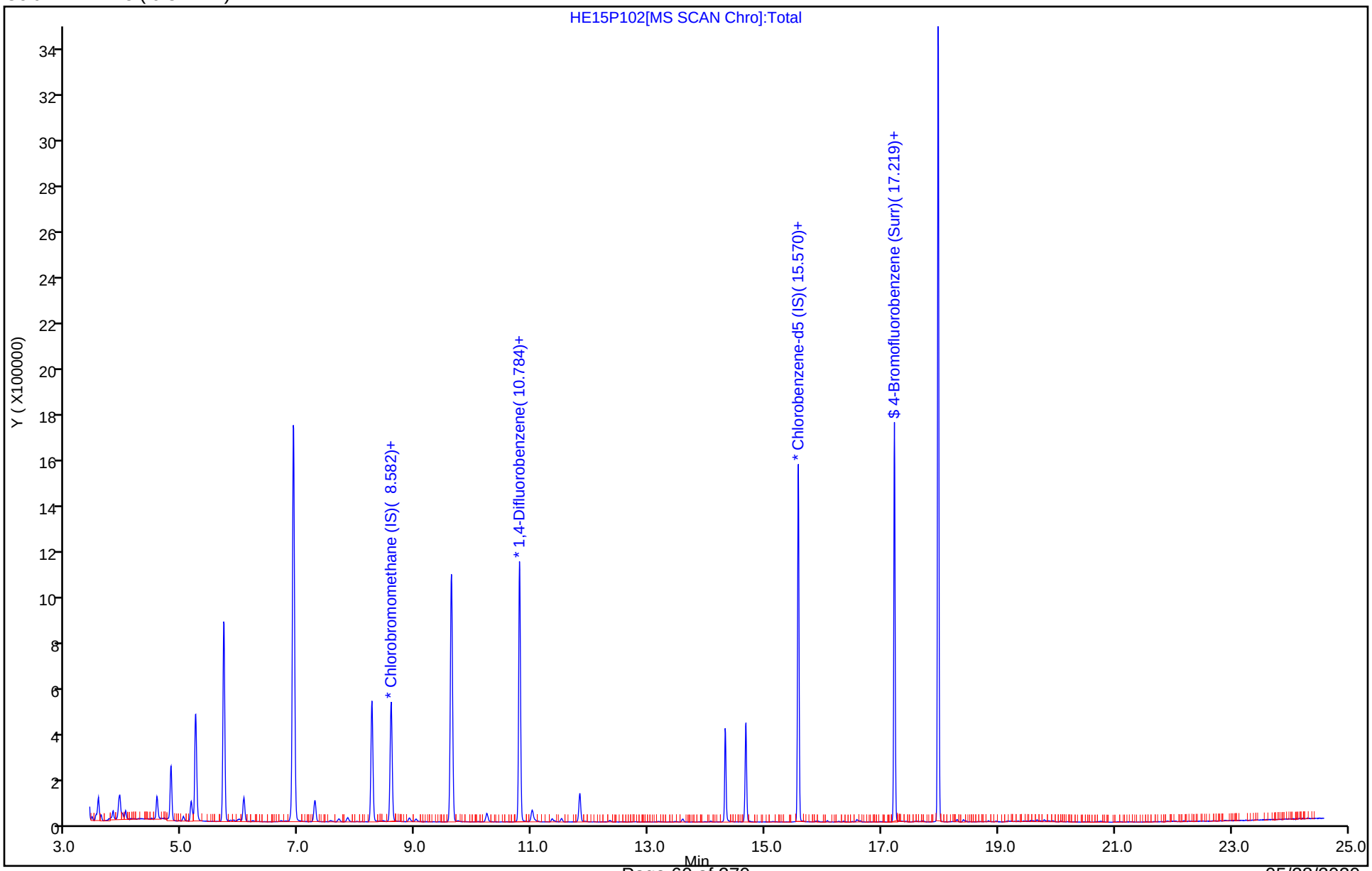
40MXISSURP_00004 Amount Added: 40.00 Units: mL Run Reagent

Report Date: 18-May-2020 17:24:25 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HE15P102.D				
Injection Date:	15-May-2020 15:18:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	140-19093-A-2	Lab Sample ID:	140-19093-2	Worklist Smp#:	8
Client ID:	BLDG A MID GAC				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HE15P102.D				
Lims ID:	140-19093-A-2				
Client ID:	BLDG A MID GAC				
Sample Type:	Client				
Inject. Date:	15-May-2020 15:18:30	ALS Bottle#:	2	Worklist Smp#:	8
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0015105-008				
Misc. Info.:	140-19093-a-2				
Operator ID:	HMT	Instrument ID:	MH		
Method:	\\chromfs\Knoxville\ChromData\MH\20200513-15460.b\MH_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	18-May-2020 17:24:24	Calib Date:	16-Apr-2020 18:34:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC10.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1040				

First Level Reviewer: khachitpongpanits Date: 18-May-2020 17:24:24

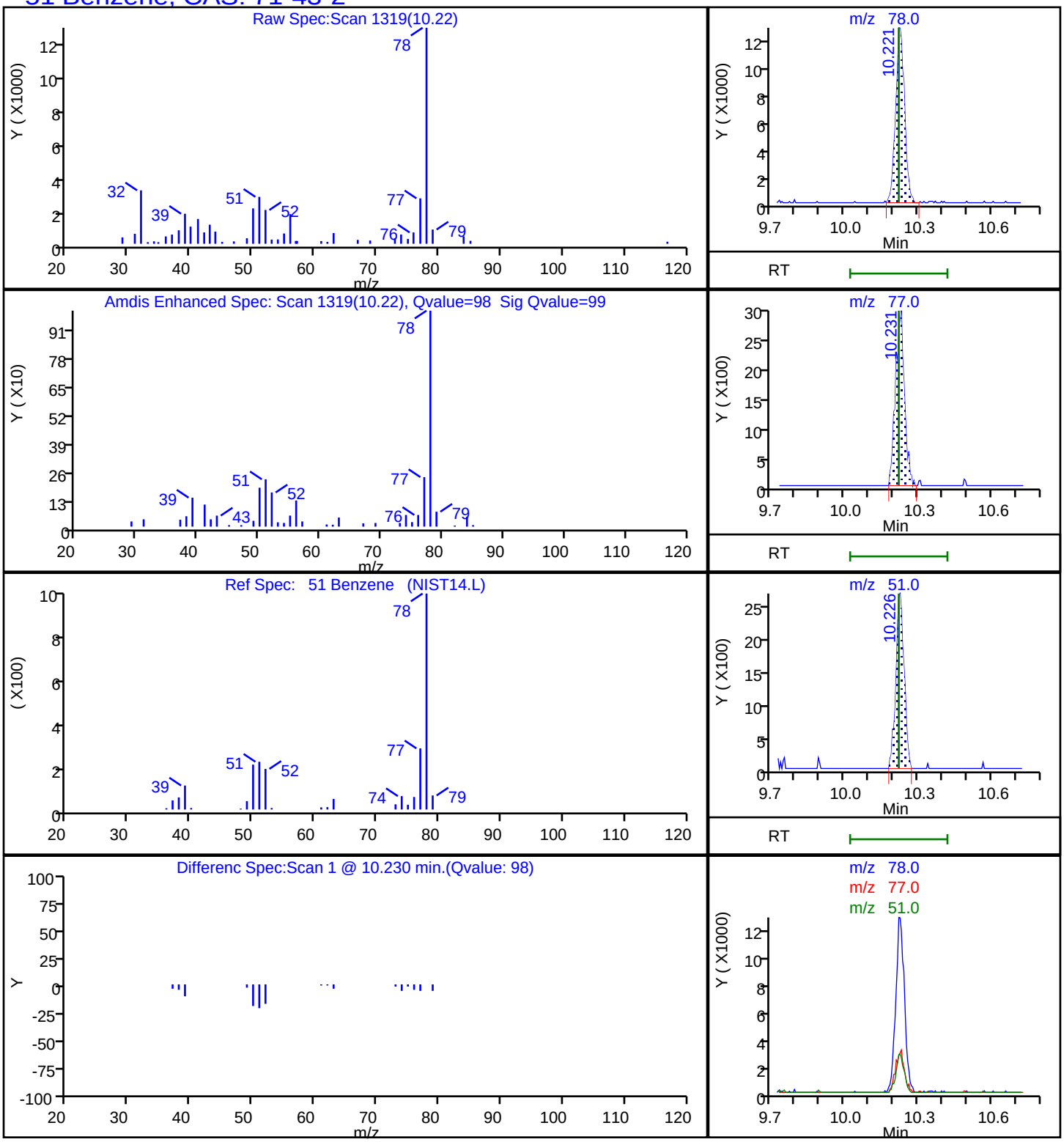
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.00	3.67	91.85

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HE15P102.D

Injection Date:	15-May-2020 15:18:30	Instrument ID:	MH		
Lims ID:	140-19093-A-2	Lab Sample ID:	140-19093-2		
Client ID:	BLDG A MID GAC				
Operator ID:	HMT	ALS Bottle#:	2	Worklist Smp#:	8
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

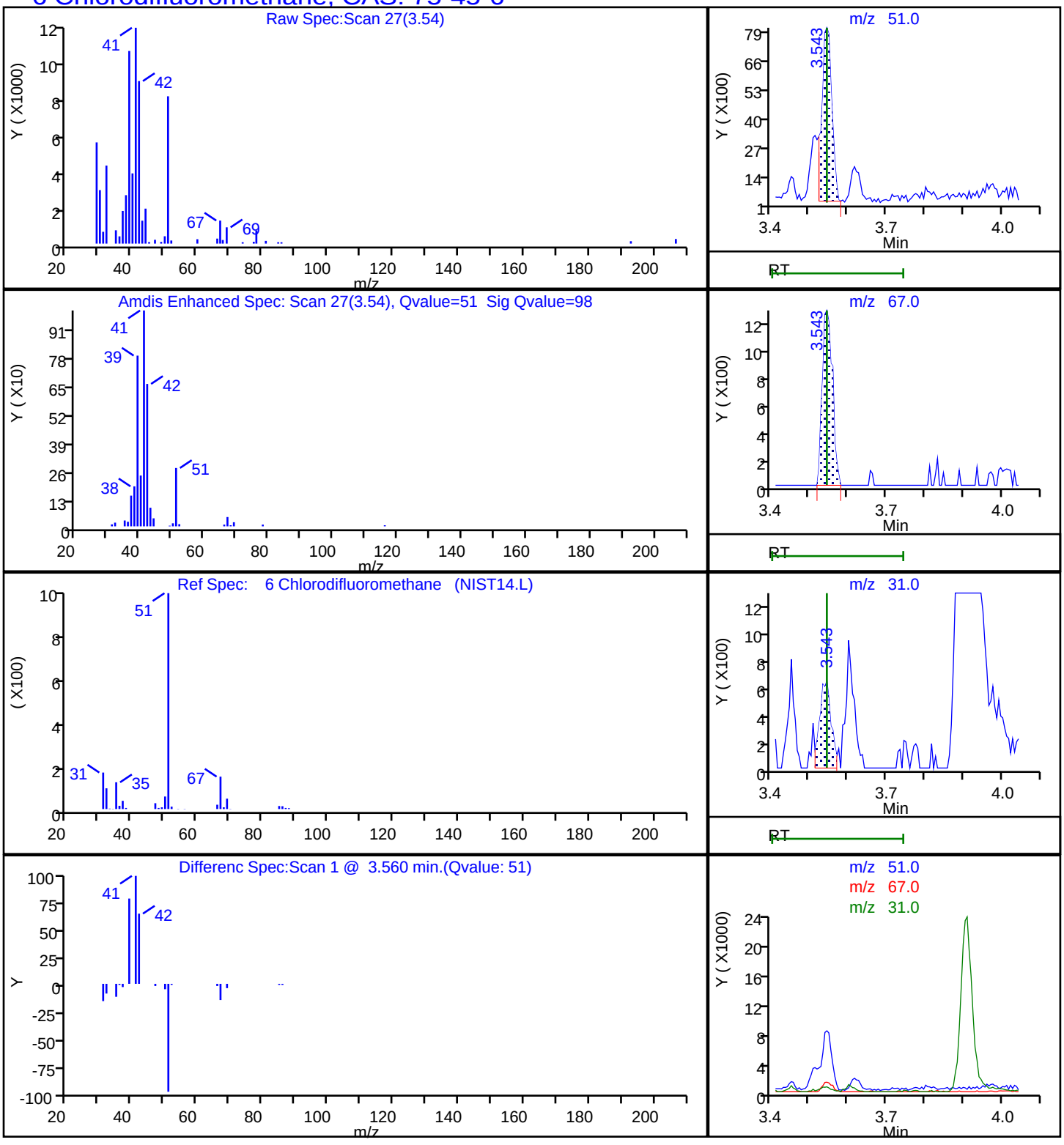
51 Benzene, CAS: 71-43-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HE15P102.D				
Injection Date:	15-May-2020 15:18:30	Instrument ID:	MH		
Lims ID:	140-19093-A-2	Lab Sample ID:	140-19093-2		
Client ID:	BLDG A MID GAC				
Operator ID:	HMT	ALS Bottle#:	2	Worklist Smp#:	8
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

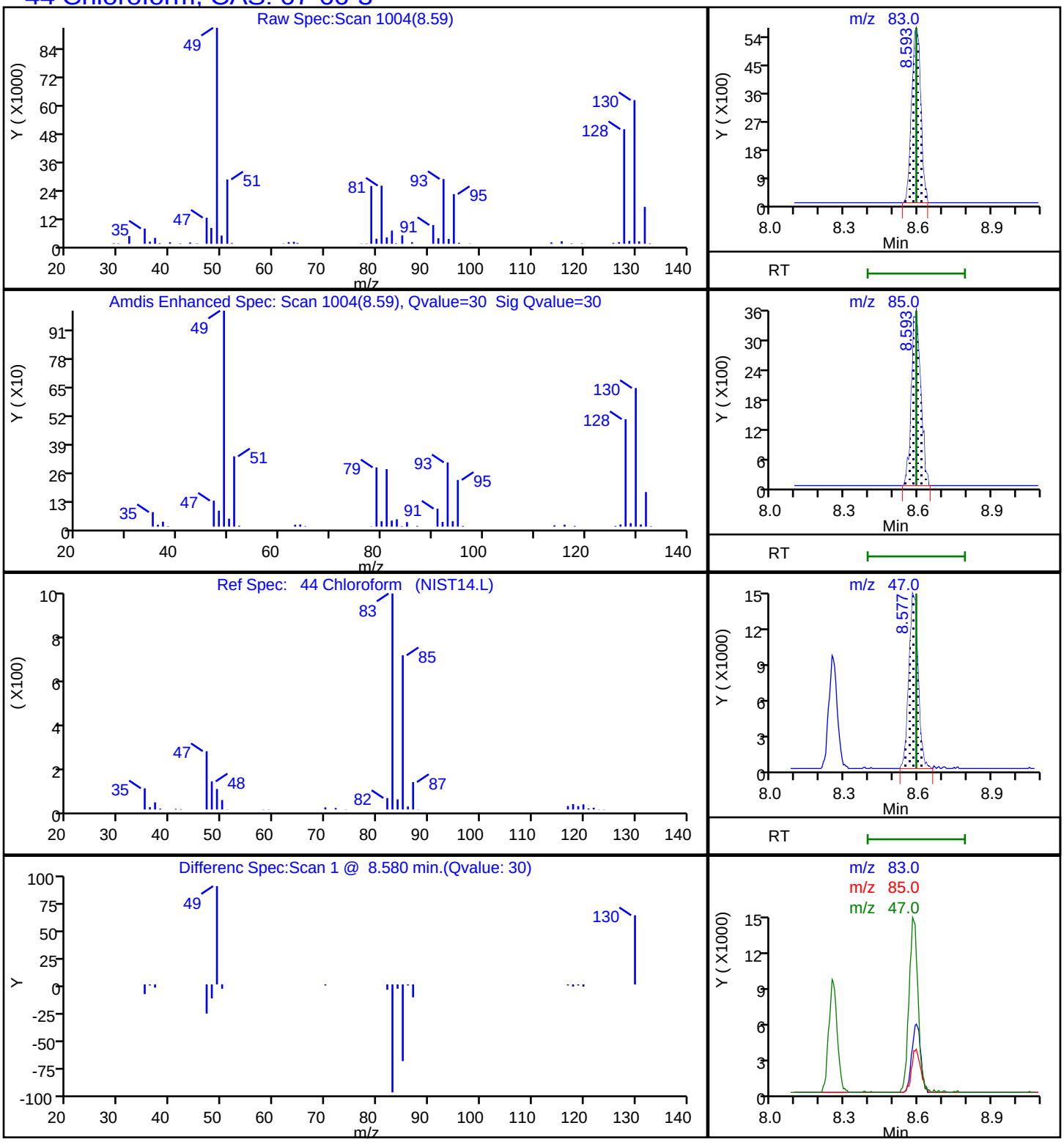
6 Chlorodifluoromethane, CAS: 75-45-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HE15P102.D				
Injection Date:	15-May-2020 15:18:30	Instrument ID:	MH		
Lims ID:	140-19093-A-2	Lab Sample ID:	140-19093-2		
Client ID:	BLDG A MID GAC				
Operator ID:	HMT	ALS Bottle#:	2	Worklist Smp#:	8
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

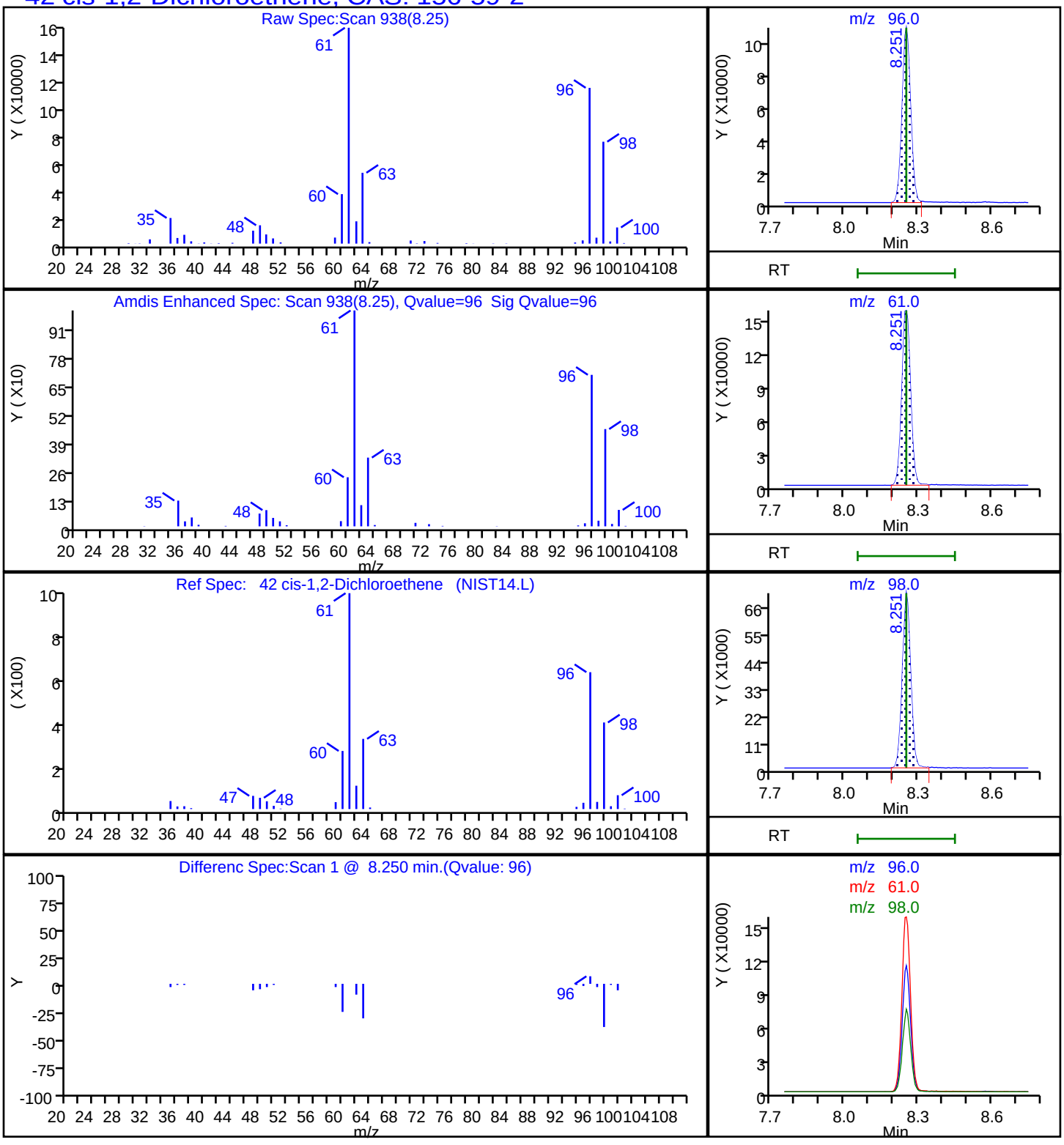
44 Chloroform, CAS: 67-66-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HE15P102.D		
Injection Date:	15-May-2020 15:18:30	Instrument ID:	MH
Lims ID:	140-19093-A-2	Lab Sample ID:	140-19093-2
Client ID:	BLDG A MID GAC		
Operator ID:	HMT	ALS Bottle#:	2 Worklist Smp#: 8
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

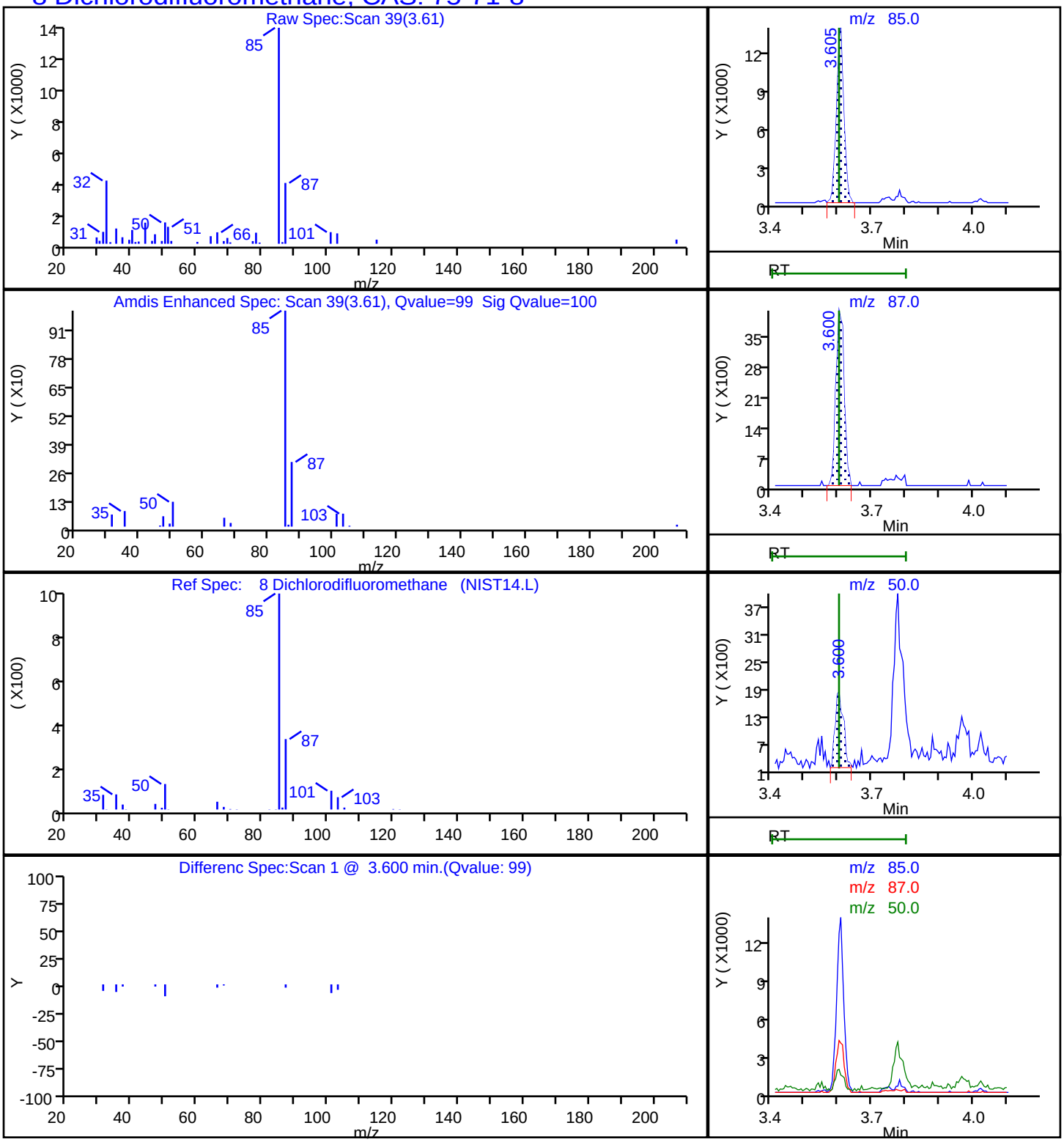
42 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HE15P102.D				
Injection Date:	15-May-2020 15:18:30	Instrument ID:	MH		
Lims ID:	140-19093-A-2	Lab Sample ID:	140-19093-2		
Client ID:	BLDG A MID GAC				
Operator ID:	HMT	ALS Bottle#:	2	Worklist Smp#:	8
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

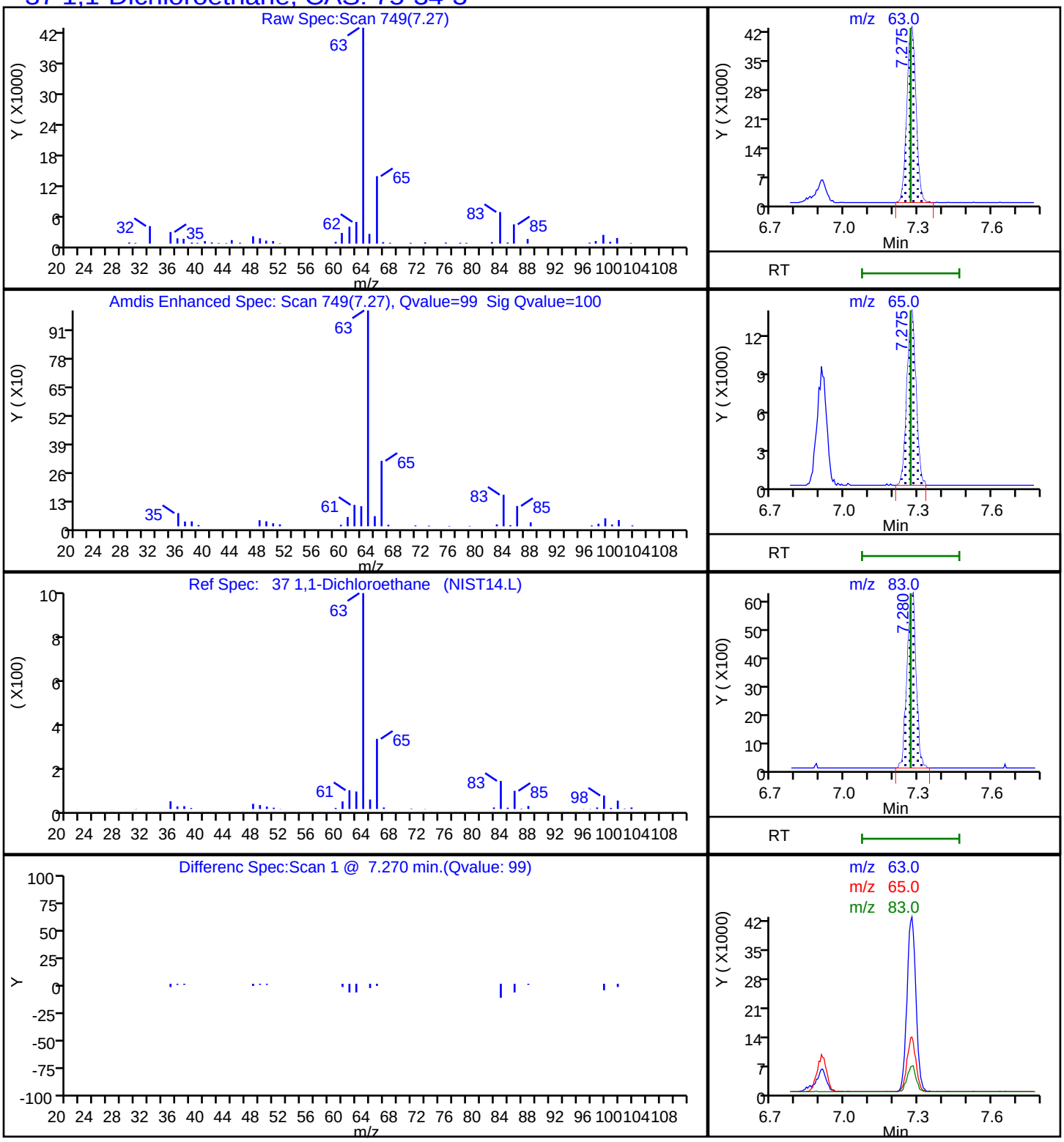
8 Dichlorodifluoromethane, CAS: 75-71-8



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HE15P102.D				
Injection Date:	15-May-2020 15:18:30	Instrument ID:	MH		
Lims ID:	140-19093-A-2	Lab Sample ID:	140-19093-2		
Client ID:	BLDG A MID GAC				
Operator ID:	HMT	ALS Bottle#:	2	Worklist Smp#:	8
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

37 1,1-Dichloroethane, CAS: 75-34-3

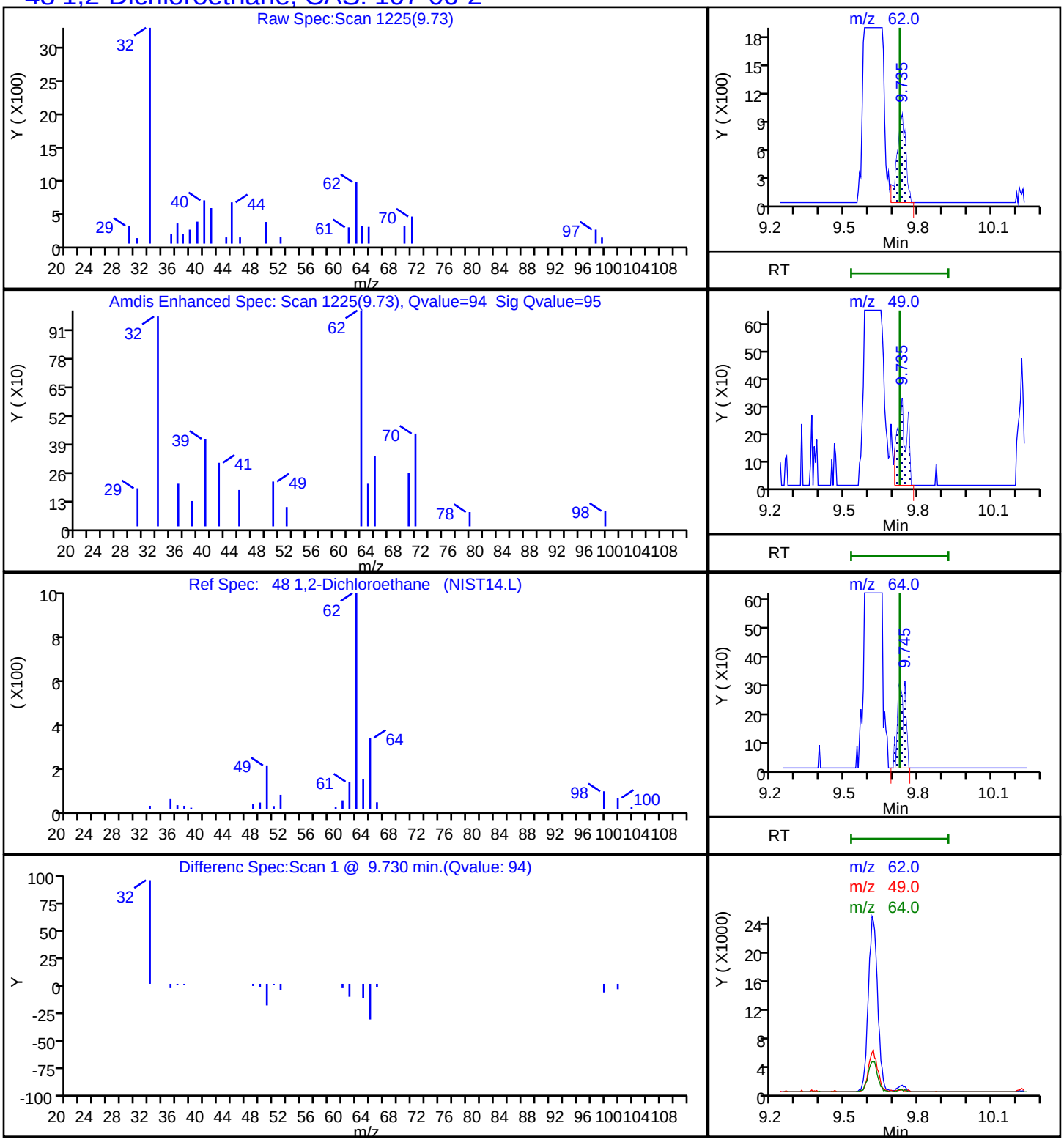


Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HE15P102.D

Injection Date:	15-May-2020 15:18:30	Instrument ID:	MH		
Lims ID:	140-19093-A-2	Lab Sample ID:	140-19093-2		
Client ID:	BLDG A MID GAC				
Operator ID:	HMT	ALS Bottle#:	2	Worklist Smp#:	8
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

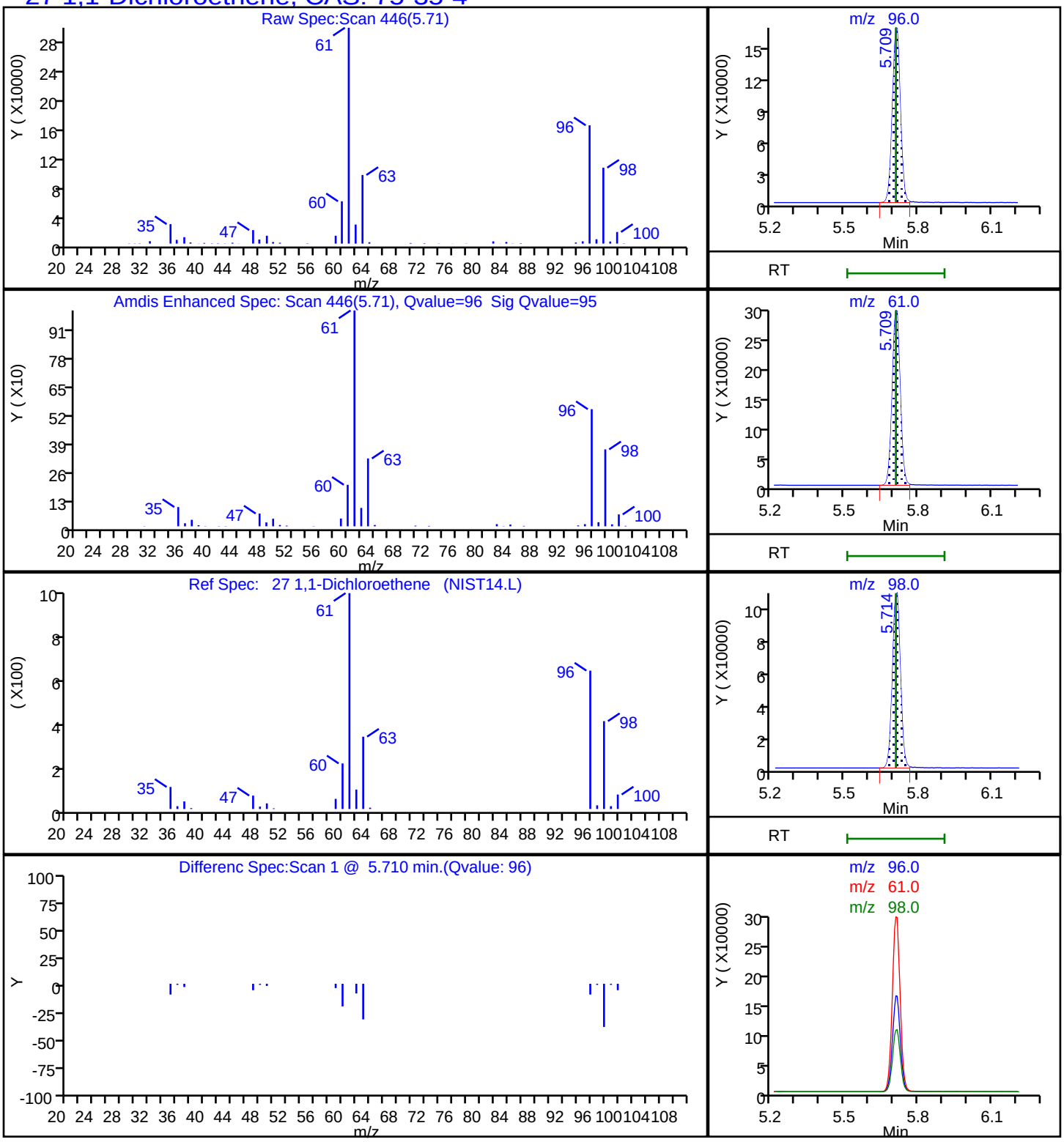
48 1,2-Dichloroethane, CAS: 107-06-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HE15P102.D		
Injection Date:	15-May-2020 15:18:30	Instrument ID:	MH
Lims ID:	140-19093-A-2	Lab Sample ID:	140-19093-2
Client ID:	BLDG A MID GAC		
Operator ID:	HMT	ALS Bottle#:	2 Worklist Smp#: 8
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

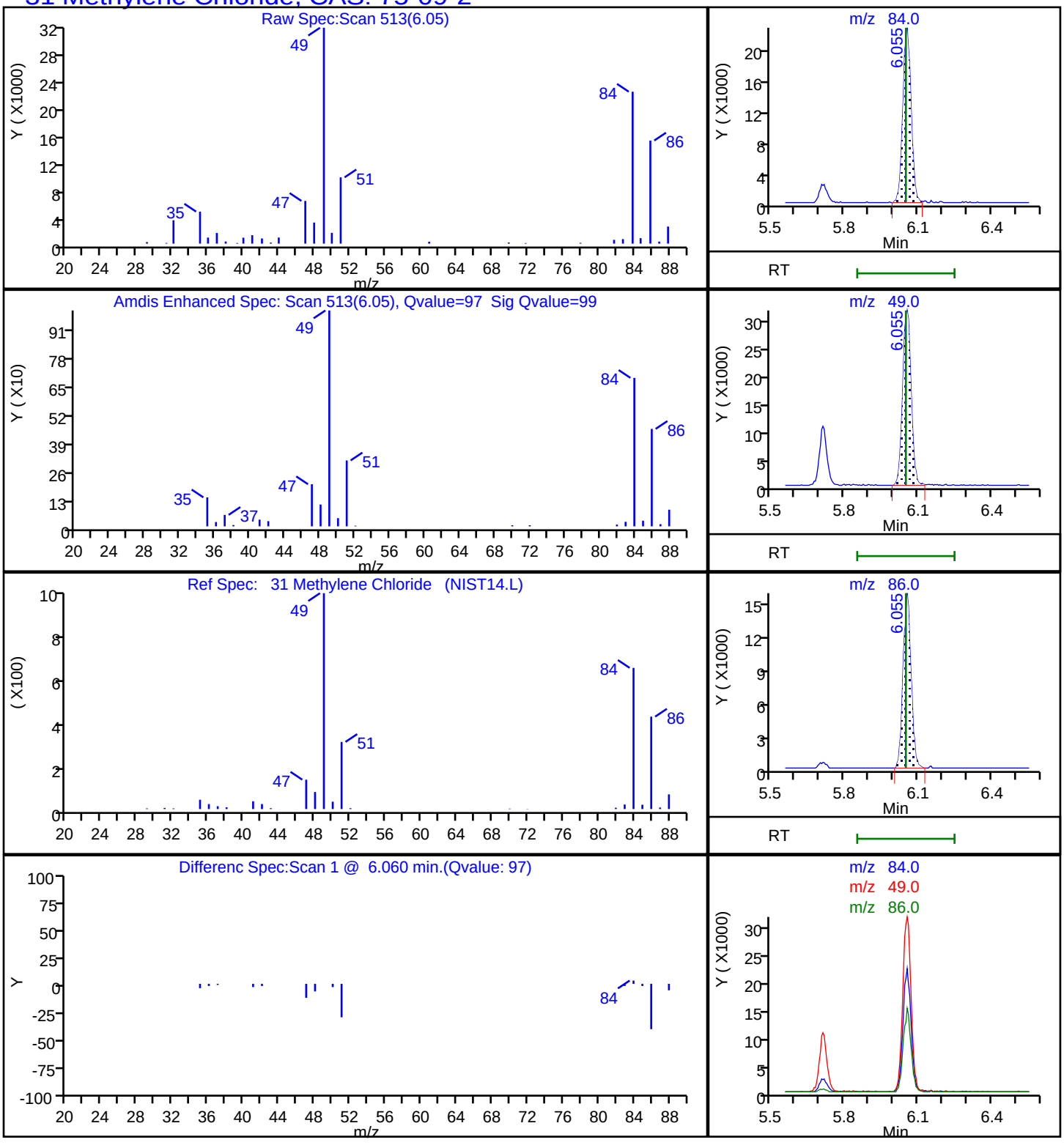
27 1,1-Dichloroethene, CAS: 75-35-4



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HE15P102.D				
Injection Date:	15-May-2020 15:18:30	Instrument ID:	MH		
Lims ID:	140-19093-A-2	Lab Sample ID:	140-19093-2		
Client ID:	BLDG A MID GAC				
Operator ID:	HMT	ALS Bottle#:	2	Worklist Smp#:	8
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

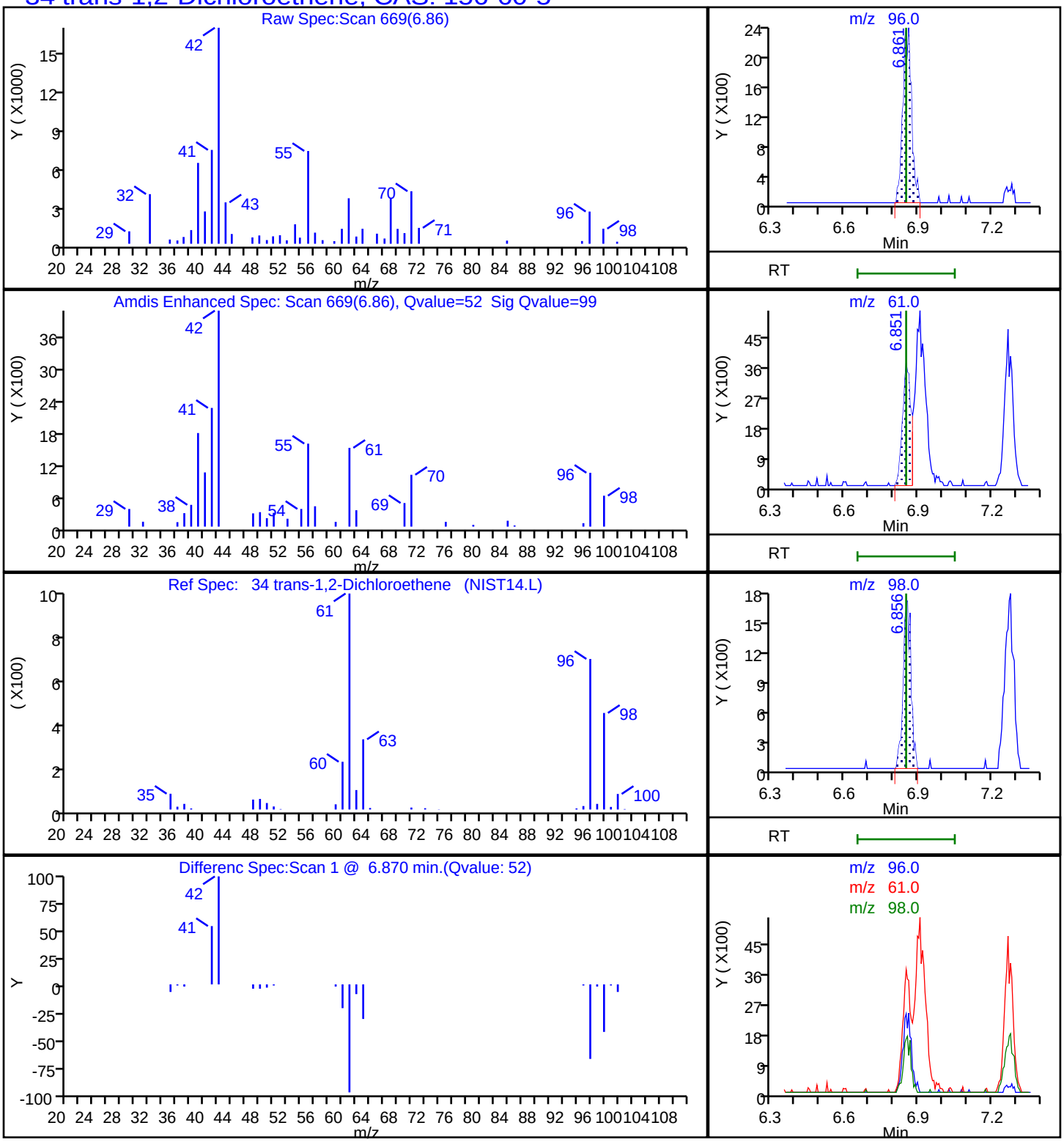
31 Methylene Chloride, CAS: 75-09-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HE15P102.D				
Injection Date:	15-May-2020 15:18:30	Instrument ID:	MH		
Lims ID:	140-19093-A-2	Lab Sample ID:	140-19093-2		
Client ID:	BLDG A MID GAC				
Operator ID:	HMT	ALS Bottle#:	2	Worklist Smp#:	8
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

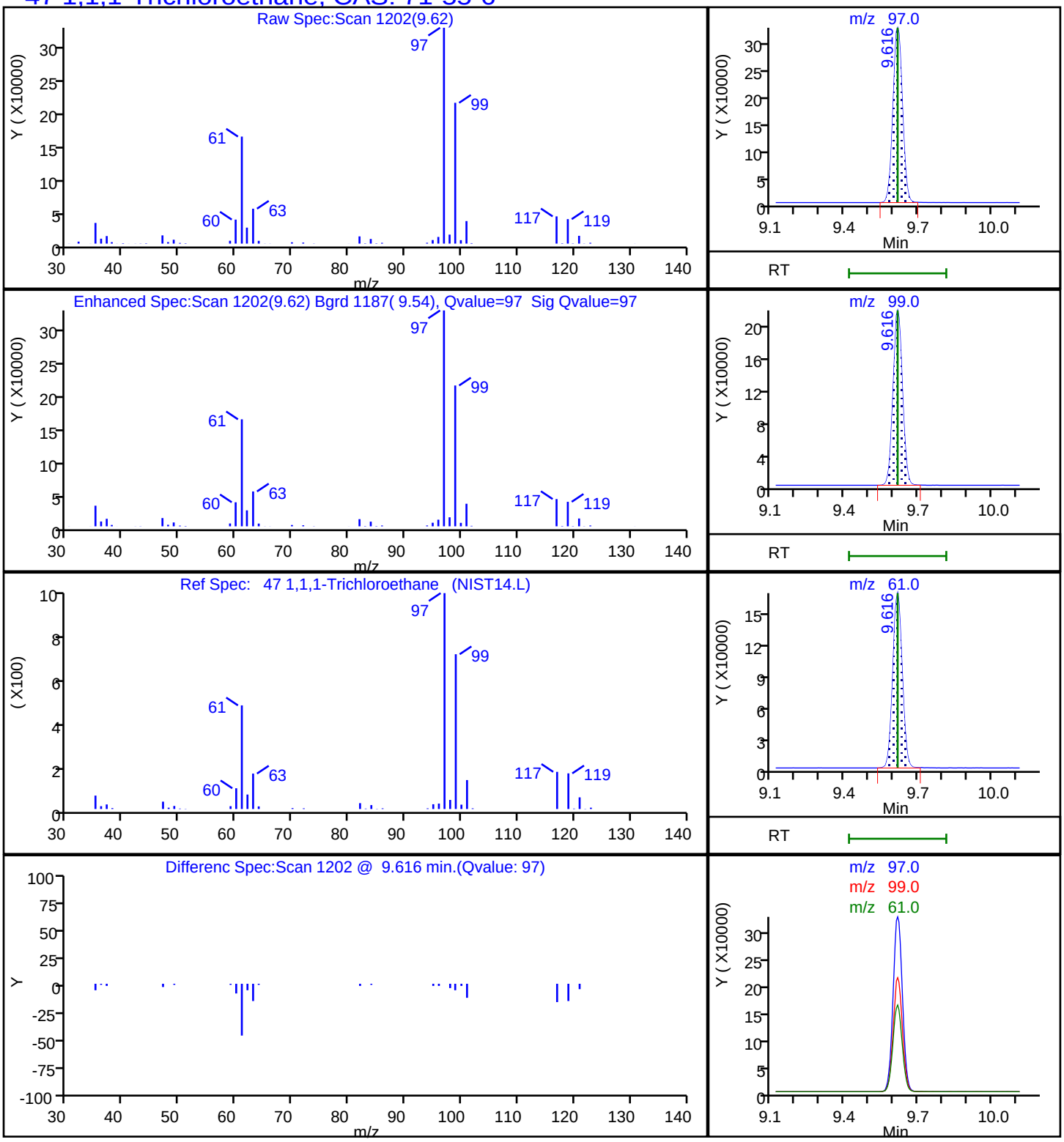
34 trans-1,2-Dichloroethene, CAS: 156-60-5



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HE15P102.D				
Injection Date:	15-May-2020 15:18:30	Instrument ID:	MH		
Lims ID:	140-19093-A-2	Lab Sample ID:	140-19093-2		
Client ID:	BLDG A MID GAC				
Operator ID:	HMT	ALS Bottle#:	2	Worklist Smp#:	8
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

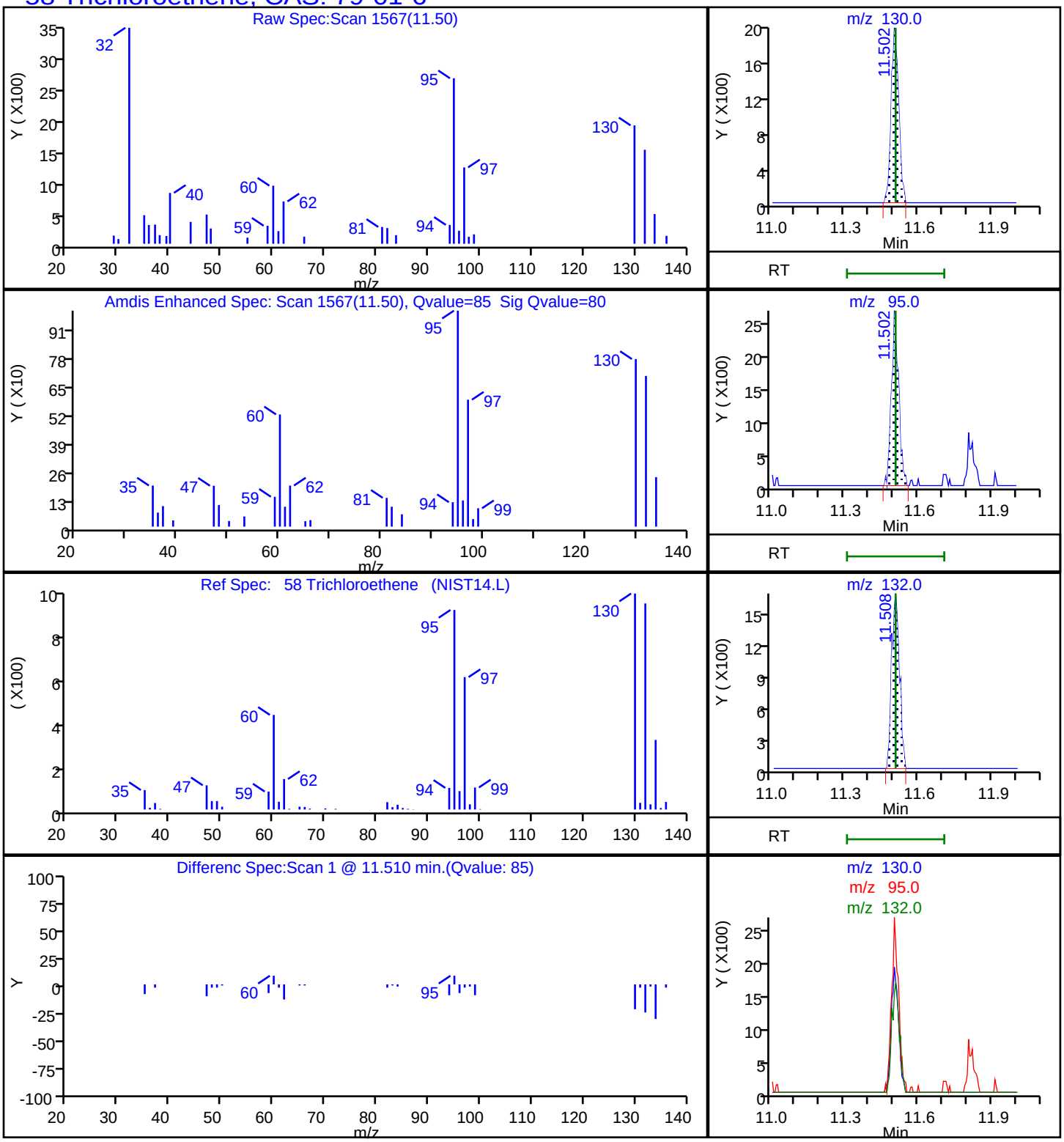
47 1,1,1-Trichloroethane, CAS: 71-55-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HE15P102.D		
Injection Date:	15-May-2020 15:18:30	Instrument ID:	MH
Lims ID:	140-19093-A-2	Lab Sample ID:	140-19093-2
Client ID:	BLDG A MID GAC		
Operator ID:	HMT	ALS Bottle#:	2 Worklist Smp#: 8
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

58 Trichloroethene, CAS: 79-01-6

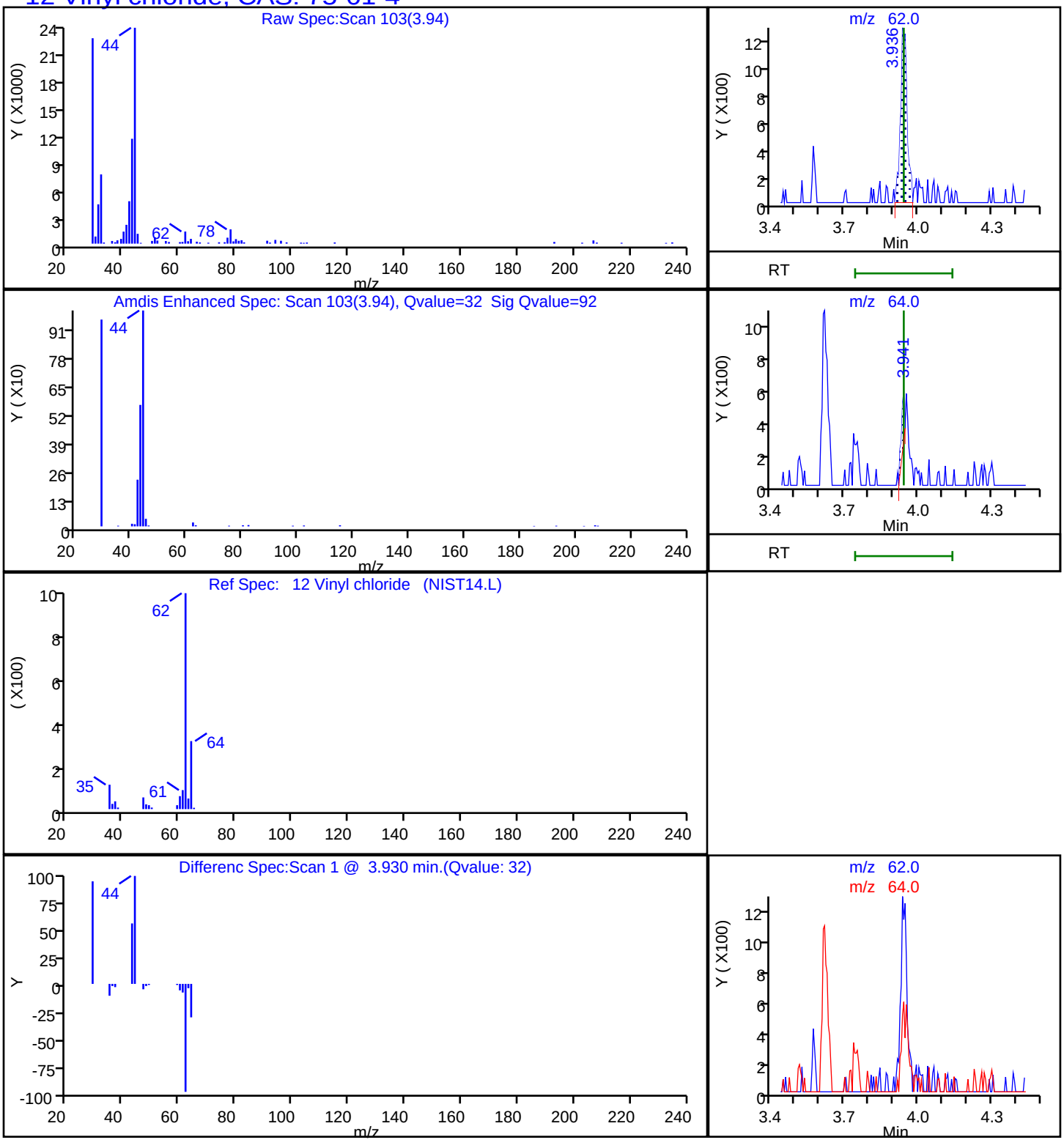


Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HE15P102.D

Injection Date:	15-May-2020 15:18:30	Instrument ID:	MH		
Lims ID:	140-19093-A-2	Lab Sample ID:	140-19093-2		
Client ID:	BLDG A MID GAC				
Operator ID:	HMT	ALS Bottle#:	2	Worklist Smp#:	8
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

12 Vinyl chloride, CAS: 75-01-4



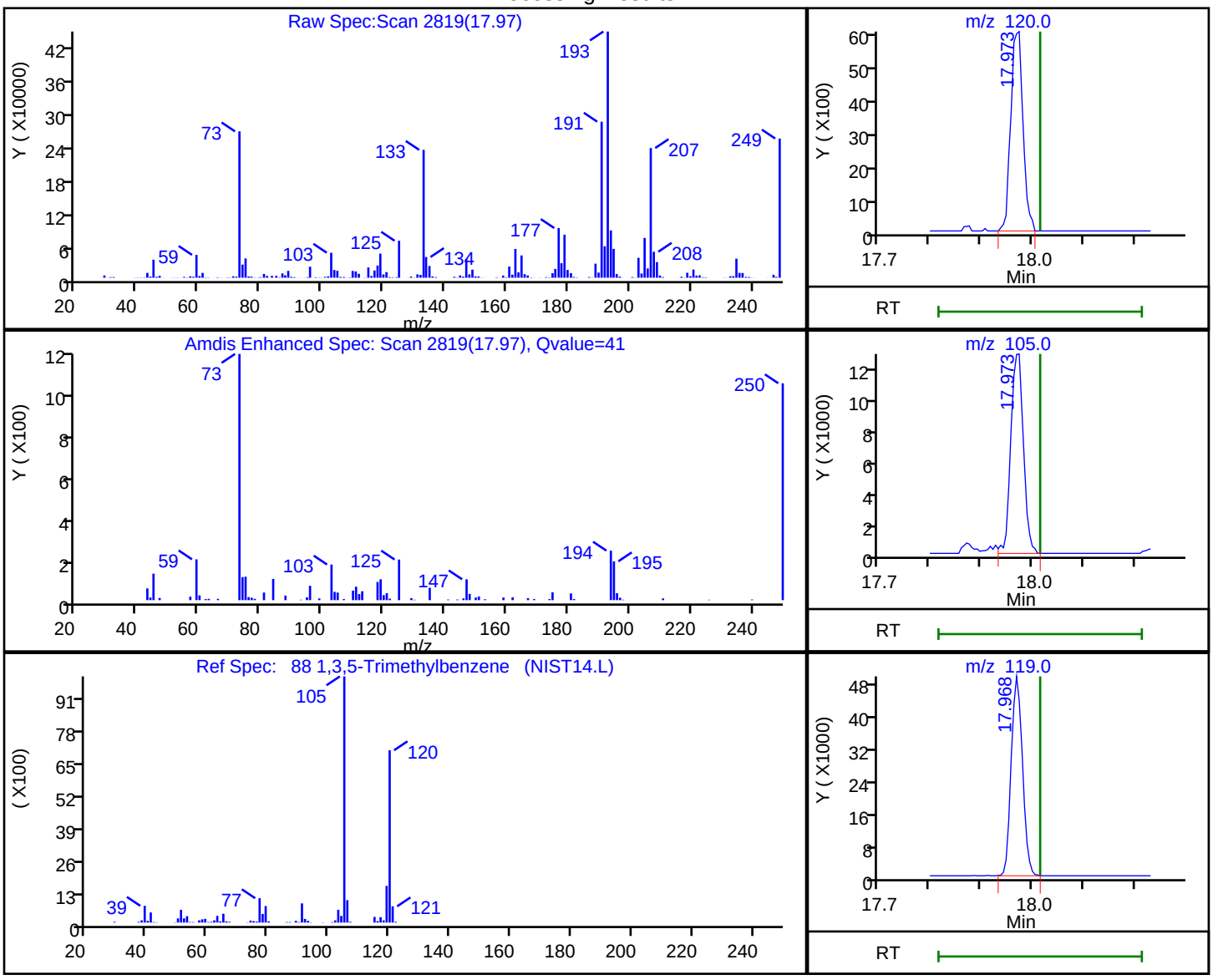
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HE15P102.D				
Injection Date:	15-May-2020 15:18:30	Instrument ID:	MH		
Lims ID:	140-19093-A-2	Lab Sample ID:	140-19093-2		
Client ID:	BLDG A MID GAC				
Operator ID:	HMT	ALS Bottle#:	2	Worklist Smp#:	8
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

88 1,3,5-Trimethylbenzene, CAS: 108-67-8

Processing Results



RT	Mass	Response	Amount
17.97	120.00	10094	0.102625
17.97	105.00	21807	
17.97	119.00	77189	

Reviewer: khachitpongpanits, 18-May-2020 17:24:16

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19093-1

SDG No.:

Client Sample ID: BLDG A EFFLUENT Lab Sample ID: 140-19093-3

Matrix: Air Lab File ID: HE15P103.D

Analysis Method: TO 15 LL Date Collected: 05/13/2020 09:31

Sample wt/vol: 100(mL) Date Analyzed: 05/15/2020 16:10

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 39584 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.17	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	ND		0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	0.49		0.40	0.11
67-66-3	Chloroform	119.38	0.20	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	9.1		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.47		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	2.2		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	27		0.40	0.040
100-41-4	Ethylbenzene	106.17	ND		0.40	0.065
75-09-2	Methylene Chloride	84.93	0.87	J	2.0	0.80
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.035
108-88-3	Toluene	92.14	1.2		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	0.23	J	0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	5.5		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	2.0		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.11
75-01-4	Vinyl chloride	62.50	0.14	J *	0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.19	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	92		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19093-1

SDG No.:

Client Sample ID: BLDG A EFFLUENT Lab Sample ID: 140-19093-3

Matrix: Air Lab File ID: HE15P103.D

Analysis Method: TO 15 LL Date Collected: 05/13/2020 09:31

Sample wt/vol: 100(mL) Date Analyzed: 05/15/2020 16:10

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 39584 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.55	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	ND		2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	1.7		1.4	0.39
67-66-3	Chloroform	119.38	0.98	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	36		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.3		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	8.8		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	110		1.6	0.16
100-41-4	Ethylbenzene	106.17	ND		1.7	0.28
75-09-2	Methylene Chloride	84.93	3.0	J	6.9	2.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.24
108-88-3	Toluene	92.14	4.4		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	0.92	J	1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	30		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	11		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.54
75-01-4	Vinyl chloride	62.50	0.36	J *	0.51	0.33
1330-20-7	Xylenes, Total	106.17	0.83	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	92		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HE15P103.D
Lims ID: 140-19093-A-3
Client ID: BLDG A EFFLUENT
Sample Type: Client
Inject. Date: 15-May-2020 16:10:30 ALS Bottle#: 3 Worklist Smp#: 9
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0015105-009
Misc. Info.: 140-19093-a-3
Operator ID: HMT Instrument ID: MH

Method: \\chromfs\Knoxville\ChromData\MH\20200513-15460.b\MH_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 18-May-2020 17:24:53 Calib Date: 16-Apr-2020 18:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC10.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1040

First Level Reviewer: khachitpongpanits Date: 18-May-2020 17:24:53

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.577	8.577	0.000	94	149490	4.00	
* 2 1,4-Difluorobenzene	114	10.784	10.784	0.000	96	979739	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.570	15.570	0.000	90	791191	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.219	17.239	-0.021	89	488235	3.68	
6 Chlorodifluoromethane	51	3.538	3.543	-0.005	59	15410	0.0977	
8 Dichlorodifluoromethane	85	3.595	3.600	-0.005	99	22694	0.0936	
12 Vinyl chloride	62	3.931	3.941	-0.010	34	2422	0.0279	
27 1,1-Dichloroethene	96	5.703	5.709	-0.006	96	398147	5.47	
31 Methylene Chloride	84	6.044	6.050	-0.006	97	51804	0.1738	
34 trans-1,2-Dichloroethene	96	6.846	6.851	-0.005	85	3343	0.0465	
37 1,1-Dichloroethane	63	7.269	7.269	0.000	99	62534	0.4368	
42 cis-1,2-Dichloroethene	96	8.246	8.251	-0.005	96	136889	1.82	
44 Chloroform	83	8.582	8.592	-0.010	29	7055	0.0400	
47 1,1,1-Trichloroethane	97	9.611	9.616	-0.005	96	179836	1.09	
51 Benzene	78	10.221	10.216	0.001	95	7350	0.0345	
58 Trichloroethene	130	11.502	11.502	-0.005	90	34854	0.4001	
67 Toluene	91	13.585	13.585	0.000	92	50985	0.2360	
77 m-Xylene & p-Xylene	91	16.066	16.071	-0.005	97	8080	0.0371	
S 116 Xylenes, Total	100				0		0.0371	

Reagents:

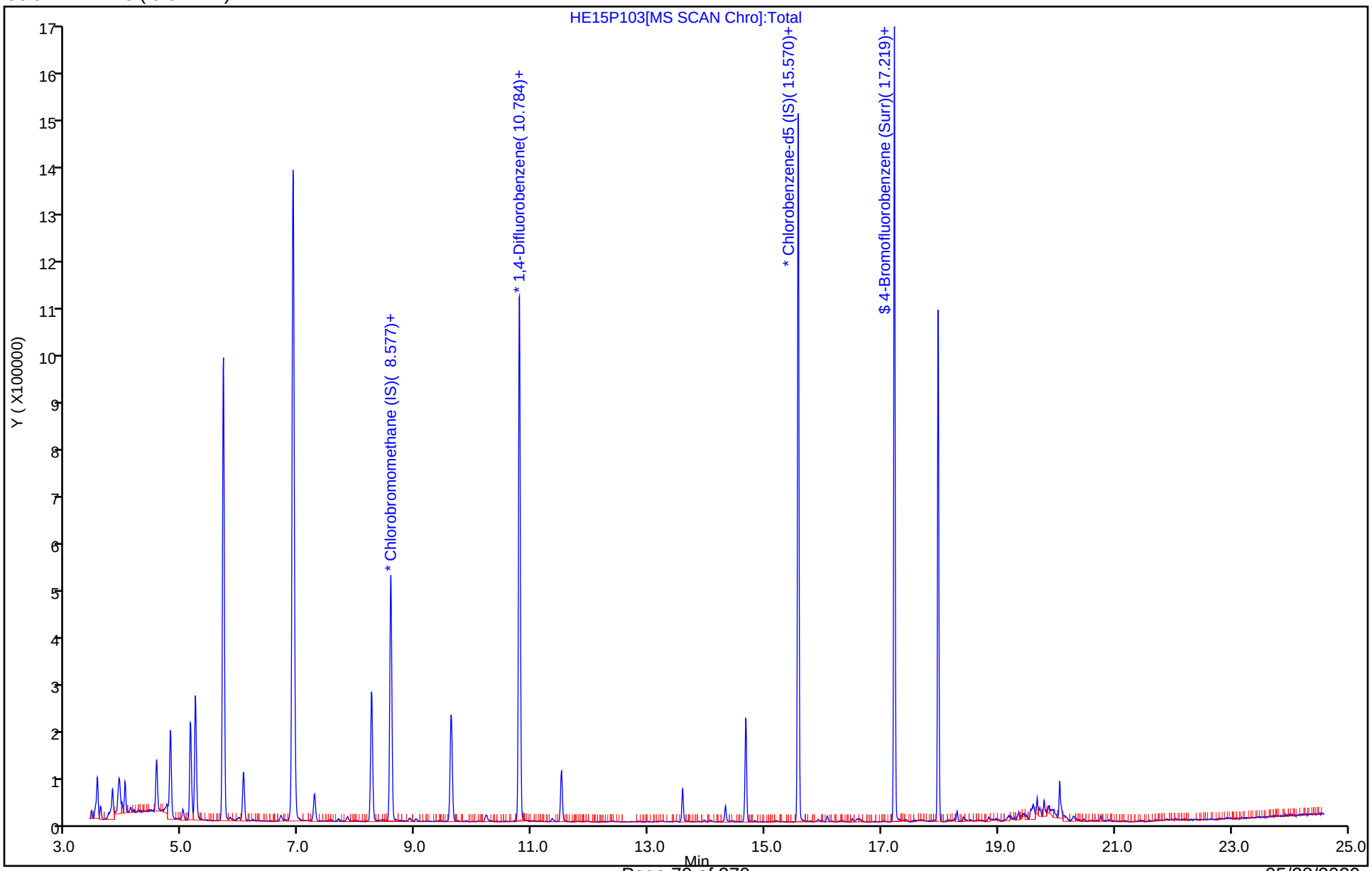
40MXISSURP_00004 Amount Added: 40.00 Units: mL Run Reagent

Report Date: 18-May-2020 17:24:54 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HE15P103.D				
Injection Date:	15-May-2020 16:10:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	140-19093-A-3	Lab Sample ID:	140-19093-3	Worklist Smp#:	9
Client ID:	BLDG A EFFLUENT				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HE15P103.D				
Lims ID:	140-19093-A-3				
Client ID:	BLDG A EFFLUENT				
Sample Type:	Client				
Inject. Date:	15-May-2020 16:10:30	ALS Bottle#:	3	Worklist Smp#:	9
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0015105-009				
Misc. Info.:	140-19093-a-3				
Operator ID:	HMT	Instrument ID:	MH		
Method:	\\chromfs\Knoxville\ChromData\MH\20200513-15460.b\MH_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	18-May-2020 17:24:53	Calib Date:	16-Apr-2020 18:34:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC10.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1040				

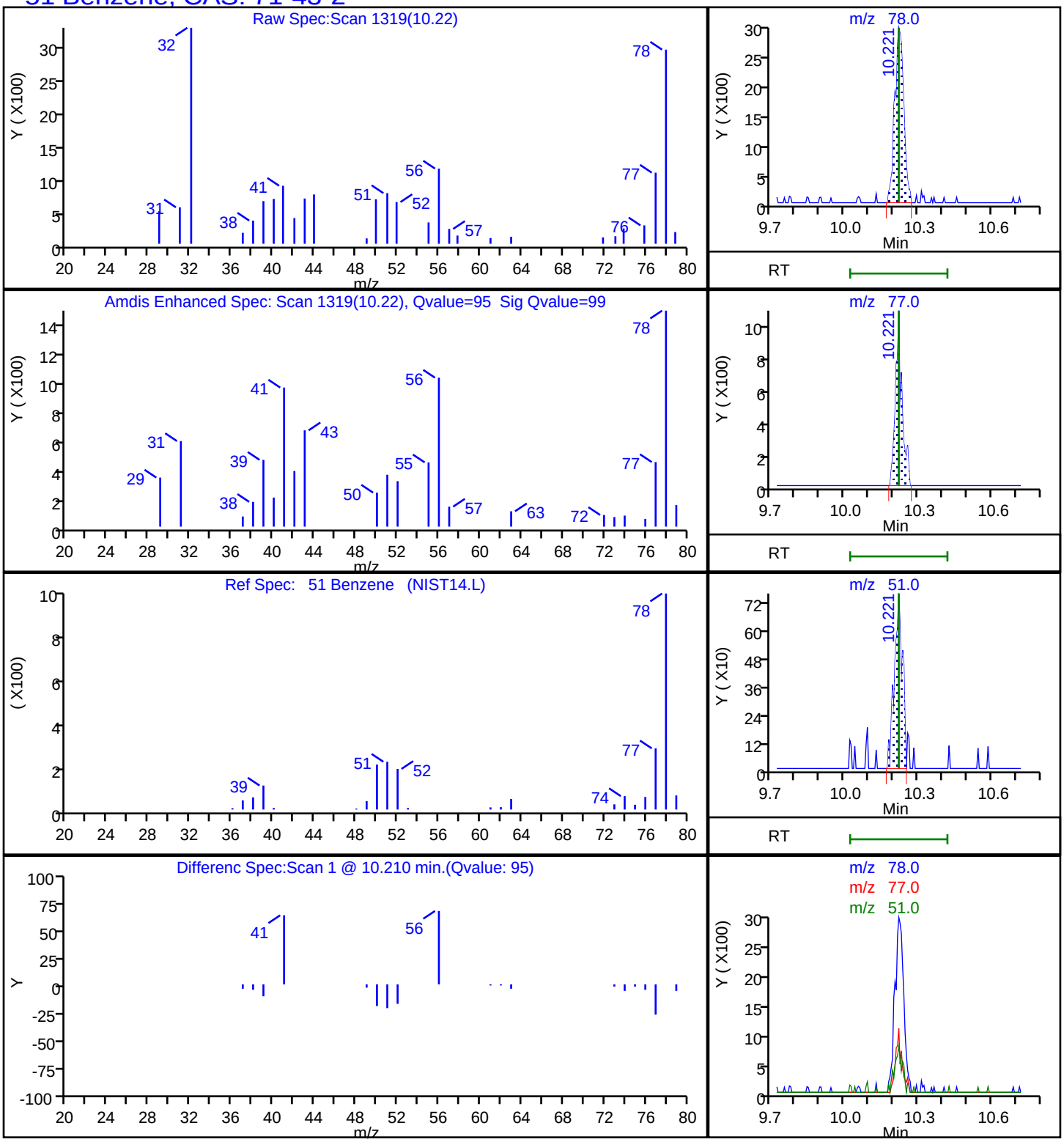
First Level Reviewer: khachitpongpanits Date: 18-May-2020 17:24:53

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.00	3.68	91.96

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HE15P103.D		
Injection Date:	15-May-2020 16:10:30	Instrument ID:	MH
Lims ID:	140-19093-A-3	Lab Sample ID:	140-19093-3
Client ID:	BLDG A EFFLUENT		
Operator ID:	HMT	ALS Bottle#:	3 Worklist Smp#: 9
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

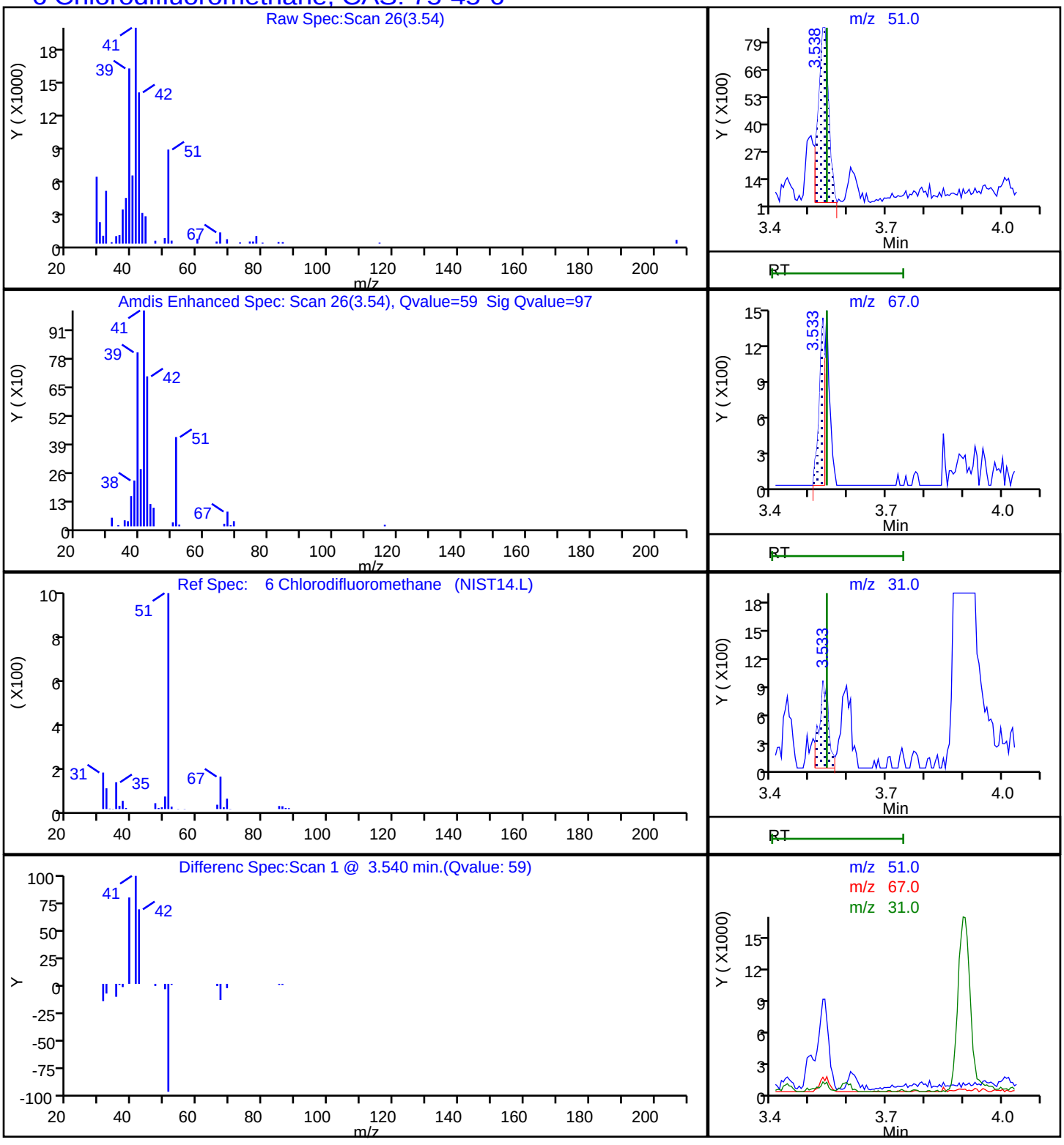
51 Benzene, CAS: 71-43-2



Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HE15P103.D
Injection Date: 15-May-2020 16:10:30 Instrument ID: MH
Lims ID: 140-19093-A-3 Lab Sample ID: 140-19093-3
Client ID: BLDG A EFFLUENT
Operator ID: HMT ALS Bottle#: 3 Worklist Smp#: 9
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Method: MH_TO15 Limit Group: MSA TO14A_15 Routine ICAL
Column: RTX-5 (0.32 mm) Detector MS SCAN

6 Chlorodifluoromethane, CAS: 75-45-6

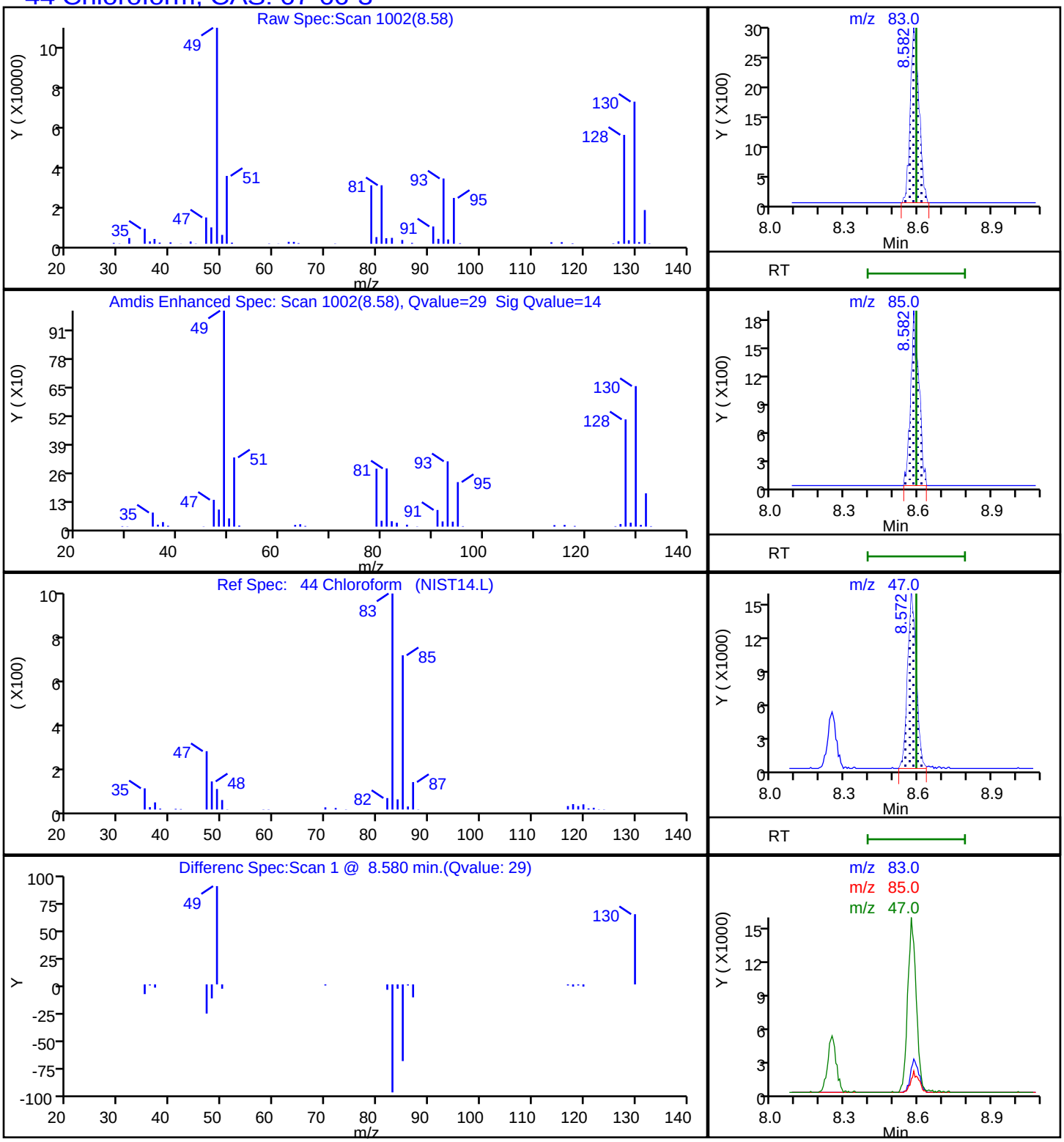


Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HE15P103.D

Injection Date:	15-May-2020 16:10:30	Instrument ID:	MH		
Lims ID:	140-19093-A-3	Lab Sample ID:	140-19093-3		
Client ID:	BLDG A EFFLUENT				
Operator ID:	HMT	ALS Bottle#:	3	Worklist Smp#:	9
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

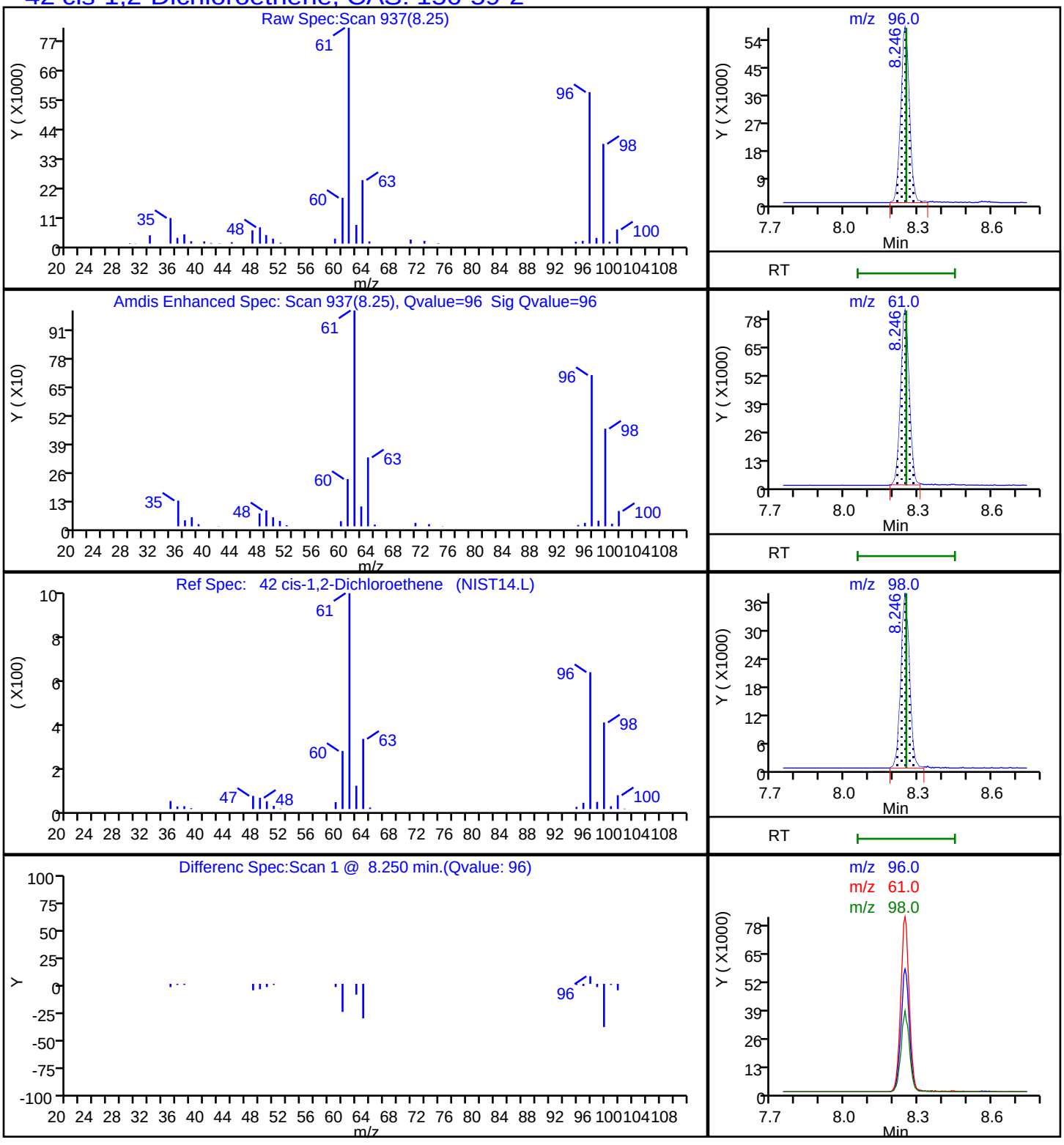
44 Chloroform, CAS: 67-66-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HE15P103.D		
Injection Date:	15-May-2020 16:10:30	Instrument ID:	MH
Lims ID:	140-19093-A-3	Lab Sample ID:	140-19093-3
Client ID:	BLDG A EFFLUENT		
Operator ID:	HMT	ALS Bottle#:	3 Worklist Smp#: 9
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

42 cis-1,2-Dichloroethene, CAS: 156-59-2

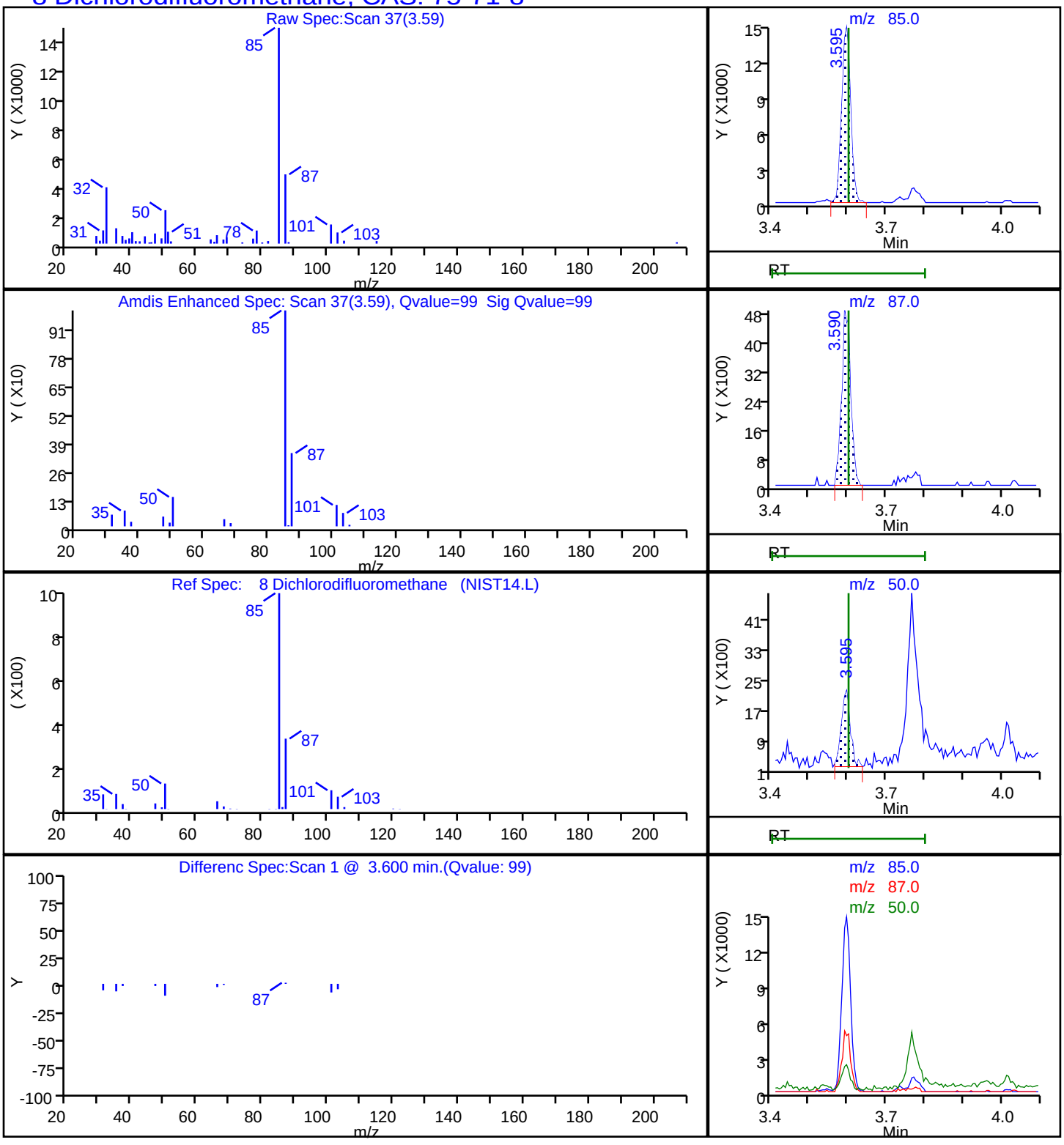


Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HE15P103.D

Injection Date:	15-May-2020 16:10:30	Instrument ID:	MH
Lims ID:	140-19093-A-3	Lab Sample ID:	140-19093-3
Client ID:	BLDG A EFFLUENT		
Operator ID:	HMT	ALS Bottle#:	3 Worklist Smp#: 9
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

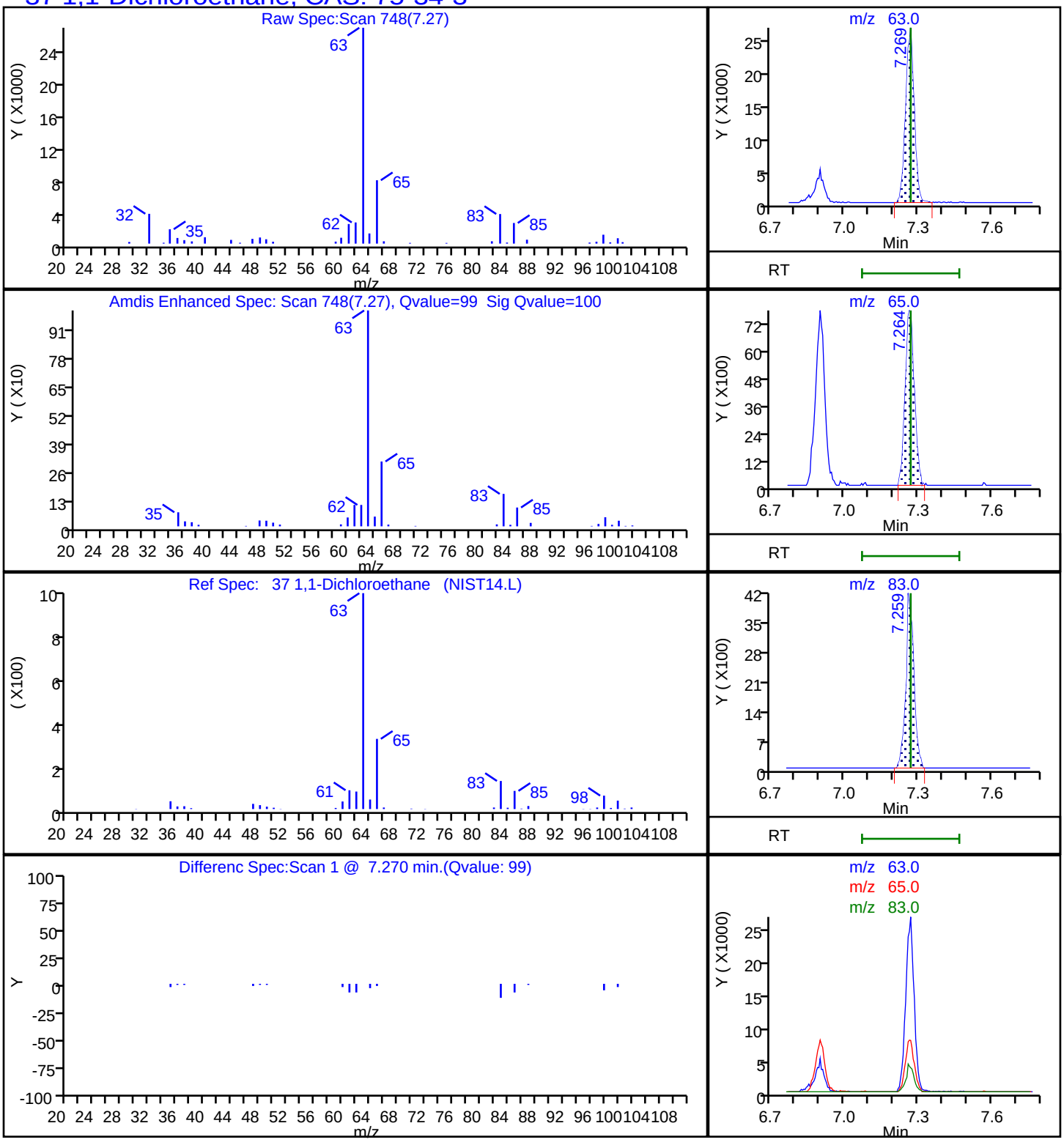
8 Dichlorodifluoromethane, CAS: 75-71-8



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HE15P103.D		
Injection Date:	15-May-2020 16:10:30	Instrument ID:	MH
Lims ID:	140-19093-A-3	Lab Sample ID:	140-19093-3
Client ID:	BLDG A EFFLUENT		
Operator ID:	HMT	ALS Bottle#:	3 Worklist Smp#: 9
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

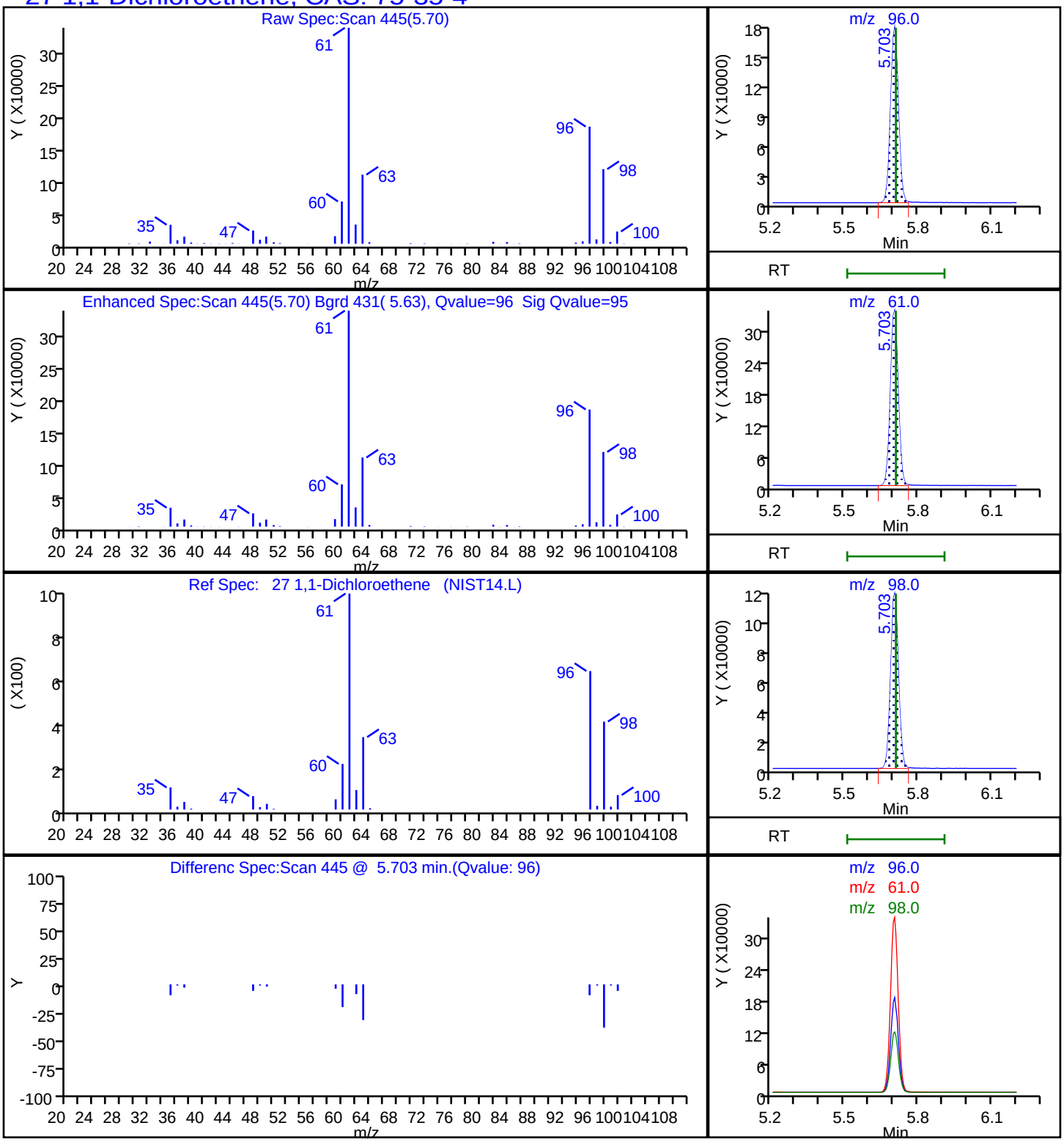
37 1,1-Dichloroethane, CAS: 75-34-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HE15P103.D		
Injection Date:	15-May-2020 16:10:30	Instrument ID:	MH
Lims ID:	140-19093-A-3	Lab Sample ID:	140-19093-3
Client ID:	BLDG A EFFLUENT		
Operator ID:	HMT	ALS Bottle#:	3 Worklist Smp#: 9
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

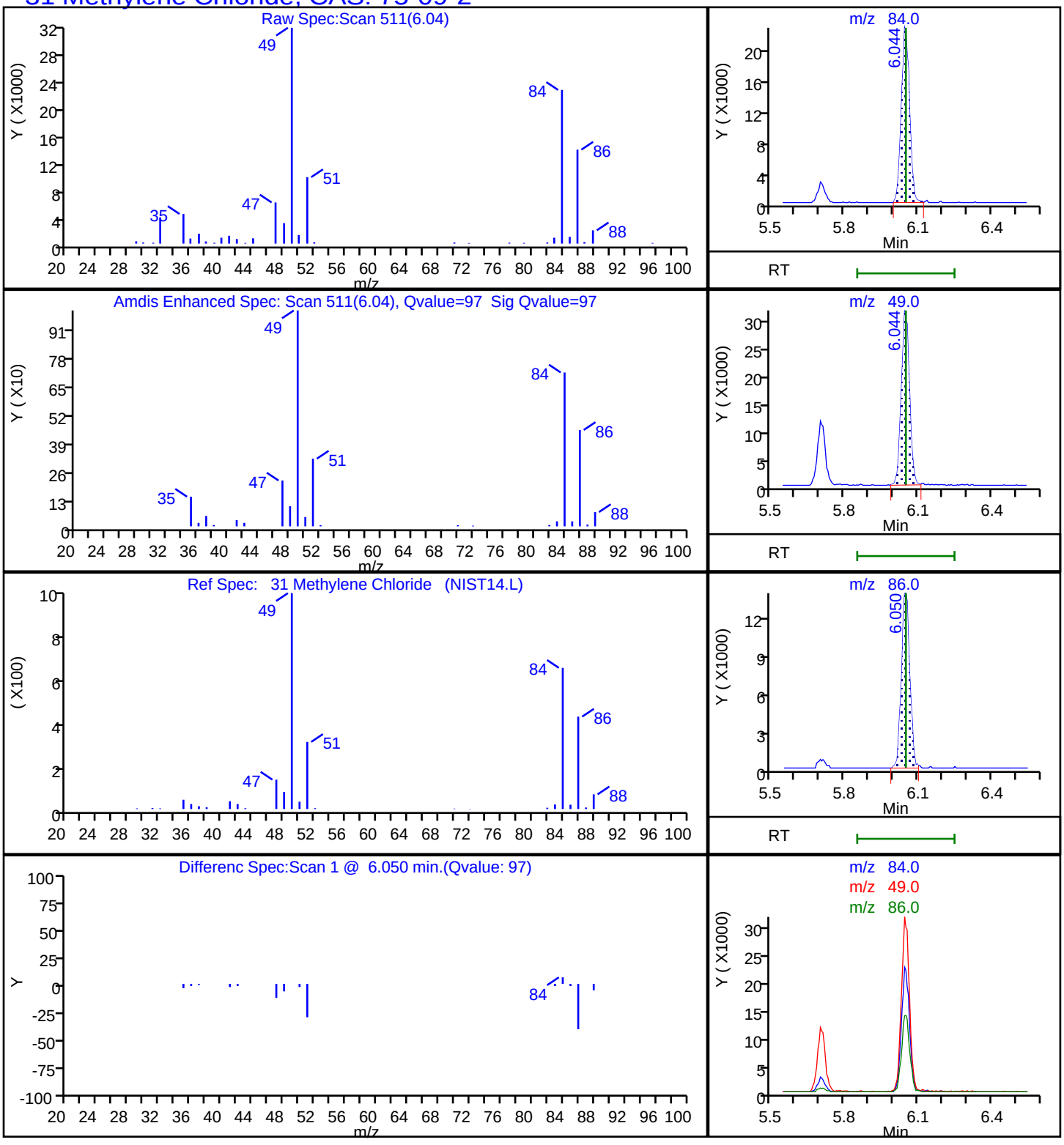
27 1,1-Dichloroethene, CAS: 75-35-4



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HE15P103.D		
Injection Date:	15-May-2020 16:10:30	Instrument ID:	MH
Lims ID:	140-19093-A-3	Lab Sample ID:	140-19093-3
Client ID:	BLDG A EFFLUENT		
Operator ID:	HMT	ALS Bottle#:	3 Worklist Smp#: 9
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

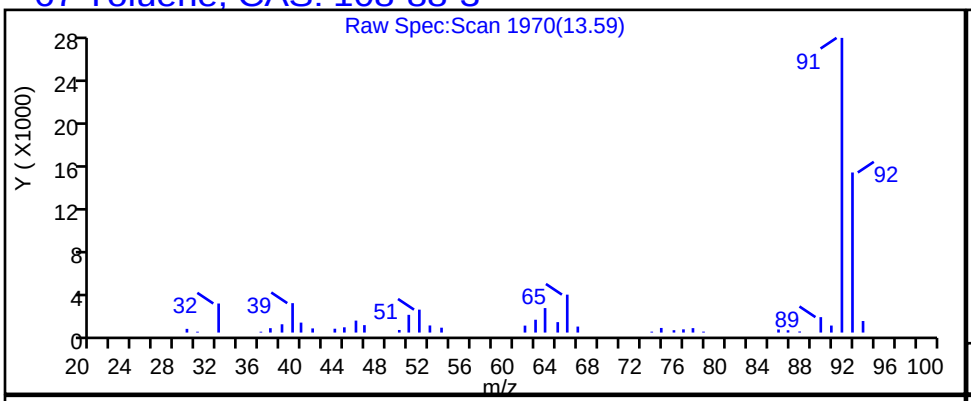
31 Methylene Chloride, CAS: 75-09-2

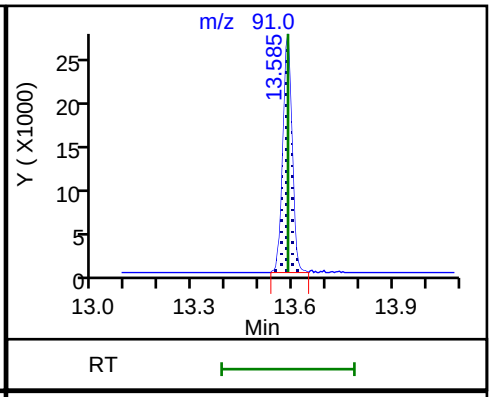


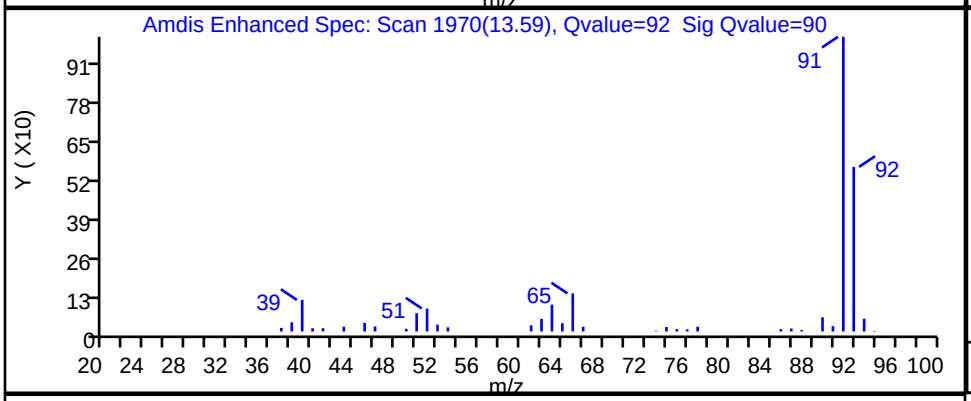
Eurofins TestAmerica, Knoxville

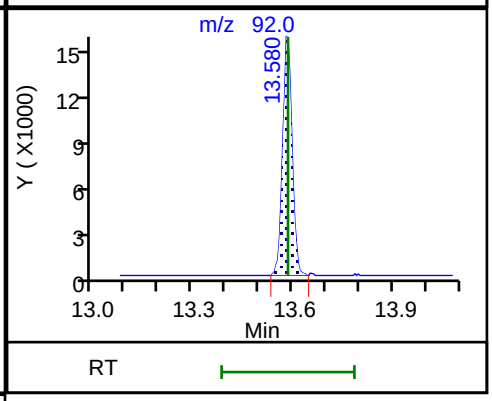
Data File:	\\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HE15P103.D				
Injection Date:	15-May-2020 16:10:30	Instrument ID:	MH		
Lims ID:	140-19093-A-3	Lab Sample ID:	140-19093-3		
Client ID:	BLDG A EFFLUENT				
Operator ID:	HMT	ALS Bottle#:	3	Worklist Smp#:	9
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

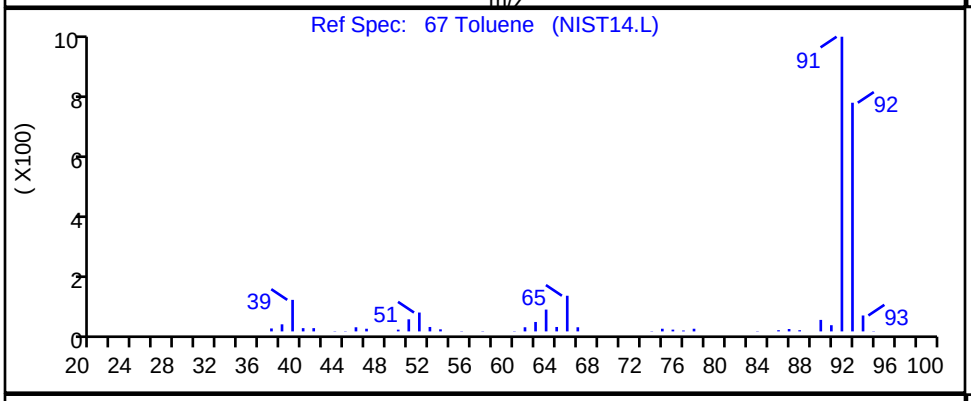
67 Toluene, CAS: 108-88-3

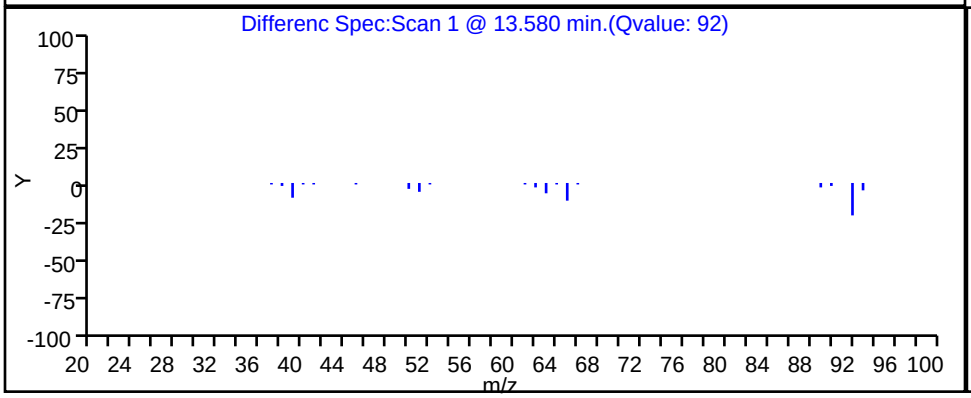


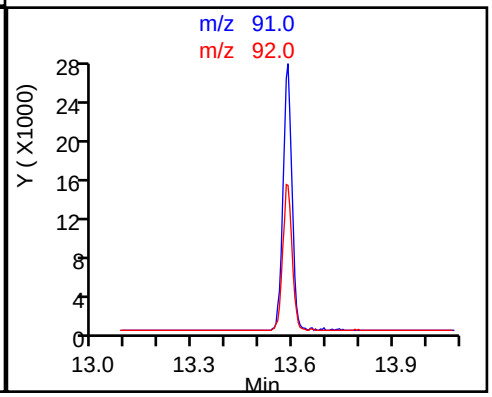








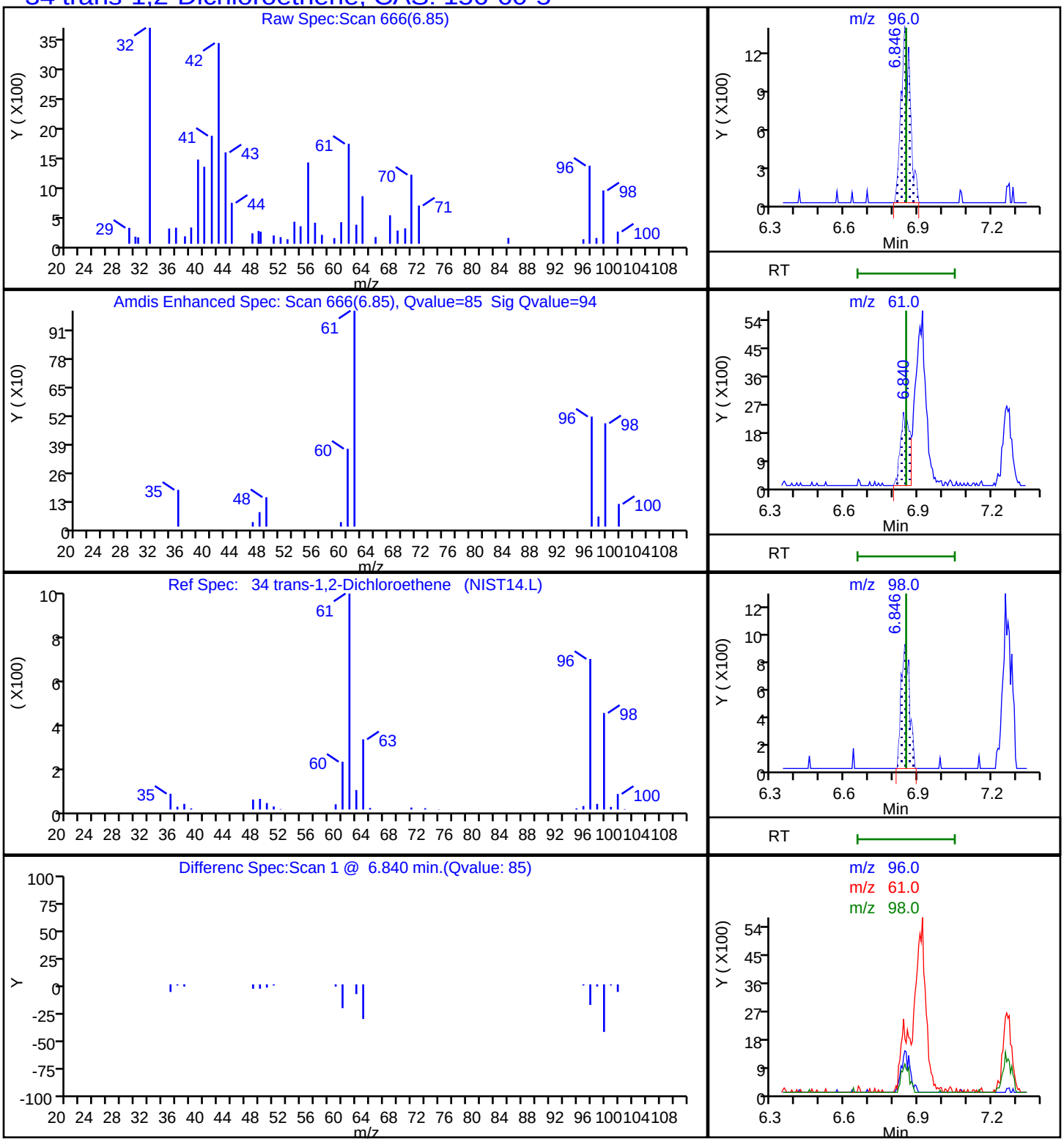




Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HE15P103.D		
Injection Date:	15-May-2020 16:10:30	Instrument ID:	MH
Lims ID:	140-19093-A-3	Lab Sample ID:	140-19093-3
Client ID:	BLDG A EFFLUENT		
Operator ID:	HMT	ALS Bottle#:	3 Worklist Smp#: 9
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

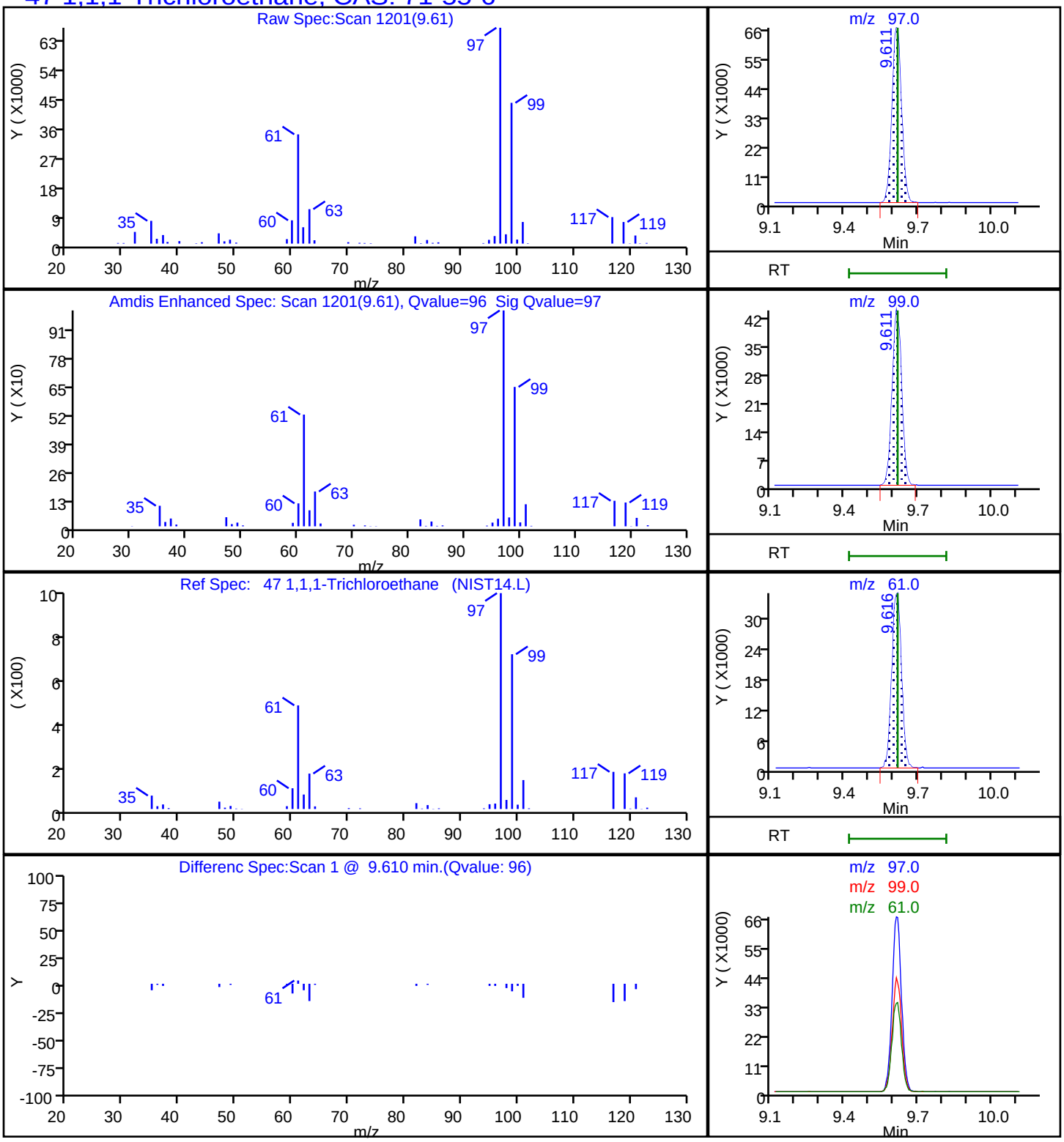
34 trans-1,2-Dichloroethene, CAS: 156-60-5



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HE15P103.D		
Injection Date:	15-May-2020 16:10:30	Instrument ID:	MH
Lims ID:	140-19093-A-3	Lab Sample ID:	140-19093-3
Client ID:	BLDG A EFFLUENT		
Operator ID:	HMT	ALS Bottle#:	3 Worklist Smp#: 9
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

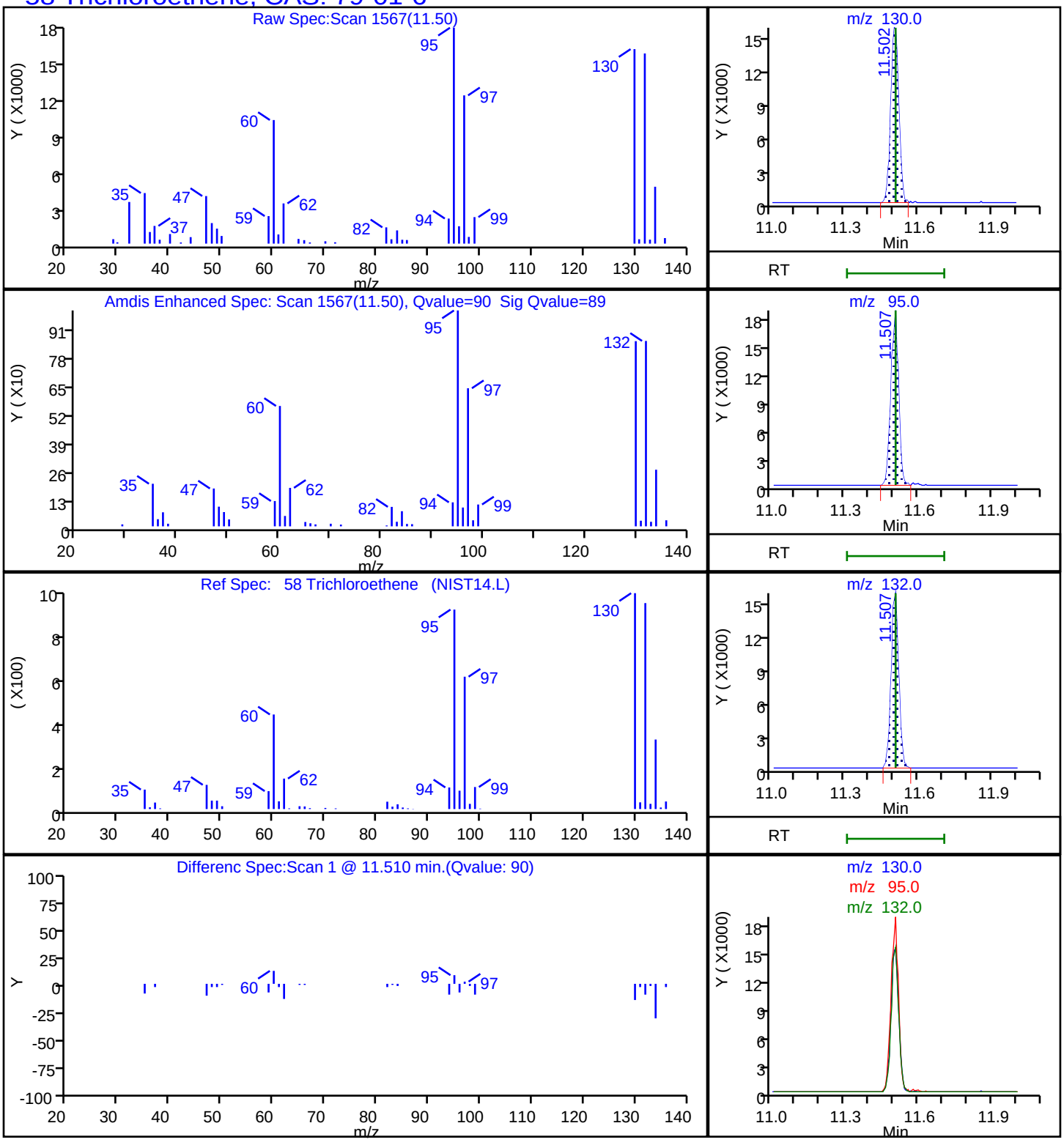
47 1,1,1-Trichloroethane, CAS: 71-55-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HE15P103.D		
Injection Date:	15-May-2020 16:10:30	Instrument ID:	MH
Lims ID:	140-19093-A-3	Lab Sample ID:	140-19093-3
Client ID:	BLDG A EFFLUENT		
Operator ID:	HMT	ALS Bottle#:	3 Worklist Smp#: 9
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

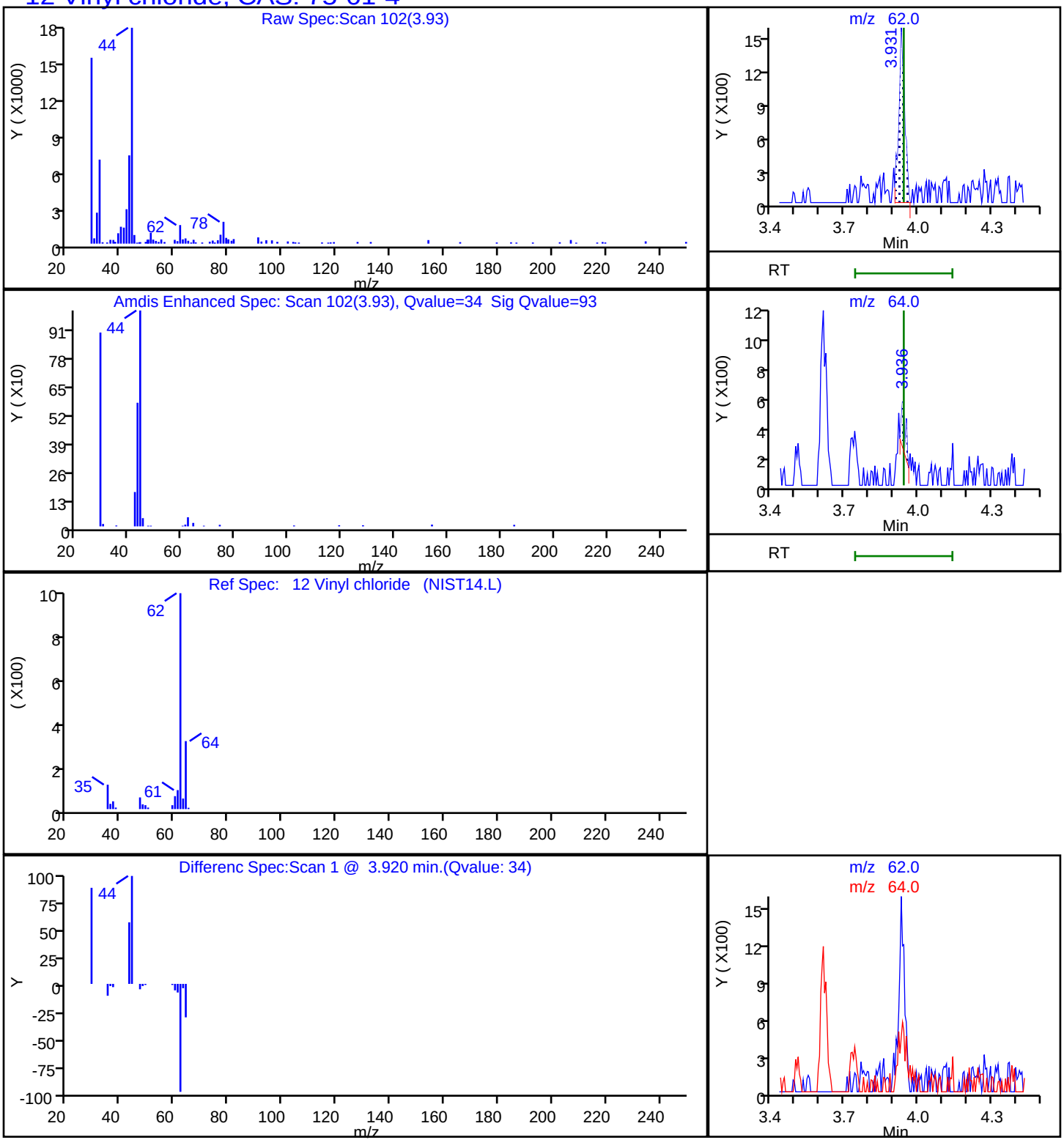
58 Trichloroethene, CAS: 79-01-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HE15P103.D		
Injection Date:	15-May-2020 16:10:30	Instrument ID:	MH
Lims ID:	140-19093-A-3	Lab Sample ID:	140-19093-3
Client ID:	BLDG A EFFLUENT		
Operator ID:	HMT	ALS Bottle#:	3 Worklist Smp#: 9
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

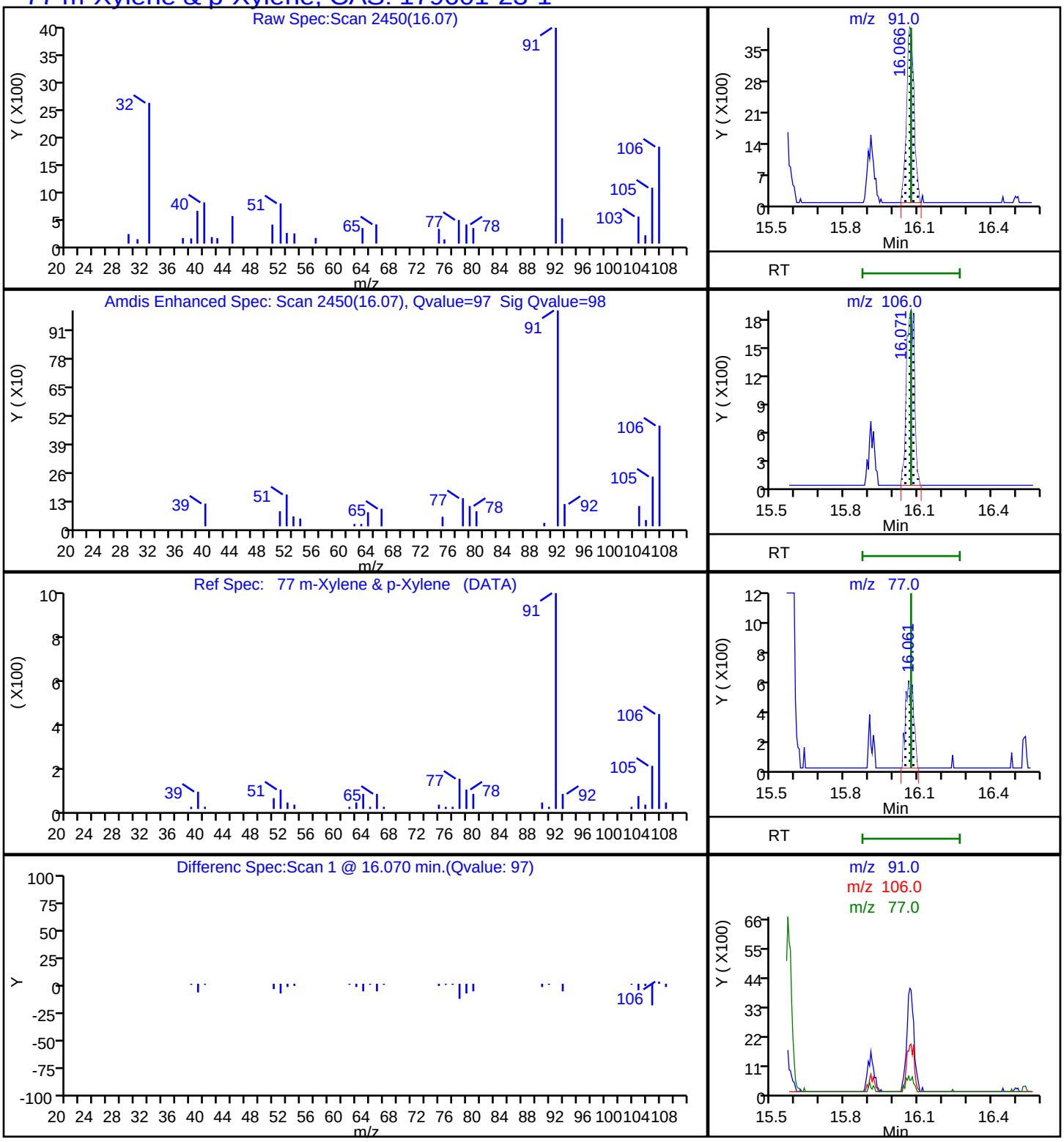
12 Vinyl chloride, CAS: 75-01-4



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HE15P103.D		
Injection Date:	15-May-2020 16:10:30	Instrument ID:	MH
Lims ID:	140-19093-A-3	Lab Sample ID:	140-19093-3
Client ID:	BLDG A EFFLUENT		
Operator ID:	HMT	ALS Bottle#:	3 Worklist Smp#: 9
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

77 m-Xylene & p-Xylene, CAS: 179601-23-1



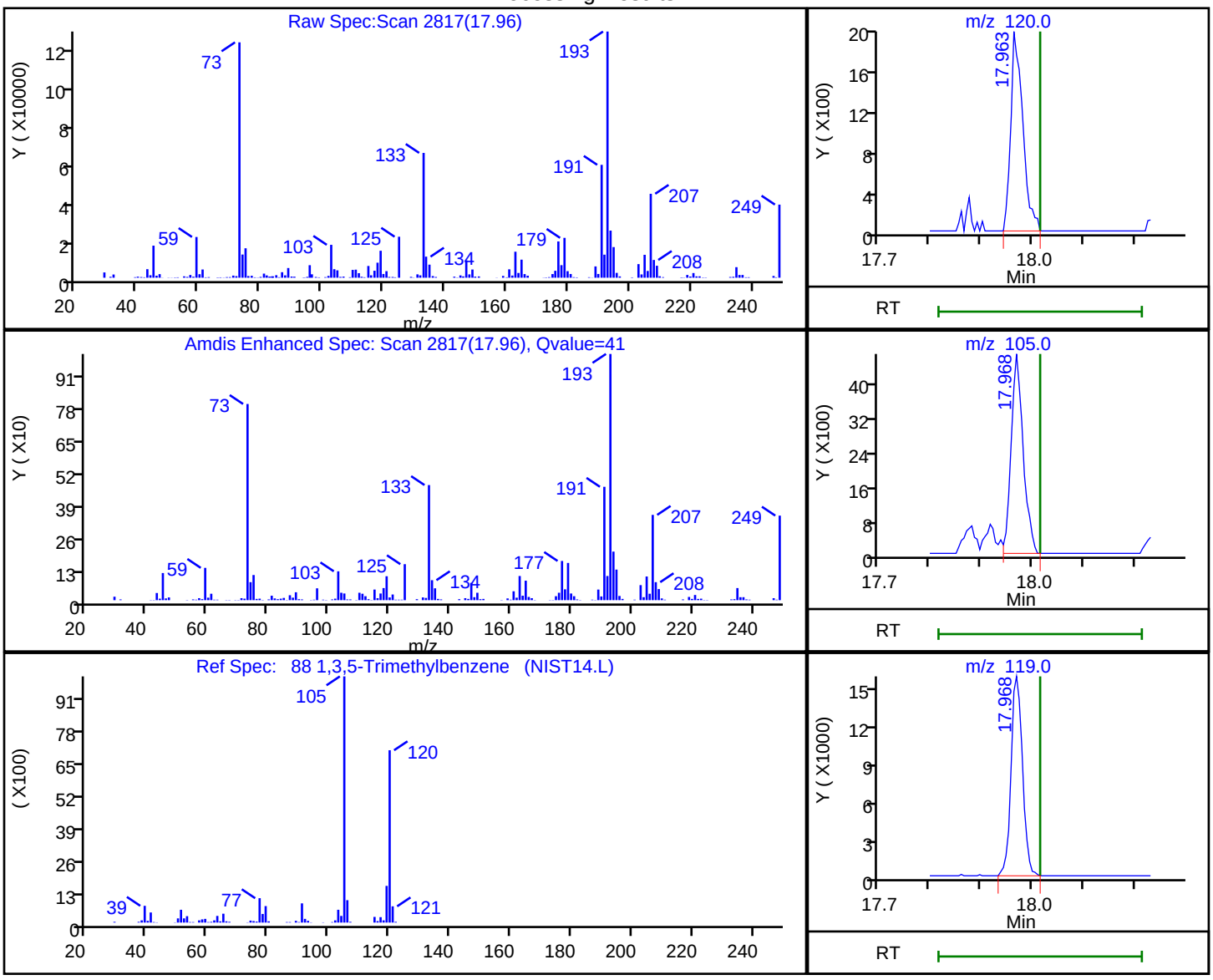
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HE15P103.D				
Injection Date:	15-May-2020 16:10:30	Instrument ID:	MH		
Lims ID:	140-19093-A-3	Lab Sample ID:	140-19093-3		
Client ID:	BLDG A EFFLUENT				
Operator ID:	HMT	ALS Bottle#:	3	Worklist Smp#:	9
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

88 1,3,5-Trimethylbenzene, CAS: 108-67-8

Processing Results



RT	Mass	Response	Amount
17.96	120.00	3234	0.051848
17.97	105.00	7651	
17.97	119.00	23973	

Reviewer: khachitpongpanits, 18-May-2020 17:24:45

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19093-1

SDG No.:

Client Sample ID: BLDG C INFLUENT Lab Sample ID: 140-19093-4

Matrix: Air Lab File ID: HE15P104.D

Analysis Method: TO 15 LL Date Collected: 05/13/2020 11:41

Sample wt/vol: 100(mL) Date Analyzed: 05/15/2020 17:03

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 39584 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	1.5		0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.081	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	4.8		0.40	0.11
67-66-3	Chloroform	119.38	0.11	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	0.52		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.43		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	0.068	J	0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	0.80
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	0.17	J	0.40	0.035
108-88-3	Toluene	92.14	1.6		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	4.0		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	0.35	J	0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	0.32	J	0.40	0.11
75-01-4	Vinyl chloride	62.50	ND	*	0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.32	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	101		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19093-1

SDG No.:

Client Sample ID: BLDG C INFLUENT Lab Sample ID: 140-19093-4

Matrix: Air Lab File ID: HE15P104.D

Analysis Method: TO 15 LL Date Collected: 05/13/2020 11:41

Sample wt/vol: 100(mL) Date Analyzed: 05/15/2020 17:03

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 39584 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	4.7		1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.51	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	17		1.4	0.39
67-66-3	Chloroform	119.38	0.53	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	2.1		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.1		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	0.30	J	1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	2.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	1.2	J	2.7	0.24
108-88-3	Toluene	92.14	6.0		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	21		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	1.7	J	2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	1.6	J	2.0	0.54
75-01-4	Vinyl chloride	62.50	ND	*	0.51	0.33
1330-20-7	Xylenes, Total	106.17	1.4	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	101		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HE15P104.D				
Lims ID:	140-19093-A-4				
Client ID:	BLDG C INFLUENT				
Sample Type:	Client				
Inject. Date:	15-May-2020 17:03:30	ALS Bottle#:	4	Worklist Smp#:	10
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0015105-010				
Misc. Info.:	140-19093-a-4				
Operator ID:	HMT	Instrument ID:	MH		
Method:	\\chromfs\Knoxville\ChromData\MH\20200513-15460.b\MH_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	18-May-2020 17:24:53	Calib Date:	16-Apr-2020 18:34:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC10.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1040				
First Level Reviewer: khachitpongpanits		Date:	18-May-2020 17:25:25		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.582	8.577	0.005	94	155339	4.00	
* 2 1,4-Difluorobenzene	114	10.784	10.784	0.000	96	1031209	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.570	15.570	0.000	90	844514	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.218	17.239	-0.021	88	570424	4.03	
6 Chlorodifluoromethane	51	3.538	3.543	-0.005	96	155956	0.9517	
8 Dichlorodifluoromethane	85	3.600	3.600	0.000	99	21796	0.0865	
42 cis-1,2-Dichloroethene	96	8.246	8.251	-0.005	95	8093	0.1038	
44 Chloroform	83	8.592	8.592	0.000	28	3968	0.0216	
51 Benzene	78	10.226	10.216	0.006	97	65330	0.2913	
52 Carbon tetrachloride	117	10.252	10.246	0.006	28	2609	0.0161	
58 Trichloroethene	130	11.507	11.502	0.000	89	72471	0.7903	
67 Toluene	91	13.585	13.585	0.000	93	75403	0.3204	
73 Tetrachloroethene	129	14.743	14.732	0.011	91	3097	0.0342	
76 Ethylbenzene	91	15.901	15.906	-0.005	96	4165	0.0137	
77 m-Xylene & p-Xylene	91	16.066	16.071	-0.005	96	8648	0.0372	
81 o-Xylene	91	16.598	16.598	0.000	71	6342	0.0263	
88 1,3,5-Trimethylbenzene	120	17.983	18.014	-0.031	62	5188	0.0646	
92 1,2,4-Trimethylbenzene	105	18.454	18.474	-0.020	98	20169	0.0707	
S 116 Xylenes, Total	100				0		0.0635	

Reagents:

40MXISSURP_00004 Amount Added: 40.00 Units: mL Run Reagent

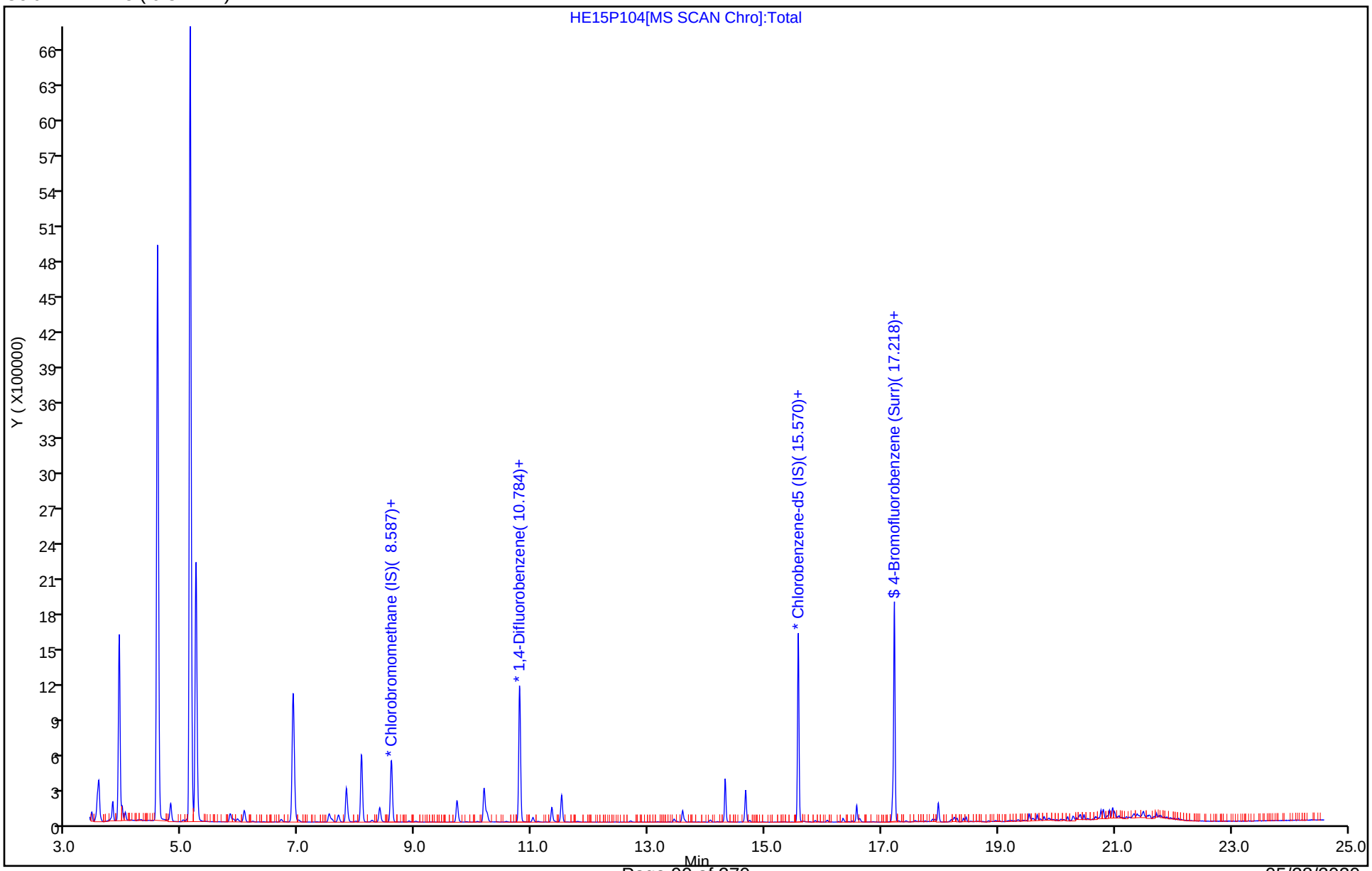
Report Date: 18-May-2020 17:25:25 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HE15P104.D

Injection Date:	15-May-2020 17:03:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	140-19093-A-4	Lab Sample ID:	140-19093-4	Worklist Smp#:	10
Client ID:	BLDG C INFLUENT				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HE15P104.D				
Lims ID:	140-19093-A-4				
Client ID:	BLDG C INFLUENT				
Sample Type:	Client				
Inject. Date:	15-May-2020 17:03:30	ALS Bottle#:	4	Worklist Smp#:	10
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0015105-010				
Misc. Info.:	140-19093-a-4				
Operator ID:	HMT	Instrument ID:	MH		
Method:	\\chromfs\Knoxville\ChromData\MH\20200513-15460.b\MH_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	18-May-2020 17:24:53	Calib Date:	16-Apr-2020 18:34:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC10.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1040				

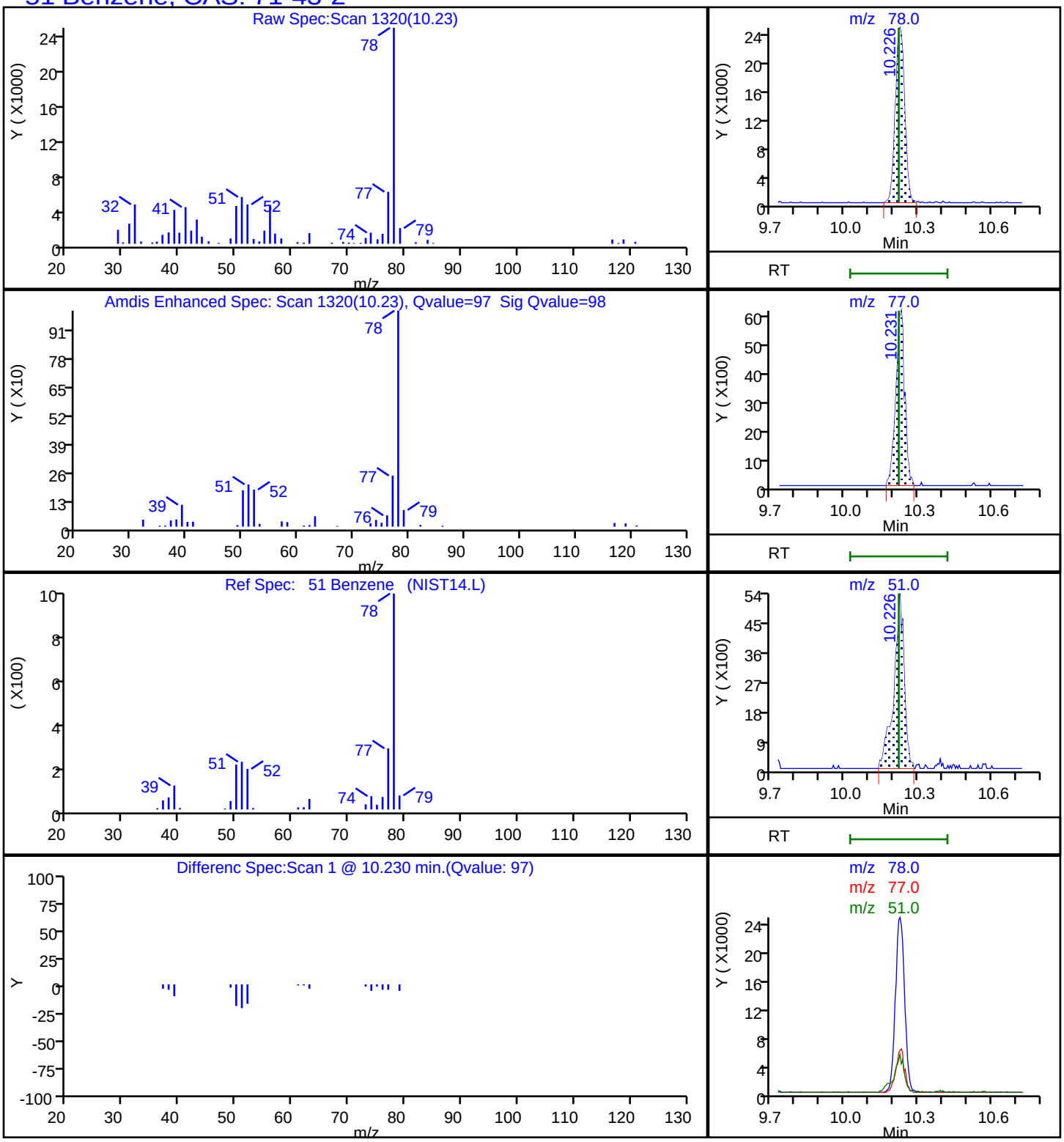
First Level Reviewer: khachitpongpanits Date: 18-May-2020 17:25:25

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.00	4.03	100.65

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HE15P104.D		
Injection Date:	15-May-2020 17:03:30	Instrument ID:	MH
Lims ID:	140-19093-A-4	Lab Sample ID:	140-19093-4
Client ID:	BLDG C INFLUENT		
Operator ID:	HMT	ALS Bottle#:	4 Worklist Smp#: 10
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

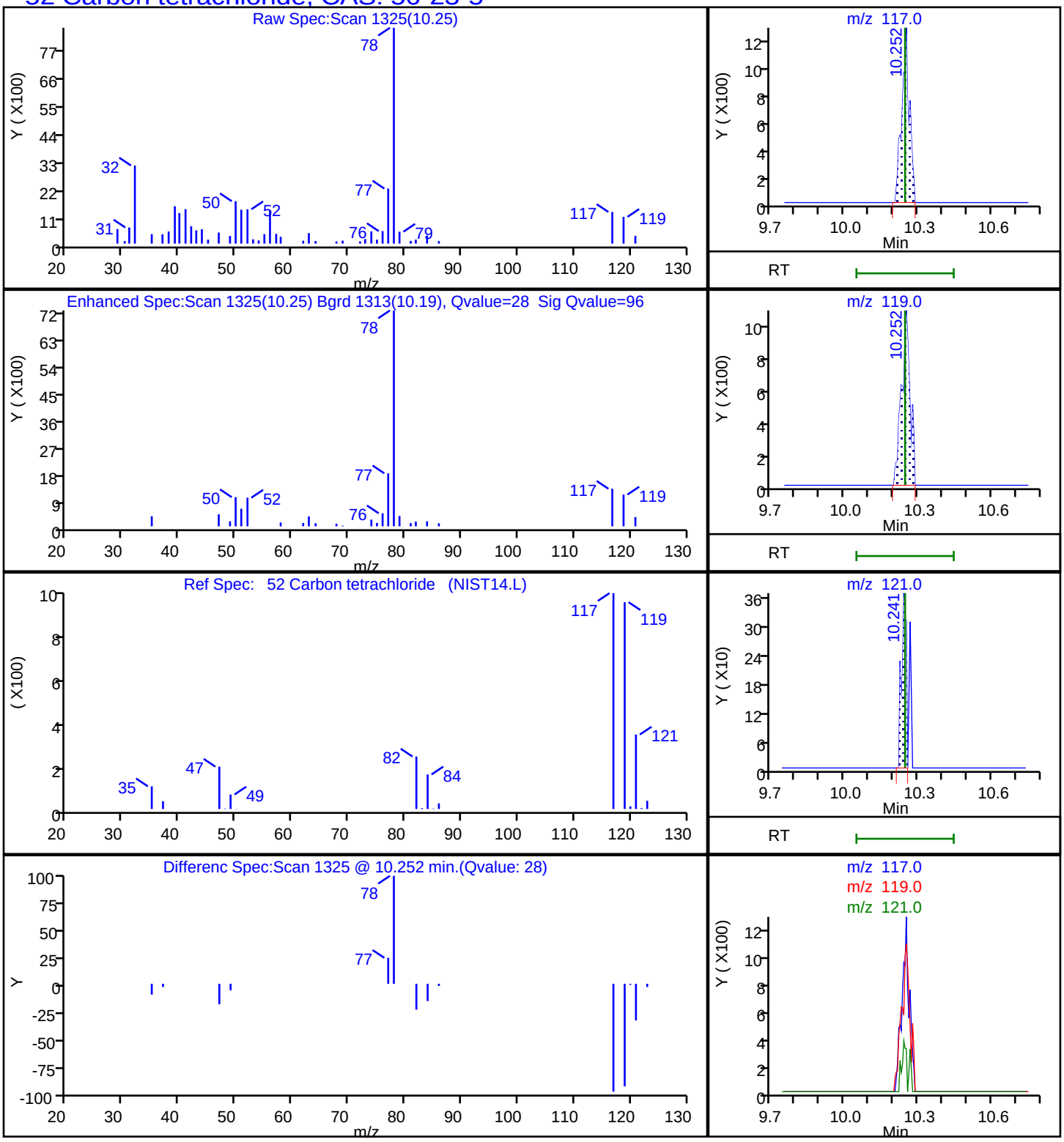
51 Benzene, CAS: 71-43-2



Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HE15P104.D
Injection Date: 15-May-2020 17:03:30 Instrument ID: MH
Lims ID: 140-19093-A-4 Lab Sample ID: 140-19093-4
Client ID: BLDG C INFLUENT
Operator ID: HMT ALS Bottle#: 4 Worklist Smp#: 10
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Method: MH_TO15 Limit Group: MSA TO14A_15 Routine ICAL
Column: RTX-5 (0.32 mm) Detector MS SCAN

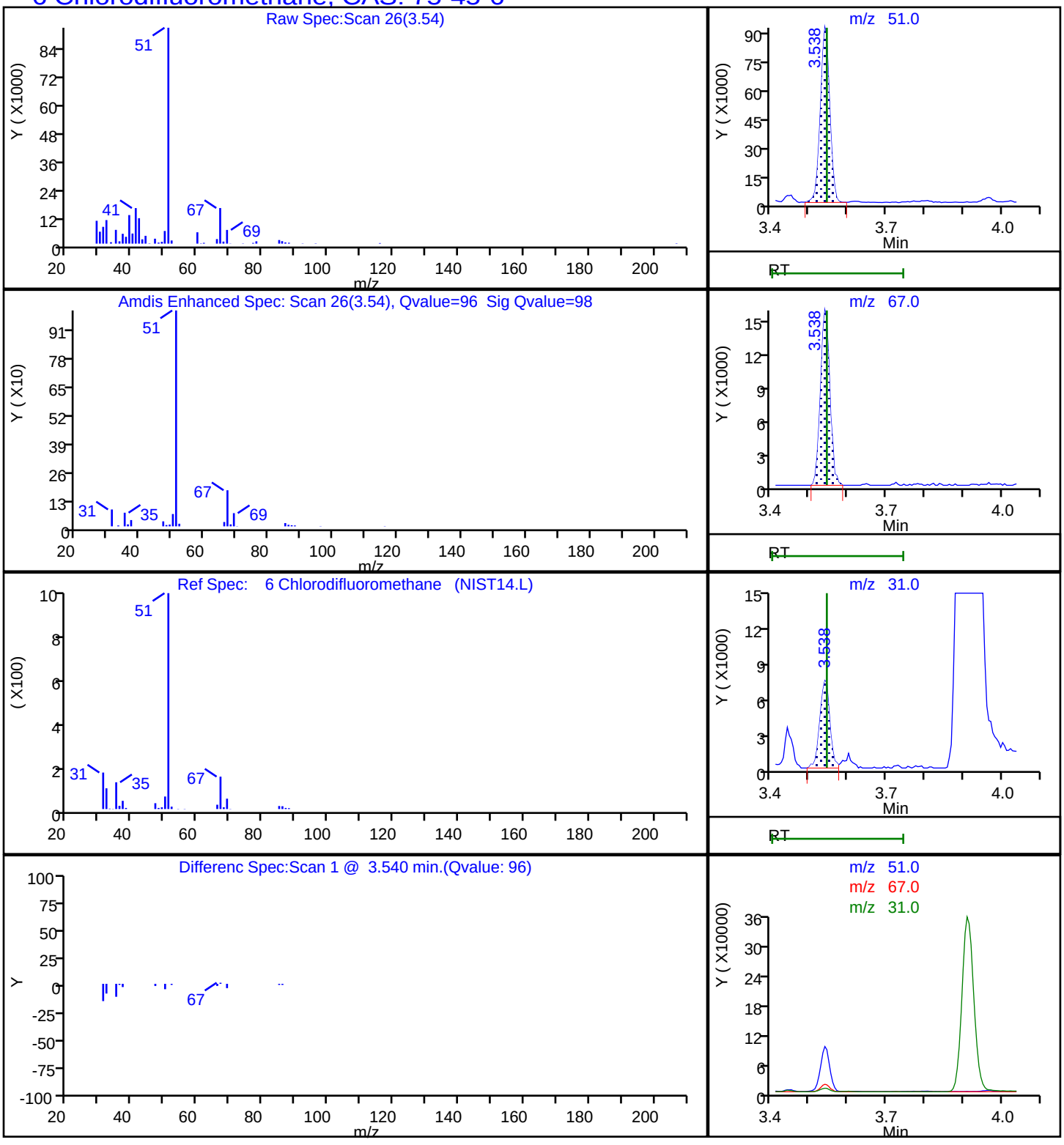
52 Carbon tetrachloride, CAS: 56-23-5



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HE15P104.D				
Injection Date:	15-May-2020 17:03:30	Instrument ID:	MH		
Lims ID:	140-19093-A-4	Lab Sample ID:	140-19093-4		
Client ID:	BLDG C INFLUENT				
Operator ID:	HMT	ALS Bottle#:	4	Worklist Smp#:	10
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

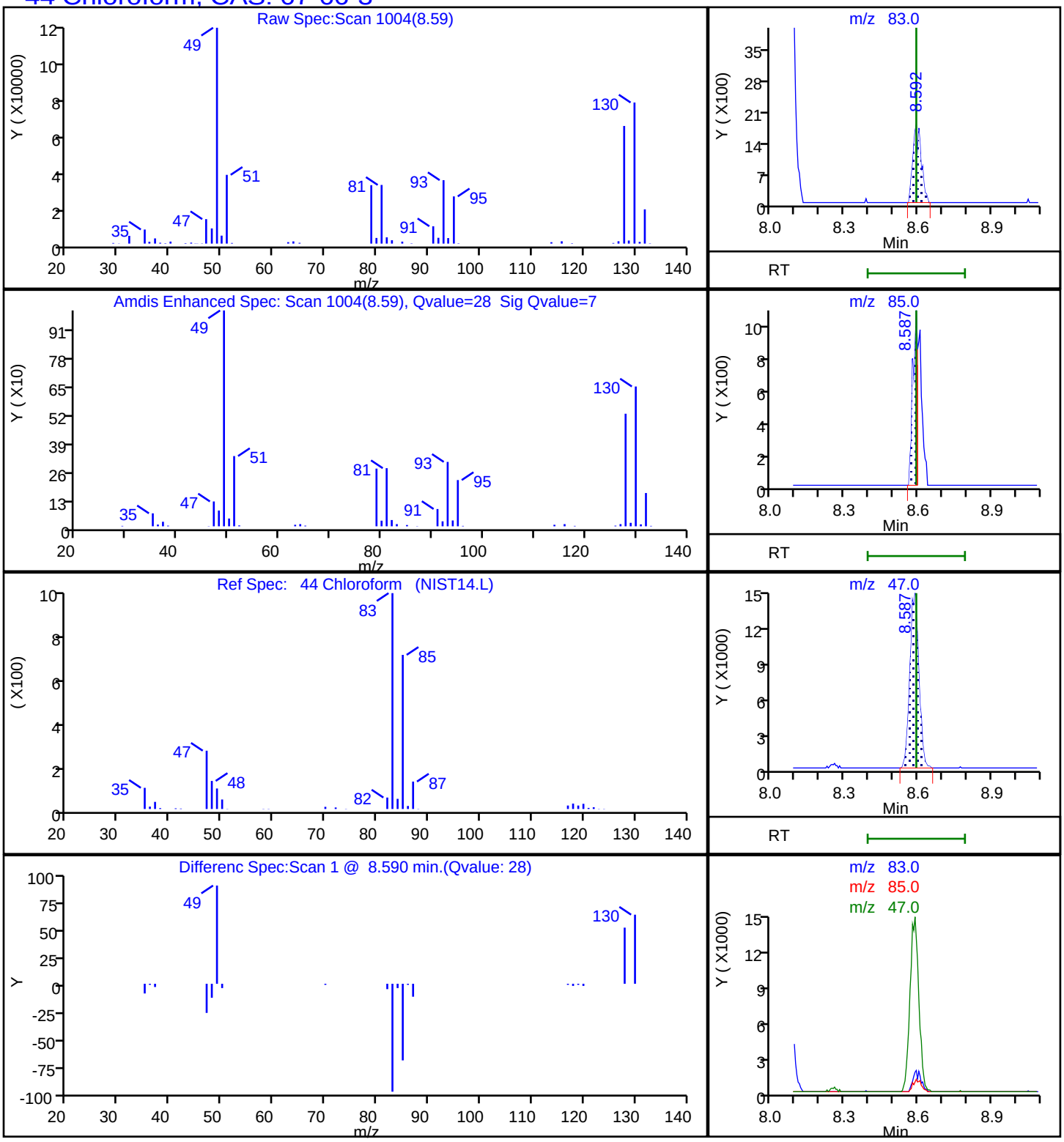
6 Chlorodifluoromethane, CAS: 75-45-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HE15P104.D				
Injection Date:	15-May-2020 17:03:30	Instrument ID:	MH		
Lims ID:	140-19093-A-4	Lab Sample ID:	140-19093-4		
Client ID:	BLDG C INFLUENT				
Operator ID:	HMT	ALS Bottle#:	4	Worklist Smp#:	10
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

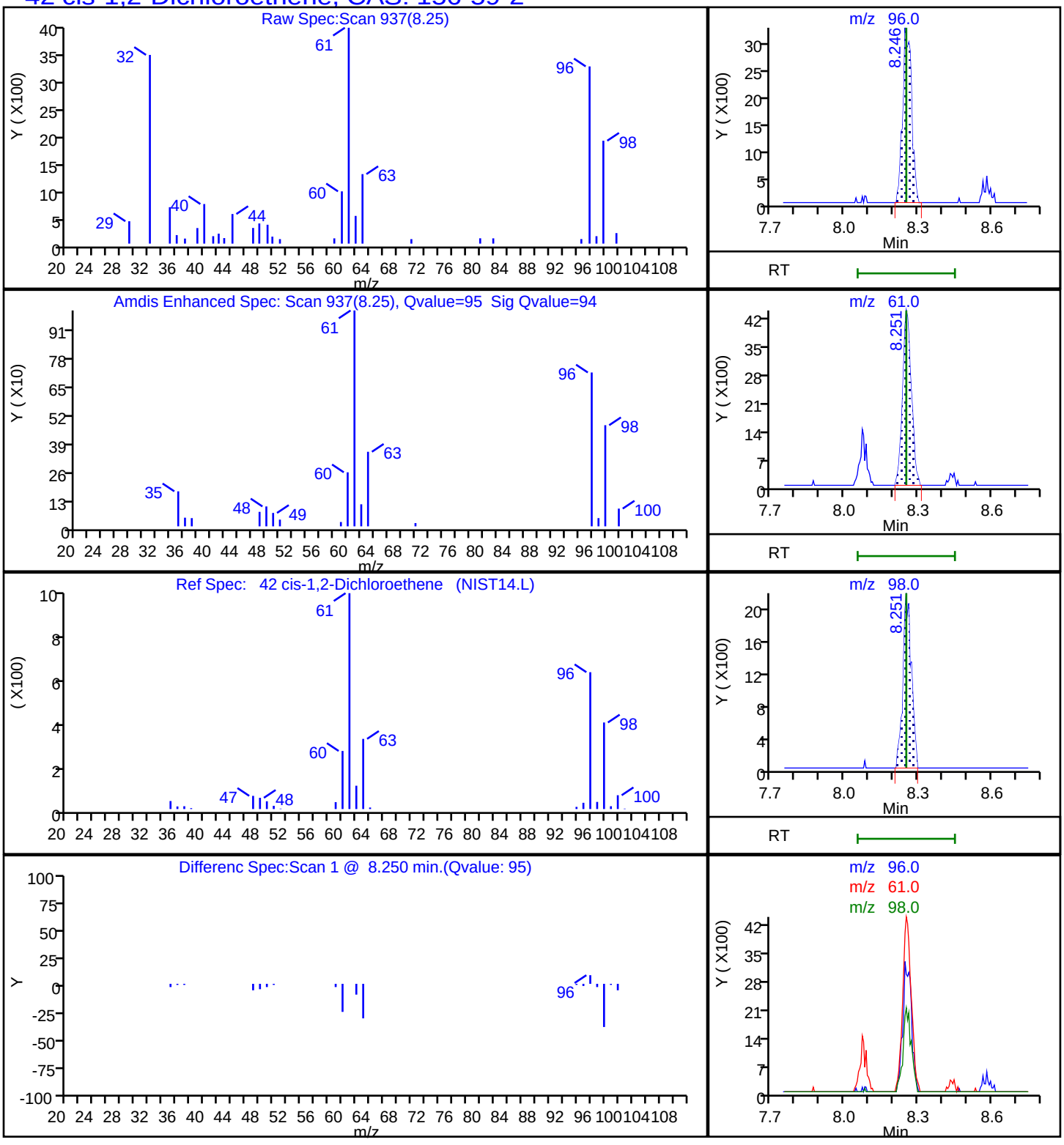
44 Chloroform, CAS: 67-66-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HE15P104.D		
Injection Date:	15-May-2020 17:03:30	Instrument ID:	MH
Lims ID:	140-19093-A-4	Lab Sample ID:	140-19093-4
Client ID:	BLDG C INFLUENT		
Operator ID:	HMT	ALS Bottle#:	4 Worklist Smp#: 10
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

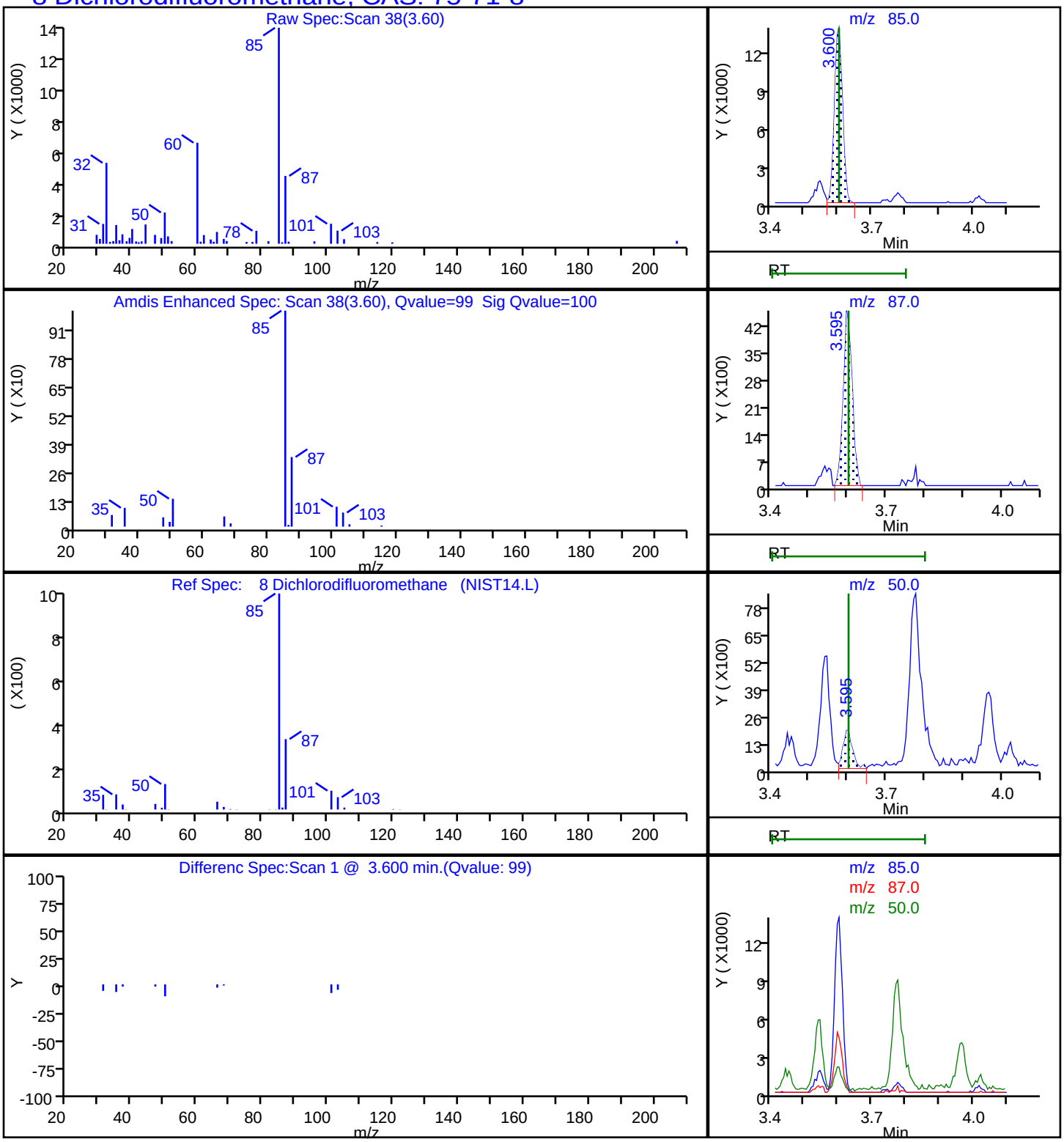
42 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HE15P104.D				
Injection Date:	15-May-2020 17:03:30	Instrument ID:	MH		
Lims ID:	140-19093-A-4	Lab Sample ID:	140-19093-4		
Client ID:	BLDG C INFLUENT				
Operator ID:	HMT	ALS Bottle#:	4	Worklist Smp#:	10
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

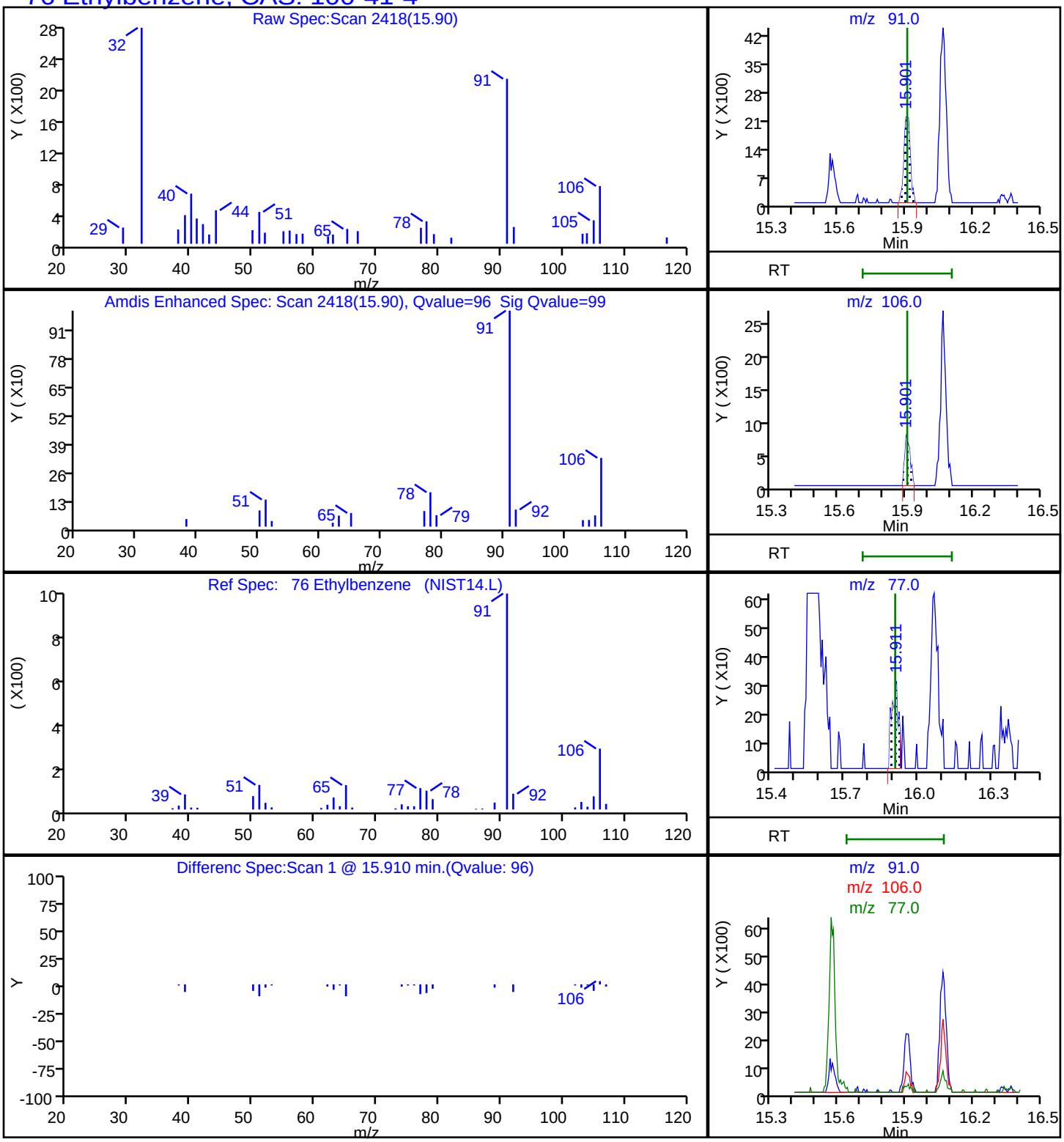
8 Dichlorodifluoromethane, CAS: 75-71-8



Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HE15P104.D
Injection Date: 15-May-2020 17:03:30 Instrument ID: MH
Lims ID: 140-19093-A-4 Lab Sample ID: 140-19093-4
Client ID: BLDG C INFLUENT
Operator ID: HMT ALS Bottle#: 4 Worklist Smp#: 10
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Method: MH_TO15 Limit Group: MSA TO14A_15 Routine ICAL
Column: RTX-5 (0.32 mm) Detector MS SCAN

76 Ethylbenzene, CAS: 100-41-4

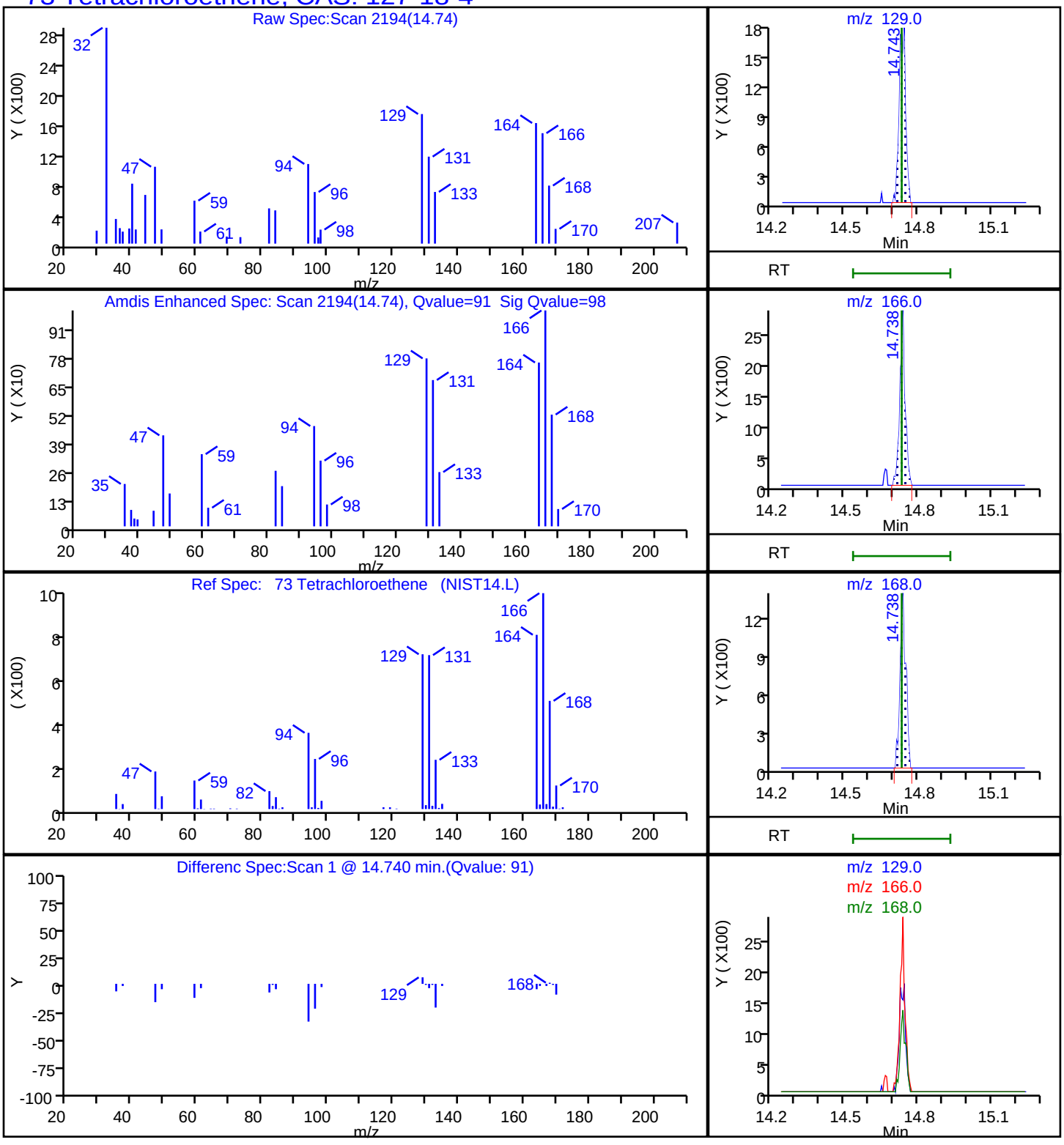


Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HE15P104.D

Injection Date:	15-May-2020 17:03:30	Instrument ID:	MH
Lims ID:	140-19093-A-4	Lab Sample ID:	140-19093-4
Client ID:	BLDG C INFLUENT		
Operator ID:	HMT	ALS Bottle#:	4 Worklist Smp#: 10
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

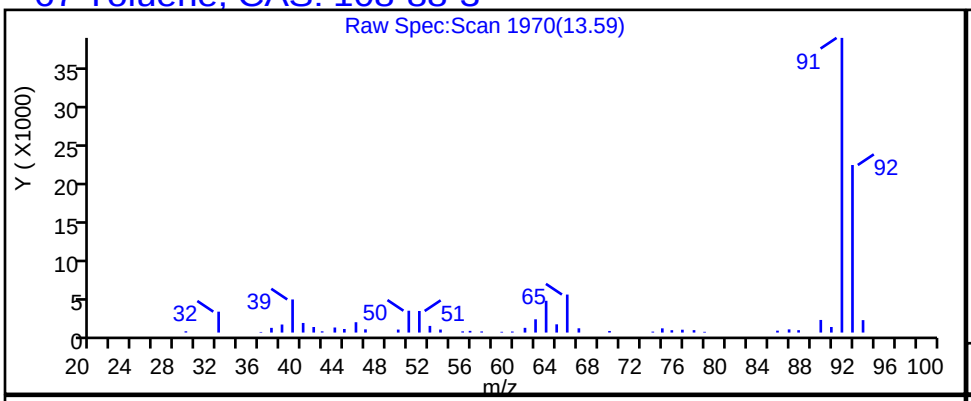
73 Tetrachloroethene, CAS: 127-18-4

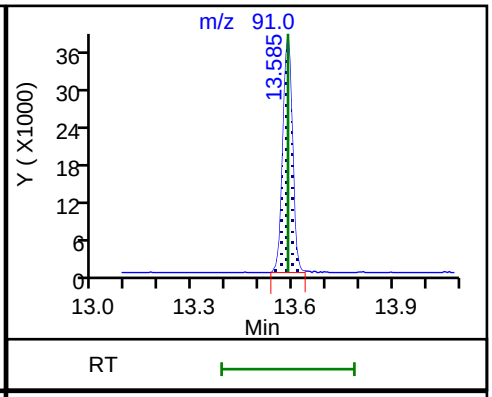


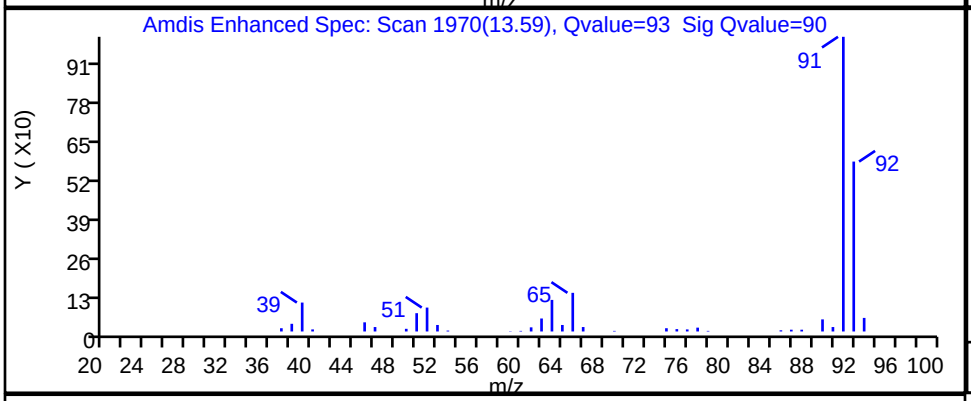
Eurofins TestAmerica, Knoxville

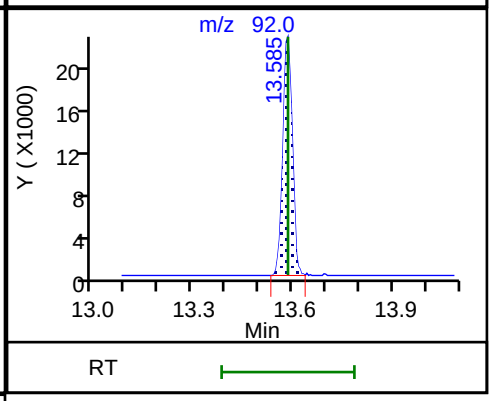
Data File:	\\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HE15P104.D		
Injection Date:	15-May-2020 17:03:30	Instrument ID:	MH
Lims ID:	140-19093-A-4	Lab Sample ID:	140-19093-4
Client ID:	BLDG C INFLUENT		
Operator ID:	HMT	ALS Bottle#:	4 Worklist Smp#: 10
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

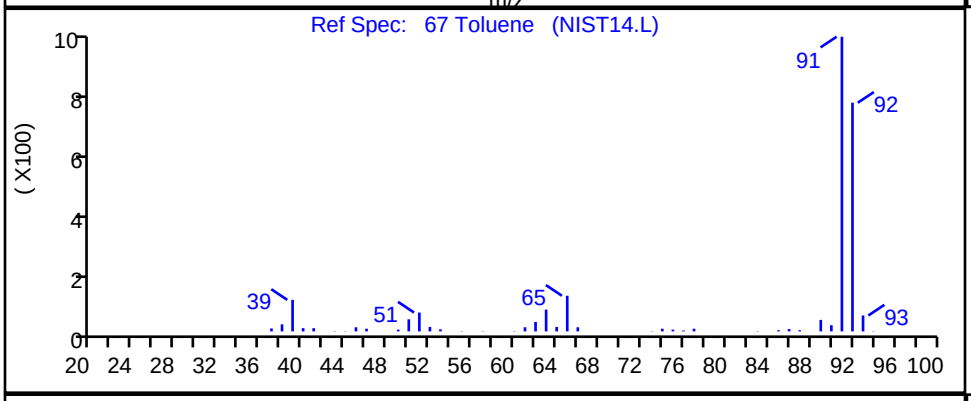
67 Toluene, CAS: 108-88-3

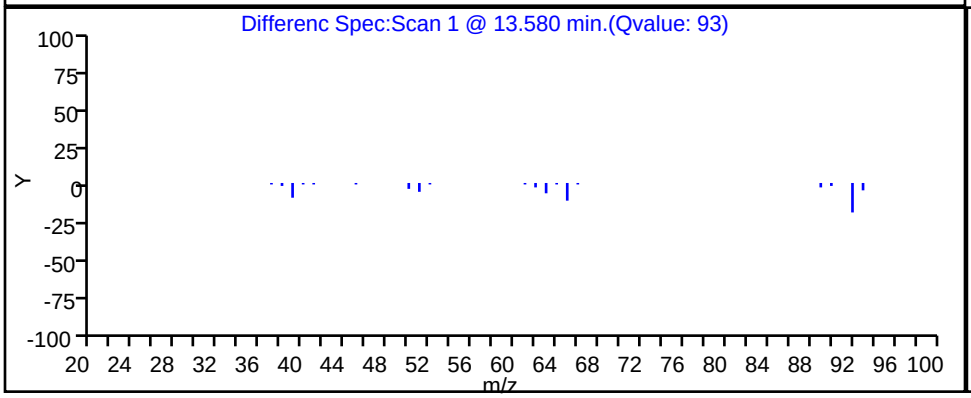


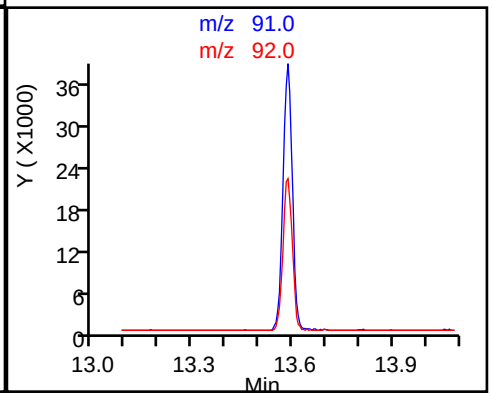








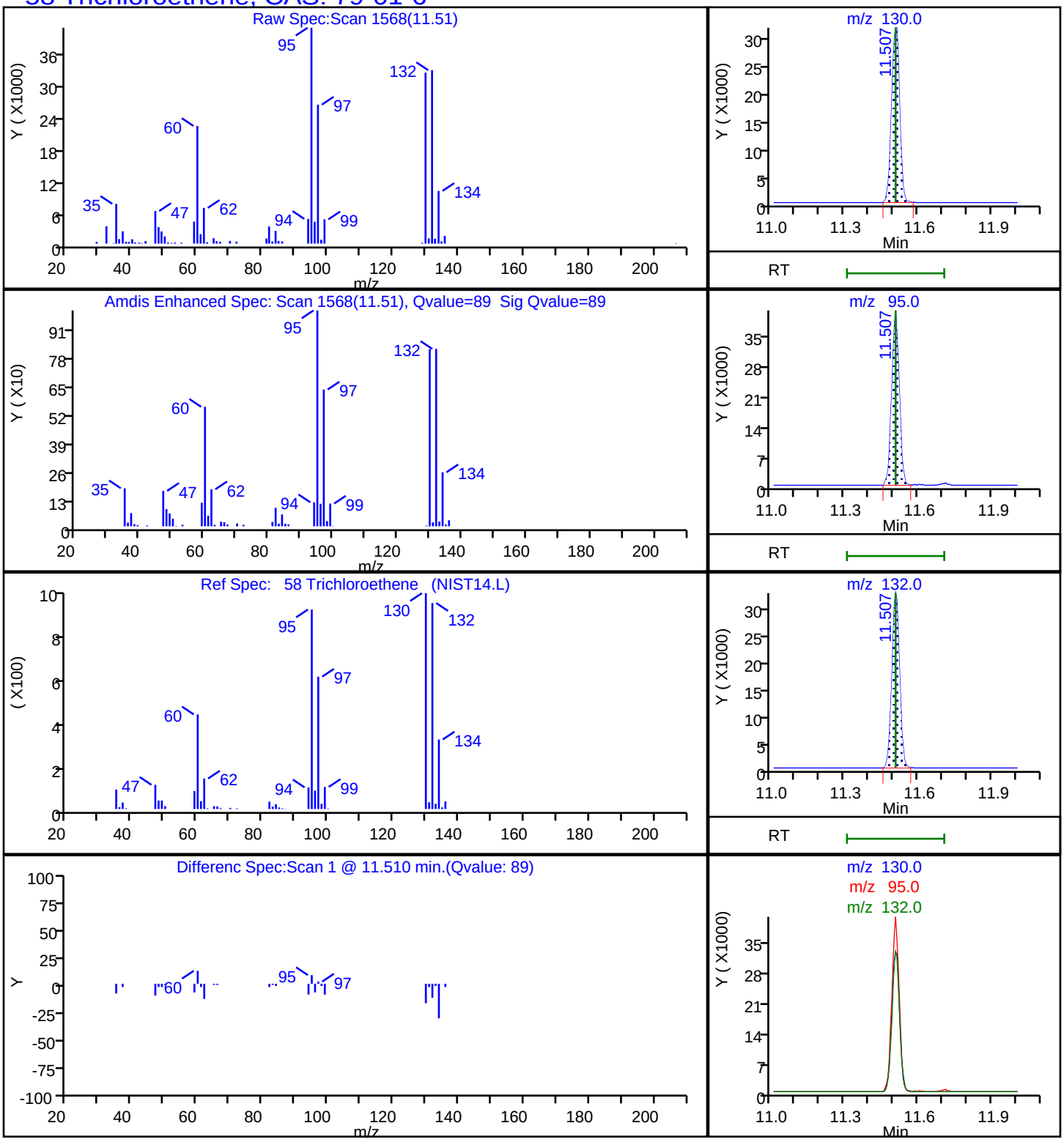




Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HE15P104.D		
Injection Date:	15-May-2020 17:03:30	Instrument ID:	MH
Lims ID:	140-19093-A-4	Lab Sample ID:	140-19093-4
Client ID:	BLDG C INFLUENT		
Operator ID:	HMT	ALS Bottle#:	4 Worklist Smp#: 10
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

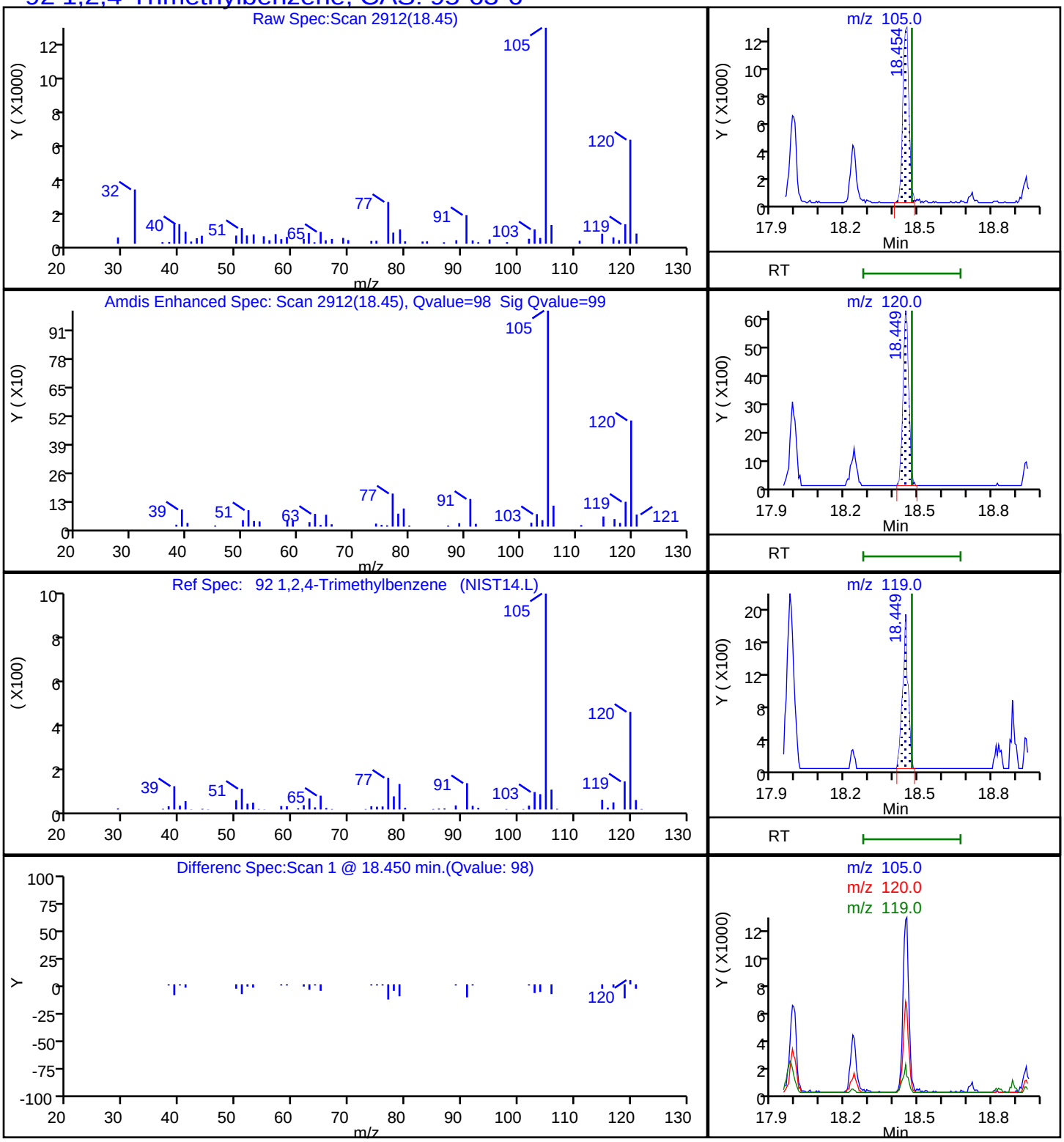
58 Trichloroethene, CAS: 79-01-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HE15P104.D		
Injection Date:	15-May-2020 17:03:30	Instrument ID:	MH
Lims ID:	140-19093-A-4	Lab Sample ID:	140-19093-4
Client ID:	BLDG C INFLUENT		
Operator ID:	HMT	ALS Bottle#:	4 Worklist Smp#: 10
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

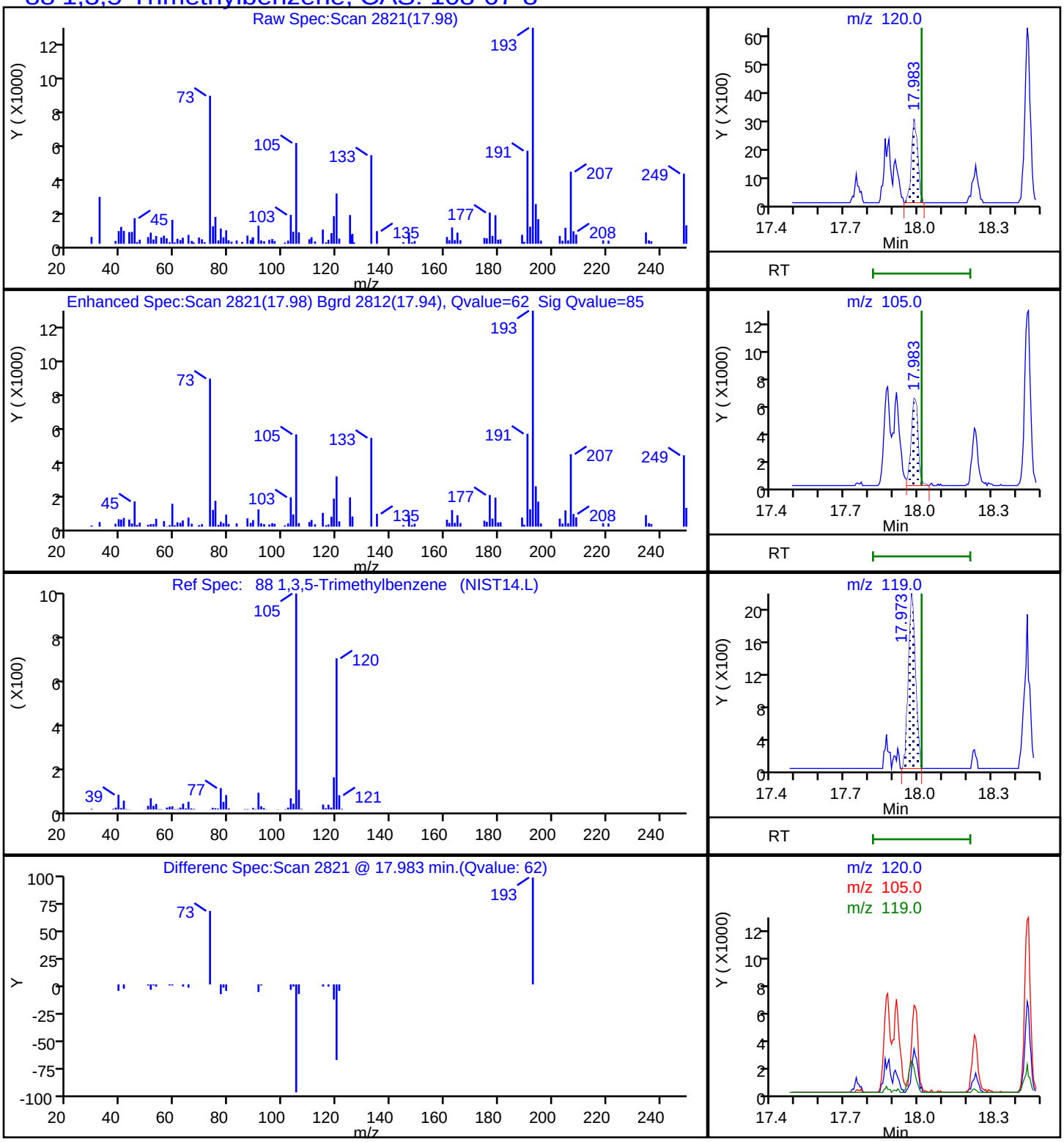
92 1,2,4-Trimethylbenzene, CAS: 95-63-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HE15P104.D				
Injection Date:	15-May-2020 17:03:30	Instrument ID:	MH		
Lims ID:	140-19093-A-4	Lab Sample ID:	140-19093-4		
Client ID:	BLDG C INFLUENT				
Operator ID:	HMT	ALS Bottle#:	4	Worklist Smp#:	10
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

88 1,3,5-Trimethylbenzene, CAS: 108-67-8

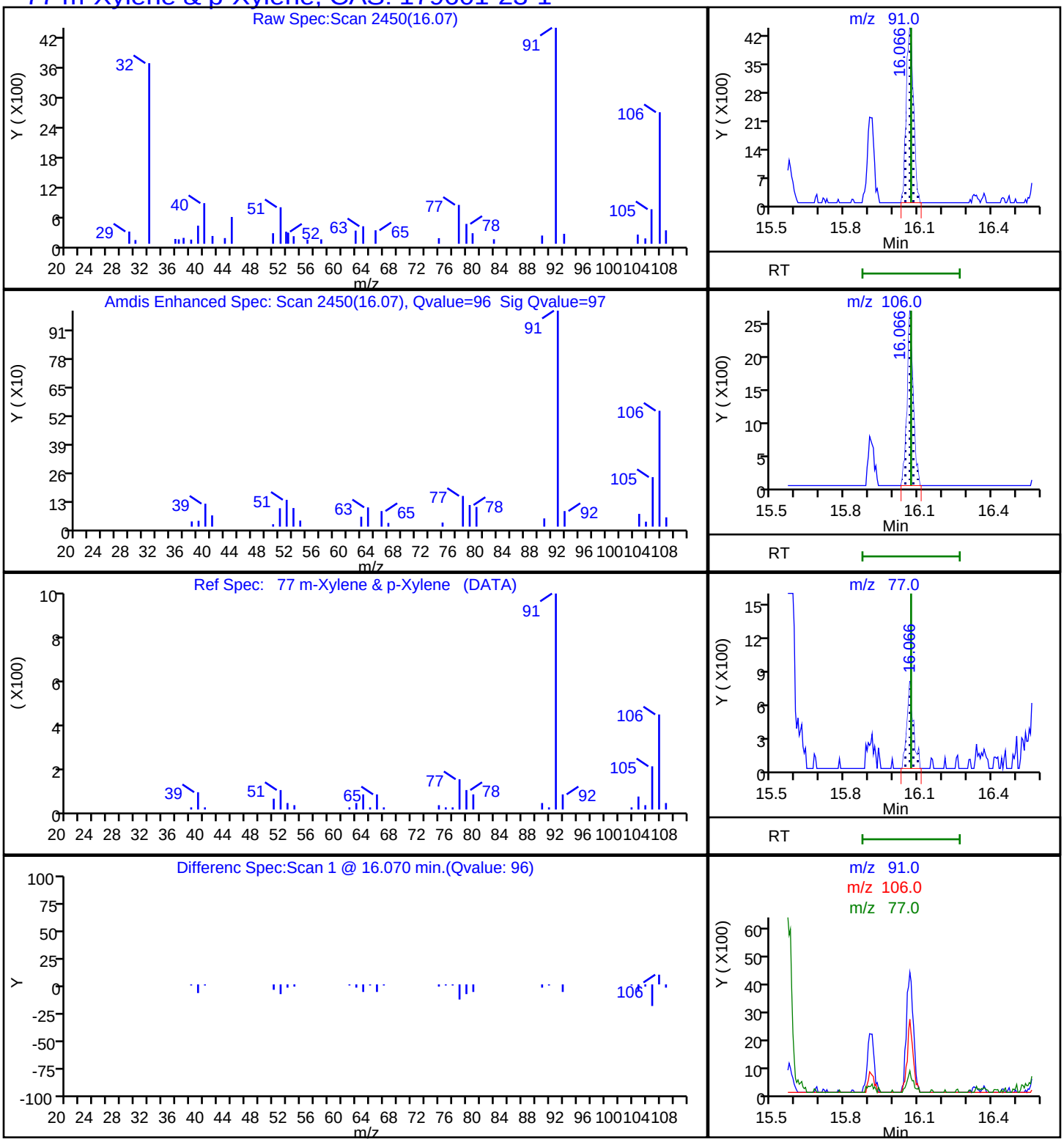


Report Date: 18-May-2020 17:25:25 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HE15P104.D				
Injection Date:	15-May-2020 17:03:30	Instrument ID:	MH		
Lims ID:	140-19093-A-4	Lab Sample ID:	140-19093-4		
Client ID:	BLDG C INFLUENT				
Operator ID:	HMT	ALS Bottle#:	4	Worklist Smp#:	10
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

77 m-Xylene & p-Xylene, CAS: 179601-23-1

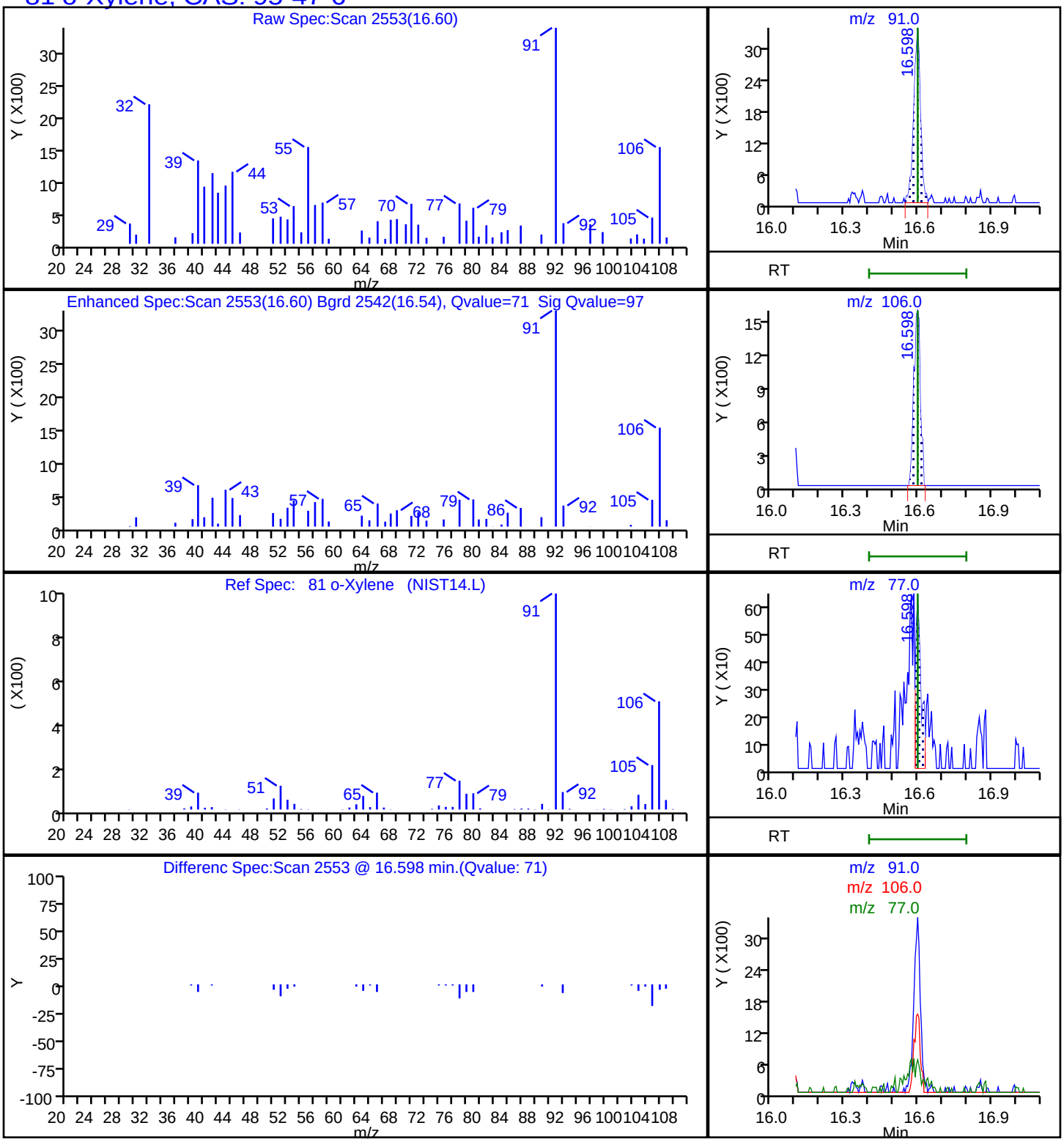


Report Date: 18-May-2020 17:25:25 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HE15P104.D				
Injection Date:	15-May-2020 17:03:30	Instrument ID:	MH		
Lims ID:	140-19093-A-4	Lab Sample ID:	140-19093-4		
Client ID:	BLDG C INFLUENT				
Operator ID:	HMT	ALS Bottle#:	4	Worklist Smp#:	10
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

81 o-Xylene, CAS: 95-47-6



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19093-1

SDG No.:

Client Sample ID: BLDG C MID GAC Lab Sample ID: 140-19093-5

Matrix: Air Lab File ID: HE15P105.D

Analysis Method: TO 15 LL Date Collected: 05/13/2020 11:37

Sample wt/vol: 100(mL) Date Analyzed: 05/15/2020 17:57

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 39584 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	2.9		0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.082	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	5.2		0.40	0.11
67-66-3	Chloroform	119.38	0.10	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	0.36	J	0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.46		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	ND		0.40	0.065
75-09-2	Methylene Chloride	84.93	0.93	J	2.0	0.80
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	0.16	J	0.40	0.035
108-88-3	Toluene	92.14	1.3		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	3.2		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.11
75-01-4	Vinyl chloride	62.50	ND	*	0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.26	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	94		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19093-1

SDG No.:

Client Sample ID: BLDG C MID GAC Lab Sample ID: 140-19093-5

Matrix: Air Lab File ID: HE15P105.D

Analysis Method: TO 15 LL Date Collected: 05/13/2020 11:37

Sample wt/vol: 100(mL) Date Analyzed: 05/15/2020 17:57

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 39584 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	9.3		1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.51	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	18		1.4	0.39
67-66-3	Chloroform	119.38	0.51	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	1.4	J	1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.3		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	ND		1.7	0.28
75-09-2	Methylene Chloride	84.93	3.2	J	6.9	2.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	1.1	J	2.7	0.24
108-88-3	Toluene	92.14	4.9		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	17		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.54
75-01-4	Vinyl chloride	62.50	ND	*	0.51	0.33
1330-20-7	Xylenes, Total	106.17	1.1	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	94		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HE15P105.D
Lims ID: 140-19093-A-5
Client ID: BLDG C MID GAC
Sample Type: Client
Inject. Date: 15-May-2020 17:57:30 ALS Bottle#: 5 Worklist Smp#: 11
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0015105-011
Misc. Info.: 140-19093-a-5
Operator ID: HMT Instrument ID: MH

Method: \\chromfs\Knoxville\ChromData\MH\20200513-15460.b\MH_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 18-May-2020 17:26:20 Calib Date: 16-Apr-2020 18:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC10.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1040

First Level Reviewer: khachitpongpanits Date: 18-May-2020 17:26:20

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.587	8.577	0.010	92	166014	4.00	
* 2 1,4-Difluorobenzene	114	10.789	10.784	0.005	95	1107724	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.570	15.570	0.000	90	916294	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.219	17.239	-0.020	88	580572	3.78	
6 Chlorodifluoromethane	51	3.543	3.543	0.000	96	181529	1.04	
8 Dichlorodifluoromethane	85	3.605	3.600	0.005	100	24914	0.0925	
31 Methylene Chloride	84	6.065	6.050	0.015	98	58395	0.1857	
42 cis-1,2-Dichloroethene	96	8.262	8.251	0.011	93	6023	0.0723	
44 Chloroform	83	8.608	8.592	0.016	37	4075	0.0208	
51 Benzene	78	10.226	10.216	0.006	96	139549	0.5792	
52 Carbon tetrachloride	117	10.252	10.246	0.006	90	2842	0.0163	
58 Trichloroethene	130	11.508	11.502	0.001	89	63908	0.6488	
67 Toluene	91	13.585	13.585	0.000	92	64839	0.2574	
73 Tetrachloroethene	129	14.738	14.732	0.006	88	3211	0.0327	
77 m-Xylene & p-Xylene	91	16.066	16.071	-0.005	94	9307	0.0369	
81 o-Xylene	91	16.604	16.598	0.006	96	4009	0.0153	
S 116 Xylenes, Total	100				0		0.0522	

Reagents:

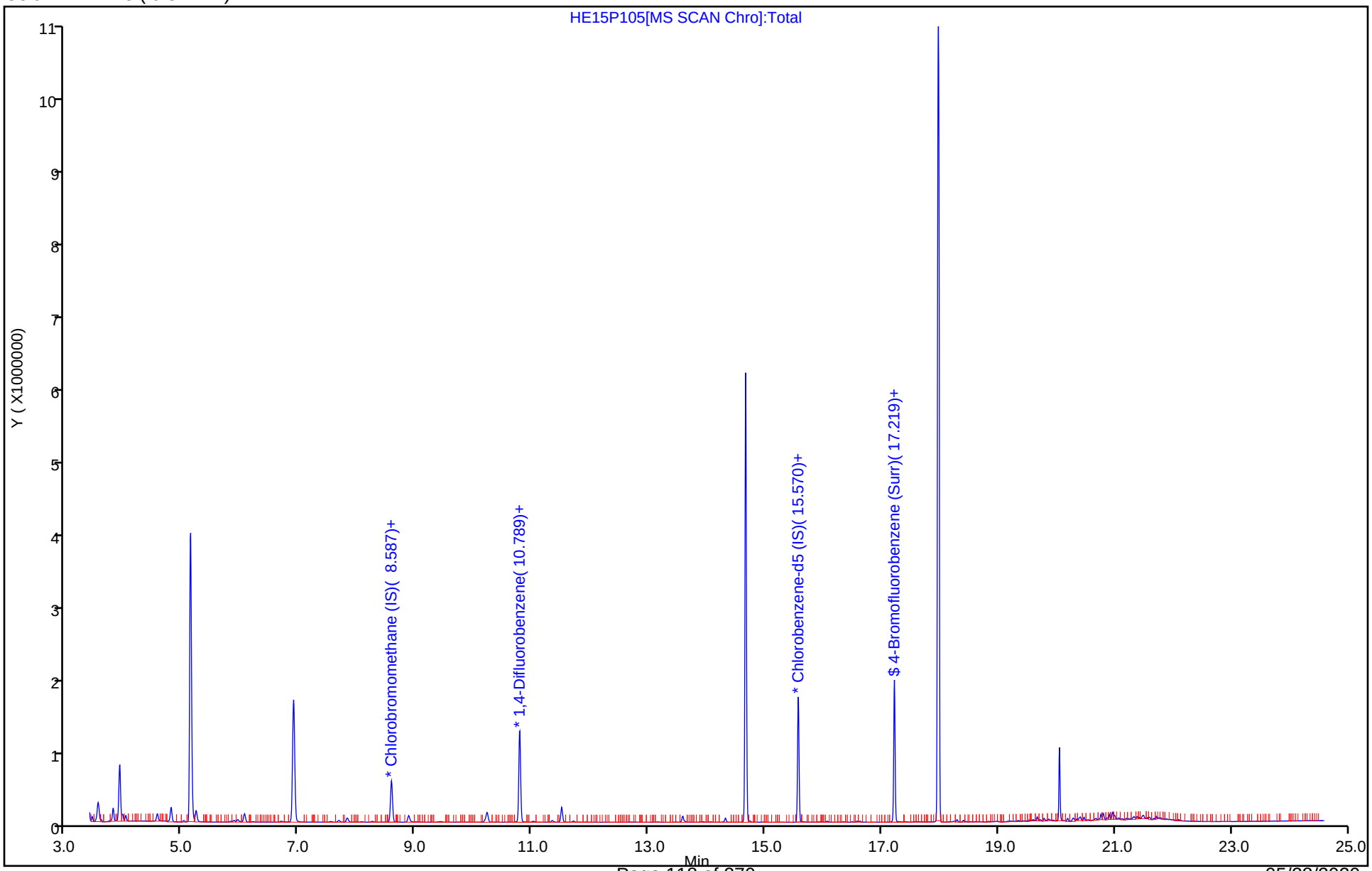
40MXISSURP_00004 Amount Added: 40.00 Units: mL Run Reagent

Report Date: 18-May-2020 17:26:20 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HE15P105.D				
Injection Date:	15-May-2020 17:57:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	140-19093-A-5	Lab Sample ID:	140-19093-5	Worklist Smp#:	11
Client ID:	BLDG C MID GAC				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HE15P105.D				
Lims ID:	140-19093-A-5				
Client ID:	BLDG C MID GAC				
Sample Type:	Client				
Inject. Date:	15-May-2020 17:57:30	ALS Bottle#:	5	Worklist Smp#:	11
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0015105-011				
Misc. Info.:	140-19093-a-5				
Operator ID:	HMT	Instrument ID:	MH		
Method:	\\chromfs\Knoxville\ChromData\MH\20200513-15460.b\MH_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	18-May-2020 17:26:20	Calib Date:	16-Apr-2020 18:34:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC10.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1040				

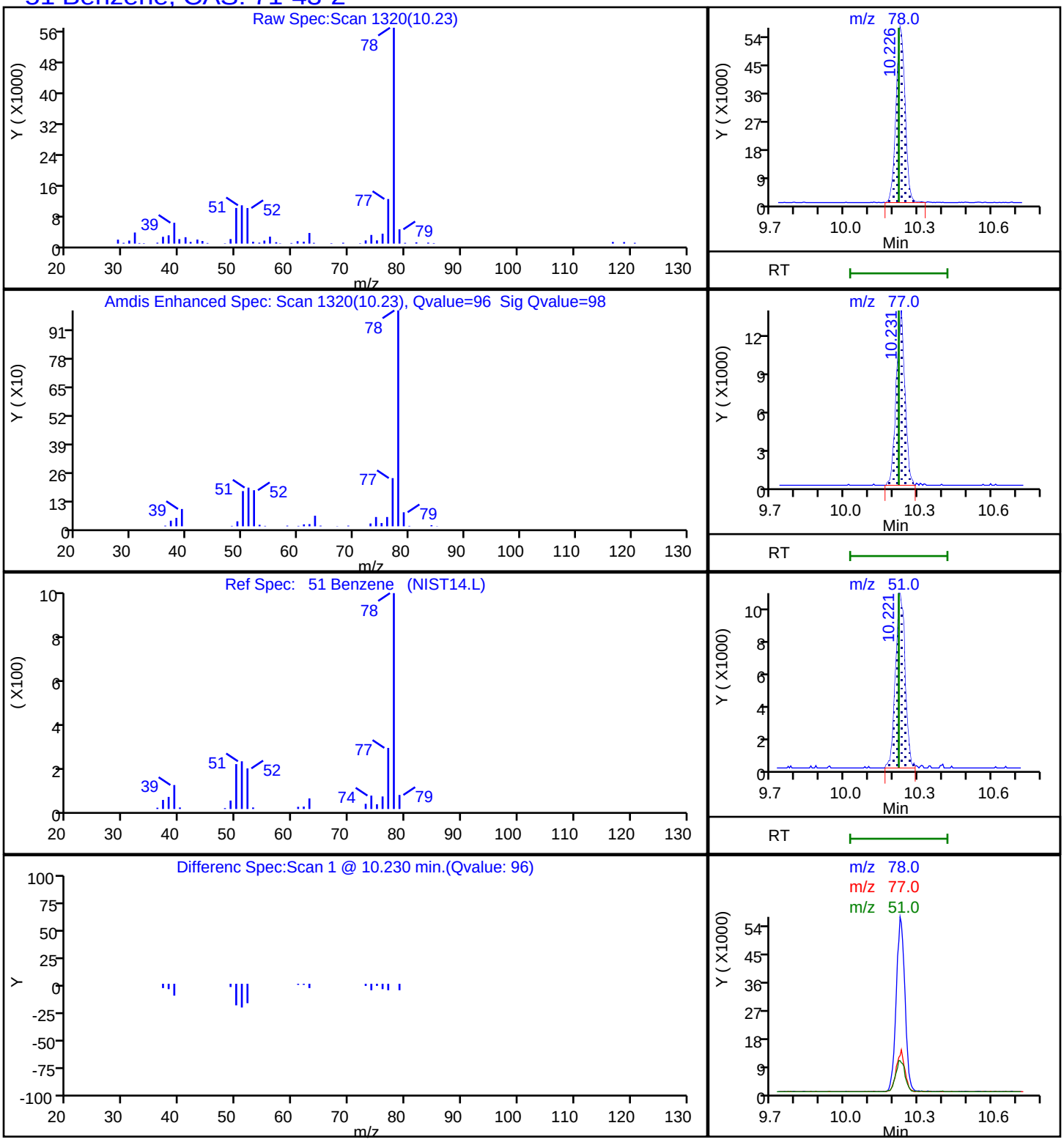
First Level Reviewer: khachitpongpanits Date: 18-May-2020 17:26:20

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.00	3.78	94.42

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HE15P105.D		
Injection Date:	15-May-2020 17:57:30	Instrument ID:	MH
Lims ID:	140-19093-A-5	Lab Sample ID:	140-19093-5
Client ID:	BLDG C MID GAC		
Operator ID:	HMT	ALS Bottle#:	5 Worklist Smp#: 11
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

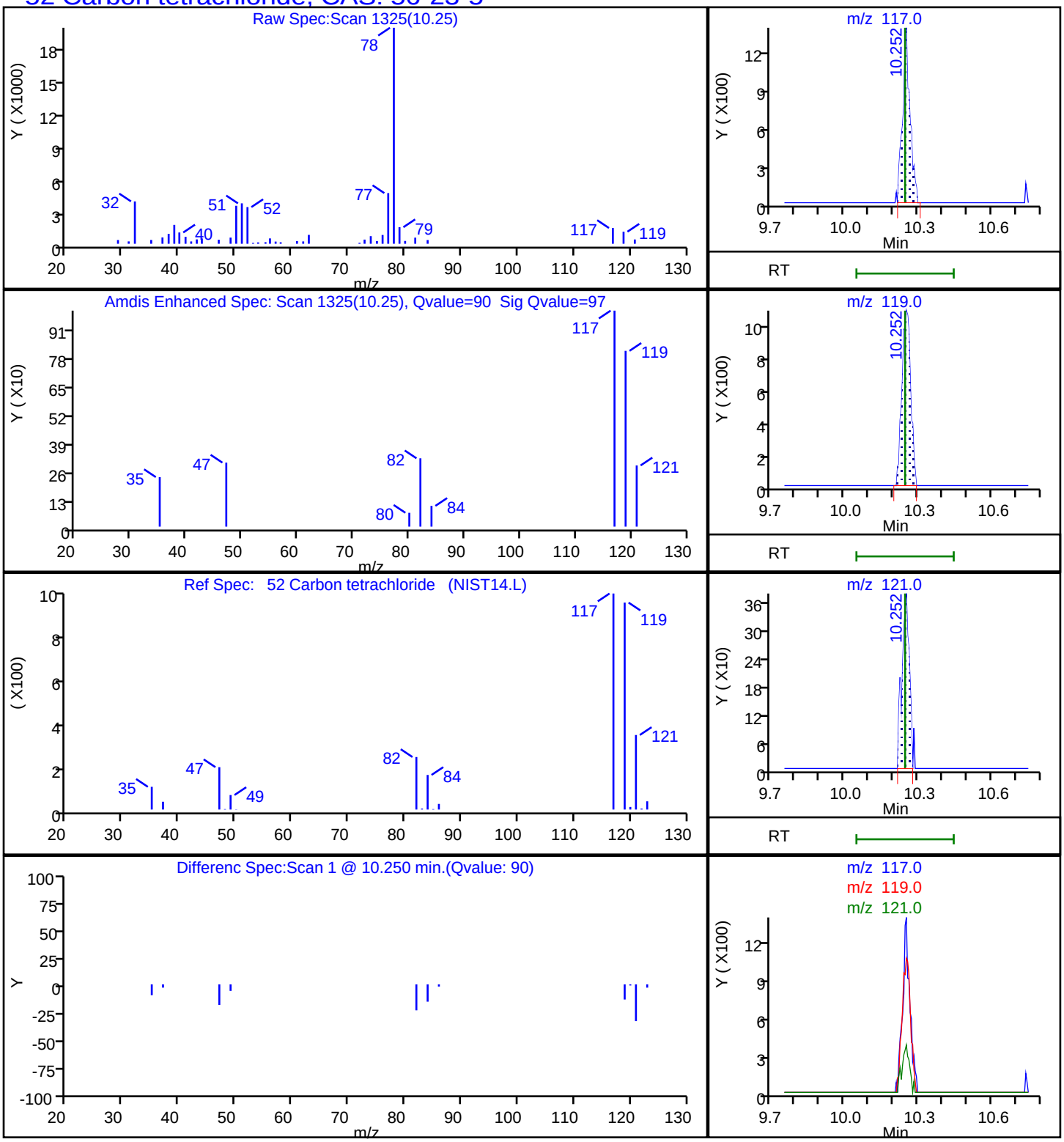
51 Benzene, CAS: 71-43-2



Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HE15P105.D
Injection Date: 15-May-2020 17:57:30 Instrument ID: MH
Lims ID: 140-19093-A-5 Lab Sample ID: 140-19093-5
Client ID: BLDG C MID GAC
Operator ID: HMT ALS Bottle#: 5 Worklist Smp#: 11
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Method: MH_TO15 Limit Group: MSA TO14A_15 Routine ICAL
Column: RTX-5 (0.32 mm) Detector MS SCAN

52 Carbon tetrachloride, CAS: 56-23-5

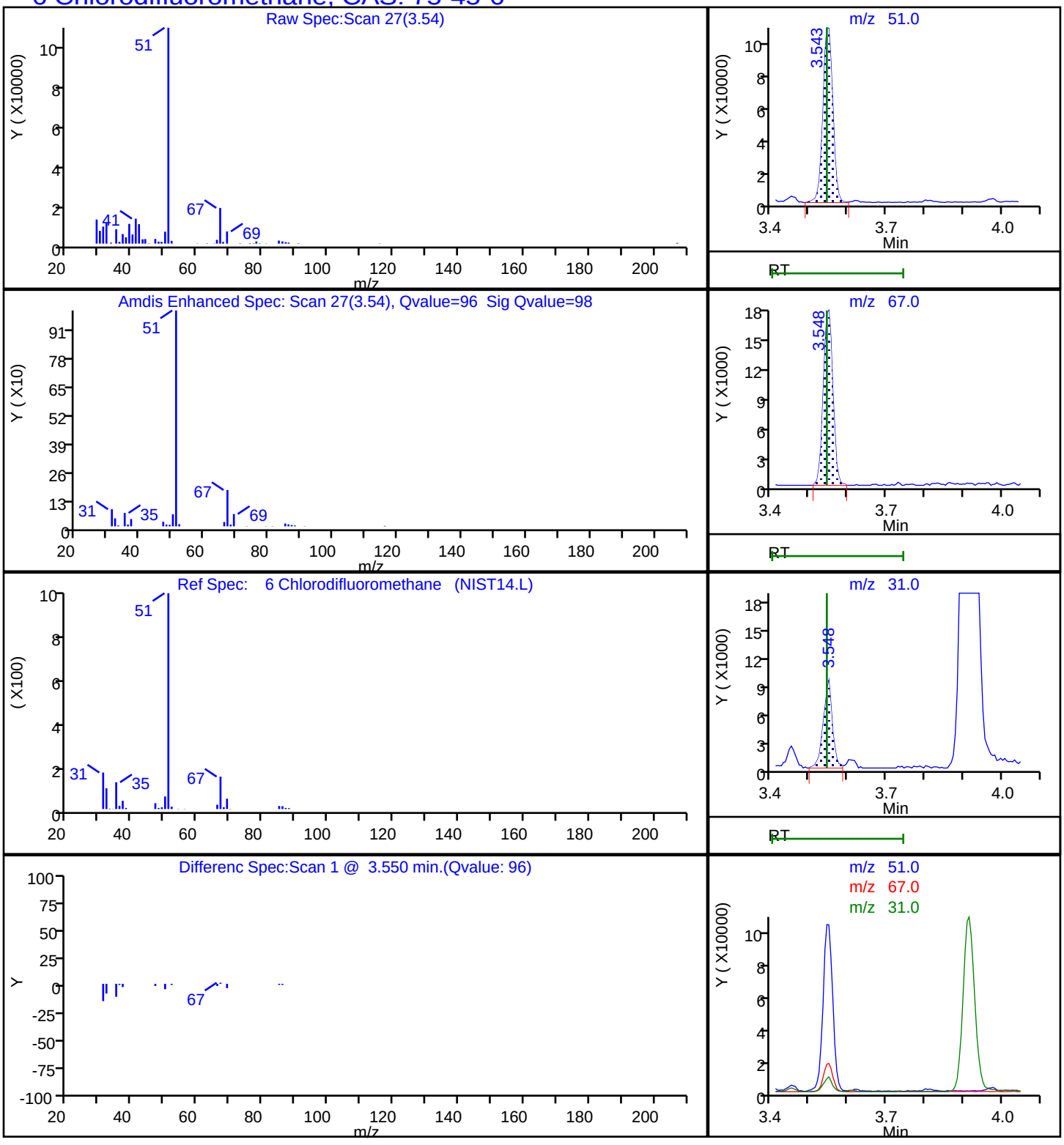


Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HE15P105.D

Injection Date:	15-May-2020 17:57:30	Instrument ID:	MH		
Lims ID:	140-19093-A-5	Lab Sample ID:	140-19093-5		
Client ID:	BLDG C MID GAC				
Operator ID:	HMT	ALS Bottle#:	5	Worklist Smp#:	11
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

6 Chlorodifluoromethane, CAS: 75-45-6

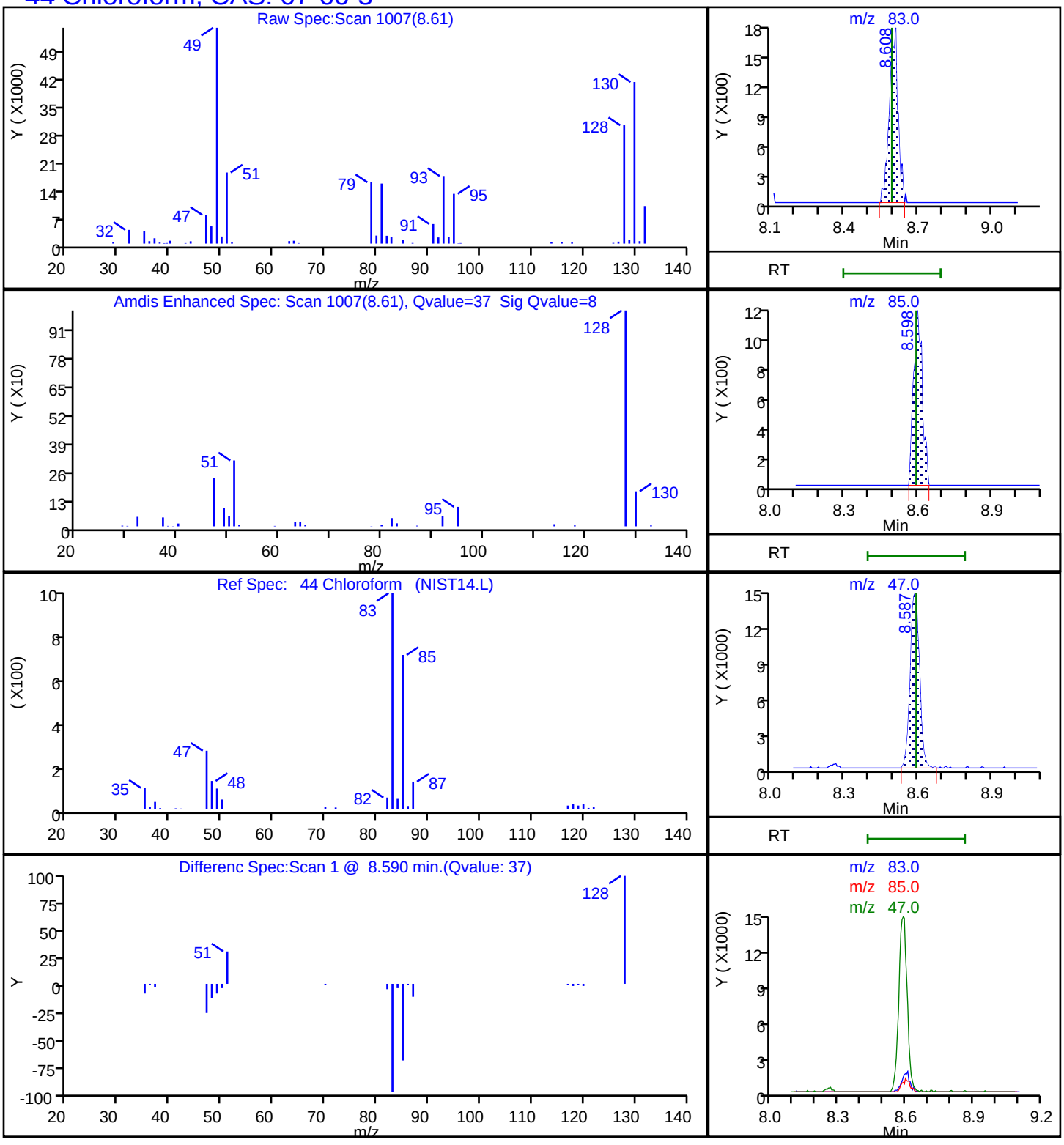


Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HE15P105.D

Injection Date:	15-May-2020 17:57:30	Instrument ID:	MH
Lims ID:	140-19093-A-5	Lab Sample ID:	140-19093-5
Client ID:	BLDG C MID GAC		
Operator ID:	HMT	ALS Bottle#:	5 Worklist Smp#: 11
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

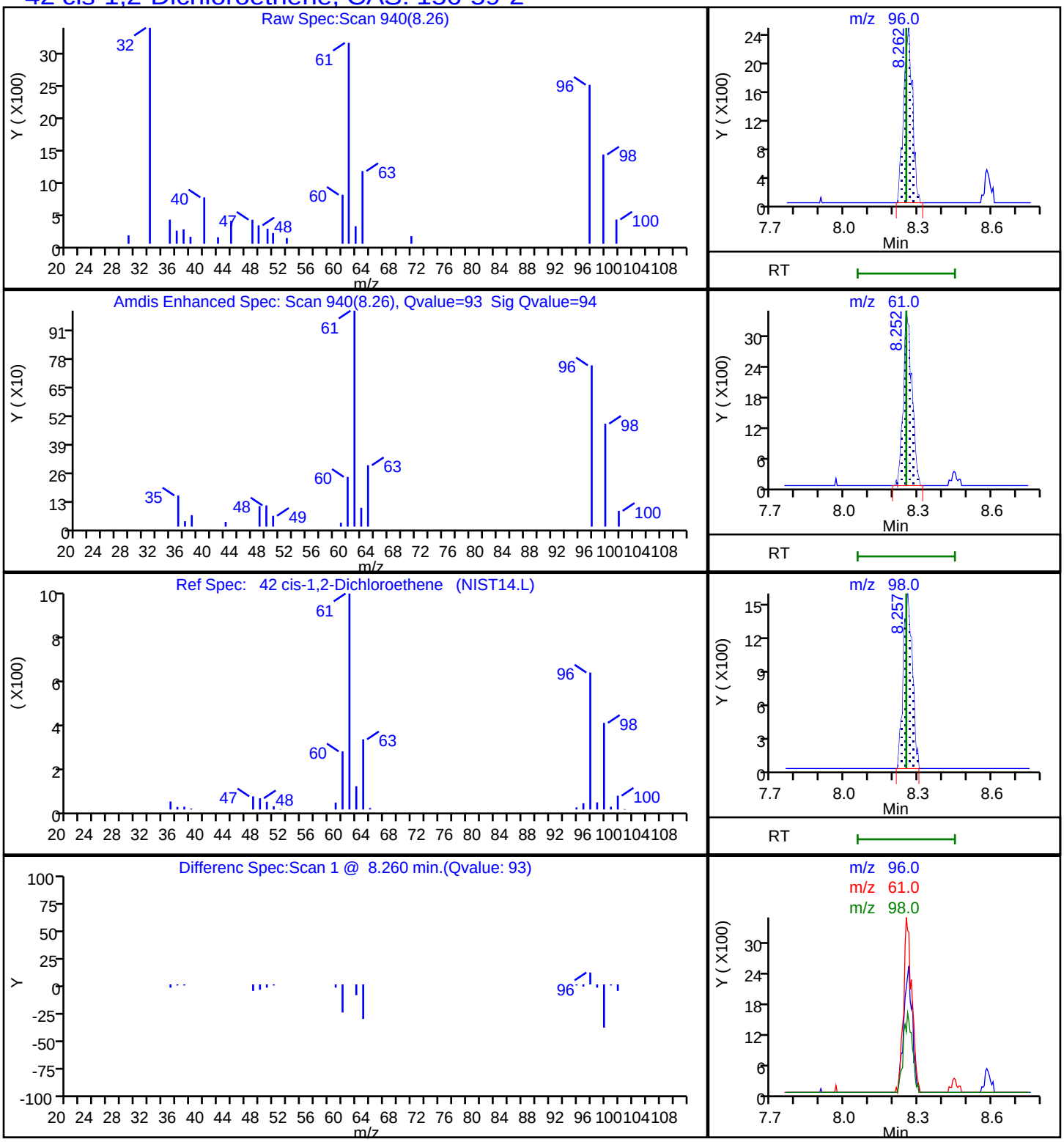
44 Chloroform, CAS: 67-66-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HE15P105.D		
Injection Date:	15-May-2020 17:57:30	Instrument ID:	MH
Lims ID:	140-19093-A-5	Lab Sample ID:	140-19093-5
Client ID:	BLDG C MID GAC		
Operator ID:	HMT	ALS Bottle#:	5 Worklist Smp#: 11
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

42 cis-1,2-Dichloroethene, CAS: 156-59-2

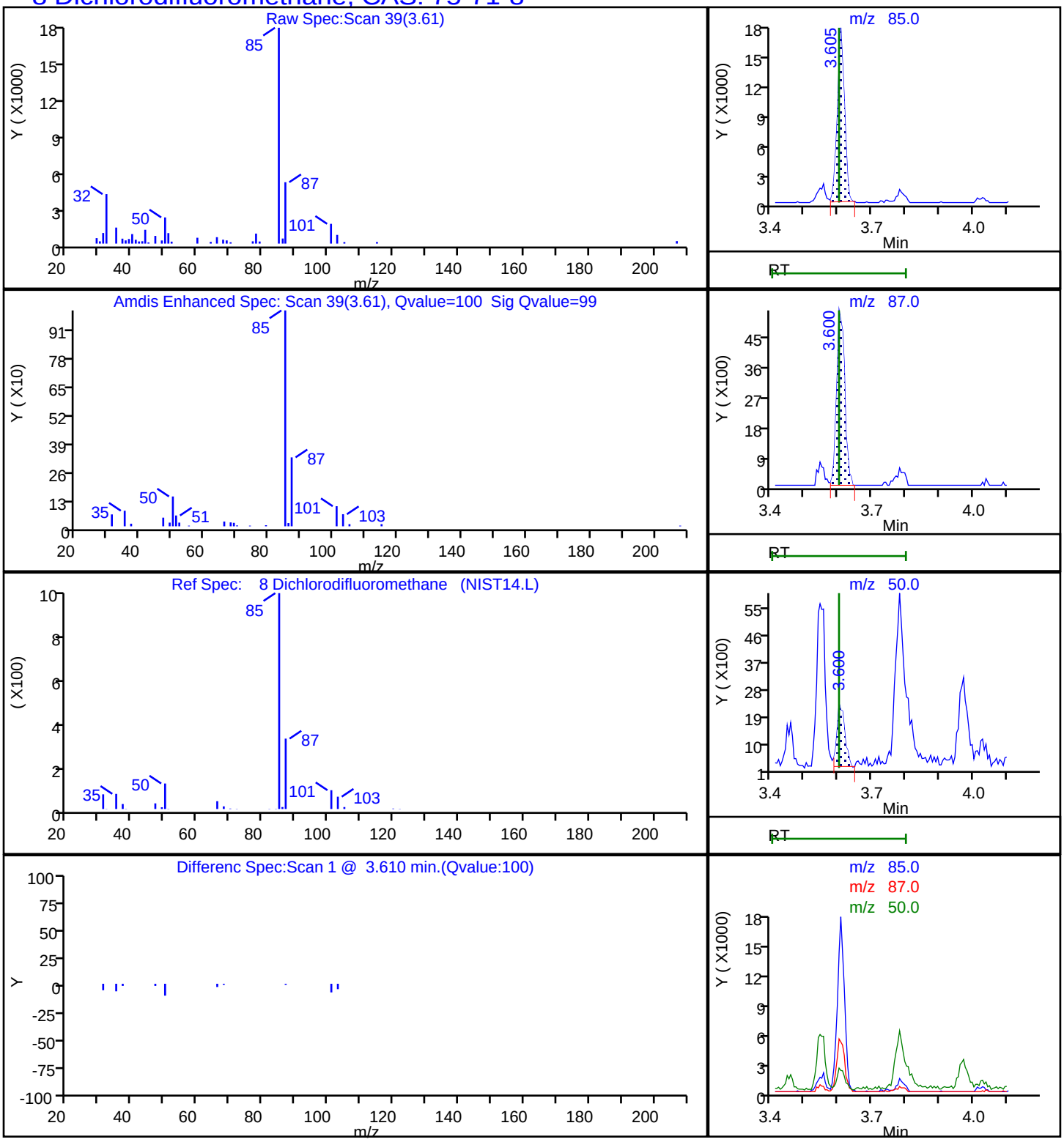


Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HE15P105.D

Injection Date:	15-May-2020 17:57:30	Instrument ID:	MH		
Lims ID:	140-19093-A-5	Lab Sample ID:	140-19093-5		
Client ID:	BLDG C MID GAC				
Operator ID:	HMT	ALS Bottle#:	5	Worklist Smp#:	11
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

8 Dichlorodifluoromethane, CAS: 75-71-8

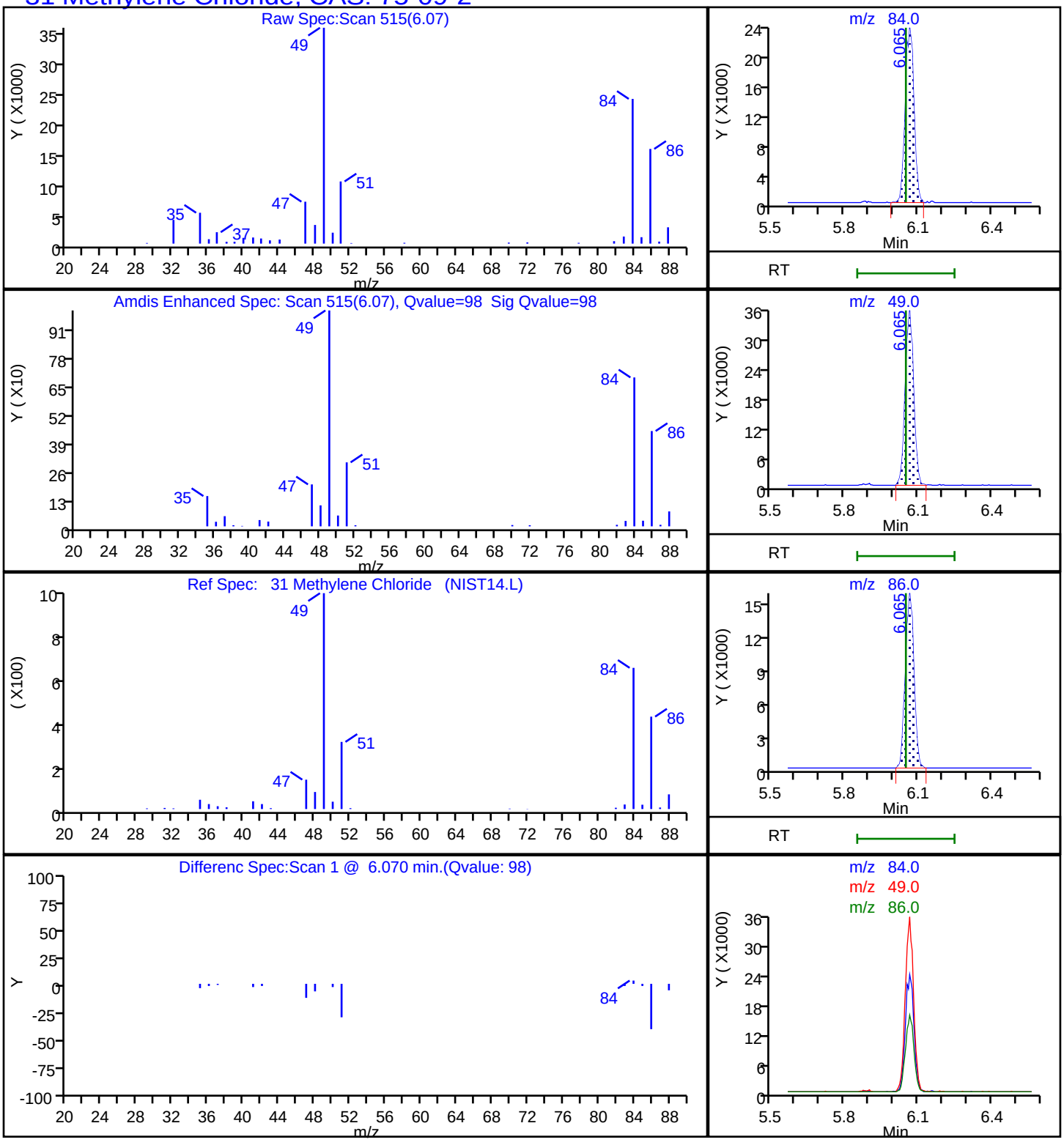


Report Date: 18-May-2020 17:26:20 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HE15P105.D				
Injection Date:	15-May-2020 17:57:30	Instrument ID:	MH		
Lims ID:	140-19093-A-5	Lab Sample ID:	140-19093-5		
Client ID:	BLDG C MID GAC				
Operator ID:	HMT	ALS Bottle#:	5	Worklist Smp#:	11
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

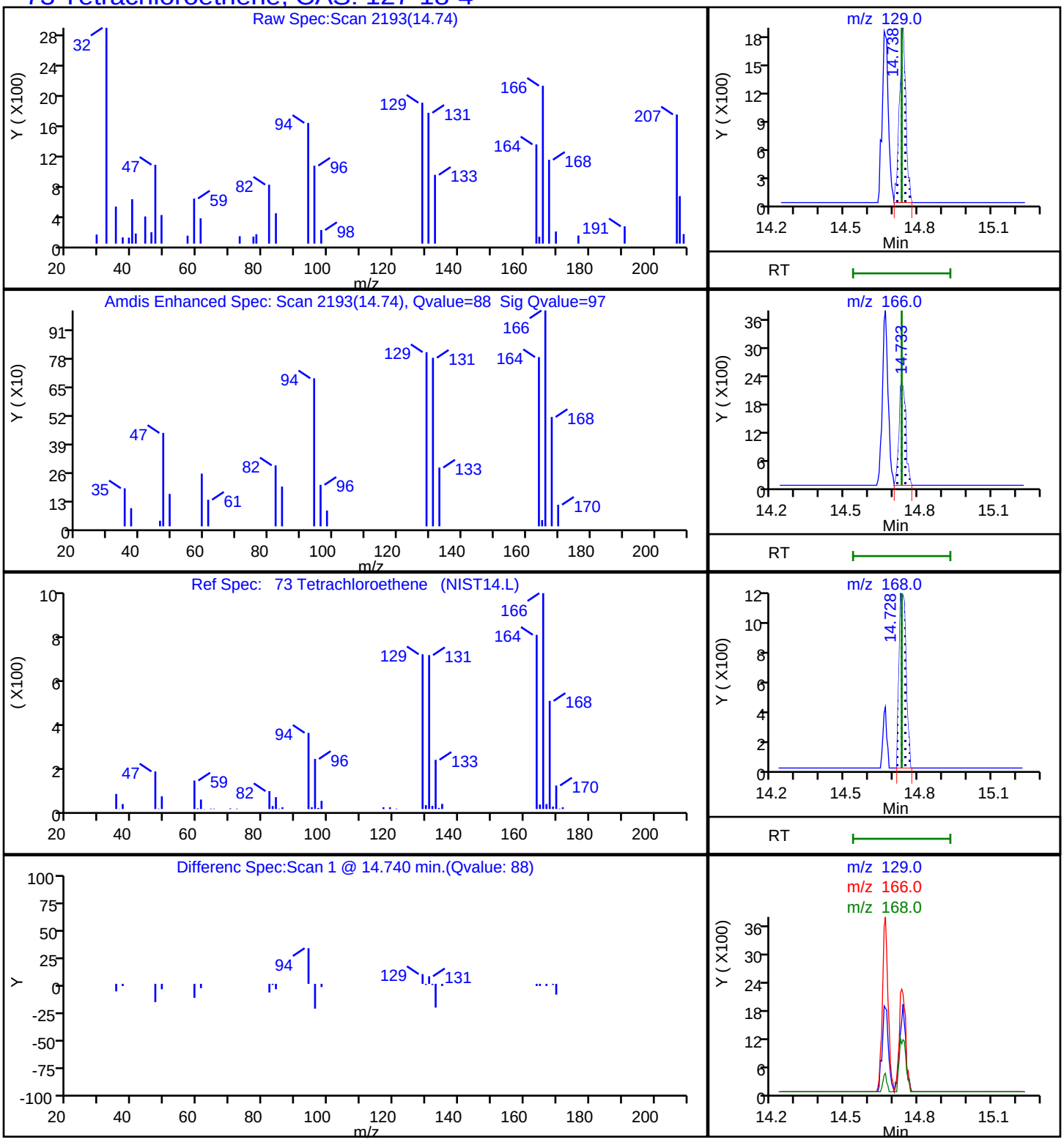
31 Methylene Chloride, CAS: 75-09-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HE15P105.D		
Injection Date:	15-May-2020 17:57:30	Instrument ID:	MH
Lims ID:	140-19093-A-5	Lab Sample ID:	140-19093-5
Client ID:	BLDG C MID GAC		
Operator ID:	HMT	ALS Bottle#:	5 Worklist Smp#: 11
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

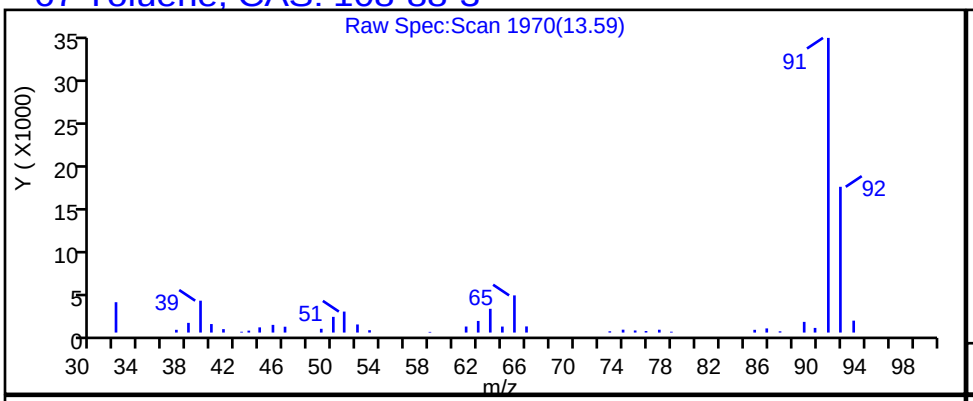
73 Tetrachloroethene, CAS: 127-18-4

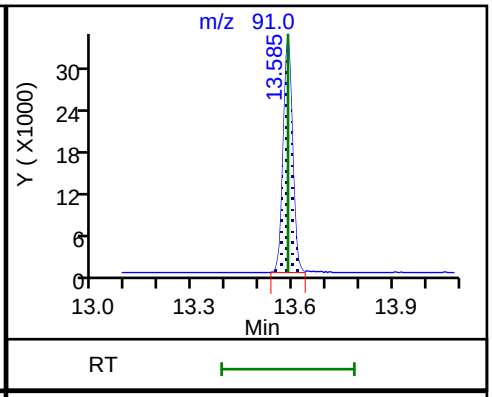


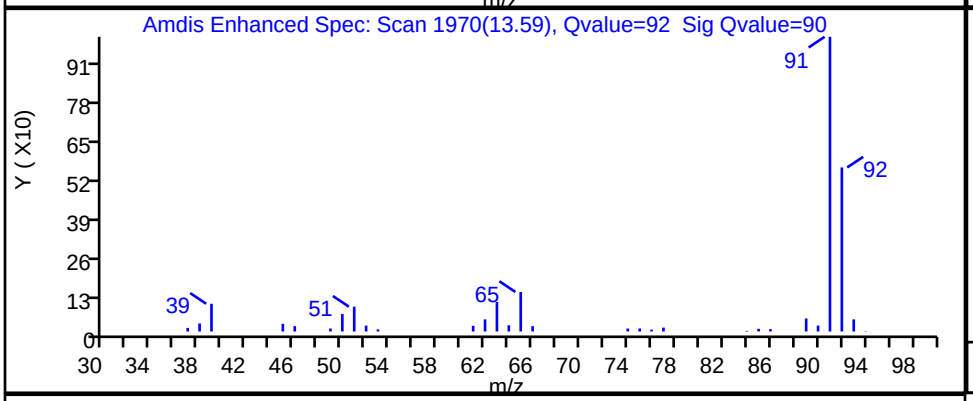
Eurofins TestAmerica, Knoxville

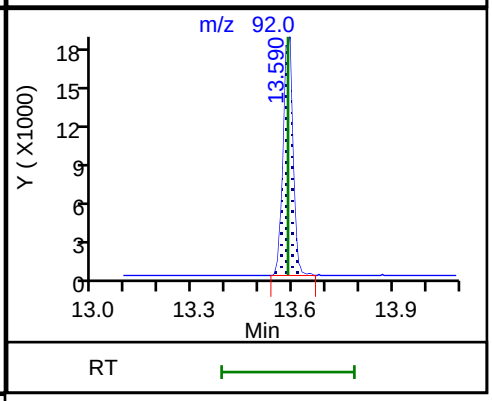
Data File:	\\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HE15P105.D		
Injection Date:	15-May-2020 17:57:30	Instrument ID:	MH
Lims ID:	140-19093-A-5	Lab Sample ID:	140-19093-5
Client ID:	BLDG C MID GAC		
Operator ID:	HMT	ALS Bottle#:	5 Worklist Smp#: 11
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

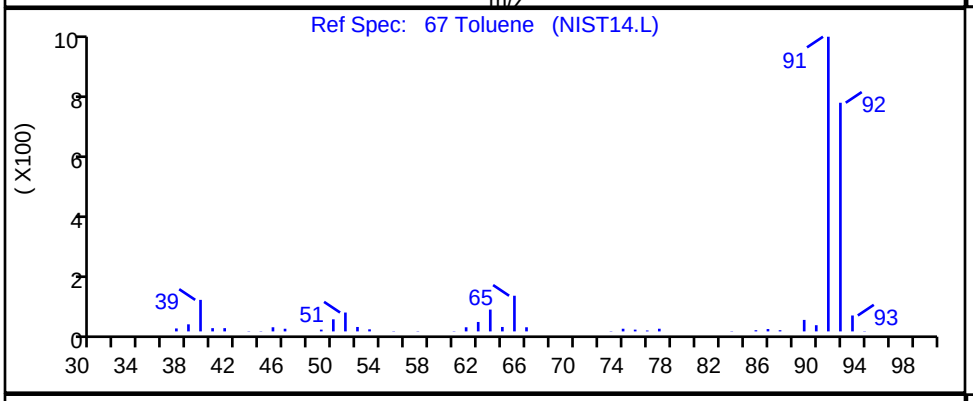
67 Toluene, CAS: 108-88-3

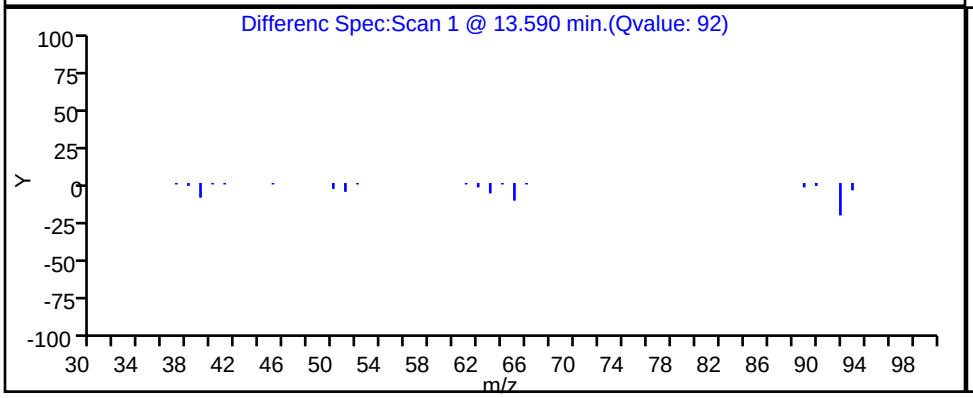


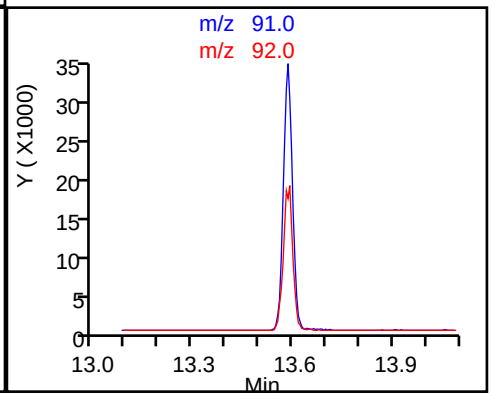








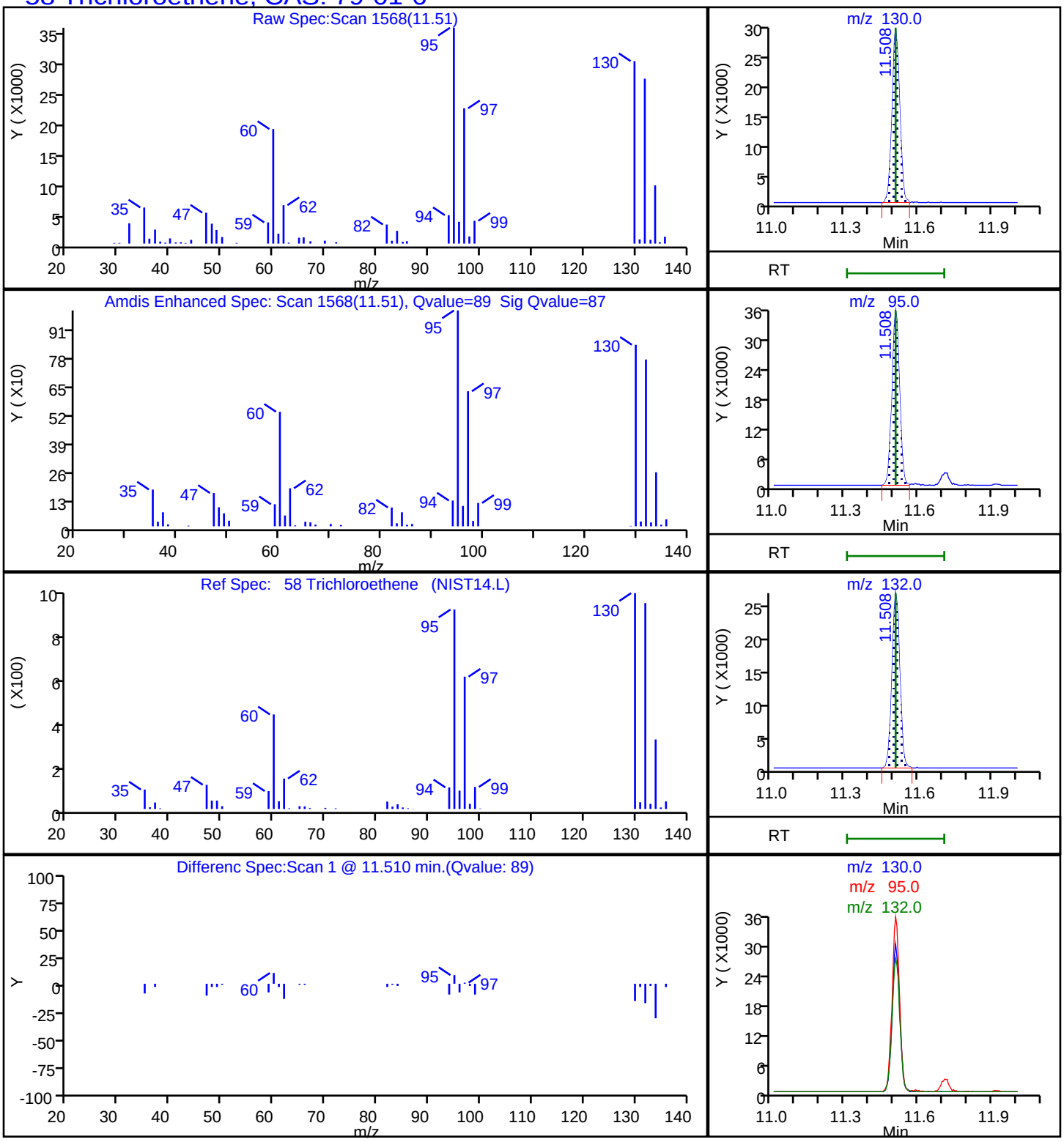




Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HE15P105.D		
Injection Date:	15-May-2020 17:57:30	Instrument ID:	MH
Lims ID:	140-19093-A-5	Lab Sample ID:	140-19093-5
Client ID:	BLDG C MID GAC		
Operator ID:	HMT	ALS Bottle#:	5 Worklist Smp#: 11
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

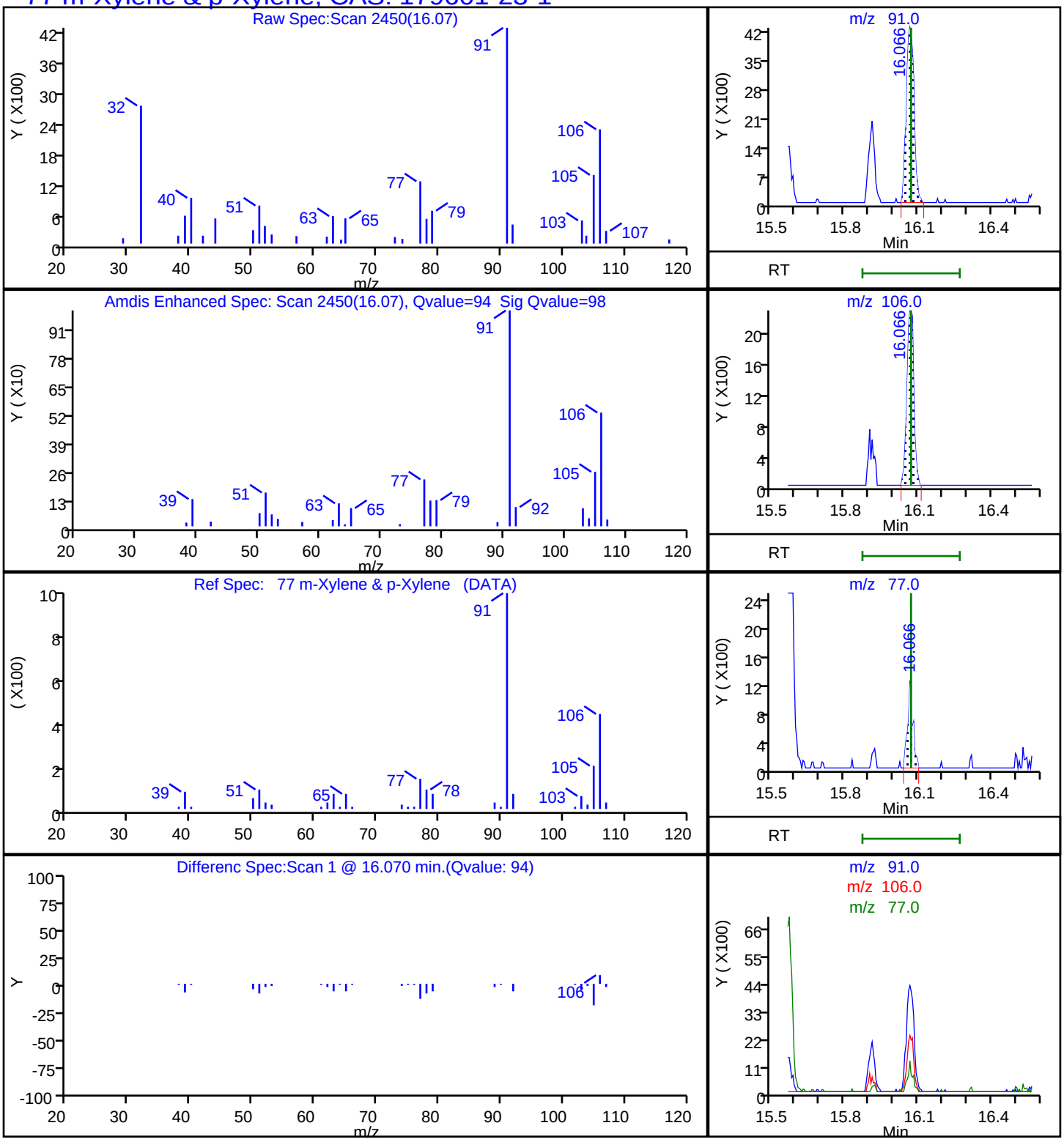
58 Trichloroethene, CAS: 79-01-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HE15P105.D		
Injection Date:	15-May-2020 17:57:30	Instrument ID:	MH
Lims ID:	140-19093-A-5	Lab Sample ID:	140-19093-5
Client ID:	BLDG C MID GAC		
Operator ID:	HMT	ALS Bottle#:	5 Worklist Smp#: 11
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

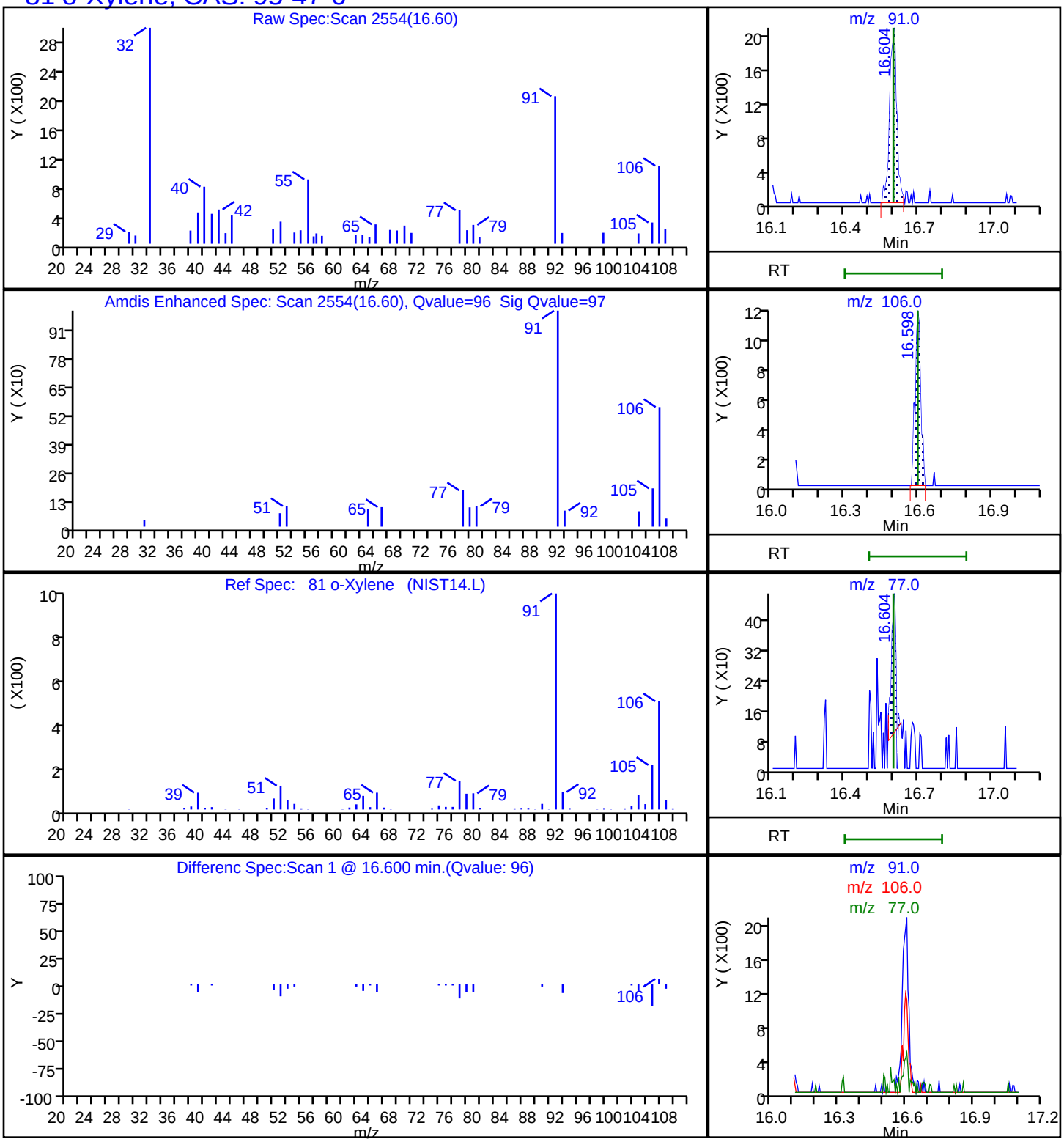
77 m-Xylene & p-Xylene, CAS: 179601-23-1



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HE15P105.D		
Injection Date:	15-May-2020 17:57:30	Instrument ID:	MH
Lims ID:	140-19093-A-5	Lab Sample ID:	140-19093-5
Client ID:	BLDG C MID GAC		
Operator ID:	HMT	ALS Bottle#:	5 Worklist Smp#: 11
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

81 o-Xylene, CAS: 95-47-6



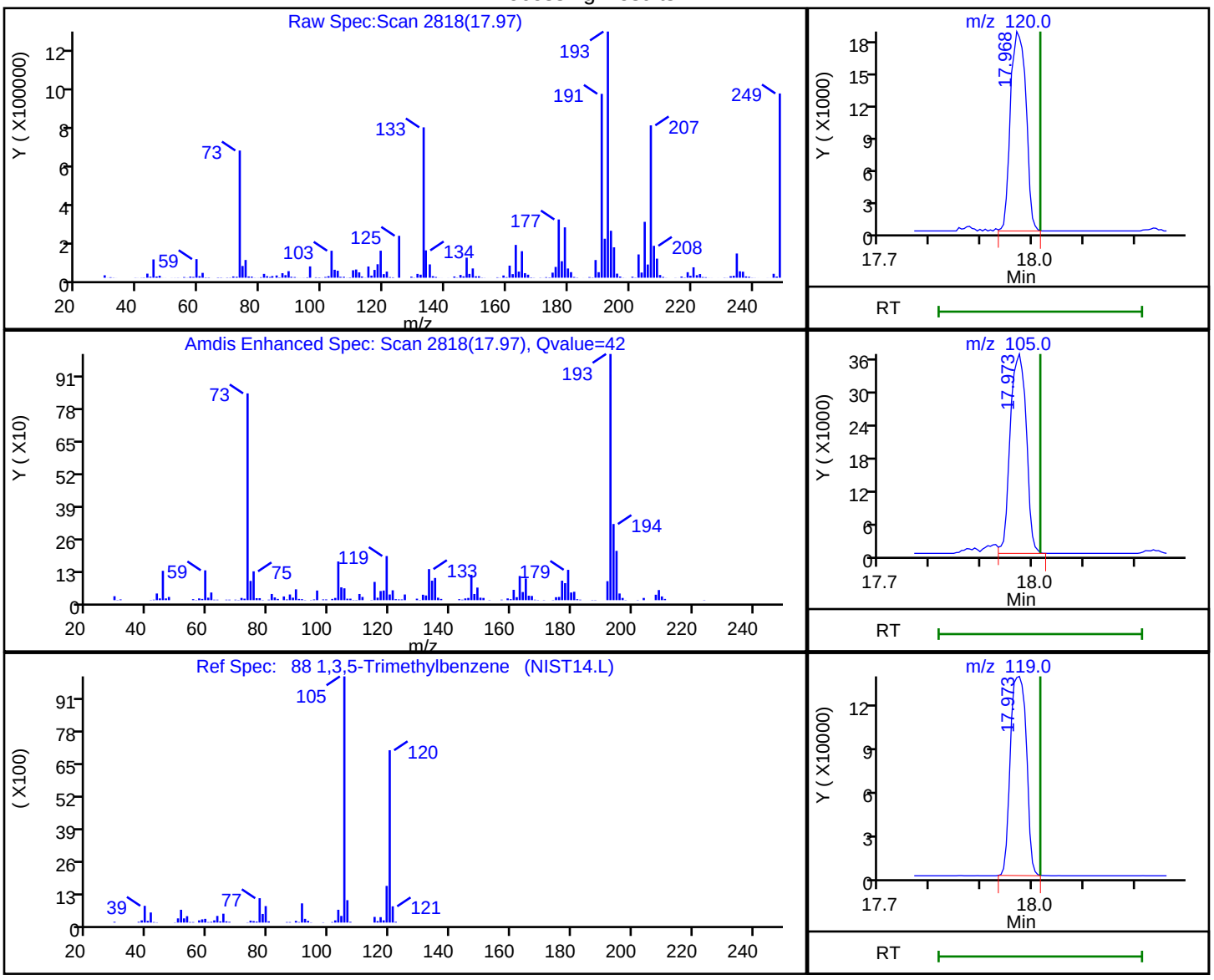
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HE15P105.D				
Injection Date:	15-May-2020 17:57:30	Instrument ID:	MH		
Lims ID:	140-19093-A-5	Lab Sample ID:	140-19093-5		
Client ID:	BLDG C MID GAC				
Operator ID:	HMT	ALS Bottle#:	5	Worklist Smp#:	11
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

88 1,3,5-Trimethylbenzene, CAS: 108-67-8

Processing Results



RT	Mass	Response	Amount
17.97	120.00	38300	0.285992
17.97	105.00	80432	
17.97	119.00	299456	

Reviewer: khachitpongpanits, 18-May-2020 17:26:03

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19093-1

SDG No.:

Client Sample ID: BLDG C EFFLUENT Lab Sample ID: 140-19093-6

Matrix: Air Lab File ID: HE15P106.D

Analysis Method: TO 15 LL Date Collected: 05/13/2020 11:33

Sample wt/vol: 100(mL) Date Analyzed: 05/15/2020 18:53

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 39584 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	2.1		0.40	0.040
56-23-5	Carbon tetrachloride	153.81	ND		0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	4.5		0.40	0.11
67-66-3	Chloroform	119.38	0.10	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	0.77		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.49		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	ND		0.40	0.065
75-09-2	Methylene Chloride	84.93	1.4	J	2.0	0.80
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.035
108-88-3	Toluene	92.14	1.4		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	0.063	J	0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	0.14	J	0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	0.53		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	0.46		0.40	0.11
75-01-4	Vinyl chloride	62.50	ND	*	0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.18	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	99		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19093-1

SDG No.:

Client Sample ID: BLDG C EFFLUENT Lab Sample ID: 140-19093-6

Matrix: Air Lab File ID: HE15P106.D

Analysis Method: TO 15 LL Date Collected: 05/13/2020 11:33

Sample wt/vol: 100(mL) Date Analyzed: 05/15/2020 18:53

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 39584 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	6.8		1.3	0.13
56-23-5	Carbon tetrachloride	153.81	ND		2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	16		1.4	0.39
67-66-3	Chloroform	119.38	0.49	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	3.0		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.4		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	ND		1.7	0.28
75-09-2	Methylene Chloride	84.93	4.8	J	6.9	2.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.24
108-88-3	Toluene	92.14	5.4		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	0.25	J	1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	0.78	J	1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	2.6		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	2.3		2.0	0.54
75-01-4	Vinyl chloride	62.50	ND	*	0.51	0.33
1330-20-7	Xylenes, Total	106.17	0.78	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	99		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HE15P106.D
Lims ID: 140-19093-A-6
Client ID: BLDG C EFFLUENT
Sample Type: Client
Inject. Date: 15-May-2020 18:53:30 ALS Bottle#: 6 Worklist Smp#: 12
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0015105-012
Misc. Info.: 140-19093-a-6
Operator ID: HMT Instrument ID: MH

Method: \\chromfs\Knoxville\ChromData\MH\20200513-15460.b\MH_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 18-May-2020 17:26:20 Calib Date: 16-Apr-2020 18:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC10.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1040

First Level Reviewer: khachitpongpanits Date: 18-May-2020 17:27:02

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.587	8.577	0.010	94	177392	4.00	
* 2 1,4-Difluorobenzene	114	10.789	10.784	0.005	96	1196663	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.570	15.570	0.000	90	938120	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.219	17.239	-0.020	88	623177	3.96	
6 Chlorodifluoromethane	51	3.543	3.543	0.000	96	166720	0.8909	
8 Dichlorodifluoromethane	85	3.605	3.600	0.005	99	27921	0.0970	
31 Methylene Chloride	84	6.065	6.050	0.015	97	69327	0.2752	
34 trans-1,2-Dichloroethene	96	6.861	6.851	0.010	1	1079	0.0126	
42 cis-1,2-Dichloroethene	96	8.257	8.251	0.006	94	13641	0.1532	
44 Chloroform	83	8.593	8.592	0.001	28	4170	0.0199	
51 Benzene	78	10.226	10.216	0.006	95	110641	0.4251	
58 Trichloroethene	130	11.513	11.502	0.006	86	3077	0.0289	
67 Toluene	91	13.585	13.585	0.000	92	74367	0.2864	
77 m-Xylene & p-Xylene	91	16.066	16.071	-0.005	96	9378	0.0363	
88 1,3,5-Trimethylbenzene	120	17.989	18.014	-0.025	91	9982	0.0925	
92 1,2,4-Trimethylbenzene	105	18.454	18.474	-0.020	98	33824	0.1067	
S 116 Xylenes, Total	100				0		0.0363	

Reagents:

40MXISSURP_00004 Amount Added: 40.00 Units: mL Run Reagent

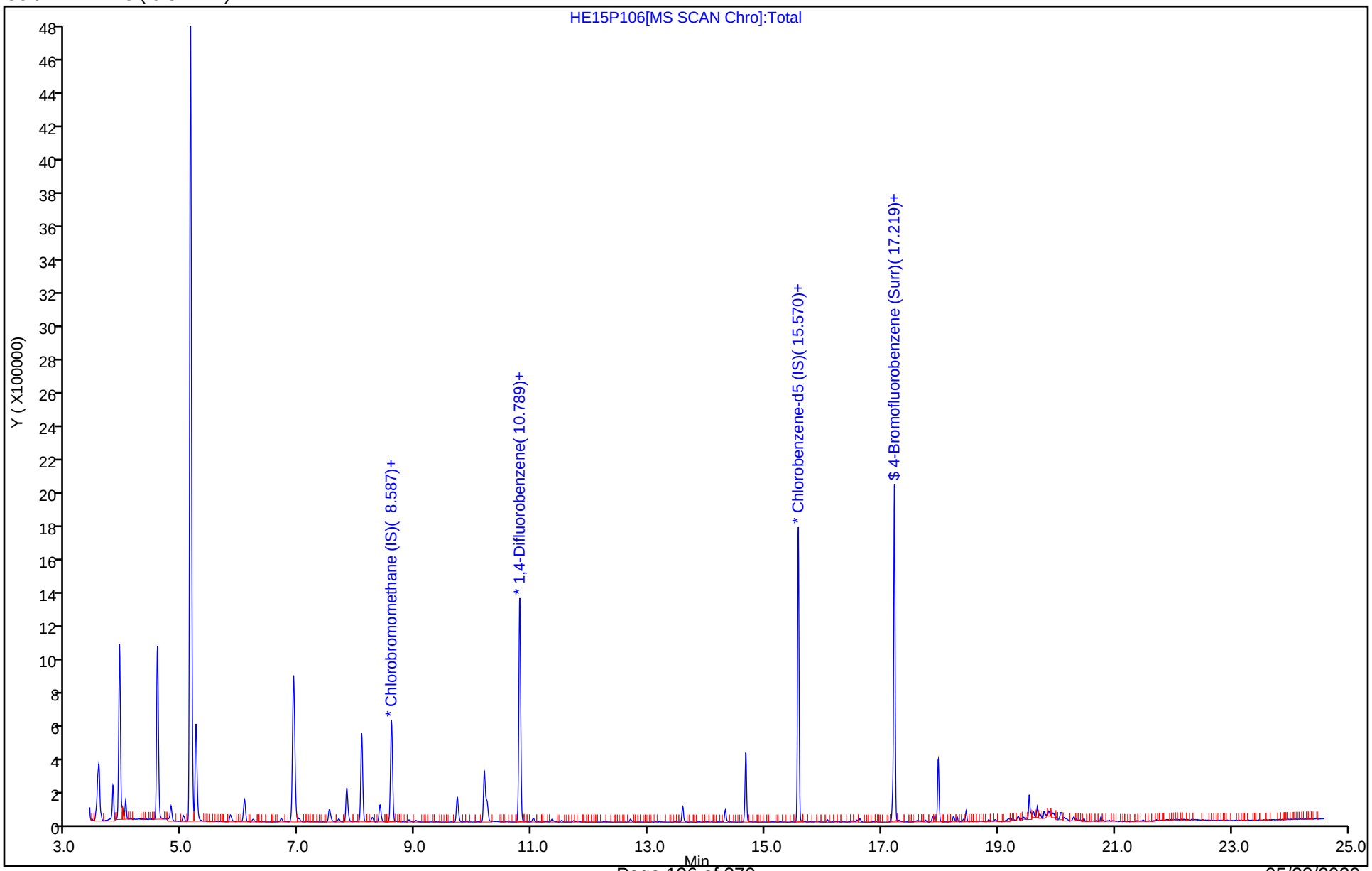
Report Date: 18-May-2020 17:27:02 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HE15P106.D

Injection Date:	15-May-2020 18:53:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	140-19093-A-6	Lab Sample ID:	140-19093-6	Worklist Smp#:	12
Client ID:	BLDG C EFFLUENT				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HE15P106.D				
Lims ID:	140-19093-A-6				
Client ID:	BLDG C EFFLUENT				
Sample Type:	Client				
Inject. Date:	15-May-2020 18:53:30	ALS Bottle#:	6	Worklist Smp#:	12
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0015105-012				
Misc. Info.:	140-19093-a-6				
Operator ID:	HMT	Instrument ID:	MH		
Method:	\\chromfs\Knoxville\ChromData\MH\20200513-15460.b\MH_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	18-May-2020 17:26:20	Calib Date:	16-Apr-2020 18:34:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC10.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1040				

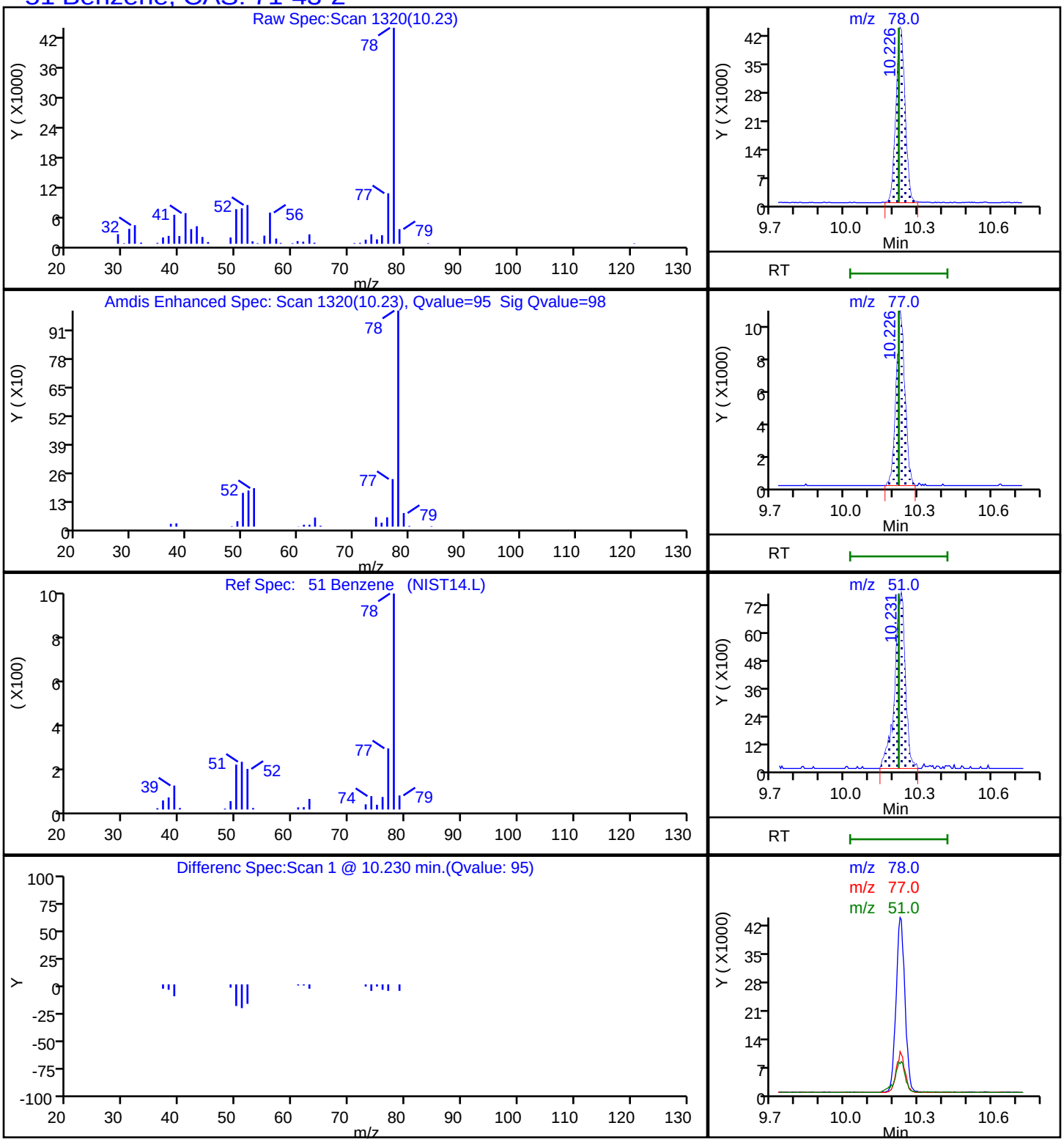
First Level Reviewer: khachitpongpanits Date: 18-May-2020 17:27:02

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.00	3.96	98.99

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HE15P106.D		
Injection Date:	15-May-2020 18:53:30	Instrument ID:	MH
Lims ID:	140-19093-A-6	Lab Sample ID:	140-19093-6
Client ID:	BLDG C EFFLUENT		
Operator ID:	HMT	ALS Bottle#:	6 Worklist Smp#: 12
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

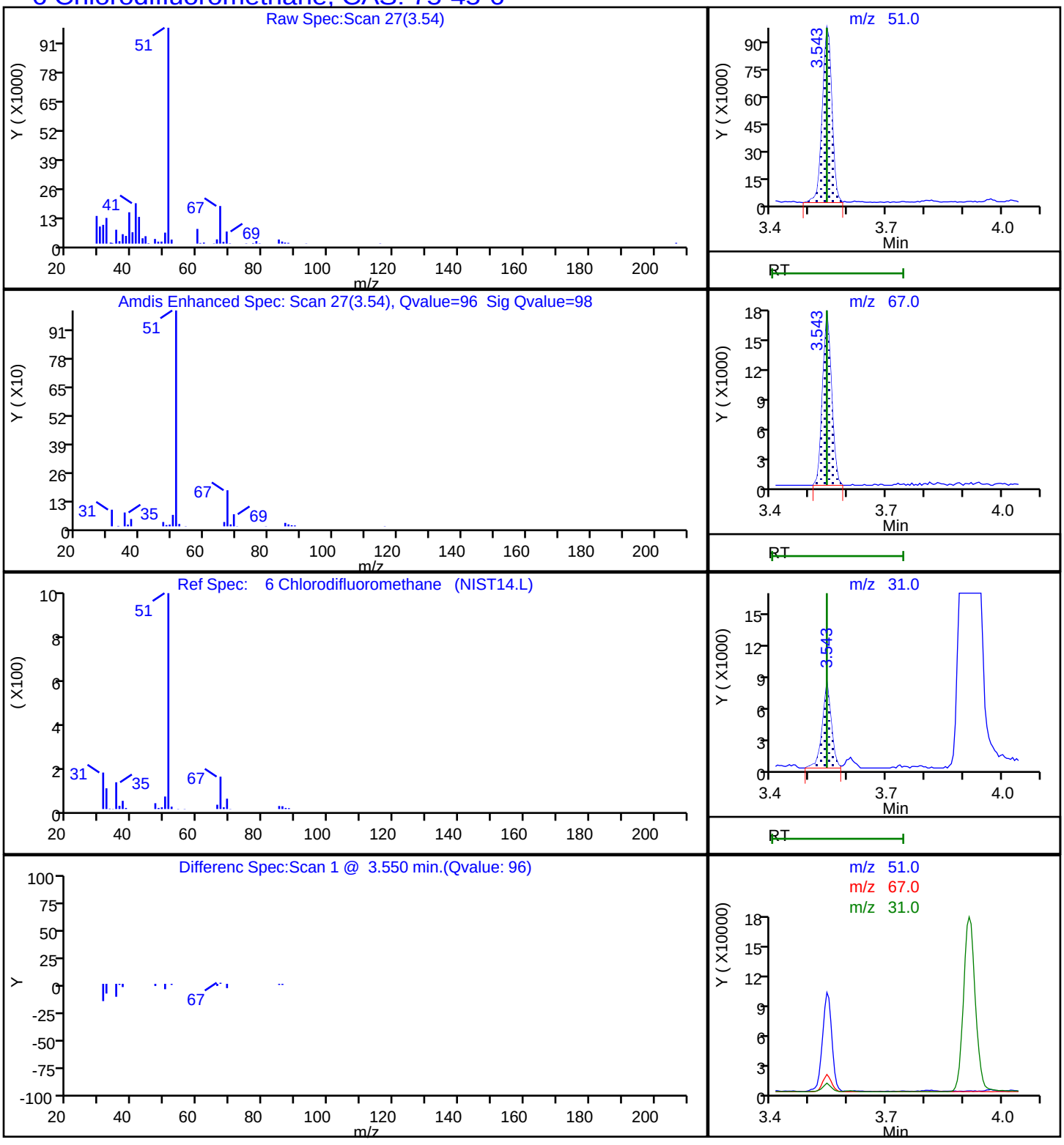
51 Benzene, CAS: 71-43-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HE15P106.D				
Injection Date:	15-May-2020 18:53:30	Instrument ID:	MH		
Lims ID:	140-19093-A-6	Lab Sample ID:	140-19093-6		
Client ID:	BLDG C EFFLUENT				
Operator ID:	HMT	ALS Bottle#:	6	Worklist Smp#:	12
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

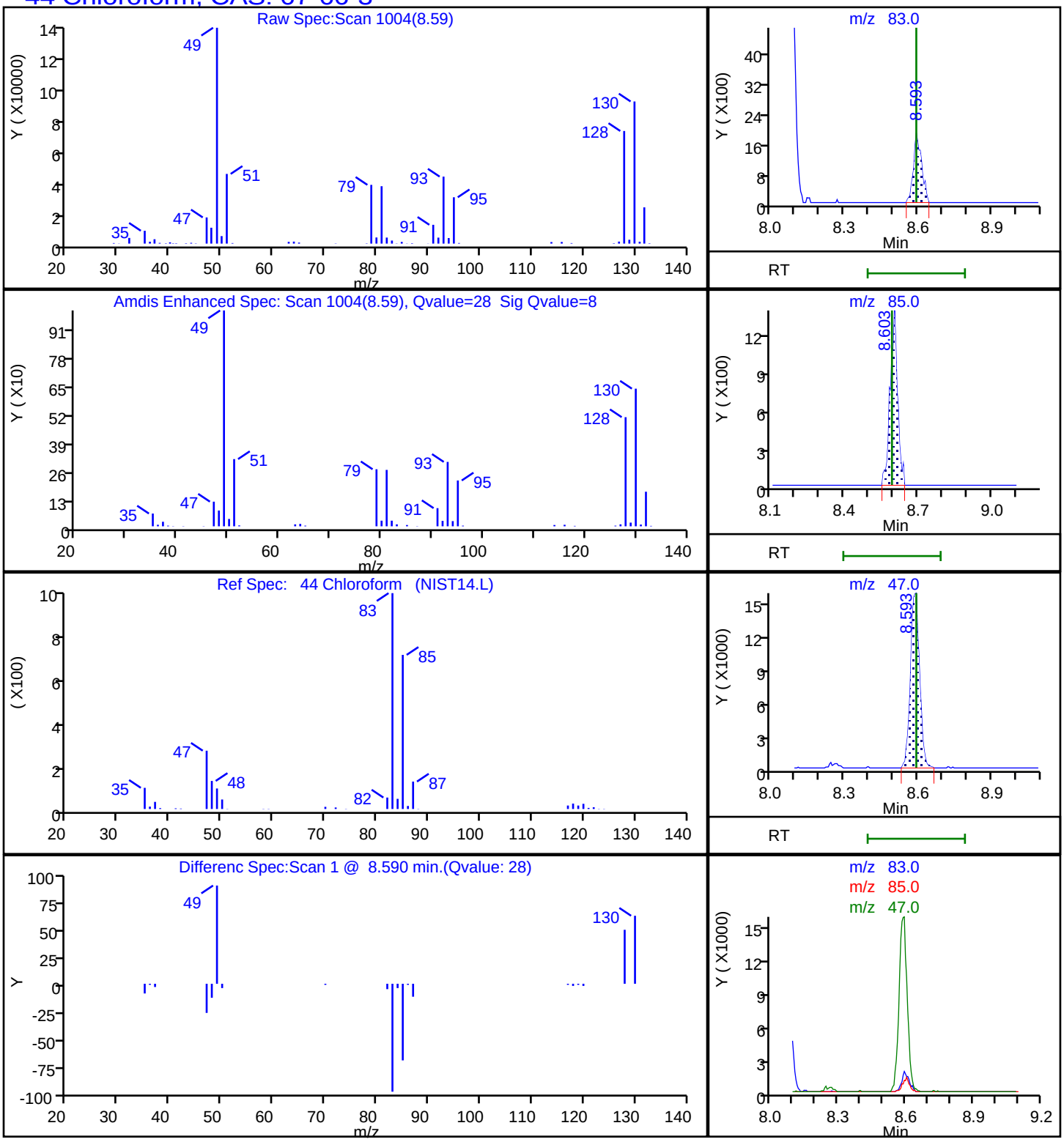
6 Chlorodifluoromethane, CAS: 75-45-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HE15P106.D		
Injection Date:	15-May-2020 18:53:30	Instrument ID:	MH
Lims ID:	140-19093-A-6	Lab Sample ID:	140-19093-6
Client ID:	BLDG C EFFLUENT		
Operator ID:	HMT	ALS Bottle#:	6 Worklist Smp#: 12
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

44 Chloroform, CAS: 67-66-3



Eurofins TestAmerica, Knoxville

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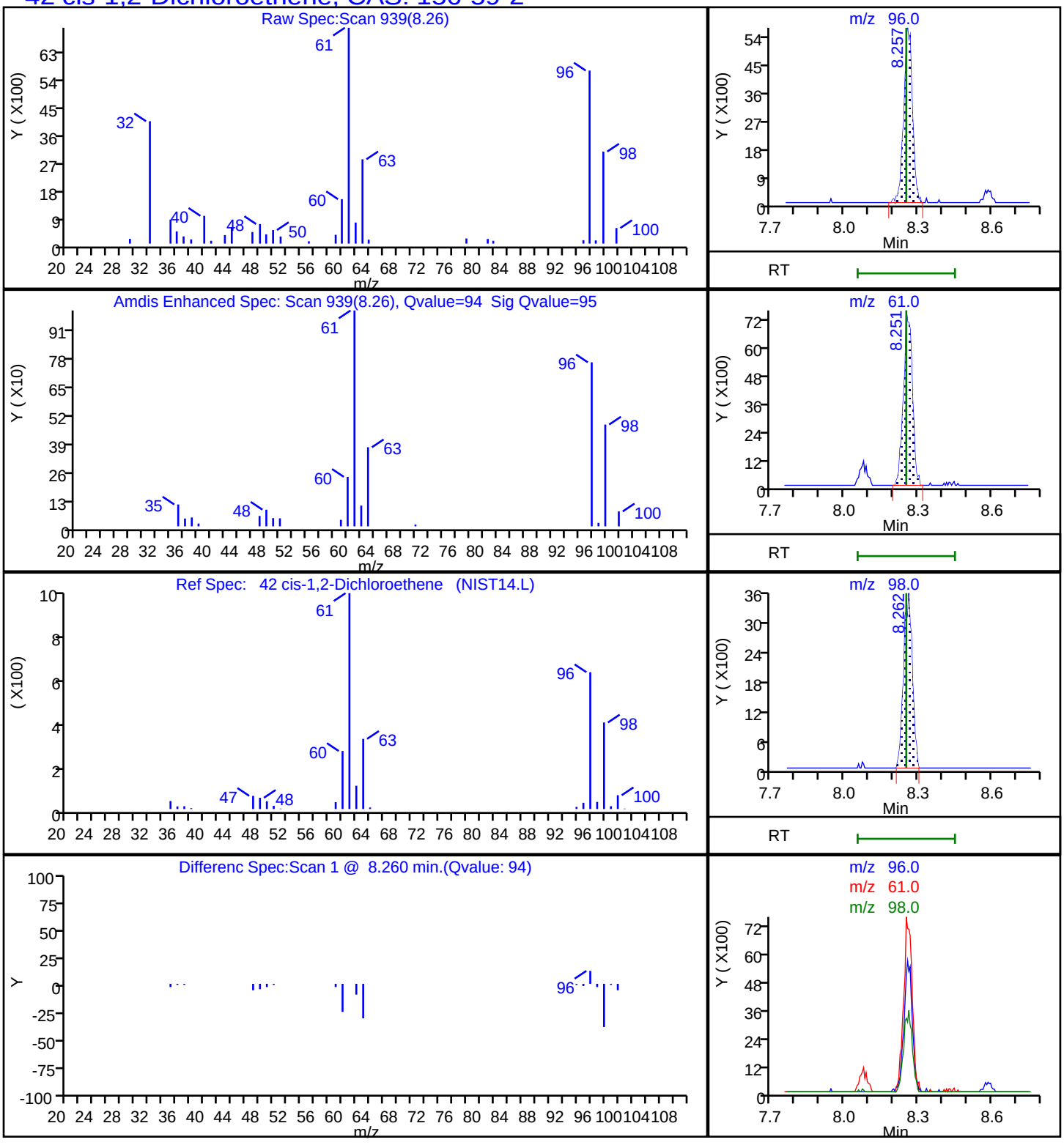
Lims ID:	140-19093-A-6	Lab Sample ID:	140-19093-6		
Client ID:	BLDG C EFFLUENT				
Operator ID:	HMT	ALS Bottle#:	6	Worklist Smp#:	12
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

42 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins TestAmerica, Knoxville

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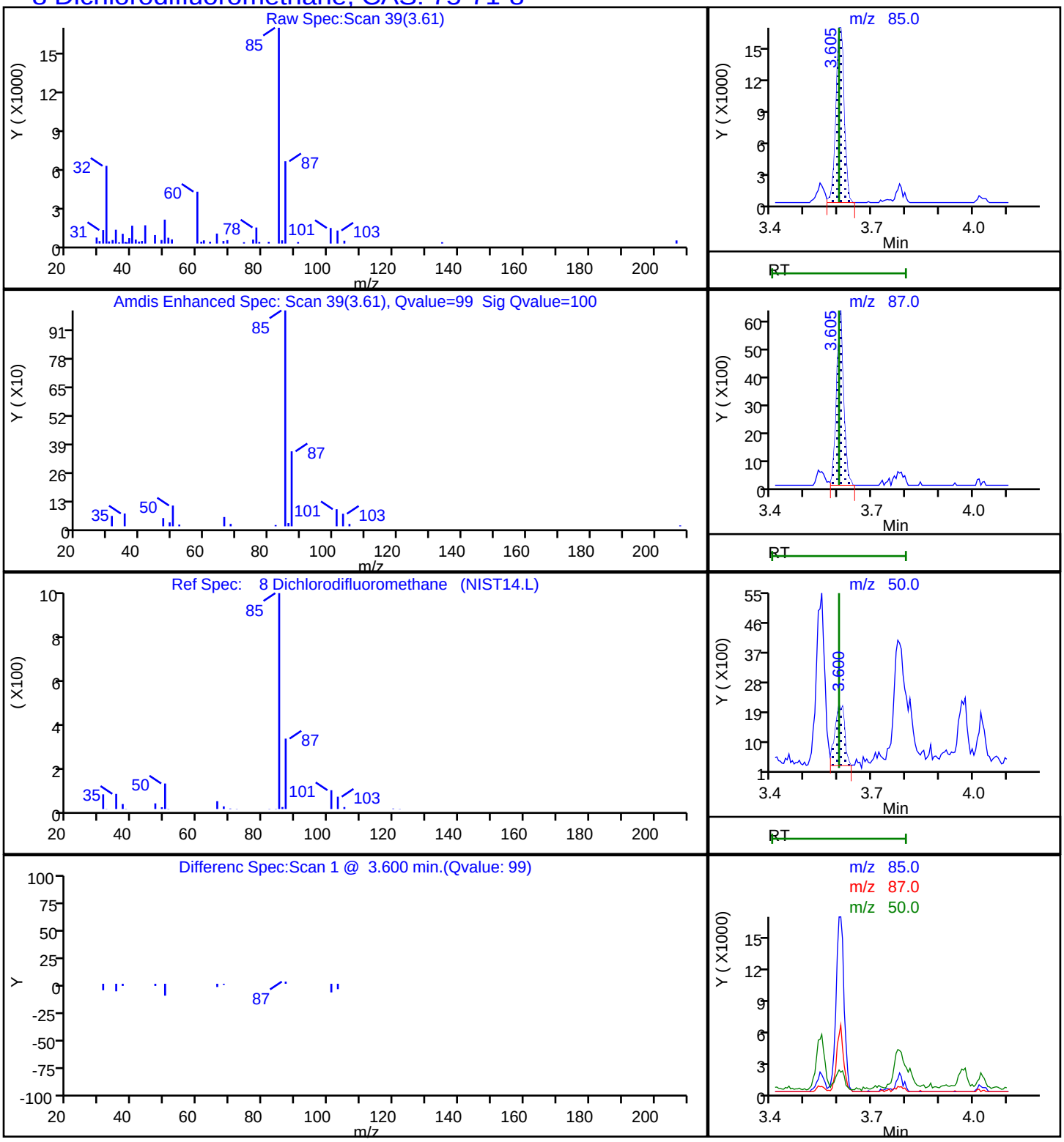
Injection Date:	15-May-2020 18:53:30	Instrument ID:	MH
Lims ID:	140-19093-A-6	Lab Sample ID:	140-19093-6
Client ID:	BLDG C EFFLUENT		
Operator ID:	HMT	ALS Bottle#:	6 Worklist Smp#: 12
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

8 Dichlorodifluoromethane, CAS: 75-71-8



Eurofins TestAmerica, Knoxville

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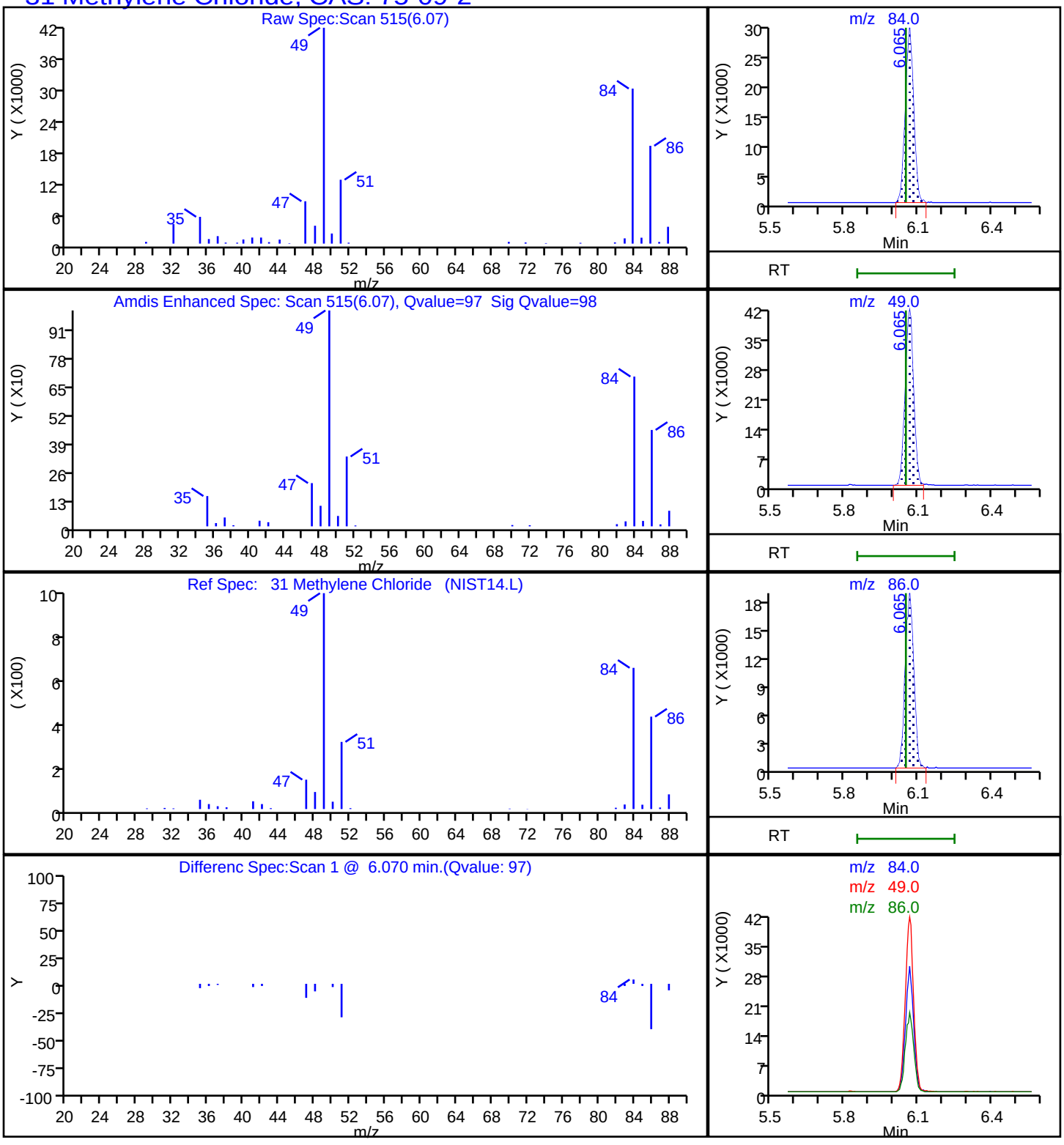
Lims ID:	140-19093-A-6	Lab Sample ID:	140-19093-6
Client ID:	BLDG C EFFLUENT		
Operator ID:	HMT	ALS Bottle#:	6 Worklist Smp#: 12
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

31 Methylene Chloride, CAS: 75-09-2



Report Date: 18-May-2020 17:27:02 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HE15P106.D

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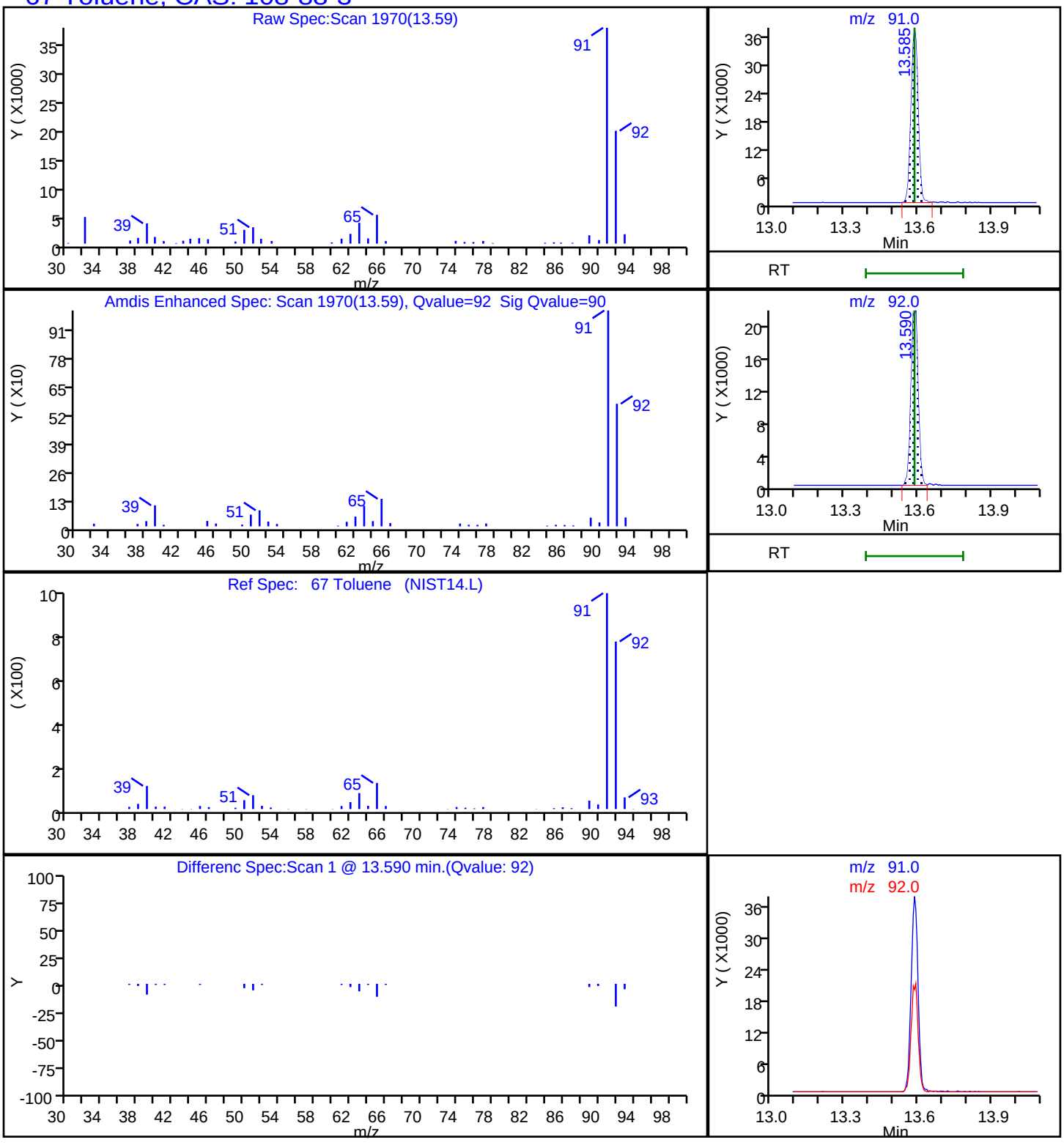
Lims ID:	140-19093-A-6	Lab Sample ID:	140-19093-6		
Client ID:	BLDG C EFFLUENT				
Operator ID:	HMT	ALS Bottle#:	6	Worklist Smp#:	12
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

67 Toluene, CAS: 108-88-3



Eurofins TestAmerica, Knoxville

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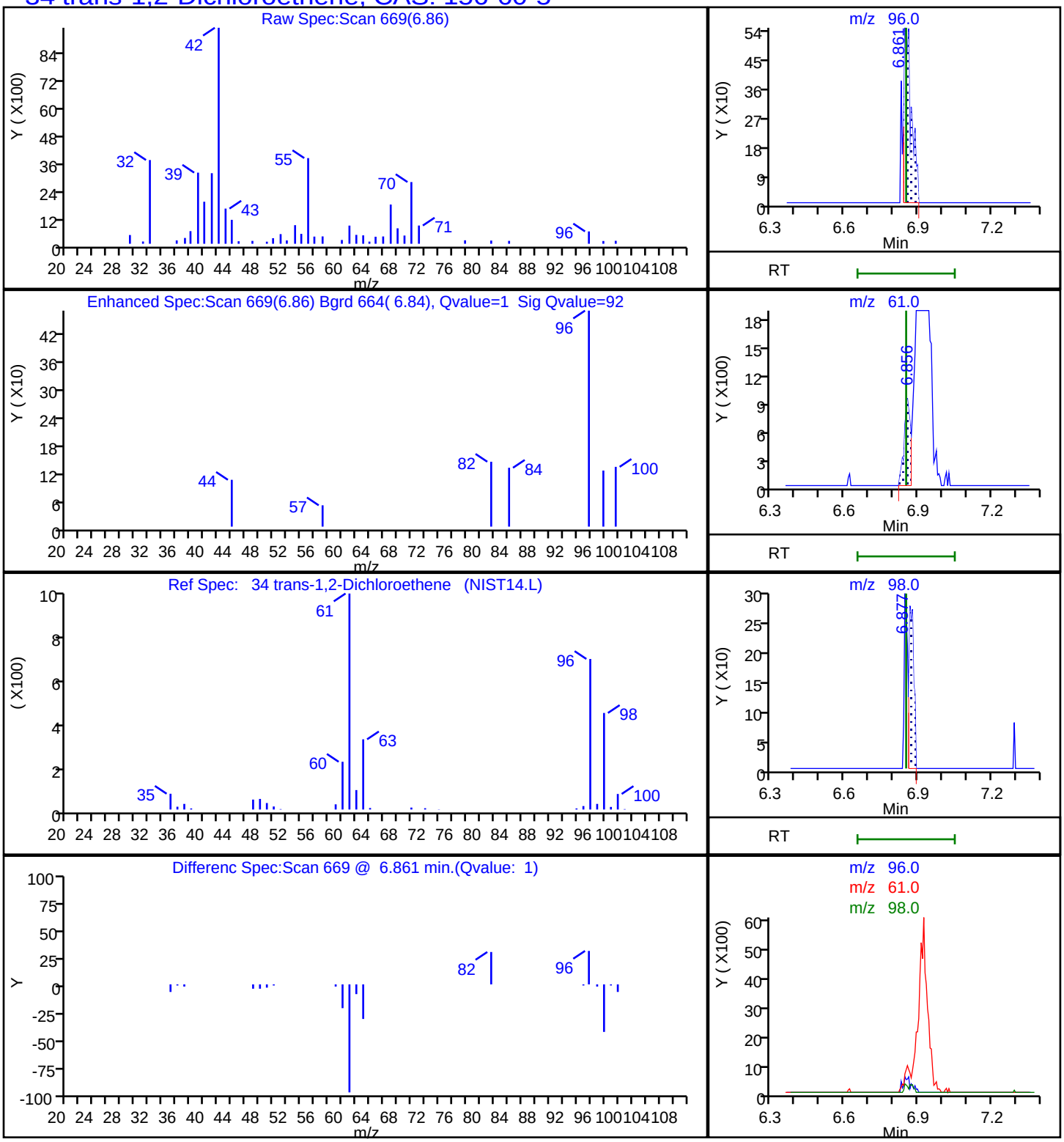
Lims ID:	140-19093-A-6	Lab Sample ID:	140-19093-6		
Client ID:	BLDG C EFFLUENT				
Operator ID:	HMT	ALS Bottle#:	6	Worklist Smp#:	12
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

34 trans-1,2-Dichloroethene, CAS: 156-60-5



Eurofins TestAmerica, Knoxville

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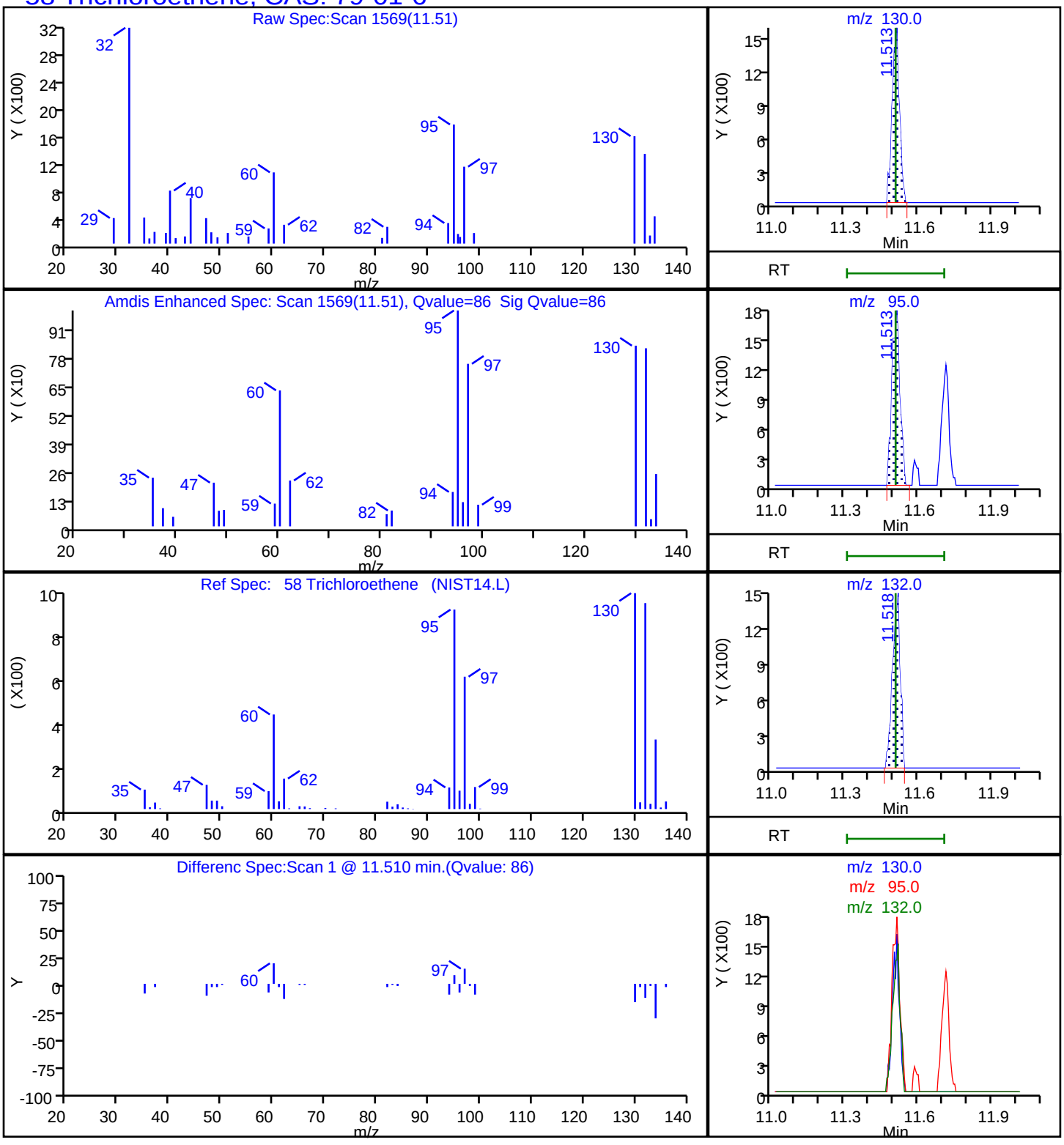
Lims ID:	140-19093-A-6	Lab Sample ID:	140-19093-6
Client ID:	BLDG C EFFLUENT		
Operator ID:	HMT	ALS Bottle#:	6 Worklist Smp#: 12
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

58 Trichloroethene, CAS: 79-01-6



Eurofins TestAmerica, Knoxville

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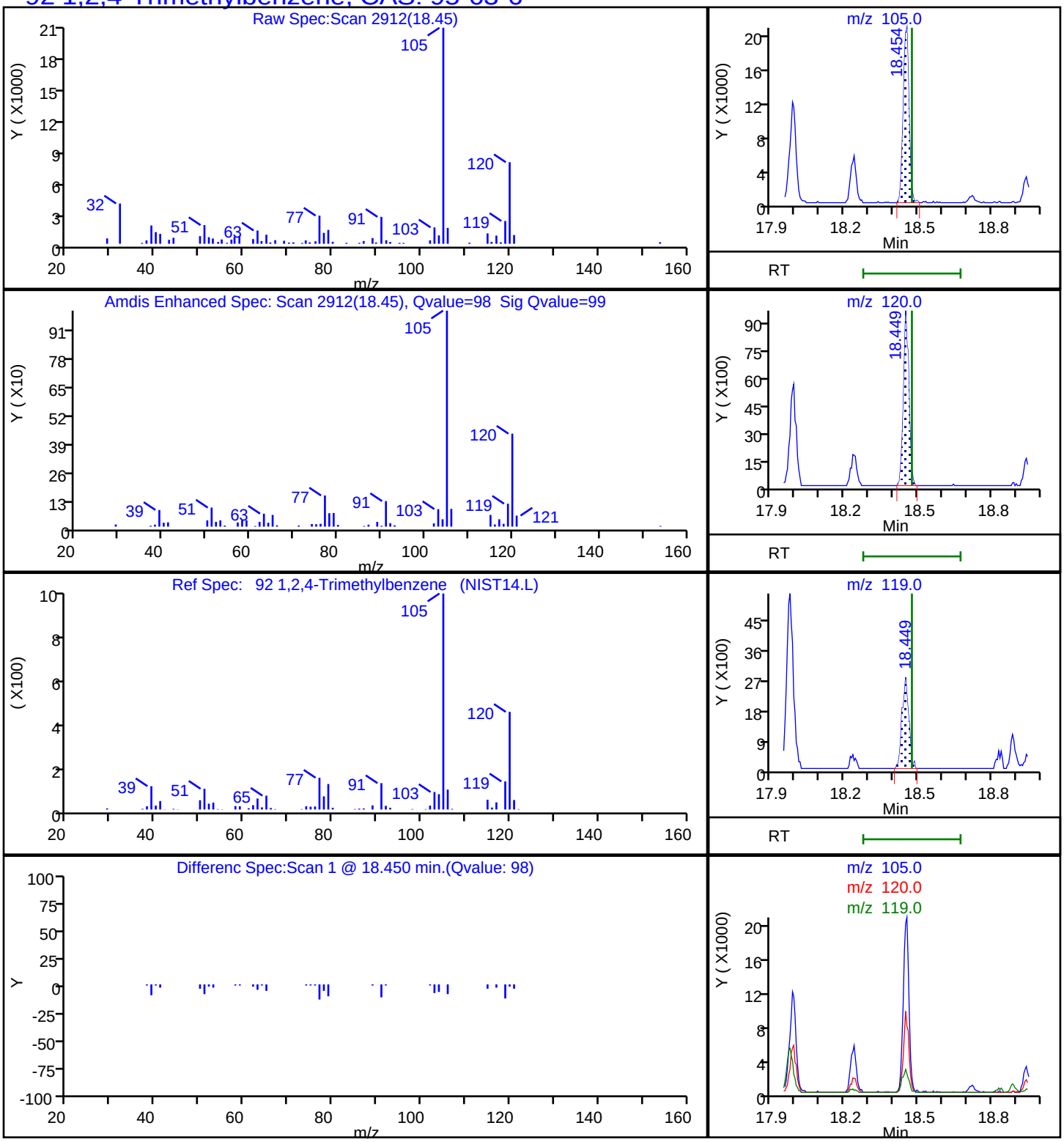
Lims ID:	140-19093-A-6	Lab Sample ID:	140-19093-6		
Client ID:	BLDG C EFFLUENT				
Operator ID:	HMT	ALS Bottle#:	6	Worklist Smp#:	12
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

92 1,2,4-Trimethylbenzene, CAS: 95-63-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HE15P106.D				
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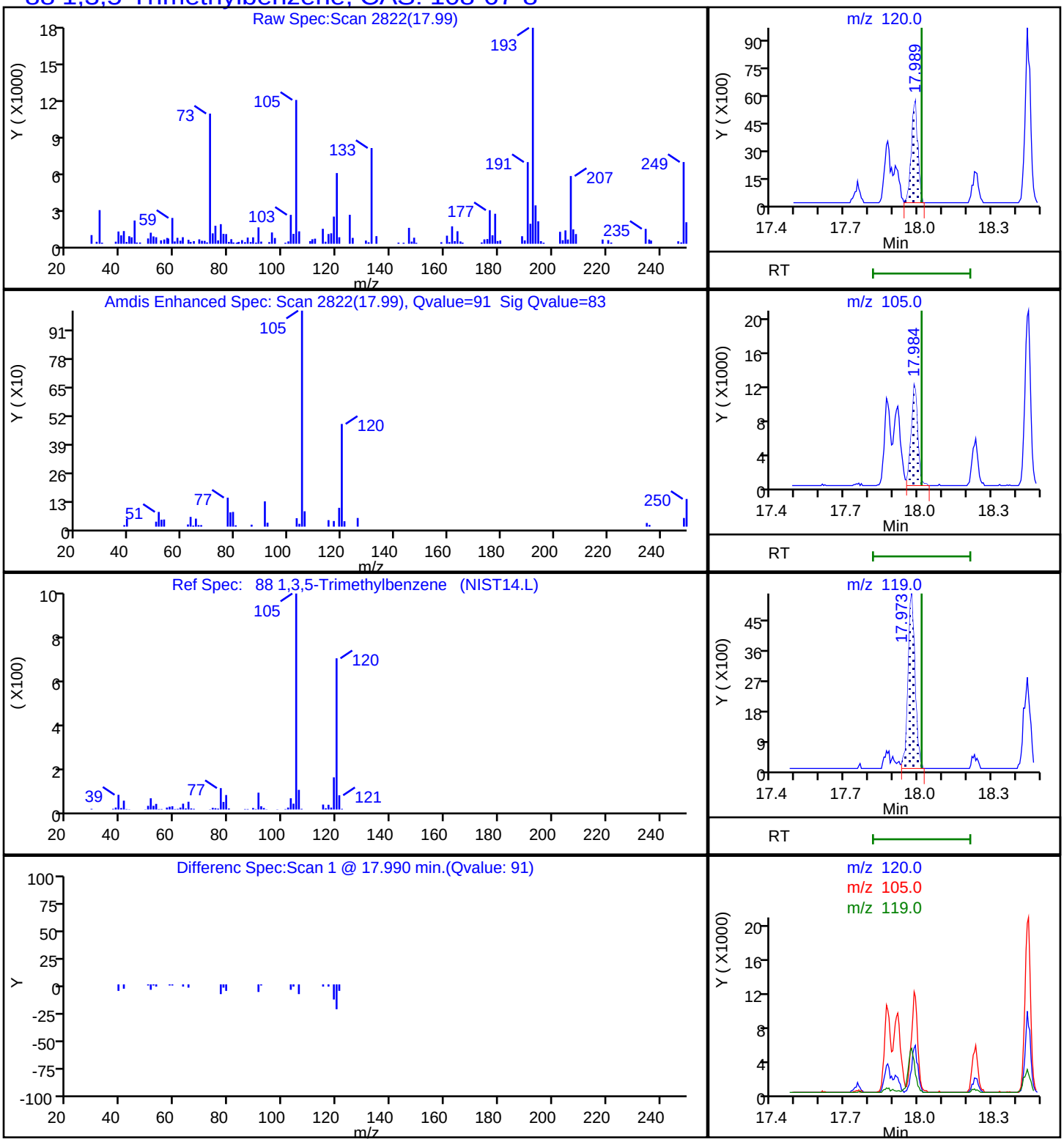
Lims ID:	140-19093-A-6	Lab Sample ID:	140-19093-6		
Client ID:	BLDG C EFFLUENT				
Operator ID:	HMT	ALS Bottle#:	6	Worklist Smp#:	12
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

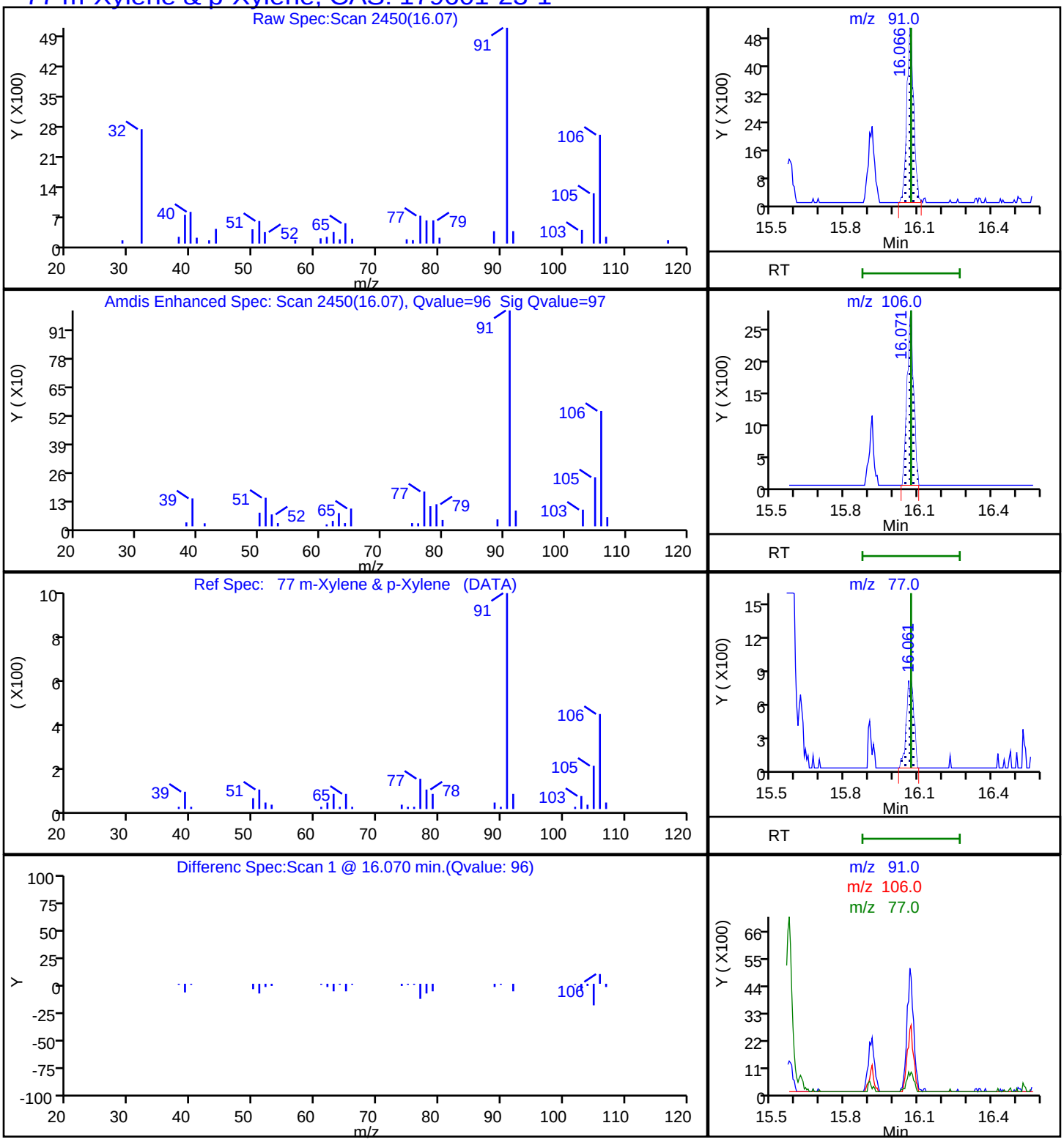
88 1,3,5-Trimethylbenzene, CAS: 108-67-8



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HE15P106.D		
Injection Date:	15-May-2020 18:53:30	Instrument ID:	MH
Lims ID:	140-19093-A-6	Lab Sample ID:	140-19093-6
Client ID:	BLDG C EFFLUENT		
Operator ID:	HMT	ALS Bottle#:	6 Worklist Smp#: 12
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

77 m-Xylene & p-Xylene, CAS: 179601-23-1



FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19093-1 Analy Batch No.: 39100

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/16/2020 08:03 Calibration End Date: 04/16/2020 18:34 Calibration ID: 2402

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 140-39100/3	HD16IC01.D
Level 2	IC 140-39100/4	HD16IC02.D
Level 3	IC 140-39100/5	HD16IC03.D
Level 4	IC 140-39100/6	HD16IC04.D
Level 5	IC 140-39100/7	HD16IC05.D
Level 6	IC 140-39100/8	HD16IC06.D
Level 7	ICIS 140-39100/9	HD16IC07.D
Level 8	IC 140-39100/11	HD16IC08.D
Level 9	IC 140-39100/13	HD16C09.D
Level 10	IC 140-39100/15	HD16IC10.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Chlorodifluoromethane	+++++ 4.2946	4.6026 4.0842	4.4835 4.0706	4.2657 4.0514	4.3120 3.8121	Ave		4.2196				5.7		30.0			
Propene	+++++ 2.5917	+++++ 2.0258	+++++ 1.8090	+++++ 1.6736	+++++ 1.4660	Lin2	1.1197	1.4793							0.9970		0.9900
Dichlorodifluoromethane	+++++ 6.6689	6.7930 6.3727	6.9951 6.1862	6.7142 6.1533	6.7616 5.7611	Ave		6.4896				6.1		30.0			
Chloromethane	+++++ 0.6912	+++++ 0.6683	0.8910 0.6452	0.8242 0.6526	0.7164 0.5706	Ave		0.7074				14.6		30.0			
1,2-Dichloro-1,1,2,2-tetrafluoroethane	+++++ 4.6440	4.5896 4.1781	4.3819 4.2258	4.5264 4.1913	4.4433 3.7642	Ave		4.3272				6.3		30.0			
Vinyl chloride	3.0661 2.2564	2.5523 2.1864	2.4141 2.1324	2.3209 2.1507	2.2217 1.9058	Ave		2.3207				13.5		30.0			
Butane	+++++ 2.7017	3.3127 2.6844	3.0290 2.5768	2.8532 2.5824	2.6964 2.3136	Ave		2.7500				10.5		30.0			
1,3-Butadiene	+++++ 1.5927	1.7722 1.5596	1.6155 1.5400	1.5879 1.5696	1.5352 1.4222	Ave		1.5772				5.8		30.0			
Bromomethane	+++++ 2.4743	+++++ 2.3770	2.7721 2.3553	2.5579 2.3418	2.5201 2.1996	Ave		2.4498				7.1		30.0			
Chloroethane	+++++ 0.9693	+++++ 0.9597	1.1483 0.9329	1.0778 0.9275	0.9698 0.9170	Ave		0.9878				8.3		30.0			
Ethanol	+++++ 0.7044	+++++ 0.7355	+++++ 0.7181	0.7345 0.7069	0.7328 0.6605	Ave		0.7132				3.7		30.0			
Vinyl bromide	+++++ 2.2557	+++++ 2.1765	2.4205 2.1671	2.2386 2.1459	2.2353 2.0096	Ave		2.2062				5.3		30.0			
2-Methylbutane	+++++ 1.9039	2.4402 1.9339	2.2777 1.8575	2.1410 1.8086	2.0105 1.7879	Ave		2.0179				11.1		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19093-1 Analy Batch No.: 39100

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/16/2020 08:03 Calibration End Date: 04/16/2020 18:34 Calibration ID: 2402

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Trichlorofluoromethane	6.7823 5.7080	6.1556 5.6592	6.0351 5.5541	5.8856 5.3969	5.8778 5.1361	Ave		5.8191				7.8		30.0			
Acrolein	+++++ 0.6862	+++++ 0.7030	+++++ 0.6772	+++++ 0.6894	0.6941 0.6320	Ave		0.6803				3.7		30.0			
Acetonitrile	+++++ 0.8359	+++++ 0.8383	+++++ 0.8191	0.7410 0.7929	0.7369 0.7190	Ave		0.7833				6.4		30.0			
Acetone	+++++ 0.8917	+++++ 0.8988	+++++ 0.8752	1.0600 0.8535	0.9437 0.7769	Ave		0.9000				9.7		30.0			
Pentane	+++++ 0.2472	+++++ 0.2525	+++++ 0.2504	0.2625 0.2429	0.2736 0.2322	Ave		0.2516				5.3		30.0			
Isopropyl alcohol	2.9493 2.5244	2.4151 2.6018	2.6023 2.5840	2.5372 2.4797	2.4914 2.2051	QuaF		2.7217	-0.010728						1.0000		0.9900
Ethyl ether	+++++ 1.8091	+++++ 1.7667	1.8136 1.7438	1.7416 1.7048	1.8243 1.5309	Ave		1.7418				5.4		30.0			
1,1-Dichloroethene	2.2016 1.8708	2.1076 1.9120	1.9711 1.8961	1.8950 1.8998	1.9015 1.8336	Ave		1.9489				5.9		30.0			
tert-Butyl alcohol	+++++ 3.2170	+++++ 3.3641	+++++ 3.3859	2.9817 3.3898	3.1179 3.1794	Ave		3.2337				4.8		30.0			
Acrylonitrile	+++++ 1.4909	+++++ 1.4994	+++++ 1.5329	1.4892 1.5076	1.4284 1.3852	Ave		1.4762				3.5		30.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	+++++ 4.5490	4.8933 4.4521	4.7945 4.3855	4.5924 4.2826	4.6444 4.0230	Ave		4.5130				5.9		30.0			
Methylene Chloride	+++++ 2.8749	+++++ 2.3339	+++++ 2.0479	+++++ 1.8895	4.4246 1.7125	Lin2	1.0826	1.7465							0.9980		0.9900
3-Chloropropene	+++++ 1.6974	+++++ 1.5385	1.9108 1.6110	1.7720 1.5561	1.7011 1.3786	Ave		1.6457				9.9		30.0			
Carbon disulfide	+++++ 5.9663	+++++ 5.8850	5.9504 5.9252	5.9492 5.7822	5.8376 5.4048	Ave		5.8376				3.2		30.0			
trans-1,2-Dichloroethene	+++++ 1.9397	1.9428 1.9445	1.8842 1.9529	1.9102 1.9693	1.8451 1.9216	Ave		1.9234				2.0		30.0			
2-Methylpentane	+++++ 4.0185	3.7736 3.9557	3.7266 3.9191	3.7159 3.7905	3.8712 3.4711	Ave		3.8047				4.3		30.0			
Methyl tert-butyl ether	+++++ 4.6378	+++++ 4.7554	4.0347 4.7070	4.2782 4.6586	4.4847 4.4126	Ave		4.4961				5.5		30.0			
1,1-Dichloroethane	+++++ 3.7793	4.1806 3.7361	4.2197 3.6795	3.9061 3.6537	3.8669 3.4525	Ave		3.8305				6.5		30.0			
Vinyl acetate	+++++ 4.9871	+++++ 5.1158	3.9251 5.3263	4.0518 5.3806	4.3806 5.0152	Ave		4.7728				12.0		30.0			
2-Butanone (MEK)	+++++ 0.8666	+++++ 0.8821	0.7442 0.8828	0.8384 0.9008	0.8293 0.8694	Ave		0.8517				5.8		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19093-1 Analy Batch No.: 39100

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/16/2020 08:03 Calibration End Date: 04/16/2020 18:34 Calibration ID: 2402

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Hexane	+++++ 1.5140	1.3928 1.4884	1.4603 1.4816	1.3607 1.4410	1.4467 1.3660	Ave		1.4391				3.8		30.0			
cis-1,2-Dichloroethene	+++++ 2.0246	2.0880 2.0566	1.9535 2.0429	1.8964 2.0599	1.9765 1.9729	Ave		2.0079				3.1		30.0			
Ethyl acetate	+++++ 4.5136	+++++ 4.4390	4.1192 4.4709	4.0916 4.4679	4.2669 4.1510	Ave		4.3150				4.1		30.0			
Chloroform	+++++ 4.8186	4.7511 4.6663	5.1189 4.6040	4.7708 4.5449	4.9092 4.3215	Ave		4.7228				4.8		30.0			
Tetrahydrofuran	+++++ 2.0675	+++++ 2.0290	1.8646 2.0569	1.8582 2.0539	1.8669 1.9080	Ave		1.9631				4.9		30.0			
1,1,1-Trichloroethane	4.6607 4.4283	4.5570 4.3649	4.2611 4.3776	4.2927 4.3633	4.3680 4.2902	Ave		4.3964				2.8		30.0			
1,2-Dichloroethane	+++++ 0.4326	0.4200 0.4213	0.4320 0.4200	0.4164 0.4198	0.4395 0.4091	Ave		0.4234				2.2		30.0			
1-Butanol	+++++ 0.0845	+++++ 0.0922	+++++ 0.1015	0.0643 0.1072	0.0761 0.1040	Ave		0.0900				17.6		30.0			
Cyclohexane	+++++ 0.1205	+++++ 0.1202	0.1027 0.1213	0.0923 0.1223	0.1177 0.1244	Ave		0.1152				9.9		30.0			
Benzene	+++++ 0.8861	0.9203 0.8659	0.8567 0.8596	0.8583 0.8636	0.8594 0.8606	Ave		0.8700				2.4		30.0			
Carbon tetrachloride	0.7035 0.6368	0.6132 0.5290	0.5961 0.6392	0.6164 0.6524	0.6208 0.6755	Ave		0.6283				7.5		30.0			
2,3-Dimethylpentane	+++++ 0.1712	+++++ 0.1764	0.1482 0.1719	0.1503 0.1715	0.1648 0.1672	Ave		0.1652				6.3		30.0			
Thiophene	+++++ 0.5074	+++++ 0.5039	0.4469 0.5007	0.4508 0.5082	0.4852 0.4975	Ave		0.4876				5.1		30.0			
2,2,4-Trimethylpentane	+++++ 1.3606	1.3050 1.3630	1.2417 1.3705	1.2283 1.3799	1.2824 1.3695	Ave		1.3223				4.5		30.0			
Heptane	+++++ 0.2483	+++++ 0.2565	0.2039 0.2626	0.2067 0.2733	0.2270 0.2784	Ave		0.2446				11.8		30.0			
1,2-Dichloropropane	+++++ 0.3644	+++++ 0.3559	0.3658 0.3552	0.3430 0.3587	0.3561 0.3540	Ave		0.3566				2.0		30.0			
Trichloroethene	0.4173 0.3457	0.3423 0.3579	0.3443 0.3500	0.3327 0.3615	0.3391 0.3661	Ave		0.3557				6.7		30.0			
Dibromomethane	+++++ 0.4428	0.4737 0.4359	0.4217 0.4292	0.4144 0.4369	0.4366 0.4305	Ave		0.4357				3.8		30.0			
Bromodichloromethane	+++++ 0.7058	0.6319 0.6993	0.6311 0.7106	0.6344 0.7220	0.6755 0.7288	Ave		0.6822				5.9		30.0			
1,4-Dioxane	+++++ 0.1225	+++++ 0.1334	+++++ 0.1367	0.1087 0.1364	0.1170 0.1324	Ave		0.1267				8.6		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19093-1 Analy Batch No.: 39100

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/16/2020 08:03 Calibration End Date: 04/16/2020 18:34 Calibration ID: 2402

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Methyl methacrylate	+++++ 0.3381	+++++ 0.3469	0.2529 0.3561	0.2648 0.3592	0.3066 0.3424	Ave		0.3209				13.0		30.0			
Methylcyclohexane	+++++ 0.4507	0.3499 0.4715	0.3439 0.4850	0.3549 0.5010	0.4071 0.5125	Lin1	-0.013	0.5026							0.9990		0.9900
4-Methyl-2-pentanone (MIBK)	+++++ 0.6679	0.4819 0.6884	0.4680 0.7199	0.5075 0.7310	0.5941 0.7175	Ave		0.6196				17.5		30.0			
cis-1,3-Dichloropropene	+++++ 0.4898	0.3571 0.4999	0.3706 0.5161	0.4004 0.5375	0.4457 0.5349	Ave		0.4613				15.2		30.0			
trans-1,3-Dichloropropene	+++++ 0.4971	0.3895 0.5152	0.3859 0.5397	0.3870 0.5720	0.4373 0.5700	Ave		0.4771				16.4		30.0			
Toluene	+++++ 1.1774	+++++ 1.2069	0.9667 1.1825	0.9734 1.1775	1.1110 1.1581	Lin2	-0.020	1.1771							0.9990		0.9900
1,1,2-Trichloroethane	+++++ 0.4329	0.4129 0.4325	0.4237 0.4160	0.4271 0.4060	0.4366 0.3887	Ave		0.4196				3.7		30.0			
2-Hexanone	+++++ 0.3708	+++++ 0.4095	+++++ 0.4216	0.2209 0.4225	0.2949 0.4252	Ave		0.3665				21.7		30.0			
C8 Range	+++++ 2.7557	+++++ 2.7681	2.0999 2.7972	2.2602 2.8000	2.5899 2.7646	Ave		2.6044				10.5		30.0			
Octane	+++++ 0.3167	+++++ 0.3309	+++++ 0.3340	0.2227 0.3360	0.2931 0.3419	Ave		0.3108				13.6		30.0			
Dibromochloromethane	+++++ 0.7657	0.5983 0.7789	0.6427 0.8086	0.6503 0.8363	0.7247 0.8649	Ave		0.7412				12.6		30.0			
1,2-Dibromoethane (EDB)	+++++ 0.7247	0.6094 0.7228	0.6175 0.7335	0.6222 0.7552	0.7003 0.7529	Ave		0.6932				8.6		30.0			
Tetrachloroethene	0.4615 0.4194	0.4554 0.4285	0.4032 0.4190	0.4139 0.4258	0.4229 0.4352	Ave		0.4285				4.2		30.0			
Chlorobenzene	+++++ 0.9115	0.9917 0.9164	0.9432 0.9147	0.8840 0.9435	0.9113 0.9620	Ave		0.9309				3.5		30.0			
Ethylbenzene	+++++ 1.5067	+++++ 1.5513	1.1790 1.5666	1.2124 1.5668	1.4086 1.5620	Ave		1.4442				11.2		30.0			
m-Xylene & p-Xylene	+++++ 1.1998	0.8398 1.2188	0.9173 1.2186	0.9705 1.2351	1.1355 1.1769	Ave		1.1014				13.7		30.0			
Nonane	+++++ 0.7428	+++++ 0.7737	+++++ 0.7701	0.5038 0.7671	0.6636 0.7422	Ave		0.7090				13.8		30.0			
Bromoform	+++++ 0.7588	+++++ 0.7693	0.5073 0.8929	0.5287 0.9642	0.6714 0.9989	Ave		0.7614				24.4		30.0			
Styrene	+++++ 0.8242	+++++ 0.8625	0.5350 0.8643	0.6365 0.8509	0.7561 0.8320	Lin2	-0.027	0.8487							0.9990		0.9900
o-Xylene	+++++ 1.2537	0.9010 1.2480	1.0261 1.2149	1.0842 1.1731	1.2133 1.1540	Ave		1.1409				10.3		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19093-1 Analy Batch No.: 39100

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/16/2020 08:03 Calibration End Date: 04/16/2020 18:34 Calibration ID: 2402

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
1,1,2,2-Tetrachloroethane	+++++ 1.1462	+++++ 1.1179	1.0110 1.1371	1.0273 1.0972	1.1167 1.1004	Ave		1.0942				4.5		30.0			
1,2,3-Trichloropropane	+++++ 0.2489	+++++ 0.2473	0.2249 0.2477	0.2329 0.2392	0.2409 0.2484	Ave		0.2413				3.6		30.0			
Isopropylbenzene	+++++ 1.5935	+++++ 1.6303	+++++ 1.6363	1.2293 1.6120	1.4566 1.6271	Ave		1.5407				9.8		30.0			
Propylbenzene	+++++ 0.4097	+++++ 0.4286	+++++ 0.4423	0.2878 0.4415	0.3719 +++++	Ave		0.3970				15.0		30.0			
2-Chlorotoluene	+++++ 0.4175	0.3205 0.4156	0.3517 0.4194	0.3535 0.4051	0.3990 +++++	Ave		0.3853				9.8		30.0			
4-Ethyltoluene	+++++ 1.6342	+++++ 1.6781	1.0957 1.7073	1.2229 1.6559	1.4589 1.7019	Ave		1.5193				15.7		30.0			
1,3,5-Trimethylbenzene	+++++ 0.6247	+++++ 0.6416	0.4496 0.6503	0.5084 0.6394	0.5804 0.6641	Lin2	-0.017	0.6442							0.9990		0.9900
Alpha Methyl Styrene	+++++ 0.5881	+++++ 0.6570	+++++ 0.6993	0.3596 0.7083	0.4680 0.7668	Ave		0.6067				24.0		30.0			
Decane	+++++ 1.0726	+++++ 1.0625	+++++ 1.0570	0.7950 1.0002	1.0152 0.9594	Ave		0.9946				9.7		30.0			
tert-Butylbenzene	+++++ 1.4199	+++++ 1.4357	1.0213 1.4705	1.1804 1.4834	1.3147 1.5192	Ave		1.3557				12.8		30.0			
1,2,4-Trimethylbenzene	+++++ 1.4577	+++++ 1.4594	0.9981 1.4822	1.1592 1.4573	1.3655 1.4289	Ave		1.3510				13.1		30.0			
sec-Butylbenzene	+++++ 2.1080	+++++ 2.1852	1.4048 2.2466	1.5415 2.2427	1.8864 +++++	Ave		1.9450				17.8		30.0			
1,3-Dichlorobenzene	0.8677 0.9272	0.8078 0.9331	0.7503 0.9745	0.8227 0.9777	0.8808 0.9814	Ave		0.8923				9.0		30.0			
Benzyl chloride	+++++ 1.0716	+++++ 1.2230	+++++ 1.3284	0.6848 1.3629	0.8894 1.4274	Ave		1.1411				24.0		30.0			
1,4-Dichlorobenzene	0.8750 0.8807	0.6820 0.8996	0.6976 0.9415	0.7728 0.9381	0.8332 0.9640	Ave		0.8484				11.8		30.0			
4-Isopropyltoluene	+++++ 1.6161	+++++ 1.6452	1.0016 1.6668	1.2030 1.6707	1.4758 1.6679	Ave		1.4934				17.1		30.0			
1,2,3-Trimethylbenzene	+++++ 1.4515	+++++ 1.4602	1.0088 1.4537	1.1976 1.4110	1.3622 1.4185	Ave		1.3454				12.0		30.0			
Indane	+++++ 1.3369	+++++ 1.3758	0.9566 1.4336	1.0020 1.4533	1.2184 1.3698	Ave		1.2683				15.2		30.0			
1,2-Dichlorobenzene	0.8948 0.9349	0.7448 0.9439	0.7863 0.9862	0.8153 1.0055	0.9015 0.9853	Ave		0.8999				10.0		30.0			
Indene	+++++ 1.1167	+++++ 1.2078	+++++ 1.2815	0.7819 1.3128	0.9758 1.2468	Ave		1.1319				17.0		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19093-1 Analy Batch No.: 39100

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/16/2020 08:03 Calibration End Date: 04/16/2020 18:34 Calibration ID: 2402

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Butylbenzene	+++++ 1.9599	+++++ 1.9528	+++++ 1.9933	1.5170 1.9985	1.8319 1.7018	Lin2	-0.064	1.9478							0.9960		0.9900
Undecane	+++++ 1.1889	+++++ 1.2151	+++++ 1.2538	0.7689 1.2796	1.0031 1.1348	Ave		1.1206				16.1		30.0			
1,2-Dibromo-3-Chloropropane	+++++ 0.4589	+++++ 0.5198	0.2556 +++++	0.2966 +++++	0.3995 +++++	Lin1	-0.028	0.5124							0.9950		0.9900
1,2,4,5-Tetramethylbenzene	+++++ 1.4386	+++++ 1.5093	0.6700 1.6414	0.8615 1.7703	1.1812 +++++	Lin1	-0.125	1.7087							0.9960		0.9900
Dodecane	+++++ 1.0635	+++++ 1.1170	+++++ 1.2260	+++++ 1.3119	0.7874 1.1287	Ave		1.1058				16.2		30.0			
1,2,4-Trichlorobenzene	+++++ 0.6133	+++++ 0.6574	0.3729 0.7926	0.4132 +++++	0.5129 +++++	Ave		0.5604				28.2		30.0			
Naphthalene	+++++ 1.4342	0.8441 1.5502	0.7272 1.7894	0.8359 1.7945	1.2503 +++++	Ave		1.2782				33.9	*	30.0			
Hexachlorobutadiene	+++++ 0.7624	0.6973 0.7723	0.7209 0.8166	0.7411 0.9175	0.7038 0.8398	Ave		0.7746				9.3		30.0			
1,2,3-Trichlorobenzene	+++++ 0.6601	0.5209 0.6542	0.4725 0.7278	0.5276 0.7685	0.5823 0.7496	Ave		0.6293				17.2		30.0			
2-Methylnaphthalene	+++++ 0.3280	+++++ 0.3669	+++++ 0.5743	+++++ 0.6380	0.2027 0.5268	Ave		0.4394				37.9		50.0			
1-Methylnaphthalene	+++++ 0.5144	+++++ 0.4923	+++++ 0.6654	+++++ 0.7050	0.3681 0.5282	Ave		0.5456				22.5		50.0			
4-Bromofluorobenzene (Surr)	0.6470 0.7042	0.6481 0.6953	0.6569 0.6942	0.6828 0.6519	0.7049 0.6255	Ave		0.6711				4.2		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19093-1 Analy Batch No.: 39100

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/16/2020 08:03 Calibration End Date: 04/16/2020 18:34 Calibration ID: 2402

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 140-39100/3	HD16IC01.D
Level 2	IC 140-39100/4	HD16IC02.D
Level 3	IC 140-39100/5	HD16IC03.D
Level 4	IC 140-39100/6	HD16IC04.D
Level 5	IC 140-39100/7	HD16IC05.D
Level 6	IC 140-39100/8	HD16IC06.D
Level 7	ICIS 140-39100/9	HD16IC07.D
Level 8	IC 140-39100/11	HD16IC08.D
Level 9	IC 140-39100/13	HD16C09.D
Level 10	IC 140-39100/15	HD16IC10.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
Chlorodifluoromethane	CBM	Ave	+++++ 231500	11004 486289	20123 963019	35814 2067462	89827 4645992	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Propene	CBM	Lin2	+++++ 139705	+++++ 241206	+++++ 427965	+++++ 854036	+++++ 1786636	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	+++++ 16.0
Dichlorodifluoromethane	CBM	Ave	+++++ 359489	16241 758766	31396 1463527	56371 3140078	140856 7021295	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Chloromethane	CBM	Ave	+++++ 37262	+++++ 79574	3999 152640	6920 333046	14923 695361	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2-Dichloro-1,1,2,2-tetrafluoroethane	CBM	Ave	+++++ 250336	10973 497468	19667 999739	38003 2138873	92562 4587553	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Vinyl chloride	CBM	Ave	3905 121630	6102 260327	10835 504476	19486 1097532	46282 2322657	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Butane	CBM	Ave	+++++ 145634	7920 319615	13595 609622	23955 1317848	56170 2819645	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,3-Butadiene	CBM	Ave	+++++ 85854	4237 185695	7251 364329	13332 800991	31980 1733328	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Bromomethane	CBM	Ave	+++++ 133380	+++++ 283021	12442 557215	21476 1195058	52498 2680699	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Chloroethane	CBM	Ave	+++++ 52250	+++++ 114269	5154 220714	9049 473312	20202 1117601	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Ethanol	CBM	Ave	+++++ 189858	+++++ 437849	+++++ 849422	30833 1803812	76328 4024711	+++++ 5.00	+++++ 10.0	+++++ 20.0	0.800 40.0	2.00 80.0
Vinyl bromide	CBM	Ave	+++++ 121595	+++++ 259146	10864 512684	18795 1095069	46565 2449170	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Methylbutane	CBM	Ave	+++++ 102629	5834 230259	10223 439434	17975 922954	41883 2179006	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Trichlorofluoromethane	CBM	Ave	8638 307689	14717 673807	27087 1313983	49414 2754124	122445 6259604	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19093-1 Analy Batch No.: 39100

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/16/2020 08:03 Calibration End Date: 04/16/2020 18:34 Calibration ID: 2402

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
Acrolein	CBM	Ave	+++++ 36991	+++++ 83698	+++++ 160207	+++++ 351820	14460 770263	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
Acetonitrile	CBM	Ave	+++++ 45061	+++++ 99811	+++++ 193771	6221 404640	15350 876291	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Acetone	CBM	Ave	+++++ 144197	+++++ 321031	+++++ 621189	26699 1306609	58978 2840455	+++++ 3.00	+++++ 6.00	+++++ 12.0	0.480 24.0	1.20 48.0
Pentane	CBM	Ave	+++++ 13325	+++++ 30063	+++++ 59233	2204 123932	5699 283032	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Isopropyl alcohol	CBM	QuaF	11269 408240	17322 929352	35039 1833925	63906 3796296	155698 8062272	0.0600 3.00	0.120 6.00	0.240 12.0	0.480 24.0	1.20 48.0
Ethyl ether	CBM	Ave	+++++ 97518	+++++ 210353	8140 412535	14622 869980	38004 1865787	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,1-Dichloroethene	CBM	Ave	2804 100847	5039 227649	8847 448571	15910 969472	39611 2234722	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
tert-Butyl alcohol	CBM	Ave	+++++ 173411	+++++ 400539	+++++ 801044	25034 1729850	64952 3874874	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Acrylonitrile	CBM	Ave	+++++ 80366	+++++ 178531	+++++ 362650	12503 769371	29756 1688190	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,1,2-Trichloro-1,2,2-trifluoroetha ne	CBM	Ave	+++++ 245213	11699 530093	21519 1037519	38557 2185448	96750 4903021	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Methylene Chloride	CBM	Lin2	+++++ 154970	+++++ 277879	+++++ 484483	+++++ 964215	92172 2087076	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
3-Chloropropene	CBM	Ave	+++++ 91499	+++++ 183177	8576 381139	14877 794100	35436 1680097	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Carbon disulfide	CBM	Ave	+++++ 321614	+++++ 700695	26707 1401786	49948 2950735	121608 6586980	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
trans-1,2-Dichloroethene	CBM	Ave	+++++ 104558	4645 231517	8457 462023	16038 1004966	38437 2341906	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Methylpentane	CBM	Ave	+++++ 216620	9022 470982	16726 927170	31198 1934336	80643 4230295	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Methyl tert-butyl ether	CBM	Ave	+++++ 250002	+++++ 566203	18109 1113570	35919 2377350	93424 5377846	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,1-Dichloroethane	CBM	Ave	+++++ 203725	9995 444836	18939 870501	32795 1864545	80555 4207742	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Vinyl acetate	CBM	Ave	+++++ 268831	+++++ 609105	17617 1260082	34018 2745775	91256 6112232	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Butanone (MEK)	CBM	Ave	+++++ 46715	+++++ 105028	3340 208856	7039 459705	17276 1059600	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Hexane	CBM	Ave	+++++ 81612	3330 177214	6554 350514	11424 735372	30138 1664785	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
cis-1,2-Dichloroethene	CBM	Ave	+++++ 109138	4992 244867	8768 483319	15922 1051184	41173 2404412	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19093-1 Analy Batch No.: 39100

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/16/2020 08:03 Calibration End Date: 04/16/2020 18:34 Calibration ID: 2402

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
Ethyl acetate	CBM	Ave	+++++ 243309	+++++ 528533	18488 1057713	34352 2280021	88887 5058973	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Chloroform	CBM	Ave	+++++ 259748	11359 555591	22975 1089216	40055 2319314	102267 5266742	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Tetrahydrofuran	CBM	Ave	+++++ 111448	+++++ 241581	8369 486618	15601 1048134	38891 2325299	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,1,1-Trichloroethane	CBM	Ave	5936 238710	10895 519709	19125 1035652	36041 2226667	90992 5228667	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2-Dichloroethane	DFBZ	Ave	+++++ 159660	6770 341615	13517 674961	24301 1438586	63603 3239207	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1-Butanol	DFBZ	Ave	+++++ 31194	+++++ 74752	+++++ 163141	3754 367453	11011 823377	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Cyclohexane	DFBZ	Ave	+++++ 44463	+++++ 97449	3214 194896	5387 419218	17030 984941	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Benzene	DFBZ	Ave	+++++ 327048	14835 702040	26805 1381354	50090 2959608	124381 6814294	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Carbon tetrachloride	DFBZ	Ave	6123 235027	9885 428945	18653 1027125	35971 2236066	89850 5348449	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2,3-Dimethylpentane	DFBZ	Ave	+++++ 63177	+++++ 143017	4636 276254	8770 587746	23858 1323627	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Thiophene	DFBZ	Ave	+++++ 187275	+++++ 408590	13982 804688	26308 1741820	70215 3939750	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2,2,4-Trimethylpentane	DFBZ	Ave	+++++ 502191	21037 1105098	38853 2202334	71678 4729216	185595 10844560	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Heptane	DFBZ	Ave	+++++ 91657	+++++ 207953	6380 422040	12061 936570	32858 2204310	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2-Dichloropropane	DFBZ	Ave	+++++ 134477	+++++ 288578	11447 570867	20019 1229183	51542 2802753	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Trichloroethene	DFBZ	Ave	3632 127602	5518 290163	10774 562502	19415 1238898	49084 2898833	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Dibromomethane	DFBZ	Ave	+++++ 163438	7636 353400	13194 689705	24181 1497232	63193 3408707	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Bromodichloromethane	DFBZ	Ave	+++++ 260503	10187 566974	19747 1141997	37024 2474307	97760 5771198	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,4-Dioxane	DFBZ	Ave	+++++ 45200	+++++ 108163	+++++ 219730	6344 467421	16940 1048208	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Methyl methacrylate	DFBZ	Ave	+++++ 124803	+++++ 281242	7912 572229	15453 1231161	44369 2711034	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Methylcyclohexane	DFBZ	Lin1	+++++ 166351	5640 382280	10759 779341	20710 1717022	58914 4057821	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
4-Methyl-2-pentanone (MIBK)	DFBZ	Ave	+++++ 246503	7769 558163	14642 1156932	29615 2505241	85978 5681206	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19093-1 Analy Batch No.: 39100

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/16/2020 08:03 Calibration End Date: 04/16/2020 18:34 Calibration ID: 2402

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
cis-1,3-Dichloropropene	DFBZ	Ave	+++++ 180786	5756 405317	11596 829424	23365 1842062	64503 4235824	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
trans-1,3-Dichloropropene	CBZd 5	Ave	+++++ 151775	4983 347837	9453 751139	18209 1757736	50863 4155320	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Toluene	CBZd 5	Lin2	+++++ 359526	+++++ 814775	23680 1645627	45801 3618377	129213 8442824	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,1,2-Trichloroethane	CBZd 5	Ave	+++++ 132187	5283 292002	10378 578879	20097 1247689	50779 2833954	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Hexanone	CBZd 5	Ave	+++++ 113223	+++++ 276466	+++++ 586718	10396 1298399	34298 3099705	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
C8 Range	DFBZ	Ave	+++++ 1017108	+++++ 2244338	65706 4495106	131899 9596132	374828 21890779	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Octane	CBZd 5	Ave	+++++ 96698	+++++ 223369	+++++ 464843	10479 1032477	34092 2492358	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Dibromochloromethane	CBZd 5	Ave	+++++ 233797	7655 525843	15744 1125338	30600 2569991	84287 6305124	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2-Dibromoethane (EDB)	CBZd 5	Ave	+++++ 221286	7797 487987	15125 1020772	29274 2320778	81447 5488598	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Tetrachloroethene	CBZd 5	Ave	3169 128051	5826 289299	9877 583145	19473 1308529	49185 3173034	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Chlorobenzene	CBZd 5	Ave	+++++ 278338	12688 618693	23105 1272896	41596 2899265	105985 7013464	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Ethylbenzene	CBZd 5	Ave	+++++ 460069	+++++ 1047293	28881 2180137	57047 4814622	163820 11387475	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
m-Xylene & p-Xylene	CBZd 5	Ave	+++++ 732692	21489 1645607	44937 3391621	91330 7590625	264124 17159700	+++++ 2.00	0.0800 4.00	0.160 8.00	0.320 16.0	0.800 32.0
Nonane	CBZd 5	Ave	+++++ 226817	+++++ 522325	+++++ 1071726	23707 2357236	77180 5410526	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Bromoform	CBZd 5	Ave	+++++ 231700	+++++ 519364	12426 1242561	24877 2962933	78091 7282003	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Styrene	CBZd 5	Lin2	+++++ 251682	+++++ 582294	13105 1202773	29948 2614749	87934 6065693	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
o-Xylene	CBZd 5	Ave	+++++ 382815	11527 842502	25134 1690681	51012 3605048	141114 8412759	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,1,2,2-Tetrachloroethane	CBZd 5	Ave	+++++ 349990	+++++ 754733	24765 1582520	48338 3371779	129877 8021948	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2,3-Trichloropropane	CBZd 5	Ave	+++++ 76006	+++++ 166974	5508 344685	10959 735160	28017 1810615	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Isopropylbenzene	CBZd 5	Ave	+++++ 486566	+++++ 1100652	+++++ 2277155	57843 4953618	169405 11862116	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Propylbenzene	CBZd 5	Ave	+++++ 125088	+++++ 289338	+++++ 615504	13541 1356728	43255 +++++	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 +++++

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19093-1 Analy Batch No.: 39100

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/16/2020 08:03 Calibration End Date: 04/16/2020 18:34 Calibration ID: 2402

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
2-Chlorotoluene	CBZd 5	Ave	+++++ 127493	4101 280556	8616 583613	16633 1244997	46403 +++++	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
4-Ethyltoluene	CBZd 5	Ave	+++++ 499000	+++++ 1132867	26839 2375918	57542 5088580	169671 12406817	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,3,5-Trimethylbenzene	CBZd 5	Lin2	+++++ 190751	+++++ 433130	11014 904990	23921 1964746	67506 4841639	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Alpha Methyl Styrene	CBZd 5	Ave	+++++ 179584	+++++ 443556	+++++ 973148	16922 2176590	54434 5590147	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Decane	CBZd 5	Ave	+++++ 327523	+++++ 717310	+++++ 1470997	37409 3073620	118068 6994366	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
tert-Butylbenzene	CBZd 5	Ave	+++++ 433573	+++++ 969278	25018 2046472	55542 4558596	152906 11074891	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2,4-Trimethylbenzene	CBZd 5	Ave	+++++ 445105	+++++ 985232	24449 2062691	54541 4478253	158811 10416980	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
sec-Butylbenzene	CBZd 5	Ave	+++++ 643662	+++++ 1475251	34412 3126528	72529 6891856	219395 +++++	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
1,3-Dichlorobenzene	CBZd 5	Ave	5959 283133	10335 629940	18378 1356116	38711 3004392	102440 7154411	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Benzyl chloride	CBZd 5	Ave	+++++ 327220	+++++ 825637	+++++ 1848688	32222 4188193	103438 10405686	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,4-Dichlorobenzene	CBZd 5	Ave	6009 268919	8725 607350	17088 1310298	36362 2882638	96899 7027867	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
4-Isopropyltoluene	CBZd 5	Ave	+++++ 493467	+++++ 1110692	24534 2319630	56604 5134104	171643 12159293	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2,3-Trimethylbenzene	CBZd 5	Ave	+++++ 443228	+++++ 985784	24711 2023027	56349 4335946	158427 10341419	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Indane	CBZd 5	Ave	+++++ 408235	+++++ 928811	23433 1995144	47145 4466008	141703 9985831	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2-Dichlorobenzene	CBZd 5	Ave	6145 285474	9529 637250	19261 1372447	38362 3089904	104846 7182845	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Indene	CBZd 5	Ave	+++++ 340988	+++++ 815409	+++++ 1783350	36789 4034180	113484 9089023	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Butylbenzene	CBZd 5	Lin2	+++++ 598461	+++++ 1318318	+++++ 2773990	71377 6141265	213054 12406646	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Undecane	CBZd 5	Ave	+++++ 363019	+++++ 820319	+++++ 1744807	36177 3932182	116661 8272907	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,2-Dibromo-3-Chloropropane	CBZd 5	Lin1	+++++ 140139	+++++ 350953	6262 +++++	13954 +++++	46467 +++++	+++++ 1.00	+++++ 2.00	0.0800 +++++	0.160 +++++	0.400 +++++
1,2,4,5-Tetramethylbenzene	CBZd 5	Lin1	+++++ 439273	+++++ 1018930	16411 2284296	40538 5440106	137380 +++++	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
Dodecane	CBZd 5	Ave	+++++ 324734	+++++ 754126	+++++ 1706215	+++++ 4031518	91576 8228196	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19093-1 Analy Batch No.: 39100

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/16/2020 08:03 Calibration End Date: 04/16/2020 18:34 Calibration ID: 2402

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
1,2,4-Trichlorobenzene	CBZd 5	Ave	+++++ 187269	+++++ 443828	9135 1103007	19442 +++++	59652 +++++	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 +++++	0.400 +++++
Naphthalene	CBZd 5	Ave	+++++ 437919	10799 1046543	17814 2490239	39332 5514360	145411 +++++	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
Hexachlorobutadiene	CBZd 5	Ave	+++++ 232795	8921 521395	17658 1136376	34869 2819544	81851 6122575	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2,3-Trichlorobenzene	CBZd 5	Ave	+++++ 201572	6664 441687	11573 1012803	24824 2361537	67722 5464745	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Methylnaphthalene	CBZd 5	Ave	+++++ 100153	+++++ 247741	+++++ 799266	+++++ 1960658	23571 3840400	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
1-Methylnaphthalene	CBZd 5	Ave	+++++ 157067	+++++ 332364	+++++ 926074	+++++ 2166654	42808 3851176	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
4-Bromofluorobenzene (Surr)	CBZd 5	Ave	888610 860143	829134 938760	804495 966038	803145 1001617	819799 1140026	4.00 4.00	4.00 4.00	4.00 4.00	4.00 4.00	4.00 4.00

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD
Lin2 = Linear 1/conc^2 ISTD
QuaF = Quadratic ISTD forced zero

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19093-1 Analy Batch No.: 39100

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/16/2020 08:03 Calibration End Date: 04/16/2020 18:34 Calibration ID: 2402

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 140-39100/3	HD16IC01.D
Level 2	IC 140-39100/4	HD16IC02.D
Level 3	IC 140-39100/5	HD16IC03.D
Level 4	IC 140-39100/6	HD16IC04.D
Level 5	IC 140-39100/7	HD16IC05.D
Level 6	IC 140-39100/8	HD16IC06.D
Level 7	ICIS 140-39100/9	HD16IC07.D
Level 8	IC 140-39100/11	HD16IC08.D
Level 9	IC 140-39100/13	HD16C09.D
Level 10	IC 140-39100/15	HD16IC10.D

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
Chlorodifluoromethane	+++++	9.1						50				
Propene	+++++	+++++	+++++	+++++	+++++	-0.5						50
Dichlorodifluoromethane	+++++	4.7						50				
Chloromethane	+++++	+++++	25.9						50			
1,2-Dichloro-1,1,2,2-tetrafluoroethane	+++++	6.1						50				
Vinyl chloride	32.1						50					
Butane	+++++	20.5						50				
1,3-Butadiene	+++++	12.4						50				
Bromomethane	+++++	+++++	13.2						50			
Chloroethane	+++++	+++++	16.3						50			
Ethanol	+++++	+++++	+++++	3.0						50		
Vinyl bromide	+++++	+++++	9.7						50			
2-Methylbutane	+++++	20.9						50				
Trichlorofluoromethane	16.6						50					

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19093-1 Analy Batch No.: 39100

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/16/2020 08:03 Calibration End Date: 04/16/2020 18:34 Calibration ID: 2402

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
Acrolein	+++++	+++++	+++++	+++++	2.0						50	
Acetonitrile	+++++	+++++	+++++	-5.4						50		
Acetone	+++++	+++++	+++++	17.8						80		
Pentane	+++++	+++++	+++++	4.3						50		
Isopropyl alcohol	8.4						50					
Ethyl ether	+++++	+++++	4.1						50			
1,1-Dichloroethene	13.0						50					
tert-Butyl alcohol	+++++	+++++	+++++	-7.8						50		
Acrylonitrile	+++++	+++++	+++++	0.9						50		
1,1,2-Trichloro-1,2,2-trifluoroethane	+++++	8.4						50				
Methylene Chloride	+++++	+++++	+++++	+++++	-1.6						80	
3-Chloropropene	+++++	+++++	16.1						50			
Carbon disulfide	+++++	+++++	1.9						50			
trans-1,2-Dichloroethene	+++++	1.0						50				
2-Methylpentane	+++++	-0.8						50				
Methyl tert-butyl ether	+++++	+++++	-10.3						50			
1,1-Dichloroethane	+++++	9.1						50				
Vinyl acetate	+++++	+++++	-17.8						50			
2-Butanone (MEK)	+++++	+++++	-12.6						50			
Hexane	+++++	-3.2						50				
cis-1,2-Dichloroethene	+++++	4.0						50				

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19093-1 Analy Batch No.: 39100

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/16/2020 08:03 Calibration End Date: 04/16/2020 18:34 Calibration ID: 2402

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
Ethyl acetate	+++++	+++++	-4.5						50			
Chloroform	+++++	0.6						50				
Tetrahydrofuran	+++++	+++++	-5.0						50			
1,1,1-Trichloroethane	6.0						50					
1,2-Dichloroethane	+++++	-0.8						50				
1-Butanol	+++++	+++++	+++++	-28.5						50		
Cyclohexane	+++++	+++++	-10.8						50			
Benzene	+++++	5.8						50				
Carbon tetrachloride	12.0						50					
2,3-Dimethylpentane	+++++	+++++	-10.3						50			
Thiophene	+++++	+++++	-8.4						50			
2,2,4-Trimethylpentane	+++++	-1.3						50				
Heptane	+++++	+++++	-16.6						50			
1,2-Dichloropropane	+++++	+++++	2.6						50			
Trichloroethene	17.3						50					
Dibromomethane	+++++	8.7						50				
Bromodichloromethane	+++++	-7.4						50				
1,4-Dioxane	+++++	+++++	+++++	-14.2						50		
Methyl methacrylate	+++++	+++++	-21.2						50			
Methylcyclohexane	+++++	36.4						50				
4-Methyl-2-pentanone (MIBK)	+++++	-22.2						50				

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19093-1 Analy Batch No.: 39100

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/16/2020 08:03 Calibration End Date: 04/16/2020 18:34 Calibration ID: 2402

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
cis-1,3-Dichloropropene	+++++	-22.6						50				
trans-1,3-Dichloropropene	+++++	-18.4						50				
Toluene	+++++	+++++	3.3						50			
1,1,2-Trichloroethane	+++++	-1.6						50				
2-Hexanone	+++++	+++++	+++++	-39.7						50		
Octane	+++++	+++++	+++++	-28.3						50		
Dibromochloromethane	+++++	-19.3						50				
1,2-Dibromoethane (EDB)	+++++	-12.1						50				
Tetrachloroethene	7.7						50					
Chlorobenzene	+++++	6.5						50				
Ethylbenzene	+++++	+++++	-18.4						50			
m-Xylene & p-Xylene	+++++	-23.7						50				
Nonane	+++++	+++++	+++++	-28.9						50		
Bromoform	+++++	+++++	-33.4						50			
Styrene	+++++	+++++	2.9						50			
o-Xylene	+++++	-21.0						50				
1,1,2,2-Tetrachloroethane	+++++	+++++	-7.6						50			
1,2,3-Trichloropropane	+++++	+++++	-6.8						50			
Isopropylbenzene	+++++	+++++	+++++	-20.2						50		
Propylbenzene	+++++	+++++	+++++	-27.5 +++++						50		
2-Chlorotoluene	+++++	-16.8		+++++				50				

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19093-1 Analy Batch No.: 39100

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/16/2020 08:03 Calibration End Date: 04/16/2020 18:34 Calibration ID: 2402

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
4-Ethyltoluene	+++++	+++++	-27.9						50			
1,3,5-Trimethylbenzene	+++++	+++++	2.9						50			
Alpha Methyl Styrene	+++++	+++++	+++++	-40.7						50		
Decane	+++++	+++++	+++++	-20.1						50		
tert-Butylbenzene	+++++	+++++	-24.7						50			
1,2,4-Trimethylbenzene	+++++	+++++	-26.1						50			
sec-Butylbenzene	+++++	+++++	-27.8	+++++					50			
1,3-Dichlorobenzene	-2.8						50					
Benzyl chloride	+++++	+++++	+++++	-40.0						50		
1,4-Dichlorobenzene	3.1						50					
4-Isopropyltoluene	+++++	+++++	-32.9						50			
1,2,3-Trimethylbenzene	+++++	+++++	-25.0						50			
Indane	+++++	+++++	-24.6						50			
1,2-Dichlorobenzene	-0.6						50					
Indene	+++++	+++++	+++++	-30.9						50		
Butylbenzene	+++++	+++++	+++++	-1.7						50		
Undecane	+++++	+++++	+++++	-31.4						50		
1,2-Dibromo-3-Chloropropane	+++++	+++++ +++++	17.6 +++++	+++++					50			
1,2,4,5-Tetramethylbenzene	+++++	+++++	30.6	+++++					50			
Dodecane	+++++	+++++	+++++	+++++	-28.8						50	
1,2,4-Trichlorobenzene	+++++	+++++	-33.5 +++++	+++++					50			

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19093-1 Analy Batch No.: 39100

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/16/2020 08:03 Calibration End Date: 04/16/2020 18:34 Calibration ID: 2402

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
Naphthalene	+++++	-34.0		+++++				80				
Hexachlorobutadiene	+++++	-10.0						50				
1,2,3-Trichlorobenzene	+++++	-17.2						50				
2-Methylnaphthalene	+++++	+++++	+++++	+++++	-53.9						80	
1-Methylnaphthalene	+++++	+++++	+++++	+++++	-32.5						80	

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC01.D
Lims ID: IC L1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 16-Apr-2020 08:03:30 ALS Bottle#: 1 Worklist Smp#: 3
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0015239-003
Misc. Info.: 297345
Operator ID: HMT Instrument ID: MH
Sublist: chrom-MH_TO15*sub7

Method: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\MH_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 21-Apr-2020 10:48:16 Calib Date: 16-Apr-2020 18:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC10.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX0331

First Level Reviewer: tajh Date: 16-Apr-2020 12:16:35

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.582	8.589	-0.007	97	254723	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.784	10.792	-0.008	95	1740764	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.570	15.572	-0.002	89	1373487	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr	95	17.219	17.222	-0.003	88	888610	4.00	3.86	
6 Chlorodifluoromethane	51	3.548	3.546	0.002	69	5795	0.0200	0.0216	
7 Propene	41	3.553	3.555	-0.002	99	61509	0.0200	-0.1040	
8 Dichlorodifluoromethane	85	3.610	3.606	0.004	99	10211	0.0200	0.0247	
9 Chloromethane	52	3.776	3.779	-0.003	55	1401	0.0200	0.0311	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.786	3.785	0.001	96	6921	0.0200	0.0251	
11 Acetaldehyde	44	3.936	3.930	0.006	99	9951	0.1000	0.1983	
12 Vinyl chloride	62	3.946	3.945	0.001	69	3905	0.0200	0.0264	
13 Butane	43	4.029	4.028	0.001	83	5363	0.0200	0.0306	
14 Butadiene	54	4.029	4.028	0.001	66	2771	0.0200	0.0276	
15 Bromomethane	94	4.334	4.337	-0.003	93	4051	0.0200	0.0260	
16 Chloroethane	64	4.479	4.473	0.005	77	2250	0.0200	0.0358	
17 Ethanol	31	4.572	4.571	0.001	98	5996	0.1000	0.1320	
18 Vinyl bromide	106	4.763	4.763	0.000	95	3891	0.0200	0.0277	
19 2-Methylbutane	43	4.804	4.806	-0.002	83	5036	0.0200	0.0392	
20 Trichlorofluoromethane	101	5.021	5.022	-0.001	99	8638	0.0200	0.0233	
21 Acrolein	56	5.037	5.037	0.000	46	1934	0.0200	0.0446	
22 Acetonitrile	40	5.238	5.116	0.122	59	734	0.0200	0.0147	
23 Acetone	58	5.166	5.154	0.012	97	5466	0.0600	0.0954	
24 Pentane	72	5.228	5.236	-0.008	97	414	0.0200	0.0258	
25 Isopropyl alcohol	45	5.254	5.241	0.013	93	11269	0.0600	0.0650	
26 Ethyl ether	31	5.429	5.408	0.021	85	2795	0.0200	0.0252	
27 1,1-Dichloroethene	96	5.709	5.716	-0.007	95	2804	0.0200	0.0226	
28 Acrylonitrile	53	5.833	5.826	0.007	74	2474	0.0200	0.0263	
29 2-Methyl-2-propanol	59	5.864	5.832	0.032	95	4477	0.0200	0.0217	
30 1,1,2-Trichloro-1,2,2-trif	101	5.884	5.889	-0.005	91	7634	0.0200	0.0266	
31 Methylene Chloride	84	6.060	6.063	-0.003	98	68713	0.0200	-0.002048	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.076	6.076	0.000	92	3666	0.0200	0.0350	
33 Carbon disulfide	76	6.210	6.218	-0.008	98	8516	0.0200	0.0229	
34 trans-1,2-Dichloroethene	96	6.846	6.859	-0.013	92	2820	0.0200	0.0230	
35 2-Methylpentane	43	6.871	6.873	-0.002	91	5962	0.0200	0.0246	
36 Methyl tert-butyl ether	73	7.011	6.989	0.022	94	5977	0.0200	0.0209	
37 1,1-Dichloroethane	63	7.269	7.280	-0.011	99	6149	0.0200	0.0252	
38 Vinyl acetate	43	7.388	7.385	0.003	97	6358	0.0200	0.0209	
39 2-Butanone (MEK)	72	7.843	7.832	0.011	86	1290	0.0200	0.0238	
40 Hexane	56	7.848	7.848	0.000	70	2148	0.0200	0.0234	
41 Isopropyl ether	45	8.029	8.011	0.018	93	8402	0.0200	0.0214	
42 cis-1,2-Dichloroethene	96	8.246	8.259	-0.013	96	2881	0.0200	0.0225	
43 Ethyl acetate	43	8.453	8.446	0.007	97	6511	0.0200	0.0237	
44 Chloroform	83	8.587	8.601	-0.014	32	7551	0.0200	0.0251	
45 Tert-butyl ethyl ether	59	8.706	8.688	0.018	94	7187	0.0200	0.0210	
46 Tetrahydrofuran	42	9.037	9.005	0.032	83	3037	0.0200	0.0243	
47 1,1,1-Trichloroethane	97	9.611	9.623	-0.012	96	5936	0.0200	0.0212	
48 1,2-Dichloroethane	62	9.724	9.736	-0.012	95	4554	0.0200	0.0247	
49 n-Butanol	31	10.231	10.201	0.030	45	794	0.0200	0.0203	
50 Cyclohexane	69	10.221	10.229	-0.008	66	956	0.0200	0.0191	
51 Benzene	78	10.215	10.231	-0.016	97	9757	0.0200	0.0258	
52 Carbon tetrachloride	117	10.246	10.253	-0.007	87	6123	0.0200	0.0224	
53 2,3-Dimethylpentane	71	10.339	10.351	-0.012	80	1266	0.0200	0.0176	
54 Thiophene	84	10.500	10.512	-0.012	93	4765	0.0200	0.0225	
55 Isooctane	57	11.001	11.005	-0.004	97	13396	0.0200	0.0233	
56 n-Heptane	71	11.389	11.392	-0.003	88	2191	0.0200	0.0206	
57 1,2-Dichloropropane	63	11.476	11.478	-0.002	91	4038	0.0200	0.0260	
58 Trichloroethene	130	11.513	11.514	-0.001	90	3632	0.0200	0.0235	
59 Dibromomethane	93	11.595	11.602	-0.007	92	4667	0.0200	0.0246	
60 Dichlorobromomethane	83	11.740	11.748	-0.008	95	6385	0.0200	0.0215	
61 1,4-Dioxane	88	11.797	11.770	0.027	54	866	0.0200	0.0157	
62 Methyl methacrylate	41	11.843	11.847	-0.004	89	2379	0.0200	0.0170	
63 Methylcyclohexane	83	12.288	12.288	0.000	89	3362	0.0200	0.0421	
64 4-Methyl-2-pentanone (MIBK	43	12.727	12.710	0.017	82	4711	0.0200	0.0175	
65 cis-1,3-Dichloropropene	75	12.763	12.764	-0.001	95	3914	0.0200	0.0195	
66 trans-1,3-Dichloropropene	75	13.466	13.471	-0.005	96	2962	0.0200	0.0181	
67 Toluene	91	13.590	13.589	0.001	93	8047	0.0200	0.0369	
68 1,1,2-Trichloroethane	83	13.668	13.670	-0.002	96	3590	0.0200	0.0249	
69 2-Hexanone	58	14.066	14.059	0.007	92	1638	0.0200	0.0130	
70 n-Octane	85	14.288	14.287	0.001	88	1375	0.0200	0.0129	
71 Chlorodibromomethane	129	14.371	14.374	-0.003	92	4653	0.0200	0.0183	
72 Ethylene Dibromide	107	14.665	14.668	-0.003	92	5139	0.0200	0.0216	
73 Tetrachloroethene	129	14.738	14.739	-0.001	89	3169	0.0200	0.0215	
74 Chlorobenzene	112	15.616	15.622	-0.006	93	7787	0.0200	0.0244	
75 2,3-Dimethylheptane	43	15.642	15.643	-0.001	92	7962	0.0200	0.0221	
76 Ethylbenzene	91	15.911	15.911	0.000	97	9752	0.0200	0.0197	
77 m-Xylene & p-Xylene	91	16.076	16.076	0.000	97	13152	0.0400	0.0348	
78 n-Nonane	57	16.500	16.497	0.003	88	3002	0.0200	0.0123	
79 Bromoform	173	16.531	16.527	0.004	50	3507	0.0200	0.0134	
80 Styrene	104	16.541	16.541	0.000	94	3545	0.0200	0.0441	
81 o-Xylene	91	16.598	16.601	-0.003	98	6472	0.0200	0.0165	
82 1,1,2,2-Tetrachloroethane	83	16.929	16.930	-0.001	94	7449	0.0200	0.0198	
83 1,2,3-Trichloropropane	110	17.084	17.089	-0.005	95	1720	0.0200	0.0208	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	17.193	17.192	0.001	53	9365	0.0200	0.0177	
85 N-Propylbenzene	120	17.756	17.756	0.000	98	2157	0.0200	0.0158	
86 2-Chlorotoluene	126	17.792	17.794	-0.002	97	2530	0.0200	0.0191	
87 4-Ethyltoluene	105	17.911	17.912	-0.001	97	7197	0.0200	0.0138	
88 1,3,5-Trimethylbenzene	120	17.989	17.992	-0.003	91	2953	0.0200	0.0398	
89 Alpha Methyl Styrene	118	18.237	18.237	0.000	81	2333	0.0200	0.0112	
90 n-Decane	57	18.299	18.299	0.000	92	3516	0.0200	0.0103	
91 tert-Butylbenzene	119	18.438	18.439	-0.001	87	6765	0.0200	0.0145	
92 1,2,4-Trimethylbenzene	105	18.454	18.454	0.000	92	6071	0.0200	0.0131	
93 sec-Butylbenzene	105	18.717	18.722	-0.005	97	8811	0.0200	0.0132	
94 1,3-Dichlorobenzene	146	18.738	18.739	-0.001	93	5959	0.0200	0.0194	
95 Benzyl chloride	91	18.816	18.817	-0.001	79	4628	0.0200	0.0118	
96 1,4-Dichlorobenzene	146	18.826	18.829	-0.003	94	6009	0.0200	0.0206	
97 4-Isopropyltoluene	119	18.893	18.894	-0.001	93	6143	0.0200	0.0120	
98 1,2,3-Trimethylbenzene	105	18.945	18.948	-0.003	98	6577	0.0200	0.0142	
99 Butylcyclohexane	83	19.002	19.005	-0.003	89	5109	0.0200	0.0129	
101 2,3-Dihydroindene	117	19.203	19.204	-0.001	84	6074	0.0200	0.0139	
100 1,2-Dichlorobenzene	146	19.203	19.205	-0.002	89	6145	0.0200	0.0199	
102 Indene	116	19.338	19.340	-0.002	79	4114	0.0200	0.0106	
103 n-Butylbenzene	91	19.348	19.346	0.002	95	7706	0.0200	0.0442	
104 Undecane	57	19.668	19.672	-0.004	85	3302	0.0200	0.008582	
105 1,2-Dibromo-3-Chloropropan	157	19.834	19.833	0.001	82	1855	0.0200	0.0647	
106 1,2,4,5-Tetramethylbenzene	119	20.128	20.128	0.000	95	4324	0.0200	0.0805	
107 Dodecane	57	20.764	20.765	-0.001	87	2551	0.0200	0.006719	
108 1,2,4-Trichlorobenzene	180	20.966	20.966	0.000	90	3355	0.0200	0.0174	
109 Naphthalene	128	21.110	21.111	-0.001	98	6254	0.0200	0.0142	
110 Hexachlorobutadiene	225	21.338	21.338	0.000	87	5391	0.0200	0.0203	
111 1,2,3-Trichlorobenzene	180	21.405	21.410	-0.005	92	4316	0.0200	0.0200	
112 2-Methylnaphthalene	142	22.066	22.062	0.004	93	1509	0.0200	0.0100	
113 1-Methylnaphthalene	142	22.191	22.191	0.000	92	2313	0.0200	0.0123	
A 115 C8 Range	1	14.278	(14.247-14.309)		0	27177	0.0200	0.0240	
S 116 Xylenes, Total	100				0		0.0600	0.0513	
S 117 1,2-Dichloroethene, Total	1				0		0.0400	0.0456	

Reagents:

40L1-3DQP_00026	Amount Added: 50.00	Units: mL	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

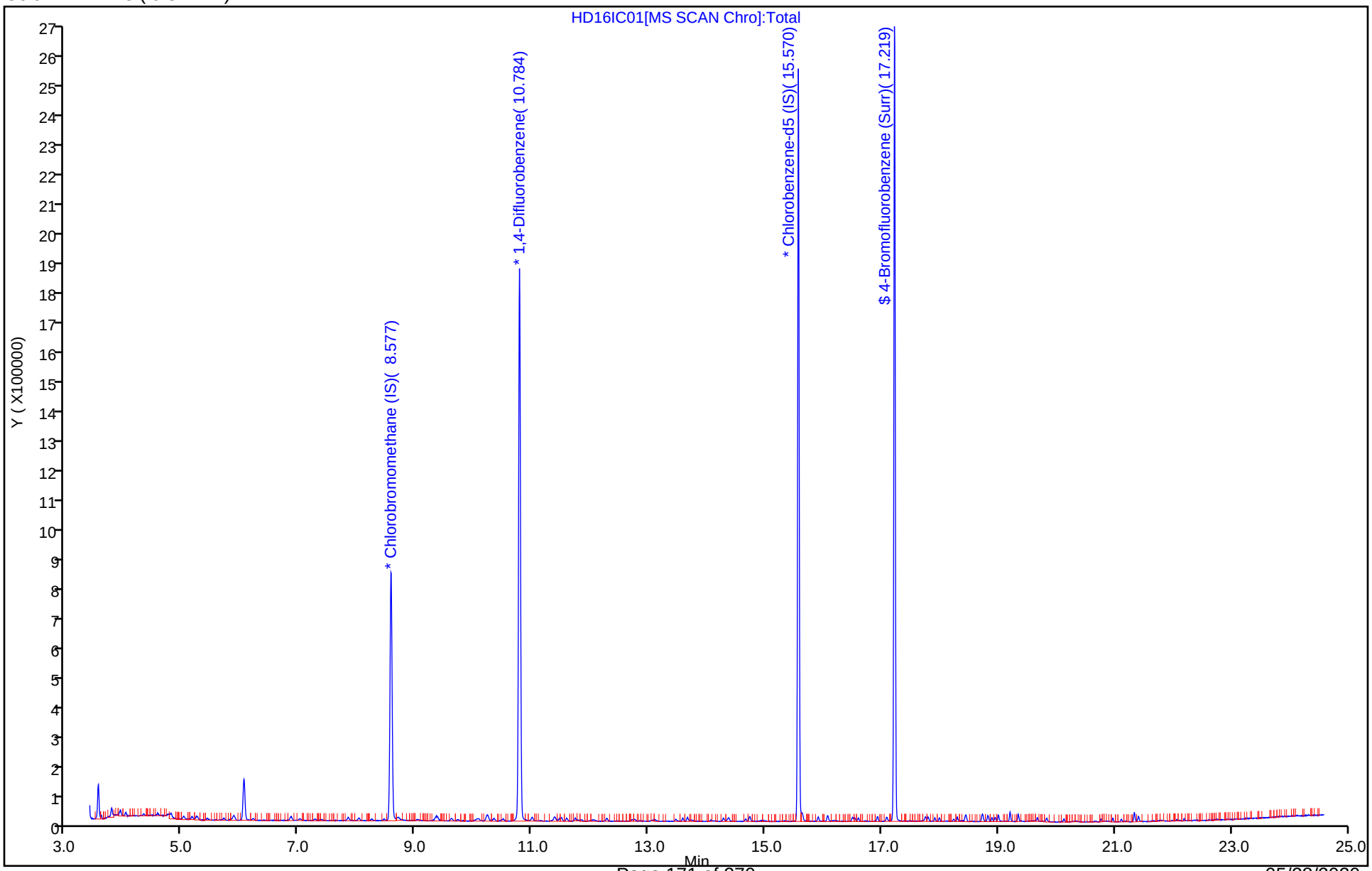
Report Date: 21-Apr-2020 10:48:17 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC01.D

Injection Date:	16-Apr-2020 08:03:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	IC L1			Worklist Smp#:	3
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

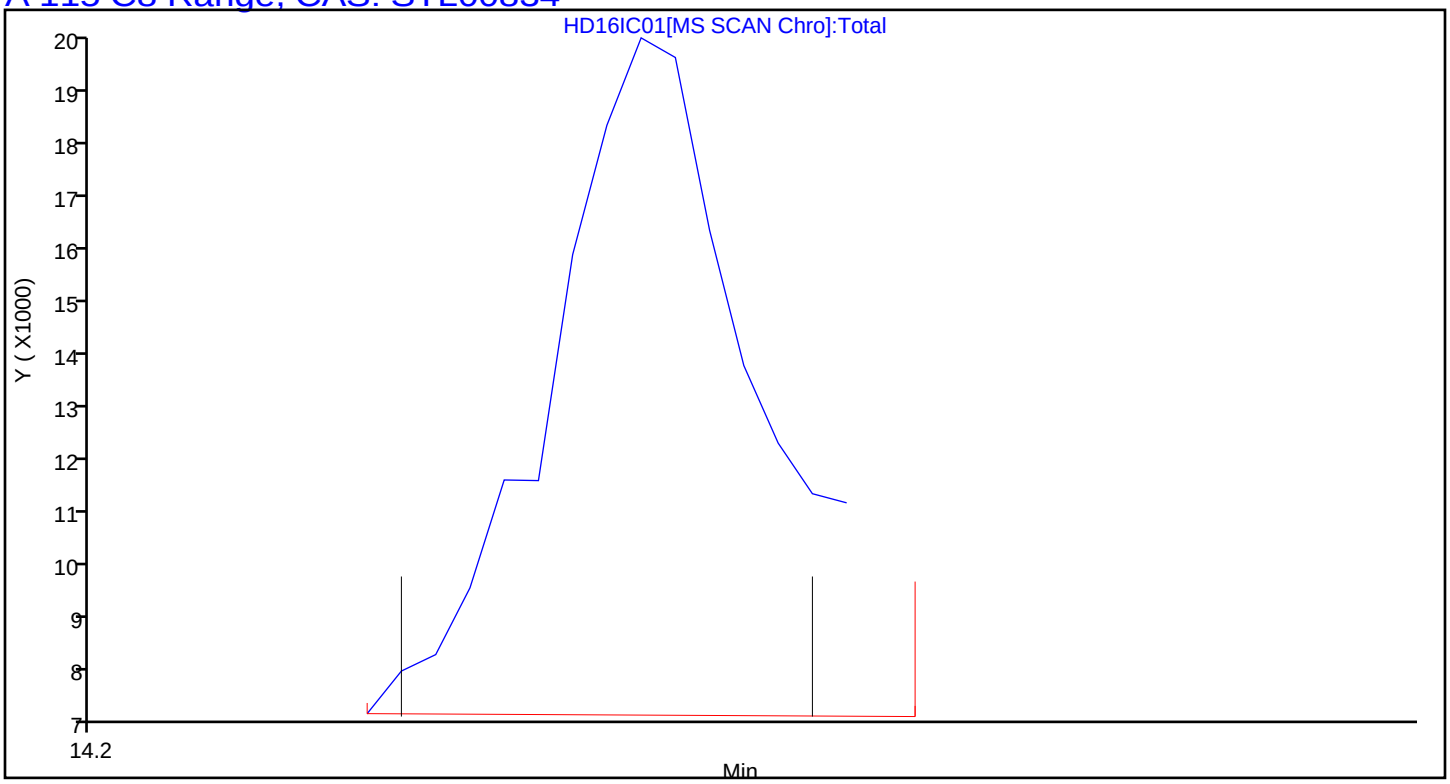


Report Date: 21-Apr-2020 10:48:17 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC01.D				
Injection Date:	16-Apr-2020 08:03:30	Instrument ID:	MH		
Lims ID:	IC L1				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	1	Worklist Smp#:	3
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 115 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC02.D
Lims ID: IC L2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 16-Apr-2020 08:55:30 ALS Bottle#: 1 Worklist Smp#: 4
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0015239-004
Misc. Info.: 297345
Operator ID: HMT Instrument ID: MH
Sublist: chrom-MH_TO15*sub7

Method: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\MH_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 21-Apr-2020 10:48:21 Calib Date: 16-Apr-2020 18:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC10.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX0331

First Level Reviewer: tajh Date: 20-Apr-2020 10:42:41

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.587	8.589	-0.002	96	239083	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.789	10.792	-0.003	95	1612037	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.570	15.572	-0.002	90	1279385	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr	95	17.219	17.222	-0.004	88	829134	4.00	3.86	
6 Chlorodifluoromethane	51	3.543	3.546	-0.003	96	11004	0.0400	0.0436	
7 Propene	41	3.558	3.555	0.003	98	58784	0.0400	-0.0921	
8 Dichlorodifluoromethane	85	3.605	3.606	-0.001	100	16241	0.0400	0.0419	
9 Chloromethane	52	3.781	3.779	0.002	56	2364	0.0400	0.0559	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.791	3.785	0.006	94	10973	0.0400	0.0424	
11 Acetaldehyde	44	3.936	3.930	0.006	99	15241	0.2000	0.3235	
12 Vinyl chloride	62	3.946	3.945	0.001	76	6102	0.0400	0.0440	
14 Butadiene	54	4.029	4.028	0.001	72	4237	0.0400	0.0449	
13 Butane	43	4.034	4.028	0.006	85	7920	0.0400	0.0482	
15 Bromomethane	94	4.339	4.337	0.002	96	7204	0.0400	0.0492	
16 Chloroethane	64	4.478	4.473	0.005	96	2842	0.0400	0.0481	
17 Ethanol	31	4.571	4.571	0.000	93	6449	0.2000	0.1513	
18 Vinyl bromide	106	4.763	4.763	0.000	97	5814	0.0400	0.0441	
19 2-Methylbutane	43	4.809	4.806	0.003	87	5834	0.0400	0.0484	
20 Trichlorofluoromethane	101	5.021	5.022	-0.001	97	14717	0.0400	0.0423	
21 Acrolein	56	5.037	5.037	0.000	82	2493	0.0400	0.0613	
23 Acetone	58	5.176	5.154	0.022	98	7470	0.1200	0.1389	
24 Pentane	72	5.233	5.236	-0.003	95	593	0.0400	0.0394	
22 Acetonitrile	40	5.099	5.116	-0.017	61	1859	0.0400	0.0397	
25 Isopropyl alcohol	45	5.259	5.241	0.018	95	17322	0.1200	0.1065	
26 Ethyl ether	31	5.424	5.408	0.016	94	4481	0.0400	0.0430	
27 1,1-Dichloroethene	96	5.719	5.716	0.003	98	5039	0.0400	0.0433	
28 Acrylonitrile	53	5.817	5.826	-0.009	79	3442	0.0400	0.0390	
29 2-Methyl-2-propanol	59	5.864	5.832	0.032	96	7099	0.0400	0.0367	
30 1,1,2-Trichloro-1,2,2-trif	101	5.889	5.889	0.000	90	11699	0.0400	0.0434	
31 Methylene Chloride	84	6.060	6.063	-0.003	98	65438	0.0400	0.006995	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.075	6.076	-0.001	26	5068	0.0400	0.0515	
33 Carbon disulfide	76	6.215	6.218	-0.003	97	14043	0.0400	0.0402	
34 trans-1,2-Dichloroethene	96	6.861	6.859	0.002	96	4645	0.0400	0.0404	
35 2-Methylpentane	43	6.866	6.873	-0.007	92	9022	0.0400	0.0397	
36 Methyl tert-butyl ether	73	7.011	6.989	0.022	96	9732	0.0400	0.0362	
37 1,1-Dichloroethane	63	7.280	7.280	0.000	98	9995	0.0400	0.0437	
38 Vinyl acetate	43	7.383	7.385	-0.002	98	8602	0.0400	0.0302	
39 2-Butanone (MEK)	72	7.853	7.832	0.021	88	2031	0.0400	0.0399	
40 Hexane	56	7.848	7.848	0.000	66	3330	0.0400	0.0387	
41 Isopropyl ether	45	8.024	8.011	0.013	92	12793	0.0400	0.0346	
42 cis-1,2-Dichloroethene	96	8.262	8.259	0.003	93	4992	0.0400	0.0416	
43 Ethyl acetate	43	8.463	8.446	0.017	98	9614	0.0400	0.0373	
44 Chloroform	83	8.592	8.601	-0.009	28	11359	0.0400	0.0402	
45 Tert-butyl ethyl ether	59	8.706	8.688	0.018	97	11498	0.0400	0.0358	
46 Tetrahydrofuran	42	9.027	9.005	0.022	89	4518	0.0400	0.0385	
47 1,1,1-Trichloroethane	97	9.616	9.623	-0.007	96	10895	0.0400	0.0415	
48 1,2-Dichloroethane	62	9.730	9.736	-0.006	95	6770	0.0400	0.0397	
51 Benzene	78	10.226	10.231	-0.005	97	14835	0.0400	0.0423	
50 Cyclohexane	69	10.236	10.229	0.007	68	1840	0.0400	0.0396	
49 n-Butanol	31	10.226	10.201	0.025	51	1260	0.0400	0.0347	
52 Carbon tetrachloride	117	10.246	10.253	-0.007	95	9885	0.0400	0.0390	
53 2,3-Dimethylpentane	71	10.345	10.351	-0.006	85	2487	0.0400	0.0374	
54 Thiophene	84	10.515	10.512	0.003	97	7140	0.0400	0.0363	
55 Isooctane	57	11.006	11.005	0.001	97	21037	0.0400	0.0395	
56 n-Heptane	71	11.378	11.392	-0.014	85	3036	0.0400	0.0308	
57 1,2-Dichloropropane	63	11.476	11.478	-0.002	92	6155	0.0400	0.0428	
58 Trichloroethene	130	11.513	11.514	-0.001	93	5518	0.0400	0.0385	
59 Dibromomethane	93	11.600	11.602	-0.002	89	7636	0.0400	0.0435	
60 Dichlorobromomethane	83	11.745	11.748	-0.003	98	10187	0.0400	0.0371	
61 1,4-Dioxane	88	11.787	11.770	0.017	91	1354	0.0400	0.0265	
62 Methyl methacrylate	41	11.843	11.847	-0.004	90	3974	0.0400	0.0307	
63 Methylcyclohexane	83	12.283	12.288	-0.005	88	5640	0.0400	0.0546	
64 4-Methyl-2-pentanone (MIBK	43	12.727	12.710	0.017	96	7769	0.0400	0.0311	
65 cis-1,3-Dichloropropene	75	12.758	12.764	-0.006	96	5756	0.0400	0.0310	
66 trans-1,3-Dichloropropene	75	13.466	13.471	-0.005	97	4983	0.0400	0.0327	
67 Toluene	91	13.590	13.589	0.001	94	12414	0.0400	0.0499	
68 1,1,2-Trichloroethane	83	13.668	13.670	-0.002	96	5283	0.0400	0.0394	
69 2-Hexanone	58	14.071	14.059	0.012	90	2622	0.0400	0.0224	
70 n-Octane	85	14.283	14.287	-0.004	87	2755	0.0400	0.0277	
71 Chlorodibromomethane	129	14.371	14.374	-0.003	91	7655	0.0400	0.0323	
72 Ethylene Dibromide	107	14.665	14.668	-0.003	91	7797	0.0400	0.0352	
73 Tetrachloroethene	129	14.738	14.739	-0.001	91	5826	0.0400	0.0425	
74 Chlorobenzene	112	15.621	15.622	-0.001	94	12688	0.0400	0.0426	
75 2,3-Dimethylheptane	43	15.642	15.643	-0.001	94	13002	0.0400	0.0387	
76 Ethylbenzene	91	15.911	15.911	0.000	99	15394	0.0400	0.0333	
77 m-Xylene & p-Xylene	91	16.076	16.076	0.000	97	21489	0.0800	0.0610	
78 n-Nonane	57	16.495	16.497	-0.002	84	4970	0.0400	0.0219	
79 Bromoform	173	16.526	16.527	-0.001	89	5336	0.0400	0.0219	
80 Styrene	104	16.536	16.541	-0.005	98	6698	0.0400	0.0566	
81 o-Xylene	91	16.598	16.601	-0.003	99	11527	0.0400	0.0316	
82 1,1,2,2-Tetrachloroethane	83	16.929	16.930	-0.001	94	12222	0.0400	0.0349	
83 1,2,3-Trichloropropane	110	17.089	17.089	0.000	97	2694	0.0400	0.0349	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	17.193	17.192	0.001	95	14622	0.0400	0.0297	
85 N-Propylbenzene	120	17.751	17.756	-0.005	98	3198	0.0400	0.0252	
86 2-Chlorotoluene	126	17.797	17.794	0.003	97	4101	0.0400	0.0333	
87 4-Ethyltoluene	105	17.911	17.912	-0.001	97	12492	0.0400	0.0257	
88 1,3,5-Trimethylbenzene	120	17.994	17.992	0.002	91	4975	0.0400	0.0506	
89 Alpha Methyl Styrene	118	18.237	18.237	0.000	85	3715	0.0400	0.0191	
90 n-Decane	57	18.299	18.299	0.000	94	7134	0.0400	0.0224	
91 tert-Butylbenzene	119	18.438	18.439	-0.001	85	11036	0.0400	0.0255	
92 1,2,4-Trimethylbenzene	105	18.449	18.454	-0.005	96	10946	0.0400	0.0253	
93 sec-Butylbenzene	105	18.717	18.722	-0.005	97	15780	0.0400	0.0254	
94 1,3-Dichlorobenzene	146	18.738	18.739	-0.001	97	10335	0.0400	0.0362	
95 Benzyl chloride	91	18.816	18.817	-0.001	84	7540	0.0400	0.0207	
96 1,4-Dichlorobenzene	146	18.826	18.829	-0.003	88	8725	0.0400	0.0322	
97 4-Isopropyltoluene	119	18.893	18.894	-0.001	94	10711	0.0400	0.0224	
98 1,2,3-Trimethylbenzene	105	18.945	18.948	-0.003	98	11293	0.0400	0.0262	
99 Butylcyclohexane	83	19.002	19.005	-0.003	88	9783	0.0400	0.0265	
100 1,2-Dichlorobenzene	146	19.203	19.205	-0.002	90	9529	0.0400	0.0331	
101 2,3-Dihydroindene	117	19.203	19.204	-0.001	86	10341	0.0400	0.0255	
102 Indene	116	19.338	19.340	-0.002	83	7472	0.0400	0.0206	
103 n-Butylbenzene	91	19.343	19.346	-0.003	94	14058	0.0400	0.0552	
104 Undecane	57	19.668	19.672	-0.004	92	5756	0.0400	0.0161	
105 1,2-Dibromo-3-Chloropropan	157	19.834	19.833	0.001	81	2654	0.0400	0.0704	
106 1,2,4,5-Tetramethylbenzene	119	20.128	20.128	0.000	96	7681	0.0400	0.0872	
107 Dodecane	57	20.764	20.765	-0.001	89	4357	0.0400	0.0123	
108 1,2,4-Trichlorobenzene	180	20.966	20.966	0.000	91	4652	0.0400	0.0260	
109 Naphthalene	128	21.110	21.111	-0.001	98	10799	0.0400	0.0264	
110 Hexachlorobutadiene	225	21.338	21.338	0.000	87	8921	0.0400	0.0360	
111 1,2,3-Trichlorobenzene	180	21.410	21.410	0.000	93	6664	0.0400	0.0331	
112 2-Methylnaphthalene	142	22.066	22.062	0.004	86	1785	0.0400	0.0127	
113 1-Methylnaphthalene	142	22.190	22.191	-0.001	97	3783	0.0400	0.0217	
A 115 C8 Range	1	14.288	(14.257-14.319)		0	50714	0.0400	0.0483	
S 116 Xylenes, Total	100				0		0.1200	0.0926	
S 117 1,2-Dichloroethene, Total	1				0		0.0800	0.0820	

Reagents:

40L1-3DQP_00026	Amount Added: 100.00	Units: mL	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

Report Date: 21-Apr-2020 10:48:22 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC02.D

Injection Date:	16-Apr-2020 08:55:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	IC L2			Worklist Smp#:	4
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

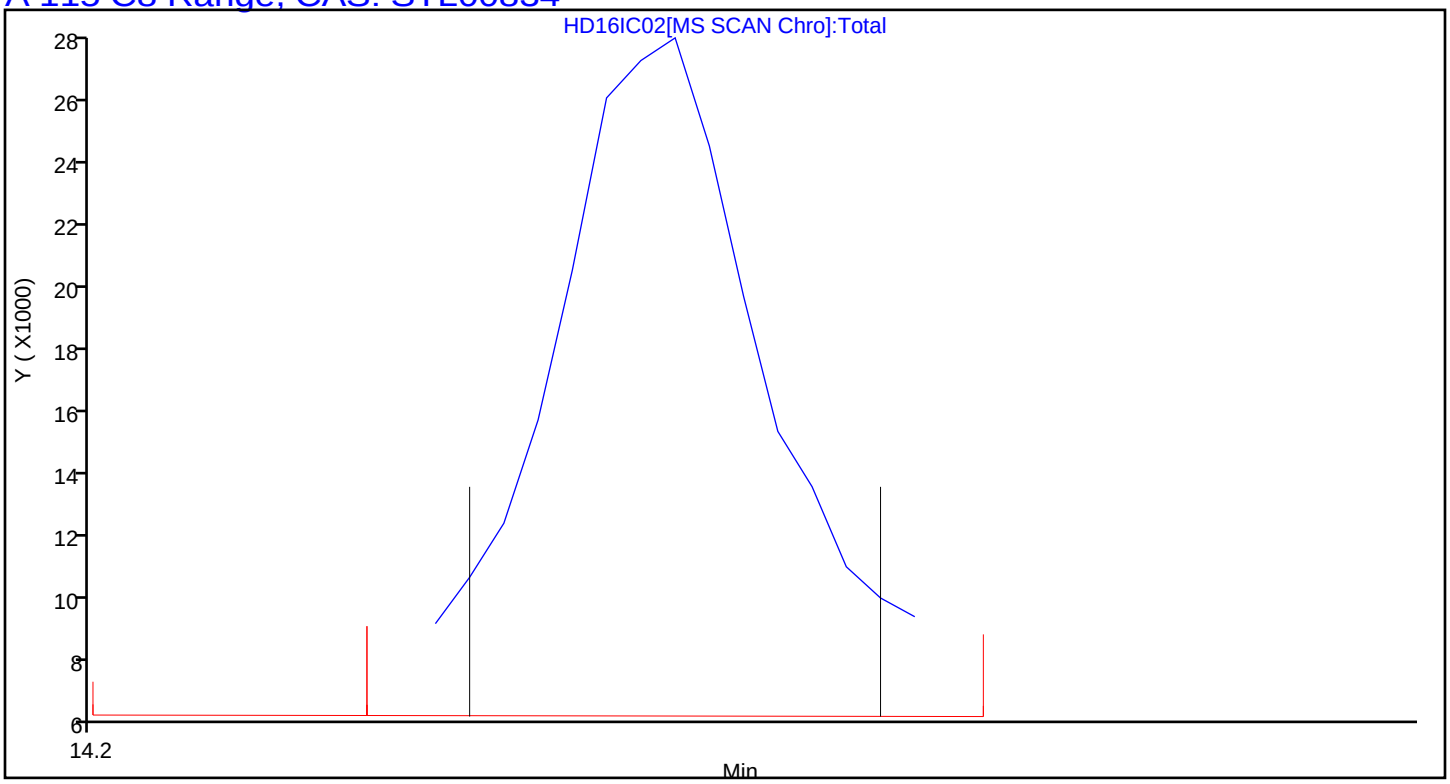


Report Date: 21-Apr-2020 10:48:22 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC02.D				
Injection Date:	16-Apr-2020 08:55:30	Instrument ID:	MH		
Lims ID:	IC L2				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	1	Worklist Smp#:	4
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 115 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC03.D
Lims ID: IC L3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 16-Apr-2020 09:47:30 ALS Bottle#: 1 Worklist Smp#: 5
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0015239-005
Misc. Info.: 297344
Operator ID: HMT Instrument ID: MH
Sublist: chrom-MH_TO15*sub7

Method: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\MH_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 21-Apr-2020 10:48:26 Calib Date: 16-Apr-2020 18:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC10.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX0331

First Level Reviewer: tajh Date: 20-Apr-2020 12:48:25

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.582	8.589	-0.007	96	224413	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.789	10.792	-0.003	95	1564476	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.570	15.572	-0.002	89	1224759	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr	95	17.219	17.222	-0.003	88	804495	4.00	3.92	
6 Chlorodifluoromethane	51	3.548	3.546	0.002	97	20123	0.0800	0.0850	
7 Propene	41	3.553	3.555	-0.002	99	60711	0.0800	-0.0254	
8 Dichlorodifluoromethane	85	3.605	3.606	-0.001	99	31396	0.0800	0.0862	
9 Chloromethane	52	3.776	3.779	-0.003	59	3999	0.0800	0.1008	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.781	3.785	-0.004	96	19667	0.0800	0.0810	
11 Acetaldehyde	44	3.931	3.930	0.001	99	20986	0.4000	0.4746	
12 Vinyl chloride	62	3.946	3.945	0.001	98	10835	0.0800	0.0832	
14 Butadiene	54	4.034	4.028	0.006	74	7251	0.0800	0.0819	
13 Butane	43	4.029	4.028	0.001	84	13595	0.0800	0.0881	
15 Bromomethane	94	4.339	4.337	0.002	97	12442	0.0800	0.0905	
16 Chloroethane	64	4.468	4.473	-0.005	93	5154	0.0800	0.0930	
17 Ethanol	31	4.572	4.571	0.001	94	17868	0.4000	0.4465	
18 Vinyl bromide	106	4.763	4.763	0.000	97	10864	0.0800	0.0878	
19 2-Methylbutane	43	4.804	4.806	-0.002	89	10223	0.0800	0.0903	
20 Trichlorofluoromethane	101	5.021	5.022	-0.001	97	27087	0.0800	0.0830	
21 Acrolein	56	5.037	5.037	0.000	34	2618	0.0800	0.0686	
22 Acetonitrile	40	5.099	5.116	-0.017	95	4096	0.0800	0.0932	
23 Acetone	58	5.161	5.154	0.007	99	14577	0.2400	0.2887	
24 Pentane	72	5.233	5.236	-0.003	96	1127	0.0800	0.0798	
25 Isopropyl alcohol	45	5.254	5.241	0.013	93	35039	0.2400	0.2297	
26 Ethyl ether	31	5.414	5.408	0.006	94	8140	0.0800	0.0833	
27 1,1-Dichloroethene	96	5.719	5.716	0.003	98	8847	0.0800	0.0809	
28 Acrylonitrile	53	5.822	5.826	-0.004	96	6786	0.0800	0.0819	
29 2-Methyl-2-propanol	59	5.848	5.832	0.016	96	14273	0.0800	0.0787	
30 1,1,2-Trichloro-1,2,2-trif	101	5.890	5.889	0.001	91	21519	0.0800	0.0850	
31 Methylene Chloride	84	6.060	6.063	-0.003	97	67049	0.0800	0.0644	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.070	6.076	-0.006	97	8576	0.0800	0.0929	
33 Carbon disulfide	76	6.220	6.218	0.002	97	26707	0.0800	0.0815	
34 trans-1,2-Dichloroethene	96	6.856	6.859	-0.003	96	8457	0.0800	0.0784	
35 2-Methylpentane	43	6.872	6.873	-0.001	94	16726	0.0800	0.0784	
36 Methyl tert-butyl ether	73	7.006	6.989	0.017	96	18109	0.0800	0.0718	
37 1,1-Dichloroethane	63	7.280	7.280	0.000	100	18939	0.0800	0.0881	
38 Vinyl acetate	43	7.383	7.385	-0.002	99	17617	0.0800	0.0658	
40 Hexane	56	7.843	7.848	-0.005	69	6554	0.0800	0.0812	
39 2-Butanone (MEK)	72	7.833	7.832	0.001	90	3340	0.0800	0.0699	
41 Isopropyl ether	45	8.019	8.011	0.008	96	24281	0.0800	0.0701	
42 cis-1,2-Dichloroethene	96	8.251	8.259	-0.008	93	8768	0.0800	0.0778	
43 Ethyl acetate	43	8.448	8.446	0.002	99	18488	0.0800	0.0764	
44 Chloroform	83	8.593	8.601	-0.008	29	22975	0.0800	0.0867	
45 Tert-butyl ethyl ether	59	8.701	8.688	0.013	97	21735	0.0800	0.0720	
46 Tetrahydrofuran	42	9.027	9.005	0.022	91	8369	0.0800	0.0760	
47 1,1,1-Trichloroethane	97	9.621	9.623	-0.002	96	19125	0.0800	0.0775	
48 1,2-Dichloroethane	62	9.730	9.736	-0.006	96	13517	0.0800	0.0816	
49 n-Butanol	31	10.215	10.201	0.014	70	2186	0.0800	0.0621	
51 Benzene	78	10.231	10.231	0.000	97	26805	0.0800	0.0788	
50 Cyclohexane	69	10.231	10.229	0.002	70	3214	0.0800	0.0714	
52 Carbon tetrachloride	117	10.246	10.253	-0.007	92	18653	0.0800	0.0759	
53 2,3-Dimethylpentane	71	10.355	10.351	0.004	86	4636	0.0800	0.0718	
54 Thiophene	84	10.515	10.512	0.003	95	13982	0.0800	0.0733	
55 Isooctane	57	11.006	11.005	0.001	99	38853	0.0800	0.0751	
56 n-Heptane	71	11.399	11.392	0.007	86	6380	0.0800	0.0667	
57 1,2-Dichloropropane	63	11.471	11.478	-0.007	89	11447	0.0800	0.0821	
58 Trichloroethene	130	11.508	11.514	-0.006	89	10774	0.0800	0.0774	
59 Dibromomethane	93	11.601	11.602	-0.001	88	13194	0.0800	0.0774	
60 Dichlorobromomethane	83	11.740	11.748	-0.008	97	19747	0.0800	0.0740	
61 1,4-Dioxane	88	11.781	11.770	0.011	92	3527	0.0800	0.0712	
62 Methyl methacrylate	41	11.849	11.847	0.002	92	7912	0.0800	0.0630	
63 Methylcyclohexane	83	12.283	12.288	-0.005	87	10759	0.0800	0.0815	
64 4-Methyl-2-pentanone (MIBK	43	12.717	12.710	0.007	97	14642	0.0800	0.0604	
65 cis-1,3-Dichloropropene	75	12.763	12.764	-0.001	95	11596	0.0800	0.0643	
66 trans-1,3-Dichloropropene	75	13.472	13.471	0.001	96	9453	0.0800	0.0647	
67 Toluene	91	13.585	13.589	-0.004	91	23680	0.0800	0.0827	
68 1,1,2-Trichloroethane	83	13.668	13.670	-0.002	94	10378	0.0800	0.0808	
69 2-Hexanone	58	14.061	14.059	0.002	91	5643	0.0800	0.0503	
70 n-Octane	85	14.288	14.287	0.001	88	5305	0.0800	0.0558	
71 Chlorodibromomethane	129	14.371	14.374	-0.003	96	15744	0.0800	0.0694	
72 Ethylene Dibromide	107	14.665	14.668	-0.003	97	15125	0.0800	0.0713	
73 Tetrachloroethene	129	14.738	14.739	-0.001	91	9877	0.0800	0.0753	
74 Chlorobenzene	112	15.622	15.622	0.000	94	23105	0.0800	0.0811	
75 2,3-Dimethylheptane	43	15.642	15.643	-0.001	94	25111	0.0800	0.0780	
76 Ethylbenzene	91	15.911	15.911	0.000	99	28881	0.0800	0.0653	
77 m-Xylene & p-Xylene	91	16.076	16.076	0.000	98	44937	0.1600	0.1333	
78 n-Nonane	57	16.495	16.497	-0.002	87	10925	0.0800	0.0503	
79 Bromoform	173	16.521	16.527	-0.006	88	12426	0.0800	0.0533	
80 Styrene	104	16.542	16.541	0.001	98	13105	0.0800	0.0823	
81 o-Xylene	91	16.598	16.601	-0.003	97	25134	0.0800	0.0719	
82 1,1,2,2-Tetrachloroethane	83	16.929	16.930	-0.001	97	24765	0.0800	0.0739	
83 1,2,3-Trichloropropane	110	17.089	17.089	0.000	96	5508	0.0800	0.0746	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	17.193	17.192	0.001	98	28293	0.0800	0.0600	
85 N-Propylbenzene	120	17.756	17.756	0.000	98	6666	0.0800	0.0548	
86 2-Chlorotoluene	126	17.797	17.794	0.003	96	8616	0.0800	0.0730	
87 4-Ethyltoluene	105	17.911	17.912	-0.001	98	26839	0.0800	0.0577	
88 1,3,5-Trimethylbenzene	120	17.989	17.992	-0.003	91	11014	0.0800	0.0823	
89 Alpha Methyl Styrene	118	18.237	18.237	0.000	87	7791	0.0800	0.0419	
90 n-Decane	57	18.299	18.299	0.000	92	15877	0.0800	0.0521	
91 tert-Butylbenzene	119	18.438	18.439	-0.001	86	25018	0.0800	0.0603	
92 1,2,4-Trimethylbenzene	105	18.454	18.454	0.000	95	24449	0.0800	0.0591	
93 sec-Butylbenzene	105	18.723	18.722	0.001	98	34412	0.0800	0.0578	
94 1,3-Dichlorobenzene	146	18.738	18.739	-0.001	97	18378	0.0800	0.0673	
95 Benzyl chloride	91	18.816	18.817	-0.001	94	15176	0.0800	0.0434	
96 1,4-Dichlorobenzene	146	18.831	18.829	0.002	91	17088	0.0800	0.0658	
97 4-Isopropyltoluene	119	18.893	18.894	-0.001	96	24534	0.0800	0.0537	
98 1,2,3-Trimethylbenzene	105	18.950	18.948	0.002	99	24711	0.0800	0.0600	
99 Butylcyclohexane	83	19.007	19.005	0.002	90	22388	0.0800	0.0634	
100 1,2-Dichlorobenzene	146	19.203	19.205	-0.002	87	19261	0.0800	0.0699	
101 2,3-Dihydroindene	117	19.203	19.204	-0.001	89	23433	0.0800	0.0603	
102 Indene	116	19.338	19.340	-0.002	88	15495	0.0800	0.0447	
103 n-Butylbenzene	91	19.343	19.346	-0.003	95	31649	0.0800	0.0857	
104 Undecane	57	19.674	19.672	0.002	91	13620	0.0800	0.0397	
105 1,2-Dibromo-3-Chloropropan	157	19.829	19.833	-0.004	83	6262	0.0800	0.0941	
106 1,2,4,5-Tetramethylbenzene	119	20.128	20.128	0.000	94	16411	0.0800	0.1045	
107 Dodecane	57	20.764	20.765	-0.001	88	9680	0.0800	0.0286	
108 1,2,4-Trichlorobenzene	180	20.966	20.966	0.000	93	9135	0.0800	0.0532	
109 Naphthalene	128	21.110	21.111	-0.001	98	17814	0.0800	0.0455	
110 Hexachlorobutadiene	225	21.338	21.338	0.000	86	17658	0.0800	0.0744	
111 1,2,3-Trichlorobenzene	180	21.405	21.410	-0.005	91	11573	0.0800	0.0601	
112 2-Methylnaphthalene	142	22.061	22.062	-0.001	95	1755	0.0800	0.0130	
113 1-Methylnaphthalene	142	22.191	22.191	0.000	93	3519	0.0800	0.0211	
A 115 C8 Range	1	14.286	(14.247-14.340)		0	65706	0.0800	0.0645	
S 116 Xylenes, Total	100				0		0.2400	0.2052	
S 117 1,2-Dichloroethene, Total	1				0		0.1600	0.1562	

Reagents:

40L4DQP_00018	Amount Added: 100.00	Units: mL	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

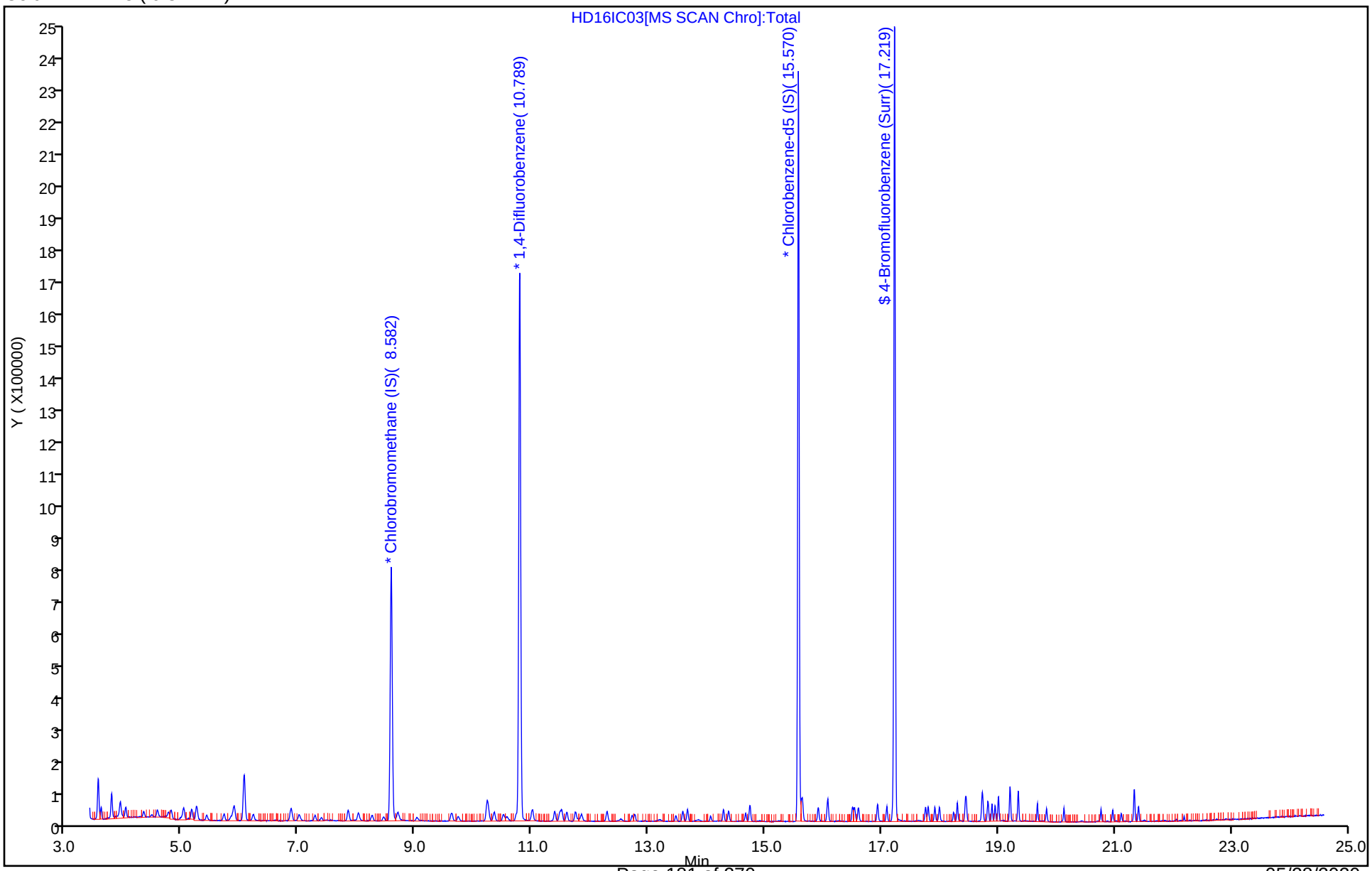
Report Date: 21-Apr-2020 10:48:27 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC03.D

Injection Date:	16-Apr-2020 09:47:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	IC L3			Worklist Smp#:	5
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

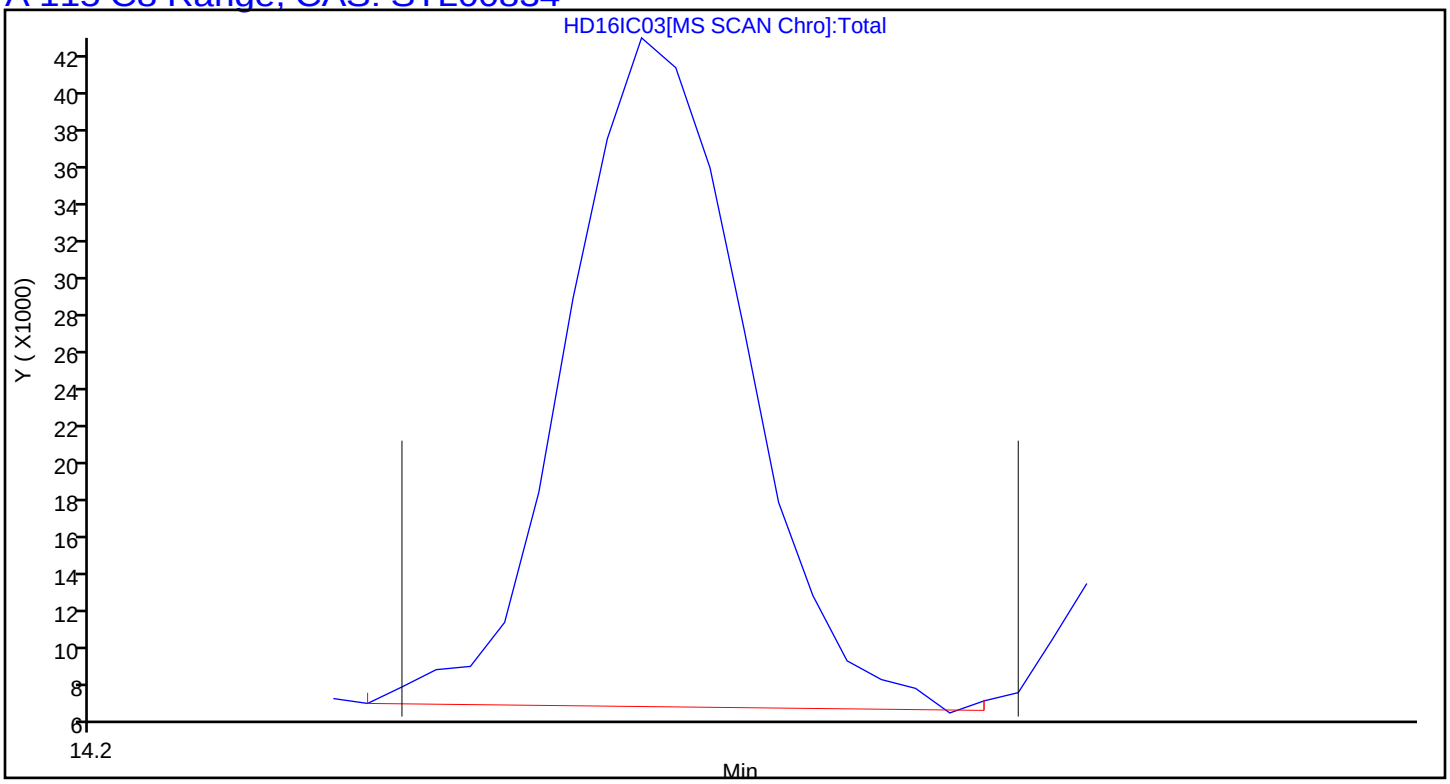


05/28/2020

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC03.D				
Injection Date:	16-Apr-2020 09:47:30	Instrument ID:	MH		
Lims ID:	IC L3				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	1	Worklist Smp#:	5
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 115 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC04.D
Lims ID: IC L4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 16-Apr-2020 10:40:30 ALS Bottle#: 2 Worklist Smp#: 6
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0015239-006
Misc. Info.: 297344
Operator ID: HMT Instrument ID: MH
Sublist: chrom-MH_TO15*sub7

Method: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\MH_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 21-Apr-2020 10:48:31 Calib Date: 16-Apr-2020 18:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC10.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX0331

First Level Reviewer: tajh Date: 16-Apr-2020 12:06:48

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.582	8.589	-0.007	96	209895	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.789	10.792	-0.003	96	1458934	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.570	15.572	-0.002	89	1176311	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr	95	17.218	17.222	-0.004	88	803145	4.00	4.07	
6 Chlorodifluoromethane	51	3.548	3.546	0.002	97	35814	0.1600	0.1617	
7 Propene	41	3.558	3.555	0.003	99	64620	0.1600	0.0756	
8 Dichlorodifluoromethane	85	3.605	3.606	-0.001	99	56371	0.1600	0.1655	
9 Chloromethane	52	3.781	3.779	0.002	52	6920	0.1600	0.1864	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.786	3.785	0.001	94	38003	0.1600	0.1674	
11 Acetaldehyde	44	3.931	3.930	0.001	95	38170	0.8000	0.9230	
12 Vinyl chloride	62	3.946	3.945	0.001	99	19486	0.1600	0.1600	
13 Butane	43	4.024	4.028	-0.004	85	23955	0.1600	0.1660	
14 Butadiene	54	4.029	4.028	0.001	74	13332	0.1600	0.1611	
15 Bromomethane	94	4.339	4.337	0.002	97	21476	0.1600	0.1671	
16 Chloroethane	64	4.478	4.473	0.005	95	9049	0.1600	0.1746	
17 Ethanol	31	4.566	4.571	-0.005	93	30833	0.8000	0.8238	
18 Vinyl bromide	106	4.763	4.763	0.000	97	18795	0.1600	0.1624	
19 2-Methylbutane	43	4.804	4.806	-0.002	93	17975	0.1600	0.1698	
20 Trichlorofluoromethane	101	5.021	5.022	-0.001	97	49414	0.1600	0.1618	
21 Acrolein	56	5.037	5.037	0.000	82	5955	0.1600	0.1668	
22 Acetonitrile	40	5.099	5.116	-0.017	95	6221	0.1600	0.1514	
23 Acetone	58	5.155	5.154	0.001	98	26699	0.4800	0.5654	
24 Pentane	72	5.238	5.236	0.002	75	2204	0.1600	0.1669	
25 Isopropyl alcohol	45	5.238	5.241	-0.003	86	63906	0.4800	0.4483	
26 Ethyl ether	31	5.409	5.408	0.001	93	14622	0.1600	0.1600	
27 1,1-Dichloroethene	96	5.719	5.716	0.003	97	15910	0.1600	0.1556	
28 Acrylonitrile	53	5.827	5.826	0.001	95	12503	0.1600	0.1614	
29 2-Methyl-2-propanol	59	5.838	5.832	0.006	96	25034	0.1600	0.1475	
30 1,1,2-Trichloro-1,2,2-trif	101	5.889	5.889	0.000	91	38557	0.1600	0.1628	
31 Methylene Chloride	84	6.060	6.063	-0.003	98	71189	0.1600	0.1569	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.075	6.076	-0.001	49	14877	0.1600	0.1723	
33 Carbon disulfide	76	6.220	6.218	0.002	100	49948	0.1600	0.1631	
34 trans-1,2-Dichloroethene	96	6.861	6.859	0.002	97	16038	0.1600	0.1589	
35 2-Methylpentane	43	6.877	6.873	0.004	92	31198	0.1600	0.1563	
36 Methyl tert-butyl ether	73	6.995	6.989	0.006	95	35919	0.1600	0.1522	
37 1,1-Dichloroethane	63	7.275	7.280	-0.005	100	32795	0.1600	0.1632	
38 Vinyl acetate	43	7.388	7.385	0.003	99	34018	0.1600	0.1358	
39 2-Butanone (MEK)	72	7.828	7.832	-0.004	93	7039	0.1600	0.1575	
40 Hexane	56	7.848	7.848	0.000	74	11424	0.1600	0.1513	
41 Isopropyl ether	45	8.014	8.011	0.003	94	48337	0.1600	0.1491	
42 cis-1,2-Dichloroethene	96	8.262	8.259	0.003	98	15922	0.1600	0.1511	
43 Ethyl acetate	43	8.448	8.446	0.002	99	34352	0.1600	0.1517	
44 Chloroform	83	8.603	8.601	0.002	97	40055	0.1600	0.1616	
45 Tert-butyl ethyl ether	59	8.685	8.688	-0.003	98	41879	0.1600	0.1484	
46 Tetrahydrofuran	42	9.011	9.005	0.006	90	15601	0.1600	0.1514	
47 1,1,1-Trichloroethane	97	9.621	9.623	-0.002	96	36041	0.1600	0.1562	
48 1,2-Dichloroethane	62	9.735	9.736	-0.001	96	24301	0.1600	0.1574	
49 n-Butanol	31	10.210	10.201	0.009	51	3754	0.1600	0.1144	
50 Cyclohexane	69	10.231	10.229	0.002	66	5387	0.1600	0.1282	
51 Benzene	78	10.226	10.231	-0.005	97	50090	0.1600	0.1578	
52 Carbon tetrachloride	117	10.252	10.253	-0.001	93	35971	0.1600	0.1570	
53 2,3-Dimethylpentane	71	10.350	10.351	-0.001	87	8770	0.1600	0.1456	
54 Thiophene	84	10.505	10.512	-0.007	96	26308	0.1600	0.1479	
55 Isooctane	57	11.001	11.005	-0.004	97	71678	0.1600	0.1486	
56 n-Heptane	71	11.389	11.392	-0.003	89	12061	0.1600	0.1352	
57 1,2-Dichloropropane	63	11.476	11.478	-0.002	92	20019	0.1600	0.1539	
58 Trichloroethene	130	11.513	11.514	-0.001	90	19415	0.1600	0.1497	
59 Dibromomethane	93	11.595	11.602	-0.007	88	24181	0.1600	0.1522	
60 Dichlorobromomethane	83	11.750	11.748	0.002	97	37024	0.1600	0.1488	
61 1,4-Dioxane	88	11.776	11.770	0.006	94	6344	0.1600	0.1372	
62 Methyl methacrylate	41	11.854	11.847	0.007	92	15453	0.1600	0.1320	
63 Methylcyclohexane	83	12.288	12.288	0.000	94	20710	0.1600	0.1397	
64 4-Methyl-2-pentanone (MIBK	43	12.712	12.710	0.002	98	29615	0.1600	0.1311	
65 cis-1,3-Dichloropropene	75	12.763	12.764	-0.001	96	23365	0.1600	0.1389	
66 trans-1,3-Dichloropropene	75	13.471	13.471	0.000	97	18209	0.1600	0.1298	
67 Toluene	91	13.585	13.589	-0.004	93	45801	0.1600	0.1493	
68 1,1,2-Trichloroethane	83	13.668	13.670	-0.002	96	20097	0.1600	0.1629	
69 2-Hexanone	58	14.066	14.059	0.007	90	10396	0.1600	0.0965	
70 n-Octane	85	14.283	14.287	-0.004	90	10479	0.1600	0.1147	
71 Chlorodibromomethane	129	14.371	14.374	-0.003	96	30600	0.1600	0.1404	
72 Ethylene Dibromide	107	14.670	14.668	0.002	98	29274	0.1600	0.1436	
73 Tetrachloroethene	129	14.738	14.739	-0.001	88	19473	0.1600	0.1545	
74 Chlorobenzene	112	15.621	15.622	-0.001	92	41596	0.1600	0.1519	
75 2,3-Dimethylheptane	43	15.642	15.643	-0.001	94	48441	0.1600	0.1567	
76 Ethylbenzene	91	15.911	15.911	0.000	99	57047	0.1600	0.1343	
77 m-Xylene & p-Xylene	91	16.076	16.076	0.000	99	91330	0.3200	0.2820	
78 n-Nonane	57	16.500	16.497	0.003	91	23707	0.1600	0.1137	
79 Bromoform	173	16.526	16.527	-0.001	88	24877	0.1600	0.1111	
80 Styrene	104	16.541	16.541	0.000	98	29948	0.1600	0.1519	
81 o-Xylene	91	16.598	16.601	-0.003	98	51012	0.1600	0.1520	
82 1,1,2,2-Tetrachloroethane	83	16.929	16.930	-0.001	98	48338	0.1600	0.1502	
83 1,2,3-Trichloropropane	110	17.084	17.089	-0.005	96	10959	0.1600	0.1545	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	17.193	17.192	0.001	98	57843	0.1600	0.1277	
85 N-Propylbenzene	120	17.756	17.756	0.000	99	13541	0.1600	0.1160	
86 2-Chlorotoluene	126	17.797	17.794	0.003	97	16633	0.1600	0.1468	
87 4-Ethyltoluene	105	17.911	17.912	-0.001	98	57542	0.1600	0.1288	
88 1,3,5-Trimethylbenzene	120	17.994	17.992	0.002	91	23921	0.1600	0.1527	
89 Alpha Methyl Styrene	118	18.237	18.237	0.000	87	16922	0.1600	0.0948	
90 n-Decane	57	18.299	18.299	0.000	92	37409	0.1600	0.1279	
91 tert-Butylbenzene	119	18.438	18.439	-0.001	88	55542	0.1600	0.1393	
92 1,2,4-Trimethylbenzene	105	18.454	18.454	0.000	97	54541	0.1600	0.1373	
93 sec-Butylbenzene	105	18.722	18.722	0.000	97	72529	0.1600	0.1268	
94 1,3-Dichlorobenzene	146	18.738	18.739	-0.001	96	38711	0.1600	0.1475	
95 Benzyl chloride	91	18.815	18.817	-0.002	96	32222	0.1600	0.0960	
96 1,4-Dichlorobenzene	146	18.826	18.829	-0.003	92	36362	0.1600	0.1457	
97 4-Isopropyltoluene	119	18.893	18.894	-0.001	97	56604	0.1600	0.1289	
98 1,2,3-Trimethylbenzene	105	18.945	18.948	-0.003	99	56349	0.1600	0.1424	
99 Butylcyclohexane	83	19.002	19.005	-0.003	91	49688	0.1600	0.1466	
100 1,2-Dichlorobenzene	146	19.203	19.205	-0.002	86	38362	0.1600	0.1450	
101 2,3-Dihydroindene	117	19.203	19.204	-0.001	89	47145	0.1600	0.1264	
102 Indene	116	19.343	19.340	0.003	91	36789	0.1600	0.1105	
103 n-Butylbenzene	91	19.343	19.346	-0.003	96	71377	0.1600	0.1573	
104 Undecane	57	19.673	19.672	0.001	93	36177	0.1600	0.1098	
105 1,2-Dibromo-3-Chloropropan	157	19.834	19.833	0.001	84	13954	0.1600	0.1468	
106 1,2,4,5-Tetramethylbenzene	119	20.128	20.128	0.000	96	40538	0.1600	0.1538	
107 Dodecane	57	20.764	20.765	-0.001	89	25133	0.1600	0.0773	
108 1,2,4-Trichlorobenzene	180	20.966	20.966	0.000	91	19442	0.1600	0.1180	
109 Naphthalene	128	21.110	21.111	-0.001	98	39332	0.1600	0.1046	
110 Hexachlorobutadiene	225	21.338	21.338	0.000	89	34869	0.1600	0.1531	
111 1,2,3-Trichlorobenzene	180	21.410	21.410	0.000	91	24824	0.1600	0.1341	
112 2-Methylnaphthalene	142	22.061	22.062	-0.001	94	3392	0.1600	0.0262	
113 1-Methylnaphthalene	142	22.190	22.191	-0.001	95	8251	0.1600	0.0514	
A 115 C8 Range	1	14.280	(14.247-14.329)		0	131899	0.1600	0.1389	
S 116 Xylenes, Total	100				0		0.4800	0.4340	
S 117 1,2-Dichloroethene, Total	1				0		0.3200	0.3100	

Reagents:

40L4DQP_00018	Amount Added: 200.00	Units: mL	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

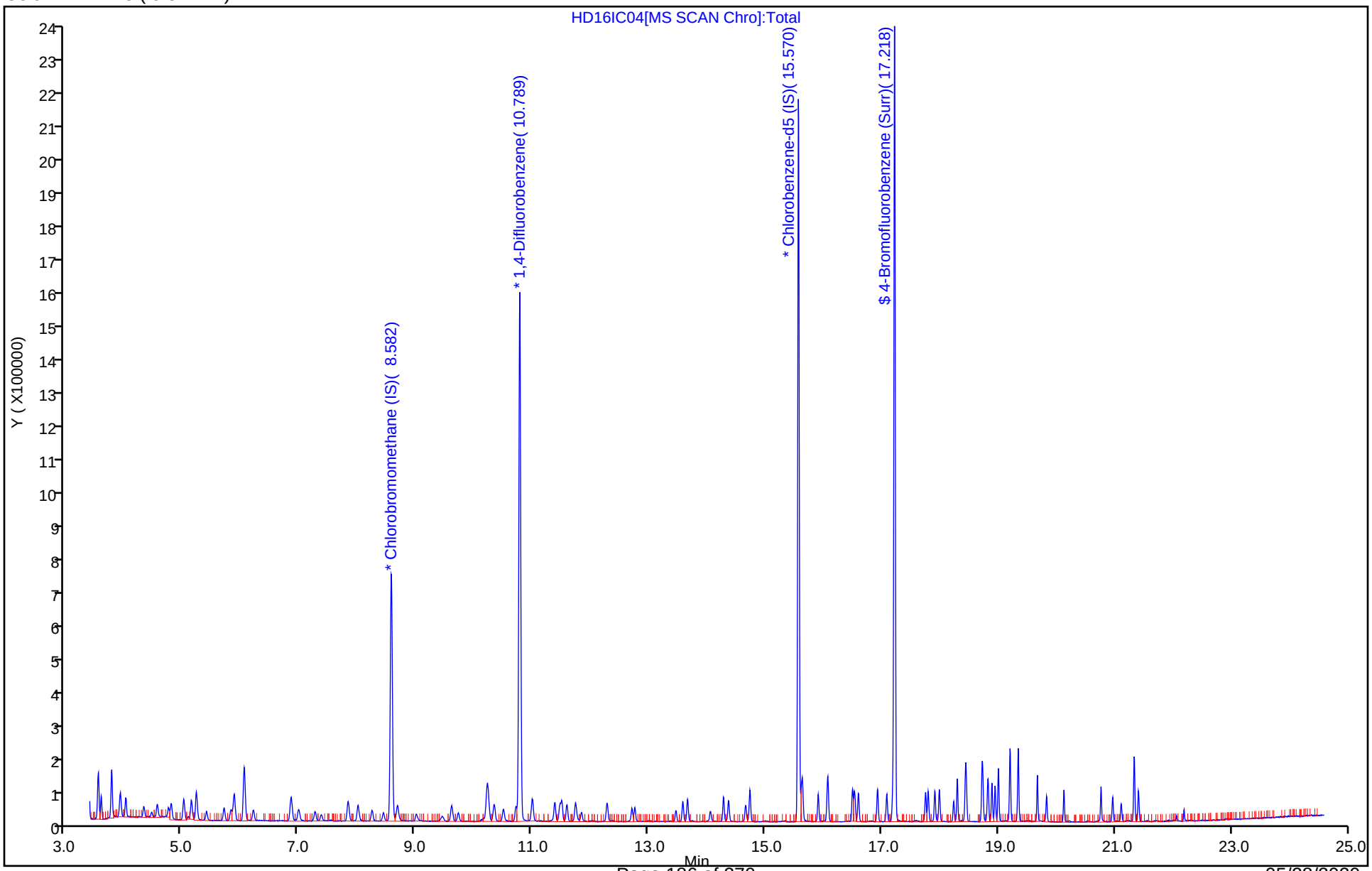
Report Date: 21-Apr-2020 10:48:32 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC04.D

Injection Date:	16-Apr-2020 10:40:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	IC L4			Worklist Smp#:	6
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

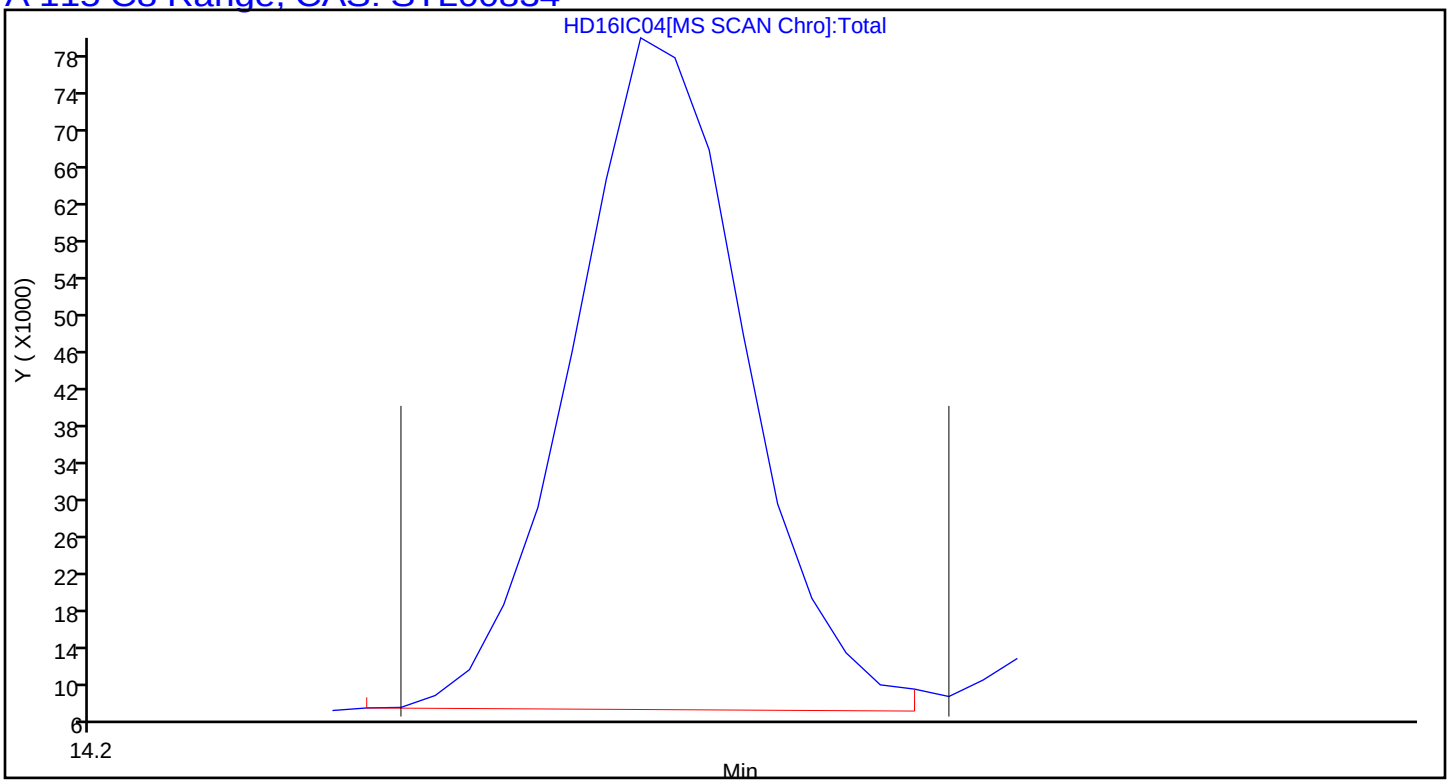
Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC04.D				
Injection Date:	16-Apr-2020 10:40:30	Instrument ID:	MH		
Lims ID:	IC L4				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	2	Worklist Smp#:	6
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 115 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC05.D
Lims ID: IC L5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 16-Apr-2020 11:33:30 ALS Bottle#: 3 Worklist Smp#: 7
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0015239-007
Misc. Info.: 297343
Operator ID: HMT Instrument ID: MH
Sublist: chrom-MH_TO15*sub7

Method: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\MH_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 21-Apr-2020 10:48:37 Calib Date: 16-Apr-2020 18:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC10.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX0331

First Level Reviewer: tajh Date: 16-Apr-2020 12:19:50

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.587	8.589	-0.002	96	208317	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.789	10.792	-0.003	96	1447284	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.570	15.572	-0.002	90	1163030	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr	95	17.219	17.222	-0.003	88	819799	4.00	4.20	
6 Chlorodifluoromethane	51	3.543	3.546	-0.003	97	89827	0.4000	0.4088	
7 Propene	41	3.553	3.555	-0.002	99	84283	0.4000	0.3371	
8 Dichlorodifluoromethane	85	3.605	3.606	-0.001	100	140856	0.4000	0.4168	
9 Chloromethane	52	3.776	3.779	-0.003	55	14923	0.4000	0.4050	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.786	3.785	0.001	95	92562	0.4000	0.4107	
11 Acetaldehyde	44	3.925	3.930	-0.005	97	79977	2.00	1.95	
12 Vinyl chloride	62	3.941	3.945	-0.004	99	46282	0.4000	0.3829	
13 Butane	43	4.029	4.028	0.001	82	56170	0.4000	0.3922	
14 Butadiene	54	4.029	4.028	0.001	71	31980	0.4000	0.3893	
15 Bromomethane	94	4.334	4.337	-0.003	97	52498	0.4000	0.4115	
16 Chloroethane	64	4.468	4.473	-0.005	96	20202	0.4000	0.3927	
17 Ethanol	31	4.561	4.571	-0.010	93	76328	2.00	2.05	
18 Vinyl bromide	106	4.763	4.763	0.000	95	46565	0.4000	0.4053	
19 2-Methylbutane	43	4.804	4.806	-0.002	88	41883	0.4000	0.3985	
20 Trichlorofluoromethane	101	5.021	5.022	-0.001	98	122445	0.4000	0.4040	
21 Acrolein	56	5.037	5.037	0.000	26	14460	0.4000	0.4081	
22 Acetonitrile	40	5.099	5.116	-0.017	100	15350	0.4000	0.3763	
23 Acetone	58	5.150	5.154	-0.004	98	58978	1.20	1.26	
25 Isopropyl alcohol	45	5.233	5.241	-0.008	84	155698	1.20	1.10	
24 Pentane	72	5.233	5.236	-0.003	76	5699	0.4000	0.4349	
26 Ethyl ether	31	5.409	5.408	0.001	95	38004	0.4000	0.4189	
27 1,1-Dichloroethene	96	5.709	5.716	-0.007	96	39611	0.4000	0.3903	
28 Acrylonitrile	53	5.822	5.826	-0.004	67	29756	0.4000	0.3870	
29 2-Methyl-2-propanol	59	5.827	5.832	-0.005	95	64952	0.4000	0.3857	
30 1,1,2-Trichloro-1,2,2-trif	101	5.889	5.889	0.000	91	96750	0.4000	0.4116	
31 Methylene Chloride	84	6.060	6.063	-0.003	99	92172	0.4000	0.3935	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.070	6.076	-0.006	97	35436	0.4000	0.4135	
33 Carbon disulfide	76	6.215	6.218	-0.003	100	121608	0.4000	0.4000	
34 trans-1,2-Dichloroethene	96	6.851	6.859	-0.008	97	38437	0.4000	0.3837	
35 2-Methylpentane	43	6.871	6.873	-0.002	94	80643	0.4000	0.4070	
36 Methyl tert-butyl ether	73	6.980	6.989	-0.009	96	93424	0.4000	0.3990	
37 1,1-Dichloroethane	63	7.275	7.280	-0.005	99	80555	0.4000	0.4038	
38 Vinyl acetate	43	7.378	7.385	-0.007	99	91256	0.4000	0.3671	
39 2-Butanone (MEK)	72	7.828	7.832	-0.004	95	17276	0.4000	0.3895	
40 Hexane	56	7.843	7.848	-0.005	78	30138	0.4000	0.4021	
41 Isopropyl ether	45	8.003	8.011	-0.008	96	129250	0.4000	0.4017	
42 cis-1,2-Dichloroethene	96	8.251	8.259	-0.008	96	41173	0.4000	0.3937	
43 Ethyl acetate	43	8.443	8.446	-0.003	99	88887	0.4000	0.3955	
44 Chloroform	83	8.598	8.601	-0.003	95	102267	0.4000	0.4158	
45 Tert-butyl ethyl ether	59	8.680	8.688	-0.008	97	111041	0.4000	0.3963	
46 Tetrahydrofuran	42	8.996	9.005	-0.009	93	38891	0.4000	0.3804	
47 1,1,1-Trichloroethane	97	9.621	9.623	-0.002	97	90992	0.4000	0.3974	
48 1,2-Dichloroethane	62	9.730	9.736	-0.006	97	63603	0.4000	0.4152	
49 n-Butanol	31	10.205	10.201	0.004	75	11011	0.4000	0.3382	
51 Benzene	78	10.231	10.231	0.000	97	124381	0.4000	0.3951	
50 Cyclohexane	69	10.231	10.229	0.002	70	17030	0.4000	0.4087	
52 Carbon tetrachloride	117	10.252	10.253	-0.001	94	89850	0.4000	0.3952	
53 2,3-Dimethylpentane	71	10.350	10.351	-0.001	88	23858	0.4000	0.3992	
54 Thiophene	84	10.505	10.512	-0.007	96	70215	0.4000	0.3980	
55 Isooctane	57	11.001	11.005	-0.004	98	185595	0.4000	0.3879	
56 n-Heptane	71	11.394	11.392	0.002	91	32858	0.4000	0.3713	
57 1,2-Dichloropropane	63	11.471	11.478	-0.007	91	51542	0.4000	0.3994	
58 Trichloroethene	130	11.513	11.514	-0.001	91	49084	0.4000	0.3814	
59 Dibromomethane	93	11.595	11.602	-0.007	87	63193	0.4000	0.4008	
60 Dichlorobromomethane	83	11.745	11.748	-0.003	97	97760	0.4000	0.3961	
61 1,4-Dioxane	88	11.766	11.770	-0.004	91	16940	0.4000	0.3694	
62 Methyl methacrylate	41	11.849	11.847	0.002	94	44369	0.4000	0.3822	
63 Methylcyclohexane	83	12.288	12.288	0.000	92	58914	0.4000	0.3507	
64 4-Methyl-2-pentanone (MIBK	43	12.707	12.710	-0.003	96	85978	0.4000	0.3835	
65 cis-1,3-Dichloropropene	75	12.763	12.764	-0.001	95	64503	0.4000	0.3864	
66 trans-1,3-Dichloropropene	75	13.471	13.471	0.000	97	50863	0.4000	0.3667	
67 Toluene	91	13.585	13.589	-0.004	93	129213	0.4000	0.3945	
68 1,1,2-Trichloroethane	83	13.668	13.670	-0.002	96	50779	0.4000	0.4162	
69 2-Hexanone	58	14.061	14.059	0.002	91	34298	0.4000	0.3219	
70 n-Octane	85	14.288	14.287	0.001	91	34092	0.4000	0.3773	
71 Chlorodibromomethane	129	14.376	14.374	0.002	95	84287	0.4000	0.3911	
72 Ethylene Dibromide	107	14.665	14.668	-0.003	95	81447	0.4000	0.4041	
73 Tetrachloroethene	129	14.738	14.739	-0.001	89	49185	0.4000	0.3948	
74 Chlorobenzene	112	15.622	15.622	0.000	92	105985	0.4000	0.3916	
75 2,3-Dimethylheptane	43	15.642	15.643	-0.001	95	129339	0.4000	0.4231	
76 Ethylbenzene	91	15.911	15.911	0.000	99	163820	0.4000	0.3901	
77 m-Xylene & p-Xylene	91	16.071	16.076	-0.005	99	264124	0.8000	0.8248	
78 n-Nonane	57	16.500	16.497	0.003	90	77180	0.4000	0.3744	
79 Bromoform	173	16.526	16.527	-0.001	89	78091	0.4000	0.3527	
80 Styrene	104	16.541	16.541	0.000	98	87934	0.4000	0.3883	
81 o-Xylene	91	16.598	16.601	-0.003	98	141114	0.4000	0.4254	
82 1,1,2,2-Tetrachloroethane	83	16.929	16.930	-0.001	98	129877	0.4000	0.4082	
83 1,2,3-Trichloropropane	110	17.089	17.089	0.000	97	28017	0.4000	0.3994	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	17.193	17.192	0.001	98	169405	0.4000	0.3782	
85 N-Propylbenzene	120	17.756	17.756	0.000	98	43255	0.4000	0.3748	
86 2-Chlorotoluene	126	17.803	17.794	0.009	97	46403	0.4000	0.4142	
87 4-Ethyltoluene	105	17.911	17.912	-0.001	98	169671	0.4000	0.3841	
88 1,3,5-Trimethylbenzene	120	17.989	17.992	-0.003	91	67506	0.4000	0.3869	
89 Alpha Methyl Styrene	118	18.237	18.237	0.000	86	54434	0.4000	0.3086	
90 n-Decane	57	18.299	18.299	0.000	89	118068	0.4000	0.4083	
91 tert-Butylbenzene	119	18.438	18.439	-0.001	88	152906	0.4000	0.3879	
92 1,2,4-Trimethylbenzene	105	18.454	18.454	0.000	96	158811	0.4000	0.4043	
93 sec-Butylbenzene	105	18.723	18.722	0.001	98	219395	0.4000	0.3879	
94 1,3-Dichlorobenzene	146	18.738	18.739	-0.001	97	102440	0.4000	0.3948	
95 Benzyl chloride	91	18.816	18.817	-0.001	97	103438	0.4000	0.3118	
96 1,4-Dichlorobenzene	146	18.826	18.829	-0.003	91	96899	0.4000	0.3928	
97 4-Isopropyltoluene	119	18.893	18.894	-0.001	96	171643	0.4000	0.3953	
98 1,2,3-Trimethylbenzene	105	18.950	18.948	0.002	99	158427	0.4000	0.4050	
99 Butylcyclohexane	83	19.002	19.005	-0.003	92	139594	0.4000	0.4165	
100 1,2-Dichlorobenzene	146	19.203	19.205	-0.002	82	104846	0.4000	0.4007	
101 2,3-Dihydroindene	117	19.203	19.204	-0.001	92	141703	0.4000	0.3843	
102 Indene	116	19.338	19.340	-0.002	90	113484	0.4000	0.3448	
103 n-Butylbenzene	91	19.348	19.346	0.002	96	213054	0.4000	0.4088	
104 Undecane	57	19.674	19.672	0.002	95	116661	0.4000	0.3581	
105 1,2-Dibromo-3-Chloropropan	157	19.829	19.833	-0.004	87	46467	0.4000	0.3661	
106 1,2,4,5-Tetramethylbenzene	119	20.128	20.128	0.000	96	137380	0.4000	0.3496	
107 Dodecane	57	20.764	20.765	-0.001	93	91576	0.4000	0.2848	
108 1,2,4-Trichlorobenzene	180	20.966	20.966	0.000	92	59652	0.4000	0.3661	
109 Naphthalene	128	21.110	21.111	-0.001	98	145411	0.4000	0.3913	
110 Hexachlorobutadiene	225	21.338	21.338	0.000	89	81851	0.4000	0.3634	
111 1,2,3-Trichlorobenzene	180	21.410	21.410	0.000	94	67722	0.4000	0.3701	
112 2-Methylnaphthalene	142	22.061	22.062	-0.001	95	23571	0.4000	0.1845	
113 1-Methylnaphthalene	142	22.191	22.191	0.000	96	42808	0.4000	0.2699	
A 115 C8 Range	1	14.280	(14.247-14.329)		0	374828	0.4000	0.3978	
S 116 Xylenes, Total	100				0		1.20	1.25	
S 117 1,2-Dichloroethene, Total	1				0		0.8000	0.7775	

Reagents:

40L5DQP_00018	Amount Added: 200.00	Units: mL	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

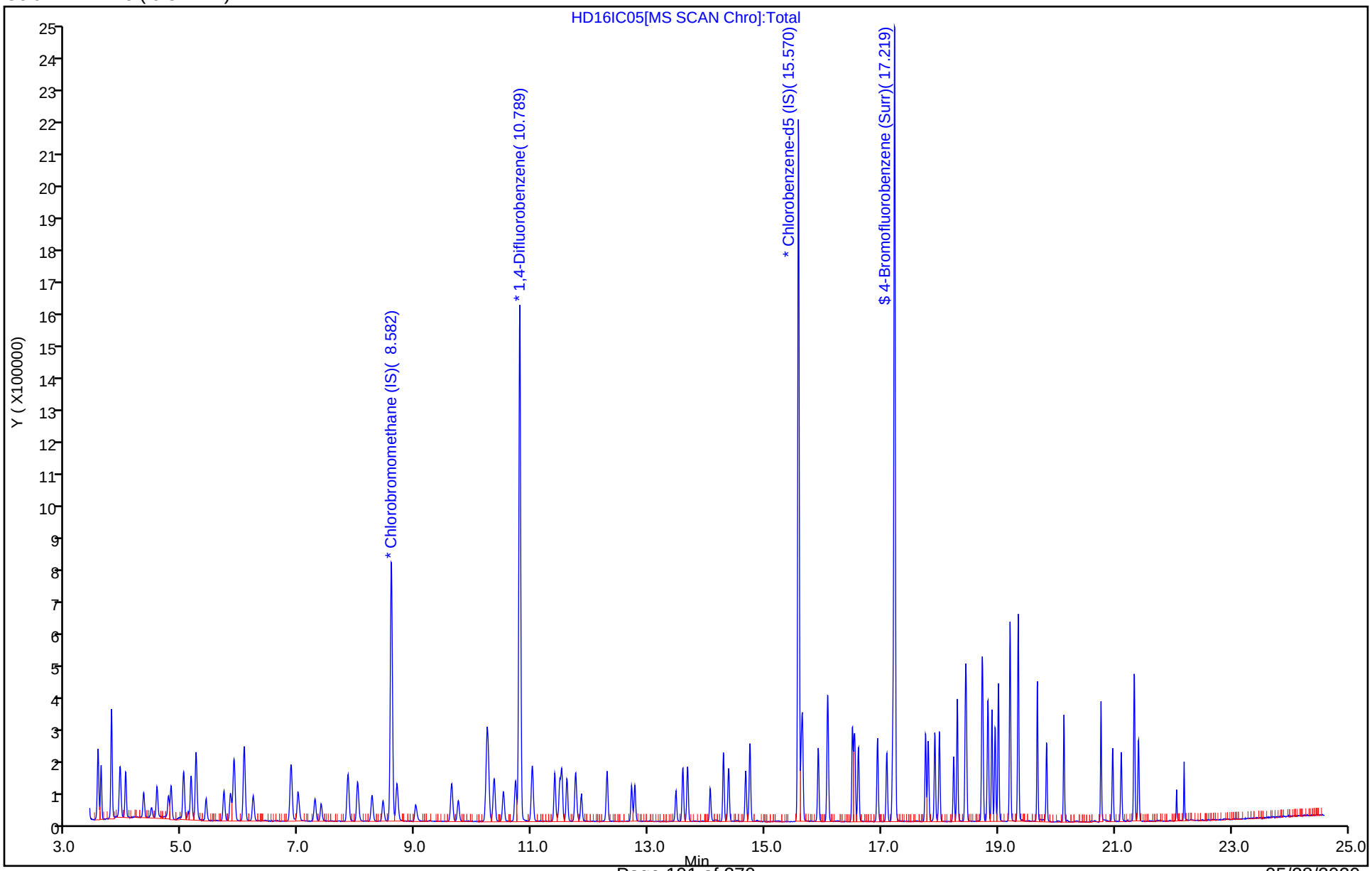
Report Date: 21-Apr-2020 10:48:38 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC05.D

Injection Date:	16-Apr-2020 11:33:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	IC L5			Worklist Smp#:	7
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

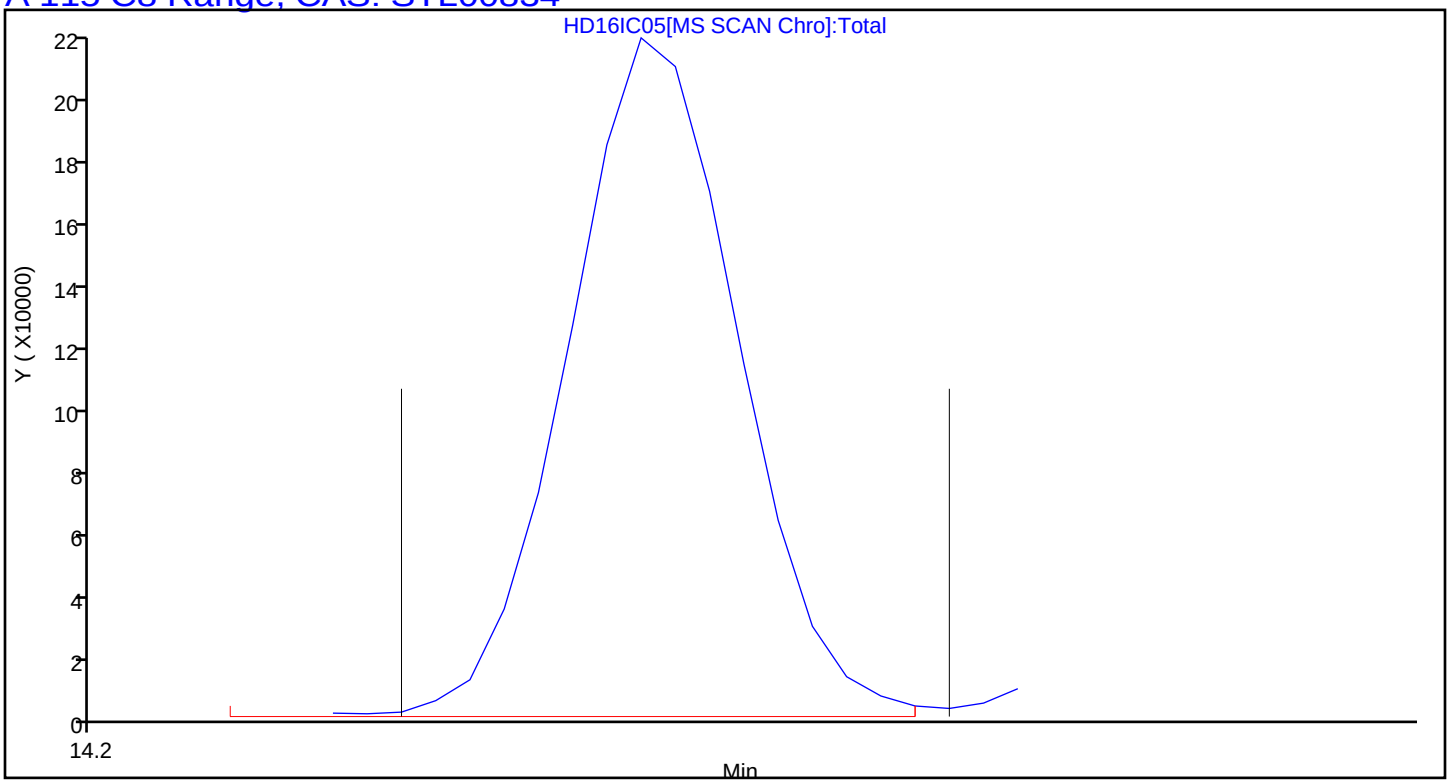
Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC05.D				
Injection Date:	16-Apr-2020 11:33:30	Instrument ID:	MH		
Lims ID:	IC L5				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	3	Worklist Smp#:	7
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 115 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC06.D
Lims ID: IC L6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 16-Apr-2020 12:26:30 ALS Bottle#: 4 Worklist Smp#: 8
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0015239-008
Misc. Info.: 297342
Operator ID: HMT Instrument ID: MH
Sublist: chrom-MH_TO15*sub7

Method: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\MH_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 21-Apr-2020 10:48:42 Calib Date: 16-Apr-2020 18:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC10.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX0331

First Level Reviewer: tajh Date: 16-Apr-2020 13:23:44

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.582	8.589	-0.007	96	215621	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.789	10.792	-0.003	95	1476348	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.575	15.572	0.003	89	1221397	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr	95	17.224	17.222	0.002	89	860143	4.00	4.20	
6 Chlorodifluoromethane	51	3.543	3.546	-0.003	97	231500	1.00	1.02	
7 Propene	41	3.553	3.555	-0.002	99	139705	1.00	1.00	
8 Dichlorodifluoromethane	85	3.605	3.606	-0.001	100	359489	1.00	1.03	
9 Chloromethane	52	3.776	3.779	-0.003	96	37262	1.00	0.9771	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.781	3.785	-0.004	94	250336	1.00	1.07	
11 Acetaldehyde	44	3.926	3.930	-0.004	95	211668	5.00	4.98	
12 Vinyl chloride	62	3.941	3.945	-0.004	99	121630	1.00	0.9723	
14 Butadiene	54	4.024	4.028	-0.004	72	85854	1.00	1.01	
13 Butane	43	4.024	4.028	-0.004	82	145634	1.00	0.9824	
15 Bromomethane	94	4.334	4.337	-0.003	98	133380	1.00	1.01	
16 Chloroethane	64	4.468	4.473	-0.005	97	52250	1.00	0.9813	
17 Ethanol	31	4.561	4.571	-0.010	93	189858	5.00	4.94	
18 Vinyl bromide	106	4.758	4.763	-0.005	96	121595	1.00	1.02	
19 2-Methylbutane	43	4.804	4.806	-0.002	87	102629	1.00	0.9435	
20 Trichlorofluoromethane	101	5.016	5.022	-0.006	99	307689	1.00	0.9809	
21 Acrolein	56	5.032	5.037	-0.005	93	36991	1.00	1.01	
22 Acetonitrile	40	5.099	5.116	-0.017	97	45061	1.00	1.07	
23 Acetone	58	5.140	5.154	-0.014	98	144197	3.00	2.97	
25 Isopropyl alcohol	45	5.223	5.241	-0.018	93	408240	3.00	2.81	
24 Pentane	72	5.233	5.236	-0.003	96	13325	1.00	0.9825	
26 Ethyl ether	31	5.399	5.408	-0.009	95	97518	1.00	1.04	
27 1,1-Dichloroethene	96	5.714	5.716	-0.002	96	100847	1.00	0.9599	
28 Acrylonitrile	53	5.822	5.826	-0.004	95	80366	1.00	1.01	
29 2-Methyl-2-propanol	59	5.812	5.832	-0.020	96	173411	1.00	0.99	
30 1,1,2-Trichloro-1,2,2-trif	101	5.884	5.889	-0.005	91	245213	1.00	1.01	
31 Methylene Chloride	84	6.060	6.063	-0.003	98	154970	1.00	1.03	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.076	6.076	0.000	98	91499	1.00	1.03	
33 Carbon disulfide	76	6.215	6.218	-0.003	100	321614	1.00	1.02	
34 trans-1,2-Dichloroethene	96	6.856	6.859	-0.003	96	104558	1.00	1.01	
35 2-Methylpentane	43	6.872	6.873	-0.001	94	216620	1.00	1.06	
36 Methyl tert-butyl ether	73	6.975	6.989	-0.014	97	250002	1.00	1.03	
37 1,1-Dichloroethane	63	7.275	7.280	-0.005	100	203725	1.00	0.9866	
38 Vinyl acetate	43	7.378	7.385	-0.007	100	268831	1.00	1.04	
39 2-Butanone (MEK)	72	7.823	7.832	-0.010	96	46715	1.00	1.02	
40 Hexane	56	7.843	7.848	-0.005	89	81612	1.00	1.05	
41 Isopropyl ether	45	8.003	8.011	-0.008	97	355721	1.00	1.07	
42 cis-1,2-Dichloroethene	96	8.257	8.259	-0.002	96	109138	1.00	1.01	
43 Ethyl acetate	43	8.438	8.446	-0.008	99	243309	1.00	1.05	
44 Chloroform	83	8.598	8.601	-0.003	97	259748	1.00	1.02	
45 Tert-butyl ethyl ether	59	8.675	8.688	-0.013	97	302438	1.00	1.04	
46 Tetrahydrofuran	42	8.991	9.005	-0.014	93	111448	1.00	1.05	
47 1,1,1-Trichloroethane	97	9.621	9.623	-0.002	97	238710	1.00	1.01	
48 1,2-Dichloroethane	62	9.735	9.736	-0.001	97	159660	1.00	1.02	
49 n-Butanol	31	10.190	10.201	-0.011	76	31194	1.00	0.9393	
50 Cyclohexane	69	10.221	10.229	-0.008	78	44463	1.00	1.05	
51 Benzene	78	10.231	10.231	0.000	97	327048	1.00	1.02	
52 Carbon tetrachloride	117	10.252	10.253	-0.001	94	235027	1.00	1.01	
53 2,3-Dimethylpentane	71	10.350	10.351	-0.001	88	63177	1.00	1.04	
54 Thiophene	84	10.510	10.512	-0.002	96	187275	1.00	1.04	
55 Isooctane	57	11.001	11.005	-0.004	98	502191	1.00	1.03	
56 n-Heptane	71	11.389	11.392	-0.003	91	91657	1.00	1.02	
57 1,2-Dichloropropane	63	11.477	11.478	-0.001	91	134477	1.00	1.02	
58 Trichloroethene	130	11.513	11.514	-0.001	90	127602	1.00	0.9720	
59 Dibromomethane	93	11.601	11.602	-0.001	88	163438	1.00	1.02	
60 Dichlorobromomethane	83	11.750	11.748	0.002	97	260503	1.00	1.03	
61 1,4-Dioxane	88	11.761	11.770	-0.009	90	45200	1.00	0.9663	
62 Methyl methacrylate	41	11.843	11.847	-0.004	94	124803	1.00	1.05	
63 Methylcyclohexane	83	12.288	12.288	0.000	94	166351	1.00	0.9235	
64 4-Methyl-2-pentanone (MIBK	43	12.701	12.710	-0.009	97	246503	1.00	1.08	
65 cis-1,3-Dichloropropene	75	12.763	12.764	-0.001	95	180786	1.00	1.06	
66 trans-1,3-Dichloropropene	75	13.472	13.471	0.001	98	151775	1.00	1.04	
67 Toluene	91	13.585	13.589	-0.004	92	359526	1.00	1.02	
68 1,1,2-Trichloroethane	83	13.668	13.670	-0.002	96	132187	1.00	1.03	
69 2-Hexanone	58	14.056	14.059	-0.003	91	113223	1.00	1.01	
70 n-Octane	85	14.283	14.287	-0.004	93	96698	1.00	1.02	
71 Chlorodibromomethane	129	14.376	14.374	0.002	96	233797	1.00	1.03	
72 Ethylene Dibromide	107	14.665	14.668	-0.003	98	221286	1.00	1.05	
73 Tetrachloroethene	129	14.738	14.739	-0.001	91	128051	1.00	0.9787	
74 Chlorobenzene	112	15.622	15.622	0.000	92	278338	1.00	0.9792	
75 2,3-Dimethylheptane	43	15.642	15.643	-0.001	95	346291	1.00	1.08	
76 Ethylbenzene	91	15.911	15.911	0.000	99	460069	1.00	1.04	
77 m-Xylene & p-Xylene	91	16.071	16.076	-0.005	99	732692	2.00	2.18	
78 n-Nonane	57	16.495	16.497	-0.002	92	226817	1.00	1.05	
79 Bromoform	173	16.526	16.527	-0.001	92	231700	1.00	1.00	
80 Styrene	104	16.542	16.541	0.001	98	251682	1.00	1.00	
81 o-Xylene	91	16.604	16.601	0.003	98	382815	1.00	1.10	
82 1,1,2,2-Tetrachloroethane	83	16.929	16.930	-0.001	98	349990	1.00	1.05	
83 1,2,3-Trichloropropane	110	17.089	17.089	0.000	97	76006	1.00	1.03	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	17.188	17.192	-0.004	97	486566	1.00	1.03	
85 N-Propylbenzene	120	17.756	17.756	0.000	98	125088	1.00	1.03	
86 2-Chlorotoluene	126	17.797	17.794	0.003	97	127493	1.00	1.08	
87 4-Ethyltoluene	105	17.911	17.912	-0.001	99	499000	1.00	1.08	
88 1,3,5-Trimethylbenzene	120	17.994	17.992	0.002	91	190751	1.00	1.00	
89 Alpha Methyl Styrene	118	18.237	18.237	0.000	85	179584	1.00	0.9693	
90 n-Decane	57	18.299	18.299	0.000	90	327523	1.00	1.08	
91 tert-Butylbenzene	119	18.438	18.439	-0.001	87	433573	1.00	1.05	
92 1,2,4-Trimethylbenzene	105	18.454	18.454	0.000	97	445105	1.00	1.08	
93 sec-Butylbenzene	105	18.723	18.722	0.001	98	643662	1.00	1.08	
94 1,3-Dichlorobenzene	146	18.738	18.739	-0.001	98	283133	1.00	1.04	
95 Benzyl chloride	91	18.816	18.817	-0.001	96	327220	1.00	0.9391	
96 1,4-Dichlorobenzene	146	18.826	18.829	-0.003	95	268919	1.00	1.04	
97 4-Isopropyltoluene	119	18.893	18.894	-0.001	96	493467	1.00	1.08	
98 1,2,3-Trimethylbenzene	105	18.945	18.948	-0.003	99	443228	1.00	1.08	
99 Butylcyclohexane	83	19.002	19.005	-0.003	93	385710	1.00	1.10	
100 1,2-Dichlorobenzene	146	19.203	19.205	-0.002	79	285474	1.00	1.04	
101 2,3-Dihydroindene	117	19.203	19.204	-0.001	92	408235	1.00	1.05	
102 Indene	116	19.338	19.340	-0.002	89	340988	1.00	0.9866	
103 n-Butylbenzene	91	19.343	19.346	-0.003	97	598461	1.00	1.04	
104 Undecane	57	19.674	19.672	0.002	95	363019	1.00	1.06	
105 1,2-Dibromo-3-Chloropropan	157	19.834	19.833	0.001	94	140139	1.00	0.9498	
106 1,2,4,5-Tetramethylbenzene	119	20.128	20.128	0.000	96	439273	1.00	0.9150	
107 Dodecane	57	20.764	20.765	-0.001	95	324734	1.00	0.9618	
108 1,2,4-Trichlorobenzene	180	20.966	20.966	0.000	93	187269	1.00	1.09	
109 Naphthalene	128	21.110	21.111	-0.001	98	437919	1.00	1.12	
110 Hexachlorobutadiene	225	21.338	21.338	0.000	89	232795	1.00	0.9842	
111 1,2,3-Trichlorobenzene	180	21.410	21.410	0.000	92	201572	1.00	1.05	
112 2-Methylnaphthalene	142	22.061	22.062	-0.001	96	100153	1.00	0.7464	
113 1-Methylnaphthalene	142	22.191	22.191	0.000	96	157067	1.00	0.9428	
A 115 C8 Range	1	14.273	(14.231-14.345)		0	1017108	1.00	1.06	
S 116 Xylenes, Total	100				0		3.00	3.28	
S 117 1,2-Dichloroethene, Total	1				0		2.00	2.02	

Reagents:

40L6DQP_00017	Amount Added: 200.00	Units: mL	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

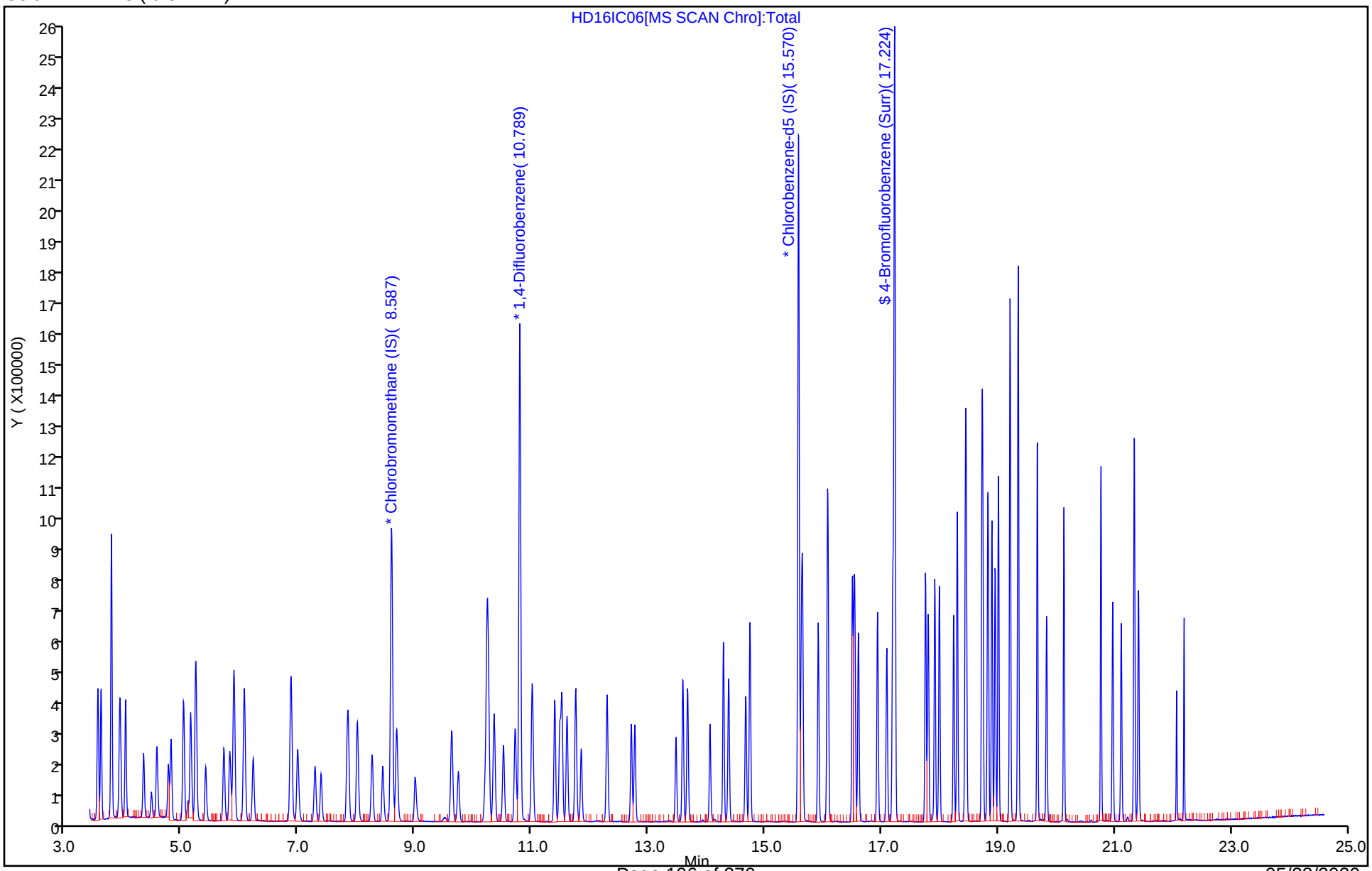
Report Date: 21-Apr-2020 10:48:43 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC06.D

Injection Date:	16-Apr-2020 12:26:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	IC L6			Worklist Smp#:	8
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

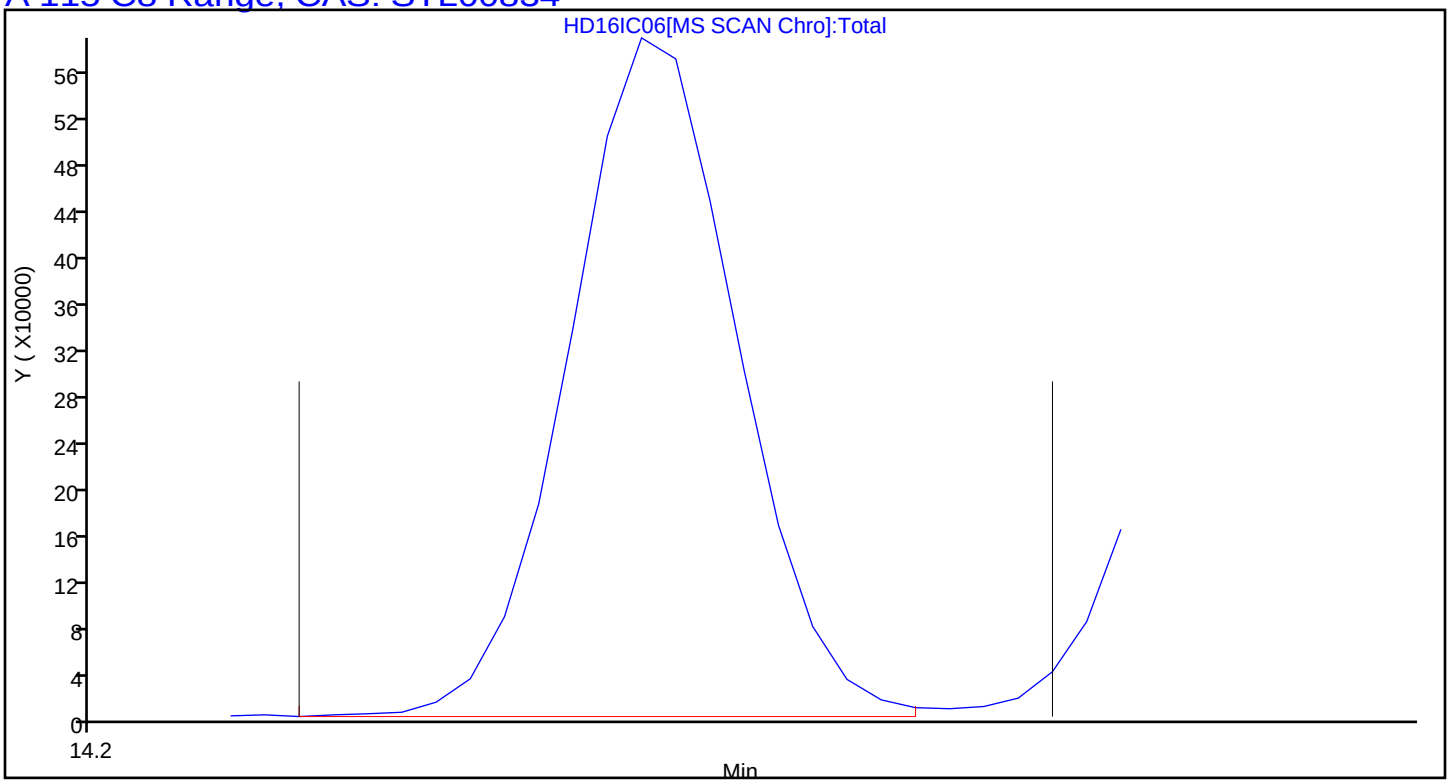


Report Date: 21-Apr-2020 10:48:43 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC06.D				
Injection Date:	16-Apr-2020 12:26:30	Instrument ID:	MH		
Lims ID:	IC L6				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	4	Worklist Smp#:	8
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 115 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC07.D
Lims ID: ICIS L7
Client ID:
Sample Type: ICIS Calib Level: 7
Inject. Date: 16-Apr-2020 13:19:30 ALS Bottle#: 5 Worklist Smp#: 9
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0015239-009
Misc. Info.: 297186
Operator ID: HMT Instrument ID: MH
Sublist: chrom-MH_TO15*sub7

Method: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\MH_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 21-Apr-2020 10:48:47 Calib Date: 16-Apr-2020 18:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC10.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX0331

First Level Reviewer: tajh Date: 16-Apr-2020 14:19:56

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.593	8.589	0.003	96	238129	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.794	10.792	0.002	95	1621590	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.575	15.572	0.003	89	1350213	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr	95	17.224	17.222	0.002	89	938760	4.00	4.14	
6 Chlorodifluoromethane	51	3.548	3.546	0.002	97	486289	2.00	1.94	
7 Propene	41	3.559	3.555	0.003	99	241206	2.00	1.98	
8 Dichlorodifluoromethane	85	3.610	3.606	0.004	100	758766	2.00	1.96	
9 Chloromethane	52	3.786	3.779	0.007	98	79574	2.00	1.89	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.791	3.785	0.006	95	497468	2.00	1.93	
11 Acetaldehyde	44	3.931	3.930	0.001	99	459205	10.0	9.79	
12 Vinyl chloride	62	3.946	3.945	0.001	99	260327	2.00	1.88	
14 Butadiene	54	4.029	4.028	0.001	72	185695	2.00	1.98	
13 Butane	43	4.029	4.028	0.001	83	319615	2.00	1.95	
15 Bromomethane	94	4.339	4.337	0.002	97	283021	2.00	1.94	
16 Chloroethane	64	4.473	4.473	0.000	95	114269	2.00	1.94	
17 Ethanol	31	4.572	4.571	0.001	93	437849	10.0	10.3	
18 Vinyl bromide	106	4.768	4.763	0.005	97	259146	2.00	1.97	
19 2-Methylbutane	43	4.809	4.806	0.003	89	230259	2.00	1.92	
20 Trichlorofluoromethane	101	5.026	5.022	0.004	99	673807	2.00	1.95	
21 Acrolein	56	5.037	5.037	0.000	93	83698	2.00	2.07	
22 Acetonitrile	40	5.104	5.116	-0.012	99	99811	2.00	2.14	
23 Acetone	58	5.145	5.154	-0.009	98	321031	6.00	5.99	
25 Isopropyl alcohol	45	5.233	5.241	-0.008	93	929352	6.00	5.87	
24 Pentane	72	5.243	5.236	0.007	96	30063	2.00	2.01	
26 Ethyl ether	31	5.404	5.408	-0.004	96	210353	2.00	2.03	
27 1,1-Dichloroethene	96	5.719	5.716	0.003	96	227649	2.00	1.96	
29 2-Methyl-2-propanol	59	5.817	5.832	-0.015	95	400539	2.00	2.08	
28 Acrylonitrile	53	5.827	5.826	0.001	96	178531	2.00	2.03	
30 1,1,2-Trichloro-1,2,2-trif	101	5.889	5.889	0.000	92	530093	2.00	1.97	
31 Methylene Chloride	84	6.065	6.063	0.002	99	277879	2.00	2.05	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.081	6.076	0.005	98	183177	2.00	1.87	
33 Carbon disulfide	76	6.220	6.218	0.002	99	700695	2.00	2.02	
34 trans-1,2-Dichloroethene	96	6.861	6.859	0.002	97	231517	2.00	2.02	
35 2-Methylpentane	43	6.877	6.873	0.004	94	470982	2.00	2.08	
36 Methyl tert-butyl ether	73	6.985	6.989	-0.004	97	566203	2.00	2.12	
37 1,1-Dichloroethane	63	7.285	7.280	0.005	100	444836	2.00	1.95	
38 Vinyl acetate	43	7.388	7.385	0.003	100	609105	2.00	2.14	
39 2-Butanone (MEK)	72	7.833	7.832	0.001	96	105028	2.00	2.07	
40 Hexane	56	7.853	7.848	0.005	88	177214	2.00	2.07	
41 Isopropyl ether	45	8.003	8.011	-0.008	98	779860	2.00	2.12	
42 cis-1,2-Dichloroethene	96	8.262	8.259	0.003	96	244867	2.00	2.05	
43 Ethyl acetate	43	8.443	8.446	-0.003	99	528533	2.00	2.06	
44 Chloroform	83	8.608	8.601	0.007	97	555591	2.00	1.98	
45 Tert-butyl ethyl ether	59	8.680	8.688	-0.008	96	682084	2.00	2.13	
46 Tetrahydrofuran	42	8.996	9.005	-0.009	93	241581	2.00	2.07	
47 1,1,1-Trichloroethane	97	9.626	9.623	0.003	97	519709	2.00	1.99	
48 1,2-Dichloroethane	62	9.745	9.736	0.009	97	341615	2.00	1.99	
49 n-Butanol	31	10.190	10.201	-0.011	82	74752	2.00	2.05	
50 Cyclohexane	69	10.231	10.229	0.002	93	97449	2.00	2.09	
51 Benzene	78	10.236	10.231	0.005	97	702040	2.00	1.99	
52 Carbon tetrachloride	117	10.257	10.253	0.004	95	428945	2.00	1.68	
53 2,3-Dimethylpentane	71	10.355	10.351	0.004	90	143017	2.00	2.14	
54 Thiophene	84	10.515	10.512	0.003	97	408590	2.00	2.07	
55 Isooctane	57	11.006	11.005	0.001	98	1105098	2.00	2.06	
56 n-Heptane	71	11.394	11.392	0.002	91	207953	2.00	2.10	
57 1,2-Dichloropropane	63	11.482	11.478	0.004	92	288578	2.00	2.00	
58 Trichloroethene	130	11.518	11.514	0.004	90	290163	2.00	2.01	
59 Dibromomethane	93	11.606	11.602	0.004	90	353400	2.00	2.00	
60 Dichlorobromomethane	83	11.750	11.748	0.002	98	566974	2.00	2.05	
61 1,4-Dioxane	88	11.761	11.770	-0.009	87	108163	2.00	2.11	
62 Methyl methacrylate	41	11.843	11.847	-0.004	94	281242	2.00	2.16	
63 Methylcyclohexane	83	12.293	12.288	0.005	95	382280	2.00	1.90	
64 4-Methyl-2-pentanone (MIBK	43	12.701	12.710	-0.009	97	558163	2.00	2.22	
65 cis-1,3-Dichloropropene	75	12.763	12.764	-0.001	95	405317	2.00	2.17	
66 trans-1,3-Dichloropropene	75	13.471	13.471	0.000	97	347837	2.00	2.16	
67 Toluene	91	13.590	13.589	0.001	93	814775	2.00	2.07	
68 1,1,2-Trichloroethane	83	13.673	13.670	0.003	96	292002	2.00	2.06	
69 2-Hexanone	58	14.055	14.059	-0.004	92	276466	2.00	2.23	
70 n-Octane	85	14.288	14.287	0.001	93	223369	2.00	2.13	
71 Chlorodibromomethane	129	14.376	14.374	0.002	97	525843	2.00	2.10	
72 Ethylene Dibromide	107	14.665	14.668	-0.003	97	487987	2.00	2.09	
73 Tetrachloroethene	129	14.738	14.739	-0.001	91	289299	2.00	2.00	
74 Chlorobenzene	112	15.621	15.622	-0.001	93	618693	2.00	1.97	
75 2,3-Dimethylheptane	43	15.642	15.643	-0.001	96	746142	2.00	2.10	
76 Ethylbenzene	91	15.911	15.911	0.000	99	1047293	2.00	2.15	
77 m-Xylene & p-Xylene	91	16.076	16.076	0.000	99	1645607	4.00	4.43	
78 n-Nonane	57	16.495	16.497	-0.002	91	522325	2.00	2.18	
79 Bromoform	173	16.526	16.527	-0.001	91	519364	2.00	2.02	
80 Styrene	104	16.541	16.541	0.000	99	582294	2.00	2.06	
81 o-Xylene	91	16.603	16.601	0.002	98	842502	2.00	2.19	
82 1,1,2,2-Tetrachloroethane	83	16.929	16.930	-0.001	98	754733	2.00	2.04	
83 1,2,3-Trichloropropane	110	17.089	17.089	0.000	97	166974	2.00	2.05	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	17.193	17.192	0.001	96	1100652	2.00	2.12	
85 N-Propylbenzene	120	17.756	17.756	0.000	98	289338	2.00	2.16	
86 2-Chlorotoluene	126	17.803	17.794	0.009	98	280556	2.00	2.16	
87 4-Ethyltoluene	105	17.911	17.912	-0.001	99	1132867	2.00	2.21	
88 1,3,5-Trimethylbenzene	120	17.994	17.992	0.002	91	433130	2.00	2.02	
89 Alpha Methyl Styrene	118	18.237	18.237	0.000	86	443556	2.00	2.17	
90 n-Decane	57	18.299	18.299	0.000	90	717310	2.00	2.14	
91 tert-Butylbenzene	119	18.438	18.439	-0.001	89	969278	2.00	2.12	
92 1,2,4-Trimethylbenzene	105	18.454	18.454	0.000	96	985232	2.00	2.16	
93 sec-Butylbenzene	105	18.723	18.722	0.000	98	1475251	2.00	2.25	
94 1,3-Dichlorobenzene	146	18.738	18.739	-0.001	98	629940	2.00	2.09	
95 Benzyl chloride	91	18.816	18.817	-0.001	97	825637	2.00	2.14	
96 1,4-Dichlorobenzene	146	18.831	18.829	0.002	95	607350	2.00	2.12	
97 4-Isopropyltoluene	119	18.893	18.894	-0.001	96	1110692	2.00	2.20	
98 1,2,3-Trimethylbenzene	105	18.950	18.948	0.002	99	985784	2.00	2.17	
99 Butylcyclohexane	83	19.007	19.005	0.002	94	840561	2.00	2.16	
100 1,2-Dichlorobenzene	146	19.203	19.205	-0.002	79	637250	2.00	2.10	
101 2,3-Dihydroindene	117	19.203	19.204	-0.001	93	928811	2.00	2.17	
102 Indene	116	19.338	19.340	-0.002	92	815409	2.00	2.13	
103 n-Butylbenzene	91	19.348	19.346	0.002	98	1318318	2.00	2.04	
104 Undecane	57	19.673	19.672	0.001	95	820319	2.00	2.17	
105 1,2-Dibromo-3-Chloropropan	157	19.834	19.833	0.001	95	350953	2.00	2.08	
106 1,2,4,5-Tetramethylbenzene	119	20.128	20.128	0.000	96	1018930	2.00	1.84	
107 Dodecane	57	20.764	20.765	-0.001	96	754126	2.00	2.02	
108 1,2,4-Trichlorobenzene	180	20.966	20.966	0.000	93	443828	2.00	2.35	
109 Naphthalene	128	21.110	21.111	-0.001	99	1046543	2.00	2.43	
110 Hexachlorobutadiene	225	21.338	21.338	0.000	90	521395	2.00	1.99	
111 1,2,3-Trichlorobenzene	180	21.410	21.410	0.000	92	441687	2.00	2.08	
112 2-Methylnaphthalene	142	22.061	22.062	-0.001	97	247741	2.00	1.67	
113 1-Methylnaphthalene	142	22.190	22.191	-0.001	96	332364	2.00	1.80	
A 115 C8 Range	1	14.288	(14.242-14.345)		0	2244338	2.00	2.13	
S 116 Xylenes, Total	100				0		6.00	6.61	
S 117 1,2-Dichloroethene, Total	1				0		4.00	4.07	

Reagents:

40L7DQP_00017	Amount Added: 200.00	Units: mL	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

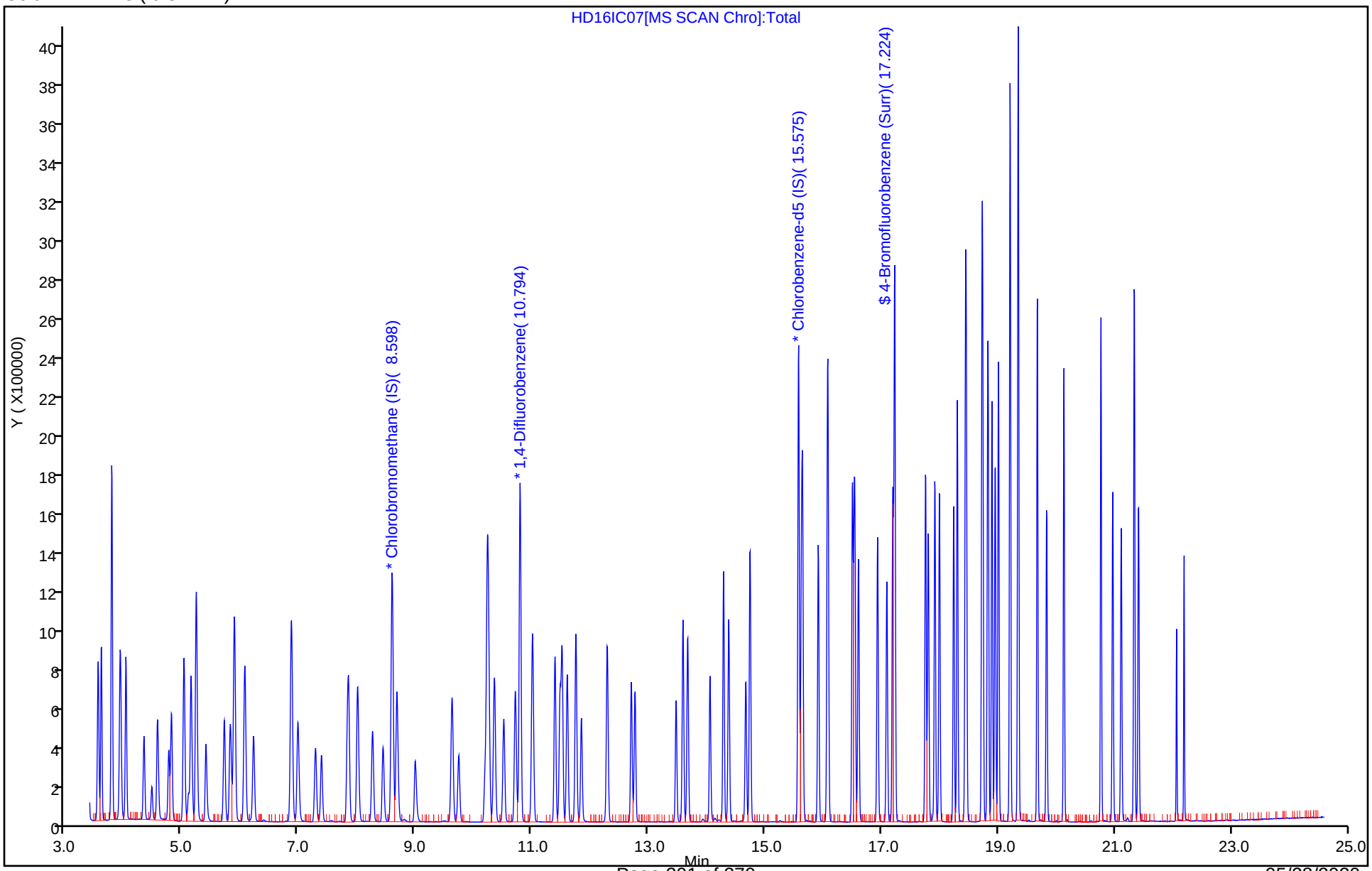
Report Date: 21-Apr-2020 10:48:48 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC07.D

Injection Date:	16-Apr-2020 13:19:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	ICIS L7			Worklist Smp#:	9
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

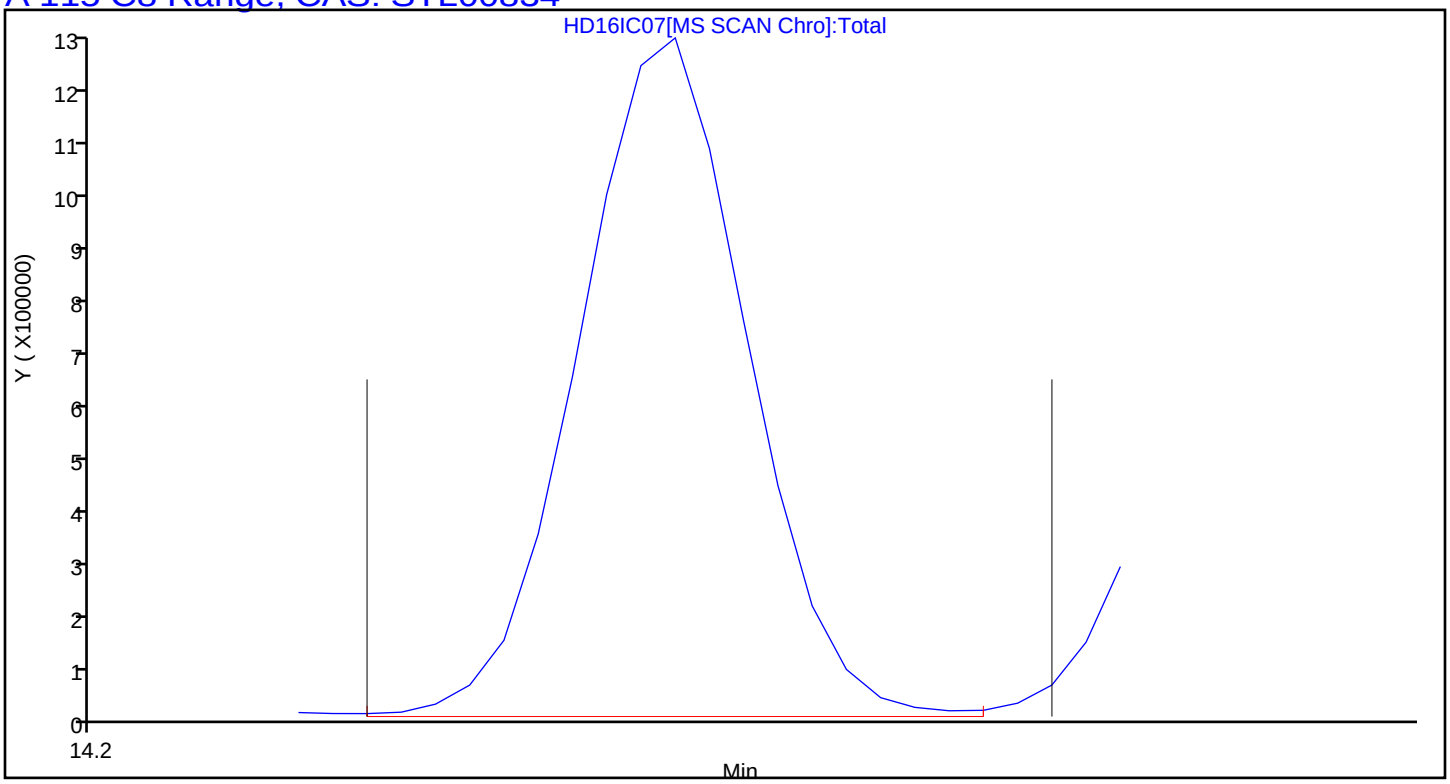
Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC07.D				
Injection Date:	16-Apr-2020 13:19:30	Instrument ID:	MH		
Lims ID:	ICIS L7				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	5	Worklist Smp#:	9
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 115 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC08.D
Lims ID: IC L8
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 16-Apr-2020 15:04:30 ALS Bottle#: 6 Worklist Smp#: 11
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0015239-011
Misc. Info.: 297185
Operator ID: HMT Instrument ID: MH
Sublist: chrom-MH_TO15*sub7

Method: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\MH_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 21-Apr-2020 10:48:53 Calib Date: 16-Apr-2020 18:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC10.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX0331

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.598	8.589	0.009	96	236579	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.794	10.792	0.002	95	1606994	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.575	15.572	0.003	88	1391655	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr	95	17.224	17.222	0.002	90	966038	4.00	4.14	
6 Chlorodifluoromethane	51	3.548	3.546	0.002	97	963019	4.00	3.86	
7 Propene	41	3.559	3.555	0.004	99	427965	4.00	4.13	
8 Dichlorodifluoromethane	85	3.605	3.606	-0.001	100	1463527	4.00	3.81	
9 Chloromethane	52	3.781	3.779	0.002	97	152640	4.00	3.65	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.786	3.785	0.001	97	999739	4.00	3.91	
11 Acetaldehyde	44	3.926	3.930	-0.004	98	873674	20.0	18.7	
12 Vinyl chloride	62	3.946	3.945	0.001	99	504476	4.00	3.68	
14 Butadiene	54	4.029	4.028	0.001	73	364329	4.00	3.91	
13 Butane	43	4.029	4.028	0.001	83	609622	4.00	3.75	
15 Bromomethane	94	4.339	4.337	0.002	98	557215	4.00	3.85	
16 Chloroethane	64	4.473	4.473	0.000	95	220714	4.00	3.78	
17 Ethanol	31	4.572	4.571	0.001	92	849422	20.0	20.1	
18 Vinyl bromide	106	4.763	4.763	0.000	97	512684	4.00	3.93	
19 2-Methylbutane	43	4.809	4.806	0.003	89	439434	4.00	3.68	
20 Trichlorofluoromethane	101	5.026	5.022	0.004	99	1313983	4.00	3.82	
21 Acrolein	56	5.037	5.037	0.000	92	160207	4.00	3.98	
22 Acetonitrile	40	5.104	5.116	-0.012	99	193771	4.00	4.18	
23 Acetone	58	5.145	5.154	-0.009	98	621189	12.0	11.7	
25 Isopropyl alcohol	45	5.233	5.241	-0.008	92	1833925	12.0	12.0	
24 Pentane	72	5.238	5.236	0.002	93	59233	4.00	3.98	
26 Ethyl ether	31	5.399	5.408	-0.009	95	412535	4.00	4.00	
27 1,1-Dichloroethene	96	5.719	5.716	0.003	96	448571	4.00	3.89	
29 2-Methyl-2-propanol	59	5.812	5.832	-0.020	94	801044	4.00	4.19	
28 Acrylonitrile	53	5.828	5.826	0.002	94	362650	4.00	4.15	
30 1,1,2-Trichloro-1,2,2-trif	101	5.890	5.889	0.001	92	1037519	4.00	3.89	
31 Methylene Chloride	84	6.065	6.063	0.002	98	484483	4.00	4.07	
32 3-Chloro-1-propene	39	6.076	6.076	0.000	99	381139	4.00	3.92	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
33 Carbon disulfide	76	6.220	6.218	0.002	99	1401786	4.00	4.06	
34 trans-1,2-Dichloroethene	96	6.866	6.859	0.007	97	462023	4.00	4.06	
35 2-Methylpentane	43	6.872	6.873	-0.001	95	927170	4.00	4.12	
36 Methyl tert-butyl ether	73	6.975	6.989	-0.014	97	1113570	4.00	4.19	
37 1,1-Dichloroethane	63	7.285	7.280	0.005	100	870501	4.00	3.84	
38 Vinyl acetate	43	7.383	7.385	-0.002	100	1260082	4.00	4.46	
39 2-Butanone (MEK)	72	7.828	7.832	-0.004	96	208856	4.00	4.15	
40 Hexane	56	7.848	7.848	0.000	86	350514	4.00	4.12	
41 Isopropyl ether	45	8.003	8.011	-0.008	98	1542058	4.00	4.22	
42 cis-1,2-Dichloroethene	96	8.267	8.259	0.008	95	483319	4.00	4.07	
43 Ethyl acetate	43	8.438	8.446	-0.008	99	1057713	4.00	4.14	
44 Chloroform	83	8.608	8.601	0.007	97	1089216	4.00	3.90	
45 Tert-butyl ethyl ether	59	8.681	8.688	-0.008	96	1373717	4.00	4.32	
46 Tetrahydrofuran	42	8.991	9.005	-0.014	93	486618	4.00	4.19	
47 1,1,1-Trichloroethane	97	9.626	9.623	0.003	97	1035652	4.00	3.98	
48 1,2-Dichloroethane	62	9.740	9.736	0.004	97	674961	4.00	3.97	
49 n-Butanol	31	10.185	10.201	-0.017	84	163141	4.00	4.51	
50 Cyclohexane	69	10.231	10.229	0.002	81	194896	4.00	4.21	
51 Benzene	78	10.236	10.231	0.005	97	1381354	4.00	3.95	
52 Carbon tetrachloride	117	10.257	10.253	0.004	95	1027125	4.00	4.07	
53 2,3-Dimethylpentane	71	10.355	10.351	0.004	89	276254	4.00	4.16	
54 Thiophene	84	10.515	10.512	0.003	96	804688	4.00	4.11	
55 Isooctane	57	11.006	11.005	0.001	98	2202334	4.00	4.15	
56 n-Heptane	71	11.394	11.392	0.002	91	422040	4.00	4.30	
57 1,2-Dichloropropane	63	11.482	11.478	0.004	92	570867	4.00	3.98	
58 Trichloroethene	130	11.518	11.514	0.004	91	562502	4.00	3.94	
59 Dibromomethane	93	11.606	11.602	0.004	90	689705	4.00	3.94	
60 Dichlorobromomethane	83	11.751	11.748	0.003	98	1141997	4.00	4.17	
61 1,4-Dioxane	88	11.756	11.770	-0.014	85	219730	4.00	4.32	
62 Methyl methacrylate	41	11.844	11.847	-0.003	95	572229	4.00	4.44	
63 Methylcyclohexane	83	12.293	12.288	0.005	96	779341	4.00	3.89	
64 4-Methyl-2-pentanone (MIBK	43	12.702	12.710	-0.008	97	1156932	4.00	4.65	
65 cis-1,3-Dichloropropene	75	12.769	12.764	0.005	95	829424	4.00	4.48	
66 trans-1,3-Dichloropropene	75	13.472	13.471	0.001	98	751139	4.00	4.53	
67 Toluene	91	13.590	13.589	0.001	93	1645627	4.00	4.04	
68 1,1,2-Trichloroethane	83	13.673	13.670	0.003	96	578879	4.00	3.97	
69 2-Hexanone	58	14.050	14.059	-0.009	92	586718	4.00	4.60	
70 n-Octane	85	14.288	14.287	0.001	93	464843	4.00	4.30	
71 Chlorodibromomethane	129	14.376	14.374	0.002	97	1125338	4.00	4.36	
72 Ethylene Dibromide	107	14.671	14.668	0.003	97	1020772	4.00	4.23	
73 Tetrachloroethene	129	14.743	14.739	0.004	92	583145	4.00	3.91	
74 Chlorobenzene	112	15.622	15.622	0.000	93	1272896	4.00	3.93	
75 2,3-Dimethylheptane	43	15.642	15.643	-0.001	96	1480622	4.00	4.05	
76 Ethylbenzene	91	15.911	15.911	0.000	99	2180137	4.00	4.34	
77 m-Xylene & p-Xylene	91	16.076	16.076	0.000	99	3391621	8.00	8.85	
78 n-Nonane	57	16.495	16.497	-0.002	90	1071726	4.00	4.34	
79 Bromoform	173	16.526	16.527	-0.001	92	1242561	4.00	4.69	
80 Styrene	104	16.542	16.541	0.001	99	1202773	4.00	4.11	
81 o-Xylene	91	16.604	16.601	0.003	99	1690681	4.00	4.26	
82 1,1,2,2-Tetrachloroethane	83	16.929	16.930	-0.001	98	1582520	4.00	4.16	
83 1,2,3-Trichloropropane	110	17.089	17.089	0.000	98	344685	4.00	4.11	
84 Isopropylbenzene	105	17.193	17.192	0.001	97	2277155	4.00	4.25	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
85 N-Propylbenzene	120	17.756	17.756	0.000	98	615504	4.00	4.46	
86 2-Chlorotoluene	126	17.803	17.794	0.009	98	583613	4.00	4.35	
87 4-Ethyltoluene	105	17.911	17.912	-0.001	99	2375918	4.00	4.49	
88 1,3,5-Trimethylbenzene	120	17.994	17.992	0.002	91	904990	4.00	4.06	
89 Alpha Methyl Styrene	118	18.237	18.237	0.000	86	973148	4.00	4.61	
90 n-Decane	57	18.299	18.299	0.000	90	1470997	4.00	4.25	
91 tert-Butylbenzene	119	18.438	18.439	-0.001	94	2046472	4.00	4.34	
92 1,2,4-Trimethylbenzene	105	18.454	18.454	0.000	96	2062691	4.00	4.39	
93 sec-Butylbenzene	105	18.723	18.722	0.001	98	3126528	4.00	4.62	
94 1,3-Dichlorobenzene	146	18.738	18.739	-0.001	98	1356116	4.00	4.37	
95 Benzyl chloride	91	18.816	18.817	-0.001	97	1848688	4.00	4.66	
96 1,4-Dichlorobenzene	146	18.831	18.829	0.002	96	1310298	4.00	4.44	
97 4-Isopropyltoluene	119	18.893	18.894	-0.001	96	2319630	4.00	4.46	
98 1,2,3-Trimethylbenzene	105	18.950	18.948	0.002	99	2023027	4.00	4.32	
99 Butylcyclohexane	83	19.007	19.005	0.002	95	1709009	4.00	4.26	
100 1,2-Dichlorobenzene	146	19.203	19.205	-0.002	80	1372447	4.00	4.38	
101 2,3-Dihydroindene	117	19.203	19.204	-0.001	93	1995144	4.00	4.52	
102 Indene	116	19.343	19.340	0.003	90	1783350	4.00	4.53	
103 n-Butylbenzene	91	19.348	19.346	0.002	97	2773990	4.00	4.13	
104 Undecane	57	19.674	19.672	0.002	95	1744807	4.00	4.48	
105 1,2-Dibromo-3-Chloropropan	157	19.834	19.833	0.001	98	820660	4.00	4.66	
106 1,2,4,5-Tetramethylbenzene	119	20.128	20.128	0.000	96	2284296	4.00	3.92	
107 Dodecane	57	20.764	20.765	-0.001	97	1706215	4.00	4.44	
108 1,2,4-Trichlorobenzene	180	20.966	20.966	0.000	93	1103007	4.00	5.66	
109 Naphthalene	128	21.110	21.111	-0.001	99	2490239	4.00	5.60	
110 Hexachlorobutadiene	225	21.338	21.338	0.000	91	1136376	4.00	4.22	
111 1,2,3-Trichlorobenzene	180	21.410	21.410	0.000	92	1012803	4.00	4.63	
112 2-Methylnaphthalene	142	22.061	22.062	-0.001	97	799266	4.00	5.23	
113 1-Methylnaphthalene	142	22.191	22.191	0.000	97	926074	4.00	4.88	
A 115 C8 Range	1	14.293	(14.242-14.335)		0	4495106	4.00	4.30	
S 116 Xylenes, Total	100				0		12.0	13.1	
S 117 1,2-Dichloroethene, Total	1				0		8.00	8.13	

Reagents:

40L8DQP_00017	Amount Added: 200.00	Units: mL	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

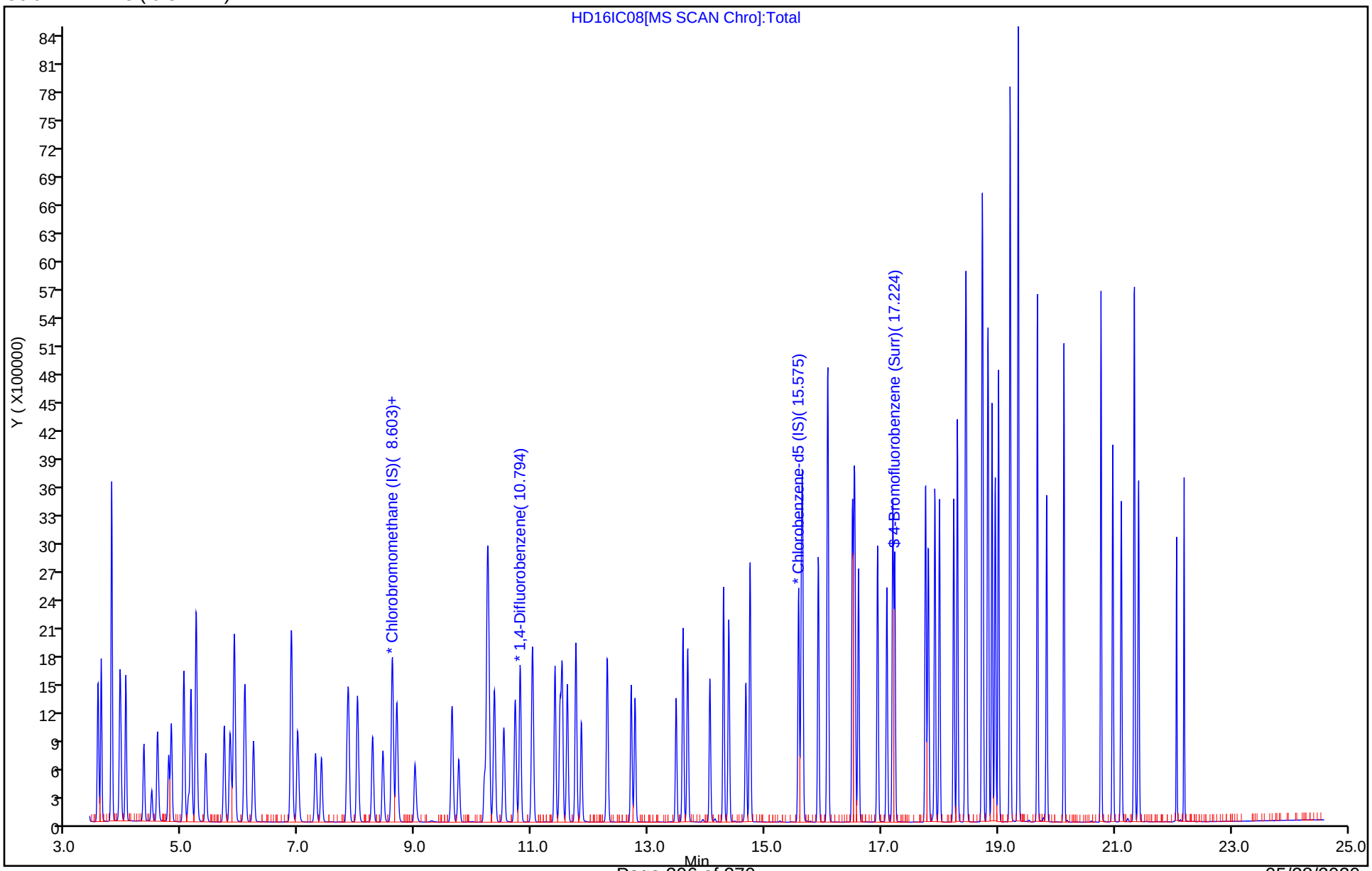
Report Date: 21-Apr-2020 10:48:54 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC08.D

Injection Date:	16-Apr-2020 15:04:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	IC L8			Worklist Smp#:	11
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

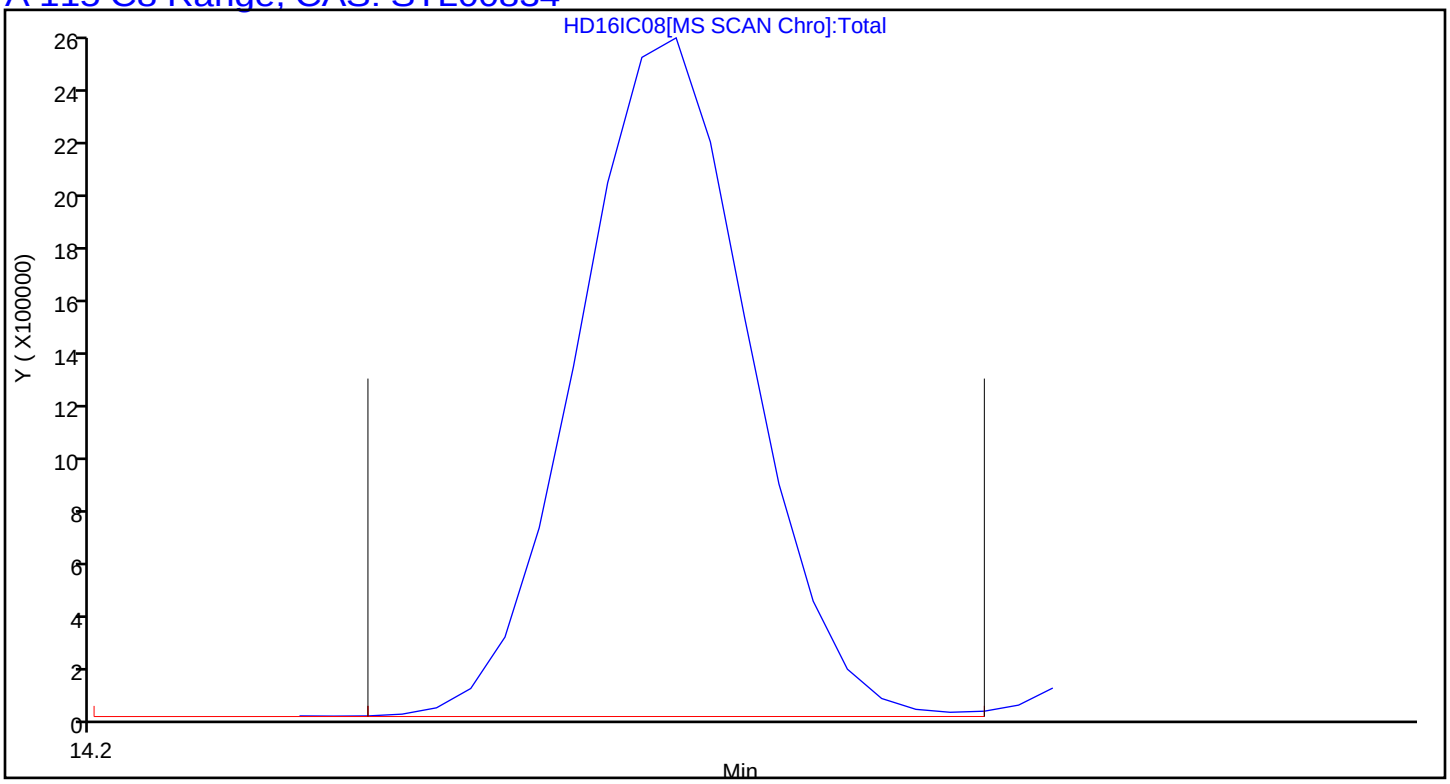


Report Date: 21-Apr-2020 10:48:54 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC08.D				
Injection Date:	16-Apr-2020 15:04:30	Instrument ID:	MH		
Lims ID:	IC L8				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	6	Worklist Smp#:	11
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 115 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16C09.D
Lims ID: IC L9
Client ID:
Sample Type: IC Calib Level: 9
Inject. Date: 16-Apr-2020 16:49:30 ALS Bottle#: 7 Worklist Smp#: 13
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0015239-013
Misc. Info.: 297184
Operator ID: HMT Instrument ID: MH
Sublist: chrom-MH_TO15*sub7

Method: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\MH_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 21-Apr-2020 10:48:58 Calib Date: 16-Apr-2020 18:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC10.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX0331

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.592	8.589	0.003	96	255156	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.794	10.792	0.002	95	1713618	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.575	15.572	0.003	88	1536489	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr	95	17.224	17.222	0.002	90	1001617	4.00	3.89	
6 Chlorodifluoromethane	51	3.543	3.546	-0.003	97	2067462	8.00	7.68	
7 Propene	41	3.553	3.555	-0.002	99	854036	8.00	8.29	
8 Dichlorodifluoromethane	85	3.600	3.606	-0.006	100	3140078	8.00	7.59	
9 Chloromethane	52	3.776	3.779	-0.003	97	333046	8.00	7.38	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.781	3.785	-0.004	95	2138873	8.00	7.75	
11 Acetaldehyde	44	3.925	3.930	-0.005	97	1939473	40.0	38.6	
12 Vinyl chloride	62	3.941	3.945	-0.004	99	1097532	8.00	7.41	
14 Butadiene	54	4.024	4.028	-0.004	74	800991	8.00	7.96	
13 Butane	43	4.024	4.028	-0.004	82	1317848	8.00	7.51	
15 Bromomethane	94	4.334	4.337	-0.003	98	1195058	8.00	7.65	
16 Chloroethane	64	4.468	4.473	-0.005	95	473312	8.00	7.51	
17 Ethanol	31	4.572	4.571	0.001	92	1803812	40.0	39.6	
18 Vinyl bromide	106	4.763	4.763	0.000	98	1095069	8.00	7.78	
19 2-Methylbutane	43	4.804	4.806	-0.002	88	922954	8.00	7.17	
20 Trichlorofluoromethane	101	5.021	5.022	-0.001	100	2754124	8.00	7.42	
21 Acrolein	56	5.037	5.037	0.000	93	351820	8.00	8.11	
22 Acetonitrile	40	5.104	5.116	-0.012	99	404640	8.00	8.10	
23 Acetone	58	5.145	5.154	-0.009	97	1306609	24.0	22.8	
25 Isopropyl alcohol	45	5.233	5.241	-0.008	88	3796296	24.0	24.2	
24 Pentane	72	5.233	5.236	-0.003	69	123932	8.00	7.72	
26 Ethyl ether	31	5.393	5.408	-0.015	96	869980	8.00	7.83	
27 1,1-Dichloroethene	96	5.714	5.716	-0.002	96	969472	8.00	7.80	
29 2-Methyl-2-propanol	59	5.812	5.832	-0.020	94	1729850	8.00	8.39	
28 Acrylonitrile	53	5.827	5.826	0.001	94	769371	8.00	8.17	
30 1,1,2-Trichloro-1,2,2-trif	101	5.889	5.889	0.000	95	2185448	8.00	7.59	
31 Methylene Chloride	84	6.065	6.063	0.002	98	964215	8.00	8.03	
32 3-Chloro-1-propene	39	6.075	6.076	-0.001	99	794100	8.00	7.56	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
33 Carbon disulfide	76	6.215	6.218	-0.003	99	2950735	8.00	7.92	
34 trans-1,2-Dichloroethene	96	6.861	6.859	0.002	97	1004966	8.00	8.19	
35 2-Methylpentane	43	6.871	6.873	-0.002	94	1934336	8.00	7.97	
36 Methyl tert-butyl ether	73	6.975	6.989	-0.014	96	2377350	8.00	8.29	
37 1,1-Dichloroethane	63	7.285	7.280	0.005	100	1864545	8.00	7.63	
38 Vinyl acetate	43	7.383	7.385	-0.002	100	2745775	8.00	9.02	
39 2-Butanone (MEK)	72	7.822	7.832	-0.010	96	459705	8.00	8.46	
40 Hexane	56	7.848	7.848	0.000	89	735372	8.00	8.01	
41 Isopropyl ether	45	7.998	8.011	-0.013	99	3280525	8.00	8.32	
42 cis-1,2-Dichloroethene	96	8.262	8.259	0.003	95	1051184	8.00	8.21	
43 Ethyl acetate	43	8.437	8.446	-0.009	99	2280021	8.00	8.28	
44 Chloroform	83	8.608	8.601	0.007	97	2319314	8.00	7.70	
45 Tert-butyl ethyl ether	59	8.675	8.688	-0.013	95	2958694	8.00	8.62	
46 Tetrahydrofuran	42	8.985	9.005	-0.020	93	1048134	8.00	8.37	
47 1,1,1-Trichloroethane	97	9.626	9.623	0.003	97	2226667	8.00	7.94	
48 1,2-Dichloroethane	62	9.740	9.736	0.004	97	1438586	8.00	7.93	
49 n-Butanol	31	10.174	10.201	-0.027	88	367453	8.00	9.53	
50 Cyclohexane	69	10.226	10.229	-0.003	91	419218	8.00	8.50	
51 Benzene	78	10.231	10.231	0.000	97	2959608	8.00	7.94	
52 Carbon tetrachloride	117	10.257	10.253	0.004	97	2236066	8.00	8.31	
53 2,3-Dimethylpentane	71	10.350	10.351	-0.001	89	587746	8.00	8.31	
54 Thiophene	84	10.515	10.512	0.003	95	1741820	8.00	8.34	
55 Isooctane	57	11.006	11.005	0.001	98	4729216	8.00	8.35	
56 n-Heptane	71	11.394	11.392	0.002	90	936570	8.00	8.94	
57 1,2-Dichloropropane	63	11.482	11.478	0.004	93	1229183	8.00	8.05	
58 Trichloroethene	130	11.513	11.514	-0.001	95	1238898	8.00	8.13	
59 Dibromomethane	93	11.606	11.602	0.004	93	1497232	8.00	8.02	
60 Dichlorobromomethane	83	11.750	11.748	0.002	98	2474307	8.00	8.47	
61 1,4-Dioxane	88	11.756	11.770	-0.014	84	467421	8.00	8.61	
62 Methyl methacrylate	41	11.843	11.847	-0.004	96	1231161	8.00	8.96	
63 Methylcyclohexane	83	12.288	12.288	0.000	96	1717022	8.00	8.00	
64 4-Methyl-2-pentanone (MIBK	43	12.696	12.710	-0.014	97	2505241	8.00	9.44	
65 cis-1,3-Dichloropropene	75	12.763	12.764	-0.001	94	1842062	8.00	9.32	
66 trans-1,3-Dichloropropene	75	13.471	13.471	0.000	97	1757736	8.00	9.59	
67 Toluene	91	13.590	13.589	0.001	93	3618377	8.00	8.02	
68 1,1,2-Trichloroethane	83	13.673	13.670	0.003	96	1247689	8.00	7.74	
69 2-Hexanone	58	14.050	14.059	-0.009	93	1298399	8.00	9.22	
70 n-Octane	85	14.288	14.287	0.001	91	1032477	8.00	8.65	
71 Chlorodibromomethane	129	14.376	14.374	0.002	97	2569991	8.00	9.03	
72 Ethylene Dibromide	107	14.670	14.668	0.002	98	2320778	8.00	8.72	
73 Tetrachloroethene	129	14.743	14.739	0.004	94	1308529	8.00	7.95	
74 Chlorobenzene	112	15.621	15.622	-0.001	93	2899265	8.00	8.11	
75 2,3-Dimethylheptane	43	15.642	15.643	-0.001	94	3076901	8.00	7.62	
76 Ethylbenzene	91	15.911	15.911	0.000	99	4814622	8.00	8.68	
77 m-Xylene & p-Xylene	91	16.076	16.076	0.000	99	7590625	16.0	17.9	
78 n-Nonane	57	16.495	16.497	-0.002	89	2357236	8.00	8.65	
79 Bromoform	173	16.526	16.527	-0.001	93	2962933	8.00	10.1	
80 Styrene	104	16.541	16.541	0.000	99	2614749	8.00	8.05	
81 o-Xylene	91	16.603	16.601	0.002	98	3605048	8.00	8.23	
82 1,1,2,2-Tetrachloroethane	83	16.929	16.930	-0.001	98	3371779	8.00	8.02	
83 1,2,3-Trichloropropane	110	17.089	17.089	0.000	98	735160	8.00	7.93	
84 Isopropylbenzene	105	17.193	17.192	0.001	97	4953618	8.00	8.37	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
85 N-Propylbenzene	120	17.756	17.756	0.000	98	1356728	8.00	8.90	
86 2-Chlorotoluene	126	17.797	17.794	0.003	97	1244997	8.00	8.41	
87 4-Ethyltoluene	105	17.911	17.912	-0.001	99	5088580	8.00	8.72	
88 1,3,5-Trimethylbenzene	120	17.994	17.992	0.002	92	1964746	8.00	7.97	
89 Alpha Methyl Styrene	118	18.237	18.237	0.000	87	2176590	8.00	9.34	
90 n-Decane	57	18.299	18.299	0.000	90	3073620	8.00	8.05	
91 tert-Butylbenzene	119	18.438	18.439	-0.001	93	4558596	8.00	8.75	
92 1,2,4-Trimethylbenzene	105	18.454	18.454	0.000	96	4478253	8.00	8.63	
93 sec-Butylbenzene	105	18.723	18.722	0.000	98	6891856	8.00	9.22	
94 1,3-Dichlorobenzene	146	18.738	18.739	-0.001	99	3004392	8.00	8.77	
95 Benzyl chloride	91	18.821	18.817	0.004	97	4188193	8.00	9.56	
96 1,4-Dichlorobenzene	146	18.831	18.829	0.002	95	2882638	8.00	8.84	
97 4-Isopropyltoluene	119	18.893	18.894	-0.001	97	5134104	8.00	8.95	
98 1,2,3-Trimethylbenzene	105	18.950	18.948	0.002	99	4335946	8.00	8.39	
99 Butylcyclohexane	83	19.007	19.005	0.002	95	3621023	8.00	8.18	
100 1,2-Dichlorobenzene	146	19.208	19.205	0.003	82	3089904	8.00	8.94	
101 2,3-Dihydroindene	117	19.208	19.204	0.004	93	4466008	8.00	9.17	
102 Indene	116	19.343	19.340	0.003	90	4034180	8.00	9.28	
103 n-Butylbenzene	91	19.348	19.346	0.002	97	6141265	8.00	8.24	
104 Undecane	57	19.673	19.672	0.001	94	3932182	8.00	9.14	
105 1,2-Dibromo-3-Chloropropan	157	19.834	19.833	0.001	98	1871705	8.00	9.56	
106 1,2,4,5-Tetramethylbenzene	119	20.128	20.128	0.000	96	5440106	8.00	8.36	
107 Dodecane	57	20.764	20.765	-0.001	98	4031518	8.00	9.49	
108 1,2,4-Trichlorobenzene	180	20.966	20.966	0.000	93	2692423	8.00	12.5	
109 Naphthalene	128	21.115	21.111	0.004	99	5514360	8.00	11.2	
110 Hexachlorobutadiene	225	21.338	21.338	0.000	91	2819544	8.00	9.48	
111 1,2,3-Trichlorobenzene	180	21.410	21.410	0.000	93	2361537	8.00	9.77	
112 2-Methylnaphthalene	142	22.061	22.062	-0.001	98	1960658	8.00	11.6	
113 1-Methylnaphthalene	142	22.190	22.191	-0.001	98	2166654	8.00	10.3	
A 115 C8 Range	1	14.288	(14.242-14.335)		0	9596132	8.00	8.60	
S 116 Xylenes, Total	100				0		24.0	26.2	
S 117 1,2-Dichloroethene, Total	1				0		16.0	16.4	

Reagents:

40L9DQP_00017	Amount Added: 200.00	Units: mL	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

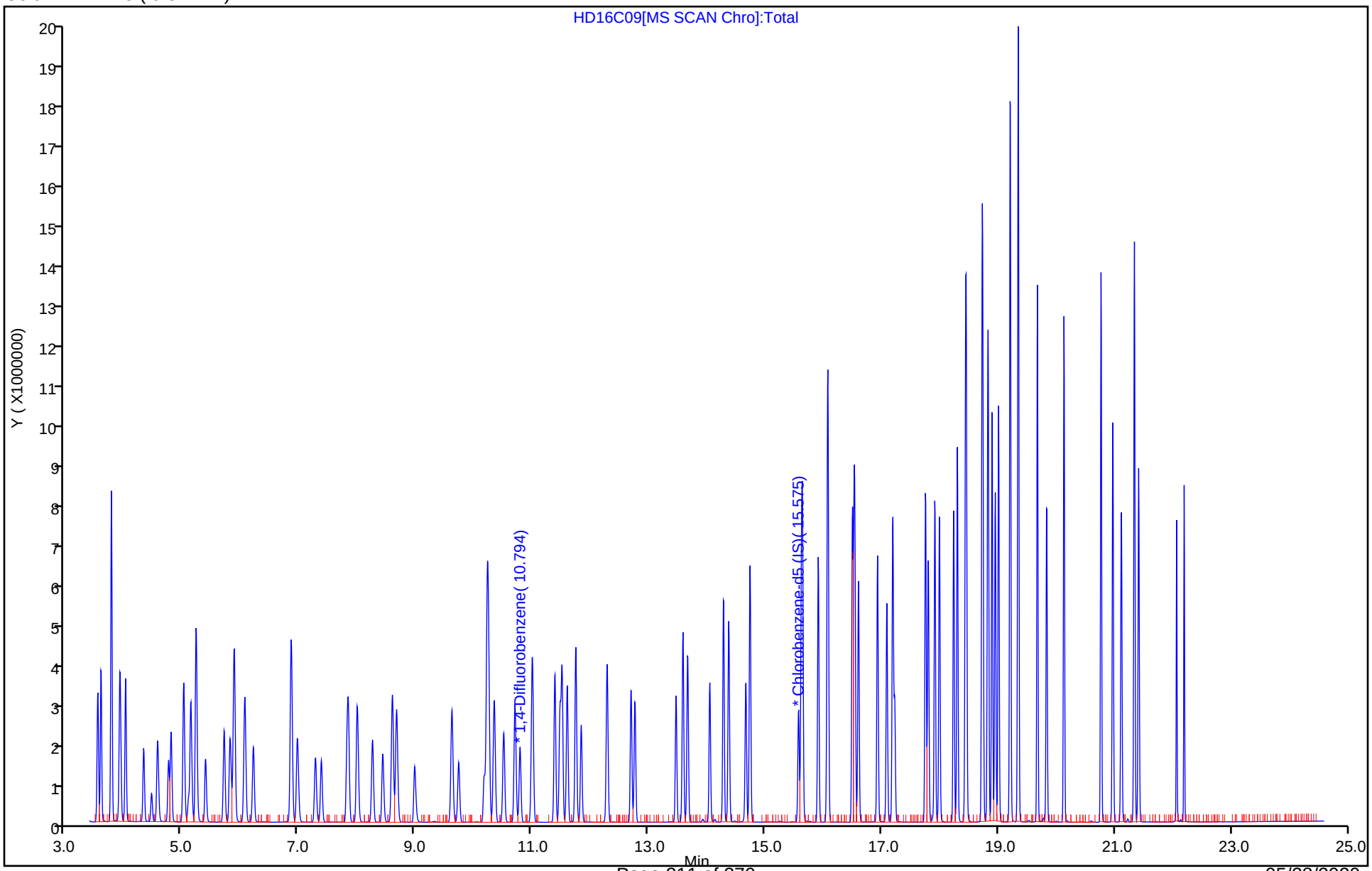
Report Date: 21-Apr-2020 10:48:59 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16C09.D

Injection Date:	16-Apr-2020 16:49:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	IC L9			Worklist Smp#:	13
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

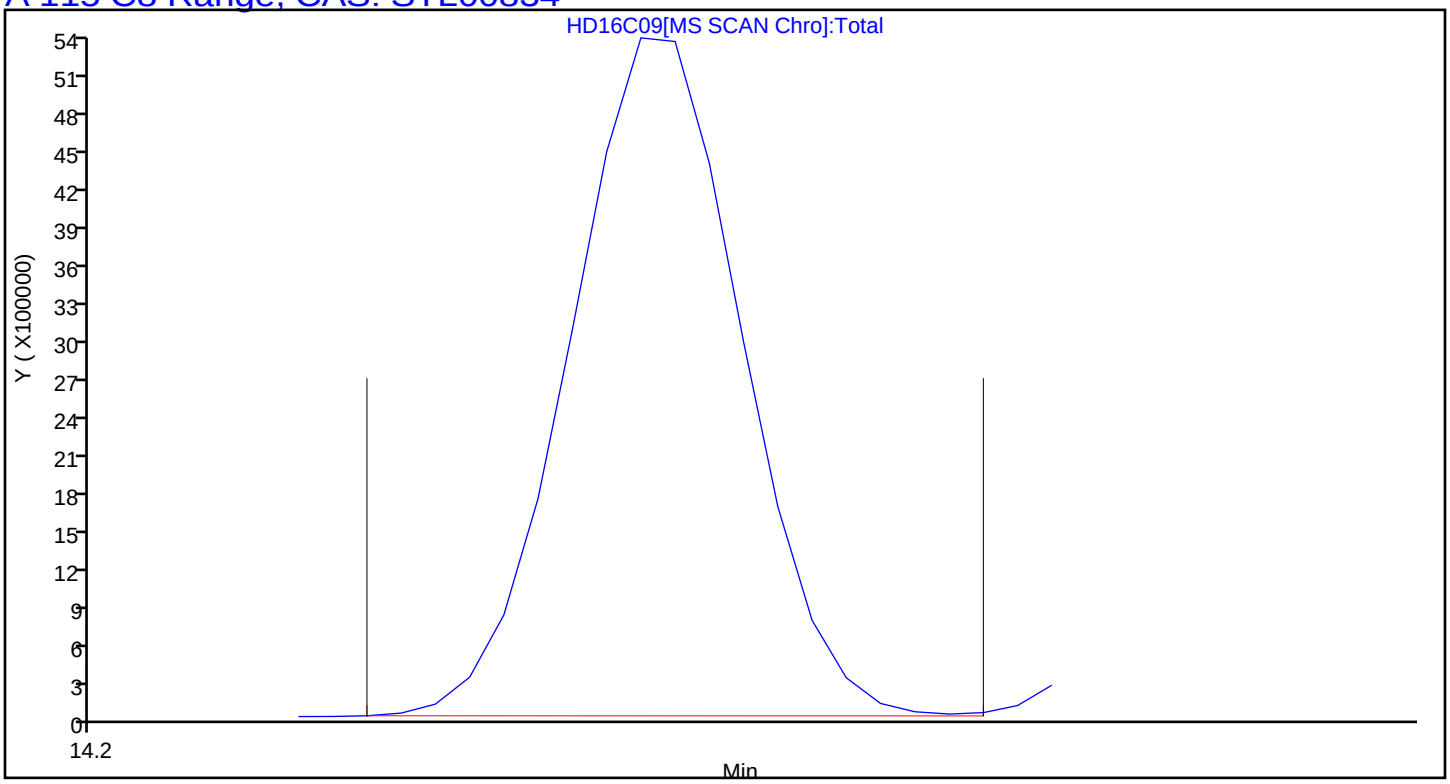


Report Date: 21-Apr-2020 10:48:59 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16C09.D				
Injection Date:	16-Apr-2020 16:49:30	Instrument ID:	MH		
Lims ID:	IC L9				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	7	Worklist Smp#:	13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 115 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC10.D
Lims ID: IC L10
Client ID:
Sample Type: IC Calib Level: 10
Inject. Date: 16-Apr-2020 18:34:30 ALS Bottle#: 8 Worklist Smp#: 15
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0015239-015
Misc. Info.: 297183
Operator ID: HMT Instrument ID: MH
Sublist: chrom-MH_TO15*sub7

Method: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\MH_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 21-Apr-2020 10:49:05 Calib Date: 16-Apr-2020 18:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC10.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX0331

First Level Reviewer: tajh Date: 20-Apr-2020 08:23:01

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.603	8.589	0.014	94	304684	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.805	10.792	0.013	95	1979586	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.575	15.572	0.003	87	1822536	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr	95	17.229	17.222	0.007	91	1140026	4.00	3.73	
6 Chlorodifluoromethane	51	3.543	3.546	-0.003	96	4645992	16.0	14.5	
7 Propene	41	3.553	3.555	-0.002	99	1786636	16.0	15.1	
8 Dichlorodifluoromethane	85	3.605	3.606	-0.001	100	7021295	16.0	14.2	
9 Chloromethane	52	3.781	3.779	0.002	98	695361	16.0	12.9	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.786	3.785	0.001	94	4587553	16.0	13.9	
11 Acetaldehyde	44	3.931	3.930	0.001	96	3884148	80.0	64.7	
12 Vinyl chloride	62	3.946	3.945	0.001	99	2322657	16.0	13.1	
14 Butadiene	54	4.029	4.028	0.001	75	1733328	16.0	14.4	
13 Butane	43	4.029	4.028	0.001	82	2819645	16.0	13.5	
15 Bromomethane	94	4.339	4.337	0.002	98	2680699	16.0	14.4	
16 Chloroethane	64	4.479	4.473	0.006	95	1117601	16.0	14.9	
17 Ethanol	31	4.587	4.571	0.016	91	4024711	80.0	74.1	
18 Vinyl bromide	106	4.768	4.763	0.005	97	2449170	16.0	14.6	
19 2-Methylbutane	43	4.809	4.806	0.003	89	2179006	16.0	14.2	
20 Trichlorofluoromethane	101	5.026	5.022	0.004	100	6259604	16.0	14.1	
21 Acrolein	56	5.042	5.037	0.005	92	770263	16.0	14.9	
22 Acetonitrile	40	5.114	5.116	-0.002	99	876291	16.0	14.7	
23 Acetone	58	5.150	5.154	-0.004	97	2840455	48.0	41.4	
25 Isopropyl alcohol	45	5.254	5.241	0.013	95	8062272	48.0	48.0	
24 Pentane	72	5.243	5.236	0.007	98	283032	16.0	14.8	
26 Ethyl ether	31	5.404	5.408	-0.004	93	1865787	16.0	14.1	
27 1,1-Dichloroethene	96	5.724	5.716	0.008	97	2234722	16.0	15.1	
29 2-Methyl-2-propanol	59	5.827	5.832	-0.005	94	3874874	16.0	15.7	
28 Acrylonitrile	53	5.838	5.826	0.012	94	1688190	16.0	15.0	
30 1,1,2-Trichloro-1,2,2-trif	101	5.895	5.889	0.006	94	4903021	16.0	14.3	
31 Methylene Chloride	84	6.076	6.063	0.013	96	2087076	16.0	15.1	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.086	6.076	0.010	98	1680097	16.0	13.4	
33 Carbon disulfide	76	6.225	6.218	0.007	98	6586980	16.0	14.8	
34 trans-1,2-Dichloroethene	96	6.871	6.859	0.012	97	2341906	16.0	16.0	
35 2-Methylpentane	43	6.882	6.873	0.009	95	4230295	16.0	14.6	
36 Methyl tert-butyl ether	73	6.980	6.989	-0.009	96	5377846	16.0	15.7	
37 1,1-Dichloroethane	63	7.295	7.280	0.015	100	4207742	16.0	14.4	
38 Vinyl acetate	43	7.394	7.385	0.009	100	6112232	16.0	16.8	
39 2-Butanone (MEK)	72	7.833	7.832	0.001	97	1059600	16.0	16.3	
40 Hexane	56	7.853	7.848	0.005	83	1664785	16.0	15.2	
41 Isopropyl ether	45	8.009	8.011	-0.002	99	7257936	16.0	15.4	
42 cis-1,2-Dichloroethene	96	8.272	8.259	0.013	95	2404412	16.0	15.7	
43 Ethyl acetate	43	8.448	8.446	0.002	99	5058973	16.0	15.4	
44 Chloroform	83	8.618	8.601	0.017	97	5266742	16.0	14.6	
45 Tert-butyl ethyl ether	59	8.686	8.688	-0.002	95	6705595	16.0	16.4	
46 Tetrahydrofuran	42	8.991	9.005	-0.014	92	2325299	16.0	15.6	
47 1,1,1-Trichloroethane	97	9.637	9.623	0.014	96	5228667	16.0	15.6	
48 1,2-Dichloroethane	62	9.750	9.736	0.014	97	3239207	16.0	15.5	
49 n-Butanol	31	10.190	10.201	-0.011	83	823377	16.0	18.5	
50 Cyclohexane	69	10.236	10.229	0.007	94	984941	16.0	17.3	
51 Benzene	78	10.246	10.231	0.015	97	6814294	16.0	15.8	
52 Carbon tetrachloride	117	10.262	10.253	0.009	97	5348449	16.0	17.2	
53 2,3-Dimethylpentane	71	10.360	10.351	0.009	89	1323627	16.0	16.2	
54 Thiophene	84	10.526	10.512	0.014	95	3939750	16.0	16.3	
55 Isooctane	57	11.011	11.005	0.006	99	10844560	16.0	16.6	
56 n-Heptane	71	11.399	11.392	0.007	89	2204310	16.0	18.2	
57 1,2-Dichloropropane	63	11.487	11.478	0.009	94	2802753	16.0	15.9	
58 Trichloroethene	130	11.523	11.514	0.009	95	2898833	16.0	16.5	
59 Dibromomethane	93	11.611	11.602	0.009	95	3408707	16.0	15.8	
60 Dichlorobromomethane	83	11.756	11.748	0.008	98	5771198	16.0	17.1	
61 1,4-Dioxane	88	11.761	11.770	-0.009	81	1048208	16.0	16.7	
62 Methyl methacrylate	41	11.854	11.847	0.007	97	2711034	16.0	17.1	
63 Methylcyclohexane	83	12.293	12.288	0.005	96	4057821	16.0	16.3	
64 4-Methyl-2-pentanone (MIBK	43	12.707	12.710	-0.003	96	5681206	16.0	18.5	
65 cis-1,3-Dichloropropene	75	12.774	12.764	0.010	93	4235824	16.0	18.6	
66 trans-1,3-Dichloropropene	75	13.477	13.471	0.006	97	4155320	16.0	19.1	
67 Toluene	91	13.596	13.589	0.007	93	8442824	16.0	15.8	
68 1,1,2-Trichloroethane	83	13.673	13.670	0.003	97	2833954	16.0	14.8	
69 2-Hexanone	58	14.056	14.059	-0.003	93	3099705	16.0	18.6	
70 n-Octane	85	14.293	14.287	0.006	90	2492358	16.0	17.6	
71 Chlorodibromomethane	129	14.381	14.374	0.007	97	6305124	16.0	18.7	
72 Ethylene Dibromide	107	14.676	14.668	0.008	98	5488598	16.0	17.4	
73 Tetrachloroethene	129	14.743	14.739	0.004	95	3173034	16.0	16.3	
74 Chlorobenzene	112	15.627	15.622	0.005	93	7013464	16.0	16.5	
75 2,3-Dimethylheptane	43	15.647	15.643	0.004	95	6326673	16.0	13.2	
76 Ethylbenzene	91	15.916	15.911	0.005	98	11387475	16.0	17.3	
77 m-Xylene & p-Xylene	91	16.082	16.076	0.006	98	17159700	32.0	34.2	
78 n-Nonane	57	16.500	16.497	0.003	85	5410526	16.0	16.7	
79 Bromoform	173	16.531	16.527	0.004	93	7282003	16.0	21.0	
80 Styrene	104	16.547	16.541	0.006	99	6065693	16.0	15.7	
81 o-Xylene	91	16.609	16.601	0.008	98	8412759	16.0	16.2	
82 1,1,2,2-Tetrachloroethane	83	16.934	16.930	0.004	98	8021948	16.0	16.1	
83 1,2,3-Trichloropropane	110	17.095	17.089	0.006	99	1810615	16.0	16.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	17.193	17.192	0.001	97	11862116	16.0	16.9	
85 N-Propylbenzene	120	17.756	17.756	0.000	99	3414296	16.0	18.9	e
86 2-Chlorotoluene	126	17.756	17.794	-0.038	97	2385342	16.0	13.6	e
87 4-Ethyltoluene	105	17.916	17.912	0.004	98	12406817	16.0	17.9	
88 1,3,5-Trimethylbenzene	120	17.994	17.992	0.002	92	4841639	16.0	16.5	
89 Alpha Methyl Styrene	118	18.242	18.237	0.005	88	5590147	16.0	20.2	
90 n-Decane	57	18.304	18.299	0.005	89	6994366	16.0	15.4	
91 tert-Butylbenzene	119	18.443	18.439	0.004	88	11074891	16.0	17.9	
92 1,2,4-Trimethylbenzene	105	18.459	18.454	0.005	96	10416980	16.0	16.9	
93 sec-Butylbenzene	105	18.723	18.722	0.001	97	14975296	16.0	16.9	e
94 1,3-Dichlorobenzene	146	18.743	18.739	0.004	99	7154411	16.0	17.6	
95 Benzyl chloride	91	18.826	18.817	0.009	98	10405686	16.0	20.0	
96 1,4-Dichlorobenzene	146	18.836	18.829	0.007	94	7027867	16.0	18.2	
97 4-Isopropyltoluene	119	18.898	18.894	0.004	96	12159293	16.0	17.9	
98 1,2,3-Trimethylbenzene	105	18.955	18.948	0.007	98	10341419	16.0	16.9	
99 Butylcyclohexane	83	19.012	19.005	0.007	96	8295437	16.0	15.8	
100 1,2-Dichlorobenzene	146	19.214	19.205	0.009	83	7182845	16.0	17.5	
101 2,3-Dihydroindene	117	19.208	19.204	0.004	94	9985831	16.0	17.3	
102 Indene	116	19.343	19.340	0.003	92	9089023	16.0	17.6	
103 n-Butylbenzene	91	19.353	19.346	0.007	98	12406646	16.0	14.0	
104 Undecane	57	19.674	19.672	0.002	92	8272907	16.0	16.2	
105 1,2-Dibromo-3-Chloropropan	157	19.834	19.833	0.001	97	4909704	16.0	21.1	
106 1,2,4,5-Tetramethylbenzene	119	20.128	20.128	0.000	96	12395752	16.0	16.0	e
107 Dodecane	57	20.769	20.765	0.004	98	8228196	16.0	16.3	
108 1,2,4-Trichlorobenzene	180	20.971	20.966	0.005	93	6648419	16.0	26.0	
109 Naphthalene	128	21.116	21.111	0.005	99	13023599	16.0	22.4	e
110 Hexachlorobutadiene	225	21.338	21.338	0.000	92	6122575	16.0	17.3	
111 1,2,3-Trichlorobenzene	180	21.415	21.410	0.005	93	5464745	16.0	19.1	
112 2-Methylnaphthalene	142	22.061	22.062	-0.001	99	3840400	16.0	19.2	
113 1-Methylnaphthalene	142	22.191	22.191	0.000	99	3851176	16.0	15.5	
A 115 C8 Range	1	14.293	(14.242-14.335)		0	21890779	16.0	17.0	
S 116 Xylenes, Total	100				0		48.0	50.4	
S 117 1,2-Dichloroethene, Total	1				0		32.0	31.7	

QC Flag Legend

Processing Flags

e - Potential Peak Saturated

Reagents:

40L10DQP_00017	Amount Added: 200.00	Units: mL	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

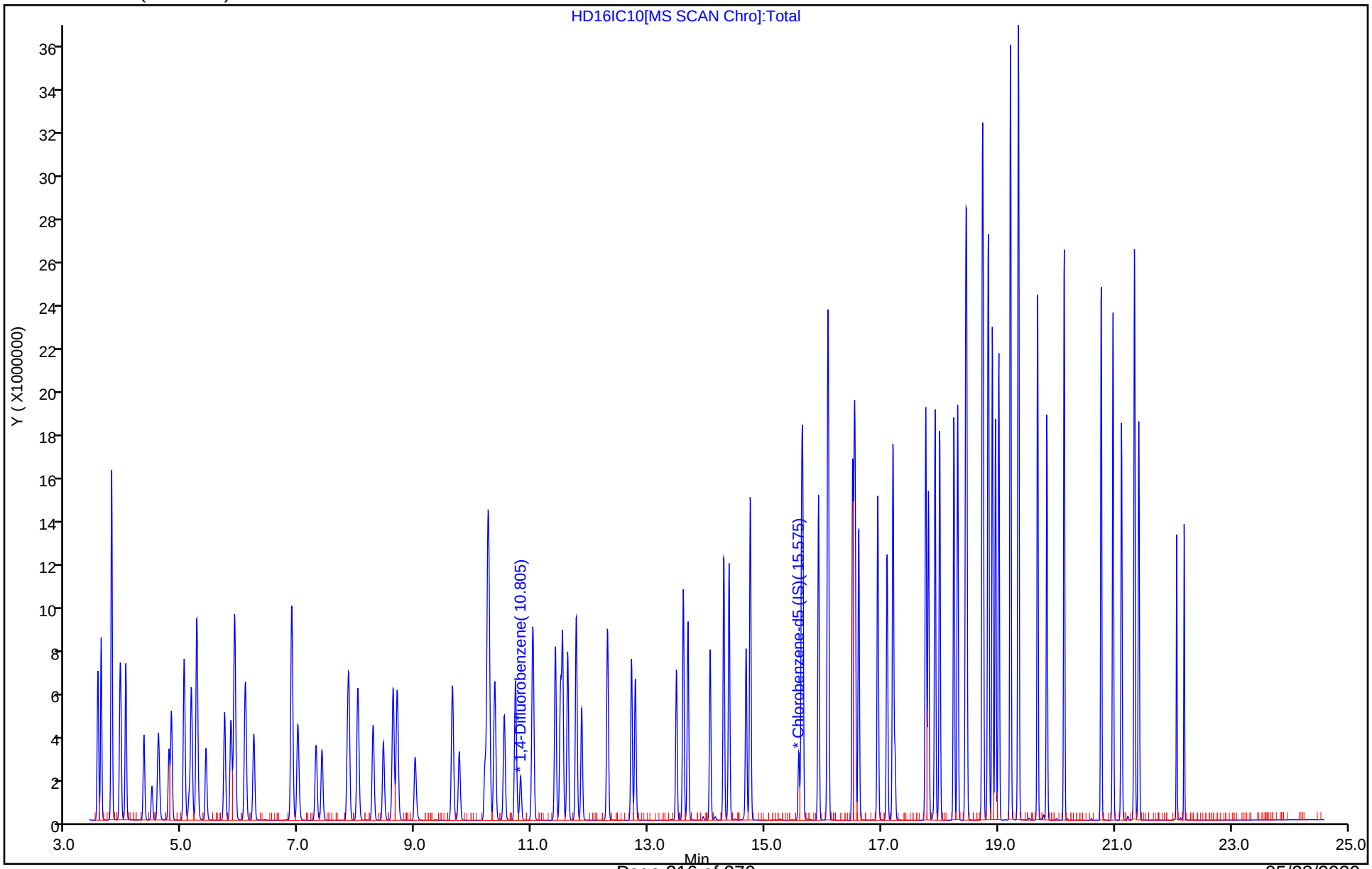
Report Date: 21-Apr-2020 10:49:06 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC10.D

Injection Date:	16-Apr-2020 18:34:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	IC L10			Worklist Smp#:	15
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

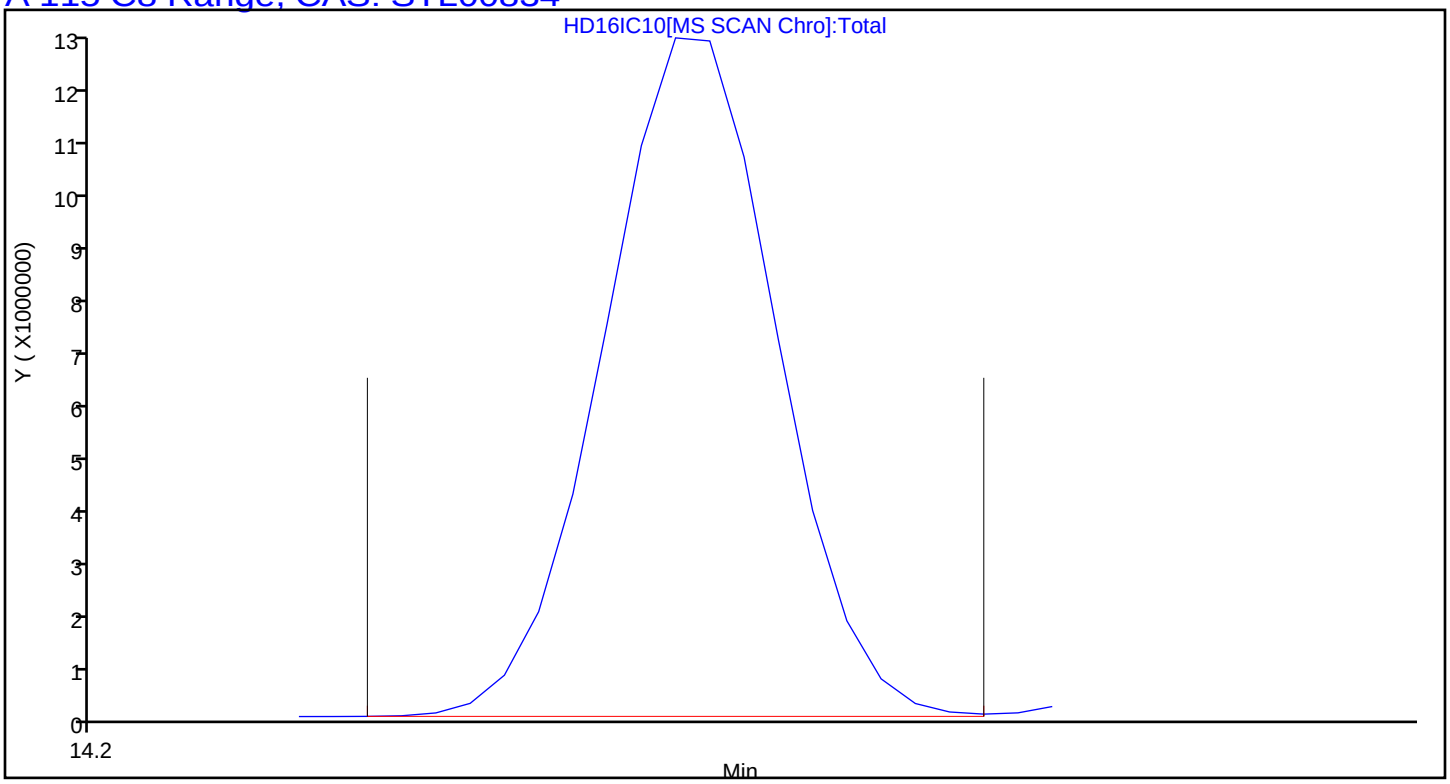
Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC10.D				
Injection Date:	16-Apr-2020 18:34:30	Instrument ID:	MH		
Lims ID:	IC L10				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	8	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 115 C8 Range, CAS: STL00834



FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19093-1

SDG No.:

Lab Sample ID: ICV 140-39100/17 Calibration Date: 04/16/2020 20:21

Instrument ID: MH Calib Start Date: 04/16/2020 08:03

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 04/16/2020 18:34

Lab File ID: HD16ICV.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorodifluoromethane	Ave	4.220	4.359		1.03	1.00	3.3	35.0
Propene	Lin2		2.480			1.00	-8.0	35.0
Dichlorodifluoromethane	Ave	6.490	7.104		1.09	1.00	9.5	35.0
Chloromethane	Ave	0.7074	0.7301		1.03	1.00	3.2	35.0
1,2-Dichloro-1,1,2,2-tetrafluoroethane	Ave	4.327	4.829		1.12	1.00	11.6	35.0
Acetaldehyde	Ave	0.7881	0.7790		4.94	5.00	-1.2	35.0
Vinyl chloride	Ave	2.321	2.584		1.11	1.00	11.3	35.0
1,3-Butadiene	Ave	1.577	1.793		1.14	1.00	13.7	35.0
Butane	Ave	2.750	3.140		1.14	1.00	14.2	35.0
Bromomethane	Ave	2.450	2.659		1.09	1.00	8.5	35.0
Chloroethane	Ave	0.9878	1.155		1.17	1.00	16.9	35.0
Ethanol	Ave	0.7132	0.6855		4.81	5.00	-3.9	35.0
Vinyl bromide	Ave	2.206	2.620		1.19	1.00	18.8	35.0
2-Methylbutane	Ave	2.018	2.407		1.19	1.00	19.3	35.0
Trichlorofluoromethane	Ave	5.819	6.299		1.08	1.00	8.3	35.0
Acrolein	Ave	0.6803	0.9006		1.32	1.00	32.4	35.0
Acetonitrile	Ave	0.7833	0.8861		1.13	1.00	13.1	35.0
Acetone	Ave	0.9000	1.006		1.12	1.00	11.7	35.0
Isopropyl alcohol	QuaF		3.572		1.32	1.00	31.9	35.0
Pentane	Ave	0.2516	0.3104		1.23	1.00	23.4	35.0
Ethyl ether	Ave	1.742	1.986		1.14	1.00	14.0	35.0
1,1-Dichloroethene	Ave	1.949	2.172		1.11	1.00	11.4	35.0
tert-Butyl alcohol	Ave	3.234	3.912		1.21	1.00	21.0	35.0
Acrylonitrile	Ave	1.476	1.723		1.17	1.00	16.7	35.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	4.513	5.096		1.13	1.00	12.9	35.0
Methylene Chloride	Lin2		3.071		1.14	1.00	13.9	35.0
3-Chloropropene	Ave	1.646	1.676		1.02	1.00	1.9	35.0
Carbon disulfide	Ave	5.838	6.516		1.12	1.00	11.6	35.0
trans-1,2-Dichloroethene	Ave	1.923	2.175		1.13	1.00	13.1	35.0
2-Methylpentane	Ave	3.805	3.944		1.04	1.00	3.7	35.0
Methyl tert-butyl ether	Ave	4.496	5.294		1.18	1.00	17.7	35.0
1,1-Dichloroethane	Ave	3.831	4.172		1.09	1.00	8.9	35.0
Vinyl acetate	Ave	4.773	5.645		1.18	1.00	18.3	35.0
2-Butanone (MEK)	Ave	0.8517	1.001		1.18	1.00	17.5	35.0
Hexane	Ave	1.439	1.648		1.15	1.00	14.5	35.0
Isopropyl ether	Ave	6.178	7.245		1.17	1.00	17.3	35.0
cis-1,2-Dichloroethene	Ave	2.008	2.326		1.16	1.00	15.8	35.0
Ethyl acetate	Ave	4.315	4.538		1.05	1.00	5.2	35.0
Chloroform	Ave	4.723	5.155		1.09	1.00	9.2	35.0
Tert-butyl ethyl ether	Ave	5.380	6.026		1.12	1.00	12.0	35.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19093-1

SDG No.:

Lab Sample ID: ICV 140-39100/17 Calibration Date: 04/16/2020 20:21

Instrument ID: MH Calib Start Date: 04/16/2020 08:03

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 04/16/2020 18:34

Lab File ID: HD16ICV.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Tetrahydrofuran	Ave	1.963	2.205		1.12	1.00	12.3	35.0
1,1,1-Trichloroethane	Ave	4.396	4.794		1.09	1.00	9.0	35.0
1,2-Dichloroethane	Ave	0.4234	0.4669		1.10	1.00	10.3	35.0
1-Butanol	Ave	0.0900	0.0978		1.09	1.00	8.6	35.0
Cyclohexane	Ave	0.1152	0.1380		1.20	1.00	19.8	35.0
Benzene	Ave	0.8700	0.9899		1.14	1.00	13.8	35.0
Carbon tetrachloride	Ave	0.6283	0.7210		1.15	1.00	14.8	35.0
2,3-Dimethylpentane	Ave	0.1652	0.1904		1.15	1.00	15.2	35.0
Thiophene	Ave	0.4876	0.5446		1.12	1.00	11.7	35.0
2,2,4-Trimethylpentane	Ave	1.322	1.512		1.14	1.00	14.3	35.0
Heptane	Ave	0.2446	0.2908		1.19	1.00	18.9	35.0
1,2-Dichloropropane	Ave	0.3566	0.3895		1.09	1.00	9.2	35.0
Trichloroethene	Ave	0.3557	0.4016		1.13	1.00	12.9	35.0
Dibromomethane	Ave	0.4357	0.4720		1.08	1.00	8.3	35.0
Bromodichloromethane	Ave	0.6822	0.7538		1.11	1.00	10.5	35.0
1,4-Dioxane	Ave	0.1267	0.1498		1.18	1.00	18.2	35.0
Methyl methacrylate	Ave	0.3209	0.3623		1.13	1.00	12.9	35.0
Methylcyclohexane	Lin1		0.6428		1.31	1.00	30.6	35.0
4-Methyl-2-pentanone (MIBK)	Ave	0.6196	0.7159		1.16	1.00	15.5	35.0
cis-1,3-Dichloropropene	Ave	0.4613	0.5608		1.22	1.00	21.6	35.0
trans-1,3-Dichloropropene	Ave	0.4771	0.5946		1.25	1.00	24.6	35.0
Toluene	Lin2		1.387		1.20	1.00	19.5	35.0
1,1,2-Trichloroethane	Ave	0.4196	0.4763		1.14	1.00	13.5	35.0
2-Hexanone	Ave	0.3665	0.4479		1.22	1.00	22.2	35.0
Octane	Ave	0.3108	0.3896		1.25	1.00	25.4	35.0
Dibromochloromethane	Ave	0.7412	0.8715		1.18	1.00	17.6	35.0
1,2-Dibromoethane (EDB)	Ave	0.6932	0.8193		1.18	1.00	18.2	35.0
Tetrachloroethene	Ave	0.4285	0.4959		1.16	1.00	15.7	35.0
Chlorobenzene	Ave	0.9309	1.070		1.15	1.00	15.0	35.0
2,3-Dimethylheptane	Ave	1.051	1.062		1.01	1.00	1.0	35.0
Ethylbenzene	Ave	1.444	1.765		1.22	1.00	22.2	35.0
m-Xylene & p-Xylene	Ave	1.101	1.402		2.55	2.00	27.3	35.0
Nonane	Ave	0.7090	0.8503		1.20	1.00	19.9	35.0
Bromoform	Ave	0.7614	0.8772		1.15	1.00	15.2	35.0
Styrene	Lin2		0.9657		1.17	1.00	17.0	35.0
o-Xylene	Ave	1.141	1.402		1.23	1.00	22.9	35.0
1,1,2,2-Tetrachloroethane	Ave	1.094	1.218		1.11	1.00	11.3	35.0
1,2,3-Trichloropropane	Ave	0.2413	0.2717		1.13	1.00	12.6	35.0
Isopropylbenzene	Ave	1.541	1.868		1.21	1.00	21.2	35.0
Propylbenzene	Ave	0.3970	0.4806		1.21	1.00	21.1	35.0
2-Chlorotoluene	Ave	0.3853	0.4796		1.24	1.00	24.5	35.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19093-1

SDG No.:

Lab Sample ID: ICV 140-39100/17 Calibration Date: 04/16/2020 20:21

Instrument ID: MH Calib Start Date: 04/16/2020 08:03

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 04/16/2020 18:34

Lab File ID: HD16ICV.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Ethyltoluene	Ave	1.519	1.760		1.16	1.00	15.9	35.0
1,3,5-Trimethylbenzene	Lin2		0.8168		1.29	1.00	29.4	35.0
Alpha Methyl Styrene	Ave	0.6067	0.6959		1.15	1.00	14.7	35.0
Decane	Ave	0.9946	1.131		1.14	1.00	13.7	35.0
tert-Butylbenzene	Ave	1.356	1.572		1.16	1.00	15.9	35.0
1,2,4-Trimethylbenzene	Ave	1.351	1.595		1.18	1.00	18.0	35.0
sec-Butylbenzene	Ave	1.945	2.314		1.19	1.00	19.0	35.0
1,3-Dichlorobenzene	Ave	0.8923	1.024		1.15	1.00	14.8	35.0
Benzyl chloride	Ave	1.141	1.247		1.09	1.00	9.2	35.0
1,4-Dichlorobenzene	Ave	0.8484	0.9853		1.16	1.00	16.1	35.0
4-Isopropyltoluene	Ave	1.493	1.737		1.16	1.00	16.3	35.0
1,2,3-Trimethylbenzene	Ave	1.345	1.147		0.852	1.00	-14.8	35.0
Butylcyclohexane	Ave	1.153	1.225		1.06	1.00	6.3	35.0
1,2-Dichlorobenzene	Ave	0.8999	1.019		1.13	1.00	13.2	35.0
Indane	Ave	1.268	1.412		1.11	1.00	11.3	35.0
Indene	Ave	1.132	1.049		0.927	1.00	-7.3	35.0
Butylbenzene	Lin2		2.069		1.09	1.00	9.5	35.0
Undecane	Ave	1.121	1.206		1.08	1.00	7.6	35.0
1,2-Dibromo-3-Chloropropane	Lin1		0.4292		0.892	1.00	-10.8	35.0
1,2,4,5-Tetramethylbenzene	Lin1		1.494		0.948	1.00	-5.2	35.0
Dodecane	Ave	1.106	1.075		0.972	1.00	-2.8	35.0
1,2,4-Trichlorobenzene	Ave	0.5604	0.7271		1.30	1.00	29.8	35.0
Naphthalene	Ave	1.278	1.674		1.31	1.00	31.0	35.0
Hexachlorobutadiene	Ave	0.7746	0.8508		1.10	1.00	9.8	35.0
1,2,3-Trichlorobenzene	Ave	0.6293	0.7548		1.20	1.00	20.0	35.0
2-Methylnaphthalene	Ave	0.4394	0.2841		0.646	1.00	-35.4	50.0
1-Methylnaphthalene	Ave	0.5456	0.3882		0.712	1.00	-28.8	50.0
4-Bromofluorobenzene (Surr)	Ave	0.6711	0.6703		4.00	4.00	-0.1	35.0

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16ICV.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 16-Apr-2020 20:21:30 ALS Bottle#: 9 Worklist Smp#: 17
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0015239-017
Misc. Info.: S117
Operator ID: HMT Instrument ID: MH
Sublist:

Method: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\MH_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 21-Apr-2020 10:49:05 Calib Date: 16-Apr-2020 18:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC10.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX0331

First Level Reviewer: tajh Date: 20-Apr-2020 08:20:25

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.587	8.603	-0.016	95	348376	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.794	10.805	-0.011	95	2365337	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.570	15.575	-0.005	88	1913911	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr	95	17.224	17.229	-0.005	91	1282863	4.00	4.00	
6 Chlorodifluoromethane	51	3.543	3.543	0.000	96	379618	1.00	1.03	
7 Propene	41	3.553	3.553	0.000	99	216028	1.00	0.9198	7
8 Dichlorodifluoromethane	85	3.605	3.605	0.000	100	618723	1.00	1.09	
9 Chloromethane	52	3.776	3.781	-0.005	97	63584	1.00	1.03	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.781	3.786	-0.005	94	420592	1.00	1.12	
11 Acetaldehyde	44	3.926	3.931	-0.005	93	339219	5.00	4.94	
12 Vinyl chloride	62	3.941	3.946	-0.005	98	225036	1.00	1.11	
14 Butadiene	54	4.024	4.029	-0.005	70	156192	1.00	1.14	
13 Butane	43	4.024	4.029	-0.005	83	273481	1.00	1.14	
15 Bromomethane	94	4.334	4.339	-0.005	98	231562	1.00	1.09	
16 Chloroethane	64	4.468	4.479	-0.011	95	100590	1.00	1.17	
17 Ethanol	31	4.561	4.587	-0.026	91	298503	5.00	4.81	
18 Vinyl bromide	106	4.758	4.768	-0.010	98	228211	1.00	1.19	
19 2-Methylbutane	43	4.809	4.809	0.000	89	209621	1.00	1.19	
20 Trichlorofluoromethane	101	5.021	5.026	-0.005	99	548637	1.00	1.08	
21 Acrolein	56	5.032	5.042	-0.010	92	78440	1.00	1.32	
22 Acetonitrile	40	5.099	5.114	-0.015	99	77170	1.00	1.13	
23 Acetone	58	5.145	5.150	-0.005	97	87581	1.00	1.12	
24 Pentane	72	5.233	5.243	-0.010	98	27034	1.00	1.23	
25 Isopropyl alcohol	45	5.228	5.254	-0.026	93	311139	1.00	1.32	
26 Ethyl ether	31	5.399	5.404	-0.005	94	172977	1.00	1.14	
27 1,1-Dichloroethene	96	5.714	5.724	-0.010	97	189125	1.00	1.11	
29 2-Methyl-2-propanol	59	5.812	5.827	-0.015	95	340718	1.00	1.21	
28 Acrylonitrile	53	5.822	5.838	-0.016	94	150056	1.00	1.17	
30 1,1,2-Trichloro-1,2,2-trif	101	5.884	5.895	-0.011	93	443841	1.00	1.13	
31 Methylene Chloride	84	6.060	6.076	-0.016	97	267497	1.00	1.14	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.070	6.086	-0.016	97	145984	1.00	1.02	
33 Carbon disulfide	76	6.215	6.225	-0.010	99	567472	1.00	1.12	
34 trans-1,2-Dichloroethene	96	6.861	6.871	-0.010	98	189462	1.00	1.13	
35 2-Methylpentane	43	6.872	6.882	-0.010	94	343472	1.00	1.04	
36 Methyl tert-butyl ether	73	6.980	6.980	0.000	97	461090	1.00	1.18	
37 1,1-Dichloroethane	63	7.275	7.295	-0.020	100	363328	1.00	1.09	
38 Vinyl acetate	43	7.378	7.394	-0.016	100	491664	1.00	1.18	
39 2-Butanone (MEK)	72	7.823	7.833	-0.010	96	87196	1.00	1.18	
40 Hexane	56	7.848	7.853	-0.005	89	143518	1.00	1.15	
41 Isopropyl ether	45	8.003	8.009	-0.006	98	631010	1.00	1.17	
42 cis-1,2-Dichloroethene	96	8.257	8.272	-0.015	95	202553	1.00	1.16	
43 Ethyl acetate	43	8.438	8.448	-0.010	99	395216	1.00	1.05	
44 Chloroform	83	8.598	8.618	-0.020	96	448979	1.00	1.09	
45 Tert-butyl ethyl ether	59	8.675	8.686	-0.011	96	524857	1.00	1.12	
46 Tetrahydrofuran	42	8.996	8.991	0.005	94	192025	1.00	1.12	
47 1,1,1-Trichloroethane	97	9.621	9.637	-0.016	96	417494	1.00	1.09	
48 1,2-Dichloroethane	62	9.740	9.750	-0.010	97	276066	1.00	1.10	
49 n-Butanol	31	10.190	10.190	0.000	61	57807	1.00	1.09	
50 Cyclohexane	69	10.226	10.236	-0.010	78	81576	1.00	1.20	
51 Benzene	78	10.231	10.246	-0.015	97	585363	1.00	1.14	
52 Carbon tetrachloride	117	10.252	10.262	-0.010	96	426341	1.00	1.15	
53 2,3-Dimethylpentane	71	10.350	10.360	-0.010	90	112564	1.00	1.15	
54 Thiophene	84	10.510	10.526	-0.016	96	322060	1.00	1.12	
55 Isooctane	57	11.006	11.011	-0.005	99	893841	1.00	1.14	
56 n-Heptane	71	11.389	11.399	-0.010	90	171968	1.00	1.19	
57 1,2-Dichloropropane	63	11.477	11.487	-0.010	93	230318	1.00	1.09	
58 Trichloroethene	130	11.513	11.523	-0.010	92	237489	1.00	1.13	
59 Dibromomethane	93	11.601	11.611	-0.010	93	279108	1.00	1.08	
60 Dichlorobromomethane	83	11.751	11.756	-0.005	98	445773	1.00	1.11	
61 1,4-Dioxane	88	11.761	11.761	0.000	85	88605	1.00	1.18	
62 Methyl methacrylate	41	11.844	11.854	-0.010	95	214263	1.00	1.13	
63 Methylcyclohexane	83	12.288	12.293	-0.005	96	380089	1.00	1.31	
64 4-Methyl-2-pentanone (MIBK	43	12.702	12.707	-0.005	97	423304	1.00	1.16	
65 cis-1,3-Dichloropropene	75	12.764	12.774	-0.010	93	331632	1.00	1.22	
66 trans-1,3-Dichloropropene	75	13.472	13.477	-0.005	98	284505	1.00	1.25	
67 Toluene	91	13.590	13.596	-0.006	93	663552	1.00	1.20	
68 1,1,2-Trichloroethane	83	13.668	13.673	-0.005	96	227899	1.00	1.14	
69 2-Hexanone	58	14.050	14.056	-0.006	92	214319	1.00	1.22	
70 n-Octane	85	14.288	14.293	-0.005	92	186400	1.00	1.25	
71 Chlorodibromomethane	129	14.376	14.381	-0.005	97	417013	1.00	1.18	
72 Ethylene Dibromide	107	14.665	14.676	-0.011	98	392028	1.00	1.18	
73 Tetrachloroethene	129	14.738	14.743	-0.005	93	237283	1.00	1.16	
74 Chlorobenzene	112	15.622	15.627	-0.005	93	512134	1.00	1.15	
75 2,3-Dimethylheptane	43	15.642	15.647	-0.005	96	508311	1.00	1.01	
76 Ethylbenzene	91	15.911	15.916	-0.005	99	844335	1.00	1.22	
77 m-Xylene & p-Xylene	91	16.071	16.082	-0.011	99	1341555	2.00	2.55	
78 n-Nonane	57	16.495	16.500	-0.005	91	406843	1.00	1.20	
79 Bromoform	173	16.526	16.531	-0.005	92	419716	1.00	1.15	
80 Styrene	104	16.542	16.547	-0.005	99	462062	1.00	1.17	
81 o-Xylene	91	16.604	16.609	-0.005	98	670895	1.00	1.23	
82 1,1,2,2-Tetrachloroethane	83	16.929	16.934	-0.005	99	582701	1.00	1.11	
83 1,2,3-Trichloropropane	110	17.089	17.095	-0.006	98	129980	1.00	1.13	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	17.188	17.193	-0.005	97	893846	1.00	1.21	
85 N-Propylbenzene	120	17.751	17.756	-0.005	98	229958	1.00	1.21	
86 2-Chlorotoluene	126	17.798	17.756	0.042	98	229488	1.00	1.24	
87 4-Ethyltoluene	105	17.911	17.916	-0.005	99	842275	1.00	1.16	
88 1,3,5-Trimethylbenzene	120	17.994	17.994	0.000	92	390808	1.00	1.29	
89 Alpha Methyl Styrene	118	18.237	18.242	-0.005	87	332986	1.00	1.15	
90 n-Decane	57	18.299	18.304	-0.005	90	540922	1.00	1.14	
91 tert-Butylbenzene	119	18.438	18.443	-0.005	89	752086	1.00	1.16	
92 1,2,4-Trimethylbenzene	105	18.454	18.459	-0.005	96	762977	1.00	1.18	
93 sec-Butylbenzene	105	18.723	18.723	0.000	99	1107036	1.00	1.19	
94 1,3-Dichlorobenzene	146	18.738	18.743	-0.005	98	490057	1.00	1.15	
95 Benzyl chloride	91	18.816	18.826	-0.010	97	596425	1.00	1.09	
96 1,4-Dichlorobenzene	146	18.826	18.836	-0.010	92	471446	1.00	1.16	
97 4-Isopropyltoluene	119	18.893	18.898	-0.005	96	831196	1.00	1.16	
98 1,2,3-Trimethylbenzene	105	18.945	18.955	-0.010	99	548622	1.00	0.8522	
99 Butylcyclohexane	83	19.002	19.012	-0.010	94	586264	1.00	1.06	
101 2,3-Dihydroindene	117	19.203	19.208	-0.005	93	675567	1.00	1.11	
100 1,2-Dichlorobenzene	146	19.203	19.214	-0.011	82	487474	1.00	1.13	
102 Indene	116	19.338	19.343	-0.005	89	502015	1.00	0.9269	
103 n-Butylbenzene	91	19.348	19.353	-0.005	97	989875	1.00	1.09	
104 Undecane	57	19.668	19.674	-0.006	95	577128	1.00	1.08	
105 1,2-Dibromo-3-Chloropropan	157	19.834	19.834	0.000	97	205341	1.00	0.8917	
106 1,2,4,5-Tetramethylbenzene	119	20.128	20.128	0.000	96	714956	1.00	0.9476	a
107 Dodecane	57	20.764	20.769	-0.005	96	514185	1.00	0.9718	
108 1,2,4-Trichlorobenzene	180	20.966	20.971	-0.005	93	347909	1.00	1.30	
109 Naphthalene	128	21.110	21.116	-0.006	99	801144	1.00	1.31	
110 Hexachlorobutadiene	225	21.338	21.338	0.000	91	407109	1.00	1.10	
111 1,2,3-Trichlorobenzene	180	21.410	21.415	-0.005	92	361176	1.00	1.20	
112 2-Methylnaphthalene	142	22.061	22.061	0.000	97	135916	1.00	0.6464	
113 1-Methylnaphthalene	142	22.191	22.191	0.000	98	185766	1.00	0.7116	
A 115 C8 Range	1	14.281	(14.242-14.335)		0	1759244	1.00	1.14	
S 116 Xylenes, Total	100				0		3.00	3.77	
S 117 1,2-Dichloroethene, Total	1				0		2.00	2.29	
T 139 2-Methylthiophene TIC	97	13.746	13.673	0.073	95	527741	1.00	1.10	
T 142 3-Methylthiophene TIC	97	13.947	13.673	0.274	95	523022	1.00	1.09	
T 141 2-Ethylthiophene TIC	97	16.014	15.580	0.434	97	622158	1.00	1.30	
T 152 1,2-Dimethyl-4-Ethylbenzen	119	19.731	20.144	-0.414	96	605562	1.00	1.27	
T 149 1,2,3,5-Tetramethylbenzene	119	20.128	20.144	-0.016	96	710716	1.00	1.49	
T 151 Benzo(b)thiophene TIC	134	21.224	22.283	-1.059	97	382355	1.00	0.7991	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

a - User Assigned ID

Reagents:

40CV101S_00117	Amount Added: 50.00	Units: mL	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

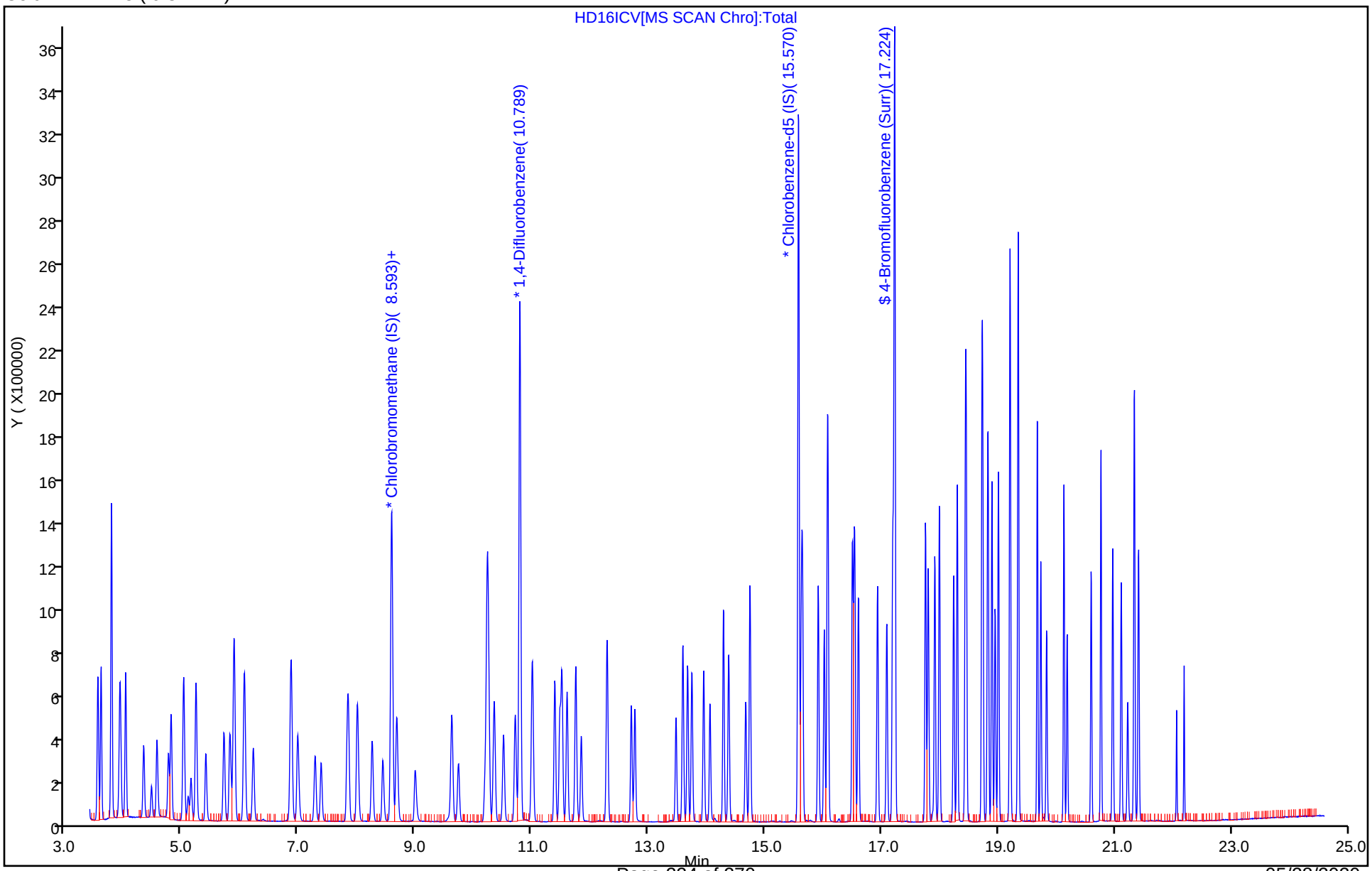
Report Date: 21-Apr-2020 11:01:31 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16ICV.D

Injection Date:	16-Apr-2020 20:21:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	ICV			Worklist Smp#:	17
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Knoxville

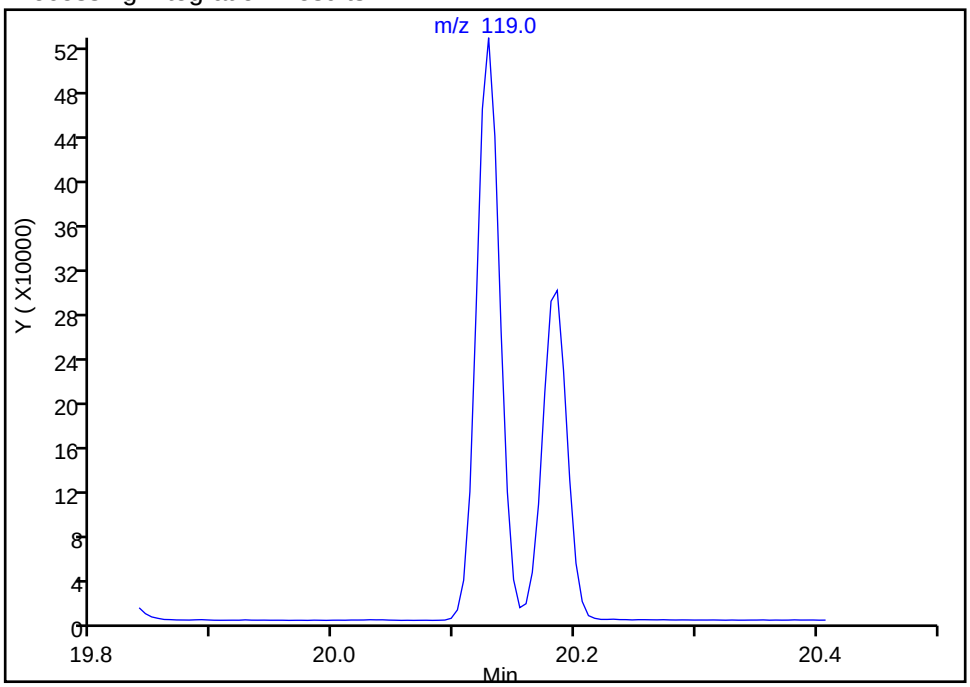
Data File:	\\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16ICV.D				
Injection Date:	16-Apr-2020 20:21:30	Instrument ID:	MH		
Lims ID:	ICV				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	9	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

106 1,2,4,5-Tetramethylbenzene, CAS: 95-93-2

Signal: 1

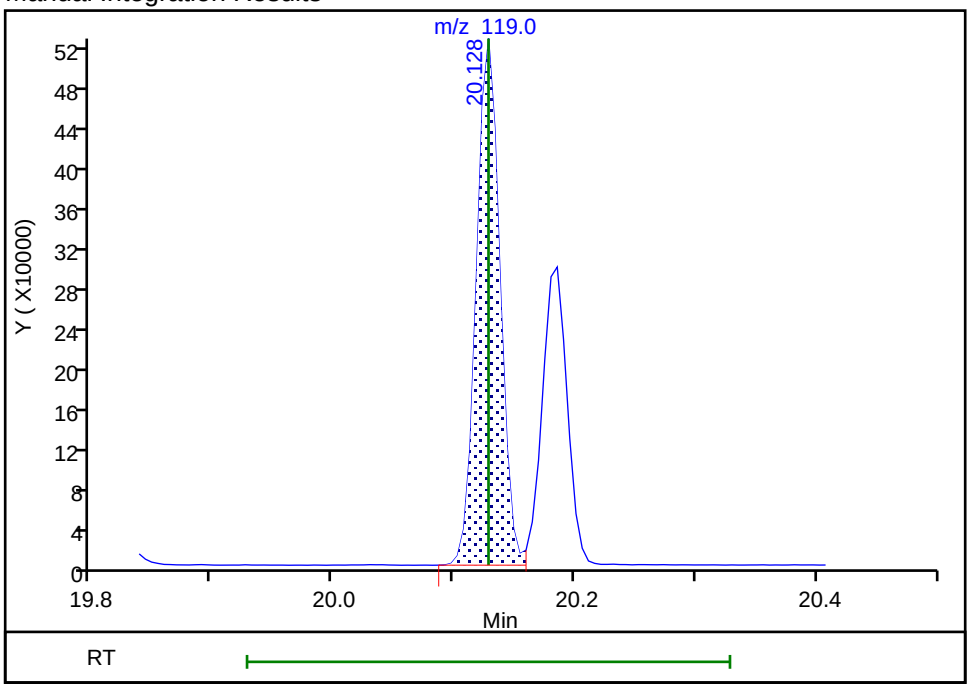
Not Detected
Expected RT: 20.13

Processing Integration Results



Manual Integration Results

RT: 20.13
Area: 714956
Amount: 0.947599
Amount Units: ppb v/v



Reviewer: tajh, 20-Apr-2020 13:02:58
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19093-1

SDG No.:

Lab Sample ID: CCVIS 140-39584/7 Calibration Date: 05/15/2020 11:16

Instrument ID: MH Calib Start Date: 04/16/2020 08:03

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 04/16/2020 18:34

Lab File ID: HCCVE15A.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorodifluoromethane	Ave	4.220	4.442		1.68	1.60	5.3	30.0
Propene	Lin2		1.980		1.39	1.60	-13.4	30.0
Dichlorodifluoromethane	Ave	6.490	7.797		1.92	1.60	20.1	30.0
Chloromethane	Ave	0.7074	0.7992		1.81	1.60	13.0	30.0
1,2-Dichloro-1,1,2,2-tetrafluoroethane	Ave	4.327	6.452		2.39	1.60	49.1*	30.0
Acetaldehyde	Ave	0.7881	0.9050		9.19	8.00	14.8	30.0
Vinyl chloride	Ave	2.321	3.156		2.18	1.60	36.0*	30.0
1,3-Butadiene	Ave	1.577	2.084		2.11	1.60	32.2*	30.0
Butane	Ave	2.750	3.120		1.82	1.60	13.5	30.0
Bromomethane	Ave	2.450	3.622		2.37	1.60	47.8*	30.0
Chloroethane	Ave	0.9878	1.335		2.16	1.60	35.2*	30.0
Ethanol	Ave	0.7132	0.7179		8.05	8.00	0.6	30.0
Vinyl bromide	Ave	2.206	3.337		2.42	1.60	51.3*	30.0
2-Methylbutane	Ave	2.018	2.236		1.77	1.60	10.8	30.0
Trichlorofluoromethane	Ave	5.819	6.568		1.81	1.60	12.9	30.0
Acrolein	Ave	0.6803	0.6505		1.53	1.60	-4.4	30.0
Acetonitrile	Ave	0.7833	0.8256		1.69	1.60	5.4	30.0
Acetone	Ave	0.9000	0.9567		5.10	4.80	6.3	30.0
Isopropyl alcohol	QuaF		2.445		4.39	4.80	-8.6	30.0
Pentane	Ave	0.2516	0.2775		1.76	1.60	10.3	30.0
Ethyl ether	Ave	1.742	1.539		1.41	1.60	-11.6	30.0
1,1-Dichloroethene	Ave	1.949	1.954		1.60	1.60	0.3	30.0
tert-Butyl alcohol	Ave	3.234	3.338		1.65	1.60	3.2	30.0
Acrylonitrile	Ave	1.476	1.545		1.67	1.60	4.7	30.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	4.513	5.045		1.79	1.60	11.8	30.0
Methylene Chloride	Lin2		2.703		1.86	1.60	16.0	30.0
3-Chloropropene	Ave	1.646	1.516		1.47	1.60	-7.9	30.0
Carbon disulfide	Ave	5.838	6.448		1.77	1.60	10.5	30.0
trans-1,2-Dichloroethene	Ave	1.923	1.983		1.65	1.60	3.1	30.0
2-Methylpentane	Ave	3.805	3.616		1.52	1.60	-5.0	30.0
Methyl tert-butyl ether	Ave	4.496	4.752		1.69	1.60	5.7	30.0
1,1-Dichloroethane	Ave	3.831	3.959		1.65	1.60	3.3	30.0
Vinyl acetate	Ave	4.773	4.593		1.54	1.60	-3.8	30.0
2-Butanone (MEK)	Ave	0.8517	0.8511		1.60	1.60	-0.0	30.0
Hexane	Ave	1.439	1.528		1.70	1.60	6.2	30.0
Isopropyl ether	Ave	6.178	6.049		1.57	1.60	-2.1	30.0
cis-1,2-Dichloroethene	Ave	2.008	2.051		1.63	1.60	2.1	30.0
Ethyl acetate	Ave	4.315	4.074		1.51	1.60	-5.6	30.0
Chloroform	Ave	4.723	5.366		1.82	1.60	13.6	30.0
Tert-butyl ethyl ether	Ave	5.380	5.737		1.71	1.60	6.6	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19093-1

SDG No.:

Lab Sample ID: CCVIS 140-39584/7 Calibration Date: 05/15/2020 11:16

Instrument ID: MH Calib Start Date: 04/16/2020 08:03

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 04/16/2020 18:34

Lab File ID: HCCVE15A.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Tetrahydrofuran	Ave	1.963	1.776		1.45	1.60	-9.5	30.0
1,1,1-Trichloroethane	Ave	4.396	4.809		1.75	1.60	9.4	30.0
1,2-Dichloroethane	Ave	0.4234	0.4687		1.77	1.60	10.7	30.0
1-Butanol	Ave	0.0900	0.0648		1.15	1.60	-28.0	30.0
Benzene	Ave	0.8700	0.9278		1.71	1.60	6.6	30.0
Cyclohexane	Ave	0.1152	0.1209		1.68	1.60	5.0	30.0
Carbon tetrachloride	Ave	0.6283	0.7366		1.88	1.60	17.2	30.0
2,3-Dimethylpentane	Ave	0.1652	0.1708		1.65	1.60	3.4	30.0
Thiophene	Ave	0.4876	0.5167		1.70	1.60	6.0	30.0
2,2,4-Trimethylpentane	Ave	1.322	1.344		1.63	1.60	1.6	30.0
Heptane	Ave	0.2446	0.2476		1.62	1.60	1.2	30.0
1,2-Dichloropropane	Ave	0.3566	0.3763		1.69	1.60	5.5	30.0
Trichloroethene	Ave	0.3557	0.3772		1.70	1.60	6.0	30.0
Dibromomethane	Ave	0.4357	0.4888		1.79	1.60	12.2	30.0
Bromodichloromethane	Ave	0.6822	0.7919		1.86	1.60	16.1	30.0
1,4-Dioxane	Ave	0.1267	0.1151		1.45	1.60	-9.2	30.0
Methyl methacrylate	Ave	0.3209	0.3175		1.58	1.60	-1.0	30.0
Methylcyclohexane	Lin1		0.4656		1.51	1.60	-5.7	30.0
4-Methyl-2-pentanone (MIBK)	Ave	0.6196	0.6290		1.62	1.60	1.5	30.0
cis-1,3-Dichloropropene	Ave	0.4613	0.5371		1.86	1.60	16.4	30.0
trans-1,3-Dichloropropene	Ave	0.4771	0.5284		1.77	1.60	10.7	30.0
Toluene	Lin2		1.263		1.73	1.60	8.4	30.0
1,1,2-Trichloroethane	Ave	0.4196	0.4883		1.86	1.60	16.4	30.0
2-Hexanone	Ave	0.3665	0.3890		1.70	1.60	6.1	30.0
Octane	Ave	0.3108	0.3398		1.75	1.60	9.3	30.0
Dibromochloromethane	Ave	0.7412	0.9261		2.00	1.60	24.9	30.0
1,2-Dibromoethane (EDB)	Ave	0.6932	0.8054		1.86	1.60	16.2	30.0
Tetrachloroethene	Ave	0.4285	0.4606		1.72	1.60	7.5	30.0
Chlorobenzene	Ave	0.9309	1.017		1.75	1.60	9.3	30.0
2,3-Dimethylheptane	Ave	1.051	1.105		1.68	1.60	5.1	30.0
Ethylbenzene	Ave	1.444	1.645		1.82	1.60	13.9	30.0
m-Xylene & p-Xylene	Ave	1.101	1.344		3.91	3.20	22.1	30.0
Nonane	Ave	0.7090	0.7825		1.77	1.60	10.4	30.0
Bromoform	Ave	0.7614	0.9845		2.07	1.60	29.3	30.0
Styrene	Lin2		0.9369		1.80	1.60	12.4	30.0
o-Xylene	Ave	1.141	1.390		1.95	1.60	21.8	30.0
1,1,2,2-Tetrachloroethane	Ave	1.094	1.301		1.90	1.60	18.9	30.0
1,2,3-Trichloropropane	Ave	0.2413	0.2729		1.81	1.60	13.1	30.0
Isopropylbenzene	Ave	1.541	1.777		1.84	1.60	15.3	30.0
Propylbenzene	Ave	0.3970	0.4437		1.79	1.60	11.8	30.0
2-Chlorotoluene	Ave	0.3853	0.4703		1.95	1.60	22.0	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19093-1

SDG No.:

Lab Sample ID: CCVIS 140-39584/7 Calibration Date: 05/15/2020 11:16

Instrument ID: MH Calib Start Date: 04/16/2020 08:03

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 04/16/2020 18:34

Lab File ID: HCCVE15A.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Ethyltoluene	Ave	1.519	1.820		1.92	1.60	19.8	30.0
1,3,5-Trimethylbenzene	Lin2		0.7201		1.81	1.60	13.4	30.0
Alpha Methyl Styrene	Ave	0.6067	0.6726		1.77	1.60	10.8	30.0
Decane	Ave	0.9946	1.173		1.89	1.60	17.9	30.0
tert-Butylbenzene	Ave	1.356	1.628		1.92	1.60	20.1	30.0
1,2,4-Trimethylbenzene	Ave	1.351	1.678		1.99	1.60	24.2	30.0
sec-Butylbenzene	Ave	1.945	2.421		1.99	1.60	24.5	30.0
1,3-Dichlorobenzene	Ave	0.8923	1.117		2.00	1.60	25.1	30.0
Benzyl chloride	Ave	1.141	1.320		1.85	1.60	15.6	30.0
1,4-Dichlorobenzene	Ave	0.8484	1.065		2.01	1.60	25.5	30.0
4-Isopropyltoluene	Ave	1.493	1.846		1.98	1.60	23.6	30.0
1,2,3-Trimethylbenzene	Ave	1.345	1.652		1.96	1.60	22.8	30.0
Butylcyclohexane	Ave	1.153	1.445		2.01	1.60	25.4	30.0
Indane	Ave	1.268	1.579		1.99	1.60	24.5	30.0
1,2-Dichlorobenzene	Ave	0.8999	1.127		2.00	1.60	25.2	30.0
Indene	Ave	1.132	1.346		1.90	1.60	18.9	30.0
Butylbenzene	Lin2		2.321		1.94	1.60	21.2	30.0
Undecane	Ave	1.121	1.342		1.92	1.60	19.7	30.0
1,2-Dibromo-3-Chloropropane	Lin1		0.5939		1.91	1.60	19.3	30.0
1,2,4,5-Tetramethylbenzene	Lin1		1.670		1.64	1.60	2.3	30.0
Dodecane	Ave	1.106	1.200		1.74	1.60	8.5	30.0
1,2,4-Trichlorobenzene	Ave	0.5604	0.7713		2.20	1.60	37.6*	30.0
Naphthalene	Ave	1.278	1.727		2.16	1.60	35.1*	30.0
Hexachlorobutadiene	Ave	0.7746	0.9456		1.95	1.60	22.1	30.0
1,2,3-Trichlorobenzene	Ave	0.6293	0.7862		2.00	1.60	24.9	30.0
2-Methylnaphthalene	Ave	0.4394	0.5140		1.87	1.60	17.0	50.0
1-Methylnaphthalene	Ave	0.5456	0.7868		2.31	1.60	44.2	50.0
4-Bromofluorobenzene (Surr)	Ave	0.6711	0.7130		4.25	4.00	6.2	30.0

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HCCVE15A.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 15-May-2020 11:16:30 ALS Bottle#: 1 Worklist Smp#: 7
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0015460-002
Misc. Info.: P110 80ML
Operator ID: HMT Instrument ID: MH
Sublist: chrom-MH_TO15*sub7

Method: \\chromfs\Knoxville\ChromData\MH\20200513-15460.b\MH_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 18-May-2020 17:17:17 Calib Date: 16-Apr-2020 18:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC10.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1040

First Level Reviewer: khachitpongpanits Date: 18-May-2020 17:17:17

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.577	8.577	0.000	95	175280	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.784	10.784	0.000	95	1197070	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.570	15.570	0.000	90	957658	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.239	17.239	0.000	90	682799	4.00	4.25	
6 Chlorodifluoromethane	51	3.543	3.543	0.000	96	311437	1.60	1.68	
7 Propene	41	3.553	3.553	0.000	99	138855	1.60	1.39	
8 Dichlorodifluoromethane	85	3.600	3.600	0.000	100	546656	1.60	1.92	
9 Chloromethane	52	3.776	3.776	0.000	97	56030	1.60	1.81	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.781	3.781	0.000	94	452348	1.60	2.39	
11 Acetaldehyde	44	3.920	3.920	0.000	90	317252	8.00	9.19	
12 Vinyl chloride	62	3.941	3.941	0.000	99	221282	1.60	2.18	
14 Butadiene	54	4.018	4.018	0.000	77	146136	1.60	2.11	
13 Butane	43	4.024	4.024	0.000	81	218784	1.60	1.82	
15 Bromomethane	94	4.329	4.329	0.000	98	253926	1.60	2.37	
16 Chloroethane	64	4.468	4.468	0.000	91	93610	1.60	2.16	
17 Ethanol	31	4.551	4.551	0.000	88	251650	8.00	8.05	
18 Vinyl bromide	106	4.758	4.758	0.000	97	233956	1.60	2.42	
19 2-Methylbutane	43	4.799	4.799	0.000	85	156753	1.60	1.77	
20 Trichlorofluoromethane	101	5.011	5.011	0.000	99	460530	1.60	1.81	
21 Acrolein	56	5.026	5.026	0.000	90	45608	1.60	1.53	
22 Acetonitrile	40	5.088	5.088	0.000	98	57885	1.60	1.69	
23 Acetone	58	5.135	5.135	0.000	97	201235	4.80	5.10	
25 Isopropyl alcohol	45	5.212	5.212	0.000	94	514320	4.80	4.39	
24 Pentane	72	5.228	5.228	0.000	97	19457	1.60	1.76	
26 Ethyl ether	31	5.388	5.388	0.000	88	107900	1.60	1.41	
27 1,1-Dichloroethene	96	5.709	5.709	0.000	95	136993	1.60	1.60	
29 2-Methyl-2-propanol	59	5.802	5.802	0.000	94	234017	1.60	1.65	
28 Acrylonitrile	53	5.812	5.812	0.000	94	108339	1.60	1.67	
30 1,1,2-Trichloro-1,2,2-trifluoroe	101	5.879	5.879	0.000	91	353683	1.60	1.79	
31 Methylene Chloride	84	6.050	6.050	0.000	97	189518	1.60	1.86	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.065	6.065	0.000	98	106271	1.60	1.47	
33 Carbon disulfide	76	6.210	6.210	0.000	99	452075	1.60	1.77	
34 trans-1,2-Dichloroethene	96	6.851	6.851	0.000	96	139059	1.60	1.65	
35 2-Methylpentane	43	6.861	6.861	0.000	92	253504	1.60	1.52	
36 Methyl tert-butyl ether	73	6.964	6.964	0.000	96	333182	1.60	1.69	
37 1,1-Dichloroethane	63	7.269	7.269	0.000	99	277557	1.60	1.65	
38 Vinyl acetate	43	7.373	7.373	0.000	100	322013	1.60	1.54	
39 2-Butanone (MEK)	72	7.812	7.812	0.000	96	59669	1.60	1.60	
40 Hexane	56	7.838	7.838	0.000	89	107117	1.60	1.70	
41 Isopropyl ether	45	7.988	7.988	0.000	97	424133	1.60	1.57	
42 cis-1,2-Dichloroethene	96	8.251	8.251	0.000	97	143781	1.60	1.63	
43 Ethyl acetate	43	8.427	8.427	0.000	99	285602	1.60	1.51	
44 Chloroform	83	8.592	8.592	0.000	98	376255	1.60	1.82	
45 Tert-butyl ethyl ether	59	8.665	8.665	0.000	96	402249	1.60	1.71	
46 Tetrahydrofuran	42	8.980	8.980	0.000	89	124511	1.60	1.45	
47 1,1,1-Trichloroethane	97	9.616	9.616	0.000	97	337180	1.60	1.75	
48 1,2-Dichloroethane	62	9.724	9.724	0.000	98	224431	1.60	1.77	
49 n-Butanol	31	10.184	10.184	0.000	89	31036	1.60	1.15	
50 Cyclohexane	69	10.221	10.221	0.000	86	57896	1.60	1.68	
51 Benzene	78	10.221	10.221	0.000	97	444251	1.60	1.71	
52 Carbon tetrachloride	117	10.246	10.246	0.000	94	352697	1.60	1.88	
53 2,3-Dimethylpentane	71	10.339	10.339	0.000	88	81791	1.60	1.65	
54 Thiophene	84	10.500	10.500	0.000	96	247393	1.60	1.70	
55 Isooctane	57	10.996	10.996	0.000	98	643410	1.60	1.63	
56 n-Heptane	71	11.383	11.383	0.000	88	118574	1.60	1.62	
57 1,2-Dichloropropane	63	11.471	11.471	0.000	92	180178	1.60	1.69	
58 Trichloroethene	130	11.507	11.507	0.000	91	180609	1.60	1.70	
59 Dibromomethane	93	11.595	11.595	0.000	89	234031	1.60	1.79	
60 Dichlorobromomethane	83	11.740	11.740	0.000	98	379199	1.60	1.86	
61 1,4-Dioxane	88	11.750	11.750	0.000	89	55130	1.60	1.45	
62 Methyl methacrylate	41	11.838	11.838	0.000	95	152039	1.60	1.58	
63 Methylcyclohexane	83	12.283	12.283	0.000	95	222938	1.60	1.51	
64 4-Methyl-2-pentanone (MIBK)	43	12.696	12.696	0.000	97	301158	1.60	1.62	
65 cis-1,3-Dichloropropene	75	12.758	12.758	0.000	94	257191	1.60	1.86	
66 trans-1,3-Dichloropropene	75	13.466	13.466	0.000	97	202396	1.60	1.77	
67 Toluene	91	13.585	13.585	0.000	93	483906	1.60	1.73	
68 1,1,2-Trichloroethane	83	13.663	13.663	0.000	96	187030	1.60	1.86	
69 2-Hexanone	58	14.050	14.050	0.000	93	148991	1.60	1.70	
70 n-Octane	85	14.283	14.283	0.000	90	130164	1.60	1.75	
71 Chlorodibromomethane	129	14.371	14.371	0.000	96	354745	1.60	2.00	
72 Ethylene Dibromide	107	14.660	14.660	0.000	96	308502	1.60	1.86	
73 Tetrachloroethene	129	14.733	14.733	0.000	90	176443	1.60	1.72	
74 Chlorobenzene	112	15.616	15.616	0.000	92	389654	1.60	1.75	
75 2,3-Dimethylheptane	43	15.637	15.637	0.000	94	423367	1.60	1.68	
76 Ethylbenzene	91	15.906	15.906	0.000	99	630224	1.60	1.82	
77 m-Xylene & p-Xylene	91	16.071	16.071	0.000	99	1029919	3.20	3.91	
78 n-Nonane	57	16.495	16.495	0.000	87	299753	1.60	1.77	
79 Bromoform	173	16.521	16.521	0.000	90	377128	1.60	2.07	
80 Styrene	104	16.536	16.536	0.000	99	358894	1.60	1.80	
81 o-Xylene	91	16.598	16.598	0.000	98	532397	1.60	1.95	
82 1,1,2,2-Tetrachloroethane	83	16.934	16.934	0.000	98	498481	1.60	1.90	
83 1,2,3-Trichloropropane	110	17.100	17.100	0.000	97	104537	1.60	1.81	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	17.208	17.208	0.000	97	680532	1.60	1.84	
85 N-Propylbenzene	120	17.782	17.782	0.000	98	169945	1.60	1.79	
86 2-Chlorotoluene	126	17.828	17.828	0.000	97	180135	1.60	1.95	
87 4-Ethyltoluene	105	17.937	17.937	0.000	99	697281	1.60	1.92	
88 1,3,5-Trimethylbenzene	120	18.014	18.014	0.000	92	275839	1.60	1.81	
89 Alpha Methyl Styrene	118	18.262	18.262	0.000	85	257629	1.60	1.77	
90 n-Decane	57	18.319	18.319	0.000	90	449312	1.60	1.89	
91 tert-Butylbenzene	119	18.459	18.459	0.000	91	623724	1.60	1.92	
92 1,2,4-Trimethylbenzene	105	18.474	18.474	0.000	96	642625	1.60	1.99	
93 sec-Butylbenzene	105	18.743	18.743	0.000	98	927573	1.60	1.99	
94 1,3-Dichlorobenzene	146	18.759	18.759	0.000	97	427722	1.60	2.00	
95 Benzyl chloride	91	18.836	18.836	0.000	97	505480	1.60	1.85	
96 1,4-Dichlorobenzene	146	18.847	18.847	0.000	94	407894	1.60	2.01	
97 4-Isopropyltoluene	119	18.914	18.914	0.000	96	706990	1.60	1.98	
98 1,2,3-Trimethylbenzene	105	18.965	18.965	0.000	99	632942	1.60	1.96	
99 Butylcyclohexane	83	19.022	19.022	0.000	95	553622	1.60	2.01	
101 2,3-Dihydroindene	117	19.219	19.219	0.000	92	604770	1.60	1.99	
100 1,2-Dichlorobenzene	146	19.224	19.224	0.000	81	431660	1.60	2.00	
102 Indene	116	19.358	19.358	0.000	89	515624	1.60	1.90	
103 n-Butylbenzene	91	19.363	19.363	0.000	96	888931	1.60	1.94	
104 Undecane	57	19.684	19.684	0.000	94	513966	1.60	1.92	
105 1,2-Dibromo-3-Chloropropane	157	19.844	19.844	0.000	95	227512	1.60	1.91	
106 1,2,4,5-Tetramethylbenzene	119	20.139	20.139	0.000	96	639844	1.60	1.64	
107 Dodecane	57	20.769	20.769	0.000	97	459758	1.60	1.74	
108 1,2,4-Trichlorobenzene	180	20.976	20.976	0.000	92	295455	1.60	2.20	
109 Naphthalene	128	21.121	21.121	0.000	99	661676	1.60	2.16	
110 Hexachlorobutadiene	225	21.343	21.343	0.000	90	362227	1.60	1.95	
111 1,2,3-Trichlorobenzene	180	21.415	21.415	0.000	92	301176	1.60	2.00	
112 2-Methylnaphthalene	142	22.061	22.061	0.000	96	196894	1.60	1.87	
113 1-Methylnaphthalene	142	22.190	22.190	0.000	96	301420	1.60	2.31	
A 115 C8 Range	1	14.278	(14.231-14.335)		0	1318235	1.60	1.69	
S 116 Xylenes, Total	100				0		4.80	5.86	
S 117 1,2-Dichloroethene, Total	1				0		3.20	3.28	

Reagents:

40CV101P_00110	Amount Added: 80.00	Units: mL	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

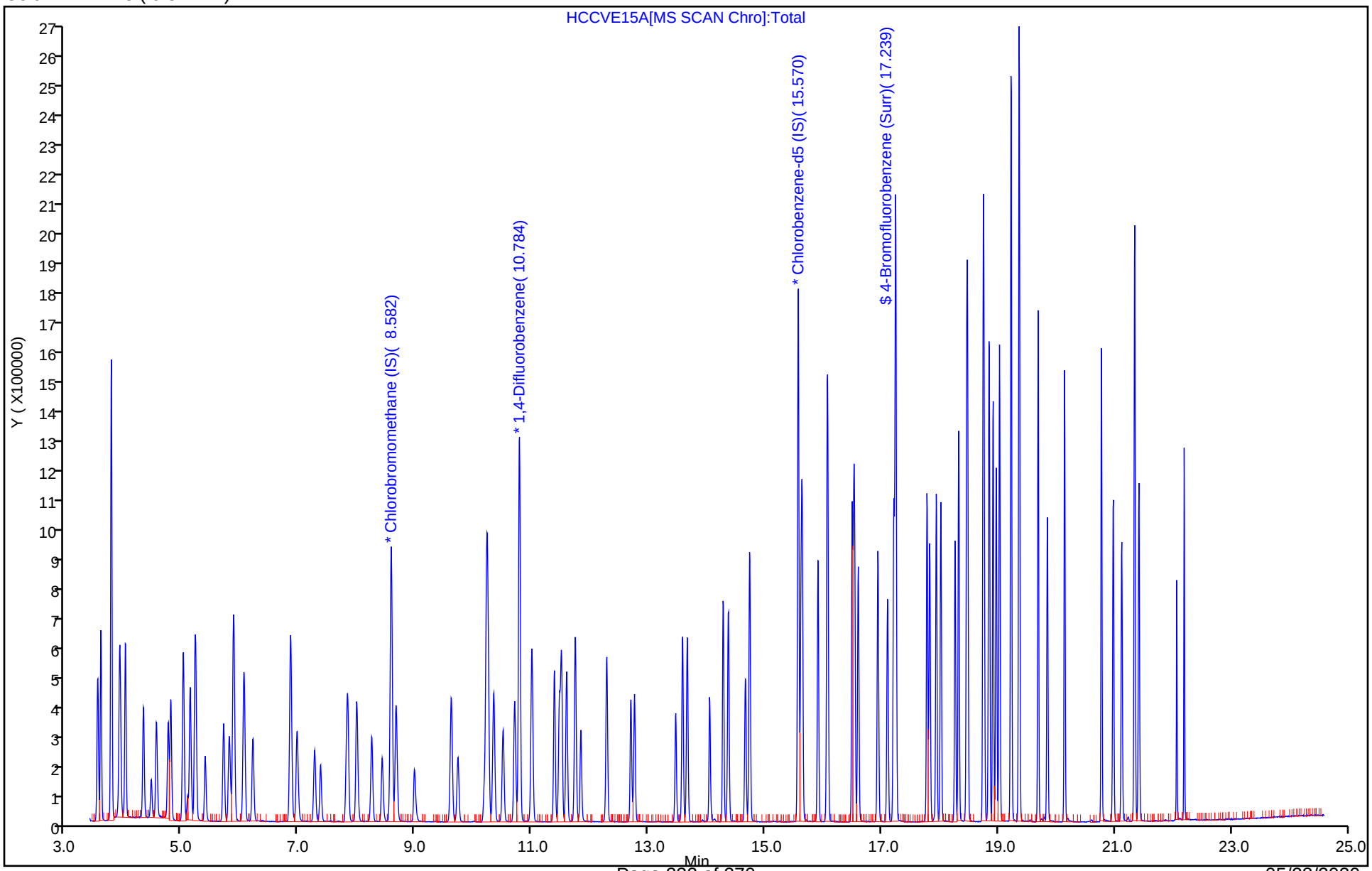
Report Date: 18-May-2020 17:17:18 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HCCVE15A.D

Injection Date:	15-May-2020 11:16:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	CCVIS			Worklist Smp#:	7
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HDNUD16X.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	16-Apr-2020 06:14:30	ALS Bottle#:	21	Worklist Smp#:	1
Injection Vol:	500.0 mL	Dil. Factor:	1.0000		
Sample Info:					
Misc. Info.:	DNU				
Operator ID:	HMT	Instrument ID:	MH		
Method:	\\chromfs\Knoxville\ChromData\MH\20200416-15239.b\MH_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	21-Apr-2020 10:48:14	Calib Date:	16-Apr-2020 18:34:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC10.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX0331				

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
$ 5 BFB	95	4.508	4.508	0.000	0	1186897	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

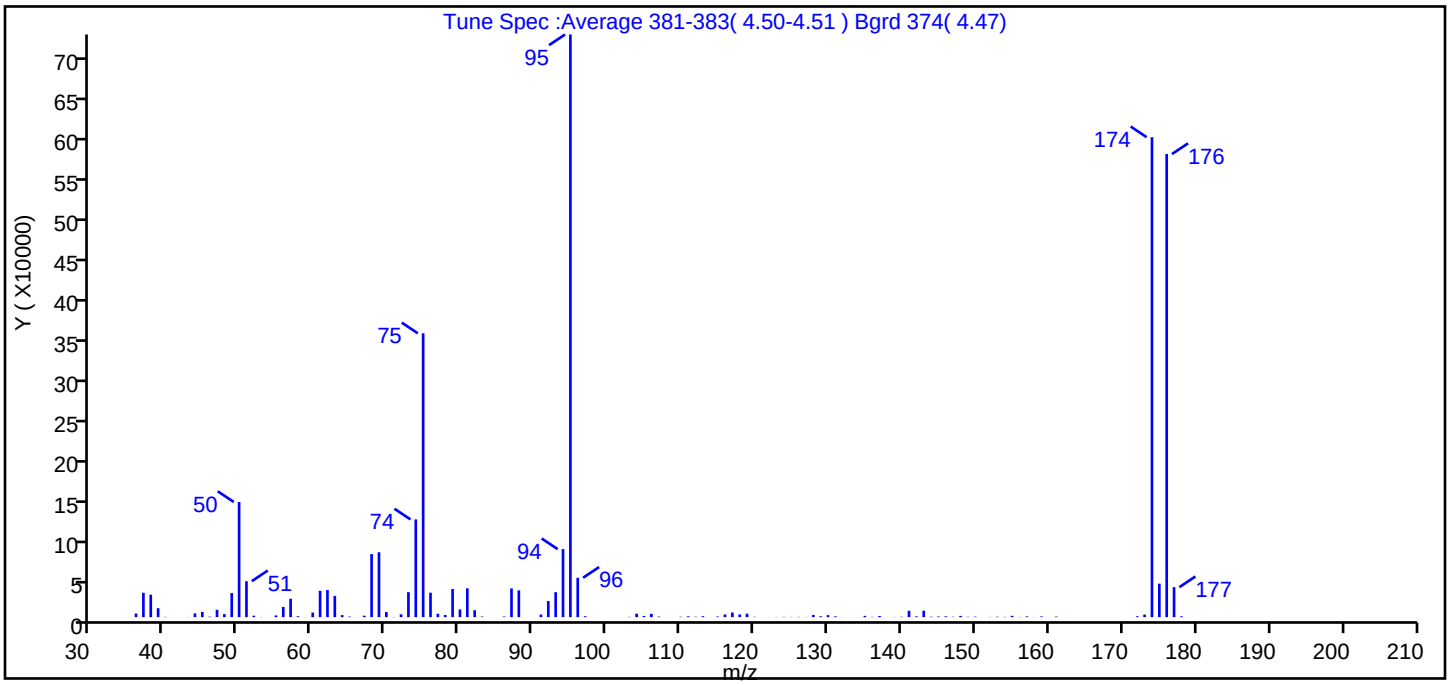
40MXSUR_00003 Amount Added: 40.00 Units: mL

MS Tune Report

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HDNUD16X.D
Injection Date: 16-Apr-2020 06:14:30 Instrument ID: MH
Lims ID: BFB
Client ID:
Operator ID: HMT ALS Bottle#: 21 Worklist Smp#: 1
Injection Vol: 500.0 mL Dil. Factor: 1.0000
Method: MH_TO15 Limit Group: MSA TO14A_15 Routine ICAL
Tune Method: BFB Method 8260

$ 5 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	19.8
75	30 to 60% of m/z 95	48.7
96	5 to 9% of m/z 95	6.8
173	Less than 2% of m/z 174	0.4 (0.5)
174	50 to 120% of m/z 95	82.4
175	5 to 9% of m/z 174	5.7 (7.0)
176	Greater than 95% but less than 101% of m/z 174	79.5 (96.5)
177	5 to 9% of m/z 176	5.1 (6.5)

Data File: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HDNUD16X.D\MH_TO15.rslt\spectra.d
Injection Date: 16-Apr-2020 06:14:30
Spectrum: Tune Spec :Average 381-383(4.50-4.51) Bgrd 374(4.47)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 122

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	42	68.00	78216	106.00	4085	140.00	440
36.00	4509	69.00	80568	107.00	679	141.00	7896
37.00	30280	70.00	6455	108.00	26	142.00	970
38.00	27888	71.00	189	110.00	461	143.00	7975
39.00	11077	72.00	3553	111.00	1045	144.00	568
40.00	363	73.00	31016	112.00	523	145.00	819
42.00	59	74.00	121328	113.00	1160	146.00	1003
43.00	178	75.00	352384	115.00	807	147.00	484
44.00	4651	76.00	30328	116.00	3316	148.00	1536
45.00	6512	77.00	4175	117.00	5801	149.00	443
46.00	599	78.00	2677	118.00	3335	150.00	621
47.00	9102	79.00	34936	119.00	4306	152.00	268
48.00	3723	80.00	9621	120.00	412	153.00	532
49.00	29992	81.00	35784	122.00	101	154.00	348
50.00	142976	82.00	8555	123.00	253	155.00	1598
51.00	44656	83.00	740	124.00	442	156.00	251
52.00	1845	84.00	25	125.00	267	157.00	981
53.00	224	86.00	809	126.00	336	158.00	137
55.00	2106	87.00	35648	127.00	247	159.00	844
56.00	12643	88.00	33240	128.00	2717	160.00	62
57.00	22832	89.00	33	129.00	1064	161.00	735
58.00	1098	91.00	3215	130.00	2490	172.00	1134
59.00	157	92.00	19992	131.00	1007	173.00	3188
60.00	5721	93.00	30992	132.00	137	174.00	595904
61.00	32736	94.00	84416	133.00	94	175.00	41592
62.00	33600	95.00	723392	134.00	110	176.00	574976
63.00	26360	96.00	48912	135.00	1586	177.00	37224
64.00	2546	97.00	1186	136.00	312	178.00	1070
65.00	693	103.00	405	137.00	1439	208.00	57
66.00	96	104.00	4292	138.00	44		
67.00	1773	105.00	1478	139.00	240		

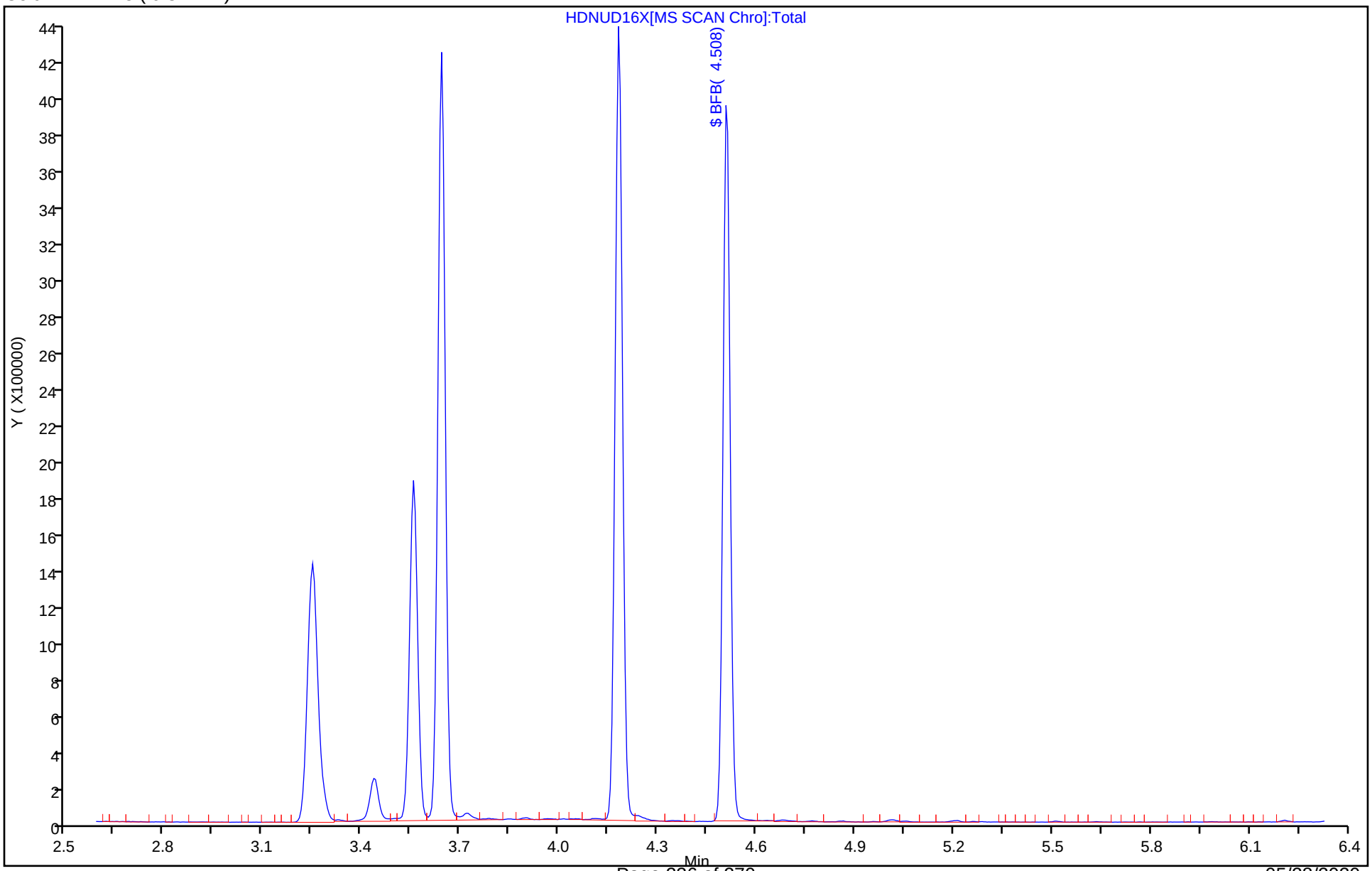
Report Date: 21-Apr-2020 10:48:14 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HDNUD16X.D

Injection Date:	16-Apr-2020 06:14:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	500.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HBFBE15A.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	15-May-2020 10:46:30	ALS Bottle#:	16	Worklist Smp#:	6
Injection Vol:	500.0 mL	Dil. Factor:	1.0000		
Sample Info:	140-0015460-001				
Misc. Info.:	BFB				
Operator ID:	HMT	Instrument ID:	MH		
Method:	\\chromfs\Knoxville\ChromData\MH\20200513-15460.b\MH_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	18-May-2020 17:13:53	Calib Date:	16-Apr-2020 18:34:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC10.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1040				
First Level Reviewer: khachitpongpanits		Date:	18-May-2020 17:13:53		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
$ 5 BFB	95	4.503	4.503	0.000	0	732660	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

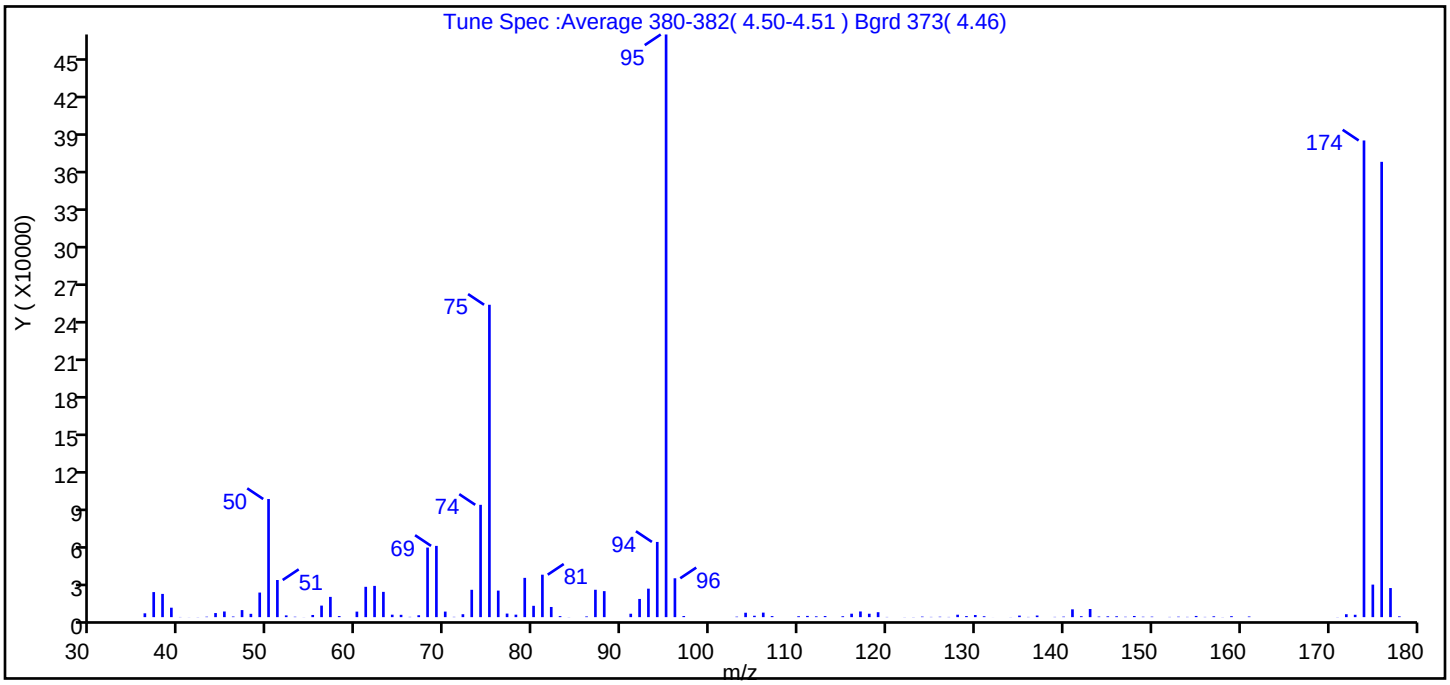
40MXSUR_00003 Amount Added: 40.00 Units: mL

MS Tune Report

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HBFBE15A.D
Injection Date: 15-May-2020 10:46:30 Instrument ID: MH
Lims ID: BFB
Client ID:
Operator ID: HMT ALS Bottle#: 16 Worklist Smp#: 6
Injection Vol: 500.0 mL Dil. Factor: 1.0000
Method: MH_TO15 Limit Group: MSA TO14A_15 Routine ICAL
Tune Method: BFB Method 8260

$ 5 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	20.3
75	30 to 60% of m/z 95	53.6
96	5 to 9% of m/z 95	6.7
173	Less than 2% of m/z 174	0.4 (0.5)
174	50 to 120% of m/z 95	81.8
175	5 to 9% of m/z 174	5.6 (6.8)
176	Greater than 95% but less than 101% of m/z 174	78.1 (95.5)
177	5 to 9% of m/z 176	5.0 (6.4)

Data File: \\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HBFBE15A.D\MH_TO15.rslt\spectra.d
Injection Date: 15-May-2020 10:46:30
Spectrum: Tune Spec :Average 380-382(4.50-4.51) Bgrd 373(4.46)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 117

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	3037	67.00	1494	105.00	1107	141.00	6205
37.00	19880	68.00	55200	106.00	3590	142.00	738
38.00	18440	69.00	56544	107.00	839	143.00	6465
39.00	7503	70.00	4412	110.00	715	144.00	457
40.00	133	71.00	227	111.00	983	145.00	659
41.00	67	72.00	2319	112.00	659	146.00	704
42.00	100	73.00	21696	113.00	877	147.00	300
43.00	351	74.00	89128	115.00	720	148.00	913
44.00	3246	75.00	247872	116.00	2734	149.00	323
45.00	4487	76.00	21064	117.00	4501	150.00	395
46.00	488	77.00	2836	118.00	2700	152.00	184
47.00	5600	78.00	1971	119.00	3923	153.00	370
48.00	2637	79.00	31168	120.00	163	154.00	208
49.00	19504	80.00	8992	122.00	90	155.00	949
50.00	93728	81.00	33688	123.00	114	156.00	188
51.00	29464	82.00	8063	124.00	429	157.00	676
52.00	1388	83.00	794	125.00	188	158.00	96
53.00	327	84.00	94	126.00	325	159.00	753
54.00	67	86.00	564	127.00	167	161.00	522
55.00	1723	87.00	21728	128.00	1930	171.00	104
56.00	9162	88.00	20640	129.00	842	172.00	2320
57.00	16075	91.00	2707	130.00	1681	173.00	1886
58.00	833	92.00	14442	131.00	713	174.00	378240
60.00	4397	93.00	22600	132.00	33	175.00	25824
61.00	24064	94.00	59680	134.00	88	176.00	361280
62.00	24800	95.00	462336	135.00	1230	177.00	23088
63.00	20056	96.00	30848	136.00	175	178.00	613
64.00	1962	97.00	871	137.00	1284		
65.00	1850	103.00	379	139.00	203		
66.00	215	104.00	3497	140.00	401		

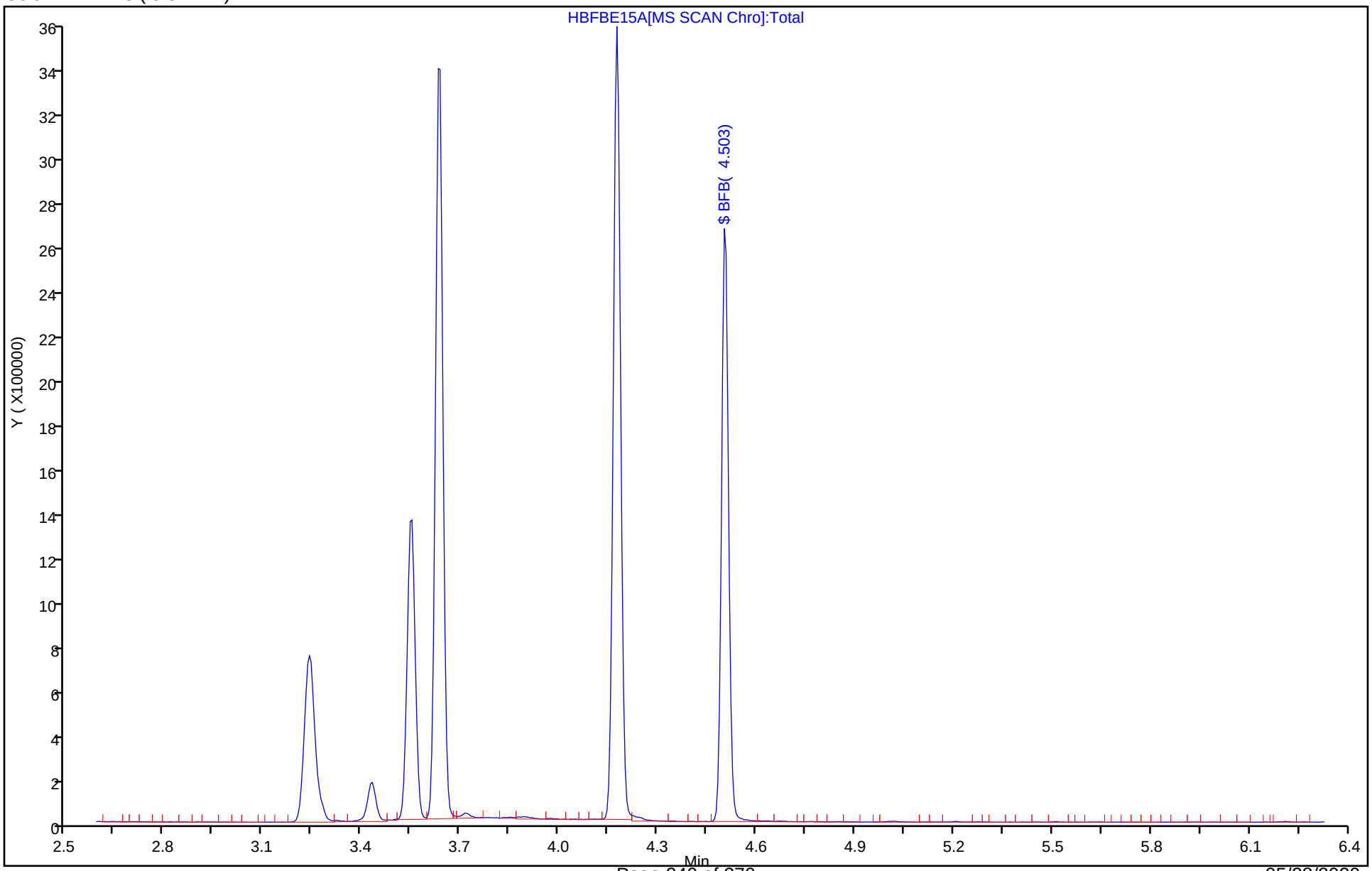
Report Date: 18-May-2020 17:13:53 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HBFBE15A.D

Injection Date:	15-May-2020 10:46:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	BFB			Worklist Smp#:	6
Client ID:					
Injection Vol:	500.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19093-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 140-39584/4

Matrix: Air Lab File ID: H500BE15.D

Analysis Method: TO 15 LL Date Collected:

Sample wt/vol: 500(mL) Date Analyzed: 05/15/2020 13:32

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 39584 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	ND		0.080	0.0080
56-23-5	Carbon tetrachloride	153.81	ND		0.080	0.0070
75-45-6	Chlorodifluoromethane	86.47	ND		0.080	0.022
67-66-3	Chloroform	119.38	ND		0.080	0.0070
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.080	0.010
75-71-8	Dichlorodifluoromethane	120.91	ND		0.080	0.014
75-34-3	1,1-Dichloroethane	98.96	ND		0.080	0.0070
107-06-2	1,2-Dichloroethane	98.96	ND		0.080	0.010
75-35-4	1,1-Dichloroethene	96.94	ND		0.080	0.0080
100-41-4	Ethylbenzene	106.17	ND		0.080	0.013
75-09-2	Methylene Chloride	84.93	ND		0.40	0.16
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.40	0.052
91-20-3	Naphthalene	128.17	ND		0.040	0.040
127-18-4	Tetrachloroethene	165.83	ND		0.080	0.0070
108-88-3	Toluene	92.14	ND		0.12	0.078
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.080	0.0070
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.080	0.064
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.080	0.037
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.080	0.0070
79-01-6	Trichloroethene	131.39	ND		0.040	0.0060
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.080	0.036
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.080	0.020
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.080	0.022
75-01-4	Vinyl chloride	62.50	ND		0.040	0.026
1330-20-7	Xylenes, Total	106.17	ND		0.16	0.024

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	92		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19093-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 140-39584/4

Matrix: Air Lab File ID: H500BE15.D

Analysis Method: TO 15 LL Date Collected:

Sample wt/vol: 500(mL) Date Analyzed: 05/15/2020 13:32

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 39584 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	ND		0.26	0.026
56-23-5	Carbon tetrachloride	153.81	ND		0.50	0.044
75-45-6	Chlorodifluoromethane	86.47	ND		0.28	0.078
67-66-3	Chloroform	119.38	ND		0.39	0.034
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.32	0.040
75-71-8	Dichlorodifluoromethane	120.91	ND		0.40	0.069
75-34-3	1,1-Dichloroethane	98.96	ND		0.32	0.028
107-06-2	1,2-Dichloroethane	98.96	ND		0.32	0.040
75-35-4	1,1-Dichloroethene	96.94	ND		0.32	0.032
100-41-4	Ethylbenzene	106.17	ND		0.35	0.056
75-09-2	Methylene Chloride	84.93	ND		1.4	0.56
1634-04-4	Methyl tert-butyl ether	88.15	ND		1.4	0.19
91-20-3	Naphthalene	128.17	ND		0.21	0.21
127-18-4	Tetrachloroethene	165.83	ND		0.54	0.047
108-88-3	Toluene	92.14	ND		0.45	0.29
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.32	0.028
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.59	0.47
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.44	0.20
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.44	0.038
79-01-6	Trichloroethene	131.39	ND		0.21	0.032
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.39	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.39	0.098
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.39	0.11
75-01-4	Vinyl chloride	62.50	ND		0.10	0.066
1330-20-7	Xylenes, Total	106.17	ND		0.69	0.10

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	92		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MH\20200513-15460.b\H500BE15.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 15-May-2020 13:32:30 ALS Bottle#: 16 Worklist Smp#: 4
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0015105-004
Misc. Info.: 500ML BLK
Operator ID: HMT Instrument ID: MH

Method: \\chromfs\Knoxville\ChromData\MH\20200513-15460.b\MH_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 18-May-2020 17:18:25 Calib Date: 16-Apr-2020 18:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC10.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1040

First Level Reviewer: khachitpongpanits Date: 18-May-2020 17:18:25

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.577	8.577	0.000	93	173180	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.779	10.784	-0.005	95	1175745	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.570	15.570	0.000	89	877860	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.218	17.239	-0.021	89	539313	4.00	3.66	
7 Propene	41	3.553	3.553	0.000	98	38384		-0.1576	7
29 2-Methyl-2-propanol	59	5.869	5.802	0.067	94	4599		0.0328	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

40MXISSURP_00004 Amount Added: 40.00 Units: mL Run Reagent

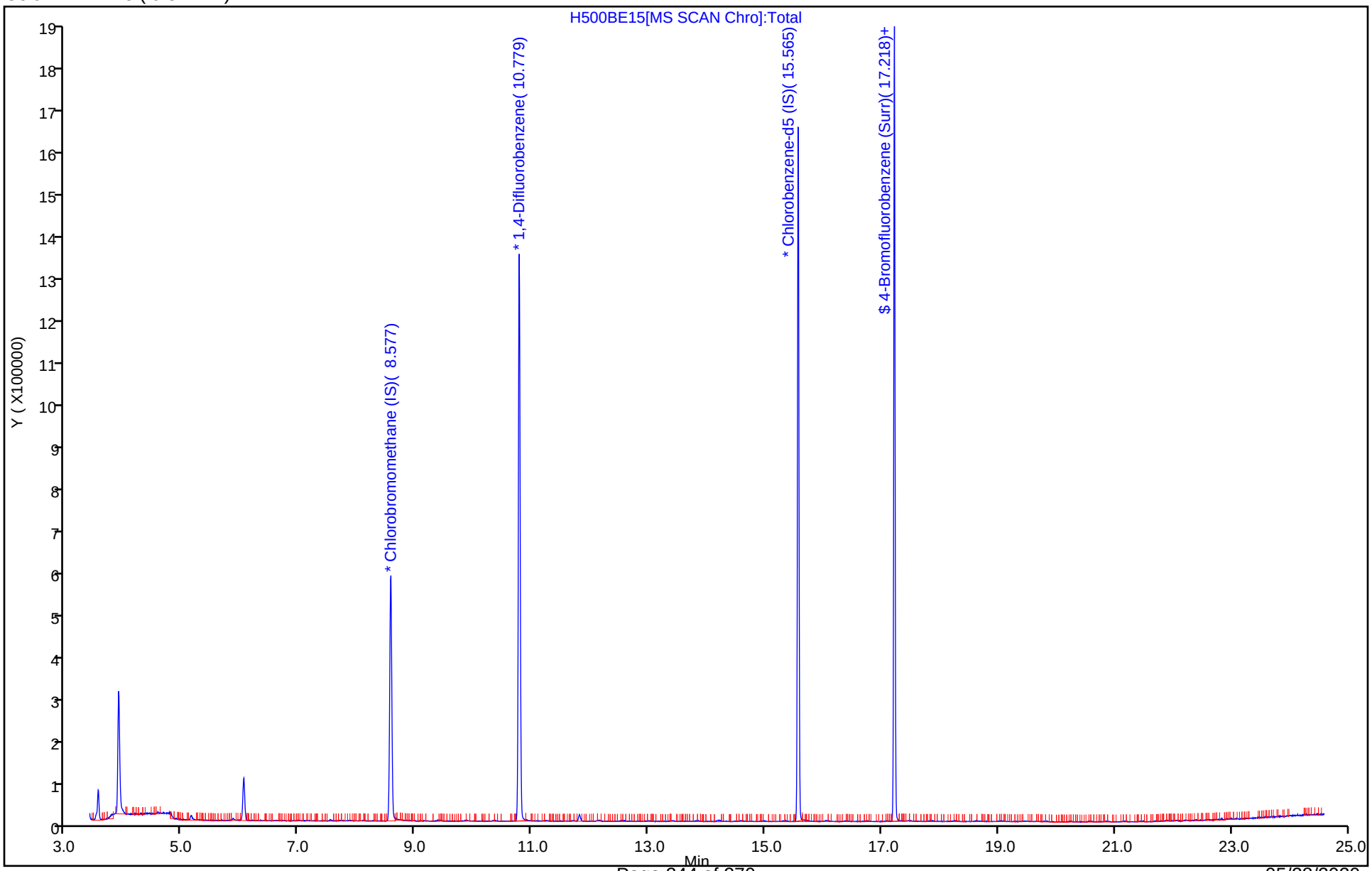
Report Date: 18-May-2020 17:18:25 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200513-15460.b\H500BE15.D

Injection Date:	15-May-2020 13:32:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	MB			Worklist Smp#:	4
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MH\20200513-15460.b\H500BE15.D				
Lims ID:	MB				
Client ID:					
Sample Type:	MB				
Inject. Date:	15-May-2020 13:32:30	ALS Bottle#:	16	Worklist Smp#:	4
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0015105-004				
Misc. Info.:	500ML BLK				
Operator ID:	HMT	Instrument ID:	MH		
Method:	\\chromfs\Knoxville\ChromData\MH\20200513-15460.b\MH_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	18-May-2020 17:18:25	Calib Date:	16-Apr-2020 18:34:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC10.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1040				

First Level Reviewer: khachitpongpanits Date: 18-May-2020 17:18:25

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.00	3.66	91.55

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19093-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 140-39584/1007

Matrix: Air Lab File ID: HCCVE15A-LCS.d

Analysis Method: TO 15 LL Date Collected:

Sample wt/vol: 500(mL) Date Analyzed: 05/15/2020 11:16

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 39584 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	1.71		0.080	0.0080
56-23-5	Carbon tetrachloride	153.81	1.88		0.080	0.0070
75-45-6	Chlorodifluoromethane	86.47	1.68		0.080	0.022
67-66-3	Chloroform	119.38	1.82		0.080	0.0070
156-59-2	cis-1,2-Dichloroethene	96.94	1.63		0.080	0.010
75-71-8	Dichlorodifluoromethane	120.91	1.92		0.080	0.014
75-34-3	1,1-Dichloroethane	98.96	1.65		0.080	0.0070
107-06-2	1,2-Dichloroethane	98.96	1.77		0.080	0.010
75-35-4	1,1-Dichloroethene	96.94	1.60		0.080	0.0080
100-41-4	Ethylbenzene	106.17	1.82		0.080	0.013
75-09-2	Methylene Chloride	84.93	1.86		0.40	0.16
1634-04-4	Methyl tert-butyl ether	88.15	1.69		0.40	0.052
91-20-3	Naphthalene	128.17	2.16		0.040	0.040
127-18-4	Tetrachloroethene	165.83	1.72		0.080	0.0070
108-88-3	Toluene	92.14	1.73		0.12	0.078
156-60-5	trans-1,2-Dichloroethene	96.94	1.65		0.080	0.0070
120-82-1	1,2,4-Trichlorobenzene	181.45	2.20		0.080	0.064
71-55-6	1,1,1-Trichloroethane	133.41	1.75		0.080	0.037
79-00-5	1,1,2-Trichloroethane	133.41	1.86		0.080	0.0070
79-01-6	Trichloroethene	131.39	1.70		0.040	0.0060
526-73-8	1,2,3-Trimethylbenzene	120.19	1.96		0.080	0.036
95-63-6	1,2,4-Trimethylbenzene	120.20	1.99		0.080	0.020
108-67-8	1,3,5-Trimethylbenzene	120.20	1.81		0.080	0.022
75-01-4	Vinyl chloride	62.50	2.18		0.040	0.026
1330-20-7	Xylenes, Total	106.17	5.86		0.16	0.024

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	106		60-140

TestAmerica Laboratories
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HCCVE15A-LCS.d
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 15-May-2020 11:16:30 ALS Bottle#: 1 Worklist Smp#: 1007
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0015460-002
Misc. Info.: P110 80ML
Operator ID: HMT Instrument ID: MH

Method: \\chromfs\Knoxville\ChromData\MH\20200513-15460.b\MH_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 18-May-2020 17:17:17 Calib Date: 16-Apr-2020 18:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC10.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1040

First Level Reviewer: khachitpongpanits Date: 18-May-2020 17:17:17

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.577	8.577	0.000	95	175280	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.784	10.784	0.000	95	1197070	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.570	15.570	0.000	90	957658	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.239	17.239	0.000	90	682799	4.00	4.25	
6 Chlorodifluoromethane	51	3.543	3.543	0.000	96	311437	1.60	1.68	
7 Propene	41	3.553	3.553	0.000	99	138855	1.60	1.39	
8 Dichlorodifluoromethane	85	3.600	3.600	0.000	100	546656	1.60	1.92	
9 Chloromethane	52	3.776	3.776	0.000	97	56030	1.60	1.81	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.781	3.781	0.000	94	452348	1.60	2.39	
11 Acetaldehyde	44	3.920	3.920	0.000	90	317252	8.00	9.19	
12 Vinyl chloride	62	3.941	3.941	0.000	99	221282	1.60	2.18	
14 Butadiene	54	4.018	4.018	0.000	77	146136	1.60	2.11	
13 Butane	43	4.024	4.024	0.000	81	218784	1.60	1.82	
15 Bromomethane	94	4.329	4.329	0.000	98	253926	1.60	2.37	
16 Chloroethane	64	4.468	4.468	0.000	91	93610	1.60	2.16	
17 Ethanol	31	4.551	4.551	0.000	88	251650	8.00	8.05	
18 Vinyl bromide	106	4.758	4.758	0.000	97	233956	1.60	2.42	
19 2-Methylbutane	43	4.799	4.799	0.000	85	156753	1.60	1.77	
20 Trichlorofluoromethane	101	5.011	5.011	0.000	99	460530	1.60	1.81	
21 Acrolein	56	5.026	5.026	0.000	90	45608	1.60	1.53	
22 Acetonitrile	40	5.088	5.088	0.000	98	57885	1.60	1.69	
23 Acetone	58	5.135	5.135	0.000	97	201235	4.80	5.10	
25 Isopropyl alcohol	45	5.212	5.212	0.000	94	514320	4.80	4.39	
24 Pentane	72	5.228	5.228	0.000	97	19457	1.60	1.76	
26 Ethyl ether	31	5.388	5.388	0.000	88	107900	1.60	1.41	
27 1,1-Dichloroethene	96	5.709	5.709	0.000	95	136993	1.60	1.60	
29 2-Methyl-2-propanol	59	5.802	5.802	0.000	94	234017	1.60	1.65	
28 Acrylonitrile	53	5.812	5.812	0.000	94	108339	1.60	1.67	
30 1,1,2-Trichloro-1,2,2-trifluoroe	101	5.879	5.879	0.000	91	353683	1.60	1.79	
31 Methylene Chloride	84	6.050	6.050	0.000	97	189518	1.60	1.86	
32 3-Chloro-1-propene	39	6.065	6.065	0.000	98	106271	1.60	1.47	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
33 Carbon disulfide	76	6.210	6.210	0.000	99	452075	1.60	1.77	
34 trans-1,2-Dichloroethene	96	6.851	6.851	0.000	96	139059	1.60	1.65	
35 2-Methylpentane	43	6.861	6.861	0.000	92	253504	1.60	1.52	
36 Methyl tert-butyl ether	73	6.964	6.964	0.000	96	333182	1.60	1.69	
37 1,1-Dichloroethane	63	7.269	7.269	0.000	99	277557	1.60	1.65	
38 Vinyl acetate	43	7.373	7.373	0.000	100	322013	1.60	1.54	
39 2-Butanone (MEK)	72	7.812	7.812	0.000	96	59669	1.60	1.60	
40 Hexane	56	7.838	7.838	0.000	89	107117	1.60	1.70	
41 Isopropyl ether	45	7.988	7.988	0.000	97	424133	1.60	1.57	
42 cis-1,2-Dichloroethene	96	8.251	8.251	0.000	97	143781	1.60	1.63	
43 Ethyl acetate	43	8.427	8.427	0.000	99	285602	1.60	1.51	
44 Chloroform	83	8.592	8.592	0.000	98	376255	1.60	1.82	
45 Tert-butyl ethyl ether	59	8.665	8.665	0.000	96	402249	1.60	1.71	
46 Tetrahydrofuran	42	8.980	8.980	0.000	89	124511	1.60	1.45	
47 1,1,1-Trichloroethane	97	9.616	9.616	0.000	97	337180	1.60	1.75	
48 1,2-Dichloroethane	62	9.724	9.724	0.000	98	224431	1.60	1.77	
49 n-Butanol	31	10.184	10.184	0.000	89	31036	1.60	1.15	
50 Cyclohexane	69	10.221	10.221	0.000	86	57896	1.60	1.68	
51 Benzene	78	10.221	10.221	0.000	97	444251	1.60	1.71	
52 Carbon tetrachloride	117	10.246	10.246	0.000	94	352697	1.60	1.88	
53 2,3-Dimethylpentane	71	10.339	10.339	0.000	88	81791	1.60	1.65	
54 Thiophene	84	10.500	10.500	0.000	96	247393	1.60	1.70	
55 Isooctane	57	10.996	10.996	0.000	98	643410	1.60	1.63	
56 n-Heptane	71	11.383	11.383	0.000	88	118574	1.60	1.62	
57 1,2-Dichloropropane	63	11.471	11.471	0.000	92	180178	1.60	1.69	
58 Trichloroethene	130	11.507	11.507	0.000	91	180609	1.60	1.70	
59 Dibromomethane	93	11.595	11.595	0.000	89	234031	1.60	1.79	
60 Dichlorobromomethane	83	11.740	11.740	0.000	98	379199	1.60	1.86	
61 1,4-Dioxane	88	11.750	11.750	0.000	89	55130	1.60	1.45	
62 Methyl methacrylate	41	11.838	11.838	0.000	95	152039	1.60	1.58	
63 Methylcyclohexane	83	12.283	12.283	0.000	95	222938	1.60	1.51	
64 4-Methyl-2-pentanone (MIBK)	43	12.696	12.696	0.000	97	301158	1.60	1.62	
65 cis-1,3-Dichloropropene	75	12.758	12.758	0.000	94	257191	1.60	1.86	
66 trans-1,3-Dichloropropene	75	13.466	13.466	0.000	97	202396	1.60	1.77	
67 Toluene	91	13.585	13.585	0.000	93	483906	1.60	1.73	
68 1,1,2-Trichloroethane	83	13.663	13.663	0.000	96	187030	1.60	1.86	
69 2-Hexanone	58	14.050	14.050	0.000	93	148991	1.60	1.70	
70 n-Octane	85	14.283	14.283	0.000	90	130164	1.60	1.75	
71 Chlorodibromomethane	129	14.371	14.371	0.000	96	354745	1.60	2.00	
72 Ethylene Dibromide	107	14.660	14.660	0.000	96	308502	1.60	1.86	
73 Tetrachloroethene	129	14.733	14.733	0.000	90	176443	1.60	1.72	
74 Chlorobenzene	112	15.616	15.616	0.000	92	389654	1.60	1.75	
75 2,3-Dimethylheptane	43	15.637	15.637	0.000	94	423367	1.60	1.68	
76 Ethylbenzene	91	15.906	15.906	0.000	99	630224	1.60	1.82	
77 m-Xylene & p-Xylene	91	16.071	16.071	0.000	99	1029919	3.20	3.91	
78 n-Nonane	57	16.495	16.495	0.000	87	299753	1.60	1.77	
79 Bromoform	173	16.521	16.521	0.000	90	377128	1.60	2.07	
80 Styrene	104	16.536	16.536	0.000	99	358894	1.60	1.80	
81 o-Xylene	91	16.598	16.598	0.000	98	532397	1.60	1.95	
82 1,1,2,2-Tetrachloroethane	83	16.934	16.934	0.000	98	498481	1.60	1.90	
83 1,2,3-Trichloropropane	110	17.100	17.100	0.000	97	104537	1.60	1.81	
84 Isopropylbenzene	105	17.208	17.208	0.000	97	680532	1.60	1.84	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
85 N-Propylbenzene	120	17.782	17.782	0.000	98	169945	1.60	1.79	
86 2-Chlorotoluene	126	17.828	17.828	0.000	97	180135	1.60	1.95	
87 4-Ethyltoluene	105	17.937	17.937	0.000	99	697281	1.60	1.92	
88 1,3,5-Trimethylbenzene	120	18.014	18.014	0.000	92	275839	1.60	1.81	
89 Alpha Methyl Styrene	118	18.262	18.262	0.000	85	257629	1.60	1.77	
90 n-Decane	57	18.319	18.319	0.000	90	449312	1.60	1.89	
91 tert-Butylbenzene	119	18.459	18.459	0.000	91	623724	1.60	1.92	
92 1,2,4-Trimethylbenzene	105	18.474	18.474	0.000	96	642625	1.60	1.99	
93 sec-Butylbenzene	105	18.743	18.743	0.000	98	927573	1.60	1.99	
94 1,3-Dichlorobenzene	146	18.759	18.759	0.000	97	427722	1.60	2.00	
95 Benzyl chloride	91	18.836	18.836	0.000	97	505480	1.60	1.85	
96 1,4-Dichlorobenzene	146	18.847	18.847	0.000	94	407894	1.60	2.01	
97 4-Isopropyltoluene	119	18.914	18.914	0.000	96	706990	1.60	1.98	
98 1,2,3-Trimethylbenzene	105	18.965	18.965	0.000	99	632942	1.60	1.96	
99 Butylcyclohexane	83	19.022	19.022	0.000	95	553622	1.60	2.01	
101 2,3-Dihydroindene	117	19.219	19.219	0.000	92	604770	1.60	1.99	
100 1,2-Dichlorobenzene	146	19.224	19.224	0.000	81	431660	1.60	2.00	
102 Indene	116	19.358	19.358	0.000	89	515624	1.60	1.90	
103 n-Butylbenzene	91	19.363	19.363	0.000	96	888931	1.60	1.94	
104 Undecane	57	19.684	19.684	0.000	94	513966	1.60	1.92	
105 1,2-Dibromo-3-Chloropropane	157	19.844	19.844	0.000	95	227512	1.60	1.91	
106 1,2,4,5-Tetramethylbenzene	119	20.139	20.139	0.000	96	639844	1.60	1.64	
107 Dodecane	57	20.769	20.769	0.000	97	459758	1.60	1.74	
108 1,2,4-Trichlorobenzene	180	20.976	20.976	0.000	92	295455	1.60	2.20	
109 Naphthalene	128	21.121	21.121	0.000	99	661676	1.60	2.16	
110 Hexachlorobutadiene	225	21.343	21.343	0.000	90	362227	1.60	1.95	
111 1,2,3-Trichlorobenzene	180	21.415	21.415	0.000	92	301176	1.60	2.00	
112 2-Methylnaphthalene	142	22.061	22.061	0.000	96	196894	1.60	1.87	
113 1-Methylnaphthalene	142	22.190	22.190	0.000	96	301420	1.60	2.31	
A 115 C8 Range	1	14.278	(14.231-14.335)		0	1318235	1.60	1.69	
S 116 Xylenes, Total	100				0		4.80	5.86	
S 117 1,2-Dichloroethene, Total	1				0		3.20	3.28	

Reagents:

40CV101P_00110	Amount Added: 80.00	Units: mL	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

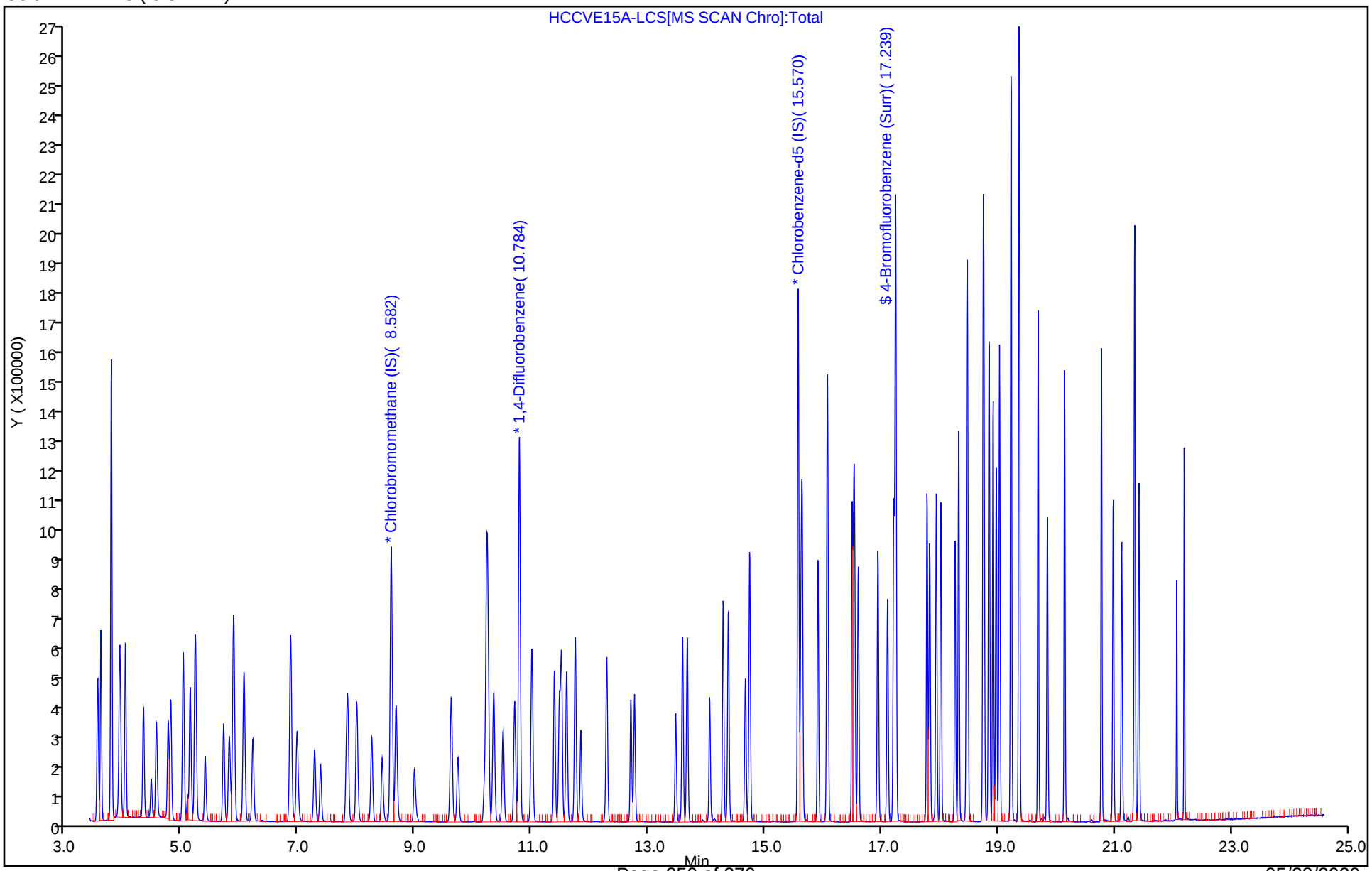
Report Date: 18-May-2020 17:17:19 Chrom Revision: 2.3 05-May-2020 17:48:18

TestAmerica Laboratories

Data File: \\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HCCVE15A-LCS.d

Injection Date:	15-May-2020 11:16:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	LCS			Worklist Smp#:	1007
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



TestAmerica Laboratories
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MH\20200513-15460.b\HCCVE15A-LCS.d				
Lims ID:	LCS				
Client ID:					
Sample Type:	LCS				
Inject. Date:	15-May-2020 11:16:30	ALS Bottle#:	1	Worklist Smp#:	1007
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0015460-002				
Misc. Info.:	P110 80ML				
Operator ID:	HMT	Instrument ID:	MH		
Method:	\\chromfs\Knoxville\ChromData\MH\20200513-15460.b\MH_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	18-May-2020 17:17:17	Calib Date:	16-Apr-2020 18:34:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC10.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1040				

First Level Reviewer: khachitpongpanits Date: 18-May-2020 17:17:17

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.00	4.25	106.25

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19093-1

SDG No.:

Instrument ID: MH Start Date: 04/16/2020 06:14

Analysis Batch Number: 39100 End Date: 04/16/2020 23:05

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 140-39100/1		04/16/2020 06:14	1	HDNUD16X.D	RTX-5 0.32(mm)
IC 140-39100/3		04/16/2020 08:03	1	HD16IC01.D	RTX-5 0.32(mm)
IC 140-39100/4		04/16/2020 08:55	1	HD16IC02.D	RTX-5 0.32(mm)
140-18735-A-5 MDLV		04/16/2020 08:55	1		RTX-5 0.32(mm)
IC 140-39100/5		04/16/2020 09:47	1	HD16IC03.D	RTX-5 0.32(mm)
140-18735-A-6 MDLV		04/16/2020 09:47	1		RTX-5 0.32(mm)
IC 140-39100/6		04/16/2020 10:40	1	HD16IC04.D	RTX-5 0.32(mm)
140-18735-A-7 MDLV		04/16/2020 10:40	1		RTX-5 0.32(mm)
IC 140-39100/7		04/16/2020 11:33	1	HD16IC05.D	RTX-5 0.32(mm)
140-18735-A-8 MDLV		04/16/2020 11:33	1		RTX-5 0.32(mm)
IC 140-39100/8		04/16/2020 12:26	1	HD16IC06.D	RTX-5 0.32(mm)
ICIS 140-39100/9		04/16/2020 13:19	1	HD16IC07.D	RTX-5 0.32(mm)
IC 140-39100/11		04/16/2020 15:04	1	HD16IC08.D	RTX-5 0.32(mm)
IC 140-39100/13		04/16/2020 16:49	1	HD16C09.D	RTX-5 0.32(mm)
IC 140-39100/15		04/16/2020 18:34	1	HD16IC10.D	RTX-5 0.32(mm)
ICV 140-39100/17		04/16/2020 20:21	1	HD16ICV.D	RTX-5 0.32(mm)
ZZZZZ		04/16/2020 23:05	1		RTX-5 0.32(mm)

Eurofins/TestAmerica Knoxville GC/MS Air - Initial Calibration Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 21 & KNOX-MS-0023, Rev 4

Analysis Date:	4/16/20	Instrument:	MH	Chrom WL #:	15239	TALS Batch & Event #	TO14/15: 2402 / 39100	DODS: 2403/39101
							DOD: 2405 / 39103	OHIO: 2404 / 39102

Chrom/Worklist Review	1st	Comments	2nd
1. Re-read each Limit Group [method editor-limit groups]	✓		na
2. Verify LODV in Chrom [method editor -> edit -> MDL]	✓		na
3. Are the reagents and init/final volumes correct and first level "unlock/clear"? (Verify reagents & amt. injected at each level) [WL Sample Reagents Tab vs. Entech]	✓		
4. Files linked properly to calibration levels? [Sample List- Lab ID vs. Info]	✓		
5. Did BFB meet tune criteria? [F8]	✓		
6. Were all standards injected within 24 hr of BFB? [F7]	✓		
7. High point checked for saturation and point removed if so? [Chrom]	✓	Removed.	
8. If manual integrations performed, are they properly performed, correct, baseline clearly identified, and correct reason given? [Chrom]	NA		
9. RT for each IS ±20 sec avg. RT? [F6 IstdRec]	✓		
10. Area for each IS ± 40% avg. area? [F6 IstdRec]	✓		
11. Each analyte ± 0.06 RRT of avg. RRT? [F6 - RRT]	✓		
12. Elution order checked on isomeric pairs? [Chrom]			
• dichlorodifluoromethane / 1,2-dichlorotetrafluoroethane	✓		
• 2-methyl butane / acrolein	✓		
• trichlorofluoromethane / 1,1,2-trichlorotrifluoroethane	✓		
• vinyl acetate / hexane	✓		
• cis- and trans- isomers	✓		
• ethyl benzene / m/p-xylene / o-xylene	✓		
• n-propylbenzene/4-ethyl toluene/1,3,5-trimethylbenzene/1,2,4-trimethylbenzene/ sec-butylbenzene/1,2,3-trimethylbenzene	✓		
• tert-butylbenzene/4-isopropyltoluene	✓		
• 1,3- , 1,4- , and 1,2-dichlorobenzene	✓		
• 1,2-dimethyl-4-ethylbenzene/1,2,4,5-, 1,2,3,5-, and 1,2,3,4-tetramethylbenzenes	✓	In ICV	
• 1,2,4- and 1,2,3-trichlorobenzenes	✓		
• 2-, and 1-methylnaphthalene	✓		
13. "Range" analytes & internal standard RIC ID'd correctly, inspected for interferences & proper integration?	✓		

MLG Review	TO	DOD	OH	Comments	TO-	DOD	OH
14. Is %RSD for all target analytes ≤ 30%? (with up to 2 compounds with RSD ≤ 40%) 1& 2 methylnaphthalene ≤ 50% MeCl2, Naph [F6 Σ]	✓	✓	✓				
15. Were at least 5 levels of each compound analyzed? [F6]	✓	✓	✓				
16. Is low level std at or <RL and are the remaining points consec.? [F6]	✓	Naph	✓	DOD: RL Naph 0.76			
17. At least 6 consec. points used for quad curves; at least 5 consec. points for linear curves? (Note: Ohio does not allow quad) [F6]	✓	✓	✓				
18. If curves were used, is correlation coefficient ≥0.990? [F6]	✓	✓					
19. Is the intercept less than the RL for each curve? [F6]	✓	✓					
20. For quadratic: is a tangent's slope to the curve entirely positive or negative and continuous. [Cntrl-C, details]	✓	✓	na				na
21. Is low point RSE ≤ 50 %? [F6]	✓	✓	✓				
22. Is the second source analysis within limits? [F8 - icv]	✓	✓	✓	↑ICV DOD			
Analyst/Date: 4/21/20 ICV ↑ IPA · DOD				**2nd Level Reviewer/Date:**			

TALS Review	TO	DOD	OH	Comments	TO	DOD	OH
23. Upload ICAL	✓	✓	✓		na	na	na
24. Graphics uploaded? [paperclip]	✓	✓	✓				
25. All points are in the most recent active calibration event? [Calibration Events –'Fix ICAL linkage' if needed]	✓	✓	✓				
26. Runs linked to BFB? [QC Links]	✓	✓	✓				
27. Run Checklist and acknowledge findings [F8]	✓	✓	✓				
28. If criteria not met, was a NCM generated?	✓	✓	✓				
29. After review in TALS, approve the method in TALS.	na	na	na				
30. After verifying TALS is correct, lock method in Chrom <resolve any error issues>	na	na	na				
31. Checklist & Entech report scanned, attached & assigned properly?	na	na	na				

Analyst/date:	2nd Level Reviewer/date:
Comments: 1245 TMPBZ. TTMBZ 130 %. RSD. 4/21/20 4/21/20	Comments:

Eurofins/TestAmerica Knoxville GC/MS Air - Initial Calibration Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 20 & KNOX-MS-0023, Rev 4

Analysis Date:	4/16/20	Instrument:	MH	Chrom WL #:	15239	TALS Batch & Event #	TO14/15: 39100 /2402	DOD5: 39101/2402
							DOD: 39103 / 2403	OHIO: 39102/2403

Chrom/Worklist Review	1st	Comments	2nd
1. Re-read each Limit Group [method editor-limit groups]			na
2. Verify LODV in Chrom [method editor -> edit -> MDL]			na
3. Are the reagents and init/final volumes correct and first level "unlock/clear"? (Verify reagents & amt. injected at each level) [WL Sample Reagents Tab vs. Entech]			Y
4. Files linked properly to calibration levels? [Sample List- Lab ID vs. Info]			Y
5. Did BFB meet tune criteria? [F8]			Y
6. Were all standards injected within 24 hr of BFB? [F7]			Y
7. High point checked for saturation and point removed if so? [Chrom]			Y
8. If manual integrations performed, are they properly performed, correct, baseline clearly identified, and correct reason given? [Chrom]			NA
9. RT for each IS ±20 sec avg. RT? [F6 IstdRec]			Y
10. Area for each IS ± 40% avg. area? [F6 IstdRec]			Y
11. Each analyte ± 0.06 RRT of avg. RRT? [F6 - RRT]			Y
12. Elution order checked on isomeric pairs? [Chrom]			
• dichlorodifluoromethane / 1,2-dichlorotetrafluoroethane			Y
• 2-methyl butane / acrolein			Y
• trichlorofluoromethane / 1,1,2-trichlorotrifluoroethane			Y
• vinyl acetate / hexane			Y
• cis- and trans- isomers			Y
• ethyl benzene / m/p-xylene / o-xylene			Y
• n-propylbenzene/4-ethyl toluene/1,3,5-trimethylbenzene/1,2,4-trimethylbenzene/ sec-butylbenzene/1,2,3-trimethylbenzene			NA
• tert-butylbenzene/4-isopropyltoluene			Y
• 1,3- , 1,4- , and 1,2-dichlorobenzene			Y
• 1,2-dimethyl-4-ethylbenzene/1,2,4,5-, 1,2,3,5-, and 1,2,3,4-tetramethylbenzenes			Y
• 1,2,4- and 1,2,3-trichlorobenzenes			Y
• 2-, and 1-methylnaphthalene			Y
13. "Range" analytes & internal standard RIC ID'd correctly, inspected for interferences & proper integration?			Y

MLG Review	TO	DOD	OH	Comments	TO-	DOD	OH
14. Is %RSD for all target analytes ≤ 30%? (with up to 2 compounds with RSD ≤ 40%) 1& 2 methylnaphthalene ≤ 50% [F6 ∑]				mecl2 naphthalene	Y	Y	Y
15. Were at least 5 levels of each compound analyzed? [F6]					Y	Y	Y
16. Is low level std at or <RL and are the remaining points consec.? [F6]					Y	Y	Y
17. At least 6 consec. points used for quad curves; at least 5 consec. points for linear curves? (Note: Ohio does not allow quad) [F6]					Y	Y	Y
18. If curves were used, is correlation coefficient ≥0.990? [F6]					Y	Y	Y
19. Is the intercept less than the RL for each curve? [F6]					Y	Y	Y
20. For quadratic: is a tangent's slope to the curve entirely positive or negative and continuous. [Cntrl-C, details]			na		Y	Y	na
21. Is low point RSE ≤ 50 %? [F6]					Y	Y	Y
22. Is the second source analysis within limits? [F8 - icv]				IPA high DOD icv	Y	Y	Y

Analyst/Date:	2nd Level Reviewer/Date: LL 4/21/20

TALS Review	TO	DOD	OH	Comments	TO	DOD	OH
23. Upload ICAL					na	na	na
24. Graphics uploaded? [paperclip]					Y	Y	Y
25. All points are in the most recent active calibration event? [Calibration Events –'Fix ICAL linkage' if needed]					Y	Y	Y
26. Runs linked to BFB? [QC Links]					Y	Y	Y
27. Run Checklist and acknowledge findings [F8]					Y	Y	Y
28. If criteria not met, was a NCM generated?					Y	Y	Y
29. After review in TALS, approve the method in TALS.	na	na	na		Y	Y	Y
30. After verifying TALS is correct, lock method in Chrom <resolve any error issues>	na	na	na		Y	Y	Y
31. Checklist & Entech report scanned, attached & assigned properly?	na	na	na		Y	Y	Y

Analyst/date:	2nd Level Reviewer/date: LL 4/21/20
Comments:	Comments:

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19093-1

SDG No.:

Instrument ID: MH Start Date: 05/15/2020 10:46

Analysis Batch Number: 39584 End Date: 05/16/2020 05:47

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 140-39584/6		05/15/2020 10:46	1	HBFBE15A.D	RTX-5 0.32(mm)
CCVIS 140-39584/7		05/15/2020 11:16	1	HCCVE15A.D	RTX-5 0.32(mm)
LCS 140-39584/1007		05/15/2020 11:16	1	HCCVE15A-LCS.d	RTX-5 0.32(mm)
MB 140-39584/4		05/15/2020 13:32	1	H500BE15.D	RTX-5 0.32(mm)
140-19093-1		05/15/2020 14:25	1	HE15P101.D	RTX-5 0.32(mm)
140-19093-2		05/15/2020 15:18	1	HE15P102.D	RTX-5 0.32(mm)
140-19093-3		05/15/2020 16:10	1	HE15P103.D	RTX-5 0.32(mm)
140-19093-4		05/15/2020 17:03	1	HE15P104.D	RTX-5 0.32(mm)
140-19093-5		05/15/2020 17:57	1	HE15P105.D	RTX-5 0.32(mm)
140-19093-6		05/15/2020 18:53	1	HE15P106.D	RTX-5 0.32(mm)
ZZZZZ		05/15/2020 19:51	1		RTX-5 0.32(mm)
ZZZZZ		05/15/2020 20:52	1		RTX-5 0.32(mm)
ZZZZZ		05/15/2020 21:52	1		RTX-5 0.32(mm)
ZZZZZ		05/15/2020 22:50	1		RTX-5 0.32(mm)
ZZZZZ		05/15/2020 23:49	1.33		RTX-5 0.32(mm)
ZZZZZ		05/16/2020 00:49	1		RTX-5 0.32(mm)
ZZZZZ		05/16/2020 01:49	1.31		RTX-5 0.32(mm)
ZZZZZ		05/16/2020 02:50	1		RTX-5 0.32(mm)
ZZZZZ		05/16/2020 03:48	1		RTX-5 0.32(mm)
ZZZZZ		05/16/2020 04:48	1		RTX-5 0.32(mm)
ZZZZZ		05/16/2020 05:47	1		RTX-5 0.32(mm)

Eurofins/TestAmerica Knoxville GC/MS Air - Batch Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 21 & KNOX-MS-0023, Rev 4

Instrument/Date	MH 5/15/20		Routine	DOD	OHIO VAP
CCAL Chrom WL #	15460	CCAL Batch #	39584		
ICAL Chrom WL #	15239	ICAL Batch # / Event #	39100 / 2402	/	/

Chrom Review	1st	If No, why is data reportable?	2nd
1. Are the reagents & init/final volumes correct? (Verify reagents & amt. injected) [WL Sample Reagent Tab]	✓		na
2. Did BFB meet tune criteria? [F8]	✓	□ [Failed TO-14A, but passes TO-15]	
3. Was the CCAL compared to the most recent & correct ICAL (correct last ICal File batch #/start/end Cal date/time)? [F8]	✓	List Target analytes outside CCV limits: 1,2,4-Trichlorobenzene, 1,2-Dichloro-1,1,2,2-tetrafluoroethane, Bromomethane, Butadiene, chloroethane, Naphthalene, Vinyl chloride	
4. Elution order checked on isomeric pairs? [Chrom]			
• dichlorodifluoromethane / 1,2-dichlorotetrafluoroethane	✓		
• 2-methyl butane / acrolein	✓		
• trichlorofluoromethane / 1,1,2-trichlorotrifluoroethane	✓		
• vinyl acetate / hexane	✓		
• cis- and trans- isomers	✓		
• ethyl benzene / m/p-xylene / o-xylene	✓		
• n-propylbenzene/4-ethyl toluene/1,3,5-trimethylbenzene/1,2,4-trimethylbenzene/sec-butylbenzene/1,2,3-trimethylbenzene	✓		
• tert-butylbenzene/4-isopropyltoluene	✓		
• 1,3- , 1,4- , and 1,2-dichlorobenzene	✓		
• 1,2-dimethyl-4-ethylbenzene/1,2,4,5-, 1,2,3,5-, and 1,2,3,4-tetramethylbenzenes	NA		
• 1,2,4-trichlorobenzene/1,2,3-trichlorobenzene	✓		
• 2-, and 1-methylnaphthalene	✓		
5. "Range" analytes & internal standard RIC ID'd correctly, inspected for interferences & proper integration?	NA		
6. Has the RT been updated to the method?	✓		
Analyst/date Suphawan K 5/18/20		**2nd Level Reviewer/date**	

7. Has the vol injected been verified vs Entech & corrected if actual amount differs >5%? [WL Sample Info: init amt = sample amt; final amt = 500 mL]	✓		
8. Do the lab ID, Info 1 and Dilution Factor columns correlate in Chrom? [Sample List - Lab ID vs. Info 1 vs. Dilution]	✓		
9. Can dilution history verified? [Mgmt Report]	✓		
10. Are all analytes present in the system blank < RL? (<1/2 RL for DoD). *If no, list blank ID:*	✓	□ Method Blank – Report, ND (NCM#_____) □ Method Blank – Report, 10X (NCM#_____)	
11. All runs - peaks ID'd correctly and false positives removed?	✓		
12. If manual integrations performed, are they properly performed, baseline clearly identified, and correct reason given?	✓		
13. IS/Surr within limits? *List samples and reason (e.g., 1 thru 5):* [Batch Results IS & SUR Tab] Sample Reason Sample Reason	✓	□ (1) Surrogate – Matrix (NCM#_____) □ (2) Surrogate – High, ND (NCM#_____) □ (3) ISTD – RA/RA Concurs (NCM#_____) □ (4) Surrogate –RX concur, Report both (NCM#_____) □ (5) ISTD – Matrix, DL required (NCM#_____)	
14. Samples outside calibration range scheduled for dilution?	NA	□ ICAL – Range Exceeded; Minimum Dilution	

Chrom Review	1st	If No, why is data reportable?	2nd
15. For first analysis that is at a dilution, is highest target analyte >20% cal range? *List samples and reason:* Sample Reason Sample Reason	✓	□ (1) Reporting Limit – Dilution, Matrix (NCM#_____) □ (2) Reporting Limit – Dilution, Non-Target (NCM#_____) □ (3) Issues with initial collection volume; see DRC.	
16. RIC inspected for proper integration for TPH?	NA		
17. Obvious non-TPH peaks excluded?	↓		
18. Individual TPH peak area < octane high point area?			

Eurofins/TestAmerica Knoxville GC/MS Air - Batch Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 21 & KNOX-MS-0023, Rev 4

TALS Review	1st	If No, why is data reportable?	2nd
19. Graphics uploaded? [open one paperclip]	/		
20. NCM generated if BFB failed TO-14A criteria, but passes TO-15?	NA	□ [Failed TO-14A, but passes TO-15] (NCM#_____)	
21. Is the %D ≤ 30% for all target analytes? [≤ 50% for 1&2 methylnaphthalene] [Chrom-F8] [TALS-Sample Results Tab]	/	☑ CCV - %D - LCS criteria met (NCM# 23058) ☑ CCV - %D high - outside criteria, samples ND, Sample IDs Included (NCM# 23060)	
22. Undiluted volume analyzed meets the method requirement (200 mL vs. 500 mL)?	/		na
23. Project & sample special instructions verified?	/		
24. If samples were Tedlar bags, was the 72 hr HT met? ** Narrate transfer to can.	NA	□ Air Analysis - Air Sample Transfer to Canister (NCM#____)	
25. Sample analyses done within analytical holding time?	/	□ Holding Time – Received w/Insufficient Time (NCM#_____) □ Holding Time – Receipt (NCM#_____)	
26. Did the LCS meet criteria (70-130% with a limited # allowed 60-140% (see table) provisional analyte limit 60-140% with a limited # allowed 50-150%, and no two consecutive MEs). [Sample Results Tab] Note: No LCS required for OH VAP.	/	☑ Marginal Exceedances - Within ME Limits and Random; Report (NCM# 23059) ☑ LCS/LCSD - %R High (NCM# 23061)	
27. Suffixes assigned properly (DL/RE)? [Sample List Tab]	NA		
28. Each job has QC created (BFB, CCV, LCS, MB)? [Sample List Tab]	/		
29. Analytes over calibration range set to secondary [Conditions Review Tab]	NA		
30. Samples not reported set to 'Acceptable' or 'Rejected'? [Sample Results Tab]	/		
31. DUP done per 20 samples and are all RPDs within limits? (for target analytes >5x RL, <25% RPD; no criteria for n-butanol) *(If DUP not reported - set to 'Acceptable' for each job)*	/		
32. Samples linked to proper blank (200 mL or 500 mL)? [QC links]	/	**500 mL blank ID:** 140-39584/4 **200 mL blank ID:** NA	
33. Samples linked to job's BFB/CCV/LCS/MB? [QC Links]	/		
34. Correct ICV linked to each MB? [QC Links]	/		
35. Were all samples/QC analyzed within 24 hr of BFB? [F7]	/		
36. If criteria were not met, was a NCM generated, and assigned to proper QC & samples? [Also see Conditions Review Tab]	/		
37. Run Checklist and acknowledge findings [F8]	/		
38. Runs set to 1st level review?	/	Runs set to 2nd level review?	
39. QC checker run and items addressed?	-na-		
40. Checklist & Entech report scanned, attached & assigned properly?	-na-		

Analyst: Suphanam Kh.	Date: 5/18/20	2nd Level Reviewer :	Date:
Comments:		**Comments:**	
Example Calculation: 140-19094-4 Chloromethane			
On-column ppbv x Final Vol (mL)/Entech Initial Vol (mL) x Canister Dilution Log DF			
$0.723887 \times \frac{500}{665} \times 1.33 = 0.72$			

Eurofins/TestAmerica Knoxville GC/MS Air - Batch Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 20 & KNOX-MS-0023, Rev 4

Instrument/Date	MH 5/15/20		Routine	DOD	OHIO VAP
CCAL Chrom WL #	15430	CCAL Batch #	39584		
ICAL Chrom WL #	15239	ICAL Batch # / Event #	39100 /2402	/	/

Chrom Review	1st	If No, why is data reportable?	2nd
1. Are the reagents & init/final volumes correct? (Verify reagents & amt. injected) [WL Sample Reagent Tab]			na
2. Did BFB meet tune criteria? [F8]		□ [Failed TO-14A, but passes TO-15]	Y
3. Was the CCAL compared to the most recent & correct ICAL (correct last ICal File batch #/start/end Cal date/time)? [F8]		List Target analytes outside CCV limits: _____ _____ _____	Y
4. Elution order checked on isomeric pairs? [Chrom]			
• dichlorodifluoromethane / 1,2-dichlorotetrafluoroethane			Y
• 2-methyl butane / acrolein			Y
• trichlorofluoromethane / 1,1,2-trichlorotrifluoroethane			Y
• vinyl acetate / hexane			Y
• cis- and trans- isomers			Y
• ethyl benzene / m/p-xylene / o-xylene			Y
• n-propylbenzene/4-ethyl toluene/1,3,5-trimethylbenzene/1,2,4-trimethylbenzene/sec-butylbenzene/1,2,3-trimethylbenzene			Y
• tert-butylbenzene/4-isopropyltoluene			Y
• 1,3- , 1,4- , and 1,2-dichlorobenzene			Y
• 1,2-dimethyl-4-ethylbenzene/1,2,4,5-, 1,2,3,5-, and 1,2,3,4-tetramethylbenzenes			NA
• 1,2,4-trichlorobenzene/1,2,3-trichlorobenzene			Y
• 2-, and 1-methylnaphthalene			Y
5. "Range" analytes & internal standard RIC ID'd correctly, inspected for interferences & proper integration?			NA
6. Has the RT been updated to the method?			Y
Analyst/date		**2nd Level Reviewer/date LL 5/18/20**	

7. Has the vol injected been verified vs Entech & corrected if actual amount differs >5%? [WL Sample Info: init amt = sample amt; final amt = 500 mL]			Y
8. Do the lab ID, Info 1 and Dilution Factor columns correlate in Chrom? [Sample List - Lab ID vs. Info 1 vs. Dilution]			Y
9. Can dilution history verified? [Mgmt Report]			Y
10. Are all analytes present in the system blank < RL**?** (<1/2 RL for DoD). *If no, list blank ID:*		□ Method Blank – Report, ND (NCM#_____) □ Method Blank – Report, 10X (NCM#_____)	Y
11. All runs - peaks ID'd correctly and false positives removed?			Y
12. If manual integrations performed, are they properly performed, baseline clearly identified, and correct reason given?			Y
13. IS/Surr within limits? *List samples and reason (e.g.,* 1 thru 5*):* [Batch Results IS & SUR Tab] Sample Reason Sample Reason _____ _____ _____ _____ _____ _____ _____ _____		□ (1) Surrogate – Matrix (NCM#_____) □ (2) Surrogate – High, ND (NCM#_____) □ (3) ISTD – RA/RA Concurs (NCM#_____) □ (4) Surrogate –RX concur, Report both (NCM#_____) □ (5) ISTD – Matrix, DL required (NCM#_____)	Y
14. Samples outside calibration range scheduled for dilution?		□ ICAL – Range Exceeded; Minimum Dilution	NA

Chrom Review	1st	If No, why is data reportable?	2nd
15. For first analysis that is at a dilution, is highest target analyte >20% cal range? *List samples and reason:* Sample Reason Sample Reason _____ _____ _____ _____ _____ _____ _____ _____		□ (1) Reporting Limit – Dilution, Matrix (NCM#_____) □ (2) Reporting Limit – Dilution, Non-Target (NCM#_____) □ (3) Issues with initial collection volume; see DRC.	Y
16. RIC inspected for proper integration for TPH?			NA
17. Obvious non-TPH peaks excluded?			NA
18. Individual TPH peak area < octane high point area?			NA

Eurofins/TestAmerica Knoxville GC/MS Air - Batch Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 20 & KNOX-MS-0023, Rev 4

TALS Review	**1st**	**If No, why is data reportable?**	**2nd**
19. Graphics uploaded? [open one paperclip]			**Y**
20. NCM generated if BFB failed TO-14A criteria, but passes TO-15?		□ [Failed TO-14A, but passes TO-15] (NCM#_____)	**NA**
21. Is the %D ≤ 30% for all target analytes? [≤ 50% for 1&2 methylnaphthalene] [Chrom-F8] [TALS-Sample Results Tab]		□ CCV - %D - LCS criteria met (NCM#_____) □ CCV - %D high - outside criteria, samples ND, Sample IDs Included (NCM#_____)	**Y**
22. Undiluted volume analyzed meets the method requirement (200 mL vs. 500 mL)?			**na**
23. Project & sample special instructions verified?			**Y**
24. If samples were Tedlar bags, was the 72 hr HT met? ** Narrate transfer to can.		□ Air Analysis - Air Sample Transfer to Canister (NCM#____)	**NA**
25. Sample analyses done within analytical holding time?		□ Holding Time – Received w/Insufficient Time (NCM#_____) □ Holding Time – Receipt (NCM#_____)	**Y**
26. Did the LCS meet criteria (70-130% with a limited # allowed 60-140% (see table) provisional analyte limit 60-140% with a limited # allowed 50-150%, and no two consecutive MEs). [Sample Results Tab] Note: No LCS required for OH VAP.		□ Marginal Exceedances - Within ME Limits and Random; Report (NCM# ___) □ LCS/LCSD - %R High (NCM#_____)	**Y**
27. Suffixes assigned properly (DL/RE)? [Sample List Tab]			**NA**
28. Each job has QC created (BFB, CCV, LCS, MB)? [Sample List Tab]			**Y**
29. Analytes over calibration range set to secondary [Conditions Review Tab]			**NA**
30. Samples not reported set to 'Acceptable' or 'Rejected'? [Sample Results Tab]			**Y**
31. DUP done per 20 samples and are all RPDs within limits? (for target analytes >5x RL, <25% RPD; no criteria for n-butanol) *(If DUP not reported - set to 'Acceptable' for each job)*			**Y**
32. Samples linked to proper blank (200 mL or 500 mL)? [QC links]		**500 mL blank ID: 4** **200 mL blank ID: NA**	**Y**
33. Samples linked to job's BFB/CCV/LCS/MB? [QC Links]			**Y**
34. Correct ICV linked to each MB? [QC Links]			**Y**
35. Were all samples/QC analyzed within 24 hr of BFB? [F7]			**Y**
36. If criteria were not met, was a NCM generated, and assigned to proper QC & samples? [Also see Conditions Review Tab]			**Y**
37. Run Checklist and acknowledge findings [F8]			**Y**
38. Runs set to 1st level review?		Runs set to 2nd level review?	**Y**
39. QC checker run and items addressed?	**-na-**		**Y**
40. Checklist & Entech report scanned, attached & assigned properly?	**-na-**		**Y**

Analyst:	**Date:**	**2nd Level Reviewer : LL**	**Date: 5/18/20**
Comments:		**Comments:**	
Example Calculation:			
On-column ppbv x Final Vol (mL)/Entech Initial Vol (mL) x Canister Dilution Log DF			

Number of target analytes in LCS	# marginal exceedances of LCS control limits allowed
>90	5
71 - 90	4
51 - 70	3
31 - 50	2
11 - 30	1
< 11	0

AIR - GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Knoxvill Job No.: 140-19093-1

SDG No.:

Batch Number: 39584 Batch Start Date: 05/15/20 10:46 Batch Analyst: Khachitpongpanit, Suphawa

Batch Method: TO 15 LL Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	InitialPressure	FinalPressure	40CV101P 00110	40MXISSURP 00004
MB 140-39584/4		TO 15 LL		500 mL	500 mL	1	1		40 mL
140-19093-A-1	BLDG A INFLUENT	TO 15 LL	T	25 mL	500 mL	1	1		40 mL
BFB 140-39584/6		TO 15 LL		500 mL	500 mL	1	1		
CCVIS 140-39584/7		TO 15 LL		500 mL	500 mL	1	1	80 mL	40 mL
140-19093-A-2	BLDG A MID GAC	TO 15 LL	T	100 mL	500 mL	1	1		40 mL
140-19093-A-3	BLDG A EFFLUENT	TO 15 LL	T	100 mL	500 mL	1	1		40 mL
140-19093-A-4	BLDG C INFLUENT	TO 15 LL	T	100 mL	500 mL	1	1		40 mL
140-19093-A-5	BLDG C MID GAC	TO 15 LL	T	100 mL	500 mL	1	1		40 mL
140-19093-A-6	BLDG C EFFLUENT	TO 15 LL	T	100 mL	500 mL	1	1		40 mL
LCS 140-39584/1007		TO 15 LL		500 mL	500 mL	1	1	80 mL	40 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	40MXSUR 00003					
MB 140-39584/4		TO 15 LL							
140-19093-A-1	BLDG A INFLUENT	TO 15 LL	T						
BFB 140-39584/6		TO 15 LL		40 mL					
CCVIS 140-39584/7		TO 15 LL							
140-19093-A-2	BLDG A MID GAC	TO 15 LL	T						
140-19093-A-3	BLDG A EFFLUENT	TO 15 LL	T						
140-19093-A-4	BLDG C INFLUENT	TO 15 LL	T						
140-19093-A-5	BLDG C MID GAC	TO 15 LL	T						
140-19093-A-6	BLDG C EFFLUENT	TO 15 LL	T						
LCS 140-39584/1007		TO 15 LL							

Batch Notes	

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Lab Name: Eurofins TestAmerica, Knoxvill Job No.: 140-19093-1

SDG No.:

Batch Number: 39584 Batch Start Date: 05/15/20 10:46 Batch Analyst: Khachitpongpanit, Suphawa

Batch Method: TO 15 LL Batch End Date:

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-18848-1

SDG No.:

Client Sample ID: 11521 Lab Sample ID: 140-18848-1

Matrix: Air Lab File ID: D16L18848.D

Analysis Method: TO-15 Date Collected: 04/14/2020 11:00

Sample wt/vol: 200(mL) Date Analyzed: 04/16/2020 18:28

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 39069 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	ND		0.20	
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.20	
79-00-5	1,1,2-Trichloroethane	ND		0.20	
76-13-1	1,1,2-Trichlorotrifluoroethane	ND		0.20	
75-34-3	1,1-Dichloroethane	ND		0.20	
75-35-4	1,1-Dichloroethene	ND		0.20	
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	
96-18-4	1,2,3-Trichloropropane	ND		0.50	
526-73-8	1,2,3-Trimethylbenzene	ND		0.20	
95-93-2	1,2,4,5-Tetramethylbenzene	ND		0.20	
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	
95-63-6	1,2,4-Trimethylbenzene	ND		0.20	
96-12-8	1,2-Dibromo-3-Chloropropane	ND		0.40	
106-93-4	1,2-Dibromoethane	ND		0.20	
95-50-1	1,2-Dichlorobenzene	ND		0.40	
107-06-2	1,2-Dichloroethane	ND		0.20	
78-87-5	1,2-Dichloropropane	ND		0.20	
76-14-2	1,2-Dichlorotetrafluoroethane	ND		0.20	
108-67-8	1,3,5-Trimethylbenzene	ND		0.20	
106-99-0	1,3-Butadiene	ND		0.40	
541-73-1	1,3-Dichlorobenzene	ND		0.20	
106-46-7	1,4-Dichlorobenzene	ND		0.20	
123-91-1	1,4-Dioxane	ND		0.40	
71-36-3	1-Butanol	ND		2.0	
90-12-0	1-Methylnaphthalene	ND		2.5	
540-84-1	2,2,4-Trimethylpentane	ND		0.40	
565-59-3	2,3-Dimethylpentane	ND		0.20	
78-93-3	2-Butanone	ND		1.0	
95-49-8	2-Chlorotoluene	ND		0.40	
591-78-6	2-Hexanone	ND		0.40	
78-78-4	2-Methylbutane	ND		0.50	
91-57-6	2-Methylnaphthalene	ND		2.5	
107-83-5	2-Methylpentane	ND		0.20	
107-05-1	3-Chloropropene	ND		0.20	
622-96-8	4-Ethyltoluene	ND		0.40	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		1.0	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-18848-1

SDG No.:

Client Sample ID: 11521 Lab Sample ID: 140-18848-1

Matrix: Air Lab File ID: D16L18848.D

Analysis Method: TO-15 Date Collected: 04/14/2020 11:00

Sample wt/vol: 200(mL) Date Analyzed: 04/16/2020 18:28

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 39069 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
67-64-1	Acetone	ND		7.5	
75-05-8	Acetonitrile	ND		1.0	
107-02-8	Acrolein	ND		1.0	
107-13-1	Acrylonitrile	ND		2.0	
98-83-9	Alpha Methyl Styrene	ND		0.40	
71-43-2	Benzene	ND		0.20	
100-44-7	Benzyl chloride	ND		0.40	
75-27-4	Bromodichloromethane	ND		0.20	
75-25-2	Bromoform	ND		0.20	
74-83-9	Bromomethane	ND		0.20	
106-97-8	Butane	ND		1.0	
75-15-0	Carbon disulfide	ND		0.40	
56-23-5	Carbon tetrachloride	ND		0.20	
108-90-7	Chlorobenzene	ND		0.20	
75-45-6	Chlorodifluoromethane	ND		0.20	
75-00-3	Chloroethane	ND		0.20	
67-66-3	Chloroform	ND		0.20	
74-87-3	Chloromethane	ND		1.0	
156-59-2	cis-1,2-Dichloroethene	ND		0.20	
10061-01-5	cis-1,3-Dichloropropene	ND		0.40	
98-82-8	Cumene	ND		0.40	
110-82-7	Cyclohexane	ND		0.40	
124-48-1	Dibromochloromethane	ND		0.20	
74-95-3	Dibromomethane	ND		0.40	
75-71-8	Dichlorodifluoromethane	ND		0.20	
64-17-5	Ethanol	ND		5.0	
141-78-6	Ethyl acetate	ND		2.0	
60-29-7	Ethyl ether	ND		2.0	
100-41-4	Ethylbenzene	ND		0.20	
87-68-3	Hexachlorobutadiene	ND		1.0	
110-54-3	Hexane	ND		0.40	
496-11-7	Indane	ND		0.20	
95-13-6	Indene	ND		0.40	
67-63-0	Isopropyl alcohol	ND		1.2	
179601-23-1	m&p-Xylene	ND		0.20	
80-62-6	Methyl methacrylate	ND		0.40	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-18848-1

SDG No.:

Client Sample ID: 11521 Lab Sample ID: 140-18848-1

Matrix: Air Lab File ID: D16L18848.D

Analysis Method: TO-15 Date Collected: 04/14/2020 11:00

Sample wt/vol: 200(mL) Date Analyzed: 04/16/2020 18:28

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 39069 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
1634-04-4	Methyl tert-butyl ether	ND		1.0	
108-87-2	Methylcyclohexane	ND		0.20	
75-09-2	Methylene Chloride	ND		1.0	
91-20-3	Naphthalene	ND		0.40	
104-51-8	n-Butylbenzene	ND		0.40	
124-18-5	n-Decane	ND		1.0	
112-40-3	n-Dodecane	ND		1.0	
142-82-5	n-Heptane	ND		0.40	
111-84-2	n-Nonane	ND		0.40	
111-65-9	n-Octane	ND		0.40	
103-65-1	N-Propylbenzene	ND		0.40	
1120-21-4	n-Undecane	ND		1.0	
95-47-6	o-Xylene	ND		0.20	
99-87-6	p-Cymene	ND		0.20	
109-66-0	Pentane	ND		2.5	
115-07-1	Propene	ND		2.5	
135-98-8	sec-Butylbenzene	ND		0.40	
100-42-5	Styrene	ND		0.20	
75-65-0	tert-Butanol	ND		1.0	
98-06-6	tert-Butylbenzene	ND		0.40	
127-18-4	Tetrachloroethene	ND		0.20	
109-99-9	Tetrahydrofuran	ND		1.0	
110-02-1	Thiophene	ND		0.20	
108-88-3	Toluene	ND		1.0	
156-60-5	trans-1,2-Dichloroethene	ND		0.20	
10061-02-6	trans-1,3-Dichloropropene	ND		0.20	
79-01-6	Trichloroethene	ND		0.20	
75-69-4	Trichlorofluoromethane	ND		0.20	
108-05-4	Vinyl acetate	ND		1.0	
593-60-2	Vinyl bromide	ND		0.20	
75-01-4	Vinyl chloride	ND		0.40	

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200415-15221.b\D16L18848.D
Lims ID: 140-18848-A-1
Client ID: 11521
Sample Type: Client
Inject. Date: 16-Apr-2020 18:28:30 ALS Bottle#: 4 Worklist Smp#: 7
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0015221-007
Misc. Info.: 11521
Operator ID: HMT Instrument ID: MG

Method: \\chromfs\Knoxville\ChromData\MG\20200415-15221.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 17-Apr-2020 10:25:21 Calib Date: 13-Mar-2020 00:45:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Knoxville\ChromData\MG\20200312-14911.b\GC12IC10.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1010

First Level Reviewer: khachitpongpanits Date: 17-Apr-2020 10:25:21

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.871	8.876	-0.005	93	127547	4.00	
* 2 1,4-Difluorobenzene	114	11.054	11.060	-0.006	97	907555	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.784	15.784	0.000	94	835488	4.00	
$ 4 4-Bromofluorobenzene (Surr	95	17.423	17.423	0.000	74	659534	4.41	
7 Propene	41	3.726	3.721	0.005	99	54617	0.9109	7
17 Ethanol	31	4.826	4.789	0.037	99	16427	1.08	
19 2-Methylbutane	43	5.037	5.037	0.000	1	727	0.0171	
25 Isopropyl alcohol	45	5.560	5.560	0.070	90	1530	0.0384	
31 Methylene Chloride	84	6.320	6.320	0.000	99	37161	0.2293	
107 Undecane	57	19.742	19.742	0.000	80	775	0.006162	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

40MXISSURP_00004 Amount Added: 40.00 Units: mL Run Reagent

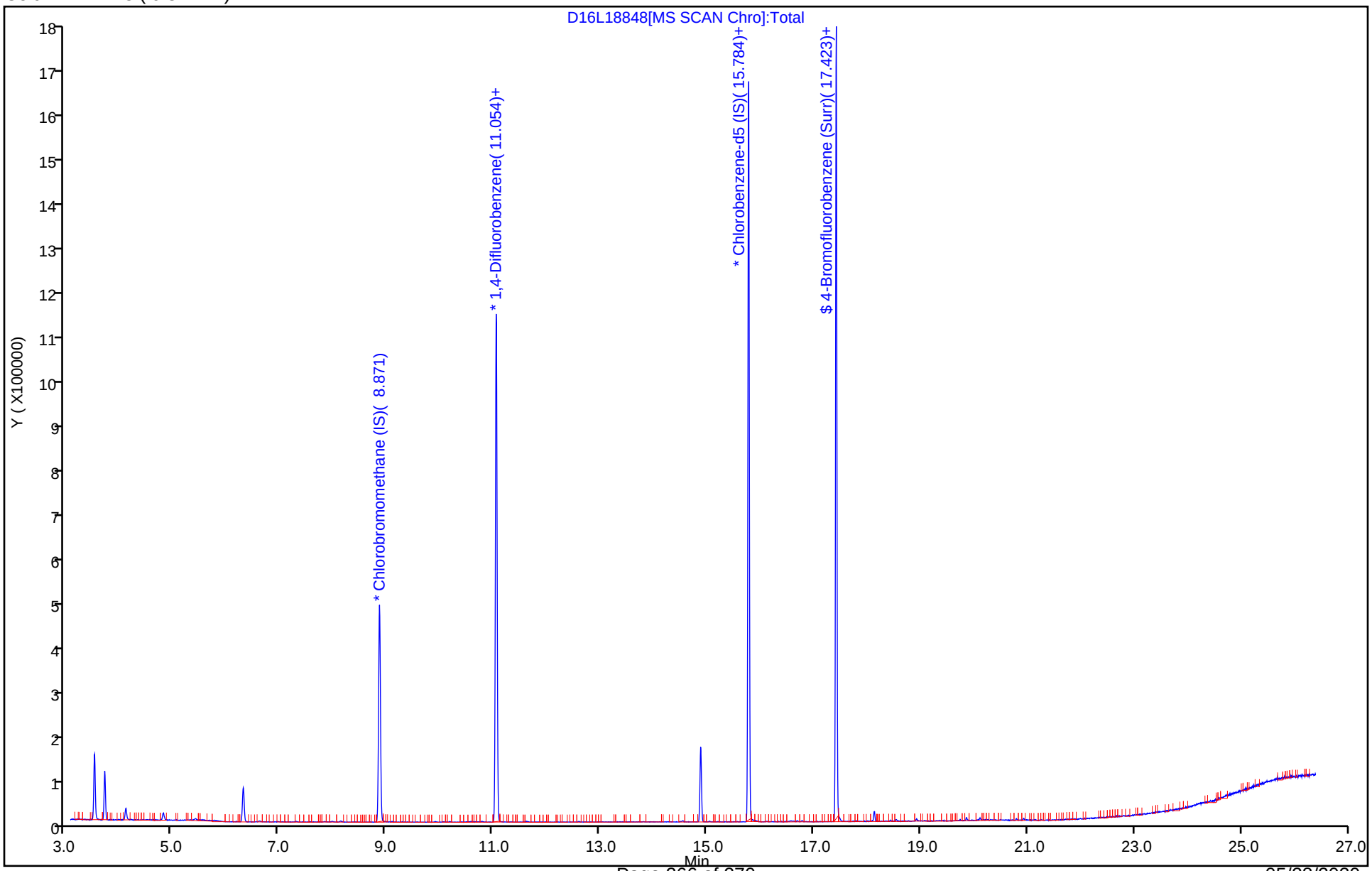
Report Date: 17-Apr-2020 10:25:21 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200415-15221.b\D16L18848.D

Injection Date:	16-Apr-2020 18:28:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	140-18848-A-1	Lab Sample ID:	140-18848-1	Worklist Smp#:	7
Client ID:	11521				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Shipping and Receiving Documents

Eurofins TestAmerica, Knoxville
5815 Middlebrook Pike
Knoxville, TN 37921
Phone 865-291-3000
Fax 865-584-4315

Canister Samples Chain of Custody Record

TestAmerica Laboratories, Inc. assumes no liability with respect to the collection and shipment of these samples.

140-19093 Chain of Custody

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact Information	Client Project Manager: Peter Rich	Samples Collected By:	COC No:
Company Name: Tetra Tech	Phone: 410-990-4607		1 of 1 COCs
Address: 580 Awald Rd. Suite 300	Email:		
City/State/Zip: Annapolis MD 21403			For Lab Use Only:
Phone: 410-990-4607	Site Contact:		Walk-in Client:
FAX:	Tel/Fax		Lab Sampling:
Project Name: Lockheed Martin MRC	Analysis Turnaround Time		
Site/Location:	Standard (Specific): ✓		Job / SDG No.:
P O # 117-G512140	Rush (Specifiy):		(See below for Add'l Items)

Sample Identification	Sample Start Date	Time Start	Sample End Date	Time Stop	Canister Vacuum in Field, "Hg (Start)	Canister Vacuum in Field, "Hg (Stop)	Flow Controller ID	Canister ID	TO-14/15 (Standard / Low Level)	TO-15 SIM	EPA 3C	EPA 25C	ASTM D-1946	EPA 15/16	Other (Please specify in notes section)	Sample Type	Indoor Air/Ambient Air	Sub-Slab	Soil Gas	Soil Vapor Extraction (SVE)	Landfill Gas	Other (Please specify in notes section)	Sample Specific Notes:
Bldg A Influent	5/13	9:41	5/13	9:42	-27	-4	09899	11713	X														
Bldg A Mid GAC	5/13	9:35	5/13	9:36	-30	-4	10104	34002418	X														
Bldg A Effluent	5/13	9:30	5/13	9:31	-30	-4	10766	10980	X														
Bldg C Influent	5/13	11:40	5/13	11:41	-30	-4	10614	10614	X														
Bldg C Mid GAC	5/13	11:36	5/13	11:37	-30	-4	09958	[redacted]11665	X														
Bldg C Effluent	5/13	11:32	5/13	11:33	-30	-4	11594	11828	X														

Temperature (Fahrenheit)		
	Interior	Ambient
Start		
Stop	65	

Pressure (inches of Hg)		
	Interior	Ambient
Start		
Stop		

Received @ ambient, 1 box, Fedex Po
TK# 7704 5679 0238
Custody seal intact
KW 5/14/20

Special Instructions/QC Requirements & Comments:

Samples Shipped by:	Date / Time:	Samples Received by:	
Samples Relinquished by:	Date / Time: 5/13/2020 1:00	Received by:	5/13/20 1310
Relinquished by:	Date / Time: 5/13/20 1700	Received by: ETA	5/14/20 1615

6 Cans, 6 KR

Lab Use Only: Shipper Name: Opened by: Condition:

Loc: 140

EUROFINS/TESTAMERICA KNOXVILLE SAMPLE RECEIPT/CONDITION UPON RECEIPT ANOMALY CHECKLIST **Log In Number:** 19093

Review Items	Yes	No	NA	If No, what was the problem?
1. Are the shipping containers intact?	/			☐ **Containers, Broken**
2. Were ambient air containers received intact?			/	☑ Checked in lab
3. The coolers/containers custody seal if present, is it intact?	/			☐ Yes ☐ NA
4. Is the cooler temperature within limits? (> freezing temp. of water to 6 °C, VOST: 10°C) Thermometer ID :_____ Correction factor: _____			/	☐ **Cooler Out of Temp, Client Contacted, Proceed/Cancel** ☐ **Cooler Out of Temp, Same Day Receipt**
5. Were all of the sample containers received intact?	/			☐ **Containers, Broken**
6. Were samples received in appropriate containers?	/			☐ **Containers, Improper; Client Contacted; Proceed/Cancel**
7. Do sample container labels match COC? (IDs, Dates, Times)	/			☐ **COC & Samples Do Not Match** ☐ **COC Incorrect/Incomplete** ☐ **COC Not Received**
8. Were all of the samples listed on the COC received?	/			☐ **Sample Received, Not on COC** ☐ **Sample on COC, Not Received**
9. Is the date/time of sample collection noted?	/			☐ **COC; No Date/Time; Client Contacted**
10. Was the sampler identified on the COC?		/		☑ **Sampler Not Listed on COC**
11. Is the client and project name/# identified?	/			☐ **COC Incorrect/Incomplete**
12. Are tests/parameters listed for each sample?	/			☐ **COC No tests on COC**
13. Is the matrix of the samples noted?	/			☐ **COC Incorrect/Incomplete**
14. Was COC relinquished? (Signed/Dated/Timed)	/			☐ **COC Incorrect/Incomplete**
15. Were samples received within holding time?	/			☐ **Holding Time - Receipt**
16. Were samples received with correct chemical preservative (excluding Encore)?			/	☐ **pH Adjusted, pH Included (See box 16A)** ☐ **Incorrect Preservative**
17. Were VOA samples received without headspace?			/	☐ **Headspace (VOA only)**
18. Did you check for residual chlorine, if necessary? (e.g. 1613B, 1668) Chlorine test strip lot number:_____			/	☐ **Residual Chlorine**
19. For 1613B water samples is pH<9?			/	☐ If no, notify lab to adjust
20. For rad samples was sample activity info. Provided?			/	☐ Project missing info

Comments/Actions Taken

10.

Labeling Verified by: **Date:**

pH test strip lot number:

Box 16A: pH Preservation	Box 18A: Residual Chlorine
Preservative:	
Lot Number:	
Exp Date:	
Analyst:	
Date:	
Time:	

Project #: 14002921 PM Instructions: _____

Sample Receiving Associate: KLW Date: 5/19/20

QA026R32.doc, 062719

TestAmerica Knoxville - Air Canister Initial Pressure Check

Gauge ID: G5
Date: 5/15/2020

Analyst	Sample ID	Asset #	Cleaning Job	Cert	Size (L)	Pressure @ Receipt (-in Hg or +psig)	Time	Comments
BRS	140-19093-a-1	11713	18848	B	1	-1.9	8:24	
BRS	140-19093-a-2	34002418	18848	B	1	-2.6	8:25	
BRS	140-19093-a-3	10980	18848	B	1	-2.3	8:26	
BRS	140-19093-a-4	11879	18848	B	1	-1.7	8:27	
BRS	140-19093-a-5	11665	18848	B	1	-2.4	8:28	
BRS	140-19093-a-6	11828	18848	B	1	-1.9	8:29	

ANALYTICAL REPORT

Job Number: 140-19488-1

Job Description: LMMRC SSDS - Middle River

For:
Tetra Tech GEO
980 Awald Road
Suite 302
Annapolis, MD 21403

Attention: Peter Rich



Approved for release.
Jamie A McKinney
Senior Project Manager
7/8/2020 12:00 PM

Jamie A McKinney, Senior Project Manager
5815 Middlebrook Pike, Knoxville, TN, 37921
(865)291-3000
jamie.mckinney@testamericainc.com
07/08/2020

cc: Belssi Chang
Amy Thomson

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins TestAmerica Project Manager.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

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Qualifiers

Air - GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job Narrative
140-19488-1

Comments
No additional comments.

Receipt
The samples were received on 6/26/2020 12:08 PM; the samples arrived in good condition, and where required, properly preserved and on ice.

Receipt Exceptions

The Field Sampler was not listed on the Chain of Custody.

Air - GC/MS VOA
Methods TO 15 LL, TO-14A, TO-14A Low, TO-15: Initial calibration verification (ICV 140-39100/17) associated with batch 140-39100 had internal standard recoveries above QC limits. There is no impact on the data; since all the analytes recovered well within limits.

Methods TO 15 LL, TO-14A, TO-15: EPA methods TO-14A and TO-15 specify the use of humidified "zero air" as the blank reagent for canister cleaning, instrument calibration and sample analysis. Ultra-high purity humidified nitrogen from a cryogenic reservoir is used in place of "zero air" by TestAmerica Knoxville.

Methods TO 15 LL, TO-14A, TO-14A Low, TO-15: The Initial Calibration for Methylene Chloride did not meet the %RSD criterion specified in the standard operating procedure for average response factor. An linear calibration model was selected which met the acceptance criterion for coefficient of determination (r2) at 0.998 and the read back criteria for the individual calibration points. (ICIS 140-39464/20)

Methods TO 15 LL, TO-15: Although the BFB is flagged as outside control limits for TO-14 on batch 140-40575, the results are within limits for TO-15, which is required for this project.

Methods TO 15 LL, TO-15: The continuing calibration verification (CCV) associated with batch 140-40629 exhibited % difference of > 30% for the following analyte(s) 1,2-Dichloro-1,1,2,2-tetrafluoroethane and Vinyl chloride; however, the results were within the LCS acceptance limits. The EPA method requires that all target analytes in the continuing calibration verification standard be within 30% difference from the initial calibration. According to the laboratory standard operating procedure, the continuing calibration is acceptable if it meets the laboratory control sample acceptance criteria.

Methods TO 15 LL, TO-15: The following analyte(s) recovered outside control limits for the LCS associated with analytical batch 140-40629: Vinyl chloride. This is not indicative of a systematic control problem because this was random marginal exceedance. Qualified results have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: Tetra Tech GEO
Job ID: 140-19488-1
Project/Site: LMMRC SSDS - Middle River

Client Sample ID: BLDG A EFFLUENT — Lab Sample ID: 140-19488-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.73		0.40	0.040	ppb v/v	1		TO 15 LL	Total/NA
Chloroform	0.29	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	22		0.40	0.050	ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.32	J	0.40	0.070	ppb v/v	1		TO 15 LL	Total/NA
1,1-Dichloroethane	3.6		0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
1,1-Dichloroethene	31		0.40	0.040	ppb v/v	1		TO 15 LL	Total/NA
Methylene Chloride	5.4	B	2.0	0.80	ppb v/v	1		TO 15 LL	Total/NA
Naphthalene	0.73		0.20	0.20	ppb v/v	1		TO 15 LL	Total/NA
Toluene	0.95		0.60	0.39	ppb v/v	1		TO 15 LL	Total/NA
trans-1,2-Dichloroethene	0.49		0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
1,1,1-Trichloroethane	8.8		0.40	0.19	ppb v/v	1		TO 15 LL	Total/NA
Trichloroethene	4.8		0.20	0.030	ppb v/v	1		TO 15 LL	Total/NA
Xylenes, Total	0.28	J	0.80	0.12	ppb v/v	1		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	2.3		1.3	0.13	ug/m3	1		TO 15 LL	Total/NA
Chloroform	1.4	J	2.0	0.17	ug/m3	1		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	86		1.6	0.20	ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	1.6	J	2.0	0.35	ug/m3	1		TO 15 LL	Total/NA
1,1-Dichloroethane	15		1.6	0.14	ug/m3	1		TO 15 LL	Total/NA
1,1-Dichloroethene	120		1.6	0.16	ug/m3	1		TO 15 LL	Total/NA
Methylene Chloride	19	B	6.9	2.8	ug/m3	1		TO 15 LL	Total/NA
Naphthalene	3.8		1.0	1.0	ug/m3	1		TO 15 LL	Total/NA
Toluene	3.6		2.3	1.5	ug/m3	1		TO 15 LL	Total/NA
trans-1,2-Dichloroethene	1.9		1.6	0.14	ug/m3	1		TO 15 LL	Total/NA
1,1,1-Trichloroethane	48		2.2	1.0	ug/m3	1		TO 15 LL	Total/NA
Trichloroethene	26		1.1	0.16	ug/m3	1		TO 15 LL	Total/NA
Xylenes, Total	1.2	J	3.5	0.52	ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: BLDG A MID GAC — Lab Sample ID: 140-19488-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	2.1		0.40	0.040	ppb v/v	1		TO 15 LL	Total/NA
Chlorodifluoromethane	0.38	J	0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Chloroform	0.57		0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	28		0.40	0.050	ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.29	J	0.40	0.070	ppb v/v	1		TO 15 LL	Total/NA
1,1-Dichloroethane	4.3		0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
1,2-Dichloroethane	0.14	J	0.40	0.050	ppb v/v	1		TO 15 LL	Total/NA
1,1-Dichloroethene	20		0.40	0.040	ppb v/v	1		TO 15 LL	Total/NA
Methylene Chloride	5.5	B	2.0	0.80	ppb v/v	1		TO 15 LL	Total/NA
Toluene	0.42	J	0.60	0.39	ppb v/v	1		TO 15 LL	Total/NA
trans-1,2-Dichloroethene	0.55		0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
1,1,1-Trichloroethane	64		0.40	0.19	ppb v/v	1		TO 15 LL	Total/NA
Trichloroethene	1.7		0.20	0.030	ppb v/v	1		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	6.6		1.3	0.13	ug/m3	1		TO 15 LL	Total/NA
Chlorodifluoromethane	1.3	J	1.4	0.39	ug/m3	1		TO 15 LL	Total/NA
Chloroform	2.8		2.0	0.17	ug/m3	1		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	110		1.6	0.20	ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	1.5	J	2.0	0.35	ug/m3	1		TO 15 LL	Total/NA
1,1-Dichloroethane	17		1.6	0.14	ug/m3	1		TO 15 LL	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: BLDG A MID GAC (Continued)
Lab Sample ID: 140-19488-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2-Dichloroethane	0.55	J	1.6	0.20	ug/m3	1		TO 15 LL	Total/NA
1,1-Dichloroethene	81		1.6	0.16	ug/m3	1		TO 15 LL	Total/NA
Methylene Chloride	19	B	6.9	2.8	ug/m3	1		TO 15 LL	Total/NA
Toluene	1.6	J	2.3	1.5	ug/m3	1		TO 15 LL	Total/NA
trans-1,2-Dichloroethene	2.2		1.6	0.14	ug/m3	1		TO 15 LL	Total/NA
1,1,1-Trichloroethane	350		2.2	1.0	ug/m3	1		TO 15 LL	Total/NA
Trichloroethene	9.0		1.1	0.16	ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: BLDG A INFLUENT
Lab Sample ID: 140-19488-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	7.3		1.6	0.16	ppb v/v	1		TO 15 LL	Total/NA
Chloroform	0.26	J	1.6	0.14	ppb v/v	1		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	14		1.6	0.20	ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.41	J	1.6	0.28	ppb v/v	1		TO 15 LL	Total/NA
1,1-Dichloroethane	2.5		1.6	0.14	ppb v/v	1		TO 15 LL	Total/NA
1,1-Dichloroethene	14		1.6	0.16	ppb v/v	1		TO 15 LL	Total/NA
Methylene Chloride	4.1	J B	8.0	3.2	ppb v/v	1		TO 15 LL	Total/NA
Tetrachloroethene	0.15	J	1.6	0.14	ppb v/v	1		TO 15 LL	Total/NA
trans-1,2-Dichloroethene	0.35	J	1.6	0.14	ppb v/v	1		TO 15 LL	Total/NA
1,1,1-Trichloroethane	60		1.6	0.74	ppb v/v	1		TO 15 LL	Total/NA
Trichloroethene	150		0.80	0.12	ppb v/v	1		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	23		5.1	0.51	ug/m3	1		TO 15 LL	Total/NA
Chloroform	1.3	J	7.8	0.68	ug/m3	1		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	56		6.3	0.79	ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.0	J	7.9	1.4	ug/m3	1		TO 15 LL	Total/NA
1,1-Dichloroethane	10		6.5	0.57	ug/m3	1		TO 15 LL	Total/NA
1,1-Dichloroethene	55		6.3	0.63	ug/m3	1		TO 15 LL	Total/NA
Methylene Chloride	14	J B	28	11	ug/m3	1		TO 15 LL	Total/NA
Tetrachloroethene	1.0	J	11	0.95	ug/m3	1		TO 15 LL	Total/NA
trans-1,2-Dichloroethene	1.4	J	6.3	0.56	ug/m3	1		TO 15 LL	Total/NA
1,1,1-Trichloroethane	330		8.7	4.0	ug/m3	1		TO 15 LL	Total/NA
Trichloroethene	810		4.3	0.64	ug/m3	1		TO 15 LL	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: BLDG A EFFLUENT
Lab Sample ID: 140-19488-1

Date Collected: 06/25/20 09:37
Matrix: Air
Date Received: 06/26/20 12:08
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.73**		0.40	0.040	ppb v/v			06/30/20 22:18	1
Carbon tetrachloride	ND		0.40	0.035	ppb v/v			06/30/20 22:18	1
Chlorodifluoromethane	ND		0.40	0.11	ppb v/v			06/30/20 22:18	1
Chloroform	**0.29**	**J**	0.40	0.035	ppb v/v			06/30/20 22:18	1
cis-1,2-Dichloroethene	**22**		0.40	0.050	ppb v/v			06/30/20 22:18	1
Dichlorodifluoromethane	**0.32**	**J**	0.40	0.070	ppb v/v			06/30/20 22:18	1
1,1-Dichloroethane	**3.6**		0.40	0.035	ppb v/v			06/30/20 22:18	1
1,2-Dichloroethane	ND		0.40	0.050	ppb v/v			06/30/20 22:18	1
1,1-Dichloroethene	**31**		0.40	0.040	ppb v/v			06/30/20 22:18	1
Ethylbenzene	ND		0.40	0.065	ppb v/v			06/30/20 22:18	1
Methylene Chloride	**5.4**	**B**	2.0	0.80	ppb v/v			06/30/20 22:18	1
Methyl tert-butyl ether	ND		2.0	0.26	ppb v/v			06/30/20 22:18	1
Naphthalene	**0.73**		0.20	0.20	ppb v/v			06/30/20 22:18	1
Tetrachloroethene	ND		0.40	0.035	ppb v/v			06/30/20 22:18	1
Toluene	**0.95**		0.60	0.39	ppb v/v			06/30/20 22:18	1
trans-1,2-Dichloroethene	**0.49**		0.40	0.035	ppb v/v			06/30/20 22:18	1
1,2,4-Trichlorobenzene	ND		0.40	0.32	ppb v/v			06/30/20 22:18	1
1,1,1-Trichloroethane	**8.8**		0.40	0.19	ppb v/v			06/30/20 22:18	1
1,1,2-Trichloroethane	ND		0.40	0.035	ppb v/v			06/30/20 22:18	1
Trichloroethene	**4.8**		0.20	0.030	ppb v/v			06/30/20 22:18	1
1,2,3-Trimethylbenzene	ND		0.40	0.18	ppb v/v			06/30/20 22:18	1
1,2,4-Trimethylbenzene	ND		0.40	0.10	ppb v/v			06/30/20 22:18	1
1,3,5-Trimethylbenzene	ND		0.40	0.11	ppb v/v			06/30/20 22:18	1
Vinyl chloride	ND	*	0.20	0.13	ppb v/v			06/30/20 22:18	1
Xylenes, Total	**0.28**	**J**	0.80	0.12	ppb v/v			06/30/20 22:18	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**2.3**		1.3	0.13	ug/m3			06/30/20 22:18	1
Carbon tetrachloride	ND		2.5	0.22	ug/m3			06/30/20 22:18	1
Chlorodifluoromethane	ND		1.4	0.39	ug/m3			06/30/20 22:18	1
Chloroform	**1.4**	**J**	2.0	0.17	ug/m3			06/30/20 22:18	1
cis-1,2-Dichloroethene	**86**		1.6	0.20	ug/m3			06/30/20 22:18	1
Dichlorodifluoromethane	**1.6**	**J**	2.0	0.35	ug/m3			06/30/20 22:18	1
1,1-Dichloroethane	**15**		1.6	0.14	ug/m3			06/30/20 22:18	1
1,2-Dichloroethane	ND		1.6	0.20	ug/m3			06/30/20 22:18	1
1,1-Dichloroethene	**120**		1.6	0.16	ug/m3			06/30/20 22:18	1
Ethylbenzene	ND		1.7	0.28	ug/m3			06/30/20 22:18	1
Methylene Chloride	**19**	**B**	6.9	2.8	ug/m3			06/30/20 22:18	1
Methyl tert-butyl ether	ND		7.2	0.94	ug/m3			06/30/20 22:18	1
Naphthalene	**3.8**		1.0	1.0	ug/m3			06/30/20 22:18	1
Tetrachloroethene	ND		2.7	0.24	ug/m3			06/30/20 22:18	1
Toluene	**3.6**		2.3	1.5	ug/m3			06/30/20 22:18	1
trans-1,2-Dichloroethene	**1.9**		1.6	0.14	ug/m3			06/30/20 22:18	1
1,2,4-Trichlorobenzene	ND		3.0	2.4	ug/m3			06/30/20 22:18	1
1,1,1-Trichloroethane	**48**		2.2	1.0	ug/m3			06/30/20 22:18	1
1,1,2-Trichloroethane	ND		2.2	0.19	ug/m3			06/30/20 22:18	1
Trichloroethene	**26**		1.1	0.16	ug/m3			06/30/20 22:18	1
1,2,3-Trimethylbenzene	ND		2.0	0.88	ug/m3			06/30/20 22:18	1
1,2,4-Trimethylbenzene	ND		2.0	0.49	ug/m3			06/30/20 22:18	1

Client Sample ID: BLDG A EFFLUENT
Lab Sample ID: 140-19488-1

Date Collected: 06/25/20 09:37
Matrix: Air
Date Received: 06/26/20 12:08
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		2.0	0.54	ug/m3			06/30/20 22:18	1
Vinyl chloride	ND	*	0.51	0.33	ug/m3			06/30/20 22:18	1
Xylenes, Total	**1.2**	**J**	3.5	0.52	ug/m3			06/30/20 22:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*60 - 140*		*06/30/20 22:18*	*1*

Client Sample ID: BLDG A MID GAC
Lab Sample ID: 140-19488-2

Date Collected: 06/25/20 09:43
Matrix: Air
Date Received: 06/26/20 12:08
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**2.1**		0.40	0.040	ppb v/v			06/30/20 23:10	1
Carbon tetrachloride	ND		0.40	0.035	ppb v/v			06/30/20 23:10	1
Chlorodifluoromethane	**0.38**	**J**	0.40	0.11	ppb v/v			06/30/20 23:10	1
Chloroform	**0.57**		0.40	0.035	ppb v/v			06/30/20 23:10	1
cis-1,2-Dichloroethene	**28**		0.40	0.050	ppb v/v			06/30/20 23:10	1
Dichlorodifluoromethane	**0.29**	**J**	0.40	0.070	ppb v/v			06/30/20 23:10	1
1,1-Dichloroethane	**4.3**		0.40	0.035	ppb v/v			06/30/20 23:10	1
1,2-Dichloroethane	**0.14**	**J**	0.40	0.050	ppb v/v			06/30/20 23:10	1
1,1-Dichloroethene	**20**		0.40	0.040	ppb v/v			06/30/20 23:10	1
Ethylbenzene	ND		0.40	0.065	ppb v/v			06/30/20 23:10	1
Methylene Chloride	**5.5**	**B**	2.0	0.80	ppb v/v			06/30/20 23:10	1
Methyl tert-butyl ether	ND		2.0	0.26	ppb v/v			06/30/20 23:10	1
Naphthalene	ND		0.20	0.20	ppb v/v			06/30/20 23:10	1
Tetrachloroethene	ND		0.40	0.035	ppb v/v			06/30/20 23:10	1
Toluene	**0.42**	**J**	0.60	0.39	ppb v/v			06/30/20 23:10	1
trans-1,2-Dichloroethene	**0.55**		0.40	0.035	ppb v/v			06/30/20 23:10	1
1,2,4-Trichlorobenzene	ND		0.40	0.32	ppb v/v			06/30/20 23:10	1
1,1,1-Trichloroethane	**64**		0.40	0.19	ppb v/v			06/30/20 23:10	1
1,1,2-Trichloroethane	ND		0.40	0.035	ppb v/v			06/30/20 23:10	1
Trichloroethene	**1.7**		0.20	0.030	ppb v/v			06/30/20 23:10	1
1,2,3-Trimethylbenzene	ND		0.40	0.18	ppb v/v			06/30/20 23:10	1
1,2,4-Trimethylbenzene	ND		0.40	0.10	ppb v/v			06/30/20 23:10	1
1,3,5-Trimethylbenzene	ND		0.40	0.11	ppb v/v			06/30/20 23:10	1
Vinyl chloride	ND	*	0.20	0.13	ppb v/v			06/30/20 23:10	1
Xylenes, Total	ND		0.80	0.12	ppb v/v			06/30/20 23:10	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**6.6**		1.3	0.13	ug/m3			06/30/20 23:10	1
Carbon tetrachloride	ND		2.5	0.22	ug/m3			06/30/20 23:10	1
Chlorodifluoromethane	**1.3**	**J**	1.4	0.39	ug/m3			06/30/20 23:10	1
Chloroform	**2.8**		2.0	0.17	ug/m3			06/30/20 23:10	1
cis-1,2-Dichloroethene	**110**		1.6	0.20	ug/m3			06/30/20 23:10	1
Dichlorodifluoromethane	**1.5**	**J**	2.0	0.35	ug/m3			06/30/20 23:10	1
1,1-Dichloroethane	**17**		1.6	0.14	ug/m3			06/30/20 23:10	1
1,2-Dichloroethane	**0.55**	**J**	1.6	0.20	ug/m3			06/30/20 23:10	1
1,1-Dichloroethene	**81**		1.6	0.16	ug/m3			06/30/20 23:10	1
Ethylbenzene	ND		1.7	0.28	ug/m3			06/30/20 23:10	1
Methylene Chloride	**19**	**B**	6.9	2.8	ug/m3			06/30/20 23:10	1
Methyl tert-butyl ether	ND		7.2	0.94	ug/m3			06/30/20 23:10	1
Naphthalene	ND		1.0	1.0	ug/m3			06/30/20 23:10	1
Tetrachloroethene	ND		2.7	0.24	ug/m3			06/30/20 23:10	1
Toluene	**1.6**	**J**	2.3	1.5	ug/m3			06/30/20 23:10	1
trans-1,2-Dichloroethene	**2.2**		1.6	0.14	ug/m3			06/30/20 23:10	1
1,2,4-Trichlorobenzene	ND		3.0	2.4	ug/m3			06/30/20 23:10	1
1,1,1-Trichloroethane	**350**		2.2	1.0	ug/m3			06/30/20 23:10	1
1,1,2-Trichloroethane	ND		2.2	0.19	ug/m3			06/30/20 23:10	1
Trichloroethene	**9.0**		1.1	0.16	ug/m3			06/30/20 23:10	1
1,2,3-Trimethylbenzene	ND		2.0	0.88	ug/m3			06/30/20 23:10	1
1,2,4-Trimethylbenzene	ND		2.0	0.49	ug/m3			06/30/20 23:10	1

Client Sample ID: BLDG A MID GAC
Lab Sample ID: 140-19488-2

Date Collected: 06/25/20 09:43
Matrix: Air
Date Received: 06/26/20 12:08
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		2.0	0.54	ug/m3			06/30/20 23:10	1
Vinyl chloride	ND	*	0.51	0.33	ug/m3			06/30/20 23:10	1
Xylenes, Total	ND		3.5	0.52	ug/m3			06/30/20 23:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*60 - 140*		*06/30/20 23:10*	*1*

Client Sample ID: BLDG A INFLUENT
Lab Sample ID: 140-19488-3

Date Collected: 06/25/20 09:50
Matrix: Air
Date Received: 06/26/20 12:08
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**7.3**		1.6	0.16	ppb v/v			07/01/20 00:03	1
Carbon tetrachloride	ND		1.6	0.14	ppb v/v			07/01/20 00:03	1
Chlorodifluoromethane	ND		1.6	0.44	ppb v/v			07/01/20 00:03	1
Chloroform	**0.26**	**J**	1.6	0.14	ppb v/v			07/01/20 00:03	1
cis-1,2-Dichloroethene	**14**		1.6	0.20	ppb v/v			07/01/20 00:03	1
Dichlorodifluoromethane	**0.41**	**J**	1.6	0.28	ppb v/v			07/01/20 00:03	1
1,1-Dichloroethane	**2.5**		1.6	0.14	ppb v/v			07/01/20 00:03	1
1,2-Dichloroethane	ND		1.6	0.20	ppb v/v			07/01/20 00:03	1
1,1-Dichloroethene	**14**		1.6	0.16	ppb v/v			07/01/20 00:03	1
Ethylbenzene	ND		1.6	0.26	ppb v/v			07/01/20 00:03	1
Methylene Chloride	**4.1**	**J B**	8.0	3.2	ppb v/v			07/01/20 00:03	1
Methyl tert-butyl ether	ND		8.0	1.0	ppb v/v			07/01/20 00:03	1
Naphthalene	ND		0.80	0.80	ppb v/v			07/01/20 00:03	1
Tetrachloroethene	**0.15**	**J**	1.6	0.14	ppb v/v			07/01/20 00:03	1
Toluene	ND		2.4	1.6	ppb v/v			07/01/20 00:03	1
trans-1,2-Dichloroethene	**0.35**	**J**	1.6	0.14	ppb v/v			07/01/20 00:03	1
1,2,4-Trichlorobenzene	ND		1.6	1.3	ppb v/v			07/01/20 00:03	1
1,1,1-Trichloroethane	**60**		1.6	0.74	ppb v/v			07/01/20 00:03	1
1,1,2-Trichloroethane	ND		1.6	0.14	ppb v/v			07/01/20 00:03	1
Trichloroethene	**150**		0.80	0.12	ppb v/v			07/01/20 00:03	1
1,2,3-Trimethylbenzene	ND		1.6	0.72	ppb v/v			07/01/20 00:03	1
1,2,4-Trimethylbenzene	ND		1.6	0.40	ppb v/v			07/01/20 00:03	1
1,3,5-Trimethylbenzene	ND		1.6	0.44	ppb v/v			07/01/20 00:03	1
Vinyl chloride	ND	*	0.80	0.52	ppb v/v			07/01/20 00:03	1
Xylenes, Total	ND		3.2	0.48	ppb v/v			07/01/20 00:03	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**23**		5.1	0.51	ug/m3			07/01/20 00:03	1
Carbon tetrachloride	ND		10	0.88	ug/m3			07/01/20 00:03	1
Chlorodifluoromethane	ND		5.7	1.6	ug/m3			07/01/20 00:03	1
Chloroform	**1.3**	**J**	7.8	0.68	ug/m3			07/01/20 00:03	1
cis-1,2-Dichloroethene	**56**		6.3	0.79	ug/m3			07/01/20 00:03	1
Dichlorodifluoromethane	**2.0**	**J**	7.9	1.4	ug/m3			07/01/20 00:03	1
1,1-Dichloroethane	**10**		6.5	0.57	ug/m3			07/01/20 00:03	1
1,2-Dichloroethane	ND		6.5	0.81	ug/m3			07/01/20 00:03	1
1,1-Dichloroethene	**55**		6.3	0.63	ug/m3			07/01/20 00:03	1
Ethylbenzene	ND		6.9	1.1	ug/m3			07/01/20 00:03	1
Methylene Chloride	**14**	**J B**	28	11	ug/m3			07/01/20 00:03	1
Methyl tert-butyl ether	ND		29	3.7	ug/m3			07/01/20 00:03	1
Naphthalene	ND		4.2	4.2	ug/m3			07/01/20 00:03	1
Tetrachloroethene	**1.0**	**J**	11	0.95	ug/m3			07/01/20 00:03	1
Toluene	ND		9.0	5.9	ug/m3			07/01/20 00:03	1
trans-1,2-Dichloroethene	**1.4**	**J**	6.3	0.56	ug/m3			07/01/20 00:03	1
1,2,4-Trichlorobenzene	ND		12	9.5	ug/m3			07/01/20 00:03	1
1,1,1-Trichloroethane	**330**		8.7	4.0	ug/m3			07/01/20 00:03	1
1,1,2-Trichloroethane	ND		8.7	0.76	ug/m3			07/01/20 00:03	1
Trichloroethene	**810**		4.3	0.64	ug/m3			07/01/20 00:03	1
1,2,3-Trimethylbenzene	ND		7.9	3.5	ug/m3			07/01/20 00:03	1
1,2,4-Trimethylbenzene	ND		7.9	2.0	ug/m3			07/01/20 00:03	1

Client: Tetra Tech GEO
Job ID: 140-19488-1
Project/Site: LMMRC SSDS - Middle River

Client Sample ID: BLDG A INFLUENT
Lab Sample ID: 140-19488-3
Date Collected: 06/25/20 09:50
Matrix: Air
Date Received: 06/26/20 12:08
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		7.9	2.2	ug/m3			07/01/20 00:03	1
Vinyl chloride	ND	*	2.0	1.3	ug/m3			07/01/20 00:03	1
Xylenes, Total	ND		14	2.1	ug/m3			07/01/20 00:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*60 - 140*		*07/01/20 00:03*	*1*

Default Detection Limits

Client: Tetra Tech GEO
Job ID: 140-19488-1
Project/Site: LMMRC SSDS - Middle River

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	RL	MDL	Units
1,1,1-Trichloroethane	0.080	0.037	ppb v/v
1,1,1-Trichloroethane	0.44	0.20	ug/m3
1,1,2-Trichloroethane	0.080	0.0070	ppb v/v
1,1,2-Trichloroethane	0.44	0.038	ug/m3
1,1-Dichloroethane	0.080	0.0070	ppb v/v
1,1-Dichloroethane	0.32	0.028	ug/m3
1,1-Dichloroethene	0.080	0.0080	ppb v/v
1,1-Dichloroethene	0.32	0.032	ug/m3
1,2,3-Trimethylbenzene	0.080	0.036	ppb v/v
1,2,3-Trimethylbenzene	0.39	0.18	ug/m3
1,2,4-Trichlorobenzene	0.080	0.064	ppb v/v
1,2,4-Trichlorobenzene	0.59	0.47	ug/m3
1,2,4-Trimethylbenzene	0.080	0.020	ppb v/v
1,2,4-Trimethylbenzene	0.39	0.098	ug/m3
1,2-Dichloroethane	0.080	0.010	ppb v/v
1,2-Dichloroethane	0.32	0.040	ug/m3
1,3,5-Trimethylbenzene	0.080	0.022	ppb v/v
1,3,5-Trimethylbenzene	0.39	0.11	ug/m3
Benzene	0.080	0.0080	ppb v/v
Benzene	0.26	0.026	ug/m3
Carbon tetrachloride	0.080	0.0070	ppb v/v
Carbon tetrachloride	0.50	0.044	ug/m3
Chlorodifluoromethane	0.080	0.022	ppb v/v
Chlorodifluoromethane	0.28	0.078	ug/m3
Chloroform	0.080	0.0070	ppb v/v
Chloroform	0.39	0.034	ug/m3
cis-1,2-Dichloroethene	0.080	0.010	ppb v/v
cis-1,2-Dichloroethene	0.32	0.040	ug/m3
Dichlorodifluoromethane	0.080	0.014	ppb v/v
Dichlorodifluoromethane	0.40	0.069	ug/m3
Ethylbenzene	0.080	0.013	ppb v/v
Ethylbenzene	0.35	0.056	ug/m3
Methyl tert-butyl ether	0.40	0.052	ppb v/v
Methyl tert-butyl ether	1.4	0.19	ug/m3
Methylene Chloride	0.40	0.16	ppb v/v
Methylene Chloride	1.4	0.56	ug/m3
Naphthalene	0.040	0.040	ppb v/v
Naphthalene	0.21	0.21	ug/m3
Tetrachloroethene	0.080	0.0070	ppb v/v
Tetrachloroethene	0.54	0.047	ug/m3
Toluene	0.12	0.078	ppb v/v
Toluene	0.45	0.29	ug/m3
trans-1,2-Dichloroethene	0.080	0.0070	ppb v/v
trans-1,2-Dichloroethene	0.32	0.028	ug/m3
Trichloroethene	0.040	0.0060	ppb v/v
Trichloroethene	0.21	0.032	ug/m3
Vinyl chloride	0.040	0.026	ppb v/v
Vinyl chloride	0.10	0.066	ug/m3
Xylenes, Total	0.16	0.024	ppb v/v
Xylenes, Total	0.69	0.10	ug/m3

Surrogate Summary

Client: Tetra Tech GEO
Project/Site: LMMRC SSDS - Middle River

Job ID: 140-19488-1

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Matrix: Air **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)								
Lab Sample ID	Client Sample ID	BFB (60-140)								
140-19488-1	BLDG A EFFLUENT	98								
140-19488-2	BLDG A MID GAC	94								
140-19488-3	BLDG A INFLUENT	94								
LCS 140-40629/1002	Lab Control Sample	105								
MB 140-40629/4	Method Blank	91								

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Lab Sample ID: MB 140-40629/4
Matrix: Air
Analysis Batch: 40629

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.080	0.0080	ppb v/v			06/30/20 09:32	1
Carbon tetrachloride	ND		0.080	0.0070	ppb v/v			06/30/20 09:32	1
Chlorodifluoromethane	ND		0.080	0.022	ppb v/v			06/30/20 09:32	1
Chloroform	ND		0.080	0.0070	ppb v/v			06/30/20 09:32	1
cis-1,2-Dichloroethene	ND		0.080	0.010	ppb v/v			06/30/20 09:32	1
Dichlorodifluoromethane	ND		0.080	0.014	ppb v/v			06/30/20 09:32	1
1,1-Dichloroethane	ND		0.080	0.0070	ppb v/v			06/30/20 09:32	1
1,2-Dichloroethane	ND		0.080	0.010	ppb v/v			06/30/20 09:32	1
1,1-Dichloroethene	ND		0.080	0.0080	ppb v/v			06/30/20 09:32	1
Ethylbenzene	ND		0.080	0.013	ppb v/v			06/30/20 09:32	1
Methylene Chloride	0.169	J	0.40	0.16	ppb v/v			06/30/20 09:32	1
Methyl tert-butyl ether	ND		0.40	0.052	ppb v/v			06/30/20 09:32	1
Naphthalene	ND		0.040	0.040	ppb v/v			06/30/20 09:32	1
Tetrachloroethene	ND		0.080	0.0070	ppb v/v			06/30/20 09:32	1
Toluene	ND		0.12	0.078	ppb v/v			06/30/20 09:32	1
trans-1,2-Dichloroethene	ND		0.080	0.0070	ppb v/v			06/30/20 09:32	1
1,2,4-Trichlorobenzene	ND		0.080	0.064	ppb v/v			06/30/20 09:32	1
1,1,1-Trichloroethane	ND		0.080	0.037	ppb v/v			06/30/20 09:32	1
1,1,2-Trichloroethane	ND		0.080	0.0070	ppb v/v			06/30/20 09:32	1
Trichloroethene	ND		0.040	0.0060	ppb v/v			06/30/20 09:32	1
1,2,3-Trimethylbenzene	ND		0.080	0.036	ppb v/v			06/30/20 09:32	1
1,2,4-Trimethylbenzene	ND		0.080	0.020	ppb v/v			06/30/20 09:32	1
1,3,5-Trimethylbenzene	ND		0.080	0.022	ppb v/v			06/30/20 09:32	1
Vinyl chloride	ND		0.040	0.026	ppb v/v			06/30/20 09:32	1
Xylenes, Total	ND		0.16	0.024	ppb v/v			06/30/20 09:32	1

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.26	0.026	ug/m3			06/30/20 09:32	1
Carbon tetrachloride	ND		0.50	0.044	ug/m3			06/30/20 09:32	1
Chlorodifluoromethane	ND		0.28	0.078	ug/m3			06/30/20 09:32	1
Chloroform	ND		0.39	0.034	ug/m3			06/30/20 09:32	1
cis-1,2-Dichloroethene	ND		0.32	0.040	ug/m3			06/30/20 09:32	1
Dichlorodifluoromethane	ND		0.40	0.069	ug/m3			06/30/20 09:32	1
1,1-Dichloroethane	ND		0.32	0.028	ug/m3			06/30/20 09:32	1
1,2-Dichloroethane	ND		0.32	0.040	ug/m3			06/30/20 09:32	1
1,1-Dichloroethene	ND		0.32	0.032	ug/m3			06/30/20 09:32	1
Ethylbenzene	ND		0.35	0.056	ug/m3			06/30/20 09:32	1
Methylene Chloride	0.586	J	1.4	0.56	ug/m3			06/30/20 09:32	1
Methyl tert-butyl ether	ND		1.4	0.19	ug/m3			06/30/20 09:32	1
Naphthalene	ND		0.21	0.21	ug/m3			06/30/20 09:32	1
Tetrachloroethene	ND		0.54	0.047	ug/m3			06/30/20 09:32	1
Toluene	ND		0.45	0.29	ug/m3			06/30/20 09:32	1
trans-1,2-Dichloroethene	ND		0.32	0.028	ug/m3			06/30/20 09:32	1
1,2,4-Trichlorobenzene	ND		0.59	0.47	ug/m3			06/30/20 09:32	1
1,1,1-Trichloroethane	ND		0.44	0.20	ug/m3			06/30/20 09:32	1
1,1,2-Trichloroethane	ND		0.44	0.038	ug/m3			06/30/20 09:32	1
Trichloroethene	ND		0.21	0.032	ug/m3			06/30/20 09:32	1
1,2,3-Trimethylbenzene	ND		0.39	0.18	ug/m3			06/30/20 09:32	1

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Lab Sample ID: MB 140-40629/4
Matrix: Air
Analysis Batch: 40629

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.39	0.098	ug/m3			06/30/20 09:32	1
1,3,5-Trimethylbenzene	ND		0.39	0.11	ug/m3			06/30/20 09:32	1
Vinyl chloride	ND		0.10	0.066	ug/m3			06/30/20 09:32	1
Xylenes, Total	ND		0.69	0.10	ug/m3			06/30/20 09:32	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*60 - 140*		*06/30/20 09:32*	*1*

Lab Sample ID: LCS 140-40629/1002
Matrix: Air
Analysis Batch: 40629

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	1.60	1.16		ppb v/v		72	70 - 130
Carbon tetrachloride	1.60	1.18		ppb v/v		74	70 - 130
Chlorodifluoromethane	1.60	1.24		ppb v/v		78	60 - 140
Chloroform	1.60	1.25		ppb v/v		78	70 - 130
cis-1,2-Dichloroethene	1.60	1.31		ppb v/v		82	70 - 130
Dichlorodifluoromethane	1.60	1.20		ppb v/v		75	60 - 140
1,1-Dichloroethane	1.60	1.26		ppb v/v		79	70 - 130
1,2-Dichloroethane	1.60	1.16		ppb v/v		72	70 - 130
1,1-Dichloroethene	1.60	1.28		ppb v/v		80	70 - 130
Ethylbenzene	1.60	1.29		ppb v/v		80	70 - 130
Methylene Chloride	1.60	1.58		ppb v/v		99	70 - 130
Methyl tert-butyl ether	1.60	1.19		ppb v/v		74	60 - 140
Naphthalene	1.60	1.58		ppb v/v		99	60 - 140
Tetrachloroethene	1.60	1.20		ppb v/v		75	70 - 130
Toluene	1.60	1.24		ppb v/v		77	70 - 130
trans-1,2-Dichloroethene	1.60	1.32		ppb v/v		82	70 - 130
1,2,4-Trichlorobenzene	1.60	1.42		ppb v/v		89	60 - 140
1,1,1-Trichloroethane	1.60	1.23		ppb v/v		77	70 - 130
1,1,2-Trichloroethane	1.60	1.24		ppb v/v		78	70 - 130
Trichloroethene	1.60	1.20		ppb v/v		75	70 - 130
1,2,3-Trimethylbenzene	1.60	1.42		ppb v/v		89	70 - 130
1,2,4-Trimethylbenzene	1.60	1.36		ppb v/v		85	70 - 130
1,3,5-Trimethylbenzene	1.60	1.29		ppb v/v		81	70 - 130
Vinyl chloride	1.60	1.08	*	ppb v/v		68	70 - 130
Xylenes, Total	4.80	4.01		ppb v/v		84	70 - 130

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	5.1	3.70		ug/m3		72	70 - 130
Carbon tetrachloride	10	7.44		ug/m3		74	70 - 130
Chlorodifluoromethane	5.7	4.39		ug/m3		78	60 - 140
Chloroform	7.8	6.10		ug/m3		78	70 - 130
cis-1,2-Dichloroethene	6.3	5.20		ug/m3		82	70 - 130
Dichlorodifluoromethane	7.9	5.91		ug/m3		75	60 - 140
1,1-Dichloroethane	6.5	5.12		ug/m3		79	70 - 130

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Lab Sample ID: LCS 140-40629/1002
Matrix: Air
Analysis Batch: 40629

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,2-Dichloroethane			6.5	4.68		ug/m3		72	70 - 130		
1,1-Dichloroethene			6.3	5.07		ug/m3		80	70 - 130		
Ethylbenzene			6.9	5.58		ug/m3		80	70 - 130		
Methylene Chloride			5.6	5.50		ug/m3		99	70 - 130		
Methyl tert-butyl ether			5.8	4.28		ug/m3		74	60 - 140		
Naphthalene			8.4	8.28		ug/m3		99	60 - 140		
Tetrachloroethene			11	8.17		ug/m3		75	70 - 130		
Toluene			6.0	4.66		ug/m3		77	70 - 130		
trans-1,2-Dichloroethene			6.3	5.22		ug/m3		82	70 - 130		
1,2,4-Trichlorobenzene			12	10.5		ug/m3		89	60 - 140		
1,1,1-Trichloroethane			8.7	6.71		ug/m3		77	70 - 130		
1,1,2-Trichloroethane			8.7	6.79		ug/m3		78	70 - 130		
Trichloroethene			8.6	6.45		ug/m3		75	70 - 130		
1,2,3-Trimethylbenzene			7.9	6.99		ug/m3		89	70 - 130		
1,2,4-Trimethylbenzene			7.9	6.68		ug/m3		85	70 - 130		
1,3,5-Trimethylbenzene			7.9	6.34		ug/m3		81	70 - 130		
Vinyl chloride			4.1	2.77	*	ug/m3		68	70 - 130		
Xylenes, Total			21	17.4		ug/m3		84	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*60 - 140*

QC Association Summary

Client: Tetra Tech GEO
Job ID: 140-19488-1
Project/Site: LMMRC SSDS - Middle River

Air - GC/MS VOA

Analysis Batch: 40629

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-19488-1	BLDG A EFFLUENT	Total/NA	Air	TO 15 LL	
140-19488-2	BLDG A MID GAC	Total/NA	Air	TO 15 LL	
140-19488-3	BLDG A INFLUENT	Total/NA	Air	TO 15 LL	
MB 140-40629/4	Method Blank	Total/NA	Air	TO 15 LL	
LCS 140-40629/1002	Lab Control Sample	Total/NA	Air	TO 15 LL	

Lab Chronicle

Client: Tetra Tech GEO
Job ID: 140-19488-1
Project/Site: LMMRC SSDS - Middle River

Client Sample ID: BLDG A EFFLUENT
Lab Sample ID: 140-19488-1
Date Collected: 06/25/20 09:37
Matrix: Air
Date Received: 06/26/20 12:08

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	100 mL	500 mL	40629	06/30/20 22:18	S1K	TAL KNX
	Instrument ID: MH									

Client Sample ID: BLDG A MID GAC
Lab Sample ID: 140-19488-2
Date Collected: 06/25/20 09:43
Matrix: Air
Date Received: 06/26/20 12:08

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	100 mL	500 mL	40629	06/30/20 23:10	S1K	TAL KNX
	Instrument ID: MH									

Client Sample ID: BLDG A INFLUENT
Lab Sample ID: 140-19488-3
Date Collected: 06/25/20 09:50
Matrix: Air
Date Received: 06/26/20 12:08

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	25 mL	500 mL	40629	07/01/20 00:03	S1K	TAL KNX
	Instrument ID: MH									

Client Sample ID: Method Blank
Lab Sample ID: MB 140-40629/4
Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	500 mL	500 mL	40629	06/30/20 09:32	S1K	TAL KNX
	Instrument ID: MH									

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 140-40629/1002
Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	500 mL	500 mL	40629	06/30/20 07:49	S1K	TAL KNX
	Instrument ID: MH									

Laboratory References:

TAL KNX = Eurofins TestAmerica, Knoxville, 5815 Middlebrook Pike, Knoxville, TN 37921, TEL (865)291-3000

Method Summary

Client: Tetra Tech GEO
Job ID: 140-19488-1
Project/Site: LMMRC SSDS - Middle River

Method	Method Description	Protocol	Laboratory
TO 15 LL	Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)	EPA	TAL KNX

Protocol References:

EPA = US Environmental Protection Agency

Laboratory References:

TAL KNX = Eurofins TestAmerica, Knoxville, 5815 Middlebrook Pike, Knoxville, TN 37921, TEL (865)291-3000

Sample Summary

Client: Tetra Tech GEO
Job ID: 140-19488-1
Project/Site: LMMRC SSDS - Middle River

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
140-19488-1	BLDG A EFFLUENT	Air	06/25/20 09:37	06/26/20 12:08	Air Canister (1-Liter) #34002205
140-19488-2	BLDG A MID GAC	Air	06/25/20 09:43	06/26/20 12:08	Air Canister (1-Liter) #10333
140-19488-3	BLDG A INFLUENT	Air	06/25/20 09:50	06/26/20 12:08	Air Canister (1-Liter) #34001625

Method TO15 Low Level

Volatile Organic Compounds - Low level (GC/MS) by Method TO 15

FORM II
AIR - GC/MS VOA SURROGATE RECOVERY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19488-1

SDG No.:

Matrix: Air Level: Low

GC Column (1): RTX-5 ID: 0.32(mm)

Client Sample ID	Lab Sample ID	BFB #
BLDG A EFFLUENT	140-19488-1	98
BLDG A MID GAC	140-19488-2	94
BLDG A INFLUENT	140-19488-3	94
	MB 140-40629/4	91
	LCS 140-40629/1002	105

	QC LIMITS
BFB = 4-Bromofluorobenzene (Surr)	60-140

Column to be used to flag recovery values

FORM II TO 15 LL

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19488-1

SDG No.:

Matrix: Air Level: Low Lab File ID: HCCVF30-LCS.d

Lab ID: LCS 140-40629/1002 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Benzene	1.60	1.16	72	70-130	
Carbon tetrachloride	1.60	1.18	74	70-130	
Chlorodifluoromethane	1.60	1.24	78	60-140	
Chloroform	1.60	1.25	78	70-130	
cis-1,2-Dichloroethene	1.60	1.31	82	70-130	
Dichlorodifluoromethane	1.60	1.20	75	60-140	
1,1-Dichloroethane	1.60	1.26	79	70-130	
1,2-Dichloroethane	1.60	1.16	72	70-130	
1,1-Dichloroethene	1.60	1.28	80	70-130	
Ethylbenzene	1.60	1.29	80	70-130	
Methylene Chloride	1.60	1.58	99	70-130	
Methyl tert-butyl ether	1.60	1.19	74	60-140	
Naphthalene	1.60	1.58	99	60-140	
Tetrachloroethene	1.60	1.20	75	70-130	
Toluene	1.60	1.24	77	70-130	
trans-1,2-Dichloroethene	1.60	1.32	82	70-130	
1,2,4-Trichlorobenzene	1.60	1.42	89	60-140	
1,1,1-Trichloroethane	1.60	1.23	77	70-130	
1,1,2-Trichloroethane	1.60	1.24	78	70-130	
Trichloroethene	1.60	1.20	75	70-130	
1,2,3-Trimethylbenzene	1.60	1.42	89	70-130	
1,2,4-Trimethylbenzene	1.60	1.36	85	70-130	
1,3,5-Trimethylbenzene	1.60	1.29	81	70-130	
Vinyl chloride	1.60	1.08	68	70-130	*
Xylenes, Total	4.80	4.01	84	70-130	

Column to be used to flag recovery and RPD values

FORM III TO 15 LL

FORM IV
AIR - GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19488-1

SDG No.:

Lab File ID: H500BF30.D Lab Sample ID: MB 140-40629/4

Matrix: Air Heated Purge:(Y/N) N

Instrument ID: MH Date Analyzed: 06/30/2020 09:32

GC Column: RTX-5 ID: 0.32(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 140-40629/1002	HCCVF30-LCS.d	06/30/2020 07:49
BLDG A EFFLUENT	140-19488-1	HF30P110.D	06/30/2020 22:18
BLDG A MID GAC	140-19488-2	HF30P111.D	06/30/2020 23:10
BLDG A INFLUENT	140-19488-3	HF30P112.D	07/01/2020 00:03

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19488-1

SDG No.:

Lab File ID: HDNUD16X.D BFB Injection Date: 04/16/2020

Instrument ID: MH BFB Injection Time: 06:14

Analysis Batch No.: 39100

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	19.8	
75	30.0 - 60.0 % of mass 95	48.7	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.8	
173	Less than 2.0 % of mass 174	0.4	(0.5) 1
174	50.0 - 120.00 % of mass 95	82.4	
175	5.0 - 9.0 % of mass 174	5.7	(7.0) 1
176	95.0 - 101.0 % of mass 174	79.5	(96.5) 1
177	5.0 - 9.0 % of mass 176	5.1	(6.5) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 140-39100/3	HD16IC01.D	04/16/2020	8:03
	IC 140-39100/4	HD16IC02.D	04/16/2020	8:55
	IC 140-39100/5	HD16IC03.D	04/16/2020	9:47
	IC 140-39100/6	HD16IC04.D	04/16/2020	10:40
	IC 140-39100/7	HD16IC05.D	04/16/2020	11:33
	IC 140-39100/8	HD16IC06.D	04/16/2020	12:26
	ICIS 140-39100/9	HD16IC07.D	04/16/2020	13:19
	IC 140-39100/11	HD16IC08.D	04/16/2020	15:04
	IC 140-39100/13	HD16C09.D	04/16/2020	16:49
	IC 140-39100/15	HD16IC10.D	04/16/2020	18:34
	ICV 140-39100/17	HD16ICV.D	04/16/2020	20:21

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19488-1

SDG No.:

Lab File ID: HBFBF30.D BFB Injection Date: 06/30/2020

Instrument ID: MH BFB Injection Time: 07:21

Analysis Batch No.: 40629

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	22.3	
75	30.0 - 60.0 % of mass 95	49.2	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.8	
173	Less than 2.0 % of mass 174	0.4	(0.5) 1
174	50.0 - 120.00 % of mass 95	77.1	
175	5.0 - 9.0 % of mass 174	5.6	(7.3) 1
176	95.0 - 101.0 % of mass 174	75.5	(97.9) 1
177	5.0 - 9.0 % of mass 176	4.9	(6.4) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 140-40629/2	HCCVF30.D	06/30/2020	7:49
	LCS 140-40629/1002	HCCVF30-LCS.d	06/30/2020	7:49
	MB 140-40629/4	H500BF30.D	06/30/2020	9:32
BLDG A EFFLUENT	140-19488-1	HF30P110.D	06/30/2020	22:18
BLDG A MID GAC	140-19488-2	HF30P111.D	06/30/2020	23:10
BLDG A INFLUENT	140-19488-3	HF30P112.D	07/01/2020	0:03

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19488-1

SDG No.:

Sample No.: ICIS 140-39100/9 Date Analyzed: 04/16/2020 13:19

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm)

Lab File ID (Standard): HD16IC07.D Heated Purge: (Y/N) N

Calibration ID: 2402

		CBM		DFBZ		CBZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		238129	8.59	1621590	10.79	1350213	15.58
UPPER LIMIT		333381	8.92	2270226	11.12	1890298	15.91
LOWER LIMIT		142877	8.26	972954	10.46	810128	15.25
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 140-39100/17		348376*3	8.59	2365337*3	10.79	1913911*3	15.57

CBM = Chlorobromomethane (IS)
DFBZ = 1,4-Difluorobenzene
CBZd5 = Chlorobenzene-d5 (IS)

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO 15 LL

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19488-1

SDG No.:

Sample No.: CCVIS 140-40629/2 Date Analyzed: 06/30/2020 07:49

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm)

Lab File ID (Standard): HCCVF30.D Heated Purge: (Y/N) N

Calibration ID: 2402

		CBM		DFBZ		CBZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		116293	8.58	871871	10.78	703225	15.57
UPPER LIMIT		162810	8.91	1220619	11.11	984515	15.90
LOWER LIMIT		69776	8.25	523123	10.45	421935	15.24
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 140-40629/1002		116293	8.58	871871	10.78	703225	15.57
MB 140-40629/4		131346	8.57	973248	10.78	754773	15.57
140-19488-1	BLDG A EFFLUENT	98501	8.58	712064	10.78	556043	15.57
140-19488-2	BLDG A MID GAC	106279	8.58	762130	10.78	601156	15.57
140-19488-3	BLDG A INFLUENT	104248	8.58	752366	10.78	552726	15.57

CBM = Chlorobromomethane (IS)
DFBZ = 1,4-Difluorobenzene
CBZd5 = Chlorobenzene-d5 (IS)

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO 15 LL

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19488-1

SDG No.:

Client Sample ID: BLDG A EFFLUENT Lab Sample ID: 140-19488-1

Matrix: Air Lab File ID: HF30P110.D

Analysis Method: TO 15 LL Date Collected: 06/25/2020 09:37

Sample wt/vol: 100(mL) Date Analyzed: 06/30/2020 22:18

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 40629 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.73		0.40	0.040
56-23-5	Carbon tetrachloride	153.81	ND		0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	ND		0.40	0.11
67-66-3	Chloroform	119.38	0.29	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	22		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.32	J	0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	3.6		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	31		0.40	0.040
100-41-4	Ethylbenzene	106.17	ND		0.40	0.065
75-09-2	Methylene Chloride	84.93	5.4	B	2.0	0.80
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	0.73		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.035
108-88-3	Toluene	92.14	0.95		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	0.49		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	8.8		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	4.8		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.11
75-01-4	Vinyl chloride	62.50	ND	*	0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.28	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	98		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19488-1

SDG No.:

Client Sample ID: BLDG A EFFLUENT Lab Sample ID: 140-19488-1

Matrix: Air Lab File ID: HF30P110.D

Analysis Method: TO 15 LL Date Collected: 06/25/2020 09:37

Sample wt/vol: 100(mL) Date Analyzed: 06/30/2020 22:18

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 40629 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	2.3		1.3	0.13
56-23-5	Carbon tetrachloride	153.81	ND		2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	ND		1.4	0.39
67-66-3	Chloroform	119.38	1.4	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	86		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	1.6	J	2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	15		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	120		1.6	0.16
100-41-4	Ethylbenzene	106.17	ND		1.7	0.28
75-09-2	Methylene Chloride	84.93	19	B	6.9	2.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	3.8		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.24
108-88-3	Toluene	92.14	3.6		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	1.9		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	48		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	26		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.54
75-01-4	Vinyl chloride	62.50	ND	*	0.51	0.33
1330-20-7	Xylenes, Total	106.17	1.2	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	98		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MH\20200629-15882.b\HF30P110.D				
Lims ID:	140-19488-A-1				
Client ID:	BLDG A EFFLUENT				
Sample Type:	Client				
Inject. Date:	30-Jun-2020 22:18:30	ALS Bottle#:	10	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0015882-017				
Misc. Info.:	140-19488-a-1				
Operator ID:	HMT	Instrument ID:	MH		
Method:	\\chromfs\Knoxville\ChromData\MH\20200629-15882.b\MH_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	01-Jul-2020 12:34:24	Calib Date:	16-Apr-2020 18:34:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC10.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1017				
First Level Reviewer: khachitpongpanits		Date:	01-Jul-2020 12:34:41		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.577	8.577	0.000	96	98501	4.00	
* 2 1,4-Difluorobenzene	114	10.779	10.779	0.000	96	712064	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.565	15.565	0.000	90	556043	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.213	17.234	-0.021	87	366402	3.93	
8 Dichlorodifluoromethane	85	3.605	3.605	0.000	100	10161	0.0636	
27 1,1-Dichloroethene	96	5.703	5.709	-0.005	96	293508	6.12	
31 Methylene Chloride	84	6.050	6.055	-0.005	99	73144	1.08	
34 trans-1,2-Dichloroethene	96	6.846	6.851	-0.005	98	4656	0.0983	
37 1,1-Dichloroethane	63	7.269	7.264	0.005	99	68534	0.7266	
42 cis-1,2-Dichloroethene	96	8.246	8.246	0.000	96	214700	4.34	
44 Chloroform	83	8.587	8.587	0.000	29	6756	0.0581	
47 1,1,1-Trichloroethane	97	9.611	9.611	0.000	97	189803	1.75	
51 Benzene	78	10.220	10.220	0.000	97	22469	0.1451	
58 Trichloroethene	130	11.497	11.502	-0.005	91	60605	0.9571	
67 Toluene	91	13.580	13.580	0.000	93	28262	0.1897	
77 m-Xylene & p-Xylene	91	16.061	16.066	-0.005	98	6069	0.0396	
81 o-Xylene	91	16.588	16.593	-0.005	96	2646	0.0167	
109 Naphthalene	128	21.105	21.115	-0.010	98	26057	0.1466	
S 116 Xylenes, Total	100				0		0.0563	

Reagents:

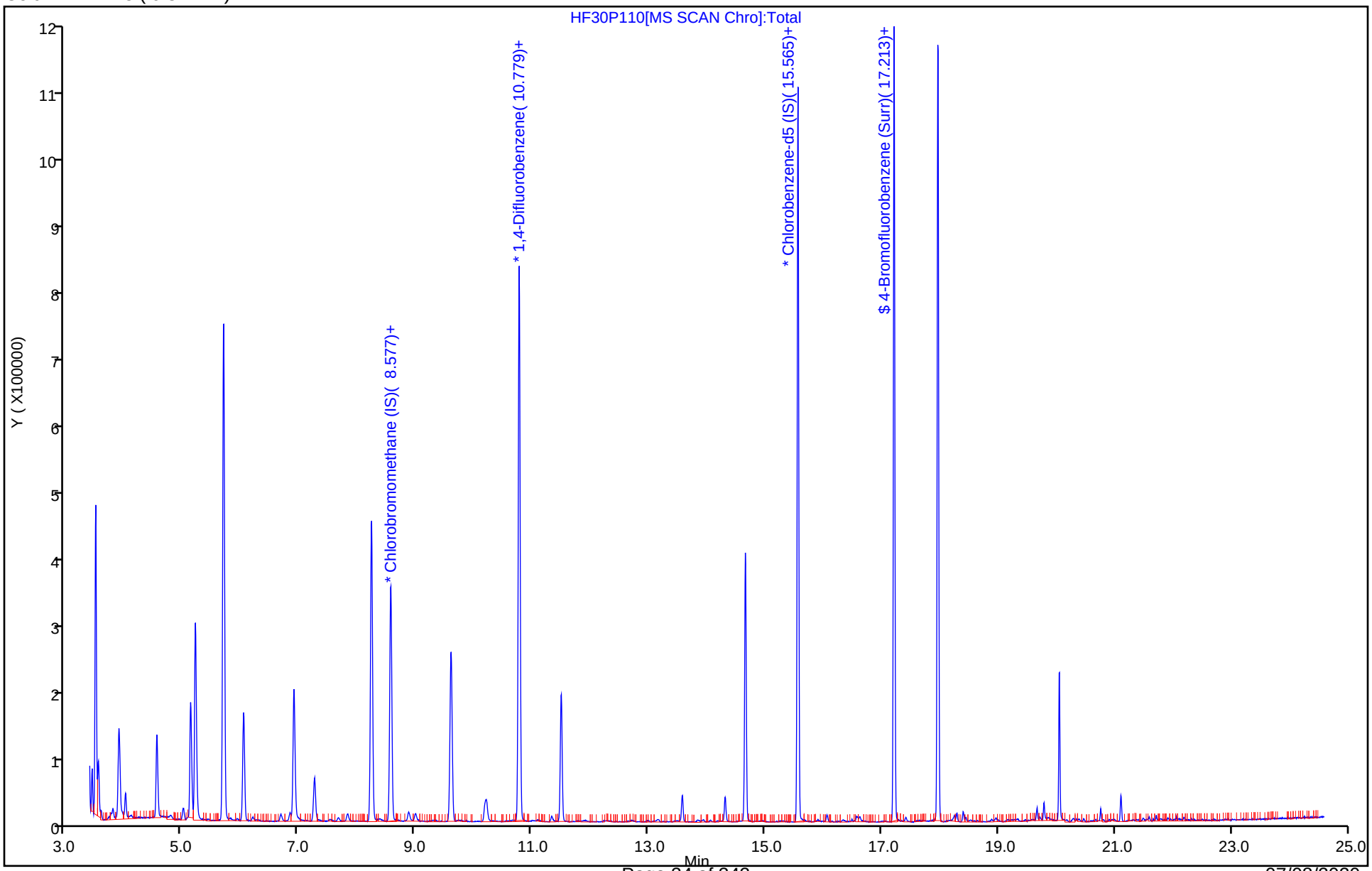
40MXISSURP_00004 Amount Added: 40.00 Units: mL Run Reagent

Report Date: 01-Jul-2020 12:34:41 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200629-15882.b\HF30P110.D				
Injection Date:	30-Jun-2020 22:18:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	140-19488-A-1	Lab Sample ID:	140-19488-1	Worklist Smp#:	17
Client ID:	BLDG A EFFLUENT				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MH\20200629-15882.b\HF30P110.D				
Lims ID:	140-19488-A-1				
Client ID:	BLDG A EFFLUENT				
Sample Type:	Client				
Inject. Date:	30-Jun-2020 22:18:30	ALS Bottle#:	10	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0015882-017				
Misc. Info.:	140-19488-a-1				
Operator ID:	HMT	Instrument ID:	MH		
Method:	\\chromfs\Knoxville\ChromData\MH\20200629-15882.b\MH_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	01-Jul-2020 12:34:24	Calib Date:	16-Apr-2020 18:34:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC10.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1017				

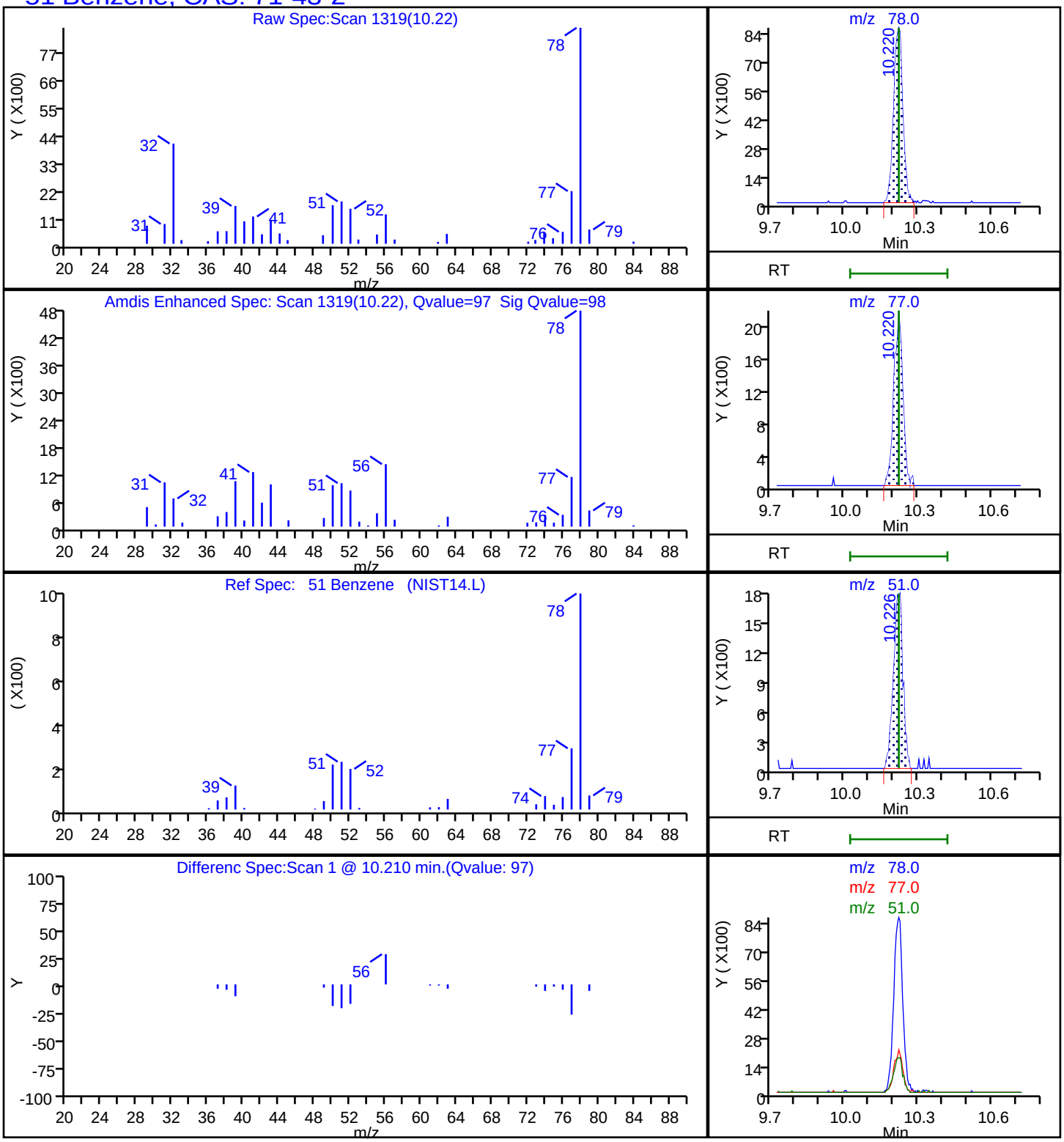
First Level Reviewer: khachitpongpanits Date: 01-Jul-2020 12:34:41

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.00	3.93	98.19

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200629-15882.b\HF30P110.D				
Injection Date:	30-Jun-2020 22:18:30	Instrument ID:	MH		
Lims ID:	140-19488-A-1	Lab Sample ID:	140-19488-1		
Client ID:	BLDG A EFFLUENT				
Operator ID:	HMT	ALS Bottle#:	10	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

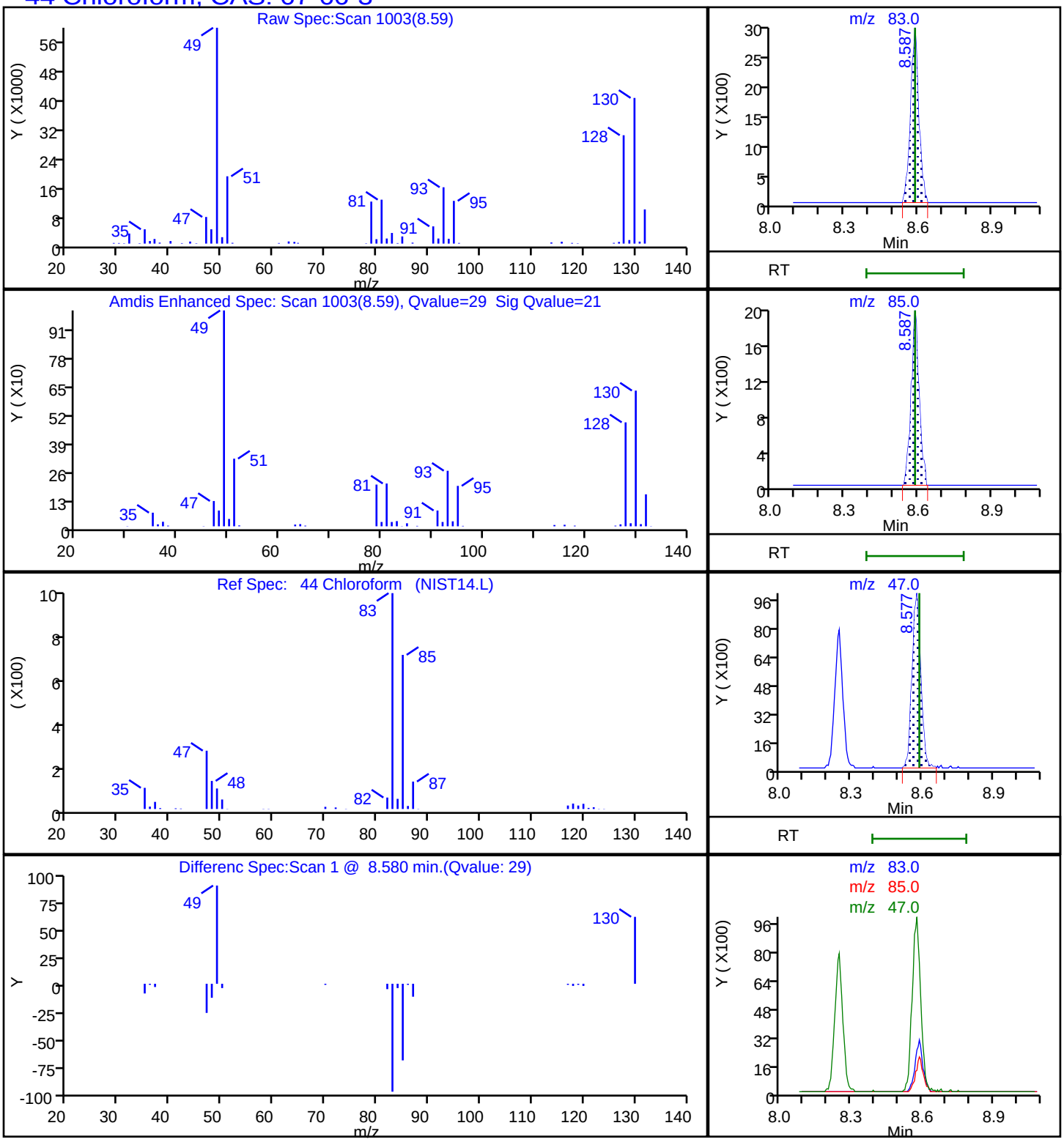
51 Benzene, CAS: 71-43-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200629-15882.b\HF30P110.D				
Injection Date:	30-Jun-2020 22:18:30	Instrument ID:	MH		
Lims ID:	140-19488-A-1	Lab Sample ID:	140-19488-1		
Client ID:	BLDG A EFFLUENT				
Operator ID:	HMT	ALS Bottle#:	10	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

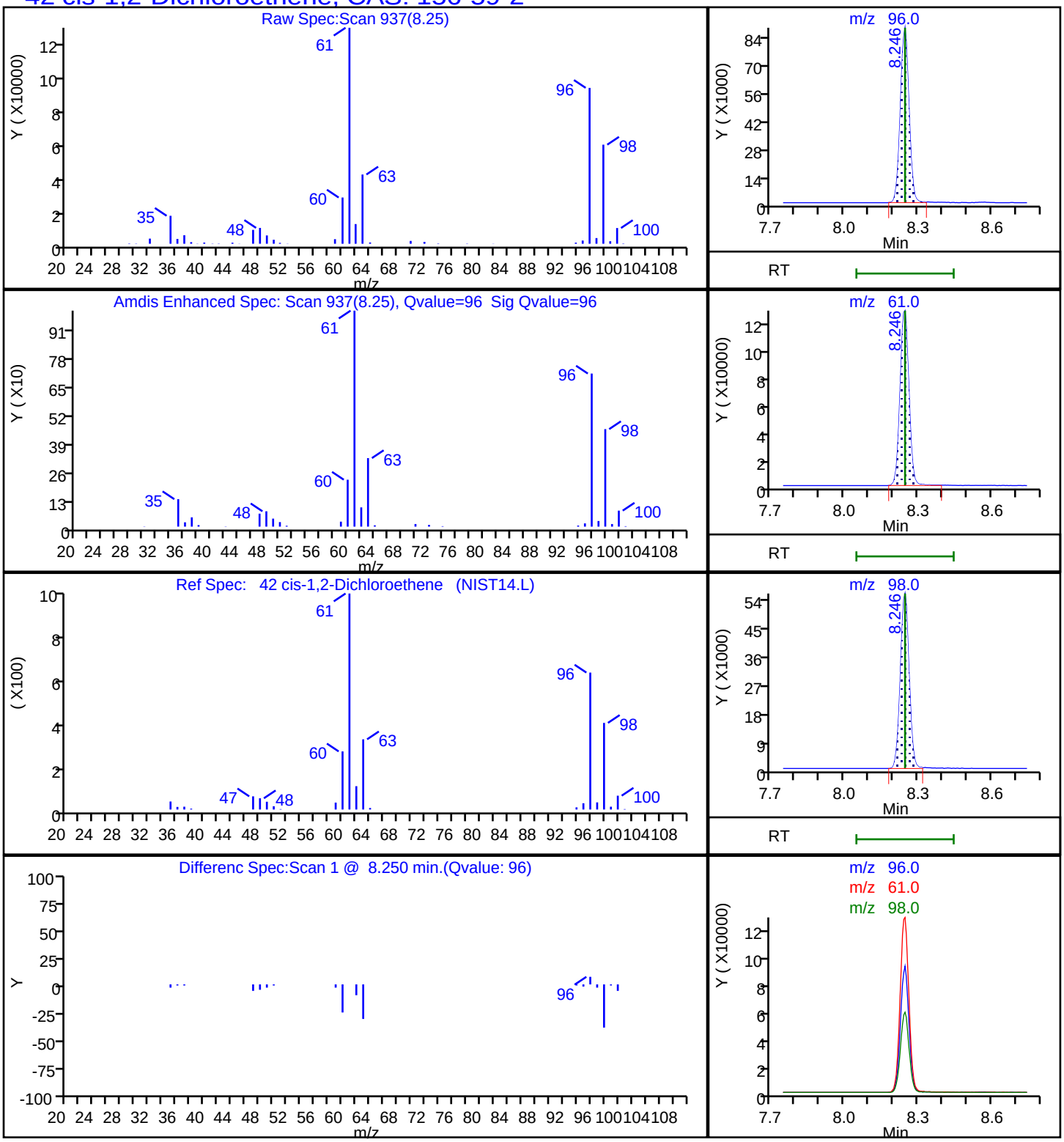
44 Chloroform, CAS: 67-66-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200629-15882.b\HF30P110.D				
Injection Date:	30-Jun-2020 22:18:30	Instrument ID:	MH		
Lims ID:	140-19488-A-1	Lab Sample ID:	140-19488-1		
Client ID:	BLDG A EFFLUENT				
Operator ID:	HMT	ALS Bottle#:	10	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

42 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200629-15882.b\HF30P110.D

Injection Date: 30-Jun-2020 22:18:30 Instrument ID: MH

Lims ID: 140-19488-A-1 Lab Sample ID: 140-19488-1

Client ID: BLDG A EFFLUENT

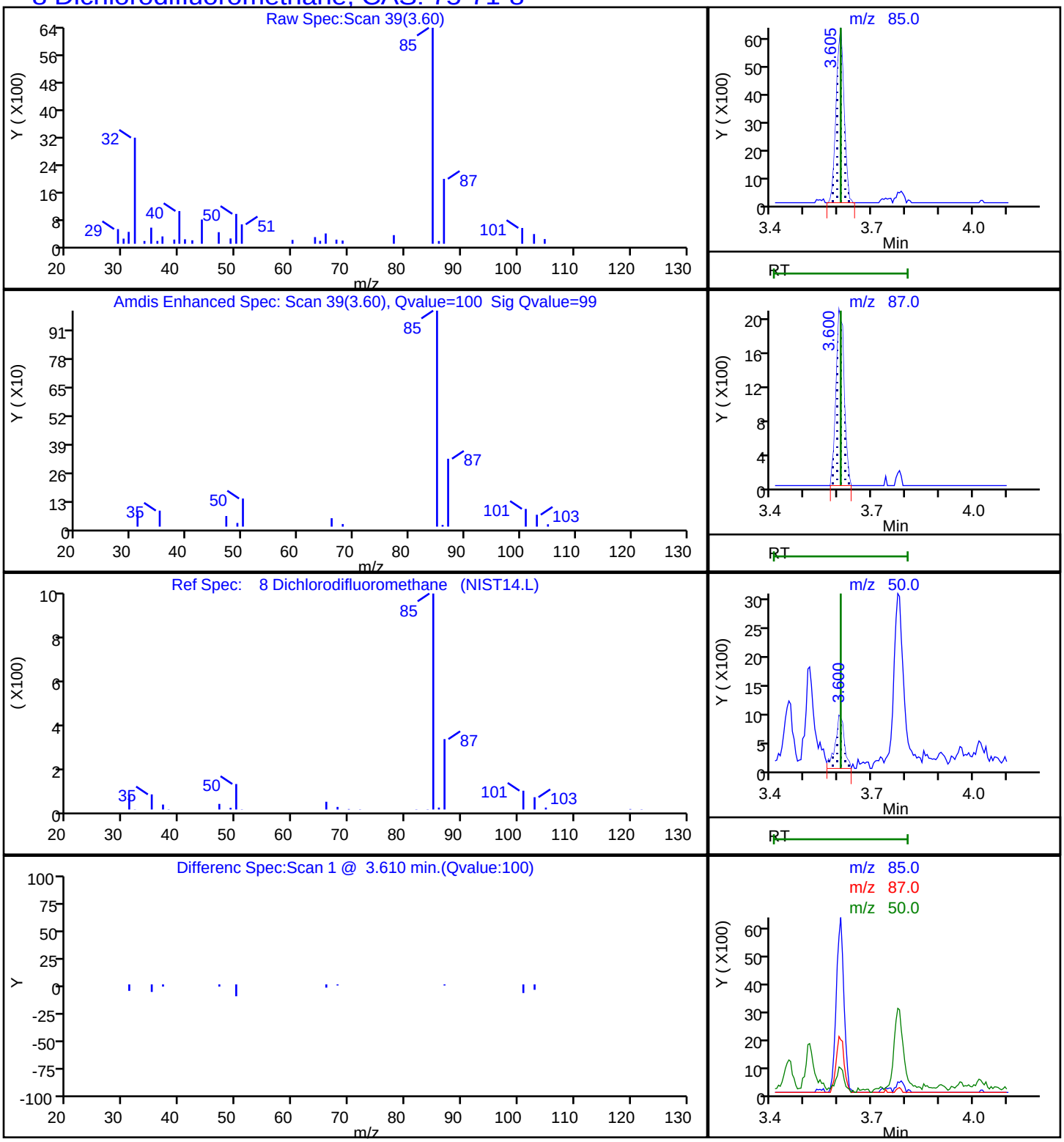
Operator ID: HMT ALS Bottle#: 10 Worklist Smp#: 17

Purge Vol: 500.000 mL Dil. Factor: 1.0000

Method: MH_TO15 Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm) Detector MS SCAN

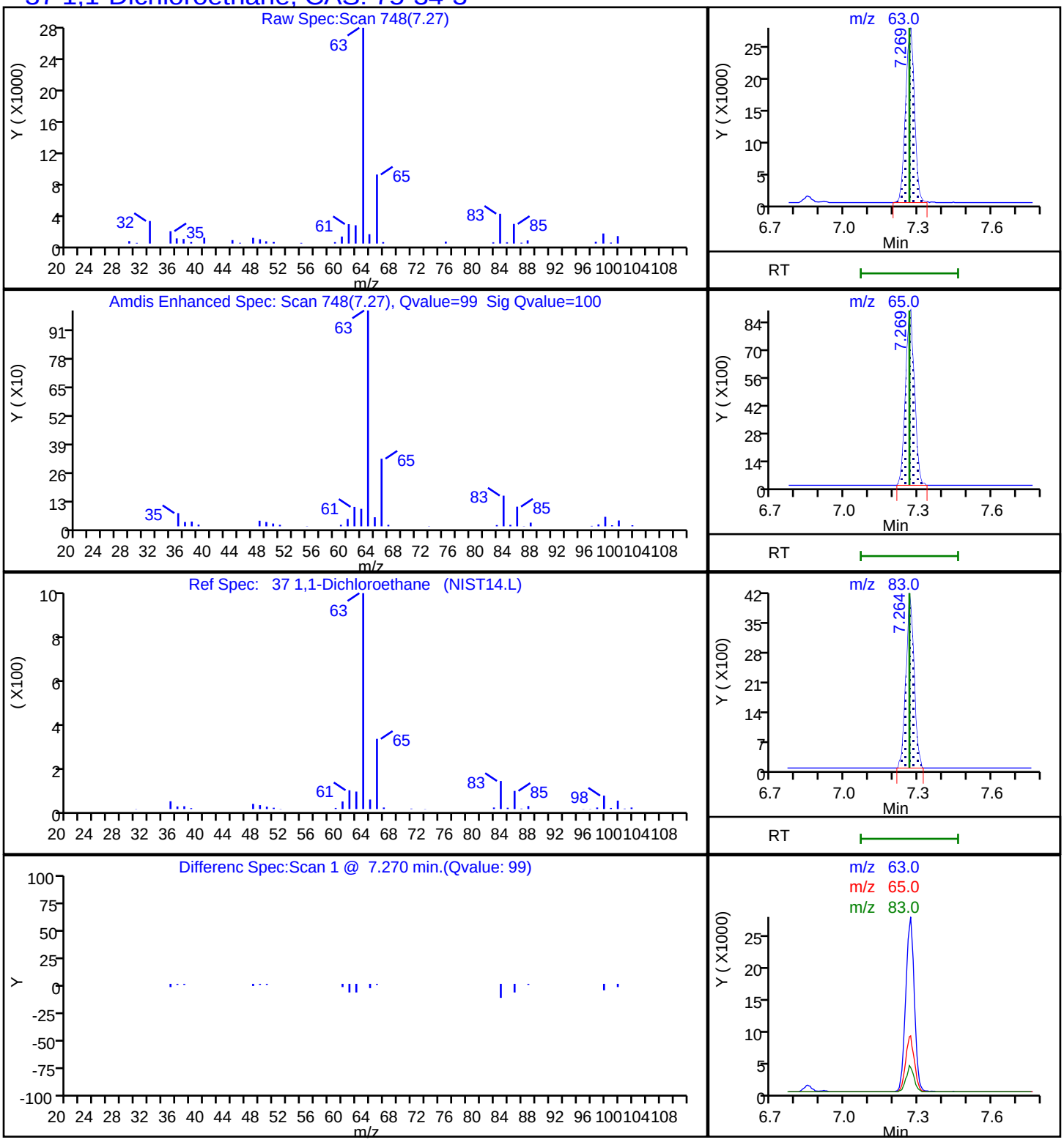
8 Dichlorodifluoromethane, CAS: 75-71-8



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200629-15882.b\HF30P110.D		
Injection Date:	30-Jun-2020 22:18:30	Instrument ID:	MH
Lims ID:	140-19488-A-1	Lab Sample ID:	140-19488-1
Client ID:	BLDG A EFFLUENT		
Operator ID:	HMT	ALS Bottle#:	10 Worklist Smp#: 17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

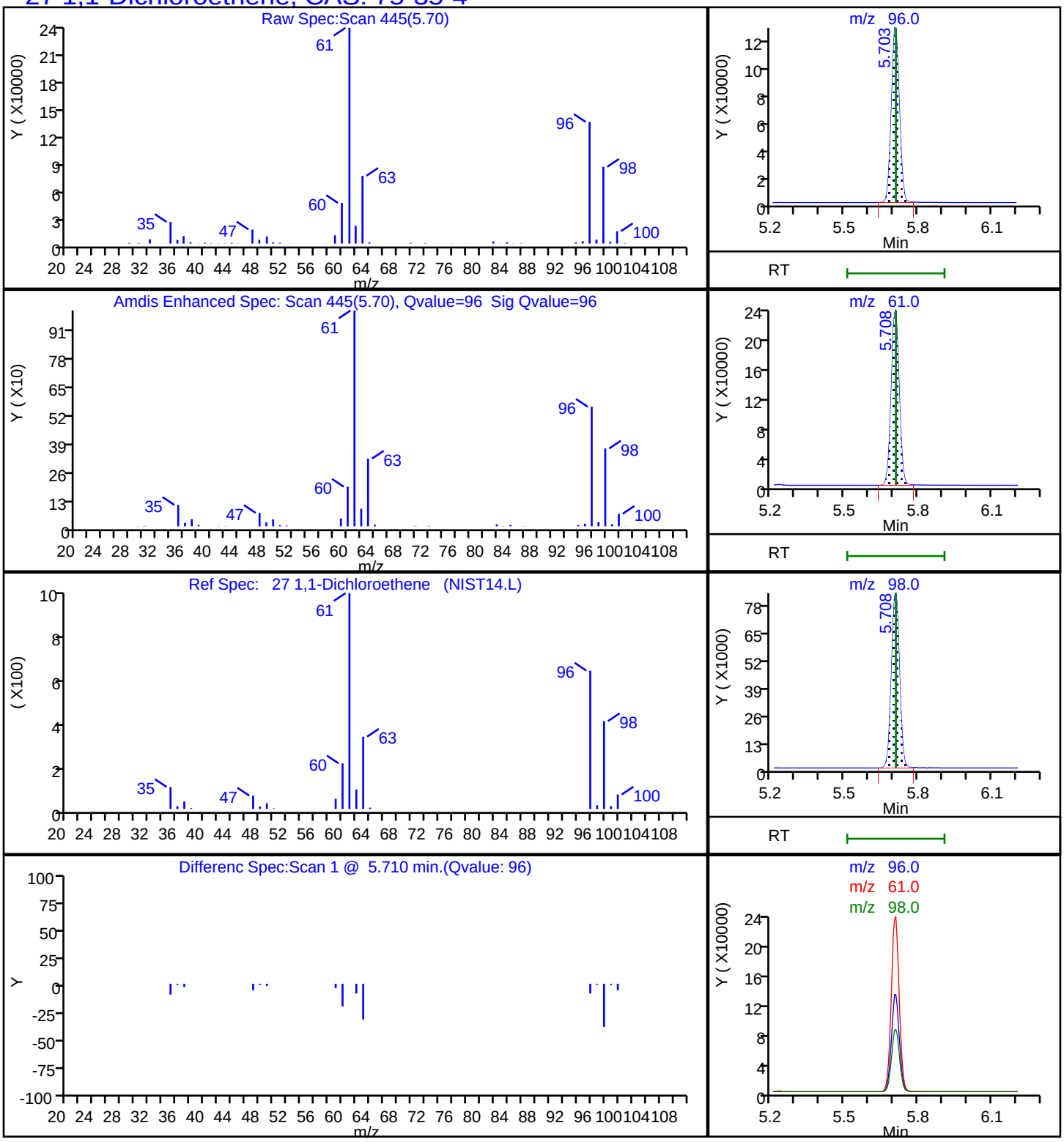
37 1,1-Dichloroethane, CAS: 75-34-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200629-15882.b\HF30P110.D		
Injection Date:	30-Jun-2020 22:18:30	Instrument ID:	MH
Lims ID:	140-19488-A-1	Lab Sample ID:	140-19488-1
Client ID:	BLDG A EFFLUENT		
Operator ID:	HMT	ALS Bottle#:	10 Worklist Smp#: 17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

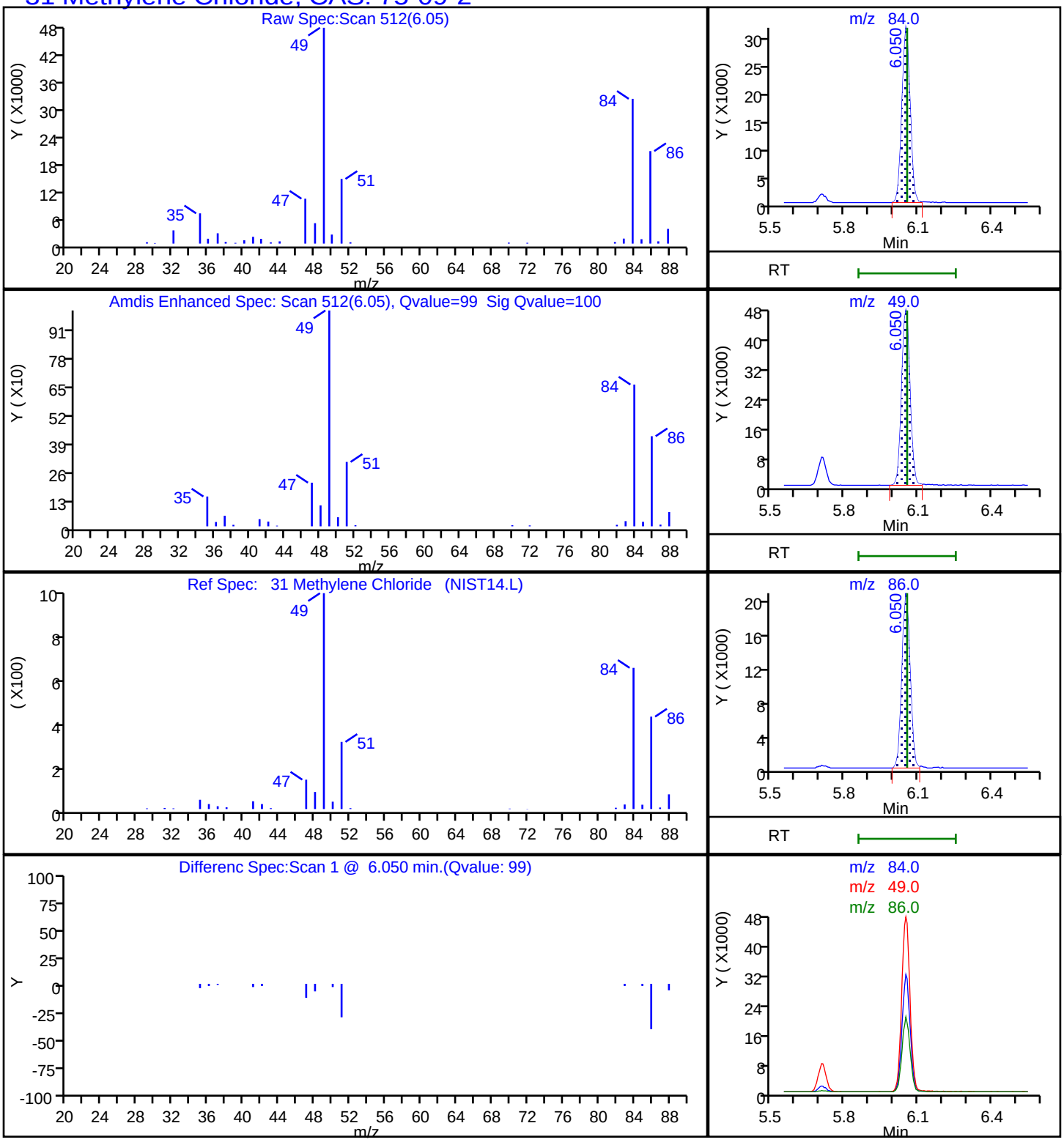
27 1,1-Dichloroethene, CAS: 75-35-4



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200629-15882.b\HF30P110.D				
Injection Date:	30-Jun-2020 22:18:30	Instrument ID:	MH		
Lims ID:	140-19488-A-1	Lab Sample ID:	140-19488-1		
Client ID:	BLDG A EFFLUENT				
Operator ID:	HMT	ALS Bottle#:	10	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

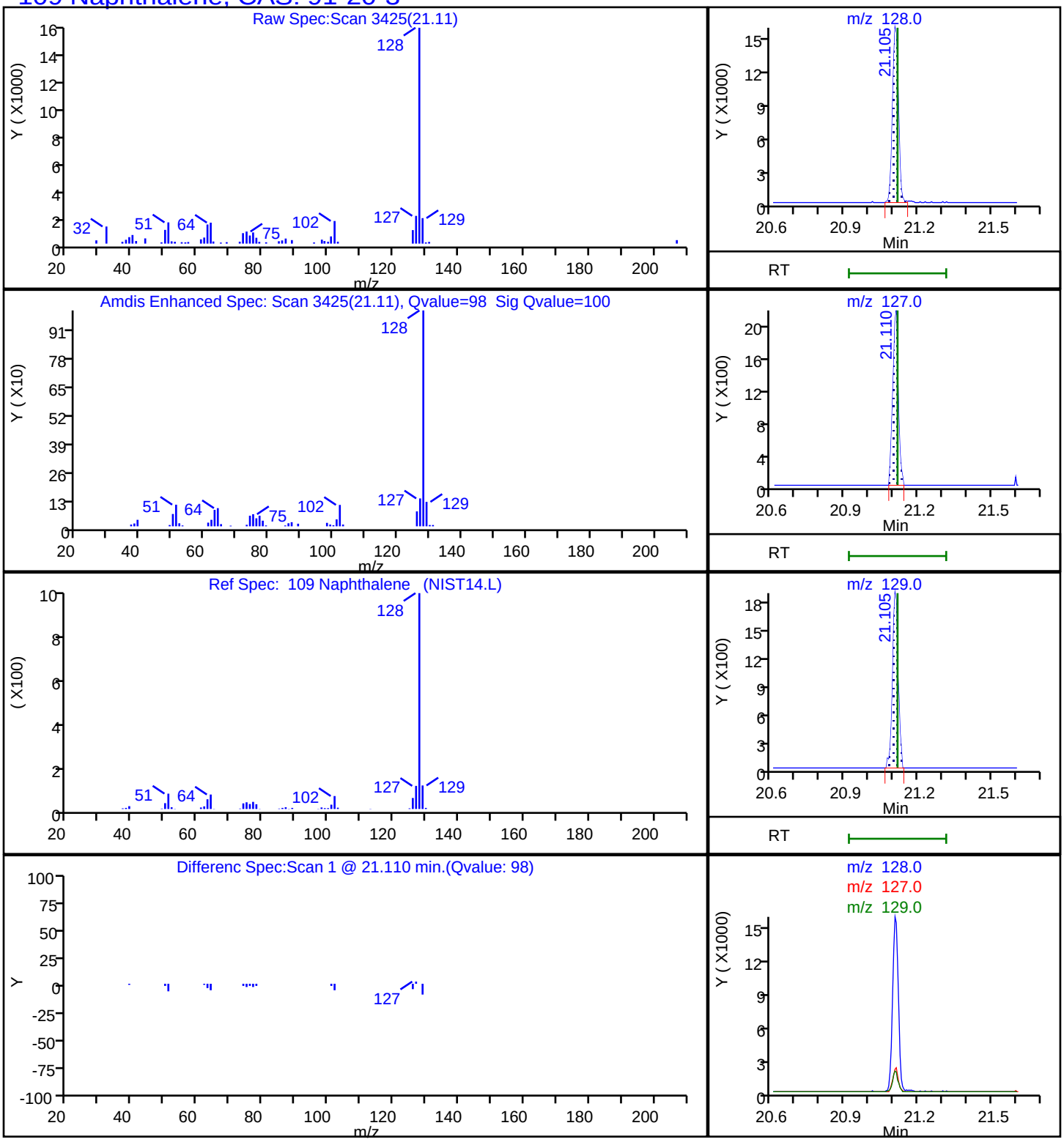
31 Methylene Chloride, CAS: 75-09-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200629-15882.b\HF30P110.D				
Injection Date:	30-Jun-2020 22:18:30	Instrument ID:	MH		
Lims ID:	140-19488-A-1	Lab Sample ID:	140-19488-1		
Client ID:	BLDG A EFFLUENT				
Operator ID:	HMT	ALS Bottle#:	10	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

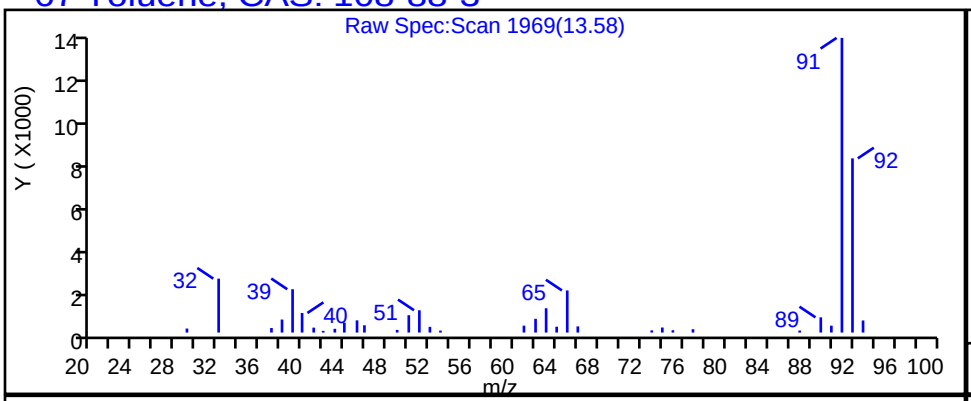
109 Naphthalene, CAS: 91-20-3

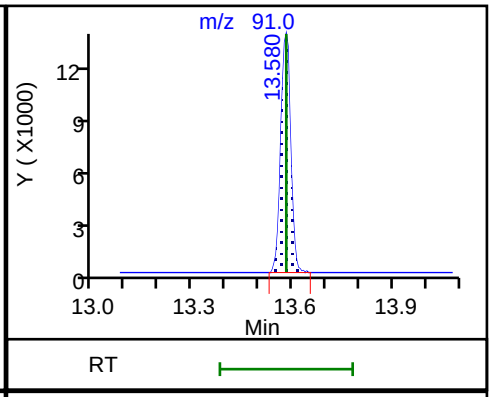


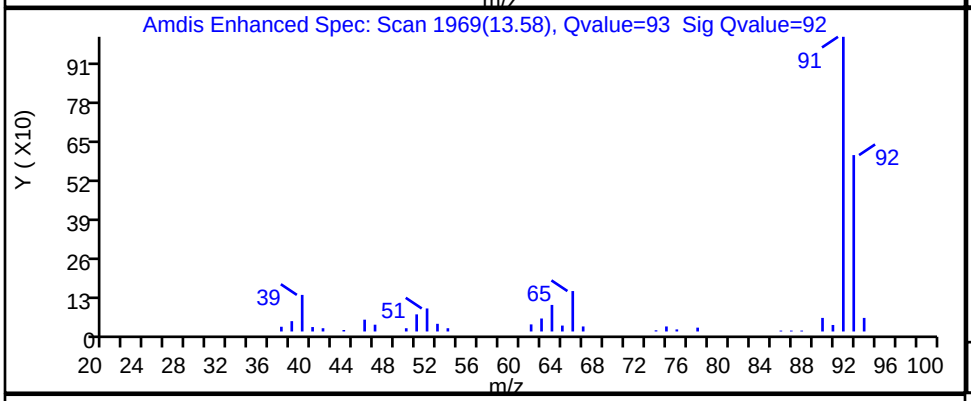
Eurofins TestAmerica, Knoxville

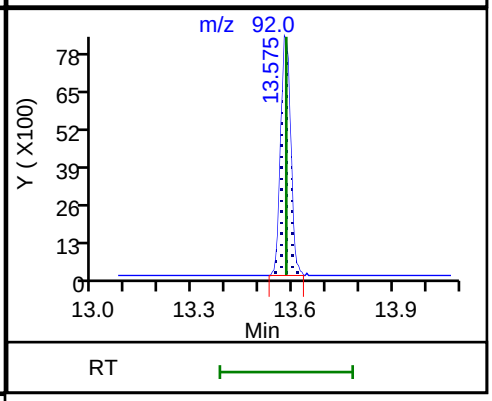
Data File:	\\chromfs\Knoxville\ChromData\MH\20200629-15882.b\HF30P110.D				
Injection Date:	30-Jun-2020 22:18:30	Instrument ID:	MH		
Lims ID:	140-19488-A-1	Lab Sample ID:	140-19488-1		
Client ID:	BLDG A EFFLUENT				
Operator ID:	HMT	ALS Bottle#:	10	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

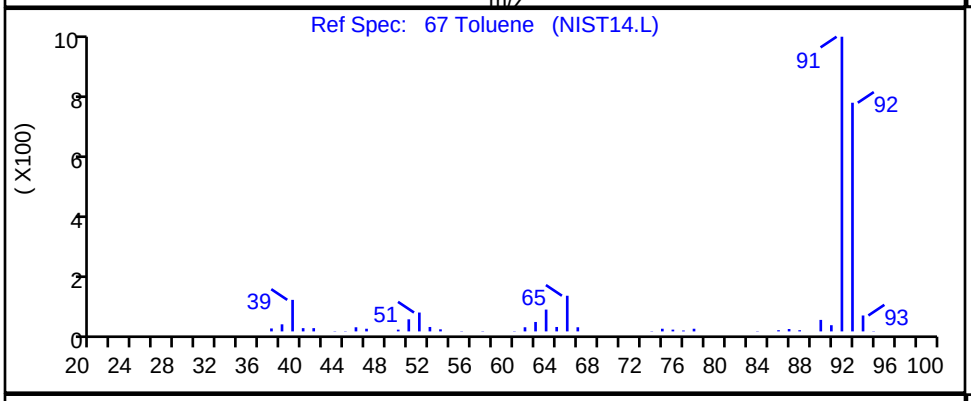
67 Toluene, CAS: 108-88-3

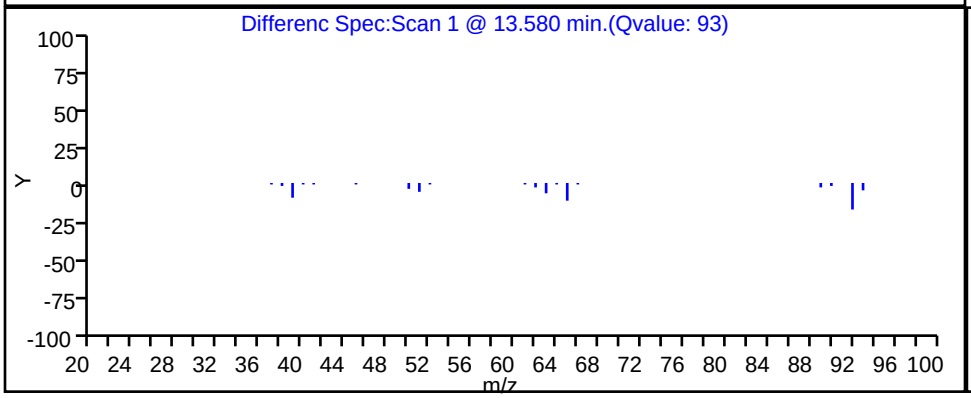


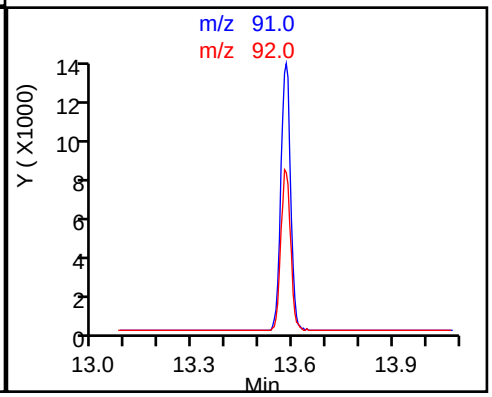








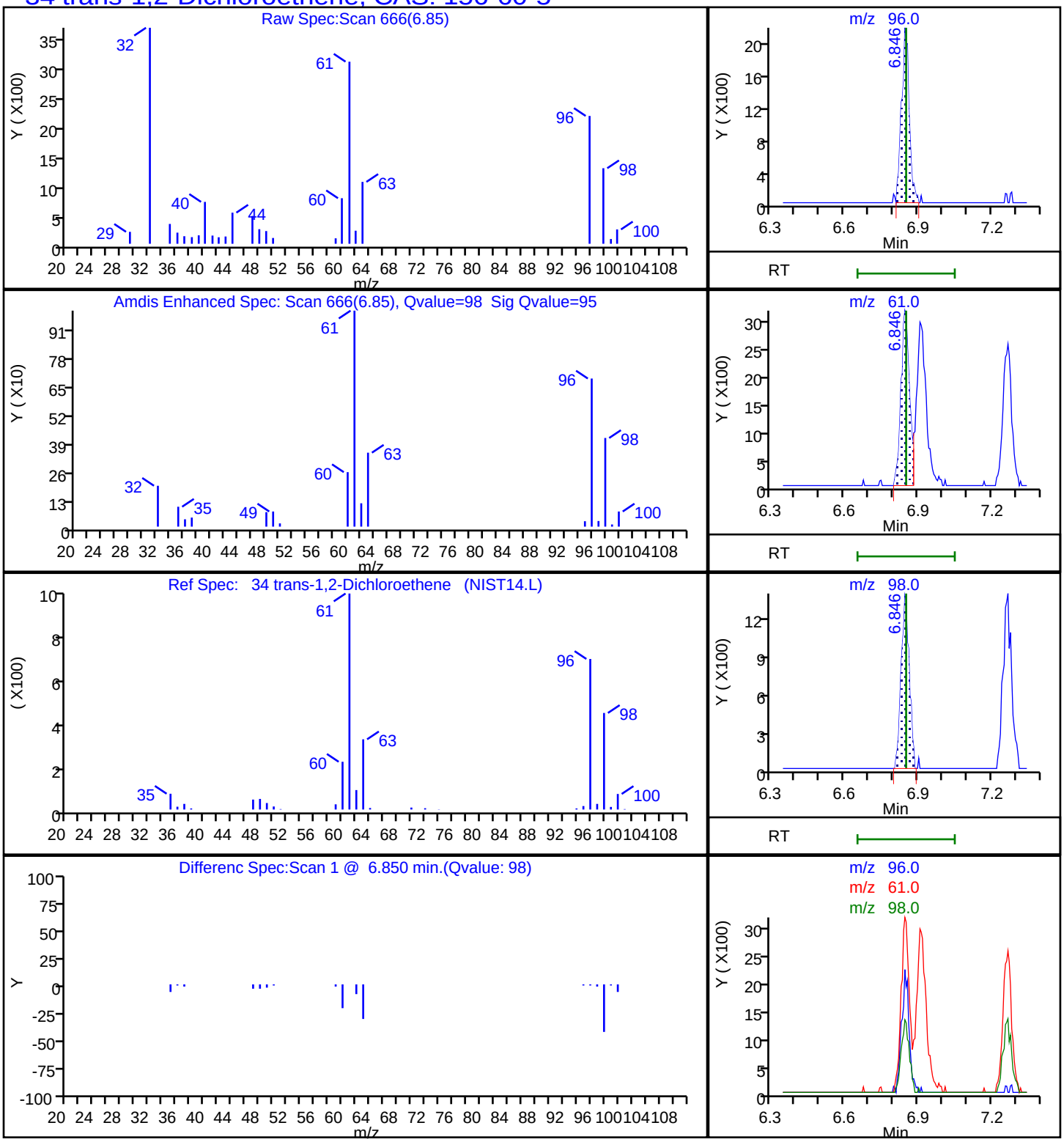




Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200629-15882.b\HF30P110.D		
Injection Date:	30-Jun-2020 22:18:30	Instrument ID:	MH
Lims ID:	140-19488-A-1	Lab Sample ID:	140-19488-1
Client ID:	BLDG A EFFLUENT		
Operator ID:	HMT	ALS Bottle#:	10 Worklist Smp#: 17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

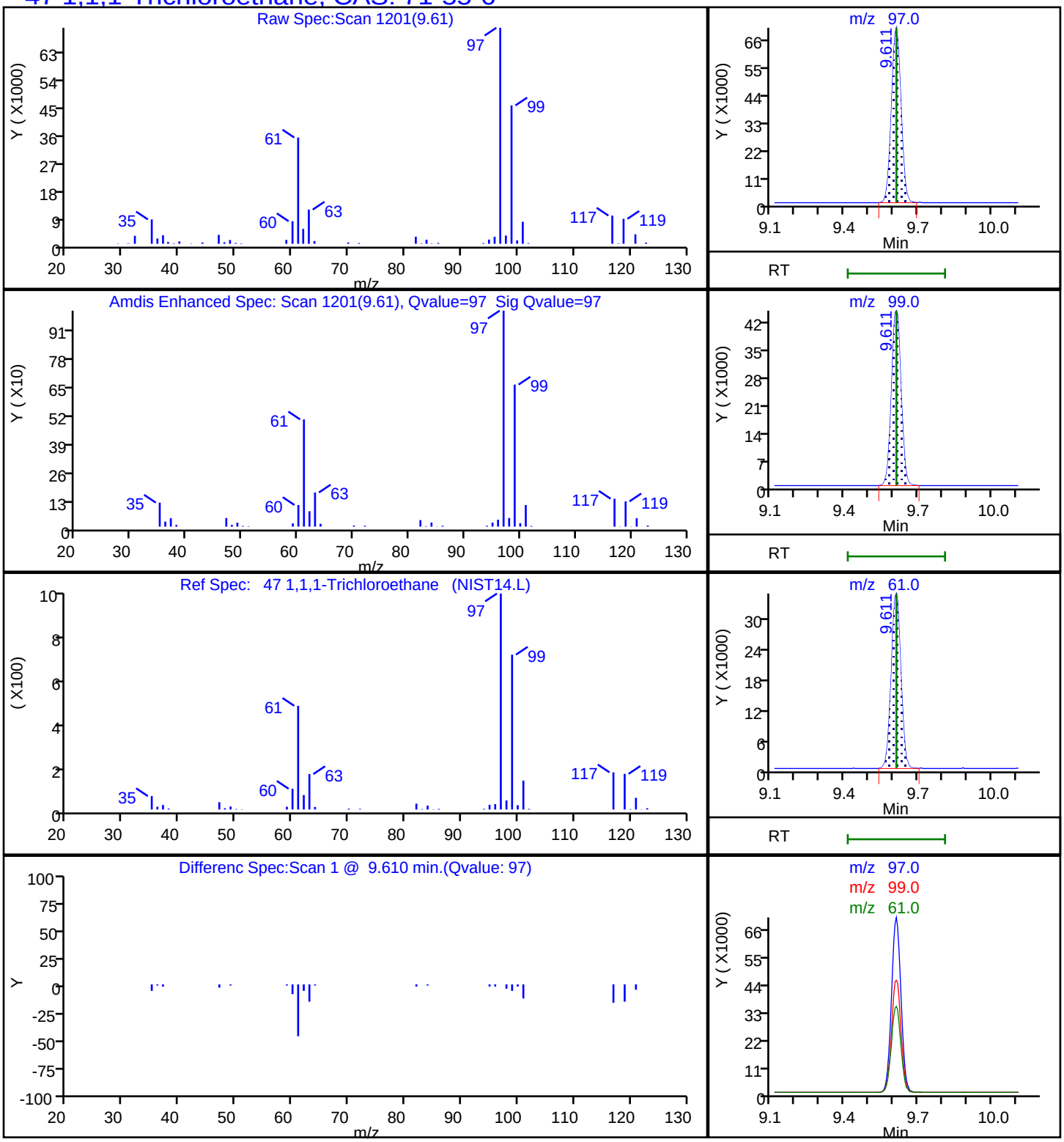
34 trans-1,2-Dichloroethene, CAS: 156-60-5



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200629-15882.b\HF30P110.D				
Injection Date:	30-Jun-2020 22:18:30	Instrument ID:	MH		
Lims ID:	140-19488-A-1	Lab Sample ID:	140-19488-1		
Client ID:	BLDG A EFFLUENT				
Operator ID:	HMT	ALS Bottle#:	10	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

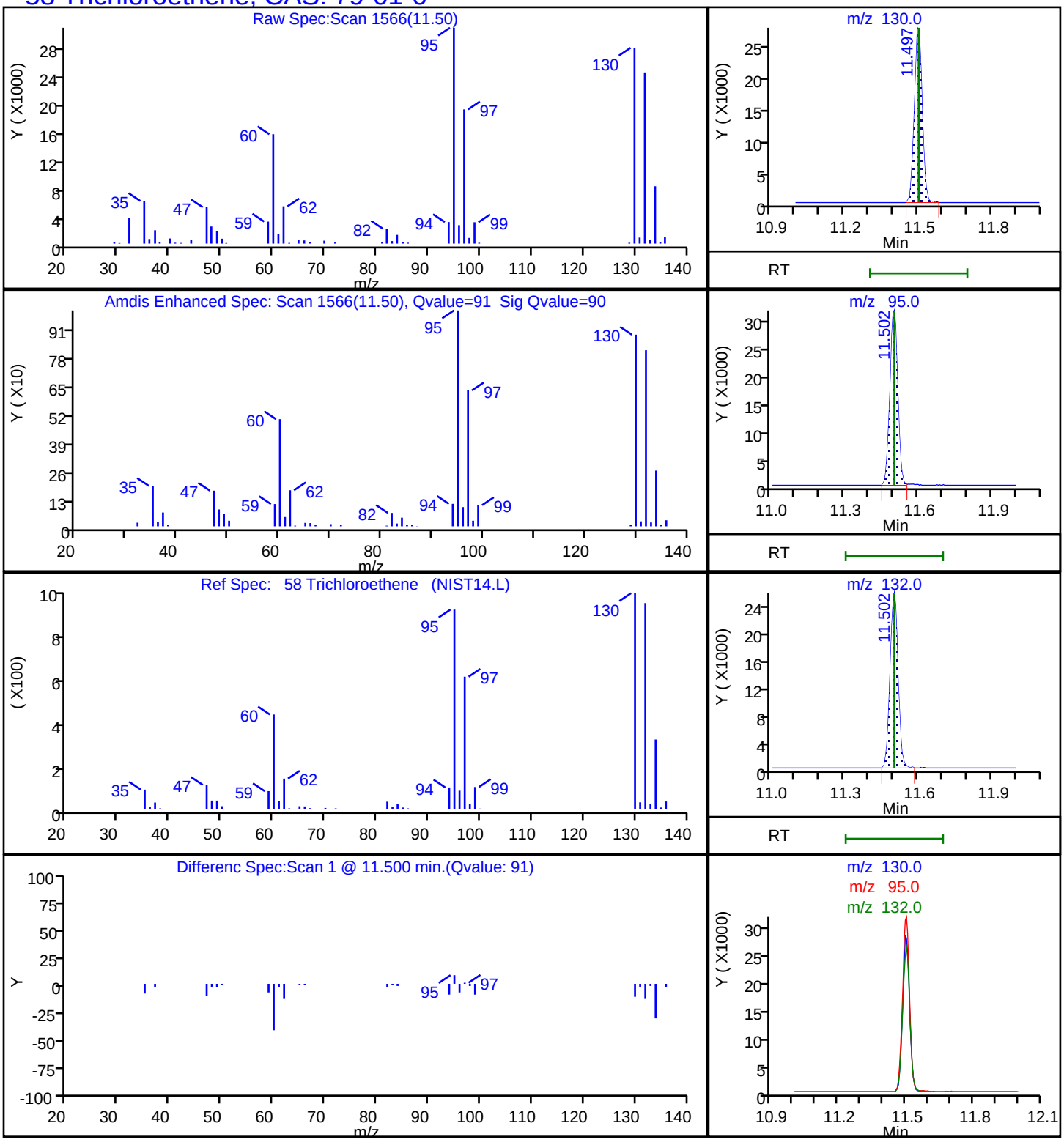
47 1,1,1-Trichloroethane, CAS: 71-55-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200629-15882.b\HF30P110.D		
Injection Date:	30-Jun-2020 22:18:30	Instrument ID:	MH
Lims ID:	140-19488-A-1	Lab Sample ID:	140-19488-1
Client ID:	BLDG A EFFLUENT		
Operator ID:	HMT	ALS Bottle#:	10 Worklist Smp#: 17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

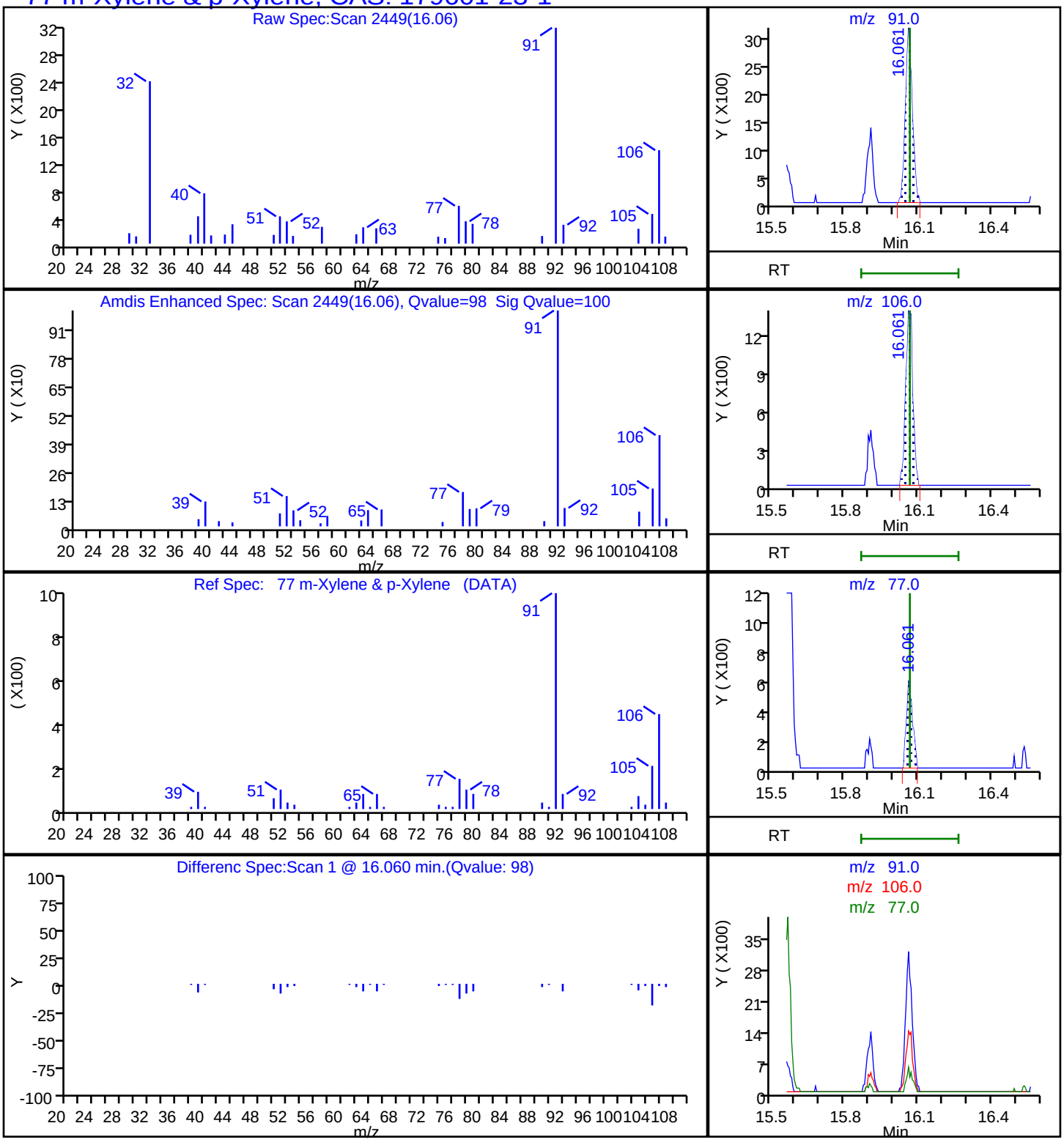
58 Trichloroethene, CAS: 79-01-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200629-15882.b\HF30P110.D				
Injection Date:	30-Jun-2020 22:18:30	Instrument ID:	MH		
Lims ID:	140-19488-A-1	Lab Sample ID:	140-19488-1		
Client ID:	BLDG A EFFLUENT				
Operator ID:	HMT	ALS Bottle#:	10	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

77 m-Xylene & p-Xylene, CAS: 179601-23-1

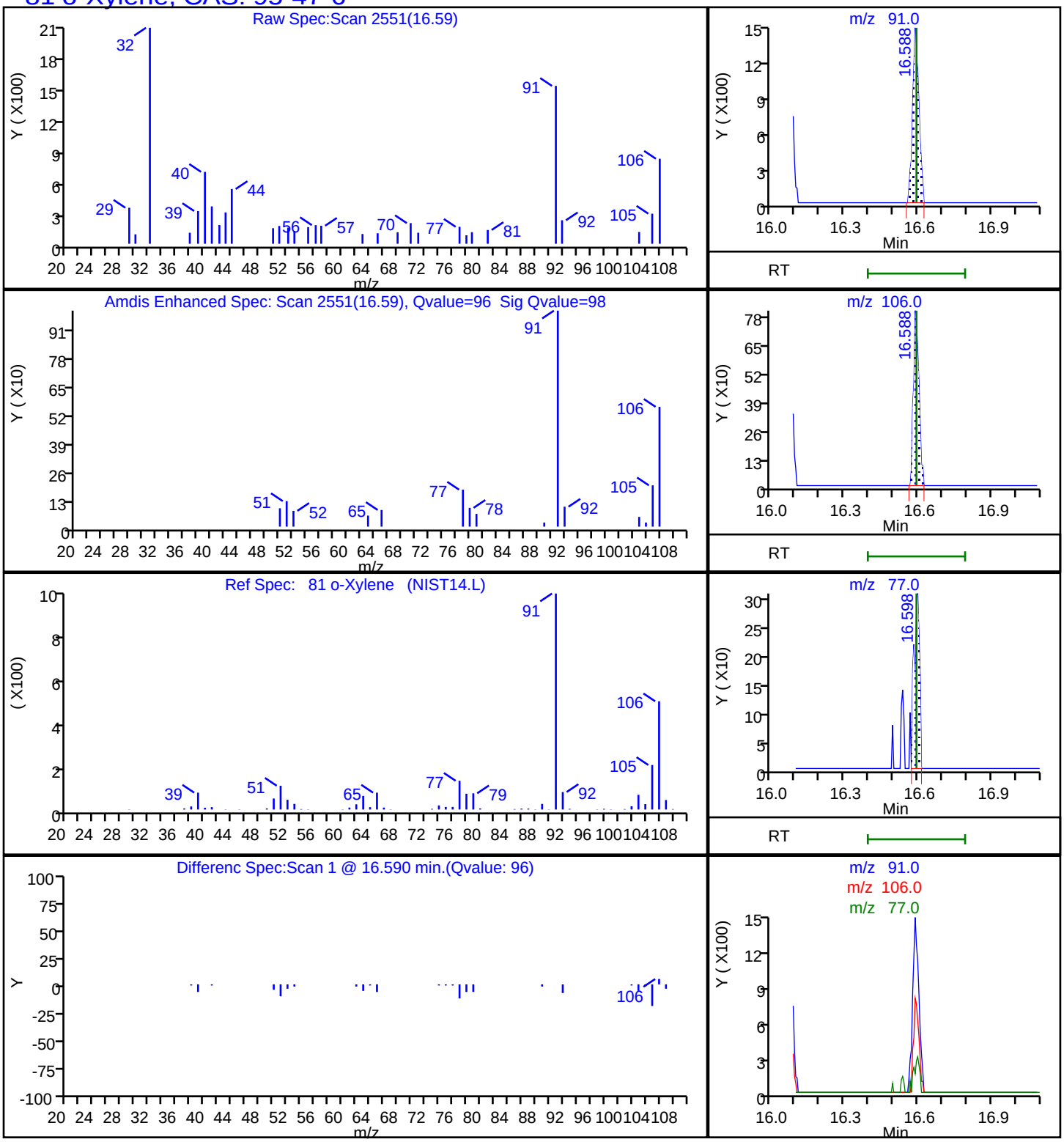


Report Date: 01-Jul-2020 12:34:42 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200629-15882.b\HF30P110.D				
Injection Date:	30-Jun-2020 22:18:30	Instrument ID:	MH		
Lims ID:	140-19488-A-1	Lab Sample ID:	140-19488-1		
Client ID:	BLDG A EFFLUENT				
Operator ID:	HMT	ALS Bottle#:	10	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

81 o-Xylene, CAS: 95-47-6



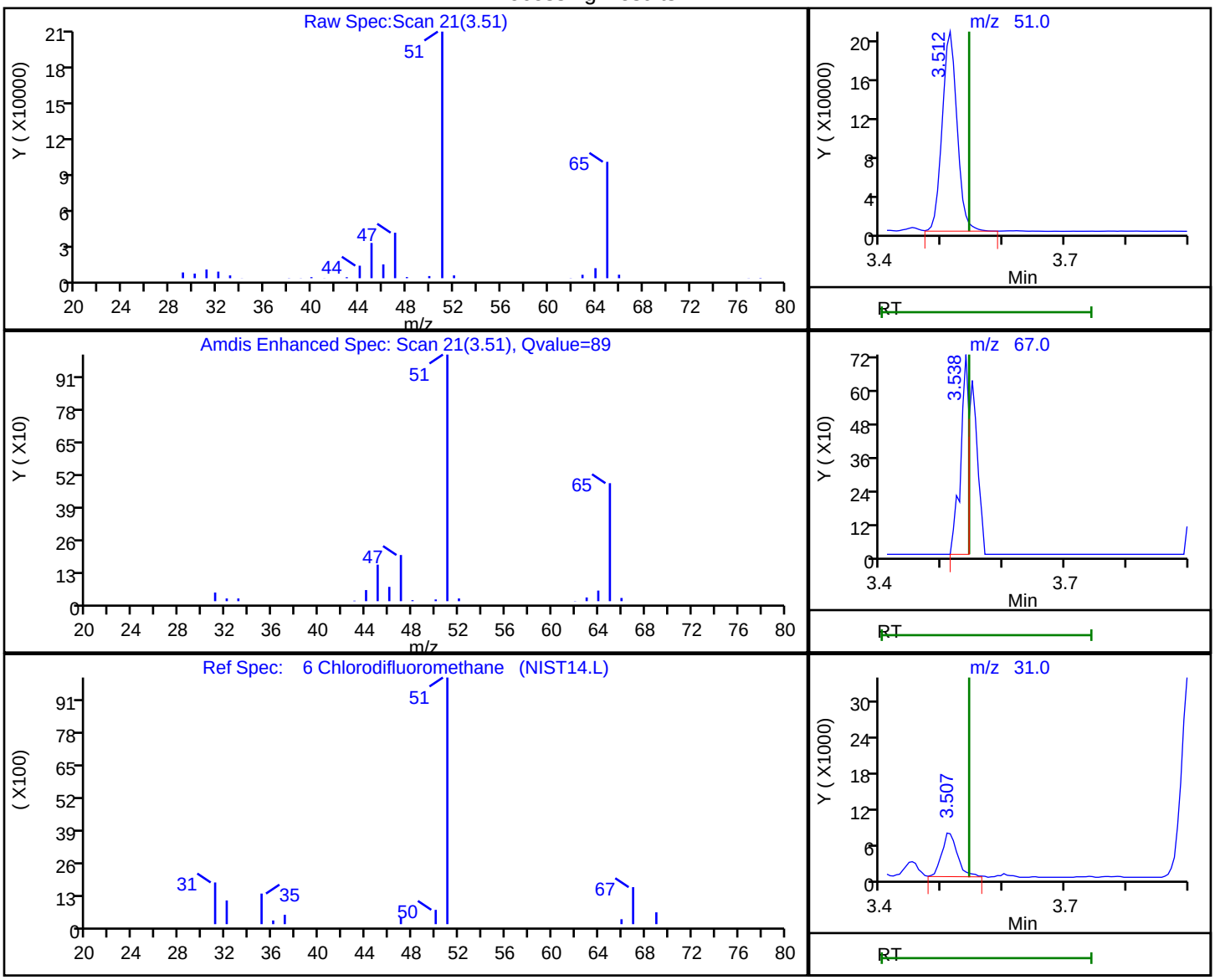
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200629-15882.b\HF30P110.D				
Injection Date:	30-Jun-2020 22:18:30	Instrument ID:	MH		
Lims ID:	140-19488-A-1	Lab Sample ID:	140-19488-1		
Client ID:	BLDG A EFFLUENT				
Operator ID:	HMT	ALS Bottle#:	10	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

6 Chlorodifluoromethane, CAS: 75-45-6

Processing Results



RT	Mass	Response	Amount
3.51	51.00	348827	3.357024
3.54	67.00	694	
3.51	31.00	13016	

Reviewer: khachitpongpanits, 01-Jul-2020 12:33:51

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

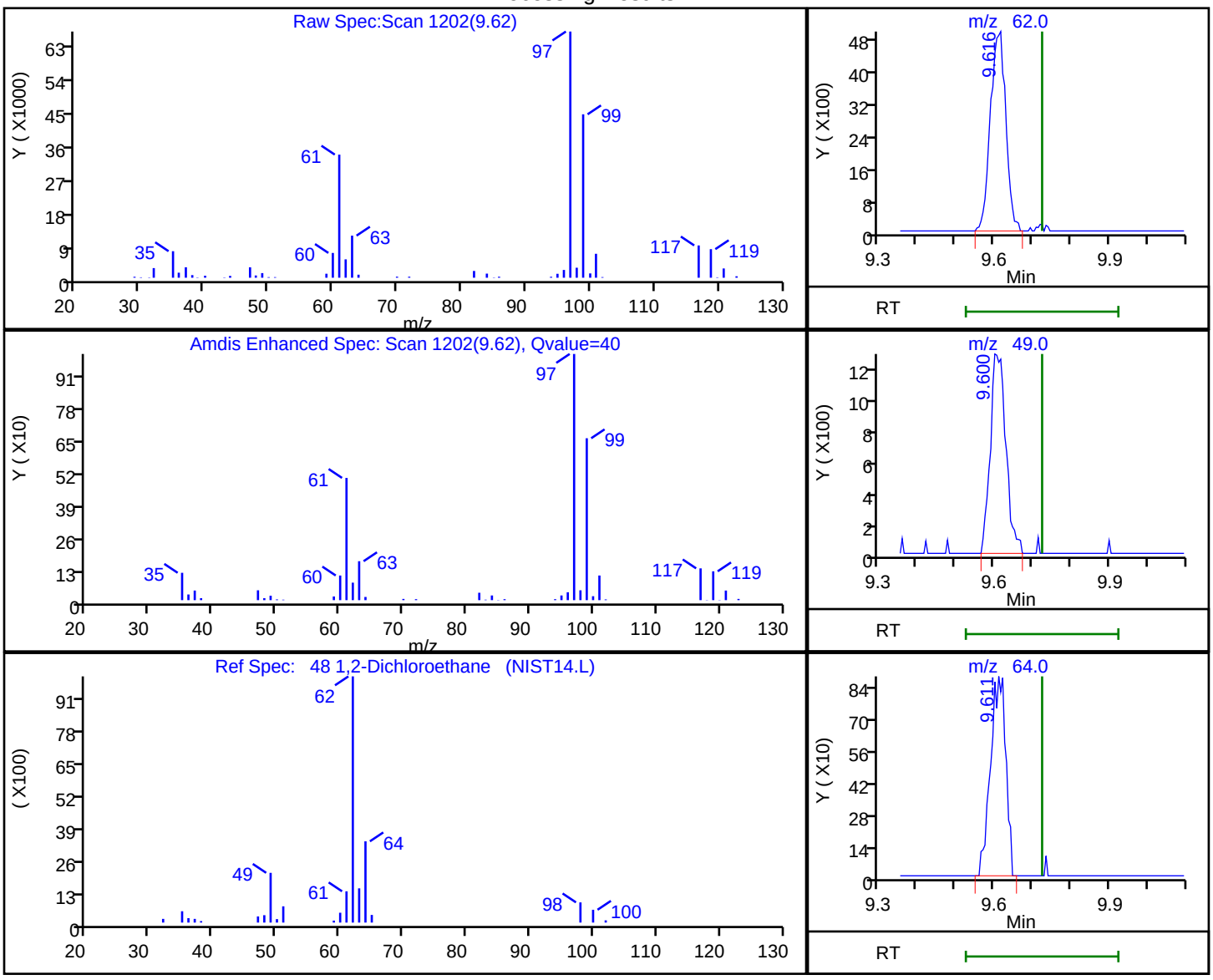
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200629-15882.b\HF30P110.D				
Injection Date:	30-Jun-2020 22:18:30	Instrument ID:	MH		
Lims ID:	140-19488-A-1	Lab Sample ID:	140-19488-1		
Client ID:	BLDG A EFFLUENT				
Operator ID:	HMT	ALS Bottle#:	10	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

48 1,2-Dichloroethane, CAS: 107-06-2

Processing Results



RT	Mass	Response	Amount
9.62	62.00	13891	0.184299
9.60	49.00	3622	
9.61	64.00	2458	

Reviewer: khachitpongpanits, 01-Jul-2020 12:34:02

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

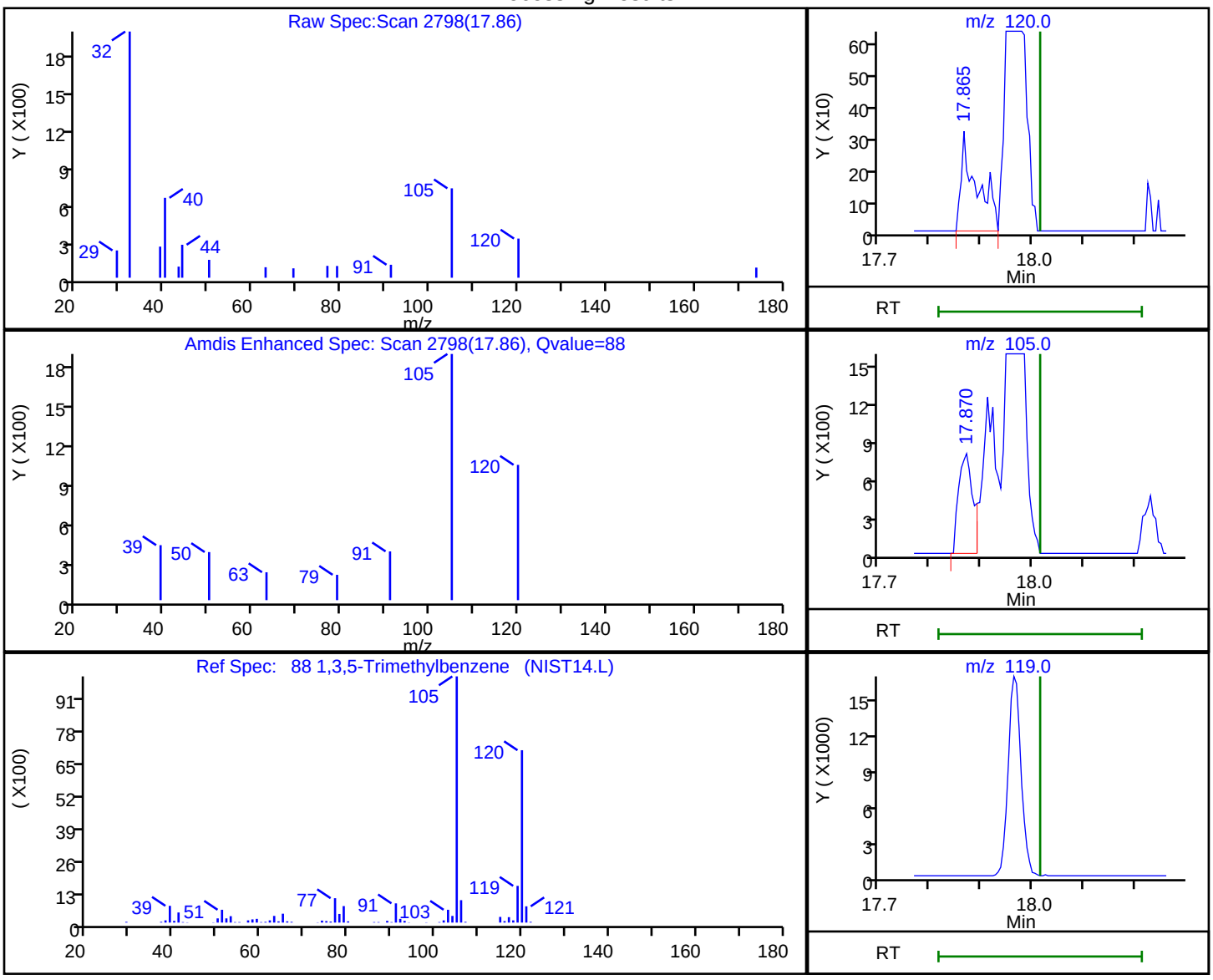
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200629-15882.b\HF30P110.D				
Injection Date:	30-Jun-2020 22:18:30	Instrument ID:	MH		
Lims ID:	140-19488-A-1	Lab Sample ID:	140-19488-1		
Client ID:	BLDG A EFFLUENT				
Operator ID:	HMT	ALS Bottle#:	10	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

88 1,3,5-Trimethylbenzene, CAS: 108-67-8

Processing Results



RT	Mass	Response	Amount
17.86	120.00	674	0.033995
17.87	105.00	1509	
18.01	119.00	0	

Reviewer: khachitpongpanits, 01-Jul-2020 12:34:10

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19488-1

SDG No.:

Client Sample ID: BLDG A MID GAC Lab Sample ID: 140-19488-2

Matrix: Air Lab File ID: HF30P111.D

Analysis Method: TO 15 LL Date Collected: 06/25/2020 09:43

Sample wt/vol: 100(mL) Date Analyzed: 06/30/2020 23:10

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 40629 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	2.1		0.40	0.040
56-23-5	Carbon tetrachloride	153.81	ND		0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	0.38	J	0.40	0.11
67-66-3	Chloroform	119.38	0.57		0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	28		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.29	J	0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	4.3		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	0.14	J	0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	20		0.40	0.040
100-41-4	Ethylbenzene	106.17	ND		0.40	0.065
75-09-2	Methylene Chloride	84.93	5.5	B	2.0	0.80
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.035
108-88-3	Toluene	92.14	0.42	J	0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	0.55		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	64		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	1.7		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.11
75-01-4	Vinyl chloride	62.50	ND	*	0.20	0.13
1330-20-7	Xylenes, Total	106.17	ND		0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	94		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19488-1

SDG No.:

Client Sample ID: BLDG A MID GAC Lab Sample ID: 140-19488-2

Matrix: Air Lab File ID: HF30P111.D

Analysis Method: TO 15 LL Date Collected: 06/25/2020 09:43

Sample wt/vol: 100(mL) Date Analyzed: 06/30/2020 23:10

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 40629 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	6.6		1.3	0.13
56-23-5	Carbon tetrachloride	153.81	ND		2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	1.3	J	1.4	0.39
67-66-3	Chloroform	119.38	2.8		2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	110		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	1.5	J	2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	17		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	0.55	J	1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	81		1.6	0.16
100-41-4	Ethylbenzene	106.17	ND		1.7	0.28
75-09-2	Methylene Chloride	84.93	19	B	6.9	2.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.24
108-88-3	Toluene	92.14	1.6	J	2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	2.2		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	350		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	9.0		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.54
75-01-4	Vinyl chloride	62.50	ND	*	0.51	0.33
1330-20-7	Xylenes, Total	106.17	ND		3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	94		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MH\20200629-15882.b\HF30P111.D				
Lims ID:	140-19488-A-2				
Client ID:	BLDG A MID GAC				
Sample Type:	Client				
Inject. Date:	30-Jun-2020 23:10:30	ALS Bottle#:	11	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0015882-018				
Misc. Info.:	140-19488-a-2				
Operator ID:	HMT	Instrument ID:	MH		
Method:	\\chromfs\Knoxville\ChromData\MH\20200629-15882.b\MH_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	01-Jul-2020 12:35:42	Calib Date:	16-Apr-2020 18:34:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC10.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1017				
First Level Reviewer: khachitpongpanits		Date:	01-Jul-2020 12:35:42		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.577	8.577	0.000	97	106279	4.00	
* 2 1,4-Difluorobenzene	114	10.784	10.779	0.005	95	762130	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.565	15.565	0.000	89	601156	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.213	17.234	-0.021	88	378459	3.75	
6 Chlorodifluoromethane	51	3.543	3.543	0.000	95	8543	0.0762	
8 Dichlorodifluoromethane	85	3.605	3.605	0.000	99	10120	0.0587	
27 1,1-Dichloroethene	96	5.703	5.709	-0.005	97	211962	4.09	
31 Methylene Chloride	84	6.050	6.055	-0.005	99	79642	1.10	
34 trans-1,2-Dichloroethene	96	6.851	6.851	0.000	96	5631	0.1102	
37 1,1-Dichloroethane	63	7.269	7.264	0.005	100	86817	0.8530	
42 cis-1,2-Dichloroethene	96	8.246	8.246	0.000	96	297929	5.58	
44 Chloroform	83	8.593	8.587	0.006	97	14351	0.1144	
47 1,1,1-Trichloroethane	97	9.611	9.611	0.000	96	1500703	12.8	
48 1,2-Dichloroethane	62	9.724	9.724	0.000	93	2210	0.0274	
51 Benzene	78	10.221	10.220	0.001	97	68253	0.4117	
58 Trichloroethene	130	11.502	11.502	0.000	92	22700	0.3349	
67 Toluene	91	13.580	13.580	0.000	91	11896	0.0842	

Reagents:

40MXISSURP_00004 Amount Added: 40.00 Units: mL Run Reagent

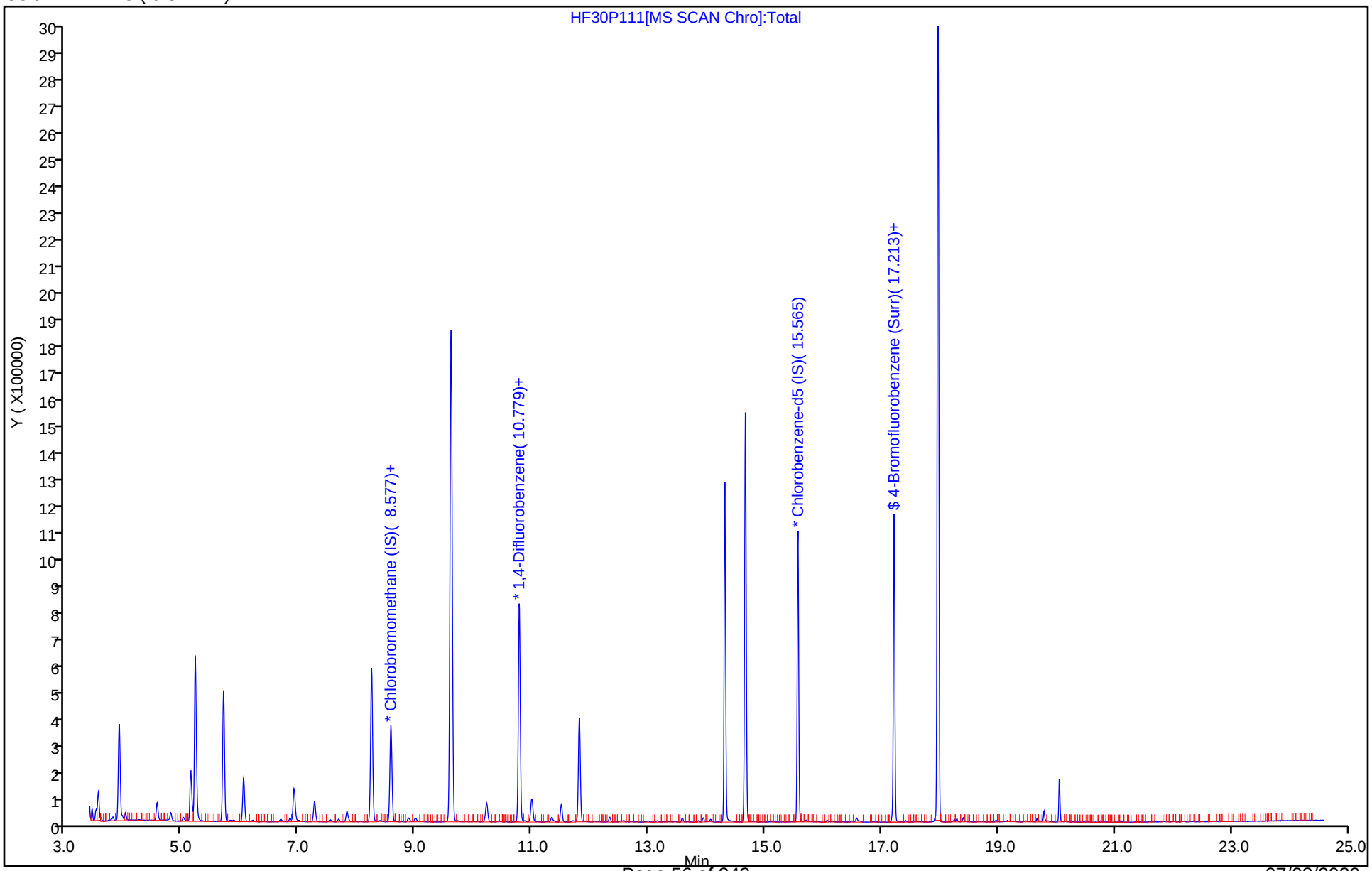
Report Date: 01-Jul-2020 12:35:42 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200629-15882.b\HF30P111.D

Injection Date:	30-Jun-2020 23:10:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	140-19488-A-2	Lab Sample ID:	140-19488-2	Worklist Smp#:	18
Client ID:	BLDG A MID GAC				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MH\20200629-15882.b\HF30P111.D				
Lims ID:	140-19488-A-2				
Client ID:	BLDG A MID GAC				
Sample Type:	Client				
Inject. Date:	30-Jun-2020 23:10:30	ALS Bottle#:	11	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0015882-018				
Misc. Info.:	140-19488-a-2				
Operator ID:	HMT	Instrument ID:	MH		
Method:	\\chromfs\Knoxville\ChromData\MH\20200629-15882.b\MH_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	01-Jul-2020 12:35:42	Calib Date:	16-Apr-2020 18:34:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC10.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1017				

First Level Reviewer: khachitpongpanits Date: 01-Jul-2020 12:35:42

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.00	3.75	93.81

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200629-15882.b\HF30P111.D

Injection Date: 30-Jun-2020 23:10:30 Instrument ID: MH

Lims ID: 140-19488-A-2 Lab Sample ID: 140-19488-2

Client ID: BLDG A MID GAC

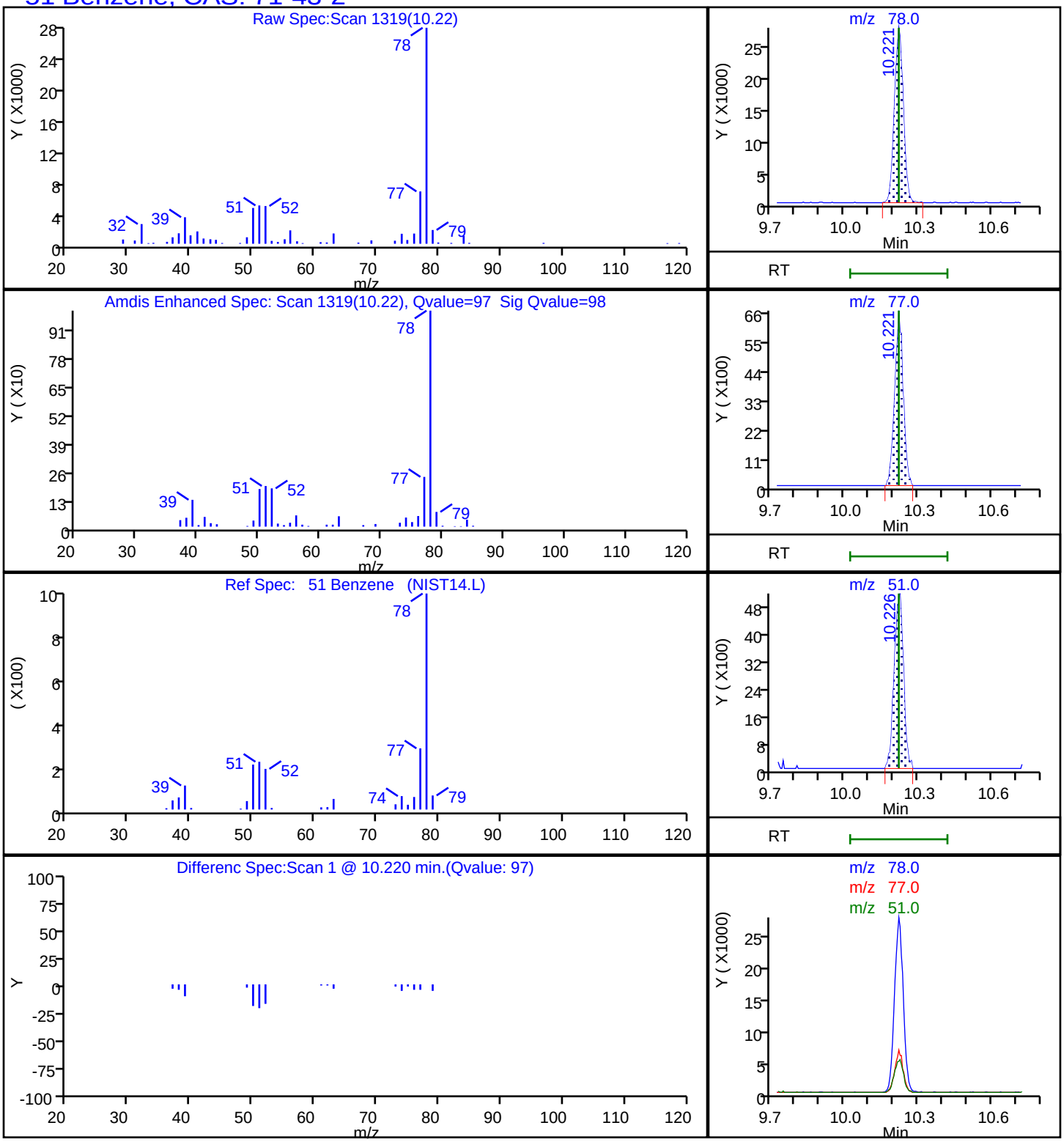
Operator ID: HMT ALS Bottle#: 11 Worklist Smp#: 18

Purge Vol: 500.000 mL Dil. Factor: 1.0000

Method: MH_TO15 Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm) Detector MS SCAN

51 Benzene, CAS: 71-43-2



Eurofins TestAmerica, Knoxville

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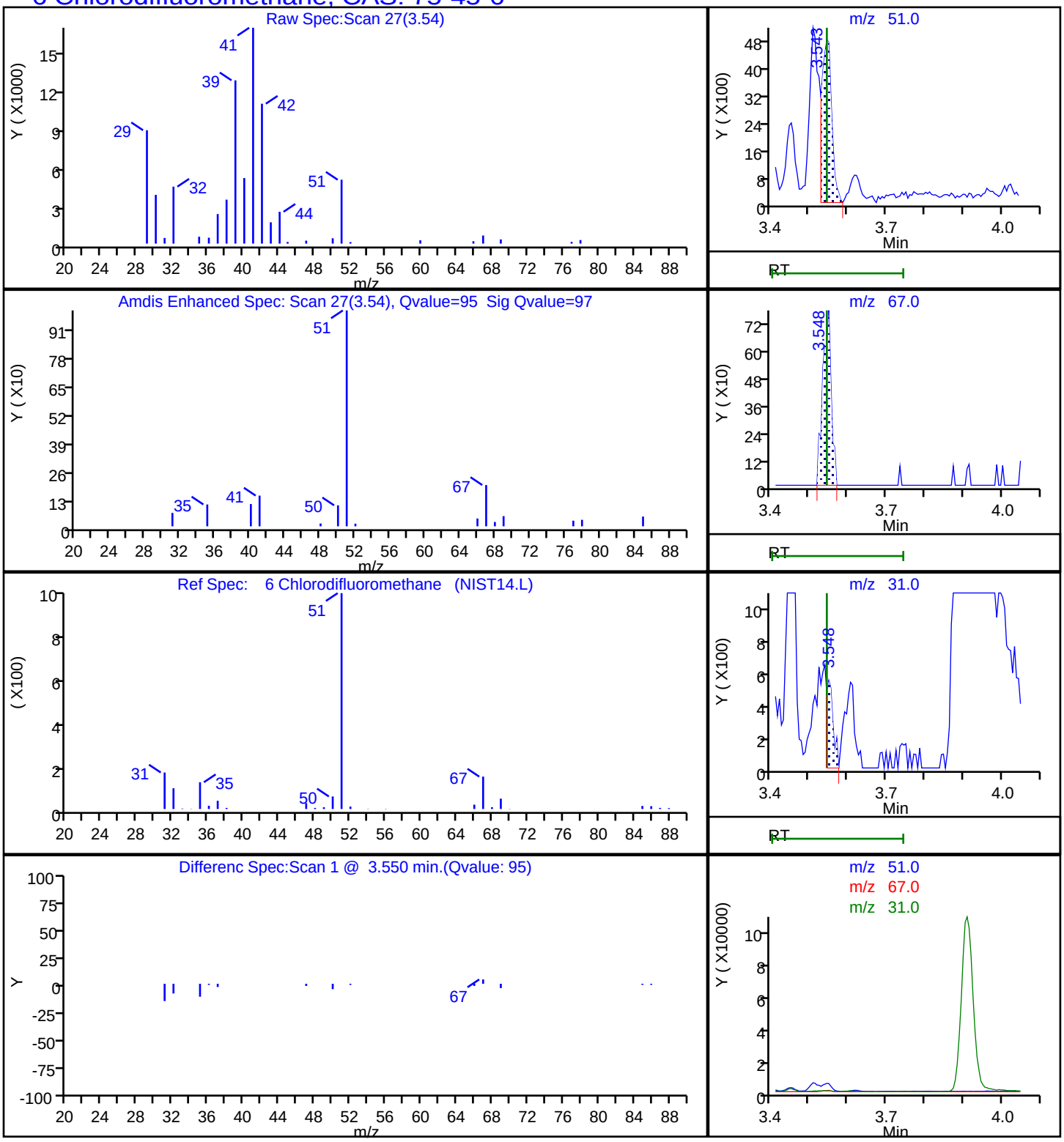
Lims ID:	140-19488-A-2	Lab Sample ID:	140-19488-2		
Client ID:	BLDG A MID GAC				
Operator ID:	HMT	ALS Bottle#:	11	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

6 Chlorodifluoromethane, CAS: 75-45-6

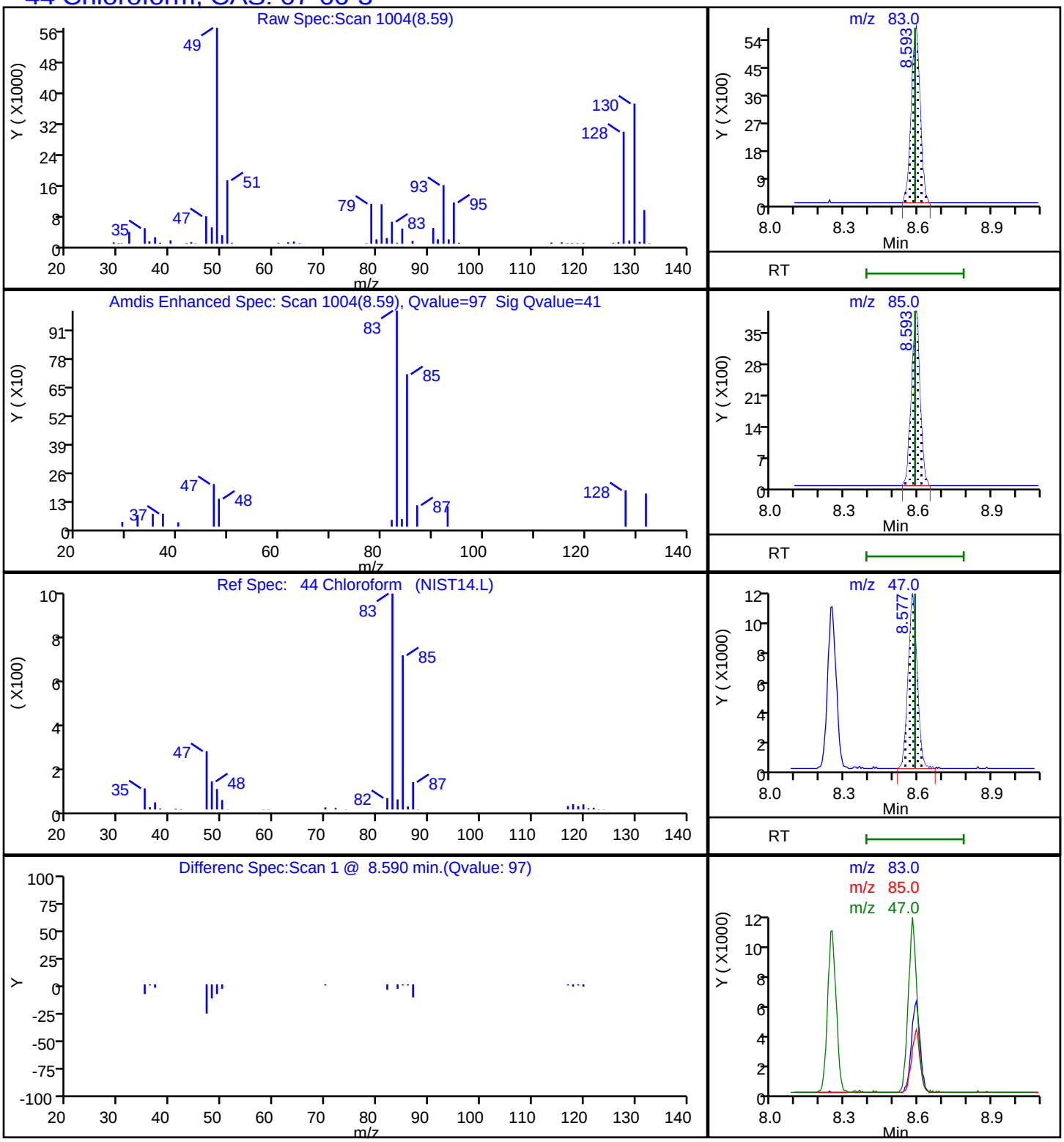


Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200629-15882.b\HF30P111.D

Injection Date:	30-Jun-2020 23:10:30	Instrument ID:	MH		
Lims ID:	140-19488-A-2	Lab Sample ID:	140-19488-2		
Client ID:	BLDG A MID GAC				
Operator ID:	HMT	ALS Bottle#:	11	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

44 Chloroform, CAS: 67-66-3



Eurofins TestAmerica, Knoxville

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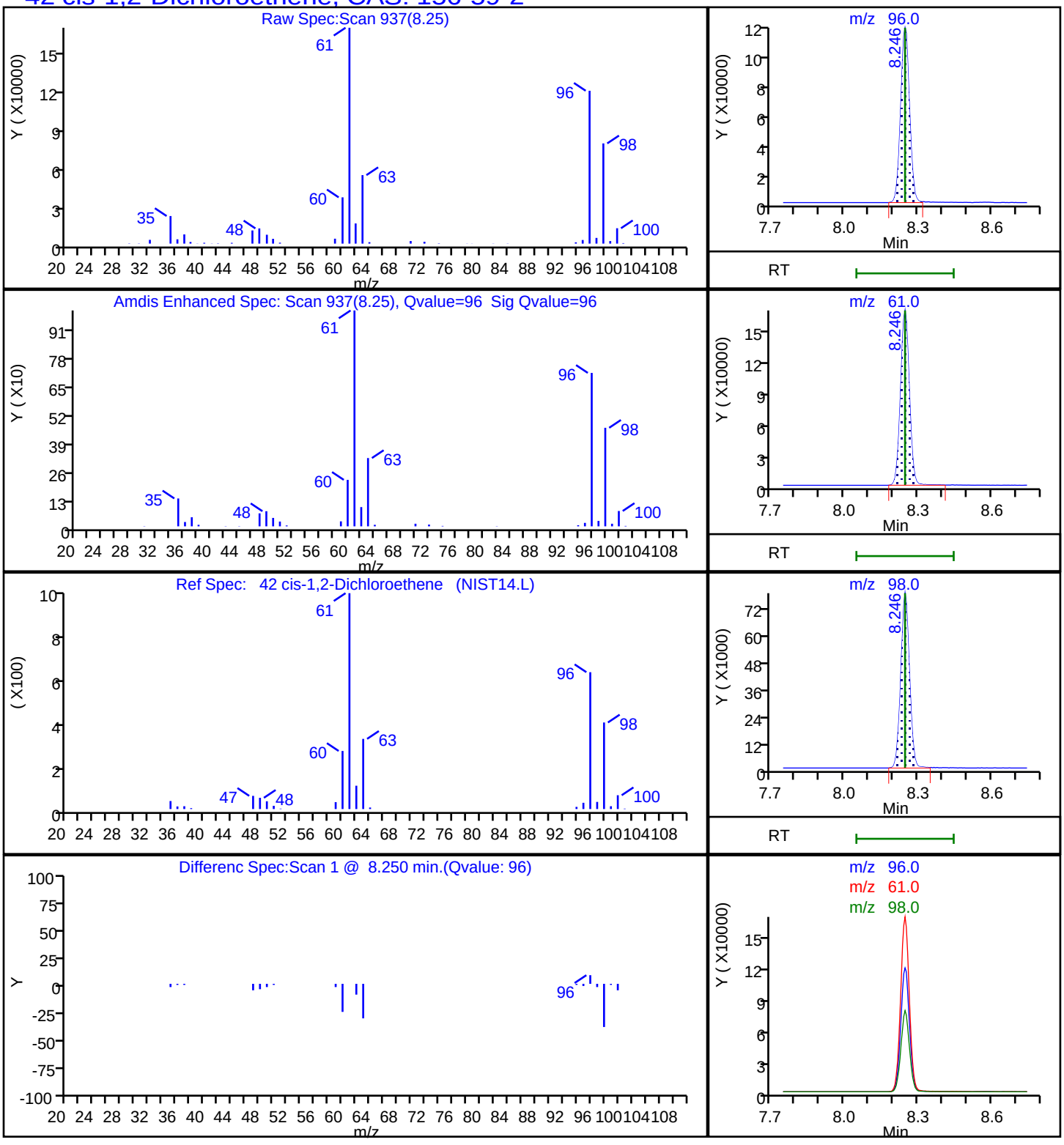
Lims ID:	140-19488-A-2	Lab Sample ID:	140-19488-2		
Client ID:	BLDG A MID GAC				
Operator ID:	HMT	ALS Bottle#:	11	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

42 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins TestAmerica, Knoxville

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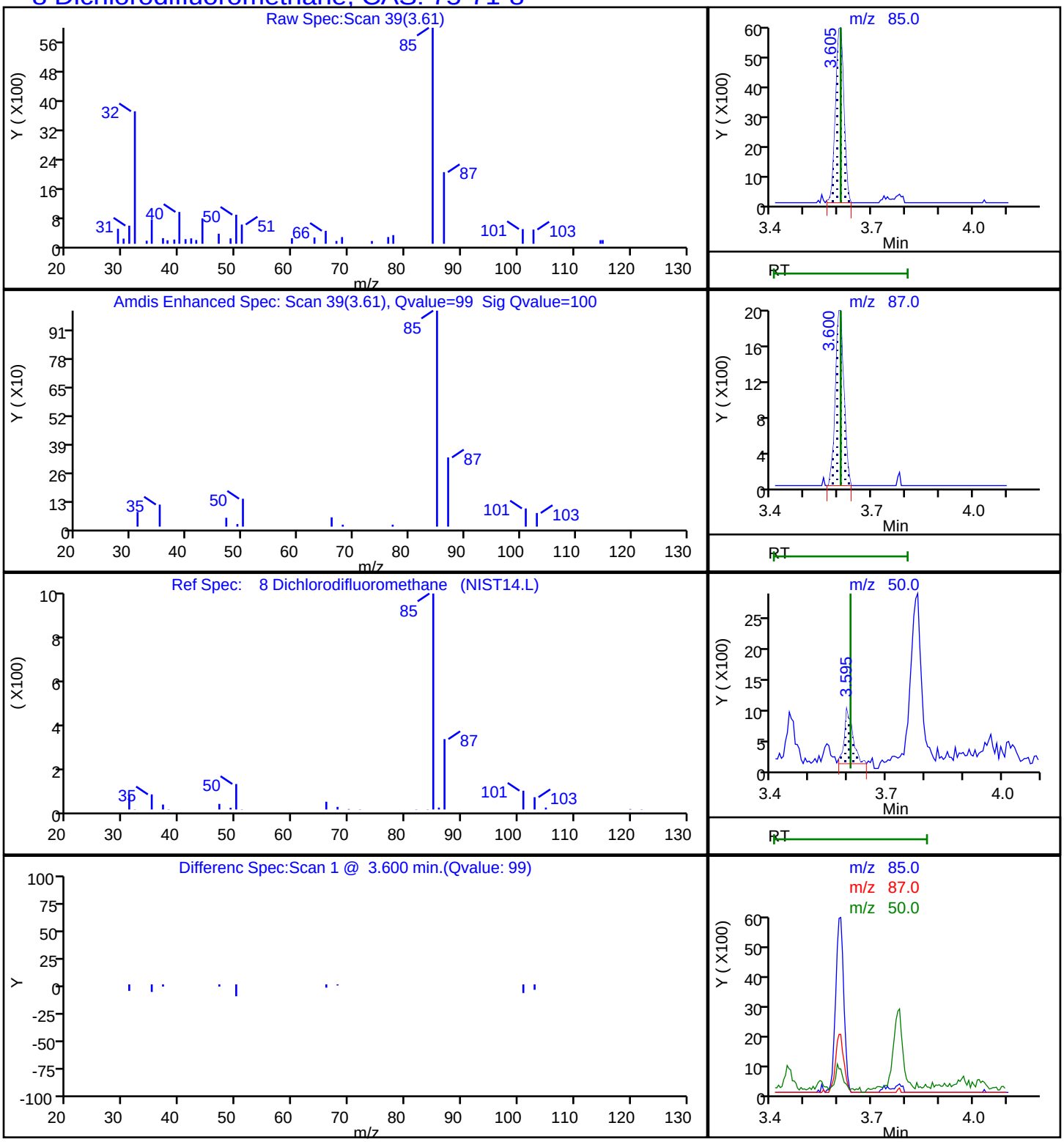
Lims ID:	140-19488-A-2	Lab Sample ID:	140-19488-2		
Client ID:	BLDG A MID GAC				
Operator ID:	HMT	ALS Bottle#:	11	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

8 Dichlorodifluoromethane, CAS: 75-71-8



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200629-15882.b\HF30P111.D				
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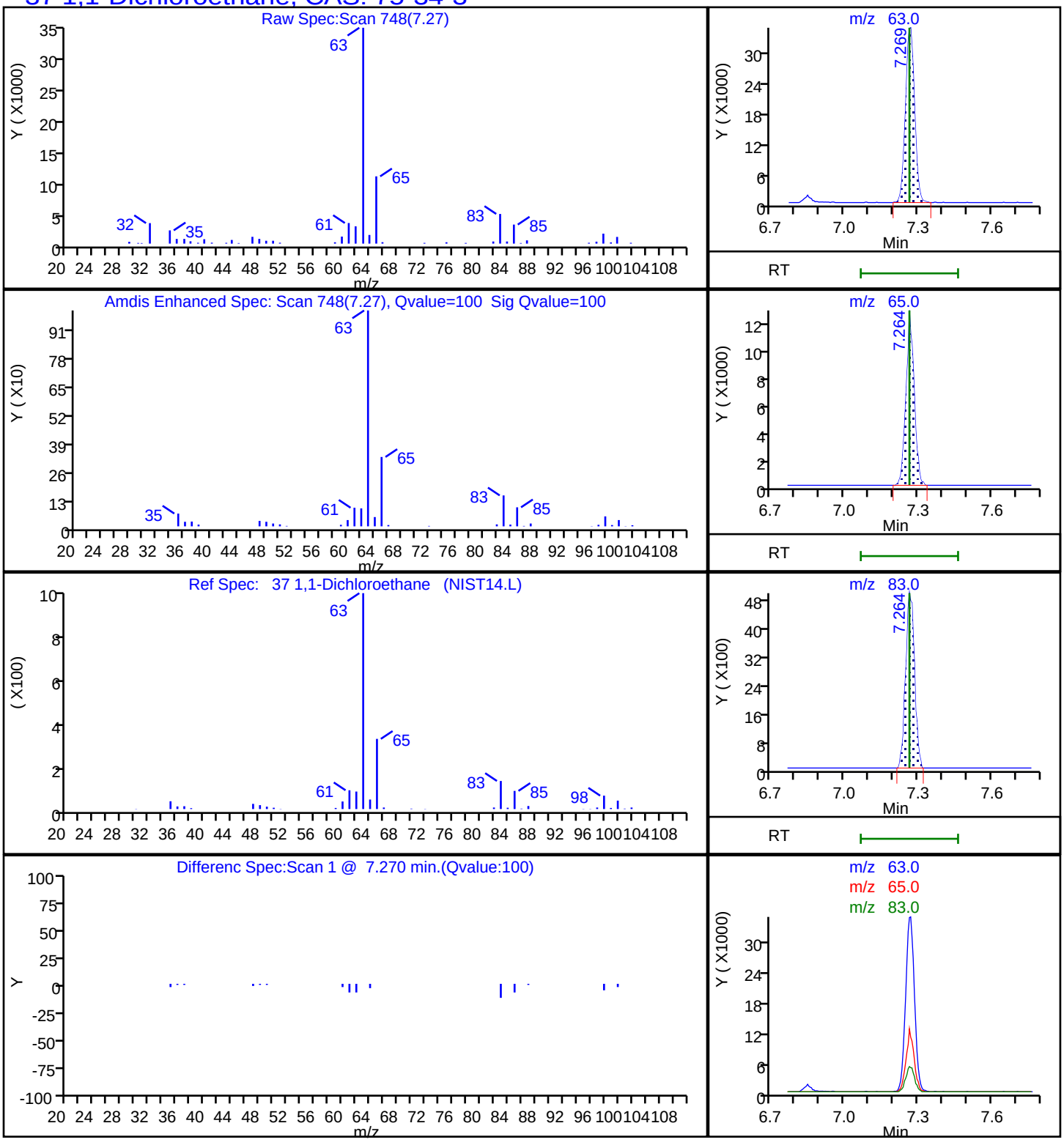
Lims ID:	140-19488-A-2	Lab Sample ID:	140-19488-2		
Client ID:	BLDG A MID GAC				
Operator ID:	HMT	ALS Bottle#:	11	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

37 1,1-Dichloroethane, CAS: 75-34-3



Report Date: 01-Jul-2020 12:35:42 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Knoxville

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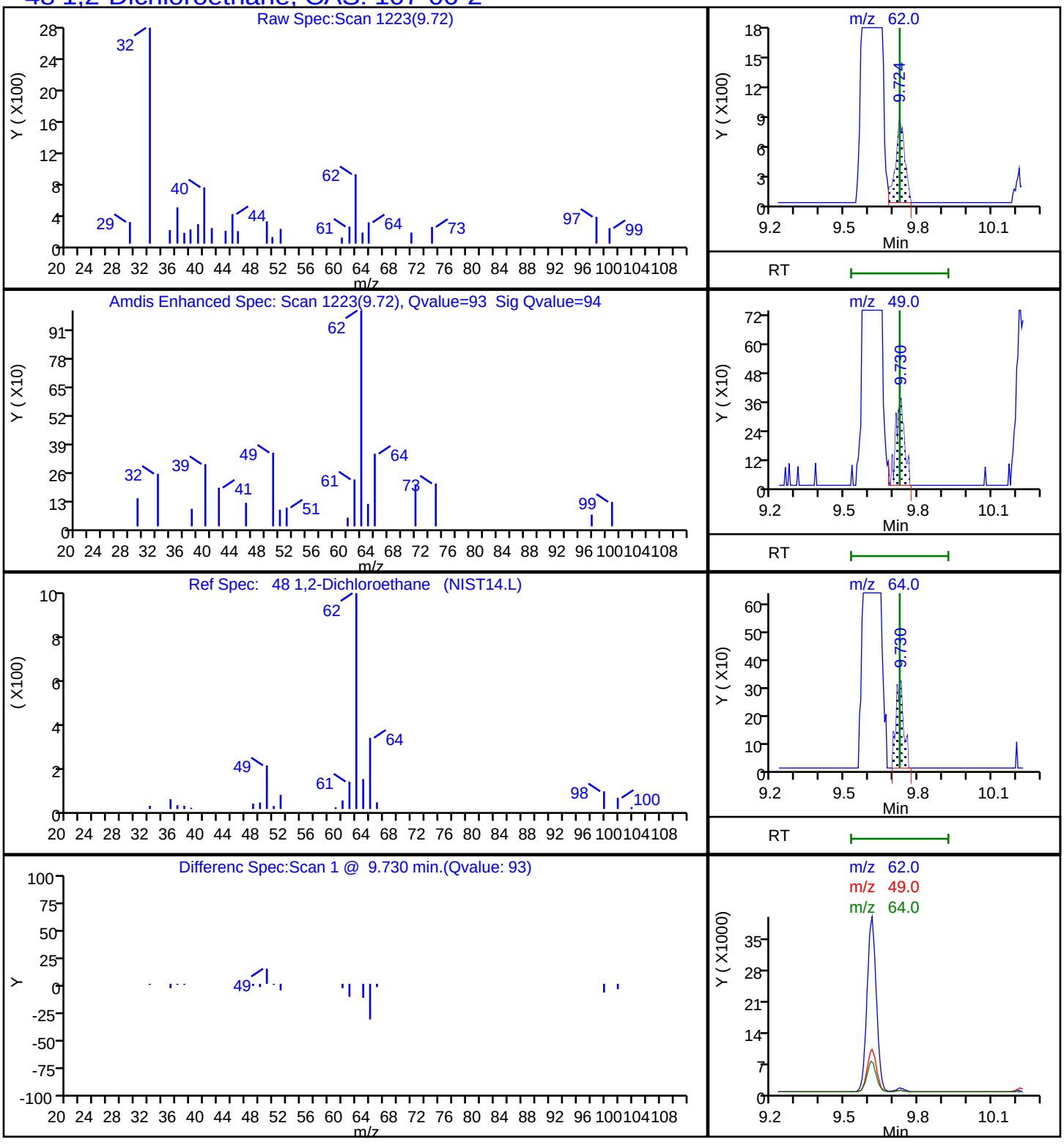
Lims ID:	140-19488-A-2	Lab Sample ID:	140-19488-2		
Client ID:	BLDG A MID GAC				
Operator ID:	HMT	ALS Bottle#:	11	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

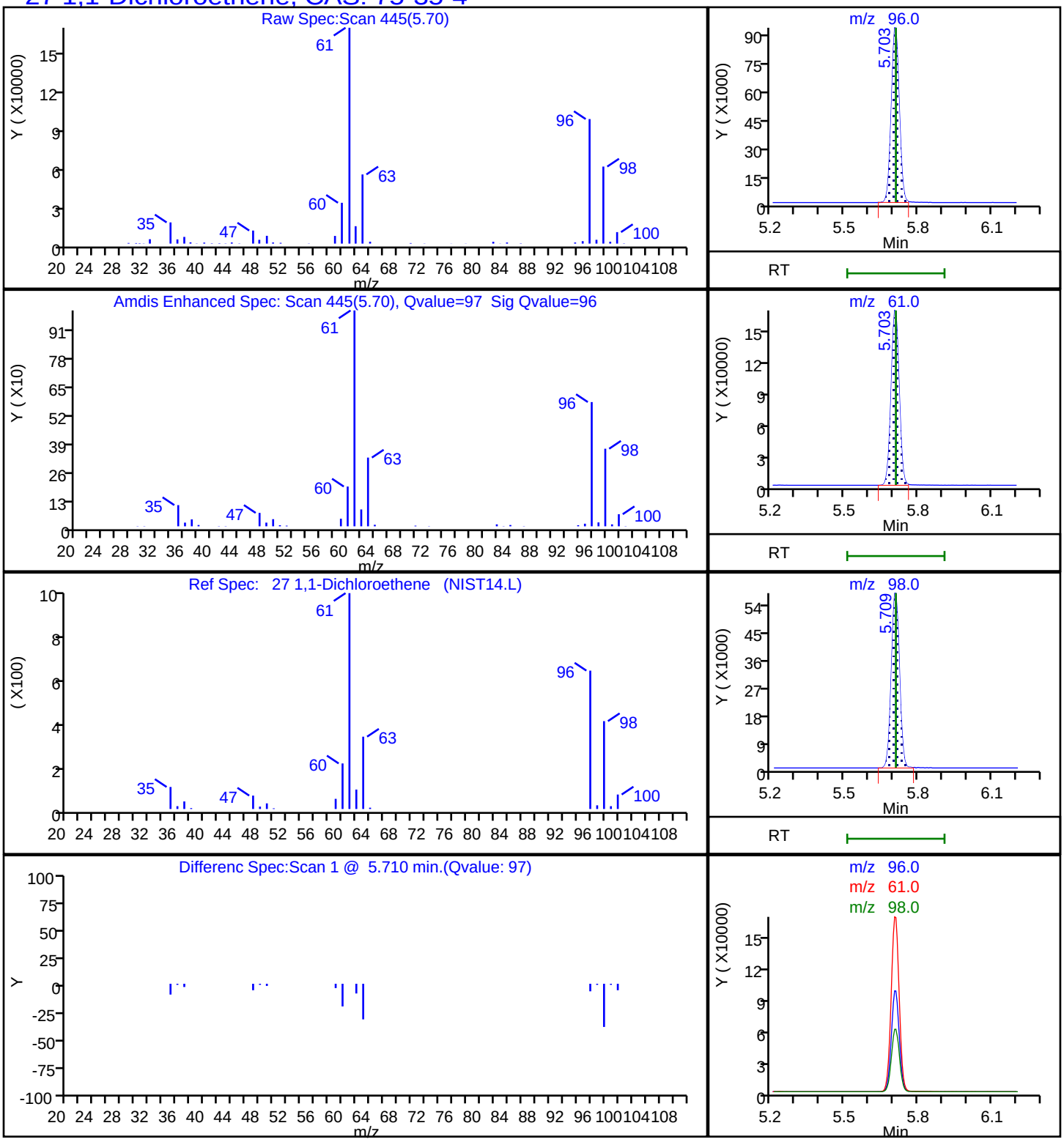
48 1,2-Dichloroethane, CAS: 107-06-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200629-15882.b\HF30P111.D				
Injection Date:	30-Jun-2020 23:10:30	Instrument ID:	MH		
Lims ID:	140-19488-A-2	Lab Sample ID:	140-19488-2		
Client ID:	BLDG A MID GAC				
Operator ID:	HMT	ALS Bottle#:	11	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

27 1,1-Dichloroethene, CAS: 75-35-4



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200629-15882.b\HF30P111.D				
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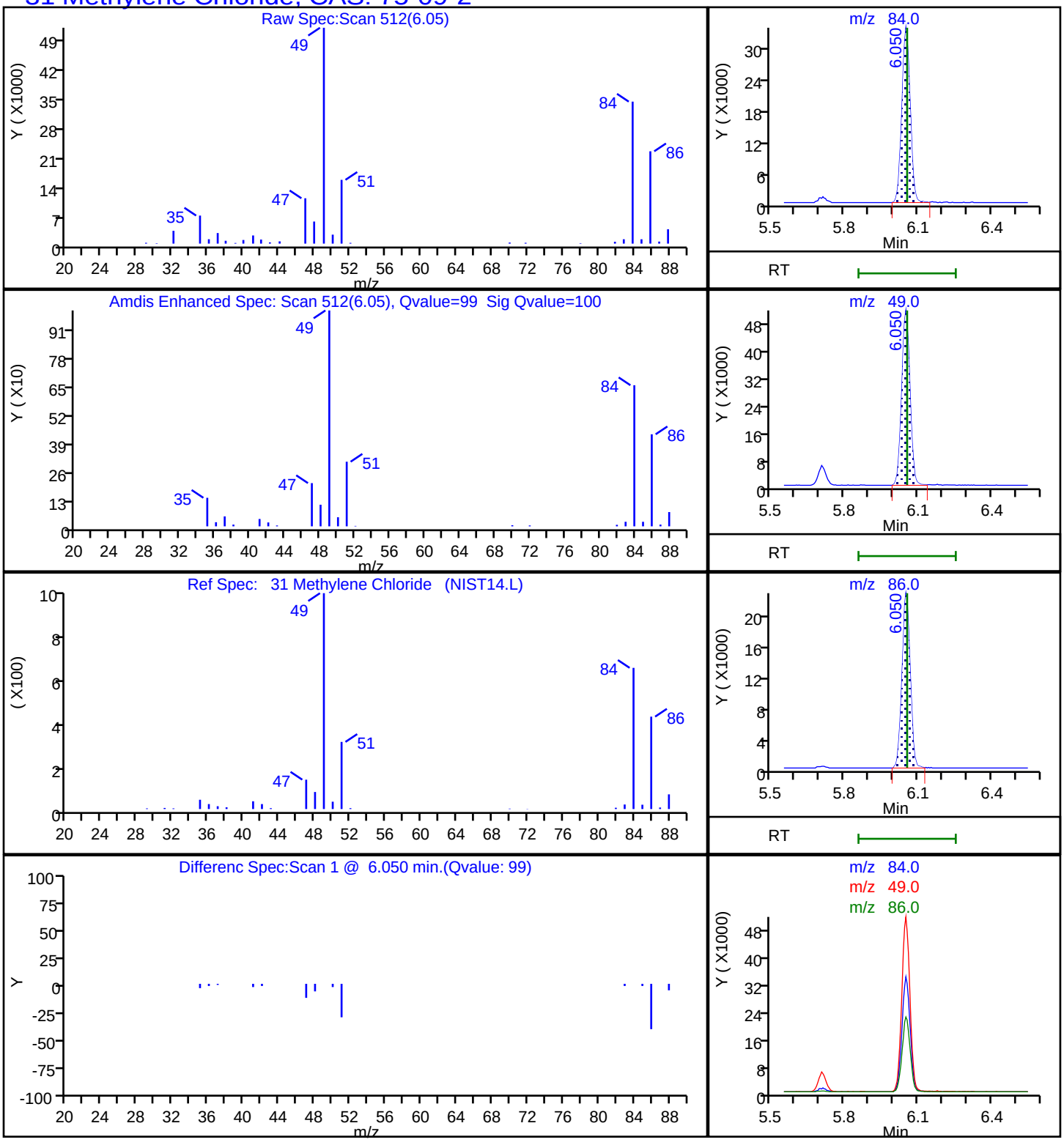
Lims ID:	140-19488-A-2	Lab Sample ID:	140-19488-2		
Client ID:	BLDG A MID GAC				
Operator ID:	HMT	ALS Bottle#:	11	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

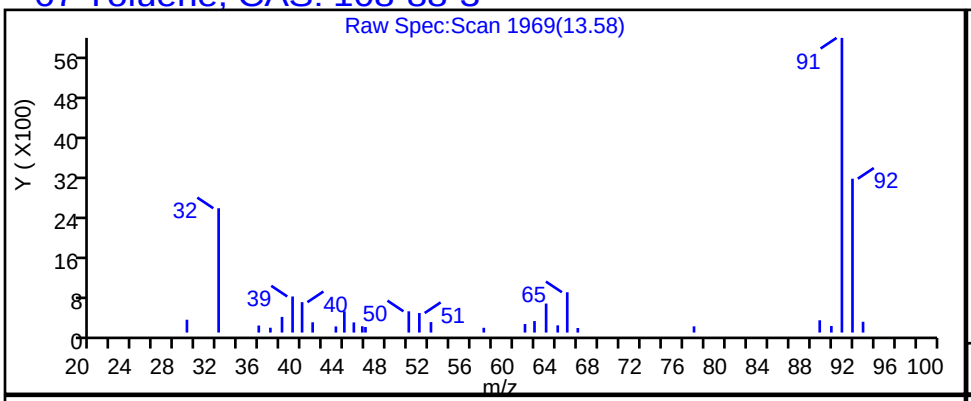
31 Methylene Chloride, CAS: 75-09-2

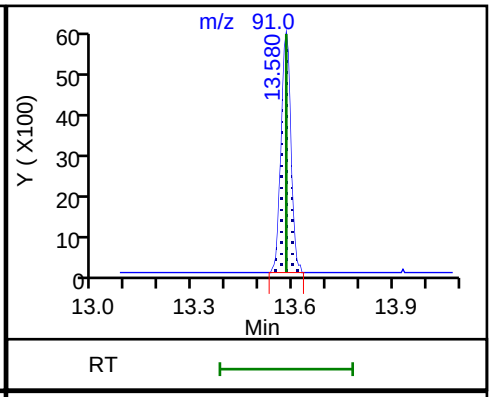


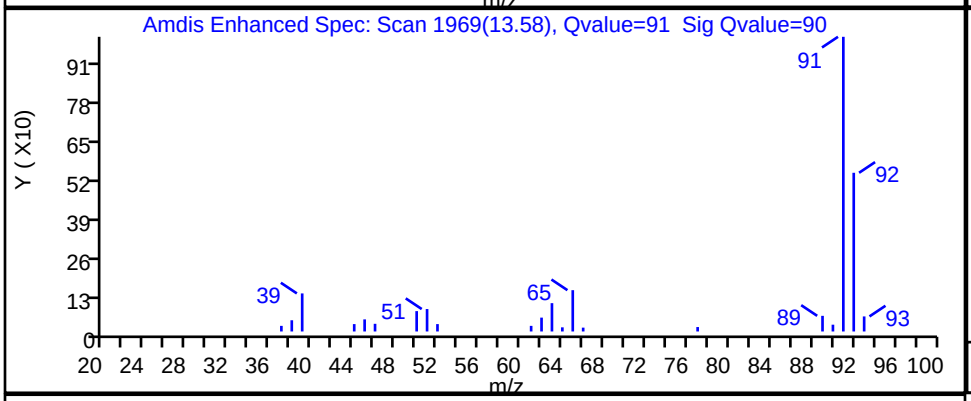
Eurofins TestAmerica, Knoxville

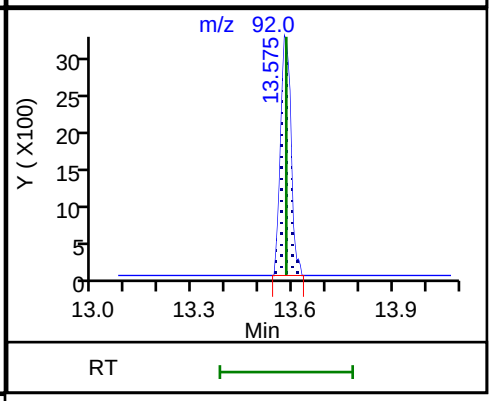
Data File:	\\chromfs\Knoxville\ChromData\MH\20200629-15882.b\HF30P111.D		
Injection Date:	30-Jun-2020 23:10:30	Instrument ID:	MH
Lims ID:	140-19488-A-2	Lab Sample ID:	140-19488-2
Client ID:	BLDG A MID GAC		
Operator ID:	HMT	ALS Bottle#:	11 Worklist Smp#: 18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

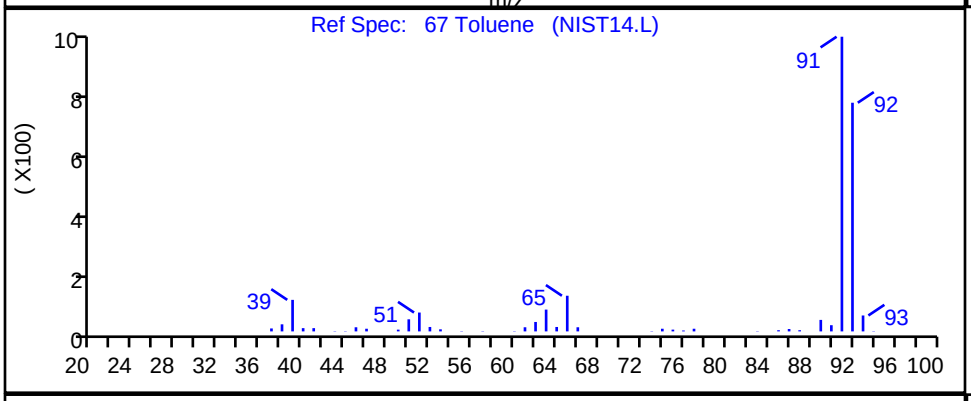
67 Toluene, CAS: 108-88-3

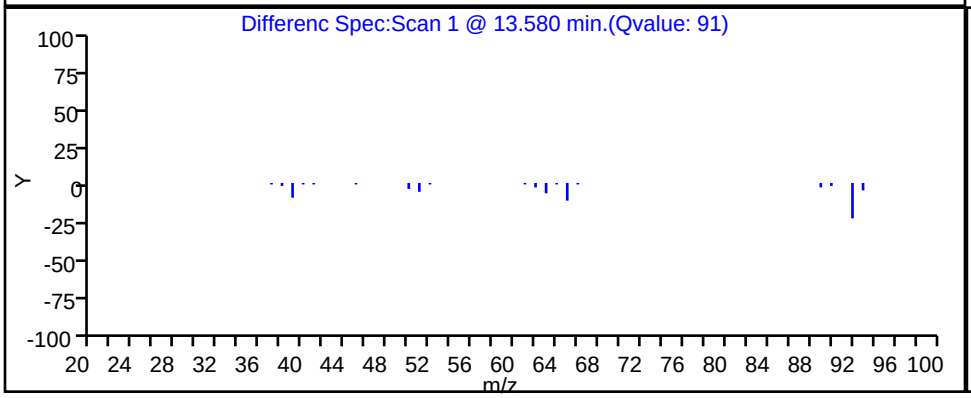


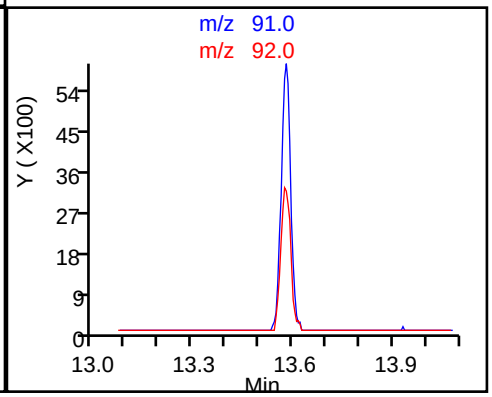








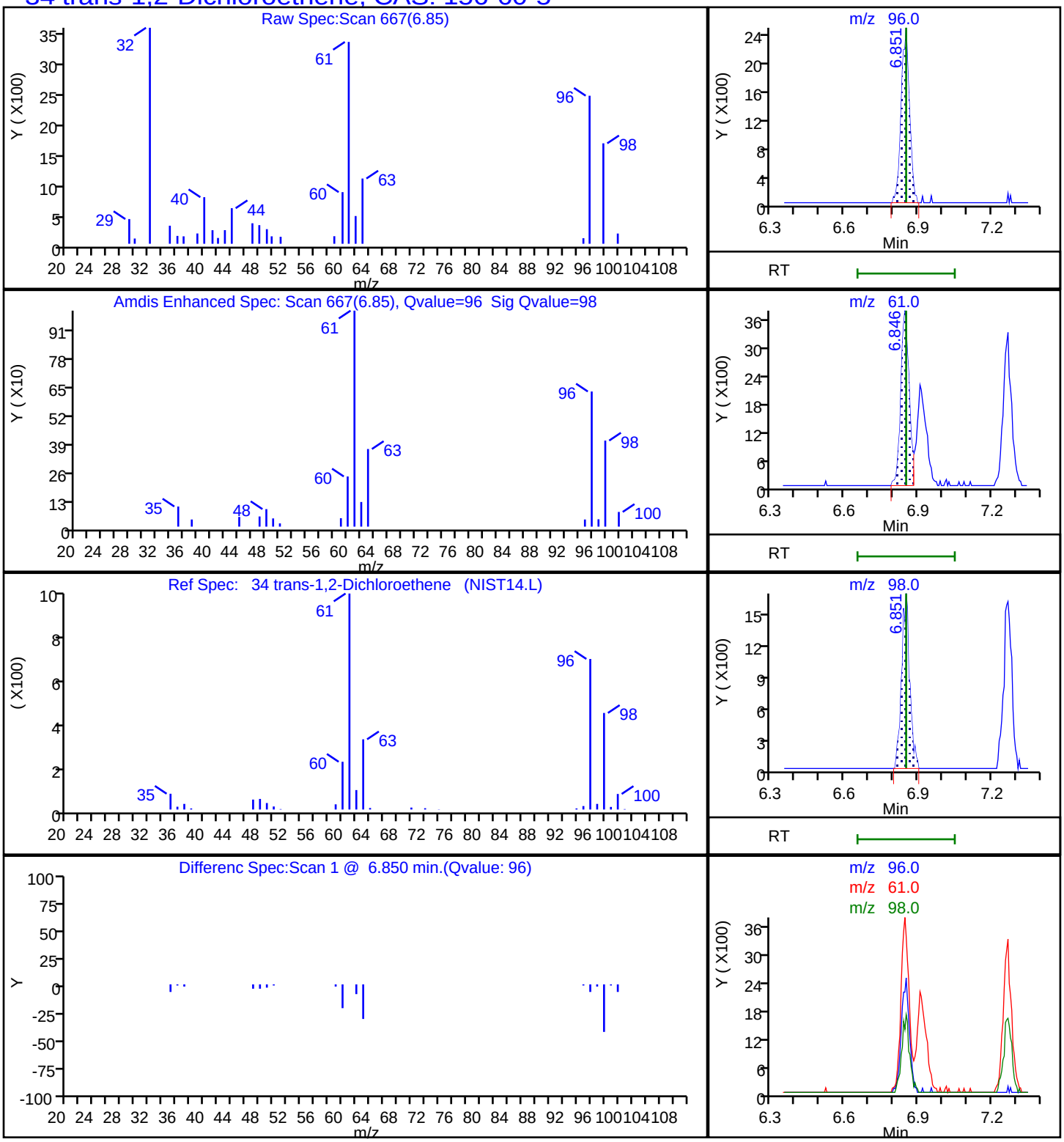




Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200629-15882.b\HF30P111.D				
Injection Date:	30-Jun-2020 23:10:30	Instrument ID:	MH		
Lims ID:	140-19488-A-2	Lab Sample ID:	140-19488-2		
Client ID:	BLDG A MID GAC				
Operator ID:	HMT	ALS Bottle#:	11	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

34 trans-1,2-Dichloroethene, CAS: 156-60-5



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200629-15882.b\HF30P111.D				
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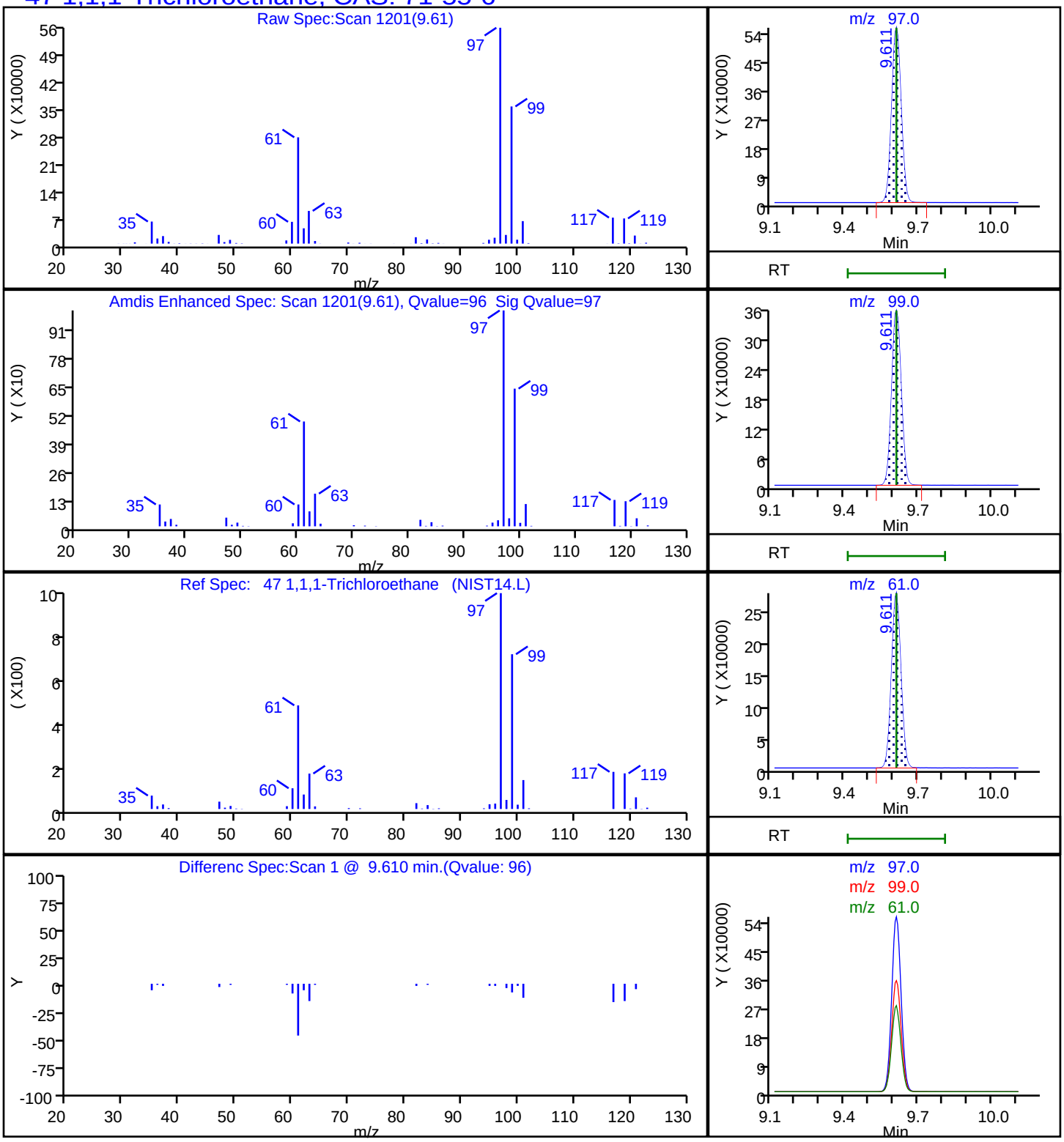
Lims ID:	140-19488-A-2	Lab Sample ID:	140-19488-2		
Client ID:	BLDG A MID GAC				
Operator ID:	HMT	ALS Bottle#:	11	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

47 1,1,1-Trichloroethane, CAS: 71-55-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200629-15882.b\HF30P111.D				
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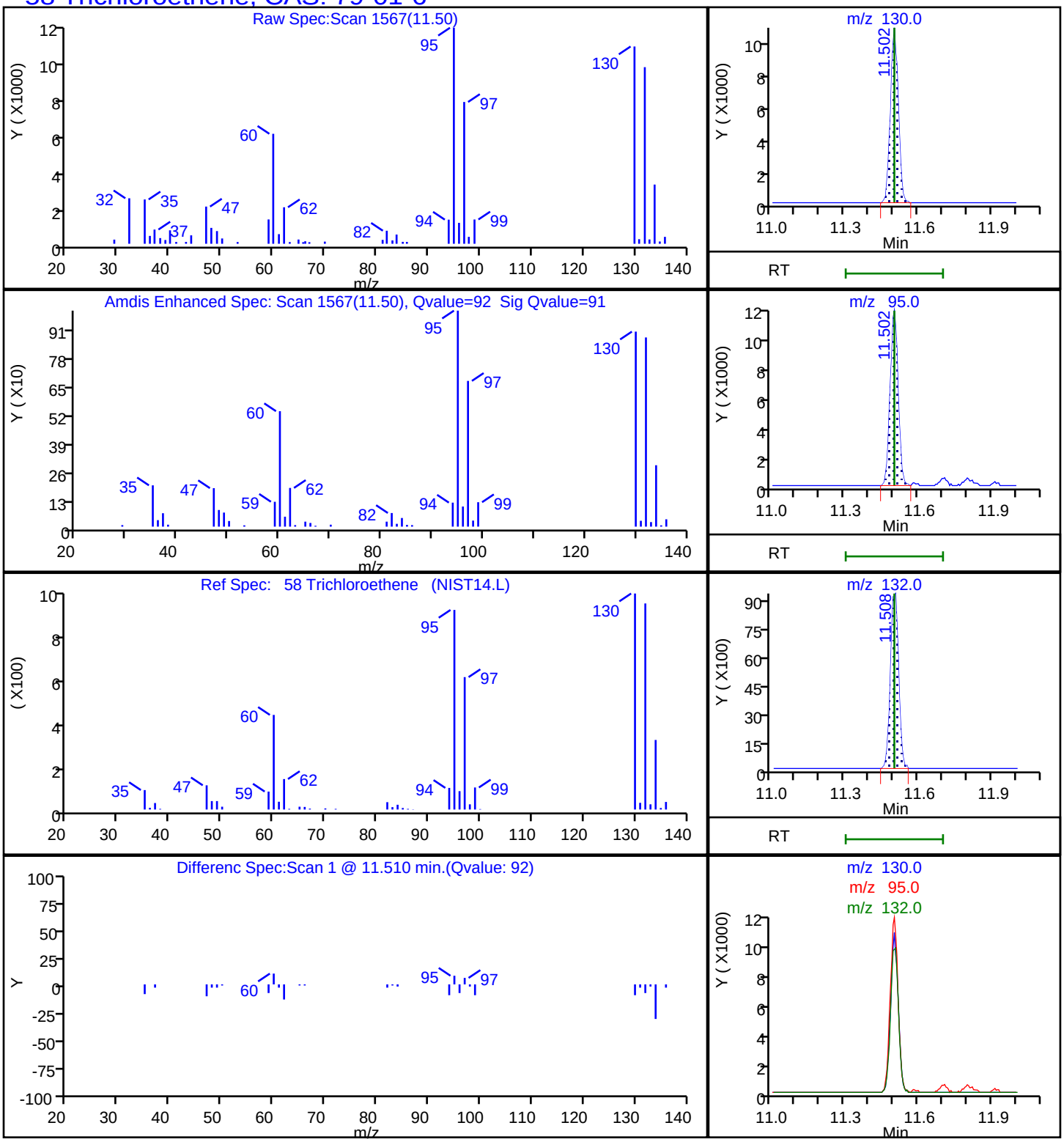
Lims ID:	140-19488-A-2	Lab Sample ID:	140-19488-2		
Client ID:	BLDG A MID GAC				
Operator ID:	HMT	ALS Bottle#:	11	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

58 Trichloroethene, CAS: 79-01-6



Eurofins TestAmerica, Knoxville

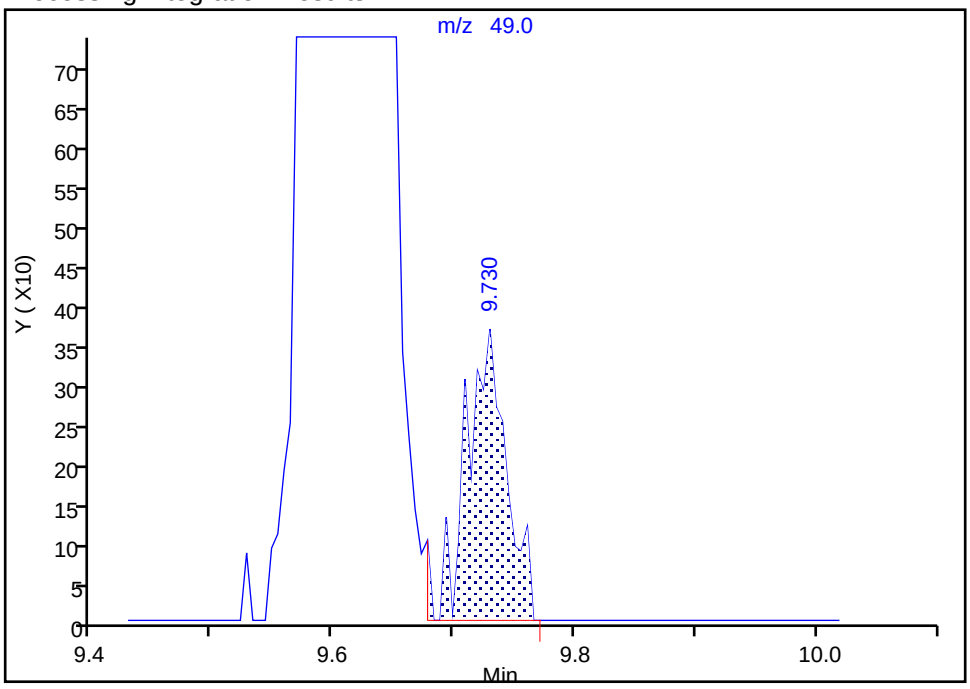
Data File:	\\chromfs\Knoxville\ChromData\MH\20200629-15882.b\HF30P111.D				
Injection Date:	30-Jun-2020 23:10:30	Instrument ID:	MH		
Lims ID:	140-19488-A-2	Lab Sample ID:	140-19488-2		
Client ID:	BLDG A MID GAC				
Operator ID:	HMT	ALS Bottle#:	11	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

48 1,2-Dichloroethane, CAS: 107-06-2

Signal: 2

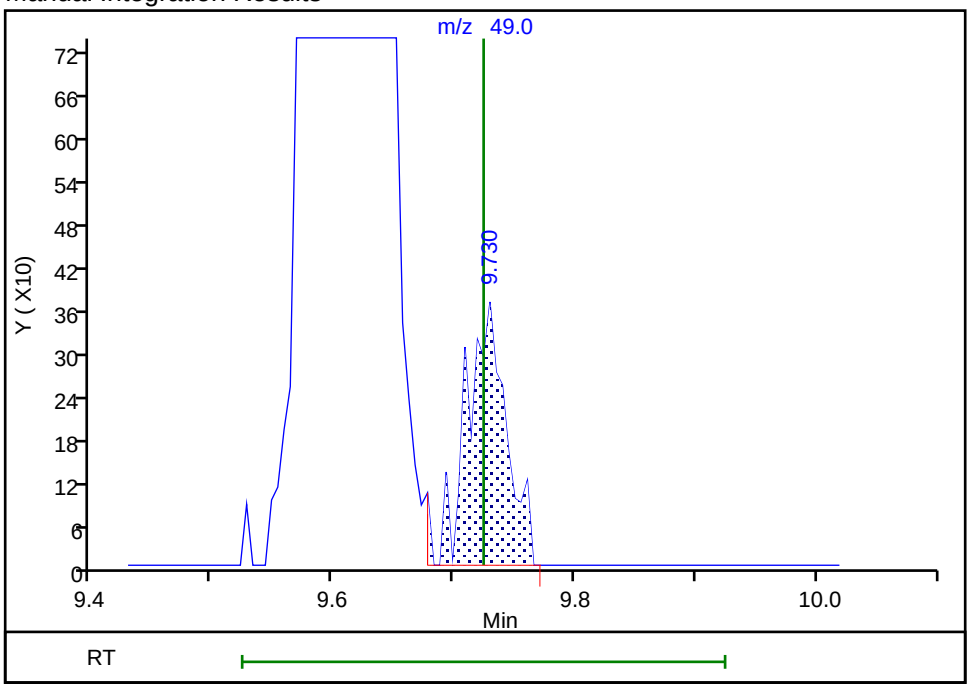
Processing Integration Results

RT: 9.73
Area: 853
Amount: 0.027395
Amount Units: ppb v/v



Manual Integration Results

RT: 9.73
Area: 853
Amount: 0.027395
Amount Units: ppb v/v



Reviewer: khachitpongpanits, 01-Jul-2020 12:35:09
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Knoxville

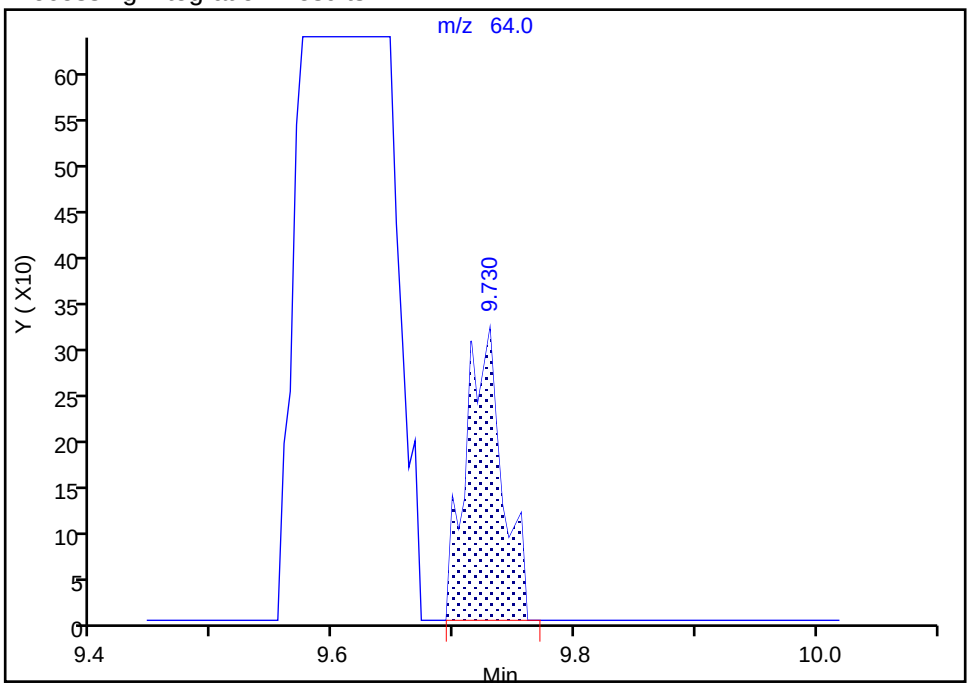
Data File:	\\chromfs\Knoxville\ChromData\MH\20200629-15882.b\HF30P111.D				
Injection Date:	30-Jun-2020 23:10:30	Instrument ID:	MH		
Lims ID:	140-19488-A-2	Lab Sample ID:	140-19488-2		
Client ID:	BLDG A MID GAC				
Operator ID:	HMT	ALS Bottle#:	11	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

48 1,2-Dichloroethane, CAS: 107-06-2

Signal: 3

Processing Integration Results

RT: 9.73
Area: 666
Amount: 0.027395
Amount Units: ppb v/v



Manual Integration Results

RT: 9.73
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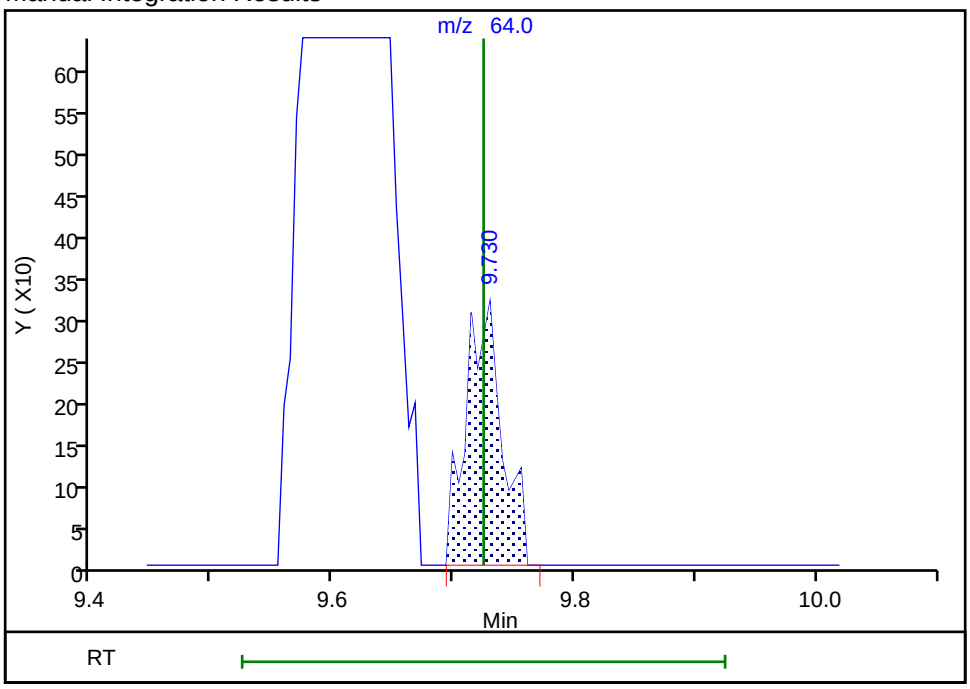
Amount: 0.027395
Amount Units: ppb v/v



Reviewer: khachitpongpanits, 01-Jul-2020 12:35:09

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

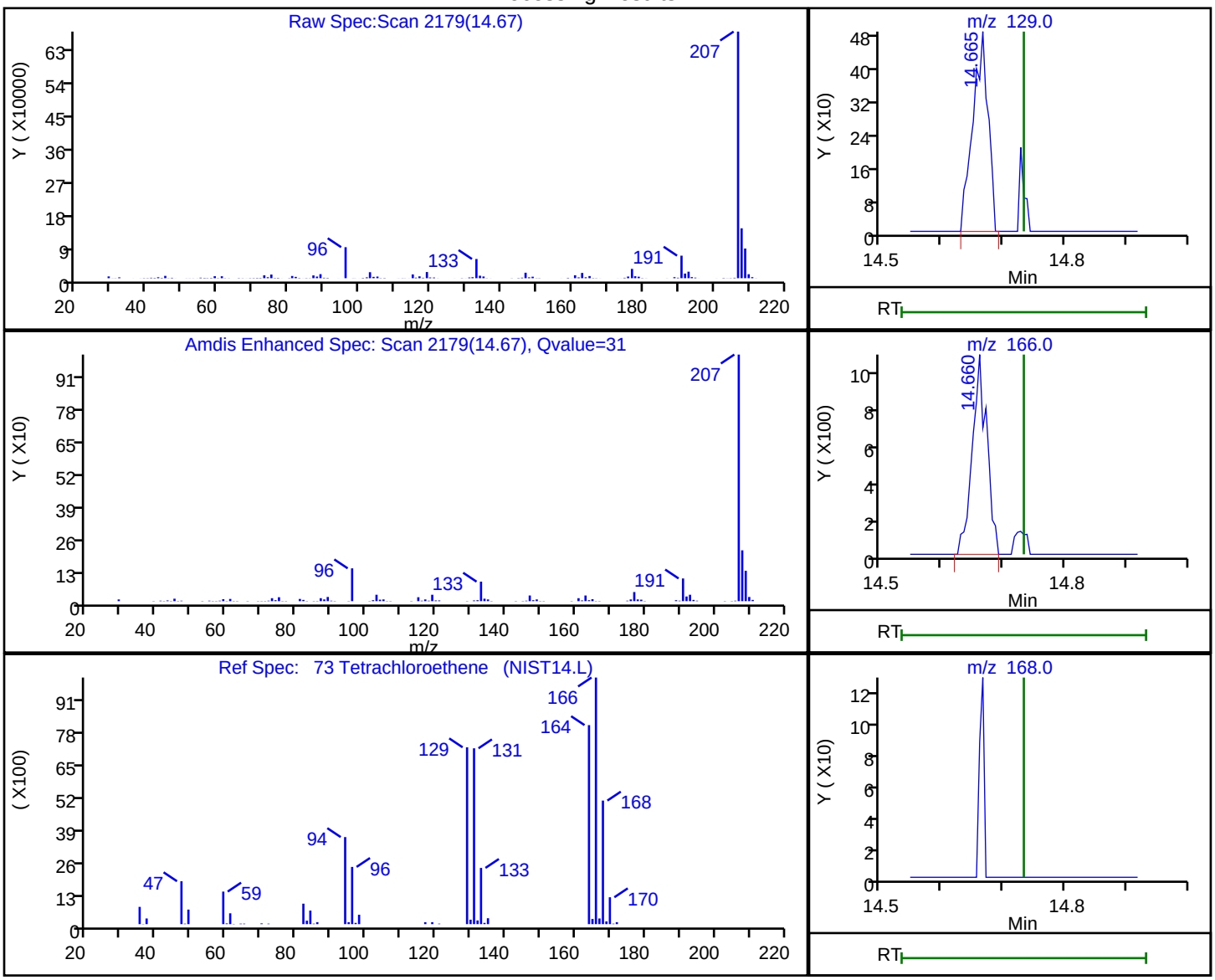
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200629-15882.b\HF30P111.D				
Injection Date:	30-Jun-2020 23:10:30	Instrument ID:	MH		
Lims ID:	140-19488-A-2	Lab Sample ID:	140-19488-2		
Client ID:	BLDG A MID GAC				
Operator ID:	HMT	ALS Bottle#:	11	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

73 Tetrachloroethene, CAS: 127-18-4

Processing Results



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14.67	129.00	845	0.013122
14.66	166.00	1662	
14.73	168.00	0	

Reviewer: khachitpongpanits, 01-Jul-2020 12:35:19

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

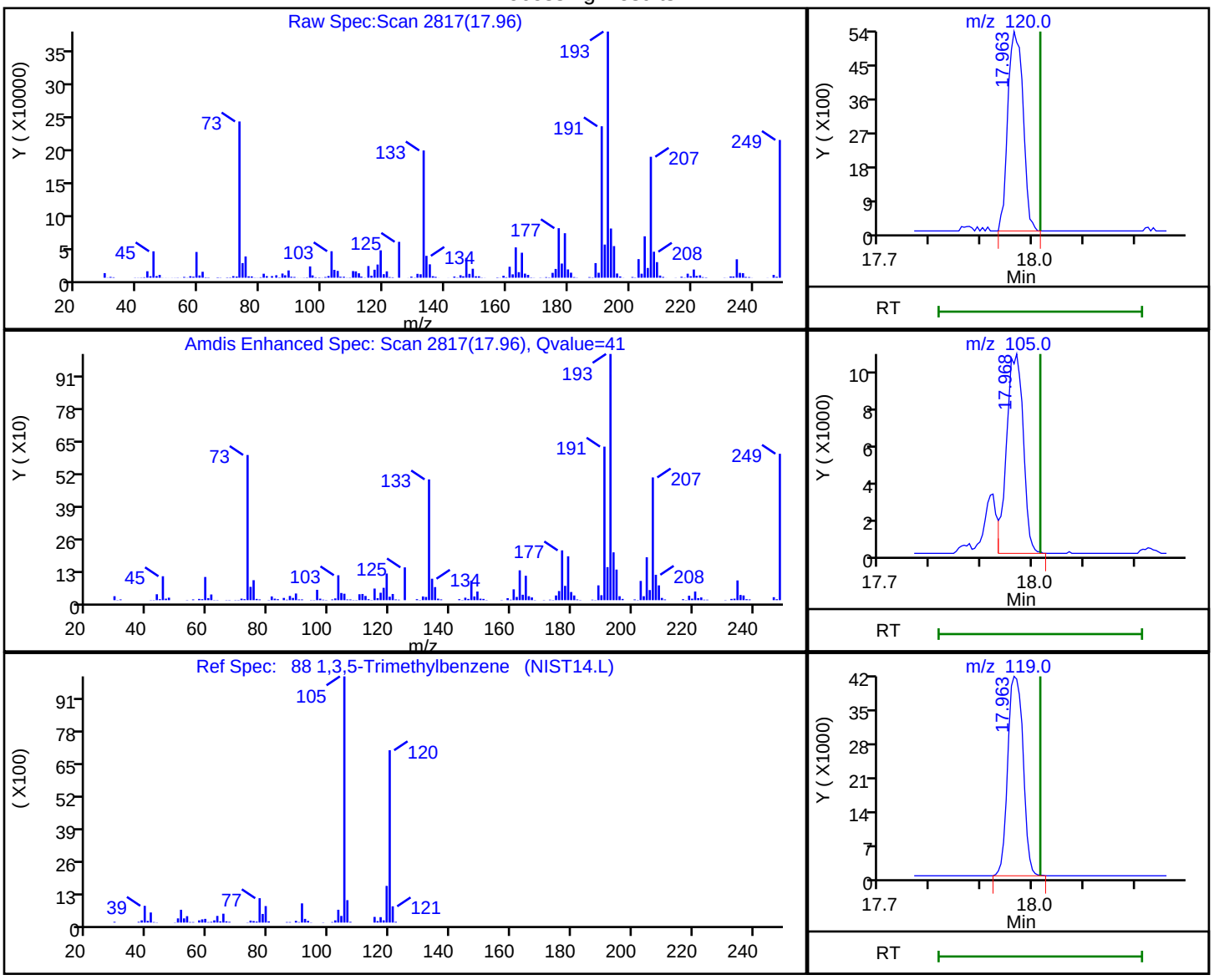
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200629-15882.b\HF30P111.D				
Injection Date:	30-Jun-2020 23:10:30	Instrument ID:	MH		
Lims ID:	140-19488-A-2	Lab Sample ID:	140-19488-2		
Client ID:	BLDG A MID GAC				
Operator ID:	HMT	ALS Bottle#:	11	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

88 1,3,5-Trimethylbenzene, CAS: 108-67-8

Processing Results



RT	Mass	Response	Amount
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17.97	105.00	24892	
17.96	119.00	87342	

Reviewer: khachitpongpanits, 01-Jul-2020 12:35:22

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19488-1

SDG No.:

Client Sample ID: BLDG A INFLUENT Lab Sample ID: 140-19488-3

Matrix: Air Lab File ID: HF30P112.D

Analysis Method: TO 15 LL Date Collected: 06/25/2020 09:50

Sample wt/vol: 25(mL) Date Analyzed: 07/01/2020 00:03

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 40629 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	7.3		1.6	0.16
56-23-5	Carbon tetrachloride	153.81	ND		1.6	0.14
75-45-6	Chlorodifluoromethane	86.47	ND		1.6	0.44
67-66-3	Chloroform	119.38	0.26	J	1.6	0.14
156-59-2	cis-1,2-Dichloroethene	96.94	14		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	0.41	J	1.6	0.28
75-34-3	1,1-Dichloroethane	98.96	2.5		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	14		1.6	0.16
100-41-4	Ethylbenzene	106.17	ND		1.6	0.26
75-09-2	Methylene Chloride	84.93	4.1	J B	8.0	3.2
1634-04-4	Methyl tert-butyl ether	88.15	ND		8.0	1.0
91-20-3	Naphthalene	128.17	ND		0.80	0.80
127-18-4	Tetrachloroethene	165.83	0.15	J	1.6	0.14
108-88-3	Toluene	92.14	ND		2.4	1.6
156-60-5	trans-1,2-Dichloroethene	96.94	0.35	J	1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		1.6	1.3
71-55-6	1,1,1-Trichloroethane	133.41	60		1.6	0.74
79-00-5	1,1,2-Trichloroethane	133.41	ND		1.6	0.14
79-01-6	Trichloroethene	131.39	150		0.80	0.12
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		1.6	0.72
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		1.6	0.40
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		1.6	0.44
75-01-4	Vinyl chloride	62.50	ND	*	0.80	0.52
1330-20-7	Xylenes, Total	106.17	ND		3.2	0.48

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	94		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19488-1

SDG No.:

Client Sample ID: BLDG A INFLUENT Lab Sample ID: 140-19488-3

Matrix: Air Lab File ID: HF30P112.D

Analysis Method: TO 15 LL Date Collected: 06/25/2020 09:50

Sample wt/vol: 25(mL) Date Analyzed: 07/01/2020 00:03

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 40629 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	23		5.1	0.51
56-23-5	Carbon tetrachloride	153.81	ND		10	0.88
75-45-6	Chlorodifluoromethane	86.47	ND		5.7	1.6
67-66-3	Chloroform	119.38	1.3	J	7.8	0.68
156-59-2	cis-1,2-Dichloroethene	96.94	56		6.3	0.79
75-71-8	Dichlorodifluoromethane	120.91	2.0	J	7.9	1.4
75-34-3	1,1-Dichloroethane	98.96	10		6.5	0.57
107-06-2	1,2-Dichloroethane	98.96	ND		6.5	0.81
75-35-4	1,1-Dichloroethene	96.94	55		6.3	0.63
100-41-4	Ethylbenzene	106.17	ND		6.9	1.1
75-09-2	Methylene Chloride	84.93	14	J B	28	11
1634-04-4	Methyl tert-butyl ether	88.15	ND		29	3.7
91-20-3	Naphthalene	128.17	ND		4.2	4.2
127-18-4	Tetrachloroethene	165.83	1.0	J	11	0.95
108-88-3	Toluene	92.14	ND		9.0	5.9
156-60-5	trans-1,2-Dichloroethene	96.94	1.4	J	6.3	0.56
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		12	9.5
71-55-6	1,1,1-Trichloroethane	133.41	330		8.7	4.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		8.7	0.76
79-01-6	Trichloroethene	131.39	810		4.3	0.64
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		7.9	3.5
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		7.9	2.0
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		7.9	2.2
75-01-4	Vinyl chloride	62.50	ND	*	2.0	1.3
1330-20-7	Xylenes, Total	106.17	ND		14	2.1

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	94		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MH\20200629-15882.b\HF30P112.D
Lims ID: 140-19488-A-3
Client ID: BLDG A INFLUENT
Sample Type: Client
Inject. Date: 01-Jul-2020 00:03:30 ALS Bottle#: 12 Worklist Smp#: 19
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0015882-019
Misc. Info.: 140-19488-a-3
Operator ID: HMT Instrument ID: MH

Method: \\chromfs\Knoxville\ChromData\MH\20200629-15882.b\MH_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 01-Jul-2020 12:40:07 Calib Date: 16-Apr-2020 18:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC10.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1017

First Level Reviewer: khachitpongpanits Date: 01-Jul-2020 12:40:07

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
*	1 Chlorobromomethane (IS)	128	8.577	8.577	0.000	97	104248	4.00	
*	2 1,4-Difluorobenzene	114	10.779	10.779	0.000	95	752366	4.00	
*	3 Chlorobenzene-d5 (IS)	117	15.565	15.565	0.000	89	552726	4.00	
$	4 4-Bromofluorobenzene (Surr)	95	17.213	17.234	-0.021	88	348725	3.76	
	6 Chlorodifluoromethane	51	3.548	3.543	0.005	36	1733	0.0158	
	8 Dichlorodifluoromethane	85	3.605	3.605	0.000	99	3446	0.0204	
	27 1,1-Dichloroethene	96	5.709	5.709	0.000	97	35256	0.6941	
	31 Methylene Chloride	84	6.055	6.055	0.000	99	37594	0.2061	
	34 trans-1,2-Dichloroethene	96	6.846	6.851	-0.005	92	867	0.0173	
	37 1,1-Dichloroethane	63	7.269	7.264	0.005	99	12708	0.1273	
	42 cis-1,2-Dichloroethene	96	8.251	8.246	0.005	95	36944	0.7060	
	44 Chloroform	83	8.598	8.587	0.011	67	1583	0.0129	
	47 1,1,1-Trichloroethane	97	9.611	9.611	0.000	97	343510	3.00	
	51 Benzene	78	10.220	10.220	0.000	98	60081	0.3671	
	58 Trichloroethene	130	11.502	11.502	0.000	92	505145	7.55	
	67 Toluene	91	13.585	13.580	0.005	92	7794	0.0649	
	73 Tetrachloroethene	129	14.727	14.732	-0.005	80	435	0.007347	

Reagents:

40MXISSURP_00004 Amount Added: 40.00 Units: mL Run Reagent

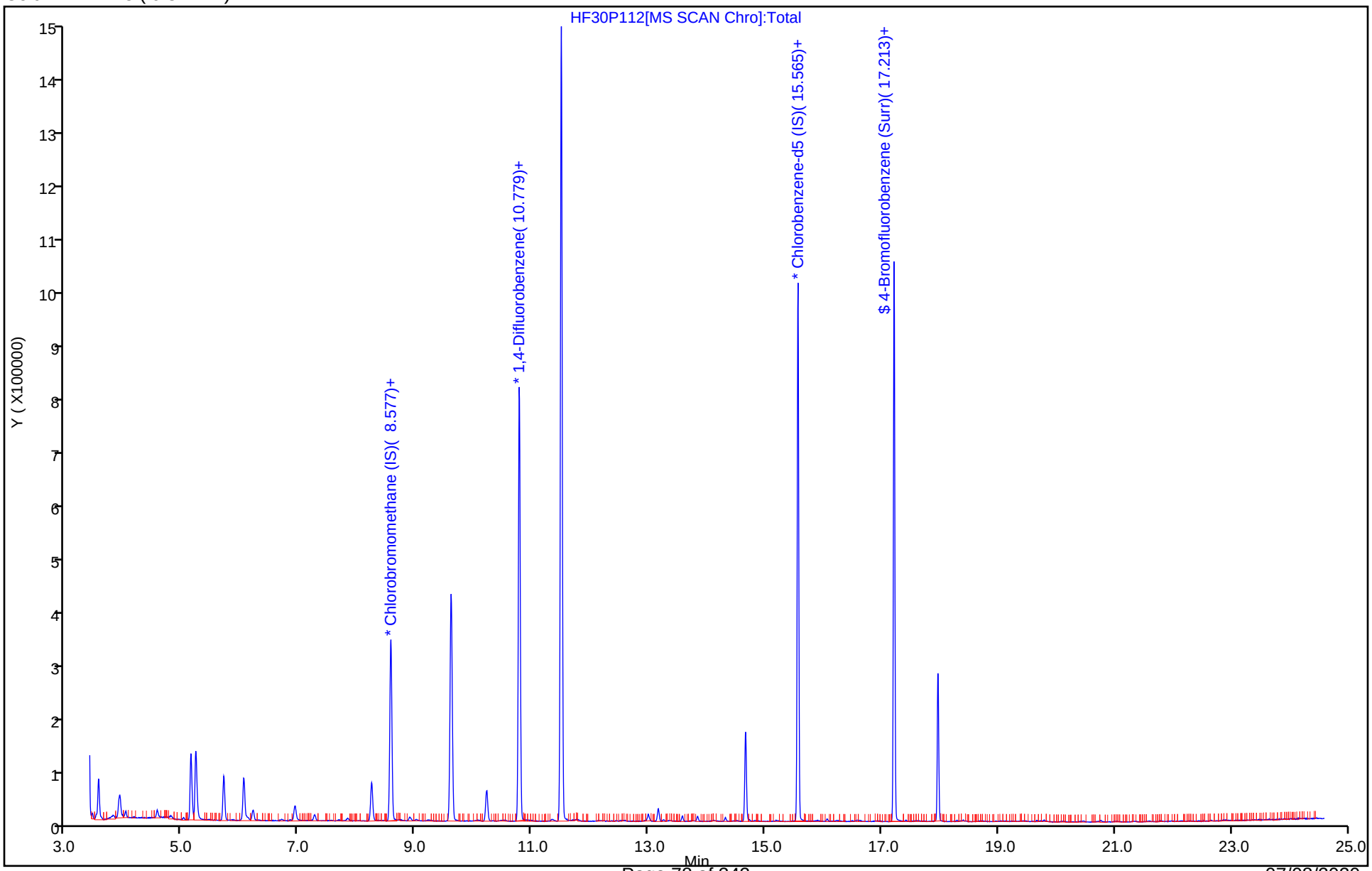
Report Date: 01-Jul-2020 12:40:07 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200629-15882.b\HF30P112.D

Injection Date:	01-Jul-2020 00:03:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	140-19488-A-3	Lab Sample ID:	140-19488-3	Worklist Smp#:	19
Client ID:	BLDG A INFLUENT				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MH\20200629-15882.b\HF30P112.D				
Lims ID:	140-19488-A-3				
Client ID:	BLDG A INFLUENT				
Sample Type:	Client				
Inject. Date:	01-Jul-2020 00:03:30	ALS Bottle#:	12	Worklist Smp#:	19
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0015882-019				
Misc. Info.:	140-19488-a-3				
Operator ID:	HMT	Instrument ID:	MH		
Method:	\\chromfs\Knoxville\ChromData\MH\20200629-15882.b\MH_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	01-Jul-2020 12:40:07	Calib Date:	16-Apr-2020 18:34:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC10.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1017				

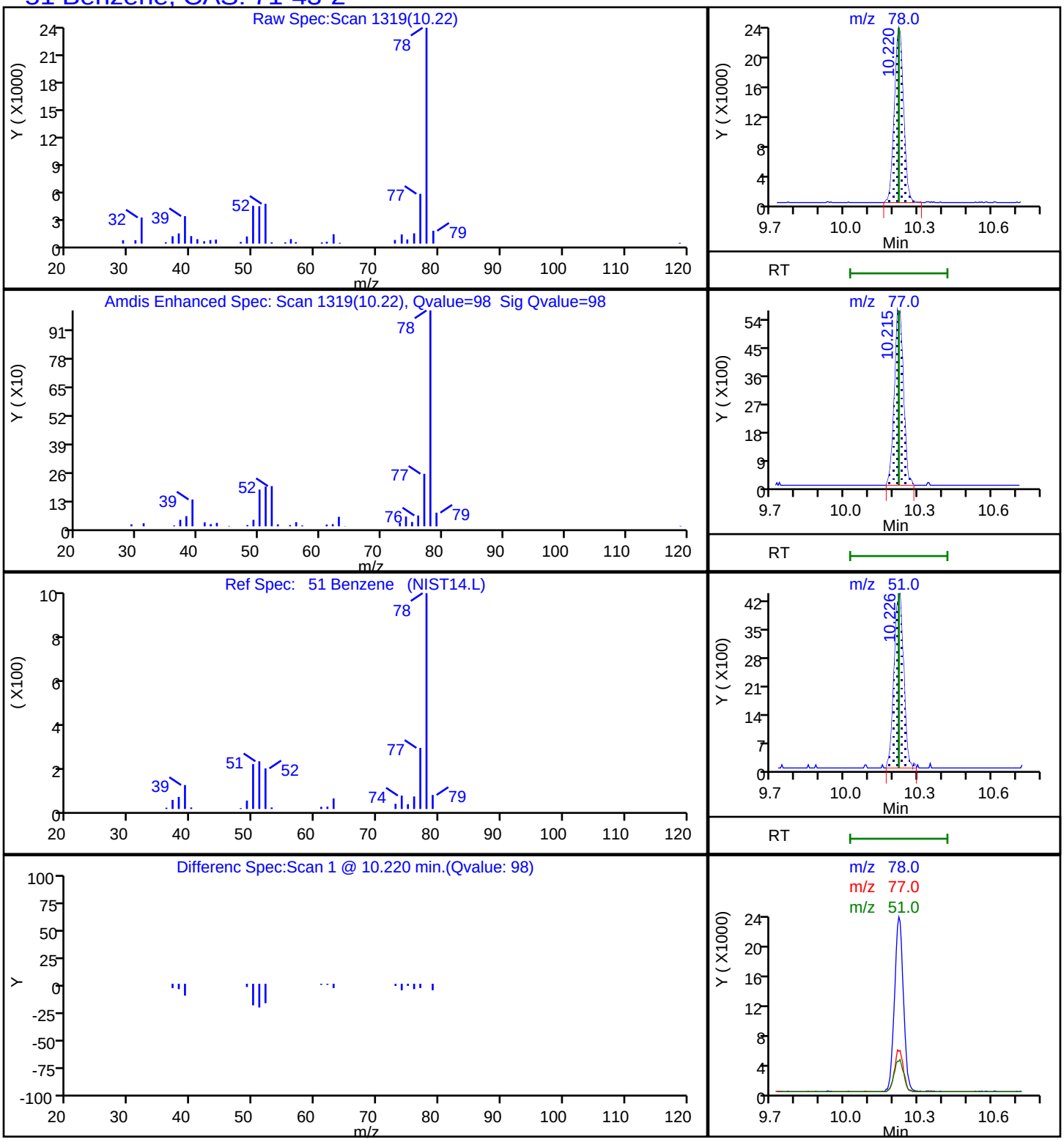
First Level Reviewer: khachitpongpanits Date: 01-Jul-2020 12:40:07

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.00	3.76	94.02

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200629-15882.b\HF30P112.D		
Injection Date:	01-Jul-2020 00:03:30	Instrument ID:	MH
Lims ID:	140-19488-A-3	Lab Sample ID:	140-19488-3
Client ID:	BLDG A INFLUENT		
Operator ID:	HMT	ALS Bottle#:	12 Worklist Smp#: 19
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

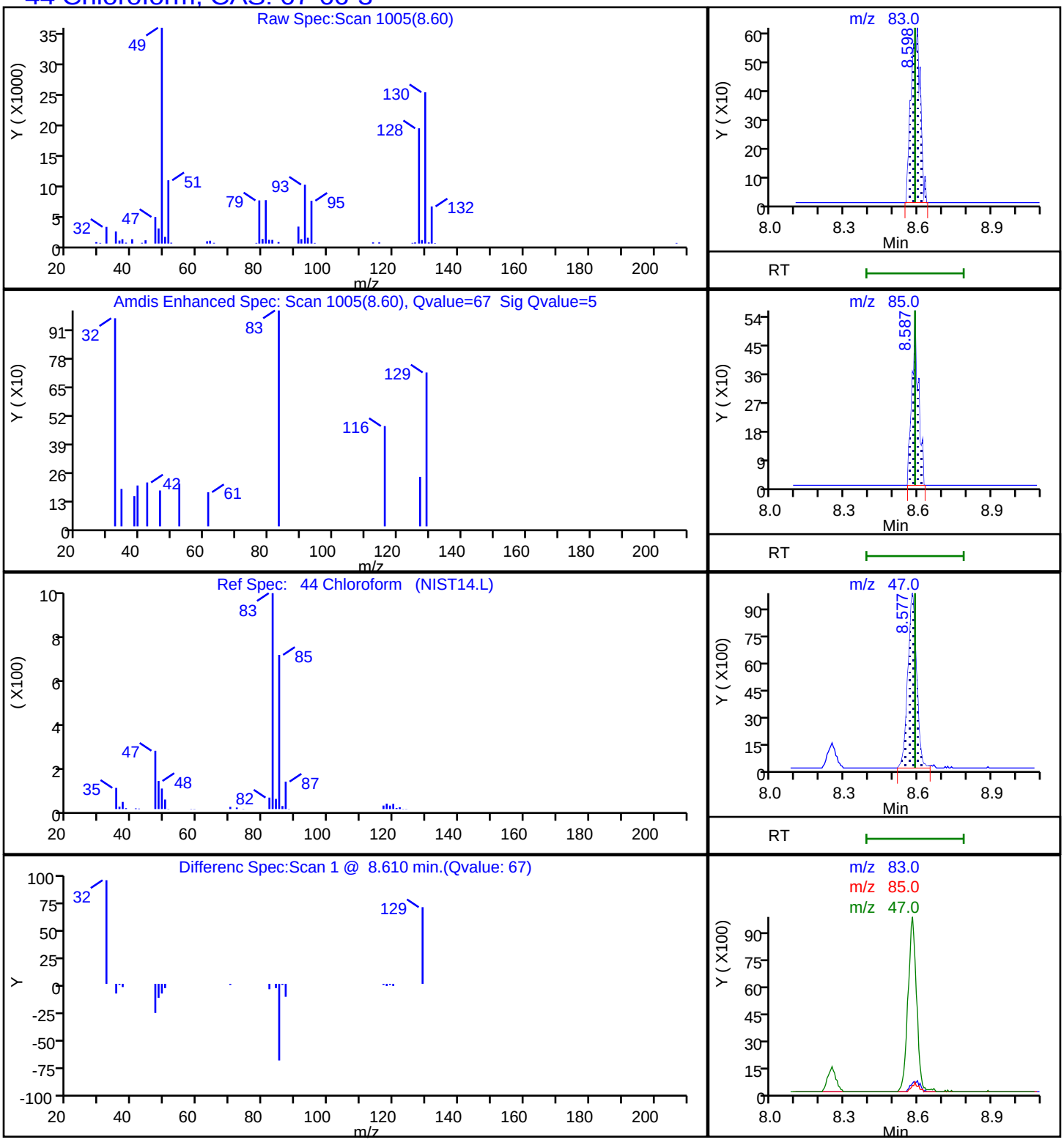
51 Benzene, CAS: 71-43-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200629-15882.b\HF30P112.D				
Injection Date:	01-Jul-2020 00:03:30	Instrument ID:	MH		
Lims ID:	140-19488-A-3	Lab Sample ID:	140-19488-3		
Client ID:	BLDG A INFLUENT				
Operator ID:	HMT	ALS Bottle#:	12	Worklist Smp#:	19
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

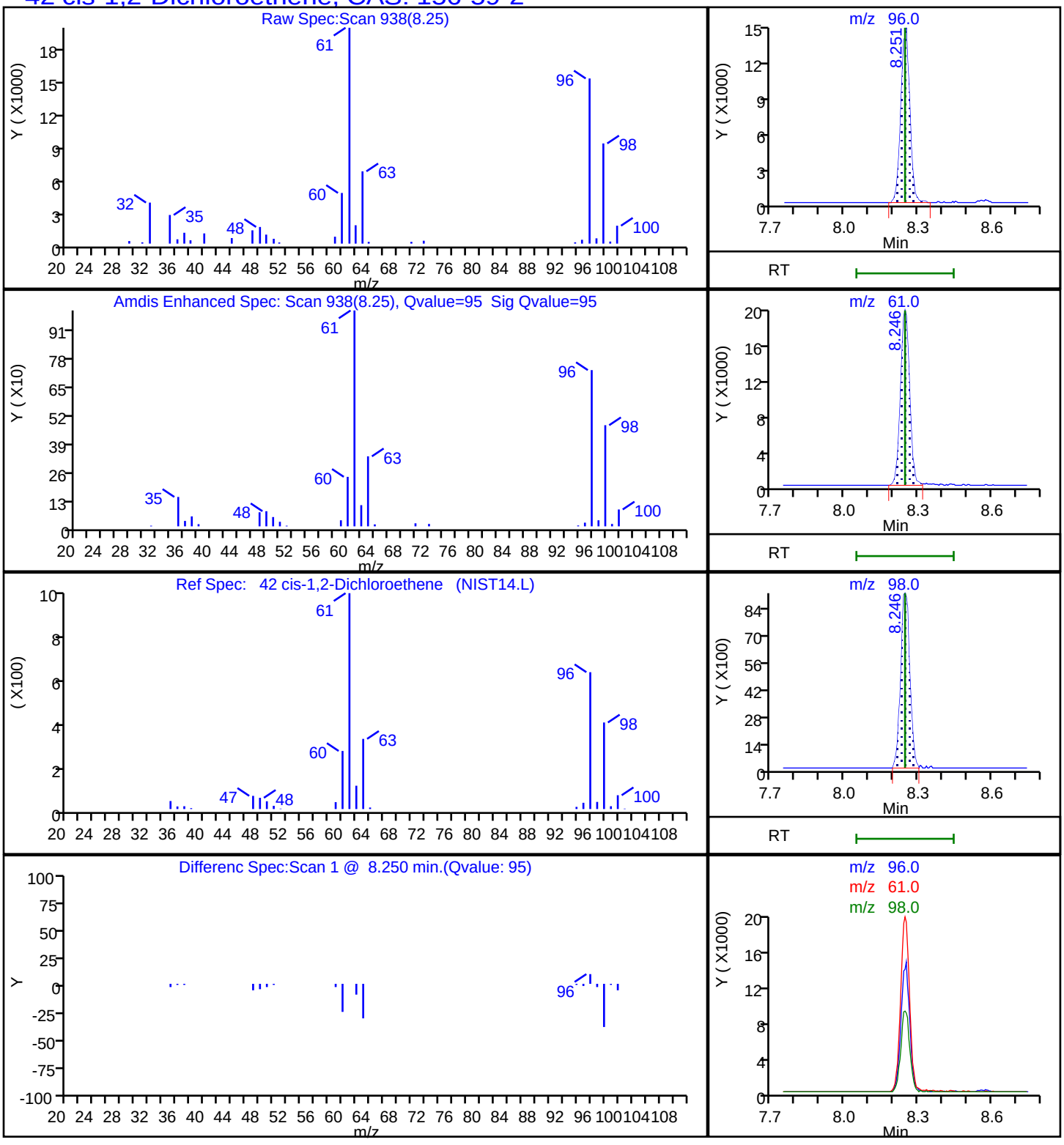
44 Chloroform, CAS: 67-66-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200629-15882.b\HF30P112.D				
Injection Date:	01-Jul-2020 00:03:30	Instrument ID:	MH		
Lims ID:	140-19488-A-3	Lab Sample ID:	140-19488-3		
Client ID:	BLDG A INFLUENT				
Operator ID:	HMT	ALS Bottle#:	12	Worklist Smp#:	19
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

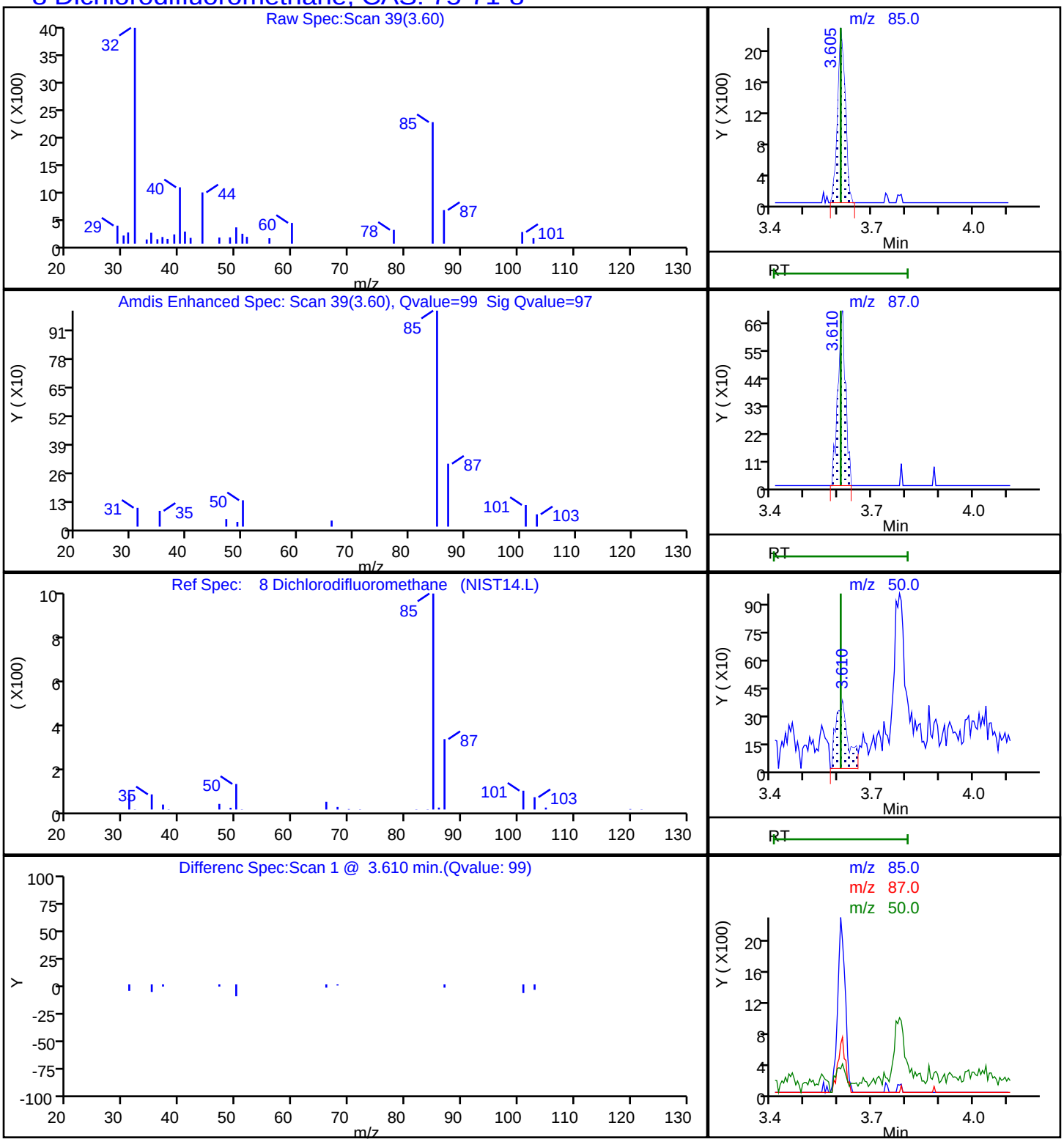
42 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200629-15882.b\HF30P112.D				
Injection Date:	01-Jul-2020 00:03:30	Instrument ID:	MH		
Lims ID:	140-19488-A-3	Lab Sample ID:	140-19488-3		
Client ID:	BLDG A INFLUENT				
Operator ID:	HMT	ALS Bottle#:	12	Worklist Smp#:	19
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

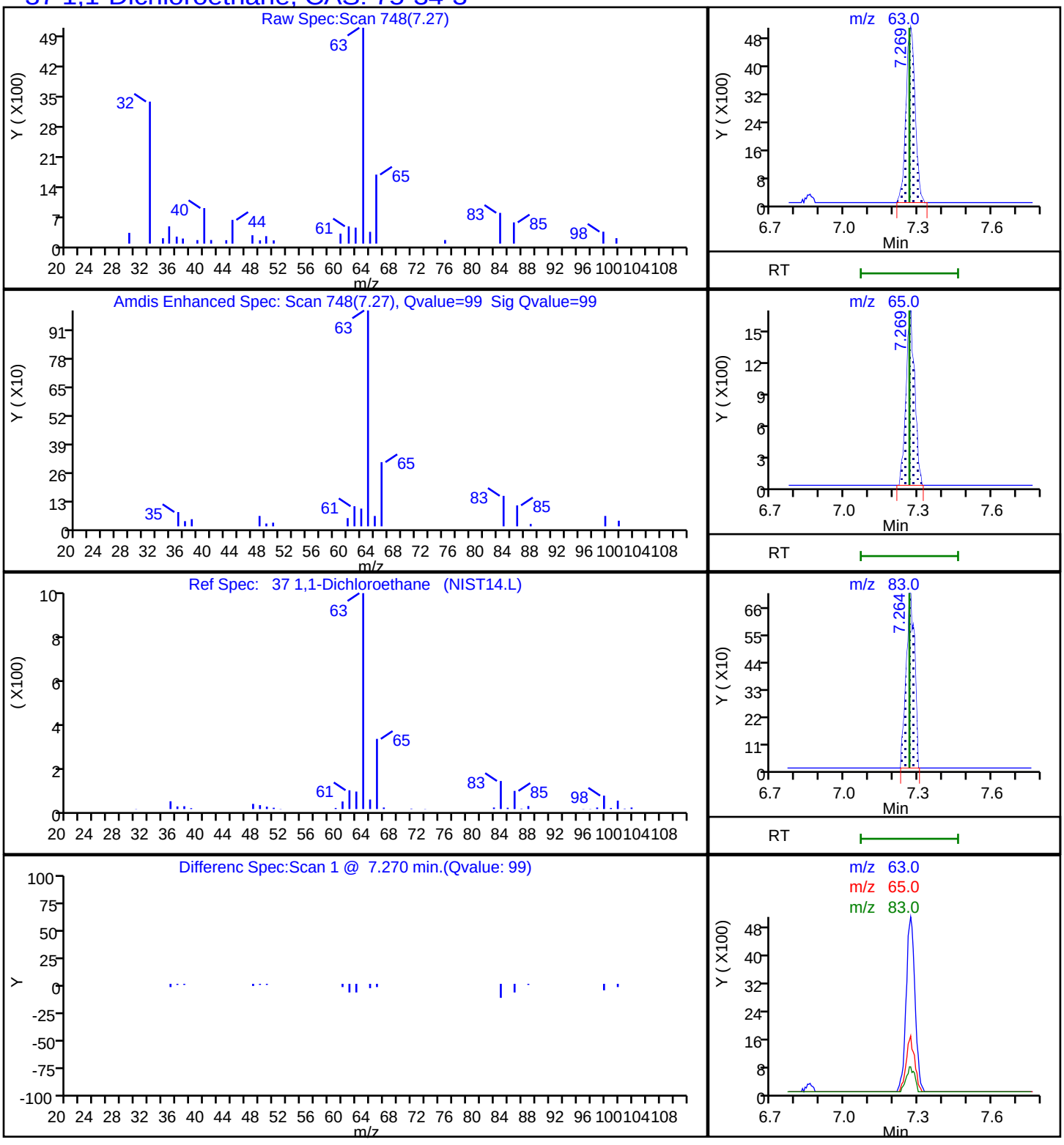
8 Dichlorodifluoromethane, CAS: 75-71-8



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200629-15882.b\HF30P112.D		
Injection Date:	01-Jul-2020 00:03:30	Instrument ID:	MH
Lims ID:	140-19488-A-3	Lab Sample ID:	140-19488-3
Client ID:	BLDG A INFLUENT		
Operator ID:	HMT	ALS Bottle#:	12 Worklist Smp#: 19
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

37 1,1-Dichloroethane, CAS: 75-34-3



Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200629-15882.b\HF30P112.D

Injection Date: 01-Jul-2020 00:03:30 Instrument ID: MH

Lims ID: 140-19488-A-3 Lab Sample ID: 140-19488-3

Client ID: BLDG A INFLUENT

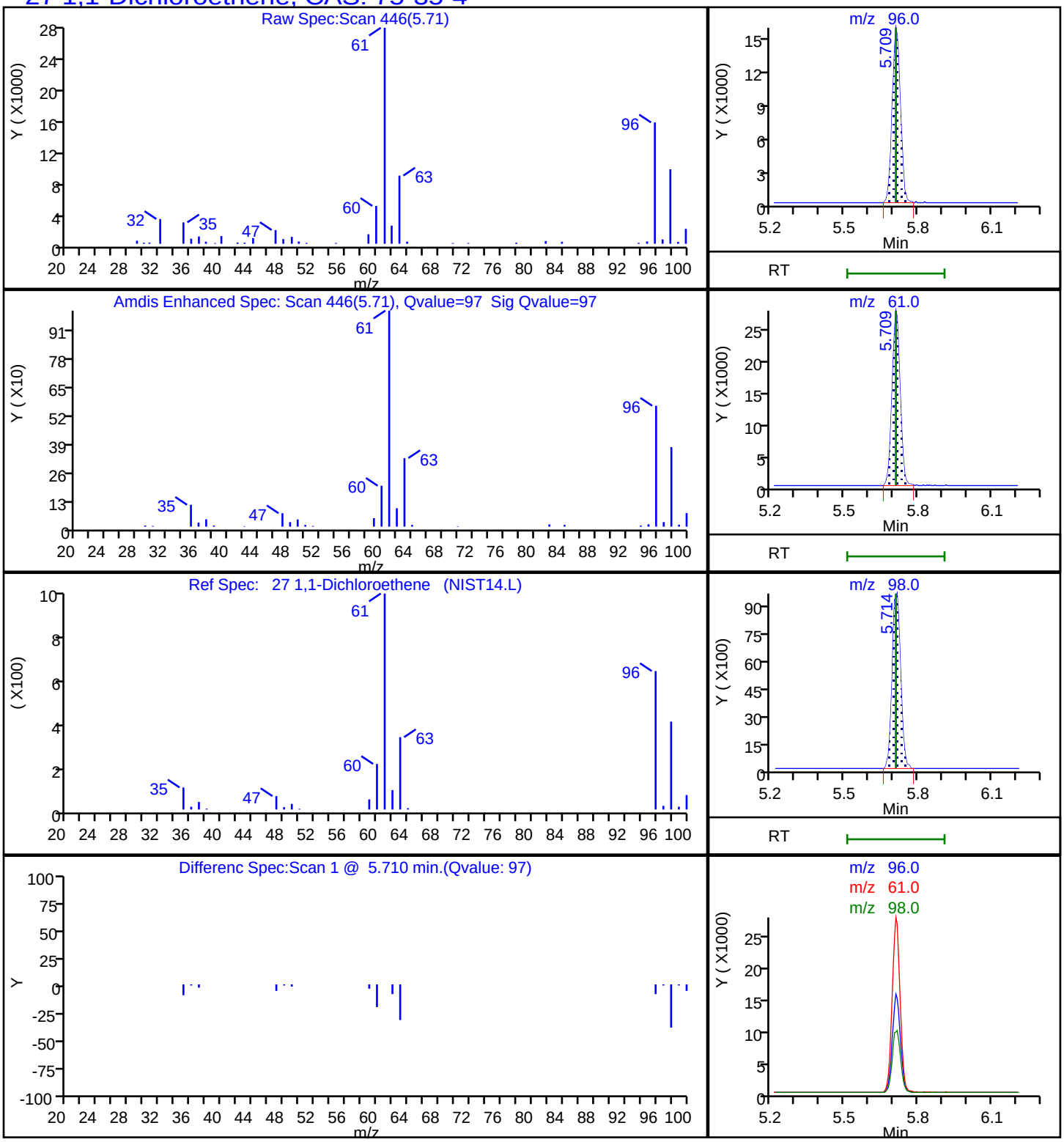
Operator ID: HMT ALS Bottle#: 12 Worklist Smp#: 19

Purge Vol: 500.000 mL Dil. Factor: 1.0000

Method: MH_TO15 Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm) Detector MS SCAN

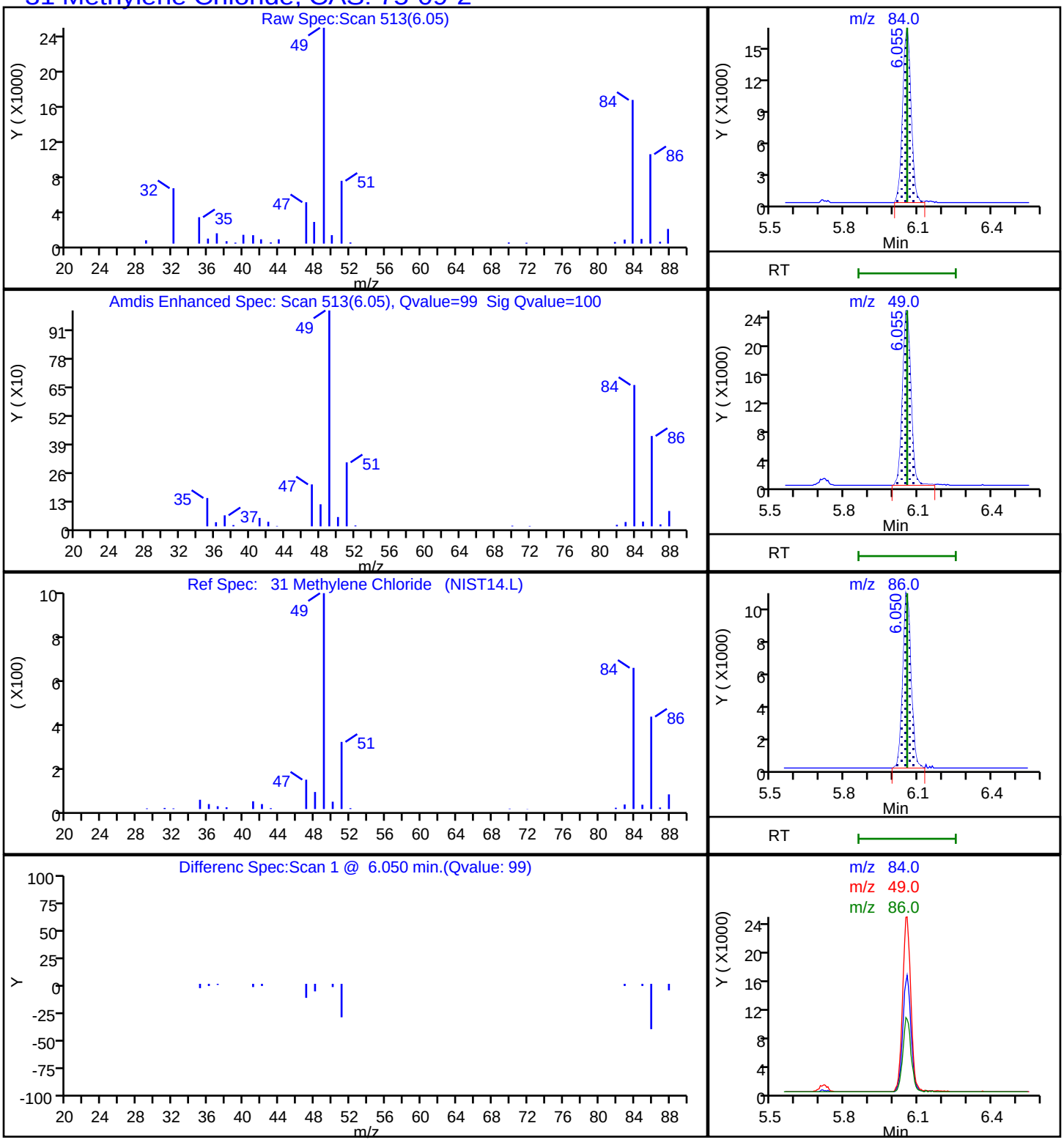
27 1,1-Dichloroethene, CAS: 75-35-4



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200629-15882.b\HF30P112.D				
Injection Date:	01-Jul-2020 00:03:30	Instrument ID:	MH		
Lims ID:	140-19488-A-3	Lab Sample ID:	140-19488-3		
Client ID:	BLDG A INFLUENT				
Operator ID:	HMT	ALS Bottle#:	12	Worklist Smp#:	19
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

31 Methylene Chloride, CAS: 75-09-2

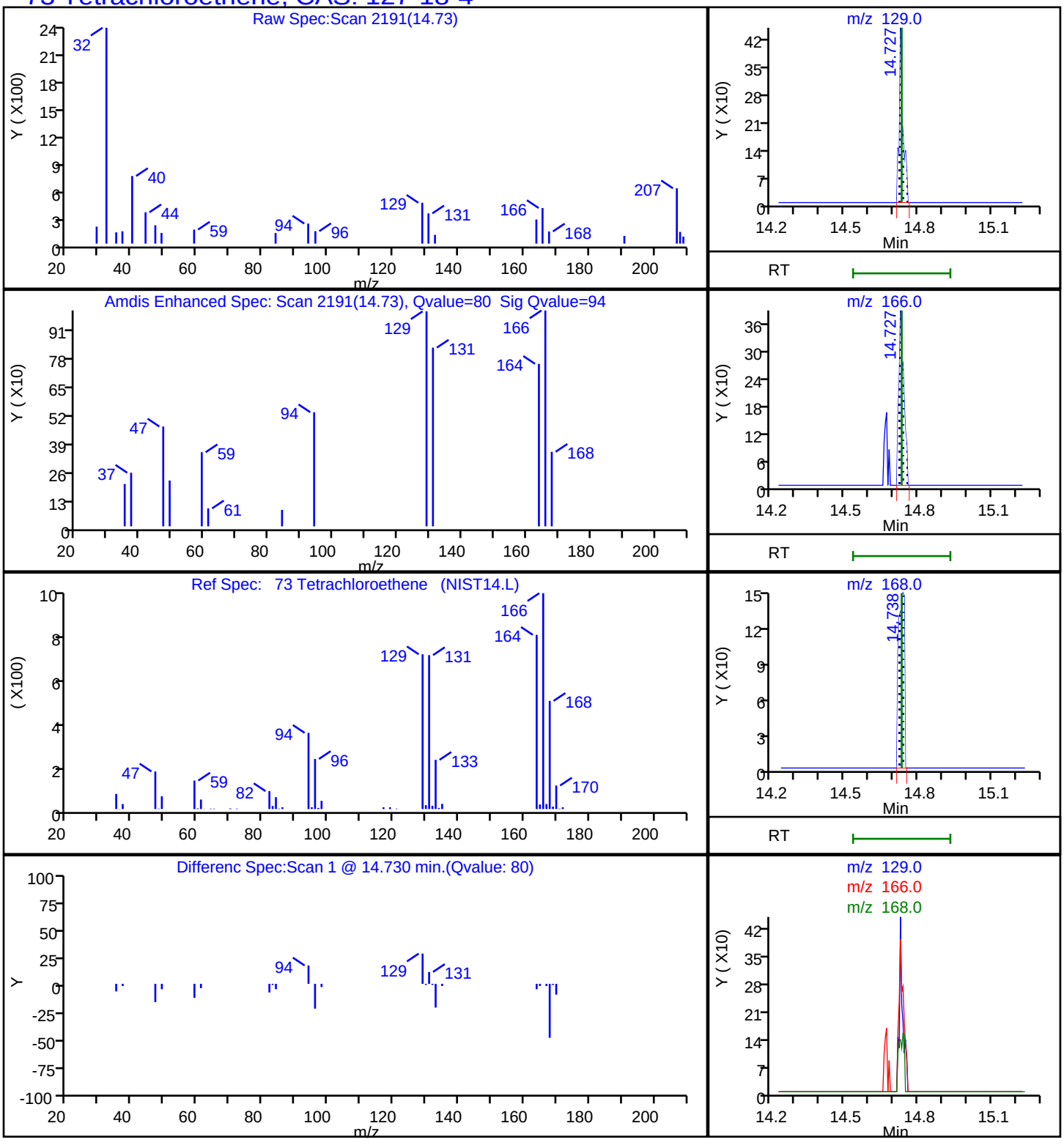


Report Date: 01-Jul-2020 12:40:07 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200629-15882.b\HF30P112.D				
Injection Date:	01-Jul-2020 00:03:30	Instrument ID:	MH		
Lims ID:	140-19488-A-3	Lab Sample ID:	140-19488-3		
Client ID:	BLDG A INFLUENT				
Operator ID:	HMT	ALS Bottle#:	12	Worklist Smp#:	19
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

73 Tetrachloroethene, CAS: 127-18-4

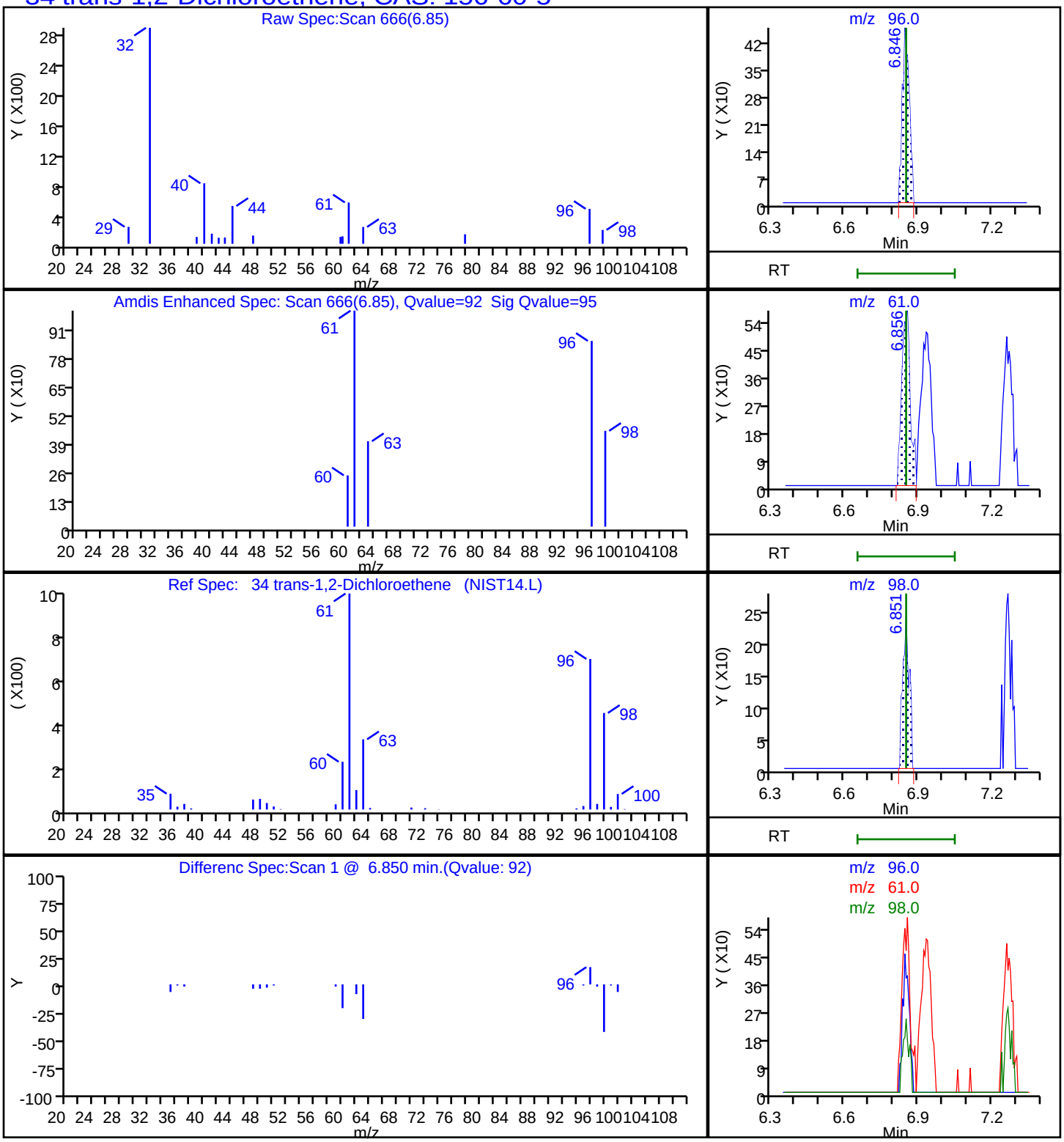


Report Date: 01-Jul-2020 12:40:07 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200629-15882.b\HF30P112.D				
Injection Date:	01-Jul-2020 00:03:30	Instrument ID:	MH		
Lims ID:	140-19488-A-3	Lab Sample ID:	140-19488-3		
Client ID:	BLDG A INFLUENT				
Operator ID:	HMT	ALS Bottle#:	12	Worklist Smp#:	19
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

34 trans-1,2-Dichloroethene, CAS: 156-60-5



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200629-15882.b\HF30P112.D				
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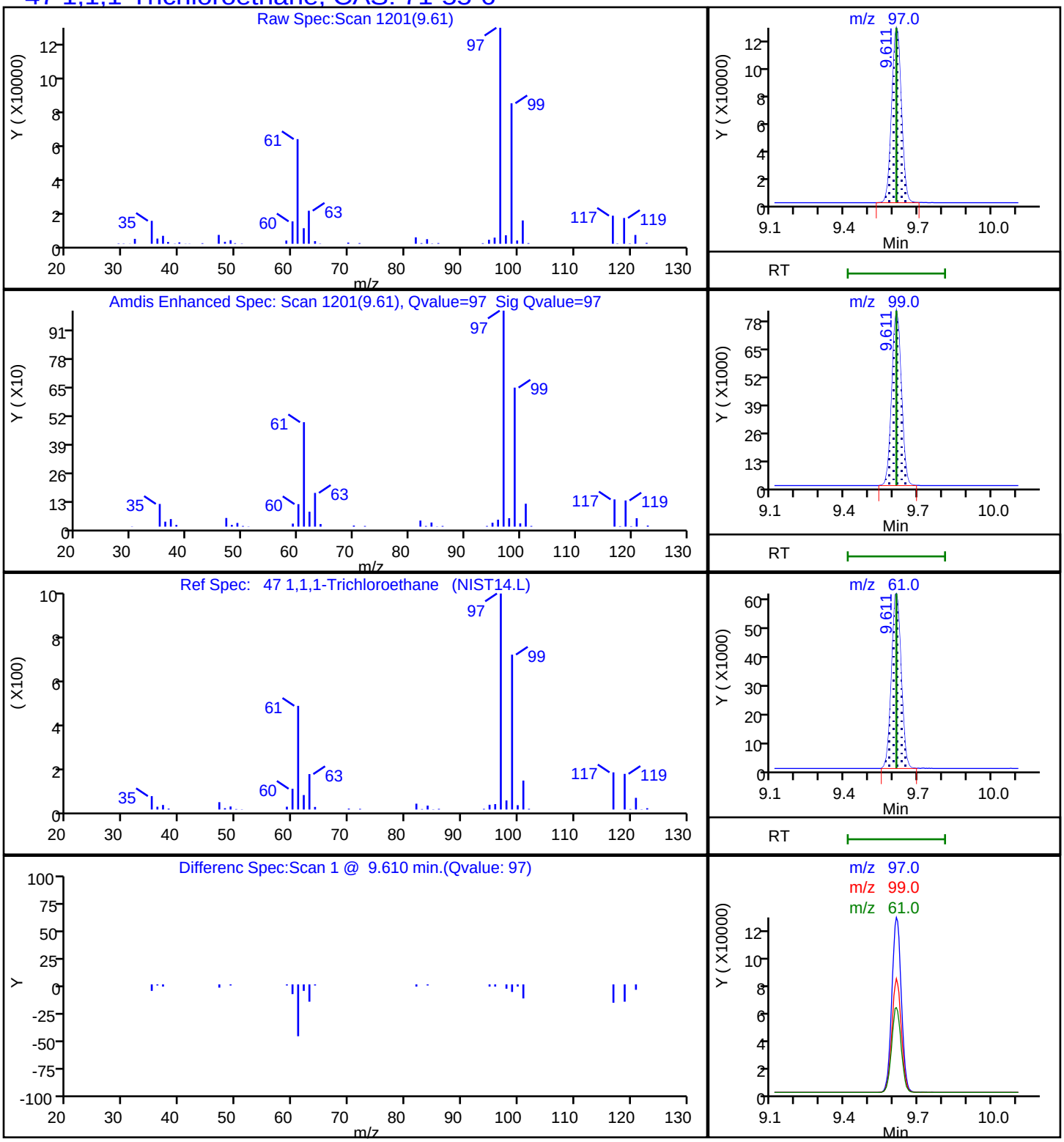
Lims ID:	140-19488-A-3	Lab Sample ID:	140-19488-3		
Client ID:	BLDG A INFLUENT				
Operator ID:	HMT	ALS Bottle#:	12	Worklist Smp#:	19
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

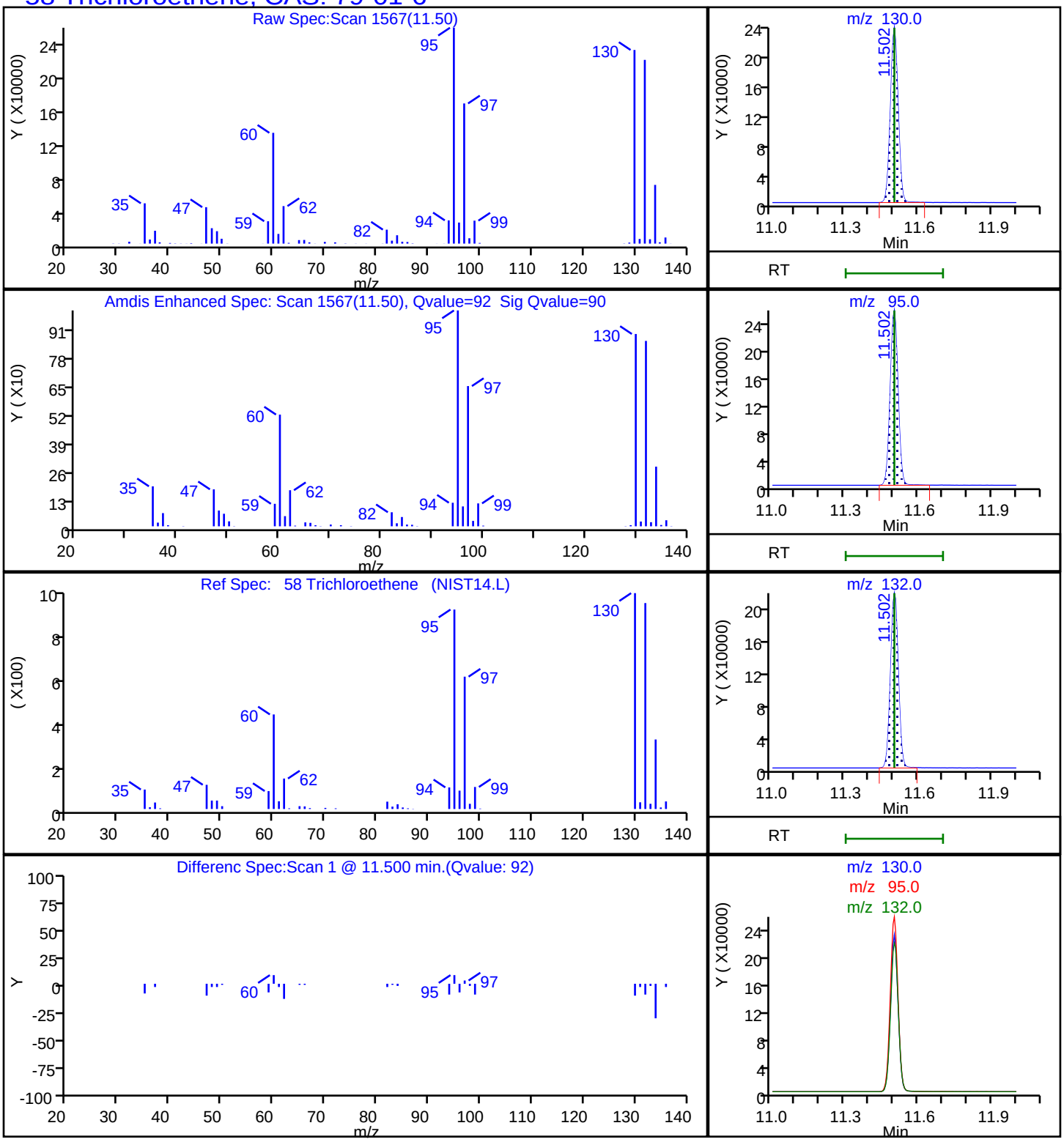
47 1,1,1-Trichloroethane, CAS: 71-55-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200629-15882.b\HF30P112.D				
Injection Date:	01-Jul-2020 00:03:30	Instrument ID:	MH		
Lims ID:	140-19488-A-3	Lab Sample ID:	140-19488-3		
Client ID:	BLDG A INFLUENT				
Operator ID:	HMT	ALS Bottle#:	12	Worklist Smp#:	19
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

58 Trichloroethene, CAS: 79-01-6



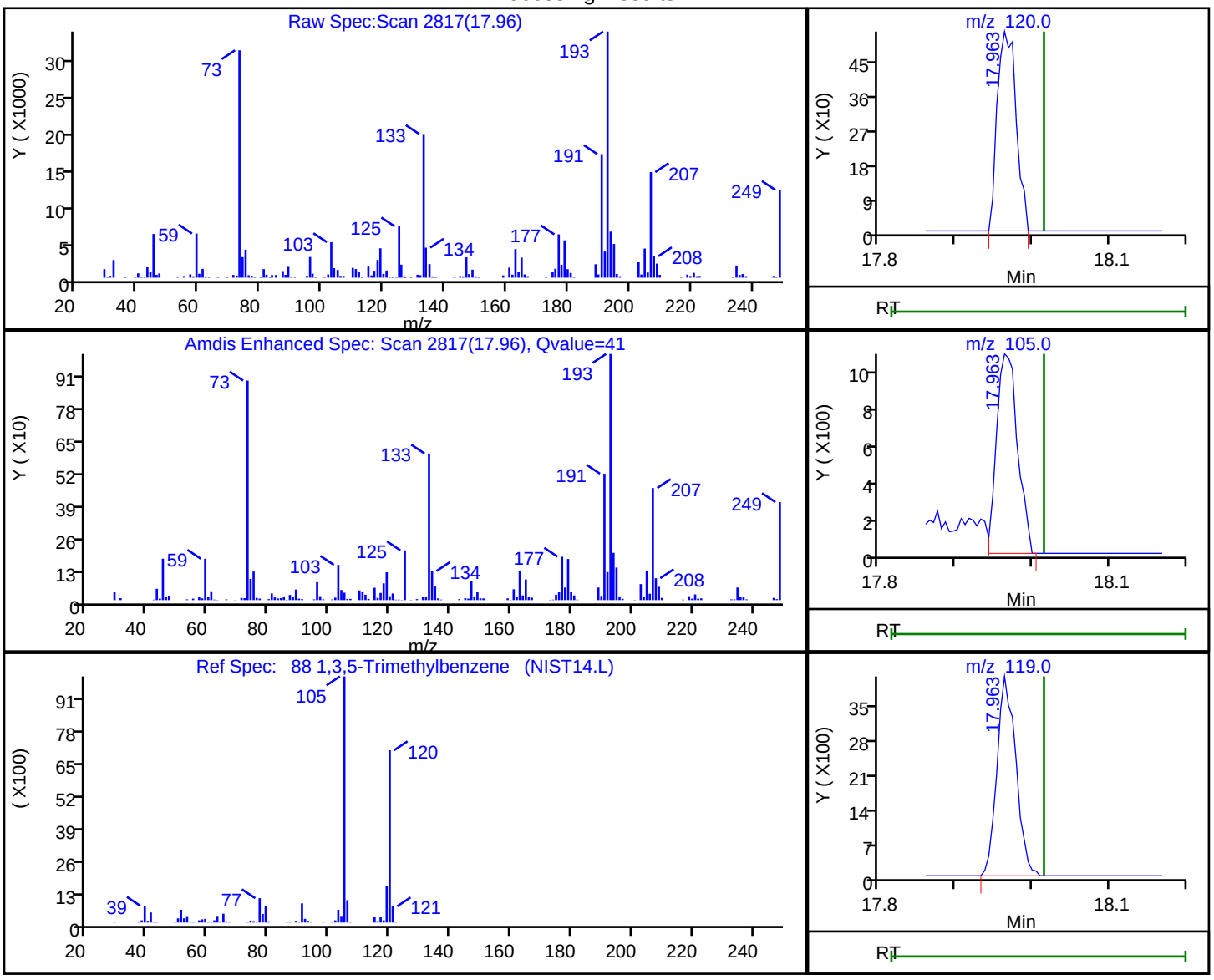
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200629-15882.b\HF30P112.D				
Injection Date:	01-Jul-2020 00:03:30	Instrument ID:	MH		
Lims ID:	140-19488-A-3	Lab Sample ID:	140-19488-3		
Client ID:	BLDG A INFLUENT				
Operator ID:	HMT	ALS Bottle#:	12	Worklist Smp#:	19
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

88 1,3,5-Trimethylbenzene, CAS: 108-67-8

Processing Results



RT	Mass	Response	Amount
17.96	120.00	901	0.036590
17.96	105.00	2023	
17.96	119.00	6981	

Reviewer: khachitpongpanits, 01-Jul-2020 12:36:46

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19488-1 Analy Batch No.: 39100

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/16/2020 08:03 Calibration End Date: 04/16/2020 18:34 Calibration ID: 2402

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 140-39100/3	HD16IC01.D
Level 2	IC 140-39100/4	HD16IC02.D
Level 3	IC 140-39100/5	HD16IC03.D
Level 4	IC 140-39100/6	HD16IC04.D
Level 5	IC 140-39100/7	HD16IC05.D
Level 6	IC 140-39100/8	HD16IC06.D
Level 7	ICIS 140-39100/9	HD16IC07.D
Level 8	IC 140-39100/11	HD16IC08.D
Level 9	IC 140-39100/13	HD16C09.D
Level 10	IC 140-39100/15	HD16IC10.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Chlorodifluoromethane	+++++ 4.2946	4.6026 4.0842	4.4835 4.0706	4.2657 4.0514	4.3120 3.8121	Ave		4.2196				5.7		30.0			
Propene	+++++ 2.5917	+++++ 2.0258	+++++ 1.8090	+++++ 1.6736	+++++ 1.4660	Lin2	1.1197	1.4793							0.9970		0.9900
Dichlorodifluoromethane	+++++ 6.6689	6.7930 6.3727	6.9951 6.1862	6.7142 6.1533	6.7616 5.7611	Ave		6.4896				6.1		30.0			
Chloromethane	+++++ 0.6912	+++++ 0.6683	0.8910 0.6452	0.8242 0.6526	0.7164 0.5706	Ave		0.7074				14.6		30.0			
1,2-Dichloro-1,1,2,2-tetrafluoroethane	+++++ 4.6440	4.5896 4.1781	4.3819 4.2258	4.5264 4.1913	4.4433 3.7642	Ave		4.3272				6.3		30.0			
Vinyl chloride	3.0661 2.2564	2.5523 2.1864	2.4141 2.1324	2.3209 2.1507	2.2217 1.9058	Ave		2.3207				13.5		30.0			
Butane	+++++ 2.7017	3.3127 2.6844	3.0290 2.5768	2.8532 2.5824	2.6964 2.3136	Ave		2.7500				10.5		30.0			
1,3-Butadiene	+++++ 1.5927	1.7722 1.5596	1.6155 1.5400	1.5879 1.5696	1.5352 1.4222	Ave		1.5772				5.8		30.0			
Bromomethane	+++++ 2.4743	+++++ 2.3770	2.7721 2.3553	2.5579 2.3418	2.5201 2.1996	Ave		2.4498				7.1		30.0			
Chloroethane	+++++ 0.9693	+++++ 0.9597	1.1483 0.9329	1.0778 0.9275	0.9698 0.9170	Ave		0.9878				8.3		30.0			
Ethanol	+++++ 0.7044	+++++ 0.7355	+++++ 0.7181	0.7345 0.7069	0.7328 0.6605	Ave		0.7132				3.7		30.0			
Vinyl bromide	+++++ 2.2557	+++++ 2.1765	2.4205 2.1671	2.2386 2.1459	2.2353 2.0096	Ave		2.2062				5.3		30.0			
2-Methylbutane	+++++ 1.9039	2.4402 1.9339	2.2777 1.8575	2.1410 1.8086	2.0105 1.7879	Ave		2.0179				11.1		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19488-1 Analy Batch No.: 39100

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/16/2020 08:03 Calibration End Date: 04/16/2020 18:34 Calibration ID: 2402

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Trichlorofluoromethane	6.7823 5.7080	6.1556 5.6592	6.0351 5.5541	5.8856 5.3969	5.8778 5.1361	Ave		5.8191				7.8		30.0			
Acrolein	+++++ 0.6862	+++++ 0.7030	+++++ 0.6772	+++++ 0.6894	0.6941 0.6320	Ave		0.6803				3.7		30.0			
Acetonitrile	+++++ 0.8359	+++++ 0.8383	+++++ 0.8191	0.7410 0.7929	0.7369 0.7190	Ave		0.7833				6.4		30.0			
Acetone	+++++ 0.8917	+++++ 0.8988	+++++ 0.8752	1.0600 0.8535	0.9437 0.7769	Ave		0.9000				9.7		30.0			
Pentane	+++++ 0.2472	+++++ 0.2525	+++++ 0.2504	0.2625 0.2429	0.2736 0.2322	Ave		0.2516				5.3		30.0			
Isopropyl alcohol	2.9493 2.5244	2.4151 2.6018	2.6023 2.5840	2.5372 2.4797	2.4914 2.2051	QuaF		2.7217	-0.010728						1.0000		0.9900
Ethyl ether	+++++ 1.8091	+++++ 1.7667	1.8136 1.7438	1.7416 1.7048	1.8243 1.5309	Ave		1.7418				5.4		30.0			
1,1-Dichloroethene	2.2016 1.8708	2.1076 1.9120	1.9711 1.8961	1.8950 1.8998	1.9015 1.8336	Ave		1.9489				5.9		30.0			
tert-Butyl alcohol	+++++ 3.2170	+++++ 3.3641	+++++ 3.3859	2.9817 3.3898	3.1179 3.1794	Ave		3.2337				4.8		30.0			
Acrylonitrile	+++++ 1.4909	+++++ 1.4994	+++++ 1.5329	1.4892 1.5076	1.4284 1.3852	Ave		1.4762				3.5		30.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	+++++ 4.5490	4.8933 4.4521	4.7945 4.3855	4.5924 4.2826	4.6444 4.0230	Ave		4.5130				5.9		30.0			
Methylene Chloride	+++++ 2.8749	+++++ 2.3339	+++++ 2.0479	+++++ 1.8895	4.4246 1.7125	Lin2	1.0826	1.7465							0.9980		0.9900
3-Chloropropene	+++++ 1.6974	+++++ 1.5385	1.9108 1.6110	1.7720 1.5561	1.7011 1.3786	Ave		1.6457				9.9		30.0			
Carbon disulfide	+++++ 5.9663	+++++ 5.8850	5.9504 5.9252	5.9492 5.7822	5.8376 5.4048	Ave		5.8376				3.2		30.0			
trans-1,2-Dichloroethene	+++++ 1.9397	1.9428 1.9445	1.8842 1.9529	1.9102 1.9693	1.8451 1.9216	Ave		1.9234				2.0		30.0			
2-Methylpentane	+++++ 4.0185	3.7736 3.9557	3.7266 3.9191	3.7159 3.7905	3.8712 3.4711	Ave		3.8047				4.3		30.0			
Methyl tert-butyl ether	+++++ 4.6378	+++++ 4.7554	4.0347 4.7070	4.2782 4.6586	4.4847 4.4126	Ave		4.4961				5.5		30.0			
1,1-Dichloroethane	+++++ 3.7793	4.1806 3.7361	4.2197 3.6795	3.9061 3.6537	3.8669 3.4525	Ave		3.8305				6.5		30.0			
Vinyl acetate	+++++ 4.9871	+++++ 5.1158	3.9251 5.3263	4.0518 5.3806	4.3806 5.0152	Ave		4.7728				12.0		30.0			
2-Butanone (MEK)	+++++ 0.8666	+++++ 0.8821	0.7442 0.8828	0.8384 0.9008	0.8293 0.8694	Ave		0.8517				5.8		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19488-1 Analy Batch No.: 39100

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/16/2020 08:03 Calibration End Date: 04/16/2020 18:34 Calibration ID: 2402

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Hexane	+++++ 1.5140	1.3928 1.4884	1.4603 1.4816	1.3607 1.4410	1.4467 1.3660	Ave		1.4391				3.8		30.0			
cis-1,2-Dichloroethene	+++++ 2.0246	2.0880 2.0566	1.9535 2.0429	1.8964 2.0599	1.9765 1.9729	Ave		2.0079				3.1		30.0			
Ethyl acetate	+++++ 4.5136	+++++ 4.4390	4.1192 4.4709	4.0916 4.4679	4.2669 4.1510	Ave		4.3150				4.1		30.0			
Chloroform	+++++ 4.8186	4.7511 4.6663	5.1189 4.6040	4.7708 4.5449	4.9092 4.3215	Ave		4.7228				4.8		30.0			
Tetrahydrofuran	+++++ 2.0675	+++++ 2.0290	1.8646 2.0569	1.8582 2.0539	1.8669 1.9080	Ave		1.9631				4.9		30.0			
1,1,1-Trichloroethane	4.6607 4.4283	4.5570 4.3649	4.2611 4.3776	4.2927 4.3633	4.3680 4.2902	Ave		4.3964				2.8		30.0			
1,2-Dichloroethane	+++++ 0.4326	0.4200 0.4213	0.4320 0.4200	0.4164 0.4198	0.4395 0.4091	Ave		0.4234				2.2		30.0			
1-Butanol	+++++ 0.0845	+++++ 0.0922	+++++ 0.1015	0.0643 0.1072	0.0761 0.1040	Ave		0.0900				17.6		30.0			
Cyclohexane	+++++ 0.1205	+++++ 0.1202	0.1027 0.1213	0.0923 0.1223	0.1177 0.1244	Ave		0.1152				9.9		30.0			
Benzene	+++++ 0.8861	0.9203 0.8659	0.8567 0.8596	0.8583 0.8636	0.8594 0.8606	Ave		0.8700				2.4		30.0			
Carbon tetrachloride	0.7035 0.6368	0.6132 0.5290	0.5961 0.6392	0.6164 0.6524	0.6208 0.6755	Ave		0.6283				7.5		30.0			
2,3-Dimethylpentane	+++++ 0.1712	+++++ 0.1764	0.1482 0.1719	0.1503 0.1715	0.1648 0.1672	Ave		0.1652				6.3		30.0			
Thiophene	+++++ 0.5074	+++++ 0.5039	0.4469 0.5007	0.4508 0.5082	0.4852 0.4975	Ave		0.4876				5.1		30.0			
2,2,4-Trimethylpentane	+++++ 1.3606	1.3050 1.3630	1.2417 1.3705	1.2283 1.3799	1.2824 1.3695	Ave		1.3223				4.5		30.0			
Heptane	+++++ 0.2483	+++++ 0.2565	0.2039 0.2626	0.2067 0.2733	0.2270 0.2784	Ave		0.2446				11.8		30.0			
1,2-Dichloropropane	+++++ 0.3644	+++++ 0.3559	0.3658 0.3552	0.3430 0.3587	0.3561 0.3540	Ave		0.3566				2.0		30.0			
Trichloroethene	0.4173 0.3457	0.3423 0.3579	0.3443 0.3500	0.3327 0.3615	0.3391 0.3661	Ave		0.3557				6.7		30.0			
Dibromomethane	+++++ 0.4428	0.4737 0.4359	0.4217 0.4292	0.4144 0.4369	0.4366 0.4305	Ave		0.4357				3.8		30.0			
Bromodichloromethane	+++++ 0.7058	0.6319 0.6993	0.6311 0.7106	0.6344 0.7220	0.6755 0.7288	Ave		0.6822				5.9		30.0			
1,4-Dioxane	+++++ 0.1225	+++++ 0.1334	+++++ 0.1367	0.1087 0.1364	0.1170 0.1324	Ave		0.1267				8.6		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19488-1 Analy Batch No.: 39100

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/16/2020 08:03 Calibration End Date: 04/16/2020 18:34 Calibration ID: 2402

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Methyl methacrylate	+++++ 0.3381	+++++ 0.3469	0.2529 0.3561	0.2648 0.3592	0.3066 0.3424	Ave		0.3209				13.0		30.0			
Methylcyclohexane	+++++ 0.4507	0.3499 0.4715	0.3439 0.4850	0.3549 0.5010	0.4071 0.5125	Lin1	-0.013	0.5026							0.9990		0.9900
4-Methyl-2-pentanone (MIBK)	+++++ 0.6679	0.4819 0.6884	0.4680 0.7199	0.5075 0.7310	0.5941 0.7175	Ave		0.6196				17.5		30.0			
cis-1,3-Dichloropropene	+++++ 0.4898	0.3571 0.4999	0.3706 0.5161	0.4004 0.5375	0.4457 0.5349	Ave		0.4613				15.2		30.0			
trans-1,3-Dichloropropene	+++++ 0.4971	0.3895 0.5152	0.3859 0.5397	0.3870 0.5720	0.4373 0.5700	Ave		0.4771				16.4		30.0			
Toluene	+++++ 1.1774	+++++ 1.2069	0.9667 1.1825	0.9734 1.1775	1.1110 1.1581	Lin2	-0.020	1.1771							0.9990		0.9900
1,1,2-Trichloroethane	+++++ 0.4329	0.4129 0.4325	0.4237 0.4160	0.4271 0.4060	0.4366 0.3887	Ave		0.4196				3.7		30.0			
2-Hexanone	+++++ 0.3708	+++++ 0.4095	+++++ 0.4216	0.2209 0.4225	0.2949 0.4252	Ave		0.3665				21.7		30.0			
C8 Range	+++++ 2.7557	+++++ 2.7681	2.0999 2.7972	2.2602 2.8000	2.5899 2.7646	Ave		2.6044				10.5		30.0			
Octane	+++++ 0.3167	+++++ 0.3309	+++++ 0.3340	0.2227 0.3360	0.2931 0.3419	Ave		0.3108				13.6		30.0			
Dibromochloromethane	+++++ 0.7657	0.5983 0.7789	0.6427 0.8086	0.6503 0.8363	0.7247 0.8649	Ave		0.7412				12.6		30.0			
1,2-Dibromoethane (EDB)	+++++ 0.7247	0.6094 0.7228	0.6175 0.7335	0.6222 0.7552	0.7003 0.7529	Ave		0.6932				8.6		30.0			
Tetrachloroethene	0.4615 0.4194	0.4554 0.4285	0.4032 0.4190	0.4139 0.4258	0.4229 0.4352	Ave		0.4285				4.2		30.0			
Chlorobenzene	+++++ 0.9115	0.9917 0.9164	0.9432 0.9147	0.8840 0.9435	0.9113 0.9620	Ave		0.9309				3.5		30.0			
Ethylbenzene	+++++ 1.5067	+++++ 1.5513	1.1790 1.5666	1.2124 1.5668	1.4086 1.5620	Ave		1.4442				11.2		30.0			
m-Xylene & p-Xylene	+++++ 1.1998	0.8398 1.2188	0.9173 1.2186	0.9705 1.2351	1.1355 1.1769	Ave		1.1014				13.7		30.0			
Nonane	+++++ 0.7428	+++++ 0.7737	+++++ 0.7701	0.5038 0.7671	0.6636 0.7422	Ave		0.7090				13.8		30.0			
Bromoform	+++++ 0.7588	+++++ 0.7693	0.5073 0.8929	0.5287 0.9642	0.6714 0.9989	Ave		0.7614				24.4		30.0			
Styrene	+++++ 0.8242	+++++ 0.8625	0.5350 0.8643	0.6365 0.8509	0.7561 0.8320	Lin2	-0.027	0.8487							0.9990		0.9900
o-Xylene	+++++ 1.2537	0.9010 1.2480	1.0261 1.2149	1.0842 1.1731	1.2133 1.1540	Ave		1.1409				10.3		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19488-1 Analy Batch No.: 39100

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/16/2020 08:03 Calibration End Date: 04/16/2020 18:34 Calibration ID: 2402

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
1,1,2,2-Tetrachloroethane	+++++ 1.1462	+++++ 1.1179	1.0110 1.1371	1.0273 1.0972	1.1167 1.1004	Ave		1.0942				4.5		30.0			
1,2,3-Trichloropropane	+++++ 0.2489	+++++ 0.2473	0.2249 0.2477	0.2329 0.2392	0.2409 0.2484	Ave		0.2413				3.6		30.0			
Isopropylbenzene	+++++ 1.5935	+++++ 1.6303	+++++ 1.6363	1.2293 1.6120	1.4566 1.6271	Ave		1.5407				9.8		30.0			
Propylbenzene	+++++ 0.4097	+++++ 0.4286	+++++ 0.4423	0.2878 0.4415	0.3719 +++++	Ave		0.3970				15.0		30.0			
2-Chlorotoluene	+++++ 0.4175	0.3205 0.4156	0.3517 0.4194	0.3535 0.4051	0.3990 +++++	Ave		0.3853				9.8		30.0			
4-Ethyltoluene	+++++ 1.6342	+++++ 1.6781	1.0957 1.7073	1.2229 1.6559	1.4589 1.7019	Ave		1.5193				15.7		30.0			
1,3,5-Trimethylbenzene	+++++ 0.6247	+++++ 0.6416	0.4496 0.6503	0.5084 0.6394	0.5804 0.6641	Lin2	-0.017	0.6442							0.9990		0.9900
Alpha Methyl Styrene	+++++ 0.5881	+++++ 0.6570	+++++ 0.6993	0.3596 0.7083	0.4680 0.7668	Ave		0.6067				24.0		30.0			
Decane	+++++ 1.0726	+++++ 1.0625	+++++ 1.0570	0.7950 1.0002	1.0152 0.9594	Ave		0.9946				9.7		30.0			
tert-Butylbenzene	+++++ 1.4199	+++++ 1.4357	1.0213 1.4705	1.1804 1.4834	1.3147 1.5192	Ave		1.3557				12.8		30.0			
1,2,4-Trimethylbenzene	+++++ 1.4577	+++++ 1.4594	0.9981 1.4822	1.1592 1.4573	1.3655 1.4289	Ave		1.3510				13.1		30.0			
sec-Butylbenzene	+++++ 2.1080	+++++ 2.1852	1.4048 2.2466	1.5415 2.2427	1.8864 +++++	Ave		1.9450				17.8		30.0			
1,3-Dichlorobenzene	0.8677 0.9272	0.8078 0.9331	0.7503 0.9745	0.8227 0.9777	0.8808 0.9814	Ave		0.8923				9.0		30.0			
Benzyl chloride	+++++ 1.0716	+++++ 1.2230	+++++ 1.3284	0.6848 1.3629	0.8894 1.4274	Ave		1.1411				24.0		30.0			
1,4-Dichlorobenzene	0.8750 0.8807	0.6820 0.8996	0.6976 0.9415	0.7728 0.9381	0.8332 0.9640	Ave		0.8484				11.8		30.0			
4-Isopropyltoluene	+++++ 1.6161	+++++ 1.6452	1.0016 1.6668	1.2030 1.6707	1.4758 1.6679	Ave		1.4934				17.1		30.0			
1,2,3-Trimethylbenzene	+++++ 1.4515	+++++ 1.4602	1.0088 1.4537	1.1976 1.4110	1.3622 1.4185	Ave		1.3454				12.0		30.0			
Indane	+++++ 1.3369	+++++ 1.3758	0.9566 1.4336	1.0020 1.4533	1.2184 1.3698	Ave		1.2683				15.2		30.0			
1,2-Dichlorobenzene	0.8948 0.9349	0.7448 0.9439	0.7863 0.9862	0.8153 1.0055	0.9015 0.9853	Ave		0.8999				10.0		30.0			
Indene	+++++ 1.1167	+++++ 1.2078	+++++ 1.2815	0.7819 1.3128	0.9758 1.2468	Ave		1.1319				17.0		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19488-1 Analy Batch No.: 39100

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/16/2020 08:03 Calibration End Date: 04/16/2020 18:34 Calibration ID: 2402

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Butylbenzene	+++++ 1.9599	+++++ 1.9528	+++++ 1.9933	1.5170 1.9985	1.8319 1.7018	Lin2	-0.064	1.9478							0.9960		0.9900
Undecane	+++++ 1.1889	+++++ 1.2151	+++++ 1.2538	0.7689 1.2796	1.0031 1.1348	Ave		1.1206				16.1		30.0			
1,2-Dibromo-3-Chloropropane	+++++ 0.4589	+++++ 0.5198	0.2556 +++++	0.2966 +++++	0.3995 +++++	Lin1	-0.028	0.5124							0.9950		0.9900
1,2,4,5-Tetramethylbenzene	+++++ 1.4386	+++++ 1.5093	0.6700 1.6414	0.8615 1.7703	1.1812 +++++	Lin1	-0.125	1.7087							0.9960		0.9900
Dodecane	+++++ 1.0635	+++++ 1.1170	+++++ 1.2260	+++++ 1.3119	0.7874 1.1287	Ave		1.1058				16.2		30.0			
1,2,4-Trichlorobenzene	+++++ 0.6133	+++++ 0.6574	0.3729 0.7926	0.4132 +++++	0.5129 +++++	Ave		0.5604				28.2		30.0			
Naphthalene	+++++ 1.4342	0.8441 1.5502	0.7272 1.7894	0.8359 1.7945	1.2503 +++++	Ave		1.2782				33.9	*	30.0			
Hexachlorobutadiene	+++++ 0.7624	0.6973 0.7723	0.7209 0.8166	0.7411 0.9175	0.7038 0.8398	Ave		0.7746				9.3		30.0			
1,2,3-Trichlorobenzene	+++++ 0.6601	0.5209 0.6542	0.4725 0.7278	0.5276 0.7685	0.5823 0.7496	Ave		0.6293				17.2		30.0			
2-Methylnaphthalene	+++++ 0.3280	+++++ 0.3669	+++++ 0.5743	+++++ 0.6380	0.2027 0.5268	Ave		0.4394				37.9		50.0			
1-Methylnaphthalene	+++++ 0.5144	+++++ 0.4923	+++++ 0.6654	+++++ 0.7050	0.3681 0.5282	Ave		0.5456				22.5		50.0			
4-Bromofluorobenzene (Surr)	0.6470 0.7042	0.6481 0.6953	0.6569 0.6942	0.6828 0.6519	0.7049 0.6255	Ave		0.6711				4.2		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19488-1 Analy Batch No.: 39100

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/16/2020 08:03 Calibration End Date: 04/16/2020 18:34 Calibration ID: 2402

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 140-39100/3	HD16IC01.D
Level 2	IC 140-39100/4	HD16IC02.D
Level 3	IC 140-39100/5	HD16IC03.D
Level 4	IC 140-39100/6	HD16IC04.D
Level 5	IC 140-39100/7	HD16IC05.D
Level 6	IC 140-39100/8	HD16IC06.D
Level 7	ICIS 140-39100/9	HD16IC07.D
Level 8	IC 140-39100/11	HD16IC08.D
Level 9	IC 140-39100/13	HD16C09.D
Level 10	IC 140-39100/15	HD16IC10.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
Chlorodifluoromethane	CBM	Ave	+++++ 231500	11004 486289	20123 963019	35814 2067462	89827 4645992	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Propene	CBM	Lin2	+++++ 139705	+++++ 241206	+++++ 427965	+++++ 854036	+++++ 1786636	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	+++++ 16.0
Dichlorodifluoromethane	CBM	Ave	+++++ 359489	16241 758766	31396 1463527	56371 3140078	140856 7021295	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Chloromethane	CBM	Ave	+++++ 37262	+++++ 79574	3999 152640	6920 333046	14923 695361	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2-Dichloro-1,1,2,2-tetrafluoroethane	CBM	Ave	+++++ 250336	10973 497468	19667 999739	38003 2138873	92562 4587553	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Vinyl chloride	CBM	Ave	3905 121630	6102 260327	10835 504476	19486 1097532	46282 2322657	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Butane	CBM	Ave	+++++ 145634	7920 319615	13595 609622	23955 1317848	56170 2819645	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,3-Butadiene	CBM	Ave	+++++ 85854	4237 185695	7251 364329	13332 800991	31980 1733328	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Bromomethane	CBM	Ave	+++++ 133380	+++++ 283021	12442 557215	21476 1195058	52498 2680699	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Chloroethane	CBM	Ave	+++++ 52250	+++++ 114269	5154 220714	9049 473312	20202 1117601	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Ethanol	CBM	Ave	+++++ 189858	+++++ 437849	+++++ 849422	30833 1803812	76328 4024711	+++++ 5.00	+++++ 10.0	+++++ 20.0	0.800 40.0	2.00 80.0
Vinyl bromide	CBM	Ave	+++++ 121595	+++++ 259146	10864 512684	18795 1095069	46565 2449170	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Methylbutane	CBM	Ave	+++++ 102629	5834 230259	10223 439434	17975 922954	41883 2179006	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Trichlorofluoromethane	CBM	Ave	8638 307689	14717 673807	27087 1313983	49414 2754124	122445 6259604	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19488-1 Analy Batch No.: 39100

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/16/2020 08:03 Calibration End Date: 04/16/2020 18:34 Calibration ID: 2402

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
Acrolein	CBM	Ave	+++++ 36991	+++++ 83698	+++++ 160207	+++++ 351820	14460 770263	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
Acetonitrile	CBM	Ave	+++++ 45061	+++++ 99811	+++++ 193771	6221 404640	15350 876291	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Acetone	CBM	Ave	+++++ 144197	+++++ 321031	+++++ 621189	26699 1306609	58978 2840455	+++++ 3.00	+++++ 6.00	+++++ 12.0	0.480 24.0	1.20 48.0
Pentane	CBM	Ave	+++++ 13325	+++++ 30063	+++++ 59233	2204 123932	5699 283032	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Isopropyl alcohol	CBM	QuaF	11269 408240	17322 929352	35039 1833925	63906 3796296	155698 8062272	0.0600 3.00	0.120 6.00	0.240 12.0	0.480 24.0	1.20 48.0
Ethyl ether	CBM	Ave	+++++ 97518	+++++ 210353	8140 412535	14622 869980	38004 1865787	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,1-Dichloroethene	CBM	Ave	2804 100847	5039 227649	8847 448571	15910 969472	39611 2234722	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
tert-Butyl alcohol	CBM	Ave	+++++ 173411	+++++ 400539	+++++ 801044	25034 1729850	64952 3874874	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Acrylonitrile	CBM	Ave	+++++ 80366	+++++ 178531	+++++ 362650	12503 769371	29756 1688190	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,1,2-Trichloro-1,2,2-trifluoroetha ne	CBM	Ave	+++++ 245213	11699 530093	21519 1037519	38557 2185448	96750 4903021	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Methylene Chloride	CBM	Lin2	+++++ 154970	+++++ 277879	+++++ 484483	+++++ 964215	92172 2087076	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
3-Chloropropene	CBM	Ave	+++++ 91499	+++++ 183177	8576 381139	14877 794100	35436 1680097	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Carbon disulfide	CBM	Ave	+++++ 321614	+++++ 700695	26707 1401786	49948 2950735	121608 6586980	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
trans-1,2-Dichloroethene	CBM	Ave	+++++ 104558	4645 231517	8457 462023	16038 1004966	38437 2341906	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Methylpentane	CBM	Ave	+++++ 216620	9022 470982	16726 927170	31198 1934336	80643 4230295	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Methyl tert-butyl ether	CBM	Ave	+++++ 250002	+++++ 566203	18109 1113570	35919 2377350	93424 5377846	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,1-Dichloroethane	CBM	Ave	+++++ 203725	9995 444836	18939 870501	32795 1864545	80555 4207742	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Vinyl acetate	CBM	Ave	+++++ 268831	+++++ 609105	17617 1260082	34018 2745775	91256 6112232	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Butanone (MEK)	CBM	Ave	+++++ 46715	+++++ 105028	3340 208856	7039 459705	17276 1059600	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Hexane	CBM	Ave	+++++ 81612	3330 177214	6554 350514	11424 735372	30138 1664785	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
cis-1,2-Dichloroethene	CBM	Ave	+++++ 109138	4992 244867	8768 483319	15922 1051184	41173 2404412	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19488-1 Analy Batch No.: 39100

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/16/2020 08:03 Calibration End Date: 04/16/2020 18:34 Calibration ID: 2402

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
Ethyl acetate	CBM	Ave	+++++ 243309	+++++ 528533	18488 1057713	34352 2280021	88887 5058973	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Chloroform	CBM	Ave	+++++ 259748	11359 555591	22975 1089216	40055 2319314	102267 5266742	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Tetrahydrofuran	CBM	Ave	+++++ 111448	+++++ 241581	8369 486618	15601 1048134	38891 2325299	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,1,1-Trichloroethane	CBM	Ave	5936 238710	10895 519709	19125 1035652	36041 2226667	90992 5228667	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2-Dichloroethane	DFBZ	Ave	+++++ 159660	6770 341615	13517 674961	24301 1438586	63603 3239207	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1-Butanol	DFBZ	Ave	+++++ 31194	+++++ 74752	+++++ 163141	3754 367453	11011 823377	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Cyclohexane	DFBZ	Ave	+++++ 44463	+++++ 97449	3214 194896	5387 419218	17030 984941	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Benzene	DFBZ	Ave	+++++ 327048	14835 702040	26805 1381354	50090 2959608	124381 6814294	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Carbon tetrachloride	DFBZ	Ave	6123 235027	9885 428945	18653 1027125	35971 2236066	89850 5348449	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2,3-Dimethylpentane	DFBZ	Ave	+++++ 63177	+++++ 143017	4636 276254	8770 587746	23858 1323627	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Thiophene	DFBZ	Ave	+++++ 187275	+++++ 408590	13982 804688	26308 1741820	70215 3939750	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2,2,4-Trimethylpentane	DFBZ	Ave	+++++ 502191	21037 1105098	38853 2202334	71678 4729216	185595 10844560	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Heptane	DFBZ	Ave	+++++ 91657	+++++ 207953	6380 422040	12061 936570	32858 2204310	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2-Dichloropropane	DFBZ	Ave	+++++ 134477	+++++ 288578	11447 570867	20019 1229183	51542 2802753	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Trichloroethene	DFBZ	Ave	3632 127602	5518 290163	10774 562502	19415 1238898	49084 2898833	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Dibromomethane	DFBZ	Ave	+++++ 163438	7636 353400	13194 689705	24181 1497232	63193 3408707	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Bromodichloromethane	DFBZ	Ave	+++++ 260503	10187 566974	19747 1141997	37024 2474307	97760 5771198	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,4-Dioxane	DFBZ	Ave	+++++ 45200	+++++ 108163	+++++ 219730	6344 467421	16940 1048208	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Methyl methacrylate	DFBZ	Ave	+++++ 124803	+++++ 281242	7912 572229	15453 1231161	44369 2711034	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Methylcyclohexane	DFBZ	Lin1	+++++ 166351	5640 382280	10759 779341	20710 1717022	58914 4057821	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
4-Methyl-2-pentanone (MIBK)	DFBZ	Ave	+++++ 246503	7769 558163	14642 1156932	29615 2505241	85978 5681206	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19488-1 Analy Batch No.: 39100

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/16/2020 08:03 Calibration End Date: 04/16/2020 18:34 Calibration ID: 2402

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
cis-1,3-Dichloropropene	DFBZ	Ave	+++++ 180786	5756 405317	11596 829424	23365 1842062	64503 4235824	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
trans-1,3-Dichloropropene	CBZd 5	Ave	+++++ 151775	4983 347837	9453 751139	18209 1757736	50863 4155320	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Toluene	CBZd 5	Lin2	+++++ 359526	+++++ 814775	23680 1645627	45801 3618377	129213 8442824	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,1,2-Trichloroethane	CBZd 5	Ave	+++++ 132187	5283 292002	10378 578879	20097 1247689	50779 2833954	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Hexanone	CBZd 5	Ave	+++++ 113223	+++++ 276466	+++++ 586718	10396 1298399	34298 3099705	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
C8 Range	DFBZ	Ave	+++++ 1017108	+++++ 2244338	65706 4495106	131899 9596132	374828 21890779	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Octane	CBZd 5	Ave	+++++ 96698	+++++ 223369	+++++ 464843	10479 1032477	34092 2492358	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Dibromochloromethane	CBZd 5	Ave	+++++ 233797	7655 525843	15744 1125338	30600 2569991	84287 6305124	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2-Dibromoethane (EDB)	CBZd 5	Ave	+++++ 221286	7797 487987	15125 1020772	29274 2320778	81447 5488598	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Tetrachloroethene	CBZd 5	Ave	3169 128051	5826 289299	9877 583145	19473 1308529	49185 3173034	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Chlorobenzene	CBZd 5	Ave	+++++ 278338	12688 618693	23105 1272896	41596 2899265	105985 7013464	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Ethylbenzene	CBZd 5	Ave	+++++ 460069	+++++ 1047293	28881 2180137	57047 4814622	163820 11387475	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
m-Xylene & p-Xylene	CBZd 5	Ave	+++++ 732692	21489 1645607	44937 3391621	91330 7590625	264124 17159700	+++++ 2.00	0.0800 4.00	0.160 8.00	0.320 16.0	0.800 32.0
Nonane	CBZd 5	Ave	+++++ 226817	+++++ 522325	+++++ 1071726	23707 2357236	77180 5410526	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Bromoform	CBZd 5	Ave	+++++ 231700	+++++ 519364	12426 1242561	24877 2962933	78091 7282003	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Styrene	CBZd 5	Lin2	+++++ 251682	+++++ 582294	13105 1202773	29948 2614749	87934 6065693	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
o-Xylene	CBZd 5	Ave	+++++ 382815	11527 842502	25134 1690681	51012 3605048	141114 8412759	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,1,2,2-Tetrachloroethane	CBZd 5	Ave	+++++ 349990	+++++ 754733	24765 1582520	48338 3371779	129877 8021948	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2,3-Trichloropropane	CBZd 5	Ave	+++++ 76006	+++++ 166974	5508 344685	10959 735160	28017 1810615	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Isopropylbenzene	CBZd 5	Ave	+++++ 486566	+++++ 1100652	+++++ 2277155	57843 4953618	169405 11862116	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Propylbenzene	CBZd 5	Ave	+++++ 125088	+++++ 289338	+++++ 615504	13541 1356728	43255 +++++	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 +++++

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19488-1 Analy Batch No.: 39100

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/16/2020 08:03 Calibration End Date: 04/16/2020 18:34 Calibration ID: 2402

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
2-Chlorotoluene	CBZd 5	Ave	+++++ 127493	4101 280556	8616 583613	16633 1244997	46403 +++++	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
4-Ethyltoluene	CBZd 5	Ave	+++++ 499000	+++++ 1132867	26839 2375918	57542 5088580	169671 12406817	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,3,5-Trimethylbenzene	CBZd 5	Lin2	+++++ 190751	+++++ 433130	11014 904990	23921 1964746	67506 4841639	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Alpha Methyl Styrene	CBZd 5	Ave	+++++ 179584	+++++ 443556	+++++ 973148	16922 2176590	54434 5590147	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Decane	CBZd 5	Ave	+++++ 327523	+++++ 717310	+++++ 1470997	37409 3073620	118068 6994366	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
tert-Butylbenzene	CBZd 5	Ave	+++++ 433573	+++++ 969278	25018 2046472	55542 4558596	152906 11074891	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2,4-Trimethylbenzene	CBZd 5	Ave	+++++ 445105	+++++ 985232	24449 2062691	54541 4478253	158811 10416980	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
sec-Butylbenzene	CBZd 5	Ave	+++++ 643662	+++++ 1475251	34412 3126528	72529 6891856	219395 +++++	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
1,3-Dichlorobenzene	CBZd 5	Ave	5959 283133	10335 629940	18378 1356116	38711 3004392	102440 7154411	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Benzyl chloride	CBZd 5	Ave	+++++ 327220	+++++ 825637	+++++ 1848688	32222 4188193	103438 10405686	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,4-Dichlorobenzene	CBZd 5	Ave	6009 268919	8725 607350	17088 1310298	36362 2882638	96899 7027867	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
4-Isopropyltoluene	CBZd 5	Ave	+++++ 493467	+++++ 1110692	24534 2319630	56604 5134104	171643 12159293	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2,3-Trimethylbenzene	CBZd 5	Ave	+++++ 443228	+++++ 985784	24711 2023027	56349 4335946	158427 10341419	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Indane	CBZd 5	Ave	+++++ 408235	+++++ 928811	23433 1995144	47145 4466008	141703 9985831	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2-Dichlorobenzene	CBZd 5	Ave	6145 285474	9529 637250	19261 1372447	38362 3089904	104846 7182845	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Indene	CBZd 5	Ave	+++++ 340988	+++++ 815409	+++++ 1783350	36789 4034180	113484 9089023	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Butylbenzene	CBZd 5	Lin2	+++++ 598461	+++++ 1318318	+++++ 2773990	71377 6141265	213054 12406646	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Undecane	CBZd 5	Ave	+++++ 363019	+++++ 820319	+++++ 1744807	36177 3932182	116661 8272907	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,2-Dibromo-3-Chloropropane	CBZd 5	Lin1	+++++ 140139	+++++ 350953	6262 +++++	13954 +++++	46467 +++++	+++++ 1.00	+++++ 2.00	0.0800 +++++	0.160 +++++	0.400 +++++
1,2,4,5-Tetramethylbenzene	CBZd 5	Lin1	+++++ 439273	+++++ 1018930	16411 2284296	40538 5440106	137380 +++++	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
Dodecane	CBZd 5	Ave	+++++ 324734	+++++ 754126	+++++ 1706215	+++++ 4031518	91576 8228196	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19488-1 Analy Batch No.: 39100

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/16/2020 08:03 Calibration End Date: 04/16/2020 18:34 Calibration ID: 2402

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
1,2,4-Trichlorobenzene	CBZd5	Ave	+++++ 187269	+++++ 443828	9135 1103007	19442 +++++	59652 +++++	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 +++++	0.400 +++++
Naphthalene	CBZd5	Ave	+++++ 437919	10799 1046543	17814 2490239	39332 5514360	145411 +++++	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
Hexachlorobutadiene	CBZd5	Ave	+++++ 232795	8921 521395	17658 1136376	34869 2819544	81851 6122575	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2,3-Trichlorobenzene	CBZd5	Ave	+++++ 201572	6664 441687	11573 1012803	24824 2361537	67722 5464745	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Methylnaphthalene	CBZd5	Ave	+++++ 100153	+++++ 247741	+++++ 799266	+++++ 1960658	23571 3840400	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
1-Methylnaphthalene	CBZd5	Ave	+++++ 157067	+++++ 332364	+++++ 926074	+++++ 2166654	42808 3851176	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
4-Bromofluorobenzene (Surr)	CBZd5	Ave	888610 860143	829134 938760	804495 966038	803145 1001617	819799 1140026	4.00 4.00	4.00 4.00	4.00 4.00	4.00 4.00	4.00 4.00

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD
Lin2 = Linear 1/conc^2 ISTD
QuaF = Quadratic ISTD forced zero

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19488-1 Analy Batch No.: 39100

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/16/2020 08:03 Calibration End Date: 04/16/2020 18:34 Calibration ID: 2402

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 140-39100/3	HD16IC01.D
Level 2	IC 140-39100/4	HD16IC02.D
Level 3	IC 140-39100/5	HD16IC03.D
Level 4	IC 140-39100/6	HD16IC04.D
Level 5	IC 140-39100/7	HD16IC05.D
Level 6	IC 140-39100/8	HD16IC06.D
Level 7	ICIS 140-39100/9	HD16IC07.D
Level 8	IC 140-39100/11	HD16IC08.D
Level 9	IC 140-39100/13	HD16C09.D
Level 10	IC 140-39100/15	HD16IC10.D

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
Chlorodifluoromethane	+++++	9.1						50				
Propene	+++++	+++++	+++++	+++++	+++++	-0.5						50
Dichlorodifluoromethane	+++++	4.7						50				
Chloromethane	+++++	+++++	25.9						50			
1,2-Dichloro-1,1,2,2-tetrafluoroethane	+++++	6.1						50				
Vinyl chloride	32.1						50					
Butane	+++++	20.5						50				
1,3-Butadiene	+++++	12.4						50				
Bromomethane	+++++	+++++	13.2						50			
Chloroethane	+++++	+++++	16.3						50			
Ethanol	+++++	+++++	+++++	3.0						50		
Vinyl bromide	+++++	+++++	9.7						50			
2-Methylbutane	+++++	20.9						50				
Trichlorofluoromethane	16.6						50					

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19488-1 Analy Batch No.: 39100

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/16/2020 08:03 Calibration End Date: 04/16/2020 18:34 Calibration ID: 2402

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
Acrolein	+++++	+++++	+++++	+++++	2.0						50	
Acetonitrile	+++++	+++++	+++++	-5.4						50		
Acetone	+++++	+++++	+++++	17.8						80		
Pentane	+++++	+++++	+++++	4.3						50		
Isopropyl alcohol	8.4						50					
Ethyl ether	+++++	+++++	4.1						50			
1,1-Dichloroethene	13.0						50					
tert-Butyl alcohol	+++++	+++++	+++++	-7.8						50		
Acrylonitrile	+++++	+++++	+++++	0.9						50		
1,1,2-Trichloro-1,2,2-trifluoroethane	+++++	8.4						50				
Methylene Chloride	+++++	+++++	+++++	+++++	-1.6						80	
3-Chloropropene	+++++	+++++	16.1						50			
Carbon disulfide	+++++	+++++	1.9						50			
trans-1,2-Dichloroethene	+++++	1.0						50				
2-Methylpentane	+++++	-0.8						50				
Methyl tert-butyl ether	+++++	+++++	-10.3						50			
1,1-Dichloroethane	+++++	9.1						50				
Vinyl acetate	+++++	+++++	-17.8						50			
2-Butanone (MEK)	+++++	+++++	-12.6						50			
Hexane	+++++	-3.2						50				
cis-1,2-Dichloroethene	+++++	4.0						50				

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19488-1 Analy Batch No.: 39100

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/16/2020 08:03 Calibration End Date: 04/16/2020 18:34 Calibration ID: 2402

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
Ethyl acetate	+++++	+++++	-4.5						50			
Chloroform	+++++	0.6						50				
Tetrahydrofuran	+++++	+++++	-5.0						50			
1,1,1-Trichloroethane	6.0						50					
1,2-Dichloroethane	+++++	-0.8						50				
1-Butanol	+++++	+++++	+++++	-28.5						50		
Cyclohexane	+++++	+++++	-10.8						50			
Benzene	+++++	5.8						50				
Carbon tetrachloride	12.0						50					
2,3-Dimethylpentane	+++++	+++++	-10.3						50			
Thiophene	+++++	+++++	-8.4						50			
2,2,4-Trimethylpentane	+++++	-1.3						50				
Heptane	+++++	+++++	-16.6						50			
1,2-Dichloropropane	+++++	+++++	2.6						50			
Trichloroethene	17.3						50					
Dibromomethane	+++++	8.7						50				
Bromodichloromethane	+++++	-7.4						50				
1,4-Dioxane	+++++	+++++	+++++	-14.2						50		
Methyl methacrylate	+++++	+++++	-21.2						50			
Methylcyclohexane	+++++	36.4						50				
4-Methyl-2-pentanone (MIBK)	+++++	-22.2						50				

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19488-1 Analy Batch No.: 39100

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/16/2020 08:03 Calibration End Date: 04/16/2020 18:34 Calibration ID: 2402

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
cis-1,3-Dichloropropene	+++++	-22.6						50				
trans-1,3-Dichloropropene	+++++	-18.4						50				
Toluene	+++++	+++++	3.3						50			
1,1,2-Trichloroethane	+++++	-1.6						50				
2-Hexanone	+++++	+++++	+++++	-39.7						50		
Octane	+++++	+++++	+++++	-28.3						50		
Dibromochloromethane	+++++	-19.3						50				
1,2-Dibromoethane (EDB)	+++++	-12.1						50				
Tetrachloroethene	7.7						50					
Chlorobenzene	+++++	6.5						50				
Ethylbenzene	+++++	+++++	-18.4						50			
m-Xylene & p-Xylene	+++++	-23.7						50				
Nonane	+++++	+++++	+++++	-28.9						50		
Bromoform	+++++	+++++	-33.4						50			
Styrene	+++++	+++++	2.9						50			
o-Xylene	+++++	-21.0						50				
1,1,2,2-Tetrachloroethane	+++++	+++++	-7.6						50			
1,2,3-Trichloropropane	+++++	+++++	-6.8						50			
Isopropylbenzene	+++++	+++++	+++++	-20.2						50		
Propylbenzene	+++++	+++++	+++++	-27.5 +++++						50		
2-Chlorotoluene	+++++	-16.8		+++++				50				

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19488-1 Analy Batch No.: 39100

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/16/2020 08:03 Calibration End Date: 04/16/2020 18:34 Calibration ID: 2402

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
4-Ethyltoluene	+++++	+++++	-27.9						50			
1,3,5-Trimethylbenzene	+++++	+++++	2.9						50			
Alpha Methyl Styrene	+++++	+++++	+++++	-40.7						50		
Decane	+++++	+++++	+++++	-20.1						50		
tert-Butylbenzene	+++++	+++++	-24.7						50			
1,2,4-Trimethylbenzene	+++++	+++++	-26.1						50			
sec-Butylbenzene	+++++	+++++	-27.8	+++++					50			
1,3-Dichlorobenzene	-2.8						50					
Benzyl chloride	+++++	+++++	+++++	-40.0						50		
1,4-Dichlorobenzene	3.1						50					
4-Isopropyltoluene	+++++	+++++	-32.9						50			
1,2,3-Trimethylbenzene	+++++	+++++	-25.0						50			
Indane	+++++	+++++	-24.6						50			
1,2-Dichlorobenzene	-0.6						50					
Indene	+++++	+++++	+++++	-30.9						50		
Butylbenzene	+++++	+++++	+++++	-1.7						50		
Undecane	+++++	+++++	+++++	-31.4						50		
1,2-Dibromo-3-Chloropropane	+++++	+++++ +++++	17.6 +++++	+++++					50			
1,2,4,5-Tetramethylbenzene	+++++	+++++	30.6	+++++					50			
Dodecane	+++++	+++++	+++++	+++++	-28.8						50	
1,2,4-Trichlorobenzene	+++++	+++++	-33.5 +++++	+++++					50			

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19488-1 Analy Batch No.: 39100

SDG No.:

Instrument ID: MH GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/16/2020 08:03 Calibration End Date: 04/16/2020 18:34 Calibration ID: 2402

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
Naphthalene	+++++	-34.0		+++++				80				
Hexachlorobutadiene	+++++	-10.0						50				
1,2,3-Trichlorobenzene	+++++	-17.2						50				
2-Methylnaphthalene	+++++	+++++	+++++	+++++	-53.9						80	
1-Methylnaphthalene	+++++	+++++	+++++	+++++	-32.5						80	

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC01.D
Lims ID: IC L1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 16-Apr-2020 08:03:30 ALS Bottle#: 1 Worklist Smp#: 3
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0015239-003
Misc. Info.: 297345
Operator ID: HMT Instrument ID: MH
Sublist: chrom-MH_TO15*sub7

Method: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\MH_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 21-Apr-2020 10:48:16 Calib Date: 16-Apr-2020 18:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC10.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX0331

First Level Reviewer: tajh Date: 16-Apr-2020 12:16:35

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.582	8.589	-0.007	97	254723	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.784	10.792	-0.008	95	1740764	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.570	15.572	-0.002	89	1373487	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr	95	17.219	17.222	-0.003	88	888610	4.00	3.86	
6 Chlorodifluoromethane	51	3.548	3.546	0.002	69	5795	0.0200	0.0216	
7 Propene	41	3.553	3.555	-0.002	99	61509	0.0200	-0.1040	
8 Dichlorodifluoromethane	85	3.610	3.606	0.004	99	10211	0.0200	0.0247	
9 Chloromethane	52	3.776	3.779	-0.003	55	1401	0.0200	0.0311	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.786	3.785	0.001	96	6921	0.0200	0.0251	
11 Acetaldehyde	44	3.936	3.930	0.006	99	9951	0.1000	0.1983	
12 Vinyl chloride	62	3.946	3.945	0.001	69	3905	0.0200	0.0264	
13 Butane	43	4.029	4.028	0.001	83	5363	0.0200	0.0306	
14 Butadiene	54	4.029	4.028	0.001	66	2771	0.0200	0.0276	
15 Bromomethane	94	4.334	4.337	-0.003	93	4051	0.0200	0.0260	
16 Chloroethane	64	4.479	4.473	0.005	77	2250	0.0200	0.0358	
17 Ethanol	31	4.572	4.571	0.001	98	5996	0.1000	0.1320	
18 Vinyl bromide	106	4.763	4.763	0.000	95	3891	0.0200	0.0277	
19 2-Methylbutane	43	4.804	4.806	-0.002	83	5036	0.0200	0.0392	
20 Trichlorofluoromethane	101	5.021	5.022	-0.001	99	8638	0.0200	0.0233	
21 Acrolein	56	5.037	5.037	0.000	46	1934	0.0200	0.0446	
22 Acetonitrile	40	5.238	5.116	0.122	59	734	0.0200	0.0147	
23 Acetone	58	5.166	5.154	0.012	97	5466	0.0600	0.0954	
24 Pentane	72	5.228	5.236	-0.008	97	414	0.0200	0.0258	
25 Isopropyl alcohol	45	5.254	5.241	0.013	93	11269	0.0600	0.0650	
26 Ethyl ether	31	5.429	5.408	0.021	85	2795	0.0200	0.0252	
27 1,1-Dichloroethene	96	5.709	5.716	-0.007	95	2804	0.0200	0.0226	
28 Acrylonitrile	53	5.833	5.826	0.007	74	2474	0.0200	0.0263	
29 2-Methyl-2-propanol	59	5.864	5.832	0.032	95	4477	0.0200	0.0217	
30 1,1,2-Trichloro-1,2,2-trif	101	5.884	5.889	-0.005	91	7634	0.0200	0.0266	
31 Methylene Chloride	84	6.060	6.063	-0.003	98	68713	0.0200	-0.002048	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.076	6.076	0.000	92	3666	0.0200	0.0350	
33 Carbon disulfide	76	6.210	6.218	-0.008	98	8516	0.0200	0.0229	
34 trans-1,2-Dichloroethene	96	6.846	6.859	-0.013	92	2820	0.0200	0.0230	
35 2-Methylpentane	43	6.871	6.873	-0.002	91	5962	0.0200	0.0246	
36 Methyl tert-butyl ether	73	7.011	6.989	0.022	94	5977	0.0200	0.0209	
37 1,1-Dichloroethane	63	7.269	7.280	-0.011	99	6149	0.0200	0.0252	
38 Vinyl acetate	43	7.388	7.385	0.003	97	6358	0.0200	0.0209	
39 2-Butanone (MEK)	72	7.843	7.832	0.011	86	1290	0.0200	0.0238	
40 Hexane	56	7.848	7.848	0.000	70	2148	0.0200	0.0234	
41 Isopropyl ether	45	8.029	8.011	0.018	93	8402	0.0200	0.0214	
42 cis-1,2-Dichloroethene	96	8.246	8.259	-0.013	96	2881	0.0200	0.0225	
43 Ethyl acetate	43	8.453	8.446	0.007	97	6511	0.0200	0.0237	
44 Chloroform	83	8.587	8.601	-0.014	32	7551	0.0200	0.0251	
45 Tert-butyl ethyl ether	59	8.706	8.688	0.018	94	7187	0.0200	0.0210	
46 Tetrahydrofuran	42	9.037	9.005	0.032	83	3037	0.0200	0.0243	
47 1,1,1-Trichloroethane	97	9.611	9.623	-0.012	96	5936	0.0200	0.0212	
48 1,2-Dichloroethane	62	9.724	9.736	-0.012	95	4554	0.0200	0.0247	
49 n-Butanol	31	10.231	10.201	0.030	45	794	0.0200	0.0203	
50 Cyclohexane	69	10.221	10.229	-0.008	66	956	0.0200	0.0191	
51 Benzene	78	10.215	10.231	-0.016	97	9757	0.0200	0.0258	
52 Carbon tetrachloride	117	10.246	10.253	-0.007	87	6123	0.0200	0.0224	
53 2,3-Dimethylpentane	71	10.339	10.351	-0.012	80	1266	0.0200	0.0176	
54 Thiophene	84	10.500	10.512	-0.012	93	4765	0.0200	0.0225	
55 Isooctane	57	11.001	11.005	-0.004	97	13396	0.0200	0.0233	
56 n-Heptane	71	11.389	11.392	-0.003	88	2191	0.0200	0.0206	
57 1,2-Dichloropropane	63	11.476	11.478	-0.002	91	4038	0.0200	0.0260	
58 Trichloroethene	130	11.513	11.514	-0.001	90	3632	0.0200	0.0235	
59 Dibromomethane	93	11.595	11.602	-0.007	92	4667	0.0200	0.0246	
60 Dichlorobromomethane	83	11.740	11.748	-0.008	95	6385	0.0200	0.0215	
61 1,4-Dioxane	88	11.797	11.770	0.027	54	866	0.0200	0.0157	
62 Methyl methacrylate	41	11.843	11.847	-0.004	89	2379	0.0200	0.0170	
63 Methylcyclohexane	83	12.288	12.288	0.000	89	3362	0.0200	0.0421	
64 4-Methyl-2-pentanone (MIBK	43	12.727	12.710	0.017	82	4711	0.0200	0.0175	
65 cis-1,3-Dichloropropene	75	12.763	12.764	-0.001	95	3914	0.0200	0.0195	
66 trans-1,3-Dichloropropene	75	13.466	13.471	-0.005	96	2962	0.0200	0.0181	
67 Toluene	91	13.590	13.589	0.001	93	8047	0.0200	0.0369	
68 1,1,2-Trichloroethane	83	13.668	13.670	-0.002	96	3590	0.0200	0.0249	
69 2-Hexanone	58	14.066	14.059	0.007	92	1638	0.0200	0.0130	
70 n-Octane	85	14.288	14.287	0.001	88	1375	0.0200	0.0129	
71 Chlorodibromomethane	129	14.371	14.374	-0.003	92	4653	0.0200	0.0183	
72 Ethylene Dibromide	107	14.665	14.668	-0.003	92	5139	0.0200	0.0216	
73 Tetrachloroethene	129	14.738	14.739	-0.001	89	3169	0.0200	0.0215	
74 Chlorobenzene	112	15.616	15.622	-0.006	93	7787	0.0200	0.0244	
75 2,3-Dimethylheptane	43	15.642	15.643	-0.001	92	7962	0.0200	0.0221	
76 Ethylbenzene	91	15.911	15.911	0.000	97	9752	0.0200	0.0197	
77 m-Xylene & p-Xylene	91	16.076	16.076	0.000	97	13152	0.0400	0.0348	
78 n-Nonane	57	16.500	16.497	0.003	88	3002	0.0200	0.0123	
79 Bromoform	173	16.531	16.527	0.004	50	3507	0.0200	0.0134	
80 Styrene	104	16.541	16.541	0.000	94	3545	0.0200	0.0441	
81 o-Xylene	91	16.598	16.601	-0.003	98	6472	0.0200	0.0165	
82 1,1,2,2-Tetrachloroethane	83	16.929	16.930	-0.001	94	7449	0.0200	0.0198	
83 1,2,3-Trichloropropane	110	17.084	17.089	-0.005	95	1720	0.0200	0.0208	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	17.193	17.192	0.001	53	9365	0.0200	0.0177	
85 N-Propylbenzene	120	17.756	17.756	0.000	98	2157	0.0200	0.0158	
86 2-Chlorotoluene	126	17.792	17.794	-0.002	97	2530	0.0200	0.0191	
87 4-Ethyltoluene	105	17.911	17.912	-0.001	97	7197	0.0200	0.0138	
88 1,3,5-Trimethylbenzene	120	17.989	17.992	-0.003	91	2953	0.0200	0.0398	
89 Alpha Methyl Styrene	118	18.237	18.237	0.000	81	2333	0.0200	0.0112	
90 n-Decane	57	18.299	18.299	0.000	92	3516	0.0200	0.0103	
91 tert-Butylbenzene	119	18.438	18.439	-0.001	87	6765	0.0200	0.0145	
92 1,2,4-Trimethylbenzene	105	18.454	18.454	0.000	92	6071	0.0200	0.0131	
93 sec-Butylbenzene	105	18.717	18.722	-0.005	97	8811	0.0200	0.0132	
94 1,3-Dichlorobenzene	146	18.738	18.739	-0.001	93	5959	0.0200	0.0194	
95 Benzyl chloride	91	18.816	18.817	-0.001	79	4628	0.0200	0.0118	
96 1,4-Dichlorobenzene	146	18.826	18.829	-0.003	94	6009	0.0200	0.0206	
97 4-Isopropyltoluene	119	18.893	18.894	-0.001	93	6143	0.0200	0.0120	
98 1,2,3-Trimethylbenzene	105	18.945	18.948	-0.003	98	6577	0.0200	0.0142	
99 Butylcyclohexane	83	19.002	19.005	-0.003	89	5109	0.0200	0.0129	
101 2,3-Dihydroindene	117	19.203	19.204	-0.001	84	6074	0.0200	0.0139	
100 1,2-Dichlorobenzene	146	19.203	19.205	-0.002	89	6145	0.0200	0.0199	
102 Indene	116	19.338	19.340	-0.002	79	4114	0.0200	0.0106	
103 n-Butylbenzene	91	19.348	19.346	0.002	95	7706	0.0200	0.0442	
104 Undecane	57	19.668	19.672	-0.004	85	3302	0.0200	0.008582	
105 1,2-Dibromo-3-Chloropropan	157	19.834	19.833	0.001	82	1855	0.0200	0.0647	
106 1,2,4,5-Tetramethylbenzene	119	20.128	20.128	0.000	95	4324	0.0200	0.0805	
107 Dodecane	57	20.764	20.765	-0.001	87	2551	0.0200	0.006719	
108 1,2,4-Trichlorobenzene	180	20.966	20.966	0.000	90	3355	0.0200	0.0174	
109 Naphthalene	128	21.110	21.111	-0.001	98	6254	0.0200	0.0142	
110 Hexachlorobutadiene	225	21.338	21.338	0.000	87	5391	0.0200	0.0203	
111 1,2,3-Trichlorobenzene	180	21.405	21.410	-0.005	92	4316	0.0200	0.0200	
112 2-Methylnaphthalene	142	22.066	22.062	0.004	93	1509	0.0200	0.0100	
113 1-Methylnaphthalene	142	22.191	22.191	0.000	92	2313	0.0200	0.0123	
A 115 C8 Range	1	14.278	(14.247-14.309)		0	27177	0.0200	0.0240	
S 116 Xylenes, Total	100				0		0.0600	0.0513	
S 117 1,2-Dichloroethene, Total	1				0		0.0400	0.0456	

Reagents:

40L1-3DQP_00026	Amount Added: 50.00	Units: mL	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

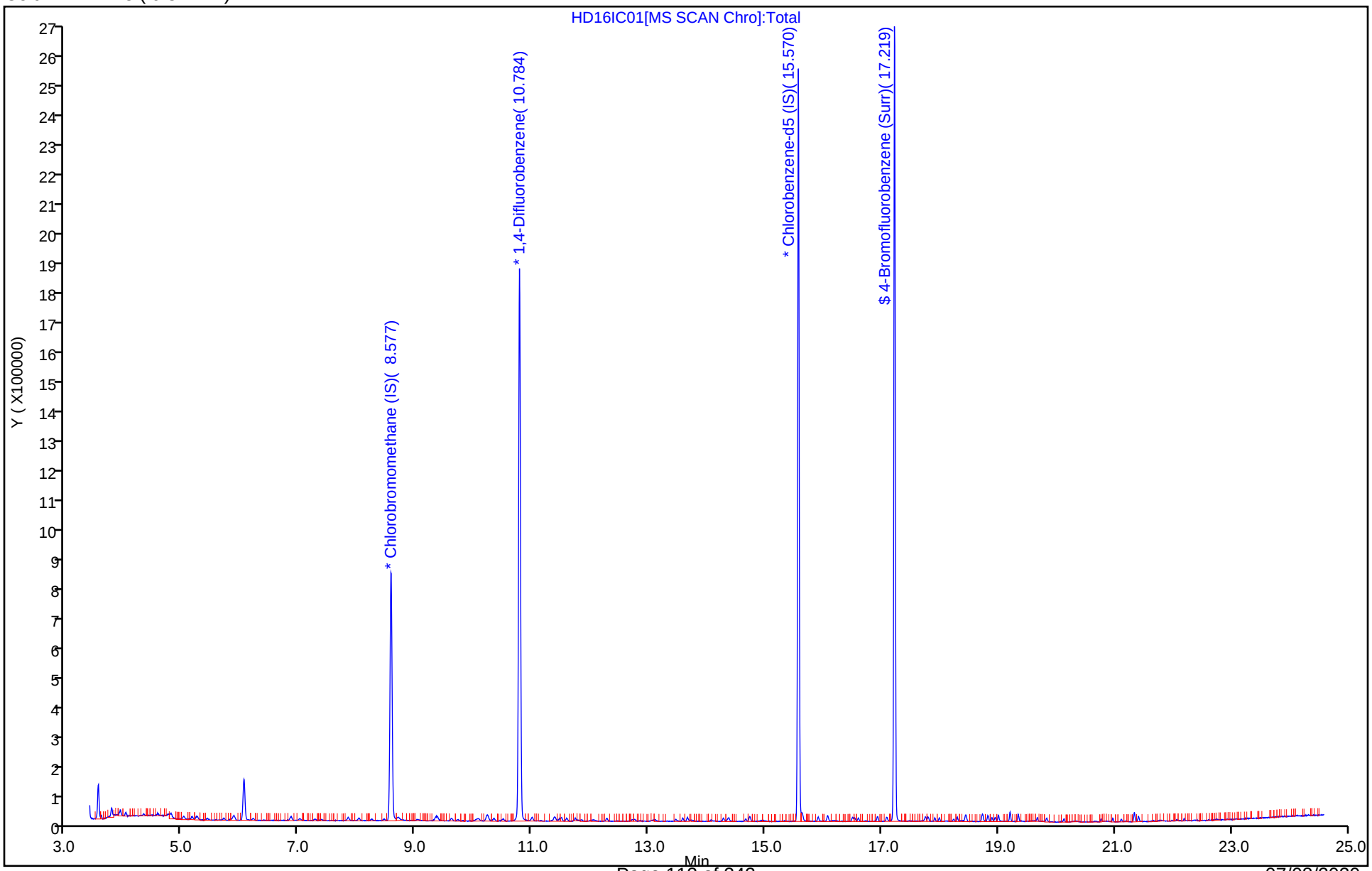
Report Date: 21-Apr-2020 10:48:17 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC01.D

Injection Date:	16-Apr-2020 08:03:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	IC L1			Worklist Smp#:	3
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

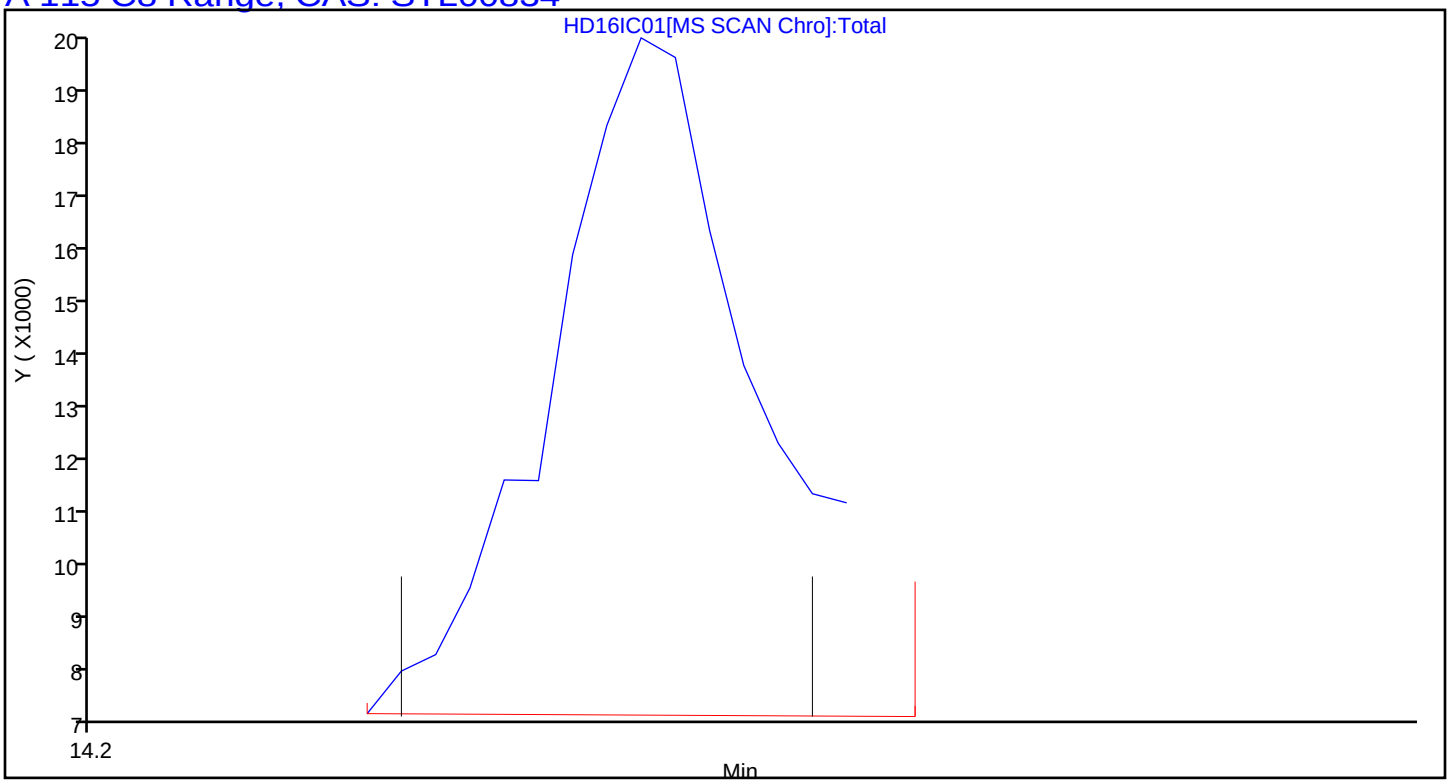


Report Date: 21-Apr-2020 10:48:17 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC01.D				
Injection Date:	16-Apr-2020 08:03:30	Instrument ID:	MH		
Lims ID:	IC L1				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	1	Worklist Smp#:	3
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 115 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC02.D
Lims ID: IC L2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 16-Apr-2020 08:55:30 ALS Bottle#: 1 Worklist Smp#: 4
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0015239-004
Misc. Info.: 297345
Operator ID: HMT Instrument ID: MH
Sublist: chrom-MH_TO15*sub7

Method: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\MH_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 21-Apr-2020 10:48:21 Calib Date: 16-Apr-2020 18:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC10.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX0331

First Level Reviewer: tajh Date: 20-Apr-2020 10:42:41

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.587	8.589	-0.002	96	239083	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.789	10.792	-0.003	95	1612037	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.570	15.572	-0.002	90	1279385	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr	95	17.219	17.222	-0.004	88	829134	4.00	3.86	
6 Chlorodifluoromethane	51	3.543	3.546	-0.003	96	11004	0.0400	0.0436	
7 Propene	41	3.558	3.555	0.003	98	58784	0.0400	-0.0921	
8 Dichlorodifluoromethane	85	3.605	3.606	-0.001	100	16241	0.0400	0.0419	
9 Chloromethane	52	3.781	3.779	0.002	56	2364	0.0400	0.0559	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.791	3.785	0.006	94	10973	0.0400	0.0424	
11 Acetaldehyde	44	3.936	3.930	0.006	99	15241	0.2000	0.3235	
12 Vinyl chloride	62	3.946	3.945	0.001	76	6102	0.0400	0.0440	
14 Butadiene	54	4.029	4.028	0.001	72	4237	0.0400	0.0449	
13 Butane	43	4.034	4.028	0.006	85	7920	0.0400	0.0482	
15 Bromomethane	94	4.339	4.337	0.002	96	7204	0.0400	0.0492	
16 Chloroethane	64	4.478	4.473	0.005	96	2842	0.0400	0.0481	
17 Ethanol	31	4.571	4.571	0.000	93	6449	0.2000	0.1513	
18 Vinyl bromide	106	4.763	4.763	0.000	97	5814	0.0400	0.0441	
19 2-Methylbutane	43	4.809	4.806	0.003	87	5834	0.0400	0.0484	
20 Trichlorofluoromethane	101	5.021	5.022	-0.001	97	14717	0.0400	0.0423	
21 Acrolein	56	5.037	5.037	0.000	82	2493	0.0400	0.0613	
23 Acetone	58	5.176	5.154	0.022	98	7470	0.1200	0.1389	
24 Pentane	72	5.233	5.236	-0.003	95	593	0.0400	0.0394	
22 Acetonitrile	40	5.099	5.116	-0.017	61	1859	0.0400	0.0397	
25 Isopropyl alcohol	45	5.259	5.241	0.018	95	17322	0.1200	0.1065	
26 Ethyl ether	31	5.424	5.408	0.016	94	4481	0.0400	0.0430	
27 1,1-Dichloroethene	96	5.719	5.716	0.003	98	5039	0.0400	0.0433	
28 Acrylonitrile	53	5.817	5.826	-0.009	79	3442	0.0400	0.0390	
29 2-Methyl-2-propanol	59	5.864	5.832	0.032	96	7099	0.0400	0.0367	
30 1,1,2-Trichloro-1,2,2-trif	101	5.889	5.889	0.000	90	11699	0.0400	0.0434	
31 Methylene Chloride	84	6.060	6.063	-0.003	98	65438	0.0400	0.006995	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.075	6.076	-0.001	26	5068	0.0400	0.0515	
33 Carbon disulfide	76	6.215	6.218	-0.003	97	14043	0.0400	0.0402	
34 trans-1,2-Dichloroethene	96	6.861	6.859	0.002	96	4645	0.0400	0.0404	
35 2-Methylpentane	43	6.866	6.873	-0.007	92	9022	0.0400	0.0397	
36 Methyl tert-butyl ether	73	7.011	6.989	0.022	96	9732	0.0400	0.0362	
37 1,1-Dichloroethane	63	7.280	7.280	0.000	98	9995	0.0400	0.0437	
38 Vinyl acetate	43	7.383	7.385	-0.002	98	8602	0.0400	0.0302	
39 2-Butanone (MEK)	72	7.853	7.832	0.021	88	2031	0.0400	0.0399	
40 Hexane	56	7.848	7.848	0.000	66	3330	0.0400	0.0387	
41 Isopropyl ether	45	8.024	8.011	0.013	92	12793	0.0400	0.0346	
42 cis-1,2-Dichloroethene	96	8.262	8.259	0.003	93	4992	0.0400	0.0416	
43 Ethyl acetate	43	8.463	8.446	0.017	98	9614	0.0400	0.0373	
44 Chloroform	83	8.592	8.601	-0.009	28	11359	0.0400	0.0402	
45 Tert-butyl ethyl ether	59	8.706	8.688	0.018	97	11498	0.0400	0.0358	
46 Tetrahydrofuran	42	9.027	9.005	0.022	89	4518	0.0400	0.0385	
47 1,1,1-Trichloroethane	97	9.616	9.623	-0.007	96	10895	0.0400	0.0415	
48 1,2-Dichloroethane	62	9.730	9.736	-0.006	95	6770	0.0400	0.0397	
51 Benzene	78	10.226	10.231	-0.005	97	14835	0.0400	0.0423	
50 Cyclohexane	69	10.236	10.229	0.007	68	1840	0.0400	0.0396	
49 n-Butanol	31	10.226	10.201	0.025	51	1260	0.0400	0.0347	
52 Carbon tetrachloride	117	10.246	10.253	-0.007	95	9885	0.0400	0.0390	
53 2,3-Dimethylpentane	71	10.345	10.351	-0.006	85	2487	0.0400	0.0374	
54 Thiophene	84	10.515	10.512	0.003	97	7140	0.0400	0.0363	
55 Isooctane	57	11.006	11.005	0.001	97	21037	0.0400	0.0395	
56 n-Heptane	71	11.378	11.392	-0.014	85	3036	0.0400	0.0308	
57 1,2-Dichloropropane	63	11.476	11.478	-0.002	92	6155	0.0400	0.0428	
58 Trichloroethene	130	11.513	11.514	-0.001	93	5518	0.0400	0.0385	
59 Dibromomethane	93	11.600	11.602	-0.002	89	7636	0.0400	0.0435	
60 Dichlorobromomethane	83	11.745	11.748	-0.003	98	10187	0.0400	0.0371	
61 1,4-Dioxane	88	11.787	11.770	0.017	91	1354	0.0400	0.0265	
62 Methyl methacrylate	41	11.843	11.847	-0.004	90	3974	0.0400	0.0307	
63 Methylcyclohexane	83	12.283	12.288	-0.005	88	5640	0.0400	0.0546	
64 4-Methyl-2-pentanone (MIBK	43	12.727	12.710	0.017	96	7769	0.0400	0.0311	
65 cis-1,3-Dichloropropene	75	12.758	12.764	-0.006	96	5756	0.0400	0.0310	
66 trans-1,3-Dichloropropene	75	13.466	13.471	-0.005	97	4983	0.0400	0.0327	
67 Toluene	91	13.590	13.589	0.001	94	12414	0.0400	0.0499	
68 1,1,2-Trichloroethane	83	13.668	13.670	-0.002	96	5283	0.0400	0.0394	
69 2-Hexanone	58	14.071	14.059	0.012	90	2622	0.0400	0.0224	
70 n-Octane	85	14.283	14.287	-0.004	87	2755	0.0400	0.0277	
71 Chlorodibromomethane	129	14.371	14.374	-0.003	91	7655	0.0400	0.0323	
72 Ethylene Dibromide	107	14.665	14.668	-0.003	91	7797	0.0400	0.0352	
73 Tetrachloroethene	129	14.738	14.739	-0.001	91	5826	0.0400	0.0425	
74 Chlorobenzene	112	15.621	15.622	-0.001	94	12688	0.0400	0.0426	
75 2,3-Dimethylheptane	43	15.642	15.643	-0.001	94	13002	0.0400	0.0387	
76 Ethylbenzene	91	15.911	15.911	0.000	99	15394	0.0400	0.0333	
77 m-Xylene & p-Xylene	91	16.076	16.076	0.000	97	21489	0.0800	0.0610	
78 n-Nonane	57	16.495	16.497	-0.002	84	4970	0.0400	0.0219	
79 Bromoform	173	16.526	16.527	-0.001	89	5336	0.0400	0.0219	
80 Styrene	104	16.536	16.541	-0.005	98	6698	0.0400	0.0566	
81 o-Xylene	91	16.598	16.601	-0.003	99	11527	0.0400	0.0316	
82 1,1,2,2-Tetrachloroethane	83	16.929	16.930	-0.001	94	12222	0.0400	0.0349	
83 1,2,3-Trichloropropane	110	17.089	17.089	0.000	97	2694	0.0400	0.0349	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	17.193	17.192	0.001	95	14622	0.0400	0.0297	
85 N-Propylbenzene	120	17.751	17.756	-0.005	98	3198	0.0400	0.0252	
86 2-Chlorotoluene	126	17.797	17.794	0.003	97	4101	0.0400	0.0333	
87 4-Ethyltoluene	105	17.911	17.912	-0.001	97	12492	0.0400	0.0257	
88 1,3,5-Trimethylbenzene	120	17.994	17.992	0.002	91	4975	0.0400	0.0506	
89 Alpha Methyl Styrene	118	18.237	18.237	0.000	85	3715	0.0400	0.0191	
90 n-Decane	57	18.299	18.299	0.000	94	7134	0.0400	0.0224	
91 tert-Butylbenzene	119	18.438	18.439	-0.001	85	11036	0.0400	0.0255	
92 1,2,4-Trimethylbenzene	105	18.449	18.454	-0.005	96	10946	0.0400	0.0253	
93 sec-Butylbenzene	105	18.717	18.722	-0.005	97	15780	0.0400	0.0254	
94 1,3-Dichlorobenzene	146	18.738	18.739	-0.001	97	10335	0.0400	0.0362	
95 Benzyl chloride	91	18.816	18.817	-0.001	84	7540	0.0400	0.0207	
96 1,4-Dichlorobenzene	146	18.826	18.829	-0.003	88	8725	0.0400	0.0322	
97 4-Isopropyltoluene	119	18.893	18.894	-0.001	94	10711	0.0400	0.0224	
98 1,2,3-Trimethylbenzene	105	18.945	18.948	-0.003	98	11293	0.0400	0.0262	
99 Butylcyclohexane	83	19.002	19.005	-0.003	88	9783	0.0400	0.0265	
100 1,2-Dichlorobenzene	146	19.203	19.205	-0.002	90	9529	0.0400	0.0331	
101 2,3-Dihydroindene	117	19.203	19.204	-0.001	86	10341	0.0400	0.0255	
102 Indene	116	19.338	19.340	-0.002	83	7472	0.0400	0.0206	
103 n-Butylbenzene	91	19.343	19.346	-0.003	94	14058	0.0400	0.0552	
104 Undecane	57	19.668	19.672	-0.004	92	5756	0.0400	0.0161	
105 1,2-Dibromo-3-Chloropropan	157	19.834	19.833	0.001	81	2654	0.0400	0.0704	
106 1,2,4,5-Tetramethylbenzene	119	20.128	20.128	0.000	96	7681	0.0400	0.0872	
107 Dodecane	57	20.764	20.765	-0.001	89	4357	0.0400	0.0123	
108 1,2,4-Trichlorobenzene	180	20.966	20.966	0.000	91	4652	0.0400	0.0260	
109 Naphthalene	128	21.110	21.111	-0.001	98	10799	0.0400	0.0264	
110 Hexachlorobutadiene	225	21.338	21.338	0.000	87	8921	0.0400	0.0360	
111 1,2,3-Trichlorobenzene	180	21.410	21.410	0.000	93	6664	0.0400	0.0331	
112 2-Methylnaphthalene	142	22.066	22.062	0.004	86	1785	0.0400	0.0127	
113 1-Methylnaphthalene	142	22.190	22.191	-0.001	97	3783	0.0400	0.0217	
A 115 C8 Range	1	14.288	(14.257-14.319)		0	50714	0.0400	0.0483	
S 116 Xylenes, Total	100				0		0.1200	0.0926	
S 117 1,2-Dichloroethene, Total	1				0		0.0800	0.0820	

Reagents:

40L1-3DQP_00026	Amount Added: 100.00	Units: mL	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

Report Date: 21-Apr-2020 10:48:22 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC02.D

Injection Date:	16-Apr-2020 08:55:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	IC L2			Worklist Smp#:	4
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

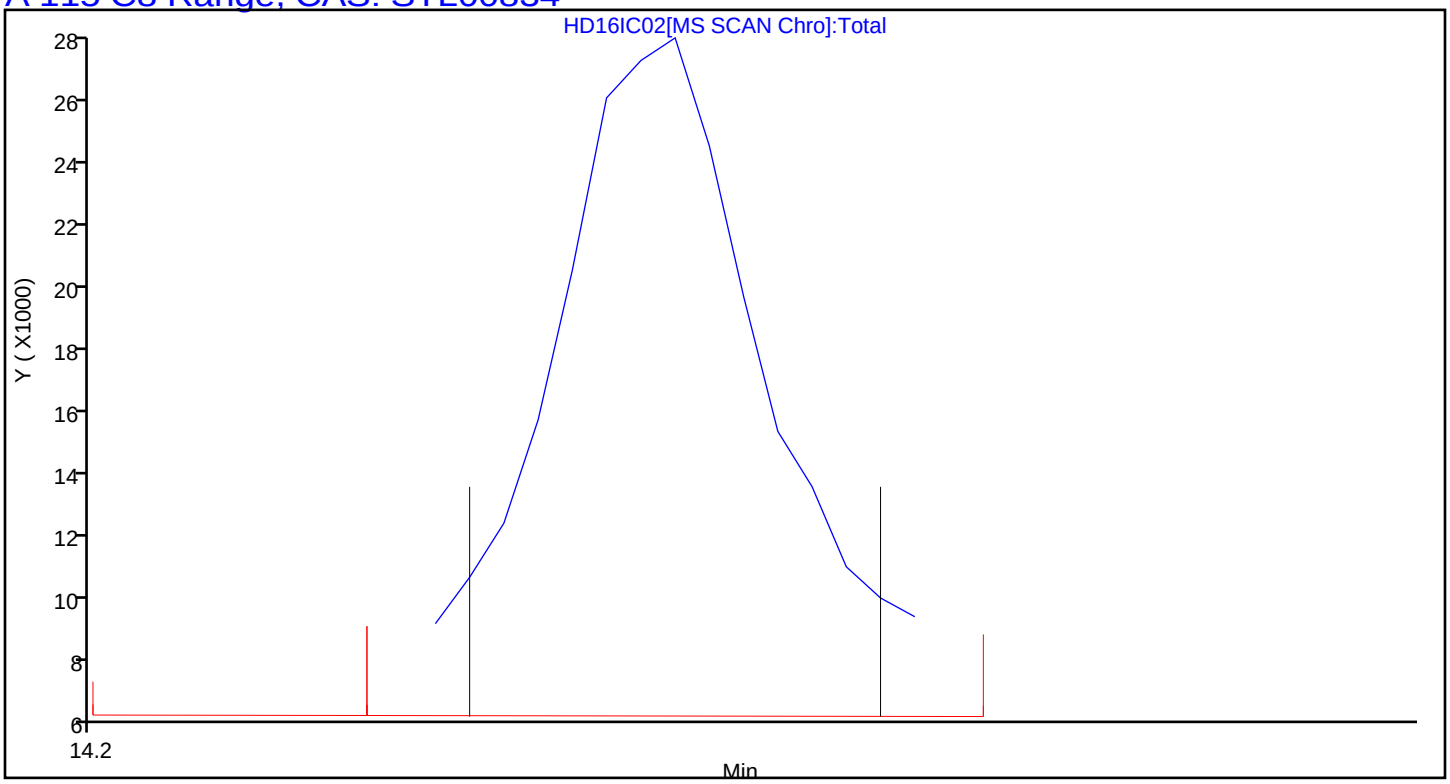


Report Date: 21-Apr-2020 10:48:22 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC02.D				
Injection Date:	16-Apr-2020 08:55:30	Instrument ID:	MH		
Lims ID:	IC L2				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	1	Worklist Smp#:	4
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 115 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC03.D
Lims ID: IC L3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 16-Apr-2020 09:47:30 ALS Bottle#: 1 Worklist Smp#: 5
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0015239-005
Misc. Info.: 297344
Operator ID: HMT Instrument ID: MH
Sublist: chrom-MH_TO15*sub7

Method: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\MH_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 21-Apr-2020 10:48:26 Calib Date: 16-Apr-2020 18:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC10.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX0331

First Level Reviewer: tajh Date: 20-Apr-2020 12:48:25

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.582	8.589	-0.007	96	224413	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.789	10.792	-0.003	95	1564476	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.570	15.572	-0.002	89	1224759	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr	95	17.219	17.222	-0.003	88	804495	4.00	3.92	
6 Chlorodifluoromethane	51	3.548	3.546	0.002	97	20123	0.0800	0.0850	
7 Propene	41	3.553	3.555	-0.002	99	60711	0.0800	-0.0254	
8 Dichlorodifluoromethane	85	3.605	3.606	-0.001	99	31396	0.0800	0.0862	
9 Chloromethane	52	3.776	3.779	-0.003	59	3999	0.0800	0.1008	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.781	3.785	-0.004	96	19667	0.0800	0.0810	
11 Acetaldehyde	44	3.931	3.930	0.001	99	20986	0.4000	0.4746	
12 Vinyl chloride	62	3.946	3.945	0.001	98	10835	0.0800	0.0832	
14 Butadiene	54	4.034	4.028	0.006	74	7251	0.0800	0.0819	
13 Butane	43	4.029	4.028	0.001	84	13595	0.0800	0.0881	
15 Bromomethane	94	4.339	4.337	0.002	97	12442	0.0800	0.0905	
16 Chloroethane	64	4.468	4.473	-0.005	93	5154	0.0800	0.0930	
17 Ethanol	31	4.572	4.571	0.001	94	17868	0.4000	0.4465	
18 Vinyl bromide	106	4.763	4.763	0.000	97	10864	0.0800	0.0878	
19 2-Methylbutane	43	4.804	4.806	-0.002	89	10223	0.0800	0.0903	
20 Trichlorofluoromethane	101	5.021	5.022	-0.001	97	27087	0.0800	0.0830	
21 Acrolein	56	5.037	5.037	0.000	34	2618	0.0800	0.0686	
22 Acetonitrile	40	5.099	5.116	-0.017	95	4096	0.0800	0.0932	
23 Acetone	58	5.161	5.154	0.007	99	14577	0.2400	0.2887	
24 Pentane	72	5.233	5.236	-0.003	96	1127	0.0800	0.0798	
25 Isopropyl alcohol	45	5.254	5.241	0.013	93	35039	0.2400	0.2297	
26 Ethyl ether	31	5.414	5.408	0.006	94	8140	0.0800	0.0833	
27 1,1-Dichloroethene	96	5.719	5.716	0.003	98	8847	0.0800	0.0809	
28 Acrylonitrile	53	5.822	5.826	-0.004	96	6786	0.0800	0.0819	
29 2-Methyl-2-propanol	59	5.848	5.832	0.016	96	14273	0.0800	0.0787	
30 1,1,2-Trichloro-1,2,2-trif	101	5.890	5.889	0.001	91	21519	0.0800	0.0850	
31 Methylene Chloride	84	6.060	6.063	-0.003	97	67049	0.0800	0.0644	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.070	6.076	-0.006	97	8576	0.0800	0.0929	
33 Carbon disulfide	76	6.220	6.218	0.002	97	26707	0.0800	0.0815	
34 trans-1,2-Dichloroethene	96	6.856	6.859	-0.003	96	8457	0.0800	0.0784	
35 2-Methylpentane	43	6.872	6.873	-0.001	94	16726	0.0800	0.0784	
36 Methyl tert-butyl ether	73	7.006	6.989	0.017	96	18109	0.0800	0.0718	
37 1,1-Dichloroethane	63	7.280	7.280	0.000	100	18939	0.0800	0.0881	
38 Vinyl acetate	43	7.383	7.385	-0.002	99	17617	0.0800	0.0658	
40 Hexane	56	7.843	7.848	-0.005	69	6554	0.0800	0.0812	
39 2-Butanone (MEK)	72	7.833	7.832	0.001	90	3340	0.0800	0.0699	
41 Isopropyl ether	45	8.019	8.011	0.008	96	24281	0.0800	0.0701	
42 cis-1,2-Dichloroethene	96	8.251	8.259	-0.008	93	8768	0.0800	0.0778	
43 Ethyl acetate	43	8.448	8.446	0.002	99	18488	0.0800	0.0764	
44 Chloroform	83	8.593	8.601	-0.008	29	22975	0.0800	0.0867	
45 Tert-butyl ethyl ether	59	8.701	8.688	0.013	97	21735	0.0800	0.0720	
46 Tetrahydrofuran	42	9.027	9.005	0.022	91	8369	0.0800	0.0760	
47 1,1,1-Trichloroethane	97	9.621	9.623	-0.002	96	19125	0.0800	0.0775	
48 1,2-Dichloroethane	62	9.730	9.736	-0.006	96	13517	0.0800	0.0816	
49 n-Butanol	31	10.215	10.201	0.014	70	2186	0.0800	0.0621	
51 Benzene	78	10.231	10.231	0.000	97	26805	0.0800	0.0788	
50 Cyclohexane	69	10.231	10.229	0.002	70	3214	0.0800	0.0714	
52 Carbon tetrachloride	117	10.246	10.253	-0.007	92	18653	0.0800	0.0759	
53 2,3-Dimethylpentane	71	10.355	10.351	0.004	86	4636	0.0800	0.0718	
54 Thiophene	84	10.515	10.512	0.003	95	13982	0.0800	0.0733	
55 Isooctane	57	11.006	11.005	0.001	99	38853	0.0800	0.0751	
56 n-Heptane	71	11.399	11.392	0.007	86	6380	0.0800	0.0667	
57 1,2-Dichloropropane	63	11.471	11.478	-0.007	89	11447	0.0800	0.0821	
58 Trichloroethene	130	11.508	11.514	-0.006	89	10774	0.0800	0.0774	
59 Dibromomethane	93	11.601	11.602	-0.001	88	13194	0.0800	0.0774	
60 Dichlorobromomethane	83	11.740	11.748	-0.008	97	19747	0.0800	0.0740	
61 1,4-Dioxane	88	11.781	11.770	0.011	92	3527	0.0800	0.0712	
62 Methyl methacrylate	41	11.849	11.847	0.002	92	7912	0.0800	0.0630	
63 Methylcyclohexane	83	12.283	12.288	-0.005	87	10759	0.0800	0.0815	
64 4-Methyl-2-pentanone (MIBK	43	12.717	12.710	0.007	97	14642	0.0800	0.0604	
65 cis-1,3-Dichloropropene	75	12.763	12.764	-0.001	95	11596	0.0800	0.0643	
66 trans-1,3-Dichloropropene	75	13.472	13.471	0.001	96	9453	0.0800	0.0647	
67 Toluene	91	13.585	13.589	-0.004	91	23680	0.0800	0.0827	
68 1,1,2-Trichloroethane	83	13.668	13.670	-0.002	94	10378	0.0800	0.0808	
69 2-Hexanone	58	14.061	14.059	0.002	91	5643	0.0800	0.0503	
70 n-Octane	85	14.288	14.287	0.001	88	5305	0.0800	0.0558	
71 Chlorodibromomethane	129	14.371	14.374	-0.003	96	15744	0.0800	0.0694	
72 Ethylene Dibromide	107	14.665	14.668	-0.003	97	15125	0.0800	0.0713	
73 Tetrachloroethene	129	14.738	14.739	-0.001	91	9877	0.0800	0.0753	
74 Chlorobenzene	112	15.622	15.622	0.000	94	23105	0.0800	0.0811	
75 2,3-Dimethylheptane	43	15.642	15.643	-0.001	94	25111	0.0800	0.0780	
76 Ethylbenzene	91	15.911	15.911	0.000	99	28881	0.0800	0.0653	
77 m-Xylene & p-Xylene	91	16.076	16.076	0.000	98	44937	0.1600	0.1333	
78 n-Nonane	57	16.495	16.497	-0.002	87	10925	0.0800	0.0503	
79 Bromoform	173	16.521	16.527	-0.006	88	12426	0.0800	0.0533	
80 Styrene	104	16.542	16.541	0.001	98	13105	0.0800	0.0823	
81 o-Xylene	91	16.598	16.601	-0.003	97	25134	0.0800	0.0719	
82 1,1,2,2-Tetrachloroethane	83	16.929	16.930	-0.001	97	24765	0.0800	0.0739	
83 1,2,3-Trichloropropane	110	17.089	17.089	0.000	96	5508	0.0800	0.0746	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	17.193	17.192	0.001	98	28293	0.0800	0.0600	
85 N-Propylbenzene	120	17.756	17.756	0.000	98	6666	0.0800	0.0548	
86 2-Chlorotoluene	126	17.797	17.794	0.003	96	8616	0.0800	0.0730	
87 4-Ethyltoluene	105	17.911	17.912	-0.001	98	26839	0.0800	0.0577	
88 1,3,5-Trimethylbenzene	120	17.989	17.992	-0.003	91	11014	0.0800	0.0823	
89 Alpha Methyl Styrene	118	18.237	18.237	0.000	87	7791	0.0800	0.0419	
90 n-Decane	57	18.299	18.299	0.000	92	15877	0.0800	0.0521	
91 tert-Butylbenzene	119	18.438	18.439	-0.001	86	25018	0.0800	0.0603	
92 1,2,4-Trimethylbenzene	105	18.454	18.454	0.000	95	24449	0.0800	0.0591	
93 sec-Butylbenzene	105	18.723	18.722	0.001	98	34412	0.0800	0.0578	
94 1,3-Dichlorobenzene	146	18.738	18.739	-0.001	97	18378	0.0800	0.0673	
95 Benzyl chloride	91	18.816	18.817	-0.001	94	15176	0.0800	0.0434	
96 1,4-Dichlorobenzene	146	18.831	18.829	0.002	91	17088	0.0800	0.0658	
97 4-Isopropyltoluene	119	18.893	18.894	-0.001	96	24534	0.0800	0.0537	
98 1,2,3-Trimethylbenzene	105	18.950	18.948	0.002	99	24711	0.0800	0.0600	
99 Butylcyclohexane	83	19.007	19.005	0.002	90	22388	0.0800	0.0634	
100 1,2-Dichlorobenzene	146	19.203	19.205	-0.002	87	19261	0.0800	0.0699	
101 2,3-Dihydroindene	117	19.203	19.204	-0.001	89	23433	0.0800	0.0603	
102 Indene	116	19.338	19.340	-0.002	88	15495	0.0800	0.0447	
103 n-Butylbenzene	91	19.343	19.346	-0.003	95	31649	0.0800	0.0857	
104 Undecane	57	19.674	19.672	0.002	91	13620	0.0800	0.0397	
105 1,2-Dibromo-3-Chloropropan	157	19.829	19.833	-0.004	83	6262	0.0800	0.0941	
106 1,2,4,5-Tetramethylbenzene	119	20.128	20.128	0.000	94	16411	0.0800	0.1045	
107 Dodecane	57	20.764	20.765	-0.001	88	9680	0.0800	0.0286	
108 1,2,4-Trichlorobenzene	180	20.966	20.966	0.000	93	9135	0.0800	0.0532	
109 Naphthalene	128	21.110	21.111	-0.001	98	17814	0.0800	0.0455	
110 Hexachlorobutadiene	225	21.338	21.338	0.000	86	17658	0.0800	0.0744	
111 1,2,3-Trichlorobenzene	180	21.405	21.410	-0.005	91	11573	0.0800	0.0601	
112 2-Methylnaphthalene	142	22.061	22.062	-0.001	95	1755	0.0800	0.0130	
113 1-Methylnaphthalene	142	22.191	22.191	0.000	93	3519	0.0800	0.0211	
A 115 C8 Range	1	14.286	(14.247-14.340)		0	65706	0.0800	0.0645	
S 116 Xylenes, Total	100				0		0.2400	0.2052	
S 117 1,2-Dichloroethene, Total	1				0		0.1600	0.1562	

Reagents:

40L4DQP_00018	Amount Added: 100.00	Units: mL	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

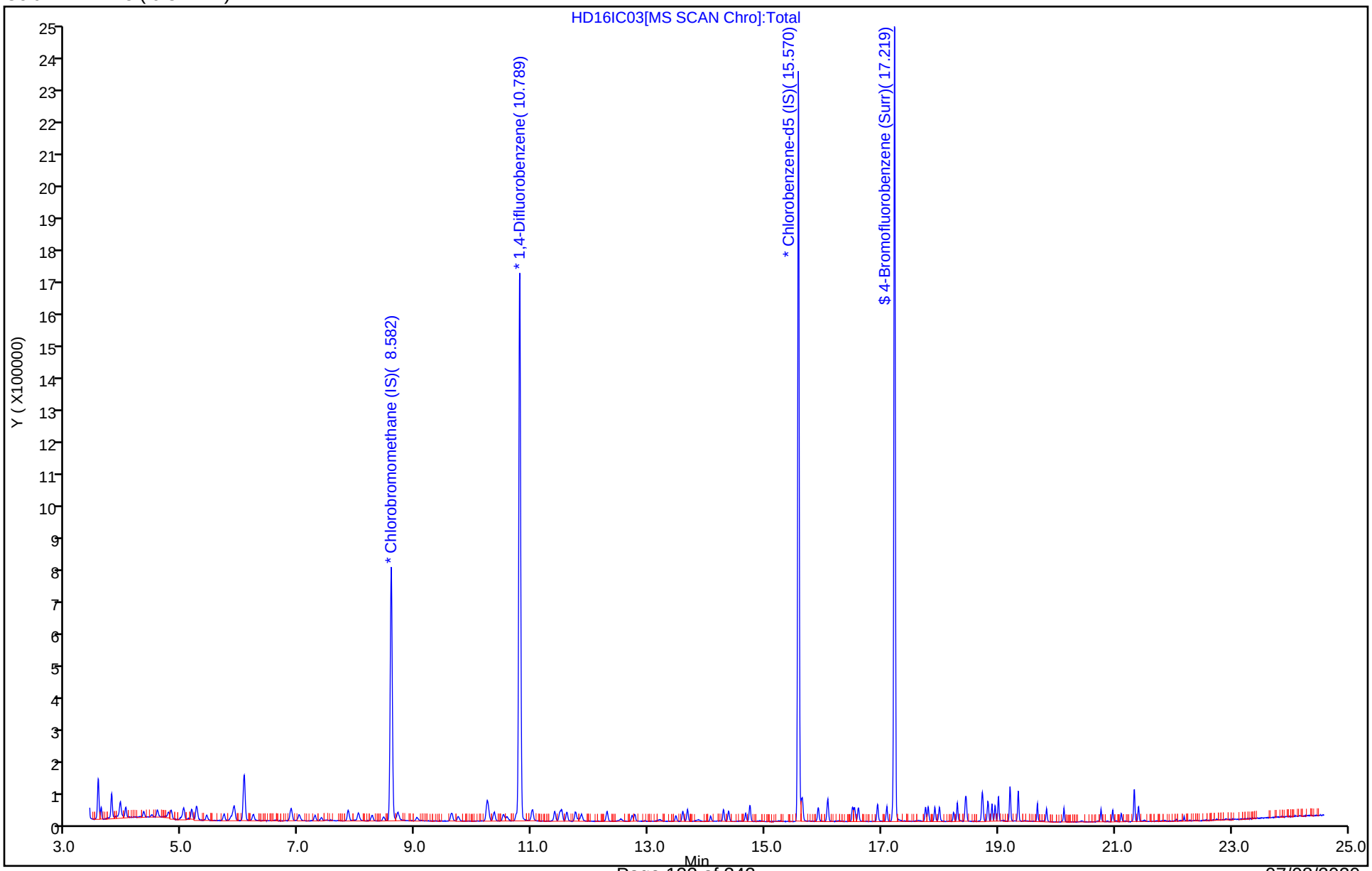
Report Date: 21-Apr-2020 10:48:27 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC03.D

Injection Date:	16-Apr-2020 09:47:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	IC L3			Worklist Smp#:	5
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

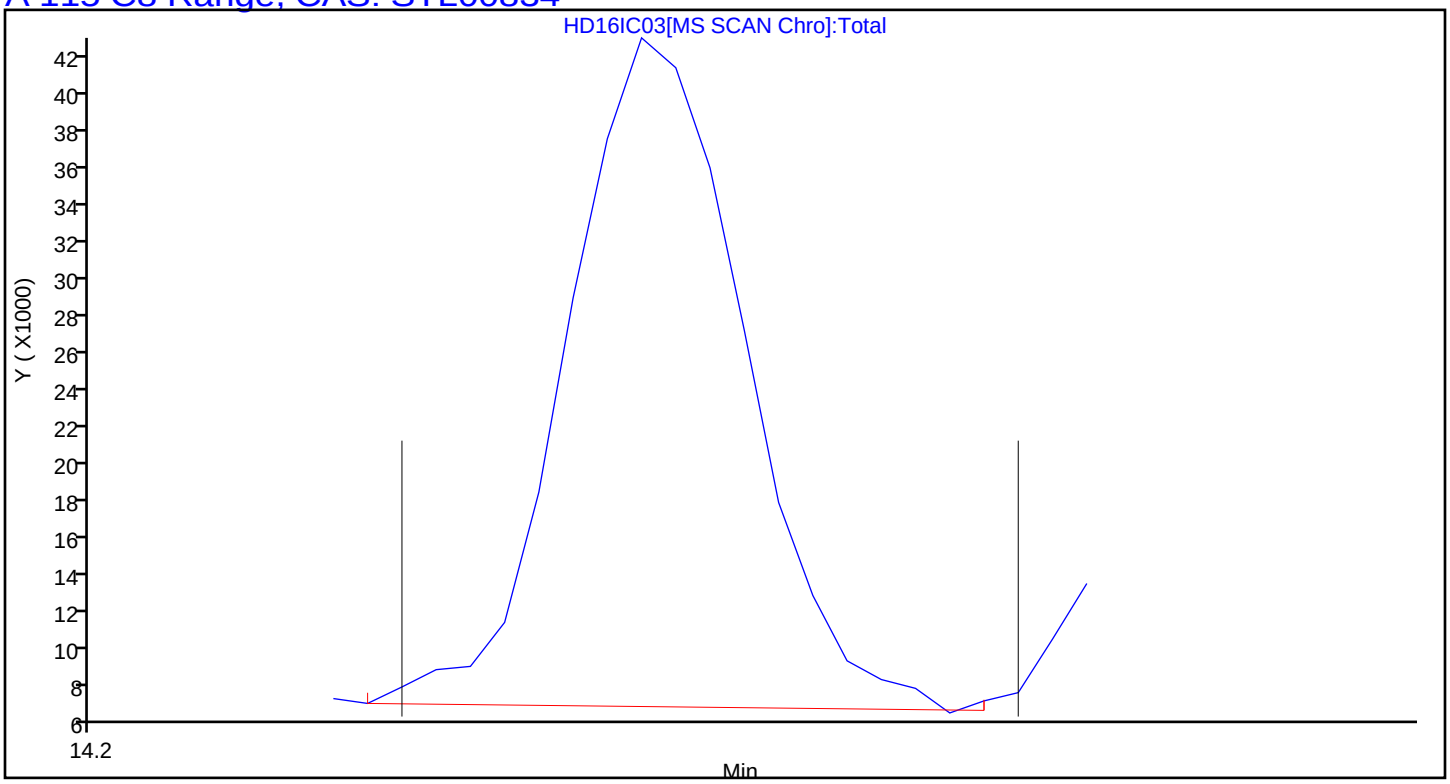


Report Date: 21-Apr-2020 10:48:27 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC03.D				
Injection Date:	16-Apr-2020 09:47:30	Instrument ID:	MH		
Lims ID:	IC L3				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	1	Worklist Smp#:	5
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 115 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC04.D
Lims ID: IC L4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 16-Apr-2020 10:40:30 ALS Bottle#: 2 Worklist Smp#: 6
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0015239-006
Misc. Info.: 297344
Operator ID: HMT Instrument ID: MH
Sublist: chrom-MH_TO15*sub7

Method: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\MH_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 21-Apr-2020 10:48:31 Calib Date: 16-Apr-2020 18:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC10.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX0331

First Level Reviewer: tajh Date: 16-Apr-2020 12:06:48

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.582	8.589	-0.007	96	209895	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.789	10.792	-0.003	96	1458934	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.570	15.572	-0.002	89	1176311	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr	95	17.218	17.222	-0.004	88	803145	4.00	4.07	
6 Chlorodifluoromethane	51	3.548	3.546	0.002	97	35814	0.1600	0.1617	
7 Propene	41	3.558	3.555	0.003	99	64620	0.1600	0.0756	
8 Dichlorodifluoromethane	85	3.605	3.606	-0.001	99	56371	0.1600	0.1655	
9 Chloromethane	52	3.781	3.779	0.002	52	6920	0.1600	0.1864	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.786	3.785	0.001	94	38003	0.1600	0.1674	
11 Acetaldehyde	44	3.931	3.930	0.001	95	38170	0.8000	0.9230	
12 Vinyl chloride	62	3.946	3.945	0.001	99	19486	0.1600	0.1600	
13 Butane	43	4.024	4.028	-0.004	85	23955	0.1600	0.1660	
14 Butadiene	54	4.029	4.028	0.001	74	13332	0.1600	0.1611	
15 Bromomethane	94	4.339	4.337	0.002	97	21476	0.1600	0.1671	
16 Chloroethane	64	4.478	4.473	0.005	95	9049	0.1600	0.1746	
17 Ethanol	31	4.566	4.571	-0.005	93	30833	0.8000	0.8238	
18 Vinyl bromide	106	4.763	4.763	0.000	97	18795	0.1600	0.1624	
19 2-Methylbutane	43	4.804	4.806	-0.002	93	17975	0.1600	0.1698	
20 Trichlorofluoromethane	101	5.021	5.022	-0.001	97	49414	0.1600	0.1618	
21 Acrolein	56	5.037	5.037	0.000	82	5955	0.1600	0.1668	
22 Acetonitrile	40	5.099	5.116	-0.017	95	6221	0.1600	0.1514	
23 Acetone	58	5.155	5.154	0.001	98	26699	0.4800	0.5654	
24 Pentane	72	5.238	5.236	0.002	75	2204	0.1600	0.1669	
25 Isopropyl alcohol	45	5.238	5.241	-0.003	86	63906	0.4800	0.4483	
26 Ethyl ether	31	5.409	5.408	0.001	93	14622	0.1600	0.1600	
27 1,1-Dichloroethene	96	5.719	5.716	0.003	97	15910	0.1600	0.1556	
28 Acrylonitrile	53	5.827	5.826	0.001	95	12503	0.1600	0.1614	
29 2-Methyl-2-propanol	59	5.838	5.832	0.006	96	25034	0.1600	0.1475	
30 1,1,2-Trichloro-1,2,2-trif	101	5.889	5.889	0.000	91	38557	0.1600	0.1628	
31 Methylene Chloride	84	6.060	6.063	-0.003	98	71189	0.1600	0.1569	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.075	6.076	-0.001	49	14877	0.1600	0.1723	
33 Carbon disulfide	76	6.220	6.218	0.002	100	49948	0.1600	0.1631	
34 trans-1,2-Dichloroethene	96	6.861	6.859	0.002	97	16038	0.1600	0.1589	
35 2-Methylpentane	43	6.877	6.873	0.004	92	31198	0.1600	0.1563	
36 Methyl tert-butyl ether	73	6.995	6.989	0.006	95	35919	0.1600	0.1522	
37 1,1-Dichloroethane	63	7.275	7.280	-0.005	100	32795	0.1600	0.1632	
38 Vinyl acetate	43	7.388	7.385	0.003	99	34018	0.1600	0.1358	
39 2-Butanone (MEK)	72	7.828	7.832	-0.004	93	7039	0.1600	0.1575	
40 Hexane	56	7.848	7.848	0.000	74	11424	0.1600	0.1513	
41 Isopropyl ether	45	8.014	8.011	0.003	94	48337	0.1600	0.1491	
42 cis-1,2-Dichloroethene	96	8.262	8.259	0.003	98	15922	0.1600	0.1511	
43 Ethyl acetate	43	8.448	8.446	0.002	99	34352	0.1600	0.1517	
44 Chloroform	83	8.603	8.601	0.002	97	40055	0.1600	0.1616	
45 Tert-butyl ethyl ether	59	8.685	8.688	-0.003	98	41879	0.1600	0.1484	
46 Tetrahydrofuran	42	9.011	9.005	0.006	90	15601	0.1600	0.1514	
47 1,1,1-Trichloroethane	97	9.621	9.623	-0.002	96	36041	0.1600	0.1562	
48 1,2-Dichloroethane	62	9.735	9.736	-0.001	96	24301	0.1600	0.1574	
49 n-Butanol	31	10.210	10.201	0.009	51	3754	0.1600	0.1144	
50 Cyclohexane	69	10.231	10.229	0.002	66	5387	0.1600	0.1282	
51 Benzene	78	10.226	10.231	-0.005	97	50090	0.1600	0.1578	
52 Carbon tetrachloride	117	10.252	10.253	-0.001	93	35971	0.1600	0.1570	
53 2,3-Dimethylpentane	71	10.350	10.351	-0.001	87	8770	0.1600	0.1456	
54 Thiophene	84	10.505	10.512	-0.007	96	26308	0.1600	0.1479	
55 Isooctane	57	11.001	11.005	-0.004	97	71678	0.1600	0.1486	
56 n-Heptane	71	11.389	11.392	-0.003	89	12061	0.1600	0.1352	
57 1,2-Dichloropropane	63	11.476	11.478	-0.002	92	20019	0.1600	0.1539	
58 Trichloroethene	130	11.513	11.514	-0.001	90	19415	0.1600	0.1497	
59 Dibromomethane	93	11.595	11.602	-0.007	88	24181	0.1600	0.1522	
60 Dichlorobromomethane	83	11.750	11.748	0.002	97	37024	0.1600	0.1488	
61 1,4-Dioxane	88	11.776	11.770	0.006	94	6344	0.1600	0.1372	
62 Methyl methacrylate	41	11.854	11.847	0.007	92	15453	0.1600	0.1320	
63 Methylcyclohexane	83	12.288	12.288	0.000	94	20710	0.1600	0.1397	
64 4-Methyl-2-pentanone (MIBK	43	12.712	12.710	0.002	98	29615	0.1600	0.1311	
65 cis-1,3-Dichloropropene	75	12.763	12.764	-0.001	96	23365	0.1600	0.1389	
66 trans-1,3-Dichloropropene	75	13.471	13.471	0.000	97	18209	0.1600	0.1298	
67 Toluene	91	13.585	13.589	-0.004	93	45801	0.1600	0.1493	
68 1,1,2-Trichloroethane	83	13.668	13.670	-0.002	96	20097	0.1600	0.1629	
69 2-Hexanone	58	14.066	14.059	0.007	90	10396	0.1600	0.0965	
70 n-Octane	85	14.283	14.287	-0.004	90	10479	0.1600	0.1147	
71 Chlorodibromomethane	129	14.371	14.374	-0.003	96	30600	0.1600	0.1404	
72 Ethylene Dibromide	107	14.670	14.668	0.002	98	29274	0.1600	0.1436	
73 Tetrachloroethene	129	14.738	14.739	-0.001	88	19473	0.1600	0.1545	
74 Chlorobenzene	112	15.621	15.622	-0.001	92	41596	0.1600	0.1519	
75 2,3-Dimethylheptane	43	15.642	15.643	-0.001	94	48441	0.1600	0.1567	
76 Ethylbenzene	91	15.911	15.911	0.000	99	57047	0.1600	0.1343	
77 m-Xylene & p-Xylene	91	16.076	16.076	0.000	99	91330	0.3200	0.2820	
78 n-Nonane	57	16.500	16.497	0.003	91	23707	0.1600	0.1137	
79 Bromoform	173	16.526	16.527	-0.001	88	24877	0.1600	0.1111	
80 Styrene	104	16.541	16.541	0.000	98	29948	0.1600	0.1519	
81 o-Xylene	91	16.598	16.601	-0.003	98	51012	0.1600	0.1520	
82 1,1,2,2-Tetrachloroethane	83	16.929	16.930	-0.001	98	48338	0.1600	0.1502	
83 1,2,3-Trichloropropane	110	17.084	17.089	-0.005	96	10959	0.1600	0.1545	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	17.193	17.192	0.001	98	57843	0.1600	0.1277	
85 N-Propylbenzene	120	17.756	17.756	0.000	99	13541	0.1600	0.1160	
86 2-Chlorotoluene	126	17.797	17.794	0.003	97	16633	0.1600	0.1468	
87 4-Ethyltoluene	105	17.911	17.912	-0.001	98	57542	0.1600	0.1288	
88 1,3,5-Trimethylbenzene	120	17.994	17.992	0.002	91	23921	0.1600	0.1527	
89 Alpha Methyl Styrene	118	18.237	18.237	0.000	87	16922	0.1600	0.0948	
90 n-Decane	57	18.299	18.299	0.000	92	37409	0.1600	0.1279	
91 tert-Butylbenzene	119	18.438	18.439	-0.001	88	55542	0.1600	0.1393	
92 1,2,4-Trimethylbenzene	105	18.454	18.454	0.000	97	54541	0.1600	0.1373	
93 sec-Butylbenzene	105	18.722	18.722	0.000	97	72529	0.1600	0.1268	
94 1,3-Dichlorobenzene	146	18.738	18.739	-0.001	96	38711	0.1600	0.1475	
95 Benzyl chloride	91	18.815	18.817	-0.002	96	32222	0.1600	0.0960	
96 1,4-Dichlorobenzene	146	18.826	18.829	-0.003	92	36362	0.1600	0.1457	
97 4-Isopropyltoluene	119	18.893	18.894	-0.001	97	56604	0.1600	0.1289	
98 1,2,3-Trimethylbenzene	105	18.945	18.948	-0.003	99	56349	0.1600	0.1424	
99 Butylcyclohexane	83	19.002	19.005	-0.003	91	49688	0.1600	0.1466	
100 1,2-Dichlorobenzene	146	19.203	19.205	-0.002	86	38362	0.1600	0.1450	
101 2,3-Dihydroindene	117	19.203	19.204	-0.001	89	47145	0.1600	0.1264	
102 Indene	116	19.343	19.340	0.003	91	36789	0.1600	0.1105	
103 n-Butylbenzene	91	19.343	19.346	-0.003	96	71377	0.1600	0.1573	
104 Undecane	57	19.673	19.672	0.001	93	36177	0.1600	0.1098	
105 1,2-Dibromo-3-Chloropropan	157	19.834	19.833	0.001	84	13954	0.1600	0.1468	
106 1,2,4,5-Tetramethylbenzene	119	20.128	20.128	0.000	96	40538	0.1600	0.1538	
107 Dodecane	57	20.764	20.765	-0.001	89	25133	0.1600	0.0773	
108 1,2,4-Trichlorobenzene	180	20.966	20.966	0.000	91	19442	0.1600	0.1180	
109 Naphthalene	128	21.110	21.111	-0.001	98	39332	0.1600	0.1046	
110 Hexachlorobutadiene	225	21.338	21.338	0.000	89	34869	0.1600	0.1531	
111 1,2,3-Trichlorobenzene	180	21.410	21.410	0.000	91	24824	0.1600	0.1341	
112 2-Methylnaphthalene	142	22.061	22.062	-0.001	94	3392	0.1600	0.0262	
113 1-Methylnaphthalene	142	22.190	22.191	-0.001	95	8251	0.1600	0.0514	
A 115 C8 Range	1	14.280	(14.247-14.329)		0	131899	0.1600	0.1389	
S 116 Xylenes, Total	100				0		0.4800	0.4340	
S 117 1,2-Dichloroethene, Total	1				0		0.3200	0.3100	

Reagents:

40L4DQP_00018	Amount Added: 200.00	Units: mL	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

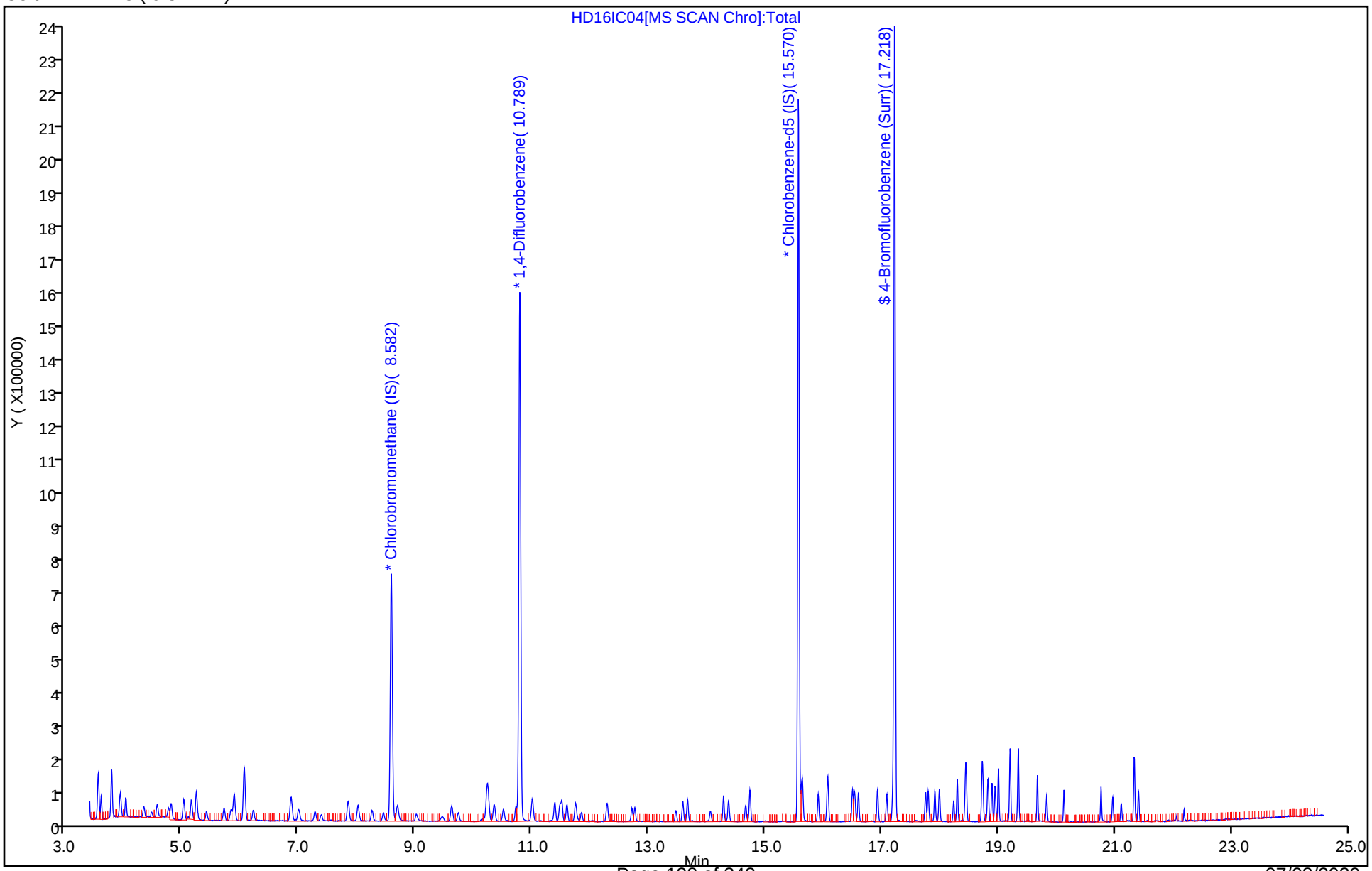
Report Date: 21-Apr-2020 10:48:32 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC04.D

Injection Date:	16-Apr-2020 10:40:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	IC L4			Worklist Smp#:	6
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

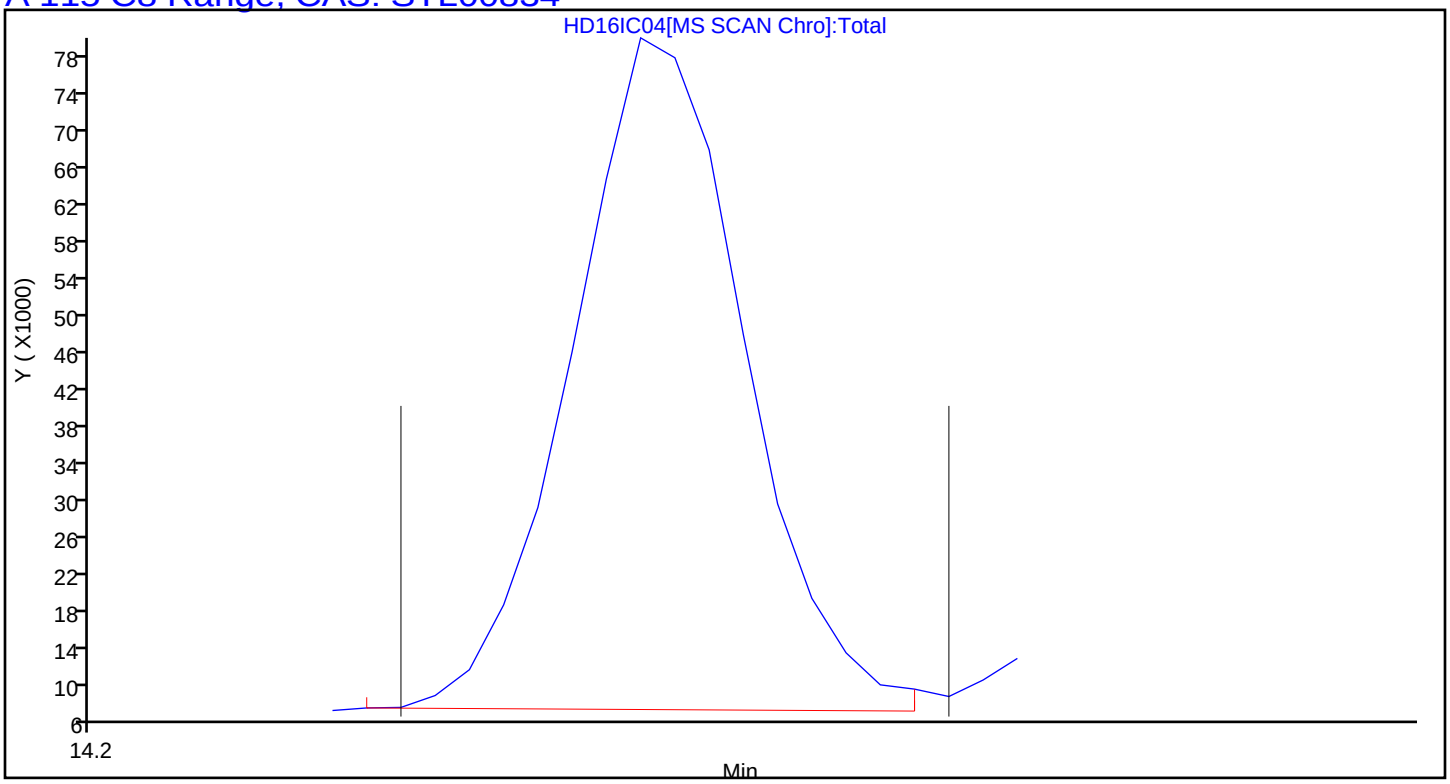
Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC04.D				
Injection Date:	16-Apr-2020 10:40:30	Instrument ID:	MH		
Lims ID:	IC L4				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	2	Worklist Smp#:	6
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 115 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC05.D
Lims ID: IC L5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 16-Apr-2020 11:33:30 ALS Bottle#: 3 Worklist Smp#: 7
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0015239-007
Misc. Info.: 297343
Operator ID: HMT Instrument ID: MH
Sublist: chrom-MH_TO15*sub7

Method: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\MH_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 21-Apr-2020 10:48:37 Calib Date: 16-Apr-2020 18:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC10.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX0331

First Level Reviewer: tajh Date: 16-Apr-2020 12:19:50

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.587	8.589	-0.002	96	208317	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.789	10.792	-0.003	96	1447284	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.570	15.572	-0.002	90	1163030	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr	95	17.219	17.222	-0.003	88	819799	4.00	4.20	
6 Chlorodifluoromethane	51	3.543	3.546	-0.003	97	89827	0.4000	0.4088	
7 Propene	41	3.553	3.555	-0.002	99	84283	0.4000	0.3371	
8 Dichlorodifluoromethane	85	3.605	3.606	-0.001	100	140856	0.4000	0.4168	
9 Chloromethane	52	3.776	3.779	-0.003	55	14923	0.4000	0.4050	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.786	3.785	0.001	95	92562	0.4000	0.4107	
11 Acetaldehyde	44	3.925	3.930	-0.005	97	79977	2.00	1.95	
12 Vinyl chloride	62	3.941	3.945	-0.004	99	46282	0.4000	0.3829	
13 Butane	43	4.029	4.028	0.001	82	56170	0.4000	0.3922	
14 Butadiene	54	4.029	4.028	0.001	71	31980	0.4000	0.3893	
15 Bromomethane	94	4.334	4.337	-0.003	97	52498	0.4000	0.4115	
16 Chloroethane	64	4.468	4.473	-0.005	96	20202	0.4000	0.3927	
17 Ethanol	31	4.561	4.571	-0.010	93	76328	2.00	2.05	
18 Vinyl bromide	106	4.763	4.763	0.000	95	46565	0.4000	0.4053	
19 2-Methylbutane	43	4.804	4.806	-0.002	88	41883	0.4000	0.3985	
20 Trichlorofluoromethane	101	5.021	5.022	-0.001	98	122445	0.4000	0.4040	
21 Acrolein	56	5.037	5.037	0.000	26	14460	0.4000	0.4081	
22 Acetonitrile	40	5.099	5.116	-0.017	100	15350	0.4000	0.3763	
23 Acetone	58	5.150	5.154	-0.004	98	58978	1.20	1.26	
25 Isopropyl alcohol	45	5.233	5.241	-0.008	84	155698	1.20	1.10	
24 Pentane	72	5.233	5.236	-0.003	76	5699	0.4000	0.4349	
26 Ethyl ether	31	5.409	5.408	0.001	95	38004	0.4000	0.4189	
27 1,1-Dichloroethene	96	5.709	5.716	-0.007	96	39611	0.4000	0.3903	
28 Acrylonitrile	53	5.822	5.826	-0.004	67	29756	0.4000	0.3870	
29 2-Methyl-2-propanol	59	5.827	5.832	-0.005	95	64952	0.4000	0.3857	
30 1,1,2-Trichloro-1,2,2-trif	101	5.889	5.889	0.000	91	96750	0.4000	0.4116	
31 Methylene Chloride	84	6.060	6.063	-0.003	99	92172	0.4000	0.3935	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.070	6.076	-0.006	97	35436	0.4000	0.4135	
33 Carbon disulfide	76	6.215	6.218	-0.003	100	121608	0.4000	0.4000	
34 trans-1,2-Dichloroethene	96	6.851	6.859	-0.008	97	38437	0.4000	0.3837	
35 2-Methylpentane	43	6.871	6.873	-0.002	94	80643	0.4000	0.4070	
36 Methyl tert-butyl ether	73	6.980	6.989	-0.009	96	93424	0.4000	0.3990	
37 1,1-Dichloroethane	63	7.275	7.280	-0.005	99	80555	0.4000	0.4038	
38 Vinyl acetate	43	7.378	7.385	-0.007	99	91256	0.4000	0.3671	
39 2-Butanone (MEK)	72	7.828	7.832	-0.004	95	17276	0.4000	0.3895	
40 Hexane	56	7.843	7.848	-0.005	78	30138	0.4000	0.4021	
41 Isopropyl ether	45	8.003	8.011	-0.008	96	129250	0.4000	0.4017	
42 cis-1,2-Dichloroethene	96	8.251	8.259	-0.008	96	41173	0.4000	0.3937	
43 Ethyl acetate	43	8.443	8.446	-0.003	99	88887	0.4000	0.3955	
44 Chloroform	83	8.598	8.601	-0.003	95	102267	0.4000	0.4158	
45 Tert-butyl ethyl ether	59	8.680	8.688	-0.008	97	111041	0.4000	0.3963	
46 Tetrahydrofuran	42	8.996	9.005	-0.009	93	38891	0.4000	0.3804	
47 1,1,1-Trichloroethane	97	9.621	9.623	-0.002	97	90992	0.4000	0.3974	
48 1,2-Dichloroethane	62	9.730	9.736	-0.006	97	63603	0.4000	0.4152	
49 n-Butanol	31	10.205	10.201	0.004	75	11011	0.4000	0.3382	
51 Benzene	78	10.231	10.231	0.000	97	124381	0.4000	0.3951	
50 Cyclohexane	69	10.231	10.229	0.002	70	17030	0.4000	0.4087	
52 Carbon tetrachloride	117	10.252	10.253	-0.001	94	89850	0.4000	0.3952	
53 2,3-Dimethylpentane	71	10.350	10.351	-0.001	88	23858	0.4000	0.3992	
54 Thiophene	84	10.505	10.512	-0.007	96	70215	0.4000	0.3980	
55 Isooctane	57	11.001	11.005	-0.004	98	185595	0.4000	0.3879	
56 n-Heptane	71	11.394	11.392	0.002	91	32858	0.4000	0.3713	
57 1,2-Dichloropropane	63	11.471	11.478	-0.007	91	51542	0.4000	0.3994	
58 Trichloroethene	130	11.513	11.514	-0.001	91	49084	0.4000	0.3814	
59 Dibromomethane	93	11.595	11.602	-0.007	87	63193	0.4000	0.4008	
60 Dichlorobromomethane	83	11.745	11.748	-0.003	97	97760	0.4000	0.3961	
61 1,4-Dioxane	88	11.766	11.770	-0.004	91	16940	0.4000	0.3694	
62 Methyl methacrylate	41	11.849	11.847	0.002	94	44369	0.4000	0.3822	
63 Methylcyclohexane	83	12.288	12.288	0.000	92	58914	0.4000	0.3507	
64 4-Methyl-2-pentanone (MIBK	43	12.707	12.710	-0.003	96	85978	0.4000	0.3835	
65 cis-1,3-Dichloropropene	75	12.763	12.764	-0.001	95	64503	0.4000	0.3864	
66 trans-1,3-Dichloropropene	75	13.471	13.471	0.000	97	50863	0.4000	0.3667	
67 Toluene	91	13.585	13.589	-0.004	93	129213	0.4000	0.3945	
68 1,1,2-Trichloroethane	83	13.668	13.670	-0.002	96	50779	0.4000	0.4162	
69 2-Hexanone	58	14.061	14.059	0.002	91	34298	0.4000	0.3219	
70 n-Octane	85	14.288	14.287	0.001	91	34092	0.4000	0.3773	
71 Chlorodibromomethane	129	14.376	14.374	0.002	95	84287	0.4000	0.3911	
72 Ethylene Dibromide	107	14.665	14.668	-0.003	95	81447	0.4000	0.4041	
73 Tetrachloroethene	129	14.738	14.739	-0.001	89	49185	0.4000	0.3948	
74 Chlorobenzene	112	15.622	15.622	0.000	92	105985	0.4000	0.3916	
75 2,3-Dimethylheptane	43	15.642	15.643	-0.001	95	129339	0.4000	0.4231	
76 Ethylbenzene	91	15.911	15.911	0.000	99	163820	0.4000	0.3901	
77 m-Xylene & p-Xylene	91	16.071	16.076	-0.005	99	264124	0.8000	0.8248	
78 n-Nonane	57	16.500	16.497	0.003	90	77180	0.4000	0.3744	
79 Bromoform	173	16.526	16.527	-0.001	89	78091	0.4000	0.3527	
80 Styrene	104	16.541	16.541	0.000	98	87934	0.4000	0.3883	
81 o-Xylene	91	16.598	16.601	-0.003	98	141114	0.4000	0.4254	
82 1,1,2,2-Tetrachloroethane	83	16.929	16.930	-0.001	98	129877	0.4000	0.4082	
83 1,2,3-Trichloropropane	110	17.089	17.089	0.000	97	28017	0.4000	0.3994	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	17.193	17.192	0.001	98	169405	0.4000	0.3782	
85 N-Propylbenzene	120	17.756	17.756	0.000	98	43255	0.4000	0.3748	
86 2-Chlorotoluene	126	17.803	17.794	0.009	97	46403	0.4000	0.4142	
87 4-Ethyltoluene	105	17.911	17.912	-0.001	98	169671	0.4000	0.3841	
88 1,3,5-Trimethylbenzene	120	17.989	17.992	-0.003	91	67506	0.4000	0.3869	
89 Alpha Methyl Styrene	118	18.237	18.237	0.000	86	54434	0.4000	0.3086	
90 n-Decane	57	18.299	18.299	0.000	89	118068	0.4000	0.4083	
91 tert-Butylbenzene	119	18.438	18.439	-0.001	88	152906	0.4000	0.3879	
92 1,2,4-Trimethylbenzene	105	18.454	18.454	0.000	96	158811	0.4000	0.4043	
93 sec-Butylbenzene	105	18.723	18.722	0.001	98	219395	0.4000	0.3879	
94 1,3-Dichlorobenzene	146	18.738	18.739	-0.001	97	102440	0.4000	0.3948	
95 Benzyl chloride	91	18.816	18.817	-0.001	97	103438	0.4000	0.3118	
96 1,4-Dichlorobenzene	146	18.826	18.829	-0.003	91	96899	0.4000	0.3928	
97 4-Isopropyltoluene	119	18.893	18.894	-0.001	96	171643	0.4000	0.3953	
98 1,2,3-Trimethylbenzene	105	18.950	18.948	0.002	99	158427	0.4000	0.4050	
99 Butylcyclohexane	83	19.002	19.005	-0.003	92	139594	0.4000	0.4165	
100 1,2-Dichlorobenzene	146	19.203	19.205	-0.002	82	104846	0.4000	0.4007	
101 2,3-Dihydroindene	117	19.203	19.204	-0.001	92	141703	0.4000	0.3843	
102 Indene	116	19.338	19.340	-0.002	90	113484	0.4000	0.3448	
103 n-Butylbenzene	91	19.348	19.346	0.002	96	213054	0.4000	0.4088	
104 Undecane	57	19.674	19.672	0.002	95	116661	0.4000	0.3581	
105 1,2-Dibromo-3-Chloropropan	157	19.829	19.833	-0.004	87	46467	0.4000	0.3661	
106 1,2,4,5-Tetramethylbenzene	119	20.128	20.128	0.000	96	137380	0.4000	0.3496	
107 Dodecane	57	20.764	20.765	-0.001	93	91576	0.4000	0.2848	
108 1,2,4-Trichlorobenzene	180	20.966	20.966	0.000	92	59652	0.4000	0.3661	
109 Naphthalene	128	21.110	21.111	-0.001	98	145411	0.4000	0.3913	
110 Hexachlorobutadiene	225	21.338	21.338	0.000	89	81851	0.4000	0.3634	
111 1,2,3-Trichlorobenzene	180	21.410	21.410	0.000	94	67722	0.4000	0.3701	
112 2-Methylnaphthalene	142	22.061	22.062	-0.001	95	23571	0.4000	0.1845	
113 1-Methylnaphthalene	142	22.191	22.191	0.000	96	42808	0.4000	0.2699	
A 115 C8 Range	1	14.280	(14.247-14.329)		0	374828	0.4000	0.3978	
S 116 Xylenes, Total	100				0		1.20	1.25	
S 117 1,2-Dichloroethene, Total	1				0		0.8000	0.7775	

Reagents:

40L5DQP_00018	Amount Added: 200.00	Units: mL	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

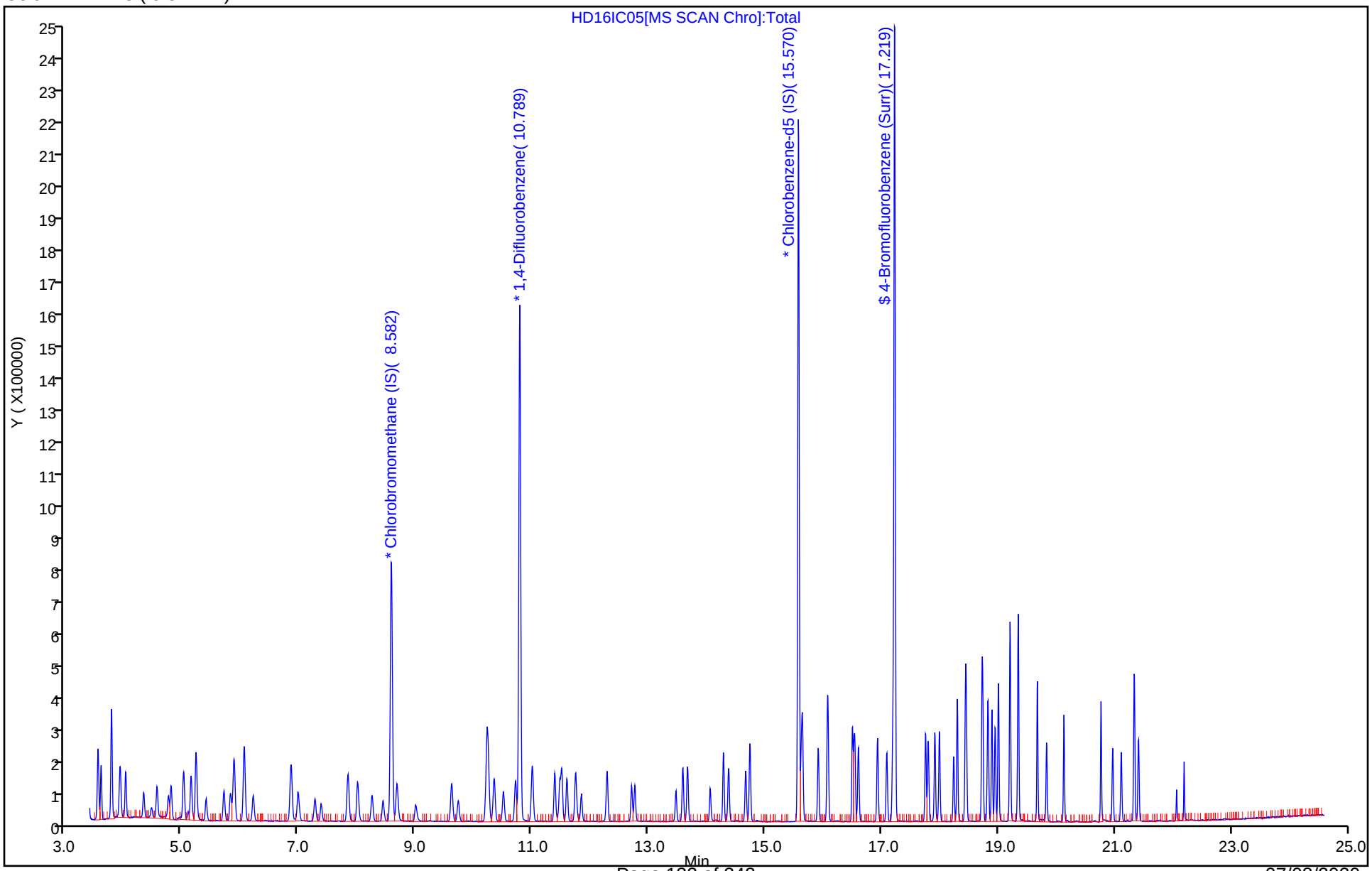
Report Date: 21-Apr-2020 10:48:38 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC05.D

Injection Date:	16-Apr-2020 11:33:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	IC L5			Worklist Smp#:	7
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

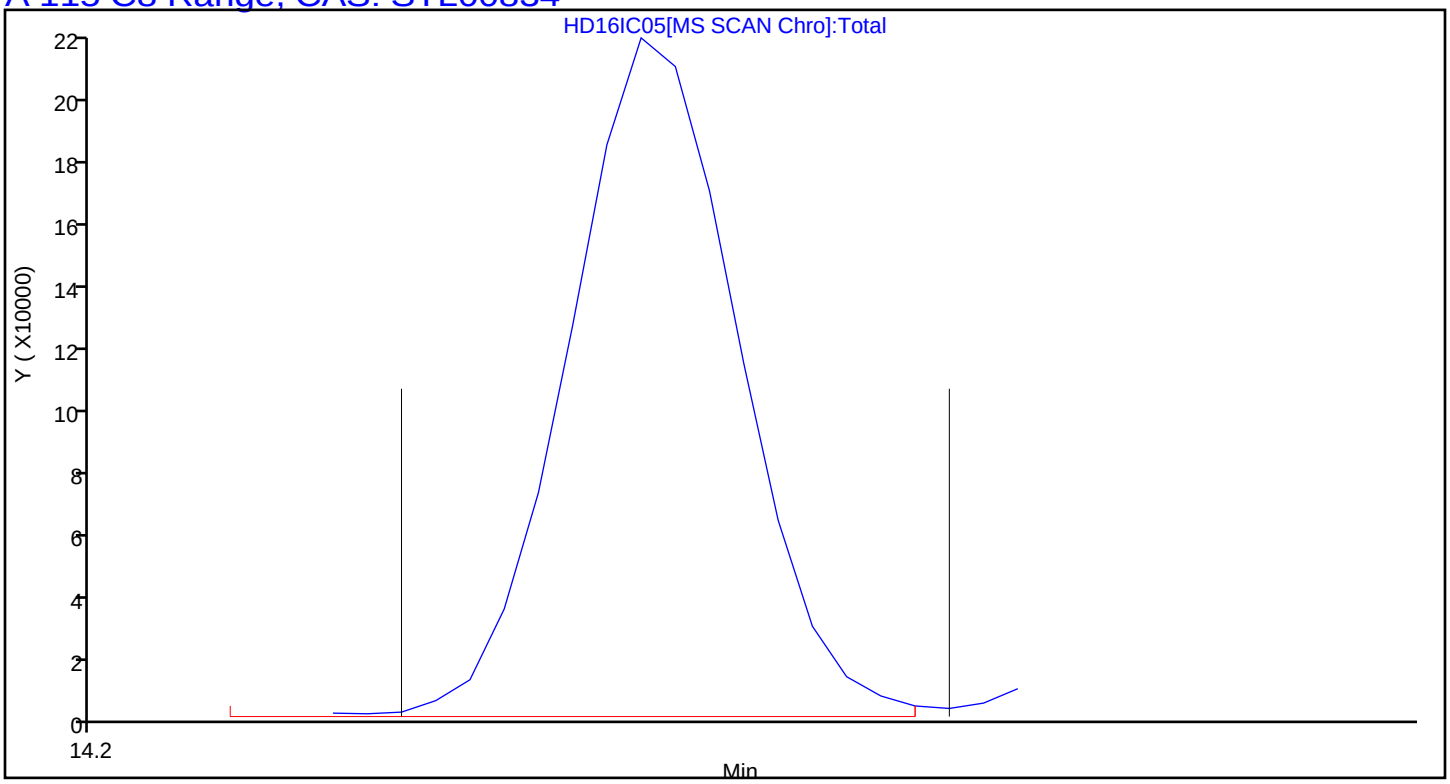


Report Date: 21-Apr-2020 10:48:38 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC05.D				
Injection Date:	16-Apr-2020 11:33:30	Instrument ID:	MH		
Lims ID:	IC L5				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	3	Worklist Smp#:	7
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 115 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC06.D
Lims ID: IC L6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 16-Apr-2020 12:26:30 ALS Bottle#: 4 Worklist Smp#: 8
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0015239-008
Misc. Info.: 297342
Operator ID: HMT Instrument ID: MH
Sublist: chrom-MH_TO15*sub7

Method: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\MH_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 21-Apr-2020 10:48:42 Calib Date: 16-Apr-2020 18:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC10.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX0331

First Level Reviewer: tajh Date: 16-Apr-2020 13:23:44

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.582	8.589	-0.007	96	215621	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.789	10.792	-0.003	95	1476348	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.575	15.572	0.003	89	1221397	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr	95	17.224	17.222	0.002	89	860143	4.00	4.20	
6 Chlorodifluoromethane	51	3.543	3.546	-0.003	97	231500	1.00	1.02	
7 Propene	41	3.553	3.555	-0.002	99	139705	1.00	1.00	
8 Dichlorodifluoromethane	85	3.605	3.606	-0.001	100	359489	1.00	1.03	
9 Chloromethane	52	3.776	3.779	-0.003	96	37262	1.00	0.9771	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.781	3.785	-0.004	94	250336	1.00	1.07	
11 Acetaldehyde	44	3.926	3.930	-0.004	95	211668	5.00	4.98	
12 Vinyl chloride	62	3.941	3.945	-0.004	99	121630	1.00	0.9723	
14 Butadiene	54	4.024	4.028	-0.004	72	85854	1.00	1.01	
13 Butane	43	4.024	4.028	-0.004	82	145634	1.00	0.9824	
15 Bromomethane	94	4.334	4.337	-0.003	98	133380	1.00	1.01	
16 Chloroethane	64	4.468	4.473	-0.005	97	52250	1.00	0.9813	
17 Ethanol	31	4.561	4.571	-0.010	93	189858	5.00	4.94	
18 Vinyl bromide	106	4.758	4.763	-0.005	96	121595	1.00	1.02	
19 2-Methylbutane	43	4.804	4.806	-0.002	87	102629	1.00	0.9435	
20 Trichlorofluoromethane	101	5.016	5.022	-0.006	99	307689	1.00	0.9809	
21 Acrolein	56	5.032	5.037	-0.005	93	36991	1.00	1.01	
22 Acetonitrile	40	5.099	5.116	-0.017	97	45061	1.00	1.07	
23 Acetone	58	5.140	5.154	-0.014	98	144197	3.00	2.97	
25 Isopropyl alcohol	45	5.223	5.241	-0.018	93	408240	3.00	2.81	
24 Pentane	72	5.233	5.236	-0.003	96	13325	1.00	0.9825	
26 Ethyl ether	31	5.399	5.408	-0.009	95	97518	1.00	1.04	
27 1,1-Dichloroethene	96	5.714	5.716	-0.002	96	100847	1.00	0.9599	
28 Acrylonitrile	53	5.822	5.826	-0.004	95	80366	1.00	1.01	
29 2-Methyl-2-propanol	59	5.812	5.832	-0.020	96	173411	1.00	0.99	
30 1,1,2-Trichloro-1,2,2-trif	101	5.884	5.889	-0.005	91	245213	1.00	1.01	
31 Methylene Chloride	84	6.060	6.063	-0.003	98	154970	1.00	1.03	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.076	6.076	0.000	98	91499	1.00	1.03	
33 Carbon disulfide	76	6.215	6.218	-0.003	100	321614	1.00	1.02	
34 trans-1,2-Dichloroethene	96	6.856	6.859	-0.003	96	104558	1.00	1.01	
35 2-Methylpentane	43	6.872	6.873	-0.001	94	216620	1.00	1.06	
36 Methyl tert-butyl ether	73	6.975	6.989	-0.014	97	250002	1.00	1.03	
37 1,1-Dichloroethane	63	7.275	7.280	-0.005	100	203725	1.00	0.9866	
38 Vinyl acetate	43	7.378	7.385	-0.007	100	268831	1.00	1.04	
39 2-Butanone (MEK)	72	7.823	7.832	-0.010	96	46715	1.00	1.02	
40 Hexane	56	7.843	7.848	-0.005	89	81612	1.00	1.05	
41 Isopropyl ether	45	8.003	8.011	-0.008	97	355721	1.00	1.07	
42 cis-1,2-Dichloroethene	96	8.257	8.259	-0.002	96	109138	1.00	1.01	
43 Ethyl acetate	43	8.438	8.446	-0.008	99	243309	1.00	1.05	
44 Chloroform	83	8.598	8.601	-0.003	97	259748	1.00	1.02	
45 Tert-butyl ethyl ether	59	8.675	8.688	-0.013	97	302438	1.00	1.04	
46 Tetrahydrofuran	42	8.991	9.005	-0.014	93	111448	1.00	1.05	
47 1,1,1-Trichloroethane	97	9.621	9.623	-0.002	97	238710	1.00	1.01	
48 1,2-Dichloroethane	62	9.735	9.736	-0.001	97	159660	1.00	1.02	
49 n-Butanol	31	10.190	10.201	-0.011	76	31194	1.00	0.9393	
50 Cyclohexane	69	10.221	10.229	-0.008	78	44463	1.00	1.05	
51 Benzene	78	10.231	10.231	0.000	97	327048	1.00	1.02	
52 Carbon tetrachloride	117	10.252	10.253	-0.001	94	235027	1.00	1.01	
53 2,3-Dimethylpentane	71	10.350	10.351	-0.001	88	63177	1.00	1.04	
54 Thiophene	84	10.510	10.512	-0.002	96	187275	1.00	1.04	
55 Isooctane	57	11.001	11.005	-0.004	98	502191	1.00	1.03	
56 n-Heptane	71	11.389	11.392	-0.003	91	91657	1.00	1.02	
57 1,2-Dichloropropane	63	11.477	11.478	-0.001	91	134477	1.00	1.02	
58 Trichloroethene	130	11.513	11.514	-0.001	90	127602	1.00	0.9720	
59 Dibromomethane	93	11.601	11.602	-0.001	88	163438	1.00	1.02	
60 Dichlorobromomethane	83	11.750	11.748	0.002	97	260503	1.00	1.03	
61 1,4-Dioxane	88	11.761	11.770	-0.009	90	45200	1.00	0.9663	
62 Methyl methacrylate	41	11.843	11.847	-0.004	94	124803	1.00	1.05	
63 Methylcyclohexane	83	12.288	12.288	0.000	94	166351	1.00	0.9235	
64 4-Methyl-2-pentanone (MIBK	43	12.701	12.710	-0.009	97	246503	1.00	1.08	
65 cis-1,3-Dichloropropene	75	12.763	12.764	-0.001	95	180786	1.00	1.06	
66 trans-1,3-Dichloropropene	75	13.472	13.471	0.001	98	151775	1.00	1.04	
67 Toluene	91	13.585	13.589	-0.004	92	359526	1.00	1.02	
68 1,1,2-Trichloroethane	83	13.668	13.670	-0.002	96	132187	1.00	1.03	
69 2-Hexanone	58	14.056	14.059	-0.003	91	113223	1.00	1.01	
70 n-Octane	85	14.283	14.287	-0.004	93	96698	1.00	1.02	
71 Chlorodibromomethane	129	14.376	14.374	0.002	96	233797	1.00	1.03	
72 Ethylene Dibromide	107	14.665	14.668	-0.003	98	221286	1.00	1.05	
73 Tetrachloroethene	129	14.738	14.739	-0.001	91	128051	1.00	0.9787	
74 Chlorobenzene	112	15.622	15.622	0.000	92	278338	1.00	0.9792	
75 2,3-Dimethylheptane	43	15.642	15.643	-0.001	95	346291	1.00	1.08	
76 Ethylbenzene	91	15.911	15.911	0.000	99	460069	1.00	1.04	
77 m-Xylene & p-Xylene	91	16.071	16.076	-0.005	99	732692	2.00	2.18	
78 n-Nonane	57	16.495	16.497	-0.002	92	226817	1.00	1.05	
79 Bromoform	173	16.526	16.527	-0.001	92	231700	1.00	1.00	
80 Styrene	104	16.542	16.541	0.001	98	251682	1.00	1.00	
81 o-Xylene	91	16.604	16.601	0.003	98	382815	1.00	1.10	
82 1,1,2,2-Tetrachloroethane	83	16.929	16.930	-0.001	98	349990	1.00	1.05	
83 1,2,3-Trichloropropane	110	17.089	17.089	0.000	97	76006	1.00	1.03	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	17.188	17.192	-0.004	97	486566	1.00	1.03	
85 N-Propylbenzene	120	17.756	17.756	0.000	98	125088	1.00	1.03	
86 2-Chlorotoluene	126	17.797	17.794	0.003	97	127493	1.00	1.08	
87 4-Ethyltoluene	105	17.911	17.912	-0.001	99	499000	1.00	1.08	
88 1,3,5-Trimethylbenzene	120	17.994	17.992	0.002	91	190751	1.00	1.00	
89 Alpha Methyl Styrene	118	18.237	18.237	0.000	85	179584	1.00	0.9693	
90 n-Decane	57	18.299	18.299	0.000	90	327523	1.00	1.08	
91 tert-Butylbenzene	119	18.438	18.439	-0.001	87	433573	1.00	1.05	
92 1,2,4-Trimethylbenzene	105	18.454	18.454	0.000	97	445105	1.00	1.08	
93 sec-Butylbenzene	105	18.723	18.722	0.001	98	643662	1.00	1.08	
94 1,3-Dichlorobenzene	146	18.738	18.739	-0.001	98	283133	1.00	1.04	
95 Benzyl chloride	91	18.816	18.817	-0.001	96	327220	1.00	0.9391	
96 1,4-Dichlorobenzene	146	18.826	18.829	-0.003	95	268919	1.00	1.04	
97 4-Isopropyltoluene	119	18.893	18.894	-0.001	96	493467	1.00	1.08	
98 1,2,3-Trimethylbenzene	105	18.945	18.948	-0.003	99	443228	1.00	1.08	
99 Butylcyclohexane	83	19.002	19.005	-0.003	93	385710	1.00	1.10	
100 1,2-Dichlorobenzene	146	19.203	19.205	-0.002	79	285474	1.00	1.04	
101 2,3-Dihydroindene	117	19.203	19.204	-0.001	92	408235	1.00	1.05	
102 Indene	116	19.338	19.340	-0.002	89	340988	1.00	0.9866	
103 n-Butylbenzene	91	19.343	19.346	-0.003	97	598461	1.00	1.04	
104 Undecane	57	19.674	19.672	0.002	95	363019	1.00	1.06	
105 1,2-Dibromo-3-Chloropropan	157	19.834	19.833	0.001	94	140139	1.00	0.9498	
106 1,2,4,5-Tetramethylbenzene	119	20.128	20.128	0.000	96	439273	1.00	0.9150	
107 Dodecane	57	20.764	20.765	-0.001	95	324734	1.00	0.9618	
108 1,2,4-Trichlorobenzene	180	20.966	20.966	0.000	93	187269	1.00	1.09	
109 Naphthalene	128	21.110	21.111	-0.001	98	437919	1.00	1.12	
110 Hexachlorobutadiene	225	21.338	21.338	0.000	89	232795	1.00	0.9842	
111 1,2,3-Trichlorobenzene	180	21.410	21.410	0.000	92	201572	1.00	1.05	
112 2-Methylnaphthalene	142	22.061	22.062	-0.001	96	100153	1.00	0.7464	
113 1-Methylnaphthalene	142	22.191	22.191	0.000	96	157067	1.00	0.9428	
A 115 C8 Range	1	14.273	(14.231-14.345)		0	1017108	1.00	1.06	
S 116 Xylenes, Total	100				0		3.00	3.28	
S 117 1,2-Dichloroethene, Total	1				0		2.00	2.02	

Reagents:

40L6DQP_00017	Amount Added: 200.00	Units: mL	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

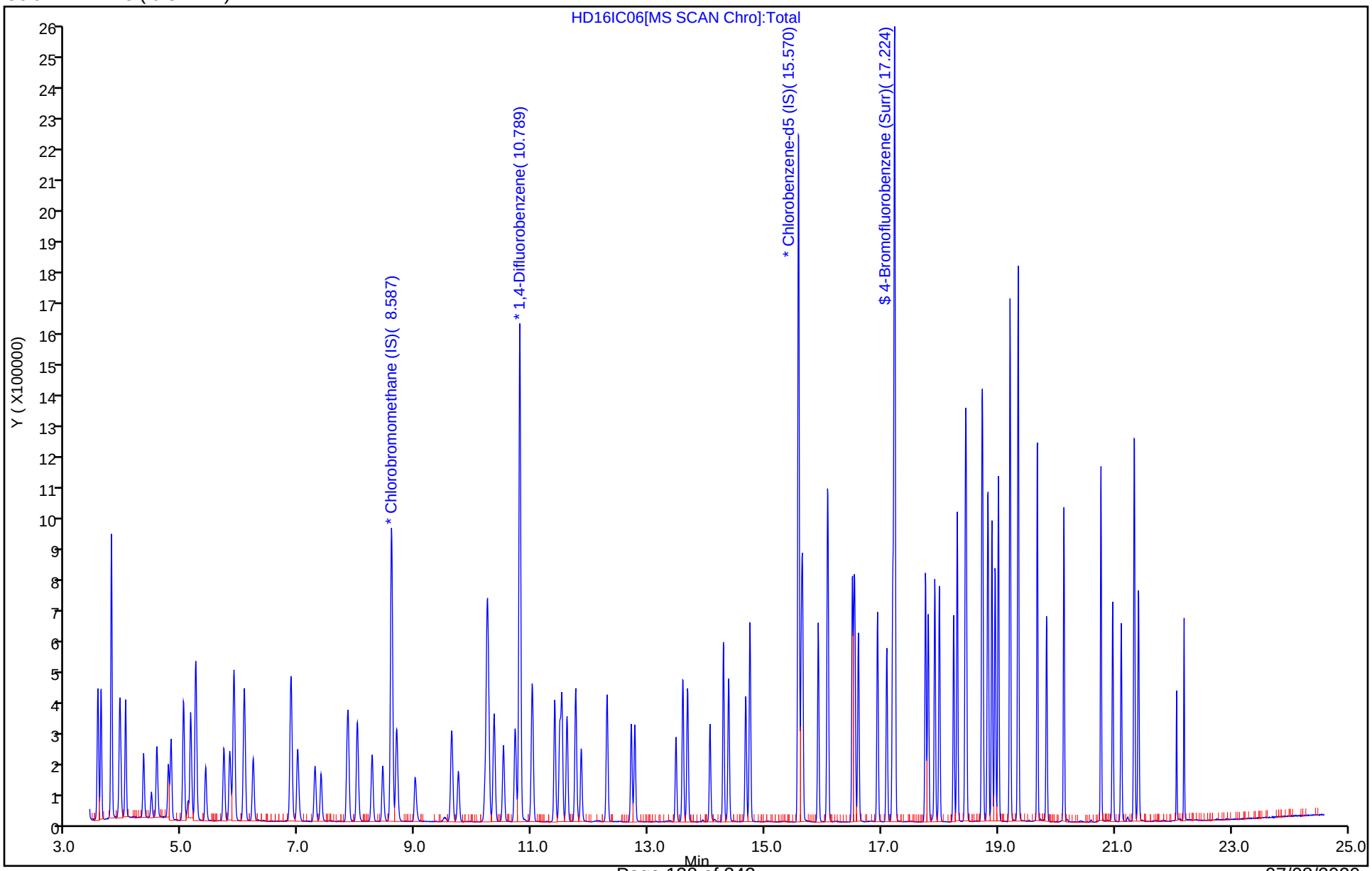
Report Date: 21-Apr-2020 10:48:43 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC06.D

Injection Date:	16-Apr-2020 12:26:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	IC L6			Worklist Smp#:	8
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

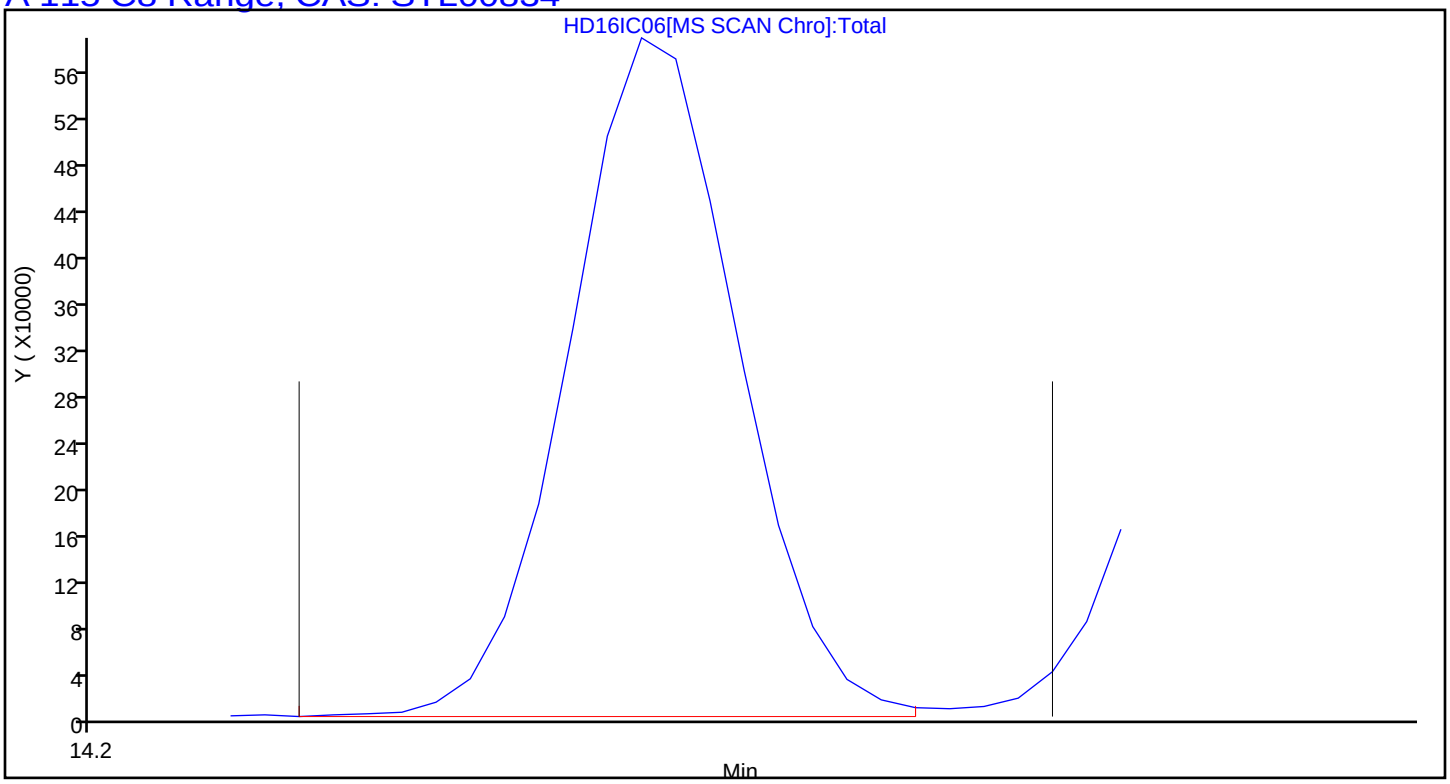


Report Date: 21-Apr-2020 10:48:43 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC06.D				
Injection Date:	16-Apr-2020 12:26:30	Instrument ID:	MH		
Lims ID:	IC L6				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	4	Worklist Smp#:	8
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 115 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC07.D
Lims ID: ICIS L7
Client ID:
Sample Type: ICIS Calib Level: 7
Inject. Date: 16-Apr-2020 13:19:30 ALS Bottle#: 5 Worklist Smp#: 9
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0015239-009
Misc. Info.: 297186
Operator ID: HMT Instrument ID: MH
Sublist: chrom-MH_TO15*sub7

Method: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\MH_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 21-Apr-2020 10:48:47 Calib Date: 16-Apr-2020 18:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC10.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX0331

First Level Reviewer: tajh Date: 16-Apr-2020 14:19:56

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.593	8.589	0.003	96	238129	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.794	10.792	0.002	95	1621590	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.575	15.572	0.003	89	1350213	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr	95	17.224	17.222	0.002	89	938760	4.00	4.14	
6 Chlorodifluoromethane	51	3.548	3.546	0.002	97	486289	2.00	1.94	
7 Propene	41	3.559	3.555	0.003	99	241206	2.00	1.98	
8 Dichlorodifluoromethane	85	3.610	3.606	0.004	100	758766	2.00	1.96	
9 Chloromethane	52	3.786	3.779	0.007	98	79574	2.00	1.89	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.791	3.785	0.006	95	497468	2.00	1.93	
11 Acetaldehyde	44	3.931	3.930	0.001	99	459205	10.0	9.79	
12 Vinyl chloride	62	3.946	3.945	0.001	99	260327	2.00	1.88	
14 Butadiene	54	4.029	4.028	0.001	72	185695	2.00	1.98	
13 Butane	43	4.029	4.028	0.001	83	319615	2.00	1.95	
15 Bromomethane	94	4.339	4.337	0.002	97	283021	2.00	1.94	
16 Chloroethane	64	4.473	4.473	0.000	95	114269	2.00	1.94	
17 Ethanol	31	4.572	4.571	0.001	93	437849	10.0	10.3	
18 Vinyl bromide	106	4.768	4.763	0.005	97	259146	2.00	1.97	
19 2-Methylbutane	43	4.809	4.806	0.003	89	230259	2.00	1.92	
20 Trichlorofluoromethane	101	5.026	5.022	0.004	99	673807	2.00	1.95	
21 Acrolein	56	5.037	5.037	0.000	93	83698	2.00	2.07	
22 Acetonitrile	40	5.104	5.116	-0.012	99	99811	2.00	2.14	
23 Acetone	58	5.145	5.154	-0.009	98	321031	6.00	5.99	
25 Isopropyl alcohol	45	5.233	5.241	-0.008	93	929352	6.00	5.87	
24 Pentane	72	5.243	5.236	0.007	96	30063	2.00	2.01	
26 Ethyl ether	31	5.404	5.408	-0.004	96	210353	2.00	2.03	
27 1,1-Dichloroethene	96	5.719	5.716	0.003	96	227649	2.00	1.96	
29 2-Methyl-2-propanol	59	5.817	5.832	-0.015	95	400539	2.00	2.08	
28 Acrylonitrile	53	5.827	5.826	0.001	96	178531	2.00	2.03	
30 1,1,2-Trichloro-1,2,2-trif	101	5.889	5.889	0.000	92	530093	2.00	1.97	
31 Methylene Chloride	84	6.065	6.063	0.002	99	277879	2.00	2.05	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.081	6.076	0.005	98	183177	2.00	1.87	
33 Carbon disulfide	76	6.220	6.218	0.002	99	700695	2.00	2.02	
34 trans-1,2-Dichloroethene	96	6.861	6.859	0.002	97	231517	2.00	2.02	
35 2-Methylpentane	43	6.877	6.873	0.004	94	470982	2.00	2.08	
36 Methyl tert-butyl ether	73	6.985	6.989	-0.004	97	566203	2.00	2.12	
37 1,1-Dichloroethane	63	7.285	7.280	0.005	100	444836	2.00	1.95	
38 Vinyl acetate	43	7.388	7.385	0.003	100	609105	2.00	2.14	
39 2-Butanone (MEK)	72	7.833	7.832	0.001	96	105028	2.00	2.07	
40 Hexane	56	7.853	7.848	0.005	88	177214	2.00	2.07	
41 Isopropyl ether	45	8.003	8.011	-0.008	98	779860	2.00	2.12	
42 cis-1,2-Dichloroethene	96	8.262	8.259	0.003	96	244867	2.00	2.05	
43 Ethyl acetate	43	8.443	8.446	-0.003	99	528533	2.00	2.06	
44 Chloroform	83	8.608	8.601	0.007	97	555591	2.00	1.98	
45 Tert-butyl ethyl ether	59	8.680	8.688	-0.008	96	682084	2.00	2.13	
46 Tetrahydrofuran	42	8.996	9.005	-0.009	93	241581	2.00	2.07	
47 1,1,1-Trichloroethane	97	9.626	9.623	0.003	97	519709	2.00	1.99	
48 1,2-Dichloroethane	62	9.745	9.736	0.009	97	341615	2.00	1.99	
49 n-Butanol	31	10.190	10.201	-0.011	82	74752	2.00	2.05	
50 Cyclohexane	69	10.231	10.229	0.002	93	97449	2.00	2.09	
51 Benzene	78	10.236	10.231	0.005	97	702040	2.00	1.99	
52 Carbon tetrachloride	117	10.257	10.253	0.004	95	428945	2.00	1.68	
53 2,3-Dimethylpentane	71	10.355	10.351	0.004	90	143017	2.00	2.14	
54 Thiophene	84	10.515	10.512	0.003	97	408590	2.00	2.07	
55 Isooctane	57	11.006	11.005	0.001	98	1105098	2.00	2.06	
56 n-Heptane	71	11.394	11.392	0.002	91	207953	2.00	2.10	
57 1,2-Dichloropropane	63	11.482	11.478	0.004	92	288578	2.00	2.00	
58 Trichloroethene	130	11.518	11.514	0.004	90	290163	2.00	2.01	
59 Dibromomethane	93	11.606	11.602	0.004	90	353400	2.00	2.00	
60 Dichlorobromomethane	83	11.750	11.748	0.002	98	566974	2.00	2.05	
61 1,4-Dioxane	88	11.761	11.770	-0.009	87	108163	2.00	2.11	
62 Methyl methacrylate	41	11.843	11.847	-0.004	94	281242	2.00	2.16	
63 Methylcyclohexane	83	12.293	12.288	0.005	95	382280	2.00	1.90	
64 4-Methyl-2-pentanone (MIBK	43	12.701	12.710	-0.009	97	558163	2.00	2.22	
65 cis-1,3-Dichloropropene	75	12.763	12.764	-0.001	95	405317	2.00	2.17	
66 trans-1,3-Dichloropropene	75	13.471	13.471	0.000	97	347837	2.00	2.16	
67 Toluene	91	13.590	13.589	0.001	93	814775	2.00	2.07	
68 1,1,2-Trichloroethane	83	13.673	13.670	0.003	96	292002	2.00	2.06	
69 2-Hexanone	58	14.055	14.059	-0.004	92	276466	2.00	2.23	
70 n-Octane	85	14.288	14.287	0.001	93	223369	2.00	2.13	
71 Chlorodibromomethane	129	14.376	14.374	0.002	97	525843	2.00	2.10	
72 Ethylene Dibromide	107	14.665	14.668	-0.003	97	487987	2.00	2.09	
73 Tetrachloroethene	129	14.738	14.739	-0.001	91	289299	2.00	2.00	
74 Chlorobenzene	112	15.621	15.622	-0.001	93	618693	2.00	1.97	
75 2,3-Dimethylheptane	43	15.642	15.643	-0.001	96	746142	2.00	2.10	
76 Ethylbenzene	91	15.911	15.911	0.000	99	1047293	2.00	2.15	
77 m-Xylene & p-Xylene	91	16.076	16.076	0.000	99	1645607	4.00	4.43	
78 n-Nonane	57	16.495	16.497	-0.002	91	522325	2.00	2.18	
79 Bromoform	173	16.526	16.527	-0.001	91	519364	2.00	2.02	
80 Styrene	104	16.541	16.541	0.000	99	582294	2.00	2.06	
81 o-Xylene	91	16.603	16.601	0.002	98	842502	2.00	2.19	
82 1,1,2,2-Tetrachloroethane	83	16.929	16.930	-0.001	98	754733	2.00	2.04	
83 1,2,3-Trichloropropane	110	17.089	17.089	0.000	97	166974	2.00	2.05	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	17.193	17.192	0.001	96	1100652	2.00	2.12	
85 N-Propylbenzene	120	17.756	17.756	0.000	98	289338	2.00	2.16	
86 2-Chlorotoluene	126	17.803	17.794	0.009	98	280556	2.00	2.16	
87 4-Ethyltoluene	105	17.911	17.912	-0.001	99	1132867	2.00	2.21	
88 1,3,5-Trimethylbenzene	120	17.994	17.992	0.002	91	433130	2.00	2.02	
89 Alpha Methyl Styrene	118	18.237	18.237	0.000	86	443556	2.00	2.17	
90 n-Decane	57	18.299	18.299	0.000	90	717310	2.00	2.14	
91 tert-Butylbenzene	119	18.438	18.439	-0.001	89	969278	2.00	2.12	
92 1,2,4-Trimethylbenzene	105	18.454	18.454	0.000	96	985232	2.00	2.16	
93 sec-Butylbenzene	105	18.723	18.722	0.000	98	1475251	2.00	2.25	
94 1,3-Dichlorobenzene	146	18.738	18.739	-0.001	98	629940	2.00	2.09	
95 Benzyl chloride	91	18.816	18.817	-0.001	97	825637	2.00	2.14	
96 1,4-Dichlorobenzene	146	18.831	18.829	0.002	95	607350	2.00	2.12	
97 4-Isopropyltoluene	119	18.893	18.894	-0.001	96	1110692	2.00	2.20	
98 1,2,3-Trimethylbenzene	105	18.950	18.948	0.002	99	985784	2.00	2.17	
99 Butylcyclohexane	83	19.007	19.005	0.002	94	840561	2.00	2.16	
100 1,2-Dichlorobenzene	146	19.203	19.205	-0.002	79	637250	2.00	2.10	
101 2,3-Dihydroindene	117	19.203	19.204	-0.001	93	928811	2.00	2.17	
102 Indene	116	19.338	19.340	-0.002	92	815409	2.00	2.13	
103 n-Butylbenzene	91	19.348	19.346	0.002	98	1318318	2.00	2.04	
104 Undecane	57	19.673	19.672	0.001	95	820319	2.00	2.17	
105 1,2-Dibromo-3-Chloropropan	157	19.834	19.833	0.001	95	350953	2.00	2.08	
106 1,2,4,5-Tetramethylbenzene	119	20.128	20.128	0.000	96	1018930	2.00	1.84	
107 Dodecane	57	20.764	20.765	-0.001	96	754126	2.00	2.02	
108 1,2,4-Trichlorobenzene	180	20.966	20.966	0.000	93	443828	2.00	2.35	
109 Naphthalene	128	21.110	21.111	-0.001	99	1046543	2.00	2.43	
110 Hexachlorobutadiene	225	21.338	21.338	0.000	90	521395	2.00	1.99	
111 1,2,3-Trichlorobenzene	180	21.410	21.410	0.000	92	441687	2.00	2.08	
112 2-Methylnaphthalene	142	22.061	22.062	-0.001	97	247741	2.00	1.67	
113 1-Methylnaphthalene	142	22.190	22.191	-0.001	96	332364	2.00	1.80	
A 115 C8 Range	1	14.288	(14.242-14.345)		0	2244338	2.00	2.13	
S 116 Xylenes, Total	100				0		6.00	6.61	
S 117 1,2-Dichloroethene, Total	1				0		4.00	4.07	

Reagents:

40L7DQP_00017	Amount Added: 200.00	Units: mL	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

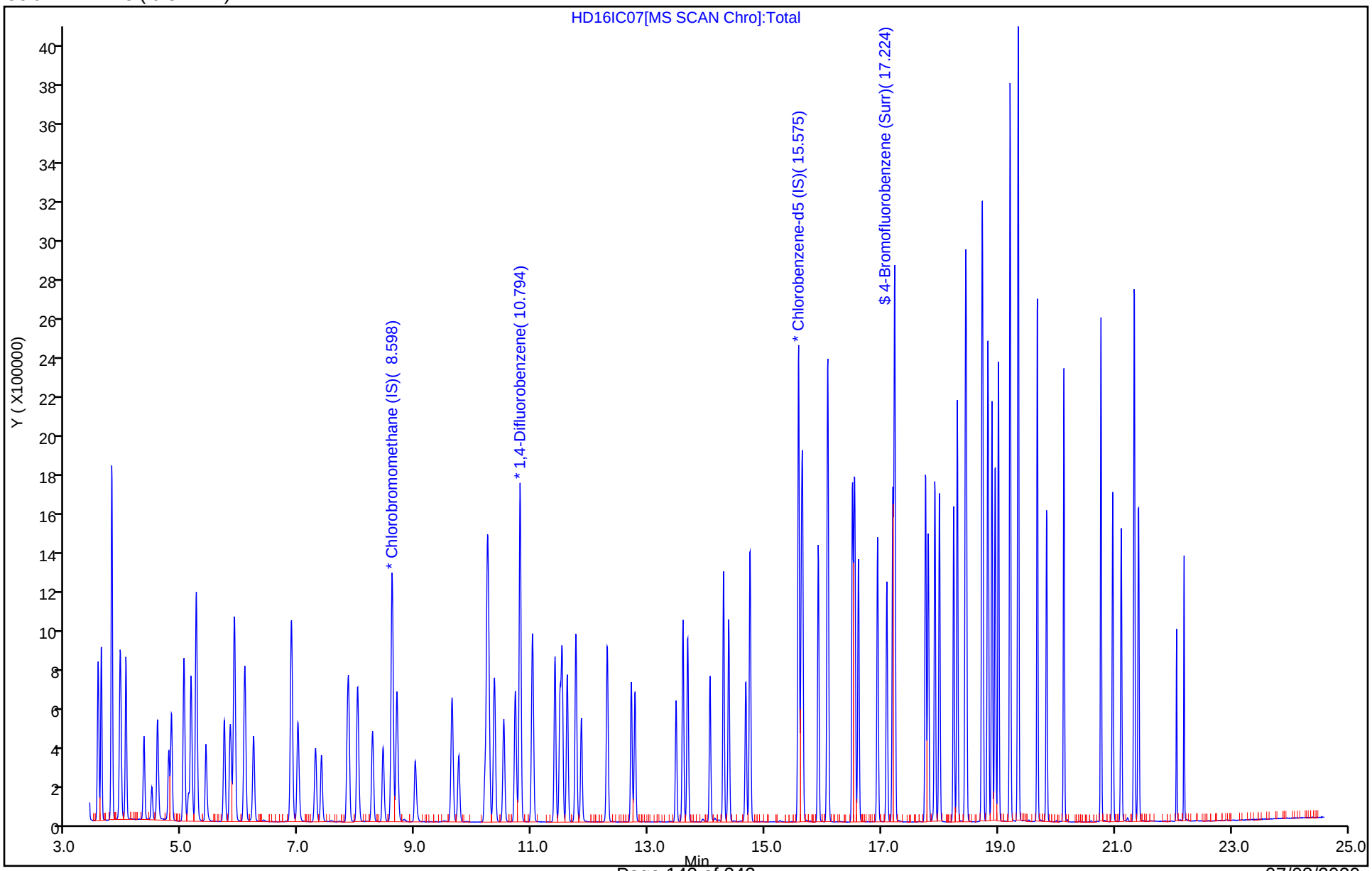
Report Date: 21-Apr-2020 10:48:48 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC07.D

Injection Date:	16-Apr-2020 13:19:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	ICIS L7			Worklist Smp#:	9
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

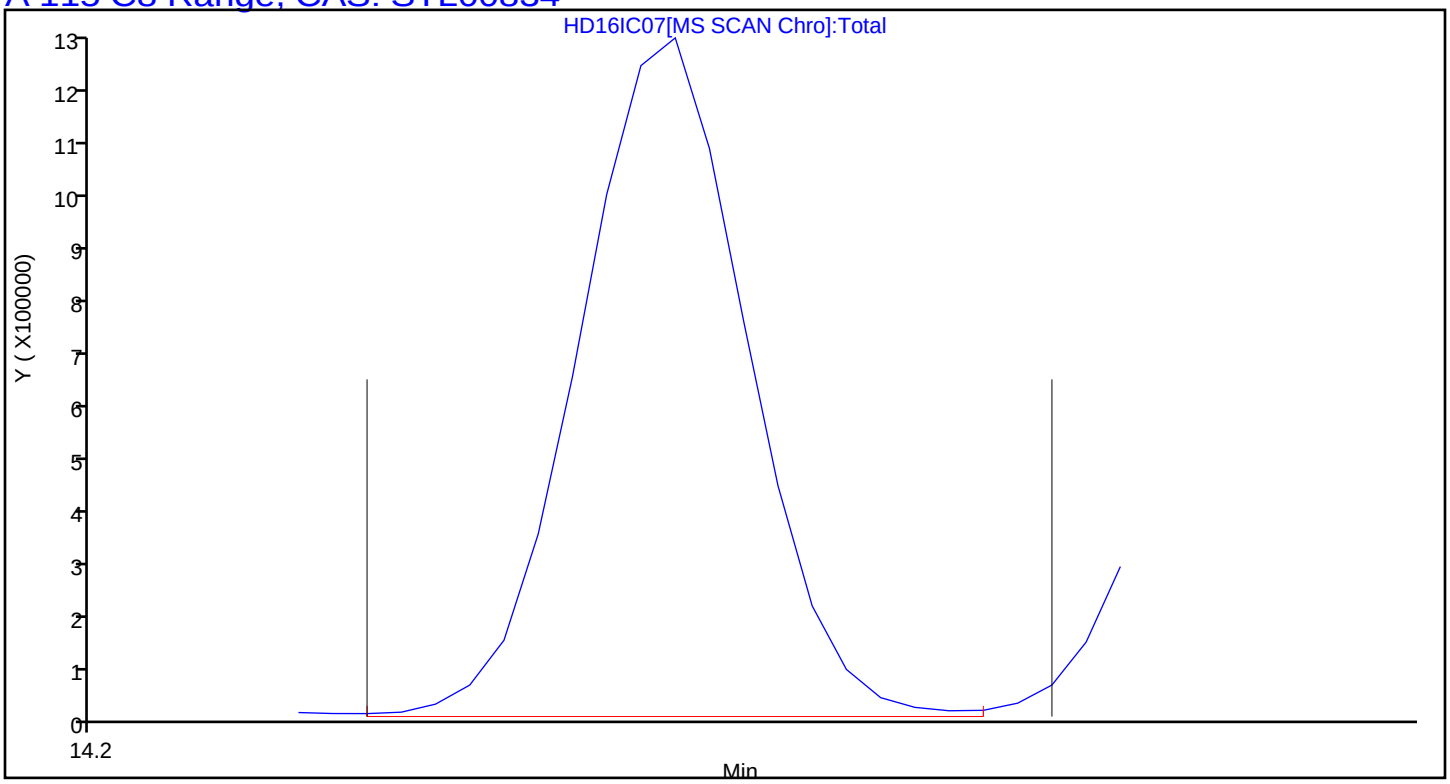


Report Date: 21-Apr-2020 10:48:48 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC07.D				
Injection Date:	16-Apr-2020 13:19:30	Instrument ID:	MH		
Lims ID:	ICIS L7				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	5	Worklist Smp#:	9
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 115 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC08.D
Lims ID: IC L8
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 16-Apr-2020 15:04:30 ALS Bottle#: 6 Worklist Smp#: 11
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0015239-011
Misc. Info.: 297185
Operator ID: HMT Instrument ID: MH
Sublist: chrom-MH_TO15*sub7

Method: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\MH_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 21-Apr-2020 10:48:53 Calib Date: 16-Apr-2020 18:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC10.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX0331

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.598	8.589	0.009	96	236579	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.794	10.792	0.002	95	1606994	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.575	15.572	0.003	88	1391655	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr	95	17.224	17.222	0.002	90	966038	4.00	4.14	
6 Chlorodifluoromethane	51	3.548	3.546	0.002	97	963019	4.00	3.86	
7 Propene	41	3.559	3.555	0.004	99	427965	4.00	4.13	
8 Dichlorodifluoromethane	85	3.605	3.606	-0.001	100	1463527	4.00	3.81	
9 Chloromethane	52	3.781	3.779	0.002	97	152640	4.00	3.65	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.786	3.785	0.001	97	999739	4.00	3.91	
11 Acetaldehyde	44	3.926	3.930	-0.004	98	873674	20.0	18.7	
12 Vinyl chloride	62	3.946	3.945	0.001	99	504476	4.00	3.68	
14 Butadiene	54	4.029	4.028	0.001	73	364329	4.00	3.91	
13 Butane	43	4.029	4.028	0.001	83	609622	4.00	3.75	
15 Bromomethane	94	4.339	4.337	0.002	98	557215	4.00	3.85	
16 Chloroethane	64	4.473	4.473	0.000	95	220714	4.00	3.78	
17 Ethanol	31	4.572	4.571	0.001	92	849422	20.0	20.1	
18 Vinyl bromide	106	4.763	4.763	0.000	97	512684	4.00	3.93	
19 2-Methylbutane	43	4.809	4.806	0.003	89	439434	4.00	3.68	
20 Trichlorofluoromethane	101	5.026	5.022	0.004	99	1313983	4.00	3.82	
21 Acrolein	56	5.037	5.037	0.000	92	160207	4.00	3.98	
22 Acetonitrile	40	5.104	5.116	-0.012	99	193771	4.00	4.18	
23 Acetone	58	5.145	5.154	-0.009	98	621189	12.0	11.7	
25 Isopropyl alcohol	45	5.233	5.241	-0.008	92	1833925	12.0	12.0	
24 Pentane	72	5.238	5.236	0.002	93	59233	4.00	3.98	
26 Ethyl ether	31	5.399	5.408	-0.009	95	412535	4.00	4.00	
27 1,1-Dichloroethene	96	5.719	5.716	0.003	96	448571	4.00	3.89	
29 2-Methyl-2-propanol	59	5.812	5.832	-0.020	94	801044	4.00	4.19	
28 Acrylonitrile	53	5.828	5.826	0.002	94	362650	4.00	4.15	
30 1,1,2-Trichloro-1,2,2-trif	101	5.890	5.889	0.001	92	1037519	4.00	3.89	
31 Methylene Chloride	84	6.065	6.063	0.002	98	484483	4.00	4.07	
32 3-Chloro-1-propene	39	6.076	6.076	0.000	99	381139	4.00	3.92	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
33 Carbon disulfide	76	6.220	6.218	0.002	99	1401786	4.00	4.06	
34 trans-1,2-Dichloroethene	96	6.866	6.859	0.007	97	462023	4.00	4.06	
35 2-Methylpentane	43	6.872	6.873	-0.001	95	927170	4.00	4.12	
36 Methyl tert-butyl ether	73	6.975	6.989	-0.014	97	1113570	4.00	4.19	
37 1,1-Dichloroethane	63	7.285	7.280	0.005	100	870501	4.00	3.84	
38 Vinyl acetate	43	7.383	7.385	-0.002	100	1260082	4.00	4.46	
39 2-Butanone (MEK)	72	7.828	7.832	-0.004	96	208856	4.00	4.15	
40 Hexane	56	7.848	7.848	0.000	86	350514	4.00	4.12	
41 Isopropyl ether	45	8.003	8.011	-0.008	98	1542058	4.00	4.22	
42 cis-1,2-Dichloroethene	96	8.267	8.259	0.008	95	483319	4.00	4.07	
43 Ethyl acetate	43	8.438	8.446	-0.008	99	1057713	4.00	4.14	
44 Chloroform	83	8.608	8.601	0.007	97	1089216	4.00	3.90	
45 Tert-butyl ethyl ether	59	8.681	8.688	-0.008	96	1373717	4.00	4.32	
46 Tetrahydrofuran	42	8.991	9.005	-0.014	93	486618	4.00	4.19	
47 1,1,1-Trichloroethane	97	9.626	9.623	0.003	97	1035652	4.00	3.98	
48 1,2-Dichloroethane	62	9.740	9.736	0.004	97	674961	4.00	3.97	
49 n-Butanol	31	10.185	10.201	-0.017	84	163141	4.00	4.51	
50 Cyclohexane	69	10.231	10.229	0.002	81	194896	4.00	4.21	
51 Benzene	78	10.236	10.231	0.005	97	1381354	4.00	3.95	
52 Carbon tetrachloride	117	10.257	10.253	0.004	95	1027125	4.00	4.07	
53 2,3-Dimethylpentane	71	10.355	10.351	0.004	89	276254	4.00	4.16	
54 Thiophene	84	10.515	10.512	0.003	96	804688	4.00	4.11	
55 Isooctane	57	11.006	11.005	0.001	98	2202334	4.00	4.15	
56 n-Heptane	71	11.394	11.392	0.002	91	422040	4.00	4.30	
57 1,2-Dichloropropane	63	11.482	11.478	0.004	92	570867	4.00	3.98	
58 Trichloroethene	130	11.518	11.514	0.004	91	562502	4.00	3.94	
59 Dibromomethane	93	11.606	11.602	0.004	90	689705	4.00	3.94	
60 Dichlorobromomethane	83	11.751	11.748	0.003	98	1141997	4.00	4.17	
61 1,4-Dioxane	88	11.756	11.770	-0.014	85	219730	4.00	4.32	
62 Methyl methacrylate	41	11.844	11.847	-0.003	95	572229	4.00	4.44	
63 Methylcyclohexane	83	12.293	12.288	0.005	96	779341	4.00	3.89	
64 4-Methyl-2-pentanone (MIBK	43	12.702	12.710	-0.008	97	1156932	4.00	4.65	
65 cis-1,3-Dichloropropene	75	12.769	12.764	0.005	95	829424	4.00	4.48	
66 trans-1,3-Dichloropropene	75	13.472	13.471	0.001	98	751139	4.00	4.53	
67 Toluene	91	13.590	13.589	0.001	93	1645627	4.00	4.04	
68 1,1,2-Trichloroethane	83	13.673	13.670	0.003	96	578879	4.00	3.97	
69 2-Hexanone	58	14.050	14.059	-0.009	92	586718	4.00	4.60	
70 n-Octane	85	14.288	14.287	0.001	93	464843	4.00	4.30	
71 Chlorodibromomethane	129	14.376	14.374	0.002	97	1125338	4.00	4.36	
72 Ethylene Dibromide	107	14.671	14.668	0.003	97	1020772	4.00	4.23	
73 Tetrachloroethene	129	14.743	14.739	0.004	92	583145	4.00	3.91	
74 Chlorobenzene	112	15.622	15.622	0.000	93	1272896	4.00	3.93	
75 2,3-Dimethylheptane	43	15.642	15.643	-0.001	96	1480622	4.00	4.05	
76 Ethylbenzene	91	15.911	15.911	0.000	99	2180137	4.00	4.34	
77 m-Xylene & p-Xylene	91	16.076	16.076	0.000	99	3391621	8.00	8.85	
78 n-Nonane	57	16.495	16.497	-0.002	90	1071726	4.00	4.34	
79 Bromoform	173	16.526	16.527	-0.001	92	1242561	4.00	4.69	
80 Styrene	104	16.542	16.541	0.001	99	1202773	4.00	4.11	
81 o-Xylene	91	16.604	16.601	0.003	99	1690681	4.00	4.26	
82 1,1,2,2-Tetrachloroethane	83	16.929	16.930	-0.001	98	1582520	4.00	4.16	
83 1,2,3-Trichloropropane	110	17.089	17.089	0.000	98	344685	4.00	4.11	
84 Isopropylbenzene	105	17.193	17.192	0.001	97	2277155	4.00	4.25	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
85 N-Propylbenzene	120	17.756	17.756	0.000	98	615504	4.00	4.46	
86 2-Chlorotoluene	126	17.803	17.794	0.009	98	583613	4.00	4.35	
87 4-Ethyltoluene	105	17.911	17.912	-0.001	99	2375918	4.00	4.49	
88 1,3,5-Trimethylbenzene	120	17.994	17.992	0.002	91	904990	4.00	4.06	
89 Alpha Methyl Styrene	118	18.237	18.237	0.000	86	973148	4.00	4.61	
90 n-Decane	57	18.299	18.299	0.000	90	1470997	4.00	4.25	
91 tert-Butylbenzene	119	18.438	18.439	-0.001	94	2046472	4.00	4.34	
92 1,2,4-Trimethylbenzene	105	18.454	18.454	0.000	96	2062691	4.00	4.39	
93 sec-Butylbenzene	105	18.723	18.722	0.001	98	3126528	4.00	4.62	
94 1,3-Dichlorobenzene	146	18.738	18.739	-0.001	98	1356116	4.00	4.37	
95 Benzyl chloride	91	18.816	18.817	-0.001	97	1848688	4.00	4.66	
96 1,4-Dichlorobenzene	146	18.831	18.829	0.002	96	1310298	4.00	4.44	
97 4-Isopropyltoluene	119	18.893	18.894	-0.001	96	2319630	4.00	4.46	
98 1,2,3-Trimethylbenzene	105	18.950	18.948	0.002	99	2023027	4.00	4.32	
99 Butylcyclohexane	83	19.007	19.005	0.002	95	1709009	4.00	4.26	
100 1,2-Dichlorobenzene	146	19.203	19.205	-0.002	80	1372447	4.00	4.38	
101 2,3-Dihydroindene	117	19.203	19.204	-0.001	93	1995144	4.00	4.52	
102 Indene	116	19.343	19.340	0.003	90	1783350	4.00	4.53	
103 n-Butylbenzene	91	19.348	19.346	0.002	97	2773990	4.00	4.13	
104 Undecane	57	19.674	19.672	0.002	95	1744807	4.00	4.48	
105 1,2-Dibromo-3-Chloropropan	157	19.834	19.833	0.001	98	820660	4.00	4.66	
106 1,2,4,5-Tetramethylbenzene	119	20.128	20.128	0.000	96	2284296	4.00	3.92	
107 Dodecane	57	20.764	20.765	-0.001	97	1706215	4.00	4.44	
108 1,2,4-Trichlorobenzene	180	20.966	20.966	0.000	93	1103007	4.00	5.66	
109 Naphthalene	128	21.110	21.111	-0.001	99	2490239	4.00	5.60	
110 Hexachlorobutadiene	225	21.338	21.338	0.000	91	1136376	4.00	4.22	
111 1,2,3-Trichlorobenzene	180	21.410	21.410	0.000	92	1012803	4.00	4.63	
112 2-Methylnaphthalene	142	22.061	22.062	-0.001	97	799266	4.00	5.23	
113 1-Methylnaphthalene	142	22.191	22.191	0.000	97	926074	4.00	4.88	
A 115 C8 Range	1	14.293	(14.242-14.335)		0	4495106	4.00	4.30	
S 116 Xylenes, Total	100				0		12.0	13.1	
S 117 1,2-Dichloroethene, Total	1				0		8.00	8.13	

Reagents:

40L8DQP_00017	Amount Added: 200.00	Units: mL	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

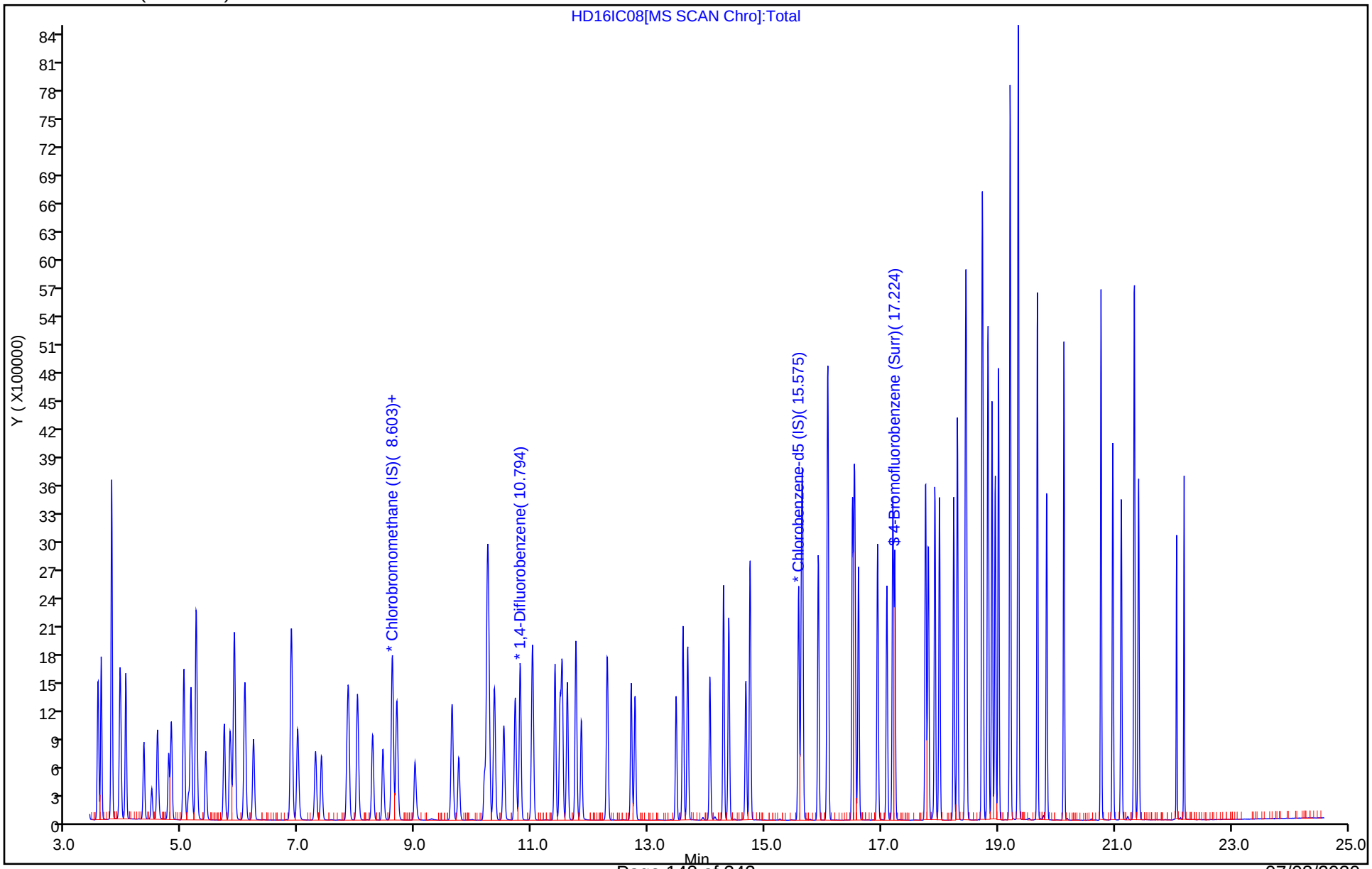
Report Date: 21-Apr-2020 10:48:54 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC08.D

Injection Date:	16-Apr-2020 15:04:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	IC L8			Worklist Smp#:	11
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

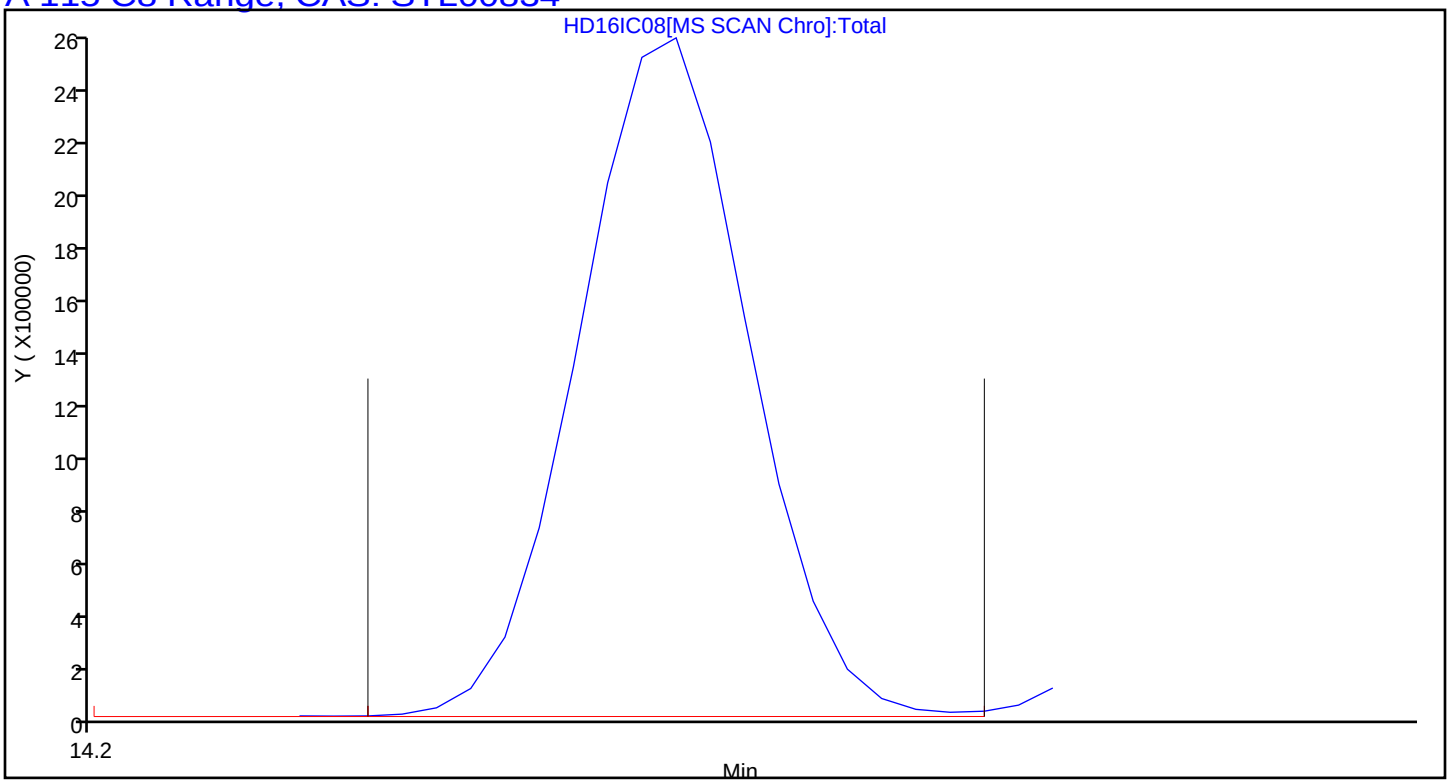


Report Date: 21-Apr-2020 10:48:54 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC08.D				
Injection Date:	16-Apr-2020 15:04:30	Instrument ID:	MH		
Lims ID:	IC L8				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	6	Worklist Smp#:	11
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 115 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16C09.D
Lims ID: IC L9
Client ID:
Sample Type: IC Calib Level: 9
Inject. Date: 16-Apr-2020 16:49:30 ALS Bottle#: 7 Worklist Smp#: 13
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0015239-013
Misc. Info.: 297184
Operator ID: HMT Instrument ID: MH
Sublist: chrom-MH_TO15*sub7

Method: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\MH_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 21-Apr-2020 10:48:58 Calib Date: 16-Apr-2020 18:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC10.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX0331

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.592	8.589	0.003	96	255156	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.794	10.792	0.002	95	1713618	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.575	15.572	0.003	88	1536489	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr	95	17.224	17.222	0.002	90	1001617	4.00	3.89	
6 Chlorodifluoromethane	51	3.543	3.546	-0.003	97	2067462	8.00	7.68	
7 Propene	41	3.553	3.555	-0.002	99	854036	8.00	8.29	
8 Dichlorodifluoromethane	85	3.600	3.606	-0.006	100	3140078	8.00	7.59	
9 Chloromethane	52	3.776	3.779	-0.003	97	333046	8.00	7.38	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.781	3.785	-0.004	95	2138873	8.00	7.75	
11 Acetaldehyde	44	3.925	3.930	-0.005	97	1939473	40.0	38.6	
12 Vinyl chloride	62	3.941	3.945	-0.004	99	1097532	8.00	7.41	
14 Butadiene	54	4.024	4.028	-0.004	74	800991	8.00	7.96	
13 Butane	43	4.024	4.028	-0.004	82	1317848	8.00	7.51	
15 Bromomethane	94	4.334	4.337	-0.003	98	1195058	8.00	7.65	
16 Chloroethane	64	4.468	4.473	-0.005	95	473312	8.00	7.51	
17 Ethanol	31	4.572	4.571	0.001	92	1803812	40.0	39.6	
18 Vinyl bromide	106	4.763	4.763	0.000	98	1095069	8.00	7.78	
19 2-Methylbutane	43	4.804	4.806	-0.002	88	922954	8.00	7.17	
20 Trichlorofluoromethane	101	5.021	5.022	-0.001	100	2754124	8.00	7.42	
21 Acrolein	56	5.037	5.037	0.000	93	351820	8.00	8.11	
22 Acetonitrile	40	5.104	5.116	-0.012	99	404640	8.00	8.10	
23 Acetone	58	5.145	5.154	-0.009	97	1306609	24.0	22.8	
25 Isopropyl alcohol	45	5.233	5.241	-0.008	88	3796296	24.0	24.2	
24 Pentane	72	5.233	5.236	-0.003	69	123932	8.00	7.72	
26 Ethyl ether	31	5.393	5.408	-0.015	96	869980	8.00	7.83	
27 1,1-Dichloroethene	96	5.714	5.716	-0.002	96	969472	8.00	7.80	
29 2-Methyl-2-propanol	59	5.812	5.832	-0.020	94	1729850	8.00	8.39	
28 Acrylonitrile	53	5.827	5.826	0.001	94	769371	8.00	8.17	
30 1,1,2-Trichloro-1,2,2-trif	101	5.889	5.889	0.000	95	2185448	8.00	7.59	
31 Methylene Chloride	84	6.065	6.063	0.002	98	964215	8.00	8.03	
32 3-Chloro-1-propene	39	6.075	6.076	-0.001	99	794100	8.00	7.56	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
33 Carbon disulfide	76	6.215	6.218	-0.003	99	2950735	8.00	7.92	
34 trans-1,2-Dichloroethene	96	6.861	6.859	0.002	97	1004966	8.00	8.19	
35 2-Methylpentane	43	6.871	6.873	-0.002	94	1934336	8.00	7.97	
36 Methyl tert-butyl ether	73	6.975	6.989	-0.014	96	2377350	8.00	8.29	
37 1,1-Dichloroethane	63	7.285	7.280	0.005	100	1864545	8.00	7.63	
38 Vinyl acetate	43	7.383	7.385	-0.002	100	2745775	8.00	9.02	
39 2-Butanone (MEK)	72	7.822	7.832	-0.010	96	459705	8.00	8.46	
40 Hexane	56	7.848	7.848	0.000	89	735372	8.00	8.01	
41 Isopropyl ether	45	7.998	8.011	-0.013	99	3280525	8.00	8.32	
42 cis-1,2-Dichloroethene	96	8.262	8.259	0.003	95	1051184	8.00	8.21	
43 Ethyl acetate	43	8.437	8.446	-0.009	99	2280021	8.00	8.28	
44 Chloroform	83	8.608	8.601	0.007	97	2319314	8.00	7.70	
45 Tert-butyl ethyl ether	59	8.675	8.688	-0.013	95	2958694	8.00	8.62	
46 Tetrahydrofuran	42	8.985	9.005	-0.020	93	1048134	8.00	8.37	
47 1,1,1-Trichloroethane	97	9.626	9.623	0.003	97	2226667	8.00	7.94	
48 1,2-Dichloroethane	62	9.740	9.736	0.004	97	1438586	8.00	7.93	
49 n-Butanol	31	10.174	10.201	-0.027	88	367453	8.00	9.53	
50 Cyclohexane	69	10.226	10.229	-0.003	91	419218	8.00	8.50	
51 Benzene	78	10.231	10.231	0.000	97	2959608	8.00	7.94	
52 Carbon tetrachloride	117	10.257	10.253	0.004	97	2236066	8.00	8.31	
53 2,3-Dimethylpentane	71	10.350	10.351	-0.001	89	587746	8.00	8.31	
54 Thiophene	84	10.515	10.512	0.003	95	1741820	8.00	8.34	
55 Isooctane	57	11.006	11.005	0.001	98	4729216	8.00	8.35	
56 n-Heptane	71	11.394	11.392	0.002	90	936570	8.00	8.94	
57 1,2-Dichloropropane	63	11.482	11.478	0.004	93	1229183	8.00	8.05	
58 Trichloroethene	130	11.513	11.514	-0.001	95	1238898	8.00	8.13	
59 Dibromomethane	93	11.606	11.602	0.004	93	1497232	8.00	8.02	
60 Dichlorobromomethane	83	11.750	11.748	0.002	98	2474307	8.00	8.47	
61 1,4-Dioxane	88	11.756	11.770	-0.014	84	467421	8.00	8.61	
62 Methyl methacrylate	41	11.843	11.847	-0.004	96	1231161	8.00	8.96	
63 Methylcyclohexane	83	12.288	12.288	0.000	96	1717022	8.00	8.00	
64 4-Methyl-2-pentanone (MIBK	43	12.696	12.710	-0.014	97	2505241	8.00	9.44	
65 cis-1,3-Dichloropropene	75	12.763	12.764	-0.001	94	1842062	8.00	9.32	
66 trans-1,3-Dichloropropene	75	13.471	13.471	0.000	97	1757736	8.00	9.59	
67 Toluene	91	13.590	13.589	0.001	93	3618377	8.00	8.02	
68 1,1,2-Trichloroethane	83	13.673	13.670	0.003	96	1247689	8.00	7.74	
69 2-Hexanone	58	14.050	14.059	-0.009	93	1298399	8.00	9.22	
70 n-Octane	85	14.288	14.287	0.001	91	1032477	8.00	8.65	
71 Chlorodibromomethane	129	14.376	14.374	0.002	97	2569991	8.00	9.03	
72 Ethylene Dibromide	107	14.670	14.668	0.002	98	2320778	8.00	8.72	
73 Tetrachloroethene	129	14.743	14.739	0.004	94	1308529	8.00	7.95	
74 Chlorobenzene	112	15.621	15.622	-0.001	93	2899265	8.00	8.11	
75 2,3-Dimethylheptane	43	15.642	15.643	-0.001	94	3076901	8.00	7.62	
76 Ethylbenzene	91	15.911	15.911	0.000	99	4814622	8.00	8.68	
77 m-Xylene & p-Xylene	91	16.076	16.076	0.000	99	7590625	16.0	17.9	
78 n-Nonane	57	16.495	16.497	-0.002	89	2357236	8.00	8.65	
79 Bromoform	173	16.526	16.527	-0.001	93	2962933	8.00	10.1	
80 Styrene	104	16.541	16.541	0.000	99	2614749	8.00	8.05	
81 o-Xylene	91	16.603	16.601	0.002	98	3605048	8.00	8.23	
82 1,1,2,2-Tetrachloroethane	83	16.929	16.930	-0.001	98	3371779	8.00	8.02	
83 1,2,3-Trichloropropane	110	17.089	17.089	0.000	98	735160	8.00	7.93	
84 Isopropylbenzene	105	17.193	17.192	0.001	97	4953618	8.00	8.37	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
85 N-Propylbenzene	120	17.756	17.756	0.000	98	1356728	8.00	8.90	
86 2-Chlorotoluene	126	17.797	17.794	0.003	97	1244997	8.00	8.41	
87 4-Ethyltoluene	105	17.911	17.912	-0.001	99	5088580	8.00	8.72	
88 1,3,5-Trimethylbenzene	120	17.994	17.992	0.002	92	1964746	8.00	7.97	
89 Alpha Methyl Styrene	118	18.237	18.237	0.000	87	2176590	8.00	9.34	
90 n-Decane	57	18.299	18.299	0.000	90	3073620	8.00	8.05	
91 tert-Butylbenzene	119	18.438	18.439	-0.001	93	4558596	8.00	8.75	
92 1,2,4-Trimethylbenzene	105	18.454	18.454	0.000	96	4478253	8.00	8.63	
93 sec-Butylbenzene	105	18.723	18.722	0.000	98	6891856	8.00	9.22	
94 1,3-Dichlorobenzene	146	18.738	18.739	-0.001	99	3004392	8.00	8.77	
95 Benzyl chloride	91	18.821	18.817	0.004	97	4188193	8.00	9.56	
96 1,4-Dichlorobenzene	146	18.831	18.829	0.002	95	2882638	8.00	8.84	
97 4-Isopropyltoluene	119	18.893	18.894	-0.001	97	5134104	8.00	8.95	
98 1,2,3-Trimethylbenzene	105	18.950	18.948	0.002	99	4335946	8.00	8.39	
99 Butylcyclohexane	83	19.007	19.005	0.002	95	3621023	8.00	8.18	
100 1,2-Dichlorobenzene	146	19.208	19.205	0.003	82	3089904	8.00	8.94	
101 2,3-Dihydroindene	117	19.208	19.204	0.004	93	4466008	8.00	9.17	
102 Indene	116	19.343	19.340	0.003	90	4034180	8.00	9.28	
103 n-Butylbenzene	91	19.348	19.346	0.002	97	6141265	8.00	8.24	
104 Undecane	57	19.673	19.672	0.001	94	3932182	8.00	9.14	
105 1,2-Dibromo-3-Chloropropan	157	19.834	19.833	0.001	98	1871705	8.00	9.56	
106 1,2,4,5-Tetramethylbenzene	119	20.128	20.128	0.000	96	5440106	8.00	8.36	
107 Dodecane	57	20.764	20.765	-0.001	98	4031518	8.00	9.49	
108 1,2,4-Trichlorobenzene	180	20.966	20.966	0.000	93	2692423	8.00	12.5	
109 Naphthalene	128	21.115	21.111	0.004	99	5514360	8.00	11.2	
110 Hexachlorobutadiene	225	21.338	21.338	0.000	91	2819544	8.00	9.48	
111 1,2,3-Trichlorobenzene	180	21.410	21.410	0.000	93	2361537	8.00	9.77	
112 2-Methylnaphthalene	142	22.061	22.062	-0.001	98	1960658	8.00	11.6	
113 1-Methylnaphthalene	142	22.190	22.191	-0.001	98	2166654	8.00	10.3	
A 115 C8 Range	1	14.288	(14.242-14.335)		0	9596132	8.00	8.60	
S 116 Xylenes, Total	100				0		24.0	26.2	
S 117 1,2-Dichloroethene, Total	1				0		16.0	16.4	

Reagents:

40L9DQP_00017	Amount Added: 200.00	Units: mL	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

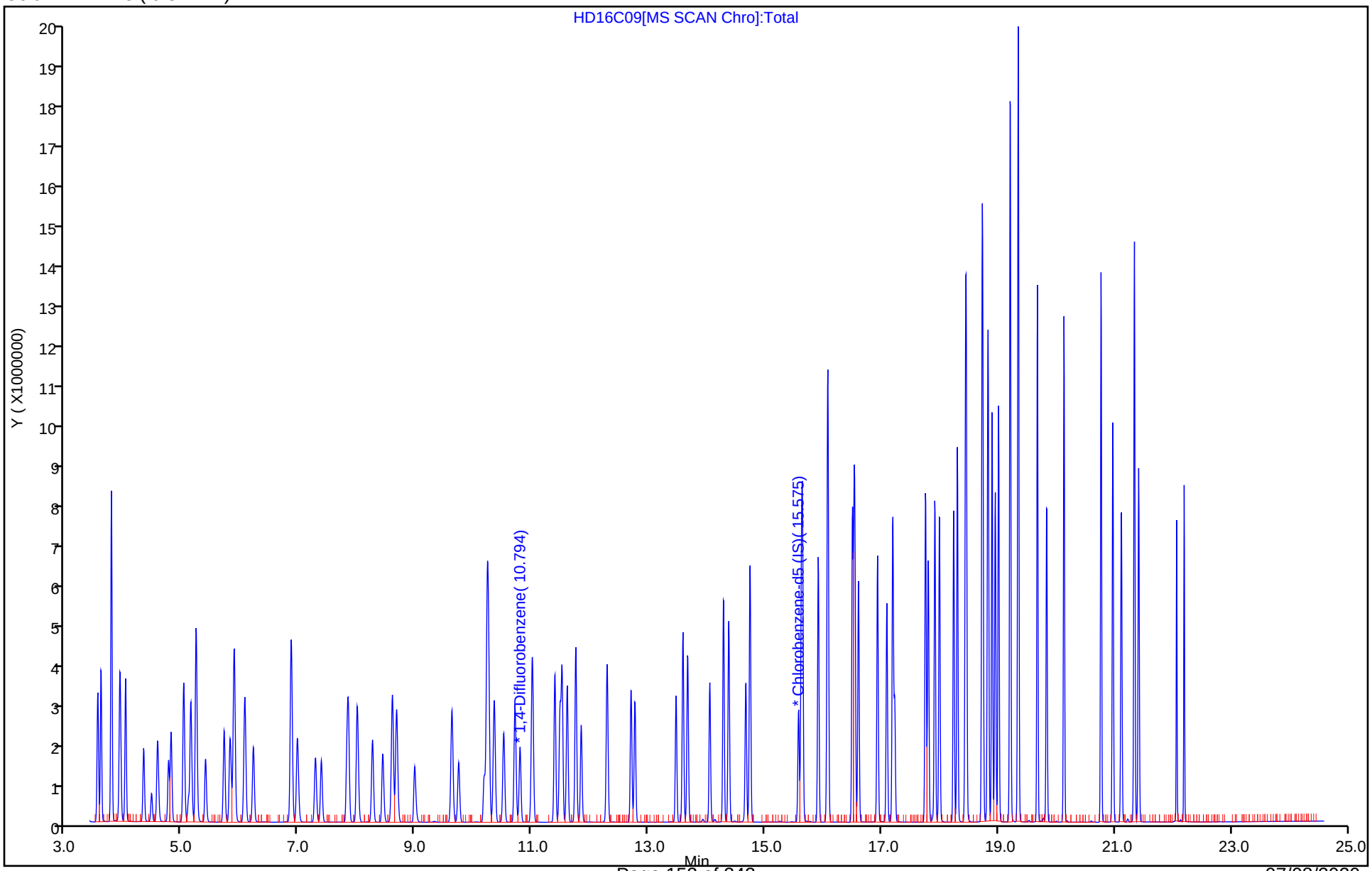
Report Date: 21-Apr-2020 10:48:59 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16C09.D

Injection Date:	16-Apr-2020 16:49:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	IC L9			Worklist Smp#:	13
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

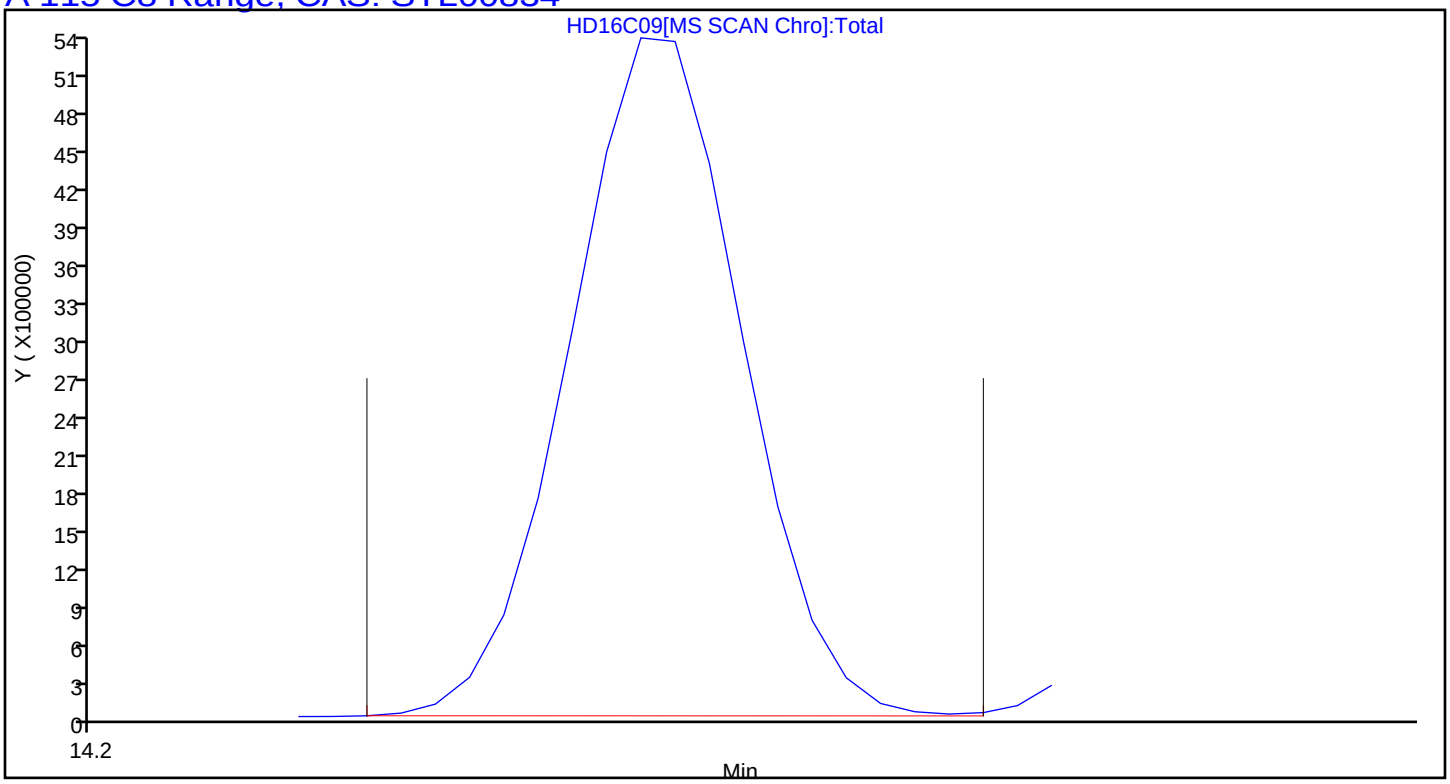


Report Date: 21-Apr-2020 10:48:59 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16C09.D				
Injection Date:	16-Apr-2020 16:49:30	Instrument ID:	MH		
Lims ID:	IC L9				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	7	Worklist Smp#:	13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 115 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC10.D
Lims ID: IC L10
Client ID:
Sample Type: IC Calib Level: 10
Inject. Date: 16-Apr-2020 18:34:30 ALS Bottle#: 8 Worklist Smp#: 15
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0015239-015
Misc. Info.: 297183
Operator ID: HMT Instrument ID: MH
Sublist: chrom-MH_TO15*sub7

Method: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\MH_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 21-Apr-2020 10:49:05 Calib Date: 16-Apr-2020 18:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC10.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX0331

First Level Reviewer: tajh Date: 20-Apr-2020 08:23:01

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.603	8.589	0.014	94	304684	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.805	10.792	0.013	95	1979586	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.575	15.572	0.003	87	1822536	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr	95	17.229	17.222	0.007	91	1140026	4.00	3.73	
6 Chlorodifluoromethane	51	3.543	3.546	-0.003	96	4645992	16.0	14.5	
7 Propene	41	3.553	3.555	-0.002	99	1786636	16.0	15.1	
8 Dichlorodifluoromethane	85	3.605	3.606	-0.001	100	7021295	16.0	14.2	
9 Chloromethane	52	3.781	3.779	0.002	98	695361	16.0	12.9	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.786	3.785	0.001	94	4587553	16.0	13.9	
11 Acetaldehyde	44	3.931	3.930	0.001	96	3884148	80.0	64.7	
12 Vinyl chloride	62	3.946	3.945	0.001	99	2322657	16.0	13.1	
14 Butadiene	54	4.029	4.028	0.001	75	1733328	16.0	14.4	
13 Butane	43	4.029	4.028	0.001	82	2819645	16.0	13.5	
15 Bromomethane	94	4.339	4.337	0.002	98	2680699	16.0	14.4	
16 Chloroethane	64	4.479	4.473	0.006	95	1117601	16.0	14.9	
17 Ethanol	31	4.587	4.571	0.016	91	4024711	80.0	74.1	
18 Vinyl bromide	106	4.768	4.763	0.005	97	2449170	16.0	14.6	
19 2-Methylbutane	43	4.809	4.806	0.003	89	2179006	16.0	14.2	
20 Trichlorofluoromethane	101	5.026	5.022	0.004	100	6259604	16.0	14.1	
21 Acrolein	56	5.042	5.037	0.005	92	770263	16.0	14.9	
22 Acetonitrile	40	5.114	5.116	-0.002	99	876291	16.0	14.7	
23 Acetone	58	5.150	5.154	-0.004	97	2840455	48.0	41.4	
25 Isopropyl alcohol	45	5.254	5.241	0.013	95	8062272	48.0	48.0	
24 Pentane	72	5.243	5.236	0.007	98	283032	16.0	14.8	
26 Ethyl ether	31	5.404	5.408	-0.004	93	1865787	16.0	14.1	
27 1,1-Dichloroethene	96	5.724	5.716	0.008	97	2234722	16.0	15.1	
29 2-Methyl-2-propanol	59	5.827	5.832	-0.005	94	3874874	16.0	15.7	
28 Acrylonitrile	53	5.838	5.826	0.012	94	1688190	16.0	15.0	
30 1,1,2-Trichloro-1,2,2-trif	101	5.895	5.889	0.006	94	4903021	16.0	14.3	
31 Methylene Chloride	84	6.076	6.063	0.013	96	2087076	16.0	15.1	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.086	6.076	0.010	98	1680097	16.0	13.4	
33 Carbon disulfide	76	6.225	6.218	0.007	98	6586980	16.0	14.8	
34 trans-1,2-Dichloroethene	96	6.871	6.859	0.012	97	2341906	16.0	16.0	
35 2-Methylpentane	43	6.882	6.873	0.009	95	4230295	16.0	14.6	
36 Methyl tert-butyl ether	73	6.980	6.989	-0.009	96	5377846	16.0	15.7	
37 1,1-Dichloroethane	63	7.295	7.280	0.015	100	4207742	16.0	14.4	
38 Vinyl acetate	43	7.394	7.385	0.009	100	6112232	16.0	16.8	
39 2-Butanone (MEK)	72	7.833	7.832	0.001	97	1059600	16.0	16.3	
40 Hexane	56	7.853	7.848	0.005	83	1664785	16.0	15.2	
41 Isopropyl ether	45	8.009	8.011	-0.002	99	7257936	16.0	15.4	
42 cis-1,2-Dichloroethene	96	8.272	8.259	0.013	95	2404412	16.0	15.7	
43 Ethyl acetate	43	8.448	8.446	0.002	99	5058973	16.0	15.4	
44 Chloroform	83	8.618	8.601	0.017	97	5266742	16.0	14.6	
45 Tert-butyl ethyl ether	59	8.686	8.688	-0.002	95	6705595	16.0	16.4	
46 Tetrahydrofuran	42	8.991	9.005	-0.014	92	2325299	16.0	15.6	
47 1,1,1-Trichloroethane	97	9.637	9.623	0.014	96	5228667	16.0	15.6	
48 1,2-Dichloroethane	62	9.750	9.736	0.014	97	3239207	16.0	15.5	
49 n-Butanol	31	10.190	10.201	-0.011	83	823377	16.0	18.5	
50 Cyclohexane	69	10.236	10.229	0.007	94	984941	16.0	17.3	
51 Benzene	78	10.246	10.231	0.015	97	6814294	16.0	15.8	
52 Carbon tetrachloride	117	10.262	10.253	0.009	97	5348449	16.0	17.2	
53 2,3-Dimethylpentane	71	10.360	10.351	0.009	89	1323627	16.0	16.2	
54 Thiophene	84	10.526	10.512	0.014	95	3939750	16.0	16.3	
55 Isooctane	57	11.011	11.005	0.006	99	10844560	16.0	16.6	
56 n-Heptane	71	11.399	11.392	0.007	89	2204310	16.0	18.2	
57 1,2-Dichloropropane	63	11.487	11.478	0.009	94	2802753	16.0	15.9	
58 Trichloroethene	130	11.523	11.514	0.009	95	2898833	16.0	16.5	
59 Dibromomethane	93	11.611	11.602	0.009	95	3408707	16.0	15.8	
60 Dichlorobromomethane	83	11.756	11.748	0.008	98	5771198	16.0	17.1	
61 1,4-Dioxane	88	11.761	11.770	-0.009	81	1048208	16.0	16.7	
62 Methyl methacrylate	41	11.854	11.847	0.007	97	2711034	16.0	17.1	
63 Methylcyclohexane	83	12.293	12.288	0.005	96	4057821	16.0	16.3	
64 4-Methyl-2-pentanone (MIBK	43	12.707	12.710	-0.003	96	5681206	16.0	18.5	
65 cis-1,3-Dichloropropene	75	12.774	12.764	0.010	93	4235824	16.0	18.6	
66 trans-1,3-Dichloropropene	75	13.477	13.471	0.006	97	4155320	16.0	19.1	
67 Toluene	91	13.596	13.589	0.007	93	8442824	16.0	15.8	
68 1,1,2-Trichloroethane	83	13.673	13.670	0.003	97	2833954	16.0	14.8	
69 2-Hexanone	58	14.056	14.059	-0.003	93	3099705	16.0	18.6	
70 n-Octane	85	14.293	14.287	0.006	90	2492358	16.0	17.6	
71 Chlorodibromomethane	129	14.381	14.374	0.007	97	6305124	16.0	18.7	
72 Ethylene Dibromide	107	14.676	14.668	0.008	98	5488598	16.0	17.4	
73 Tetrachloroethene	129	14.743	14.739	0.004	95	3173034	16.0	16.3	
74 Chlorobenzene	112	15.627	15.622	0.005	93	7013464	16.0	16.5	
75 2,3-Dimethylheptane	43	15.647	15.643	0.004	95	6326673	16.0	13.2	
76 Ethylbenzene	91	15.916	15.911	0.005	98	11387475	16.0	17.3	
77 m-Xylene & p-Xylene	91	16.082	16.076	0.006	98	17159700	32.0	34.2	
78 n-Nonane	57	16.500	16.497	0.003	85	5410526	16.0	16.7	
79 Bromoform	173	16.531	16.527	0.004	93	7282003	16.0	21.0	
80 Styrene	104	16.547	16.541	0.006	99	6065693	16.0	15.7	
81 o-Xylene	91	16.609	16.601	0.008	98	8412759	16.0	16.2	
82 1,1,2,2-Tetrachloroethane	83	16.934	16.930	0.004	98	8021948	16.0	16.1	
83 1,2,3-Trichloropropane	110	17.095	17.089	0.006	99	1810615	16.0	16.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	17.193	17.192	0.001	97	11862116	16.0	16.9	
85 N-Propylbenzene	120	17.756	17.756	0.000	99	3414296	16.0	18.9	e
86 2-Chlorotoluene	126	17.756	17.794	-0.038	97	2385342	16.0	13.6	e
87 4-Ethyltoluene	105	17.916	17.912	0.004	98	12406817	16.0	17.9	
88 1,3,5-Trimethylbenzene	120	17.994	17.992	0.002	92	4841639	16.0	16.5	
89 Alpha Methyl Styrene	118	18.242	18.237	0.005	88	5590147	16.0	20.2	
90 n-Decane	57	18.304	18.299	0.005	89	6994366	16.0	15.4	
91 tert-Butylbenzene	119	18.443	18.439	0.004	88	11074891	16.0	17.9	
92 1,2,4-Trimethylbenzene	105	18.459	18.454	0.005	96	10416980	16.0	16.9	
93 sec-Butylbenzene	105	18.723	18.722	0.001	97	14975296	16.0	16.9	e
94 1,3-Dichlorobenzene	146	18.743	18.739	0.004	99	7154411	16.0	17.6	
95 Benzyl chloride	91	18.826	18.817	0.009	98	10405686	16.0	20.0	
96 1,4-Dichlorobenzene	146	18.836	18.829	0.007	94	7027867	16.0	18.2	
97 4-Isopropyltoluene	119	18.898	18.894	0.004	96	12159293	16.0	17.9	
98 1,2,3-Trimethylbenzene	105	18.955	18.948	0.007	98	10341419	16.0	16.9	
99 Butylcyclohexane	83	19.012	19.005	0.007	96	8295437	16.0	15.8	
100 1,2-Dichlorobenzene	146	19.214	19.205	0.009	83	7182845	16.0	17.5	
101 2,3-Dihydroindene	117	19.208	19.204	0.004	94	9985831	16.0	17.3	
102 Indene	116	19.343	19.340	0.003	92	9089023	16.0	17.6	
103 n-Butylbenzene	91	19.353	19.346	0.007	98	12406646	16.0	14.0	
104 Undecane	57	19.674	19.672	0.002	92	8272907	16.0	16.2	
105 1,2-Dibromo-3-Chloropropan	157	19.834	19.833	0.001	97	4909704	16.0	21.1	
106 1,2,4,5-Tetramethylbenzene	119	20.128	20.128	0.000	96	12395752	16.0	16.0	e
107 Dodecane	57	20.769	20.765	0.004	98	8228196	16.0	16.3	
108 1,2,4-Trichlorobenzene	180	20.971	20.966	0.005	93	6648419	16.0	26.0	
109 Naphthalene	128	21.116	21.111	0.005	99	13023599	16.0	22.4	e
110 Hexachlorobutadiene	225	21.338	21.338	0.000	92	6122575	16.0	17.3	
111 1,2,3-Trichlorobenzene	180	21.415	21.410	0.005	93	5464745	16.0	19.1	
112 2-Methylnaphthalene	142	22.061	22.062	-0.001	99	3840400	16.0	19.2	
113 1-Methylnaphthalene	142	22.191	22.191	0.000	99	3851176	16.0	15.5	
A 115 C8 Range	1	14.293	(14.242-14.335)		0	21890779	16.0	17.0	
S 116 Xylenes, Total	100				0		48.0	50.4	
S 117 1,2-Dichloroethene, Total	1				0		32.0	31.7	

QC Flag Legend

Processing Flags

e - Potential Peak Saturated

Reagents:

40L10DQP_00017	Amount Added: 200.00	Units: mL	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

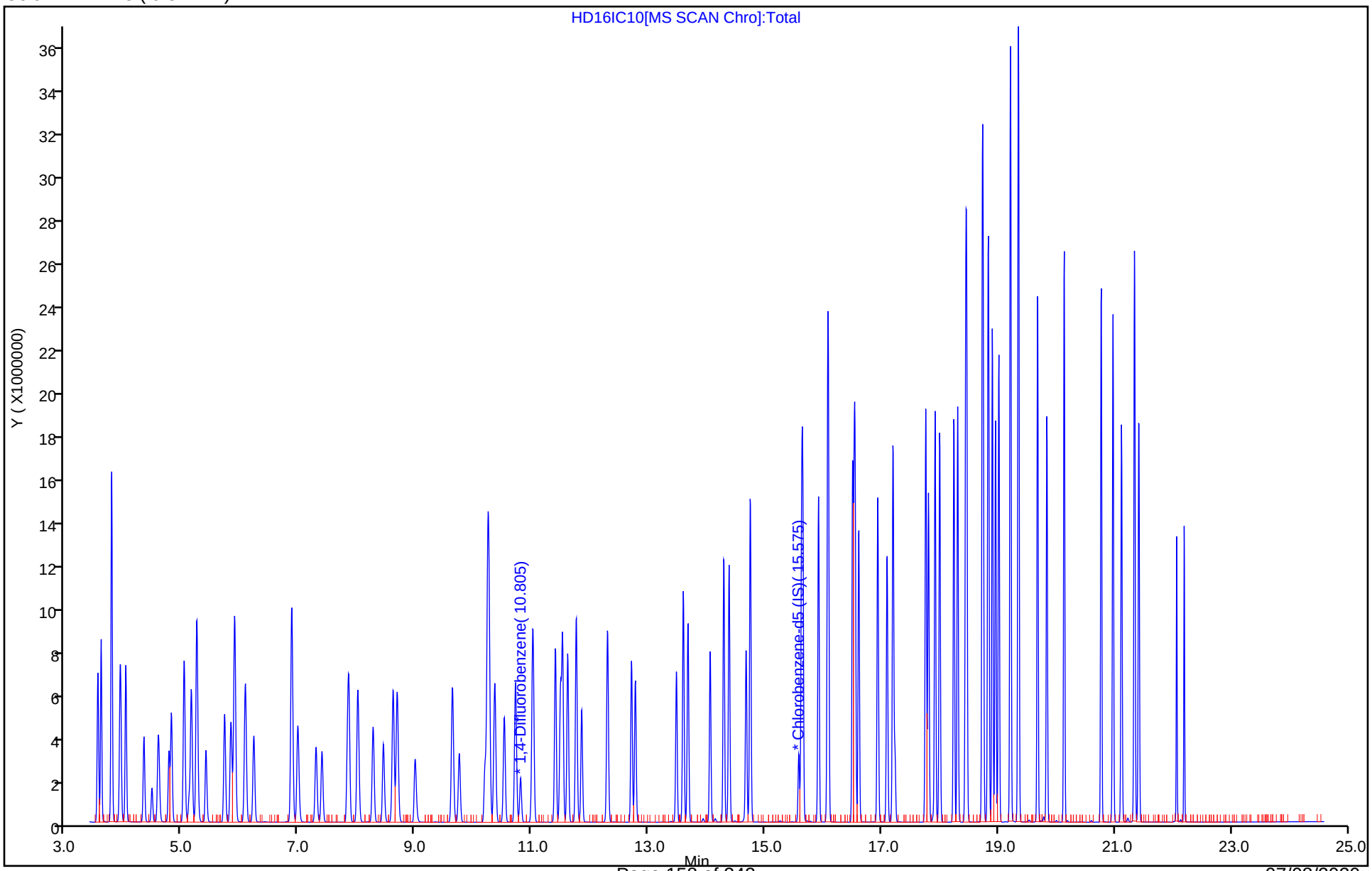
Report Date: 21-Apr-2020 10:49:06 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC10.D

Injection Date:	16-Apr-2020 18:34:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	IC L10			Worklist Smp#:	15
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

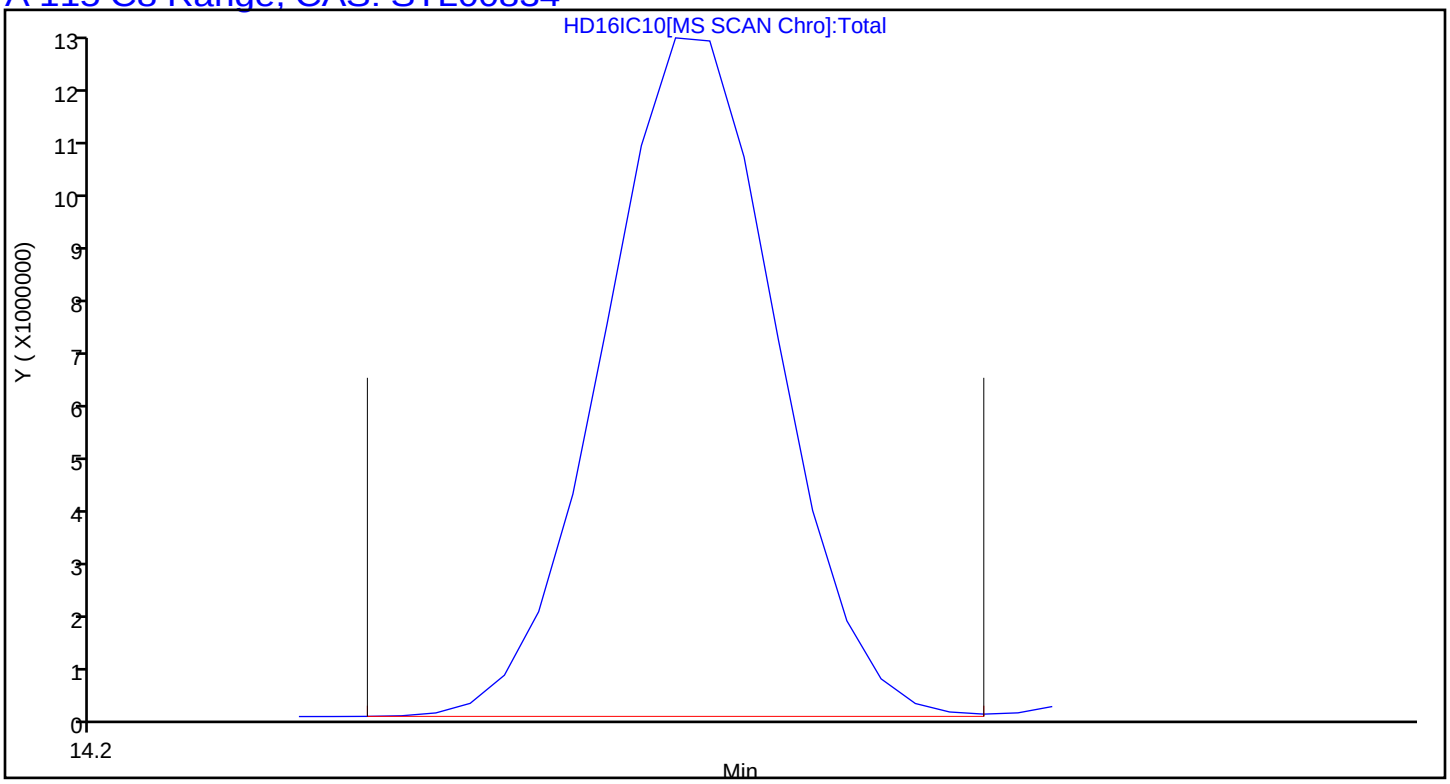


Report Date: 21-Apr-2020 10:49:06 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC10.D				
Injection Date:	16-Apr-2020 18:34:30	Instrument ID:	MH		
Lims ID:	IC L10				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	8	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 115 C8 Range, CAS: STL00834



FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19488-1

SDG No.:

Lab Sample ID: ICV 140-39100/17 Calibration Date: 04/16/2020 20:21

Instrument ID: MH Calib Start Date: 04/16/2020 08:03

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 04/16/2020 18:34

Lab File ID: HD16ICV.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorodifluoromethane	Ave	4.220	4.359		1.03	1.00	3.3	35.0
Propene	Lin2		2.480			1.00	-8.0	35.0
Dichlorodifluoromethane	Ave	6.490	7.104		1.09	1.00	9.5	35.0
Chloromethane	Ave	0.7074	0.7301		1.03	1.00	3.2	35.0
1,2-Dichloro-1,1,2,2-tetrafluoroethane	Ave	4.327	4.829		1.12	1.00	11.6	35.0
Acetaldehyde	Ave	0.7881	0.7790		4.94	5.00	-1.2	35.0
Vinyl chloride	Ave	2.321	2.584		1.11	1.00	11.3	35.0
1,3-Butadiene	Ave	1.577	1.793		1.14	1.00	13.7	35.0
Butane	Ave	2.750	3.140		1.14	1.00	14.2	35.0
Bromomethane	Ave	2.450	2.659		1.09	1.00	8.5	35.0
Chloroethane	Ave	0.9878	1.155		1.17	1.00	16.9	35.0
Ethanol	Ave	0.7132	0.6855		4.81	5.00	-3.9	35.0
Vinyl bromide	Ave	2.206	2.620		1.19	1.00	18.8	35.0
2-Methylbutane	Ave	2.018	2.407		1.19	1.00	19.3	35.0
Trichlorofluoromethane	Ave	5.819	6.299		1.08	1.00	8.3	35.0
Acrolein	Ave	0.6803	0.9006		1.32	1.00	32.4	35.0
Acetonitrile	Ave	0.7833	0.8861		1.13	1.00	13.1	35.0
Acetone	Ave	0.9000	1.006		1.12	1.00	11.7	35.0
Isopropyl alcohol	QuaF		3.572		1.32	1.00	31.9	35.0
Pentane	Ave	0.2516	0.3104		1.23	1.00	23.4	35.0
Ethyl ether	Ave	1.742	1.986		1.14	1.00	14.0	35.0
1,1-Dichloroethene	Ave	1.949	2.172		1.11	1.00	11.4	35.0
tert-Butyl alcohol	Ave	3.234	3.912		1.21	1.00	21.0	35.0
Acrylonitrile	Ave	1.476	1.723		1.17	1.00	16.7	35.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	4.513	5.096		1.13	1.00	12.9	35.0
Methylene Chloride	Lin2		3.071		1.14	1.00	13.9	35.0
3-Chloropropene	Ave	1.646	1.676		1.02	1.00	1.9	35.0
Carbon disulfide	Ave	5.838	6.516		1.12	1.00	11.6	35.0
trans-1,2-Dichloroethene	Ave	1.923	2.175		1.13	1.00	13.1	35.0
2-Methylpentane	Ave	3.805	3.944		1.04	1.00	3.7	35.0
Methyl tert-butyl ether	Ave	4.496	5.294		1.18	1.00	17.7	35.0
1,1-Dichloroethane	Ave	3.831	4.172		1.09	1.00	8.9	35.0
Vinyl acetate	Ave	4.773	5.645		1.18	1.00	18.3	35.0
2-Butanone (MEK)	Ave	0.8517	1.001		1.18	1.00	17.5	35.0
Hexane	Ave	1.439	1.648		1.15	1.00	14.5	35.0
Isopropyl ether	Ave	6.178	7.245		1.17	1.00	17.3	35.0
cis-1,2-Dichloroethene	Ave	2.008	2.326		1.16	1.00	15.8	35.0
Ethyl acetate	Ave	4.315	4.538		1.05	1.00	5.2	35.0
Chloroform	Ave	4.723	5.155		1.09	1.00	9.2	35.0
Tert-butyl ethyl ether	Ave	5.380	6.026		1.12	1.00	12.0	35.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19488-1

SDG No.:

Lab Sample ID: ICV 140-39100/17 Calibration Date: 04/16/2020 20:21

Instrument ID: MH Calib Start Date: 04/16/2020 08:03

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 04/16/2020 18:34

Lab File ID: HD16ICV.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Tetrahydrofuran	Ave	1.963	2.205		1.12	1.00	12.3	35.0
1,1,1-Trichloroethane	Ave	4.396	4.794		1.09	1.00	9.0	35.0
1,2-Dichloroethane	Ave	0.4234	0.4669		1.10	1.00	10.3	35.0
1-Butanol	Ave	0.0900	0.0978		1.09	1.00	8.6	35.0
Cyclohexane	Ave	0.1152	0.1380		1.20	1.00	19.8	35.0
Benzene	Ave	0.8700	0.9899		1.14	1.00	13.8	35.0
Carbon tetrachloride	Ave	0.6283	0.7210		1.15	1.00	14.8	35.0
2,3-Dimethylpentane	Ave	0.1652	0.1904		1.15	1.00	15.2	35.0
Thiophene	Ave	0.4876	0.5446		1.12	1.00	11.7	35.0
2,2,4-Trimethylpentane	Ave	1.322	1.512		1.14	1.00	14.3	35.0
Heptane	Ave	0.2446	0.2908		1.19	1.00	18.9	35.0
1,2-Dichloropropane	Ave	0.3566	0.3895		1.09	1.00	9.2	35.0
Trichloroethene	Ave	0.3557	0.4016		1.13	1.00	12.9	35.0
Dibromomethane	Ave	0.4357	0.4720		1.08	1.00	8.3	35.0
Bromodichloromethane	Ave	0.6822	0.7538		1.11	1.00	10.5	35.0
1,4-Dioxane	Ave	0.1267	0.1498		1.18	1.00	18.2	35.0
Methyl methacrylate	Ave	0.3209	0.3623		1.13	1.00	12.9	35.0
Methylcyclohexane	Lin1		0.6428		1.31	1.00	30.6	35.0
4-Methyl-2-pentanone (MIBK)	Ave	0.6196	0.7159		1.16	1.00	15.5	35.0
cis-1,3-Dichloropropene	Ave	0.4613	0.5608		1.22	1.00	21.6	35.0
trans-1,3-Dichloropropene	Ave	0.4771	0.5946		1.25	1.00	24.6	35.0
Toluene	Lin2		1.387		1.20	1.00	19.5	35.0
1,1,2-Trichloroethane	Ave	0.4196	0.4763		1.14	1.00	13.5	35.0
2-Hexanone	Ave	0.3665	0.4479		1.22	1.00	22.2	35.0
Octane	Ave	0.3108	0.3896		1.25	1.00	25.4	35.0
Dibromochloromethane	Ave	0.7412	0.8715		1.18	1.00	17.6	35.0
1,2-Dibromoethane (EDB)	Ave	0.6932	0.8193		1.18	1.00	18.2	35.0
Tetrachloroethene	Ave	0.4285	0.4959		1.16	1.00	15.7	35.0
Chlorobenzene	Ave	0.9309	1.070		1.15	1.00	15.0	35.0
2,3-Dimethylheptane	Ave	1.051	1.062		1.01	1.00	1.0	35.0
Ethylbenzene	Ave	1.444	1.765		1.22	1.00	22.2	35.0
m-Xylene & p-Xylene	Ave	1.101	1.402		2.55	2.00	27.3	35.0
Nonane	Ave	0.7090	0.8503		1.20	1.00	19.9	35.0
Bromoform	Ave	0.7614	0.8772		1.15	1.00	15.2	35.0
Styrene	Lin2		0.9657		1.17	1.00	17.0	35.0
o-Xylene	Ave	1.141	1.402		1.23	1.00	22.9	35.0
1,1,2,2-Tetrachloroethane	Ave	1.094	1.218		1.11	1.00	11.3	35.0
1,2,3-Trichloropropane	Ave	0.2413	0.2717		1.13	1.00	12.6	35.0
Isopropylbenzene	Ave	1.541	1.868		1.21	1.00	21.2	35.0
Propylbenzene	Ave	0.3970	0.4806		1.21	1.00	21.1	35.0
2-Chlorotoluene	Ave	0.3853	0.4796		1.24	1.00	24.5	35.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19488-1

SDG No.:

Lab Sample ID: ICV 140-39100/17 Calibration Date: 04/16/2020 20:21

Instrument ID: MH Calib Start Date: 04/16/2020 08:03

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 04/16/2020 18:34

Lab File ID: HD16ICV.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Ethyltoluene	Ave	1.519	1.760		1.16	1.00	15.9	35.0
1,3,5-Trimethylbenzene	Lin2		0.8168		1.29	1.00	29.4	35.0
Alpha Methyl Styrene	Ave	0.6067	0.6959		1.15	1.00	14.7	35.0
Decane	Ave	0.9946	1.131		1.14	1.00	13.7	35.0
tert-Butylbenzene	Ave	1.356	1.572		1.16	1.00	15.9	35.0
1,2,4-Trimethylbenzene	Ave	1.351	1.595		1.18	1.00	18.0	35.0
sec-Butylbenzene	Ave	1.945	2.314		1.19	1.00	19.0	35.0
1,3-Dichlorobenzene	Ave	0.8923	1.024		1.15	1.00	14.8	35.0
Benzyl chloride	Ave	1.141	1.247		1.09	1.00	9.2	35.0
1,4-Dichlorobenzene	Ave	0.8484	0.9853		1.16	1.00	16.1	35.0
4-Isopropyltoluene	Ave	1.493	1.737		1.16	1.00	16.3	35.0
1,2,3-Trimethylbenzene	Ave	1.345	1.147		0.852	1.00	-14.8	35.0
Butylcyclohexane	Ave	1.153	1.225		1.06	1.00	6.3	35.0
1,2-Dichlorobenzene	Ave	0.8999	1.019		1.13	1.00	13.2	35.0
Indane	Ave	1.268	1.412		1.11	1.00	11.3	35.0
Indene	Ave	1.132	1.049		0.927	1.00	-7.3	35.0
Butylbenzene	Lin2		2.069		1.09	1.00	9.5	35.0
Undecane	Ave	1.121	1.206		1.08	1.00	7.6	35.0
1,2-Dibromo-3-Chloropropane	Lin1		0.4292		0.892	1.00	-10.8	35.0
1,2,4,5-Tetramethylbenzene	Lin1		1.494		0.948	1.00	-5.2	35.0
Dodecane	Ave	1.106	1.075		0.972	1.00	-2.8	35.0
1,2,4-Trichlorobenzene	Ave	0.5604	0.7271		1.30	1.00	29.8	35.0
Naphthalene	Ave	1.278	1.674		1.31	1.00	31.0	35.0
Hexachlorobutadiene	Ave	0.7746	0.8508		1.10	1.00	9.8	35.0
1,2,3-Trichlorobenzene	Ave	0.6293	0.7548		1.20	1.00	20.0	35.0
2-Methylnaphthalene	Ave	0.4394	0.2841		0.646	1.00	-35.4	50.0
1-Methylnaphthalene	Ave	0.5456	0.3882		0.712	1.00	-28.8	50.0
4-Bromofluorobenzene (Surr)	Ave	0.6711	0.6703		4.00	4.00	-0.1	35.0

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16ICV.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 16-Apr-2020 20:21:30 ALS Bottle#: 9 Worklist Smp#: 17
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0015239-017
Misc. Info.: S117
Operator ID: HMT Instrument ID: MH
Sublist:

Method: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\MH_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 21-Apr-2020 10:49:05 Calib Date: 16-Apr-2020 18:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC10.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX0331

First Level Reviewer: tajh Date: 20-Apr-2020 08:20:25

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.587	8.603	-0.016	95	348376	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.794	10.805	-0.011	95	2365337	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.570	15.575	-0.005	88	1913911	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr	95	17.224	17.229	-0.005	91	1282863	4.00	4.00	
6 Chlorodifluoromethane	51	3.543	3.543	0.000	96	379618	1.00	1.03	
7 Propene	41	3.553	3.553	0.000	99	216028	1.00	0.9198	7
8 Dichlorodifluoromethane	85	3.605	3.605	0.000	100	618723	1.00	1.09	
9 Chloromethane	52	3.776	3.781	-0.005	97	63584	1.00	1.03	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.781	3.786	-0.005	94	420592	1.00	1.12	
11 Acetaldehyde	44	3.926	3.931	-0.005	93	339219	5.00	4.94	
12 Vinyl chloride	62	3.941	3.946	-0.005	98	225036	1.00	1.11	
14 Butadiene	54	4.024	4.029	-0.005	70	156192	1.00	1.14	
13 Butane	43	4.024	4.029	-0.005	83	273481	1.00	1.14	
15 Bromomethane	94	4.334	4.339	-0.005	98	231562	1.00	1.09	
16 Chloroethane	64	4.468	4.479	-0.011	95	100590	1.00	1.17	
17 Ethanol	31	4.561	4.587	-0.026	91	298503	5.00	4.81	
18 Vinyl bromide	106	4.758	4.768	-0.010	98	228211	1.00	1.19	
19 2-Methylbutane	43	4.809	4.809	0.000	89	209621	1.00	1.19	
20 Trichlorofluoromethane	101	5.021	5.026	-0.005	99	548637	1.00	1.08	
21 Acrolein	56	5.032	5.042	-0.010	92	78440	1.00	1.32	
22 Acetonitrile	40	5.099	5.114	-0.015	99	77170	1.00	1.13	
23 Acetone	58	5.145	5.150	-0.005	97	87581	1.00	1.12	
24 Pentane	72	5.233	5.243	-0.010	98	27034	1.00	1.23	
25 Isopropyl alcohol	45	5.228	5.254	-0.026	93	311139	1.00	1.32	
26 Ethyl ether	31	5.399	5.404	-0.005	94	172977	1.00	1.14	
27 1,1-Dichloroethene	96	5.714	5.724	-0.010	97	189125	1.00	1.11	
29 2-Methyl-2-propanol	59	5.812	5.827	-0.015	95	340718	1.00	1.21	
28 Acrylonitrile	53	5.822	5.838	-0.016	94	150056	1.00	1.17	
30 1,1,2-Trichloro-1,2,2-trif	101	5.884	5.895	-0.011	93	443841	1.00	1.13	
31 Methylene Chloride	84	6.060	6.076	-0.016	97	267497	1.00	1.14	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.070	6.086	-0.016	97	145984	1.00	1.02	
33 Carbon disulfide	76	6.215	6.225	-0.010	99	567472	1.00	1.12	
34 trans-1,2-Dichloroethene	96	6.861	6.871	-0.010	98	189462	1.00	1.13	
35 2-Methylpentane	43	6.872	6.882	-0.010	94	343472	1.00	1.04	
36 Methyl tert-butyl ether	73	6.980	6.980	0.000	97	461090	1.00	1.18	
37 1,1-Dichloroethane	63	7.275	7.295	-0.020	100	363328	1.00	1.09	
38 Vinyl acetate	43	7.378	7.394	-0.016	100	491664	1.00	1.18	
39 2-Butanone (MEK)	72	7.823	7.833	-0.010	96	87196	1.00	1.18	
40 Hexane	56	7.848	7.853	-0.005	89	143518	1.00	1.15	
41 Isopropyl ether	45	8.003	8.009	-0.006	98	631010	1.00	1.17	
42 cis-1,2-Dichloroethene	96	8.257	8.272	-0.015	95	202553	1.00	1.16	
43 Ethyl acetate	43	8.438	8.448	-0.010	99	395216	1.00	1.05	
44 Chloroform	83	8.598	8.618	-0.020	96	448979	1.00	1.09	
45 Tert-butyl ethyl ether	59	8.675	8.686	-0.011	96	524857	1.00	1.12	
46 Tetrahydrofuran	42	8.996	8.991	0.005	94	192025	1.00	1.12	
47 1,1,1-Trichloroethane	97	9.621	9.637	-0.016	96	417494	1.00	1.09	
48 1,2-Dichloroethane	62	9.740	9.750	-0.010	97	276066	1.00	1.10	
49 n-Butanol	31	10.190	10.190	0.000	61	57807	1.00	1.09	
50 Cyclohexane	69	10.226	10.236	-0.010	78	81576	1.00	1.20	
51 Benzene	78	10.231	10.246	-0.015	97	585363	1.00	1.14	
52 Carbon tetrachloride	117	10.252	10.262	-0.010	96	426341	1.00	1.15	
53 2,3-Dimethylpentane	71	10.350	10.360	-0.010	90	112564	1.00	1.15	
54 Thiophene	84	10.510	10.526	-0.016	96	322060	1.00	1.12	
55 Isooctane	57	11.006	11.011	-0.005	99	893841	1.00	1.14	
56 n-Heptane	71	11.389	11.399	-0.010	90	171968	1.00	1.19	
57 1,2-Dichloropropane	63	11.477	11.487	-0.010	93	230318	1.00	1.09	
58 Trichloroethene	130	11.513	11.523	-0.010	92	237489	1.00	1.13	
59 Dibromomethane	93	11.601	11.611	-0.010	93	279108	1.00	1.08	
60 Dichlorobromomethane	83	11.751	11.756	-0.005	98	445773	1.00	1.11	
61 1,4-Dioxane	88	11.761	11.761	0.000	85	88605	1.00	1.18	
62 Methyl methacrylate	41	11.844	11.854	-0.010	95	214263	1.00	1.13	
63 Methylcyclohexane	83	12.288	12.293	-0.005	96	380089	1.00	1.31	
64 4-Methyl-2-pentanone (MIBK	43	12.702	12.707	-0.005	97	423304	1.00	1.16	
65 cis-1,3-Dichloropropene	75	12.764	12.774	-0.010	93	331632	1.00	1.22	
66 trans-1,3-Dichloropropene	75	13.472	13.477	-0.005	98	284505	1.00	1.25	
67 Toluene	91	13.590	13.596	-0.006	93	663552	1.00	1.20	
68 1,1,2-Trichloroethane	83	13.668	13.673	-0.005	96	227899	1.00	1.14	
69 2-Hexanone	58	14.050	14.056	-0.006	92	214319	1.00	1.22	
70 n-Octane	85	14.288	14.293	-0.005	92	186400	1.00	1.25	
71 Chlorodibromomethane	129	14.376	14.381	-0.005	97	417013	1.00	1.18	
72 Ethylene Dibromide	107	14.665	14.676	-0.011	98	392028	1.00	1.18	
73 Tetrachloroethene	129	14.738	14.743	-0.005	93	237283	1.00	1.16	
74 Chlorobenzene	112	15.622	15.627	-0.005	93	512134	1.00	1.15	
75 2,3-Dimethylheptane	43	15.642	15.647	-0.005	96	508311	1.00	1.01	
76 Ethylbenzene	91	15.911	15.916	-0.005	99	844335	1.00	1.22	
77 m-Xylene & p-Xylene	91	16.071	16.082	-0.011	99	1341555	2.00	2.55	
78 n-Nonane	57	16.495	16.500	-0.005	91	406843	1.00	1.20	
79 Bromoform	173	16.526	16.531	-0.005	92	419716	1.00	1.15	
80 Styrene	104	16.542	16.547	-0.005	99	462062	1.00	1.17	
81 o-Xylene	91	16.604	16.609	-0.005	98	670895	1.00	1.23	
82 1,1,2,2-Tetrachloroethane	83	16.929	16.934	-0.005	99	582701	1.00	1.11	
83 1,2,3-Trichloropropane	110	17.089	17.095	-0.006	98	129980	1.00	1.13	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	17.188	17.193	-0.005	97	893846	1.00	1.21	
85 N-Propylbenzene	120	17.751	17.756	-0.005	98	229958	1.00	1.21	
86 2-Chlorotoluene	126	17.798	17.756	0.042	98	229488	1.00	1.24	
87 4-Ethyltoluene	105	17.911	17.916	-0.005	99	842275	1.00	1.16	
88 1,3,5-Trimethylbenzene	120	17.994	17.994	0.000	92	390808	1.00	1.29	
89 Alpha Methyl Styrene	118	18.237	18.242	-0.005	87	332986	1.00	1.15	
90 n-Decane	57	18.299	18.304	-0.005	90	540922	1.00	1.14	
91 tert-Butylbenzene	119	18.438	18.443	-0.005	89	752086	1.00	1.16	
92 1,2,4-Trimethylbenzene	105	18.454	18.459	-0.005	96	762977	1.00	1.18	
93 sec-Butylbenzene	105	18.723	18.723	0.000	99	1107036	1.00	1.19	
94 1,3-Dichlorobenzene	146	18.738	18.743	-0.005	98	490057	1.00	1.15	
95 Benzyl chloride	91	18.816	18.826	-0.010	97	596425	1.00	1.09	
96 1,4-Dichlorobenzene	146	18.826	18.836	-0.010	92	471446	1.00	1.16	
97 4-Isopropyltoluene	119	18.893	18.898	-0.005	96	831196	1.00	1.16	
98 1,2,3-Trimethylbenzene	105	18.945	18.955	-0.010	99	548622	1.00	0.8522	
99 Butylcyclohexane	83	19.002	19.012	-0.010	94	586264	1.00	1.06	
101 2,3-Dihydroindene	117	19.203	19.208	-0.005	93	675567	1.00	1.11	
100 1,2-Dichlorobenzene	146	19.203	19.214	-0.011	82	487474	1.00	1.13	
102 Indene	116	19.338	19.343	-0.005	89	502015	1.00	0.9269	
103 n-Butylbenzene	91	19.348	19.353	-0.005	97	989875	1.00	1.09	
104 Undecane	57	19.668	19.674	-0.006	95	577128	1.00	1.08	
105 1,2-Dibromo-3-Chloropropan	157	19.834	19.834	0.000	97	205341	1.00	0.8917	
106 1,2,4,5-Tetramethylbenzene	119	20.128	20.128	0.000	96	714956	1.00	0.9476	a
107 Dodecane	57	20.764	20.769	-0.005	96	514185	1.00	0.9718	
108 1,2,4-Trichlorobenzene	180	20.966	20.971	-0.005	93	347909	1.00	1.30	
109 Naphthalene	128	21.110	21.116	-0.006	99	801144	1.00	1.31	
110 Hexachlorobutadiene	225	21.338	21.338	0.000	91	407109	1.00	1.10	
111 1,2,3-Trichlorobenzene	180	21.410	21.415	-0.005	92	361176	1.00	1.20	
112 2-Methylnaphthalene	142	22.061	22.061	0.000	97	135916	1.00	0.6464	
113 1-Methylnaphthalene	142	22.191	22.191	0.000	98	185766	1.00	0.7116	
A 115 C8 Range	1	14.281	(14.242-14.335)		0	1759244	1.00	1.14	
S 116 Xylenes, Total	100				0		3.00	3.77	
S 117 1,2-Dichloroethene, Total	1				0		2.00	2.29	
T 139 2-Methylthiophene TIC	97	13.746	13.673	0.073	95	527741	1.00	1.10	
T 142 3-Methylthiophene TIC	97	13.947	13.673	0.274	95	523022	1.00	1.09	
T 141 2-Ethylthiophene TIC	97	16.014	15.580	0.434	97	622158	1.00	1.30	
T 152 1,2-Dimethyl-4-Ethylbenzen	119	19.731	20.144	-0.414	96	605562	1.00	1.27	
T 149 1,2,3,5-Tetramethylbenzene	119	20.128	20.144	-0.016	96	710716	1.00	1.49	
T 151 Benzo(b)thiophene TIC	134	21.224	22.283	-1.059	97	382355	1.00	0.7991	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

a - User Assigned ID

Reagents:

40CV101S_00117	Amount Added: 50.00	Units: mL	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

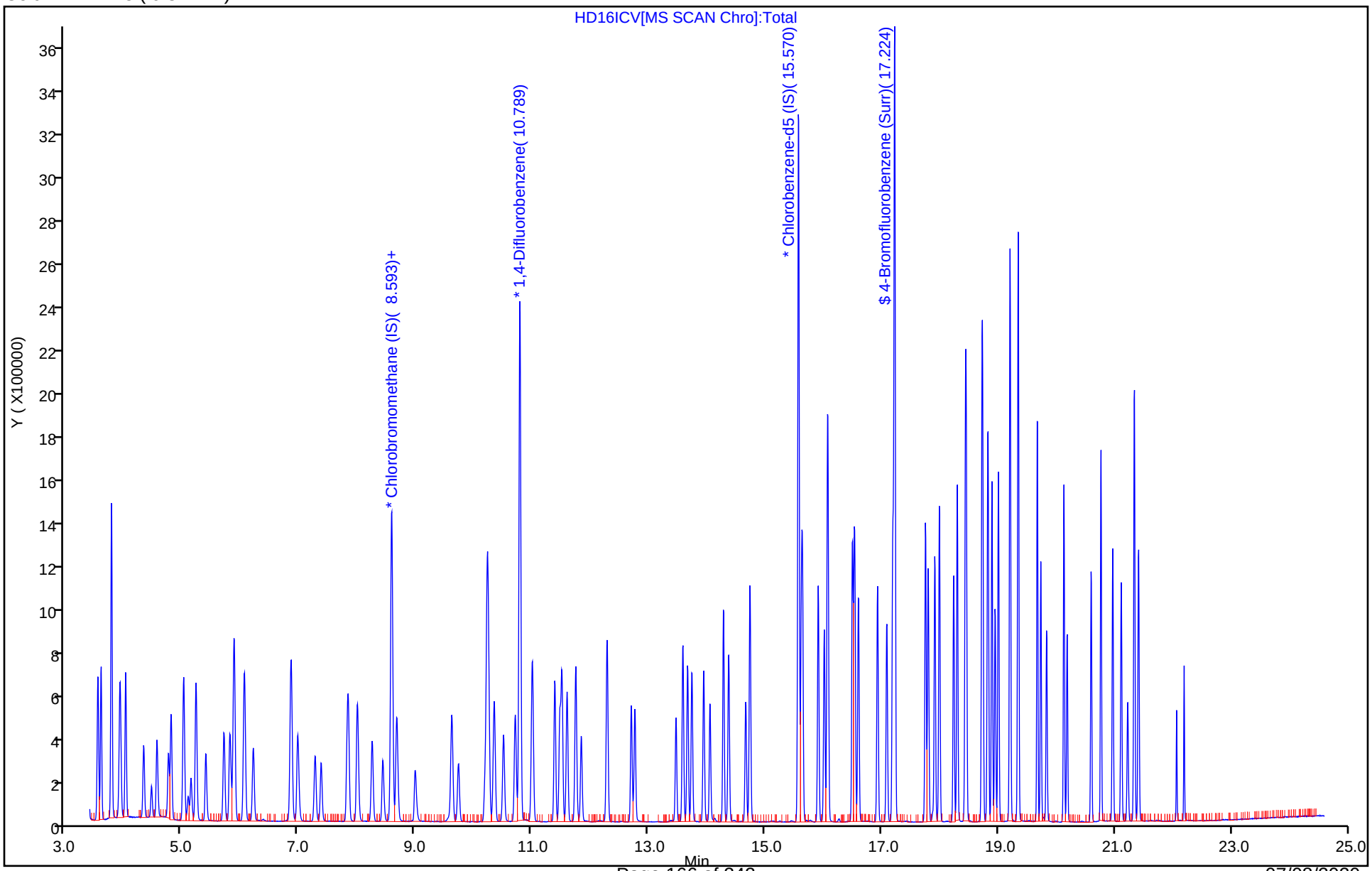
Report Date: 21-Apr-2020 11:01:31 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16ICV.D

Injection Date:	16-Apr-2020 20:21:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	ICV			Worklist Smp#:	17
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville

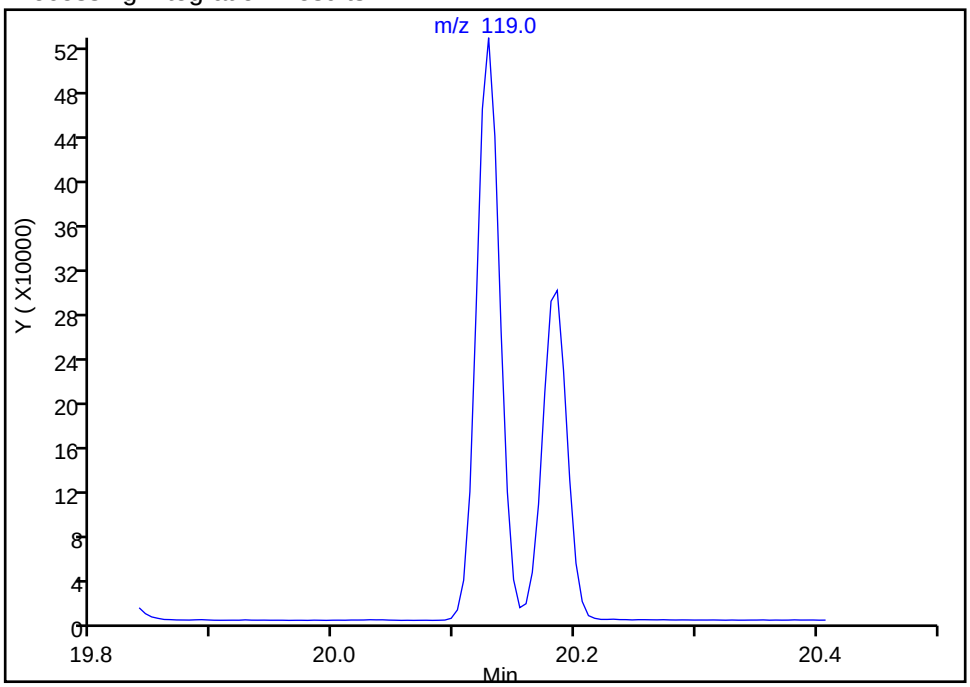
Data File:	\\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16ICV.D				
Injection Date:	16-Apr-2020 20:21:30	Instrument ID:	MH		
Lims ID:	ICV				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	9	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

106 1,2,4,5-Tetramethylbenzene, CAS: 95-93-2

Signal: 1

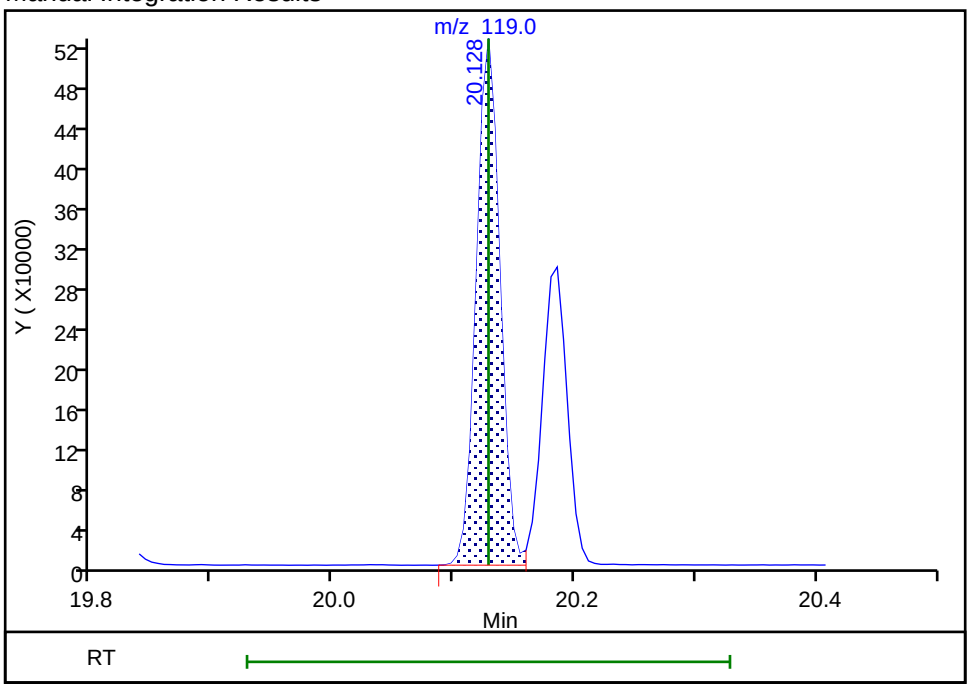
Not Detected
Expected RT: 20.13

Processing Integration Results



Manual Integration Results

RT: 20.13
Area: 714956
Amount: 0.947599
Amount Units: ppb v/v



Reviewer: tajh, 20-Apr-2020 13:02:58
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19488-1

SDG No.:

Lab Sample ID: CCVIS 140-40629/2 Calibration Date: 06/30/2020 07:49

Instrument ID: MH Calib Start Date: 04/16/2020 08:03

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 04/16/2020 18:34

Lab File ID: HCCVF30.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorodifluoromethane	Ave	4.220	3.276		1.24	1.60	-22.4	30.0
Propene	Lin2		2.075		1.49	1.60	-7.1	30.0
Dichlorodifluoromethane	Ave	6.490	4.847		1.20	1.60	-25.3	30.0
Chloromethane	Ave	0.7074	0.5084		1.15	1.60	-28.1	30.0
1,2-Dichloro-1,1,2,2-tetrafluoroethane	Ave	4.327	2.938		1.09	1.60	-32.1*	30.0
Acetaldehyde	Ave	0.7881	0.6526		6.62	8.00	-17.2	30.0
Vinyl chloride	Ave	2.321	1.572		1.08	1.60	-32.2*	30.0
1,3-Butadiene	Ave	1.577	1.141		1.16	1.60	-27.7	30.0
Butane	Ave	2.750	2.138		1.24	1.60	-22.3	30.0
Bromomethane	Ave	2.450	1.754		1.15	1.60	-28.4	30.0
Chloroethane	Ave	0.9878	0.7332		1.19	1.60	-25.8	30.0
Ethanol	Ave	0.7132	0.6994		7.84	8.00	-1.9	30.0
Vinyl bromide	Ave	2.206	1.514		1.10	1.60	-31.4*	30.0
2-Methylbutane	Ave	2.018	1.718		1.36	1.60	-14.9	30.0
Trichlorofluoromethane	Ave	5.819	4.569		1.26	1.60	-21.5	30.0
Acrolein	Ave	0.6803	0.5002		1.18	1.60	-26.5	30.0
Acetonitrile	Ave	0.7833	0.8007		1.64	1.60	2.2	30.0
Acetone	Ave	0.9000	0.7584		4.04	4.80	-15.7	30.0
Isopropyl alcohol	QuaF		2.079		3.72	4.80	-22.5	30.0
Pentane	Ave	0.2516	0.2179		1.39	1.60	-13.4	30.0
Ethyl ether	Ave	1.742	1.814		1.67	1.60	4.1	30.0
1,1-Dichloroethene	Ave	1.949	1.558		1.28	1.60	-20.1	30.0
tert-Butyl alcohol	Ave	3.234	2.078		1.03	1.60	-35.7*	30.0
Acrylonitrile	Ave	1.476	1.273		1.38	1.60	-13.8	30.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	4.513	3.720		1.32	1.60	-17.6	30.0
Methylene Chloride	Lin2		2.404		1.58	1.60	-1.1	30.0
3-Chloropropene	Ave	1.646	1.467		1.43	1.60	-10.9	30.0
Carbon disulfide	Ave	5.838	4.830		1.32	1.60	-17.3	30.0
trans-1,2-Dichloroethene	Ave	1.923	1.581		1.32	1.60	-17.8	30.0
2-Methylpentane	Ave	3.805	3.510		1.48	1.60	-7.7	30.0
Methyl tert-butyl ether	Ave	4.496	3.337		1.19	1.60	-25.8	30.0
1,1-Dichloroethane	Ave	3.831	3.026		1.26	1.60	-21.0	30.0
Vinyl acetate	Ave	4.773	4.294		1.44	1.60	-10.0	30.0
2-Butanone (MEK)	Ave	0.8517	0.6893		1.29	1.60	-19.1	30.0
Hexane	Ave	1.439	1.186		1.32	1.60	-17.6	30.0
Isopropyl ether	Ave	6.178	5.588		1.45	1.60	-9.5	30.0
cis-1,2-Dichloroethene	Ave	2.008	1.645		1.31	1.60	-18.1	30.0
Ethyl acetate	Ave	4.315	3.767		1.40	1.60	-12.7	30.0
Chloroform	Ave	4.723	3.690		1.25	1.60	-21.9	30.0
Tert-butyl ethyl ether	Ave	5.380	4.159		1.24	1.60	-22.7	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19488-1

SDG No.:

Lab Sample ID: CCVIS 140-40629/2 Calibration Date: 06/30/2020 07:49

Instrument ID: MH Calib Start Date: 04/16/2020 08:03

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 04/16/2020 18:34

Lab File ID: HCCVF30.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Tetrahydrofuran	Ave	1.963	1.718		1.40	1.60	-12.5	30.0
1,1,1-Trichloroethane	Ave	4.396	3.378		1.23	1.60	-23.2	30.0
1,2-Dichloroethane	Ave	0.4234	0.3062		1.16	1.60	-27.7	30.0
1-Butanol	Ave	0.0900	0.0707		1.26	1.60	-21.4	30.0
Cyclohexane	Ave	0.1152	0.0861		1.20	1.60	-25.2	30.0
Benzene	Ave	0.8700	0.6295		1.16	1.60	-27.7	30.0
Carbon tetrachloride	Ave	0.6283	0.4645		1.18	1.60	-26.1	30.0
2,3-Dimethylpentane	Ave	0.1652	0.1249		1.21	1.60	-24.4	30.0
Thiophene	Ave	0.4876	0.3590		1.18	1.60	-26.4	30.0
2,2,4-Trimethylpentane	Ave	1.322	0.9949		1.20	1.60	-24.8	30.0
Heptane	Ave	0.2446	0.1863		1.22	1.60	-23.8	30.0
1,2-Dichloropropane	Ave	0.3566	0.2584		1.16	1.60	-27.5	30.0
Trichloroethene	Ave	0.3557	0.2669		1.20	1.60	-25.0	30.0
Dibromomethane	Ave	0.4357	0.3089		1.13	1.60	-29.1	30.0
Bromodichloromethane	Ave	0.6822	0.4993		1.17	1.60	-26.8	30.0
1,4-Dioxane	Ave	0.1267	0.0853		1.08	1.60	-32.7*	30.0
Methyl methacrylate	Ave	0.3209	0.2804		1.40	1.60	-12.6	30.0
Methylcyclohexane	Lin1		0.3377		1.10	1.60	-31.1*	30.0
4-Methyl-2-pentanone (MIBK)	Ave	0.6196	0.5319		1.37	1.60	-14.1	30.0
cis-1,3-Dichloropropene	Ave	0.4613	0.3524		1.22	1.60	-23.6	30.0
trans-1,3-Dichloropropene	Ave	0.4771	0.3618		1.21	1.60	-24.2	30.0
Toluene	Lin2		0.8973		1.24	1.60	-22.7	30.0
1,1,2-Trichloroethane	Ave	0.4196	0.3263		1.24	1.60	-22.2	30.0
2-Hexanone	Ave	0.3665	0.2833		1.24	1.60	-22.7	30.0
Octane	Ave	0.3108	0.2460		1.27	1.60	-20.8	30.0
Dibromochloromethane	Ave	0.7412	0.6106		1.32	1.60	-17.6	30.0
1,2-Dibromoethane (EDB)	Ave	0.6932	0.5418		1.25	1.60	-21.8	30.0
Tetrachloroethene	Ave	0.4285	0.3224		1.20	1.60	-24.8	30.0
Chlorobenzene	Ave	0.9309	0.7031		1.21	1.60	-24.5	30.0
2,3-Dimethylheptane	Ave	1.051	0.9332		1.42	1.60	-11.2	30.0
Ethylbenzene	Ave	1.444	1.160		1.29	1.60	-19.7	30.0
m-Xylene & p-Xylene	Ave	1.101	0.9101		2.64	3.20	-17.4	30.0
Nonane	Ave	0.7090	0.5841		1.32	1.60	-17.6	30.0
Bromoform	Ave	0.7614	0.6050		1.27	1.60	-20.5	30.0
Styrene	Lin2		0.6609		1.28	1.60	-20.1	30.0
o-Xylene	Ave	1.141	0.9784		1.37	1.60	-14.2	30.0
1,1,2,2-Tetrachloroethane	Ave	1.094	0.8770		1.28	1.60	-19.9	30.0
1,2,3-Trichloropropane	Ave	0.2413	0.1959		1.30	1.60	-18.8	30.0
Isopropylbenzene	Ave	1.541	1.268		1.32	1.60	-17.7	30.0
Propylbenzene	Ave	0.3970	0.3398		1.37	1.60	-14.4	30.0
2-Chlorotoluene	Ave	0.3853	0.3375		1.40	1.60	-12.4	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19488-1

SDG No.:

Lab Sample ID: CCVIS 140-40629/2 Calibration Date: 06/30/2020 07:49

Instrument ID: MH Calib Start Date: 04/16/2020 08:03

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 04/16/2020 18:34

Lab File ID: HCCVF30.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Ethyltoluene	Ave	1.519	1.323		1.39	1.60	-12.9	30.0
1,3,5-Trimethylbenzene	Lin2		0.5084		1.29	1.60	-19.4	30.0
Alpha Methyl Styrene	Ave	0.6067	0.5114		1.35	1.60	-15.7	30.0
Decane	Ave	0.9946	0.8508		1.37	1.60	-14.5	30.0
tert-Butylbenzene	Ave	1.356	1.126		1.33	1.60	-16.9	30.0
1,2,4-Trimethylbenzene	Ave	1.351	1.148		1.36	1.60	-15.0	30.0
sec-Butylbenzene	Ave	1.945	1.692		1.39	1.60	-13.0	30.0
1,3-Dichlorobenzene	Ave	0.8923	0.7395		1.33	1.60	-17.1	30.0
Benzyl chloride	Ave	1.141	0.8248		1.16	1.60	-27.7	30.0
1,4-Dichlorobenzene	Ave	0.8484	0.7228		1.36	1.60	-14.8	30.0
4-Isopropyltoluene	Ave	1.493	1.314		1.41	1.60	-12.0	30.0
1,2,3-Trimethylbenzene	Ave	1.345	1.195		1.42	1.60	-11.2	30.0
Butylcyclohexane	Ave	1.153	0.9909		1.38	1.60	-14.0	30.0
1,2-Dichlorobenzene	Ave	0.8999	0.7458		1.33	1.60	-17.1	30.0
Indane	Ave	1.268	1.085		1.37	1.60	-14.4	30.0
Indene	Ave	1.132	0.9292		1.31	1.60	-17.9	30.0
Butylbenzene	Lin2		1.540		1.30	1.60	-18.9	30.0
Undecane	Ave	1.121	0.9596		1.37	1.60	-14.4	30.0
1,2-Dibromo-3-Chloropropane	Lin1		0.4045		1.32	1.60	-17.7	30.0
1,2,4,5-Tetramethylbenzene	Lin1		1.167		1.17	1.60	-27.2	30.0
Dodecane	Ave	1.106	0.8701		1.26	1.60	-21.3	30.0
1,2,4-Trichlorobenzene	Ave	0.5604	0.4971		1.42	1.60	-11.3	30.0
Naphthalene	Ave	1.278	1.263		1.58	1.60	-1.2	30.0
Hexachlorobutadiene	Ave	0.7746	0.5613		1.16	1.60	-27.5	30.0
1,2,3-Trichlorobenzene	Ave	0.6293	0.5171		1.31	1.60	-17.8	30.0
2-Methylnaphthalene	Ave	0.4394	0.2625		0.956	1.60	-40.3	50.0
1-Methylnaphthalene	Ave	0.5456	0.3847		1.13	1.60	-29.5	50.0
4-Bromofluorobenzene (Surr)	Ave	0.6711	0.7013		4.18	4.00	4.5	30.0

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MH\20200629-15882.b\HCCVF30.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 30-Jun-2020 07:49:30 ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0015882-002
Misc. Info.: P116 80ML
Operator ID: HMT Instrument ID: MH
Sublist: chrom-MH_TO15*sub7

Method: \\chromfs\Knoxville\ChromData\MH\20200629-15882.b\MH_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 01-Jul-2020 11:29:24 Calib Date: 16-Apr-2020 18:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC10.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1017

First Level Reviewer: khachitpongpanits Date: 01-Jul-2020 11:29:24

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.577	8.577	0.000	97	116293	4.00	4.00	s
* 2 1,4-Difluorobenzene	114	10.779	10.779	0.000	95	871871	4.00	4.00	s
* 3 Chlorobenzene-d5 (IS)	117	15.565	15.565	0.000	89	703225	4.00	4.00	s
$ 4 4-Bromofluorobenzene (Surr)	95	17.234	17.234	0.000	88	493154	4.00	4.18	
6 Chlorodifluoromethane	51	3.543	3.543	0.000	97	152394	1.60	1.24	
7 Propene	41	3.553	3.553	0.000	98	96512	1.60	1.49	
8 Dichlorodifluoromethane	85	3.605	3.605	0.000	100	225486	1.60	1.20	
9 Chloromethane	52	3.781	3.781	0.000	97	23647	1.60	1.15	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.786	3.786	0.000	97	136647	1.60	1.09	
11 Acetaldehyde	44	3.925	3.925	0.000	97	151786	8.00	6.62	
12 Vinyl chloride	62	3.941	3.941	0.000	99	73147	1.60	1.08	
13 Butane	43	4.024	4.024	0.000	83	99436	1.60	1.24	
14 Butadiene	54	4.024	4.024	0.000	71	53059	1.60	1.16	
15 Bromomethane	94	4.334	4.334	0.000	98	81587	1.60	1.15	
16 Chloroethane	64	4.468	4.468	0.000	94	34106	1.60	1.19	
17 Ethanol	31	4.561	4.561	0.000	97	162673	8.00	7.84	
18 Vinyl bromide	106	4.758	4.758	0.000	96	70419	1.60	1.10	
19 2-Methylbutane	43	4.804	4.804	0.000	89	79899	1.60	1.36	
20 Trichlorofluoromethane	101	5.016	5.016	0.000	99	212550	1.60	1.26	
21 Acrolein	56	5.026	5.026	0.000	95	23269	1.60	1.18	
22 Acetonitrile	40	5.099	5.099	0.000	99	37244	1.60	1.64	
23 Acetone	58	5.140	5.140	0.000	99	105837	4.80	4.04	
25 Isopropyl alcohol	45	5.223	5.223	0.000	94	290120	4.80	3.72	
24 Pentane	72	5.233	5.233	0.000	97	10138	1.60	1.39	
26 Ethyl ether	31	5.393	5.393	0.000	92	84377	1.60	1.67	
27 1,1-Dichloroethene	96	5.709	5.709	0.000	97	72464	1.60	1.28	
29 2-Methyl-2-propanol	59	5.807	5.807	0.000	94	96648	1.60	1.03	
28 Acrylonitrile	53	5.812	5.812	0.000	94	59214	1.60	1.38	
30 1,1,2-Trichloro-1,2,2-trifluoroe	101	5.879	5.879	0.000	92	173062	1.60	1.32	
31 Methylene Chloride	84	6.055	6.055	0.000	98	111811	1.60	1.58	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.065	6.065	0.000	96	68238	1.60	1.43	
33 Carbon disulfide	76	6.210	6.210	0.000	100	224681	1.60	1.32	
34 trans-1,2-Dichloroethene	96	6.851	6.851	0.000	97	73559	1.60	1.32	
35 2-Methylpentane	43	6.861	6.861	0.000	96	163296	1.60	1.48	
36 Methyl tert-butyl ether	73	6.970	6.970	0.000	96	155222	1.60	1.19	
37 1,1-Dichloroethane	63	7.264	7.264	0.000	100	140756	1.60	1.26	
38 Vinyl acetate	43	7.368	7.368	0.000	100	199725	1.60	1.44	
39 2-Butanone (MEK)	72	7.817	7.817	0.000	96	32066	1.60	1.29	
40 Hexane	56	7.838	7.838	0.000	89	55189	1.60	1.32	
41 Isopropyl ether	45	7.993	7.993	0.000	97	259932	1.60	1.45	
42 cis-1,2-Dichloroethene	96	8.246	8.246	0.000	95	76504	1.60	1.31	
43 Ethyl acetate	43	8.427	8.427	0.000	98	175233	1.60	1.40	
44 Chloroform	83	8.587	8.587	0.000	97	171669	1.60	1.25	
45 Tert-butyl ethyl ether	59	8.665	8.665	0.000	98	193461	1.60	1.24	
46 Tetrahydrofuran	42	8.980	8.980	0.000	93	79921	1.60	1.40	
47 1,1,1-Trichloroethane	97	9.611	9.611	0.000	97	157156	1.60	1.23	
48 1,2-Dichloroethane	62	9.724	9.724	0.000	96	106768	1.60	1.16	
49 n-Butanol	31	10.179	10.179	0.000	87	24670	1.60	1.26	
50 Cyclohexane	69	10.215	10.215	0.000	79	30023	1.60	1.20	
51 Benzene	78	10.221	10.221	0.000	97	219518	1.60	1.16	
52 Carbon tetrachloride	117	10.241	10.241	0.000	94	161988	1.60	1.18	
53 2,3-Dimethylpentane	71	10.339	10.339	0.000	90	43563	1.60	1.21	
54 Thiophene	84	10.500	10.500	0.000	96	125186	1.60	1.18	
55 Isooctane	57	10.991	10.991	0.000	98	346952	1.60	1.20	
56 n-Heptane	71	11.378	11.378	0.000	93	64964	1.60	1.22	
57 1,2-Dichloropropane	63	11.466	11.466	0.000	90	90115	1.60	1.16	
58 Trichloroethene	130	11.502	11.502	0.000	95	93088	1.60	1.20	
59 Dibromomethane	93	11.590	11.590	0.000	91	107736	1.60	1.13	
60 Dichlorobromomethane	83	11.740	11.740	0.000	98	174114	1.60	1.17	
61 1,4-Dioxane	88	11.750	11.750	0.000	92	29742	1.60	1.08	
62 Methyl methacrylate	41	11.833	11.833	0.000	91	97795	1.60	1.40	
63 Methylcyclohexane	83	12.278	12.278	0.000	93	117766	1.60	1.10	
64 4-Methyl-2-pentanone (MIBK)	43	12.691	12.691	0.000	98	185503	1.60	1.37	
65 cis-1,3-Dichloropropene	75	12.758	12.758	0.000	97	122894	1.60	1.22	
66 trans-1,3-Dichloropropene	75	13.461	13.461	0.000	98	101756	1.60	1.21	
67 Toluene	91	13.580	13.580	0.000	93	252388	1.60	1.24	
68 1,1,2-Trichloroethane	83	13.657	13.657	0.000	97	91784	1.60	1.24	
69 2-Hexanone	58	14.045	14.045	0.000	90	79679	1.60	1.24	
70 n-Octane	85	14.278	14.278	0.000	95	69187	1.60	1.27	
71 Chlorodibromomethane	129	14.366	14.366	0.000	97	171764	1.60	1.32	
72 Ethylene Dibromide	107	14.655	14.655	0.000	98	152404	1.60	1.25	
73 Tetrachloroethene	129	14.732	14.732	0.000	91	90693	1.60	1.20	
74 Chlorobenzene	112	15.611	15.611	0.000	93	197766	1.60	1.21	
75 2,3-Dimethylheptane	43	15.632	15.632	0.000	95	262512	1.60	1.42	
76 Ethylbenzene	91	15.901	15.901	0.000	99	326388	1.60	1.29	
77 m-Xylene & p-Xylene	91	16.066	16.066	0.000	98	512002	3.20	2.64	
78 n-Nonane	57	16.490	16.490	0.000	94	164295	1.60	1.32	
79 Bromoform	173	16.516	16.516	0.000	92	170184	1.60	1.27	
80 Styrene	104	16.536	16.536	0.000	99	185901	1.60	1.28	
81 o-Xylene	91	16.593	16.593	0.000	98	275225	1.60	1.37	
82 1,1,2,2-Tetrachloroethane	83	16.929	16.929	0.000	98	246685	1.60	1.28	
83 1,2,3-Trichloropropane	110	17.100	17.100	0.000	97	55110	1.60	1.30	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	17.203	17.203	0.000	96	356740	1.60	1.32	
85 N-Propylbenzene	120	17.777	17.777	0.000	98	95576	1.60	1.37	
86 2-Chlorotoluene	126	17.823	17.823	0.000	98	94937	1.60	1.40	
87 4-Ethyltoluene	105	17.932	17.932	0.000	98	372277	1.60	1.39	
88 1,3,5-Trimethylbenzene	120	18.014	18.014	0.000	91	142993	1.60	1.29	
89 Alpha Methyl Styrene	118	18.257	18.257	0.000	86	143859	1.60	1.35	
90 n-Decane	57	18.319	18.319	0.000	90	239330	1.60	1.37	
91 tert-Butylbenzene	119	18.459	18.459	0.000	89	316865	1.60	1.33	
92 1,2,4-Trimethylbenzene	105	18.469	18.469	0.000	96	322977	1.60	1.36	
93 sec-Butylbenzene	105	18.738	18.738	0.000	98	475954	1.60	1.39	
94 1,3-Dichlorobenzene	146	18.753	18.753	0.000	97	208019	1.60	1.33	
95 Benzyl chloride	91	18.831	18.831	0.000	97	231995	1.60	1.16	
96 1,4-Dichlorobenzene	146	18.847	18.847	0.000	94	203317	1.60	1.36	
97 4-Isopropyltoluene	119	18.909	18.909	0.000	96	369578	1.60	1.41	
98 1,2,3-Trimethylbenzene	105	18.960	18.960	0.000	99	336186	1.60	1.42	
99 Butylcyclohexane	83	19.017	19.017	0.000	92	278725	1.60	1.38	
100 1,2-Dichlorobenzene	146	19.219	19.219	0.000	80	209796	1.60	1.33	
101 2,3-Dihydroindene	117	19.219	19.219	0.000	92	305310	1.60	1.37	
102 Indene	116	19.353	19.353	0.000	89	261364	1.60	1.31	
103 n-Butylbenzene	91	19.358	19.358	0.000	96	433102	1.60	1.30	
104 Undecane	57	19.679	19.679	0.000	95	269930	1.60	1.37	
105 1,2-Dibromo-3-Chloropropane	157	19.839	19.839	0.000	92	113790	1.60	1.32	
106 1,2,4,5-Tetramethylbenzene	119	20.133	20.133	0.000	96	328144	1.60	1.17	
107 Dodecane	57	20.769	20.769	0.000	96	244754	1.60	1.26	
108 1,2,4-Trichlorobenzene	180	20.971	20.971	0.000	93	139817	1.60	1.42	
109 Naphthalene	128	21.115	21.115	0.000	99	355130	1.60	1.58	
110 Hexachlorobutadiene	225	21.338	21.338	0.000	89	157896	1.60	1.16	
111 1,2,3-Trichlorobenzene	180	21.410	21.410	0.000	93	145462	1.60	1.31	
112 2-Methylnaphthalene	142	22.061	22.061	0.000	97	73849	1.60	0.9559	
113 1-Methylnaphthalene	142	22.190	22.190	0.000	97	108215	1.60	1.13	
A 115 C8 Range	1	14.273	(14.226-14.319)		0	744476	1.60	1.31	
S 116 Xylenes, Total	100				0		4.80	4.02	
S 117 1,2-Dichloroethene, Total	1				0		3.20	2.63	

QC Flag Legend

Processing Flags

s - Failed ISTD Recovery Test

Reagents:

40CV101P_00116	Amount Added: 80.00	Units: ml	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

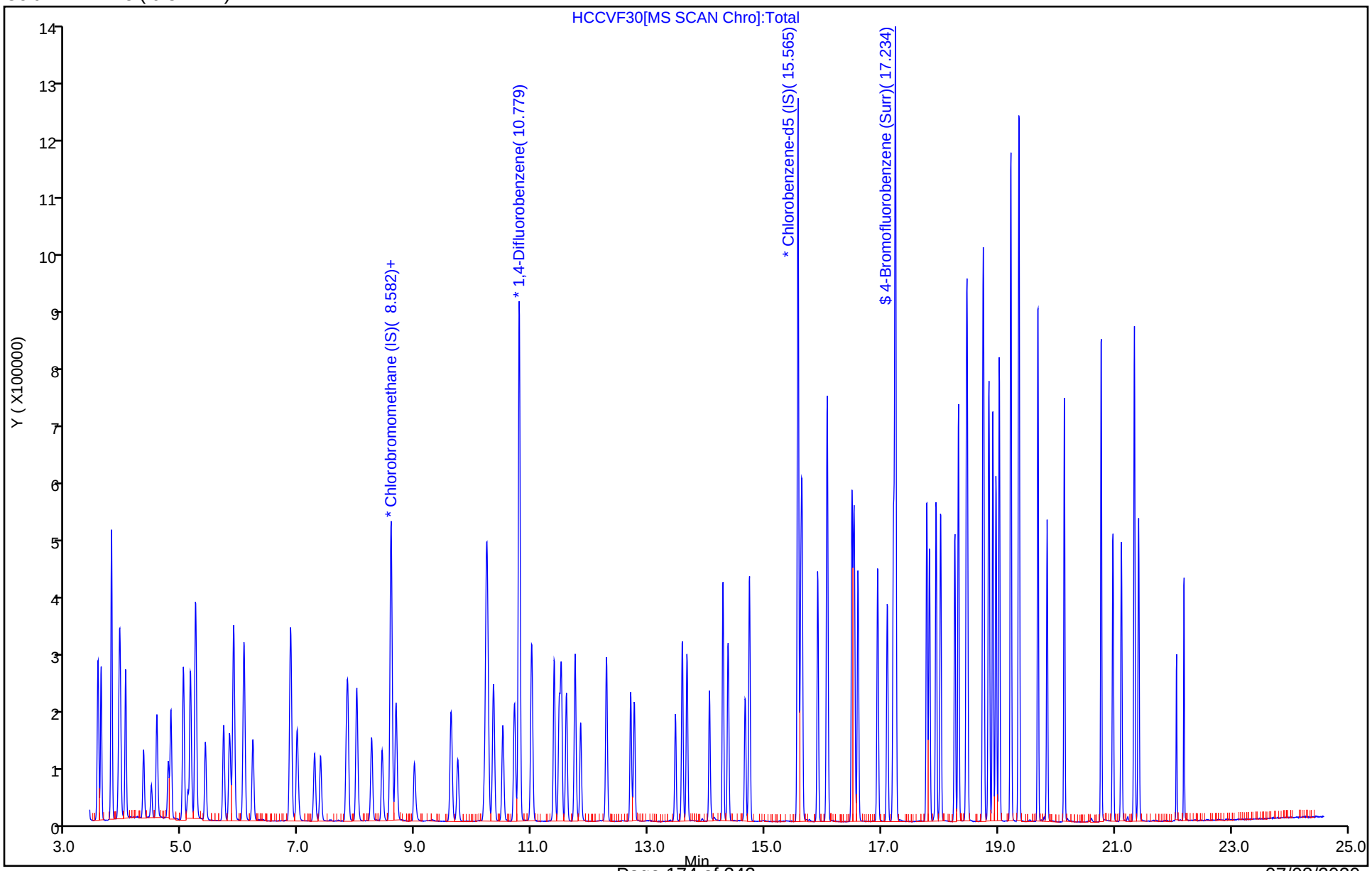
Report Date: 01-Jul-2020 11:29:24 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200629-15882.b\HCCVF30.D

Injection Date:	30-Jun-2020 07:49:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	CCVIS			Worklist Smp#:	2
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HDNUD16X.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	16-Apr-2020 06:14:30	ALS Bottle#:	21	Worklist Smp#:	1
Injection Vol:	500.0 mL	Dil. Factor:	1.0000		
Sample Info:					
Misc. Info.:	DNU				
Operator ID:	HMT	Instrument ID:	MH		
Method:	\\chromfs\Knoxville\ChromData\MH\20200416-15239.b\MH_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	21-Apr-2020 10:48:14	Calib Date:	16-Apr-2020 18:34:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC10.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX0331				

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
$ 5 BFB	95	4.508	4.508	0.000	0	1186897	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

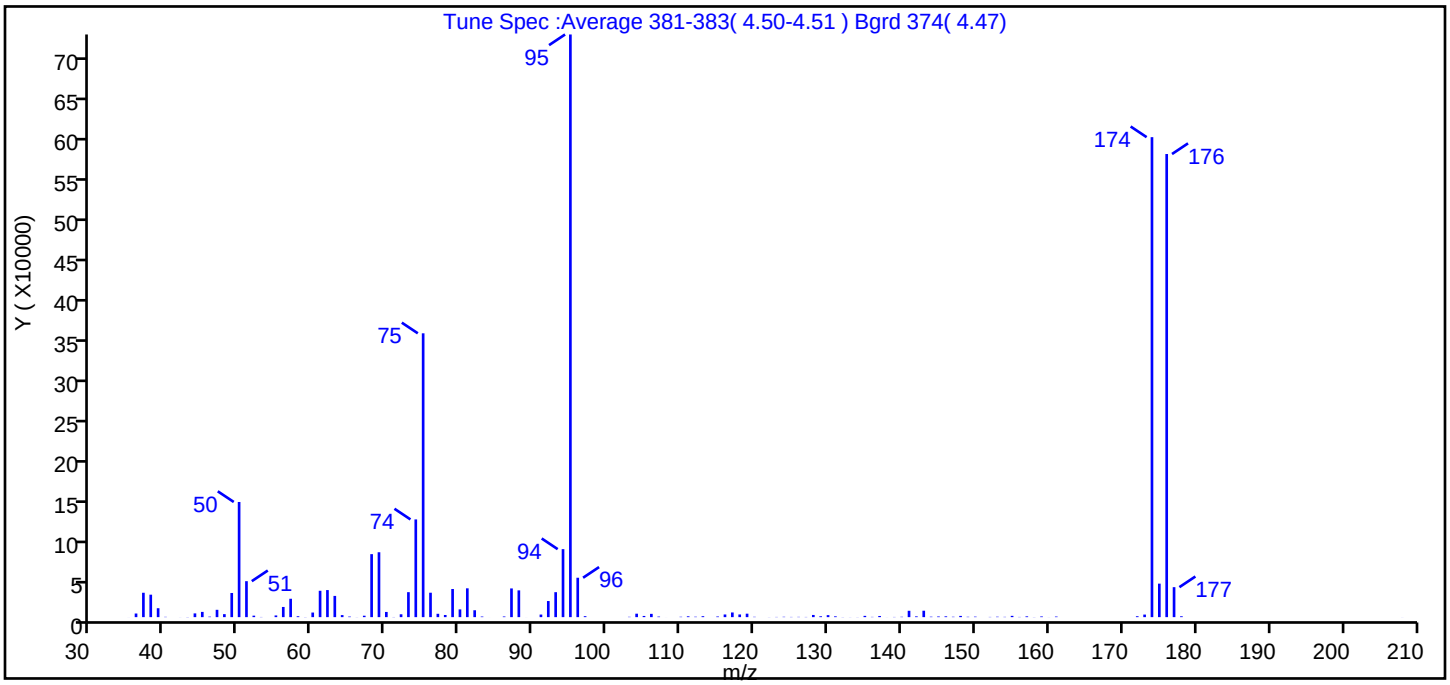
40MXSUR_00003 Amount Added: 40.00 Units: mL

MS Tune Report

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HDNUD16X.D
Injection Date: 16-Apr-2020 06:14:30 Instrument ID: MH
Lims ID: BFB
Client ID:
Operator ID: HMT ALS Bottle#: 21 Worklist Smp#: 1
Injection Vol: 500.0 mL Dil. Factor: 1.0000
Method: MH_TO15 Limit Group: MSA TO14A_15 Routine ICAL
Tune Method: BFB Method 8260

$ 5 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	19.8
75	30 to 60% of m/z 95	48.7
96	5 to 9% of m/z 95	6.8
173	Less than 2% of m/z 174	0.4 (0.5)
174	50 to 120% of m/z 95	82.4
175	5 to 9% of m/z 174	5.7 (7.0)
176	Greater than 95% but less than 101% of m/z 174	79.5 (96.5)
177	5 to 9% of m/z 176	5.1 (6.5)

Data File: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HDNUD16X.D\MH_TO15.rslt\spectra.d
Injection Date: 16-Apr-2020 06:14:30
Spectrum: Tune Spec :Average 381-383(4.50-4.51) Bgrd 374(4.47)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 122

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	42	68.00	78216	106.00	4085	140.00	440
36.00	4509	69.00	80568	107.00	679	141.00	7896
37.00	30280	70.00	6455	108.00	26	142.00	970
38.00	27888	71.00	189	110.00	461	143.00	7975
39.00	11077	72.00	3553	111.00	1045	144.00	568
40.00	363	73.00	31016	112.00	523	145.00	819
42.00	59	74.00	121328	113.00	1160	146.00	1003
43.00	178	75.00	352384	115.00	807	147.00	484
44.00	4651	76.00	30328	116.00	3316	148.00	1536
45.00	6512	77.00	4175	117.00	5801	149.00	443
46.00	599	78.00	2677	118.00	3335	150.00	621
47.00	9102	79.00	34936	119.00	4306	152.00	268
48.00	3723	80.00	9621	120.00	412	153.00	532
49.00	29992	81.00	35784	122.00	101	154.00	348
50.00	142976	82.00	8555	123.00	253	155.00	1598
51.00	44656	83.00	740	124.00	442	156.00	251
52.00	1845	84.00	25	125.00	267	157.00	981
53.00	224	86.00	809	126.00	336	158.00	137
55.00	2106	87.00	35648	127.00	247	159.00	844
56.00	12643	88.00	33240	128.00	2717	160.00	62
57.00	22832	89.00	33	129.00	1064	161.00	735
58.00	1098	91.00	3215	130.00	2490	172.00	1134
59.00	157	92.00	19992	131.00	1007	173.00	3188
60.00	5721	93.00	30992	132.00	137	174.00	595904
61.00	32736	94.00	84416	133.00	94	175.00	41592
62.00	33600	95.00	723392	134.00	110	176.00	574976
63.00	26360	96.00	48912	135.00	1586	177.00	37224
64.00	2546	97.00	1186	136.00	312	178.00	1070
65.00	693	103.00	405	137.00	1439	208.00	57
66.00	96	104.00	4292	138.00	44		
67.00	1773	105.00	1478	139.00	240		

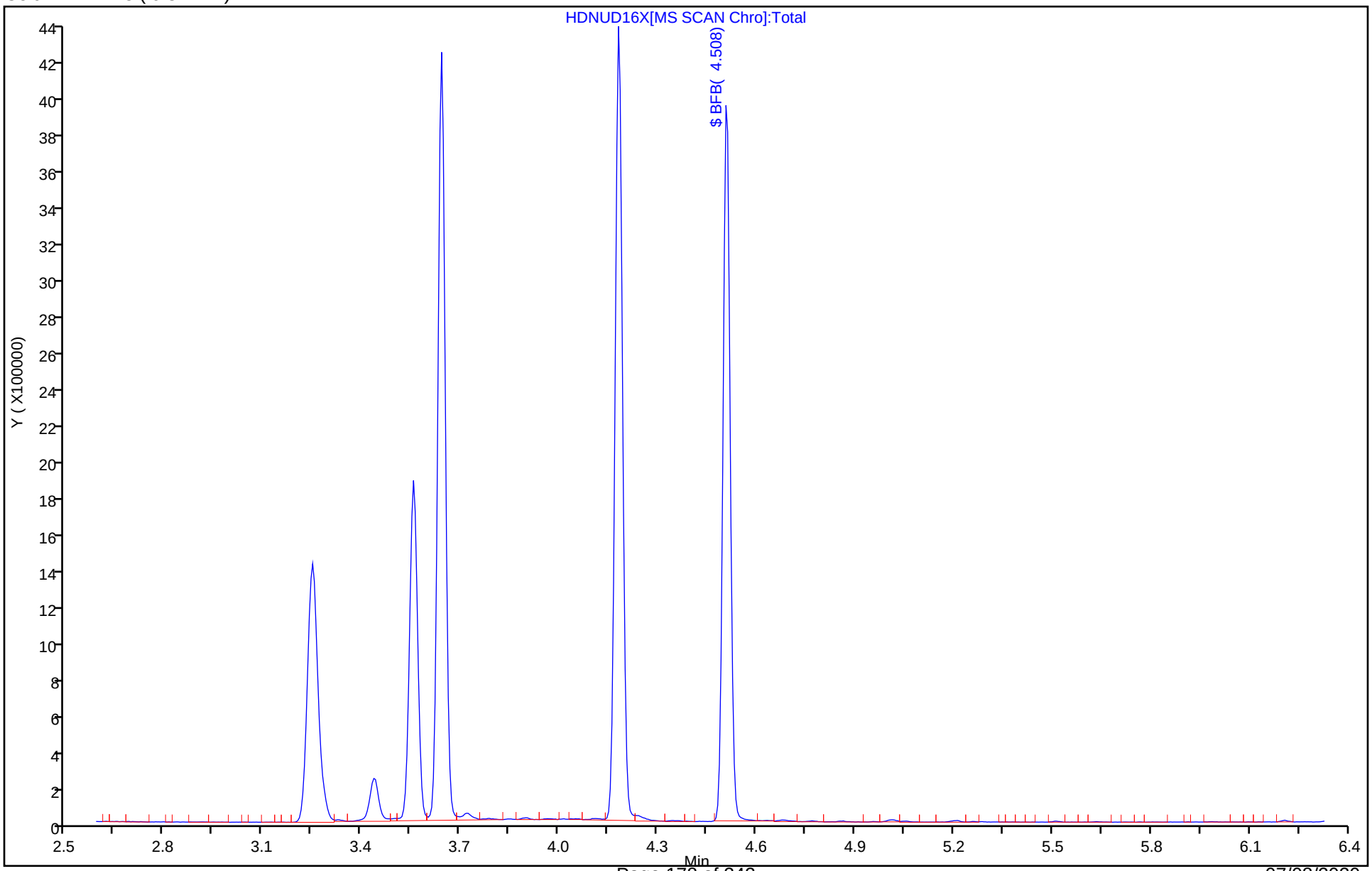
Report Date: 21-Apr-2020 10:48:14 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HDNUD16X.D

Injection Date:	16-Apr-2020 06:14:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	500.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MH\20200629-15882.b\HBFBF30.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	30-Jun-2020 07:21:30	ALS Bottle#:	16	Worklist Smp#:	1
Injection Vol:	500.0 mL	Dil. Factor:	1.0000		
Sample Info:	140-0015882-001				
Misc. Info.:	BFB				
Operator ID:	HMT	Instrument ID:	MH		
Method:	\\chromfs\Knoxville\ChromData\MH\20200629-15882.b\MH_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	01-Jul-2020 11:28:00	Calib Date:	16-Apr-2020 18:34:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC10.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1017				
First Level Reviewer: khachitpongpanits		Date:	01-Jul-2020 11:28:00		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
$ 5 BFB	95	4.503	4.503	0.000	0	447514	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

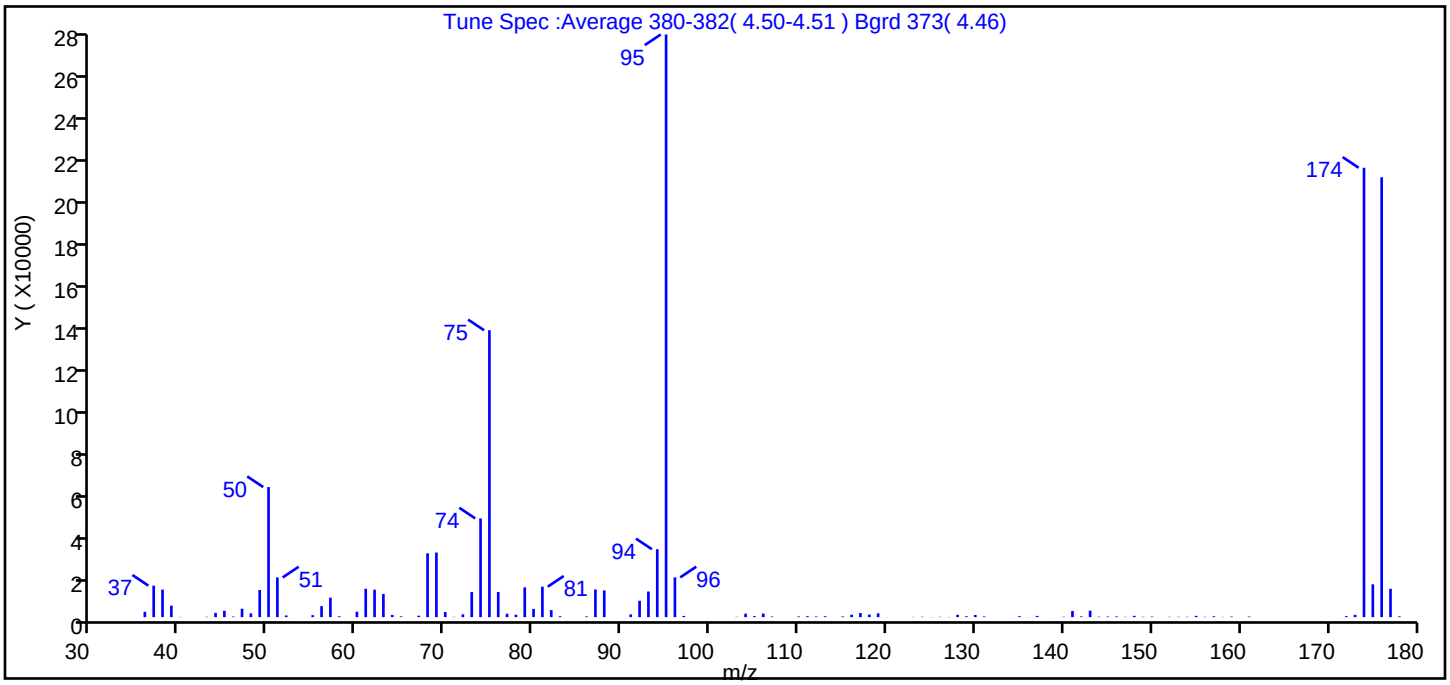
40MXSUR_00003 Amount Added: 40.00 Units: mL

MS Tune Report

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200629-15882.b\HBFBF30.D
Injection Date: 30-Jun-2020 07:21:30 Instrument ID: MH
Lims ID: BFB
Client ID:
Operator ID: HMT ALS Bottle#: 16 Worklist Smp#: 1
Injection Vol: 500.0 mL Dil. Factor: 1.0000
Method: MH_TO15 Limit Group: MSA TO14A_15 Routine ICAL
Tune Method: BFB Method 8260

$ 5 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	22.3
75	30 to 60% of m/z 95	49.2
96	5 to 9% of m/z 95	6.8
173	Less than 2% of m/z 174	0.4 (0.5)
174	50 to 120% of m/z 95	77.1
175	5 to 9% of m/z 174	5.6 (7.3)
176	Greater than 95% but less than 101% of m/z 174	75.5 (97.9)
177	5 to 9% of m/z 176	4.9 (6.4)

Data File: \\chromfs\Knoxville\ChromData\MH\20200629-15882.b\HBFBF30.D\MH_TO15.rslt\spectra.d
Injection Date: 30-Jun-2020 07:21:30
Spectrum: Tune Spec :Average 380-382(4.50-4.51) Bgrd 373(4.46)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 110

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2496	69.00	30312	106.00	1665	142.00	346
37.00	14771	70.00	2435	107.00	280	143.00	3044
38.00	12925	71.00	130	110.00	324	144.00	213
39.00	5404	72.00	1324	111.00	457	145.00	293
40.00	116	73.00	11755	112.00	302	146.00	342
43.00	184	74.00	46312	113.00	412	147.00	146
44.00	1970	75.00	134592	115.00	338	148.00	625
45.00	2989	76.00	11816	116.00	1132	149.00	169
46.00	286	77.00	1629	117.00	1929	150.00	258
47.00	3961	78.00	1134	118.00	1219	152.00	149
48.00	1755	79.00	13973	119.00	1781	153.00	157
49.00	12724	80.00	3871	120.00	64	154.00	159
50.00	61024	81.00	14284	123.00	116	155.00	626
51.00	18640	82.00	3290	124.00	190	156.00	162
52.00	796	83.00	437	125.00	75	157.00	407
53.00	36	86.00	368	126.00	148	158.00	117
55.00	936	87.00	12966	127.00	91	159.00	264
56.00	5168	88.00	12542	128.00	1085	161.00	278
57.00	9137	91.00	1292	129.00	418	171.00	25
58.00	409	92.00	7681	130.00	1023	172.00	475
60.00	2558	93.00	12019	131.00	319	173.00	1075
61.00	13320	94.00	31848	134.00	34	174.00	210816
62.00	12903	95.00	273344	135.00	451	175.00	15415
63.00	10821	96.00	18664	136.00	52	176.00	206336
64.00	1037	97.00	568	137.00	586	177.00	13305
65.00	367	103.00	150	139.00	33	178.00	364
67.00	692	104.00	1623	140.00	194		
68.00	29944	105.00	490	141.00	2894		

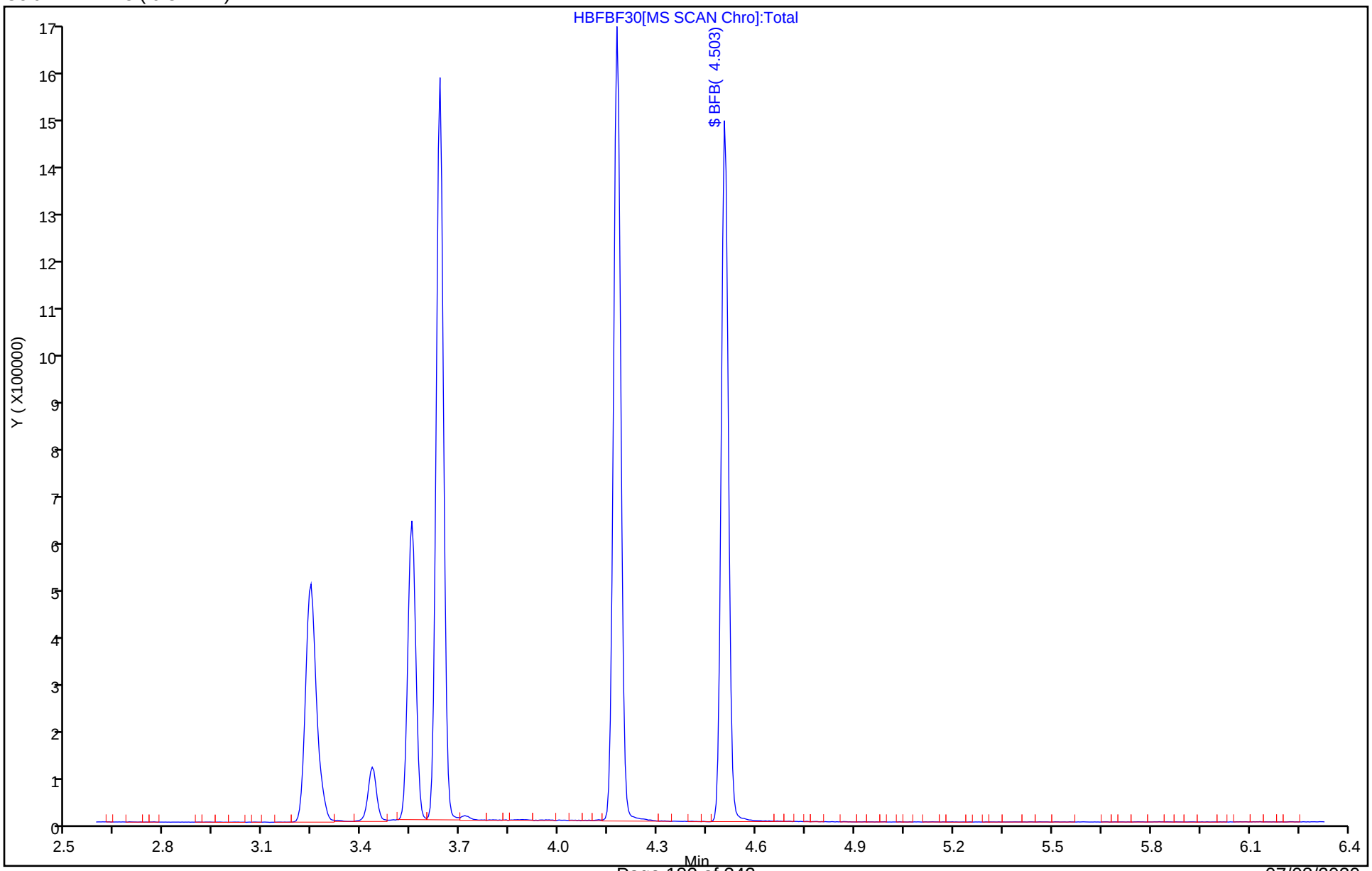
Report Date: 01-Jul-2020 11:28:00 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200629-15882.b\HBFBF30.D

Injection Date:	30-Jun-2020 07:21:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	500.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19488-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 140-40629/4

Matrix: Air Lab File ID: H500BF30.D

Analysis Method: TO 15 LL Date Collected:

Sample wt/vol: 500(mL) Date Analyzed: 06/30/2020 09:32

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 40629 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	ND		0.080	0.0080
56-23-5	Carbon tetrachloride	153.81	ND		0.080	0.0070
75-45-6	Chlorodifluoromethane	86.47	ND		0.080	0.022
67-66-3	Chloroform	119.38	ND		0.080	0.0070
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.080	0.010
75-71-8	Dichlorodifluoromethane	120.91	ND		0.080	0.014
75-34-3	1,1-Dichloroethane	98.96	ND		0.080	0.0070
107-06-2	1,2-Dichloroethane	98.96	ND		0.080	0.010
75-35-4	1,1-Dichloroethene	96.94	ND		0.080	0.0080
100-41-4	Ethylbenzene	106.17	ND		0.080	0.013
75-09-2	Methylene Chloride	84.93	0.169	J	0.40	0.16
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.40	0.052
91-20-3	Naphthalene	128.17	ND		0.040	0.040
127-18-4	Tetrachloroethene	165.83	ND		0.080	0.0070
108-88-3	Toluene	92.14	ND		0.12	0.078
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.080	0.0070
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.080	0.064
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.080	0.037
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.080	0.0070
79-01-6	Trichloroethene	131.39	ND		0.040	0.0060
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.080	0.036
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.080	0.020
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.080	0.022
75-01-4	Vinyl chloride	62.50	ND		0.040	0.026
1330-20-7	Xylenes, Total	106.17	ND		0.16	0.024

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	91		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19488-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 140-40629/4

Matrix: Air Lab File ID: H500BF30.D

Analysis Method: TO 15 LL Date Collected:

Sample wt/vol: 500(mL) Date Analyzed: 06/30/2020 09:32

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 40629 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	ND		0.26	0.026
56-23-5	Carbon tetrachloride	153.81	ND		0.50	0.044
75-45-6	Chlorodifluoromethane	86.47	ND		0.28	0.078
67-66-3	Chloroform	119.38	ND		0.39	0.034
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.32	0.040
75-71-8	Dichlorodifluoromethane	120.91	ND		0.40	0.069
75-34-3	1,1-Dichloroethane	98.96	ND		0.32	0.028
107-06-2	1,2-Dichloroethane	98.96	ND		0.32	0.040
75-35-4	1,1-Dichloroethene	96.94	ND		0.32	0.032
100-41-4	Ethylbenzene	106.17	ND		0.35	0.056
75-09-2	Methylene Chloride	84.93	0.586	J	1.4	0.56
1634-04-4	Methyl tert-butyl ether	88.15	ND		1.4	0.19
91-20-3	Naphthalene	128.17	ND		0.21	0.21
127-18-4	Tetrachloroethene	165.83	ND		0.54	0.047
108-88-3	Toluene	92.14	ND		0.45	0.29
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.32	0.028
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.59	0.47
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.44	0.20
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.44	0.038
79-01-6	Trichloroethene	131.39	ND		0.21	0.032
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.39	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.39	0.098
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.39	0.11
75-01-4	Vinyl chloride	62.50	ND		0.10	0.066
1330-20-7	Xylenes, Total	106.17	ND		0.69	0.10

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	91		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MH\20200629-15882.b\H500BF30.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 30-Jun-2020 09:32:30 ALS Bottle#: 16 Worklist Smp#: 4
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0015882-004
Misc. Info.: 500ML BLK
Operator ID: HMT Instrument ID: MH

Method: \\chromfs\Knoxville\ChromData\MH\20200629-15882.b\MH_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 01-Jul-2020 11:30:16 Calib Date: 16-Apr-2020 18:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC10.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1017

First Level Reviewer: khachitpongpanits Date: 01-Jul-2020 11:30:16

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.572	8.577	-0.005	97	131346	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.779	10.779	0.000	95	973248	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.565	15.565	0.000	89	754773	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.213	17.234	-0.021	88	458536	4.00	3.62	
7 Propene	41	3.553	3.553	0.000	98	39409		0.0544	7
31 Methylene Chloride	84	6.050	6.055	-0.005	99	45217		0.1686	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

40MXISSURP_00004 Amount Added: 40.00 Units: mL Run Reagent

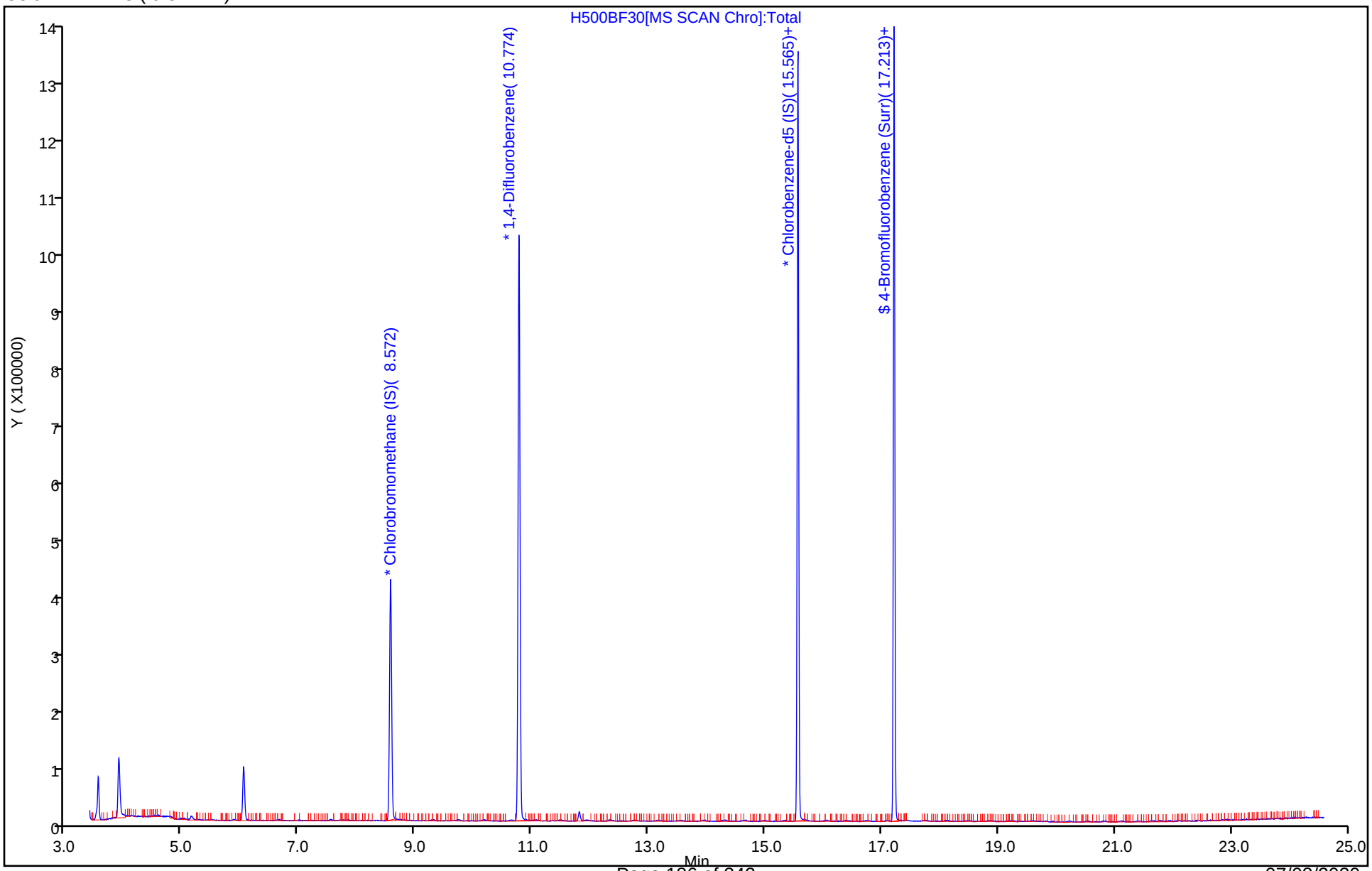
Report Date: 01-Jul-2020 11:30:16 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200629-15882.b\H500BF30.D

Injection Date:	30-Jun-2020 09:32:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	MB			Worklist Smp#:	4
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MH\20200629-15882.b\H500BF30.D				
Lims ID:	MB				
Client ID:					
Sample Type:	MB				
Inject. Date:	30-Jun-2020 09:32:30	ALS Bottle#:	16	Worklist Smp#:	4
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0015882-004				
Misc. Info.:	500ML BLK				
Operator ID:	HMT	Instrument ID:	MH		
Method:	\\chromfs\Knoxville\ChromData\MH\20200629-15882.b\MH_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	01-Jul-2020 11:30:16	Calib Date:	16-Apr-2020 18:34:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC10.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1017				

First Level Reviewer: khachitpongpanits Date: 01-Jul-2020 11:30:16

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.00	3.62	90.53

Report Date: 01-Jul-2020 11:30:16 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MH\20200629-15882.b\H500BF30.D

Injection Date: 30-Jun-2020 09:32:30 Instrument ID: MH

Lims ID: MB

Client ID:

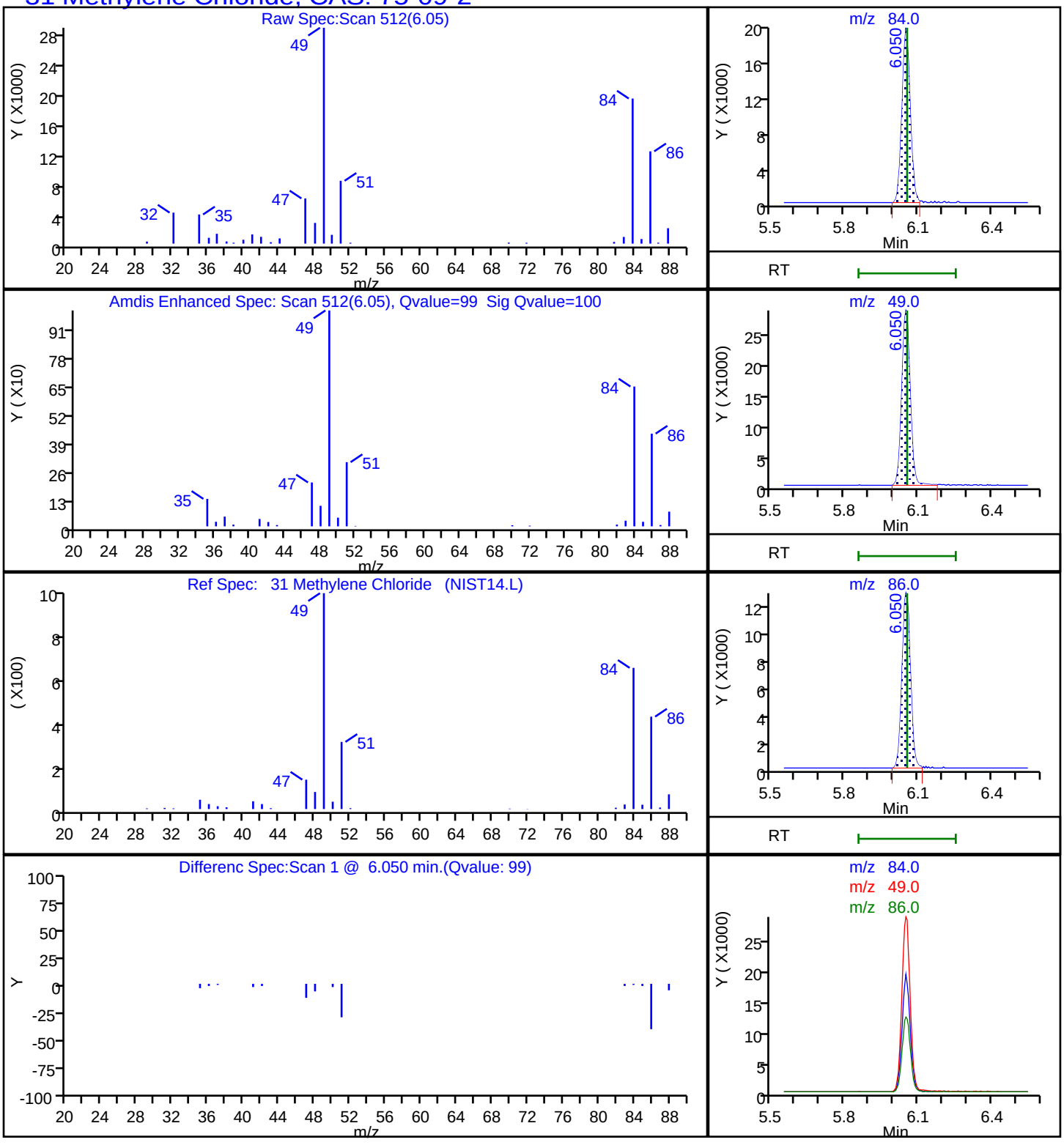
Operator ID: HMT ALS Bottle#: 16 Worklist Smp#: 4

Purge Vol: 500.000 mL Dil. Factor: 1.0000

Method: MH_TO15 Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm) Detector MS SCAN

31 Methylene Chloride, CAS: 75-09-2



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19488-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 140-40629/1002

Matrix: Air Lab File ID: HCCVF30-LCS.d

Analysis Method: TO 15 LL Date Collected:

Sample wt/vol: 500(mL) Date Analyzed: 06/30/2020 07:49

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 40629 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	1.16		0.080	0.0080
56-23-5	Carbon tetrachloride	153.81	1.18		0.080	0.0070
75-45-6	Chlorodifluoromethane	86.47	1.24		0.080	0.022
67-66-3	Chloroform	119.38	1.25		0.080	0.0070
156-59-2	cis-1,2-Dichloroethene	96.94	1.31		0.080	0.010
75-71-8	Dichlorodifluoromethane	120.91	1.20		0.080	0.014
75-34-3	1,1-Dichloroethane	98.96	1.26		0.080	0.0070
107-06-2	1,2-Dichloroethane	98.96	1.16		0.080	0.010
75-35-4	1,1-Dichloroethene	96.94	1.28		0.080	0.0080
100-41-4	Ethylbenzene	106.17	1.29		0.080	0.013
75-09-2	Methylene Chloride	84.93	1.58		0.40	0.16
1634-04-4	Methyl tert-butyl ether	88.15	1.19		0.40	0.052
91-20-3	Naphthalene	128.17	1.58		0.040	0.040
127-18-4	Tetrachloroethene	165.83	1.20		0.080	0.0070
108-88-3	Toluene	92.14	1.24		0.12	0.078
156-60-5	trans-1,2-Dichloroethene	96.94	1.32		0.080	0.0070
120-82-1	1,2,4-Trichlorobenzene	181.45	1.42		0.080	0.064
71-55-6	1,1,1-Trichloroethane	133.41	1.23		0.080	0.037
79-00-5	1,1,2-Trichloroethane	133.41	1.24		0.080	0.0070
79-01-6	Trichloroethene	131.39	1.20		0.040	0.0060
526-73-8	1,2,3-Trimethylbenzene	120.19	1.42		0.080	0.036
95-63-6	1,2,4-Trimethylbenzene	120.20	1.36		0.080	0.020
108-67-8	1,3,5-Trimethylbenzene	120.20	1.29		0.080	0.022
75-01-4	Vinyl chloride	62.50	1.08		0.040	0.026
1330-20-7	Xylenes, Total	106.17	4.01		0.16	0.024

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	105		60-140

Eurofins Environment Testing America
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MH\20200629-15882.b\HCCVF30-LCS.d
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 30-Jun-2020 07:49:30 ALS Bottle#: 1 Worklist Smp#: 1002
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0015882-002
Misc. Info.: P116 80ML
Operator ID: HMT Instrument ID: MH

Method: \\chromfs\Knoxville\ChromData\MH\20200629-15882.b\MH_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 01-Jul-2020 11:29:24 Calib Date: 16-Apr-2020 18:34:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC10.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1017

First Level Reviewer: khachitpongpanits Date: 01-Jul-2020 11:29:24

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.577	8.577	0.000	97	116293	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.779	10.779	0.000	95	871871	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.565	15.565	0.000	89	703225	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.234	17.234	0.000	88	493154	4.00	4.18	
6 Chlorodifluoromethane	51	3.543	3.543	0.000	97	152394	1.60	1.24	
7 Propene	41	3.553	3.553	0.000	98	96512	1.60	1.49	
8 Dichlorodifluoromethane	85	3.605	3.605	0.000	100	225486	1.60	1.20	
9 Chloromethane	52	3.781	3.781	0.000	97	23647	1.60	1.15	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.786	3.786	0.000	97	136647	1.60	1.09	
11 Acetaldehyde	44	3.925	3.925	0.000	97	151786	8.00	6.62	
12 Vinyl chloride	62	3.941	3.941	0.000	99	73147	1.60	1.08	
13 Butane	43	4.024	4.024	0.000	83	99436	1.60	1.24	
14 Butadiene	54	4.024	4.024	0.000	71	53059	1.60	1.16	
15 Bromomethane	94	4.334	4.334	0.000	98	81587	1.60	1.15	
16 Chloroethane	64	4.468	4.468	0.000	94	34106	1.60	1.19	
17 Ethanol	31	4.561	4.561	0.000	97	162673	8.00	7.84	
18 Vinyl bromide	106	4.758	4.758	0.000	96	70419	1.60	1.10	
19 2-Methylbutane	43	4.804	4.804	0.000	89	79899	1.60	1.36	
20 Trichlorofluoromethane	101	5.016	5.016	0.000	99	212550	1.60	1.26	
21 Acrolein	56	5.026	5.026	0.000	95	23269	1.60	1.18	
22 Acetonitrile	40	5.099	5.099	0.000	99	37244	1.60	1.64	
23 Acetone	58	5.140	5.140	0.000	99	105837	4.80	4.04	
25 Isopropyl alcohol	45	5.223	5.223	0.000	94	290120	4.80	3.72	
24 Pentane	72	5.233	5.233	0.000	97	10138	1.60	1.39	
26 Ethyl ether	31	5.393	5.393	0.000	92	84377	1.60	1.67	
27 1,1-Dichloroethene	96	5.709	5.709	0.000	97	72464	1.60	1.28	
29 2-Methyl-2-propanol	59	5.807	5.807	0.000	94	96648	1.60	1.03	
28 Acrylonitrile	53	5.812	5.812	0.000	94	59214	1.60	1.38	
30 1,1,2-Trichloro-1,2,2-trifluoroe	101	5.879	5.879	0.000	92	173062	1.60	1.32	
31 Methylene Chloride	84	6.055	6.055	0.000	98	111811	1.60	1.58	
32 3-Chloro-1-propene	39	6.065	6.065	0.000	96	68238	1.60	1.43	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
33 Carbon disulfide	76	6.210	6.210	0.000	100	224681	1.60	1.32	
34 trans-1,2-Dichloroethene	96	6.851	6.851	0.000	97	73559	1.60	1.32	
35 2-Methylpentane	43	6.861	6.861	0.000	96	163296	1.60	1.48	
36 Methyl tert-butyl ether	73	6.970	6.970	0.000	96	155222	1.60	1.19	
37 1,1-Dichloroethane	63	7.264	7.264	0.000	100	140756	1.60	1.26	
38 Vinyl acetate	43	7.368	7.368	0.000	100	199725	1.60	1.44	
39 2-Butanone (MEK)	72	7.817	7.817	0.000	96	32066	1.60	1.29	
40 Hexane	56	7.838	7.838	0.000	89	55189	1.60	1.32	
41 Isopropyl ether	45	7.993	7.993	0.000	97	259932	1.60	1.45	
42 cis-1,2-Dichloroethene	96	8.246	8.246	0.000	95	76504	1.60	1.31	
43 Ethyl acetate	43	8.427	8.427	0.000	98	175233	1.60	1.40	
44 Chloroform	83	8.587	8.587	0.000	97	171669	1.60	1.25	
45 Tert-butyl ethyl ether	59	8.665	8.665	0.000	98	193461	1.60	1.24	
46 Tetrahydrofuran	42	8.980	8.980	0.000	93	79921	1.60	1.40	
47 1,1,1-Trichloroethane	97	9.611	9.611	0.000	97	157156	1.60	1.23	
48 1,2-Dichloroethane	62	9.724	9.724	0.000	96	106768	1.60	1.16	
49 n-Butanol	31	10.179	10.179	0.000	87	24670	1.60	1.26	
50 Cyclohexane	69	10.215	10.215	0.000	79	30023	1.60	1.20	
51 Benzene	78	10.221	10.221	0.000	97	219518	1.60	1.16	
52 Carbon tetrachloride	117	10.241	10.241	0.000	94	161988	1.60	1.18	
53 2,3-Dimethylpentane	71	10.339	10.339	0.000	90	43563	1.60	1.21	
54 Thiophene	84	10.500	10.500	0.000	96	125186	1.60	1.18	
55 Isooctane	57	10.991	10.991	0.000	98	346952	1.60	1.20	
56 n-Heptane	71	11.378	11.378	0.000	93	64964	1.60	1.22	
57 1,2-Dichloropropane	63	11.466	11.466	0.000	90	90115	1.60	1.16	
58 Trichloroethene	130	11.502	11.502	0.000	95	93088	1.60	1.20	
59 Dibromomethane	93	11.590	11.590	0.000	91	107736	1.60	1.13	
60 Dichlorobromomethane	83	11.740	11.740	0.000	98	174114	1.60	1.17	
61 1,4-Dioxane	88	11.750	11.750	0.000	92	29742	1.60	1.08	
62 Methyl methacrylate	41	11.833	11.833	0.000	91	97795	1.60	1.40	
63 Methylcyclohexane	83	12.278	12.278	0.000	93	117766	1.60	1.10	
64 4-Methyl-2-pentanone (MIBK)	43	12.691	12.691	0.000	98	185503	1.60	1.37	
65 cis-1,3-Dichloropropene	75	12.758	12.758	0.000	97	122894	1.60	1.22	
66 trans-1,3-Dichloropropene	75	13.461	13.461	0.000	98	101756	1.60	1.21	
67 Toluene	91	13.580	13.580	0.000	93	252388	1.60	1.24	
68 1,1,2-Trichloroethane	83	13.657	13.657	0.000	97	91784	1.60	1.24	
69 2-Hexanone	58	14.045	14.045	0.000	90	79679	1.60	1.24	
70 n-Octane	85	14.278	14.278	0.000	95	69187	1.60	1.27	
71 Chlorodibromomethane	129	14.366	14.366	0.000	97	171764	1.60	1.32	
72 Ethylene Dibromide	107	14.655	14.655	0.000	98	152404	1.60	1.25	
73 Tetrachloroethene	129	14.732	14.732	0.000	91	90693	1.60	1.20	
74 Chlorobenzene	112	15.611	15.611	0.000	93	197766	1.60	1.21	
75 2,3-Dimethylheptane	43	15.632	15.632	0.000	95	262512	1.60	1.42	
76 Ethylbenzene	91	15.901	15.901	0.000	99	326388	1.60	1.29	
77 m-Xylene & p-Xylene	91	16.066	16.066	0.000	98	512002	3.20	2.64	
78 n-Nonane	57	16.490	16.490	0.000	94	164295	1.60	1.32	
79 Bromoform	173	16.516	16.516	0.000	92	170184	1.60	1.27	
80 Styrene	104	16.536	16.536	0.000	99	185901	1.60	1.28	
81 o-Xylene	91	16.593	16.593	0.000	98	275225	1.60	1.37	
82 1,1,2,2-Tetrachloroethane	83	16.929	16.929	0.000	98	246685	1.60	1.28	
83 1,2,3-Trichloropropane	110	17.100	17.100	0.000	97	55110	1.60	1.30	
84 Isopropylbenzene	105	17.203	17.203	0.000	96	356740	1.60	1.32	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
85 N-Propylbenzene	120	17.777	17.777	0.000	98	95576	1.60	1.37	
86 2-Chlorotoluene	126	17.823	17.823	0.000	98	94937	1.60	1.40	
87 4-Ethyltoluene	105	17.932	17.932	0.000	98	372277	1.60	1.39	
88 1,3,5-Trimethylbenzene	120	18.014	18.014	0.000	91	142993	1.60	1.29	
89 Alpha Methyl Styrene	118	18.257	18.257	0.000	86	143859	1.60	1.35	
90 n-Decane	57	18.319	18.319	0.000	90	239330	1.60	1.37	
91 tert-Butylbenzene	119	18.459	18.459	0.000	89	316865	1.60	1.33	
92 1,2,4-Trimethylbenzene	105	18.469	18.469	0.000	96	322977	1.60	1.36	
93 sec-Butylbenzene	105	18.738	18.738	0.000	98	475954	1.60	1.39	
94 1,3-Dichlorobenzene	146	18.753	18.753	0.000	97	208019	1.60	1.33	
95 Benzyl chloride	91	18.831	18.831	0.000	97	231995	1.60	1.16	
96 1,4-Dichlorobenzene	146	18.847	18.847	0.000	94	203317	1.60	1.36	
97 4-Isopropyltoluene	119	18.909	18.909	0.000	96	369578	1.60	1.41	
98 1,2,3-Trimethylbenzene	105	18.960	18.960	0.000	99	336186	1.60	1.42	
99 Butylcyclohexane	83	19.017	19.017	0.000	92	278725	1.60	1.38	
100 1,2-Dichlorobenzene	146	19.219	19.219	0.000	80	209796	1.60	1.33	
101 2,3-Dihydroindene	117	19.219	19.219	0.000	92	305310	1.60	1.37	
102 Indene	116	19.353	19.353	0.000	89	261364	1.60	1.31	
103 n-Butylbenzene	91	19.358	19.358	0.000	96	433102	1.60	1.30	
104 Undecane	57	19.679	19.679	0.000	95	269930	1.60	1.37	
105 1,2-Dibromo-3-Chloropropane	157	19.839	19.839	0.000	92	113790	1.60	1.32	
106 1,2,4,5-Tetramethylbenzene	119	20.133	20.133	0.000	96	328144	1.60	1.17	
107 Dodecane	57	20.769	20.769	0.000	96	244754	1.60	1.26	
108 1,2,4-Trichlorobenzene	180	20.971	20.971	0.000	93	139817	1.60	1.42	
109 Naphthalene	128	21.115	21.115	0.000	99	355130	1.60	1.58	
110 Hexachlorobutadiene	225	21.338	21.338	0.000	89	157896	1.60	1.16	
111 1,2,3-Trichlorobenzene	180	21.410	21.410	0.000	93	145462	1.60	1.31	
112 2-Methylnaphthalene	142	22.061	22.061	0.000	97	73849	1.60	0.9559	
113 1-Methylnaphthalene	142	22.190	22.190	0.000	97	108215	1.60	1.13	
A 115 C8 Range	1	14.273	(14.226-14.319)		0	744476	1.60	1.31	
S 116 Xylenes, Total	100				0		4.80	4.02	
S 117 1,2-Dichloroethene, Total	1				0		3.20	2.63	

Reagents:

40CV101P_00116	Amount Added: 80.00	Units: ml	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

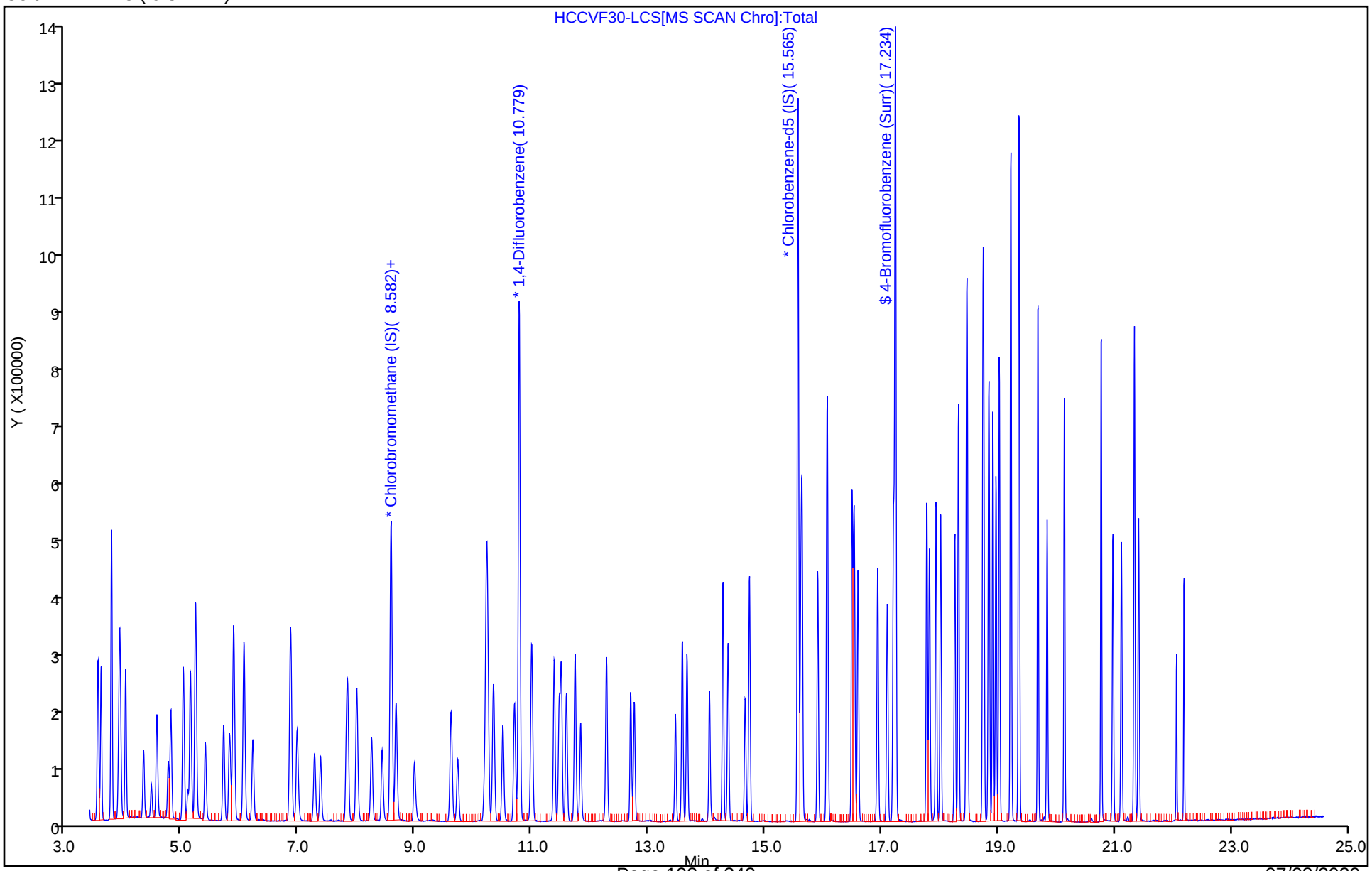
Report Date: 01-Jul-2020 11:29:27 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins Environment Testing America

Data File: \\chromfs\Knoxville\ChromData\MH\20200629-15882.b\HCCVF30-LCS.d

Injection Date:	30-Jun-2020 07:49:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	LCS			Worklist Smp#:	1002
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins Environment Testing America
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MH\20200629-15882.b\HCCVF30-LCS.d				
Lims ID:	LCS				
Client ID:					
Sample Type:	LCS				
Inject. Date:	30-Jun-2020 07:49:30	ALS Bottle#:	1	Worklist Smp#:	1002
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0015882-002				
Misc. Info.:	P116 80ML				
Operator ID:	HMT	Instrument ID:	MH		
Method:	\\chromfs\Knoxville\ChromData\MH\20200629-15882.b\MH_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	01-Jul-2020 11:29:24	Calib Date:	16-Apr-2020 18:34:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MH\20200416-15239.b\HD16IC10.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1017				

First Level Reviewer: khachitpongpanits Date: 01-Jul-2020 11:29:24

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.00	4.18	104.50

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19488-1

SDG No.:

Instrument ID: MH Start Date: 04/16/2020 06:14

Analysis Batch Number: 39100 End Date: 04/16/2020 23:05

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 140-39100/1		04/16/2020 06:14	1	HDNUD16X.D	RTX-5 0.32(mm)
IC 140-39100/3		04/16/2020 08:03	1	HD16IC01.D	RTX-5 0.32(mm)
IC 140-39100/4		04/16/2020 08:55	1	HD16IC02.D	RTX-5 0.32(mm)
140-18735-A-5 MDLV		04/16/2020 08:55	1		RTX-5 0.32(mm)
IC 140-39100/5		04/16/2020 09:47	1	HD16IC03.D	RTX-5 0.32(mm)
140-18735-A-6 MDLV		04/16/2020 09:47	1		RTX-5 0.32(mm)
IC 140-39100/6		04/16/2020 10:40	1	HD16IC04.D	RTX-5 0.32(mm)
140-18735-A-7 MDLV		04/16/2020 10:40	1		RTX-5 0.32(mm)
IC 140-39100/7		04/16/2020 11:33	1	HD16IC05.D	RTX-5 0.32(mm)
140-18735-A-8 MDLV		04/16/2020 11:33	1		RTX-5 0.32(mm)
IC 140-39100/8		04/16/2020 12:26	1	HD16IC06.D	RTX-5 0.32(mm)
ICIS 140-39100/9		04/16/2020 13:19	1	HD16IC07.D	RTX-5 0.32(mm)
IC 140-39100/11		04/16/2020 15:04	1	HD16IC08.D	RTX-5 0.32(mm)
IC 140-39100/13		04/16/2020 16:49	1	HD16C09.D	RTX-5 0.32(mm)
IC 140-39100/15		04/16/2020 18:34	1	HD16IC10.D	RTX-5 0.32(mm)
ICV 140-39100/17		04/16/2020 20:21	1	HD16ICV.D	RTX-5 0.32(mm)
ZZZZZ		04/16/2020 23:05	1		RTX-5 0.32(mm)

Eurofins/TestAmerica Knoxville GC/MS Air - Initial Calibration Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 21 & KNOX-MS-0023, Rev 4

Analysis Date:	4/16/20	Instrument:	MH	Chrom WL #:	15239	TALS Batch & Event #	TO14/15: 2402 / 39100	DODS: 2403/39101
							DOD: 2405 / 39103	OHIO: 2404 / 39102

Chrom/Worklist Review	1st	Comments	2nd
1. Re-read each Limit Group [method editor-limit groups]	✓		na
2. Verify LODV in Chrom [method editor -> edit -> MDL]	✓		na
3. Are the reagents and init/final volumes correct and first level "unlock/clear"? (Verify reagents & amt. injected at each level) [WL Sample Reagents Tab vs. Entech]	✓		
4. Files linked properly to calibration levels? [Sample List- Lab ID vs. Info]	✓		
5. Did BFB meet tune criteria? [F8]	✓		
6. Were all standards injected within 24 hr of BFB? [F7]	✓		
7. High point checked for saturation and point removed if so? [Chrom]	✓	Removed.	
8. If manual integrations performed, are they properly performed, correct, baseline clearly identified, and correct reason given? [Chrom]	NA		
9. RT for each IS ±20 sec avg. RT? [F6 IstdRec]	✓		
10. Area for each IS ± 40% avg. area? [F6 IstdRec]	✓		
11. Each analyte ± 0.06 RRT of avg. RRT? [F6 - RRT]	✓		
12. Elution order checked on isomeric pairs? [Chrom]			
• dichlorodifluoromethane / 1,2-dichlorotetrafluoroethane	✓		
• 2-methyl butane / acrolein	✓		
• trichlorofluoromethane / 1,1,2-trichlorotrifluoroethane	✓		
• vinyl acetate / hexane	✓		
• cis- and trans- isomers	✓		
• ethyl benzene / m/p-xylene / o-xylene	✓		
• n-propylbenzene/4-ethyl toluene/1,3,5-trimethylbenzene/1,2,4-trimethylbenzene/ sec-butylbenzene/1,2,3-trimethylbenzene	✓		
• tert-butylbenzene/4-isopropyltoluene	✓		
• 1,3- , 1,4- , and 1,2-dichlorobenzene	✓		
• 1,2-dimethyl-4-ethylbenzene/1,2,4,5-, 1,2,3,5-, and 1,2,3,4-tetramethylbenzenes	✓	In ICV	
• 1,2,4- and 1,2,3-trichlorobenzenes	✓		
• 2-, and 1-methylnaphthalene	✓		
13. "Range" analytes & internal standard RIC ID'd correctly, inspected for interferences & proper integration?	✓		

MLG Review	TO	DOD	OH	Comments	TO-	DOD	OH
14. Is %RSD for all target analytes ≤ 30%? (with up to 2 compounds with RSD ≤ 40%) 1& 2 methylnaphthalene ≤ 50% MeCl2 naph [F6 Σ]	✓	✓	✓				
15. Were at least 5 levels of each compound analyzed? [F6]	✓	✓	✓				
16. Is low level std at or <RL and are the remaining points consec.? [F6]	✓	naph	✓	DOD: RL naph 0.76			
17. At least 6 consec. points used for quad curves; at least 5 consec. points for linear curves? (Note: Ohio does not allow quad) [F6]	✓	✓	✓				
18. If curves were used, is correlation coefficient ≥0.990? [F6]	✓	✓					
19. Is the intercept less than the RL for each curve? [F6]	✓	✓					
20. For quadratic: is a tangent's slope to the curve entirely positive or negative and continuous. [Cntrl-C, details]	✓	✓	na				na
21. Is low point RSE ≤ 50 %? [F6]	✓	✓	✓				
22. Is the second source analysis within limits? [F8 - icv]	✓	✓	✓	↑ICV DOD			
Analyst/Date: 4/21/20 ICV ↑ IPA · DOD				**2nd Level Reviewer/Date:**			

TALS Review	TO	DOD	OH	Comments	TO	DOD	OH
23. Upload ICAL	✓	✓	✓		na	na	na
24. Graphics uploaded? [paperclip]	✓	✓	✓				
25. All points are in the most recent active calibration event? [Calibration Events –'Fix ICAL linkage' if needed]	✓	✓	✓				
26. Runs linked to BFB? [QC Links]	✓	✓	✓				
27. Run Checklist and acknowledge findings [F8]	✓	✓	✓				
28. If criteria not met, was a NCM generated?	✓	✓	✓				
29. After review in TALS, approve the method in TALS.	na	na	na				
30. After verifying TALS is correct, lock method in Chrom <resolve any error issues>	na	na	na				
31. Checklist & Entech report scanned, attached & assigned properly?	na	na	na				

Analyst/date:	2nd Level Reviewer/date:
Comments: 4/21/20	Comments:
1245 TMBZ. TTMBZ 130 %. RSD. 4/20/20	

Eurofins/TestAmerica Knoxville GC/MS Air - Initial Calibration Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 20 & KNOX-MS-0023, Rev 4

Analysis Date:	4/16/20	Instrument:	MH	Chrom WL #:	15239	TALS Batch & Event #	TO14/15: 39100 /2402	DOD5: 39101/2403
							DOD: 39103 / 2405	OHIO: 39102/2404

Chrom/Worklist Review	1st	Comments	2nd
1. Re-read each Limit Group [method editor-limit groups]			na
2. Verify LODV in Chrom [method editor -> edit -> MDL]			na
3. Are the reagents and init/final volumes correct and first level "unlock/clear"? (Verify reagents & amt. injected at each level) [WL Sample Reagents Tab vs. Entech]			Y
4. Files linked properly to calibration levels? [Sample List- Lab ID vs. Info]			Y
5. Did BFB meet tune criteria? [F8]			Y
6. Were all standards injected within 24 hr of BFB? [F7]			Y
7. High point checked for saturation and point removed if so? [Chrom]			Y
8. If manual integrations performed, are they properly performed, correct, baseline clearly identified, and correct reason given? [Chrom]			NA
9. RT for each IS ±20 sec avg. RT? [F6 IstdRec]			Y
10. Area for each IS ± 40% avg. area? [F6 IstdRec]			Y
11. Each analyte ± 0.06 RRT of avg. RRT? [F6 - RRT]			Y
12. Elution order checked on isomeric pairs? [Chrom]			
• dichlorodifluoromethane / 1,2-dichlorotetrafluoroethane			Y
• 2-methyl butane / acrolein			Y
• trichlorofluoromethane / 1,1,2-trichlorotrifluoroethane			Y
• vinyl acetate / hexane			Y
• cis- and trans- isomers			Y
• ethyl benzene / m/p-xylene / o-xylene			Y
• n-propylbenzene/4-ethyl toluene/1,3,5-trimethylbenzene/1,2,4-trimethylbenzene/ sec-butylbenzene/1,2,3-trimethylbenzene			NA
• tert-butylbenzene/4-isopropyltoluene			Y
• 1,3- , 1,4- , and 1,2-dichlorobenzene			Y
• 1,2-dimethyl-4-ethylbenzene/1,2,4,5-, 1,2,3,5-, and 1,2,3,4-tetramethylbenzenes			Y
• 1,2,4- and 1,2,3-trichlorobenzenes			Y
• 2-, and 1-methylnaphthalene			Y
13. "Range" analytes & internal standard RIC ID'd correctly, inspected for interferences & proper integration?			Y

MLG Review	TO	DOD	OH	Comments	TO-	DOD	OH
14. Is %RSD for all target analytes ≤ 30%? (with up to 2 compounds with RSD ≤ 40%) 1& 2 methylnaphthalene ≤ 50% [F6 ∑]				mecl2 naphthalene	Y	Y	Y
15. Were at least 5 levels of each compound analyzed? [F6]					Y	Y	Y
16. Is low level std at or <RL and are the remaining points consec.? [F6]					Y	Y	Y
17. At least 6 consec. points used for quad curves; at least 5 consec. points for linear curves? (Note: Ohio does not allow quad) [F6]					Y	Y	Y
18. If curves were used, is correlation coefficient ≥0.990? [F6]					Y	Y	Y
19. Is the intercept less than the RL for each curve? [F6]					Y	Y	Y
20. For quadratic: is a tangent's slope to the curve entirely positive or negative and continuous. [Cntrl-C, details]			na		Y	Y	na
21. Is low point RSE ≤ 50 %? [F6]					Y	Y	Y
22. Is the second source analysis within limits? [F8 - icv]				IPA high DOD icv	Y	Y	Y

Analyst/Date:	2nd Level Reviewer/Date: LL 4/21/20

TALS Review	TO	DOD	OH	Comments	TO	DOD	OH
23. Upload ICAL					na	na	na
24. Graphics uploaded? [paperclip]					Y	Y	Y
25. All points are in the most recent active calibration event? [Calibration Events –'Fix ICAL linkage' if needed]					Y	Y	Y
26. Runs linked to BFB? [QC Links]					Y	Y	Y
27. Run Checklist and acknowledge findings [F8]					Y	Y	Y
28. If criteria not met, was a NCM generated?					Y	Y	Y
29. After review in TALS, approve the method in TALS.	na	na	na		Y	Y	Y
30. After verifying TALS is correct, lock method in Chrom <resolve any error issues>	na	na	na		Y	Y	Y
31. Checklist & Entech report scanned, attached & assigned properly?	na	na	na		Y	Y	Y

Analyst/date:	2nd Level Reviewer/date: LL 4/21/20
Comments:	Comments:

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19488-1

SDG No.:

Instrument ID: MH Start Date: 06/30/2020 07:21

Analysis Batch Number: 40629 End Date: 07/01/2020 03:44

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 140-40629/1		06/30/2020 07:21	1	HBFBF30.D	RTX-5 0.32(mm)
CCVIS 140-40629/2		06/30/2020 07:49	1	HCCVF30.D	RTX-5 0.32(mm)
LCS 140-40629/1002		06/30/2020 07:49	1	HCCVF30-LCS.d	RTX-5 0.32(mm)
MB 140-40629/4		06/30/2020 09:32	1	H500BF30.D	RTX-5 0.32(mm)
ZZZZZ		06/30/2020 10:28	1		RTX-5 0.32(mm)
ZZZZZ		06/30/2020 14:20	1		RTX-5 0.32(mm)
ZZZZZ		06/30/2020 18:48	1		RTX-5 0.32(mm)
ZZZZZ		06/30/2020 19:40	1		RTX-5 0.32(mm)
ZZZZZ		06/30/2020 20:32	1		RTX-5 0.32(mm)
ZZZZZ		06/30/2020 21:24	1		RTX-5 0.32(mm)
140-19488-1		06/30/2020 22:18	1	HF30P110.D	RTX-5 0.32(mm)
140-19488-2		06/30/2020 23:10	1	HF30P111.D	RTX-5 0.32(mm)
140-19488-3		07/01/2020 00:03	1	HF30P112.D	RTX-5 0.32(mm)
ZZZZZ		07/01/2020 01:02	20		RTX-5 0.32(mm)
ZZZZZ		07/01/2020 02:49	1		RTX-5 0.32(mm)
ZZZZZ		07/01/2020 03:44	1		RTX-5 0.32(mm)

Eurofins/TestAmerica Knoxville GC/MS Air - Batch Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 21 & KNOX-MS-0023, Rev 4

Instrument/Date	MH 6/30/20		Routine	DOD	OHIO VAP
CCAL Chrom WL #	15882	CCAL Batch #	40629		40688
ICAL Chrom WL #	15239	ICAL Batch # / Event #	39100 / 2402	/	39102 / 2404

Chrom Review	1st	If No, why is data reportable?	2nd
1. Are the reagents & init/final volumes correct? (Verify reagents & amt. injected) [WL Sample Reagent Tab]	✓		na
2. Did BFB meet tune criteria? [F8]	✓	□ [Failed TO-14A, but passes TO-15]	
3. Was the CCAL compared to the most recent & correct ICAL (correct last ICal File batch #/start/end Cal date/time)? [F8]	✓	List Target analytes outside CCV limits: vinyl chloride, 1,2-Dichloro-1,1,2,2-tetrafluoroethane	
4. Elution order checked on isomeric pairs? [Chrom]			
• dichlorodifluoromethane / 1,2-dichlorotetrafluoroethane	✓		
• 2-methyl butane / acrolein	✓		
• trichlorofluoromethane / 1,1,2-trichlorotrifluoroethane	✓		
• vinyl acetate / hexane	✓		
• cis- and trans- isomers	✓		
• ethyl benzene / m/p-xylene / o-xylene	✓		
• n-propylbenzene/4-ethyl toluene/1,3,5-trimethylbenzene/1,2,4-trimethylbenzene/sec-butylbenzene/1,2,3-trimethylbenzene	✓		
• tert-butylbenzene/4-isopropyltoluene	✓		
• 1,3- , 1,4- , and 1,2-dichlorobenzene	✓		
• 1,2-dimethyl-4-ethylbenzene/1,2,4,5-, 1,2,3,5-, and 1,2,3,4-tetramethylbenzenes	NA		
• 1,2,4-trichlorobenzene/1,2,3-trichlorobenzene	✓		
• 2-, and 1-methylnaphthalene	✓		
5. "Range" analytes & internal standard RIC ID'd correctly, inspected for interferences & proper integration?	NA ✓		
6. Has the RT been updated to the method?	✓		
Analyst/date Sphavan Kh. 7/1/20		**2nd Level Reviewer/date**	

7. Has the vol injected been verified vs Entech & corrected if actual amount differs >5%? [WL Sample Info: init amt = sample amt; final amt = 500 mL]	✓		
8. Do the lab ID, Info 1 and Dilution Factor columns correlate in Chrom? [Sample List - Lab ID vs. Info 1 vs. Dilution]	✓		
9. Can dilution history verified? [Mgmt Report]	✓		
10. Are all analytes present in the system blank < RL? (<1/2 RL for DoD). *If no, list blank ID:*	✓	□ Method Blank – Report, ND (NCM#_____) □ Method Blank – Report, 10X (NCM#_____)	
11. All runs - peaks ID'd correctly and false positives removed?	✓		
12. If manual integrations performed, are they properly performed, baseline clearly identified, and correct reason given?	✓		
13. IS/Surr within limits? *List samples and reason (e.g., 1 thru 5):* [Batch Results IS & SUR Tab] Sample / Reason / Sample / Reason	✓	□ (1) Surrogate – Matrix (NCM#_____) □ (2) Surrogate – High, ND (NCM#_____) □ (3) ISTD – RA/RA Concurs (NCM#_____) □ (4) Surrogate –RX concur, Report both (NCM#_____) □ (5) ISTD – Matrix, DL required (NCM#_____)	
14. Samples outside calibration range scheduled for dilution?	NA	□ ICAL – Range Exceeded; Minimum Dilution	

Chrom Review	1st	If No, why is data reportable?	2nd
15. For first analysis that is at a dilution, is highest target analyte >20% cal range? *List samples and reason:* Sample / Reason / Sample / Reason	✓	□ (1) Reporting Limit – Dilution, Matrix (NCM#_____) □ (2) Reporting Limit – Dilution, Non-Target (NCM#_____) □ (3) Issues with initial collection volume; see DRC.	
16. RIC inspected for proper integration for TPH?	NA		
17. Obvious non-TPH peaks excluded?	↓		
18. Individual TPH peak area < octane high point area?	↓		

Eurofins/TestAmerica Knoxville GC/MS Air - Batch Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 21 & KNOX-MS-0023, Rev 4

TALS Review	1st	If No, why is data reportable?	2nd
19. Graphics uploaded? [open one paperclip]	✓		
20. NCM generated if BFB failed TO-14A criteria, but passes TO-15?	NA	□ [Failed TO-14A, but passes TO-15] (NCM#)	
21. Is the %D ≤ 30% for all target analytes? [≤ 50% for 1&2 methylnaphthalene] [Chrom-F8] [TALS-Sample Results Tab]	✓	☑ CCV - %D - LCS criteria met (NCM# 23930) □ CCV - %D high - outside criteria, samples ND, Sample IDs Included (NCM#)	
22. Undiluted volume analyzed meets the method requirement (200 mL vs. 500 mL)?	✓		na
23. Project & sample special instructions verified?	✓		
24. If samples were Tedlar bags, was the 72 hr HT met? ** Narrate transfer to can.	✓	☑ Air Analysis - Air Sample Transfer to Canister (NCM# 23808	
25. Sample analyses done within analytical holding time?	✓	□ Holding Time – Received w/Insufficient Time (NCM#) □ Holding Time – Receipt (NCM#)	
26. Did the LCS meet criteria (70-130% with a limited # allowed 60-140% (see table) provisional analyte limit 60-140% with a limited # allowed 50-150%, and no two consecutive MEs). [Sample Results Tab] Note: No LCS required for OH VAP.	✓	☑ Marginal Exceedances - Within ME Limits and Random; Report (NCM# 23931 □ LCS/LCSD - %R High (NCM#)	
27. Suffixes assigned properly (DL/RE)? [Sample List Tab]	✓		
28. Each job has QC created (BFB, CCV, LCS, MB)? [Sample List Tab]	✓		
29. Analytes over calibration range set to secondary [Conditions Review Tab]	NA		
30. Samples not reported set to 'Acceptable' or 'Rejected'? [Sample Results Tab]	✓		
31. DUP done per 20 samples and are all RPDs within limits? (for target analytes >5x RL, <25% RPD; no criteria for n-butanol) *(If DUP not reported - set to 'Acceptable' for each job)*	✓		
32. Samples linked to proper blank (200 mL or 500 mL)? [QC links]	✓	**500 mL blank ID:** 140-40629/4, 140-40688/4 **200 mL blank ID:** 140-40629/5	
33. Samples linked to job's BFB/CCV/LCS/MB? [QC Links]	✓		
34. Correct ICV linked to each MB? [QC Links]	✓		
35. Were all samples/QC analyzed within 24 hr of BFB? [F7]	✓		
36. If criteria were not met, was a NCM generated, and assigned to proper QC & samples? [Also see Conditions Review Tab]	✓		
37. Run Checklist and acknowledge findings [F8]	✓		
38. Runs set to 1st level review?	✓	Runs set to 2nd level review?	
39. QC checker run and items addressed?	-na-		
40. Checklist & Entech report scanned, attached & assigned properly?	-na-		

Number of target analytes in LCS	# marginal exceedances of LCS control limits allowed
>90	5
71 - 90	4
51 - 70	3
31 - 50	2
11 - 30	1
<11	0

Analyst: Suphawan Kh.	Date: 7/1/20	2nd Level Reviewer :	Date:
Comments:		**Comments:**	

Example Calculation: 140-19488-3 TCE

On-column ppbv x Final Vol (mL)/Entech Initial Vol (mL) x Canister Dilution Log DF

$7.550351 \times \frac{500}{25} \times 1.0 = 151$

Eurofins/TestAmerica Knoxville GC/MS Air - Batch Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 20 & KNOX-MS-0023, Rev 4

Instrument/Date	MH 6/30/20		Routine	DOD	OHIO VAP
CCAL Chrom WL #	15882	CCAL Batch #	40629		40688
ICAL Chrom WL #	15239	ICAL Batch # / Event #	39100 /2402		39102/2404

Chrom Review	1st	If No, why is data reportable?	2nd
1. Are the reagents & init/final volumes correct? (Verify reagents & amt. injected) [WL Sample Reagent Tab]			na
2. Did BFB meet tune criteria? [F8]		□ [Failed TO-14A, but passes TO-15]	Y
3. Was the CCAL compared to the most recent & correct ICAL (correct last ICal File batch #/start/end Cal date/time)? [F8]		List Target analytes outside CCV limits: _____ _____ _____	Y
4. Elution order checked on isomeric pairs? [Chrom]			
• dichlorodifluoromethane / 1,2-dichlorotetrafluoroethane			Y
• 2-methyl butane / acrolein			Y
• trichlorofluoromethane / 1,1,2-trichlorotrifluoroethane			Y
• vinyl acetate / hexane			Y
• cis- and trans- isomers			Y
• ethyl benzene / m/p-xylene / o-xylene			Y
• n-propylbenzene/4-ethyl toluene/1,3,5-trimethylbenzene/1,2,4-trimethylbenzene/sec-butylbenzene/1,2,3-trimethylbenzene			Y
• tert-butylbenzene/4-isopropyltoluene			Y
• 1,3- , 1,4- , and 1,2-dichlorobenzene			Y
• 1,2-dimethyl-4-ethylbenzene/1,2,4,5-, 1,2,3,5-, and 1,2,3,4-tetramethylbenzenes			NA
• 1,2,4-trichlorobenzene/1,2,3-trichlorobenzene			Y
• 2-, and 1-methylnaphthalene			Y
5. "Range" analytes & internal standard RIC ID'd correctly, inspected for interferences & proper integration?			NA
6. Has the RT been updated to the method?			Y
Analyst/date		**2nd Level Reviewer/date LL 7/1/20**	

7. Has the vol injected been verified vs Entech & corrected if actual amount differs >5%? [WL Sample Info: init amt = sample amt; final amt = 500 mL]			Y
8. Do the lab ID, Info 1 and Dilution Factor columns correlate in Chrom? [Sample List - Lab ID vs. Info 1 vs. Dilution]			Y
9. Can dilution history verified? [Mgmt Report]			Y
10. Are all analytes present in the system blank < RL**?** (<1/2 RL for DoD). *If no, list blank ID:*		□ Method Blank – Report, ND (NCM#_____) □ Method Blank – Report, 10X (NCM#_____)	Y
11. All runs - peaks ID'd correctly and false positives removed?			Y
12. If manual integrations performed, are they properly performed, baseline clearly identified, and correct reason given?			Y
13. IS/Surr within limits? *List samples and reason (e.g.,* 1 thru 5*):* [Batch Results IS & SUR Tab] Sample Reason Sample Reason _____ _____ _____ _____ _____ _____ _____ _____		□ (1) Surrogate – Matrix (NCM#_____) □ (2) Surrogate – High, ND (NCM#_____) □ (3) ISTD – RA/RA Concurs (NCM#_____) □ (4) Surrogate –RX concur, Report both (NCM#_____) □ (5) ISTD – Matrix, DL required (NCM#_____)	Y
14. Samples outside calibration range scheduled for dilution?		□ ICAL – Range Exceeded; Minimum Dilution	NA

Chrom Review	1st	If No, why is data reportable?	2nd
15. For first analysis that is at a dilution, is highest target analyte >20% cal range? *List samples and reason:* Sample Reason Sample Reason _____ _____ _____ _____ _____ _____ _____ _____		□ (1) Reporting Limit – Dilution, Matrix (NCM#_____) □ (2) Reporting Limit – Dilution, Non-Target (NCM#_____) □ (3) Issues with initial collection volume; see DRC.	Y
16. RIC inspected for proper integration for TPH?			NA
17. Obvious non-TPH peaks excluded?			NA
18. Individual TPH peak area < octane high point area?			NA

Eurofins/TestAmerica Knoxville GC/MS Air - Batch Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 20 & KNOX-MS-0023, Rev 4

TALS Review	**1st**	**If No, why is data reportable?**	**2nd**
19. Graphics uploaded? [open one paperclip]			**Y**
20. NCM generated if BFB failed TO-14A criteria, but passes TO-15?		□ [Failed TO-14A, but passes TO-15] (NCM#_____)	**NA**
21. Is the %D ≤ 30% for all target analytes? [≤ 50% for 1&2 methylnaphthalene] [Chrom-F8] [TALS-Sample Results Tab]		□ CCV - %D - LCS criteria met (NCM#_____) □ CCV - %D high - outside criteria, samples ND, Sample IDs Included (NCM#_____)	**Y**
22. Undiluted volume analyzed meets the method requirement (200 mL vs. 500 mL)?			**na**
23. Project & sample special instructions verified?			**Y**
24. If samples were Tedlar bags, was the 72 hr HT met? ** Narrate transfer to can.		□ Air Analysis - Air Sample Transfer to Canister (NCM#____)	**NA**
25. Sample analyses done within analytical holding time?		□ Holding Time – Received w/Insufficient Time (NCM#_____) □ Holding Time – Receipt (NCM#_____)	**Y**
26. Did the LCS meet criteria (70-130% with a limited # allowed 60-140% (see table) provisional analyte limit 60-140% with a limited # allowed 50-150%, and no two consecutive MEs). [Sample Results Tab] Note: No LCS required for OH VAP.		□ Marginal Exceedances - Within ME Limits and Random; Report (NCM# ___) □ LCS/LCSD - %R High (NCM#_____)	**Y**
27. Suffixes assigned properly (DL/RE)? [Sample List Tab]			**Y**
28. Each job has QC created (BFB, CCV, LCS, MB)? [Sample List Tab]			**Y**
29. Analytes over calibration range set to secondary [Conditions Review Tab]			**Y**
30. Samples not reported set to 'Acceptable' or 'Rejected'? [Sample Results Tab]			**Y**
31. DUP done per 20 samples and are all RPDs within limits? (for target analytes >5x RL, <25% RPD; no criteria for n-butanol) *(If DUP not reported - set to 'Acceptable' for each job)*			**Y**
32. Samples linked to proper blank (200 mL or 500 mL)? [QC links]		**500 mL blank ID: 4** **200 mL blank ID: 5**	**Y**
33. Samples linked to job's BFB/CCV/LCS/MB? [QC Links]			**Y**
34. Correct ICV linked to each MB? [QC Links]			**Y**
35. Were all samples/QC analyzed within 24 hr of BFB? [F7]			**Y**
36. If criteria were not met, was a NCM generated, and assigned to proper QC & samples? [Also see Conditions Review Tab]			**Y**
37. Run Checklist and acknowledge findings [F8]			**Y**
38. Runs set to 1st level review?		Runs set to 2nd level review?	**Y**
39. QC checker run and items addressed?	**-na-**		**Y**
40. Checklist & Entech report scanned, attached & assigned properly?	**-na-**		**Y**

Analyst:	**Date:**	**2nd Level Reviewer : LL**	**Date: 7/1/20**
Comments:		**Comments:**	
Example Calculation:			
On-column ppbv x Final Vol (mL)/Entech Initial Vol (mL) x Canister Dilution Log DF			

Number of target analytes in LCS	# marginal exceedances of LCS control limits allowed
>90	5
71 - 90	4
51 - 70	3
31 - 50	2
11 - 30	1
< 11	0

AIR - GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Knoxvill Job No.: 140-19488-1

SDG No.:

Batch Number: 40629 Batch Start Date: 06/30/20 07:21 Batch Analyst: Khachitpongpanit, Suphawa

Batch Method: TO 15 LL Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	InitialPressure	FinalPressure	40CV101P 00116	40MXISSURP 00004
BFB 140-40629/1		TO 15 LL		500 mL	500 mL	1	1		
CCVIS 140-40629/2		TO 15 LL		500 mL	500 mL	1	1	80 mL	40 mL
MB 140-40629/4		TO 15 LL		500 mL	500 mL	1	1		40 mL
140-19488-A-1	BLDG A EFFLUENT	TO 15 LL	T	100 mL	500 mL	1	1		40 mL
140-19488-A-2	BLDG A MID GAC	TO 15 LL	T	100 mL	500 mL	1	1		40 mL
140-19488-A-3	BLDG A INFLUENT	TO 15 LL	T	25 mL	500 mL	1	1		40 mL
LCS 140-40629/1002		TO 15 LL		500 mL	500 mL	1	1	80 mL	40 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	40MXSUR 00003					
BFB 140-40629/1		TO 15 LL		40 mL					
CCVIS 140-40629/2		TO 15 LL							
MB 140-40629/4		TO 15 LL							
140-19488-A-1	BLDG A EFFLUENT	TO 15 LL	T						
140-19488-A-2	BLDG A MID GAC	TO 15 LL	T						
140-19488-A-3	BLDG A INFLUENT	TO 15 LL	T						
LCS 140-40629/1002		TO 15 LL							

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19014-1

SDG No.:

Client Sample ID: 34002205 Lab Sample ID: 140-19014-5

Matrix: Air Lab File ID: GLOT1E08.D

Analysis Method: TO-15 Date Collected: 05/06/2020 10:35

Sample wt/vol: 200(mL) Date Analyzed: 05/09/2020 01:41

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 39507 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	ND		0.20	
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.20	
79-00-5	1,1,2-Trichloroethane	ND		0.20	
76-13-1	1,1,2-Trichlorotrifluoroethane	ND		0.20	
75-34-3	1,1-Dichloroethane	ND		0.20	
75-35-4	1,1-Dichloroethene	ND		0.20	
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	
96-18-4	1,2,3-Trichloropropane	ND		0.50	
526-73-8	1,2,3-Trimethylbenzene	ND	*	0.20	
95-93-2	1,2,4,5-Tetramethylbenzene	ND		0.20	
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	
95-63-6	1,2,4-Trimethylbenzene	ND		0.20	
96-12-8	1,2-Dibromo-3-Chloropropane	ND		0.40	
106-93-4	1,2-Dibromoethane	ND		0.20	
95-50-1	1,2-Dichlorobenzene	ND		0.40	
107-06-2	1,2-Dichloroethane	ND		0.20	
78-87-5	1,2-Dichloropropane	ND		0.20	
76-14-2	1,2-Dichlorotetrafluoroethane	ND		0.20	
108-67-8	1,3,5-Trimethylbenzene	ND		0.20	
106-99-0	1,3-Butadiene	ND		0.40	
541-73-1	1,3-Dichlorobenzene	ND		0.20	
106-46-7	1,4-Dichlorobenzene	ND		0.20	
123-91-1	1,4-Dioxane	ND		0.40	
71-36-3	1-Butanol	ND		2.0	
90-12-0	1-Methylnaphthalene	ND		2.5	
540-84-1	2,2,4-Trimethylpentane	ND		0.40	
565-59-3	2,3-Dimethylpentane	ND		0.20	
78-93-3	2-Butanone	ND		1.0	
95-49-8	2-Chlorotoluene	ND		0.40	
591-78-6	2-Hexanone	ND		0.40	
78-78-4	2-Methylbutane	ND		0.50	
91-57-6	2-Methylnaphthalene	ND		2.5	
107-83-5	2-Methylpentane	ND		0.20	
107-05-1	3-Chloropropene	ND		0.20	
622-96-8	4-Ethyltoluene	ND		0.40	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		1.0	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19014-1

SDG No.:

Client Sample ID: 34002205 Lab Sample ID: 140-19014-5

Matrix: Air Lab File ID: GLOT1E08.D

Analysis Method: TO-15 Date Collected: 05/06/2020 10:35

Sample wt/vol: 200(mL) Date Analyzed: 05/09/2020 01:41

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 39507 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
67-64-1	Acetone	ND		7.5	
75-05-8	Acetonitrile	ND		1.0	
107-02-8	Acrolein	ND		1.0	
107-13-1	Acrylonitrile	ND		2.0	
98-83-9	Alpha Methyl Styrene	ND		0.40	
71-43-2	Benzene	ND		0.20	
100-44-7	Benzyl chloride	ND		0.40	
75-27-4	Bromodichloromethane	ND		0.20	
75-25-2	Bromoform	ND		0.20	
74-83-9	Bromomethane	ND		0.20	
106-97-8	Butane	ND		1.0	
75-15-0	Carbon disulfide	ND		0.40	
56-23-5	Carbon tetrachloride	ND		0.20	
108-90-7	Chlorobenzene	ND		0.20	
75-45-6	Chlorodifluoromethane	ND		0.20	
75-00-3	Chloroethane	ND		0.20	
67-66-3	Chloroform	ND		0.20	
74-87-3	Chloromethane	ND		1.0	
156-59-2	cis-1,2-Dichloroethene	ND		0.20	
10061-01-5	cis-1,3-Dichloropropene	ND		0.40	
98-82-8	Cumene	ND		0.40	
110-82-7	Cyclohexane	ND		0.40	
124-48-1	Dibromochloromethane	ND		0.20	
74-95-3	Dibromomethane	ND		0.40	
75-71-8	Dichlorodifluoromethane	ND		0.20	
64-17-5	Ethanol	ND		5.0	
141-78-6	Ethyl acetate	ND		2.0	
60-29-7	Ethyl ether	ND		2.0	
100-41-4	Ethylbenzene	ND		0.20	
87-68-3	Hexachlorobutadiene	ND		1.0	
110-54-3	Hexane	ND		0.40	
496-11-7	Indane	ND		0.20	
95-13-6	Indene	ND		0.40	
67-63-0	Isopropyl alcohol	5.0		1.2	
179601-23-1	m&p-Xylene	ND		0.20	
80-62-6	Methyl methacrylate	ND		0.40	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19014-1

SDG No.:

Client Sample ID: 34002205 Lab Sample ID: 140-19014-5

Matrix: Air Lab File ID: GLOT1E08.D

Analysis Method: TO-15 Date Collected: 05/06/2020 10:35

Sample wt/vol: 200(mL) Date Analyzed: 05/09/2020 01:41

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 39507 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
1634-04-4	Methyl tert-butyl ether	ND		1.0	
108-87-2	Methylcyclohexane	ND		0.20	
75-09-2	Methylene Chloride	ND		1.0	
91-20-3	Naphthalene	ND		0.40	
104-51-8	n-Butylbenzene	ND		0.40	
124-18-5	n-Decane	ND		1.0	
112-40-3	n-Dodecane	ND		1.0	
142-82-5	n-Heptane	ND		0.40	
111-84-2	n-Nonane	ND		0.40	
111-65-9	n-Octane	ND		0.40	
103-65-1	N-Propylbenzene	ND		0.40	
1120-21-4	n-Undecane	ND		1.0	
95-47-6	o-Xylene	ND		0.20	
99-87-6	p-Cymene	ND		0.20	
109-66-0	Pentane	ND		2.5	
115-07-1	Propene	ND		2.5	
135-98-8	sec-Butylbenzene	ND		0.40	
100-42-5	Styrene	ND		0.20	
75-65-0	tert-Butanol	ND		1.0	
98-06-6	tert-Butylbenzene	ND		0.40	
127-18-4	Tetrachloroethene	ND		0.20	
109-99-9	Tetrahydrofuran	ND		1.0	
110-02-1	Thiophene	ND		0.20	
108-88-3	Toluene	ND		1.0	
156-60-5	trans-1,2-Dichloroethene	ND		0.20	
10061-02-6	trans-1,3-Dichloropropene	ND		0.20	
79-01-6	Trichloroethene	ND		0.20	
75-69-4	Trichlorofluoromethane	ND		0.20	
108-05-4	Vinyl acetate	ND		1.0	
593-60-2	Vinyl bromide	ND		0.20	
75-01-4	Vinyl chloride	ND		0.40	

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200508-15433.b\GLOT1E08.D
Lims ID: 140-19014-A-5
Client ID: 34002205
Sample Type: Client
Inject. Date: 09-May-2020 01:41:30 ALS Bottle#: 33 Worklist Smp#: 24
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0015433-024
Misc. Info.: 34002205
Operator ID: 7126 Instrument ID: MG

Method: \\chromfs\Knoxville\ChromData\MG\20200508-15433.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 15-May-2020 09:56:57 Calib Date: 07-May-2020 21:50:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200506-15415.b\GE07LVL7.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1049

First Level Reviewer: tajh Date: 11-May-2020 09:17:47

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.865	8.865	0.000	96	169025	4.00	
* 2 1,4-Difluorobenzene	114	11.049	11.049	0.000	95	1236310	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.773	15.773	0.000	88	1178768	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.412	17.412	0.000	82	807335	3.78	
7 Propene	41	3.726	3.721	0.005	98	57049	-0.0663	7
25 Isopropyl alcohol	45	5.527	5.506	0.021	99	142674	2.02	
30 2-Methyl-2-propanol	59	6.223	6.126	0.097	94	3396	0.0308	
51 n-Butanol	31	10.590	10.548	0.042	80	2213	0.1148	
73 Tetrachloroethene	129	14.948	14.948	0.000	80	543	0.006800	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

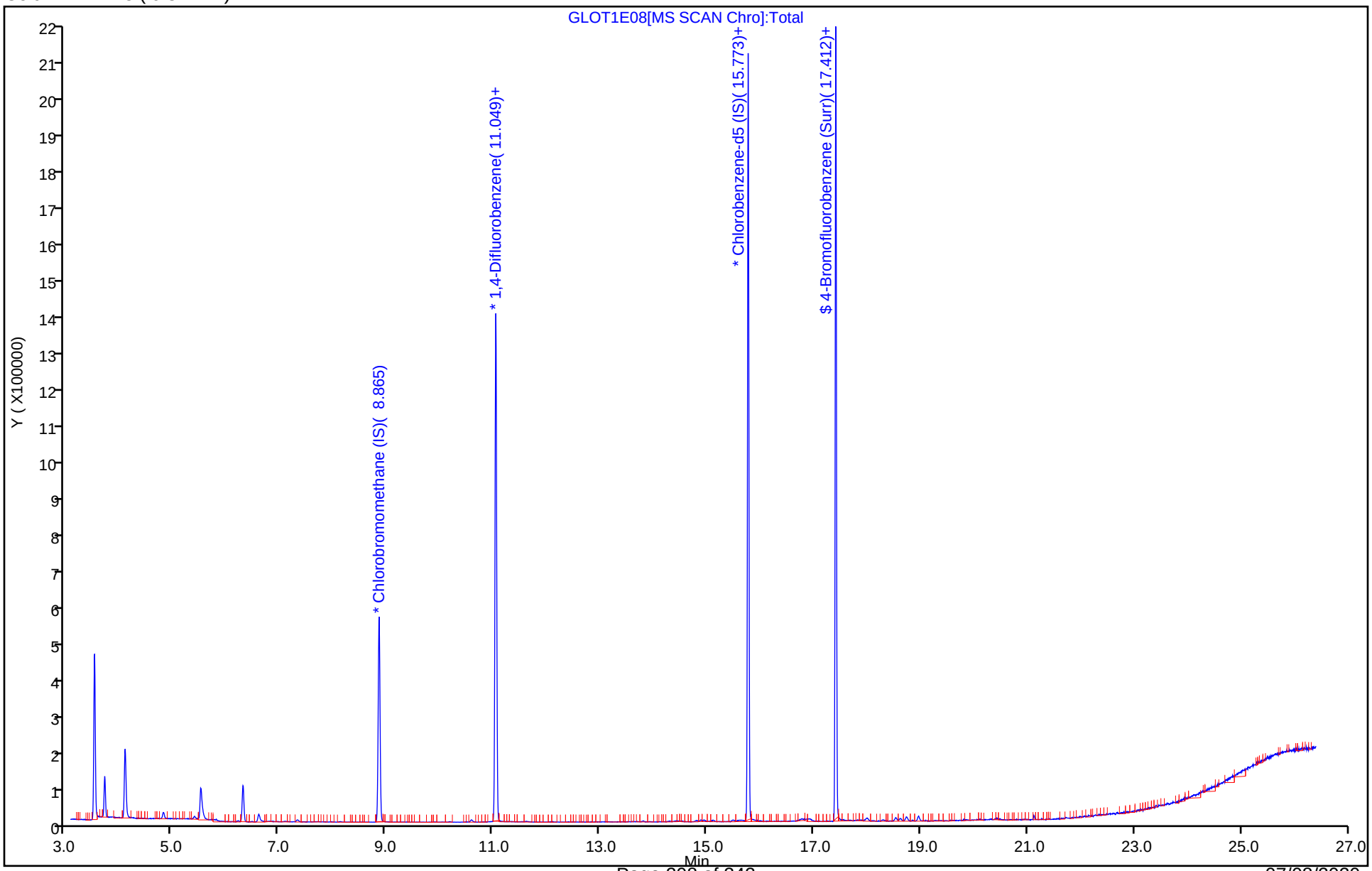
40MXISSURP_00004 Amount Added: 40.00 Units: mL Run Reagent

Report Date: 15-May-2020 09:57:22 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200508-15433.b\GLOT1E08.D				
Injection Date:	09-May-2020 01:41:30	Instrument ID:	MG	Operator ID:	7126
Lims ID:	140-19014-A-5	Lab Sample ID:	140-19014-5	Worklist Smp#:	24
Client ID:	34002205				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	33
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

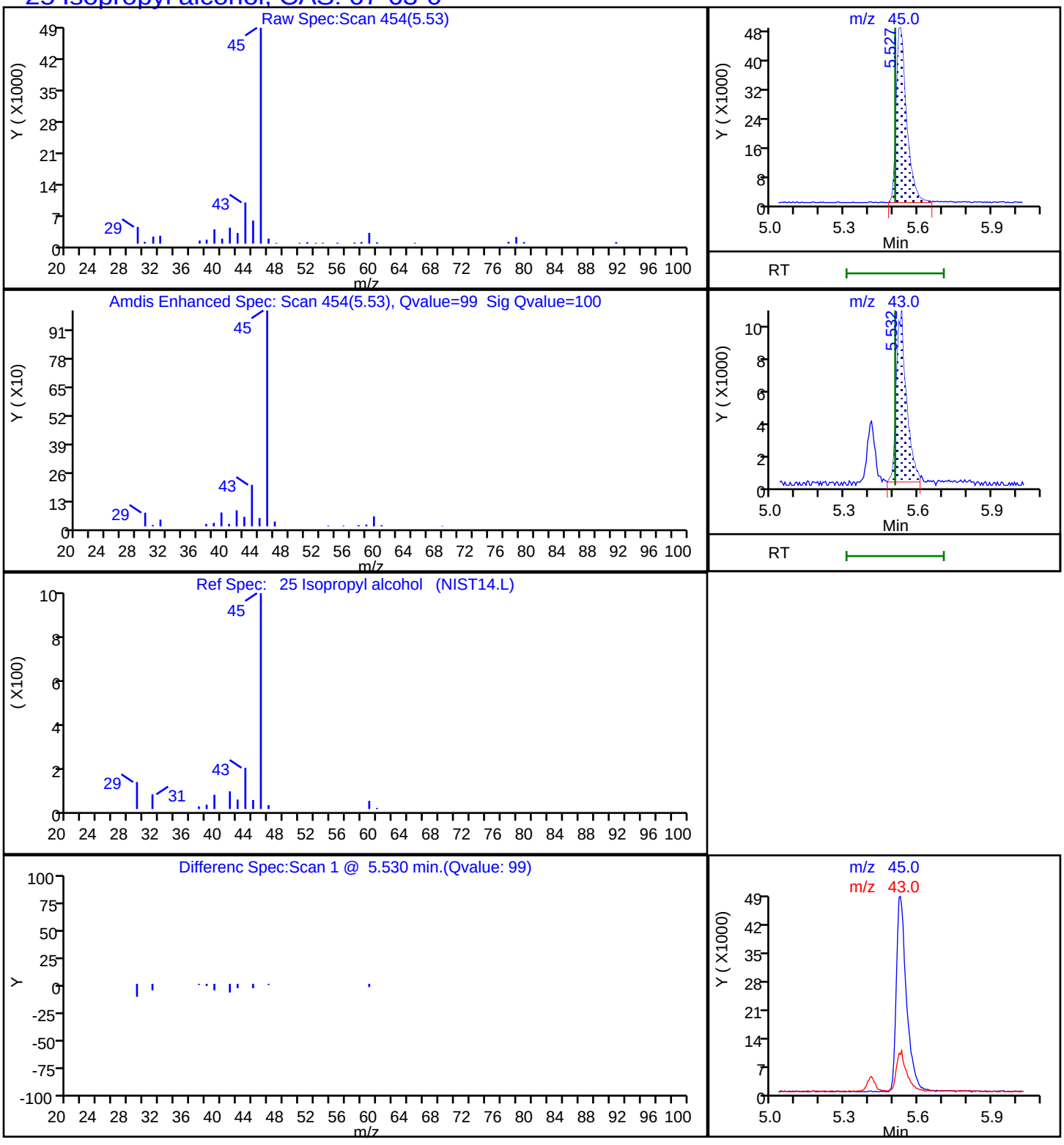
Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200508-15433.b\GLOT1E08.D		
Injection Date:	09-May-2020 01:41:30	Instrument ID:	MG
Lims ID:	140-19014-A-5	Lab Sample ID:	140-19014-5
Client ID:	34002205		
Operator ID:	7126	ALS Bottle#:	33 Worklist Smp#: 24
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

25 Isopropyl alcohol, CAS: 67-63-0



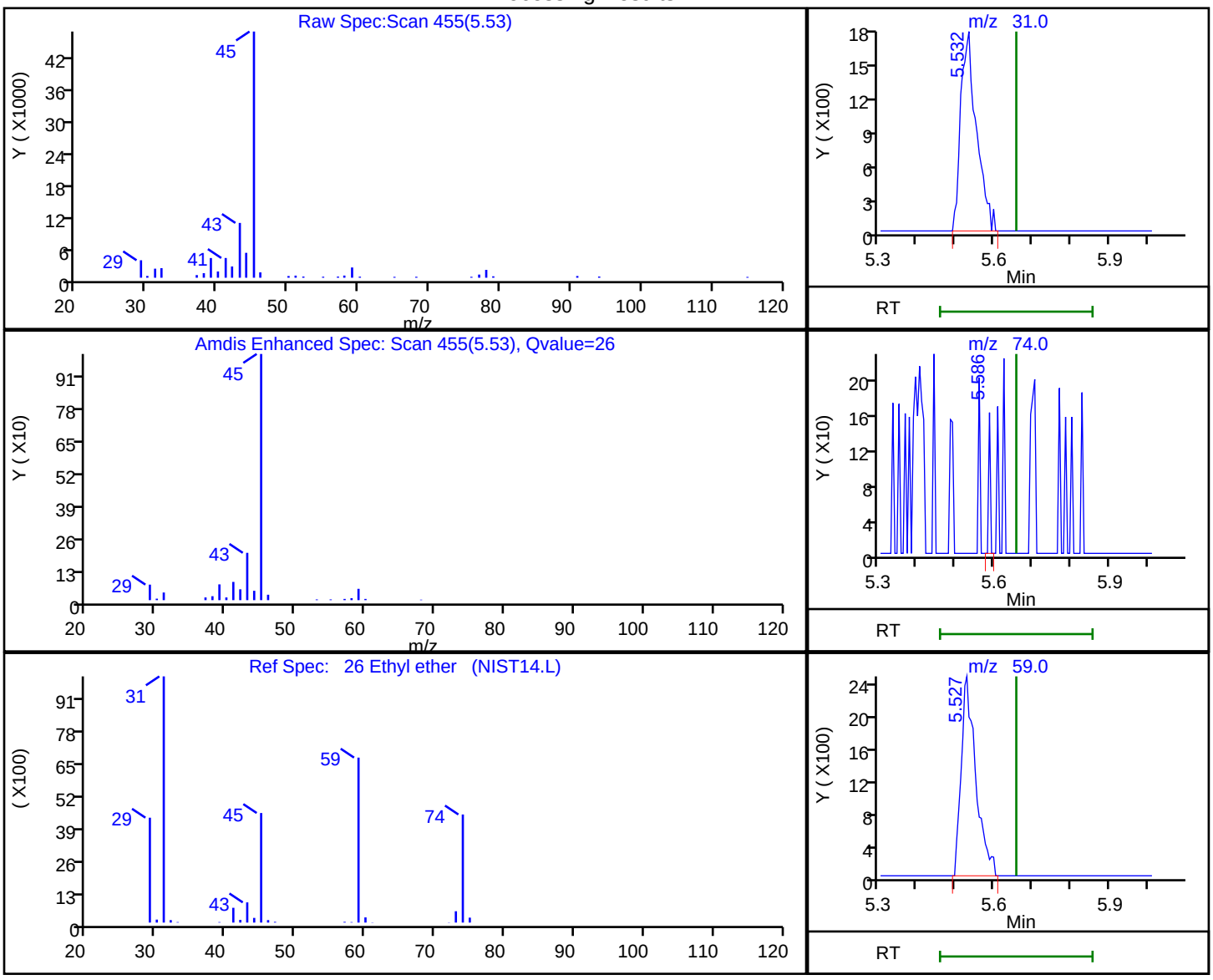
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200508-15433.b\GLOT1E08.D				
Injection Date:	09-May-2020 01:41:30	Instrument ID:	MG		
Lims ID:	140-19014-A-5	Lab Sample ID:	140-19014-5		
Client ID:	34002205				
Operator ID:	7126	ALS Bottle#:	33	Worklist Smp#:	24
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

26 Ethyl ether, CAS: 60-29-7

Processing Results



RT	Mass	Response	Amount
5.53	31.00	4883	0.110005
5.59	74.00	52	
5.53	59.00	6462	

Reviewer: tajh, 15-May-2020 09:56:31

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19038-1

SDG No.:

Client Sample ID: 10740 Lab Sample ID: 140-19038-1

Matrix: Air Lab File ID: RE11BLK01.D

Analysis Method: TO-15 Date Collected: 05/08/2020 08:50

Sample wt/vol: 200(mL) Date Analyzed: 05/11/2020 14:38

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 39492 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	ND		0.20	
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.20	
79-00-5	1,1,2-Trichloroethane	ND		0.20	
76-13-1	1,1,2-Trichlorotrifluoroethane	ND		0.20	
75-34-3	1,1-Dichloroethane	ND		0.20	
75-35-4	1,1-Dichloroethene	ND		0.20	
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	
96-18-4	1,2,3-Trichloropropane	ND		0.50	
526-73-8	1,2,3-Trimethylbenzene	ND		0.20	
95-93-2	1,2,4,5-Tetramethylbenzene	ND		0.20	
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	
95-63-6	1,2,4-Trimethylbenzene	ND		0.20	
96-12-8	1,2-Dibromo-3-Chloropropane	ND		0.40	
106-93-4	1,2-Dibromoethane	ND		0.20	
95-50-1	1,2-Dichlorobenzene	ND		0.40	
107-06-2	1,2-Dichloroethane	ND		0.20	
78-87-5	1,2-Dichloropropane	ND		0.20	
76-14-2	1,2-Dichlorotetrafluoroethane	ND		0.20	
108-67-8	1,3,5-Trimethylbenzene	ND		0.20	
106-99-0	1,3-Butadiene	ND		0.40	
541-73-1	1,3-Dichlorobenzene	ND		0.20	
106-46-7	1,4-Dichlorobenzene	ND		0.20	
123-91-1	1,4-Dioxane	ND		0.40	
71-36-3	1-Butanol	ND		2.0	
90-12-0	1-Methylnaphthalene	ND		2.5	
540-84-1	2,2,4-Trimethylpentane	ND		0.40	
565-59-3	2,3-Dimethylpentane	ND		0.20	
78-93-3	2-Butanone	ND		1.0	
95-49-8	2-Chlorotoluene	ND		0.40	
591-78-6	2-Hexanone	ND		0.40	
78-78-4	2-Methylbutane	ND		0.50	
91-57-6	2-Methylnaphthalene	ND		2.5	
107-83-5	2-Methylpentane	ND		0.20	
107-05-1	3-Chloropropene	ND		0.20	
622-96-8	4-Ethyltoluene	ND		0.40	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		1.0	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19038-1

SDG No.:

Client Sample ID: 10740 Lab Sample ID: 140-19038-1

Matrix: Air Lab File ID: RE11BLK01.D

Analysis Method: TO-15 Date Collected: 05/08/2020 08:50

Sample wt/vol: 200(mL) Date Analyzed: 05/11/2020 14:38

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 39492 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
67-64-1	Acetone	ND		7.5	
75-05-8	Acetonitrile	ND		1.0	
107-02-8	Acrolein	ND		1.0	
107-13-1	Acrylonitrile	ND		2.0	
98-83-9	Alpha Methyl Styrene	ND		0.40	
71-43-2	Benzene	ND		0.20	
100-44-7	Benzyl chloride	ND		0.40	
75-27-4	Bromodichloromethane	ND		0.20	
75-25-2	Bromoform	ND		0.20	
74-83-9	Bromomethane	ND		0.20	
106-97-8	Butane	ND		1.0	
75-15-0	Carbon disulfide	ND		0.40	
56-23-5	Carbon tetrachloride	ND		0.20	
108-90-7	Chlorobenzene	ND		0.20	
75-45-6	Chlorodifluoromethane	ND		0.20	
75-00-3	Chloroethane	ND		0.20	
67-66-3	Chloroform	ND		0.20	
74-87-3	Chloromethane	ND		1.0	
156-59-2	cis-1,2-Dichloroethene	ND		0.20	
10061-01-5	cis-1,3-Dichloropropene	ND		0.40	
98-82-8	Cumene	ND		0.40	
110-82-7	Cyclohexane	ND		0.40	
124-48-1	Dibromochloromethane	ND		0.20	
74-95-3	Dibromomethane	ND		0.40	
75-71-8	Dichlorodifluoromethane	ND		0.20	
64-17-5	Ethanol	ND		5.0	
141-78-6	Ethyl acetate	ND		2.0	
60-29-7	Ethyl ether	ND		2.0	
100-41-4	Ethylbenzene	ND		0.20	
87-68-3	Hexachlorobutadiene	ND		1.0	
110-54-3	Hexane	ND		0.40	
496-11-7	Indane	ND		0.20	
95-13-6	Indene	ND		0.40	
67-63-0	Isopropyl alcohol	ND		1.2	
179601-23-1	m&p-Xylene	ND		0.20	
80-62-6	Methyl methacrylate	ND		0.40	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19038-1

SDG No.:

Client Sample ID: 10740 Lab Sample ID: 140-19038-1

Matrix: Air Lab File ID: RE11BLK01.D

Analysis Method: TO-15 Date Collected: 05/08/2020 08:50

Sample wt/vol: 200(mL) Date Analyzed: 05/11/2020 14:38

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 39492 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
1634-04-4	Methyl tert-butyl ether	ND		1.0	
108-87-2	Methylcyclohexane	ND		0.20	
75-09-2	Methylene Chloride	ND		1.0	
91-20-3	Naphthalene	ND		0.40	
104-51-8	n-Butylbenzene	ND		0.40	
124-18-5	n-Decane	ND		1.0	
112-40-3	n-Dodecane	ND		1.0	
142-82-5	n-Heptane	ND		0.40	
111-84-2	n-Nonane	ND		0.40	
111-65-9	n-Octane	ND		0.40	
103-65-1	N-Propylbenzene	ND		0.40	
1120-21-4	n-Undecane	ND		1.0	
95-47-6	o-Xylene	ND		0.20	
99-87-6	p-Cymene	ND		0.20	
109-66-0	Pentane	ND		2.5	
115-07-1	Propene	ND		2.5	
135-98-8	sec-Butylbenzene	ND		0.40	
100-42-5	Styrene	ND		0.20	
75-65-0	tert-Butanol	ND		1.0	
98-06-6	tert-Butylbenzene	ND		0.40	
127-18-4	Tetrachloroethene	ND		0.20	
109-99-9	Tetrahydrofuran	ND		1.0	
110-02-1	Thiophene	ND		0.20	
108-88-3	Toluene	ND		1.0	
156-60-5	trans-1,2-Dichloroethene	ND		0.20	
10061-02-6	trans-1,3-Dichloropropene	ND		0.20	
79-01-6	Trichloroethene	ND		0.20	
75-69-4	Trichlorofluoromethane	ND		0.20	
108-05-4	Vinyl acetate	ND		1.0	
593-60-2	Vinyl bromide	ND		0.20	
75-01-4	Vinyl chloride	ND		0.40	

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MR\20200507-15427.b\RE11BLK01.D
Lims ID: 140-19038-A-1
Client ID: 10740
Sample Type: Client
Inject. Date: 11-May-2020 14:38:30 ALS Bottle#: 1 Worklist Smp#: 4
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0015427-004
Misc. Info.: 10740
Operator ID: HMT Instrument ID: MR

Method: \\chromfs\Knoxville\ChromData\MR\20200507-15427.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 12-May-2020 10:01:42 Calib Date: 10-Apr-2020 00:47:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MR\20200409-15180.b\RD09IC10.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1021

First Level Reviewer: khachitpongpanits Date: 12-May-2020 10:01:42

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.334	8.333	0.001	82	201667	4.00	
* 2 1,4-Difluorobenzene	114	10.571	10.577	-0.006	93	1352807	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.408	15.408	0.000	85	1131660	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.058	17.064	-0.006	94	587959	3.50	
7 Propene	41	3.335	3.340	-0.005	97	37299	-0.6102	7

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

40MXISSURP_00004 Amount Added: 40.00 Units: mL Run Reagent

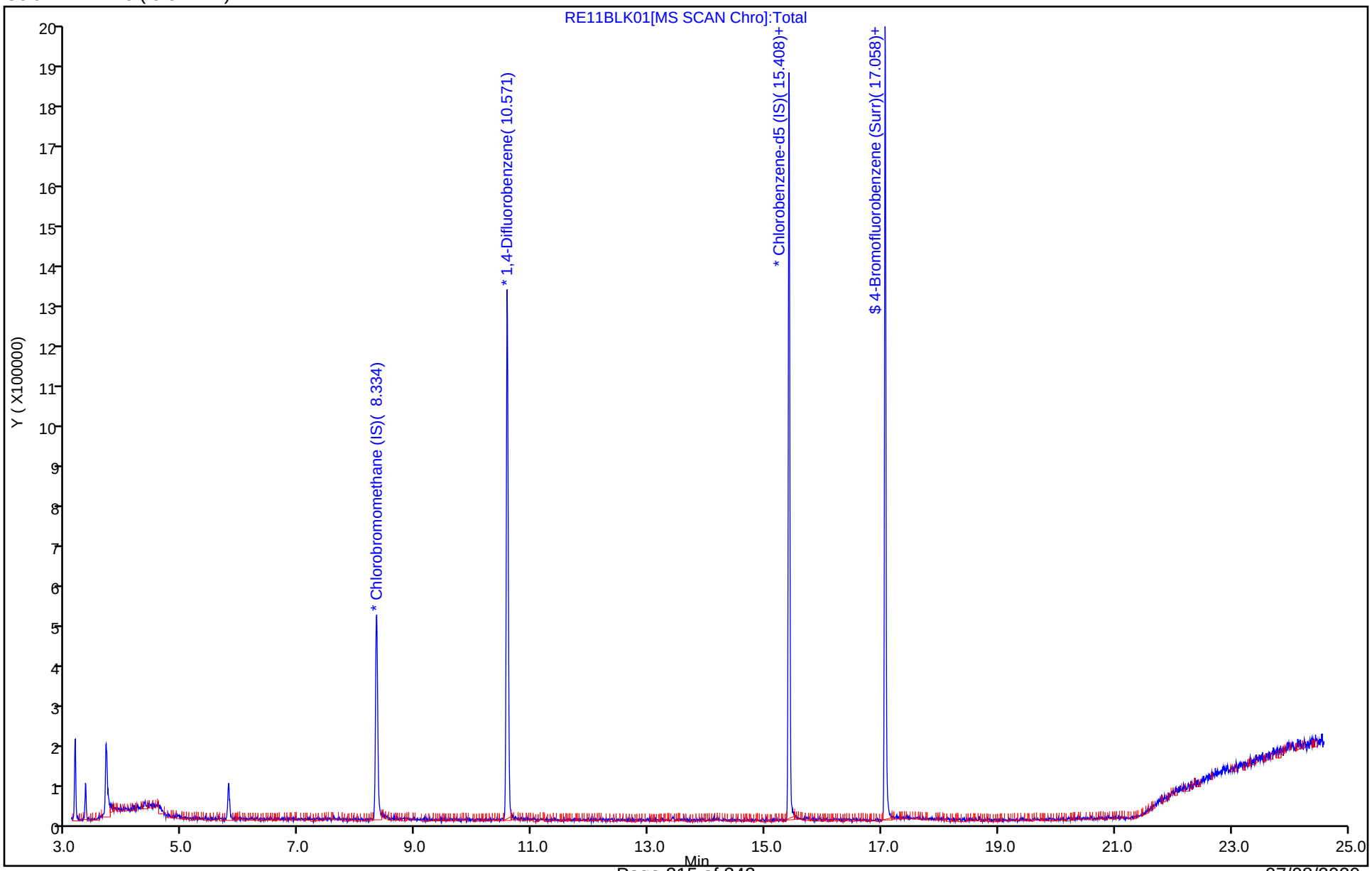
Report Date: 12-May-2020 10:01:43 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200507-15427.b\RE11BLK01.D

Injection Date:	11-May-2020 14:38:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	140-19038-A-1	Lab Sample ID:	140-19038-1	Worklist Smp#:	4
Client ID:	10740				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



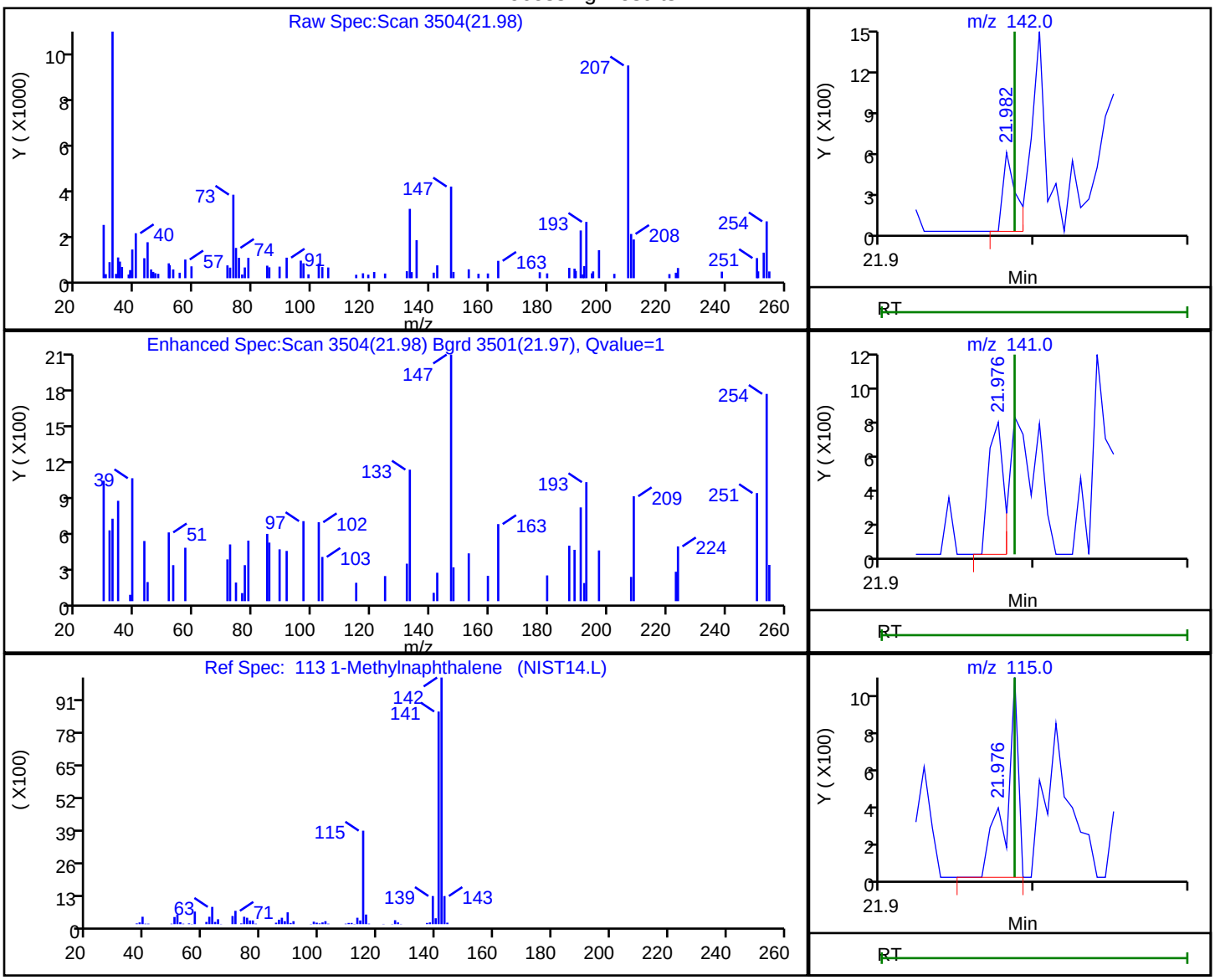
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200507-15427.b\RE11BLK01.D				
Injection Date:	11-May-2020 14:38:30	Instrument ID:	MR		
Lims ID:	140-19038-A-1	Lab Sample ID:	140-19038-1		
Client ID:	10740				
Operator ID:	HMT	ALS Bottle#:	1	Worklist Smp#:	4
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

113 1-Methylnaphthalene, CAS: 90-12-0

Processing Results



RT	Mass	Response	Amount
21.98	142.00	329	0.259961
21.98	141.00	535	
21.98	115.00	572	

Reviewer: khachitpongpanits, 12-May-2020 10:01:36

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

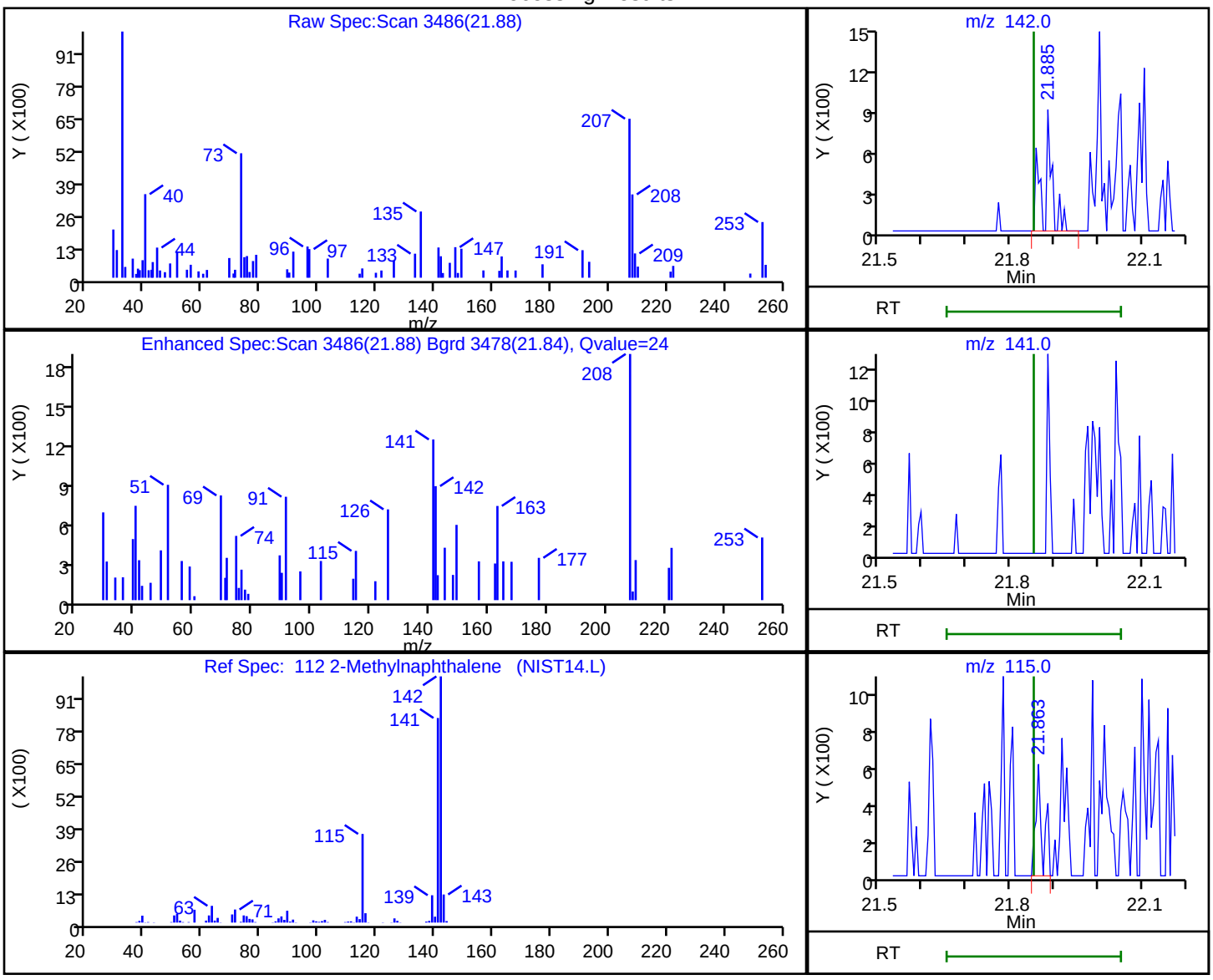
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200507-15427.b\RE11BLK01.D				
Injection Date:	11-May-2020 14:38:30	Instrument ID:	MR		
Lims ID:	140-19038-A-1	Lab Sample ID:	140-19038-1		
Client ID:	10740				
Operator ID:	HMT	ALS Bottle#:	1	Worklist Smp#:	4
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

112 2-Methylnaphthalene, CAS: 91-57-6

Processing Results



RT	Mass	Response	Amount
21.88	142.00	1119	0.620150
21.85	141.00	0	
21.86	115.00	640	

Reviewer: khachitpongpanits, 12-May-2020 10:01:35

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

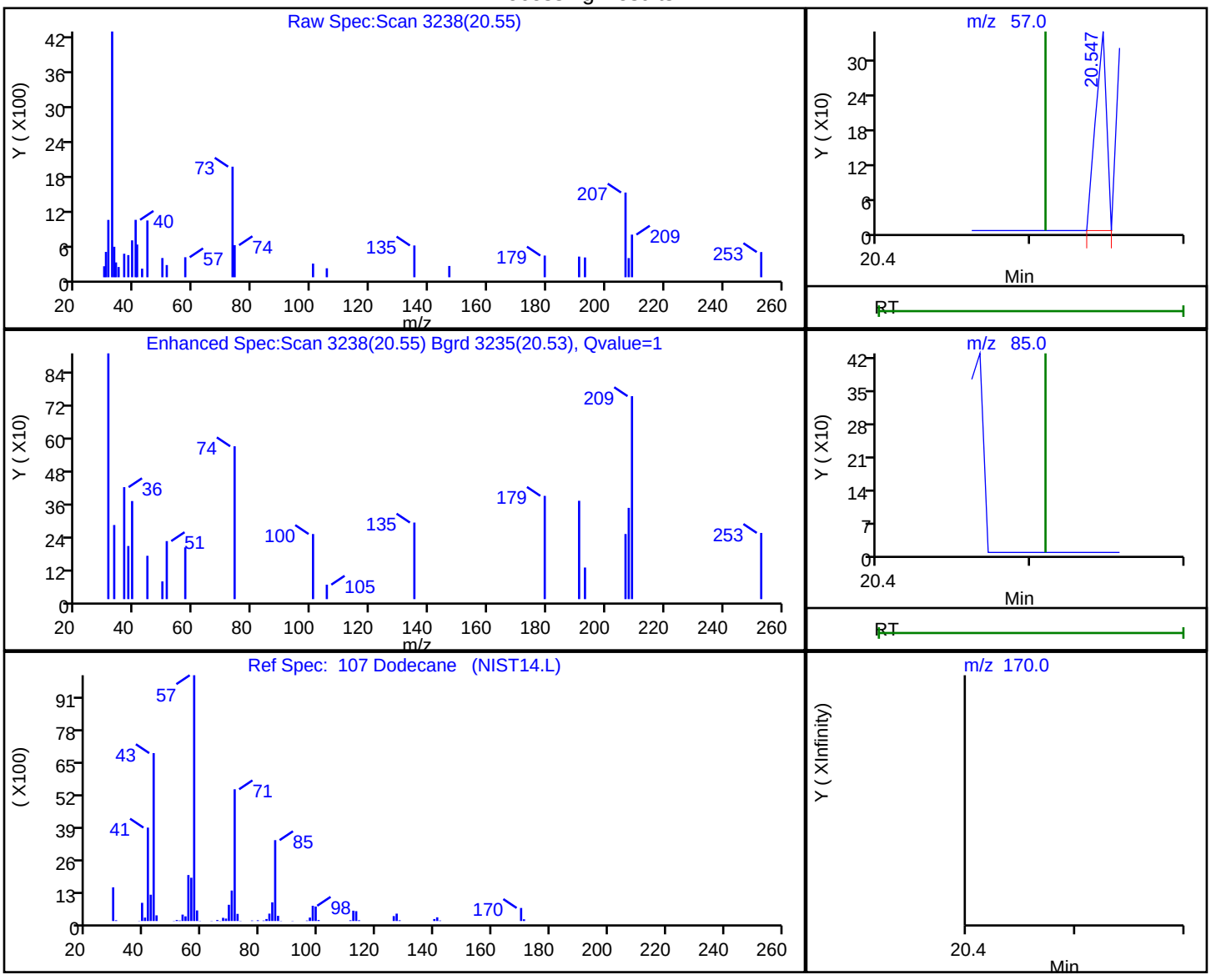
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200507-15427.b\RE11BLK01.D				
Injection Date:	11-May-2020 14:38:30	Instrument ID:	MR		
Lims ID:	140-19038-A-1	Lab Sample ID:	140-19038-1		
Client ID:	10740				
Operator ID:	HMT	ALS Bottle#:	1	Worklist Smp#:	4
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

107 Dodecane, CAS: 112-40-3

Processing Results



RT	Mass	Response	Amount
20.55	57.00	174	0.398467
20.51	85.00	0	
20.51	170.00	0	

Reviewer: khachitpongpanits, 12-May-2020 10:01:33

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19038-1

SDG No.:

Client Sample ID: 10333 Lab Sample ID: 140-19038-2

Matrix: Air Lab File ID: RE11BLK02.D

Analysis Method: TO-15 Date Collected: 05/08/2020 08:50

Sample wt/vol: 200(mL) Date Analyzed: 05/11/2020 15:27

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 39492 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	ND		0.20	
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.20	
79-00-5	1,1,2-Trichloroethane	ND		0.20	
76-13-1	1,1,2-Trichlorotrifluoroethane	ND		0.20	
75-34-3	1,1-Dichloroethane	ND		0.20	
75-35-4	1,1-Dichloroethene	ND		0.20	
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	
96-18-4	1,2,3-Trichloropropane	ND		0.50	
526-73-8	1,2,3-Trimethylbenzene	ND		0.20	
95-93-2	1,2,4,5-Tetramethylbenzene	ND		0.20	
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	
95-63-6	1,2,4-Trimethylbenzene	ND		0.20	
96-12-8	1,2-Dibromo-3-Chloropropane	ND		0.40	
106-93-4	1,2-Dibromoethane	ND		0.20	
95-50-1	1,2-Dichlorobenzene	ND		0.40	
107-06-2	1,2-Dichloroethane	ND		0.20	
78-87-5	1,2-Dichloropropane	ND		0.20	
76-14-2	1,2-Dichlorotetrafluoroethane	ND		0.20	
108-67-8	1,3,5-Trimethylbenzene	ND		0.20	
106-99-0	1,3-Butadiene	ND		0.40	
541-73-1	1,3-Dichlorobenzene	ND		0.20	
106-46-7	1,4-Dichlorobenzene	ND		0.20	
123-91-1	1,4-Dioxane	ND		0.40	
71-36-3	1-Butanol	ND		2.0	
90-12-0	1-Methylnaphthalene	ND		2.5	
540-84-1	2,2,4-Trimethylpentane	ND		0.40	
565-59-3	2,3-Dimethylpentane	ND		0.20	
78-93-3	2-Butanone	ND		1.0	
95-49-8	2-Chlorotoluene	ND		0.40	
591-78-6	2-Hexanone	ND		0.40	
78-78-4	2-Methylbutane	ND		0.50	
91-57-6	2-Methylnaphthalene	ND		2.5	
107-83-5	2-Methylpentane	ND		0.20	
107-05-1	3-Chloropropene	ND		0.20	
622-96-8	4-Ethyltoluene	ND		0.40	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		1.0	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19038-1

SDG No.:

Client Sample ID: 10333 Lab Sample ID: 140-19038-2

Matrix: Air Lab File ID: RE11BLK02.D

Analysis Method: TO-15 Date Collected: 05/08/2020 08:50

Sample wt/vol: 200(mL) Date Analyzed: 05/11/2020 15:27

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 39492 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
67-64-1	Acetone	ND		7.5	
75-05-8	Acetonitrile	ND		1.0	
107-02-8	Acrolein	ND		1.0	
107-13-1	Acrylonitrile	ND		2.0	
98-83-9	Alpha Methyl Styrene	ND		0.40	
71-43-2	Benzene	ND		0.20	
100-44-7	Benzyl chloride	ND		0.40	
75-27-4	Bromodichloromethane	ND		0.20	
75-25-2	Bromoform	ND		0.20	
74-83-9	Bromomethane	ND		0.20	
106-97-8	Butane	ND		1.0	
75-15-0	Carbon disulfide	ND		0.40	
56-23-5	Carbon tetrachloride	ND		0.20	
108-90-7	Chlorobenzene	ND		0.20	
75-45-6	Chlorodifluoromethane	ND		0.20	
75-00-3	Chloroethane	ND		0.20	
67-66-3	Chloroform	ND		0.20	
74-87-3	Chloromethane	ND		1.0	
156-59-2	cis-1,2-Dichloroethene	ND		0.20	
10061-01-5	cis-1,3-Dichloropropene	ND		0.40	
98-82-8	Cumene	ND		0.40	
110-82-7	Cyclohexane	ND		0.40	
124-48-1	Dibromochloromethane	ND		0.20	
74-95-3	Dibromomethane	ND		0.40	
75-71-8	Dichlorodifluoromethane	ND		0.20	
64-17-5	Ethanol	ND		5.0	
141-78-6	Ethyl acetate	ND		2.0	
60-29-7	Ethyl ether	ND		2.0	
100-41-4	Ethylbenzene	ND		0.20	
87-68-3	Hexachlorobutadiene	ND		1.0	
110-54-3	Hexane	ND		0.40	
496-11-7	Indane	ND		0.20	
95-13-6	Indene	ND		0.40	
67-63-0	Isopropyl alcohol	ND		1.2	
179601-23-1	m&p-Xylene	ND		0.20	
80-62-6	Methyl methacrylate	ND		0.40	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19038-1

SDG No.:

Client Sample ID: 10333 Lab Sample ID: 140-19038-2

Matrix: Air Lab File ID: RE11BLK02.D

Analysis Method: TO-15 Date Collected: 05/08/2020 08:50

Sample wt/vol: 200(mL) Date Analyzed: 05/11/2020 15:27

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 39492 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
1634-04-4	Methyl tert-butyl ether	ND		1.0	
108-87-2	Methylcyclohexane	ND		0.20	
75-09-2	Methylene Chloride	ND		1.0	
91-20-3	Naphthalene	ND		0.40	
104-51-8	n-Butylbenzene	ND		0.40	
124-18-5	n-Decane	ND		1.0	
112-40-3	n-Dodecane	ND		1.0	
142-82-5	n-Heptane	ND		0.40	
111-84-2	n-Nonane	ND		0.40	
111-65-9	n-Octane	ND		0.40	
103-65-1	N-Propylbenzene	ND		0.40	
1120-21-4	n-Undecane	ND		1.0	
95-47-6	o-Xylene	ND		0.20	
99-87-6	p-Cymene	ND		0.20	
109-66-0	Pentane	ND		2.5	
115-07-1	Propene	ND		2.5	
135-98-8	sec-Butylbenzene	ND		0.40	
100-42-5	Styrene	ND		0.20	
75-65-0	tert-Butanol	ND		1.0	
98-06-6	tert-Butylbenzene	ND		0.40	
127-18-4	Tetrachloroethene	ND		0.20	
109-99-9	Tetrahydrofuran	ND		1.0	
110-02-1	Thiophene	ND		0.20	
108-88-3	Toluene	ND		1.0	
156-60-5	trans-1,2-Dichloroethene	ND		0.20	
10061-02-6	trans-1,3-Dichloropropene	ND		0.20	
79-01-6	Trichloroethene	ND		0.20	
75-69-4	Trichlorofluoromethane	ND		0.20	
108-05-4	Vinyl acetate	ND		1.0	
593-60-2	Vinyl bromide	ND		0.20	
75-01-4	Vinyl chloride	ND		0.40	

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MR\20200507-15427.b\RE11BLK02.D
Lims ID: 140-19038-A-2
Client ID: 10333
Sample Type: Client
Inject. Date: 11-May-2020 15:27:30 ALS Bottle#: 2 Worklist Smp#: 5
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0015427-005
Misc. Info.: 10333
Operator ID: HMT Instrument ID: MR

Method: \\chromfs\Knoxville\ChromData\MR\20200507-15427.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 12-May-2020 10:02:25 Calib Date: 10-Apr-2020 00:47:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MR\20200409-15180.b\RD09IC10.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1021

First Level Reviewer: khachitpongpanits Date: 12-May-2020 10:02:25

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.339	8.333	0.006	78	185097	4.00	
* 2 1,4-Difluorobenzene	114	10.577	10.577	0.000	93	1353568	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.414	15.408	0.006	82	1125859	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.058	17.064	-0.006	95	570594	3.42	
7 Propene	41	3.335	3.340	-0.005	97	35298	-0.5921	7
58 Trichloroethene	130	11.316	11.310	0.006	28	2781	0.0218	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

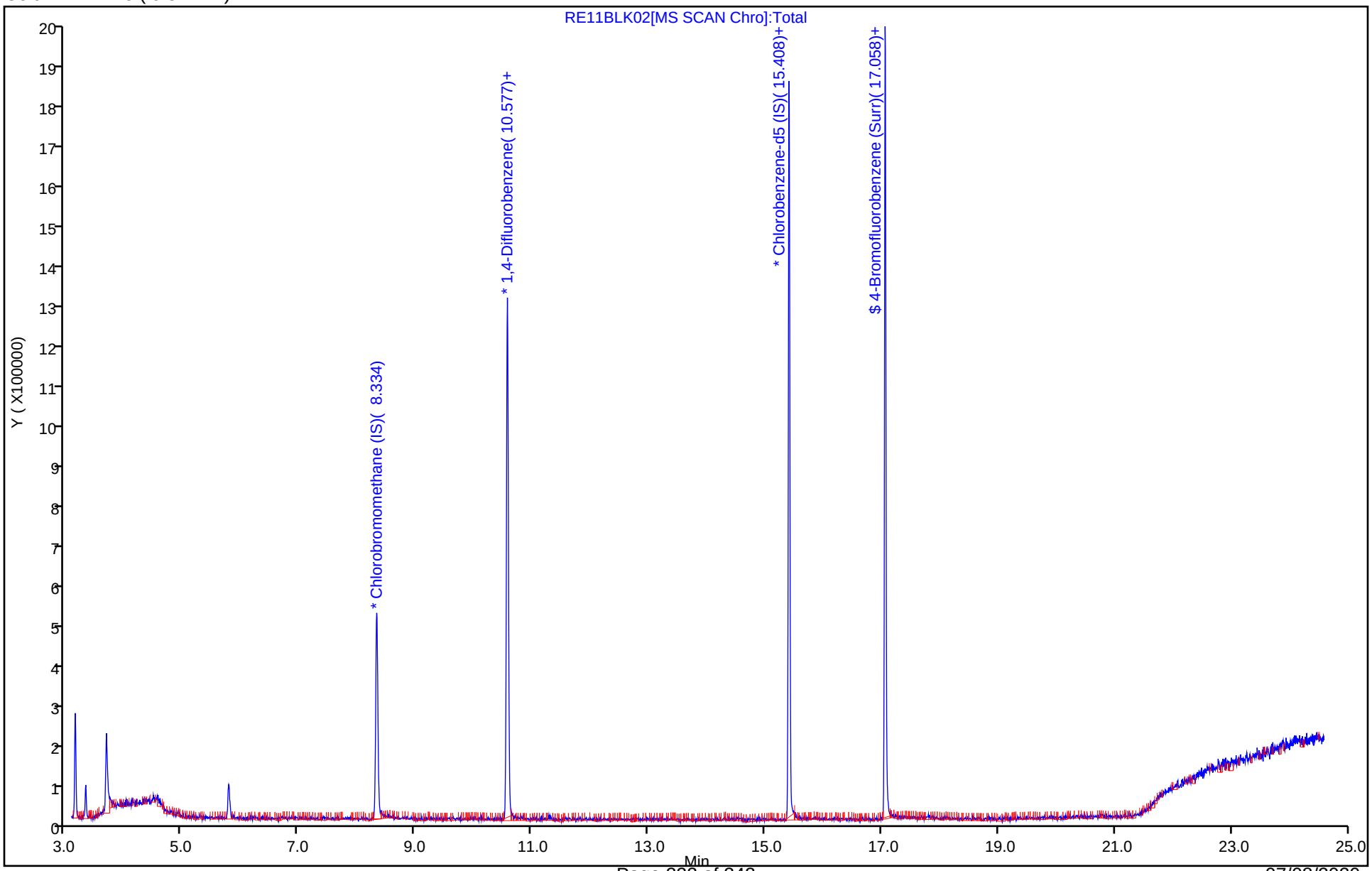
40MXISSURP_00004 Amount Added: 40.00 Units: mL Run Reagent

Report Date: 12-May-2020 10:02:25 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200507-15427.b\RE11BLK02.D				
Injection Date:	11-May-2020 15:27:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	140-19038-A-2	Lab Sample ID:	140-19038-2	Worklist Smp#:	5
Client ID:	10333				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



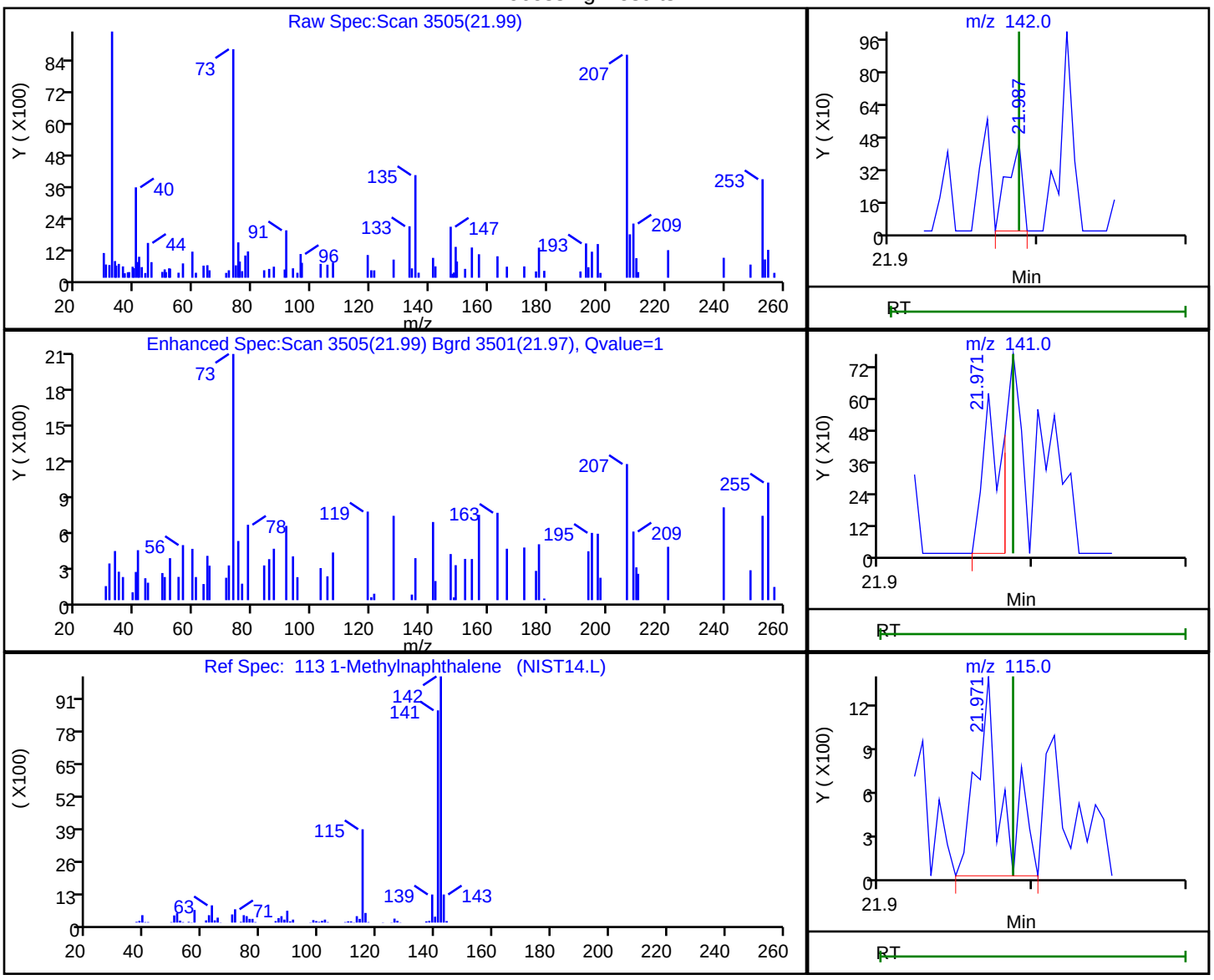
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200507-15427.b\RE11BLK02.D				
Injection Date:	11-May-2020 15:27:30	Instrument ID:	MR		
Lims ID:	140-19038-A-2	Lab Sample ID:	140-19038-2		
Client ID:	10333				
Operator ID:	HMT	ALS Bottle#:	2	Worklist Smp#:	5
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

113 1-Methylnaphthalene, CAS: 90-12-0

Processing Results



RT	Mass	Response	Amount
21.99	142.00	314	0.259944
21.97	141.00	500	
21.97	115.00	1539	

Reviewer: khachitpongpanits, 12-May-2020 10:02:20

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

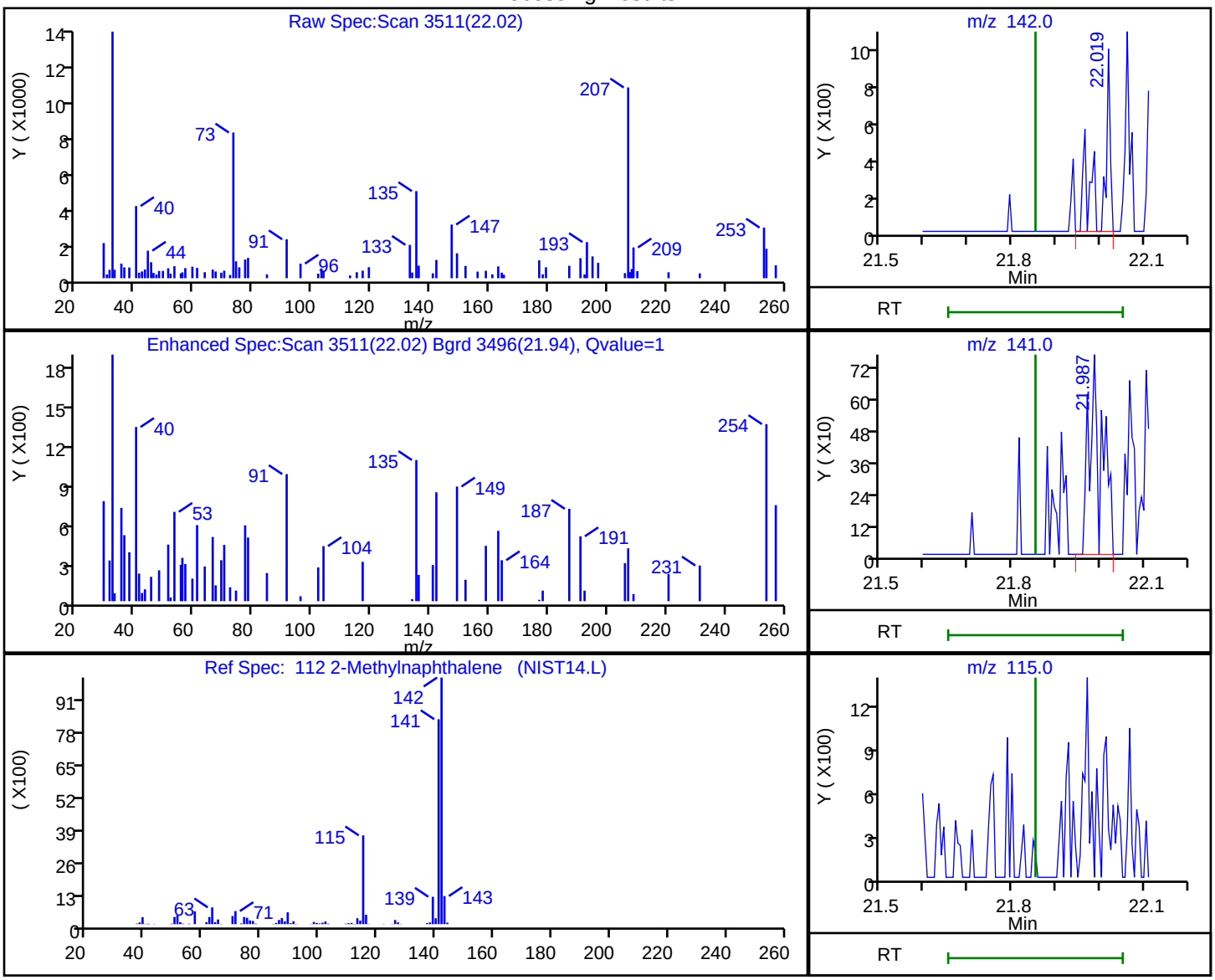
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200507-15427.b\RE11BLK02.D				
Injection Date:	11-May-2020 15:27:30	Instrument ID:	MR		
Lims ID:	140-19038-A-2	Lab Sample ID:	140-19038-2		
Client ID:	10333				
Operator ID:	HMT	ALS Bottle#:	2	Worklist Smp#:	5
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

112 2-Methylnaphthalene, CAS: 91-57-6

Processing Results



RT	Mass	Response	Amount
22.02	142.00	1187	0.620284
21.99	141.00	1538	
21.85	115.00	0	

Reviewer: khachitpongpanits, 12-May-2020 10:02:19

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

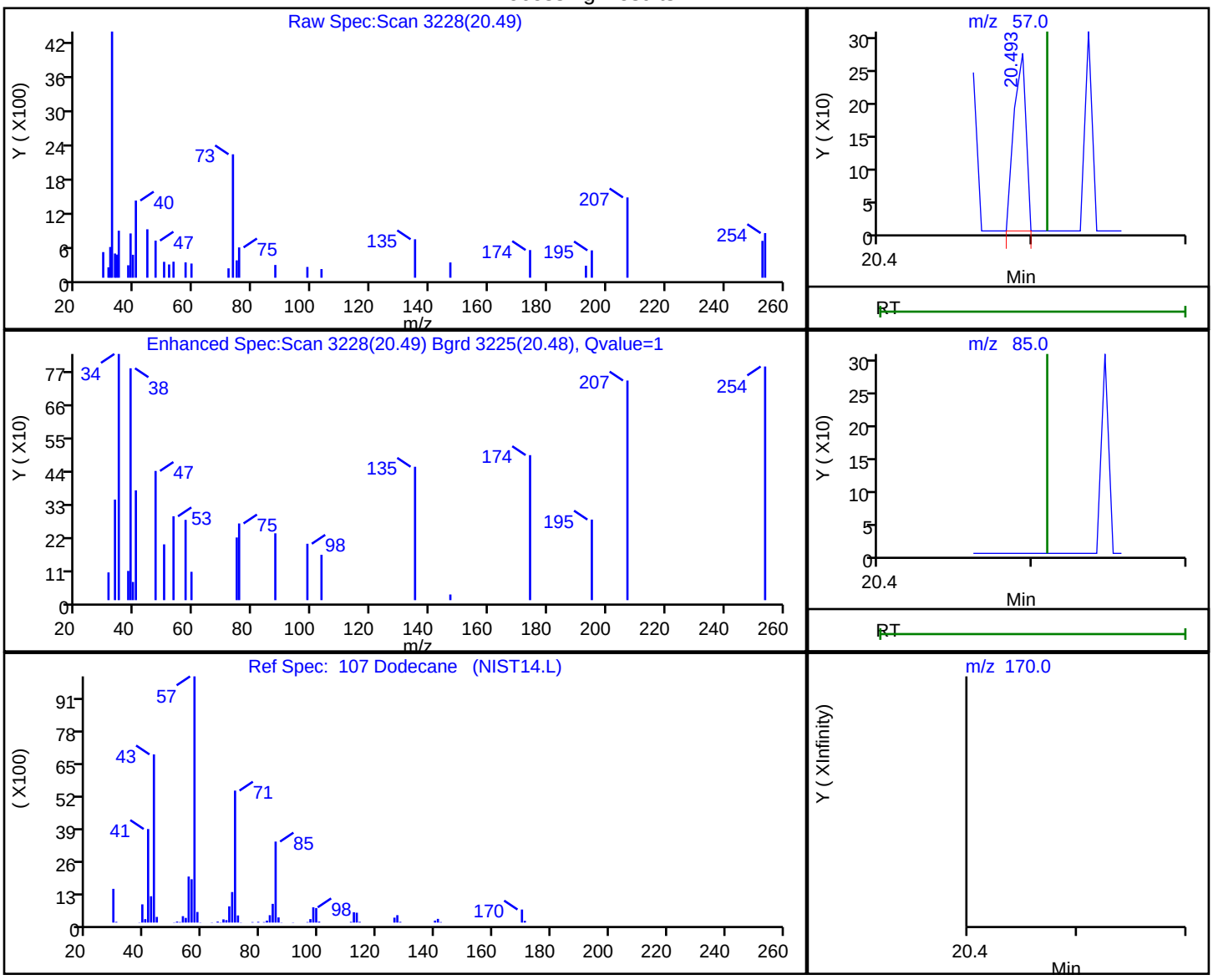
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200507-15427.b\RE11BLK02.D				
Injection Date:	11-May-2020 15:27:30	Instrument ID:	MR		
Lims ID:	140-19038-A-2	Lab Sample ID:	140-19038-2		
Client ID:	10333				
Operator ID:	HMT	ALS Bottle#:	2	Worklist Smp#:	5
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

107 Dodecane, CAS: 112-40-3

Processing Results



RT	Mass	Response	Amount
20.49	57.00	147	0.398415
20.51	85.00	0	
20.51	170.00	0	

Reviewer: khachitpongpanits, 12-May-2020 10:02:17

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19038-1

SDG No.:

Client Sample ID: 11812 Lab Sample ID: 140-19038-3

Matrix: Air Lab File ID: RE11BLK03.D

Analysis Method: TO-15 Date Collected: 05/08/2020 08:50

Sample wt/vol: 200(mL) Date Analyzed: 05/11/2020 16:16

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 39492 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	ND		0.20	
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.20	
79-00-5	1,1,2-Trichloroethane	ND		0.20	
76-13-1	1,1,2-Trichlorotrifluoroethane	ND		0.20	
75-34-3	1,1-Dichloroethane	ND		0.20	
75-35-4	1,1-Dichloroethene	ND		0.20	
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	
96-18-4	1,2,3-Trichloropropane	ND		0.50	
526-73-8	1,2,3-Trimethylbenzene	ND		0.20	
95-93-2	1,2,4,5-Tetramethylbenzene	ND		0.20	
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	
95-63-6	1,2,4-Trimethylbenzene	ND		0.20	
96-12-8	1,2-Dibromo-3-Chloropropane	ND		0.40	
106-93-4	1,2-Dibromoethane	ND		0.20	
95-50-1	1,2-Dichlorobenzene	ND		0.40	
107-06-2	1,2-Dichloroethane	ND		0.20	
78-87-5	1,2-Dichloropropane	ND		0.20	
76-14-2	1,2-Dichlorotetrafluoroethane	ND		0.20	
108-67-8	1,3,5-Trimethylbenzene	ND		0.20	
106-99-0	1,3-Butadiene	ND		0.40	
541-73-1	1,3-Dichlorobenzene	ND		0.20	
106-46-7	1,4-Dichlorobenzene	ND		0.20	
123-91-1	1,4-Dioxane	ND		0.40	
71-36-3	1-Butanol	ND		2.0	
90-12-0	1-Methylnaphthalene	ND		2.5	
540-84-1	2,2,4-Trimethylpentane	ND		0.40	
565-59-3	2,3-Dimethylpentane	ND		0.20	
78-93-3	2-Butanone	ND		1.0	
95-49-8	2-Chlorotoluene	ND		0.40	
591-78-6	2-Hexanone	ND		0.40	
78-78-4	2-Methylbutane	ND		0.50	
91-57-6	2-Methylnaphthalene	ND		2.5	
107-83-5	2-Methylpentane	ND		0.20	
107-05-1	3-Chloropropene	ND		0.20	
622-96-8	4-Ethyltoluene	ND		0.40	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		1.0	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19038-1

SDG No.:

Client Sample ID: 11812 Lab Sample ID: 140-19038-3

Matrix: Air Lab File ID: RE11BLK03.D

Analysis Method: TO-15 Date Collected: 05/08/2020 08:50

Sample wt/vol: 200(mL) Date Analyzed: 05/11/2020 16:16

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 39492 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
67-64-1	Acetone	ND		7.5	
75-05-8	Acetonitrile	ND		1.0	
107-02-8	Acrolein	ND		1.0	
107-13-1	Acrylonitrile	ND		2.0	
98-83-9	Alpha Methyl Styrene	ND		0.40	
71-43-2	Benzene	ND		0.20	
100-44-7	Benzyl chloride	ND		0.40	
75-27-4	Bromodichloromethane	ND		0.20	
75-25-2	Bromoform	ND		0.20	
74-83-9	Bromomethane	ND		0.20	
106-97-8	Butane	ND		1.0	
75-15-0	Carbon disulfide	ND		0.40	
56-23-5	Carbon tetrachloride	ND		0.20	
108-90-7	Chlorobenzene	ND		0.20	
75-45-6	Chlorodifluoromethane	ND		0.20	
75-00-3	Chloroethane	ND		0.20	
67-66-3	Chloroform	ND		0.20	
74-87-3	Chloromethane	ND		1.0	
156-59-2	cis-1,2-Dichloroethene	ND		0.20	
10061-01-5	cis-1,3-Dichloropropene	ND		0.40	
98-82-8	Cumene	ND		0.40	
110-82-7	Cyclohexane	ND		0.40	
124-48-1	Dibromochloromethane	ND		0.20	
74-95-3	Dibromomethane	ND		0.40	
75-71-8	Dichlorodifluoromethane	ND		0.20	
64-17-5	Ethanol	ND		5.0	
141-78-6	Ethyl acetate	ND		2.0	
60-29-7	Ethyl ether	ND		2.0	
100-41-4	Ethylbenzene	ND		0.20	
87-68-3	Hexachlorobutadiene	ND		1.0	
110-54-3	Hexane	ND		0.40	
496-11-7	Indane	ND		0.20	
95-13-6	Indene	ND		0.40	
67-63-0	Isopropyl alcohol	ND		1.2	
179601-23-1	m&p-Xylene	ND		0.20	
80-62-6	Methyl methacrylate	ND		0.40	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19038-1

SDG No.:

Client Sample ID: 11812 Lab Sample ID: 140-19038-3

Matrix: Air Lab File ID: RE11BLK03.D

Analysis Method: TO-15 Date Collected: 05/08/2020 08:50

Sample wt/vol: 200(mL) Date Analyzed: 05/11/2020 16:16

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 39492 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
1634-04-4	Methyl tert-butyl ether	ND		1.0	
108-87-2	Methylcyclohexane	ND		0.20	
75-09-2	Methylene Chloride	ND		1.0	
91-20-3	Naphthalene	ND		0.40	
104-51-8	n-Butylbenzene	ND		0.40	
124-18-5	n-Decane	ND		1.0	
112-40-3	n-Dodecane	ND		1.0	
142-82-5	n-Heptane	ND		0.40	
111-84-2	n-Nonane	ND		0.40	
111-65-9	n-Octane	ND		0.40	
103-65-1	N-Propylbenzene	ND		0.40	
1120-21-4	n-Undecane	ND		1.0	
95-47-6	o-Xylene	ND		0.20	
99-87-6	p-Cymene	ND		0.20	
109-66-0	Pentane	ND		2.5	
115-07-1	Propene	ND		2.5	
135-98-8	sec-Butylbenzene	ND		0.40	
100-42-5	Styrene	ND		0.20	
75-65-0	tert-Butanol	ND		1.0	
98-06-6	tert-Butylbenzene	ND		0.40	
127-18-4	Tetrachloroethene	ND		0.20	
109-99-9	Tetrahydrofuran	ND		1.0	
110-02-1	Thiophene	ND		0.20	
108-88-3	Toluene	ND		1.0	
156-60-5	trans-1,2-Dichloroethene	ND		0.20	
10061-02-6	trans-1,3-Dichloropropene	ND		0.20	
79-01-6	Trichloroethene	ND		0.20	
75-69-4	Trichlorofluoromethane	ND		0.20	
108-05-4	Vinyl acetate	ND		1.0	
593-60-2	Vinyl bromide	ND		0.20	
75-01-4	Vinyl chloride	ND		0.40	

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MR\20200507-15427.b\RE11BLK03.D				
Lims ID:	140-19038-A-3				
Client ID:	11812				
Sample Type:	Client				
Inject. Date:	11-May-2020 16:16:30	ALS Bottle#:	3	Worklist Smp#:	10
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0015427-010				
Misc. Info.:	8459				
Operator ID:	HMT	Instrument ID:	MR		
Method:	\\chromfs\Knoxville\ChromData\MR\20200507-15427.b\MR_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	12-May-2020 10:03:24	Calib Date:	10-Apr-2020 00:47:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MR\20200409-15180.b\RD09IC10.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1021				
First Level Reviewer: khachitpongpanits		Date:	12-May-2020 10:03:24		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.328	8.333	-0.005	83	184423	4.00	
* 2 1,4-Difluorobenzene	114	10.571	10.577	-0.006	93	1293745	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.408	15.408	0.000	84	1102411	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.059	17.064	-0.006	95	575877	3.52	
7 Propene	41	3.335	3.340	-0.005	95	34452	-0.6044	7
65 cis-1,3-Dichloropropene	75	12.399	12.588	-0.189	1	356	0.002776	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

40MXISSURP_00004 Amount Added: 40.00 Units: mL Run Reagent

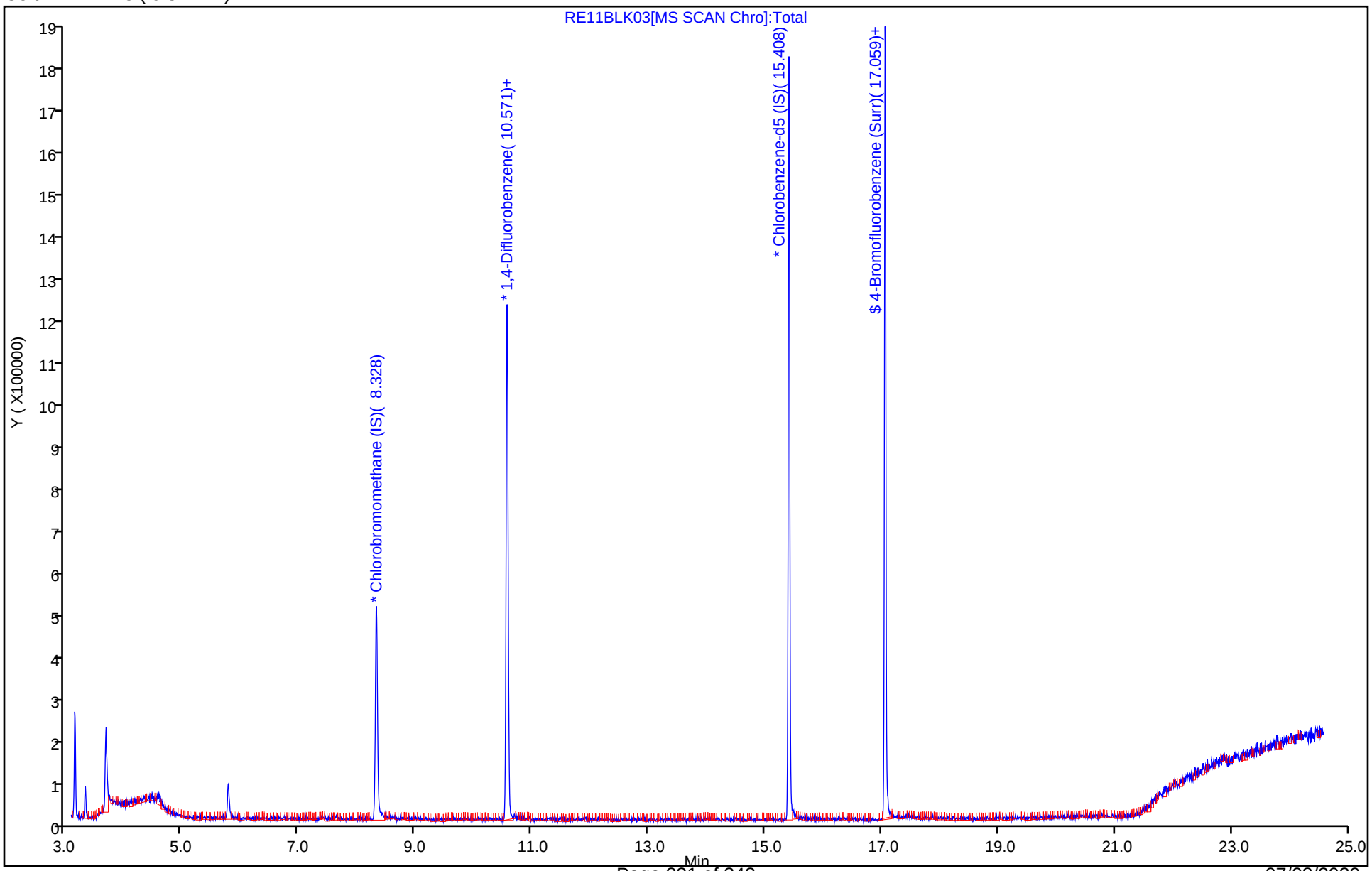
Report Date: 12-May-2020 10:03:25 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200507-15427.b\RE11BLK03.D

Injection Date:	11-May-2020 16:16:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	140-19038-A-3	Lab Sample ID:	140-19038-3	Worklist Smp#:	10
Client ID:	11812				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



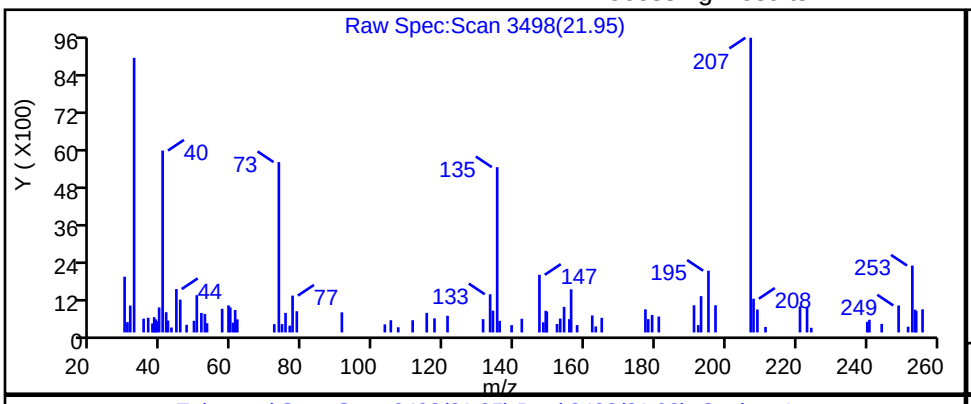
User Disabled Compound Report

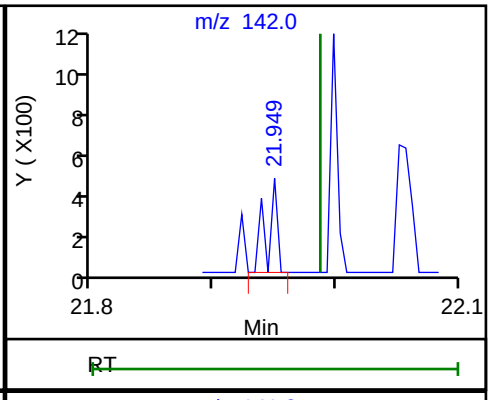
Eurofins TestAmerica, Knoxville

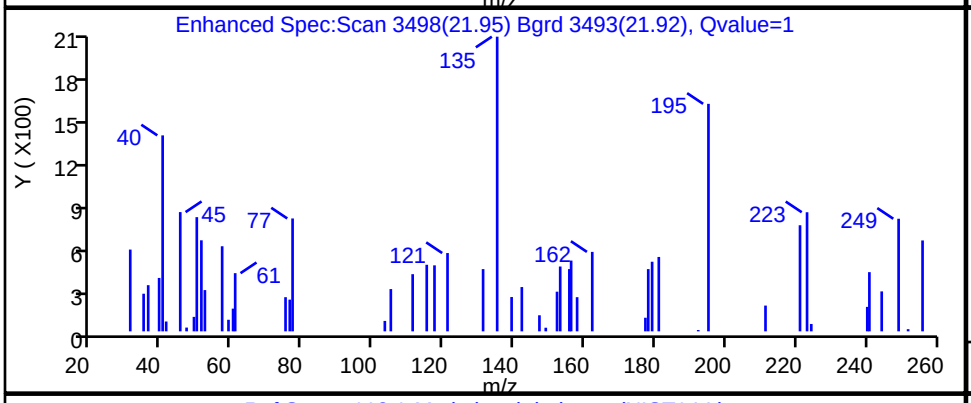
Data File:	\\chromfs\Knoxville\ChromData\MR\20200507-15427.b\RE11BLK03.D				
Injection Date:	11-May-2020 16:16:30	Instrument ID:	MR		
Lims ID:	140-19038-A-3	Lab Sample ID:	140-19038-3		
Client ID:	11812				
Operator ID:	HMT	ALS Bottle#:	3	Worklist Smp#:	10
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

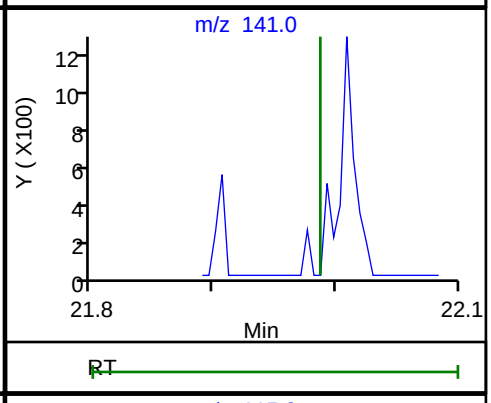
113 1-Methylnaphthalene, CAS: 90-12-0

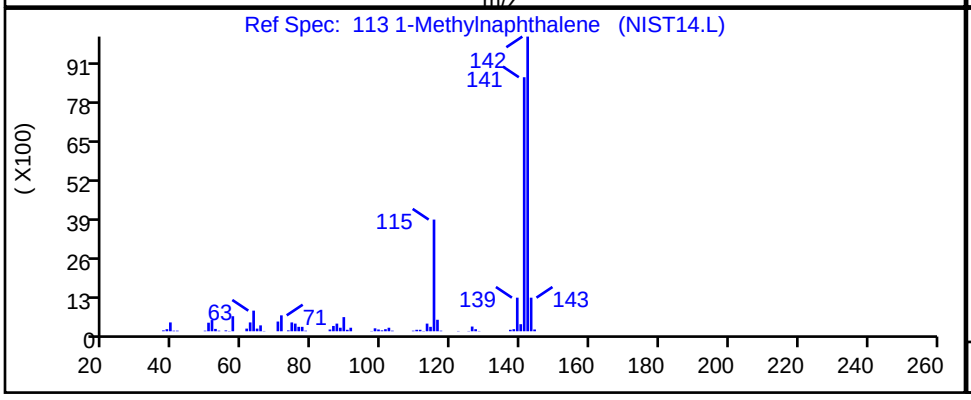
Processing Results

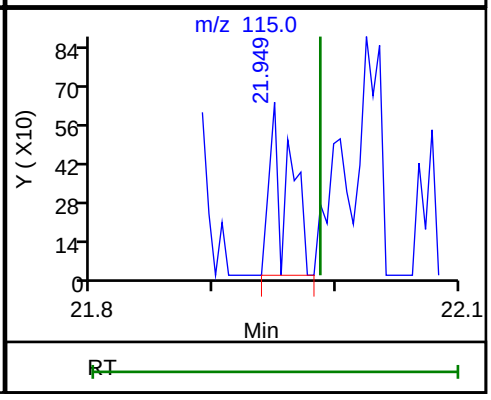












RT	Mass	Response	Amount
21.95	142.00	256	0.259877
21.99	141.00	0	
21.95	115.00	699	

Reviewer: khachitpongpanits, 12-May-2020 10:03:20

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

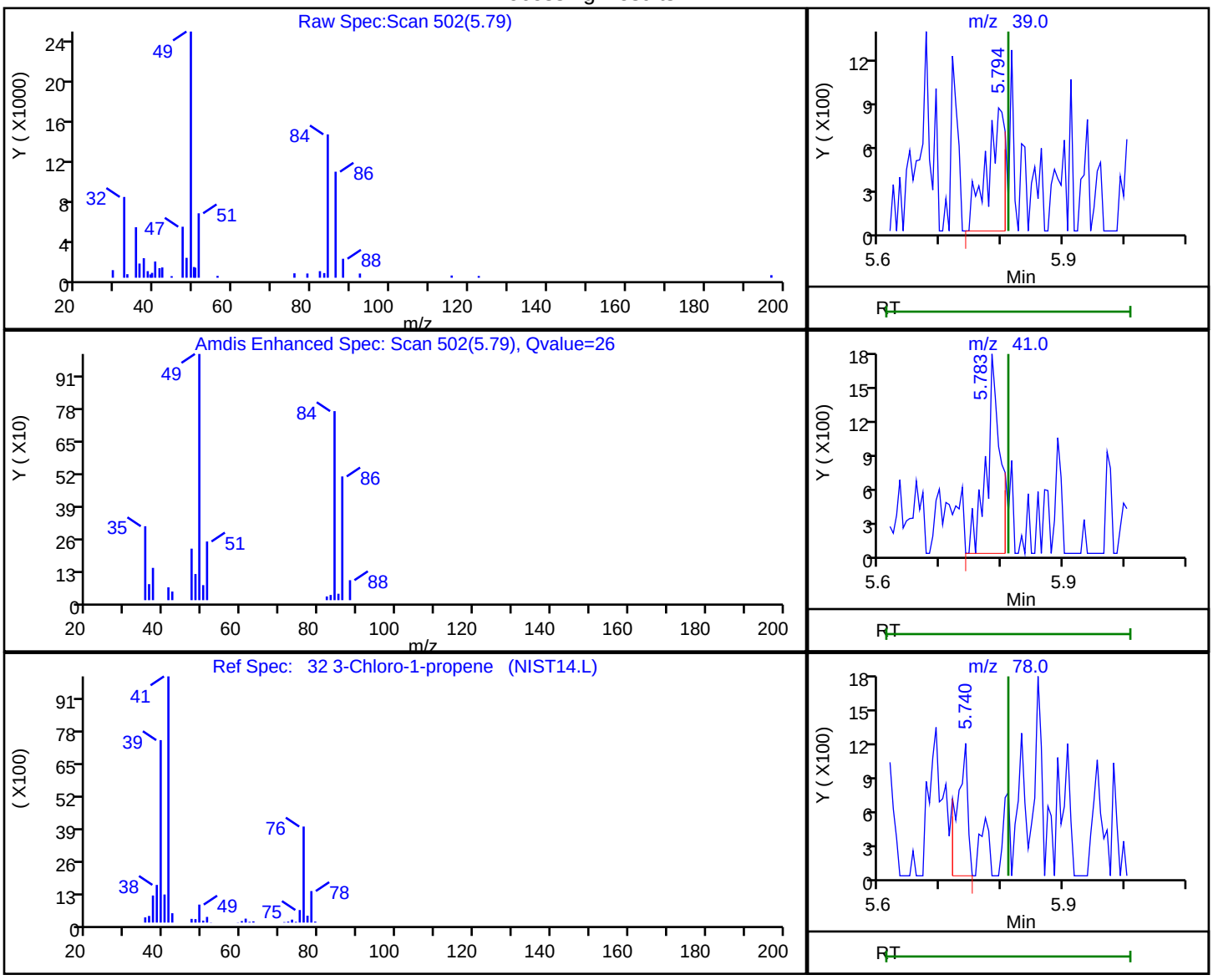
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200507-15427.b\RE11BLK03.D				
Injection Date:	11-May-2020 16:16:30	Instrument ID:	MR		
Lims ID:	140-19038-A-3	Lab Sample ID:	140-19038-3		
Client ID:	11812				
Operator ID:	HMT	ALS Bottle#:	3	Worklist Smp#:	10
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

32 3-Chloro-1-propene, CAS: 107-05-1

Processing Results



RT	Mass	Response	Amount
5.79	39.00	1697	0.019200
5.78	41.00	2713	
5.74	78.00	1400	

Reviewer: khachitpongpanits, 12-May-2020 10:02:55

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

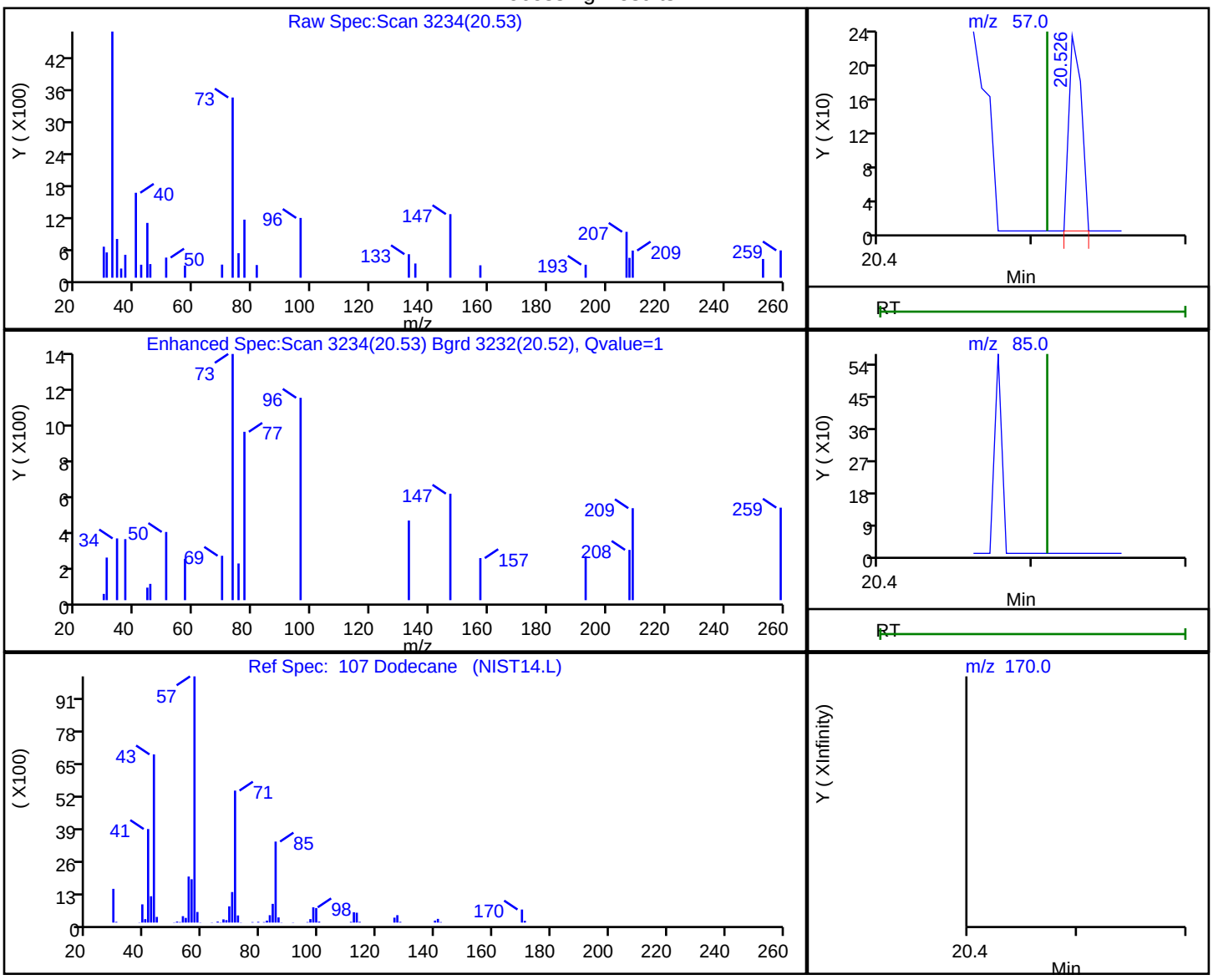
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200507-15427.b\RE11BLK03.D				
Injection Date:	11-May-2020 16:16:30	Instrument ID:	MR		
Lims ID:	140-19038-A-3	Lab Sample ID:	140-19038-3		
Client ID:	11812				
Operator ID:	HMT	ALS Bottle#:	3	Worklist Smp#:	10
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

107 Dodecane, CAS: 112-40-3

Processing Results



RT	Mass	Response	Amount
20.53	57.00	132	0.398390
20.51	85.00	0	
20.51	170.00	0	

Reviewer: khachitpongpanits, 12-May-2020 10:03:17

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19038-1

SDG No.:

Client Sample ID: 34002492 Lab Sample ID: 140-19038-4

Matrix: Air Lab File ID: RE11BLK04.D

Analysis Method: TO-15 Date Collected: 05/08/2020 08:50

Sample wt/vol: 200(mL) Date Analyzed: 05/11/2020 17:04

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 39492 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	ND		0.20	
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.20	
79-00-5	1,1,2-Trichloroethane	ND		0.20	
76-13-1	1,1,2-Trichlorotrifluoroethane	ND		0.20	
75-34-3	1,1-Dichloroethane	ND		0.20	
75-35-4	1,1-Dichloroethene	ND		0.20	
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	
96-18-4	1,2,3-Trichloropropane	ND		0.50	
526-73-8	1,2,3-Trimethylbenzene	ND		0.20	
95-93-2	1,2,4,5-Tetramethylbenzene	ND		0.20	
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	
95-63-6	1,2,4-Trimethylbenzene	ND		0.20	
96-12-8	1,2-Dibromo-3-Chloropropane	ND		0.40	
106-93-4	1,2-Dibromoethane	ND		0.20	
95-50-1	1,2-Dichlorobenzene	ND		0.40	
107-06-2	1,2-Dichloroethane	ND		0.20	
78-87-5	1,2-Dichloropropane	ND		0.20	
76-14-2	1,2-Dichlorotetrafluoroethane	ND		0.20	
108-67-8	1,3,5-Trimethylbenzene	ND		0.20	
106-99-0	1,3-Butadiene	ND		0.40	
541-73-1	1,3-Dichlorobenzene	ND		0.20	
106-46-7	1,4-Dichlorobenzene	ND		0.20	
123-91-1	1,4-Dioxane	ND		0.40	
71-36-3	1-Butanol	ND		2.0	
90-12-0	1-Methylnaphthalene	ND		2.5	
540-84-1	2,2,4-Trimethylpentane	ND		0.40	
565-59-3	2,3-Dimethylpentane	ND		0.20	
78-93-3	2-Butanone	ND		1.0	
95-49-8	2-Chlorotoluene	ND		0.40	
591-78-6	2-Hexanone	ND		0.40	
78-78-4	2-Methylbutane	ND		0.50	
91-57-6	2-Methylnaphthalene	ND		2.5	
107-83-5	2-Methylpentane	ND		0.20	
107-05-1	3-Chloropropene	ND		0.20	
622-96-8	4-Ethyltoluene	ND		0.40	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		1.0	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19038-1

SDG No.:

Client Sample ID: 34002492 Lab Sample ID: 140-19038-4

Matrix: Air Lab File ID: RE11BLK04.D

Analysis Method: TO-15 Date Collected: 05/08/2020 08:50

Sample wt/vol: 200(mL) Date Analyzed: 05/11/2020 17:04

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 39492 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
67-64-1	Acetone	ND		7.5	
75-05-8	Acetonitrile	ND		1.0	
107-02-8	Acrolein	ND		1.0	
107-13-1	Acrylonitrile	ND		2.0	
98-83-9	Alpha Methyl Styrene	ND		0.40	
71-43-2	Benzene	ND		0.20	
100-44-7	Benzyl chloride	ND		0.40	
75-27-4	Bromodichloromethane	ND		0.20	
75-25-2	Bromoform	ND		0.20	
74-83-9	Bromomethane	ND		0.20	
106-97-8	Butane	ND		1.0	
75-15-0	Carbon disulfide	ND		0.40	
56-23-5	Carbon tetrachloride	ND		0.20	
108-90-7	Chlorobenzene	ND		0.20	
75-45-6	Chlorodifluoromethane	ND		0.20	
75-00-3	Chloroethane	ND		0.20	
67-66-3	Chloroform	ND		0.20	
74-87-3	Chloromethane	ND		1.0	
156-59-2	cis-1,2-Dichloroethene	ND		0.20	
10061-01-5	cis-1,3-Dichloropropene	ND		0.40	
98-82-8	Cumene	ND		0.40	
110-82-7	Cyclohexane	ND		0.40	
124-48-1	Dibromochloromethane	ND		0.20	
74-95-3	Dibromomethane	ND		0.40	
75-71-8	Dichlorodifluoromethane	ND		0.20	
64-17-5	Ethanol	ND		5.0	
141-78-6	Ethyl acetate	ND		2.0	
60-29-7	Ethyl ether	ND		2.0	
100-41-4	Ethylbenzene	ND		0.20	
87-68-3	Hexachlorobutadiene	ND		1.0	
110-54-3	Hexane	ND		0.40	
496-11-7	Indane	ND		0.20	
95-13-6	Indene	ND		0.40	
67-63-0	Isopropyl alcohol	ND		1.2	
179601-23-1	m&p-Xylene	ND		0.20	
80-62-6	Methyl methacrylate	ND		0.40	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19038-1

SDG No.:

Client Sample ID: 34002492 Lab Sample ID: 140-19038-4

Matrix: Air Lab File ID: RE11BLK04.D

Analysis Method: TO-15 Date Collected: 05/08/2020 08:50

Sample wt/vol: 200(mL) Date Analyzed: 05/11/2020 17:04

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 39492 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
1634-04-4	Methyl tert-butyl ether	ND		1.0	
108-87-2	Methylcyclohexane	ND		0.20	
75-09-2	Methylene Chloride	ND		1.0	
91-20-3	Naphthalene	ND		0.40	
104-51-8	n-Butylbenzene	ND		0.40	
124-18-5	n-Decane	ND		1.0	
112-40-3	n-Dodecane	ND		1.0	
142-82-5	n-Heptane	ND		0.40	
111-84-2	n-Nonane	ND		0.40	
111-65-9	n-Octane	ND		0.40	
103-65-1	N-Propylbenzene	ND		0.40	
1120-21-4	n-Undecane	ND		1.0	
95-47-6	o-Xylene	ND		0.20	
99-87-6	p-Cymene	ND		0.20	
109-66-0	Pentane	ND		2.5	
115-07-1	Propene	ND		2.5	
135-98-8	sec-Butylbenzene	ND		0.40	
100-42-5	Styrene	ND		0.20	
75-65-0	tert-Butanol	ND		1.0	
98-06-6	tert-Butylbenzene	ND		0.40	
127-18-4	Tetrachloroethene	ND		0.20	
109-99-9	Tetrahydrofuran	ND		1.0	
110-02-1	Thiophene	ND		0.20	
108-88-3	Toluene	ND		1.0	
156-60-5	trans-1,2-Dichloroethene	ND		0.20	
10061-02-6	trans-1,3-Dichloropropene	ND		0.20	
79-01-6	Trichloroethene	ND		0.20	
75-69-4	Trichlorofluoromethane	ND		0.20	
108-05-4	Vinyl acetate	ND		1.0	
593-60-2	Vinyl bromide	ND		0.20	
75-01-4	Vinyl chloride	ND		0.40	

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MR\20200507-15427.b\RE11BLK04.D
Lims ID: 140-19038-A-4
Client ID: 34002492
Sample Type: Client
Inject. Date: 11-May-2020 17:04:30 ALS Bottle#: 4 Worklist Smp#: 11
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0015427-011
Misc. Info.: 34002391
Operator ID: HMT Instrument ID: MR

Method: \\chromfs\Knoxville\ChromData\MR\20200507-15427.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 12-May-2020 10:04:05 Calib Date: 10-Apr-2020 00:47:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MR\20200409-15180.b\RD09IC10.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1021

First Level Reviewer: khachitpongpanits Date: 12-May-2020 10:04:05

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.334	8.333	0.001	84	188500	4.00	
* 2 1,4-Difluorobenzene	114	10.577	10.577	0.000	93	1306299	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.409	15.408	0.000	84	1116240	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.059	17.064	-0.005	95	568323	3.43	
7 Propene	41	3.346	3.340	0.006	96	36698	-0.5795	7

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

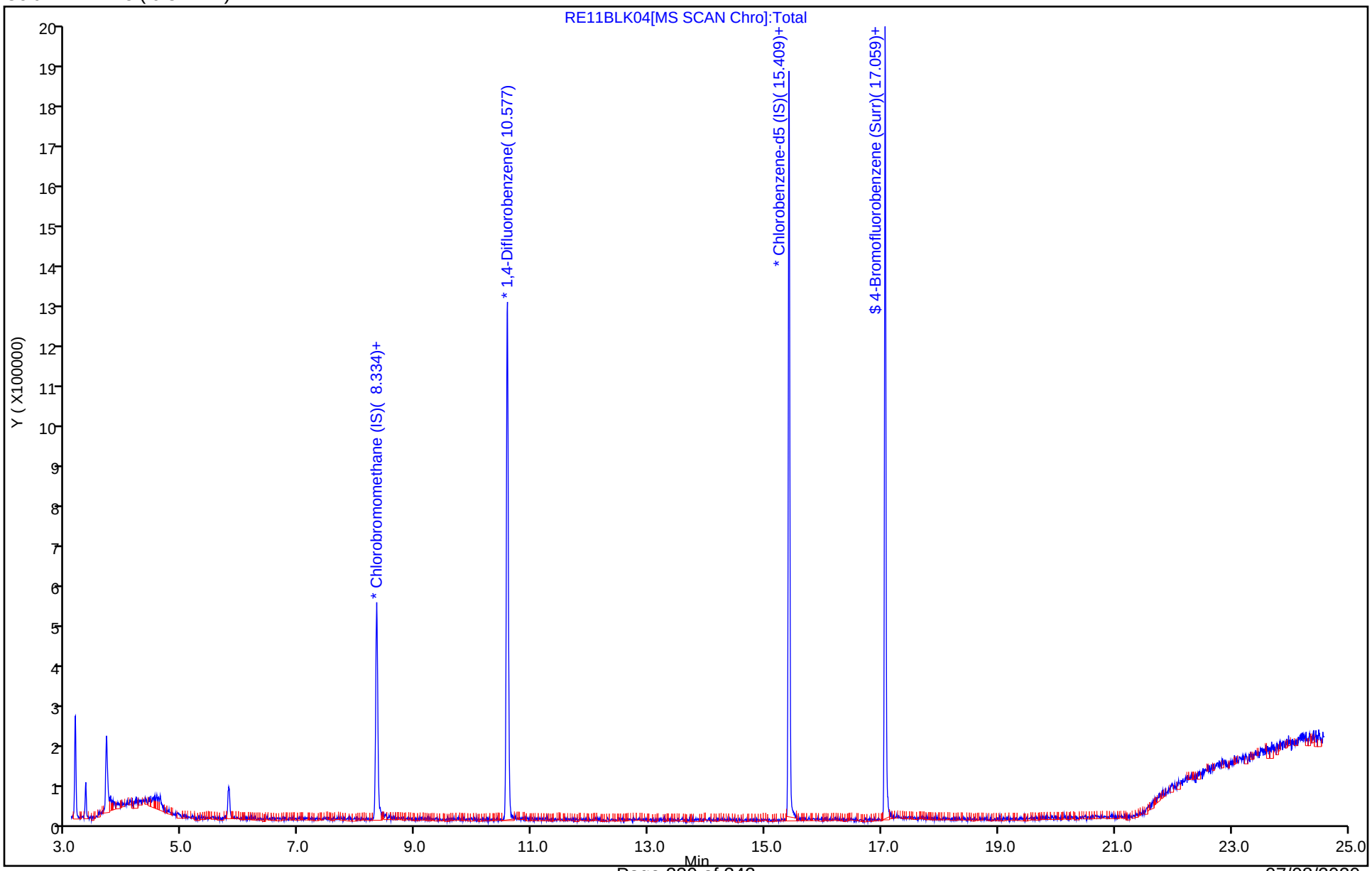
40MXISSURP_00004 Amount Added: 40.00 Units: mL Run Reagent

Report Date: 12-May-2020 10:04:06 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200507-15427.b\RE11BLK04.D				
Injection Date:	11-May-2020 17:04:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	140-19038-A-4	Lab Sample ID:	140-19038-4	Worklist Smp#:	11
Client ID:	34002492				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



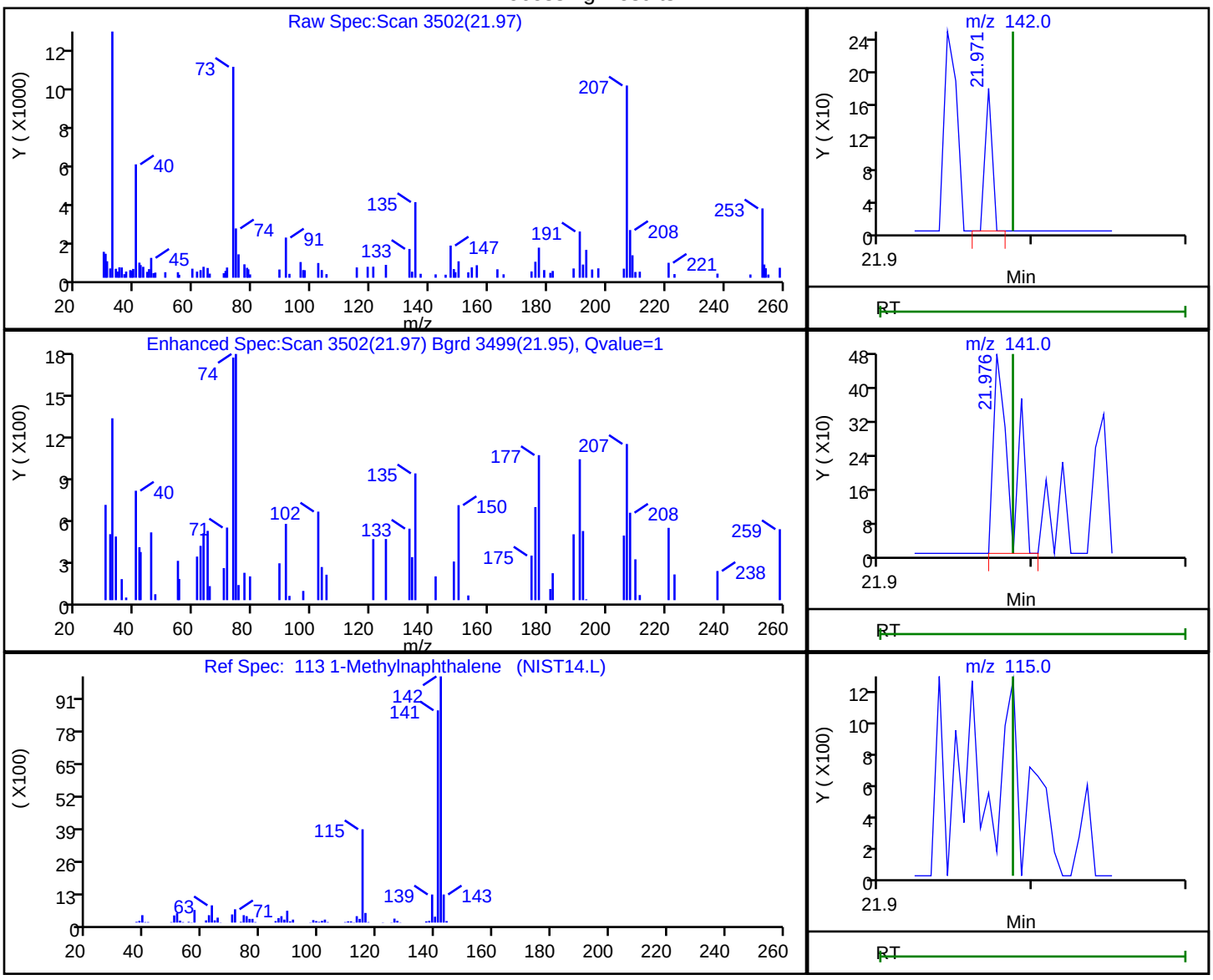
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200507-15427.b\RE11BLK04.D				
Injection Date:	11-May-2020 17:04:30	Instrument ID:	MR		
Lims ID:	140-19038-A-4	Lab Sample ID:	140-19038-4		
Client ID:	34002492				
Operator ID:	HMT	ALS Bottle#:	4	Worklist Smp#:	11
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

113 1-Methylnaphthalene, CAS: 90-12-0

Processing Results



RT	Mass	Response	Amount
21.97	142.00	56	0.259615
21.98	141.00	374	
21.99	115.00	0	

Reviewer: khachitpongpanits, 12-May-2020 10:04:02

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

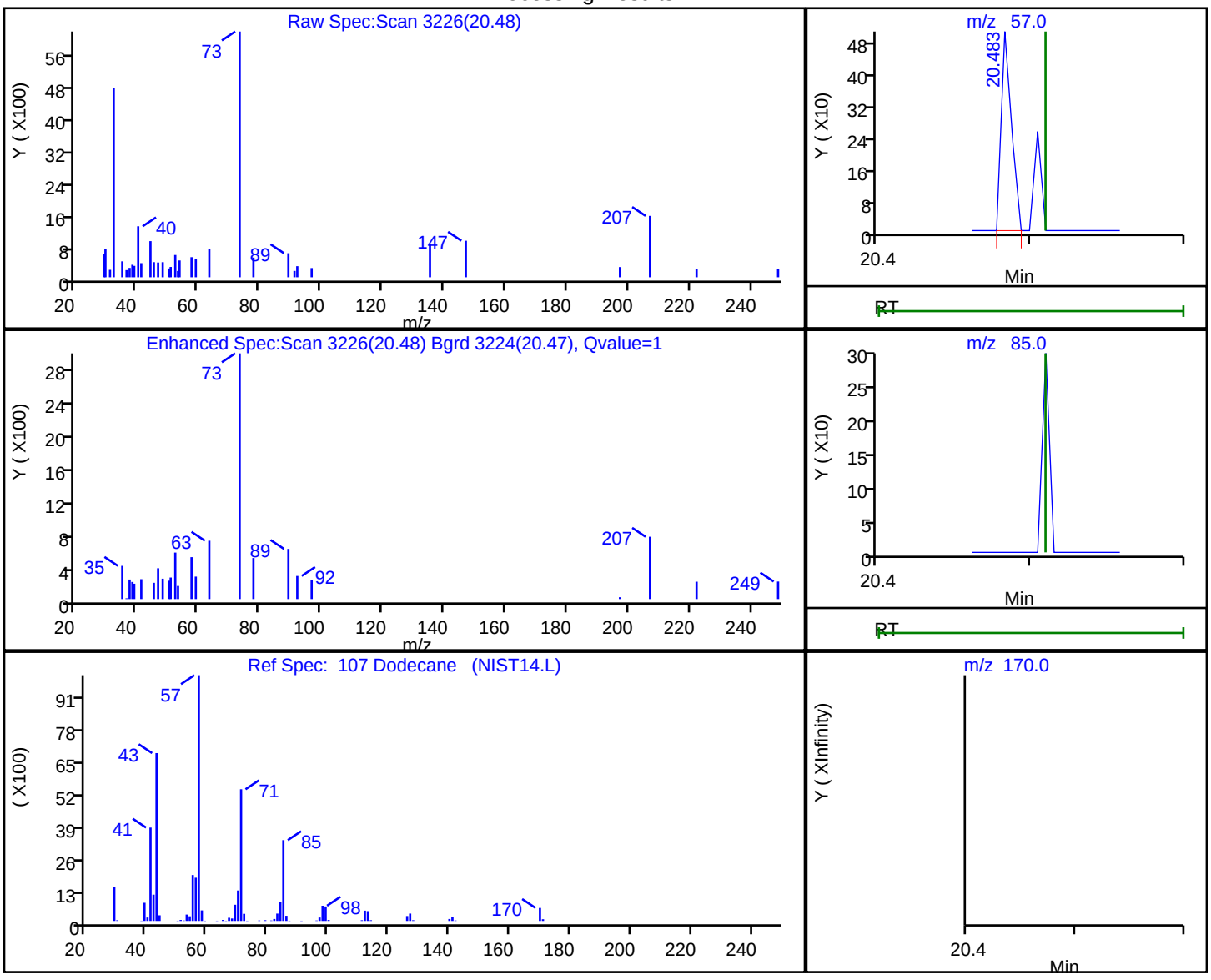
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200507-15427.b\RE11BLK04.D				
Injection Date:	11-May-2020 17:04:30	Instrument ID:	MR		
Lims ID:	140-19038-A-4	Lab Sample ID:	140-19038-4		
Client ID:	34002492				
Operator ID:	HMT	ALS Bottle#:	4	Worklist Smp#:	11
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

107 Dodecane, CAS: 112-40-3

Processing Results



RT	Mass	Response	Amount
20.48	57.00	232	0.398590
20.51	85.00	0	
20.51	170.00	0	

Reviewer: khachitpongpanits, 12-May-2020 10:03:59

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19038-1

SDG No.:

Client Sample ID: 8286 Lab Sample ID: 140-19038-5

Matrix: Air Lab File ID: RE11BLK05.D

Analysis Method: TO-15 Date Collected: 05/08/2020 08:50

Sample wt/vol: 200(mL) Date Analyzed: 05/11/2020 17:52

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 39492 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	ND		0.20	
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.20	
79-00-5	1,1,2-Trichloroethane	ND		0.20	
76-13-1	1,1,2-Trichlorotrifluoroethane	ND		0.20	
75-34-3	1,1-Dichloroethane	ND		0.20	
75-35-4	1,1-Dichloroethene	ND		0.20	
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	
96-18-4	1,2,3-Trichloropropane	ND		0.50	
526-73-8	1,2,3-Trimethylbenzene	ND		0.20	
95-93-2	1,2,4,5-Tetramethylbenzene	ND		0.20	
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	
95-63-6	1,2,4-Trimethylbenzene	ND		0.20	
96-12-8	1,2-Dibromo-3-Chloropropane	ND		0.40	
106-93-4	1,2-Dibromoethane	ND		0.20	
95-50-1	1,2-Dichlorobenzene	ND		0.40	
107-06-2	1,2-Dichloroethane	ND		0.20	
78-87-5	1,2-Dichloropropane	ND		0.20	
76-14-2	1,2-Dichlorotetrafluoroethane	ND		0.20	
108-67-8	1,3,5-Trimethylbenzene	ND		0.20	
106-99-0	1,3-Butadiene	ND		0.40	
541-73-1	1,3-Dichlorobenzene	ND		0.20	
106-46-7	1,4-Dichlorobenzene	ND		0.20	
123-91-1	1,4-Dioxane	ND		0.40	
71-36-3	1-Butanol	ND		2.0	
90-12-0	1-Methylnaphthalene	ND		2.5	
540-84-1	2,2,4-Trimethylpentane	ND		0.40	
565-59-3	2,3-Dimethylpentane	ND		0.20	
78-93-3	2-Butanone	ND		1.0	
95-49-8	2-Chlorotoluene	ND		0.40	
591-78-6	2-Hexanone	ND		0.40	
78-78-4	2-Methylbutane	ND		0.50	
91-57-6	2-Methylnaphthalene	ND		2.5	
107-83-5	2-Methylpentane	ND		0.20	
107-05-1	3-Chloropropene	ND		0.20	
622-96-8	4-Ethyltoluene	ND		0.40	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		1.0	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19038-1

SDG No.:

Client Sample ID: 8286 Lab Sample ID: 140-19038-5

Matrix: Air Lab File ID: RE11BLK05.D

Analysis Method: TO-15 Date Collected: 05/08/2020 08:50

Sample wt/vol: 200(mL) Date Analyzed: 05/11/2020 17:52

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 39492 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
67-64-1	Acetone	ND		7.5	
75-05-8	Acetonitrile	ND		1.0	
107-02-8	Acrolein	ND		1.0	
107-13-1	Acrylonitrile	ND		2.0	
98-83-9	Alpha Methyl Styrene	ND		0.40	
71-43-2	Benzene	ND		0.20	
100-44-7	Benzyl chloride	ND		0.40	
75-27-4	Bromodichloromethane	ND		0.20	
75-25-2	Bromoform	ND		0.20	
74-83-9	Bromomethane	ND		0.20	
106-97-8	Butane	ND		1.0	
75-15-0	Carbon disulfide	ND		0.40	
56-23-5	Carbon tetrachloride	ND		0.20	
108-90-7	Chlorobenzene	ND		0.20	
75-45-6	Chlorodifluoromethane	ND		0.20	
75-00-3	Chloroethane	ND		0.20	
67-66-3	Chloroform	ND		0.20	
74-87-3	Chloromethane	ND		1.0	
156-59-2	cis-1,2-Dichloroethene	ND		0.20	
10061-01-5	cis-1,3-Dichloropropene	ND		0.40	
98-82-8	Cumene	ND		0.40	
110-82-7	Cyclohexane	ND		0.40	
124-48-1	Dibromochloromethane	ND		0.20	
74-95-3	Dibromomethane	ND		0.40	
75-71-8	Dichlorodifluoromethane	ND		0.20	
64-17-5	Ethanol	ND		5.0	
141-78-6	Ethyl acetate	ND		2.0	
60-29-7	Ethyl ether	ND		2.0	
100-41-4	Ethylbenzene	ND		0.20	
87-68-3	Hexachlorobutadiene	ND		1.0	
110-54-3	Hexane	ND		0.40	
496-11-7	Indane	ND		0.20	
95-13-6	Indene	ND		0.40	
67-63-0	Isopropyl alcohol	ND		1.2	
179601-23-1	m&p-Xylene	ND		0.20	
80-62-6	Methyl methacrylate	ND		0.40	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19038-1

SDG No.:

Client Sample ID: 8286 Lab Sample ID: 140-19038-5

Matrix: Air Lab File ID: RE11BLK05.D

Analysis Method: TO-15 Date Collected: 05/08/2020 08:50

Sample wt/vol: 200(mL) Date Analyzed: 05/11/2020 17:52

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 39492 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
1634-04-4	Methyl tert-butyl ether	ND		1.0	
108-87-2	Methylcyclohexane	ND		0.20	
75-09-2	Methylene Chloride	ND		1.0	
91-20-3	Naphthalene	ND		0.40	
104-51-8	n-Butylbenzene	ND		0.40	
124-18-5	n-Decane	ND		1.0	
112-40-3	n-Dodecane	ND		1.0	
142-82-5	n-Heptane	ND		0.40	
111-84-2	n-Nonane	ND		0.40	
111-65-9	n-Octane	ND		0.40	
103-65-1	N-Propylbenzene	ND		0.40	
1120-21-4	n-Undecane	ND		1.0	
95-47-6	o-Xylene	ND		0.20	
99-87-6	p-Cymene	ND		0.20	
109-66-0	Pentane	ND		2.5	
115-07-1	Propene	ND		2.5	
135-98-8	sec-Butylbenzene	ND		0.40	
100-42-5	Styrene	ND		0.20	
75-65-0	tert-Butanol	ND		1.0	
98-06-6	tert-Butylbenzene	ND		0.40	
127-18-4	Tetrachloroethene	ND		0.20	
109-99-9	Tetrahydrofuran	ND		1.0	
110-02-1	Thiophene	ND		0.20	
108-88-3	Toluene	ND		1.0	
156-60-5	trans-1,2-Dichloroethene	ND		0.20	
10061-02-6	trans-1,3-Dichloropropene	ND		0.20	
79-01-6	Trichloroethene	ND		0.20	
75-69-4	Trichlorofluoromethane	ND		0.20	
108-05-4	Vinyl acetate	ND		1.0	
593-60-2	Vinyl bromide	ND		0.20	
75-01-4	Vinyl chloride	ND		0.40	

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MR\20200507-15427.b\RE11BLK05.D				
Lims ID:	140-19038-A-5				
Client ID:	8286				
Sample Type:	Client				
Inject. Date:	11-May-2020 17:52:30	ALS Bottle#:	5	Worklist Smp#:	12
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0015427-012				
Misc. Info.:	34001625				
Operator ID:	HMT	Instrument ID:	MR		
Method:	\\chromfs\Knoxville\ChromData\MR\20200507-15427.b\MR_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	12-May-2020 10:04:54	Calib Date:	10-Apr-2020 00:47:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MR\20200409-15180.b\RD09IC10.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1021				
First Level Reviewer: khachitpongpanits		Date:	12-May-2020 10:04:54		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.328	8.333	-0.005	79	179847	4.00	
* 2 1,4-Difluorobenzene	114	10.571	10.577	-0.006	93	1291757	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.408	15.408	0.000	84	1104739	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.058	17.064	-0.006	92	556294	3.40	
7 Propene	41	3.335	3.340	-0.005	96	36922	-0.5459	7

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

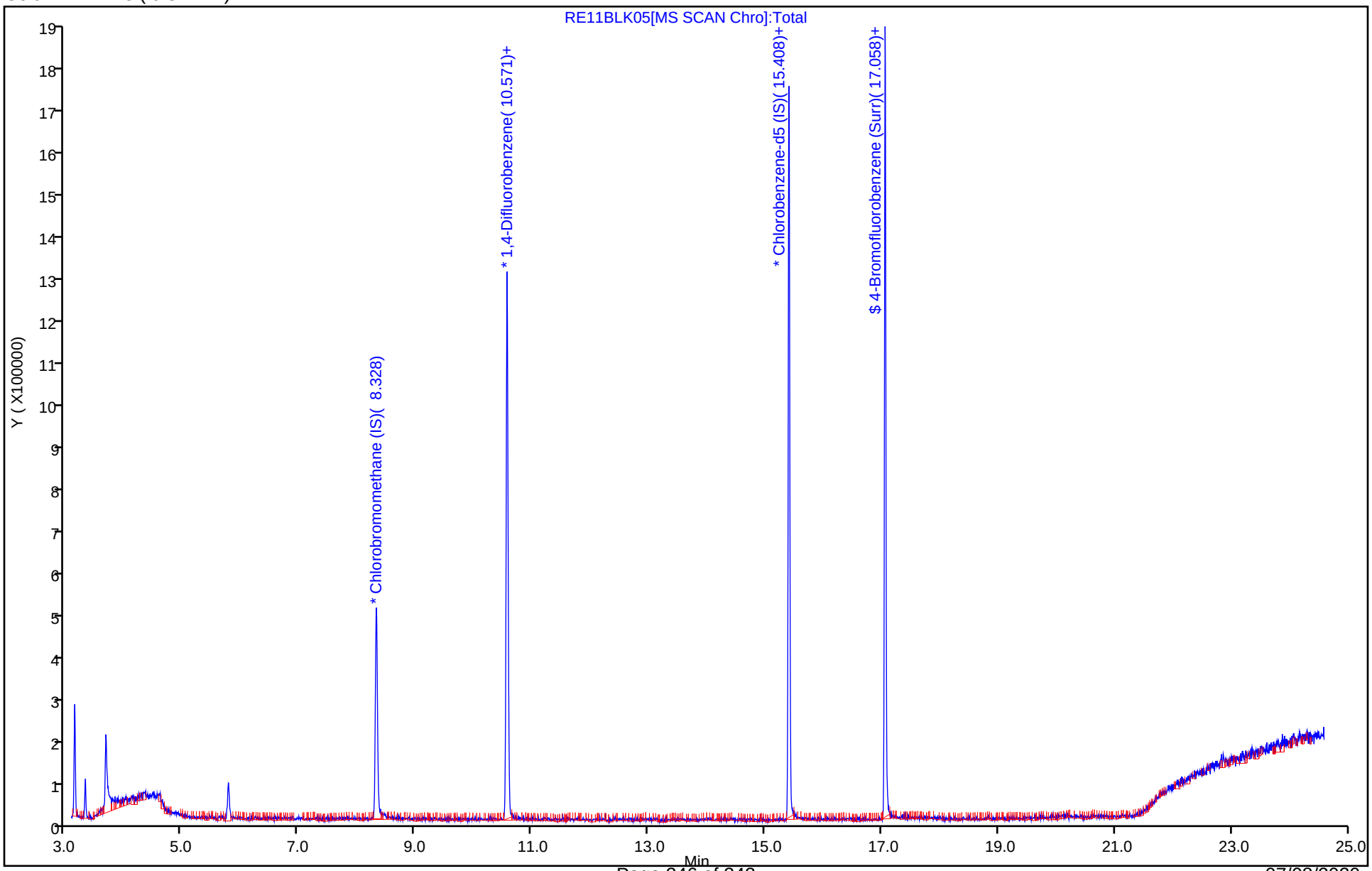
40MXISSURP_00004 Amount Added: 40.00 Units: mL Run Reagent

Report Date: 12-May-2020 10:04:54 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200507-15427.b\RE11BLK05.D				
Injection Date:	11-May-2020 17:52:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	140-19038-A-5	Lab Sample ID:	140-19038-5	Worklist Smp#:	12
Client ID:	8286				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



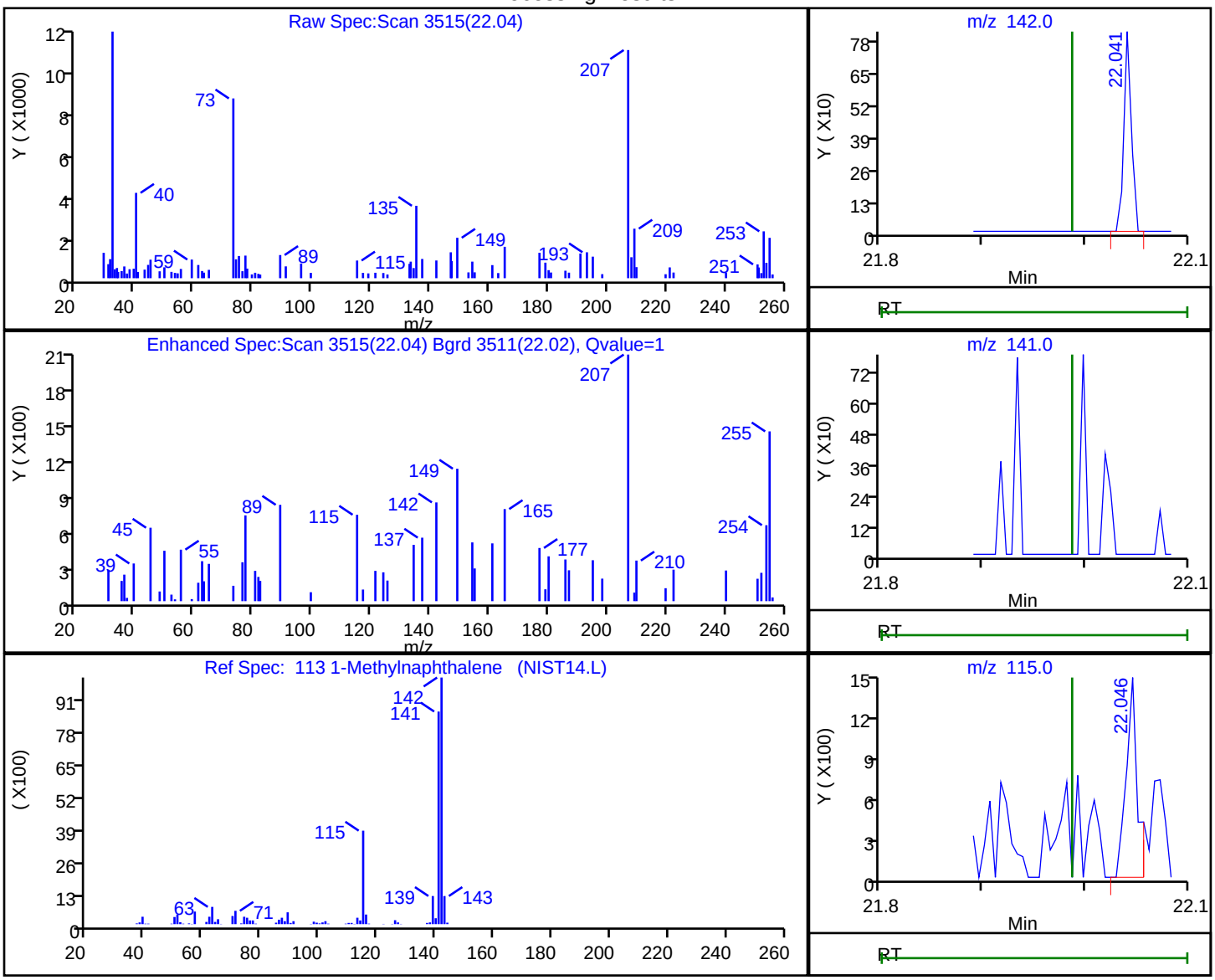
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200507-15427.b\RE11BLK05.D				
Injection Date:	11-May-2020 17:52:30	Instrument ID:	MR		
Lims ID:	140-19038-A-5	Lab Sample ID:	140-19038-5		
Client ID:	8286				
Operator ID:	HMT	ALS Bottle#:	5	Worklist Smp#:	12
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

113 1-Methylnaphthalene, CAS: 90-12-0

Processing Results



RT	Mass	Response	Amount
22.04	142.00	417	0.260086
21.99	141.00	0	
22.05	115.00	1111	

Reviewer: khachitpongpanits, 12-May-2020 10:04:50

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

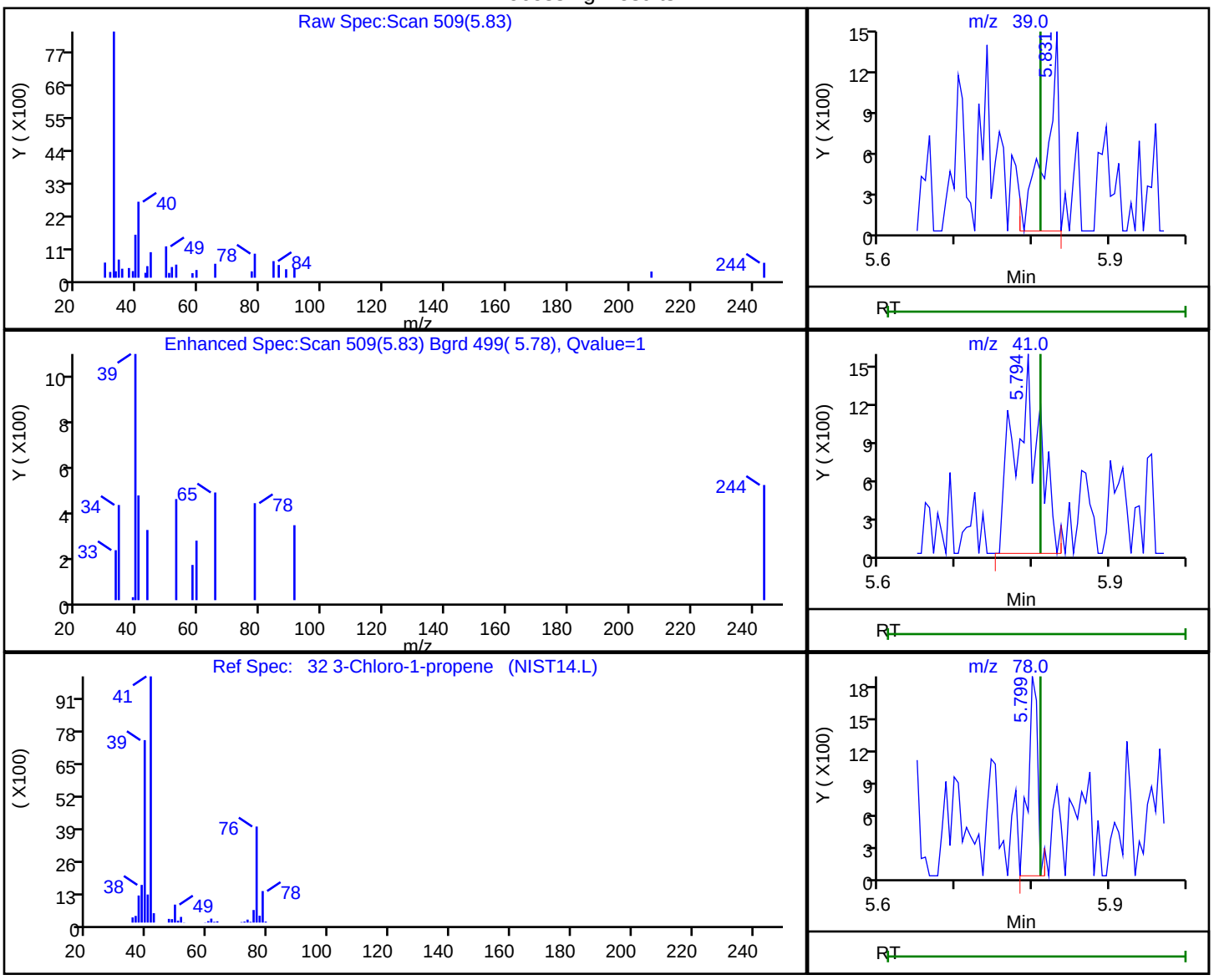
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200507-15427.b\RE11BLK05.D				
Injection Date:	11-May-2020 17:52:30	Instrument ID:	MR		
Lims ID:	140-19038-A-5	Lab Sample ID:	140-19038-5		
Client ID:	8286				
Operator ID:	HMT	ALS Bottle#:	5	Worklist Smp#:	12
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

32 3-Chloro-1-propene, CAS: 107-05-1

Processing Results



RT	Mass	Response	Amount
5.83	39.00	1685	0.019549
5.79	41.00	3447	
5.80	78.00	1604	

Reviewer: khachitpongpanits, 12-May-2020 10:04:25

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

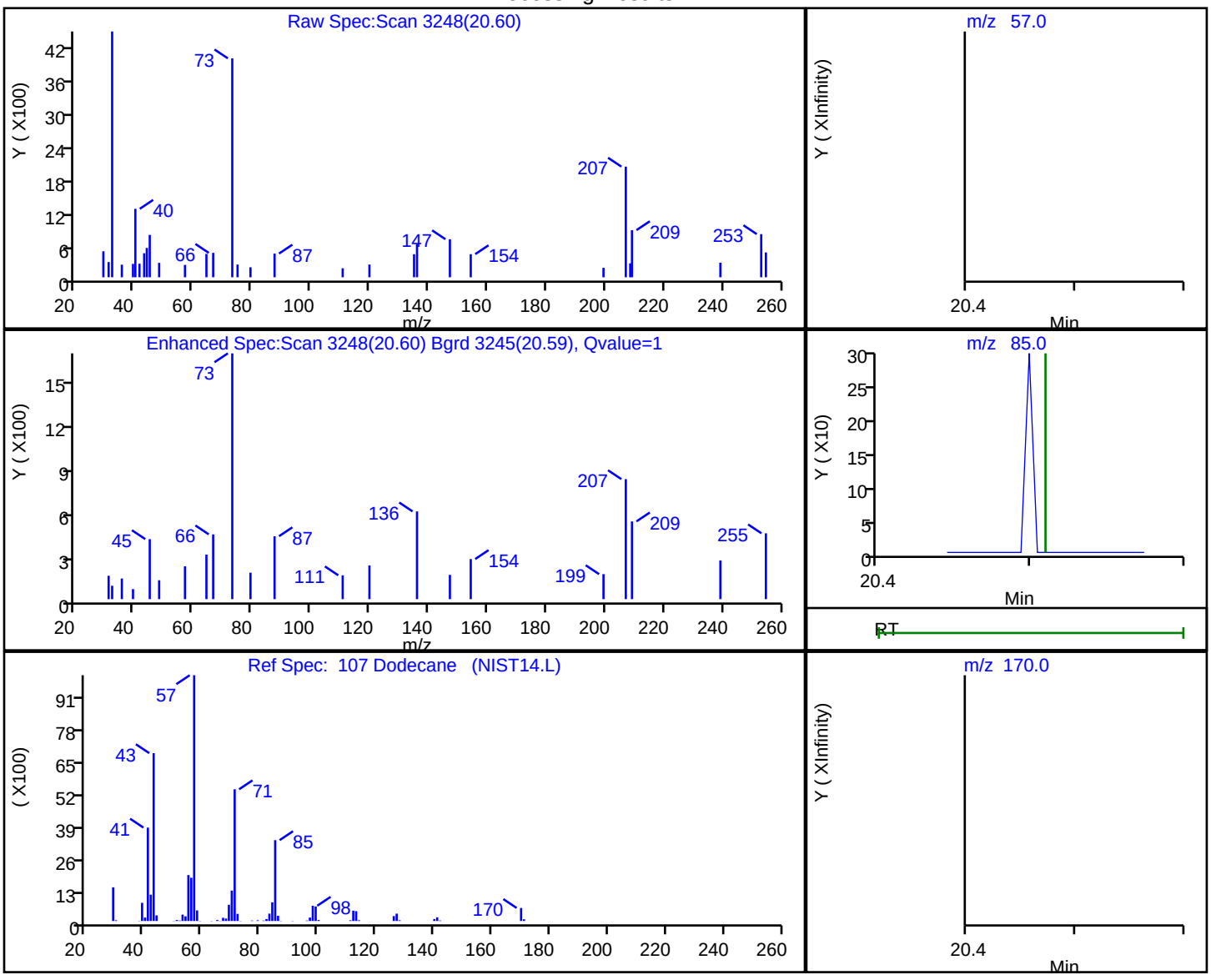
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200507-15427.b\RE11BLK05.D				
Injection Date:	11-May-2020 17:52:30	Instrument ID:	MR		
Lims ID:	140-19038-A-5	Lab Sample ID:	140-19038-5		
Client ID:	8286				
Operator ID:	HMT	ALS Bottle#:	5	Worklist Smp#:	12
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

107 Dodecane, CAS: 112-40-3

Processing Results



RT	Mass	Response	Amount
20.60	57.00	122	0.398369
20.51	85.00	0	
20.51	170.00	0	

Reviewer: khachitpongpanits, 12-May-2020 10:04:45

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19038-1

SDG No.:

Client Sample ID: 34000956 Lab Sample ID: 140-19038-6

Matrix: Air Lab File ID: RE11BLK06.D

Analysis Method: TO-15 Date Collected: 05/08/2020 08:50

Sample wt/vol: 200(mL) Date Analyzed: 05/11/2020 18:41

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 39492 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	ND		0.20	
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.20	
79-00-5	1,1,2-Trichloroethane	ND		0.20	
76-13-1	1,1,2-Trichlorotrifluoroethane	ND		0.20	
75-34-3	1,1-Dichloroethane	ND		0.20	
75-35-4	1,1-Dichloroethene	ND		0.20	
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	
96-18-4	1,2,3-Trichloropropane	ND		0.50	
526-73-8	1,2,3-Trimethylbenzene	ND		0.20	
95-93-2	1,2,4,5-Tetramethylbenzene	ND		0.20	
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	
95-63-6	1,2,4-Trimethylbenzene	ND		0.20	
96-12-8	1,2-Dibromo-3-Chloropropane	ND		0.40	
106-93-4	1,2-Dibromoethane	ND		0.20	
95-50-1	1,2-Dichlorobenzene	ND		0.40	
107-06-2	1,2-Dichloroethane	ND		0.20	
78-87-5	1,2-Dichloropropane	ND		0.20	
76-14-2	1,2-Dichlorotetrafluoroethane	ND		0.20	
108-67-8	1,3,5-Trimethylbenzene	ND		0.20	
106-99-0	1,3-Butadiene	ND		0.40	
541-73-1	1,3-Dichlorobenzene	ND		0.20	
106-46-7	1,4-Dichlorobenzene	ND		0.20	
123-91-1	1,4-Dioxane	ND		0.40	
71-36-3	1-Butanol	ND		2.0	
90-12-0	1-Methylnaphthalene	ND		2.5	
540-84-1	2,2,4-Trimethylpentane	ND		0.40	
565-59-3	2,3-Dimethylpentane	ND		0.20	
78-93-3	2-Butanone	ND		1.0	
95-49-8	2-Chlorotoluene	ND		0.40	
591-78-6	2-Hexanone	ND		0.40	
78-78-4	2-Methylbutane	ND		0.50	
91-57-6	2-Methylnaphthalene	ND		2.5	
107-83-5	2-Methylpentane	ND		0.20	
107-05-1	3-Chloropropene	ND		0.20	
622-96-8	4-Ethyltoluene	ND		0.40	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		1.0	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19038-1

SDG No.:

Client Sample ID: 34000956 Lab Sample ID: 140-19038-6

Matrix: Air Lab File ID: RE11BLK06.D

Analysis Method: TO-15 Date Collected: 05/08/2020 08:50

Sample wt/vol: 200(mL) Date Analyzed: 05/11/2020 18:41

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 39492 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
67-64-1	Acetone	ND		7.5	
75-05-8	Acetonitrile	ND		1.0	
107-02-8	Acrolein	ND		1.0	
107-13-1	Acrylonitrile	ND		2.0	
98-83-9	Alpha Methyl Styrene	ND		0.40	
71-43-2	Benzene	ND		0.20	
100-44-7	Benzyl chloride	ND		0.40	
75-27-4	Bromodichloromethane	ND		0.20	
75-25-2	Bromoform	ND		0.20	
74-83-9	Bromomethane	ND		0.20	
106-97-8	Butane	ND		1.0	
75-15-0	Carbon disulfide	ND		0.40	
56-23-5	Carbon tetrachloride	ND		0.20	
108-90-7	Chlorobenzene	ND		0.20	
75-45-6	Chlorodifluoromethane	ND		0.20	
75-00-3	Chloroethane	ND		0.20	
67-66-3	Chloroform	ND		0.20	
74-87-3	Chloromethane	ND		1.0	
156-59-2	cis-1,2-Dichloroethene	ND		0.20	
10061-01-5	cis-1,3-Dichloropropene	ND		0.40	
98-82-8	Cumene	ND		0.40	
110-82-7	Cyclohexane	ND		0.40	
124-48-1	Dibromochloromethane	ND		0.20	
74-95-3	Dibromomethane	ND		0.40	
75-71-8	Dichlorodifluoromethane	ND		0.20	
64-17-5	Ethanol	ND		5.0	
141-78-6	Ethyl acetate	ND		2.0	
60-29-7	Ethyl ether	ND		2.0	
100-41-4	Ethylbenzene	ND		0.20	
87-68-3	Hexachlorobutadiene	ND		1.0	
110-54-3	Hexane	ND		0.40	
496-11-7	Indane	ND		0.20	
95-13-6	Indene	ND		0.40	
67-63-0	Isopropyl alcohol	ND		1.2	
179601-23-1	m&p-Xylene	ND		0.20	
80-62-6	Methyl methacrylate	ND		0.40	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19038-1

SDG No.:

Client Sample ID: 34000956 Lab Sample ID: 140-19038-6

Matrix: Air Lab File ID: RE11BLK06.D

Analysis Method: TO-15 Date Collected: 05/08/2020 08:50

Sample wt/vol: 200(mL) Date Analyzed: 05/11/2020 18:41

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 39492 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
1634-04-4	Methyl tert-butyl ether	ND		1.0	
108-87-2	Methylcyclohexane	ND		0.20	
75-09-2	Methylene Chloride	ND		1.0	
91-20-3	Naphthalene	ND		0.40	
104-51-8	n-Butylbenzene	ND		0.40	
124-18-5	n-Decane	ND		1.0	
112-40-3	n-Dodecane	ND		1.0	
142-82-5	n-Heptane	ND		0.40	
111-84-2	n-Nonane	ND		0.40	
111-65-9	n-Octane	ND		0.40	
103-65-1	N-Propylbenzene	ND		0.40	
1120-21-4	n-Undecane	ND		1.0	
95-47-6	o-Xylene	ND		0.20	
99-87-6	p-Cymene	ND		0.20	
109-66-0	Pentane	ND		2.5	
115-07-1	Propene	ND		2.5	
135-98-8	sec-Butylbenzene	ND		0.40	
100-42-5	Styrene	ND		0.20	
75-65-0	tert-Butanol	ND		1.0	
98-06-6	tert-Butylbenzene	ND		0.40	
127-18-4	Tetrachloroethene	ND		0.20	
109-99-9	Tetrahydrofuran	ND		1.0	
110-02-1	Thiophene	ND		0.20	
108-88-3	Toluene	ND		1.0	
156-60-5	trans-1,2-Dichloroethene	ND		0.20	
10061-02-6	trans-1,3-Dichloropropene	ND		0.20	
79-01-6	Trichloroethene	ND		0.20	
75-69-4	Trichlorofluoromethane	ND		0.20	
108-05-4	Vinyl acetate	ND		1.0	
593-60-2	Vinyl bromide	ND		0.20	
75-01-4	Vinyl chloride	ND		0.40	

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MR\20200507-15427.b\RE11BLK06.D
Lims ID: 140-19038-A-6
Client ID: 34000956
Sample Type: Client
Inject. Date: 11-May-2020 18:41:30 ALS Bottle#: 6 Worklist Smp#: 13
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0015427-009
Misc. Info.: 34000956
Operator ID: HMT Instrument ID: MR

Method: \\chromfs\Knoxville\ChromData\MR\20200507-15427.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 12-May-2020 10:05:42 Calib Date: 10-Apr-2020 00:47:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MR\20200409-15180.b\RD09IC10.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1021

First Level Reviewer: khachitpongpanits Date: 12-May-2020 10:05:42

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
*	1 Chlorobromomethane (IS)	128	8.323	8.333	-0.010	86	179905	4.00	
*	2 1,4-Difluorobenzene	114	10.577	10.577	0.000	93	1272324	4.00	
*	3 Chlorobenzene-d5 (IS)	117	15.408	15.408	0.000	83	1100813	4.00	
$	4 4-Bromofluorobenzene (Surr)	95	17.059	17.064	-0.005	94	533382	3.27	
	7 Propene	41	3.340	3.340	0.000	93	35655	-0.5684	7

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

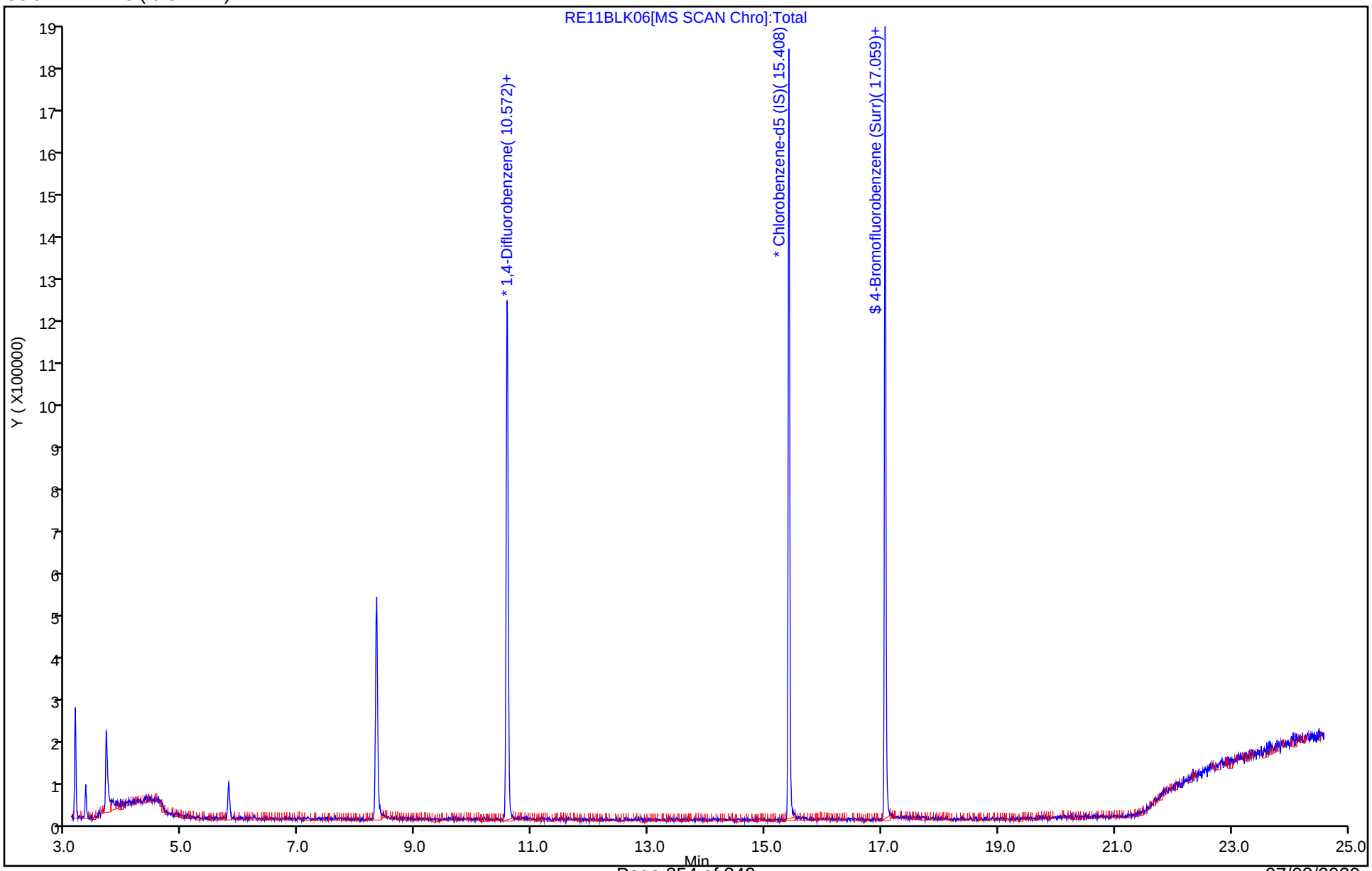
40MXISSURP_00004 Amount Added: 40.00 Units: mL Run Reagent

Report Date: 12-May-2020 10:05:43 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200507-15427.b\RE11BLK06.D				
Injection Date:	11-May-2020 18:41:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	140-19038-A-6	Lab Sample ID:	140-19038-6	Worklist Smp#:	13
Client ID:	34000956				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



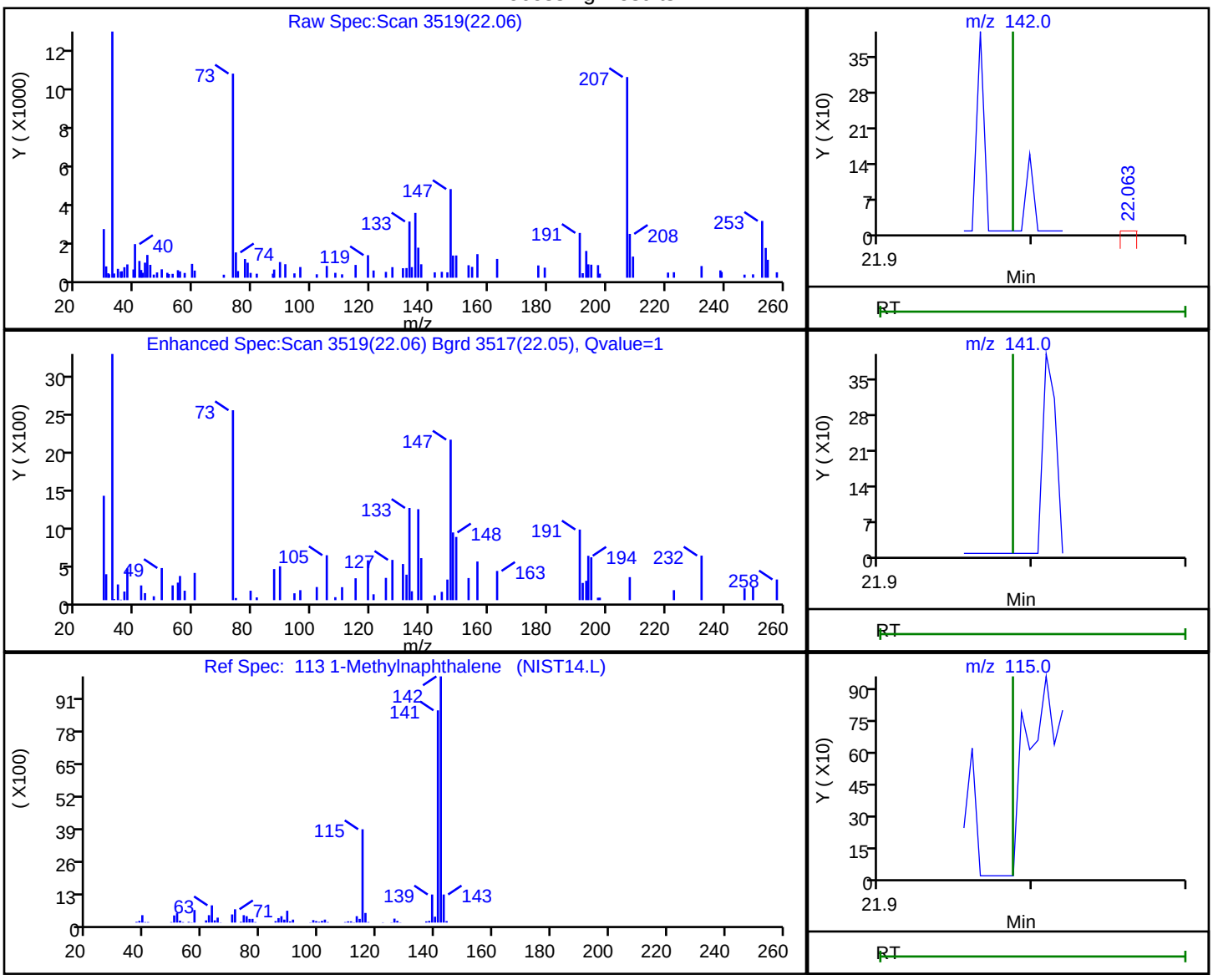
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200507-15427.b\RE11BLK06.D				
Injection Date:	11-May-2020 18:41:30	Instrument ID:	MR		
Lims ID:	140-19038-A-6	Lab Sample ID:	140-19038-6		
Client ID:	34000956				
Operator ID:	HMT	ALS Bottle#:	6	Worklist Smp#:	13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

113 1-Methylnaphthalene, CAS: 90-12-0

Processing Results



RT	Mass	Response	Amount
22.06	142.00	87	0.259657
21.99	141.00	0	
22.07	115.00	2021	

Reviewer: khachitpongpanits, 12-May-2020 10:05:38

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

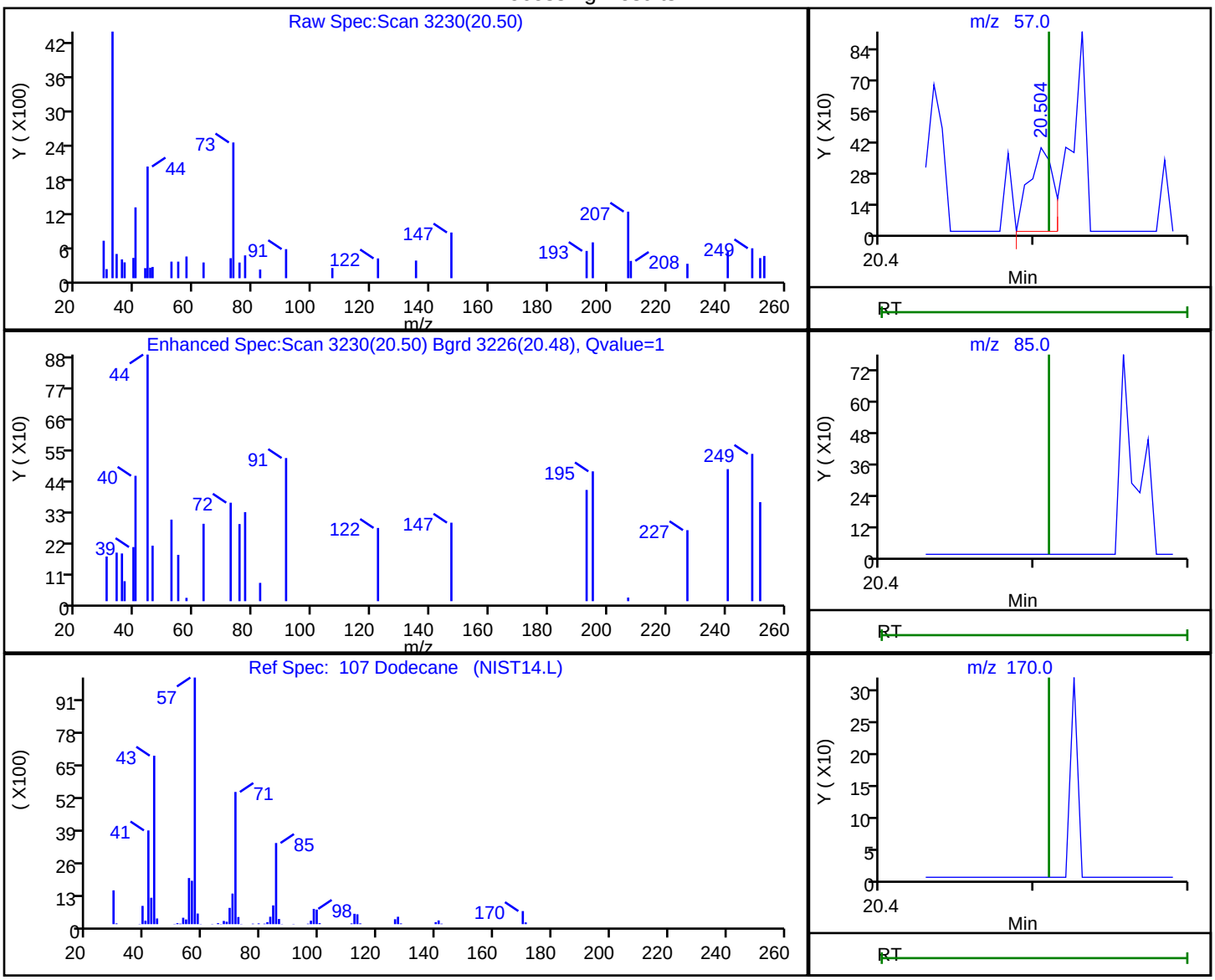
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200507-15427.b\RE11BLK06.D				
Injection Date:	11-May-2020 18:41:30	Instrument ID:	MR		
Lims ID:	140-19038-A-6	Lab Sample ID:	140-19038-6		
Client ID:	34000956				
Operator ID:	HMT	ALS Bottle#:	6	Worklist Smp#:	13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

107 Dodecane, CAS: 112-40-3

Processing Results



RT	Mass	Response	Amount
20.50	57.00	426	0.398996
20.51	85.00	0	
20.51	170.00	0	

Reviewer: khachitpongpanits, 12-May-2020 10:05:32

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19038-1

SDG No.:

Client Sample ID: 34002391 Lab Sample ID: 140-19038-8

Matrix: Air Lab File ID: RE11BLK08.D

Analysis Method: TO-15 Date Collected: 05/08/2020 08:50

Sample wt/vol: 200(mL) Date Analyzed: 05/11/2020 20:18

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 39492 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	ND		0.20	
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.20	
79-00-5	1,1,2-Trichloroethane	ND		0.20	
76-13-1	1,1,2-Trichlorotrifluoroethane	ND		0.20	
75-34-3	1,1-Dichloroethane	ND		0.20	
75-35-4	1,1-Dichloroethene	ND		0.20	
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	
96-18-4	1,2,3-Trichloropropane	ND		0.50	
526-73-8	1,2,3-Trimethylbenzene	ND		0.20	
95-93-2	1,2,4,5-Tetramethylbenzene	ND		0.20	
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	
95-63-6	1,2,4-Trimethylbenzene	ND		0.20	
96-12-8	1,2-Dibromo-3-Chloropropane	ND		0.40	
106-93-4	1,2-Dibromoethane	ND		0.20	
95-50-1	1,2-Dichlorobenzene	ND		0.40	
107-06-2	1,2-Dichloroethane	ND		0.20	
78-87-5	1,2-Dichloropropane	ND		0.20	
76-14-2	1,2-Dichlorotetrafluoroethane	ND		0.20	
108-67-8	1,3,5-Trimethylbenzene	ND		0.20	
106-99-0	1,3-Butadiene	ND		0.40	
541-73-1	1,3-Dichlorobenzene	ND		0.20	
106-46-7	1,4-Dichlorobenzene	ND		0.20	
123-91-1	1,4-Dioxane	ND		0.40	
71-36-3	1-Butanol	ND		2.0	
90-12-0	1-Methylnaphthalene	ND		2.5	
540-84-1	2,2,4-Trimethylpentane	ND		0.40	
565-59-3	2,3-Dimethylpentane	ND		0.20	
78-93-3	2-Butanone	ND		1.0	
95-49-8	2-Chlorotoluene	ND		0.40	
591-78-6	2-Hexanone	ND		0.40	
78-78-4	2-Methylbutane	ND		0.50	
91-57-6	2-Methylnaphthalene	ND		2.5	
107-83-5	2-Methylpentane	ND		0.20	
107-05-1	3-Chloropropene	ND		0.20	
622-96-8	4-Ethyltoluene	ND		0.40	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		1.0	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19038-1

SDG No.:

Client Sample ID: 34002391 Lab Sample ID: 140-19038-8

Matrix: Air Lab File ID: RE11BLK08.D

Analysis Method: TO-15 Date Collected: 05/08/2020 08:50

Sample wt/vol: 200(mL) Date Analyzed: 05/11/2020 20:18

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 39492 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
67-64-1	Acetone	ND		7.5	
75-05-8	Acetonitrile	ND		1.0	
107-02-8	Acrolein	ND		1.0	
107-13-1	Acrylonitrile	ND		2.0	
98-83-9	Alpha Methyl Styrene	ND		0.40	
71-43-2	Benzene	ND		0.20	
100-44-7	Benzyl chloride	ND		0.40	
75-27-4	Bromodichloromethane	ND		0.20	
75-25-2	Bromoform	ND		0.20	
74-83-9	Bromomethane	ND		0.20	
106-97-8	Butane	ND		1.0	
75-15-0	Carbon disulfide	ND		0.40	
56-23-5	Carbon tetrachloride	ND		0.20	
108-90-7	Chlorobenzene	ND		0.20	
75-45-6	Chlorodifluoromethane	ND		0.20	
75-00-3	Chloroethane	ND		0.20	
67-66-3	Chloroform	ND		0.20	
74-87-3	Chloromethane	ND		1.0	
156-59-2	cis-1,2-Dichloroethene	ND		0.20	
10061-01-5	cis-1,3-Dichloropropene	ND		0.40	
98-82-8	Cumene	ND		0.40	
110-82-7	Cyclohexane	ND		0.40	
124-48-1	Dibromochloromethane	ND		0.20	
74-95-3	Dibromomethane	ND		0.40	
75-71-8	Dichlorodifluoromethane	ND		0.20	
64-17-5	Ethanol	ND		5.0	
141-78-6	Ethyl acetate	ND		2.0	
60-29-7	Ethyl ether	ND		2.0	
100-41-4	Ethylbenzene	ND		0.20	
87-68-3	Hexachlorobutadiene	ND		1.0	
110-54-3	Hexane	ND		0.40	
496-11-7	Indane	ND		0.20	
95-13-6	Indene	ND		0.40	
67-63-0	Isopropyl alcohol	ND		1.2	
179601-23-1	m&p-Xylene	ND		0.20	
80-62-6	Methyl methacrylate	ND		0.40	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19038-1

SDG No.:

Client Sample ID: 34002391 Lab Sample ID: 140-19038-8

Matrix: Air Lab File ID: RE11BLK08.D

Analysis Method: TO-15 Date Collected: 05/08/2020 08:50

Sample wt/vol: 200(mL) Date Analyzed: 05/11/2020 20:18

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 39492 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
1634-04-4	Methyl tert-butyl ether	ND		1.0	
108-87-2	Methylcyclohexane	ND		0.20	
75-09-2	Methylene Chloride	ND		1.0	
91-20-3	Naphthalene	ND		0.40	
104-51-8	n-Butylbenzene	ND		0.40	
124-18-5	n-Decane	ND		1.0	
112-40-3	n-Dodecane	ND		1.0	
142-82-5	n-Heptane	ND		0.40	
111-84-2	n-Nonane	ND		0.40	
111-65-9	n-Octane	ND		0.40	
103-65-1	N-Propylbenzene	ND		0.40	
1120-21-4	n-Undecane	ND		1.0	
95-47-6	o-Xylene	ND		0.20	
99-87-6	p-Cymene	ND		0.20	
109-66-0	Pentane	ND		2.5	
115-07-1	Propene	ND		2.5	
135-98-8	sec-Butylbenzene	ND		0.40	
100-42-5	Styrene	ND		0.20	
75-65-0	tert-Butanol	ND		1.0	
98-06-6	tert-Butylbenzene	ND		0.40	
127-18-4	Tetrachloroethene	ND		0.20	
109-99-9	Tetrahydrofuran	ND		1.0	
110-02-1	Thiophene	ND		0.20	
108-88-3	Toluene	ND		1.0	
156-60-5	trans-1,2-Dichloroethene	ND		0.20	
10061-02-6	trans-1,3-Dichloropropene	ND		0.20	
79-01-6	Trichloroethene	ND		0.20	
75-69-4	Trichlorofluoromethane	ND		0.20	
108-05-4	Vinyl acetate	ND		1.0	
593-60-2	Vinyl bromide	ND		0.20	
75-01-4	Vinyl chloride	ND		0.40	

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MR\20200507-15427.b\RE11BLK08.D				
Lims ID:	140-19038-A-8				
Client ID:	34002391				
Sample Type:	Client				
Inject. Date:	11-May-2020 20:18:30	ALS Bottle#:	8	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0015427-011				
Misc. Info.:	34002391				
Operator ID:	HMT	Instrument ID:	MR		
Method:	\\chromfs\Knoxville\ChromData\MR\20200507-15427.b\MR_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	12-May-2020 10:07:23	Calib Date:	10-Apr-2020 00:47:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MR\20200409-15180.b\RD09IC10.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1021				
First Level Reviewer: khachitpongpanits		Date:	12-May-2020 10:07:23		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.334	8.333	0.001	81	185887	4.00	
* 2 1,4-Difluorobenzene	114	10.577	10.577	0.000	93	1274025	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.408	15.408	0.000	84	1090276	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.059	17.064	-0.005	94	550085	3.40	
7 Propene	41	3.340	3.340	0.000	97	38877	-0.5337	7
43 Ethyl acetate	43	8.226	8.199	0.027	83	18399	0.0900	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

40MXISSURP_00004 Amount Added: 40.00 Units: mL Run Reagent

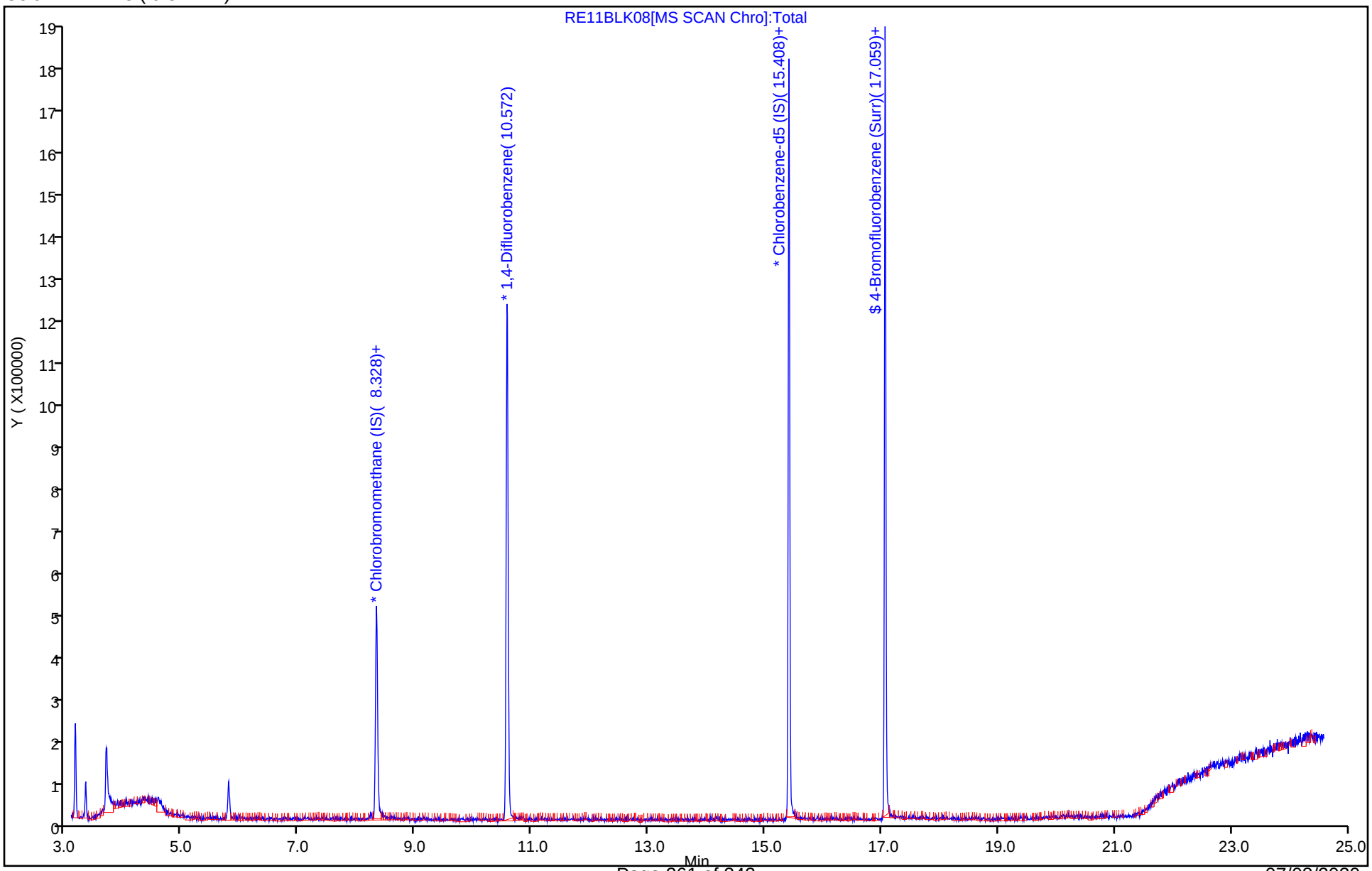
Report Date: 12-May-2020 10:07:24 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200507-15427.b\RE11BLK08.D

Injection Date:	11-May-2020 20:18:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	140-19038-A-8	Lab Sample ID:	140-19038-8	Worklist Smp#:	15
Client ID:	34002391				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



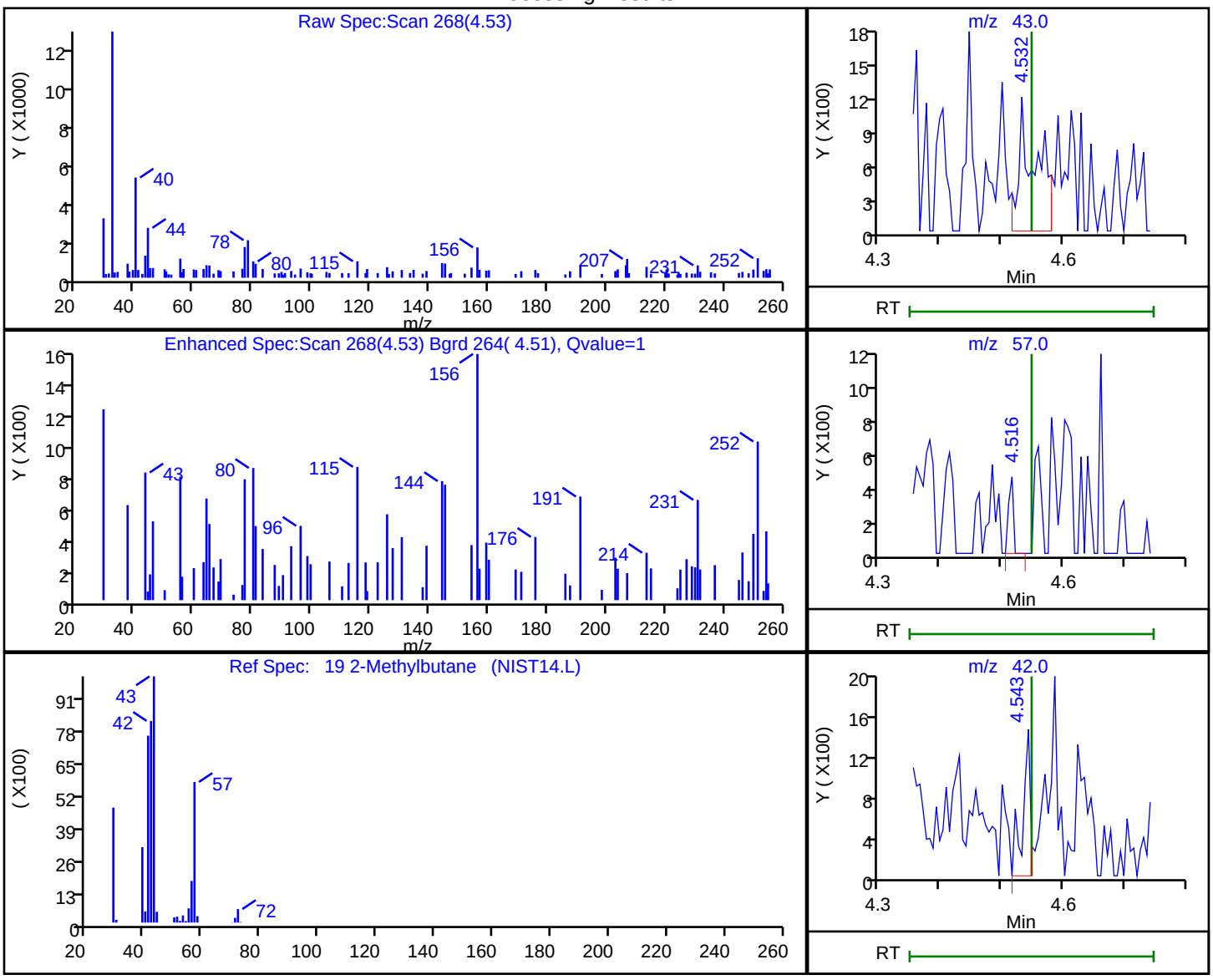
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200507-15427.b\RE11BLK08.D				
Injection Date:	11-May-2020 20:18:30	Instrument ID:	MR		
Lims ID:	140-19038-A-8	Lab Sample ID:	140-19038-8		
Client ID:	34002391				
Operator ID:	HMT	ALS Bottle#:	8	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

19 2-Methylbutane, CAS: 78-78-4

Processing Results



RT	Mass	Response	Amount
4.53	43.00	2291	0.015063
4.52	57.00	238	
4.54	42.00	1229	

Reviewer: khachitpongpanits, 12-May-2020 10:06:39

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

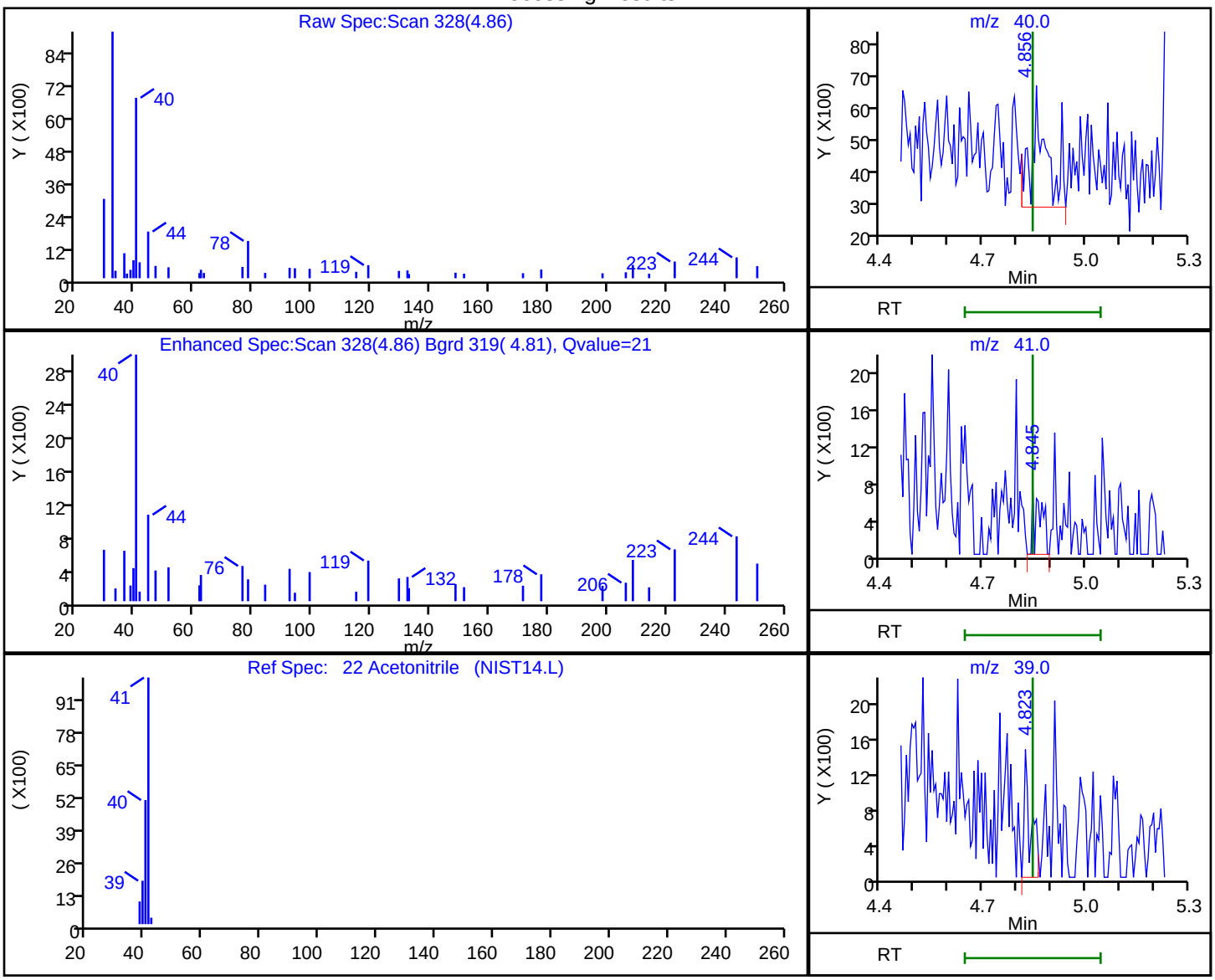
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200507-15427.b\RE11BLK08.D				
Injection Date:	11-May-2020 20:18:30	Instrument ID:	MR		
Lims ID:	140-19038-A-8	Lab Sample ID:	140-19038-8		
Client ID:	34002391				
Operator ID:	HMT	ALS Bottle#:	8	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

22 Acetonitrile, CAS: 75-05-8

Processing Results



RT	Mass	Response	Amount
4.86	40.00	11570	0.293483
4.84	41.00	1169	
4.82	39.00	1886	

Reviewer: khachitpongpanits, 12-May-2020 10:06:44

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

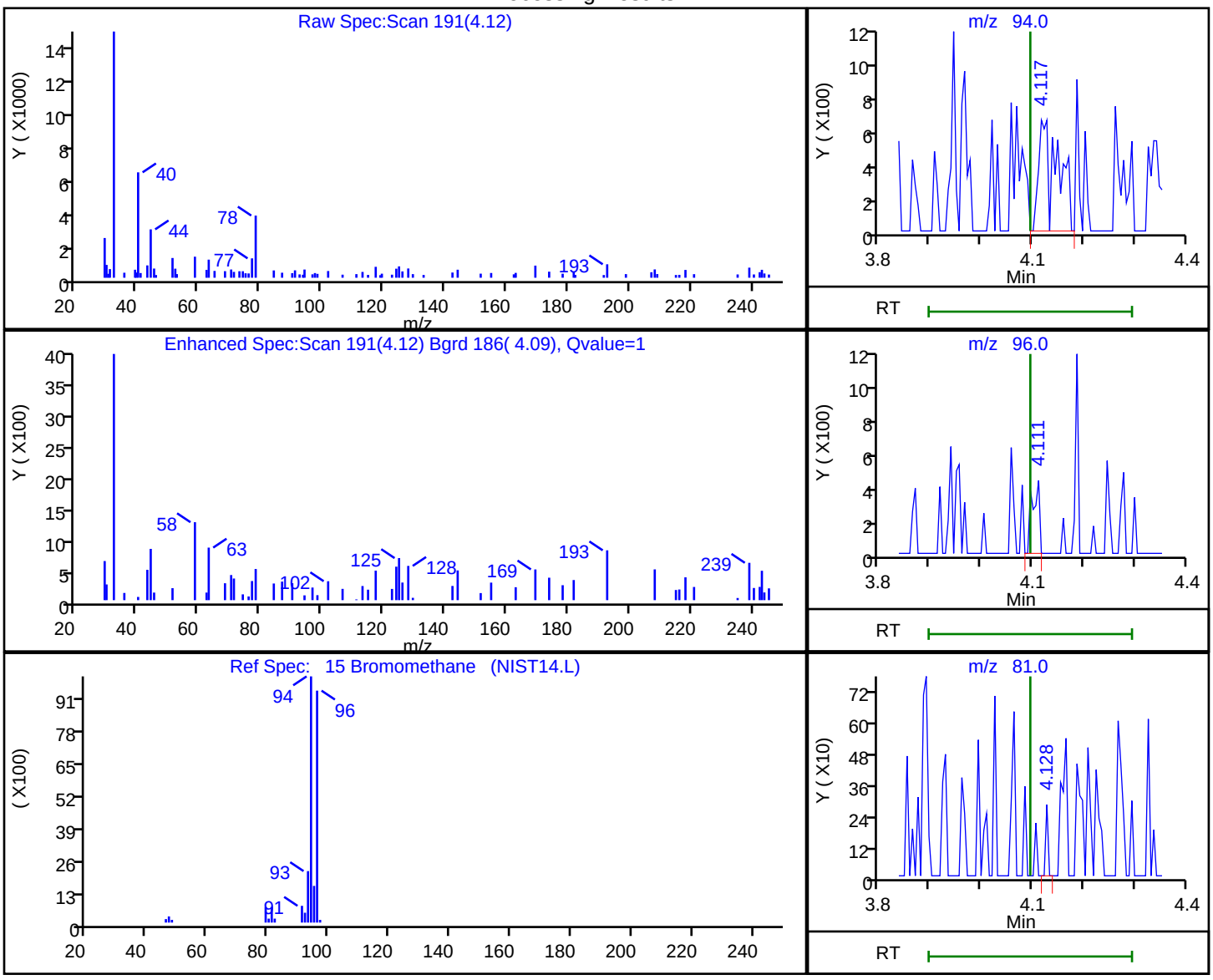
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200507-15427.b\RE11BLK08.D				
Injection Date:	11-May-2020 20:18:30	Instrument ID:	MR		
Lims ID:	140-19038-A-8	Lab Sample ID:	140-19038-8		
Client ID:	34002391				
Operator ID:	HMT	ALS Bottle#:	8	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

15 Bromomethane, CAS: 74-83-9

Processing Results



RT	Mass	Response	Amount
4.12	94.00	1727	0.013883
4.11	96.00	442	
4.13	81.00	90	

Reviewer: khachitpongpanits, 12-May-2020 10:06:35

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

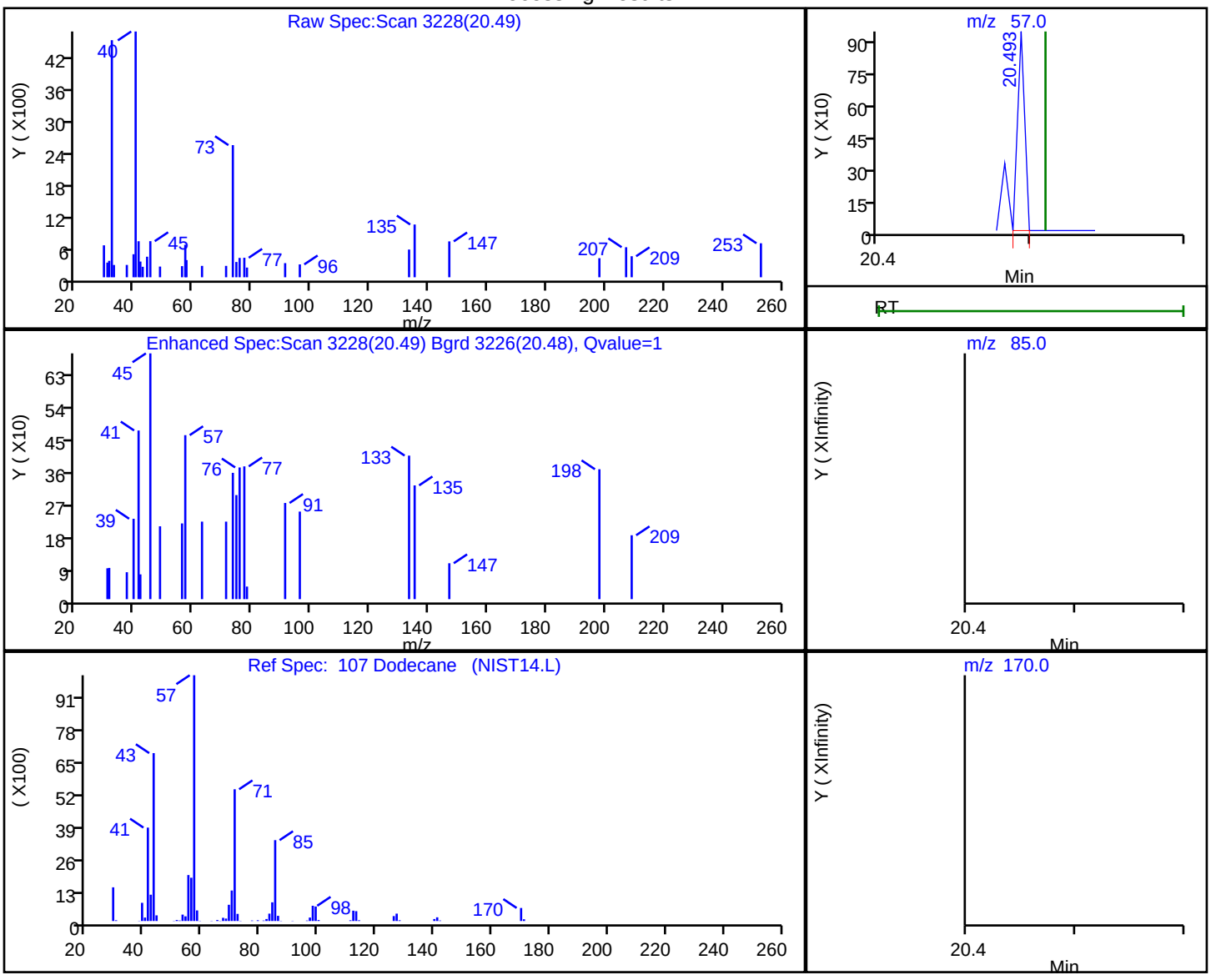
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200507-15427.b\RE11BLK08.D				
Injection Date:	11-May-2020 20:18:30	Instrument ID:	MR		
Lims ID:	140-19038-A-8	Lab Sample ID:	140-19038-8		
Client ID:	34002391				
Operator ID:	HMT	ALS Bottle#:	8	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

107 Dodecane, CAS: 112-40-3

Processing Results



RT	Mass	Response	Amount
20.49	57.00	305	0.398753
20.51	85.00	0	
20.51	170.00	0	

Reviewer: khachitpongpanits, 12-May-2020 10:07:19

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19038-1

SDG No.:

Client Sample ID: 34001625 Lab Sample ID: 140-19038-9

Matrix: Air Lab File ID: RE11BLK09.D

Analysis Method: TO-15 Date Collected: 05/08/2020 08:50

Sample wt/vol: 200(mL) Date Analyzed: 05/11/2020 21:06

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 39492 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	ND		0.20	
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.20	
79-00-5	1,1,2-Trichloroethane	ND		0.20	
76-13-1	1,1,2-Trichlorotrifluoroethane	ND		0.20	
75-34-3	1,1-Dichloroethane	ND		0.20	
75-35-4	1,1-Dichloroethene	ND		0.20	
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	
96-18-4	1,2,3-Trichloropropane	ND		0.50	
526-73-8	1,2,3-Trimethylbenzene	ND		0.20	
95-93-2	1,2,4,5-Tetramethylbenzene	ND		0.20	
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	
95-63-6	1,2,4-Trimethylbenzene	ND		0.20	
96-12-8	1,2-Dibromo-3-Chloropropane	ND		0.40	
106-93-4	1,2-Dibromoethane	ND		0.20	
95-50-1	1,2-Dichlorobenzene	ND		0.40	
107-06-2	1,2-Dichloroethane	ND		0.20	
78-87-5	1,2-Dichloropropane	ND		0.20	
76-14-2	1,2-Dichlorotetrafluoroethane	ND		0.20	
108-67-8	1,3,5-Trimethylbenzene	ND		0.20	
106-99-0	1,3-Butadiene	ND		0.40	
541-73-1	1,3-Dichlorobenzene	ND		0.20	
106-46-7	1,4-Dichlorobenzene	ND		0.20	
123-91-1	1,4-Dioxane	ND		0.40	
71-36-3	1-Butanol	ND		2.0	
90-12-0	1-Methylnaphthalene	ND		2.5	
540-84-1	2,2,4-Trimethylpentane	ND		0.40	
565-59-3	2,3-Dimethylpentane	ND		0.20	
78-93-3	2-Butanone	ND		1.0	
95-49-8	2-Chlorotoluene	ND		0.40	
591-78-6	2-Hexanone	ND		0.40	
78-78-4	2-Methylbutane	ND		0.50	
91-57-6	2-Methylnaphthalene	ND		2.5	
107-83-5	2-Methylpentane	ND		0.20	
107-05-1	3-Chloropropene	ND		0.20	
622-96-8	4-Ethyltoluene	ND		0.40	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		1.0	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19038-1

SDG No.:

Client Sample ID: 34001625 Lab Sample ID: 140-19038-9

Matrix: Air Lab File ID: RE11BLK09.D

Analysis Method: TO-15 Date Collected: 05/08/2020 08:50

Sample wt/vol: 200(mL) Date Analyzed: 05/11/2020 21:06

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 39492 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
67-64-1	Acetone	ND		7.5	
75-05-8	Acetonitrile	ND		1.0	
107-02-8	Acrolein	ND		1.0	
107-13-1	Acrylonitrile	ND		2.0	
98-83-9	Alpha Methyl Styrene	ND		0.40	
71-43-2	Benzene	ND		0.20	
100-44-7	Benzyl chloride	ND		0.40	
75-27-4	Bromodichloromethane	ND		0.20	
75-25-2	Bromoform	ND		0.20	
74-83-9	Bromomethane	ND		0.20	
106-97-8	Butane	ND		1.0	
75-15-0	Carbon disulfide	ND		0.40	
56-23-5	Carbon tetrachloride	ND		0.20	
108-90-7	Chlorobenzene	ND		0.20	
75-45-6	Chlorodifluoromethane	ND		0.20	
75-00-3	Chloroethane	ND		0.20	
67-66-3	Chloroform	ND		0.20	
74-87-3	Chloromethane	ND		1.0	
156-59-2	cis-1,2-Dichloroethene	ND		0.20	
10061-01-5	cis-1,3-Dichloropropene	ND		0.40	
98-82-8	Cumene	ND		0.40	
110-82-7	Cyclohexane	ND		0.40	
124-48-1	Dibromochloromethane	ND		0.20	
74-95-3	Dibromomethane	ND		0.40	
75-71-8	Dichlorodifluoromethane	ND		0.20	
64-17-5	Ethanol	ND		5.0	
141-78-6	Ethyl acetate	ND		2.0	
60-29-7	Ethyl ether	ND		2.0	
100-41-4	Ethylbenzene	ND		0.20	
87-68-3	Hexachlorobutadiene	ND		1.0	
110-54-3	Hexane	ND		0.40	
496-11-7	Indane	ND		0.20	
95-13-6	Indene	ND		0.40	
67-63-0	Isopropyl alcohol	ND		1.2	
179601-23-1	m&p-Xylene	ND		0.20	
80-62-6	Methyl methacrylate	ND		0.40	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19038-1

SDG No.:

Client Sample ID: 34001625 Lab Sample ID: 140-19038-9

Matrix: Air Lab File ID: RE11BLK09.D

Analysis Method: TO-15 Date Collected: 05/08/2020 08:50

Sample wt/vol: 200(mL) Date Analyzed: 05/11/2020 21:06

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 39492 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
1634-04-4	Methyl tert-butyl ether	ND		1.0	
108-87-2	Methylcyclohexane	ND		0.20	
75-09-2	Methylene Chloride	ND		1.0	
91-20-3	Naphthalene	ND		0.40	
104-51-8	n-Butylbenzene	ND		0.40	
124-18-5	n-Decane	ND		1.0	
112-40-3	n-Dodecane	ND		1.0	
142-82-5	n-Heptane	ND		0.40	
111-84-2	n-Nonane	ND		0.40	
111-65-9	n-Octane	ND		0.40	
103-65-1	N-Propylbenzene	ND		0.40	
1120-21-4	n-Undecane	ND		1.0	
95-47-6	o-Xylene	ND		0.20	
99-87-6	p-Cymene	ND		0.20	
109-66-0	Pentane	ND		2.5	
115-07-1	Propene	ND		2.5	
135-98-8	sec-Butylbenzene	ND		0.40	
100-42-5	Styrene	ND		0.20	
75-65-0	tert-Butanol	ND		1.0	
98-06-6	tert-Butylbenzene	ND		0.40	
127-18-4	Tetrachloroethene	ND		0.20	
109-99-9	Tetrahydrofuran	ND		1.0	
110-02-1	Thiophene	ND		0.20	
108-88-3	Toluene	ND		1.0	
156-60-5	trans-1,2-Dichloroethene	ND		0.20	
10061-02-6	trans-1,3-Dichloropropene	ND		0.20	
79-01-6	Trichloroethene	ND		0.20	
75-69-4	Trichlorofluoromethane	ND		0.20	
108-05-4	Vinyl acetate	ND		1.0	
593-60-2	Vinyl bromide	ND		0.20	
75-01-4	Vinyl chloride	ND		0.40	

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MR\20200507-15427.b\RE11BLK09.D				
Lims ID:	140-19038-A-9				
Client ID:	34001625				
Sample Type:	Client				
Inject. Date:	11-May-2020 21:06:30	ALS Bottle#:	9	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0015427-012				
Misc. Info.:	34001625				
Operator ID:	HMT	Instrument ID:	MR		
Method:	\\chromfs\Knoxville\ChromData\MR\20200507-15427.b\MR_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	12-May-2020 10:08:23	Calib Date:	10-Apr-2020 00:47:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MR\20200409-15180.b\RD09IC10.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1021				
First Level Reviewer: khachitpongpanits		Date:	12-May-2020 10:08:23		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.323	8.333	-0.010	85	176108	4.00	
* 2 1,4-Difluorobenzene	114	10.572	10.577	-0.005	93	1252419	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.408	15.408	0.000	84	1033304	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.059	17.064	-0.005	94	524679	3.43	
7 Propene	41	3.335	3.340	-0.005	96	36235	-0.5444	7

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

40MXISSURP_00004 Amount Added: 40.00 Units: mL Run Reagent

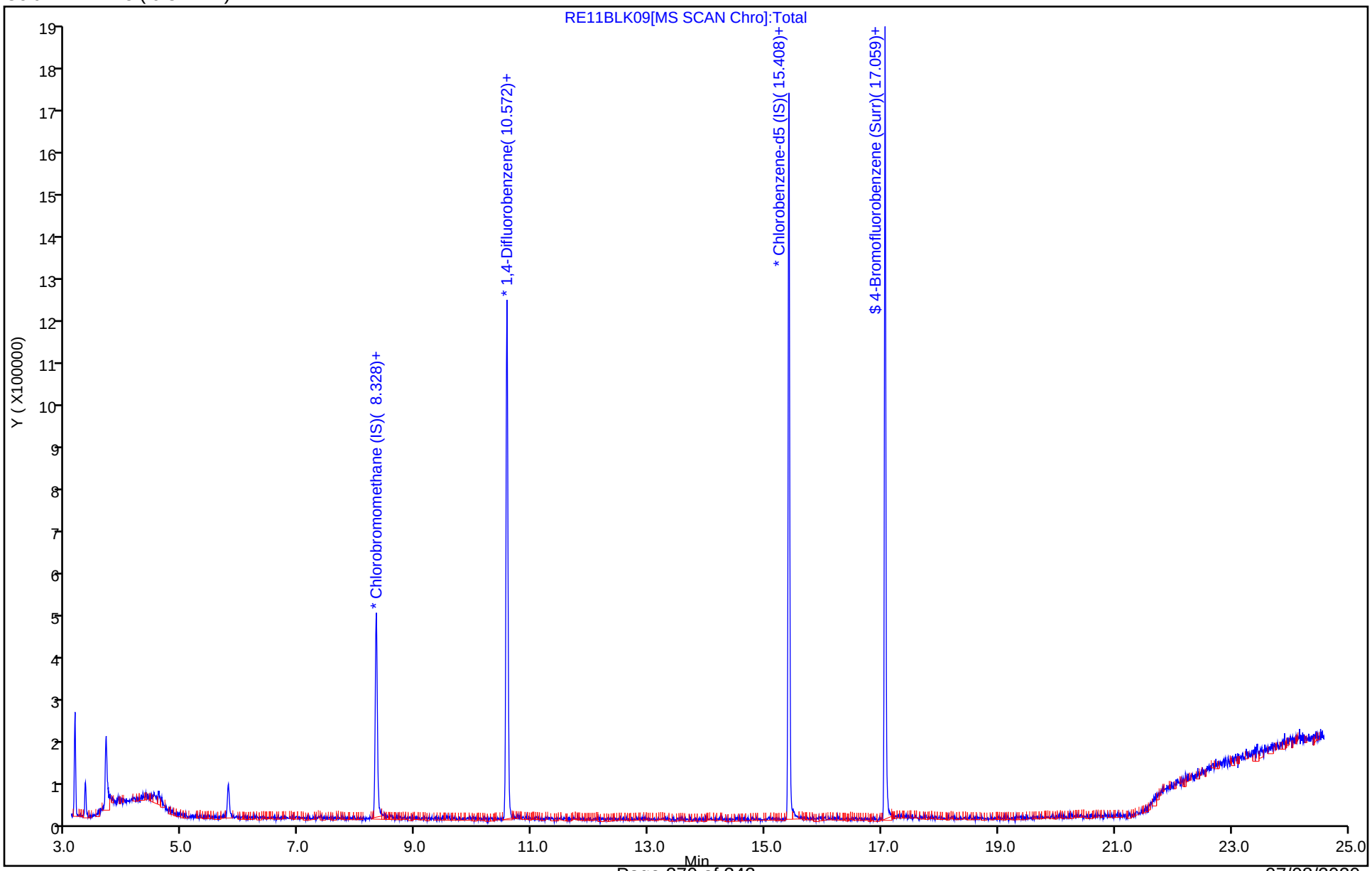
Report Date: 12-May-2020 10:08:24 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200507-15427.b\RE11BLK09.D

Injection Date:	11-May-2020 21:06:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	140-19038-A-9	Lab Sample ID:	140-19038-9	Worklist Smp#:	16
Client ID:	34001625				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



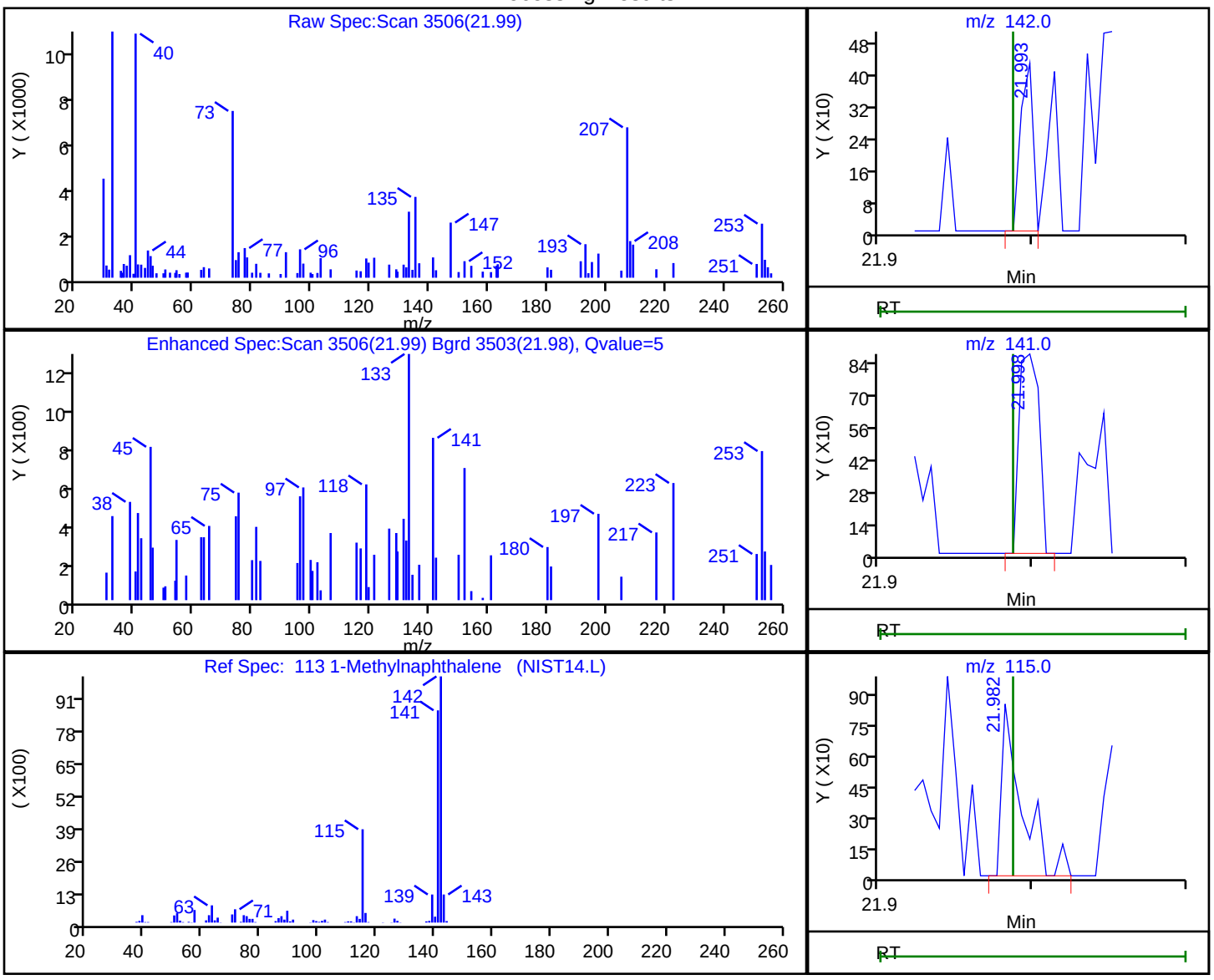
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200507-15427.b\RE11BLK09.D				
Injection Date:	11-May-2020 21:06:30	Instrument ID:	MR		
Lims ID:	140-19038-A-9	Lab Sample ID:	140-19038-9		
Client ID:	34001625				
Operator ID:	HMT	ALS Bottle#:	9	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

113 1-Methylnaphthalene, CAS: 90-12-0

Processing Results



RT	Mass	Response	Amount
21.99	142.00	238	0.259874
22.00	141.00	792	
21.98	115.00	768	

Reviewer: khachitpongpanits, 12-May-2020 10:08:19

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

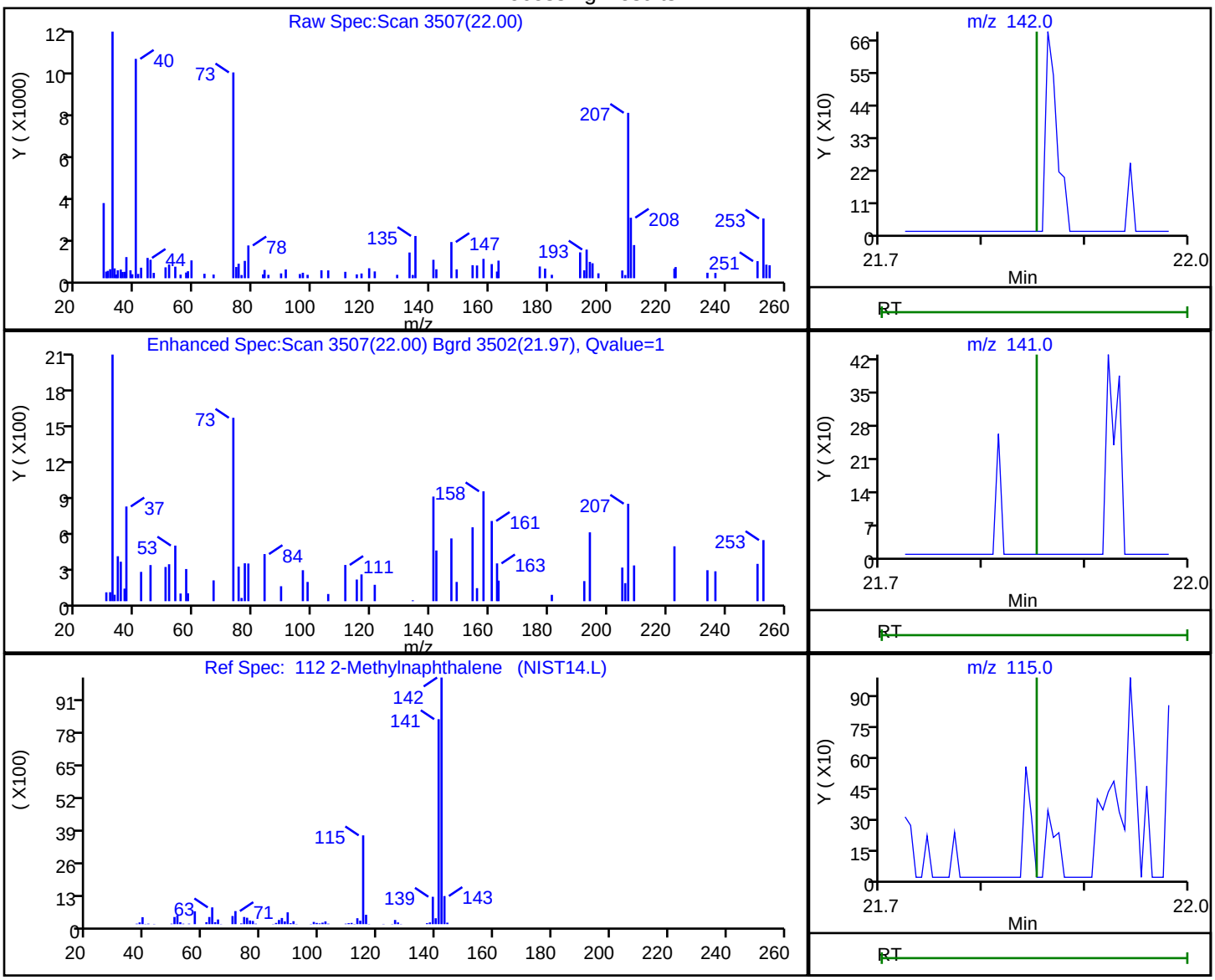
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200507-15427.b\RE11BLK09.D				
Injection Date:	11-May-2020 21:06:30	Instrument ID:	MR		
Lims ID:	140-19038-A-9	Lab Sample ID:	140-19038-9		
Client ID:	34001625				
Operator ID:	HMT	ALS Bottle#:	9	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

112 2-Methylnaphthalene, CAS: 91-57-6

Processing Results



RT	Mass	Response	Amount
22.00	142.00	427	0.618973
22.00	141.00	792	
21.98	115.00	768	

Reviewer: khachitpongpanits, 12-May-2020 10:08:17

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

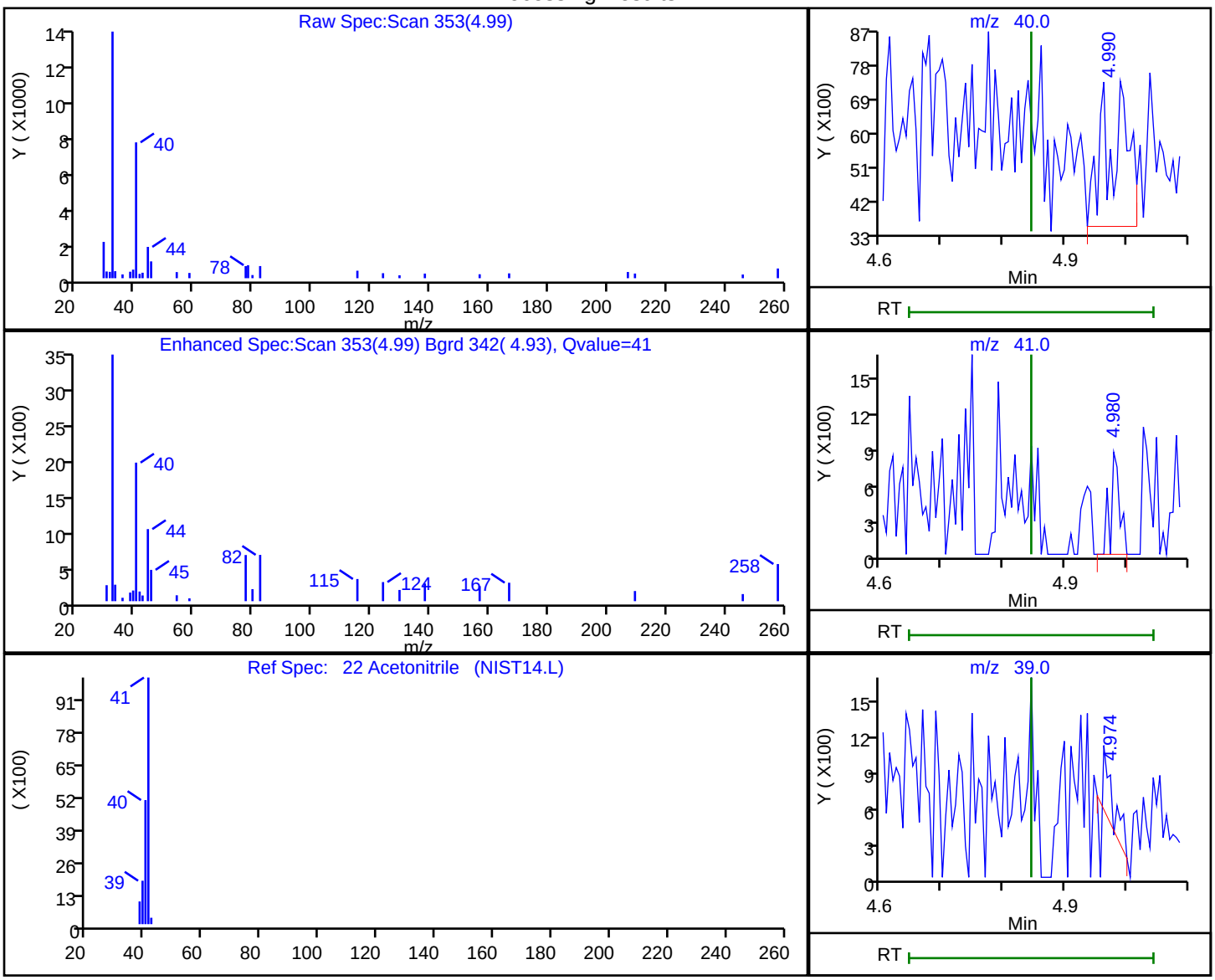
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200507-15427.b\RE11BLK09.D				
Injection Date:	11-May-2020 21:06:30	Instrument ID:	MR		
Lims ID:	140-19038-A-9	Lab Sample ID:	140-19038-9		
Client ID:	34001625				
Operator ID:	HMT	ALS Bottle#:	9	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

22 Acetonitrile, CAS: 75-05-8

Processing Results



RT	Mass	Response	Amount
4.99	40.00	9662	0.258694
4.98	41.00	879	
4.97	39.00	431	

Reviewer: khachitpongpanits, 12-May-2020 10:07:42

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

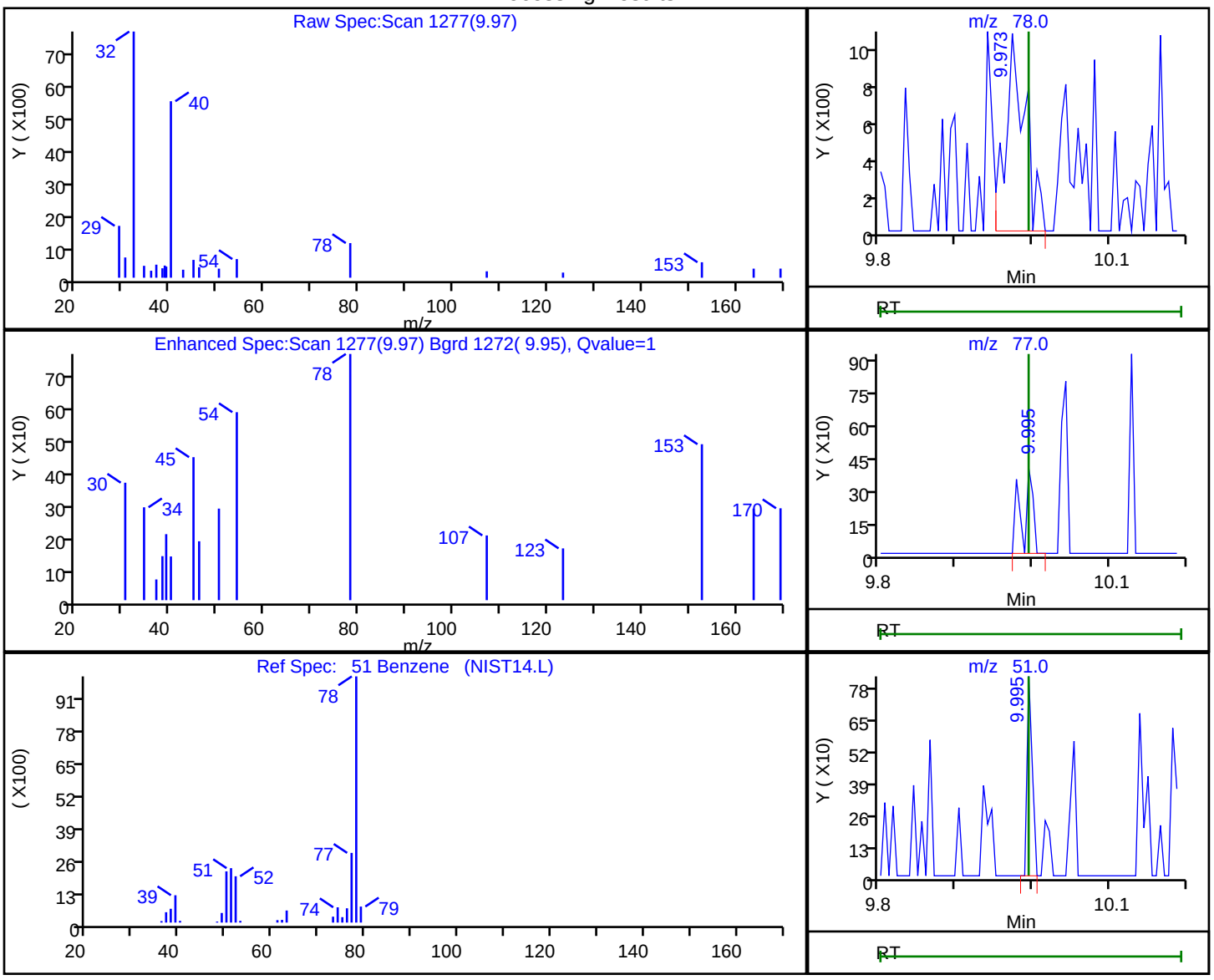
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200507-15427.b\RE11BLK09.D				
Injection Date:	11-May-2020 21:06:30	Instrument ID:	MR		
Lims ID:	140-19038-A-9	Lab Sample ID:	140-19038-9		
Client ID:	34001625				
Operator ID:	HMT	ALS Bottle#:	9	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

51 Benzene, CAS: 71-43-2

Processing Results



RT	Mass	Response	Amount
9.97	78.00	1926	0.008218
9.99	77.00	382	
9.99	51.00	394	

Reviewer: khachitpongpanits, 12-May-2020 10:07:57

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

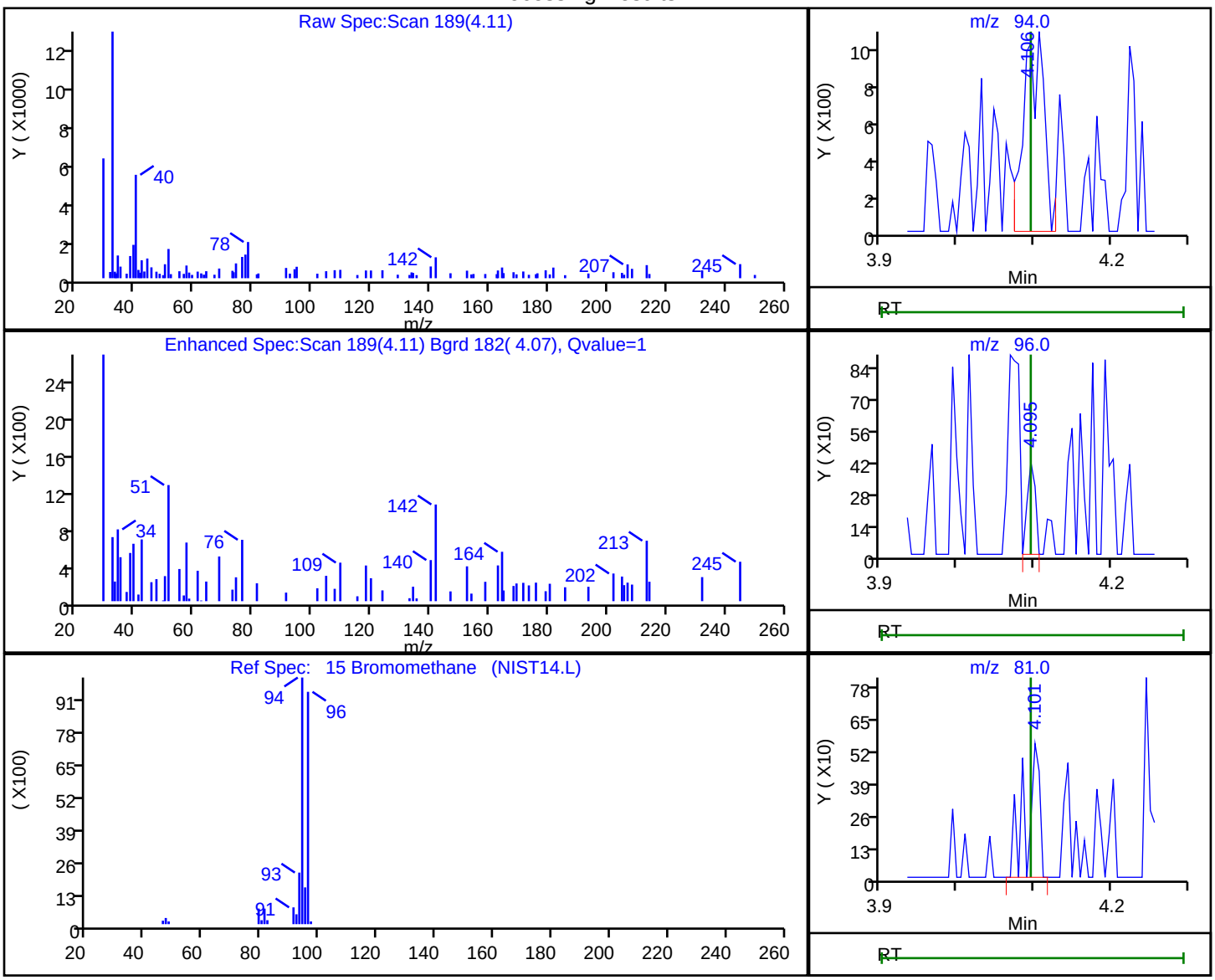
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200507-15427.b\RE11BLK09.D				
Injection Date:	11-May-2020 21:06:30	Instrument ID:	MR		
Lims ID:	140-19038-A-9	Lab Sample ID:	140-19038-9		
Client ID:	34001625				
Operator ID:	HMT	ALS Bottle#:	9	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

15 Bromomethane, CAS: 74-83-9

Processing Results



RT	Mass	Response	Amount
4.11	94.00	1888	0.016020
4.10	96.00	306	
4.10	81.00	659	

Reviewer: khachitpongpanits, 12-May-2020 10:07:35

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

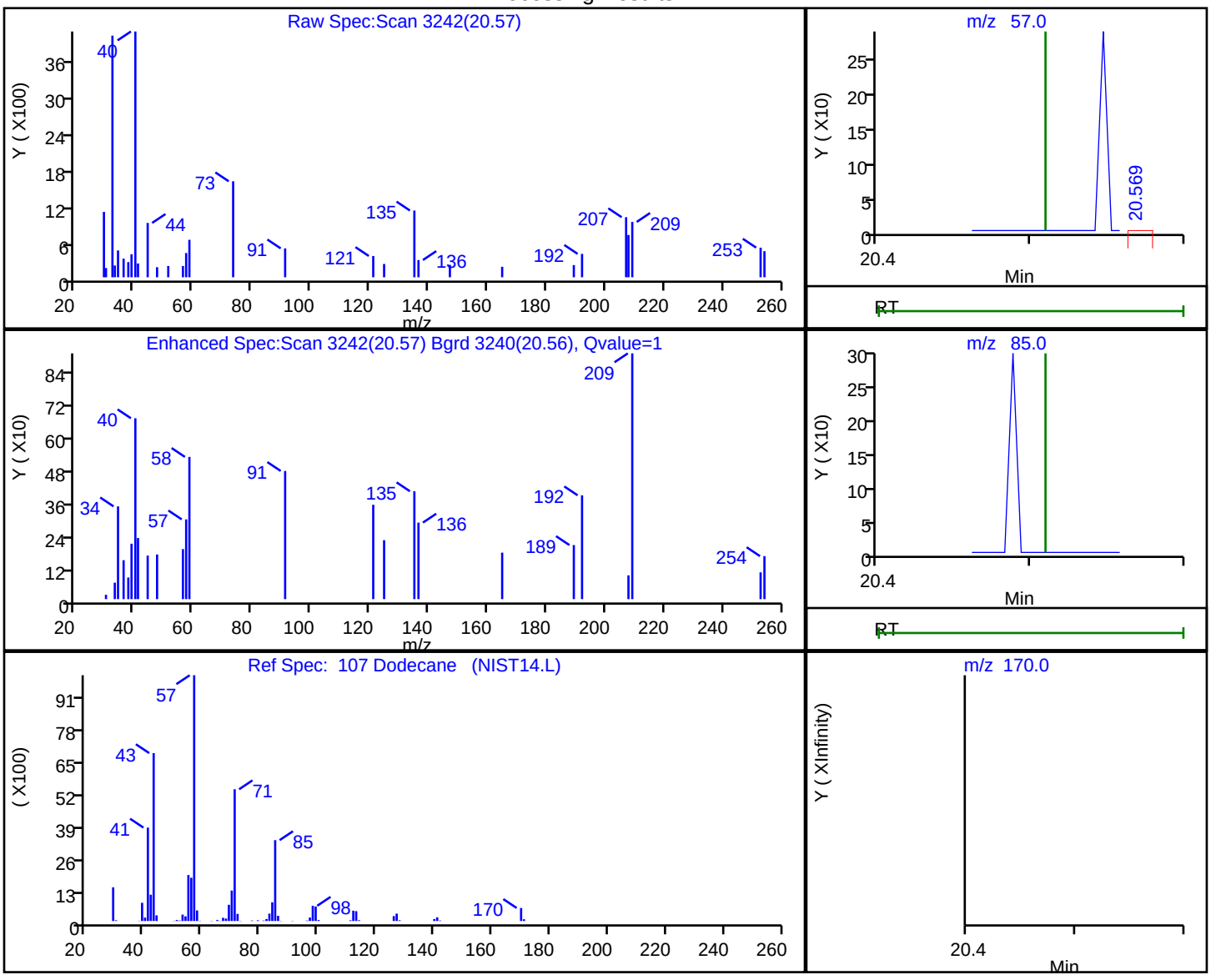
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200507-15427.b\RE11BLK09.D				
Injection Date:	11-May-2020 21:06:30	Instrument ID:	MR		
Lims ID:	140-19038-A-9	Lab Sample ID:	140-19038-9		
Client ID:	34001625				
Operator ID:	HMT	ALS Bottle#:	9	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

107 Dodecane, CAS: 112-40-3

Processing Results



RT	Mass	Response	Amount
20.57	57.00	241	0.398648
20.51	85.00	0	
20.51	170.00	0	

Reviewer: khachitpongpanits, 12-May-2020 10:08:14

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19038-1

SDG No.:

Client Sample ID: 34000740 Lab Sample ID: 140-19038-10

Matrix: Air Lab File ID: RE11BLK10.D

Analysis Method: TO-15 Date Collected: 05/08/2020 08:50

Sample wt/vol: 200(mL) Date Analyzed: 05/11/2020 21:54

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 39492 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	ND		0.20	
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.20	
79-00-5	1,1,2-Trichloroethane	ND		0.20	
76-13-1	1,1,2-Trichlorotrifluoroethane	ND		0.20	
75-34-3	1,1-Dichloroethane	ND		0.20	
75-35-4	1,1-Dichloroethene	ND		0.20	
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	
96-18-4	1,2,3-Trichloropropane	ND		0.50	
526-73-8	1,2,3-Trimethylbenzene	ND		0.20	
95-93-2	1,2,4,5-Tetramethylbenzene	ND		0.20	
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	
95-63-6	1,2,4-Trimethylbenzene	ND		0.20	
96-12-8	1,2-Dibromo-3-Chloropropane	ND		0.40	
106-93-4	1,2-Dibromoethane	ND		0.20	
95-50-1	1,2-Dichlorobenzene	ND		0.40	
107-06-2	1,2-Dichloroethane	ND		0.20	
78-87-5	1,2-Dichloropropane	ND		0.20	
76-14-2	1,2-Dichlorotetrafluoroethane	ND		0.20	
108-67-8	1,3,5-Trimethylbenzene	ND		0.20	
106-99-0	1,3-Butadiene	ND		0.40	
541-73-1	1,3-Dichlorobenzene	ND		0.20	
106-46-7	1,4-Dichlorobenzene	ND		0.20	
123-91-1	1,4-Dioxane	ND		0.40	
71-36-3	1-Butanol	ND		2.0	
90-12-0	1-Methylnaphthalene	ND		2.5	
540-84-1	2,2,4-Trimethylpentane	ND		0.40	
565-59-3	2,3-Dimethylpentane	ND		0.20	
78-93-3	2-Butanone	ND		1.0	
95-49-8	2-Chlorotoluene	ND		0.40	
591-78-6	2-Hexanone	ND		0.40	
78-78-4	2-Methylbutane	ND		0.50	
91-57-6	2-Methylnaphthalene	ND		2.5	
107-83-5	2-Methylpentane	ND		0.20	
107-05-1	3-Chloropropene	ND		0.20	
622-96-8	4-Ethyltoluene	ND		0.40	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		1.0	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19038-1

SDG No.:

Client Sample ID: 34000740 Lab Sample ID: 140-19038-10

Matrix: Air Lab File ID: RE11BLK10.D

Analysis Method: TO-15 Date Collected: 05/08/2020 08:50

Sample wt/vol: 200(mL) Date Analyzed: 05/11/2020 21:54

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 39492 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
67-64-1	Acetone	ND		7.5	
75-05-8	Acetonitrile	ND		1.0	
107-02-8	Acrolein	ND		1.0	
107-13-1	Acrylonitrile	ND		2.0	
98-83-9	Alpha Methyl Styrene	ND		0.40	
71-43-2	Benzene	ND		0.20	
100-44-7	Benzyl chloride	ND		0.40	
75-27-4	Bromodichloromethane	ND		0.20	
75-25-2	Bromoform	ND		0.20	
74-83-9	Bromomethane	ND		0.20	
106-97-8	Butane	ND		1.0	
75-15-0	Carbon disulfide	ND		0.40	
56-23-5	Carbon tetrachloride	ND		0.20	
108-90-7	Chlorobenzene	ND		0.20	
75-45-6	Chlorodifluoromethane	ND		0.20	
75-00-3	Chloroethane	ND		0.20	
67-66-3	Chloroform	ND		0.20	
74-87-3	Chloromethane	ND		1.0	
156-59-2	cis-1,2-Dichloroethene	ND		0.20	
10061-01-5	cis-1,3-Dichloropropene	ND		0.40	
98-82-8	Cumene	ND		0.40	
110-82-7	Cyclohexane	ND		0.40	
124-48-1	Dibromochloromethane	ND		0.20	
74-95-3	Dibromomethane	ND		0.40	
75-71-8	Dichlorodifluoromethane	ND		0.20	
64-17-5	Ethanol	ND		5.0	
141-78-6	Ethyl acetate	ND		2.0	
60-29-7	Ethyl ether	ND		2.0	
100-41-4	Ethylbenzene	ND		0.20	
87-68-3	Hexachlorobutadiene	ND		1.0	
110-54-3	Hexane	ND		0.40	
496-11-7	Indane	ND		0.20	
95-13-6	Indene	ND		0.40	
67-63-0	Isopropyl alcohol	ND		1.2	
179601-23-1	m&p-Xylene	ND		0.20	
80-62-6	Methyl methacrylate	ND		0.40	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19038-1

SDG No.:

Client Sample ID: 34000740 Lab Sample ID: 140-19038-10

Matrix: Air Lab File ID: RE11BLK10.D

Analysis Method: TO-15 Date Collected: 05/08/2020 08:50

Sample wt/vol: 200(mL) Date Analyzed: 05/11/2020 21:54

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 39492 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
1634-04-4	Methyl tert-butyl ether	ND		1.0	
108-87-2	Methylcyclohexane	ND		0.20	
75-09-2	Methylene Chloride	ND		1.0	
91-20-3	Naphthalene	ND		0.40	
104-51-8	n-Butylbenzene	ND		0.40	
124-18-5	n-Decane	ND		1.0	
112-40-3	n-Dodecane	ND		1.0	
142-82-5	n-Heptane	ND		0.40	
111-84-2	n-Nonane	ND		0.40	
111-65-9	n-Octane	ND		0.40	
103-65-1	N-Propylbenzene	ND		0.40	
1120-21-4	n-Undecane	ND		1.0	
95-47-6	o-Xylene	ND		0.20	
99-87-6	p-Cymene	ND		0.20	
109-66-0	Pentane	ND		2.5	
115-07-1	Propene	ND		2.5	
135-98-8	sec-Butylbenzene	ND		0.40	
100-42-5	Styrene	ND		0.20	
75-65-0	tert-Butanol	ND		1.0	
98-06-6	tert-Butylbenzene	ND		0.40	
127-18-4	Tetrachloroethene	ND		0.20	
109-99-9	Tetrahydrofuran	ND		1.0	
110-02-1	Thiophene	ND		0.20	
108-88-3	Toluene	ND		1.0	
156-60-5	trans-1,2-Dichloroethene	ND		0.20	
10061-02-6	trans-1,3-Dichloropropene	ND		0.20	
79-01-6	Trichloroethene	ND		0.20	
75-69-4	Trichlorofluoromethane	ND		0.20	
108-05-4	Vinyl acetate	ND		1.0	
593-60-2	Vinyl bromide	ND		0.20	
75-01-4	Vinyl chloride	ND		0.40	

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MR\20200507-15427.b\RE11BLK10.D				
Lims ID:	140-19038-A-10				
Client ID:	34000740				
Sample Type:	Client				
Inject. Date:	11-May-2020 21:54:30	ALS Bottle#:	10	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0015427-013				
Misc. Info.:	34000740				
Operator ID:	HMT	Instrument ID:	MR		
Method:	\\chromfs\Knoxville\ChromData\MR\20200507-15427.b\MR_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	12-May-2020 10:09:16	Calib Date:	10-Apr-2020 00:47:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MR\20200409-15180.b\RD09IC10.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1021				
First Level Reviewer: khachitpongpanits		Date:	12-May-2020 10:09:16		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.328	8.333	-0.005	86	177363	4.00	
* 2 1,4-Difluorobenzene	114	10.566	10.577	-0.011	93	1233841	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.409	15.408	0.000	85	1028907	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.059	17.064	-0.005	94	516156	3.38	
7 Propene	41	3.330	3.340	-0.010	97	39654	-0.4881	7

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

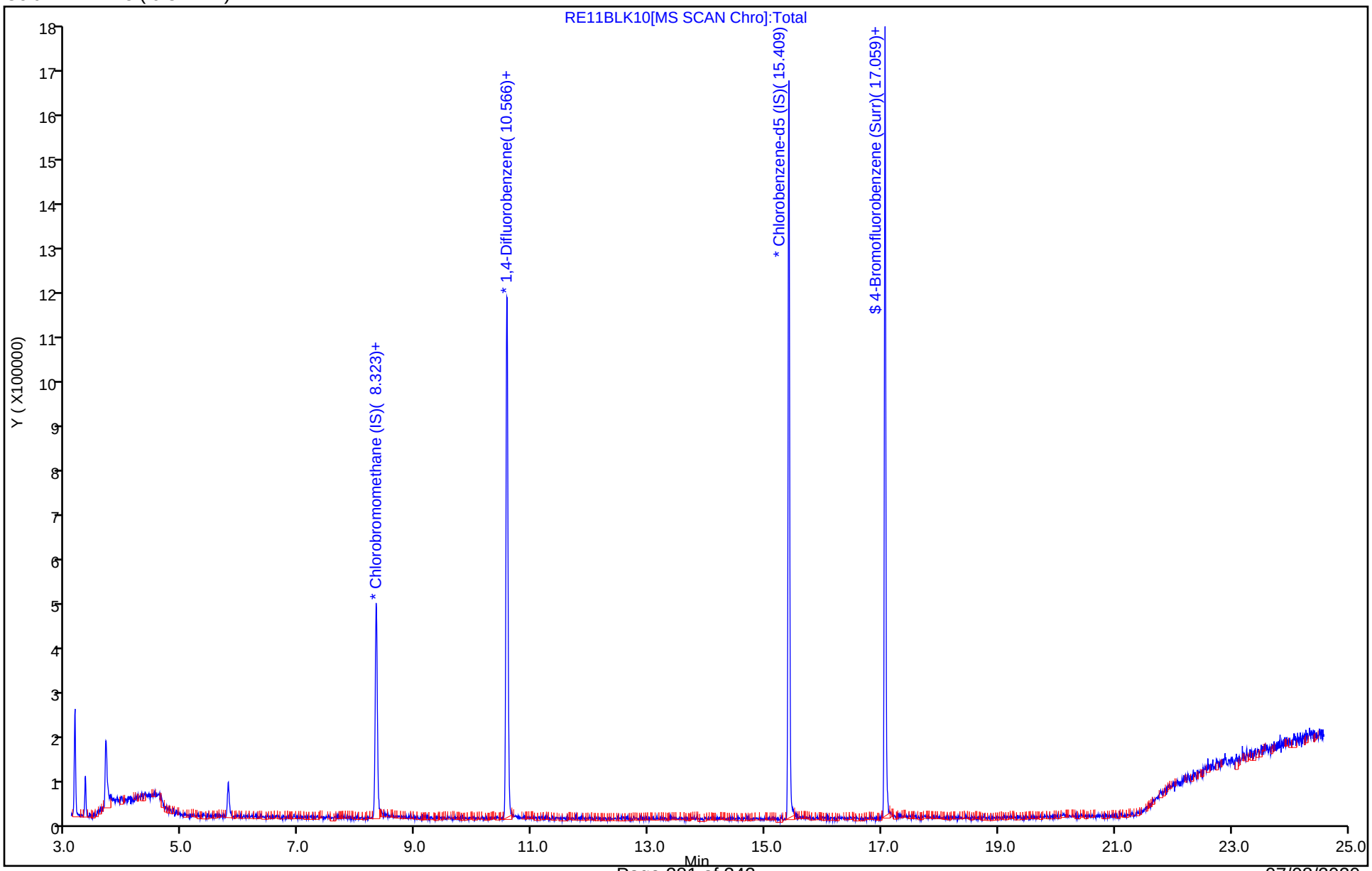
40MXISSURP_00004 Amount Added: 40.00 Units: mL Run Reagent

Report Date: 12-May-2020 10:09:16 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200507-15427.b\RE11BLK10.D				
Injection Date:	11-May-2020 21:54:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	140-19038-A-10	Lab Sample ID:	140-19038-10	Worklist Smp#:	17
Client ID:	34000740				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



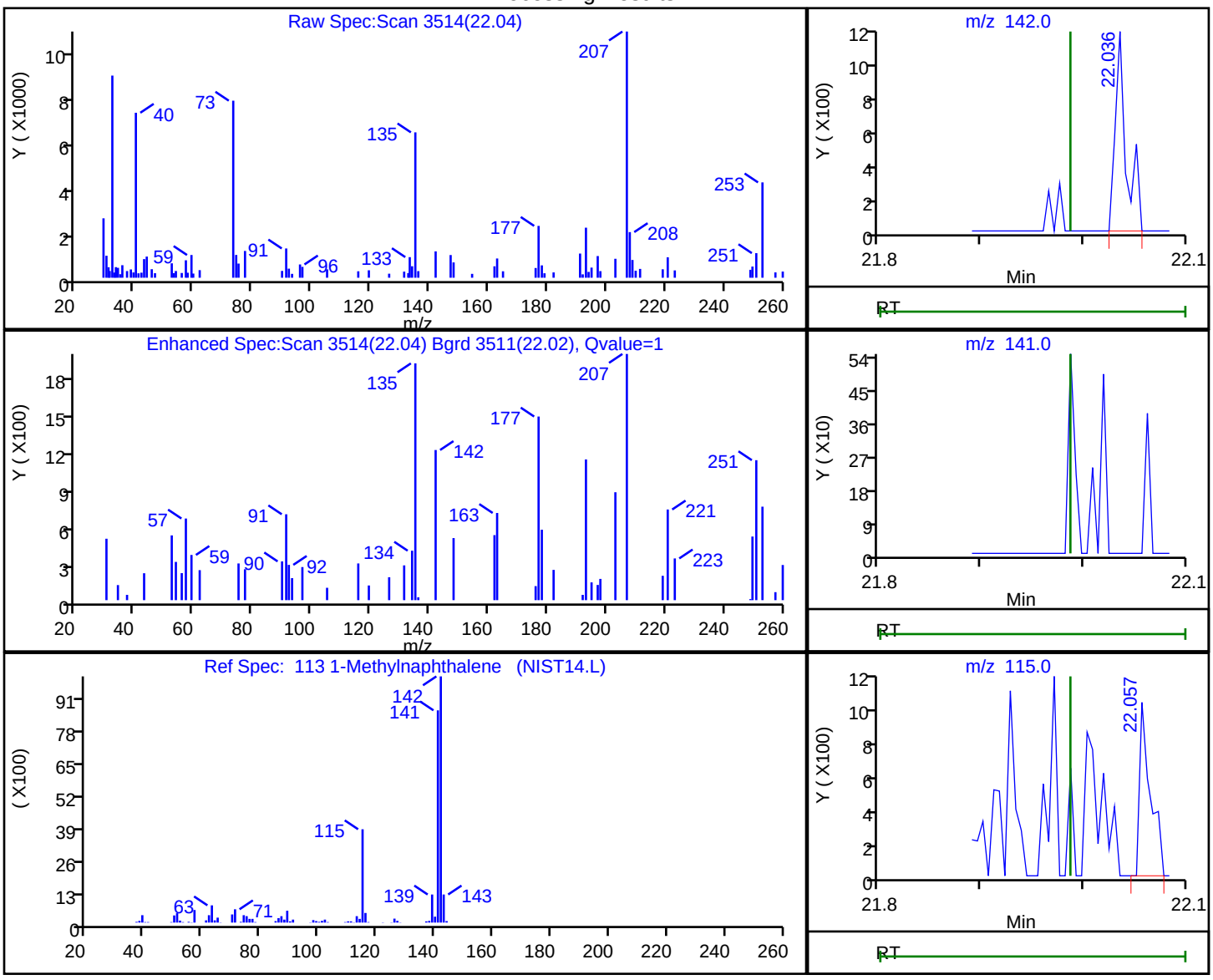
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200507-15427.b\RE11BLK10.D				
Injection Date:	11-May-2020 21:54:30	Instrument ID:	MR		
Lims ID:	140-19038-A-10	Lab Sample ID:	140-19038-10		
Client ID:	34000740				
Operator ID:	HMT	ALS Bottle#:	10	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

113 1-Methylnaphthalene, CAS: 90-12-0

Processing Results



RT	Mass	Response	Amount
22.04	142.00	880	0.260775
21.99	141.00	0	
22.06	115.00	730	

Reviewer: khachitpongpanits, 12-May-2020 10:09:12

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

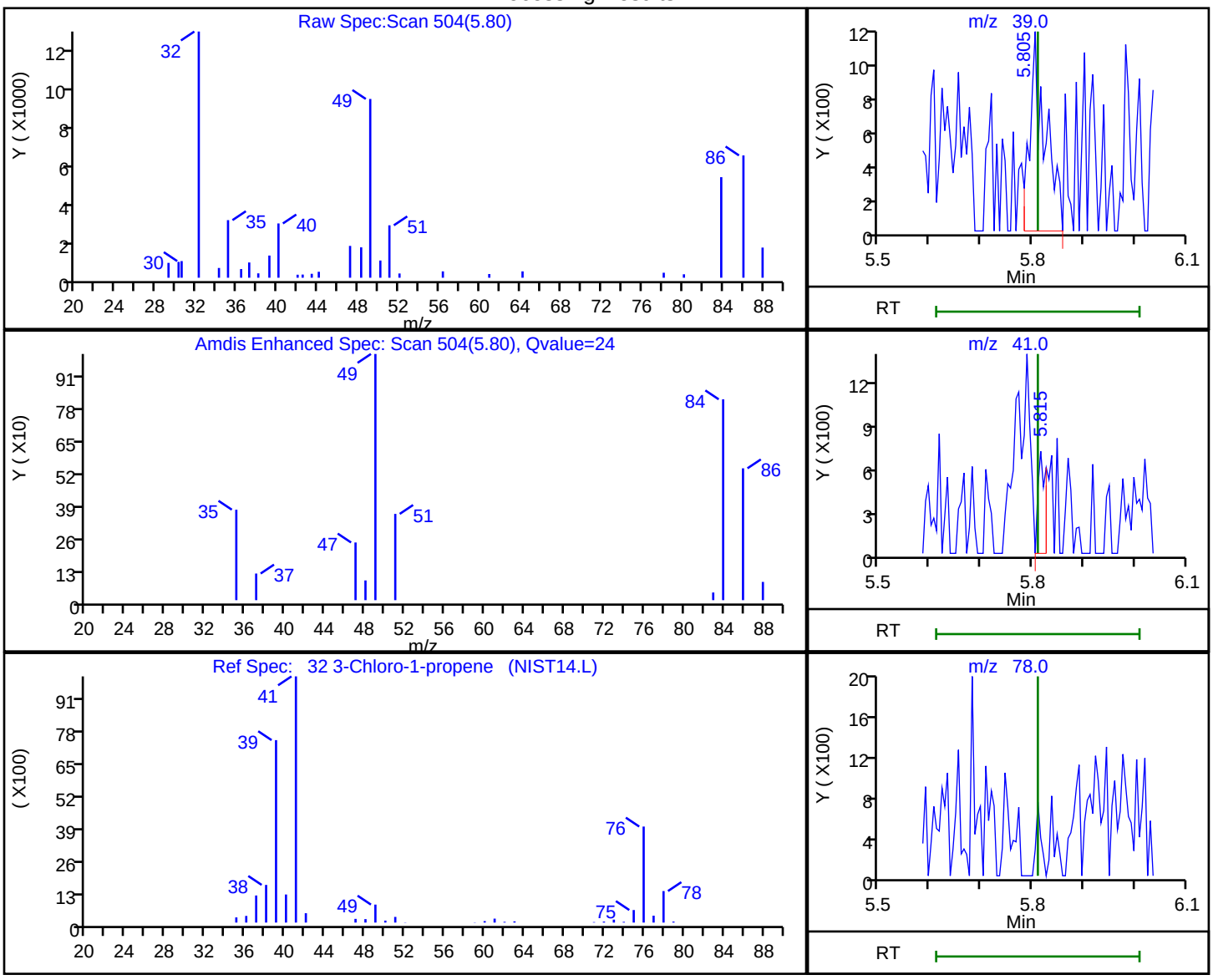
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200507-15427.b\RE11BLK10.D				
Injection Date:	11-May-2020 21:54:30	Instrument ID:	MR		
Lims ID:	140-19038-A-10	Lab Sample ID:	140-19038-10		
Client ID:	34000740				
Operator ID:	HMT	ALS Bottle#:	10	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

32 3-Chloro-1-propene, CAS: 107-05-1

Processing Results



RT	Mass	Response	Amount
5.80	39.00	2382	0.028023
5.82	41.00	698	
5.81	78.00	0	

Reviewer: khachitpongpanits, 12-May-2020 10:08:43

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

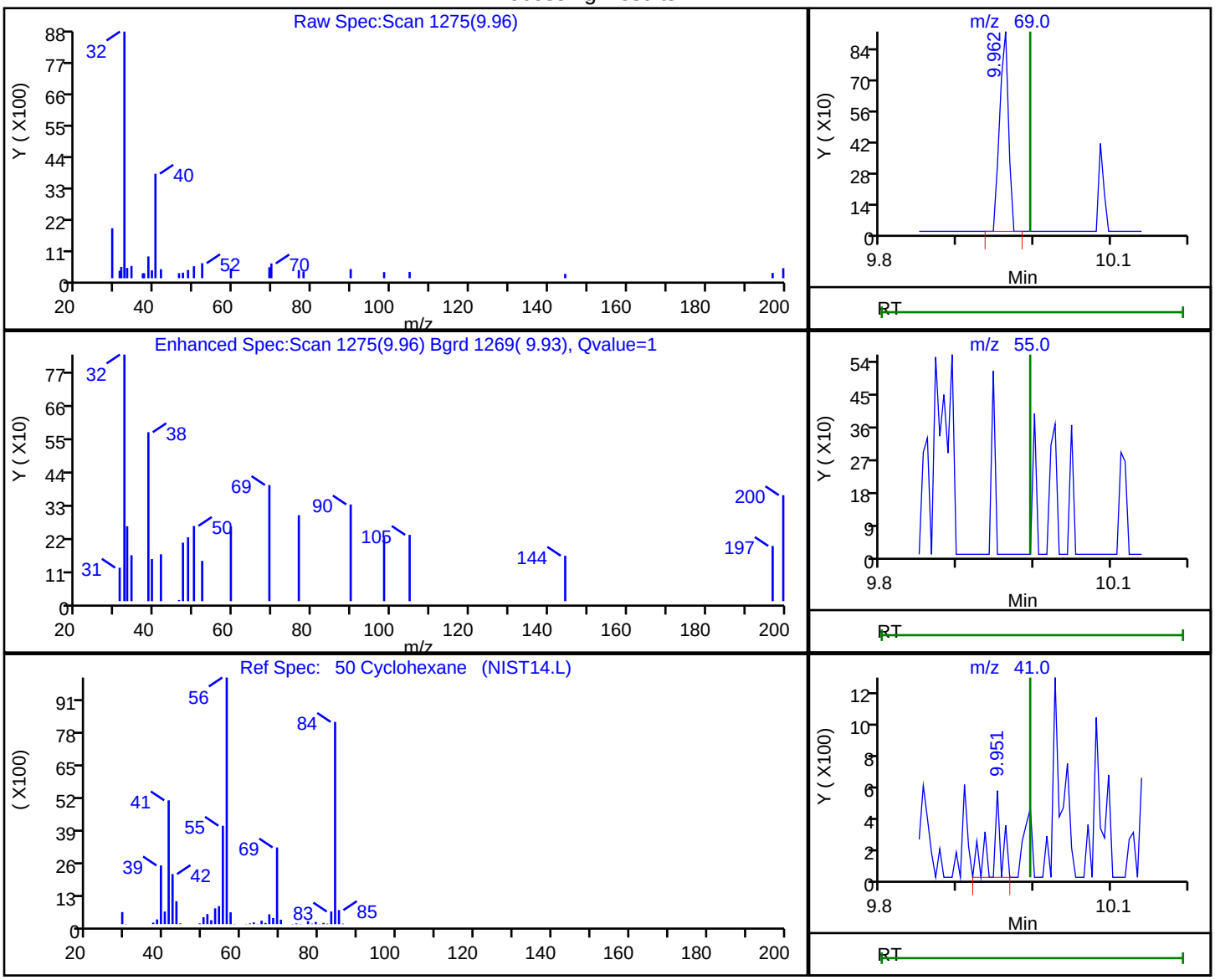
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200507-15427.b\RE11BLK10.D				
Injection Date:	11-May-2020 21:54:30	Instrument ID:	MR		
Lims ID:	140-19038-A-10	Lab Sample ID:	140-19038-10		
Client ID:	34000740				
Operator ID:	HMT	ALS Bottle#:	10	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

50 Cyclohexane, CAS: 110-82-7

Processing Results



RT	Mass	Response	Amount
9.96	69.00	724	0.021136
9.99	55.00	0	
9.95	41.00	439	

Reviewer: khachitpongpanits, 12-May-2020 10:08:51

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

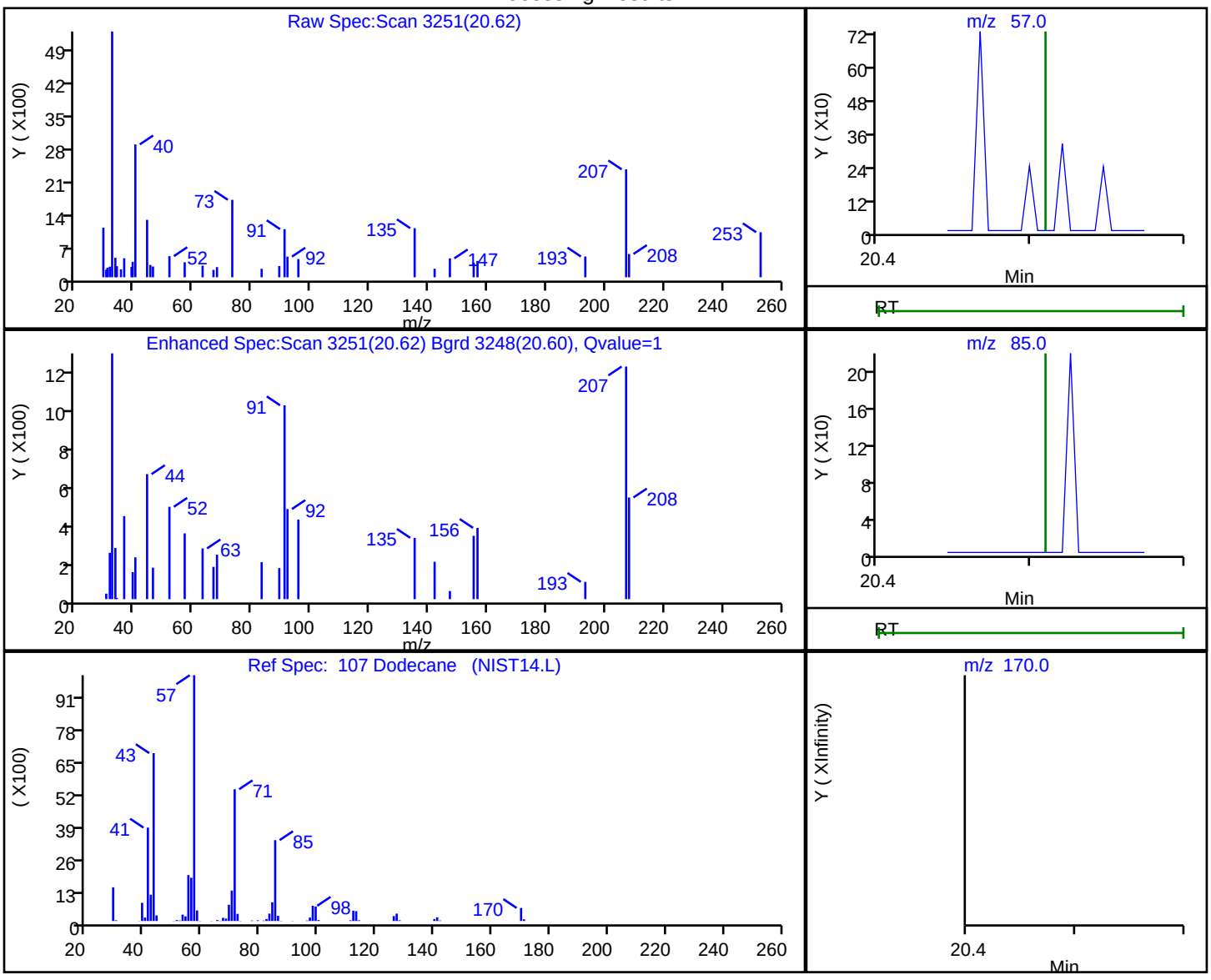
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200507-15427.b\RE11BLK10.D				
Injection Date:	11-May-2020 21:54:30	Instrument ID:	MR		
Lims ID:	140-19038-A-10	Lab Sample ID:	140-19038-10		
Client ID:	34000740				
Operator ID:	HMT	ALS Bottle#:	10	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

107 Dodecane, CAS: 112-40-3

Processing Results



RT	Mass	Response	Amount
20.62	57.00	295	0.398769
20.51	85.00	0	
20.51	170.00	0	

Reviewer: khachitpongpanits, 12-May-2020 10:09:09

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19038-1

SDG No.:

Client Sample ID: 34000763 Lab Sample ID: 140-19038-11

Matrix: Air Lab File ID: RE11BLK11.D

Analysis Method: TO-15 Date Collected: 05/08/2020 08:50

Sample wt/vol: 200(mL) Date Analyzed: 05/11/2020 22:42

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 39492 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	ND		0.20	
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.20	
79-00-5	1,1,2-Trichloroethane	ND		0.20	
76-13-1	1,1,2-Trichlorotrifluoroethane	ND		0.20	
75-34-3	1,1-Dichloroethane	ND		0.20	
75-35-4	1,1-Dichloroethene	ND		0.20	
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	
96-18-4	1,2,3-Trichloropropane	ND		0.50	
526-73-8	1,2,3-Trimethylbenzene	ND		0.20	
95-93-2	1,2,4,5-Tetramethylbenzene	ND		0.20	
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	
95-63-6	1,2,4-Trimethylbenzene	ND		0.20	
96-12-8	1,2-Dibromo-3-Chloropropane	ND		0.40	
106-93-4	1,2-Dibromoethane	ND		0.20	
95-50-1	1,2-Dichlorobenzene	ND		0.40	
107-06-2	1,2-Dichloroethane	ND		0.20	
78-87-5	1,2-Dichloropropane	ND		0.20	
76-14-2	1,2-Dichlorotetrafluoroethane	ND		0.20	
108-67-8	1,3,5-Trimethylbenzene	ND		0.20	
106-99-0	1,3-Butadiene	ND		0.40	
541-73-1	1,3-Dichlorobenzene	ND		0.20	
106-46-7	1,4-Dichlorobenzene	ND		0.20	
123-91-1	1,4-Dioxane	ND		0.40	
71-36-3	1-Butanol	ND		2.0	
90-12-0	1-Methylnaphthalene	ND		2.5	
540-84-1	2,2,4-Trimethylpentane	ND		0.40	
565-59-3	2,3-Dimethylpentane	ND		0.20	
78-93-3	2-Butanone	ND		1.0	
95-49-8	2-Chlorotoluene	ND		0.40	
591-78-6	2-Hexanone	ND		0.40	
78-78-4	2-Methylbutane	ND		0.50	
91-57-6	2-Methylnaphthalene	ND		2.5	
107-83-5	2-Methylpentane	ND		0.20	
107-05-1	3-Chloropropene	ND		0.20	
622-96-8	4-Ethyltoluene	ND		0.40	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		1.0	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19038-1

SDG No.:

Client Sample ID: 34000763 Lab Sample ID: 140-19038-11

Matrix: Air Lab File ID: RE11BLK11.D

Analysis Method: TO-15 Date Collected: 05/08/2020 08:50

Sample wt/vol: 200(mL) Date Analyzed: 05/11/2020 22:42

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 39492 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
67-64-1	Acetone	ND		7.5	
75-05-8	Acetonitrile	ND		1.0	
107-02-8	Acrolein	ND		1.0	
107-13-1	Acrylonitrile	ND		2.0	
98-83-9	Alpha Methyl Styrene	ND		0.40	
71-43-2	Benzene	ND		0.20	
100-44-7	Benzyl chloride	ND		0.40	
75-27-4	Bromodichloromethane	ND		0.20	
75-25-2	Bromoform	ND		0.20	
74-83-9	Bromomethane	ND		0.20	
106-97-8	Butane	ND		1.0	
75-15-0	Carbon disulfide	ND		0.40	
56-23-5	Carbon tetrachloride	ND		0.20	
108-90-7	Chlorobenzene	ND		0.20	
75-45-6	Chlorodifluoromethane	ND		0.20	
75-00-3	Chloroethane	ND		0.20	
67-66-3	Chloroform	ND		0.20	
74-87-3	Chloromethane	ND		1.0	
156-59-2	cis-1,2-Dichloroethene	ND		0.20	
10061-01-5	cis-1,3-Dichloropropene	ND		0.40	
98-82-8	Cumene	ND		0.40	
110-82-7	Cyclohexane	ND		0.40	
124-48-1	Dibromochloromethane	ND		0.20	
74-95-3	Dibromomethane	ND		0.40	
75-71-8	Dichlorodifluoromethane	ND		0.20	
64-17-5	Ethanol	ND		5.0	
141-78-6	Ethyl acetate	ND		2.0	
60-29-7	Ethyl ether	ND		2.0	
100-41-4	Ethylbenzene	ND		0.20	
87-68-3	Hexachlorobutadiene	ND		1.0	
110-54-3	Hexane	ND		0.40	
496-11-7	Indane	ND		0.20	
95-13-6	Indene	ND		0.40	
67-63-0	Isopropyl alcohol	ND		1.2	
179601-23-1	m&p-Xylene	ND		0.20	
80-62-6	Methyl methacrylate	ND		0.40	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19038-1

SDG No.:

Client Sample ID: 34000763 Lab Sample ID: 140-19038-11

Matrix: Air Lab File ID: RE11BLK11.D

Analysis Method: TO-15 Date Collected: 05/08/2020 08:50

Sample wt/vol: 200(mL) Date Analyzed: 05/11/2020 22:42

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 39492 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
1634-04-4	Methyl tert-butyl ether	ND		1.0	
108-87-2	Methylcyclohexane	ND		0.20	
75-09-2	Methylene Chloride	ND		1.0	
91-20-3	Naphthalene	ND		0.40	
104-51-8	n-Butylbenzene	ND		0.40	
124-18-5	n-Decane	ND		1.0	
112-40-3	n-Dodecane	ND		1.0	
142-82-5	n-Heptane	ND		0.40	
111-84-2	n-Nonane	ND		0.40	
111-65-9	n-Octane	ND		0.40	
103-65-1	N-Propylbenzene	ND		0.40	
1120-21-4	n-Undecane	ND		1.0	
95-47-6	o-Xylene	ND		0.20	
99-87-6	p-Cymene	ND		0.20	
109-66-0	Pentane	ND		2.5	
115-07-1	Propene	ND		2.5	
135-98-8	sec-Butylbenzene	ND		0.40	
100-42-5	Styrene	ND		0.20	
75-65-0	tert-Butanol	ND		1.0	
98-06-6	tert-Butylbenzene	ND		0.40	
127-18-4	Tetrachloroethene	ND		0.20	
109-99-9	Tetrahydrofuran	ND		1.0	
110-02-1	Thiophene	ND		0.20	
108-88-3	Toluene	ND		1.0	
156-60-5	trans-1,2-Dichloroethene	ND		0.20	
10061-02-6	trans-1,3-Dichloropropene	ND		0.20	
79-01-6	Trichloroethene	ND		0.20	
75-69-4	Trichlorofluoromethane	ND		0.20	
108-05-4	Vinyl acetate	ND		1.0	
593-60-2	Vinyl bromide	ND		0.20	
75-01-4	Vinyl chloride	ND		0.40	

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MR\20200507-15427.b\RE11BLK11.D				
Lims ID:	140-19038-A-11				
Client ID:	34000763				
Sample Type:	Client				
Inject. Date:	11-May-2020 22:42:30	ALS Bottle#:	11	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0015427-014				
Misc. Info.:	34000763				
Operator ID:	HMT	Instrument ID:	MR		
Method:	\\chromfs\Knoxville\ChromData\MR\20200507-15427.b\MR_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	12-May-2020 10:28:12	Calib Date:	10-Apr-2020 00:47:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MR\20200409-15180.b\RD09IC10.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1021				
First Level Reviewer: khachitpongpanits		Date:	12-May-2020 10:28:12		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.328	8.333	-0.005	84	175311	4.00	
* 2 1,4-Difluorobenzene	114	10.571	10.577	-0.006	93	1243445	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.408	15.408	0.000	84	1060837	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.053	17.064	-0.011	94	518182	3.30	
7 Propene	41	3.335	3.338	-0.005	96	38255	-0.5051	7
31 Methylene Chloride	84	5.783	5.779	0.000	93	48014	0.1940	
33 Carbon disulfide	76	5.934	5.941	-0.011	74	6115	0.0283	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

40MXISSURP_00004 Amount Added: 40.00 Units: mL Run Reagent

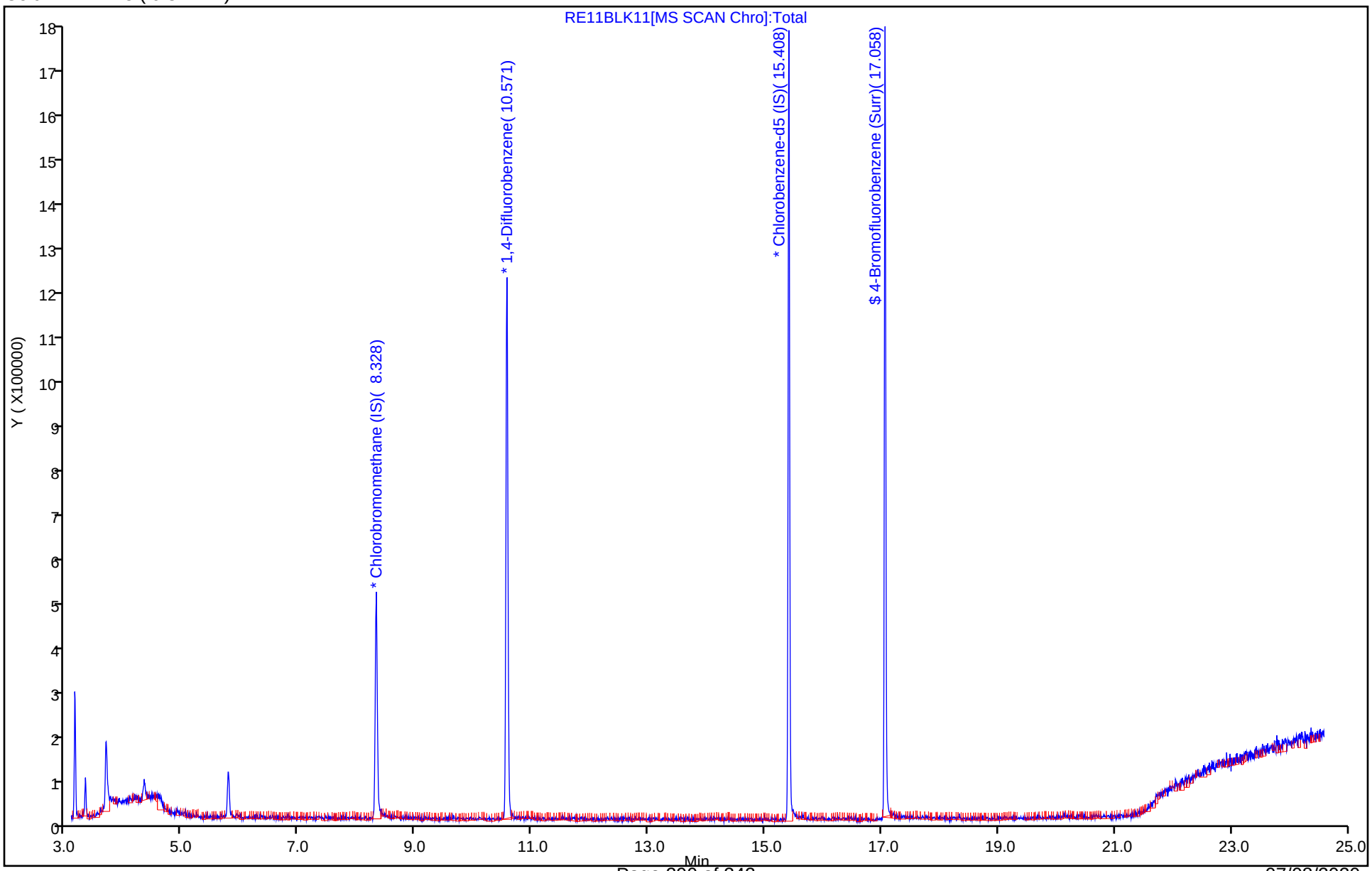
Report Date: 12-May-2020 10:28:12 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200507-15427.b\RE11BLK11.D

Injection Date:	11-May-2020 22:42:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	140-19038-A-11	Lab Sample ID:	140-19038-11	Worklist Smp#:	18
Client ID:	34000763				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



07/08/2020

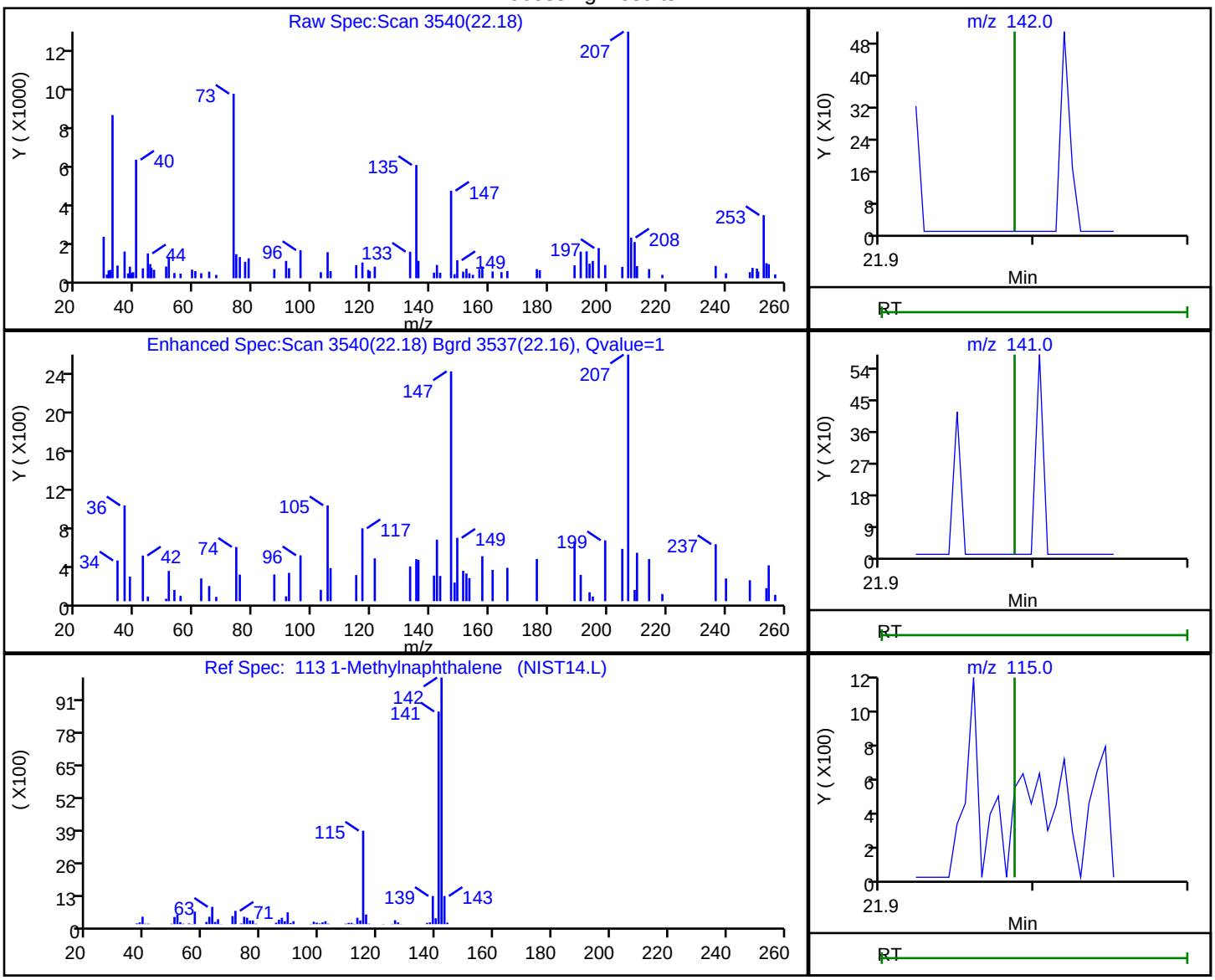
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200507-15427.b\RE11BLK11.D				
Injection Date:	11-May-2020 22:42:30	Instrument ID:	MR		
Lims ID:	140-19038-A-11	Lab Sample ID:	140-19038-11		
Client ID:	34000763				
Operator ID:	HMT	ALS Bottle#:	11	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

113 1-Methylnaphthalene, CAS: 90-12-0

Processing Results



RT	Mass	Response	Amount
22.18	142.00	346	0.260013
22.17	141.00	398	
22.18	115.00	705	

Reviewer: khachitpongpanits, 12-May-2020 10:28:07

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

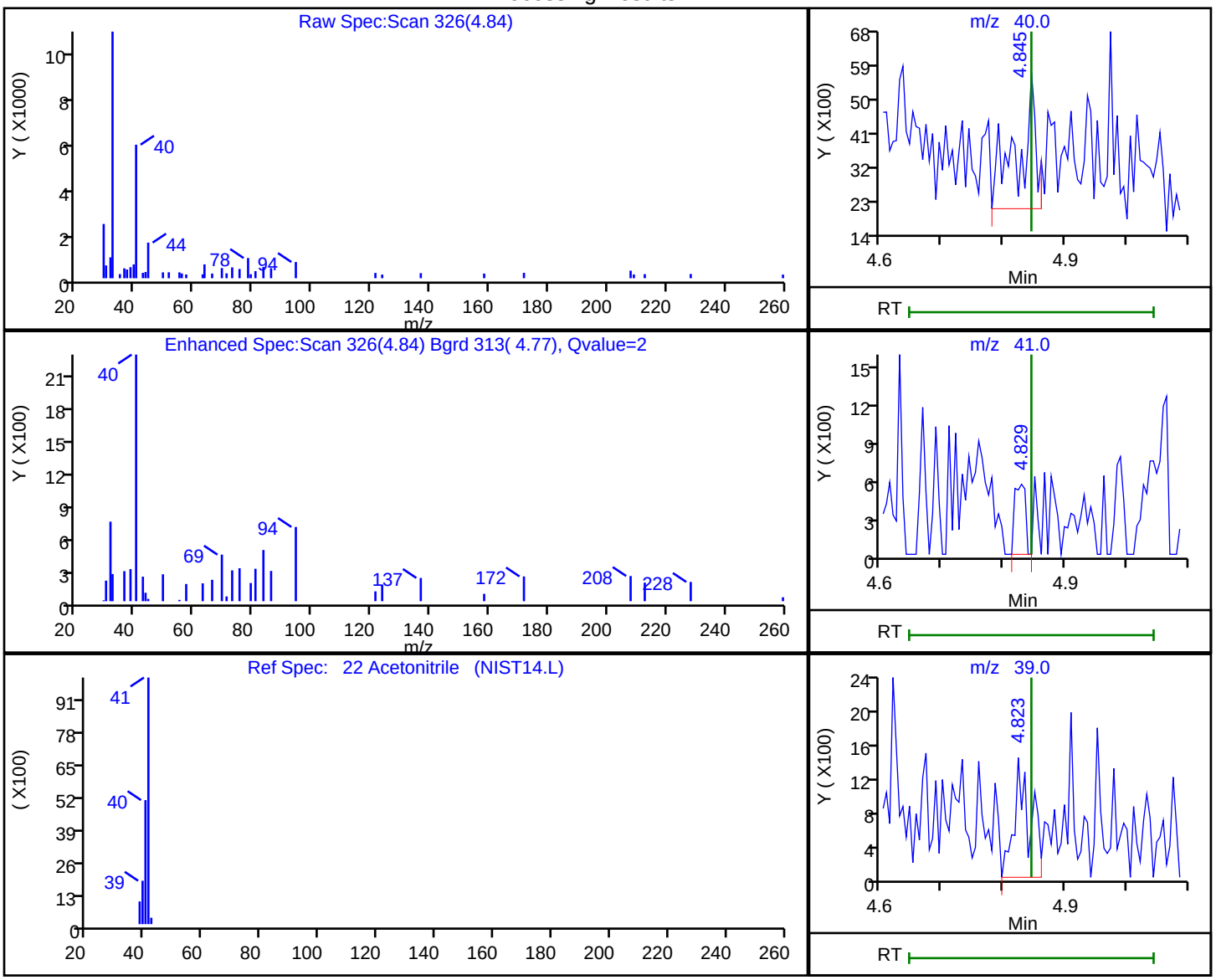
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200507-15427.b\RE11BLK11.D				
Injection Date:	11-May-2020 22:42:30	Instrument ID:	MR		
Lims ID:	140-19038-A-11	Lab Sample ID:	140-19038-11		
Client ID:	34000763				
Operator ID:	HMT	ALS Bottle#:	11	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

22 Acetonitrile, CAS: 75-05-8

Processing Results



RT	Mass	Response	Amount
4.84	40.00	7167	0.192764
4.83	41.00	661	
4.82	39.00	2515	

Reviewer: khachitpongpanits, 12-May-2020 10:27:38

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

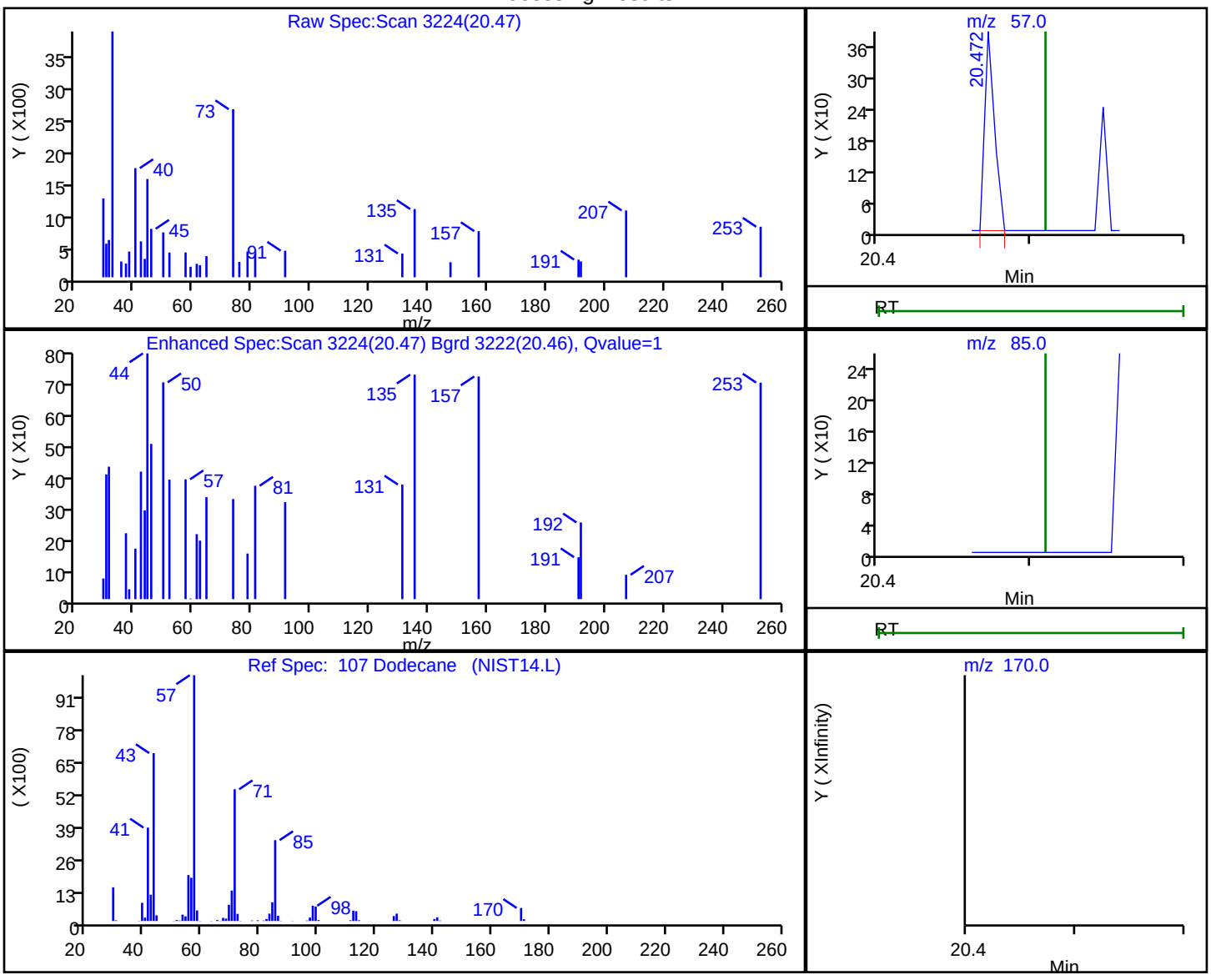
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200507-15427.b\RE11BLK11.D				
Injection Date:	11-May-2020 22:42:30	Instrument ID:	MR		
Lims ID:	140-19038-A-11	Lab Sample ID:	140-19038-11		
Client ID:	34000763				
Operator ID:	HMT	ALS Bottle#:	11	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

107 Dodecane, CAS: 112-40-3

Processing Results



RT	Mass	Response	Amount
20.47	57.00	175	0.398493
20.51	85.00	0	
20.51	170.00	0	

Reviewer: khachitpongpanits, 12-May-2020 10:28:05

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19038-1

SDG No.:

Client Sample ID: 8514 Lab Sample ID: 140-19038-12

Matrix: Air Lab File ID: RE11BLK12.D

Analysis Method: TO-15 Date Collected: 05/08/2020 08:50

Sample wt/vol: 200(mL) Date Analyzed: 05/11/2020 23:31

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 39492 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	ND		0.20	
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.20	
79-00-5	1,1,2-Trichloroethane	ND		0.20	
76-13-1	1,1,2-Trichlorotrifluoroethane	ND		0.20	
75-34-3	1,1-Dichloroethane	ND		0.20	
75-35-4	1,1-Dichloroethene	ND		0.20	
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	
96-18-4	1,2,3-Trichloropropane	ND		0.50	
526-73-8	1,2,3-Trimethylbenzene	ND		0.20	
95-93-2	1,2,4,5-Tetramethylbenzene	ND		0.20	
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	
95-63-6	1,2,4-Trimethylbenzene	ND		0.20	
96-12-8	1,2-Dibromo-3-Chloropropane	ND		0.40	
106-93-4	1,2-Dibromoethane	ND		0.20	
95-50-1	1,2-Dichlorobenzene	ND		0.40	
107-06-2	1,2-Dichloroethane	ND		0.20	
78-87-5	1,2-Dichloropropane	ND		0.20	
76-14-2	1,2-Dichlorotetrafluoroethane	ND		0.20	
108-67-8	1,3,5-Trimethylbenzene	ND		0.20	
106-99-0	1,3-Butadiene	ND		0.40	
541-73-1	1,3-Dichlorobenzene	ND		0.20	
106-46-7	1,4-Dichlorobenzene	ND		0.20	
123-91-1	1,4-Dioxane	ND		0.40	
71-36-3	1-Butanol	ND		2.0	
90-12-0	1-Methylnaphthalene	ND		2.5	
540-84-1	2,2,4-Trimethylpentane	ND		0.40	
565-59-3	2,3-Dimethylpentane	ND		0.20	
78-93-3	2-Butanone	ND		1.0	
95-49-8	2-Chlorotoluene	ND		0.40	
591-78-6	2-Hexanone	ND		0.40	
78-78-4	2-Methylbutane	ND		0.50	
91-57-6	2-Methylnaphthalene	ND		2.5	
107-83-5	2-Methylpentane	ND		0.20	
107-05-1	3-Chloropropene	ND		0.20	
622-96-8	4-Ethyltoluene	ND		0.40	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		1.0	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19038-1

SDG No.:

Client Sample ID: 8514 Lab Sample ID: 140-19038-12

Matrix: Air Lab File ID: RE11BLK12.D

Analysis Method: TO-15 Date Collected: 05/08/2020 08:50

Sample wt/vol: 200(mL) Date Analyzed: 05/11/2020 23:31

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 39492 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
67-64-1	Acetone	ND		7.5	
75-05-8	Acetonitrile	ND		1.0	
107-02-8	Acrolein	ND		1.0	
107-13-1	Acrylonitrile	ND		2.0	
98-83-9	Alpha Methyl Styrene	ND		0.40	
71-43-2	Benzene	ND		0.20	
100-44-7	Benzyl chloride	ND		0.40	
75-27-4	Bromodichloromethane	ND		0.20	
75-25-2	Bromoform	ND		0.20	
74-83-9	Bromomethane	ND		0.20	
106-97-8	Butane	ND		1.0	
75-15-0	Carbon disulfide	ND		0.40	
56-23-5	Carbon tetrachloride	ND		0.20	
108-90-7	Chlorobenzene	ND		0.20	
75-45-6	Chlorodifluoromethane	ND		0.20	
75-00-3	Chloroethane	ND		0.20	
67-66-3	Chloroform	ND		0.20	
74-87-3	Chloromethane	ND		1.0	
156-59-2	cis-1,2-Dichloroethene	ND		0.20	
10061-01-5	cis-1,3-Dichloropropene	ND		0.40	
98-82-8	Cumene	ND		0.40	
110-82-7	Cyclohexane	ND		0.40	
124-48-1	Dibromochloromethane	ND		0.20	
74-95-3	Dibromomethane	ND		0.40	
75-71-8	Dichlorodifluoromethane	ND		0.20	
64-17-5	Ethanol	ND		5.0	
141-78-6	Ethyl acetate	ND		2.0	
60-29-7	Ethyl ether	ND		2.0	
100-41-4	Ethylbenzene	ND		0.20	
87-68-3	Hexachlorobutadiene	ND		1.0	
110-54-3	Hexane	ND		0.40	
496-11-7	Indane	ND		0.20	
95-13-6	Indene	ND		0.40	
67-63-0	Isopropyl alcohol	ND		1.2	
179601-23-1	m&p-Xylene	ND		0.20	
80-62-6	Methyl methacrylate	ND		0.40	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19038-1

SDG No.:

Client Sample ID: 8514 Lab Sample ID: 140-19038-12

Matrix: Air Lab File ID: RE11BLK12.D

Analysis Method: TO-15 Date Collected: 05/08/2020 08:50

Sample wt/vol: 200(mL) Date Analyzed: 05/11/2020 23:31

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 39492 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
1634-04-4	Methyl tert-butyl ether	ND		1.0	
108-87-2	Methylcyclohexane	ND		0.20	
75-09-2	Methylene Chloride	ND		1.0	
91-20-3	Naphthalene	ND		0.40	
104-51-8	n-Butylbenzene	ND		0.40	
124-18-5	n-Decane	ND		1.0	
112-40-3	n-Dodecane	ND		1.0	
142-82-5	n-Heptane	ND		0.40	
111-84-2	n-Nonane	ND		0.40	
111-65-9	n-Octane	ND		0.40	
103-65-1	N-Propylbenzene	ND		0.40	
1120-21-4	n-Undecane	ND		1.0	
95-47-6	o-Xylene	ND		0.20	
99-87-6	p-Cymene	ND		0.20	
109-66-0	Pentane	ND		2.5	
115-07-1	Propene	ND		2.5	
135-98-8	sec-Butylbenzene	ND		0.40	
100-42-5	Styrene	ND		0.20	
75-65-0	tert-Butanol	ND		1.0	
98-06-6	tert-Butylbenzene	ND		0.40	
127-18-4	Tetrachloroethene	ND		0.20	
109-99-9	Tetrahydrofuran	ND		1.0	
110-02-1	Thiophene	ND		0.20	
108-88-3	Toluene	ND		1.0	
156-60-5	trans-1,2-Dichloroethene	ND		0.20	
10061-02-6	trans-1,3-Dichloropropene	ND		0.20	
79-01-6	Trichloroethene	ND		0.20	
75-69-4	Trichlorofluoromethane	ND		0.20	
108-05-4	Vinyl acetate	ND		1.0	
593-60-2	Vinyl bromide	ND		0.20	
75-01-4	Vinyl chloride	ND		0.40	

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MR\20200507-15427.b\RE11BLK12.D				
Lims ID:	140-19038-A-12				
Client ID:	8514				
Sample Type:	Client				
Inject. Date:	11-May-2020 23:31:30	ALS Bottle#:	12	Worklist Smp#:	19
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0015427-015				
Misc. Info.:	8514				
Operator ID:	HMT	Instrument ID:	MR		
Method:	\\chromfs\Knoxville\ChromData\MR\20200507-15427.b\MR_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	12-May-2020 12:23:18	Calib Date:	10-Apr-2020 00:47:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MR\20200409-15180.b\RD09IC10.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1021				
First Level Reviewer: khachitpongpanits		Date:	12-May-2020 12:23:18		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.328	8.333	-0.005	84	174805	4.00	
* 2 1,4-Difluorobenzene	114	10.566	10.577	-0.011	93	1213100	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.408	15.408	0.000	84	1056884	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.059	17.064	-0.006	93	532487	3.40	
7 Propene	41	3.335	3.338	-0.005	99	38781	-0.4935	7

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

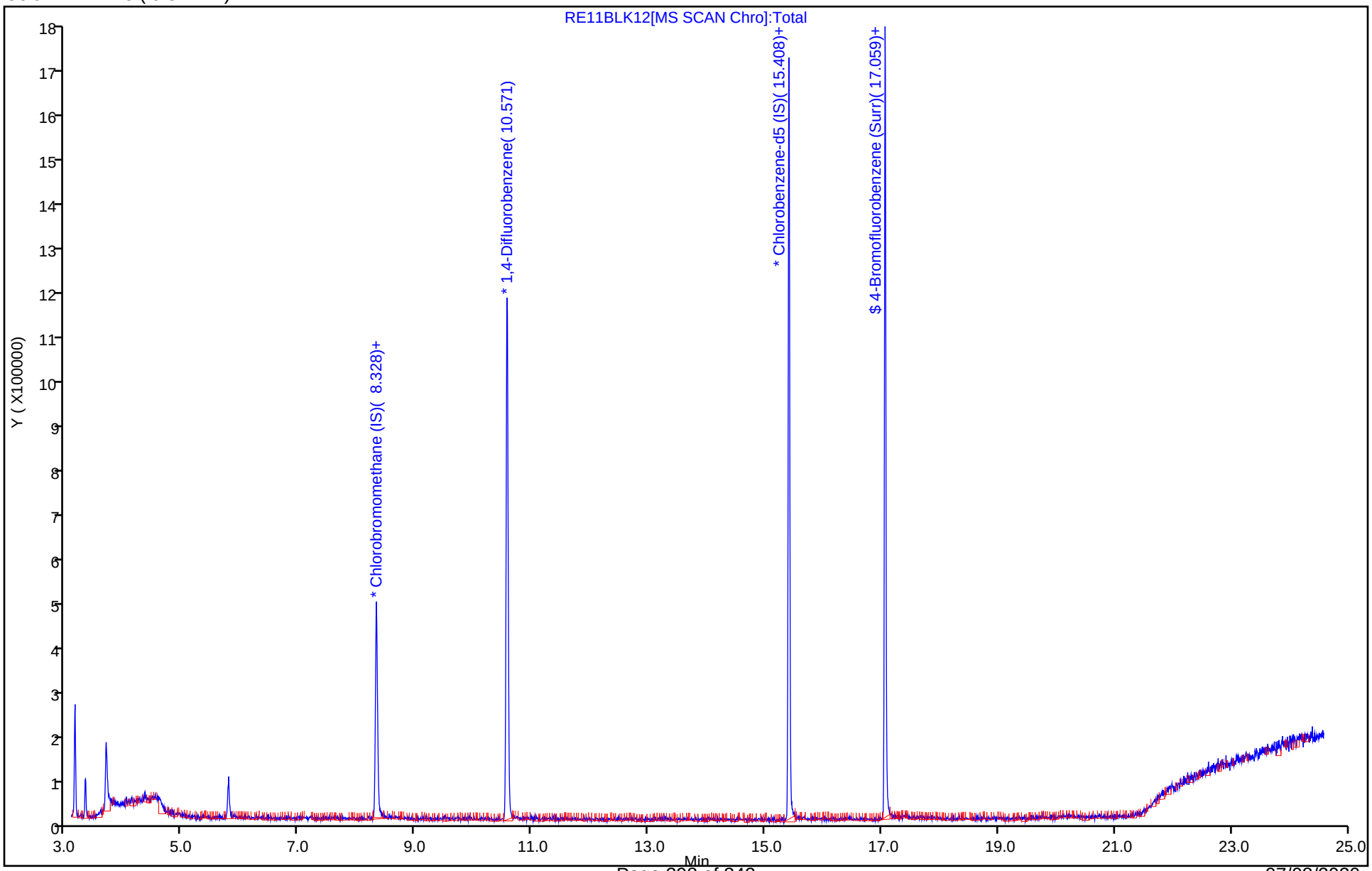
40MXISSURP_00004 Amount Added: 40.00 Units: mL Run Reagent

Report Date: 12-May-2020 12:23:19 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200507-15427.b\RE11BLK12.D				
Injection Date:	11-May-2020 23:31:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	140-19038-A-12	Lab Sample ID:	140-19038-12	Worklist Smp#:	19
Client ID:	8514				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



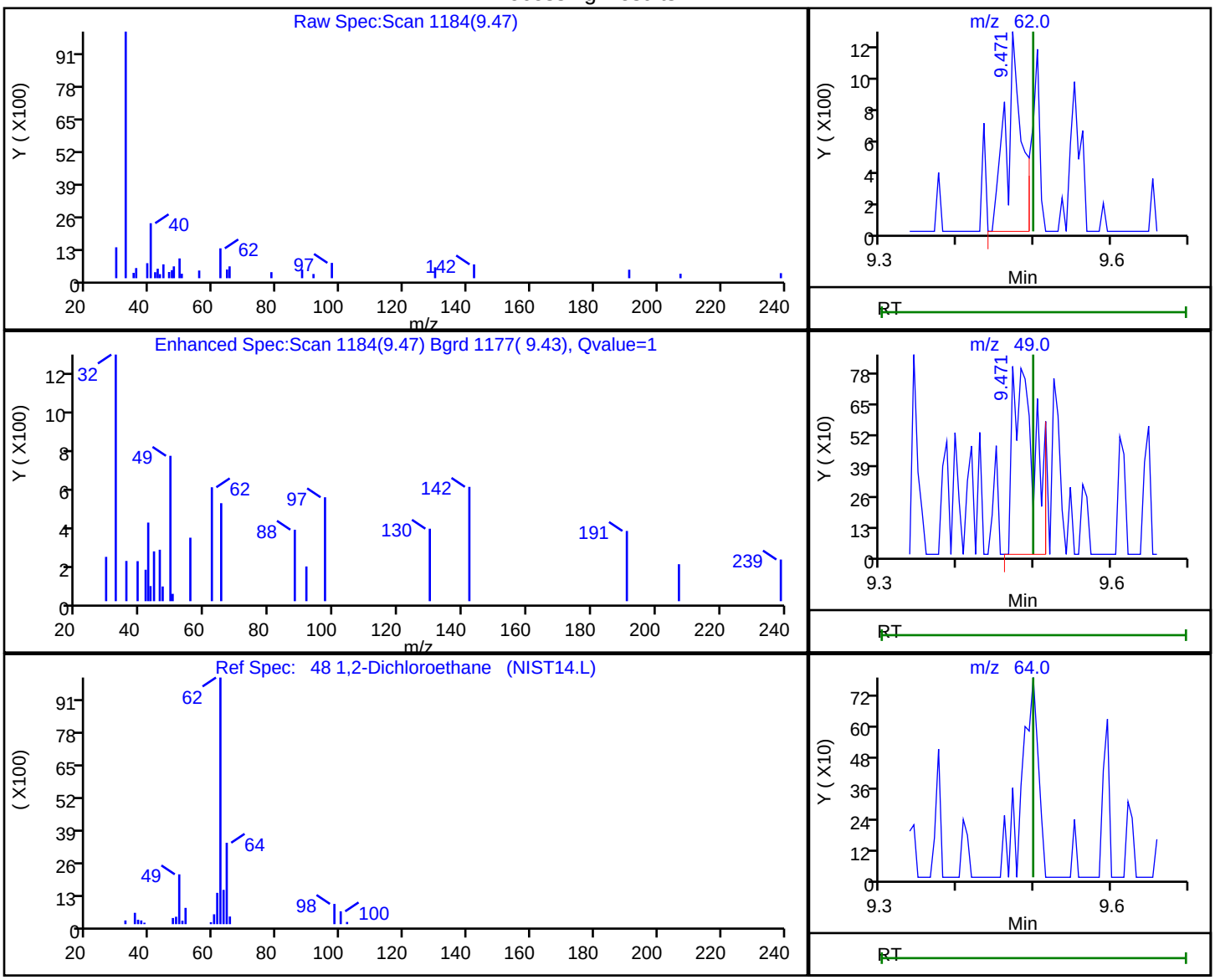
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200507-15427.b\RE11BLK12.D				
Injection Date:	11-May-2020 23:31:30	Instrument ID:	MR		
Lims ID:	140-19038-A-12	Lab Sample ID:	140-19038-12		
Client ID:	8514				
Operator ID:	HMT	ALS Bottle#:	12	Worklist Smp#:	19
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

48 1,2-Dichloroethane, CAS: 107-06-2

Processing Results



RT	Mass	Response	Amount
9.47	62.00	1690	0.020168
9.47	49.00	1628	
9.50	64.00	0	

Reviewer: khachitpongpanits, 12-May-2020 12:22:53

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

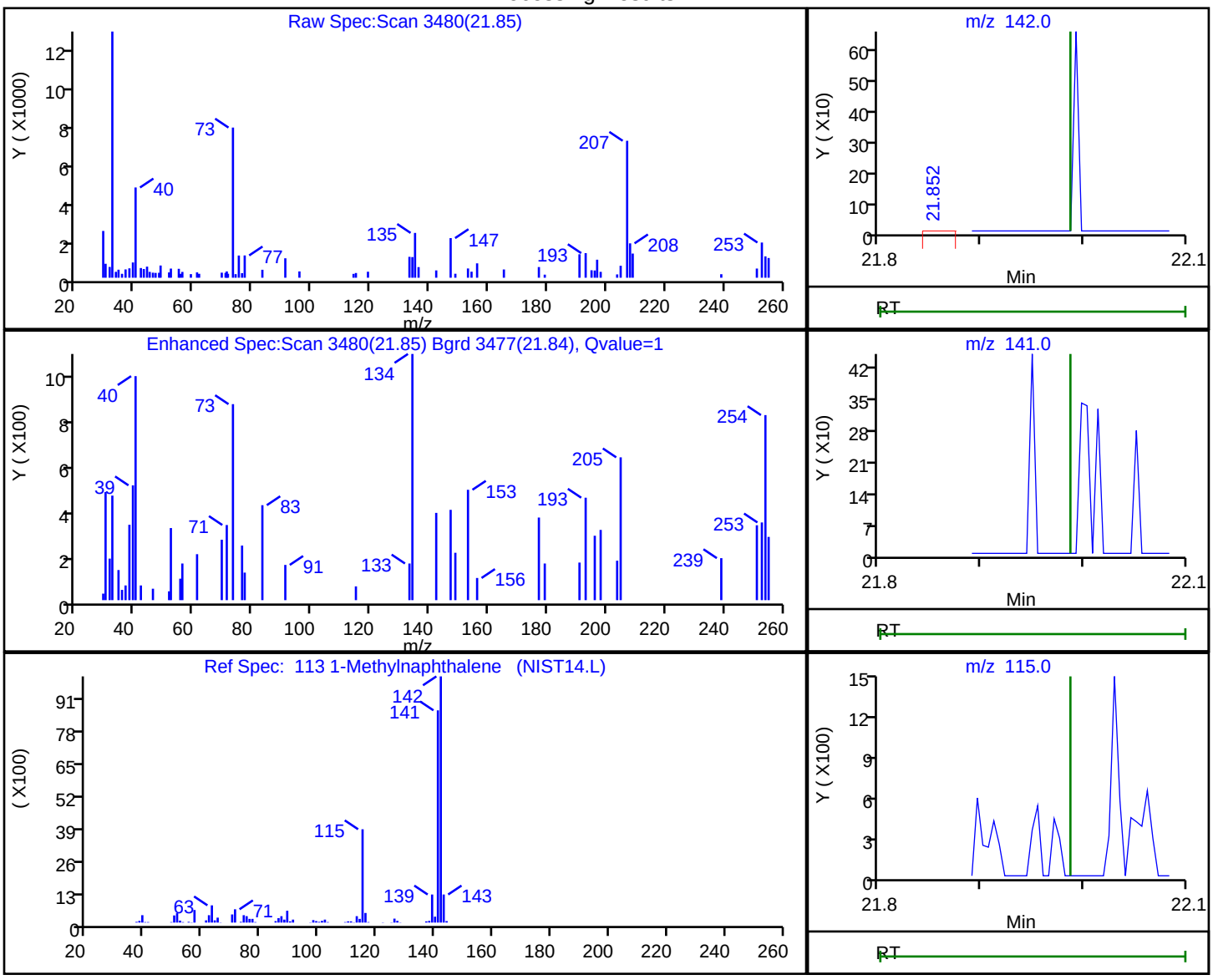
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200507-15427.b\RE11BLK12.D				
Injection Date:	11-May-2020 23:31:30	Instrument ID:	MR		
Lims ID:	140-19038-A-12	Lab Sample ID:	140-19038-12		
Client ID:	8514				
Operator ID:	HMT	ALS Bottle#:	12	Worklist Smp#:	19
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

113 1-Methylnaphthalene, CAS: 90-12-0

Processing Results



RT	Mass	Response	Amount
21.85	142.00	171	0.259776
21.99	141.00	0	
21.99	115.00	0	

Reviewer: khachitpongpanits, 12-May-2020 12:23:14

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

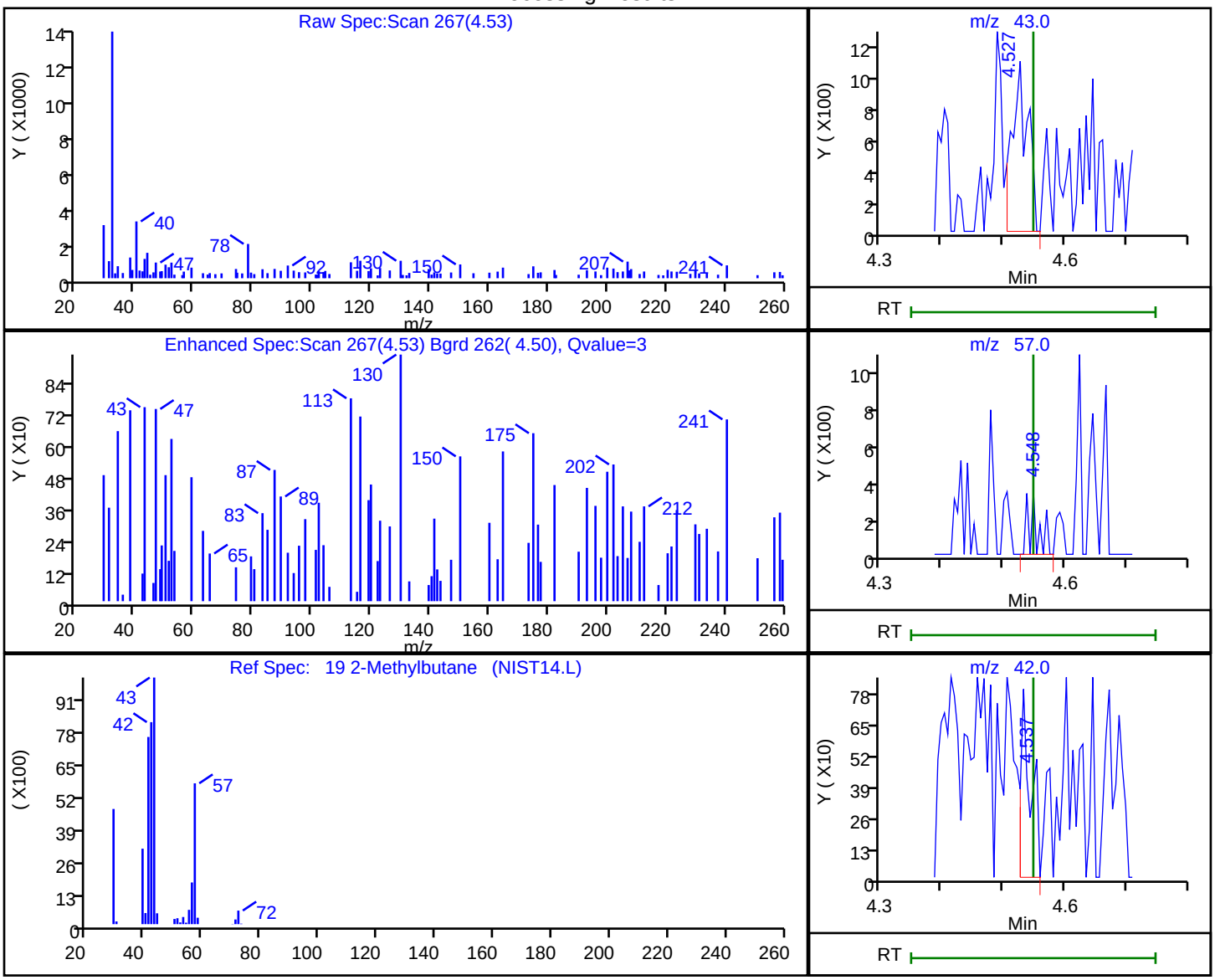
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200507-15427.b\RE11BLK12.D				
Injection Date:	11-May-2020 23:31:30	Instrument ID:	MR		
Lims ID:	140-19038-A-12	Lab Sample ID:	140-19038-12		
Client ID:	8514				
Operator ID:	HMT	ALS Bottle#:	12	Worklist Smp#:	19
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

19 2-Methylbutane, CAS: 78-78-4

Processing Results



RT	Mass	Response	Amount
4.53	43.00	1866	0.013047
4.55	57.00	344	
4.54	42.00	882	

Reviewer: khachitpongpanits, 12-May-2020 12:22:34

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

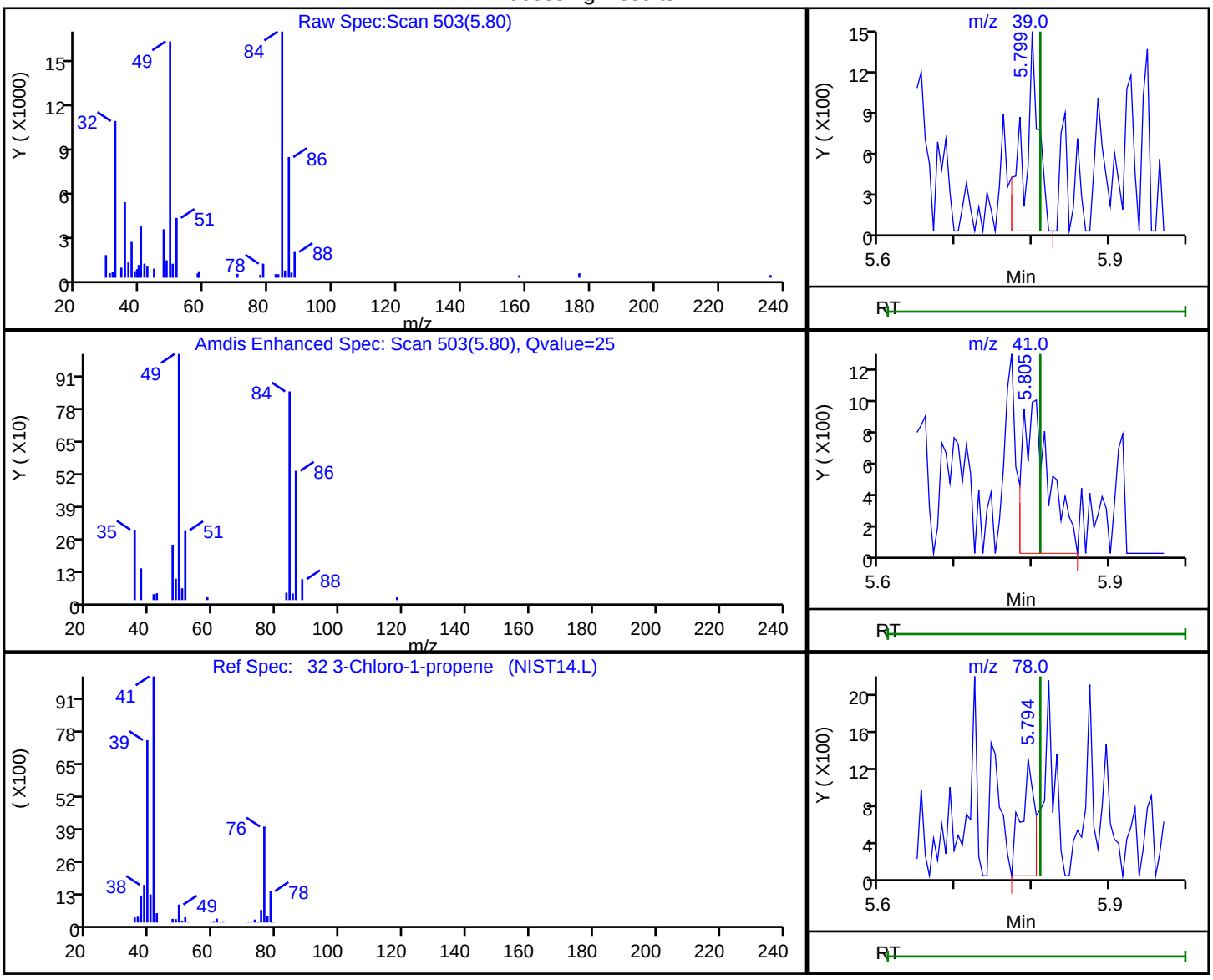
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200507-15427.b\RE11BLK12.D				
Injection Date:	11-May-2020 23:31:30	Instrument ID:	MR		
Lims ID:	140-19038-A-12	Lab Sample ID:	140-19038-12		
Client ID:	8514				
Operator ID:	HMT	ALS Bottle#:	12	Worklist Smp#:	19
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

32 3-Chloro-1-propene, CAS: 107-05-1

Processing Results



RT	Mass	Response	Amount
5.80	39.00	1740	0.020770
5.80	41.00	2331	
5.79	78.00	1509	

Reviewer: khachitpongpanits, 12-May-2020 12:22:42

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

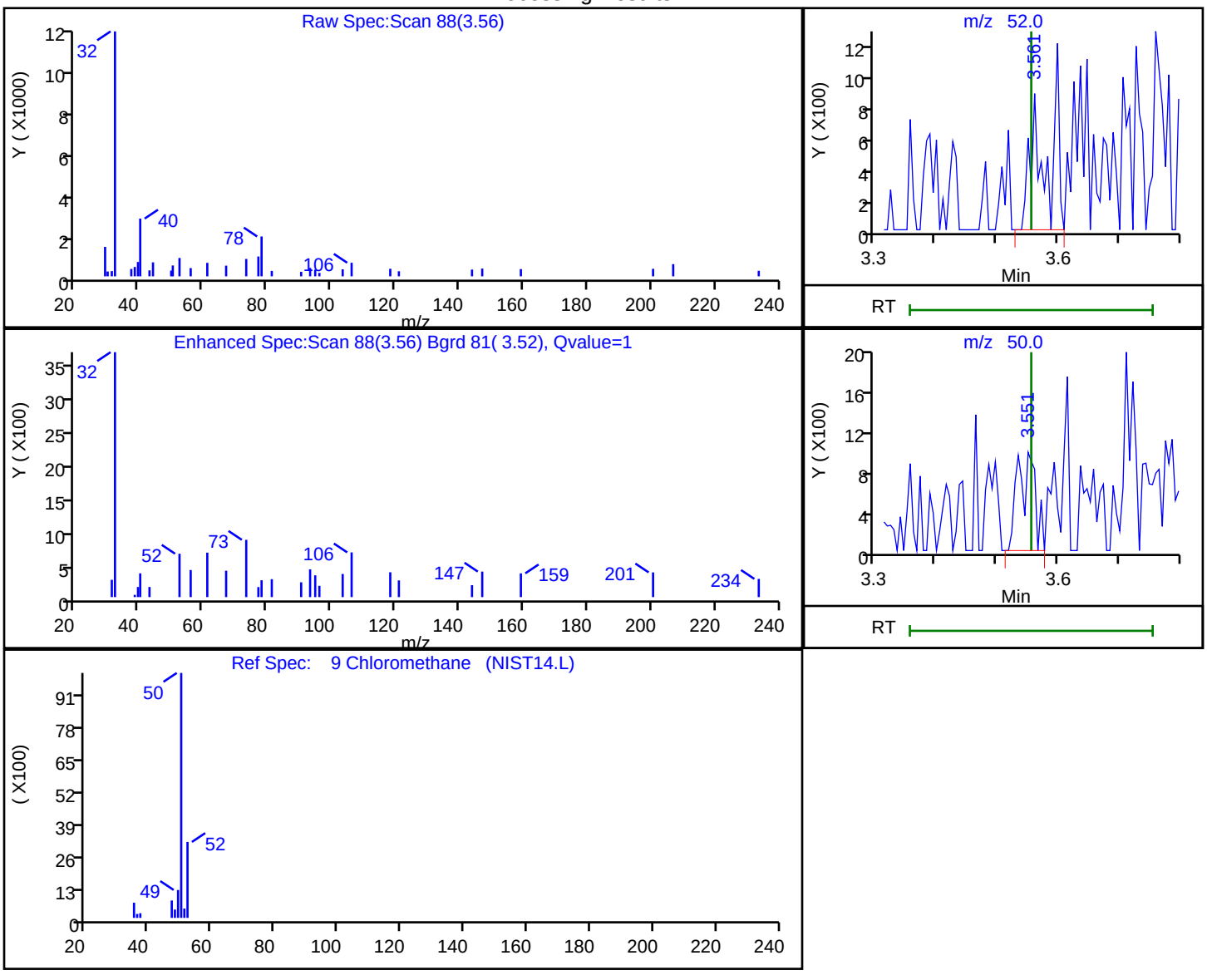
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200507-15427.b\RE11BLK12.D				
Injection Date:	11-May-2020 23:31:30	Instrument ID:	MR		
Lims ID:	140-19038-A-12	Lab Sample ID:	140-19038-12		
Client ID:	8514				
Operator ID:	HMT	ALS Bottle#:	12	Worklist Smp#:	19
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

9 Chloromethane, CAS: 74-87-3

Processing Results



RT	Mass	Response	Amount
3.56	52.00	1774	0.065617
3.55	50.00	1944	

Reviewer: khachitpongpanits, 12-May-2020 12:22:28

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

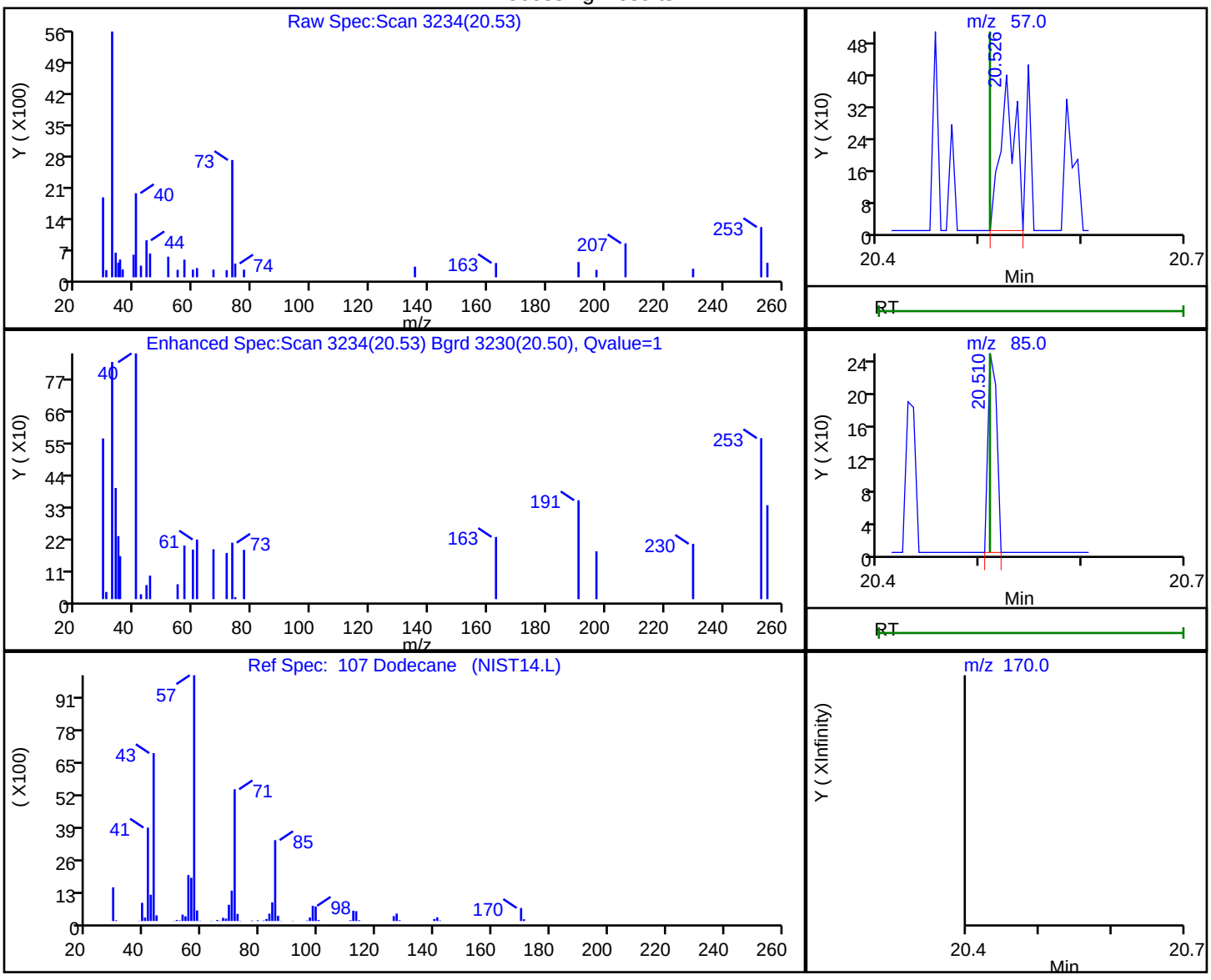
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200507-15427.b\RE11BLK12.D				
Injection Date:	11-May-2020 23:31:30	Instrument ID:	MR		
Lims ID:	140-19038-A-12	Lab Sample ID:	140-19038-12		
Client ID:	8514				
Operator ID:	HMT	ALS Bottle#:	12	Worklist Smp#:	19
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

107 Dodecane, CAS: 112-40-3

Processing Results



RT	Mass	Response	Amount
20.53	57.00	406	0.398990
20.51	85.00	147	
20.51	170.00	0	

Reviewer: khachitpongpanits, 12-May-2020 12:23:10

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19038-1

SDG No.:

Client Sample ID: 8974 Lab Sample ID: 140-19038-13

Matrix: Air Lab File ID: RE11BLK13.D

Analysis Method: TO-15 Date Collected: 05/08/2020 08:50

Sample wt/vol: 200(mL) Date Analyzed: 05/12/2020 00:20

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 39492 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	ND		0.20	
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.20	
79-00-5	1,1,2-Trichloroethane	ND		0.20	
76-13-1	1,1,2-Trichlorotrifluoroethane	ND		0.20	
75-34-3	1,1-Dichloroethane	ND		0.20	
75-35-4	1,1-Dichloroethene	ND		0.20	
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	
96-18-4	1,2,3-Trichloropropane	ND		0.50	
526-73-8	1,2,3-Trimethylbenzene	ND		0.20	
95-93-2	1,2,4,5-Tetramethylbenzene	ND		0.20	
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	
95-63-6	1,2,4-Trimethylbenzene	ND		0.20	
96-12-8	1,2-Dibromo-3-Chloropropane	ND		0.40	
106-93-4	1,2-Dibromoethane	ND		0.20	
95-50-1	1,2-Dichlorobenzene	ND		0.40	
107-06-2	1,2-Dichloroethane	ND		0.20	
78-87-5	1,2-Dichloropropane	ND		0.20	
76-14-2	1,2-Dichlorotetrafluoroethane	ND		0.20	
108-67-8	1,3,5-Trimethylbenzene	ND		0.20	
106-99-0	1,3-Butadiene	ND		0.40	
541-73-1	1,3-Dichlorobenzene	ND		0.20	
106-46-7	1,4-Dichlorobenzene	ND		0.20	
123-91-1	1,4-Dioxane	ND		0.40	
71-36-3	1-Butanol	ND		2.0	
90-12-0	1-Methylnaphthalene	ND		2.5	
540-84-1	2,2,4-Trimethylpentane	ND		0.40	
565-59-3	2,3-Dimethylpentane	ND		0.20	
78-93-3	2-Butanone	ND		1.0	
95-49-8	2-Chlorotoluene	ND		0.40	
591-78-6	2-Hexanone	ND		0.40	
78-78-4	2-Methylbutane	ND		0.50	
91-57-6	2-Methylnaphthalene	ND		2.5	
107-83-5	2-Methylpentane	ND		0.20	
107-05-1	3-Chloropropene	ND		0.20	
622-96-8	4-Ethyltoluene	ND		0.40	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		1.0	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19038-1

SDG No.:

Client Sample ID: 8974 Lab Sample ID: 140-19038-13

Matrix: Air Lab File ID: RE11BLK13.D

Analysis Method: TO-15 Date Collected: 05/08/2020 08:50

Sample wt/vol: 200(mL) Date Analyzed: 05/12/2020 00:20

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 39492 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
67-64-1	Acetone	ND		7.5	
75-05-8	Acetonitrile	ND		1.0	
107-02-8	Acrolein	ND		1.0	
107-13-1	Acrylonitrile	ND		2.0	
98-83-9	Alpha Methyl Styrene	ND		0.40	
71-43-2	Benzene	ND		0.20	
100-44-7	Benzyl chloride	ND		0.40	
75-27-4	Bromodichloromethane	ND		0.20	
75-25-2	Bromoform	ND		0.20	
74-83-9	Bromomethane	ND		0.20	
106-97-8	Butane	ND		1.0	
75-15-0	Carbon disulfide	ND		0.40	
56-23-5	Carbon tetrachloride	ND		0.20	
108-90-7	Chlorobenzene	ND		0.20	
75-45-6	Chlorodifluoromethane	ND		0.20	
75-00-3	Chloroethane	ND		0.20	
67-66-3	Chloroform	ND		0.20	
74-87-3	Chloromethane	ND		1.0	
156-59-2	cis-1,2-Dichloroethene	ND		0.20	
10061-01-5	cis-1,3-Dichloropropene	ND		0.40	
98-82-8	Cumene	ND		0.40	
110-82-7	Cyclohexane	ND		0.40	
124-48-1	Dibromochloromethane	ND		0.20	
74-95-3	Dibromomethane	ND		0.40	
75-71-8	Dichlorodifluoromethane	ND		0.20	
64-17-5	Ethanol	ND		5.0	
141-78-6	Ethyl acetate	ND		2.0	
60-29-7	Ethyl ether	ND		2.0	
100-41-4	Ethylbenzene	ND		0.20	
87-68-3	Hexachlorobutadiene	ND		1.0	
110-54-3	Hexane	ND		0.40	
496-11-7	Indane	ND		0.20	
95-13-6	Indene	ND		0.40	
67-63-0	Isopropyl alcohol	ND		1.2	
179601-23-1	m&p-Xylene	ND		0.20	
80-62-6	Methyl methacrylate	ND		0.40	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19038-1

SDG No.:

Client Sample ID: 8974 Lab Sample ID: 140-19038-13

Matrix: Air Lab File ID: RE11BLK13.D

Analysis Method: TO-15 Date Collected: 05/08/2020 08:50

Sample wt/vol: 200(mL) Date Analyzed: 05/12/2020 00:20

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 39492 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
1634-04-4	Methyl tert-butyl ether	ND		1.0	
108-87-2	Methylcyclohexane	ND		0.20	
75-09-2	Methylene Chloride	ND		1.0	
91-20-3	Naphthalene	ND		0.40	
104-51-8	n-Butylbenzene	ND		0.40	
124-18-5	n-Decane	ND		1.0	
112-40-3	n-Dodecane	ND		1.0	
142-82-5	n-Heptane	ND		0.40	
111-84-2	n-Nonane	ND		0.40	
111-65-9	n-Octane	ND		0.40	
103-65-1	N-Propylbenzene	ND		0.40	
1120-21-4	n-Undecane	ND		1.0	
95-47-6	o-Xylene	ND		0.20	
99-87-6	p-Cymene	ND		0.20	
109-66-0	Pentane	ND		2.5	
115-07-1	Propene	ND		2.5	
135-98-8	sec-Butylbenzene	ND		0.40	
100-42-5	Styrene	ND		0.20	
75-65-0	tert-Butanol	ND		1.0	
98-06-6	tert-Butylbenzene	ND		0.40	
127-18-4	Tetrachloroethene	ND		0.20	
109-99-9	Tetrahydrofuran	ND		1.0	
110-02-1	Thiophene	ND		0.20	
108-88-3	Toluene	ND		1.0	
156-60-5	trans-1,2-Dichloroethene	ND		0.20	
10061-02-6	trans-1,3-Dichloropropene	ND		0.20	
79-01-6	Trichloroethene	ND		0.20	
75-69-4	Trichlorofluoromethane	ND		0.20	
108-05-4	Vinyl acetate	ND		1.0	
593-60-2	Vinyl bromide	ND		0.20	
75-01-4	Vinyl chloride	ND		0.40	

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MR\20200507-15427.b\RE11BLK13.D
Lims ID: 140-19038-A-13
Client ID: 8974
Sample Type: Client
Inject. Date: 12-May-2020 00:20:30 ALS Bottle#: 13 Worklist Smp#: 20
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0015427-016
Misc. Info.: 8974
Operator ID: HMT Instrument ID: MR

Method: \\chromfs\Knoxville\ChromData\MR\20200507-15427.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 12-May-2020 12:24:01 Calib Date: 10-Apr-2020 00:47:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MR\20200409-15180.b\RD09IC10.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1021

First Level Reviewer: khachitpongpanits Date: 12-May-2020 12:24:01

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.328	8.333	-0.005	82	176178	4.00	
* 2 1,4-Difluorobenzene	114	10.566	10.577	-0.011	93	1218601	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.409	15.408	0.000	84	1015254	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.059	17.064	-0.005	94	512630	3.41	
7 Propene	41	3.335	3.338	-0.005	94	41286	-0.4540	7
33 Carbon disulfide	76	5.934	5.941	-0.011	32	2940	0.0136	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

40MXISSURP_00004 Amount Added: 40.00 Units: mL Run Reagent

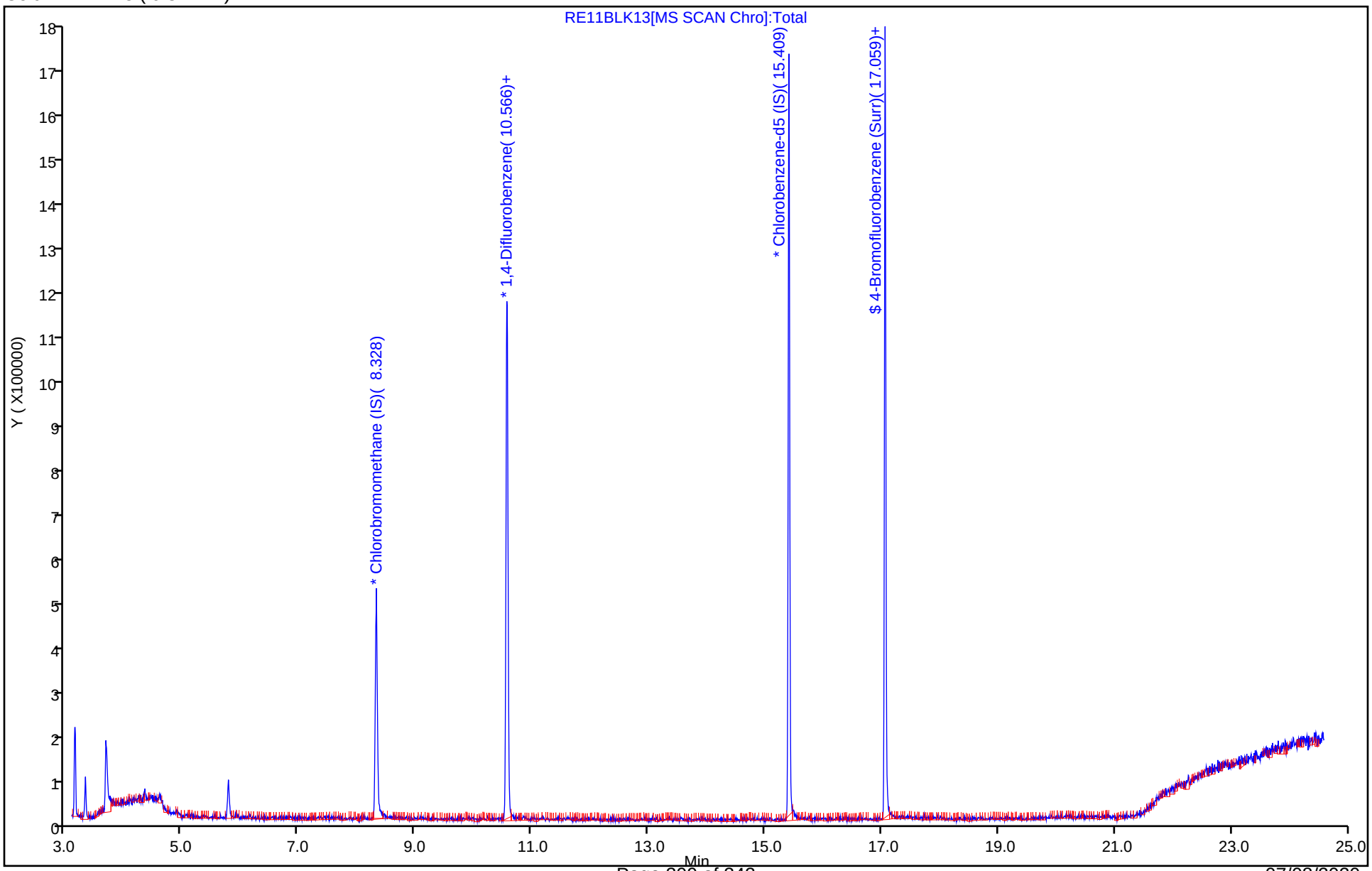
Report Date: 12-May-2020 12:24:02 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200507-15427.b\RE11BLK13.D

Injection Date:	12-May-2020 00:20:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	140-19038-A-13	Lab Sample ID:	140-19038-13	Worklist Smp#:	20
Client ID:	8974				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



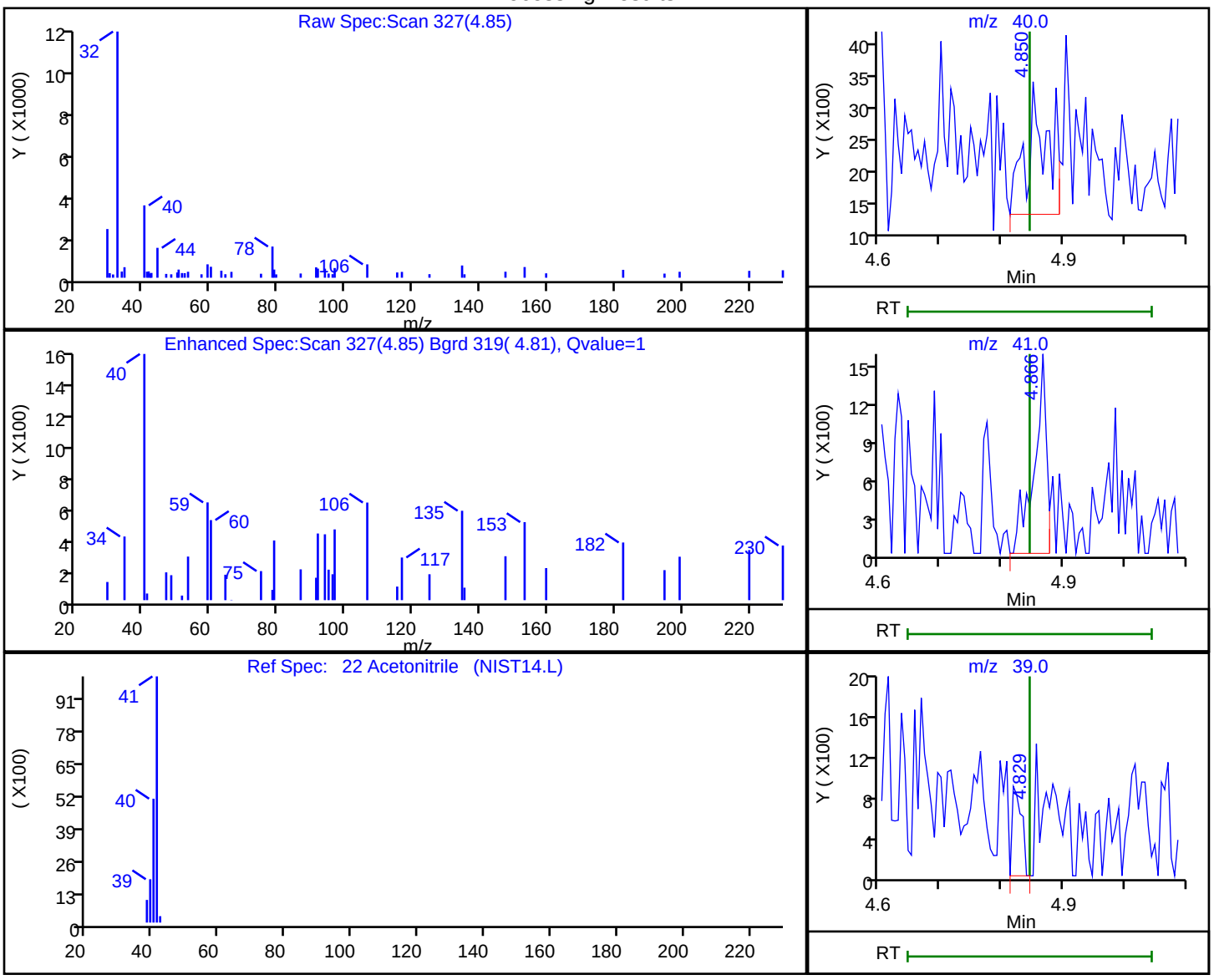
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200507-15427.b\RE11BLK13.D				
Injection Date:	12-May-2020 00:20:30	Instrument ID:	MR		
Lims ID:	140-19038-A-13	Lab Sample ID:	140-19038-13		
Client ID:	8974				
Operator ID:	HMT	ALS Bottle#:	13	Worklist Smp#:	20
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

22 Acetonitrile, CAS: 75-05-8

Processing Results



RT	Mass	Response	Amount
4.85	40.00	4970	0.133016
4.87	41.00	2218	
4.83	39.00	907	

Reviewer: khachitpongpanits, 12-May-2020 12:23:33

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

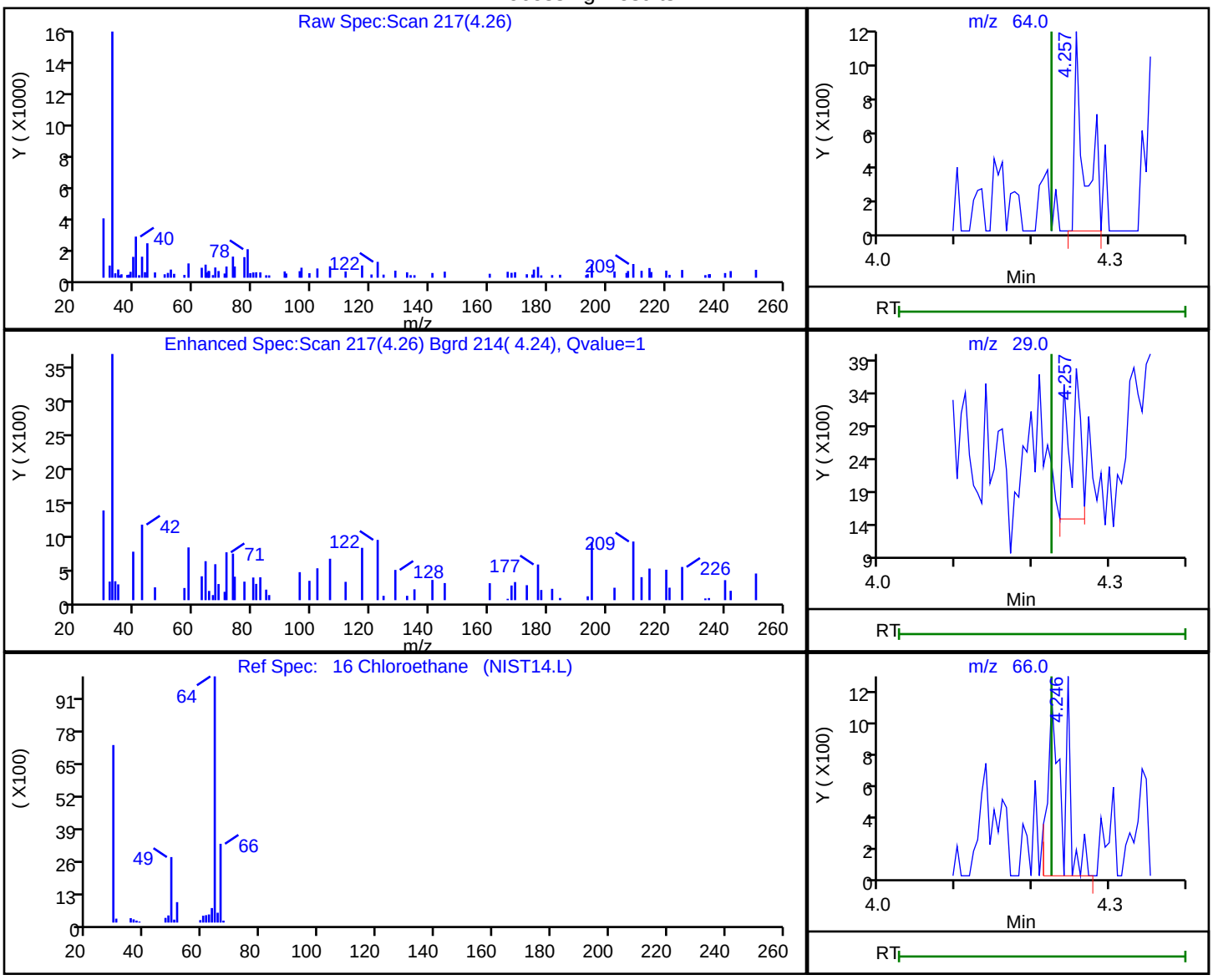
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200507-15427.b\RE11BLK13.D				
Injection Date:	12-May-2020 00:20:30	Instrument ID:	MR		
Lims ID:	140-19038-A-13	Lab Sample ID:	140-19038-13		
Client ID:	8974				
Operator ID:	HMT	ALS Bottle#:	13	Worklist Smp#:	20
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

16 Chloroethane, CAS: 75-00-3

Processing Results



RT	Mass	Response	Amount
4.26	64.00	999	0.017995
4.26	29.00	2484	
4.25	66.00	1657	

Reviewer: khachitpongpanits, 12-May-2020 12:23:29

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

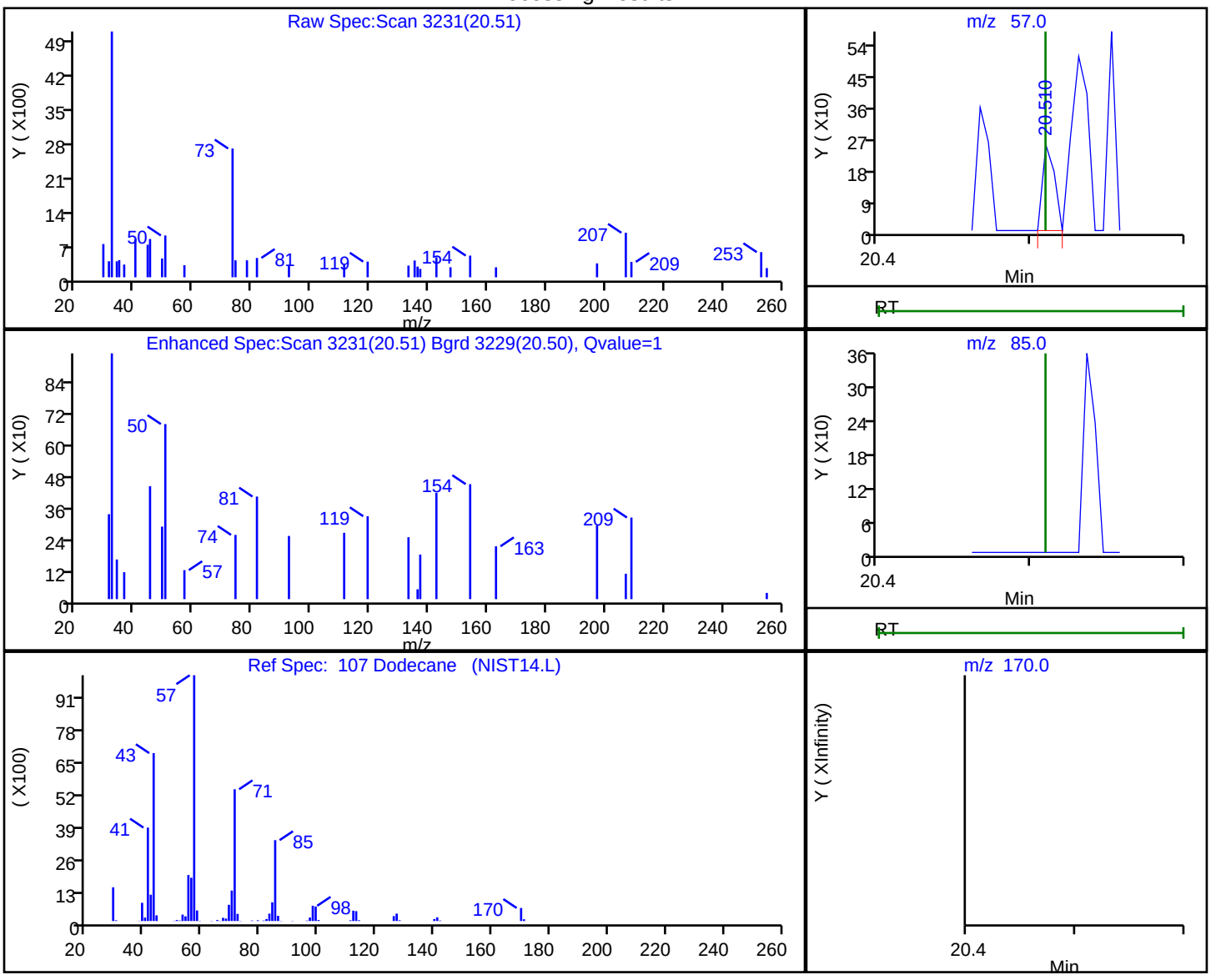
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200507-15427.b\RE11BLK13.D				
Injection Date:	12-May-2020 00:20:30	Instrument ID:	MR		
Lims ID:	140-19038-A-13	Lab Sample ID:	140-19038-13		
Client ID:	8974				
Operator ID:	HMT	ALS Bottle#:	13	Worklist Smp#:	20
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

107 Dodecane, CAS: 112-40-3

Processing Results



RT	Mass	Response	Amount
20.51	57.00	135	0.398420
20.51	85.00	0	
20.51	170.00	0	

Reviewer: khachitpongpanits, 12-May-2020 12:23:57

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19038-1

SDG No.:

Client Sample ID: 34001032 Lab Sample ID: 140-19038-14

Matrix: Air Lab File ID: R11BLK14.D

Analysis Method: TO-15 Date Collected: 05/08/2020 08:50

Sample wt/vol: 200(mL) Date Analyzed: 05/12/2020 01:08

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 39492 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	ND		0.20	
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.20	
79-00-5	1,1,2-Trichloroethane	ND		0.20	
76-13-1	1,1,2-Trichlorotrifluoroethane	ND		0.20	
75-34-3	1,1-Dichloroethane	ND		0.20	
75-35-4	1,1-Dichloroethene	ND		0.20	
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	
96-18-4	1,2,3-Trichloropropane	ND		0.50	
526-73-8	1,2,3-Trimethylbenzene	ND		0.20	
95-93-2	1,2,4,5-Tetramethylbenzene	ND		0.20	
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	
95-63-6	1,2,4-Trimethylbenzene	ND		0.20	
96-12-8	1,2-Dibromo-3-Chloropropane	ND		0.40	
106-93-4	1,2-Dibromoethane	ND		0.20	
95-50-1	1,2-Dichlorobenzene	ND		0.40	
107-06-2	1,2-Dichloroethane	ND		0.20	
78-87-5	1,2-Dichloropropane	ND		0.20	
76-14-2	1,2-Dichlorotetrafluoroethane	ND		0.20	
108-67-8	1,3,5-Trimethylbenzene	ND		0.20	
106-99-0	1,3-Butadiene	ND		0.40	
541-73-1	1,3-Dichlorobenzene	ND		0.20	
106-46-7	1,4-Dichlorobenzene	ND		0.20	
123-91-1	1,4-Dioxane	ND		0.40	
71-36-3	1-Butanol	ND		2.0	
90-12-0	1-Methylnaphthalene	ND		2.5	
540-84-1	2,2,4-Trimethylpentane	ND		0.40	
565-59-3	2,3-Dimethylpentane	ND		0.20	
78-93-3	2-Butanone	ND		1.0	
95-49-8	2-Chlorotoluene	ND		0.40	
591-78-6	2-Hexanone	ND		0.40	
78-78-4	2-Methylbutane	ND		0.50	
91-57-6	2-Methylnaphthalene	ND		2.5	
107-83-5	2-Methylpentane	ND		0.20	
107-05-1	3-Chloropropene	ND		0.20	
622-96-8	4-Ethyltoluene	ND		0.40	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		1.0	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19038-1

SDG No.:

Client Sample ID: 34001032 Lab Sample ID: 140-19038-14

Matrix: Air Lab File ID: R11BLK14.D

Analysis Method: TO-15 Date Collected: 05/08/2020 08:50

Sample wt/vol: 200(mL) Date Analyzed: 05/12/2020 01:08

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 39492 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
67-64-1	Acetone	ND		7.5	
75-05-8	Acetonitrile	ND		1.0	
107-02-8	Acrolein	ND		1.0	
107-13-1	Acrylonitrile	ND		2.0	
98-83-9	Alpha Methyl Styrene	ND		0.40	
71-43-2	Benzene	ND		0.20	
100-44-7	Benzyl chloride	ND		0.40	
75-27-4	Bromodichloromethane	ND		0.20	
75-25-2	Bromoform	ND		0.20	
74-83-9	Bromomethane	ND		0.20	
106-97-8	Butane	ND		1.0	
75-15-0	Carbon disulfide	ND		0.40	
56-23-5	Carbon tetrachloride	ND		0.20	
108-90-7	Chlorobenzene	ND		0.20	
75-45-6	Chlorodifluoromethane	ND		0.20	
75-00-3	Chloroethane	ND		0.20	
67-66-3	Chloroform	ND		0.20	
74-87-3	Chloromethane	ND		1.0	
156-59-2	cis-1,2-Dichloroethene	ND		0.20	
10061-01-5	cis-1,3-Dichloropropene	ND		0.40	
98-82-8	Cumene	ND		0.40	
110-82-7	Cyclohexane	ND		0.40	
124-48-1	Dibromochloromethane	ND		0.20	
74-95-3	Dibromomethane	ND		0.40	
75-71-8	Dichlorodifluoromethane	ND		0.20	
64-17-5	Ethanol	ND		5.0	
141-78-6	Ethyl acetate	ND		2.0	
60-29-7	Ethyl ether	ND		2.0	
100-41-4	Ethylbenzene	ND		0.20	
87-68-3	Hexachlorobutadiene	ND		1.0	
110-54-3	Hexane	ND		0.40	
496-11-7	Indane	ND		0.20	
95-13-6	Indene	ND		0.40	
67-63-0	Isopropyl alcohol	ND		1.2	
179601-23-1	m&p-Xylene	ND		0.20	
80-62-6	Methyl methacrylate	ND		0.40	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19038-1

SDG No.:

Client Sample ID: 34001032 Lab Sample ID: 140-19038-14

Matrix: Air Lab File ID: R11BLK14.D

Analysis Method: TO-15 Date Collected: 05/08/2020 08:50

Sample wt/vol: 200(mL) Date Analyzed: 05/12/2020 01:08

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 39492 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
1634-04-4	Methyl tert-butyl ether	ND		1.0	
108-87-2	Methylcyclohexane	ND		0.20	
75-09-2	Methylene Chloride	ND		1.0	
91-20-3	Naphthalene	ND		0.40	
104-51-8	n-Butylbenzene	ND		0.40	
124-18-5	n-Decane	ND		1.0	
112-40-3	n-Dodecane	ND		1.0	
142-82-5	n-Heptane	ND		0.40	
111-84-2	n-Nonane	ND		0.40	
111-65-9	n-Octane	ND		0.40	
103-65-1	N-Propylbenzene	ND		0.40	
1120-21-4	n-Undecane	ND		1.0	
95-47-6	o-Xylene	ND		0.20	
99-87-6	p-Cymene	ND		0.20	
109-66-0	Pentane	ND		2.5	
115-07-1	Propene	ND		2.5	
135-98-8	sec-Butylbenzene	ND		0.40	
100-42-5	Styrene	ND		0.20	
75-65-0	tert-Butanol	ND		1.0	
98-06-6	tert-Butylbenzene	ND		0.40	
127-18-4	Tetrachloroethene	ND		0.20	
109-99-9	Tetrahydrofuran	ND		1.0	
110-02-1	Thiophene	ND		0.20	
108-88-3	Toluene	ND		1.0	
156-60-5	trans-1,2-Dichloroethene	ND		0.20	
10061-02-6	trans-1,3-Dichloropropene	ND		0.20	
79-01-6	Trichloroethene	ND		0.20	
75-69-4	Trichlorofluoromethane	ND		0.20	
108-05-4	Vinyl acetate	ND		1.0	
593-60-2	Vinyl bromide	ND		0.20	
75-01-4	Vinyl chloride	ND		0.40	

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MR\20200507-15427.b\R11BLK14.D				
Lims ID:	140-19038-A-14				
Client ID:	34001032				
Sample Type:	Client				
Inject. Date:	12-May-2020 01:08:30	ALS Bottle#:	14	Worklist Smp#:	21
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0015427-017				
Misc. Info.:	34001032				
Operator ID:	HMT	Instrument ID:	MR		
Method:	\\chromfs\Knoxville\ChromData\MR\20200507-15427.b\MR_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	12-May-2020 15:33:22	Calib Date:	10-Apr-2020 00:47:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MR\20200409-15180.b\RD09IC10.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1008				
First Level Reviewer: khachitpongpanits		Date:	12-May-2020 15:33:22		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.339	8.333	0.006	81	169457	4.00	
* 2 1,4-Difluorobenzene	114	10.571	10.577	-0.006	93	1254588	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.408	15.408	0.000	85	1041908	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.058	17.064	-0.006	94	523167	3.39	
7 Propene	41	3.335	3.338	-0.005	94	35269	-0.5369	7

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

40MXISSURP_00004 Amount Added: 40.00 Units: mL Run Reagent

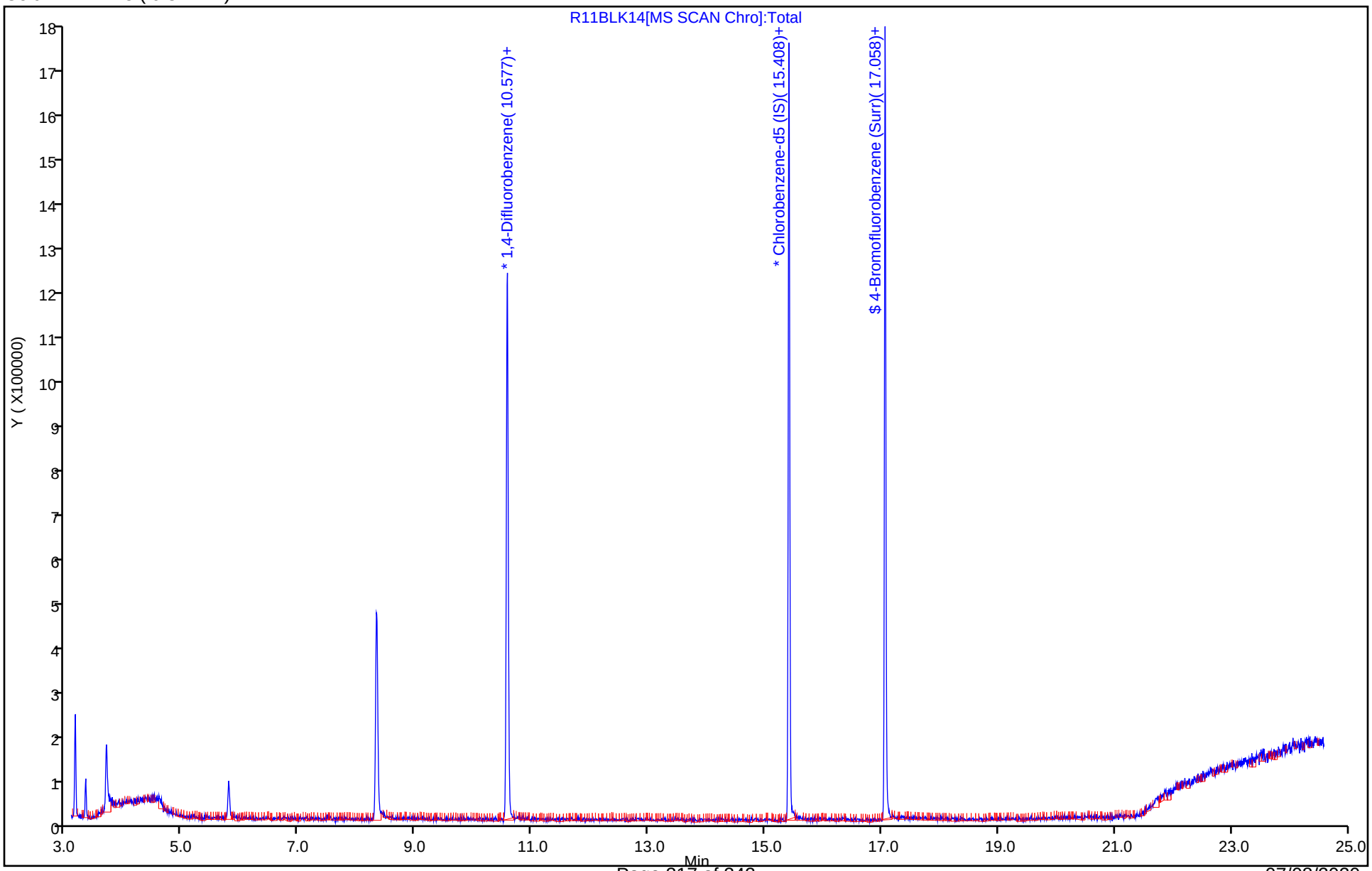
Report Date: 12-May-2020 15:33:22 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200507-15427.b\R11BLK14.D

Injection Date:	12-May-2020 01:08:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	140-19038-A-14	Lab Sample ID:	140-19038-14	Worklist Smp#:	21
Client ID:	34001032				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



07/08/2020

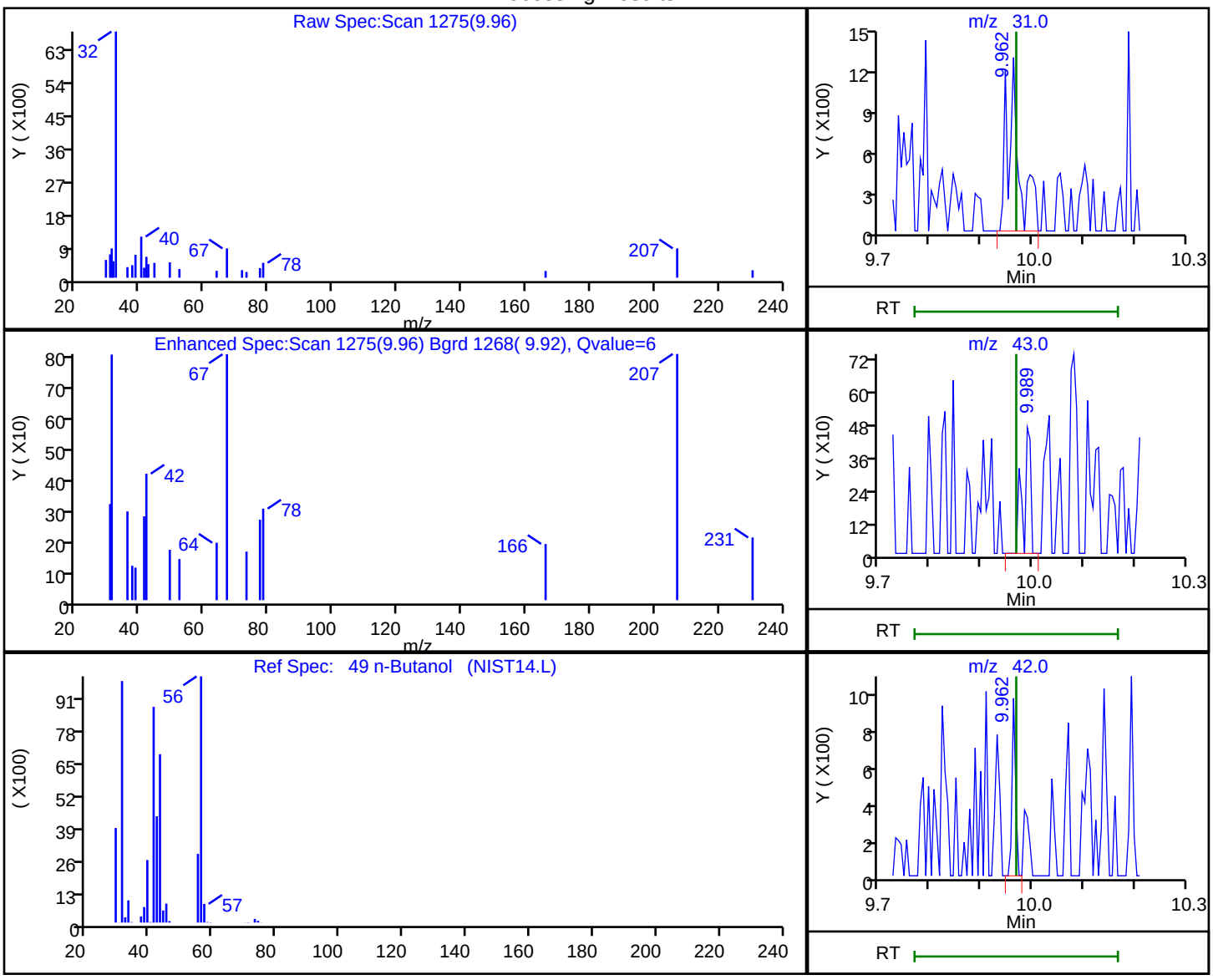
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200507-15427.b\R11BLK14.D				
Injection Date:	12-May-2020 01:08:30	Instrument ID:	MR		
Lims ID:	140-19038-A-14	Lab Sample ID:	140-19038-14		
Client ID:	34001032				
Operator ID:	HMT	ALS Bottle#:	14	Worklist Smp#:	21
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

49 n-Butanol, CAS: 71-36-3

Processing Results



RT	Mass	Response	Amount
9.96	31.00	1989	0.041884
9.99	43.00	449	
9.96	42.00	463	

Reviewer: khachitpongpanits, 12-May-2020 15:32:55

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

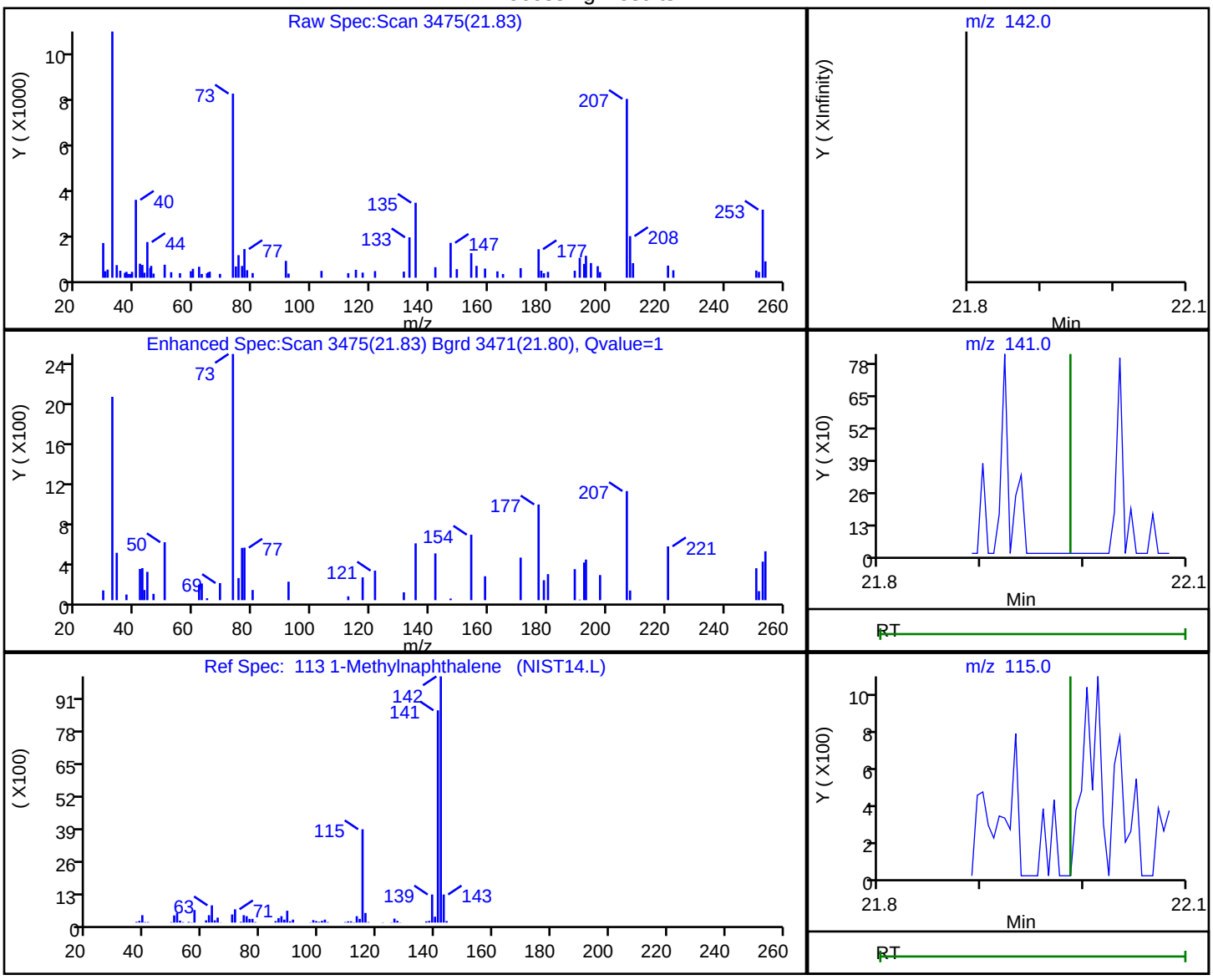
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200507-15427.b\R11BLK14.D				
Injection Date:	12-May-2020 01:08:30	Instrument ID:	MR		
Lims ID:	140-19038-A-14	Lab Sample ID:	140-19038-14		
Client ID:	34001032				
Operator ID:	HMT	ALS Bottle#:	14	Worklist Smp#:	21
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

113 1-Methylnaphthalene, CAS: 90-12-0

Processing Results



RT	Mass	Response	Amount
21.83	142.00	338	0.260010
21.99	141.00	0	
21.99	115.00	0	

Reviewer: khachitpongpanits, 12-May-2020 15:33:18

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

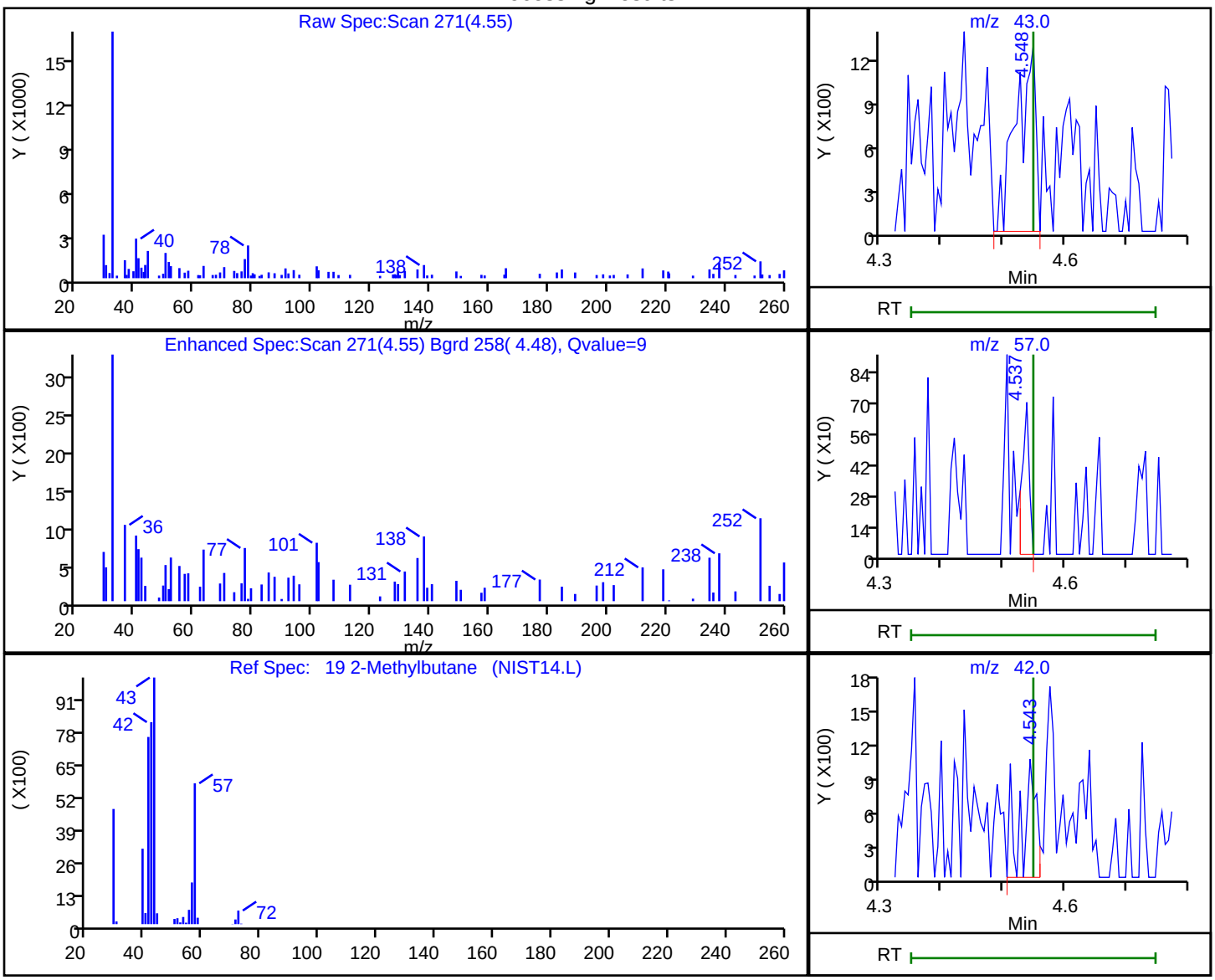
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200507-15427.b\R11BLK14.D				
Injection Date:	12-May-2020 01:08:30	Instrument ID:	MR		
Lims ID:	140-19038-A-14	Lab Sample ID:	140-19038-14		
Client ID:	34001032				
Operator ID:	HMT	ALS Bottle#:	14	Worklist Smp#:	21
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

19 2-Methylbutane, CAS: 78-78-4

Processing Results



RT	Mass	Response	Amount
4.55	43.00	2789	0.020115
4.54	57.00	550	
4.54	42.00	1706	

Reviewer: khachitpongpanits, 12-May-2020 15:32:44

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

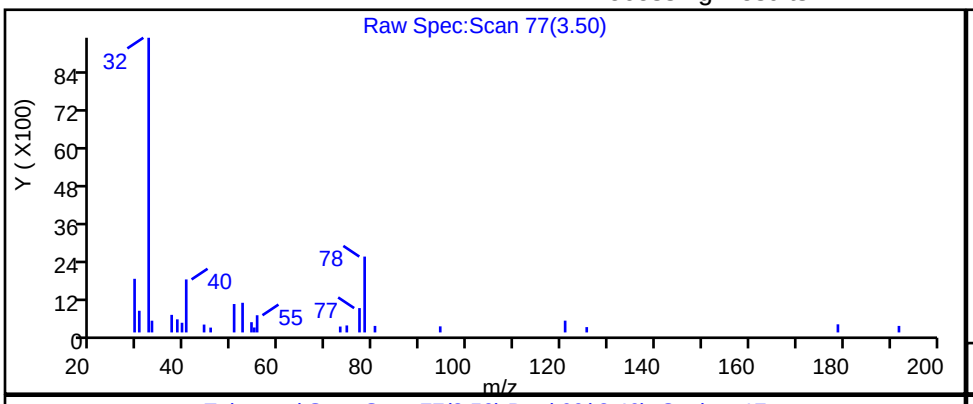
User Disabled Compound Report

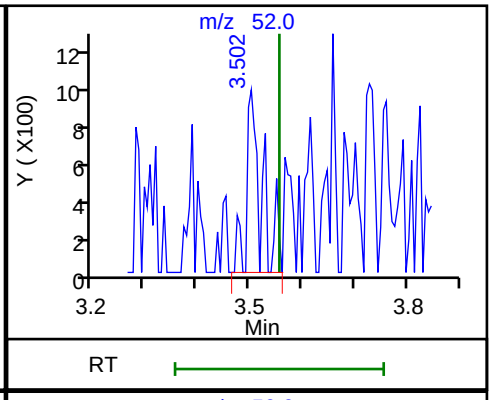
Eurofins TestAmerica, Knoxville

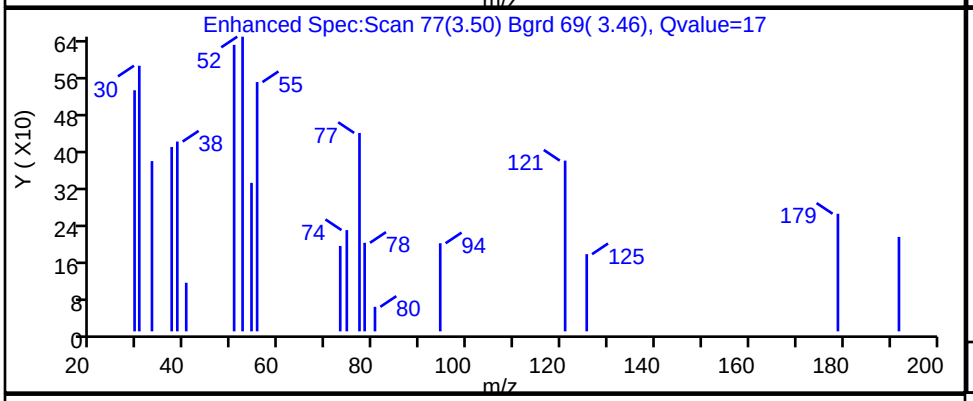
Data File:	\\chromfs\Knoxville\ChromData\MR\20200507-15427.b\R11BLK14.D				
Injection Date:	12-May-2020 01:08:30	Instrument ID:	MR		
Lims ID:	140-19038-A-14	Lab Sample ID:	140-19038-14		
Client ID:	34001032				
Operator ID:	HMT	ALS Bottle#:	14	Worklist Smp#:	21
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

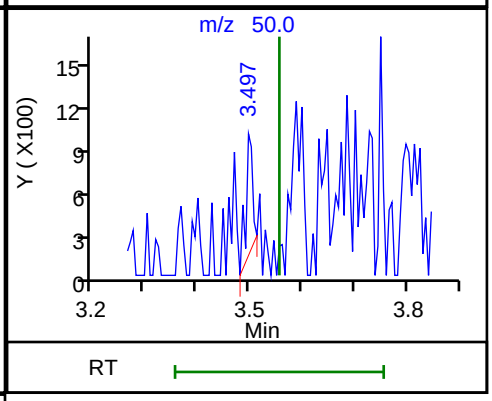
9 Chloromethane, CAS: 74-87-3

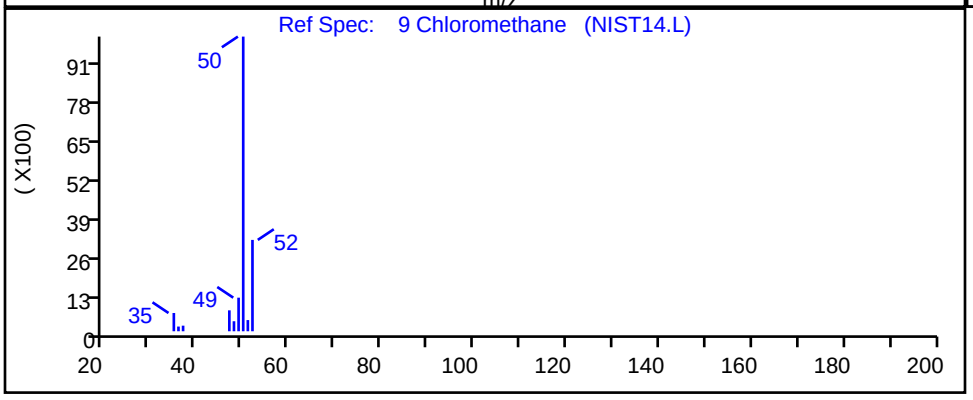
Processing Results











RT	Mass	Response	Amount
3.50	52.00	1862	0.071046
3.50	50.00	734	

Reviewer: khachitpongpanits, 12-May-2020 15:32:38

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

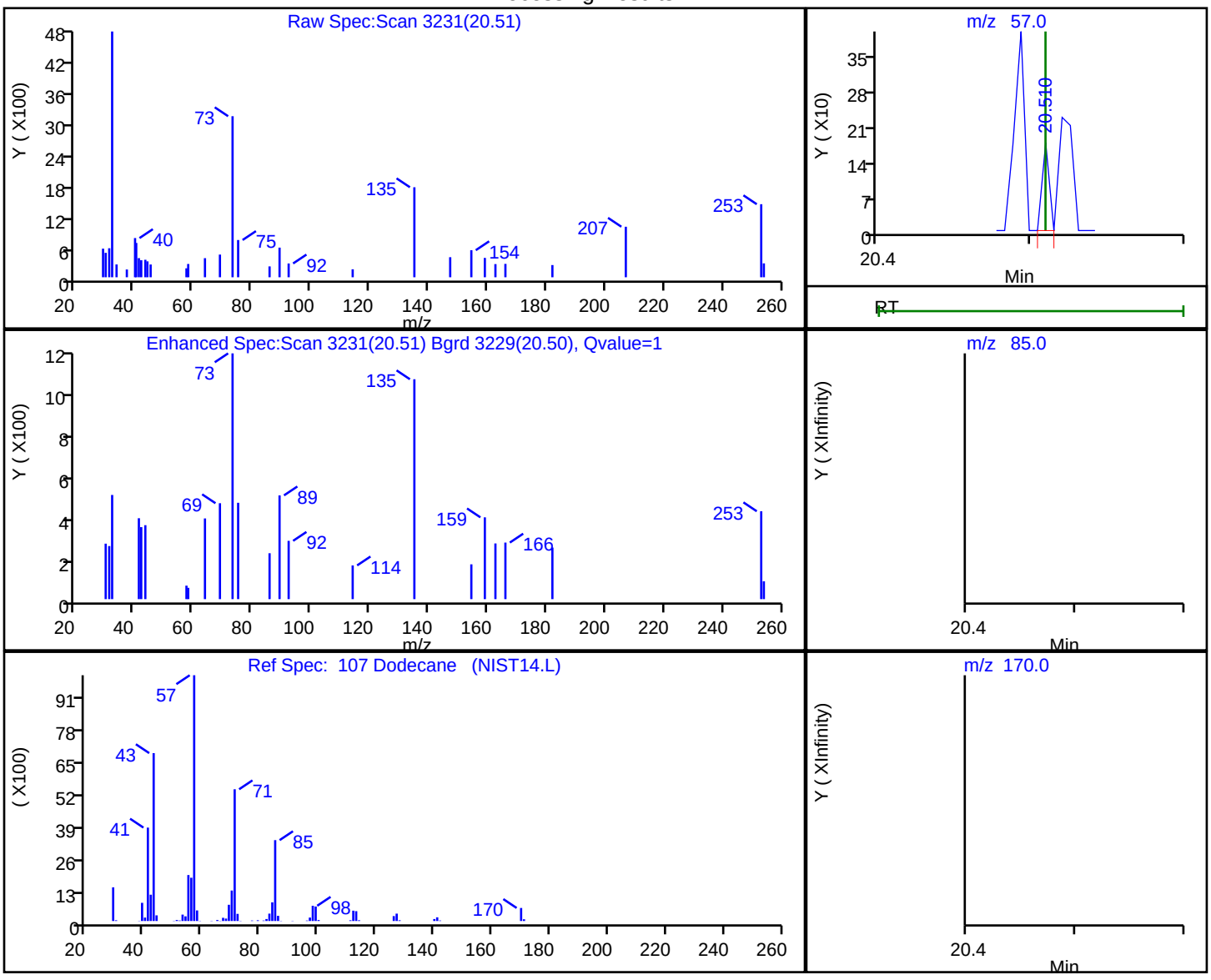
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200507-15427.b\R11BLK14.D				
Injection Date:	12-May-2020 01:08:30	Instrument ID:	MR		
Lims ID:	140-19038-A-14	Lab Sample ID:	140-19038-14		
Client ID:	34001032				
Operator ID:	HMT	ALS Bottle#:	14	Worklist Smp#:	21
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

107 Dodecane, CAS: 112-40-3

Processing Results



RT	Mass	Response	Amount
20.51	57.00	56	0.398240
20.51	85.00	0	
20.51	170.00	0	

Reviewer: khachitpongpanits, 12-May-2020 15:33:15

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19038-1

SDG No.:

Client Sample ID: 8319 Lab Sample ID: 140-19038-15

Matrix: Air Lab File ID: RE11BLK15.D

Analysis Method: TO-15 Date Collected: 05/08/2020 08:50

Sample wt/vol: 200(mL) Date Analyzed: 05/12/2020 01:56

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 39492 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	ND		0.20	
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.20	
79-00-5	1,1,2-Trichloroethane	ND		0.20	
76-13-1	1,1,2-Trichlorotrifluoroethane	ND		0.20	
75-34-3	1,1-Dichloroethane	ND		0.20	
75-35-4	1,1-Dichloroethene	ND		0.20	
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	
96-18-4	1,2,3-Trichloropropane	ND		0.50	
526-73-8	1,2,3-Trimethylbenzene	ND		0.20	
95-93-2	1,2,4,5-Tetramethylbenzene	ND		0.20	
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	
95-63-6	1,2,4-Trimethylbenzene	ND		0.20	
96-12-8	1,2-Dibromo-3-Chloropropane	ND		0.40	
106-93-4	1,2-Dibromoethane	ND		0.20	
95-50-1	1,2-Dichlorobenzene	ND		0.40	
107-06-2	1,2-Dichloroethane	ND		0.20	
78-87-5	1,2-Dichloropropane	ND		0.20	
76-14-2	1,2-Dichlorotetrafluoroethane	ND		0.20	
108-67-8	1,3,5-Trimethylbenzene	ND		0.20	
106-99-0	1,3-Butadiene	ND		0.40	
541-73-1	1,3-Dichlorobenzene	ND		0.20	
106-46-7	1,4-Dichlorobenzene	ND		0.20	
123-91-1	1,4-Dioxane	ND		0.40	
71-36-3	1-Butanol	ND		2.0	
90-12-0	1-Methylnaphthalene	ND		2.5	
540-84-1	2,2,4-Trimethylpentane	ND		0.40	
565-59-3	2,3-Dimethylpentane	ND		0.20	
78-93-3	2-Butanone	ND		1.0	
95-49-8	2-Chlorotoluene	ND		0.40	
591-78-6	2-Hexanone	ND		0.40	
78-78-4	2-Methylbutane	ND		0.50	
91-57-6	2-Methylnaphthalene	ND		2.5	
107-83-5	2-Methylpentane	ND		0.20	
107-05-1	3-Chloropropene	ND		0.20	
622-96-8	4-Ethyltoluene	ND		0.40	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		1.0	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19038-1

SDG No.:

Client Sample ID: 8319 Lab Sample ID: 140-19038-15

Matrix: Air Lab File ID: RE11BLK15.D

Analysis Method: TO-15 Date Collected: 05/08/2020 08:50

Sample wt/vol: 200(mL) Date Analyzed: 05/12/2020 01:56

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 39492 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
67-64-1	Acetone	ND		7.5	
75-05-8	Acetonitrile	ND		1.0	
107-02-8	Acrolein	ND		1.0	
107-13-1	Acrylonitrile	ND		2.0	
98-83-9	Alpha Methyl Styrene	ND		0.40	
71-43-2	Benzene	ND		0.20	
100-44-7	Benzyl chloride	ND		0.40	
75-27-4	Bromodichloromethane	ND		0.20	
75-25-2	Bromoform	ND		0.20	
74-83-9	Bromomethane	ND		0.20	
106-97-8	Butane	ND		1.0	
75-15-0	Carbon disulfide	ND		0.40	
56-23-5	Carbon tetrachloride	ND		0.20	
108-90-7	Chlorobenzene	ND		0.20	
75-45-6	Chlorodifluoromethane	ND		0.20	
75-00-3	Chloroethane	ND		0.20	
67-66-3	Chloroform	ND		0.20	
74-87-3	Chloromethane	ND		1.0	
156-59-2	cis-1,2-Dichloroethene	ND		0.20	
10061-01-5	cis-1,3-Dichloropropene	ND		0.40	
98-82-8	Cumene	ND		0.40	
110-82-7	Cyclohexane	ND		0.40	
124-48-1	Dibromochloromethane	ND		0.20	
74-95-3	Dibromomethane	ND		0.40	
75-71-8	Dichlorodifluoromethane	ND		0.20	
64-17-5	Ethanol	ND		5.0	
141-78-6	Ethyl acetate	ND		2.0	
60-29-7	Ethyl ether	ND		2.0	
100-41-4	Ethylbenzene	ND		0.20	
87-68-3	Hexachlorobutadiene	ND		1.0	
110-54-3	Hexane	ND		0.40	
496-11-7	Indane	ND		0.20	
95-13-6	Indene	ND		0.40	
67-63-0	Isopropyl alcohol	ND		1.2	
179601-23-1	m&p-Xylene	ND		0.20	
80-62-6	Methyl methacrylate	ND		0.40	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19038-1

SDG No.:

Client Sample ID: 8319 Lab Sample ID: 140-19038-15

Matrix: Air Lab File ID: RE11BLK15.D

Analysis Method: TO-15 Date Collected: 05/08/2020 08:50

Sample wt/vol: 200(mL) Date Analyzed: 05/12/2020 01:56

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 39492 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
1634-04-4	Methyl tert-butyl ether	ND		1.0	
108-87-2	Methylcyclohexane	ND		0.20	
75-09-2	Methylene Chloride	ND		1.0	
91-20-3	Naphthalene	ND		0.40	
104-51-8	n-Butylbenzene	ND		0.40	
124-18-5	n-Decane	ND		1.0	
112-40-3	n-Dodecane	ND		1.0	
142-82-5	n-Heptane	ND		0.40	
111-84-2	n-Nonane	ND		0.40	
111-65-9	n-Octane	ND		0.40	
103-65-1	N-Propylbenzene	ND		0.40	
1120-21-4	n-Undecane	ND		1.0	
95-47-6	o-Xylene	ND		0.20	
99-87-6	p-Cymene	ND		0.20	
109-66-0	Pentane	ND		2.5	
115-07-1	Propene	ND		2.5	
135-98-8	sec-Butylbenzene	ND		0.40	
100-42-5	Styrene	ND		0.20	
75-65-0	tert-Butanol	ND		1.0	
98-06-6	tert-Butylbenzene	ND		0.40	
127-18-4	Tetrachloroethene	ND		0.20	
109-99-9	Tetrahydrofuran	ND		1.0	
110-02-1	Thiophene	ND		0.20	
108-88-3	Toluene	ND		1.0	
156-60-5	trans-1,2-Dichloroethene	ND		0.20	
10061-02-6	trans-1,3-Dichloropropene	ND		0.20	
79-01-6	Trichloroethene	ND		0.20	
75-69-4	Trichlorofluoromethane	ND		0.20	
108-05-4	Vinyl acetate	ND		1.0	
593-60-2	Vinyl bromide	ND		0.20	
75-01-4	Vinyl chloride	ND		0.40	

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MR\20200507-15427.b\RE11BLK15.D				
Lims ID:	140-19038-A-15				
Client ID:	8319				
Sample Type:	Client				
Inject. Date:	12-May-2020 01:56:30	ALS Bottle#:	15	Worklist Smp#:	22
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0015427-018				
Misc. Info.:	8319				
Operator ID:	HMT	Instrument ID:	MR		
Method:	\\chromfs\Knoxville\ChromData\MR\20200507-15427.b\MR_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	12-May-2020 15:34:04	Calib Date:	10-Apr-2020 00:47:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MR\20200409-15180.b\RD09IC10.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1008				
First Level Reviewer: khachitpongpanits		Date:	12-May-2020 15:34:04		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.323	8.333	-0.010	89	176754	4.00	
* 2 1,4-Difluorobenzene	114	10.571	10.577	-0.006	93	1228314	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.408	15.408	0.000	84	1052170	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.058	17.064	-0.006	94	529463	3.39	
7 Propene	41	3.346	3.338	0.006	93	35224	-0.5649	7

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

40MXISSURP_00004 Amount Added: 40.00 Units: mL Run Reagent

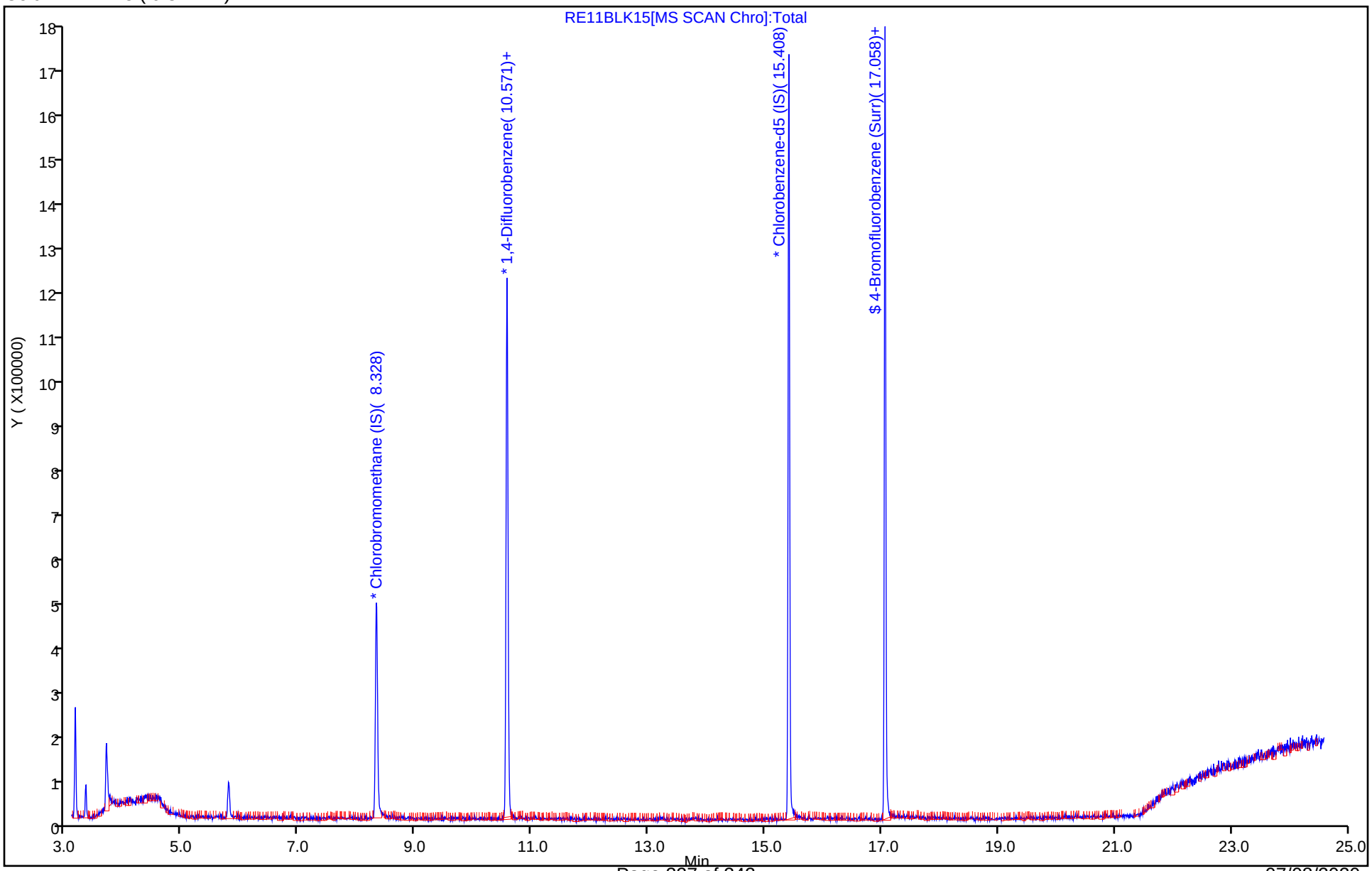
Report Date: 12-May-2020 15:34:04 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200507-15427.b\RE11BLK15.D

Injection Date:	12-May-2020 01:56:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	140-19038-A-15	Lab Sample ID:	140-19038-15	Worklist Smp#:	22
Client ID:	8319				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



07/08/2020

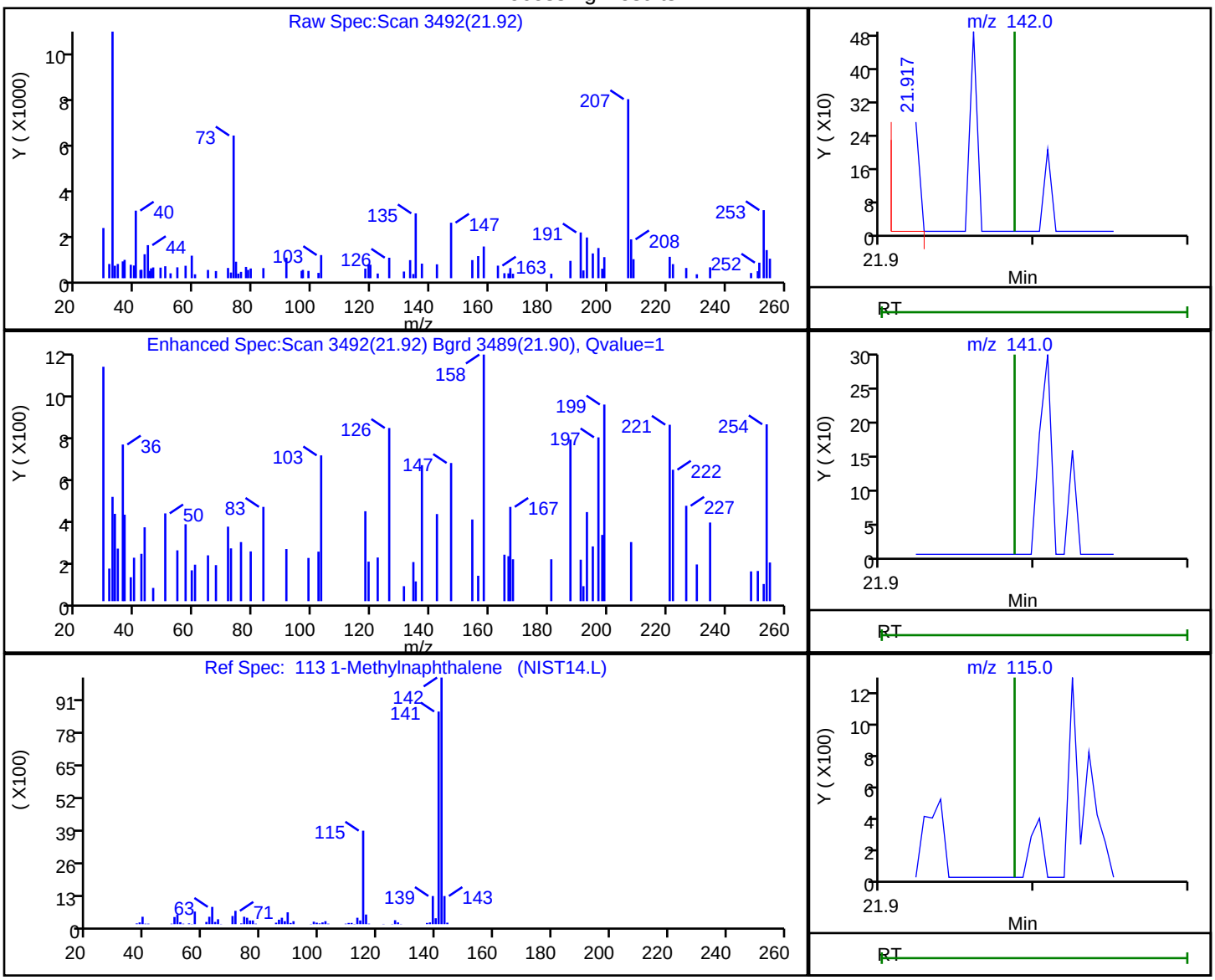
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200507-15427.b\RE11BLK15.D				
Injection Date:	12-May-2020 01:56:30	Instrument ID:	MR		
Lims ID:	140-19038-A-15	Lab Sample ID:	140-19038-15		
Client ID:	8319				
Operator ID:	HMT	ALS Bottle#:	15	Worklist Smp#:	22
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

113 1-Methylnaphthalene, CAS: 90-12-0

Processing Results



RT	Mass	Response	Amount
21.92	142.00	279	0.259925
21.99	141.00	0	
21.99	115.00	0	

Reviewer: khachitpongpanits, 12-May-2020 15:34:00

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

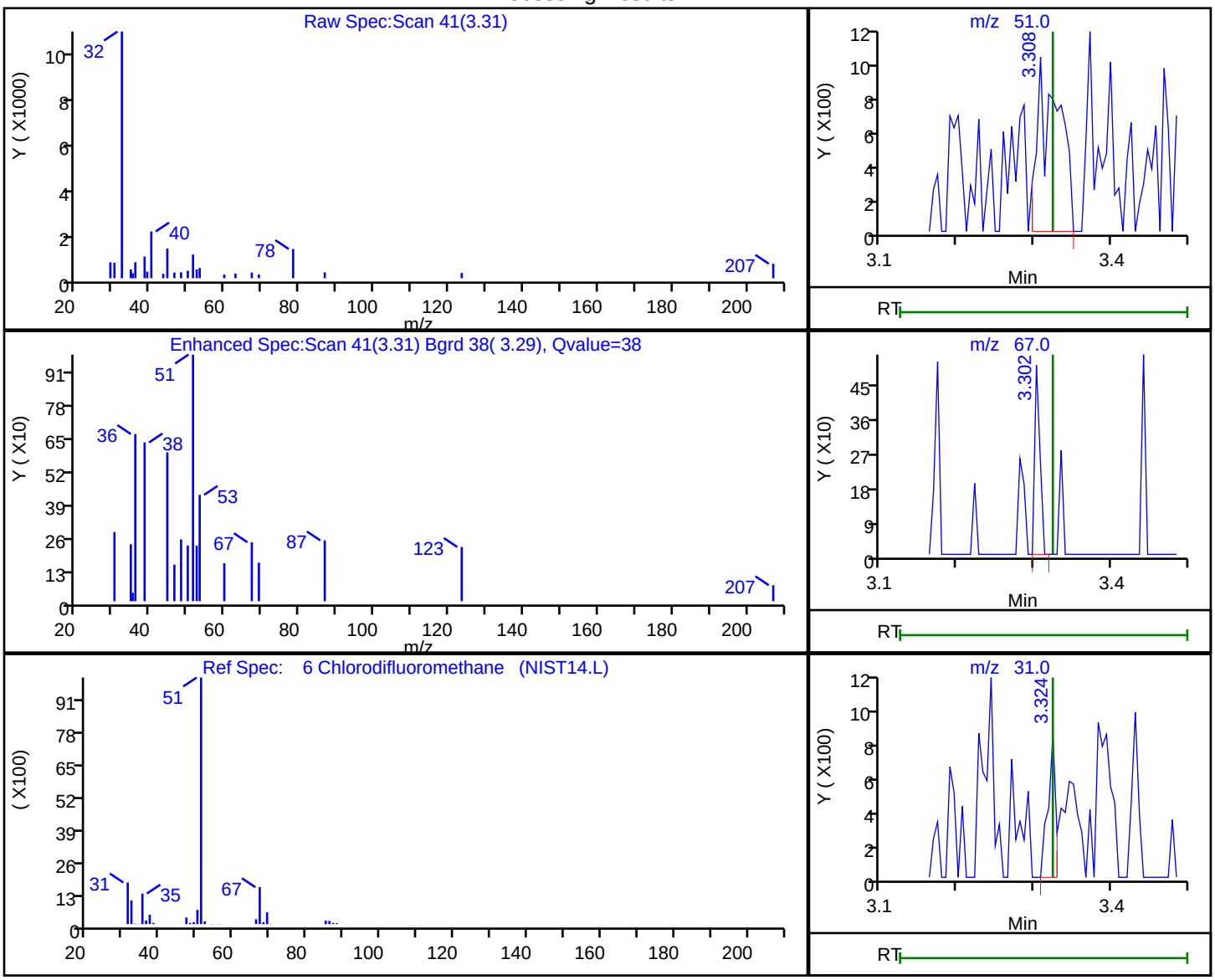
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200507-15427.b\RE11BLK15.D				
Injection Date:	12-May-2020 01:56:30	Instrument ID:	MR		
Lims ID:	140-19038-A-15	Lab Sample ID:	140-19038-15		
Client ID:	8319				
Operator ID:	HMT	ALS Bottle#:	15	Worklist Smp#:	22
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

6 Chlorodifluoromethane, CAS: 75-45-6

Processing Results



RT	Mass	Response	Amount
3.31	51.00	1916	0.015416
3.30	67.00	235	
3.32	31.00	566	

Reviewer: khachitpongpanits, 12-May-2020 15:33:33

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

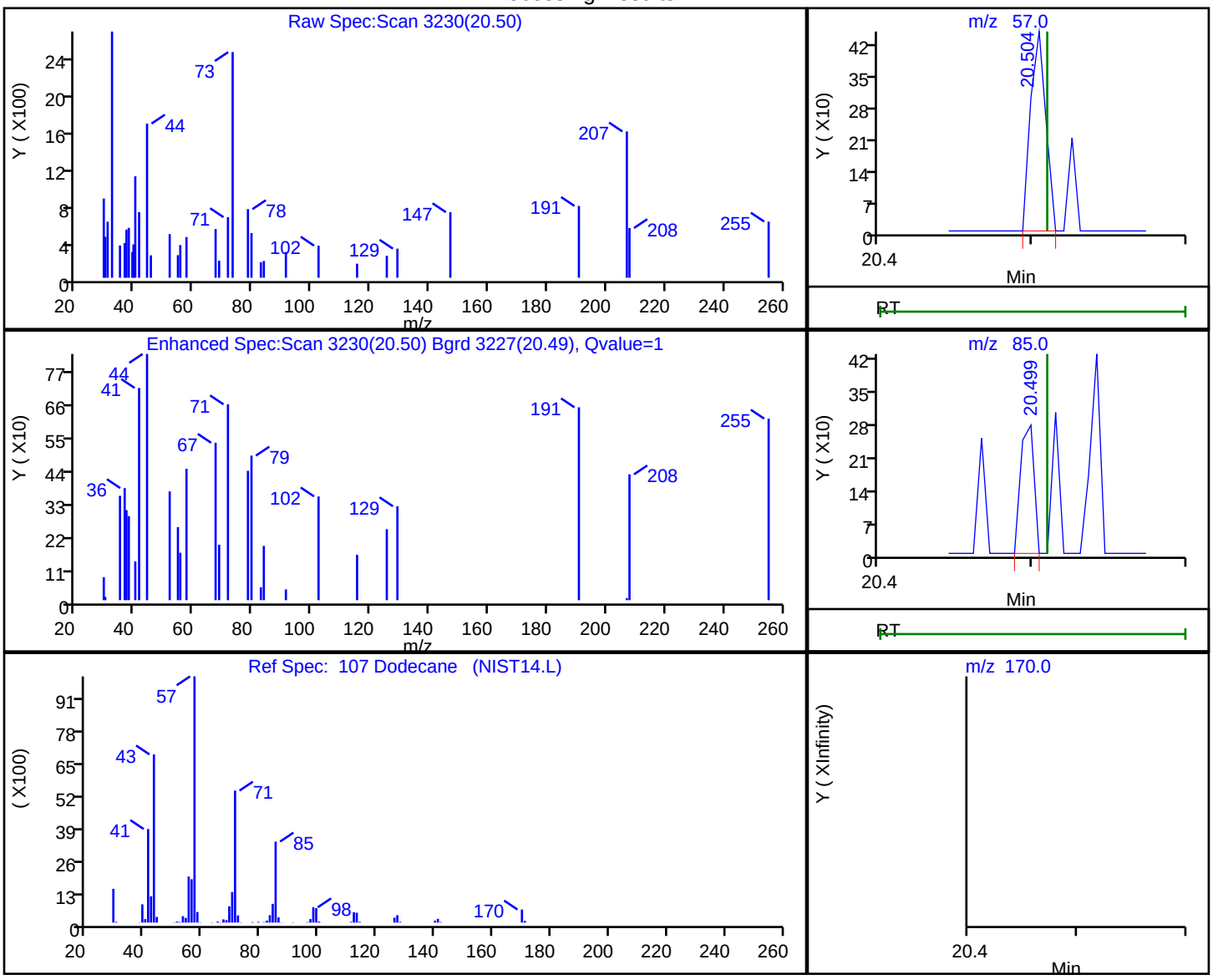
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200507-15427.b\RE11BLK15.D				
Injection Date:	12-May-2020 01:56:30	Instrument ID:	MR		
Lims ID:	140-19038-A-15	Lab Sample ID:	140-19038-15		
Client ID:	8319				
Operator ID:	HMT	ALS Bottle#:	15	Worklist Smp#:	22
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

107 Dodecane, CAS: 112-40-3

Processing Results



RT	Mass	Response	Amount
20.50	57.00	305	0.398776
20.50	85.00	167	
20.51	170.00	0	

Reviewer: khachitpongpanits, 12-May-2020 15:33:57

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19038-1

SDG No.:

Client Sample ID: 10742 Lab Sample ID: 140-19038-16

Matrix: Air Lab File ID: RE11BLK16.D

Analysis Method: TO-15 Date Collected: 05/08/2020 08:50

Sample wt/vol: 200(mL) Date Analyzed: 05/12/2020 02:44

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 39492 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	ND		0.20	
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.20	
79-00-5	1,1,2-Trichloroethane	ND		0.20	
76-13-1	1,1,2-Trichlorotrifluoroethane	ND		0.20	
75-34-3	1,1-Dichloroethane	ND		0.20	
75-35-4	1,1-Dichloroethene	ND		0.20	
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	
96-18-4	1,2,3-Trichloropropane	ND		0.50	
526-73-8	1,2,3-Trimethylbenzene	ND		0.20	
95-93-2	1,2,4,5-Tetramethylbenzene	ND		0.20	
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	
95-63-6	1,2,4-Trimethylbenzene	ND		0.20	
96-12-8	1,2-Dibromo-3-Chloropropane	ND		0.40	
106-93-4	1,2-Dibromoethane	ND		0.20	
95-50-1	1,2-Dichlorobenzene	ND		0.40	
107-06-2	1,2-Dichloroethane	ND		0.20	
78-87-5	1,2-Dichloropropane	ND		0.20	
76-14-2	1,2-Dichlorotetrafluoroethane	ND		0.20	
108-67-8	1,3,5-Trimethylbenzene	ND		0.20	
106-99-0	1,3-Butadiene	ND		0.40	
541-73-1	1,3-Dichlorobenzene	ND		0.20	
106-46-7	1,4-Dichlorobenzene	ND		0.20	
123-91-1	1,4-Dioxane	ND		0.40	
71-36-3	1-Butanol	ND		2.0	
90-12-0	1-Methylnaphthalene	ND		2.5	
540-84-1	2,2,4-Trimethylpentane	ND		0.40	
565-59-3	2,3-Dimethylpentane	ND		0.20	
78-93-3	2-Butanone	ND		1.0	
95-49-8	2-Chlorotoluene	ND		0.40	
591-78-6	2-Hexanone	ND		0.40	
78-78-4	2-Methylbutane	ND		0.50	
91-57-6	2-Methylnaphthalene	ND		2.5	
107-83-5	2-Methylpentane	ND		0.20	
107-05-1	3-Chloropropene	ND		0.20	
622-96-8	4-Ethyltoluene	ND		0.40	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		1.0	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19038-1

SDG No.:

Client Sample ID: 10742 Lab Sample ID: 140-19038-16

Matrix: Air Lab File ID: RE11BLK16.D

Analysis Method: TO-15 Date Collected: 05/08/2020 08:50

Sample wt/vol: 200(mL) Date Analyzed: 05/12/2020 02:44

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 39492 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
67-64-1	Acetone	ND		7.5	
75-05-8	Acetonitrile	ND		1.0	
107-02-8	Acrolein	ND		1.0	
107-13-1	Acrylonitrile	ND		2.0	
98-83-9	Alpha Methyl Styrene	ND		0.40	
71-43-2	Benzene	ND		0.20	
100-44-7	Benzyl chloride	ND		0.40	
75-27-4	Bromodichloromethane	ND		0.20	
75-25-2	Bromoform	ND		0.20	
74-83-9	Bromomethane	ND		0.20	
106-97-8	Butane	ND		1.0	
75-15-0	Carbon disulfide	ND		0.40	
56-23-5	Carbon tetrachloride	ND		0.20	
108-90-7	Chlorobenzene	ND		0.20	
75-45-6	Chlorodifluoromethane	ND		0.20	
75-00-3	Chloroethane	ND		0.20	
67-66-3	Chloroform	ND		0.20	
74-87-3	Chloromethane	ND		1.0	
156-59-2	cis-1,2-Dichloroethene	ND		0.20	
10061-01-5	cis-1,3-Dichloropropene	ND		0.40	
98-82-8	Cumene	ND		0.40	
110-82-7	Cyclohexane	ND		0.40	
124-48-1	Dibromochloromethane	ND		0.20	
74-95-3	Dibromomethane	ND		0.40	
75-71-8	Dichlorodifluoromethane	ND		0.20	
64-17-5	Ethanol	ND		5.0	
141-78-6	Ethyl acetate	ND		2.0	
60-29-7	Ethyl ether	ND		2.0	
100-41-4	Ethylbenzene	ND		0.20	
87-68-3	Hexachlorobutadiene	ND		1.0	
110-54-3	Hexane	ND		0.40	
496-11-7	Indane	ND		0.20	
95-13-6	Indene	ND		0.40	
67-63-0	Isopropyl alcohol	ND		1.2	
179601-23-1	m&p-Xylene	ND		0.20	
80-62-6	Methyl methacrylate	ND		0.40	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19038-1

SDG No.:

Client Sample ID: 10742 Lab Sample ID: 140-19038-16

Matrix: Air Lab File ID: RE11BLK16.D

Analysis Method: TO-15 Date Collected: 05/08/2020 08:50

Sample wt/vol: 200(mL) Date Analyzed: 05/12/2020 02:44

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 39492 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
1634-04-4	Methyl tert-butyl ether	ND		1.0	
108-87-2	Methylcyclohexane	ND		0.20	
75-09-2	Methylene Chloride	ND		1.0	
91-20-3	Naphthalene	ND		0.40	
104-51-8	n-Butylbenzene	ND		0.40	
124-18-5	n-Decane	ND		1.0	
112-40-3	n-Dodecane	ND		1.0	
142-82-5	n-Heptane	ND		0.40	
111-84-2	n-Nonane	ND		0.40	
111-65-9	n-Octane	ND		0.40	
103-65-1	N-Propylbenzene	ND		0.40	
1120-21-4	n-Undecane	ND		1.0	
95-47-6	o-Xylene	ND		0.20	
99-87-6	p-Cymene	ND		0.20	
109-66-0	Pentane	ND		2.5	
115-07-1	Propene	ND		2.5	
135-98-8	sec-Butylbenzene	ND		0.40	
100-42-5	Styrene	ND		0.20	
75-65-0	tert-Butanol	ND		1.0	
98-06-6	tert-Butylbenzene	ND		0.40	
127-18-4	Tetrachloroethene	ND		0.20	
109-99-9	Tetrahydrofuran	ND		1.0	
110-02-1	Thiophene	ND		0.20	
108-88-3	Toluene	ND		1.0	
156-60-5	trans-1,2-Dichloroethene	ND		0.20	
10061-02-6	trans-1,3-Dichloropropene	ND		0.20	
79-01-6	Trichloroethene	ND		0.20	
75-69-4	Trichlorofluoromethane	ND		0.20	
108-05-4	Vinyl acetate	ND		1.0	
593-60-2	Vinyl bromide	ND		0.20	
75-01-4	Vinyl chloride	ND		0.40	

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MR\20200507-15427.b\RE11BLK16.D
Lims ID: 140-19038-A-16
Client ID: 10742
Sample Type: Client
Inject. Date: 12-May-2020 02:44:30 ALS Bottle#: 16 Worklist Smp#: 23
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0015427-019
Misc. Info.: 10742
Operator ID: HMT Instrument ID: MR

Method: \\chromfs\Knoxville\ChromData\MR\20200507-15427.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 12-May-2020 15:34:52 Calib Date: 10-Apr-2020 00:47:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MR\20200409-15180.b\RD09IC10.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1008

First Level Reviewer: khachitpongpanits Date: 12-May-2020 15:34:52

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.328	8.333	-0.005	85	167877	4.00	
* 2 1,4-Difluorobenzene	114	10.571	10.577	-0.006	93	1219658	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.408	15.408	0.000	85	1017377	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.058	17.064	-0.006	94	510979	3.39	
7 Propene	41	3.335	3.338	-0.005	92	37340	-0.4917	7

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

40MXISSURP_00004 Amount Added: 40.00 Units: mL Run Reagent

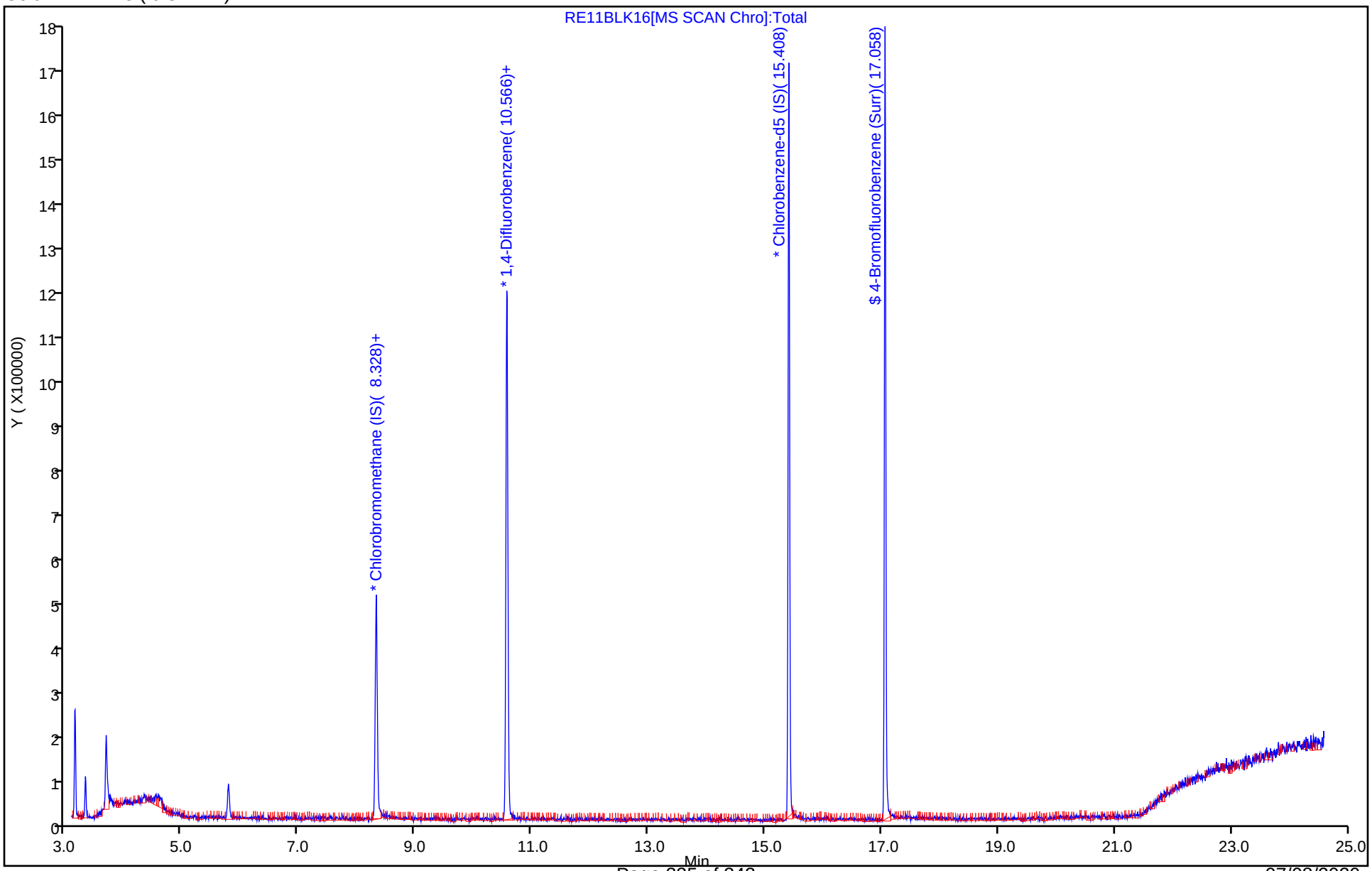
Report Date: 12-May-2020 15:34:52 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200507-15427.b\RE11BLK16.D

Injection Date:	12-May-2020 02:44:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	140-19038-A-16	Lab Sample ID:	140-19038-16	Worklist Smp#:	23
Client ID:	10742				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



07/08/2020

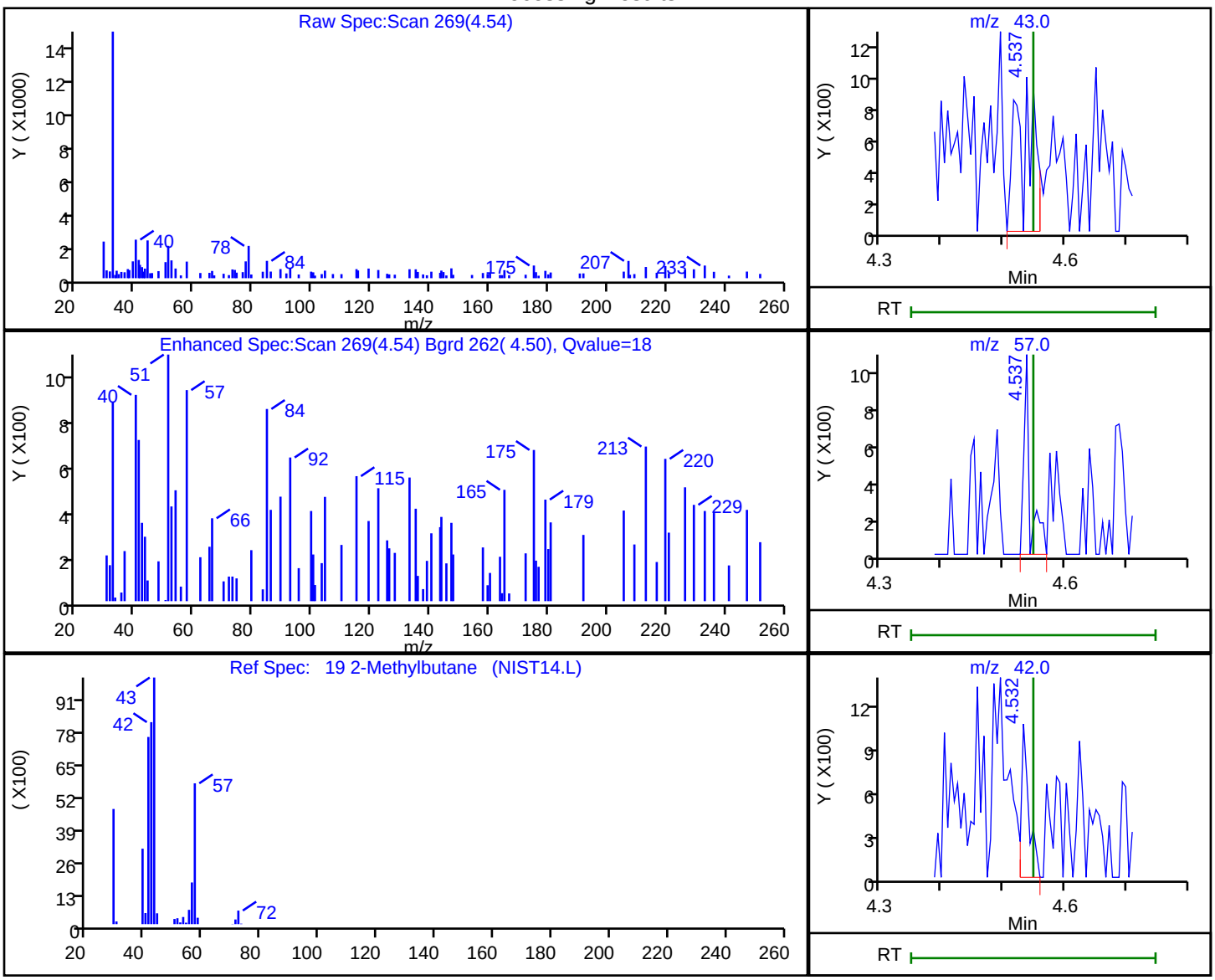
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200507-15427.b\RE11BLK16.D				
Injection Date:	12-May-2020 02:44:30	Instrument ID:	MR		
Lims ID:	140-19038-A-16	Lab Sample ID:	140-19038-16		
Client ID:	10742				
Operator ID:	HMT	ALS Bottle#:	16	Worklist Smp#:	23
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

19 2-Methylbutane, CAS: 78-78-4

Processing Results



RT	Mass	Response	Amount
4.54	43.00	1859	0.013534
4.54	57.00	699	
4.53	42.00	856	

Reviewer: khachitpongpanits, 12-May-2020 15:34:22

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

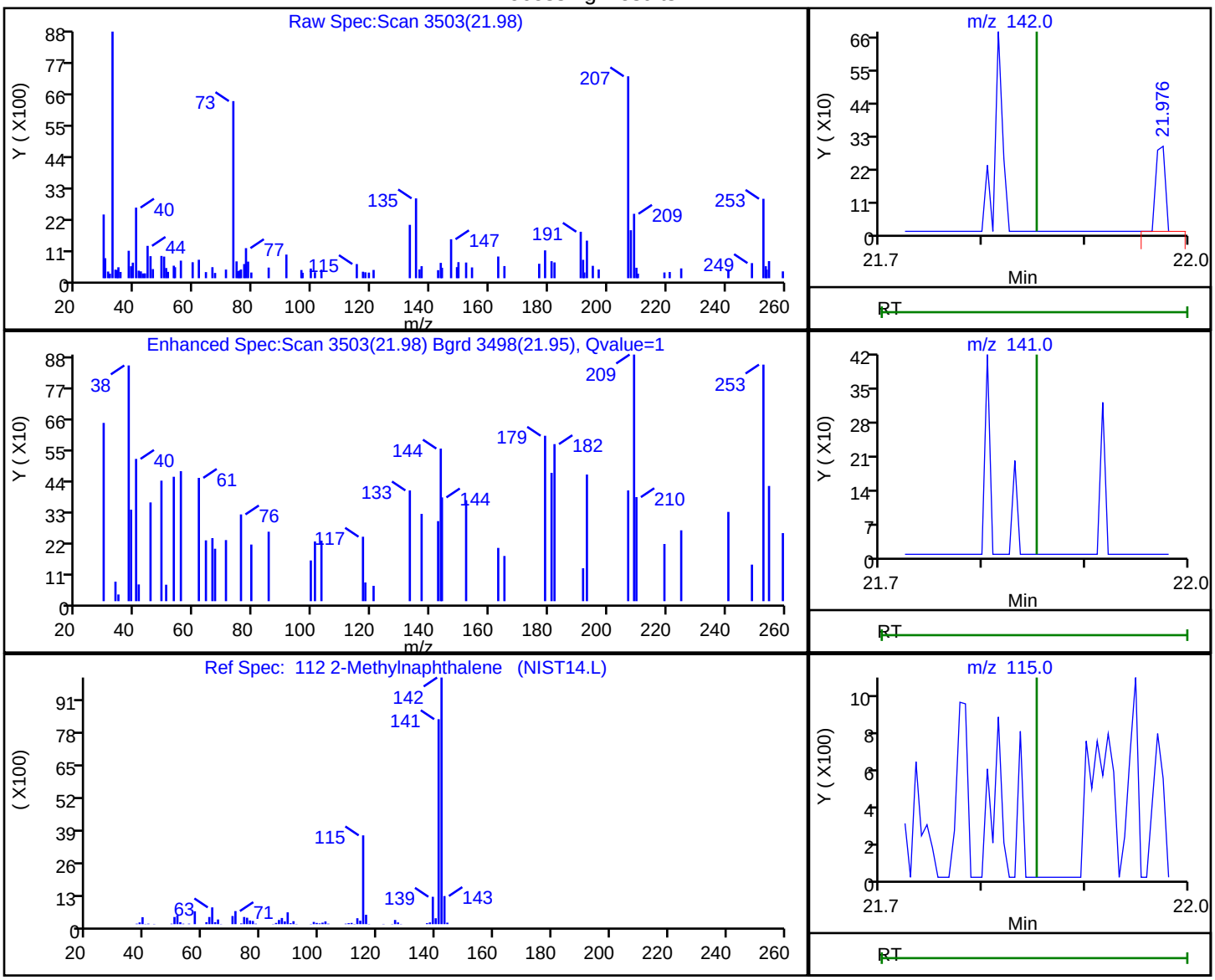
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200507-15427.b\RE11BLK16.D				
Injection Date:	12-May-2020 02:44:30	Instrument ID:	MR		
Lims ID:	140-19038-A-16	Lab Sample ID:	140-19038-16		
Client ID:	10742				
Operator ID:	HMT	ALS Bottle#:	16	Worklist Smp#:	23
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

112 2-Methylnaphthalene, CAS: 91-57-6

Processing Results



RT	Mass	Response	Amount
21.98	142.00	248	0.618627
21.85	141.00	0	
21.85	115.00	0	

Reviewer: khachitpongpanits, 12-May-2020 15:34:48

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

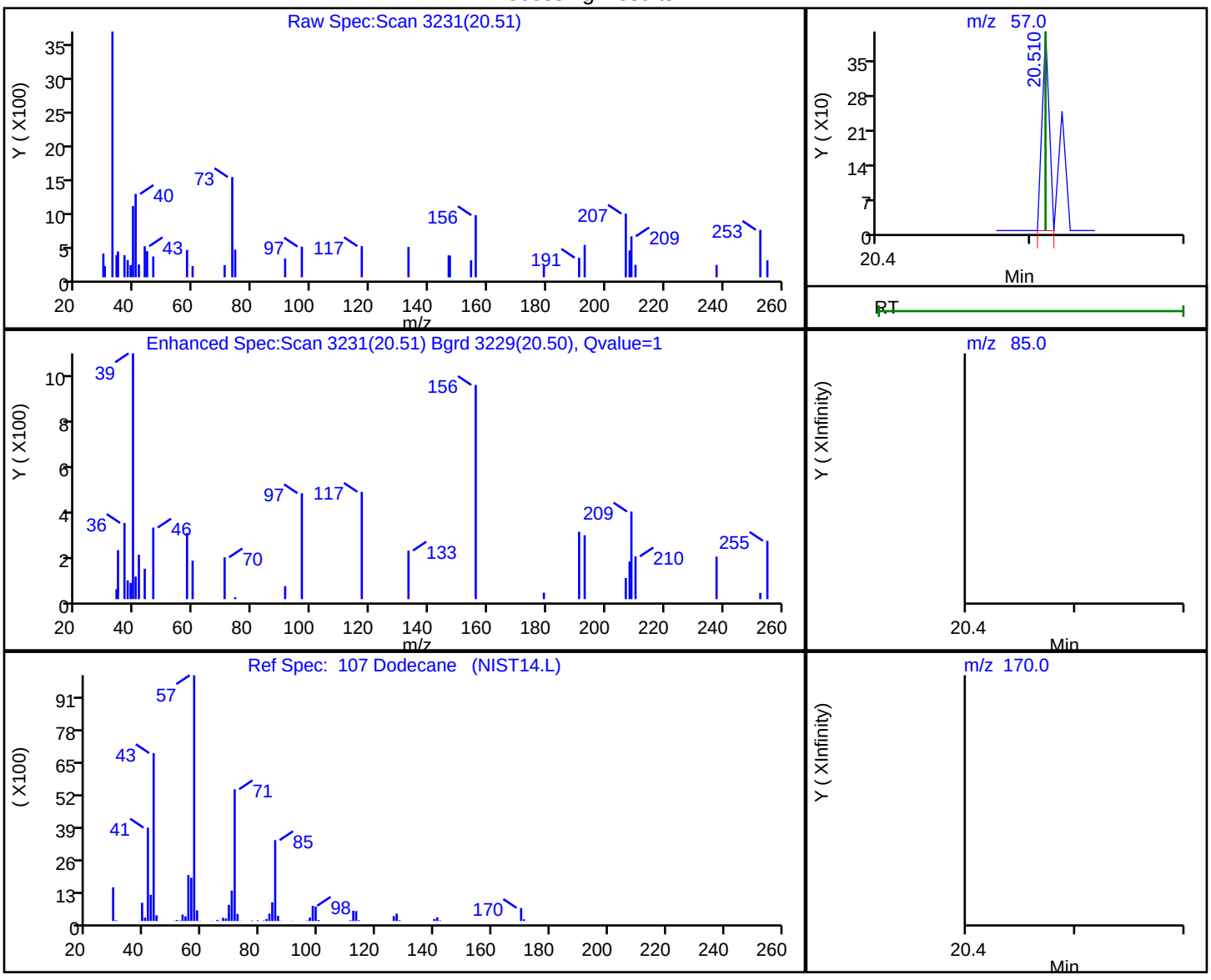
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200507-15427.b\RE11BLK16.D				
Injection Date:	12-May-2020 02:44:30	Instrument ID:	MR		
Lims ID:	140-19038-A-16	Lab Sample ID:	140-19038-16		
Client ID:	10742				
Operator ID:	HMT	ALS Bottle#:	16	Worklist Smp#:	23
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

107 Dodecane, CAS: 112-40-3

Processing Results



RT	Mass	Response	Amount
20.51	57.00	131	0.398410
20.51	85.00	0	
20.51	170.00	0	

Reviewer: khachitpongpanits, 12-May-2020 15:34:44

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Shipping and Receiving Documents

Eurofins TestAmerica, Knoxville
5815 Middlebrook Pike
Knoxville, TN 37921
Phone 865-291-3000
Fax 865-584-4315

Baltimore #201

Canister Samples Chain of Custody Record

TestAmerica Laboratories, Inc. assumes no liability with respect to the collection and shipment of these samples.

140-19488 Chain of Custody

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact Information		Client Project Manager: Peter Kich	Samples Collected By:	COC No:
Company Name: Tetra tech		Phone: 410-990-4607		1 of 1 COCs
Address: 990 Awald Rd Suite 302		Email:		
City/State/Zip: Annapolis / MD / 21403				For Lab Use Only:
Phone: 410-990-4607		Site Contact:		Walk-in Client:
FAX:		Tel/Fax		Lab Sampling:
Project Name: LMC		Analysis Turnaround Time		
Site/Location: Middle River		Standard (Specific): V		Job / SDG No.:
PO # 117-0512140		Rush (Specifiy):		(See below for Add'l Items)

Sample Identification	Sample Start Date	Time Start	Sample End Date	Time Stop	Canister Vacuum in Field, "Hg (Start)	Canister Vacuum in Field, "Hg (Stop)	Flow Controller ID	Canister ID	TO-14/15 (Standard / Low Level)	TO-15 SIM	EPA 3C	EPA 25C	ASTM D-1946	EPA 15/16	Other (Please specify in notes section)	Sample Type	Indoor Air/Ambient Air	Sub-Slab	Soil Gas	Soil Vapor Extraction (SVE)	Landfill Gas	Other (Please specify in notes section)	Sample Specific Notes:
Bldg A Effluent	6/25	9:36	6/25	9:37	-30	-4	10104	3400220	X														
Bldg A Mid GaC	6/25	9:42	6/25	9:43	-29	-4	11594	10333	X														
Bldg A Influent	6/25	9:49	6/25	9:50	-29	-4	10614	3400625	X														

Temperature (Fahrenheit)			
	Start	Interior	Ambient
	Stop	80°	80°

Pressure (inches of Hg)		
	Start	Interior	Ambient
	Stop		

Received @ ambient, 1 box, Fedex RO tr# tr# 7708 0754 4880
Custody seal intact
KH 6/26/20

Special Instructions/QC Requirements & Comments:

Samples Shipped by:	Date / Time:	Samples Received by:	
Samples Relinquished by:	Date / Time: 6/25/2020 13:40	Received by:	6/25/20 1340
Relinquished by:	Date / Time: 6/25/20 1700	Received by: ETA	6/26/20 0900 3 coolers, 3 KR, 1 T
Lab Use Only: Shipper Name:	Opened by:	Condition:	

Form No. CA-C-WI-003, Rev. 2.13, dated 4/10/2019

07/08/2020

Loc: 140

EUROFINS/TESTAMERICA KNOXVILLE SAMPLE RECEIPT/CONDITION UPON RECEIPT ANOMALY CHECKLIST **Log In Number:** **19488**

Review Items	Yes	No	NA	If No, what was the problem?
1. Are the shipping containers intact?	/			☐ **Containers, Broken**
2. Were ambient air containers received intact?			/	☑ Checked in lab
3. The coolers/containers custody seal if present, is it intact?	/			☐ Yes ☐ NA
4. Is the cooler temperature within limits? (> freezing temp. of water to 6 °C, VOST: 10°C) Thermometer ID :_____ Correction factor: _____			/	☐ **Cooler Out of Temp, Client Contacted, Proceed/Cancel** ☐ **Cooler Out of Temp, Same Day Receipt**
5. Were all of the sample containers received intact?	/			☐ **Containers, Broken**
6. Were samples received in appropriate containers?	/			☐ **Containers, Improper; Client Contacted; Proceed/Cancel**
7. Do sample container labels match COC? (IDs, Dates, Times)	/			☐ **COC & Samples Do Not Match** ☐ **COC Incorrect/Incomplete** ☐ **COC Not Received**
8. Were all of the samples listed on the COC received?	/			☐ **Sample Received, Not on COC** ☐ **Sample on COC, Not Received**
9. Is the date/time of sample collection noted?	/			☐ **COC; No Date/Time; Client Contacted**
10. Was the sampler identified on the COC?		/		☑ **Sampler Not Listed on COC**
11. Is the client and project name/# identified?	/			☐ **COC Incorrect/Incomplete**
12. Are tests/parameters listed for each sample?	/			☐ **COC No tests on COC**
13. Is the matrix of the samples noted?	/			☐ **COC Incorrect/Incomplete**
14. Was COC relinquished? (Signed/Dated/Timed)	/			☐ **COC Incorrect/Incomplete**
15. Were samples received within holding time?	/			☐ **Holding Time - Receipt**
16. Were samples received with correct chemical preservative (excluding Encore)?			/	☐ **pH Adjusted, pH Included (See box 16A)** ☐ **Incorrect Preservative**
17. Were VOA samples received without headspace?			/	☐ **Headspace (VOA only)**
18. Did you check for residual chlorine, if necessary? (e.g. 1613B, 1668) Chlorine test strip lot number:			/	☐ **Residual Chlorine**
19. For 1613B water samples is pH<9?			/	☐ If no, notify lab to adjust
20. For rad samples was sample activity info. Provided?			/	☐ Project missing info

Comments/Actions Taken

10.

Labeling Verified by: **Date:**

pH test strip lot number:

Box 16A: pH Preservation	Box 18A: Residual Chlorine
Preservative:	
Lot Number:	
Exp Date:	
Analyst:	
Date:	
Time:	

Project #: 1400 2921 PM Instructions:

Sample Receiving Associate: Date: 6/26/20

QA026R32.doc, 062719

TestAmerica Knoxville - Air Canister Initial Pressure Check

Gauge ID: G5
Date: 6/26/2020

Analyst	Sample ID	Asset #	Cleaning Job	Cert	Size (L)	Pressure @ Receipt (-in Hg or +psig)	Time	Comments
BRS	140-19488-a-1	34002205	19014	B	1	-3.4	12:51	
BRS	140-19488-a-2	10333	19038	B	1	-3.2	12:52	
BRS	140-19488-a-3	34001625	19038	B	1	-3.5	12:53	

ANALYTICAL REPORT

Job Number: 140-19811-1

Job Description: LMMRC SSDS - Middle River

For:
Tetra Tech GEO
980 Awald Road
Suite 302
Annapolis, MD 21403

Attention: Peter Rich



Approved for release.
Diana L Lange
Project Management Assistant II
8/5/2020 3:51 PM

Designee for
Jamie A McKinney, Senior Project Manager
5815 Middlebrook Pike, Knoxville, TN, 37921
(865)291-3000
Jamie.McKinney@Eurofinset.com
08/05/2020

cc: Belssi Chang
Amy Thomson

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins TestAmerica Project Manager.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

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Qualifiers

Air - GC/MS VOA

Qualifier	Qualifier Description
E	Result exceeded calibration range.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job Narrative
140-19811-1

Comments
No additional comments.

Receipt
The samples were received on 7/24/2020 9:45 AM; the samples arrived in good condition, and where required, properly preserved and on ice.

Air - GC/MS VOA
Methods 3005A, TO 15 LL, TO-14A, TO-15: EPA methods TO-14A and TO-15 specify the use of humidified "zero air" as the blank reagent for canister cleaning, instrument calibration and sample analysis. Ultra-high purity humidified nitrogen from a cryogenic reservoir is used in place of "zero air" by TestAmerica Knoxville.

Methods TO 15 LL, TO-14A, TO-14A Low, TO-15: The Initial Calibration for Methylene Chloride did not meet the %RSD criterion specified in the standard operating procedure for average response factor. An linear calibration model was selected which met the acceptance criterion for coefficient of determination (r2) at 0.998 and the read back criteria for the individual calibration points.

(ICIS 140-41306/15)

Methods TO 15 LL, TO-15: Although the BFB is flagged as outside control limits for TO-14 on batch 140-41306, the results are within limits for TO-15, which is required for this project.

Methods TO 15 LL, TO-15: Although the BFB is flagged as outside control limits for TO-14 on batch 140-41446, the results are within limits for TO-15, which is required for this project.

Method TO 15 LL: The continuing calibration verification (CCV) associated with batch 140-41417 exhibited % difference of > 30% for the following analyte(s) Dichlorodifluoromethane; however, the results were within the LCS acceptance limits. The EPA method requires that all target analytes in the continuing calibration verification standard be within 30% difference from the initial calibration. According to the laboratory standard operating procedure, the continuing calibration is acceptable if it meets the laboratory control sample acceptance criteria.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: Tetra Tech GEO
Job ID: 140-19811-1
Project/Site: LMMRC SSDS - Middle River

Client Sample ID: BLDG A EFFLUENT
Lab Sample ID: 140-19811-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.16	J	0.40	0.040	ppb v/v	1		TO 15 LL	Total/NA
Chlorodifluoromethane	0.81		0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Chloroform	0.41		0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	25		0.40	0.050	ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.61		0.40	0.070	ppb v/v	1		TO 15 LL	Total/NA
1,1-Dichloroethane	5.6		0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
1,1-Dichloroethene	36		0.40	0.040	ppb v/v	1		TO 15 LL	Total/NA
Ethylbenzene	0.25	J	0.40	0.065	ppb v/v	1		TO 15 LL	Total/NA
Methylene Chloride	6.2		2.0	0.80	ppb v/v	1		TO 15 LL	Total/NA
Tetrachloroethene	0.19	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Toluene	0.40	J	0.60	0.39	ppb v/v	1		TO 15 LL	Total/NA
trans-1,2-Dichloroethene	0.53		0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
1,1,1-Trichloroethane	10		0.40	0.19	ppb v/v	1		TO 15 LL	Total/NA
Trichloroethene	2.6		0.20	0.030	ppb v/v	1		TO 15 LL	Total/NA
Xylenes, Total	0.17	J	0.80	0.12	ppb v/v	1		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.52	J	1.3	0.13	ug/m3	1		TO 15 LL	Total/NA
Chlorodifluoromethane	2.9		1.4	0.39	ug/m3	1		TO 15 LL	Total/NA
Chloroform	2.0		2.0	0.17	ug/m3	1		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	97		1.6	0.20	ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	3.0		2.0	0.35	ug/m3	1		TO 15 LL	Total/NA
1,1-Dichloroethane	23		1.6	0.14	ug/m3	1		TO 15 LL	Total/NA
1,1-Dichloroethene	140		1.6	0.16	ug/m3	1		TO 15 LL	Total/NA
Ethylbenzene	1.1	J	1.7	0.28	ug/m3	1		TO 15 LL	Total/NA
Methylene Chloride	22		6.9	2.8	ug/m3	1		TO 15 LL	Total/NA
Tetrachloroethene	1.3	J	2.7	0.24	ug/m3	1		TO 15 LL	Total/NA
Toluene	1.5	J	2.3	1.5	ug/m3	1		TO 15 LL	Total/NA
trans-1,2-Dichloroethene	2.1		1.6	0.14	ug/m3	1		TO 15 LL	Total/NA
1,1,1-Trichloroethane	56		2.2	1.0	ug/m3	1		TO 15 LL	Total/NA
Trichloroethene	14		1.1	0.16	ug/m3	1		TO 15 LL	Total/NA
Xylenes, Total	0.74	J	3.5	0.52	ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: BLDG A MID GAC
Lab Sample ID: 140-19811-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1.7		0.40	0.040	ppb v/v	1		TO 15 LL	Total/NA
Chlorodifluoromethane	0.87		0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Chloroform	0.76		0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	31		0.40	0.050	ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.73		0.40	0.070	ppb v/v	1		TO 15 LL	Total/NA
1,1-Dichloroethane	4.9		0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
1,2-Dichloroethane	0.23	J	0.40	0.050	ppb v/v	1		TO 15 LL	Total/NA
1,1-Dichloroethene	22		0.40	0.040	ppb v/v	1		TO 15 LL	Total/NA
Ethylbenzene	0.070	J	0.40	0.065	ppb v/v	1		TO 15 LL	Total/NA
Methylene Chloride	5.4		2.0	0.80	ppb v/v	1		TO 15 LL	Total/NA
Tetrachloroethene	0.39	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Toluene	0.39	J	0.60	0.39	ppb v/v	1		TO 15 LL	Total/NA
trans-1,2-Dichloroethene	0.57		0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
1,1,1-Trichloroethane	120	E	0.40	0.19	ppb v/v	1		TO 15 LL	Total/NA
Trichloroethene	0.25		0.20	0.030	ppb v/v	1		TO 15 LL	Total/NA
Vinyl chloride	0.15	J	0.20	0.13	ppb v/v	1		TO 15 LL	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: BLDG A MID GAC (Continued)
Lab Sample ID: 140-19811-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Xylenes, Total	0.30	J	0.80	0.12	ppb v/v	1		TO 15 LL	Total/NA
1,1,1-Trichloroethane - DL	100		1.3	0.62	ppb v/v	1		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	5.4		1.3	0.13	ug/m3	1		TO 15 LL	Total/NA
Chlorodifluoromethane	3.1		1.4	0.39	ug/m3	1		TO 15 LL	Total/NA
Chloroform	3.7		2.0	0.17	ug/m3	1		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	120		1.6	0.20	ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	3.6		2.0	0.35	ug/m3	1		TO 15 LL	Total/NA
1,1-Dichloroethane	20		1.6	0.14	ug/m3	1		TO 15 LL	Total/NA
1,2-Dichloroethane	0.93	J	1.6	0.20	ug/m3	1		TO 15 LL	Total/NA
1,1-Dichloroethene	86		1.6	0.16	ug/m3	1		TO 15 LL	Total/NA
Ethylbenzene	0.30	J	1.7	0.28	ug/m3	1		TO 15 LL	Total/NA
Methylene Chloride	19		6.9	2.8	ug/m3	1		TO 15 LL	Total/NA
Tetrachloroethene	2.6	J	2.7	0.24	ug/m3	1		TO 15 LL	Total/NA
Toluene	1.5	J	2.3	1.5	ug/m3	1		TO 15 LL	Total/NA
trans-1,2-Dichloroethene	2.3		1.6	0.14	ug/m3	1		TO 15 LL	Total/NA
1,1,1-Trichloroethane	670	E	2.2	1.0	ug/m3	1		TO 15 LL	Total/NA
Trichloroethene	1.3		1.1	0.16	ug/m3	1		TO 15 LL	Total/NA
Vinyl chloride	0.38	J	0.51	0.33	ug/m3	1		TO 15 LL	Total/NA
Xylenes, Total	1.3	J	3.5	0.52	ug/m3	1		TO 15 LL	Total/NA
1,1,1-Trichloroethane - DL	550		7.3	3.4	ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: BLDG A INFLUENT
Lab Sample ID: 140-19811-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	14		1.6	0.16	ppb v/v	1		TO 15 LL	Total/NA
Chlorodifluoromethane	0.87	J	1.6	0.44	ppb v/v	1		TO 15 LL	Total/NA
Chloroform	1.5	J	1.6	0.14	ppb v/v	1		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	19		1.6	0.20	ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.73	J	1.6	0.28	ppb v/v	1		TO 15 LL	Total/NA
1,1-Dichloroethane	4.0		1.6	0.14	ppb v/v	1		TO 15 LL	Total/NA
1,1-Dichloroethene	19		1.6	0.16	ppb v/v	1		TO 15 LL	Total/NA
Methylene Chloride	7.9	J	8.0	3.2	ppb v/v	1		TO 15 LL	Total/NA
Tetrachloroethene	0.21	J	1.6	0.14	ppb v/v	1		TO 15 LL	Total/NA
trans-1,2-Dichloroethene	0.43	J	1.6	0.14	ppb v/v	1		TO 15 LL	Total/NA
1,1,1-Trichloroethane	99		1.6	0.74	ppb v/v	1		TO 15 LL	Total/NA
Trichloroethene	220		0.80	0.12	ppb v/v	1		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	43		5.1	0.51	ug/m3	1		TO 15 LL	Total/NA
Chlorodifluoromethane	3.1	J	5.7	1.6	ug/m3	1		TO 15 LL	Total/NA
Chloroform	7.4	J	7.8	0.68	ug/m3	1		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	76		6.3	0.79	ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	3.6	J	7.9	1.4	ug/m3	1		TO 15 LL	Total/NA
1,1-Dichloroethane	16		6.5	0.57	ug/m3	1		TO 15 LL	Total/NA
1,1-Dichloroethene	74		6.3	0.63	ug/m3	1		TO 15 LL	Total/NA
Methylene Chloride	28	J	28	11	ug/m3	1		TO 15 LL	Total/NA
Tetrachloroethene	1.4	J	11	0.95	ug/m3	1		TO 15 LL	Total/NA
trans-1,2-Dichloroethene	1.7	J	6.3	0.56	ug/m3	1		TO 15 LL	Total/NA
1,1,1-Trichloroethane	540		8.7	4.0	ug/m3	1		TO 15 LL	Total/NA
Trichloroethene	1200		4.3	0.64	ug/m3	1		TO 15 LL	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: BLDG B EFFLUENT
Lab Sample ID: 140-19811-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	2.8		0.40	0.040	ppb v/v	1		TO 15 LL	Total/NA
Chlorodifluoromethane	5.5		0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Chloroform	0.31	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	1.3		0.40	0.050	ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.65		0.40	0.070	ppb v/v	1		TO 15 LL	Total/NA
Ethylbenzene	0.12	J	0.40	0.065	ppb v/v	1		TO 15 LL	Total/NA
Methylene Chloride	8.6		2.0	0.80	ppb v/v	1		TO 15 LL	Total/NA
Tetrachloroethene	0.037	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Toluene	1.6		0.60	0.39	ppb v/v	1		TO 15 LL	Total/NA
trans-1,2-Dichloroethene	0.16	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
1,1,1-Trichloroethane	0.41		0.40	0.19	ppb v/v	1		TO 15 LL	Total/NA
Trichloroethene	0.17	J	0.20	0.030	ppb v/v	1		TO 15 LL	Total/NA
1,2,3-Trimethylbenzene	0.30	J	0.40	0.18	ppb v/v	1		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	1.2		0.40	0.10	ppb v/v	1		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	0.66		0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Xylenes, Total	0.45	J	0.80	0.12	ppb v/v	1		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	8.9		1.3	0.13	ug/m3	1		TO 15 LL	Total/NA
Chlorodifluoromethane	19		1.4	0.39	ug/m3	1		TO 15 LL	Total/NA
Chloroform	1.5	J	2.0	0.17	ug/m3	1		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	5.3		1.6	0.20	ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	3.2		2.0	0.35	ug/m3	1		TO 15 LL	Total/NA
Ethylbenzene	0.50	J	1.7	0.28	ug/m3	1		TO 15 LL	Total/NA
Methylene Chloride	30		6.9	2.8	ug/m3	1		TO 15 LL	Total/NA
Tetrachloroethene	0.25	J	2.7	0.24	ug/m3	1		TO 15 LL	Total/NA
Toluene	6.1		2.3	1.5	ug/m3	1		TO 15 LL	Total/NA
trans-1,2-Dichloroethene	0.64	J	1.6	0.14	ug/m3	1		TO 15 LL	Total/NA
1,1,1-Trichloroethane	2.3		2.2	1.0	ug/m3	1		TO 15 LL	Total/NA
Trichloroethene	0.90	J	1.1	0.16	ug/m3	1		TO 15 LL	Total/NA
1,2,3-Trimethylbenzene	1.5	J	2.0	0.88	ug/m3	1		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	6.0		2.0	0.49	ug/m3	1		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	3.2		2.0	0.54	ug/m3	1		TO 15 LL	Total/NA
Xylenes, Total	2.0	J	3.5	0.52	ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: BLDG B MID GAC
Lab Sample ID: 140-19811-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	5.1		0.40	0.040	ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.087	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Chlorodifluoromethane	5.9		0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Chloroform	0.26	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	0.35	J	0.40	0.050	ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.59		0.40	0.070	ppb v/v	1		TO 15 LL	Total/NA
Ethylbenzene	1.1		0.40	0.065	ppb v/v	1		TO 15 LL	Total/NA
Methylene Chloride	7.5		2.0	0.80	ppb v/v	1		TO 15 LL	Total/NA
Tetrachloroethene	0.24	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Toluene	6.6		0.60	0.39	ppb v/v	1		TO 15 LL	Total/NA
trans-1,2-Dichloroethene	0.075	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Trichloroethene	4.6		0.20	0.030	ppb v/v	1		TO 15 LL	Total/NA
1,2,3-Trimethylbenzene	0.72		0.40	0.18	ppb v/v	1		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	2.0		0.40	0.10	ppb v/v	1		TO 15 LL	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: BLDG B MID GAC (Continued) — Lab Sample ID: 140-19811-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,3,5-Trimethylbenzene	4.4		0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Xylenes, Total	5.7		0.80	0.12	ppb v/v	1		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	16		1.3	0.13	ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.55	J	2.5	0.22	ug/m3	1		TO 15 LL	Total/NA
Chlorodifluoromethane	21		1.4	0.39	ug/m3	1		TO 15 LL	Total/NA
Chloroform	1.3	J	2.0	0.17	ug/m3	1		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	1.4	J	1.6	0.20	ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.9		2.0	0.35	ug/m3	1		TO 15 LL	Total/NA
Ethylbenzene	4.7		1.7	0.28	ug/m3	1		TO 15 LL	Total/NA
Methylene Chloride	26		6.9	2.8	ug/m3	1		TO 15 LL	Total/NA
Tetrachloroethene	1.6	J	2.7	0.24	ug/m3	1		TO 15 LL	Total/NA
Toluene	25		2.3	1.5	ug/m3	1		TO 15 LL	Total/NA
trans-1,2-Dichloroethene	0.30	J	1.6	0.14	ug/m3	1		TO 15 LL	Total/NA
Trichloroethene	25		1.1	0.16	ug/m3	1		TO 15 LL	Total/NA
1,2,3-Trimethylbenzene	3.5		2.0	0.88	ug/m3	1		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	10		2.0	0.49	ug/m3	1		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	22		2.0	0.54	ug/m3	1		TO 15 LL	Total/NA
Xylenes, Total	25		3.5	0.52	ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: BLDG B INFLUENT — Lab Sample ID: 140-19811-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1.7		0.40	0.040	ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.099	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Chlorodifluoromethane	6.2		0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Chloroform	0.28	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	0.40		0.40	0.050	ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.64		0.40	0.070	ppb v/v	1		TO 15 LL	Total/NA
Ethylbenzene	0.16	J	0.40	0.065	ppb v/v	1		TO 15 LL	Total/NA
Methylene Chloride	12		2.0	0.80	ppb v/v	1		TO 15 LL	Total/NA
Tetrachloroethene	0.25	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Toluene	4.5		0.60	0.39	ppb v/v	1		TO 15 LL	Total/NA
trans-1,2-Dichloroethene	0.11	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Trichloroethene	5.9		0.20	0.030	ppb v/v	1		TO 15 LL	Total/NA
1,2,3-Trimethylbenzene	0.22	J	0.40	0.18	ppb v/v	1		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	0.83		0.40	0.10	ppb v/v	1		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	0.37	J	0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Xylenes, Total	0.82		0.80	0.12	ppb v/v	1		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	5.4		1.3	0.13	ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.62	J	2.5	0.22	ug/m3	1		TO 15 LL	Total/NA
Chlorodifluoromethane	22		1.4	0.39	ug/m3	1		TO 15 LL	Total/NA
Chloroform	1.4	J	2.0	0.17	ug/m3	1		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	1.6		1.6	0.20	ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	3.2		2.0	0.35	ug/m3	1		TO 15 LL	Total/NA
Ethylbenzene	0.70	J	1.7	0.28	ug/m3	1		TO 15 LL	Total/NA
Methylene Chloride	42		6.9	2.8	ug/m3	1		TO 15 LL	Total/NA
Tetrachloroethene	1.7	J	2.7	0.24	ug/m3	1		TO 15 LL	Total/NA
Toluene	17		2.3	1.5	ug/m3	1		TO 15 LL	Total/NA
trans-1,2-Dichloroethene	0.42	J	1.6	0.14	ug/m3	1		TO 15 LL	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: BLDG B INFLUENT (Continued)
Lab Sample ID: 140-19811-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	32		1.1	0.16	ug/m3	1		TO 15 LL	Total/NA
1,2,3-Trimethylbenzene	1.1	J	2.0	0.88	ug/m3	1		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	4.1		2.0	0.49	ug/m3	1		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	1.8	J	2.0	0.54	ug/m3	1		TO 15 LL	Total/NA
Xylenes, Total	3.6		3.5	0.52	ug/m3	1		TO 15 LL	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: BLDG A EFFLUENT
Lab Sample ID: 140-19811-1

Date Collected: 07/23/20 11:04
Matrix: Air
Date Received: 07/24/20 09:45
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.16**	**J**	0.40	0.040	ppb v/v			07/31/20 20:40	1
Carbon tetrachloride	ND		0.40	0.035	ppb v/v			07/31/20 20:40	1
Chlorodifluoromethane	**0.81**		0.40	0.11	ppb v/v			07/31/20 20:40	1
Chloroform	**0.41**		0.40	0.035	ppb v/v			07/31/20 20:40	1
cis-1,2-Dichloroethene	**25**		0.40	0.050	ppb v/v			07/31/20 20:40	1
Dichlorodifluoromethane	**0.61**		0.40	0.070	ppb v/v			07/31/20 20:40	1
1,1-Dichloroethane	**5.6**		0.40	0.035	ppb v/v			07/31/20 20:40	1
1,2-Dichloroethane	ND		0.40	0.050	ppb v/v			07/31/20 20:40	1
1,1-Dichloroethene	**36**		0.40	0.040	ppb v/v			07/31/20 20:40	1
Ethylbenzene	**0.25**	**J**	0.40	0.065	ppb v/v			07/31/20 20:40	1
Methylene Chloride	**6.2**		2.0	0.80	ppb v/v			07/31/20 20:40	1
Methyl tert-butyl ether	ND		2.0	0.26	ppb v/v			07/31/20 20:40	1
Naphthalene	ND		0.20	0.20	ppb v/v			07/31/20 20:40	1
Tetrachloroethene	**0.19**	**J**	0.40	0.035	ppb v/v			07/31/20 20:40	1
Toluene	**0.40**	**J**	0.60	0.39	ppb v/v			07/31/20 20:40	1
trans-1,2-Dichloroethene	**0.53**		0.40	0.035	ppb v/v			07/31/20 20:40	1
1,2,4-Trichlorobenzene	ND		0.40	0.32	ppb v/v			07/31/20 20:40	1
1,1,1-Trichloroethane	**10**		0.40	0.19	ppb v/v			07/31/20 20:40	1
1,1,2-Trichloroethane	ND		0.40	0.035	ppb v/v			07/31/20 20:40	1
Trichloroethene	**2.6**		0.20	0.030	ppb v/v			07/31/20 20:40	1
1,2,3-Trimethylbenzene	ND		0.40	0.18	ppb v/v			07/31/20 20:40	1
1,2,4-Trimethylbenzene	ND		0.40	0.10	ppb v/v			07/31/20 20:40	1
1,3,5-Trimethylbenzene	ND		0.40	0.11	ppb v/v			07/31/20 20:40	1
Vinyl chloride	ND		0.20	0.13	ppb v/v			07/31/20 20:40	1
Xylenes, Total	**0.17**	**J**	0.80	0.12	ppb v/v			07/31/20 20:40	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.52**	**J**	1.3	0.13	ug/m3			07/31/20 20:40	1
Carbon tetrachloride	ND		2.5	0.22	ug/m3			07/31/20 20:40	1
Chlorodifluoromethane	**2.9**		1.4	0.39	ug/m3			07/31/20 20:40	1
Chloroform	**2.0**		2.0	0.17	ug/m3			07/31/20 20:40	1
cis-1,2-Dichloroethene	**97**		1.6	0.20	ug/m3			07/31/20 20:40	1
Dichlorodifluoromethane	**3.0**		2.0	0.35	ug/m3			07/31/20 20:40	1
1,1-Dichloroethane	**23**		1.6	0.14	ug/m3			07/31/20 20:40	1
1,2-Dichloroethane	ND		1.6	0.20	ug/m3			07/31/20 20:40	1
1,1-Dichloroethene	**140**		1.6	0.16	ug/m3			07/31/20 20:40	1
Ethylbenzene	**1.1**	**J**	1.7	0.28	ug/m3			07/31/20 20:40	1
Methylene Chloride	**22**		6.9	2.8	ug/m3			07/31/20 20:40	1
Methyl tert-butyl ether	ND		7.2	0.94	ug/m3			07/31/20 20:40	1
Naphthalene	ND		1.0	1.0	ug/m3			07/31/20 20:40	1
Tetrachloroethene	**1.3**	**J**	2.7	0.24	ug/m3			07/31/20 20:40	1
Toluene	**1.5**	**J**	2.3	1.5	ug/m3			07/31/20 20:40	1
trans-1,2-Dichloroethene	**2.1**		1.6	0.14	ug/m3			07/31/20 20:40	1
1,2,4-Trichlorobenzene	ND		3.0	2.4	ug/m3			07/31/20 20:40	1
1,1,1-Trichloroethane	**56**		2.2	1.0	ug/m3			07/31/20 20:40	1
1,1,2-Trichloroethane	ND		2.2	0.19	ug/m3			07/31/20 20:40	1
Trichloroethene	**14**		1.1	0.16	ug/m3			07/31/20 20:40	1
1,2,3-Trimethylbenzene	ND		2.0	0.88	ug/m3			07/31/20 20:40	1
1,2,4-Trimethylbenzene	ND		2.0	0.49	ug/m3			07/31/20 20:40	1

Client Sample ID: BLDG A EFFLUENT
Lab Sample ID: 140-19811-1

Date Collected: 07/23/20 11:04
Matrix: Air
Date Received: 07/24/20 09:45
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		2.0	0.54	ug/m3			07/31/20 20:40	1
Vinyl chloride	ND		0.51	0.33	ug/m3			07/31/20 20:40	1
Xylenes, Total	**0.74**	**J**	3.5	0.52	ug/m3			07/31/20 20:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*60 - 140*		*07/31/20 20:40*	*1*

Client Sample ID: BLDG A MID GAC
Lab Sample ID: 140-19811-2

Date Collected: 07/23/20 11:10
Matrix: Air
Date Received: 07/24/20 09:45
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**1.7**		0.40	0.040	ppb v/v			07/31/20 21:26	1
Carbon tetrachloride	ND		0.40	0.035	ppb v/v			07/31/20 21:26	1
Chlorodifluoromethane	**0.87**		0.40	0.11	ppb v/v			07/31/20 21:26	1
Chloroform	**0.76**		0.40	0.035	ppb v/v			07/31/20 21:26	1
cis-1,2-Dichloroethene	**31**		0.40	0.050	ppb v/v			07/31/20 21:26	1
Dichlorodifluoromethane	**0.73**		0.40	0.070	ppb v/v			07/31/20 21:26	1
1,1-Dichloroethane	**4.9**		0.40	0.035	ppb v/v			07/31/20 21:26	1
1,2-Dichloroethane	**0.23**	**J**	0.40	0.050	ppb v/v			07/31/20 21:26	1
1,1-Dichloroethene	**22**		0.40	0.040	ppb v/v			07/31/20 21:26	1
Ethylbenzene	**0.070**	**J**	0.40	0.065	ppb v/v			07/31/20 21:26	1
Methylene Chloride	**5.4**		2.0	0.80	ppb v/v			07/31/20 21:26	1
Methyl tert-butyl ether	ND		2.0	0.26	ppb v/v			07/31/20 21:26	1
Naphthalene	ND		0.20	0.20	ppb v/v			07/31/20 21:26	1
Tetrachloroethene	**0.39**	**J**	0.40	0.035	ppb v/v			07/31/20 21:26	1
Toluene	**0.39**	**J**	0.60	0.39	ppb v/v			07/31/20 21:26	1
trans-1,2-Dichloroethene	**0.57**		0.40	0.035	ppb v/v			07/31/20 21:26	1
1,2,4-Trichlorobenzene	ND		0.40	0.32	ppb v/v			07/31/20 21:26	1
1,1,1-Trichloroethane	**120**	**E**	0.40	0.19	ppb v/v			07/31/20 21:26	1
1,1,2-Trichloroethane	ND		0.40	0.035	ppb v/v			07/31/20 21:26	1
Trichloroethene	**0.25**		0.20	0.030	ppb v/v			07/31/20 21:26	1
1,2,3-Trimethylbenzene	ND		0.40	0.18	ppb v/v			07/31/20 21:26	1
1,2,4-Trimethylbenzene	ND		0.40	0.10	ppb v/v			07/31/20 21:26	1
1,3,5-Trimethylbenzene	ND		0.40	0.11	ppb v/v			07/31/20 21:26	1
Vinyl chloride	**0.15**	**J**	0.20	0.13	ppb v/v			07/31/20 21:26	1
Xylenes, Total	**0.30**	**J**	0.80	0.12	ppb v/v			07/31/20 21:26	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**5.4**		1.3	0.13	ug/m3			07/31/20 21:26	1
Carbon tetrachloride	ND		2.5	0.22	ug/m3			07/31/20 21:26	1
Chlorodifluoromethane	**3.1**		1.4	0.39	ug/m3			07/31/20 21:26	1
Chloroform	**3.7**		2.0	0.17	ug/m3			07/31/20 21:26	1
cis-1,2-Dichloroethene	**120**		1.6	0.20	ug/m3			07/31/20 21:26	1
Dichlorodifluoromethane	**3.6**		2.0	0.35	ug/m3			07/31/20 21:26	1
1,1-Dichloroethane	**20**		1.6	0.14	ug/m3			07/31/20 21:26	1
1,2-Dichloroethane	**0.93**	**J**	1.6	0.20	ug/m3			07/31/20 21:26	1
1,1-Dichloroethene	**86**		1.6	0.16	ug/m3			07/31/20 21:26	1
Ethylbenzene	**0.30**	**J**	1.7	0.28	ug/m3			07/31/20 21:26	1
Methylene Chloride	**19**		6.9	2.8	ug/m3			07/31/20 21:26	1
Methyl tert-butyl ether	ND		7.2	0.94	ug/m3			07/31/20 21:26	1
Naphthalene	ND		1.0	1.0	ug/m3			07/31/20 21:26	1
Tetrachloroethene	**2.6**	**J**	2.7	0.24	ug/m3			07/31/20 21:26	1
Toluene	**1.5**	**J**	2.3	1.5	ug/m3			07/31/20 21:26	1
trans-1,2-Dichloroethene	**2.3**		1.6	0.14	ug/m3			07/31/20 21:26	1
1,2,4-Trichlorobenzene	ND		3.0	2.4	ug/m3			07/31/20 21:26	1
1,1,1-Trichloroethane	**670**	**E**	2.2	1.0	ug/m3			07/31/20 21:26	1
1,1,2-Trichloroethane	ND		2.2	0.19	ug/m3			07/31/20 21:26	1
Trichloroethene	**1.3**		1.1	0.16	ug/m3			07/31/20 21:26	1
1,2,3-Trimethylbenzene	ND		2.0	0.88	ug/m3			07/31/20 21:26	1
1,2,4-Trimethylbenzene	ND		2.0	0.49	ug/m3			07/31/20 21:26	1

Client Sample ID: BLDG A MID GAC
Lab Sample ID: 140-19811-2

Date Collected: 07/23/20 11:10
Matrix: Air
Date Received: 07/24/20 09:45
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		2.0	0.54	ug/m3			07/31/20 21:26	1
Vinyl chloride	**0.38**	**J**	0.51	0.33	ug/m3			07/31/20 21:26	1
Xylenes, Total	**1.3**	**J**	3.5	0.52	ug/m3			07/31/20 21:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*60 - 140*		*07/31/20 21:26*	*1*

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**100**		1.3	0.62	ppb v/v			08/01/20 21:01	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**550**		7.3	3.4	ug/m3			08/01/20 21:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*86*		*60 - 140*		*08/01/20 21:01*	*1*

Client Sample ID: BLDG A INFLUENT
Lab Sample ID: 140-19811-3

Date Collected: 07/23/20 11:17
Matrix: Air
Date Received: 07/24/20 09:45
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**14**		1.6	0.16	ppb v/v			07/31/20 22:09	1
Carbon tetrachloride	ND		1.6	0.14	ppb v/v			07/31/20 22:09	1
Chlorodifluoromethane	**0.87**	**J**	1.6	0.44	ppb v/v			07/31/20 22:09	1
Chloroform	**1.5**	**J**	1.6	0.14	ppb v/v			07/31/20 22:09	1
cis-1,2-Dichloroethene	**19**		1.6	0.20	ppb v/v			07/31/20 22:09	1
Dichlorodifluoromethane	**0.73**	**J**	1.6	0.28	ppb v/v			07/31/20 22:09	1
1,1-Dichloroethane	**4.0**		1.6	0.14	ppb v/v			07/31/20 22:09	1
1,2-Dichloroethane	ND		1.6	0.20	ppb v/v			07/31/20 22:09	1
1,1-Dichloroethene	**19**		1.6	0.16	ppb v/v			07/31/20 22:09	1
Ethylbenzene	ND		1.6	0.26	ppb v/v			07/31/20 22:09	1
Methylene Chloride	**7.9**	**J**	8.0	3.2	ppb v/v			07/31/20 22:09	1
Methyl tert-butyl ether	ND		8.0	1.0	ppb v/v			07/31/20 22:09	1
Naphthalene	ND		0.80	0.80	ppb v/v			07/31/20 22:09	1
Tetrachloroethene	**0.21**	**J**	1.6	0.14	ppb v/v			07/31/20 22:09	1
Toluene	ND		2.4	1.6	ppb v/v			07/31/20 22:09	1
trans-1,2-Dichloroethene	**0.43**	**J**	1.6	0.14	ppb v/v			07/31/20 22:09	1
1,2,4-Trichlorobenzene	ND		1.6	1.3	ppb v/v			07/31/20 22:09	1
1,1,1-Trichloroethane	**99**		1.6	0.74	ppb v/v			07/31/20 22:09	1
1,1,2-Trichloroethane	ND		1.6	0.14	ppb v/v			07/31/20 22:09	1
Trichloroethene	**220**		0.80	0.12	ppb v/v			07/31/20 22:09	1
1,2,3-Trimethylbenzene	ND		1.6	0.72	ppb v/v			07/31/20 22:09	1
1,2,4-Trimethylbenzene	ND		1.6	0.40	ppb v/v			07/31/20 22:09	1
1,3,5-Trimethylbenzene	ND		1.6	0.44	ppb v/v			07/31/20 22:09	1
Vinyl chloride	ND		0.80	0.52	ppb v/v			07/31/20 22:09	1
Xylenes, Total	ND		3.2	0.48	ppb v/v			07/31/20 22:09	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**43**		5.1	0.51	ug/m3			07/31/20 22:09	1
Carbon tetrachloride	ND		10	0.88	ug/m3			07/31/20 22:09	1
Chlorodifluoromethane	**3.1**	**J**	5.7	1.6	ug/m3			07/31/20 22:09	1
Chloroform	**7.4**	**J**	7.8	0.68	ug/m3			07/31/20 22:09	1
cis-1,2-Dichloroethene	**76**		6.3	0.79	ug/m3			07/31/20 22:09	1
Dichlorodifluoromethane	**3.6**	**J**	7.9	1.4	ug/m3			07/31/20 22:09	1
1,1-Dichloroethane	**16**		6.5	0.57	ug/m3			07/31/20 22:09	1
1,2-Dichloroethane	ND		6.5	0.81	ug/m3			07/31/20 22:09	1
1,1-Dichloroethene	**74**		6.3	0.63	ug/m3			07/31/20 22:09	1
Ethylbenzene	ND		6.9	1.1	ug/m3			07/31/20 22:09	1
Methylene Chloride	**28**	**J**	28	11	ug/m3			07/31/20 22:09	1
Methyl tert-butyl ether	ND		29	3.7	ug/m3			07/31/20 22:09	1
Naphthalene	ND		4.2	4.2	ug/m3			07/31/20 22:09	1
Tetrachloroethene	**1.4**	**J**	11	0.95	ug/m3			07/31/20 22:09	1
Toluene	ND		9.0	5.9	ug/m3			07/31/20 22:09	1
trans-1,2-Dichloroethene	**1.7**	**J**	6.3	0.56	ug/m3			07/31/20 22:09	1
1,2,4-Trichlorobenzene	ND		12	9.5	ug/m3			07/31/20 22:09	1
1,1,1-Trichloroethane	**540**		8.7	4.0	ug/m3			07/31/20 22:09	1
1,1,2-Trichloroethane	ND		8.7	0.76	ug/m3			07/31/20 22:09	1
Trichloroethene	**1200**		4.3	0.64	ug/m3			07/31/20 22:09	1
1,2,3-Trimethylbenzene	ND		7.9	3.5	ug/m3			07/31/20 22:09	1
1,2,4-Trimethylbenzene	ND		7.9	2.0	ug/m3			07/31/20 22:09	1

Client: Tetra Tech GEO
Job ID: 140-19811-1
Project/Site: LMMRC SSDS - Middle River

Client Sample ID: BLDG A INFLUENT
Lab Sample ID: 140-19811-3

Date Collected: 07/23/20 11:17
Matrix: Air
Date Received: 07/24/20 09:45
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		7.9	2.2	ug/m3			07/31/20 22:09	1
Vinyl chloride	ND		2.0	1.3	ug/m3			07/31/20 22:09	1
Xylenes, Total	ND		14	2.1	ug/m3			07/31/20 22:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*60 - 140*		*07/31/20 22:09*	*1*

Client Sample ID: BLDG B EFFLUENT
Lab Sample ID: 140-19811-4

Date Collected: 07/23/20 13:26
Matrix: Air
Date Received: 07/24/20 09:45
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**2.8**		0.40	0.040	ppb v/v			07/31/20 22:53	1
Carbon tetrachloride	ND		0.40	0.035	ppb v/v			07/31/20 22:53	1
Chlorodifluoromethane	**5.5**		0.40	0.11	ppb v/v			07/31/20 22:53	1
Chloroform	**0.31**	**J**	0.40	0.035	ppb v/v			07/31/20 22:53	1
cis-1,2-Dichloroethene	**1.3**		0.40	0.050	ppb v/v			07/31/20 22:53	1
Dichlorodifluoromethane	**0.65**		0.40	0.070	ppb v/v			07/31/20 22:53	1
1,1-Dichloroethane	ND		0.40	0.035	ppb v/v			07/31/20 22:53	1
1,2-Dichloroethane	ND		0.40	0.050	ppb v/v			07/31/20 22:53	1
1,1-Dichloroethene	ND		0.40	0.040	ppb v/v			07/31/20 22:53	1
Ethylbenzene	**0.12**	**J**	0.40	0.065	ppb v/v			07/31/20 22:53	1
Methylene Chloride	**8.6**		2.0	0.80	ppb v/v			07/31/20 22:53	1
Methyl tert-butyl ether	ND		2.0	0.26	ppb v/v			07/31/20 22:53	1
Naphthalene	ND		0.20	0.20	ppb v/v			07/31/20 22:53	1
Tetrachloroethene	**0.037**	**J**	0.40	0.035	ppb v/v			07/31/20 22:53	1
Toluene	**1.6**		0.60	0.39	ppb v/v			07/31/20 22:53	1
trans-1,2-Dichloroethene	**0.16**	**J**	0.40	0.035	ppb v/v			07/31/20 22:53	1
1,2,4-Trichlorobenzene	ND		0.40	0.32	ppb v/v			07/31/20 22:53	1
1,1,1-Trichloroethane	**0.41**		0.40	0.19	ppb v/v			07/31/20 22:53	1
1,1,2-Trichloroethane	ND		0.40	0.035	ppb v/v			07/31/20 22:53	1
Trichloroethene	**0.17**	**J**	0.20	0.030	ppb v/v			07/31/20 22:53	1
1,2,3-Trimethylbenzene	**0.30**	**J**	0.40	0.18	ppb v/v			07/31/20 22:53	1
1,2,4-Trimethylbenzene	**1.2**		0.40	0.10	ppb v/v			07/31/20 22:53	1
1,3,5-Trimethylbenzene	**0.66**		0.40	0.11	ppb v/v			07/31/20 22:53	1
Vinyl chloride	ND		0.20	0.13	ppb v/v			07/31/20 22:53	1
Xylenes, Total	**0.45**	**J**	0.80	0.12	ppb v/v			07/31/20 22:53	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**8.9**		1.3	0.13	ug/m3			07/31/20 22:53	1
Carbon tetrachloride	ND		2.5	0.22	ug/m3			07/31/20 22:53	1
Chlorodifluoromethane	**19**		1.4	0.39	ug/m3			07/31/20 22:53	1
Chloroform	**1.5**	**J**	2.0	0.17	ug/m3			07/31/20 22:53	1
cis-1,2-Dichloroethene	**5.3**		1.6	0.20	ug/m3			07/31/20 22:53	1
Dichlorodifluoromethane	**3.2**		2.0	0.35	ug/m3			07/31/20 22:53	1
1,1-Dichloroethane	ND		1.6	0.14	ug/m3			07/31/20 22:53	1
1,2-Dichloroethane	ND		1.6	0.20	ug/m3			07/31/20 22:53	1
1,1-Dichloroethene	ND		1.6	0.16	ug/m3			07/31/20 22:53	1
Ethylbenzene	**0.50**	**J**	1.7	0.28	ug/m3			07/31/20 22:53	1
Methylene Chloride	**30**		6.9	2.8	ug/m3			07/31/20 22:53	1
Methyl tert-butyl ether	ND		7.2	0.94	ug/m3			07/31/20 22:53	1
Naphthalene	ND		1.0	1.0	ug/m3			07/31/20 22:53	1
Tetrachloroethene	**0.25**	**J**	2.7	0.24	ug/m3			07/31/20 22:53	1
Toluene	**6.1**		2.3	1.5	ug/m3			07/31/20 22:53	1
trans-1,2-Dichloroethene	**0.64**	**J**	1.6	0.14	ug/m3			07/31/20 22:53	1
1,2,4-Trichlorobenzene	ND		3.0	2.4	ug/m3			07/31/20 22:53	1
1,1,1-Trichloroethane	**2.3**		2.2	1.0	ug/m3			07/31/20 22:53	1
1,1,2-Trichloroethane	ND		2.2	0.19	ug/m3			07/31/20 22:53	1
Trichloroethene	**0.90**	**J**	1.1	0.16	ug/m3			07/31/20 22:53	1
1,2,3-Trimethylbenzene	**1.5**	**J**	2.0	0.88	ug/m3			07/31/20 22:53	1
1,2,4-Trimethylbenzene	**6.0**		2.0	0.49	ug/m3			07/31/20 22:53	1

Client Sample ID: BLDG B EFFLUENT
Lab Sample ID: 140-19811-4

Date Collected: 07/23/20 13:26
Matrix: Air
Date Received: 07/24/20 09:45
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	**3.2**		2.0	0.54	ug/m3			07/31/20 22:53	1
Vinyl chloride	ND		0.51	0.33	ug/m3			07/31/20 22:53	1
Xylenes, Total	**2.0**	**J**	3.5	0.52	ug/m3			07/31/20 22:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*60 - 140*		*07/31/20 22:53*	*1*

Client Sample ID: BLDG B MID GAC
Lab Sample ID: 140-19811-5

Date Collected: 07/23/20 13:31
Matrix: Air
Date Received: 07/24/20 09:45
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**5.1**		0.40	0.040	ppb v/v			07/31/20 23:38	1
Carbon tetrachloride	**0.087**	**J**	0.40	0.035	ppb v/v			07/31/20 23:38	1
Chlorodifluoromethane	**5.9**		0.40	0.11	ppb v/v			07/31/20 23:38	1
Chloroform	**0.26**	**J**	0.40	0.035	ppb v/v			07/31/20 23:38	1
cis-1,2-Dichloroethene	**0.35**	**J**	0.40	0.050	ppb v/v			07/31/20 23:38	1
Dichlorodifluoromethane	**0.59**		0.40	0.070	ppb v/v			07/31/20 23:38	1
1,1-Dichloroethane	ND		0.40	0.035	ppb v/v			07/31/20 23:38	1
1,2-Dichloroethane	ND		0.40	0.050	ppb v/v			07/31/20 23:38	1
1,1-Dichloroethene	ND		0.40	0.040	ppb v/v			07/31/20 23:38	1
Ethylbenzene	**1.1**		0.40	0.065	ppb v/v			07/31/20 23:38	1
Methylene Chloride	**7.5**		2.0	0.80	ppb v/v			07/31/20 23:38	1
Methyl tert-butyl ether	ND		2.0	0.26	ppb v/v			07/31/20 23:38	1
Naphthalene	ND		0.20	0.20	ppb v/v			07/31/20 23:38	1
Tetrachloroethene	**0.24**	**J**	0.40	0.035	ppb v/v			07/31/20 23:38	1
Toluene	**6.6**		0.60	0.39	ppb v/v			07/31/20 23:38	1
trans-1,2-Dichloroethene	**0.075**	**J**	0.40	0.035	ppb v/v			07/31/20 23:38	1
1,2,4-Trichlorobenzene	ND		0.40	0.32	ppb v/v			07/31/20 23:38	1
1,1,1-Trichloroethane	ND		0.40	0.19	ppb v/v			07/31/20 23:38	1
1,1,2-Trichloroethane	ND		0.40	0.035	ppb v/v			07/31/20 23:38	1
Trichloroethene	**4.6**		0.20	0.030	ppb v/v			07/31/20 23:38	1
1,2,3-Trimethylbenzene	**0.72**		0.40	0.18	ppb v/v			07/31/20 23:38	1
1,2,4-Trimethylbenzene	**2.0**		0.40	0.10	ppb v/v			07/31/20 23:38	1
1,3,5-Trimethylbenzene	**4.4**		0.40	0.11	ppb v/v			07/31/20 23:38	1
Vinyl chloride	ND		0.20	0.13	ppb v/v			07/31/20 23:38	1
Xylenes, Total	**5.7**		0.80	0.12	ppb v/v			07/31/20 23:38	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**16**		1.3	0.13	ug/m3			07/31/20 23:38	1
Carbon tetrachloride	**0.55**	**J**	2.5	0.22	ug/m3			07/31/20 23:38	1
Chlorodifluoromethane	**21**		1.4	0.39	ug/m3			07/31/20 23:38	1
Chloroform	**1.3**	**J**	2.0	0.17	ug/m3			07/31/20 23:38	1
cis-1,2-Dichloroethene	**1.4**	**J**	1.6	0.20	ug/m3			07/31/20 23:38	1
Dichlorodifluoromethane	**2.9**		2.0	0.35	ug/m3			07/31/20 23:38	1
1,1-Dichloroethane	ND		1.6	0.14	ug/m3			07/31/20 23:38	1
1,2-Dichloroethane	ND		1.6	0.20	ug/m3			07/31/20 23:38	1
1,1-Dichloroethene	ND		1.6	0.16	ug/m3			07/31/20 23:38	1
Ethylbenzene	**4.7**		1.7	0.28	ug/m3			07/31/20 23:38	1
Methylene Chloride	**26**		6.9	2.8	ug/m3			07/31/20 23:38	1
Methyl tert-butyl ether	ND		7.2	0.94	ug/m3			07/31/20 23:38	1
Naphthalene	ND		1.0	1.0	ug/m3			07/31/20 23:38	1
Tetrachloroethene	**1.6**	**J**	2.7	0.24	ug/m3			07/31/20 23:38	1
Toluene	**25**		2.3	1.5	ug/m3			07/31/20 23:38	1
trans-1,2-Dichloroethene	**0.30**	**J**	1.6	0.14	ug/m3			07/31/20 23:38	1
1,2,4-Trichlorobenzene	ND		3.0	2.4	ug/m3			07/31/20 23:38	1
1,1,1-Trichloroethane	ND		2.2	1.0	ug/m3			07/31/20 23:38	1
1,1,2-Trichloroethane	ND		2.2	0.19	ug/m3			07/31/20 23:38	1
Trichloroethene	**25**		1.1	0.16	ug/m3			07/31/20 23:38	1
1,2,3-Trimethylbenzene	**3.5**		2.0	0.88	ug/m3			07/31/20 23:38	1
1,2,4-Trimethylbenzene	**10**		2.0	0.49	ug/m3			07/31/20 23:38	1

Client Sample ID: BLDG B MID GAC
Lab Sample ID: 140-19811-5

Date Collected: 07/23/20 13:31
Matrix: Air
Date Received: 07/24/20 09:45
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	**22**		2.0	0.54	ug/m3			07/31/20 23:38	1
Vinyl chloride	ND		0.51	0.33	ug/m3			07/31/20 23:38	1
Xylenes, Total	**25**		3.5	0.52	ug/m3			07/31/20 23:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*60 - 140*		*07/31/20 23:38*	*1*

Client Sample ID: BLDG B INFLUENT
Lab Sample ID: 140-19811-6

Date Collected: 07/23/20 13:36
Matrix: Air
Date Received: 07/24/20 09:45
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**1.7**		0.40	0.040	ppb v/v			08/01/20 00:23	1
Carbon tetrachloride	**0.099**	**J**	0.40	0.035	ppb v/v			08/01/20 00:23	1
Chlorodifluoromethane	**6.2**		0.40	0.11	ppb v/v			08/01/20 00:23	1
Chloroform	**0.28**	**J**	0.40	0.035	ppb v/v			08/01/20 00:23	1
cis-1,2-Dichloroethene	**0.40**		0.40	0.050	ppb v/v			08/01/20 00:23	1
Dichlorodifluoromethane	**0.64**		0.40	0.070	ppb v/v			08/01/20 00:23	1
1,1-Dichloroethane	ND		0.40	0.035	ppb v/v			08/01/20 00:23	1
1,2-Dichloroethane	ND		0.40	0.050	ppb v/v			08/01/20 00:23	1
1,1-Dichloroethene	ND		0.40	0.040	ppb v/v			08/01/20 00:23	1
Ethylbenzene	**0.16**	**J**	0.40	0.065	ppb v/v			08/01/20 00:23	1
Methylene Chloride	**12**		2.0	0.80	ppb v/v			08/01/20 00:23	1
Methyl tert-butyl ether	ND		2.0	0.26	ppb v/v			08/01/20 00:23	1
Naphthalene	ND		0.20	0.20	ppb v/v			08/01/20 00:23	1
Tetrachloroethene	**0.25**	**J**	0.40	0.035	ppb v/v			08/01/20 00:23	1
Toluene	**4.5**		0.60	0.39	ppb v/v			08/01/20 00:23	1
trans-1,2-Dichloroethene	**0.11**	**J**	0.40	0.035	ppb v/v			08/01/20 00:23	1
1,2,4-Trichlorobenzene	ND		0.40	0.32	ppb v/v			08/01/20 00:23	1
1,1,1-Trichloroethane	ND		0.40	0.19	ppb v/v			08/01/20 00:23	1
1,1,2-Trichloroethane	ND		0.40	0.035	ppb v/v			08/01/20 00:23	1
Trichloroethene	**5.9**		0.20	0.030	ppb v/v			08/01/20 00:23	1
1,2,3-Trimethylbenzene	**0.22**	**J**	0.40	0.18	ppb v/v			08/01/20 00:23	1
1,2,4-Trimethylbenzene	**0.83**		0.40	0.10	ppb v/v			08/01/20 00:23	1
1,3,5-Trimethylbenzene	**0.37**	**J**	0.40	0.11	ppb v/v			08/01/20 00:23	1
Vinyl chloride	ND		0.20	0.13	ppb v/v			08/01/20 00:23	1
Xylenes, Total	**0.82**		0.80	0.12	ppb v/v			08/01/20 00:23	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**5.4**		1.3	0.13	ug/m3			08/01/20 00:23	1
Carbon tetrachloride	**0.62**	**J**	2.5	0.22	ug/m3			08/01/20 00:23	1
Chlorodifluoromethane	**22**		1.4	0.39	ug/m3			08/01/20 00:23	1
Chloroform	**1.4**	**J**	2.0	0.17	ug/m3			08/01/20 00:23	1
cis-1,2-Dichloroethene	**1.6**		1.6	0.20	ug/m3			08/01/20 00:23	1
Dichlorodifluoromethane	**3.2**		2.0	0.35	ug/m3			08/01/20 00:23	1
1,1-Dichloroethane	ND		1.6	0.14	ug/m3			08/01/20 00:23	1
1,2-Dichloroethane	ND		1.6	0.20	ug/m3			08/01/20 00:23	1
1,1-Dichloroethene	ND		1.6	0.16	ug/m3			08/01/20 00:23	1
Ethylbenzene	**0.70**	**J**	1.7	0.28	ug/m3			08/01/20 00:23	1
Methylene Chloride	**42**		6.9	2.8	ug/m3			08/01/20 00:23	1
Methyl tert-butyl ether	ND		7.2	0.94	ug/m3			08/01/20 00:23	1
Naphthalene	ND		1.0	1.0	ug/m3			08/01/20 00:23	1
Tetrachloroethene	**1.7**	**J**	2.7	0.24	ug/m3			08/01/20 00:23	1
Toluene	**17**		2.3	1.5	ug/m3			08/01/20 00:23	1
trans-1,2-Dichloroethene	**0.42**	**J**	1.6	0.14	ug/m3			08/01/20 00:23	1
1,2,4-Trichlorobenzene	ND		3.0	2.4	ug/m3			08/01/20 00:23	1
1,1,1-Trichloroethane	ND		2.2	1.0	ug/m3			08/01/20 00:23	1
1,1,2-Trichloroethane	ND		2.2	0.19	ug/m3			08/01/20 00:23	1
Trichloroethene	**32**		1.1	0.16	ug/m3			08/01/20 00:23	1
1,2,3-Trimethylbenzene	**1.1**	**J**	2.0	0.88	ug/m3			08/01/20 00:23	1
1,2,4-Trimethylbenzene	**4.1**		2.0	0.49	ug/m3			08/01/20 00:23	1

Client Sample ID: BLDG B INFLUENT
Lab Sample ID: 140-19811-6

Date Collected: 07/23/20 13:36
Matrix: Air
Date Received: 07/24/20 09:45
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	**1.8**	**J**	2.0	0.54	ug/m3			08/01/20 00:23	1
Vinyl chloride	ND		0.51	0.33	ug/m3			08/01/20 00:23	1
Xylenes, Total	**3.6**		3.5	0.52	ug/m3			08/01/20 00:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*60 - 140*		*08/01/20 00:23*	*1*

Default Detection Limits

Client: Tetra Tech GEO
Job ID: 140-19811-1
Project/Site: LMMRC SSDS - Middle River

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	RL	MDL	Units
1,1,1-Trichloroethane	0.080	0.037	ppb v/v
1,1,1-Trichloroethane	0.44	0.20	ug/m3
1,1,2-Trichloroethane	0.080	0.0070	ppb v/v
1,1,2-Trichloroethane	0.44	0.038	ug/m3
1,1-Dichloroethane	0.080	0.0070	ppb v/v
1,1-Dichloroethane	0.32	0.028	ug/m3
1,1-Dichloroethene	0.080	0.0080	ppb v/v
1,1-Dichloroethene	0.32	0.032	ug/m3
1,2,3-Trimethylbenzene	0.080	0.036	ppb v/v
1,2,3-Trimethylbenzene	0.39	0.18	ug/m3
1,2,4-Trichlorobenzene	0.080	0.064	ppb v/v
1,2,4-Trichlorobenzene	0.59	0.47	ug/m3
1,2,4-Trimethylbenzene	0.080	0.020	ppb v/v
1,2,4-Trimethylbenzene	0.39	0.098	ug/m3
1,2-Dichloroethane	0.080	0.010	ppb v/v
1,2-Dichloroethane	0.32	0.040	ug/m3
1,3,5-Trimethylbenzene	0.080	0.022	ppb v/v
1,3,5-Trimethylbenzene	0.39	0.11	ug/m3
Benzene	0.080	0.0080	ppb v/v
Benzene	0.26	0.026	ug/m3
Carbon tetrachloride	0.080	0.0070	ppb v/v
Carbon tetrachloride	0.50	0.044	ug/m3
Chlorodifluoromethane	0.080	0.022	ppb v/v
Chlorodifluoromethane	0.28	0.078	ug/m3
Chloroform	0.080	0.0070	ppb v/v
Chloroform	0.39	0.034	ug/m3
cis-1,2-Dichloroethene	0.080	0.010	ppb v/v
cis-1,2-Dichloroethene	0.32	0.040	ug/m3
Dichlorodifluoromethane	0.080	0.014	ppb v/v
Dichlorodifluoromethane	0.40	0.069	ug/m3
Ethylbenzene	0.080	0.013	ppb v/v
Ethylbenzene	0.35	0.056	ug/m3
Methyl tert-butyl ether	0.40	0.052	ppb v/v
Methyl tert-butyl ether	1.4	0.19	ug/m3
Methylene Chloride	0.40	0.16	ppb v/v
Methylene Chloride	1.4	0.56	ug/m3
Naphthalene	0.040	0.040	ppb v/v
Naphthalene	0.21	0.21	ug/m3
Tetrachloroethene	0.080	0.0070	ppb v/v
Tetrachloroethene	0.54	0.047	ug/m3
Toluene	0.12	0.078	ppb v/v
Toluene	0.45	0.29	ug/m3
trans-1,2-Dichloroethene	0.080	0.0070	ppb v/v
trans-1,2-Dichloroethene	0.32	0.028	ug/m3
Trichloroethene	0.040	0.0060	ppb v/v
Trichloroethene	0.21	0.032	ug/m3
Vinyl chloride	0.040	0.026	ppb v/v
Vinyl chloride	0.10	0.066	ug/m3
Xylenes, Total	0.16	0.024	ppb v/v
Xylenes, Total	0.69	0.10	ug/m3

Surrogate Summary

Client: Tetra Tech GEO
Project/Site: LMMRC SSDS - Middle River

Job ID: 140-19811-1

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Matrix: Air **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)								
Lab Sample ID	Client Sample ID	BFB (60-140)								
140-19811-1	BLDG A EFFLUENT	96								
140-19811-2	BLDG A MID GAC	97								
140-19811-2 - DL	BLDG A MID GAC	86								
140-19811-3	BLDG A INFLUENT	94								
140-19811-4	BLDG B EFFLUENT	96								
140-19811-5	BLDG B MID GAC	97								
140-19811-6	BLDG B INFLUENT	93								
LCS 140-41417/1002	Lab Control Sample	100								
LCS 140-41446/1002	Lab Control Sample	98								
MB 140-41417/4	Method Blank	91								
MB 140-41446/4	Method Blank	86								

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Lab Sample ID: MB 140-41417/4
Matrix: Air
Analysis Batch: 41417

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.080	0.0080	ppb v/v			07/31/20 12:04	1
Carbon tetrachloride	ND		0.080	0.0070	ppb v/v			07/31/20 12:04	1
Chlorodifluoromethane	ND		0.080	0.022	ppb v/v			07/31/20 12:04	1
Chloroform	ND		0.080	0.0070	ppb v/v			07/31/20 12:04	1
cis-1,2-Dichloroethene	ND		0.080	0.010	ppb v/v			07/31/20 12:04	1
Dichlorodifluoromethane	ND		0.080	0.014	ppb v/v			07/31/20 12:04	1
1,1-Dichloroethane	ND		0.080	0.0070	ppb v/v			07/31/20 12:04	1
1,2-Dichloroethane	ND		0.080	0.010	ppb v/v			07/31/20 12:04	1
1,1-Dichloroethene	ND		0.080	0.0080	ppb v/v			07/31/20 12:04	1
Ethylbenzene	ND		0.080	0.013	ppb v/v			07/31/20 12:04	1
Methylene Chloride	ND		0.40	0.16	ppb v/v			07/31/20 12:04	1
Methyl tert-butyl ether	ND		0.40	0.052	ppb v/v			07/31/20 12:04	1
Naphthalene	ND		0.040	0.040	ppb v/v			07/31/20 12:04	1
Tetrachloroethene	ND		0.080	0.0070	ppb v/v			07/31/20 12:04	1
Toluene	ND		0.12	0.078	ppb v/v			07/31/20 12:04	1
trans-1,2-Dichloroethene	ND		0.080	0.0070	ppb v/v			07/31/20 12:04	1
1,2,4-Trichlorobenzene	ND		0.080	0.064	ppb v/v			07/31/20 12:04	1
1,1,1-Trichloroethane	ND		0.080	0.037	ppb v/v			07/31/20 12:04	1
1,1,2-Trichloroethane	ND		0.080	0.0070	ppb v/v			07/31/20 12:04	1
Trichloroethene	ND		0.040	0.0060	ppb v/v			07/31/20 12:04	1
1,2,3-Trimethylbenzene	ND		0.080	0.036	ppb v/v			07/31/20 12:04	1
1,2,4-Trimethylbenzene	ND		0.080	0.020	ppb v/v			07/31/20 12:04	1
1,3,5-Trimethylbenzene	ND		0.080	0.022	ppb v/v			07/31/20 12:04	1
Vinyl chloride	ND		0.040	0.026	ppb v/v			07/31/20 12:04	1
Xylenes, Total	ND		0.16	0.024	ppb v/v			07/31/20 12:04	1

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.26	0.026	ug/m3			07/31/20 12:04	1
Carbon tetrachloride	ND		0.50	0.044	ug/m3			07/31/20 12:04	1
Chlorodifluoromethane	ND		0.28	0.078	ug/m3			07/31/20 12:04	1
Chloroform	ND		0.39	0.034	ug/m3			07/31/20 12:04	1
cis-1,2-Dichloroethene	ND		0.32	0.040	ug/m3			07/31/20 12:04	1
Dichlorodifluoromethane	ND		0.40	0.069	ug/m3			07/31/20 12:04	1
1,1-Dichloroethane	ND		0.32	0.028	ug/m3			07/31/20 12:04	1
1,2-Dichloroethane	ND		0.32	0.040	ug/m3			07/31/20 12:04	1
1,1-Dichloroethene	ND		0.32	0.032	ug/m3			07/31/20 12:04	1
Ethylbenzene	ND		0.35	0.056	ug/m3			07/31/20 12:04	1
Methylene Chloride	ND		1.4	0.56	ug/m3			07/31/20 12:04	1
Methyl tert-butyl ether	ND		1.4	0.19	ug/m3			07/31/20 12:04	1
Naphthalene	ND		0.21	0.21	ug/m3			07/31/20 12:04	1
Tetrachloroethene	ND		0.54	0.047	ug/m3			07/31/20 12:04	1
Toluene	ND		0.45	0.29	ug/m3			07/31/20 12:04	1
trans-1,2-Dichloroethene	ND		0.32	0.028	ug/m3			07/31/20 12:04	1
1,2,4-Trichlorobenzene	ND		0.59	0.47	ug/m3			07/31/20 12:04	1
1,1,1-Trichloroethane	ND		0.44	0.20	ug/m3			07/31/20 12:04	1
1,1,2-Trichloroethane	ND		0.44	0.038	ug/m3			07/31/20 12:04	1
Trichloroethene	ND		0.21	0.032	ug/m3			07/31/20 12:04	1
1,2,3-Trimethylbenzene	ND		0.39	0.18	ug/m3			07/31/20 12:04	1

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Lab Sample ID: MB 140-41417/4
Matrix: Air
Analysis Batch: 41417

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.39	0.098	ug/m3			07/31/20 12:04	1
1,3,5-Trimethylbenzene	ND		0.39	0.11	ug/m3			07/31/20 12:04	1
Vinyl chloride	ND		0.10	0.066	ug/m3			07/31/20 12:04	1
Xylenes, Total	ND		0.69	0.10	ug/m3			07/31/20 12:04	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*60 - 140*		*07/31/20 12:04*	*1*

Lab Sample ID: LCS 140-41417/1002
Matrix: Air
Analysis Batch: 41417

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	1.60	1.49		ppb v/v		93	70 - 130
Carbon tetrachloride	1.60	1.66		ppb v/v		104	70 - 130
Chlorodifluoromethane	1.60	2.05		ppb v/v		128	60 - 140
Chloroform	1.60	1.58		ppb v/v		99	70 - 130
cis-1,2-Dichloroethene	1.60	1.63		ppb v/v		102	70 - 130
Dichlorodifluoromethane	1.60	2.12		ppb v/v		133	60 - 140
1,1-Dichloroethane	1.60	1.58		ppb v/v		99	70 - 130
1,2-Dichloroethane	1.60	1.45		ppb v/v		91	70 - 130
1,1-Dichloroethene	1.60	1.68		ppb v/v		105	70 - 130
Ethylbenzene	1.60	1.52		ppb v/v		95	70 - 130
Methylene Chloride	1.60	1.78		ppb v/v		111	70 - 130
Methyl tert-butyl ether	1.60	1.65		ppb v/v		103	60 - 140
Naphthalene	1.60	1.35		ppb v/v		84	60 - 140
Tetrachloroethene	1.60	1.40		ppb v/v		87	70 - 130
Toluene	1.60	1.49		ppb v/v		93	70 - 130
trans-1,2-Dichloroethene	1.60	1.64		ppb v/v		102	70 - 130
1,2,4-Trichlorobenzene	1.60	1.27		ppb v/v		80	60 - 140
1,1,1-Trichloroethane	1.60	1.60		ppb v/v		100	70 - 130
1,1,2-Trichloroethane	1.60	1.60		ppb v/v		100	70 - 130
Trichloroethene	1.60	1.37		ppb v/v		85	70 - 130
1,2,3-Trimethylbenzene	1.60	1.84		ppb v/v		115	70 - 130
1,2,4-Trimethylbenzene	1.60	1.48		ppb v/v		92	70 - 130
1,3,5-Trimethylbenzene	1.60	1.48		ppb v/v		92	70 - 130
Vinyl chloride	1.60	2.06		ppb v/v		129	70 - 130
Xylenes, Total	4.80	4.55		ppb v/v		95	70 - 130

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	5.1	4.75		ug/m3		93	70 - 130
Carbon tetrachloride	10	10.5		ug/m3		104	70 - 130
Chlorodifluoromethane	5.7	7.23		ug/m3		128	60 - 140
Chloroform	7.8	7.71		ug/m3		99	70 - 130
cis-1,2-Dichloroethene	6.3	6.44		ug/m3		102	70 - 130
Dichlorodifluoromethane	7.9	10.5		ug/m3		133	60 - 140
1,1-Dichloroethane	6.5	6.41		ug/m3		99	70 - 130

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Lab Sample ID: LCS 140-41417/1002
Matrix: Air
Analysis Batch: 41417

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloroethane	6.5	5.88		ug/m3		91	70 - 130
1,1-Dichloroethene	6.3	6.66		ug/m3		105	70 - 130
Ethylbenzene	6.9	6.58		ug/m3		95	70 - 130
Methylene Chloride	5.6	6.18		ug/m3		111	70 - 130
Methyl tert-butyl ether	5.8	5.96		ug/m3		103	60 - 140
Naphthalene	8.4	7.05		ug/m3		84	60 - 140
Tetrachloroethene	11	9.46		ug/m3		87	70 - 130
Toluene	6.0	5.61		ug/m3		93	70 - 130
trans-1,2-Dichloroethene	6.3	6.50		ug/m3		102	70 - 130
1,2,4-Trichlorobenzene	12	9.44		ug/m3		80	60 - 140
1,1,1-Trichloroethane	8.7	8.74		ug/m3		100	70 - 130
1,1,2-Trichloroethane	8.7	8.72		ug/m3		100	70 - 130
Trichloroethene	8.6	7.35		ug/m3		85	70 - 130
1,2,3-Trimethylbenzene	7.9	9.03		ug/m3		115	70 - 130
1,2,4-Trimethylbenzene	7.9	7.27		ug/m3		92	70 - 130
1,3,5-Trimethylbenzene	7.9	7.25		ug/m3		92	70 - 130
Vinyl chloride	4.1	5.26		ug/m3		129	70 - 130
Xylenes, Total	21	19.8		ug/m3		95	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*60 - 140*

Lab Sample ID: MB 140-41446/4
Matrix: Air
Analysis Batch: 41446

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.080	0.037	ppb v/v			08/01/20 12:00	1

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.44	0.20	ug/m3			08/01/20 12:00	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*86*		*60 - 140*		*08/01/20 12:00*	*1*

Lab Sample ID: LCS 140-41446/1002
Matrix: Air
Analysis Batch: 41446

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	1.60	1.68		ppb v/v		105	70 - 130

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	8.7	9.17		ug/m3		105	70 - 130

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Lab Sample ID: LCS 140-41446/1002
Matrix: Air
Analysis Batch: 41446

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	*98*		*60 - 140*

QC Association Summary

Client: Tetra Tech GEO
Job ID: 140-19811-1
Project/Site: LMMRC SSDS - Middle River

Air - GC/MS VOA

Analysis Batch: 41417

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-19811-1	BLDG A EFFLUENT	Total/NA	Air	TO 15 LL	
140-19811-2	BLDG A MID GAC	Total/NA	Air	TO 15 LL	
140-19811-3	BLDG A INFLUENT	Total/NA	Air	TO 15 LL	
140-19811-4	BLDG B EFFLUENT	Total/NA	Air	TO 15 LL	
140-19811-5	BLDG B MID GAC	Total/NA	Air	TO 15 LL	
140-19811-6	BLDG B INFLUENT	Total/NA	Air	TO 15 LL	
MB 140-41417/4	Method Blank	Total/NA	Air	TO 15 LL	
LCS 140-41417/1002	Lab Control Sample	Total/NA	Air	TO 15 LL	

Analysis Batch: 41446

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-19811-2 - DL	BLDG A MID GAC	Total/NA	Air	TO 15 LL	
MB 140-41446/4	Method Blank	Total/NA	Air	TO 15 LL	
LCS 140-41446/1002	Lab Control Sample	Total/NA	Air	TO 15 LL	

Client Sample ID: BLDG A EFFLUENT
Lab Sample ID: 140-19811-1
Date Collected: 07/23/20 11:04
Matrix: Air
Date Received: 07/24/20 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	100 mL	500 mL	41417	07/31/20 20:40	S1K	TAL KNX
	Instrument ID: MG									

Client Sample ID: BLDG A MID GAC
Lab Sample ID: 140-19811-2
Date Collected: 07/23/20 11:10
Matrix: Air
Date Received: 07/24/20 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	100 mL	500 mL	41417	07/31/20 21:26	S1K	TAL KNX
	Instrument ID: MG									
Total/NA	Analysis	TO 15 LL	DL	1	30 mL	500 mL	41446	08/01/20 21:01	S1K	TAL KNX
	Instrument ID: MR									

Client Sample ID: BLDG A INFLUENT
Lab Sample ID: 140-19811-3
Date Collected: 07/23/20 11:17
Matrix: Air
Date Received: 07/24/20 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	25 mL	500 mL	41417	07/31/20 22:09	S1K	TAL KNX
	Instrument ID: MG									

Client Sample ID: BLDG B EFFLUENT
Lab Sample ID: 140-19811-4
Date Collected: 07/23/20 13:26
Matrix: Air
Date Received: 07/24/20 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	100 mL	500 mL	41417	07/31/20 22:53	S1K	TAL KNX
	Instrument ID: MG									

Client Sample ID: BLDG B MID GAC
Lab Sample ID: 140-19811-5
Date Collected: 07/23/20 13:31
Matrix: Air
Date Received: 07/24/20 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	100 mL	500 mL	41417	07/31/20 23:38	S1K	TAL KNX
	Instrument ID: MG									

Client Sample ID: BLDG B INFLUENT
Lab Sample ID: 140-19811-6
Date Collected: 07/23/20 13:36
Matrix: Air
Date Received: 07/24/20 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	100 mL	500 mL	41417	08/01/20 00:23	S1K	TAL KNX
	Instrument ID: MG									

Lab Chronicle

Client: Tetra Tech GEO
Job ID: 140-19811-1
Project/Site: LMMRC SSDS - Middle River

Client Sample ID: Method Blank
Lab Sample ID: MB 140-41417/4
Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	500 mL	500 mL	41417	07/31/20 12:04	S1K	TAL KNX
	Instrument ID: MG									

Client Sample ID: Method Blank
Lab Sample ID: MB 140-41446/4
Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	500 mL	500 mL	41446	08/01/20 12:00	S1K	TAL KNX
	Instrument ID: MR									

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 140-41417/1002
Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	500 mL	500 mL	41417	07/31/20 09:06	S1K	TAL KNX
	Instrument ID: MG									

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 140-41446/1002
Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	500 mL	500 mL	41446	08/01/20 08:35	S1K	TAL KNX
	Instrument ID: MR									

Laboratory References:
TAL KNX = Eurofins TestAmerica, Knoxville, 5815 Middlebrook Pike, Knoxville, TN 37921, TEL (865)291-3000

Method Summary

Client: Tetra Tech GEO
Job ID: 140-19811-1
Project/Site: LMMRC SSDS - Middle River

Method	Method Description	Protocol	Laboratory
TO 15 LL	Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)	EPA	TAL KNX

Protocol References:

EPA = US Environmental Protection Agency

Laboratory References:

TAL KNX = Eurofins TestAmerica, Knoxville, 5815 Middlebrook Pike, Knoxville, TN 37921, TEL (865)291-3000

Sample Summary

Client: Tetra Tech GEO
Project/Site: LMMRC SSDS - Middle River

Job ID: 140-19811-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
140-19811-1	BLDG A EFFLUENT	Air	07/23/20 11:04	07/24/20 09:45	Air Canister (1-Liter) #34000634
140-19811-2	BLDG A MID GAC	Air	07/23/20 11:10	07/24/20 09:45	Air Canister (1-Liter) #34000669
140-19811-3	BLDG A INFLUENT	Air	07/23/20 11:17	07/24/20 09:45	Air Canister (1-Liter) #34001796
140-19811-4	BLDG B EFFLUENT	Air	07/23/20 13:26	07/24/20 09:45	Air Canister (1-Liter) #34000313
140-19811-5	BLDG B MID GAC	Air	07/23/20 13:31	07/24/20 09:45	Air Canister (1-Liter) #7567
140-19811-6	BLDG B INFLUENT	Air	07/23/20 13:36	07/24/20 09:45	Air Canister (1-Liter) #34002459

Method TO15 Low Level

Volatile Organic Compounds - Low level (GC/MS) by Method TO 15

FORM II
AIR - GC/MS VOA SURROGATE RECOVERY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19811-1

SDG No.:

Matrix: Air Level: Low

GC Column (1): RTX-5 ID: 0.32(mm)

Client Sample ID	Lab Sample ID	BFB #
BLDG A EFFLUENT	140-19811-1	96
BLDG A MID GAC	140-19811-2	97
BLDG A MID GAC DL	140-19811-2 DL	86
BLDG A INFLUENT	140-19811-3	94
BLDG B EFFLUENT	140-19811-4	96
BLDG B MID GAC	140-19811-5	97
BLDG B INFLUENT	140-19811-6	93
	MB 140-41417/4	91
	MB 140-41446/4	86
	LCS 140-41417/1002	100
	LCS 140-41446/1002	98

	QC LIMITS
BFB = 4-Bromofluorobenzene (Surr)	60-140

Column to be used to flag recovery values

FORM II TO 15 LL

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19811-1

SDG No.:

Matrix: Air Level: Low Lab File ID: GCCVG31-LCS.d

Lab ID: LCS 140-41417/1002 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Benzene	1.60	1.49	93	70-130	
Carbon tetrachloride	1.60	1.66	104	70-130	
Chlorodifluoromethane	1.60	2.05	128	60-140	
Chloroform	1.60	1.58	99	70-130	
cis-1,2-Dichloroethene	1.60	1.63	102	70-130	
Dichlorodifluoromethane	1.60	2.12	133	60-140	
1,1-Dichloroethane	1.60	1.58	99	70-130	
1,2-Dichloroethane	1.60	1.45	91	70-130	
1,1-Dichloroethene	1.60	1.68	105	70-130	
Ethylbenzene	1.60	1.52	95	70-130	
Methylene Chloride	1.60	1.78	111	70-130	
Methyl tert-butyl ether	1.60	1.65	103	60-140	
Naphthalene	1.60	1.35	84	60-140	
Tetrachloroethene	1.60	1.40	87	70-130	
Toluene	1.60	1.49	93	70-130	
trans-1,2-Dichloroethene	1.60	1.64	102	70-130	
1,2,4-Trichlorobenzene	1.60	1.27	80	60-140	
1,1,1-Trichloroethane	1.60	1.60	100	70-130	
1,1,2-Trichloroethane	1.60	1.60	100	70-130	
Trichloroethene	1.60	1.37	85	70-130	
1,2,3-Trimethylbenzene	1.60	1.84	115	70-130	
1,2,4-Trimethylbenzene	1.60	1.48	92	70-130	
1,3,5-Trimethylbenzene	1.60	1.48	92	70-130	
Vinyl chloride	1.60	2.06	129	70-130	
Xylenes, Total	4.80	4.55	95	70-130	

Column to be used to flag recovery and RPD values

FORM III TO 15 LL

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19811-1

SDG No.:

Matrix: Air Level: Low Lab File ID: RCCVH01-LCS.d

Lab ID: LCS 140-41446/1002 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	1.60	1.68	105	70-130	

Column to be used to flag recovery and RPD values

FORM III TO 15 LL

FORM IV
AIR - GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19811-1

SDG No.:

Lab File ID: G500BG31.D Lab Sample ID: MB 140-41417/4

Matrix: Air Heated Purge:(Y/N) N

Instrument ID: MG Date Analyzed: 07/31/2020 12:04

GC Column: RTX-5 ID: 0.32(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 140-41417/1002	GCCVG31-LCS.d	07/31/2020 09:06
BLDG A EFFLUENT	140-19811-1	GG31P111.D	07/31/2020 20:40
BLDG A MID GAC	140-19811-2	GG31P112.D	07/31/2020 21:26
BLDG A INFLUENT	140-19811-3	GG31P113.D	07/31/2020 22:09
BLDG B EFFLUENT	140-19811-4	GG31P114.D	07/31/2020 22:53
BLDG B MID GAC	140-19811-5	GG31P115.D	07/31/2020 23:38
BLDG B INFLUENT	140-19811-6	GG31P116.D	08/01/2020 00:23

FORM IV
AIR - GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19811-1

SDG No.:

Lab File ID: R500BH01.D Lab Sample ID: MB 140-41446/4

Matrix: Air Heated Purge:(Y/N) N

Instrument ID: MR Date Analyzed: 08/01/2020 12:00

GC Column: RTX-5 ID: 0.32(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 140-41446/1002	RCCVH01-LCS.d	08/01/2020 08:35
BLDG A MID GAC DL	140-19811-2 DL	RH01P109.D	08/01/2020 21:01

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19811-1

SDG No.:

Lab File ID: GBFBG15IC.D BFB Injection Date: 07/15/2020

Instrument ID: MG BFB Injection Time: 12:19

Analysis Batch No.: 41058

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	18.8	
75	30.0 - 60.0 % of mass 95	57.3	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.8	
173	Less than 2.0 % of mass 174	0.3	(0.5) 1
174	50.0 - 120.00 % of mass 95	67.4	
175	5.0 - 9.0 % of mass 174	4.6	(6.9) 1
176	95.0 - 101.0 % of mass 174	65.8	(97.6) 1
177	5.0 - 9.0 % of mass 176	4.2	(6.4) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 140-41058/21	GG15IC10.D	07/15/2020	12:53
	IC 140-41058/4	GG15IC09.D	07/15/2020	14:28
	IC 140-41058/6	GG15IC08.D	07/15/2020	15:55
	IC 140-41058/8	GG15IC01.D	07/15/2020	17:25
	IC 140-41058/9	GG15IC02.D	07/15/2020	18:11
	IC 140-41058/10	GG15IC03.D	07/15/2020	18:58
	IC 140-41058/11	GG15IC04.D	07/15/2020	19:47
	IC 140-41058/12	GG15IC05.D	07/15/2020	20:32
	IC 140-41058/13	GG15IC06.D	07/15/2020	21:18
	ICIS 140-41058/14	GG15IC07.D	07/15/2020	22:02
	ICV 140-41058/16	GG15ICV.D	07/16/2020	0:19

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19811-1

SDG No.:

Lab File ID: GBFBG31.D BFB Injection Date: 07/31/2020

Instrument ID: MG BFB Injection Time: 08:31

Analysis Batch No.: 41417

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	18.0	
75	30.0 - 60.0 % of mass 95	56.6	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.8	
173	Less than 2.0 % of mass 174	0.3	(0.5) 1
174	50.0 - 120.00 % of mass 95	64.6	
175	5.0 - 9.0 % of mass 174	4.4	(6.8) 1
176	95.0 - 101.0 % of mass 174	62.0	(95.9) 1
177	5.0 - 9.0 % of mass 176	4.0	(6.4) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 140-41417/2	GCCVG31.D	07/31/2020	9:06
	LCS 140-41417/1002	GCCVG31-LCS.d	07/31/2020	9:06
	MB 140-41417/4	G500BG31.D	07/31/2020	12:04
BLDG A EFFLUENT	140-19811-1	GG31P111.D	07/31/2020	20:40
BLDG A MID GAC	140-19811-2	GG31P112.D	07/31/2020	21:26
BLDG A INFLUENT	140-19811-3	GG31P113.D	07/31/2020	22:09
BLDG B EFFLUENT	140-19811-4	GG31P114.D	07/31/2020	22:53
BLDG B MID GAC	140-19811-5	GG31P115.D	07/31/2020	23:38
BLDG B INFLUENT	140-19811-6	GG31P116.D	08/01/2020	0:23

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19811-1

SDG No.:

Lab File ID: RG27BLKZ.D BFB Injection Date: 07/27/2020

Instrument ID: MR BFB Injection Time: 16:54

Analysis Batch No.: 41306

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE		
50	15.0 - 40.0 % of mass 95	34.9		
75	30.0 - 60.0 % of mass 95	49.8		
95	Base Peak, 100% relative abundance	100.0		
96	5.0 - 9.0 % of mass 95	6.7		
173	Less than 2.0 % of mass 174	0.7	(0.7) 1	
174	50.0 - 120.00 % of mass 95	101.7		
175	5.0 - 9.0 % of mass 174	7.3	(7.1) 1	
176	95.0 - 101.0 % of mass 174	96.2	(94.6) 1	*
177	5.0 - 9.0 % of mass 176	6.7	(6.9) 2	

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 140-41306/3	RG27IC10.D	07/27/2020	17:38
	IC 140-41306/7	RG27IC08.D	07/27/2020	21:45
	IC 140-41306/9	RG27IC01.D	07/27/2020	23:58
	IC 140-41306/10	RG27IC02.D	07/28/2020	1:02
	IC 140-41306/11	RG27IC03.D	07/28/2020	2:07
	IC 140-41306/12	RG27IC04.D	07/28/2020	3:11
	IC 140-41306/13	RG27IC05.D	07/28/2020	4:17
	IC 140-41306/14	RG27IC06.D	07/28/2020	5:24
	ICIS 140-41306/15	RG27IC07.D	07/28/2020	6:29
	IC 140-41306/23	RG27IC09R.D	07/28/2020	9:59
	ICV 140-41306/18	RG27LCS.D	07/28/2020	12:30

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19811-1

SDG No.:

Lab File ID: RDNUH01.D BFB Injection Date: 08/01/2020

Instrument ID: MR BFB Injection Time: 08:07

Analysis Batch No.: 41446

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE		
50	15.0 - 40.0 % of mass 95	39.9		
75	30.0 - 60.0 % of mass 95	53.5		
95	Base Peak, 100% relative abundance	100.0		
96	5.0 - 9.0 % of mass 95	6.6		
173	Less than 2.0 % of mass 174	0.5	(0.6) 1	
174	50.0 - 120.00 % of mass 95	87.9		
175	5.0 - 9.0 % of mass 174	6.2	(7.1) 1	
176	95.0 - 101.0 % of mass 174	82.0	(93.2) 1	*
177	5.0 - 9.0 % of mass 176	4.7	(5.7) 2	

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 140-41446/2	RCCVH01.D	08/01/2020	8:35
	LCS 140-41446/1002	RCCVH01-LCS.d	08/01/2020	8:35
	MB 140-41446/4	R500BH01.D	08/01/2020	12:00
BLDG A MID GAC DL	140-19811-2 DL	RH01P109.D	08/01/2020	21:01

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19811-1

SDG No.:

Sample No.: ICIS 140-41058/14 Date Analyzed: 07/15/2020 22:02

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm)

Lab File ID (Standard): GG15IC07.D Heated Purge: (Y/N) N

Calibration ID: 2525

		CBM		DFBZ		CBZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		179107	8.84	1585235	11.02	1411654	15.75
UPPER LIMIT		250750	9.17	2219329	11.35	1976316	16.08
LOWER LIMIT		107464	8.51	951141	10.69	846992	15.42
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 140-41058/16		205175	8.84	1591539	11.02	1621760	15.75

CBM = Chlorobromomethane (IS)
DFBZ = 1,4-Difluorobenzene
CBZd5 = Chlorobenzene-d5 (IS)

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO 15 LL

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19811-1

SDG No.:

Sample No.: CCVIS 140-41417/2 Date Analyzed: 07/31/2020 09:06

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm)

Lab File ID (Standard): GCCVG31.D Heated Purge: (Y/N) N

Calibration ID: 2525

		CBM		DFBZ		CBZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		164300	8.84	1425277	11.02	1220392	15.75
UPPER LIMIT		230020	9.17	1995388	11.35	1708549	16.08
LOWER LIMIT		98580	8.51	855166	10.69	732235	15.42
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 140-41417/1002		164300	8.84	1425277	11.02	1220392	15.75
MB 140-41417/4		153574	8.83	1333062	11.02	1099478	15.75
140-19811-1	BLDG A EFFLUENT	134039	8.85	1139503	11.03	1010816	15.75
140-19811-2	BLDG A MID GAC	134719	8.85	1173817	11.03	1076316	15.75
140-19811-3	BLDG A INFLUENT	139702	8.83	1197911	11.02	1052423	15.75
140-19811-4	BLDG B EFFLUENT	134263	8.84	1224160	11.02	1077468	15.75
140-19811-5	BLDG B MID GAC	145180	8.83	1275251	11.02	1082498	15.75
140-19811-6	BLDG B INFLUENT	169330	8.84	1396294	11.02	1142043	15.75

CBM = Chlorobromomethane (IS)
DFBZ = 1,4-Difluorobenzene
CBZd5 = Chlorobenzene-d5 (IS)

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO 15 LL

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19811-1

SDG No.:

Sample No.: ICIS 140-41306/15 Date Analyzed: 07/28/2020 06:29

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm)

Lab File ID (Standard): RG27IC07.D Heated Purge: (Y/N) N

Calibration ID: 2540

		CBM		DFBZ		CBZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		195356	8.30	1601225	10.53	1324871	15.37
UPPER LIMIT		273498	8.63	2241715	10.86	1854819	15.70
LOWER LIMIT		117214	7.97	960735	10.20	794923	15.04
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 140-41306/18		178764	8.30	1519481	10.54	1266782	15.37

CBM = Chlorobromomethane (IS)
DFBZ = 1,4-Difluorobenzene
CBZd5 = Chlorobenzene-d5 (IS)

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO 15 LL

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19811-1

SDG No.:

Sample No.: CCVIS 140-41446/2 Date Analyzed: 08/01/2020 08:35

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm)

Lab File ID (Standard): RCCVH01.D Heated Purge: (Y/N) N

Calibration ID: 2540

		CBM		DFBZ		CBZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		117996	8.32	979726	10.54	833270	15.38
UPPER LIMIT		165194	8.65	1371616	10.87	1166578	15.71
LOWER LIMIT		70798	7.99	587836	10.21	499962	15.05
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 140-41446/1002		117996	8.32	979726	10.54	833270	15.38
MB 140-41446/4		110471	8.31	958992	10.54	796184	15.38
140-19811-2 DL	BLDG A MID GAC DL	84379	8.30	744618	10.53	605400	15.37

CBM = Chlorobromomethane (IS)
DFBZ = 1,4-Difluorobenzene
CBZd5 = Chlorobenzene-d5 (IS)

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO 15 LL

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19811-1

SDG No.:

Client Sample ID: BLDG A EFFLUENT Lab Sample ID: 140-19811-1

Matrix: Air Lab File ID: GG31P111.D

Analysis Method: TO 15 LL Date Collected: 07/23/2020 11:04

Sample wt/vol: 100(mL) Date Analyzed: 07/31/2020 20:40

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 41417 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.16	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	ND		0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	0.81		0.40	0.11
67-66-3	Chloroform	119.38	0.41		0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	25		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.61		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	5.6		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	36		0.40	0.040
100-41-4	Ethylbenzene	106.17	0.25	J	0.40	0.065
75-09-2	Methylene Chloride	84.93	6.2		2.0	0.80
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	0.19	J	0.40	0.035
108-88-3	Toluene	92.14	0.40	J	0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	0.53		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	10		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	2.6		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.17	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	96		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19811-1

SDG No.:

Client Sample ID: BLDG A EFFLUENT Lab Sample ID: 140-19811-1

Matrix: Air Lab File ID: GG31P111.D

Analysis Method: TO 15 LL Date Collected: 07/23/2020 11:04

Sample wt/vol: 100(mL) Date Analyzed: 07/31/2020 20:40

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 41417 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.52	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	ND		2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	2.9		1.4	0.39
67-66-3	Chloroform	119.38	2.0		2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	97		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	3.0		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	23		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	140		1.6	0.16
100-41-4	Ethylbenzene	106.17	1.1	J	1.7	0.28
75-09-2	Methylene Chloride	84.93	22		6.9	2.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	1.3	J	2.7	0.24
108-88-3	Toluene	92.14	1.5	J	2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	2.1		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	56		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	14		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	0.74	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	96		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GG31P111.D
Lims ID: 140-19811-A-1
Client ID: BLDG A EFFLUENT
Sample Type: Client
Inject. Date: 31-Jul-2020 20:40:30 ALS Bottle#: 11 Worklist Smp#: 15
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016161-015
Misc. Info.: 140-19811-a-1
Operator ID: HMT Instrument ID: MG

Method: \\chromfs\Knoxville\ChromData\MG\20200729-16161.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 03-Aug-2020 13:23:15 Calib Date: 15-Jul-2020 22:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1011

First Level Reviewer: khachitpongpanits Date: 03-Aug-2020 13:23:15

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.849	8.838	0.011	92	134039	4.00	
* 2 1,4-Difluorobenzene	114	11.028	11.017	0.011	97	1139503	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.751	15.746	0.005	95	1010816	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.391	17.391	0.000	74	788528	3.84	
6 Chlorodifluoromethane	51	3.721	3.710	0.011	46	22025	0.1616	
8 Dichlorodifluoromethane	85	3.786	3.767	0.016	100	29857	0.1222	
27 1,1-Dichloroethene	96	5.969	5.944	0.021	93	446540	7.12	
31 Methylene Chloride	84	6.315	6.293	0.022	98	127777	1.24	
34 trans-1,2-Dichloroethene	96	7.123	7.097	0.021	89	7398	0.1057	
37 1,1-Dichloroethane	63	7.544	7.518	0.021	99	173274	1.12	
42 cis-1,2-Dichloroethene	96	8.520	8.499	0.016	98	349254	4.91	
44 Chloroform	83	8.865	8.843	0.016	95	14546	0.0817	
47 1,1,1-Trichloroethane	97	9.890	9.874	0.016	96	392302	2.04	
50 Benzene	78	10.488	10.478	0.010	96	7684	0.0327	
58 Trichloroethene	130	11.734	11.734	0.000	85	41713	0.5240	
67 Toluene	91	13.783	13.778	0.005	93	17638	0.0804	
73 Tetrachloroethene	129	14.915	14.921	-0.006	81	2849	0.0380	
78 Ethylbenzene	91	16.086	16.086	0.000	98	14607	0.0507	
79 m-Xylene & p-Xylene	91	16.242	16.247	-0.005	98	7740	0.0338	
S 124 Xylenes, Total	100				0		0.0338	

Reagents:

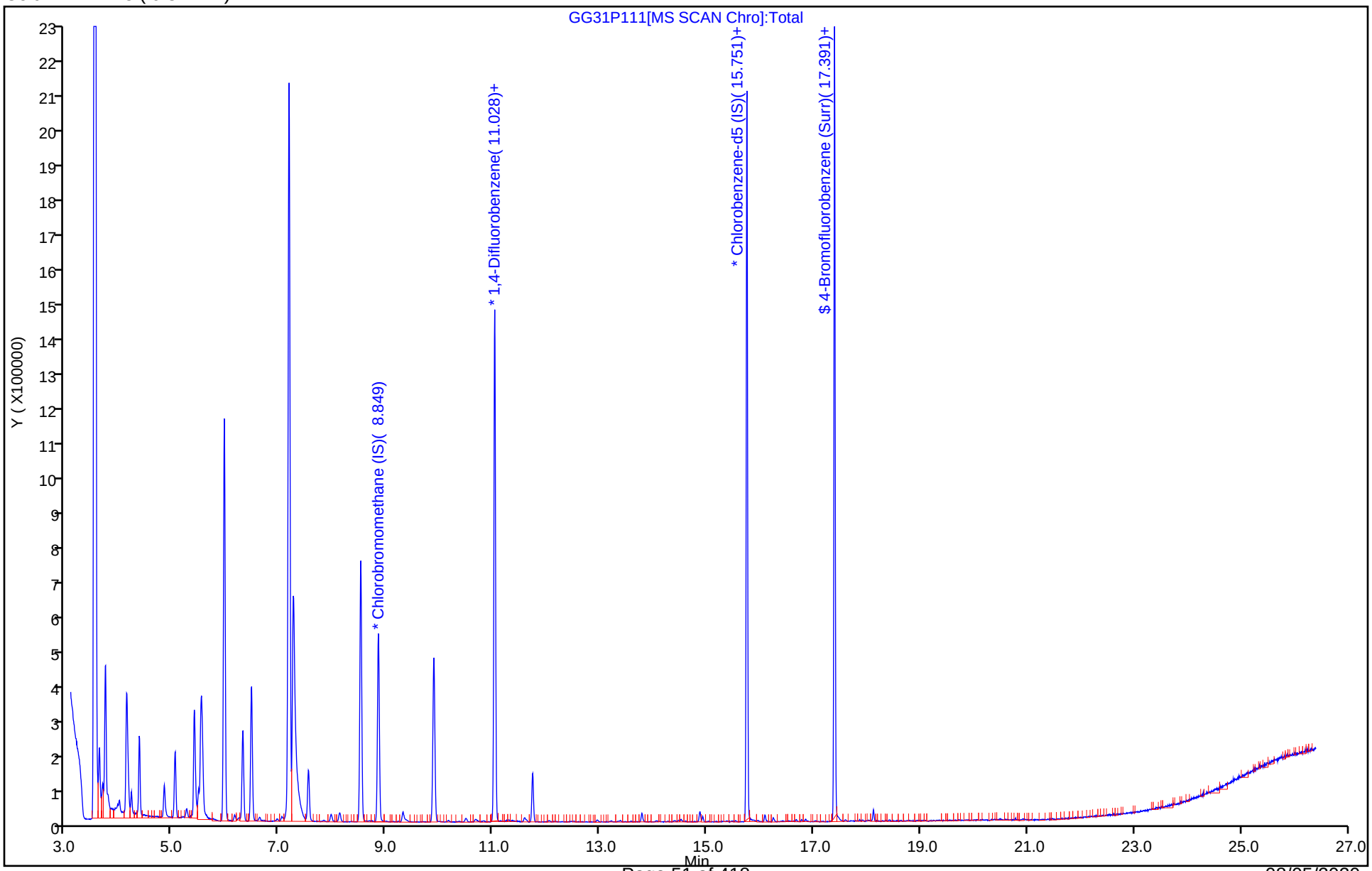
40MXISSURP_00004 Amount Added: 40.00 Units: mL Run Reagent

Report Date: 03-Aug-2020 13:23:15 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GG31P111.D				
Injection Date:	31-Jul-2020 20:40:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	140-19811-A-1	Lab Sample ID:	140-19811-1	Worklist Smp#:	15
Client ID:	BLDG A EFFLUENT				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GG31P111.D				
Lims ID:	140-19811-A-1				
Client ID:	BLDG A EFFLUENT				
Sample Type:	Client				
Inject. Date:	31-Jul-2020 20:40:30	ALS Bottle#:	11	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016161-015				
Misc. Info.:	140-19811-a-1				
Operator ID:	HMT	Instrument ID:	MG		
Method:	\\chromfs\Knoxville\ChromData\MG\20200729-16161.b\MG_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	03-Aug-2020 13:23:15	Calib Date:	15-Jul-2020 22:02:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1011				

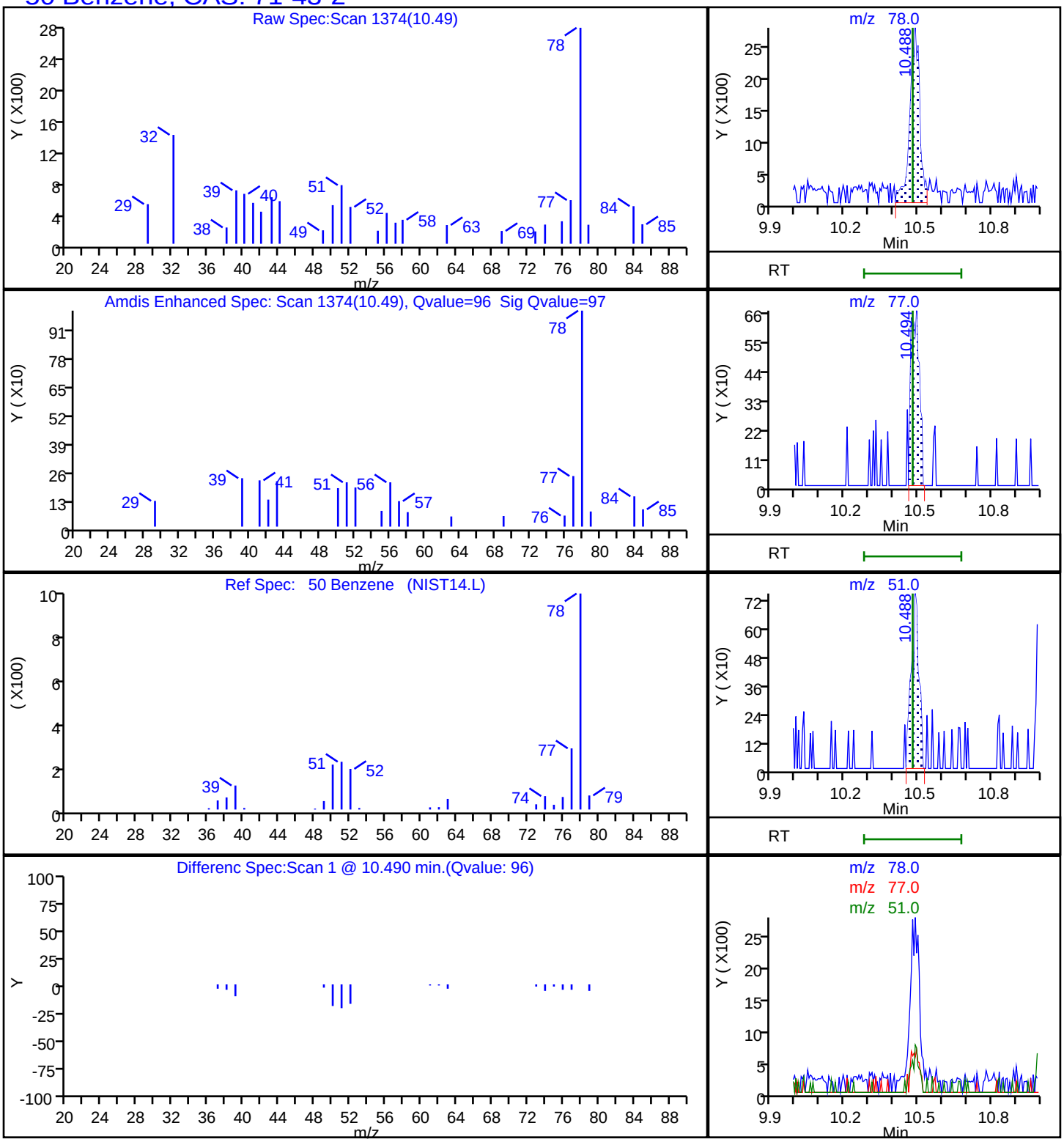
First Level Reviewer: khachitpongpanits Date: 03-Aug-2020 13:23:15

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.00	3.84	95.95

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GG31P111.D				
Injection Date:	31-Jul-2020 20:40:30	Instrument ID:	MG		
Lims ID:	140-19811-A-1	Lab Sample ID:	140-19811-1		
Client ID:	BLDG A EFFLUENT				
Operator ID:	HMT	ALS Bottle#:	11	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

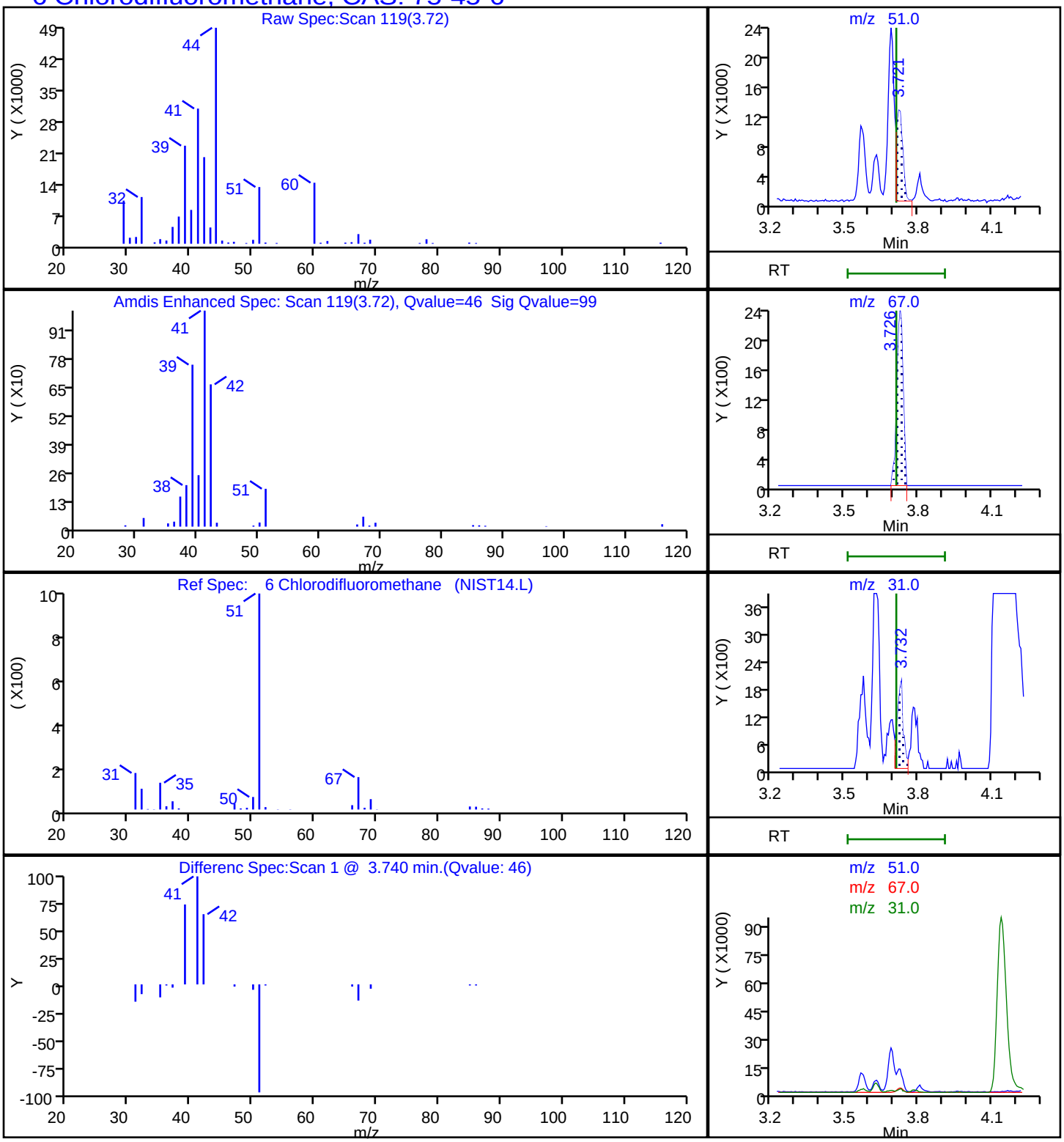
50 Benzene, CAS: 71-43-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GG31P111.D				
Injection Date:	31-Jul-2020 20:40:30	Instrument ID:	MG		
Lims ID:	140-19811-A-1	Lab Sample ID:	140-19811-1		
Client ID:	BLDG A EFFLUENT				
Operator ID:	HMT	ALS Bottle#:	11	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

6 Chlorodifluoromethane, CAS: 75-45-6



Eurofins TestAmerica, Knoxville

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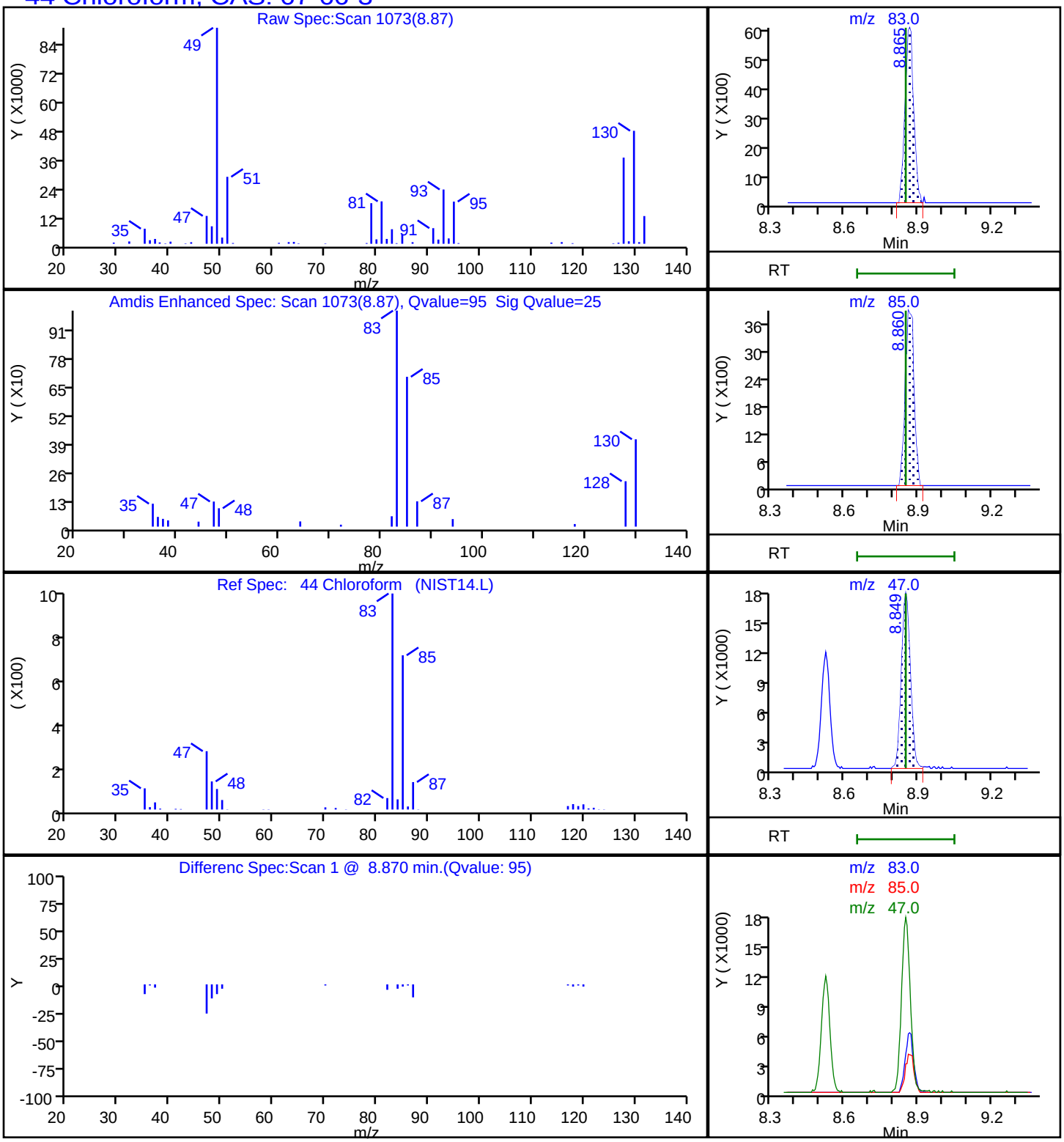
Injection Date:	31-Jul-2020 20:40:30	Instrument ID:	MG		
Lims ID:	140-19811-A-1	Lab Sample ID:	140-19811-1		
Client ID:	BLDG A EFFLUENT				
Operator ID:	HMT	ALS Bottle#:	11	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

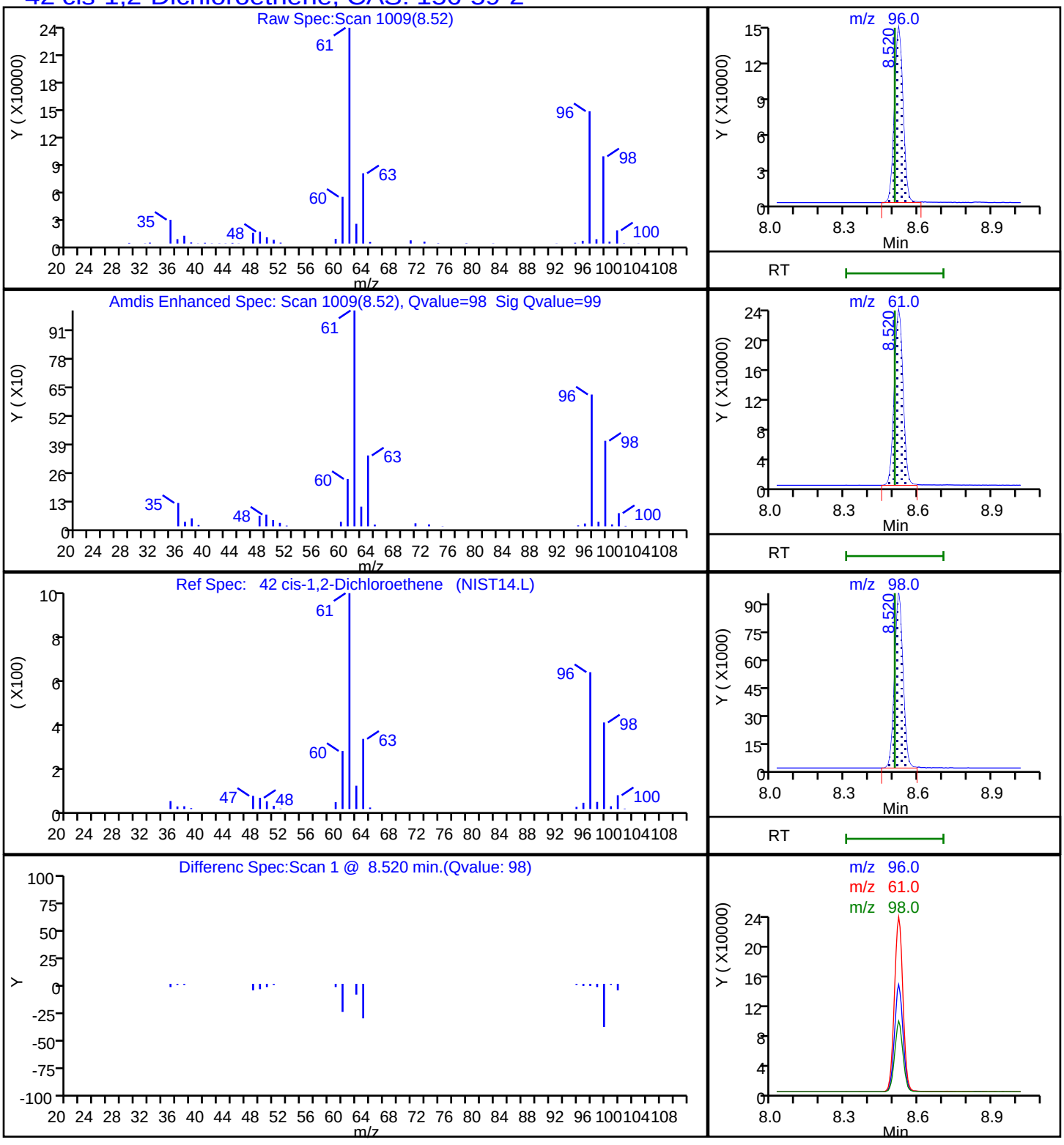
44 Chloroform, CAS: 67-66-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GG31P111.D		
Injection Date:	31-Jul-2020 20:40:30	Instrument ID:	MG
Lims ID:	140-19811-A-1	Lab Sample ID:	140-19811-1
Client ID:	BLDG A EFFLUENT		
Operator ID:	HMT	ALS Bottle#:	11 Worklist Smp#: 15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

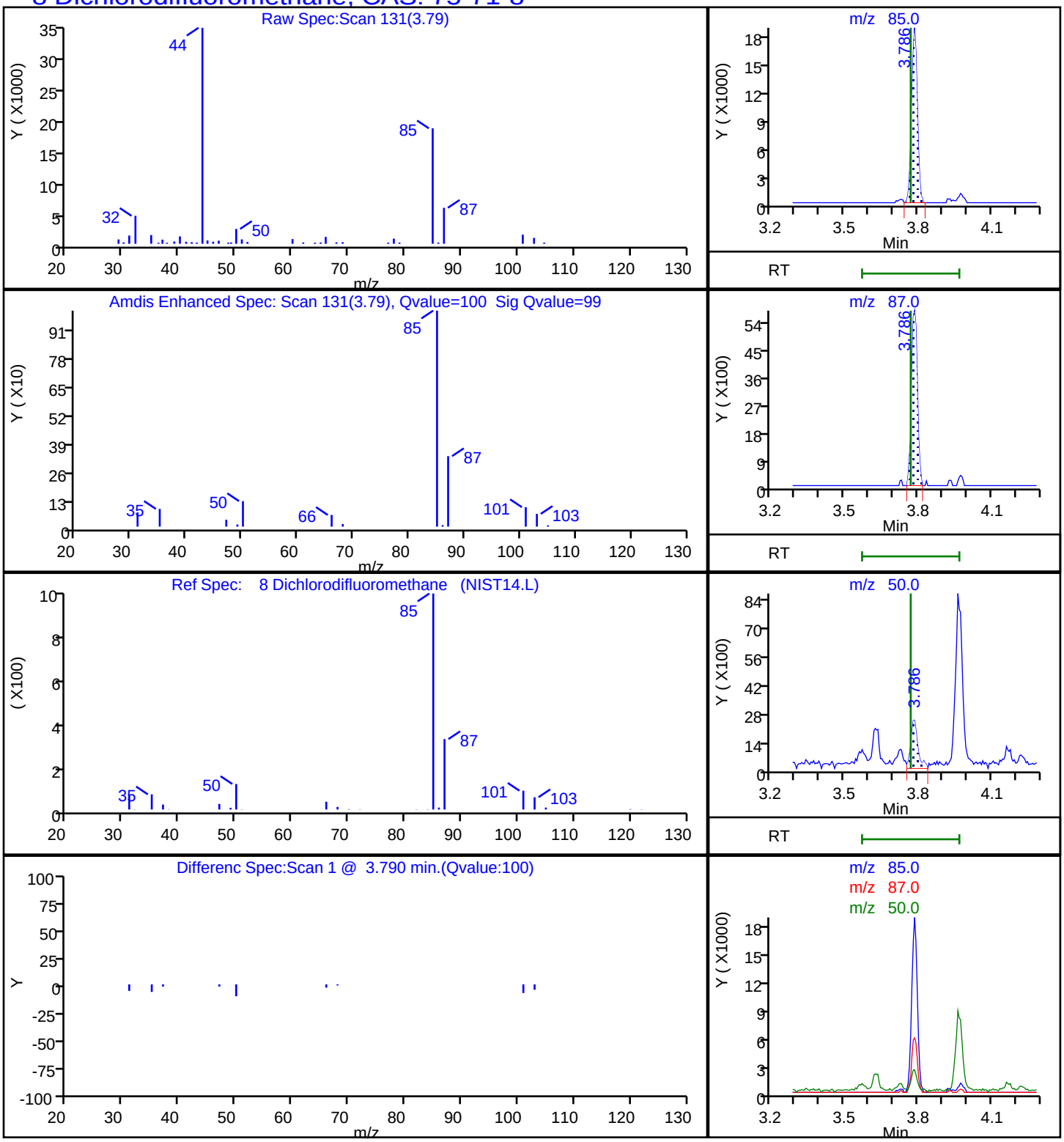
42 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GG31P111.D				
Injection Date:	31-Jul-2020 20:40:30	Instrument ID:	MG		
Lims ID:	140-19811-A-1	Lab Sample ID:	140-19811-1		
Client ID:	BLDG A EFFLUENT				
Operator ID:	HMT	ALS Bottle#:	11	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

8 Dichlorodifluoromethane, CAS: 75-71-8



Eurofins TestAmerica, Knoxville

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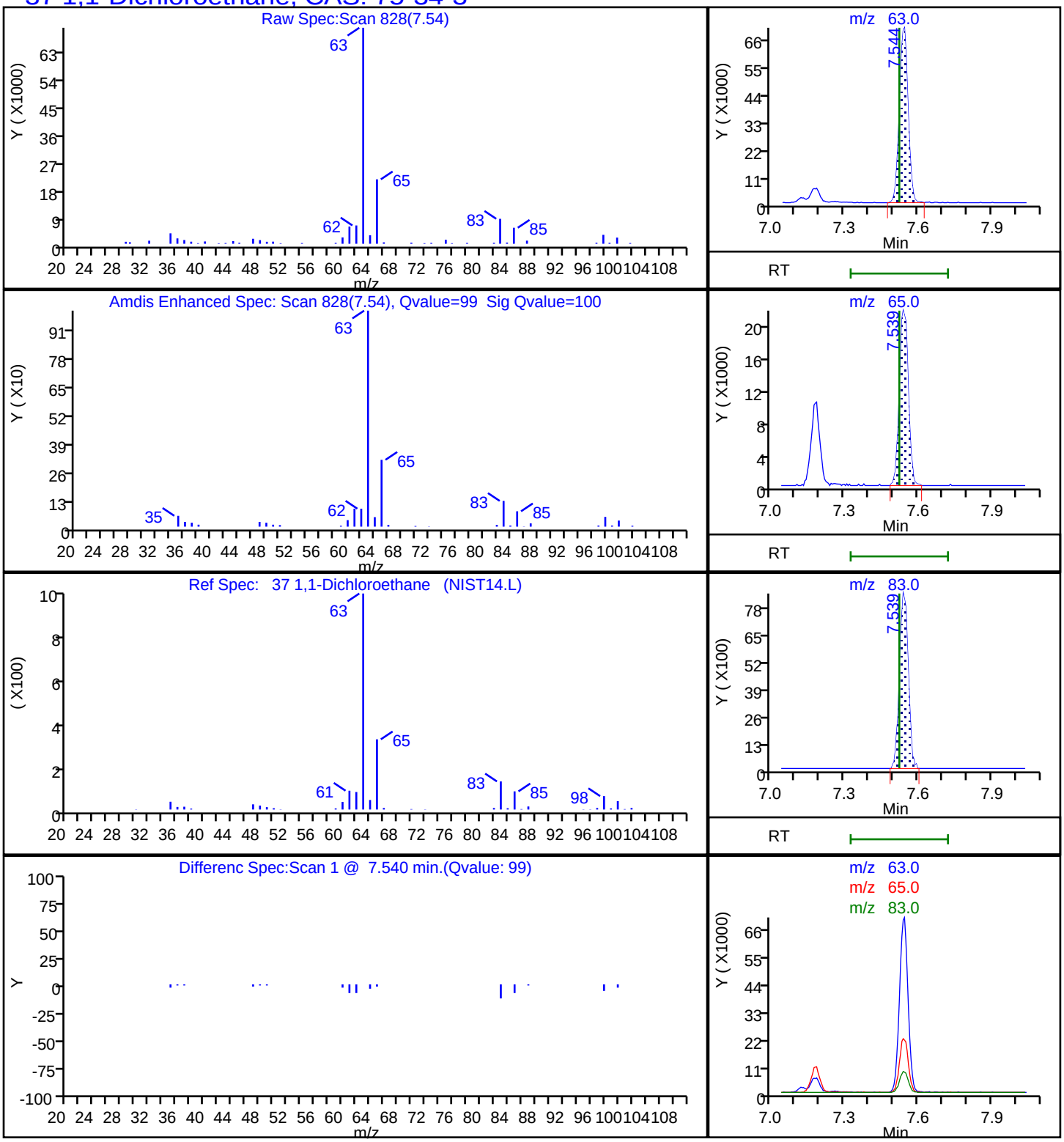
Injection Date:	31-Jul-2020 20:40:30	Instrument ID:	MG
Lims ID:	140-19811-A-1	Lab Sample ID:	140-19811-1
Client ID:	BLDG A EFFLUENT		
Operator ID:	HMT	ALS Bottle#:	11 Worklist Smp#: 15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

37 1,1-Dichloroethane, CAS: 75-34-3



Eurofins TestAmerica, Knoxville

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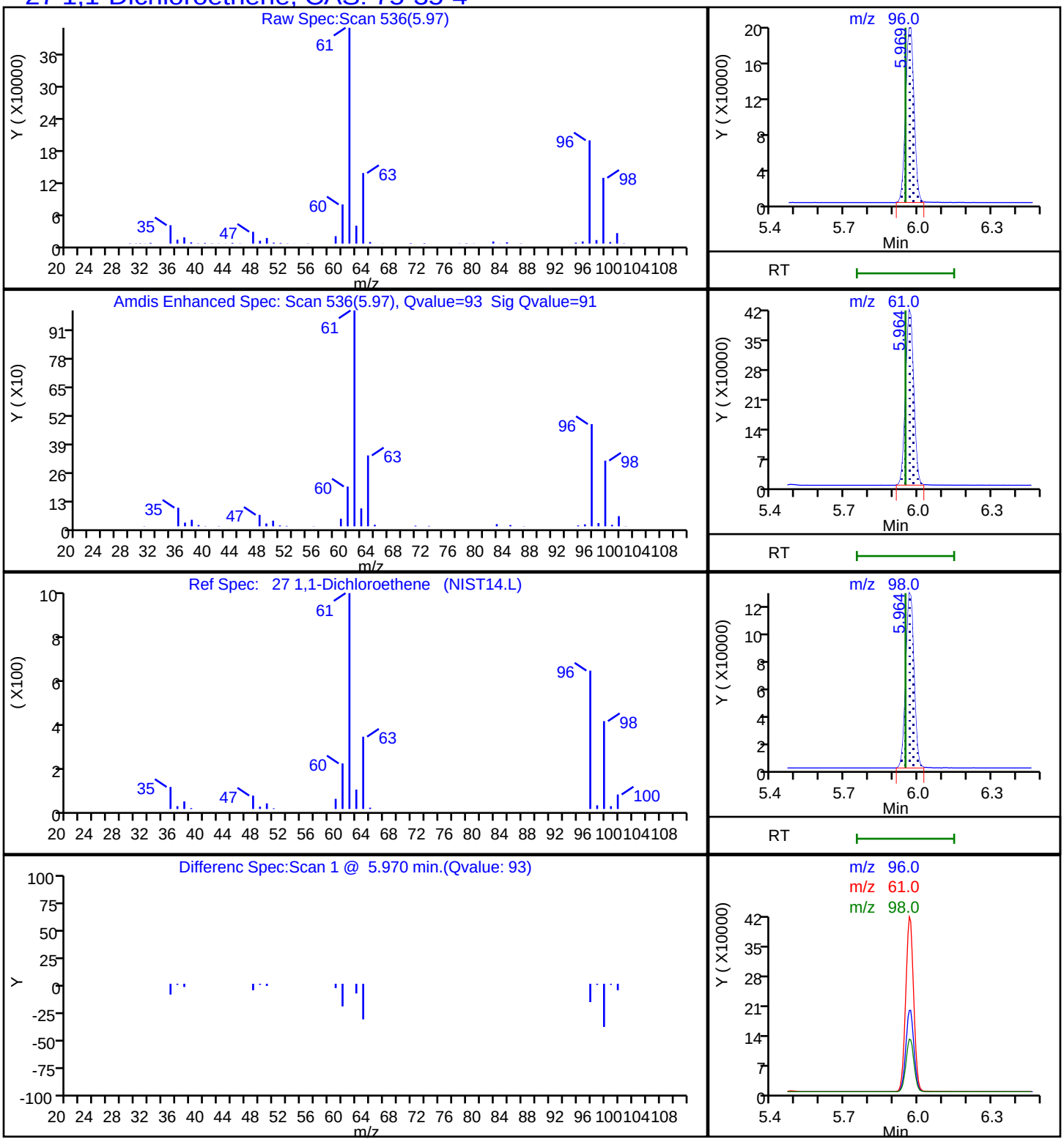
Injection Date:	31-Jul-2020 20:40:30	Instrument ID:	MG
Lims ID:	140-19811-A-1	Lab Sample ID:	140-19811-1
Client ID:	BLDG A EFFLUENT		
Operator ID:	HMT	ALS Bottle#:	11 Worklist Smp#: 15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

27 1,1-Dichloroethene, CAS: 75-35-4



Eurofins TestAmerica, Knoxville

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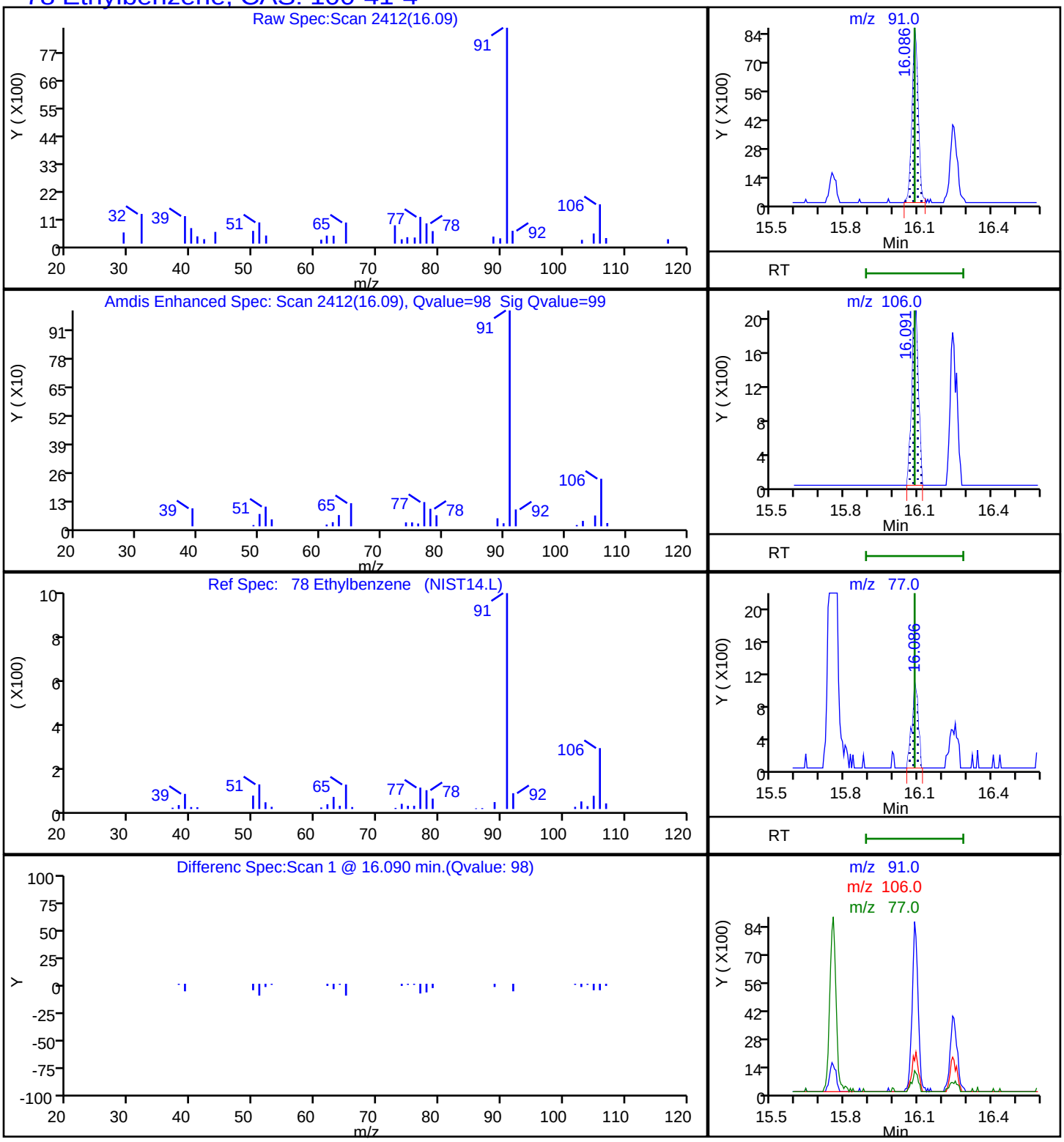
Lims ID:	140-19811-A-1	Lab Sample ID:	140-19811-1		
Client ID:	BLDG A EFFLUENT				
Operator ID:	HMT	ALS Bottle#:	11	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

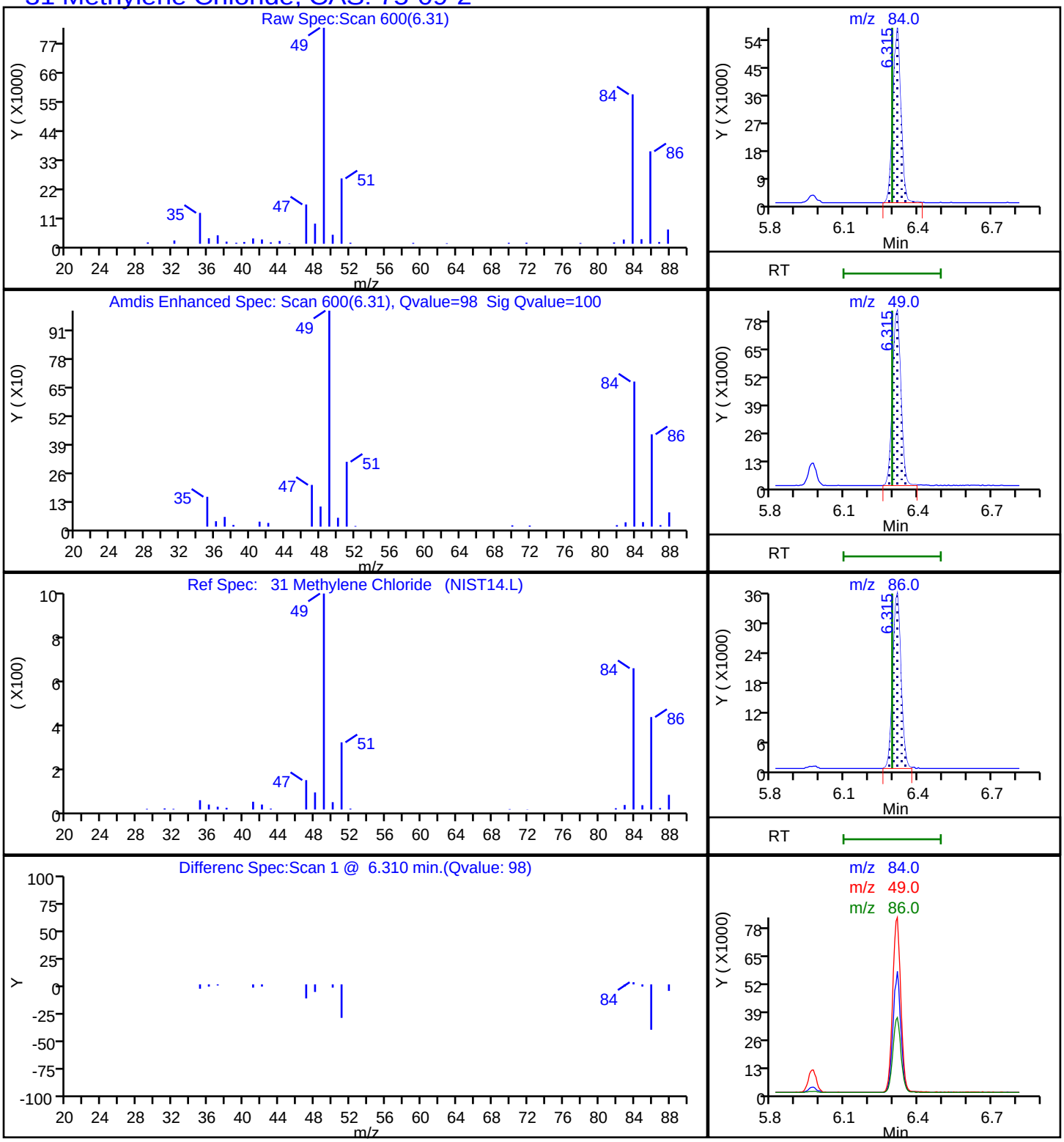
78 Ethylbenzene, CAS: 100-41-4



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GG31P111.D				
Injection Date:	31-Jul-2020 20:40:30	Instrument ID:	MG		
Lims ID:	140-19811-A-1	Lab Sample ID:	140-19811-1		
Client ID:	BLDG A EFFLUENT				
Operator ID:	HMT	ALS Bottle#:	11	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

31 Methylene Chloride, CAS: 75-09-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GG31P111.D		
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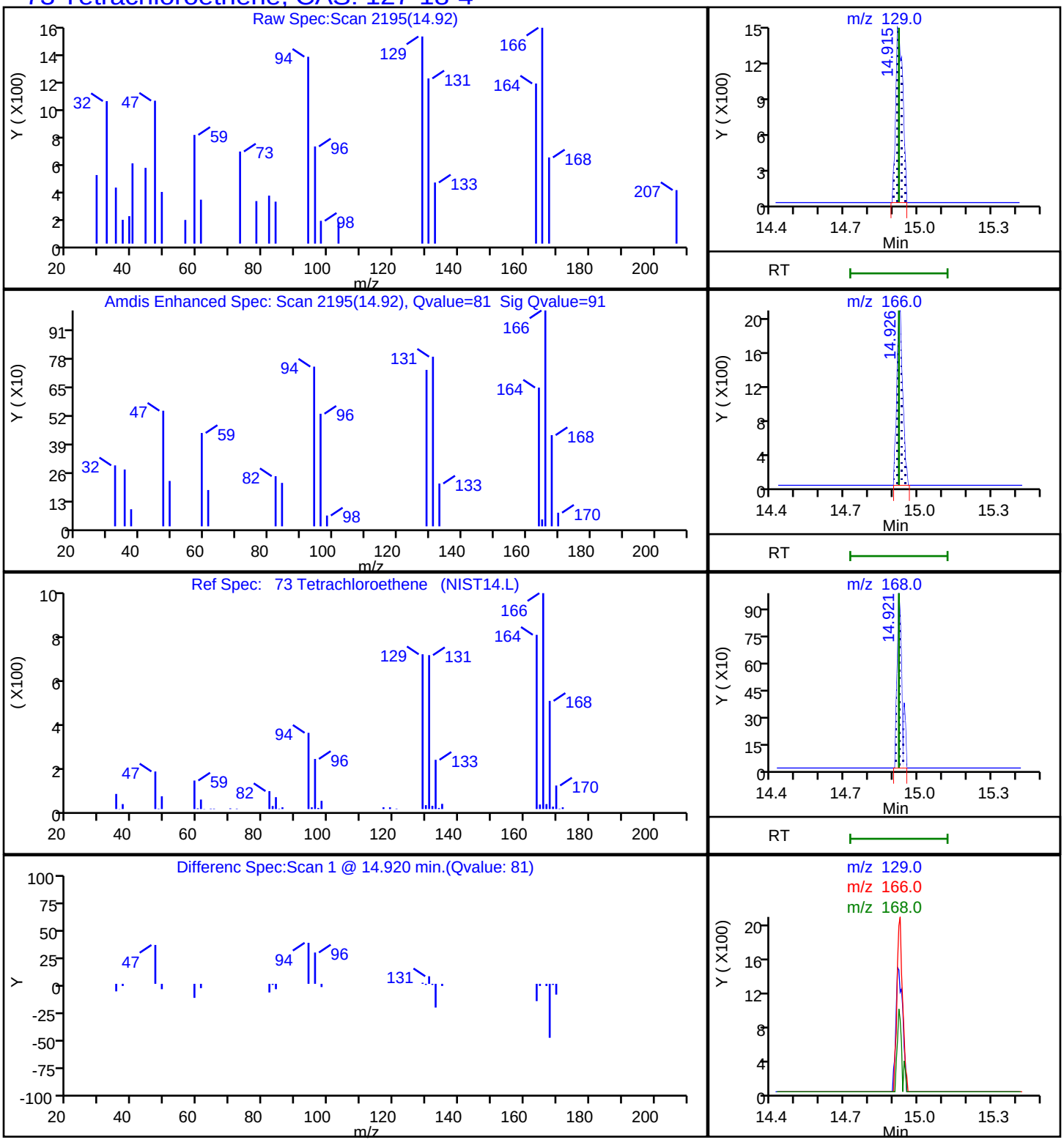
Lims ID:	140-19811-A-1	Lab Sample ID:	140-19811-1
Client ID:	BLDG A EFFLUENT		
Operator ID:	HMT	ALS Bottle#:	11 Worklist Smp#: 15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

73 Tetrachloroethene, CAS: 127-18-4



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GG31P111.D		
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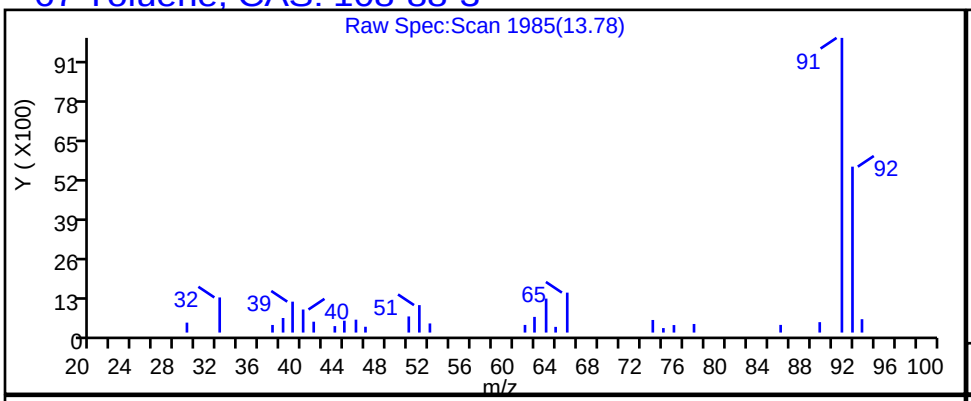
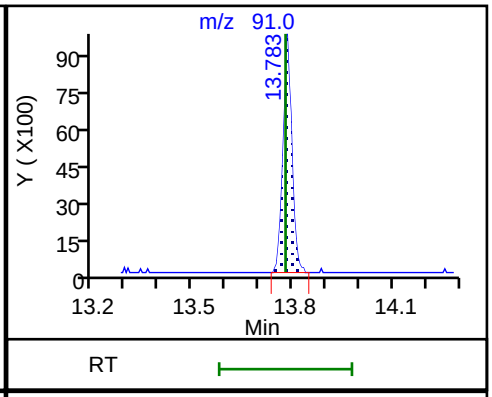
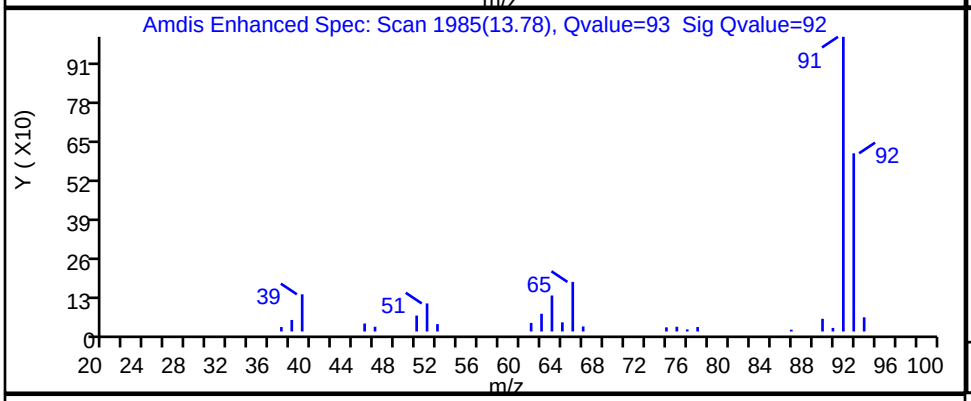
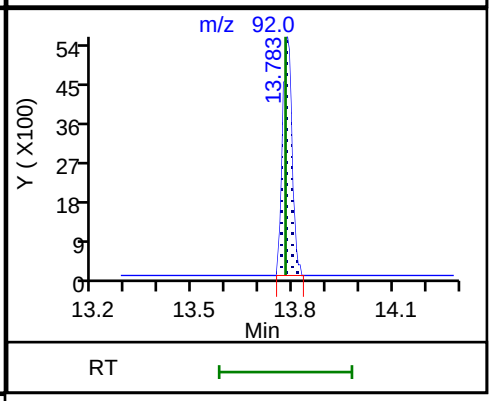
Lims ID:	140-19811-A-1	Lab Sample ID:	140-19811-1
Client ID:	BLDG A EFFLUENT		
Operator ID:	HMT	ALS Bottle#:	11 Worklist Smp#: 15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

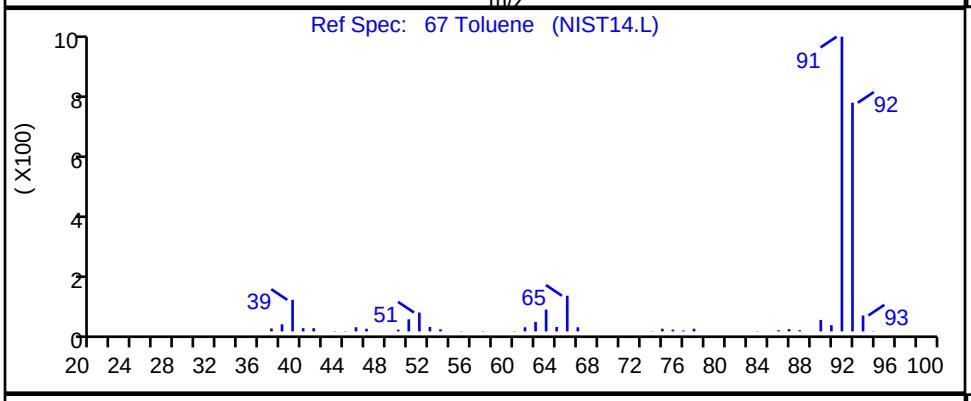
67 Toluene, CAS: 108-88-3

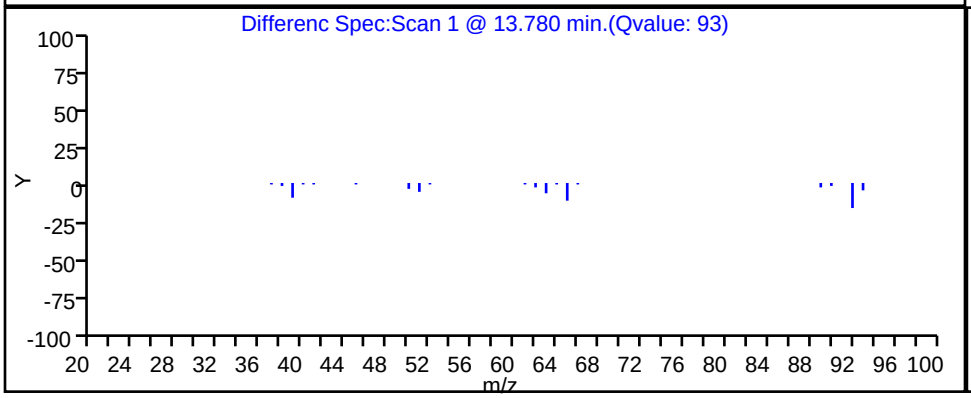


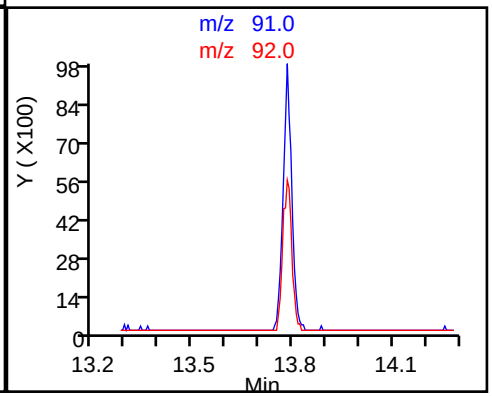










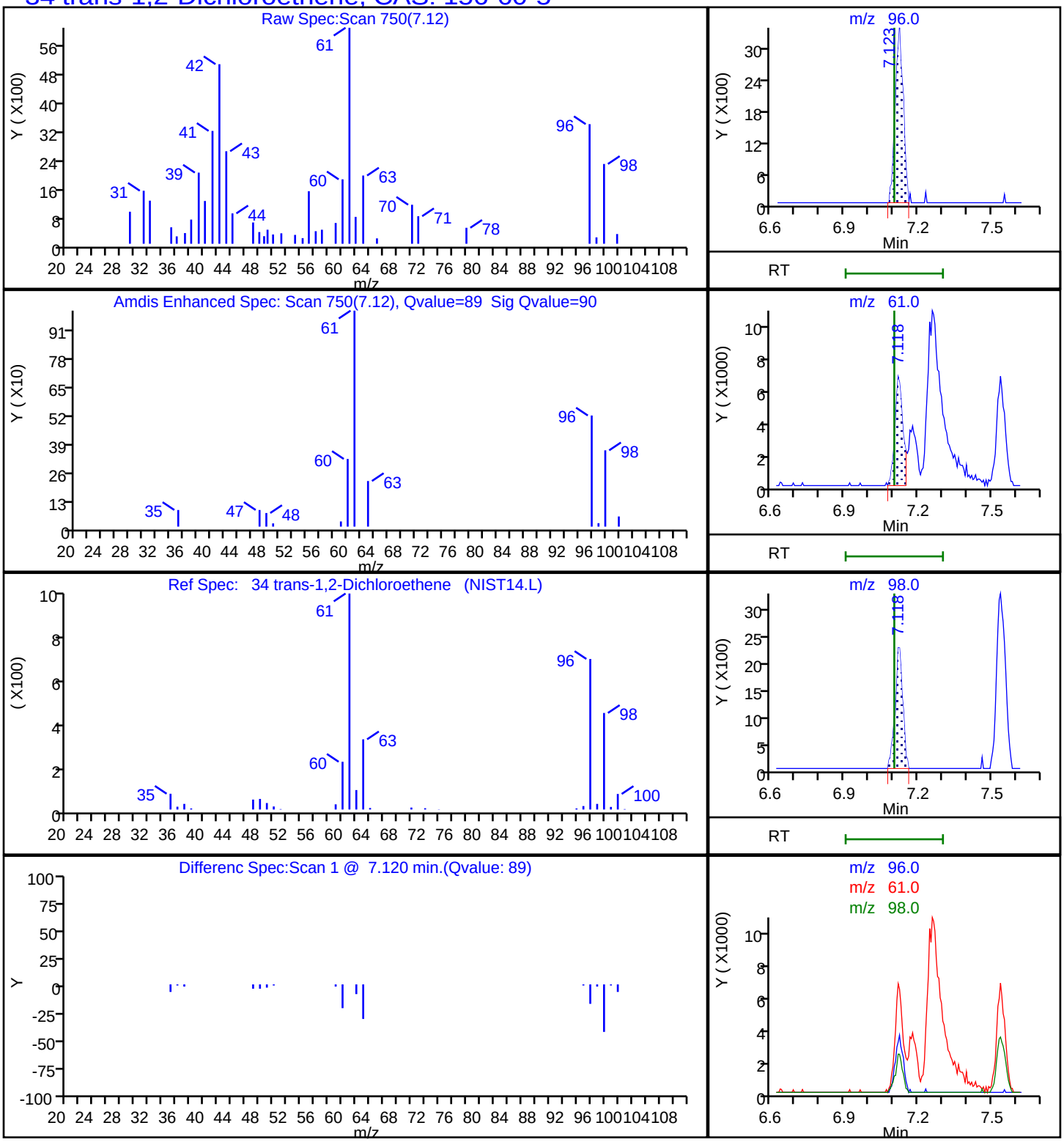


Report Date: 03-Aug-2020 13:23:15 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GG31P111.D				
Injection Date:	31-Jul-2020 20:40:30	Instrument ID:	MG		
Lims ID:	140-19811-A-1	Lab Sample ID:	140-19811-1		
Client ID:	BLDG A EFFLUENT				
Operator ID:	HMT	ALS Bottle#:	11	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

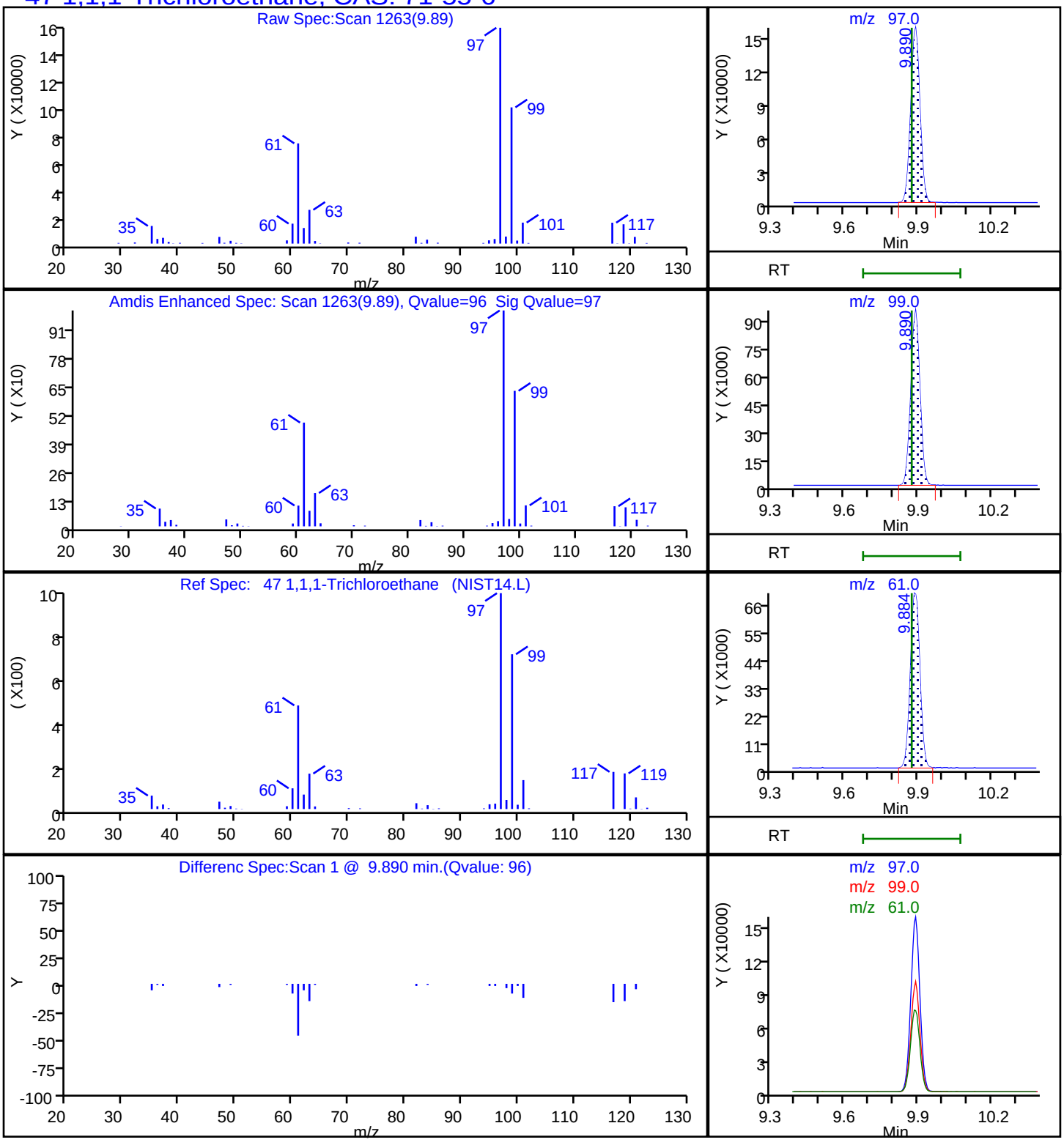
34 trans-1,2-Dichloroethene, CAS: 156-60-5



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GG31P111.D		
Injection Date:	31-Jul-2020 20:40:30	Instrument ID:	MG
Lims ID:	140-19811-A-1	Lab Sample ID:	140-19811-1
Client ID:	BLDG A EFFLUENT		
Operator ID:	HMT	ALS Bottle#:	11 Worklist Smp#: 15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

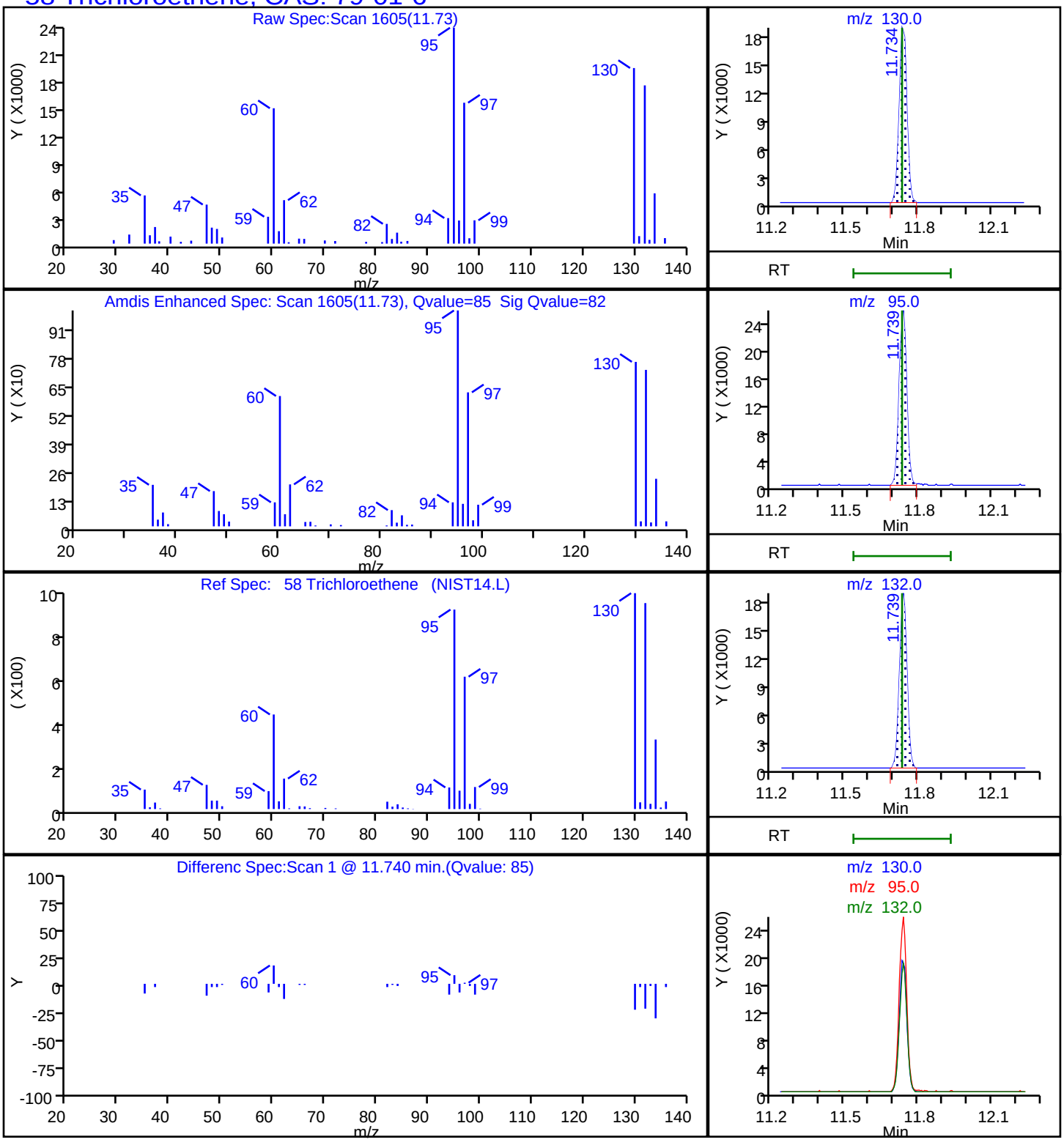
47 1,1,1-Trichloroethane, CAS: 71-55-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GG31P111.D		
Injection Date:	31-Jul-2020 20:40:30	Instrument ID:	MG
Lims ID:	140-19811-A-1	Lab Sample ID:	140-19811-1
Client ID:	BLDG A EFFLUENT		
Operator ID:	HMT	ALS Bottle#:	11 Worklist Smp#: 15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

58 Trichloroethene, CAS: 79-01-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GG31P111.D				
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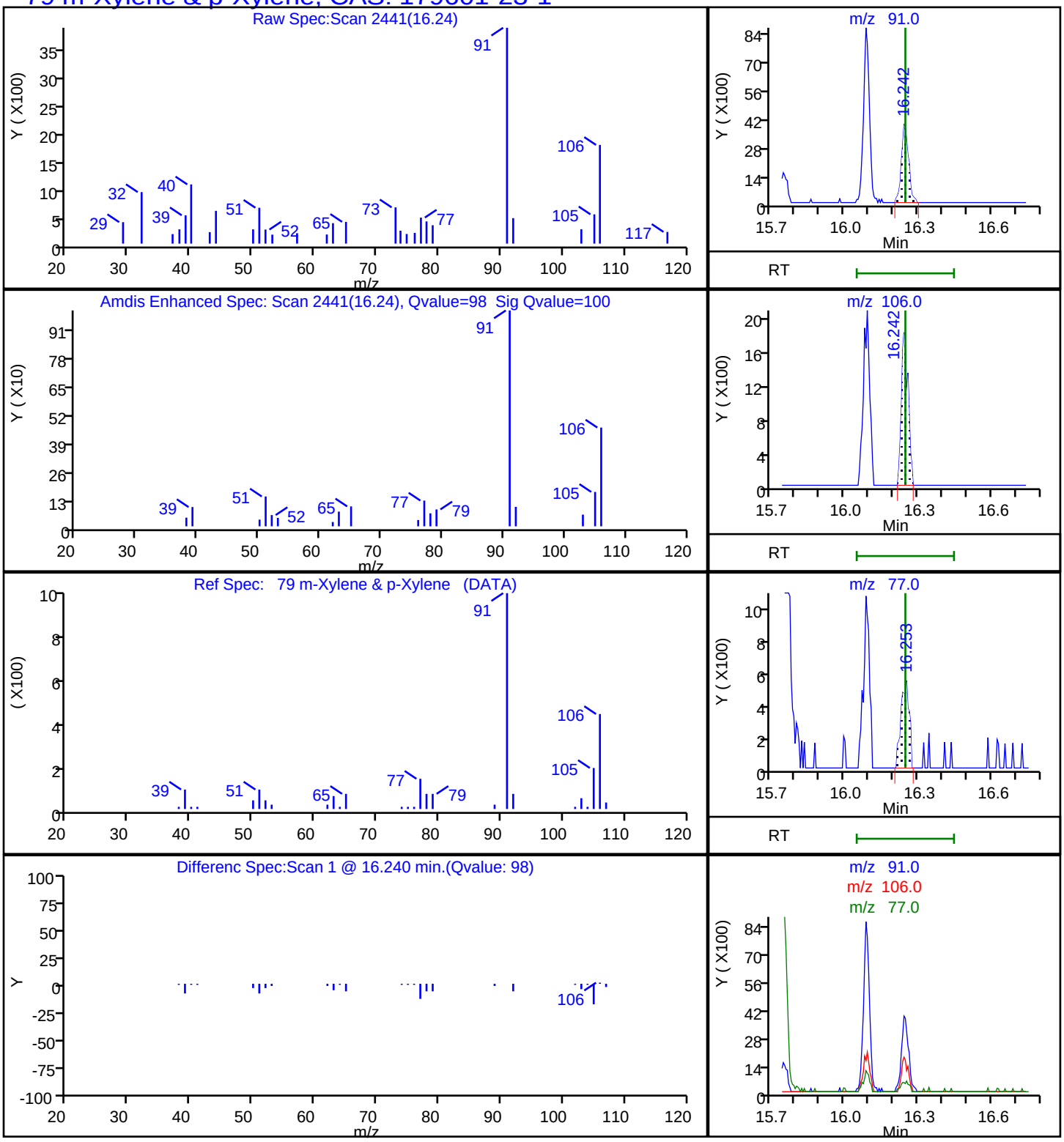
Lims ID:	140-19811-A-1	Lab Sample ID:	140-19811-1		
Client ID:	BLDG A EFFLUENT				
Operator ID:	HMT	ALS Bottle#:	11	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

79 m-Xylene & p-Xylene, CAS: 179601-23-1



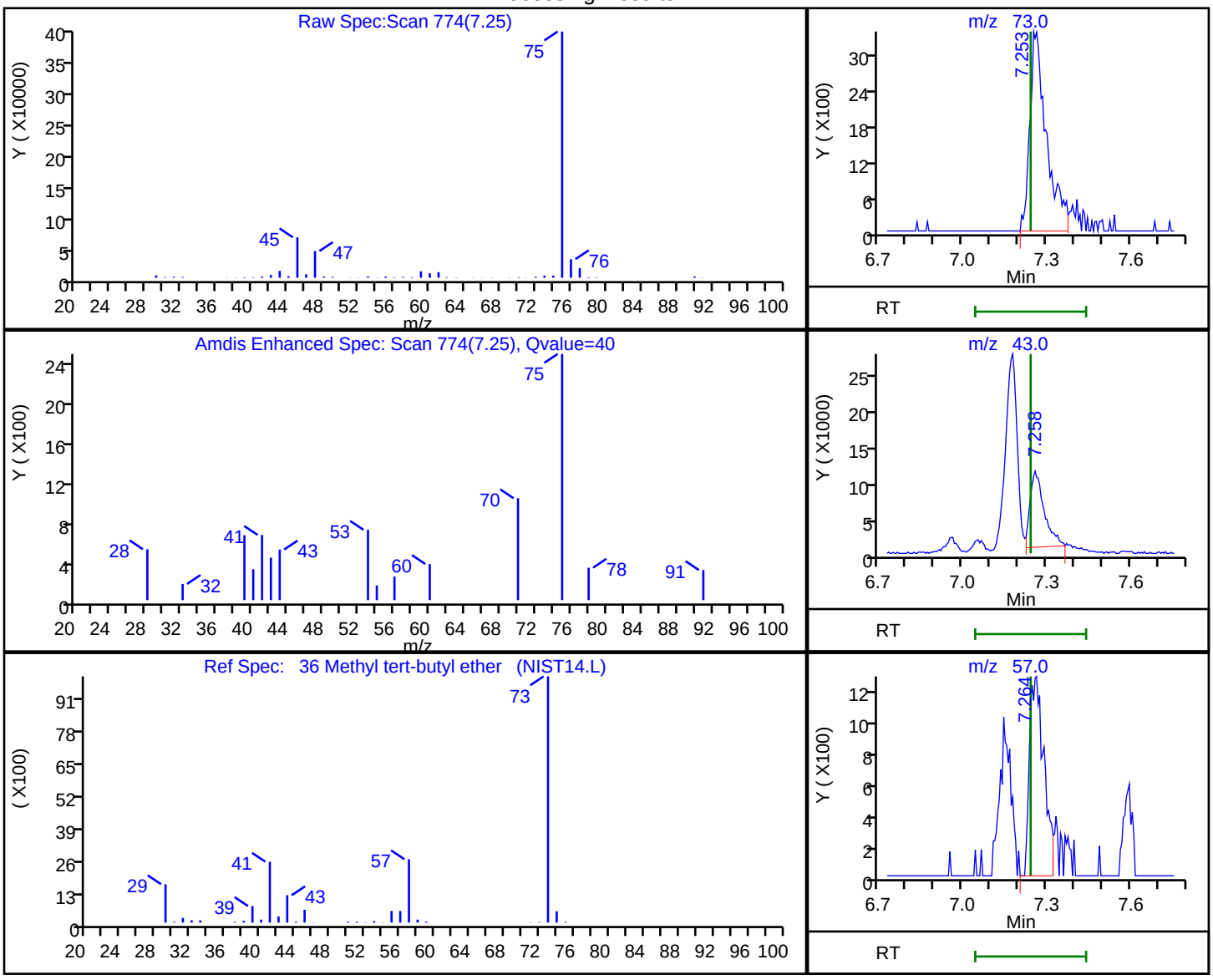
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GG31P111.D				
Injection Date:	31-Jul-2020 20:40:30	Instrument ID:	MG		
Lims ID:	140-19811-A-1	Lab Sample ID:	140-19811-1		
Client ID:	BLDG A EFFLUENT				
Operator ID:	HMT	ALS Bottle#:	11	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

36 Methyl tert-butyl ether, CAS: 1634-04-4

Processing Results



RT	Mass	Response	Amount
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7.26	43.00	37739	
7.26	57.00	4506	

Reviewer: khachitpongpanits, 03-Aug-2020 13:22:56

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19811-1

SDG No.:

Client Sample ID: BLDG A MID GAC Lab Sample ID: 140-19811-2

Matrix: Air Lab File ID: GG31P112.D

Analysis Method: TO 15 LL Date Collected: 07/23/2020 11:10

Sample wt/vol: 100(mL) Date Analyzed: 07/31/2020 21:26

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 41417 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	1.7		0.40	0.040
56-23-5	Carbon tetrachloride	153.81	ND		0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	0.87		0.40	0.11
67-66-3	Chloroform	119.38	0.76		0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	31		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.73		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	4.9		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	0.23	J	0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	22		0.40	0.040
100-41-4	Ethylbenzene	106.17	0.070	J	0.40	0.065
75-09-2	Methylene Chloride	84.93	5.4		2.0	0.80
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	0.39	J	0.40	0.035
108-88-3	Toluene	92.14	0.39	J	0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	0.57		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	*1,1,1-Trichloroethane*	*133.41*	*120*	*E*	*0.40*	*0.19*
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	0.25		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.11
75-01-4	Vinyl chloride	62.50	0.15	J	0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.30	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	97		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19811-1

SDG No.:

Client Sample ID: BLDG A MID GAC Lab Sample ID: 140-19811-2

Matrix: Air Lab File ID: GG31P112.D

Analysis Method: TO 15 LL Date Collected: 07/23/2020 11:10

Sample wt/vol: 100(mL) Date Analyzed: 07/31/2020 21:26

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 41417 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	5.4		1.3	0.13
56-23-5	Carbon tetrachloride	153.81	ND		2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	3.1		1.4	0.39
67-66-3	Chloroform	119.38	3.7		2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	120		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	3.6		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	20		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	0.93	J	1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	86		1.6	0.16
100-41-4	Ethylbenzene	106.17	0.30	J	1.7	0.28
75-09-2	Methylene Chloride	84.93	19		6.9	2.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	2.6	J	2.7	0.24
108-88-3	Toluene	92.14	1.5	J	2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	2.3		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	*1,1,1-Trichloroethane*	*133.41*	*670*	*E*	*2.2*	*1.0*
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	1.3		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.54
75-01-4	Vinyl chloride	62.50	0.38	J	0.51	0.33
1330-20-7	Xylenes, Total	106.17	1.3	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	97		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GG31P112.D
Lims ID: 140-19811-A-2
Client ID: BLDG A MID GAC
Sample Type: Client
Inject. Date: 31-Jul-2020 21:26:30 ALS Bottle#: 12 Worklist Smp#: 16
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016161-016
Misc. Info.: 140-19811-a-2
Operator ID: HMT Instrument ID: MG

Method: \\chromfs\Knoxville\ChromData\MG\20200729-16161.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 03-Aug-2020 13:24:04 Calib Date: 15-Jul-2020 22:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1011

First Level Reviewer: khachitpongpanits Date: 03-Aug-2020 13:24:04

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.849	8.838	0.011	92	134719	4.00	
* 2 1,4-Difluorobenzene	114	11.027	11.017	0.010	97	1173817	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.751	15.746	0.005	94	1076316	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.390	17.391	-0.001	74	845213	3.86	
6 Chlorodifluoromethane	51	3.721	3.710	0.011	96	23752	0.1734	
8 Dichlorodifluoromethane	85	3.780	3.767	0.010	100	35841	0.1459	
12 Vinyl chloride	62	4.131	4.123	0.006	32	2771	0.0301	
27 1,1-Dichloroethene	96	5.959	5.944	0.011	93	274420	4.35	
31 Methylene Chloride	84	6.304	6.293	0.011	98	117899	1.07	
34 trans-1,2-Dichloroethene	96	7.113	7.097	0.011	93	8060	0.1146	
37 1,1-Dichloroethane	63	7.533	7.518	0.010	99	153579	0.9895	
42 cis-1,2-Dichloroethene	96	8.515	8.499	0.011	98	443451	6.20	
44 Chloroform	83	8.860	8.843	0.011	30	27341	0.1527	
47 1,1,1-Trichloroethane	97	9.884	9.874	0.010	96	4719896	24.4	E
48 1,2-Dichloroethane	62	9.992	9.981	0.010	96	5963	0.0460	
50 Benzene	78	10.488	10.478	0.010	96	82313	0.3400	
58 Trichloroethene	130	11.739	11.734	0.005	82	4030	0.0491	
67 Toluene	91	13.783	13.778	0.005	93	18298	0.0784	
73 Tetrachloroethene	129	14.926	14.921	0.005	72	6239	0.0781	
78 Ethylbenzene	91	16.086	16.086	0.000	96	4264	0.0139	
79 m-Xylene & p-Xylene	91	16.247	16.247	0.000	97	9536	0.0391	
83 o-Xylene	91	16.781	16.771	0.010	91	5105	0.0198	
S 124 Xylenes, Total	100				0		0.0589	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Reagents:

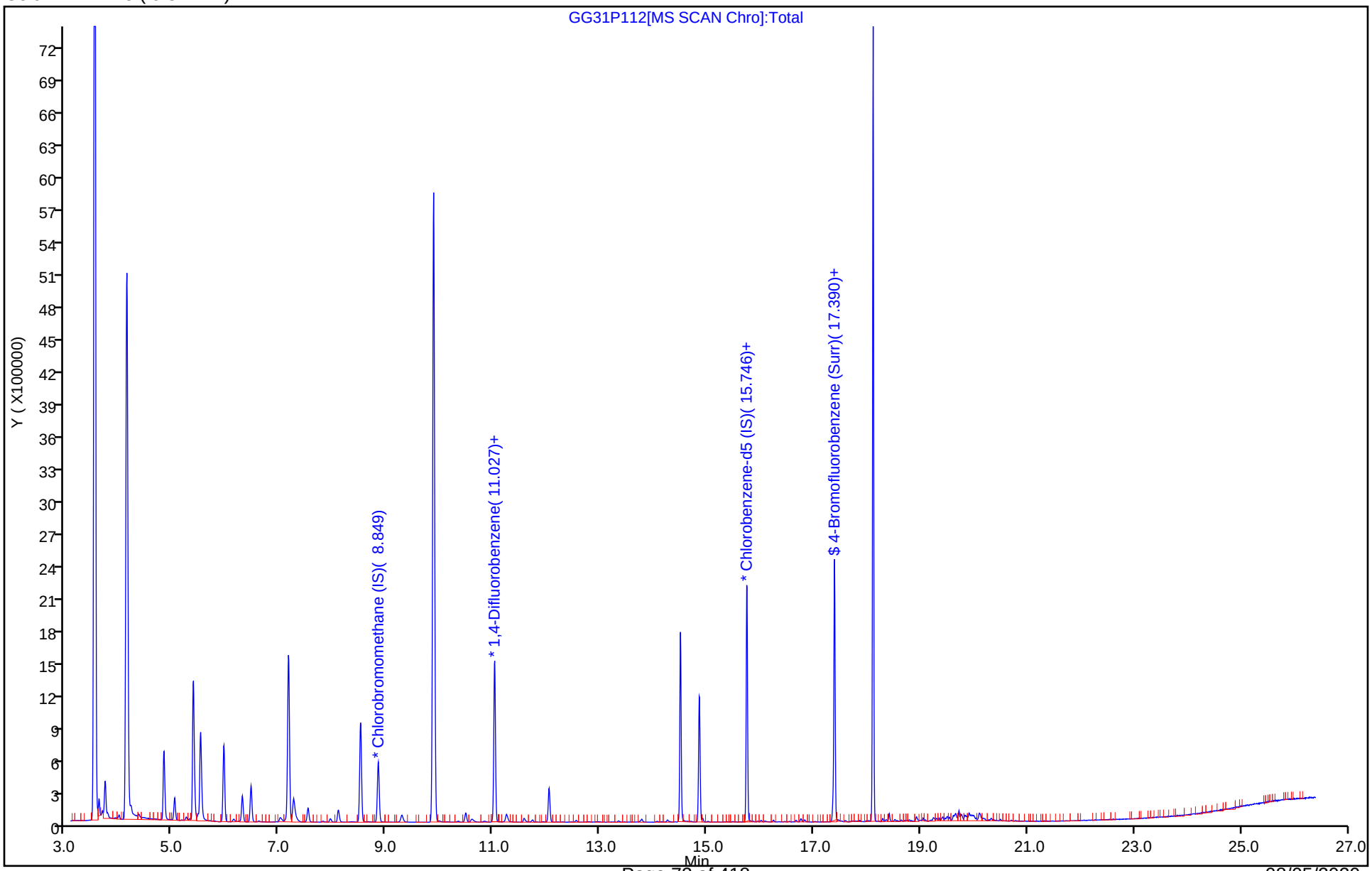
40MXISSURP_00004 Amount Added: 40.00 Units: mL Run Reagent

Report Date: 03-Aug-2020 13:24:05 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GG31P112.D				
Injection Date:	31-Jul-2020 21:26:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	140-19811-A-2	Lab Sample ID:	140-19811-2	Worklist Smp#:	16
Client ID:	BLDG A MID GAC				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GG31P112.D				
Lims ID:	140-19811-A-2				
Client ID:	BLDG A MID GAC				
Sample Type:	Client				
Inject. Date:	31-Jul-2020 21:26:30	ALS Bottle#:	12	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016161-016				
Misc. Info.:	140-19811-a-2				
Operator ID:	HMT	Instrument ID:	MG		
Method:	\\chromfs\Knoxville\ChromData\MG\20200729-16161.b\MG_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	03-Aug-2020 13:24:04	Calib Date:	15-Jul-2020 22:02:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1011				

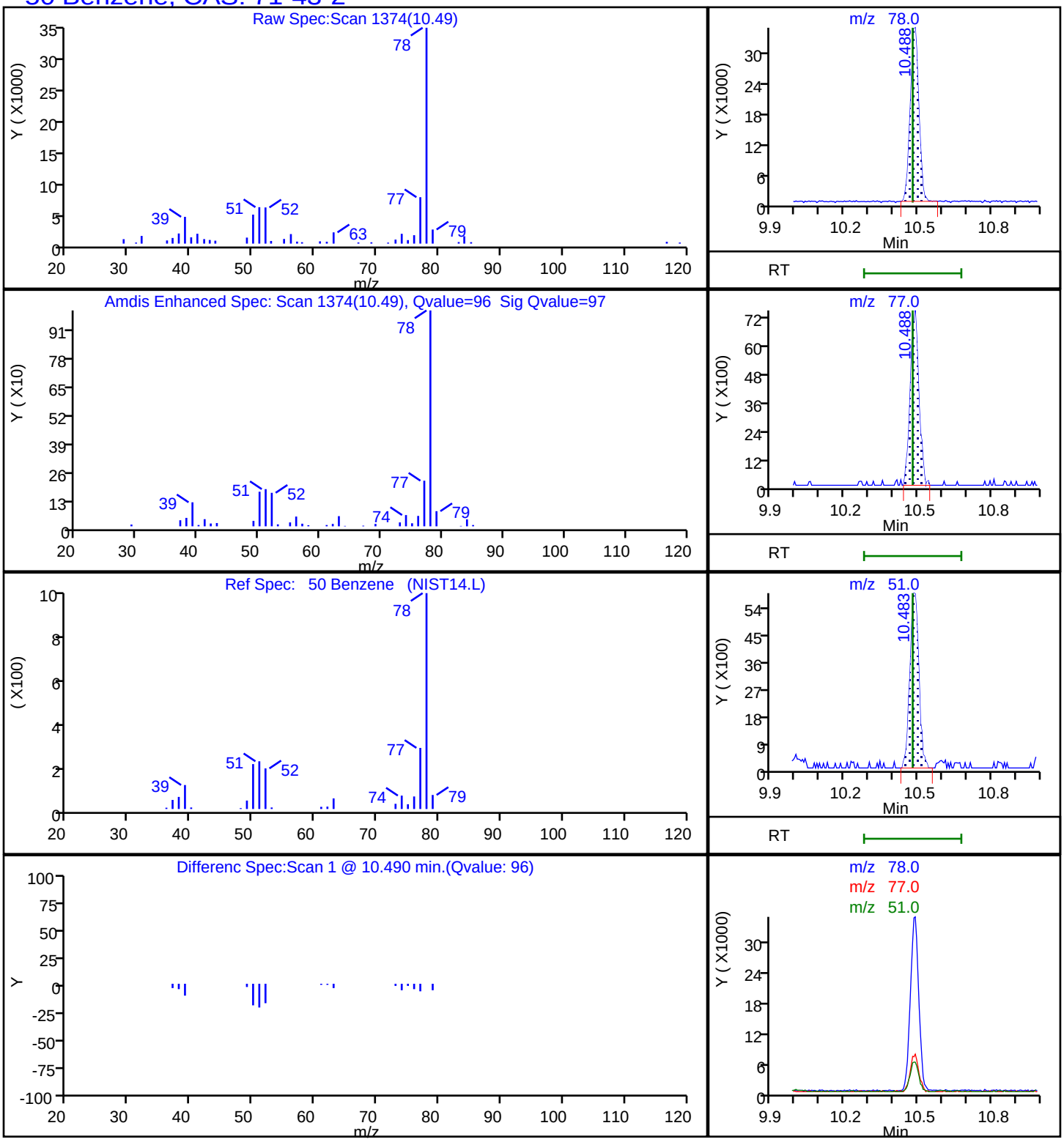
First Level Reviewer: khachitpongpanits Date: 03-Aug-2020 13:24:04

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.00	3.86	96.59

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GG31P112.D		
Injection Date:	31-Jul-2020 21:26:30	Instrument ID:	MG
Lims ID:	140-19811-A-2	Lab Sample ID:	140-19811-2
Client ID:	BLDG A MID GAC		
Operator ID:	HMT	ALS Bottle#:	12 Worklist Smp#: 16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

50 Benzene, CAS: 71-43-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GG31P112.D				
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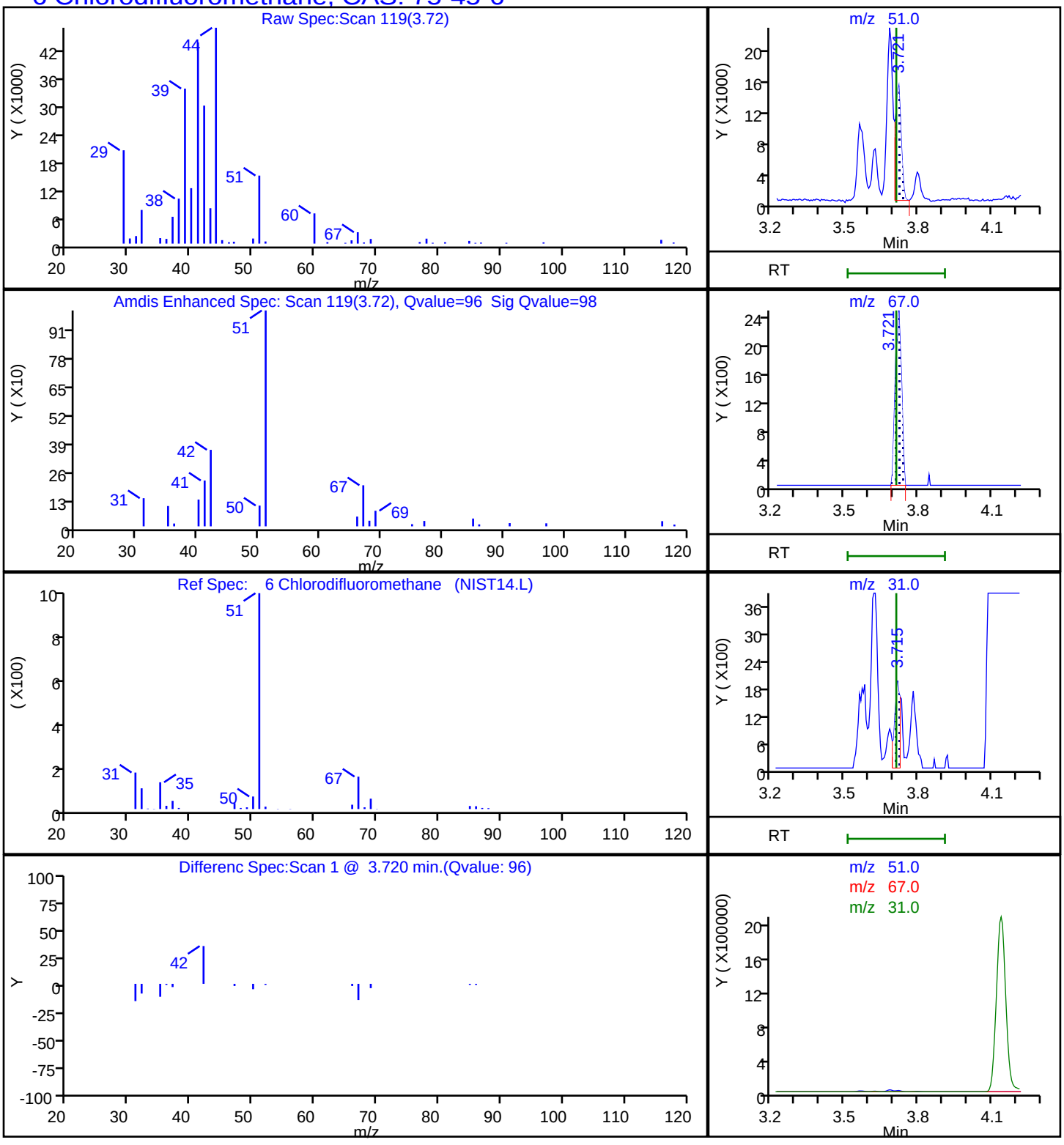
Lims ID:	140-19811-A-2	Lab Sample ID:	140-19811-2		
Client ID:	BLDG A MID GAC				
Operator ID:	HMT	ALS Bottle#:	12	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

6 Chlorodifluoromethane, CAS: 75-45-6



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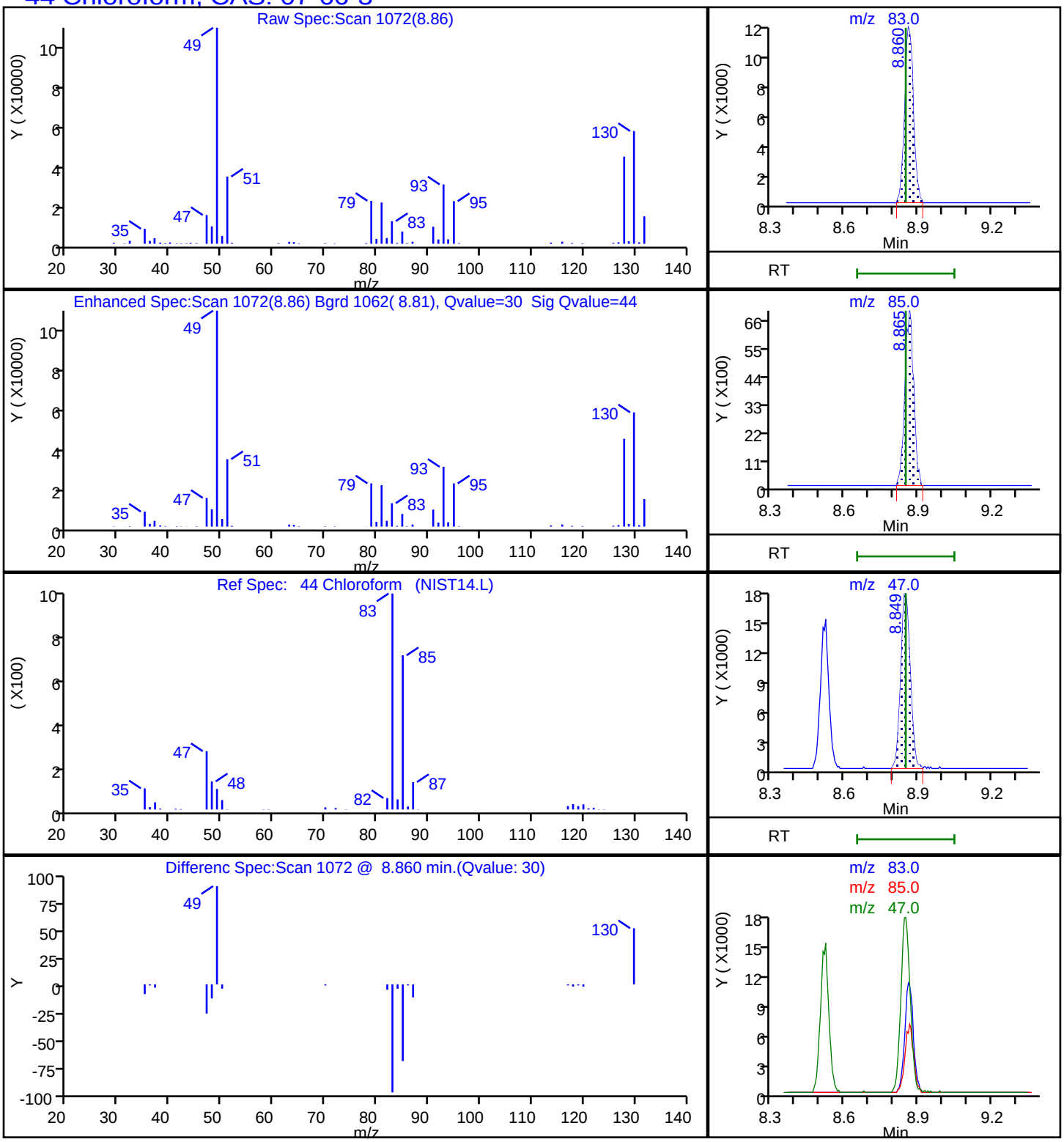
Lims ID:	140-19811-A-2	Lab Sample ID:	140-19811-2		
Client ID:	BLDG A MID GAC				
Operator ID:	HMT	ALS Bottle#:	12	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

44 Chloroform, CAS: 67-66-3



Eurofins TestAmerica, Knoxville

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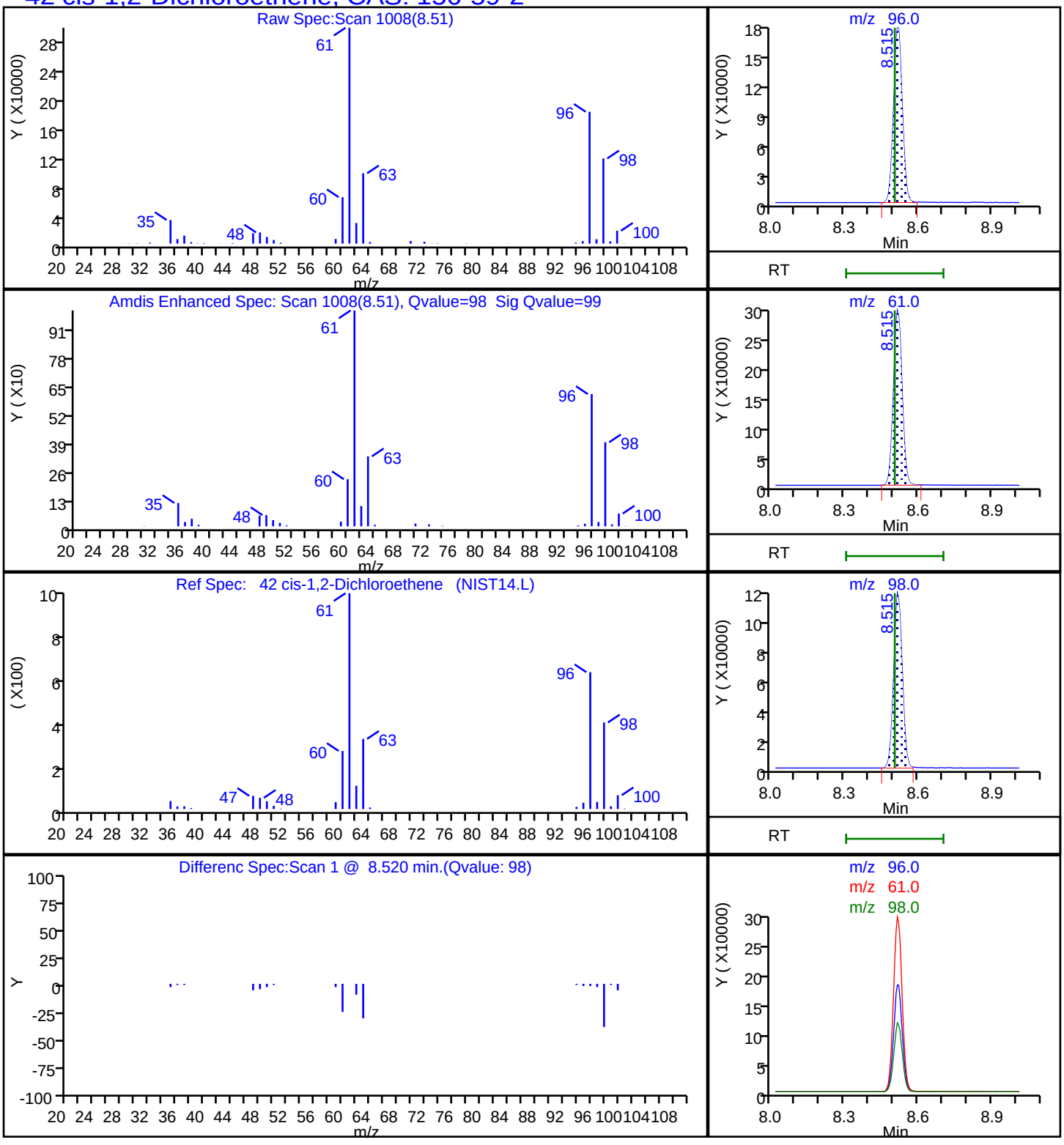
Lims ID:	140-19811-A-2	Lab Sample ID:	140-19811-2
Client ID:	BLDG A MID GAC		
Operator ID:	HMT	ALS Bottle#:	12 Worklist Smp#: 16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

42 cis-1,2-Dichloroethene, CAS: 156-59-2



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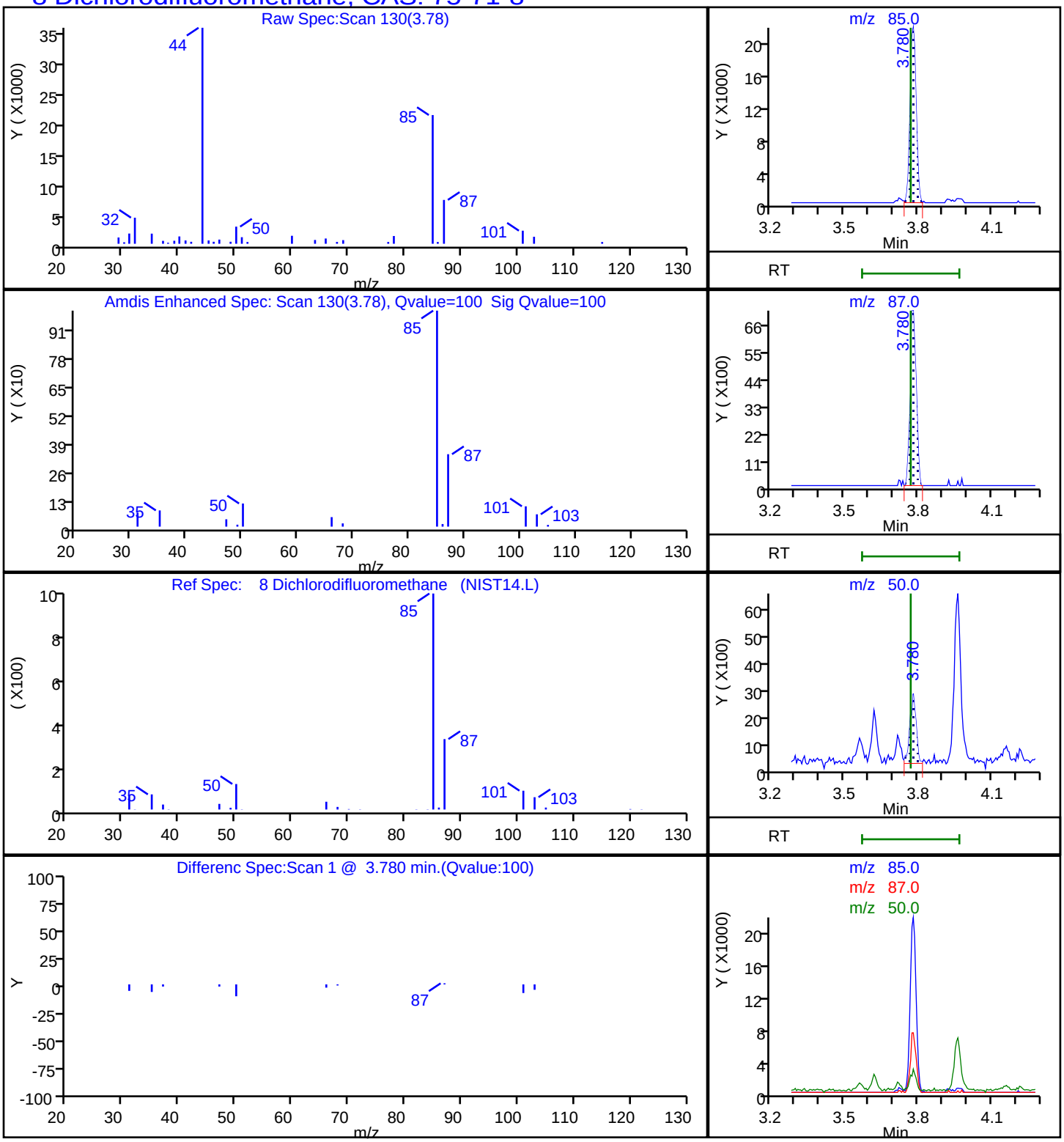
Lims ID:	140-19811-A-2	Lab Sample ID:	140-19811-2		
Client ID:	BLDG A MID GAC				
Operator ID:	HMT	ALS Bottle#:	12	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

8 Dichlorodifluoromethane, CAS: 75-71-8



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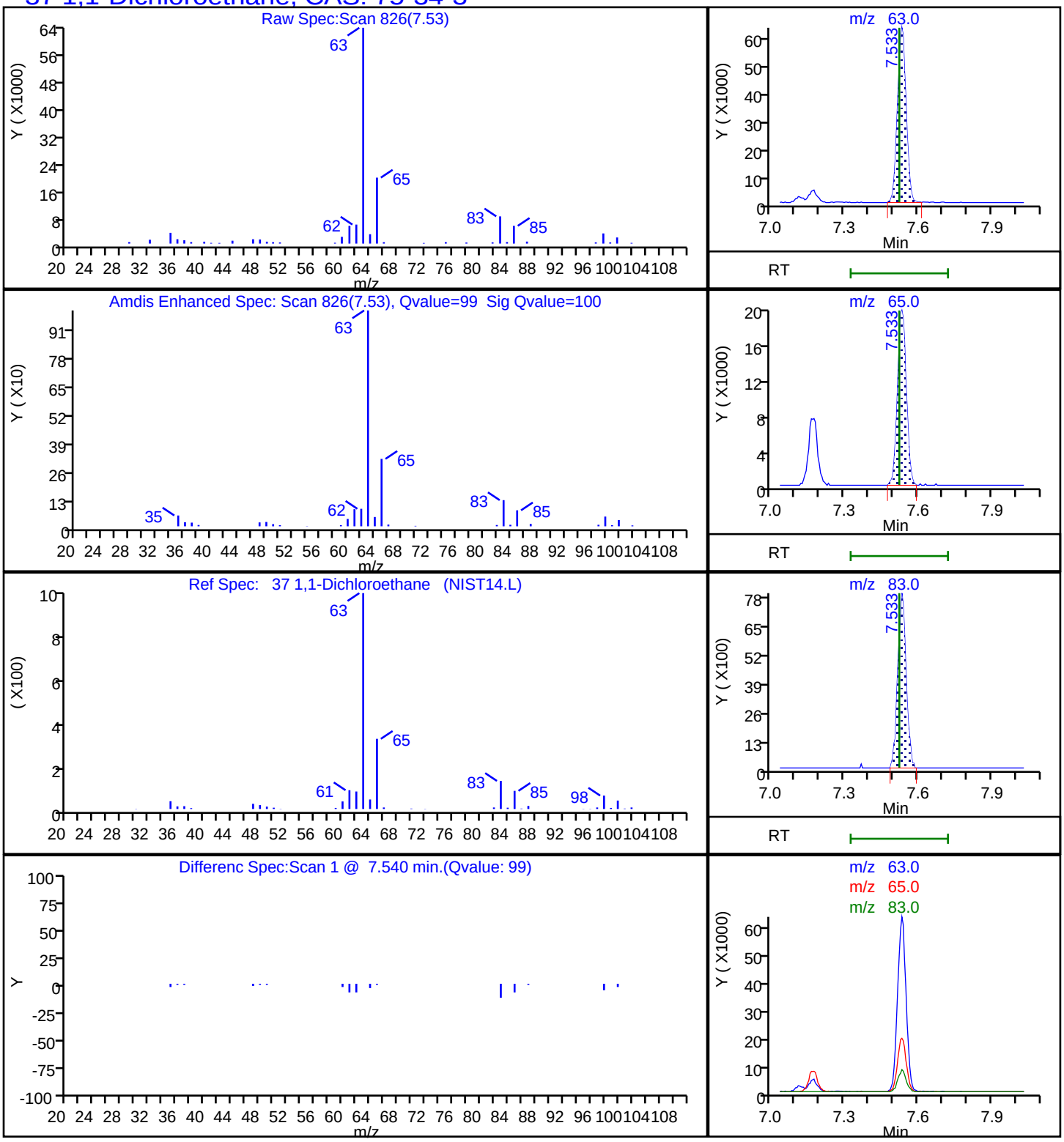
Lims ID:	140-19811-A-2	Lab Sample ID:	140-19811-2		
Client ID:	BLDG A MID GAC				
Operator ID:	HMT	ALS Bottle#:	12	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

37 1,1-Dichloroethane, CAS: 75-34-3



Eurofins TestAmerica, Knoxville

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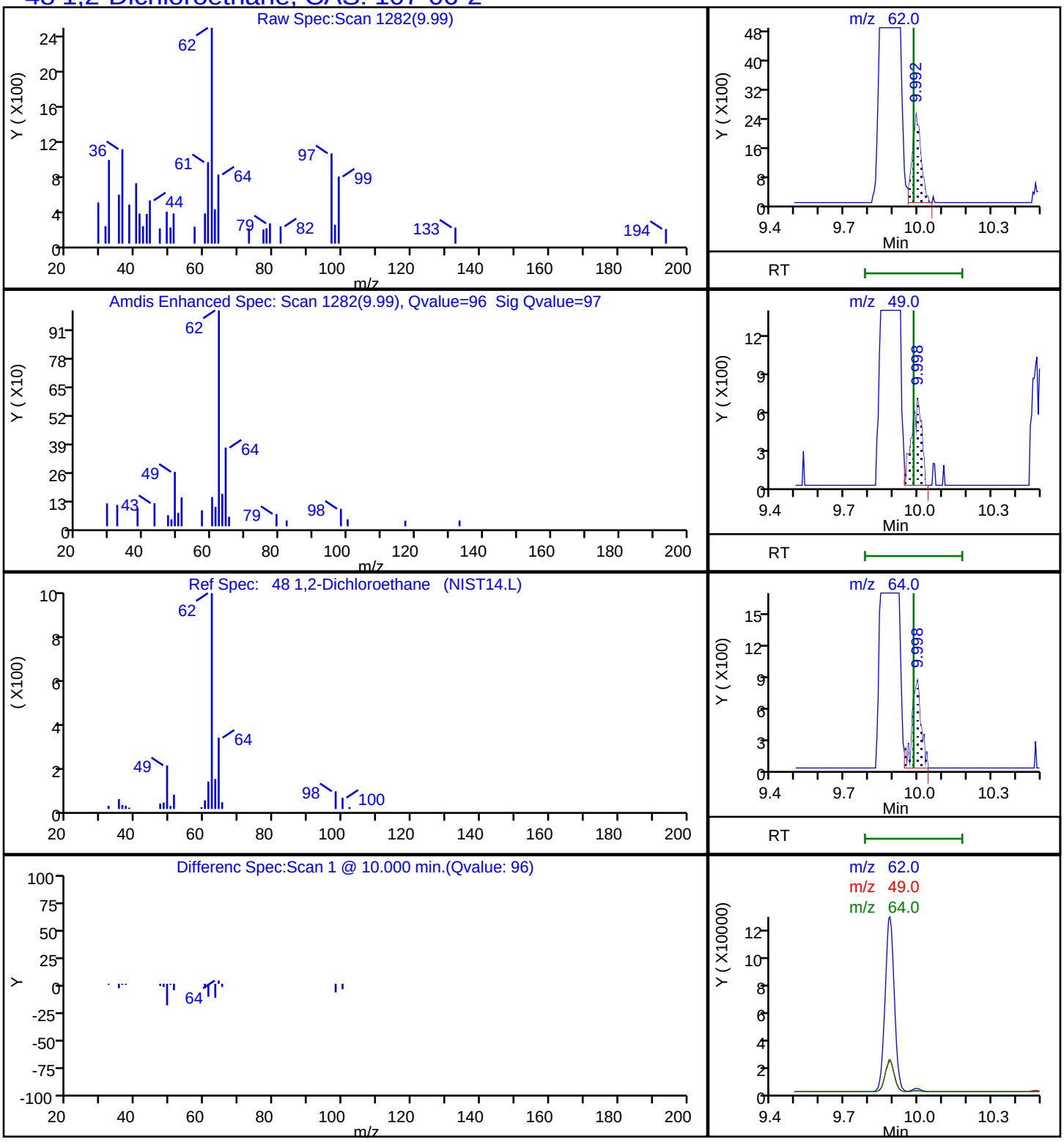
Lims ID:	140-19811-A-2	Lab Sample ID:	140-19811-2		
Client ID:	BLDG A MID GAC				
Operator ID:	HMT	ALS Bottle#:	12	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

48 1,2-Dichloroethane, CAS: 107-06-2



Eurofins TestAmerica, Knoxville

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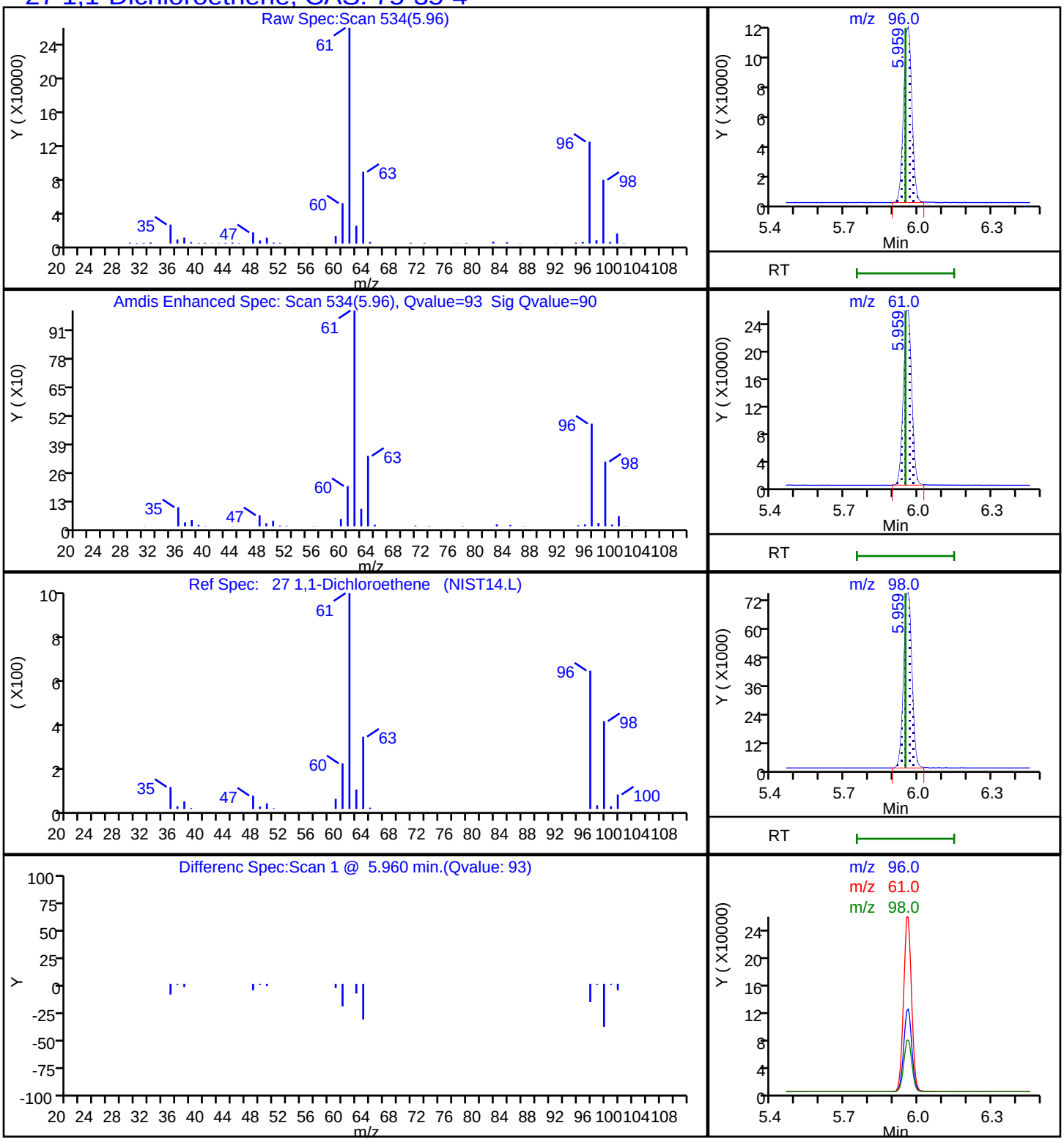
Lims ID:	140-19811-A-2	Lab Sample ID:	140-19811-2
Client ID:	BLDG A MID GAC		
Operator ID:	HMT	ALS Bottle#:	12 Worklist Smp#: 16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

27 1,1-Dichloroethene, CAS: 75-35-4



Eurofins TestAmerica, Knoxville

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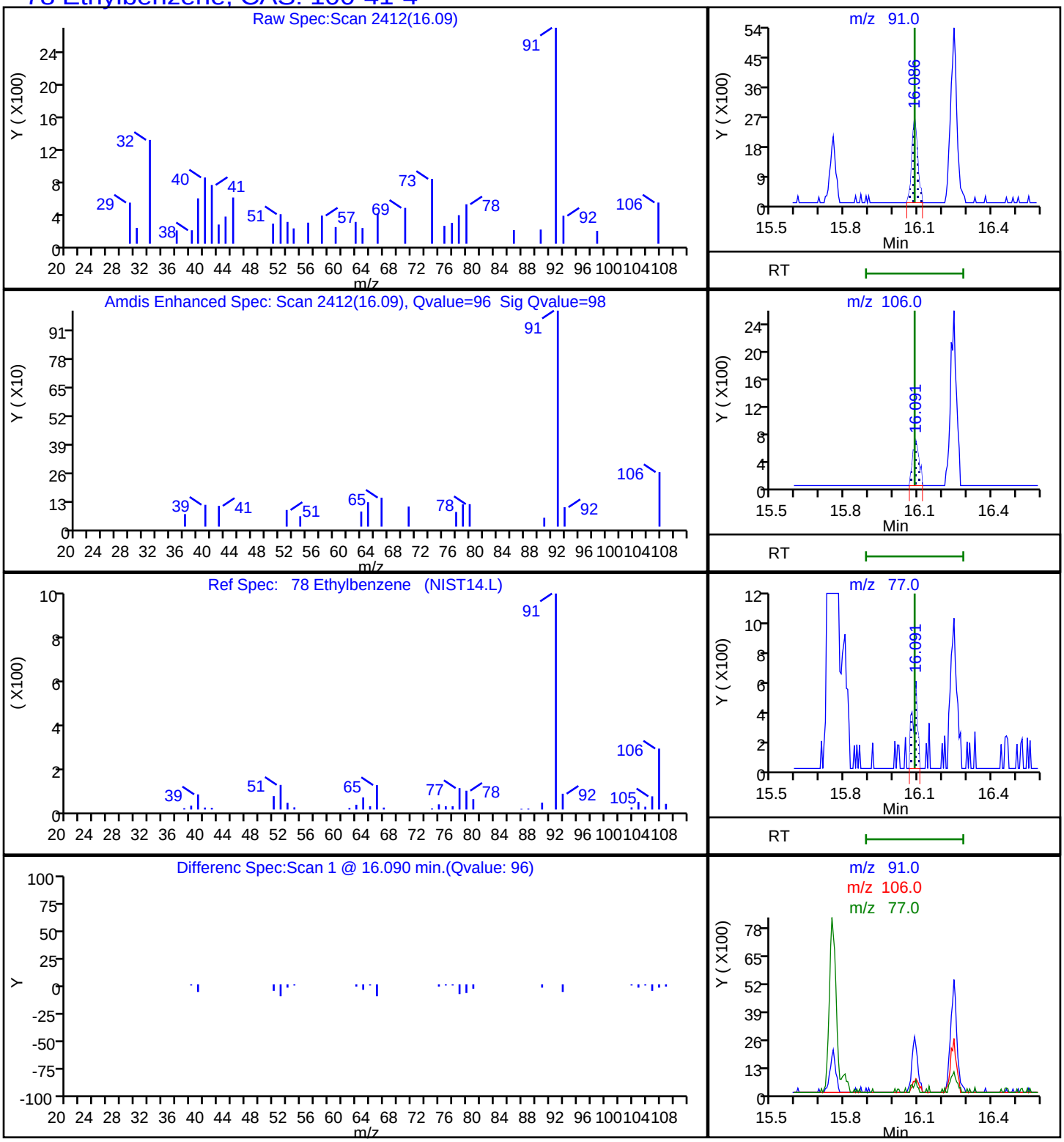
Lims ID:	140-19811-A-2	Lab Sample ID:	140-19811-2		
Client ID:	BLDG A MID GAC				
Operator ID:	HMT	ALS Bottle#:	12	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

78 Ethylbenzene, CAS: 100-41-4



Eurofins TestAmerica, Knoxville

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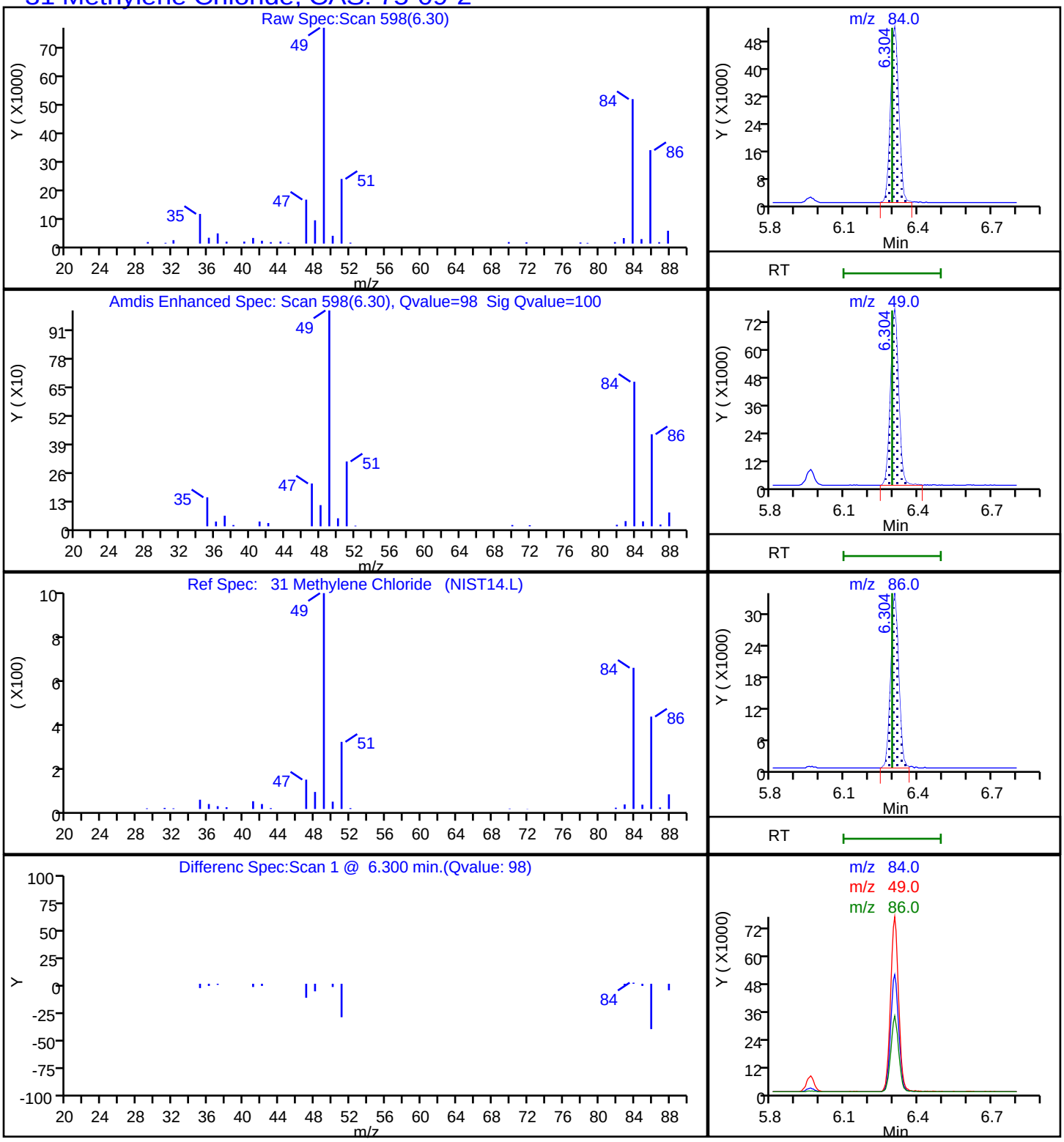
Lims ID:	140-19811-A-2	Lab Sample ID:	140-19811-2		
Client ID:	BLDG A MID GAC				
Operator ID:	HMT	ALS Bottle#:	12	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

31 Methylene Chloride, CAS: 75-09-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GG31P112.D		
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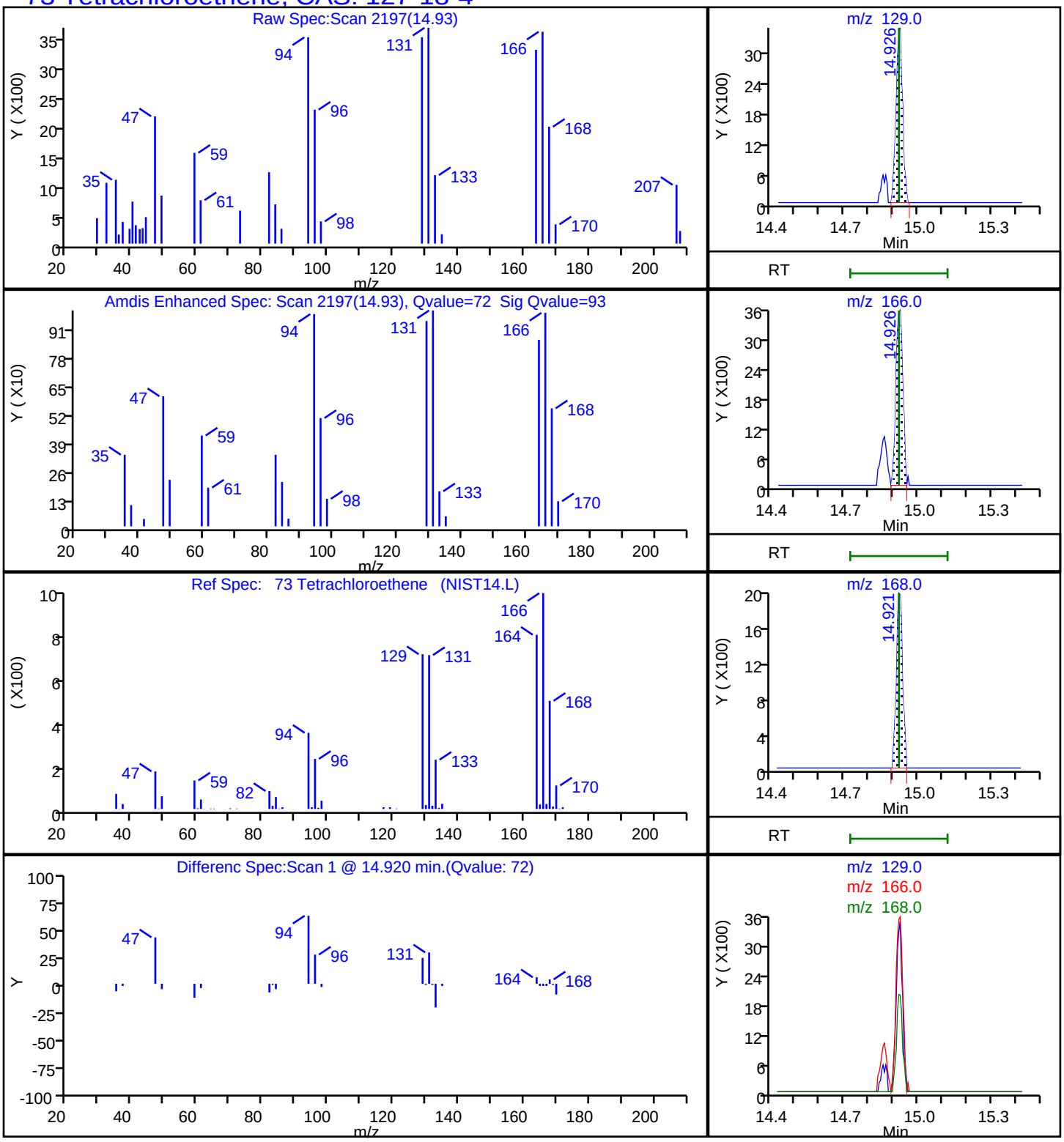
Lims ID:	140-19811-A-2	Lab Sample ID:	140-19811-2
Client ID:	BLDG A MID GAC		
Operator ID:	HMT	ALS Bottle#:	12 Worklist Smp#: 16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

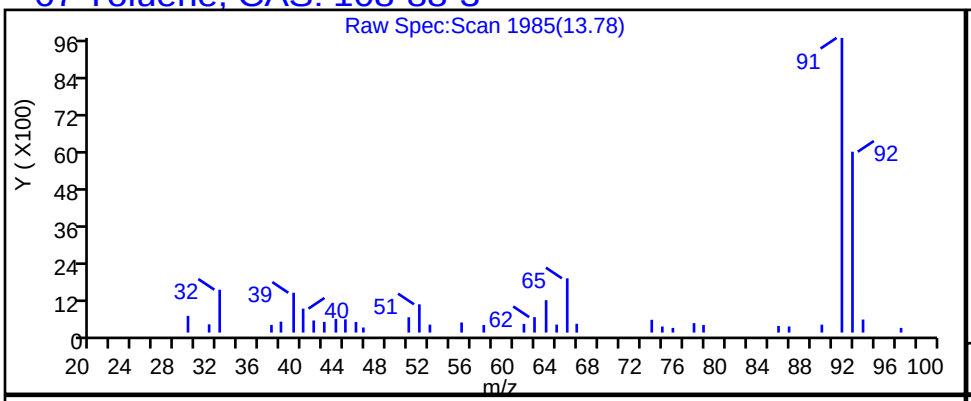
73 Tetrachloroethene, CAS: 127-18-4

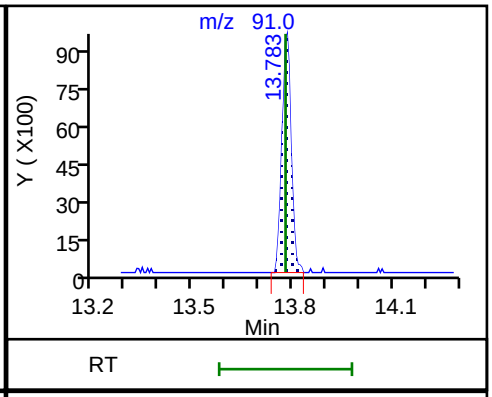


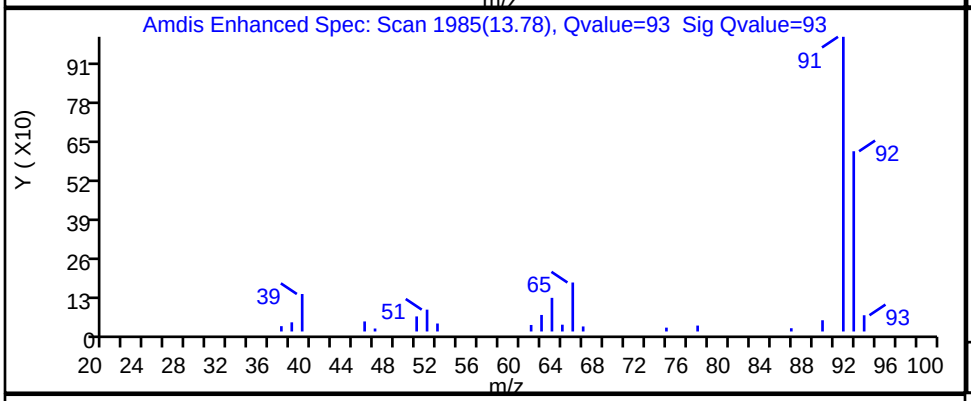
Eurofins TestAmerica, Knoxville

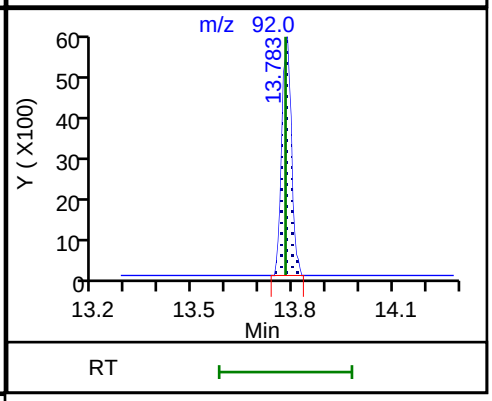
Data File:	\\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GG31P112.D		
Injection Date:	31-Jul-2020 21:26:30	Instrument ID:	MG
Lims ID:	140-19811-A-2	Lab Sample ID:	140-19811-2
Client ID:	BLDG A MID GAC		
Operator ID:	HMT	ALS Bottle#:	12 Worklist Smp#: 16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

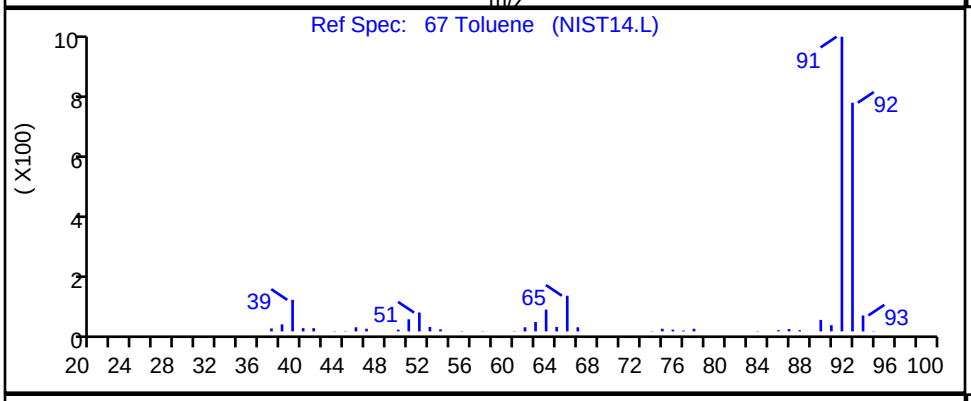
67 Toluene, CAS: 108-88-3

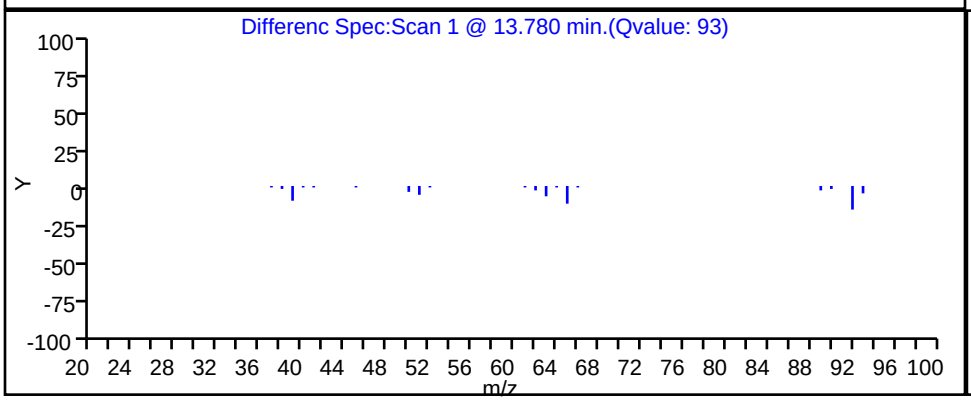


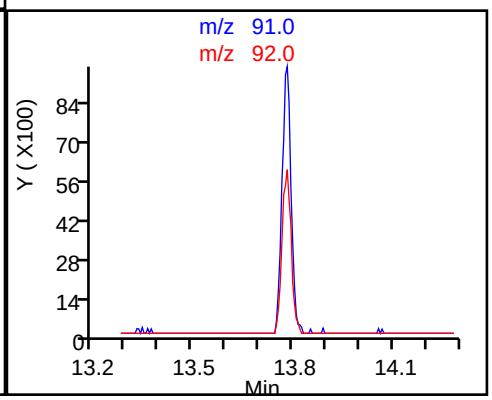










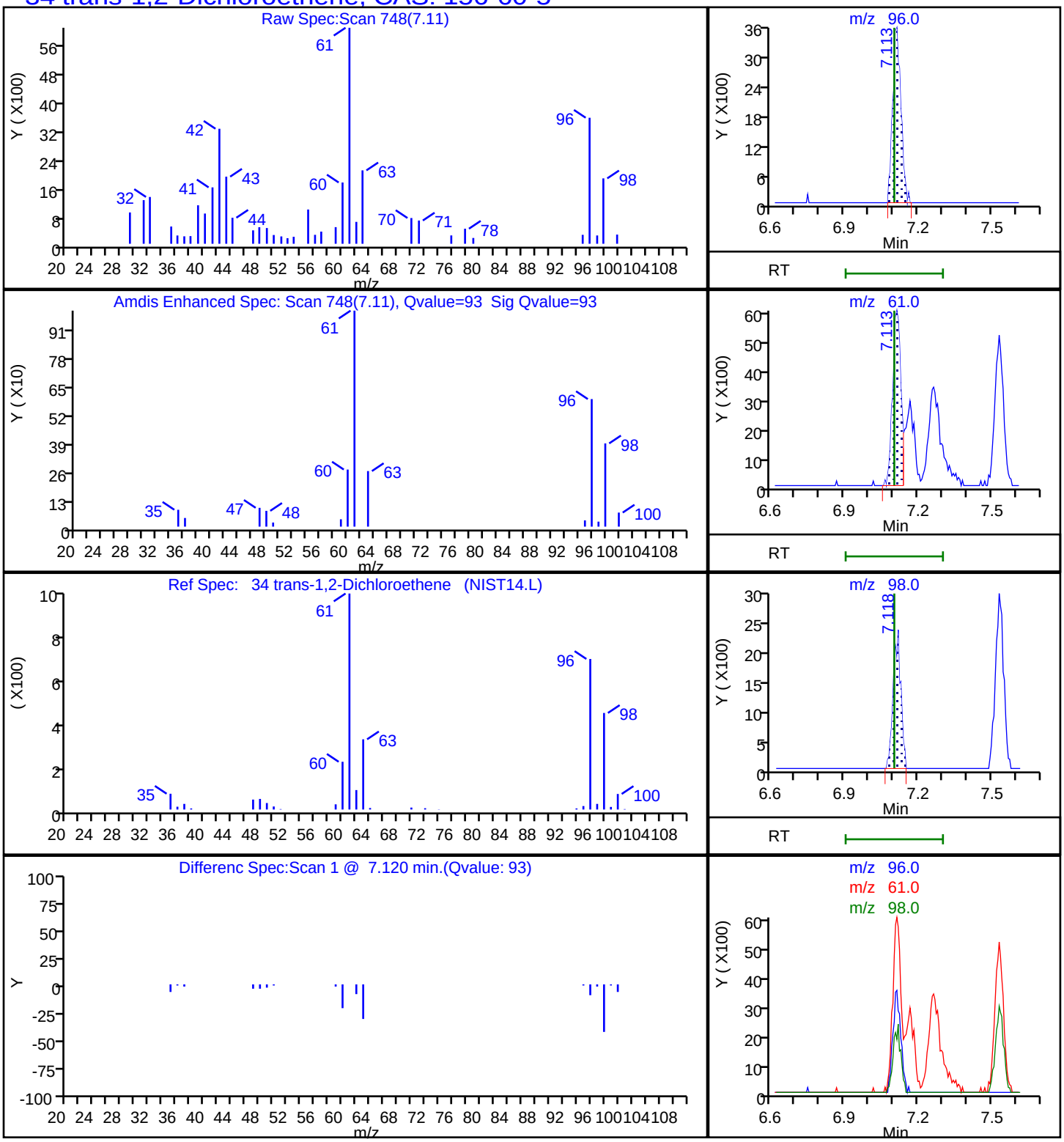


Report Date: 03-Aug-2020 13:24:05 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GG31P112.D				
Injection Date:	31-Jul-2020 21:26:30	Instrument ID:	MG		
Lims ID:	140-19811-A-2	Lab Sample ID:	140-19811-2		
Client ID:	BLDG A MID GAC				
Operator ID:	HMT	ALS Bottle#:	12	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

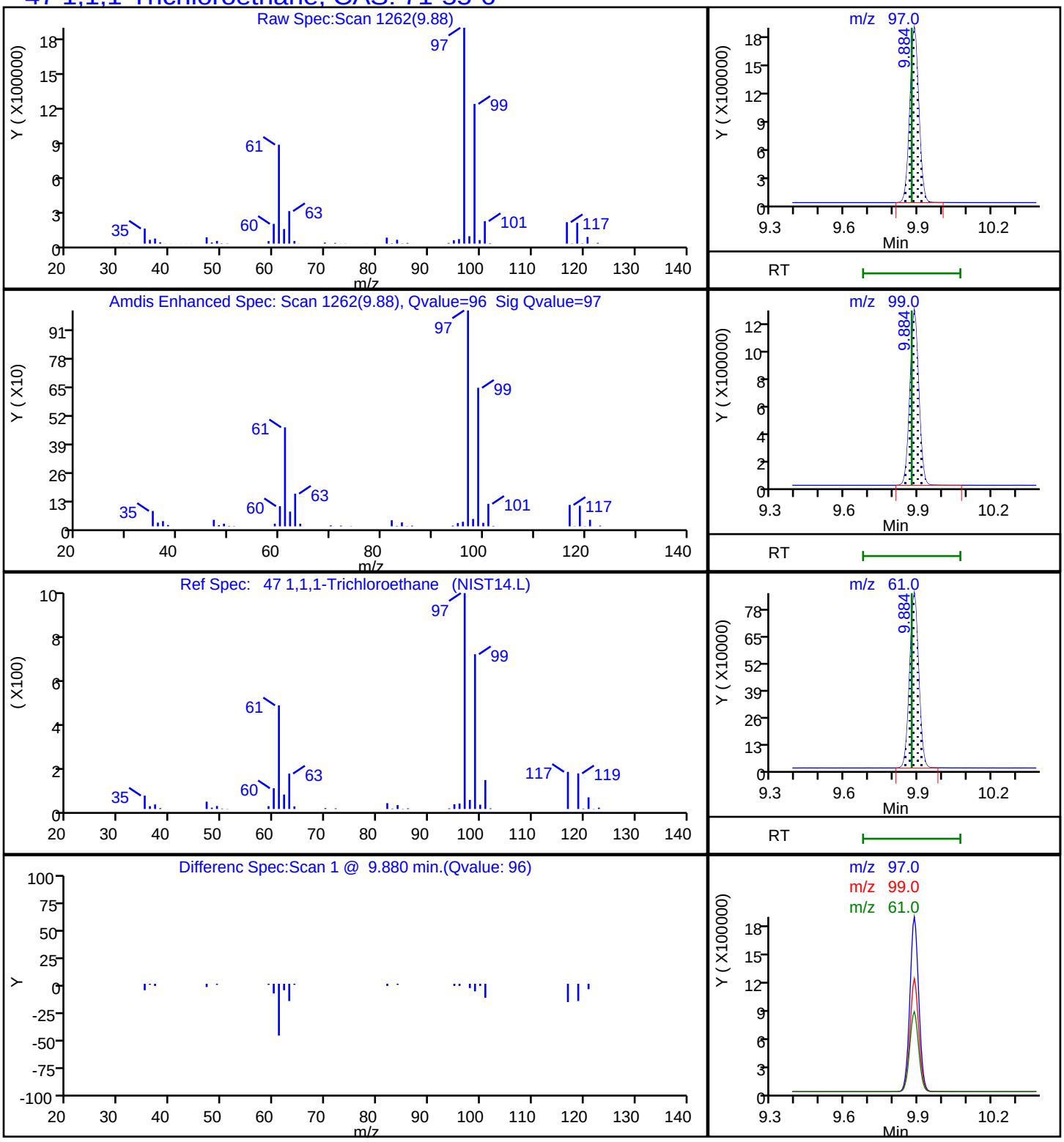
34 trans-1,2-Dichloroethene, CAS: 156-60-5



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GG31P112.D				
Injection Date:	31-Jul-2020 21:26:30	Instrument ID:	MG		
Lims ID:	140-19811-A-2	Lab Sample ID:	140-19811-2		
Client ID:	BLDG A MID GAC				
Operator ID:	HMT	ALS Bottle#:	12	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

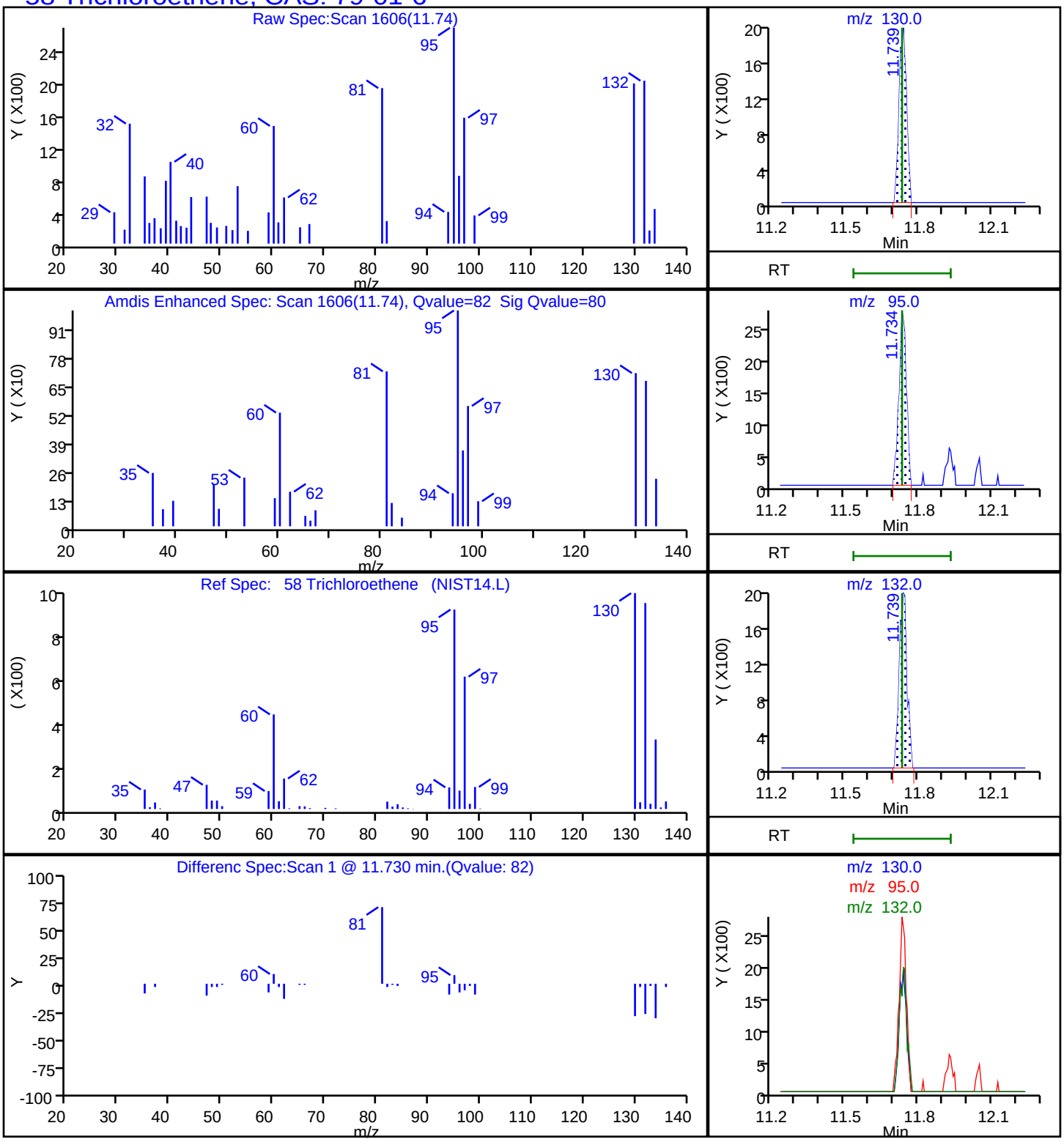
47 1,1,1-Trichloroethane, CAS: 71-55-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GG31P112.D				
Injection Date:	31-Jul-2020 21:26:30	Instrument ID:	MG		
Lims ID:	140-19811-A-2	Lab Sample ID:	140-19811-2		
Client ID:	BLDG A MID GAC				
Operator ID:	HMT	ALS Bottle#:	12	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

58 Trichloroethene, CAS: 79-01-6

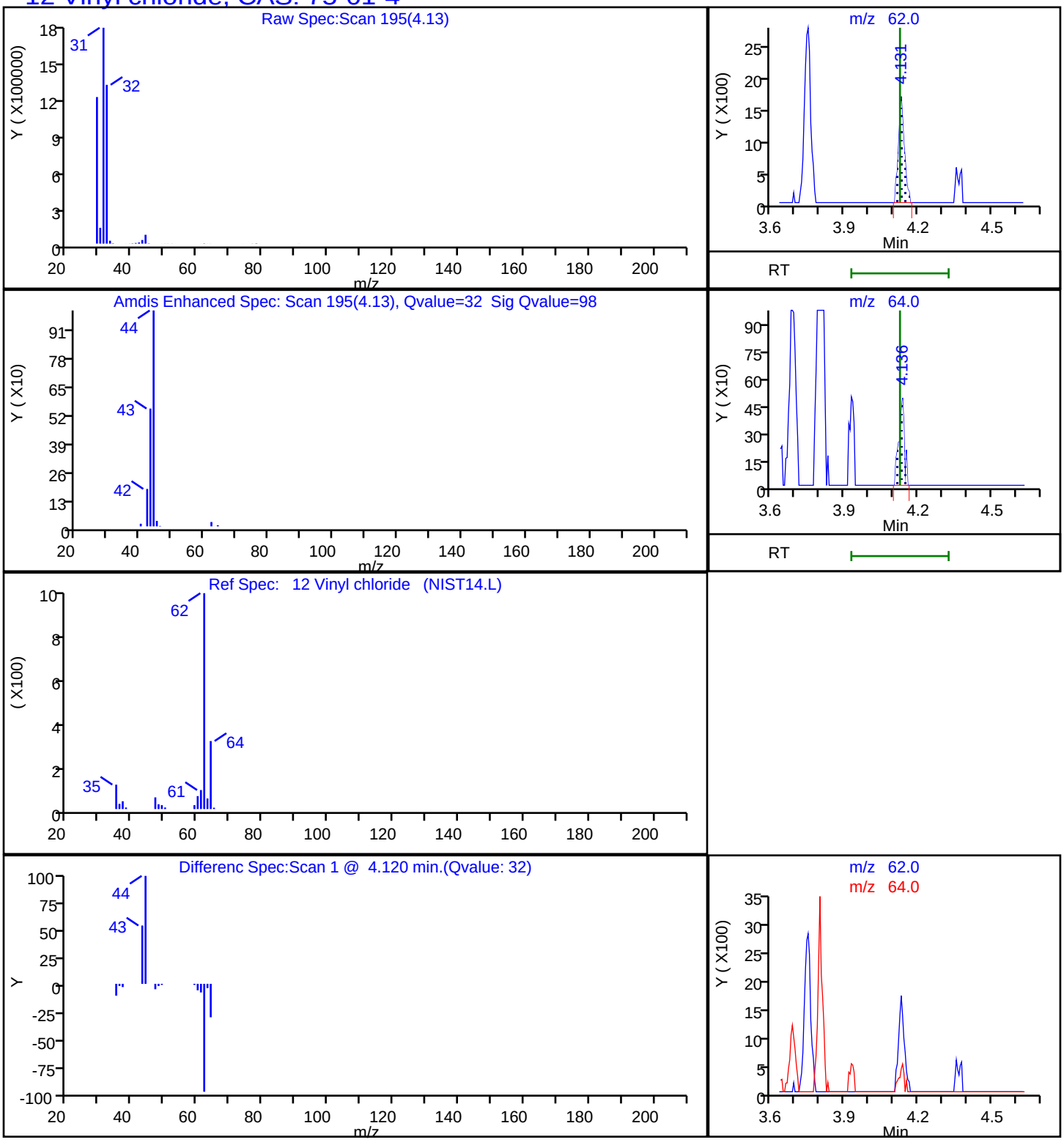


Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GG31P112.D

Injection Date:	31-Jul-2020 21:26:30	Instrument ID:	MG
Lims ID:	140-19811-A-2	Lab Sample ID:	140-19811-2
Client ID:	BLDG A MID GAC		
Operator ID:	HMT	ALS Bottle#:	12 Worklist Smp#: 16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

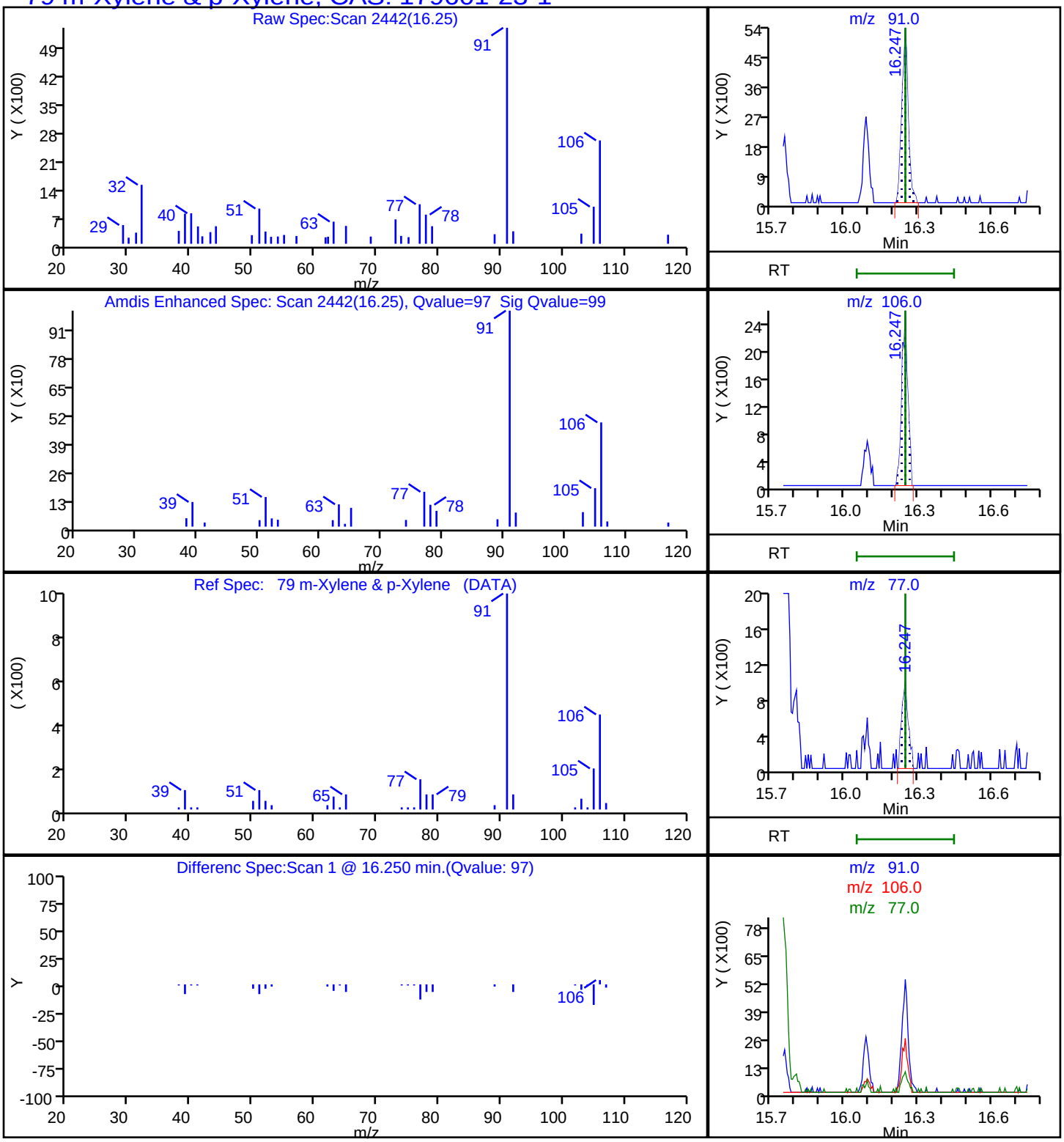
12 Vinyl chloride, CAS: 75-01-4



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GG31P112.D				
Injection Date:	31-Jul-2020 21:26:30	Instrument ID:	MG		
Lims ID:	140-19811-A-2	Lab Sample ID:	140-19811-2		
Client ID:	BLDG A MID GAC				
Operator ID:	HMT	ALS Bottle#:	12	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

79 m-Xylene & p-Xylene, CAS: 179601-23-1



Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GG31P112.D

Injection Date: 31-Jul-2020 21:26:30 Instrument ID: MG

Lims ID: 140-19811-A-2 Lab Sample ID: 140-19811-2

Client ID: BLDG A MID GAC

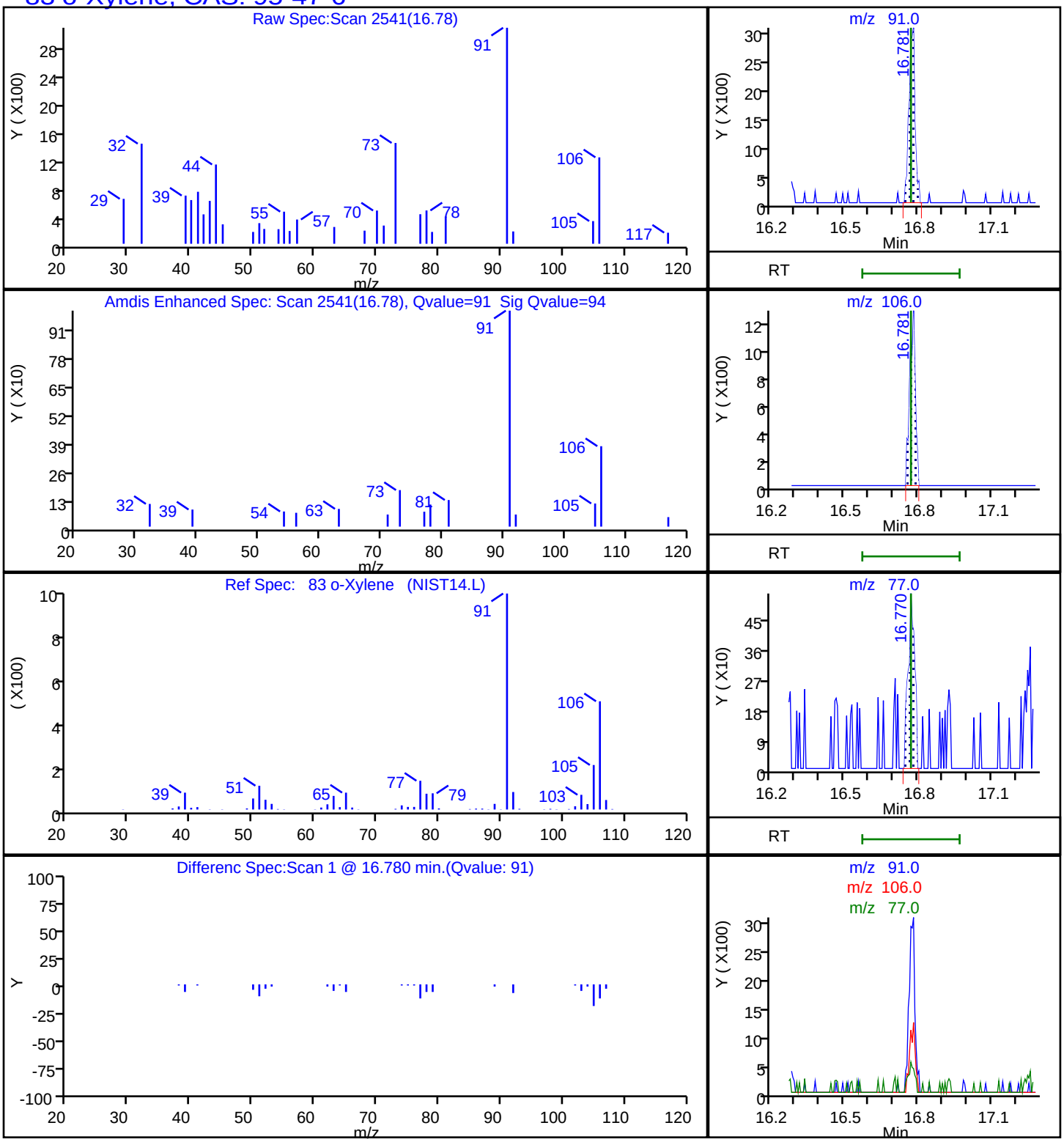
Operator ID: HMT ALS Bottle#: 12 Worklist Smp#: 16

Purge Vol: 500.000 mL Dil. Factor: 1.0000

Method: MG_TO15 Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm) Detector MS SCAN

83 o-Xylene, CAS: 95-47-6



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Knoxville

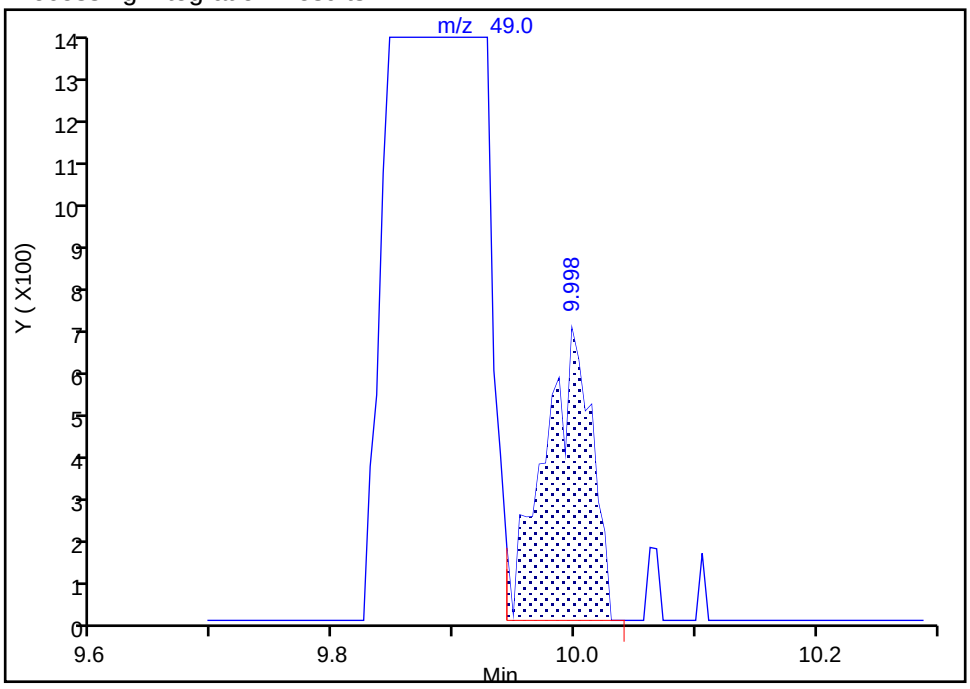
Data File:	\\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GG31P112.D				
Injection Date:	31-Jul-2020 21:26:30	Instrument ID:	MG		
Lims ID:	140-19811-A-2	Lab Sample ID:	140-19811-2		
Client ID:	BLDG A MID GAC				
Operator ID:	HMT	ALS Bottle#:	12	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

48 1,2-Dichloroethane, CAS: 107-06-2

Signal: 2

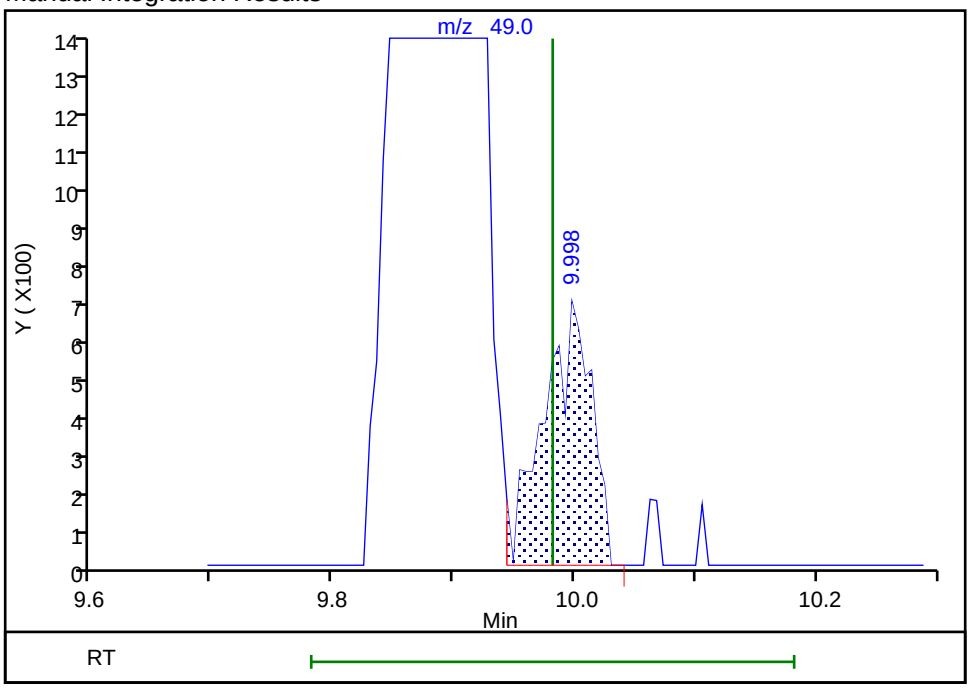
Processing Integration Results

RT: 10.00
Area: 1826
Amount: 0.045958
Amount Units: ppb v/v



Manual Integration Results

RT: 10.00
Area: 1826
Amount: 0.045958
Amount Units: ppb v/v



Reviewer: khachitpongpanits, 03-Aug-2020 13:23:29

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Knoxville

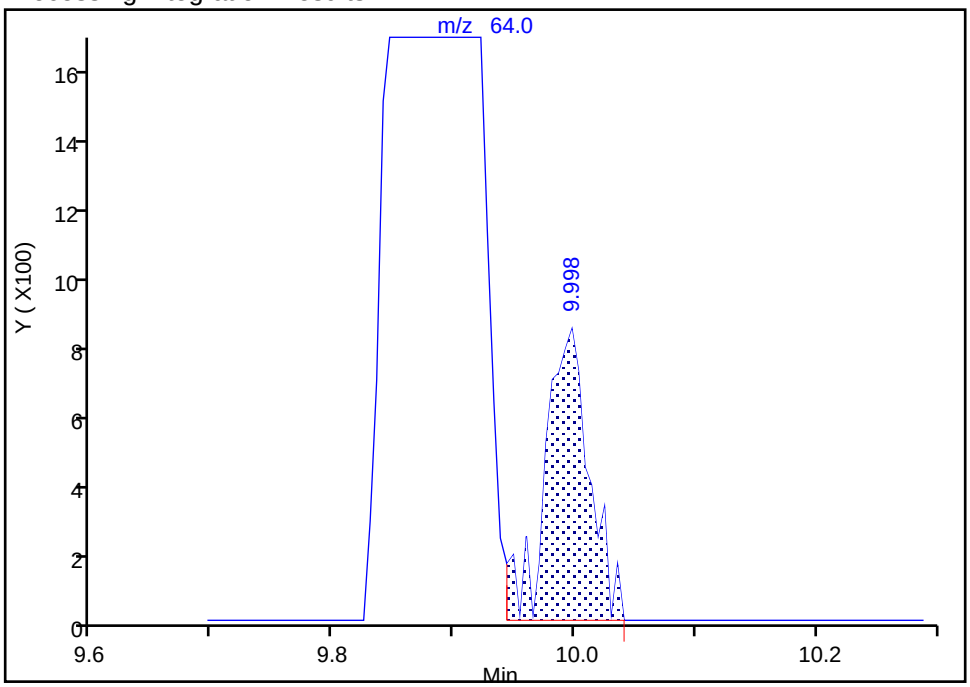
Data File:	\\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GG31P112.D				
Injection Date:	31-Jul-2020 21:26:30	Instrument ID:	MG		
Lims ID:	140-19811-A-2	Lab Sample ID:	140-19811-2		
Client ID:	BLDG A MID GAC				
Operator ID:	HMT	ALS Bottle#:	12	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

48 1,2-Dichloroethane, CAS: 107-06-2

Signal: 3

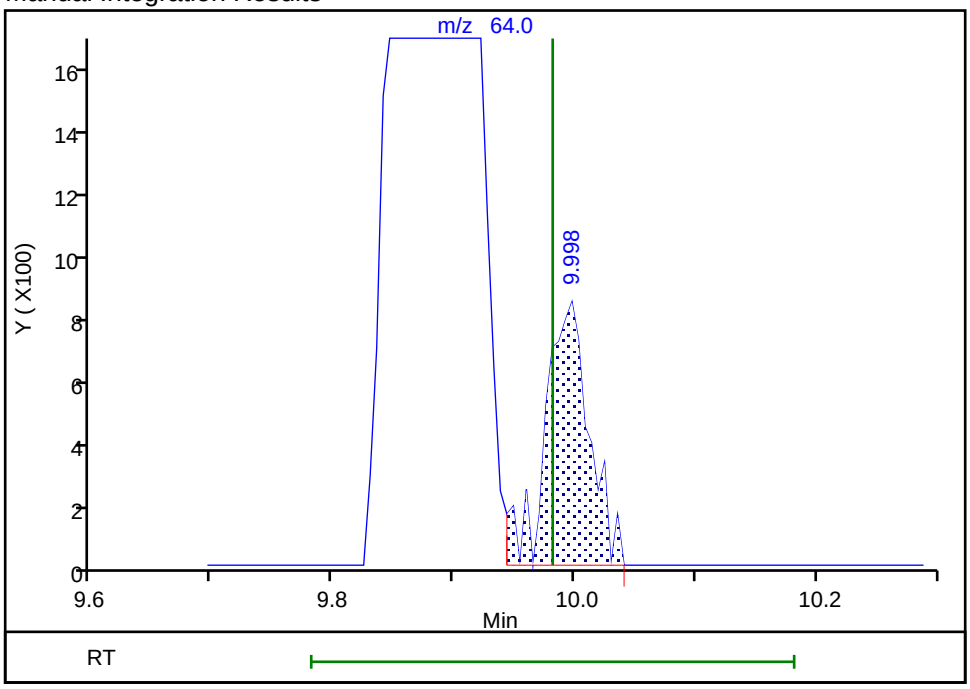
Processing Integration Results

RT: 10.00
Area: 2117
Amount: 0.045958
Amount Units: ppb v/v



Manual Integration Results

RT: 10.00
Area: 2117
Amount: 0.045958
Amount Units: ppb v/v



Reviewer: khachitpongpanits, 03-Aug-2020 13:23:29
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19811-1

SDG No.:

Client Sample ID: BLDG A MID GAC DL Lab Sample ID: 140-19811-2 DL

Matrix: Air Lab File ID: RH01P109.D

Analysis Method: TO 15 LL Date Collected: 07/23/2020 11:10

Sample wt/vol: 30(mL) Date Analyzed: 08/01/2020 21:01

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 41446 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	133.41	100		1.3	0.62

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	86		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19811-1

SDG No.:

Client Sample ID: BLDG A MID GAC DL Lab Sample ID: 140-19811-2 DL

Matrix: Air Lab File ID: RH01P109.D

Analysis Method: TO 15 LL Date Collected: 07/23/2020 11:10

Sample wt/vol: 30(mL) Date Analyzed: 08/01/2020 21:01

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 41446 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	133.41	550		7.3	3.4

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	86		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MR\20200730-16173.b\RH01P109.D				
Lims ID:	140-19811-A-2				
Client ID:	BLDG A MID GAC				
Sample Type:	Client				
Inject. Date:	01-Aug-2020 21:01:30	ALS Bottle#:	9	Worklist Smp#:	14
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016173-014				
Misc. Info.:	140-19811-a-2				
Operator ID:	HMT	Instrument ID:	MR		
Method:	\\chromfs\Knoxville\ChromData\MR\20200730-16173.b\MR_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	03-Aug-2020 15:23:40	Calib Date:	28-Jul-2020 09:59:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC09R.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1028				
First Level Reviewer: khachitpongpanits		Date:	03-Aug-2020 15:23:40		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.301	8.317	-0.016	88	84379	4.00	
* 2 1,4-Difluorobenzene	114	10.534	10.544	-0.010	96	744618	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.371	15.376	-0.005	91	605400	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.021	17.026	-0.005	95	315206	3.45	
6 Chlorodifluoromethane	51	3.340	3.346	-0.006	37	5348	0.0433	
8 Dichlorodifluoromethane	85	3.389	3.405	-0.016	59	3613	0.0433	
27 1,1-Dichloroethene	96	5.432	5.431	-0.017	95	58552	1.29	
31 Methylene Chloride	84	5.772	5.788	-0.016	89	42975	0.3535	
34 trans-1,2-Dichloroethene	96	6.581	6.560	0.000	6	1639	0.0380	
37 1,1-Dichloroethane	63	6.985	6.983	-0.017	96	30543	0.3022	
42 cis-1,2-Dichloroethene	96	7.967	7.957	-0.016	95	84013	1.73	
44 Chloroform	83	8.307	8.328	-0.021	28	4469	0.0483	
47 1,1,1-Trichloroethane	97	9.342	9.328	-0.011	93	580297	6.05	
51 Benzene	78	9.962	9.962	0.000	90	16845	0.1136	
58 Trichloroethene	130	11.278	11.284	0.000	25	1387	0.0213	
73 Tetrachloroethene	129	14.540	14.540	0.000	73	3046	0.0507	

Reagents:

40MXISSURP_00004 Amount Added: 40.00 Units: mL Run Reagent

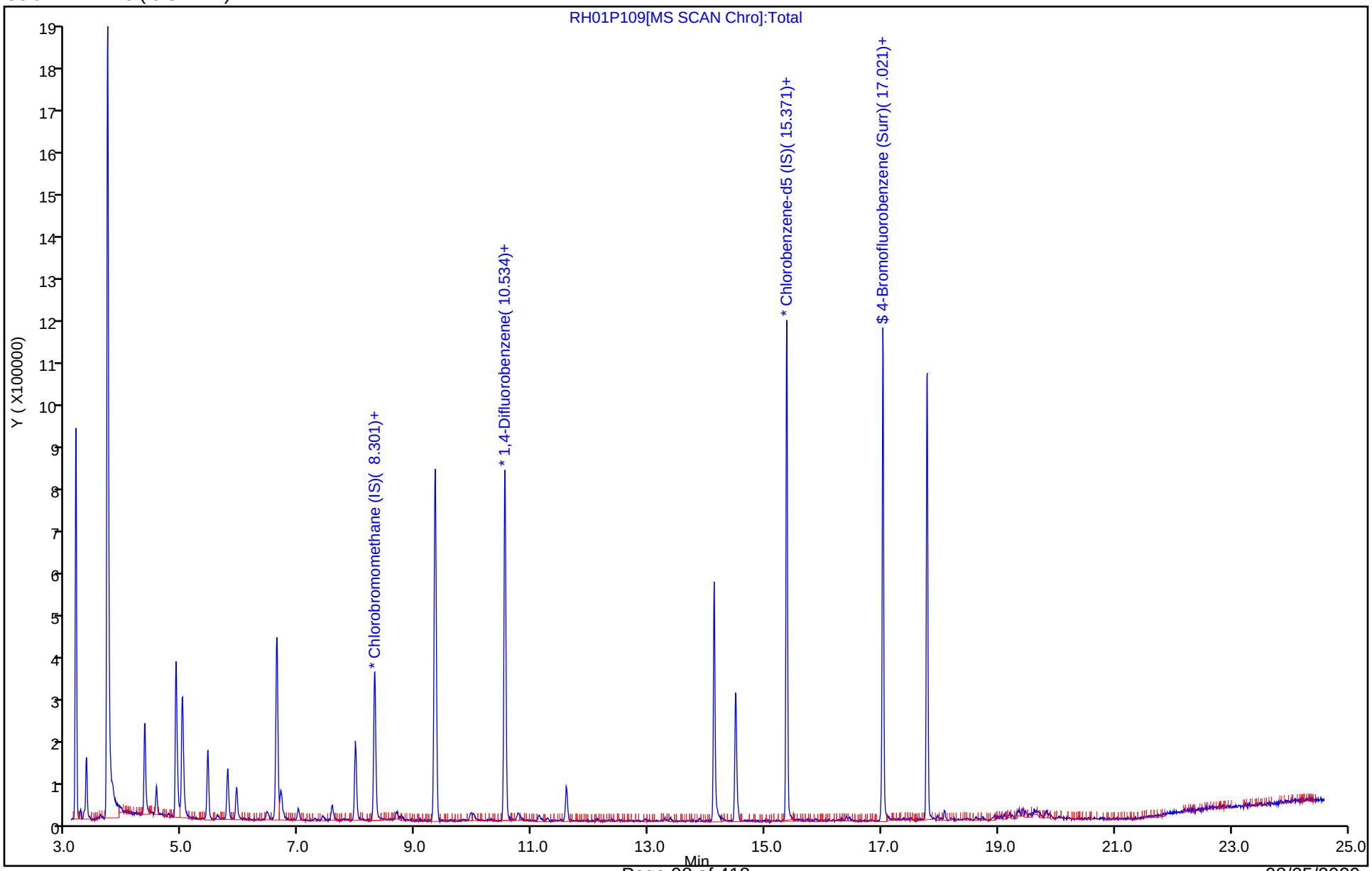
Report Date: 03-Aug-2020 15:23:40 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200730-16173.b\RH01P109.D

Injection Date:	01-Aug-2020 21:01:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	140-19811-A-2	Lab Sample ID:	140-19811-2	Worklist Smp#:	14
Client ID:	BLDG A MID GAC				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MR\20200730-16173.b\RH01P109.D				
Lims ID:	140-19811-A-2				
Client ID:	BLDG A MID GAC				
Sample Type:	Client				
Inject. Date:	01-Aug-2020 21:01:30	ALS Bottle#:	9	Worklist Smp#:	14
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016173-014				
Misc. Info.:	140-19811-a-2				
Operator ID:	HMT	Instrument ID:	MR		
Method:	\\chromfs\Knoxville\ChromData\MR\20200730-16173.b\MR_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	03-Aug-2020 15:23:40	Calib Date:	28-Jul-2020 09:59:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC09R.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1028				

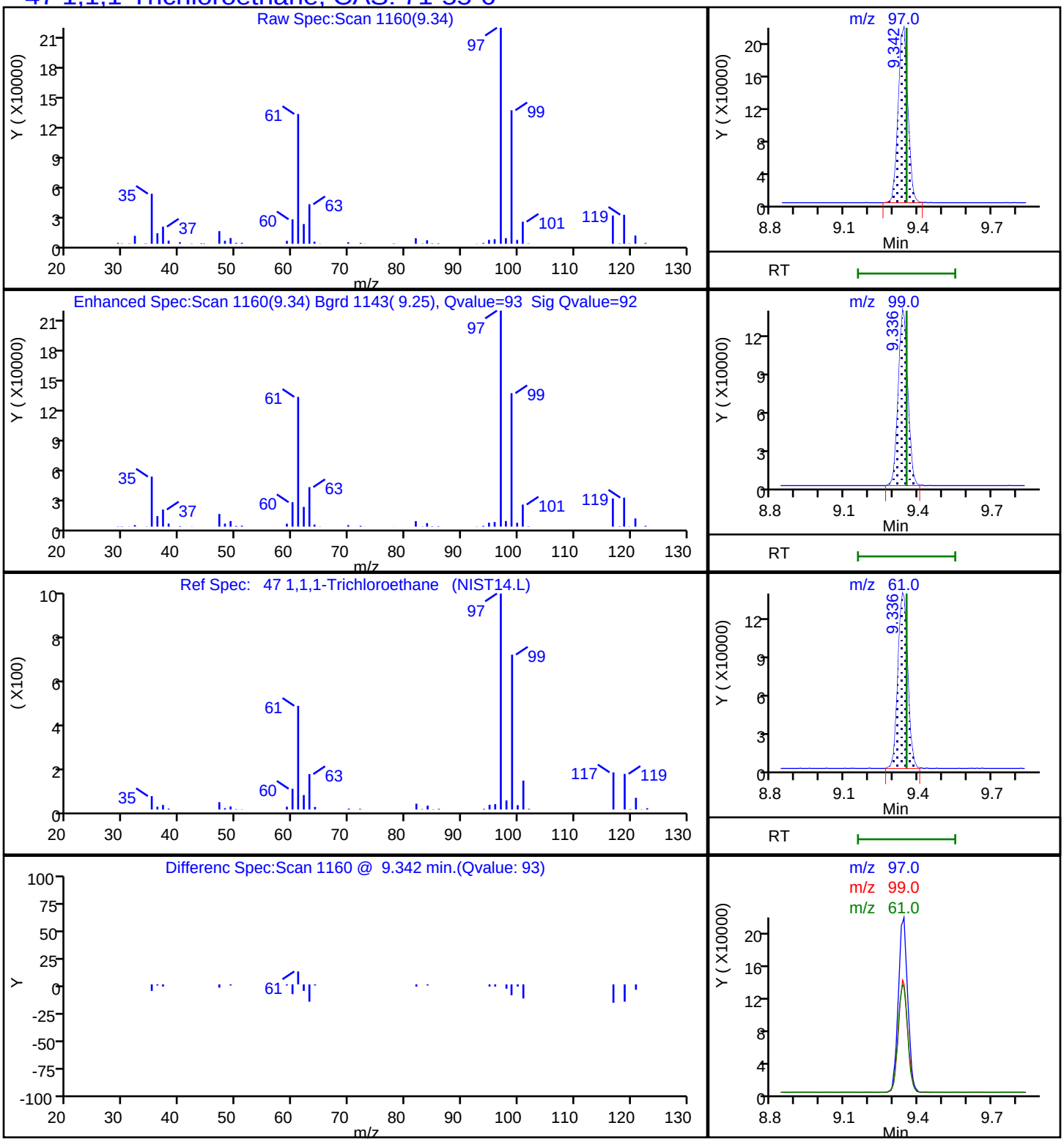
First Level Reviewer: khachitpongpanits Date: 03-Aug-2020 15:23:40

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.00	3.45	86.20

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200730-16173.b\RH01P109.D		
Injection Date:	01-Aug-2020 21:01:30	Instrument ID:	MR
Lims ID:	140-19811-A-2	Lab Sample ID:	140-19811-2
Client ID:	BLDG A MID GAC		
Operator ID:	HMT	ALS Bottle#:	9 Worklist Smp#: 14
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

47 1,1,1-Trichloroethane, CAS: 71-55-6



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19811-1

SDG No.:

Client Sample ID: BLDG A INFLUENT Lab Sample ID: 140-19811-3

Matrix: Air Lab File ID: GG31P113.D

Analysis Method: TO 15 LL Date Collected: 07/23/2020 11:17

Sample wt/vol: 25(mL) Date Analyzed: 07/31/2020 22:09

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 41417 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	14		1.6	0.16
56-23-5	Carbon tetrachloride	153.81	ND		1.6	0.14
75-45-6	Chlorodifluoromethane	86.47	0.87	J	1.6	0.44
67-66-3	Chloroform	119.38	1.5	J	1.6	0.14
156-59-2	cis-1,2-Dichloroethene	96.94	19		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	0.73	J	1.6	0.28
75-34-3	1,1-Dichloroethane	98.96	4.0		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	19		1.6	0.16
100-41-4	Ethylbenzene	106.17	ND		1.6	0.26
75-09-2	Methylene Chloride	84.93	7.9	J	8.0	3.2
1634-04-4	Methyl tert-butyl ether	88.15	ND		8.0	1.0
91-20-3	Naphthalene	128.17	ND		0.80	0.80
127-18-4	Tetrachloroethene	165.83	0.21	J	1.6	0.14
108-88-3	Toluene	92.14	ND		2.4	1.6
156-60-5	trans-1,2-Dichloroethene	96.94	0.43	J	1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		1.6	1.3
71-55-6	1,1,1-Trichloroethane	133.41	99		1.6	0.74
79-00-5	1,1,2-Trichloroethane	133.41	ND		1.6	0.14
79-01-6	Trichloroethene	131.39	220		0.80	0.12
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		1.6	0.72
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		1.6	0.40
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		1.6	0.44
75-01-4	Vinyl chloride	62.50	ND		0.80	0.52
1330-20-7	Xylenes, Total	106.17	ND		3.2	0.48

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	94		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19811-1

SDG No.:

Client Sample ID: BLDG A INFLUENT Lab Sample ID: 140-19811-3

Matrix: Air Lab File ID: GG31P113.D

Analysis Method: TO 15 LL Date Collected: 07/23/2020 11:17

Sample wt/vol: 25(mL) Date Analyzed: 07/31/2020 22:09

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 41417 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	43		5.1	0.51
56-23-5	Carbon tetrachloride	153.81	ND		10	0.88
75-45-6	Chlorodifluoromethane	86.47	3.1	J	5.7	1.6
67-66-3	Chloroform	119.38	7.4	J	7.8	0.68
156-59-2	cis-1,2-Dichloroethene	96.94	76		6.3	0.79
75-71-8	Dichlorodifluoromethane	120.91	3.6	J	7.9	1.4
75-34-3	1,1-Dichloroethane	98.96	16		6.5	0.57
107-06-2	1,2-Dichloroethane	98.96	ND		6.5	0.81
75-35-4	1,1-Dichloroethene	96.94	74		6.3	0.63
100-41-4	Ethylbenzene	106.17	ND		6.9	1.1
75-09-2	Methylene Chloride	84.93	28	J	28	11
1634-04-4	Methyl tert-butyl ether	88.15	ND		29	3.7
91-20-3	Naphthalene	128.17	ND		4.2	4.2
127-18-4	Tetrachloroethene	165.83	1.4	J	11	0.95
108-88-3	Toluene	92.14	ND		9.0	5.9
156-60-5	trans-1,2-Dichloroethene	96.94	1.7	J	6.3	0.56
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		12	9.5
71-55-6	1,1,1-Trichloroethane	133.41	540		8.7	4.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		8.7	0.76
79-01-6	Trichloroethene	131.39	1200		4.3	0.64
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		7.9	3.5
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		7.9	2.0
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		7.9	2.2
75-01-4	Vinyl chloride	62.50	ND		2.0	1.3
1330-20-7	Xylenes, Total	106.17	ND		14	2.1

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	94		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GG31P113.D
Lims ID: 140-19811-A-3
Client ID: BLDG A INFLUENT
Sample Type: Client
Inject. Date: 31-Jul-2020 22:09:30 ALS Bottle#: 13 Worklist Smp#: 17
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016161-017
Misc. Info.: 140-19811-a-3
Operator ID: HMT Instrument ID: MG

Method: \\chromfs\Knoxville\ChromData\MG\20200729-16161.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 03-Aug-2020 13:24:04 Calib Date: 15-Jul-2020 22:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1011

First Level Reviewer: khachitpongpanits Date: 03-Aug-2020 13:24:26

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.833	8.838	-0.005	92	139702	4.00	
* 2 1,4-Difluorobenzene	114	11.017	11.017	0.000	97	1197911	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.746	15.746	0.000	94	1052423	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.391	17.391	0.000	75	804527	3.76	
6 Chlorodifluoromethane	51	3.710	3.710	0.000	37	6211	0.0437	
8 Dichlorodifluoromethane	85	3.769	3.767	-0.001	99	9301	0.0365	
27 1,1-Dichloroethene	96	5.948	5.944	0.000	93	60723	0.9283	
31 Methylene Chloride	84	6.293	6.293	0.000	98	79178	0.3973	
34 trans-1,2-Dichloroethene	96	7.102	7.097	0.000	88	1560	0.0214	
37 1,1-Dichloroethane	63	7.522	7.518	-0.001	100	32026	0.1990	
42 cis-1,2-Dichloroethene	96	8.504	8.499	0.000	99	71204	0.9601	
44 Chloroform	83	8.844	8.843	-0.005	27	14050	0.0757	
47 1,1,1-Trichloroethane	97	9.874	9.874	0.000	96	992545	4.96	
50 Benzene	78	10.472	10.478	-0.006	96	166792	0.6751	
58 Trichloroethene	130	11.729	11.734	-0.005	86	903327	10.8	
67 Toluene	91	13.778	13.778	0.000	93	12172	0.0533	
73 Tetrachloroethene	129	14.921	14.921	0.000	79	821	0.0105	

Reagents:

40MXISSURP_00004 Amount Added: 40.00 Units: mL Run Reagent

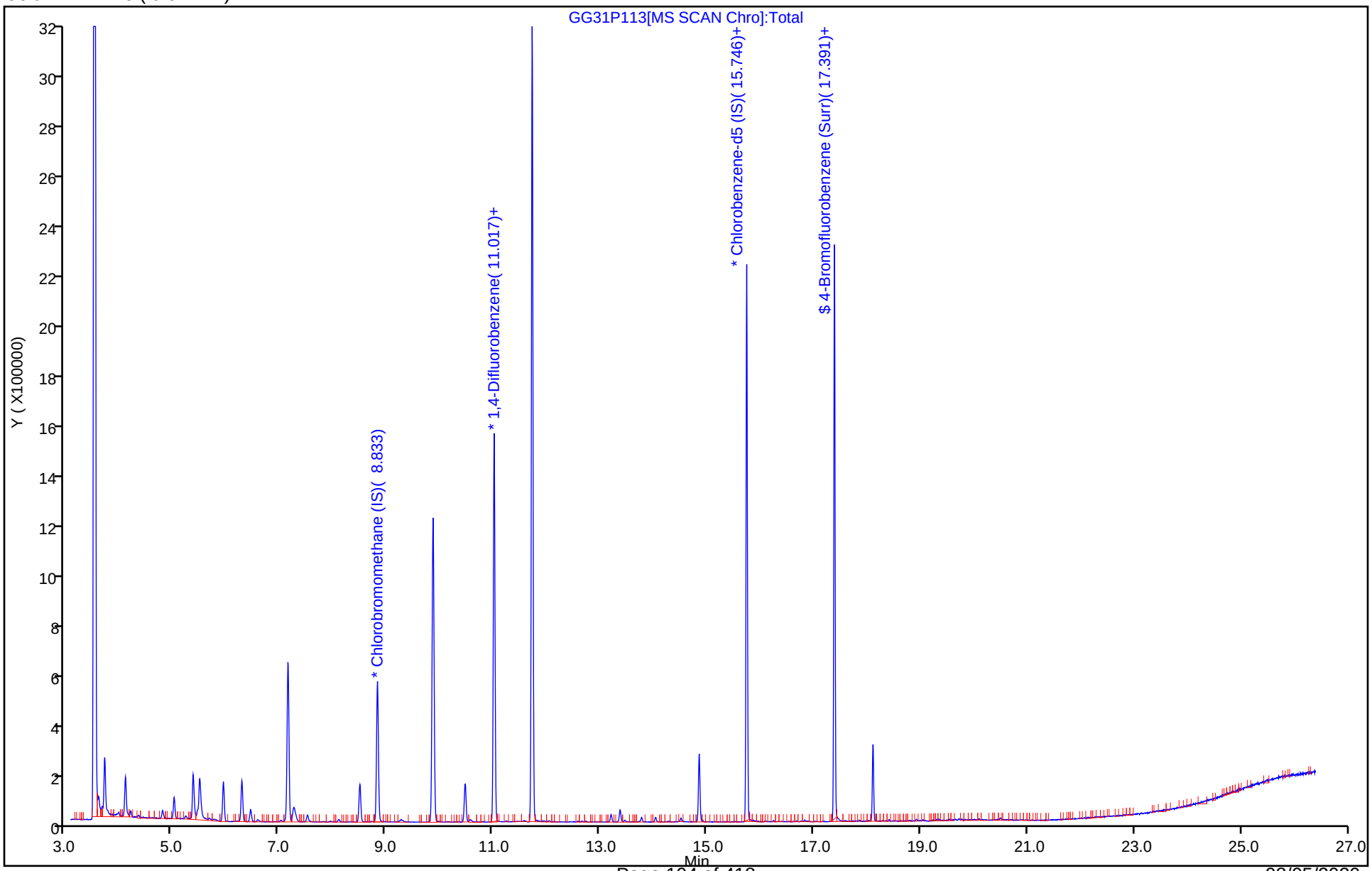
Report Date: 03-Aug-2020 13:24:27 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GG31P113.D

Injection Date:	31-Jul-2020 22:09:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	140-19811-A-3	Lab Sample ID:	140-19811-3	Worklist Smp#:	17
Client ID:	BLDG A INFLUENT				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GG31P113.D				
Lims ID:	140-19811-A-3				
Client ID:	BLDG A INFLUENT				
Sample Type:	Client				
Inject. Date:	31-Jul-2020 22:09:30	ALS Bottle#:	13	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016161-017				
Misc. Info.:	140-19811-a-3				
Operator ID:	HMT	Instrument ID:	MG		
Method:	\\chromfs\Knoxville\ChromData\MG\20200729-16161.b\MG_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	03-Aug-2020 13:24:04	Calib Date:	15-Jul-2020 22:02:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1011				

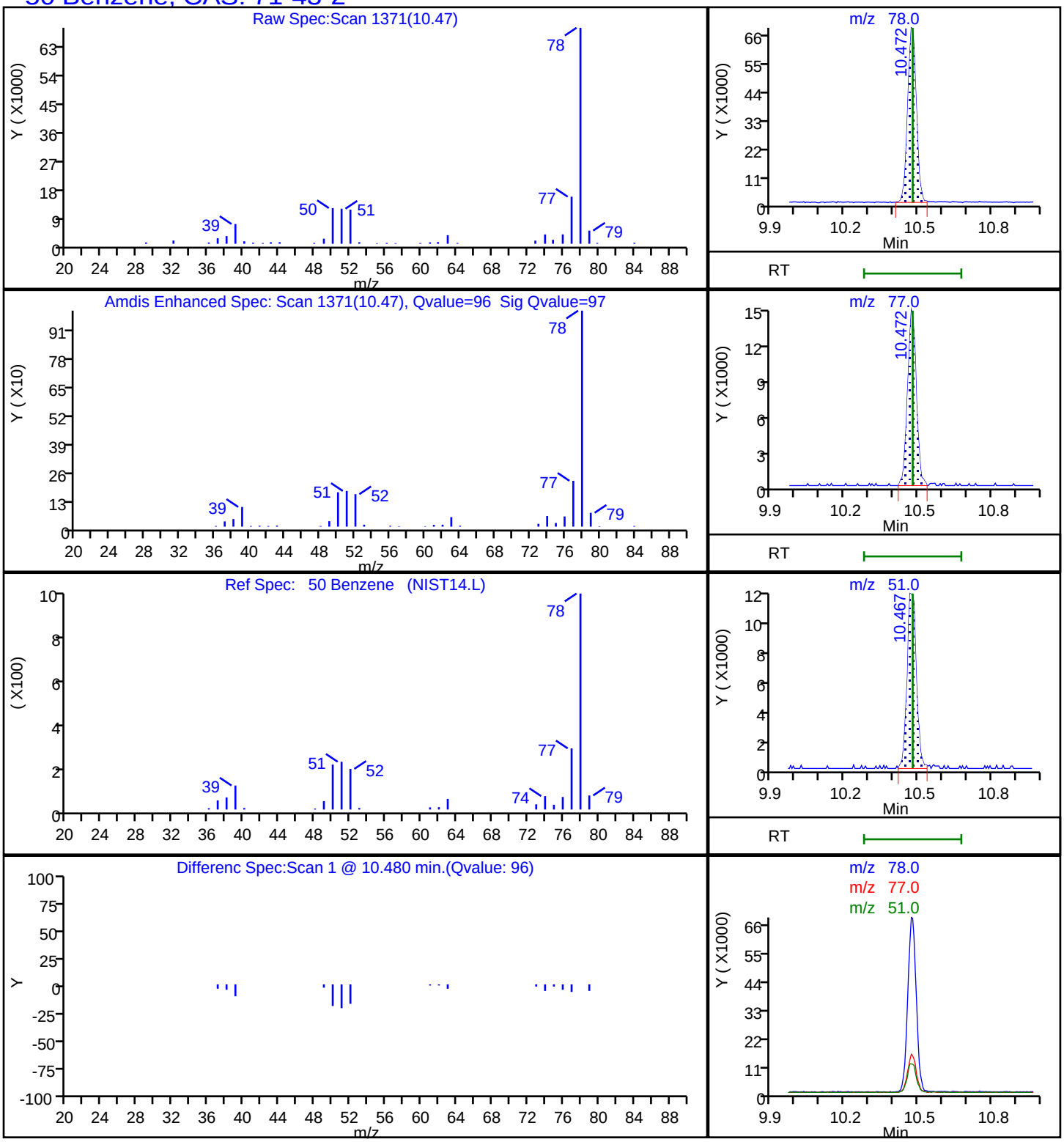
First Level Reviewer: khachitpongpanits Date: 03-Aug-2020 13:24:26

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.00	3.76	94.02

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GG31P113.D				
Injection Date:	31-Jul-2020 22:09:30	Instrument ID:	MG		
Lims ID:	140-19811-A-3	Lab Sample ID:	140-19811-3		
Client ID:	BLDG A INFLUENT				
Operator ID:	HMT	ALS Bottle#:	13	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

50 Benzene, CAS: 71-43-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GG31P113.D				
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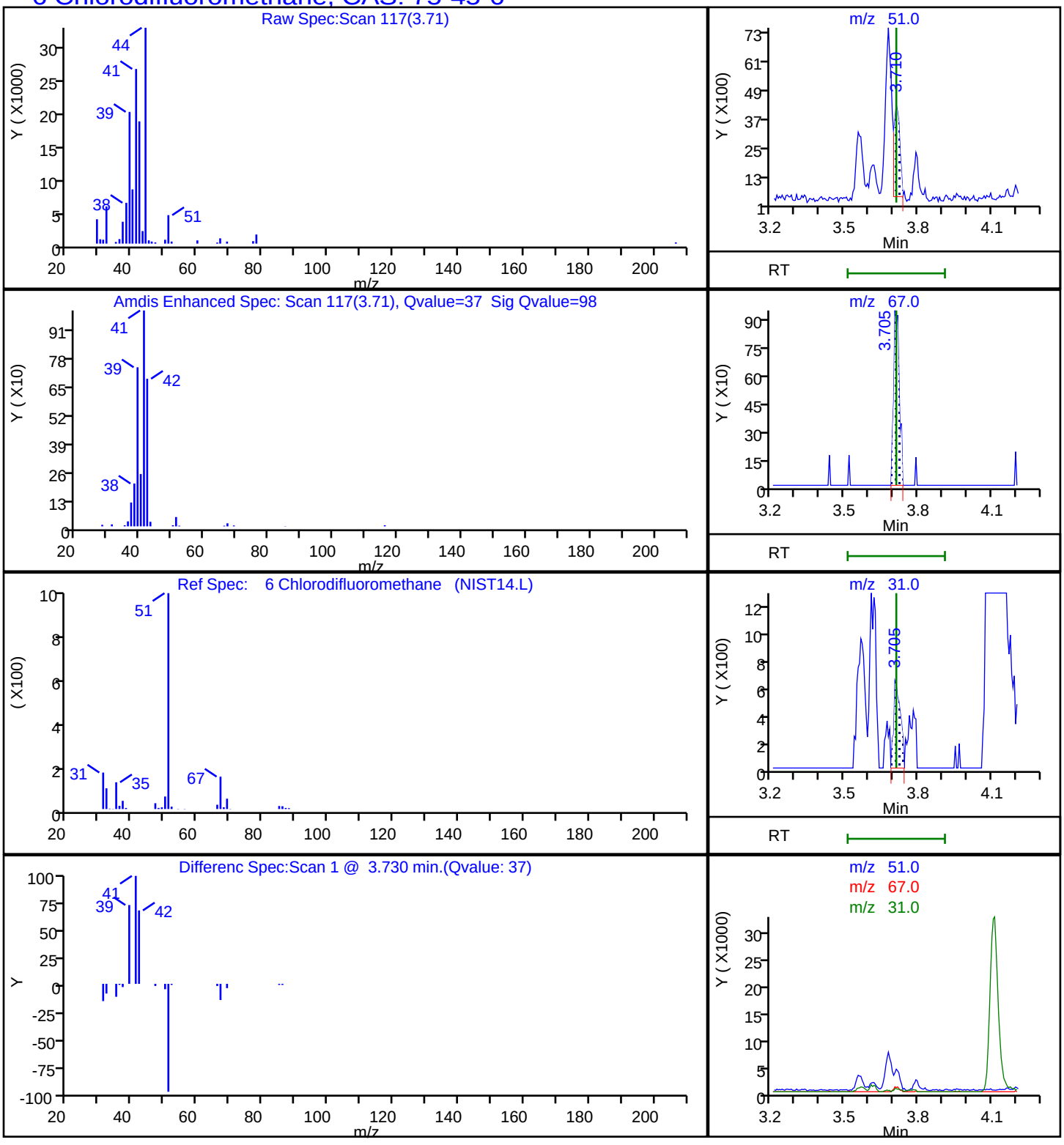
Lims ID:	140-19811-A-3	Lab Sample ID:	140-19811-3		
Client ID:	BLDG A INFLUENT				
Operator ID:	HMT	ALS Bottle#:	13	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

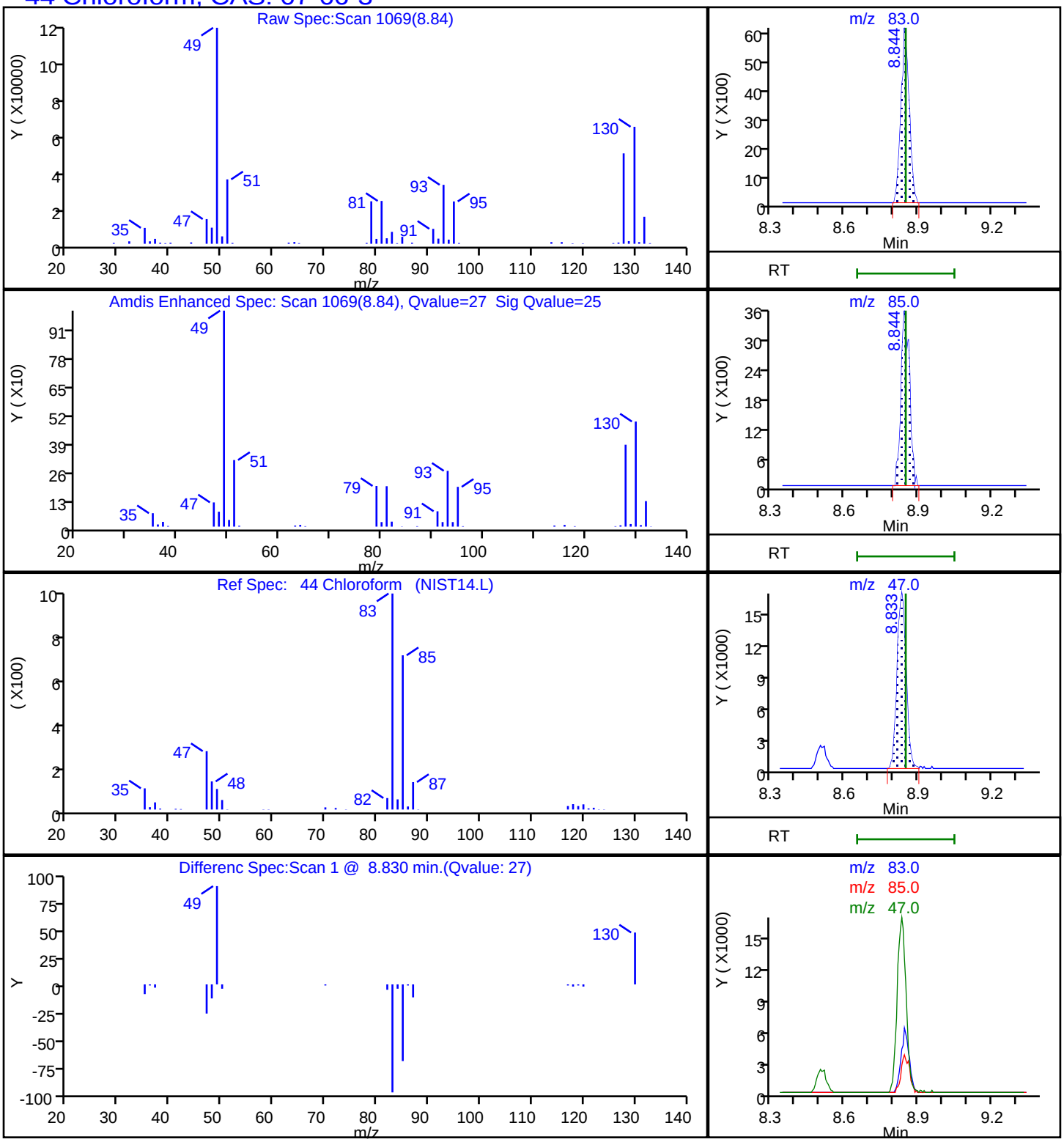
6 Chlorodifluoromethane, CAS: 75-45-6



Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GG31P113.D
Injection Date: 31-Jul-2020 22:09:30 Instrument ID: MG
Lims ID: 140-19811-A-3 Lab Sample ID: 140-19811-3
Client ID: BLDG A INFLUENT
Operator ID: HMT ALS Bottle#: 13 Worklist Smp#: 17
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Method: MG_TO15 Limit Group: MSA TO14A_15 Routine ICAL
Column: RTX-5 (0.32 mm) Detector MS SCAN

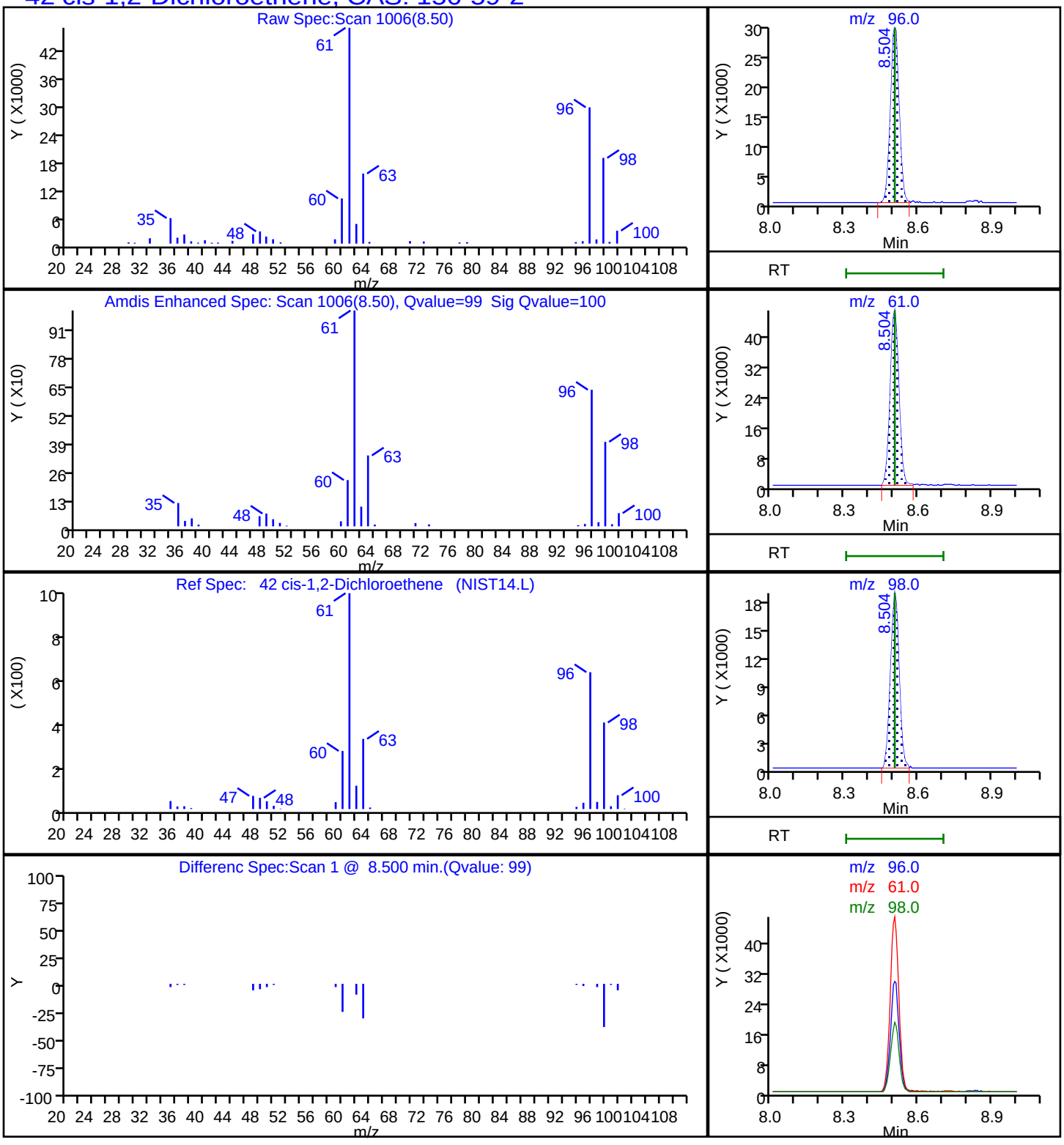
44 Chloroform, CAS: 67-66-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GG31P113.D				
Injection Date:	31-Jul-2020 22:09:30	Instrument ID:	MG		
Lims ID:	140-19811-A-3	Lab Sample ID:	140-19811-3		
Client ID:	BLDG A INFLUENT				
Operator ID:	HMT	ALS Bottle#:	13	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

42 cis-1,2-Dichloroethene, CAS: 156-59-2

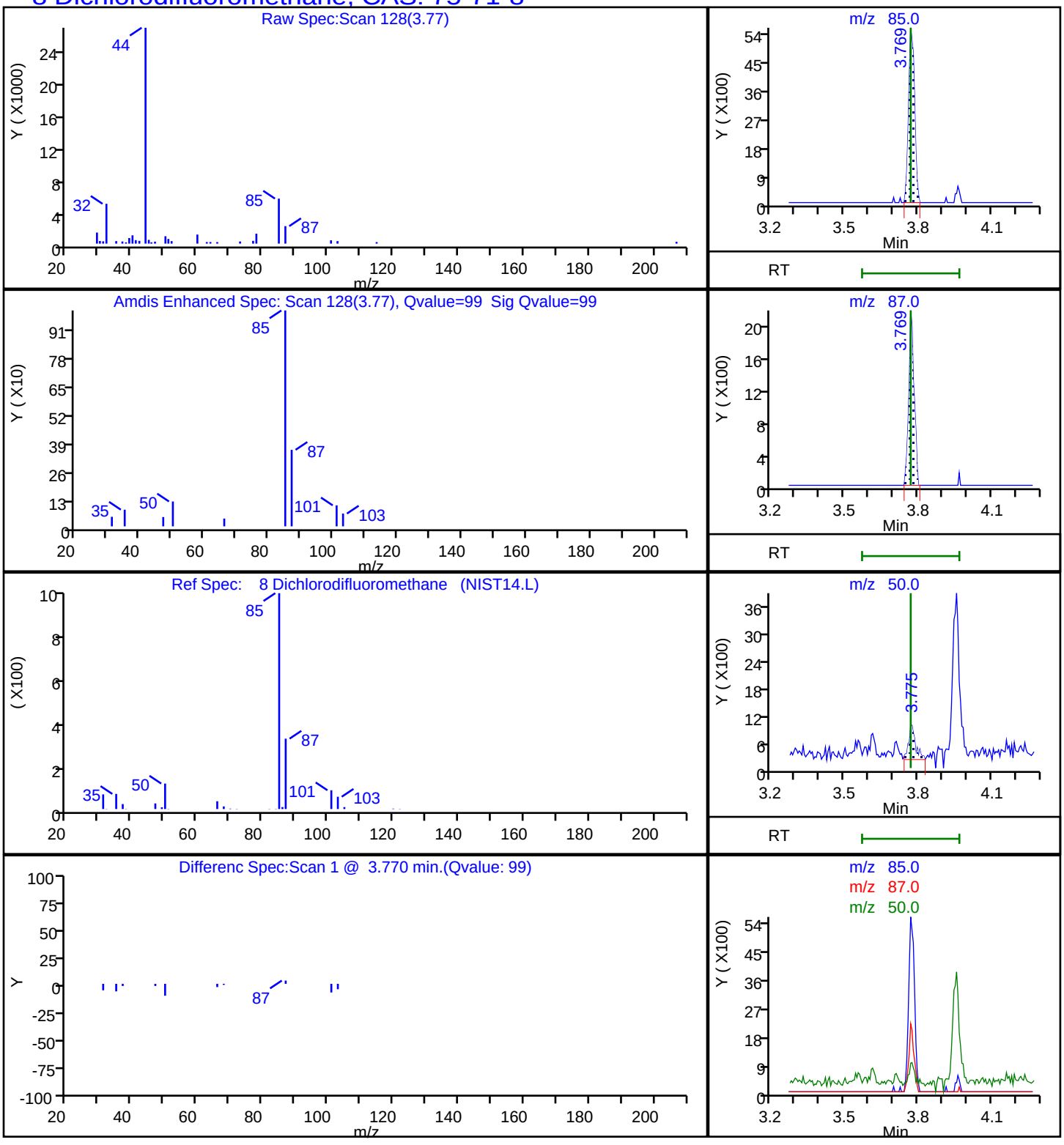


Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GG31P113.D

Injection Date:	31-Jul-2020 22:09:30	Instrument ID:	MG		
Lims ID:	140-19811-A-3	Lab Sample ID:	140-19811-3		
Client ID:	BLDG A INFLUENT				
Operator ID:	HMT	ALS Bottle#:	13	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

8 Dichlorodifluoromethane, CAS: 75-71-8



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GG31P113.D				
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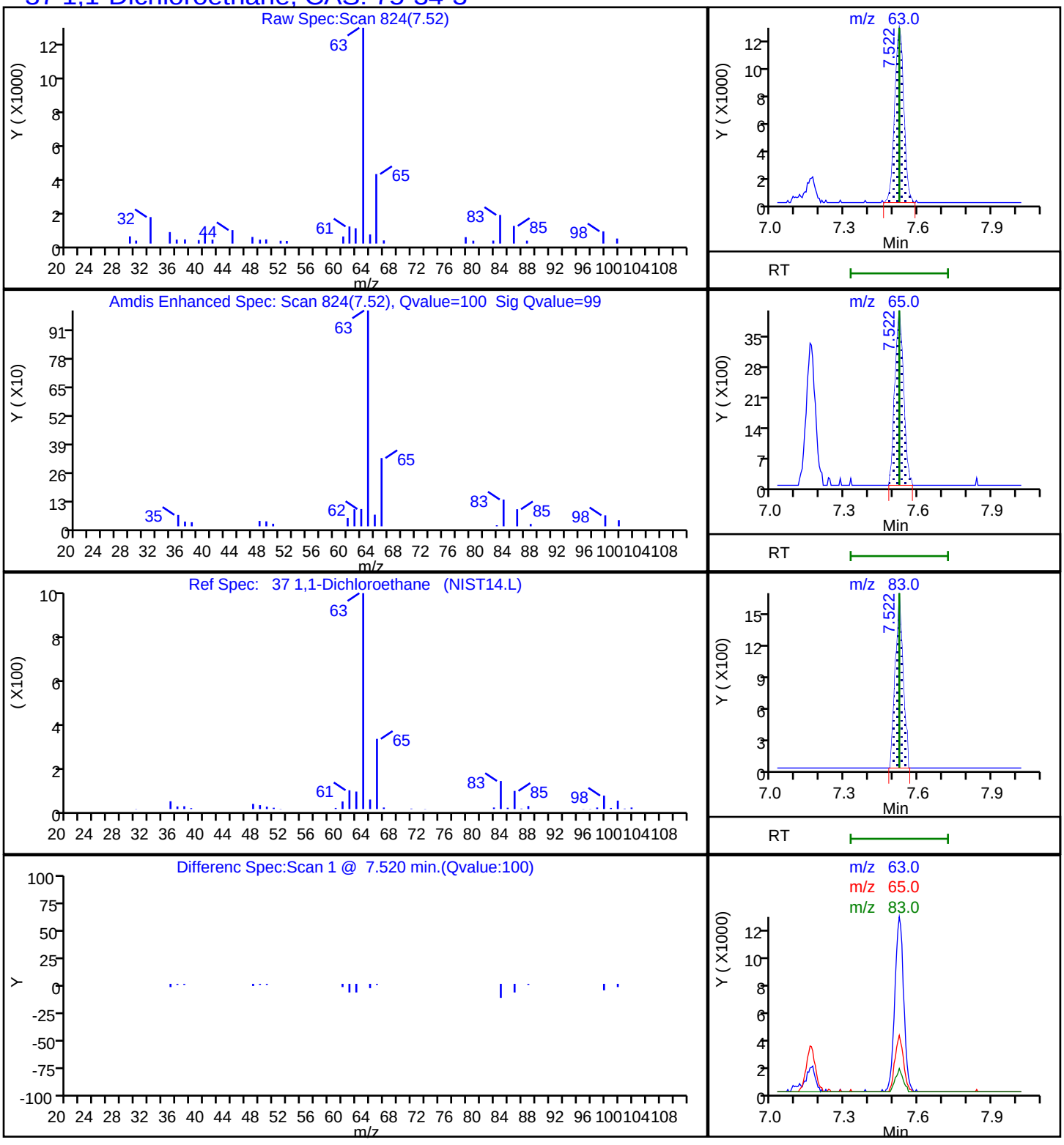
Lims ID:	140-19811-A-3	Lab Sample ID:	140-19811-3		
Client ID:	BLDG A INFLUENT				
Operator ID:	HMT	ALS Bottle#:	13	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

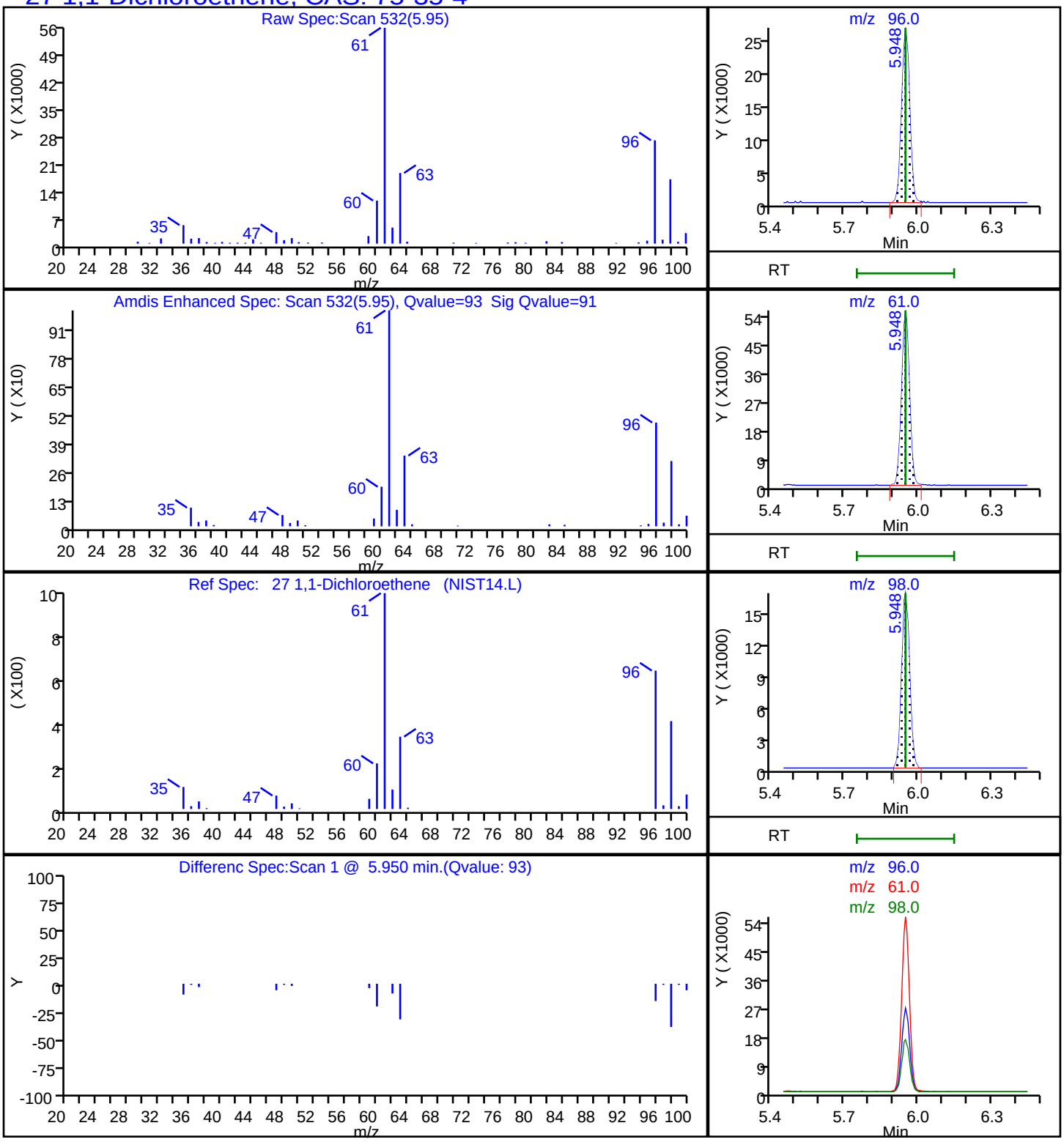
37 1,1-Dichloroethane, CAS: 75-34-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GG31P113.D		
Injection Date:	31-Jul-2020 22:09:30	Instrument ID:	MG
Lims ID:	140-19811-A-3	Lab Sample ID:	140-19811-3
Client ID:	BLDG A INFLUENT		
Operator ID:	HMT	ALS Bottle#:	13 Worklist Smp#: 17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

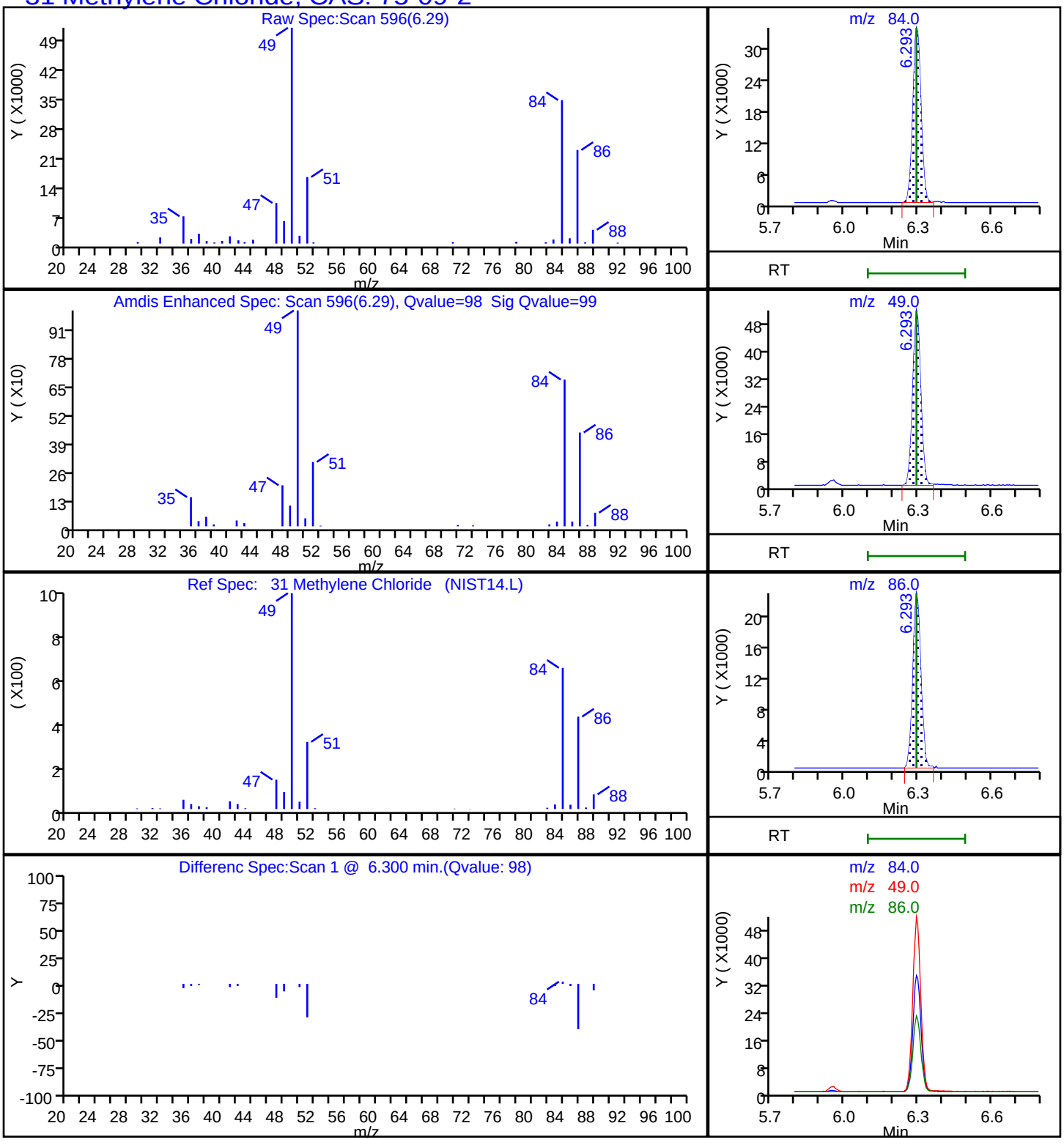
27 1,1-Dichloroethene, CAS: 75-35-4



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GG31P113.D				
Injection Date:	31-Jul-2020 22:09:30	Instrument ID:	MG		
Lims ID:	140-19811-A-3	Lab Sample ID:	140-19811-3		
Client ID:	BLDG A INFLUENT				
Operator ID:	HMT	ALS Bottle#:	13	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

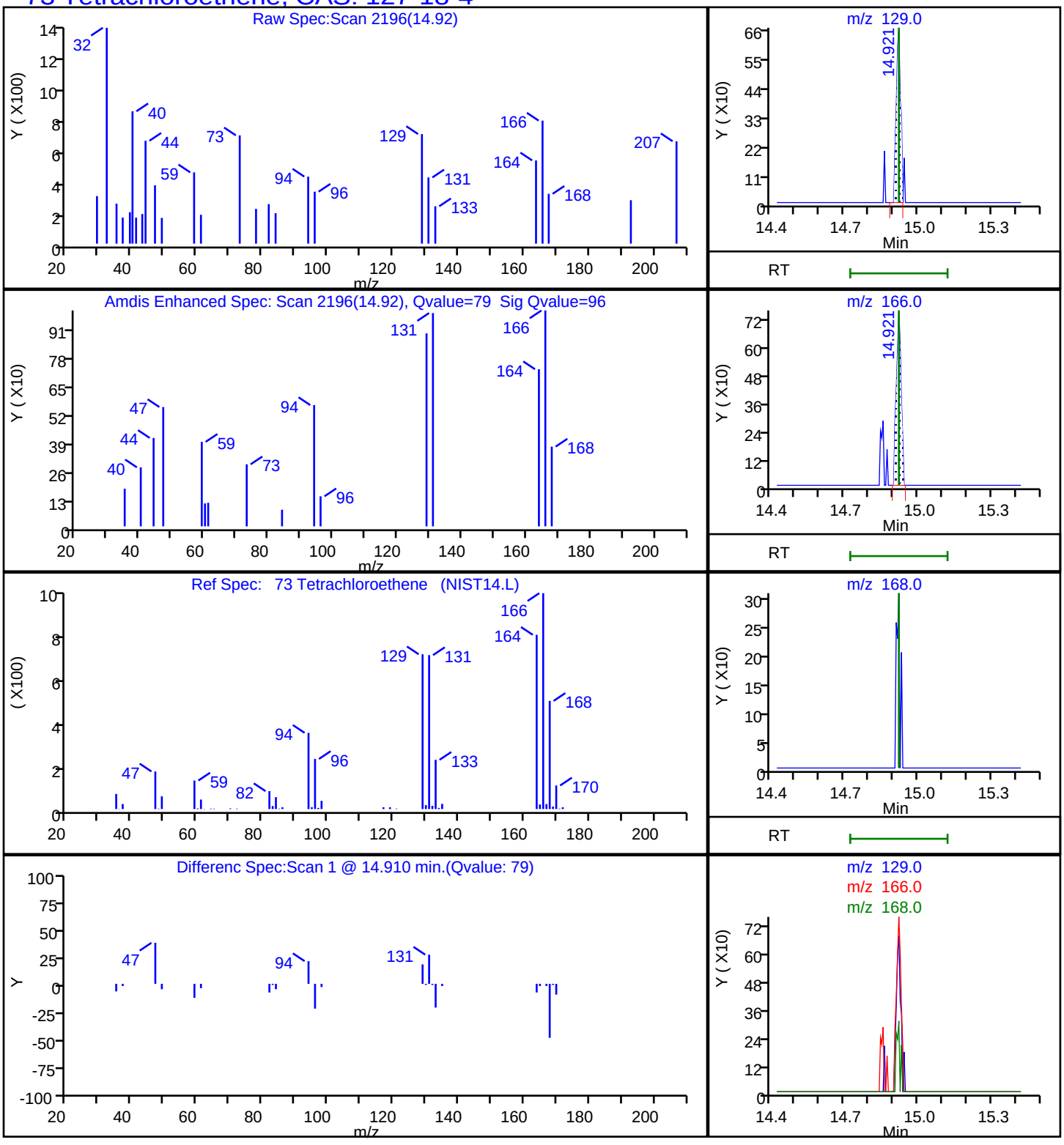
31 Methylene Chloride, CAS: 75-09-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GG31P113.D		
Injection Date:	31-Jul-2020 22:09:30	Instrument ID:	MG
Lims ID:	140-19811-A-3	Lab Sample ID:	140-19811-3
Client ID:	BLDG A INFLUENT		
Operator ID:	HMT	ALS Bottle#:	13 Worklist Smp#: 17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

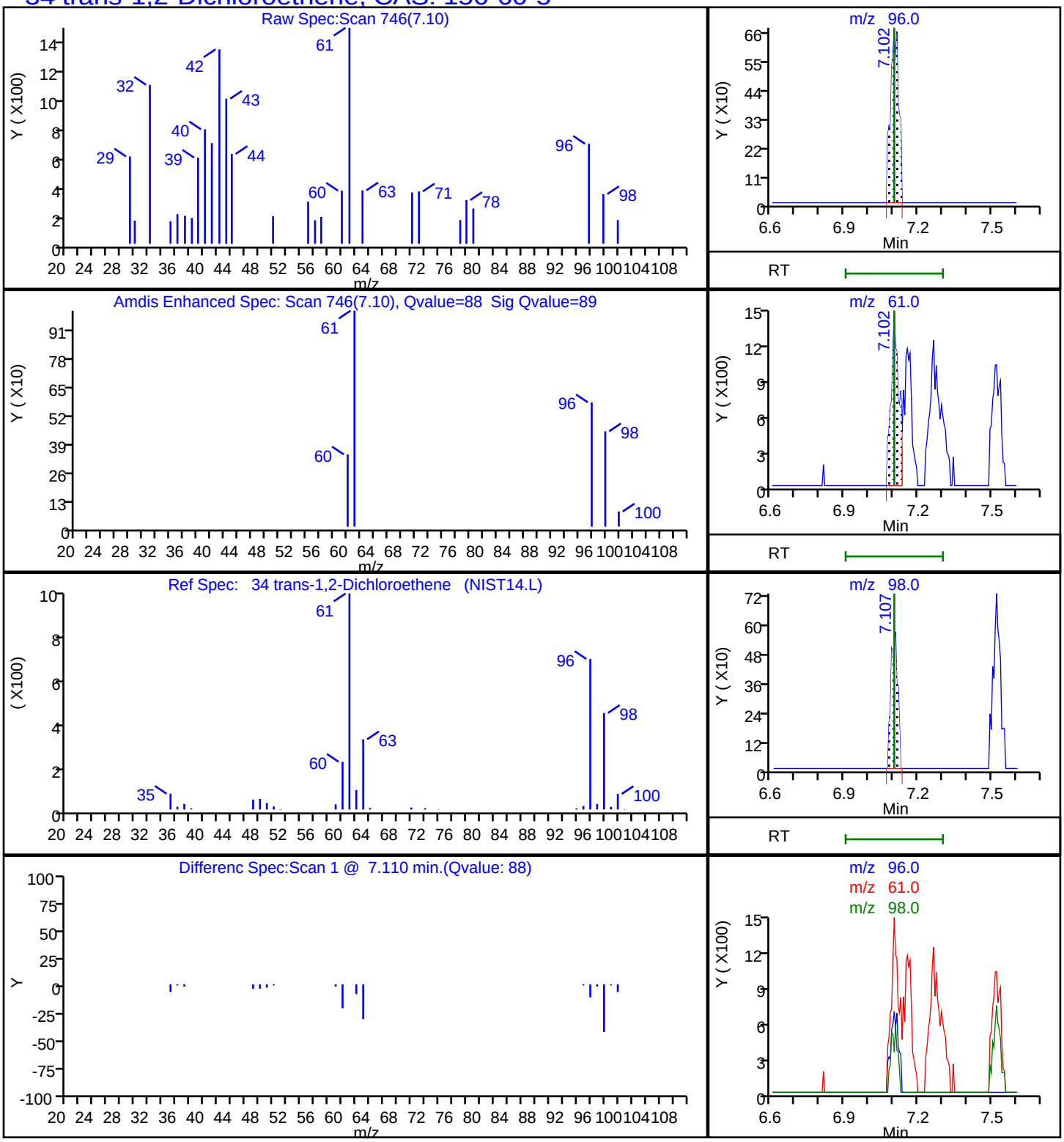
73 Tetrachloroethene, CAS: 127-18-4



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GG31P113.D				
Injection Date:	31-Jul-2020 22:09:30	Instrument ID:	MG		
Lims ID:	140-19811-A-3	Lab Sample ID:	140-19811-3		
Client ID:	BLDG A INFLUENT				
Operator ID:	HMT	ALS Bottle#:	13	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

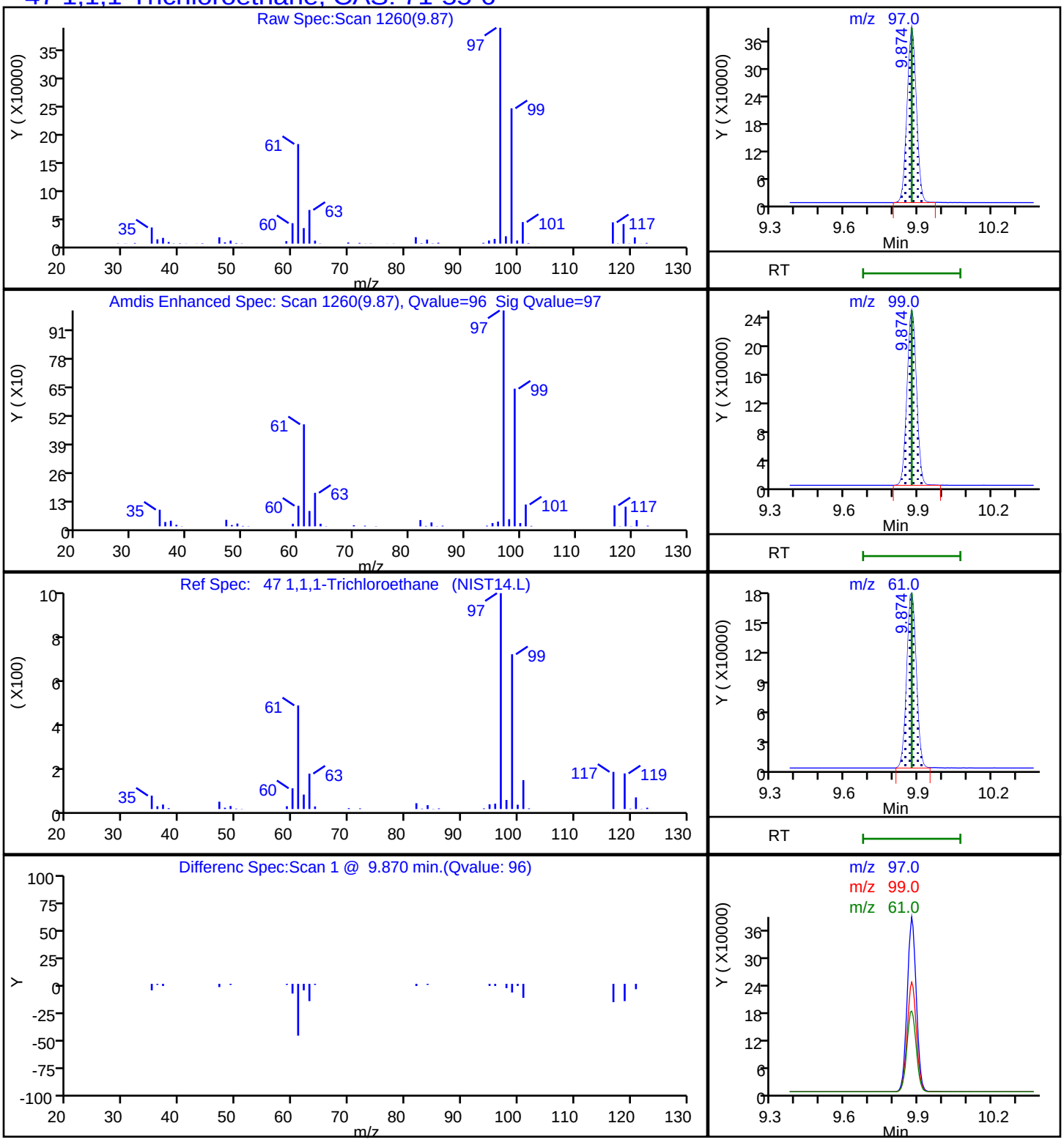
34 trans-1,2-Dichloroethene, CAS: 156-60-5



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GG31P113.D				
Injection Date:	31-Jul-2020 22:09:30	Instrument ID:	MG		
Lims ID:	140-19811-A-3	Lab Sample ID:	140-19811-3		
Client ID:	BLDG A INFLUENT				
Operator ID:	HMT	ALS Bottle#:	13	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

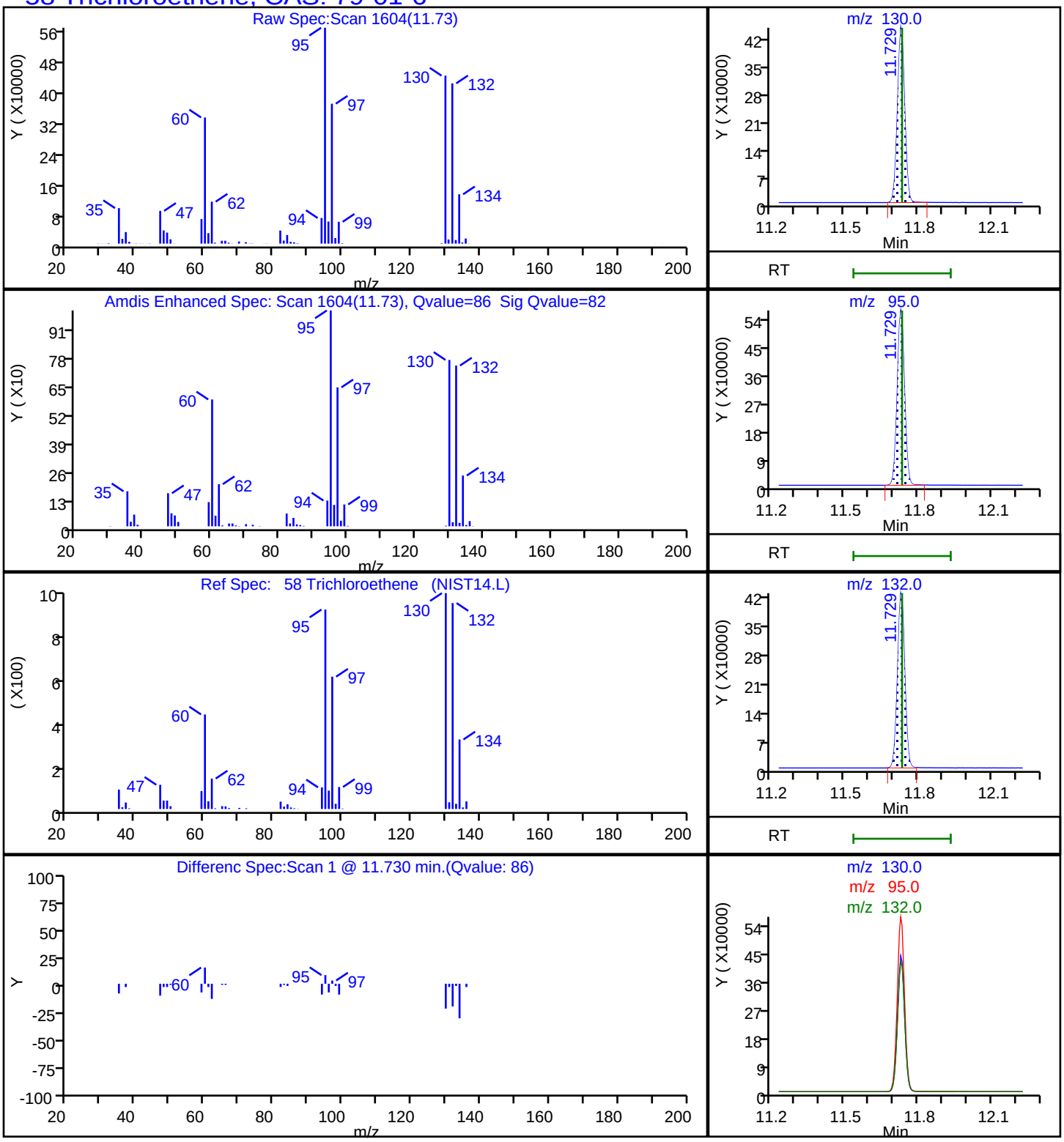
47 1,1,1-Trichloroethane, CAS: 71-55-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GG31P113.D				
Injection Date:	31-Jul-2020 22:09:30	Instrument ID:	MG		
Lims ID:	140-19811-A-3	Lab Sample ID:	140-19811-3		
Client ID:	BLDG A INFLUENT				
Operator ID:	HMT	ALS Bottle#:	13	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

58 Trichloroethene, CAS: 79-01-6



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19811-1

SDG No.:

Client Sample ID: BLDG B EFFLUENT Lab Sample ID: 140-19811-4

Matrix: Air Lab File ID: GG31P114.D

Analysis Method: TO 15 LL Date Collected: 07/23/2020 13:26

Sample wt/vol: 100(mL) Date Analyzed: 07/31/2020 22:53

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 41417 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	2.8		0.40	0.040
56-23-5	Carbon tetrachloride	153.81	ND		0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	5.5		0.40	0.11
67-66-3	Chloroform	119.38	0.31	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	1.3		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.65		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	0.12	J	0.40	0.065
75-09-2	Methylene Chloride	84.93	8.6		2.0	0.80
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	0.037	J	0.40	0.035
108-88-3	Toluene	92.14	1.6		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	0.16	J	0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	0.41		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	0.17	J	0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	0.30	J	0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	1.2		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	0.66		0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.45	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	96		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19811-1

SDG No.:

Client Sample ID: BLDG B EFFLUENT Lab Sample ID: 140-19811-4

Matrix: Air Lab File ID: GG31P114.D

Analysis Method: TO 15 LL Date Collected: 07/23/2020 13:26

Sample wt/vol: 100(mL) Date Analyzed: 07/31/2020 22:53

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 41417 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	8.9		1.3	0.13
56-23-5	Carbon tetrachloride	153.81	ND		2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	19		1.4	0.39
67-66-3	Chloroform	119.38	1.5	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	5.3		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	3.2		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	0.50	J	1.7	0.28
75-09-2	Methylene Chloride	84.93	30		6.9	2.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	0.25	J	2.7	0.24
108-88-3	Toluene	92.14	6.1		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	0.64	J	1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	2.3		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	0.90	J	1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	1.5	J	2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	6.0		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	3.2		2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	2.0	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	96		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GG31P114.D
Lims ID: 140-19811-A-4
Client ID: BLDG B EFFLUENT
Sample Type: Client
Inject. Date: 31-Jul-2020 22:53:30 ALS Bottle#: 14 Worklist Smp#: 18
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016161-018
Misc. Info.: 140-19811-a-4
Operator ID: HMT Instrument ID: MG

Method: \\chromfs\Knoxville\ChromData\MG\20200729-16161.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 03-Aug-2020 13:25:12 Calib Date: 15-Jul-2020 22:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1011

First Level Reviewer: khachitpongpanits Date: 03-Aug-2020 13:25:12

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.838	8.838	0.000	92	134263	4.00	
* 2 1,4-Difluorobenzene	114	11.017	11.017	0.000	97	1224160	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.746	15.746	0.000	95	1077468	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.391	17.391	0.000	74	845270	3.86	
6 Chlorodifluoromethane	51	3.710	3.710	0.000	96	149417	1.09	
8 Dichlorodifluoromethane	85	3.769	3.767	-0.001	99	31668	0.1293	
31 Methylene Chloride	84	6.304	6.293	0.011	98	156627	1.71	
34 trans-1,2-Dichloroethene	96	7.107	7.097	0.005	48	2257	0.0322	
42 cis-1,2-Dichloroethene	96	8.509	8.499	0.005	98	18913	0.2654	
44 Chloroform	83	8.849	8.843	0.000	28	10997	0.0616	
47 1,1,1-Trichloroethane	97	9.879	9.874	0.005	95	15921	0.0827	
50 Benzene	78	10.478	10.478	0.000	95	140466	0.5563	
58 Trichloroethene	130	11.734	11.734	0.000	84	2866	0.0335	
67 Toluene	91	13.772	13.778	-0.006	93	75848	0.3244	
73 Tetrachloroethene	129	14.915	14.921	-0.006	18	599	0.007491	
78 Ethylbenzene	91	16.080	16.086	-0.006	98	7135	0.0232	
79 m-Xylene & p-Xylene	91	16.242	16.247	-0.005	98	15552	0.0637	
83 o-Xylene	91	16.770	16.771	-0.001	96	6908	0.0267	
90 1,3,5-Trimethylbenzene	120	18.119	18.119	-0.005	90	16187	0.1316	
95 1,2,4-Trimethylbenzene	105	18.561	18.560	0.000	98	69116	0.2431	
101 1,2,3-Trimethylbenzene	105	19.024	19.036	-0.006	98	12697	0.0602	
S 124 Xylenes, Total	100				0		0.0904	

Reagents:

40MXISSURP_00004 Amount Added: 40.00 Units: mL Run Reagent

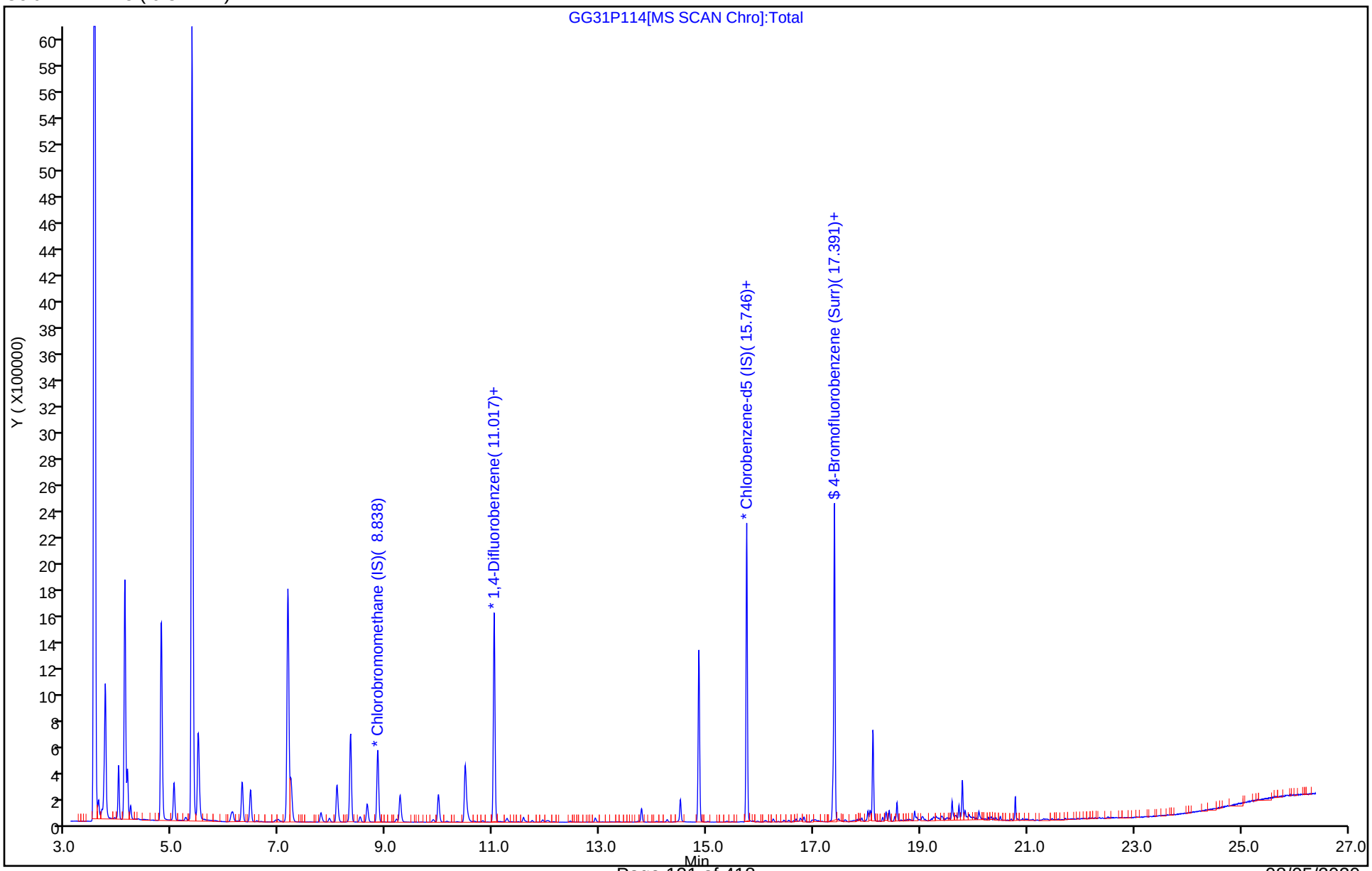
Report Date: 03-Aug-2020 13:25:12 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GG31P114.D

Injection Date:	31-Jul-2020 22:53:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	140-19811-A-4	Lab Sample ID:	140-19811-4	Worklist Smp#:	18
Client ID:	BLDG B EFFLUENT				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GG31P114.D				
Lims ID:	140-19811-A-4				
Client ID:	BLDG B EFFLUENT				
Sample Type:	Client				
Inject. Date:	31-Jul-2020 22:53:30	ALS Bottle#:	14	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016161-018				
Misc. Info.:	140-19811-a-4				
Operator ID:	HMT	Instrument ID:	MG		
Method:	\\chromfs\Knoxville\ChromData\MG\20200729-16161.b\MG_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	03-Aug-2020 13:25:12	Calib Date:	15-Jul-2020 22:02:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1011				

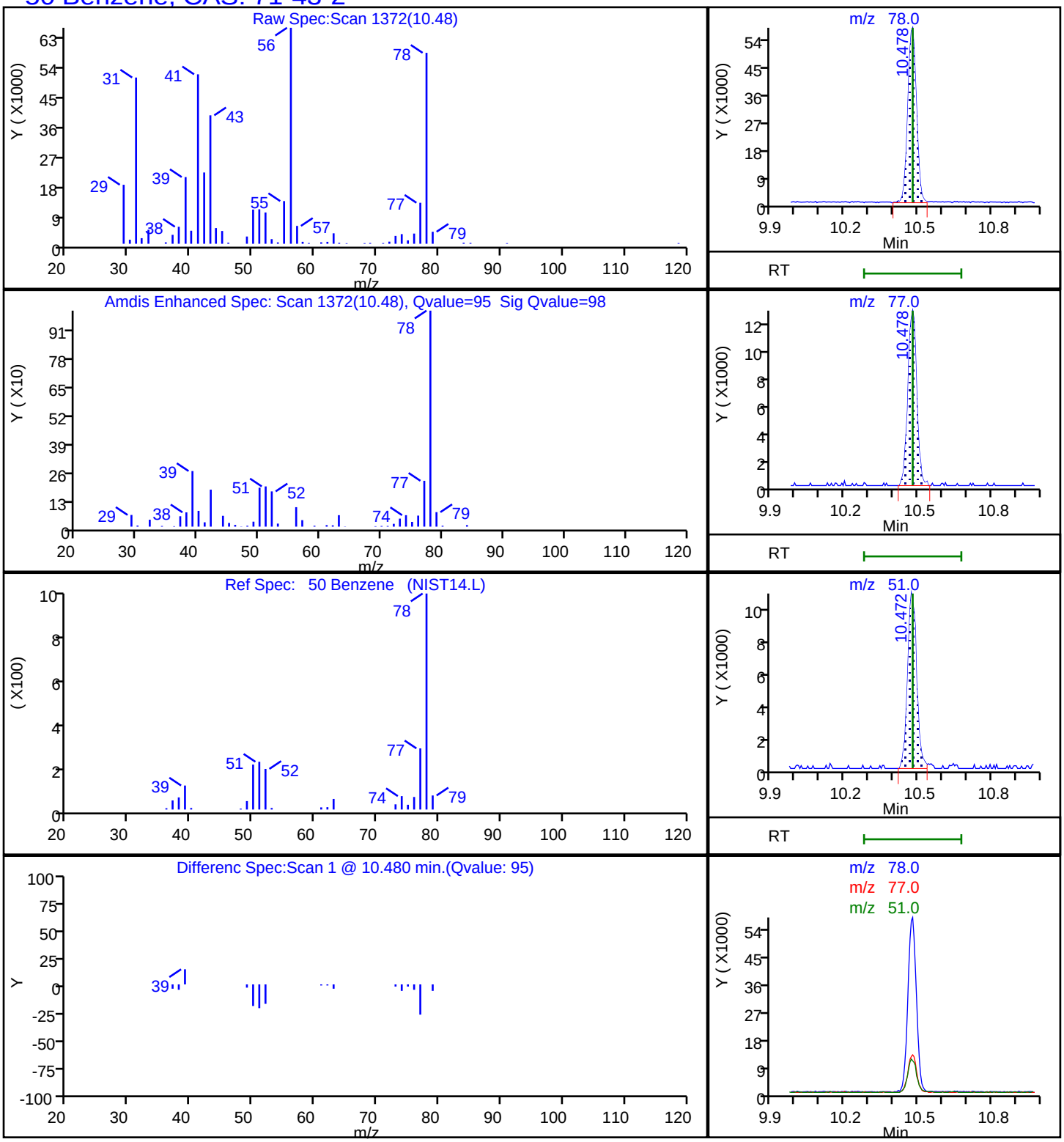
First Level Reviewer: khachitpongpanits Date: 03-Aug-2020 13:25:12

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.00	3.86	96.49

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GG31P114.D		
Injection Date:	31-Jul-2020 22:53:30	Instrument ID:	MG
Lims ID:	140-19811-A-4	Lab Sample ID:	140-19811-4
Client ID:	BLDG B EFFLUENT		
Operator ID:	HMT	ALS Bottle#:	14 Worklist Smp#: 18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

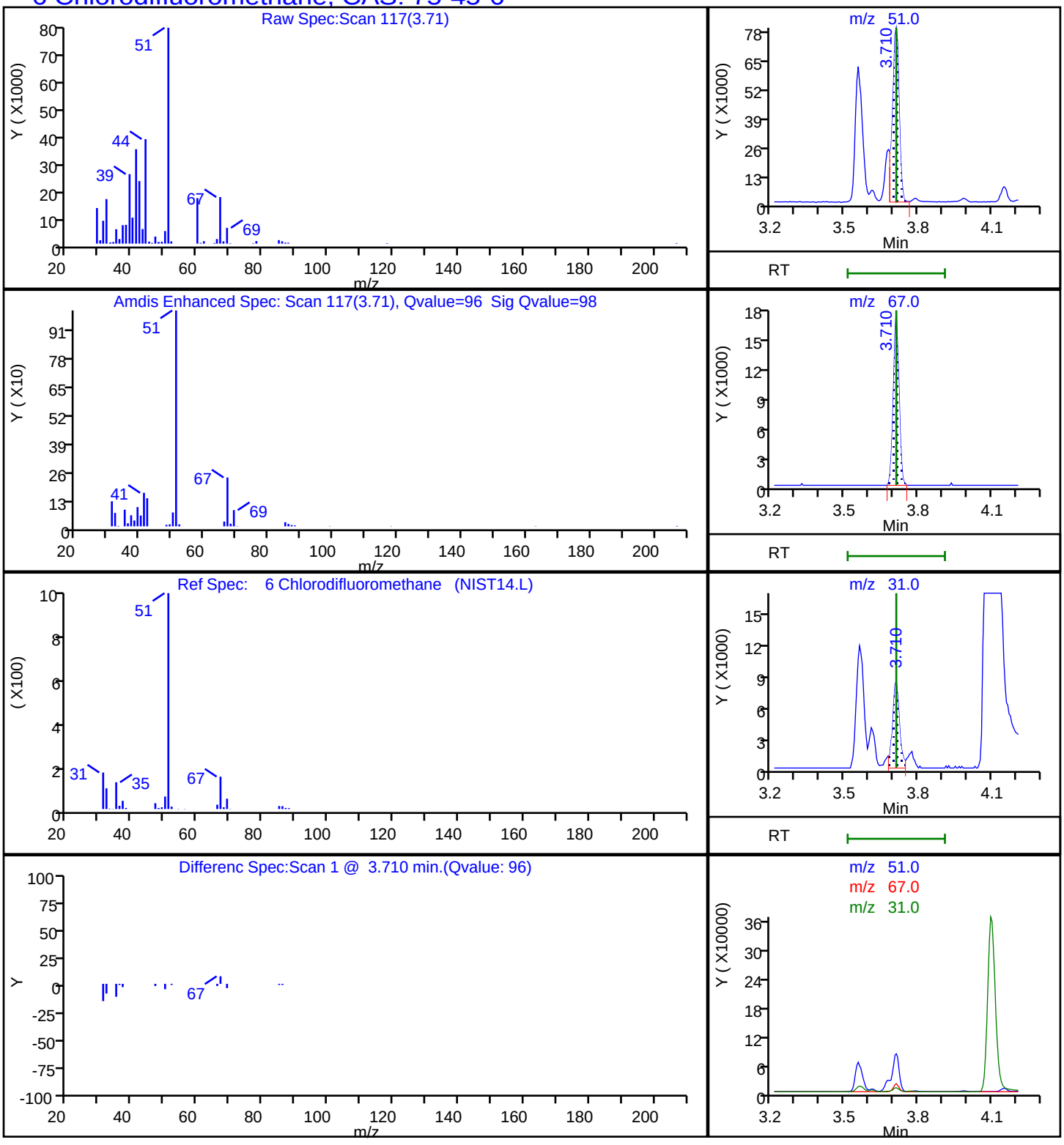
50 Benzene, CAS: 71-43-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GG31P114.D				
Injection Date:	31-Jul-2020 22:53:30	Instrument ID:	MG		
Lims ID:	140-19811-A-4	Lab Sample ID:	140-19811-4		
Client ID:	BLDG B EFFLUENT				
Operator ID:	HMT	ALS Bottle#:	14	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

6 Chlorodifluoromethane, CAS: 75-45-6



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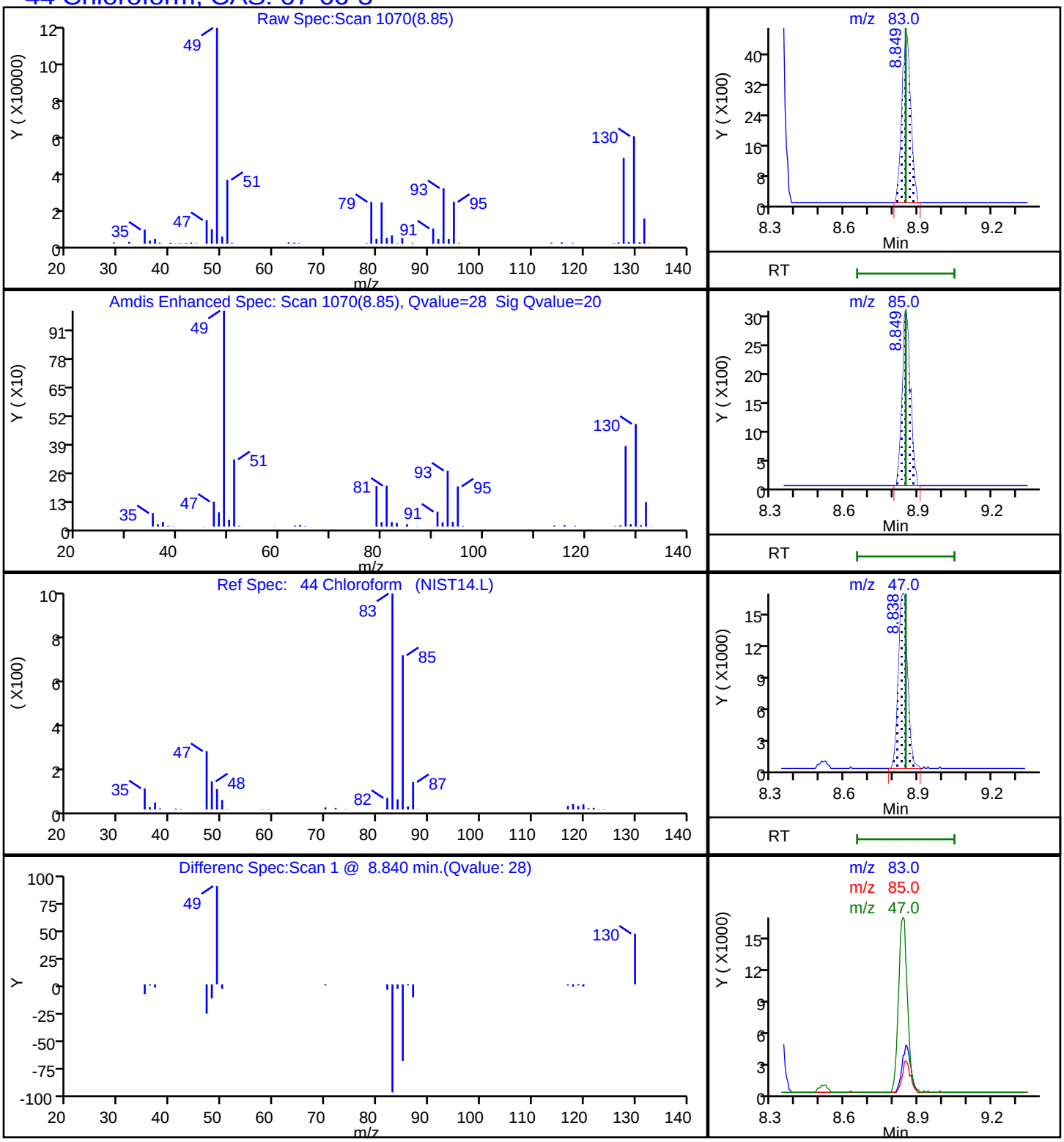
Lims ID:	140-19811-A-4	Lab Sample ID:	140-19811-4		
Client ID:	BLDG B EFFLUENT				
Operator ID:	HMT	ALS Bottle#:	14	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

44 Chloroform, CAS: 67-66-3



Eurofins TestAmerica, Knoxville

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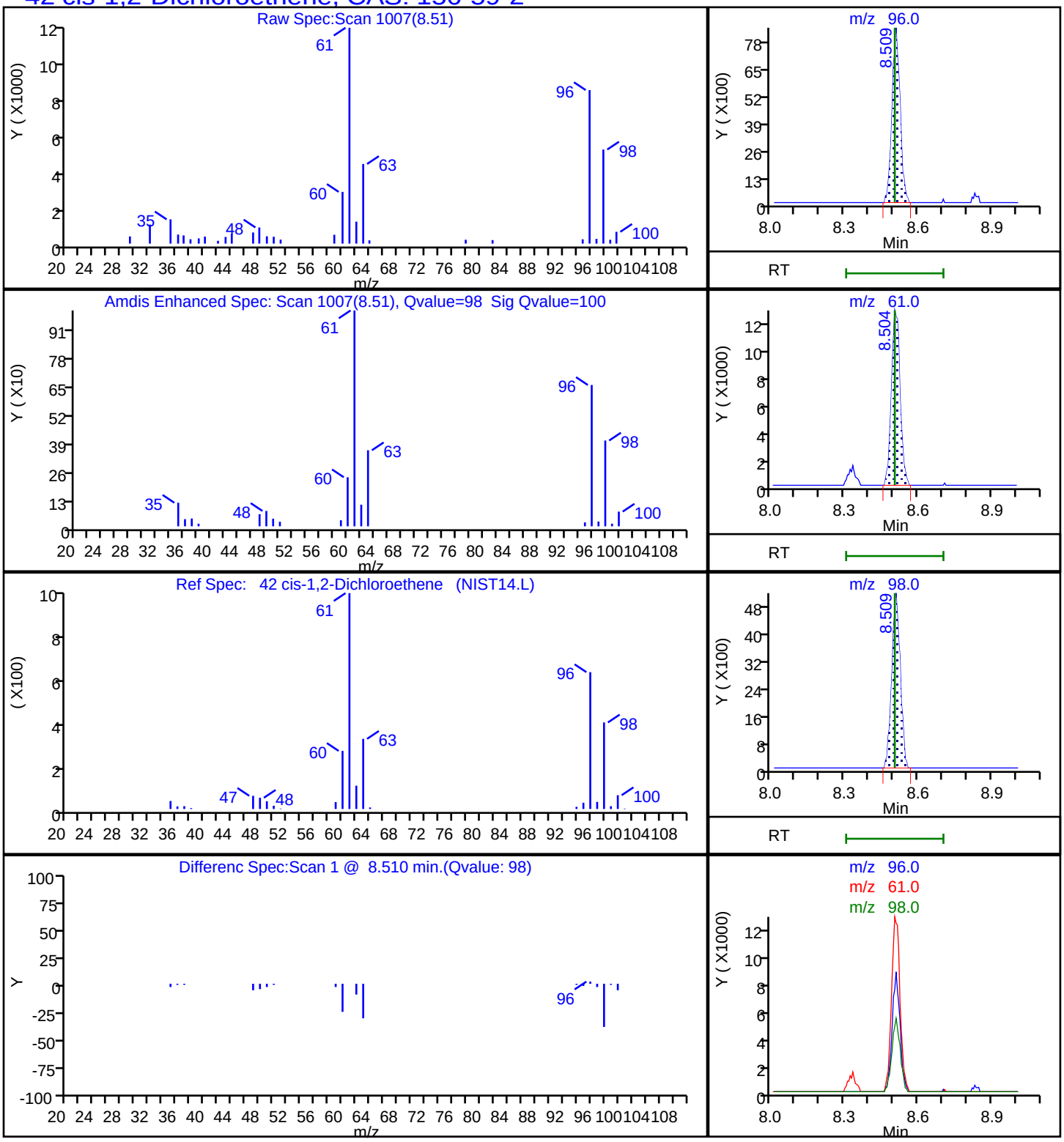
Injection Date:	31-Jul-2020 22:53:30	Instrument ID:	MG
Lims ID:	140-19811-A-4	Lab Sample ID:	140-19811-4
Client ID:	BLDG B EFFLUENT		
Operator ID:	HMT	ALS Bottle#:	14 Worklist Smp#: 18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

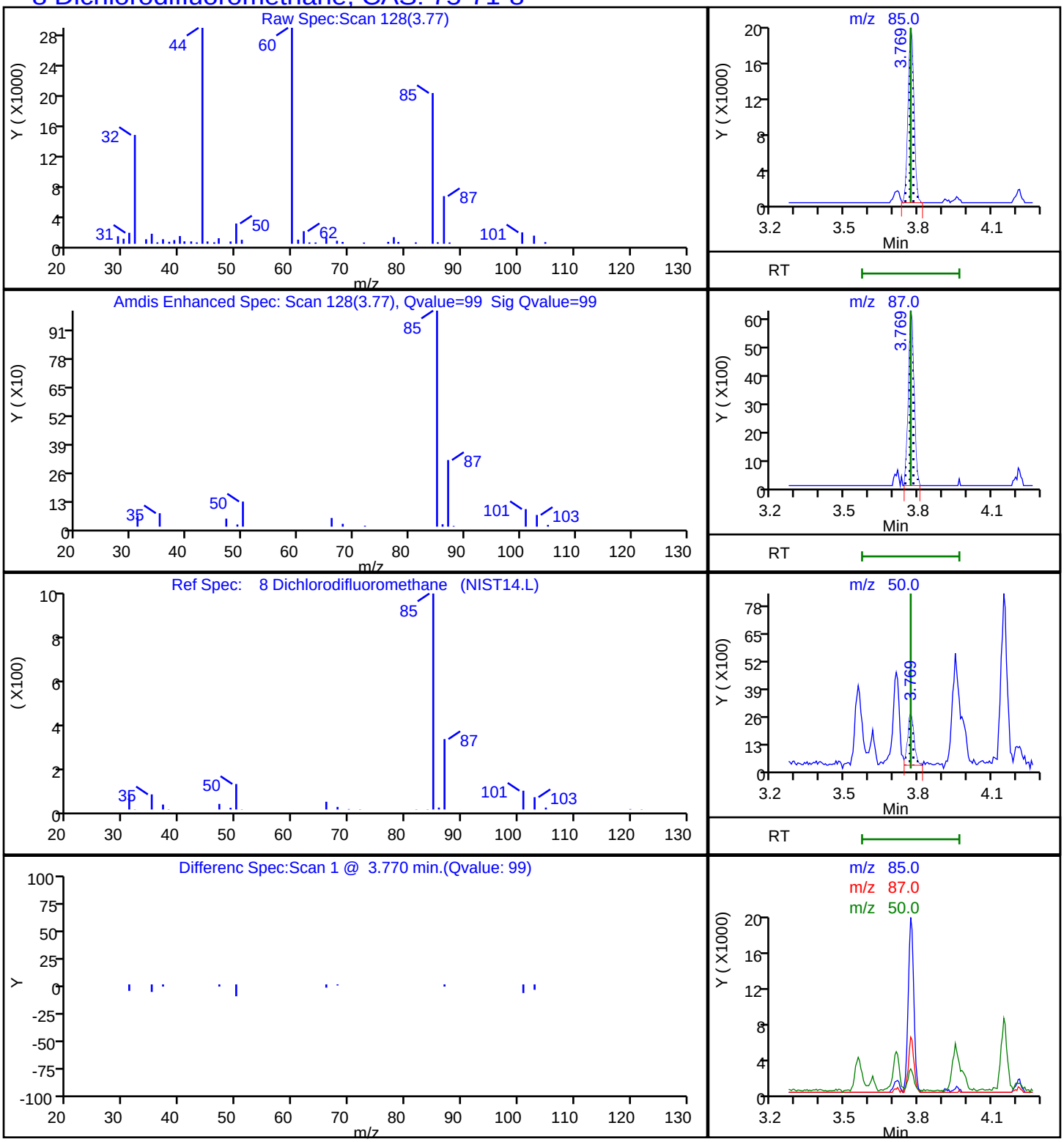
42 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GG31P114.D				
Injection Date:	31-Jul-2020 22:53:30	Instrument ID:	MG		
Lims ID:	140-19811-A-4	Lab Sample ID:	140-19811-4		
Client ID:	BLDG B EFFLUENT				
Operator ID:	HMT	ALS Bottle#:	14	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

8 Dichlorodifluoromethane, CAS: 75-71-8



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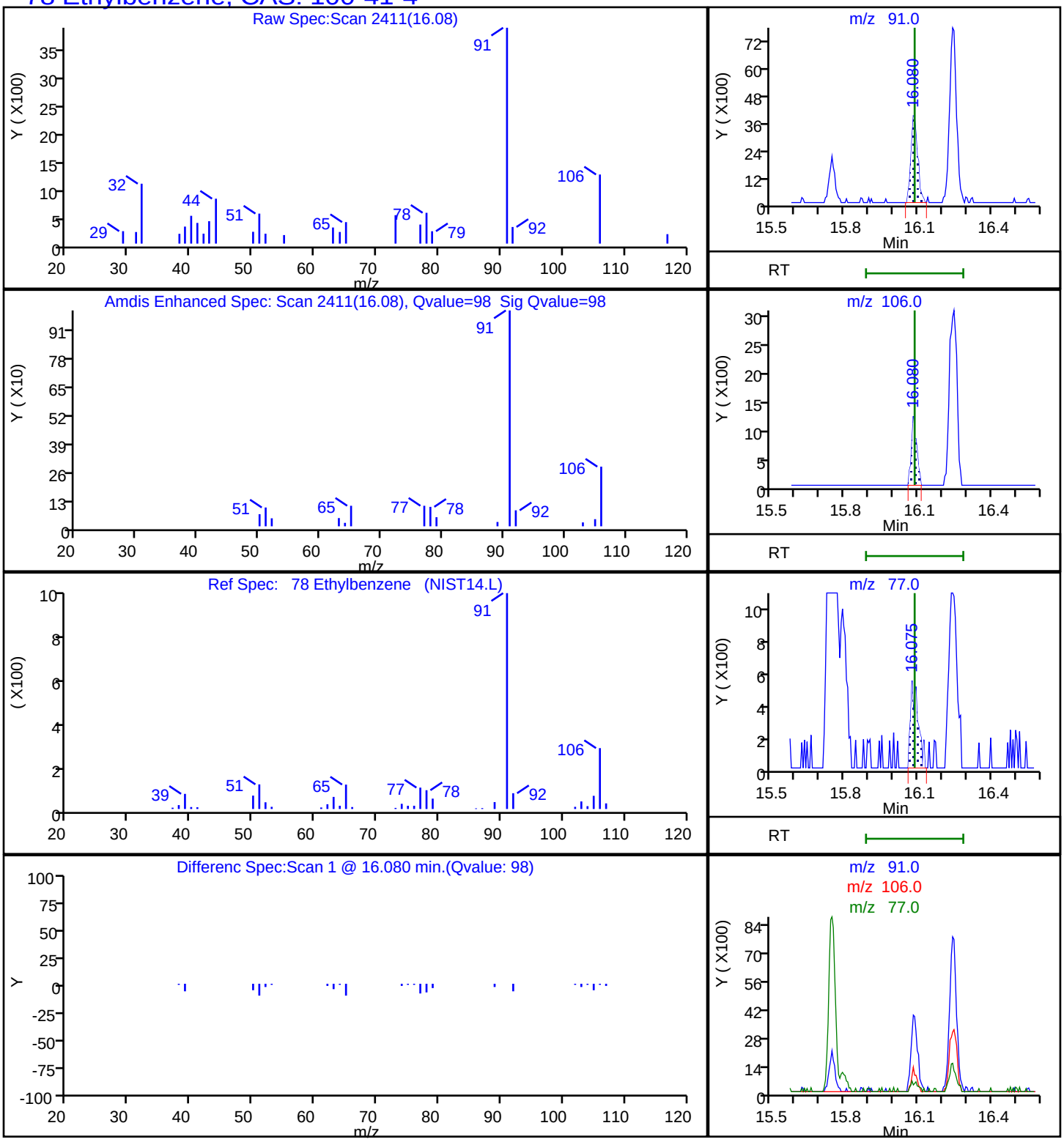
Data File: \\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GG31P114.D

Injection Date:	31-Jul-2020 22:53:30	Instrument ID:	MG		
Lims ID:	140-19811-A-4	Lab Sample ID:	140-19811-4		
Client ID:	BLDG B EFFLUENT				
Operator ID:	HMT	ALS Bottle#:	14	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

78 Ethylbenzene, CAS: 100-41-4



Eurofins TestAmerica, Knoxville

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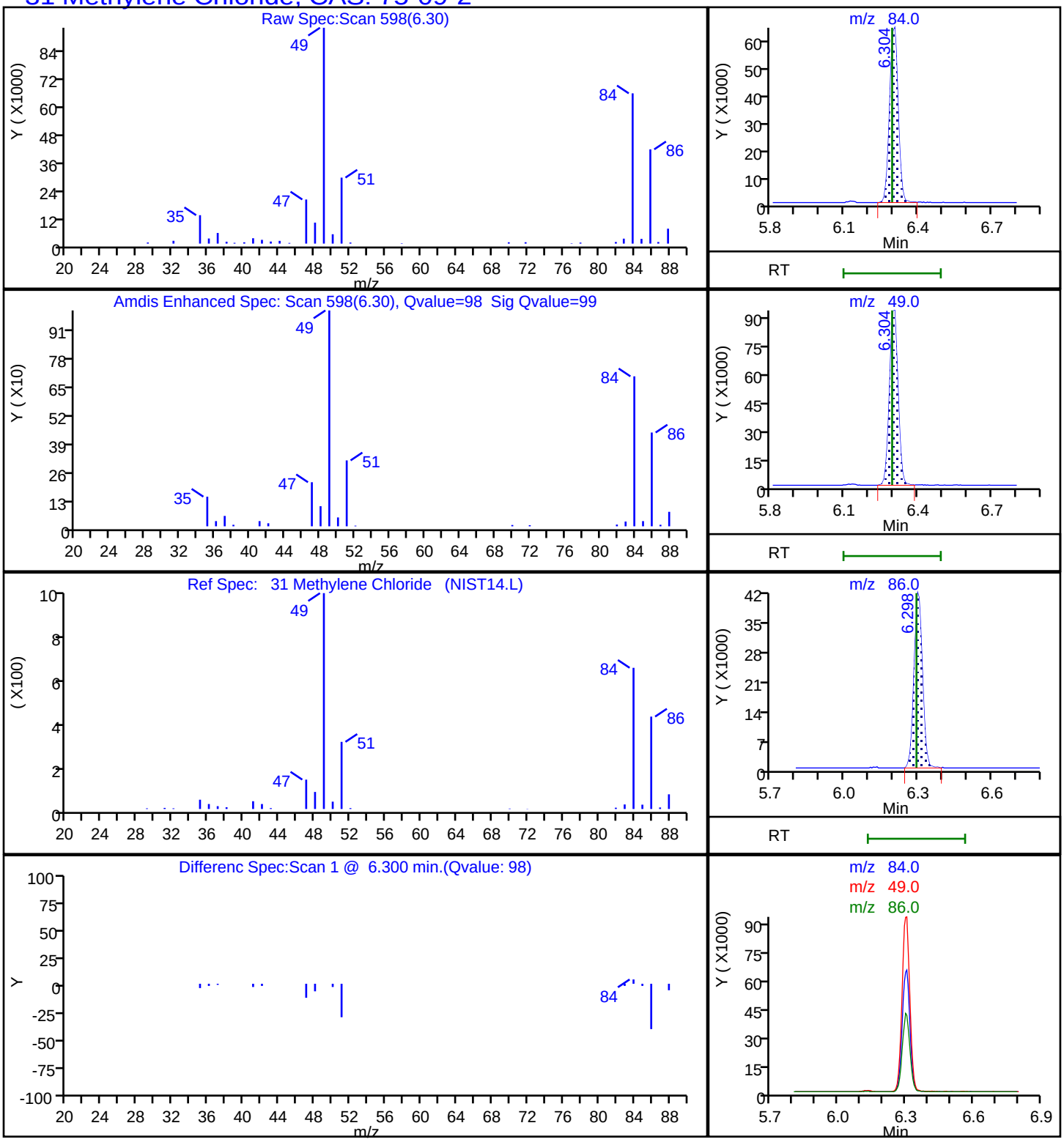
Injection Date:	31-Jul-2020 22:53:30	Instrument ID:	MG		
Lims ID:	140-19811-A-4	Lab Sample ID:	140-19811-4		
Client ID:	BLDG B EFFLUENT				
Operator ID:	HMT	ALS Bottle#:	14	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

31 Methylene Chloride, CAS: 75-09-2



Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GG31P114.D

Injection Date: 31-Jul-2020 22:53:30 Instrument ID: MG

Lims ID: 140-19811-A-4 Lab Sample ID: 140-19811-4

Client ID: BLDG B EFFLUENT

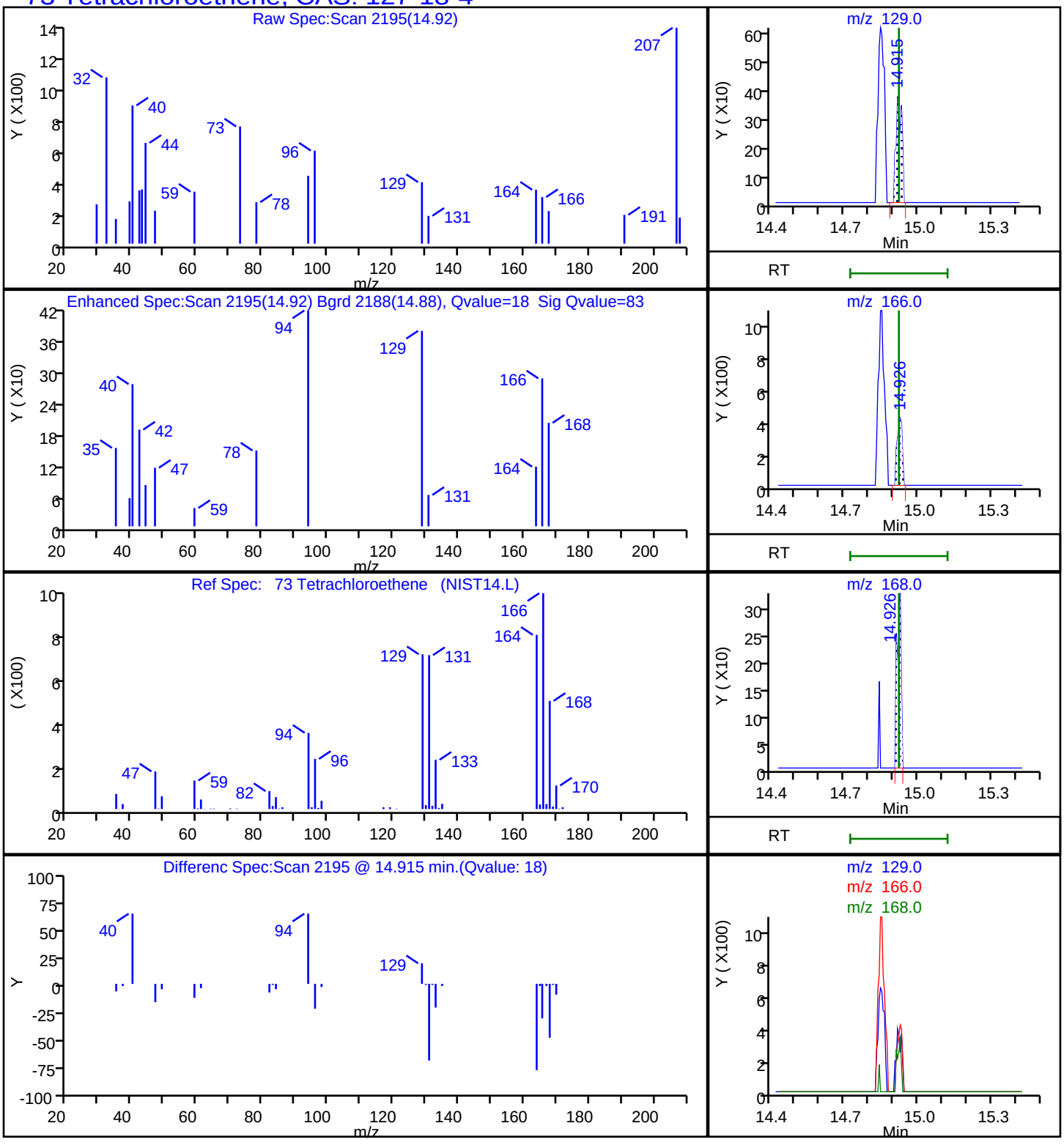
Operator ID: HMT ALS Bottle#: 14 Worklist Smp#: 18

Purge Vol: 500.000 mL Dil. Factor: 1.0000

Method: MG_TO15 Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm) Detector MS SCAN

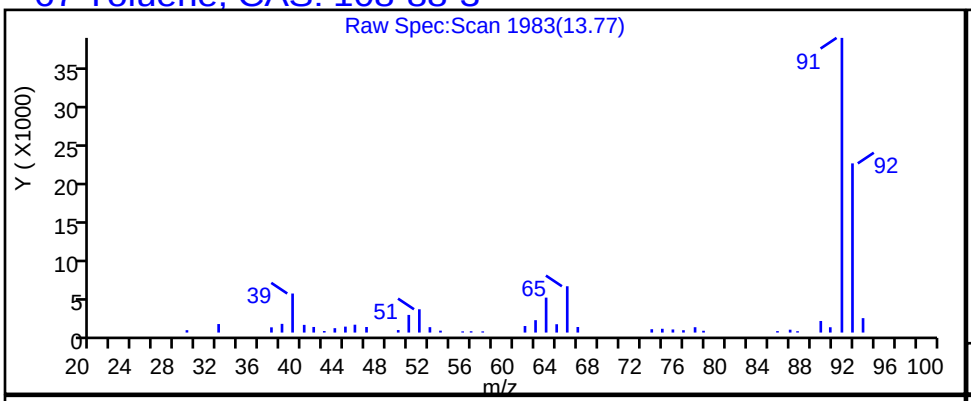
73 Tetrachloroethene, CAS: 127-18-4

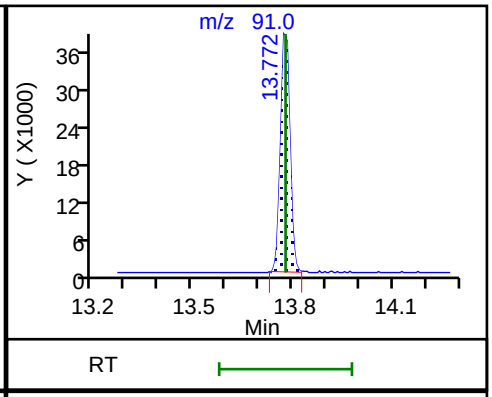


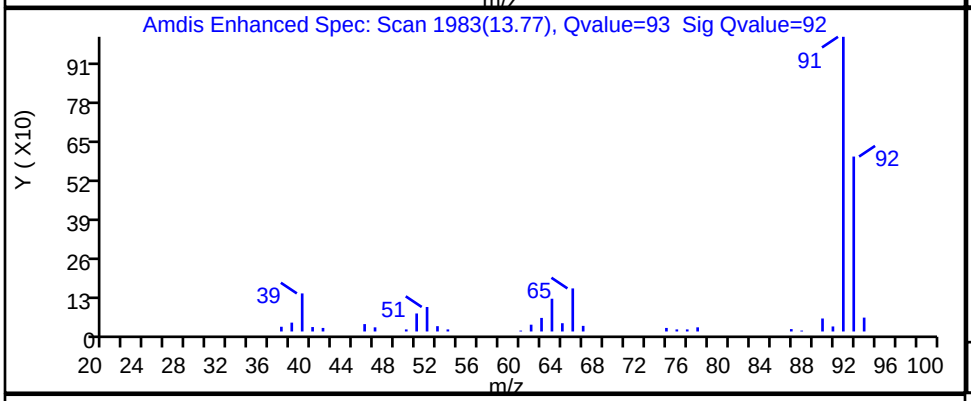
Eurofins TestAmerica, Knoxville

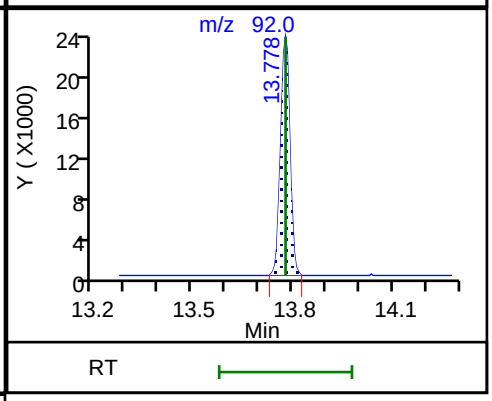
Data File:	\\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GG31P114.D				
Injection Date:	31-Jul-2020 22:53:30	Instrument ID:	MG		
Lims ID:	140-19811-A-4	Lab Sample ID:	140-19811-4		
Client ID:	BLDG B EFFLUENT				
Operator ID:	HMT	ALS Bottle#:	14	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

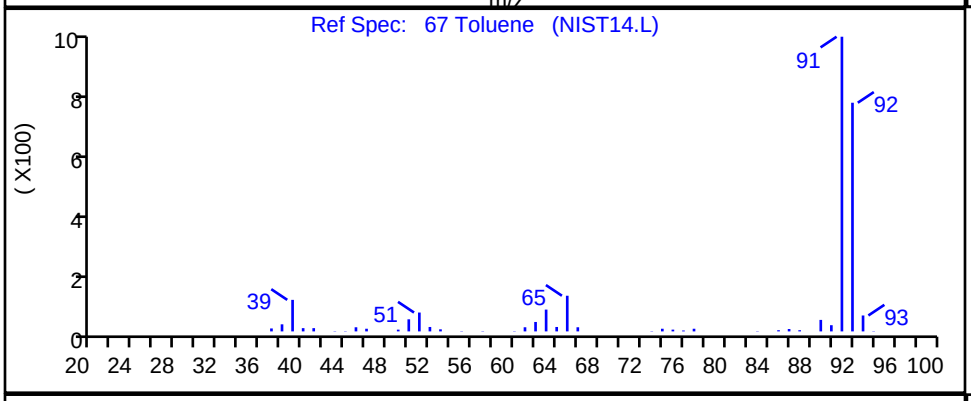
67 Toluene, CAS: 108-88-3

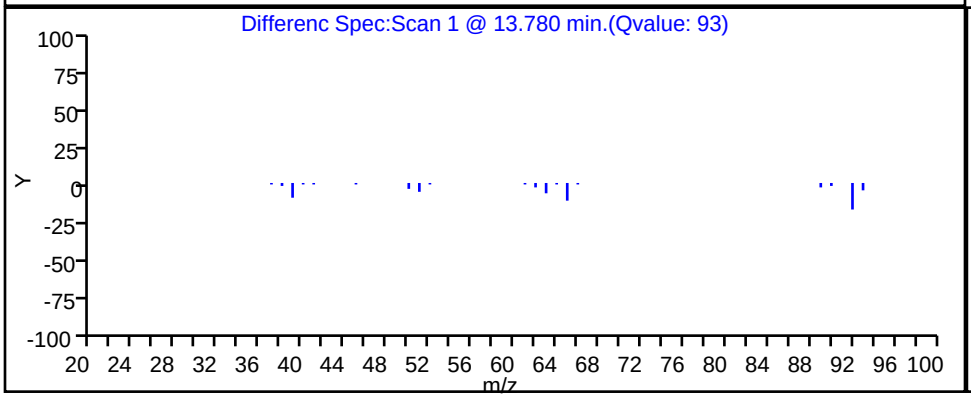


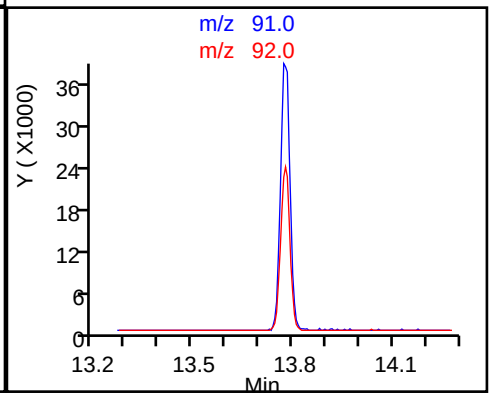








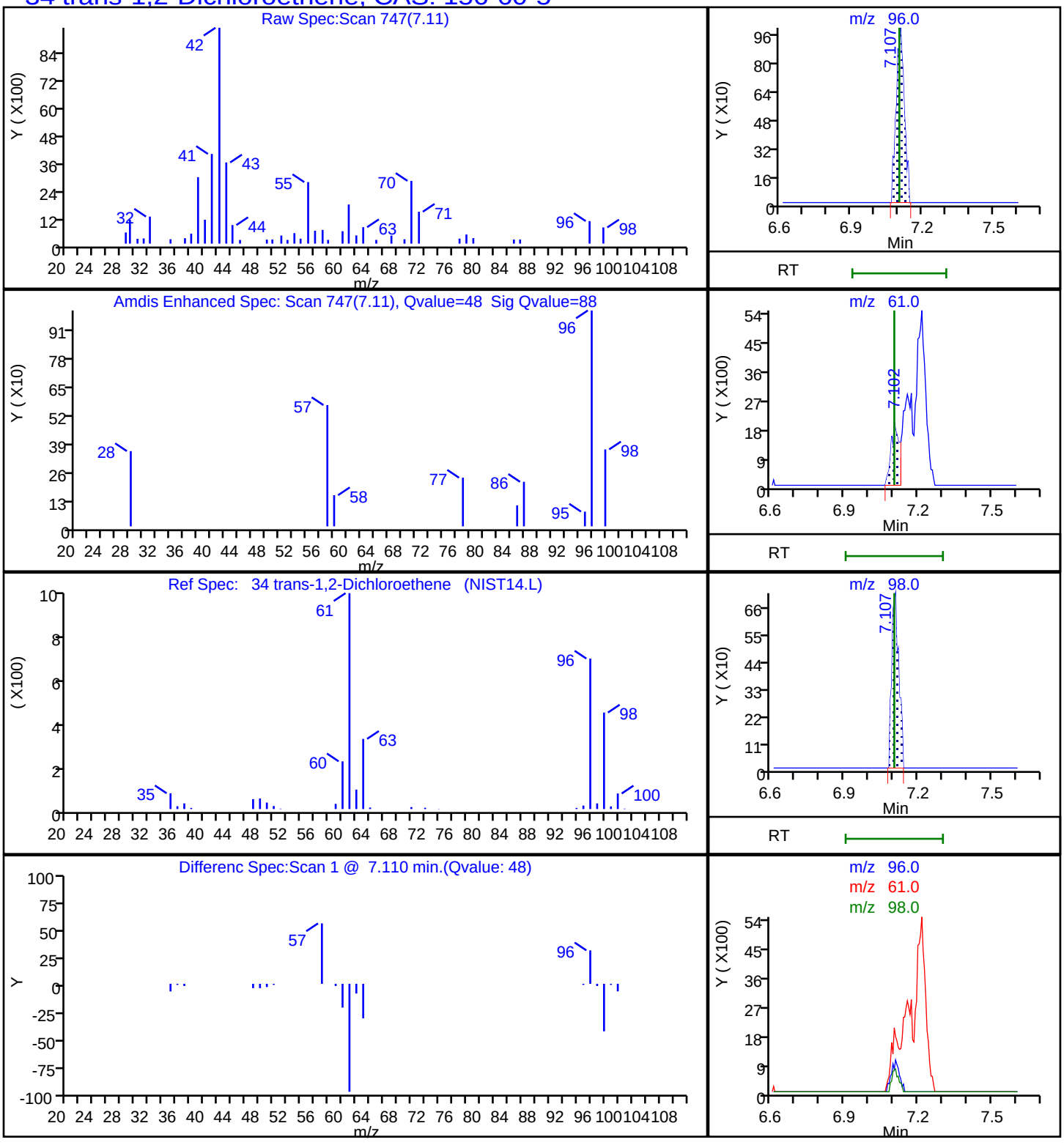




Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GG31P114.D		
Injection Date:	31-Jul-2020 22:53:30	Instrument ID:	MG
Lims ID:	140-19811-A-4	Lab Sample ID:	140-19811-4
Client ID:	BLDG B EFFLUENT		
Operator ID:	HMT	ALS Bottle#:	14 Worklist Smp#: 18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

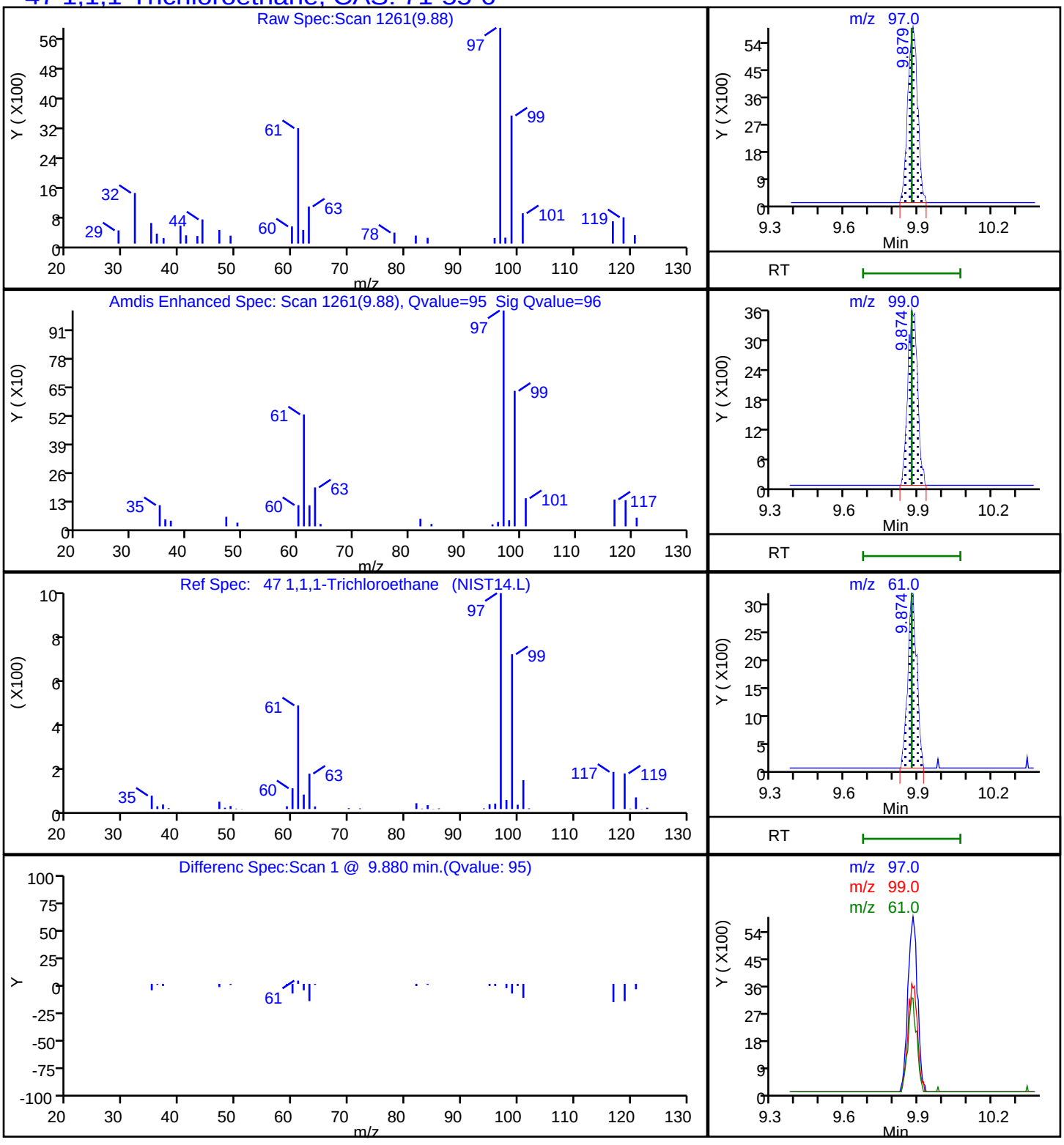
34 trans-1,2-Dichloroethene, CAS: 156-60-5



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GG31P114.D				
Injection Date:	31-Jul-2020 22:53:30	Instrument ID:	MG		
Lims ID:	140-19811-A-4	Lab Sample ID:	140-19811-4		
Client ID:	BLDG B EFFLUENT				
Operator ID:	HMT	ALS Bottle#:	14	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

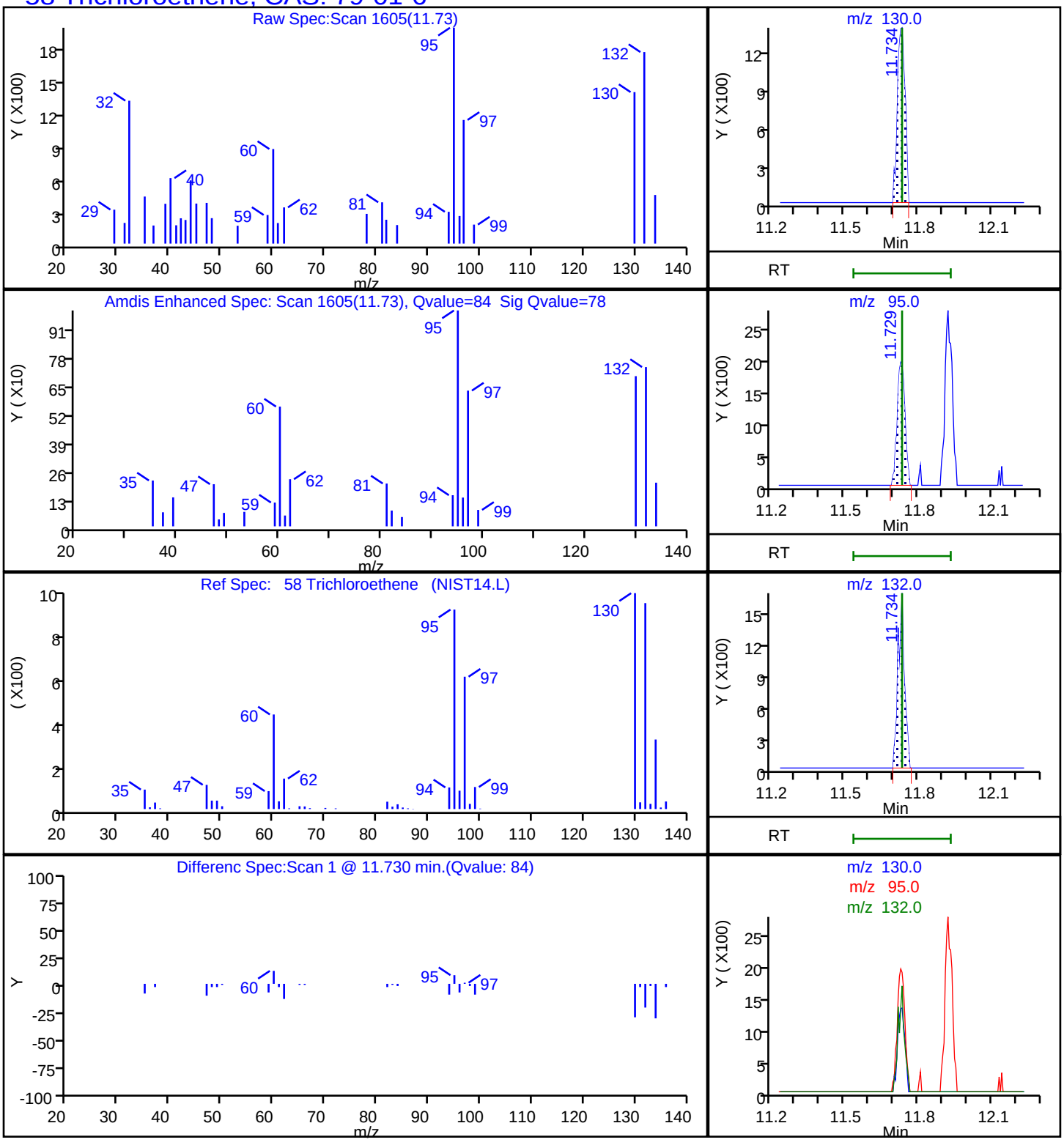
47 1,1,1-Trichloroethane, CAS: 71-55-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GG31P114.D		
Injection Date:	31-Jul-2020 22:53:30	Instrument ID:	MG
Lims ID:	140-19811-A-4	Lab Sample ID:	140-19811-4
Client ID:	BLDG B EFFLUENT		
Operator ID:	HMT	ALS Bottle#:	14 Worklist Smp#: 18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

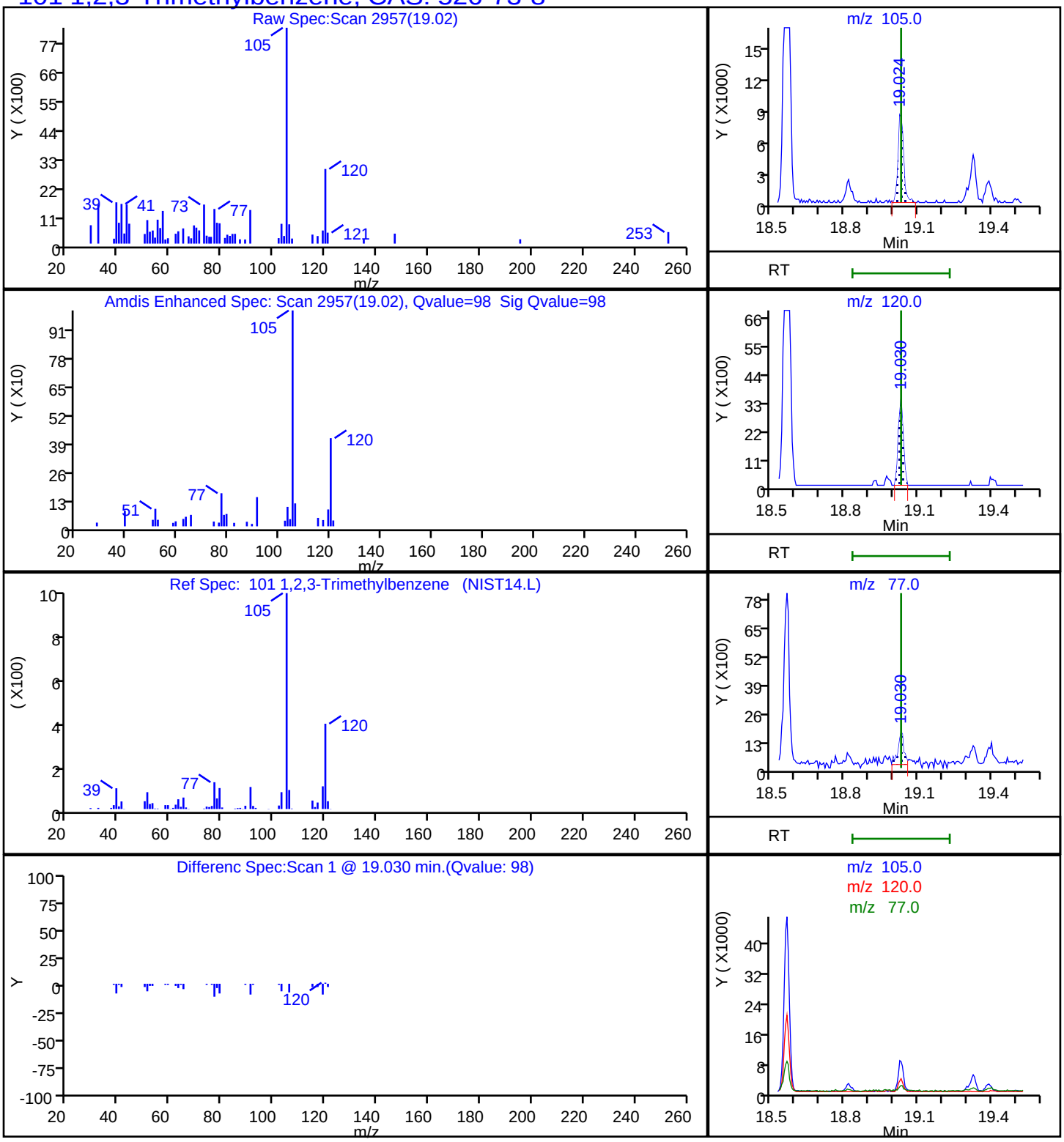
58 Trichloroethene, CAS: 79-01-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GG31P114.D		
Injection Date:	31-Jul-2020 22:53:30	Instrument ID:	MG
Lims ID:	140-19811-A-4	Lab Sample ID:	140-19811-4
Client ID:	BLDG B EFFLUENT		
Operator ID:	HMT	ALS Bottle#:	14 Worklist Smp#: 18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

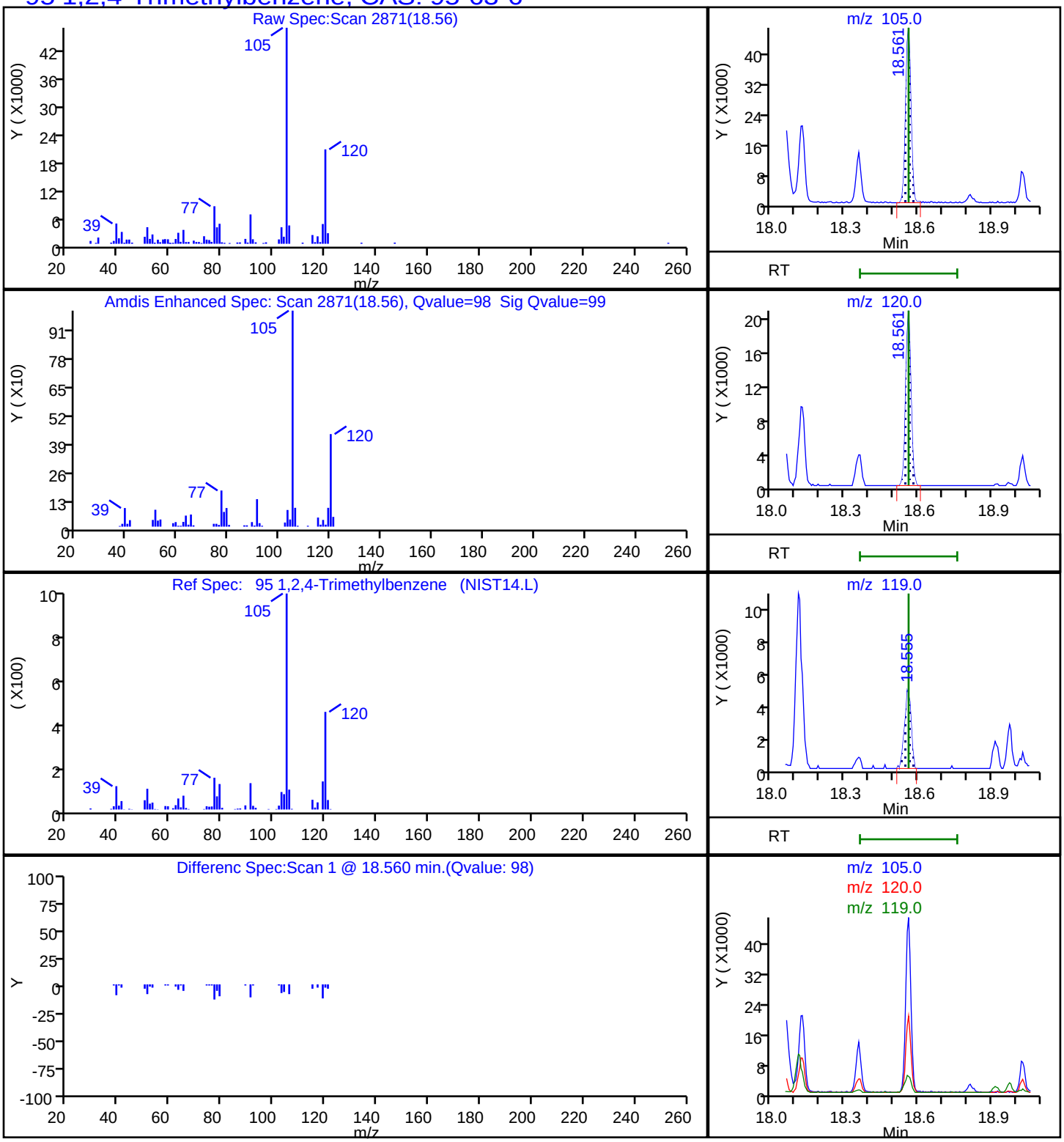
101 1,2,3-Trimethylbenzene, CAS: 526-73-8



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GG31P114.D				
Injection Date:	31-Jul-2020 22:53:30	Instrument ID:	MG		
Lims ID:	140-19811-A-4	Lab Sample ID:	140-19811-4		
Client ID:	BLDG B EFFLUENT				
Operator ID:	HMT	ALS Bottle#:	14	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

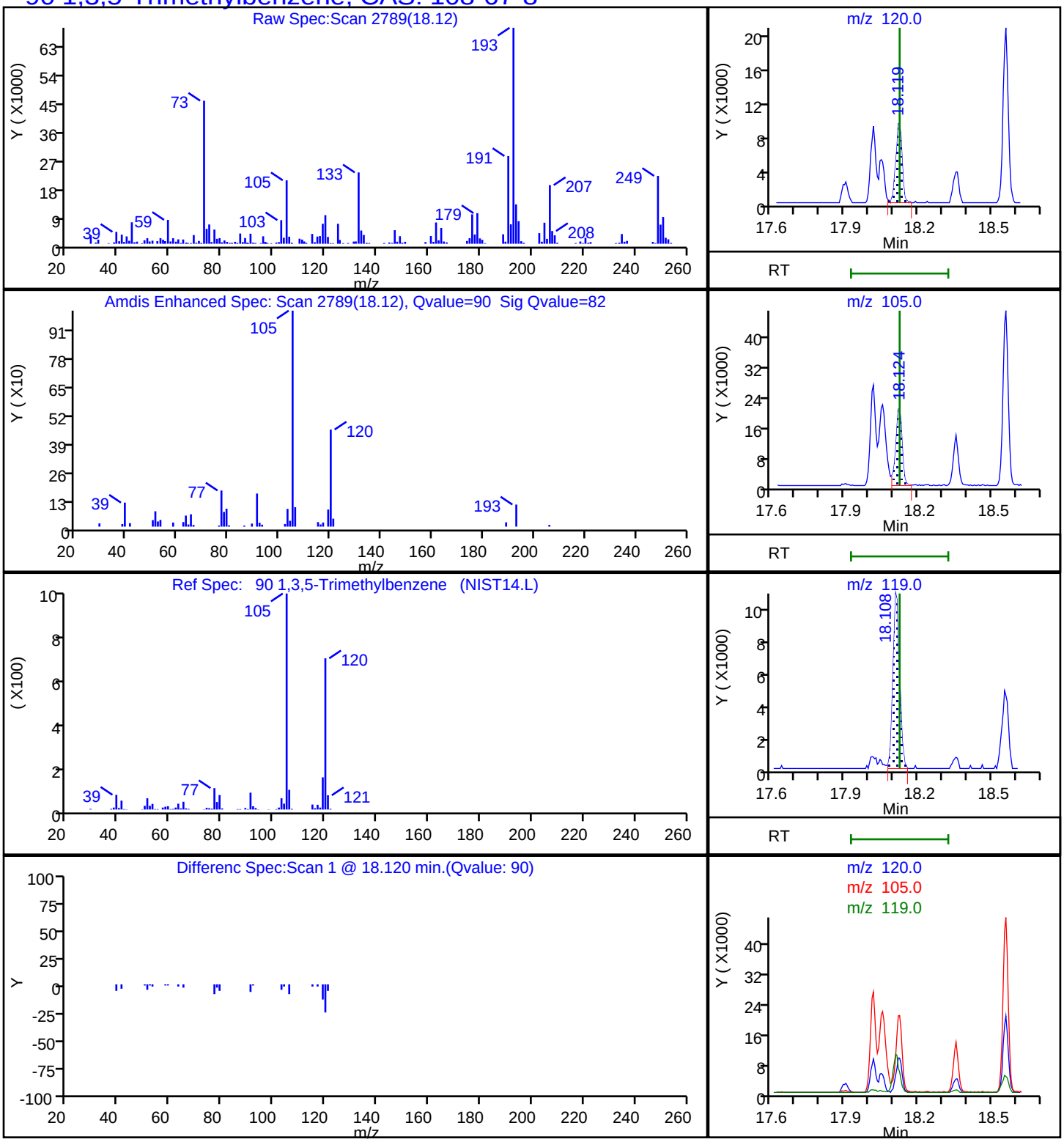
95 1,2,4-Trimethylbenzene, CAS: 95-63-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GG31P114.D				
Injection Date:	31-Jul-2020 22:53:30	Instrument ID:	MG		
Lims ID:	140-19811-A-4	Lab Sample ID:	140-19811-4		
Client ID:	BLDG B EFFLUENT				
Operator ID:	HMT	ALS Bottle#:	14	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

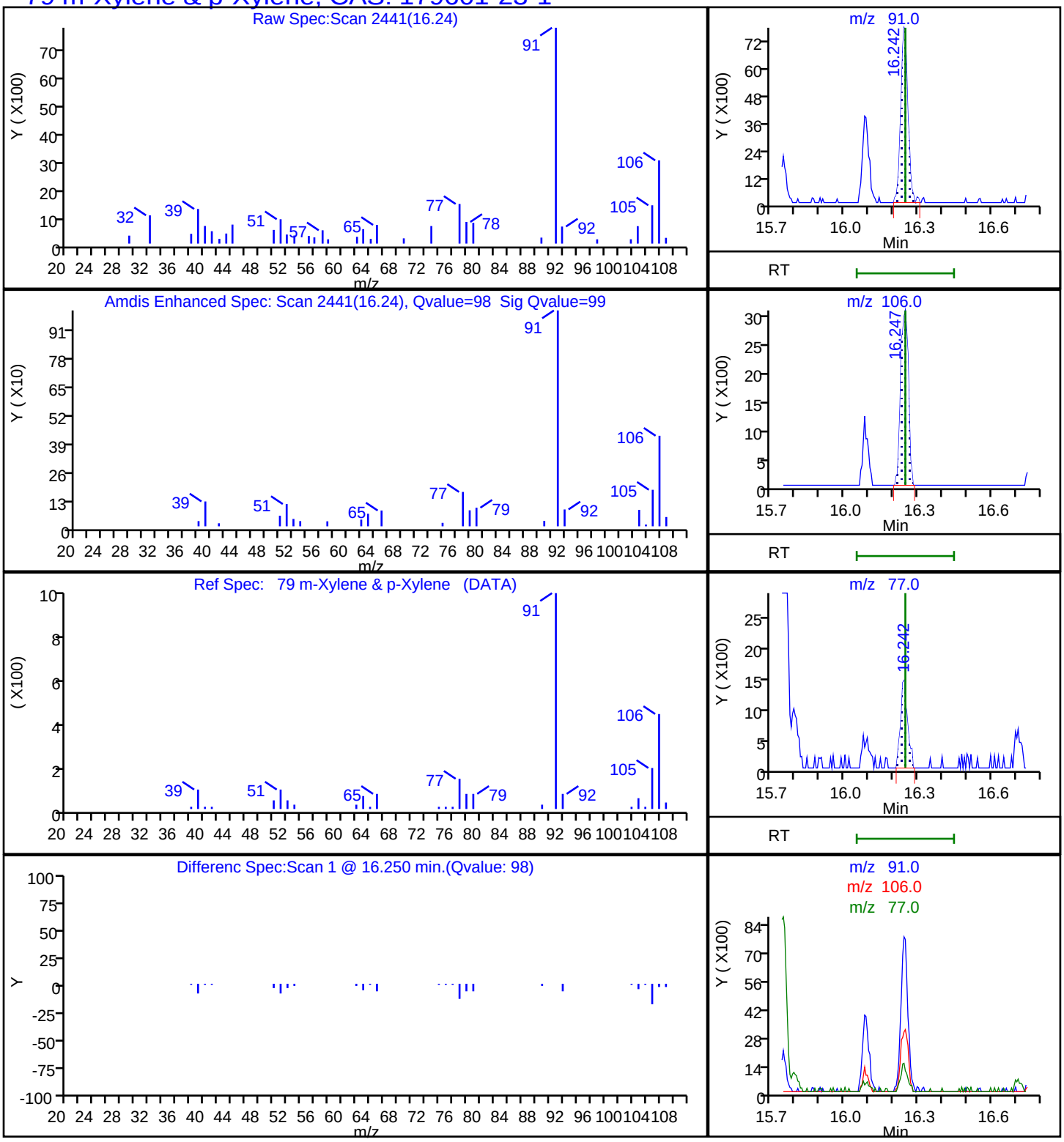
90 1,3,5-Trimethylbenzene, CAS: 108-67-8



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GG31P114.D				
Injection Date:	31-Jul-2020 22:53:30	Instrument ID:	MG		
Lims ID:	140-19811-A-4	Lab Sample ID:	140-19811-4		
Client ID:	BLDG B EFFLUENT				
Operator ID:	HMT	ALS Bottle#:	14	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

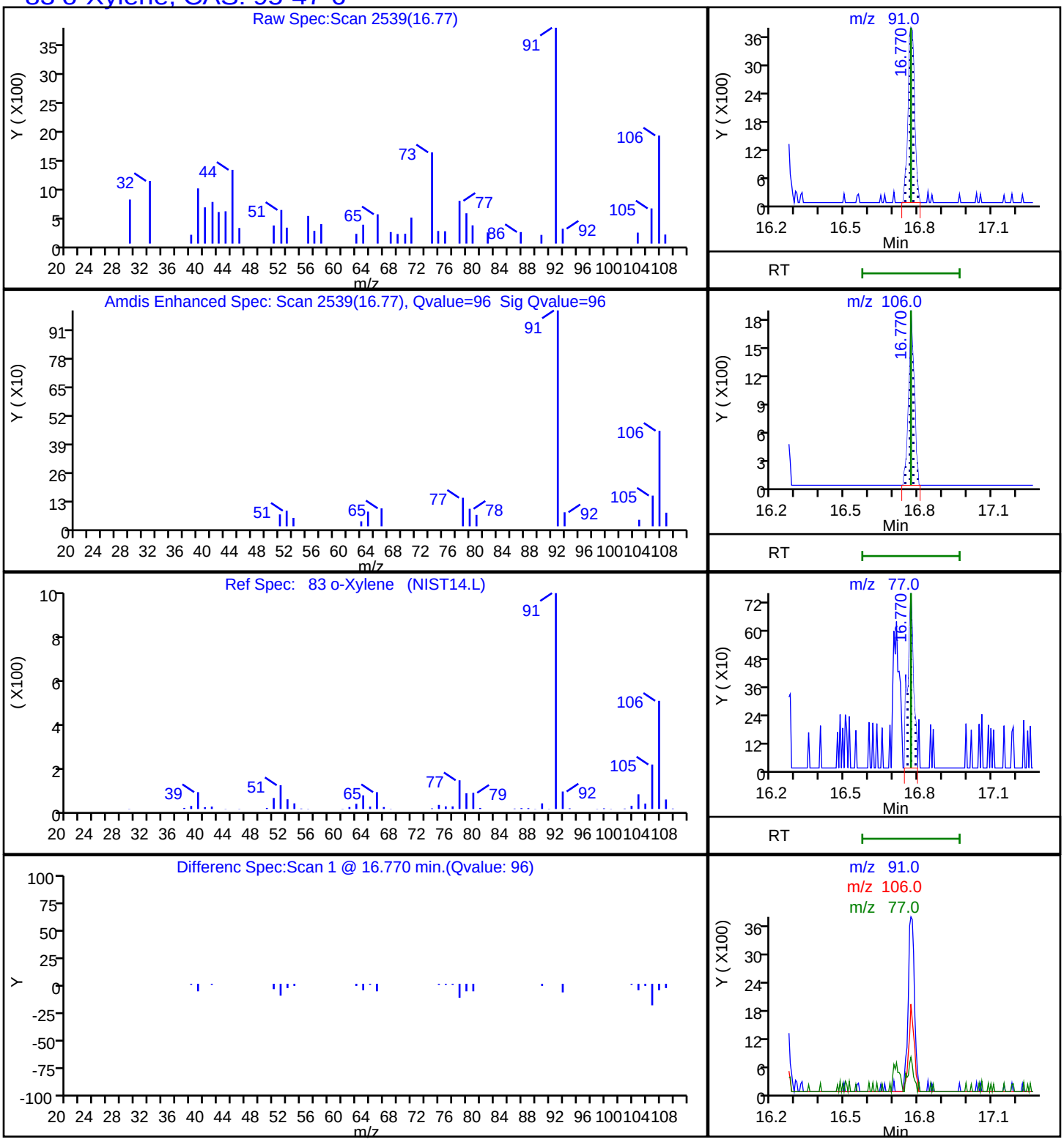
79 m-Xylene & p-Xylene, CAS: 179601-23-1



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GG31P114.D				
Injection Date:	31-Jul-2020 22:53:30	Instrument ID:	MG		
Lims ID:	140-19811-A-4	Lab Sample ID:	140-19811-4		
Client ID:	BLDG B EFFLUENT				
Operator ID:	HMT	ALS Bottle#:	14	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

83 o-Xylene, CAS: 95-47-6



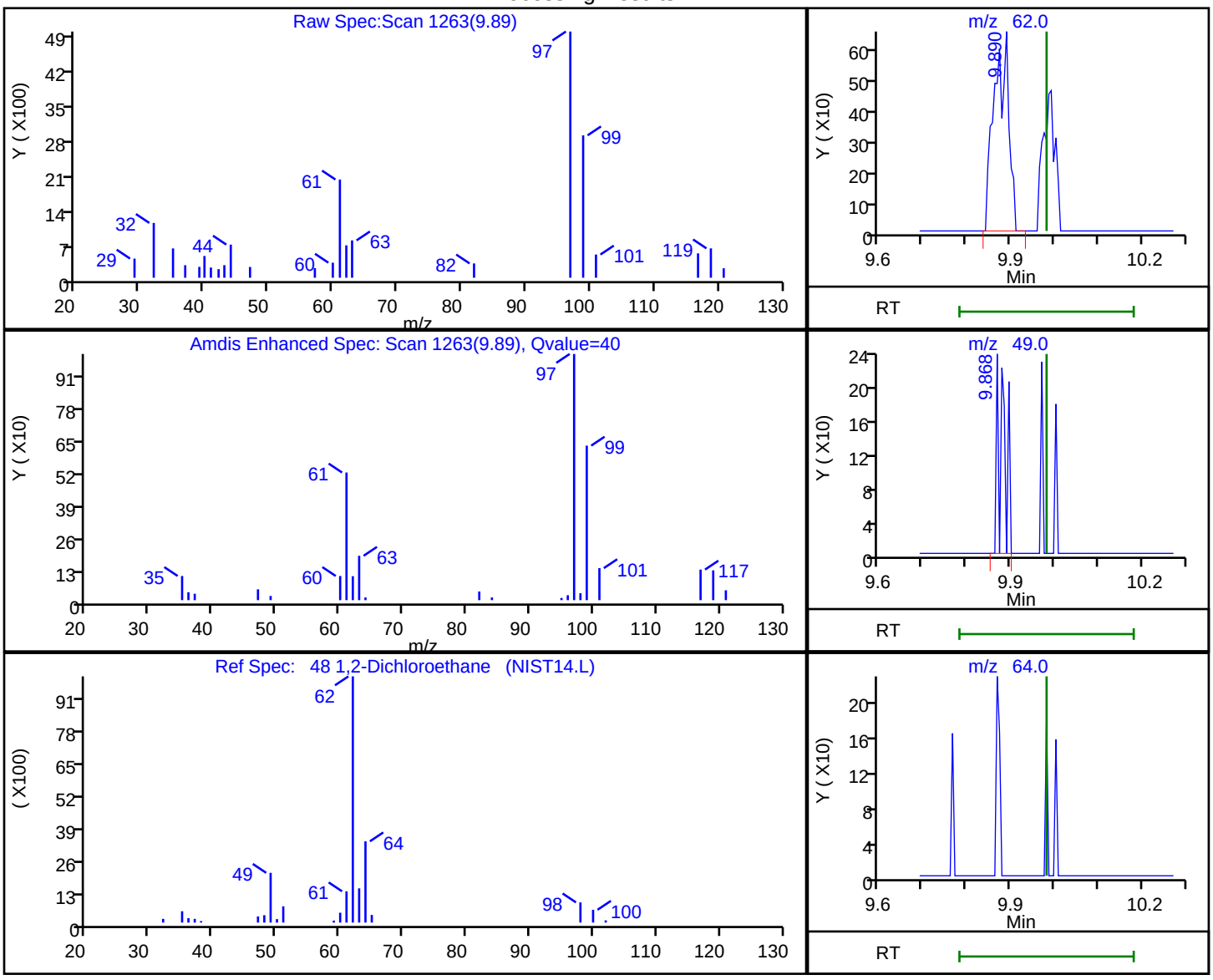
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GG31P114.D				
Injection Date:	31-Jul-2020 22:53:30	Instrument ID:	MG		
Lims ID:	140-19811-A-4	Lab Sample ID:	140-19811-4		
Client ID:	BLDG B EFFLUENT				
Operator ID:	HMT	ALS Bottle#:	14	Worklist Smp#:	18
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

48 1,2-Dichloroethane, CAS: 107-06-2

Processing Results



RT	Mass	Response	Amount
9.89	62.00	1524	0.011263
9.87	49.00	264	
9.98	64.00	0	

Reviewer: khachitpongpanits, 03-Aug-2020 13:24:59

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19811-1

SDG No.:

Client Sample ID: BLDG B MID GAC Lab Sample ID: 140-19811-5

Matrix: Air Lab File ID: GG31P115.D

Analysis Method: TO 15 LL Date Collected: 07/23/2020 13:31

Sample wt/vol: 100(mL) Date Analyzed: 07/31/2020 23:38

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 41417 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	5.1		0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.087	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	5.9		0.40	0.11
67-66-3	Chloroform	119.38	0.26	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	0.35	J	0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.59		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	1.1		0.40	0.065
75-09-2	Methylene Chloride	84.93	7.5		2.0	0.80
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	0.24	J	0.40	0.035
108-88-3	Toluene	92.14	6.6		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	0.075	J	0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	4.6		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	0.72		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	2.0		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	4.4		0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	5.7		0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	97		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19811-1

SDG No.:

Client Sample ID: BLDG B MID GAC Lab Sample ID: 140-19811-5

Matrix: Air Lab File ID: GG31P115.D

Analysis Method: TO 15 LL Date Collected: 07/23/2020 13:31

Sample wt/vol: 100(mL) Date Analyzed: 07/31/2020 23:38

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 41417 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	16		1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.55	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	21		1.4	0.39
67-66-3	Chloroform	119.38	1.3	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	1.4	J	1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.9		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	4.7		1.7	0.28
75-09-2	Methylene Chloride	84.93	26		6.9	2.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	1.6	J	2.7	0.24
108-88-3	Toluene	92.14	25		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	0.30	J	1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	25		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	3.5		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	10		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	22		2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	25		3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	97		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GG31P115.D
Lims ID: 140-19811-A-5
Client ID: BLDG B MID GAC
Sample Type: Client
Inject. Date: 31-Jul-2020 23:38:30 ALS Bottle#: 15 Worklist Smp#: 19
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016161-019
Misc. Info.: 140-19811-a-5
Operator ID: HMT Instrument ID: MG

Method: \\chromfs\Knoxville\ChromData\MG\20200729-16161.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 03-Aug-2020 13:25:12 Calib Date: 15-Jul-2020 22:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1011

First Level Reviewer: khachitpongpanits Date: 03-Aug-2020 13:26:19

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.833	8.838	-0.005	92	145180	4.00	
* 2 1,4-Difluorobenzene	114	11.017	11.017	0.000	97	1275251	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.746	15.746	0.000	94	1082498	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.385	17.391	-0.006	74	849359	3.86	
6 Chlorodifluoromethane	51	3.710	3.710	0.000	95	173629	1.18	
8 Dichlorodifluoromethane	85	3.769	3.767	-0.001	100	31086	0.1174	
31 Methylene Chloride	84	6.298	6.293	0.005	98	154877	1.49	
34 trans-1,2-Dichloroethene	96	7.107	7.097	0.005	34	1138	0.0150	
42 cis-1,2-Dichloroethene	96	8.509	8.499	0.005	97	5448	0.0707	
44 Chloroform	83	8.854	8.843	0.005	28	10082	0.0523	
47 1,1,1-Trichloroethane	97	9.874	9.874	0.000	94	3647	0.0175	
50 Benzene	78	10.472	10.478	-0.006	96	270893	1.03	
52 Carbon tetrachloride	117	10.499	10.499	0.000	90	3157	0.0174	
58 Trichloroethene	130	11.729	11.734	-0.006	86	82720	0.9285	
67 Toluene	91	13.778	13.778	0.000	94	311329	1.33	
73 Tetrachloroethene	129	14.921	14.921	0.000	81	3899	0.0485	
78 Ethylbenzene	91	16.086	16.086	0.000	99	67057	0.2174	
79 m-Xylene & p-Xylene	91	16.242	16.247	-0.005	99	195980	0.7986	
83 o-Xylene	91	16.770	16.771	-0.001	97	90213	0.3475	
90 1,3,5-Trimethylbenzene	120	18.113	18.119	-0.011	83	108320	0.8764	
95 1,2,4-Trimethylbenzene	105	18.555	18.560	-0.006	98	115869	0.4056	
101 1,2,3-Trimethylbenzene	105	19.030	19.036	0.000	98	30453	0.1431	
S 124 Xylenes, Total	100				0		1.15	

Reagents:

40MXISSURP_00004 Amount Added: 40.00 Units: mL Run Reagent

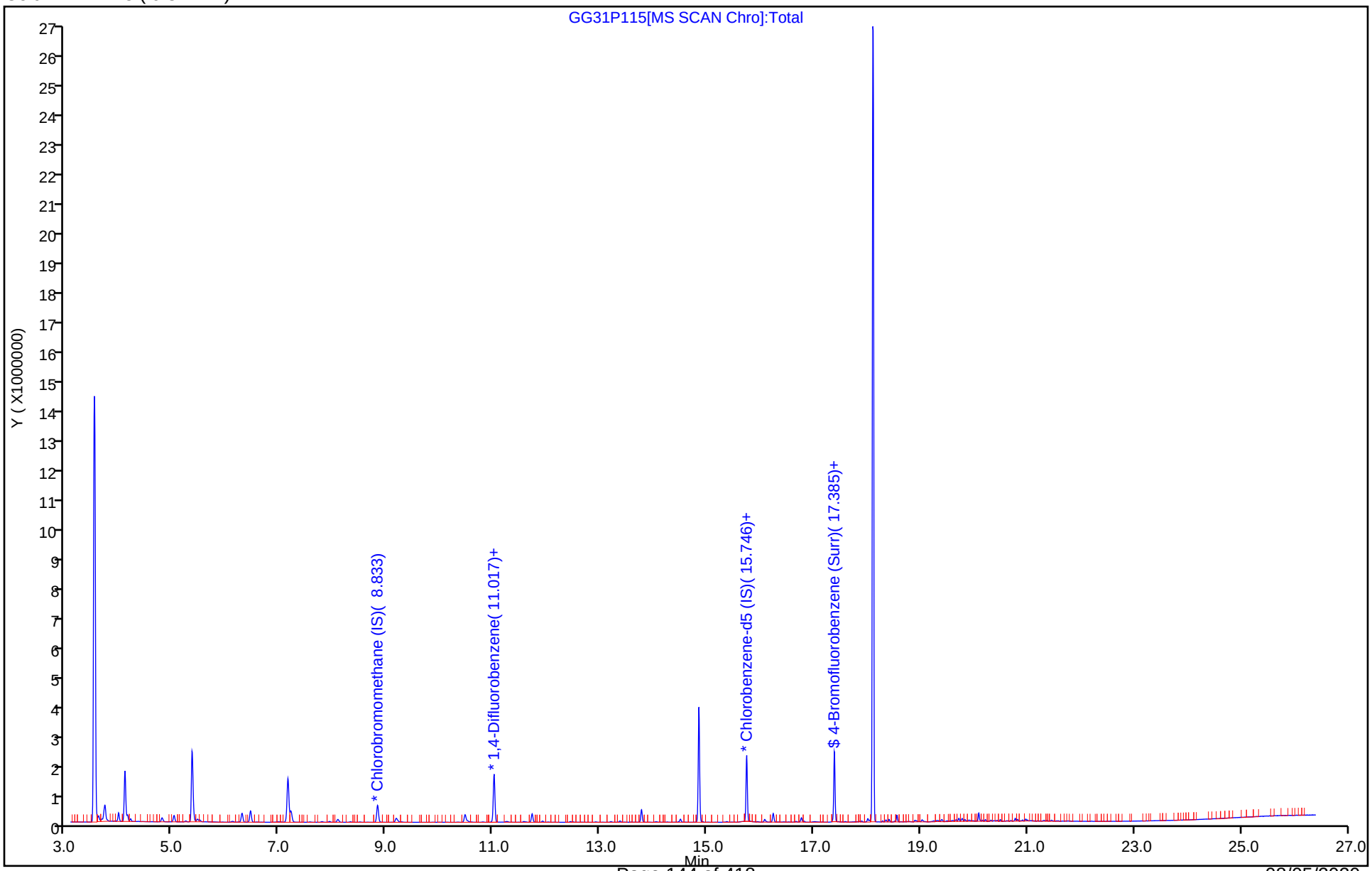
Report Date: 03-Aug-2020 13:26:20 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GG31P115.D

Injection Date:	31-Jul-2020 23:38:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	140-19811-A-5	Lab Sample ID:	140-19811-5	Worklist Smp#:	19
Client ID:	BLDG B MID GAC				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GG31P115.D				
Lims ID:	140-19811-A-5				
Client ID:	BLDG B MID GAC				
Sample Type:	Client				
Inject. Date:	31-Jul-2020 23:38:30	ALS Bottle#:	15	Worklist Smp#:	19
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016161-019				
Misc. Info.:	140-19811-a-5				
Operator ID:	HMT	Instrument ID:	MG		
Method:	\\chromfs\Knoxville\ChromData\MG\20200729-16161.b\MG_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	03-Aug-2020 13:25:12	Calib Date:	15-Jul-2020 22:02:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1011				

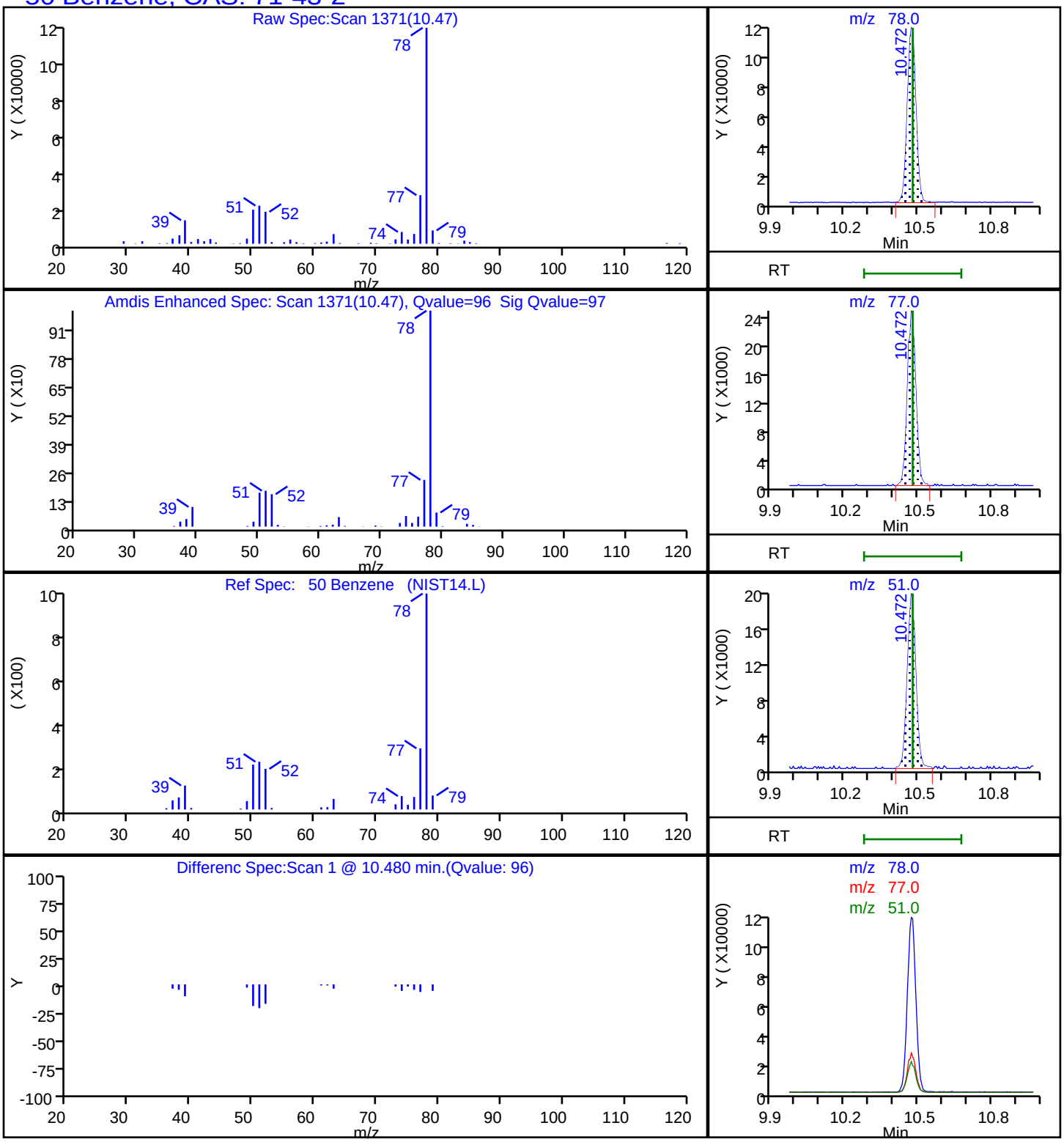
First Level Reviewer: khachitpongpanits Date: 03-Aug-2020 13:26:19

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.00	3.86	96.51

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GG31P115.D		
Injection Date:	31-Jul-2020 23:38:30	Instrument ID:	MG
Lims ID:	140-19811-A-5	Lab Sample ID:	140-19811-5
Client ID:	BLDG B MID GAC		
Operator ID:	HMT	ALS Bottle#:	15 Worklist Smp#: 19
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

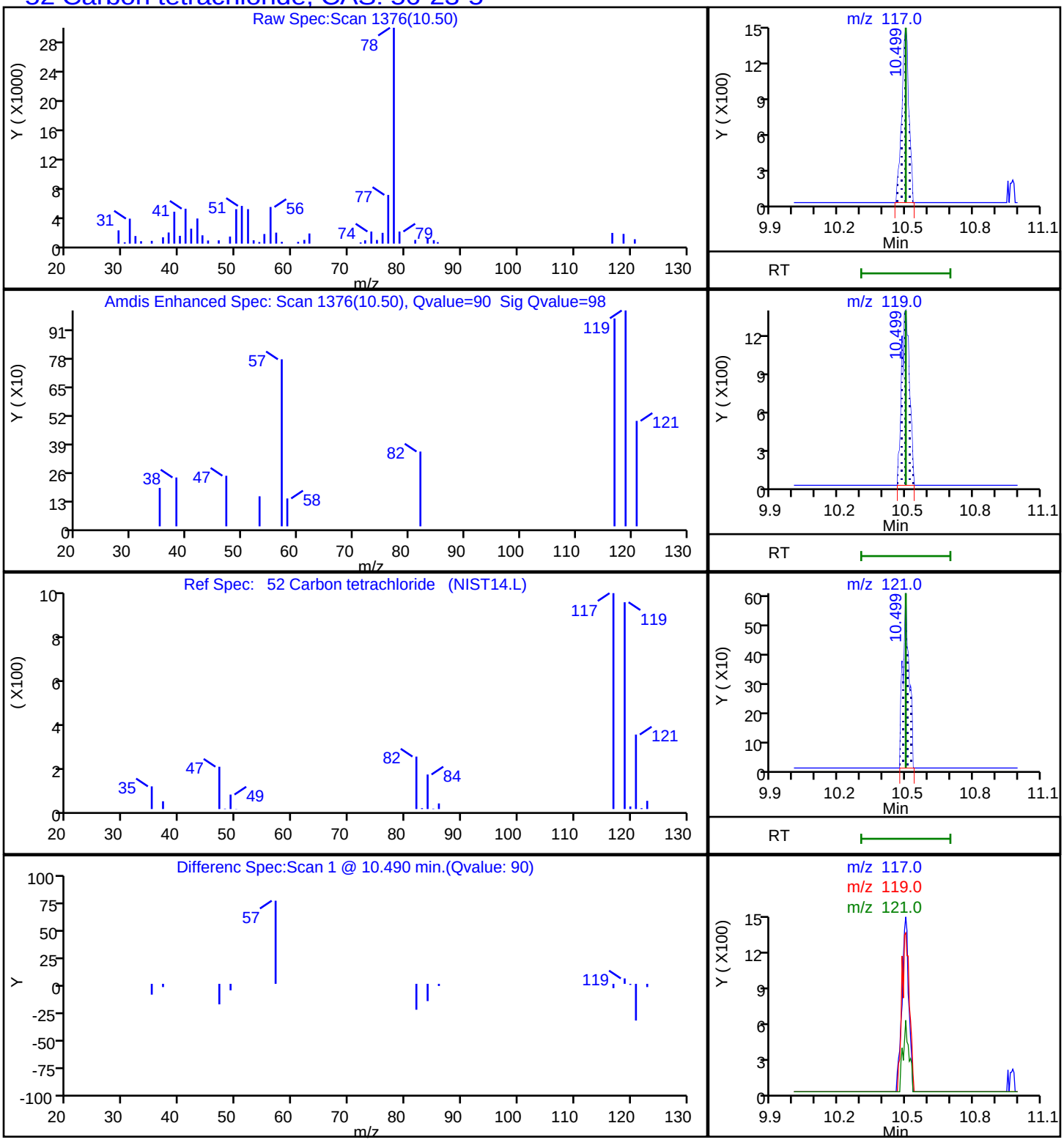
50 Benzene, CAS: 71-43-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GG31P115.D		
Injection Date:	31-Jul-2020 23:38:30	Instrument ID:	MG
Lims ID:	140-19811-A-5	Lab Sample ID:	140-19811-5
Client ID:	BLDG B MID GAC		
Operator ID:	HMT	ALS Bottle#:	15 Worklist Smp#: 19
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

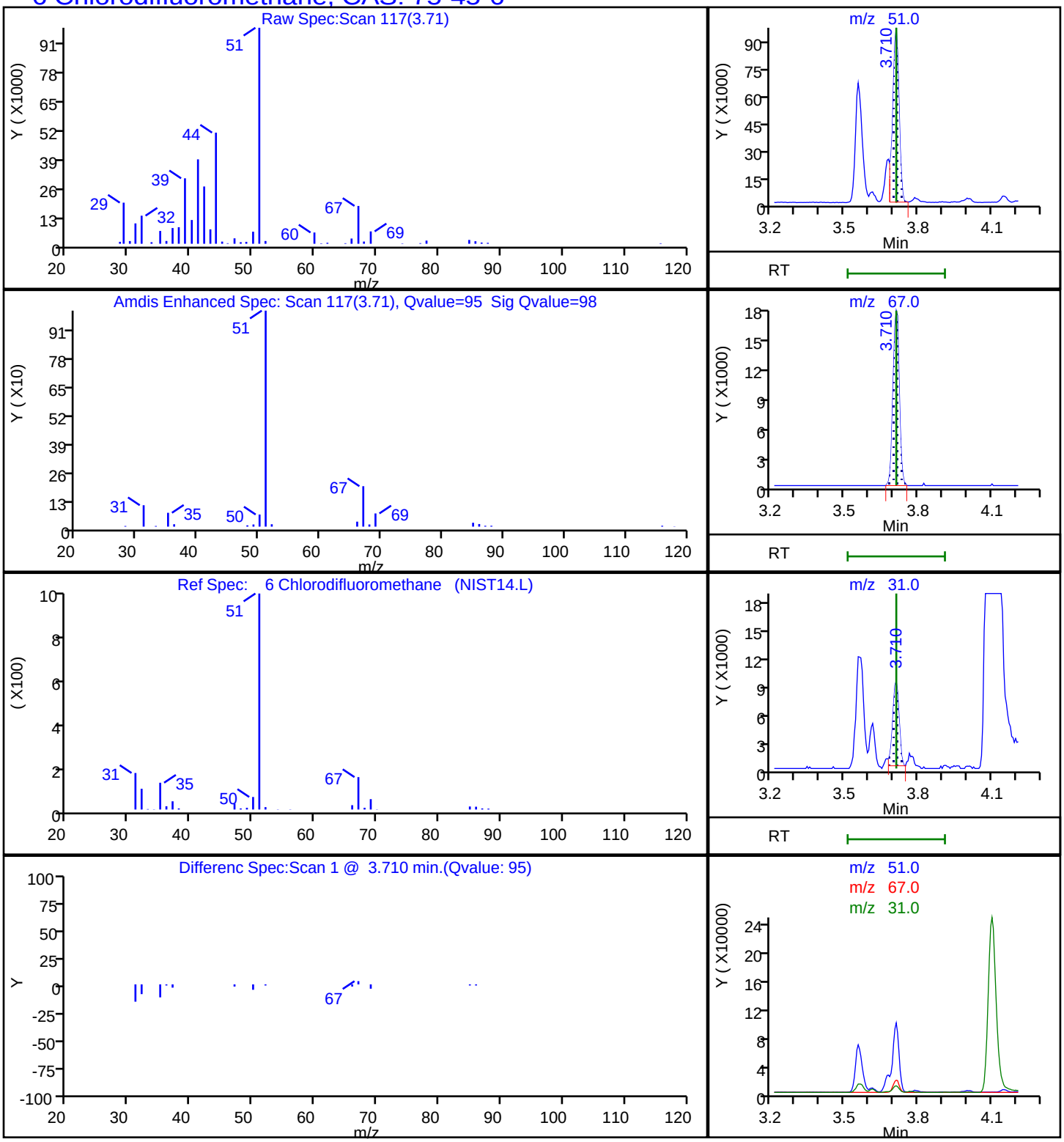
52 Carbon tetrachloride, CAS: 56-23-5



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GG31P115.D				
Injection Date:	31-Jul-2020 23:38:30	Instrument ID:	MG		
Lims ID:	140-19811-A-5	Lab Sample ID:	140-19811-5		
Client ID:	BLDG B MID GAC				
Operator ID:	HMT	ALS Bottle#:	15	Worklist Smp#:	19
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

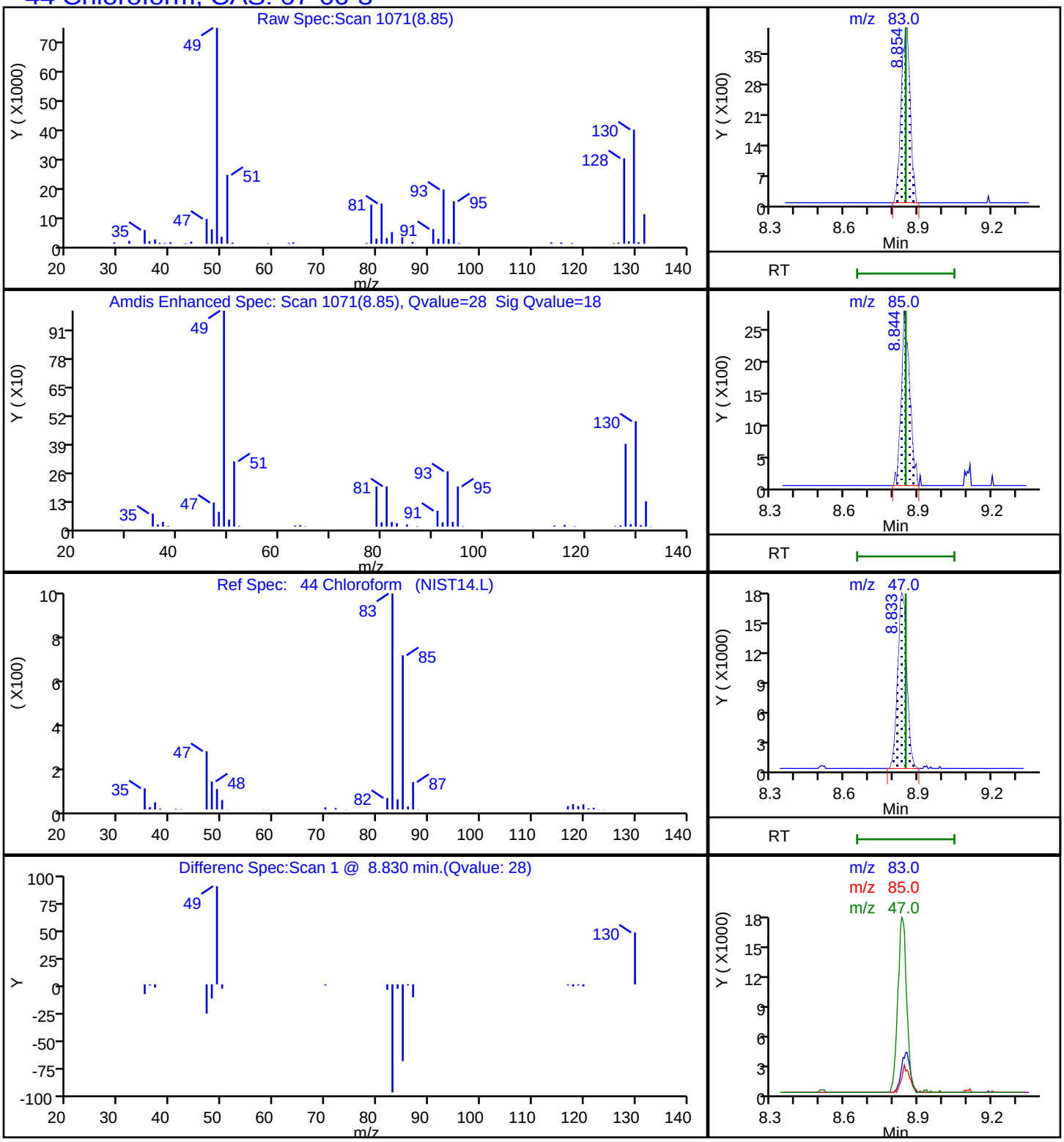
6 Chlorodifluoromethane, CAS: 75-45-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GG31P115.D		
Injection Date:	31-Jul-2020 23:38:30	Instrument ID:	MG
Lims ID:	140-19811-A-5	Lab Sample ID:	140-19811-5
Client ID:	BLDG B MID GAC		
Operator ID:	HMT	ALS Bottle#:	15 Worklist Smp#: 19
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

44 Chloroform, CAS: 67-66-3



Eurofins TestAmerica, Knoxville

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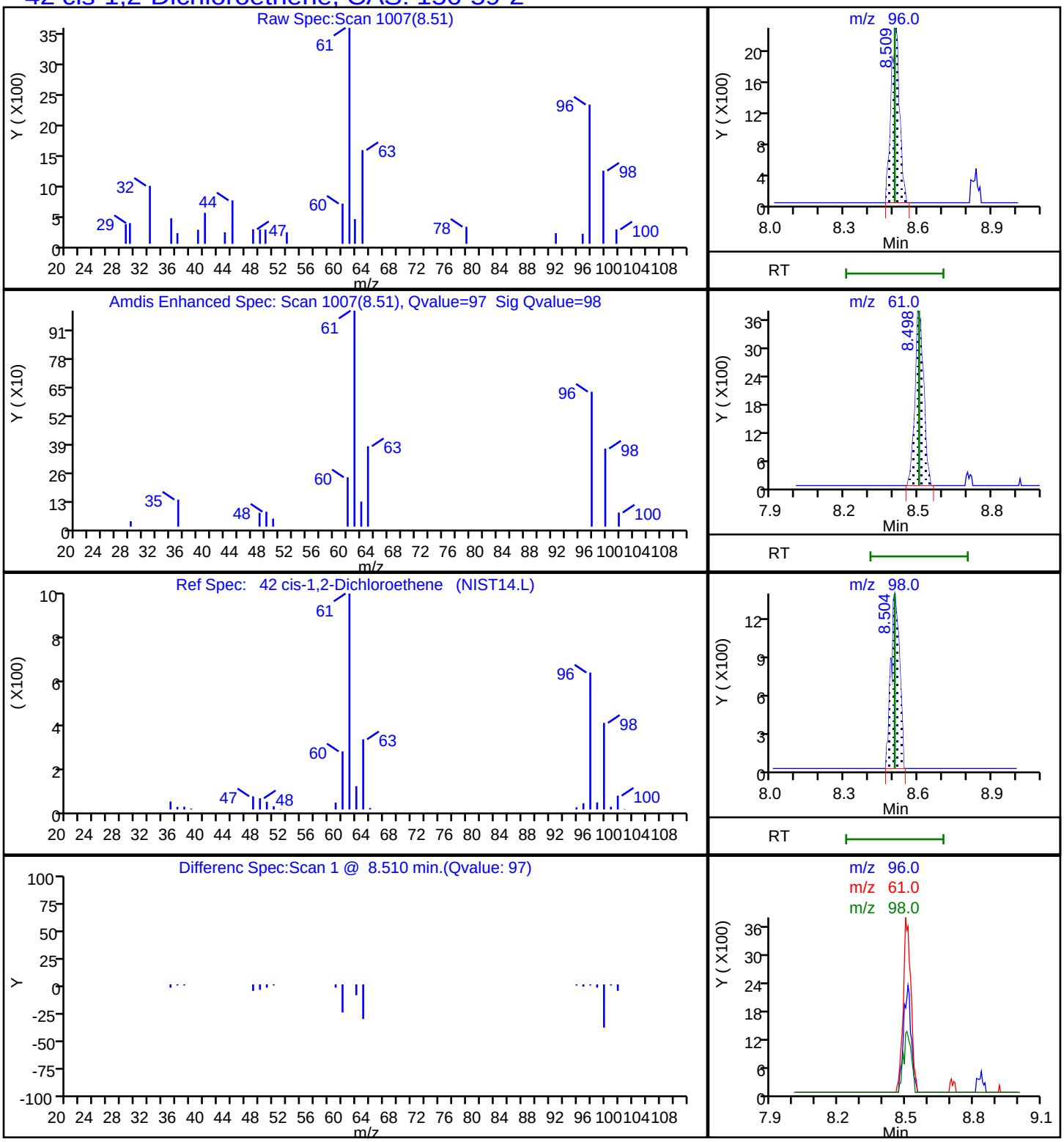
Lims ID:	140-19811-A-5	Lab Sample ID:	140-19811-5		
Client ID:	BLDG B MID GAC				
Operator ID:	HMT	ALS Bottle#:	15	Worklist Smp#:	19
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

42 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins TestAmerica, Knoxville

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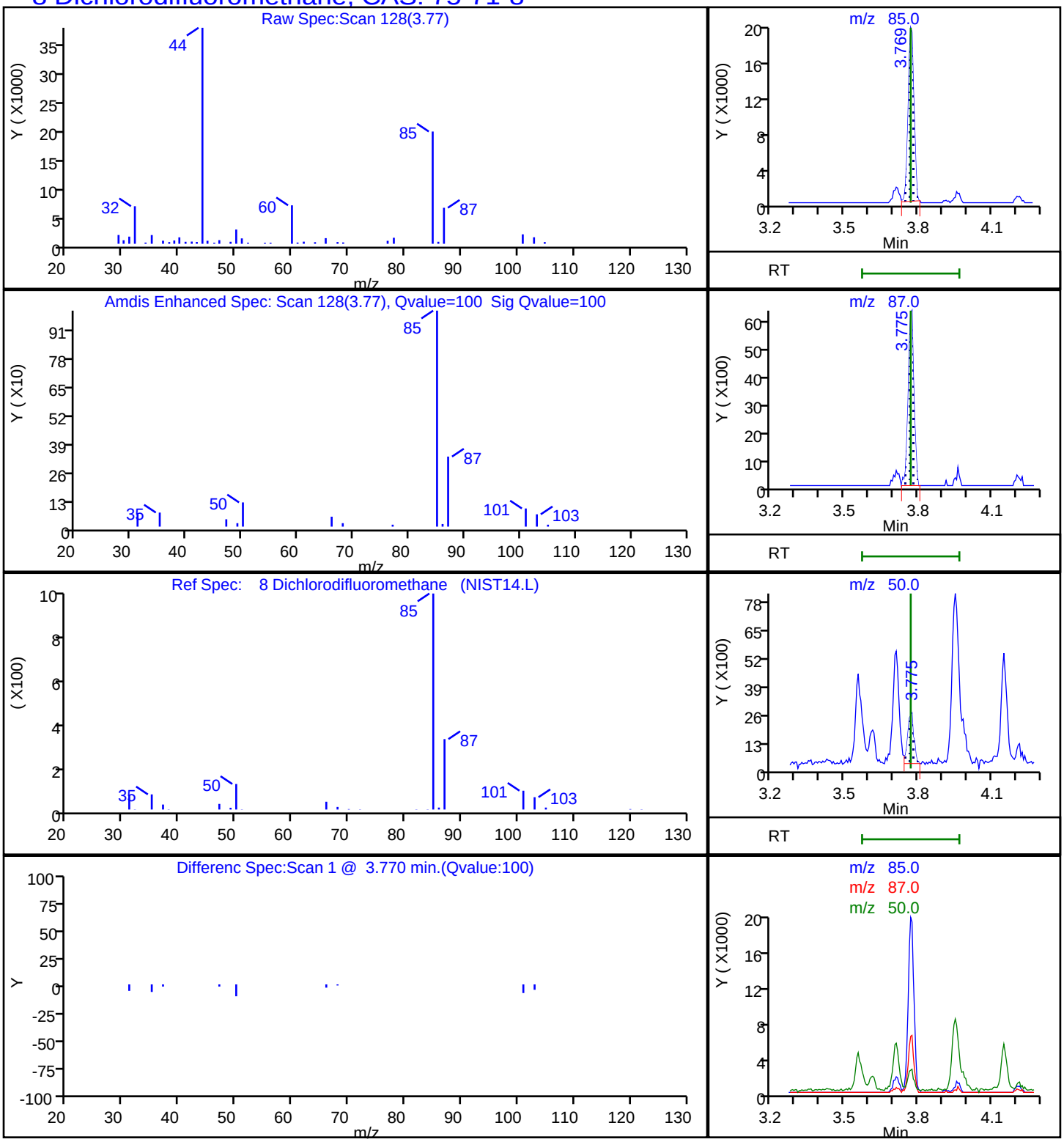
Lims ID:	140-19811-A-5	Lab Sample ID:	140-19811-5		
Client ID:	BLDG B MID GAC				
Operator ID:	HMT	ALS Bottle#:	15	Worklist Smp#:	19
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

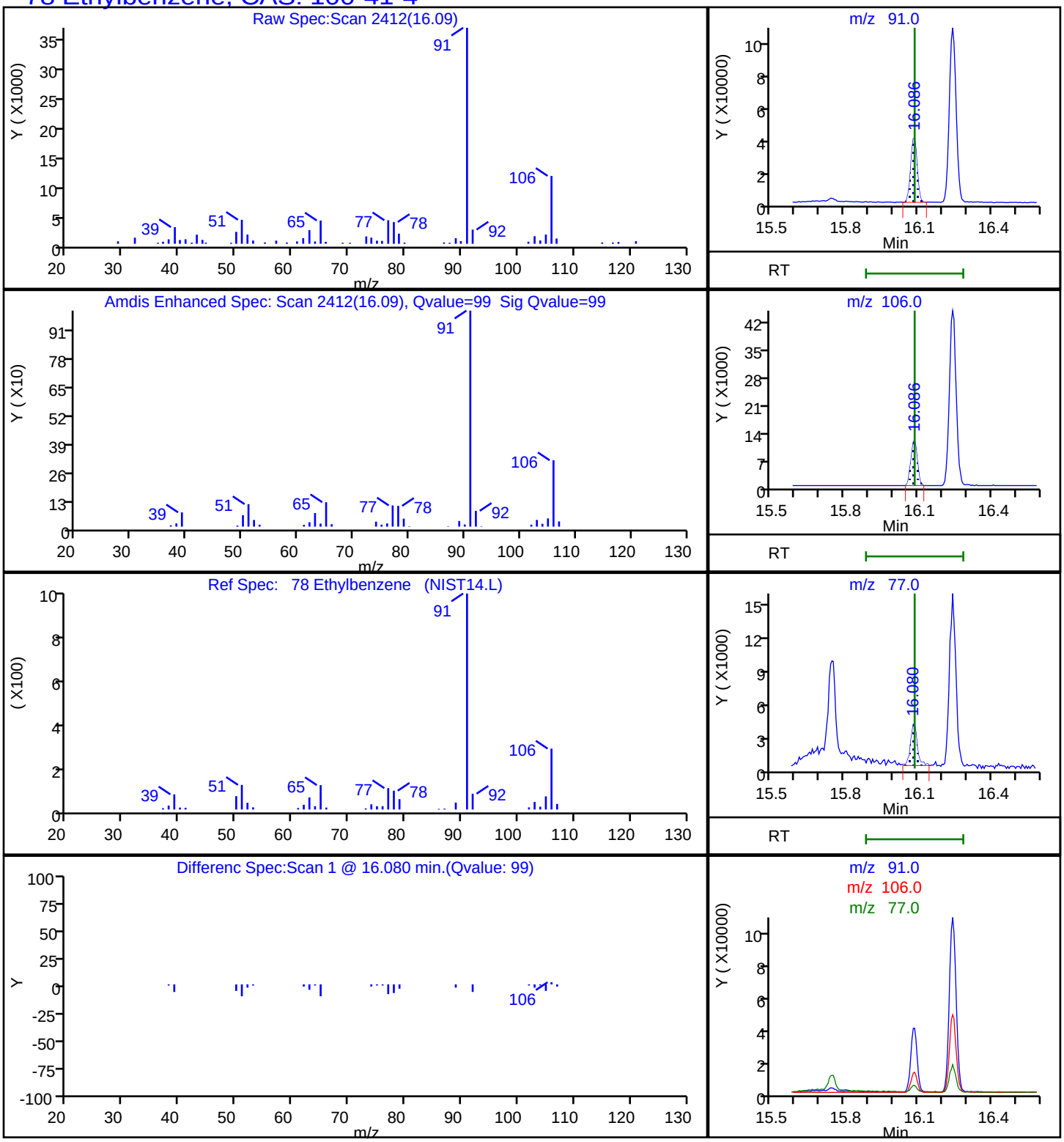
8 Dichlorodifluoromethane, CAS: 75-71-8



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GG31P115.D		
Injection Date:	31-Jul-2020 23:38:30	Instrument ID:	MG
Lims ID:	140-19811-A-5	Lab Sample ID:	140-19811-5
Client ID:	BLDG B MID GAC		
Operator ID:	HMT	ALS Bottle#:	15 Worklist Smp#: 19
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

78 Ethylbenzene, CAS: 100-41-4



Eurofins TestAmerica, Knoxville

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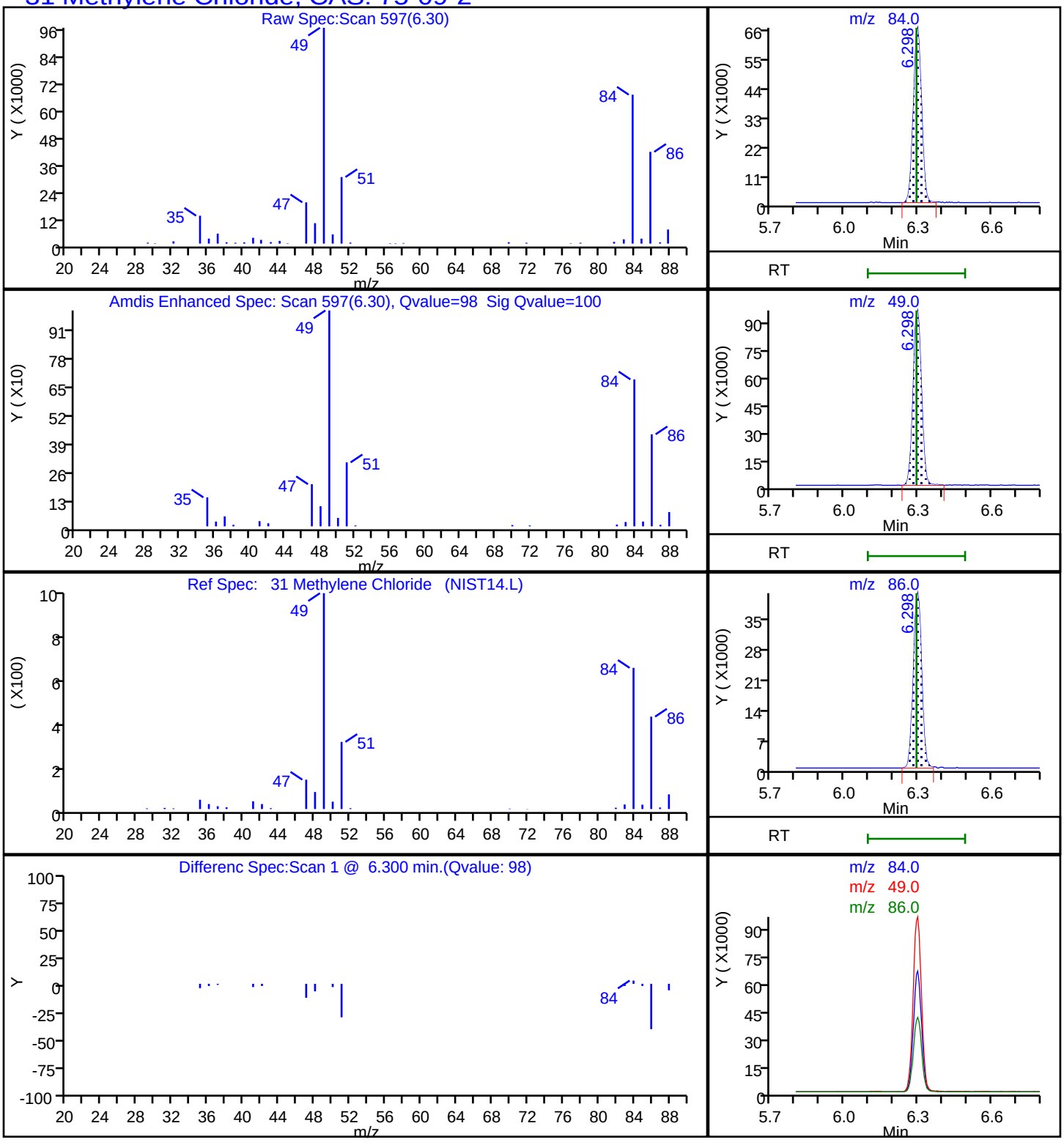
Lims ID:	140-19811-A-5	Lab Sample ID:	140-19811-5		
Client ID:	BLDG B MID GAC				
Operator ID:	HMT	ALS Bottle#:	15	Worklist Smp#:	19
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

31 Methylene Chloride, CAS: 75-09-2



Eurofins TestAmerica, Knoxville

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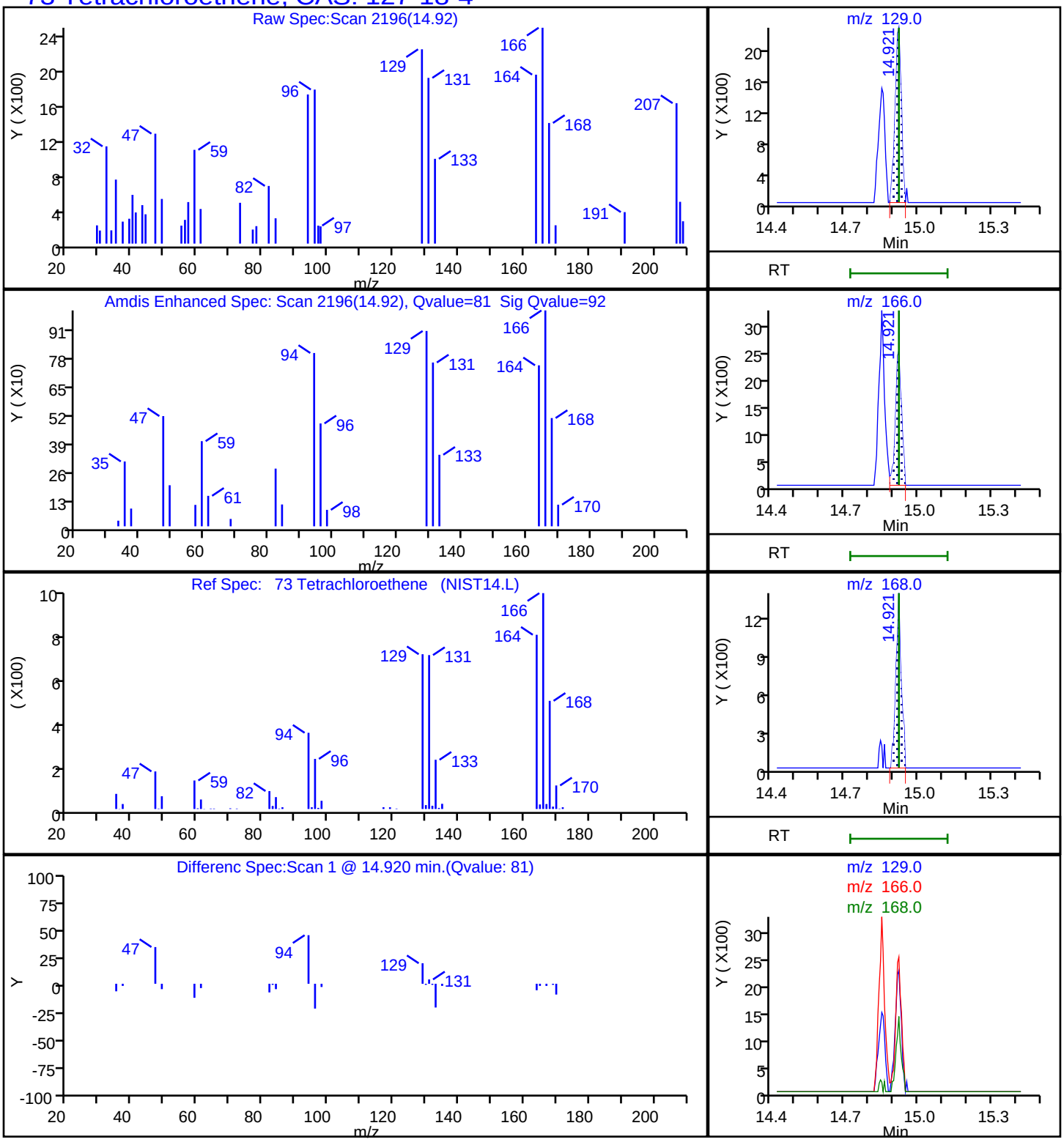
Lims ID:	140-19811-A-5	Lab Sample ID:	140-19811-5		
Client ID:	BLDG B MID GAC				
Operator ID:	HMT	ALS Bottle#:	15	Worklist Smp#:	19
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

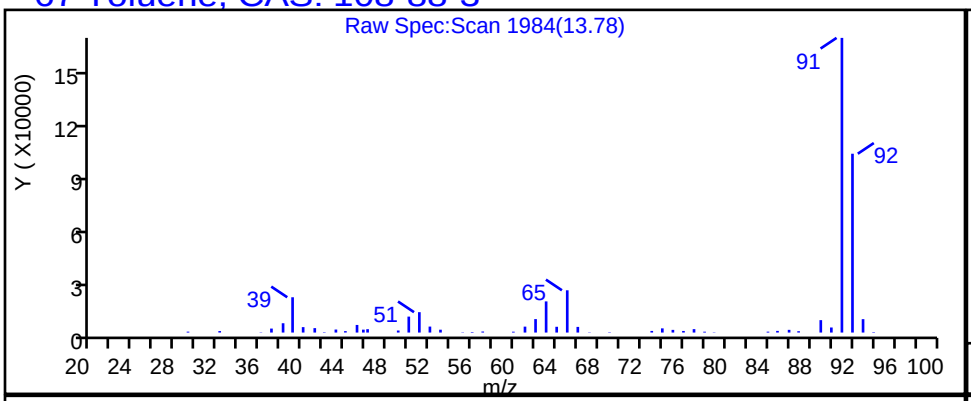
73 Tetrachloroethene, CAS: 127-18-4

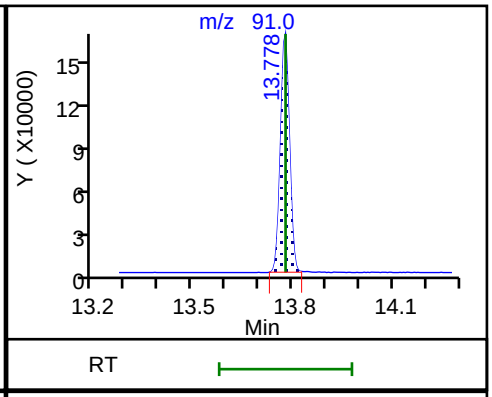


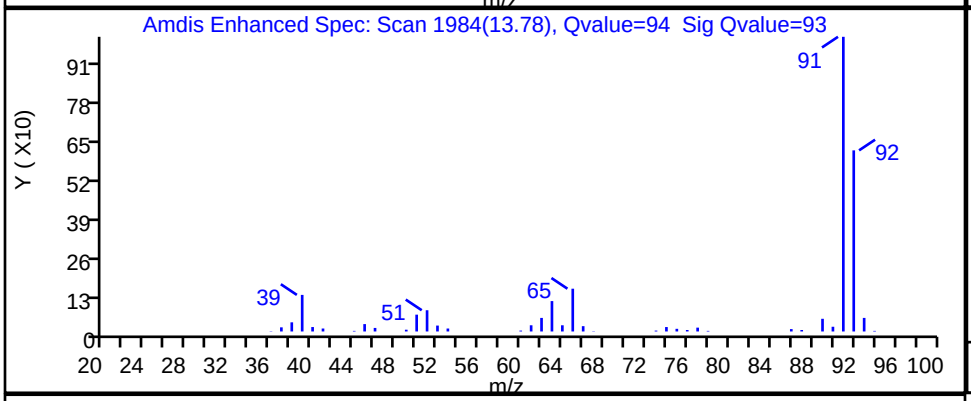
Eurofins TestAmerica, Knoxville

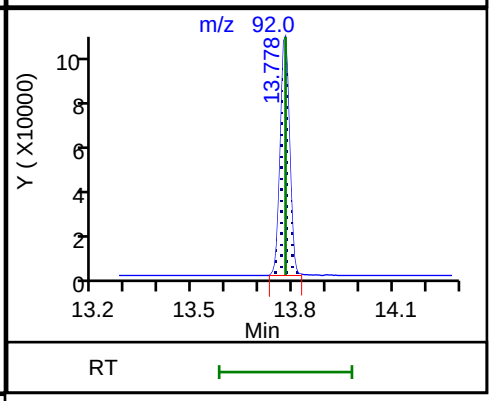
Data File:	\\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GG31P115.D		
Injection Date:	31-Jul-2020 23:38:30	Instrument ID:	MG
Lims ID:	140-19811-A-5	Lab Sample ID:	140-19811-5
Client ID:	BLDG B MID GAC		
Operator ID:	HMT	ALS Bottle#:	15 Worklist Smp#: 19
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

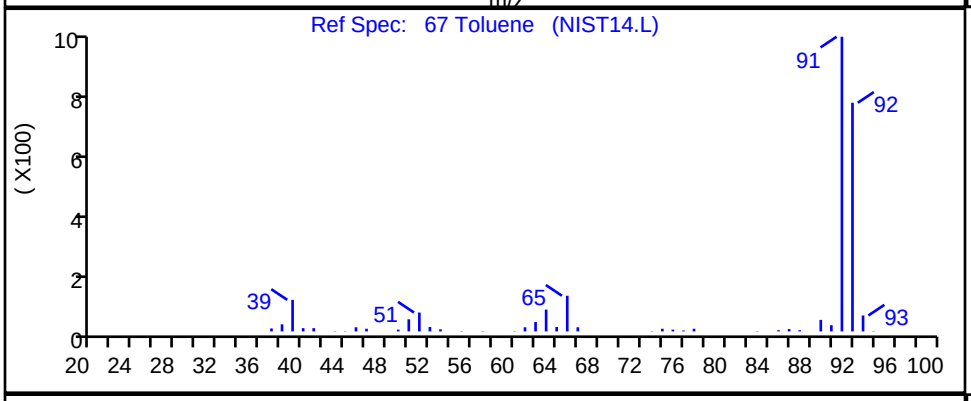
67 Toluene, CAS: 108-88-3

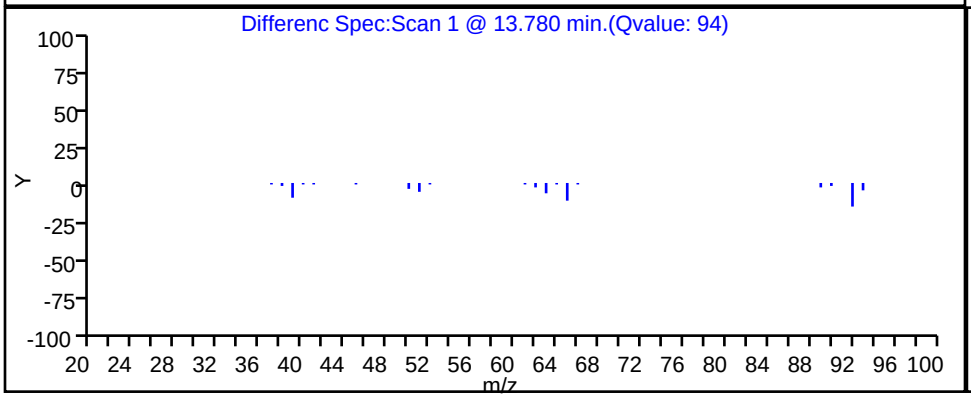


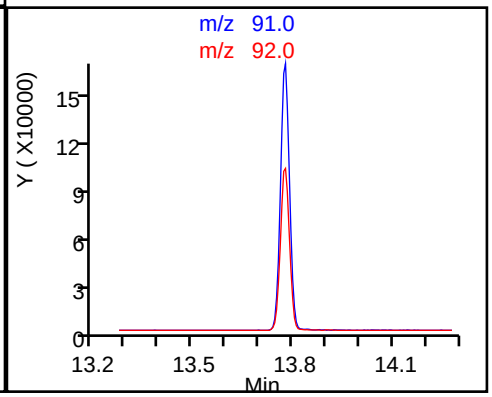








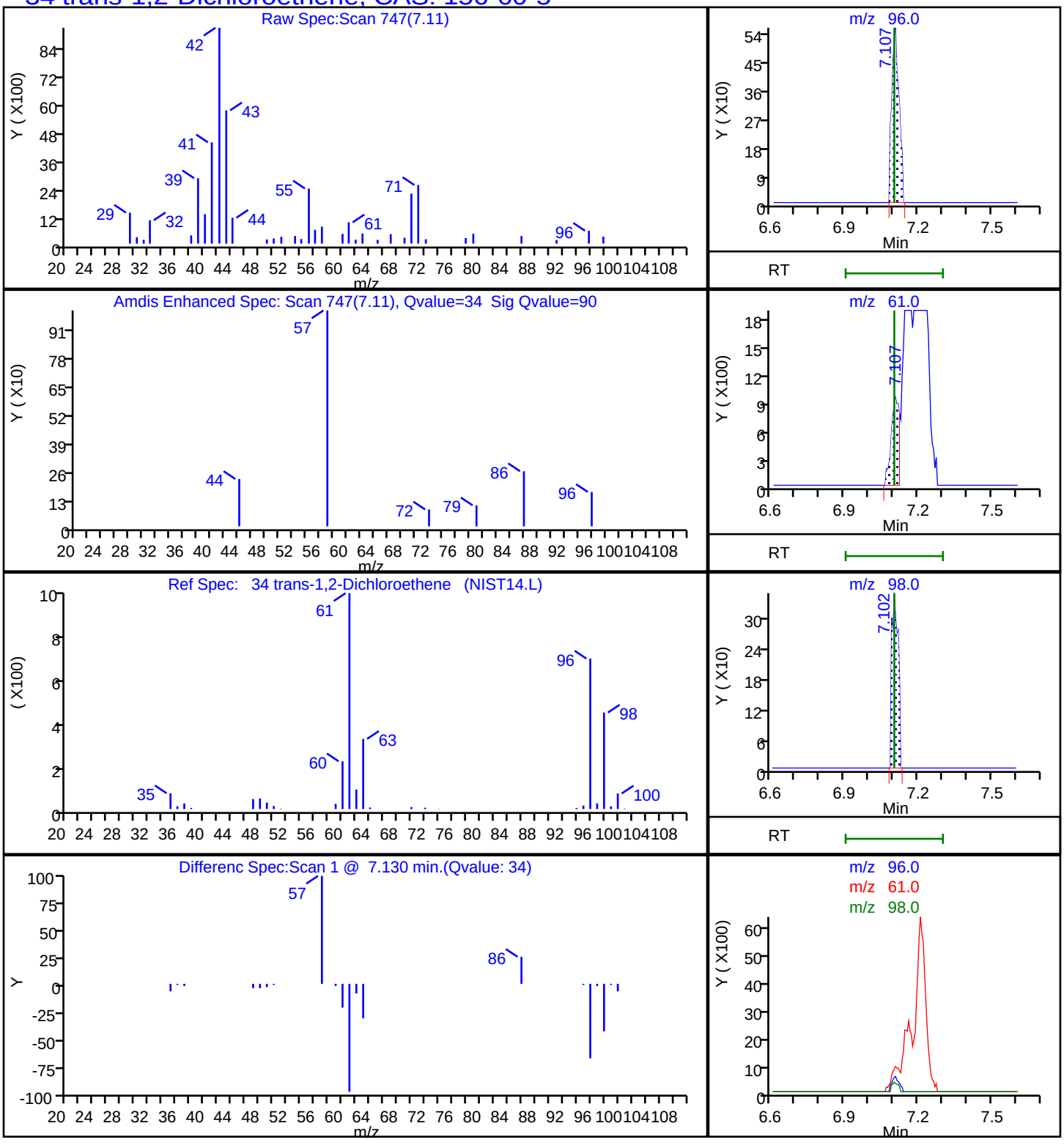




Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GG31P115.D				
Injection Date:	31-Jul-2020 23:38:30	Instrument ID:	MG		
Lims ID:	140-19811-A-5	Lab Sample ID:	140-19811-5		
Client ID:	BLDG B MID GAC				
Operator ID:	HMT	ALS Bottle#:	15	Worklist Smp#:	19
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

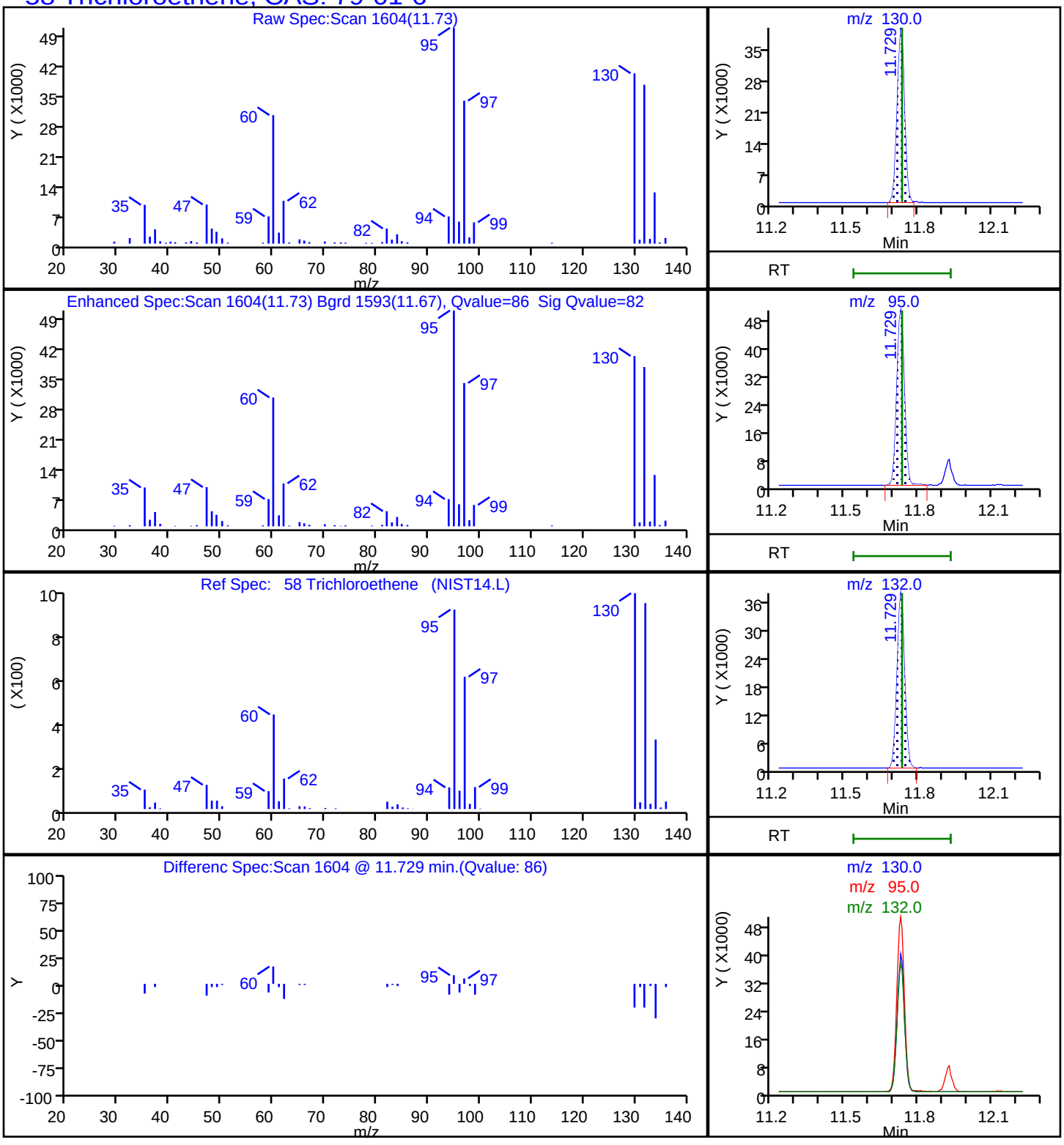
34 trans-1,2-Dichloroethene, CAS: 156-60-5



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GG31P115.D		
Injection Date:	31-Jul-2020 23:38:30	Instrument ID:	MG
Lims ID:	140-19811-A-5	Lab Sample ID:	140-19811-5
Client ID:	BLDG B MID GAC		
Operator ID:	HMT	ALS Bottle#:	15 Worklist Smp#: 19
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

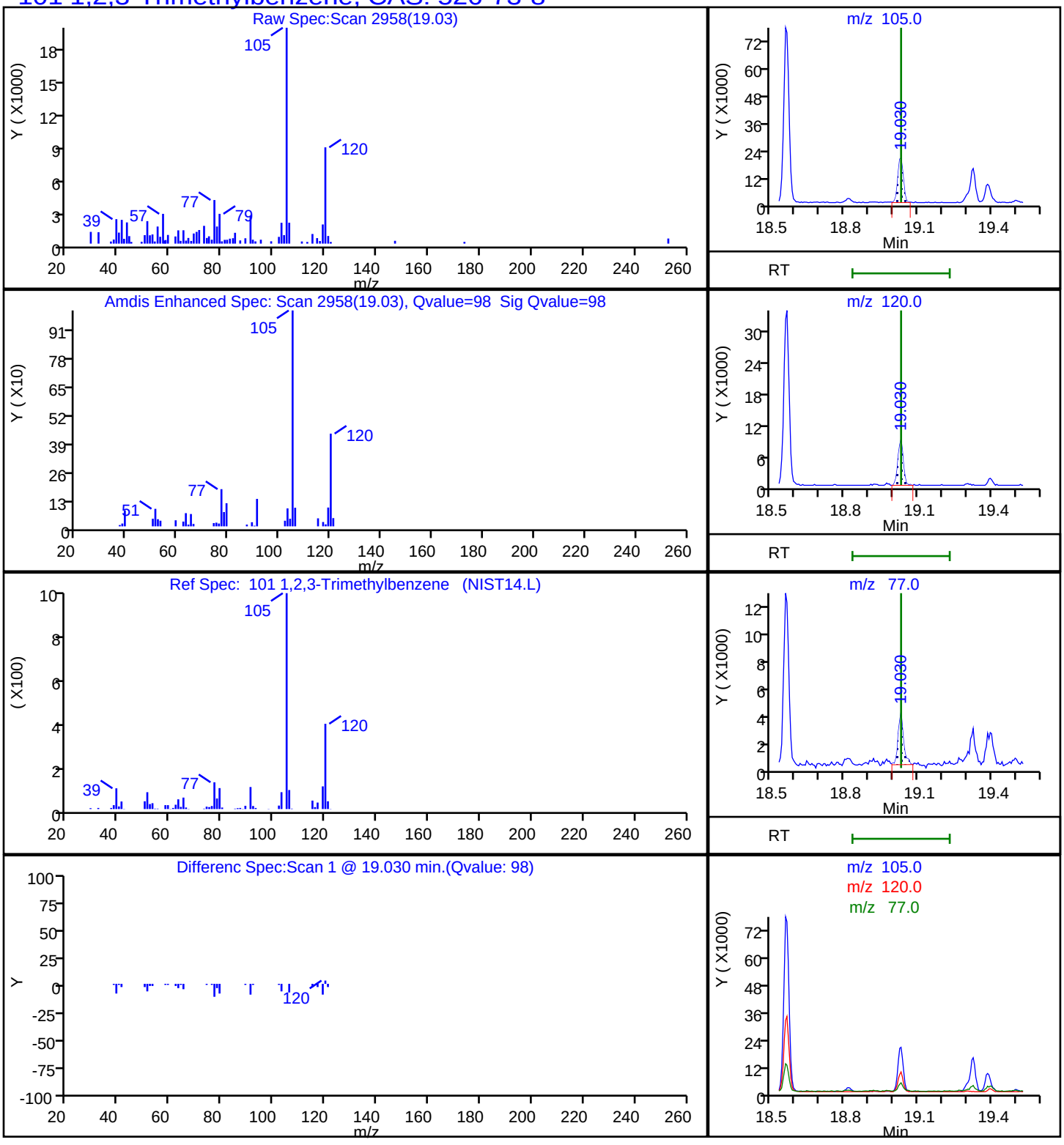
58 Trichloroethene, CAS: 79-01-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GG31P115.D				
Injection Date:	31-Jul-2020 23:38:30	Instrument ID:	MG		
Lims ID:	140-19811-A-5	Lab Sample ID:	140-19811-5		
Client ID:	BLDG B MID GAC				
Operator ID:	HMT	ALS Bottle#:	15	Worklist Smp#:	19
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

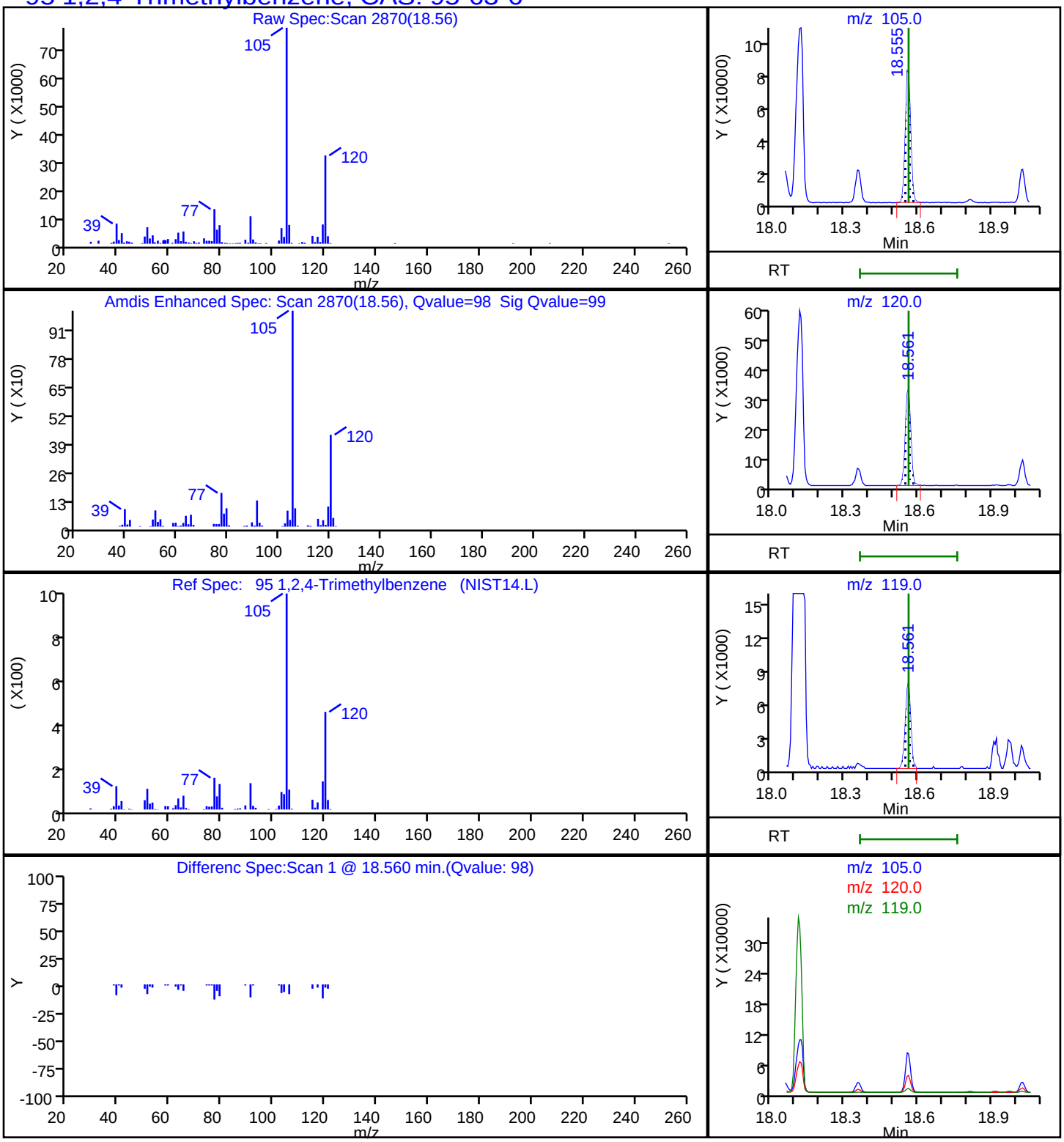
101 1,2,3-Trimethylbenzene, CAS: 526-73-8



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GG31P115.D				
Injection Date:	31-Jul-2020 23:38:30	Instrument ID:	MG		
Lims ID:	140-19811-A-5	Lab Sample ID:	140-19811-5		
Client ID:	BLDG B MID GAC				
Operator ID:	HMT	ALS Bottle#:	15	Worklist Smp#:	19
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

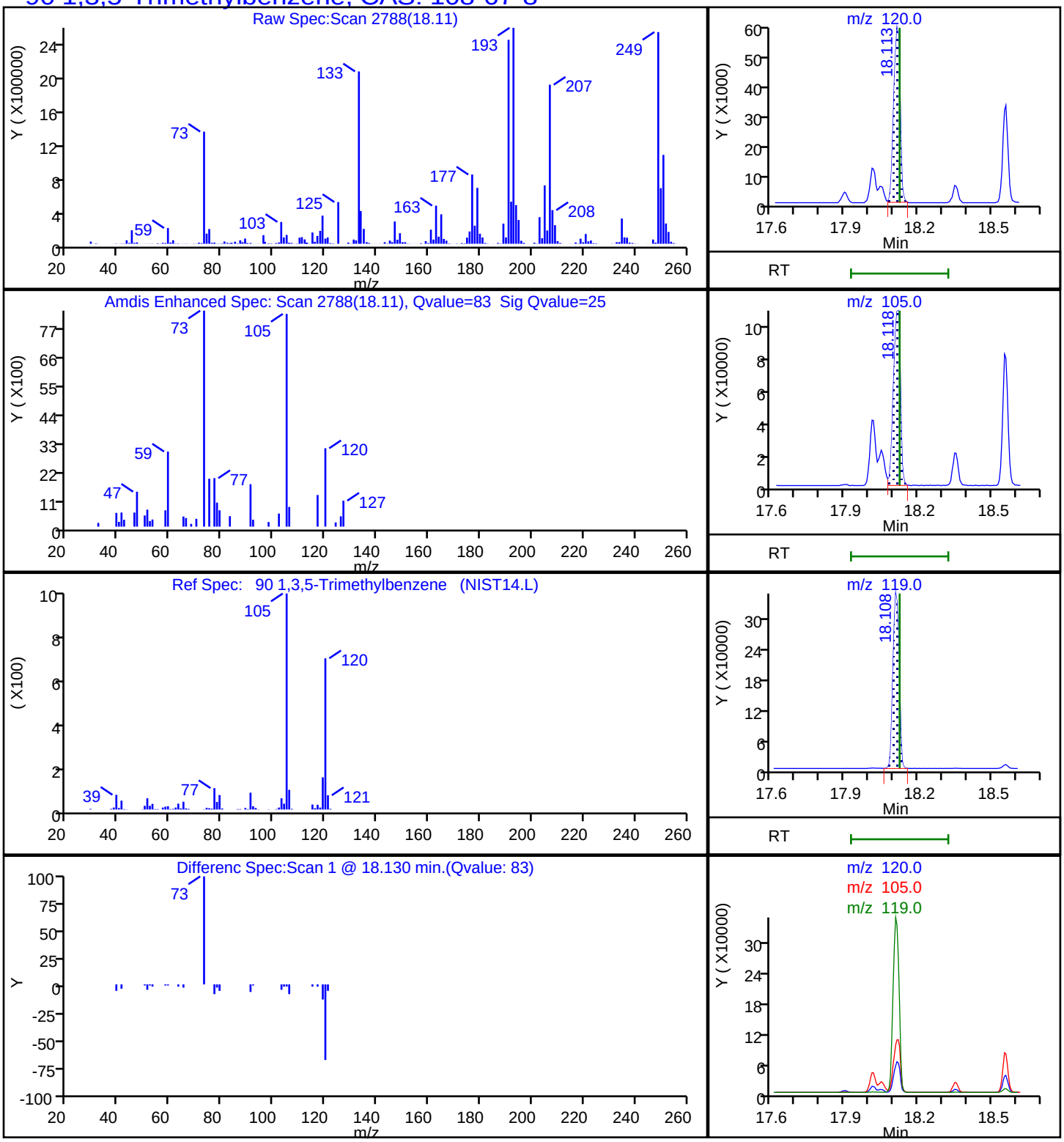
95 1,2,4-Trimethylbenzene, CAS: 95-63-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GG31P115.D				
Injection Date:	31-Jul-2020 23:38:30	Instrument ID:	MG		
Lims ID:	140-19811-A-5	Lab Sample ID:	140-19811-5		
Client ID:	BLDG B MID GAC				
Operator ID:	HMT	ALS Bottle#:	15	Worklist Smp#:	19
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

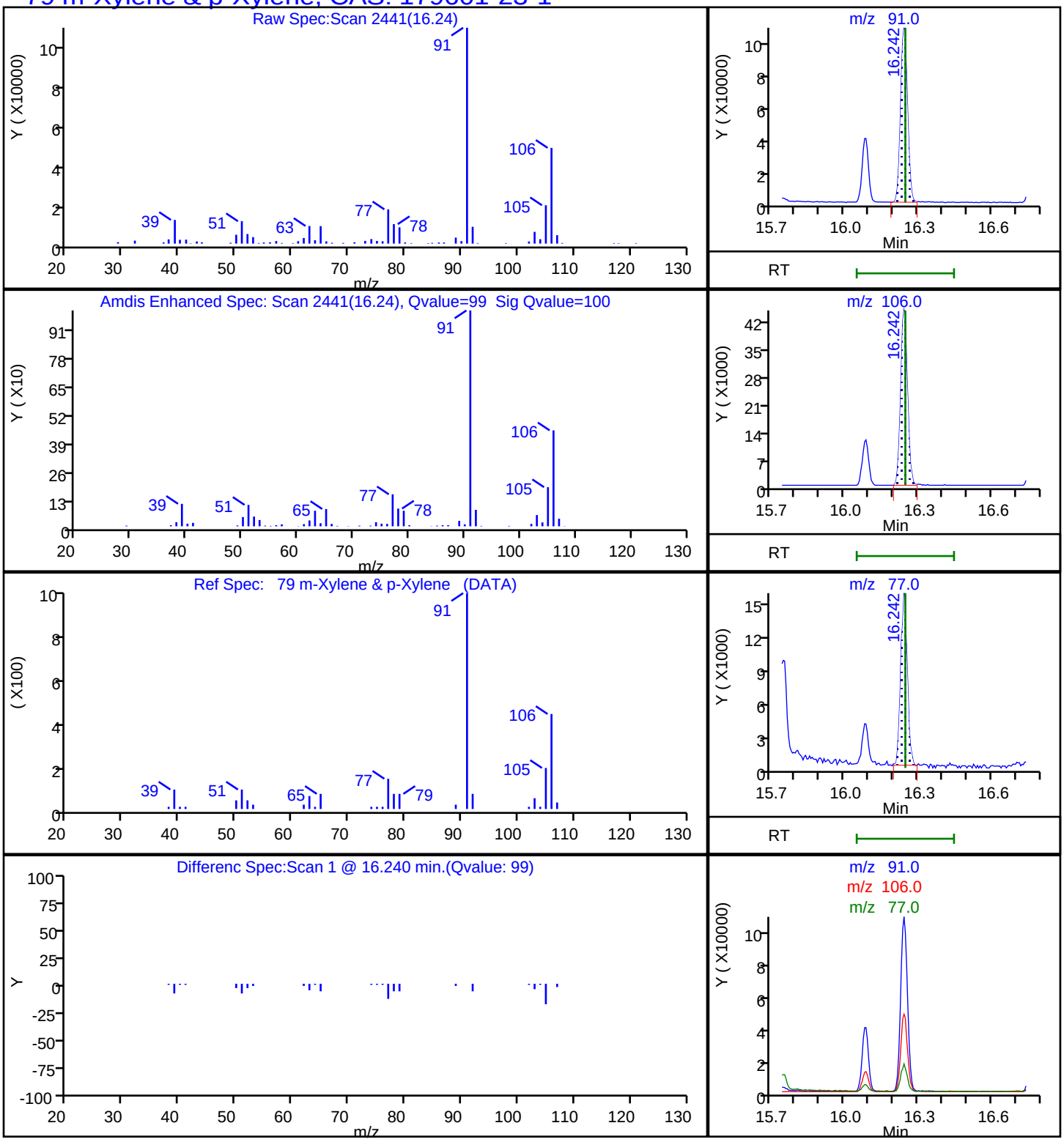
90 1,3,5-Trimethylbenzene, CAS: 108-67-8



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GG31P115.D		
Injection Date:	31-Jul-2020 23:38:30	Instrument ID:	MG
Lims ID:	140-19811-A-5	Lab Sample ID:	140-19811-5
Client ID:	BLDG B MID GAC		
Operator ID:	HMT	ALS Bottle#:	15 Worklist Smp#: 19
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

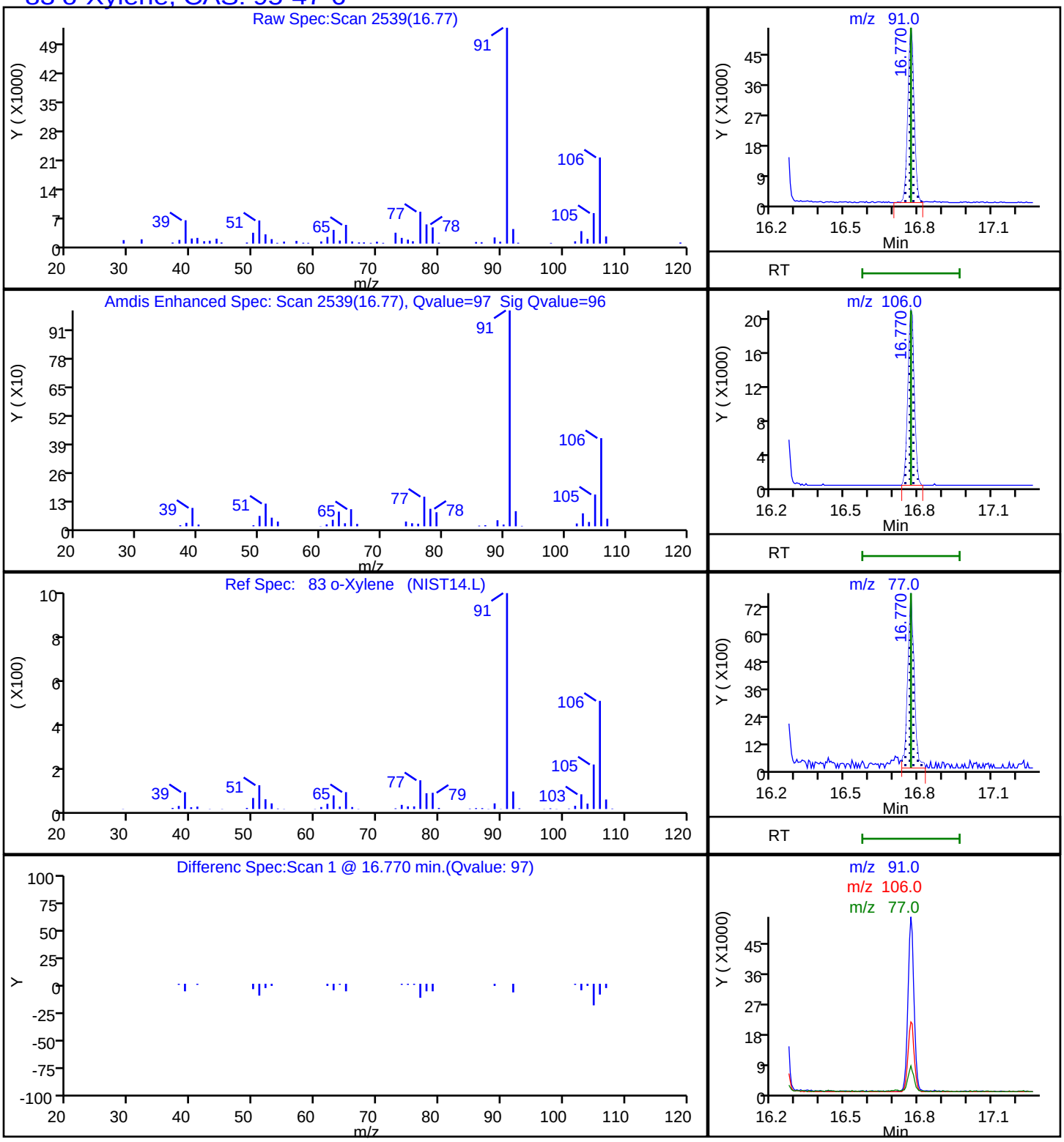
79 m-Xylene & p-Xylene, CAS: 179601-23-1



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GG31P115.D		
Injection Date:	31-Jul-2020 23:38:30	Instrument ID:	MG
Lims ID:	140-19811-A-5	Lab Sample ID:	140-19811-5
Client ID:	BLDG B MID GAC		
Operator ID:	HMT	ALS Bottle#:	15 Worklist Smp#: 19
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

83 o-Xylene, CAS: 95-47-6



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19811-1

SDG No.:

Client Sample ID: BLDG B INFLUENT Lab Sample ID: 140-19811-6

Matrix: Air Lab File ID: GG31P116.D

Analysis Method: TO 15 LL Date Collected: 07/23/2020 13:36

Sample wt/vol: 100(mL) Date Analyzed: 08/01/2020 00:23

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 41417 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	1.7		0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.099	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	6.2		0.40	0.11
67-66-3	Chloroform	119.38	0.28	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	0.40		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.64		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	0.16	J	0.40	0.065
75-09-2	Methylene Chloride	84.93	12		2.0	0.80
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	0.25	J	0.40	0.035
108-88-3	Toluene	92.14	4.5		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	0.11	J	0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	5.9		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	0.22	J	0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	0.83		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	0.37	J	0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.82		0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	93		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19811-1

SDG No.:

Client Sample ID: BLDG B INFLUENT Lab Sample ID: 140-19811-6

Matrix: Air Lab File ID: GG31P116.D

Analysis Method: TO 15 LL Date Collected: 07/23/2020 13:36

Sample wt/vol: 100(mL) Date Analyzed: 08/01/2020 00:23

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 41417 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	5.4		1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.62	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	22		1.4	0.39
67-66-3	Chloroform	119.38	1.4	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	1.6		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	3.2		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	0.70	J	1.7	0.28
75-09-2	Methylene Chloride	84.93	42		6.9	2.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	1.7	J	2.7	0.24
108-88-3	Toluene	92.14	17		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	0.42	J	1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	32		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	1.1	J	2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	4.1		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	1.8	J	2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	3.6		3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	93		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GG31P116.D
Lims ID: 140-19811-A-6
Client ID: BLDG B INFLUENT
Sample Type: Client
Inject. Date: 01-Aug-2020 00:23:30 ALS Bottle#: 16 Worklist Smp#: 20
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016161-020
Misc. Info.: 140-19811-a-6
Operator ID: HMT Instrument ID: MG

Method: \\chromfs\Knoxville\ChromData\MG\20200729-16161.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 03-Aug-2020 13:25:12 Calib Date: 15-Jul-2020 22:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1011

First Level Reviewer: khachitpongpanits Date: 03-Aug-2020 13:26:42

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.844	8.838	0.006	93	169330	4.00	
* 2 1,4-Difluorobenzene	114	11.022	11.017	0.005	97	1396294	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.746	15.746	0.000	93	1142043	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.390	17.391	-0.001	76	861742	3.71	
6 Chlorodifluoromethane	51	3.710	3.710	0.000	95	212511	1.23	
8 Dichlorodifluoromethane	85	3.769	3.767	-0.001	99	39485	0.1279	
31 Methylene Chloride	84	6.304	6.293	0.011	97	252519	2.42	
34 trans-1,2-Dichloroethene	96	7.107	7.097	0.005	43	1877	0.0212	
42 cis-1,2-Dichloroethene	96	8.515	8.499	0.011	99	7120	0.0792	
44 Chloroform	83	8.860	8.843	0.011	87	12518	0.0556	
47 1,1,1-Trichloroethane	97	9.879	9.874	0.005	93	4443	0.0183	
50 Benzene	78	10.477	10.478	-0.001	69	97205	0.3375	
52 Carbon tetrachloride	117	10.504	10.499	0.005	25	3940	0.0198	
58 Trichloroethene	130	11.728	11.734	-0.006	87	114997	1.18	
67 Toluene	91	13.778	13.778	0.000	93	223852	0.9034	
73 Tetrachloroethene	129	14.921	14.921	0.000	85	4284	0.0505	
78 Ethylbenzene	91	16.086	16.086	0.000	98	10508	0.0323	
79 m-Xylene & p-Xylene	91	16.242	16.247	-0.005	99	28746	0.1110	
83 o-Xylene	91	16.770	16.771	-0.001	95	14301	0.0522	
90 1,3,5-Trimethylbenzene	120	18.124	18.119	0.000	91	9561	0.0733	
95 1,2,4-Trimethylbenzene	105	18.561	18.560	0.000	98	50203	0.1666	
101 1,2,3-Trimethylbenzene	105	19.030	19.036	0.000	98	9979	0.0447	
S 124 Xylenes, Total	100				0		0.1632	

Reagents:

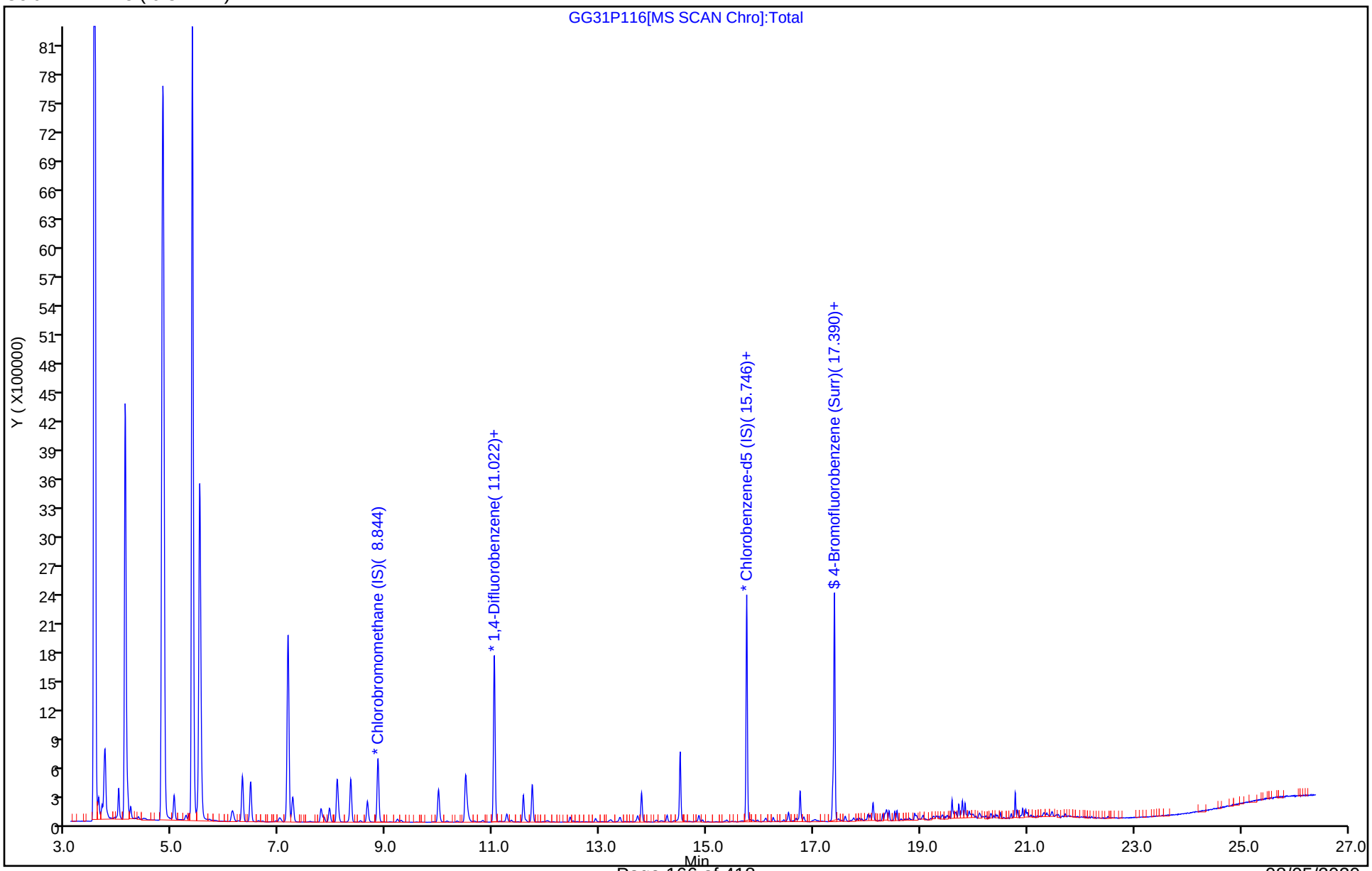
40MXISSURP_00004 Amount Added: 40.00 Units: mL Run Reagent

Report Date: 03-Aug-2020 13:26:43 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GG31P116.D				
Injection Date:	01-Aug-2020 00:23:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	140-19811-A-6	Lab Sample ID:	140-19811-6	Worklist Smp#:	20
Client ID:	BLDG B INFLUENT				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GG31P116.D				
Lims ID:	140-19811-A-6				
Client ID:	BLDG B INFLUENT				
Sample Type:	Client				
Inject. Date:	01-Aug-2020 00:23:30	ALS Bottle#:	16	Worklist Smp#:	20
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016161-020				
Misc. Info.:	140-19811-a-6				
Operator ID:	HMT	Instrument ID:	MG		
Method:	\\chromfs\Knoxville\ChromData\MG\20200729-16161.b\MG_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	03-Aug-2020 13:25:12	Calib Date:	15-Jul-2020 22:02:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1011				

First Level Reviewer: khachitpongpanits Date: 03-Aug-2020 13:26:42

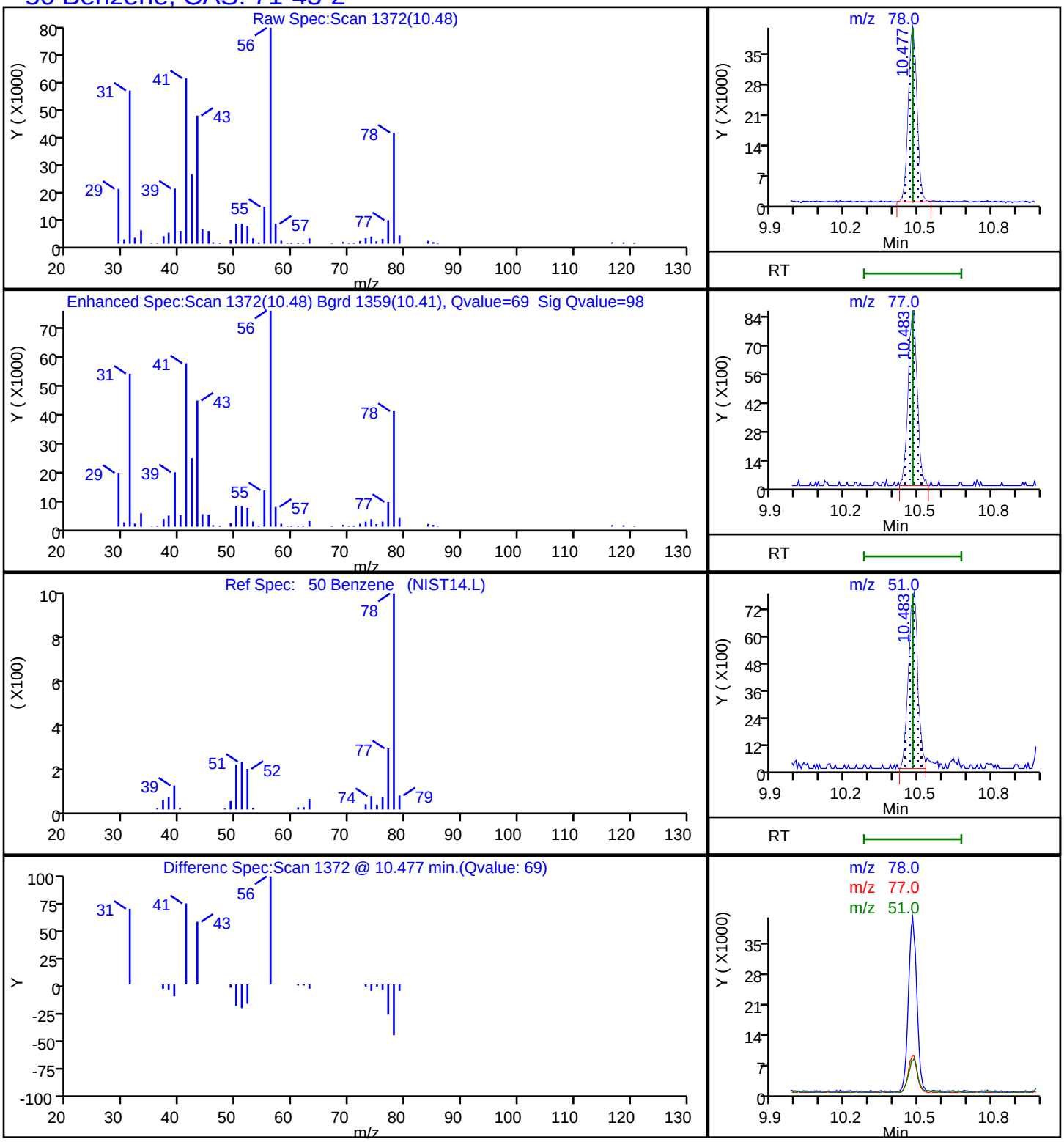
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.00	3.71	92.81

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GG31P116.D

Injection Date:	01-Aug-2020 00:23:30	Instrument ID:	MG		
Lims ID:	140-19811-A-6	Lab Sample ID:	140-19811-6		
Client ID:	BLDG B INFLUENT				
Operator ID:	HMT	ALS Bottle#:	16	Worklist Smp#:	20
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

50 Benzene, CAS: 71-43-2



Eurofins TestAmerica, Knoxville

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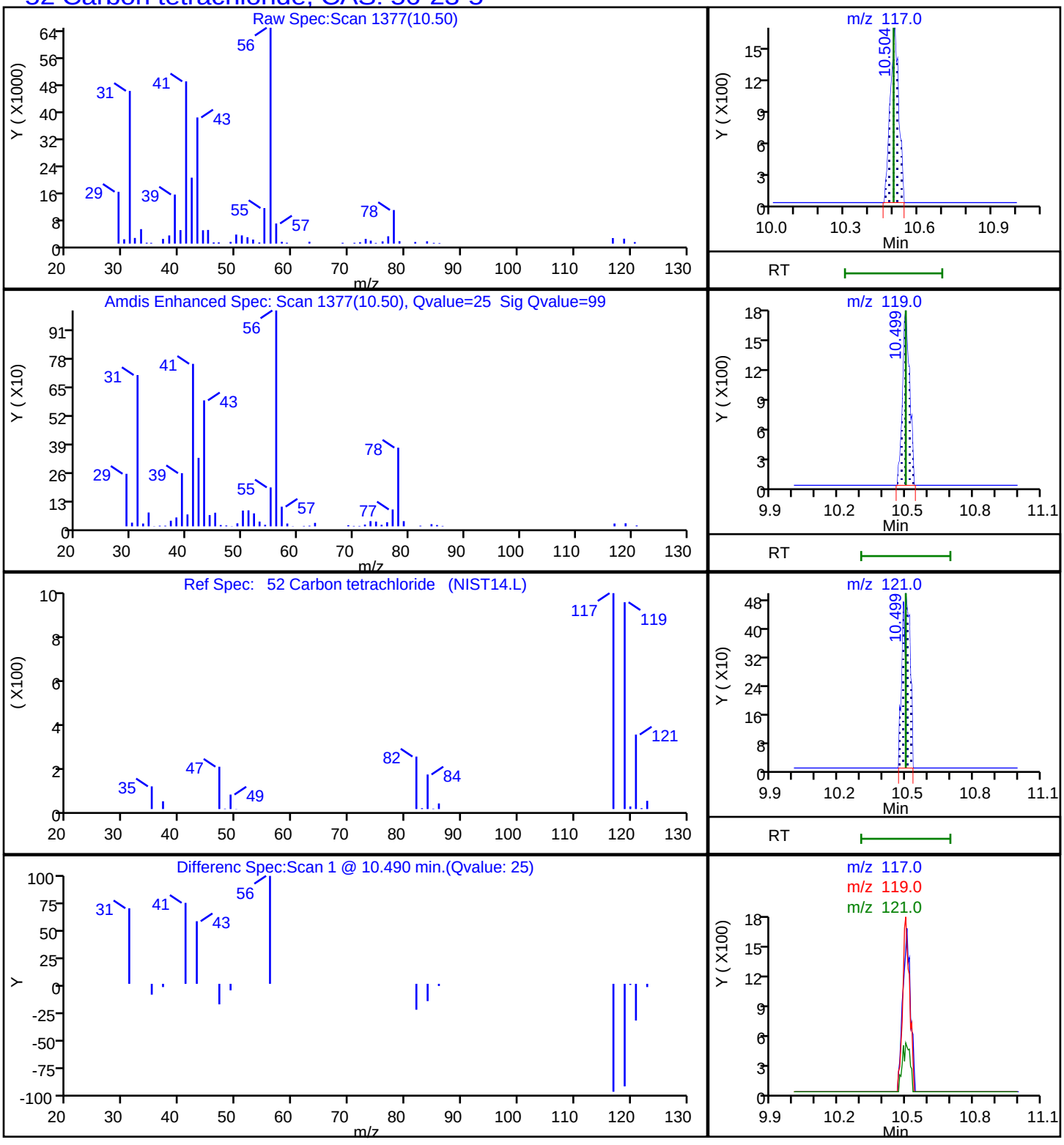
Lims ID:	140-19811-A-6	Lab Sample ID:	140-19811-6		
Client ID:	BLDG B INFLUENT				
Operator ID:	HMT	ALS Bottle#:	16	Worklist Smp#:	20
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

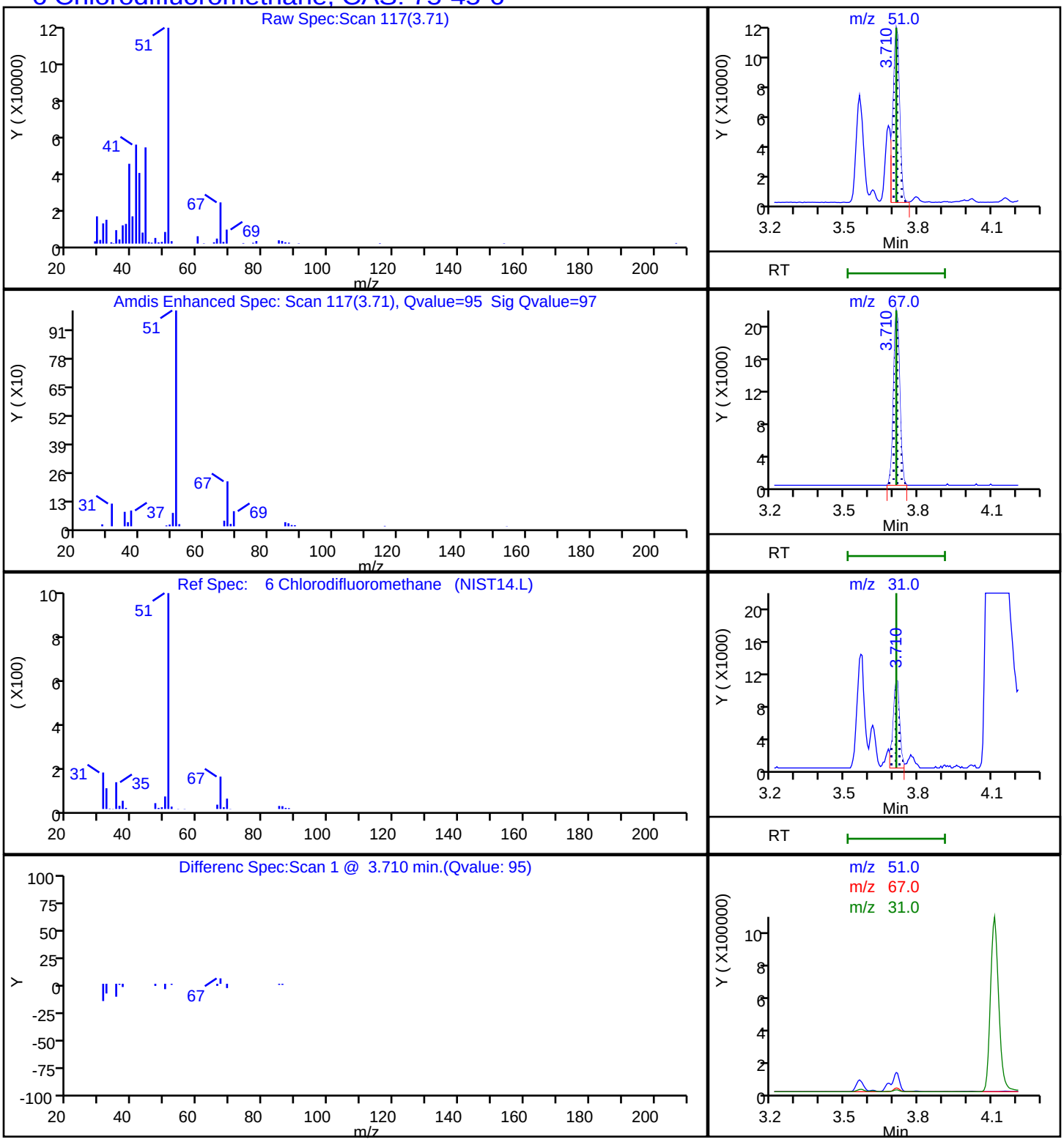
52 Carbon tetrachloride, CAS: 56-23-5



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GG31P116.D				
Injection Date:	01-Aug-2020 00:23:30	Instrument ID:	MG		
Lims ID:	140-19811-A-6	Lab Sample ID:	140-19811-6		
Client ID:	BLDG B INFLUENT				
Operator ID:	HMT	ALS Bottle#:	16	Worklist Smp#:	20
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

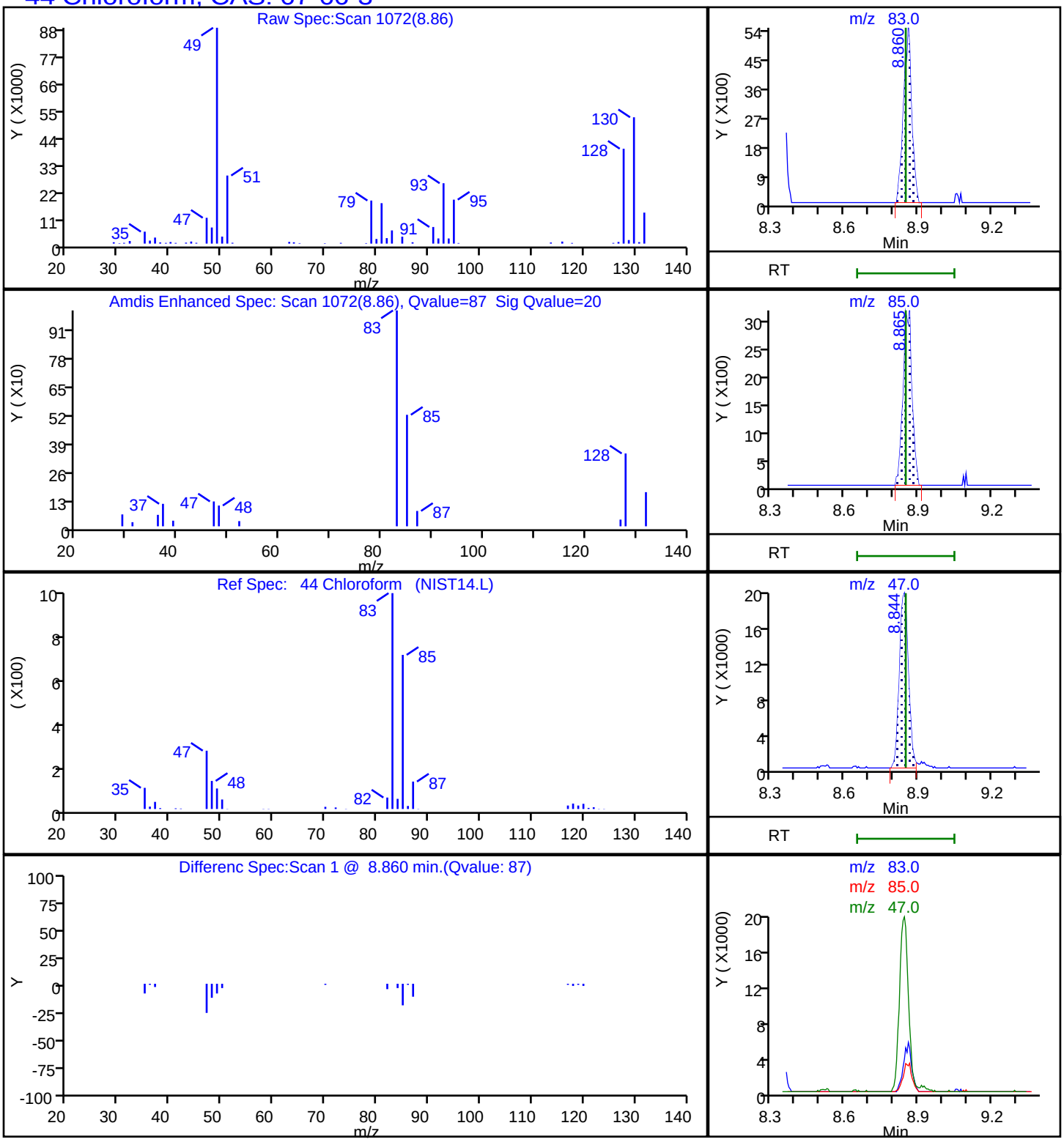
6 Chlorodifluoromethane, CAS: 75-45-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GG31P116.D				
Injection Date:	01-Aug-2020 00:23:30	Instrument ID:	MG		
Lims ID:	140-19811-A-6	Lab Sample ID:	140-19811-6		
Client ID:	BLDG B INFLUENT				
Operator ID:	HMT	ALS Bottle#:	16	Worklist Smp#:	20
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

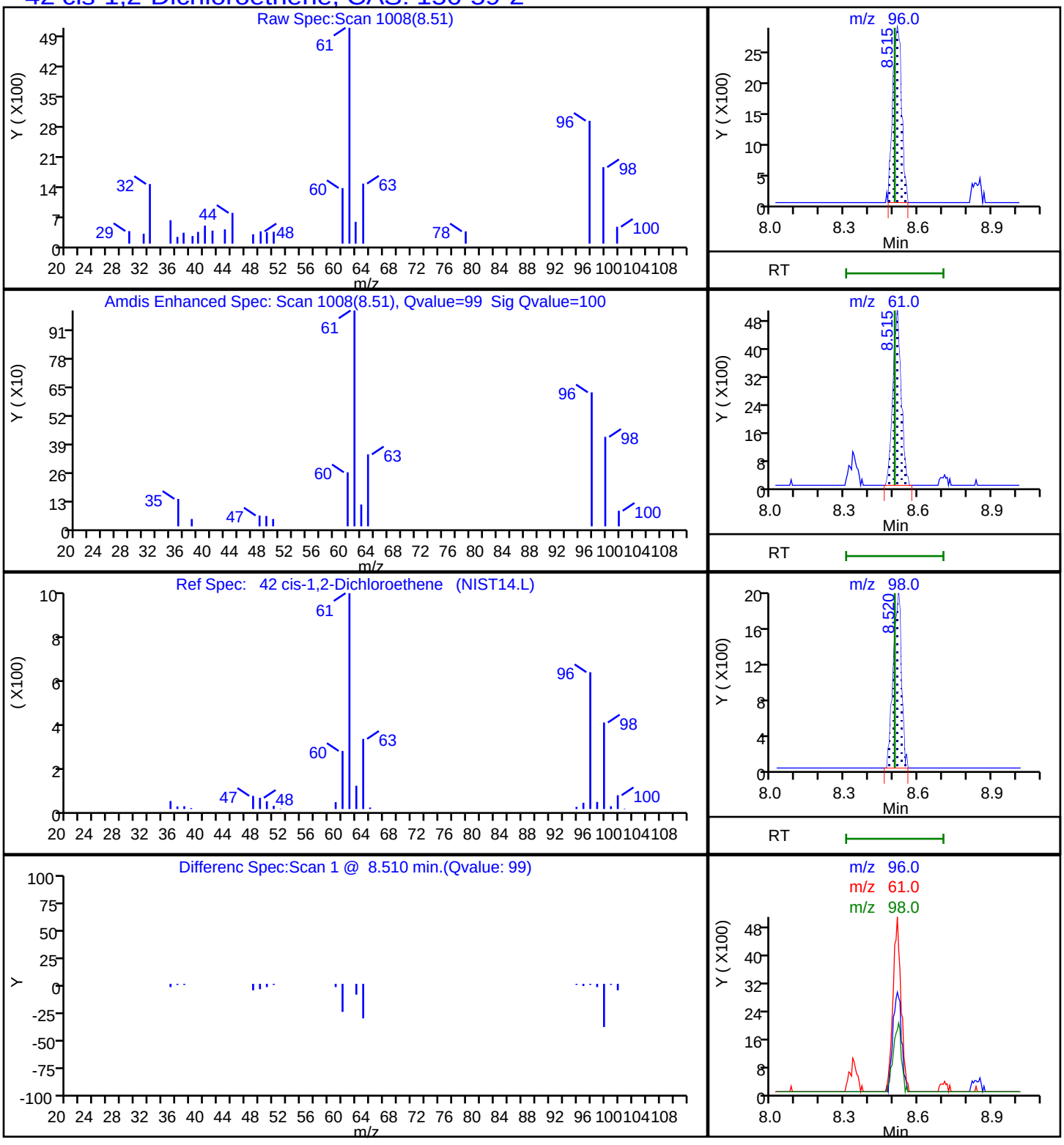
44 Chloroform, CAS: 67-66-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GG31P116.D				
Injection Date:	01-Aug-2020 00:23:30	Instrument ID:	MG		
Lims ID:	140-19811-A-6	Lab Sample ID:	140-19811-6		
Client ID:	BLDG B INFLUENT				
Operator ID:	HMT	ALS Bottle#:	16	Worklist Smp#:	20
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

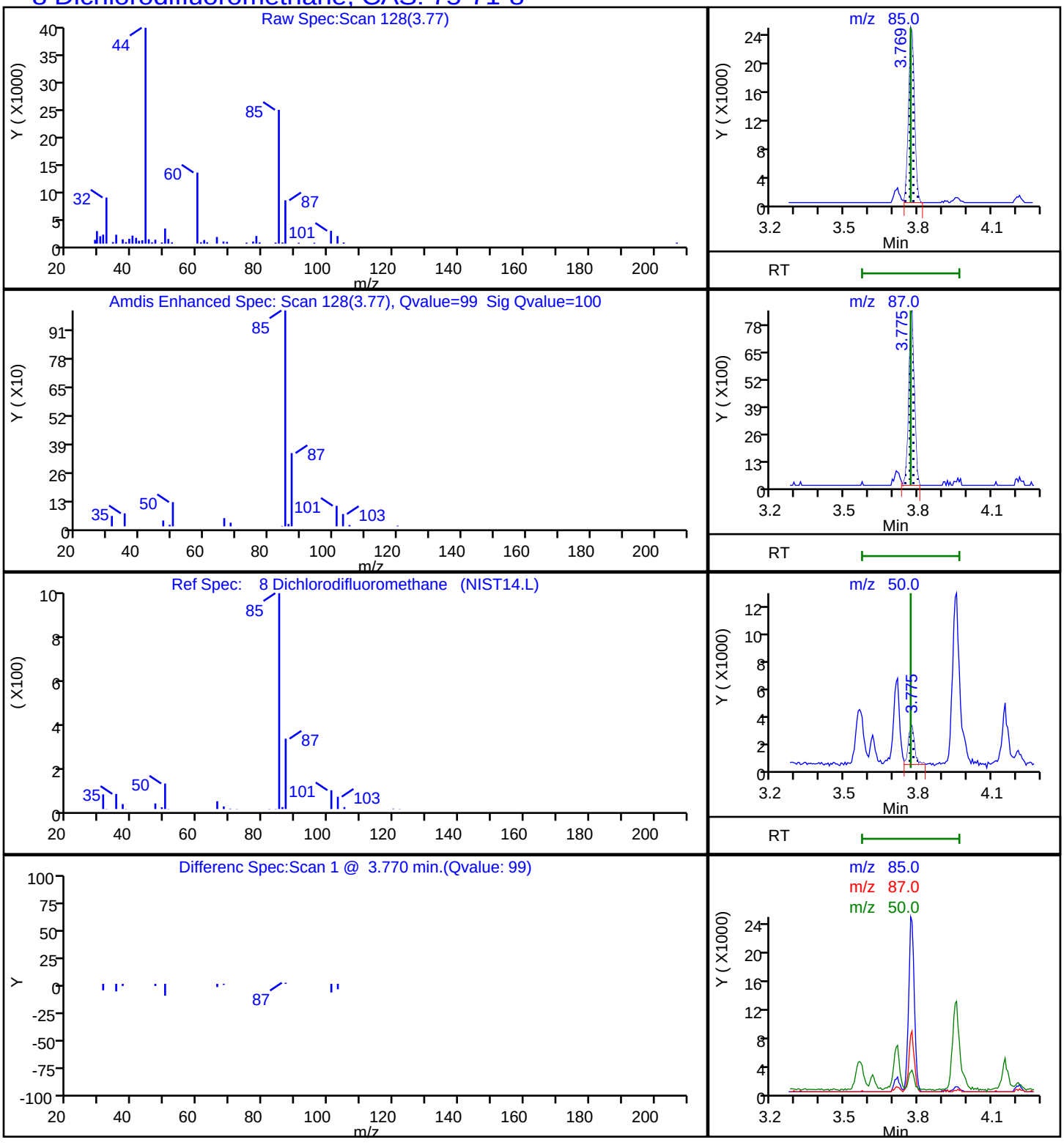
42 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GG31P116.D				
Injection Date:	01-Aug-2020 00:23:30	Instrument ID:	MG		
Lims ID:	140-19811-A-6	Lab Sample ID:	140-19811-6		
Client ID:	BLDG B INFLUENT				
Operator ID:	HMT	ALS Bottle#:	16	Worklist Smp#:	20
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

8 Dichlorodifluoromethane, CAS: 75-71-8

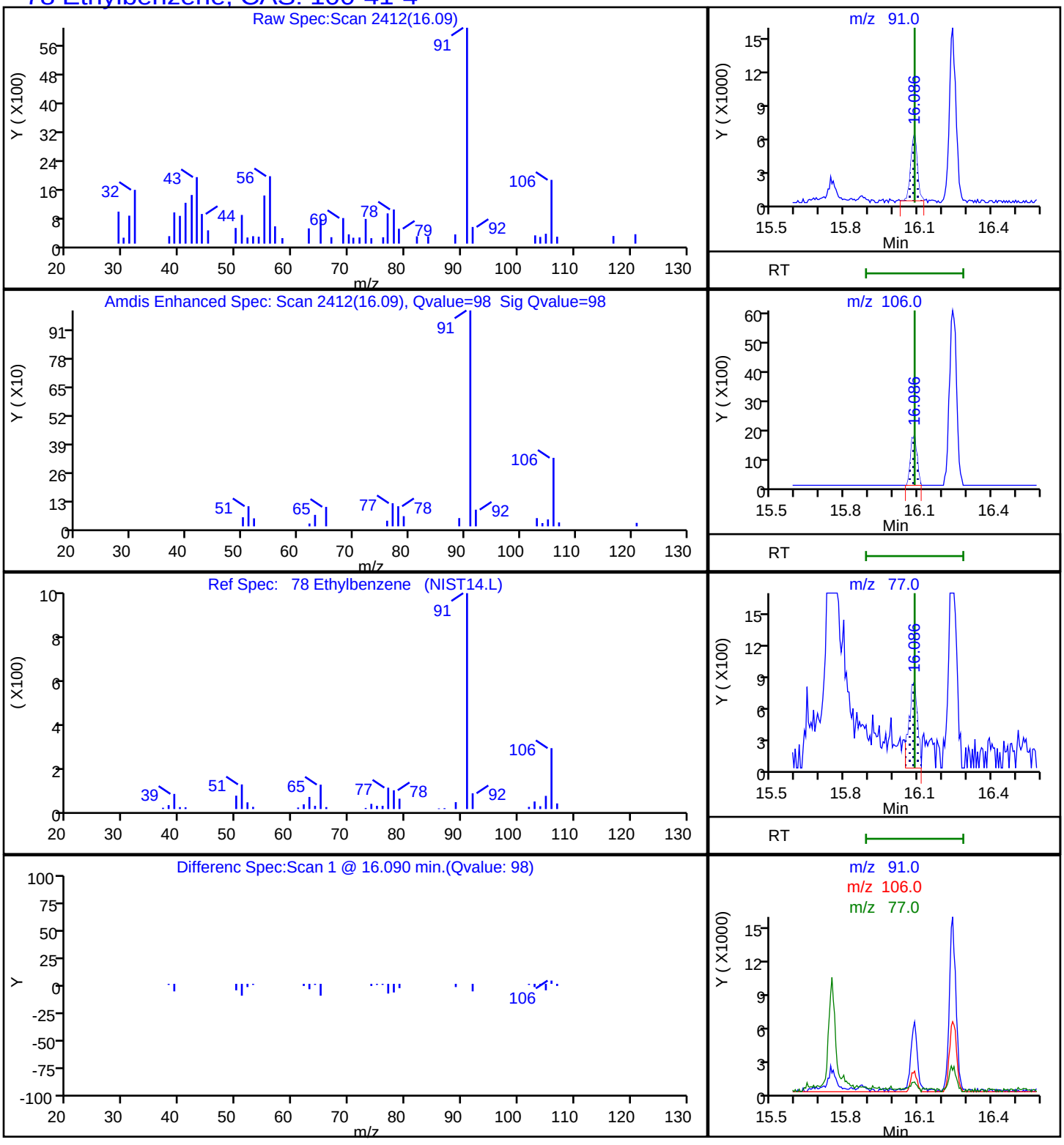


Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GG31P116.D

Injection Date:	01-Aug-2020 00:23:30	Instrument ID:	MG
Lims ID:	140-19811-A-6	Lab Sample ID:	140-19811-6
Client ID:	BLDG B INFLUENT		
Operator ID:	HMT	ALS Bottle#:	16 Worklist Smp#: 20
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

78 Ethylbenzene, CAS: 100-41-4



Eurofins TestAmerica, Knoxville

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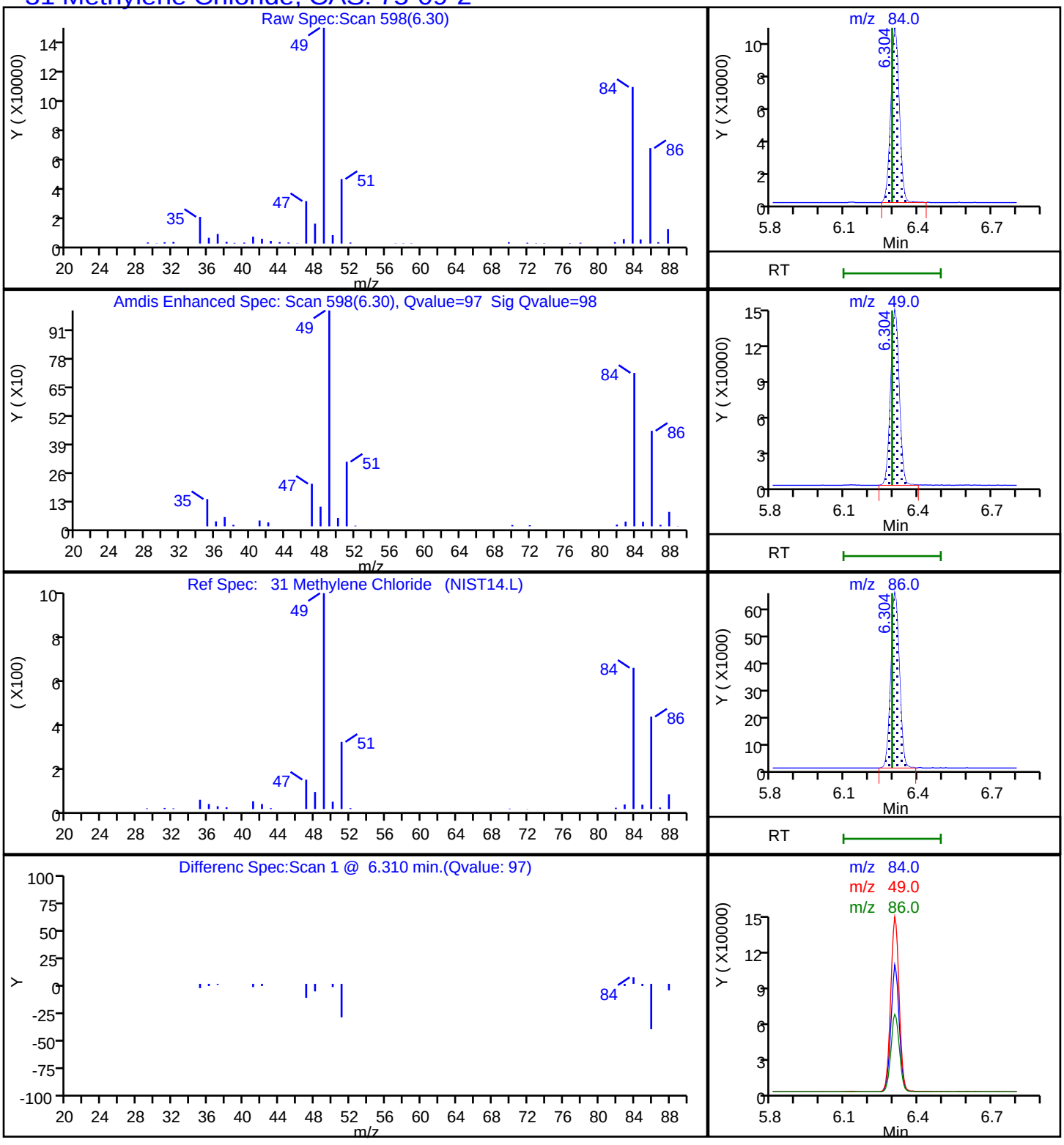
Lims ID:	140-19811-A-6	Lab Sample ID:	140-19811-6		
Client ID:	BLDG B INFLUENT				
Operator ID:	HMT	ALS Bottle#:	16	Worklist Smp#:	20
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

31 Methylene Chloride, CAS: 75-09-2



Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GG31P116.D

Injection Date: 01-Aug-2020 00:23:30 Instrument ID: MG

Lims ID: 140-19811-A-6 Lab Sample ID: 140-19811-6

Client ID: BLDG B INFLUENT

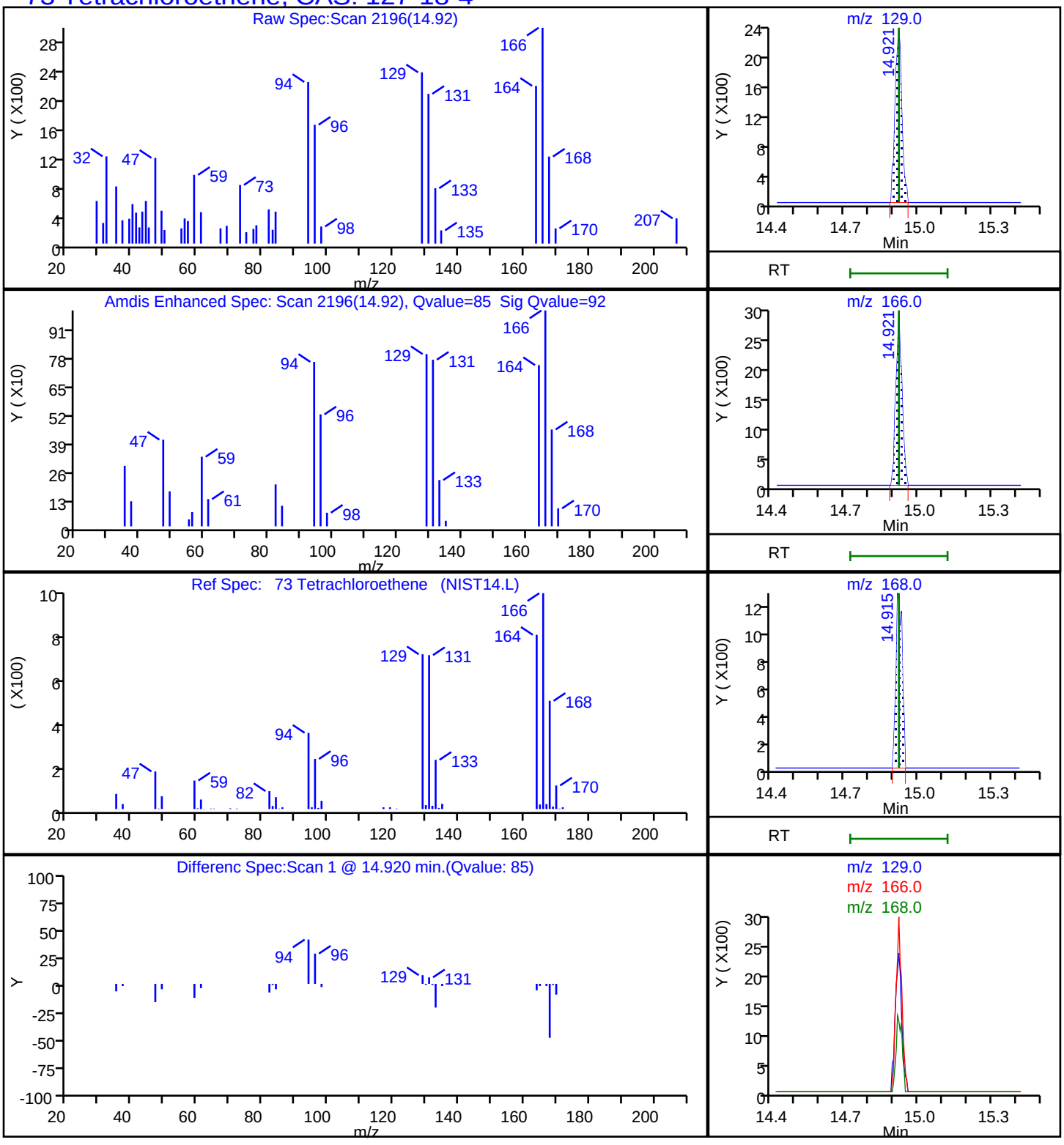
Operator ID: HMT ALS Bottle#: 16 Worklist Smp#: 20

Purge Vol: 500.000 mL Dil. Factor: 1.0000

Method: MG_TO15 Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm) Detector MS SCAN

73 Tetrachloroethene, CAS: 127-18-4



Eurofins TestAmerica, Knoxville

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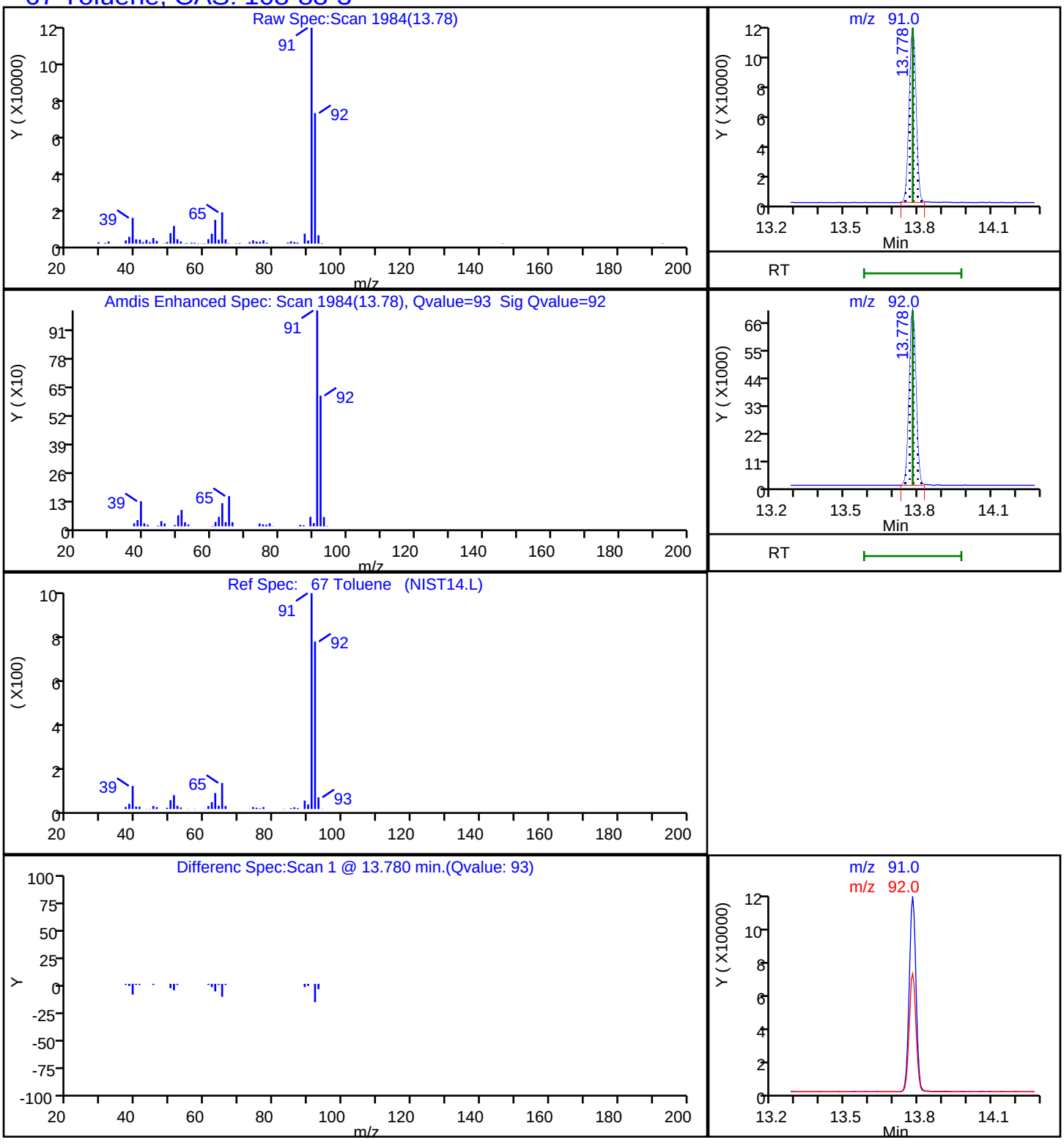
Injection Date:	01-Aug-2020 00:23:30	Instrument ID:	MG
Lims ID:	140-19811-A-6	Lab Sample ID:	140-19811-6
Client ID:	BLDG B INFLUENT		
Operator ID:	HMT	ALS Bottle#:	16 Worklist Smp#: 20
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

67 Toluene, CAS: 108-88-3



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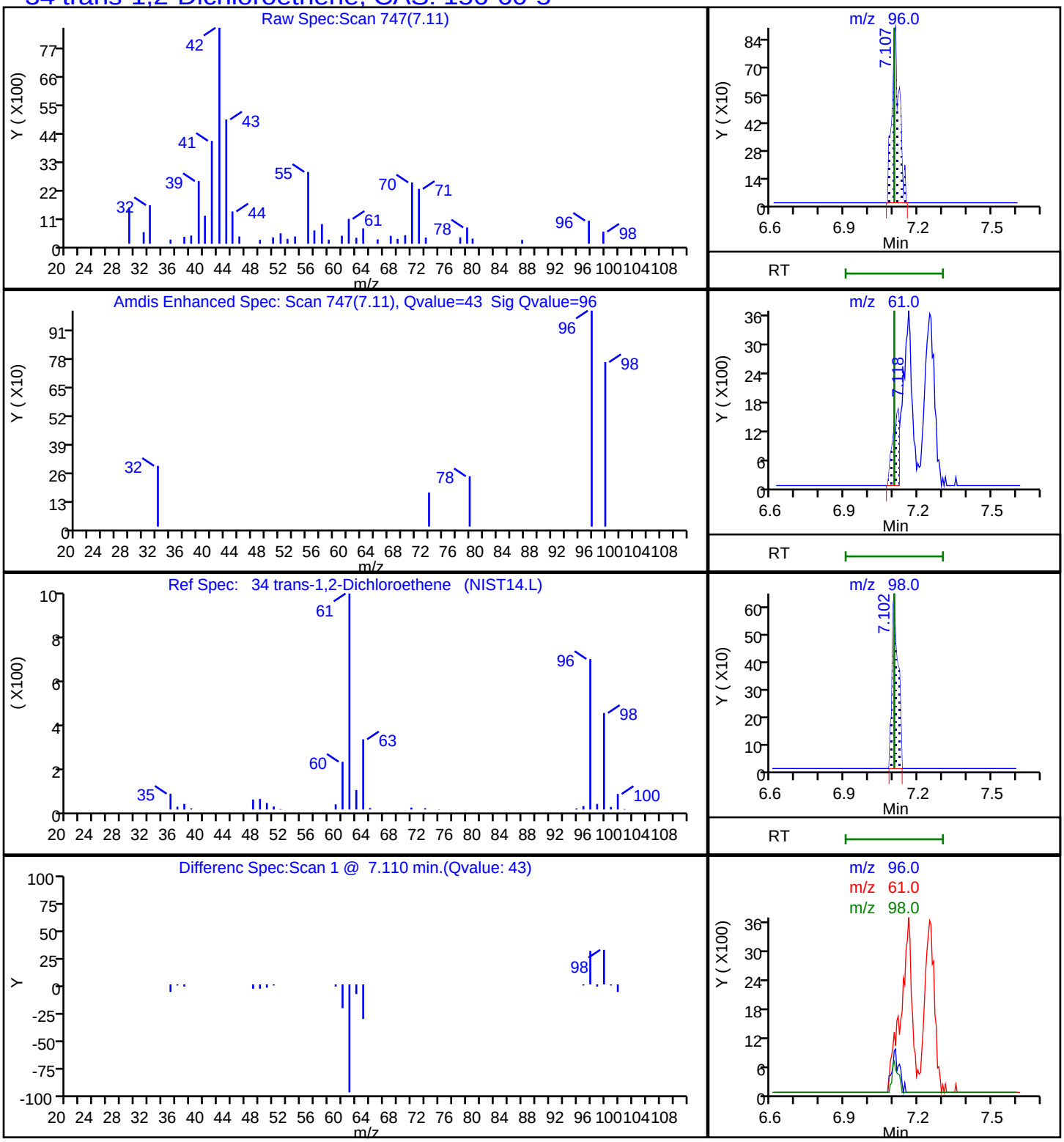
Lims ID:	140-19811-A-6	Lab Sample ID:	140-19811-6		
Client ID:	BLDG B INFLUENT				
Operator ID:	HMT	ALS Bottle#:	16	Worklist Smp#:	20
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

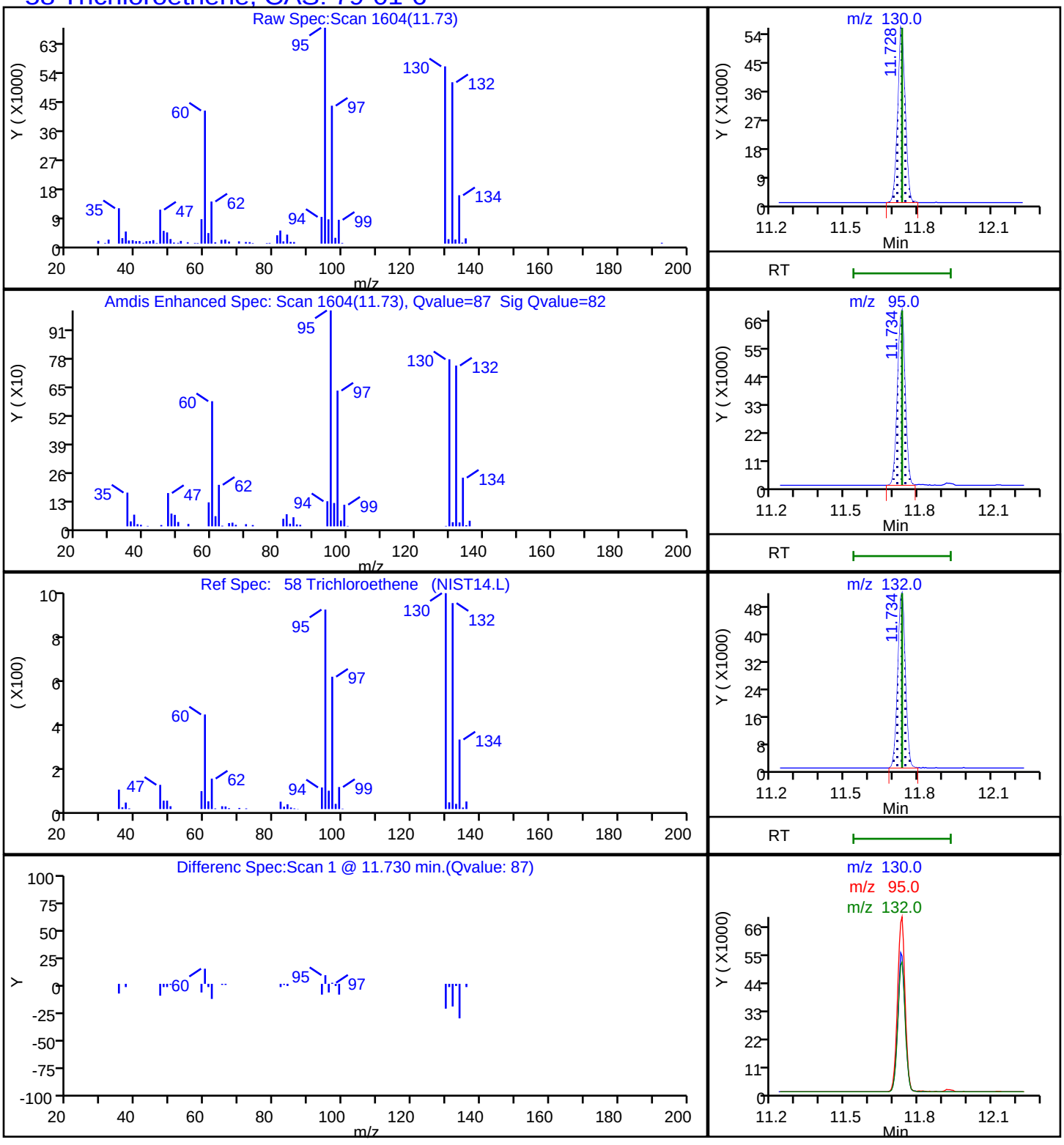
34 trans-1,2-Dichloroethene, CAS: 156-60-5



Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GG31P116.D
Injection Date: 01-Aug-2020 00:23:30 Instrument ID: MG
Lims ID: 140-19811-A-6 Lab Sample ID: 140-19811-6
Client ID: BLDG B INFLUENT
Operator ID: HMT ALS Bottle#: 16 Worklist Smp#: 20
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Method: MG_TO15 Limit Group: MSA TO14A_15 Routine ICAL
Column: RTX-5 (0.32 mm) Detector MS SCAN

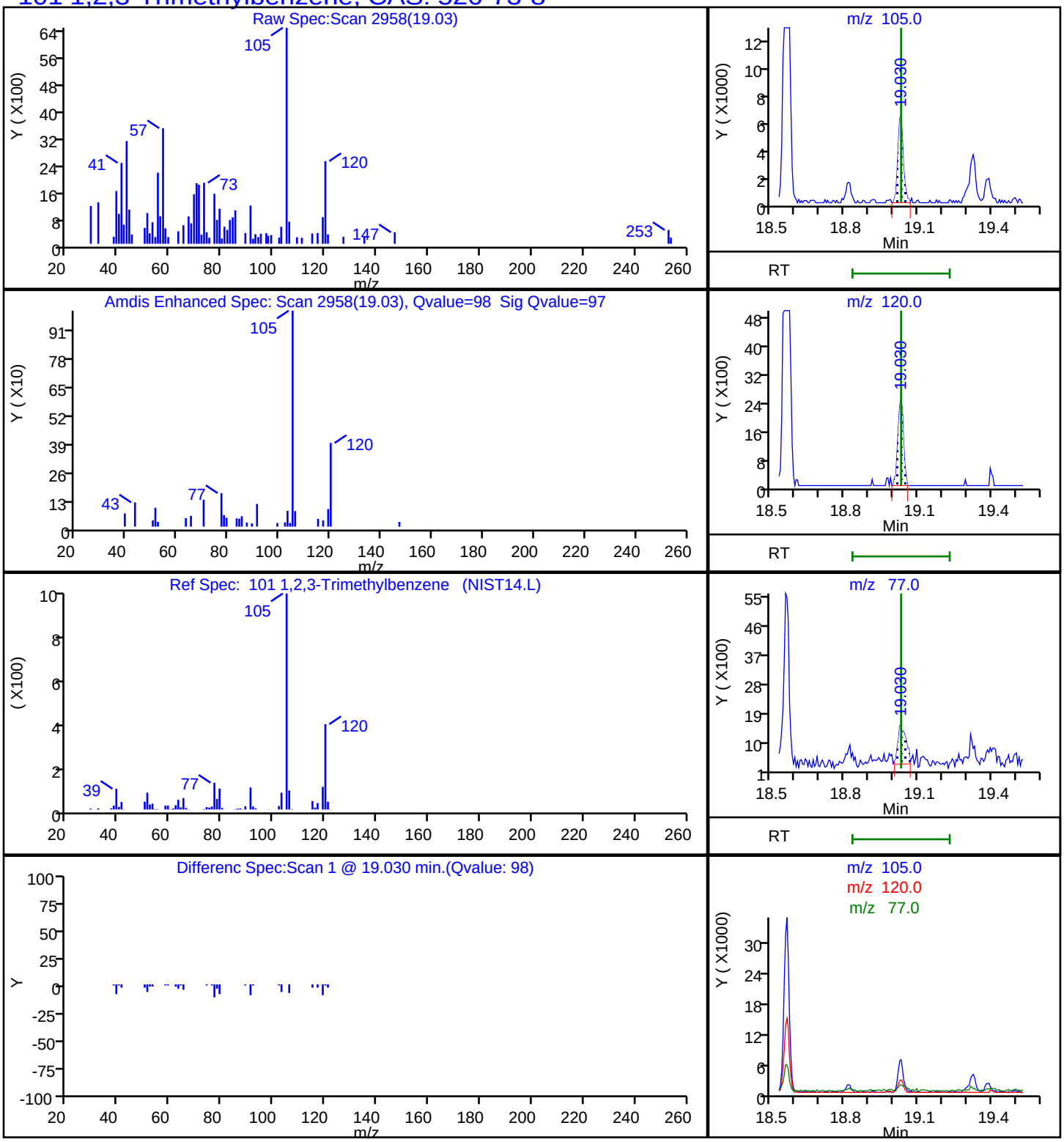
58 Trichloroethene, CAS: 79-01-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GG31P116.D				
Injection Date:	01-Aug-2020 00:23:30	Instrument ID:	MG		
Lims ID:	140-19811-A-6	Lab Sample ID:	140-19811-6		
Client ID:	BLDG B INFLUENT				
Operator ID:	HMT	ALS Bottle#:	16	Worklist Smp#:	20
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

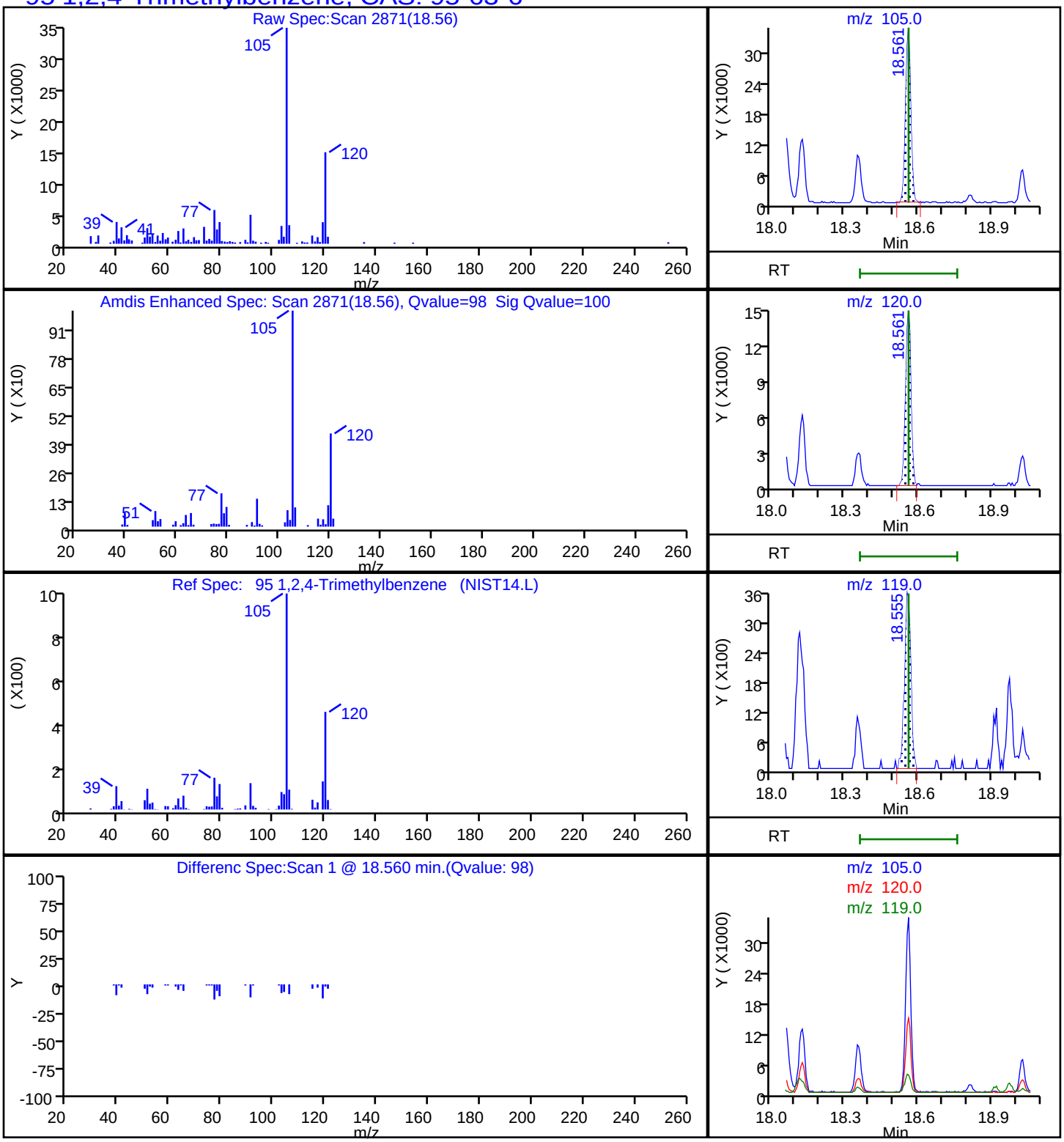
101 1,2,3-Trimethylbenzene, CAS: 526-73-8



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GG31P116.D				
Injection Date:	01-Aug-2020 00:23:30	Instrument ID:	MG		
Lims ID:	140-19811-A-6	Lab Sample ID:	140-19811-6		
Client ID:	BLDG B INFLUENT				
Operator ID:	HMT	ALS Bottle#:	16	Worklist Smp#:	20
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

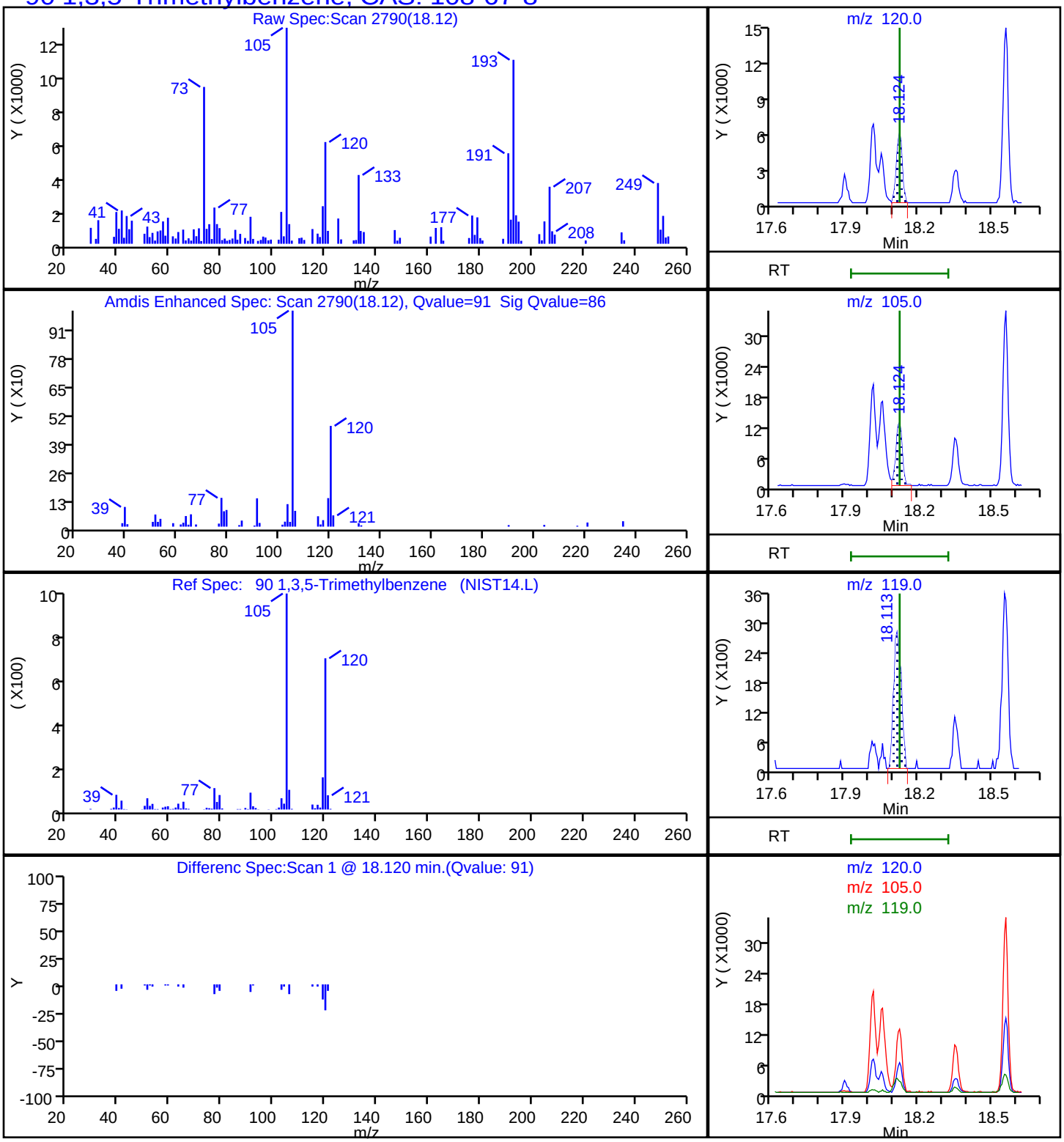
95 1,2,4-Trimethylbenzene, CAS: 95-63-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GG31P116.D				
Injection Date:	01-Aug-2020 00:23:30	Instrument ID:	MG		
Lims ID:	140-19811-A-6	Lab Sample ID:	140-19811-6		
Client ID:	BLDG B INFLUENT				
Operator ID:	HMT	ALS Bottle#:	16	Worklist Smp#:	20
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

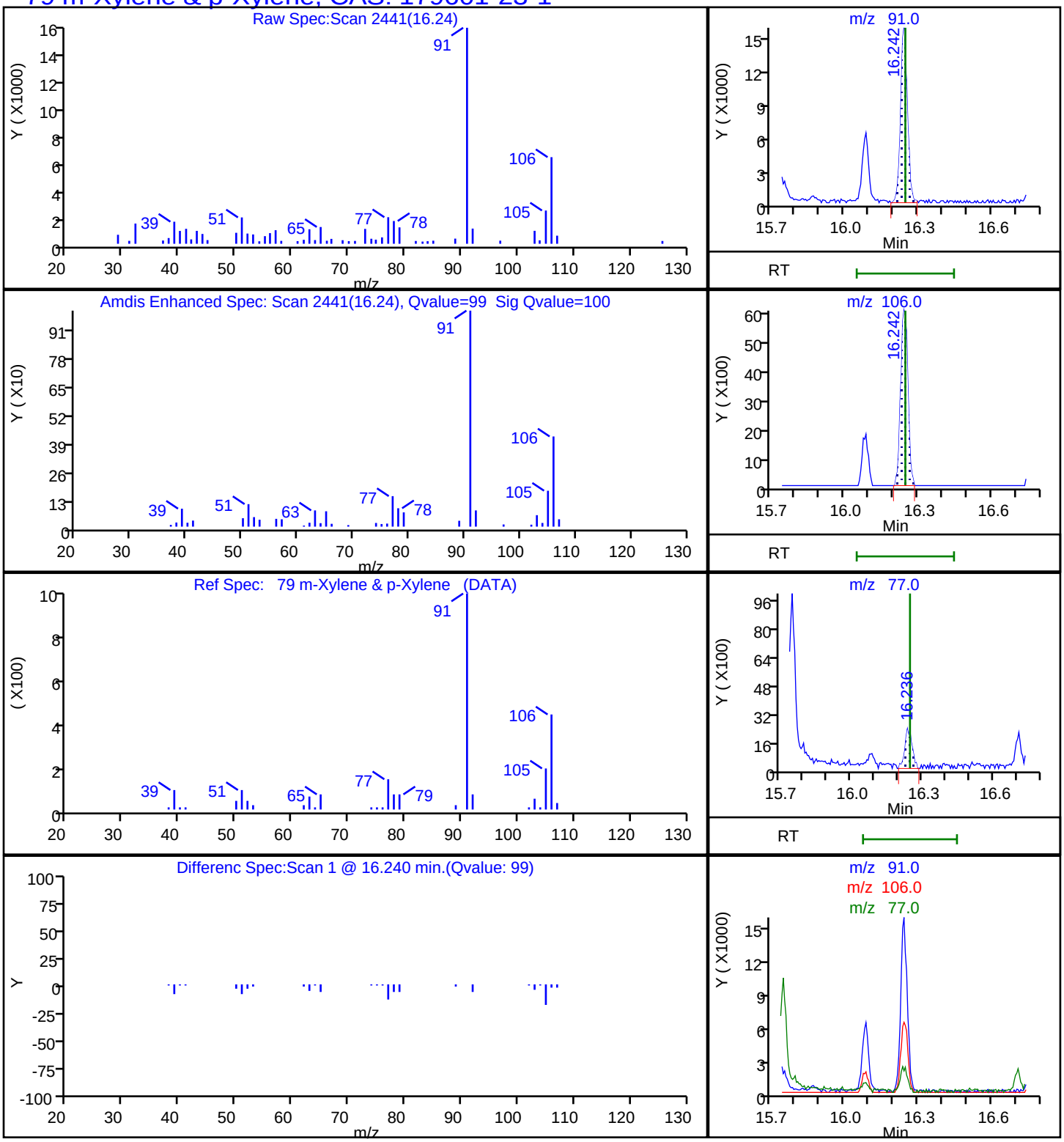
90 1,3,5-Trimethylbenzene, CAS: 108-67-8



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GG31P116.D				
Injection Date:	01-Aug-2020 00:23:30	Instrument ID:	MG		
Lims ID:	140-19811-A-6	Lab Sample ID:	140-19811-6		
Client ID:	BLDG B INFLUENT				
Operator ID:	HMT	ALS Bottle#:	16	Worklist Smp#:	20
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

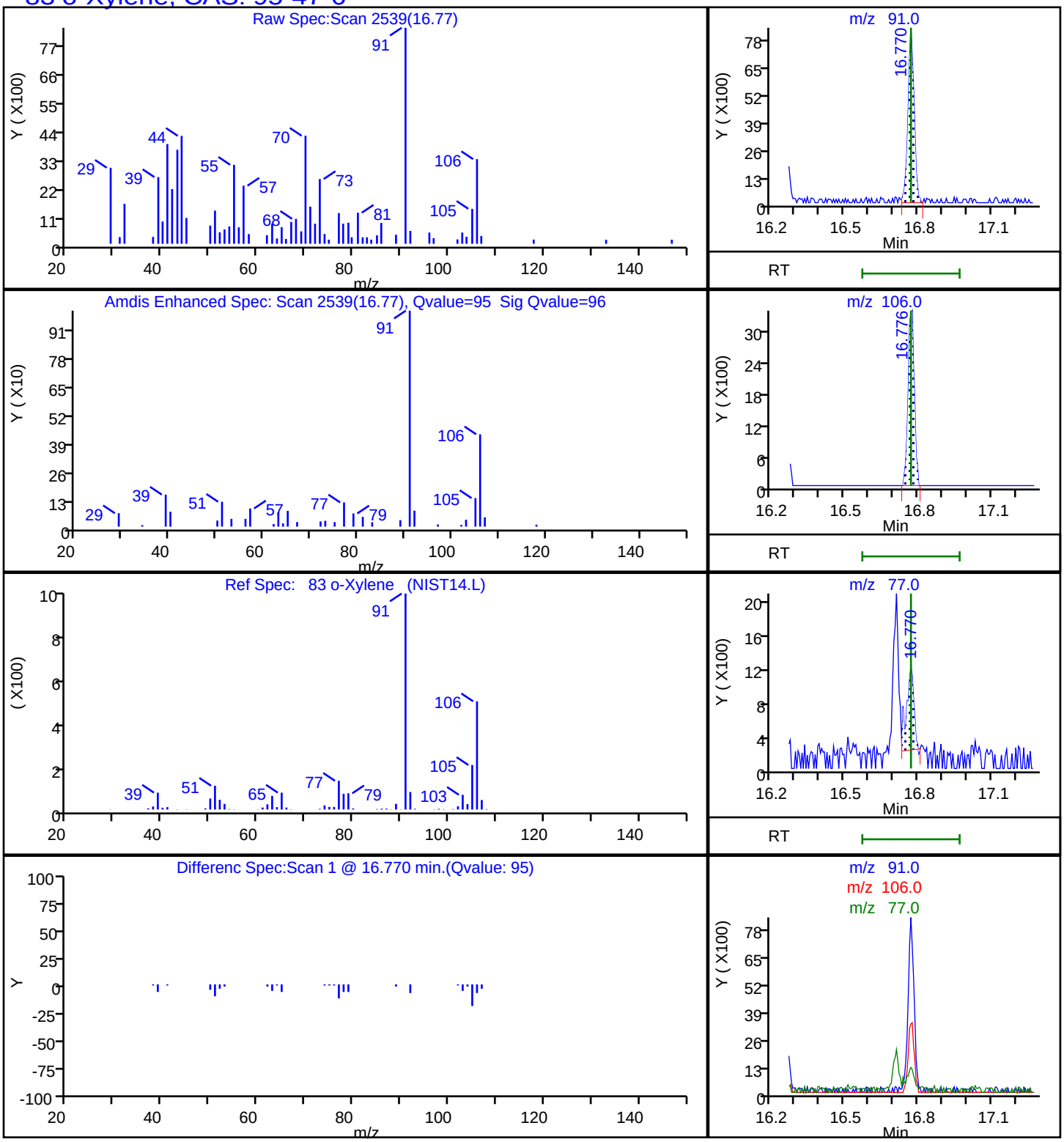
79 m-Xylene & p-Xylene, CAS: 179601-23-1



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GG31P116.D				
Injection Date:	01-Aug-2020 00:23:30	Instrument ID:	MG		
Lims ID:	140-19811-A-6	Lab Sample ID:	140-19811-6		
Client ID:	BLDG B INFLUENT				
Operator ID:	HMT	ALS Bottle#:	16	Worklist Smp#:	20
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

83 o-Xylene, CAS: 95-47-6



FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19811-1 Analy Batch No.: 41058

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/15/2020 12:53 Calibration End Date: 07/15/2020 22:02 Calibration ID: 2525

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 140-41058/8	GG15IC01.D
Level 2	IC 140-41058/9	GG15IC02.D
Level 3	IC 140-41058/10	GG15IC03.D
Level 4	IC 140-41058/11	GG15IC04.D
Level 5	IC 140-41058/12	GG15IC05.D
Level 6	IC 140-41058/13	GG15IC06.D
Level 7	ICIS 140-41058/14	GG15IC07.D
Level 8	IC 140-41058/6	GG15IC08.D
Level 9	IC 140-41058/4	GG15IC09.D
Level 10	IC 140-41058/21	GG15IC10.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Chlorodifluoromethane	+++++ 4.4063	4.4792 3.9673	4.2165 3.9317	4.3268 3.3063	4.1974 3.7664	Ave		4.0664				9.1		30.0			
Propene	+++++ 4.2558	+++++ 2.9101	+++++ 2.4958	+++++ 1.8775	+++++ 1.9553	Lin2	2.5163	1.7238							0.9910		0.9900
Dichlorodifluoromethane	+++++ 7.7489	7.5316 7.1544	7.6767 7.2839	7.2864 6.3640	7.4173 7.1826	Ave		7.2940				5.6		30.0			
Chloromethane	+++++ 0.7129	+++++ 0.6865	+++++ 0.6751	0.8247 0.5793	0.7883 0.6034	Ave		0.6957				12.9		30.0			
1,2-Dichloro-1,1,2,2-tetrafluoroethane	4.1985 3.8640	3.7508 3.5575	3.9352 3.7717	3.5542 3.4865	3.7672 3.8936	Ave		3.7779				5.6		30.0			
Vinyl chloride	3.1028 2.7440	2.6935 2.5973	2.9239 2.6748	2.8930 2.3515	2.8905 2.4671	Ave		2.7338				8.3		30.0			
Butane	+++++ 3.8406	+++++ 3.6564	+++++ 3.7050	4.3055 3.2243	4.2903 3.3876	Ave		3.7728				10.9		30.0			
1,3-Butadiene	2.1120 1.9263	1.9769 1.8531	2.0797 1.9000	2.0265 1.6718	1.9958 1.7642	Ave		1.9306				7.2		30.0			
Bromomethane	+++++ 2.2525	2.4364 2.1836	2.4746 2.2923	2.3560 2.0363	2.2866 2.2159	Ave		2.2816				5.8		30.0			
Chloroethane	+++++ 1.2772	1.4370 1.2758	1.3859 1.2967	1.4215 1.1317	1.3555 1.2503	Ave		1.3146				7.3		30.0			
Ethanol	+++++ 0.8020	+++++ 0.8987	+++++ 0.7856	1.0316 0.7170	0.9228 0.8347	QuaF		0.6953	0.0016869						0.9970		0.9900
Vinyl bromide	2.1491 2.0703	2.0058 1.9272	2.0510 2.0412	1.9145 1.7901	1.9322 2.0281	Ave		1.9910				5.1		30.0			
2-Methylbutane	+++++ 2.2089	+++++ 2.3334	2.8807 2.3793	2.7102 2.0108	2.6625 2.2642	Ave		2.4312				12.0		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19811-1 Analy Batch No.: 41058

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/15/2020 12:53 Calibration End Date: 07/15/2020 22:02 Calibration ID: 2525

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Trichlorofluoromethane	+++++ 7.6415	7.3302 6.9532	7.2372 7.1773	7.0627 6.3869	7.0738 7.6582	Ave		7.1690				5.3		30.0			
Acrolein	+++++ 0.4711	+++++ 0.4181	+++++ 0.4184	0.4992 0.4021	0.5095 0.5220	Ave		0.4629				10.7		30.0			
Acetonitrile	+++++ 0.6988	+++++ 0.7094	+++++ 0.6135	+++++ 0.5975	0.7812 0.6931	Ave		0.6823				9.9		30.0			
Acetone	+++++ 0.9110	+++++ 0.9304	+++++ 0.6754	+++++ 0.6936	1.0611 0.8406	Ave		0.8520				17.4		30.0			
Pentane	+++++ 0.4821	+++++ 0.4312	0.4261 0.4517	0.4516 0.4031	0.4551 0.4993	Ave		0.4500				6.8		30.0			
Isopropyl alcohol	+++++ 2.1014	+++++ 2.2578	2.2437 1.9059	2.1393 1.8107	2.1443 2.1844	Ave		2.0984				7.6		30.0			
Ethyl ether	+++++ 1.5823	+++++ 1.7179	1.6892 1.4436	1.6866 1.4014	1.7000 1.6776	Ave		1.6123				7.7		30.0			
1,1-Dichloroethene	+++++ 1.7249	2.0412 1.8089	1.8106 1.9767	1.8301 1.8207	1.8728 1.9702	Ave		1.8729				5.4		30.0			
Acrylonitrile	+++++ 1.2270	+++++ 1.2920	1.2639 1.1504	1.1345 1.1559	1.2226 1.3208	Ave		1.2209				5.7		30.0			
tert-Butyl alcohol	+++++ 3.1898	+++++ 3.4653	+++++ 3.1572	2.9517 3.0367	3.2177 3.5646	Ave		3.2261				6.8		30.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	+++++ 3.9035	4.2859 4.0539	4.2852 4.3876	4.0468 3.9751	4.0828 4.6459	Ave		4.1852				5.6		30.0			
Methylene Chloride	+++++ 3.2902	+++++ 2.5803	+++++ 2.3181	+++++ 1.9168	5.7073 1.9872	Lin2	1.5412	1.8268							0.9970		0.9900
3-Chloropropene	+++++ 1.8910	+++++ 1.8749	2.0919 1.9929	2.1927 1.7599	1.4541 1.9199	Ave		1.8972				11.8		30.0			
Carbon disulfide	+++++ 6.1040	6.7068 6.2097	6.3602 6.6310	6.2105 5.9090	6.2702 6.5952	Ave		6.3330				4.2		30.0			
trans-1,2-Dichloroethene	2.3091 1.9677	2.1070 1.9872	2.0426 2.1606	2.0421 1.9607	2.0342 2.2733	Ave		2.0885				5.9		30.0			
2-Methylpentane	+++++ 5.0593	5.6313 4.9815	5.3910 5.0854	5.1906 4.2355	5.2357 4.8259	Ave		5.0707				7.7		30.0			
Methyl tert-butyl ether	5.6440 6.1368	5.5129 6.4086	5.7792 5.2511	5.3905 5.6677	5.9122 6.6166	Ave		5.8319				7.6		30.0			
1,1-Dichloroethane	5.4119 4.4553	4.9725 4.3964	4.7607 4.5221	4.5225 3.9701	4.4984 4.5753	Ave		4.6085				8.3		30.0			
Vinyl acetate	+++++ 4.7741	4.0850 5.0766	4.3529 4.1909	4.0726 4.2481	4.6001 5.3289	Ave		4.5255				10.0		30.0			
2-Butanone (MEK)	+++++ 0.9700	+++++ 1.0378	+++++ 0.7998	1.0592 0.8802	0.9773 1.0823	Ave		0.9724				10.5		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19811-1 Analy Batch No.: 41058

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/15/2020 12:53 Calibration End Date: 07/15/2020 22:02 Calibration ID: 2525

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Hexane	+++++ 1.7946	2.0497 1.7628	1.8140 1.8085	1.9087 1.5772	1.8450 1.8254	Ave		1.8206				6.8		30.0			
cis-1,2-Dichloroethene	+++++ 2.0591	2.0958 2.1033	2.1423 2.2017	2.1207 1.9964	2.1027 2.2882	Ave		2.1234				3.9		30.0			
Ethyl acetate	+++++ 4.1713	+++++ 4.4135	3.8527 3.2263	3.7029 3.5163	4.0786 4.3461	Ave		3.9135				10.6		30.0			
Chloroform	+++++ 5.2969	5.4095 5.2092	5.6274 5.3344	5.3528 4.7375	5.2742 5.6039	Ave		5.3162				4.9		30.0			
Tetrahydrofuran	+++++ 2.3156	+++++ 2.4131	2.3381 1.8591	2.1515 1.9545	2.3120 2.3905	Ave		2.2168				9.4		30.0			
1,1,1-Trichloroethane	6.2225 5.6017	5.6457 5.6775	5.7274 5.8259	5.5099 5.3260	5.5863 6.2281	Ave		5.7351				5.1		30.0			
1,2-Dichloroethane	0.5083 0.4103	0.4099 0.4159	0.4512 0.4473	0.4272 0.3777	0.4179 0.5557	Ave		0.4421				11.9		30.0			
Benzene	+++++ 0.7505	0.8733 0.7505	0.8372 0.8546	0.8031 0.7199	0.7750 1.0611	Ave		0.8250				12.4		30.0			
Cyclohexane	+++++ 0.1341	0.1333 0.1352	0.1452 0.1561	0.1453 0.1314	0.1381 0.1921	Ave		0.1456				13.1		30.0			
1-Butanol	+++++ 0.0781	+++++ 0.0743	+++++ 0.0772	0.0733 0.0656	0.0739 0.1012	Ave		0.0777				14.3		30.0			
Carbon tetrachloride	0.5563 0.5577	0.4978 0.4738	0.5435 0.6962	0.5450 0.6097	0.3090 0.9050	Ave		0.5694				27.1		30.0			
2,3-Dimethylpentane	+++++ 0.1983	0.2106 0.2010	0.2194 0.2241	0.2069 0.1869	0.2030 0.2685	Ave		0.2132				11.0		30.0			
Thiophene	+++++ 0.4034	0.4148 0.4072	0.4617 0.4575	0.4329 0.3810	0.4104 0.5633	Ave		0.4369				12.4		30.0			
2,2,4-Trimethylpentane	+++++ 1.3446	1.3651 1.3428	1.4648 1.4383	1.3928 1.1636	1.3770 1.6763	Ave		1.3961				9.7		30.0			
Heptane	0.3396 0.2883	0.2887 0.2913	0.3110 0.3276	0.3000 0.2799	0.2830 0.4205	Ave		0.3130				13.6		30.0			
1,2-Dichloropropane	0.3661 0.2897	0.3067 0.2904	0.3397 0.2919	0.2983 0.2586	0.2865 0.3823	Ave		0.3110				12.6		30.0			
Trichloroethene	0.3156 0.2515	0.2561 0.2483	0.2757 0.2980	0.2585 0.2500	0.2502 0.3904	Ave		0.2794				16.2		30.0			
Dibromomethane	0.4023 0.2977	0.3101 0.2992	0.3191 0.3305	0.2995 0.2827	0.2997 0.4321	Ave		0.3273				15.2		30.0			
Bromodichloromethane	+++++ 0.5754	+++++ 0.5753	0.5437 0.6541	0.5383 0.5603	0.5319 +++++	Ave		0.5684				7.3		30.0			
1,4-Dioxane	+++++ 0.0886	+++++ 0.0942	+++++ 0.0891	0.0835 0.0881	0.0795 0.1324	Ave		0.0936				18.9		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19811-1 Analy Batch No.: 41058

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/15/2020 12:53 Calibration End Date: 07/15/2020 22:02 Calibration ID: 2525

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Methyl methacrylate	+++++ 0.2946	+++++ 0.3103	0.2573 0.2534	0.2408 0.2681	0.2650 0.4145	Ave		0.2880				19.4		30.0			
Methylcyclohexane	+++++ 0.4784	+++++ 0.4866	0.5085 0.5387	0.5059 +++++	0.4715 +++++	Lin1	-0.005	0.5164							0.9970		0.9900
4-Methyl-2-pentanone (MIBK)	+++++ 0.5257	+++++ 0.5506	0.4798 0.4272	0.4276 0.4429	0.4833 0.6622	Ave		0.4999				15.9		30.0			
cis-1,3-Dichloropropene	0.4715 0.4069	0.3657 0.4050	0.4416 0.4521	0.4025 0.3688	0.3987 0.6012	Ave		0.4314				15.9		30.0			
trans-1,3-Dichloropropene	0.4451 0.4276	0.3859 0.4239	0.4000 0.4147	0.3778 0.3770	0.3752 0.5086	Ave		0.4136				10.0		30.0			
Toluene	0.9976 0.8303	0.8131 0.8519	0.8808 0.8197	0.8049 0.8291	0.8166 1.0347	Ave		0.8679				9.4		30.0			
1,1,2-Trichloroethane	0.2691 0.2666	0.2513 0.2657	0.2655 0.2512	0.2556 0.2454	0.2570 0.3114	Ave		0.2639				7.0		30.0			
2-Hexanone	+++++ 0.2783	+++++ 0.2985	0.2520 0.2325	0.2065 0.2559	0.2419 0.3177	Ave		0.2604				13.9		30.0			
C8 Range	+++++ 2.9967	+++++ 3.0060	+++++ 2.8947	2.8510 2.7267	2.9104 3.2259	Ave		2.9445				5.3		30.0			
Octane	0.3075 0.3094	0.2848 0.3232	0.3211 0.3292	0.2863 0.3255	0.2889 0.4013	Ave		0.3177				10.6		30.0			
Dibromochloromethane	+++++ 0.4483	+++++ 0.4467	0.4026 0.4960	0.3695 0.4929	0.3670 0.6692	Ave		0.4615				21.1		30.0			
1,2-Dibromoethane (EDB)	+++++ 0.4161	+++++ 0.4082	0.4144 0.4022	0.3736 0.3693	0.3848 0.5056	Ave		0.4093				10.5		30.0			
Tetrachloroethene	0.3674 0.2723	0.2734 0.2738	0.2801 0.2906	0.2680 0.2878	0.2639 0.3913	Ave		0.2968				15.0		30.0			
Chlorobenzene	0.7186 0.5773	0.5880 0.5855	0.6385 0.5867	0.5721 0.5886	0.5736 0.8305	Ave		0.6259				13.5		30.0			
Ethylbenzene	1.1372 1.1322	1.0173 1.1882	1.0888 1.0871	1.0214 1.1607	1.0636 1.5019	Ave		1.1398				12.2		30.0			
m-Xylene & p-Xylene	0.8852 0.8939	0.7658 0.9578	0.8508 0.8687	0.7705 0.9524	0.8537 1.2693	Ave		0.9068				15.7		30.0			
Nonane	0.6177 0.6362	0.5704 0.6627	0.6093 0.5954	0.5666 0.5914	0.6115 0.7348	Ave		0.6196				8.0		30.0			
Bromoform	+++++ 0.3546	+++++ 0.3713	0.2715 0.4397	0.2656 0.5215	0.2437 +++++	Ave		0.3526				28.9		30.0			
Styrene	+++++ 0.5529	+++++ 0.6101	0.4349 0.5690	0.4302 0.6281	0.5005 +++++	Ave		0.5322				14.9		30.0			
o-Xylene	0.9559 0.9708	0.8496 1.0446	0.9335 0.8980	0.8180 0.9864	0.8980 1.2389	Ave		0.9594				12.4		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19811-1 Analy Batch No.: 41058

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/15/2020 12:53 Calibration End Date: 07/15/2020 22:02 Calibration ID: 2525

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
1,1,2,2-Tetrachloroethane	0.5558 0.6855	0.5610 0.7271	0.6342 0.5714	0.5784 0.6473	0.6030 0.8217	Ave		0.6385				13.4		30.0			
1,2,3-Trichloropropane	0.1702 0.1944	0.1583 0.2095	0.1838 0.1687	0.1638 0.1948	0.1762 0.2559	Ave		0.1876				15.4		30.0			
Isopropylbenzene	1.2402 1.1941	1.1108 1.3251	1.1438 1.1098	1.0215 1.2864	1.0983 1.6613	Ave		1.2191				14.9		30.0			
Propylbenzene	+++++ 0.2825	+++++ 0.3253	0.2736 0.2687	0.2415 0.3289	0.2637 0.4465	Ave		0.3038				21.4		30.0			
2-Chlorotoluene	+++++ 0.2592	+++++ 0.2872	0.2710 0.2623	0.2288 0.2940	0.2418 0.3929	Ave		0.2797				18.1		30.0			
4-Ethyltoluene	+++++ 1.1074	+++++ 1.2604	+++++ 1.0289	0.9181 1.2284	1.0288 1.6465	Ave		1.1741				20.4		30.0			
1,3,5-Trimethylbenzene	+++++ 0.4368	+++++ 0.4968	0.3930 0.4045	0.3585 0.4911	0.3936 0.6791	Ave		0.4567				22.4		30.0			
Alpha Methyl Styrene	+++++ 0.4048	+++++ 0.4735	0.2936 0.3991	0.2717 0.4932	0.3243 +++++	Ave		0.3800				22.7		30.0			
Decane	0.6988 0.8049	0.6274 0.8389	0.7354 0.6506	0.6689 0.6958	0.7249 0.8452	Ave		0.7291				10.6		30.0			
tert-Butylbenzene	+++++ 1.0241	+++++ 1.1614	0.9380 0.9285	0.8270 1.1445	0.9112 +++++	Ave		0.9907				12.6		30.0			
1,2,4-Trimethylbenzene	+++++ 1.0345	+++++ 1.1655	0.9131 0.9145	0.8360 1.1145	0.9040 1.5631	Ave		1.0557				22.2		30.0			
sec-Butylbenzene	+++++ 1.4993	+++++ 1.6585	1.3314 1.3170	1.2005 1.6120	1.3273 2.2776	Ave		1.5279				22.4		30.0			
1,3-Dichlorobenzene	+++++ 0.5455	0.5044 0.6031	0.5566 0.5521	0.4765 0.6624	0.4744 +++++	Ave		0.5469				11.7		30.0			
Benzyl chloride	+++++ 0.8751	+++++ 1.0474	0.7124 0.8377	0.6061 0.9809	0.7535 +++++	Ave		0.8304				18.5		30.0			
1,4-Dichlorobenzene	0.6413 0.5408	0.5101 0.5990	0.5444 0.5414	0.4796 0.6407	0.4848 +++++	Ave		0.5536				11.0		30.0			
4-Isopropyltoluene	+++++ 1.1679	+++++ 1.2998	0.9828 1.0198	0.9276 1.2756	1.0102 1.7566	Ave		1.1800				22.9		30.0			
1,2,3-Trimethylbenzene	+++++ 1.0618	+++++ 1.1855	0.9251 0.9156	0.8483 1.0893	0.9259 1.4615	QuaF		0.7805	0.0423381						0.9990		0.9900
Indane	0.8384 0.8821	0.7313 0.9932	0.8372 0.8235	0.7133 1.0105	0.7725 +++++	Ave		0.8447				12.3		30.0			
1,2-Dichlorobenzene	0.6432 0.5518	0.4905 0.6239	0.5355 0.5398	0.4722 0.6832	0.4777 +++++	Ave		0.5575				13.7		30.0			
Indene	+++++ 0.7450	+++++ 0.8842	0.6007 0.7231	0.5560 0.8997	0.6415 +++++	Ave		0.7215				18.5		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19811-1 Analy Batch No.: 41058

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/15/2020 12:53 Calibration End Date: 07/15/2020 22:02 Calibration ID: 2525

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Butylbenzene	+++++ 1.3773	+++++ 1.5154	1.1198 1.1362	1.0563 1.3704	1.1878 1.9086	Ave		1.3340				21.0		30.0			
Undecane	0.7221 0.9229	0.7283 0.9276	0.8216 0.6595	0.7271 0.7266	0.7920 0.8567	Ave		0.7884				11.6		30.0			
1,2-Dibromo-3-Chloropropane	0.2114 0.2614	0.1602 0.3019	0.1682 0.2668	0.1753 +++++	0.1926 +++++	Ave		0.2172				24.4		30.0			
1,2,4,5-Tetramethylbenzene	+++++ 1.1119	+++++ 1.2502	0.9259 0.9867	0.8456 1.2107	0.9327 +++++	Ave		1.0377				14.9		30.0			
Dodecane	0.7645 0.7764	0.6051 0.7934	0.7779 0.5850	0.6242 0.4510	0.6309 0.7512	Ave		0.6760				16.8		30.0			
1,2,4-Trichlorobenzene	+++++ 0.3988	0.4081 0.4950	0.3863 0.4369	0.3315 0.5217	0.3140 +++++	Ave		0.4115				17.5		30.0			
Naphthalene	+++++ 1.0566	1.1752 1.2521	1.1083 1.0448	0.8864 1.1202	0.8263 +++++	Ave		1.0587				13.4		30.0			
Hexachlorobutadiene	0.4662 0.4794	0.4035 0.5945	0.4304 0.5014	0.3894 0.7054	0.3787 +++++	Ave		0.4832				22.1		30.0			
1,2,3-Trichlorobenzene	+++++ 0.3783	0.4225 0.4963	0.4013 0.4444	0.3212 0.3911	0.2862 +++++	Ave		0.3927				17.0		30.0			
2-Methylnaphthalene	+++++ 0.4572	0.8046 0.5361	0.7131 0.7659	0.4625 0.4189	0.3883 0.9683	Ave		0.6128				33.5		50.0			
1-Methylnaphthalene	+++++ 0.5421	1.0639 0.6409	0.8535 0.8863	0.5798 0.4673	0.4492 1.0796	Ave		0.7292				33.8		50.0			
4-Bromofluorobenzene (Surr)	0.7827 0.8079	0.7779 0.8324	0.7840 0.8411	0.7990 0.8057	0.8034 0.8963	Ave		0.8130				4.4		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19811-1 Analy Batch No.: 41058

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/15/2020 12:53 Calibration End Date: 07/15/2020 22:02 Calibration ID: 2525

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 140-41058/8	GG15IC01.D
Level 2	IC 140-41058/9	GG15IC02.D
Level 3	IC 140-41058/10	GG15IC03.D
Level 4	IC 140-41058/11	GG15IC04.D
Level 5	IC 140-41058/12	GG15IC05.D
Level 6	IC 140-41058/13	GG15IC06.D
Level 7	ICIS 140-41058/14	GG15IC07.D
Level 8	IC 140-41058/6	GG15IC08.D
Level 9	IC 140-41058/4	GG15IC09.D
Level 10	IC 140-41058/21	GG15IC10.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
Chlorodifluoromethane	CBM	Ave	+++++ 190134	8363 355286	15139 808438	30180 1479303	75352 2523928	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Propene	CBM	Lin2	+++++ 183637	+++++ 260607	+++++ 513182	+++++ 840024	+++++ 1310261	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	+++++ 16.0
Dichlorodifluoromethane	CBM	Ave	+++++ 334364	14062 640703	27563 1497719	50823 2847427	133157 4813201	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Chloromethane	CBM	Ave	+++++ 30761	+++++ 61480	+++++ 138821	5752 259202	14151 404367	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,2-Dichloro-1,1,2,2-tetrafluoroethane	CBM	Ave	3962 166732	7003 318591	14129 775546	24791 1559954	67629 2609205	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Vinyl chloride	CBM	Ave	2928 118405	5029 232593	10498 549991	20179 1052139	51891 1653274	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Butane	CBM	Ave	+++++ 165723	+++++ 327446	+++++ 761829	30031 1442650	77021 2270081	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,3-Butadiene	CBM	Ave	1993 83118	3691 165955	7467 390687	14135 747983	35829 1182241	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Bromomethane	CBM	Ave	+++++ 97197	4549 195553	8885 471335	16433 911092	41050 1484900	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Chloroethane	CBM	Ave	+++++ 55110	2683 114248	4976 266623	9915 506341	24335 837824	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Ethanol	CBM	QuaF	+++++ 173032	+++++ 402389	+++++ 807634	35979 1604009	82833 2796885	+++++ 5.00	+++++ 10.0	+++++ 20.0	0.800 40.0	2.00 80.0
Vinyl bromide	CBM	Ave	2028 89335	3745 172585	7364 419720	13354 800924	34687 1359074	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Methylbutane	CBM	Ave	+++++ 95313	+++++ 208963	10343 489230	18904 899697	47798 1517271	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Trichlorofluoromethane	CBM	Ave	+++++ 329731	13686 622680	25985 1475791	49263 2857645	126990 5131943	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19811-1 Analy Batch No.: 41058

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/15/2020 12:53 Calibration End Date: 07/15/2020 22:02 Calibration ID: 2525

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
Acrolein	CBM	Ave	+++++ 20330	+++++ 37446	+++++ 86031	3482 179895	9147 349789	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Acetonitrile	CBM	Ave	+++++ 30152	+++++ 63532	+++++ 126158	+++++ 267329	14024 464495	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
Acetone	CBM	Ave	+++++ 117934	+++++ 249951	+++++ 416606	+++++ 930983	57147 1689823	+++++ 3.00	+++++ 6.00	+++++ 12.0	+++++ 24.0	1.20 48.0
Pentane	CBM	Ave	+++++ 20801	+++++ 38616	1530 92879	3150 180355	8170 334580	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Isopropyl alcohol	CBM	Ave	+++++ 272032	+++++ 606574	24168 1175696	44765 2430401	115484 4391364	+++++ 3.00	+++++ 6.00	0.240 12.0	0.480 24.0	1.20 48.0
Ethyl ether	CBM	Ave	+++++ 68276	+++++ 153848	6065 296840	11764 627006	30519 1124219	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,1-Dichloroethene	CBM	Ave	+++++ 74430	3811 161995	6501 406439	12765 814607	33621 1320258	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Acrylonitrile	CBM	Ave	+++++ 52944	+++++ 115706	4538 236547	7913 517172	21948 885078	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
tert-Butyl alcohol	CBM	Ave	+++++ 137641	+++++ 310331	+++++ 649174	20588 1358711	57764 2388702	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,1,2-Trichloro-1,2,2-trifluoroetha ne	CBM	Ave	+++++ 168437	8002 363043	15386 902182	28227 1778549	73295 3113337	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Methylene Chloride	CBM	Lin2	+++++ 141971	+++++ 231075	+++++ 476658	+++++ 857601	102459 1331674	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
3-Chloropropene	CBM	Ave	+++++ 81595	+++++ 167901	7511 409790	15294 787404	26105 1286544	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Carbon disulfide	CBM	Ave	+++++ 263386	12522 556101	22836 1363476	43319 2643847	112564 4419618	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
trans-1,2-Dichloroethene	CBM	Ave	2179 84905	3934 177962	7334 444268	14244 877242	36518 1523405	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Methylpentane	CBM	Ave	+++++ 218309	10514 446107	19356 1045667	36205 1895083	93993 3233937	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Methyl tert-butyl ether	CBM	Ave	5326 264802	10293 573910	20750 1079721	37599 2535853	106137 4433940	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,1-Dichloroethane	CBM	Ave	5107 192246	9284 393709	17093 929825	31545 1776307	80757 3066026	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Vinyl acetate	CBM	Ave	+++++ 206001	7627 454630	15629 861733	28407 1900706	82582 3571055	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Butanone (MEK)	CBM	Ave	+++++ 41854	+++++ 92943	+++++ 164454	7388 393821	17544 725294	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Hexane	CBM	Ave	+++++ 77435	3827 157864	6513 371862	13313 705698	33121 1223253	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
cis-1,2-Dichloroethene	CBM	Ave	+++++ 88852	3913 188361	7692 452709	14792 893239	37748 1533364	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19811-1 Analy Batch No.: 41058

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/15/2020 12:53 Calibration End Date: 07/15/2020 22:02 Calibration ID: 2525

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
Ethyl acetate	CBM	Ave	+++++ 179990	+++++ 395242	13833 663392	25828 1573267	73220 2912424	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Chloroform	CBM	Ave	+++++ 228561	10100 466501	20205 1096869	37336 2119675	94684 3755288	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Tetrahydrofuran	CBM	Ave	+++++ 99920	+++++ 216098	8395 382270	15007 874487	41506 1601942	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,1,1-Trichloroethane	CBM	Ave	5872 241713	10541 508437	20564 1197930	38432 2382984	100286 4173583	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2-Dichloroethane	DFBZ	Ave	4278 157739	6892 329677	13192 753828	25307 1474272	66709 2615527	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Benzene	DFBZ	Ave	+++++ 288567	14684 594896	24475 1440140	47574 2810243	123712 4994527	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Cyclohexane	DFBZ	Ave	+++++ 51549	2241 107133	4244 263114	8607 513051	22047 904459	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1-Butanol	DFBZ	Ave	+++++ 30009	+++++ 58927	+++++ 130076	4340 256216	11804 476385	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Carbon tetrachloride	DFBZ	Ave	4682 214433	8371 375521	15888 1173167	32283 2379973	49334 4259967	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2,3-Dimethylpentane	DFBZ	Ave	+++++ 76259	3542 159316	6414 377710	12254 729530	32408 1263926	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Thiophene	DFBZ	Ave	+++++ 155103	6975 322722	13497 770961	25644 1487281	65514 2651503	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2,2,4-Trimethylpentane	DFBZ	Ave	+++++ 516981	22954 1064296	42823 2423728	82504 4542162	219821 7890499	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Heptane	DFBZ	Ave	2858 110833	4854 230866	9091 551982	17773 1092735	45176 1979515	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2-Dichloropropane	DFBZ	Ave	3081 111371	5158 230193	9930 491819	17668 1009494	45740 1799564	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Trichloroethene	DFBZ	Ave	2656 96687	4307 196817	8061 502158	15315 975759	39945 1837783	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Dibromomethane	DFBZ	Ave	3386 114469	5214 237166	9330 557019	17739 1103503	47845 2034131	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Bromodichloromethane	DFBZ	Ave	+++++ 221235	+++++ 455959	15895 1102256	31890 2187194	84911 +++++	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
1,4-Dioxane	DFBZ	Ave	+++++ 34057	+++++ 74662	+++++ 150131	4949 344071	12691 623125	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Methyl methacrylate	DFBZ	Ave	+++++ 113285	+++++ 245965	7521 427105	14265 1046475	42312 1951045	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Methylcyclohexane	DFBZ	Lin1	+++++ 183918	+++++ 385717	14867 907797	29969 +++++	75262 +++++	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 +++++	0.400 +++++
4-Methyl-2-pentanone (MIBK)	DFBZ	Ave	+++++ 202106	+++++ 436411	14028 719955	25328 1729065	77155 3117228	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19811-1 Analy Batch No.: 41058

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/15/2020 12:53 Calibration End Date: 07/15/2020 22:02 Calibration ID: 2525

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
cis-1,3-Dichloropropene	DFBZ	Ave	3968 156457	6149 321027	12909 761819	23842 1439675	63645 2829914	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
trans-1,3-Dichloropropene	CBZd 5	Ave	3349 143535	5749 299199	10747 677141	20954 1328848	54746 2709174	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Toluene	CBZd 5	Ave	7507 278724	12112 601268	23667 1338570	44637 2922631	119162 5511722	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,1,2-Trichloroethane	CBZd 5	Ave	2025 89505	3743 187522	7133 410239	14175 865146	37510 1659004	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Hexanone	CBZd 5	Ave	+++++ 93421	+++++ 210723	6772 379734	11454 902045	35303 1692474	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
C8 Range	CBZd 5	Ave	+++++ 1006020	+++++ 2121726	+++++ 4726851	158108 9611519	424704 17183525	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Octane	CBZd 5	Ave	2314 103853	4243 228134	8629 537611	15880 1147426	42155 2137497	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Dibromochloromethane	CBZd 5	Ave	+++++ 150495	+++++ 315285	10817 809979	20490 1737563	53552 3564469	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2-Dibromoethane (EDB)	CBZd 5	Ave	+++++ 139684	+++++ 288099	11135 656699	20720 1301837	56158 2692950	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Tetrachloroethene	CBZd 5	Ave	2765 91406	4072 193223	7527 474507	14862 1014330	38507 2084183	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Chlorobenzene	CBZd 5	Ave	5407 193814	8758 413252	17157 957998	31726 2074966	83702 4423608	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Ethylbenzene	CBZd 5	Ave	8557 380102	15154 838637	29257 1775083	56644 4091382	155214 7999979	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
m-Xylene & p-Xylene	CBZd 5	Ave	13322 600207	22814 1352087	45725 2837114	85460 6714557	249164 13522466	0.0400 2.00	0.0800 4.00	0.160 8.00	0.320 16.0	0.800 32.0
Nonane	CBZd 5	Ave	4648 213591	8497 467764	16373 972283	31424 2084702	89239 3913851	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Bromoform	CBZd 5	Ave	+++++ 119045	+++++ 262090	7295 717985	14728 1838115	35566 +++++	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
Styrene	CBZd 5	Ave	+++++ 185604	+++++ 430593	11687 929210	23856 2214193	73037 +++++	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
o-Xylene	CBZd 5	Ave	7193 325908	12655 737287	25083 1466374	45362 3477069	131043 6599312	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,1,2,2-Tetrachloroethane	CBZd 5	Ave	4182 230136	8357 513238	17040 933008	32079 2281671	87989 4376816	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2,3-Trichloropropane	CBZd 5	Ave	1281 65266	2358 147848	4940 275495	9084 686599	25717 1363256	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Isopropylbenzene	CBZd 5	Ave	9332 400866	16547 935269	30733 1812280	56648 4534572	160270 8849449	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Propylbenzene	CBZd 5	Ave	+++++ 94843	+++++ 229581	7353 438717	13393 1159290	38488 2378468	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19811-1 Analy Batch No.: 41058

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/15/2020 12:53 Calibration End Date: 07/15/2020 22:02 Calibration ID: 2525

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
2-Chlorotoluene	CBZd 5	Ave	+++++ 87009	+++++ 202724	7282 428375	12690 1036411	35289 2092822	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
4-Ethyltoluene	CBZd 5	Ave	+++++ 371754	+++++ 889602	+++++ 1680195	50918 4330157	150122 8770407	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,3,5-Trimethylbenzene	CBZd 5	Ave	+++++ 146651	+++++ 350662	10560 660577	19881 1731230	57435 3617290	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Alpha Methyl Styrene	CBZd 5	Ave	+++++ 135899	+++++ 334215	7888 651651	15069 1738531	47326 +++++	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
Decane	CBZd 5	Ave	5258 270199	9346 592142	19761 1062382	37095 2452798	105777 4502247	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
tert-Butylbenzene	CBZd 5	Ave	+++++ 343785	+++++ 819734	25204 1516160	45863 4034224	132968 +++++	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
1,2,4-Trimethylbenzene	CBZd 5	Ave	+++++ 347304	+++++ 822650	24535 1493254	46363 3928728	131917 8326250	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
sec-Butylbenzene	CBZd 5	Ave	+++++ 503313	+++++ 1170579	35776 2150499	66579 5682261	193690 12132121	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,3-Dichlorobenzene	CBZd 5	Ave	+++++ 183120	7514 425697	14955 901583	26425 2334823	69225 +++++	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
Benzyl chloride	CBZd 5	Ave	+++++ 293789	+++++ 739302	19143 1367829	33613 3457493	109953 +++++	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
1,4-Dichlorobenzene	CBZd 5	Ave	4826 181563	7598 422766	14629 884085	26600 2258368	70751 +++++	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
4-Isopropyltoluene	CBZd 5	Ave	+++++ 392070	+++++ 917420	26407 1665288	51441 4496508	147418 9356856	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2,3-Trimethylbenzene	CBZd 5	QuaF	+++++ 356442	+++++ 836772	24859 1495110	47045 3839924	135108 7785122	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Indane	CBZd 5	Ave	6309 296113	10894 701017	22495 1344704	39559 3561978	112727 +++++	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
1,2-Dichlorobenzene	CBZd 5	Ave	4840 185243	7306 440348	14388 881407	26189 2408327	69708 +++++	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
Indene	CBZd 5	Ave	+++++ 250094	+++++ 624096	16141 1180841	30832 3171592	93609 +++++	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
Butylbenzene	CBZd 5	Ave	+++++ 462362	+++++ 1069578	30089 1855288	58580 4830521	173331 10166628	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Undecane	CBZd 5	Ave	5434 309838	10848 654717	22076 1076844	40322 2561417	115570 4563495	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2-Dibromo-3-Chloropropane	CBZd 5	Ave	1591 87769	2387 213065	4519 435714	9721 +++++	28099 +++++	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 +++++	0.400 +++++
1,2,4,5-Tetramethylbenzene	CBZd 5	Ave	+++++ 373275	+++++ 882392	24879 1611182	46893 4267744	136106 +++++	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
Dodecane	CBZd 5	Ave	5753 260636	9013 560014	20902 955266	34618 1589826	92067 4001315	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19811-1 Analy Batch No.: 41058

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/15/2020 12:53 Calibration End Date: 07/15/2020 22:02 Calibration ID: 2525

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
1,2,4-Trichlorobenzene	CBZd5	Ave	+++++ 133880	6079 349392	10379 713366	18382 1839108	45814 +++++	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
Naphthalene	CBZd5	Ave	+++++ 354697	17506 883787	29780 1706005	49157 3948849	120579 +++++	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
Hexachlorobutadiene	CBZd5	Ave	3508 160933	6011 419604	11566 818788	21594 2486557	55266 +++++	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
1,2,3-Trichlorobenzene	CBZd5	Ave	+++++ 127006	6294 350335	10782 725748	17814 1378728	41759 +++++	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
2-Methylnaphthalene	CBZd5	Ave	+++++ 153485	11986 378412	19163 1250682	25651 1476813	56670 5158127	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1-Methylnaphthalene	CBZd5	Ave	+++++ 182006	15849 452400	22935 1447360	32157 1647368	65547 5750777	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
4-Bromofluorobenzene (Surr)	CBZd5	Ave	1177868 1084929	1158753 1175087	1053301 1373408	1107728 1420018	1172428 1193530	4.00 4.00	4.00 4.00	4.00 4.00	4.00 4.00	4.00 4.00

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD
Lin2 = Linear 1/conc^2 ISTD
QuaF = Quadratic ISTD forced zero

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19811-1 Analy Batch No.: 41058

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/15/2020 12:53 Calibration End Date: 07/15/2020 22:02 Calibration ID: 2525

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 140-41058/8	GG15IC01.D
Level 2	IC 140-41058/9	GG15IC02.D
Level 3	IC 140-41058/10	GG15IC03.D
Level 4	IC 140-41058/11	GG15IC04.D
Level 5	IC 140-41058/12	GG15IC05.D
Level 6	IC 140-41058/13	GG15IC06.D
Level 7	ICIS 140-41058/14	GG15IC07.D
Level 8	IC 140-41058/6	GG15IC08.D
Level 9	IC 140-41058/4	GG15IC09.D
Level 10	IC 140-41058/21	GG15IC10.D

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
Chlorodifluoromethane	+++++	10.2						50				
Propene	+++++	+++++	+++++	+++++	+++++	0.9						50
Dichlorodifluoromethane	+++++	3.3						50				
Chloromethane	+++++	+++++	+++++	18.5						50		
1,2-Dichloro-1,1,2,2-tetrafluoroethane	11.1						50					
Vinyl chloride	13.5						50					
Butane	+++++	+++++	+++++	14.1						50		
1,3-Butadiene	9.4						50					
Bromomethane	+++++	6.8						50				
Chloroethane	+++++	9.3						50				
Ethanol	+++++	+++++	+++++	47.9						50		
Vinyl bromide	7.9						50					
2-Methylbutane	+++++	+++++	18.5						50			
Trichlorofluoromethane	+++++	2.2						50				

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19811-1 Analy Batch No.: 41058

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/15/2020 12:53 Calibration End Date: 07/15/2020 22:02 Calibration ID: 2525

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
Acrolein	+++++	+++++	+++++	7.8						50		
Acetonitrile	+++++	+++++	+++++	+++++	14.5						50	
Acetone	+++++	+++++	+++++	+++++	24.5						80	
Pentane	+++++	+++++	-5.3						50			
Isopropyl alcohol	+++++	+++++	6.9						50			
Ethyl ether	+++++	+++++	4.8						50			
1,1-Dichloroethene	+++++	9.0						50				
Acrylonitrile	+++++	+++++	3.5						50			
tert-Butyl alcohol	+++++	+++++	+++++	-8.5						50		
1,1,2-Trichloro-1,2,2-trifluoroethane	+++++	2.4						50				
Methylene Chloride	+++++	+++++	+++++	+++++	1.5						80	
3-Chloropropene	+++++	+++++	10.3						50			
Carbon disulfide	+++++	5.9						50				
trans-1,2-Dichloroethene	10.6						50					
2-Methylpentane	+++++	11.1						50				
Methyl tert-butyl ether	-3.2						50					
1,1-Dichloroethane	17.4						50					
Vinyl acetate	+++++	-9.7						50				
2-Butanone (MEK)	+++++	+++++	+++++	8.9						50		
Hexane	+++++	12.6						50				
cis-1,2-Dichloroethene	+++++	-1.3						50				

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19811-1 Analy Batch No.: 41058

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/15/2020 12:53 Calibration End Date: 07/15/2020 22:02 Calibration ID: 2525

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
Ethyl acetate	+++++	+++++	-1.6						50			
Chloroform	+++++	1.8						50				
Tetrahydrofuran	+++++	+++++	5.5						50			
1,1,1-Trichloroethane	8.5						50					
1,2-Dichloroethane	15.0						50					
Benzene	+++++	5.8						50				
Cyclohexane	+++++	-8.5						50				
1-Butanol	+++++	+++++	+++++	-5.7						50		
Carbon tetrachloride	-2.3						50					
2,3-Dimethylpentane	+++++	-1.2						50				
Thiophene	+++++	-5.1						50				
2,2,4-Trimethylpentane	+++++	-2.2						50				
Heptane	8.5						50					
1,2-Dichloropropane	17.7						50					
Trichloroethene	12.9						50					
Dibromomethane	22.9						50					
Bromodichloromethane	+++++	+++++	-4.3	+++++					50			
1,4-Dioxane	+++++	+++++	+++++	-10.8						50		
Methyl methacrylate	+++++	+++++	-10.7						50			
Methylcyclohexane	+++++	+++++	9.9 +++++	+++++					50			
4-Methyl-2-pentanone (MIBK)	+++++	+++++	-4.0						50			

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19811-1 Analy Batch No.: 41058

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/15/2020 12:53 Calibration End Date: 07/15/2020 22:02 Calibration ID: 2525

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
cis-1,3-Dichloropropene	9.3						50					
trans-1,3-Dichloropropene	7.6						50					
Toluene	15.0						50					
1,1,2-Trichloroethane	2.0						50					
2-Hexanone	+++++	+++++	-3.2						50			
Octane	-3.2						50					
Dibromochloromethane	+++++	+++++	-12.8						50			
1,2-Dibromoethane (EDB)	+++++	+++++	1.3						50			
Tetrachloroethene	23.8						50					
Chlorobenzene	14.8						50					
Ethylbenzene	-0.2						50					
m-Xylene & p-Xylene	-2.4						50					
Nonane	-0.3						50					
Bromoform	+++++	+++++	-23.0	+++++					50			
Styrene	+++++	+++++	-18.3	+++++					50			
o-Xylene	-0.4						50					
1,1,2,2-Tetrachloroethane	-13.0						50					
1,2,3-Trichloropropane	-9.2						50					
Isopropylbenzene	1.7						50					
Propylbenzene	+++++	+++++	-9.9						50			
2-Chlorotoluene	+++++	+++++	-3.1						50			

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19811-1 Analy Batch No.: 41058

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/15/2020 12:53 Calibration End Date: 07/15/2020 22:02 Calibration ID: 2525

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
4-Ethyltoluene	+++++	+++++	+++++	-21.8						50		
1,3,5-Trimethylbenzene	+++++	+++++	-13.9						50			
Alpha Methyl Styrene	+++++	+++++	-22.8	+++++					50			
Decane	-4.2						50					
tert-Butylbenzene	+++++	+++++	-5.3	+++++					50			
1,2,4-Trimethylbenzene	+++++	+++++	-13.5						50			
sec-Butylbenzene	+++++	+++++	-12.9						50			
1,3-Dichlorobenzene	+++++	-7.8		+++++				50				
Benzyl chloride	+++++	+++++	-14.2	+++++					50			
1,4-Dichlorobenzene	15.9			+++++			50					
4-Isopropyltoluene	+++++	+++++	-16.7						50			
1,2,3-Trimethylbenzene	+++++	+++++	17.9						50			
Indane	-0.7			+++++			50					
1,2-Dichlorobenzene	15.4			+++++			50					
Indene	+++++	+++++	-16.7	+++++					50			
Butylbenzene	+++++	+++++	-16.1						50			
Undecane	-8.4						50					
1,2-Dibromo-3-Chloropropane	-2.7		+++++	+++++			50					
1,2,4,5-Tetramethylbenzene	+++++	+++++	-10.8	+++++					50			
Dodecane	13.1						50					
1,2,4-Trichlorobenzene	+++++	-0.8		+++++				50				

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19811-1 Analy Batch No.: 41058

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/15/2020 12:53 Calibration End Date: 07/15/2020 22:02 Calibration ID: 2525

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
Naphthalene	+++++	11.0		+++++				80				
Hexachlorobutadiene	-3.5			+++++			50					
1,2,3-Trichlorobenzene	+++++	7.6		+++++				50				
2-Methylnaphthalene	+++++	31.3						80				
1-Methylnaphthalene	+++++	45.9						80				

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC09.D
Lims ID: IC L9
Client ID:
Sample Type: IC Calib Level: 9
Inject. Date: 15-Jul-2020 14:28:30 ALS Bottle#: 15 Worklist Smp#: 4
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016031-004
Misc. Info.: 306866
Operator ID: HMT Instrument ID: MG
Sublist: chrom-MG_TO15*sub17

Method: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 16-Jul-2020 15:14:37 Calib Date: 15-Jul-2020 22:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1066

First Level Reviewer: barlozhetskayaa Date: 16-Jul-2020 15:05:04

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.849	8.843	0.006	95	223712	4.00	4.00	
* 2 1,4-Difluorobenzene	114	11.033	11.026	0.007	96	1951827	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.757	15.754	0.003	91	1762491	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.401	17.397	0.004	82	1420018	4.00	3.96	
6 Chlorodifluoromethane	51	3.705	3.708	-0.003	96	1479303	8.00	6.50	
7 Propene	41	3.721	3.719	0.002	99	840024	8.00	7.25	
8 Dichlorodifluoromethane	85	3.769	3.770	-0.001	100	2847427	8.00	6.98	
9 Chloromethane	52	3.953	3.952	0.001	98	259202	8.00	6.66	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.958	3.960	-0.002	95	1559954	8.00	7.38	
11 Acetaldehyde	44	4.104	4.111	-0.007	96	1564340	40.0	31.6	
12 Vinyl chloride	62	4.120	4.122	-0.002	99	1052139	8.00	6.88	
13 Butane	43	4.212	4.210	0.002	85	1442650	8.00	6.84	
14 Butadiene	54	4.212	4.210	0.002	68	747983	8.00	6.93	
15 Bromomethane	94	4.530	4.531	-0.001	98	911092	8.00	7.14	
16 Chloroethane	64	4.670	4.673	-0.003	98	506341	8.00	6.89	
17 Ethanol	31	4.789	4.804	-0.015	98	1604009	40.0	37.8	
18 Vinyl bromide	106	4.977	4.975	0.002	98	800924	8.00	7.19	
19 2-Methylbutane	43	5.026	5.025	0.001	88	899697	8.00	6.62	
20 Trichlorofluoromethane	101	5.247	5.246	0.001	99	2857645	8.00	7.13	
21 Acrolein	56	5.258	5.263	-0.005	93	179895	8.00	6.95	
22 Acetonitrile	40	5.322	5.322	0.000	98	267329	8.00	7.01	
23 Acetone	58	5.366	5.385	-0.019	98	930983	24.0	19.5	
24 Pentane	72	5.468	5.467	0.001	98	180355	8.00	7.17	
25 Isopropyl alcohol	45	5.479	5.507	-0.028	96	2430401	24.0	20.7	
26 Ethyl ether	31	5.630	5.650	-0.020	89	627006	8.00	6.95	
27 1,1-Dichloroethene	96	5.953	5.951	0.002	94	814607	8.00	7.78	
28 Acrylonitrile	53	6.061	6.061	0.000	96	517172	8.00	7.57	
29 1,1,2-Trichloro-1,2,2-trifluoroe	101	6.131	6.129	0.002	92	1778549	8.00	7.60	
30 2-Methyl-2-propanol	59	6.077	6.136	-0.059	94	1358711	8.00	7.53	
31 Methylene Chloride	84	6.304	6.299	0.005	93	857601	8.00	7.55	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.315	6.313	0.002	99	787404	8.00	7.42	
33 Carbon disulfide	76	6.460	6.462	-0.002	98	2643847	8.00	7.46	
34 trans-1,2-Dichloroethene	96	7.113	7.109	0.004	96	877242	8.00	7.51	
35 2-Methylpentane	43	7.129	7.129	0.000	92	1895083	8.00	6.68	
36 Methyl tert-butyl ether	73	7.237	7.266	-0.029	95	2535853	8.00	7.77	
37 1,1-Dichloroethane	63	7.533	7.528	0.005	100	1776307	8.00	6.89	
38 Vinyl acetate	43	7.636	7.641	-0.005	100	1900706	8.00	7.51	
39 2-Butanone (MEK)	72	8.083	8.102	-0.019	99	393821	8.00	7.24	
40 Hexane	56	8.110	8.111	-0.001	93	705698	8.00	6.93	
41 Isopropyl ether	45	8.272	8.289	-0.017	95	2536031	8.00	7.27	
42 cis-1,2-Dichloroethene	96	8.520	8.514	0.006	97	893239	8.00	7.52	
43 Ethyl acetate	43	8.703	8.715	-0.012	99	1573267	8.00	7.19	
44 Chloroform	83	8.865	8.857	0.008	96	2119675	8.00	7.13	
45 Tert-butyl ethyl ether	59	8.946	8.969	-0.023	95	2668609	8.00	7.55	
46 Tetrahydrofuran	42	9.259	9.287	-0.028	91	874487	8.00	7.05	
47 1,1,1-Trichloroethane	97	9.890	9.884	0.006	95	2382984	8.00	7.43	
48 1,2-Dichloroethane	62	9.998	9.992	0.006	99	1474272	8.00	6.83	
50 Benzene	78	10.488	10.483	0.005	95	2810243	8.00	6.98	
49 Cyclohexane	69	10.488	10.488	0.000	75	513051	8.00	7.22	
52 Carbon tetrachloride	117	10.510	10.508	0.002	97	2379973	8.00	8.57	
51 n-Butanol	31	10.461	10.524	-0.063	79	256216	8.00	6.76	
53 2,3-Dimethylpentane	71	10.607	10.606	0.001	90	729530	8.00	7.01	
54 Thiophene	84	10.763	10.756	0.007	95	1487281	8.00	6.98	
55 Isooctane	57	11.254	11.250	0.004	98	4542162	8.00	6.67	
56 n-Heptane	71	11.626	11.624	0.002	88	1092735	8.00	7.16	
57 1,2-Dichloropropane	63	11.707	11.701	0.006	89	1009494	8.00	6.65	
58 Trichloroethene	130	11.745	11.739	0.006	91	975759	8.00	7.16	
59 Dibromomethane	93	11.826	11.820	0.006	89	1103503	8.00	6.91	
60 Dichlorobromomethane	83	11.971	11.967	0.004	98	2187194	8.00	7.89	
61 1,4-Dioxane	88	11.987	12.018	-0.031	89	344071	8.00	7.53	
62 Methyl methacrylate	41	12.063	12.070	-0.007	97	1046475	8.00	7.45	
63 Methylcyclohexane	83	12.510	12.507	0.003	97	1800484	8.00	7.16	
64 4-Methyl-2-pentanone (MIBK)	43	12.915	12.933	-0.018	96	1729065	8.00	7.09	
65 cis-1,3-Dichloropropene	75	12.969	12.967	0.002	93	1439675	8.00	6.84	
66 trans-1,3-Dichloropropene	75	13.664	13.661	0.003	95	1328848	8.00	7.29	
67 Toluene	91	13.788	13.786	0.002	94	2922631	8.00	7.64	
68 1,1,2-Trichloroethane	83	13.864	13.859	0.005	97	865146	8.00	7.44	
69 2-Hexanone	58	14.252	14.266	-0.014	95	902045	8.00	7.86	
70 n-Octane	85	14.479	14.479	0.000	90	1147426	8.00	8.20	
71 Chlorodibromomethane	129	14.565	14.562	0.003	97	1737563	8.00	8.54	
72 Ethylene Dibromide	107	14.856	14.852	0.004	97	1301837	8.00	7.22	
73 Tetrachloroethene	129	14.932	14.929	0.003	94	1014330	8.00	7.76	
75 Chlorobenzene	112	15.805	15.802	0.003	90	2074966	8.00	7.52	
74 2,3-Dimethylheptane	43	15.827	15.824	0.003	90	2985724	8.00	6.80	
78 Ethylbenzene	91	16.096	16.092	0.004	99	4091382	8.00	8.15	
79 m-Xylene & p-Xylene	91	16.258	16.254	0.004	99	6714557	16.0	16.8	
80 n-Nonane	57	16.679	16.676	0.003	86	2084702	8.00	7.64	
81 Bromoform	173	16.700	16.700	0.000	94	1838115	8.00	11.8	
82 Styrene	104	16.722	16.718	0.004	97	2214193	8.00	9.44	
83 o-Xylene	91	16.781	16.780	0.001	97	3477069	8.00	8.23	
84 1,1,2,2-Tetrachloroethane	83	17.105	17.101	0.004	99	2281671	8.00	8.11	
85 1,2,3-Trichloropropane	110	17.261	17.260	0.001	99	686599	8.00	8.31	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
86 Isopropylbenzene	105	17.369	17.367	0.002	97	4534572	8.00	8.44	
87 N-Propylbenzene	120	17.908	17.907	0.001	98	1159290	8.00	8.66	
88 2-Chlorotoluene	126	17.951	17.951	0.000	96	1036411	8.00	8.41	
89 4-Ethyltoluene	105	18.059	18.056	0.003	98	4330157	8.00	8.37	
90 1,3,5-Trimethylbenzene	120	18.135	18.131	0.004	91	1731230	8.00	8.60	
92 Alpha Methyl Styrene	118	18.361	18.361	0.000	86	1738531	8.00	10.4	
93 n-Decane	57	18.421	18.420	0.000	92	2452798	8.00	7.64	
94 tert-Butylbenzene	119	18.555	18.554	0.001	92	4034224	8.00	9.24	
95 1,2,4-Trimethylbenzene	105	18.571	18.567	0.004	96	3928728	8.00	8.45	
96 sec-Butylbenzene	105	18.825	18.821	0.004	97	5682261	8.00	8.44	
97 1,3-Dichlorobenzene	146	18.836	18.836	0.000	97	2334823	8.00	9.69	
98 Benzyl chloride	91	18.911	18.909	0.002	97	3457493	8.00	9.45	
99 1,4-Dichlorobenzene	146	18.922	18.922	0.000	95	2258368	8.00	9.26	
100 4-Isopropyltoluene	119	18.987	18.983	0.004	96	4496508	8.00	8.65	
101 1,2,3-Trimethylbenzene	105	19.041	19.036	0.005	99	3839924	8.00	7.84	
102 Butylcyclohexane	83	19.095	19.091	0.004	96	3331499	8.00	7.99	
103 2,3-Dihydroindene	117	19.283	19.279	0.004	93	3561978	8.00	9.57	
104 1,2-Dichlorobenzene	146	19.283	19.280	0.003	81	2408327	8.00	9.80	
106 Indene	116	19.413	19.409	0.004	90	3171592	8.00	9.98	
105 n-Butylbenzene	91	19.418	19.414	0.004	98	4830521	8.00	8.22	
107 Undecane	57	19.725	19.726	-0.001	92	2561417	8.00	7.37	
108 1,2-Dibromo-3-Chloropropane	157	19.876	19.877	-0.001	92	1192357	8.00	12.5	
109 1,2,4,5-Tetramethylbenzene	119	20.168	20.165	0.003	96	4267744	8.00	9.33	
110 Dodecane	57	20.777	20.778	-0.001	96	1589826	8.00	5.34	
111 1,2,4-Trichlorobenzene	180	20.976	20.973	0.003	93	1839108	8.00	10.1	
112 Naphthalene	128	21.111	21.112	-0.001	99	3948849	8.00	8.46	
113 Hexachlorobutadiene	225	21.322	21.320	0.002	96	2486557	8.00	11.7	
114 1,2,3-Trichlorobenzene	180	21.392	21.388	0.004	94	1378728	8.00	7.97	
115 2-Methylnaphthalene	142	22.157	22.158	-0.001	98	1476813	8.00	5.47	
116 1-Methylnaphthalene	142	22.330	22.333	-0.003	99	1647368	8.00	5.13	
A 122 C8 Range	1	14.473	(14.420-14.527)		0	9611519	8.00	7.41	
S 123 1,2-Dichloroethene, Total	1				0		16.0	15.0	
S 124 Xylenes, Total	100				0		24.0	25.0	

Reagents:

40L9DQP_00018	Amount Added: 200.00	Units: mL	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

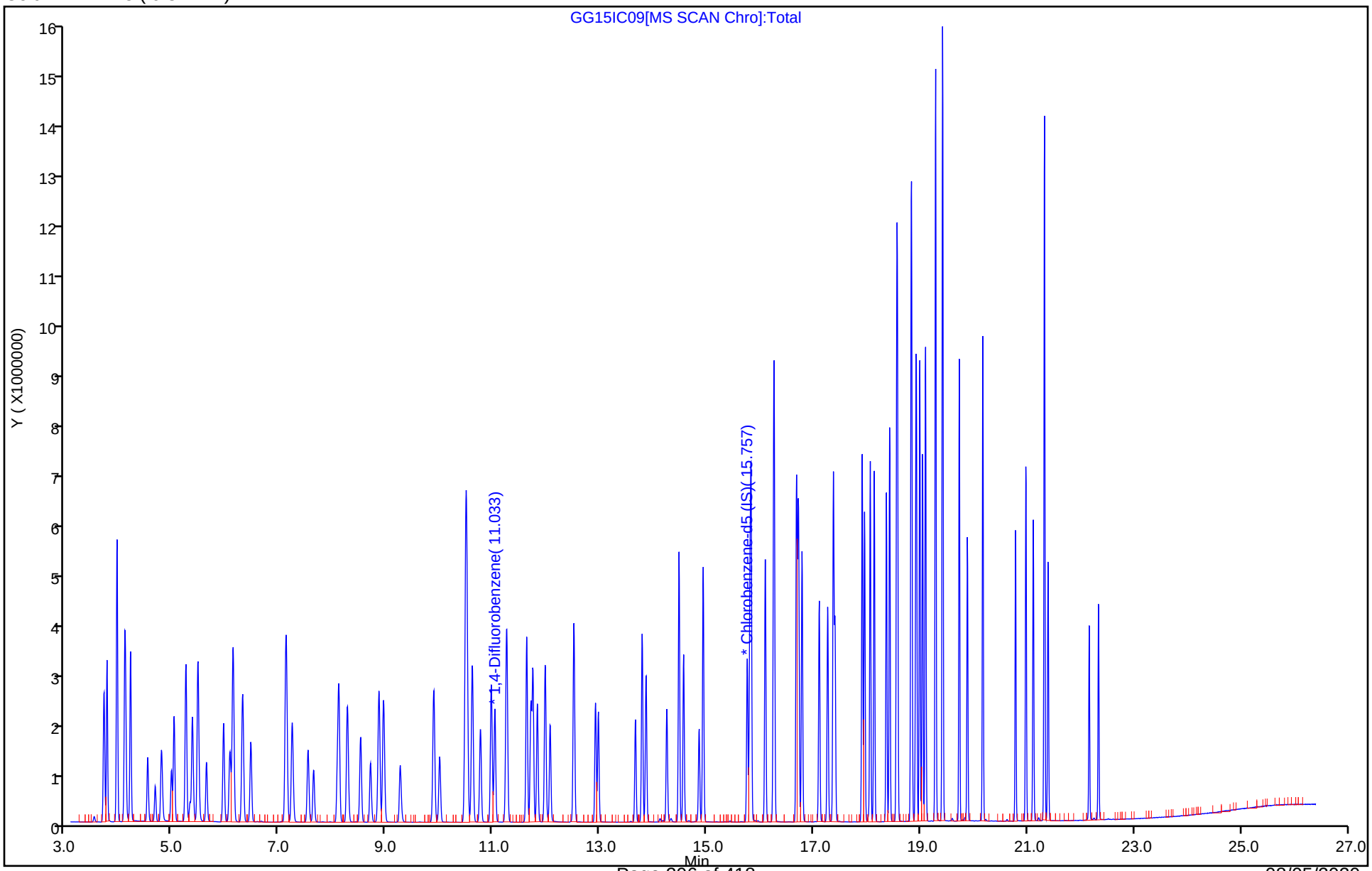
Report Date: 16-Jul-2020 15:14:38 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC09.D

Injection Date:	15-Jul-2020 14:28:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	IC L9			Worklist Smp#:	4
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

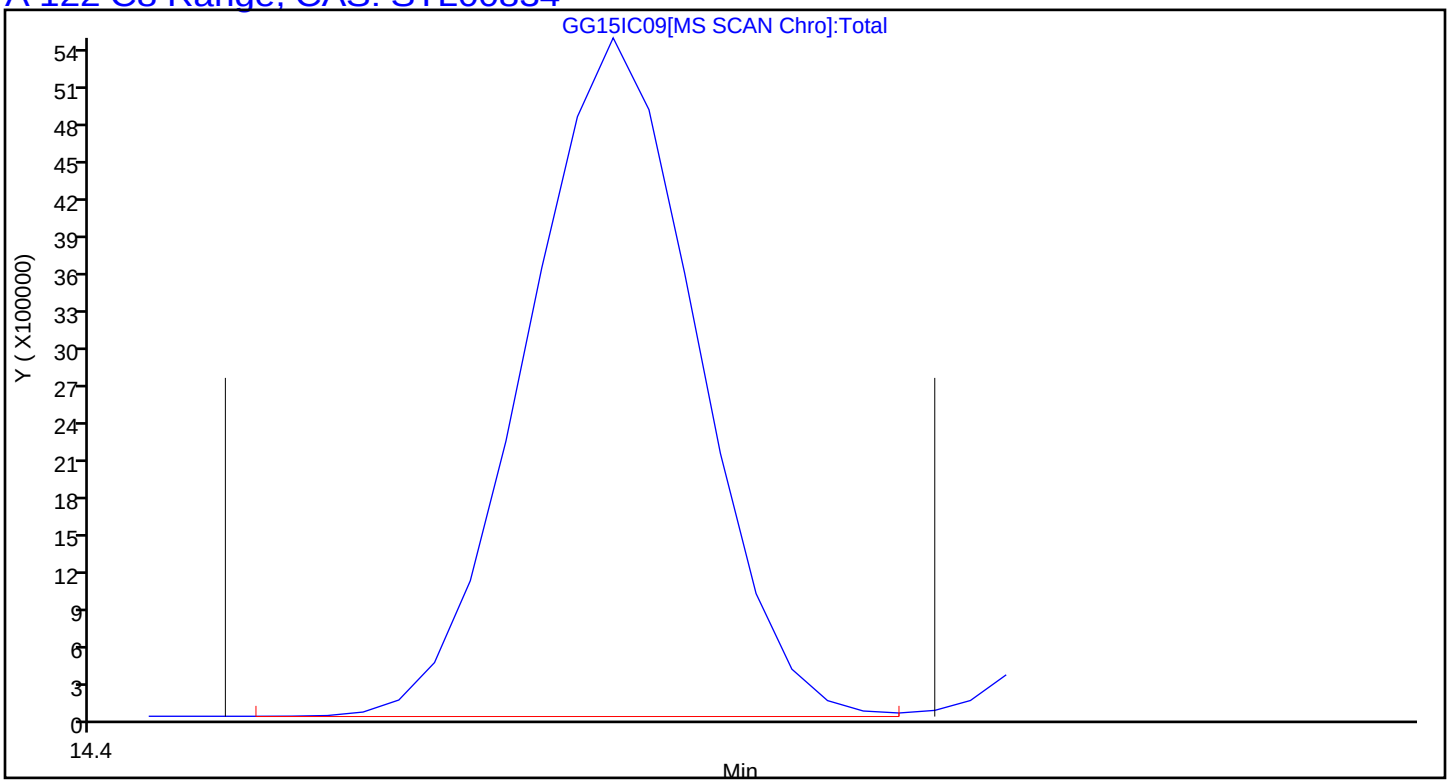
Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC09.D				
Injection Date:	15-Jul-2020 14:28:30	Instrument ID:	MG		
Lims ID:	IC L9				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	15	Worklist Smp#:	4
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 122 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC08.D
Lims ID: IC L8
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 15-Jul-2020 15:55:30 ALS Bottle#: 15 Worklist Smp#: 6
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016031-006
Misc. Info.: 306866
Operator ID: HMT Instrument ID: MG
Sublist: chrom-MG_TO15*sub17

Method: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 16-Jul-2020 15:14:46 Calib Date: 15-Jul-2020 22:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1066

First Level Reviewer: barlozhetskayaa Date: 16-Jul-2020 15:03:06

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.844	8.843	0.001	95	205620	4.00	4.00	
* 2 1,4-Difluorobenzene	114	11.028	11.026	0.002	96	1685175	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.757	15.754	0.003	91	1632924	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.396	17.397	-0.001	81	1373408	4.00	4.14	
6 Chlorodifluoromethane	51	3.705	3.708	-0.003	96	808438	4.00	3.87	
7 Propene	41	3.715	3.719	-0.004	99	513182	4.00	4.33	
8 Dichlorodifluoromethane	85	3.769	3.770	-0.001	100	1497719	4.00	3.99	
9 Chloromethane	52	3.953	3.952	0.001	98	138821	4.00	3.88	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.958	3.960	-0.002	96	775546	4.00	3.99	
11 Acetaldehyde	44	4.104	4.111	-0.007	95	787161	20.0	17.3	
12 Vinyl chloride	62	4.120	4.122	-0.002	99	549991	4.00	3.91	
13 Butane	43	4.212	4.210	0.002	86	761829	4.00	3.93	
14 Butadiene	54	4.206	4.210	-0.004	69	390687	4.00	3.94	
15 Bromomethane	94	4.530	4.531	-0.001	98	471335	4.00	4.02	
16 Chloroethane	64	4.670	4.673	-0.003	98	266623	4.00	3.95	
17 Ethanol	31	4.783	4.804	-0.021	98	807634	20.0	21.5	
18 Vinyl bromide	106	4.972	4.975	-0.003	98	419720	4.00	4.10	
19 2-Methylbutane	43	5.026	5.025	0.001	90	489230	4.00	3.91	
20 Trichlorofluoromethane	101	5.247	5.246	0.001	99	1475791	4.00	4.00	
21 Acrolein	56	5.258	5.263	-0.005	93	86031	4.00	3.62	
22 Acetonitrile	40	5.322	5.322	0.000	98	126158	4.00	3.60	
23 Acetone	58	5.366	5.385	-0.019	98	416606	12.0	9.51	
24 Pentane	72	5.468	5.467	0.001	99	92879	4.00	4.01	
25 Isopropyl alcohol	45	5.473	5.507	-0.034	96	1175696	12.0	10.9	
26 Ethyl ether	31	5.630	5.650	-0.020	91	296840	4.00	3.58	
27 1,1-Dichloroethene	96	5.948	5.951	-0.003	94	406439	4.00	4.22	
28 Acrylonitrile	53	6.056	6.061	-0.005	96	236547	4.00	3.77	
30 2-Methyl-2-propanol	59	6.077	6.136	-0.059	94	649174	4.00	3.91	
29 1,1,2-Trichloro-1,2,2-trifluoroe	101	6.131	6.129	0.002	94	902182	4.00	4.19	
31 Methylene Chloride	84	6.298	6.299	-0.001	94	476658	4.00	4.23	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.315	6.313	0.002	99	409790	4.00	4.20	
33 Carbon disulfide	76	6.460	6.462	-0.002	99	1363476	4.00	4.19	
34 trans-1,2-Dichloroethene	96	7.107	7.109	-0.002	95	444268	4.00	4.14	
35 2-Methylpentane	43	7.129	7.129	0.000	93	1045667	4.00	4.01	
36 Methyl tert-butyl ether	73	7.242	7.266	-0.024	96	1079721	4.00	3.60	
37 1,1-Dichloroethane	63	7.528	7.528	0.000	100	929825	4.00	3.92	
38 Vinyl acetate	43	7.636	7.641	-0.005	100	861733	4.00	3.70	
39 2-Butanone (MEK)	72	8.083	8.102	-0.019	98	164454	4.00	3.29	
40 Hexane	56	8.110	8.111	-0.001	93	371862	4.00	3.97	
41 Isopropyl ether	45	8.272	8.289	-0.017	96	1106058	4.00	3.45	
42 cis-1,2-Dichloroethene	96	8.515	8.514	0.001	98	452709	4.00	4.15	
43 Ethyl acetate	43	8.698	8.715	-0.017	99	663392	4.00	3.30	
44 Chloroform	83	8.860	8.857	0.003	96	1096869	4.00	4.01	
45 Tert-butyl ethyl ether	59	8.946	8.969	-0.023	95	1147203	4.00	3.53	
46 Tetrahydrofuran	42	9.259	9.287	-0.028	92	382270	4.00	3.35	
47 1,1,1-Trichloroethane	97	9.884	9.884	0.000	95	1197930	4.00	4.06	
48 1,2-Dichloroethane	62	9.992	9.992	0.000	99	753828	4.00	4.05	
51 n-Butanol	31	10.477	10.524	-0.047	67	130076	4.00	3.98	
49 Cyclohexane	69	10.488	10.488	0.000	75	263114	4.00	4.29	
50 Benzene	78	10.483	10.483	0.000	95	1440140	4.00	4.14	
52 Carbon tetrachloride	117	10.510	10.508	0.002	96	1173167	4.00	4.89	
53 2,3-Dimethylpentane	71	10.607	10.606	0.001	90	377710	4.00	4.21	
54 Thiophene	84	10.758	10.756	0.002	96	770961	4.00	4.19	
55 Isooctane	57	11.249	11.250	-0.001	98	2423728	4.00	4.12	
56 n-Heptane	71	11.626	11.624	0.002	89	551982	4.00	4.19	
57 1,2-Dichloropropane	63	11.702	11.701	0.001	89	491819	4.00	3.75	
58 Trichloroethene	130	11.739	11.739	0.000	90	502158	4.00	4.27	
59 Dibromomethane	93	11.820	11.820	0.000	86	557019	4.00	4.04	
60 Dichlorobromomethane	83	11.971	11.967	0.004	98	1102256	4.00	4.60	
61 1,4-Dioxane	88	11.987	12.018	-0.031	91	150131	4.00	3.81	
62 Methyl methacrylate	41	12.063	12.070	-0.007	96	427105	4.00	3.52	
63 Methylcyclohexane	83	12.510	12.507	0.003	96	907797	4.00	4.18	
64 4-Methyl-2-pentanone (MIBK)	43	12.915	12.933	-0.018	97	719955	4.00	3.42	
65 cis-1,3-Dichloropropene	75	12.969	12.967	0.002	93	761819	4.00	4.19	
66 trans-1,3-Dichloropropene	75	13.659	13.661	-0.002	95	677141	4.00	4.01	
67 Toluene	91	13.788	13.786	0.002	94	1338570	4.00	3.78	
68 1,1,2-Trichloroethane	83	13.859	13.859	-0.001	97	410239	4.00	3.81	
69 2-Hexanone	58	14.252	14.266	-0.014	94	379734	4.00	3.57	
70 n-Octane	85	14.479	14.479	0.000	91	537611	4.00	4.14	
71 Chlorodibromomethane	129	14.560	14.562	-0.002	97	809979	4.00	4.30	
72 Ethylene Dibromide	107	14.851	14.852	-0.001	98	656699	4.00	3.93	
73 Tetrachloroethene	129	14.932	14.929	0.003	91	474507	4.00	3.92	
75 Chlorobenzene	112	15.805	15.802	0.003	88	957998	4.00	3.75	
74 2,3-Dimethylheptane	43	15.827	15.824	0.003	93	1543376	4.00	3.79	
78 Ethylbenzene	91	16.091	16.092	-0.001	99	1775083	4.00	3.81	
79 m-Xylene & p-Xylene	91	16.253	16.254	-0.001	100	2837114	8.00	7.66	
80 n-Nonane	57	16.673	16.676	-0.003	90	972283	4.00	3.84	
81 Bromoform	173	16.700	16.700	0.000	93	717985	4.00	4.99	
82 Styrene	104	16.716	16.718	-0.002	97	929210	4.00	4.28	
83 o-Xylene	91	16.781	16.780	0.001	97	1466374	4.00	3.74	
84 1,1,2,2-Tetrachloroethane	83	17.099	17.101	-0.002	99	933008	4.00	3.58	
85 1,2,3-Trichloropropane	110	17.261	17.260	0.001	99	275495	4.00	3.60	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
86 Isopropylbenzene	105	17.369	17.367	0.002	97	1812280	4.00	3.64	
87 N-Propylbenzene	120	17.908	17.907	0.001	98	438717	4.00	3.54	
88 2-Chlorotoluene	126	17.951	17.951	0.000	96	428375	4.00	3.75	
89 4-Ethyltoluene	105	18.054	18.056	-0.002	98	1680195	4.00	3.51	
90 1,3,5-Trimethylbenzene	120	18.135	18.131	0.004	91	660577	4.00	3.54	
92 Alpha Methyl Styrene	118	18.361	18.361	0.000	84	651651	4.00	4.20	
93 n-Decane	57	18.420	18.420	0.000	92	1062382	4.00	3.57	
94 tert-Butylbenzene	119	18.555	18.554	0.001	91	1516160	4.00	3.75	
95 1,2,4-Trimethylbenzene	105	18.566	18.567	-0.001	96	1493254	4.00	3.47	
96 sec-Butylbenzene	105	18.819	18.821	-0.002	98	2150499	4.00	3.45	
97 1,3-Dichlorobenzene	146	18.836	18.836	0.000	97	901583	4.00	4.04	
98 Benzyl chloride	91	18.911	18.909	0.002	97	1367829	4.00	4.03	
99 1,4-Dichlorobenzene	146	18.922	18.922	0.000	90	884085	4.00	3.91	
100 4-Isopropyltoluene	119	18.981	18.983	-0.002	97	1665288	4.00	3.46	
101 1,2,3-Trimethylbenzene	105	19.035	19.036	-0.001	99	1495110	4.00	3.88	
102 Butylcyclohexane	83	19.089	19.091	-0.002	95	1442074	4.00	3.73	
103 2,3-Dihydroindene	117	19.278	19.279	-0.001	92	1344704	4.00	3.90	
104 1,2-Dichlorobenzene	146	19.278	19.280	-0.002	83	881407	4.00	3.87	
106 Indene	116	19.407	19.409	-0.002	90	1180841	4.00	4.01	
105 n-Butylbenzene	91	19.413	19.414	-0.001	97	1855288	4.00	3.41	
107 Undecane	57	19.725	19.726	-0.001	94	1076844	4.00	3.35	
108 1,2-Dibromo-3-Chloropropane	157	19.876	19.877	-0.001	89	435714	4.00	4.91	
109 1,2,4,5-Tetramethylbenzene	119	20.168	20.165	0.003	96	1611182	4.00	3.80	
110 Dodecane	57	20.777	20.778	-0.001	96	955266	4.00	3.46	
111 1,2,4-Trichlorobenzene	180	20.971	20.973	-0.002	93	713366	4.00	4.25	
112 Naphthalene	128	21.111	21.112	-0.001	99	1706005	4.00	3.95	
113 Hexachlorobutadiene	225	21.322	21.320	0.002	95	818788	4.00	4.15	
114 1,2,3-Trichlorobenzene	180	21.386	21.388	-0.002	94	725748	4.00	4.53	
115 2-Methylnaphthalene	142	22.157	22.158	-0.001	98	1250682	4.00	5.00	
116 1-Methylnaphthalene	142	22.330	22.333	-0.003	98	1447360	4.00	4.86	
A 122 C8 Range	1	14.473	(14.420-14.527)		0	4726851	4.00	3.93	
S 123 1,2-Dichloroethene, Total	1				0		8.00	8.29	
S 124 Xylenes, Total	100				0		12.0	11.4	

Reagents:

40L9DQP_00018	Amount Added: 100.00	Units: mL	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

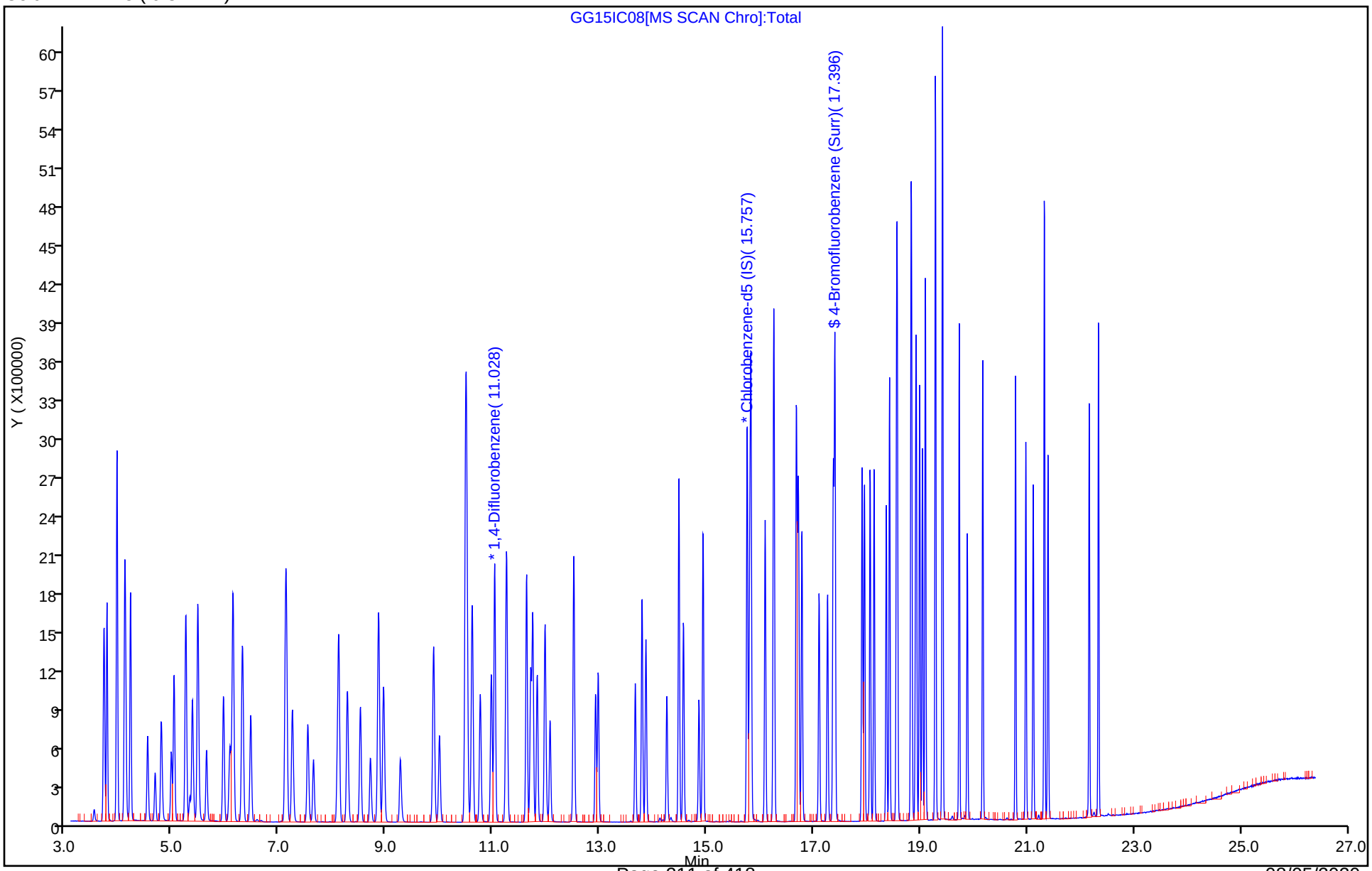
Report Date: 16-Jul-2020 15:14:48 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC08.D

Injection Date:	15-Jul-2020 15:55:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	IC L8			Worklist Smp#:	6
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

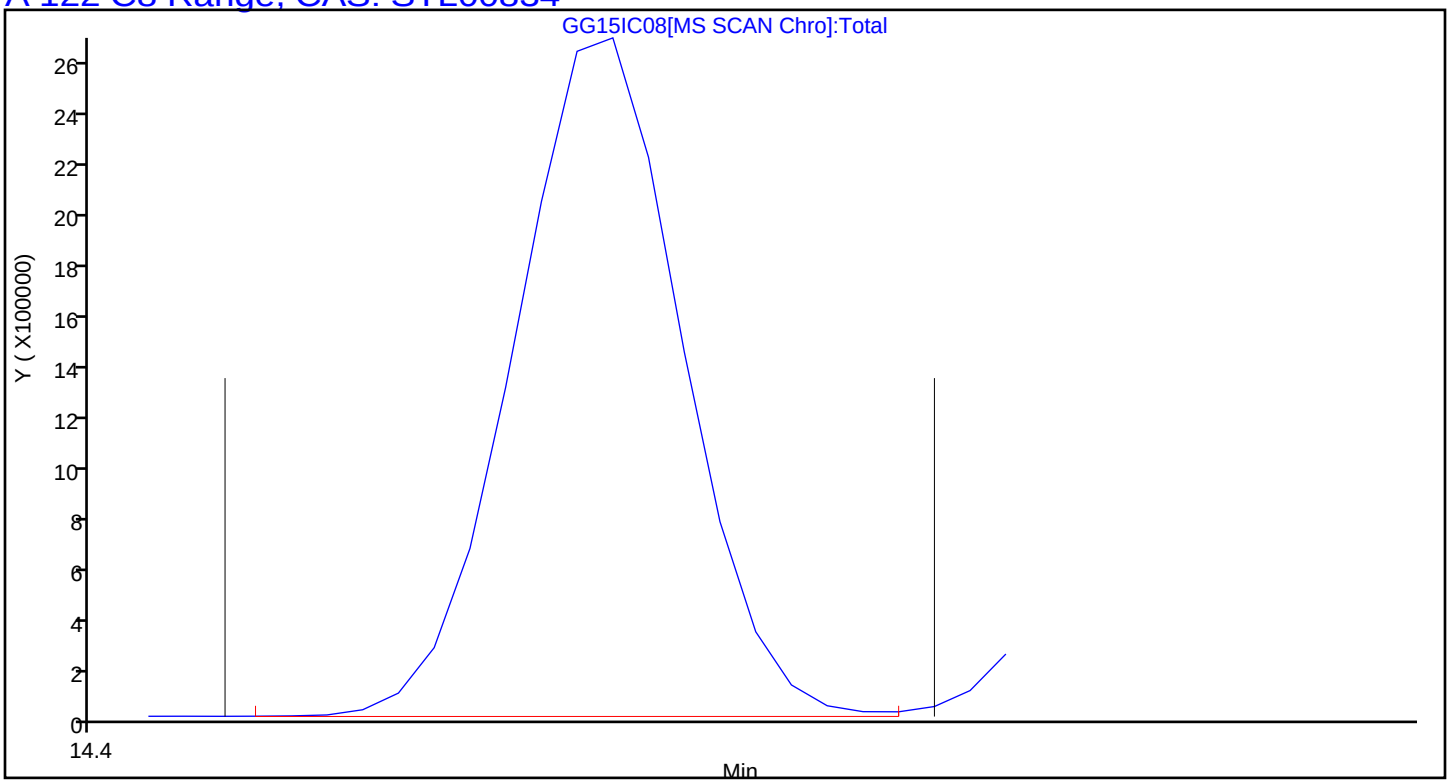


Report Date: 16-Jul-2020 15:14:48 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC08.D				
Injection Date:	15-Jul-2020 15:55:30	Instrument ID:	MG		
Lims ID:	IC L8				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	15	Worklist Smp#:	6
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 122 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC01.D
Lims ID: IC L1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 15-Jul-2020 17:25:30 ALS Bottle#: 1 Worklist Smp#: 8
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016031-008
Misc. Info.: 307387
Operator ID: HMT Instrument ID: MG
Sublist: chrom-MG_TO15*sub17

Method: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 16-Jul-2020 15:14:54 Calib Date: 15-Jul-2020 22:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1066

First Level Reviewer: tajh Date: 16-Jul-2020 09:10:43

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.838	8.843	-0.005	95	188733	4.00	4.00	
* 2 1,4-Difluorobenzene	114	11.022	11.026	-0.004	96	1683125	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.751	15.754	-0.003	92	1504972	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.396	17.397	-0.001	79	1177868	4.00	3.85	
6 Chlorodifluoromethane	51	3.710	3.708	0.002	34	5891	0.0200	0.0307	
7 Propene	41	3.721	3.719	0.002	98	87625	0.0200	-0.3824	
8 Dichlorodifluoromethane	85	3.769	3.770	-0.001	99	8239	0.0200	0.0239	
9 Chloromethane	52	3.947	3.952	-0.005	57	1539	0.0200	0.0469	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.963	3.960	0.003	95	3962	0.0200	0.0222	
11 Acetaldehyde	44	4.120	4.111	0.009	92	16708	0.1000	0.4005	
12 Vinyl chloride	62	4.120	4.122	-0.002	39	2928	0.0200	0.0227	
14 Butadiene	54	4.212	4.210	0.002	66	1993	0.0200	0.0219	
13 Butane	43	4.212	4.210	0.002	86	5332	0.0200	0.0300	
15 Bromomethane	94	4.530	4.531	-0.001	94	2608	0.0200	0.0242	
16 Chloroethane	64	4.675	4.673	0.002	94	1605	0.0200	0.0259	
17 Ethanol	31	4.821	4.804	0.017	95	5398	0.1000	0.1645	
18 Vinyl bromide	106	4.972	4.975	-0.003	96	2028	0.0200	0.0216	
19 2-Methylbutane	43	5.020	5.025	-0.005	85	4028	0.0200	0.0351	
20 Trichlorofluoromethane	101	5.247	5.246	0.001	98	7889	0.0200	0.0233	
21 Acrolein	56	5.268	5.263	0.005	39	786	0.0200	0.0360	
23 Acetone	58	5.409	5.385	0.024	96	6294	0.0600	0.1566	
24 Pentane	72	5.479	5.467	0.012	76	526	0.0200	0.0248	
25 Isopropyl alcohol	45	5.543	5.507	0.036	99	7722	0.0600	0.0780	
26 Ethyl ether	31	5.673	5.650	0.023	57	1512	0.0200	0.0199	
27 1,1-Dichloroethene	96	5.948	5.951	-0.003	92	2182	0.0200	0.0247	
28 Acrylonitrile	53	6.061	6.061	0.000	96	1359	0.0200	0.0236	
30 2-Methyl-2-propanol	59	6.201	6.136	0.065	96	4367	0.0200	0.0287	
29 1,1,2-Trichloro-1,2,2-trifluoroe	101	6.120	6.129	-0.009	91	4744	0.0200	0.0240	
31 Methylene Chloride	84	6.298	6.299	-0.001	95	78775	0.0200	0.0703	
32 3-Chloro-1-propene	39	6.309	6.313	-0.004	89	3094	0.0200	0.0346	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
33 Carbon disulfide	76	6.460	6.462	-0.002	99	7315	0.0200	0.0245	
34 trans-1,2-Dichloroethene	96	7.107	7.109	-0.002	93	2179	0.0200	0.0221	
35 2-Methylpentane	43	7.129	7.129	0.000	92	5778	0.0200	0.0242	
36 Methyl tert-butyl ether	73	7.307	7.266	0.041	94	5326	0.0200	0.0194	
37 1,1-Dichloroethane	63	7.517	7.528	-0.011	98	5107	0.0200	0.0235	
38 Vinyl acetate	43	7.652	7.641	0.011	55	3852	0.0200	0.0180	
39 2-Butanone (MEK)	72	8.132	8.102	0.030	82	1031	0.0200	0.0225	
40 Hexane	56	8.105	8.111	-0.006	80	2177	0.0200	0.0253	
41 Isopropyl ether	45	8.315	8.289	0.026	93	5704	0.0200	0.0194	
42 cis-1,2-Dichloroethene	96	8.504	8.514	-0.010	97	2382	0.0200	0.0238	
43 Ethyl acetate	43	8.741	8.715	0.026	90	3284	0.0200	0.0178	
44 Chloroform	83	8.849	8.857	-0.008	28	6171	0.0200	0.0246	
45 Tert-butyl ethyl ether	59	9.000	8.969	0.031	96	5155	0.0200	0.0173	
46 Tetrahydrofuran	42	9.329	9.287	0.042	87	2016	0.0200	0.0193	
47 1,1,1-Trichloroethane	97	9.884	9.884	0.000	94	5872	0.0200	0.0217	
48 1,2-Dichloroethane	62	9.987	9.992	-0.005	96	4278	0.0200	0.0230	
51 n-Butanol	31	10.564	10.524	0.040	73	2219	0.0200	0.0679	
50 Benzene	78	10.477	10.483	-0.006	96	9262	0.0200	0.0267	
49 Cyclohexane	69	10.488	10.488	0.000	71	1224	0.0200	0.0200	
52 Carbon tetrachloride	117	10.504	10.508	-0.004	96	4682	0.0200	0.0195	
53 2,3-Dimethylpentane	71	10.607	10.606	0.001	88	1951	0.0200	0.0217	
54 Thiophene	84	10.747	10.756	-0.009	95	4187	0.0200	0.0228	
55 Isooctane	57	11.249	11.250	-0.001	98	13544	0.0200	0.0231	
56 n-Heptane	71	11.615	11.624	-0.009	88	2858	0.0200	0.0217	
57 1,2-Dichloropropane	63	11.696	11.701	-0.005	84	3081	0.0200	0.0235	
58 Trichloroethene	130	11.734	11.739	-0.005	86	2656	0.0200	0.0226	
59 Dibromomethane	93	11.820	11.820	0.000	81	3386	0.0200	0.0246	
60 Dichlorobromomethane	83	11.955	11.967	-0.012	97	4997	0.0200	0.0209	
61 1,4-Dioxane	88	12.057	12.018	0.039	20	431	0.0200	0.0109	
62 Methyl methacrylate	41	12.074	12.070	0.004	93	1861	0.0200	0.0154	
63 Methylcyclohexane	83	12.500	12.507	-0.007	95	4357	0.0200	0.0292	
64 4-Methyl-2-pentanone (MIBK)	43	12.958	12.933	0.025	79	3453	0.0200	0.0164	
65 cis-1,3-Dichloropropene	75	12.963	12.967	-0.004	95	3968	0.0200	0.0219	
66 trans-1,3-Dichloropropene	75	13.659	13.661	-0.002	95	3349	0.0200	0.0215	
67 Toluene	91	13.783	13.786	-0.003	96	7507	0.0200	0.0230	
68 1,1,2-Trichloroethane	83	13.858	13.859	-0.001	92	2025	0.0200	0.0204	
69 2-Hexanone	58	14.279	14.266	0.013	46	1058	0.0200	0.0108	
70 n-Octane	85	14.479	14.479	0.000	89	2314	0.0200	0.0194	
71 Chlorodibromomethane	129	14.559	14.562	-0.003	95	3222	0.0200	0.0186	
72 Ethylene Dibromide	107	14.851	14.852	-0.001	95	3699	0.0200	0.0240	
73 Tetrachloroethene	129	14.932	14.929	0.003	87	2765	0.0200	0.0248	
75 Chlorobenzene	112	15.800	15.802	-0.002	92	5407	0.0200	0.0230	
74 2,3-Dimethylheptane	43	15.821	15.824	-0.003	95	8286	0.0200	0.0221	
78 Ethylbenzene	91	16.091	16.092	-0.001	97	8557	0.0200	0.0200	
79 m-Xylene & p-Xylene	91	16.253	16.254	-0.001	99	13322	0.0400	0.0390	
80 n-Nonane	57	16.679	16.676	0.003	89	4648	0.0200	0.0199	
81 Bromoform	173	16.695	16.700	-0.005	83	2163	0.0200	0.0163	
82 Styrene	104	16.722	16.718	0.004	92	3256	0.0200	0.0163	
83 o-Xylene	91	16.776	16.780	-0.004	96	7193	0.0200	0.0199	
84 1,1,2,2-Tetrachloroethane	83	17.099	17.101	-0.002	95	4182	0.0200	0.0174	
85 1,2,3-Trichloropropane	110	17.261	17.260	0.001	94	1281	0.0200	0.0182	
86 Isopropylbenzene	105	17.364	17.367	-0.003	87	9332	0.0200	0.0203	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
87 N-Propylbenzene	120	17.908	17.907	0.001	97	1805	0.0200	0.0158	
88 2-Chlorotoluene	126	17.951	17.951	0.000	95	1946	0.0200	0.0185	
89 4-Ethyltoluene	105	18.054	18.056	-0.002	97	7505	0.0200	0.0170	
90 1,3,5-Trimethylbenzene	120	18.124	18.131	-0.007	89	2414	0.0200	0.0140	
92 Alpha Methyl Styrene	118	18.361	18.361	0.000	84	2077	0.0200	0.0145	
93 n-Decane	57	18.420	18.420	0.000	92	5258	0.0200	0.0192	
94 tert-Butylbenzene	119	18.550	18.554	-0.004	85	6322	0.0200	0.0170	
95 1,2,4-Trimethylbenzene	105	18.566	18.567	-0.001	94	6457	0.0200	0.0163	
96 sec-Butylbenzene	105	18.819	18.821	-0.002	97	8893	0.0200	0.0155	
97 1,3-Dichlorobenzene	146	18.836	18.836	0.000	84	4536	0.0200	0.0220	
98 Benzyl chloride	91	18.911	18.909	0.002	86	6289	0.0200	0.0201	
99 1,4-Dichlorobenzene	146	18.922	18.922	0.000	83	4826	0.0200	0.0232	
100 4-Isopropyltoluene	119	18.976	18.983	-0.007	94	7160	0.0200	0.0161	
101 1,2,3-Trimethylbenzene	105	19.035	19.036	-0.001	97	6806	0.0200	0.0231	
102 Butylcyclohexane	83	19.089	19.091	-0.002	93	6992	0.0200	0.0196	
103 2,3-Dihydroindene	117	19.272	19.279	-0.007	90	6309	0.0200	0.0199	
104 1,2-Dichlorobenzene	146	19.278	19.280	-0.002	81	4840	0.0200	0.0231	
106 Indene	116	19.407	19.409	-0.002	87	4801	0.0200	0.0177	
105 n-Butylbenzene	91	19.413	19.414	-0.001	95	8110	0.0200	0.0162	
107 Undecane	57	19.725	19.726	-0.001	91	5434	0.0200	0.0183	
108 1,2-Dibromo-3-Chloropropane	157	19.876	19.877	-0.001	83	1591	0.0200	0.0195	
109 1,2,4,5-Tetramethylbenzene	119	20.162	20.165	-0.003	93	8252	0.0200	0.0211	
110 Dodecane	57	20.777	20.778	-0.001	92	5753	0.0200	0.0226	
111 1,2,4-Trichlorobenzene	180	20.971	20.973	-0.002	89	5309	0.0200	0.0343	
112 Naphthalene	128	21.111	21.112	-0.001	98	16183	0.0200	0.0406	
113 Hexachlorobutadiene	225	21.316	21.320	-0.004	81	3508	0.0200	0.0193	
114 1,2,3-Trichlorobenzene	180	21.386	21.388	-0.002	89	5901	0.0200	0.0399	
115 2-Methylnaphthalene	142	22.163	22.158	0.005	97	14751	0.0200	0.0640	
116 1-Methylnaphthalene	142	22.335	22.333	0.002	97	18387	0.0200	0.0670	
A 122 C8 Range	1	14.466	(14.431-14.506)		0	26981	0.0200	0.0244	
S 123 1,2-Dichloroethene, Total	1				0		0.0400	0.0459	
S 124 Xylenes, Total	100				0		0.0600	0.0590	

Reagents:

40L1-3DQP_00028	Amount Added: 50.00	Units: mL	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

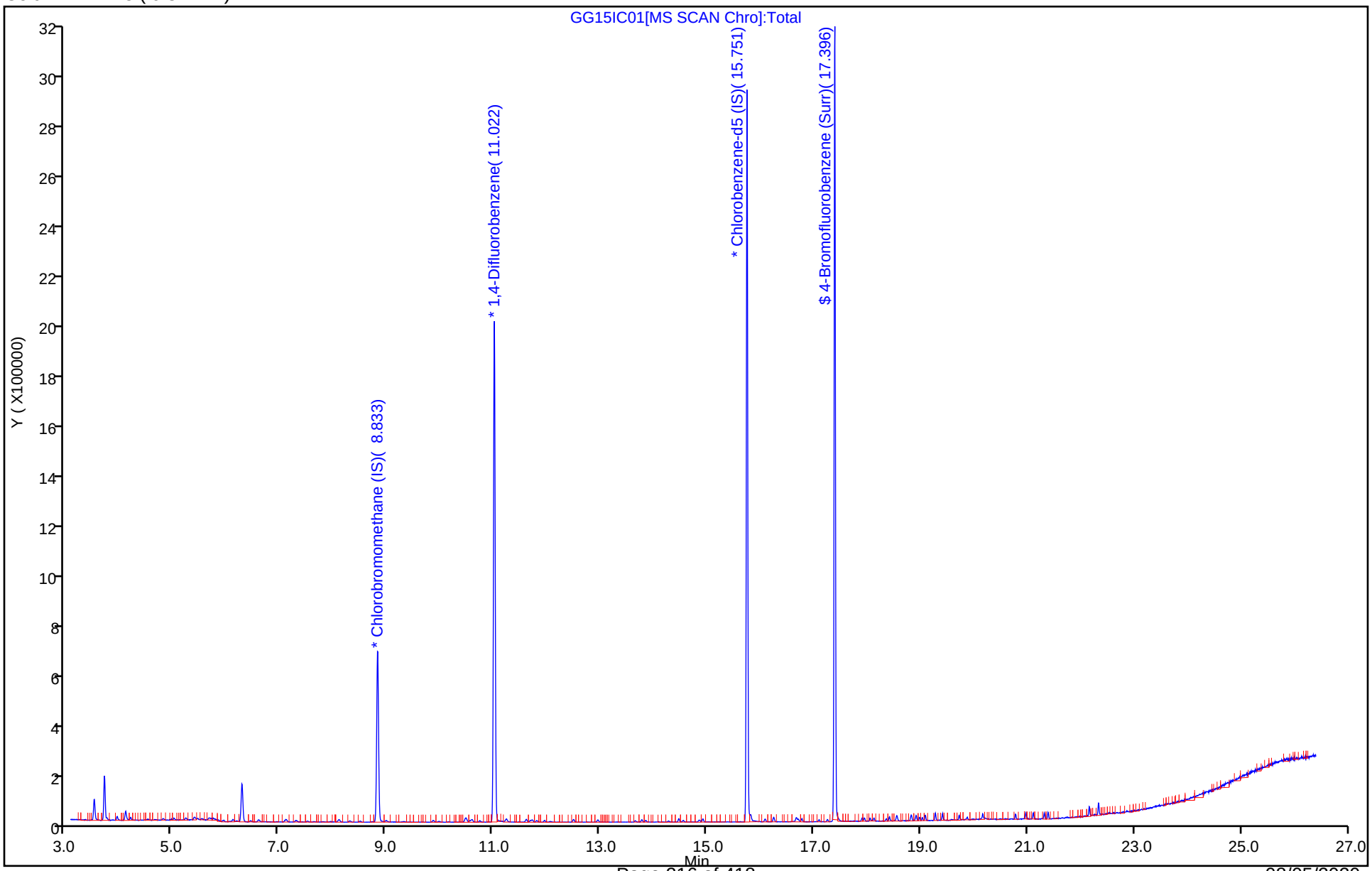
Report Date: 16-Jul-2020 15:14:55 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC01.D

Injection Date:	15-Jul-2020 17:25:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	IC L1			Worklist Smp#:	8
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

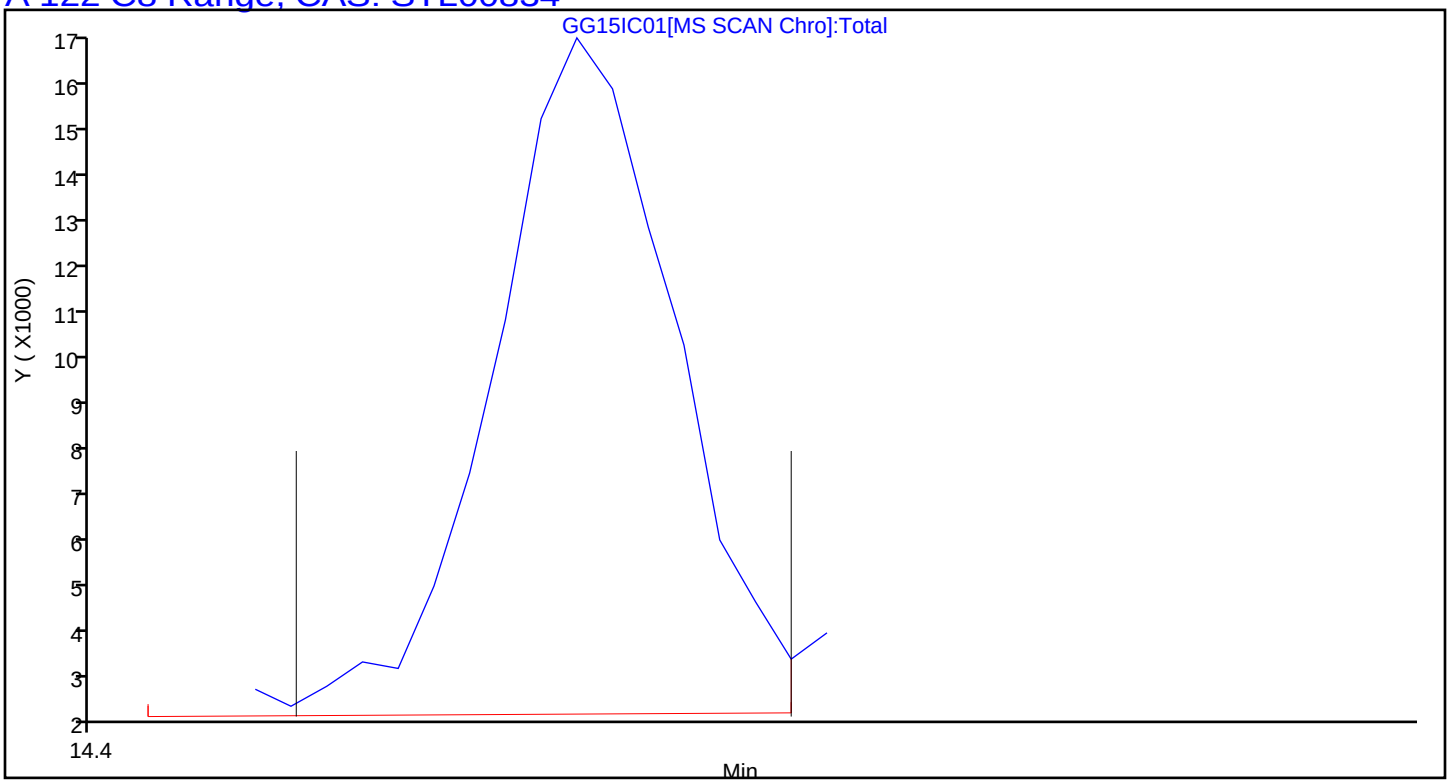


Report Date: 16-Jul-2020 15:14:55 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC01.D				
Injection Date:	15-Jul-2020 17:25:30	Instrument ID:	MG		
Lims ID:	IC L1				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	1	Worklist Smp#:	8
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 122 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC02.D
Lims ID: IC L2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 15-Jul-2020 18:11:30 ALS Bottle#: 1 Worklist Smp#: 9
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016031-009
Misc. Info.: 307387
Operator ID: HMT Instrument ID: MG
Sublist: chrom-MG_TO15*sub17

Method: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 16-Jul-2020 15:15:01 Calib Date: 15-Jul-2020 22:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1066

First Level Reviewer: tajh Date: 16-Jul-2020 09:11:43

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.855	8.843	0.011	95	186707	4.00	4.00	
* 2 1,4-Difluorobenzene	114	11.033	11.026	0.007	97	1681507	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.757	15.754	0.003	93	1489582	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.396	17.397	-0.001	77	1158753	4.00	3.83	
6 Chlorodifluoromethane	51	3.726	3.708	0.018	41	8363	0.0400	0.0441	
7 Propene	41	3.732	3.719	0.013	99	89964	0.0400	-0.3416	
8 Dichlorodifluoromethane	85	3.786	3.770	0.016	100	14062	0.0400	0.0413	
9 Chloromethane	52	3.964	3.952	0.012	52	1746	0.0400	0.0538	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.974	3.960	0.014	94	7003	0.0400	0.0397	
11 Acetaldehyde	44	4.142	4.111	0.031	96	27289	0.2000	0.6613	
12 Vinyl chloride	62	4.136	4.122	0.014	42	5029	0.0400	0.0394	
13 Butane	43	4.222	4.210	0.012	83	8820	0.0400	0.0501	
14 Butadiene	54	4.222	4.210	0.012	66	3691	0.0400	0.0410	
15 Bromomethane	94	4.546	4.531	0.015	95	4549	0.0400	0.0427	
16 Chloroethane	64	4.692	4.673	0.019	97	2683	0.0400	0.0437	
17 Ethanol	31	4.875	4.804	0.071	98	11429	0.2000	0.3518	
18 Vinyl bromide	106	4.988	4.975	0.013	97	3745	0.0400	0.0403	
19 2-Methylbutane	43	5.042	5.025	0.017	89	5834	0.0400	0.0514	
20 Trichlorofluoromethane	101	5.263	5.246	0.017	98	13686	0.0400	0.0409	
21 Acrolein	56	5.301	5.263	0.038	71	1610	0.0400	0.0745	
23 Acetone	58	5.436	5.385	0.051	95	13354	0.1200	0.3358	
24 Pentane	72	5.473	5.467	0.006	91	782	0.0400	0.0372	
25 Isopropyl alcohol	45	5.619	5.507	0.112	97	14094	0.1200	0.1439	
26 Ethyl ether	31	5.711	5.650	0.061	86	3389	0.0400	0.0450	
27 1,1-Dichloroethene	96	5.970	5.951	0.019	92	3811	0.0400	0.0436	
28 Acrylonitrile	53	6.083	6.061	0.022	94	2288	0.0400	0.0401	
29 1,1,2-Trichloro-1,2,2-trifluoroe	101	6.148	6.129	0.019	88	8002	0.0400	0.0410	
30 2-Methyl-2-propanol	59	6.304	6.136	0.168	39	7348	0.0400	0.0488	
31 Methylene Chloride	84	6.315	6.299	0.016	97	79898	0.0400	0.0933	
32 3-Chloro-1-propene	39	6.325	6.313	0.012	25	4838	0.0400	0.0546	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
33 Carbon disulfide	76	6.476	6.462	0.014	99	12522	0.0400	0.0424	
34 trans-1,2-Dichloroethene	96	7.118	7.109	0.009	95	3934	0.0400	0.0404	
35 2-Methylpentane	43	7.151	7.129	0.022	93	10514	0.0400	0.0444	
36 Methyl tert-butyl ether	73	7.345	7.266	0.079	96	10293	0.0400	0.0378	
37 1,1-Dichloroethane	63	7.539	7.528	0.011	99	9284	0.0400	0.0432	
38 Vinyl acetate	43	7.663	7.641	0.022	99	7627	0.0400	0.0361	
40 Hexane	56	8.132	8.111	0.021	86	3827	0.0400	0.0450	
39 2-Butanone (MEK)	72	8.159	8.102	0.057	99	2439	0.0400	0.0537	
41 Isopropyl ether	45	8.348	8.289	0.059	96	11349	0.0400	0.0390	
42 cis-1,2-Dichloroethene	96	8.531	8.514	0.017	97	3913	0.0400	0.0395	
43 Ethyl acetate	43	8.763	8.715	0.048	97	7211	0.0400	0.0395	
44 Chloroform	83	8.865	8.857	0.008	91	10100	0.0400	0.0407	
45 Tert-butyl ethyl ether	59	9.038	8.969	0.069	96	10991	0.0400	0.0372	
46 Tetrahydrofuran	42	9.356	9.287	0.069	93	4421	0.0400	0.0427	
47 1,1,1-Trichloroethane	97	9.890	9.884	0.006	97	10541	0.0400	0.0394	
48 1,2-Dichloroethane	62	10.003	9.992	0.011	95	6892	0.0400	0.0371	
50 Benzene	78	10.488	10.483	0.005	96	14684	0.0400	0.0423	
49 Cyclohexane	69	10.505	10.488	0.017	79	2241	0.0400	0.0366	
52 Carbon tetrachloride	117	10.515	10.508	0.007	94	8371	0.0400	0.0350	
51 n-Butanol	31	10.656	10.524	0.132	67	2440	0.0400	0.0747	
53 2,3-Dimethylpentane	71	10.612	10.606	0.006	90	3542	0.0400	0.0395	
54 Thiophene	84	10.763	10.756	0.007	98	6975	0.0400	0.0380	
55 Isooctane	57	11.260	11.250	0.010	98	22954	0.0400	0.0391	
56 n-Heptane	71	11.632	11.624	0.008	87	4854	0.0400	0.0369	
57 1,2-Dichloropropane	63	11.707	11.701	0.006	84	5158	0.0400	0.0395	
58 Trichloroethene	130	11.739	11.739	0.000	86	4307	0.0400	0.0367	
59 Dibromomethane	93	11.820	11.820	0.000	84	5214	0.0400	0.0379	
60 Dichlorobromomethane	83	11.977	11.967	0.010	95	8493	0.0400	0.0355	
61 1,4-Dioxane	88	12.090	12.018	0.072	50	1202	0.0400	0.0305	
62 Methyl methacrylate	41	12.095	12.070	0.025	93	3948	0.0400	0.0326	
63 Methylcyclohexane	83	12.511	12.507	0.004	91	7770	0.0400	0.0449	
64 4-Methyl-2-pentanone (MIBK)	43	12.980	12.933	0.047	92	6739	0.0400	0.0321	
65 cis-1,3-Dichloropropene	75	12.974	12.967	0.007	97	6149	0.0400	0.0339	
66 trans-1,3-Dichloropropene	75	13.670	13.661	0.009	95	5749	0.0400	0.0373	
67 Toluene	91	13.789	13.786	0.003	93	12112	0.0400	0.0375	
68 1,1,2-Trichloroethane	83	13.864	13.859	0.005	96	3743	0.0400	0.0381	
69 2-Hexanone	58	14.306	14.266	0.040	95	3275	0.0400	0.0338	
70 n-Octane	85	14.484	14.479	0.005	90	4243	0.0400	0.0359	
71 Chlorodibromomethane	129	14.565	14.562	0.003	94	5092	0.0400	0.0296	
72 Ethylene Dibromide	107	14.856	14.852	0.004	97	5632	0.0400	0.0370	
73 Tetrachloroethene	129	14.932	14.929	0.003	80	4072	0.0400	0.0368	
75 Chlorobenzene	112	15.805	15.802	0.003	87	8758	0.0400	0.0376	
74 2,3-Dimethylheptane	43	15.827	15.824	0.003	95	15168	0.0400	0.0409	
78 Ethylbenzene	91	16.091	16.092	-0.001	99	15154	0.0400	0.0357	
79 m-Xylene & p-Xylene	91	16.253	16.254	-0.001	98	22814	0.0800	0.0676	
80 n-Nonane	57	16.679	16.676	0.003	90	8497	0.0400	0.0368	
81 Bromoform	173	16.706	16.700	0.006	86	3360	0.0400	0.0256	
82 Styrene	104	16.717	16.718	-0.001	93	5968	0.0400	0.0301	
83 o-Xylene	91	16.781	16.780	0.001	97	12655	0.0400	0.0354	
84 1,1,2,2-Tetrachloroethane	83	17.105	17.101	0.004	97	8357	0.0400	0.0351	
85 1,2,3-Trichloropropane	110	17.256	17.260	-0.004	97	2358	0.0400	0.0338	
86 Isopropylbenzene	105	17.369	17.367	0.002	94	16547	0.0400	0.0364	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
87 N-Propylbenzene	120	17.908	17.907	0.001	98	3650	0.0400	0.0323	
88 2-Chlorotoluene	126	17.951	17.951	0.000	95	3379	0.0400	0.0324	
89 4-Ethyltoluene	105	18.059	18.056	0.003	97	14031	0.0400	0.0321	
90 1,3,5-Trimethylbenzene	120	18.135	18.131	0.004	89	5309	0.0400	0.0312	
92 Alpha Methyl Styrene	118	18.361	18.361	0.000	82	3884	0.0400	0.0274	
93 n-Decane	57	18.421	18.420	0.001	92	9346	0.0400	0.0344	
94 tert-Butylbenzene	119	18.555	18.554	0.001	85	12696	0.0400	0.0344	
95 1,2,4-Trimethylbenzene	105	18.566	18.567	-0.001	95	12361	0.0400	0.0314	
96 sec-Butylbenzene	105	18.820	18.821	-0.001	97	17709	0.0400	0.0311	
97 1,3-Dichlorobenzene	146	18.836	18.836	0.000	90	7514	0.0400	0.0369	
98 Benzyl chloride	91	18.911	18.909	0.002	96	8661	0.0400	0.0280	
99 1,4-Dichlorobenzene	146	18.922	18.922	0.000	85	7598	0.0400	0.0369	
100 4-Isopropyltoluene	119	18.987	18.983	0.004	95	13691	0.0400	0.0312	
101 1,2,3-Trimethylbenzene	105	19.035	19.036	-0.001	97	12355	0.0400	0.0424	
102 Butylcyclohexane	83	19.095	19.091	0.004	92	13075	0.0400	0.0371	
103 2,3-Dihydroindene	117	19.278	19.279	-0.001	91	10894	0.0400	0.0346	
104 1,2-Dichlorobenzene	146	19.283	19.280	0.003	79	7306	0.0400	0.0352	
106 Indene	116	19.407	19.409	-0.002	76	7735	0.0400	0.0288	
105 n-Butylbenzene	91	19.413	19.414	-0.001	96	15396	0.0400	0.0310	
107 Undecane	57	19.726	19.726	0.000	94	10848	0.0400	0.0369	
108 1,2-Dibromo-3-Chloropropane	157	19.877	19.877	-0.001	79	2387	0.0400	0.0295	
109 1,2,4,5-Tetramethylbenzene	119	20.168	20.165	0.003	93	12699	0.0400	0.0329	
110 Dodecane	57	20.782	20.778	0.004	94	9013	0.0400	0.0358	
111 1,2,4-Trichlorobenzene	180	20.977	20.973	0.004	87	6079	0.0400	0.0397	
112 Naphthalene	128	21.111	21.112	-0.001	98	17506	0.0400	0.0444	
113 Hexachlorobutadiene	225	21.316	21.320	-0.004	84	6011	0.0400	0.0334	
114 1,2,3-Trichlorobenzene	180	21.392	21.388	0.004	90	6294	0.0400	0.0430	
115 2-Methylnaphthalene	142	22.157	22.158	-0.001	96	11986	0.0400	0.0525	
116 1-Methylnaphthalene	142	22.335	22.333	0.002	96	15849	0.0400	0.0584	
A 122 C8 Range	1	14.474	(14.436-14.511)		0	42999	0.0400	0.0392	
S 123 1,2-Dichloroethene, Total	1				0		0.0800	0.0798	
S 124 Xylenes, Total	100				0		0.1200	0.1030	

Reagents:

40L1-3DQP_00028	Amount Added: 100.00	Units: mL	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

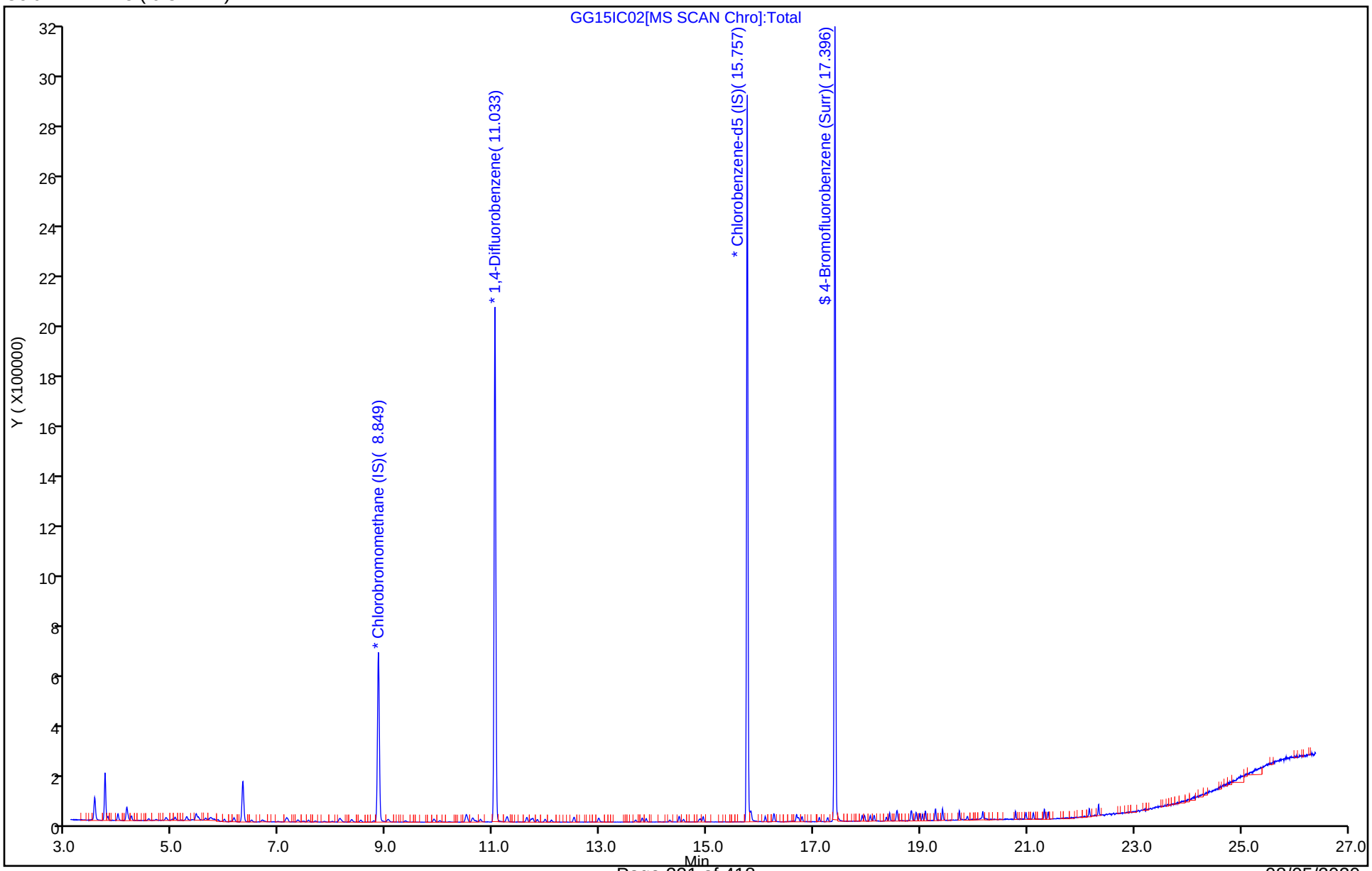
Report Date: 16-Jul-2020 15:15:02 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC02.D

Injection Date:	15-Jul-2020 18:11:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	IC L2			Worklist Smp#:	9
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

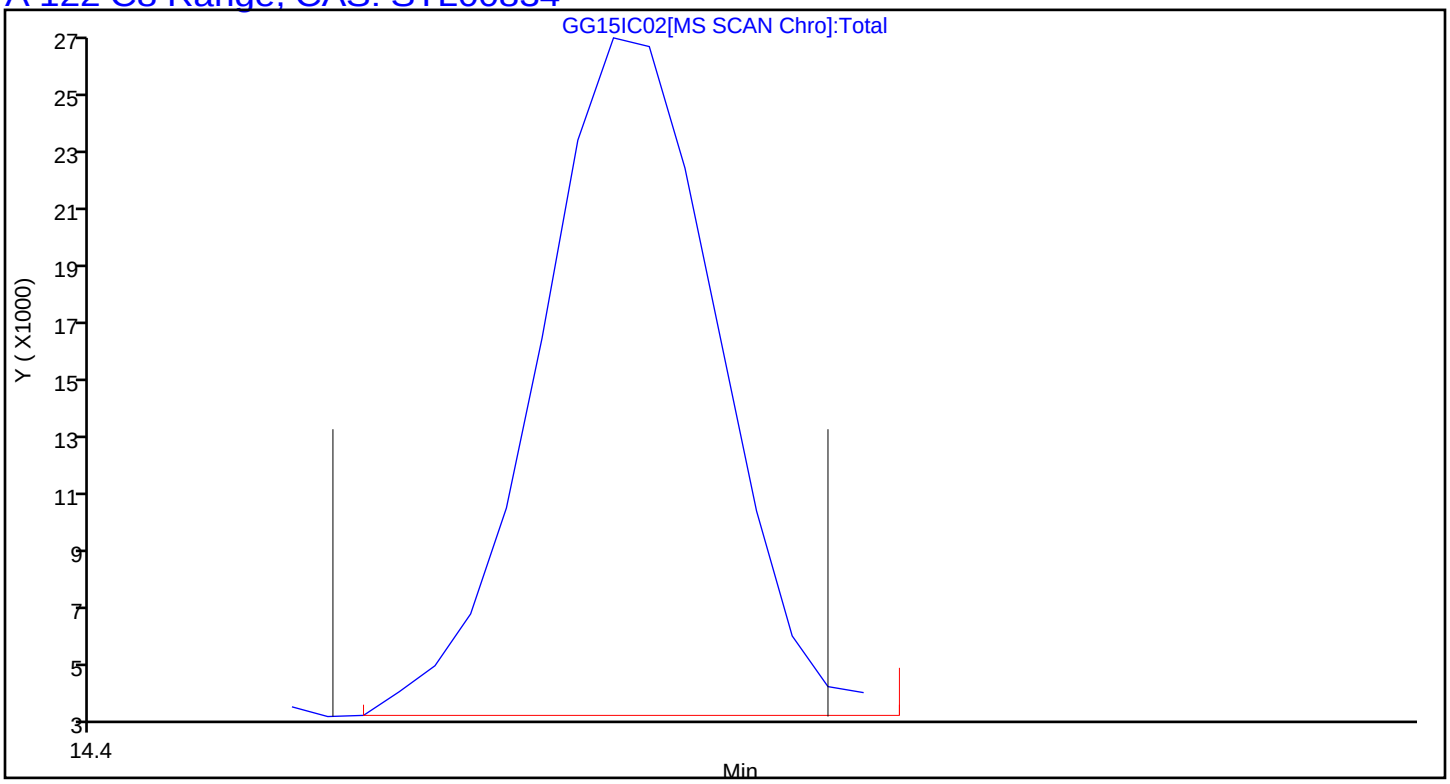


Report Date: 16-Jul-2020 15:15:02 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC02.D				
Injection Date:	15-Jul-2020 18:11:30	Instrument ID:	MG		
Lims ID:	IC L2				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	1	Worklist Smp#:	9
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 122 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC03.D
Lims ID: IC L3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 15-Jul-2020 18:58:30 ALS Bottle#: 1 Worklist Smp#: 10
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016031-010
Misc. Info.: 307387
Operator ID: HMT Instrument ID: MG
Sublist: chrom-MG_TO15*sub17

Method: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 16-Jul-2020 15:15:09 Calib Date: 15-Jul-2020 22:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1066

First Level Reviewer: tajh Date: 16-Jul-2020 09:12:15

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.838	8.843	-0.005	94	179523	4.00	4.00	
* 2 1,4-Difluorobenzene	114	11.022	11.026	-0.004	97	1461726	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.751	15.754	-0.003	93	1343515	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.396	17.397	-0.001	77	1053301	4.00	3.86	
6 Chlorodifluoromethane	51	3.710	3.708	0.002	96	15139	0.0800	0.0830	
7 Propene	41	3.715	3.719	-0.004	99	94406	0.0800	-0.2395	
8 Dichlorodifluoromethane	85	3.769	3.770	-0.001	100	27563	0.0800	0.0842	
9 Chloromethane	52	3.947	3.952	-0.005	58	3394	0.0800	0.1087	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.958	3.960	-0.002	96	14129	0.0800	0.0833	
12 Vinyl chloride	62	4.120	4.122	-0.002	39	10498	0.0800	0.0856	
11 Acetaldehyde	44	4.109	4.111	-0.002	92	50638	0.4000	1.28	
13 Butane	43	4.206	4.210	-0.004	86	16962	0.0800	0.1002	
14 Butadiene	54	4.206	4.210	-0.004	62	7467	0.0800	0.0862	
15 Bromomethane	94	4.530	4.531	-0.001	97	8885	0.0800	0.0868	
16 Chloroethane	64	4.670	4.673	-0.003	95	4976	0.0800	0.0843	
17 Ethanol	31	4.810	4.804	0.006	97	18622	0.4000	0.5959	
18 Vinyl bromide	106	4.972	4.975	-0.003	98	7364	0.0800	0.0824	
19 2-Methylbutane	43	5.020	5.025	-0.005	90	10343	0.0800	0.0948	
20 Trichlorofluoromethane	101	5.247	5.246	0.001	99	25985	0.0800	0.0808	
21 Acrolein	56	5.263	5.263	0.000	92	2655	0.0800	0.1278	
22 Acetonitrile	40	5.328	5.322	0.006	97	2743	0.0800	0.0896	
23 Acetone	58	5.392	5.385	0.007	98	23161	0.2400	0.6057	
24 Pentane	72	5.463	5.467	-0.004	97	1530	0.0800	0.0758	
25 Isopropyl alcohol	45	5.516	5.507	0.009	98	24168	0.2400	0.2566	
26 Ethyl ether	31	5.657	5.650	0.007	94	6065	0.0800	0.0838	
27 1,1-Dichloroethene	96	5.942	5.951	-0.009	93	6501	0.0800	0.0773	
28 Acrylonitrile	53	6.061	6.061	0.000	96	4538	0.0800	0.0828	
29 1,1,2-Trichloro-1,2,2-trifluoroe	101	6.120	6.129	-0.009	88	15386	0.0800	0.0819	
30 2-Methyl-2-propanol	59	6.158	6.136	0.022	94	13760	0.0800	0.0950	
31 Methylene Chloride	84	6.293	6.299	-0.006	97	78832	0.0800	0.1178	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.309	6.313	-0.004	32	7511	0.0800	0.0882	
33 Carbon disulfide	76	6.455	6.462	-0.007	99	22836	0.0800	0.0803	
34 trans-1,2-Dichloroethene	96	7.102	7.109	-0.007	95	7334	0.0800	0.0782	
35 2-Methylpentane	43	7.118	7.129	-0.011	94	19356	0.0800	0.0851	
36 Methyl tert-butyl ether	73	7.280	7.266	0.014	96	20750	0.0800	0.0793	
37 1,1-Dichloroethane	63	7.522	7.528	-0.006	99	17093	0.0800	0.0826	
38 Vinyl acetate	43	7.641	7.641	0.000	99	15629	0.0800	0.0769	
40 Hexane	56	8.110	8.111	-0.001	69	6513	0.0800	0.0797	
39 2-Butanone (MEK)	72	8.110	8.102	0.008	86	4643	0.0800	0.1064	
41 Isopropyl ether	45	8.299	8.289	0.010	94	22199	0.0800	0.0793	
42 cis-1,2-Dichloroethene	96	8.504	8.514	-0.010	98	7692	0.0800	0.0807	
43 Ethyl acetate	43	8.720	8.715	0.005	98	13833	0.0800	0.0788	
44 Chloroform	83	8.849	8.857	-0.008	93	20205	0.0800	0.0847	
45 Tert-butyl ethyl ether	59	8.978	8.969	0.009	96	22232	0.0800	0.0784	
46 Tetrahydrofuran	42	9.307	9.287	0.020	91	8395	0.0800	0.0844	
47 1,1,1-Trichloroethane	97	9.879	9.884	-0.005	94	20564	0.0800	0.0799	
48 1,2-Dichloroethane	62	9.987	9.992	-0.005	98	13192	0.0800	0.0816	
50 Benzene	78	10.477	10.483	-0.006	96	24475	0.0800	0.0812	
49 Cyclohexane	69	10.488	10.488	0.000	74	4244	0.0800	0.0797	
52 Carbon tetrachloride	117	10.504	10.508	-0.004	96	15888	0.0800	0.0764	
53 2,3-Dimethylpentane	71	10.601	10.606	-0.005	91	6414	0.0800	0.0823	
51 n-Butanol	31	10.553	10.524	0.029	56	3241	0.0800	0.1142	
54 Thiophene	84	10.747	10.756	-0.009	98	13497	0.0800	0.0845	
55 Isooctane	57	11.243	11.250	-0.007	98	42823	0.0800	0.0839	
56 n-Heptane	71	11.621	11.624	-0.003	90	9091	0.0800	0.0795	
57 1,2-Dichloropropane	63	11.696	11.701	-0.005	89	9930	0.0800	0.0874	
58 Trichloroethene	130	11.734	11.739	-0.005	86	8061	0.0800	0.0789	
59 Dibromomethane	93	11.815	11.820	-0.005	83	9330	0.0800	0.0780	
60 Dichlorobromomethane	83	11.960	11.967	-0.007	97	15895	0.0800	0.0765	
61 1,4-Dioxane	88	12.036	12.018	0.018	87	2210	0.0800	0.0646	
62 Methyl methacrylate	41	12.074	12.070	0.004	95	7521	0.0800	0.0715	
63 Methylcyclohexane	83	12.505	12.507	-0.002	94	14867	0.0800	0.0879	
65 cis-1,3-Dichloropropene	75	12.963	12.967	-0.004	97	12909	0.0800	0.0819	
64 4-Methyl-2-pentanone (MIBK)	43	12.942	12.933	0.009	98	14028	0.0800	0.0768	
66 trans-1,3-Dichloropropene	75	13.654	13.661	-0.007	97	10747	0.0800	0.0774	
67 Toluene	91	13.783	13.786	-0.003	94	23667	0.0800	0.0812	
68 1,1,2-Trichloroethane	83	13.853	13.859	-0.006	93	7133	0.0800	0.0805	
69 2-Hexanone	58	14.274	14.266	0.008	94	6772	0.0800	0.0774	
70 n-Octane	85	14.479	14.479	0.000	94	8629	0.0800	0.0809	
71 Chlorodibromomethane	129	14.559	14.562	-0.003	95	10817	0.0800	0.0698	
72 Ethylene Dibromide	107	14.851	14.852	-0.001	93	11135	0.0800	0.0810	
73 Tetrachloroethene	129	14.926	14.929	-0.003	86	7527	0.0800	0.0755	
75 Chlorobenzene	112	15.800	15.802	-0.002	92	17157	0.0800	0.0816	
74 2,3-Dimethylheptane	43	15.821	15.824	-0.003	95	28595	0.0800	0.0854	
78 Ethylbenzene	91	16.091	16.092	-0.001	99	29257	0.0800	0.0764	
79 m-Xylene & p-Xylene	91	16.253	16.254	-0.001	100	45725	0.1600	0.1501	
80 n-Nonane	57	16.673	16.676	-0.003	89	16373	0.0800	0.0787	
81 Bromoform	173	16.695	16.700	-0.005	88	7295	0.0800	0.0616	
82 Styrene	104	16.716	16.718	-0.002	95	11687	0.0800	0.0654	
83 o-Xylene	91	16.781	16.780	0.001	96	25083	0.0800	0.0778	
84 1,1,2,2-Tetrachloroethane	83	17.099	17.101	-0.002	97	17040	0.0800	0.0795	
85 1,2,3-Trichloropropane	110	17.261	17.260	0.001	98	4940	0.0800	0.0784	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
86 Isopropylbenzene	105	17.364	17.367	-0.003	98	30733	0.0800	0.0751	
87 N-Propylbenzene	120	17.908	17.907	0.001	98	7353	0.0800	0.0720	
88 2-Chlorotoluene	126	17.951	17.951	0.000	96	7282	0.0800	0.0775	
89 4-Ethyltoluene	105	18.054	18.056	-0.002	98	28757	0.0800	0.0729	
90 1,3,5-Trimethylbenzene	120	18.129	18.131	-0.002	90	10560	0.0800	0.0688	
92 Alpha Methyl Styrene	118	18.361	18.361	0.000	86	7888	0.0800	0.0618	
93 n-Decane	57	18.415	18.420	-0.005	92	19761	0.0800	0.0807	
94 tert-Butylbenzene	119	18.555	18.554	0.001	86	25204	0.0800	0.0757	
95 1,2,4-Trimethylbenzene	105	18.566	18.567	-0.001	96	24535	0.0800	0.0692	
96 sec-Butylbenzene	105	18.819	18.821	-0.002	97	35776	0.0800	0.0697	
97 1,3-Dichlorobenzene	146	18.830	18.836	-0.006	92	14955	0.0800	0.0814	
98 Benzyl chloride	91	18.906	18.909	-0.003	96	19143	0.0800	0.0686	
99 1,4-Dichlorobenzene	146	18.922	18.922	0.000	86	14629	0.0800	0.0787	
100 4-Isopropyltoluene	119	18.981	18.983	-0.002	94	26407	0.0800	0.0666	
101 1,2,3-Trimethylbenzene	105	19.035	19.036	-0.001	98	24859	0.0800	0.0943	
102 Butylcyclohexane	83	19.089	19.091	-0.002	89	24149	0.0800	0.0760	
103 2,3-Dihydroindene	117	19.278	19.279	-0.001	91	22495	0.0800	0.0793	
104 1,2-Dichlorobenzene	146	19.278	19.280	-0.002	81	14388	0.0800	0.0768	
106 Indene	116	19.407	19.409	-0.002	92	16141	0.0800	0.0666	
105 n-Butylbenzene	91	19.413	19.414	-0.001	96	30089	0.0800	0.0672	
107 Undecane	57	19.725	19.726	-0.001	95	22076	0.0800	0.0834	
108 1,2-Dibromo-3-Chloropropane	157	19.876	19.877	-0.001	80	4519	0.0800	0.0619	
109 1,2,4,5-Tetramethylbenzene	119	20.162	20.165	-0.003	95	24879	0.0800	0.0714	
110 Dodecane	57	20.777	20.778	-0.001	95	20902	0.0800	0.0921	
111 1,2,4-Trichlorobenzene	180	20.971	20.973	-0.002	89	10379	0.0800	0.0751	
112 Naphthalene	128	21.111	21.112	-0.001	98	29780	0.0800	0.0837	
113 Hexachlorobutadiene	225	21.322	21.320	0.002	85	11566	0.0800	0.0713	
114 1,2,3-Trichlorobenzene	180	21.386	21.388	-0.002	90	10782	0.0800	0.0817	
115 2-Methylnaphthalene	142	22.157	22.158	-0.001	96	19163	0.0800	0.0931	
116 1-Methylnaphthalene	142	22.335	22.333	0.002	98	22935	0.0800	0.0936	
A 122 C8 Range	1	14.463	(14.431-14.516)		0	81993	0.0800	0.0829	
S 123 1,2-Dichloroethene, Total	1				0		0.1600	0.1590	
S 124 Xylenes, Total	100				0		0.2400	0.2280	

Reagents:

40L1-3DQP_00028	Amount Added: 200.00	Units: mL	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

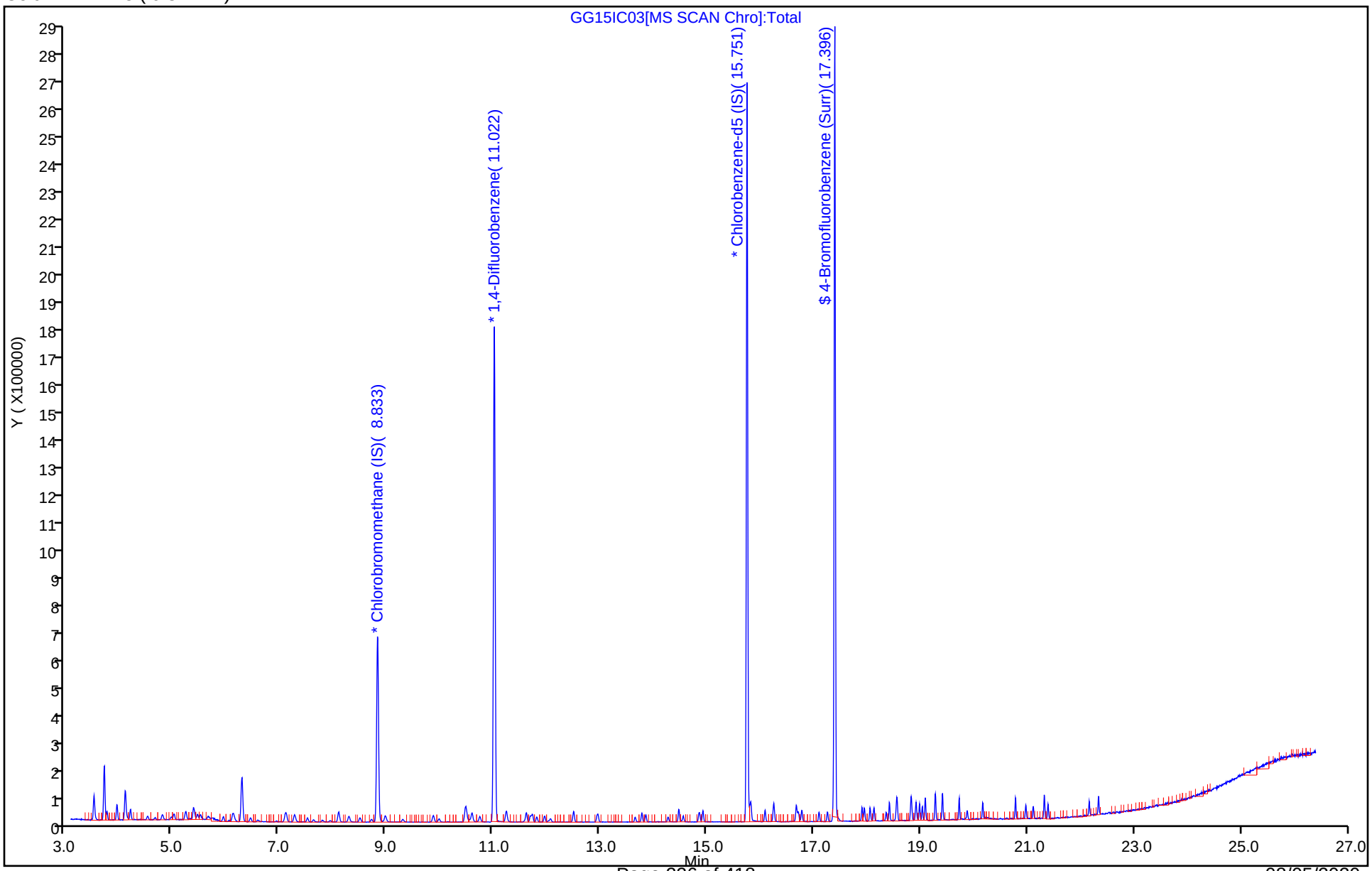
Report Date: 16-Jul-2020 15:15:10 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC03.D

Injection Date:	15-Jul-2020 18:58:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	IC L3			Worklist Smp#:	10
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

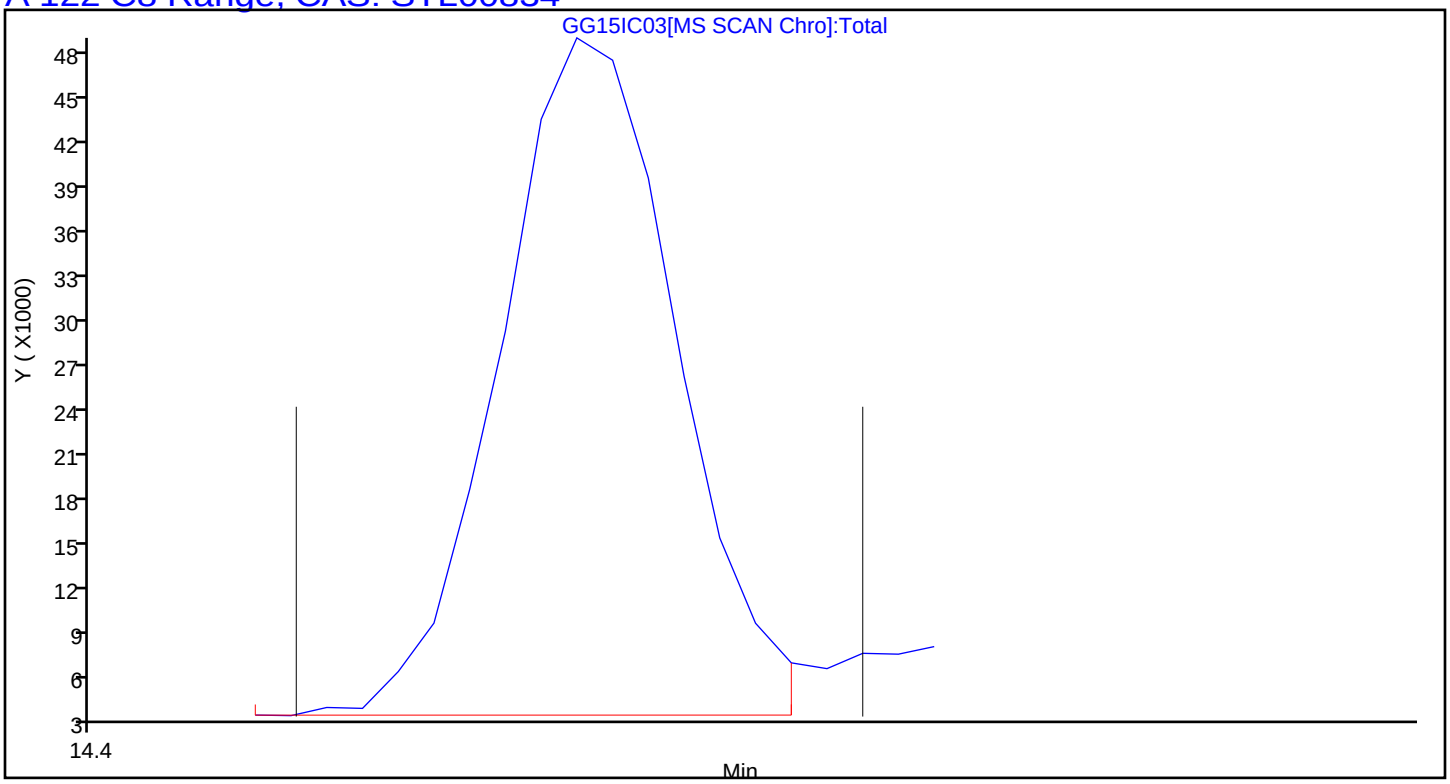


Report Date: 16-Jul-2020 15:15:10 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC03.D				
Injection Date:	15-Jul-2020 18:58:30	Instrument ID:	MG		
Lims ID:	IC L3				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	1	Worklist Smp#:	10
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 122 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC04.D
Lims ID: IC L4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 15-Jul-2020 19:47:30 ALS Bottle#: 2 Worklist Smp#: 11
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016031-011
Misc. Info.: 307382
Operator ID: HMT Instrument ID: MG
Sublist: chrom-MG_TO15*sub17

Method: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 16-Jul-2020 15:15:17 Calib Date: 15-Jul-2020 22:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1066

First Level Reviewer: tajh Date: 16-Jul-2020 08:57:35

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.833	8.843	-0.010	93	174377	4.00	4.00	
* 2 1,4-Difluorobenzene	114	11.022	11.026	-0.004	97	1480932	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.751	15.754	-0.003	93	1386442	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.396	17.397	-0.001	78	1107728	4.00	3.93	
6 Chlorodifluoromethane	51	3.710	3.708	0.002	97	30180	0.1600	0.1702	
7 Propene	41	3.721	3.719	0.002	100	99555	0.1600	-0.1349	
8 Dichlorodifluoromethane	85	3.769	3.770	-0.001	100	50823	0.1600	0.1598	
9 Chloromethane	52	3.953	3.952	0.001	61	5752	0.1600	0.1896	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.964	3.960	0.004	96	24791	0.1600	0.1505	
11 Acetaldehyde	44	4.115	4.111	0.003	91	59053	0.8000	1.53	
12 Vinyl chloride	62	4.125	4.122	0.003	99	20179	0.1600	0.1693	
13 Butane	43	4.212	4.210	0.002	86	30031	0.1600	0.1826	
14 Butadiene	54	4.212	4.210	0.002	64	14135	0.1600	0.1679	
15 Bromomethane	94	4.530	4.531	-0.001	95	16433	0.1600	0.1652	
16 Chloroethane	64	4.670	4.673	-0.003	98	9915	0.1600	0.1730	
17 Ethanol	31	4.810	4.804	0.006	98	35979	0.8000	1.18	
18 Vinyl bromide	106	4.977	4.975	0.002	95	13354	0.1600	0.1539	
19 2-Methylbutane	43	5.026	5.025	0.001	89	18904	0.1600	0.1784	
20 Trichlorofluoromethane	101	5.247	5.246	0.001	99	49263	0.1600	0.1576	
21 Acrolein	56	5.263	5.263	0.000	26	3482	0.1600	0.1725	
22 Acetonitrile	40	5.328	5.322	0.006	97	6020	0.1600	0.2024	
23 Acetone	58	5.392	5.385	0.007	99	30059	0.4800	0.8093	
24 Pentane	72	5.468	5.467	0.001	97	3150	0.1600	0.1606	
25 Isopropyl alcohol	45	5.522	5.507	0.015	98	44765	0.4800	0.4893	
26 Ethyl ether	31	5.657	5.650	0.007	94	11764	0.1600	0.1674	
27 1,1-Dichloroethene	96	5.948	5.951	-0.003	94	12765	0.1600	0.1563	
28 Acrylonitrile	53	6.061	6.061	0.000	98	7913	0.1600	0.1487	
29 1,1,2-Trichloro-1,2,2-trifluoroe	101	6.137	6.129	0.008	89	28227	0.1600	0.1547	
30 2-Methyl-2-propanol	59	6.164	6.136	0.028	96	20588	0.1600	0.1464	
31 Methylene Chloride	84	6.298	6.299	-0.001	97	82240	0.1600	0.1890	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.315	6.313	0.002	98	15294	0.1600	0.1849	
33 Carbon disulfide	76	6.466	6.462	0.004	99	43319	0.1600	0.1569	
34 trans-1,2-Dichloroethene	96	7.107	7.109	-0.002	94	14244	0.1600	0.1565	
35 2-Methylpentane	43	7.129	7.129	0.000	94	36205	0.1600	0.1638	
36 Methyl tert-butyl ether	73	7.280	7.266	0.014	96	37599	0.1600	0.1479	
37 1,1-Dichloroethane	63	7.528	7.528	0.000	100	31545	0.1600	0.1570	
38 Vinyl acetate	43	7.641	7.641	0.000	100	28407	0.1600	0.1440	
40 Hexane	56	8.110	8.111	-0.001	74	13313	0.1600	0.1677	
39 2-Butanone (MEK)	72	8.110	8.102	0.008	85	7388	0.1600	0.1743	
41 Isopropyl ether	45	8.294	8.289	0.005	97	40946	0.1600	0.1507	
42 cis-1,2-Dichloroethene	96	8.515	8.514	0.001	97	14792	0.1600	0.1598	
43 Ethyl acetate	43	8.720	8.715	0.005	98	25828	0.1600	0.1514	
44 Chloroform	83	8.854	8.857	-0.003	94	37336	0.1600	0.1611	
45 Tert-butyl ethyl ether	59	8.978	8.969	0.009	96	40688	0.1600	0.1476	
46 Tetrahydrofuran	42	9.297	9.287	0.010	93	15007	0.1600	0.1553	
47 1,1,1-Trichloroethane	97	9.884	9.884	0.000	96	38432	0.1600	0.1537	
48 1,2-Dichloroethane	62	9.987	9.992	-0.005	99	25307	0.1600	0.1546	
50 Benzene	78	10.483	10.483	0.000	96	47574	0.1600	0.1558	
49 Cyclohexane	69	10.488	10.488	0.000	72	8607	0.1600	0.1596	
52 Carbon tetrachloride	117	10.504	10.508	-0.004	96	32283	0.1600	0.1531	
51 n-Butanol	31	10.564	10.524	0.040	67	4340	0.1600	0.1509	
53 2,3-Dimethylpentane	71	10.607	10.606	0.001	92	12254	0.1600	0.1552	
54 Thiophene	84	10.753	10.756	-0.004	96	25644	0.1600	0.1585	
55 Isooctane	57	11.249	11.250	-0.001	99	82504	0.1600	0.1596	
56 n-Heptane	71	11.626	11.624	0.002	92	17773	0.1600	0.1534	
57 1,2-Dichloropropane	63	11.702	11.701	0.001	90	17668	0.1600	0.1534	
58 Trichloroethene	130	11.739	11.739	0.000	86	15315	0.1600	0.1480	
59 Dibromomethane	93	11.815	11.820	-0.005	80	17739	0.1600	0.1464	
60 Dichlorobromomethane	83	11.960	11.967	-0.007	99	31890	0.1600	0.1515	
61 1,4-Dioxane	88	12.036	12.018	0.018	82	4949	0.1600	0.1428	
62 Methyl methacrylate	41	12.074	12.070	0.004	95	14265	0.1600	0.1338	
63 Methylcyclohexane	83	12.505	12.507	-0.002	96	29969	0.1600	0.1659	
64 4-Methyl-2-pentanone (MIBK)	43	12.942	12.933	0.009	97	25328	0.1600	0.1368	
65 cis-1,3-Dichloropropene	75	12.963	12.967	-0.004	97	23842	0.1600	0.1493	
66 trans-1,3-Dichloropropene	75	13.659	13.661	-0.002	96	20954	0.1600	0.1462	
67 Toluene	91	13.783	13.786	-0.003	93	44637	0.1600	0.1484	
68 1,1,2-Trichloroethane	83	13.853	13.859	-0.006	95	14175	0.1600	0.1550	
69 2-Hexanone	58	14.274	14.266	0.008	93	11454	0.1600	0.1269	
70 n-Octane	85	14.479	14.479	0.000	93	15880	0.1600	0.1442	
71 Chlorodibromomethane	129	14.560	14.562	-0.002	94	20490	0.1600	0.1281	
72 Ethylene Dibromide	107	14.851	14.852	-0.001	96	20720	0.1600	0.1461	
73 Tetrachloroethene	129	14.926	14.929	-0.003	84	14862	0.1600	0.1444	
75 Chlorobenzene	112	15.800	15.802	-0.002	89	31726	0.1600	0.1462	
74 2,3-Dimethylheptane	43	15.821	15.824	-0.003	96	53687	0.1600	0.1554	
78 Ethylbenzene	91	16.091	16.092	-0.001	99	56644	0.1600	0.1434	
79 m-Xylene & p-Xylene	91	16.253	16.254	-0.001	99	85460	0.3200	0.2719	
80 n-Nonane	57	16.679	16.676	0.003	92	31424	0.1600	0.1463	
81 Bromoform	173	16.700	16.700	0.000	87	14728	0.1600	0.1205	
82 Styrene	104	16.716	16.718	-0.002	96	23856	0.1600	0.1293	
83 o-Xylene	91	16.781	16.780	0.001	96	45362	0.1600	0.1364	
84 1,1,2,2-Tetrachloroethane	83	17.099	17.101	-0.002	97	32079	0.1600	0.1449	
85 1,2,3-Trichloropropane	110	17.261	17.260	0.001	98	9084	0.1600	0.1397	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
86 Isopropylbenzene	105	17.369	17.367	0.002	97	56648	0.1600	0.1341	
87 N-Propylbenzene	120	17.908	17.907	0.001	97	13393	0.1600	0.1272	
88 2-Chlorotoluene	126	17.951	17.951	0.000	95	12690	0.1600	0.1309	
89 4-Ethyltoluene	105	18.054	18.056	-0.002	98	50918	0.1600	0.1251	
90 1,3,5-Trimethylbenzene	120	18.129	18.131	-0.002	90	19881	0.1600	0.1256	
92 Alpha Methyl Styrene	118	18.361	18.361	0.000	85	15069	0.1600	0.1144	
93 n-Decane	57	18.420	18.420	0.000	91	37095	0.1600	0.1468	
94 tert-Butylbenzene	119	18.555	18.554	0.001	85	45863	0.1600	0.1336	
95 1,2,4-Trimethylbenzene	105	18.566	18.567	-0.001	96	46363	0.1600	0.1267	
96 sec-Butylbenzene	105	18.819	18.821	-0.002	97	66579	0.1600	0.1257	
97 1,3-Dichlorobenzene	146	18.836	18.836	0.000	91	26425	0.1600	0.1394	
98 Benzyl chloride	91	18.906	18.909	-0.003	96	33613	0.1600	0.1168	
99 1,4-Dichlorobenzene	146	18.922	18.922	0.000	85	26600	0.1600	0.1386	
100 4-Isopropyltoluene	119	18.981	18.983	-0.002	95	51441	0.1600	0.1258	
101 1,2,3-Trimethylbenzene	105	19.035	19.036	-0.001	99	47045	0.1600	0.1723	
102 Butylcyclohexane	83	19.089	19.091	-0.002	92	46751	0.1600	0.1425	
103 2,3-Dihydroindene	117	19.278	19.279	-0.001	90	39559	0.1600	0.1351	
104 1,2-Dichlorobenzene	146	19.278	19.280	-0.002	77	26189	0.1600	0.1355	
106 Indene	116	19.407	19.409	-0.002	87	30832	0.1600	0.1233	
105 n-Butylbenzene	91	19.413	19.414	-0.001	97	58580	0.1600	0.1267	
107 Undecane	57	19.725	19.726	-0.001	95	40322	0.1600	0.1475	
108 1,2-Dibromo-3-Chloropropane	157	19.876	19.877	-0.001	80	9721	0.1600	0.1291	
109 1,2,4,5-Tetramethylbenzene	119	20.168	20.165	0.003	95	46893	0.1600	0.1304	
110 Dodecane	57	20.777	20.778	-0.001	94	34618	0.1600	0.1478	
111 1,2,4-Trichlorobenzene	180	20.971	20.973	-0.002	89	18382	0.1600	0.1289	
112 Naphthalene	128	21.111	21.112	-0.001	98	49157	0.1600	0.1340	
113 Hexachlorobutadiene	225	21.322	21.320	0.002	86	21594	0.1600	0.1289	
114 1,2,3-Trichlorobenzene	180	21.386	21.388	-0.002	91	17814	0.1600	0.1309	
115 2-Methylnaphthalene	142	22.157	22.158	-0.001	98	25651	0.1600	0.1208	
116 1-Methylnaphthalene	142	22.335	22.333	0.002	97	32157	0.1600	0.1272	
A 122 C8 Range	1	14.474	(14.431-14.516)		0	158108	0.1600	0.1549	
S 123 1,2-Dichloroethene, Total	1				0		0.3200	0.3162	
S 124 Xylenes, Total	100				0		0.4800	0.4083	

Reagents:

40L4DQP_00019	Amount Added: 200.00	Units: mL	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

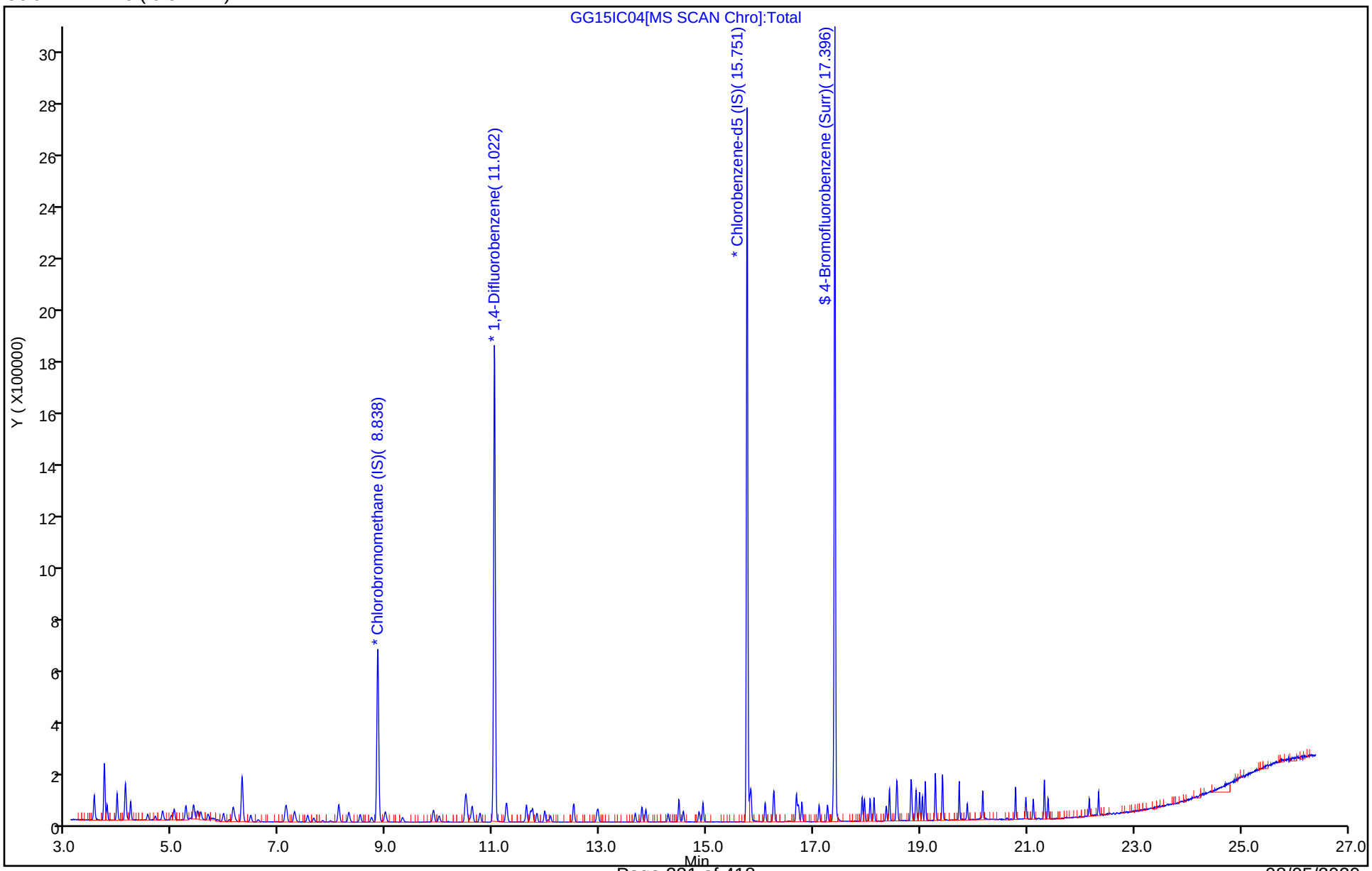
Report Date: 16-Jul-2020 15:15:18 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC04.D

Injection Date:	15-Jul-2020 19:47:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	IC L4			Worklist Smp#:	11
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

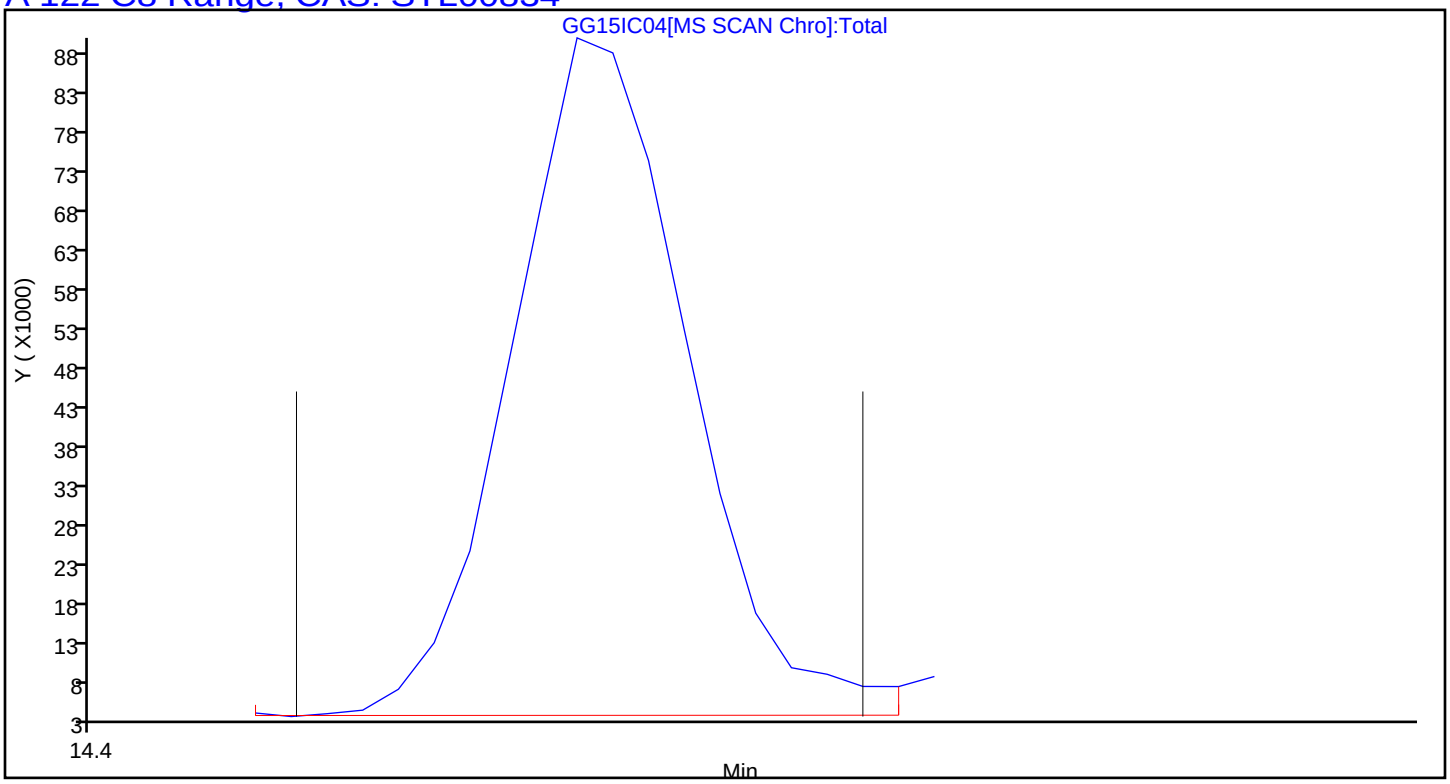


Report Date: 16-Jul-2020 15:15:18 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC04.D				
Injection Date:	15-Jul-2020 19:47:30	Instrument ID:	MG		
Lims ID:	IC L4				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	2	Worklist Smp#:	11
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 122 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC05.D
Lims ID: IC L5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 15-Jul-2020 20:32:30 ALS Bottle#: 3 Worklist Smp#: 12
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016031-012
Misc. Info.: 307381
Operator ID: HMT Instrument ID: MG
Sublist: chrom-MG_TO15*sub17

Method: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 16-Jul-2020 15:15:24 Calib Date: 15-Jul-2020 22:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1066

First Level Reviewer: tajh Date: 16-Jul-2020 07:09:28

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.838	8.843	-0.005	93	179522	4.00	4.00	
* 2 1,4-Difluorobenzene	114	11.022	11.026	-0.004	97	1596384	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.751	15.754	-0.003	93	1459263	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.396	17.397	-0.001	77	1172428	4.00	3.95	
6 Chlorodifluoromethane	51	3.705	3.708	-0.003	96	75352	0.4000	0.4129	
7 Propene	41	3.721	3.719	0.002	99	121579	0.4000	0.1118	
8 Dichlorodifluoromethane	85	3.769	3.770	-0.001	100	133157	0.4000	0.4068	
9 Chloromethane	52	3.953	3.952	0.001	98	14151	0.4000	0.4532	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.958	3.960	-0.002	96	67629	0.4000	0.3989	
11 Acetaldehyde	44	4.109	4.111	-0.002	90	113031	2.00	2.85	
12 Vinyl chloride	62	4.120	4.122	-0.002	98	51891	0.4000	0.4229	
13 Butane	43	4.212	4.210	0.002	86	77021	0.4000	0.4549	
14 Butadiene	54	4.212	4.210	0.002	64	35829	0.4000	0.4135	
15 Bromomethane	94	4.530	4.531	-0.001	98	41050	0.4000	0.4009	
16 Chloroethane	64	4.670	4.673	-0.003	97	24335	0.4000	0.4125	
17 Ethanol	31	4.794	4.804	-0.010	98	82833	2.00	2.64	
18 Vinyl bromide	106	4.977	4.975	0.002	97	34687	0.4000	0.3882	
19 2-Methylbutane	43	5.026	5.025	0.001	91	47798	0.4000	0.4380	
20 Trichlorofluoromethane	101	5.242	5.246	-0.004	99	126990	0.4000	0.3947	
21 Acrolein	56	5.258	5.263	-0.005	26	9147	0.4000	0.4403	
22 Acetonitrile	40	5.317	5.322	-0.005	97	14024	0.4000	0.4580	
23 Acetone	58	5.382	5.385	-0.003	99	57147	1.20	1.49	
24 Pentane	72	5.463	5.467	-0.004	99	8170	0.4000	0.4045	
25 Isopropyl alcohol	45	5.495	5.507	-0.012	99	115484	1.20	1.23	
26 Ethyl ether	31	5.646	5.650	-0.004	92	30519	0.4000	0.4218	
27 1,1-Dichloroethene	96	5.948	5.951	-0.003	94	33621	0.4000	0.4000	
28 Acrylonitrile	53	6.056	6.061	-0.005	94	21948	0.4000	0.4006	
29 1,1,2-Trichloro-1,2,2-trifluoroe	101	6.126	6.129	-0.003	87	73295	0.4000	0.3902	
30 2-Methyl-2-propanol	59	6.126	6.136	-0.010	91	57764	0.4000	0.3989	
31 Methylene Chloride	84	6.293	6.299	-0.006	96	102459	0.4000	0.4060	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.309	6.313	-0.004	98	26105	0.4000	0.3066	
33 Carbon disulfide	76	6.460	6.462	-0.002	99	112564	0.4000	0.3960	
34 trans-1,2-Dichloroethene	96	7.107	7.109	-0.002	95	36518	0.4000	0.3896	
35 2-Methylpentane	43	7.129	7.129	0.000	94	93993	0.4000	0.4130	
36 Methyl tert-butyl ether	73	7.253	7.266	-0.013	96	106137	0.4000	0.4055	
37 1,1-Dichloroethane	63	7.528	7.528	0.000	100	80757	0.4000	0.3904	
38 Vinyl acetate	43	7.636	7.641	-0.005	100	82582	0.4000	0.4066	
40 Hexane	56	8.110	8.111	-0.001	88	33121	0.4000	0.4053	
39 2-Butanone (MEK)	72	8.089	8.102	-0.013	96	17544	0.4000	0.4020	
41 Isopropyl ether	45	8.283	8.289	-0.006	96	119133	0.4000	0.4258	
42 cis-1,2-Dichloroethene	96	8.509	8.514	-0.005	99	37748	0.4000	0.3961	
43 Ethyl acetate	43	8.703	8.715	-0.012	99	73220	0.4000	0.4169	
44 Chloroform	83	8.849	8.857	-0.008	95	94684	0.4000	0.3968	
45 Tert-butyl ethyl ether	59	8.957	8.969	-0.012	96	115576	0.4000	0.4073	
46 Tetrahydrofuran	42	9.280	9.287	-0.007	96	41506	0.4000	0.4172	
47 1,1,1-Trichloroethane	97	9.879	9.884	-0.005	96	100286	0.4000	0.3896	
48 1,2-Dichloroethane	62	9.987	9.992	-0.005	98	66709	0.4000	0.3780	
50 Benzene	78	10.478	10.483	-0.005	96	123712	0.4000	0.3757	
49 Cyclohexane	69	10.478	10.488	-0.010	70	22047	0.4000	0.3793	
52 Carbon tetrachloride	117	10.505	10.508	-0.004	96	49334	0.4000	0.2171	
51 n-Butanol	31	10.526	10.524	0.002	66	11804	0.4000	0.3808	
53 2,3-Dimethylpentane	71	10.607	10.606	0.001	92	32408	0.4000	0.3809	
54 Thiophene	84	10.753	10.756	-0.003	97	65514	0.4000	0.3757	
55 Isooctane	57	11.249	11.250	-0.001	98	219821	0.4000	0.3945	
56 n-Heptane	71	11.621	11.624	-0.003	92	45176	0.4000	0.3617	
57 1,2-Dichloropropane	63	11.696	11.701	-0.005	89	45740	0.4000	0.3685	
58 Trichloroethene	130	11.734	11.739	-0.005	87	39945	0.4000	0.3582	
59 Dibromomethane	93	11.815	11.820	-0.005	81	47845	0.4000	0.3663	
60 Dichlorobromomethane	83	11.966	11.967	-0.001	98	84911	0.4000	0.3743	
61 1,4-Dioxane	88	12.009	12.018	-0.009	91	12691	0.4000	0.3396	
62 Methyl methacrylate	41	12.068	12.070	-0.002	93	42312	0.4000	0.3681	
63 Methylcyclohexane	83	12.505	12.507	-0.002	95	75262	0.4000	0.3744	
64 4-Methyl-2-pentanone (MIBK)	43	12.931	12.933	-0.002	97	77155	0.4000	0.3867	
65 cis-1,3-Dichloropropene	75	12.963	12.967	-0.004	95	63645	0.4000	0.3697	
66 trans-1,3-Dichloropropene	75	13.659	13.661	-0.002	96	54746	0.4000	0.3629	
67 Toluene	91	13.783	13.786	-0.003	93	119162	0.4000	0.3764	
68 1,1,2-Trichloroethane	83	13.853	13.859	-0.006	94	37510	0.4000	0.3896	
69 2-Hexanone	58	14.263	14.266	-0.003	92	35303	0.4000	0.3716	
70 n-Octane	85	14.479	14.479	0.000	93	42155	0.4000	0.3637	
71 Chlorodibromomethane	129	14.560	14.562	-0.002	95	53552	0.4000	0.3181	
72 Ethylene Dibromide	107	14.845	14.852	-0.007	98	56158	0.4000	0.3761	
73 Tetrachloroethene	129	14.926	14.929	-0.003	85	38507	0.4000	0.3556	
75 Chlorobenzene	112	15.800	15.802	-0.002	87	83702	0.4000	0.3666	
74 2,3-Dimethylheptane	43	15.821	15.824	-0.003	96	145060	0.4000	0.3990	
78 Ethylbenzene	91	16.091	16.092	-0.001	100	155214	0.4000	0.3733	
79 m-Xylene & p-Xylene	91	16.253	16.254	-0.001	100	249164	0.8000	0.7532	
80 n-Nonane	57	16.673	16.676	-0.003	92	89239	0.4000	0.3948	
81 Bromoform	173	16.700	16.700	0.000	87	35566	0.4000	0.2765	
82 Styrene	104	16.717	16.718	-0.001	97	73037	0.4000	0.3761	
83 o-Xylene	91	16.776	16.780	-0.004	97	131043	0.4000	0.3744	
84 1,1,2,2-Tetrachloroethane	83	17.099	17.101	-0.002	98	87989	0.4000	0.3777	
85 1,2,3-Trichloropropane	110	17.256	17.260	-0.004	98	25717	0.4000	0.3758	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
86 Isopropylbenzene	105	17.364	17.367	-0.003	98	160270	0.4000	0.3604	
87 N-Propylbenzene	120	17.903	17.907	-0.004	98	38488	0.4000	0.3472	
88 2-Chlorotoluene	126	17.946	17.951	-0.005	95	35289	0.4000	0.3459	
89 4-Ethyltoluene	105	18.054	18.056	-0.002	98	150122	0.4000	0.3505	
90 1,3,5-Trimethylbenzene	120	18.129	18.131	-0.002	90	57435	0.4000	0.3447	
92 Alpha Methyl Styrene	118	18.356	18.361	-0.005	85	47326	0.4000	0.3414	
93 n-Decane	57	18.421	18.420	0.000	91	105777	0.4000	0.3977	
94 tert-Butylbenzene	119	18.550	18.554	-0.004	88	132968	0.4000	0.3679	
95 1,2,4-Trimethylbenzene	105	18.566	18.567	-0.001	95	131917	0.4000	0.3425	
96 sec-Butylbenzene	105	18.820	18.821	-0.001	97	193690	0.4000	0.3475	
97 1,3-Dichlorobenzene	146	18.836	18.836	0.000	93	69225	0.4000	0.3470	
98 Benzyl chloride	91	18.906	18.909	-0.003	96	109953	0.4000	0.3629	
99 1,4-Dichlorobenzene	146	18.922	18.922	0.000	92	70751	0.4000	0.3503	
100 4-Isopropyltoluene	119	18.981	18.983	-0.002	95	147418	0.4000	0.3424	
101 1,2,3-Trimethylbenzene	105	19.035	19.036	-0.001	99	135108	0.4000	0.4629	
102 Butylcyclohexane	83	19.089	19.091	-0.002	92	127815	0.4000	0.3701	
103 2,3-Dihydroindene	117	19.278	19.279	-0.001	92	112727	0.4000	0.3658	
104 1,2-Dichlorobenzene	146	19.278	19.280	-0.002	76	69708	0.4000	0.3427	
106 Indene	116	19.407	19.409	-0.002	90	93609	0.4000	0.3557	
105 n-Butylbenzene	91	19.413	19.414	-0.001	97	173331	0.4000	0.3562	
107 Undecane	57	19.725	19.726	-0.001	96	115570	0.4000	0.4018	
108 1,2-Dibromo-3-Chloropropane	157	19.876	19.877	-0.001	82	28099	0.4000	0.3546	
109 1,2,4,5-Tetramethylbenzene	119	20.162	20.165	-0.003	95	136106	0.4000	0.3595	
110 Dodecane	57	20.777	20.778	-0.001	95	92067	0.4000	0.3733	
111 1,2,4-Trichlorobenzene	180	20.971	20.973	-0.002	90	45814	0.4000	0.3052	
112 Naphthalene	128	21.111	21.112	-0.001	98	120579	0.4000	0.3122	
113 Hexachlorobutadiene	225	21.322	21.320	0.002	89	55266	0.4000	0.3135	
114 1,2,3-Trichlorobenzene	180	21.386	21.388	-0.002	90	41759	0.4000	0.2915	
115 2-Methylnaphthalene	142	22.157	22.158	-0.001	96	56670	0.4000	0.2535	
116 1-Methylnaphthalene	142	22.335	22.333	0.002	97	65547	0.4000	0.2464	
A 122 C8 Range	1	14.473	(14.420-14.527)		0	424704	0.4000	0.3954	
S 123 1,2-Dichloroethene, Total	1				0		0.8000	0.7857	
S 124 Xylenes, Total	100				0		1.20	1.13	

Reagents:

40L5DQP_00019	Amount Added: 200.00	Units: mL	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

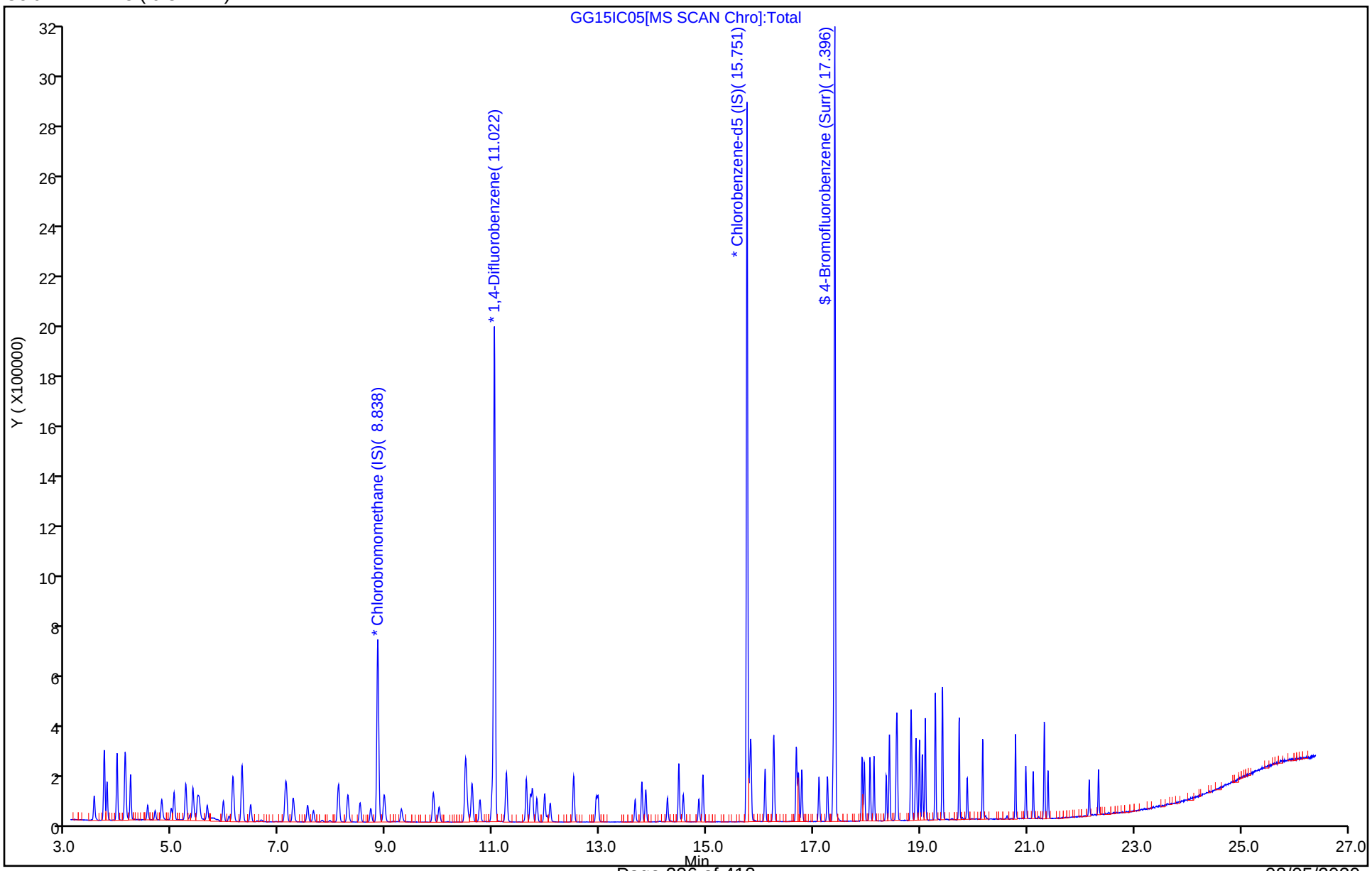
Report Date: 16-Jul-2020 15:15:25 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC05.D

Injection Date:	15-Jul-2020 20:32:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	IC L5			Worklist Smp#:	12
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

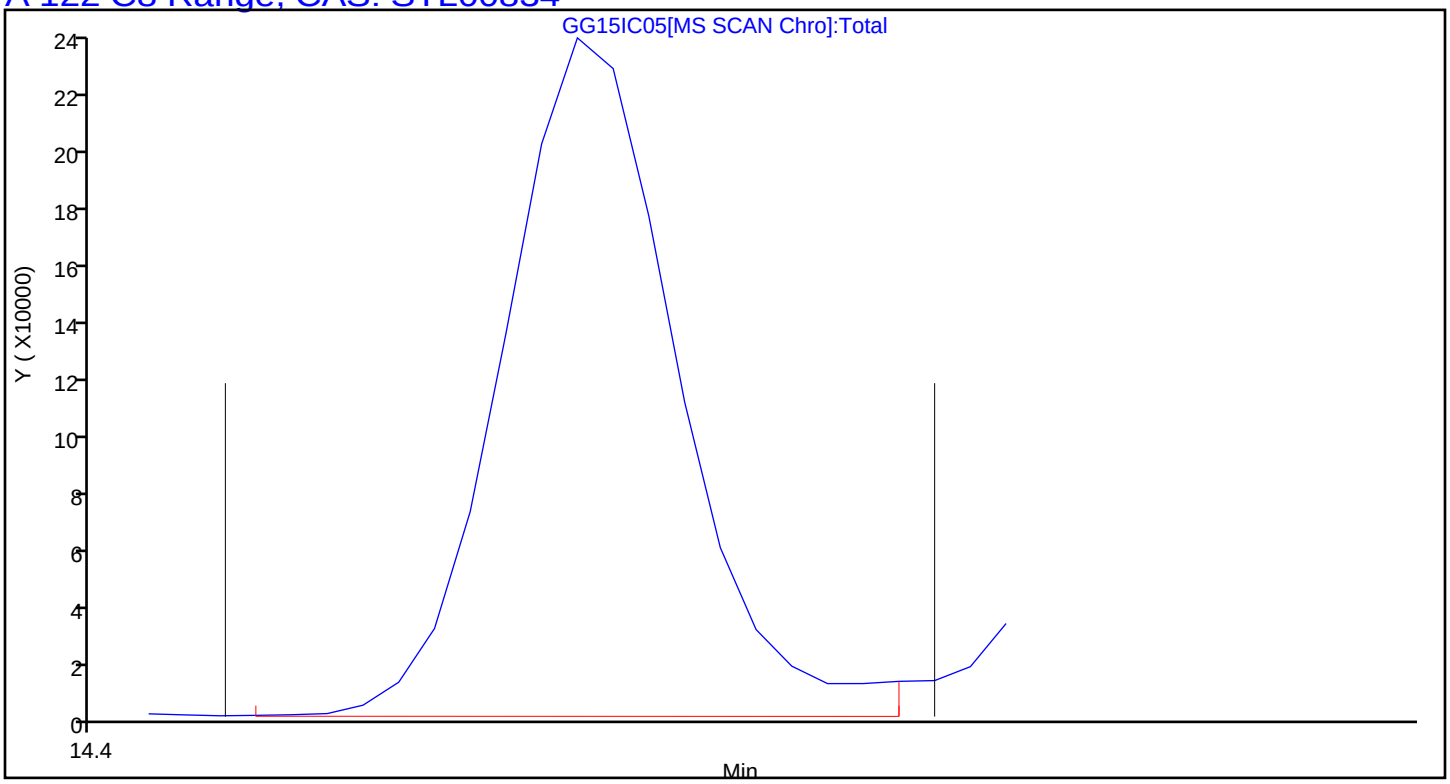


Report Date: 16-Jul-2020 15:15:25 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC05.D				
Injection Date:	15-Jul-2020 20:32:30	Instrument ID:	MG		
Lims ID:	IC L5				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	3	Worklist Smp#:	12
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 122 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC06.D
Lims ID: IC L6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 15-Jul-2020 21:18:30 ALS Bottle#: 4 Worklist Smp#: 13
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016031-013
Misc. Info.: 307380
Operator ID: HMT Instrument ID: MG
Sublist: chrom-MG_TO15*sub17

Method: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 16-Jul-2020 15:15:32 Calib Date: 15-Jul-2020 22:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1066

First Level Reviewer: barlozhetskayaa Date: 16-Jul-2020 14:19:51

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.833	8.843	-0.010	93	172600	4.00	4.00	
* 2 1,4-Difluorobenzene	114	11.022	11.026	-0.004	97	1537936	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.751	15.754	-0.003	93	1342822	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.396	17.397	-0.001	77	1084929	4.00	3.97	
6 Chlorodifluoromethane	51	3.699	3.708	-0.009	96	190134	1.00	1.08	
7 Propene	41	3.710	3.719	-0.009	99	183637	1.00	1.01	
8 Dichlorodifluoromethane	85	3.764	3.770	-0.006	100	334364	1.00	1.06	
9 Chloromethane	52	3.947	3.952	-0.005	98	30761	1.00	1.02	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.953	3.960	-0.007	96	166732	1.00	1.02	
11 Acetaldehyde	44	4.098	4.111	-0.013	92	208954	5.00	5.48	
12 Vinyl chloride	62	4.115	4.122	-0.008	98	118405	1.00	1.00	
13 Butane	43	4.206	4.210	-0.004	86	165723	1.00	1.02	
14 Butadiene	54	4.206	4.210	-0.004	66	83118	1.00	1.00	
15 Bromomethane	94	4.524	4.531	-0.007	98	97197	1.00	0.9873	
16 Chloroethane	64	4.665	4.673	-0.008	98	55110	1.00	0.9715	
17 Ethanol	31	4.778	4.804	-0.026	98	173032	5.00	5.69	
18 Vinyl bromide	106	4.967	4.975	-0.009	98	89335	1.00	1.04	
19 2-Methylbutane	43	5.020	5.025	-0.005	89	95313	1.00	0.9085	
20 Trichlorofluoromethane	101	5.236	5.246	-0.010	99	329731	1.00	1.07	
21 Acrolein	56	5.247	5.263	-0.016	26	20330	1.00	1.02	
22 Acetonitrile	40	5.312	5.322	-0.010	98	30152	1.00	1.02	
23 Acetone	58	5.366	5.385	-0.019	98	117934	3.00	3.21	
24 Pentane	72	5.457	5.467	-0.010	98	20801	1.00	1.07	
25 Isopropyl alcohol	45	5.463	5.507	-0.044	93	272032	3.00	3.00	
26 Ethyl ether	31	5.630	5.650	-0.020	88	68276	1.00	0.9814	
27 1,1-Dichloroethene	96	5.943	5.951	-0.008	92	74430	1.00	0.9210	
28 Acrylonitrile	53	6.045	6.061	-0.016	98	52944	1.00	1.00	
30 2-Methyl-2-propanol	59	6.083	6.136	-0.053	96	137641	1.00	0.9887	
29 1,1,2-Trichloro-1,2,2-trifluoroe	101	6.120	6.129	-0.009	88	168437	1.00	0.9327	
31 Methylene Chloride	84	6.293	6.299	-0.006	97	141971	1.00	0.9574	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.304	6.313	-0.009	98	81595	1.00	1.00	
33 Carbon disulfide	76	6.455	6.462	-0.007	99	263386	1.00	0.9638	
34 trans-1,2-Dichloroethene	96	7.102	7.109	-0.007	94	84905	1.00	0.9422	
35 2-Methylpentane	43	7.123	7.129	-0.006	94	218309	1.00	1.00	
36 Methyl tert-butyl ether	73	7.237	7.266	-0.029	96	264802	1.00	1.05	
37 1,1-Dichloroethane	63	7.522	7.528	-0.006	100	192246	1.00	0.9668	
38 Vinyl acetate	43	7.630	7.641	-0.011	100	206001	1.00	1.05	
39 2-Butanone (MEK)	72	8.083	8.102	-0.019	97	41854	1.00	1.00	
40 Hexane	56	8.099	8.111	-0.012	92	77435	1.00	0.9857	
41 Isopropyl ether	45	8.267	8.289	-0.022	96	291723	1.00	1.08	
42 cis-1,2-Dichloroethene	96	8.504	8.514	-0.010	97	88852	1.00	0.9698	
43 Ethyl acetate	43	8.698	8.715	-0.017	99	179990	1.00	1.07	
44 Chloroform	83	8.849	8.857	-0.008	96	228561	1.00	1.00	
45 Tert-butyl ethyl ether	59	8.946	8.969	-0.023	96	294139	1.00	1.08	
46 Tetrahydrofuran	42	9.264	9.287	-0.023	93	99920	1.00	1.04	
47 1,1,1-Trichloroethane	97	9.874	9.884	-0.010	95	241713	1.00	0.9767	
48 1,2-Dichloroethane	62	9.987	9.992	-0.005	98	157739	1.00	0.9279	
49 Cyclohexane	69	10.478	10.488	-0.010	90	51549	1.00	0.9206	
50 Benzene	78	10.478	10.483	-0.005	96	288567	1.00	0.9097	
52 Carbon tetrachloride	117	10.504	10.508	-0.004	97	214433	1.00	0.9795	
51 n-Butanol	31	10.483	10.524	-0.041	65	30009	1.00	1.01	
53 2,3-Dimethylpentane	71	10.602	10.606	-0.004	92	76259	1.00	0.9303	
54 Thiophene	84	10.753	10.756	-0.004	97	155103	1.00	0.9233	
55 Isooctane	57	11.243	11.250	-0.007	98	516981	1.00	0.9631	
56 n-Heptane	71	11.621	11.624	-0.003	91	110833	1.00	0.9210	
57 1,2-Dichloropropane	63	11.696	11.701	-0.005	89	111371	1.00	0.9313	
58 Trichloroethene	130	11.734	11.739	-0.005	88	96687	1.00	0.8999	
59 Dibromomethane	93	11.815	11.820	-0.005	82	114469	1.00	0.9096	
60 Dichlorobromomethane	83	11.966	11.967	-0.001	98	221235	1.00	1.01	
61 1,4-Dioxane	88	11.998	12.018	-0.020	94	34057	1.00	0.9460	
62 Methyl methacrylate	41	12.063	12.070	-0.007	93	113285	1.00	1.02	
63 Methylcyclohexane	83	12.505	12.507	-0.002	96	183918	1.00	0.9355	
64 4-Methyl-2-pentanone (MIBK)	43	12.915	12.933	-0.018	98	202106	1.00	1.05	
65 cis-1,3-Dichloropropene	75	12.963	12.967	-0.004	93	156457	1.00	0.9433	
66 trans-1,3-Dichloropropene	75	13.659	13.661	-0.002	95	143535	1.00	1.03	
67 Toluene	91	13.783	13.786	-0.003	93	278724	1.00	0.9567	
68 1,1,2-Trichloroethane	83	13.859	13.859	0.000	95	89505	1.00	1.01	
69 2-Hexanone	58	14.252	14.266	-0.014	93	93421	1.00	1.07	
70 n-Octane	85	14.473	14.479	-0.006	93	103853	1.00	0.9736	
71 Chlorodibromomethane	129	14.560	14.562	-0.002	96	150495	1.00	0.9714	
72 Ethylene Dibromide	107	14.851	14.852	-0.001	97	139684	1.00	1.02	
73 Tetrachloroethene	129	14.926	14.929	-0.003	86	91406	1.00	0.9172	
75 Chlorobenzene	112	15.800	15.802	-0.002	87	193814	1.00	0.9224	
74 2,3-Dimethylheptane	43	15.821	15.824	-0.003	96	348024	1.00	1.04	
78 Ethylbenzene	91	16.091	16.092	-0.001	100	380102	1.00	0.99	
79 m-Xylene & p-Xylene	91	16.253	16.254	-0.001	100	600207	2.00	1.97	
80 n-Nonane	57	16.673	16.676	-0.003	92	213591	1.00	1.03	
81 Bromoform	173	16.700	16.700	0.000	88	119045	1.00	1.01	
82 Styrene	104	16.716	16.718	-0.002	96	185604	1.00	1.04	
83 o-Xylene	91	16.776	16.780	-0.004	96	325908	1.00	1.01	
84 1,1,2,2-Tetrachloroethane	83	17.099	17.101	-0.002	98	230136	1.00	1.07	
85 1,2,3-Trichloropropane	110	17.256	17.260	-0.004	98	65266	1.00	1.04	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
86 Isopropylbenzene	105	17.364	17.367	-0.003	98	400866	1.00	0.9795	
87 N-Propylbenzene	120	17.903	17.907	-0.004	97	94843	1.00	0.9298	
88 2-Chlorotoluene	126	17.951	17.951	0.000	96	87009	1.00	0.9268	
89 4-Ethyltoluene	105	18.054	18.056	-0.002	98	371754	1.00	0.9432	
90 1,3,5-Trimethylbenzene	120	18.129	18.131	-0.002	90	146651	1.00	0.9566	
92 Alpha Methyl Styrene	118	18.356	18.361	-0.005	83	135899	1.00	1.07	
93 n-Decane	57	18.415	18.420	-0.005	91	270199	1.00	1.10	
94 tert-Butylbenzene	119	18.550	18.554	-0.004	86	343785	1.00	1.03	
95 1,2,4-Trimethylbenzene	105	18.566	18.567	-0.001	95	347304	1.00	0.9800	
96 sec-Butylbenzene	105	18.820	18.821	-0.001	97	503313	1.00	0.9812	
97 1,3-Dichlorobenzene	146	18.836	18.836	0.000	95	183120	1.00	1.00	
98 Benzyl chloride	91	18.906	18.909	-0.003	96	293789	1.00	1.05	
99 1,4-Dichlorobenzene	146	18.922	18.922	0.000	91	181563	1.00	0.9770	
100 4-Isopropyltoluene	119	18.981	18.983	-0.002	95	392070	1.00	0.9897	
101 1,2,3-Trimethylbenzene	105	19.035	19.036	-0.001	99	356442	1.00	1.27	
102 Butylcyclohexane	83	19.089	19.091	-0.002	93	329564	1.00	1.04	
103 2,3-Dihydroindene	117	19.278	19.279	-0.001	91	296113	1.00	1.04	
104 1,2-Dichlorobenzene	146	19.278	19.280	-0.002	76	185243	1.00	0.9897	
106 Indene	116	19.407	19.409	-0.002	89	250094	1.00	1.03	
105 n-Butylbenzene	91	19.413	19.414	-0.001	97	462362	1.00	1.03	
107 Undecane	57	19.725	19.726	-0.001	95	309838	1.00	1.17	
108 1,2-Dibromo-3-Chloropropane	157	19.876	19.877	-0.001	85	87769	1.00	1.20	
109 1,2,4,5-Tetramethylbenzene	119	20.162	20.165	-0.003	94	373275	1.00	1.07	
110 Dodecane	57	20.777	20.778	-0.001	95	260636	1.00	1.15	
111 1,2,4-Trichlorobenzene	180	20.971	20.973	-0.002	91	133880	1.00	0.9691	
112 Naphthalene	128	21.111	21.112	-0.001	98	354697	1.00	1.00	
113 Hexachlorobutadiene	225	21.322	21.320	0.002	89	160933	1.00	0.99	
114 1,2,3-Trichlorobenzene	180	21.386	21.388	-0.002	92	127006	1.00	0.9634	
115 2-Methylnaphthalene	142	22.157	22.158	-0.001	97	153485	1.00	0.7461	
116 1-Methylnaphthalene	142	22.330	22.333	-0.003	97	182006	1.00	0.7435	
A 122 C8 Range	1	14.476	(14.415-14.533)		0	1006020	1.00	1.02	
S 123 1,2-Dichloroethene, Total	1				0		2.00	1.91	
S 124 Xylenes, Total	100				0		3.00	2.98	

Reagents:

40L6DQP_00018	Amount Added: 200.00	Units: mL	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

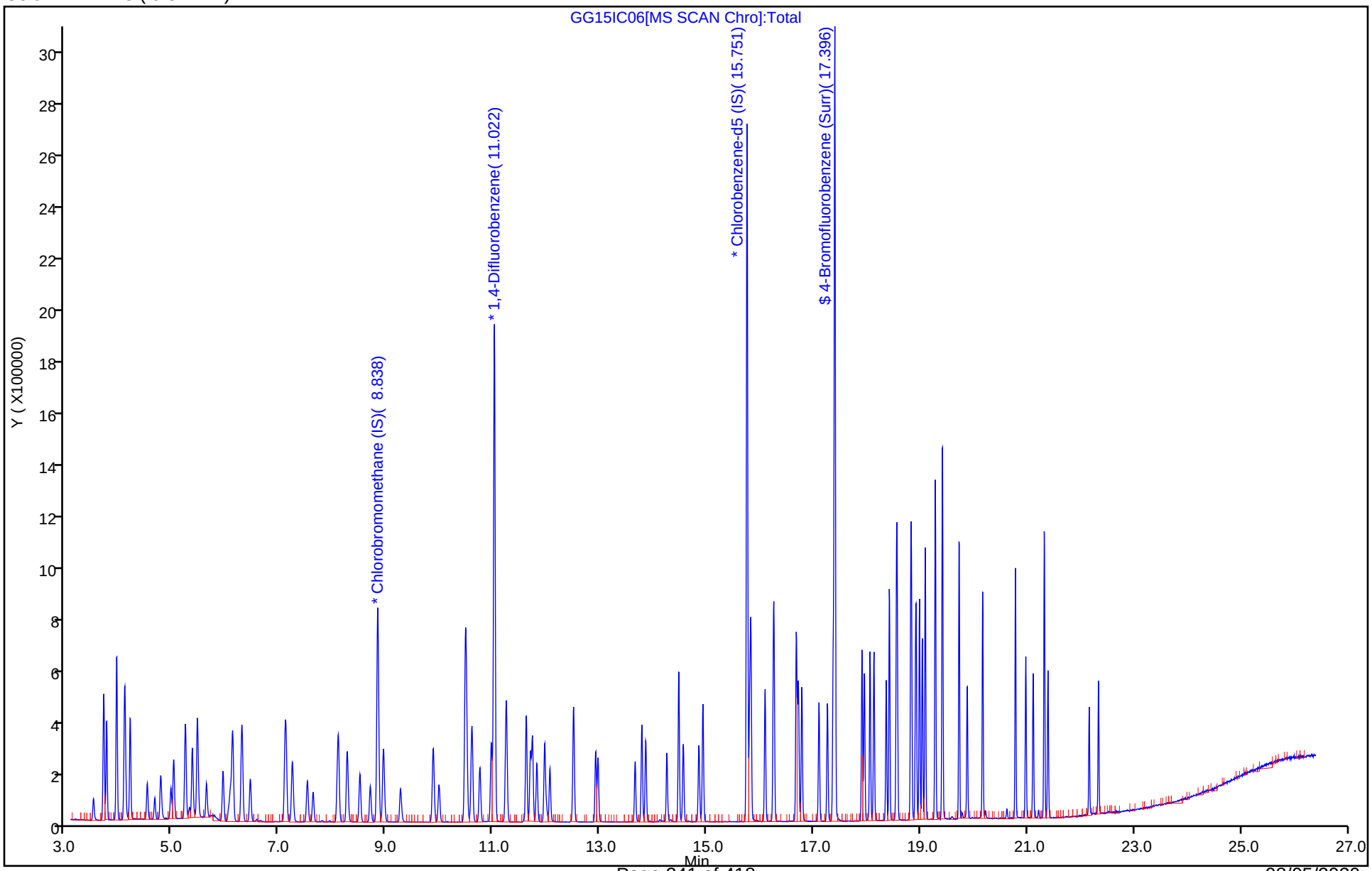
Report Date: 16-Jul-2020 15:15:33 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC06.D

Injection Date:	15-Jul-2020 21:18:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	IC L6			Worklist Smp#:	13
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

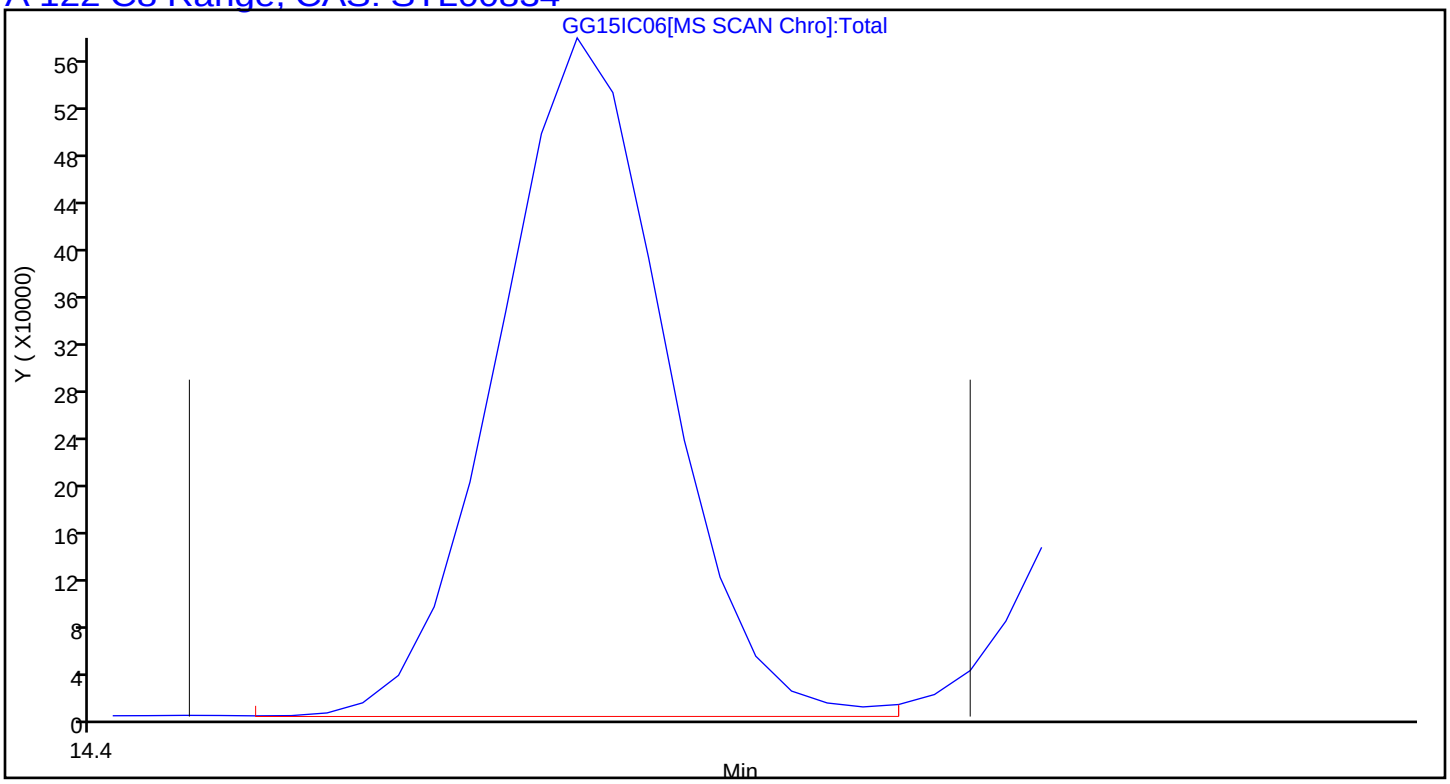


Report Date: 16-Jul-2020 15:15:33 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC06.D				
Injection Date:	15-Jul-2020 21:18:30	Instrument ID:	MG		
Lims ID:	IC L6				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	4	Worklist Smp#:	13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 122 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC07.D
Lims ID: ICIS L7
Client ID:
Sample Type: ICIS Calib Level: 7
Inject. Date: 15-Jul-2020 22:02:30 ALS Bottle#: 5 Worklist Smp#: 14
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016031-014
Misc. Info.: 306867
Operator ID: HMT Instrument ID: MG
Sublist: chrom-MG_TO15*sub17

Method: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 16-Jul-2020 15:15:40 Calib Date: 15-Jul-2020 22:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1066

First Level Reviewer: tajh Date: 16-Jul-2020 13:16:05

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.838	8.843	-0.005	93	179107	4.00	4.00	
* 2 1,4-Difluorobenzene	114	11.022	11.026	-0.004	97	1585235	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.751	15.754	-0.003	92	1411654	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.396	17.397	-0.001	79	1175087	4.00	4.10	
6 Chlorodifluoromethane	51	3.705	3.708	-0.003	96	355286	2.00	1.95	
7 Propene	41	3.715	3.719	-0.004	99	260607	2.00	1.92	
8 Dichlorodifluoromethane	85	3.769	3.770	-0.001	100	640703	2.00	1.96	
9 Chloromethane	52	3.947	3.952	-0.005	98	61480	2.00	1.97	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.958	3.960	-0.002	98	318591	2.00	1.88	
11 Acetaldehyde	44	4.104	4.111	-0.007	95	417475	10.0	10.5	
12 Vinyl chloride	62	4.120	4.122	-0.002	99	232593	2.00	1.90	
13 Butane	43	4.206	4.210	-0.004	86	327446	2.00	1.94	
14 Butadiene	54	4.206	4.210	-0.004	67	165955	2.00	1.92	
15 Bromomethane	94	4.530	4.531	-0.001	98	195553	2.00	1.91	
16 Chloroethane	64	4.670	4.673	-0.003	98	114248	2.00	1.94	
17 Ethanol	31	4.778	4.804	-0.026	99	402389	10.0	12.5	
18 Vinyl bromide	106	4.972	4.975	-0.003	97	172585	2.00	1.94	
19 2-Methylbutane	43	5.020	5.025	-0.005	89	208963	2.00	1.92	
20 Trichlorofluoromethane	101	5.241	5.246	-0.005	99	622680	2.00	1.94	
21 Acrolein	56	5.252	5.263	-0.011	94	37446	2.00	1.81	
22 Acetonitrile	40	5.317	5.322	-0.005	99	63532	2.00	2.08	
23 Acetone	58	5.365	5.385	-0.020	98	249951	6.00	6.55	
24 Pentane	72	5.468	5.467	0.001	96	38616	2.00	1.92	
25 Isopropyl alcohol	45	5.468	5.507	-0.039	93	606574	6.00	6.46	
26 Ethyl ether	31	5.635	5.650	-0.015	91	153848	2.00	2.13	
27 1,1-Dichloroethene	96	5.948	5.951	-0.003	93	161995	2.00	1.93	
28 Acrylonitrile	53	6.050	6.061	-0.011	98	115706	2.00	2.12	
30 2-Methyl-2-propanol	59	6.077	6.136	-0.059	95	310331	2.00	2.15	
29 1,1,2-Trichloro-1,2,2-trifluoroe	101	6.126	6.129	-0.003	89	363043	2.00	1.94	
31 Methylene Chloride	84	6.293	6.299	-0.006	97	231075	2.00	1.98	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.309	6.313	-0.004	97	167901	2.00	1.98	
33 Carbon disulfide	76	6.460	6.462	-0.002	99	556101	2.00	1.96	
34 trans-1,2-Dichloroethene	96	7.107	7.109	-0.002	94	177962	2.00	1.90	
35 2-Methylpentane	43	7.123	7.129	-0.006	94	446107	2.00	1.96	
36 Methyl tert-butyl ether	73	7.237	7.266	-0.029	96	573910	2.00	2.20	
37 1,1-Dichloroethane	63	7.528	7.528	0.000	100	393709	2.00	1.91	
38 Vinyl acetate	43	7.630	7.641	-0.011	100	454630	2.00	2.24	
39 2-Butanone (MEK)	72	8.078	8.102	-0.024	98	92943	2.00	2.13	
40 Hexane	56	8.105	8.111	-0.006	92	157864	2.00	1.94	
41 Isopropyl ether	45	8.267	8.289	-0.022	96	623267	2.00	2.23	
42 cis-1,2-Dichloroethene	96	8.509	8.514	-0.005	98	188361	2.00	1.98	
43 Ethyl acetate	43	8.698	8.715	-0.017	99	395242	2.00	2.26	
44 Chloroform	83	8.854	8.857	-0.003	96	466501	2.00	1.96	
45 Tert-butyl ethyl ether	59	8.946	8.969	-0.023	95	635299	2.00	2.24	
46 Tetrahydrofuran	42	9.259	9.287	-0.028	93	216098	2.00	2.18	
47 1,1,1-Trichloroethane	97	9.879	9.884	-0.005	95	508437	2.00	1.98	
48 1,2-Dichloroethane	62	9.987	9.992	-0.005	98	329677	2.00	1.88	
49 Cyclohexane	69	10.483	10.488	-0.005	92	107133	2.00	1.86	
50 Benzene	78	10.477	10.483	-0.006	96	594896	2.00	1.82	
51 n-Butanol	31	10.488	10.524	-0.036	65	58927	2.00	1.91	
52 Carbon tetrachloride	117	10.504	10.508	-0.004	97	375521	2.00	1.66	
53 2,3-Dimethylpentane	71	10.601	10.606	-0.005	91	159316	2.00	1.89	
54 Thiophene	84	10.752	10.756	-0.004	97	322722	2.00	1.86	
55 Isooctane	57	11.249	11.250	-0.001	98	1064296	2.00	1.92	
56 n-Heptane	71	11.621	11.624	-0.003	91	230866	2.00	1.86	
57 1,2-Dichloropropane	63	11.696	11.701	-0.005	89	230193	2.00	1.87	
58 Trichloroethene	130	11.739	11.739	0.000	90	196817	2.00	1.78	
59 Dibromomethane	93	11.820	11.820	0.000	83	237166	2.00	1.83	
60 Dichlorobromomethane	83	11.966	11.967	-0.001	97	455959	2.00	2.02	
61 1,4-Dioxane	88	11.987	12.018	-0.031	94	74662	2.00	2.01	
62 Methyl methacrylate	41	12.057	12.070	-0.013	95	245965	2.00	2.15	
63 Methylcyclohexane	83	12.505	12.507	-0.002	95	385717	2.00	1.89	
64 4-Methyl-2-pentanone (MIBK)	43	12.915	12.933	-0.018	97	436411	2.00	2.20	
65 cis-1,3-Dichloropropene	75	12.963	12.967	-0.004	93	321027	2.00	1.88	
66 trans-1,3-Dichloropropene	75	13.659	13.661	-0.002	95	299199	2.00	2.05	
67 Toluene	91	13.783	13.786	-0.003	94	601268	2.00	1.96	
68 1,1,2-Trichloroethane	83	13.853	13.859	-0.006	96	187522	2.00	2.01	
69 2-Hexanone	58	14.252	14.266	-0.014	94	210723	2.00	2.29	
70 n-Octane	85	14.473	14.479	-0.006	93	228134	2.00	2.03	
71 Chlorodibromomethane	129	14.559	14.562	-0.003	96	315285	2.00	1.94	
72 Ethylene Dibromide	107	14.851	14.852	-0.001	97	288099	2.00	1.99	
73 Tetrachloroethene	129	14.926	14.929	-0.003	87	193223	2.00	1.84	
75 Chlorobenzene	112	15.800	15.802	-0.002	87	413252	2.00	1.87	
74 2,3-Dimethylheptane	43	15.821	15.824	-0.003	95	730275	2.00	2.08	
78 Ethylbenzene	91	16.091	16.092	-0.001	99	838637	2.00	2.08	
79 m-Xylene & p-Xylene	91	16.253	16.254	-0.001	100	1352087	4.00	4.22	
80 n-Nonane	57	16.673	16.676	-0.003	90	467764	2.00	2.14	
81 Bromoform	173	16.700	16.700	0.000	92	262090	2.00	2.11	
82 Styrene	104	16.716	16.718	-0.002	97	430593	2.00	2.29	
83 o-Xylene	91	16.776	16.780	-0.004	97	737287	2.00	2.18	
84 1,1,2,2-Tetrachloroethane	83	17.099	17.101	-0.002	98	513238	2.00	2.28	
85 1,2,3-Trichloropropane	110	17.261	17.260	0.001	99	147848	2.00	2.23	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
86 Isopropylbenzene	105	17.364	17.367	-0.003	98	935269	2.00	2.17	
87 N-Propylbenzene	120	17.903	17.907	-0.004	98	229581	2.00	2.14	
88 2-Chlorotoluene	126	17.951	17.951	0.000	96	202724	2.00	2.05	
89 4-Ethyltoluene	105	18.054	18.056	-0.002	98	889602	2.00	2.15	
90 1,3,5-Trimethylbenzene	120	18.129	18.131	-0.002	91	350662	2.00	2.18	
92 Alpha Methyl Styrene	118	18.361	18.361	0.000	84	334215	2.00	2.49	
93 n-Decane	57	18.420	18.420	0.000	92	592142	2.00	2.30	
94 tert-Butylbenzene	119	18.550	18.554	-0.004	87	819734	2.00	2.34	
95 1,2,4-Trimethylbenzene	105	18.566	18.567	-0.001	96	822650	2.00	2.21	
96 sec-Butylbenzene	105	18.819	18.821	-0.002	97	1170579	2.00	2.17	
97 1,3-Dichlorobenzene	146	18.836	18.836	0.000	94	425697	2.00	2.21	
98 Benzyl chloride	91	18.906	18.909	-0.003	96	739302	2.00	2.52	
99 1,4-Dichlorobenzene	146	18.922	18.922	0.000	88	422766	2.00	2.16	
100 4-Isopropyltoluene	119	18.981	18.983	-0.002	96	917420	2.00	2.20	
101 1,2,3-Trimethylbenzene	105	19.035	19.036	-0.001	99	836772	2.00	2.66	
102 Butylcyclohexane	83	19.089	19.091	-0.002	94	738208	2.00	2.21	
103 2,3-Dihydroindene	117	19.278	19.279	-0.001	92	701017	2.00	2.35	
104 1,2-Dichlorobenzene	146	19.278	19.280	-0.002	77	440348	2.00	2.24	
106 Indene	116	19.407	19.409	-0.002	91	624096	2.00	2.45	
105 n-Butylbenzene	91	19.413	19.414	-0.001	97	1069578	2.00	2.27	
107 Undecane	57	19.725	19.726	-0.001	95	654717	2.00	2.35	
108 1,2-Dibromo-3-Chloropropane	157	19.876	19.877	-0.001	87	213065	2.00	2.78	
109 1,2,4,5-Tetramethylbenzene	119	20.162	20.165	-0.003	95	882392	2.00	2.41	
110 Dodecane	57	20.777	20.778	-0.001	95	560014	2.00	2.35	
111 1,2,4-Trichlorobenzene	180	20.971	20.973	-0.002	91	349392	2.00	2.41	
112 Naphthalene	128	21.111	21.112	-0.001	99	883787	2.00	2.37	
113 Hexachlorobutadiene	225	21.322	21.320	0.002	92	419604	2.00	2.46	
114 1,2,3-Trichlorobenzene	180	21.386	21.388	-0.002	93	350335	2.00	2.53	
115 2-Methylnaphthalene	142	22.157	22.158	-0.001	98	378412	2.00	1.75	
116 1-Methylnaphthalene	142	22.330	22.333	-0.003	98	452400	2.00	1.76	
A 122 C8 Range	1	14.473	(14.415-14.522)		0	2121726	2.00	2.04	
S 123 1,2-Dichloroethene, Total	1				0		4.00	3.88	
S 124 Xylenes, Total	100				0		6.00	6.40	

Reagents:

40L7DQP_00018	Amount Added: 200.00	Units: mL	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

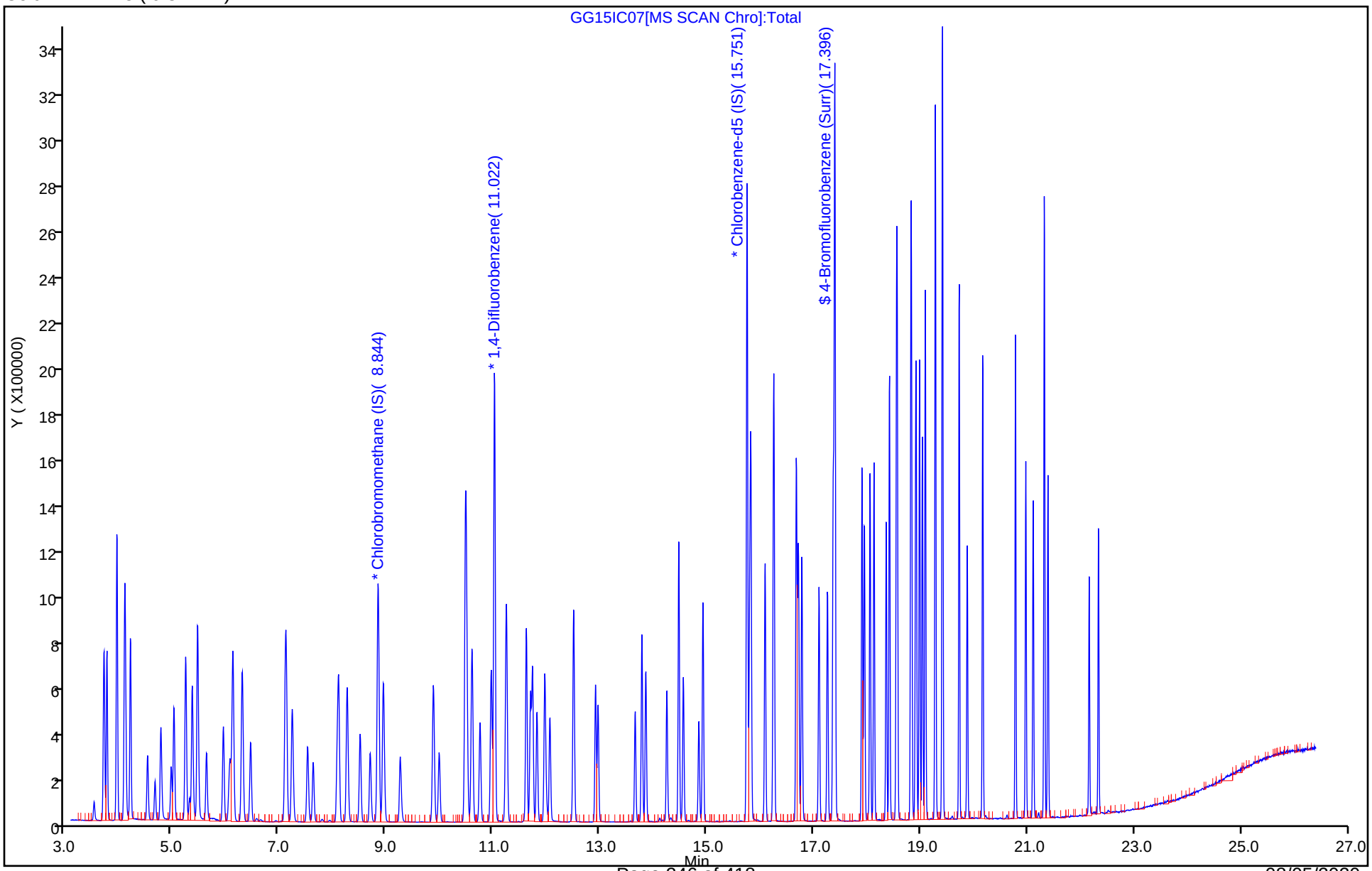
Report Date: 16-Jul-2020 15:15:41 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC07.D

Injection Date:	15-Jul-2020 22:02:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	ICIS L7			Worklist Smp#:	14
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

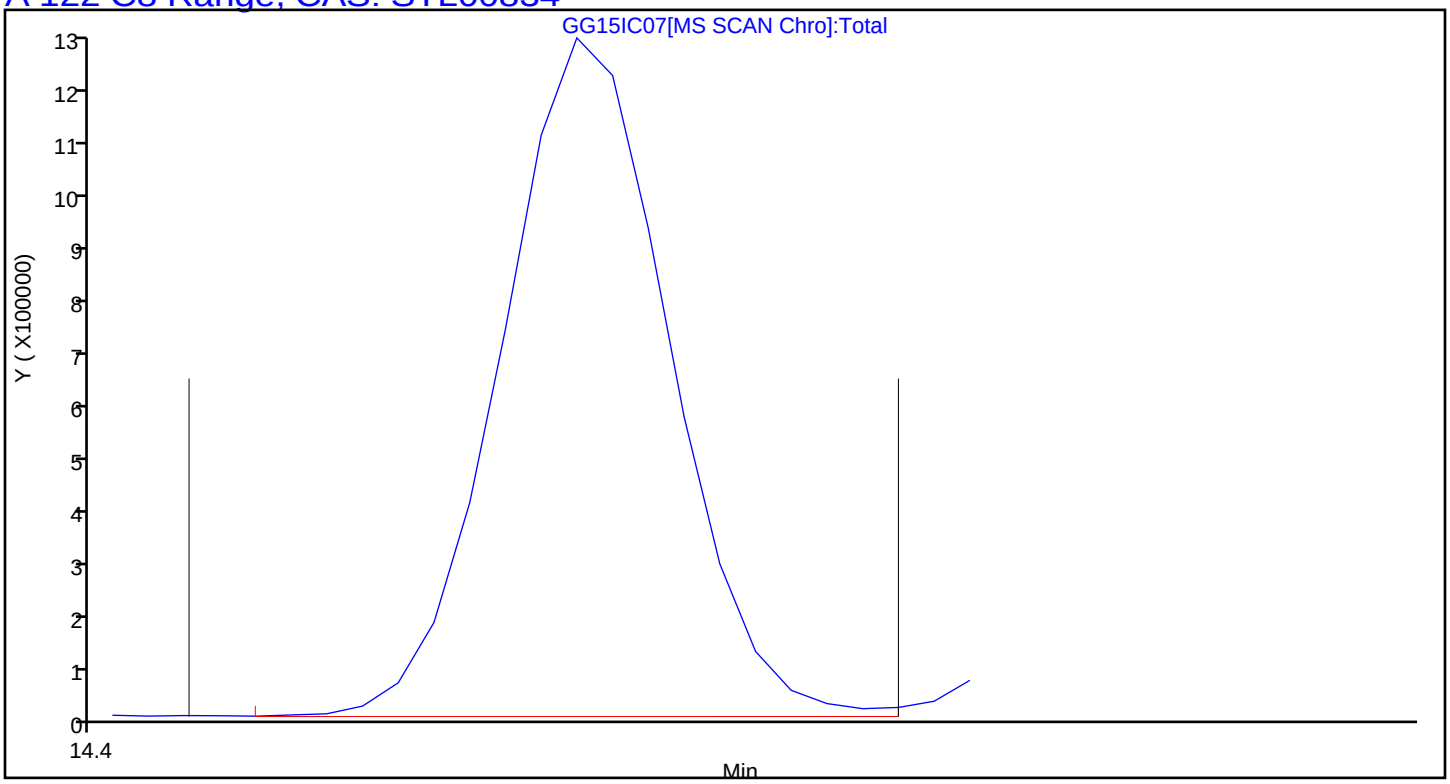


Report Date: 16-Jul-2020 15:15:41 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC07.D				
Injection Date:	15-Jul-2020 22:02:30	Instrument ID:	MG		
Lims ID:	ICIS L7				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	5	Worklist Smp#:	14
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 122 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC10.D
Lims ID: IC L10
Client ID:
Sample Type: IC Calib Level: 10
Inject. Date: 15-Jul-2020 12:53:30 ALS Bottle#: 14 Worklist Smp#: 21
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016031-002
Misc. Info.: 306865
Operator ID: HMT Instrument ID: MG
Sublist: chrom-MG_TO15*sub17

Method: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 16-Jul-2020 15:15:49 Calib Date: 15-Jul-2020 22:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1066

First Level Reviewer: barlozhetskayaa Date: 16-Jul-2020 15:05:41

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
*	1 Chlorobromomethane (IS)	128	8.860	8.843	0.017	95	167531	4.00	4.00	
*	2 1,4-Difluorobenzene	114	11.038	11.026	0.012	96	1176772	4.00	4.00	
*	3 Chlorobenzene-d5 (IS)	117	15.762	15.754	0.008	91	1331683	4.00	4.00	
$	4 4-Bromofluorobenzene (Surr)	95	17.401	17.397	0.004	81	1193530	4.00	4.41	
	6 Chlorodifluoromethane	51	3.705	3.708	-0.003	96	2523928	16.0	14.8	
	7 Propene	41	3.715	3.719	-0.004	99	1310261	16.0	16.7	
	8 Dichlorodifluoromethane	85	3.769	3.770	-0.001	100	4813201	16.0	15.8	
	9 Chloromethane	52	3.953	3.952	0.001	100	404367	16.0	13.9	
	10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.958	3.960	-0.002	95	2609205	16.0	16.5	
	11 Acetaldehyde	44	4.109	4.111	-0.002	95	2276199	80.0	61.5	
	12 Vinyl chloride	62	4.120	4.122	-0.002	99	1653274	16.0	14.4	
	13 Butane	43	4.206	4.210	-0.004	85	2270081	16.0	14.4	
	14 Butadiene	54	4.211	4.210	0.001	70	1182241	16.0	14.6	
	15 Bromomethane	94	4.535	4.531	0.004	97	1484900	16.0	15.5	
	16 Chloroethane	64	4.675	4.673	0.002	97	837824	16.0	15.2	
	17 Ethanol	31	4.805	4.804	0.001	98	2796885	80.0	80.4	
	18 Vinyl bromide	106	4.977	4.975	0.002	97	1359074	16.0	16.3	
	19 2-Methylbutane	43	5.026	5.025	0.001	88	1517271	16.0	14.9	
	20 Trichlorofluoromethane	101	5.247	5.246	0.001	99	5131943	16.0	17.1	
	21 Acrolein	56	5.258	5.263	-0.005	94	349789	16.0	18.0	
	22 Acetonitrile	40	5.333	5.322	0.011	99	464495	16.0	16.3	
	23 Acetone	58	5.376	5.385	-0.009	97	1689823	48.0	47.4	
	24 Pentane	72	5.468	5.467	0.001	98	334580	16.0	17.8	
	25 Isopropyl alcohol	45	5.495	5.507	-0.012	96	4391364	48.0	50.0	
	26 Ethyl ether	31	5.635	5.650	-0.015	89	1124219	16.0	16.6	
	27 1,1-Dichloroethene	96	5.959	5.951	0.008	94	1320258	16.0	16.8	
	28 Acrylonitrile	53	6.072	6.061	0.011	96	885078	16.0	17.3	
	30 2-Methyl-2-propanol	59	6.088	6.136	-0.048	95	2388702	16.0	17.7	
	29 1,1,2-Trichloro-1,2,2-trifluoroe	101	6.131	6.129	0.002	93	3113337	16.0	17.8	
	31 Methylene Chloride	84	6.309	6.299	0.010	94	1331674	16.0	16.6	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.320	6.313	0.007	99	1286544	16.0	16.2	
33 Carbon disulfide	76	6.465	6.462	0.003	99	4419618	16.0	16.7	
34 trans-1,2-Dichloroethene	96	7.118	7.109	0.009	96	1523405	16.0	17.4	
35 2-Methylpentane	43	7.134	7.129	0.005	91	3233937	16.0	15.2	
36 Methyl tert-butyl ether	73	7.242	7.266	-0.024	95	4433940	16.0	18.2	
37 1,1-Dichloroethane	63	7.539	7.528	0.011	100	3066026	16.0	15.9	
38 Vinyl acetate	43	7.646	7.641	0.005	100	3571055	16.0	18.8	
39 2-Butanone (MEK)	72	8.094	8.102	-0.008	99	725294	16.0	17.8	
40 Hexane	56	8.116	8.111	0.005	92	1223253	16.0	16.0	
41 Isopropyl ether	45	8.277	8.289	-0.012	95	4526981	16.0	17.3	
42 cis-1,2-Dichloroethene	96	8.525	8.514	0.011	98	1533364	16.0	17.2	
43 Ethyl acetate	43	8.709	8.715	-0.006	99	2912424	16.0	17.8	
44 Chloroform	83	8.870	8.857	0.013	97	3755288	16.0	16.9	
45 Tert-butyl ethyl ether	59	8.951	8.969	-0.018	95	4754378	16.0	18.0	
46 Tetrahydrofuran	42	9.264	9.287	-0.023	91	1601942	16.0	17.3	
47 1,1,1-Trichloroethane	97	9.895	9.884	0.011	95	4173583	16.0	17.4	
48 1,2-Dichloroethane	62	10.008	9.992	0.016	99	2615527	16.0	20.1	
50 Benzene	78	10.499	10.483	0.016	95	4994527	16.0	20.6	
49 Cyclohexane	69	10.494	10.488	0.006	90	904459	16.0	21.1	
51 n-Butanol	31	10.472	10.524	-0.052	77	476385	16.0	20.9	
52 Carbon tetrachloride	117	10.515	10.508	0.007	97	4259967	16.0	25.4	
53 2,3-Dimethylpentane	71	10.612	10.606	0.006	92	1263926	16.0	20.2	
54 Thiophene	84	10.769	10.756	0.013	96	2651503	16.0	20.6	
55 Isooctane	57	11.259	11.250	0.009	98	7890499	16.0	19.2	
56 n-Heptane	71	11.631	11.624	0.007	87	1979515	16.0	21.5	
57 1,2-Dichloropropane	63	11.712	11.701	0.011	87	1799564	16.0	19.7	
58 Trichloroethene	130	11.750	11.739	0.011	90	1837783	16.0	22.4	
59 Dibromomethane	93	11.831	11.820	0.011	91	2034131	16.0	21.1	
60 Dichlorobromomethane	83	11.976	11.967	0.009	98	4116427	16.0	24.6	
61 1,4-Dioxane	88	11.993	12.018	-0.025	89	623125	16.0	22.6	
62 Methyl methacrylate	41	12.074	12.070	0.004	96	1951045	16.0	23.0	
63 Methylcyclohexane	83	12.516	12.507	0.009	96	3204427	16.0	21.1	
64 4-Methyl-2-pentanone (MIBK)	43	12.920	12.933	-0.013	96	3117228	16.0	21.2	
65 cis-1,3-Dichloropropene	75	12.974	12.967	0.007	93	2829914	16.0	22.3	
66 trans-1,3-Dichloropropene	75	13.670	13.661	0.009	95	2709174	16.0	19.7	
67 Toluene	91	13.794	13.786	0.008	94	5511722	16.0	19.1	
68 1,1,2-Trichloroethane	83	13.869	13.859	0.010	98	1659004	16.0	18.9	
69 2-Hexanone	58	14.257	14.266	-0.009	95	1692474	16.0	19.5	
70 n-Octane	85	14.484	14.479	0.005	87	2137497	16.0	20.2	
71 Chlorodibromomethane	129	14.570	14.562	0.008	97	3564469	16.0	23.2	
72 Ethylene Dibromide	107	14.861	14.852	0.009	98	2692950	16.0	19.8	
73 Tetrachloroethene	129	14.937	14.929	0.008	95	2084183	16.0	21.1	
75 Chlorobenzene	112	15.810	15.802	0.008	91	4423608	16.0	21.2	
74 2,3-Dimethylheptane	43	15.832	15.824	0.008	92	5100573	16.0	15.4	
78 Ethylbenzene	91	16.096	16.092	0.004	99	7999979	16.0	21.1	
79 m-Xylene & p-Xylene	91	16.263	16.254	0.009	98	13522466	32.0	44.8	
80 n-Nonane	57	16.679	16.676	0.003	83	3913851	16.0	19.0	
81 Bromoform	173	16.706	16.700	0.006	96	4903415	16.0	41.8	
82 Styrene	104	16.722	16.718	0.004	97	4827498	16.0	27.2	
83 o-Xylene	91	16.786	16.780	0.006	97	6599312	16.0	20.7	
84 1,1,2,2-Tetrachloroethane	83	17.110	17.101	0.009	99	4376816	16.0	20.6	
85 1,2,3-Trichloropropane	110	17.266	17.260	0.006	98	1363256	16.0	21.8	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
86 Isopropylbenzene	105	17.374	17.367	0.007	97	8849449	16.0	21.8	
87 N-Propylbenzene	120	17.913	17.907	0.006	99	2378468	16.0	23.5	
88 2-Chlorotoluene	126	17.957	17.951	0.006	97	2092822	16.0	22.5	
89 4-Ethyltoluene	105	18.064	18.056	0.008	98	8770407	16.0	22.4	
90 1,3,5-Trimethylbenzene	120	18.140	18.131	0.009	92	3617290	16.0	23.8	
92 Alpha Methyl Styrene	118	18.366	18.361	0.005	87	3685663	16.0	29.1	
93 n-Decane	57	18.426	18.420	0.006	93	4502247	16.0	18.5	
94 tert-Butylbenzene	119	18.561	18.554	0.007	95	8822833	16.0	26.8	
95 1,2,4-Trimethylbenzene	105	18.571	18.567	0.004	95	8326250	16.0	23.7	
96 sec-Butylbenzene	105	18.830	18.821	0.009	98	12132121	16.0	23.8	
97 1,3-Dichlorobenzene	146	18.841	18.836	0.005	98	5628707	16.0	30.9	
98 Benzyl chloride	91	18.916	18.909	0.007	98	7710627	16.0	27.9	
99 1,4-Dichlorobenzene	146	18.927	18.922	0.005	92	5186270	16.0	28.1	
100 4-Isopropyltoluene	119	18.992	18.983	0.009	96	9356856	16.0	23.8	
101 1,2,3-Trimethylbenzene	105	19.040	19.036	0.004	98	7785122	16.0	16.0	
102 Butylcyclohexane	83	19.100	19.091	0.009	96	6312775	16.0	20.0	
103 2,3-Dihydroindene	117	19.289	19.279	0.010	94	8038792	16.0	28.6	
104 1,2-Dichlorobenzene	146	19.289	19.280	0.009	85	5883538	16.0	31.7	
106 Indene	116	19.418	19.409	0.009	93	7416416	16.0	30.9	
105 n-Butylbenzene	91	19.418	19.414	0.004	98	10166628	16.0	22.9	
107 Undecane	57	19.731	19.726	0.005	89	4563495	16.0	17.4	
108 1,2-Dibromo-3-Chloropropane	157	19.882	19.877	0.005	96	2869772	16.0	39.7	
109 1,2,4,5-Tetramethylbenzene	119	20.167	20.165	0.002	97	8878341	16.0	25.7	
110 Dodecane	57	20.782	20.778	0.004	95	4001315	16.0	17.8	
111 1,2,4-Trichlorobenzene	180	20.976	20.973	0.003	94	5230048	16.0	38.2	
112 Naphthalene	128	21.117	21.112	0.005	98	9165825	16.0	26.0	
113 Hexachlorobutadiene	225	21.321	21.320	0.001	94	5966608	16.0	37.1	
114 1,2,3-Trichlorobenzene	180	21.392	21.388	0.004	95	4723177	16.0	36.1	
115 2-Methylnaphthalene	142	22.157	22.158	-0.001	99	5158127	16.0	25.3	
116 1-Methylnaphthalene	142	22.335	22.333	0.002	98	5750777	16.0	23.7	
A 122 C8 Range	1	14.469	(14.420-14.527)		0	17183525	16.0	17.5	
S 123 1,2-Dichloroethene, Total	1				0		32.0	34.7	
S 124 Xylenes, Total	100				0		48.0	65.5	

Reagents:

40L10DQP_00018	Amount Added: 200.00	Units: mL	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

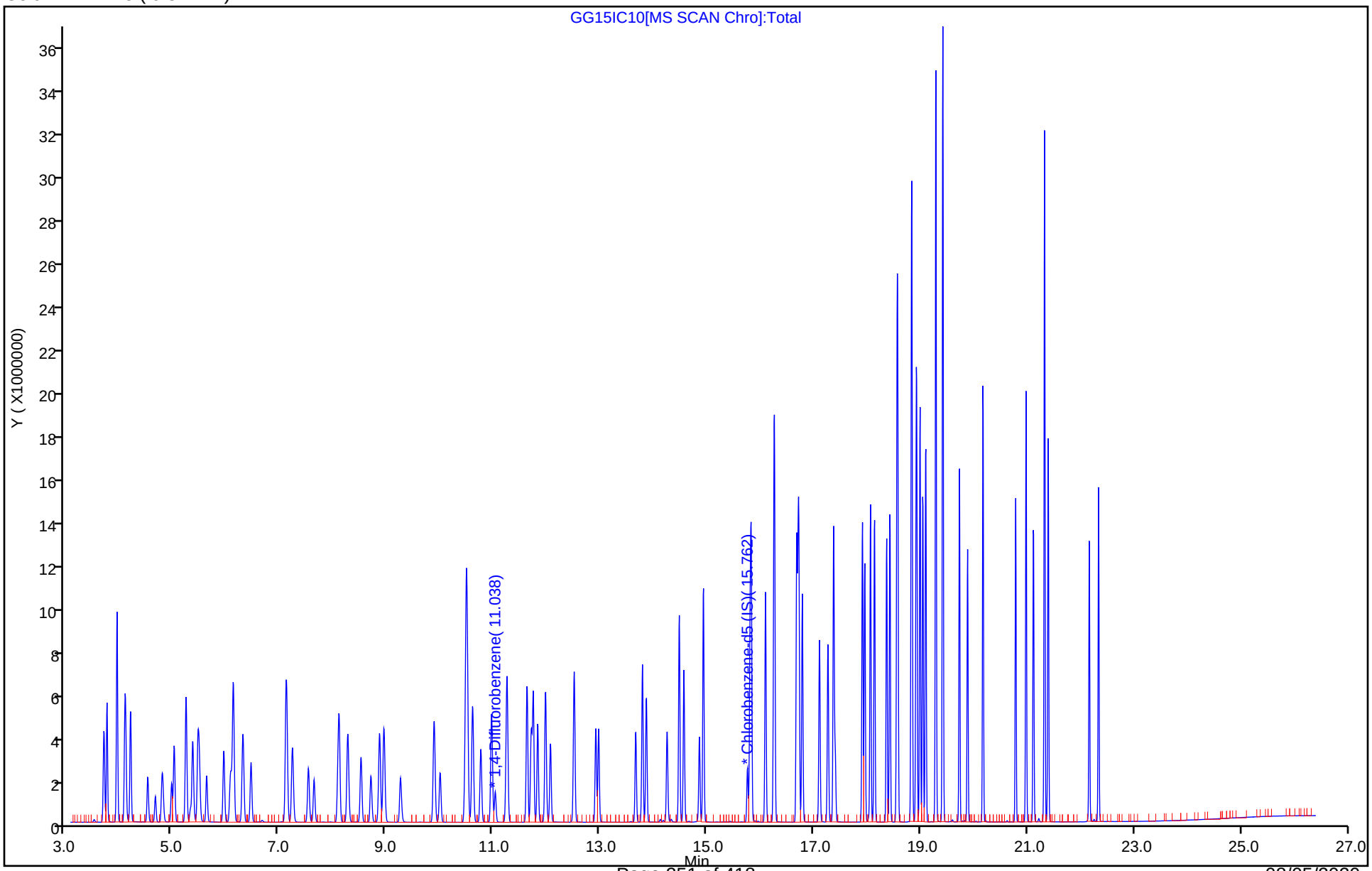
Report Date: 16-Jul-2020 15:15:50 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC10.D

Injection Date:	15-Jul-2020 12:53:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	IC L10			Worklist Smp#:	21
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

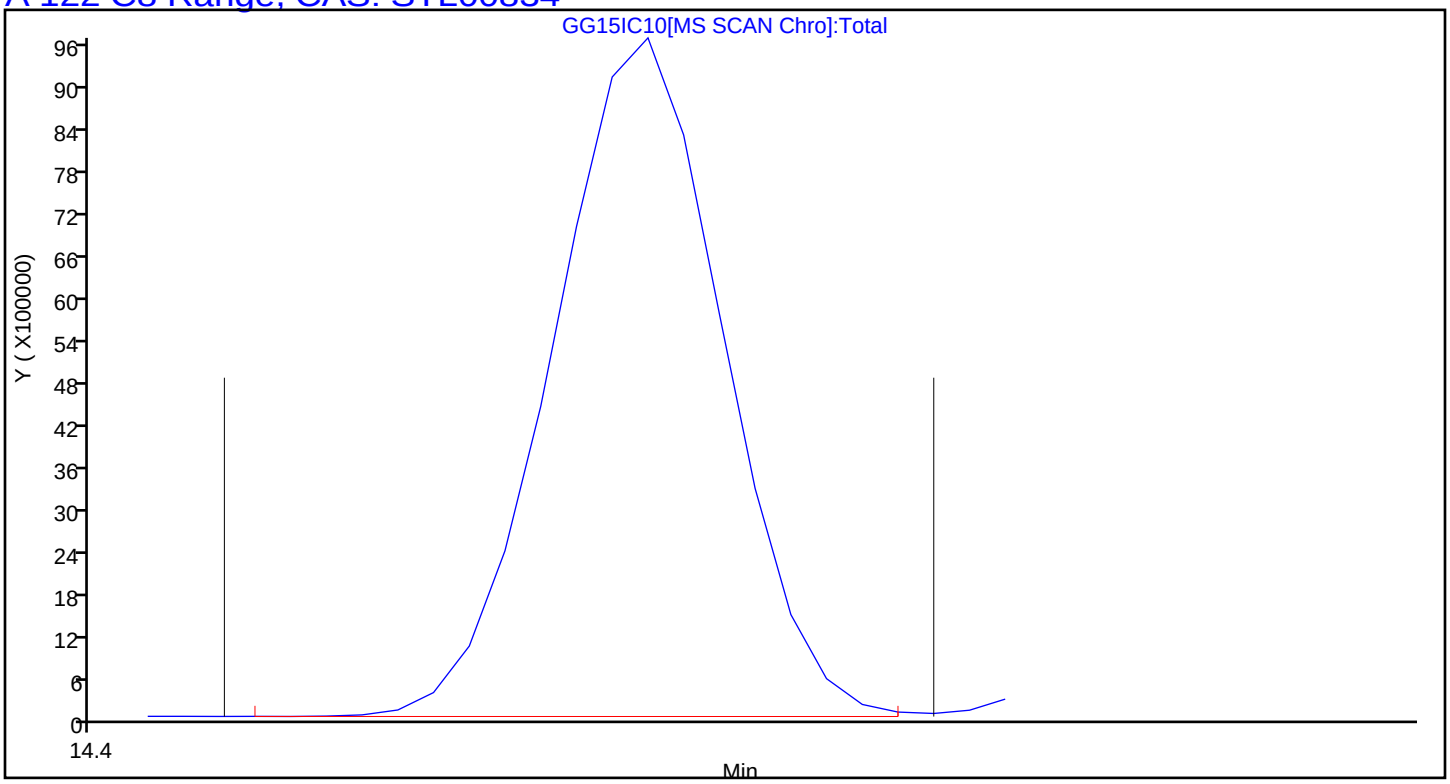


Report Date: 16-Jul-2020 15:15:50 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC10.D				
Injection Date:	15-Jul-2020 12:53:30	Instrument ID:	MG		
Lims ID:	IC L10				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	14	Worklist Smp#:	21
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 122 C8 Range, CAS: STL00834



FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19811-1 Analy Batch No.: 41306

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/27/2020 17:38 Calibration End Date: 07/28/2020 09:59 Calibration ID: 2540

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 140-41306/9	RG27IC01.D
Level 2	IC 140-41306/10	RG27IC02.D
Level 3	IC 140-41306/11	RG27IC03.D
Level 4	IC 140-41306/12	RG27IC04.D
Level 5	IC 140-41306/13	RG27IC05.D
Level 6	IC 140-41306/14	RG27IC06.D
Level 7	ICIS 140-41306/15	RG27IC07.D
Level 8	IC 140-41306/7	RG27IC08.D
Level 9	IC 140-41306/23	RG27IC09R.D
Level 10	IC 140-41306/3	RG27IC10.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Chlorodifluoromethane	+++++ 5.4890	+++++ 6.2452	6.2528 5.9844	6.2490 6.1439	5.9506 4.5184	Ave		5.8542				10.2		30.0			
Propene	+++++ 4.7245	+++++ 4.1427	+++++ 3.4919	+++++ 3.2280	4.1289 2.3551	Qua	0.4506	3.9463	-0.101079						0.9990		0.9900
Dichlorodifluoromethane	+++++ 3.6838	+++++ 4.4240	3.7366 3.9948	4.1998 4.5173	4.1241 2.9529	Ave		3.9542				12.7		30.0			
Chloromethane	+++++ 0.9643	+++++ 1.1112	+++++ 1.0271	1.1247 1.0645	1.0265 0.7608	Ave		1.0113				12.2		30.0			
1,2-Dichloro-1,1,2,2-tetrafluoroethane	+++++ 3.6281	+++++ 4.2656	3.7973 4.1382	3.9892 4.4962	3.7718 2.9027	Ave		3.8737				12.5		30.0			
Vinyl chloride	3.0535 2.6629	3.2950 3.0412	2.8559 2.9633	3.0903 3.0030	2.9731 2.1147	Ave		2.9053				11.1		30.0			
Butane	+++++ 5.1275	+++++ 5.5029	5.7968 5.3567	5.2030 5.4435	5.4459 3.9451	Ave		5.2277				10.6		30.0			
1,3-Butadiene	+++++ 2.3454	+++++ 2.6993	2.1987 2.6161	2.5537 2.6694	2.5313 1.9219	Ave		2.4420				11.0		30.0			
Bromomethane	+++++ 1.9857	+++++ 2.2311	2.1545 2.1532	2.1204 2.2995	2.1266 1.5915	Ave		2.0828				10.5		30.0			
Chloroethane	+++++ 1.2344	+++++ 1.3315	1.2939 1.2791	1.2317 1.3043	1.2730 0.9419	Ave		1.2362				10.0		30.0			
Ethanol	+++++ 1.4294	+++++ 1.7783	1.5551 1.7307	1.6373 1.6279	1.6528 1.3053	Ave		1.5896				9.8		30.0			
Vinyl bromide	+++++ 1.9171	+++++ 2.0918	1.8697 2.0517	2.0235 2.1819	2.0456 1.6050	Ave		1.9733				9.0		30.0			
2-Methylbutane	+++++ 3.7139	+++++ 3.8804	4.1190 3.7221	4.4390 3.8266	4.2314 2.9552	Ave		3.8609				11.6		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19811-1 Analy Batch No.: 41306

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/27/2020 17:38 Calibration End Date: 07/28/2020 09:59 Calibration ID: 2540

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Trichlorofluoromethane	5.5064 4.8874	5.0672 5.0081	4.5188 4.8179	4.7506 5.1685	5.1701 4.1180	Ave		4.9013				7.9		30.0			
Acrolein	+++++ 0.8207	+++++ 0.8750	+++++ 0.8661	+++++ 0.9620	0.8128 0.7942	Ave		0.8551				7.1		30.0			
Acetonitrile	+++++ 1.1670	+++++ 1.2151	+++++ 1.2383	+++++ 1.2637	1.2260 1.0637	Ave		1.1956				6.0		30.0			
Acetone	2.3102 1.3452	2.1295 1.3315	2.0090 1.2457	1.4936 1.2708	1.3963 +++++	Ave		1.6146				25.7		30.0			
Pentane	+++++ 0.3878	+++++ 0.3864	+++++ 0.3745	0.3506 0.3820	0.4709 0.3069	Ave		0.3799				13.0		30.0			
Isopropyl alcohol	+++++ 4.1341	+++++ 4.7458	+++++ 4.6081	4.5074 4.4709	4.6612 3.6440	QuaF		5.0982	-0.030102						0.9990		0.9900
Ethyl ether	+++++ 3.5525	4.0713 3.5496	3.5309 3.4912	3.6310 3.4344	3.8579 2.9600	Ave		3.5643				8.5		30.0			
1,1-Dichloroethene	2.4220 2.1047	2.3228 2.0274	2.2244 2.0747	2.2571 2.1038	2.2594 1.7859	Ave		2.1582				8.3		30.0			
Acrylonitrile	+++++ 1.7998	+++++ 1.8860	+++++ 2.0071	1.5856 2.0998	1.6112 1.8155	Ave		1.8293				10.4		30.0			
tert-Butyl alcohol	+++++ 4.7370	+++++ 5.2285	4.2292 5.1310	5.4882 5.1223	5.2338 4.2515	Ave		4.9277				9.6		30.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0889 4.4211	4.3545 4.2616	4.5429 4.2237	4.4565 4.3553	4.5951 3.6290	Ave		4.3929				8.3		30.0			
Methylene Chloride	+++++ 3.0449	+++++ 2.4474	+++++ 2.0708	+++++ 1.9275	5.2955 1.6186	Lin2	1.4498	1.6618							0.9960		0.9900
3-Chloropropene	+++++ 2.9284	+++++ 2.7145	3.1113 2.8219	2.7660 2.8206	3.1146 2.4552	Ave		2.8416				7.6		30.0			
Carbon disulfide	+++++ 5.7876	+++++ 5.7166	5.5248 5.7891	6.3218 5.6999	6.3347 4.9746	Ave		5.7687				7.5		30.0			
trans-1,2-Dichloroethene	+++++ 2.0707	+++++ 1.9861	2.1827 2.0315	2.0110 2.0568	2.1651 1.8340	Ave		2.0422				5.3		30.0			
2-Methylpentane	+++++ 7.0861	8.2395 6.8543	7.6393 6.9799	7.4718 6.9124	7.4687 5.9669	Ave		7.1799				8.8		30.0			
Methyl tert-butyl ether	+++++ 5.3409	+++++ 5.2231	5.4602 5.3063	5.5543 5.2789	5.7932 4.5810	Ave		5.3172				6.6		30.0			
1,1-Dichloroethane	5.5691 4.5484	5.6544 4.5175	4.7116 4.5358	5.0157 4.5738	4.8641 3.9293	Ave		4.7920				10.8		30.0			
Vinyl acetate	+++++ 7.8807	+++++ 8.0658	7.2630 8.5418	7.2711 8.7848	8.0334 7.8619	Ave		7.9628				6.7		30.0			
2-Butanone (MEK)	+++++ 1.0180	+++++ 0.9925	+++++ 1.0149	1.1046 1.0142	1.0341 0.9189	Ave		1.0139				5.4		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19811-1 Analy Batch No.: 41306

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/27/2020 17:38 Calibration End Date: 07/28/2020 09:59 Calibration ID: 2540

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Hexane	+++++ 2.1844	+++++ 2.1304	2.3098 2.1584	2.1544 2.1524	2.3098 1.8786	Ave		2.1598				6.2		30.0			
cis-1,2-Dichloroethene	+++++ 2.2672	2.6414 2.2134	2.3615 2.2663	2.4081 2.2196	2.3312 2.0023	Ave		2.3012				7.5		30.0			
Ethyl acetate	+++++ 7.5671	+++++ 7.3218	7.1710 7.5997	7.4729 7.5805	7.7829 6.7539	Ave		7.4062				4.4		30.0			
Chloroform	4.4477 4.3893	4.8206 4.2354	4.3915 4.3714	4.5546 4.2869	4.6239 3.7830	Ave		4.3904				6.2		30.0			
Tetrahydrofuran	+++++ 3.8588	+++++ 3.6271	3.9436 3.7023	3.9238 3.6375	4.0941 3.2703	Ave		3.7572				6.8		30.0			
1,1,1-Trichloroethane	5.2172 4.5600	5.0824 4.2140	4.7725 4.4074	4.3764 4.3674	4.6457 3.8578	Ave		4.5501				8.9		30.0			
1,2-Dichloroethane	+++++ 0.3769	0.3883 0.3827	0.3392 0.3886	0.3632 0.4075	0.3705 0.3593	Ave		0.3751				5.3		30.0			
Cyclohexane	+++++ 0.1204	+++++ 0.1158	0.1149 0.1133	0.1250 0.1163	0.1201 0.1027	Ave		0.1161				5.7		30.0			
Benzene	+++++ 0.7971	0.9200 0.7820	0.8338 0.7701	0.7922 0.7790	0.7843 0.7107	Ave		0.7966				7.1		30.0			
1-Butanol	+++++ 0.1567	+++++ 0.1893	+++++ 0.1944	0.1830 0.1899	0.1857 0.1724	Ave		0.1816				7.2		30.0			
Carbon tetrachloride	0.5497 0.5101	0.4986 0.4713	0.4698 0.5262	0.5200 0.5268	0.5151 0.4783	Ave		0.5066				5.3		30.0			
2,3-Dimethylpentane	+++++ 0.1805	0.1787 0.1716	0.1638 0.1754	0.1759 0.1762	0.1812 0.1604	Ave		0.1737				4.2		30.0			
Thiophene	+++++ 0.4387	0.4506 0.4451	0.4230 0.4530	0.4199 0.4510	0.4499 0.4207	Ave		0.4391				3.2		30.0			
2,2,4-Trimethylpentane	+++++ 1.6616	1.8054 1.6302	1.7594 1.6562	1.7120 1.7110	1.6524 1.5517	Ave		1.6822				4.4		30.0			
Heptane	+++++ 0.2740	+++++ 0.2625	0.2632 0.2685	0.2898 0.2735	0.2644 0.2520	Ave		0.2685				4.1		30.0			
1,2-Dichloropropane	+++++ 0.3583	0.3571 0.3640	0.3874 0.3672	0.3885 0.3665	0.3781 0.3390	Ave		0.3673				4.3		30.0			
Trichloroethene	0.3732 0.3407	0.3752 0.3416	0.3660 0.3416	0.3302 0.3530	0.3401 0.3293	Ave		0.3491				4.8		30.0			
Dibromomethane	0.3718 0.3166	0.3136 0.3155	0.3104 0.3161	0.2921 0.3285	0.3052 0.3093	Ave		0.3179				6.6		30.0			
Bromodichloromethane	0.5515 0.5444	0.5504 0.5423	0.5219 0.5590	0.5212 0.5666	0.5429 0.5305	Ave		0.5431				2.8		30.0			
1,4-Dioxane	+++++ 0.1114	+++++ 0.1344	+++++ 0.1350	0.1232 0.1264	0.1257 0.1178	Ave		0.1248				6.8		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19811-1 Analy Batch No.: 41306

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/27/2020 17:38 Calibration End Date: 07/28/2020 09:59 Calibration ID: 2540

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Methyl methacrylate	+++++ 0.5192	+++++ 0.5176	0.4896 0.5376	0.5149 0.5593	0.5294 0.5265	Ave		0.5242				3.8		30.0			
Methylcyclohexane	+++++ 0.4589	+++++ 0.4598	0.4642 0.4579	0.4628 0.4637	0.4725 0.4337	Ave		0.4592				2.5		30.0			
4-Methyl-2-pentanone (MIBK)	1.0514 0.9873	0.9227 0.9809	0.9100 1.0054	0.9067 1.0392	1.0010 0.9841	Ave		0.9789				5.2		30.0			
cis-1,3-Dichloropropene	0.4748 0.4284	0.3950 0.4343	0.4053 0.4519	0.4062 0.4627	0.4152 0.4401	Ave		0.4314				6.1		30.0			
trans-1,3-Dichloropropene	+++++ 0.4329	0.4478 0.4409	0.4136 0.4854	0.4031 0.4825	0.4007 0.4440	Ave		0.4390				7.0		30.0			
Toluene	1.2667 1.0772	1.1129 1.0678	1.0795 1.0866	1.1322 1.0567	1.1135 0.9761	Ave		1.0969				6.7		30.0			
1,1,2-Trichloroethane	0.3644 0.3362	0.4237 0.3476	0.3450 0.3451	0.3313 0.3314	0.3555 0.3108	Ave		0.3491				8.6		30.0			
2-Hexanone	+++++ 0.4591	+++++ 0.5024	0.4288 0.5230	0.3906 0.5160	0.4543 0.4839	Ave		0.4698				9.7		30.0			
C8 Range	+++++ 3.6081	+++++ 3.4728	3.5757 3.5761	3.7802 3.7036	3.5313 3.6053	Ave		3.6066				2.7		30.0			
Octane	+++++ 0.3468	+++++ 0.3286	0.3241 0.3392	0.3537 0.3364	0.3266 0.3207	Ave		0.3345				3.5		30.0			
Dibromochloromethane	0.6803 0.6772	0.7122 0.7005	0.6537 0.7349	0.6931 0.7228	0.6888 0.7038	Ave		0.6967				3.4		30.0			
1,2-Dibromoethane (EDB)	0.6297 0.5987	0.6045 0.6042	0.5380 0.6383	0.5875 0.6327	0.6045 0.6095	Ave		0.6048				4.7		30.0			
Tetrachloroethene	0.4188 0.3883	0.4158 0.3843	0.4253 0.3933	0.3903 0.3983	0.3716 0.3811	Ave		0.3967				4.5		30.0			
Chlorobenzene	0.9764 0.8588	0.8504 0.8825	0.8871 0.8818	0.8728 0.8720	0.8651 0.8511	Ave		0.8798				4.1		30.0			
Ethylbenzene	1.7726 1.4580	1.5982 1.4622	1.5472 1.4705	1.3948 1.4745	1.4862 1.4156	Ave		1.5080				7.3		30.0			
m-Xylene & p-Xylene	1.3334 1.0847	1.2031 1.1209	1.0695 1.1169	1.1161 1.1714	1.1092 1.1020	Ave		1.1427				6.8		30.0			
Nonane	0.9060 0.9658	1.0035 0.9720	0.9558 1.0199	0.9202 1.0585	0.9451 1.0150	Ave		0.9762				4.9		30.0			
Bromoform	0.9058 0.7547	0.7324 0.8889	0.7353 0.9760	0.7582 1.0585	0.7811 1.0450	Ave		0.8636				14.9		30.0			
Styrene	0.9019 0.8206	0.7571 0.8567	0.8080 0.8719	0.7413 0.9124	0.7944 0.8853	Ave		0.8350				7.2		30.0			
o-Xylene	+++++ 1.1708	1.3480 1.1877	1.1918 1.1989	1.1461 1.2330	1.1689 1.2105	Ave		1.2062				4.9		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19811-1 Analy Batch No.: 41306

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/27/2020 17:38 Calibration End Date: 07/28/2020 09:59 Calibration ID: 2540

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
1,1,2,2-Tetrachloroethane	0.9948 0.9619	0.9565 0.9751	0.9613 1.0082	0.9500 1.0250	0.9428 1.0127	Ave		0.9788				3.0		30.0			
1,2,3-Trichloropropane	+++++ 0.2548	+++++ 0.2610	0.2827 0.2728	0.2428 0.2818	0.2570 0.2844	Ave		0.2672				5.8		30.0			
Isopropylbenzene	1.9944 1.7203	1.8737 1.7413	1.7144 1.7684	1.7048 1.8718	1.6212 1.8077	Ave		1.7818				6.0		30.0			
Propylbenzene	0.4690 0.4709	0.4467 0.4896	0.4344 0.5001	0.4718 0.5319	0.4368 0.5320	Ave		0.4783				7.4		30.0			
2-Chlorotoluene	0.5215 0.4415	0.4794 0.4584	0.4438 0.4592	0.4564 0.4793	0.4144 0.4848	Ave		0.4639				6.3		30.0			
4-Ethyltoluene	1.5699 1.7266	1.4515 1.7216	1.4697 1.8192	1.6022 1.9629	1.6377 1.9167	Ave		1.6878				10.4		30.0			
1,3,5-Trimethylbenzene	0.7686 0.7080	0.6746 0.7394	0.6851 0.7693	0.6758 0.7850	0.7340 0.7848	Ave		0.7325				6.0		30.0			
Alpha Methyl Styrene	0.6286 0.7129	0.6419 0.7707	0.6768 0.8120	0.6252 0.8602	0.6779 0.8737	Ave		0.7280				13.0		30.0			
Decane	1.1919 1.3175	1.1694 1.3880	1.1554 1.4656	1.2317 1.5174	1.2414 1.4890	Ave		1.3167				10.5		30.0			
tert-Butylbenzene	1.3872 1.5639	1.4027 1.5993	1.6223 1.7195	1.5082 1.7840	1.4782 1.7865	Ave		1.5852				9.2		30.0			
1,2,4-Trimethylbenzene	1.3427 1.4986	1.3723 1.5498	1.3543 1.6765	1.3543 1.7274	1.3614 1.7356	Ave		1.4973				11.0		30.0			
sec-Butylbenzene	2.0707 2.3029	2.0982 2.3420	2.1356 2.5554	2.1582 2.6183	2.1565 +++++	Ave		2.2709				8.8		30.0			
1,3-Dichlorobenzene	1.0481 1.0554	1.0372 1.1314	0.9340 1.2667	0.9359 1.3528	0.9793 1.3957	Ave		1.1136				15.1		30.0			
Benzyl chloride	1.2008 1.1254	1.0573 1.3048	0.9736 1.4176	0.9263 1.5067	1.0411 1.5666	Ave		1.2120				18.7		30.0			
1,4-Dichlorobenzene	1.0220 1.0110	0.9271 1.1375	0.9105 1.2482	0.8729 1.3330	0.9263 1.3849	Ave		1.0773				17.4		30.0			
4-Isopropyltoluene	1.4990 1.8290	1.5354 1.9269	1.6010 2.0759	1.6308 2.1232	1.6605 +++++	Ave		1.7646				13.2		30.0			
1,2,3-Trimethylbenzene	1.7841 1.5545	1.4183 1.6345	1.5512 1.7470	1.4803 1.8061	1.4461 1.8025	Ave		1.6225				9.4		30.0			
Indane	1.6816 1.4464	1.3749 1.5137	1.3912 1.6864	1.2903 1.7246	1.3461 1.7773	Ave		1.5232				11.7		30.0			
1,2-Dichlorobenzene	1.2930 1.0856	0.9923 1.1585	0.9705 1.2824	0.9609 1.3530	0.9758 1.4344	Ave		1.1506				15.5		30.0			
Indene	1.1690 1.2549	1.1485 1.3519	1.1325 1.4992	1.0654 1.5439	1.1634 1.6127	Ave		1.2941				15.1		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19811-1 Analy Batch No.: 41306

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/27/2020 17:38 Calibration End Date: 07/28/2020 09:59 Calibration ID: 2540

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Butylbenzene	1.6484 1.8134	1.4327 1.9319	1.4454 2.1142	1.5180 2.1253	1.6684 +++++	Ave		1.7442				15.4		30.0			
Undecane	1.3280 1.5951	1.3771 1.7343	1.3442 1.8948	1.2179 1.9157	1.3196 +++++	Ave		1.5252				17.5		30.0			
1,2-Dibromo-3-Chloropropane	+++++ 0.6081	+++++ 0.7491	0.4885 0.8174	0.4743 0.8487	0.5603 0.8966	Ave		0.6804				24.7		30.0			
1,2,4,5-Tetramethylbenzene	+++++ 1.7961	+++++ 1.9105	1.6044 2.1036	1.2967 2.1381	1.5432 +++++	Ave		1.7704				17.4		30.0			
Dodecane	+++++ 1.4164	+++++ 1.8006	+++++ 2.0464	+++++ 2.0764	1.1311 +++++	Ave		1.6942				24.3		30.0			
1,2,4-Trichlorobenzene	+++++ 0.9947	0.9344 1.1955	0.7930 1.3350	0.5910 1.4749	0.7772 +++++	Ave		1.0119				29.9		30.0			
Naphthalene	2.0891 1.8519	1.8639 2.2466	1.7818 2.3304	0.9730 2.4046	1.5746 +++++	Ave		1.9018				23.4		30.0			
Hexachlorobutadiene	+++++ 1.0886	1.0331 1.1684	1.0697 1.2765	0.9388 1.3952	0.9275 1.4680	Ave		1.1518				16.7		30.0			
1,2,3-Trichlorobenzene	+++++ 0.9918	0.9907 1.2461	0.9066 1.3722	0.5998 1.5308	0.7984 1.5463	Ave		1.1092				29.9		30.0			
2-Methylnaphthalene	+++++ 0.5701	+++++ 1.0705	+++++ 1.3329	+++++ 1.6070	0.5351 +++++	Ave		1.0232				45.9		50.0			
1-Methylnaphthalene	+++++ 0.9278	+++++ 1.3444	+++++ 1.5484	+++++ 1.7152	0.8617 +++++	Ave		1.2795				29.4		50.0			
4-Bromofluorobenzene (Surr)	0.5582 0.6017	0.5478 0.6209	0.5669 0.6372	0.5742 0.6581	0.5736 0.7013	Ave		0.6040				8.2		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19811-1 Analy Batch No.: 41306

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/27/2020 17:38 Calibration End Date: 07/28/2020 09:59 Calibration ID: 2540

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 140-41306/9	RG27IC01.D
Level 2	IC 140-41306/10	RG27IC02.D
Level 3	IC 140-41306/11	RG27IC03.D
Level 4	IC 140-41306/12	RG27IC04.D
Level 5	IC 140-41306/13	RG27IC05.D
Level 6	IC 140-41306/14	RG27IC06.D
Level 7	ICIS 140-41306/15	RG27IC07.D
Level 8	IC 140-41306/7	RG27IC08.D
Level 9	IC 140-41306/23	RG27IC09R.D
Level 10	IC 140-41306/3	RG27IC10.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
Chlorodifluoromethane	CBM	Ave	+++++ 246131	+++++ 610022	22350 1232908	43560 2704427	97045 3835967	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Propene	CBM	Qua	+++++ 211848	+++++ 404650	+++++ 719403	+++++ 1420885	67336 1999419	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
Dichlorodifluoromethane	CBM	Ave	+++++ 165184	+++++ 432131	13356 823005	29276 1988425	67258 2506971	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Chloromethane	CBM	Ave	+++++ 43238	+++++ 108542	+++++ 211594	7840 468576	16741 645856	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,2-Dichloro-1,1,2,2-tetrafluoroethane	CBM	Ave	+++++ 162687	+++++ 416653	13573 852566	27808 1979144	61512 2464342	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Vinyl chloride	CBM	Ave	3167 119406	5853 297061	10208 610510	21542 1321837	48486 1795312	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Butane	CBM	Ave	+++++ 229919	+++++ 537514	20720 1103583	36269 2396125	88814 3349286	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,3-Butadiene	CBM	Ave	+++++ 105169	+++++ 263658	7859 538969	17801 1175020	41282 1631624	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Bromomethane	CBM	Ave	+++++ 89042	+++++ 217931	7701 443596	14781 1012173	34681 1351143	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Chloroethane	CBM	Ave	+++++ 55353	+++++ 130061	4625 263531	8586 574110	20761 799669	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Ethanol	CBM	Ave	+++++ 320471	+++++ 868482	27793 1782780	57067 3582876	134775 5540653	+++++ 5.00	+++++ 10.0	0.400 20.0	0.800 40.0	2.00 80.0
Vinyl bromide	CBM	Ave	+++++ 85965	+++++ 204321	6683 422689	14105 960416	33361 1362620	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Methylbutane	CBM	Ave	+++++ 166534	+++++ 379028	14723 766822	30943 1684402	69007 2508890	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Trichlorofluoromethane	CBM	Ave	5711 219154	9001 489182	16152 992591	33115 2275038	84317 3496099	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19811-1 Analy Batch No.: 41306

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/27/2020 17:38 Calibration End Date: 07/28/2020 09:59 Calibration ID: 2540

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
Acrolein	CBM	Ave	+++++ 36799	+++++ 85469	+++++ 178437	+++++ 423441	13255 674260	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
Acetonitrile	CBM	Ave	+++++ 52329	+++++ 118691	+++++ 255111	+++++ 556254	19994 903021	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
Acetone	CBM	Ave	7188 180954	11348 390168	21543 769898	31234 1678072	68315 +++++	0.0600 3.00	0.120 6.00	0.240 12.0	0.480 24.0	1.20 +++++
Pentane	CBM	Ave	+++++ 17390	+++++ 37740	+++++ 77148	2444 168144	7679 260521	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Isopropyl alcohol	CBM	QuaF	+++++ 556131	+++++ 1390680	+++++ 2848066	94261 5903919	228050 9280873	+++++ 3.00	+++++ 6.00	+++++ 12.0	0.480 24.0	1.20 48.0
Ethyl ether	CBM	Ave	+++++ 159295	7232 346722	12621 719254	25311 1511753	62916 2512978	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,1-Dichloroethene	CBM	Ave	2512 94377	4126 198031	7951 427440	15734 926047	36848 1516167	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Acrylonitrile	CBM	Ave	+++++ 80704	+++++ 184217	+++++ 413502	11053 924290	26276 1541328	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
tert-Butyl alcohol	CBM	Ave	+++++ 212410	+++++ 510711	15117 1057085	38257 2254744	85356 3609428	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,1,2-Trichloro-1,2,2-trifluoroetha ne	CBM	Ave	5278 198245	7735 416266	16238 870177	31065 1917116	74939 3080881	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Methylene Chloride	CBM	Lin2	+++++ 136534	+++++ 239056	+++++ 426624	+++++ 848449	86361 1374114	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
3-Chloropropene	CBM	Ave	+++++ 131311	+++++ 265148	11121 581361	19281 1241566	50795 2084374	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Carbon disulfide	CBM	Ave	+++++ 259519	+++++ 558390	19748 1192667	44068 2508957	103310 4223326	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
trans-1,2-Dichloroethene	CBM	Ave	+++++ 92853	+++++ 193997	7802 418527	14018 905380	35310 1556978	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Methylpentane	CBM	Ave	+++++ 317743	14636 669518	27306 1438011	52084 3042685	121804 5065710	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Methyl tert-butyl ether	CBM	Ave	+++++ 239488	+++++ 510185	19517 1093199	38718 2323660	94478 3889171	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,1-Dichloroethane	CBM	Ave	5776 203952	10044 441264	16841 934467	34963 2013274	79326 3335869	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Vinyl acetate	CBM	Ave	+++++ 353375	+++++ 787850	25961 1759799	50685 3866895	131013 6674553	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Butanone (MEK)	CBM	Ave	+++++ 45649	+++++ 96950	+++++ 209096	7700 446445	16864 780088	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Hexane	CBM	Ave	+++++ 97950	+++++ 208092	8256 444669	15018 947461	37669 1594913	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
cis-1,2-Dichloroethene	CBM	Ave	+++++ 101662	4692 216200	8441 466901	16786 977003	38019 1699886	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19811-1 Analy Batch No.: 41306

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/27/2020 17:38 Calibration End Date: 07/28/2020 09:59 Calibration ID: 2540

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
Ethyl acetate	CBM	Ave	+++++ 339312	+++++ 715182	25632 1565696	52092 3336777	126927 5733838	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Chloroform	CBM	Ave	4613 196820	8563 413702	15697 900593	31749 1887013	75409 3211626	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Tetrahydrofuran	CBM	Ave	+++++ 173031	+++++ 354292	14096 762749	27352 1601129	66768 2776417	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,1,1-Trichloroethane	CBM	Ave	5411 204471	9028 411611	17059 908022	30507 1922423	75765 3275184	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2-Dichloroethane	DFBZ	Ave	+++++ 144733	6253 306423	10550 672283	21685 1448028	53350 2460009	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Cyclohexane	DFBZ	Ave	+++++ 46240	+++++ 92688	3573 196062	7461 413070	17290 703270	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Benzene	DFBZ	Ave	+++++ 306125	14816 626098	25933 1332154	47298 2767807	112925 4865566	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1-Butanol	DFBZ	Ave	+++++ 60188	+++++ 151551	+++++ 336272	10929 674603	26740 1180496	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Carbon tetrachloride	DFBZ	Ave	4833 195887	8030 377305	14613 910191	31048 1871799	74165 3274105	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2,3-Dimethylpentane	DFBZ	Ave	+++++ 69317	2877 137406	5095 303336	10505 626099	26093 1097915	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Thiophene	DFBZ	Ave	+++++ 168471	7256 356353	13155 783591	25072 1602525	64778 2880352	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2,2,4-Trimethylpentane	DFBZ	Ave	+++++ 638094	29074 1305159	54721 2864948	102219 6079409	237917 10622791	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Heptane	DFBZ	Ave	+++++ 105214	+++++ 210131	8185 464455	17300 971980	38064 1725170	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2-Dichloropropane	DFBZ	Ave	+++++ 137586	5751 291387	12048 635169	23195 1302225	54434 2320849	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Trichloroethene	DFBZ	Ave	3281 130842	6043 273468	11385 590859	19716 1254193	48964 2254609	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Dibromomethane	DFBZ	Ave	3269 121569	5050 252570	9655 546757	17443 1167279	43944 2117185	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Bromodichloromethane	DFBZ	Ave	4849 209068	8864 434191	16233 967086	31116 2013292	78168 3631438	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,4-Dioxane	DFBZ	Ave	+++++ 42789	+++++ 107588	+++++ 233489	7355 449229	18102 806385	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Methyl methacrylate	DFBZ	Ave	+++++ 199371	+++++ 414367	15229 929916	30743 1987185	76225 3604061	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Methylcyclohexane	DFBZ	Ave	+++++ 176238	+++++ 368156	14439 792085	27635 1647594	68034 2969356	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
4-Methyl-2-pentanone (MIBK)	DFBZ	Ave	9244 379139	14860 785359	28304 1739238	54138 3692453	144122 6737256	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19811-1 Analy Batch No.: 41306

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/27/2020 17:38 Calibration End Date: 07/28/2020 09:59 Calibration ID: 2540

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
cis-1,3-Dichloropropene	DFBZ	Ave	4175 164512	6361 347671	12607 781659	24251 1644237	59780 3013045	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
trans-1,3-Dichloropropene	CBZd 5	Ave	+++++ 139920	5795 292083	10582 701991	19725 1507029	47513 2769568	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Toluene	CBZd 5	Ave	9082 348176	14401 707352	27621 1571492	55409 3300253	132029 6088407	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,1,2-Trichloroethane	CBZd 5	Ave	2613 108656	5483 230231	8827 499056	16211 1034912	42151 1938784	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Hexanone	CBZd 5	Ave	+++++ 148380	+++++ 332776	10972 756406	19116 1611422	53872 3018143	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
C8 Range	DFBZ	Ave	+++++ 1385610	+++++ 2780330	111213 6186213	225700 13159790	508427 24681269	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Octane	CBZd 5	Ave	+++++ 112095	+++++ 217667	8292 490607	17309 1050543	38720 2000001	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Dibromochloromethane	CBZd 5	Ave	4878 218891	9216 464052	16726 1062915	33919 2257599	81665 4389647	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2-Dibromoethane (EDB)	CBZd 5	Ave	4515 193516	7823 400269	13765 923134	28751 1975955	71680 3801697	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Tetrachloroethene	CBZd 5	Ave	3003 125507	5381 254548	10882 568875	19101 1244049	44056 2377282	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Chlorobenzene	CBZd 5	Ave	7001 277579	11005 584619	22698 1275338	42713 2723295	102575 5308785	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Ethylbenzene	CBZd 5	Ave	12710 471263	20681 968642	39590 2126782	68260 4605232	176214 8829342	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
m-Xylene & p-Xylene	CBZd 5	Ave	19121 701209	31137 1485011	54731 3230671	109239 7316737	263030 13746712	0.0400 2.00	0.0800 4.00	0.160 8.00	0.320 16.0	0.800 32.0
Nonane	CBZd 5	Ave	6496 312166	12986 643865	24458 1475086	45033 3305943	112064 6331112	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Bromoform	CBZd 5	Ave	6495 243953	9478 588832	18815 1411559	37105 3305834	92619 6517763	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Styrene	CBZd 5	Ave	6467 265242	9797 567479	20676 1261090	36278 2849656	94195 5521771	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
o-Xylene	CBZd 5	Ave	+++++ 378432	17444 786791	30495 1733927	56091 3851012	138599 7550396	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,1,2,2-Tetrachloroethane	CBZd 5	Ave	7133 310901	12378 645943	24597 1458099	46493 3201216	111782 6316679	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2,3-Trichloropropane	CBZd 5	Ave	+++++ 82364	+++++ 172869	7234 394619	11880 880055	30475 1773747	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Isopropylbenzene	CBZd 5	Ave	14300 556043	24247 1153514	43868 2557625	83433 5846094	192221 11275174	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Propylbenzene	CBZd 5	Ave	3363 152207	5780 324309	11115 723311	23090 1661180	51788 3318378	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19811-1 Analy Batch No.: 41306

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/27/2020 17:38 Calibration End Date: 07/28/2020 09:59 Calibration ID: 2540

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
2-Chlorotoluene	CBZd 5	Ave	3739 142720	6204 303657	11355 664201	22336 1496836	49136 3024156	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
4-Ethyltoluene	CBZd 5	Ave	11256 558091	18783 1140462	37607 2631086	78410 6130590	194186 11954975	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,3,5-Trimethylbenzene	CBZd 5	Ave	5511 228846	8729 489785	17530 1112576	33074 2451651	87032 4894991	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Alpha Methyl Styrene	CBZd 5	Ave	4507 230432	8307 510559	17319 1174362	30595 2686630	80373 5449340	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Decane	CBZd 5	Ave	8546 425855	15132 919474	29564 2119650	60278 4739206	147194 9287448	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
tert-Butylbenzene	CBZd 5	Ave	9946 505499	18152 1059433	41512 2486960	73807 5571641	175264 11143124	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2,4-Trimethylbenzene	CBZd 5	Ave	9627 484388	17758 1026613	34654 2424783	66278 5395091	161416 10825211	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
sec-Butylbenzene	CBZd 5	Ave	14847 744352	27152 1551449	54645 3695848	105622 8177611	255689 +++++	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
1,3-Dichlorobenzene	CBZd 5	Ave	7515 341120	13422 749501	23898 1832060	45803 4224922	116112 8705572	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Benzyl chloride	CBZd 5	Ave	8610 363757	13682 864342	24912 2050279	45333 4705628	123445 9771254	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,4-Dichlorobenzene	CBZd 5	Ave	7328 326790	11997 753519	23299 1805225	42717 4163245	109825 8637875	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
4-Isopropyltoluene	CBZd 5	Ave	10748 591170	19869 1276463	40966 3002320	79807 6631232	196886 +++++	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
1,2,3-Trimethylbenzene	CBZd 5	Ave	12792 502468	18353 1082775	39691 2526726	72444 5640889	171458 11242894	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Indane	CBZd 5	Ave	12057 467506	17792 1002703	35598 2439031	63148 5386129	159609 11085298	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2-Dichlorobenzene	CBZd 5	Ave	9271 350911	12841 767442	24834 1854706	47024 4225696	115699 8946828	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Indene	CBZd 5	Ave	8382 405611	14862 895514	28979 2168271	52137 4821815	137942 10058942	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Butylbenzene	CBZd 5	Ave	11819 586131	18540 1279727	36985 3057820	74291 6637730	197823 +++++	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
Undecane	CBZd 5	Ave	9522 515581	17820 1148890	34395 2740455	59603 5983015	156468 +++++	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
1,2-Dibromo-3-Chloropropane	CBZd 5	Ave	+++++ 196551	+++++ 496254	12500 1182195	23210 2650514	66434 5592211	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2,4,5-Tetramethylbenzene	CBZd 5	Ave	+++++ 580543	+++++ 1265555	41054 3042455	63459 6677711	182976 +++++	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
Dodecane	CBZd 5	Ave	+++++ 457806	+++++ 1192788	+++++ 2959688	+++++ 6484922	134117 +++++	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 +++++

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19811-1 Analy Batch No.: 41306

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/27/2020 17:38 Calibration End Date: 07/28/2020 09:59 Calibration ID: 2540

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
1,2,4-Trichlorobenzene	CBZd5	Ave	+++++ 321510	12091 791917	20292 1930818	28921 4606294	92149 +++++	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
Naphthalene	CBZd5	Ave	14979 598591	24120 1488208	45592 3370388	47616 7509973	186701 +++++	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
Hexachlorobutadiene	CBZd5	Ave	+++++ 351871	13369 773986	27371 1846182	45945 4357579	109969 9156281	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2,3-Trichlorobenzene	CBZd5	Ave	+++++ 320569	12820 825449	23199 1984631	29355 4781136	94670 9644459	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Methylnaphthalene	CBZd5	Ave	+++++ 184287	+++++ 709189	+++++ 1927899	+++++ 5019369	63454 +++++	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 +++++
1-Methylnaphthalene	CBZd5	Ave	+++++ 299900	+++++ 890639	+++++ 2239586	+++++ 5357267	102177 +++++	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 +++++
4-Bromofluorobenzene (Surr)	CBZd5	Ave	800496 777885	708909 822674	725248 921642	702516 1027625	680156 1093561	4.00 4.00	4.00 4.00	4.00 4.00	4.00 4.00	4.00 4.00

Curve Type Legend:

Ave = Average ISTD
Lin2 = Linear 1/conc^2 ISTD
Qua = Quadratic ISTD
QuaF = Quadratic ISTD forced zero

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19811-1 Analy Batch No.: 41306

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/27/2020 17:38 Calibration End Date: 07/28/2020 09:59 Calibration ID: 2540

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 140-41306/9	RG27IC01.D
Level 2	IC 140-41306/10	RG27IC02.D
Level 3	IC 140-41306/11	RG27IC03.D
Level 4	IC 140-41306/12	RG27IC04.D
Level 5	IC 140-41306/13	RG27IC05.D
Level 6	IC 140-41306/14	RG27IC06.D
Level 7	ICIS 140-41306/15	RG27IC07.D
Level 8	IC 140-41306/7	RG27IC08.D
Level 9	IC 140-41306/23	RG27IC09R.D
Level 10	IC 140-41306/3	RG27IC10.D

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
Chlorodifluoromethane	+++++	+++++	6.8						50			
Propene	+++++	+++++	+++++	+++++	-23.3						50	
Dichlorodifluoromethane	+++++	+++++	-5.5						50			
Chloromethane	+++++	+++++	+++++	11.2						50		
1,2-Dichloro-1,1,2,2-tetrafluoroethane	+++++	+++++	-2.0						50			
Vinyl chloride	5.1						50					
Butane	+++++	+++++	10.9						50			
1,3-Butadiene	+++++	+++++	-10.0						50			
Bromomethane	+++++	+++++	3.4						50			
Chloroethane	+++++	+++++	4.7						50			
Ethanol	+++++	+++++	-2.2						50			
Vinyl bromide	+++++	+++++	-5.2						50			
2-Methylbutane	+++++	+++++	6.7						50			
Trichlorofluoromethane	12.3						50					

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19811-1 Analy Batch No.: 41306

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/27/2020 17:38 Calibration End Date: 07/28/2020 09:59 Calibration ID: 2540

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
Acrolein	+++++	+++++	+++++	+++++	-5.0						50	
Acetonitrile	+++++	+++++	+++++	+++++	2.5						50	
Acetone	43.1			+++++			80					
Pentane	+++++	+++++	+++++	-7.7						50		
Isopropyl alcohol	+++++	+++++	+++++	-11.4						50		
Ethyl ether	+++++	14.2						50				
1,1-Dichloroethene	12.2						50					
Acrylonitrile	+++++	+++++	+++++	-13.3						50		
tert-Butyl alcohol	+++++	+++++	-14.2						50			
1,1,2-Trichloro-1,2,2-trifluoroethane	15.8						50					
Methylene Chloride	+++++	+++++	+++++	+++++	0.5						80	
3-Chloropropene	+++++	+++++	9.5						50			
Carbon disulfide	+++++	+++++	-4.2						50			
trans-1,2-Dichloroethene	+++++	+++++	6.9						50			
2-Methylpentane	+++++	14.8						50				
Methyl tert-butyl ether	+++++	+++++	2.7						50			
1,1-Dichloroethane	16.2						50					
Vinyl acetate	+++++	+++++	-8.8						50			
2-Butanone (MEK)	+++++	+++++	+++++	8.9						50		
Hexane	+++++	+++++	6.9						50			
cis-1,2-Dichloroethene	+++++	14.8						50				

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19811-1 Analy Batch No.: 41306

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/27/2020 17:38 Calibration End Date: 07/28/2020 09:59 Calibration ID: 2540

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
Ethyl acetate	+++++	+++++	-3.2						50			
Chloroform	1.3						50					
Tetrahydrofuran	+++++	+++++	5.0						50			
1,1,1-Trichloroethane	14.7						50					
1,2-Dichloroethane	+++++	3.5						50				
Cyclohexane	+++++	+++++	-1.0						50			
Benzene	+++++	15.5						50				
1-Butanol	+++++	+++++	+++++	0.8						50		
Carbon tetrachloride	8.5						50					
2,3-Dimethylpentane	+++++	2.8						50				
Thiophene	+++++	2.6						50				
2,2,4-Trimethylpentane	+++++	7.3						50				
Heptane	+++++	+++++	-2.0						50			
1,2-Dichloropropane	+++++	-2.8						50				
Trichloroethene	6.9						50					
Dibromomethane	17.0						50					
Bromodichloromethane	1.6						50					
1,4-Dioxane	+++++	+++++	+++++	-1.3						50		
Methyl methacrylate	+++++	+++++	-6.6						50			
Methylcyclohexane	+++++	+++++	1.1						50			
4-Methyl-2-pentanone (MIBK)	7.4						50					

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19811-1 Analy Batch No.: 41306

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/27/2020 17:38 Calibration End Date: 07/28/2020 09:59 Calibration ID: 2540

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
cis-1,3-Dichloropropene	10.1						50					
trans-1,3-Dichloropropene	+++++	2.0						50				
Toluene	15.5						50					
1,1,2-Trichloroethane	4.4						50					
2-Hexanone	+++++	+++++	-8.7						50			
Octane	+++++	+++++	-3.1						50			
Dibromochloromethane	-2.4						50					
1,2-Dibromoethane (EDB)	4.1						50					
Tetrachloroethene	5.6						50					
Chlorobenzene	11.0						50					
Ethylbenzene	17.6						50					
m-Xylene & p-Xylene	16.7						50					
Nonane	-7.2						50					
Bromoform	4.9						50					
Styrene	8.0						50					
o-Xylene	+++++	11.8						50				
1,1,2,2-Tetrachloroethane	1.6						50					
1,2,3-Trichloropropane	+++++	+++++	5.8						50			
Isopropylbenzene	11.9						50					
Propylbenzene	-1.9						50					
2-Chlorotoluene	12.4						50					

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19811-1 Analy Batch No.: 41306

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/27/2020 17:38 Calibration End Date: 07/28/2020 09:59 Calibration ID: 2540

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
4-Ethyltoluene	-7.0						50					
1,3,5-Trimethylbenzene	4.9						50					
Alpha Methyl Styrene	-13.7						50					
Decane	-9.5						50					
tert-Butylbenzene	-12.5						50					
1,2,4-Trimethylbenzene	-10.3						50					
sec-Butylbenzene	-8.8			+++++			50					
1,3-Dichlorobenzene	-5.9						50					
Benzyl chloride	-0.9						50					
1,4-Dichlorobenzene	-5.1						50					
4-Isopropyltoluene	-15.1			+++++			50					
1,2,3-Trimethylbenzene	10.0						50					
Indane	10.4						50					
1,2-Dichlorobenzene	12.4						50					
Indene	-9.7						50					
Butylbenzene	-5.5			+++++			50					
Undecane	-12.9			+++++			50					
1,2-Dibromo-3-Chloropropane	+++++	+++++	-28.2						50			
1,2,4,5-Tetramethylbenzene	+++++	+++++	-9.4	+++++					50			
Dodecane	+++++	+++++	+++++	+++++ +++++	-33.2						50	
1,2,4-Trichlorobenzene	+++++	-7.7		+++++				50				

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19811-1 Analy Batch No.: 41306

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/27/2020 17:38 Calibration End Date: 07/28/2020 09:59 Calibration ID: 2540

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
Naphthalene	9.9			+++++			80					
Hexachlorobutadiene	+++++	-10.3						50				
1,2,3-Trichlorobenzene	+++++	-10.7						50				
2-Methylnaphthalene	+++++	+++++	+++++	+++++ +++++	-47.7						80	
1-Methylnaphthalene	+++++	+++++	+++++	+++++ +++++	-32.7						80	

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC10.D
Lims ID: IC L10
Client ID:
Sample Type: IC Calib Level: 10
Inject. Date: 27-Jul-2020 17:38:30 ALS Bottle#: 15 Worklist Smp#: 3
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016116-003
Misc. Info.: 314600
Operator ID: HMT Instrument ID: MR
Sublist: chrom-MR_TO15*sub16

Method: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 28-Jul-2020 16:47:00 Calib Date: 28-Jul-2020 09:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC09R.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1014

First Level Reviewer: tajh Date: 28-Jul-2020 08:03:55

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.323	8.308	0.015	93	212243	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.550	10.539	0.011	96	1711456	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.381	15.375	0.006	89	1559330	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.032	17.025	0.007	95	1093561	4.00	4.64	
6 Chlorodifluoromethane	51	3.340	3.343	-0.003	96	3835967	16.0	12.3	
7 Propene	41	3.351	3.349	0.002	99	1999419	16.0	16.0	
8 Dichlorodifluoromethane	85	3.400	3.400	0.000	98	2506971	16.0	11.9	
9 Chloromethane	52	3.567	3.569	-0.002	100	645856	16.0	12.0	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.578	3.577	0.001	93	2464342	16.0	12.0	
11 Acetaldehyde	44	3.718	3.724	-0.006	98	4525315	80.0	61.6	
12 Vinyl chloride	62	3.723	3.726	-0.003	99	1795312	16.0	11.6	
13 Butane	43	3.809	3.808	0.001	86	3349286	16.0	12.1	
14 Butadiene	54	3.809	3.809	0.000	66	1631624	16.0	12.6	
15 Bromomethane	94	4.106	4.103	0.003	98	1351143	16.0	12.2	
16 Chloroethane	64	4.235	4.235	0.000	85	799669	16.0	12.2	
17 Ethanol	31	4.365	4.364	0.001	97	5540653	80.0	65.7	
18 Vinyl bromide	106	4.521	4.515	0.006	98	1362620	16.0	13.0	
19 2-Methylbutane	43	4.559	4.561	-0.002	94	2508890	16.0	12.2	
20 Trichlorofluoromethane	101	4.769	4.765	0.004	98	3496099	16.0	13.4	
21 Acrolein	56	4.791	4.779	0.012	95	674260	16.0	14.9	
22 Acetonitrile	40	4.861	4.870	-0.009	99	903021	16.0	14.2	
23 Acetone	58	4.899	4.913	-0.014	99	2645057	48.0	30.9	
24 Pentane	72	4.980	4.971	0.009	97	260521	16.0	12.9	
25 Isopropyl alcohol	45	5.012	5.027	-0.015	99	9280873	48.0	47.8	
26 Ethyl ether	31	5.147	5.168	-0.021	89	2512978	16.0	13.3	
27 1,1-Dichloroethene	96	5.454	5.444	0.010	94	1516167	16.0	13.2	
28 Acrylonitrile	53	5.573	5.572	0.001	94	1541328	16.0	15.9	
30 1,1,2-Trichloro-1,2,2-trifluoroe	101	5.627	5.622	0.005	96	3080881	16.0	13.2	
29 2-Methyl-2-propanol	59	5.584	5.629	-0.045	96	3609428	16.0	13.8	
31 Methylene Chloride	84	5.799	5.788	0.011	91	1374114	16.0	14.7	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	5.810	5.802	0.008	95	2084374	16.0	13.8	
33 Carbon disulfide	76	5.945	5.938	0.007	98	4223326	16.0	13.8	
34 trans-1,2-Dichloroethene	96	6.592	6.580	0.012	94	1556978	16.0	14.4	
35 2-Methylpentane	43	6.608	6.600	0.008	97	5065710	16.0	13.3	
36 Methyl tert-butyl ether	73	6.711	6.747	-0.036	93	3889171	16.0	13.8	
37 1,1-Dichloroethane	63	7.012	7.002	0.010	99	3335869	16.0	13.1	
38 Vinyl acetate	43	7.120	7.120	0.000	100	6674553	16.0	15.8	
40 Hexane	56	7.579	7.575	0.004	86	1594913	16.0	13.9	
39 2-Butanone (MEK)	72	7.563	7.583	-0.020	95	780088	16.0	14.5	
41 Isopropyl ether	45	7.740	7.761	-0.021	96	8213902	16.0	14.0	
42 cis-1,2-Dichloroethene	96	7.994	7.981	0.013	98	1699886	16.0	13.9	
43 Ethyl acetate	43	8.183	8.189	-0.006	97	5733838	16.0	14.6	
44 Chloroform	83	8.339	8.326	0.013	91	3211626	16.0	13.8	
45 Tert-butyl ethyl ether	59	8.420	8.448	-0.028	97	6294618	16.0	13.7	
46 Tetrahydrofuran	42	8.716	8.750	-0.034	91	2776417	16.0	13.9	
47 1,1,1-Trichloroethane	97	9.358	9.348	0.010	95	3275184	16.0	13.6	
48 1,2-Dichloroethane	62	9.471	9.461	0.010	94	2460009	16.0	15.3	
50 Cyclohexane	69	9.962	9.954	0.008	83	703270	16.0	14.2	
51 Benzene	78	9.968	9.958	0.010	96	4865566	16.0	14.3	
49 n-Butanol	31	9.935	9.970	-0.035	78	1180496	16.0	15.2	
52 Carbon tetrachloride	117	9.989	9.980	0.009	93	3274105	16.0	15.1	
53 2,3-Dimethylpentane	71	10.102	10.094	0.008	91	1097915	16.0	14.8	
54 Thiophene	84	10.253	10.245	0.008	94	2880352	16.0	15.3	
55 Isooctane	57	10.771	10.766	0.005	97	10622791	16.0	14.8	
56 n-Heptane	71	11.170	11.162	0.008	95	1725170	16.0	15.0	
57 1,2-Dichloropropane	63	11.246	11.235	0.011	88	2320849	16.0	14.8	
58 Trichloroethene	130	11.283	11.272	0.011	95	2254609	16.0	15.1	
59 Dibromomethane	93	11.370	11.357	0.013	91	2117185	16.0	15.6	
60 Dichlorobromomethane	83	11.521	11.510	0.011	96	3631438	16.0	15.6	
61 1,4-Dioxane	88	11.526	11.563	-0.037	95	806385	16.0	15.1	
62 Methyl methacrylate	41	11.628	11.632	-0.004	85	3604061	16.0	16.1	
63 Methylcyclohexane	83	12.071	12.063	0.008	85	2969356	16.0	15.1	
64 4-Methyl-2-pentanone (MIBK)	43	12.497	12.517	-0.020	97	6737256	16.0	16.1	
65 cis-1,3-Dichloropropene	75	12.556	12.548	0.008	96	3013045	16.0	16.3	
66 trans-1,3-Dichloropropene	75	13.268	13.261	0.007	90	2769568	16.0	16.2	
67 Toluene	91	13.386	13.381	0.005	92	6088407	16.0	14.2	
68 1,1,2-Trichloroethane	83	13.467	13.460	0.007	97	1938784	16.0	14.2	
69 2-Hexanone	58	13.861	13.878	-0.017	89	3018143	16.0	16.5	
70 n-Octane	85	14.098	14.096	0.002	98	2000001	16.0	15.3	
71 Chlorodibromomethane	129	14.174	14.165	0.009	96	4389647	16.0	16.2	
72 Ethylene Dibromide	107	14.470	14.462	0.008	98	3801697	16.0	16.1	
73 Tetrachloroethene	129	14.546	14.538	0.008	93	2377282	16.0	15.4	
74 Chlorobenzene	112	15.430	15.423	0.007	92	5308785	16.0	15.5	
75 2,3-Dimethylheptane	43	15.457	15.455	0.002	92	9553379	16.0	14.4	
76 Ethylbenzene	91	15.721	15.718	0.003	98	8829342	16.0	15.0	
77 m-Xylene & p-Xylene	91	15.888	15.881	0.007	95	13746712	32.0	30.9	
78 n-Nonane	57	16.314	16.314	0.000	94	6331112	16.0	16.6	
79 Bromoform	173	16.325	16.323	0.002	98	6517763	16.0	19.4	
80 Styrene	104	16.352	16.346	0.006	96	5521771	16.0	17.0	
81 o-Xylene	91	16.411	16.406	0.005	99	7550396	16.0	16.1	
82 1,1,2,2-Tetrachloroethane	83	16.735	16.734	0.001	99	6316679	16.0	16.6	
83 1,2,3-Trichloropropane	110	16.897	16.895	0.002	92	1773747	16.0	17.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	16.999	16.998	0.001	97	11275174	16.0	16.2	
85 N-Propylbenzene	120	17.549	17.547	0.002	99	3318378	16.0	17.8	
86 2-Chlorotoluene	126	17.592	17.590	0.002	97	3024156	16.0	16.7	
87 4-Ethyltoluene	105	17.706	17.704	0.002	98	11954975	16.0	18.2	
88 1,3,5-Trimethylbenzene	120	17.786	17.782	0.004	92	4894991	16.0	17.1	
89 Alpha Methyl Styrene	118	18.024	18.020	0.004	91	5449340	16.0	19.2	
90 n-Decane	57	18.094	18.089	0.005	87	9287448	16.0	18.1	
91 tert-Butylbenzene	119	18.223	18.218	0.005	92	11143124	16.0	18.0	
92 1,2,4-Trimethylbenzene	105	18.234	18.232	0.002	96	10825211	16.0	18.5	
93 sec-Butylbenzene	105	18.493	18.494	-0.001	97	14850865	16.0	16.8	e
94 1,3-Dichlorobenzene	146	18.509	18.504	0.005	96	8705572	16.0	20.1	
95 Benzyl chloride	91	18.590	18.584	0.006	98	9771254	16.0	20.7	
96 1,4-Dichlorobenzene	146	18.601	18.596	0.005	98	8637875	16.0	20.6	
97 4-Isopropyltoluene	119	18.665	18.662	0.003	96	13015365	16.0	18.9	e
98 1,2,3-Trimethylbenzene	105	18.719	18.713	0.006	99	11242894	16.0	17.8	
99 Butylcyclohexane	83	18.779	18.773	0.006	84	8507552	16.0	17.3	
100 2,3-Dihydroindene	117	18.967	18.961	0.006	93	11085298	16.0	18.7	
101 1,2-Dichlorobenzene	146	18.967	18.962	0.005	87	8946828	16.0	19.9	
102 Indene	116	19.097	19.093	0.004	94	10058942	16.0	19.9	
103 n-Butylbenzene	91	19.108	19.106	0.002	98	12961757	16.0	19.1	e
104 Undecane	57	19.431	19.431	0.000	91	11772092	16.0	19.8	e
105 1,2-Dibromo-3-Chloropropane	157	19.577	19.577	0.000	92	5592211	16.0	21.1	
106 1,2,4,5-Tetramethylbenzene	119	19.873	19.873	0.000	98	12729432	16.0	18.4	e
107 Dodecane	57	20.488	20.489	-0.001	89	12344207	16.0	18.7	e
108 1,2,4-Trichlorobenzene	180	20.677	20.672	0.005	94	9540497	16.0	24.2	
109 Naphthalene	128	20.806	20.807	-0.001	97	14240864	16.0	19.2	e
110 Hexachlorobutadiene	225	21.033	21.028	0.005	95	9156281	16.0	20.4	
111 1,2,3-Trichlorobenzene	180	21.097	21.097	0.000	94	9644459	16.0	22.3	
112 2-Methylnaphthalene	142	21.836	21.834	0.002	94	10108781	16.0	25.3	e
A 116 C8 Range	1	14.090	(14.055-14.152)		0	24681269	16.0	16.0	
S 117 Xylenes, Total	100				0		48.0	46.9	
S 118 1,2-Dichloroethene, Total	1				0		32.0	28.3	

QC Flag Legend

Processing Flags

e - Potential Peak Saturated

Reagents:

40L10DQP_00019	Amount Added: 200.00	Units: mL	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

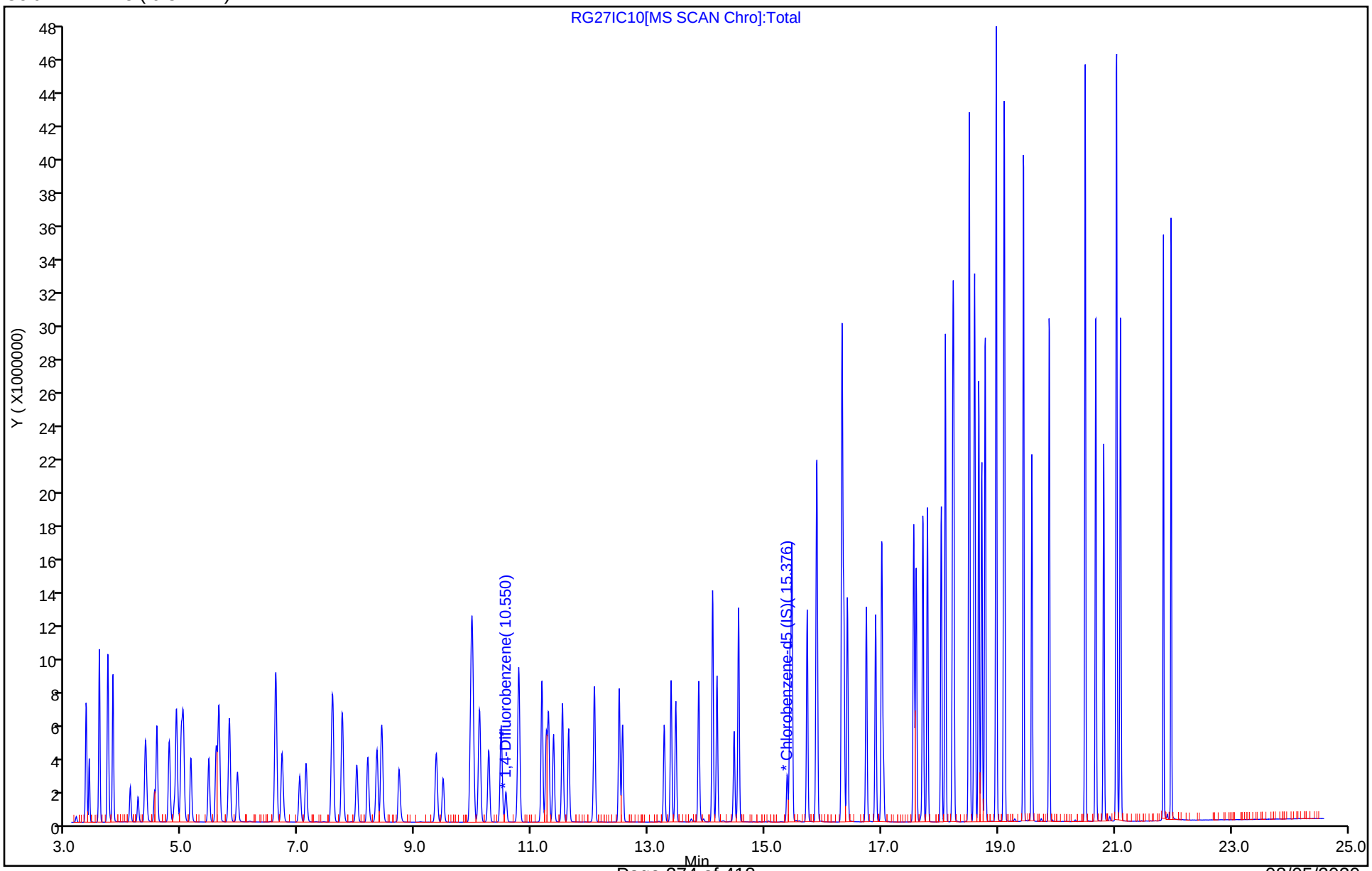
Report Date: 28-Jul-2020 16:47:01 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC10.D

Injection Date:	27-Jul-2020 17:38:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	IC L10			Worklist Smp#:	3
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

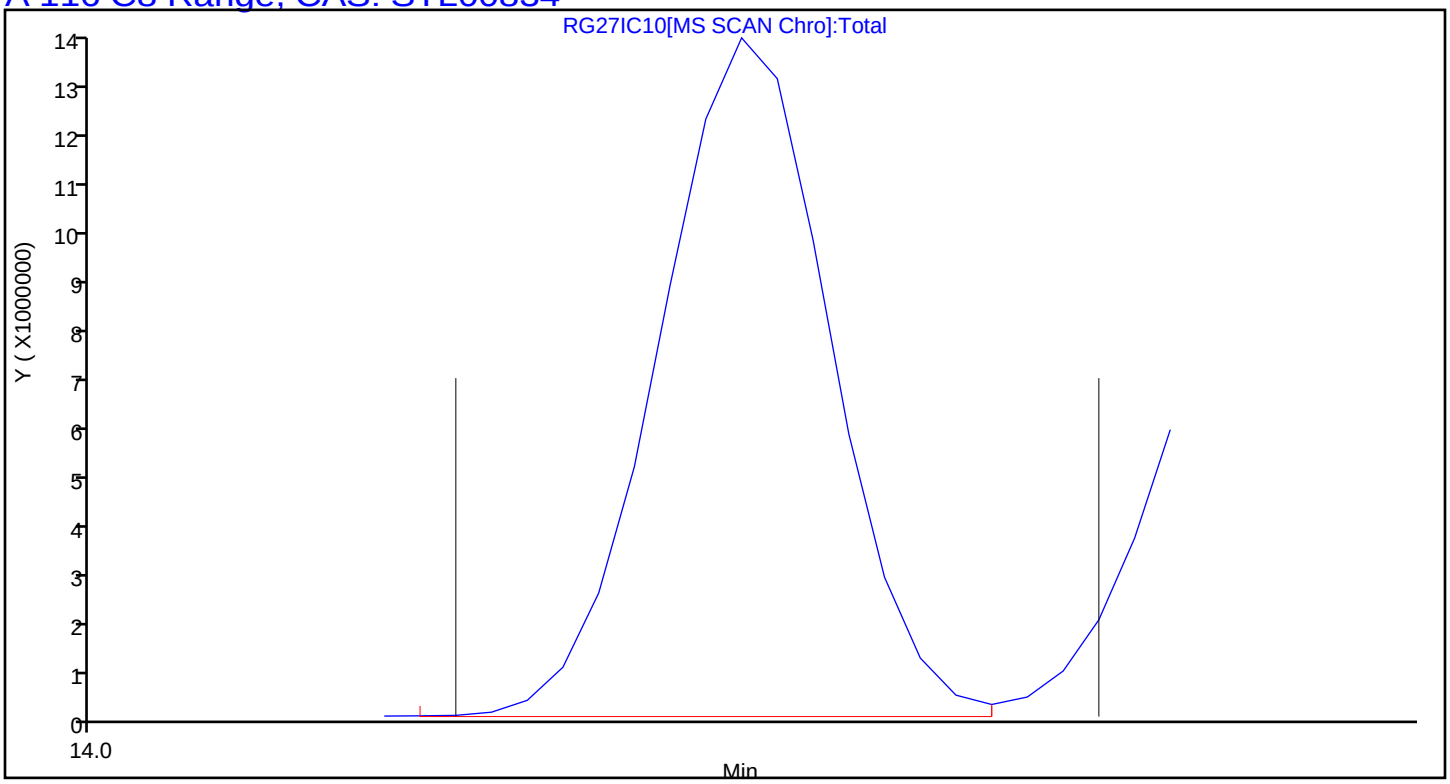


Report Date: 28-Jul-2020 16:47:01 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC10.D				
Injection Date:	27-Jul-2020 17:38:30	Instrument ID:	MR		
Lims ID:	IC L10				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	15	Worklist Smp#:	3
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 116 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC08.D
Lims ID: IC L8
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 27-Jul-2020 21:45:30 ALS Bottle#: 13 Worklist Smp#: 7
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016116-007
Misc. Info.: 314607
Operator ID: HMT Instrument ID: MR
Sublist: chrom-MR_TO15*sub16

Method: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 28-Jul-2020 16:47:09 Calib Date: 28-Jul-2020 09:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC09R.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1014

First Level Reviewer: barlozhetskayaa Date: 28-Jul-2020 16:37:44

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.307	8.308	-0.001	92	206021	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.539	10.539	0.000	96	1729884	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.376	15.375	0.001	90	1446297	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.026	17.025	0.001	95	921642	4.00	4.22	
6 Chlorodifluoromethane	51	3.335	3.343	-0.008	97	1232908	4.00	4.09	
7 Propene	41	3.340	3.349	-0.009	99	719403	4.00	3.79	
8 Dichlorodifluoromethane	85	3.389	3.400	-0.011	98	823005	4.00	4.04	
9 Chloromethane	52	3.561	3.569	-0.008	98	211594	4.00	4.06	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.567	3.577	-0.010	90	852566	4.00	4.27	
11 Acetaldehyde	44	3.707	3.724	-0.017	98	1487111	20.0	20.9	
12 Vinyl chloride	62	3.718	3.726	-0.008	98	610510	4.00	4.08	
13 Butane	43	3.799	3.808	-0.009	86	1103583	4.00	4.10	
14 Butadiene	54	3.799	3.809	-0.010	66	538969	4.00	4.29	
15 Bromomethane	94	4.095	4.103	-0.008	97	443596	4.00	4.14	
16 Chloroethane	64	4.225	4.235	-0.011	89	263531	4.00	4.14	
17 Ethanol	31	4.343	4.364	-0.021	96	1782780	20.0	21.8	
18 Vinyl bromide	106	4.505	4.515	-0.010	98	422689	4.00	4.16	
19 2-Methylbutane	43	4.553	4.561	-0.008	94	766822	4.00	3.86	
20 Trichlorofluoromethane	101	4.758	4.765	-0.007	98	992591	4.00	3.93	
21 Acrolein	56	4.775	4.779	-0.004	95	178437	4.00	4.05	
22 Acetonitrile	40	4.845	4.870	-0.025	94	255111	4.00	4.14	
23 Acetone	58	4.882	4.913	-0.031	99	769898	12.0	9.26	
24 Pentane	72	4.969	4.971	-0.002	97	77148	4.00	3.94	
25 Isopropyl alcohol	45	4.990	5.027	-0.037	96	2848066	12.0	11.6	
26 Ethyl ether	31	5.136	5.168	-0.032	90	719254	4.00	3.92	
27 1,1-Dichloroethene	96	5.438	5.444	-0.006	94	427440	4.00	3.85	
28 Acrylonitrile	53	5.556	5.572	-0.016	95	413502	4.00	4.39	
29 2-Methyl-2-propanol	59	5.567	5.629	-0.062	96	1057085	4.00	4.16	
30 1,1,2-Trichloro-1,2,2-trifluoroe	101	5.616	5.622	-0.006	97	870177	4.00	3.85	
31 Methylene Chloride	84	5.783	5.788	-0.005	90	426624	4.00	4.11	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	5.799	5.802	-0.003	95	581361	4.00	3.97	
33 Carbon disulfide	76	5.929	5.938	-0.010	98	1192667	4.00	4.01	
34 trans-1,2-Dichloroethene	96	6.581	6.580	0.001	94	418527	4.00	3.98	
35 2-Methylpentane	43	6.592	6.600	-0.008	97	1438011	4.00	3.89	
36 Methyl tert-butyl ether	73	6.705	6.747	-0.042	92	1093199	4.00	3.99	
37 1,1-Dichloroethane	63	6.996	7.002	-0.006	99	934467	4.00	3.79	
38 Vinyl acetate	43	7.109	7.120	-0.011	100	1759799	4.00	4.29	
39 2-Butanone (MEK)	72	7.552	7.583	-0.031	95	209096	4.00	4.00	
40 Hexane	56	7.573	7.575	-0.002	87	444669	4.00	4.00	
41 Isopropyl ether	45	7.735	7.761	-0.026	97	2295046	4.00	4.03	
42 cis-1,2-Dichloroethene	96	7.983	7.981	0.002	98	466901	4.00	3.94	
43 Ethyl acetate	43	8.172	8.189	-0.017	97	1565696	4.00	4.10	
44 Chloroform	83	8.328	8.326	0.002	94	900593	4.00	3.98	
45 Tert-butyl ethyl ether	59	8.414	8.448	-0.034	97	1746941	4.00	3.91	
46 Tetrahydrofuran	42	8.716	8.750	-0.034	92	762749	4.00	3.94	
47 1,1,1-Trichloroethane	97	9.347	9.348	-0.001	95	908022	4.00	3.87	
48 1,2-Dichloroethane	62	9.466	9.461	0.005	94	672283	4.00	4.14	
49 n-Butanol	31	9.940	9.970	-0.030	72	336272	4.00	4.28	
50 Cyclohexane	69	9.946	9.954	-0.008	79	196062	4.00	3.91	
51 Benzene	78	9.957	9.958	-0.001	97	1332154	4.00	3.87	
52 Carbon tetrachloride	117	9.978	9.980	-0.002	95	910191	4.00	4.15	
53 2,3-Dimethylpentane	71	10.091	10.094	-0.003	91	303336	4.00	4.04	
54 Thiophene	84	10.248	10.245	0.003	95	783591	4.00	4.13	
55 Isooctane	57	10.765	10.766	-0.001	97	2864948	4.00	3.94	
56 n-Heptane	71	11.164	11.162	0.002	95	464455	4.00	4.00	
57 1,2-Dichloropropane	63	11.235	11.235	0.000	89	635169	4.00	4.00	
58 Trichloroethene	130	11.272	11.272	0.000	95	590859	4.00	3.91	
59 Dibromomethane	93	11.359	11.357	0.002	93	546757	4.00	3.98	
60 Dichlorobromomethane	83	11.515	11.510	0.005	96	967086	4.00	4.12	
61 1,4-Dioxane	88	11.531	11.563	-0.032	94	233489	4.00	4.32	
62 Methyl methacrylate	41	11.623	11.632	-0.009	85	929916	4.00	4.10	
63 Methylcyclohexane	83	12.065	12.063	0.002	85	792085	4.00	3.99	
64 4-Methyl-2-pentanone (MIBK)	43	12.491	12.517	-0.026	97	1739238	4.00	4.11	
65 cis-1,3-Dichloropropene	75	12.545	12.548	-0.003	94	781659	4.00	4.19	
66 trans-1,3-Dichloropropene	75	13.262	13.261	0.001	91	701991	4.00	4.42	
67 Toluene	91	13.381	13.381	0.000	92	1571492	4.00	3.96	
68 1,1,2-Trichloroethane	83	13.462	13.460	0.002	97	499056	4.00	3.95	
69 2-Hexanone	58	13.861	13.878	-0.017	89	756406	4.00	4.45	
70 n-Octane	85	14.098	14.096	0.002	98	490607	4.00	4.06	
71 Chlorodibromomethane	129	14.168	14.165	0.003	96	1062915	4.00	4.22	
72 Ethylene Dibromide	107	14.459	14.462	-0.003	98	923134	4.00	4.22	
73 Tetrachloroethene	129	14.540	14.538	0.002	93	568875	4.00	3.97	
74 Chlorobenzene	112	15.424	15.423	0.001	92	1275338	4.00	4.01	
75 2,3-Dimethylheptane	43	15.457	15.455	0.002	91	2380242	4.00	3.88	
76 Ethylbenzene	91	15.716	15.718	-0.002	98	2126782	4.00	3.90	
77 m-Xylene & p-Xylene	91	15.883	15.881	0.002	96	3230671	8.00	7.82	
78 n-Nonane	57	16.314	16.314	0.000	94	1475086	4.00	4.18	
79 Bromoform	173	16.320	16.323	-0.003	97	1411559	4.00	4.52	
80 Styrene	104	16.347	16.346	0.001	96	1261090	4.00	4.18	
81 o-Xylene	91	16.406	16.406	0.000	98	1733927	4.00	3.98	
82 1,1,2,2-Tetrachloroethane	83	16.735	16.734	0.001	98	1458099	4.00	4.12	
83 1,2,3-Trichloropropane	110	16.891	16.895	-0.004	92	394619	4.00	4.09	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	16.999	16.998	0.001	97	2557625	4.00	3.97	
85 N-Propylbenzene	120	17.544	17.547	-0.003	99	723311	4.00	4.18	
86 2-Chlorotoluene	126	17.587	17.590	-0.003	98	664201	4.00	3.96	
87 4-Ethyltoluene	105	17.705	17.704	0.001	99	2631086	4.00	4.31	
88 1,3,5-Trimethylbenzene	120	17.781	17.782	-0.001	92	1112576	4.00	4.20	
89 Alpha Methyl Styrene	118	18.018	18.020	-0.002	88	1174362	4.00	4.46	
90 n-Decane	57	18.088	18.089	-0.001	86	2119650	4.00	4.45	
91 tert-Butylbenzene	119	18.218	18.218	0.000	93	2486960	4.00	4.34	
92 1,2,4-Trimethylbenzene	105	18.229	18.232	-0.004	96	2424783	4.00	4.48	
93 sec-Butylbenzene	105	18.493	18.494	-0.001	98	3695848	4.00	4.50	
94 1,3-Dichlorobenzene	146	18.504	18.504	0.000	96	1832060	4.00	4.55	
95 Benzyl chloride	91	18.584	18.584	0.000	97	2050279	4.00	4.68	
96 1,4-Dichlorobenzene	146	18.595	18.596	-0.001	95	1805225	4.00	4.63	
97 4-Isopropyltoluene	119	18.660	18.662	-0.002	97	3002320	4.00	4.71	
98 1,2,3-Trimethylbenzene	105	18.714	18.713	0.001	99	2526726	4.00	4.31	
99 Butylcyclohexane	83	18.773	18.773	0.000	85	2014573	4.00	4.41	
100 2,3-Dihydroindene	117	18.962	18.961	0.001	93	2439031	4.00	4.43	
101 1,2-Dichlorobenzene	146	18.962	18.962	0.000	84	1854706	4.00	4.46	
102 Indene	116	19.091	19.093	-0.002	89	2168271	4.00	4.63	
103 n-Butylbenzene	91	19.102	19.106	-0.004	98	3057820	4.00	4.85	
104 Undecane	57	19.431	19.431	0.000	92	2740455	4.00	4.97	
105 1,2-Dibromo-3-Chloropropane	157	19.577	19.577	0.000	92	1182195	4.00	4.81	
106 1,2,4,5-Tetramethylbenzene	119	19.873	19.873	0.000	98	3042455	4.00	4.75	
107 Dodecane	57	20.488	20.489	-0.001	90	2959688	4.00	4.83	
108 1,2,4-Trichlorobenzene	180	20.671	20.672	-0.001	94	1930818	4.00	5.28	
109 Naphthalene	128	20.806	20.807	-0.001	99	3370388	4.00	4.90	
110 Hexachlorobutadiene	225	21.027	21.028	-0.001	95	1846182	4.00	4.43	
111 1,2,3-Trichlorobenzene	180	21.097	21.097	0.000	94	1984631	4.00	4.95	
112 2-Methylnaphthalene	142	21.831	21.834	-0.003	99	1927899	4.00	5.21	
113 1-Methylnaphthalene	142	21.965	21.967	-0.002	99	2239586	4.00	4.84	
A 116 C8 Range	1	14.093	(14.049-14.146)		0	6186213	4.00	3.97	
S 117 Xylenes, Total	100				0		12.0	11.8	
S 118 1,2-Dichloroethene, Total	1				0		8.00	7.92	

Reagents:

40L8DQP_00018	Amount Added: 200.00	Units: mL	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

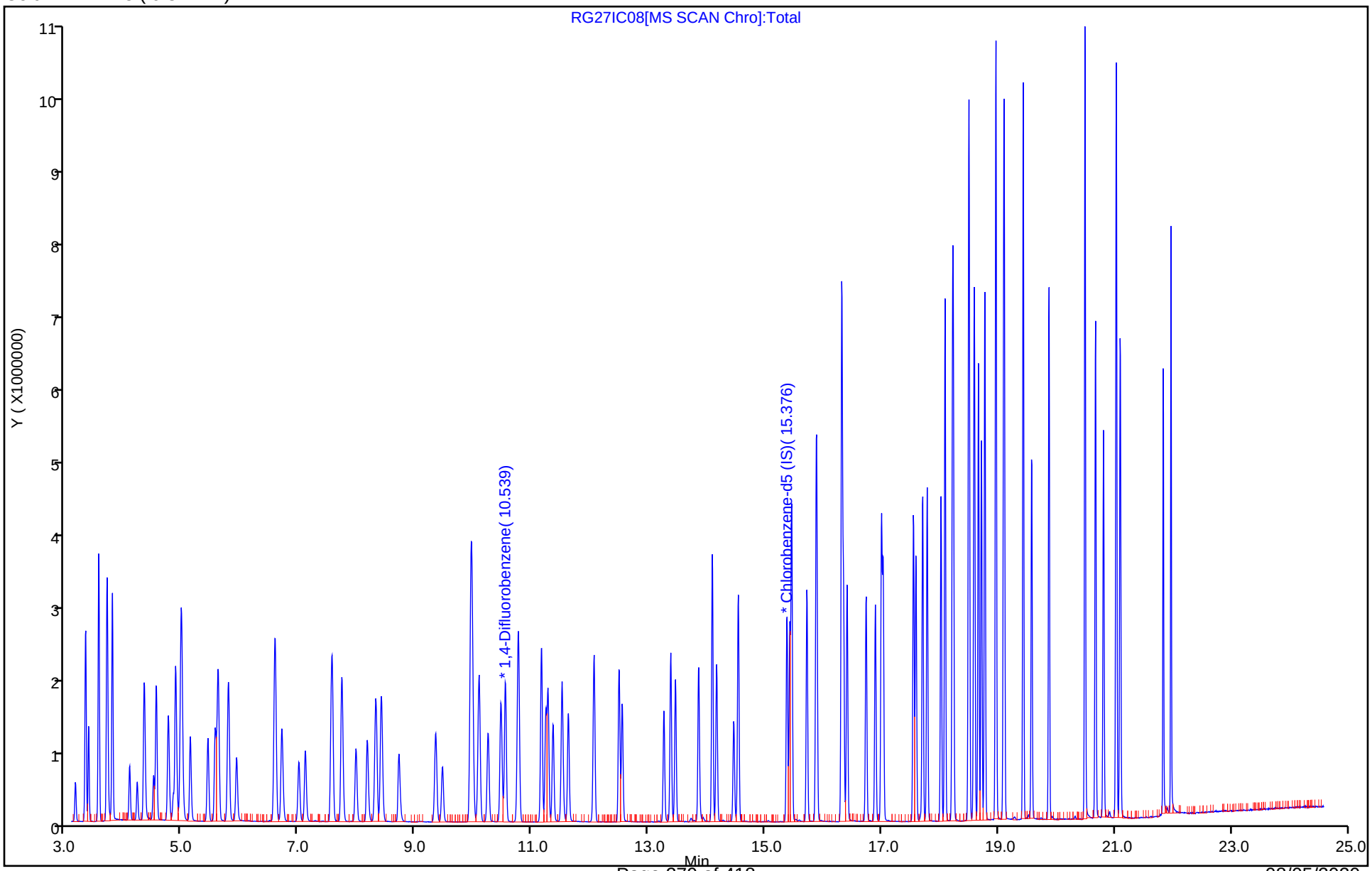
Report Date: 28-Jul-2020 16:47:11 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC08.D

Injection Date:	27-Jul-2020 21:45:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	IC L8			Worklist Smp#:	7
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

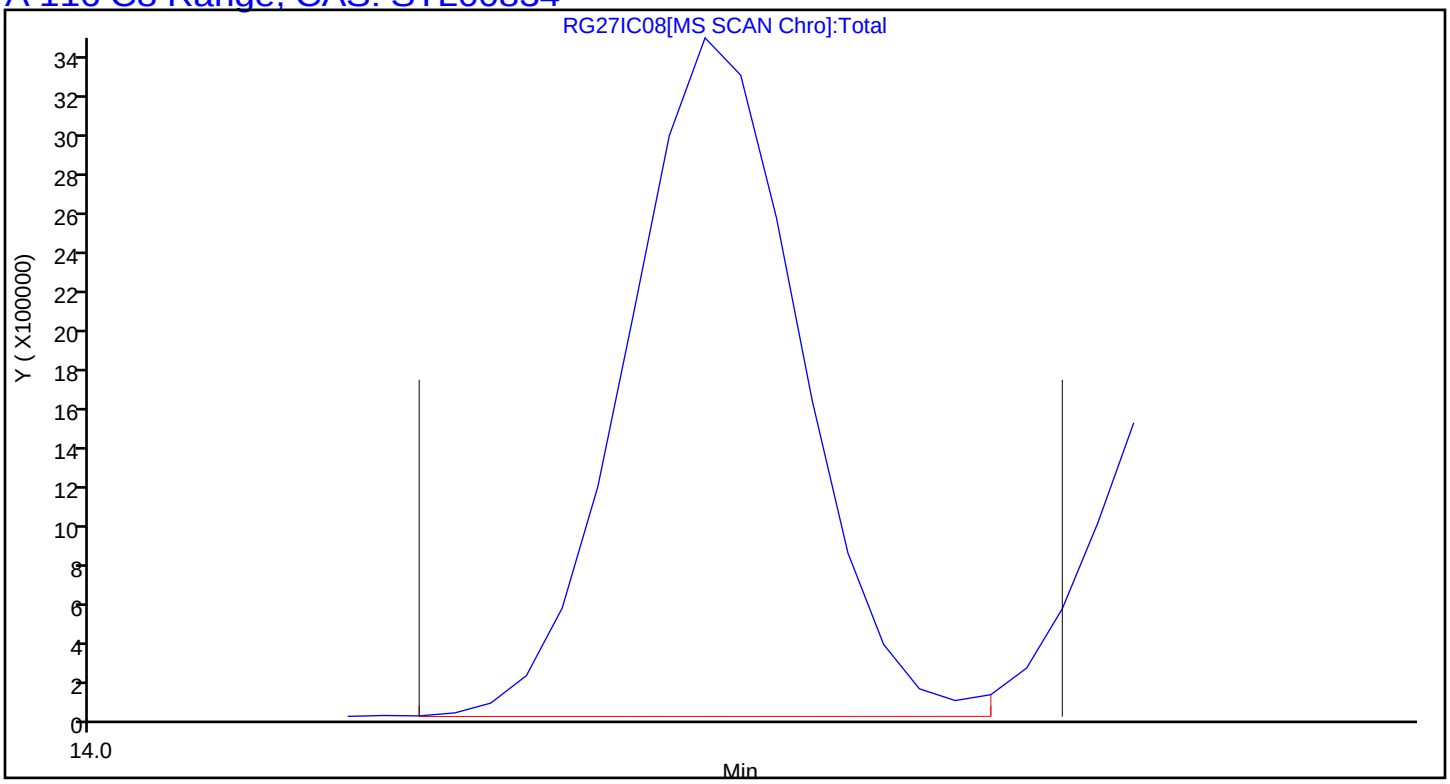


Report Date: 28-Jul-2020 16:47:11 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC08.D				
Injection Date:	27-Jul-2020 21:45:30	Instrument ID:	MR		
Lims ID:	IC L8				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	13	Worklist Smp#:	7
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 116 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC01.D
Lims ID: IC L1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 27-Jul-2020 23:58:30 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016116-009
Misc. Info.: 314720
Operator ID: HMT Instrument ID: MR
Sublist: chrom-MR_TO15*sub16

Method: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 28-Jul-2020 16:47:18 Calib Date: 28-Jul-2020 09:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC09R.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1014

First Level Reviewer: tajh Date: 28-Jul-2020 10:50:59

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.301	8.308	-0.007	94	207431	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.534	10.539	-0.005	96	1758480	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.376	15.375	0.001	90	1434015	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.026	17.025	0.001	95	800496	4.00	3.70	
6 Chlorodifluoromethane	51	3.346	3.343	0.003	37	9269	0.0200	0.0305	
7 Propene	41	3.346	3.349	-0.003	99	109408	0.0200	0.4251	
8 Dichlorodifluoromethane	85	3.399	3.400	-0.001	97	5977	0.0200	0.0291	
9 Chloromethane	52	3.572	3.569	0.003	72	1958	0.0200	0.0373	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.577	3.577	0.000	87	5541	0.0200	0.0276	
11 Acetaldehyde	44	3.734	3.724	0.010	91	14275	0.1000	0.1989	
12 Vinyl chloride	62	3.723	3.726	-0.003	41	3167	0.0200	0.0210	
13 Butane	43	3.809	3.808	0.001	88	10632	0.0200	0.0392	
14 Butadiene	54	3.815	3.809	0.006	59	2888	0.0200	0.0228	
15 Bromomethane	94	4.095	4.103	-0.008	46	3024	0.0200	0.0280	
16 Chloroethane	64	4.230	4.235	-0.005	34	1702	0.0200	0.0265	
17 Ethanol	31	4.381	4.364	0.017	99	6477	0.1000	0.0786	
18 Vinyl bromide	106	4.516	4.515	0.001	72	2257	0.0200	0.0221	
19 2-Methylbutane	43	4.553	4.561	-0.008	71	6533	0.0200	0.0326	
20 Trichlorofluoromethane	101	4.758	4.765	-0.007	96	5711	0.0200	0.0225	
21 Acrolein	56	4.726	4.779	-0.053	10	231	0.0200	0.005209	
22 Acetonitrile	40	4.963	4.870	0.093	47	2218	0.0200	0.0358	
23 Acetone	58	4.936	4.913	0.023	98	7188	0.0600	0.0858	
24 Pentane	72	4.963	4.971	-0.008	77	530	0.0200	0.0269	
25 Isopropyl alcohol	45	5.055	5.027	0.028	85	16913	0.0600	0.0640	
26 Ethyl ether	31	5.195	5.168	0.027	85	4290	0.0200	0.0232	
27 1,1-Dichloroethene	96	5.443	5.444	-0.001	44	2512	0.0200	0.0224	
28 Acrylonitrile	53	5.583	5.572	0.011	56	1652	0.0200	0.0174	
29 2-Methyl-2-propanol	59	5.680	5.629	0.051	19	5969	0.0200	0.0234	
30 1,1,2-Trichloro-1,2,2-trifluoroe	101	5.610	5.622	-0.012	64	5278	0.0200	0.0232	
31 Methylene Chloride	84	5.783	5.788	-0.005	90	66564	0.0200	-0.1000	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	5.788	5.802	-0.014	25	5751	0.0200	0.0390	
33 Carbon disulfide	76	5.934	5.938	-0.004	66	6050	0.0200	0.0202	
34 trans-1,2-Dichloroethene	96	6.576	6.580	-0.004	63	2804	0.0200	0.0265	
35 2-Methylpentane	43	6.597	6.600	-0.003	91	8726	0.0200	0.0234	
36 Methyl tert-butyl ether	73	6.807	6.747	0.060	61	7534	0.0200	0.0273	
37 1,1-Dichloroethane	63	6.996	7.002	-0.006	26	5776	0.0200	0.0232	
38 Vinyl acetate	43	7.126	7.120	0.006	64	4214	0.0200	0.0102	
39 2-Butanone (MEK)	72	7.638	7.583	0.055	1	1270	0.0200	0.0242	
40 Hexane	56	7.557	7.575	-0.018	52	2345	0.0200	0.0209	
42 cis-1,2-Dichloroethene	96	7.978	7.981	-0.003	70	2767	0.0200	0.0232	
43 Ethyl acetate	43	8.156	8.189	-0.033	1	702	0.0200	0.001828	
44 Chloroform	83	8.323	8.326	-0.003	27	4613	0.0200	0.0203	
45 Tert-butyl ethyl ether	59	8.490	8.448	0.042	60	9479	0.0200	0.0211	
46 Tetrahydrofuran	42	8.797	8.750	0.047	57	4374	0.0200	0.0224	
47 1,1,1-Trichloroethane	97	9.347	9.348	-0.001	54	5411	0.0200	0.0229	
48 1,2-Dichloroethane	62	9.455	9.461	-0.006	24	2961	0.0200	0.0180	
49 n-Butanol	31	9.886	9.970	-0.084	21	87	0.0200	0.001090	
50 Cyclohexane	69	9.951	9.954	-0.003	75	1264	0.0200	0.0248	
51 Benzene	78	9.946	9.958	-0.012	90	9765	0.0200	0.0279	
52 Carbon tetrachloride	117	9.973	9.980	-0.007	59	4833	0.0200	0.0217	
53 2,3-Dimethylpentane	71	10.108	10.094	0.014	57	1779	0.0200	0.0233	
54 Thiophene	84	10.248	10.245	0.003	39	4587	0.0200	0.0238	
55 Isooctane	57	10.760	10.766	-0.006	96	19678	0.0200	0.0266	
56 n-Heptane	71	11.154	11.162	-0.008	91	2935	0.0200	0.0249	
57 1,2-Dichloropropane	63	11.229	11.235	-0.006	50	4540	0.0200	0.0281	
58 Trichloroethene	130	11.272	11.272	0.000	51	3281	0.0200	0.0214	
59 Dibromomethane	93	11.353	11.357	-0.004	80	3269	0.0200	0.0234	
60 Dichlorobromomethane	83	11.510	11.510	0.000	91	4849	0.0200	0.0203	
61 1,4-Dioxane	88	11.607	11.563	0.044	12	883	0.0200	0.0161	
62 Methyl methacrylate	41	11.639	11.632	0.007	53	3451	0.0200	0.0150	
63 Methylcyclohexane	83	12.060	12.063	-0.003	83	4971	0.0200	0.0246	
64 4-Methyl-2-pentanone (MIBK)	43	12.545	12.517	0.028	86	9244	0.0200	0.0215	
65 cis-1,3-Dichloropropene	75	12.545	12.548	-0.003	77	4175	0.0200	0.0220	
66 trans-1,3-Dichloropropene	75	13.257	13.261	-0.004	38	3924	0.0200	0.0249	
67 Toluene	91	13.381	13.381	0.000	89	9082	0.0200	0.0231	
68 1,1,2-Trichloroethane	83	13.451	13.460	-0.009	47	2613	0.0200	0.0209	
69 2-Hexanone	58	13.920	13.878	0.042	82	3174	0.0200	0.0188	
70 n-Octane	85	14.093	14.096	-0.004	94	3097	0.0200	0.0258	
71 Chlorodibromomethane	129	14.152	14.165	-0.013	78	4878	0.0200	0.0195	
72 Ethylene Dibromide	107	14.465	14.462	0.003	91	4515	0.0200	0.0208	
73 Tetrachloroethene	129	14.535	14.538	-0.003	89	3003	0.0200	0.0211	
74 Chlorobenzene	112	15.419	15.423	-0.004	91	7001	0.0200	0.0222	
75 2,3-Dimethylheptane	43	15.451	15.455	-0.004	91	13082	0.0200	0.0215	
76 Ethylbenzene	91	15.716	15.718	-0.002	98	12710	0.0200	0.0235	
77 m-Xylene & p-Xylene	91	15.877	15.881	-0.004	97	19121	0.0400	0.0467	
78 n-Nonane	57	16.314	16.314	0.000	93	6496	0.0200	0.0186	
79 Bromoform	173	16.320	16.323	-0.003	77	6495	0.0200	0.0210	
80 Styrene	104	16.341	16.346	-0.005	94	6467	0.0200	0.0216	
81 o-Xylene	91	16.406	16.406	0.000	95	11244	0.0200	0.0260	
82 1,1,2,2-Tetrachloroethane	83	16.735	16.734	0.001	95	7133	0.0200	0.0203	
83 1,2,3-Trichloropropane	110	16.902	16.895	0.007	91	1681	0.0200	0.0176	
84 Isopropylbenzene	105	16.999	16.998	0.001	90	14300	0.0200	0.0224	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
85 N-Propylbenzene	120	17.544	17.547	-0.003	97	3363	0.0200	0.0196	
86 2-Chlorotoluene	126	17.592	17.590	0.002	92	3739	0.0200	0.0225	
87 4-Ethyltoluene	105	17.705	17.704	0.001	96	11256	0.0200	0.0186	
88 1,3,5-Trimethylbenzene	120	17.781	17.782	-0.001	92	5511	0.0200	0.0210	
89 Alpha Methyl Styrene	118	18.024	18.020	0.004	85	4507	0.0200	0.0173	
90 n-Decane	57	18.094	18.089	0.005	84	8546	0.0200	0.0181	
91 tert-Butylbenzene	119	18.223	18.218	0.005	82	9946	0.0200	0.0175	
92 1,2,4-Trimethylbenzene	105	18.234	18.232	0.002	88	9627	0.0200	0.0179	
93 sec-Butylbenzene	105	18.493	18.494	-0.001	96	14847	0.0200	0.0182	
94 1,3-Dichlorobenzene	146	18.503	18.504	-0.001	93	7515	0.0200	0.0188	
95 Benzyl chloride	91	18.579	18.584	-0.005	95	8610	0.0200	0.0198	
96 1,4-Dichlorobenzene	146	18.601	18.596	0.005	89	7328	0.0200	0.0190	
97 4-Isopropyltoluene	119	18.660	18.662	-0.002	95	10748	0.0200	0.0170	
98 1,2,3-Trimethylbenzene	105	18.714	18.713	0.001	97	12792	0.0200	0.0220	
99 Butylcyclohexane	83	18.778	18.773	0.005	87	8697	0.0200	0.0192	
100 2,3-Dihydroindene	117	18.962	18.961	0.001	92	12057	0.0200	0.0221	
101 1,2-Dichlorobenzene	146	18.962	18.962	0.000	79	9271	0.0200	0.0225	
102 Indene	116	19.097	19.093	0.004	89	8382	0.0200	0.0181	
103 n-Butylbenzene	91	19.107	19.106	0.001	93	11819	0.0200	0.0189	
104 Undecane	57	19.431	19.431	0.000	93	9522	0.0200	0.0174	
105 1,2-Dibromo-3-Chloropropane	157	19.577	19.577	0.000	86	4893	0.0200	0.0201	
106 1,2,4,5-Tetramethylbenzene	119	19.873	19.873	0.000	96	10338	0.0200	0.0163	
107 Dodecane	57	20.488	20.489	-0.001	83	7865	0.0200	0.0129	
108 1,2,4-Trichlorobenzene	180	20.677	20.672	0.005	92	8850	0.0200	0.0244	
109 Naphthalene	128	20.811	20.807	0.004	97	14979	0.0200	0.0220	
110 Hexachlorobutadiene	225	21.032	21.028	0.004	92	6607	0.0200	0.0160	
111 1,2,3-Trichlorobenzene	180	21.103	21.097	0.006	95	11613	0.0200	0.0292	
112 2-Methylnaphthalene	142	21.836	21.834	0.002	92	12732	0.0200	0.0347	
113 1-Methylnaphthalene	142	21.965	21.967	-0.002	97	20475	0.0200	0.0446	
A 116 C8 Range	1	14.093	(14.060-14.136)		0	44175	0.0200	0.0279	
S 117 Xylenes, Total	100				0		0.0600	0.0727	
S 118 1,2-Dichloroethene, Total	1				0		0.0400	0.0497	

Reagents:

40L1-3DQP_00031	Amount Added: 50.00	Units: mL	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

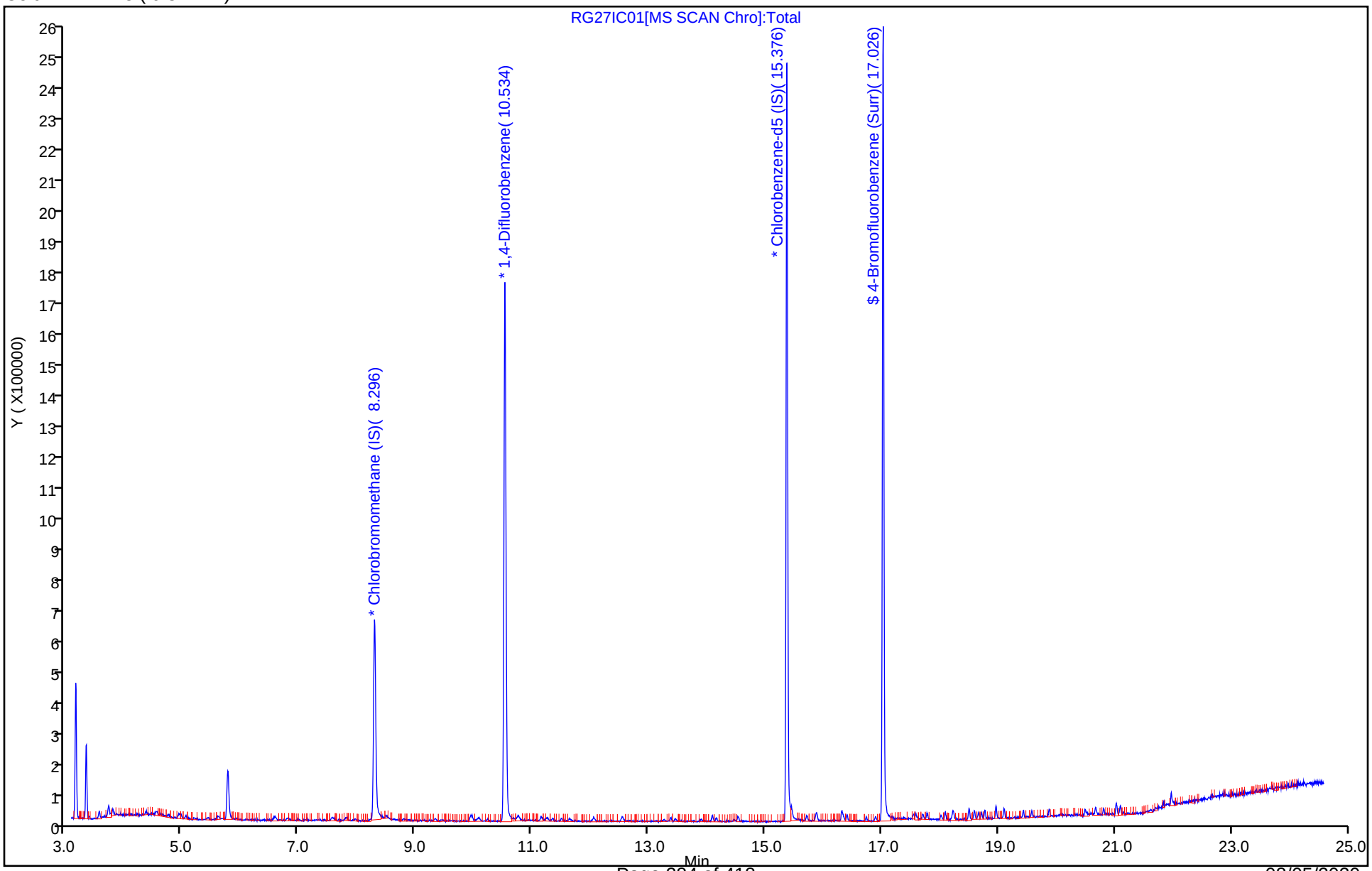
Report Date: 28-Jul-2020 16:47:19 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC01.D

Injection Date:	27-Jul-2020 23:58:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	IC L1			Worklist Smp#:	9
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

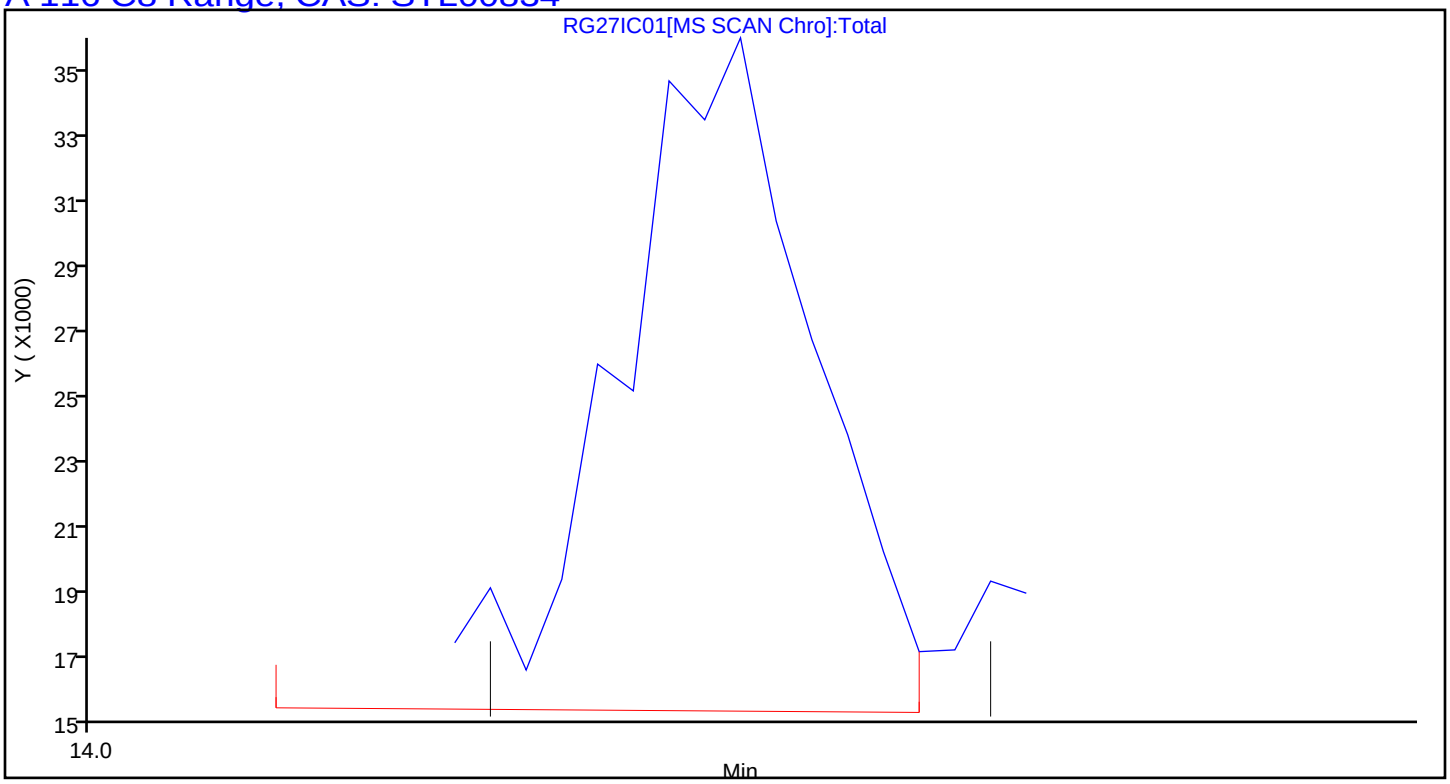


Report Date: 28-Jul-2020 16:47:20 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC01.D				
Injection Date:	27-Jul-2020 23:58:30	Instrument ID:	MR		
Lims ID:	IC L1				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 116 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC02.D
Lims ID: IC L2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 28-Jul-2020 01:02:30 ALS Bottle#: 8 Worklist Smp#: 10
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016116-010
Misc. Info.: 314720
Operator ID: HMT Instrument ID: MR
Sublist: chrom-MR_TO15*sub16

Method: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 28-Jul-2020 16:47:27 Calib Date: 28-Jul-2020 09:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC09R.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1014

First Level Reviewer: tajh Date: 28-Jul-2020 14:01:31

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.296	8.308	-0.012	93	177632	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.534	10.539	-0.005	96	1610405	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.371	15.375	-0.004	90	1294041	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.021	17.025	-0.004	94	708909	4.00	3.63	
6 Chlorodifluoromethane	51	3.346	3.343	0.003	39	13129	0.0400	0.0505	
7 Propene	41	3.351	3.349	0.002	98	94916	0.0400	0.4322	
8 Dichlorodifluoromethane	85	3.405	3.400	0.005	98	8679	0.0400	0.0494	
9 Chloromethane	52	3.567	3.569	-0.002	73	3414	0.0400	0.0760	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.578	3.577	0.001	91	7024	0.0400	0.0408	
12 Vinyl chloride	62	3.729	3.726	0.002	51	5853	0.0400	0.0454	
11 Acetaldehyde	44	3.734	3.724	0.010	98	22966	0.2000	0.3737	
13 Butane	43	3.815	3.808	0.007	80	10319	0.0400	0.0444	
14 Butadiene	54	3.809	3.809	0.000	72	5018	0.0400	0.0463	
15 Bromomethane	94	4.106	4.103	0.003	71	4311	0.0400	0.0466	
16 Chloroethane	64	4.246	4.235	0.011	45	2735	0.0400	0.0498	
17 Ethanol	31	4.376	4.364	0.012	96	12152	0.2000	0.1721	
18 Vinyl bromide	106	4.516	4.515	0.001	95	3514	0.0400	0.0401	
19 2-Methylbutane	43	4.564	4.561	0.003	87	8755	0.0400	0.0511	
21 Acrolein	56	4.812	4.779	0.033	13	2699	0.0400	0.0711	
20 Trichlorofluoromethane	101	4.764	4.765	-0.001	95	9001	0.0400	0.0414	
23 Acetone	58	4.931	4.913	0.018	97	11348	0.1200	0.1583	
22 Acetonitrile	40	4.861	4.870	-0.009	29	3126	0.0400	0.0589	
24 Pentane	72	4.942	4.971	-0.029	64	164	0.0400	0.009722	
25 Isopropyl alcohol	45	5.050	5.027	0.023	97	27246	0.1200	0.1204	
26 Ethyl ether	31	5.190	5.168	0.022	84	7232	0.0400	0.0457	
27 1,1-Dichloroethene	96	5.438	5.444	-0.006	85	4126	0.0400	0.0430	
28 Acrylonitrile	53	5.578	5.572	0.006	58	2554	0.0400	0.0314	
30 1,1,2-Trichloro-1,2,2-trifluoroe	101	5.616	5.622	-0.006	93	7735	0.0400	0.0397	
29 2-Methyl-2-propanol	59	5.670	5.629	0.041	77	9927	0.0400	0.0454	
31 Methylene Chloride	84	5.783	5.788	-0.005	93	63408	0.0400	-0.0132	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	5.799	5.802	-0.003	43	5670	0.0400	0.0449	
33 Carbon disulfide	76	5.934	5.938	-0.004	96	11559	0.0400	0.0451	
34 trans-1,2-Dichloroethene	96	6.570	6.580	-0.010	70	3573	0.0400	0.0394	
35 2-Methylpentane	43	6.603	6.600	0.003	88	14636	0.0400	0.0459	
36 Methyl tert-butyl ether	73	6.786	6.747	0.039	82	11963	0.0400	0.0507	
37 1,1-Dichloroethane	63	7.002	7.002	0.000	88	10044	0.0400	0.0472	
38 Vinyl acetate	43	7.126	7.120	0.006	96	13283	0.0400	0.0376	
40 Hexane	56	7.568	7.575	-0.007	88	4661	0.0400	0.0486	
39 2-Butanone (MEK)	72	7.616	7.583	0.033	69	2137	0.0400	0.0475	
41 Isopropyl ether	45	7.794	7.761	0.033	97	22672	0.0400	0.0462	
42 cis-1,2-Dichloroethene	96	7.972	7.981	-0.009	68	4692	0.0400	0.0459	
43 Ethyl acetate	43	8.210	8.189	0.021	77	15509	0.0400	0.0472	
44 Chloroform	83	8.317	8.326	-0.009	39	8563	0.0400	0.0439	
45 Tert-butyl ethyl ether	59	8.485	8.448	0.037	94	16915	0.0400	0.0439	
46 Tetrahydrofuran	42	8.787	8.750	0.037	78	6726	0.0400	0.0403	
47 1,1,1-Trichloroethane	97	9.337	9.348	-0.011	95	9028	0.0400	0.0447	
48 1,2-Dichloroethane	62	9.450	9.461	-0.011	57	6253	0.0400	0.0414	
49 n-Butanol	31	9.957	9.970	-0.013	41	106	0.0400	0.001450	
51 Benzene	78	9.962	9.958	0.004	93	14816	0.0400	0.0462	
50 Cyclohexane	69	9.951	9.954	-0.003	71	1861	0.0400	0.0398	
52 Carbon tetrachloride	117	9.978	9.980	-0.002	90	8030	0.0400	0.0394	
53 2,3-Dimethylpentane	71	10.081	10.094	-0.013	89	2877	0.0400	0.0411	
54 Thiophene	84	10.237	10.245	-0.008	94	7256	0.0400	0.0410	
55 Isooctane	57	10.766	10.766	0.000	97	29074	0.0400	0.0429	
56 n-Heptane	71	11.165	11.162	0.003	95	5333	0.0400	0.0493	
57 1,2-Dichloropropane	63	11.229	11.235	-0.006	63	5751	0.0400	0.0389	
58 Trichloroethene	130	11.267	11.272	-0.005	90	6043	0.0400	0.0430	
59 Dibromomethane	93	11.348	11.357	-0.009	90	5050	0.0400	0.0395	
60 Dichlorobromomethane	83	11.504	11.510	-0.006	92	8864	0.0400	0.0405	
61 1,4-Dioxane	88	11.596	11.563	0.033	11	2138	0.0400	0.0425	
62 Methyl methacrylate	41	11.634	11.632	0.002	64	9007	0.0400	0.0427	
63 Methylcyclohexane	83	12.060	12.063	-0.003	94	8768	0.0400	0.0474	
65 cis-1,3-Dichloropropene	75	12.545	12.548	-0.003	80	6361	0.0400	0.0366	
64 4-Methyl-2-pentanone (MIBK)	43	12.534	12.517	0.017	90	14860	0.0400	0.0377	
66 trans-1,3-Dichloropropene	75	13.262	13.261	0.001	73	5795	0.0400	0.0408	
67 Toluene	91	13.381	13.381	0.000	93	14401	0.0400	0.0406	
68 1,1,2-Trichloroethane	83	13.451	13.460	-0.009	90	5483	0.0400	0.0486	
69 2-Hexanone	58	13.888	13.878	0.010	92	5232	0.0400	0.0344	
70 n-Octane	85	14.093	14.096	-0.003	97	4688	0.0400	0.0433	
71 Chlorodibromomethane	129	14.163	14.165	-0.002	95	9216	0.0400	0.0409	
72 Ethylene Dibromide	107	14.454	14.462	-0.008	99	7823	0.0400	0.0400	
73 Tetrachloroethene	129	14.535	14.538	-0.003	91	5381	0.0400	0.0419	
74 Chlorobenzene	112	15.425	15.423	0.002	91	11005	0.0400	0.0387	
75 2,3-Dimethylheptane	43	15.457	15.455	0.002	92	23874	0.0400	0.0435	
76 Ethylbenzene	91	15.721	15.718	0.003	97	20681	0.0400	0.0424	
77 m-Xylene & p-Xylene	91	15.878	15.881	-0.003	96	31137	0.0800	0.0842	
78 n-Nonane	57	16.314	16.314	0.000	94	12986	0.0400	0.0411	
79 Bromoform	173	16.320	16.323	-0.003	77	9478	0.0400	0.0339	
80 Styrene	104	16.347	16.346	0.001	92	9797	0.0400	0.0363	
81 o-Xylene	91	16.401	16.406	-0.005	97	17444	0.0400	0.0447	
82 1,1,2,2-Tetrachloroethane	83	16.735	16.734	0.001	95	12378	0.0400	0.0391	
83 1,2,3-Trichloropropane	110	16.897	16.895	0.002	89	2753	0.0400	0.0319	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	16.999	16.998	0.001	93	24247	0.0400	0.0421	
85 N-Propylbenzene	120	17.549	17.547	0.002	98	5780	0.0400	0.0374	
86 2-Chlorotoluene	126	17.592	17.590	0.002	92	6204	0.0400	0.0413	
87 4-Ethyltoluene	105	17.700	17.704	-0.004	97	18783	0.0400	0.0344	
88 1,3,5-Trimethylbenzene	120	17.781	17.782	-0.001	91	8729	0.0400	0.0368	
89 Alpha Methyl Styrene	118	18.024	18.020	0.004	90	8307	0.0400	0.0353	
90 n-Decane	57	18.088	18.089	-0.001	83	15132	0.0400	0.0355	
91 tert-Butylbenzene	119	18.212	18.218	-0.006	85	18152	0.0400	0.0354	
92 1,2,4-Trimethylbenzene	105	18.234	18.232	0.002	93	17758	0.0400	0.0367	
93 sec-Butylbenzene	105	18.493	18.494	-0.001	98	27152	0.0400	0.0370	
94 1,3-Dichlorobenzene	146	18.504	18.504	0.000	92	13422	0.0400	0.0373	
95 Benzyl chloride	91	18.584	18.584	0.000	96	13682	0.0400	0.0349	
96 1,4-Dichlorobenzene	146	18.595	18.596	-0.001	89	11997	0.0400	0.0344	
97 4-Isopropyltoluene	119	18.660	18.662	-0.002	96	19869	0.0400	0.0348	
98 1,2,3-Trimethylbenzene	105	18.709	18.713	-0.004	98	18353	0.0400	0.0350	
99 Butylcyclohexane	83	18.768	18.773	-0.005	82	14609	0.0400	0.0357	
100 2,3-Dihydroindene	117	18.957	18.961	-0.004	94	17792	0.0400	0.0361	
101 1,2-Dichlorobenzene	146	18.962	18.962	0.000	89	12841	0.0400	0.0345	
102 Indene	116	19.091	19.093	-0.002	87	14862	0.0400	0.0355	
103 n-Butylbenzene	91	19.108	19.106	0.002	96	18540	0.0400	0.0329	
104 Undecane	57	19.431	19.431	0.000	88	17820	0.0400	0.0361	
105 1,2-Dibromo-3-Chloropropane	157	19.577	19.577	0.000	86	6406	0.0400	0.0291	
106 1,2,4,5-Tetramethylbenzene	119	19.873	19.873	0.000	96	17877	0.0400	0.0312	
107 Dodecane	57	20.493	20.489	0.004	83	14038	0.0400	0.0256	
108 1,2,4-Trichlorobenzene	180	20.671	20.672	-0.001	89	12091	0.0400	0.0369	
109 Naphthalene	128	20.806	20.807	-0.001	99	24120	0.0400	0.0392	
110 Hexachlorobutadiene	225	21.027	21.028	-0.001	90	13369	0.0400	0.0359	
111 1,2,3-Trichlorobenzene	180	21.092	21.097	-0.005	90	12820	0.0400	0.0357	
112 2-Methylnaphthalene	142	21.831	21.834	-0.003	94	8687	0.0400	0.0262	
113 1-Methylnaphthalene	142	21.971	21.967	0.004	94	23986	0.0400	0.0579	
A 116 C8 Range	1	14.093	(14.066-14.130)		0	58132	0.0400	0.0400	
S 117 Xylenes, Total	100				0		0.1200	0.1289	
S 118 1,2-Dichloroethene, Total	1				0		0.0800	0.0853	

Reagents:

40L1-3DQP_00031	Amount Added: 100.00	Units: mL	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

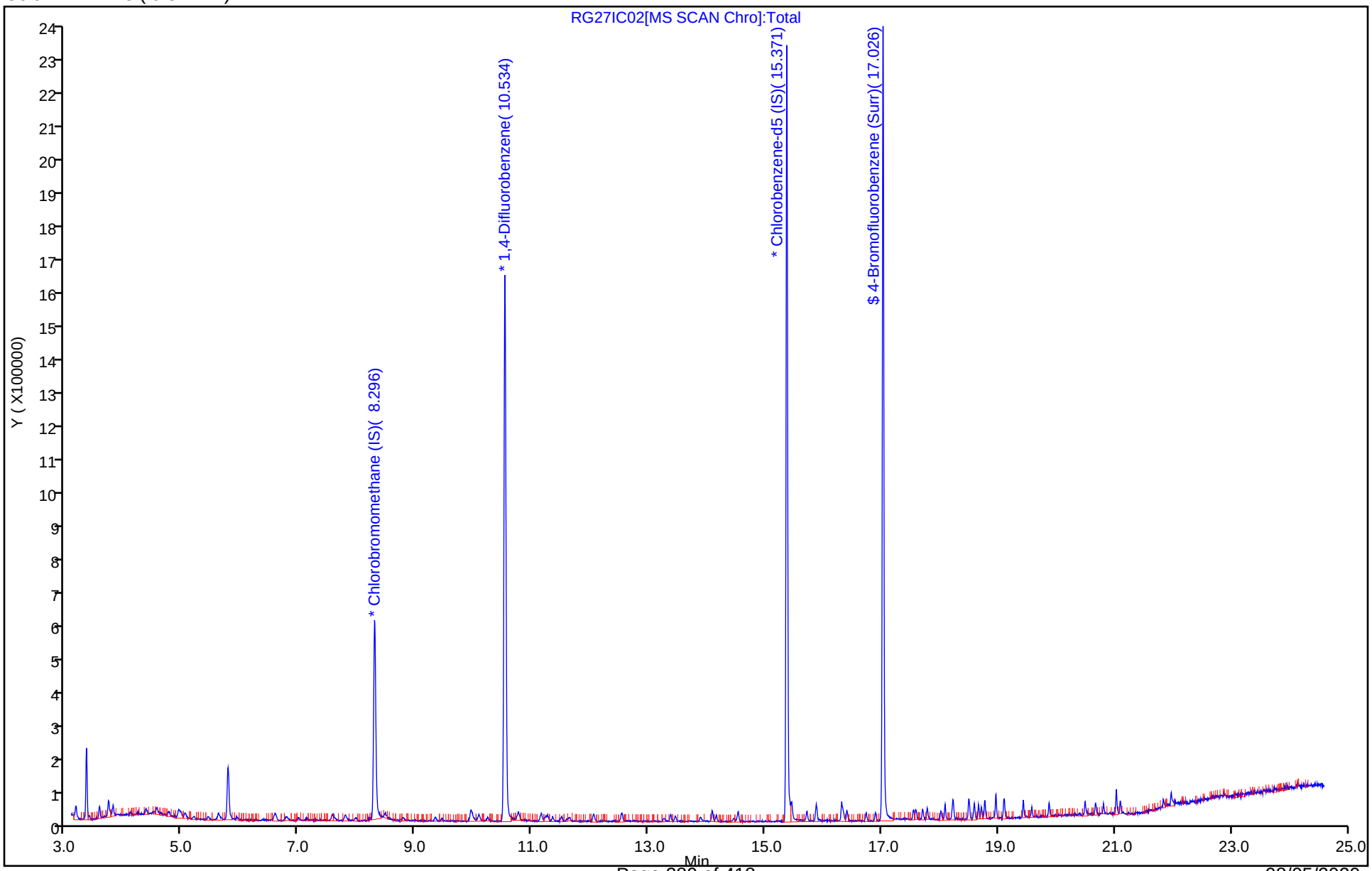
Report Date: 28-Jul-2020 16:47:28 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC02.D

Injection Date:	28-Jul-2020 01:02:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	IC L2			Worklist Smp#:	10
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

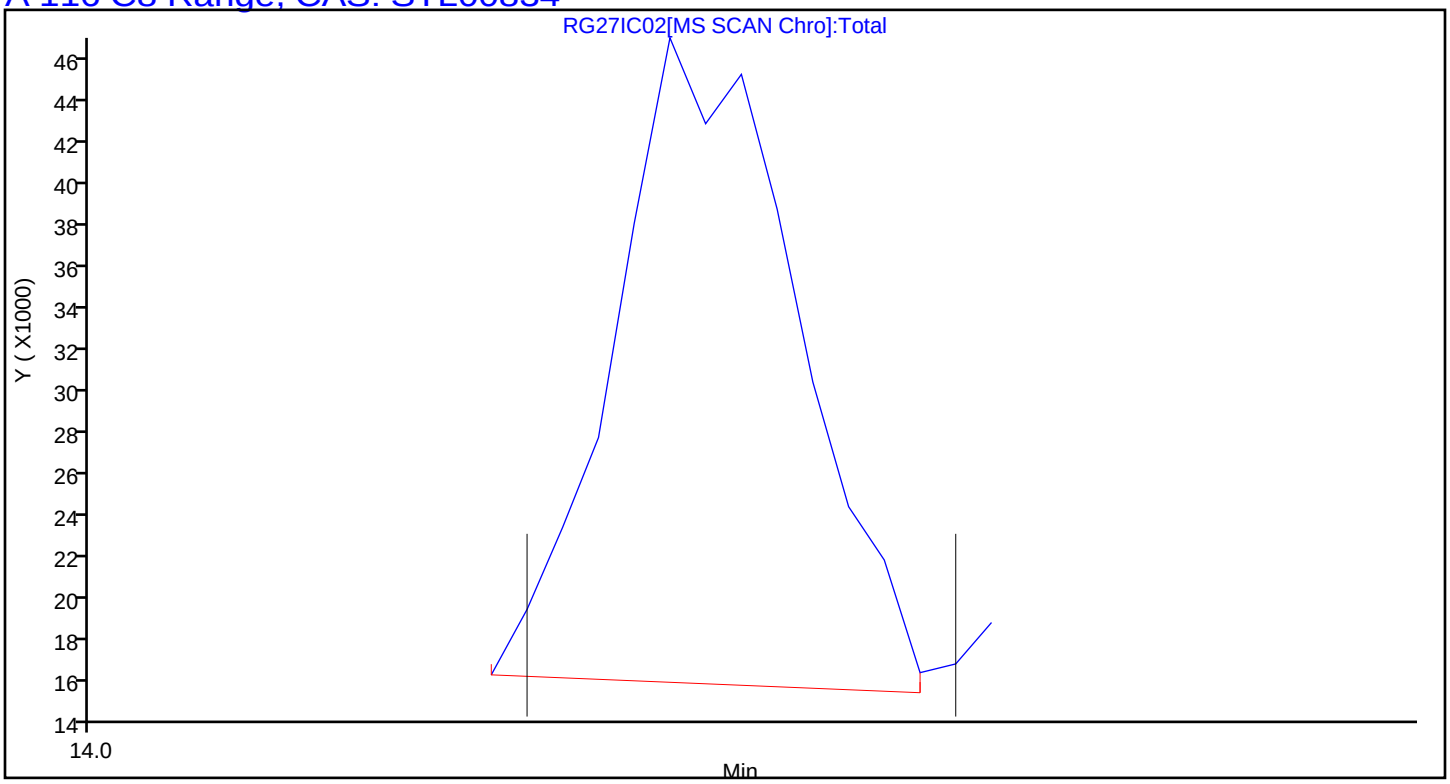


Report Date: 28-Jul-2020 16:47:28 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC02.D				
Injection Date:	28-Jul-2020 01:02:30	Instrument ID:	MR		
Lims ID:	IC L2				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	8	Worklist Smp#:	10
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 116 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC03.D
Lims ID: IC L3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 28-Jul-2020 02:07:30 ALS Bottle#: 8 Worklist Smp#: 11
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016116-011
Misc. Info.: 314720
Operator ID: HMT Instrument ID: MR
Sublist: chrom-MR_TO15*sub16

Method: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 28-Jul-2020 16:47:34 Calib Date: 28-Jul-2020 09:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC09R.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1014

First Level Reviewer: tajh Date: 28-Jul-2020 14:02:22

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.317	8.308	0.009	93	178720	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.544	10.539	0.005	96	1555116	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.376	15.375	0.001	90	1279393	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.026	17.025	0.001	95	725248	4.00	3.75	
6 Chlorodifluoromethane	51	3.362	3.343	0.019	46	22350	0.0800	0.0854	
7 Propene	41	3.362	3.349	0.013	98	95075	0.0800	0.4298	
8 Dichlorodifluoromethane	85	3.421	3.400	0.021	96	13356	0.0800	0.0756	
9 Chloromethane	52	3.588	3.569	0.019	76	5133	0.0800	0.1136	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.594	3.577	0.017	88	13573	0.0800	0.0784	
12 Vinyl chloride	62	3.750	3.726	0.024	43	10208	0.0800	0.0786	
11 Acetaldehyde	44	3.750	3.724	0.026	94	42347	0.4000	0.6849	
14 Butadiene	54	3.831	3.809	0.022	81	7859	0.0800	0.0720	
13 Butane	43	3.825	3.808	0.017	83	20720	0.0800	0.0887	
15 Bromomethane	94	4.117	4.103	0.014	93	7701	0.0800	0.0828	
16 Chloroethane	64	4.251	4.235	0.016	64	4625	0.0800	0.0837	
17 Ethanol	31	4.408	4.364	0.044	98	27793	0.4000	0.3913	
18 Vinyl bromide	106	4.532	4.515	0.017	95	6683	0.0800	0.0758	
19 2-Methylbutane	43	4.580	4.561	0.019	96	14723	0.0800	0.0853	
20 Trichlorofluoromethane	101	4.780	4.765	0.015	90	16152	0.0800	0.0738	
21 Acrolein	56	4.758	4.779	-0.021	38	237	0.0800	0.006203	
22 Acetonitrile	40	4.909	4.870	0.039	18	2319	0.0800	0.0434	
23 Acetone	58	4.963	4.913	0.050	97	21543	0.2400	0.2986	
24 Pentane	72	4.996	4.971	0.025	67	1194	0.0800	0.0704	
25 Isopropyl alcohol	45	5.098	5.027	0.071	98	49966	0.2400	0.2196	
26 Ethyl ether	31	5.233	5.168	0.065	87	12621	0.0800	0.0793	
27 1,1-Dichloroethene	96	5.454	5.444	0.010	93	7951	0.0800	0.0825	
28 Acrylonitrile	53	5.616	5.572	0.044	70	5538	0.0800	0.0678	
30 1,1,2-Trichloro-1,2,2-trifluoroe	101	5.648	5.622	0.026	92	16238	0.0800	0.0827	
29 2-Methyl-2-propanol	59	5.740	5.629	0.111	92	15117	0.0800	0.0687	
31 Methylene Chloride	84	5.810	5.788	0.022	93	65346	0.0800	0.007644	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	5.821	5.802	0.019	91	11121	0.0800	0.0876	
33 Carbon disulfide	76	5.961	5.938	0.023	94	19748	0.0800	0.0766	
34 trans-1,2-Dichloroethene	96	6.592	6.580	0.012	92	7802	0.0800	0.0855	
35 2-Methylpentane	43	6.613	6.600	0.013	97	27306	0.0800	0.0851	
36 Methyl tert-butyl ether	73	6.818	6.747	0.071	91	19517	0.0800	0.0822	
37 1,1-Dichloroethane	63	7.018	7.002	0.016	99	16841	0.0800	0.0787	
38 Vinyl acetate	43	7.153	7.120	0.033	100	25961	0.0800	0.0730	
40 Hexane	56	7.595	7.575	0.020	86	8256	0.0800	0.0856	
39 2-Butanone (MEK)	72	7.633	7.583	0.049	43	4486	0.0800	0.0990	
41 Isopropyl ether	45	7.821	7.761	0.060	96	41142	0.0800	0.0834	
42 cis-1,2-Dichloroethene	96	7.994	7.981	0.013	95	8441	0.0800	0.0821	
43 Ethyl acetate	43	8.236	8.189	0.047	87	25632	0.0800	0.0775	
44 Chloroform	83	8.339	8.326	0.013	96	15697	0.0800	0.0800	
45 Tert-butyl ethyl ether	59	8.522	8.448	0.074	97	32293	0.0800	0.0833	
46 Tetrahydrofuran	42	8.808	8.750	0.058	92	14096	0.0800	0.0840	
47 1,1,1-Trichloroethane	97	9.363	9.348	0.015	94	17059	0.0800	0.0839	
48 1,2-Dichloroethane	62	9.471	9.461	0.010	91	10550	0.0800	0.0723	
50 Cyclohexane	69	9.973	9.954	0.019	72	3573	0.0800	0.0792	
49 n-Butanol	31	10.091	9.970	0.121	73	4706	0.0800	0.0666	
51 Benzene	78	9.967	9.958	0.009	94	25933	0.0800	0.0837	
52 Carbon tetrachloride	117	9.984	9.980	0.004	91	14613	0.0800	0.0742	
53 2,3-Dimethylpentane	71	10.102	10.094	0.008	85	5095	0.0800	0.0754	
54 Thiophene	84	10.248	10.245	0.003	93	13155	0.0800	0.0771	
55 Isooctane	57	10.782	10.766	0.016	97	54721	0.0800	0.0837	
56 n-Heptane	71	11.170	11.162	0.008	93	8185	0.0800	0.0784	
57 1,2-Dichloropropane	63	11.245	11.235	0.010	89	12048	0.0800	0.0844	
58 Trichloroethene	130	11.272	11.272	0.000	95	11385	0.0800	0.0839	
59 Dibromomethane	93	11.364	11.357	0.007	90	9655	0.0800	0.0781	
60 Dichlorobromomethane	83	11.515	11.510	0.005	94	16233	0.0800	0.0769	
61 1,4-Dioxane	88	11.623	11.563	0.060	76	3948	0.0800	0.0813	
62 Methyl methacrylate	41	11.655	11.632	0.023	83	15229	0.0800	0.0747	
63 Methylcyclohexane	83	12.065	12.063	0.002	84	14439	0.0800	0.0809	
64 4-Methyl-2-pentanone (MIBK)	43	12.561	12.517	0.044	93	28304	0.0800	0.0744	
65 cis-1,3-Dichloropropene	75	12.556	12.548	0.008	80	12607	0.0800	0.0752	
66 trans-1,3-Dichloropropene	75	13.262	13.261	0.001	87	10582	0.0800	0.0754	
67 Toluene	91	13.381	13.381	0.000	94	27621	0.0800	0.0787	
68 1,1,2-Trichloroethane	83	13.462	13.460	0.002	96	8827	0.0800	0.0791	
69 2-Hexanone	58	13.909	13.878	0.031	93	10972	0.0800	0.0730	
70 n-Octane	85	14.103	14.096	0.007	97	8292	0.0800	0.0775	
71 Chlorodibromomethane	129	14.168	14.165	0.003	95	16726	0.0800	0.0751	
72 Ethylene Dibromide	107	14.470	14.462	0.008	98	13765	0.0800	0.0712	
73 Tetrachloroethene	129	14.540	14.538	0.002	91	10882	0.0800	0.0858	
74 Chlorobenzene	112	15.430	15.423	0.007	95	22698	0.0800	0.0807	
75 2,3-Dimethylheptane	43	15.457	15.455	0.002	92	44180	0.0800	0.0814	
76 Ethylbenzene	91	15.721	15.718	0.003	97	39590	0.0800	0.0821	
77 m-Xylene & p-Xylene	91	15.883	15.881	0.002	93	54731	0.1600	0.1497	
78 n-Nonane	57	16.320	16.314	0.006	94	24458	0.0800	0.0783	
79 Bromoform	173	16.330	16.323	0.007	92	18815	0.0800	0.0681	
80 Styrene	104	16.347	16.346	0.001	95	20676	0.0800	0.0774	
81 o-Xylene	91	16.411	16.406	0.005	98	30495	0.0800	0.0790	
82 1,1,2,2-Tetrachloroethane	83	16.740	16.734	0.006	96	24597	0.0800	0.0786	
83 1,2,3-Trichloropropane	110	16.902	16.895	0.007	90	7234	0.0800	0.0847	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	16.999	16.998	0.001	96	43868	0.0800	0.0770	
85 N-Propylbenzene	120	17.549	17.547	0.002	98	11115	0.0800	0.0727	
86 2-Chlorotoluene	126	17.592	17.590	0.002	98	11355	0.0800	0.0765	
87 4-Ethyltoluene	105	17.705	17.704	0.001	98	37607	0.0800	0.0697	
88 1,3,5-Trimethylbenzene	120	17.781	17.782	-0.001	92	17530	0.0800	0.0748	
89 Alpha Methyl Styrene	118	18.024	18.020	0.004	92	17319	0.0800	0.0744	
90 n-Decane	57	18.088	18.089	-0.001	87	29564	0.0800	0.0702	
91 tert-Butylbenzene	119	18.223	18.218	0.005	96	41512	0.0800	0.0819	
92 1,2,4-Trimethylbenzene	105	18.234	18.232	0.002	95	34654	0.0800	0.0724	
93 sec-Butylbenzene	105	18.498	18.494	0.004	98	54645	0.0800	0.0752	
94 1,3-Dichlorobenzene	146	18.504	18.504	0.000	72	23898	0.0800	0.0671	
95 Benzyl chloride	91	18.584	18.584	0.000	96	24912	0.0800	0.0643	
96 1,4-Dichlorobenzene	146	18.595	18.596	-0.001	93	23299	0.0800	0.0676	
97 4-Isopropyltoluene	119	18.665	18.662	0.003	96	40966	0.0800	0.0726	
98 1,2,3-Trimethylbenzene	105	18.714	18.713	0.001	97	39691	0.0800	0.0765	
99 Butylcyclohexane	83	18.773	18.773	0.000	86	29861	0.0800	0.0739	
100 2,3-Dihydroindene	117	18.956	18.961	-0.005	92	35598	0.0800	0.0731	
101 1,2-Dichlorobenzene	146	18.962	18.962	0.000	83	24834	0.0800	0.0675	
102 Indene	116	19.097	19.093	0.004	90	28979	0.0800	0.0700	
103 n-Butylbenzene	91	19.107	19.106	0.001	98	36985	0.0800	0.0663	
104 Undecane	57	19.431	19.431	0.000	91	34395	0.0800	0.0705	
105 1,2-Dibromo-3-Chloropropane	157	19.582	19.577	0.005	89	12500	0.0800	0.0574	
106 1,2,4,5-Tetramethylbenzene	119	19.873	19.873	0.000	97	41054	0.0800	0.0725	
107 Dodecane	57	20.493	20.489	0.004	87	30182	0.0800	0.0557	
108 1,2,4-Trichlorobenzene	180	20.671	20.672	-0.001	92	20292	0.0800	0.0627	
109 Naphthalene	128	20.811	20.807	0.004	98	45592	0.0800	0.0750	
110 Hexachlorobutadiene	225	21.027	21.028	-0.001	94	27371	0.0800	0.0743	
111 1,2,3-Trichlorobenzene	180	21.097	21.097	0.000	94	23199	0.0800	0.0654	
112 2-Methylnaphthalene	142	21.836	21.834	0.002	94	18034	0.0800	0.0551	
113 1-Methylnaphthalene	142	21.971	21.967	0.004	98	30945	0.0800	0.0756	
A 116 C8 Range	1	14.103	(14.060-14.136)		0	111213	0.0800	0.0793	
S 117 Xylenes, Total	100				0		0.2400	0.2288	
S 118 1,2-Dichloroethene, Total	1				0		0.1600	0.1676	

Reagents:

40L1-3DQP_00031	Amount Added: 200.00	Units: mL	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

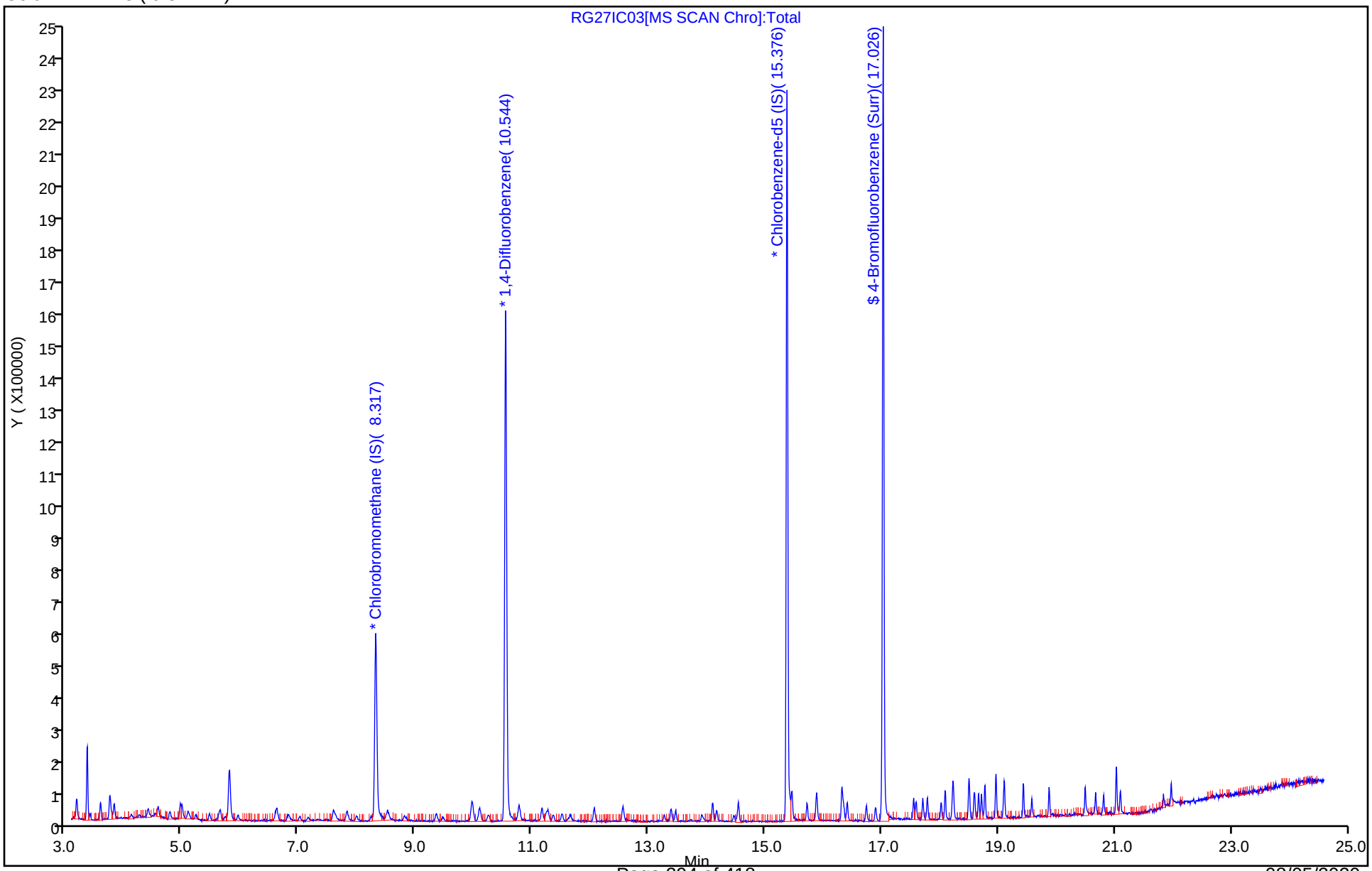
Report Date: 28-Jul-2020 16:47:35 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC03.D

Injection Date:	28-Jul-2020 02:07:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	IC L3			Worklist Smp#:	11
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

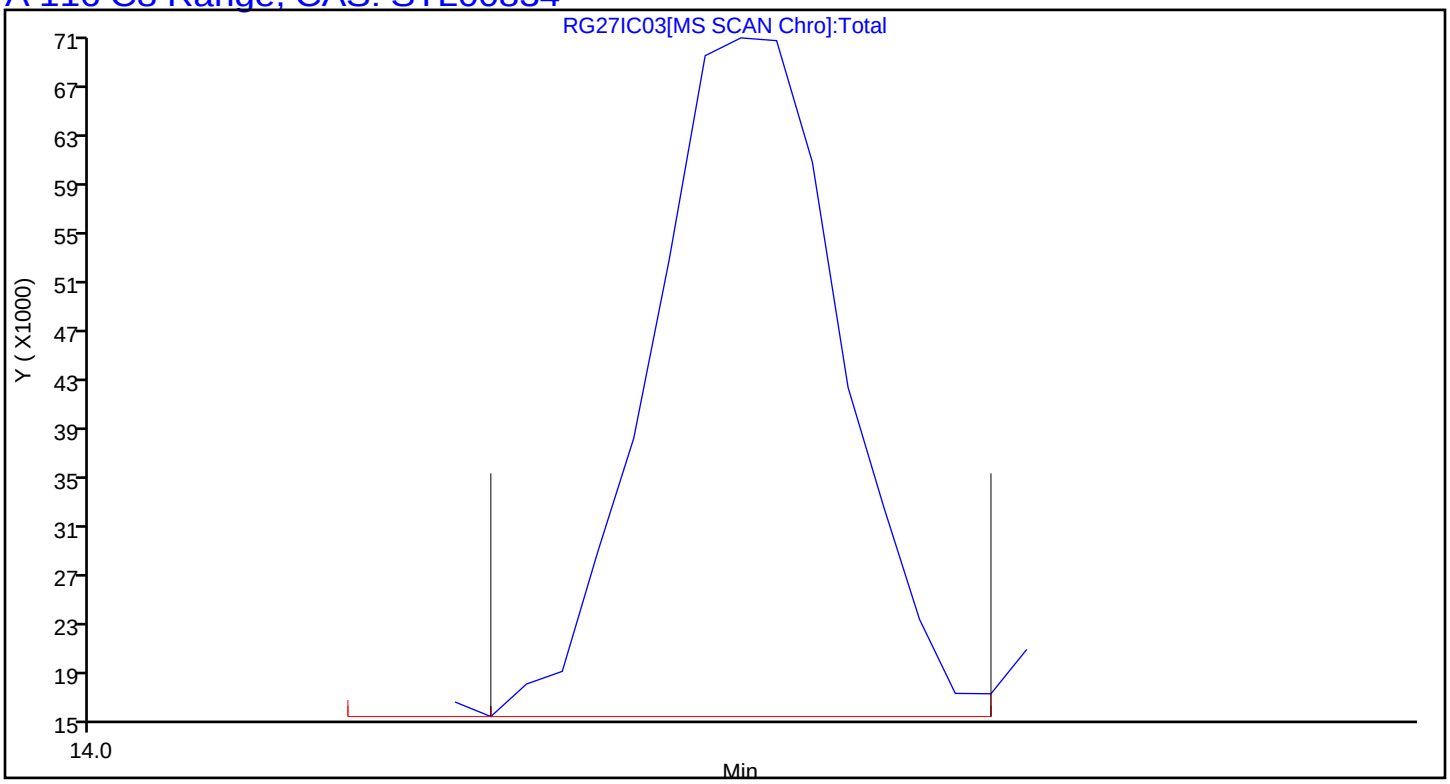


Report Date: 28-Jul-2020 16:47:35 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC03.D				
Injection Date:	28-Jul-2020 02:07:30	Instrument ID:	MR		
Lims ID:	IC L3				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	8	Worklist Smp#:	11
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 116 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC04.D
Lims ID: IC L4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 28-Jul-2020 03:11:30 ALS Bottle#: 9 Worklist Smp#: 12
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016116-012
Misc. Info.: 314718
Operator ID: HMT Instrument ID: MR
Sublist: chrom-MR_TO15*sub16

Method: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 28-Jul-2020 16:47:42 Calib Date: 28-Jul-2020 09:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC09R.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1014

First Level Reviewer: barlozhetskayaa Date: 28-Jul-2020 16:21:34

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.296	8.308	-0.012	93	174269	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.534	10.539	-0.005	96	1492660	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.376	15.375	0.001	95	1223469	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.026	17.025	0.001	95	702516	4.00	3.80	
6 Chlorodifluoromethane	51	3.340	3.343	-0.003	53	43560	0.1600	0.1708	
7 Propene	41	3.346	3.349	-0.003	97	113547	0.1600	0.5541	
8 Dichlorodifluoromethane	85	3.394	3.400	-0.006	98	29276	0.1600	0.1699	
9 Chloromethane	52	3.567	3.569	-0.002	75	7840	0.1600	0.1779	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.572	3.577	-0.005	89	27808	0.1600	0.1648	
11 Acetaldehyde	44	3.718	3.724	-0.006	95	66767	0.8000	1.11	
12 Vinyl chloride	62	3.718	3.726	-0.008	52	21542	0.1600	0.1702	
13 Butane	43	3.799	3.808	-0.010	87	36269	0.1600	0.1592	
14 Butadiene	54	3.804	3.809	-0.005	67	17801	0.1600	0.1673	
15 Bromomethane	94	4.100	4.103	-0.003	96	14781	0.1600	0.1629	
16 Chloroethane	64	4.230	4.235	-0.005	84	8586	0.1600	0.1594	
17 Ethanol	31	4.349	4.364	-0.015	97	57067	0.8000	0.8240	
18 Vinyl bromide	106	4.505	4.515	-0.010	98	14105	0.1600	0.1641	
19 2-Methylbutane	43	4.553	4.561	-0.008	94	30943	0.1600	0.1840	
21 Acrolein	56	4.780	4.779	0.001	48	5276	0.1600	0.1416	
20 Trichlorofluoromethane	101	4.758	4.765	-0.007	96	33115	0.1600	0.1551	
22 Acetonitrile	40	4.839	4.870	-0.031	64	10397	0.1600	0.1996	
23 Acetone	58	4.909	4.913	-0.004	98	31234	0.4800	0.4440	
24 Pentane	72	4.963	4.971	-0.008	95	2444	0.1600	0.1477	
25 Isopropyl alcohol	45	5.023	5.027	-0.004	98	94261	0.4800	0.4255	
26 Ethyl ether	31	5.168	5.168	0.000	88	25311	0.1600	0.1630	
27 1,1-Dichloroethene	96	5.438	5.444	-0.006	93	15734	0.1600	0.1673	
28 Acrylonitrile	53	5.556	5.572	-0.016	97	11053	0.1600	0.1387	
30 1,1,2-Trichloro-1,2,2-trifluoroe	101	5.621	5.622	-0.001	93	31065	0.1600	0.1623	
29 2-Methyl-2-propanol	59	5.637	5.629	0.008	95	38257	0.1600	0.1782	
31 Methylene Chloride	84	5.778	5.788	-0.010	93	72387	0.1600	0.1274	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	5.794	5.802	-0.008	91	19281	0.1600	0.1557	
33 Carbon disulfide	76	5.934	5.938	-0.004	99	44068	0.1600	0.1753	
34 trans-1,2-Dichloroethene	96	6.570	6.580	-0.010	93	14018	0.1600	0.1575	
35 2-Methylpentane	43	6.586	6.600	-0.014	95	52084	0.1600	0.1665	
36 Methyl tert-butyl ether	73	6.748	6.747	0.001	93	38718	0.1600	0.1671	
37 1,1-Dichloroethane	63	6.991	7.002	-0.011	98	34963	0.1600	0.1675	
38 Vinyl acetate	43	7.115	7.120	-0.005	100	50685	0.1600	0.1461	
40 Hexane	56	7.579	7.575	0.004	72	15018	0.1600	0.1596	
39 2-Butanone (MEK)	72	7.589	7.583	0.006	91	7700	0.1600	0.1743	
41 Isopropyl ether	45	7.767	7.761	0.006	95	79380	0.1600	0.1650	
42 cis-1,2-Dichloroethene	96	7.967	7.981	-0.014	93	16786	0.1600	0.1674	
43 Ethyl acetate	43	8.204	8.189	0.015	97	52092	0.1600	0.1614	
44 Chloroform	83	8.307	8.326	-0.019	30	31749	0.1600	0.1660	
45 Tert-butyl ethyl ether	59	8.452	8.448	0.004	97	63034	0.1600	0.1667	
46 Tetrahydrofuran	42	8.759	8.750	0.009	92	27352	0.1600	0.1671	
47 1,1,1-Trichloroethane	97	9.347	9.348	-0.001	96	30507	0.1600	0.1539	
48 1,2-Dichloroethane	62	9.450	9.461	-0.011	95	21685	0.1600	0.1549	
51 Benzene	78	9.951	9.958	-0.007	94	47298	0.1600	0.1591	
50 Cyclohexane	69	9.946	9.954	-0.008	69	7461	0.1600	0.1723	
52 Carbon tetrachloride	117	9.978	9.980	-0.002	93	31048	0.1600	0.1642	
49 n-Butanol	31	10.005	9.970	0.035	68	10929	0.1600	0.1612	
53 2,3-Dimethylpentane	71	10.091	10.094	-0.003	91	10505	0.1600	0.1620	
54 Thiophene	84	10.237	10.245	-0.008	94	25072	0.1600	0.1530	
55 Isooctane	57	10.765	10.766	-0.001	96	102219	0.1600	0.1628	
56 n-Heptane	71	11.154	11.162	-0.008	94	17300	0.1600	0.1727	
57 1,2-Dichloropropane	63	11.235	11.235	0.000	89	23195	0.1600	0.1692	
58 Trichloroethene	130	11.267	11.272	-0.005	93	19716	0.1600	0.1513	
59 Dibromomethane	93	11.348	11.357	-0.009	92	17443	0.1600	0.1470	
60 Dichlorobromomethane	83	11.504	11.510	-0.006	95	31116	0.1600	0.1535	
61 1,4-Dioxane	88	11.569	11.563	0.006	93	7355	0.1600	0.1579	
62 Methyl methacrylate	41	11.634	11.632	0.002	86	30743	0.1600	0.1571	
63 Methylcyclohexane	83	12.060	12.063	-0.003	85	27635	0.1600	0.1613	
65 cis-1,3-Dichloropropene	75	12.545	12.548	-0.003	91	24251	0.1600	0.1506	
64 4-Methyl-2-pentanone (MIBK)	43	12.529	12.517	0.012	95	54138	0.1600	0.1482	
66 trans-1,3-Dichloropropene	75	13.257	13.261	-0.004	88	19725	0.1600	0.1469	
67 Toluene	91	13.381	13.381	0.000	91	55409	0.1600	0.1651	
68 1,1,2-Trichloroethane	83	13.456	13.460	-0.004	89	16211	0.1600	0.1518	
69 2-Hexanone	58	13.882	13.878	0.004	87	19116	0.1600	0.1330	
70 n-Octane	85	14.093	14.096	-0.003	98	17309	0.1600	0.1692	
71 Chlorodibromomethane	129	14.163	14.165	-0.002	95	33919	0.1600	0.1592	
72 Ethylene Dibromide	107	14.459	14.462	-0.003	94	28751	0.1600	0.1554	
73 Tetrachloroethene	129	14.535	14.538	-0.003	90	19101	0.1600	0.1574	
74 Chlorobenzene	112	15.419	15.423	-0.004	96	42713	0.1600	0.1587	
75 2,3-Dimethylheptane	43	15.457	15.455	0.002	92	85415	0.1600	0.1645	
76 Ethylbenzene	91	15.716	15.718	-0.002	97	68260	0.1600	0.1480	
77 m-Xylene & p-Xylene	91	15.883	15.881	0.002	96	109239	0.3200	0.3125	
78 n-Nonane	57	16.314	16.314	0.000	92	45033	0.1600	0.1508	
79 Bromoform	173	16.325	16.323	0.002	90	37105	0.1600	0.1405	
80 Styrene	104	16.347	16.346	0.001	94	36278	0.1600	0.1420	
81 o-Xylene	91	16.406	16.406	0.000	98	56091	0.1600	0.1520	
82 1,1,2,2-Tetrachloroethane	83	16.729	16.734	-0.005	98	46493	0.1600	0.1553	
83 1,2,3-Trichloropropane	110	16.891	16.895	-0.004	91	11880	0.1600	0.1454	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	16.999	16.998	0.001	94	83433	0.1600	0.1531	
85 N-Propylbenzene	120	17.549	17.547	0.002	99	23090	0.1600	0.1578	
86 2-Chlorotoluene	126	17.592	17.590	0.002	96	22336	0.1600	0.1574	
87 4-Ethyltoluene	105	17.705	17.704	0.001	98	78410	0.1600	0.1519	
88 1,3,5-Trimethylbenzene	120	17.781	17.782	-0.001	92	33074	0.1600	0.1476	
89 Alpha Methyl Styrene	118	18.018	18.020	-0.002	89	30595	0.1600	0.1374	
90 n-Decane	57	18.088	18.089	-0.001	87	60278	0.1600	0.1497	
91 tert-Butylbenzene	119	18.212	18.218	-0.006	91	73807	0.1600	0.1522	
92 1,2,4-Trimethylbenzene	105	18.234	18.232	0.002	95	66278	0.1600	0.1447	
93 sec-Butylbenzene	105	18.493	18.494	-0.001	99	105622	0.1600	0.1521	
94 1,3-Dichlorobenzene	146	18.504	18.504	0.000	94	45803	0.1600	0.1345	
95 Benzyl chloride	91	18.584	18.584	0.000	96	45333	0.1600	0.1223	
96 1,4-Dichlorobenzene	146	18.595	18.596	-0.001	92	42717	0.1600	0.1296	
97 4-Isopropyltoluene	119	18.665	18.662	0.003	97	79807	0.1600	0.1479	
98 1,2,3-Trimethylbenzene	105	18.714	18.713	0.001	98	72444	0.1600	0.1460	
99 Butylcyclohexane	83	18.773	18.773	0.000	85	58413	0.1600	0.1512	
100 2,3-Dihydroindene	117	18.962	18.961	0.001	91	63148	0.1600	0.1355	
101 1,2-Dichlorobenzene	146	18.962	18.962	0.000	80	47024	0.1600	0.1336	
102 Indene	116	19.091	19.093	-0.002	88	52137	0.1600	0.1317	
103 n-Butylbenzene	91	19.107	19.106	0.001	97	74291	0.1600	0.1393	
104 Undecane	57	19.431	19.431	0.000	91	59603	0.1600	0.1278	
105 1,2-Dibromo-3-Chloropropane	157	19.577	19.577	0.000	85	23210	0.1600	0.1115	
106 1,2,4,5-Tetramethylbenzene	119	19.873	19.873	0.000	98	63459	0.1600	0.1172	
107 Dodecane	57	20.488	20.489	-0.001	88	40135	0.1600	0.0775	
108 1,2,4-Trichlorobenzene	180	20.671	20.672	-0.001	92	28921	0.1600	0.0934	
109 Naphthalene	128	20.806	20.807	-0.001	98	47616	0.1600	0.0819	
110 Hexachlorobutadiene	225	21.027	21.028	-0.001	94	45945	0.1600	0.1304	
111 1,2,3-Trichlorobenzene	180	21.097	21.097	0.000	95	29355	0.1600	0.0865	
112 2-Methylnaphthalene	142	21.836	21.834	0.002	88	7178	0.1600	0.0229	
113 1-Methylnaphthalene	142	21.971	21.967	0.004	98	16685	0.1600	0.0426	
A 116 C8 Range	1	14.082	(14.049-14.146)		0	225700	0.1600	0.1677	
S 117 Xylenes, Total	100				0		0.4800	0.4646	
S 118 1,2-Dichloroethene, Total	1				0		0.3200	0.3250	

Reagents:

40L4DQP_00020	Amount Added: 200.00	Units: mL	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

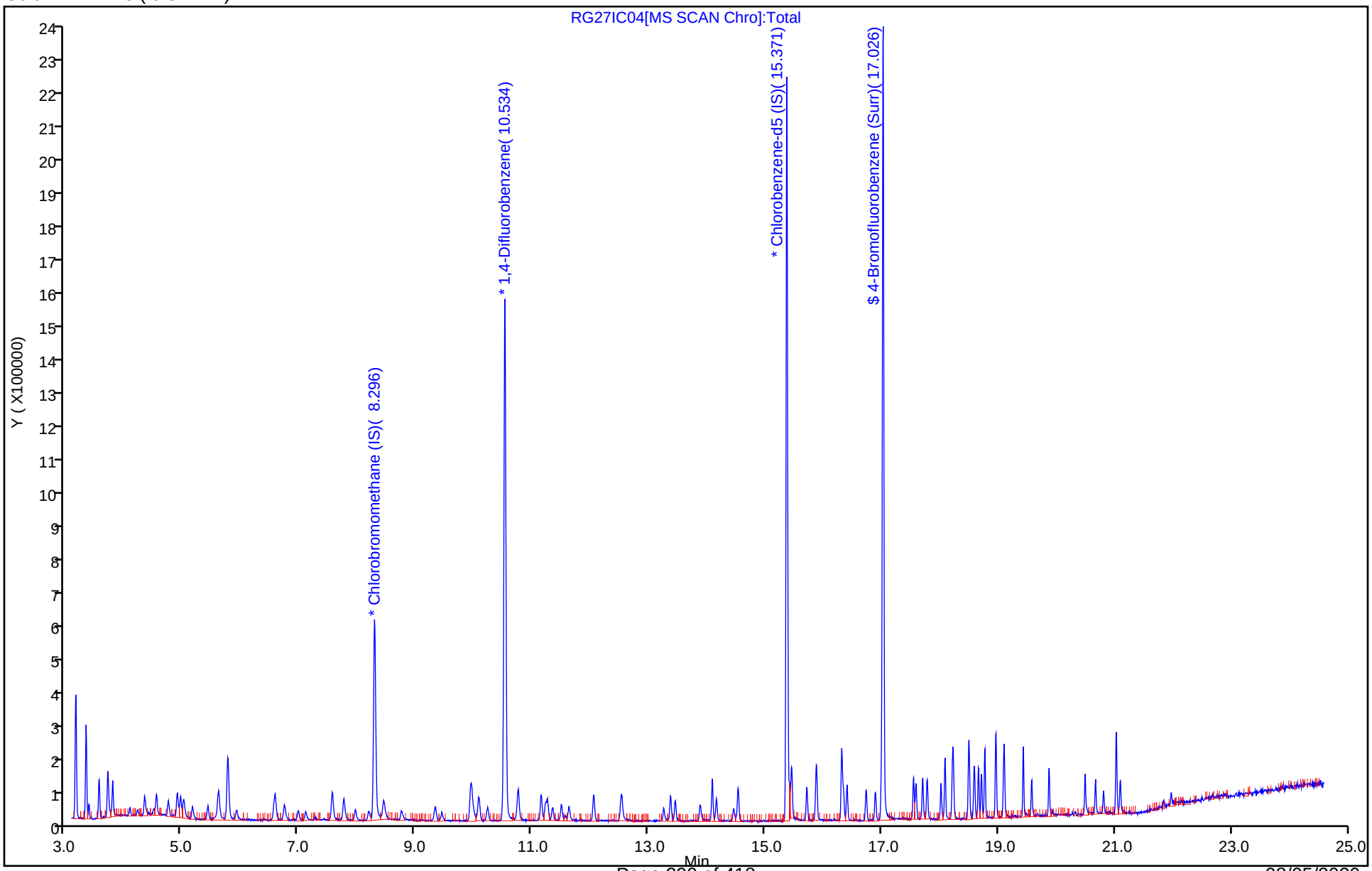
Report Date: 28-Jul-2020 16:47:43 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC04.D

Injection Date:	28-Jul-2020 03:11:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	IC L4			Worklist Smp#:	12
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

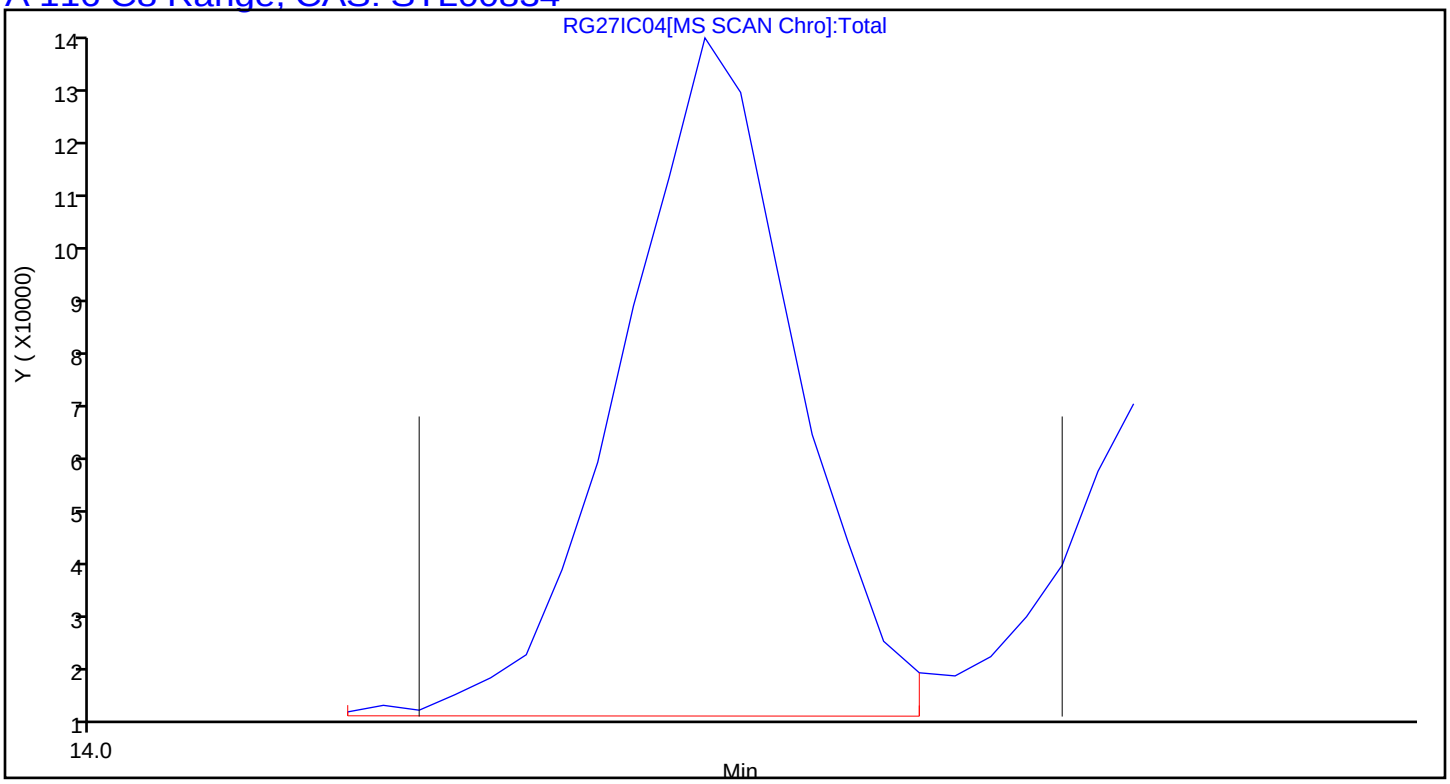


Report Date: 28-Jul-2020 16:47:43 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC04.D				
Injection Date:	28-Jul-2020 03:11:30	Instrument ID:	MR		
Lims ID:	IC L4				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	9	Worklist Smp#:	12
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 116 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC05.D
Lims ID: IC L5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 28-Jul-2020 04:17:30 ALS Bottle#: 10 Worklist Smp#: 13
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016116-013
Misc. Info.: 314717
Operator ID: HMT Instrument ID: MR
Sublist: chrom-MR_TO15*sub16

Method: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 28-Jul-2020 16:47:50 Calib Date: 28-Jul-2020 09:59:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC09R.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1014

First Level Reviewer: barlozhetskayaa Date: 28-Jul-2020 11:33:11

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.296	8.308	-0.012	92	163085	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.528	10.539	-0.011	96	1439784	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.371	15.375	-0.004	90	1185694	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.021	17.025	-0.004	94	680156	4.00	3.80	
6 Chlorodifluoromethane	51	3.329	3.343	-0.014	96	97045	0.4000	0.4066	
7 Propene	41	3.335	3.349	-0.014	62	67336	0.4000	0.3067	
8 Dichlorodifluoromethane	85	3.383	3.400	-0.017	98	67258	0.4000	0.4172	
9 Chloromethane	52	3.556	3.569	-0.013	88	16741	0.4000	0.4060	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.567	3.577	-0.010	91	61512	0.4000	0.3895	
11 Acetaldehyde	44	3.712	3.724	-0.012	97	118375	2.00	2.10	
12 Vinyl chloride	62	3.712	3.726	-0.014	53	48486	0.4000	0.4093	
13 Butane	43	3.793	3.808	-0.015	86	88814	0.4000	0.4167	
14 Butadiene	54	3.793	3.809	-0.016	64	41282	0.4000	0.4146	
15 Bromomethane	94	4.090	4.103	-0.013	97	34681	0.4000	0.4084	
16 Chloroethane	64	4.225	4.235	-0.010	88	20761	0.4000	0.4119	
17 Ethanol	31	4.338	4.364	-0.026	97	134775	2.00	2.08	
18 Vinyl bromide	106	4.505	4.515	-0.010	96	33361	0.4000	0.4147	
19 2-Methylbutane	43	4.548	4.561	-0.013	95	69007	0.4000	0.4384	
20 Trichlorofluoromethane	101	4.753	4.765	-0.012	96	84317	0.4000	0.4219	
21 Acrolein	56	4.775	4.779	-0.004	93	13255	0.4000	0.3802	
22 Acetonitrile	40	4.845	4.870	-0.025	97	19994	0.4000	0.4102	
23 Acetone	58	4.899	4.913	-0.014	99	68315	1.20	1.04	
24 Pentane	72	4.963	4.971	-0.008	95	7679	0.4000	0.4958	
25 Isopropyl alcohol	45	5.006	5.027	-0.021	96	228050	1.20	1.10	
26 Ethyl ether	31	5.152	5.168	-0.016	89	62916	0.4000	0.4329	
27 1,1-Dichloroethene	96	5.432	5.444	-0.012	95	36848	0.4000	0.4188	
28 Acrylonitrile	53	5.556	5.572	-0.016	84	26276	0.4000	0.3523	
30 1,1,2-Trichloro-1,2,2-trifluoroe	101	5.610	5.622	-0.012	95	74939	0.4000	0.4184	
29 2-Methyl-2-propanol	59	5.610	5.629	-0.019	84	85356	0.4000	0.4248	
31 Methylene Chloride	84	5.772	5.788	-0.016	92	86361	0.4000	0.4022	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	5.788	5.802	-0.014	92	50795	0.4000	0.4384	
33 Carbon disulfide	76	5.923	5.938	-0.015	98	103310	0.4000	0.4393	
34 trans-1,2-Dichloroethene	96	6.559	6.580	-0.021	96	35310	0.4000	0.4241	
35 2-Methylpentane	43	6.586	6.600	-0.014	97	121804	0.4000	0.4161	
36 Methyl tert-butyl ether	73	6.727	6.747	-0.020	92	94478	0.4000	0.4358	
37 1,1-Dichloroethane	63	6.985	7.002	-0.017	99	79326	0.4000	0.4060	
38 Vinyl acetate	43	7.104	7.120	-0.016	100	131013	0.4000	0.4035	
40 Hexane	56	7.568	7.575	-0.007	70	37669	0.4000	0.4278	
39 2-Butanone (MEK)	72	7.557	7.583	-0.026	84	16864	0.4000	0.4080	
41 Isopropyl ether	45	7.746	7.761	-0.015	96	188981	0.4000	0.4197	
42 cis-1,2-Dichloroethene	96	7.967	7.981	-0.014	97	38019	0.4000	0.4052	
43 Ethyl acetate	43	8.183	8.189	-0.006	97	126927	0.4000	0.4203	
44 Chloroform	83	8.312	8.326	-0.014	93	75409	0.4000	0.4213	
45 Tert-butyl ethyl ether	59	8.431	8.448	-0.017	98	145027	0.4000	0.4098	
46 Tetrahydrofuran	42	8.733	8.750	-0.017	92	66768	0.4000	0.4359	
47 1,1,1-Trichloroethane	97	9.337	9.348	-0.011	95	75765	0.4000	0.4084	
48 1,2-Dichloroethane	62	9.455	9.461	-0.006	93	53350	0.4000	0.3951	
50 Cyclohexane	69	9.951	9.954	-0.003	76	17290	0.4000	0.4139	
51 Benzene	78	9.940	9.958	-0.018	93	112925	0.4000	0.3938	
52 Carbon tetrachloride	117	9.967	9.980	-0.013	92	74165	0.4000	0.4067	
49 n-Butanol	31	9.978	9.970	0.008	67	26740	0.4000	0.4090	
53 2,3-Dimethylpentane	71	10.081	10.094	-0.013	93	26093	0.4000	0.4172	
54 Thiophene	84	10.232	10.245	-0.013	95	64778	0.4000	0.4099	
55 Isooctane	57	10.755	10.766	-0.011	97	237917	0.4000	0.3929	
56 n-Heptane	71	11.154	11.162	-0.008	95	38064	0.4000	0.3939	
57 1,2-Dichloropropane	63	11.229	11.235	-0.006	88	54434	0.4000	0.4117	
58 Trichloroethene	130	11.262	11.272	-0.010	95	48964	0.4000	0.3897	
59 Dibromomethane	93	11.353	11.357	-0.004	92	43944	0.4000	0.3840	
60 Dichlorobromomethane	83	11.499	11.510	-0.011	95	78168	0.4000	0.3999	
61 1,4-Dioxane	88	11.553	11.563	-0.010	94	18102	0.4000	0.4028	
62 Methyl methacrylate	41	11.623	11.632	-0.009	85	76225	0.4000	0.4039	
63 Methylcyclohexane	83	12.054	12.063	-0.009	86	68034	0.4000	0.4116	
64 4-Methyl-2-pentanone (MIBK)	43	12.507	12.517	-0.010	96	144122	0.4000	0.4090	
65 cis-1,3-Dichloropropene	75	12.545	12.548	-0.003	93	59780	0.4000	0.3850	
66 trans-1,3-Dichloropropene	75	13.257	13.261	-0.004	89	47513	0.4000	0.3651	
67 Toluene	91	13.375	13.381	-0.006	93	132029	0.4000	0.4061	
68 1,1,2-Trichloroethane	83	13.456	13.460	-0.004	97	42151	0.4000	0.4073	
69 2-Hexanone	58	13.866	13.878	-0.012	88	53872	0.4000	0.3869	
70 n-Octane	85	14.093	14.096	-0.003	99	38720	0.4000	0.3905	
71 Chlorodibromomethane	129	14.163	14.165	-0.002	96	81665	0.4000	0.3954	
72 Ethylene Dibromide	107	14.454	14.462	-0.008	95	71680	0.4000	0.3999	
73 Tetrachloroethene	129	14.535	14.538	-0.003	93	44056	0.4000	0.3746	
74 Chlorobenzene	112	15.419	15.423	-0.004	93	102575	0.4000	0.3933	
75 2,3-Dimethylheptane	43	15.451	15.455	-0.004	92	202458	0.4000	0.4024	
76 Ethylbenzene	91	15.716	15.718	-0.002	98	176214	0.4000	0.3942	
77 m-Xylene & p-Xylene	91	15.877	15.881	-0.004	96	263030	0.8000	0.7765	
78 n-Nonane	57	16.309	16.314	-0.005	94	112064	0.4000	0.3873	
79 Bromoform	173	16.320	16.323	-0.003	96	92619	0.4000	0.3618	
80 Styrene	104	16.341	16.346	-0.005	96	94195	0.4000	0.3806	
81 o-Xylene	91	16.406	16.406	0.000	98	138599	0.4000	0.3876	
82 1,1,2,2-Tetrachloroethane	83	16.729	16.734	-0.005	98	111782	0.4000	0.3853	
83 1,2,3-Trichloropropane	110	16.886	16.895	-0.009	92	30475	0.4000	0.3848	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	16.994	16.998	-0.004	96	192221	0.4000	0.3639	
85 N-Propylbenzene	120	17.544	17.547	-0.003	99	51788	0.4000	0.3653	
86 2-Chlorotoluene	126	17.587	17.590	-0.003	97	49136	0.4000	0.3573	
87 4-Ethyltoluene	105	17.706	17.704	0.002	98	194186	0.4000	0.3881	
88 1,3,5-Trimethylbenzene	120	17.781	17.782	-0.001	95	87032	0.4000	0.4009	
89 Alpha Methyl Styrene	118	18.018	18.020	-0.002	89	80373	0.4000	0.3725	
90 n-Decane	57	18.088	18.089	-0.001	85	147194	0.4000	0.3771	
91 tert-Butylbenzene	119	18.218	18.218	0.000	92	175264	0.4000	0.3730	
92 1,2,4-Trimethylbenzene	105	18.229	18.232	-0.003	96	161416	0.4000	0.3637	
93 sec-Butylbenzene	105	18.493	18.494	-0.001	99	255689	0.4000	0.3798	
94 1,3-Dichlorobenzene	146	18.504	18.504	0.000	94	116112	0.4000	0.3517	
95 Benzyl chloride	91	18.584	18.584	0.000	97	123445	0.4000	0.3436	
96 1,4-Dichlorobenzene	146	18.595	18.596	-0.001	94	109825	0.4000	0.3439	
97 4-Isopropyltoluene	119	18.660	18.662	-0.002	96	196886	0.4000	0.3764	
98 1,2,3-Trimethylbenzene	105	18.714	18.713	0.001	98	171458	0.4000	0.3565	
99 Butylcyclohexane	83	18.768	18.773	-0.005	86	141828	0.4000	0.3787	
100 2,3-Dihydroindene	117	18.962	18.961	0.001	93	159609	0.4000	0.3535	
101 1,2-Dichlorobenzene	146	18.962	18.962	0.000	82	115699	0.4000	0.3392	
102 Indene	116	19.091	19.093	-0.002	90	137942	0.4000	0.3596	
103 n-Butylbenzene	91	19.108	19.106	0.002	98	197823	0.4000	0.3826	
104 Undecane	57	19.431	19.431	0.000	90	156468	0.4000	0.3461	
105 1,2-Dibromo-3-Chloropropane	157	19.577	19.577	0.000	88	66434	0.4000	0.3294	
106 1,2,4,5-Tetramethylbenzene	119	19.873	19.873	0.000	98	182976	0.4000	0.3487	
107 Dodecane	57	20.488	20.489	-0.001	88	134117	0.4000	0.2671	
108 1,2,4-Trichlorobenzene	180	20.671	20.672	-0.001	93	92149	0.4000	0.3072	
109 Naphthalene	128	20.806	20.807	-0.001	99	186701	0.4000	0.3312	
110 Hexachlorobutadiene	225	21.027	21.028	-0.001	94	109969	0.4000	0.3221	
111 1,2,3-Trichlorobenzene	180	21.092	21.097	-0.005	94	94670	0.4000	0.2879	
112 2-Methylnaphthalene	142	21.836	21.834	0.002	98	63454	0.4000	0.2092	
113 1-Methylnaphthalene	142	21.965	21.967	-0.002	99	102177	0.4000	0.2694	
A 116 C8 Range	1	14.080	(14.044-14.130)		0	508427	0.4000	0.3916	
S 117 Xylenes, Total	100				0		1.20	1.16	
S 118 1,2-Dichloroethene, Total	1				0		0.8000	0.8293	

Reagents:

40L5DQP_00020	Amount Added: 200.00	Units: mL	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

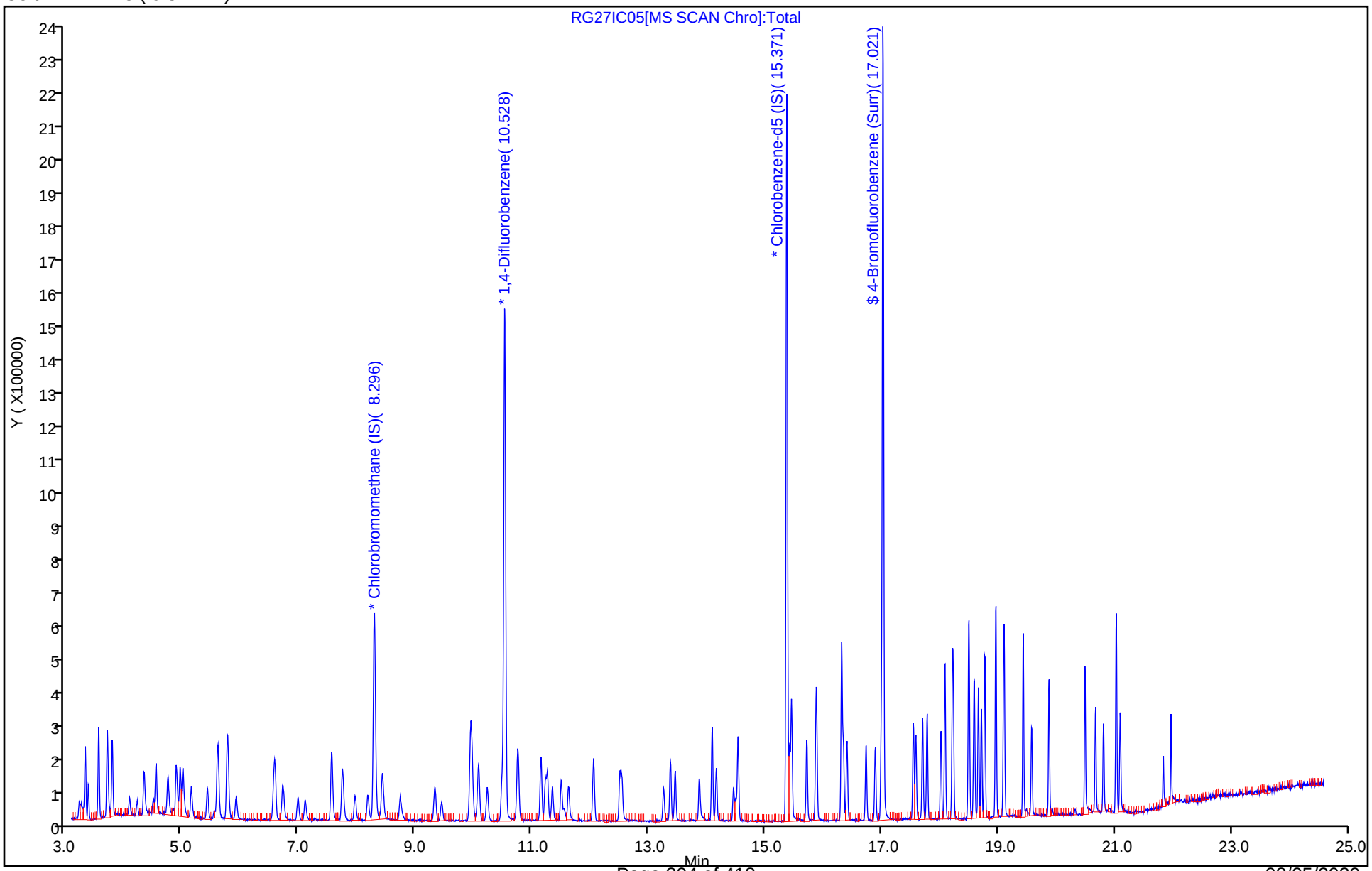
Report Date: 28-Jul-2020 16:47:51 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC05.D

Injection Date:	28-Jul-2020 04:17:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	IC L5			Worklist Smp#:	13
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

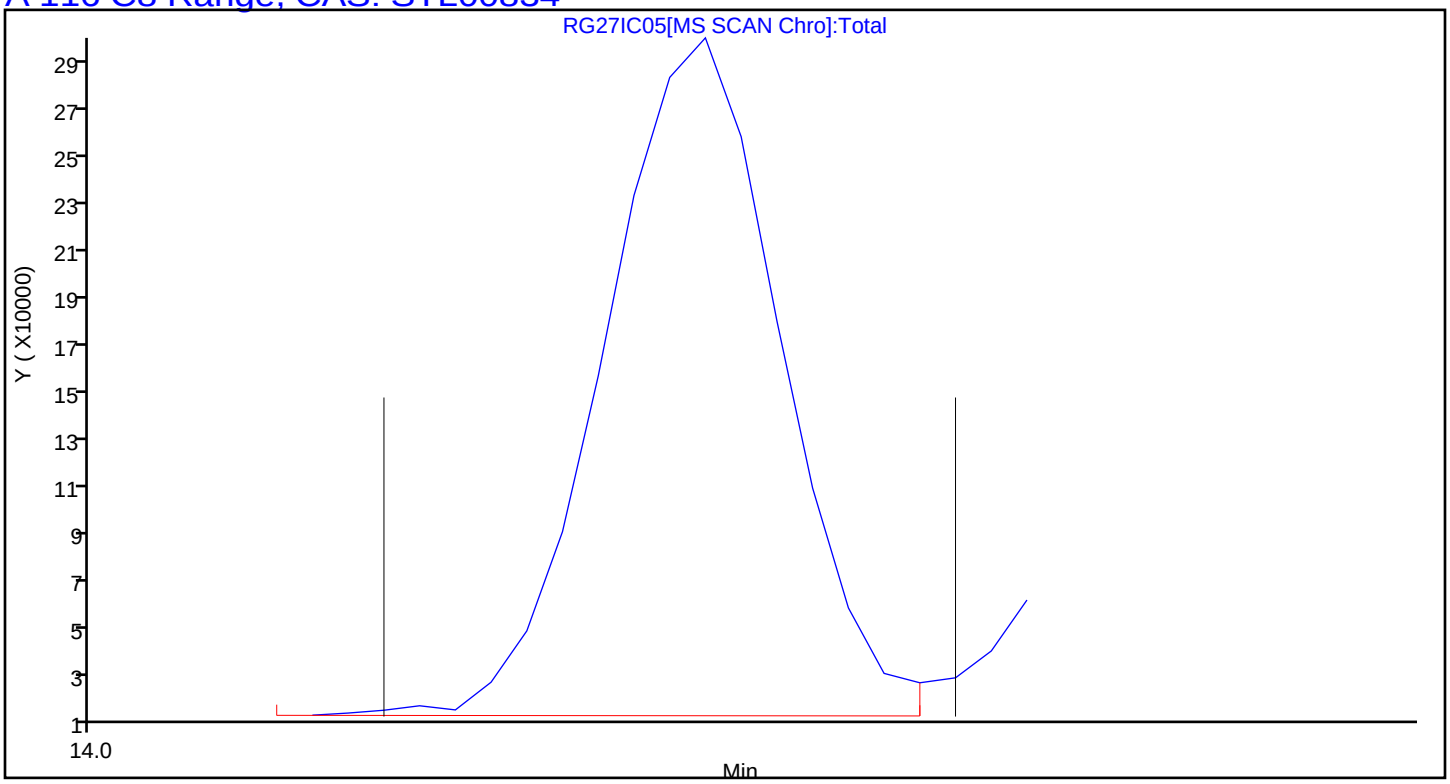


Report Date: 28-Jul-2020 16:47:51 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC05.D				
Injection Date:	28-Jul-2020 04:17:30	Instrument ID:	MR		
Lims ID:	IC L5				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	10	Worklist Smp#:	13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 116 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC06.D
Lims ID: IC L6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 28-Jul-2020 05:24:30 ALS Bottle#: 11 Worklist Smp#: 14
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016116-014
Misc. Info.: 314716
Operator ID: HMT Instrument ID: MR
Sublist: chrom-MR_TO15*sub16

Method: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 28-Jul-2020 16:47:59 Calib Date: 28-Jul-2020 09:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC09R.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1014

First Level Reviewer: tajh Date: 28-Jul-2020 14:16:49

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.323	8.308	0.015	91	179362	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.545	10.539	0.006	96	1536103	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.376	15.375	0.001	90	1292907	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.026	17.025	0.001	94	777885	4.00	3.98	
6 Chlorodifluoromethane	51	3.357	3.343	0.014	96	246131	1.00	0.9376	
7 Propene	41	3.362	3.349	0.013	97	211848	1.00	1.11	
8 Dichlorodifluoromethane	85	3.416	3.400	0.016	98	165184	1.00	0.9316	
9 Chloromethane	52	3.578	3.569	0.009	99	43238	1.00	0.9535	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.594	3.577	0.017	92	162687	1.00	0.9366	
11 Acetaldehyde	44	3.739	3.724	0.015	95	312925	5.00	5.04	
12 Vinyl chloride	62	3.739	3.726	0.013	57	119406	1.00	0.9166	
14 Butadiene	54	3.820	3.809	0.011	64	105169	1.00	0.9605	
13 Butane	43	3.820	3.808	0.012	86	229919	1.00	0.9808	
15 Bromomethane	94	4.117	4.103	0.014	96	89042	1.00	0.9534	
16 Chloroethane	64	4.252	4.235	0.017	87	55353	1.00	1.00	
17 Ethanol	31	4.381	4.364	0.017	98	320471	5.00	4.50	
18 Vinyl bromide	106	4.527	4.515	0.012	97	85965	1.00	0.9715	
19 2-Methylbutane	43	4.581	4.561	0.020	93	166534	1.00	0.9619	
20 Trichlorofluoromethane	101	4.786	4.765	0.021	97	219154	1.00	1.00	
21 Acrolein	56	4.812	4.779	0.033	92	36799	1.00	0.9597	
22 Acetonitrile	40	4.877	4.870	0.007	99	52329	1.00	0.9761	
23 Acetone	58	4.926	4.913	0.013	99	180954	3.00	2.50	
24 Pentane	72	4.990	4.971	0.019	97	17390	1.00	1.02	
25 Isopropyl alcohol	45	5.050	5.027	0.023	95	556131	3.00	2.47	
26 Ethyl ether	31	5.179	5.168	0.011	89	159295	1.00	1.00	
27 1,1-Dichloroethene	96	5.465	5.444	0.021	93	94377	1.00	0.9752	
28 Acrylonitrile	53	5.578	5.572	0.006	97	80704	1.00	0.9839	
30 1,1,2-Trichloro-1,2,2-trifluoroe	101	5.637	5.622	0.015	94	198245	1.00	1.01	
29 2-Methyl-2-propanol	59	5.654	5.629	0.025	95	212410	1.00	0.9613	
31 Methylene Chloride	84	5.805	5.788	0.017	90	136534	1.00	0.9598	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	5.821	5.802	0.019	95	131311	1.00	1.03	
33 Carbon disulfide	76	5.950	5.938	0.012	99	259519	1.00	1.00	
34 trans-1,2-Dichloroethene	96	6.597	6.580	0.017	96	92853	1.00	1.01	
35 2-Methylpentane	43	6.619	6.600	0.019	97	317743	1.00	0.9869	
36 Methyl tert-butyl ether	73	6.743	6.747	-0.004	93	239488	1.00	1.00	
37 1,1-Dichloroethane	63	7.018	7.002	0.016	98	203952	1.00	0.9492	
38 Vinyl acetate	43	7.131	7.120	0.011	100	353375	1.00	0.9897	
39 2-Butanone (MEK)	72	7.573	7.583	-0.010	88	45649	1.00	1.00	
40 Hexane	56	7.584	7.575	0.009	73	97950	1.00	1.01	
41 Isopropyl ether	45	7.767	7.761	0.006	97	506813	1.00	1.02	
42 cis-1,2-Dichloroethene	96	7.994	7.981	0.013	97	101662	1.00	0.9852	
43 Ethyl acetate	43	8.199	8.189	0.010	97	339312	1.00	1.02	
44 Chloroform	83	8.339	8.326	0.013	88	196820	1.00	1.00	
45 Tert-butyl ethyl ether	59	8.442	8.448	-0.006	98	384483	1.00	0.9879	
46 Tetrahydrofuran	42	8.749	8.750	-0.001	92	173031	1.00	1.03	
47 1,1,1-Trichloroethane	97	9.358	9.348	0.010	95	204471	1.00	1.00	
48 1,2-Dichloroethane	62	9.466	9.461	0.005	95	144733	1.00	1.00	
51 Benzene	78	9.968	9.958	0.010	95	306125	1.00	1.00	
50 Cyclohexane	69	9.962	9.954	0.008	86	46240	1.00	1.04	
52 Carbon tetrachloride	117	9.989	9.980	0.009	93	195887	1.00	1.01	
49 n-Butanol	31	10.021	9.970	0.051	76	60188	1.00	0.8629	
53 2,3-Dimethylpentane	71	10.102	10.094	0.008	95	69317	1.00	1.04	
54 Thiophene	84	10.253	10.245	0.008	95	168471	1.00	1.00	
55 Isooctane	57	10.771	10.766	0.005	97	638094	1.00	0.9877	
56 n-Heptane	71	11.170	11.162	0.008	95	105214	1.00	1.02	
57 1,2-Dichloropropane	63	11.235	11.235	0.000	88	137586	1.00	0.9754	
58 Trichloroethene	130	11.278	11.272	0.006	95	130842	1.00	0.9760	
59 Dibromomethane	93	11.359	11.357	0.002	93	121569	1.00	1.00	
60 Dichlorobromomethane	83	11.515	11.510	0.005	95	209068	1.00	1.00	
61 1,4-Dioxane	88	11.564	11.563	0.001	93	42789	1.00	0.8925	
62 Methyl methacrylate	41	11.634	11.632	0.002	85	199371	1.00	0.99	
63 Methylcyclohexane	83	12.065	12.063	0.002	88	176238	1.00	1.00	
64 4-Methyl-2-pentanone (MIBK)	43	12.518	12.517	0.001	97	379139	1.00	1.01	
65 cis-1,3-Dichloropropene	75	12.551	12.548	0.002	95	164512	1.00	0.99	
66 trans-1,3-Dichloropropene	75	13.262	13.261	0.001	92	139920	1.00	0.9861	
67 Toluene	91	13.381	13.381	0.000	93	348176	1.00	0.9820	
68 1,1,2-Trichloroethane	83	13.467	13.460	0.007	97	108656	1.00	0.9630	
69 2-Hexanone	58	13.877	13.878	-0.001	90	148380	1.00	0.9772	
70 n-Octane	85	14.098	14.096	0.002	98	112095	1.00	1.04	
71 Chlorodibromomethane	129	14.168	14.165	0.003	95	218891	1.00	0.9720	
72 Ethylene Dibromide	107	14.465	14.462	0.003	98	193516	1.00	0.9900	
73 Tetrachloroethene	129	14.540	14.538	0.002	93	125507	1.00	0.9788	
74 Chlorobenzene	112	15.425	15.423	0.002	93	277579	1.00	0.9761	
75 2,3-Dimethylheptane	43	15.457	15.455	0.002	92	533004	1.00	0.9714	
76 Ethylbenzene	91	15.716	15.718	-0.002	98	471263	1.00	0.9669	
77 m-Xylene & p-Xylene	91	15.883	15.881	0.002	95	701209	2.00	1.90	
78 n-Nonane	57	16.314	16.314	0.000	94	312166	1.00	0.9893	
79 Bromoform	173	16.325	16.323	0.002	97	243953	1.00	0.8740	
80 Styrene	104	16.347	16.346	0.001	96	265242	1.00	0.9828	
81 o-Xylene	91	16.406	16.406	0.000	98	378432	1.00	0.9706	
82 1,1,2,2-Tetrachloroethane	83	16.735	16.734	0.001	98	310901	1.00	0.9827	
83 1,2,3-Trichloropropane	110	16.897	16.895	0.002	91	82364	1.00	0.9538	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	16.999	16.998	0.001	96	556043	1.00	0.9655	
85 N-Propylbenzene	120	17.549	17.547	0.002	99	152207	1.00	0.9845	
86 2-Chlorotoluene	126	17.587	17.590	-0.003	96	142720	1.00	0.9519	
87 4-Ethyltoluene	105	17.706	17.704	0.002	98	558091	1.00	1.02	
88 1,3,5-Trimethylbenzene	120	17.781	17.782	-0.001	92	228846	1.00	0.9666	
89 Alpha Methyl Styrene	118	18.018	18.020	-0.002	89	230432	1.00	0.9793	
90 n-Decane	57	18.088	18.089	-0.001	85	425855	1.00	1.00	
91 tert-Butylbenzene	119	18.218	18.218	0.000	94	505499	1.00	0.9866	
92 1,2,4-Trimethylbenzene	105	18.229	18.232	-0.003	95	484388	1.00	1.00	
93 sec-Butylbenzene	105	18.493	18.494	-0.001	99	744352	1.00	1.01	
94 1,3-Dichlorobenzene	146	18.504	18.504	0.000	95	341120	1.00	0.9477	
95 Benzyl chloride	91	18.585	18.584	0.001	98	363757	1.00	0.9285	
96 1,4-Dichlorobenzene	146	18.595	18.596	-0.001	95	326790	1.00	0.9384	
97 4-Isopropyltoluene	119	18.660	18.662	-0.002	97	591170	1.00	1.04	
98 1,2,3-Trimethylbenzene	105	18.714	18.713	0.001	98	502468	1.00	0.9581	
99 Butylcyclohexane	83	18.773	18.773	0.000	85	413559	1.00	1.01	
100 2,3-Dihydroindene	117	18.962	18.961	0.001	94	467506	1.00	0.9495	
101 1,2-Dichlorobenzene	146	18.962	18.962	0.000	83	350911	1.00	0.9435	
102 Indene	116	19.091	19.093	-0.002	89	405611	1.00	0.9697	
103 n-Butylbenzene	91	19.108	19.106	0.002	97	586131	1.00	1.04	
104 Undecane	57	19.431	19.431	0.000	90	515581	1.00	1.05	
105 1,2-Dibromo-3-Chloropropane	157	19.577	19.577	0.000	89	196551	1.00	0.8938	
106 1,2,4,5-Tetramethylbenzene	119	19.873	19.873	0.000	98	580543	1.00	1.01	
107 Dodecane	57	20.488	20.489	-0.001	89	457806	1.00	0.8360	
108 1,2,4-Trichlorobenzene	180	20.671	20.672	-0.001	93	321510	1.00	0.9829	
109 Naphthalene	128	20.806	20.807	-0.001	99	598591	1.00	0.9738	
110 Hexachlorobutadiene	225	21.027	21.028	-0.001	88	351871	1.00	0.9452	
111 1,2,3-Trichlorobenzene	180	21.097	21.097	0.000	94	320569	1.00	0.8941	
112 2-Methylnaphthalene	142	21.836	21.834	0.002	99	184287	1.00	0.5572	
113 1-Methylnaphthalene	142	21.966	21.967	-0.001	99	299900	1.00	0.7251	
A 116 C8 Range	1	14.088	(14.050-14.147)		0	1385610	1.00	1.00	
S 117 Xylenes, Total	100				0		3.00	2.87	
S 118 1,2-Dichloroethene, Total	1				0		2.00	2.00	

Reagents:

40L6DQP_00019	Amount Added: 200.00	Units: mL	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

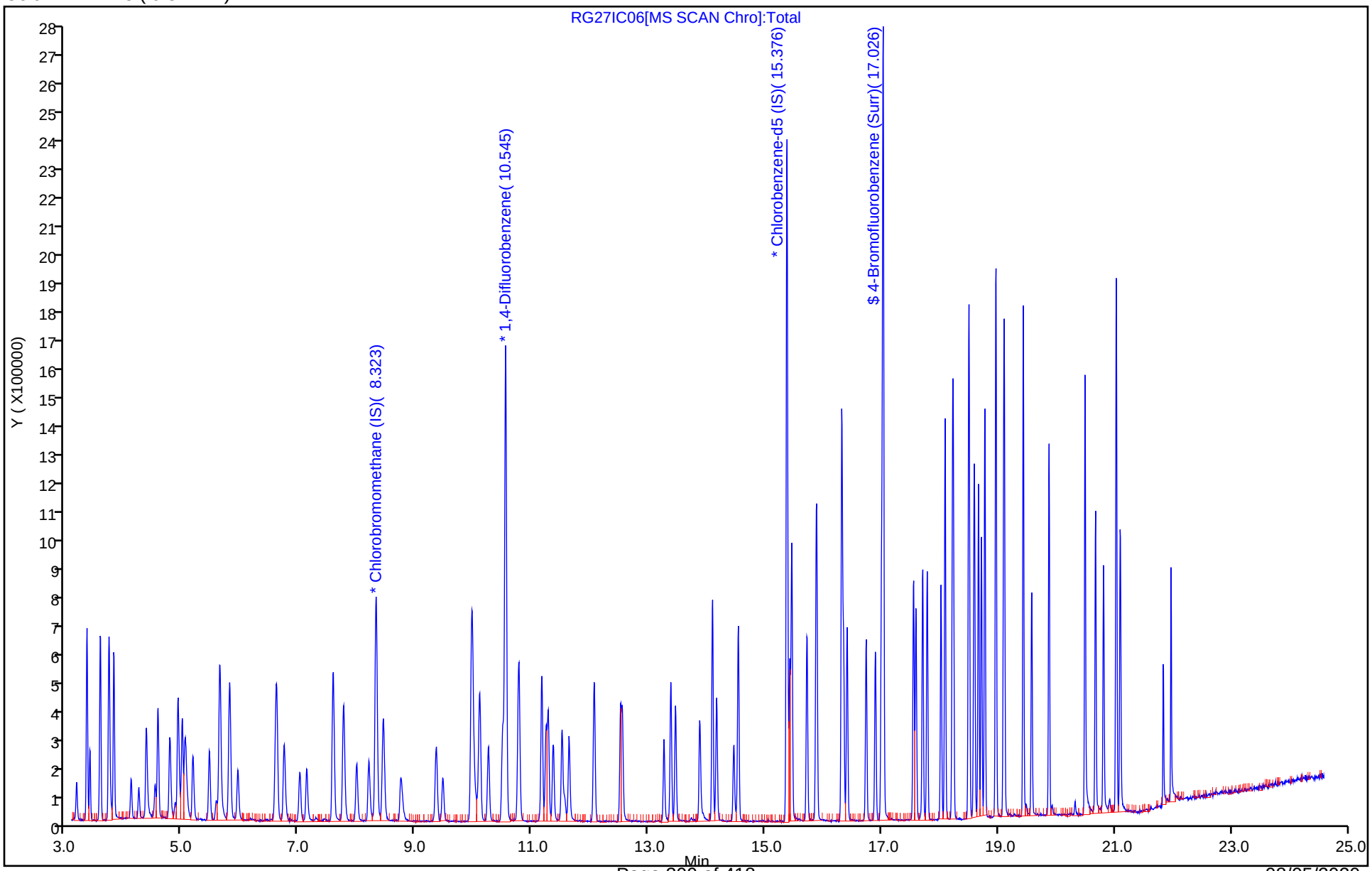
Report Date: 28-Jul-2020 16:48:00 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC06.D

Injection Date:	28-Jul-2020 05:24:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	IC L6			Worklist Smp#:	14
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

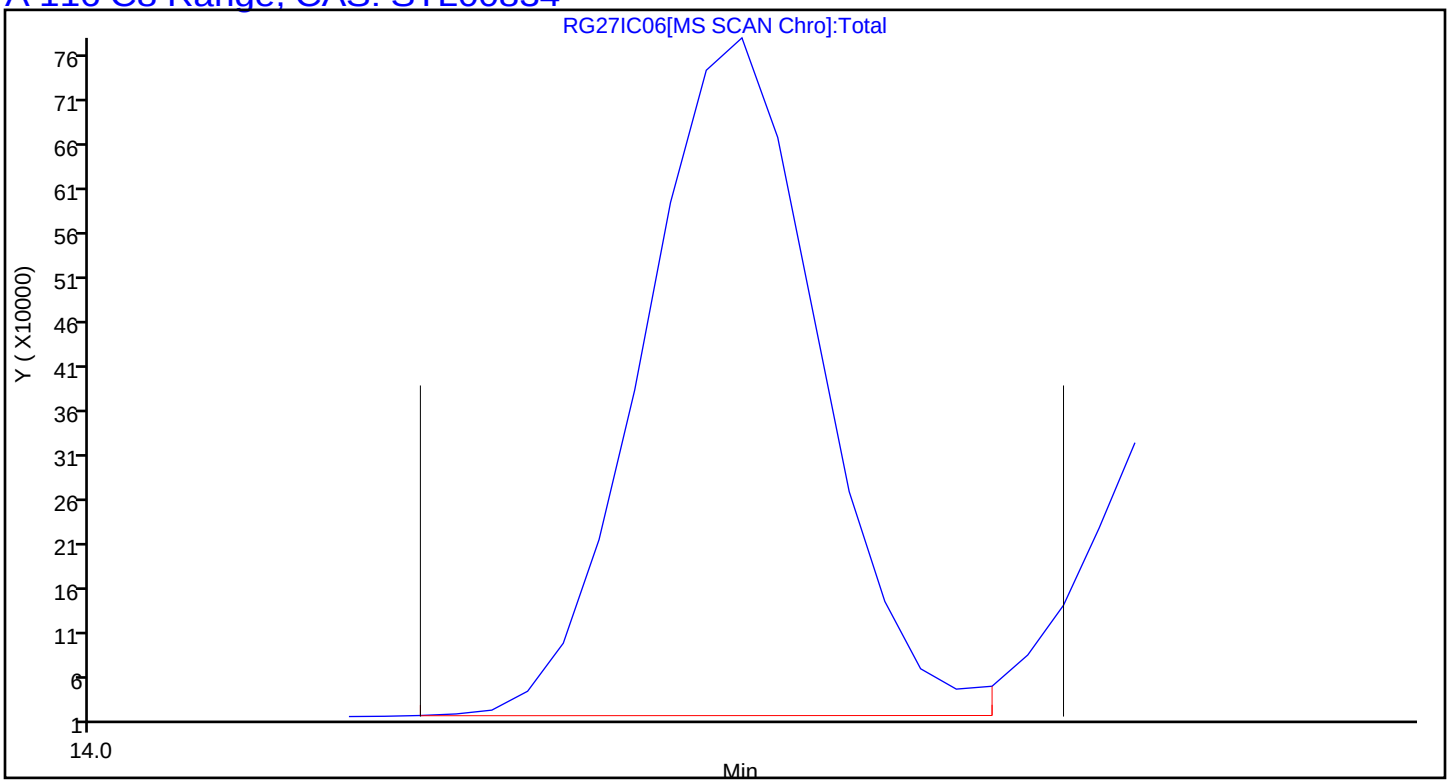


Report Date: 28-Jul-2020 16:48:00 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC06.D				
Injection Date:	28-Jul-2020 05:24:30	Instrument ID:	MR		
Lims ID:	IC L6				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	11	Worklist Smp#:	14
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 116 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC07.D
Lims ID: ICIS L7
Client ID:
Sample Type: ICIS Calib Level: 7
Inject. Date: 28-Jul-2020 06:29:30 ALS Bottle#: 12 Worklist Smp#: 15
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016116-015
Misc. Info.: 314608
Operator ID: HMT Instrument ID: MR
Sublist: chrom-MR_TO15*sub16

Method: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 28-Jul-2020 16:48:10 Calib Date: 28-Jul-2020 09:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC09R.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1014

First Level Reviewer: tajh Date: 28-Jul-2020 08:02:28

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.301	8.308	-0.007	90	195356	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.534	10.539	-0.005	96	1601225	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.371	15.375	-0.004	90	1324871	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.021	17.025	-0.004	95	822674	4.00	4.11	
6 Chlorodifluoromethane	51	3.335	3.343	-0.008	96	610022	2.00	2.13	
7 Propene	41	3.346	3.349	-0.003	99	404650	2.00	2.10	
8 Dichlorodifluoromethane	85	3.389	3.400	-0.011	99	432131	2.00	2.24	
9 Chloromethane	52	3.561	3.569	-0.008	98	108542	2.00	2.20	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.567	3.577	-0.010	89	416653	2.00	2.20	
11 Acetaldehyde	44	3.702	3.724	-0.022	97	728391	10.0	10.8	
12 Vinyl chloride	62	3.718	3.726	-0.008	99	297061	2.00	2.09	
13 Butane	43	3.799	3.808	-0.009	85	537514	2.00	2.11	
14 Butadiene	54	3.799	3.809	-0.010	66	263658	2.00	2.21	
15 Bromomethane	94	4.095	4.103	-0.008	97	217931	2.00	2.14	
16 Chloroethane	64	4.219	4.235	-0.016	89	130061	2.00	2.15	
17 Ethanol	31	4.338	4.364	-0.026	96	868482	10.0	11.2	
18 Vinyl bromide	106	4.500	4.515	-0.015	98	204321	2.00	2.12	
19 2-Methylbutane	43	4.548	4.561	-0.013	94	379028	2.00	2.01	
20 Trichlorofluoromethane	101	4.753	4.765	-0.012	98	489182	2.00	2.04	
21 Acrolein	56	4.769	4.779	-0.010	93	85469	2.00	2.05	
22 Acetonitrile	40	4.839	4.870	-0.031	95	118691	2.00	2.03	
23 Acetone	58	4.882	4.913	-0.031	99	390168	6.00	4.95	
24 Pentane	72	4.958	4.971	-0.013	94	37740	2.00	2.03	
25 Isopropyl alcohol	45	4.980	5.027	-0.047	93	1390680	6.00	5.78	
26 Ethyl ether	31	5.136	5.168	-0.032	90	346722	2.00	1.99	
27 1,1-Dichloroethene	96	5.427	5.444	-0.017	94	198031	2.00	1.88	
28 Acrylonitrile	53	5.551	5.572	-0.021	95	184217	2.00	2.06	
30 1,1,2-Trichloro-1,2,2-trifluoroe	101	5.605	5.622	-0.017	97	416266	2.00	1.94	
29 2-Methyl-2-propanol	59	5.562	5.629	-0.067	95	510711	2.00	2.12	
31 Methylene Chloride	84	5.772	5.788	-0.016	91	239056	2.00	2.07	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	5.788	5.802	-0.014	94	265148	2.00	1.91	
33 Carbon disulfide	76	5.923	5.938	-0.015	98	558390	2.00	1.98	
34 trans-1,2-Dichloroethene	96	6.570	6.580	-0.010	94	193997	2.00	1.95	
35 2-Methylpentane	43	6.586	6.600	-0.014	97	669518	2.00	1.91	
36 Methyl tert-butyl ether	73	6.705	6.747	-0.042	92	510185	2.00	1.96	
37 1,1-Dichloroethane	63	6.991	7.002	-0.011	98	441264	2.00	1.89	
38 Vinyl acetate	43	7.099	7.120	-0.021	100	787850	2.00	2.03	
39 2-Butanone (MEK)	72	7.546	7.583	-0.037	95	96950	2.00	1.96	
40 Hexane	56	7.562	7.575	-0.013	81	208092	2.00	1.97	
41 Isopropyl ether	45	7.730	7.761	-0.031	96	1053189	2.00	1.95	
42 cis-1,2-Dichloroethene	96	7.972	7.981	-0.009	98	216200	2.00	1.92	
43 Ethyl acetate	43	8.166	8.189	-0.023	98	715182	2.00	1.98	
44 Chloroform	83	8.317	8.326	-0.009	93	413702	2.00	1.93	
45 Tert-butyl ethyl ether	59	8.409	8.448	-0.039	97	802411	2.00	1.89	
46 Tetrahydrofuran	42	8.711	8.750	-0.039	92	354292	2.00	1.93	
47 1,1,1-Trichloroethane	97	9.331	9.348	-0.017	95	411611	2.00	1.85	
48 1,2-Dichloroethane	62	9.455	9.461	-0.006	94	306423	2.00	2.04	
50 Cyclohexane	69	9.941	9.954	-0.014	80	92688	2.00	2.00	
51 Benzene	78	9.951	9.958	-0.007	96	626098	2.00	1.96	
52 Carbon tetrachloride	117	9.973	9.980	-0.007	94	377305	2.00	1.86	
49 n-Butanol	31	9.946	9.970	-0.024	71	151551	2.00	2.08	
53 2,3-Dimethylpentane	71	10.081	10.094	-0.013	91	137406	2.00	1.98	
54 Thiophene	84	10.237	10.245	-0.008	95	356353	2.00	2.03	
55 Isooctane	57	10.755	10.766	-0.011	98	1305159	2.00	1.94	
56 n-Heptane	71	11.154	11.162	-0.008	95	210131	2.00	1.96	
57 1,2-Dichloropropane	63	11.229	11.235	-0.006	89	291387	2.00	1.98	
58 Trichloroethene	130	11.267	11.272	-0.005	95	273468	2.00	1.96	
59 Dibromomethane	93	11.348	11.357	-0.009	93	252570	2.00	1.98	
60 Dichlorobromomethane	83	11.504	11.510	-0.006	95	434191	2.00	2.00	
61 1,4-Dioxane	88	11.526	11.563	-0.037	92	107588	2.00	2.15	
62 Methyl methacrylate	41	11.618	11.632	-0.014	86	414367	2.00	1.97	
63 Methylcyclohexane	83	12.060	12.063	-0.003	85	368156	2.00	2.00	
64 4-Methyl-2-pentanone (MIBK)	43	12.491	12.517	-0.026	96	785359	2.00	2.00	
65 cis-1,3-Dichloropropene	75	12.540	12.548	-0.008	97	347671	2.00	2.01	
66 trans-1,3-Dichloropropene	75	13.257	13.261	-0.004	91	292083	2.00	2.01	
67 Toluene	91	13.375	13.381	-0.006	92	707352	2.00	1.95	
68 1,1,2-Trichloroethane	83	13.456	13.460	-0.004	96	230231	2.00	1.99	
69 2-Hexanone	58	13.861	13.878	-0.017	90	332776	2.00	2.14	
70 n-Octane	85	14.093	14.096	-0.003	98	217667	2.00	1.96	
71 Chlorodibromomethane	129	14.163	14.165	-0.002	96	464052	2.00	2.01	
72 Ethylene Dibromide	107	14.459	14.462	-0.003	98	400269	2.00	2.00	
73 Tetrachloroethene	129	14.535	14.538	-0.003	93	254548	2.00	1.94	
74 Chlorobenzene	112	15.419	15.423	-0.004	93	584619	2.00	2.01	
75 2,3-Dimethylheptane	43	15.452	15.455	-0.003	92	1094820	2.00	1.95	
76 Ethylbenzene	91	15.716	15.718	-0.002	98	968642	2.00	1.94	
77 m-Xylene & p-Xylene	91	15.878	15.881	-0.003	96	1485011	4.00	3.92	
78 n-Nonane	57	16.309	16.314	-0.005	95	643865	2.00	1.99	
79 Bromoform	173	16.320	16.323	-0.003	97	588832	2.00	2.06	
80 Styrene	104	16.341	16.346	-0.005	95	567479	2.00	2.05	
81 o-Xylene	91	16.406	16.406	0.000	98	786791	2.00	1.97	
82 1,1,2,2-Tetrachloroethane	83	16.730	16.734	-0.004	99	645943	2.00	1.99	
83 1,2,3-Trichloropropane	110	16.891	16.895	-0.004	92	172869	2.00	1.95	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	16.994	16.998	-0.004	97	1153514	2.00	1.95	
85 N-Propylbenzene	120	17.544	17.547	-0.003	99	324309	2.00	2.05	
86 2-Chlorotoluene	126	17.587	17.590	-0.003	97	303657	2.00	1.98	
87 4-Ethyltoluene	105	17.700	17.704	-0.004	98	1140462	2.00	2.04	
88 1,3,5-Trimethylbenzene	120	17.781	17.782	-0.001	92	489785	2.00	2.02	
89 Alpha Methyl Styrene	118	18.018	18.020	-0.002	88	510559	2.00	2.12	
90 n-Decane	57	18.088	18.089	-0.001	85	919474	2.00	2.11	
91 tert-Butylbenzene	119	18.218	18.218	0.000	94	1059433	2.00	2.02	
92 1,2,4-Trimethylbenzene	105	18.229	18.232	-0.003	96	1026613	2.00	2.07	
93 sec-Butylbenzene	105	18.493	18.494	-0.001	98	1551449	2.00	2.06	
94 1,3-Dichlorobenzene	146	18.504	18.504	0.000	96	749501	2.00	2.03	
95 Benzyl chloride	91	18.579	18.584	-0.005	97	864342	2.00	2.15	
96 1,4-Dichlorobenzene	146	18.590	18.596	-0.006	95	753519	2.00	2.11	
97 4-Isopropyltoluene	119	18.660	18.662	-0.002	97	1276463	2.00	2.18	
98 1,2,3-Trimethylbenzene	105	18.709	18.713	-0.005	98	1082775	2.00	2.01	
99 Butylcyclohexane	83	18.768	18.773	-0.005	85	871334	2.00	2.08	
100 2,3-Dihydroindene	117	18.962	18.961	0.001	95	1002703	2.00	1.99	
101 1,2-Dichlorobenzene	146	18.957	18.962	-0.005	87	767442	2.00	2.01	
102 Indene	116	19.091	19.093	-0.002	89	895514	2.00	2.09	
103 n-Butylbenzene	91	19.102	19.106	-0.004	98	1279727	2.00	2.22	
104 Undecane	57	19.431	19.431	0.000	91	1148890	2.00	2.27	
105 1,2-Dibromo-3-Chloropropane	157	19.577	19.577	0.000	91	496254	2.00	2.20	
106 1,2,4,5-Tetramethylbenzene	119	19.873	19.873	0.000	97	1265555	2.00	2.16	
107 Dodecane	57	20.488	20.489	-0.001	89	1192788	2.00	2.13	
108 1,2,4-Trichlorobenzene	180	20.671	20.672	-0.001	94	791917	2.00	2.36	
109 Naphthalene	128	20.806	20.807	-0.001	99	1488208	2.00	2.36	
110 Hexachlorobutadiene	225	21.027	21.028	-0.001	95	773986	2.00	2.03	
111 1,2,3-Trichlorobenzene	180	21.097	21.097	0.000	94	825449	2.00	2.25	
112 2-Methylnaphthalene	142	21.831	21.834	-0.003	99	709189	2.00	2.09	
113 1-Methylnaphthalene	142	21.965	21.967	-0.002	99	890639	2.00	2.10	
A 116 C8 Range	1	14.074	(14.033-14.141)		0	2780330	2.00	1.93	
S 117 Xylenes, Total	100				0		6.00	5.89	
S 118 1,2-Dichloroethene, Total	1				0		4.00	3.87	

Reagents:

40L7DQP_00019	Amount Added: 200.00	Units: mL	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

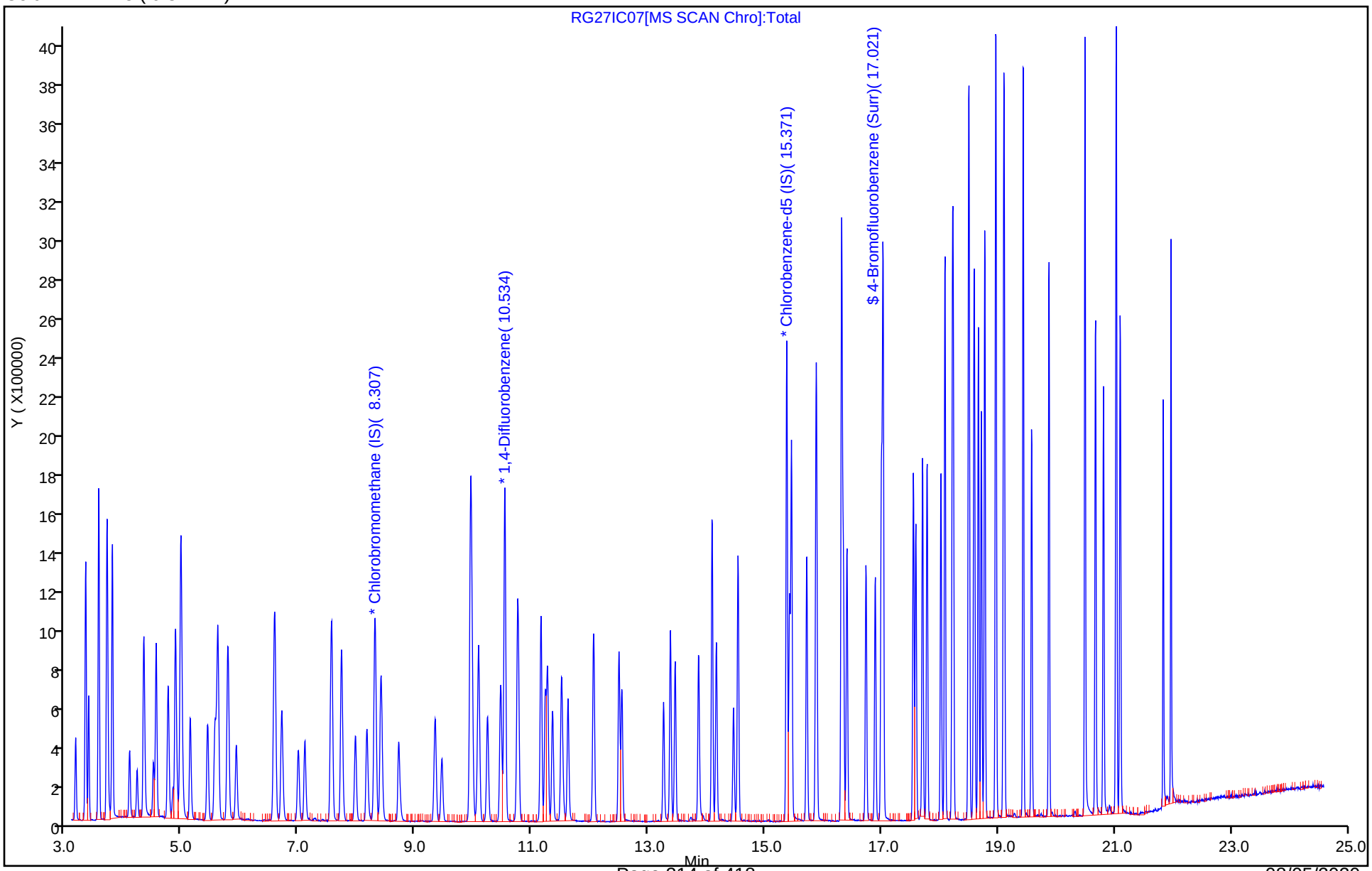
Report Date: 28-Jul-2020 16:48:11 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC07.D

Injection Date:	28-Jul-2020 06:29:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	ICIS L7			Worklist Smp#:	15
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

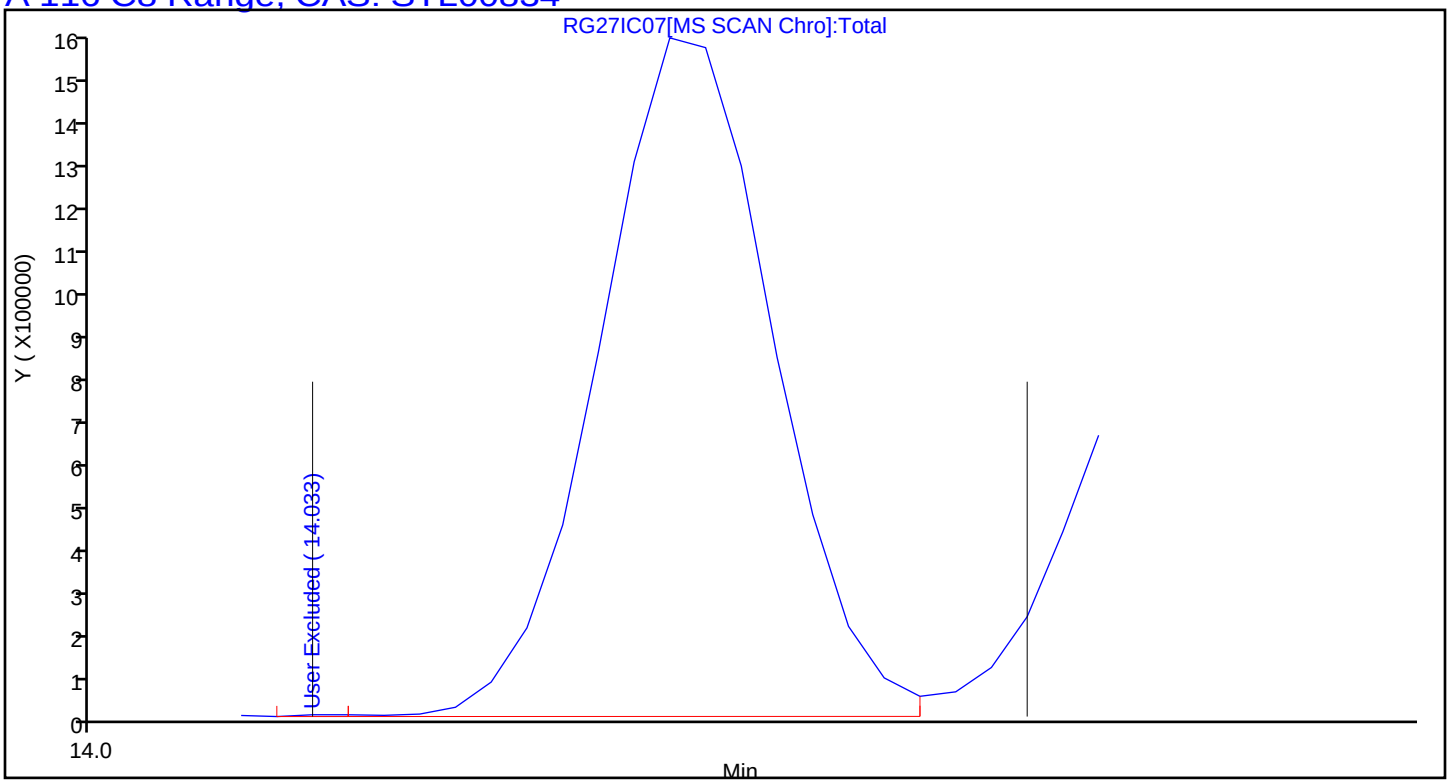


Report Date: 28-Jul-2020 16:48:11 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC07.D				
Injection Date:	28-Jul-2020 06:29:30	Instrument ID:	MR		
Lims ID:	ICIS L7				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	12	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 116 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC09R.D
Lims ID: IC L9
Client ID:
Sample Type: IC Calib Level: 9
Inject. Date: 28-Jul-2020 09:59:30 ALS Bottle#: 15 Worklist Smp#: 23
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016116-003
Misc. Info.: 314600
Operator ID: HMT Instrument ID: MR
Sublist: chrom-MR_TO15*sub16

Method: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 28-Jul-2020 16:48:23 Calib Date: 28-Jul-2020 09:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC09R.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1014

First Level Reviewer: tajh Date: 28-Jul-2020 10:39:24

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.323	8.308	0.015	89	220089	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.550	10.539	0.011	96	1776613	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.376	15.375	0.001	89	1561597	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.026	17.025	0.001	96	1027625	4.00	4.36	
6 Chlorodifluoromethane	51	3.346	3.343	0.003	96	2704427	8.00	8.40	
7 Propene	41	3.356	3.349	0.007	99	1420885	8.00	8.12	
8 Dichlorodifluoromethane	85	3.405	3.400	0.005	98	1988425	8.00	9.14	
9 Chloromethane	52	3.572	3.569	0.003	99	468576	8.00	8.42	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.577	3.577	0.000	94	1979144	8.00	9.29	
11 Acetaldehyde	44	3.723	3.724	-0.001	100	3200022	40.0	42.0	
12 Vinyl chloride	62	3.728	3.726	0.002	99	1321837	8.00	8.27	
13 Butane	43	3.809	3.808	0.001	85	2396125	8.00	8.33	
14 Butadiene	54	3.809	3.809	0.000	67	1175020	8.00	8.75	
15 Bromomethane	94	4.106	4.103	0.003	97	1012173	8.00	8.83	
16 Chloroethane	64	4.241	4.235	0.006	88	574110	8.00	8.44	
17 Ethanol	31	4.365	4.364	0.001	96	3582876	40.0	41.0	
18 Vinyl bromide	106	4.521	4.515	0.006	99	960416	8.00	8.85	
19 2-Methylbutane	43	4.564	4.561	0.003	93	1684402	8.00	7.93	
20 Trichlorofluoromethane	101	4.775	4.765	0.010	98	2275038	8.00	8.44	
21 Acrolein	56	4.791	4.779	0.012	94	423441	8.00	9.00	
22 Acetonitrile	40	4.861	4.870	-0.009	99	556254	8.00	8.46	
23 Acetone	58	4.899	4.913	-0.014	99	1678072	24.0	18.9	
24 Pentane	72	4.985	4.971	0.014	96	168144	8.00	8.04	
25 Isopropyl alcohol	45	5.006	5.027	-0.021	97	5903919	24.0	24.6	
26 Ethyl ether	31	5.147	5.168	-0.021	90	1511753	8.00	7.71	
27 1,1-Dichloroethene	96	5.454	5.444	0.010	94	926047	8.00	7.80	
28 Acrylonitrile	53	5.573	5.572	0.001	94	924290	8.00	9.18	
29 2-Methyl-2-propanol	59	5.583	5.629	-0.046	96	2254744	8.00	8.32	
30 1,1,2-Trichloro-1,2,2-trifluoroe	101	5.627	5.622	0.005	96	1917116	8.00	7.93	
31 Methylene Chloride	84	5.799	5.788	0.011	90	848449	8.00	8.41	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	5.815	5.802	0.013	95	1241566	8.00	7.94	
33 Carbon disulfide	76	5.945	5.938	0.007	98	2508957	8.00	7.90	
34 trans-1,2-Dichloroethene	96	6.597	6.580	0.017	94	905380	8.00	8.06	
35 2-Methylpentane	43	6.608	6.600	0.008	97	3042685	8.00	7.70	
36 Methyl tert-butyl ether	73	6.716	6.747	-0.031	93	2323660	8.00	7.94	
37 1,1-Dichloroethane	63	7.012	7.002	0.010	99	2013274	8.00	7.64	
38 Vinyl acetate	43	7.120	7.120	0.000	100	3866895	8.00	8.83	
39 2-Butanone (MEK)	72	7.562	7.583	-0.021	95	446445	8.00	8.00	
40 Hexane	56	7.584	7.575	0.009	85	947461	8.00	7.97	
41 Isopropyl ether	45	7.746	7.761	-0.015	96	4824702	8.00	7.94	
42 cis-1,2-Dichloroethene	96	7.988	7.981	0.007	98	977003	8.00	7.72	
43 Ethyl acetate	43	8.183	8.189	-0.006	97	3336777	8.00	8.19	
44 Chloroform	83	8.339	8.326	0.013	91	1887013	8.00	7.81	
45 Tert-butyl ethyl ether	59	8.420	8.448	-0.028	97	3734327	8.00	7.82	
46 Tetrahydrofuran	42	8.722	8.750	-0.028	91	1601129	8.00	7.75	
47 1,1,1-Trichloroethane	97	9.358	9.348	0.010	95	1922423	8.00	7.68	
48 1,2-Dichloroethane	62	9.471	9.461	0.010	94	1448028	8.00	8.69	
50 Cyclohexane	69	9.962	9.954	0.008	82	413070	8.00	8.01	
49 n-Butanol	31	9.940	9.970	-0.030	82	674603	8.00	8.36	
51 Benzene	78	9.967	9.958	0.009	96	2767807	8.00	7.82	
52 Carbon tetrachloride	117	9.989	9.980	0.009	93	1871799	8.00	8.32	
53 2,3-Dimethylpentane	71	10.102	10.094	0.008	91	626099	8.00	8.11	
54 Thiophene	84	10.259	10.245	0.014	95	1602525	8.00	8.22	
55 Isooctane	57	10.771	10.766	0.005	97	6079409	8.00	8.14	
56 n-Heptane	71	11.170	11.162	0.008	95	971980	8.00	8.15	
57 1,2-Dichloropropane	63	11.240	11.235	0.005	89	1302225	8.00	7.98	
58 Trichloroethene	130	11.283	11.272	0.011	95	1254193	8.00	8.09	
59 Dibromomethane	93	11.364	11.357	0.007	91	1167279	8.00	8.27	
60 Dichlorobromomethane	83	11.515	11.510	0.005	95	2013292	8.00	8.35	
61 1,4-Dioxane	88	11.531	11.563	-0.032	94	449229	8.00	8.10	
62 Methyl methacrylate	41	11.628	11.632	-0.004	85	1987185	8.00	8.53	
63 Methylcyclohexane	83	12.070	12.063	0.007	85	1647594	8.00	8.08	
64 4-Methyl-2-pentanone (MIBK)	43	12.496	12.517	-0.021	97	3692453	8.00	8.49	
65 cis-1,3-Dichloropropene	75	12.550	12.548	0.002	95	1644237	8.00	8.58	
66 trans-1,3-Dichloropropene	75	13.268	13.261	0.007	91	1507029	8.00	8.79	
67 Toluene	91	13.386	13.381	0.005	92	3300253	8.00	7.71	
68 1,1,2-Trichloroethane	83	13.467	13.460	0.007	97	1034912	8.00	7.59	
69 2-Hexanone	58	13.855	13.878	-0.023	89	1611422	8.00	8.79	
70 n-Octane	85	14.098	14.096	0.002	98	1050543	8.00	8.04	
71 Chlorodibromomethane	129	14.173	14.165	0.008	96	2257599	8.00	8.30	
72 Ethylene Dibromide	107	14.465	14.462	0.003	98	1975955	8.00	8.37	
73 Tetrachloroethene	129	14.540	14.538	0.002	93	1244049	8.00	8.03	
74 Chlorobenzene	112	15.425	15.423	0.002	92	2723295	8.00	7.93	
75 2,3-Dimethylheptane	43	15.457	15.455	0.002	92	5144670	8.00	7.76	
76 Ethylbenzene	91	15.721	15.718	0.003	98	4605232	8.00	7.82	
77 m-Xylene & p-Xylene	91	15.883	15.881	0.002	96	7316737	16.0	16.4	
78 n-Nonane	57	16.314	16.314	0.000	94	3305943	8.00	8.67	
79 Bromoform	173	16.325	16.323	0.002	97	3305834	8.00	9.81	
80 Styrene	104	16.347	16.346	0.001	96	2849656	8.00	8.74	
81 o-Xylene	91	16.406	16.406	0.000	99	3851012	8.00	8.18	
82 1,1,2,2-Tetrachloroethane	83	16.735	16.734	0.001	99	3201216	8.00	8.38	
83 1,2,3-Trichloropropane	110	16.897	16.895	0.002	92	880055	8.00	8.44	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	16.999	16.998	0.001	97	5846094	8.00	8.40	
85 N-Propylbenzene	120	17.549	17.547	0.002	99	1661180	8.00	8.90	
86 2-Chlorotoluene	126	17.592	17.590	0.002	98	1496836	8.00	8.27	
87 4-Ethyltoluene	105	17.706	17.704	0.002	99	6130590	8.00	9.30	
88 1,3,5-Trimethylbenzene	120	17.781	17.782	-0.001	92	2451651	8.00	8.57	
89 Alpha Methyl Styrene	118	18.018	18.020	-0.002	88	2686630	8.00	9.45	
90 n-Decane	57	18.088	18.089	-0.001	86	4739206	8.00	9.22	
91 tert-Butylbenzene	119	18.218	18.218	0.000	94	5571641	8.00	9.00	
92 1,2,4-Trimethylbenzene	105	18.234	18.232	0.002	96	5395091	8.00	9.23	
93 sec-Butylbenzene	105	18.498	18.494	0.004	99	8177611	8.00	9.22	
94 1,3-Dichlorobenzene	146	18.504	18.504	0.000	95	4224922	8.00	9.72	
95 Benzyl chloride	91	18.584	18.584	0.000	98	4705628	8.00	9.94	
96 1,4-Dichlorobenzene	146	18.595	18.596	-0.001	97	4163245	8.00	9.90	
97 4-Isopropyltoluene	119	18.665	18.662	0.003	97	6631232	8.00	9.63	
98 1,2,3-Trimethylbenzene	105	18.714	18.713	0.001	99	5640889	8.00	8.91	
99 Butylcyclohexane	83	18.773	18.773	0.000	85	4320742	8.00	8.76	
101 1,2-Dichlorobenzene	146	18.962	18.962	0.000	86	4225696	8.00	9.41	
100 2,3-Dihydroindene	117	18.962	18.961	0.001	93	5386129	8.00	9.06	
102 Indene	116	19.097	19.093	0.004	89	4821815	8.00	9.54	
103 n-Butylbenzene	91	19.108	19.106	0.002	98	6637730	8.00	9.75	
104 Undecane	57	19.431	19.431	0.000	91	5983015	8.00	10.0	
105 1,2-Dibromo-3-Chloropropane	157	19.577	19.577	0.000	92	2650514	8.00	9.98	
106 1,2,4,5-Tetramethylbenzene	119	19.873	19.873	0.000	98	6677711	8.00	9.66	
107 Dodecane	57	20.488	20.489	-0.001	89	6484922	8.00	9.80	
108 1,2,4-Trichlorobenzene	180	20.671	20.672	-0.001	94	4606294	8.00	11.7	
109 Naphthalene	128	20.806	20.807	-0.001	99	7509973	8.00	10.1	
110 Hexachlorobutadiene	225	21.027	21.028	-0.001	95	4357579	8.00	9.69	
111 1,2,3-Trichlorobenzene	180	21.097	21.097	0.000	94	4781136	8.00	11.0	
112 2-Methylnaphthalene	142	21.836	21.834	0.002	99	5019369	8.00	12.6	
113 1-Methylnaphthalene	142	21.965	21.967	-0.002	99	5357267	8.00	10.7	
A 116 C8 Range	1	14.093	(14.049-14.147)		0	13159790	8.00	8.22	
S 117 Xylenes, Total	100				0		24.0	24.6	
S 118 1,2-Dichloroethene, Total	1				0		16.0	15.8	

Reagents:

40L10DQP_00019	Amount Added: 100.00	Units: mL	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

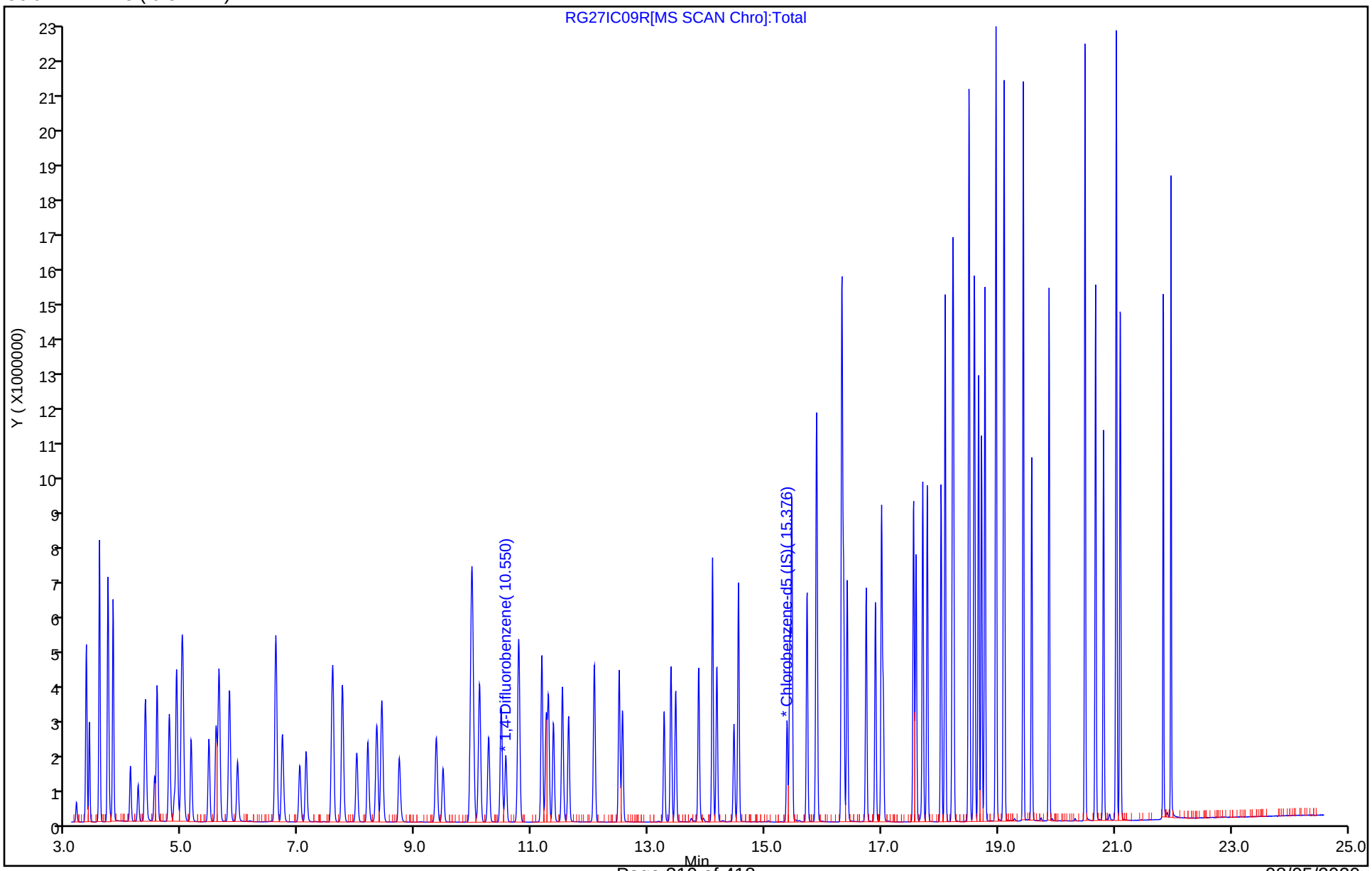
Report Date: 28-Jul-2020 16:48:24 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC09R.D

Injection Date:	28-Jul-2020 09:59:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	IC L9			Worklist Smp#:	23
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

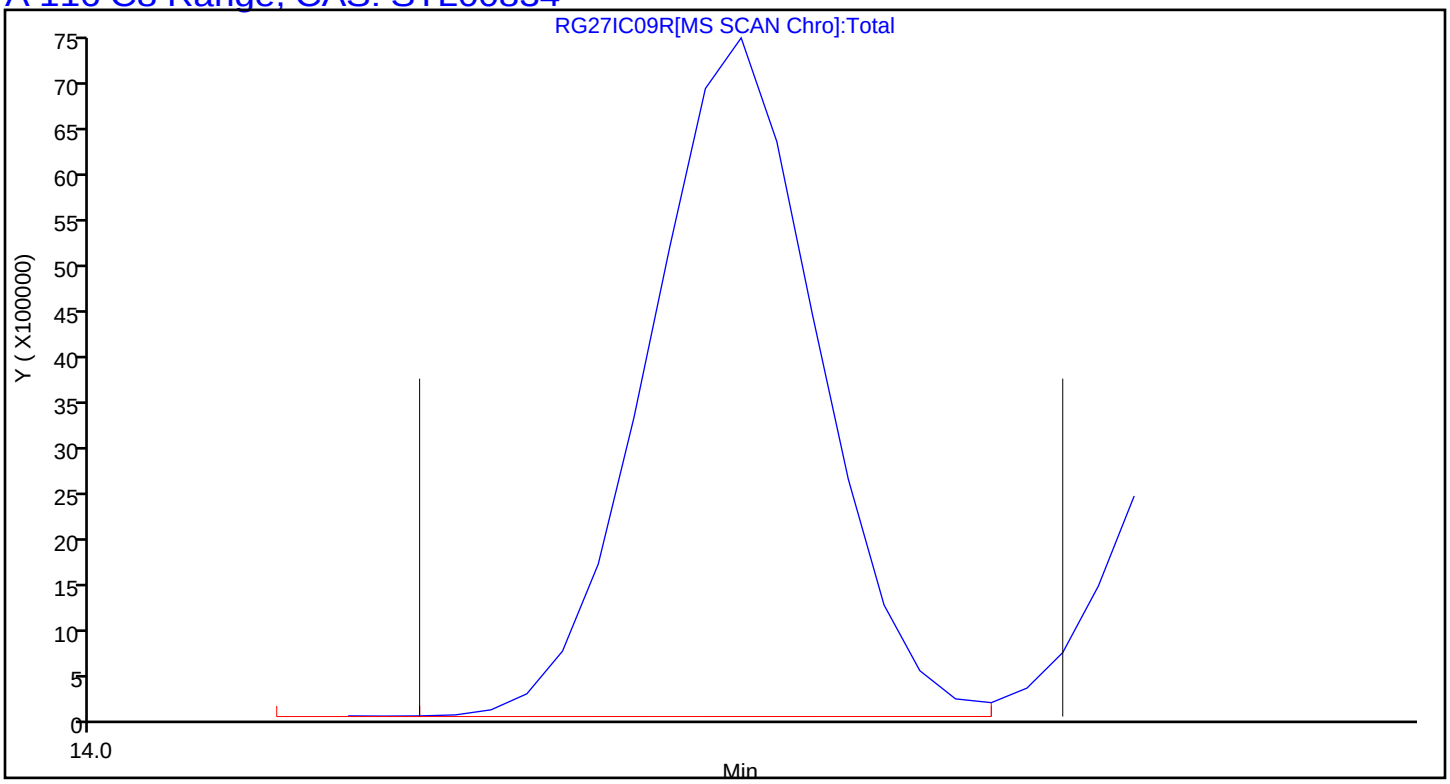


Report Date: 28-Jul-2020 16:48:24 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC09R.D				
Injection Date:	28-Jul-2020 09:59:30	Instrument ID:	MR		
Lims ID:	IC L9				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	15	Worklist Smp#:	23
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 116 C8 Range, CAS: STL00834



FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19811-1

SDG No.:

Lab Sample ID: ICV 140-41058/16 Calibration Date: 07/16/2020 00:19

Instrument ID: MG Calib Start Date: 07/15/2020 12:53

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 07/15/2020 22:02

Lab File ID: GG15ICV.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorodifluoromethane	Ave	4.066	3.833		1.89	2.00	-5.7	35.0
Propene	Lin2		2.718		1.69	2.00	-15.3	35.0
Dichlorodifluoromethane	Ave	7.294	7.223		1.98	2.00	-1.0	35.0
Chloromethane	Ave	0.6957	0.6912		1.99	2.00	-0.7	35.0
1,2-Dichloro-1,1,2,2-tetrafluoroethane	Ave	3.778	3.821		2.02	2.00	1.1	35.0
Acetaldehyde	Ave	0.8841	0.5856		6.62	10.0	-33.8	35.0
Vinyl chloride	Ave	2.734	2.772		2.03	2.00	1.4	35.0
1,3-Butadiene	Ave	1.931	1.886		1.95	2.00	-2.3	35.0
Butane	Ave	3.773	3.836		2.03	2.00	1.7	35.0
Bromomethane	Ave	2.282	2.394		2.10	2.00	4.9	35.0
Chloroethane	Ave	1.315	1.363		2.07	2.00	3.7	35.0
Ethanol	QuaF		0.5205		7.35	10.0	-26.5	35.0
Vinyl bromide	Ave	1.991	2.222		2.23	2.00	11.6	35.0
2-Methylbutane	Ave	2.431	2.423		1.99	2.00	-0.3	35.0
Trichlorofluoromethane	Ave	7.169	7.372		2.06	2.00	2.8	35.0
Acrolein	Ave	0.4629	0.4401		1.90	2.00	-4.9	35.0
Acetonitrile	Ave	0.6823	0.4577		1.34	2.00	-32.9	35.0
Acetone	Ave	0.8520	0.5742		1.35	2.00	-32.6	35.0
Pentane	Ave	0.4500	0.4771		2.12	2.00	6.0	35.0
Isopropyl alcohol	Ave	2.098	1.983		1.89	2.00	-5.5	35.0
Ethyl ether	Ave	1.612	1.210		1.50	2.00	-25.0	35.0
1,1-Dichloroethene	Ave	1.873	2.040		2.18	2.00	8.9	35.0
Acrylonitrile	Ave	1.221	0.997		1.63	2.00	-18.3	35.0
tert-Butyl alcohol	Ave	3.226	2.749		1.70	2.00	-14.8	35.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	4.185	4.514		2.16	2.00	7.9	35.0
Methylene Chloride	Lin2		2.819		2.24	2.00	12.1	35.0
3-Chloropropene	Ave	1.897	2.045		2.16	2.00	7.8	35.0
Carbon disulfide	Ave	6.333	6.767		2.14	2.00	6.9	35.0
trans-1,2-Dichloroethene	Ave	2.088	2.196		2.10	2.00	5.2	35.0
2-Methylpentane	Ave	5.071	4.708		1.86	2.00	-7.2	35.0
Methyl tert-butyl ether	Ave	5.832	4.578		1.57	2.00	-21.5	35.0
1,1-Dichloroethane	Ave	4.609	4.493		1.95	2.00	-2.5	35.0
Vinyl acetate	Ave	4.525	3.605		1.59	2.00	-20.3	35.0
2-Butanone (MEK)	Ave	0.9724	0.6598		1.36	2.00	-32.1	35.0
Hexane	Ave	1.821	1.780		1.96	2.00	-2.2	35.0
Isopropyl ether	Ave	6.234	4.719		1.51	2.00	-24.3	35.0
cis-1,2-Dichloroethene	Ave	2.123	2.190		2.06	2.00	3.2	35.0
Ethyl acetate	Ave	3.913	2.552		1.30	2.00	-34.8	35.0
Chloroform	Ave	5.316	5.166		1.94	2.00	-2.8	35.0
Tert-butyl ethyl ether	Ave	6.322	4.491		1.42	2.00	-29.0	35.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19811-1

SDG No.:

Lab Sample ID: ICV 140-41058/16 Calibration Date: 07/16/2020 00:19

Instrument ID: MG Calib Start Date: 07/15/2020 12:53

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 07/15/2020 22:02

Lab File ID: GG15ICV.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Tetrahydrofuran	Ave	2.217	1.554		1.40	2.00	-29.9	35.0
1,1,1-Trichloroethane	Ave	5.735	5.801		2.02	2.00	1.1	35.0
1,2-Dichloroethane	Ave	0.4421	0.4377		1.98	2.00	-1.0	35.0
Benzene	Ave	0.8250	0.8438		2.05	2.00	2.3	35.0
Cyclohexane	Ave	0.1456	0.1646		2.26	2.00	13.0	35.0
1-Butanol	Ave	0.0777	0.0707		1.82	2.00	-8.9	35.0
Carbon tetrachloride	Ave	0.5694	0.7218		2.54	2.00	26.8	35.0
2,3-Dimethylpentane	Ave	0.2132	0.2232		2.09	2.00	4.7	35.0
Thiophene	Ave	0.4369	0.4488		2.05	2.00	2.7	35.0
2,2,4-Trimethylpentane	Ave	1.396	1.470		2.11	2.00	5.3	35.0
Heptane	Ave	0.3130	0.3265		2.09	2.00	4.3	35.0
1,2-Dichloropropane	Ave	0.3110	0.2813		1.81	2.00	-9.6	35.0
Trichloroethene	Ave	0.2794	0.3111		2.23	2.00	11.3	35.0
Dibromomethane	Ave	0.3273	0.3404		2.08	2.00	4.0	35.0
Bromodichloromethane	Ave	0.5684	0.6516		2.29	2.00	14.6	35.0
1,4-Dioxane	Ave	0.0936	0.0780		1.67	2.00	-16.7	35.0
Methyl methacrylate	Ave	0.2880	0.2077		1.44	2.00	-27.9	35.0
Methylcyclohexane	Lin1		0.6795		2.64	2.00	32.1	35.0
4-Methyl-2-pentanone (MIBK)	Ave	0.4999	0.3856		1.54	2.00	-22.9	35.0
cis-1,3-Dichloropropene	Ave	0.4314	0.4527		2.10	2.00	4.9	35.0
trans-1,3-Dichloropropene	Ave	0.4136	0.3876		1.87	2.00	-6.3	35.0
Toluene	Ave	0.8679	0.7664		1.77	2.00	-11.7	35.0
1,1,2-Trichloroethane	Ave	0.2639	0.2344		1.78	2.00	-11.2	35.0
2-Hexanone	Ave	0.2604	0.1972		1.51	2.00	-24.3	35.0
Octane	Ave	0.3177	0.3033		1.91	2.00	-4.5	35.0
Dibromochloromethane	Ave	0.4615	0.4556		1.97	2.00	-1.3	35.0
1,2-Dibromoethane (EDB)	Ave	0.4093	0.3872		1.89	2.00	-5.4	35.0
Tetrachloroethene	Ave	0.2968	0.2814		1.90	2.00	-5.2	35.0
Chlorobenzene	Ave	0.6259	0.5624		1.80	2.00	-10.2	35.0
2,3-Dimethylheptane	Ave	0.997	0.7519		1.51	2.00	-24.6	35.0
Ethylbenzene	Ave	1.140	0.9474		1.66	2.00	-16.9	35.0
m-Xylene & p-Xylene	Ave	0.9068	0.7467		3.29	4.00	-17.7	35.0
Nonane	Ave	0.6196	0.5061		1.63	2.00	-18.3	35.0
Bromoform	Ave	0.3526	0.3427		1.94	2.00	-2.8	35.0
Styrene	Ave	0.5322	0.4831		1.82	2.00	-9.2	35.0
o-Xylene	Ave	0.9594	0.7707		1.61	2.00	-19.7	35.0
1,1,2,2-Tetrachloroethane	Ave	0.6385	0.4828		1.51	2.00	-24.4	35.0
1,2,3-Trichloropropane	Ave	0.1876	0.1427		1.52	2.00	-23.9	35.0
Isopropylbenzene	Ave	1.219	0.9487		1.56	2.00	-22.2	35.0
Propylbenzene	Ave	0.3038	0.2343		1.54	2.00	-22.9	35.0
2-Chlorotoluene	Ave	0.2797	0.2331		1.67	2.00	-16.6	35.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19811-1

SDG No.:

Lab Sample ID: ICV 140-41058/16 Calibration Date: 07/16/2020 00:19

Instrument ID: MG Calib Start Date: 07/15/2020 12:53

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 07/15/2020 22:02

Lab File ID: GG15ICV.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Ethyltoluene	Ave	1.174	0.8352		1.42	2.00	-28.9	35.0
1,3,5-Trimethylbenzene	Ave	0.4567	0.3744		1.64	2.00	-18.0	35.0
Alpha Methyl Styrene	Ave	0.3800	0.3188		1.68	2.00	-16.1	35.0
Decane	Ave	0.7291	0.5523		1.52	2.00	-24.2	35.0
tert-Butylbenzene	Ave	0.9907	0.7557		1.53	2.00	-23.7	35.0
1,2,4-Trimethylbenzene	Ave	1.056	0.7573		1.43	2.00	-28.3	35.0
sec-Butylbenzene	Ave	1.528	1.077		1.41	2.00	-29.5	35.0
1,3-Dichlorobenzene	Ave	0.5469	0.4565		1.67	2.00	-16.5	35.0
Benzyl chloride	Ave	0.8304	0.6937		1.67	2.00	-16.5	35.0
1,4-Dichlorobenzene	Ave	0.5536	0.4549		1.64	2.00	-17.8	35.0
4-Isopropyltoluene	Ave	1.180	0.8315		1.41	2.00	-29.5	35.0
1,2,3-Trimethylbenzene	QuaF		0.5611		1.34	2.00	-33.0	35.0
Butylcyclohexane	Ave	0.9465	0.6987		1.48	2.00	-26.2	35.0
1,2-Dichlorobenzene	Ave	0.5575	0.4457		1.60	2.00	-20.1	35.0
Indane	Ave	0.8447	0.6550		1.55	2.00	-22.5	35.0
Indene	Ave	0.7215	0.4887		1.35	2.00	-32.3	35.0
Butylbenzene	Ave	1.334	0.9504		1.42	2.00	-28.8	35.0
Undecane	Ave	0.7884	0.5534		1.40	2.00	-29.8	35.0
1,2-Dibromo-3-Chloropropane	Ave	0.2172	0.1556		1.43	2.00	-28.4	35.0
1,2,4,5-Tetramethylbenzene	Ave	1.038	0.7377		1.42	2.00	-28.9	35.0
Dodecane	Ave	0.6760	0.4892		1.45	2.00	-27.6	35.0
1,2,4-Trichlorobenzene	Ave	0.4115	0.3560		1.73	2.00	-13.5	35.0
Naphthalene	Ave	1.059	0.8945		1.69	2.00	-15.5	35.0
Hexachlorobutadiene	Ave	0.4832	0.3430		1.42	2.00	-29.0	35.0
1,2,3-Trichlorobenzene	Ave	0.3927	0.3707		1.89	2.00	-5.6	35.0
2-Methylnaphthalene	Ave	0.6128	0.5309		1.73	2.00	-13.4	50.0
1-Methylnaphthalene	Ave	0.7292	0.5494		1.51	2.00	-24.7	50.0
4-Bromofluorobenzene (Surr)	Ave	0.8130	0.8088		3.98	4.00	-0.5	35.0

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15ICV.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 16-Jul-2020 00:19:30 ALS Bottle#: 6 Worklist Smp#: 16
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016031-016
Misc. Info.: S119
Operator ID: HMT Instrument ID: MG
Sublist:

Method: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 17-Jul-2020 11:00:37 Calib Date: 15-Jul-2020 22:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1015

First Level Reviewer: barlozhetskayaa Date: 17-Jul-2020 11:03:30

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.838	8.838	0.000	96	205175	4.00	4.00	
* 2 1,4-Difluorobenzene	114	11.022	11.022	0.000	96	1591539	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.751	15.751	0.000	91	1621760	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.396	17.396	0.000	82	1311615	4.00	3.98	
6 Chlorodifluoromethane	51	3.705	3.705	0.000	96	393192	2.00	1.89	
7 Propene	41	3.716	3.716	0.000	99	278840	2.00	1.69	
8 Dichlorodifluoromethane	85	3.764	3.764	0.000	100	741025	2.00	1.98	
9 Chloromethane	52	3.947	3.947	0.000	98	70903	2.00	1.99	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.953	3.953	0.000	96	392015	2.00	2.02	
11 Acetaldehyde	44	4.104	4.104	0.000	97	300349	10.0	6.62	
12 Vinyl chloride	62	4.120	4.120	0.000	99	284327	2.00	2.03	
13 Butane	43	4.206	4.206	0.000	86	393561	2.00	2.03	
14 Butadiene	54	4.206	4.206	0.000	65	193501	2.00	1.95	
15 Bromomethane	94	4.530	4.530	0.000	97	245564	2.00	2.10	
16 Chloroethane	64	4.670	4.670	0.000	99	139847	2.00	2.07	
17 Ethanol	31	4.772	4.778	-0.006	98	267000	10.0	7.35	
18 Vinyl bromide	106	4.967	4.972	-0.005	98	227965	2.00	2.23	
19 2-Methylbutane	43	5.021	5.020	0.001	90	248582	2.00	1.99	
20 Trichlorofluoromethane	101	5.242	5.242	0.000	99	756305	2.00	2.06	
21 Acrolein	56	5.247	5.252	-0.005	93	45150	2.00	1.90	
22 Acetonitrile	40	5.312	5.317	-0.005	98	46955	2.00	1.34	
23 Acetone	58	5.371	5.371	0.000	98	58909	2.00	1.35	
24 Pentane	72	5.463	5.463	0.000	99	48949	2.00	2.12	
25 Isopropyl alcohol	45	5.473	5.468	0.005	92	203435	2.00	1.89	
26 Ethyl ether	31	5.635	5.635	0.000	90	124095	2.00	1.50	
27 1,1-Dichloroethene	96	5.948	5.948	0.000	94	209325	2.00	2.18	
28 Acrylonitrile	53	6.045	6.050	-0.005	96	102283	2.00	1.63	
30 2-Methyl-2-propanol	59	6.077	6.077	0.000	94	282002	2.00	1.70	
29 1,1,2-Trichloro-1,2,2-trifluoroe	101	6.126	6.126	0.000	91	463111	2.00	2.16	
31 Methylene Chloride	84	6.293	6.293	0.000	94	289149	2.00	2.24	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.309	6.309	0.000	99	209740	2.00	2.16	
33 Carbon disulfide	76	6.455	6.455	0.000	98	694247	2.00	2.14	
34 trans-1,2-Dichloroethene	96	7.102	7.102	0.000	96	225320	2.00	2.10	
35 2-Methylpentane	43	7.124	7.124	0.000	93	482963	2.00	1.86	
36 Methyl tert-butyl ether	73	7.237	7.237	0.000	96	469641	2.00	1.57	
37 1,1-Dichloroethane	63	7.523	7.523	0.000	100	460904	2.00	1.95	
38 Vinyl acetate	43	7.630	7.630	0.000	100	369821	2.00	1.59	
39 2-Butanone (MEK)	72	8.078	8.078	0.000	98	67685	2.00	1.36	
40 Hexane	56	8.100	8.105	-0.005	92	182656	2.00	1.96	
41 Isopropyl ether	45	8.267	8.267	0.000	96	484158	2.00	1.51	
42 cis-1,2-Dichloroethene	96	8.504	8.509	-0.005	98	224708	2.00	2.06	
43 Ethyl acetate	43	8.698	8.698	0.000	99	261819	2.00	1.30	
44 Chloroform	83	8.849	8.854	-0.005	97	530002	2.00	1.94	
45 Tert-butyl ethyl ether	59	8.946	8.946	0.000	95	460733	2.00	1.42	
46 Tetrahydrofuran	42	9.259	9.259	0.000	91	159417	2.00	1.40	
47 1,1,1-Trichloroethane	97	9.879	9.879	0.000	95	595076	2.00	2.02	
48 1,2-Dichloroethane	62	9.987	9.987	0.000	99	348337	2.00	1.98	
51 n-Butanol	31	10.488	10.483	0.005	67	56291	2.00	1.82	
49 Cyclohexane	69	10.483	10.483	0.000	94	130986	2.00	2.26	
50 Benzene	78	10.478	10.483	-0.005	97	671505	2.00	2.05	
52 Carbon tetrachloride	117	10.505	10.505	0.000	97	574416	2.00	2.54	
53 2,3-Dimethylpentane	71	10.602	10.602	0.000	90	177573	2.00	2.09	
54 Thiophene	84	10.753	10.753	0.000	95	357103	2.00	2.05	
55 Isooctane	57	11.243	11.243	0.000	98	1169469	2.00	2.11	
56 n-Heptane	71	11.621	11.621	0.000	89	259839	2.00	2.09	
57 1,2-Dichloropropane	63	11.696	11.696	0.000	89	223821	2.00	1.81	
58 Trichloroethene	130	11.734	11.739	-0.005	92	247587	2.00	2.23	
59 Dibromomethane	93	11.815	11.820	-0.005	87	270859	2.00	2.08	
60 Dichlorobromomethane	83	11.966	11.966	0.000	98	518522	2.00	2.29	
61 1,4-Dioxane	88	11.993	11.987	0.006	92	62034	2.00	1.67	
62 Methyl methacrylate	41	12.063	12.063	0.000	96	165310	2.00	1.44	
63 Methylcyclohexane	83	12.505	12.505	0.000	96	540749	2.00	2.64	
64 4-Methyl-2-pentanone (MIBK)	43	12.915	12.915	0.000	97	306858	2.00	1.54	
65 cis-1,3-Dichloropropene	75	12.963	12.963	0.000	92	360240	2.00	2.10	
66 trans-1,3-Dichloropropene	75	13.659	13.659	0.000	95	314315	2.00	1.87	
67 Toluene	91	13.783	13.783	0.000	94	621487	2.00	1.77	
68 1,1,2-Trichloroethane	83	13.859	13.859	0.000	97	190100	2.00	1.78	
69 2-Hexanone	58	14.252	14.252	0.000	95	159893	2.00	1.51	
70 n-Octane	85	14.473	14.473	0.000	92	245930	2.00	1.91	
71 Chlorodibromomethane	129	14.560	14.560	0.000	97	369464	2.00	1.97	
72 Ethylene Dibromide	107	14.851	14.851	0.000	98	313964	2.00	1.89	
73 Tetrachloroethene	129	14.926	14.926	0.000	90	228180	2.00	1.90	
75 Chlorobenzene	112	15.800	15.800	0.000	88	456000	2.00	1.80	
74 2,3-Dimethylheptane	43	15.821	15.821	0.000	93	609720	2.00	1.51	
78 Ethylbenzene	91	16.091	16.091	0.000	99	768256	2.00	1.66	
79 m-Xylene & p-Xylene	91	16.253	16.253	0.000	100	1210911	4.00	3.29	
80 n-Nonane	57	16.673	16.673	0.000	90	410373	2.00	1.63	
81 Bromoform	173	16.700	16.700	0.000	93	277923	2.00	1.94	
82 Styrene	104	16.717	16.717	0.000	96	391769	2.00	1.82	
83 o-Xylene	91	16.776	16.776	0.000	97	624929	2.00	1.61	
84 1,1,2,2-Tetrachloroethane	83	17.099	17.099	0.000	99	391498	2.00	1.51	
85 1,2,3-Trichloropropane	110	17.256	17.261	-0.005	99	115679	2.00	1.52	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
86 Isopropylbenzene	105	17.364	17.364	0.000	98	769264	2.00	1.56	
87 N-Propylbenzene	120	17.908	17.903	0.005	98	189953	2.00	1.54	
88 2-Chlorotoluene	126	17.951	17.946	0.005	96	189028	2.00	1.67	
89 4-Ethyltoluene	105	18.054	18.054	0.000	98	677208	2.00	1.42	
90 1,3,5-Trimethylbenzene	120	18.129	18.129	0.000	91	303571	2.00	1.64	
92 Alpha Methyl Styrene	118	18.356	18.356	0.000	84	258485	2.00	1.68	
93 n-Decane	57	18.415	18.421	-0.006	92	447835	2.00	1.52	
94 tert-Butylbenzene	119	18.550	18.550	0.000	88	612808	2.00	1.53	
95 1,2,4-Trimethylbenzene	105	18.566	18.566	0.000	96	614071	2.00	1.43	
96 sec-Butylbenzene	105	18.820	18.820	0.000	98	872997	2.00	1.41	
97 1,3-Dichlorobenzene	146	18.830	18.836	-0.006	95	370134	2.00	1.67	
98 Benzyl chloride	91	18.906	18.906	0.000	97	562482	2.00	1.67	
99 1,4-Dichlorobenzene	146	18.922	18.922	0.000	89	368880	2.00	1.64	
100 4-Isopropyltoluene	119	18.981	18.981	0.000	96	674222	2.00	1.41	
101 1,2,3-Trimethylbenzene	105	19.035	19.035	0.000	99	455006	2.00	1.34	
102 Butylcyclohexane	83	19.089	19.089	0.000	94	566531	2.00	1.48	
103 2,3-Dihydroindene	117	19.278	19.278	0.000	92	531098	2.00	1.55	
104 1,2-Dichlorobenzene	146	19.278	19.278	0.000	80	361439	2.00	1.60	
106 Indene	116	19.407	19.407	0.000	89	396294	2.00	1.35	
105 n-Butylbenzene	91	19.413	19.413	0.000	97	770646	2.00	1.42	
107 Undecane	57	19.726	19.725	0.001	95	448724	2.00	1.40	
108 1,2-Dibromo-3-Chloropropane	157	19.876	19.876	0.000	88	126174	2.00	1.43	
109 1,2,4,5-Tetramethylbenzene	119	20.162	20.162	0.000	95	598182	2.00	1.42	
110 Dodecane	57	20.777	20.777	0.000	96	396706	2.00	1.45	
111 1,2,4-Trichlorobenzene	180	20.971	20.971	0.000	92	288678	2.00	1.73	
112 Naphthalene	128	21.111	21.111	0.000	99	725335	2.00	1.69	
113 Hexachlorobutadiene	225	21.322	21.322	0.000	93	278129	2.00	1.42	
114 1,2,3-Trichlorobenzene	180	21.386	21.386	0.000	94	300611	2.00	1.89	
115 2-Methylnaphthalene	142	22.157	22.157	0.000	98	430521	2.00	1.73	
116 1-Methylnaphthalene	142	22.330	22.330	0.000	98	445527	2.00	1.51	
A 122 C8 Range	1	14.469	(14.420-14.527)		0	2193416	2.00	1.84	
S 123 1,2-Dichloroethene, Total	1				0		4.00	4.17	
S 124 Xylenes, Total	100				0		6.00	4.90	
T 136 2-Methylthiophene TIC	97	13.934	13.934	0.000	97	490699	2.00	1.21	
T 137 3-Methylthiophene TIC	97	14.134	14.139	-0.005	99	476212	2.00	1.17	
T 154 2-Ethylthiophene TIC	97	16.194	16.193	0.001	72	572032	2.00	1.41	
T 160 1,2-Dimethyl-4-Ethylbenzene TIC	119	19.779	19.779	0.000	87	477403	2.00	1.18	
T 161 1,2,3,5-Tetramethylbenzene TIC	119	20.216	20.216	0.000	93	350027	2.00	0.8633	
T 162 1,2,3,4-Tetramethylbenzene TIC	119	20.621	20.615	0.006	96	477290	2.00	1.18	
T 163 Benzo(b)thiophene TIC	134	21.214	21.214	0.000	98	385203	2.00	0.9501	

Reagents:

40CV101S_00119	Amount Added: 100.00	Units: mL	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

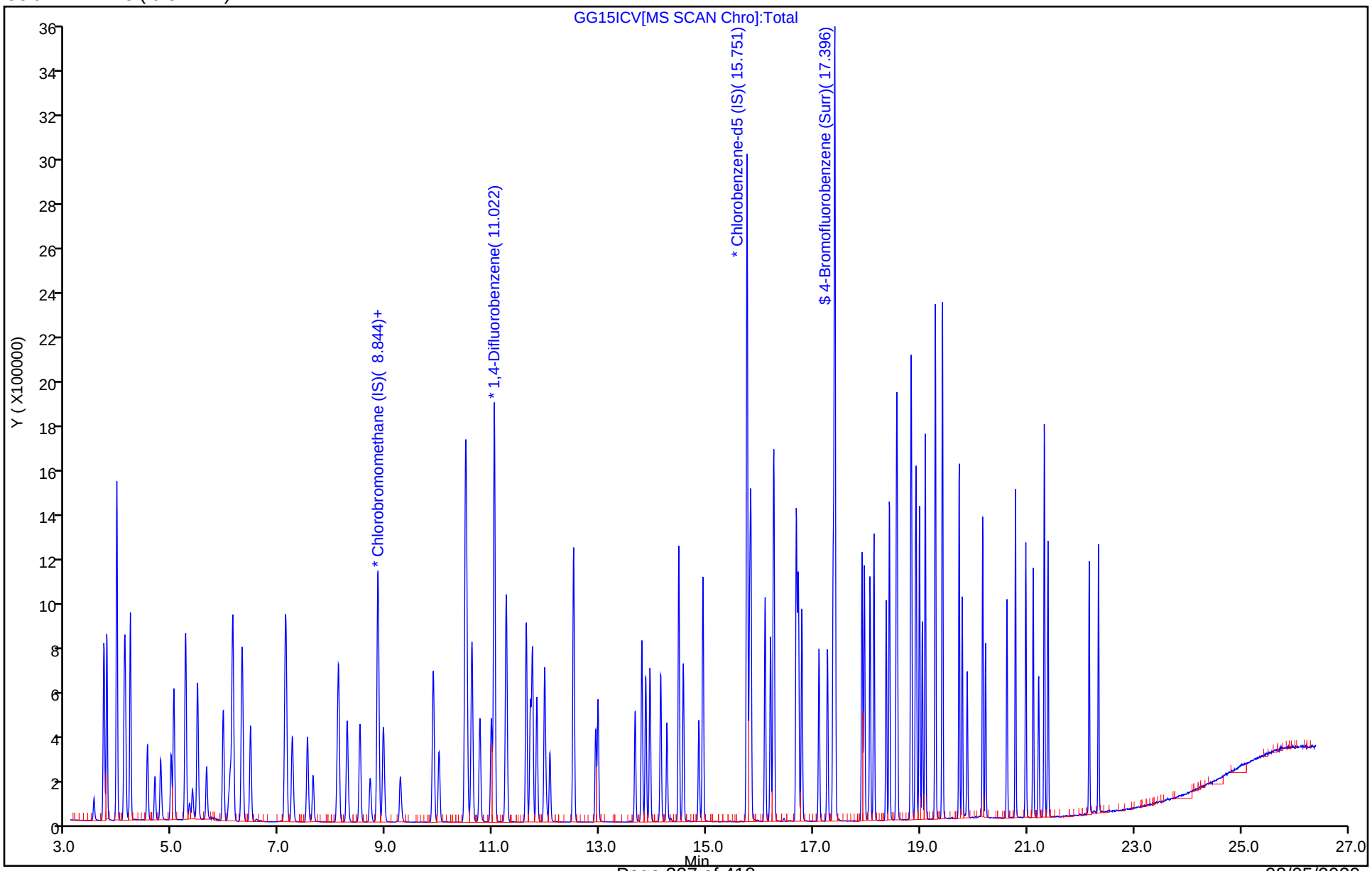
Report Date: 17-Jul-2020 11:03:31 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15ICV.D

Injection Date:	16-Jul-2020 00:19:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	ICV			Worklist Smp#:	16
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19811-1

SDG No.:

Lab Sample ID: CCVIS 140-41417/2 Calibration Date: 07/31/2020 09:06

Instrument ID: MG Calib Start Date: 07/15/2020 12:53

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 07/15/2020 22:02

Lab File ID: GCCVG31.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorodifluoromethane	Ave	4.066	5.198		2.05	1.60	27.8	30.0
Propene	Lin2		4.259		2.49	1.60	55.8*	30.0
Dichlorodifluoromethane	Ave	7.294	9.666		2.12	1.60	32.5*	30.0
Chloromethane	Ave	0.6957	0.9066		2.08	1.60	30.3*	30.0
1,2-Dichloro-1,1,2,2-tetrafluoroethane	Ave	3.778	4.540		1.92	1.60	20.2	30.0
Acetaldehyde	Ave	0.8841	1.085		9.82	8.00	22.8	30.0
Vinyl chloride	Ave	2.734	3.516		2.06	1.60	28.6	30.0
1,3-Butadiene	Ave	1.931	2.469		2.05	1.60	27.9	30.0
Butane	Ave	3.773	4.784		2.03	1.60	26.8	30.0
Bromomethane	Ave	2.282	2.881		2.02	1.60	26.3	30.0
Chloroethane	Ave	1.315	1.703		2.07	1.60	29.5	30.0
Ethanol	QuaF		1.463		16.2	8.00	102.5*	30.0
Vinyl bromide	Ave	1.991	2.442		1.96	1.60	22.7	30.0
2-Methylbutane	Ave	2.431	3.130		2.06	1.60	28.7	30.0
Trichlorofluoromethane	Ave	7.169	8.879		1.98	1.60	23.8	30.0
Acrolein	Ave	0.4629	0.6707		2.32	1.60	44.9*	30.0
Acetonitrile	Ave	0.6823	0.8924		2.09	1.60	30.8*	30.0
Acetone	Ave	0.8520	1.024		5.77	4.80	20.1	30.0
Pentane	Ave	0.4500	0.5626		2.00	1.60	25.0	30.0
Isopropyl alcohol	Ave	2.098	3.192		7.30	4.80	52.1*	30.0
Ethyl ether	Ave	1.612	2.111		2.09	1.60	30.9*	30.0
1,1-Dichloroethene	Ave	1.873	1.966		1.68	1.60	5.0	30.0
Acrylonitrile	Ave	1.221	1.298		1.70	1.60	6.3	30.0
tert-Butyl alcohol	Ave	3.226	3.879		1.92	1.60	20.2	30.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	4.185	4.293		1.64	1.60	2.6	30.0
Methylene Chloride	Lin2		2.994		1.78	1.60	11.1	30.0
3-Chloropropene	Ave	1.897	1.930		1.63	1.60	1.7	30.0
Carbon disulfide	Ave	6.333	6.834		1.73	1.60	7.9	30.0
trans-1,2-Dichloroethene	Ave	2.088	2.140		1.64	1.60	2.5	30.0
2-Methylpentane	Ave	5.071	5.333		1.68	1.60	5.2	30.0
Methyl tert-butyl ether	Ave	5.832	6.029		1.65	1.60	3.4	30.0
1,1-Dichloroethane	Ave	4.609	4.560		1.58	1.60	-1.1	30.0
Vinyl acetate	Ave	4.525	4.613		1.63	1.60	1.9	30.0
2-Butanone (MEK)	Ave	0.9724	0.9422		1.55	1.60	-3.1	30.0
Hexane	Ave	1.821	1.796		1.58	1.60	-1.4	30.0
Isopropyl ether	Ave	6.234	6.637		1.70	1.60	6.5	30.0
cis-1,2-Dichloroethene	Ave	2.123	2.157		1.63	1.60	1.6	30.0
Ethyl acetate	Ave	3.913	3.998		1.63	1.60	2.2	30.0
Chloroform	Ave	5.316	5.244		1.58	1.60	-1.4	30.0
Tert-butyl ethyl ether	Ave	6.322	6.526		1.65	1.60	3.2	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19811-1

SDG No.:

Lab Sample ID: CCVIS 140-41417/2 Calibration Date: 07/31/2020 09:06

Instrument ID: MG Calib Start Date: 07/15/2020 12:53

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 07/15/2020 22:02

Lab File ID: GCCVG31.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Tetrahydrofuran	Ave	2.217	2.287		1.65	1.60	3.2	30.0
1,1,1-Trichloroethane	Ave	5.735	5.738		1.60	1.60	0.0	30.0
1,2-Dichloroethane	Ave	0.4421	0.4013		1.45	1.60	-9.2	30.0
Benzene	Ave	0.8250	0.7673		1.49	1.60	-7.0	30.0
Cyclohexane	Ave	0.1456	0.1438		1.58	1.60	-1.3	30.0
Carbon tetrachloride	Ave	0.5694	0.5923		1.66	1.60	4.0	30.0
1-Butanol	Ave	0.0777	0.0971		2.00	1.60	25.0	30.0
2,3-Dimethylpentane	Ave	0.2132	0.2112		1.58	1.60	-1.0	30.0
Thiophene	Ave	0.4369	0.4022		1.47	1.60	-7.9	30.0
2,2,4-Trimethylpentane	Ave	1.396	1.421		1.63	1.60	1.8	30.0
Heptane	Ave	0.3130	0.2972		1.52	1.60	-5.0	30.0
1,2-Dichloropropane	Ave	0.3110	0.2870		1.48	1.60	-7.7	30.0
Trichloroethene	Ave	0.2794	0.2387		1.37	1.60	-14.6	30.0
Dibromomethane	Ave	0.3273	0.2920		1.43	1.60	-10.8	30.0
Bromodichloromethane	Ave	0.5684	0.5752		1.62	1.60	1.2	30.0
1,4-Dioxane	Ave	0.0936	0.1139		1.95	1.60	21.7	30.0
Methyl methacrylate	Ave	0.2880	0.2820		1.57	1.60	-2.1	30.0
Methylcyclohexane	Lin1		0.4988		1.55	1.60	-2.8	30.0
4-Methyl-2-pentanone (MIBK)	Ave	0.4999	0.4922		1.58	1.60	-1.5	30.0
cis-1,3-Dichloropropene	Ave	0.4314	0.3811		1.41	1.60	-11.7	30.0
trans-1,3-Dichloropropene	Ave	0.4136	0.3972		1.54	1.60	-4.0	30.0
Toluene	Ave	0.8679	0.8079		1.49	1.60	-6.9	30.0
1,1,2-Trichloroethane	Ave	0.2639	0.2637		1.60	1.60	-0.0	30.0
2-Hexanone	Ave	0.2604	0.2636		1.62	1.60	1.2	30.0
Octane	Ave	0.3177	0.3197		1.61	1.60	0.6	30.0
Dibromochloromethane	Ave	0.4615	0.4401		1.53	1.60	-4.6	30.0
1,2-Dibromoethane (EDB)	Ave	0.4093	0.3803		1.49	1.60	-7.1	30.0
Tetrachloroethene	Ave	0.2968	0.2588		1.40	1.60	-12.8	30.0
Chlorobenzene	Ave	0.6259	0.5448		1.39	1.60	-13.0	30.0
2,3-Dimethylheptane	Ave	0.997	1.048		1.68	1.60	5.1	30.0
Ethylbenzene	Ave	1.140	1.079		1.52	1.60	-5.3	30.0
m-Xylene & p-Xylene	Ave	0.9068	0.8561		3.02	3.20	-5.6	30.0
Nonane	Ave	0.6196	0.6347		1.64	1.60	2.4	30.0
Bromoform	Ave	0.3526	0.3349		1.52	1.60	-5.0	30.0
Styrene	Ave	0.5322	0.5414		1.63	1.60	1.7	30.0
o-Xylene	Ave	0.9594	0.9156		1.53	1.60	-4.6	30.0
1,1,2,2-Tetrachloroethane	Ave	0.6385	0.6859		1.72	1.60	7.4	30.0
1,2,3-Trichloropropane	Ave	0.1876	0.1824		1.56	1.60	-2.7	30.0
Isopropylbenzene	Ave	1.219	1.156		1.52	1.60	-5.2	30.0
Propylbenzene	Ave	0.3038	0.2810		1.48	1.60	-7.5	30.0
2-Chlorotoluene	Ave	0.2797	0.2579		1.48	1.60	-7.8	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19811-1

SDG No.:

Lab Sample ID: CCVIS 140-41417/2 Calibration Date: 07/31/2020 09:06

Instrument ID: MG Calib Start Date: 07/15/2020 12:53

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 07/15/2020 22:02

Lab File ID: GCCVG31.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Ethyltoluene	Ave	1.174	1.060		1.45	1.60	-9.7	30.0
1,3,5-Trimethylbenzene	Ave	0.4567	0.4212		1.48	1.60	-7.8	30.0
Alpha Methyl Styrene	Ave	0.3800	0.3975		1.67	1.60	4.6	30.0
Decane	Ave	0.7291	0.7707		1.69	1.60	5.7	30.0
tert-Butylbenzene	Ave	0.9907	0.9727		1.57	1.60	-1.8	30.0
1,2,4-Trimethylbenzene	Ave	1.056	0.9752		1.48	1.60	-7.6	30.0
sec-Butylbenzene	Ave	1.528	1.432		1.50	1.60	-6.3	30.0
1,3-Dichlorobenzene	Ave	0.5469	0.5014		1.47	1.60	-8.3	30.0
Benzyl chloride	Ave	0.8304	0.8602		1.66	1.60	3.6	30.0
1,4-Dichlorobenzene	Ave	0.5536	0.4871		1.41	1.60	-12.0	30.0
4-Isopropyltoluene	Ave	1.180	1.074		1.46	1.60	-9.0	30.0
1,2,3-Trimethylbenzene	QuaF		0.9852		1.84	1.60	14.8	30.0
Butylcyclohexane	Ave	0.9465	0.9582		1.62	1.60	1.2	30.0
1,2-Dichlorobenzene	Ave	0.5575	0.5051		1.45	1.60	-9.4	30.0
Indane	Ave	0.8447	0.8337		1.58	1.60	-1.3	30.0
Indene	Ave	0.7215	0.7218		1.60	1.60	0.0	30.0
Butylbenzene	Ave	1.334	1.265		1.52	1.60	-5.2	30.0
Undecane	Ave	0.7884	0.7922		1.61	1.60	0.5	30.0
1,2-Dibromo-3-Chloropropane	Ave	0.2172	0.2284		1.68	1.60	5.2	30.0
1,2,4,5-Tetramethylbenzene	Ave	1.038	0.9820		1.51	1.60	-5.4	30.0
Dodecane	Ave	0.6760	0.5889		1.39	1.60	-12.9	30.0
1,2,4-Trichlorobenzene	Ave	0.4115	0.3272		1.27	1.60	-20.5	30.0
Naphthalene	Ave	1.059	0.8905		1.35	1.60	-15.9	30.0
Hexachlorobutadiene	Ave	0.4832	0.4339		1.44	1.60	-10.2	30.0
1,2,3-Trichlorobenzene	Ave	0.3927	0.3011		1.23	1.60	-23.3	30.0
2-Methylnaphthalene	Ave	0.6128	0.3572		0.933	1.60	-41.7	50.0
1-Methylnaphthalene	Ave	0.7292	0.3890		0.854	1.60	-46.7	50.0
4-Bromofluorobenzene (Surr)	Ave	0.8130	0.8163		4.02	4.00	0.4	30.0

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GCCVG31.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 31-Jul-2020 09:06:30 ALS Bottle#: 16 Worklist Smp#: 2
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016132-006
Misc. Info.: P119 80ML
Operator ID: HMT Instrument ID: MG
Sublist: chrom-MG_TO15*sub17

Method: \\chromfs\Knoxville\ChromData\MG\20200729-16161.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 03-Aug-2020 13:08:46 Calib Date: 15-Jul-2020 22:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1011

First Level Reviewer: khachitpongpanits Date: 03-Aug-2020 13:08:46

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.838	8.838	0.000	91	164300	4.00	4.00	
* 2 1,4-Difluorobenzene	114	11.017	11.017	0.000	97	1425277	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.746	15.746	0.000	93	1220392	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.391	17.391	0.000	75	996195	4.00	4.02	
6 Chlorodifluoromethane	51	3.710	3.710	0.000	96	341612	1.60	2.05	
7 Propene	41	3.721	3.721	0.000	99	279910	1.60	2.49	
8 Dichlorodifluoromethane	85	3.770	3.770	0.000	100	635246	1.60	2.12	
9 Chloromethane	52	3.953	3.953	0.000	98	59579	1.60	2.08	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.958	3.958	0.000	97	298374	1.60	1.92	
11 Acetaldehyde	44	4.109	4.109	0.000	99	356614	8.00	9.82	
12 Vinyl chloride	62	4.125	4.125	0.000	99	231082	1.60	2.06	
14 Butadiene	54	4.212	4.212	0.000	67	162240	1.60	2.05	
13 Butane	43	4.212	4.212	0.000	86	314414	1.60	2.03	
15 Bromomethane	94	4.530	4.530	0.000	98	189340	1.60	2.02	
16 Chloroethane	64	4.670	4.670	0.000	97	111904	1.60	2.07	
17 Ethanol	31	4.783	4.783	0.000	98	480887	8.00	16.2	
18 Vinyl bromide	106	4.972	4.972	0.000	98	160512	1.60	1.96	
19 2-Methylbutane	43	5.021	5.021	0.000	91	205671	1.60	2.06	
20 Trichlorofluoromethane	101	5.242	5.242	0.000	99	583499	1.60	1.98	
21 Acrolein	56	5.258	5.258	0.000	94	44075	1.60	2.32	
22 Acetonitrile	40	5.317	5.317	0.000	99	58649	1.60	2.09	
23 Acetone	58	5.371	5.371	0.000	98	201828	4.80	5.77	
24 Pentane	72	5.463	5.463	0.000	97	36974	1.60	2.00	
25 Isopropyl alcohol	45	5.474	5.474	0.000	93	629384	4.80	7.30	
26 Ethyl ether	31	5.635	5.635	0.000	93	138719	1.60	2.09	
27 1,1-Dichloroethene	96	5.948	5.948	0.000	93	129220	1.60	1.68	
28 Acrylonitrile	53	6.051	6.051	0.000	97	85328	1.60	1.70	
30 2-Methyl-2-propanol	59	6.088	6.088	0.000	95	254934	1.60	1.92	
29 1,1,2-Trichloro-1,2,2-trifluoroe	101	6.126	6.126	0.000	90	282139	1.60	1.64	
31 Methylene Chloride	84	6.293	6.293	0.000	97	196733	1.60	1.78	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.309	6.309	0.000	98	126844	1.60	1.63	
33 Carbon disulfide	76	6.455	6.455	0.000	99	449122	1.60	1.73	
34 trans-1,2-Dichloroethene	96	7.102	7.102	0.000	94	140627	1.60	1.64	
35 2-Methylpentane	43	7.124	7.124	0.000	94	350476	1.60	1.68	
36 Methyl tert-butyl ether	73	7.242	7.242	0.000	96	396221	1.60	1.65	
37 1,1-Dichloroethane	63	7.523	7.523	0.000	100	299654	1.60	1.58	
38 Vinyl acetate	43	7.630	7.630	0.000	100	303146	1.60	1.63	
39 2-Butanone (MEK)	72	8.078	8.078	0.000	98	61922	1.60	1.55	
40 Hexane	56	8.105	8.105	0.000	92	118012	1.60	1.58	
41 Isopropyl ether	45	8.267	8.267	0.000	96	436200	1.60	1.70	
42 cis-1,2-Dichloroethene	96	8.504	8.504	0.000	98	141736	1.60	1.63	
43 Ethyl acetate	43	8.693	8.693	0.000	99	262757	1.60	1.63	
44 Chloroform	83	8.849	8.849	0.000	96	344657	1.60	1.58	
45 Tert-butyl ethyl ether	59	8.946	8.946	0.000	96	428880	1.60	1.65	
46 Tetrahydrofuran	42	9.264	9.264	0.000	94	150296	1.60	1.65	
47 1,1,1-Trichloroethane	97	9.874	9.874	0.000	96	377116	1.60	1.60	
48 1,2-Dichloroethane	62	9.982	9.982	0.000	99	228766	1.60	1.45	
49 Cyclohexane	69	10.478	10.478	0.000	92	81993	1.60	1.58	
50 Benzene	78	10.478	10.478	0.000	96	437471	1.60	1.49	
52 Carbon tetrachloride	117	10.499	10.499	0.000	95	337668	1.60	1.66	
51 n-Butanol	31	10.505	10.505	0.000	67	55350	1.60	2.00	
53 2,3-Dimethylpentane	71	10.602	10.602	0.000	91	120385	1.60	1.58	
54 Thiophene	84	10.747	10.747	0.000	96	229309	1.60	1.47	
55 Isooctane	57	11.243	11.243	0.000	98	810327	1.60	1.63	
56 n-Heptane	71	11.615	11.615	0.000	91	169451	1.60	1.52	
57 1,2-Dichloropropane	63	11.691	11.691	0.000	90	163621	1.60	1.48	
58 Trichloroethene	130	11.734	11.734	0.000	89	136109	1.60	1.37	
59 Dibromomethane	93	11.815	11.815	0.000	81	166494	1.60	1.43	
60 Dichlorobromomethane	83	11.961	11.961	0.000	97	327905	1.60	1.62	
61 1,4-Dioxane	88	11.988	11.988	0.000	94	64959	1.60	1.95	
62 Methyl methacrylate	41	12.058	12.058	0.000	94	160759	1.60	1.57	
63 Methylcyclohexane	83	12.500	12.500	0.000	96	284377	1.60	1.55	
64 4-Methyl-2-pentanone (MIBK)	43	12.915	12.915	0.000	98	280603	1.60	1.58	
65 cis-1,3-Dichloropropene	75	12.958	12.958	0.000	94	217276	1.60	1.41	
66 trans-1,3-Dichloropropene	75	13.654	13.654	0.000	96	193901	1.60	1.54	
67 Toluene	91	13.778	13.778	0.000	94	394370	1.60	1.49	
68 1,1,2-Trichloroethane	83	13.853	13.853	0.000	95	128729	1.60	1.60	
69 2-Hexanone	58	14.252	14.252	0.000	93	128664	1.60	1.62	
70 n-Octane	85	14.468	14.468	0.000	93	156071	1.60	1.61	
71 Chlorodibromomethane	129	14.554	14.554	0.000	95	214843	1.60	1.53	
72 Ethylene Dibromide	107	14.845	14.845	0.000	96	185666	1.60	1.49	
73 Tetrachloroethene	129	14.921	14.921	0.000	83	126346	1.60	1.40	
75 Chlorobenzene	112	15.795	15.795	0.000	87	265953	1.60	1.39	
74 2,3-Dimethylheptane	43	15.821	15.821	0.000	95	511503	1.60	1.68	
78 Ethylbenzene	91	16.086	16.086	0.000	100	526878	1.60	1.52	
79 m-Xylene & p-Xylene	91	16.247	16.247	0.000	99	835841	3.20	3.02	
80 n-Nonane	57	16.668	16.668	0.000	91	309836	1.60	1.64	
81 Bromoform	173	16.695	16.695	0.000	89	163458	1.60	1.52	
82 Styrene	104	16.711	16.711	0.000	96	264290	1.60	1.63	
83 o-Xylene	91	16.771	16.771	0.000	97	446976	1.60	1.53	
84 1,1,2,2-Tetrachloroethane	83	17.094	17.094	0.000	98	334843	1.60	1.72	
85 1,2,3-Trichloropropane	110	17.250	17.250	0.000	98	89057	1.60	1.56	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
86 Isopropylbenzene	105	17.358	17.358	0.000	98	564310	1.60	1.52	
87 N-Propylbenzene	120	17.903	17.903	0.000	98	137190	1.60	1.48	
88 2-Chlorotoluene	126	17.946	17.946	0.000	96	125906	1.60	1.48	
89 4-Ethyltoluene	105	18.049	18.049	0.000	98	517665	1.60	1.45	
90 1,3,5-Trimethylbenzene	120	18.124	18.124	0.000	92	205590	1.60	1.48	
92 Alpha Methyl Styrene	118	18.356	18.356	0.000	85	194058	1.60	1.67	
93 n-Decane	57	18.415	18.415	0.000	91	376198	1.60	1.69	
94 tert-Butylbenzene	119	18.545	18.545	0.000	92	474812	1.60	1.57	
95 1,2,4-Trimethylbenzene	105	18.561	18.561	0.000	96	476029	1.60	1.48	
96 sec-Butylbenzene	105	18.814	18.814	0.000	97	699036	1.60	1.50	
97 1,3-Dichlorobenzene	146	18.830	18.830	0.000	93	244746	1.60	1.47	
98 Benzyl chloride	91	18.901	18.901	0.000	96	419922	1.60	1.66	
99 1,4-Dichlorobenzene	146	18.917	18.917	0.000	89	237760	1.60	1.41	
100 4-Isopropyltoluene	119	18.976	18.976	0.000	95	524089	1.60	1.46	
101 1,2,3-Trimethylbenzene	105	19.030	19.030	0.000	99	480920	1.60	1.84	
102 Butylcyclohexane	83	19.084	19.084	0.000	93	467740	1.60	1.62	
104 1,2-Dichlorobenzene	146	19.273	19.273	0.000	76	246549	1.60	1.45	
103 2,3-Dihydroindene	117	19.273	19.273	0.000	92	406995	1.60	1.58	
106 Indene	116	19.402	19.402	0.000	97	352331	1.60	1.60	
105 n-Butylbenzene	91	19.407	19.407	0.000	97	617587	1.60	1.52	
107 Undecane	57	19.720	19.720	0.000	95	386731	1.60	1.61	
108 1,2-Dibromo-3-Chloropropane	157	19.871	19.871	0.000	84	111506	1.60	1.68	
109 1,2,4,5-Tetramethylbenzene	119	20.162	20.162	0.000	95	479382	1.60	1.51	
110 Dodecane	57	20.777	20.777	0.000	95	287484	1.60	1.39	
111 1,2,4-Trichlorobenzene	180	20.966	20.966	0.000	89	159719	1.60	1.27	
112 Naphthalene	128	21.106	21.106	0.000	98	434701	1.60	1.35	
113 Hexachlorobutadiene	225	21.316	21.316	0.000	86	211817	1.60	1.44	
114 1,2,3-Trichlorobenzene	180	21.381	21.381	0.000	91	146986	1.60	1.23	
115 2-Methylnaphthalene	142	22.152	22.152	0.000	96	174385	1.60	0.9328	
116 1-Methylnaphthalene	142	22.330	22.330	0.000	98	189896	1.60	0.8536	
A 122 C8 Range	1	14.453	(14.409-14.517)		0	1486967	1.60	1.66	
S 123 1,2-Dichloroethene, Total	1				0		3.20	3.26	
S 124 Xylenes, Total	100				0		4.80	4.55	

Reagents:

40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent
40CV101P_00119	Amount Added: 80.00	Units: ml	

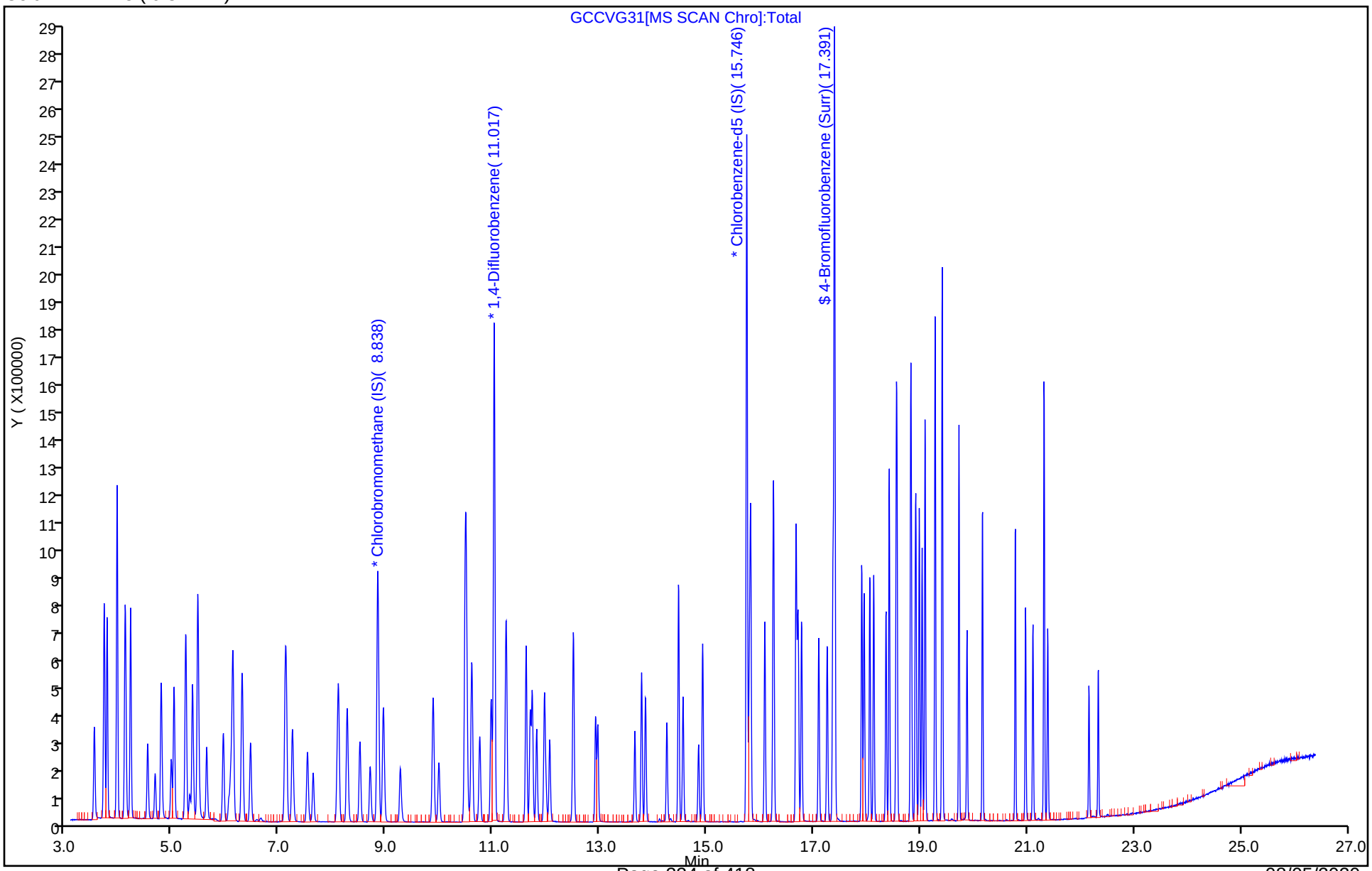
Report Date: 03-Aug-2020 13:08:47 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GCCVG31.D

Injection Date:	31-Jul-2020 09:06:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	CCVIS			Worklist Smp#:	2
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19811-1

SDG No.:

Lab Sample ID: ICV 140-41306/18 Calibration Date: 07/28/2020 12:30

Instrument ID: MR Calib Start Date: 07/27/2020 17:38

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 07/28/2020 09:59

Lab File ID: RG27LCS.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorodifluoromethane	Ave	5.854	6.566		1.12	1.00	12.2	35.0
Propene	Qua		5.442		1.31	1.00	30.9	35.0
Dichlorodifluoromethane	Ave	3.954	5.127		1.30	1.00	29.7	35.0
Chloromethane	Ave	1.011	1.071		1.06	1.00	5.9	35.0
1,2-Dichloro-1,1,2,2-tetrafluoroethane	Ave	3.874	4.409		1.14	1.00	13.8	35.0
Acetaldehyde	Ave	1.384	1.496		5.40	5.00	8.1	35.0
Vinyl chloride	Ave	2.905	3.149		1.08	1.00	8.4	35.0
1,3-Butadiene	Ave	2.442	2.662		1.09	1.00	9.0	35.0
Butane	Ave	5.228	5.897		1.13	1.00	12.8	35.0
Bromomethane	Ave	2.083	2.197		1.05	1.00	5.5	35.0
Chloroethane	Ave	1.236	1.310		1.06	1.00	5.9	35.0
Ethanol	Ave	1.590	1.399		4.40	5.00	-12.0	35.0
Vinyl bromide	Ave	1.973	2.307		1.17	1.00	16.9	35.0
2-Methylbutane	Ave	3.861	4.281		1.11	1.00	10.9	35.0
Trichlorofluoromethane	Ave	4.901	5.507		1.12	1.00	12.4	35.0
Acrolein	Ave	0.8551	0.9705		1.13	1.00	13.5	35.0
Acetonitrile	Ave	1.196	1.387		1.16	1.00	16.0	35.0
Acetone	Ave	1.615	2.176		1.35	1.00	34.8	35.0
Pentane	Ave	0.3799	0.4315		1.14	1.00	13.6	35.0
Isopropyl alcohol	QuaF		6.543		1.29	1.00	29.3	35.0
Ethyl ether	Ave	3.564	3.920		1.10	1.00	10.0	35.0
1,1-Dichloroethene	Ave	2.158	2.431		1.13	1.00	12.6	35.0
Acrylonitrile	Ave	1.829	2.053		1.12	1.00	12.2	35.0
tert-Butyl alcohol	Ave	4.928	6.045		1.23	1.00	22.7	35.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	4.393	4.931		1.12	1.00	12.2	35.0
Methylene Chloride	Lin2		3.319		1.12	1.00	12.5	35.0
3-Chloropropene	Ave	2.842	3.256		1.15	1.00	14.6	35.0
Carbon disulfide	Ave	5.769	6.624		1.15	1.00	14.8	35.0
trans-1,2-Dichloroethene	Ave	2.042	2.294		1.12	1.00	12.3	35.0
2-Methylpentane	Ave	7.180	7.404		1.03	1.00	3.1	35.0
Methyl tert-butyl ether	Ave	5.317	5.974		1.12	1.00	12.3	35.0
1,1-Dichloroethane	Ave	4.792	5.354		1.12	1.00	11.7	35.0
Vinyl acetate	Ave	7.963	9.367		1.18	1.00	17.6	35.0
2-Butanone (MEK)	Ave	1.014	1.134		1.12	1.00	11.9	35.0
Hexane	Ave	2.160	2.476		1.15	1.00	14.6	35.0
Isopropyl ether	Ave	11.04	12.51		1.13	1.00	13.2	35.0
cis-1,2-Dichloroethene	Ave	2.301	2.612		1.14	1.00	13.5	35.0
Ethyl acetate	Ave	7.406	7.968		1.08	1.00	7.6	35.0
Chloroform	Ave	4.390	5.104		1.16	1.00	16.2	35.0
Tert-butyl ethyl ether	Ave	8.680	8.751		1.01	1.00	0.8	35.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19811-1

SDG No.:

Lab Sample ID: ICV 140-41306/18 Calibration Date: 07/28/2020 12:30

Instrument ID: MR Calib Start Date: 07/27/2020 17:38

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 07/28/2020 09:59

Lab File ID: RG27LCS.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Tetrahydrofuran	Ave	3.757	4.261		1.13	1.00	13.4	35.0
1,1,1-Trichloroethane	Ave	4.550	4.912		1.08	1.00	8.0	35.0
1,2-Dichloroethane	Ave	0.3751	0.4493		1.20	1.00	19.8	35.0
Cyclohexane	Ave	0.1161	0.1370		1.18	1.00	18.1	35.0
Benzene	Ave	0.7966	0.9374		1.18	1.00	17.7	35.0
1-Butanol	Ave	0.1816	0.2414		1.33	1.00	32.9	35.0
Carbon tetrachloride	Ave	0.5066	0.4641		0.916	1.00	-8.4	35.0
2,3-Dimethylpentane	Ave	0.1737	0.1906		1.10	1.00	9.7	35.0
Thiophene	Ave	0.4391	0.5067		1.15	1.00	15.4	35.0
2,2,4-Trimethylpentane	Ave	1.682	1.893		1.13	1.00	12.5	35.0
Heptane	Ave	0.2685	0.2944		1.10	1.00	9.6	35.0
1,2-Dichloropropane	Ave	0.3673	0.4259		1.16	1.00	15.9	35.0
Trichloroethene	Ave	0.3491	0.3963		1.14	1.00	13.5	35.0
Dibromomethane	Ave	0.3179	0.3634		1.14	1.00	14.3	35.0
Bromodichloromethane	Ave	0.5431	0.6163		1.13	1.00	13.5	35.0
1,4-Dioxane	Ave	0.1248	0.1537		1.23	1.00	23.1	35.0
Methyl methacrylate	Ave	0.5242	0.5749		1.10	1.00	9.7	35.0
Methylcyclohexane	Ave	0.4592	0.6139		1.34	1.00	33.7	35.0
4-Methyl-2-pentanone (MIBK)	Ave	0.9789	1.123		1.15	1.00	14.7	35.0
cis-1,3-Dichloropropene	Ave	0.4314	0.5192		1.20	1.00	20.4	35.0
trans-1,3-Dichloropropene	Ave	0.4390	0.5330		1.21	1.00	21.4	35.0
Toluene	Ave	1.097	1.239		1.13	1.00	12.9	35.0
1,1,2-Trichloroethane	Ave	0.3491	0.3898		1.12	1.00	11.7	35.0
2-Hexanone	Ave	0.4698	0.5488		1.17	1.00	16.8	35.0
Octane	Ave	0.3345	0.3769		1.13	1.00	12.7	35.0
Dibromochloromethane	Ave	0.6967	0.7566		1.09	1.00	8.6	35.0
1,2-Dibromoethane (EDB)	Ave	0.6048	0.7174		1.19	1.00	18.6	35.0
Tetrachloroethene	Ave	0.3967	0.4483		1.13	1.00	13.0	35.0
Chlorobenzene	Ave	0.8798	0.9937		1.13	1.00	12.9	35.0
2,3-Dimethylheptane	Ave	1.698	1.666		0.981	1.00	-1.9	35.0
Ethylbenzene	Ave	1.508	1.644		1.09	1.00	9.0	35.0
m-Xylene & p-Xylene	Ave	1.143	1.302		2.28	2.00	13.9	35.0
Nonane	Ave	0.9762	1.075		1.10	1.00	10.1	35.0
Bromoform	Ave	0.8636	0.8324		0.964	1.00	-3.6	35.0
Styrene	Ave	0.8350	0.9590		1.15	1.00	14.8	35.0
o-Xylene	Ave	1.206	1.307		1.08	1.00	8.4	35.0
1,1,2,2-Tetrachloroethane	Ave	0.9788	1.052		1.07	1.00	7.5	35.0
1,2,3-Trichloropropane	Ave	0.2672	0.2811		1.05	1.00	5.2	35.0
Isopropylbenzene	Ave	1.782	1.989		1.12	1.00	11.6	35.0
Propylbenzene	Ave	0.4783	0.5515		1.15	1.00	15.3	35.0
2-Chlorotoluene	Ave	0.4639	0.5197		1.12	1.00	12.0	35.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19811-1

SDG No.:

Lab Sample ID: ICV 140-41306/18 Calibration Date: 07/28/2020 12:30

Instrument ID: MR Calib Start Date: 07/27/2020 17:38

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 07/28/2020 09:59

Lab File ID: RG27LCS.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Ethyltoluene	Ave	1.688	1.877		1.11	1.00	11.2	35.0
1,3,5-Trimethylbenzene	Ave	0.7325	0.8825		1.20	1.00	20.5	35.0
Alpha Methyl Styrene	Ave	0.7280	0.7903		1.09	1.00	8.6	35.0
Decane	Ave	1.317	1.466		1.11	1.00	11.3	35.0
tert-Butylbenzene	Ave	1.585	1.763		1.11	1.00	11.2	35.0
1,2,4-Trimethylbenzene	Ave	1.497	1.688		1.13	1.00	12.7	35.0
sec-Butylbenzene	Ave	2.271	2.519		1.11	1.00	10.9	35.0
1,3-Dichlorobenzene	Ave	1.114	1.249		1.12	1.00	12.2	35.0
Benzyl chloride	Ave	1.212	1.370		1.13	1.00	13.0	35.0
1,4-Dichlorobenzene	Ave	1.077	1.207		1.12	1.00	12.0	35.0
4-Isopropyltoluene	Ave	1.765	2.017		1.14	1.00	14.3	35.0
1,2,3-Trimethylbenzene	Ave	1.622	1.269		0.782	1.00	-21.8	35.0
Butylcyclohexane	Ave	1.263	1.309		1.04	1.00	3.7	35.0
1,2-Dichlorobenzene	Ave	1.151	1.284		1.12	1.00	11.5	35.0
Indane	Ave	1.523	1.585		1.04	1.00	4.1	35.0
Indene	Ave	1.294	1.205		0.931	1.00	-6.9	35.0
Butylbenzene	Ave	1.744	2.079		1.19	1.00	19.2	35.0
Undecane	Ave	1.525	1.790		1.17	1.00	17.4	35.0
1,2-Dibromo-3-Chloropropane	Ave	0.6804	0.5922		0.870	1.00	-13.0	35.0
1,2,4,5-Tetramethylbenzene	Ave	1.770	1.863		1.05	1.00	5.2	35.0
Dodecane	Ave	1.694	1.869		1.10	1.00	10.3	35.0
1,2,4-Trichlorobenzene	Ave	1.012	1.335		1.32	1.00	31.9	35.0
Naphthalene	Ave	1.902	2.484		1.31	1.00	30.6	35.0
Hexachlorobutadiene	Ave	1.152	1.306		1.13	1.00	13.4	35.0
1,2,3-Trichlorobenzene	Ave	1.109	1.453		1.31	1.00	31.0	35.0
2-Methylnaphthalene	Ave	1.023	0.9021		0.882	1.00	-11.8	50.0
1-Methylnaphthalene	Ave	1.280	1.296		1.01	1.00	1.3	50.0
4-Bromofluorobenzene (Surr)	Ave	0.6040	0.5986		3.96	4.00	-0.9	35.0

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27LCS.D
Lims ID: icv
Client ID:
Sample Type: ICV
Inject. Date: 28-Jul-2020 12:30:30 ALS Bottle#: 6 Worklist Smp#: 18
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016116-018
Misc. Info.: 314621S125
Operator ID: HMT Instrument ID: MR
Sublist:

Method: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 28-Jul-2020 17:12:39 Calib Date: 28-Jul-2020 09:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC09R.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1014

First Level Reviewer: barlozhetskayaa Date: 28-Jul-2020 17:12:39

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.296	8.308	-0.012	90	178764	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.539	10.539	0.000	96	1519481	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.371	15.375	-0.004	90	1266782	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.026	17.025	0.001	94	758272	4.00	3.96	
6 Chlorodifluoromethane	51	3.335	3.343	-0.008	96	293448	1.00	1.12	
7 Propene	41	3.346	3.349	-0.003	98	243229	1.00	1.31	
8 Dichlorodifluoromethane	85	3.394	3.400	-0.006	98	229118	1.00	1.30	
9 Chloromethane	52	3.561	3.569	-0.008	75	47864	1.00	1.06	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.567	3.577	-0.010	91	197030	1.00	1.14	
11 Acetaldehyde	44	3.707	3.724	-0.017	94	334229	5.00	5.40	
12 Vinyl chloride	62	3.718	3.726	-0.008	99	140747	1.00	1.08	
13 Butane	43	3.799	3.808	-0.009	86	263533	1.00	1.13	
14 Butadiene	54	3.799	3.809	-0.010	63	118948	1.00	1.09	
15 Bromomethane	94	4.095	4.103	-0.008	98	98185	1.00	1.05	
16 Chloroethane	64	4.225	4.235	-0.010	84	58533	1.00	1.06	
17 Ethanol	31	4.338	4.364	-0.026	97	312620	5.00	4.40	
18 Vinyl bromide	106	4.505	4.515	-0.010	98	103095	1.00	1.17	
19 2-Methylbutane	43	4.548	4.561	-0.013	94	191339	1.00	1.11	
20 Trichlorofluoromethane	101	4.753	4.765	-0.012	98	246124	1.00	1.12	
21 Acrolein	56	4.780	4.779	0.001	95	43373	1.00	1.13	
22 Acetonitrile	40	4.839	4.870	-0.031	98	61964	1.00	1.16	
23 Acetone	58	4.893	4.913	-0.020	99	97237	1.00	1.35	
24 Pentane	72	4.974	4.971	0.003	96	19285	1.00	1.14	
25 Isopropyl alcohol	45	4.990	5.027	-0.037	93	292410	1.00	1.29	
26 Ethyl ether	31	5.141	5.168	-0.027	89	175207	1.00	1.10	
27 1,1-Dichloroethene	96	5.432	5.444	-0.012	95	108636	1.00	1.13	
28 Acrylonitrile	53	5.546	5.572	-0.026	97	91767	1.00	1.12	
30 1,1,2-Trichloro-1,2,2-trifluoroe	101	5.610	5.622	-0.012	96	220350	1.00	1.12	
29 2-Methyl-2-propanol	59	5.583	5.629	-0.046	96	270140	1.00	1.23	
31 Methylene Chloride	84	5.778	5.788	-0.010	91	148335	1.00	1.12	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	5.794	5.802	-0.008	94	145514	1.00	1.15	
33 Carbon disulfide	76	5.929	5.938	-0.009	98	296011	1.00	1.15	
34 trans-1,2-Dichloroethene	96	6.570	6.580	-0.010	95	102501	1.00	1.12	
35 2-Methylpentane	43	6.592	6.600	-0.008	97	330874	1.00	1.03	
36 Methyl tert-butyl ether	73	6.716	6.747	-0.031	92	266967	1.00	1.12	
37 1,1-Dichloroethane	63	6.991	7.002	-0.011	99	239266	1.00	1.12	
38 Vinyl acetate	43	7.104	7.120	-0.016	100	418633	1.00	1.18	
40 Hexane	56	7.562	7.575	-0.013	76	110634	1.00	1.15	
39 2-Butanone (MEK)	72	7.552	7.583	-0.031	94	50693	1.00	1.12	
41 Isopropyl ether	45	7.740	7.761	-0.021	96	558915	1.00	1.13	
42 cis-1,2-Dichloroethene	96	7.967	7.981	-0.014	98	116729	1.00	1.14	
43 Ethyl acetate	43	8.177	8.189	-0.012	97	356099	1.00	1.08	
44 Chloroform	83	8.317	8.326	-0.009	89	228097	1.00	1.16	
45 Tert-butyl ethyl ether	59	8.420	8.448	-0.028	97	391104	1.00	1.01	
46 Tetrahydrofuran	42	8.716	8.750	-0.034	92	190406	1.00	1.13	
47 1,1,1-Trichloroethane	97	9.342	9.348	-0.006	95	219529	1.00	1.08	
48 1,2-Dichloroethane	62	9.455	9.461	-0.006	94	170664	1.00	1.20	
50 Cyclohexane	69	9.946	9.954	-0.008	77	52043	1.00	1.18	
51 Benzene	78	9.951	9.958	-0.007	94	356089	1.00	1.18	
49 n-Butanol	31	9.957	9.970	-0.013	67	91713	1.00	1.33	
52 Carbon tetrachloride	117	9.973	9.980	-0.007	93	176290	1.00	0.9161	
53 2,3-Dimethylpentane	71	10.086	10.094	-0.008	91	72390	1.00	1.10	
54 Thiophene	84	10.237	10.245	-0.008	94	192465	1.00	1.15	
55 Isooctane	57	10.760	10.766	-0.006	98	719027	1.00	1.13	
56 n-Heptane	71	11.154	11.162	-0.008	94	111817	1.00	1.10	
57 1,2-Dichloropropane	63	11.235	11.235	0.000	88	161778	1.00	1.16	
58 Trichloroethene	130	11.267	11.272	-0.005	95	150542	1.00	1.14	
59 Dibromomethane	93	11.353	11.357	-0.004	92	138050	1.00	1.14	
60 Dichlorobromomethane	83	11.504	11.510	-0.006	96	234127	1.00	1.13	
61 1,4-Dioxane	88	11.542	11.563	-0.021	94	58383	1.00	1.23	
62 Methyl methacrylate	41	11.623	11.632	-0.009	86	218391	1.00	1.10	
63 Methylcyclohexane	83	12.054	12.063	-0.009	86	233187	1.00	1.34	
64 4-Methyl-2-pentanone (MIBK)	43	12.502	12.517	-0.015	97	426535	1.00	1.15	
65 cis-1,3-Dichloropropene	75	12.545	12.548	-0.003	97	197238	1.00	1.20	
66 trans-1,3-Dichloropropene	75	13.257	13.261	-0.004	91	168803	1.00	1.21	
67 Toluene	91	13.375	13.381	-0.006	92	392369	1.00	1.13	
68 1,1,2-Trichloroethane	83	13.456	13.460	-0.004	96	123437	1.00	1.12	
69 2-Hexanone	58	13.861	13.878	-0.017	88	173789	1.00	1.17	
70 n-Octane	85	14.093	14.096	-0.003	98	119371	1.00	1.13	
71 Chlorodibromomethane	129	14.163	14.165	-0.002	96	239608	1.00	1.09	
72 Ethylene Dibromide	107	14.459	14.462	-0.003	97	227185	1.00	1.19	
73 Tetrachloroethene	129	14.535	14.538	-0.003	92	141981	1.00	1.13	
74 Chlorobenzene	112	15.419	15.423	-0.004	93	314685	1.00	1.13	
75 2,3-Dimethylheptane	43	15.452	15.455	-0.003	92	527639	1.00	0.9815	
76 Ethylbenzene	91	15.716	15.718	-0.002	98	520628	1.00	1.09	
77 m-Xylene & p-Xylene	91	15.878	15.881	-0.003	96	824710	2.00	2.28	
78 n-Nonane	57	16.314	16.314	0.000	94	340454	1.00	1.10	
79 Bromoform	173	16.320	16.323	-0.003	97	263601	1.00	0.9638	
80 Styrene	104	16.347	16.346	0.001	95	303694	1.00	1.15	
81 o-Xylene	91	16.406	16.406	0.000	98	413977	1.00	1.08	
82 1,1,2,2-Tetrachloroethane	83	16.730	16.734	-0.004	98	333162	1.00	1.07	
83 1,2,3-Trichloropropane	110	16.891	16.895	-0.004	92	89009	1.00	1.05	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	16.994	16.998	-0.004	95	629906	1.00	1.12	
85 N-Propylbenzene	120	17.549	17.547	0.002	99	174667	1.00	1.15	
86 2-Chlorotoluene	126	17.587	17.590	-0.003	96	164574	1.00	1.12	
87 4-Ethyltoluene	105	17.700	17.704	-0.004	99	594569	1.00	1.11	
88 1,3,5-Trimethylbenzene	120	17.781	17.782	-0.001	92	279476	1.00	1.20	
89 Alpha Methyl Styrene	118	18.018	18.020	-0.002	89	250286	1.00	1.09	
90 n-Decane	57	18.088	18.089	-0.001	85	464135	1.00	1.11	
91 tert-Butylbenzene	119	18.218	18.218	0.000	93	558454	1.00	1.11	
92 1,2,4-Trimethylbenzene	105	18.229	18.232	-0.003	96	534515	1.00	1.13	
93 sec-Butylbenzene	105	18.493	18.494	-0.001	98	797670	1.00	1.11	
94 1,3-Dichlorobenzene	146	18.504	18.504	0.000	96	395655	1.00	1.12	
95 Benzyl chloride	91	18.584	18.584	0.000	97	433725	1.00	1.13	
96 1,4-Dichlorobenzene	146	18.595	18.596	-0.001	95	382210	1.00	1.12	
97 4-Isopropyltoluene	119	18.660	18.662	-0.002	97	638722	1.00	1.14	
98 1,2,3-Trimethylbenzene	105	18.714	18.713	0.001	98	401939	1.00	0.7822	
99 Butylcyclohexane	83	18.773	18.773	0.000	86	414711	1.00	1.04	
100 2,3-Dihydroindene	117	18.962	18.961	0.001	93	501942	1.00	1.04	
101 1,2-Dichlorobenzene	146	18.962	18.962	0.000	93	406489	1.00	1.12	
102 Indene	116	19.097	19.093	0.004	89	381679	1.00	0.9313	
103 n-Butylbenzene	91	19.102	19.106	-0.004	98	658552	1.00	1.19	
104 Undecane	57	19.431	19.431	0.000	91	566914	1.00	1.17	
105 1,2-Dibromo-3-Chloropropane	157	19.577	19.577	0.000	90	187543	1.00	0.8704	
106 1,2,4,5-Tetramethylbenzene	119	19.873	19.873	0.000	97	589873	1.00	1.05	
107 Dodecane	57	20.488	20.489	-0.001	88	592032	1.00	1.10	
108 1,2,4-Trichlorobenzene	180	20.671	20.672	-0.001	93	422791	1.00	1.32	
109 Naphthalene	128	20.806	20.807	-0.001	99	786626	1.00	1.31	
110 Hexachlorobutadiene	225	21.027	21.028	-0.001	88	413454	1.00	1.13	
111 1,2,3-Trichlorobenzene	180	21.092	21.097	-0.005	93	460181	1.00	1.31	
112 2-Methylnaphthalene	142	21.831	21.834	-0.003	99	285706	1.00	0.8817	
113 1-Methylnaphthalene	142	21.965	21.967	-0.002	98	410495	1.00	1.01	
A 116 C8 Range	1	14.085	(14.055-14.115)		0	1541437	1.00	1.13	
S 117 Xylenes, Total	100				0		3.00	3.36	
S 118 1,2-Dichloroethene, Total	1				0		2.00	2.26	
T 143 2-Methylthiophene TIC	97	13.532	13.532	0.000	97	333995	1.00	1.05	
T 142 3-Methylthiophene TIC	97	13.737	13.742	-0.005	98	329909	1.00	1.04	
T 150 2-Ethylthiophene TIC	97	15.818	16.734	-0.922	98	400310	1.00	1.26	
T 153 1,2-Dimethyl-4-Ethylbenzene TIC	119	19.485	19.474	0.011	89	479541	1.00	1.51	
T 155 1,2,3,5-Tetramethylbenzene TIC	119	19.927	19.927	0.000	95	357919	1.00	1.13	
T 156 1,2,3,4-Tetramethylbenzene TIC	119	20.321	20.321	0.000	97	488965	1.00	1.54	
T 157 Benzo(b)thiophene TIC	134	20.909	20.909	0.000	99	382459	1.00	1.21	

Reagents:

40CV101S_00125	Amount Added: 50.00	Units: mL	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

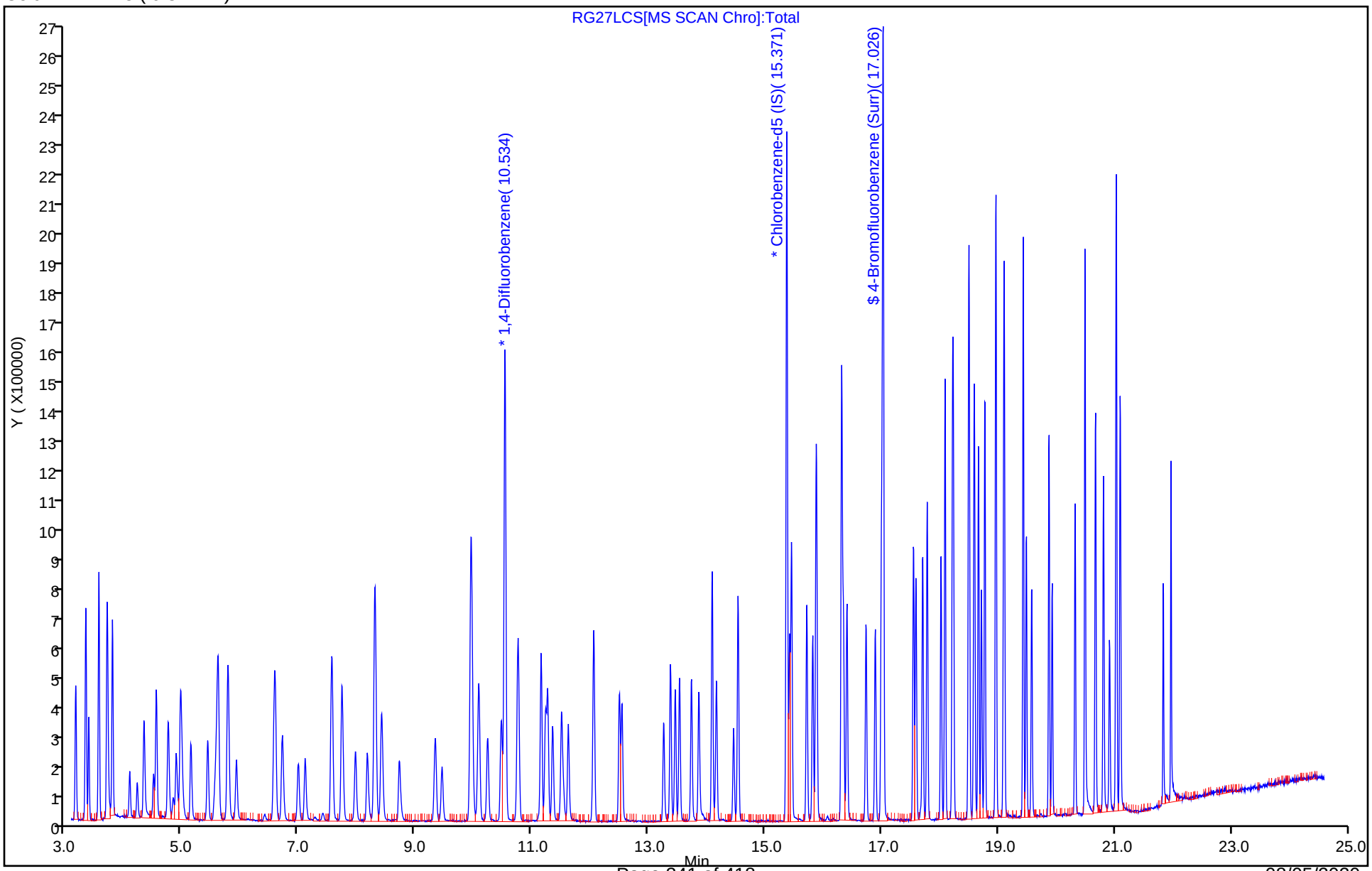
Report Date: 28-Jul-2020 17:12:41 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27LCS.D

Injection Date:	28-Jul-2020 12:30:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	icv			Worklist Smp#:	18
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19811-1

SDG No.:

Lab Sample ID: CCVIS 140-41446/2 Calibration Date: 08/01/2020 08:35

Instrument ID: MR Calib Start Date: 07/27/2020 17:38

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 07/28/2020 09:59

Lab File ID: RCCVH01.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorodifluoromethane	Ave	5.854	6.834		1.87	1.60	16.7	30.0
Propene	Qua		4.742		1.90	1.60	18.8	30.0
Dichlorodifluoromethane	Ave	3.954	4.735		1.92	1.60	19.7	30.0
Chloromethane	Ave	1.011	1.176		1.86	1.60	16.3	30.0
1,2-Dichloro-1,1,2,2-tetrafluoroethane	Ave	3.874	3.895		1.61	1.60	0.6	30.0
Acetaldehyde	Ave	1.384	1.555		8.99	8.00	12.4	30.0
Vinyl chloride	Ave	2.905	3.319		1.83	1.60	14.2	30.0
1,3-Butadiene	Ave	2.442	2.924		1.92	1.60	19.7	30.0
Butane	Ave	5.228	6.522		2.00	1.60	24.8	30.0
Bromomethane	Ave	2.083	2.232		1.71	1.60	7.1	30.0
Chloroethane	Ave	1.236	1.425		1.84	1.60	15.3	30.0
Ethanol	Ave	1.590	1.633		8.22	8.00	2.7	30.0
Vinyl bromide	Ave	1.973	2.346		1.90	1.60	18.9	30.0
2-Methylbutane	Ave	3.861	4.923		2.04	1.60	27.5	30.0
Trichlorofluoromethane	Ave	4.901	5.051		1.65	1.60	3.1	30.0
Acrolein	Ave	0.8551	1.050		1.96	1.60	22.8	30.0
Acetonitrile	Ave	1.196	1.350		1.81	1.60	12.9	30.0
Acetone	Ave	1.615	1.563		1.55	1.60	-3.2	30.0
Pentane	Ave	0.3799	0.4521		1.90	1.60	19.0	30.0
Isopropyl alcohol	QuaF		6.659		2.12	1.60	32.3*	30.0
Ethyl ether	Ave	3.564	4.904		2.20	1.60	37.6*	30.0
1,1-Dichloroethene	Ave	2.158	2.292		1.70	1.60	6.2	30.0
Acrylonitrile	Ave	1.829	2.202		1.93	1.60	20.4	30.0
tert-Butyl alcohol	Ave	4.928	5.905		1.92	1.60	19.8	30.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	4.393	4.697		1.71	1.60	6.9	30.0
Methylene Chloride	Lin2		2.875		1.90	1.60	18.5	30.0
3-Chloropropene	Ave	2.842	3.549		2.00	1.60	24.9	30.0
Carbon disulfide	Ave	5.769	6.719		1.86	1.60	16.5	30.0
trans-1,2-Dichloroethene	Ave	2.042	2.239		1.75	1.60	9.6	30.0
2-Methylpentane	Ave	7.180	8.164		1.82	1.60	13.7	30.0
Methyl tert-butyl ether	Ave	5.317	6.027		1.81	1.60	13.3	30.0
1,1-Dichloroethane	Ave	4.792	5.350		1.79	1.60	11.6	30.0
Vinyl acetate	Ave	7.963	10.91		2.19	1.60	37.0*	30.0
2-Butanone (MEK)	Ave	1.014	1.197		1.89	1.60	18.1	30.0
Hexane	Ave	2.160	2.554		1.89	1.60	18.3	30.0
Isopropyl ether	Ave	11.04	14.47		2.10	1.60	31.1*	30.0
cis-1,2-Dichloroethene	Ave	2.301	2.458		1.71	1.60	6.8	30.0
Ethyl acetate	Ave	7.406	9.204		1.99	1.60	24.3	30.0
Chloroform	Ave	4.390	4.936		1.80	1.60	12.4	30.0
Tert-butyl ethyl ether	Ave	8.680	9.264		1.71	1.60	6.7	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19811-1

SDG No.:

Lab Sample ID: CCVIS 140-41446/2 Calibration Date: 08/01/2020 08:35

Instrument ID: MR Calib Start Date: 07/27/2020 17:38

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 07/28/2020 09:59

Lab File ID: RCCVH01.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Tetrahydrofuran	Ave	3.757	4.965		2.11	1.60	32.1*	30.0
1,1,1-Trichloroethane	Ave	4.550	4.779		1.68	1.60	5.0	30.0
1,2-Dichloroethane	Ave	0.3751	0.4527		1.93	1.60	20.7	30.0
Cyclohexane	Ave	0.1161	0.1368		1.89	1.60	17.8	30.0
Benzene	Ave	0.7966	0.9445		1.90	1.60	18.6	30.0
1-Butanol	Ave	0.1816	0.2604		2.29	1.60	43.4*	30.0
Carbon tetrachloride	Ave	0.5066	0.5786		1.83	1.60	14.2	30.0
2,3-Dimethylpentane	Ave	0.1737	0.1962		1.81	1.60	12.9	30.0
Thiophene	Ave	0.4391	0.4994		1.82	1.60	13.7	30.0
2,2,4-Trimethylpentane	Ave	1.682	2.087		1.99	1.60	24.1	30.0
Heptane	Ave	0.2685	0.3259		1.94	1.60	21.4	30.0
1,2-Dichloropropane	Ave	0.3673	0.4571		1.99	1.60	24.4	30.0
Trichloroethene	Ave	0.3491	0.3765		1.73	1.60	7.9	30.0
Dibromomethane	Ave	0.3179	0.3607		1.82	1.60	13.5	30.0
Bromodichloromethane	Ave	0.5431	0.6484		1.91	1.60	19.4	30.0
1,4-Dioxane	Ave	0.1248	0.1433		1.84	1.60	14.8	30.0
Methyl methacrylate	Ave	0.5242	0.6622		2.02	1.60	26.3	30.0
Methylcyclohexane	Ave	0.4592	0.6374		2.22	1.60	38.8*	30.0
4-Methyl-2-pentanone (MIBK)	Ave	0.9789	1.324		2.16	1.60	35.3*	30.0
cis-1,3-Dichloropropene	Ave	0.4314	0.5232		1.94	1.60	21.3	30.0
trans-1,3-Dichloropropene	Ave	0.4390	0.5338		1.95	1.60	21.6	30.0
Toluene	Ave	1.097	1.248		1.82	1.60	13.8	30.0
1,1,2-Trichloroethane	Ave	0.3491	0.4128		1.89	1.60	18.2	30.0
2-Hexanone	Ave	0.4698	0.6258		2.13	1.60	33.2*	30.0
Octane	Ave	0.3345	0.3830		1.83	1.60	14.5	30.0
Dibromochloromethane	Ave	0.6967	0.7814		1.79	1.60	12.2	30.0
1,2-Dibromoethane (EDB)	Ave	0.6048	0.6912		1.83	1.60	14.3	30.0
Tetrachloroethene	Ave	0.3967	0.4182		1.69	1.60	5.4	30.0
Chlorobenzene	Ave	0.8798	1.033		1.88	1.60	17.4	30.0
2,3-Dimethylheptane	Ave	1.698	1.966		1.85	1.60	15.8	30.0
Ethylbenzene	Ave	1.508	1.700		1.80	1.60	12.7	30.0
m-Xylene & p-Xylene	Ave	1.143	1.304		3.65	3.20	14.1	30.0
Nonane	Ave	0.9762	1.224		2.01	1.60	25.4	30.0
Bromoform	Ave	0.8636	0.8712		1.61	1.60	0.9	30.0
Styrene	Ave	0.8350	1.005		1.93	1.60	20.4	30.0
o-Xylene	Ave	1.206	1.349		1.79	1.60	11.8	30.0
1,1,2,2-Tetrachloroethane	Ave	0.9788	1.220		1.99	1.60	24.6	30.0
1,2,3-Trichloropropane	Ave	0.2672	0.3045		1.82	1.60	14.0	30.0
Isopropylbenzene	Ave	1.782	2.043		1.83	1.60	14.7	30.0
Propylbenzene	Ave	0.4783	0.5744		1.92	1.60	20.1	30.0
2-Chlorotoluene	Ave	0.4639	0.5348		1.84	1.60	15.3	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19811-1

SDG No.:

Lab Sample ID: CCVIS 140-41446/2 Calibration Date: 08/01/2020 08:35

Instrument ID: MR Calib Start Date: 07/27/2020 17:38

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 07/28/2020 09:59

Lab File ID: RCCVH01.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Ethyltoluene	Ave	1.688	1.984		1.88	1.60	17.6	30.0
1,3,5-Trimethylbenzene	Ave	0.7325	0.9783		2.14	1.60	33.6*	30.0
Alpha Methyl Styrene	Ave	0.7280	0.8627		1.90	1.60	18.5	30.0
Decane	Ave	1.317	1.733		2.11	1.60	31.6*	30.0
tert-Butylbenzene	Ave	1.585	1.839		1.86	1.60	16.0	30.0
1,2,4-Trimethylbenzene	Ave	1.497	1.827		1.95	1.60	22.1	30.0
sec-Butylbenzene	Ave	2.271	2.813		1.98	1.60	23.9	30.0
1,3-Dichlorobenzene	Ave	1.114	1.293		1.86	1.60	16.1	30.0
Benzyl chloride	Ave	1.212	1.517		2.00	1.60	25.1	30.0
1,4-Dichlorobenzene	Ave	1.077	1.249		1.86	1.60	16.0	30.0
4-Isopropyltoluene	Ave	1.765	2.191		1.99	1.60	24.2	30.0
1,2,3-Trimethylbenzene	Ave	1.622	1.369		1.35	1.60	-15.6	30.0
Butylcyclohexane	Ave	1.263	1.478		1.87	1.60	17.0	30.0
1,2-Dichlorobenzene	Ave	1.151	1.324		1.84	1.60	15.1	30.0
Indane	Ave	1.523	1.708		1.79	1.60	12.2	30.0
Indene	Ave	1.294	1.330		1.64	1.60	2.7	30.0
Butylbenzene	Ave	1.744	2.391		2.19	1.60	37.1*	30.0
Undecane	Ave	1.525	2.142		2.25	1.60	40.4*	30.0
1,2-Dibromo-3-Chloropropane	Ave	0.6804	0.6394		1.50	1.60	-6.0	30.0
1,2,4,5-Tetramethylbenzene	Ave	1.770	2.022		1.83	1.60	14.2	30.0
Dodecane	Ave	1.694	2.160		2.04	1.60	27.5	30.0
1,2,4-Trichlorobenzene	Ave	1.012	1.334		2.11	1.60	31.9*	30.0
Naphthalene	Ave	1.902	2.669		2.25	1.60	40.3*	30.0
Hexachlorobutadiene	Ave	1.152	1.260		1.75	1.60	9.4	30.0
1,2,3-Trichlorobenzene	Ave	1.109	1.413		2.04	1.60	27.4	30.0
2-Methylnaphthalene	Ave	1.023	0.8553		1.34	1.60	-16.4	50.0
1-Methylnaphthalene	Ave	1.280	1.083		1.35	1.60	-15.4	50.0
4-Bromofluorobenzene (Surr)	Ave	0.6040	0.5929		3.93	4.00	-1.8	30.0

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MR\20200730-16173.b\RCCVH01.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 01-Aug-2020 08:35:30 ALS Bottle#: 16 Worklist Smp#: 2
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016173-002
Misc. Info.: S123 80ML
Operator ID: HMT Instrument ID: MR
Sublist: chrom-MR_TO15*sub19

Method: \\chromfs\Knoxville\ChromData\MR\20200730-16173.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 03-Aug-2020 15:13:08 Calib Date: 28-Jul-2020 09:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC09R.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1028

First Level Reviewer: khachitpongpanits Date: 03-Aug-2020 15:13:08

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
*	1 Chlorobromomethane (IS)	128	8.317	8.317	0.000	87	117996	4.00	4.00	
*	2 1,4-Difluorobenzene	114	10.544	10.544	0.000	96	979726	4.00	4.00	
*	3 Chlorobenzene-d5 (IS)	117	15.376	15.376	0.000	90	833270	4.00	4.00	
$	4 4-Bromofluorobenzene (Surr)	95	17.026	17.026	0.000	95	494056	4.00	3.93	
	6 Chlorodifluoromethane	51	3.346	3.346	0.000	96	322560	1.60	1.87	
	7 Propene	41	3.356	3.356	0.000	99	223809	1.60	1.90	
	8 Dichlorodifluoromethane	85	3.405	3.405	0.000	96	223489	1.60	1.92	
	9 Chloromethane	52	3.572	3.572	0.000	95	55527	1.60	1.86	
	10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.577	3.577	0.000	91	183839	1.60	1.61	
	11 Acetaldehyde	44	3.718	3.718	0.000	93	366971	8.00	8.99	
	12 Vinyl chloride	62	3.728	3.728	0.000	98	156661	1.60	1.83	
	14 Butadiene	54	3.809	3.809	0.000	62	137996	1.60	1.92	
	13 Butane	43	3.809	3.809	0.000	87	307849	1.60	2.00	
	15 Bromomethane	94	4.106	4.106	0.000	97	105326	1.60	1.71	
	16 Chloroethane	64	4.241	4.241	0.000	81	67254	1.60	1.84	
	17 Ethanol	31	4.354	4.354	0.000	98	385402	8.00	8.22	
	18 Vinyl bromide	106	4.521	4.521	0.000	98	110737	1.60	1.90	
	19 2-Methylbutane	43	4.570	4.570	0.000	94	232341	1.60	2.04	
	20 Trichlorofluoromethane	101	4.769	4.769	0.000	95	238411	1.60	1.65	
	21 Acrolein	56	4.785	4.785	0.000	92	49555	1.60	1.96	
	22 Acetonitrile	40	4.850	4.850	0.000	100	63736	1.60	1.81	
	23 Acetone	58	4.904	4.904	0.000	99	73754	1.60	1.55	
	24 Pentane	72	4.979	4.979	0.000	96	21338	1.60	1.90	
	25 Isopropyl alcohol	45	5.001	5.001	0.000	92	314299	1.60	2.12	
	26 Ethyl ether	31	5.152	5.152	0.000	85	231445	1.60	2.20	
	27 1,1-Dichloroethene	96	5.449	5.449	0.000	92	108177	1.60	1.70	
	28 Acrylonitrile	53	5.562	5.562	0.000	95	103941	1.60	1.93	
	29 2-Methyl-2-propanol	59	5.589	5.589	0.000	97	278716	1.60	1.92	
	30 1,1,2-Trichloro-1,2,2-trifluoroe	101	5.621	5.621	0.000	94	221676	1.60	1.71	
	31 Methylene Chloride	84	5.788	5.788	0.000	89	135705	1.60	1.90	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	5.804	5.804	0.000	93	167523	1.60	2.00	
33 Carbon disulfide	76	5.939	5.939	0.000	96	317135	1.60	1.86	
34 trans-1,2-Dichloroethene	96	6.581	6.581	0.000	92	105682	1.60	1.75	
35 2-Methylpentane	43	6.603	6.603	0.000	96	385343	1.60	1.82	
36 Methyl tert-butyl ether	73	6.721	6.721	0.000	90	284463	1.60	1.81	
37 1,1-Dichloroethane	63	7.002	7.002	0.000	99	252521	1.60	1.79	
38 Vinyl acetate	43	7.120	7.120	0.000	100	514896	1.60	2.19	
39 2-Butanone (MEK)	72	7.557	7.557	0.000	95	56515	1.60	1.89	
40 Hexane	56	7.579	7.579	0.000	79	120555	1.60	1.89	
41 Isopropyl ether	45	7.746	7.746	0.000	95	683097	1.60	2.10	
42 cis-1,2-Dichloroethene	96	7.983	7.983	0.000	96	116009	1.60	1.71	
43 Ethyl acetate	43	8.182	8.182	0.000	97	434408	1.60	1.99	
44 Chloroform	83	8.328	8.328	0.000	91	232950	1.60	1.80	
45 Tert-butyl ethyl ether	59	8.425	8.425	0.000	98	437227	1.60	1.71	
46 Tetrahydrofuran	42	8.733	8.733	0.000	90	234325	1.60	2.11	
47 1,1,1-Trichloroethane	97	9.353	9.353	0.000	93	225563	1.60	1.68	
48 1,2-Dichloroethane	62	9.460	9.460	0.000	92	177414	1.60	1.93	
50 Cyclohexane	69	9.957	9.957	0.000	77	53593	1.60	1.89	
51 Benzene	78	9.962	9.962	0.000	91	370147	1.60	1.90	
49 n-Butanol	31	9.967	9.967	0.000	66	102043	1.60	2.29	
52 Carbon tetrachloride	117	9.984	9.984	0.000	88	226753	1.60	1.83	
53 2,3-Dimethylpentane	71	10.097	10.097	0.000	92	76877	1.60	1.81	
54 Thiophene	84	10.248	10.248	0.000	92	195716	1.60	1.82	
55 Isooctane	57	10.771	10.771	0.000	96	818016	1.60	1.99	
56 n-Heptane	71	11.170	11.170	0.000	95	127715	1.60	1.94	
57 1,2-Dichloropropane	63	11.240	11.240	0.000	88	179113	1.60	1.99	
58 Trichloroethene	130	11.278	11.278	0.000	92	147558	1.60	1.73	
59 Dibromomethane	93	11.364	11.364	0.000	94	141364	1.60	1.82	
60 Dichlorobromomethane	83	11.515	11.515	0.000	93	254088	1.60	1.91	
61 1,4-Dioxane	88	11.537	11.537	0.000	88	56168	1.60	1.84	
62 Methyl methacrylate	41	11.628	11.628	0.000	84	259510	1.60	2.02	
63 Methylcyclohexane	83	12.065	12.065	0.000	83	249770	1.60	2.22	
64 4-Methyl-2-pentanone (MIBK)	43	12.502	12.502	0.000	96	518880	1.60	2.16	
65 cis-1,3-Dichloropropene	75	12.550	12.550	0.000	94	205052	1.60	1.94	
66 trans-1,3-Dichloropropene	75	13.267	13.267	0.000	91	177908	1.60	1.95	
67 Toluene	91	13.381	13.381	0.000	92	416058	1.60	1.82	
68 1,1,2-Trichloroethane	83	13.462	13.462	0.000	95	137572	1.60	1.89	
69 2-Hexanone	58	13.866	13.866	0.000	88	208598	1.60	2.13	
70 n-Octane	85	14.098	14.098	0.000	98	127670	1.60	1.83	
71 Chlorodibromomethane	129	14.173	14.173	0.000	93	260443	1.60	1.79	
72 Ethylene Dibromide	107	14.465	14.465	0.000	96	230381	1.60	1.83	
73 Tetrachloroethene	129	14.540	14.540	0.000	91	139403	1.60	1.69	
74 Chlorobenzene	112	15.424	15.424	0.000	92	344399	1.60	1.88	
75 2,3-Dimethylheptane	43	15.457	15.457	0.000	90	655259	1.60	1.85	
76 Ethylbenzene	91	15.716	15.716	0.000	97	566567	1.60	1.80	
77 m-Xylene & p-Xylene	91	15.883	15.883	0.000	95	869189	3.20	3.65	
78 n-Nonane	57	16.314	16.314	0.000	93	407971	1.60	2.01	
79 Bromoform	173	16.325	16.325	0.000	93	290362	1.60	1.61	
80 Styrene	104	16.347	16.347	0.000	94	334985	1.60	1.93	
81 o-Xylene	91	16.406	16.406	0.000	97	449469	1.60	1.79	
82 1,1,2,2-Tetrachloroethane	83	16.735	16.735	0.000	97	406486	1.60	1.99	
83 1,2,3-Trichloropropane	110	16.891	16.891	0.000	90	101486	1.60	1.82	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	16.999	16.999	0.000	96	681111	1.60	1.83	
85 N-Propylbenzene	120	17.549	17.549	0.000	99	191462	1.60	1.92	
86 2-Chlorotoluene	126	17.592	17.592	0.000	97	178262	1.60	1.84	
87 4-Ethyltoluene	105	17.705	17.705	0.000	98	661294	1.60	1.88	
88 1,3,5-Trimethylbenzene	120	17.781	17.781	0.000	93	326059	1.60	2.14	
89 Alpha Methyl Styrene	118	18.018	18.018	0.000	89	287539	1.60	1.90	
90 n-Decane	57	18.088	18.088	0.000	82	577505	1.60	2.11	
91 tert-Butylbenzene	119	18.218	18.218	0.000	94	612868	1.60	1.86	
92 1,2,4-Trimethylbenzene	105	18.234	18.234	0.000	95	609106	1.60	1.95	
93 sec-Butylbenzene	105	18.493	18.493	0.000	98	937447	1.60	1.98	
94 1,3-Dichlorobenzene	146	18.503	18.503	0.000	95	431026	1.60	1.86	
95 Benzyl chloride	91	18.584	18.584	0.000	96	505511	1.60	2.00	
96 1,4-Dichlorobenzene	146	18.595	18.595	0.000	94	416398	1.60	1.86	
97 4-Isopropyltoluene	119	18.660	18.660	0.000	96	730273	1.60	1.99	
98 1,2,3-Trimethylbenzene	105	18.714	18.714	0.000	97	456318	1.60	1.35	
99 Butylcyclohexane	83	18.773	18.773	0.000	83	492620	1.60	1.87	
100 2,3-Dihydroindene	117	18.962	18.962	0.000	93	569433	1.60	1.79	
101 1,2-Dichlorobenzene	146	18.962	18.962	0.000	93	441342	1.60	1.84	
102 Indene	116	19.091	19.091	0.000	92	443149	1.60	1.64	
103 n-Butylbenzene	91	19.102	19.102	0.000	98	796894	1.60	2.19	
104 Undecane	57	19.431	19.431	0.000	88	713952	1.60	2.25	
105 1,2-Dibromo-3-Chloropropane	157	19.577	19.577	0.000	88	213115	1.60	1.50	
106 1,2,4,5-Tetramethylbenzene	119	19.873	19.873	0.000	98	673997	1.60	1.83	
107 Dodecane	57	20.488	20.488	0.000	87	720038	1.60	2.04	
108 1,2,4-Trichlorobenzene	180	20.671	20.671	0.000	94	444783	1.60	2.11	
109 Naphthalene	128	20.806	20.806	0.000	99	889634	1.60	2.25	
110 Hexachlorobutadiene	225	21.027	21.027	0.000	95	420008	1.60	1.75	
111 1,2,3-Trichlorobenzene	180	21.092	21.092	0.000	94	470905	1.60	2.04	
112 2-Methylnaphthalene	142	21.831	21.831	0.000	98	285104	1.60	1.34	
113 1-Methylnaphthalene	142	21.965	21.965	0.000	98	360904	1.60	1.35	
A 116 C8 Range	1	14.093	(14.049-14.146)		0	1855022	1.60	2.10	
S 117 Xylenes, Total	100				0		4.80	5.44	
S 118 1,2-Dichloroethene, Total	1				0		3.20	3.46	
T 143 2-Methylthiophene TIC	97	13.537	13.537	0.000	99	352047	1.60	1.69	
T 142 3-Methylthiophene TIC	97	13.742	13.742	0.000	97	349650	1.60	1.68	
T 150 2-Ethylthiophene TIC	97	15.823	15.823	0.000	97	432720	1.60	2.08	a
T 153 1,2-Dimethyl-4-Ethylbenzene TIC	119	19.480	19.480	0.000	87	554998	1.60	2.66	
T 155 1,2,3,5-Tetramethylbenzene TIC	119	19.927	19.927	0.000	96	398935	1.60	1.92	
T 156 1,2,3,4-Tetramethylbenzene TIC	119	20.321	20.321	0.000	98	561369	1.60	2.69	
T 157 Benzo(b)thiophene TIC	134	20.908	20.908	0.000	98	439702	1.60	2.11	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

40CV101S_00123	Amount Added: 80.00	Units: mL	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

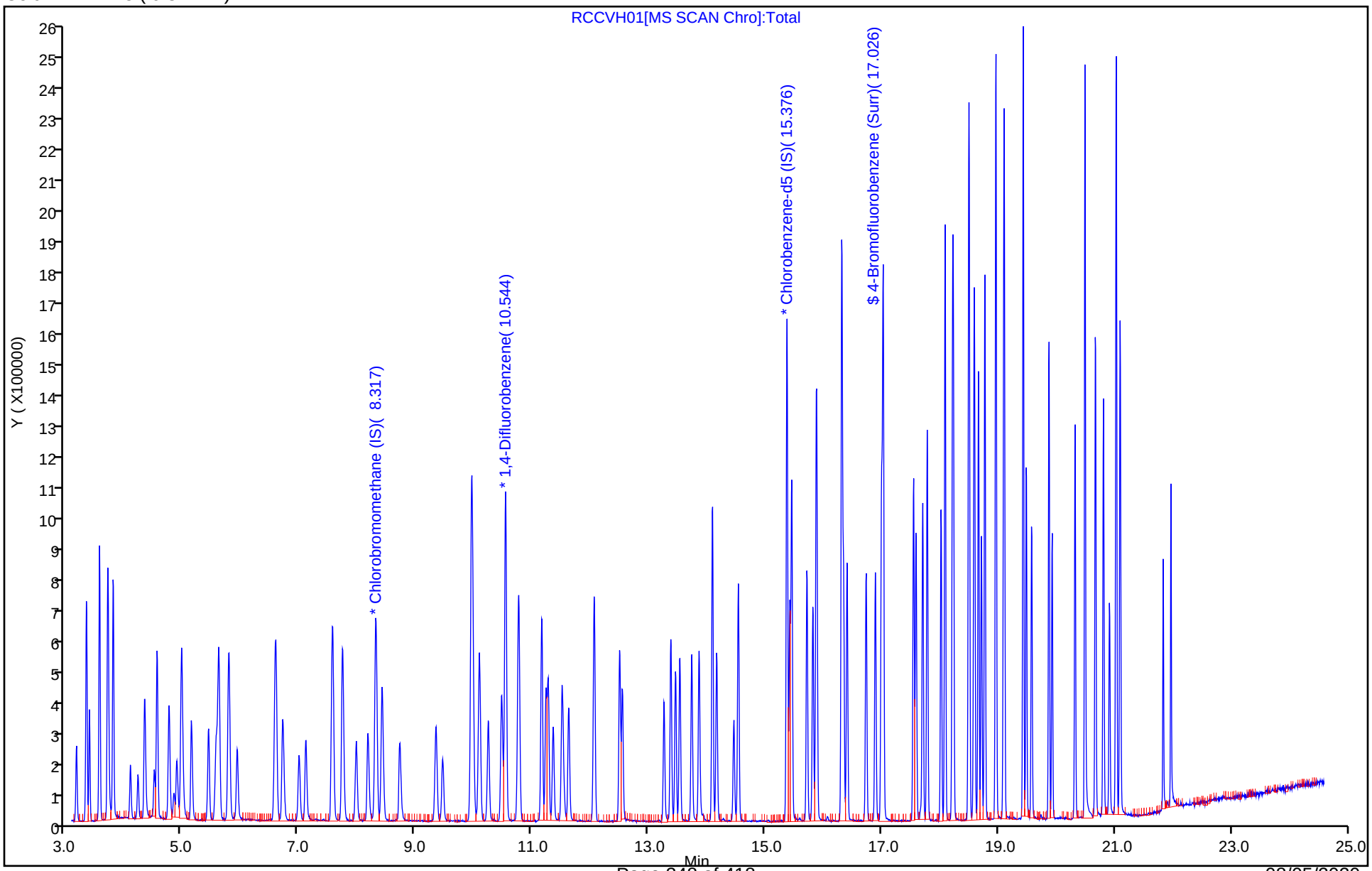
Report Date: 03-Aug-2020 15:13:09 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200730-16173.b\RCCVH01.D

Injection Date:	01-Aug-2020 08:35:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	CCVIS			Worklist Smp#:	2
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GBFBG15IC.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	15-Jul-2020 12:19:30	ALS Bottle#:	16	Worklist Smp#:	1
Injection Vol:	500.0 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016031-001				
Misc. Info.:	BFB				
Operator ID:	HMT	Instrument ID:	MG		
Method:	\\chromfs\Knoxville\ChromData\MG\20200715-16031.b\MG_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	16-Jul-2020 13:23:07	Calib Date:	15-Jul-2020 22:02:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1024				
First Level Reviewer: tajh		Date:	16-Jul-2020 07:48:21		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
$ 5 BFB	95	5.084	5.084	0.000	0	1174424	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

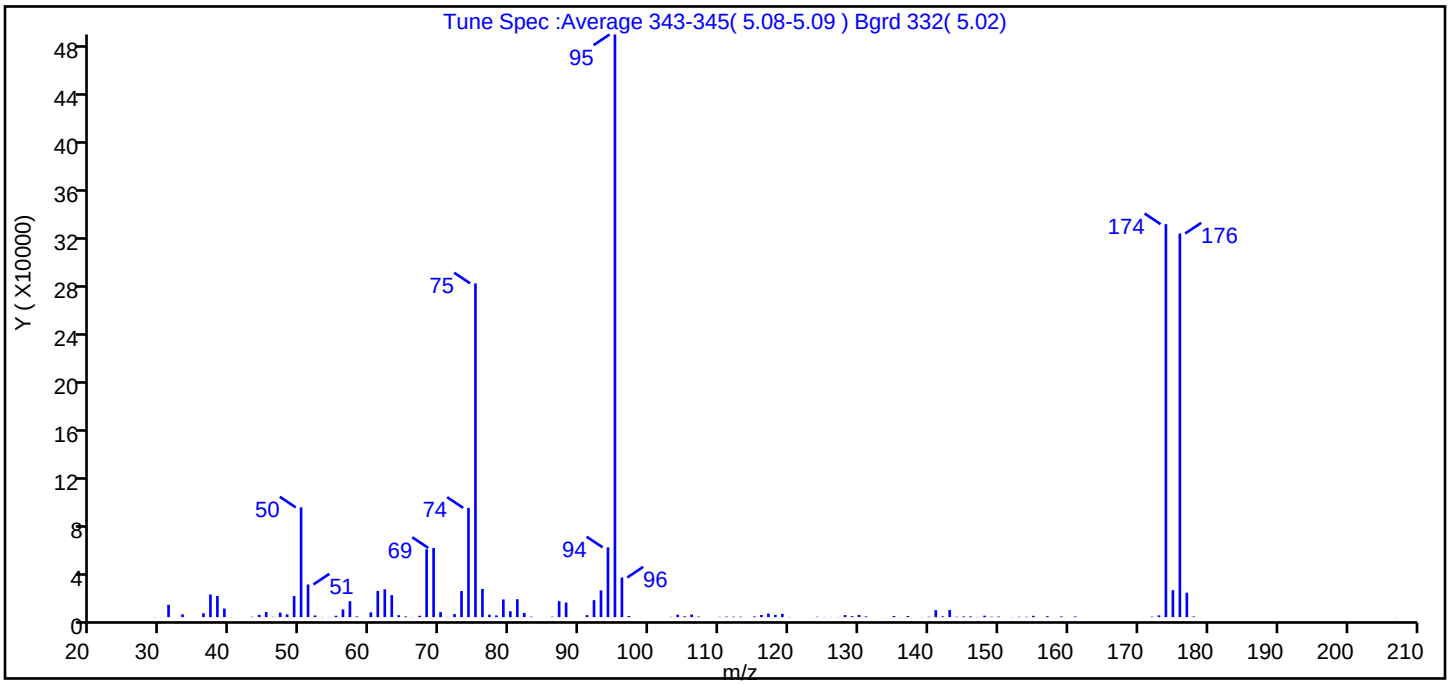
40MXSUR_00003 Amount Added: 40.00 Units: mL

MS Tune Report

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GBFBG15IC.D
Injection Date: 15-Jul-2020 12:19:30 Instrument ID: MG
Lims ID: BFB
Client ID:
Operator ID: HMT ALS Bottle#: 16 Worklist Smp#: 1
Injection Vol: 500.0 mL Dil. Factor: 1.0000
Method: MG_TO15 Limit Group: MSA TO14A_15 Routine ICAL
Tune Method: BFB Method 8260

$ 5 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	18.8
75	30 to 60% of m/z 95	57.3
96	5 to 9% of m/z 95	6.8
173	Less than 2% of m/z 174	0.3 (0.5)
174	50 to 120% of m/z 95	67.4
175	5 to 9% of m/z 174	4.6 (6.9)
176	Greater than 95% but less than 101% of m/z 174	65.8 (97.6)
177	5 to 9% of m/z 176	4.2 (6.4)

Data File: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GBFBG15IC.D\MG_TO15.rslt\spectra.d
Injection Date: 15-Jul-2020 12:19:30
Spectrum: Tune Spec :Average 343-345(5.08-5.09) Bgrd 332(5.02)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 116

m/z	Y	m/z	Y	m/z	Y	m/z	Y
29.00	110	63.00	18280	96.00	32848	137.00	935
30.00	57	64.00	1602	97.00	959	139.00	115
31.00	10204	65.00	666	103.00	250	140.00	362
33.00	2331	66.00	104	104.00	2030	141.00	5809
36.00	3219	67.00	1150	105.00	720	142.00	635
37.00	18768	68.00	56232	106.00	2198	143.00	5855
38.00	17496	69.00	57352	107.00	496	144.00	361
39.00	7089	70.00	4152	110.00	276	145.00	603
40.00	147	71.00	182	111.00	458	146.00	662
41.00	2	72.00	2529	112.00	421	147.00	189
43.00	309	73.00	21640	113.00	421	148.00	1234
44.00	1883	74.00	90568	115.00	643	149.00	366
45.00	4241	75.00	276608	116.00	1767	150.00	519
46.00	279	76.00	23360	117.00	2962	152.00	141
47.00	3766	77.00	2017	118.00	1785	153.00	316
48.00	2291	78.00	1438	119.00	2688	154.00	336
49.00	17472	79.00	14680	120.00	142	155.00	1113
50.00	90952	80.00	4899	123.00	77	156.00	66
51.00	27080	81.00	14883	124.00	332	157.00	801
52.00	1393	82.00	3464	125.00	139	159.00	599
53.00	155	83.00	406	126.00	138	161.00	556
54.00	156	86.00	373	127.00	130	172.00	418
55.00	1136	87.00	13279	128.00	1731	173.00	1519
56.00	6401	88.00	12077	129.00	843	174.00	325696
57.00	13182	91.00	1700	130.00	1860	175.00	22312
58.00	604	92.00	14074	131.00	663	176.00	317952
60.00	3952	93.00	22184	134.00	58	177.00	20272
61.00	21728	94.00	57824	135.00	1007	178.00	579
62.00	23088	95.00	482880	136.00	117	207.00	127

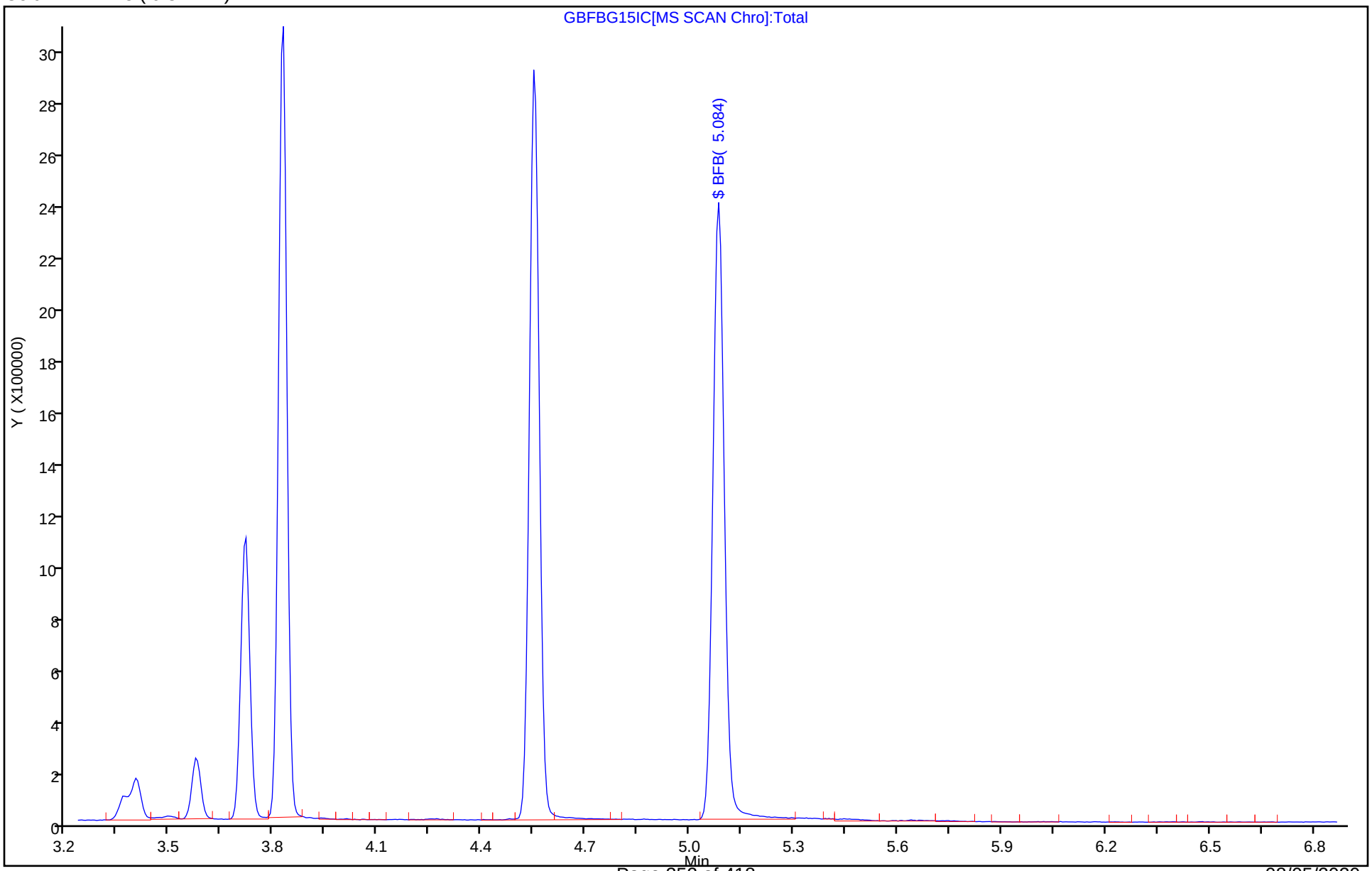
Report Date: 16-Jul-2020 13:23:07 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GBFBG15IC.D

Injection Date:	15-Jul-2020 12:19:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	500.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GBFBG31.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	31-Jul-2020 08:31:30	ALS Bottle#:	16	Worklist Smp#:	1
Injection Vol:	500.0 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016132-003				
Misc. Info.:	TUNE				
Operator ID:	HMT	Instrument ID:	MG		
Method:	\\chromfs\Knoxville\ChromData\MG\20200729-16161.b\MG_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	03-Aug-2020 13:07:25	Calib Date:	15-Jul-2020 22:02:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1011				
First Level Reviewer: khachitpongpanits		Date:	03-Aug-2020 13:07:25		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
$ 5 BFB	95	5.106	5.106	0.000	0	1487201	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

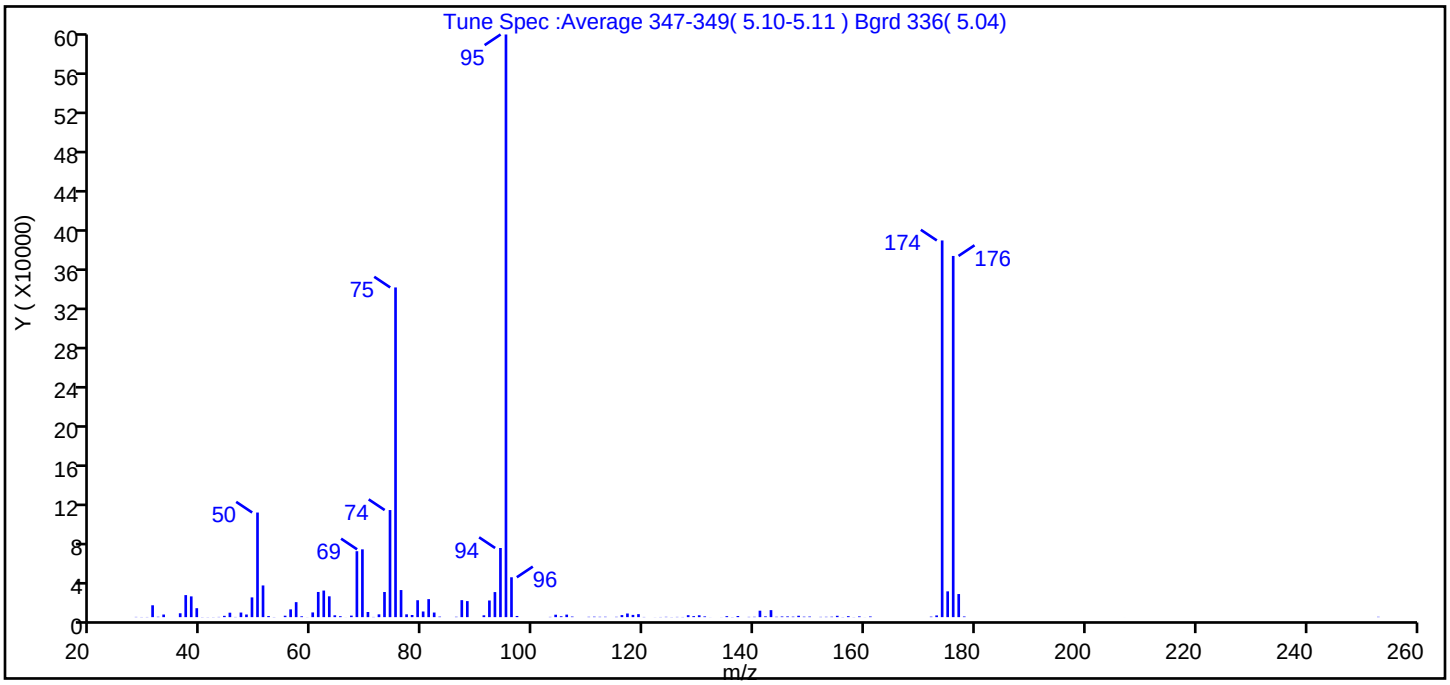
40MXSUR_00003 Amount Added: 40.00 Units: mL

MS Tune Report

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GBFBG31.D
Injection Date: 31-Jul-2020 08:31:30 Instrument ID: MG
Lims ID: BFB
Client ID:
Operator ID: HMT ALS Bottle#: 16 Worklist Smp#: 1
Injection Vol: 500.0 mL Dil. Factor: 1.0000
Method: MG_TO15 Limit Group: MSA TO14A_15 Routine ICAL
Tune Method: BFB Method 8260

$ 5 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	18.0
75	30 to 60% of m/z 95	56.6
96	5 to 9% of m/z 95	6.8
173	Less than 2% of m/z 174	0.3 (0.5)
174	50 to 120% of m/z 95	64.6
175	5 to 9% of m/z 174	4.4 (6.8)
176	Greater than 95% but less than 101% of m/z 174	62.0 (95.9)
177	5 to 9% of m/z 176	4.0 (6.4)

Data File: \\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GBFBG31.D\MG_TO15.rslt\spectra.d
Injection Date: 31-Jul-2020 08:31:30
Spectrum: Tune Spec :Average 347-349(5.10-5.11) Bgrd 336(5.04)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 124

m/z	Y	m/z	Y	m/z	Y	m/z	Y
28.00	242	62.00	27120	97.00	1189	139.00	271
29.00	159	63.00	21256	103.00	259	140.00	371
30.00	172	64.00	1883	104.00	2488	141.00	6585
31.00	12101	65.00	939	105.00	888	142.00	818
32.00	381	66.00	35	106.00	2588	143.00	7146
33.00	2666	67.00	1555	107.00	589	144.00	384
36.00	3959	68.00	67264	110.00	340	145.00	684
37.00	22480	69.00	69168	111.00	468	146.00	746
38.00	21176	70.00	5252	112.00	354	147.00	499
39.00	9123	71.00	206	113.00	386	148.00	1418
40.00	141	72.00	2848	115.00	333	149.00	475
41.00	125	73.00	25648	116.00	2085	150.00	590
42.00	129	74.00	109240	117.00	3726	152.00	282
43.00	224	75.00	336320	118.00	2299	153.00	344
44.00	1340	76.00	27640	119.00	3064	154.00	452
45.00	4529	77.00	2877	120.00	201	155.00	1386
46.00	188	78.00	2179	122.00	69	156.00	146
47.00	4687	79.00	17256	123.00	174	157.00	980
48.00	2691	80.00	5773	124.00	322	158.00	119
49.00	20144	81.00	18368	125.00	135	159.00	755
50.00	106720	82.00	4701	126.00	250	160.00	54
51.00	32336	83.00	519	127.00	172	161.00	670
52.00	1080	86.00	376	128.00	1998	172.00	516
53.00	153	87.00	17344	129.00	1039	173.00	1747
55.00	1463	88.00	16354	130.00	1922	174.00	384256
56.00	7940	91.00	1865	131.00	770	175.00	26312
57.00	15313	92.00	17000	132.00	58	176.00	368448
58.00	841	93.00	25576	134.00	62	177.00	23568
59.00	68	94.00	70536	135.00	1021	178.00	663
60.00	4813	95.00	594368	136.00	141	207.00	13
61.00	25680	96.00	40680	137.00	1158	253.00	332

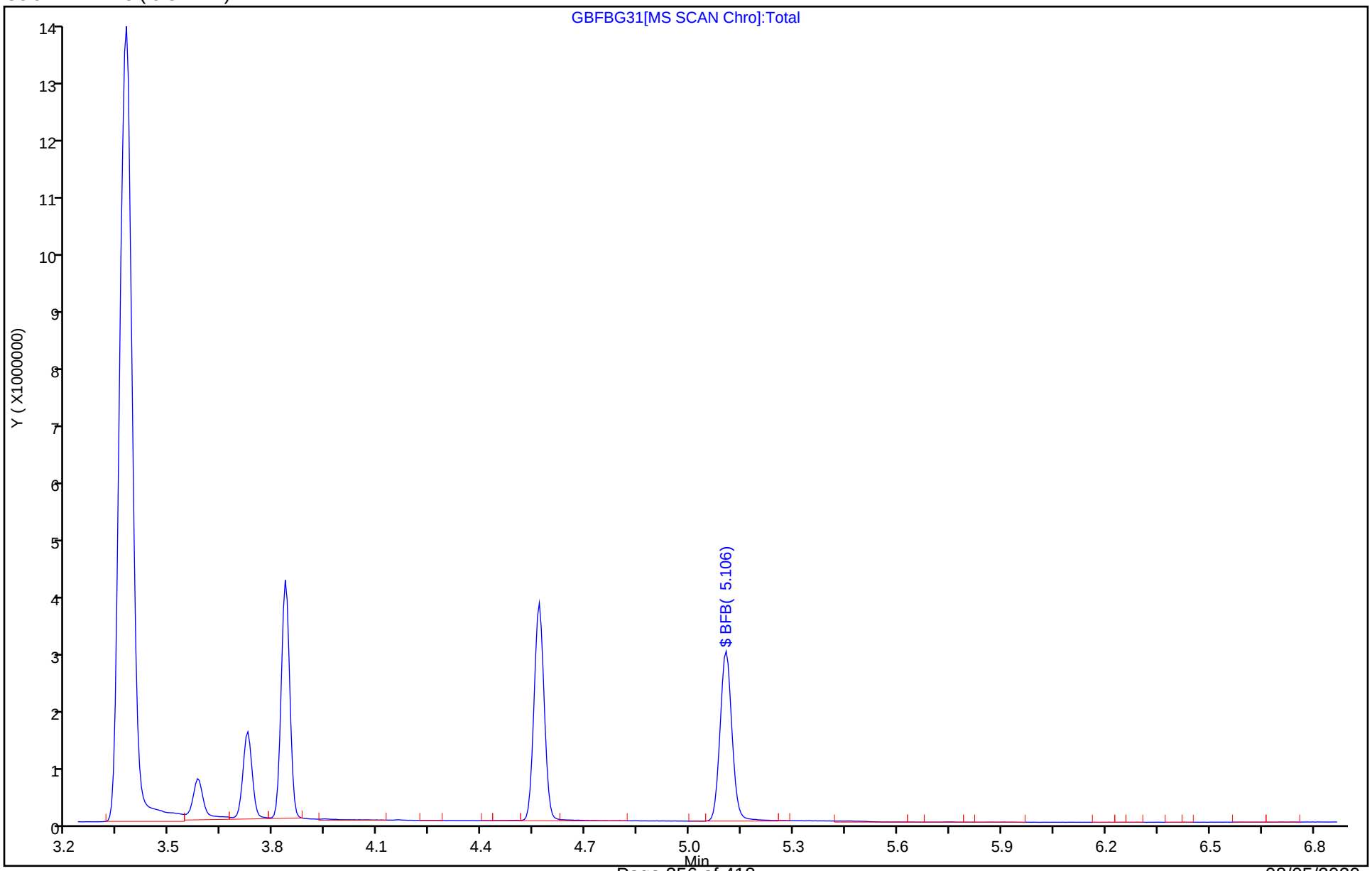
Report Date: 03-Aug-2020 13:07:25 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GBFBG31.D

Injection Date:	31-Jul-2020 08:31:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	500.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27BLKZ.D
Lims ID: BFB to15 only
Client ID:
Sample Type: BFB
Inject. Date: 27-Jul-2020 16:54:30 ALS Bottle#: 16 Worklist Smp#: 1
Injection Vol: 500.0 mL Dil. Factor: 1.0000
Sample Info: 140-0016116-001
Misc. Info.: BFB
Operator ID: HMT Instrument ID: MR

Method: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 28-Jul-2020 16:07:04 Calib Date: 28-Jul-2020 09:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC09R.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1014

First Level Reviewer: barlozhetskayaa Date: 28-Jul-2020 16:07:04

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
$ 5 BFB	95	5.978	5.978	0.000	0	457390	NR	NR	8

QC Flag Legend

Processing Flags
NR - Missing Quant Standard
8 - Failed MS Tune Ratio Test

Reagents:

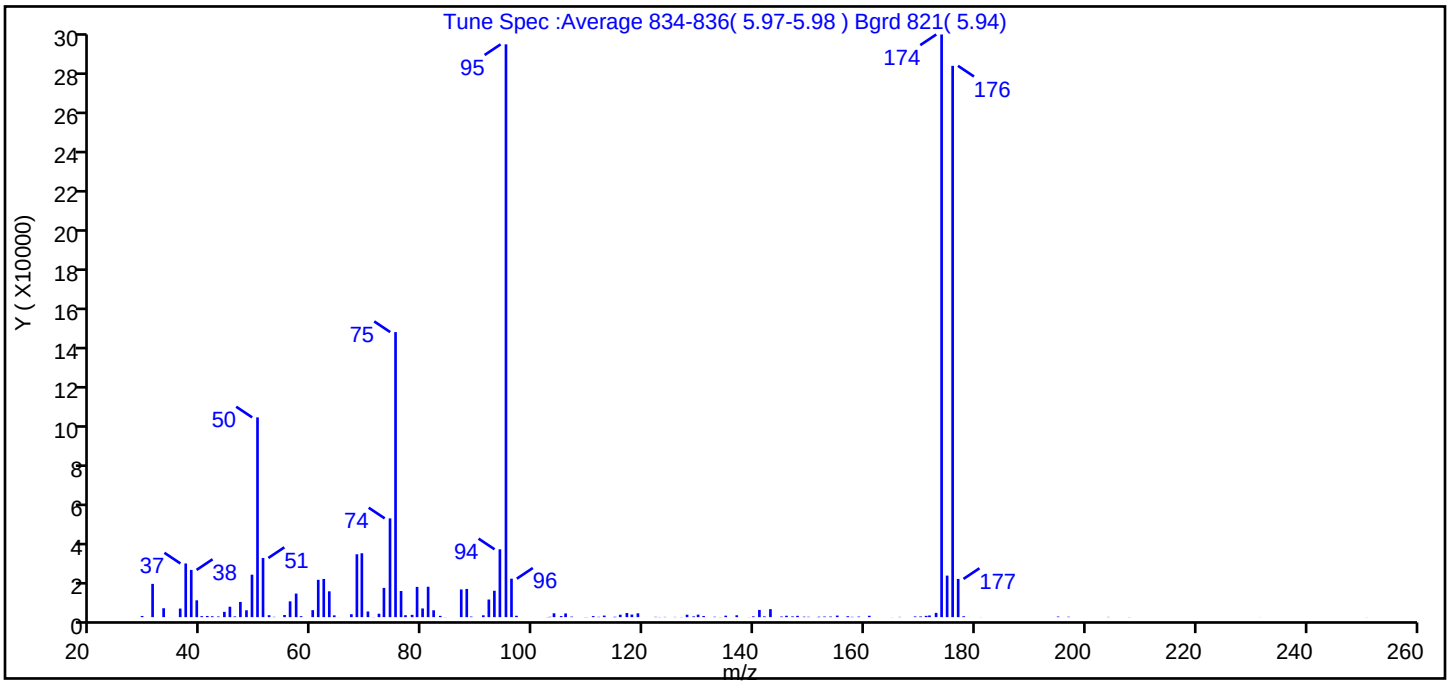
40MXSUR_00003 Amount Added: 40.00 Units: mL

MS Tune Report

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27BLKZ.D
Injection Date: 27-Jul-2020 16:54:30 Instrument ID: MR
Lims ID: BFB to15 only
Client ID:
Operator ID: HMT ALS Bottle#: 16 Worklist Smp#: 1
Injection Vol: 500.0 mL Dil. Factor: 1.0000
Method: MR_TO15 Limit Group: MSA TO14A_15 Routine ICAL
Tune Method: BFB Method 8260

$ 5 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	34.9
75	30 to 60% of m/z 95	49.8
96	5 to 9% of m/z 95	6.7
173	Less than 2% of m/z 174	0.7 (0.7)
174	50 to 120% of m/z 95	101.7
175	5 to 9% of m/z 174	7.3 (7.1)
176	Greater than 95% but less than 101% of m/z 174	96.2 (94.6)*
177	5 to 9% of m/z 176	6.7 (6.9)

Data File: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27BLKZ.D\MR_TO15.rslt\spectra.d
Injection Date: 27-Jul-2020 16:54:30
Spectrum: Tune Spec :Average 834-836(5.97-5.98) Bgrd 821(5.94)
Base Peak: 173.90
Minimum % Base Peak: 0
Number of Points: 130

m/z	Y	m/z	Y	m/z	Y	m/z	Y
29.00	584	67.00	1452	107.00	272	148.00	660
31.00	16640	68.00	31432	109.00	74	149.00	245
33.00	4449	69.00	31944	110.00	41	150.00	191
34.00	34	70.00	2827	111.00	528	152.00	54
36.00	4306	71.00	50	112.00	173	152.00	223
37.00	26840	72.00	1714	113.00	782	153.00	296
38.00	23608	73.00	14625	115.00	121	154.00	297
39.00	8420	74.00	49384	115.00	164	155.00	779
40.00	502	75.00	142528	116.00	1215	157.00	464
41.00	594	76.00	13064	117.00	2069	158.00	161
42.00	442	77.00	965	118.00	1288	159.00	286
43.00	326	78.00	1140	119.00	1914	161.00	681
44.00	2637	79.00	15125	122.00	156	165.00	40
45.00	5214	80.00	4343	123.00	85	166.00	127
46.00	377	81.00	15196	124.00	127	169.00	354
47.00	7611	82.00	3429	126.00	115	170.00	346
48.00	3434	83.00	641	127.00	89	171.00	652
49.00	21232	84.00	65	128.00	1226	172.00	837
50.00	99880	87.00	13852	129.00	389	173.00	2128
51.00	29584	88.00	14099	130.00	1242	174.00	291328
52.00	965	89.00	287	131.00	544	175.00	20768
53.00	150	91.00	919	133.00	198	176.00	275648
55.00	1078	92.00	8818	134.00	65	177.00	19112
56.00	7890	93.00	13192	135.00	738	178.00	437
57.00	11783	94.00	33920	137.00	925	181.00	44
58.00	468	95.00	286400	139.00	54	195.00	300
59.00	7	96.00	19232	140.00	394	197.00	207
60.00	3495	97.00	688	141.00	3613	204.00	119
61.00	18664	103.00	79	142.00	393	208.00	69
62.00	19104	103.00	164	143.00	3989	232.00	33
63.00	12910	104.00	1919	145.00	320	251.00	40
64.00	892	105.00	537	146.00	702		
65.00	37	106.00	1854	147.00	368		

m/z	Y	m/z	Y	m/z	Y	m/z	Y
29.00	584	67.00	1452	107.00	272	148.00	660
31.00	16640	68.00	31432	109.00	74	149.00	245
33.00	4449	69.00	31944	110.00	41	150.00	191
34.00	34	70.00	2827	111.00	528	152.00	54
36.00	4306	71.00	50	112.00	173	152.00	223
37.00	26840	72.00	1714	113.00	782	153.00	296
38.00	23608	73.00	14625	115.00	121	154.00	297
39.00	8420	74.00	49384	115.00	164	155.00	779
40.00	502	75.00	142528	116.00	1215	157.00	464
41.00	594	76.00	13064	117.00	2069	158.00	161
42.00	442	77.00	965	118.00	1288	159.00	286
43.00	326	78.00	1140	119.00	1914	161.00	681
44.00	2637	79.00	15125	122.00	156	165.00	40
45.00	5214	80.00	4343	123.00	85	166.00	127
46.00	377	81.00	15196	124.00	127	169.00	354
47.00	7611	82.00	3429	126.00	115	170.00	346
48.00	3434	83.00	641	127.00	89	171.00	652
49.00	21232	84.00	65	128.00	1226	172.00	837
50.00	99880	87.00	13852	129.00	389	173.00	2128
51.00	29584	88.00	14099	130.00	1242	174.00	291328
52.00	965	89.00	287	131.00	544	175.00	20768
53.00	150	91.00	919	133.00	198	176.00	275648
55.00	1078	92.00	8818	134.00	65	177.00	19112
56.00	7890	93.00	13192	135.00	738	178.00	437
57.00	11783	94.00	33920	137.00	925	181.00	44
58.00	468	95.00	286400	139.00	54	195.00	300
59.00	7	96.00	19232	140.00	394	197.00	207
60.00	3495	97.00	688	141.00	3613	204.00	119
61.00	18664	103.00	79	142.00	393	208.00	69
62.00	19104	103.00	164	143.00	3989	232.00	33
63.00	12910	104.00	1919	145.00	320	251.00	40
64.00	892	105.00	537	146.00	702		
65.00	37	106.00	1854	147.00	368		

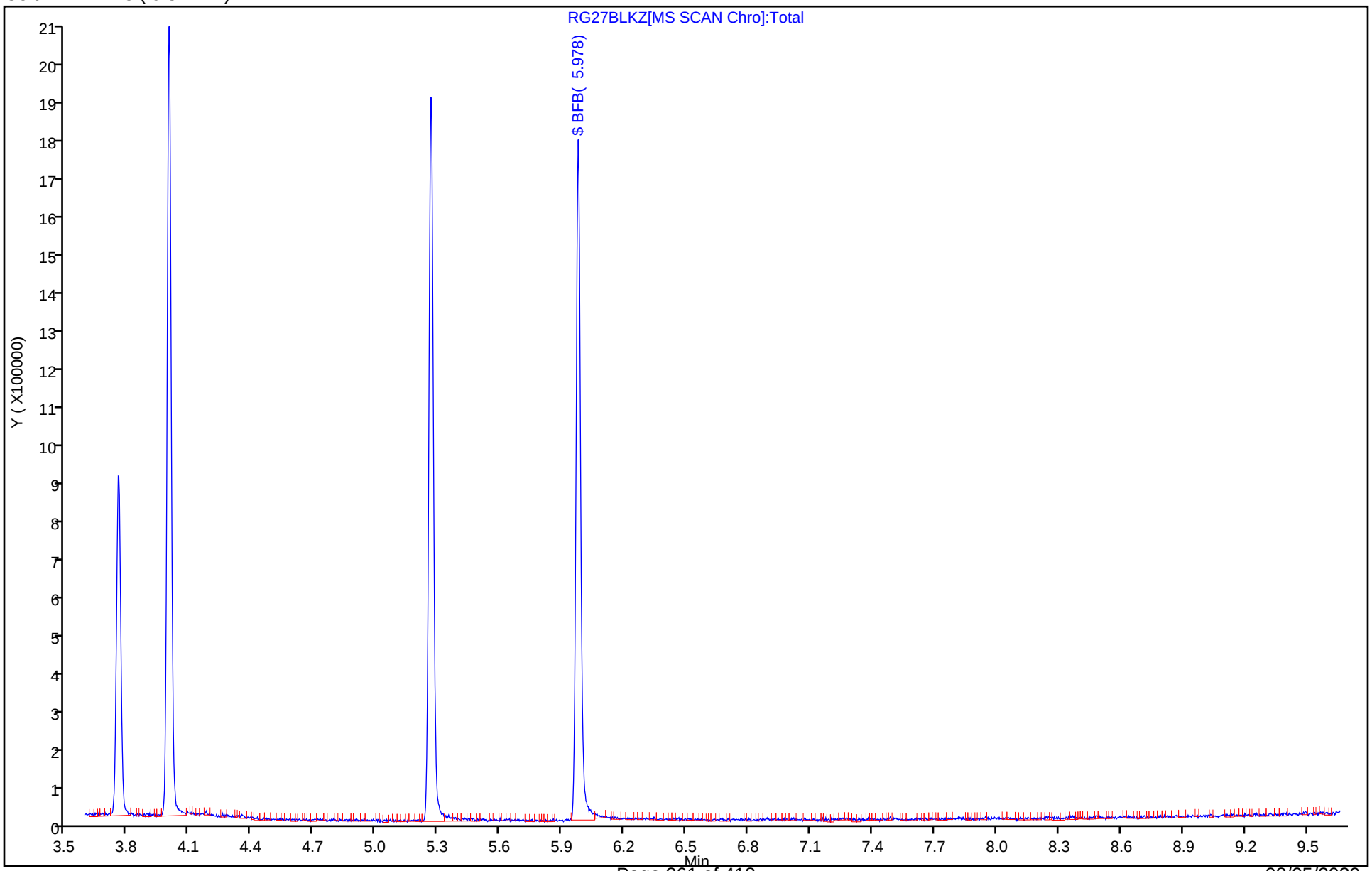
Report Date: 28-Jul-2020 16:07:04 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27BLKZ.D

Injection Date:	27-Jul-2020 16:54:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	BFB to15 only			Worklist Smp#:	1
Client ID:					
Injection Vol:	500.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MR\20200730-16173.b\RDNUH01.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	01-Aug-2020 08:07:30	ALS Bottle#:	16	Worklist Smp#:	1
Injection Vol:	500.0 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016173-001				
Misc. Info.:	BFB				
Operator ID:	HMT	Instrument ID:	MR		
Method:	\\chromfs\Knoxville\ChromData\MR\20200730-16173.b\MR_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	03-Aug-2020 15:08:44	Calib Date:	28-Jul-2020 09:59:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC09R.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1011				
First Level Reviewer: khachitpongpanits		Date:	03-Aug-2020 15:08:44		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
$ 5 BFB	95	5.963	5.963	0.000	0	260759	NR	NR	8

QC Flag Legend

Processing Flags
NR - Missing Quant Standard
8 - Failed MS Tune Ratio Test

Reagents:

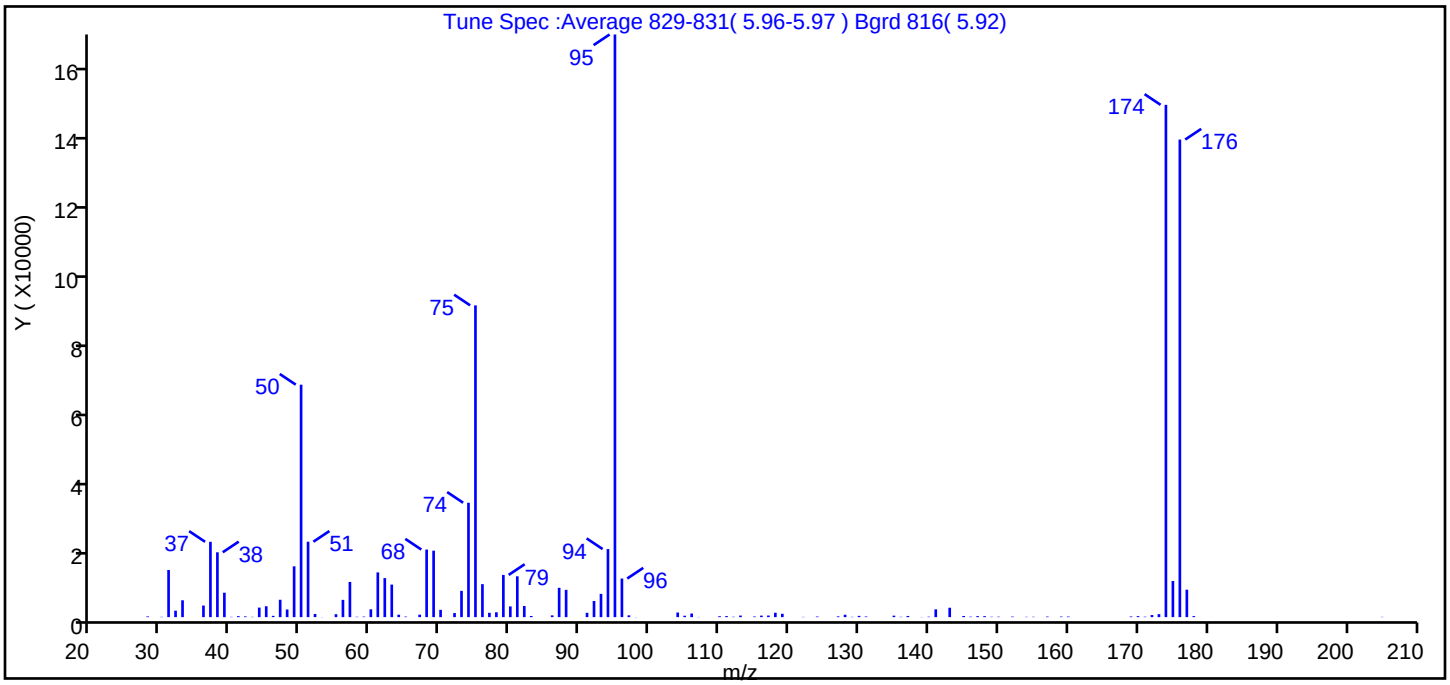
40MXSUR_00003 Amount Added: 40.00 Units: mL

MS Tune Report

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200730-16173.b\RDNUH01.D
Injection Date: 01-Aug-2020 08:07:30 Instrument ID: MR
Lims ID: BFB
Client ID:
Operator ID: HMT ALS Bottle#: 16 Worklist Smp#: 1
Injection Vol: 500.0 mL Dil. Factor: 1.0000
Method: MR_TO15 Limit Group: MSA TO14A_15 Routine ICAL
Tune Method: BFB Method 8260

$ 5 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	39.9
75	30 to 60% of m/z 95	53.5
96	5 to 9% of m/z 95	6.6
173	Less than 2% of m/z 174	0.5 (0.6)
174	50 to 120% of m/z 95	87.9
175	5 to 9% of m/z 174	6.2 (7.1)
176	Greater than 95% but less than 101% of m/z 174	82.0 (93.2)*
177	5 to 9% of m/z 176	4.7 (5.7)

Data File: \\chromfs\Knoxville\ChromData\MR\20200730-16173.b\RDNUH01.D\MR_TO15.rslt\spectra.d
Injection Date: 01-Aug-2020 08:07:30
Spectrum: Tune Spec :Average 829-831(5.96-5.97) Bgrd 816(5.92)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 112

m/z	Y	m/z	Y	m/z	Y	m/z	Y
28.00	204	59.00	147	93.00	6605	137.00	333
30.00	85	60.00	2225	94.00	19320	139.00	49
31.00	13382	61.00	12702	95.00	165376	140.00	128
32.00	1832	62.00	11081	96.00	10957	141.00	2211
33.00	4787	63.00	9240	97.00	510	143.00	2668
34.00	2	64.00	692	98.00	37	145.00	330
36.00	3293	65.00	158	104.00	1310	146.00	135
37.00	21384	67.00	702	105.00	400	147.00	287
38.00	18408	68.00	19184	106.00	1029	148.00	279
39.00	6935	69.00	18864	107.00	52	149.00	106
40.00	89	70.00	2074	110.00	258	150.00	123
41.00	283	72.00	1164	111.00	301	152.00	159
42.00	215	73.00	7463	112.00	108	154.00	93
43.00	85	74.00	32472	113.00	452	155.00	100
44.00	2708	75.00	88496	115.00	183	157.00	166
45.00	3092	76.00	9365	116.00	436	159.00	163
46.00	367	77.00	1230	117.00	464	160.00	170
47.00	4934	78.00	1383	118.00	1248	169.00	191
48.00	2173	79.00	11988	119.00	953	170.00	290
49.00	14427	80.00	3047	122.00	74	171.00	130
50.00	65984	81.00	11592	124.00	172	172.00	598
51.00	21408	82.00	3164	127.00	222	173.00	855
52.00	898	83.00	332	128.00	675	174.00	145408
53.00	38	86.00	498	129.00	87	175.00	10260
55.00	839	87.00	8323	130.00	361	176.00	135552
56.00	4907	88.00	7744	131.00	185	177.00	7793
57.00	9995	91.00	1232	135.00	421	178.00	295
58.00	110	92.00	4589	136.00	93	205.00	79

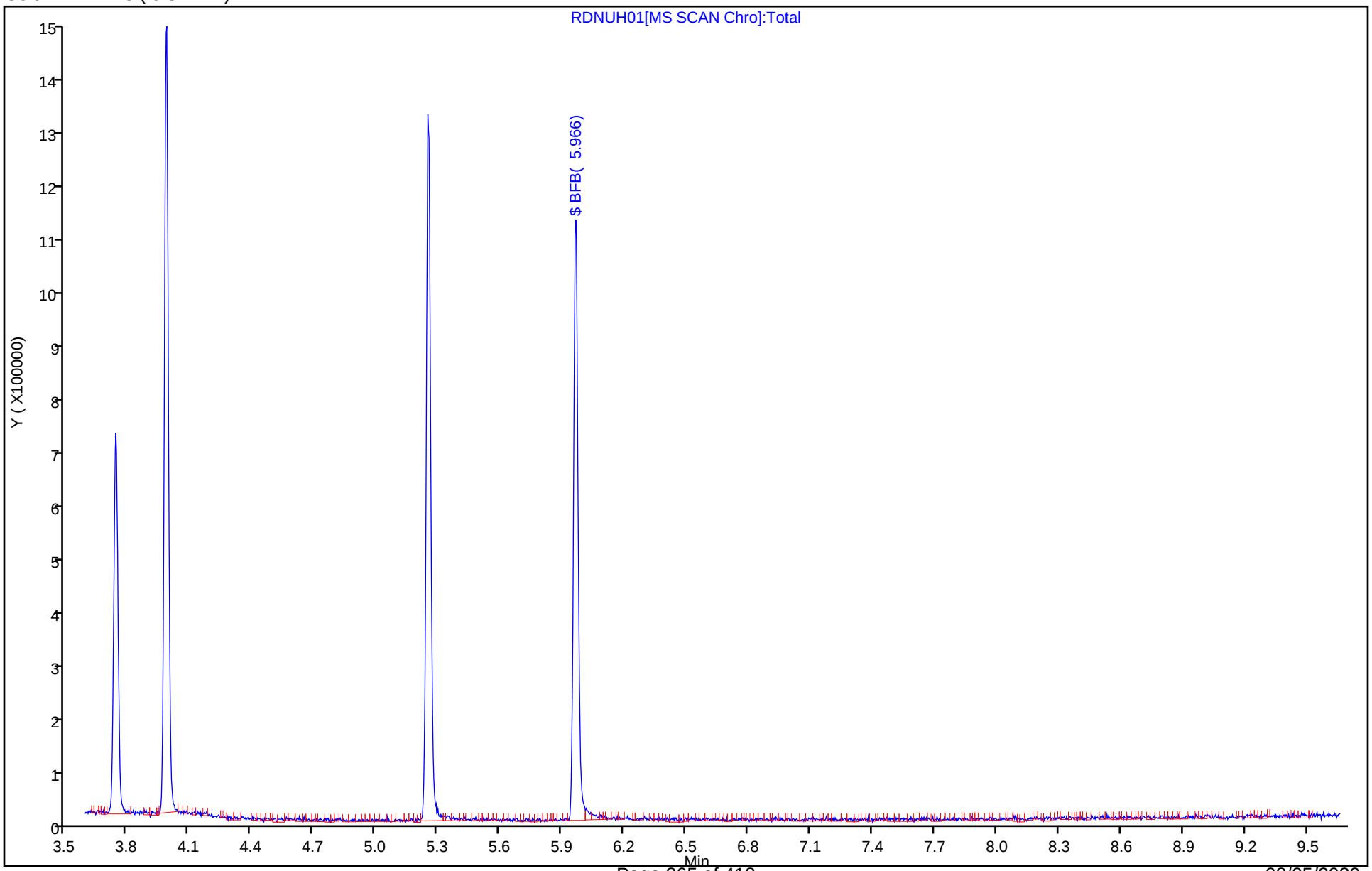
Report Date: 03-Aug-2020 15:08:44 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200730-16173.b\RDNUH01.D

Injection Date:	01-Aug-2020 08:07:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	500.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19811-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 140-41417/4

Matrix: Air Lab File ID: G500BG31.D

Analysis Method: TO 15 LL Date Collected:

Sample wt/vol: 500(mL) Date Analyzed: 07/31/2020 12:04

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 41417 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	ND		0.080	0.0080
56-23-5	Carbon tetrachloride	153.81	ND		0.080	0.0070
75-45-6	Chlorodifluoromethane	86.47	ND		0.080	0.022
67-66-3	Chloroform	119.38	ND		0.080	0.0070
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.080	0.010
75-71-8	Dichlorodifluoromethane	120.91	ND		0.080	0.014
75-34-3	1,1-Dichloroethane	98.96	ND		0.080	0.0070
107-06-2	1,2-Dichloroethane	98.96	ND		0.080	0.010
75-35-4	1,1-Dichloroethene	96.94	ND		0.080	0.0080
100-41-4	Ethylbenzene	106.17	ND		0.080	0.013
75-09-2	Methylene Chloride	84.93	ND		0.40	0.16
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.40	0.052
91-20-3	Naphthalene	128.17	ND		0.040	0.040
127-18-4	Tetrachloroethene	165.83	ND		0.080	0.0070
108-88-3	Toluene	92.14	ND		0.12	0.078
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.080	0.0070
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.080	0.064
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.080	0.037
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.080	0.0070
79-01-6	Trichloroethene	131.39	ND		0.040	0.0060
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.080	0.036
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.080	0.020
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.080	0.022
75-01-4	Vinyl chloride	62.50	ND		0.040	0.026
1330-20-7	Xylenes, Total	106.17	ND		0.16	0.024

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	91		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19811-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 140-41417/4

Matrix: Air Lab File ID: G500BG31.D

Analysis Method: TO 15 LL Date Collected:

Sample wt/vol: 500(mL) Date Analyzed: 07/31/2020 12:04

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 41417 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	ND		0.26	0.026
56-23-5	Carbon tetrachloride	153.81	ND		0.50	0.044
75-45-6	Chlorodifluoromethane	86.47	ND		0.28	0.078
67-66-3	Chloroform	119.38	ND		0.39	0.034
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.32	0.040
75-71-8	Dichlorodifluoromethane	120.91	ND		0.40	0.069
75-34-3	1,1-Dichloroethane	98.96	ND		0.32	0.028
107-06-2	1,2-Dichloroethane	98.96	ND		0.32	0.040
75-35-4	1,1-Dichloroethene	96.94	ND		0.32	0.032
100-41-4	Ethylbenzene	106.17	ND		0.35	0.056
75-09-2	Methylene Chloride	84.93	ND		1.4	0.56
1634-04-4	Methyl tert-butyl ether	88.15	ND		1.4	0.19
91-20-3	Naphthalene	128.17	ND		0.21	0.21
127-18-4	Tetrachloroethene	165.83	ND		0.54	0.047
108-88-3	Toluene	92.14	ND		0.45	0.29
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.32	0.028
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.59	0.47
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.44	0.20
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.44	0.038
79-01-6	Trichloroethene	131.39	ND		0.21	0.032
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.39	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.39	0.098
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.39	0.11
75-01-4	Vinyl chloride	62.50	ND		0.10	0.066
1330-20-7	Xylenes, Total	106.17	ND		0.69	0.10

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	91		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200729-16161.b\G500BG31.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 31-Jul-2020 12:04:30 ALS Bottle#: 16 Worklist Smp#: 4
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016161-004
Misc. Info.: 500ML BLK
Operator ID: HMT Instrument ID: MG

Method: \\chromfs\Knoxville\ChromData\MG\20200729-16161.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 03-Aug-2020 13:09:27 Calib Date: 15-Jul-2020 22:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1011

First Level Reviewer: khachitpongpanits Date: 03-Aug-2020 13:09:27

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.833	8.838	-0.005	93	153574	4.00	4.00	
* 2 1,4-Difluorobenzene	114	11.017	11.017	0.000	97	1333062	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.746	15.746	0.000	94	1099478	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.390	17.391	-0.001	74	812728	4.00	3.64	
7 Propene	41	3.721	3.721	0.000	99	82625		-0.2113	7
31 Methylene Chloride	84	6.293	6.293	0.000	98	69378		0.1455	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

40MXISSURP_00004 Amount Added: 40.00 Units: mL Run Reagent

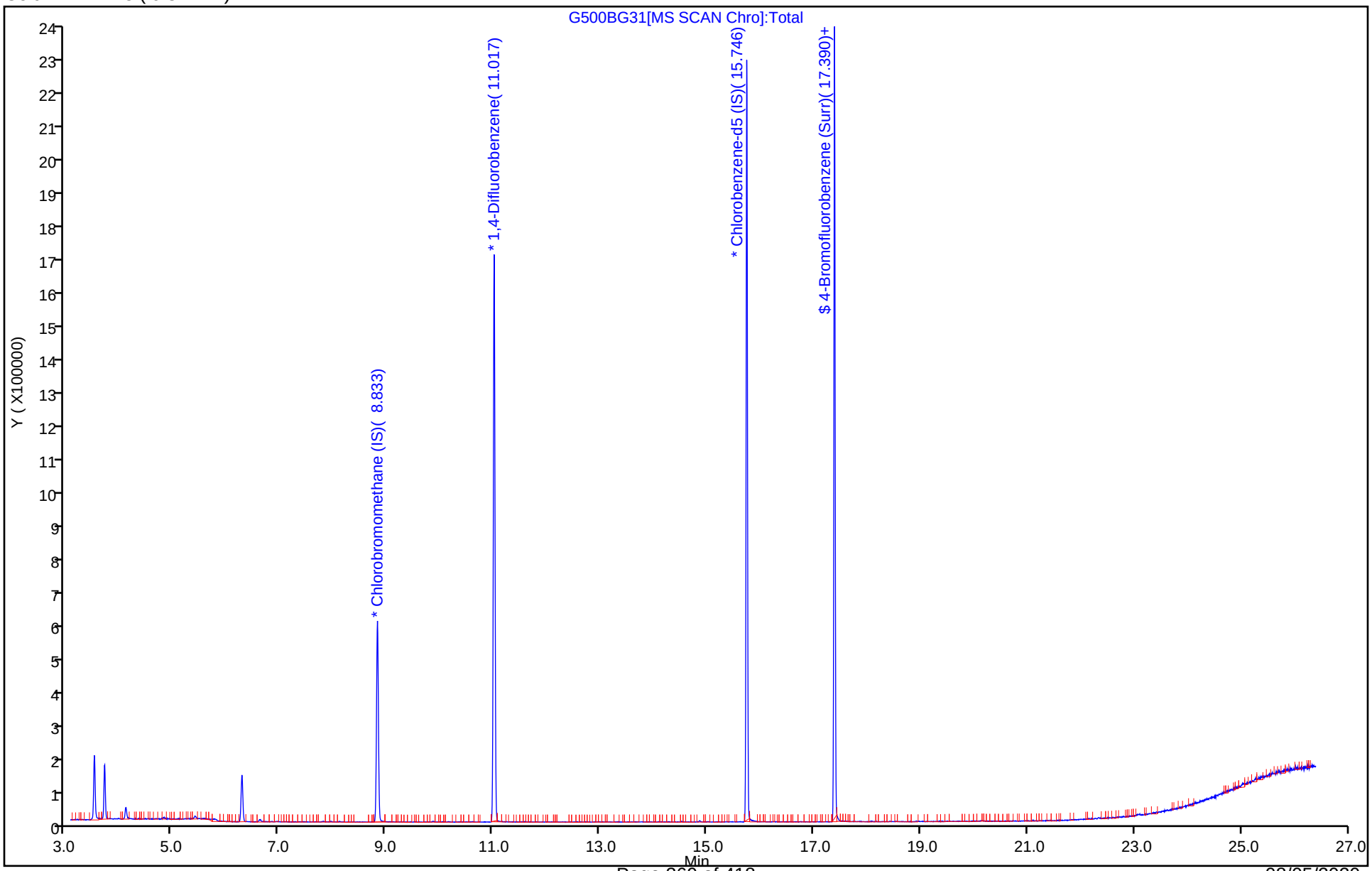
Report Date: 03-Aug-2020 13:09:28 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200729-16161.b\G500BG31.D

Injection Date:	31-Jul-2020 12:04:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	MB			Worklist Smp#:	4
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MG\20200729-16161.b\G500BG31.D				
Lims ID:	MB				
Client ID:					
Sample Type:	MB				
Inject. Date:	31-Jul-2020 12:04:30	ALS Bottle#:	16	Worklist Smp#:	4
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016161-004				
Misc. Info.:	500ML BLK				
Operator ID:	HMT	Instrument ID:	MG		
Method:	\\chromfs\Knoxville\ChromData\MG\20200729-16161.b\MG_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	03-Aug-2020 13:09:27	Calib Date:	15-Jul-2020 22:02:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1011				

First Level Reviewer: khachitpongpanits Date: 03-Aug-2020 13:09:27

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.00	3.64	90.92

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19811-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 140-41446/4

Matrix: Air Lab File ID: R500BH01.D

Analysis Method: TO 15 LL Date Collected:

Sample wt/vol: 500(mL) Date Analyzed: 08/01/2020 12:00

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 41446 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.080	0.037

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	86		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19811-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 140-41446/4

Matrix: Air Lab File ID: R500BH01.D

Analysis Method: TO 15 LL Date Collected:

Sample wt/vol: 500(mL) Date Analyzed: 08/01/2020 12:00

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 41446 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.44	0.20

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	86		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MR\20200730-16173.b\R500BH01.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 01-Aug-2020 12:00:30 ALS Bottle#: 16 Worklist Smp#: 4
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016173-004
Misc. Info.: 500ML BLK
Operator ID: HMT Instrument ID: MR

Method: \\chromfs\Knoxville\ChromData\MR\20200730-16173.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 03-Aug-2020 15:13:56 Calib Date: 28-Jul-2020 09:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC09R.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1028

First Level Reviewer: khachitpongpanits Date: 03-Aug-2020 15:13:56

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.312	8.317	-0.005	90	110471	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.544	10.544	0.000	96	958992	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.376	15.376	0.000	91	796184	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.026	17.026	0.000	94	414814	4.00	3.45	
7 Propene	41	3.356	3.356	0.000	97	66078		0.4985	7
47 1,1,1-Trichloroethane	97	9.353	9.353	0.000	5	2852		0.0227	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

40MXISSURP_00004 Amount Added: 40.00 Units: mL Run Reagent

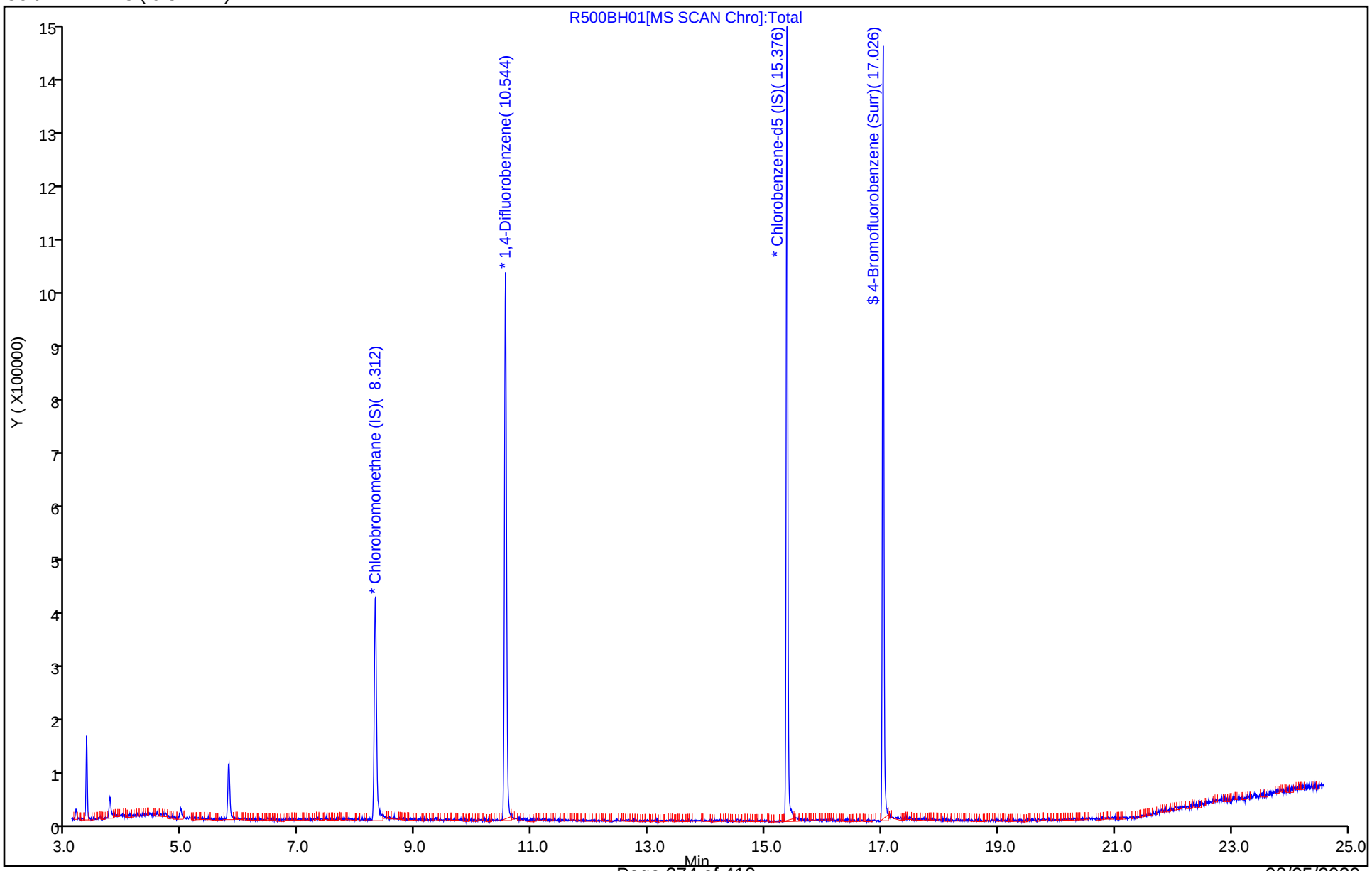
Report Date: 03-Aug-2020 15:13:57 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200730-16173.b\R500BH01.D

Injection Date:	01-Aug-2020 12:00:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	MB			Worklist Smp#:	4
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MR\20200730-16173.b\R500BH01.D				
Lims ID:	MB				
Client ID:					
Sample Type:	MB				
Inject. Date:	01-Aug-2020 12:00:30	ALS Bottle#:	16	Worklist Smp#:	4
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016173-004				
Misc. Info.:	500ML BLK				
Operator ID:	HMT	Instrument ID:	MR		
Method:	\\chromfs\Knoxville\ChromData\MR\20200730-16173.b\MR_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	03-Aug-2020 15:13:56	Calib Date:	28-Jul-2020 09:59:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC09R.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1028				

First Level Reviewer: khachitpongpanits Date: 03-Aug-2020 15:13:56

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.00	3.45	86.26

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19811-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 140-41417/1002

Matrix: Air Lab File ID: GCCVG31-LCS.d

Analysis Method: TO 15 LL Date Collected:

Sample wt/vol: 500(mL) Date Analyzed: 07/31/2020 09:06

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 41417 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	1.49		0.080	0.0080
56-23-5	Carbon tetrachloride	153.81	1.66		0.080	0.0070
75-45-6	Chlorodifluoromethane	86.47	2.05		0.080	0.022
67-66-3	Chloroform	119.38	1.58		0.080	0.0070
156-59-2	cis-1,2-Dichloroethene	96.94	1.63		0.080	0.010
75-71-8	Dichlorodifluoromethane	120.91	2.12		0.080	0.014
75-34-3	1,1-Dichloroethane	98.96	1.58		0.080	0.0070
107-06-2	1,2-Dichloroethane	98.96	1.45		0.080	0.010
75-35-4	1,1-Dichloroethene	96.94	1.68		0.080	0.0080
100-41-4	Ethylbenzene	106.17	1.52		0.080	0.013
75-09-2	Methylene Chloride	84.93	1.78		0.40	0.16
1634-04-4	Methyl tert-butyl ether	88.15	1.65		0.40	0.052
91-20-3	Naphthalene	128.17	1.35		0.040	0.040
127-18-4	Tetrachloroethene	165.83	1.40		0.080	0.0070
108-88-3	Toluene	92.14	1.49		0.12	0.078
156-60-5	trans-1,2-Dichloroethene	96.94	1.64		0.080	0.0070
120-82-1	1,2,4-Trichlorobenzene	181.45	1.27		0.080	0.064
71-55-6	1,1,1-Trichloroethane	133.41	1.60		0.080	0.037
79-00-5	1,1,2-Trichloroethane	133.41	1.60		0.080	0.0070
79-01-6	Trichloroethene	131.39	1.37		0.040	0.0060
526-73-8	1,2,3-Trimethylbenzene	120.19	1.84		0.080	0.036
95-63-6	1,2,4-Trimethylbenzene	120.20	1.48		0.080	0.020
108-67-8	1,3,5-Trimethylbenzene	120.20	1.48		0.080	0.022
75-01-4	Vinyl chloride	62.50	2.06		0.040	0.026
1330-20-7	Xylenes, Total	106.17	4.55		0.16	0.024

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	100		60-140

Eurofins Environment Testing America
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GCCVG31-LCS.d
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 31-Jul-2020 09:06:30 ALS Bottle#: 16 Worklist Smp#: 1002
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016132-006
Misc. Info.: P119 80ML
Operator ID: HMT Instrument ID: MG

Method: \\chromfs\Knoxville\ChromData\MG\20200729-16161.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 03-Aug-2020 13:08:46 Calib Date: 15-Jul-2020 22:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1011

First Level Reviewer: khachitpongpanits Date: 03-Aug-2020 13:08:46

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.838	8.838	0.000	91	164300	4.00	4.00	
* 2 1,4-Difluorobenzene	114	11.017	11.017	0.000	97	1425277	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.746	15.746	0.000	93	1220392	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.391	17.391	0.000	75	996195	4.00	4.02	
6 Chlorodifluoromethane	51	3.710	3.710	0.000	96	341612	1.60	2.05	
7 Propene	41	3.721	3.721	0.000	99	279910	1.60	2.49	
8 Dichlorodifluoromethane	85	3.770	3.770	0.000	100	635246	1.60	2.12	
9 Chloromethane	52	3.953	3.953	0.000	98	59579	1.60	2.08	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.958	3.958	0.000	97	298374	1.60	1.92	
11 Acetaldehyde	44	4.109	4.109	0.000	99	356614	8.00	9.82	
12 Vinyl chloride	62	4.125	4.125	0.000	99	231082	1.60	2.06	
14 Butadiene	54	4.212	4.212	0.000	67	162240	1.60	2.05	
13 Butane	43	4.212	4.212	0.000	86	314414	1.60	2.03	
15 Bromomethane	94	4.530	4.530	0.000	98	189340	1.60	2.02	
16 Chloroethane	64	4.670	4.670	0.000	97	111904	1.60	2.07	
17 Ethanol	31	4.783	4.783	0.000	98	480887	8.00	16.2	
18 Vinyl bromide	106	4.972	4.972	0.000	98	160512	1.60	1.96	
19 2-Methylbutane	43	5.021	5.021	0.000	91	205671	1.60	2.06	
20 Trichlorofluoromethane	101	5.242	5.242	0.000	99	583499	1.60	1.98	
21 Acrolein	56	5.258	5.258	0.000	94	44075	1.60	2.32	
22 Acetonitrile	40	5.317	5.317	0.000	99	58649	1.60	2.09	
23 Acetone	58	5.371	5.371	0.000	98	201828	4.80	5.77	
24 Pentane	72	5.463	5.463	0.000	97	36974	1.60	2.00	
25 Isopropyl alcohol	45	5.474	5.474	0.000	93	629384	4.80	7.30	
26 Ethyl ether	31	5.635	5.635	0.000	93	138719	1.60	2.09	
27 1,1-Dichloroethene	96	5.948	5.948	0.000	93	129220	1.60	1.68	
28 Acrylonitrile	53	6.051	6.051	0.000	97	85328	1.60	1.70	
30 2-Methyl-2-propanol	59	6.088	6.088	0.000	95	254934	1.60	1.92	
29 1,1,2-Trichloro-1,2,2-trifluoroe	101	6.126	6.126	0.000	90	282139	1.60	1.64	
31 Methylene Chloride	84	6.293	6.293	0.000	97	196733	1.60	1.78	
32 3-Chloro-1-propene	39	6.309	6.309	0.000	98	126844	1.60	1.63	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
33 Carbon disulfide	76	6.455	6.455	0.000	99	449122	1.60	1.73	
34 trans-1,2-Dichloroethene	96	7.102	7.102	0.000	94	140627	1.60	1.64	
35 2-Methylpentane	43	7.124	7.124	0.000	94	350476	1.60	1.68	
36 Methyl tert-butyl ether	73	7.242	7.242	0.000	96	396221	1.60	1.65	
37 1,1-Dichloroethane	63	7.523	7.523	0.000	100	299654	1.60	1.58	
38 Vinyl acetate	43	7.630	7.630	0.000	100	303146	1.60	1.63	
39 2-Butanone (MEK)	72	8.078	8.078	0.000	98	61922	1.60	1.55	
40 Hexane	56	8.105	8.105	0.000	92	118012	1.60	1.58	
41 Isopropyl ether	45	8.267	8.267	0.000	96	436200	1.60	1.70	
42 cis-1,2-Dichloroethene	96	8.504	8.504	0.000	98	141736	1.60	1.63	
43 Ethyl acetate	43	8.693	8.693	0.000	99	262757	1.60	1.63	
44 Chloroform	83	8.849	8.849	0.000	96	344657	1.60	1.58	
45 Tert-butyl ethyl ether	59	8.946	8.946	0.000	96	428880	1.60	1.65	
46 Tetrahydrofuran	42	9.264	9.264	0.000	94	150296	1.60	1.65	
47 1,1,1-Trichloroethane	97	9.874	9.874	0.000	96	377116	1.60	1.60	
48 1,2-Dichloroethane	62	9.982	9.982	0.000	99	228766	1.60	1.45	
50 Benzene	78	10.478	10.478	0.000	96	437471	1.60	1.49	
49 Cyclohexane	69	10.478	10.478	0.000	92	81993	1.60	1.58	
52 Carbon tetrachloride	117	10.499	10.499	0.000	95	337668	1.60	1.66	
51 n-Butanol	31	10.505	10.505	0.000	67	55350	1.60	2.00	
53 2,3-Dimethylpentane	71	10.602	10.602	0.000	91	120385	1.60	1.58	
54 Thiophene	84	10.747	10.747	0.000	96	229309	1.60	1.47	
55 Isooctane	57	11.243	11.243	0.000	98	810327	1.60	1.63	
56 n-Heptane	71	11.615	11.615	0.000	91	169451	1.60	1.52	
57 1,2-Dichloropropane	63	11.691	11.691	0.000	90	163621	1.60	1.48	
58 Trichloroethene	130	11.734	11.734	0.000	89	136109	1.60	1.37	
59 Dibromomethane	93	11.815	11.815	0.000	81	166494	1.60	1.43	
60 Dichlorobromomethane	83	11.961	11.961	0.000	97	327905	1.60	1.62	
61 1,4-Dioxane	88	11.988	11.988	0.000	94	64959	1.60	1.95	
62 Methyl methacrylate	41	12.058	12.058	0.000	94	160759	1.60	1.57	
63 Methylcyclohexane	83	12.500	12.500	0.000	96	284377	1.60	1.55	
64 4-Methyl-2-pentanone (MIBK)	43	12.915	12.915	0.000	98	280603	1.60	1.58	
65 cis-1,3-Dichloropropene	75	12.958	12.958	0.000	94	217276	1.60	1.41	
66 trans-1,3-Dichloropropene	75	13.654	13.654	0.000	96	193901	1.60	1.54	
67 Toluene	91	13.778	13.778	0.000	94	394370	1.60	1.49	
68 1,1,2-Trichloroethane	83	13.853	13.853	0.000	95	128729	1.60	1.60	
69 2-Hexanone	58	14.252	14.252	0.000	93	128664	1.60	1.62	
70 n-Octane	85	14.468	14.468	0.000	93	156071	1.60	1.61	
71 Chlorodibromomethane	129	14.554	14.554	0.000	95	214843	1.60	1.53	
72 Ethylene Dibromide	107	14.845	14.845	0.000	96	185666	1.60	1.49	
73 Tetrachloroethene	129	14.921	14.921	0.000	83	126346	1.60	1.40	
75 Chlorobenzene	112	15.795	15.795	0.000	87	265953	1.60	1.39	
74 2,3-Dimethylheptane	43	15.821	15.821	0.000	95	511503	1.60	1.68	
78 Ethylbenzene	91	16.086	16.086	0.000	100	526878	1.60	1.52	
79 m-Xylene & p-Xylene	91	16.247	16.247	0.000	99	835841	3.20	3.02	
80 n-Nonane	57	16.668	16.668	0.000	91	309836	1.60	1.64	
81 Bromoform	173	16.695	16.695	0.000	89	163458	1.60	1.52	
82 Styrene	104	16.711	16.711	0.000	96	264290	1.60	1.63	
83 o-Xylene	91	16.771	16.771	0.000	97	446976	1.60	1.53	
84 1,1,2,2-Tetrachloroethane	83	17.094	17.094	0.000	98	334843	1.60	1.72	
85 1,2,3-Trichloropropane	110	17.250	17.250	0.000	98	89057	1.60	1.56	
86 Isopropylbenzene	105	17.358	17.358	0.000	98	564310	1.60	1.52	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
87 N-Propylbenzene	120	17.903	17.903	0.000	98	137190	1.60	1.48	
88 2-Chlorotoluene	126	17.946	17.946	0.000	96	125906	1.60	1.48	
89 4-Ethyltoluene	105	18.049	18.049	0.000	98	517665	1.60	1.45	
90 1,3,5-Trimethylbenzene	120	18.124	18.124	0.000	92	205590	1.60	1.48	
92 Alpha Methyl Styrene	118	18.356	18.356	0.000	85	194058	1.60	1.67	
93 n-Decane	57	18.415	18.415	0.000	91	376198	1.60	1.69	
94 tert-Butylbenzene	119	18.545	18.545	0.000	92	474812	1.60	1.57	
95 1,2,4-Trimethylbenzene	105	18.561	18.561	0.000	96	476029	1.60	1.48	
96 sec-Butylbenzene	105	18.814	18.814	0.000	97	699036	1.60	1.50	
97 1,3-Dichlorobenzene	146	18.830	18.830	0.000	93	244746	1.60	1.47	
98 Benzyl chloride	91	18.901	18.901	0.000	96	419922	1.60	1.66	
99 1,4-Dichlorobenzene	146	18.917	18.917	0.000	89	237760	1.60	1.41	
100 4-Isopropyltoluene	119	18.976	18.976	0.000	95	524089	1.60	1.46	
101 1,2,3-Trimethylbenzene	105	19.030	19.030	0.000	99	480920	1.60	1.84	
102 Butylcyclohexane	83	19.084	19.084	0.000	93	467740	1.60	1.62	
104 1,2-Dichlorobenzene	146	19.273	19.273	0.000	76	246549	1.60	1.45	
103 2,3-Dihydroindene	117	19.273	19.273	0.000	92	406995	1.60	1.58	
106 Indene	116	19.402	19.402	0.000	97	352331	1.60	1.60	
105 n-Butylbenzene	91	19.407	19.407	0.000	97	617587	1.60	1.52	
107 Undecane	57	19.720	19.720	0.000	95	386731	1.60	1.61	
108 1,2-Dibromo-3-Chloropropane	157	19.871	19.871	0.000	84	111506	1.60	1.68	
109 1,2,4,5-Tetramethylbenzene	119	20.162	20.162	0.000	95	479382	1.60	1.51	
110 Dodecane	57	20.777	20.777	0.000	95	287484	1.60	1.39	
111 1,2,4-Trichlorobenzene	180	20.966	20.966	0.000	89	159719	1.60	1.27	
112 Naphthalene	128	21.106	21.106	0.000	98	434701	1.60	1.35	
113 Hexachlorobutadiene	225	21.316	21.316	0.000	86	211817	1.60	1.44	
114 1,2,3-Trichlorobenzene	180	21.381	21.381	0.000	91	146986	1.60	1.23	
115 2-Methylnaphthalene	142	22.152	22.152	0.000	96	174385	1.60	0.9328	
116 1-Methylnaphthalene	142	22.330	22.330	0.000	98	189896	1.60	0.8536	
A 122 C8 Range	1	14.453	(14.409-14.517)		0	1486967	1.60	1.66	
S 123 1,2-Dichloroethene, Total	1				0		3.20	3.26	
S 124 Xylenes, Total	100				0		4.80	4.55	

Reagents:

40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent
40CV101P_00119	Amount Added: 80.00	Units: ml	

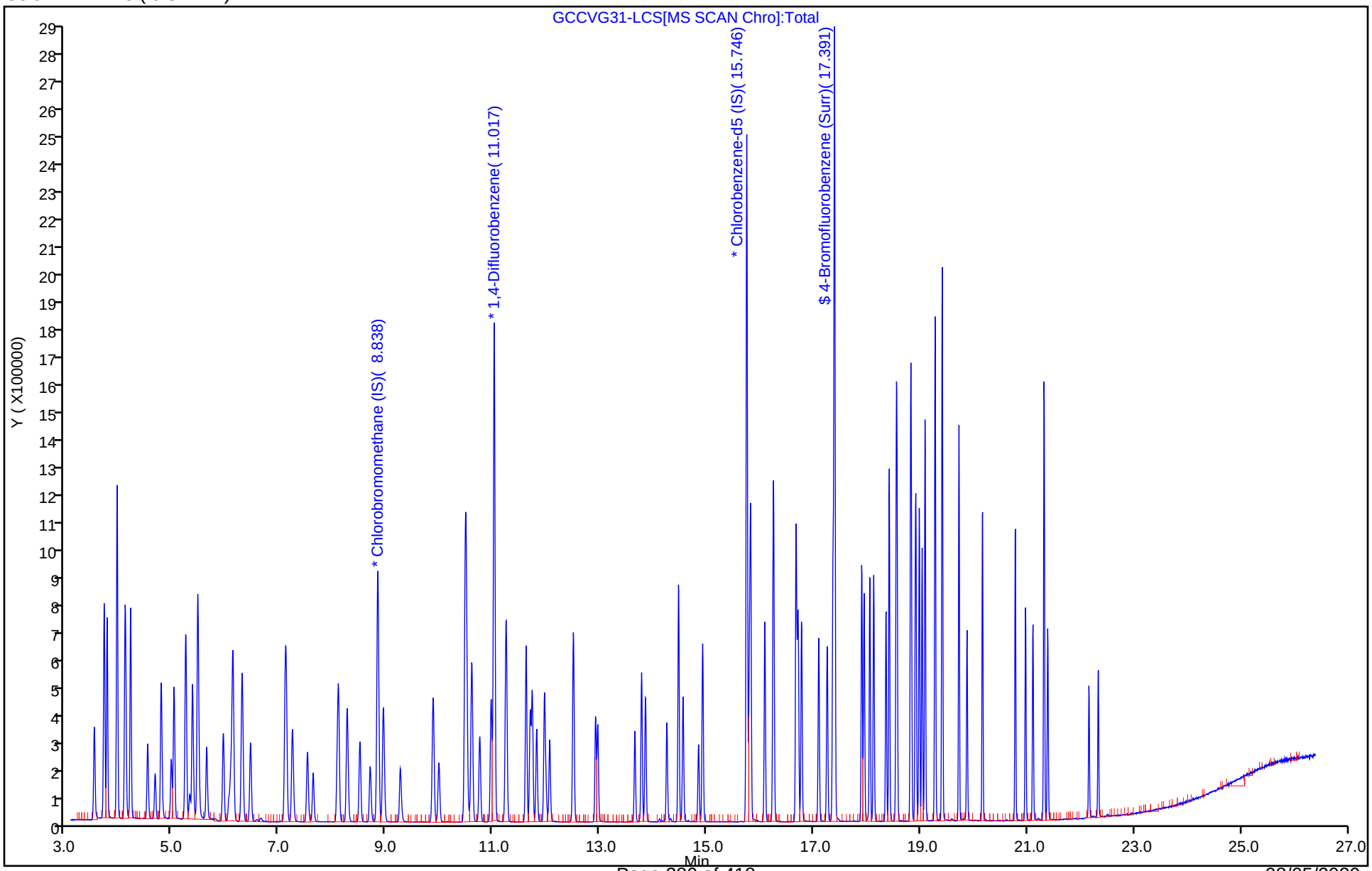
Report Date: 03-Aug-2020 13:08:50 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins Environment Testing America

Data File: \\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GCCVG31-LCS.d

Injection Date:	31-Jul-2020 09:06:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	LCS			Worklist Smp#:	1002
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins Environment Testing America
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MG\20200729-16161.b\GCCVG31-LCS.d				
Lims ID:	LCS				
Client ID:					
Sample Type:	LCS				
Inject. Date:	31-Jul-2020 09:06:30	ALS Bottle#:	16	Worklist Smp#:	1002
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016132-006				
Misc. Info.:	P119 80ML				
Operator ID:	HMT	Instrument ID:	MG		
Method:	\\chromfs\Knoxville\ChromData\MG\20200729-16161.b\MG_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	03-Aug-2020 13:08:46	Calib Date:	15-Jul-2020 22:02:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1011				

First Level Reviewer: khachitpongpanits Date: 03-Aug-2020 13:08:46

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.00	4.02	100.40

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19811-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 140-41446/1002

Matrix: Air Lab File ID: RCCVH01-LCS.d

Analysis Method: TO 15 LL Date Collected:

Sample wt/vol: 500(mL) Date Analyzed: 08/01/2020 08:35

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 41446 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	133.41	1.68		0.080	0.037

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	98		60-140

Eurofins Environment Testing America
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MR\20200730-16173.b\RCCVH01-LCS.d
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 01-Aug-2020 08:35:30 ALS Bottle#: 16 Worklist Smp#: 1002
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016173-002
Misc. Info.: S123 80ML
Operator ID: HMT Instrument ID: MR

Method: \\chromfs\Knoxville\ChromData\MR\20200730-16173.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 03-Aug-2020 15:13:08 Calib Date: 28-Jul-2020 09:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC09R.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1028

First Level Reviewer: khachitpongpanits Date: 03-Aug-2020 15:13:08

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.317	8.317	0.000	87	117996	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.544	10.544	0.000	96	979726	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.376	15.376	0.000	90	833270	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.026	17.026	0.000	95	494056	4.00	3.93	
6 Chlorodifluoromethane	51	3.346	3.346	0.000	96	322560	1.60	1.87	
7 Propene	41	3.356	3.356	0.000	99	223809	1.60	1.90	
8 Dichlorodifluoromethane	85	3.405	3.405	0.000	96	223489	1.60	1.92	
9 Chloromethane	52	3.572	3.572	0.000	95	55527	1.60	1.86	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.577	3.577	0.000	91	183839	1.60	1.61	
11 Acetaldehyde	44	3.718	3.718	0.000	93	366971	8.00	8.99	
12 Vinyl chloride	62	3.728	3.728	0.000	98	156661	1.60	1.83	
13 Butane	43	3.809	3.809	0.000	87	307849	1.60	2.00	
14 Butadiene	54	3.809	3.809	0.000	62	137996	1.60	1.92	
15 Bromomethane	94	4.106	4.106	0.000	97	105326	1.60	1.71	
16 Chloroethane	64	4.241	4.241	0.000	81	67254	1.60	1.84	
17 Ethanol	31	4.354	4.354	0.000	98	385402	8.00	8.22	
18 Vinyl bromide	106	4.521	4.521	0.000	98	110737	1.60	1.90	
19 2-Methylbutane	43	4.570	4.570	0.000	94	232341	1.60	2.04	
20 Trichlorofluoromethane	101	4.769	4.769	0.000	95	238411	1.60	1.65	
21 Acrolein	56	4.785	4.785	0.000	92	49555	1.60	1.96	
22 Acetonitrile	40	4.850	4.850	0.000	100	63736	1.60	1.81	
23 Acetone	58	4.904	4.904	0.000	99	73754	1.60	1.55	
24 Pentane	72	4.979	4.979	0.000	96	21338	1.60	1.90	
25 Isopropyl alcohol	45	5.001	5.001	0.000	92	314299	1.60	2.12	
26 Ethyl ether	31	5.152	5.152	0.000	85	231445	1.60	2.20	
27 1,1-Dichloroethene	96	5.449	5.449	0.000	92	108177	1.60	1.70	
28 Acrylonitrile	53	5.562	5.562	0.000	95	103941	1.60	1.93	
29 2-Methyl-2-propanol	59	5.589	5.589	0.000	97	278716	1.60	1.92	
30 1,1,2-Trichloro-1,2,2-trifluoroe	101	5.621	5.621	0.000	94	221676	1.60	1.71	
31 Methylene Chloride	84	5.788	5.788	0.000	89	135705	1.60	1.90	
32 3-Chloro-1-propene	39	5.804	5.804	0.000	93	167523	1.60	2.00	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
33 Carbon disulfide	76	5.939	5.939	0.000	96	317135	1.60	1.86	
34 trans-1,2-Dichloroethene	96	6.581	6.581	0.000	92	105682	1.60	1.75	
35 2-Methylpentane	43	6.603	6.603	0.000	96	385343	1.60	1.82	
36 Methyl tert-butyl ether	73	6.721	6.721	0.000	90	284463	1.60	1.81	
37 1,1-Dichloroethane	63	7.002	7.002	0.000	99	252521	1.60	1.79	
38 Vinyl acetate	43	7.120	7.120	0.000	100	514896	1.60	2.19	
39 2-Butanone (MEK)	72	7.557	7.557	0.000	95	56515	1.60	1.89	
40 Hexane	56	7.579	7.579	0.000	79	120555	1.60	1.89	
41 Isopropyl ether	45	7.746	7.746	0.000	95	683097	1.60	2.10	
42 cis-1,2-Dichloroethene	96	7.983	7.983	0.000	96	116009	1.60	1.71	
43 Ethyl acetate	43	8.182	8.182	0.000	97	434408	1.60	1.99	
44 Chloroform	83	8.328	8.328	0.000	91	232950	1.60	1.80	
45 Tert-butyl ethyl ether	59	8.425	8.425	0.000	98	437227	1.60	1.71	
46 Tetrahydrofuran	42	8.733	8.733	0.000	90	234325	1.60	2.11	
47 1,1,1-Trichloroethane	97	9.353	9.353	0.000	93	225563	1.60	1.68	
48 1,2-Dichloroethane	62	9.460	9.460	0.000	92	177414	1.60	1.93	
50 Cyclohexane	69	9.957	9.957	0.000	77	53593	1.60	1.89	
51 Benzene	78	9.962	9.962	0.000	91	370147	1.60	1.90	
49 n-Butanol	31	9.967	9.967	0.000	66	102043	1.60	2.29	
52 Carbon tetrachloride	117	9.984	9.984	0.000	88	226753	1.60	1.83	
53 2,3-Dimethylpentane	71	10.097	10.097	0.000	92	76877	1.60	1.81	
54 Thiophene	84	10.248	10.248	0.000	92	195716	1.60	1.82	
55 Isooctane	57	10.771	10.771	0.000	96	818016	1.60	1.99	
56 n-Heptane	71	11.170	11.170	0.000	95	127715	1.60	1.94	
57 1,2-Dichloropropane	63	11.240	11.240	0.000	88	179113	1.60	1.99	
58 Trichloroethene	130	11.278	11.278	0.000	92	147558	1.60	1.73	
59 Dibromomethane	93	11.364	11.364	0.000	94	141364	1.60	1.82	
60 Dichlorobromomethane	83	11.515	11.515	0.000	93	254088	1.60	1.91	
61 1,4-Dioxane	88	11.537	11.537	0.000	88	56168	1.60	1.84	
62 Methyl methacrylate	41	11.628	11.628	0.000	84	259510	1.60	2.02	
63 Methylcyclohexane	83	12.065	12.065	0.000	83	249770	1.60	2.22	
64 4-Methyl-2-pentanone (MIBK)	43	12.502	12.502	0.000	96	518880	1.60	2.16	
65 cis-1,3-Dichloropropene	75	12.550	12.550	0.000	94	205052	1.60	1.94	
66 trans-1,3-Dichloropropene	75	13.267	13.267	0.000	91	177908	1.60	1.95	
67 Toluene	91	13.381	13.381	0.000	92	416058	1.60	1.82	
68 1,1,2-Trichloroethane	83	13.462	13.462	0.000	95	137572	1.60	1.89	
69 2-Hexanone	58	13.866	13.866	0.000	88	208598	1.60	2.13	
70 n-Octane	85	14.098	14.098	0.000	98	127670	1.60	1.83	
71 Chlorodibromomethane	129	14.173	14.173	0.000	93	260443	1.60	1.79	
72 Ethylene Dibromide	107	14.465	14.465	0.000	96	230381	1.60	1.83	
73 Tetrachloroethene	129	14.540	14.540	0.000	91	139403	1.60	1.69	
74 Chlorobenzene	112	15.424	15.424	0.000	92	344399	1.60	1.88	
75 2,3-Dimethylheptane	43	15.457	15.457	0.000	90	655259	1.60	1.85	
76 Ethylbenzene	91	15.716	15.716	0.000	97	566567	1.60	1.80	
77 m-Xylene & p-Xylene	91	15.883	15.883	0.000	95	869189	3.20	3.65	
78 n-Nonane	57	16.314	16.314	0.000	93	407971	1.60	2.01	
79 Bromoform	173	16.325	16.325	0.000	93	290362	1.60	1.61	
80 Styrene	104	16.347	16.347	0.000	94	334985	1.60	1.93	
81 o-Xylene	91	16.406	16.406	0.000	97	449469	1.60	1.79	
82 1,1,2,2-Tetrachloroethane	83	16.735	16.735	0.000	97	406486	1.60	1.99	
83 1,2,3-Trichloropropane	110	16.891	16.891	0.000	90	101486	1.60	1.82	
84 Isopropylbenzene	105	16.999	16.999	0.000	96	681111	1.60	1.83	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
85 N-Propylbenzene	120	17.549	17.549	0.000	99	191462	1.60	1.92	
86 2-Chlorotoluene	126	17.592	17.592	0.000	97	178262	1.60	1.84	
87 4-Ethyltoluene	105	17.705	17.705	0.000	98	661294	1.60	1.88	
88 1,3,5-Trimethylbenzene	120	17.781	17.781	0.000	93	326059	1.60	2.14	
89 Alpha Methyl Styrene	118	18.018	18.018	0.000	89	287539	1.60	1.90	
90 n-Decane	57	18.088	18.088	0.000	82	577505	1.60	2.11	
91 tert-Butylbenzene	119	18.218	18.218	0.000	94	612868	1.60	1.86	
92 1,2,4-Trimethylbenzene	105	18.234	18.234	0.000	95	609106	1.60	1.95	
93 sec-Butylbenzene	105	18.493	18.493	0.000	98	937447	1.60	1.98	
94 1,3-Dichlorobenzene	146	18.503	18.503	0.000	95	431026	1.60	1.86	
95 Benzyl chloride	91	18.584	18.584	0.000	96	505511	1.60	2.00	
96 1,4-Dichlorobenzene	146	18.595	18.595	0.000	94	416398	1.60	1.86	
97 4-Isopropyltoluene	119	18.660	18.660	0.000	96	730273	1.60	1.99	
98 1,2,3-Trimethylbenzene	105	18.714	18.714	0.000	97	456318	1.60	1.35	
99 Butylcyclohexane	83	18.773	18.773	0.000	83	492620	1.60	1.87	
101 1,2-Dichlorobenzene	146	18.962	18.962	0.000	93	441342	1.60	1.84	
100 2,3-Dihydroindene	117	18.962	18.962	0.000	93	569433	1.60	1.79	
102 Indene	116	19.091	19.091	0.000	92	443149	1.60	1.64	
103 n-Butylbenzene	91	19.102	19.102	0.000	98	796894	1.60	2.19	
104 Undecane	57	19.431	19.431	0.000	88	713952	1.60	2.25	
105 1,2-Dibromo-3-Chloropropane	157	19.577	19.577	0.000	88	213115	1.60	1.50	
106 1,2,4,5-Tetramethylbenzene	119	19.873	19.873	0.000	98	673997	1.60	1.83	
107 Dodecane	57	20.488	20.488	0.000	87	720038	1.60	2.04	
108 1,2,4-Trichlorobenzene	180	20.671	20.671	0.000	94	444783	1.60	2.11	
109 Naphthalene	128	20.806	20.806	0.000	99	889634	1.60	2.25	
110 Hexachlorobutadiene	225	21.027	21.027	0.000	95	420008	1.60	1.75	
111 1,2,3-Trichlorobenzene	180	21.092	21.092	0.000	94	470905	1.60	2.04	
112 2-Methylnaphthalene	142	21.831	21.831	0.000	98	285104	1.60	1.34	
113 1-Methylnaphthalene	142	21.965	21.965	0.000	98	360904	1.60	1.35	
A 116 C8 Range	1	14.093	(14.049-14.146)		0	1855022	1.60	2.10	
S 117 Xylenes, Total	100				0		4.80	5.44	
S 118 1,2-Dichloroethene, Total	1				0		3.20	3.46	
T 143 2-Methylthiophene TIC	97	13.537	13.537	0.000	99	352047	1.60	1.69	
T 142 3-Methylthiophene TIC	97	13.742	13.742	0.000	97	349650	1.60	1.68	
T 150 2-Ethylthiophene TIC	97	15.823	15.823	0.000	97	432720	1.60	2.08	a
T 153 1,2-Dimethyl-4-Ethylbenzene TIC	119	19.480	19.480	0.000	87	554998	1.60	2.66	
T 155 1,2,3,5-Tetramethylbenzene TIC	119	19.927	19.927	0.000	96	398935	1.60	1.92	
T 156 1,2,3,4-Tetramethylbenzene TIC	119	20.321	20.321	0.000	98	561369	1.60	2.69	
T 157 Benzo(b)thiophene TIC	134	20.908	20.908	0.000	98	439702	1.60	2.11	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

40CV101S_00123	Amount Added: 80.00	Units: mL	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

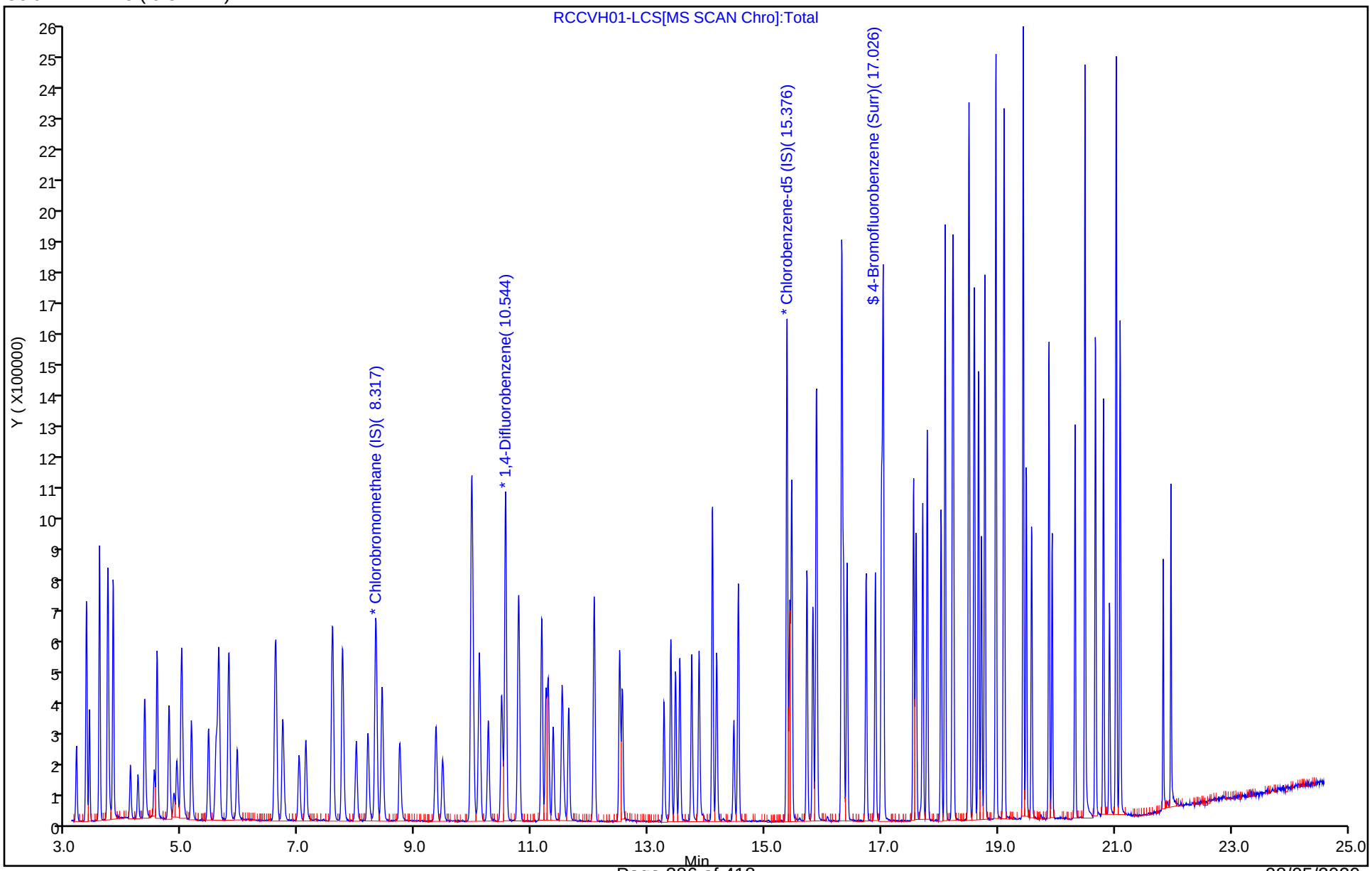
Report Date: 03-Aug-2020 15:13:12 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins Environment Testing America

Data File: \\chromfs\Knoxville\ChromData\MR\20200730-16173.b\RCCVH01-LCS.d

Injection Date:	01-Aug-2020 08:35:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	LCS			Worklist Smp#:	1002
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins Environment Testing America
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MR\20200730-16173.b\RCCVH01-LCS.d				
Lims ID:	LCS				
Client ID:					
Sample Type:	LCS				
Inject. Date:	01-Aug-2020 08:35:30	ALS Bottle#:	16	Worklist Smp#:	1002
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016173-002				
Misc. Info.:	S123 80ML				
Operator ID:	HMT	Instrument ID:	MR		
Method:	\\chromfs\Knoxville\ChromData\MR\20200730-16173.b\MR_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	03-Aug-2020 15:13:08	Calib Date:	28-Jul-2020 09:59:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC09R.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1028				

First Level Reviewer: khachitpongpanits Date: 03-Aug-2020 15:13:08

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.00	3.93	98.16

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19811-1

SDG No.:

Instrument ID: MG Start Date: 07/15/2020 12:19

Analysis Batch Number: 41058 End Date: 07/16/2020 02:48

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 140-41058/1		07/15/2020 12:19	1	GBFBG15IC.D	RTX-5 0.32(mm)
IC 140-41058/21		07/15/2020 12:53	1	GG15IC10.D	RTX-5 0.32(mm)
IC 140-41058/4		07/15/2020 14:28	1	GG15IC09.D	RTX-5 0.32(mm)
IC 140-41058/6		07/15/2020 15:55	1	GG15IC08.D	RTX-5 0.32(mm)
IC 140-41058/8		07/15/2020 17:25	1	GG15IC01.D	RTX-5 0.32(mm)
IC 140-41058/9		07/15/2020 18:11	1	GG15IC02.D	RTX-5 0.32(mm)
140-19589-A-1 MDLV		07/15/2020 18:11	1		RTX-5 0.32(mm)
ZZZZZ		07/15/2020 18:11	1		RTX-5 0.32(mm)
IC 140-41058/10		07/15/2020 18:58	1	GG15IC03.D	RTX-5 0.32(mm)
140-19589-A-2 MDLV		07/15/2020 18:58	1		RTX-5 0.32(mm)
ZZZZZ		07/15/2020 18:58	1		RTX-5 0.32(mm)
IC 140-41058/11		07/15/2020 19:47	1	GG15IC04.D	RTX-5 0.32(mm)
140-19589-A-3 MDLV		07/15/2020 19:47	1		RTX-5 0.32(mm)
ZZZZZ		07/15/2020 19:47	1		RTX-5 0.32(mm)
IC 140-41058/12		07/15/2020 20:32	1	GG15IC05.D	RTX-5 0.32(mm)
140-19589-A-4 MDLV		07/15/2020 20:32	1		RTX-5 0.32(mm)
ZZZZZ		07/15/2020 20:32	1		RTX-5 0.32(mm)
IC 140-41058/13		07/15/2020 21:18	1	GG15IC06.D	RTX-5 0.32(mm)
ICIS 140-41058/14		07/15/2020 22:02	1	GG15IC07.D	RTX-5 0.32(mm)
ICV 140-41058/16		07/16/2020 00:19	1	GG15ICV.D	RTX-5 0.32(mm)
ZZZZZ		07/16/2020 02:48	1		RTX-5 0.32(mm)

Eurofins/TestAmerica Knoxville GC/MS Air - Initial Calibration Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 21 & KNOX-MS-0023, Rev 4

Analysis Date:	7/15/20	Instrument:	MG	Chrom WL #:	16031	TALS Batch & Event #	TO14/15: 2525 / 41058	DODS: 2526 / 41057 7/16
							DOD: 2528 / 41061	OHIO: ~~2527~~ 41060

Chrom/Worklist Review	1st	Comments	2nd
1. Re-read each Limit Group [method editor-limit groups]	✓	2527 7/16/20 AK	na
2. Verify LODV in Chrom [method editor -> edit -> MDL]	✓		na
3. Are the reagents and init/final volumes correct and first level "unlock/clear"? (Verify reagents & amt. injected at each level) [WL Sample Reagents Tab vs. Entech]	✓		✓
4. Files linked properly to calibration levels? [Sample List- Lab ID vs. Info]	✓		✓
5. Did BFB meet tune criteria? [F8]	✓		✓
6. Were all standards injected within 24 hr of BFB? [F7]	✓		✓
7. High point checked for saturation and point removed if so? [Chrom]	✓		✓
8. If manual integrations performed, are they properly performed, correct, baseline clearly identified, and correct reason given? [Chrom]	MG		MA
9. RT for each IS ±20 sec avg. RT? [F6 IstdRec]	✓		✓
10. Area for each IS ± 40% avg. area? [F6 IstdRec]	✓		✓
11. Each analyte ± 0.06 RRT of avg. RRT? [F6 - RRT]	✓		✓
12. Elution order checked on isomeric pairs? [Chrom]			
• dichlorodifluoromethane / 1,2-dichlorotetrafluoroethane	✓		✓
• 2-methyl butane / acrolein	✓		✓
• trichlorofluoromethane / 1,1,2-trichlorotrifluoroethane	✓		✓
• vinyl acetate / hexane	✓		✓
• cis- and trans- isomers	✓		✓
• ethyl benzene / m/p-xylene / o-xylene	✓		✓
• n-propylbenzene/4-ethyl toluene/1,3,5-trimethylbenzene/1,2,4-trimethylbenzene/ sec-butylbenzene/1,2,3-trimethylbenzene	✓		✓
• tert-butylbenzene/4-isopropyltoluene	✓		✓
• 1,3- , 1,4- , and 1,2-dichlorobenzene	✓		✓
• 1,2-dimethyl-4-ethylbenzene/1,2,4,5-, 1,2,3,5-, and 1,2,3,4-tetramethylbenzenes	MG	in ICV	✓
• 1,2,4- and 1,2,3-trichlorobenzenes	✓		✓
• 2-, and 1-methylnaphthalene	✓		✓
13. "Range" analytes & internal standard RIC ID'd correctly, inspected for interferences & proper integration?	✓		✓

MLG Review	TO	DOD	OH	Comments	TO-	DOD	OH
14. Is %RSD for all target analytes ≤ 30%? (with up to 2 compounds with RSD ≤ 40%) 1& 2 methylnaphthalene ≤ 50% Propane Meth 740% NCM [F6 Σ]	✓	✓	✓		✓	✓	✓
15. Were at least 5 levels of each compound analyzed? [F6]	✓	✓	✓		✓	✓	✓
16. Is low level std at or <RL and are the remaining points consec.? [F6]	✓	✓	✓		✓	✓	✓
17. At least 6 consec. points used for quad curves; at least 5 consec. points for linear curves? (Note: Ohio does not allow quad) [F6]	✓	✓	✓		✓	✓	✓
18. If curves were used, is correlation coefficient ≥0.990? [F6]	✓	✓	✓		✓	✓	✓
19. Is the intercept less than the RL for each curve? [F6]	✓	✓	✓		✓	✓	✓
20. For quadratic: is a tangent's slope to the curve entirely positive or negative and continuous. [Cntrl-C, details]	✓	✓	na		✓	✓	na
21. Is low point RSE ≤ 50 %? DMC action DOD, DODS [F6]	✓	✓	✓		✓	✓	✓
22. Is the second source analysis within limits? [F8 - icv]	✓	✓	✓		✓	✓	✓

Analyst/Date: 7/16/20 **2nd Level Reviewer/Date:** 7/17/20

TALS Review	TO	DOD	OH	Comments	TO	DOD	OH
23. Upload ICAL	✓				na	na	na
24. Graphics uploaded? [paperclip]	✓	✓	✓		✓	✓	✓
25. All points are in the most recent active calibration event? [Calibration Events –'Fix ICAL linkage' if needed]	✓	✓	✓		✓	✓	✓
26. Runs linked to BFB? [QC Links]	✓	✓	✓		✓	✓	✓
27. Run Checklist and acknowledge findings [F8]	✓	✓	✓		✓	✓	✓
28. If criteria not met, was a NCM generated?	✓	✓	✓		MA →		
29. After review in TALS, approve the method in TALS.	na	na	na		✓	✓	✓
30. After verifying TALS is correct, lock method in Chrom <resolve any error issues>	na	na	na		✓	✓	✓
31. Checklist & Entech report scanned, attached & assigned properly?	na	na	na		✓	✓	✓

Analyst/date: 7/16/20 **2nd Level Reviewer/date:** 7/17/20

Comments:

Comments:

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19811-1

SDG No.:

Instrument ID: MR Start Date: 07/27/2020 16:54

Analysis Batch Number: 41306 End Date: 07/28/2020 12:30

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 140-41306/1		07/27/2020 16:54	1	RG27BLKZ.D	RTX-5 0.32(mm)
IC 140-41306/3		07/27/2020 17:38	1	RG27IC10.D	RTX-5 0.32(mm)
IC 140-41306/7		07/27/2020 21:45	1	RG27IC08.D	RTX-5 0.32(mm)
IC 140-41306/9		07/27/2020 23:58	1	RG27IC01.D	RTX-5 0.32(mm)
IC 140-41306/10		07/28/2020 01:02	1	RG27IC02.D	RTX-5 0.32(mm)
IC 140-41306/11		07/28/2020 02:07	1	RG27IC03.D	RTX-5 0.32(mm)
IC 140-41306/12		07/28/2020 03:11	1	RG27IC04.D	RTX-5 0.32(mm)
IC 140-41306/13		07/28/2020 04:17	1	RG27IC05.D	RTX-5 0.32(mm)
IC 140-41306/14		07/28/2020 05:24	1	RG27IC06.D	RTX-5 0.32(mm)
ICIS 140-41306/15		07/28/2020 06:29	1	RG27IC07.D	RTX-5 0.32(mm)
IC 140-41306/23		07/28/2020 09:59	1	RG27IC09R.D	RTX-5 0.32(mm)
ICV 140-41306/18		07/28/2020 12:30	1	RG27LCS.D	RTX-5 0.32(mm)

Eurofins/TestAmerica Knoxville GC/MS Air - Initial Calibration Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 21 & KNOX-MS-0023, Rev 4

Analysis Date:	7/27/20	Instrument:	MR	Chrom WL #:	16116	TALS Batch & Event #	TO14/15: 2540 / 41036	DODS: 2541 - 41037
							DOD: 2543 / 41039	OHIO: 2542 / 41038

Chrom/Worklist Review	1st	Comments	2nd
1. Re-read each Limit Group [method editor-limit groups]	✓		na
2. Verify LODV in Chrom [method editor -> edit -> MDL]	✓		na
3. Are the reagents and init/final volumes correct and first level "unlock/clear"? (Verify reagents & amt. injected at each level) [WL Sample Reagents Tab vs. Entech]	✓		✓
4. Files linked properly to calibration levels? [Sample List- Lab ID vs. Info]	✓		✓
5. Did BFB meet tune criteria? [F8]	✓	TO15 only	✓
6. Were all standards injected within 24 hr of BFB? [F7]	✓		✓
7. High point checked for saturation and point removed if so? [Chrom]	✓		✓
8. If manual integrations performed, are they properly performed, correct, baseline clearly identified, and correct reason given? [Chrom]	✓		NA
9. RT for each IS ±20 sec avg. RT? [F6 IstdRec]	✓		✓
10. Area for each IS ± 40% avg. area? [F6 IstdRec]	✓		✓
11. Each analyte ± 0.06 RRT of avg. RRT? [F6 - RRT]	✓		✓
12. Elution order checked on isomeric pairs? [Chrom]			
• dichlorodifluoromethane / 1,2-dichlorotetrafluoroethane	✓		✓
• 2-methyl butane / acrolein	✓		✓
• trichlorofluoromethane / 1,1,2-trichlorotrifluoroethane	✓		✓
• vinyl acetate / hexane	✓		✓
• cis- and trans- isomers	✓		✓
• ethyl benzene / m/p-xylene / o-xylene	✓		✓
• n-propylbenzene/4-ethyl toluene/1,3,5-trimethylbenzene/1,2,4-trimethylbenzene/ sec-butylbenzene/1,2,3-trimethylbenzene	✓		✓
• tert-butylbenzene/4-isopropyltoluene	✓		✓
• 1,3- , 1,4- , and 1,2-dichlorobenzene	✓		✓
• 1,2-dimethyl-4-ethylbenzene/1,2,4,5-, 1,2,3,5-, and 1,2,3,4-tetramethylbenzenes	NA	in ICV	✓
• 1,2,4- and 1,2,3-trichlorobenzenes	✓		✓
• 2-, and 1-methylnaphthalene	✓		✓
13. "Range" analytes & internal standard RIC ID'd correctly, inspected for interferences & proper integration?	✓		✓

MLG Review	TO	DOD	OH	Comments	TO-	DOD	OH
14. Is %RSD for all target analytes ≤ 30%? (with up to 2 compounds with RSD ≤ 40%) 1& 2 methylnaphthalene ≤ 50% $MeCl_2$ >40% RSD NCM [F6 Σ]	✓	✓	✓		✓	✓	✓
15. Were at least 5 levels of each compound analyzed? [F6]	✓	✓	✓		✓	✓	✓
16. Is low level std at or <RL and are the remaining points consec.? [F6]	✓	✓	✓		✓	✓	✓
17. At least 6 consec. points used for quad curves; at least 5 consec. points for linear curves? (Note: Ohio does not allow quad) [F6]	✓	✓	✓		✓	✓	✓
18. If curves were used, is correlation coefficient ≥0.990? [F6]	✓	✓	✓		✓	✓	✓
19. Is the intercept less than the RL for each curve? [F6]	✓	✓	✓		✓	✓	✓
20. For quadratic: is a tangent's slope to the curve entirely positive or negative and continuous. [Cntrl-C, details]	✓	✓	na		✓	✓	na
21. Is low point RSE ≤ 50 %? [F6]	✓	✓	✓		✓	✓	✓
22. Is the second source analysis within limits? DOD ↑acetone [F8 - icv]	✓	↑acc	✓		✓	✓	✓

Analyst/Date: 7/28/20

2nd Level Reviewer/Date: 7/28/20

TALS Review	TO	DOD	OH	Comments	TO	DOD	OH
23. Upload ICAL	✓				na	na	na
24. Graphics uploaded? [paperclip]	✓	✓	✓		✓	✓	✓
25. All points are in the most recent active calibration event? [Calibration Events –'Fix ICAL linkage' if needed]	✓	✓	✓		✓	✓	✓
26. Runs linked to BFB? [QC Links]	✓	✓	✓		✓	✓	✓
27. Run Checklist and acknowledge findings [F8]	✓	✓	✓		✓	✓	✓
28. If criteria not met, was a NCM generated?	✓	✓	✓		✓	✓	✓
29. After review in TALS, approve the method in TALS.	na	na	na		✓	✓	✓
30. After verifying TALS is correct, lock method in Chrom <resolve any error issues>	na	na	na		✓	✓	✓
31. Checklist & Entech report scanned, attached & assigned properly?	na	na	na		✓	✓	✓

Analyst/date: 7/28/20

2nd Level Reviewer/date: 7/28/20

Comments: Acetone + IPA UR LVS

Comments:

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19811-1

SDG No.:

Instrument ID: MG Start Date: 07/31/2020 08:31

Analysis Batch Number: 41417 End Date: 08/01/2020 03:26

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 140-41417/1		07/31/2020 08:31	1	GBFBG31.D	RTX-5 0.32(mm)
CCVIS 140-41417/2		07/31/2020 09:06	1	GCCVG31.D	RTX-5 0.32(mm)
LCS 140-41417/1002		07/31/2020 09:06	1	GCCVG31-LCS.d	RTX-5 0.32(mm)
MB 140-41417/4		07/31/2020 12:04	1	G500BG31.D	RTX-5 0.32(mm)
ZZZZZ		07/31/2020 12:57	1.53		RTX-5 0.32(mm)
ZZZZZ		07/31/2020 13:47	1.46		RTX-5 0.32(mm)
140-19811-1		07/31/2020 20:40	1	GG31P111.D	RTX-5 0.32(mm)
140-19811-2		07/31/2020 21:26	1	GG31P112.D	RTX-5 0.32(mm)
140-19811-3		07/31/2020 22:09	1	GG31P113.D	RTX-5 0.32(mm)
140-19811-4		07/31/2020 22:53	1	GG31P114.D	RTX-5 0.32(mm)
140-19811-5		07/31/2020 23:38	1	GG31P115.D	RTX-5 0.32(mm)
140-19811-6		08/01/2020 00:23	1	GG31P116.D	RTX-5 0.32(mm)
ZZZZZ		08/01/2020 01:07	1		RTX-5 0.32(mm)
ZZZZZ		08/01/2020 01:56	1		RTX-5 0.32(mm)
ZZZZZ		08/01/2020 02:42	1		RTX-5 0.32(mm)
ZZZZZ		08/01/2020 03:26	47.41		RTX-5 0.32(mm)

Eurofins/TestAmerica Knoxville GC/MS Air - Batch Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 21 & KNOX-MS-0023, Rev 4

Instrument/Date	MG 7/31/20		Routine	DOD	OHIO VAP
CCAL Chrom WL #	16161	CCAL Batch #	41417		41482
ICAL Chrom WL #	16031	ICAL Batch # / Event #	41058 / 2525	/	41060 / 2527

Chrom Review	1st	If No, why is data reportable?	2nd
1. Are the reagents & init/final volumes correct? (Verify reagents & amt. injected) [WL Sample Reagent Tab]	/		na
2. Did BFB meet tune criteria? [F8]	/	□ [Failed TO-14A, but passes TO-15]	
3. Was the CCAL compared to the most recent & correct ICAL (correct last ICal File batch #/start/end Cal date/time)? [F8]	/	List Target analytes outside CCV limits: IPA, Dichlorodifluoromethane	
4. Elution order checked on isomeric pairs? [Chrom]			
• dichlorodifluoromethane / 1,2-dichlorotetrafluoroethane	/		
• 2-methyl butane / acrolein	/		
• trichlorofluoromethane / 1,1,2-trichlorotrifluoroethane	/		
• vinyl acetate / hexane	/		
• cis- and trans- isomers	/		
• ethyl benzene / m/p-xylene / o-xylene	/		
• n-propylbenzene/4-ethyl toluene/1,3,5-trimethylbenzene/1,2,4-trimethylbenzene/sec-butylbenzene/1,2,3-trimethylbenzene	/		
• tert-butylbenzene/4-isopropyltoluene	/		
• 1,3- , 1,4- , and 1,2-dichlorobenzene	/		
• 1,2-dimethyl-4-ethylbenzene/1,2,4,5-, 1,2,3,5-, and 1,2,3,4-tetramethylbenzenes	NA		
• 1,2,4-trichlorobenzene/1,2,3-trichlorobenzene	/		
• 2-, and 1-methylnaphthalene	/		
5. "Range" analytes & internal standard RIC ID'd correctly, inspected for interferences & proper integration?	NA		
6. Has the RT been updated to the method?	/		
Analyst/date Suphanan Kh. 8/3/20		**2nd Level Reviewer/date**	
7. Has the vol injected been verified vs Entech & corrected if actual amount differs >5%? [WL Sample Info: init amt = sample amt; final amt = 500 mL]	/		
8. Do the lab ID, Info 1 and Dilution Factor columns correlate in Chrom? [Sample List - Lab ID vs. Info 1 vs. Dilution]	/		
9. Can dilution history verified? [Mgmt Report]	/		
10. Are all analytes present in the system blank < RL? (<1/2 RL for DoD). *If no, list blank ID:*	/	□ Method Blank – Report, ND (NCM#_____) □ Method Blank – Report, 10X (NCM#_____)	
11. All runs - peaks ID'd correctly and false positives removed?	/		
12. If manual integrations performed, are they properly performed, baseline clearly identified, and correct reason given?	/		
13. IS/Surr within limits? *List samples and reason (e.g.,* 1 thru 5*):* [Batch Results IS & SUR Tab] Sample ____ Reason ____ Sample ____ Reason ____	/	□ (1) Surrogate – Matrix (NCM#_____) □ (2) Surrogate – High, ND (NCM#_____) □ (3) ISTD – RA/RA Concurs (NCM#_____) □ (4) Surrogate –RX concur, Report both (NCM#_____) □ (5) ISTD – Matrix, DL required (NCM#_____)	
14. Samples outside calibration range scheduled for dilution?	/	□ ICAL – Range Exceeded; Minimum Dilution	
Chrom Review	**1st**	**If No, why is data reportable?**	**2nd**
15. For first analysis that is at a dilution, is highest target analyte >20% cal range? *List samples and reason:* Sample ____ Reason ____ Sample ____ Reason ____	/	□ (1) Reporting Limit – Dilution, Matrix (NCM#_____) □ (2) Reporting Limit – Dilution, Non-Target (NCM#_____) □ (3) Issues with initial collection volume; see DRC.	
16. RIC inspected for proper integration for TPH?	NA		
17. Obvious non-TPH peaks excluded?	↓		
18. Individual TPH peak area < octane high point area?	↓		

Eurofins/TestAmerica Knoxville GC/MS Air - Batch Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 21 & KNOX-MS-0023, Rev 4

TALS Review	1st	If No, why is data reportable?	2nd
19. Graphics uploaded? [open one paperclip]	✓		
20. NCM generated if BFB failed TO-14A criteria, but passes TO-15?	NA	□ [Failed TO-14A, but passes TO-15] (NCM#)	
21. Is the %D ≤ 30% for all target analytes? [≤ 50% for 1&2 methylnaphthalene] [Chrom-F8] [TALS-Sample Results Tab]	✓	☑ CCV - %D - LCS criteria met (NCM# 24425) ☑ CCV - %D high - outside criteria, samples ND, Sample IDs Included (NCM# 24426)	
22. Undiluted volume analyzed meets the method requirement (200 mL vs. 500 mL)?	✓		na
23. Project & sample special instructions verified?	✓		
24. If samples were Tedlar bags, was the 72 hr HT met? ** Narrate transfer to can.	NA	□ Air Analysis - Air Sample Transfer to Canister (NCM#____)	
25. Sample analyses done within analytical holding time?	✓	□ Holding Time – Received w/Insufficient Time (NCM#_____) □ Holding Time – Receipt (NCM#)	
26. Did the LCS meet criteria (70-130% with a limited # allowed 60-140% (see table) provisional analyte limit 60-140% with a limited # allowed 50-150%, and no two consecutive MEs). [Sample Results Tab] Note: No LCS required for OH VAP.	✓	□ Marginal Exceedances - Within ME Limits and Random; Report (NCM# ___) ☑ LCS/LCSD - %R High (NCM# 24427)	
27. Suffixes assigned properly (DL/RE)? [Sample List Tab]	NA		
28. Each job has QC created (BFB, CCV, LCS, MB)? [Sample List Tab]	✓		
29. Analytes over calibration range set to secondary [Conditions Review Tab]	✓		
30. Samples not reported set to 'Acceptable' or 'Rejected'? [Sample Results Tab]	✓		
31. DUP done per 20 samples and are all RPDs within limits? (for target analytes >5x RL, <25% RPD; no criteria for n-butanol) *(If DUP not reported - set to 'Acceptable' for each job)*	✓		
32. Samples linked to proper blank (200 mL or 500 mL)? [QC links]	✓	**500 mL blank ID:** 140-41417/4, 140-41482/4 **200 mL blank ID:** NA	
33. Samples linked to job's BFB/CCV/LCS/MB? [QC Links]	✓		
34. Correct ICV linked to each MB? [QC Links]	✓		
35. Were all samples/QC analyzed within 24 hr of BFB? [F7]	✓		
36. If criteria were not met, was a NCM generated, and assigned to proper QC & samples? [Also see Conditions Review Tab]	✓		
37. Run Checklist and acknowledge findings [F8]	✓		
38. Runs set to 1st level review?	✓	Runs set to 2nd level review?	
39. QC checker run and items addressed?	-na-		
40. Checklist & Entech report scanned, attached & assigned properly?	-na-		

Analyst: Sydney K	Date: 8/3/20	2nd Level Reviewer :	Date:
Comments:		**Comments:**	
Cl acetone line 5,6			

Example Calculation: 140-19811-3 TCE

On-column ppbv x Final Vol (mL)/Entech Initial Vol (mL) x Canister Dilution Log DF

$$10.79424 \times \frac{500}{25} \times 1.0 = 216$$

MS017r47, 3/03/2020

Eurofins/TestAmerica Knoxville GC/MS Air - Batch Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 20 & KNOX-MS-0023, Rev 4

Instrument/Date	MG 7/31/20		Routine	DOD	OHIO VAP
CCAL Chrom WL #	16161	CCAL Batch #	41417		41482
ICAL Chrom WL #	16031	ICAL Batch # / Event #	41058/2525		41060/2527

Chrom Review	1st	If No, why is data reportable?	2nd
1. Are the reagents & init/final volumes correct? (Verify reagents & amt. injected) [WL Sample Reagent Tab]			na
2. Did BFB meet tune criteria? [F8]		□ [Failed TO-14A, but passes TO-15]	Y
3. Was the CCAL compared to the most recent & correct ICAL (correct last ICal File batch #/start/end Cal date/time)? [F8]		List Target analytes outside CCV limits: _____ _____ _____	Y
4. Elution order checked on isomeric pairs? [Chrom]			
• dichlorodifluoromethane / 1,2-dichlorotetrafluoroethane			Y
• 2-methyl butane / acrolein			Y
• trichlorofluoromethane / 1,1,2-trichlorotrifluoroethane			Y
• vinyl acetate / hexane			Y
• cis- and trans- isomers			Y
• ethyl benzene / m/p-xylene / o-xylene			Y
• n-propylbenzene/4-ethyl toluene/1,3,5-trimethylbenzene/1,2,4-trimethylbenzene/sec-butylbenzene/1,2,3-trimethylbenzene			Y
• tert-butylbenzene/4-isopropyltoluene			Y
• 1,3- , 1,4- , and 1,2-dichlorobenzene			Y
• 1,2-dimethyl-4-ethylbenzene/1,2,4,5-, 1,2,3,5-, and 1,2,3,4-tetramethylbenzenes			NA
• 1,2,4-trichlorobenzene/1,2,3-trichlorobenzene			Y
• 2-, and 1-methylnaphthalene			Y
5. "Range" analytes & internal standard RIC ID'd correctly, inspected for interferences & proper integration?			**NA**
6. Has the RT been updated to the method?			**Y**
Analyst/date		**2nd Level Reviewer/date LL 8/3/20**	

7. Has the vol injected been verified vs Entech & corrected if actual amount differs >5%? [WL Sample Info: init amt = sample amt; final amt = 500 mL]			**Y**
8. Do the lab ID, Info 1 and Dilution Factor columns correlate in Chrom? [Sample List - Lab ID vs. Info 1 vs. Dilution]			**Y**
9. Can dilution history verified? [Mgmt Report]			**Y**
10. Are all analytes present in the system blank < RL**?** (<1/2 RL for DoD). *If no, list blank ID:*		□ Method Blank – Report, ND (NCM#_____) □ Method Blank – Report, 10X (NCM#_____)	**Y**
11. All runs - peaks ID'd correctly and false positives removed?			**Y**
12. If manual integrations performed, are they properly performed, baseline clearly identified, and correct reason given?			**Y**
13. IS/Surr within limits? *List samples and reason (e.g.,* 1 thru 5*):* [Batch Results IS & SUR Tab] Sample Reason Sample Reason _____ _____ _____ _____ _____ _____ _____ _____		□ (1) Surrogate – Matrix (NCM#_____) □ (2) Surrogate – High, ND (NCM#_____) □ (3) ISTD – RA/RA Concurs (NCM#_____) □ (4) Surrogate –RX concur, Report both (NCM#_____) □ (5) ISTD – Matrix, DL required (NCM#_____)	**Y**
14. Samples outside calibration range scheduled for dilution?		□ ICAL – Range Exceeded; Minimum Dilution	**Y**

Chrom Review	1st	If No, why is data reportable?	2nd
15. For first analysis that is at a dilution, is highest target analyte >20% cal range? *List samples and reason:* Sample Reason Sample Reason _____ _____ _____ _____ _____ _____ _____ _____		□ (1) Reporting Limit – Dilution, Matrix (NCM#_____) □ (2) Reporting Limit – Dilution, Non-Target (NCM#_____) □ (3) Issues with initial collection volume; see DRC.	**Y**
16. RIC inspected for proper integration for TPH?			**NA**
17. Obvious non-TPH peaks excluded?			**NA**
18. Individual TPH peak area < octane high point area?			**NA**

Eurofins/TestAmerica Knoxville GC/MS Air - Batch Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 20 & KNOX-MS-0023, Rev 4

TALS Review	**1st**	**If No, why is data reportable?**	**2nd**
19. Graphics uploaded? [open one paperclip]			**Y**
20. NCM generated if BFB failed TO-14A criteria, but passes TO-15?		□ [Failed TO-14A, but passes TO-15] (NCM#_____)	**NA**
21. Is the %D ≤ 30% for all target analytes? [≤ 50% for 1&2 methylnaphthalene] [Chrom-F8] [TALS-Sample Results Tab]		□ CCV - %D - LCS criteria met (NCM#_____) □ CCV - %D high - outside criteria, samples ND, Sample IDs Included (NCM#_____)	**Y**
22. Undiluted volume analyzed meets the method requirement (200 mL vs. 500 mL)?			**na**
23. Project & sample special instructions verified?			**Y**
24. If samples were Tedlar bags, was the 72 hr HT met? ** Narrate transfer to can.		□ Air Analysis - Air Sample Transfer to Canister (NCM#____)	**NA**
25. Sample analyses done within analytical holding time?		□ Holding Time – Received w/Insufficient Time (NCM#_____) □ Holding Time – Receipt (NCM#_____)	**Y**
26. Did the LCS meet criteria (70-130% with a limited # allowed 60-140% (see table) provisional analyte limit 60-140% with a limited # allowed 50-150%, and no two consecutive MEs). [Sample Results Tab] Note: No LCS required for OH VAP.		□ Marginal Exceedances - Within ME Limits and Random; Report (NCM# ___) □ LCS/LCSD - %R High (NCM#_____)	**Y**
27. Suffixes assigned properly (DL/RE)? [Sample List Tab]			**NA**
28. Each job has QC created (BFB, CCV, LCS, MB)? [Sample List Tab]			**Y**
29. Analytes over calibration range set to secondary [Conditions Review Tab]			**Y**
30. Samples not reported set to 'Acceptable' or 'Rejected'? [Sample Results Tab]			**Y**
31. DUP done per 20 samples and are all RPDs within limits? (for target analytes >5x RL, <25% RPD; no criteria for n-butanol) *(If DUP not reported - set to 'Acceptable' for each job)*			**Y**
32. Samples linked to proper blank (200 mL or 500 mL)? [QC links]		**500 mL blank ID: 4** **200 mL blank ID: NA**	**Y**
33. Samples linked to job's BFB/CCV/LCS/MB? [QC Links]			**Y**
34. Correct ICV linked to each MB? [QC Links]			**Y**
35. Were all samples/QC analyzed within 24 hr of BFB? [F7]			**Y**
36. If criteria were not met, was a NCM generated, and assigned to proper QC & samples? [Also see Conditions Review Tab]			**Y**
37. Run Checklist and acknowledge findings [F8]			**Y**
38. Runs set to 1st level review?		Runs set to 2nd level review?	**Y**
39. QC checker run and items addressed?	**-na-**		**Y**
40. Checklist & Entech report scanned, attached & assigned properly?	**-na-**		**Y**

Number of target analytes in LCS	# marginal exceedances of LCS control limits allowed
>90	5
71 - 90	4
51 - 70	3
31 - 50	2
11 - 30	1
< 11	0

Analyst:	**Date:**	**2nd Level Reviewer : LL**	**Date: 8/3/20**
Comments:		**Comments:**	
Example Calculation:			
On-column ppbv x Final Vol (mL)/Entech Initial Vol (mL) x Canister Dilution Log DF			

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19811-1

SDG No.:

Instrument ID: MR Start Date: 08/01/2020 08:07

Analysis Batch Number: 41446 End Date: 08/02/2020 01:50

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 140-41446/1		08/01/2020 08:07	1	RDNUH01.D	RTX-5 0.32(mm)
CCVIS 140-41446/2		08/01/2020 08:35	1	RCCVH01.D	RTX-5 0.32(mm)
LCS 140-41446/1002		08/01/2020 08:35	1	RCCVH01-LCS.d	RTX-5 0.32(mm)
MB 140-41446/4		08/01/2020 12:00	1	R500BH01.D	RTX-5 0.32(mm)
ZZZZZ		08/01/2020 12:52	1		RTX-5 0.32(mm)
ZZZZZ		08/01/2020 13:45	1		RTX-5 0.32(mm)
ZZZZZ		08/01/2020 14:35	1		RTX-5 0.32(mm)
ZZZZZ		08/01/2020 15:24	1		RTX-5 0.32(mm)
ZZZZZ		08/01/2020 16:12	1		RTX-5 0.32(mm)
ZZZZZ		08/01/2020 17:00	1		RTX-5 0.32(mm)
ZZZZZ		08/01/2020 17:48	3.72		RTX-5 0.32(mm)
ZZZZZ		08/01/2020 18:37	1		RTX-5 0.32(mm)
ZZZZZ		08/01/2020 19:24	1		RTX-5 0.32(mm)
ZZZZZ		08/01/2020 20:13	1		RTX-5 0.32(mm)
140-19811-2 DL		08/01/2020 21:01	1	RH01P109.D	RTX-5 0.32(mm)
ZZZZZ		08/01/2020 21:49	1		RTX-5 0.32(mm)
ZZZZZ		08/02/2020 00:14	1		RTX-5 0.32(mm)
ZZZZZ		08/02/2020 01:02	1		RTX-5 0.32(mm)
ZZZZZ		08/02/2020 01:50	1		RTX-5 0.32(mm)

Eurofins/TestAmerica Knoxville GC/MS Air - Batch Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 21 & KNOX-MS-0023, Rev 4

Instrument/Date	MR 8/1/20		Routine	DOD	OHIO VAP
CCAL Chrom WL #	16173	CCAL Batch #	41446		41512
ICAL Chrom WL #	16116	ICAL Batch # / Event #	41306 / 2540	/	41308 / 2542

Chrom Review	1st	If No, why is data reportable?	2nd
1. Are the reagents & init/final volumes correct? (Verify reagents & amt. injected) [WL Sample Reagent Tab]	✓		na
2. Did BFB meet tune criteria? [F8]	✓	☐ [Failed TO-14A, but passes TO-15]	
3. Was the CCAL compared to the most recent & correct ICAL (correct last ICal File batch #/start/end Cal date/time)? [F8]	✓	List Target analytes outside CCV limits: IPA, 1,2,4-Trichlorobenzene, THF, Naphthalene, 1,3,5-trimethylbenzene, MIBK, vinyl acetate, 2-Hexanone	
4. Elution order checked on isomeric pairs? [Chrom]			
• dichlorodifluoromethane / 1,2-dichlorotetrafluoroethane	✓		
• 2-methyl butane / acrolein	✓		
• trichlorofluoromethane / 1,1,2-trichlorotrifluoroethane	✓		
• vinyl acetate / hexane	✓		
• cis- and trans- isomers	✓		
• ethyl benzene / m/p-xylene / o-xylene	✓		
• n-propylbenzene/4-ethyl toluene/1,3,5-trimethylbenzene/1,2,4-trimethylbenzene/sec-butylbenzene/1,2,3-trimethylbenzene	✓		
• tert-butylbenzene/4-isopropyltoluene	✓		
• 1,3- , 1,4- , and 1,2-dichlorobenzene	✓		
• 1,2-dimethyl-4-ethylbenzene/1,2,4,5-, 1,2,3,5-, and 1,2,3,4-tetramethylbenzenes	NA		
• 1,2,4-trichlorobenzene/1,2,3-trichlorobenzene	✓		
• 2-, and 1-methylnaphthalene	✓		
5. "Range" analytes & internal standard RIC ID'd correctly, inspected for interferences & proper integration?	NA ✓		
6. Has the RT been updated to the method?	✓		
Analyst/date Suphawan Kh. 8/3/20		**2nd Level Reviewer/date**	

7. Has the vol injected been verified vs Entech & corrected if actual amount differs >5%? [WL Sample Info: init amt = sample amt; final amt = 500 mL]	✓		
8. Do the lab ID, Info 1 and Dilution Factor columns correlate in Chrom? [Sample List - Lab ID vs. Info 1 vs. Dilution]	✓		
9. Can dilution history verified? [Mgmt Report]	✓		
10. Are all analytes present in the system blank < RL? (<1/2 RL for DoD). *If no, list blank ID:*	✓	☐ Method Blank – Report, ND (NCM#_____) ☐ Method Blank – Report, 10X (NCM#_____)	
11. All runs - peaks ID'd correctly and false positives removed?	✓		
12. If manual integrations performed, are they properly performed, baseline clearly identified, and correct reason given?	✓		
13. IS/Surr within limits? *List samples and reason (e.g.,* 1 thru 5*):* [Batch Results IS & SUR Tab] Sample Reason Sample Reason _____ _____ _____ _____ _____ _____ _____ _____	✓	☐ (1) Surrogate – Matrix (NCM#_____) ☐ (2) Surrogate – High, ND (NCM#_____) ☐ (3) ISTD – RA/RA Concurs (NCM#_____) ☐ (4) Surrogate –RX concur, Report both (NCM#_____) ☐ (5) ISTD – Matrix, DL required (NCM#_____)	
14. Samples outside calibration range scheduled for dilution?	NA	☐ ICAL – Range Exceeded; Minimum Dilution	

Chrom Review	1st	If No, why is data reportable?	2nd
15. For first analysis that is at a dilution, is highest target analyte >20% cal range? *List samples and reason:* Sample Reason Sample Reason _____ _____ _____ _____	✓	☐ (1) Reporting Limit – Dilution, Matrix (NCM#_____) ☐ (2) Reporting Limit – Dilution, Non-Target (NCM#_____) ☐ (3) Issues with initial collection volume; see DRC.	
16. RIC inspected for proper integration for TPH?	NA		
17. Obvious non-TPH peaks excluded?	↓		
18. Individual TPH peak area < octane high point area?	↓		

TALS Review	1st	If No, why is data reportable?	2nd

Eurofins/TestAmerica Knoxville GC/MS Air - Batch Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 21 & KNOX-MS-0023, Rev 4

19. Graphics uploaded? [open one paperclip]	✓		
20. NCM generated if BFB failed TO-14A criteria, but passes TO-15?	✓	☒ [Failed TO-14A, but passes TO-15] (NCM# 24420)	
21. Is the %D ≤ 30% for all target analytes? [≤ 50% for 1&2 methylnaphthalene] [Chrom-F8] [TALS-Sample Results Tab]	✓	☒ CCV - %D - LCS criteria met (NCM# 24433) ☐ CCV - %D high - outside criteria, samples ND, Sample IDs Included (NCM#_____)	
22. Undiluted volume analyzed meets the method requirement (200 mL vs. 500 mL)?	✓		na
23. Project & sample special instructions verified?	✓		
24. If samples were Tedlar bags, was the 72 hr HT met? ** Narrate transfer to can.	NA	☐ Air Analysis - Air Sample Transfer to Canister (NCM#____)	
25. Sample analyses done within analytical holding time?	✓	☐ Holding Time – Received w/Insufficient Time (NCM#_____) ☐ Holding Time – Receipt (NCM#_____)	
26. Did the LCS meet criteria (70-130% with a limited # allowed 60-140% (see table) provisional analyte limit 60-140% with a limited # allowed 50-150%, and no two consecutive MEs). [Sample Results Tab] Note: No LCS required for OH VAP.	✓	☒ Marginal Exceedances - Within ME Limits and Random; Report (NCM# 24434) ☐ LCS/LCSD - %R High (NCM#_____)	
27. Suffixes assigned properly (DL/RE)? [Sample List Tab]	✓		
28. Each job has QC created (BFB, CCV, LCS, MB)? [Sample List Tab]	✓		
29. Analytes over calibration range set to secondary [Conditions Review Tab]	NA		
30. Samples not reported set to 'Acceptable' or 'Rejected'? [Sample Results Tab]	✓		
31. DUP done per 20 samples and are all RPDs within limits? (for target analytes >5x RL, <25% RPD; no criteria for n-butanol) *(If DUP not reported - set to 'Acceptable' for each job)*	✓		
32. Samples linked to proper blank (200 mL or 500 mL)? [QC links]	✓	**500 mL blank ID:** 140-41446/4, 140-41512/4 **200 mL blank ID:** 140-41446/5	
33. Samples linked to job's BFB/CCV/LCS/MB? [QC Links]	✓		
34. Correct ICV linked to each MB? [QC Links]	✓		
35. Were all samples/QC analyzed within 24 hr of BFB? [F7]	✓		
36. If criteria were not met, was a NCM generated, and assigned to proper QC & samples? [Also see Conditions Review Tab]	✓		
37. Run Checklist and acknowledge findings [F8]	✓		
38. Runs set to 1st level review?	✓	Runs set to 2nd level review?	
39. QC checker run and items addressed?	-na-		
40. Checklist & Entech report scanned, attached & assigned properly?	-na-		

Analyst: Suphawan Ph.	**Date:** 8/3/20	**2nd Level Reviewer :**	**Date:**
Comments:		**Comments:**	

Example Calculation: 140-19811-2 1,1,1-TCA

On-column ppbv x Final Vol (mL)/Entech Initial Vol (mL) x Canister Dilution Log DF

$6.045839 \times \frac{500}{30} \times 1.0 = 101$

Eurofins/TestAmerica Knoxville GC/MS Air - Batch Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 20 & KNOX-MS-0023, Rev 4

Instrument/Date	MR 8/1/20		Routine	DOD	OHIO VAP
CCAL Chrom WL #	16173	CCAL Batch #	41446		41512
ICAL Chrom WL #	16116	ICAL Batch # / Event #	41306/2540		41308/2542

Chrom Review	1st	If No, why is data reportable?	2nd
1. Are the reagents & init/final volumes correct? (Verify reagents & amt. injected) [WL Sample Reagent Tab]			na
2. Did BFB meet tune criteria? [F8]		□ [Failed TO-14A, but passes TO-15]	N
3. Was the CCAL compared to the most recent & correct ICAL (correct last ICal File batch #/start/end Cal date/time)? [F8]		List Target analytes outside CCV limits: _____ _____ _____	Y
4. Elution order checked on isomeric pairs? [Chrom]			
• dichlorodifluoromethane / 1,2-dichlorotetrafluoroethane			Y
• 2-methyl butane / acrolein			Y
• trichlorofluoromethane / 1,1,2-trichlorotrifluoroethane			Y
• vinyl acetate / hexane			Y
• cis- and trans- isomers			Y
• ethyl benzene / m/p-xylene / o-xylene			Y
• n-propylbenzene/4-ethyl toluene/1,3,5-trimethylbenzene/1,2,4-trimethylbenzene/sec-butylbenzene/1,2,3-trimethylbenzene			Y
• tert-butylbenzene/4-isopropyltoluene			Y
• 1,3- , 1,4- , and 1,2-dichlorobenzene			Y
• 1,2-dimethyl-4-ethylbenzene/1,2,4,5-, 1,2,3,5-, and 1,2,3,4-tetramethylbenzenes			NA
• 1,2,4-trichlorobenzene/1,2,3-trichlorobenzene			Y
• 2-, and 1-methylnaphthalene			Y
5. "Range" analytes & internal standard RIC ID'd correctly, inspected for interferences & proper integration?			NA
6. Has the RT been updated to the method?			Y
Analyst/date		**2nd Level Reviewer/date LL 8/3/20**	

7. Has the vol injected been verified vs Entech & corrected if actual amount differs >5%? [WL Sample Info: init amt = sample amt; final amt = 500 mL]			Y
8. Do the lab ID, Info 1 and Dilution Factor columns correlate in Chrom? [Sample List - Lab ID vs. Info 1 vs. Dilution]			Y
9. Can dilution history verified? [Mgmt Report]			Y
10. Are all analytes present in the system blank < RL**?** (<1/2 RL for DoD). *If no, list blank ID:*		□ Method Blank – Report, ND (NCM#_____) □ Method Blank – Report, 10X (NCM#_____)	Y
11. All runs - peaks ID'd correctly and false positives removed?			Y
12. If manual integrations performed, are they properly performed, baseline clearly identified, and correct reason given?			Y
13. IS/Surr within limits? *List samples and reason (e.g.,* 1 thru 5*):* [Batch Results IS & SUR Tab] Sample Reason Sample Reason _____ _____ _____ _____ _____ _____ _____ _____		□ (1) Surrogate – Matrix (NCM#_____) □ (2) Surrogate – High, ND (NCM#_____) □ (3) ISTD – RA/RA Concurs (NCM#_____) □ (4) Surrogate –RX concur, Report both (NCM#_____) □ (5) ISTD – Matrix, DL required (NCM#_____)	Y
14. Samples outside calibration range scheduled for dilution?		□ ICAL – Range Exceeded; Minimum Dilution	NA
Chrom Review	**1st**	**If No, why is data reportable?**	**2nd**
15. For first analysis that is at a dilution, is highest target analyte >20% cal range? *List samples and reason:* Sample Reason Sample Reason _____ _____ _____ _____ _____ _____ _____ _____		□ (1) Reporting Limit – Dilution, Matrix (NCM#_____) □ (2) Reporting Limit – Dilution, Non-Target (NCM#_____) □ (3) Issues with initial collection volume; see DRC.	Y
16. RIC inspected for proper integration for TPH?			NA
17. Obvious non-TPH peaks excluded?			NA
18. Individual TPH peak area < octane high point area?			NA

Eurofins/TestAmerica Knoxville GC/MS Air - Batch Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 20 & KNOX-MS-0023, Rev 4

TALS Review	**1st**	**If No, why is data reportable?**	**2nd**
19. Graphics uploaded? [open one paperclip]			**Y**
20. NCM generated if BFB failed TO-14A criteria, but passes TO-15?		□ [Failed TO-14A, but passes TO-15] (NCM#_____)	**Y**
21. Is the %D ≤ 30% for all target analytes? [≤ 50% for 1&2 methylnaphthalene] [Chrom-F8] [TALS-Sample Results Tab]		□ CCV - %D - LCS criteria met (NCM#_____) □ CCV - %D high - outside criteria, samples ND, Sample IDs Included (NCM#_____)	**Y**
22. Undiluted volume analyzed meets the method requirement (200 mL vs. 500 mL)?			**na**
23. Project & sample special instructions verified?			**Y**
24. If samples were Tedlar bags, was the 72 hr HT met? ** Narrate transfer to can.		□ Air Analysis - Air Sample Transfer to Canister (NCM#____)	**NA**
25. Sample analyses done within analytical holding time?		□ Holding Time – Received w/Insufficient Time (NCM#_____) □ Holding Time – Receipt (NCM#_____)	**Y**
26. Did the LCS meet criteria (70-130% with a limited # allowed 60-140% (see table) provisional analyte limit 60-140% with a limited # allowed 50-150%, and no two consecutive MEs). [Sample Results Tab] Note: No LCS required for OH VAP.		□ Marginal Exceedances - Within ME Limits and Random; Report (NCM# ___) □ LCS/LCSD - %R High (NCM#_____)	**Y**
27. Suffixes assigned properly (DL/RE)? [Sample List Tab]			**Y**
28. Each job has QC created (BFB, CCV, LCS, MB)? [Sample List Tab]			**Y**
29. Analytes over calibration range set to secondary [Conditions Review Tab]			**NA**
30. Samples not reported set to 'Acceptable' or 'Rejected'? [Sample Results Tab]			**Y**
31. DUP done per 20 samples and are all RPDs within limits? (for target analytes >5x RL, <25% RPD; no criteria for n-butanol) *(If DUP not reported - set to 'Acceptable' for each job)*			**Y**
32. Samples linked to proper blank (200 mL or 500 mL)? [QC links]		**500 mL blank ID: ___4** **200 mL blank ID: ___5_____**	**Y**
33. Samples linked to job's BFB/CCV/LCS/MB? [QC Links]			**Y**
34. Correct ICV linked to each MB? [QC Links]			**Y**
35. Were all samples/QC analyzed within 24 hr of BFB? [F7]			**Y**
36. If criteria were not met, was a NCM generated, and assigned to proper QC & samples? [Also see Conditions Review Tab]			**Y**
37. Run Checklist and acknowledge findings [F8]			**Y**
38. Runs set to 1st level review?		Runs set to 2nd level review?	**Y**
39. QC checker run and items addressed?	**-na-**		**Y**
40. Checklist & Entech report scanned, attached & assigned properly?	**-na-**		**Y**

Note: No LCS required for OH VAP.

Number of target analytes in LCS	# marginal exceedances of LCS control limits allowed
>90	5
71 - 90	4
51 - 70	3
31 - 50	2
11 - 30	1
< 11	0

Analyst:	**Date:**	**2nd Level Reviewer : LL**	**Date: 8/3/20**
Comments:		**Comments:**	
Example Calculation:			
On-column ppbv x Final Vol (mL)/Entech Initial Vol (mL) x Canister Dilution Log DF			

AIR - GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Knoxvill Job No.: 140-19811-1

SDG No.:

Batch Number: 41417 Batch Start Date: 07/31/20 08:31 Batch Analyst: Khachitpongpanit, Suphawa

Batch Method: TO 15 LL Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	InitialPressure	FinalPressure	40CV101P 00119	40MXISSURP 00004
BFB 140-41417/1		TO 15 LL		500 mL	500 mL	1	1		
CCVIS 140-41417/2		TO 15 LL		500 mL	500 mL	1	1	80 mL	40 mL
MB 140-41417/4		TO 15 LL		500 mL	500 mL	1	1		40 mL
140-19811-A-1	BLDG A EFFLUENT	TO 15 LL	T	100 mL	500 mL	1	1		40 mL
140-19811-A-2	BLDG A MID GAC	TO 15 LL	T	100 mL	500 mL	1	1		40 mL
140-19811-A-3	BLDG A INFLUENT	TO 15 LL	T	25 mL	500 mL	1	1		40 mL
140-19811-A-4	BLDG B EFFLUENT	TO 15 LL	T	100 mL	500 mL	1	1		40 mL
140-19811-A-5	BLDG B MID GAC	TO 15 LL	T	100 mL	500 mL	1	1		40 mL
140-19811-A-6	BLDG B INFLUENT	TO 15 LL	T	100 mL	500 mL	1	1		40 mL
LCS 140-41417/1002		TO 15 LL		500 mL	500 mL	1	1	80 mL	40 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	40MXSUR 00003					
BFB 140-41417/1		TO 15 LL		40 mL					
CCVIS 140-41417/2		TO 15 LL							
MB 140-41417/4		TO 15 LL							
140-19811-A-1	BLDG A EFFLUENT	TO 15 LL	T						
140-19811-A-2	BLDG A MID GAC	TO 15 LL	T						
140-19811-A-3	BLDG A INFLUENT	TO 15 LL	T						
140-19811-A-4	BLDG B EFFLUENT	TO 15 LL	T						
140-19811-A-5	BLDG B MID GAC	TO 15 LL	T						
140-19811-A-6	BLDG B INFLUENT	TO 15 LL	T						
LCS 140-41417/1002		TO 15 LL							

Batch Notes	

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

AIR - GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Knoxvill Job No.: 140-19811-1

SDG No.:

Batch Number: 41417 Batch Start Date: 07/31/20 08:31 Batch Analyst: Khachitpongpanit, Suphawa

Batch Method: TO 15 LL Batch End Date:

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

AIR - GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Knoxvill Job No.: 140-19811-1

SDG No.:

Batch Number: 41446 Batch Start Date: 08/01/20 08:07 Batch Analyst: Khachitpongpanit, Suphawa

Batch Method: TO 15 LL Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	InitialPressure	FinalPressure	40CV101S 00123	40MXISSURP 00004
BFB 140-41446/1		TO 15 LL		500 mL	500 mL	1	1		
CCVIS 140-41446/2		TO 15 LL		500 mL	500 mL	1	1	80 mL	40 mL
MB 140-41446/4		TO 15 LL		500 mL	500 mL	1	1		40 mL
140-19811-A-2	BLDG A MID GAC	TO 15 LL	T	30 mL	500 mL	1	1		40 mL
LCS 140-41446/1002		TO 15 LL		500 mL	500 mL	1	1	80 mL	40 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	40MXSUR 00003					
BFB 140-41446/1		TO 15 LL		40 mL					
CCVIS 140-41446/2		TO 15 LL							
MB 140-41446/4		TO 15 LL							
140-19811-A-2	BLDG A MID GAC	TO 15 LL	T						
LCS 140-41446/1002		TO 15 LL							

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-18916-1

SDG No.:

Client Sample ID: 34000669 Lab Sample ID: 140-18916-2

Matrix: Air Lab File ID: 18916BK02.D

Analysis Method: TO-15 Date Collected: 04/22/2020 08:10

Sample wt/vol: 200(mL) Date Analyzed: 04/29/2020 00:02

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 39289 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	ND		0.20	
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.20	
79-00-5	1,1,2-Trichloroethane	ND		0.20	
76-13-1	1,1,2-Trichlorotrifluoroethane	ND		0.20	
75-34-3	1,1-Dichloroethane	ND		0.20	
75-35-4	1,1-Dichloroethene	ND		0.20	
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	
96-18-4	1,2,3-Trichloropropane	ND		0.50	
526-73-8	1,2,3-Trimethylbenzene	ND		0.20	
95-93-2	1,2,4,5-Tetramethylbenzene	ND		0.20	
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	
95-63-6	1,2,4-Trimethylbenzene	ND		0.20	
96-12-8	1,2-Dibromo-3-Chloropropane	ND		0.40	
106-93-4	1,2-Dibromoethane	ND		0.20	
95-50-1	1,2-Dichlorobenzene	ND		0.40	
107-06-2	1,2-Dichloroethane	ND		0.20	
78-87-5	1,2-Dichloropropane	ND		0.20	
76-14-2	1,2-Dichlorotetrafluoroethane	ND		0.20	
108-67-8	1,3,5-Trimethylbenzene	ND		0.20	
106-99-0	1,3-Butadiene	ND		0.40	
541-73-1	1,3-Dichlorobenzene	ND		0.20	
106-46-7	1,4-Dichlorobenzene	ND		0.20	
123-91-1	1,4-Dioxane	ND		0.40	
71-36-3	1-Butanol	ND		2.0	
90-12-0	1-Methylnaphthalene	ND		2.5	
540-84-1	2,2,4-Trimethylpentane	ND		0.40	
565-59-3	2,3-Dimethylpentane	ND		0.20	
78-93-3	2-Butanone	ND		1.0	
95-49-8	2-Chlorotoluene	ND		0.40	
591-78-6	2-Hexanone	ND		0.40	
78-78-4	2-Methylbutane	ND		0.50	
91-57-6	2-Methylnaphthalene	ND		2.5	
107-83-5	2-Methylpentane	ND		0.20	
107-05-1	3-Chloropropene	ND		0.20	
622-96-8	4-Ethyltoluene	ND		0.40	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		1.0	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-18916-1

SDG No.:

Client Sample ID: 34000669 Lab Sample ID: 140-18916-2

Matrix: Air Lab File ID: 18916BK02.D

Analysis Method: TO-15 Date Collected: 04/22/2020 08:10

Sample wt/vol: 200(mL) Date Analyzed: 04/29/2020 00:02

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 39289 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
67-64-1	Acetone	ND		7.5	
75-05-8	Acetonitrile	ND		1.0	
107-02-8	Acrolein	ND		1.0	
107-13-1	Acrylonitrile	ND		2.0	
98-83-9	Alpha Methyl Styrene	ND		0.40	
71-43-2	Benzene	ND		0.20	
100-44-7	Benzyl chloride	ND		0.40	
75-27-4	Bromodichloromethane	ND		0.20	
75-25-2	Bromoform	ND		0.20	
74-83-9	Bromomethane	ND		0.20	
106-97-8	Butane	ND		1.0	
75-15-0	Carbon disulfide	ND		0.40	
56-23-5	Carbon tetrachloride	ND	*	0.20	
108-90-7	Chlorobenzene	ND		0.20	
75-45-6	Chlorodifluoromethane	ND		0.20	
75-00-3	Chloroethane	ND		0.20	
67-66-3	Chloroform	ND		0.20	
74-87-3	Chloromethane	ND		1.0	
156-59-2	cis-1,2-Dichloroethene	ND		0.20	
10061-01-5	cis-1,3-Dichloropropene	ND		0.40	
98-82-8	Cumene	ND		0.40	
110-82-7	Cyclohexane	ND		0.40	
124-48-1	Dibromochloromethane	ND		0.20	
74-95-3	Dibromomethane	ND		0.40	
75-71-8	Dichlorodifluoromethane	ND		0.20	
64-17-5	Ethanol	ND		5.0	
141-78-6	Ethyl acetate	ND		2.0	
60-29-7	Ethyl ether	ND		2.0	
100-41-4	Ethylbenzene	ND		0.20	
87-68-3	Hexachlorobutadiene	ND		1.0	
110-54-3	Hexane	ND		0.40	
496-11-7	Indane	ND		0.20	
95-13-6	Indene	ND		0.40	
67-63-0	Isopropyl alcohol	ND		1.2	
179601-23-1	m&p-Xylene	ND		0.20	
80-62-6	Methyl methacrylate	ND		0.40	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-18916-1

SDG No.:

Client Sample ID: 34000669 Lab Sample ID: 140-18916-2

Matrix: Air Lab File ID: 18916BK02.D

Analysis Method: TO-15 Date Collected: 04/22/2020 08:10

Sample wt/vol: 200(mL) Date Analyzed: 04/29/2020 00:02

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 39289 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
1634-04-4	Methyl tert-butyl ether	ND		1.0	
108-87-2	Methylcyclohexane	ND		0.20	
75-09-2	Methylene Chloride	ND		1.0	
91-20-3	Naphthalene	ND		0.40	
104-51-8	n-Butylbenzene	ND		0.40	
124-18-5	n-Decane	ND		1.0	
112-40-3	n-Dodecane	ND		1.0	
142-82-5	n-Heptane	ND		0.40	
111-84-2	n-Nonane	ND		0.40	
111-65-9	n-Octane	ND		0.40	
103-65-1	N-Propylbenzene	ND		0.40	
1120-21-4	n-Undecane	ND		1.0	
95-47-6	o-Xylene	ND		0.20	
99-87-6	p-Cymene	ND		0.20	
109-66-0	Pentane	ND		2.5	
115-07-1	Propene	ND		2.5	
135-98-8	sec-Butylbenzene	ND		0.40	
100-42-5	Styrene	ND		0.20	
75-65-0	tert-Butanol	ND		1.0	
98-06-6	tert-Butylbenzene	ND		0.40	
127-18-4	Tetrachloroethene	ND		0.20	
109-99-9	Tetrahydrofuran	ND		1.0	
110-02-1	Thiophene	ND		0.20	
108-88-3	Toluene	ND		1.0	
156-60-5	trans-1,2-Dichloroethene	ND		0.20	
10061-02-6	trans-1,3-Dichloropropene	ND		0.20	
79-01-6	Trichloroethene	ND		0.20	
75-69-4	Trichlorofluoromethane	ND		0.20	
108-05-4	Vinyl acetate	ND		1.0	
593-60-2	Vinyl bromide	ND		0.20	
75-01-4	Vinyl chloride	ND		0.40	

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MG\20200427-15325.b\18916BK02.D				
Lims ID:	140-18916-A-2				
Client ID:	34000669				
Sample Type:	Client				
Inject. Date:	29-Apr-2020 00:02:30	ALS Bottle#:	13	Worklist Smp#:	24
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0015325-024				
Misc. Info.:	34000669				
Operator ID:	HMT	Instrument ID:	MG		
Method:	\\chromfs\Knoxville\ChromData\MG\20200427-15325.b\MG_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	28-Apr-2020 22:37:47	Calib Date:	21-Apr-2020 23:19:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MG\20200420-15271.b\GD21IC10.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1032				
First Level Reviewer: khachitpongpanits		Date:	29-Apr-2020 12:04:13		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.865	8.870	-0.005	94	129606	4.00	
* 2 1,4-Difluorobenzene	114	11.049	11.054	-0.005	97	950713	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.778	15.778	0.000	93	919365	4.00	
$ 4 4-Bromofluorobenzene (Surr	95	17.417	17.417	0.000	78	738485	4.00	
7 Propene	41	3.721	3.719	0.000	97	47404	-0.4229	7
33 Carbon disulfide	76	6.471	6.478	-0.011	99	10029	0.0611	
61 1,4-Dioxane	88	12.079	12.014	0.059	62	783	0.0350	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

40MXISSURP_00004 Amount Added: 40.00 Units: mL Run Reagent

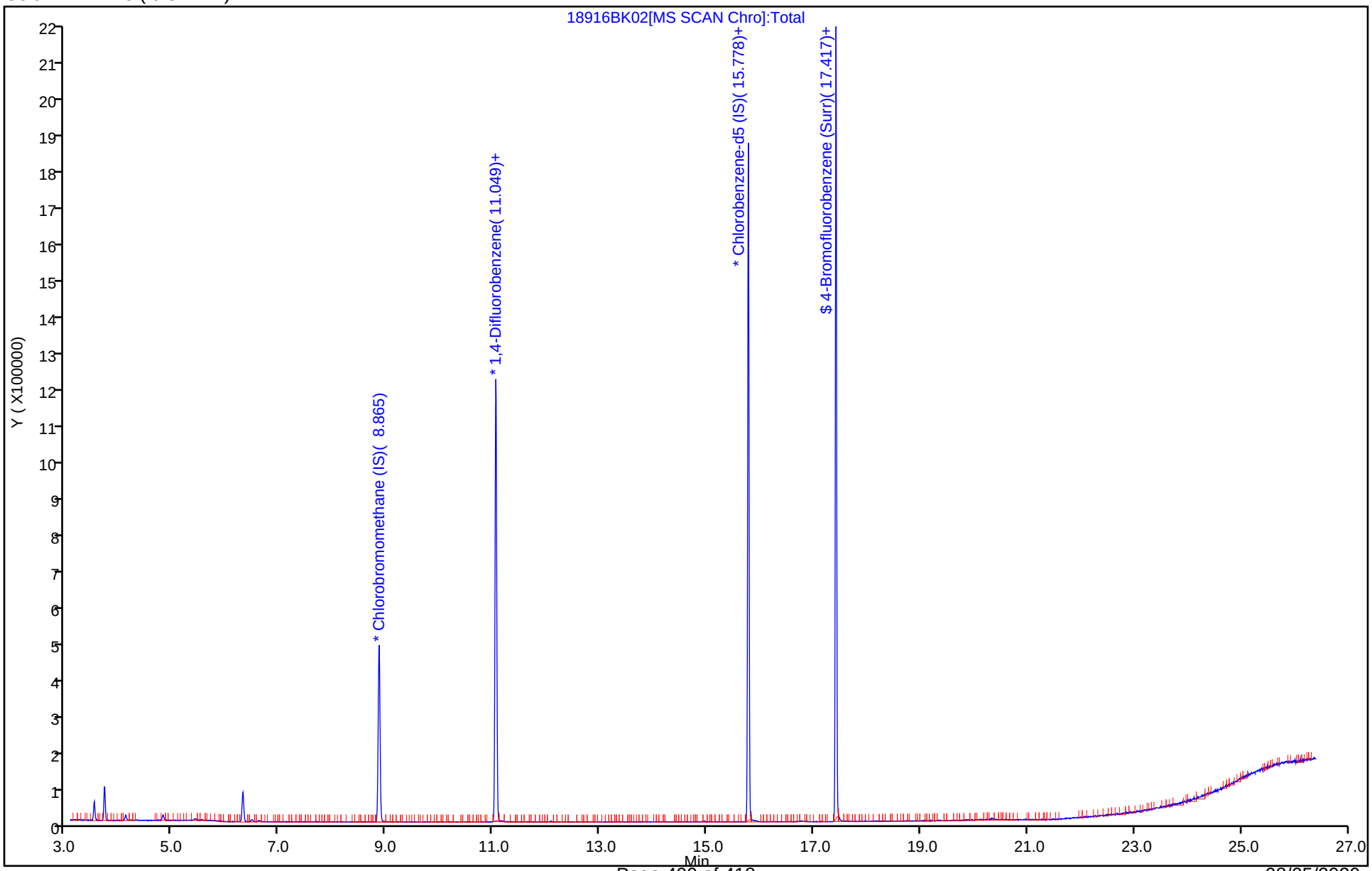
Report Date: 29-Apr-2020 12:04:13 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200427-15325.b\18916BK02.D

Injection Date:	29-Apr-2020 00:02:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	140-18916-A-2	Lab Sample ID:	140-18916-2	Worklist Smp#:	24
Client ID:	34000669				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-18916-1

SDG No.:

Client Sample ID: 34000642 Lab Sample ID: 140-18916-3

Matrix: Air Lab File ID: 18916BK03.D

Analysis Method: TO-15 Date Collected: 04/22/2020 08:10

Sample wt/vol: 200(mL) Date Analyzed: 04/29/2020 00:47

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 39289 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	ND		0.20	
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.20	
79-00-5	1,1,2-Trichloroethane	ND		0.20	
76-13-1	1,1,2-Trichlorotrifluoroethane	ND		0.20	
75-34-3	1,1-Dichloroethane	ND		0.20	
75-35-4	1,1-Dichloroethene	ND		0.20	
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	
96-18-4	1,2,3-Trichloropropane	ND		0.50	
526-73-8	1,2,3-Trimethylbenzene	ND		0.20	
95-93-2	1,2,4,5-Tetramethylbenzene	ND		0.20	
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	
95-63-6	1,2,4-Trimethylbenzene	ND		0.20	
96-12-8	1,2-Dibromo-3-Chloropropane	ND		0.40	
106-93-4	1,2-Dibromoethane	ND		0.20	
95-50-1	1,2-Dichlorobenzene	ND		0.40	
107-06-2	1,2-Dichloroethane	ND		0.20	
78-87-5	1,2-Dichloropropane	ND		0.20	
76-14-2	1,2-Dichlorotetrafluoroethane	ND		0.20	
108-67-8	1,3,5-Trimethylbenzene	ND		0.20	
106-99-0	1,3-Butadiene	ND		0.40	
541-73-1	1,3-Dichlorobenzene	ND		0.20	
106-46-7	1,4-Dichlorobenzene	ND		0.20	
123-91-1	1,4-Dioxane	ND		0.40	
71-36-3	1-Butanol	ND		2.0	
90-12-0	1-Methylnaphthalene	ND		2.5	
540-84-1	2,2,4-Trimethylpentane	ND		0.40	
565-59-3	2,3-Dimethylpentane	ND		0.20	
78-93-3	2-Butanone	ND		1.0	
95-49-8	2-Chlorotoluene	ND		0.40	
591-78-6	2-Hexanone	ND		0.40	
78-78-4	2-Methylbutane	ND		0.50	
91-57-6	2-Methylnaphthalene	ND		2.5	
107-83-5	2-Methylpentane	ND		0.20	
107-05-1	3-Chloropropene	ND		0.20	
622-96-8	4-Ethyltoluene	ND		0.40	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		1.0	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-18916-1

SDG No.:

Client Sample ID: 34000642 Lab Sample ID: 140-18916-3

Matrix: Air Lab File ID: 18916BK03.D

Analysis Method: TO-15 Date Collected: 04/22/2020 08:10

Sample wt/vol: 200(mL) Date Analyzed: 04/29/2020 00:47

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 39289 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
67-64-1	Acetone	ND		7.5	
75-05-8	Acetonitrile	ND		1.0	
107-02-8	Acrolein	ND		1.0	
107-13-1	Acrylonitrile	ND		2.0	
98-83-9	Alpha Methyl Styrene	ND		0.40	
71-43-2	Benzene	ND		0.20	
100-44-7	Benzyl chloride	ND		0.40	
75-27-4	Bromodichloromethane	ND		0.20	
75-25-2	Bromoform	ND		0.20	
74-83-9	Bromomethane	ND		0.20	
106-97-8	Butane	ND		1.0	
75-15-0	Carbon disulfide	ND		0.40	
56-23-5	Carbon tetrachloride	ND	*	0.20	
108-90-7	Chlorobenzene	ND		0.20	
75-45-6	Chlorodifluoromethane	ND		0.20	
75-00-3	Chloroethane	ND		0.20	
67-66-3	Chloroform	ND		0.20	
74-87-3	Chloromethane	ND		1.0	
156-59-2	cis-1,2-Dichloroethene	ND		0.20	
10061-01-5	cis-1,3-Dichloropropene	ND		0.40	
98-82-8	Cumene	ND		0.40	
110-82-7	Cyclohexane	ND		0.40	
124-48-1	Dibromochloromethane	ND		0.20	
74-95-3	Dibromomethane	ND		0.40	
75-71-8	Dichlorodifluoromethane	ND		0.20	
64-17-5	Ethanol	ND		5.0	
141-78-6	Ethyl acetate	ND		2.0	
60-29-7	Ethyl ether	ND		2.0	
100-41-4	Ethylbenzene	ND		0.20	
87-68-3	Hexachlorobutadiene	ND		1.0	
110-54-3	Hexane	ND		0.40	
496-11-7	Indane	ND		0.20	
95-13-6	Indene	ND		0.40	
67-63-0	Isopropyl alcohol	ND		1.2	
179601-23-1	m&p-Xylene	ND		0.20	
80-62-6	Methyl methacrylate	ND		0.40	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-18916-1

SDG No.:

Client Sample ID: 34000642 Lab Sample ID: 140-18916-3

Matrix: Air Lab File ID: 18916BK03.D

Analysis Method: TO-15 Date Collected: 04/22/2020 08:10

Sample wt/vol: 200(mL) Date Analyzed: 04/29/2020 00:47

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 39289 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
1634-04-4	Methyl tert-butyl ether	ND		1.0	
108-87-2	Methylcyclohexane	ND		0.20	
75-09-2	Methylene Chloride	ND		1.0	
91-20-3	Naphthalene	ND		0.40	
104-51-8	n-Butylbenzene	ND		0.40	
124-18-5	n-Decane	ND		1.0	
112-40-3	n-Dodecane	ND		1.0	
142-82-5	n-Heptane	ND		0.40	
111-84-2	n-Nonane	ND		0.40	
111-65-9	n-Octane	ND		0.40	
103-65-1	N-Propylbenzene	ND		0.40	
1120-21-4	n-Undecane	ND		1.0	
95-47-6	o-Xylene	ND		0.20	
99-87-6	p-Cymene	ND		0.20	
109-66-0	Pentane	ND		2.5	
115-07-1	Propene	ND		2.5	
135-98-8	sec-Butylbenzene	ND		0.40	
100-42-5	Styrene	ND		0.20	
75-65-0	tert-Butanol	ND		1.0	
98-06-6	tert-Butylbenzene	ND		0.40	
127-18-4	Tetrachloroethene	ND		0.20	
109-99-9	Tetrahydrofuran	ND		1.0	
110-02-1	Thiophene	ND		0.20	
108-88-3	Toluene	ND		1.0	
156-60-5	trans-1,2-Dichloroethene	ND		0.20	
10061-02-6	trans-1,3-Dichloropropene	ND		0.20	
79-01-6	Trichloroethene	ND		0.20	
75-69-4	Trichlorofluoromethane	ND		0.20	
108-05-4	Vinyl acetate	ND		1.0	
593-60-2	Vinyl bromide	ND		0.20	
75-01-4	Vinyl chloride	ND		0.40	

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MG\20200427-15325.b\18916BK03.D				
Lims ID:	140-18916-A-3				
Client ID:	34000642				
Sample Type:	Client				
Inject. Date:	29-Apr-2020 00:47:30	ALS Bottle#:	14	Worklist Smp#:	25
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0015325-025				
Misc. Info.:	34000642				
Operator ID:	HMT	Instrument ID:	MG		
Method:	\\chromfs\Knoxville\ChromData\MG\20200427-15325.b\MG_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	29-Apr-2020 00:07:43	Calib Date:	21-Apr-2020 23:19:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MG\20200420-15271.b\GD21IC10.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1032				
First Level Reviewer: khachitpongpanits		Date:	29-Apr-2020 14:14:39		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.865	8.870	-0.005	93	124715	4.00	
* 2 1,4-Difluorobenzene	114	11.049	11.054	-0.005	97	950946	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.778	15.778	0.000	94	917534	4.00	
$ 4 4-Bromofluorobenzene (Surr	95	17.417	17.417	0.000	78	735839	4.00	
7 Propene	41	3.721	3.719	0.000	97	47088	-0.3889	7
17 Ethanol	31	4.810	4.786	0.022	99	24099	1.00	
25 Isopropyl alcohol	45	5.549	5.481	0.065	95	3280	0.0593	
33 Carbon disulfide	76	6.482	6.478	0.000	99	15068	0.0954	
61 1,4-Dioxane	88	12.074	12.014	0.054	70	765	0.0342	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

40MXISSURP_00004 Amount Added: 40.00 Units: mL Run Reagent

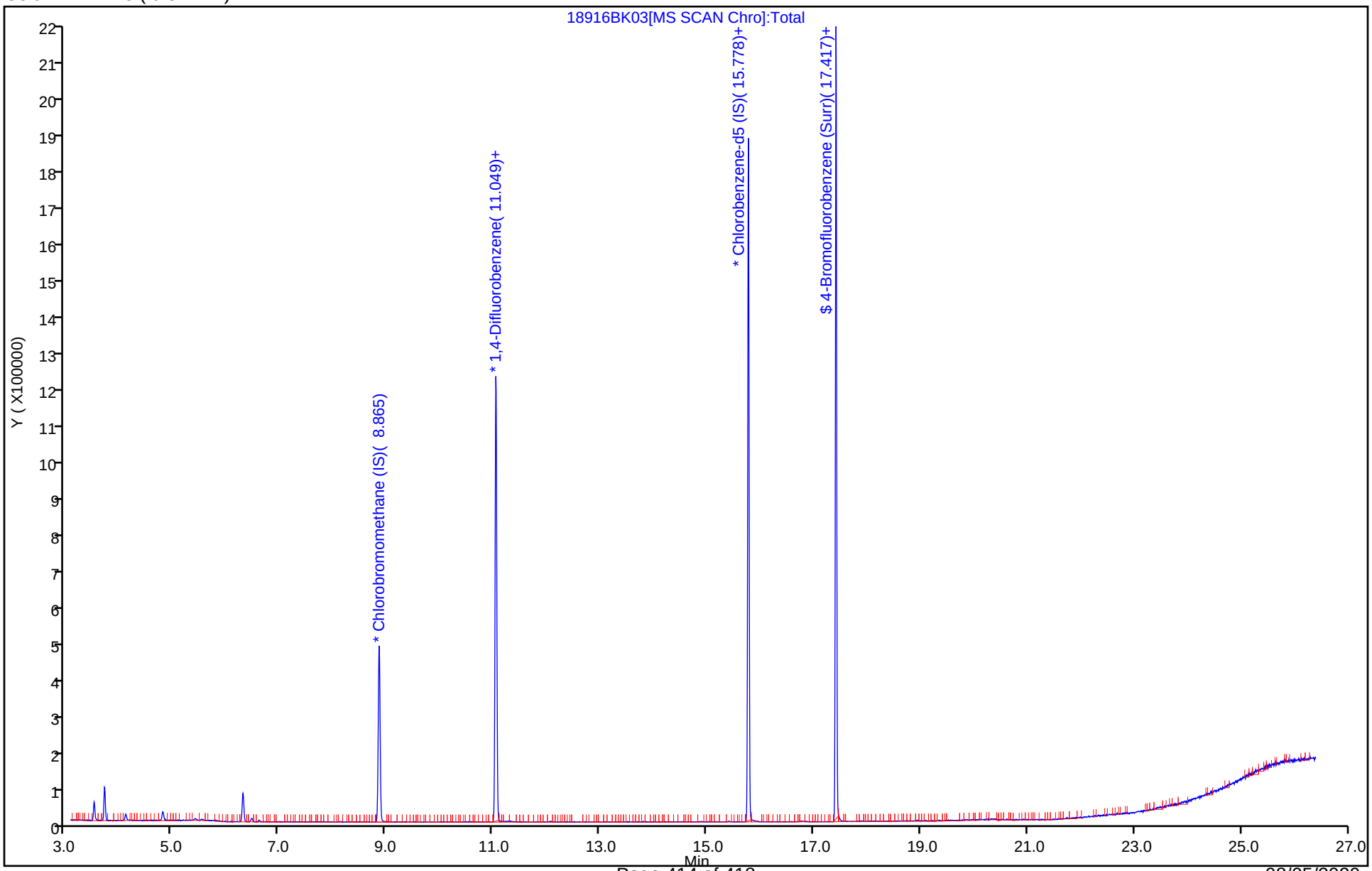
Report Date: 29-Apr-2020 14:14:39 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200427-15325.b\18916BK03.D

Injection Date:	29-Apr-2020 00:47:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	140-18916-A-3	Lab Sample ID:	140-18916-3	Worklist Smp#:	25
Client ID:	34000642				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Shipping and Receiving Documents

Eurofins TestAmerica, Knoxville
5815 Middlebrook Pike

Knoxville, TN 37921-5947
phone 865.291.3000 fax 865.584.4315

Baltimore #201

Canister Samples Chain of Custody Record

TestAmerica Laboratories, Inc. assumes no liability with respect to the collection and shipment of these samples.

140-19811 Chain of Custody

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact Information	**Client Project Manager:** Peter Rich	**Samples Collected By:** Andrew Smith	COC No: 1 of 1 COCs
Company Name: Tetra Tech	Phone: 410-990-4607		TALS Project #:
Address: 980 Ayald Rd. Suite 307	Email:		**For Lab Use Only:**
City/State/Zip Annapolis MD 21403			Walk-in Client:
Phone: 410-990-4607	Site Contact:		Lab Sampling:
FAX:	Tel/Fax		
Project Name: LMC	**Analysis Turnaround Time**		Job / SDG No.:
Site/Location: Lockheed Martin	Standard (Specific): ✓		(See below for Add'l Items)
PO# 117-0517 140	Rush (Specifiy):		

Sample Identification	Sample Start Date	Time Start	Sample End Date	Time Stop	Canister Vacuum in Field, "Hg (Start)	Canister Vacuum in Field, "Hg (Stop)	Flow Controller ID	Canister ID	TO-14/15 (Standard / Low Level)	TO-15 SIM	EPA 3C	EPA 25C	ASTM D-1946	EPA 15/16	Other (Please specify in notes section)	Sample Type	Indoor Air/Ambient Air	Sub-Slab	Soil Gas	Soil Vapor Extraction (SVE)	Landfill Gas	Other (Please specify in notes section)	Sample Specific Notes:
Bldg A Effluent	7/23	11:03	7/23	11:04	-30	-4	10614	34000634	X														
Bldg A Mid Gac	|	11:09	|	11:10	-30	-4	10936	34000669	X														
Bldg A Influent	|	11:16	|	11:17	-30	-4	10104	340001796	X														
Bldg B Effluent	|	13:25	|	13:26	-29	-4	09899	34000313	X														
Bldg B Mid GAC	|	13:30	|	13:31	-29	-4	11594	7567	X														
Bldg B Influent	↓	13:35	↓	13:36	-30	-4	09958	340002459	X														

Temperature (Fahrenheit)			
Start	Interior	Ambient	
Stop			

Pressure (inches of Hg)			
Start	Interior	Ambient	
Stop			

Received @ ambient, 1 box, Fedex PO
trk# 7710 7688 3542
Custody seal intact
KL 7/24/20

Special Instructions/QC Requirements & Comments:

Samples Shipped by:	**Date / Time:**	**Samples Received by:**	
Samples Relinquished by: [signature]	**Date / Time:** 7/23	**Received by:** [signature]	
Relinquished by: [signature]	**Date / Time:** 7/23/20 1200	**Received by:** [signature] ETA 7/24/20 0945	6 cans, 6 KR
Lab Use Only: **Shipper Name:**	**Opened by:**	**Condition:**	

Form No. CA-C-WI-003, Rev. 2.23, dated 5/4/2020

Loc: 140

EUROFINS/TESTAMERICA KNOXVILLE SAMPLE RECEIPT/CONDITION UPON RECEIPT ANOMALY CHECKLIST **Log In Number:** **19811**

Review Items	Yes	No	NA	If No, what was the problem?	Comments/Actions Taken
1. Are the shipping containers intact?	/			☐ **Containers, Broken**	
2. Were ambient air containers received intact?			/	☑ Checked in lab	
3. The coolers/containers custody seal if present, is it intact?	/			☐ Yes ☐ NA	
4. Is the cooler temperature within limits? (> freezing temp. of water to 6 °C, VOST: 10°C) Thermometer ID :_____ Correction factor: _____			/	☐ **Cooler Out of Temp, Client Contacted, Proceed/Cancel** ☐ **Cooler Out of Temp, Same Day Receipt**	
5. Were all of the sample containers received intact?	/			☐ **Containers, Broken**	
6. Were samples received in appropriate containers?	/			☐ **Containers, Improper; Client Contacted; Proceed/Cancel**	
7. Do sample container labels match COC? (IDs, Dates, Times)	/			☐ **COC & Samples Do Not Match** ☐ **COC Incorrect/Incomplete** ☐ **COC Not Received**	
8. Were all of the samples listed on the COC received?	/			☐ **Sample Received, Not on COC** ☐ **Sample on COC, Not Received**	
9. Is the date/time of sample collection noted?	/			☐ **COC; No Date/Time; Client Contacted**	
10. Was the sampler identified on the COC?	/			☐ **Sampler Not Listed on COC**	
11. Is the client and project name/# identified?	/			☐ **COC Incorrect/Incomplete**	
12. Are tests/parameters listed for each sample?	/			☐ **COC No tests on COC**	
13. Is the matrix of the samples noted?	/			☐ **COC Incorrect/Incomplete**	
14. Was COC relinquished? (Signed/Dated/Timed)	/			☐ **COC Incorrect/Incomplete**	
15. Were samples received within holding time?	/			☐ **Holding Time - Receipt**	
16. Were samples received with correct chemical preservative (excluding Encore)?			/	☐ **pH Adjusted, pH Included (See box 16A)** ☐ **Incorrect Preservative**	
17. Were VOA samples received without headspace?			/	☐ **Headspace (VOA only)**	
18. Did you check for residual chlorine, if necessary? (e.g. 1613B, 1668) Chlorine test strip lot number: _____			/	☐ **Residual Chlorine**	
19. For 1613B water samples is pH<9?			/	☐ If no, notify lab to adjust	
20. For rad samples was sample activity info. Provided?			/	☐ Project missing info	

Labeling Verified by: **Date:**

pH test strip lot number:

	Box 16A: pH Preservation	Box 18A: Residual Chlorine
Preservative:		
Lot Number:		
Exp Date:		
Analyst:		
Date:		
Time:		

Project #: 14002921 PM Instructions: _____

Sample Receiving Associate: Ken Zink Date: 7/24/20

QA026R32.doc, 062719

TestAmerica Knoxville - Air Canister Initial Pressure Check

Gauge ID: G5
Date: 7/24/2020

Analyst	Sample ID	Asset #	Cleaning Job	Cert	Size (L)	Pressure @ Receipt (-in Hg or +psig)	Time	Comments
BRS	140-19811-a-1	34000634	18916	B	1	-4.3	14:09	
BRS	140-19811-a-2	34000669	18916	B	1	-2.2	14:10	
BRS	140-19811-a-3	34001796	18916	B	1	-3.7	14:11	
BRS	140-19811-a-4	34000313	18916	B	1	-3.9	14:12	
BRS	140-19811-a-5	7567	18916	B	1	-3.2	14:13	
BRS	140-19811-a-6	34002459	18916	B	1	-3.9	14:14	

□ Receiving –Air Can –Calve Open (NCM #_____)
□ Air - Can P -24 to -25 " - Flow Contr. Works (NCM#_____)
□ Air - Can P -24 to -25 " - Flow Contr. Faulty (NCM#_____)
□ Air - Can P Out -26" - Flow Contr. Works (NCM#_____)
□ Air - Can P Out -26" - Flow Contr. Faulty (NCM#_____)
□ Air - Can P Low -24 to -25 " - Grab Sample (NCM#_____)
□ Air - Can P Low -26 "- Grab Sample (NCM#_____)

ANALYTICAL REPORT

Job Number: 140-20065-1

Job Description: LMMRC SSDS - Middle River

For:
Tetra Tech GEO
980 Awald Road
Suite 302
Annapolis, MD 21403

Attention: Peter Rich



Approved for release.
Diana L Lange
Project Management Assistant II
8/31/2020 12:03 PM

Designee for
Jamie A McKinney, Senior Project Manager
5815 Middlebrook Pike, Knoxville, TN, 37921
(865)291-3000
Jamie.McKinney@Eurofinset.com
08/31/2020

cc: Belssi Chang
Amy Thomson

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins TestAmerica Project Manager.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

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Qualifiers

Air - GC/MS VOA

Qualifier	Qualifier Description
E	Result exceeded calibration range.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job Narrative
140-20065-1

Comments
No additional comments.

Receipt
The samples were received on 8/19/2020 10:15 AM; the samples arrived in good condition, and where required, properly preserved and on ice.

Air - GC/MS VOA
Methods 3005A, TO 15 LL, TO-14A, TO-15: EPA methods TO-14A and TO-15 specify the use of humidified "zero air" as the blank reagent for canister cleaning, instrument calibration and sample analysis. Ultra-high purity humidified nitrogen from a cryogenic reservoir is used in place of "zero air" by TestAmerica Knoxville.

Methods TO 15 LL, TO-14A, TO-14A Low, TO-15: The Initial Calibration for Methylene Chloride did not meet the %RSD criterion specified in the standard operating procedure for average response factor. An linear calibration model was selected which met the acceptance criterion for coefficient of determination (r2) at 0.998 and the read back criteria for the individual calibration points.

(ICIS 140-41306/15)

Methods TO 15 LL, TO-15: Although the BFB is flagged as outside control limits for TO-14 on batch 140-41306, the results are within limits for TO-15, which is required for this project.

Method TO 15 LL: The continuing calibration verification (CCV) associated with batch 140-41859 exhibited % difference of > 30% for the following analyte(s) 1,2,4-Trichlorobenzene, Acrolein and Bromoform; however, the results were within the LCS acceptance limits. The EPA method requires that all target analytes in the continuing calibration verification standard be within 30% difference from the initial calibration. According to the laboratory standard operating procedure, the continuing calibration is acceptable if it meets the laboratory control sample acceptance criteria.

Methods TO 15 LL, TO-15: Although the BFB is flagged as outside control limits for TO-14 on batch 140-41899, the results are within limits for TO-15, which is required for this project.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: Tetra Tech GEO
Job ID: 140-20065-1
Project/Site: LMMRC SSDS - Middle River

Client Sample ID: BLDG A INFLUENT
Lab Sample ID: 140-20065-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	7.2		1.6	0.16	ppb v/v	1		TO 15 LL	Total/NA
Chlorodifluoromethane	0.46	J	1.6	0.44	ppb v/v	1		TO 15 LL	Total/NA
Chloroform	0.88	J	1.6	0.14	ppb v/v	1		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	19		1.6	0.20	ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.46	J	1.6	0.28	ppb v/v	1		TO 15 LL	Total/NA
1,1-Dichloroethane	3.9		1.6	0.14	ppb v/v	1		TO 15 LL	Total/NA
1,1-Dichloroethene	21		1.6	0.16	ppb v/v	1		TO 15 LL	Total/NA
trans-1,2-Dichloroethene	0.52	J	1.6	0.14	ppb v/v	1		TO 15 LL	Total/NA
1,1,1-Trichloroethane	99		1.6	0.74	ppb v/v	1		TO 15 LL	Total/NA
Trichloroethene	210		0.80	0.12	ppb v/v	1		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	23		5.1	0.51	ug/m3	1		TO 15 LL	Total/NA
Chlorodifluoromethane	1.6	J	5.7	1.6	ug/m3	1		TO 15 LL	Total/NA
Chloroform	4.3	J	7.8	0.68	ug/m3	1		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	76		6.3	0.79	ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.3	J	7.9	1.4	ug/m3	1		TO 15 LL	Total/NA
1,1-Dichloroethane	16		6.5	0.57	ug/m3	1		TO 15 LL	Total/NA
1,1-Dichloroethene	85		6.3	0.63	ug/m3	1		TO 15 LL	Total/NA
trans-1,2-Dichloroethene	2.0	J	6.3	0.56	ug/m3	1		TO 15 LL	Total/NA
1,1,1-Trichloroethane	540		8.7	4.0	ug/m3	1		TO 15 LL	Total/NA
Trichloroethene	1100		4.3	0.64	ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: BLDG A MID GAC
Lab Sample ID: 140-20065-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.80		0.40	0.040	ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.11	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Chlorodifluoromethane	0.85		0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Chloroform	1.2		0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	33		0.40	0.050	ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.56		0.40	0.070	ppb v/v	1		TO 15 LL	Total/NA
1,1-Dichloroethane	6.7		0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
1,2-Dichloroethane	0.37	J	0.40	0.050	ppb v/v	1		TO 15 LL	Total/NA
1,1-Dichloroethene	26		0.40	0.040	ppb v/v	1		TO 15 LL	Total/NA
Toluene	0.40	J	0.60	0.39	ppb v/v	1		TO 15 LL	Total/NA
trans-1,2-Dichloroethene	0.58		0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
1,1,1-Trichloroethane	270	E	0.40	0.19	ppb v/v	1		TO 15 LL	Total/NA
Trichloroethene	0.21		0.20	0.030	ppb v/v	1		TO 15 LL	Total/NA
1,1,1-Trichloroethane - DL	140		4.0	1.9	ppb v/v	1		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	2.6		1.3	0.13	ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.68	J	2.5	0.22	ug/m3	1		TO 15 LL	Total/NA
Chlorodifluoromethane	3.0		1.4	0.39	ug/m3	1		TO 15 LL	Total/NA
Chloroform	5.8		2.0	0.17	ug/m3	1		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	130		1.6	0.20	ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.8		2.0	0.35	ug/m3	1		TO 15 LL	Total/NA
1,1-Dichloroethane	27		1.6	0.14	ug/m3	1		TO 15 LL	Total/NA
1,2-Dichloroethane	1.5	J	1.6	0.20	ug/m3	1		TO 15 LL	Total/NA
1,1-Dichloroethene	100		1.6	0.16	ug/m3	1		TO 15 LL	Total/NA
Toluene	1.5	J	2.3	1.5	ug/m3	1		TO 15 LL	Total/NA
trans-1,2-Dichloroethene	2.3		1.6	0.14	ug/m3	1		TO 15 LL	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: BLDG A MID GAC (Continued) — Lab Sample ID: 140-20065-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	1500	E	2.2	1.0	ug/m3	1		TO 15 LL	Total/NA
Trichloroethene	1.1		1.1	0.16	ug/m3	1		TO 15 LL	Total/NA
1,1,1-Trichloroethane - DL	740		22	10	ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: BLDG A EFFLUENT — Lab Sample ID: 140-20065-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.15	J	0.40	0.040	ppb v/v	1		TO 15 LL	Total/NA
Chlorodifluoromethane	0.88		0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Chloroform	0.66		0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	36		0.40	0.050	ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.46		0.40	0.070	ppb v/v	1		TO 15 LL	Total/NA
1,1-Dichloroethane	9.1		0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
1,1-Dichloroethene	33		0.40	0.040	ppb v/v	1		TO 15 LL	Total/NA
Ethylbenzene	0.075	J	0.40	0.065	ppb v/v	1		TO 15 LL	Total/NA
Toluene	1.7		0.60	0.39	ppb v/v	1		TO 15 LL	Total/NA
trans-1,2-Dichloroethene	0.82		0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
1,1,1-Trichloroethane	13		0.40	0.19	ppb v/v	1		TO 15 LL	Total/NA
Trichloroethene	3.9		0.20	0.030	ppb v/v	1		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	0.13	J	0.40	0.10	ppb v/v	1		TO 15 LL	Total/NA
Xylenes, Total	0.45	J	0.80	0.12	ppb v/v	1		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.49	J	1.3	0.13	ug/m3	1		TO 15 LL	Total/NA
Chlorodifluoromethane	3.1		1.4	0.39	ug/m3	1		TO 15 LL	Total/NA
Chloroform	3.2		2.0	0.17	ug/m3	1		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	140		1.6	0.20	ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.3		2.0	0.35	ug/m3	1		TO 15 LL	Total/NA
1,1-Dichloroethane	37		1.6	0.14	ug/m3	1		TO 15 LL	Total/NA
1,1-Dichloroethene	130		1.6	0.16	ug/m3	1		TO 15 LL	Total/NA
Ethylbenzene	0.33	J	1.7	0.28	ug/m3	1		TO 15 LL	Total/NA
Toluene	6.4		2.3	1.5	ug/m3	1		TO 15 LL	Total/NA
trans-1,2-Dichloroethene	3.3		1.6	0.14	ug/m3	1		TO 15 LL	Total/NA
1,1,1-Trichloroethane	71		2.2	1.0	ug/m3	1		TO 15 LL	Total/NA
Trichloroethene	21		1.1	0.16	ug/m3	1		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	0.65	J	2.0	0.49	ug/m3	1		TO 15 LL	Total/NA
Xylenes, Total	2.0	J	3.5	0.52	ug/m3	1		TO 15 LL	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: BLDG A INFLUENT
Lab Sample ID: 140-20065-1

Date Collected: 08/18/20 11:10
Matrix: Air
Date Received: 08/19/20 10:15
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**7.2**		1.6	0.16	ppb v/v			08/19/20 22:58	1
Carbon tetrachloride	ND		1.6	0.14	ppb v/v			08/19/20 22:58	1
Chlorodifluoromethane	**0.46**	**J**	1.6	0.44	ppb v/v			08/19/20 22:58	1
Chloroform	**0.88**	**J**	1.6	0.14	ppb v/v			08/19/20 22:58	1
cis-1,2-Dichloroethene	**19**		1.6	0.20	ppb v/v			08/19/20 22:58	1
Dichlorodifluoromethane	**0.46**	**J**	1.6	0.28	ppb v/v			08/19/20 22:58	1
1,1-Dichloroethane	**3.9**		1.6	0.14	ppb v/v			08/19/20 22:58	1
1,2-Dichloroethane	ND		1.6	0.20	ppb v/v			08/19/20 22:58	1
1,1-Dichloroethene	**21**		1.6	0.16	ppb v/v			08/19/20 22:58	1
Ethylbenzene	ND		1.6	0.26	ppb v/v			08/19/20 22:58	1
Methylene Chloride	ND		8.0	7.8	ppb v/v			08/19/20 22:58	1
Methyl tert-butyl ether	ND		8.0	1.0	ppb v/v			08/19/20 22:58	1
Naphthalene	ND		0.80	0.80	ppb v/v			08/19/20 22:58	1
Tetrachloroethene	ND		1.6	0.14	ppb v/v			08/19/20 22:58	1
Toluene	ND		2.4	1.6	ppb v/v			08/19/20 22:58	1
trans-1,2-Dichloroethene	**0.52**	**J**	1.6	0.14	ppb v/v			08/19/20 22:58	1
1,2,4-Trichlorobenzene	ND		1.6	1.3	ppb v/v			08/19/20 22:58	1
1,1,1-Trichloroethane	**99**		1.6	0.74	ppb v/v			08/19/20 22:58	1
1,1,2-Trichloroethane	ND		1.6	0.14	ppb v/v			08/19/20 22:58	1
Trichloroethene	**210**		0.80	0.12	ppb v/v			08/19/20 22:58	1
1,2,3-Trimethylbenzene	ND		1.6	0.72	ppb v/v			08/19/20 22:58	1
1,2,4-Trimethylbenzene	ND		1.6	0.40	ppb v/v			08/19/20 22:58	1
1,3,5-Trimethylbenzene	ND		1.6	0.44	ppb v/v			08/19/20 22:58	1
Vinyl chloride	ND		0.80	0.52	ppb v/v			08/19/20 22:58	1
Xylenes, Total	ND		3.2	0.48	ppb v/v			08/19/20 22:58	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**23**		5.1	0.51	ug/m3			08/19/20 22:58	1
Carbon tetrachloride	ND		10	0.88	ug/m3			08/19/20 22:58	1
Chlorodifluoromethane	**1.6**	**J**	5.7	1.6	ug/m3			08/19/20 22:58	1
Chloroform	**4.3**	**J**	7.8	0.68	ug/m3			08/19/20 22:58	1
cis-1,2-Dichloroethene	**76**		6.3	0.79	ug/m3			08/19/20 22:58	1
Dichlorodifluoromethane	**2.3**	**J**	7.9	1.4	ug/m3			08/19/20 22:58	1
1,1-Dichloroethane	**16**		6.5	0.57	ug/m3			08/19/20 22:58	1
1,2-Dichloroethane	ND		6.5	0.81	ug/m3			08/19/20 22:58	1
1,1-Dichloroethene	**85**		6.3	0.63	ug/m3			08/19/20 22:58	1
Ethylbenzene	ND		6.9	1.1	ug/m3			08/19/20 22:58	1
Methylene Chloride	ND		28	27	ug/m3			08/19/20 22:58	1
Methyl tert-butyl ether	ND		29	3.7	ug/m3			08/19/20 22:58	1
Naphthalene	ND		4.2	4.2	ug/m3			08/19/20 22:58	1
Tetrachloroethene	ND		11	0.95	ug/m3			08/19/20 22:58	1
Toluene	ND		9.0	5.9	ug/m3			08/19/20 22:58	1
trans-1,2-Dichloroethene	**2.0**	**J**	6.3	0.56	ug/m3			08/19/20 22:58	1
1,2,4-Trichlorobenzene	ND		12	9.5	ug/m3			08/19/20 22:58	1
1,1,1-Trichloroethane	**540**		8.7	4.0	ug/m3			08/19/20 22:58	1
1,1,2-Trichloroethane	ND		8.7	0.76	ug/m3			08/19/20 22:58	1
Trichloroethene	**1100**		4.3	0.64	ug/m3			08/19/20 22:58	1
1,2,3-Trimethylbenzene	ND		7.9	3.5	ug/m3			08/19/20 22:58	1
1,2,4-Trimethylbenzene	ND		7.9	2.0	ug/m3			08/19/20 22:58	1

Client: Tetra Tech GEO
Job ID: 140-20065-1
Project/Site: LMMRC SSDS - Middle River

Client Sample ID: BLDG A INFLUENT
Lab Sample ID: 140-20065-1
Date Collected: 08/18/20 11:10
Matrix: Air
Date Received: 08/19/20 10:15
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		7.9	2.2	ug/m3			08/19/20 22:58	1
Vinyl chloride	ND		2.0	1.3	ug/m3			08/19/20 22:58	1
Xylenes, Total	ND		14	2.1	ug/m3			08/19/20 22:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*60 - 140*		*08/19/20 22:58*	*1*

Client Sample ID: BLDG A MID GAC
Lab Sample ID: 140-20065-2

Date Collected: 08/18/20 11:06
Matrix: Air
Date Received: 08/19/20 10:15
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.80**		0.40	0.040	ppb v/v			08/19/20 23:41	1
Carbon tetrachloride	**0.11**	**J**	0.40	0.035	ppb v/v			08/19/20 23:41	1
Chlorodifluoromethane	**0.85**		0.40	0.11	ppb v/v			08/19/20 23:41	1
Chloroform	**1.2**		0.40	0.035	ppb v/v			08/19/20 23:41	1
cis-1,2-Dichloroethene	**33**		0.40	0.050	ppb v/v			08/19/20 23:41	1
Dichlorodifluoromethane	**0.56**		0.40	0.070	ppb v/v			08/19/20 23:41	1
1,1-Dichloroethane	**6.7**		0.40	0.035	ppb v/v			08/19/20 23:41	1
1,2-Dichloroethane	**0.37**	**J**	0.40	0.050	ppb v/v			08/19/20 23:41	1
1,1-Dichloroethene	**26**		0.40	0.040	ppb v/v			08/19/20 23:41	1
Ethylbenzene	ND		0.40	0.065	ppb v/v			08/19/20 23:41	1
Methylene Chloride	ND		2.0	2.0	ppb v/v			08/19/20 23:41	1
Methyl tert-butyl ether	ND		2.0	0.26	ppb v/v			08/19/20 23:41	1
Naphthalene	ND		0.20	0.20	ppb v/v			08/19/20 23:41	1
Tetrachloroethene	ND		0.40	0.035	ppb v/v			08/19/20 23:41	1
Toluene	**0.40**	**J**	0.60	0.39	ppb v/v			08/19/20 23:41	1
trans-1,2-Dichloroethene	**0.58**		0.40	0.035	ppb v/v			08/19/20 23:41	1
1,2,4-Trichlorobenzene	ND		0.40	0.32	ppb v/v			08/19/20 23:41	1
1,1,1-Trichloroethane	**270**	**E**	0.40	0.19	ppb v/v			08/19/20 23:41	1
1,1,2-Trichloroethane	ND		0.40	0.035	ppb v/v			08/19/20 23:41	1
Trichloroethene	**0.21**		0.20	0.030	ppb v/v			08/19/20 23:41	1
1,2,3-Trimethylbenzene	ND		0.40	0.18	ppb v/v			08/19/20 23:41	1
1,2,4-Trimethylbenzene	ND		0.40	0.10	ppb v/v			08/19/20 23:41	1
1,3,5-Trimethylbenzene	ND		0.40	0.11	ppb v/v			08/19/20 23:41	1
Vinyl chloride	ND		0.20	0.13	ppb v/v			08/19/20 23:41	1
Xylenes, Total	ND		0.80	0.12	ppb v/v			08/19/20 23:41	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**2.6**		1.3	0.13	ug/m3			08/19/20 23:41	1
Carbon tetrachloride	**0.68**	**J**	2.5	0.22	ug/m3			08/19/20 23:41	1
Chlorodifluoromethane	**3.0**		1.4	0.39	ug/m3			08/19/20 23:41	1
Chloroform	**5.8**		2.0	0.17	ug/m3			08/19/20 23:41	1
cis-1,2-Dichloroethene	**130**		1.6	0.20	ug/m3			08/19/20 23:41	1
Dichlorodifluoromethane	**2.8**		2.0	0.35	ug/m3			08/19/20 23:41	1
1,1-Dichloroethane	**27**		1.6	0.14	ug/m3			08/19/20 23:41	1
1,2-Dichloroethane	**1.5**	**J**	1.6	0.20	ug/m3			08/19/20 23:41	1
1,1-Dichloroethene	**100**		1.6	0.16	ug/m3			08/19/20 23:41	1
Ethylbenzene	ND		1.7	0.28	ug/m3			08/19/20 23:41	1
Methylene Chloride	ND		6.9	6.8	ug/m3			08/19/20 23:41	1
Methyl tert-butyl ether	ND		7.2	0.94	ug/m3			08/19/20 23:41	1
Naphthalene	ND		1.0	1.0	ug/m3			08/19/20 23:41	1
Tetrachloroethene	ND		2.7	0.24	ug/m3			08/19/20 23:41	1
Toluene	**1.5**	**J**	2.3	1.5	ug/m3			08/19/20 23:41	1
trans-1,2-Dichloroethene	**2.3**		1.6	0.14	ug/m3			08/19/20 23:41	1
1,2,4-Trichlorobenzene	ND		3.0	2.4	ug/m3			08/19/20 23:41	1
1,1,1-Trichloroethane	**1500**	**E**	2.2	1.0	ug/m3			08/19/20 23:41	1
1,1,2-Trichloroethane	ND		2.2	0.19	ug/m3			08/19/20 23:41	1
Trichloroethene	**1.1**		1.1	0.16	ug/m3			08/19/20 23:41	1
1,2,3-Trimethylbenzene	ND		2.0	0.88	ug/m3			08/19/20 23:41	1
1,2,4-Trimethylbenzene	ND		2.0	0.49	ug/m3			08/19/20 23:41	1

Client Sample ID: BLDG A MID GAC
Lab Sample ID: 140-20065-2

Date Collected: 08/18/20 11:06
Matrix: Air
Date Received: 08/19/20 10:15
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		2.0	0.54	ug/m3			08/19/20 23:41	1
Vinyl chloride	ND		0.51	0.33	ug/m3			08/19/20 23:41	1
Xylenes, Total	ND		3.5	0.52	ug/m3			08/19/20 23:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*60 - 140*		*08/19/20 23:41*	*1*

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**140**		4.0	1.9	ppb v/v			08/20/20 18:01	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**740**		22	10	ug/m3			08/20/20 18:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*60 - 140*		*08/20/20 18:01*	*1*

Client Sample ID: BLDG A EFFLUENT
Lab Sample ID: 140-20065-3

Date Collected: 08/18/20 11:03
Matrix: Air
Date Received: 08/19/20 10:15
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.15**	**J**	0.40	0.040	ppb v/v			08/20/20 01:07	1
Carbon tetrachloride	ND		0.40	0.035	ppb v/v			08/20/20 01:07	1
Chlorodifluoromethane	**0.88**		0.40	0.11	ppb v/v			08/20/20 01:07	1
Chloroform	**0.66**		0.40	0.035	ppb v/v			08/20/20 01:07	1
cis-1,2-Dichloroethene	**36**		0.40	0.050	ppb v/v			08/20/20 01:07	1
Dichlorodifluoromethane	**0.46**		0.40	0.070	ppb v/v			08/20/20 01:07	1
1,1-Dichloroethane	**9.1**		0.40	0.035	ppb v/v			08/20/20 01:07	1
1,2-Dichloroethane	ND		0.40	0.050	ppb v/v			08/20/20 01:07	1
1,1-Dichloroethene	**33**		0.40	0.040	ppb v/v			08/20/20 01:07	1
Ethylbenzene	**0.075**	**J**	0.40	0.065	ppb v/v			08/20/20 01:07	1
Methylene Chloride	ND		2.0	2.0	ppb v/v			08/20/20 01:07	1
Methyl tert-butyl ether	ND		2.0	0.26	ppb v/v			08/20/20 01:07	1
Naphthalene	ND		0.20	0.20	ppb v/v			08/20/20 01:07	1
Tetrachloroethene	ND		0.40	0.035	ppb v/v			08/20/20 01:07	1
Toluene	**1.7**		0.60	0.39	ppb v/v			08/20/20 01:07	1
trans-1,2-Dichloroethene	**0.82**		0.40	0.035	ppb v/v			08/20/20 01:07	1
1,2,4-Trichlorobenzene	ND		0.40	0.32	ppb v/v			08/20/20 01:07	1
1,1,1-Trichloroethane	**13**		0.40	0.19	ppb v/v			08/20/20 01:07	1
1,1,2-Trichloroethane	ND		0.40	0.035	ppb v/v			08/20/20 01:07	1
Trichloroethene	**3.9**		0.20	0.030	ppb v/v			08/20/20 01:07	1
1,2,3-Trimethylbenzene	ND		0.40	0.18	ppb v/v			08/20/20 01:07	1
1,2,4-Trimethylbenzene	**0.13**	**J**	0.40	0.10	ppb v/v			08/20/20 01:07	1
1,3,5-Trimethylbenzene	ND		0.40	0.11	ppb v/v			08/20/20 01:07	1
Vinyl chloride	ND		0.20	0.13	ppb v/v			08/20/20 01:07	1
Xylenes, Total	**0.45**	**J**	0.80	0.12	ppb v/v			08/20/20 01:07	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.49**	**J**	1.3	0.13	ug/m3			08/20/20 01:07	1
Carbon tetrachloride	ND		2.5	0.22	ug/m3			08/20/20 01:07	1
Chlorodifluoromethane	**3.1**		1.4	0.39	ug/m3			08/20/20 01:07	1
Chloroform	**3.2**		2.0	0.17	ug/m3			08/20/20 01:07	1
cis-1,2-Dichloroethene	**140**		1.6	0.20	ug/m3			08/20/20 01:07	1
Dichlorodifluoromethane	**2.3**		2.0	0.35	ug/m3			08/20/20 01:07	1
1,1-Dichloroethane	**37**		1.6	0.14	ug/m3			08/20/20 01:07	1
1,2-Dichloroethane	ND		1.6	0.20	ug/m3			08/20/20 01:07	1
1,1-Dichloroethene	**130**		1.6	0.16	ug/m3			08/20/20 01:07	1
Ethylbenzene	**0.33**	**J**	1.7	0.28	ug/m3			08/20/20 01:07	1
Methylene Chloride	ND		6.9	6.8	ug/m3			08/20/20 01:07	1
Methyl tert-butyl ether	ND		7.2	0.94	ug/m3			08/20/20 01:07	1
Naphthalene	ND		1.0	1.0	ug/m3			08/20/20 01:07	1
Tetrachloroethene	ND		2.7	0.24	ug/m3			08/20/20 01:07	1
Toluene	**6.4**		2.3	1.5	ug/m3			08/20/20 01:07	1
trans-1,2-Dichloroethene	**3.3**		1.6	0.14	ug/m3			08/20/20 01:07	1
1,2,4-Trichlorobenzene	ND		3.0	2.4	ug/m3			08/20/20 01:07	1
1,1,1-Trichloroethane	**71**		2.2	1.0	ug/m3			08/20/20 01:07	1
1,1,2-Trichloroethane	ND		2.2	0.19	ug/m3			08/20/20 01:07	1
Trichloroethene	**21**		1.1	0.16	ug/m3			08/20/20 01:07	1
1,2,3-Trimethylbenzene	ND		2.0	0.88	ug/m3			08/20/20 01:07	1
1,2,4-Trimethylbenzene	**0.65**	**J**	2.0	0.49	ug/m3			08/20/20 01:07	1

Client: Tetra Tech GEO
Project/Site: LMMRC SSDS - Middle River

Job ID: 140-20065-1

Client Sample ID: BLDG A EFFLUENT
Date Collected: 08/18/20 11:03
Date Received: 08/19/20 10:15
Sample Container: Summa Canister 1L

Lab Sample ID: 140-20065-3
Matrix: Air

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		2.0	0.54	ug/m3			08/20/20 01:07	1
Vinyl chloride	ND		0.51	0.33	ug/m3			08/20/20 01:07	1
Xylenes, Total	**2.0**	**J**	3.5	0.52	ug/m3			08/20/20 01:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*86*		*60 - 140*		*08/20/20 01:07*	*1*

Default Detection Limits

Client: Tetra Tech GEO
Job ID: 140-20065-1
Project/Site: LMMRC SSDS - Middle River

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	RL	MDL	Units
1,1,1-Trichloroethane	0.080	0.037	ppb v/v
1,1,1-Trichloroethane	0.44	0.20	ug/m3
1,1,2-Trichloroethane	0.080	0.0070	ppb v/v
1,1,2-Trichloroethane	0.44	0.038	ug/m3
1,1-Dichloroethane	0.080	0.0070	ppb v/v
1,1-Dichloroethane	0.32	0.028	ug/m3
1,1-Dichloroethene	0.080	0.0080	ppb v/v
1,1-Dichloroethene	0.32	0.032	ug/m3
1,2,3-Trimethylbenzene	0.080	0.036	ppb v/v
1,2,3-Trimethylbenzene	0.39	0.18	ug/m3
1,2,4-Trichlorobenzene	0.080	0.064	ppb v/v
1,2,4-Trichlorobenzene	0.59	0.47	ug/m3
1,2,4-Trimethylbenzene	0.080	0.020	ppb v/v
1,2,4-Trimethylbenzene	0.39	0.098	ug/m3
1,2-Dichloroethane	0.080	0.010	ppb v/v
1,2-Dichloroethane	0.32	0.040	ug/m3
1,3,5-Trimethylbenzene	0.080	0.022	ppb v/v
1,3,5-Trimethylbenzene	0.39	0.11	ug/m3
Benzene	0.080	0.0080	ppb v/v
Benzene	0.26	0.026	ug/m3
Carbon tetrachloride	0.080	0.0070	ppb v/v
Carbon tetrachloride	0.50	0.044	ug/m3
Chlorodifluoromethane	0.080	0.022	ppb v/v
Chlorodifluoromethane	0.28	0.078	ug/m3
Chloroform	0.080	0.0070	ppb v/v
Chloroform	0.39	0.034	ug/m3
cis-1,2-Dichloroethene	0.080	0.010	ppb v/v
cis-1,2-Dichloroethene	0.32	0.040	ug/m3
Dichlorodifluoromethane	0.080	0.014	ppb v/v
Dichlorodifluoromethane	0.40	0.069	ug/m3
Ethylbenzene	0.080	0.013	ppb v/v
Ethylbenzene	0.35	0.056	ug/m3
Methyl tert-butyl ether	0.40	0.052	ppb v/v
Methyl tert-butyl ether	1.4	0.19	ug/m3
Methylene Chloride	0.40	0.39	ppb v/v
Methylene Chloride	1.4	1.4	ug/m3
Naphthalene	0.040	0.040	ppb v/v
Naphthalene	0.21	0.21	ug/m3
Tetrachloroethene	0.080	0.0070	ppb v/v
Tetrachloroethene	0.54	0.047	ug/m3
Toluene	0.12	0.078	ppb v/v
Toluene	0.45	0.29	ug/m3
trans-1,2-Dichloroethene	0.080	0.0070	ppb v/v
trans-1,2-Dichloroethene	0.32	0.028	ug/m3
Trichloroethene	0.040	0.0060	ppb v/v
Trichloroethene	0.21	0.032	ug/m3
Vinyl chloride	0.040	0.026	ppb v/v
Vinyl chloride	0.10	0.066	ug/m3
Xylenes, Total	0.16	0.024	ppb v/v
Xylenes, Total	0.69	0.10	ug/m3

Surrogate Summary

Client: Tetra Tech GEO
Project/Site: LMMRC SSDS - Middle River

Job ID: 140-20065-1

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Matrix: Air **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)								
		BFB								
Lab Sample ID	Client Sample ID	(60-140)								
140-20065-1	BLDG A INFLUENT	88								
140-20065-2	BLDG A MID GAC	89								
140-20065-2 - DL	BLDG A MID GAC	91								
140-20065-3	BLDG A EFFLUENT	86								
LCS 140-41859/1002	Lab Control Sample	99								
LCS 140-41899/1002	Lab Control Sample	100								
MB 140-41859/4	Method Blank	76								
MB 140-41899/4	Method Blank	88								

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Lab Sample ID: MB 140-41859/4
Matrix: Air
Analysis Batch: 41859

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.080	0.0080	ppb v/v			08/19/20 16:15	1
Carbon tetrachloride	ND		0.080	0.0070	ppb v/v			08/19/20 16:15	1
Chlorodifluoromethane	ND		0.080	0.022	ppb v/v			08/19/20 16:15	1
Chloroform	ND		0.080	0.0070	ppb v/v			08/19/20 16:15	1
cis-1,2-Dichloroethene	ND		0.080	0.010	ppb v/v			08/19/20 16:15	1
Dichlorodifluoromethane	ND		0.080	0.014	ppb v/v			08/19/20 16:15	1
1,1-Dichloroethane	ND		0.080	0.0070	ppb v/v			08/19/20 16:15	1
1,2-Dichloroethane	ND		0.080	0.010	ppb v/v			08/19/20 16:15	1
1,1-Dichloroethene	ND		0.080	0.0080	ppb v/v			08/19/20 16:15	1
Ethylbenzene	ND		0.080	0.013	ppb v/v			08/19/20 16:15	1
Methylene Chloride	ND		0.40	0.39	ppb v/v			08/19/20 16:15	1
Methyl tert-butyl ether	ND		0.40	0.052	ppb v/v			08/19/20 16:15	1
Naphthalene	ND		0.040	0.040	ppb v/v			08/19/20 16:15	1
Tetrachloroethene	ND		0.080	0.0070	ppb v/v			08/19/20 16:15	1
Toluene	ND		0.12	0.078	ppb v/v			08/19/20 16:15	1
trans-1,2-Dichloroethene	ND		0.080	0.0070	ppb v/v			08/19/20 16:15	1
1,2,4-Trichlorobenzene	ND		0.080	0.064	ppb v/v			08/19/20 16:15	1
1,1,1-Trichloroethane	ND		0.080	0.037	ppb v/v			08/19/20 16:15	1
1,1,2-Trichloroethane	ND		0.080	0.0070	ppb v/v			08/19/20 16:15	1
Trichloroethene	ND		0.040	0.0060	ppb v/v			08/19/20 16:15	1
1,2,3-Trimethylbenzene	ND		0.080	0.036	ppb v/v			08/19/20 16:15	1
1,2,4-Trimethylbenzene	ND		0.080	0.020	ppb v/v			08/19/20 16:15	1
1,3,5-Trimethylbenzene	ND		0.080	0.022	ppb v/v			08/19/20 16:15	1
Vinyl chloride	ND		0.040	0.026	ppb v/v			08/19/20 16:15	1
Xylenes, Total	ND		0.16	0.024	ppb v/v			08/19/20 16:15	1

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.26	0.026	ug/m3			08/19/20 16:15	1
Carbon tetrachloride	ND		0.50	0.044	ug/m3			08/19/20 16:15	1
Chlorodifluoromethane	ND		0.28	0.078	ug/m3			08/19/20 16:15	1
Chloroform	ND		0.39	0.034	ug/m3			08/19/20 16:15	1
cis-1,2-Dichloroethene	ND		0.32	0.040	ug/m3			08/19/20 16:15	1
Dichlorodifluoromethane	ND		0.40	0.069	ug/m3			08/19/20 16:15	1
1,1-Dichloroethane	ND		0.32	0.028	ug/m3			08/19/20 16:15	1
1,2-Dichloroethane	ND		0.32	0.040	ug/m3			08/19/20 16:15	1
1,1-Dichloroethene	ND		0.32	0.032	ug/m3			08/19/20 16:15	1
Ethylbenzene	ND		0.35	0.056	ug/m3			08/19/20 16:15	1
Methylene Chloride	ND		1.4	1.4	ug/m3			08/19/20 16:15	1
Methyl tert-butyl ether	ND		1.4	0.19	ug/m3			08/19/20 16:15	1
Naphthalene	ND		0.21	0.21	ug/m3			08/19/20 16:15	1
Tetrachloroethene	ND		0.54	0.047	ug/m3			08/19/20 16:15	1
Toluene	ND		0.45	0.29	ug/m3			08/19/20 16:15	1
trans-1,2-Dichloroethene	ND		0.32	0.028	ug/m3			08/19/20 16:15	1
1,2,4-Trichlorobenzene	ND		0.59	0.47	ug/m3			08/19/20 16:15	1
1,1,1-Trichloroethane	ND		0.44	0.20	ug/m3			08/19/20 16:15	1
1,1,2-Trichloroethane	ND		0.44	0.038	ug/m3			08/19/20 16:15	1
Trichloroethene	ND		0.21	0.032	ug/m3			08/19/20 16:15	1
1,2,3-Trimethylbenzene	ND		0.39	0.18	ug/m3			08/19/20 16:15	1

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Lab Sample ID: MB 140-41859/4
Matrix: Air
Analysis Batch: 41859

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.39	0.098	ug/m3			08/19/20 16:15	1
1,3,5-Trimethylbenzene	ND		0.39	0.11	ug/m3			08/19/20 16:15	1
Vinyl chloride	ND		0.10	0.066	ug/m3			08/19/20 16:15	1
Xylenes, Total	ND		0.69	0.10	ug/m3			08/19/20 16:15	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*76*		*60 - 140*		*08/19/20 16:15*	*1*

Lab Sample ID: LCS 140-41859/1002
Matrix: Air
Analysis Batch: 41859

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	2.20	1.74		ppb v/v		79	70 - 130
Carbon tetrachloride	2.20	2.30		ppb v/v		105	70 - 130
Chlorodifluoromethane	2.20	1.90		ppb v/v		86	60 - 140
Chloroform	2.20	1.98		ppb v/v		90	70 - 130
cis-1,2-Dichloroethene	2.20	1.92		ppb v/v		87	70 - 130
Dichlorodifluoromethane	2.20	1.91		ppb v/v		87	60 - 140
1,1-Dichloroethane	2.20	1.83		ppb v/v		83	70 - 130
1,2-Dichloroethane	2.20	1.65		ppb v/v		75	70 - 130
1,1-Dichloroethene	2.20	2.02		ppb v/v		92	70 - 130
Ethylbenzene	2.20	1.92		ppb v/v		87	70 - 130
Methylene Chloride	2.20	2.09		ppb v/v		95	70 - 130
Methyl tert-butyl ether	2.20	1.92		ppb v/v		87	60 - 140
Naphthalene	2.20	2.14		ppb v/v		97	60 - 140
Tetrachloroethene	2.20	2.02		ppb v/v		92	70 - 130
Toluene	2.20	1.78		ppb v/v		81	70 - 130
trans-1,2-Dichloroethene	2.20	1.96		ppb v/v		89	70 - 130
1,2,4-Trichlorobenzene	2.20	3.07		ppb v/v		140	60 - 140
1,1,1-Trichloroethane	2.20	2.04		ppb v/v		93	70 - 130
1,1,2-Trichloroethane	2.20	1.91		ppb v/v		87	70 - 130
Trichloroethene	2.20	1.90		ppb v/v		86	70 - 130
1,2,3-Trimethylbenzene	2.20	2.81		ppb v/v		128	70 - 130
1,2,4-Trimethylbenzene	2.20	2.35		ppb v/v		107	70 - 130
1,3,5-Trimethylbenzene	2.20	2.38		ppb v/v		108	70 - 130
Vinyl chloride	2.20	1.92		ppb v/v		87	70 - 130
Xylenes, Total	6.60	6.04		ppb v/v		92	70 - 130

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	7.0	5.57		ug/m3		79	70 - 130
Carbon tetrachloride	14	14.5		ug/m3		105	70 - 130
Chlorodifluoromethane	7.8	6.71		ug/m3		86	60 - 140
Chloroform	11	9.69		ug/m3		90	70 - 130
cis-1,2-Dichloroethene	8.7	7.63		ug/m3		87	70 - 130
Dichlorodifluoromethane	11	9.44		ug/m3		87	60 - 140
1,1-Dichloroethane	8.9	7.42		ug/m3		83	70 - 130

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Lab Sample ID: LCS 140-41859/1002
Matrix: Air
Analysis Batch: 41859

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloroethane	8.9	6.68		ug/m3		75	70 - 130
1,1-Dichloroethene	8.7	7.99		ug/m3		92	70 - 130
Ethylbenzene	9.6	8.33		ug/m3		87	70 - 130
Methylene Chloride	7.6	7.27		ug/m3		95	70 - 130
Methyl tert-butyl ether	7.9	6.93		ug/m3		87	60 - 140
Naphthalene	12	11.2		ug/m3		97	60 - 140
Tetrachloroethene	15	13.7		ug/m3		92	70 - 130
Toluene	8.3	6.70		ug/m3		81	70 - 130
trans-1,2-Dichloroethene	8.7	7.76		ug/m3		89	70 - 130
1,2,4-Trichlorobenzene	16	22.8		ug/m3		140	60 - 140
1,1,1-Trichloroethane	12	11.1		ug/m3		93	70 - 130
1,1,2-Trichloroethane	12	10.4		ug/m3		87	70 - 130
Trichloroethene	12	10.2		ug/m3		86	70 - 130
1,2,3-Trimethylbenzene	11	13.8		ug/m3		128	70 - 130
1,2,4-Trimethylbenzene	11	11.6		ug/m3		107	70 - 130
1,3,5-Trimethylbenzene	11	11.7		ug/m3		108	70 - 130
Vinyl chloride	5.6	4.90		ug/m3		87	70 - 130
Xylenes, Total	29	26.2		ug/m3		92	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*60 - 140*

Lab Sample ID: MB 140-41899/4
Matrix: Air
Analysis Batch: 41899

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.080	0.0080	ppb v/v			08/20/20 16:23	1
Carbon tetrachloride	ND		0.080	0.0070	ppb v/v			08/20/20 16:23	1
Chlorodifluoromethane	ND		0.080	0.022	ppb v/v			08/20/20 16:23	1
Chloroform	ND		0.080	0.0070	ppb v/v			08/20/20 16:23	1
cis-1,2-Dichloroethene	ND		0.080	0.010	ppb v/v			08/20/20 16:23	1
Dichlorodifluoromethane	ND		0.080	0.014	ppb v/v			08/20/20 16:23	1
1,1-Dichloroethane	ND		0.080	0.0070	ppb v/v			08/20/20 16:23	1
1,2-Dichloroethane	ND		0.080	0.010	ppb v/v			08/20/20 16:23	1
1,1-Dichloroethene	ND		0.080	0.0080	ppb v/v			08/20/20 16:23	1
Ethylbenzene	ND		0.080	0.013	ppb v/v			08/20/20 16:23	1
Methylene Chloride	ND		0.40	0.39	ppb v/v			08/20/20 16:23	1
Methyl tert-butyl ether	ND		0.40	0.052	ppb v/v			08/20/20 16:23	1
Naphthalene	ND		0.040	0.040	ppb v/v			08/20/20 16:23	1
Tetrachloroethene	ND		0.080	0.0070	ppb v/v			08/20/20 16:23	1
Toluene	ND		0.12	0.078	ppb v/v			08/20/20 16:23	1
trans-1,2-Dichloroethene	ND		0.080	0.0070	ppb v/v			08/20/20 16:23	1
1,2,4-Trichlorobenzene	ND		0.080	0.064	ppb v/v			08/20/20 16:23	1
1,1,1-Trichloroethane	ND		0.080	0.037	ppb v/v			08/20/20 16:23	1
1,1,2-Trichloroethane	ND		0.080	0.0070	ppb v/v			08/20/20 16:23	1
Trichloroethene	ND		0.040	0.0060	ppb v/v			08/20/20 16:23	1

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Lab Sample ID: MB 140-41899/4
Matrix: Air
Analysis Batch: 41899

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trimethylbenzene	ND		0.080	0.036	ppb v/v			08/20/20 16:23	1
1,2,4-Trimethylbenzene	ND		0.080	0.020	ppb v/v			08/20/20 16:23	1
1,3,5-Trimethylbenzene	ND		0.080	0.022	ppb v/v			08/20/20 16:23	1
Vinyl chloride	ND		0.040	0.026	ppb v/v			08/20/20 16:23	1
Xylenes, Total	ND		0.16	0.024	ppb v/v			08/20/20 16:23	1

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.26	0.026	ug/m3			08/20/20 16:23	1
Carbon tetrachloride	ND		0.50	0.044	ug/m3			08/20/20 16:23	1
Chlorodifluoromethane	ND		0.28	0.078	ug/m3			08/20/20 16:23	1
Chloroform	ND		0.39	0.034	ug/m3			08/20/20 16:23	1
cis-1,2-Dichloroethene	ND		0.32	0.040	ug/m3			08/20/20 16:23	1
Dichlorodifluoromethane	ND		0.40	0.069	ug/m3			08/20/20 16:23	1
1,1-Dichloroethane	ND		0.32	0.028	ug/m3			08/20/20 16:23	1
1,2-Dichloroethane	ND		0.32	0.040	ug/m3			08/20/20 16:23	1
1,1-Dichloroethene	ND		0.32	0.032	ug/m3			08/20/20 16:23	1
Ethylbenzene	ND		0.35	0.056	ug/m3			08/20/20 16:23	1
Methylene Chloride	ND		1.4	1.4	ug/m3			08/20/20 16:23	1
Methyl tert-butyl ether	ND		1.4	0.19	ug/m3			08/20/20 16:23	1
Naphthalene	ND		0.21	0.21	ug/m3			08/20/20 16:23	1
Tetrachloroethene	ND		0.54	0.047	ug/m3			08/20/20 16:23	1
Toluene	ND		0.45	0.29	ug/m3			08/20/20 16:23	1
trans-1,2-Dichloroethene	ND		0.32	0.028	ug/m3			08/20/20 16:23	1
1,2,4-Trichlorobenzene	ND		0.59	0.47	ug/m3			08/20/20 16:23	1
1,1,1-Trichloroethane	ND		0.44	0.20	ug/m3			08/20/20 16:23	1
1,1,2-Trichloroethane	ND		0.44	0.038	ug/m3			08/20/20 16:23	1
Trichloroethene	ND		0.21	0.032	ug/m3			08/20/20 16:23	1
1,2,3-Trimethylbenzene	ND		0.39	0.18	ug/m3			08/20/20 16:23	1
1,2,4-Trimethylbenzene	ND		0.39	0.098	ug/m3			08/20/20 16:23	1
1,3,5-Trimethylbenzene	ND		0.39	0.11	ug/m3			08/20/20 16:23	1
Vinyl chloride	ND		0.10	0.066	ug/m3			08/20/20 16:23	1
Xylenes, Total	ND		0.69	0.10	ug/m3			08/20/20 16:23	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*60 - 140*		*08/20/20 16:23*	*1*

Lab Sample ID: LCS 140-41899/1002
Matrix: Air
Analysis Batch: 41899

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	2.50	2.80		ppb v/v		112	70 - 130
Carbon tetrachloride	2.50	2.80		ppb v/v		112	70 - 130
Chlorodifluoromethane	2.50	1.99		ppb v/v		80	60 - 140
Chloroform	2.50	3.01		ppb v/v		120	70 - 130
cis-1,2-Dichloroethene	2.50	2.85		ppb v/v		114	70 - 130
Dichlorodifluoromethane	2.50	2.28		ppb v/v		91	60 - 140

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Lab Sample ID: LCS 140-41899/1002
Matrix: Air
Analysis Batch: 41899

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	2.50	2.59		ppb v/v		104	70 - 130
1,2-Dichloroethane	2.50	2.46		ppb v/v		98	70 - 130
1,1-Dichloroethene	2.50	2.81		ppb v/v		112	70 - 130
Ethylbenzene	2.50	2.63		ppb v/v		105	70 - 130
Methylene Chloride	2.50	3.16		ppb v/v		127	70 - 130
Methyl tert-butyl ether	2.50	3.15		ppb v/v		126	60 - 140
Naphthalene	2.50	2.92		ppb v/v		117	60 - 140
Tetrachloroethene	2.50	2.41		ppb v/v		96	70 - 130
Toluene	2.50	2.55		ppb v/v		102	70 - 130
trans-1,2-Dichloroethene	2.50	2.99		ppb v/v		120	70 - 130
1,2,4-Trichlorobenzene	2.50	2.08		ppb v/v		83	60 - 140
1,1,1-Trichloroethane	2.50	2.90		ppb v/v		116	70 - 130
1,1,2-Trichloroethane	2.50	2.59		ppb v/v		104	70 - 130
Trichloroethene	2.50	2.42		ppb v/v		97	70 - 130
1,2,3-Trimethylbenzene	2.50	1.86		ppb v/v		74	70 - 130
1,2,4-Trimethylbenzene	2.50	2.68		ppb v/v		107	70 - 130
1,3,5-Trimethylbenzene	2.50	3.11		ppb v/v		125	70 - 130
Vinyl chloride	2.50	2.16		ppb v/v		86	70 - 130
Xylenes, Total	7.50	8.08		ppb v/v		108	70 - 130

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	8.0	8.95		ug/m3		112	70 - 130
Carbon tetrachloride	16	17.6		ug/m3		112	70 - 130
Chlorodifluoromethane	8.8	7.04		ug/m3		80	60 - 140
Chloroform	12	14.7		ug/m3		120	70 - 130
cis-1,2-Dichloroethene	9.9	11.3		ug/m3		114	70 - 130
Dichlorodifluoromethane	12	11.3		ug/m3		91	60 - 140
1,1-Dichloroethane	10	10.5		ug/m3		104	70 - 130
1,2-Dichloroethane	10	9.96		ug/m3		98	70 - 130
1,1-Dichloroethene	9.9	11.1		ug/m3		112	70 - 130
Ethylbenzene	11	11.4		ug/m3		105	70 - 130
Methylene Chloride	8.7	11.0		ug/m3		127	70 - 130
Methyl tert-butyl ether	9.0	11.3		ug/m3		126	60 - 140
Naphthalene	13	15.3		ug/m3		117	60 - 140
Tetrachloroethene	17	16.3		ug/m3		96	70 - 130
Toluene	9.4	9.62		ug/m3		102	70 - 130
trans-1,2-Dichloroethene	9.9	11.9		ug/m3		120	70 - 130
1,2,4-Trichlorobenzene	19	15.5		ug/m3		83	60 - 140
1,1,1-Trichloroethane	14	15.8		ug/m3		116	70 - 130
1,1,2-Trichloroethane	14	14.1		ug/m3		104	70 - 130
Trichloroethene	13	13.0		ug/m3		97	70 - 130
1,2,3-Trimethylbenzene	12	9.14		ug/m3		74	70 - 130
1,2,4-Trimethylbenzene	12	13.2		ug/m3		107	70 - 130
1,3,5-Trimethylbenzene	12	15.3		ug/m3		125	70 - 130
Vinyl chloride	6.4	5.52		ug/m3		86	70 - 130
Xylenes, Total	33	35.1		ug/m3		108	70 - 130

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Lab Sample ID: LCS 140-41899/1002
Matrix: Air
Analysis Batch: 41899

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	100		60 - 140

QC Association Summary

Client: Tetra Tech GEO
Project/Site: LMMRC SSDS - Middle River

Job ID: 140-20065-1

Air - GC/MS VOA

Analysis Batch: 41859

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-20065-1	BLDG A INFLUENT	Total/NA	Air	TO 15 LL	
140-20065-2	BLDG A MID GAC	Total/NA	Air	TO 15 LL	
140-20065-3	BLDG A EFFLUENT	Total/NA	Air	TO 15 LL	
MB 140-41859/4	Method Blank	Total/NA	Air	TO 15 LL	
LCS 140-41859/1002	Lab Control Sample	Total/NA	Air	TO 15 LL	

Analysis Batch: 41899

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-20065-2 - DL	BLDG A MID GAC	Total/NA	Air	TO 15 LL	
MB 140-41899/4	Method Blank	Total/NA	Air	TO 15 LL	
LCS 140-41899/1002	Lab Control Sample	Total/NA	Air	TO 15 LL	

Client Sample ID: BLDG A INFLUENT
Lab Sample ID: 140-20065-1
Date Collected: 08/18/20 11:10
Matrix: Air
Date Received: 08/19/20 10:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	25 mL	500 mL	41859	08/19/20 22:58	S1K	TAL KNX
	Instrument ID: MG									

Client Sample ID: BLDG A MID GAC
Lab Sample ID: 140-20065-2
Date Collected: 08/18/20 11:06
Matrix: Air
Date Received: 08/19/20 10:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	100 mL	500 mL	41859	08/19/20 23:41	S1K	TAL KNX
	Instrument ID: MG									
Total/NA	Analysis	TO 15 LL	DL	1	10 mL	500 mL	41899	08/20/20 18:01	S1K	TAL KNX
	Instrument ID: MR									

Client Sample ID: BLDG A EFFLUENT
Lab Sample ID: 140-20065-3
Date Collected: 08/18/20 11:03
Matrix: Air
Date Received: 08/19/20 10:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	100 mL	500 mL	41859	08/20/20 01:07	S1K	TAL KNX
	Instrument ID: MG									

Client Sample ID: Method Blank
Lab Sample ID: MB 140-41859/4
Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	500 mL	500 mL	41859	08/19/20 16:15	S1K	TAL KNX
	Instrument ID: MG									

Client Sample ID: Method Blank
Lab Sample ID: MB 140-41899/4
Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	500 mL	500 mL	41899	08/20/20 16:23	S1K	TAL KNX
	Instrument ID: MR									

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 140-41859/1002
Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	500 mL	500 mL	41859	08/19/20 14:03	S1K	TAL KNX
	Instrument ID: MG									

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 140-41899/1002

Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	500 mL	500 mL	41899	08/20/20 14:37	S1K	TAL KNX
	Instrument ID: MR									

Laboratory References:

TAL KNX = Eurofins TestAmerica, Knoxville, 5815 Middlebrook Pike, Knoxville, TN 37921, TEL (865)291-3000

Method Summary

Client: Tetra Tech GEO
Job ID: 140-20065-1
Project/Site: LMMRC SSDS - Middle River

Method	Method Description	Protocol	Laboratory
TO 15 LL	Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)	EPA	TAL KNX

Protocol References:

EPA = US Environmental Protection Agency

Laboratory References:

TAL KNX = Eurofins TestAmerica, Knoxville, 5815 Middlebrook Pike, Knoxville, TN 37921, TEL (865)291-3000

Sample Summary

Client: Tetra Tech GEO
Project/Site: LMMRC SSDS - Middle River

Job ID: 140-20065-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
140-20065-1	BLDG A INFLUENT	Air	08/18/20 11:10	08/19/20 10:15	Air Canister (1-Liter) #10497
140-20065-2	BLDG A MID GAC	Air	08/18/20 11:06	08/19/20 10:15	Air Canister (1-Liter) #09802
140-20065-3	BLDG A EFFLUENT	Air	08/18/20 11:03	08/19/20 10:15	Air Canister (1-Liter) #11280

Method TO15 Low Level

Volatile Organic Compounds - Low level (GC/MS) by Method TO 15

FORM II
AIR - GC/MS VOA SURROGATE RECOVERY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20065-1

SDG No.:

Matrix: Air Level: Low

GC Column (1): RTX-5 ID: 0.32(mm)

Client Sample ID	Lab Sample ID	BFB #
BLDG A INFLUENT	140-20065-1	88
BLDG A MID GAC	140-20065-2	89
BLDG A MID GAC DL	140-20065-2 DL	91
BLDG A EFFLUENT	140-20065-3	86
	MB 140-41859/4	76
	MB 140-41899/4	88
	LCS 140-41859/1002	99
	LCS 140-41899/1002	100

	QC LIMITS
BFB = 4-Bromofluorobenzene (Surr)	60-140

Column to be used to flag recovery values

FORM II TO 15 LL

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20065-1

SDG No.:

Matrix: Air Level: Low Lab File ID: GCCVH19C-LCS.d

Lab ID: LCS 140-41859/1002 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Benzene	2.20	1.74	79	70-130	
Carbon tetrachloride	2.20	2.30	105	70-130	
Chlorodifluoromethane	2.20	1.90	86	60-140	
Chloroform	2.20	1.98	90	70-130	
cis-1,2-Dichloroethene	2.20	1.92	87	70-130	
Dichlorodifluoromethane	2.20	1.91	87	60-140	
1,1-Dichloroethane	2.20	1.83	83	70-130	
1,2-Dichloroethane	2.20	1.65	75	70-130	
1,1-Dichloroethene	2.20	2.02	92	70-130	
Ethylbenzene	2.20	1.92	87	70-130	
Methylene Chloride	2.20	2.09	95	70-130	
Methyl tert-butyl ether	2.20	1.92	87	60-140	
Naphthalene	2.20	2.14	97	60-140	
Tetrachloroethene	2.20	2.02	92	70-130	
Toluene	2.20	1.78	81	70-130	
trans-1,2-Dichloroethene	2.20	1.96	89	70-130	
1,2,4-Trichlorobenzene	2.20	3.07	140	60-140	
1,1,1-Trichloroethane	2.20	2.04	93	70-130	
1,1,2-Trichloroethane	2.20	1.91	87	70-130	
Trichloroethene	2.20	1.90	86	70-130	
1,2,3-Trimethylbenzene	2.20	2.81	128	70-130	
1,2,4-Trimethylbenzene	2.20	2.35	107	70-130	
1,3,5-Trimethylbenzene	2.20	2.38	108	70-130	
Vinyl chloride	2.20	1.92	87	70-130	
Xylenes, Total	6.60	6.04	92	70-130	

Column to be used to flag recovery and RPD values

FORM III TO 15 LL

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20065-1

SDG No.:

Matrix: Air Level: Low Lab File ID: RCCVH20B-LCS.d

Lab ID: LCS 140-41899/1002 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Benzene	2.50	2.80	112	70-130	
Carbon tetrachloride	2.50	2.80	112	70-130	
Chlorodifluoromethane	2.50	1.99	80	60-140	
Chloroform	2.50	3.01	120	70-130	
cis-1,2-Dichloroethene	2.50	2.85	114	70-130	
Dichlorodifluoromethane	2.50	2.28	91	60-140	
1,1-Dichloroethane	2.50	2.59	104	70-130	
1,2-Dichloroethane	2.50	2.46	98	70-130	
1,1-Dichloroethene	2.50	2.81	112	70-130	
Ethylbenzene	2.50	2.63	105	70-130	
Methylene Chloride	2.50	3.16	127	70-130	
Methyl tert-butyl ether	2.50	3.15	126	60-140	
Naphthalene	2.50	2.92	117	60-140	
Tetrachloroethene	2.50	2.41	96	70-130	
Toluene	2.50	2.55	102	70-130	
trans-1,2-Dichloroethene	2.50	2.99	120	70-130	
1,2,4-Trichlorobenzene	2.50	2.08	83	60-140	
1,1,1-Trichloroethane	2.50	2.90	116	70-130	
1,1,2-Trichloroethane	2.50	2.59	104	70-130	
Trichloroethene	2.50	2.42	97	70-130	
1,2,3-Trimethylbenzene	2.50	1.86	74	70-130	
1,2,4-Trimethylbenzene	2.50	2.68	107	70-130	
1,3,5-Trimethylbenzene	2.50	3.11	125	70-130	
Vinyl chloride	2.50	2.16	86	70-130	
Xylenes, Total	7.50	8.08	108	70-130	

Column to be used to flag recovery and RPD values

FORM III TO 15 LL

FORM IV
AIR - GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20065-1

SDG No.:

Lab File ID: G500BH19.D Lab Sample ID: MB 140-41859/4

Matrix: Air Heated Purge:(Y/N) N

Instrument ID: MG Date Analyzed: 08/19/2020 16:15

GC Column: RTX-5 ID: 0.32(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 140-41859/1002	GCCVH19C-LCS.d	08/19/2020 14:03
BLDG A INFLUENT	140-20065-1	GH19P108.D	08/19/2020 22:58
BLDG A MID GAC	140-20065-2	GH19P109.D	08/19/2020 23:41
BLDG A EFFLUENT	140-20065-3	GH19P110.D	08/20/2020 01:07

FORM IV
AIR - GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20065-1

SDG No.:

Lab File ID: R500BH20.D Lab Sample ID: MB 140-41899/4

Matrix: Air Heated Purge:(Y/N) N

Instrument ID: MR Date Analyzed: 08/20/2020 16:23

GC Column: RTX-5 ID: 0.32(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 140-41899/1002	RCCVH20B-LCS.d	08/20/2020 14:37
BLDG A MID GAC DL	140-20065-2 DL	RH20P101.D	08/20/2020 18:01

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20065-1

SDG No.:

Lab File ID: GBFBG15IC.D BFB Injection Date: 07/15/2020

Instrument ID: MG BFB Injection Time: 12:19

Analysis Batch No.: 41058

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	18.8	
75	30.0 - 60.0 % of mass 95	57.3	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.8	
173	Less than 2.0 % of mass 174	0.3	(0.5) 1
174	Greater than 50% of mass 95	67.4	
175	5.0 - 9.0 % of mass 174	4.6	(6.9) 1
176	95.0 - 101.0 % of mass 174	65.8	(97.6) 1
177	5.0 - 9.0 % of mass 176	4.2	(6.4) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 140-41058/21	GG15IC10.D	07/15/2020	12:53
	IC 140-41058/4	GG15IC09.D	07/15/2020	14:28
	IC 140-41058/6	GG15IC08.D	07/15/2020	15:55
	IC 140-41058/8	GG15IC01.D	07/15/2020	17:25
	IC 140-41058/9	GG15IC02.D	07/15/2020	18:11
	IC 140-41058/10	GG15IC03.D	07/15/2020	18:58
	IC 140-41058/11	GG15IC04.D	07/15/2020	19:47
	IC 140-41058/12	GG15IC05.D	07/15/2020	20:32
	IC 140-41058/13	GG15IC06.D	07/15/2020	21:18
	ICIS 140-41058/14	GG15IC07.D	07/15/2020	22:02
	ICV 140-41058/16	GG15ICV.D	07/16/2020	0:19

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20065-1

SDG No.:

Lab File ID: GBFBH19C.D BFB Injection Date: 08/19/2020

Instrument ID: MG BFB Injection Time: 13:27

Analysis Batch No.: 41859

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	17.8	
75	30.0 - 60.0 % of mass 95	53.9	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.7	
173	Less than 2.0 % of mass 174	0.4	(0.4) 1
174	Greater than 50% of mass 95	98.8	
175	5.0 - 9.0 % of mass 174	6.8	(6.9) 1
176	95.0 - 101.0 % of mass 174	96.5	(97.7) 1
177	5.0 - 9.0 % of mass 176	6.1	(6.4) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 140-41859/2	GCCVH19C.D	08/19/2020	14:03
	LCS 140-41859/1002	GCCVH19C-LCS.	08/19/2020	14:03
	MB 140-41859/4	G500BH19.D	08/19/2020	16:15
BLDG A INFLUENT	140-20065-1	GH19P108.D	08/19/2020	22:58
BLDG A MID GAC	140-20065-2	GH19P109.D	08/19/2020	23:41
BLDG A EFFLUENT	140-20065-3	GH19P110.D	08/20/2020	1:07

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20065-1

SDG No.:

Lab File ID: RG27BLKZ.D BFB Injection Date: 07/27/2020

Instrument ID: MR BFB Injection Time: 16:54

Analysis Batch No.: 41306

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE		
50	15.0 - 40.0 % of mass 95	34.9		
75	30.0 - 60.0 % of mass 95	49.8		
95	Base Peak, 100% relative abundance	100.0		
96	5.0 - 9.0 % of mass 95	6.7		
173	Less than 2.0 % of mass 174	0.7	(0.7) 1	
174	Greater than 50% of mass 95	101.7		
175	5.0 - 9.0 % of mass 174	7.3	(7.1) 1	
176	95.0 - 101.0 % of mass 174	96.2	(94.6) 1	*
177	5.0 - 9.0 % of mass 176	6.7	(6.9) 2	

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 140-41306/3	RG27IC10.D	07/27/2020	17:38
	IC 140-41306/7	RG27IC08.D	07/27/2020	21:45
	IC 140-41306/9	RG27IC01.D	07/27/2020	23:58
	IC 140-41306/10	RG27IC02.D	07/28/2020	1:02
	IC 140-41306/11	RG27IC03.D	07/28/2020	2:07
	IC 140-41306/12	RG27IC04.D	07/28/2020	3:11
	IC 140-41306/13	RG27IC05.D	07/28/2020	4:17
	IC 140-41306/14	RG27IC06.D	07/28/2020	5:24
	ICIS 140-41306/15	RG27IC07.D	07/28/2020	6:29
	IC 140-41306/23	RG27IC09R.D	07/28/2020	9:59
	ICV 140-41306/18	RG27LCS.D	07/28/2020	12:30

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20065-1

SDG No.:

Lab File ID: RBFBH20B.D BFB Injection Date: 08/20/2020

Instrument ID: MR BFB Injection Time: 14:08

Analysis Batch No.: 41899

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE		
50	15.0 - 40.0 % of mass 95	23.6		
75	30.0 - 60.0 % of mass 95	53.1		
95	Base Peak, 100% relative abundance	100.0		
96	5.0 - 9.0 % of mass 95	7.6		
173	Less than 2.0 % of mass 174	1.1	(1.5) 1	
174	Greater than 50% of mass 95	72.6		
175	5.0 - 9.0 % of mass 174	4.9	(6.8) 1	
176	95.0 - 101.0 % of mass 174	67.5	(93.1) 1	*
177	5.0 - 9.0 % of mass 176	4.1	(6.1) 2	

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 140-41899/2	RCCVH20B.D	08/20/2020	14:37
	LCS 140-41899/1002	RCCVH20B-LCS.	08/20/2020	14:37
	MB 140-41899/4	R500BH20.D	08/20/2020	16:23
BLDG A MID GAC DL	140-20065-2 DL	RH20P101.D	08/20/2020	18:01

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20065-1

SDG No.:

Sample No.: ICIS 140-41058/14 Date Analyzed: 07/15/2020 22:02

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm)

Lab File ID (Standard): GG15IC07.D Heated Purge: (Y/N) N

Calibration ID: 2525

		CBM		DFBZ		CBZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		179107	8.84	1585235	11.02	1411654	15.75
UPPER LIMIT		250750	9.17	2219329	11.35	1976316	16.08
LOWER LIMIT		107464	8.51	951141	10.69	846992	15.42
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 140-41058/16		205175	8.84	1591539	11.02	1621760	15.75

CBM = Chlorobromomethane (IS)
DFBZ = 1,4-Difluorobenzene
CBZd5 = Chlorobenzene-d5 (IS)

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO 15 LL

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20065-1

SDG No.:

Sample No.: CCVIS 140-41859/2 Date Analyzed: 08/19/2020 14:03

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm)

Lab File ID (Standard): GCCVH19C.D Heated Purge: (Y/N) N

Calibration ID: 2525

		CBM		DFBZ		CBZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		145876	8.83	1304168	11.01	1203018	15.74
UPPER LIMIT		204226	9.16	1825835	11.34	1684225	16.07
LOWER LIMIT		87526	8.50	782501	10.68	721811	15.41
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 140-41859/1002		145876	8.83	1304168	11.01	1203018	15.74
MB 140-41859/4		192042	8.82	1644293	11.01	1319011	15.74
140-20065-1	BLDG A INFLUENT	182193	8.83	1598279	11.02	1441080	15.74
140-20065-2	BLDG A MID GAC	176934	8.83	1344774	11.01	1283032	15.74
140-20065-3	BLDG A EFFLUENT	198246	8.83	1775990	11.01	1574407	15.74

CBM = Chlorobromomethane (IS)
DFBZ = 1,4-Difluorobenzene
CBZd5 = Chlorobenzene-d5 (IS)

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO 15 LL

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20065-1

SDG No.:

Sample No.: ICIS 140-41306/15 Date Analyzed: 07/28/2020 06:29

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm)

Lab File ID (Standard): RG27IC07.D Heated Purge: (Y/N) N

Calibration ID: 2540

		CBM		DFBZ		CBZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		195356	8.30	1601225	10.53	1324871	15.37
UPPER LIMIT		273498	8.63	2241715	10.86	1854819	15.70
LOWER LIMIT		117214	7.97	960735	10.20	794923	15.04
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 140-41306/18		178764	8.30	1519481	10.54	1266782	15.37

CBM = Chlorobromomethane (IS)
DFBZ = 1,4-Difluorobenzene
CBZd5 = Chlorobenzene-d5 (IS)

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO 15 LL

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20065-1

SDG No.:

Sample No.: CCVIS 140-41899/2 Date Analyzed: 08/20/2020 14:37

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm)

Lab File ID (Standard): RCCVH20B.D Heated Purge: (Y/N) N

Calibration ID: 2540

		CBM		DFBZ		CBZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		178414	8.31	1678223	10.54	1444339	15.37
UPPER LIMIT		249780	8.64	2349512	10.87	2022075	15.70
LOWER LIMIT		107048	7.98	1006934	10.21	866603	15.04
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 140-41899/1002		178414	8.31	1678223	10.54	1444339	15.37
MB 140-41899/4		169218	8.29	1699706	10.52	1374206	15.37
140-20065-2 DL	BLDG A MID GAC DL	113606	8.28	1220702	10.52	974209	15.36

CBM = Chlorobromomethane (IS)
DFBZ = 1,4-Difluorobenzene
CBZd5 = Chlorobenzene-d5 (IS)

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO 15 LL

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20065-1

SDG No.:

Client Sample ID: BLDG A INFLUENT Lab Sample ID: 140-20065-1

Matrix: Air Lab File ID: GH19P108.D

Analysis Method: TO 15 LL Date Collected: 08/18/2020 11:10

Sample wt/vol: 25(mL) Date Analyzed: 08/19/2020 22:58

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 41859 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	7.2		1.6	0.16
56-23-5	Carbon tetrachloride	153.81	ND		1.6	0.14
75-45-6	Chlorodifluoromethane	86.47	0.46	J	1.6	0.44
67-66-3	Chloroform	119.38	0.88	J	1.6	0.14
156-59-2	cis-1,2-Dichloroethene	96.94	19		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	0.46	J	1.6	0.28
75-34-3	1,1-Dichloroethane	98.96	3.9		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	21		1.6	0.16
100-41-4	Ethylbenzene	106.17	ND		1.6	0.26
75-09-2	Methylene Chloride	84.93	ND		8.0	7.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		8.0	1.0
91-20-3	Naphthalene	128.17	ND		0.80	0.80
127-18-4	Tetrachloroethene	165.83	ND		1.6	0.14
108-88-3	Toluene	92.14	ND		2.4	1.6
156-60-5	trans-1,2-Dichloroethene	96.94	0.52	J	1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		1.6	1.3
71-55-6	1,1,1-Trichloroethane	133.41	99		1.6	0.74
79-00-5	1,1,2-Trichloroethane	133.41	ND		1.6	0.14
79-01-6	Trichloroethene	131.39	210		0.80	0.12
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		1.6	0.72
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		1.6	0.40
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		1.6	0.44
75-01-4	Vinyl chloride	62.50	ND		0.80	0.52
1330-20-7	Xylenes, Total	106.17	ND		3.2	0.48

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	88		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20065-1

SDG No.:

Client Sample ID: BLDG A INFLUENT Lab Sample ID: 140-20065-1

Matrix: Air Lab File ID: GH19P108.D

Analysis Method: TO 15 LL Date Collected: 08/18/2020 11:10

Sample wt/vol: 25(mL) Date Analyzed: 08/19/2020 22:58

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 41859 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	23		5.1	0.51
56-23-5	Carbon tetrachloride	153.81	ND		10	0.88
75-45-6	Chlorodifluoromethane	86.47	1.6	J	5.7	1.6
67-66-3	Chloroform	119.38	4.3	J	7.8	0.68
156-59-2	cis-1,2-Dichloroethene	96.94	76		6.3	0.79
75-71-8	Dichlorodifluoromethane	120.91	2.3	J	7.9	1.4
75-34-3	1,1-Dichloroethane	98.96	16		6.5	0.57
107-06-2	1,2-Dichloroethane	98.96	ND		6.5	0.81
75-35-4	1,1-Dichloroethene	96.94	85		6.3	0.63
100-41-4	Ethylbenzene	106.17	ND		6.9	1.1
75-09-2	Methylene Chloride	84.93	ND		28	27
1634-04-4	Methyl tert-butyl ether	88.15	ND		29	3.7
91-20-3	Naphthalene	128.17	ND		4.2	4.2
127-18-4	Tetrachloroethene	165.83	ND		11	0.95
108-88-3	Toluene	92.14	ND		9.0	5.9
156-60-5	trans-1,2-Dichloroethene	96.94	2.0	J	6.3	0.56
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		12	9.5
71-55-6	1,1,1-Trichloroethane	133.41	540		8.7	4.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		8.7	0.76
79-01-6	Trichloroethene	131.39	1100		4.3	0.64
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		7.9	3.5
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		7.9	2.0
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		7.9	2.2
75-01-4	Vinyl chloride	62.50	ND		2.0	1.3
1330-20-7	Xylenes, Total	106.17	ND		14	2.1

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	88		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200819-16309.b\GH19P108.D
Lims ID: 140-20065-A-1
Client ID: BLDG A INFLUENT
Sample Type: Client
Inject. Date: 19-Aug-2020 22:58:30 ALS Bottle#: 8 Worklist Smp#: 12
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016309-012
Misc. Info.: 140-20065-a-1
Operator ID: HMT Instrument ID: MG

Method: \\chromfs\Knoxville\ChromData\MG\20200819-16309.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 20-Aug-2020 10:38:48 Calib Date: 15-Jul-2020 22:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1047

First Level Reviewer: khachitpongpanits Date: 20-Aug-2020 10:39:32

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.833	8.827	0.006	96	182193	4.00	
* 2 1,4-Difluorobenzene	114	11.017	11.011	0.006	96	1598279	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.740	15.740	0.000	89	1441080	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.380	17.385	-0.005	89	1036678	3.54	
6 Chlorodifluoromethane	51	3.721	3.712	0.011	37	4217	0.0228	
8 Dichlorodifluoromethane	85	3.780	3.772	0.011	99	7637	0.0230	
27 1,1-Dichloroethene	96	5.953	5.951	0.005	94	91659	1.07	
34 trans-1,2-Dichloroethene	96	7.113	7.101	0.017	94	2455	0.0258	
37 1,1-Dichloroethane	63	7.522	7.522	0.005	100	40638	0.1936	
42 cis-1,2-Dichloroethene	96	8.504	8.504	0.006	98	93063	0.9622	
44 Chloroform	83	8.854	8.849	0.010	89	10703	0.0442	
47 1,1,1-Trichloroethane	97	9.874	9.874	0.006	94	1296768	4.96	
50 Benzene	78	10.472	10.472	0.005	96	119460	0.3624	
58 Trichloroethene	130	11.729	11.729	0.005	95	1181845	10.6	
67 Toluene	91	13.772	13.772	0.000	91	20425	0.0653	

Reagents:

40MXISSURP_00004 Amount Added: 40.00 Units: mL Run Reagent

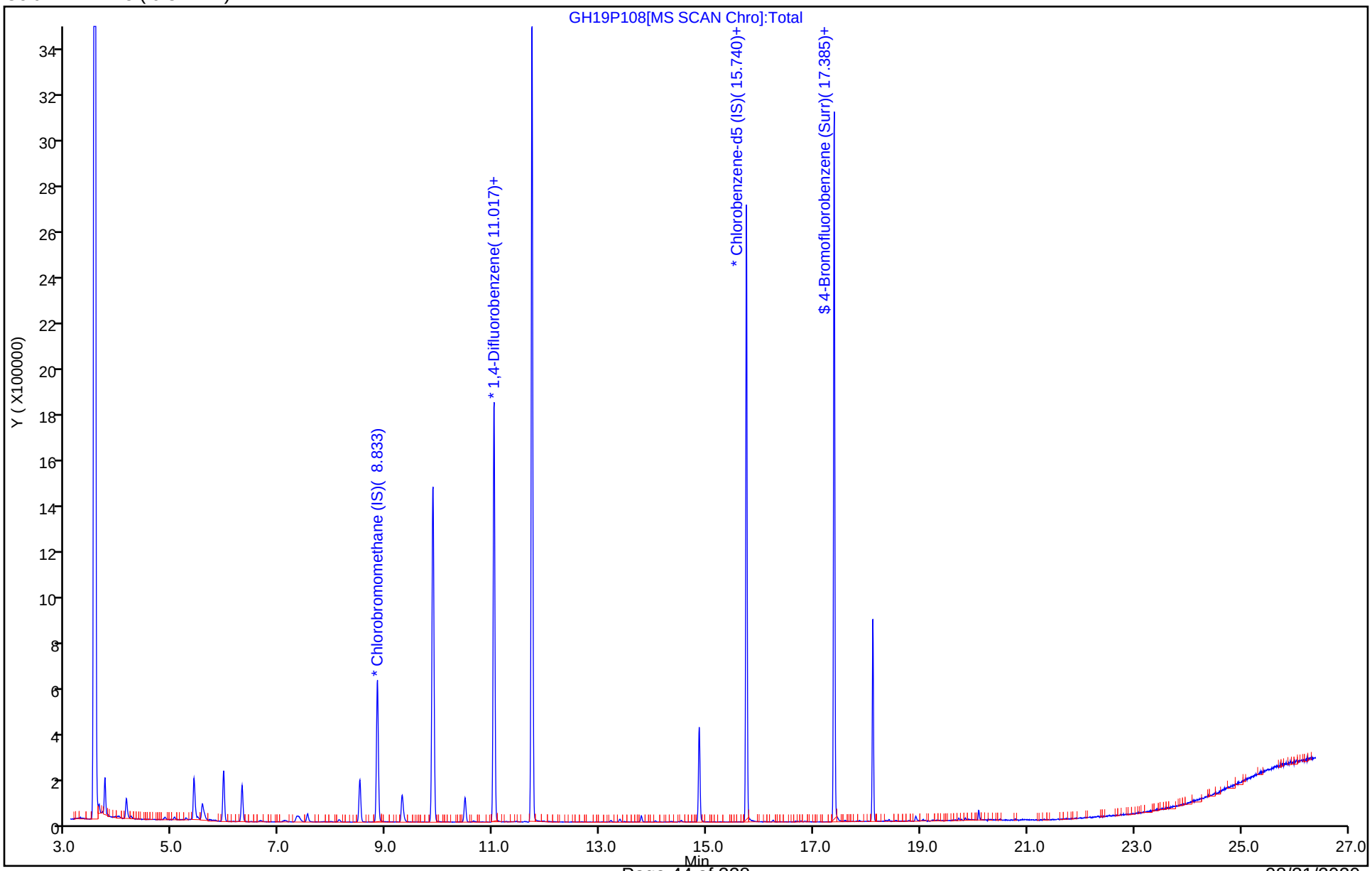
Report Date: 20-Aug-2020 10:39:33 Chrom Revision: 2.3 17-Aug-2020 20:42:08

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200819-16309.b\GH19P108.D

Injection Date:	19-Aug-2020 22:58:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	140-20065-A-1	Lab Sample ID:	140-20065-1	Worklist Smp#:	12
Client ID:	BLDG A INFLUENT				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

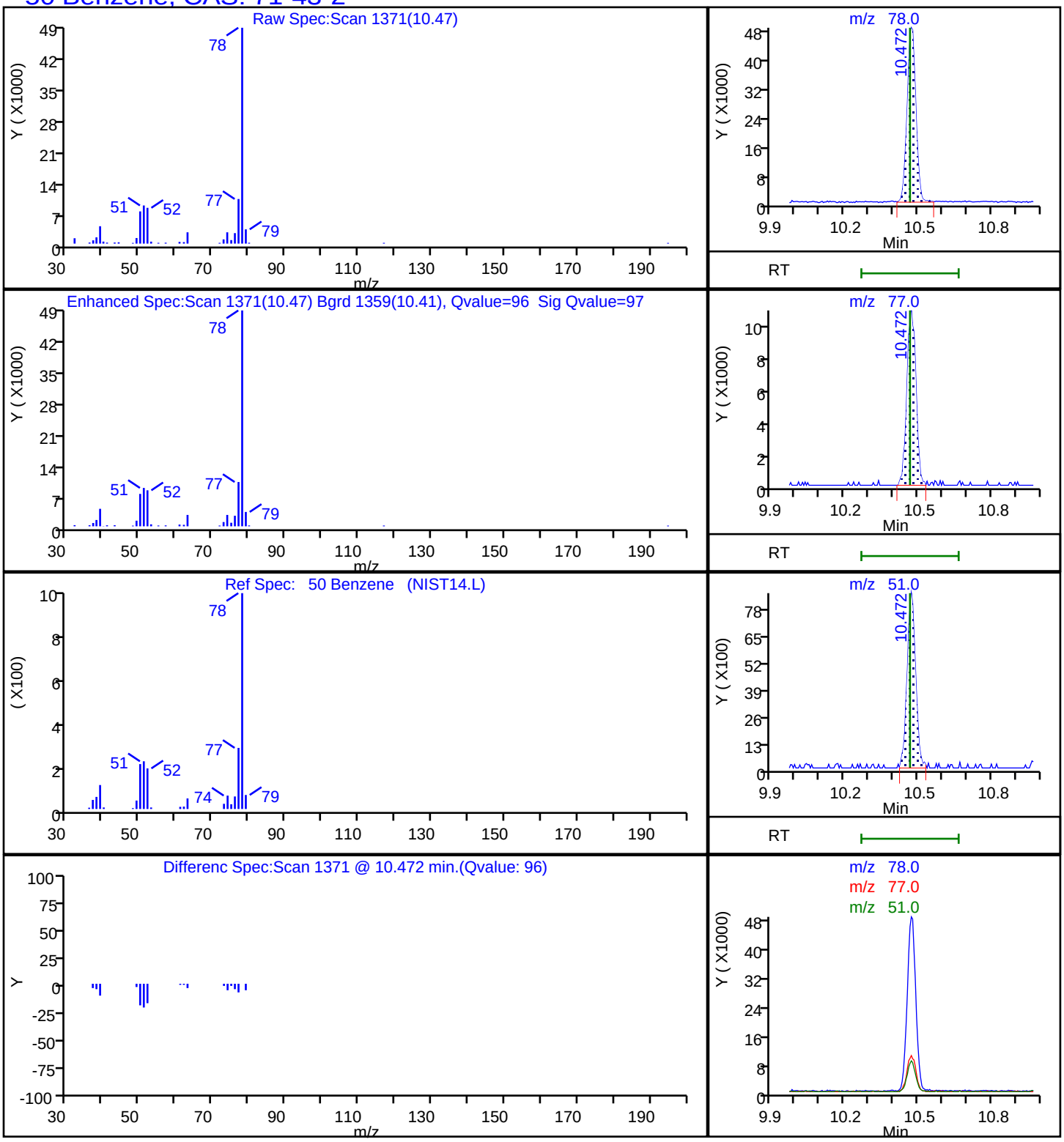
Data File:	\\chromfs\Knoxville\ChromData\MG\20200819-16309.b\GH19P108.D				
Lims ID:	140-20065-A-1				
Client ID:	BLDG A INFLUENT				
Sample Type:	Client				
Inject. Date:	19-Aug-2020 22:58:30	ALS Bottle#:	8	Worklist Smp#:	12
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016309-012				
Misc. Info.:	140-20065-a-1				
Operator ID:	HMT	Instrument ID:	MG		
Method:	\\chromfs\Knoxville\ChromData\MG\20200819-16309.b\MG_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	20-Aug-2020 10:38:48	Calib Date:	15-Jul-2020 22:02:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1047				
First Level Reviewer: khachitpongpanits		Date:	20-Aug-2020 10:39:32		

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.00	3.54	88.48

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200819-16309.b\GH19P108.D		
Injection Date:	19-Aug-2020 22:58:30	Instrument ID:	MG
Lims ID:	140-20065-A-1	Lab Sample ID:	140-20065-1
Client ID:	BLDG A INFLUENT		
Operator ID:	HMT	ALS Bottle#:	8 Worklist Smp#: 12
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

50 Benzene, CAS: 71-43-2



Report Date: 20-Aug-2020 10:39:33 Chrom Revision: 2.3 17-Aug-2020 20:42:08

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200819-16309.b\GH19P108.D

Injection Date: 19-Aug-2020 22:58:30 Instrument ID: MG

Lims ID: 140-20065-A-1 Lab Sample ID: 140-20065-1

Client ID: BLDG A INFLUENT

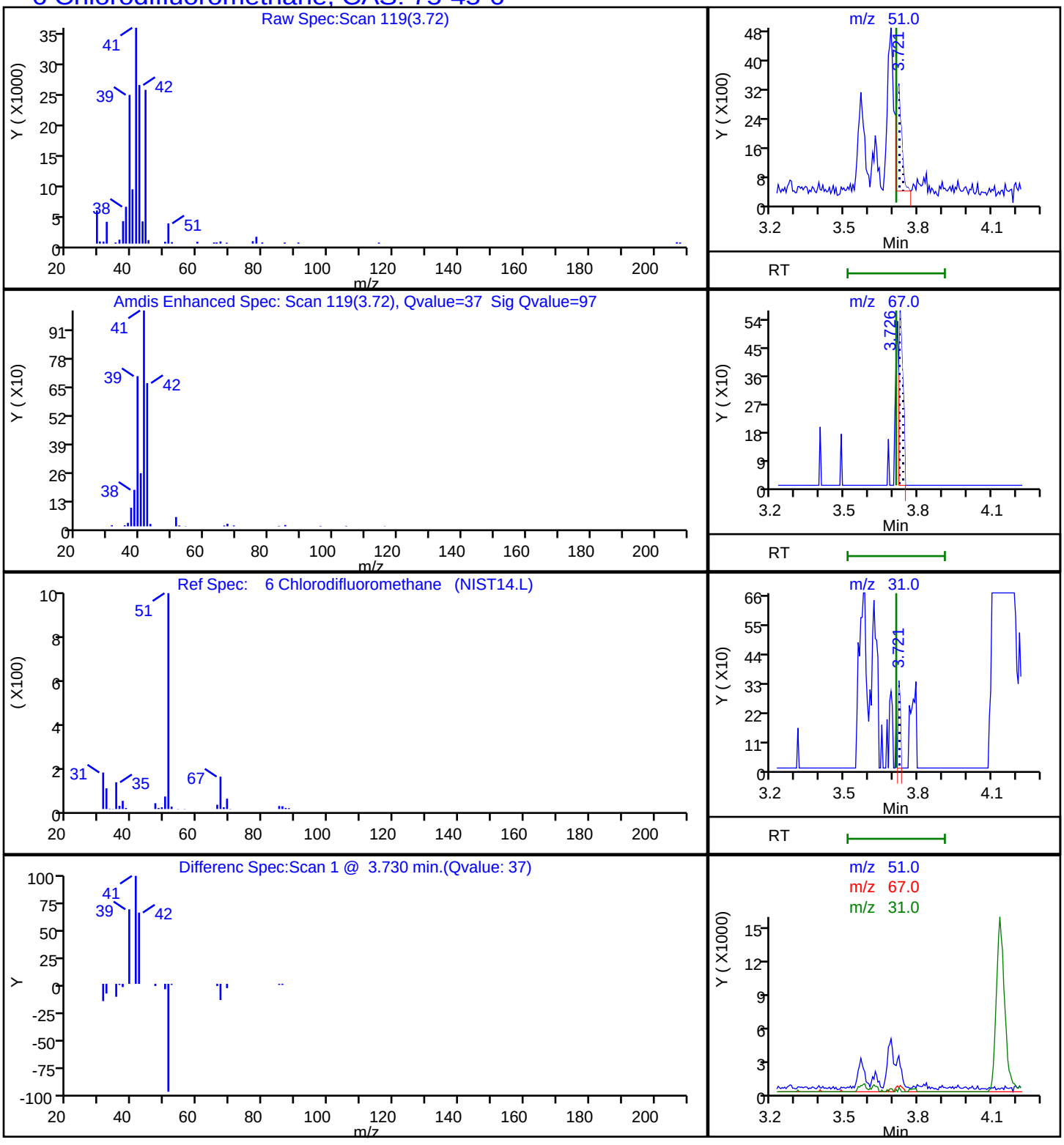
Operator ID: HMT ALS Bottle#: 8 Worklist Smp#: 12

Purge Vol: 500.000 mL Dil. Factor: 1.0000

Method: MG_TO15 Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm) Detector MS SCAN

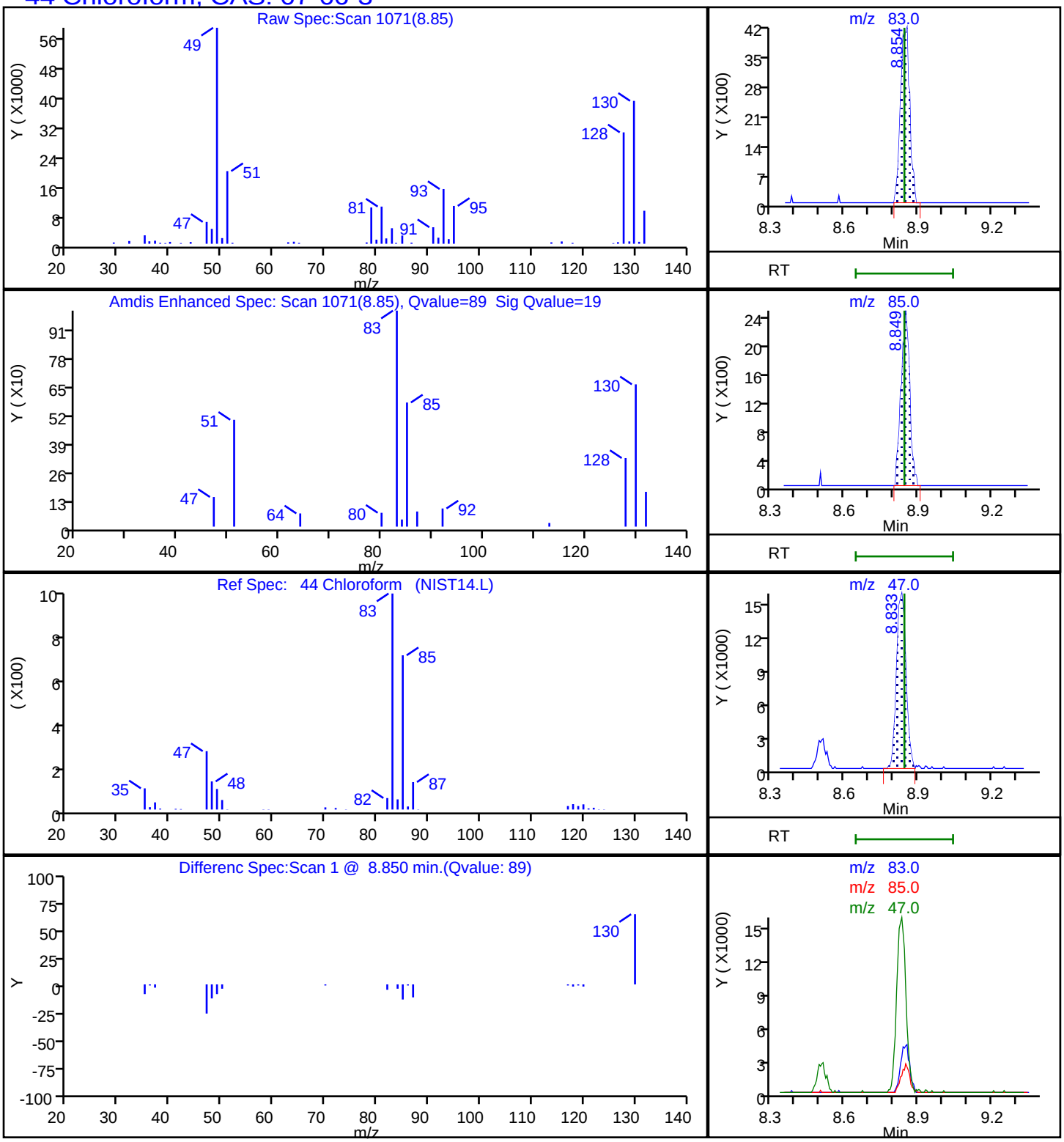
6 Chlorodifluoromethane, CAS: 75-45-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200819-16309.b\GH19P108.D		
Injection Date:	19-Aug-2020 22:58:30	Instrument ID:	MG
Lims ID:	140-20065-A-1	Lab Sample ID:	140-20065-1
Client ID:	BLDG A INFLUENT		
Operator ID:	HMT	ALS Bottle#:	8 Worklist Smp#: 12
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

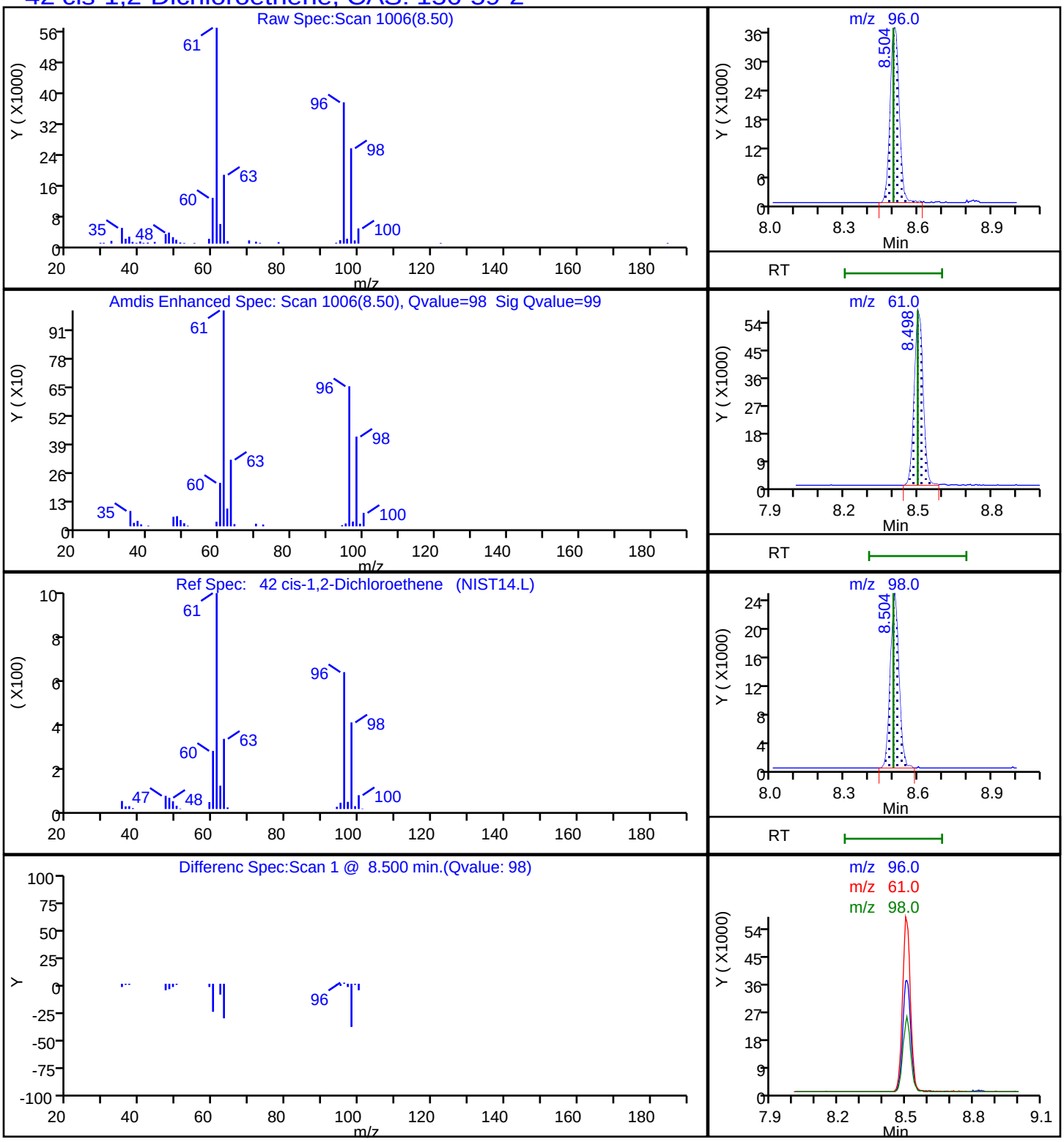
44 Chloroform, CAS: 67-66-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200819-16309.b\GH19P108.D		
Injection Date:	19-Aug-2020 22:58:30	Instrument ID:	MG
Lims ID:	140-20065-A-1	Lab Sample ID:	140-20065-1
Client ID:	BLDG A INFLUENT		
Operator ID:	HMT	ALS Bottle#:	8 Worklist Smp#: 12
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

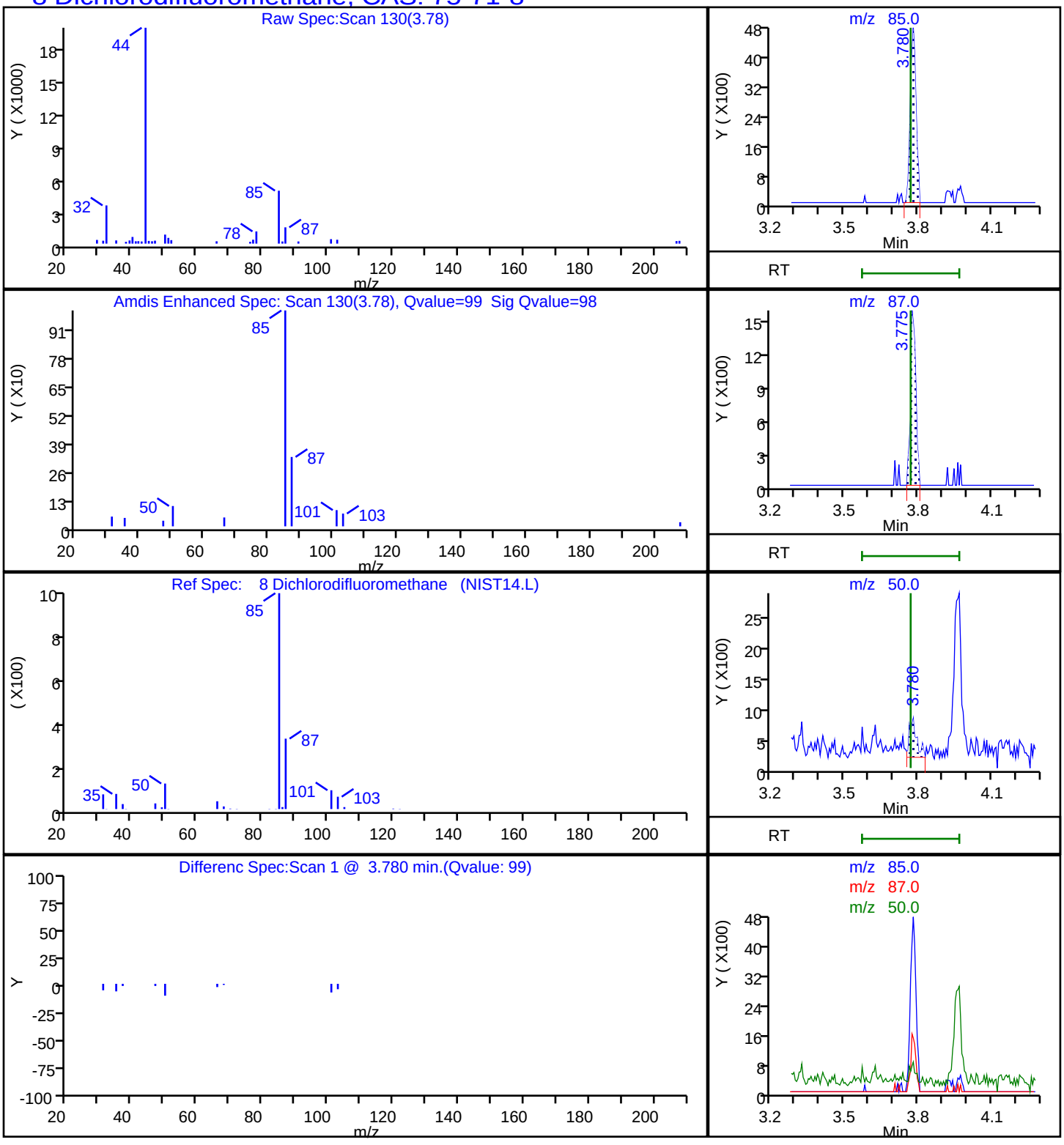
42 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200819-16309.b\GH19P108.D		
Injection Date:	19-Aug-2020 22:58:30	Instrument ID:	MG
Lims ID:	140-20065-A-1	Lab Sample ID:	140-20065-1
Client ID:	BLDG A INFLUENT		
Operator ID:	HMT	ALS Bottle#:	8 Worklist Smp#: 12
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

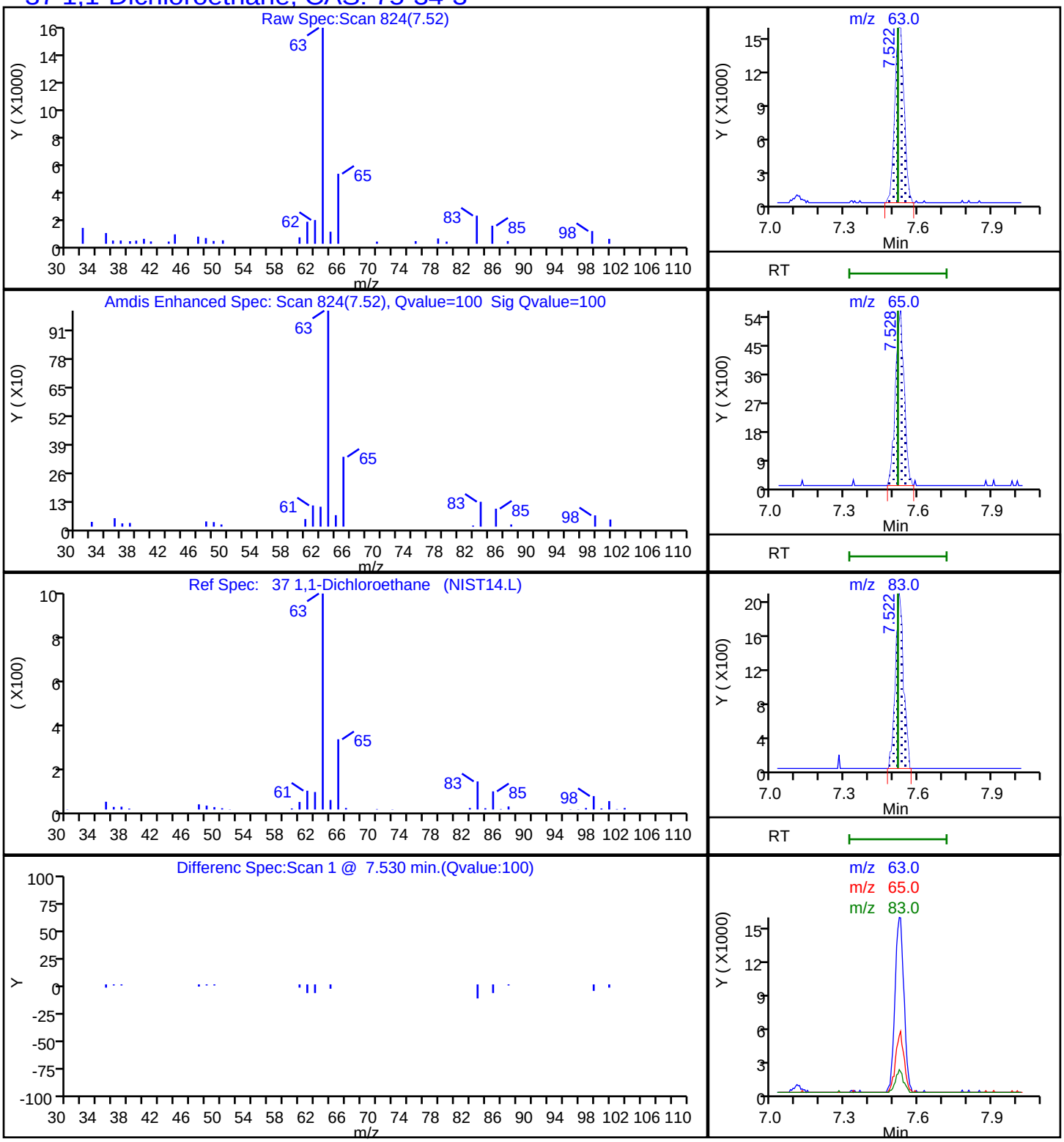
8 Dichlorodifluoromethane, CAS: 75-71-8



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200819-16309.b\GH19P108.D		
Injection Date:	19-Aug-2020 22:58:30	Instrument ID:	MG
Lims ID:	140-20065-A-1	Lab Sample ID:	140-20065-1
Client ID:	BLDG A INFLUENT		
Operator ID:	HMT	ALS Bottle#:	8 Worklist Smp#: 12
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

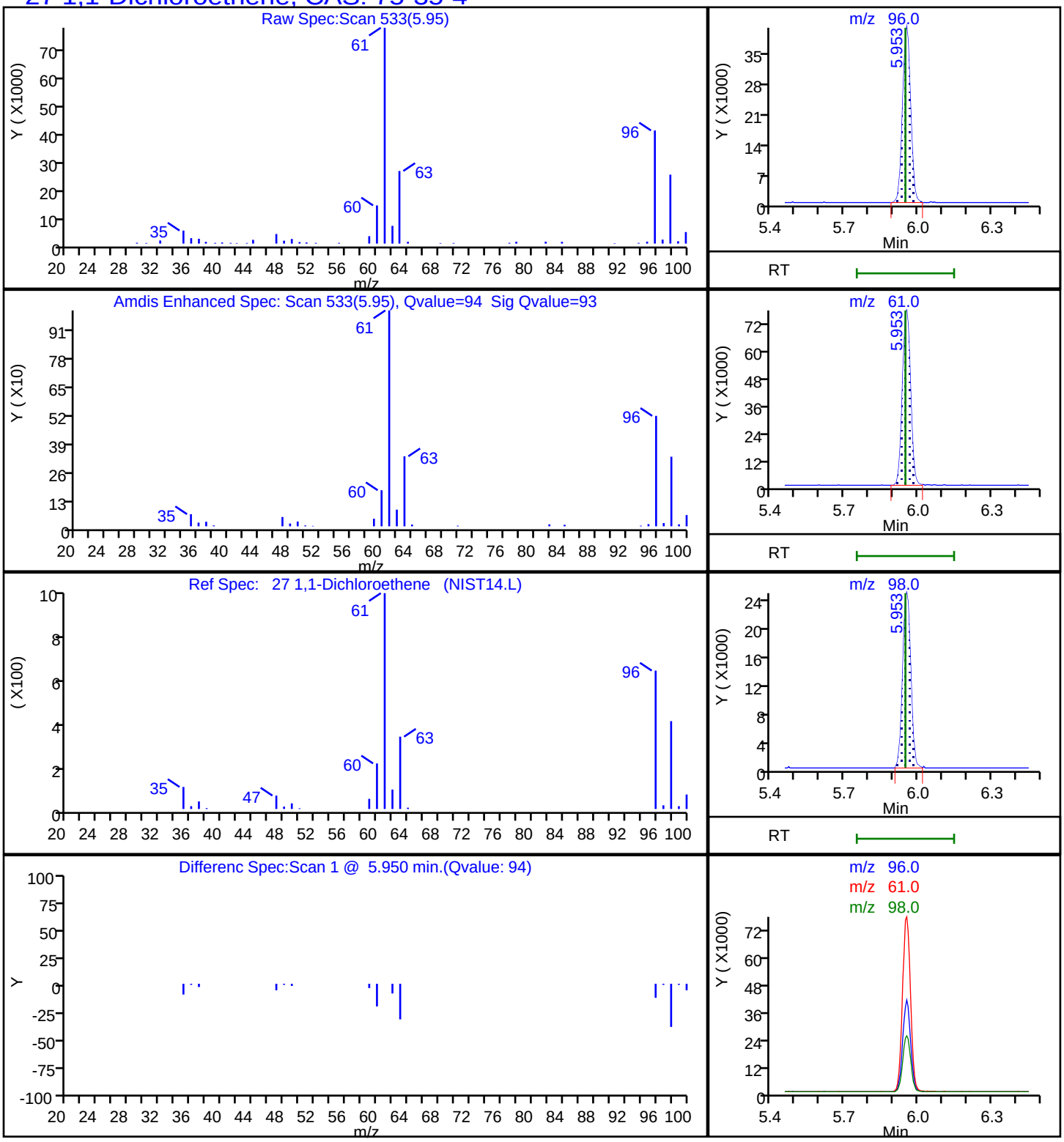
37 1,1-Dichloroethane, CAS: 75-34-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200819-16309.b\GH19P108.D		
Injection Date:	19-Aug-2020 22:58:30	Instrument ID:	MG
Lims ID:	140-20065-A-1	Lab Sample ID:	140-20065-1
Client ID:	BLDG A INFLUENT		
Operator ID:	HMT	ALS Bottle#:	8 Worklist Smp#: 12
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

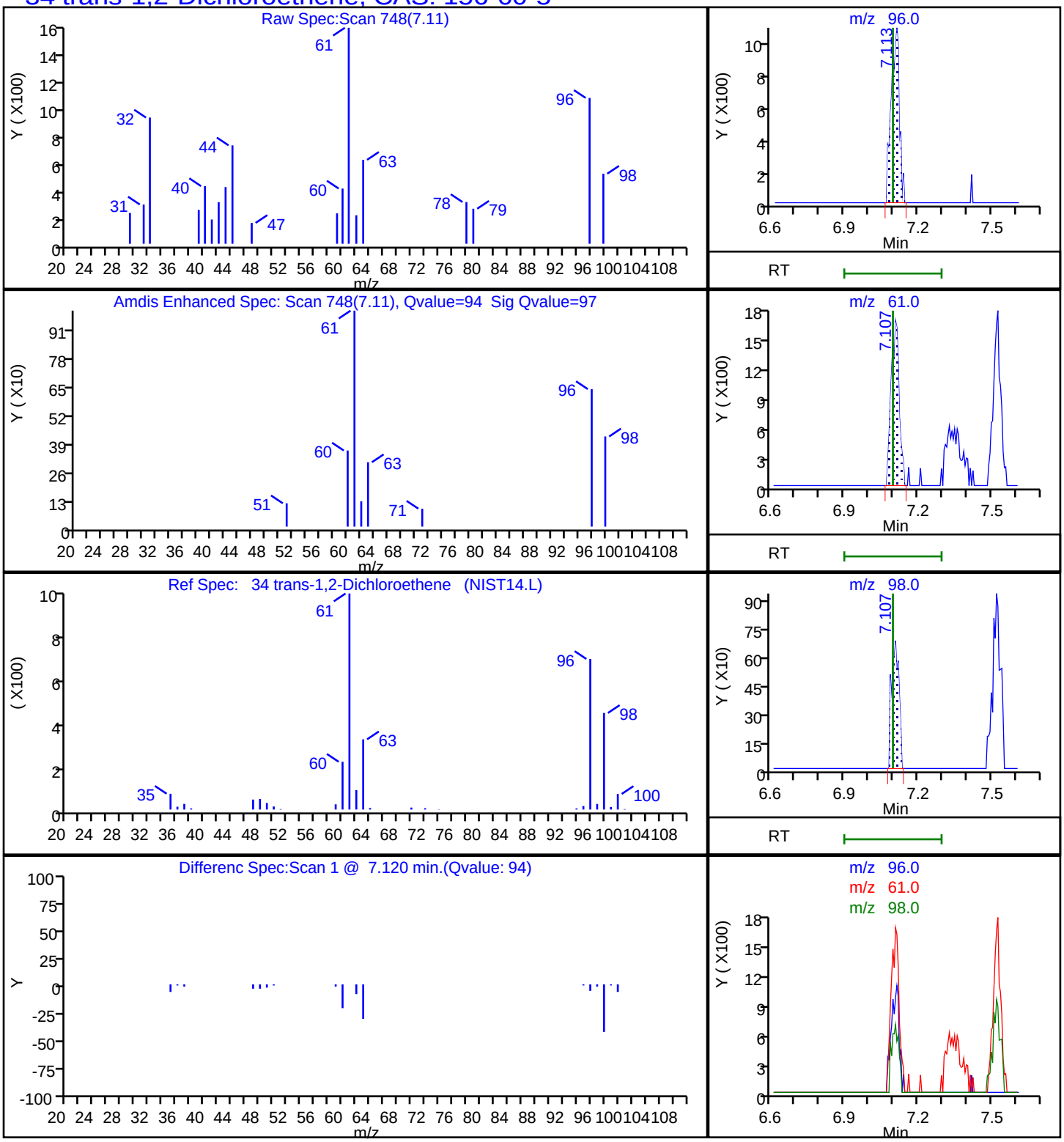
27 1,1-Dichloroethene, CAS: 75-35-4



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200819-16309.b\GH19P108.D		
Injection Date:	19-Aug-2020 22:58:30	Instrument ID:	MG
Lims ID:	140-20065-A-1	Lab Sample ID:	140-20065-1
Client ID:	BLDG A INFLUENT		
Operator ID:	HMT	ALS Bottle#:	8 Worklist Smp#: 12
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

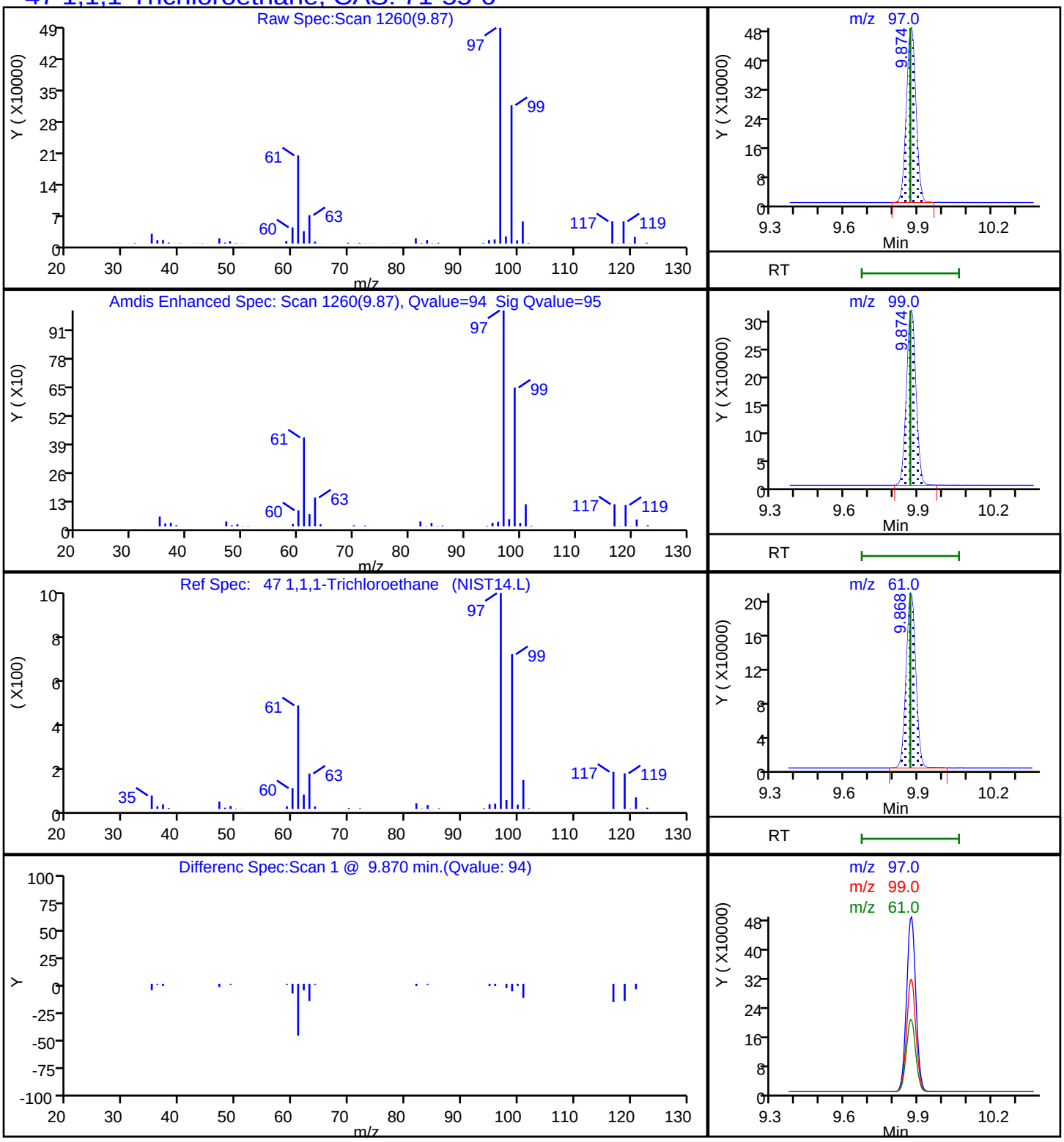
34 trans-1,2-Dichloroethene, CAS: 156-60-5



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200819-16309.b\GH19P108.D		
Injection Date:	19-Aug-2020 22:58:30	Instrument ID:	MG
Lims ID:	140-20065-A-1	Lab Sample ID:	140-20065-1
Client ID:	BLDG A INFLUENT		
Operator ID:	HMT	ALS Bottle#:	8 Worklist Smp#: 12
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

47 1,1,1-Trichloroethane, CAS: 71-55-6

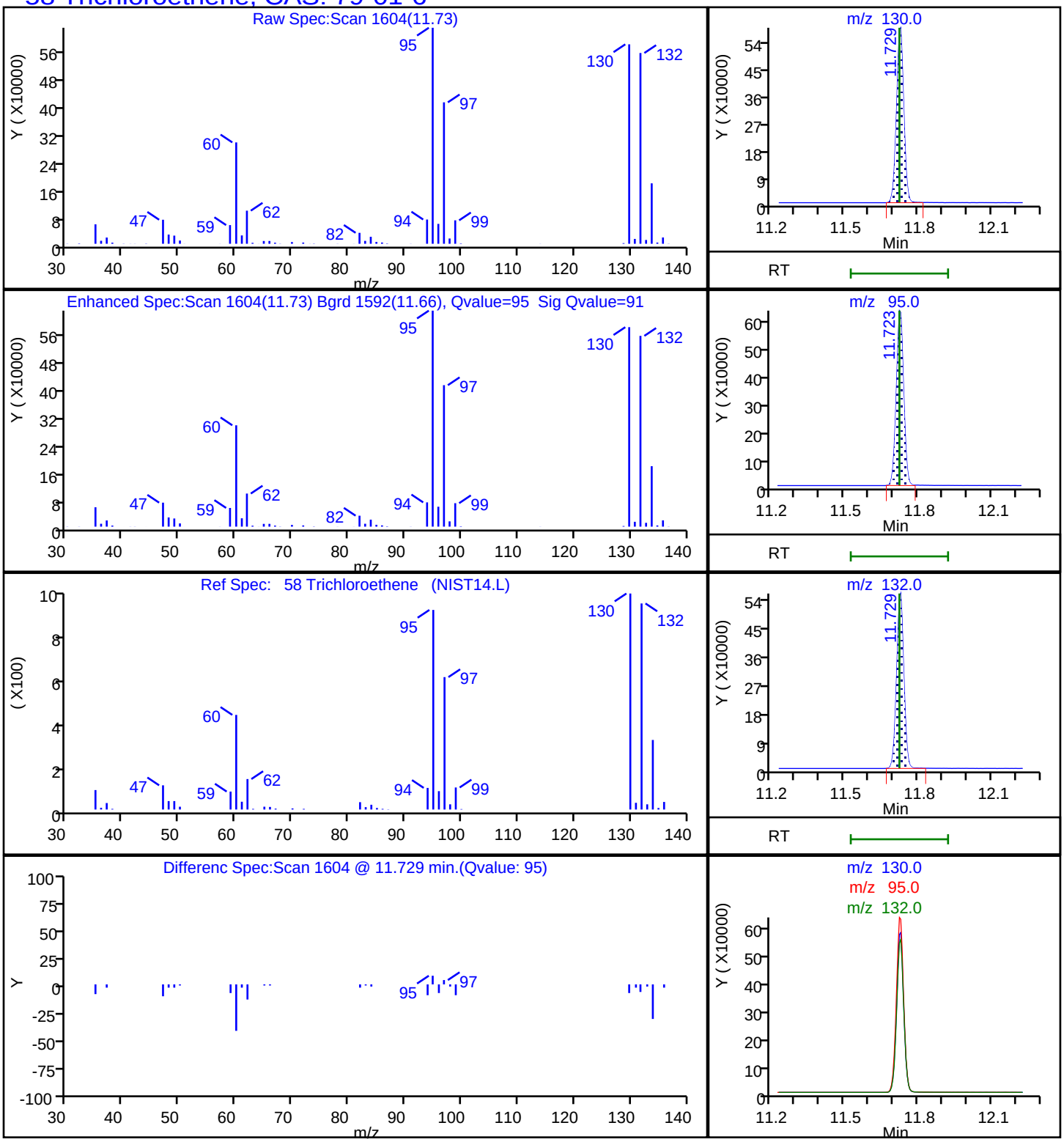


Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200819-16309.b\GH19P108.D

Injection Date:	19-Aug-2020 22:58:30	Instrument ID:	MG		
Lims ID:	140-20065-A-1	Lab Sample ID:	140-20065-1		
Client ID:	BLDG A INFLUENT				
Operator ID:	HMT	ALS Bottle#:	8	Worklist Smp#:	12
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

58 Trichloroethene, CAS: 79-01-6



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20065-1

SDG No.:

Client Sample ID: BLDG A MID GAC Lab Sample ID: 140-20065-2

Matrix: Air Lab File ID: GH19P109.D

Analysis Method: TO 15 LL Date Collected: 08/18/2020 11:06

Sample wt/vol: 100(mL) Date Analyzed: 08/19/2020 23:41

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 41859 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.80		0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.11	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	0.85		0.40	0.11
67-66-3	Chloroform	119.38	1.2		0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	33		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.56		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	6.7		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	0.37	J	0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	26		0.40	0.040
100-41-4	Ethylbenzene	106.17	ND		0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.035
108-88-3	Toluene	92.14	0.40	J	0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	0.58		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	*1,1,1-Trichloroethane*	*133.41*	*270*	*E*	*0.40*	*0.19*
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	0.21		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	ND		0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	89		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20065-1

SDG No.:

Client Sample ID: BLDG A MID GAC Lab Sample ID: 140-20065-2

Matrix: Air Lab File ID: GH19P109.D

Analysis Method: TO 15 LL Date Collected: 08/18/2020 11:06

Sample wt/vol: 100(mL) Date Analyzed: 08/19/2020 23:41

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 41859 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	2.6		1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.68	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	3.0		1.4	0.39
67-66-3	Chloroform	119.38	5.8		2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	130		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.8		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	27		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	1.5	J	1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	100		1.6	0.16
100-41-4	Ethylbenzene	106.17	ND		1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.24
108-88-3	Toluene	92.14	1.5	J	2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	2.3		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	*1,1,1-Trichloroethane*	*133.41*	*1500*	*E*	*2.2*	*1.0*
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	1.1		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	ND		3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	89		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200819-16309.b\GH19P109.D
Lims ID: 140-20065-A-2
Client ID: BLDG A MID GAC
Sample Type: Client
Inject. Date: 19-Aug-2020 23:41:30 ALS Bottle#: 9 Worklist Smp#: 13
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016309-013
Misc. Info.: 140-20065-a-2
Operator ID: HMT Instrument ID: MG

Method: \\chromfs\Knoxville\ChromData\MG\20200819-16309.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 20-Aug-2020 12:08:45 Calib Date: 15-Jul-2020 22:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1047

First Level Reviewer: khachitpongpanits Date: 20-Aug-2020 12:08:45

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.833	8.827	0.006	97	176934	4.00	
* 2 1,4-Difluorobenzene	114	11.011	11.011	0.000	96	1344774	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.740	15.740	0.000	89	1283032	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.380	17.385	-0.005	90	923765	3.54	
6 Chlorodifluoromethane	51	3.710	3.712	0.000	95	30470	0.1694	
8 Dichlorodifluoromethane	85	3.769	3.772	0.000	99	36075	0.1118	
27 1,1-Dichloroethene	96	5.943	5.952	-0.006	94	428901	5.18	
31 Methylene Chloride	84	6.293	6.297	0.000	98	85352	0.2126	
34 trans-1,2-Dichloroethene	96	7.096	7.101	0.000	96	10671	0.1155	
37 1,1-Dichloroethane	63	7.517	7.522	0.000	100	273840	1.34	
42 cis-1,2-Dichloroethene	96	8.498	8.504	0.000	97	622488	6.63	
44 Chloroform	83	8.849	8.849	0.005	94	55981	0.2381	
47 1,1,1-Trichloroethane	97	9.868	9.874	0.000	94	13569291	53.5	E
48 1,2-Dichloroethane	62	9.976	9.976	0.000	92	11101	0.0747	
50 Benzene	78	10.472	10.467	0.005	96	44384	0.1600	
52 Carbon tetrachloride	117	10.494	10.494	0.000	92	4147	0.0217	
58 Trichloroethene	130	11.718	11.723	-0.005	87	3880	0.0413	
67 Toluene	91	13.767	13.772	-0.005	93	22365	0.0803	

QC Flag Legend

Processing Flags
E - Exceeded Maximum Amount

Reagents:

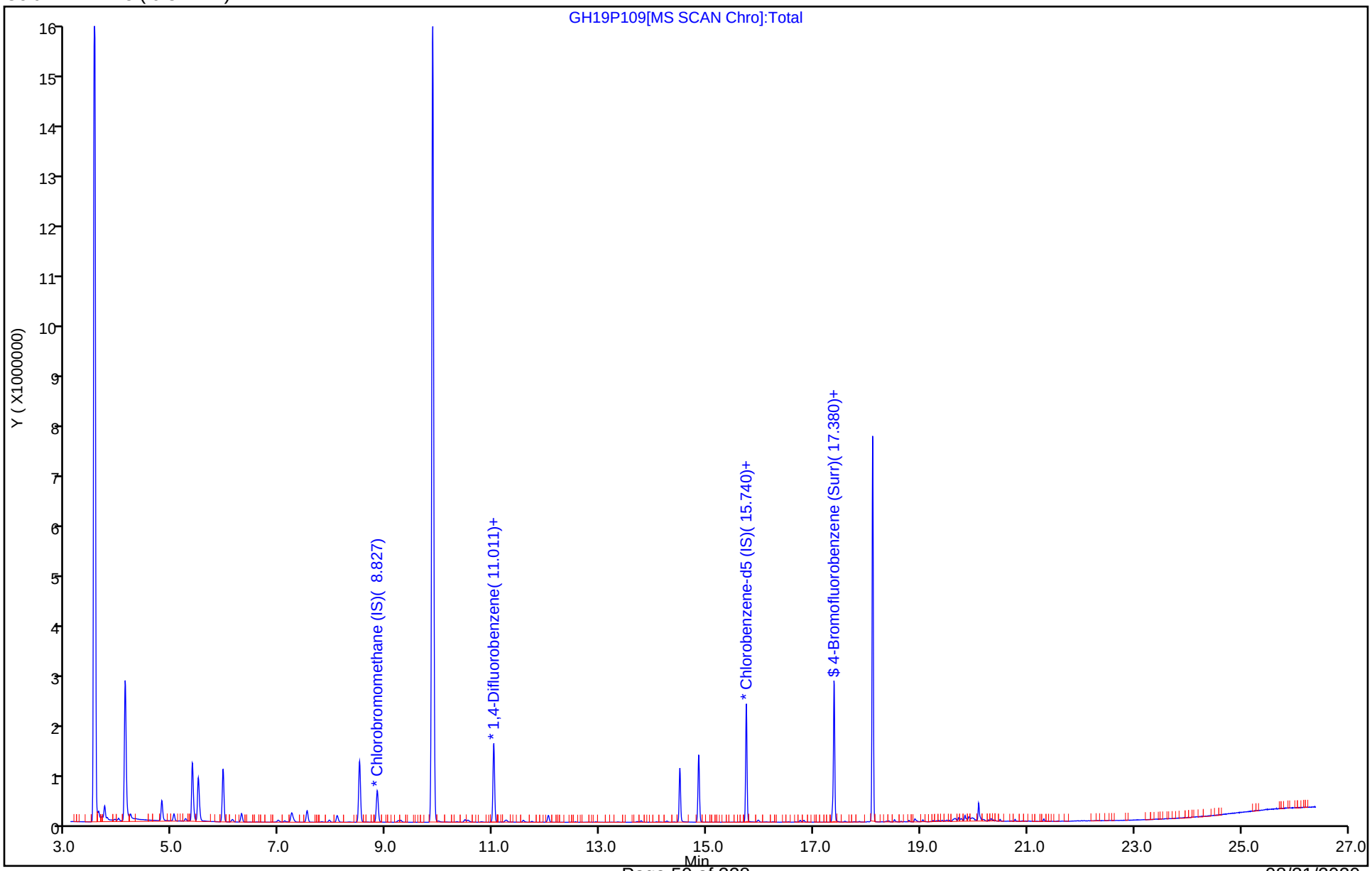
40MXISSURP_00004 Amount Added: 40.00 Units: mL Run Reagent

Report Date: 20-Aug-2020 12:08:45 Chrom Revision: 2.3 17-Aug-2020 20:42:08

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200819-16309.b\GH19P109.D				
Injection Date:	19-Aug-2020 23:41:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	140-20065-A-2	Lab Sample ID:	140-20065-2	Worklist Smp#:	13
Client ID:	BLDG A MID GAC				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MG\20200819-16309.b\GH19P109.D				
Lims ID:	140-20065-A-2				
Client ID:	BLDG A MID GAC				
Sample Type:	Client				
Inject. Date:	19-Aug-2020 23:41:30	ALS Bottle#:	9	Worklist Smp#:	13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016309-013				
Misc. Info.:	140-20065-a-2				
Operator ID:	HMT	Instrument ID:	MG		
Method:	\\chromfs\Knoxville\ChromData\MG\20200819-16309.b\MG_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	20-Aug-2020 12:08:45	Calib Date:	15-Jul-2020 22:02:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1047				

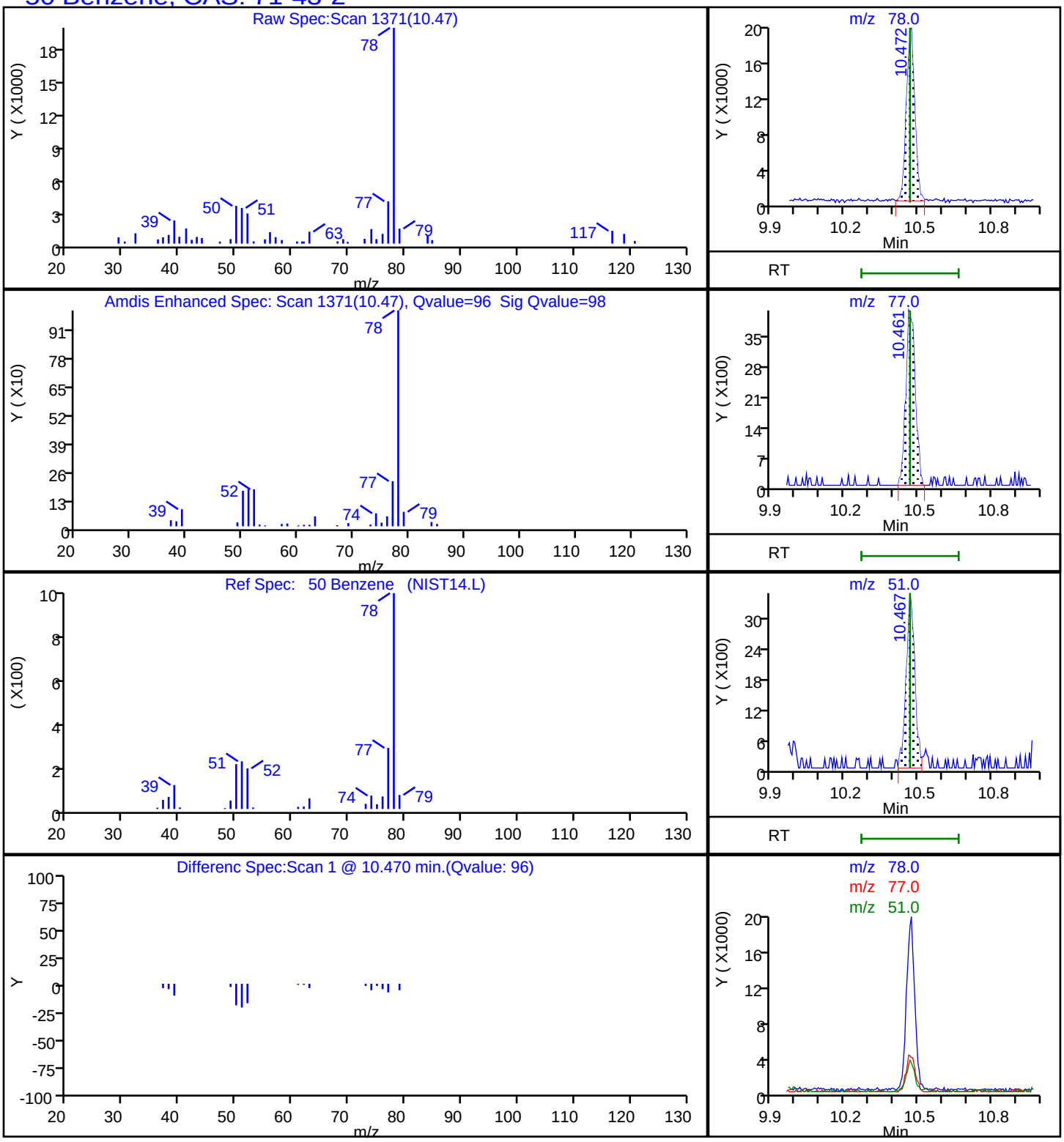
First Level Reviewer: khachitpongpanits Date: 20-Aug-2020 12:08:45

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.00	3.54	88.56

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200819-16309.b\GH19P109.D				
Injection Date:	19-Aug-2020 23:41:30	Instrument ID:	MG		
Lims ID:	140-20065-A-2	Lab Sample ID:	140-20065-2		
Client ID:	BLDG A MID GAC				
Operator ID:	HMT	ALS Bottle#:	9	Worklist Smp#:	13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

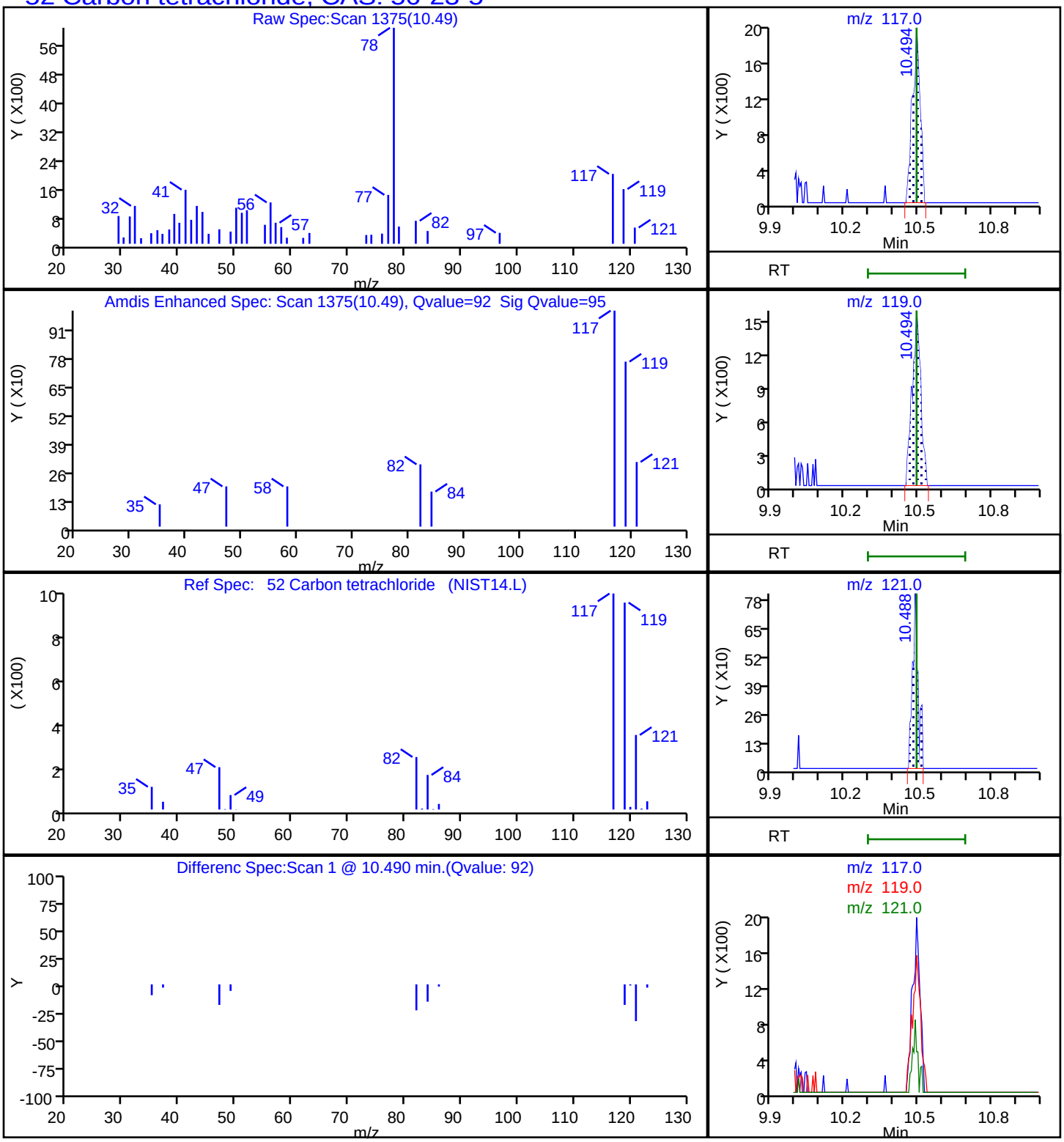
50 Benzene, CAS: 71-43-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200819-16309.b\GH19P109.D				
Injection Date:	19-Aug-2020 23:41:30	Instrument ID:	MG		
Lims ID:	140-20065-A-2	Lab Sample ID:	140-20065-2		
Client ID:	BLDG A MID GAC				
Operator ID:	HMT	ALS Bottle#:	9	Worklist Smp#:	13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

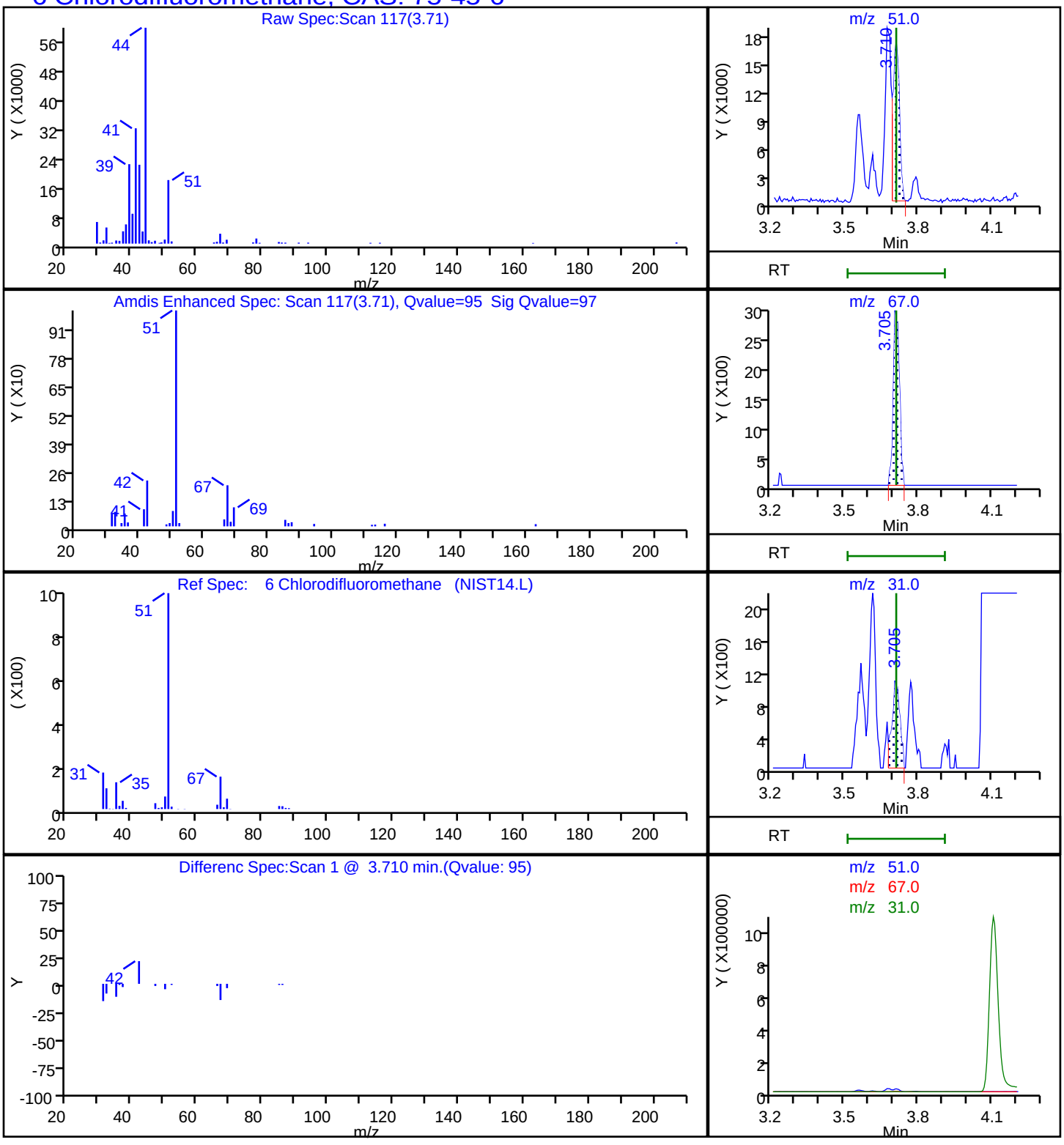
52 Carbon tetrachloride, CAS: 56-23-5



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200819-16309.b\GH19P109.D				
Injection Date:	19-Aug-2020 23:41:30	Instrument ID:	MG		
Lims ID:	140-20065-A-2	Lab Sample ID:	140-20065-2		
Client ID:	BLDG A MID GAC				
Operator ID:	HMT	ALS Bottle#:	9	Worklist Smp#:	13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

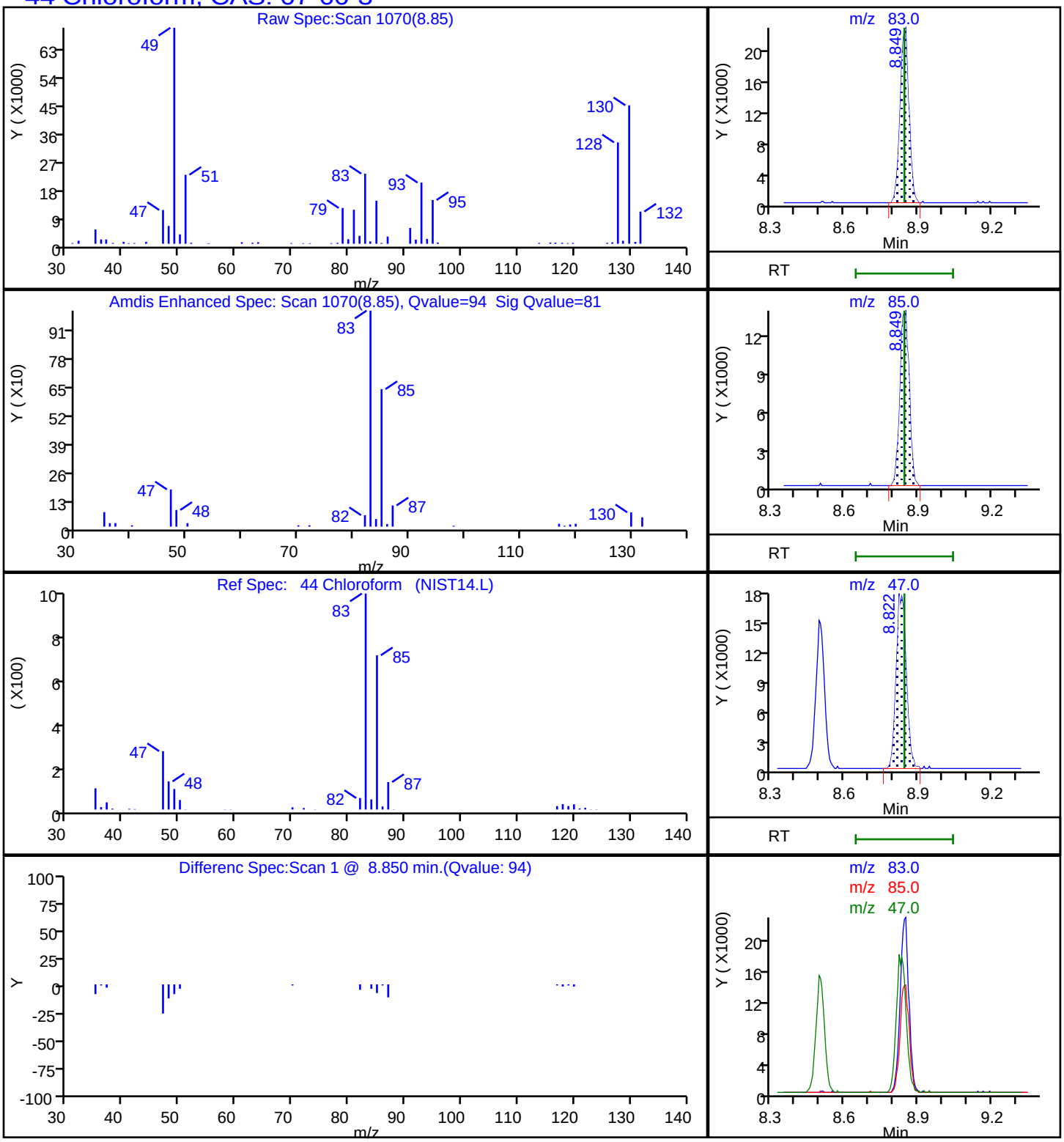
6 Chlorodifluoromethane, CAS: 75-45-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200819-16309.b\GH19P109.D				
Injection Date:	19-Aug-2020 23:41:30	Instrument ID:	MG		
Lims ID:	140-20065-A-2	Lab Sample ID:	140-20065-2		
Client ID:	BLDG A MID GAC				
Operator ID:	HMT	ALS Bottle#:	9	Worklist Smp#:	13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

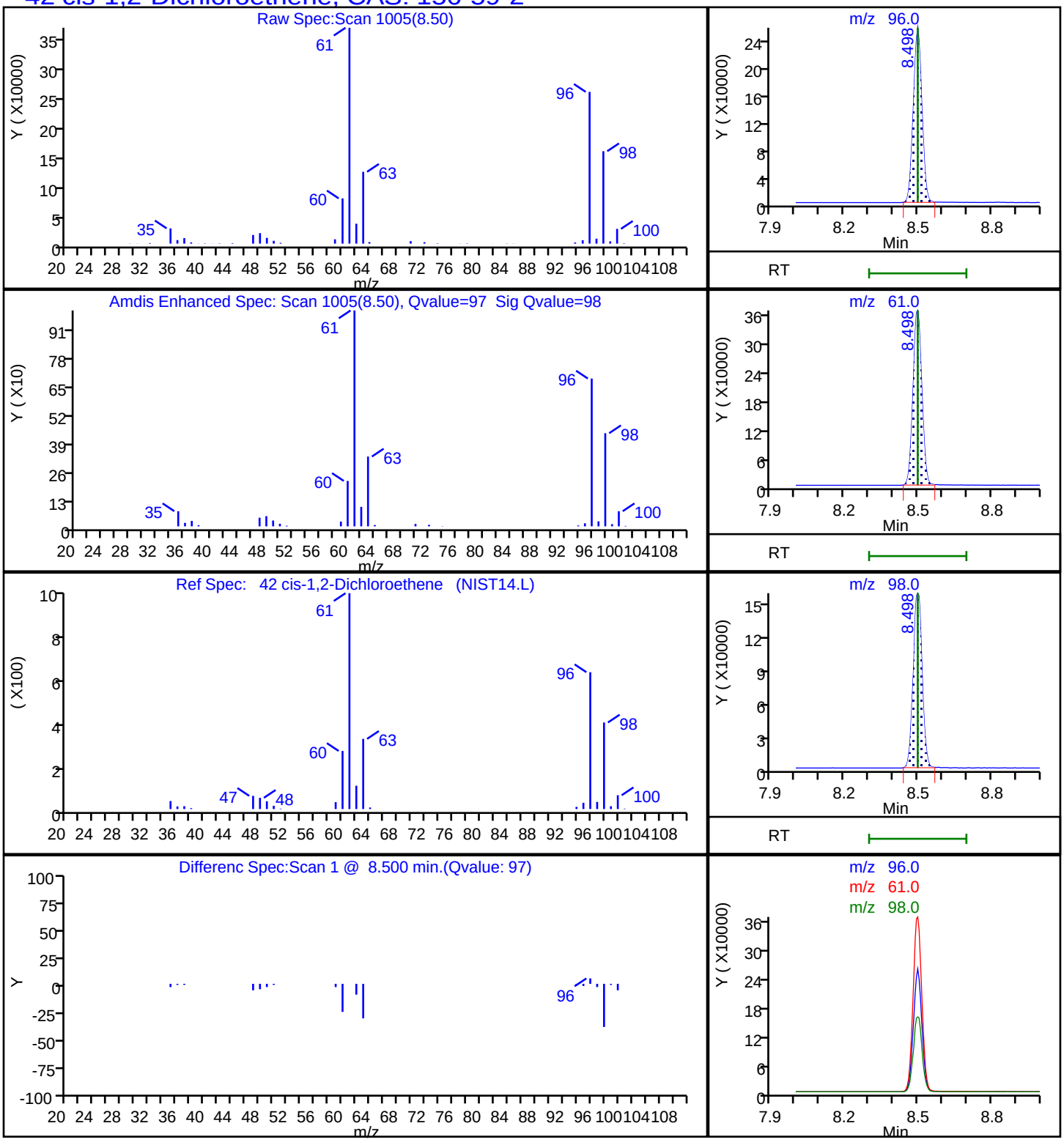
44 Chloroform, CAS: 67-66-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200819-16309.b\GH19P109.D				
Injection Date:	19-Aug-2020 23:41:30	Instrument ID:	MG		
Lims ID:	140-20065-A-2	Lab Sample ID:	140-20065-2		
Client ID:	BLDG A MID GAC				
Operator ID:	HMT	ALS Bottle#:	9	Worklist Smp#:	13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

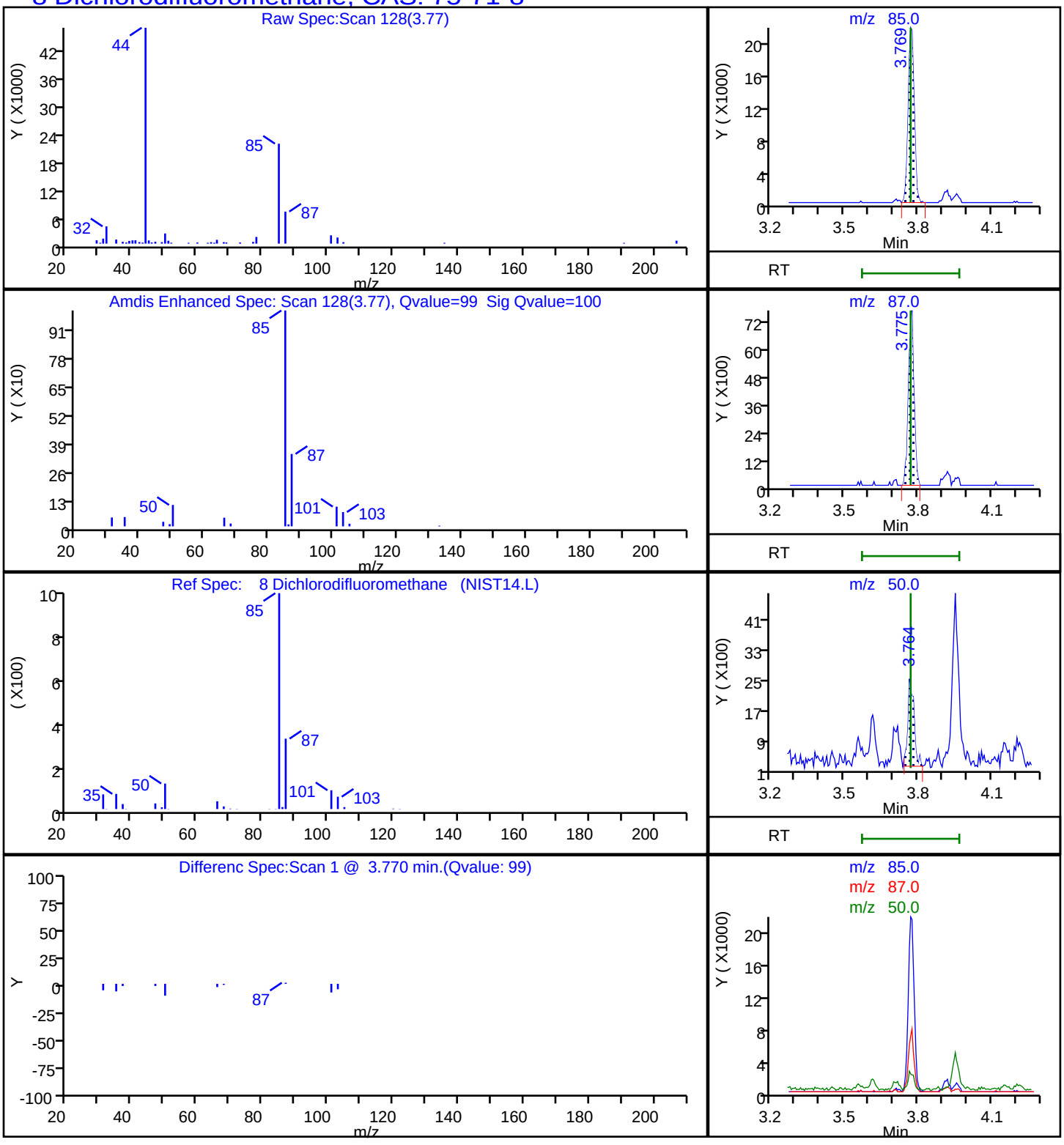
42 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200819-16309.b\GH19P109.D				
Injection Date:	19-Aug-2020 23:41:30	Instrument ID:	MG		
Lims ID:	140-20065-A-2	Lab Sample ID:	140-20065-2		
Client ID:	BLDG A MID GAC				
Operator ID:	HMT	ALS Bottle#:	9	Worklist Smp#:	13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

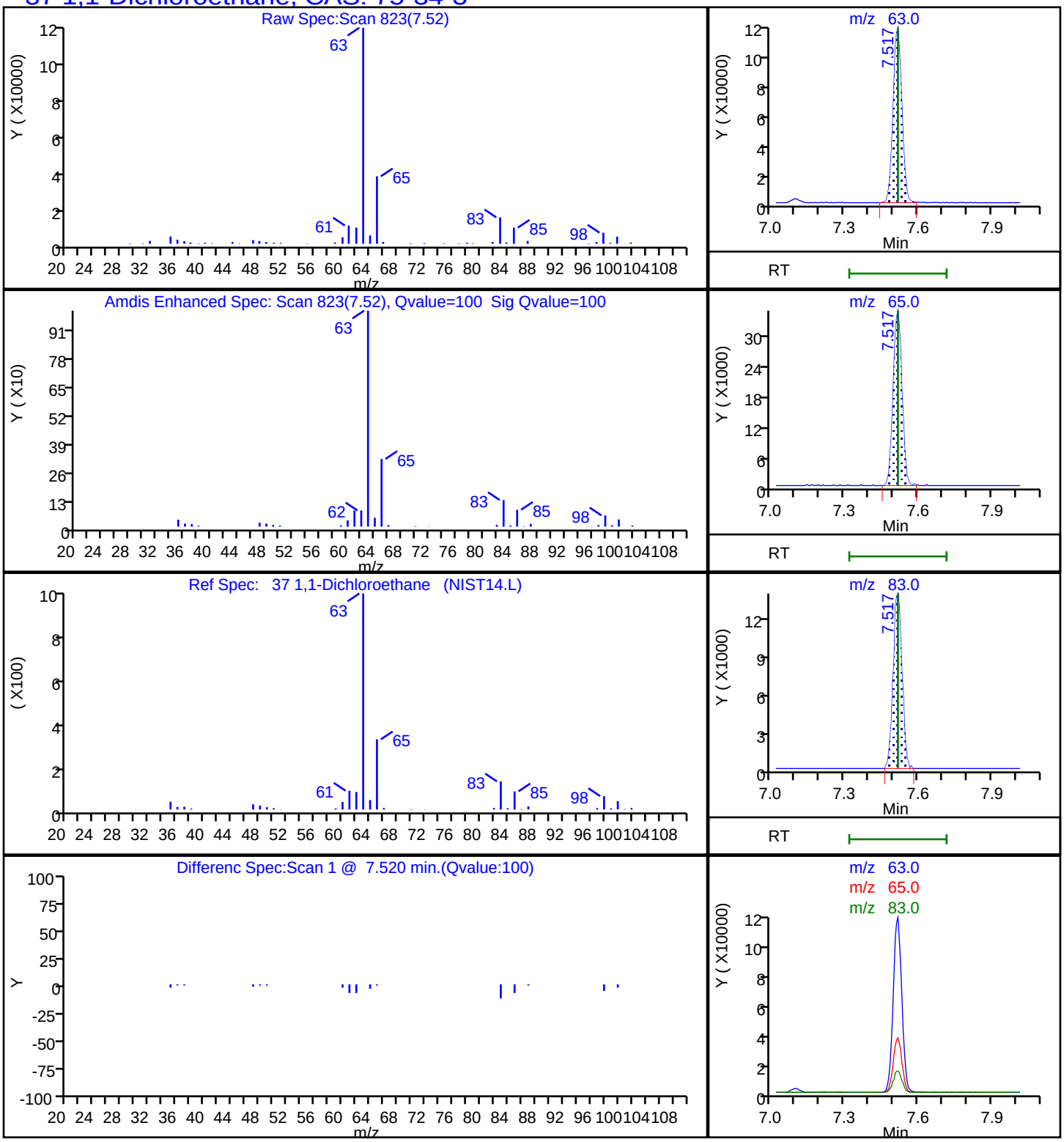
8 Dichlorodifluoromethane, CAS: 75-71-8



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200819-16309.b\GH19P109.D		
Injection Date:	19-Aug-2020 23:41:30	Instrument ID:	MG
Lims ID:	140-20065-A-2	Lab Sample ID:	140-20065-2
Client ID:	BLDG A MID GAC		
Operator ID:	HMT	ALS Bottle#:	9 Worklist Smp#: 13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

37 1,1-Dichloroethane, CAS: 75-34-3

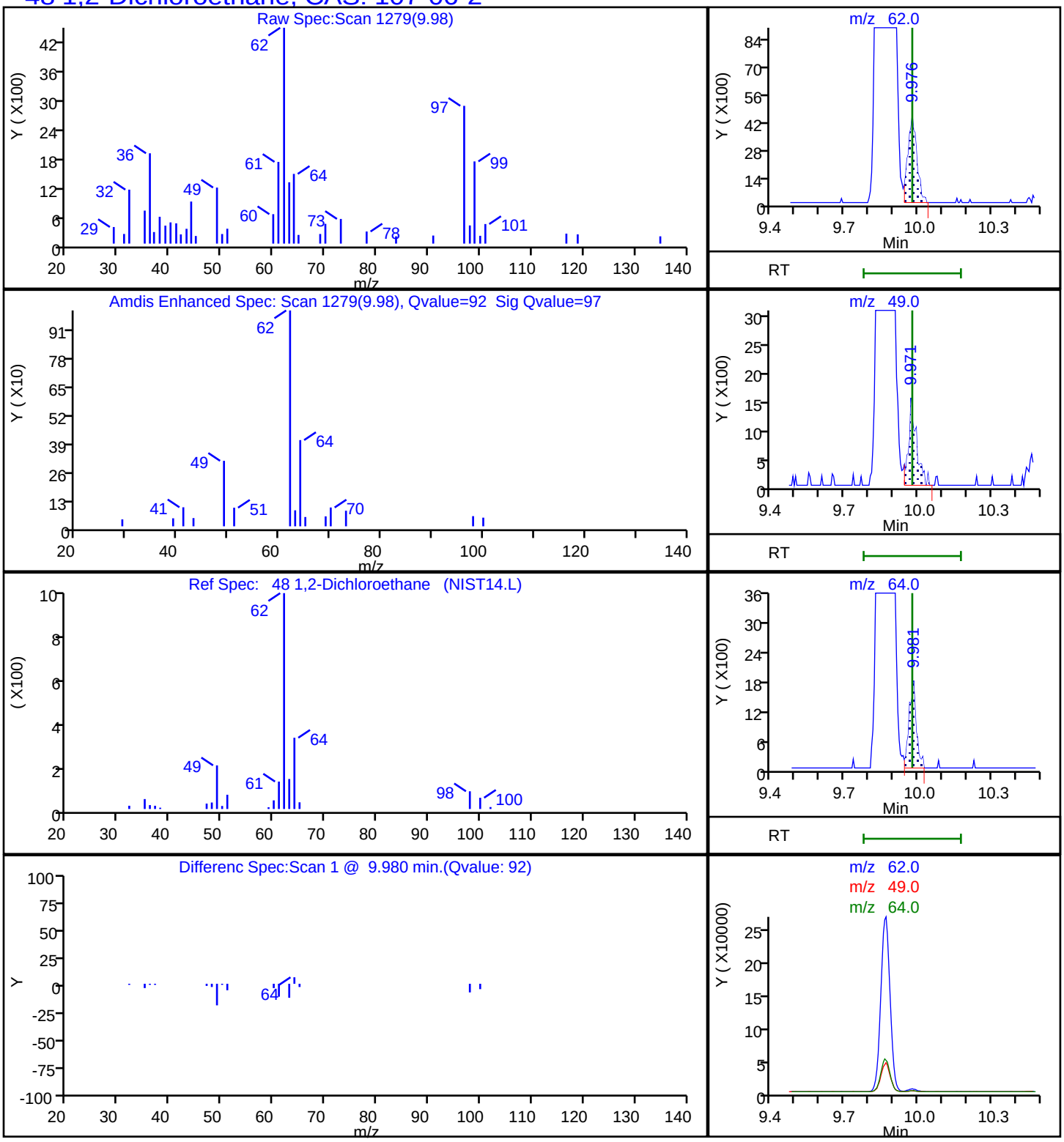


Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200819-16309.b\GH19P109.D

Injection Date:	19-Aug-2020 23:41:30	Instrument ID:	MG		
Lims ID:	140-20065-A-2	Lab Sample ID:	140-20065-2		
Client ID:	BLDG A MID GAC				
Operator ID:	HMT	ALS Bottle#:	9	Worklist Smp#:	13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

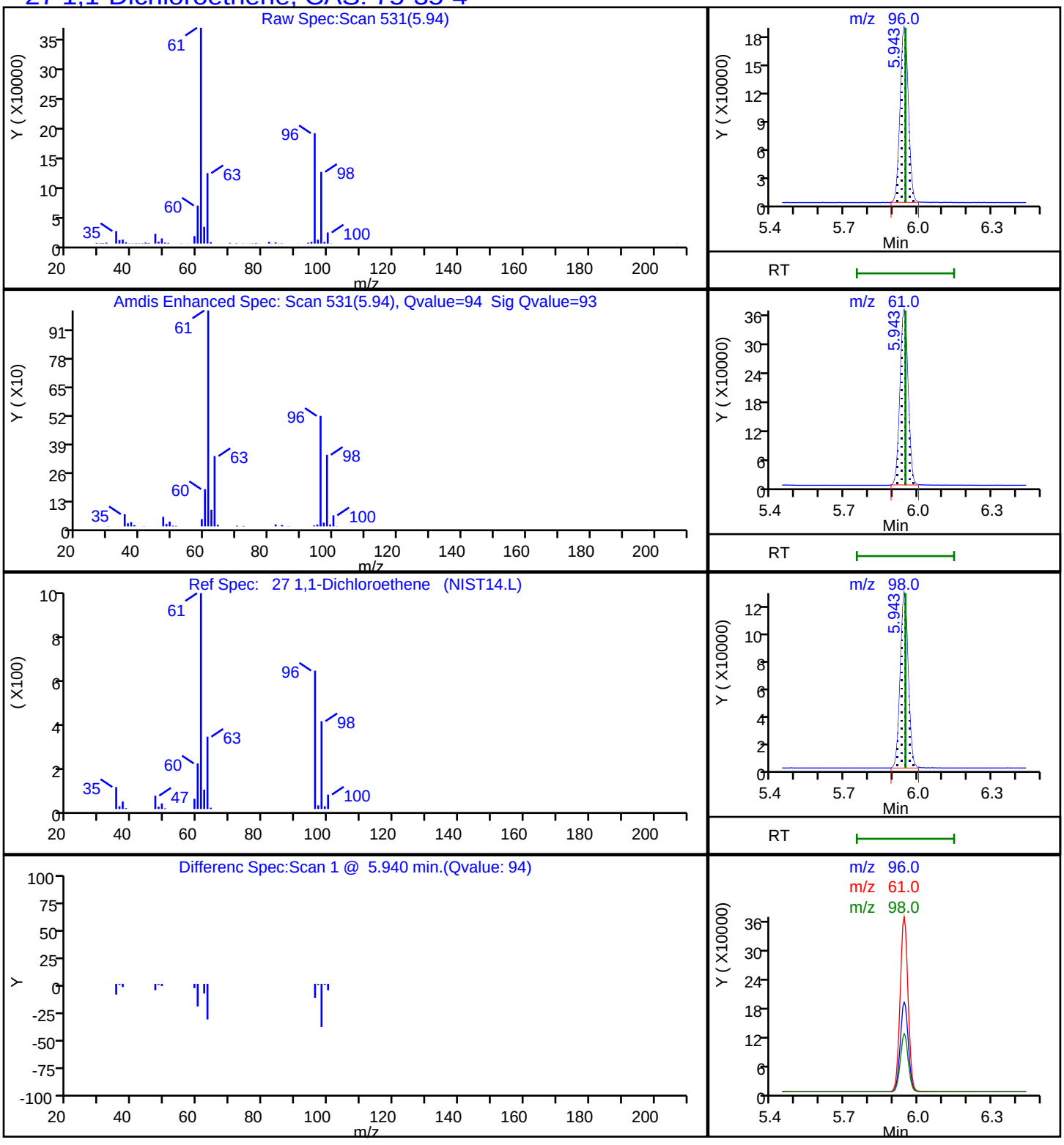
48 1,2-Dichloroethane, CAS: 107-06-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200819-16309.b\GH19P109.D		
Injection Date:	19-Aug-2020 23:41:30	Instrument ID:	MG
Lims ID:	140-20065-A-2	Lab Sample ID:	140-20065-2
Client ID:	BLDG A MID GAC		
Operator ID:	HMT	ALS Bottle#:	9 Worklist Smp#: 13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

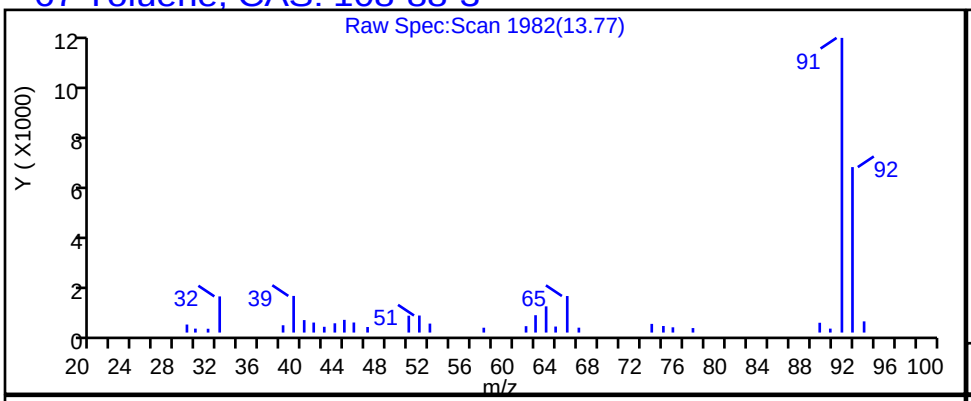
27 1,1-Dichloroethene, CAS: 75-35-4

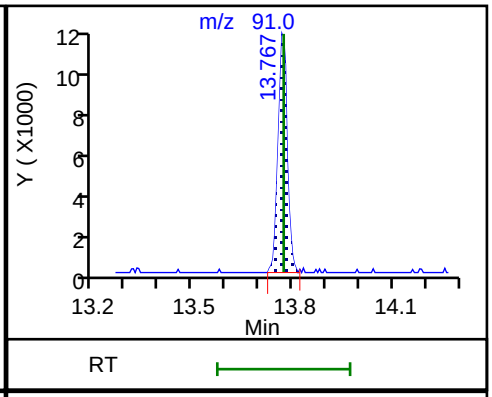


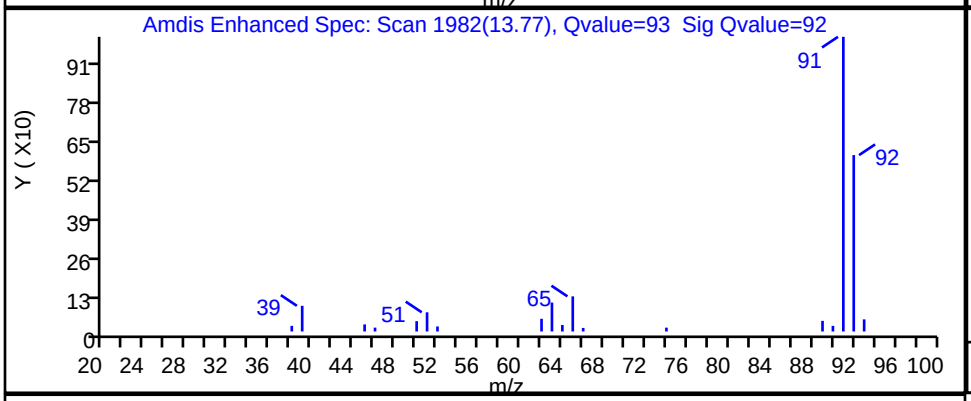
Eurofins TestAmerica, Knoxville

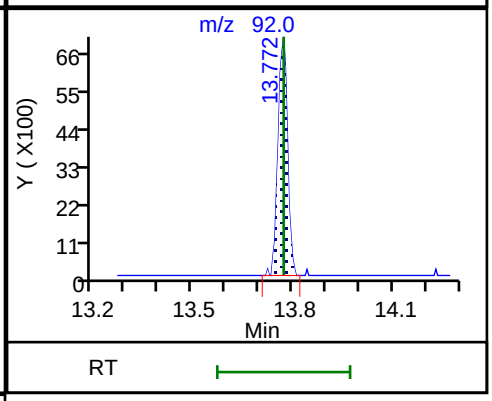
Data File:	\\chromfs\Knoxville\ChromData\MG\20200819-16309.b\GH19P109.D		
Injection Date:	19-Aug-2020 23:41:30	Instrument ID:	MG
Lims ID:	140-20065-A-2	Lab Sample ID:	140-20065-2
Client ID:	BLDG A MID GAC		
Operator ID:	HMT	ALS Bottle#:	9 Worklist Smp#: 13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

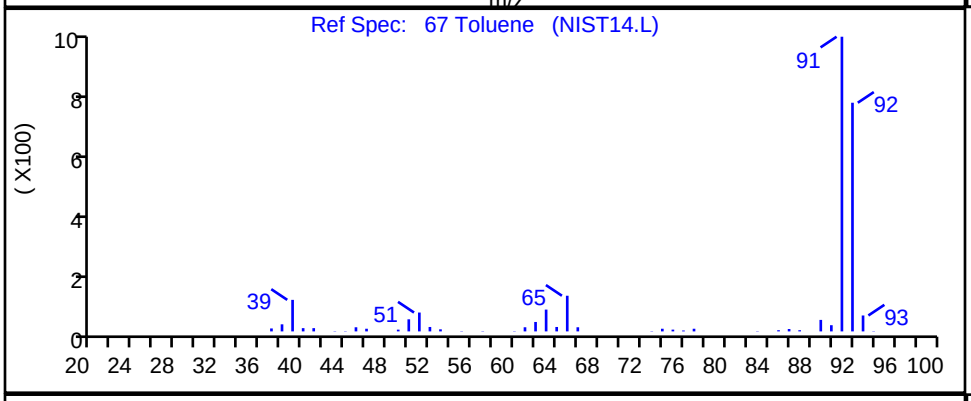
67 Toluene, CAS: 108-88-3

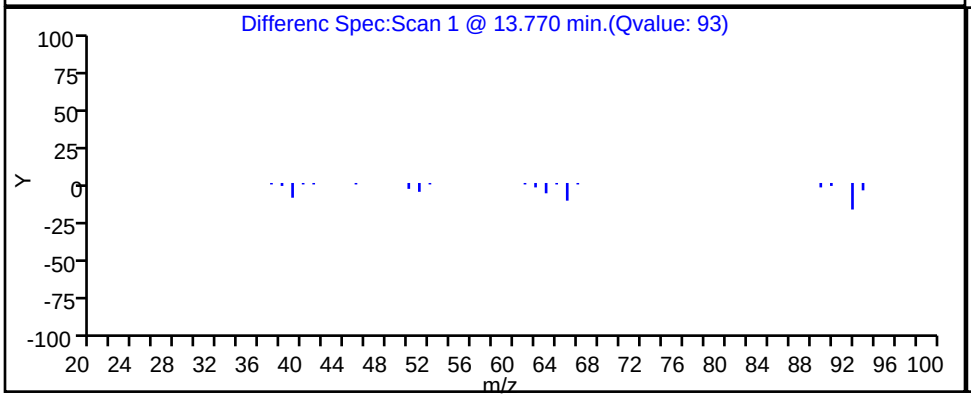


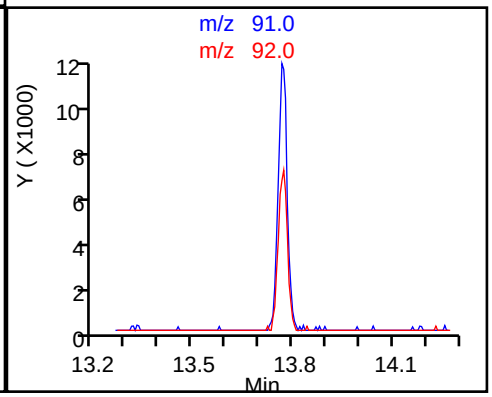








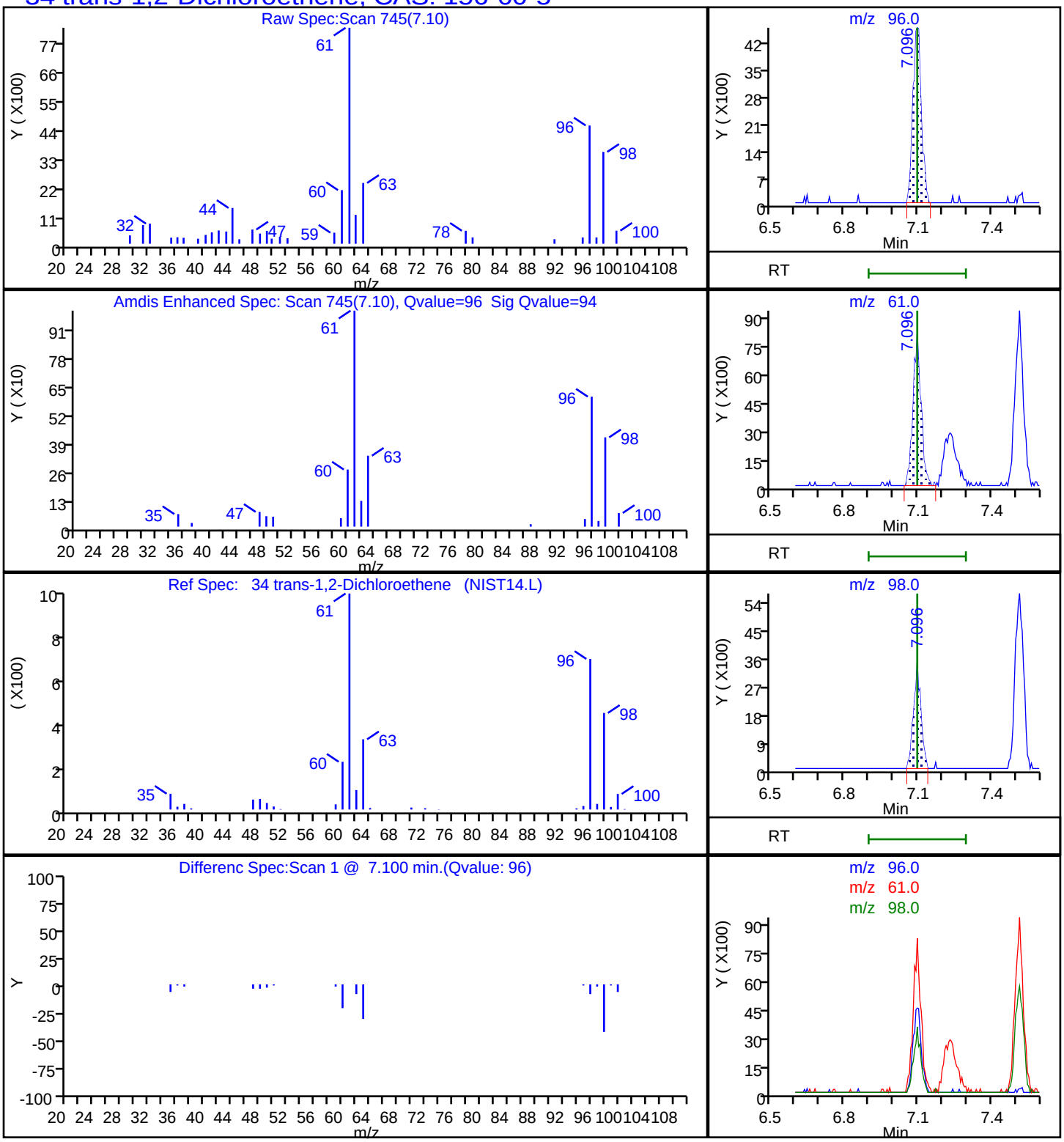




Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200819-16309.b\GH19P109.D		
Injection Date:	19-Aug-2020 23:41:30	Instrument ID:	MG
Lims ID:	140-20065-A-2	Lab Sample ID:	140-20065-2
Client ID:	BLDG A MID GAC		
Operator ID:	HMT	ALS Bottle#:	9 Worklist Smp#: 13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

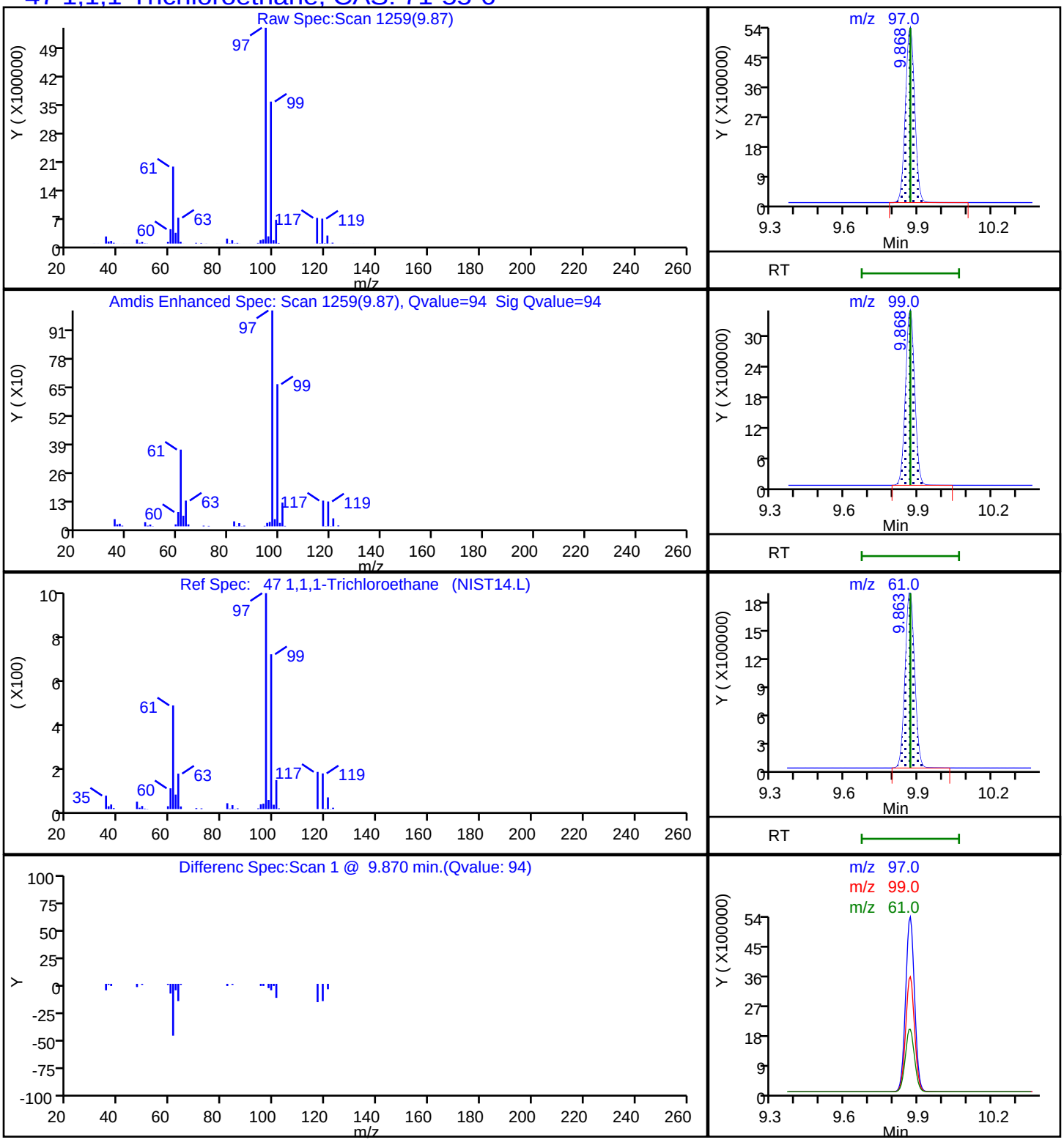
34 trans-1,2-Dichloroethene, CAS: 156-60-5



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200819-16309.b\GH19P109.D				
Injection Date:	19-Aug-2020 23:41:30	Instrument ID:	MG		
Lims ID:	140-20065-A-2	Lab Sample ID:	140-20065-2		
Client ID:	BLDG A MID GAC				
Operator ID:	HMT	ALS Bottle#:	9	Worklist Smp#:	13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

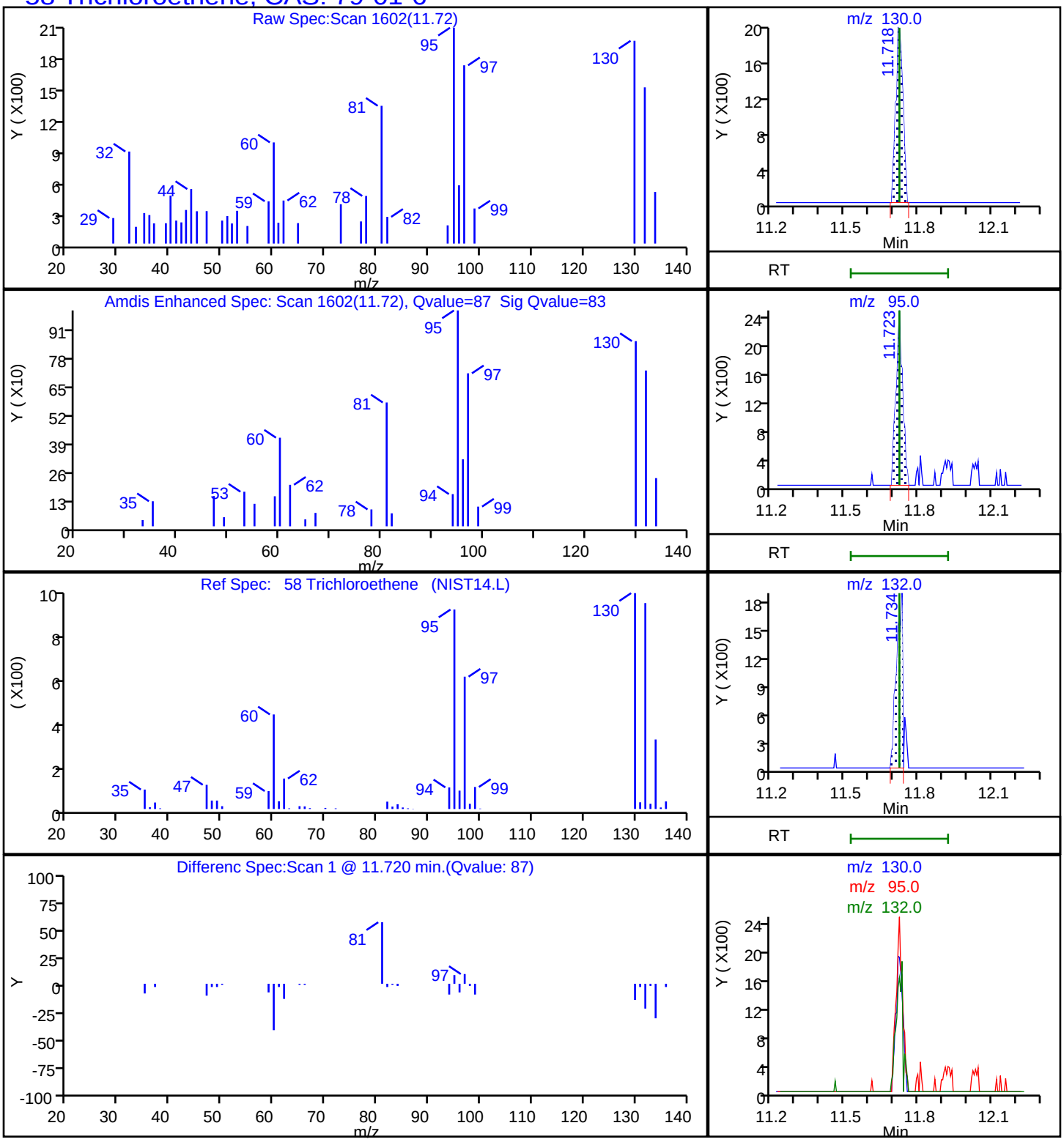
47 1,1,1-Trichloroethane, CAS: 71-55-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200819-16309.b\GH19P109.D		
Injection Date:	19-Aug-2020 23:41:30	Instrument ID:	MG
Lims ID:	140-20065-A-2	Lab Sample ID:	140-20065-2
Client ID:	BLDG A MID GAC		
Operator ID:	HMT	ALS Bottle#:	9 Worklist Smp#: 13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

58 Trichloroethene, CAS: 79-01-6



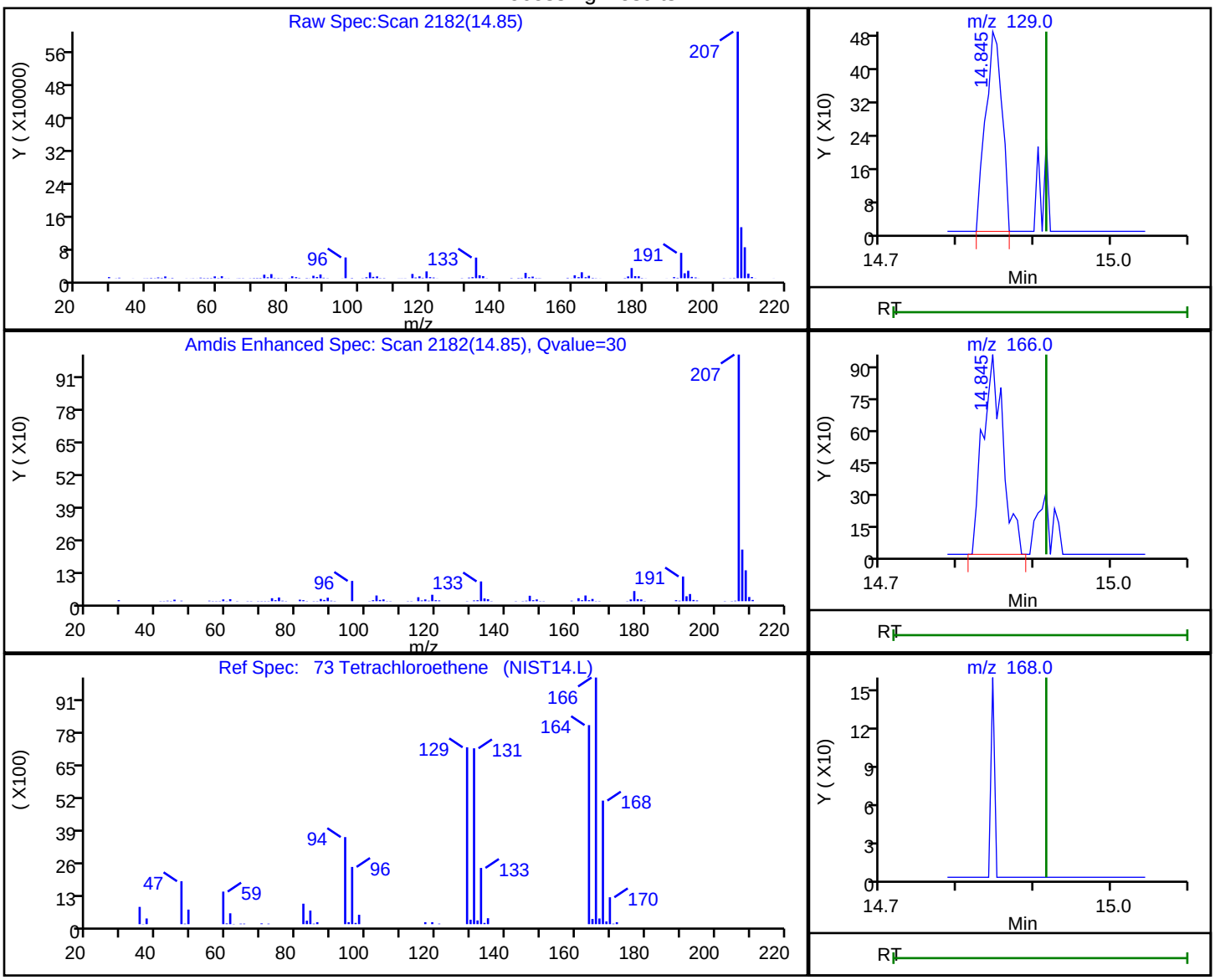
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200819-16309.b\GH19P109.D				
Injection Date:	19-Aug-2020 23:41:30	Instrument ID:	MG		
Lims ID:	140-20065-A-2	Lab Sample ID:	140-20065-2		
Client ID:	BLDG A MID GAC				
Operator ID:	HMT	ALS Bottle#:	9	Worklist Smp#:	13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

73 Tetrachloroethene, CAS: 127-18-4

Processing Results



RT	Mass	Response	Amount
14.85	129.00	725	0.007614
14.85	166.00	1756	
14.92	168.00	0	

Reviewer: khachitpongpanits, 20-Aug-2020 11:20:16

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20065-1

SDG No.:

Client Sample ID: BLDG A MID GAC DL Lab Sample ID: 140-20065-2 DL

Matrix: Air Lab File ID: RH20P101.D

Analysis Method: TO 15 LL Date Collected: 08/18/2020 11:06

Sample wt/vol: 10(mL) Date Analyzed: 08/20/2020 18:01

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 41899 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	133.41	140		4.0	1.9

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	91		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20065-1

SDG No.:

Client Sample ID: BLDG A MID GAC DL Lab Sample ID: 140-20065-2 DL

Matrix: Air Lab File ID: RH20P101.D

Analysis Method: TO 15 LL Date Collected: 08/18/2020 11:06

Sample wt/vol: 10(mL) Date Analyzed: 08/20/2020 18:01

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 41899 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	133.41	740		22	10

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	91		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MR\20200818-16322.b\RH20P101.D				
Lims ID:	140-20065-A-2				
Client ID:	BLDG A MID GAC				
Sample Type:	Client				
Inject. Date:	20-Aug-2020 18:01:30	ALS Bottle#:	1	Worklist Smp#:	6
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016322-006				
Misc. Info.:	140-20065-a-2				
Operator ID:	HMT	Instrument ID:	MR		
Method:	\\chromfs\Knoxville\ChromData\MR\20200818-16322.b\MR_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	21-Aug-2020 11:22:04	Calib Date:	28-Jul-2020 09:59:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC09R.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1057				
First Level Reviewer: khachitpongpanits		Date:	21-Aug-2020 11:23:01		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.280	8.312	-0.032	95	113606	4.00	
* 2 1,4-Difluorobenzene	114	10.523	10.539	-0.016	95	1220702	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.360	15.365	-0.005	89	974209	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.010	17.015	-0.005	85	532566	3.62	
27 1,1-Dichloroethene	96	5.438	5.436	-0.016	95	15558	0.2538	
31 Methylene Chloride	84	5.783	5.788	-0.005	96	47926	0.1430	
37 1,1-Dichloroethane	63	6.985	6.974	-0.011	15	10623	0.0781	
42 cis-1,2-Dichloroethene	96	7.961	7.957	-0.017	89	25023	0.3829	
44 Chloroform	83	8.296	8.296	-0.027	33	1830	0.0147	
47 1,1,1-Trichloroethane	97	9.331	9.342	-0.011	96	349917	2.71	
51 Benzene	78	9.957	9.957	0.000	1	3365	0.0138	

Reagents:

40MXISSURP_00004 Amount Added: 40.00 Units: mL Run Reagent

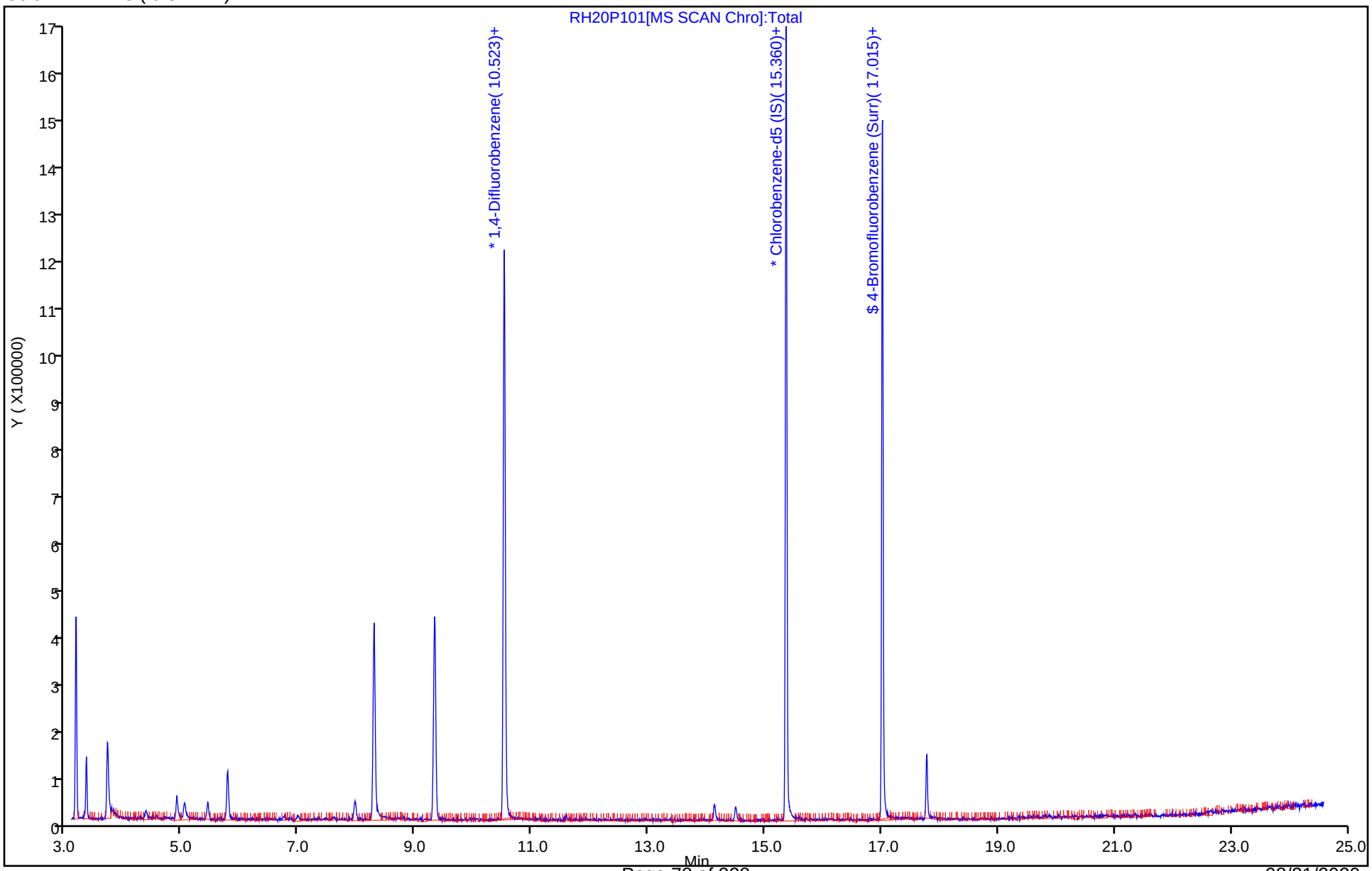
Report Date: 21-Aug-2020 11:23:01 Chrom Revision: 2.3 17-Aug-2020 20:42:08

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200818-16322.b\RH20P101.D

Injection Date:	20-Aug-2020 18:01:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	140-20065-A-2	Lab Sample ID:	140-20065-2	Worklist Smp#:	6
Client ID:	BLDG A MID GAC				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MR\20200818-16322.b\RH20P101.D				
Lims ID:	140-20065-A-2				
Client ID:	BLDG A MID GAC				
Sample Type:	Client				
Inject. Date:	20-Aug-2020 18:01:30	ALS Bottle#:	1	Worklist Smp#:	6
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016322-006				
Misc. Info.:	140-20065-a-2				
Operator ID:	HMT	Instrument ID:	MR		
Method:	\\chromfs\Knoxville\ChromData\MR\20200818-16322.b\MR_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	21-Aug-2020 11:22:04	Calib Date:	28-Jul-2020 09:59:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC09R.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1057				

First Level Reviewer: khachitpongpanits Date: 21-Aug-2020 11:23:01

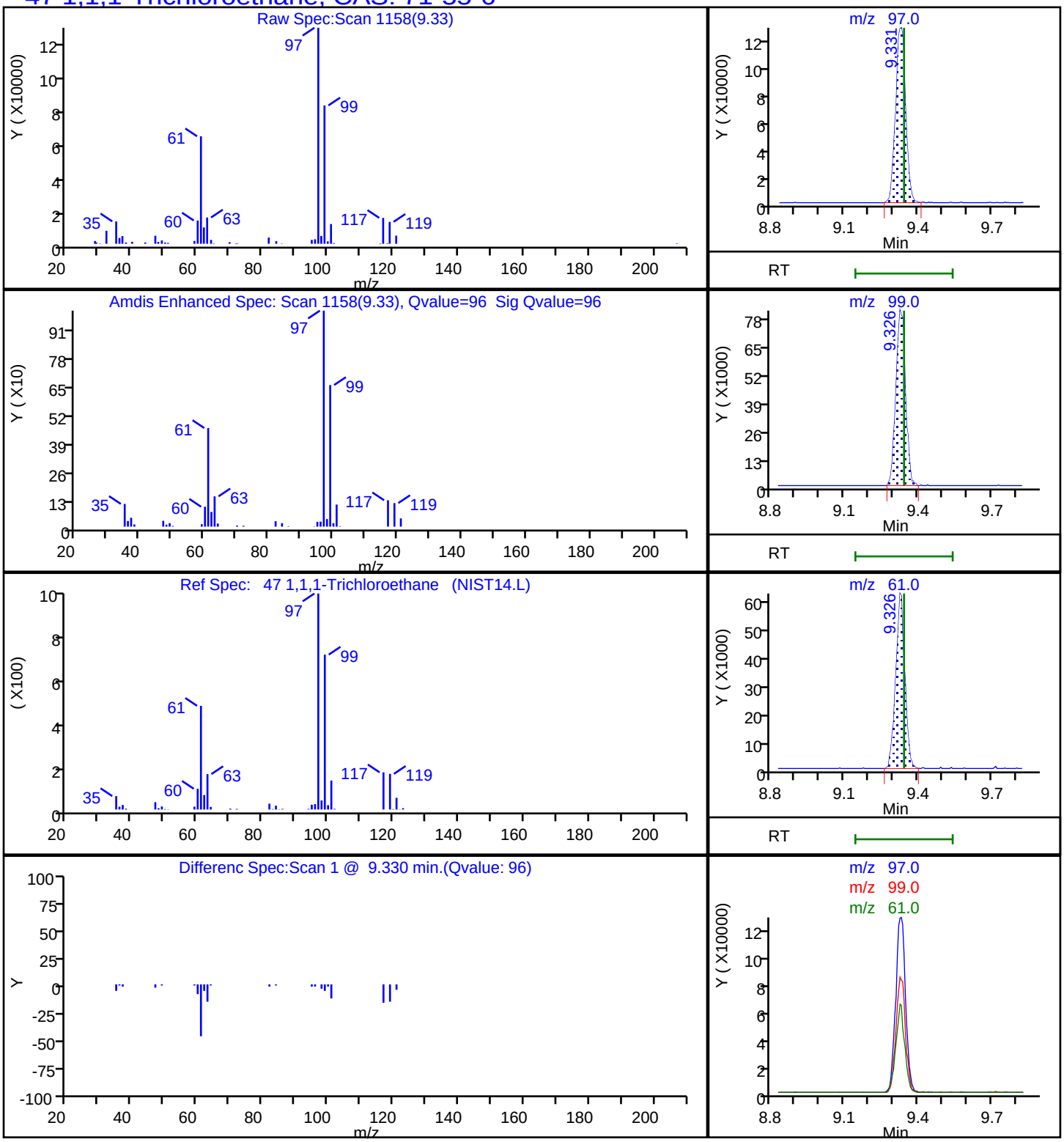
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.00	3.62	90.51

Report Date: 21-Aug-2020 11:23:01 Chrom Revision: 2.3 17-Aug-2020 20:42:08

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200818-16322.b\RH20P101.D				
Injection Date:	20-Aug-2020 18:01:30	Instrument ID:	MR		
Lims ID:	140-20065-A-2	Lab Sample ID:	140-20065-2		
Client ID:	BLDG A MID GAC				
Operator ID:	HMT	ALS Bottle#:	1	Worklist Smp#:	6
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

47 1,1,1-Trichloroethane, CAS: 71-55-6



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20065-1

SDG No.:

Client Sample ID: BLDG A EFFLUENT Lab Sample ID: 140-20065-3

Matrix: Air Lab File ID: GH19P110.D

Analysis Method: TO 15 LL Date Collected: 08/18/2020 11:03

Sample wt/vol: 100(mL) Date Analyzed: 08/20/2020 01:07

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 41859 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.15	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	ND		0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	0.88		0.40	0.11
67-66-3	Chloroform	119.38	0.66		0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	36		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.46		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	9.1		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	33		0.40	0.040
100-41-4	Ethylbenzene	106.17	0.075	J	0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.035
108-88-3	Toluene	92.14	1.7		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	0.82		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	13		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	3.9		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	0.13	J	0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.45	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	86		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20065-1

SDG No.:

Client Sample ID: BLDG A EFFLUENT Lab Sample ID: 140-20065-3

Matrix: Air Lab File ID: GH19P110.D

Analysis Method: TO 15 LL Date Collected: 08/18/2020 11:03

Sample wt/vol: 100(mL) Date Analyzed: 08/20/2020 01:07

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 41859 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.49	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	ND		2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	3.1		1.4	0.39
67-66-3	Chloroform	119.38	3.2		2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	140		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.3		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	37		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	130		1.6	0.16
100-41-4	Ethylbenzene	106.17	0.33	J	1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.24
108-88-3	Toluene	92.14	6.4		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	3.3		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	71		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	21		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	0.65	J	2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	2.0	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	86		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200819-16309.b\GH19P110.D
Lims ID: 140-20065-A-3
Client ID: BLDG A EFFLUENT
Sample Type: Client
Inject. Date: 20-Aug-2020 01:07:30 ALS Bottle#: 10 Worklist Smp#: 15
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016309-015
Misc. Info.: 140-20065-a-3
Operator ID: HMT Instrument ID: MG

Method: \\chromfs\Knoxville\ChromData\MG\20200819-16309.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 19-Aug-2020 23:41:28 Calib Date: 15-Jul-2020 22:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1047

First Level Reviewer: khachitpongpanits Date: 20-Aug-2020 12:47:30

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.827	8.827	0.000	97	198246	4.00	
* 2 1,4-Difluorobenzene	114	11.006	11.011	-0.005	95	1775990	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.740	15.740	0.000	89	1574407	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.380	17.385	-0.005	91	1099939	3.44	
6 Chlorodifluoromethane	51	3.710	3.710	0.000	95	35443	0.1759	
8 Dichlorodifluoromethane	85	3.769	3.769	0.000	100	33036	0.0914	
27 1,1-Dichloroethene	96	5.942	5.948	-0.006	94	609952	6.57	
31 Methylene Chloride	84	6.293	6.293	0.000	99	92487	0.1778	
34 trans-1,2-Dichloroethene	96	7.096	7.096	0.000	96	16975	0.1640	
37 1,1-Dichloroethane	63	7.512	7.517	-0.005	100	417527	1.83	
42 cis-1,2-Dichloroethene	96	8.498	8.498	0.000	96	753008	7.16	
44 Chloroform	83	8.838	8.844	-0.006	49	34582	0.1313	
47 1,1,1-Trichloroethane	97	9.863	9.868	-0.005	95	740965	2.61	
50 Benzene	78	10.461	10.462	-0.006	96	11270	0.0308	
58 Trichloroethene	130	11.718	11.717	-0.005	93	96073	0.7743	
67 Toluene	91	13.767	13.772	-0.005	95	115798	0.3390	
78 Ethylbenzene	91	16.080	16.080	0.000	97	6763	0.0151	
79 m-Xylene & p-Xylene	91	16.231	16.242	-0.011	98	23275	0.0652	
83 o-Xylene	91	16.765	16.765	0.000	96	9200	0.0244	
95 1,2,4-Trimethylbenzene	105	18.555	18.555	0.000	97	11058	0.0266	
S 124 Xylenes, Total	100				0		0.0896	

Reagents:

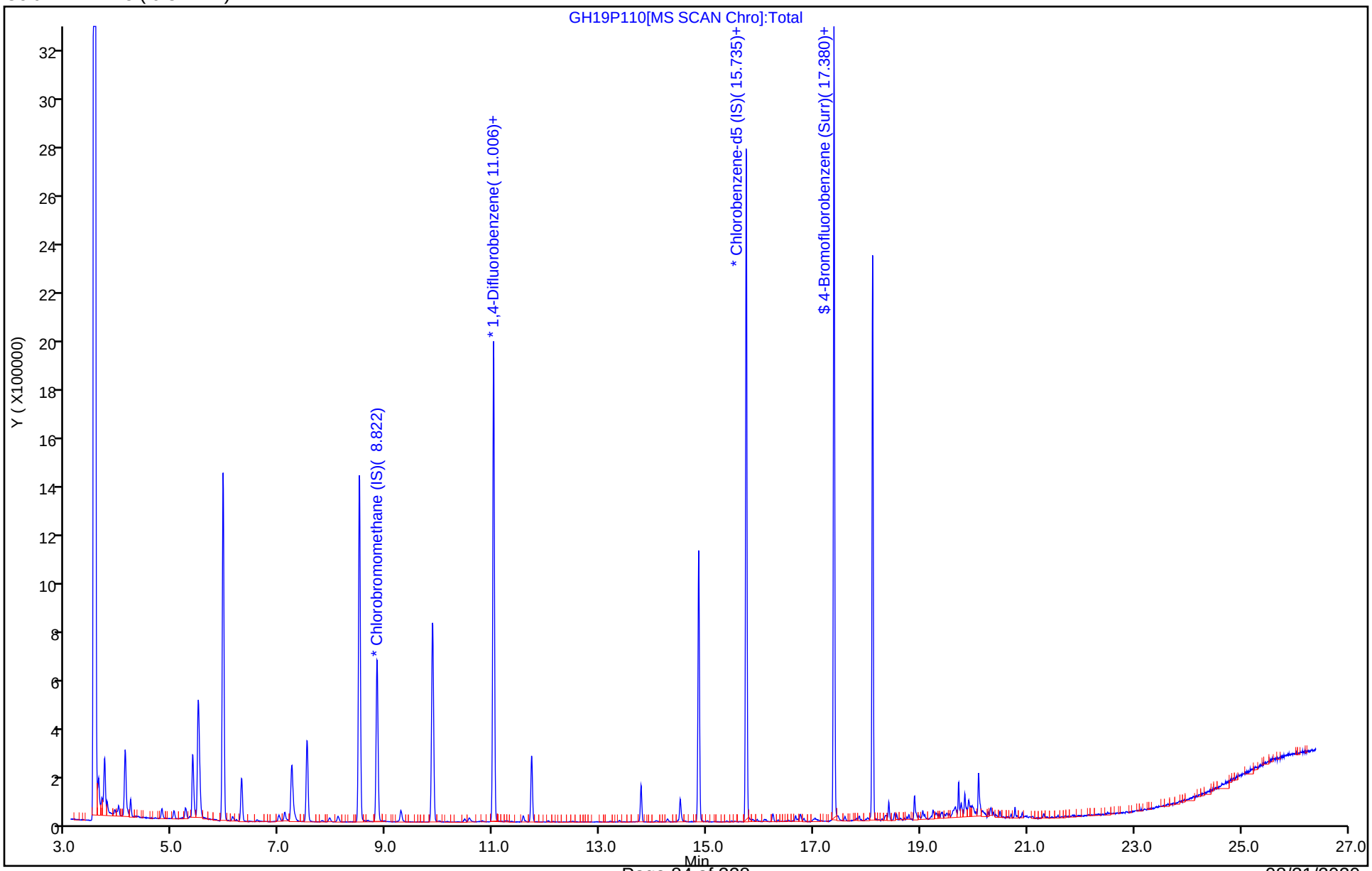
40MXISSURP_00004 Amount Added: 40.00 Units: mL Run Reagent

Report Date: 20-Aug-2020 12:47:30 Chrom Revision: 2.3 17-Aug-2020 20:42:08

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200819-16309.b\GH19P110.D				
Injection Date:	20-Aug-2020 01:07:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	140-20065-A-3	Lab Sample ID:	140-20065-3	Worklist Smp#:	15
Client ID:	BLDG A EFFLUENT				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

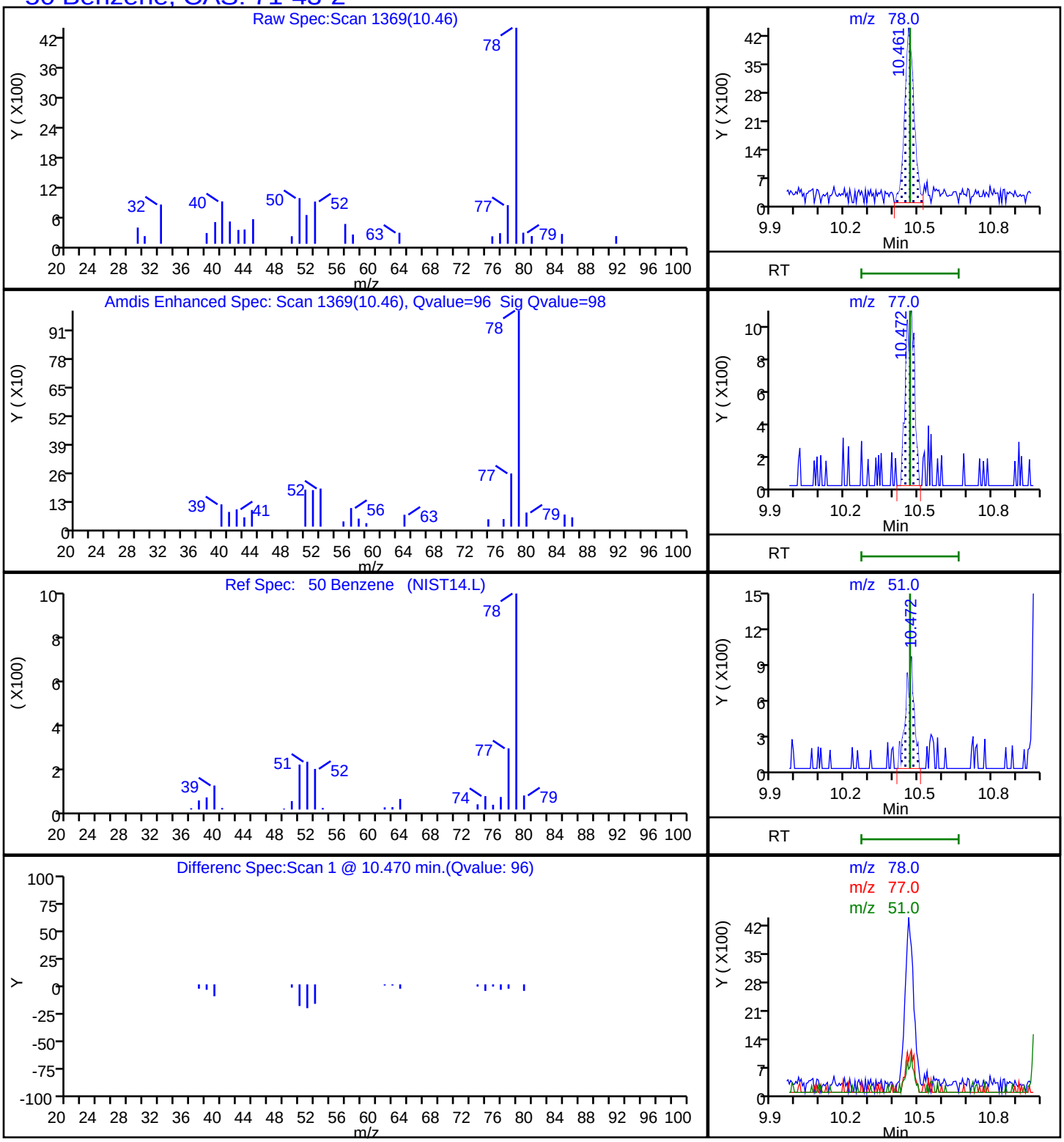
Data File:	\\chromfs\Knoxville\ChromData\MG\20200819-16309.b\GH19P110.D				
Lims ID:	140-20065-A-3				
Client ID:	BLDG A EFFLUENT				
Sample Type:	Client				
Inject. Date:	20-Aug-2020 01:07:30	ALS Bottle#:	10	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016309-015				
Misc. Info.:	140-20065-a-3				
Operator ID:	HMT	Instrument ID:	MG		
Method:	\\chromfs\Knoxville\ChromData\MG\20200819-16309.b\MG_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	19-Aug-2020 23:41:28	Calib Date:	15-Jul-2020 22:02:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1047				
First Level Reviewer: khachitpongpanits		Date:	20-Aug-2020 12:47:30		

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.00	3.44	85.93

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200819-16309.b\GH19P110.D		
Injection Date:	20-Aug-2020 01:07:30	Instrument ID:	MG
Lims ID:	140-20065-A-3	Lab Sample ID:	140-20065-3
Client ID:	BLDG A EFFLUENT		
Operator ID:	HMT	ALS Bottle#:	10 Worklist Smp#: 15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

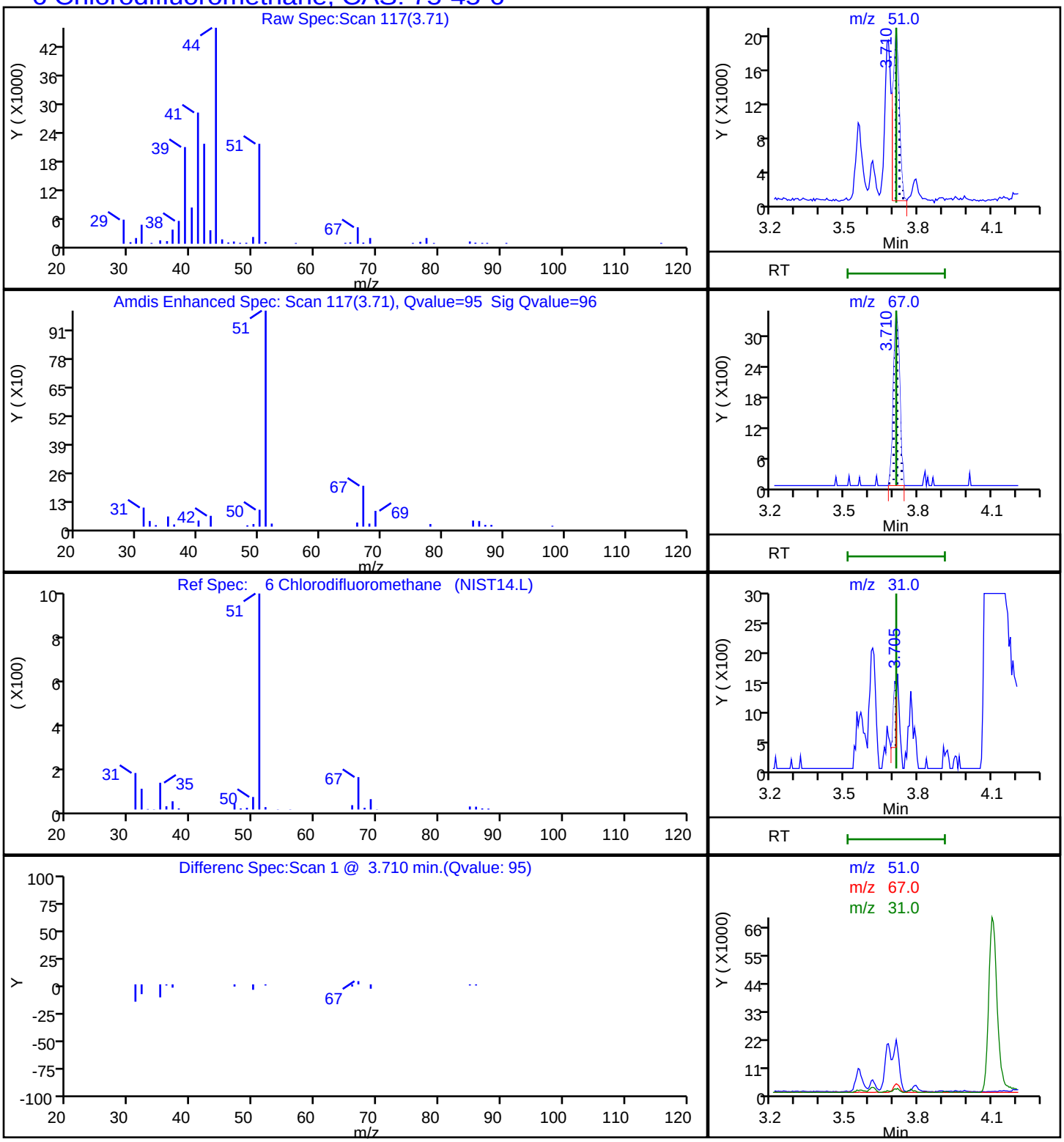
50 Benzene, CAS: 71-43-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200819-16309.b\GH19P110.D				
Injection Date:	20-Aug-2020 01:07:30	Instrument ID:	MG		
Lims ID:	140-20065-A-3	Lab Sample ID:	140-20065-3		
Client ID:	BLDG A EFFLUENT				
Operator ID:	HMT	ALS Bottle#:	10	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

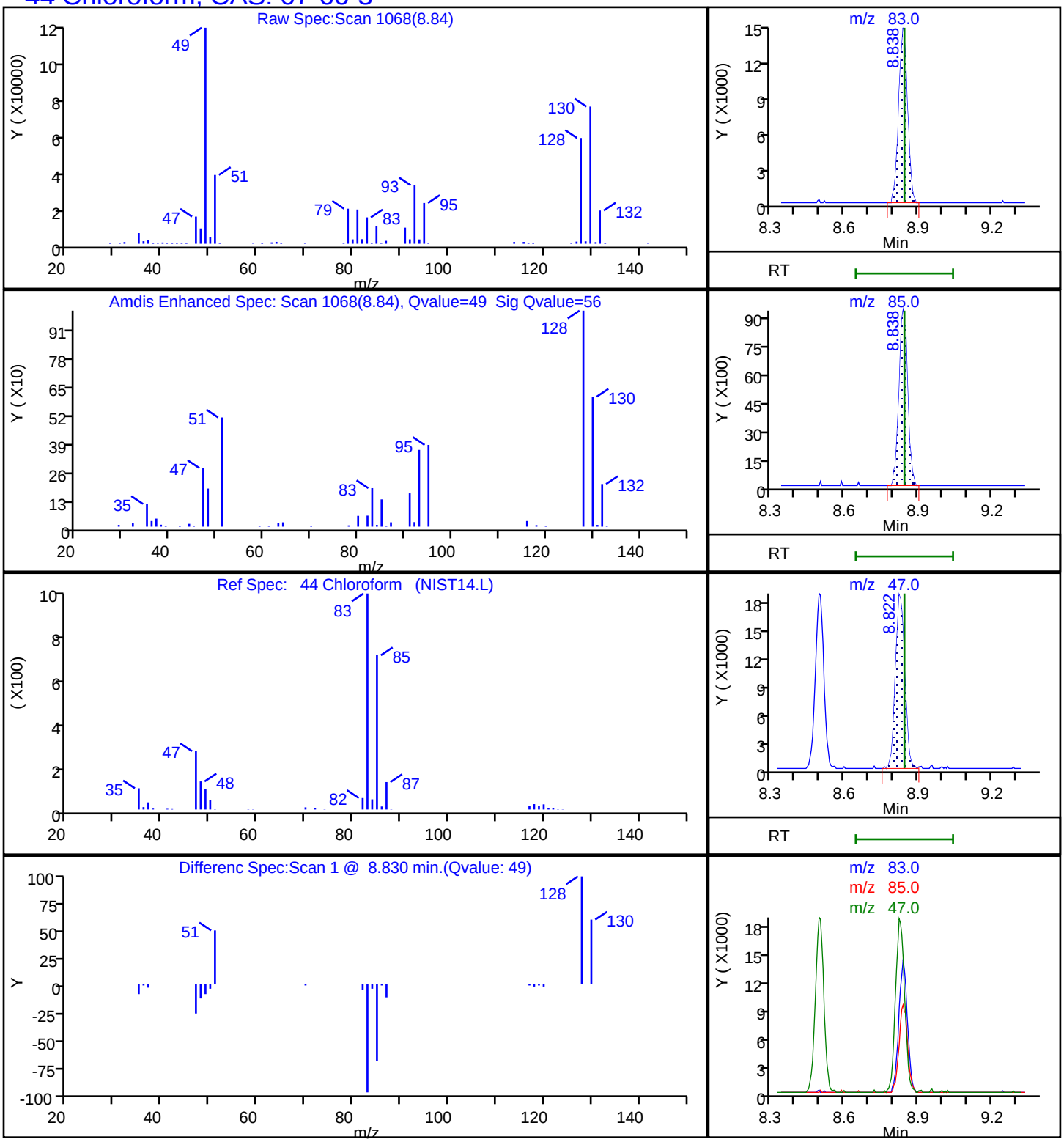
6 Chlorodifluoromethane, CAS: 75-45-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200819-16309.b\GH19P110.D		
Injection Date:	20-Aug-2020 01:07:30	Instrument ID:	MG
Lims ID:	140-20065-A-3	Lab Sample ID:	140-20065-3
Client ID:	BLDG A EFFLUENT		
Operator ID:	HMT	ALS Bottle#:	10 Worklist Smp#: 15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

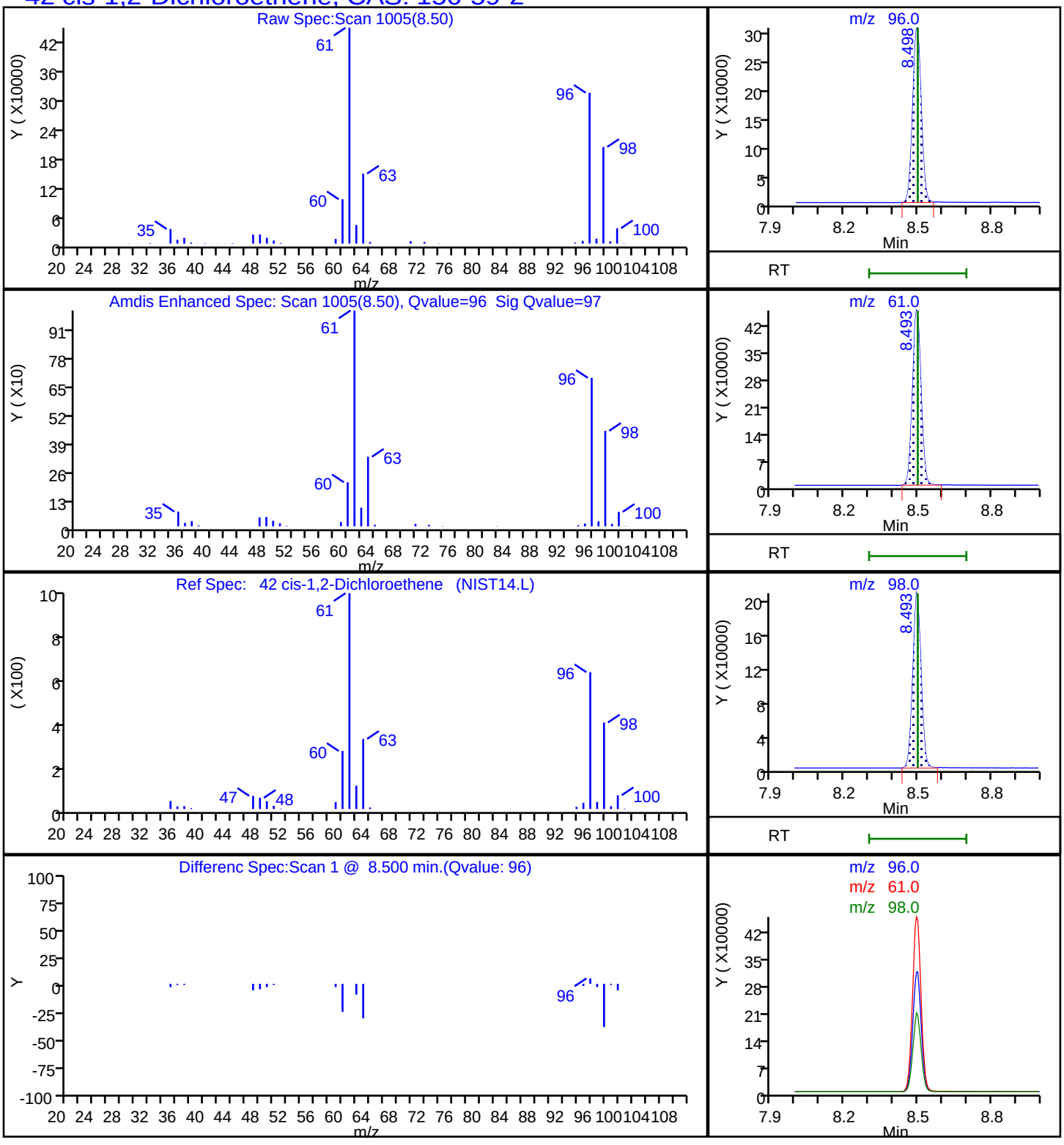
44 Chloroform, CAS: 67-66-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200819-16309.b\GH19P110.D				
Injection Date:	20-Aug-2020 01:07:30	Instrument ID:	MG		
Lims ID:	140-20065-A-3	Lab Sample ID:	140-20065-3		
Client ID:	BLDG A EFFLUENT				
Operator ID:	HMT	ALS Bottle#:	10	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

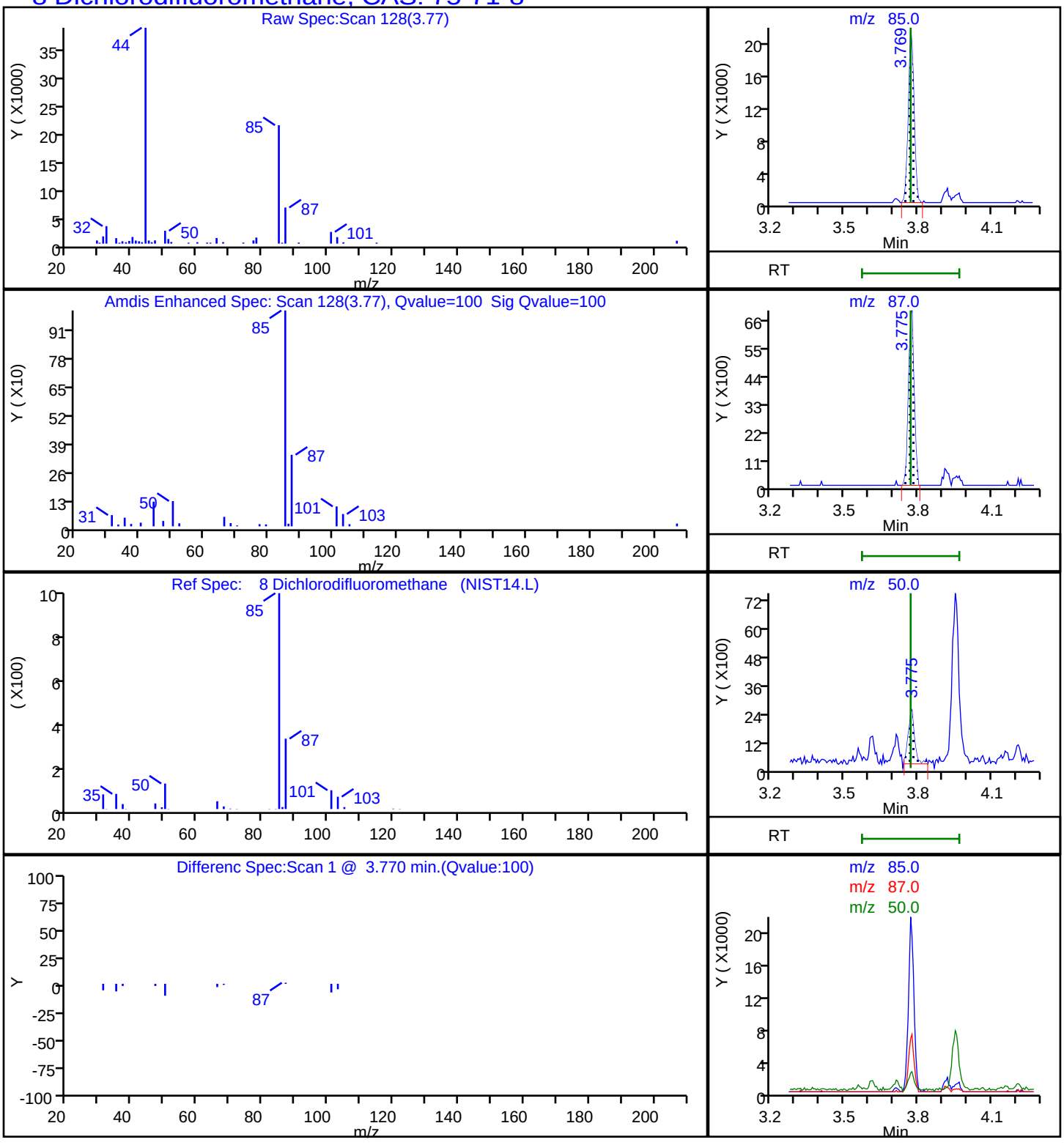
42 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200819-16309.b\GH19P110.D				
Injection Date:	20-Aug-2020 01:07:30	Instrument ID:	MG		
Lims ID:	140-20065-A-3	Lab Sample ID:	140-20065-3		
Client ID:	BLDG A EFFLUENT				
Operator ID:	HMT	ALS Bottle#:	10	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

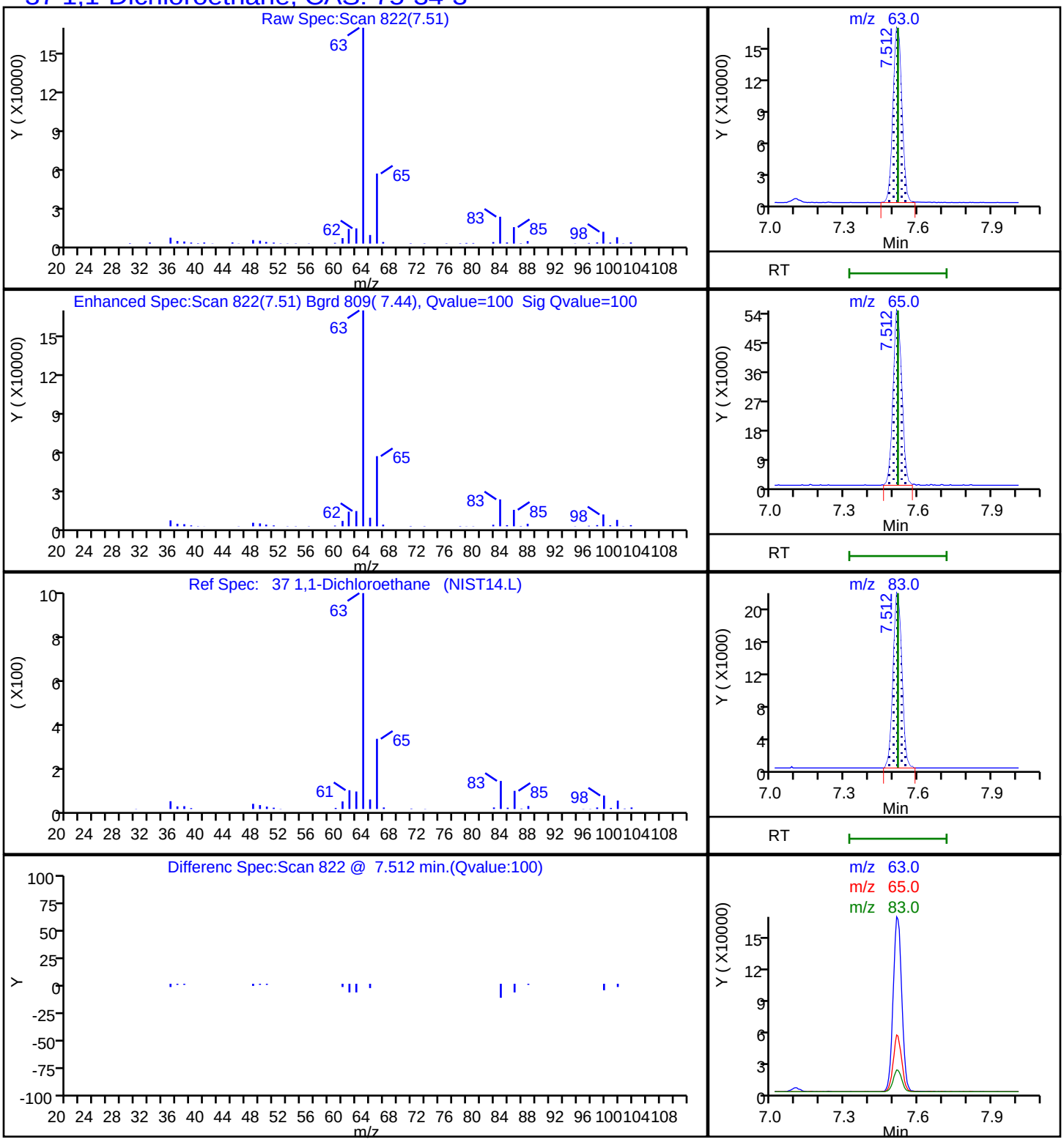
8 Dichlorodifluoromethane, CAS: 75-71-8



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200819-16309.b\GH19P110.D		
Injection Date:	20-Aug-2020 01:07:30	Instrument ID:	MG
Lims ID:	140-20065-A-3	Lab Sample ID:	140-20065-3
Client ID:	BLDG A EFFLUENT		
Operator ID:	HMT	ALS Bottle#:	10 Worklist Smp#: 15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

37 1,1-Dichloroethane, CAS: 75-34-3

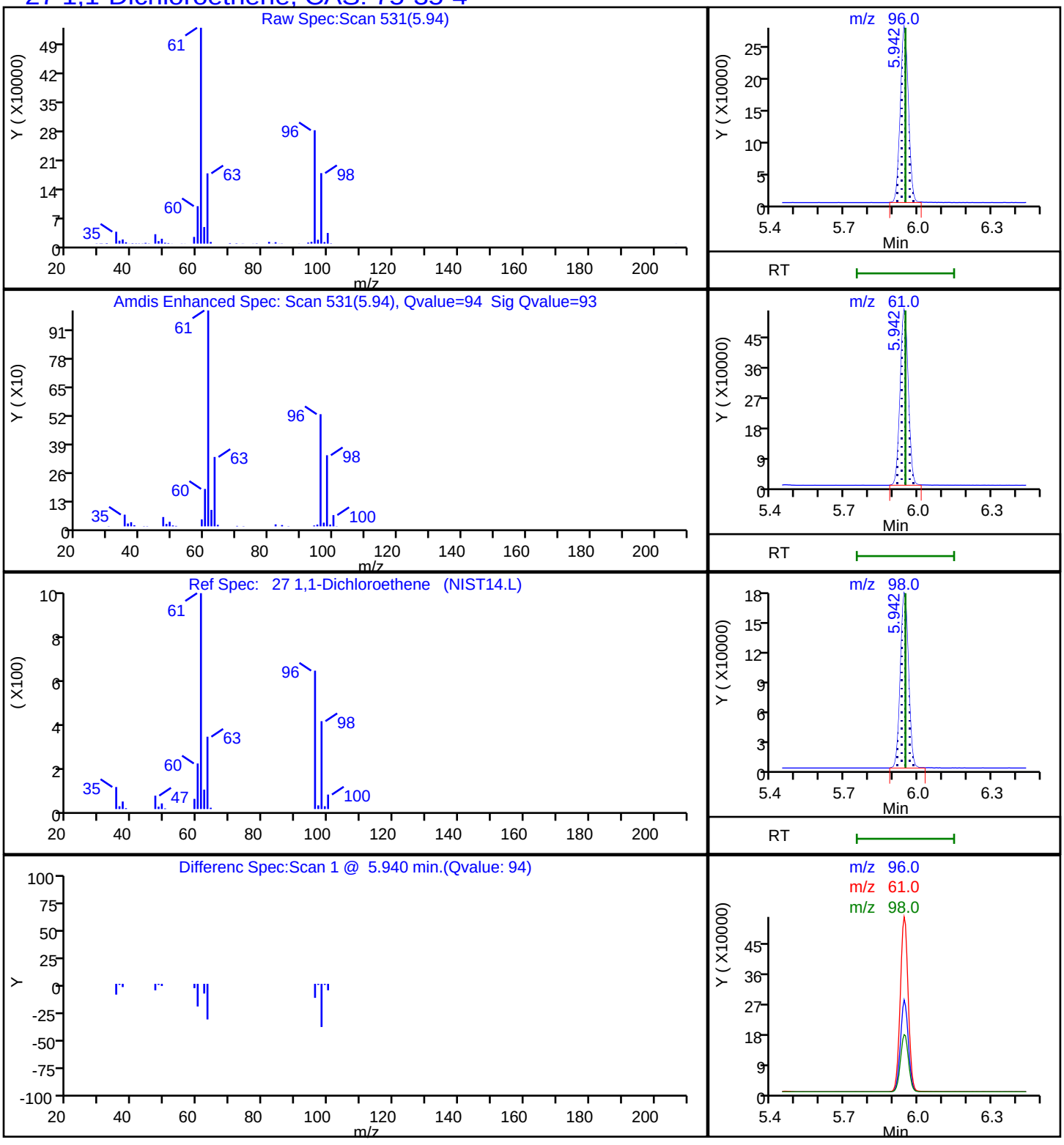


Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200819-16309.b\GH19P110.D

Injection Date:	20-Aug-2020 01:07:30	Instrument ID:	MG		
Lims ID:	140-20065-A-3	Lab Sample ID:	140-20065-3		
Client ID:	BLDG A EFFLUENT				
Operator ID:	HMT	ALS Bottle#:	10	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

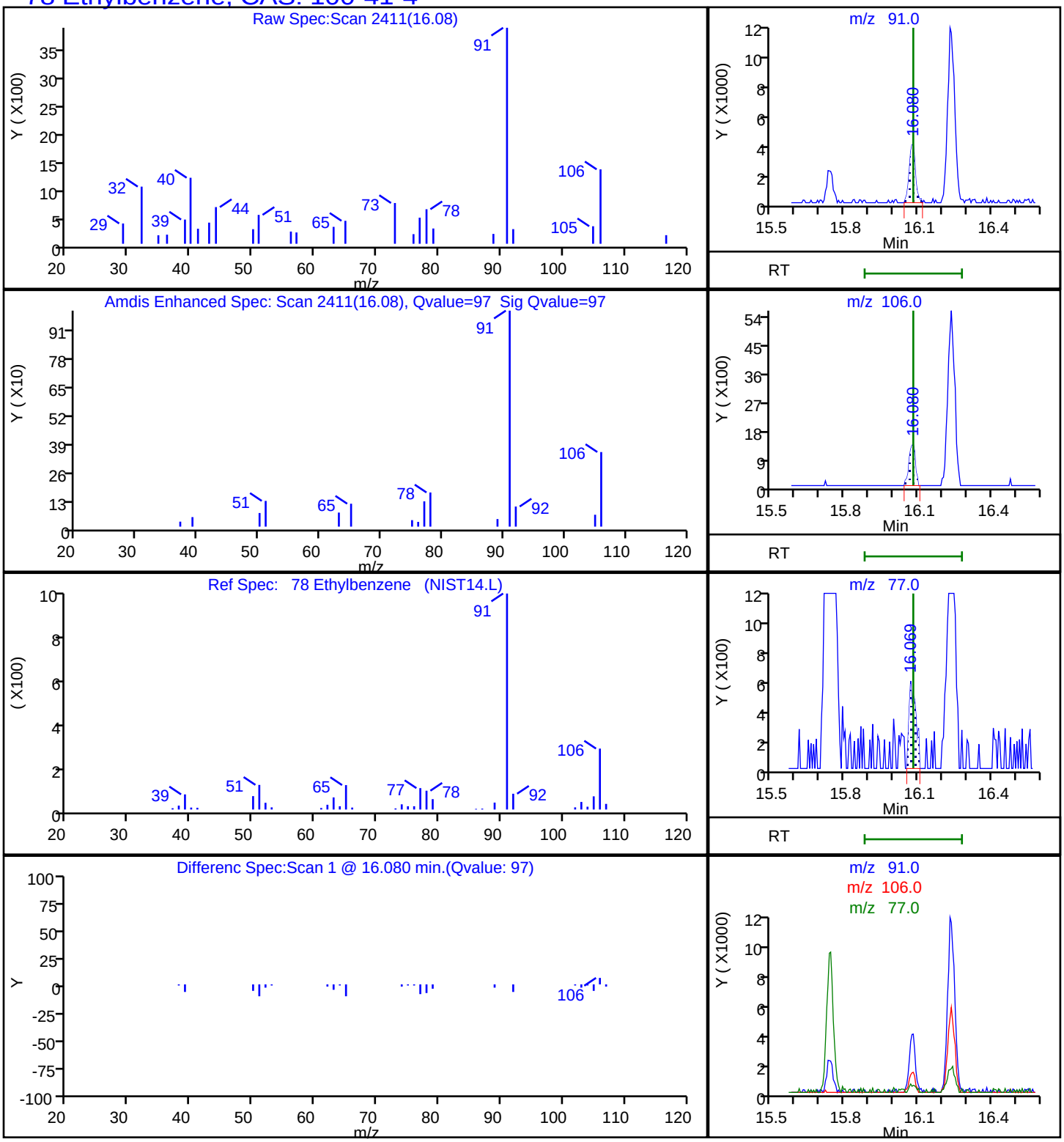
27 1,1-Dichloroethene, CAS: 75-35-4



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200819-16309.b\GH19P110.D		
Injection Date:	20-Aug-2020 01:07:30	Instrument ID:	MG
Lims ID:	140-20065-A-3	Lab Sample ID:	140-20065-3
Client ID:	BLDG A EFFLUENT		
Operator ID:	HMT	ALS Bottle#:	10 Worklist Smp#: 15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

78 Ethylbenzene, CAS: 100-41-4

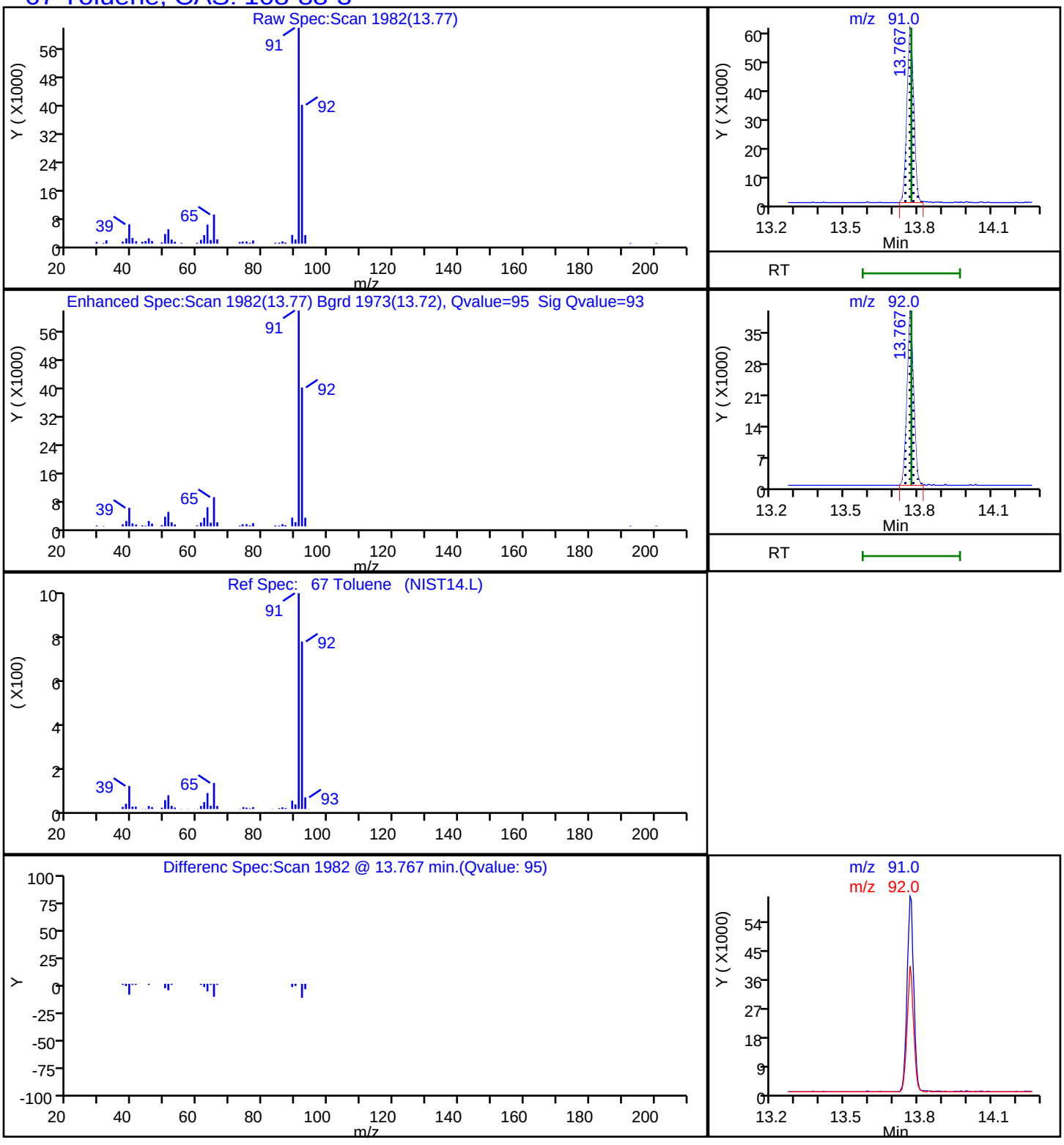


Report Date: 20-Aug-2020 12:47:31 Chrom Revision: 2.3 17-Aug-2020 20:42:08

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200819-16309.b\GH19P110.D		
Injection Date:	20-Aug-2020 01:07:30	Instrument ID:	MG
Lims ID:	140-20065-A-3	Lab Sample ID:	140-20065-3
Client ID:	BLDG A EFFLUENT		
Operator ID:	HMT	ALS Bottle#:	10 Worklist Smp#: 15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

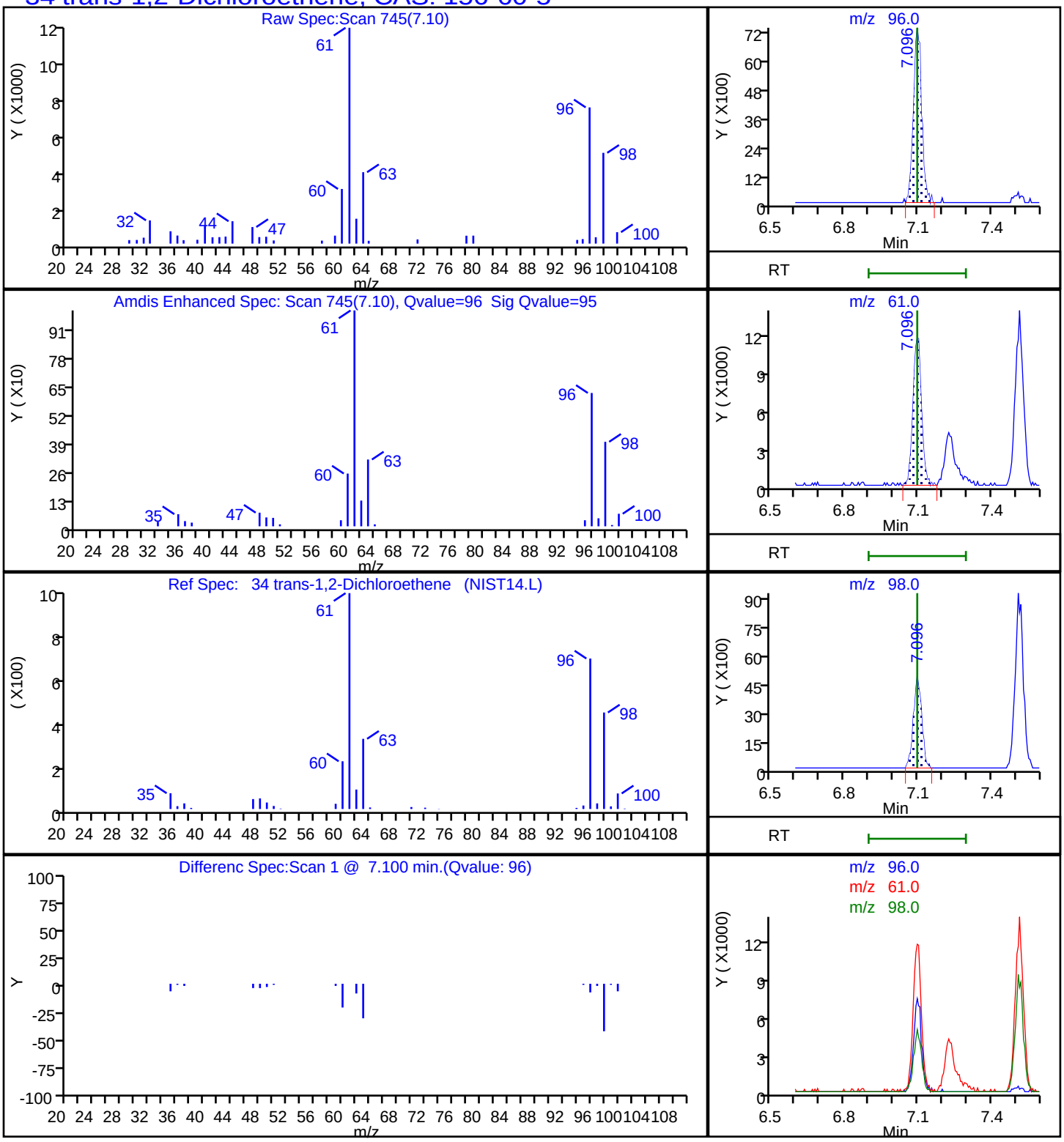
67 Toluene, CAS: 108-88-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200819-16309.b\GH19P110.D		
Injection Date:	20-Aug-2020 01:07:30	Instrument ID:	MG
Lims ID:	140-20065-A-3	Lab Sample ID:	140-20065-3
Client ID:	BLDG A EFFLUENT		
Operator ID:	HMT	ALS Bottle#:	10 Worklist Smp#: 15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

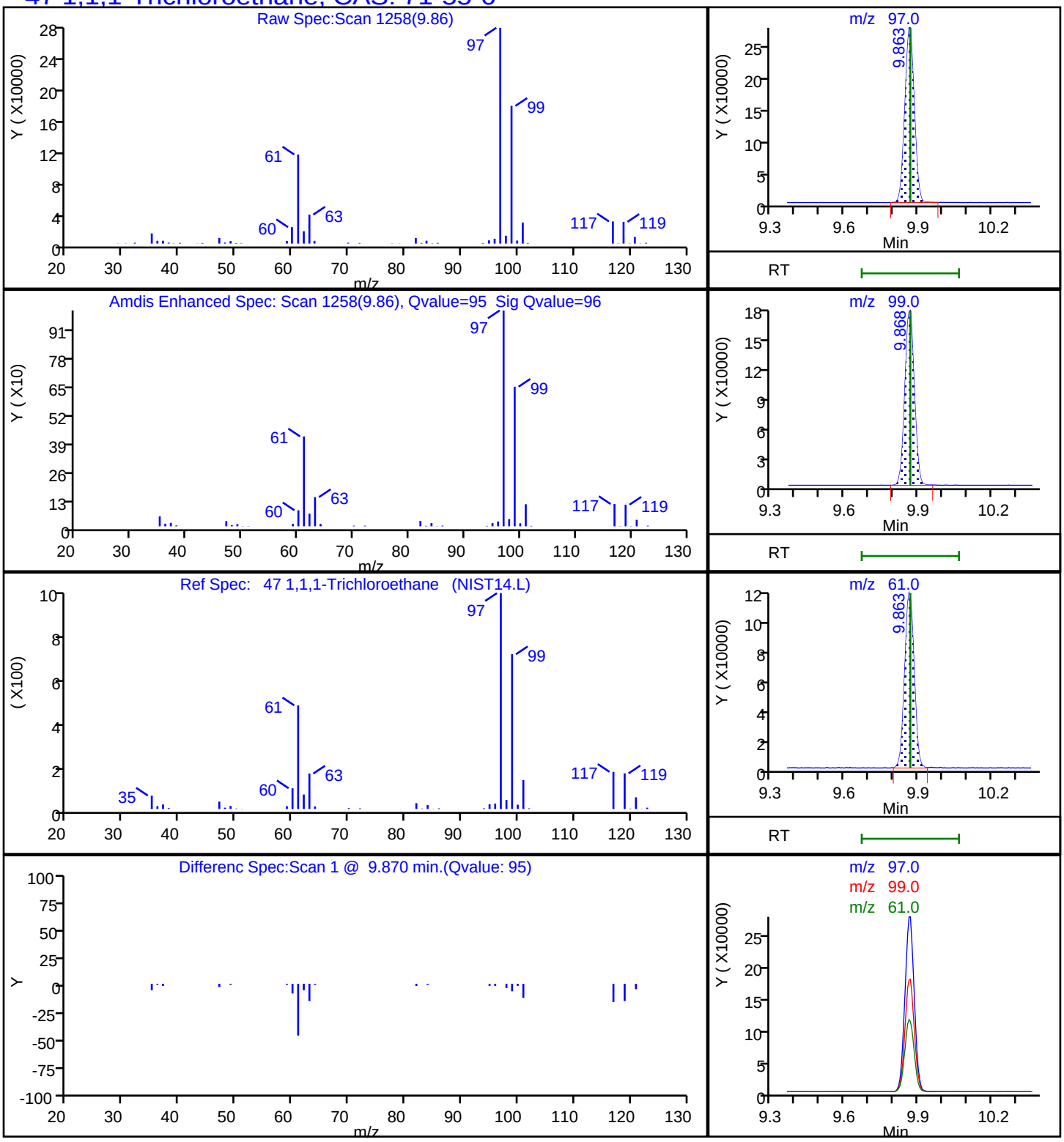
34 trans-1,2-Dichloroethene, CAS: 156-60-5



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200819-16309.b\GH19P110.D		
Injection Date:	20-Aug-2020 01:07:30	Instrument ID:	MG
Lims ID:	140-20065-A-3	Lab Sample ID:	140-20065-3
Client ID:	BLDG A EFFLUENT		
Operator ID:	HMT	ALS Bottle#:	10 Worklist Smp#: 15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

47 1,1,1-Trichloroethane, CAS: 71-55-6



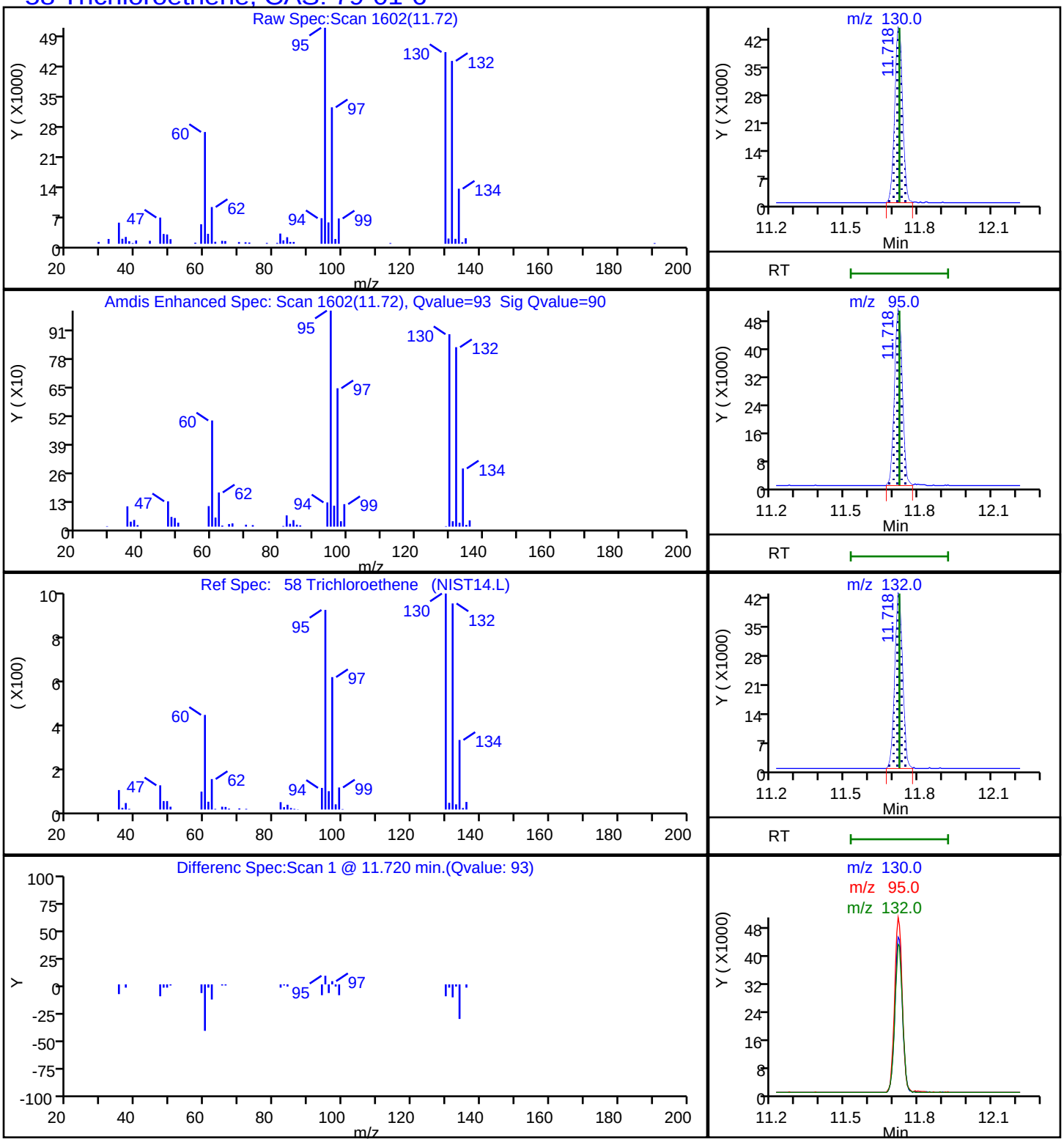
Report Date: 20-Aug-2020 12:47:31 Chrom Revision: 2.3 17-Aug-2020 20:42:08

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200819-16309.b\GH19P110.D

Injection Date:	20-Aug-2020 01:07:30	Instrument ID:	MG		
Lims ID:	140-20065-A-3	Lab Sample ID:	140-20065-3		
Client ID:	BLDG A EFFLUENT				
Operator ID:	HMT	ALS Bottle#:	10	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

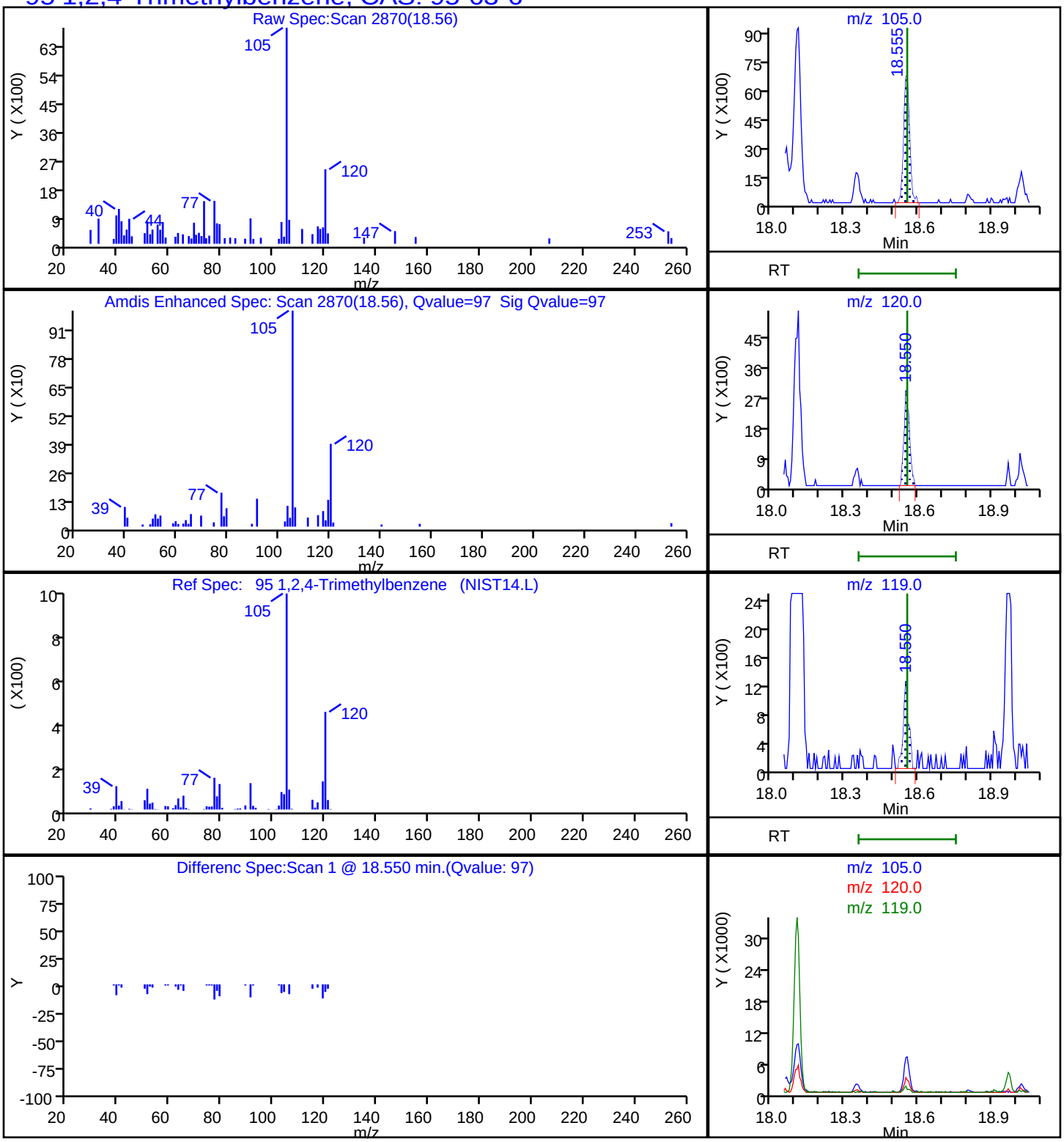
58 Trichloroethene, CAS: 79-01-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200819-16309.b\GH19P110.D		
Injection Date:	20-Aug-2020 01:07:30	Instrument ID:	MG
Lims ID:	140-20065-A-3	Lab Sample ID:	140-20065-3
Client ID:	BLDG A EFFLUENT		
Operator ID:	HMT	ALS Bottle#:	10 Worklist Smp#: 15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

95 1,2,4-Trimethylbenzene, CAS: 95-63-6

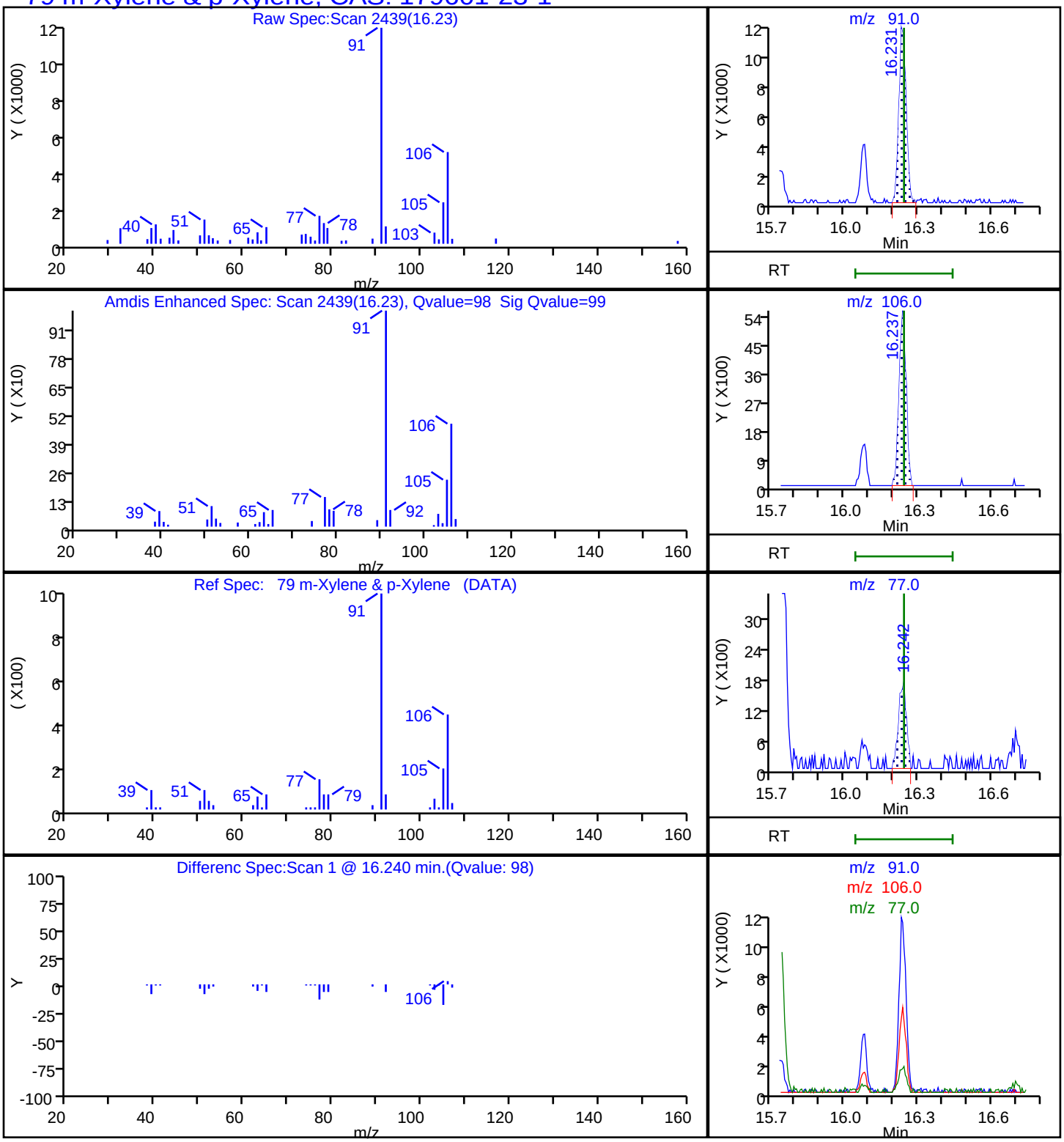


Report Date: 20-Aug-2020 12:47:31 Chrom Revision: 2.3 17-Aug-2020 20:42:08

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200819-16309.b\GH19P110.D				
Injection Date:	20-Aug-2020 01:07:30	Instrument ID:	MG		
Lims ID:	140-20065-A-3	Lab Sample ID:	140-20065-3		
Client ID:	BLDG A EFFLUENT				
Operator ID:	HMT	ALS Bottle#:	10	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

79 m-Xylene & p-Xylene, CAS: 179601-23-1

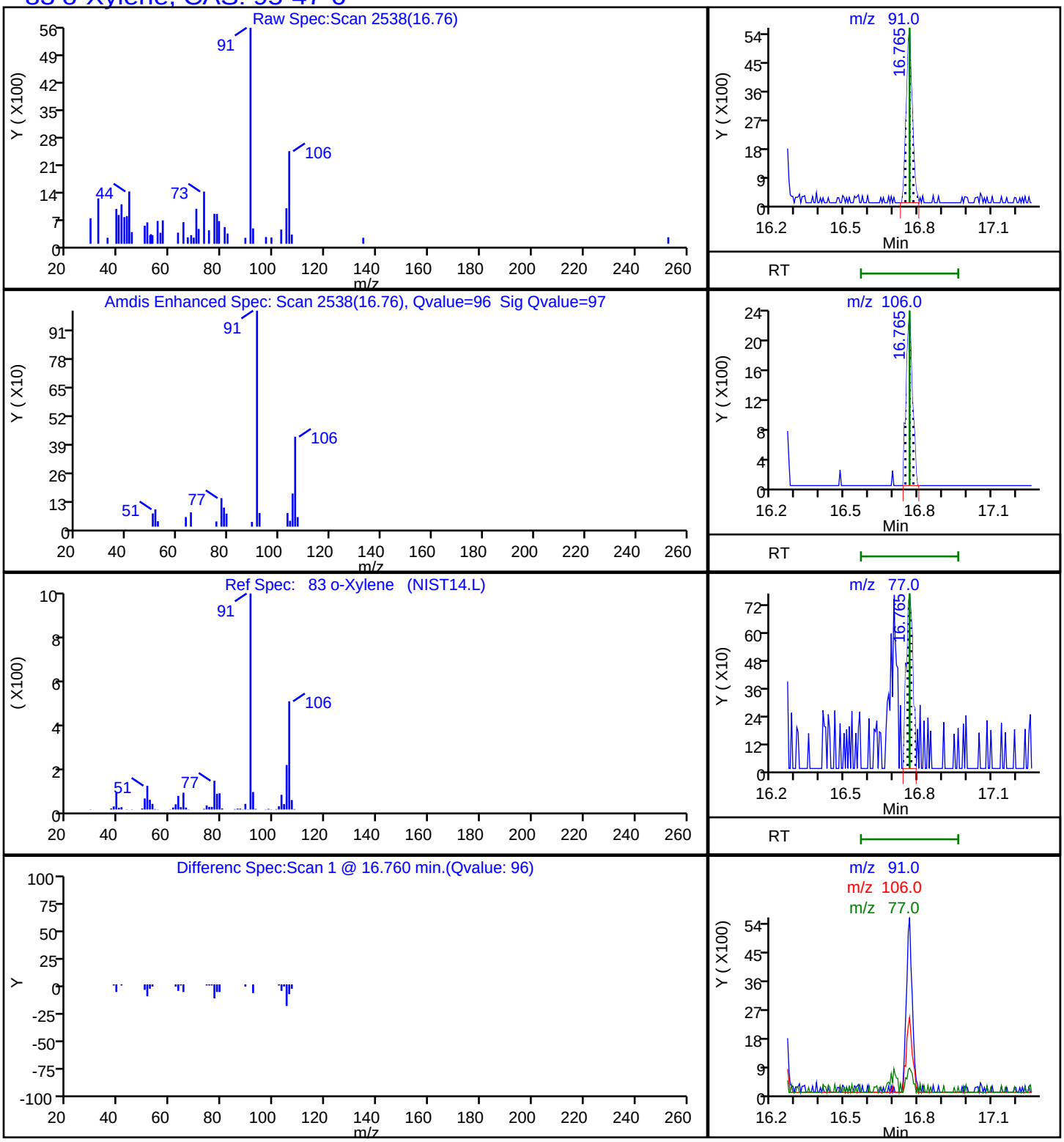


Report Date: 20-Aug-2020 12:47:31 Chrom Revision: 2.3 17-Aug-2020 20:42:08

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200819-16309.b\GH19P110.D		
Injection Date:	20-Aug-2020 01:07:30	Instrument ID:	MG
Lims ID:	140-20065-A-3	Lab Sample ID:	140-20065-3
Client ID:	BLDG A EFFLUENT		
Operator ID:	HMT	ALS Bottle#:	10 Worklist Smp#: 15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

83 o-Xylene, CAS: 95-47-6



FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20065-1 Analy Batch No.: 41058

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/15/2020 12:53 Calibration End Date: 07/15/2020 22:02 Calibration ID: 2525

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 140-41058/8	GG15IC01.D
Level 2	IC 140-41058/9	GG15IC02.D
Level 3	IC 140-41058/10	GG15IC03.D
Level 4	IC 140-41058/11	GG15IC04.D
Level 5	IC 140-41058/12	GG15IC05.D
Level 6	IC 140-41058/13	GG15IC06.D
Level 7	ICIS 140-41058/14	GG15IC07.D
Level 8	IC 140-41058/6	GG15IC08.D
Level 9	IC 140-41058/4	GG15IC09.D
Level 10	IC 140-41058/21	GG15IC10.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Chlorodifluoromethane	+++++ 4.4063	4.4792 3.9673	4.2165 3.9317	4.3268 3.3063	4.1974 3.7664	Ave		4.0664				9.1		30.0			
Propene	+++++ 4.2558	+++++ 2.9101	+++++ 2.4958	+++++ 1.8775	+++++ 1.9553	Lin2	2.5163	1.7238							0.9910		0.9900
Dichlorodifluoromethane	+++++ 7.7489	7.5316 7.1544	7.6767 7.2839	7.2864 6.3640	7.4173 7.1826	Ave		7.2940				5.6		30.0			
Chloromethane	+++++ 0.7129	+++++ 0.6865	+++++ 0.6751	0.8247 0.5793	0.7883 0.6034	Ave		0.6957				12.9		30.0			
1,2-Dichloro-1,1,2,2-tetrafluoroethane	4.1985 3.8640	3.7508 3.5575	3.9352 3.7717	3.5542 3.4865	3.7672 3.8936	Ave		3.7779				5.6		30.0			
Vinyl chloride	3.1028 2.7440	2.6935 2.5973	2.9239 2.6748	2.8930 2.3515	2.8905 2.4671	Ave		2.7338				8.3		30.0			
Butane	+++++ 3.8406	+++++ 3.6564	+++++ 3.7050	4.3055 3.2243	4.2903 3.3876	Ave		3.7728				10.9		30.0			
1,3-Butadiene	2.1120 1.9263	1.9769 1.8531	2.0797 1.9000	2.0265 1.6718	1.9958 1.7642	Ave		1.9306				7.2		30.0			
Bromomethane	+++++ 2.2525	2.4364 2.1836	2.4746 2.2923	2.3560 2.0363	2.2866 2.2159	Ave		2.2816				5.8		30.0			
Chloroethane	+++++ 1.2772	1.4370 1.2758	1.3859 1.2967	1.4215 1.1317	1.3555 1.2503	Ave		1.3146				7.3		30.0			
Ethanol	+++++ 0.8020	+++++ 0.8987	+++++ 0.7856	1.0316 0.7170	0.9228 0.8347	QuaF		0.6953	0.0016869						0.9970		0.9900
Vinyl bromide	2.1491 2.0703	2.0058 1.9272	2.0510 2.0412	1.9145 1.7901	1.9322 2.0281	Ave		1.9910				5.1		30.0			
2-Methylbutane	+++++ 2.2089	+++++ 2.3334	2.8807 2.3793	2.7102 2.0108	2.6625 2.2642	Ave		2.4312				12.0		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20065-1 Analy Batch No.: 41058

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/15/2020 12:53 Calibration End Date: 07/15/2020 22:02 Calibration ID: 2525

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Trichlorofluoromethane	+++++ 7.6415	7.3302 6.9532	7.2372 7.1773	7.0627 6.3869	7.0738 7.6582	Ave		7.1690				5.3		30.0			
Acrolein	+++++ 0.4711	+++++ 0.4181	+++++ 0.4184	0.4992 0.4021	0.5095 0.5220	Ave		0.4629				10.7		30.0			
Acetonitrile	+++++ 0.6988	+++++ 0.7094	+++++ 0.6135	+++++ 0.5975	0.7812 0.6931	Ave		0.6823				9.9		30.0			
Acetone	+++++ 0.9110	+++++ 0.9304	+++++ 0.6754	+++++ 0.6936	1.0611 0.8406	Ave		0.8520				17.4		30.0			
Pentane	+++++ 0.4821	+++++ 0.4312	0.4261 0.4517	0.4516 0.4031	0.4551 0.4993	Ave		0.4500				6.8		30.0			
Isopropyl alcohol	+++++ 2.1014	+++++ 2.2578	2.2437 1.9059	2.1393 1.8107	2.1443 2.1844	Ave		2.0984				7.6		30.0			
Ethyl ether	+++++ 1.5823	+++++ 1.7179	1.6892 1.4436	1.6866 1.4014	1.7000 1.6776	Ave		1.6123				7.7		30.0			
1,1-Dichloroethene	+++++ 1.7249	2.0412 1.8089	1.8106 1.9767	1.8301 1.8207	1.8728 1.9702	Ave		1.8729				5.4		30.0			
Acrylonitrile	+++++ 1.2270	+++++ 1.2920	1.2639 1.1504	1.1345 1.1559	1.2226 1.3208	Ave		1.2209				5.7		30.0			
tert-Butyl alcohol	+++++ 3.1898	+++++ 3.4653	+++++ 3.1572	2.9517 3.0367	3.2177 3.5646	Ave		3.2261				6.8		30.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	+++++ 3.9035	4.2859 4.0539	4.2852 4.3876	4.0468 3.9751	4.0828 4.6459	Ave		4.1852				5.6		30.0			
Methylene Chloride	+++++ 3.2902	+++++ 2.5803	+++++ 2.3181	+++++ 1.9168	5.7073 1.9872	Lin2	1.5412	1.8268							0.9970		0.9900
3-Chloropropene	+++++ 1.8910	+++++ 1.8749	2.0919 1.9929	2.1927 1.7599	1.4541 1.9199	Ave		1.8972				11.8		30.0			
Carbon disulfide	+++++ 6.1040	6.7068 6.2097	6.3602 6.6310	6.2105 5.9090	6.2702 6.5952	Ave		6.3330				4.2		30.0			
trans-1,2-Dichloroethene	2.3091 1.9677	2.1070 1.9872	2.0426 2.1606	2.0421 1.9607	2.0342 2.2733	Ave		2.0885				5.9		30.0			
2-Methylpentane	+++++ 5.0593	5.6313 4.9815	5.3910 5.0854	5.1906 4.2355	5.2357 4.8259	Ave		5.0707				7.7		30.0			
Methyl tert-butyl ether	5.6440 6.1368	5.5129 6.4086	5.7792 5.2511	5.3905 5.6677	5.9122 6.6166	Ave		5.8319				7.6		30.0			
1,1-Dichloroethane	5.4119 4.4553	4.9725 4.3964	4.7607 4.5221	4.5225 3.9701	4.4984 4.5753	Ave		4.6085				8.3		30.0			
Vinyl acetate	+++++ 4.7741	4.0850 5.0766	4.3529 4.1909	4.0726 4.2481	4.6001 5.3289	Ave		4.5255				10.0		30.0			
2-Butanone (MEK)	+++++ 0.9700	+++++ 1.0378	+++++ 0.7998	1.0592 0.8802	0.9773 1.0823	Ave		0.9724				10.5		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20065-1 Analy Batch No.: 41058

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/15/2020 12:53 Calibration End Date: 07/15/2020 22:02 Calibration ID: 2525

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Hexane	+++++ 1.7946	2.0497 1.7628	1.8140 1.8085	1.9087 1.5772	1.8450 1.8254	Ave		1.8206				6.8		30.0			
cis-1,2-Dichloroethene	+++++ 2.0591	2.0958 2.1033	2.1423 2.2017	2.1207 1.9964	2.1027 2.2882	Ave		2.1234				3.9		30.0			
Ethyl acetate	+++++ 4.1713	+++++ 4.4135	3.8527 3.2263	3.7029 3.5163	4.0786 4.3461	Ave		3.9135				10.6		30.0			
Chloroform	+++++ 5.2969	5.4095 5.2092	5.6274 5.3344	5.3528 4.7375	5.2742 5.6039	Ave		5.3162				4.9		30.0			
Tetrahydrofuran	+++++ 2.3156	+++++ 2.4131	2.3381 1.8591	2.1515 1.9545	2.3120 2.3905	Ave		2.2168				9.4		30.0			
1,1,1-Trichloroethane	6.2225 5.6017	5.6457 5.6775	5.7274 5.8259	5.5099 5.3260	5.5863 6.2281	Ave		5.7351				5.1		30.0			
1,2-Dichloroethane	0.5083 0.4103	0.4099 0.4159	0.4512 0.4473	0.4272 0.3777	0.4179 0.5557	Ave		0.4421				11.9		30.0			
Benzene	+++++ 0.7505	0.8733 0.7505	0.8372 0.8546	0.8031 0.7199	0.7750 1.0611	Ave		0.8250				12.4		30.0			
Cyclohexane	+++++ 0.1341	0.1333 0.1352	0.1452 0.1561	0.1453 0.1314	0.1381 0.1921	Ave		0.1456				13.1		30.0			
1-Butanol	+++++ 0.0781	+++++ 0.0743	+++++ 0.0772	0.0733 0.0656	0.0739 0.1012	Ave		0.0777				14.3		30.0			
Carbon tetrachloride	0.5563 0.5577	0.4978 0.4738	0.5435 0.6962	0.5450 0.6097	0.3090 0.9050	Ave		0.5694				27.1		30.0			
2,3-Dimethylpentane	+++++ 0.1983	0.2106 0.2010	0.2194 0.2241	0.2069 0.1869	0.2030 0.2685	Ave		0.2132				11.0		30.0			
Thiophene	+++++ 0.4034	0.4148 0.4072	0.4617 0.4575	0.4329 0.3810	0.4104 0.5633	Ave		0.4369				12.4		30.0			
2,2,4-Trimethylpentane	+++++ 1.3446	1.3651 1.3428	1.4648 1.4383	1.3928 1.1636	1.3770 1.6763	Ave		1.3961				9.7		30.0			
Heptane	0.3396 0.2883	0.2887 0.2913	0.3110 0.3276	0.3000 0.2799	0.2830 0.4205	Ave		0.3130				13.6		30.0			
1,2-Dichloropropane	0.3661 0.2897	0.3067 0.2904	0.3397 0.2919	0.2983 0.2586	0.2865 0.3823	Ave		0.3110				12.6		30.0			
Trichloroethene	0.3156 0.2515	0.2561 0.2483	0.2757 0.2980	0.2585 0.2500	0.2502 0.3904	Ave		0.2794				16.2		30.0			
Dibromomethane	0.4023 0.2977	0.3101 0.2992	0.3191 0.3305	0.2995 0.2827	0.2997 0.4321	Ave		0.3273				15.2		30.0			
Bromodichloromethane	+++++ 0.5754	+++++ 0.5753	0.5437 0.6541	0.5383 0.5603	0.5319 +++++	Ave		0.5684				7.3		30.0			
1,4-Dioxane	+++++ 0.0886	+++++ 0.0942	+++++ 0.0891	0.0835 0.0881	0.0795 0.1324	Ave		0.0936				18.9		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20065-1 Analy Batch No.: 41058

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/15/2020 12:53 Calibration End Date: 07/15/2020 22:02 Calibration ID: 2525

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Methyl methacrylate	+++++ 0.2946	+++++ 0.3103	0.2573 0.2534	0.2408 0.2681	0.2650 0.4145	Ave		0.2880				19.4		30.0			
Methylcyclohexane	+++++ 0.4784	+++++ 0.4866	0.5085 0.5387	0.5059 +++++	0.4715 +++++	Lin1	-0.005	0.5164							0.9970		0.9900
4-Methyl-2-pentanone (MIBK)	+++++ 0.5257	+++++ 0.5506	0.4798 0.4272	0.4276 0.4429	0.4833 0.6622	Ave		0.4999				15.9		30.0			
cis-1,3-Dichloropropene	0.4715 0.4069	0.3657 0.4050	0.4416 0.4521	0.4025 0.3688	0.3987 0.6012	Ave		0.4314				15.9		30.0			
trans-1,3-Dichloropropene	0.4451 0.4276	0.3859 0.4239	0.4000 0.4147	0.3778 0.3770	0.3752 0.5086	Ave		0.4136				10.0		30.0			
Toluene	0.9976 0.8303	0.8131 0.8519	0.8808 0.8197	0.8049 0.8291	0.8166 1.0347	Ave		0.8679				9.4		30.0			
1,1,2-Trichloroethane	0.2691 0.2666	0.2513 0.2657	0.2655 0.2512	0.2556 0.2454	0.2570 0.3114	Ave		0.2639				7.0		30.0			
2-Hexanone	+++++ 0.2783	+++++ 0.2985	0.2520 0.2325	0.2065 0.2559	0.2419 0.3177	Ave		0.2604				13.9		30.0			
C8 Range	+++++ 2.9967	+++++ 3.0060	+++++ 2.8947	2.8510 2.7267	2.9104 3.2259	Ave		2.9445				5.3		30.0			
Octane	0.3075 0.3094	0.2848 0.3232	0.3211 0.3292	0.2863 0.3255	0.2889 0.4013	Ave		0.3177				10.6		30.0			
Dibromochloromethane	+++++ 0.4483	+++++ 0.4467	0.4026 0.4960	0.3695 0.4929	0.3670 0.6692	Ave		0.4615				21.1		30.0			
1,2-Dibromoethane (EDB)	+++++ 0.4161	+++++ 0.4082	0.4144 0.4022	0.3736 0.3693	0.3848 0.5056	Ave		0.4093				10.5		30.0			
Tetrachloroethene	0.3674 0.2723	0.2734 0.2738	0.2801 0.2906	0.2680 0.2878	0.2639 0.3913	Ave		0.2968				15.0		30.0			
Chlorobenzene	0.7186 0.5773	0.5880 0.5855	0.6385 0.5867	0.5721 0.5886	0.5736 0.8305	Ave		0.6259				13.5		30.0			
Ethylbenzene	1.1372 1.1322	1.0173 1.1882	1.0888 1.0871	1.0214 1.1607	1.0636 1.5019	Ave		1.1398				12.2		30.0			
m-Xylene & p-Xylene	0.8852 0.8939	0.7658 0.9578	0.8508 0.8687	0.7705 0.9524	0.8537 1.2693	Ave		0.9068				15.7		30.0			
Nonane	0.6177 0.6362	0.5704 0.6627	0.6093 0.5954	0.5666 0.5914	0.6115 0.7348	Ave		0.6196				8.0		30.0			
Bromoform	+++++ 0.3546	+++++ 0.3713	0.2715 0.4397	0.2656 0.5215	0.2437 +++++	Ave		0.3526				28.9		30.0			
Styrene	+++++ 0.5529	+++++ 0.6101	0.4349 0.5690	0.4302 0.6281	0.5005 +++++	Ave		0.5322				14.9		30.0			
o-Xylene	0.9559 0.9708	0.8496 1.0446	0.9335 0.8980	0.8180 0.9864	0.8980 1.2389	Ave		0.9594				12.4		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20065-1 Analy Batch No.: 41058

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/15/2020 12:53 Calibration End Date: 07/15/2020 22:02 Calibration ID: 2525

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
1,1,2,2-Tetrachloroethane	0.5558 0.6855	0.5610 0.7271	0.6342 0.5714	0.5784 0.6473	0.6030 0.8217	Ave		0.6385				13.4		30.0			
1,2,3-Trichloropropane	0.1702 0.1944	0.1583 0.2095	0.1838 0.1687	0.1638 0.1948	0.1762 0.2559	Ave		0.1876				15.4		30.0			
Isopropylbenzene	1.2402 1.1941	1.1108 1.3251	1.1438 1.1098	1.0215 1.2864	1.0983 1.6613	Ave		1.2191				14.9		30.0			
Propylbenzene	+++++ 0.2825	+++++ 0.3253	0.2736 0.2687	0.2415 0.3289	0.2637 0.4465	Ave		0.3038				21.4		30.0			
2-Chlorotoluene	+++++ 0.2592	+++++ 0.2872	0.2710 0.2623	0.2288 0.2940	0.2418 0.3929	Ave		0.2797				18.1		30.0			
4-Ethyltoluene	+++++ 1.1074	+++++ 1.2604	+++++ 1.0289	0.9181 1.2284	1.0288 1.6465	Ave		1.1741				20.4		30.0			
1,3,5-Trimethylbenzene	+++++ 0.4368	+++++ 0.4968	0.3930 0.4045	0.3585 0.4911	0.3936 0.6791	Ave		0.4567				22.4		30.0			
Alpha Methyl Styrene	+++++ 0.4048	+++++ 0.4735	0.2936 0.3991	0.2717 0.4932	0.3243 +++++	Ave		0.3800				22.7		30.0			
Decane	0.6988 0.8049	0.6274 0.8389	0.7354 0.6506	0.6689 0.6958	0.7249 0.8452	Ave		0.7291				10.6		30.0			
tert-Butylbenzene	+++++ 1.0241	+++++ 1.1614	0.9380 0.9285	0.8270 1.1445	0.9112 +++++	Ave		0.9907				12.6		30.0			
1,2,4-Trimethylbenzene	+++++ 1.0345	+++++ 1.1655	0.9131 0.9145	0.8360 1.1145	0.9040 1.5631	Ave		1.0557				22.2		30.0			
sec-Butylbenzene	+++++ 1.4993	+++++ 1.6585	1.3314 1.3170	1.2005 1.6120	1.3273 2.2776	Ave		1.5279				22.4		30.0			
1,3-Dichlorobenzene	+++++ 0.5455	0.5044 0.6031	0.5566 0.5521	0.4765 0.6624	0.4744 +++++	Ave		0.5469				11.7		30.0			
Benzyl chloride	+++++ 0.8751	+++++ 1.0474	0.7124 0.8377	0.6061 0.9809	0.7535 +++++	Ave		0.8304				18.5		30.0			
1,4-Dichlorobenzene	0.6413 0.5408	0.5101 0.5990	0.5444 0.5414	0.4796 0.6407	0.4848 +++++	Ave		0.5536				11.0		30.0			
4-Isopropyltoluene	+++++ 1.1679	+++++ 1.2998	0.9828 1.0198	0.9276 1.2756	1.0102 1.7566	Ave		1.1800				22.9		30.0			
1,2,3-Trimethylbenzene	+++++ 1.0618	+++++ 1.1855	0.9251 0.9156	0.8483 1.0893	0.9259 1.4615	QuaF		0.7805	0.0423381						0.9990		0.9900
Indane	0.8384 0.8821	0.7313 0.9932	0.8372 0.8235	0.7133 1.0105	0.7725 +++++	Ave		0.8447				12.3		30.0			
1,2-Dichlorobenzene	0.6432 0.5518	0.4905 0.6239	0.5355 0.5398	0.4722 0.6832	0.4777 +++++	Ave		0.5575				13.7		30.0			
Indene	+++++ 0.7450	+++++ 0.8842	0.6007 0.7231	0.5560 0.8997	0.6415 +++++	Ave		0.7215				18.5		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20065-1 Analy Batch No.: 41058

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/15/2020 12:53 Calibration End Date: 07/15/2020 22:02 Calibration ID: 2525

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Butylbenzene	+++++ 1.3773	+++++ 1.5154	1.1198 1.1362	1.0563 1.3704	1.1878 1.9086	Ave		1.3340				21.0		30.0			
Undecane	0.7221 0.9229	0.7283 0.9276	0.8216 0.6595	0.7271 0.7266	0.7920 0.8567	Ave		0.7884				11.6		30.0			
1,2-Dibromo-3-Chloropropane	0.2114 0.2614	0.1602 0.3019	0.1682 0.2668	0.1753 +++++	0.1926 +++++	Ave		0.2172				24.4		30.0			
1,2,4,5-Tetramethylbenzene	+++++ 1.1119	+++++ 1.2502	0.9259 0.9867	0.8456 1.2107	0.9327 +++++	Ave		1.0377				14.9		30.0			
Dodecane	0.7645 0.7764	0.6051 0.7934	0.7779 0.5850	0.6242 0.4510	0.6309 0.7512	Ave		0.6760				16.8		30.0			
1,2,4-Trichlorobenzene	+++++ 0.3988	0.4081 0.4950	0.3863 0.4369	0.3315 0.5217	0.3140 +++++	Ave		0.4115				17.5		30.0			
Naphthalene	+++++ 1.0566	1.1752 1.2521	1.1083 1.0448	0.8864 1.1202	0.8263 +++++	Ave		1.0587				13.4		30.0			
Hexachlorobutadiene	0.4662 0.4794	0.4035 0.5945	0.4304 0.5014	0.3894 0.7054	0.3787 +++++	Ave		0.4832				22.1		30.0			
1,2,3-Trichlorobenzene	+++++ 0.3783	0.4225 0.4963	0.4013 0.4444	0.3212 0.3911	0.2862 +++++	Ave		0.3927				17.0		30.0			
2-Methylnaphthalene	+++++ 0.4572	0.8046 0.5361	0.7131 0.7659	0.4625 0.4189	0.3883 0.9683	Ave		0.6128				33.5		50.0			
1-Methylnaphthalene	+++++ 0.5421	1.0639 0.6409	0.8535 0.8863	0.5798 0.4673	0.4492 1.0796	Ave		0.7292				33.8		50.0			
4-Bromofluorobenzene (Surr)	0.7827 0.8079	0.7779 0.8324	0.7840 0.8411	0.7990 0.8057	0.8034 0.8963	Ave		0.8130				4.4		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20065-1 Analy Batch No.: 41058

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/15/2020 12:53 Calibration End Date: 07/15/2020 22:02 Calibration ID: 2525

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 140-41058/8	GG15IC01.D
Level 2	IC 140-41058/9	GG15IC02.D
Level 3	IC 140-41058/10	GG15IC03.D
Level 4	IC 140-41058/11	GG15IC04.D
Level 5	IC 140-41058/12	GG15IC05.D
Level 6	IC 140-41058/13	GG15IC06.D
Level 7	ICIS 140-41058/14	GG15IC07.D
Level 8	IC 140-41058/6	GG15IC08.D
Level 9	IC 140-41058/4	GG15IC09.D
Level 10	IC 140-41058/21	GG15IC10.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
Chlorodifluoromethane	CBM	Ave	+++++ 190134	8363 355286	15139 808438	30180 1479303	75352 2523928	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Propene	CBM	Lin2	+++++ 183637	+++++ 260607	+++++ 513182	+++++ 840024	+++++ 1310261	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	+++++ 16.0
Dichlorodifluoromethane	CBM	Ave	+++++ 334364	14062 640703	27563 1497719	50823 2847427	133157 4813201	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Chloromethane	CBM	Ave	+++++ 30761	+++++ 61480	+++++ 138821	5752 259202	14151 404367	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,2-Dichloro-1,1,2,2-tetrafluoroethane	CBM	Ave	3962 166732	7003 318591	14129 775546	24791 1559954	67629 2609205	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Vinyl chloride	CBM	Ave	2928 118405	5029 232593	10498 549991	20179 1052139	51891 1653274	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Butane	CBM	Ave	+++++ 165723	+++++ 327446	+++++ 761829	30031 1442650	77021 2270081	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,3-Butadiene	CBM	Ave	1993 83118	3691 165955	7467 390687	14135 747983	35829 1182241	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Bromomethane	CBM	Ave	+++++ 97197	4549 195553	8885 471335	16433 911092	41050 1484900	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Chloroethane	CBM	Ave	+++++ 55110	2683 114248	4976 266623	9915 506341	24335 837824	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Ethanol	CBM	QuaF	+++++ 173032	+++++ 402389	+++++ 807634	35979 1604009	82833 2796885	+++++ 5.00	+++++ 10.0	+++++ 20.0	0.800 40.0	2.00 80.0
Vinyl bromide	CBM	Ave	2028 89335	3745 172585	7364 419720	13354 800924	34687 1359074	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Methylbutane	CBM	Ave	+++++ 95313	+++++ 208963	10343 489230	18904 899697	47798 1517271	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Trichlorofluoromethane	CBM	Ave	+++++ 329731	13686 622680	25985 1475791	49263 2857645	126990 5131943	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20065-1 Analy Batch No.: 41058

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/15/2020 12:53 Calibration End Date: 07/15/2020 22:02 Calibration ID: 2525

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
Acrolein	CBM	Ave	+++++ 20330	+++++ 37446	+++++ 86031	3482 179895	9147 349789	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Acetonitrile	CBM	Ave	+++++ 30152	+++++ 63532	+++++ 126158	+++++ 267329	14024 464495	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
Acetone	CBM	Ave	+++++ 117934	+++++ 249951	+++++ 416606	+++++ 930983	57147 1689823	+++++ 3.00	+++++ 6.00	+++++ 12.0	+++++ 24.0	1.20 48.0
Pentane	CBM	Ave	+++++ 20801	+++++ 38616	1530 92879	3150 180355	8170 334580	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Isopropyl alcohol	CBM	Ave	+++++ 272032	+++++ 606574	24168 1175696	44765 2430401	115484 4391364	+++++ 3.00	+++++ 6.00	0.240 12.0	0.480 24.0	1.20 48.0
Ethyl ether	CBM	Ave	+++++ 68276	+++++ 153848	6065 296840	11764 627006	30519 1124219	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,1-Dichloroethene	CBM	Ave	+++++ 74430	3811 161995	6501 406439	12765 814607	33621 1320258	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Acrylonitrile	CBM	Ave	+++++ 52944	+++++ 115706	4538 236547	7913 517172	21948 885078	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
tert-Butyl alcohol	CBM	Ave	+++++ 137641	+++++ 310331	+++++ 649174	20588 1358711	57764 2388702	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,1,2-Trichloro-1,2,2-trifluoroetha ne	CBM	Ave	+++++ 168437	8002 363043	15386 902182	28227 1778549	73295 3113337	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Methylene Chloride	CBM	Lin2	+++++ 141971	+++++ 231075	+++++ 476658	+++++ 857601	102459 1331674	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
3-Chloropropene	CBM	Ave	+++++ 81595	+++++ 167901	7511 409790	15294 787404	26105 1286544	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Carbon disulfide	CBM	Ave	+++++ 263386	12522 556101	22836 1363476	43319 2643847	112564 4419618	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
trans-1,2-Dichloroethene	CBM	Ave	2179 84905	3934 177962	7334 444268	14244 877242	36518 1523405	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Methylpentane	CBM	Ave	+++++ 218309	10514 446107	19356 1045667	36205 1895083	93993 3233937	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Methyl tert-butyl ether	CBM	Ave	5326 264802	10293 573910	20750 1079721	37599 2535853	106137 4433940	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,1-Dichloroethane	CBM	Ave	5107 192246	9284 393709	17093 929825	31545 1776307	80757 3066026	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Vinyl acetate	CBM	Ave	+++++ 206001	7627 454630	15629 861733	28407 1900706	82582 3571055	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Butanone (MEK)	CBM	Ave	+++++ 41854	+++++ 92943	+++++ 164454	7388 393821	17544 725294	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Hexane	CBM	Ave	+++++ 77435	3827 157864	6513 371862	13313 705698	33121 1223253	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
cis-1,2-Dichloroethene	CBM	Ave	+++++ 88852	3913 188361	7692 452709	14792 893239	37748 1533364	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20065-1 Analy Batch No.: 41058

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/15/2020 12:53 Calibration End Date: 07/15/2020 22:02 Calibration ID: 2525

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
Ethyl acetate	CBM	Ave	+++++ 179990	+++++ 395242	13833 663392	25828 1573267	73220 2912424	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Chloroform	CBM	Ave	+++++ 228561	10100 466501	20205 1096869	37336 2119675	94684 3755288	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Tetrahydrofuran	CBM	Ave	+++++ 99920	+++++ 216098	8395 382270	15007 874487	41506 1601942	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,1,1-Trichloroethane	CBM	Ave	5872 241713	10541 508437	20564 1197930	38432 2382984	100286 4173583	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2-Dichloroethane	DFBZ	Ave	4278 157739	6892 329677	13192 753828	25307 1474272	66709 2615527	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Benzene	DFBZ	Ave	+++++ 288567	14684 594896	24475 1440140	47574 2810243	123712 4994527	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Cyclohexane	DFBZ	Ave	+++++ 51549	2241 107133	4244 263114	8607 513051	22047 904459	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1-Butanol	DFBZ	Ave	+++++ 30009	+++++ 58927	+++++ 130076	4340 256216	11804 476385	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Carbon tetrachloride	DFBZ	Ave	4682 214433	8371 375521	15888 1173167	32283 2379973	49334 4259967	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2,3-Dimethylpentane	DFBZ	Ave	+++++ 76259	3542 159316	6414 377710	12254 729530	32408 1263926	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Thiophene	DFBZ	Ave	+++++ 155103	6975 322722	13497 770961	25644 1487281	65514 2651503	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2,2,4-Trimethylpentane	DFBZ	Ave	+++++ 516981	22954 1064296	42823 2423728	82504 4542162	219821 7890499	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Heptane	DFBZ	Ave	2858 110833	4854 230866	9091 551982	17773 1092735	45176 1979515	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2-Dichloropropane	DFBZ	Ave	3081 111371	5158 230193	9930 491819	17668 1009494	45740 1799564	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Trichloroethene	DFBZ	Ave	2656 96687	4307 196817	8061 502158	15315 975759	39945 1837783	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Dibromomethane	DFBZ	Ave	3386 114469	5214 237166	9330 557019	17739 1103503	47845 2034131	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Bromodichloromethane	DFBZ	Ave	+++++ 221235	+++++ 455959	15895 1102256	31890 2187194	84911 +++++	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
1,4-Dioxane	DFBZ	Ave	+++++ 34057	+++++ 74662	+++++ 150131	4949 344071	12691 623125	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Methyl methacrylate	DFBZ	Ave	+++++ 113285	+++++ 245965	7521 427105	14265 1046475	42312 1951045	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Methylcyclohexane	DFBZ	Lin1	+++++ 183918	+++++ 385717	14867 907797	29969 +++++	75262 +++++	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 +++++	0.400 +++++
4-Methyl-2-pentanone (MIBK)	DFBZ	Ave	+++++ 202106	+++++ 436411	14028 719955	25328 1729065	77155 3117228	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20065-1 Analy Batch No.: 41058

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/15/2020 12:53 Calibration End Date: 07/15/2020 22:02 Calibration ID: 2525

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
cis-1,3-Dichloropropene	DFBZ	Ave	3968 156457	6149 321027	12909 761819	23842 1439675	63645 2829914	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
trans-1,3-Dichloropropene	CBZd 5	Ave	3349 143535	5749 299199	10747 677141	20954 1328848	54746 2709174	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Toluene	CBZd 5	Ave	7507 278724	12112 601268	23667 1338570	44637 2922631	119162 5511722	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,1,2-Trichloroethane	CBZd 5	Ave	2025 89505	3743 187522	7133 410239	14175 865146	37510 1659004	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Hexanone	CBZd 5	Ave	+++++ 93421	+++++ 210723	6772 379734	11454 902045	35303 1692474	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
C8 Range	CBZd 5	Ave	+++++ 1006020	+++++ 2121726	+++++ 4726851	158108 9611519	424704 17183525	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Octane	CBZd 5	Ave	2314 103853	4243 228134	8629 537611	15880 1147426	42155 2137497	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Dibromochloromethane	CBZd 5	Ave	+++++ 150495	+++++ 315285	10817 809979	20490 1737563	53552 3564469	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2-Dibromoethane (EDB)	CBZd 5	Ave	+++++ 139684	+++++ 288099	11135 656699	20720 1301837	56158 2692950	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Tetrachloroethene	CBZd 5	Ave	2765 91406	4072 193223	7527 474507	14862 1014330	38507 2084183	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Chlorobenzene	CBZd 5	Ave	5407 193814	8758 413252	17157 957998	31726 2074966	83702 4423608	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Ethylbenzene	CBZd 5	Ave	8557 380102	15154 838637	29257 1775083	56644 4091382	155214 7999979	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
m-Xylene & p-Xylene	CBZd 5	Ave	13322 600207	22814 1352087	45725 2837114	85460 6714557	249164 13522466	0.0400 2.00	0.0800 4.00	0.160 8.00	0.320 16.0	0.800 32.0
Nonane	CBZd 5	Ave	4648 213591	8497 467764	16373 972283	31424 2084702	89239 3913851	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Bromoform	CBZd 5	Ave	+++++ 119045	+++++ 262090	7295 717985	14728 1838115	35566 +++++	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
Styrene	CBZd 5	Ave	+++++ 185604	+++++ 430593	11687 929210	23856 2214193	73037 +++++	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
o-Xylene	CBZd 5	Ave	7193 325908	12655 737287	25083 1466374	45362 3477069	131043 6599312	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,1,2,2-Tetrachloroethane	CBZd 5	Ave	4182 230136	8357 513238	17040 933008	32079 2281671	87989 4376816	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2,3-Trichloropropane	CBZd 5	Ave	1281 65266	2358 147848	4940 275495	9084 686599	25717 1363256	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Isopropylbenzene	CBZd 5	Ave	9332 400866	16547 935269	30733 1812280	56648 4534572	160270 8849449	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Propylbenzene	CBZd 5	Ave	+++++ 94843	+++++ 229581	7353 438717	13393 1159290	38488 2378468	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20065-1 Analy Batch No.: 41058

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/15/2020 12:53 Calibration End Date: 07/15/2020 22:02 Calibration ID: 2525

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
2-Chlorotoluene	CBZd 5	Ave	+++++ 87009	+++++ 202724	7282 428375	12690 1036411	35289 2092822	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
4-Ethyltoluene	CBZd 5	Ave	+++++ 371754	+++++ 889602	+++++ 1680195	50918 4330157	150122 8770407	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,3,5-Trimethylbenzene	CBZd 5	Ave	+++++ 146651	+++++ 350662	10560 660577	19881 1731230	57435 3617290	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Alpha Methyl Styrene	CBZd 5	Ave	+++++ 135899	+++++ 334215	7888 651651	15069 1738531	47326 +++++	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
Decane	CBZd 5	Ave	5258 270199	9346 592142	19761 1062382	37095 2452798	105777 4502247	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
tert-Butylbenzene	CBZd 5	Ave	+++++ 343785	+++++ 819734	25204 1516160	45863 4034224	132968 +++++	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
1,2,4-Trimethylbenzene	CBZd 5	Ave	+++++ 347304	+++++ 822650	24535 1493254	46363 3928728	131917 8326250	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
sec-Butylbenzene	CBZd 5	Ave	+++++ 503313	+++++ 1170579	35776 2150499	66579 5682261	193690 12132121	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,3-Dichlorobenzene	CBZd 5	Ave	+++++ 183120	7514 425697	14955 901583	26425 2334823	69225 +++++	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
Benzyl chloride	CBZd 5	Ave	+++++ 293789	+++++ 739302	19143 1367829	33613 3457493	109953 +++++	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
1,4-Dichlorobenzene	CBZd 5	Ave	4826 181563	7598 422766	14629 884085	26600 2258368	70751 +++++	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
4-Isopropyltoluene	CBZd 5	Ave	+++++ 392070	+++++ 917420	26407 1665288	51441 4496508	147418 9356856	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2,3-Trimethylbenzene	CBZd 5	QuaF	+++++ 356442	+++++ 836772	24859 1495110	47045 3839924	135108 7785122	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Indane	CBZd 5	Ave	6309 296113	10894 701017	22495 1344704	39559 3561978	112727 +++++	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
1,2-Dichlorobenzene	CBZd 5	Ave	4840 185243	7306 440348	14388 881407	26189 2408327	69708 +++++	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
Indene	CBZd 5	Ave	+++++ 250094	+++++ 624096	16141 1180841	30832 3171592	93609 +++++	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
Butylbenzene	CBZd 5	Ave	+++++ 462362	+++++ 1069578	30089 1855288	58580 4830521	173331 10166628	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Undecane	CBZd 5	Ave	5434 309838	10848 654717	22076 1076844	40322 2561417	115570 4563495	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2-Dibromo-3-Chloropropane	CBZd 5	Ave	1591 87769	2387 213065	4519 435714	9721 +++++	28099 +++++	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 +++++	0.400 +++++
1,2,4,5-Tetramethylbenzene	CBZd 5	Ave	+++++ 373275	+++++ 882392	24879 1611182	46893 4267744	136106 +++++	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
Dodecane	CBZd 5	Ave	5753 260636	9013 560014	20902 955266	34618 1589826	92067 4001315	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20065-1 Analy Batch No.: 41058

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/15/2020 12:53 Calibration End Date: 07/15/2020 22:02 Calibration ID: 2525

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
1,2,4-Trichlorobenzene	CBZd5	Ave	+++++ 133880	6079 349392	10379 713366	18382 1839108	45814 +++++	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
Naphthalene	CBZd5	Ave	+++++ 354697	17506 883787	29780 1706005	49157 3948849	120579 +++++	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
Hexachlorobutadiene	CBZd5	Ave	3508 160933	6011 419604	11566 818788	21594 2486557	55266 +++++	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
1,2,3-Trichlorobenzene	CBZd5	Ave	+++++ 127006	6294 350335	10782 725748	17814 1378728	41759 +++++	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
2-Methylnaphthalene	CBZd5	Ave	+++++ 153485	11986 378412	19163 1250682	25651 1476813	56670 5158127	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1-Methylnaphthalene	CBZd5	Ave	+++++ 182006	15849 452400	22935 1447360	32157 1647368	65547 5750777	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
4-Bromofluorobenzene (Surr)	CBZd5	Ave	1177868 1084929	1158753 1175087	1053301 1373408	1107728 1420018	1172428 1193530	4.00 4.00	4.00 4.00	4.00 4.00	4.00 4.00	4.00 4.00

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD
Lin2 = Linear 1/conc^2 ISTD
QuaF = Quadratic ISTD forced zero

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20065-1 Analy Batch No.: 41058

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/15/2020 12:53 Calibration End Date: 07/15/2020 22:02 Calibration ID: 2525

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 140-41058/8	GG15IC01.D
Level 2	IC 140-41058/9	GG15IC02.D
Level 3	IC 140-41058/10	GG15IC03.D
Level 4	IC 140-41058/11	GG15IC04.D
Level 5	IC 140-41058/12	GG15IC05.D
Level 6	IC 140-41058/13	GG15IC06.D
Level 7	ICIS 140-41058/14	GG15IC07.D
Level 8	IC 140-41058/6	GG15IC08.D
Level 9	IC 140-41058/4	GG15IC09.D
Level 10	IC 140-41058/21	GG15IC10.D

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
Chlorodifluoromethane	+++++	10.2						50				
Propene	+++++	+++++	+++++	+++++	+++++	0.9						50
Dichlorodifluoromethane	+++++	3.3						50				
Chloromethane	+++++	+++++	+++++	18.5						50		
1,2-Dichloro-1,1,2,2-tetrafluoroethane	11.1						50					
Vinyl chloride	13.5						50					
Butane	+++++	+++++	+++++	14.1						50		
1,3-Butadiene	9.4						50					
Bromomethane	+++++	6.8						50				
Chloroethane	+++++	9.3						50				
Ethanol	+++++	+++++	+++++	47.9						50		
Vinyl bromide	7.9						50					
2-Methylbutane	+++++	+++++	18.5						50			
Trichlorofluoromethane	+++++	2.2						50				

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20065-1 Analy Batch No.: 41058

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/15/2020 12:53 Calibration End Date: 07/15/2020 22:02 Calibration ID: 2525

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
Acrolein	+++++	+++++	+++++	7.8						50		
Acetonitrile	+++++	+++++	+++++	+++++	14.5						50	
Acetone	+++++	+++++	+++++	+++++	24.5						80	
Pentane	+++++	+++++	-5.3						50			
Isopropyl alcohol	+++++	+++++	6.9						50			
Ethyl ether	+++++	+++++	4.8						50			
1,1-Dichloroethene	+++++	9.0						50				
Acrylonitrile	+++++	+++++	3.5						50			
tert-Butyl alcohol	+++++	+++++	+++++	-8.5						50		
1,1,2-Trichloro-1,2,2-trifluoroethane	+++++	2.4						50				
Methylene Chloride	+++++	+++++	+++++	+++++	1.5						80	
3-Chloropropene	+++++	+++++	10.3						50			
Carbon disulfide	+++++	5.9						50				
trans-1,2-Dichloroethene	10.6						50					
2-Methylpentane	+++++	11.1						50				
Methyl tert-butyl ether	-3.2						50					
1,1-Dichloroethane	17.4						50					
Vinyl acetate	+++++	-9.7						50				
2-Butanone (MEK)	+++++	+++++	+++++	8.9						50		
Hexane	+++++	12.6						50				
cis-1,2-Dichloroethene	+++++	-1.3						50				

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20065-1 Analy Batch No.: 41058

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/15/2020 12:53 Calibration End Date: 07/15/2020 22:02 Calibration ID: 2525

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
Ethyl acetate	+++++	+++++	-1.6						50			
Chloroform	+++++	1.8						50				
Tetrahydrofuran	+++++	+++++	5.5						50			
1,1,1-Trichloroethane	8.5						50					
1,2-Dichloroethane	15.0						50					
Benzene	+++++	5.8						50				
Cyclohexane	+++++	-8.5						50				
1-Butanol	+++++	+++++	+++++	-5.7						50		
Carbon tetrachloride	-2.3						50					
2,3-Dimethylpentane	+++++	-1.2						50				
Thiophene	+++++	-5.1						50				
2,2,4-Trimethylpentane	+++++	-2.2						50				
Heptane	8.5						50					
1,2-Dichloropropane	17.7						50					
Trichloroethene	12.9						50					
Dibromomethane	22.9						50					
Bromodichloromethane	+++++	+++++	-4.3	+++++					50			
1,4-Dioxane	+++++	+++++	+++++	-10.8						50		
Methyl methacrylate	+++++	+++++	-10.7						50			
Methylcyclohexane	+++++	+++++	9.9 +++++	+++++					50			
4-Methyl-2-pentanone (MIBK)	+++++	+++++	-4.0						50			

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20065-1 Analy Batch No.: 41058

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/15/2020 12:53 Calibration End Date: 07/15/2020 22:02 Calibration ID: 2525

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
cis-1,3-Dichloropropene	9.3						50					
trans-1,3-Dichloropropene	7.6						50					
Toluene	15.0						50					
1,1,2-Trichloroethane	2.0						50					
2-Hexanone	+++++	+++++	-3.2						50			
Octane	-3.2						50					
Dibromochloromethane	+++++	+++++	-12.8						50			
1,2-Dibromoethane (EDB)	+++++	+++++	1.3						50			
Tetrachloroethene	23.8						50					
Chlorobenzene	14.8						50					
Ethylbenzene	-0.2						50					
m-Xylene & p-Xylene	-2.4						50					
Nonane	-0.3						50					
Bromoform	+++++	+++++	-23.0	+++++					50			
Styrene	+++++	+++++	-18.3	+++++					50			
o-Xylene	-0.4						50					
1,1,2,2-Tetrachloroethane	-13.0						50					
1,2,3-Trichloropropane	-9.2						50					
Isopropylbenzene	1.7						50					
Propylbenzene	+++++	+++++	-9.9						50			
2-Chlorotoluene	+++++	+++++	-3.1						50			

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20065-1 Analy Batch No.: 41058

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/15/2020 12:53 Calibration End Date: 07/15/2020 22:02 Calibration ID: 2525

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
4-Ethyltoluene	+++++	+++++	+++++	-21.8						50		
1,3,5-Trimethylbenzene	+++++	+++++	-13.9						50			
Alpha Methyl Styrene	+++++	+++++	-22.8	+++++					50			
Decane	-4.2						50					
tert-Butylbenzene	+++++	+++++	-5.3	+++++					50			
1,2,4-Trimethylbenzene	+++++	+++++	-13.5						50			
sec-Butylbenzene	+++++	+++++	-12.9						50			
1,3-Dichlorobenzene	+++++	-7.8		+++++				50				
Benzyl chloride	+++++	+++++	-14.2	+++++					50			
1,4-Dichlorobenzene	15.9			+++++			50					
4-Isopropyltoluene	+++++	+++++	-16.7						50			
1,2,3-Trimethylbenzene	+++++	+++++	17.9						50			
Indane	-0.7			+++++			50					
1,2-Dichlorobenzene	15.4			+++++			50					
Indene	+++++	+++++	-16.7	+++++					50			
Butylbenzene	+++++	+++++	-16.1						50			
Undecane	-8.4						50					
1,2-Dibromo-3-Chloropropane	-2.7		+++++	+++++			50					
1,2,4,5-Tetramethylbenzene	+++++	+++++	-10.8	+++++					50			
Dodecane	13.1						50					
1,2,4-Trichlorobenzene	+++++	-0.8		+++++				50				

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20065-1 Analy Batch No.: 41058

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/15/2020 12:53 Calibration End Date: 07/15/2020 22:02 Calibration ID: 2525

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
Naphthalene	+++++	11.0		+++++				80				
Hexachlorobutadiene	-3.5			+++++			50					
1,2,3-Trichlorobenzene	+++++	7.6		+++++				50				
2-Methylnaphthalene	+++++	31.3						80				
1-Methylnaphthalene	+++++	45.9						80				

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC09.D
Lims ID: IC L9
Client ID:
Sample Type: IC Calib Level: 9
Inject. Date: 15-Jul-2020 14:28:30 ALS Bottle#: 15 Worklist Smp#: 4
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016031-004
Misc. Info.: 306866
Operator ID: HMT Instrument ID: MG
Sublist: chrom-MG_TO15*sub17

Method: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 16-Jul-2020 15:14:37 Calib Date: 15-Jul-2020 22:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1066

First Level Reviewer: barlozhetskayaa Date: 16-Jul-2020 15:05:04

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.849	8.843	0.006	95	223712	4.00	4.00	
* 2 1,4-Difluorobenzene	114	11.033	11.026	0.007	96	1951827	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.757	15.754	0.003	91	1762491	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.401	17.397	0.004	82	1420018	4.00	3.96	
6 Chlorodifluoromethane	51	3.705	3.708	-0.003	96	1479303	8.00	6.50	
7 Propene	41	3.721	3.719	0.002	99	840024	8.00	7.25	
8 Dichlorodifluoromethane	85	3.769	3.770	-0.001	100	2847427	8.00	6.98	
9 Chloromethane	52	3.953	3.952	0.001	98	259202	8.00	6.66	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.958	3.960	-0.002	95	1559954	8.00	7.38	
11 Acetaldehyde	44	4.104	4.111	-0.007	96	1564340	40.0	31.6	
12 Vinyl chloride	62	4.120	4.122	-0.002	99	1052139	8.00	6.88	
13 Butane	43	4.212	4.210	0.002	85	1442650	8.00	6.84	
14 Butadiene	54	4.212	4.210	0.002	68	747983	8.00	6.93	
15 Bromomethane	94	4.530	4.531	-0.001	98	911092	8.00	7.14	
16 Chloroethane	64	4.670	4.673	-0.003	98	506341	8.00	6.89	
17 Ethanol	31	4.789	4.804	-0.015	98	1604009	40.0	37.8	
18 Vinyl bromide	106	4.977	4.975	0.002	98	800924	8.00	7.19	
19 2-Methylbutane	43	5.026	5.025	0.001	88	899697	8.00	6.62	
20 Trichlorofluoromethane	101	5.247	5.246	0.001	99	2857645	8.00	7.13	
21 Acrolein	56	5.258	5.263	-0.005	93	179895	8.00	6.95	
22 Acetonitrile	40	5.322	5.322	0.000	98	267329	8.00	7.01	
23 Acetone	58	5.366	5.385	-0.019	98	930983	24.0	19.5	
24 Pentane	72	5.468	5.467	0.001	98	180355	8.00	7.17	
25 Isopropyl alcohol	45	5.479	5.507	-0.028	96	2430401	24.0	20.7	
26 Ethyl ether	31	5.630	5.650	-0.020	89	627006	8.00	6.95	
27 1,1-Dichloroethene	96	5.953	5.951	0.002	94	814607	8.00	7.78	
28 Acrylonitrile	53	6.061	6.061	0.000	96	517172	8.00	7.57	
29 1,1,2-Trichloro-1,2,2-trifluoroe	101	6.131	6.129	0.002	92	1778549	8.00	7.60	
30 2-Methyl-2-propanol	59	6.077	6.136	-0.059	94	1358711	8.00	7.53	
31 Methylene Chloride	84	6.304	6.299	0.005	93	857601	8.00	7.55	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.315	6.313	0.002	99	787404	8.00	7.42	
33 Carbon disulfide	76	6.460	6.462	-0.002	98	2643847	8.00	7.46	
34 trans-1,2-Dichloroethene	96	7.113	7.109	0.004	96	877242	8.00	7.51	
35 2-Methylpentane	43	7.129	7.129	0.000	92	1895083	8.00	6.68	
36 Methyl tert-butyl ether	73	7.237	7.266	-0.029	95	2535853	8.00	7.77	
37 1,1-Dichloroethane	63	7.533	7.528	0.005	100	1776307	8.00	6.89	
38 Vinyl acetate	43	7.636	7.641	-0.005	100	1900706	8.00	7.51	
39 2-Butanone (MEK)	72	8.083	8.102	-0.019	99	393821	8.00	7.24	
40 Hexane	56	8.110	8.111	-0.001	93	705698	8.00	6.93	
41 Isopropyl ether	45	8.272	8.289	-0.017	95	2536031	8.00	7.27	
42 cis-1,2-Dichloroethene	96	8.520	8.514	0.006	97	893239	8.00	7.52	
43 Ethyl acetate	43	8.703	8.715	-0.012	99	1573267	8.00	7.19	
44 Chloroform	83	8.865	8.857	0.008	96	2119675	8.00	7.13	
45 Tert-butyl ethyl ether	59	8.946	8.969	-0.023	95	2668609	8.00	7.55	
46 Tetrahydrofuran	42	9.259	9.287	-0.028	91	874487	8.00	7.05	
47 1,1,1-Trichloroethane	97	9.890	9.884	0.006	95	2382984	8.00	7.43	
48 1,2-Dichloroethane	62	9.998	9.992	0.006	99	1474272	8.00	6.83	
50 Benzene	78	10.488	10.483	0.005	95	2810243	8.00	6.98	
49 Cyclohexane	69	10.488	10.488	0.000	75	513051	8.00	7.22	
52 Carbon tetrachloride	117	10.510	10.508	0.002	97	2379973	8.00	8.57	
51 n-Butanol	31	10.461	10.524	-0.063	79	256216	8.00	6.76	
53 2,3-Dimethylpentane	71	10.607	10.606	0.001	90	729530	8.00	7.01	
54 Thiophene	84	10.763	10.756	0.007	95	1487281	8.00	6.98	
55 Isooctane	57	11.254	11.250	0.004	98	4542162	8.00	6.67	
56 n-Heptane	71	11.626	11.624	0.002	88	1092735	8.00	7.16	
57 1,2-Dichloropropane	63	11.707	11.701	0.006	89	1009494	8.00	6.65	
58 Trichloroethene	130	11.745	11.739	0.006	91	975759	8.00	7.16	
59 Dibromomethane	93	11.826	11.820	0.006	89	1103503	8.00	6.91	
60 Dichlorobromomethane	83	11.971	11.967	0.004	98	2187194	8.00	7.89	
61 1,4-Dioxane	88	11.987	12.018	-0.031	89	344071	8.00	7.53	
62 Methyl methacrylate	41	12.063	12.070	-0.007	97	1046475	8.00	7.45	
63 Methylcyclohexane	83	12.510	12.507	0.003	97	1800484	8.00	7.16	
64 4-Methyl-2-pentanone (MIBK)	43	12.915	12.933	-0.018	96	1729065	8.00	7.09	
65 cis-1,3-Dichloropropene	75	12.969	12.967	0.002	93	1439675	8.00	6.84	
66 trans-1,3-Dichloropropene	75	13.664	13.661	0.003	95	1328848	8.00	7.29	
67 Toluene	91	13.788	13.786	0.002	94	2922631	8.00	7.64	
68 1,1,2-Trichloroethane	83	13.864	13.859	0.005	97	865146	8.00	7.44	
69 2-Hexanone	58	14.252	14.266	-0.014	95	902045	8.00	7.86	
70 n-Octane	85	14.479	14.479	0.000	90	1147426	8.00	8.20	
71 Chlorodibromomethane	129	14.565	14.562	0.003	97	1737563	8.00	8.54	
72 Ethylene Dibromide	107	14.856	14.852	0.004	97	1301837	8.00	7.22	
73 Tetrachloroethene	129	14.932	14.929	0.003	94	1014330	8.00	7.76	
75 Chlorobenzene	112	15.805	15.802	0.003	90	2074966	8.00	7.52	
74 2,3-Dimethylheptane	43	15.827	15.824	0.003	90	2985724	8.00	6.80	
78 Ethylbenzene	91	16.096	16.092	0.004	99	4091382	8.00	8.15	
79 m-Xylene & p-Xylene	91	16.258	16.254	0.004	99	6714557	16.0	16.8	
80 n-Nonane	57	16.679	16.676	0.003	86	2084702	8.00	7.64	
81 Bromoform	173	16.700	16.700	0.000	94	1838115	8.00	11.8	
82 Styrene	104	16.722	16.718	0.004	97	2214193	8.00	9.44	
83 o-Xylene	91	16.781	16.780	0.001	97	3477069	8.00	8.23	
84 1,1,2,2-Tetrachloroethane	83	17.105	17.101	0.004	99	2281671	8.00	8.11	
85 1,2,3-Trichloropropane	110	17.261	17.260	0.001	99	686599	8.00	8.31	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
86 Isopropylbenzene	105	17.369	17.367	0.002	97	4534572	8.00	8.44	
87 N-Propylbenzene	120	17.908	17.907	0.001	98	1159290	8.00	8.66	
88 2-Chlorotoluene	126	17.951	17.951	0.000	96	1036411	8.00	8.41	
89 4-Ethyltoluene	105	18.059	18.056	0.003	98	4330157	8.00	8.37	
90 1,3,5-Trimethylbenzene	120	18.135	18.131	0.004	91	1731230	8.00	8.60	
92 Alpha Methyl Styrene	118	18.361	18.361	0.000	86	1738531	8.00	10.4	
93 n-Decane	57	18.421	18.420	0.000	92	2452798	8.00	7.64	
94 tert-Butylbenzene	119	18.555	18.554	0.001	92	4034224	8.00	9.24	
95 1,2,4-Trimethylbenzene	105	18.571	18.567	0.004	96	3928728	8.00	8.45	
96 sec-Butylbenzene	105	18.825	18.821	0.004	97	5682261	8.00	8.44	
97 1,3-Dichlorobenzene	146	18.836	18.836	0.000	97	2334823	8.00	9.69	
98 Benzyl chloride	91	18.911	18.909	0.002	97	3457493	8.00	9.45	
99 1,4-Dichlorobenzene	146	18.922	18.922	0.000	95	2258368	8.00	9.26	
100 4-Isopropyltoluene	119	18.987	18.983	0.004	96	4496508	8.00	8.65	
101 1,2,3-Trimethylbenzene	105	19.041	19.036	0.005	99	3839924	8.00	7.84	
102 Butylcyclohexane	83	19.095	19.091	0.004	96	3331499	8.00	7.99	
103 2,3-Dihydroindene	117	19.283	19.279	0.004	93	3561978	8.00	9.57	
104 1,2-Dichlorobenzene	146	19.283	19.280	0.003	81	2408327	8.00	9.80	
106 Indene	116	19.413	19.409	0.004	90	3171592	8.00	9.98	
105 n-Butylbenzene	91	19.418	19.414	0.004	98	4830521	8.00	8.22	
107 Undecane	57	19.725	19.726	-0.001	92	2561417	8.00	7.37	
108 1,2-Dibromo-3-Chloropropane	157	19.876	19.877	-0.001	92	1192357	8.00	12.5	
109 1,2,4,5-Tetramethylbenzene	119	20.168	20.165	0.003	96	4267744	8.00	9.33	
110 Dodecane	57	20.777	20.778	-0.001	96	1589826	8.00	5.34	
111 1,2,4-Trichlorobenzene	180	20.976	20.973	0.003	93	1839108	8.00	10.1	
112 Naphthalene	128	21.111	21.112	-0.001	99	3948849	8.00	8.46	
113 Hexachlorobutadiene	225	21.322	21.320	0.002	96	2486557	8.00	11.7	
114 1,2,3-Trichlorobenzene	180	21.392	21.388	0.004	94	1378728	8.00	7.97	
115 2-Methylnaphthalene	142	22.157	22.158	-0.001	98	1476813	8.00	5.47	
116 1-Methylnaphthalene	142	22.330	22.333	-0.003	99	1647368	8.00	5.13	
A 122 C8 Range	1	14.473	(14.420-14.527)		0	9611519	8.00	7.41	
S 123 1,2-Dichloroethene, Total	1				0		16.0	15.0	
S 124 Xylenes, Total	100				0		24.0	25.0	

Reagents:

40L9DQP_00018	Amount Added: 200.00	Units: mL	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

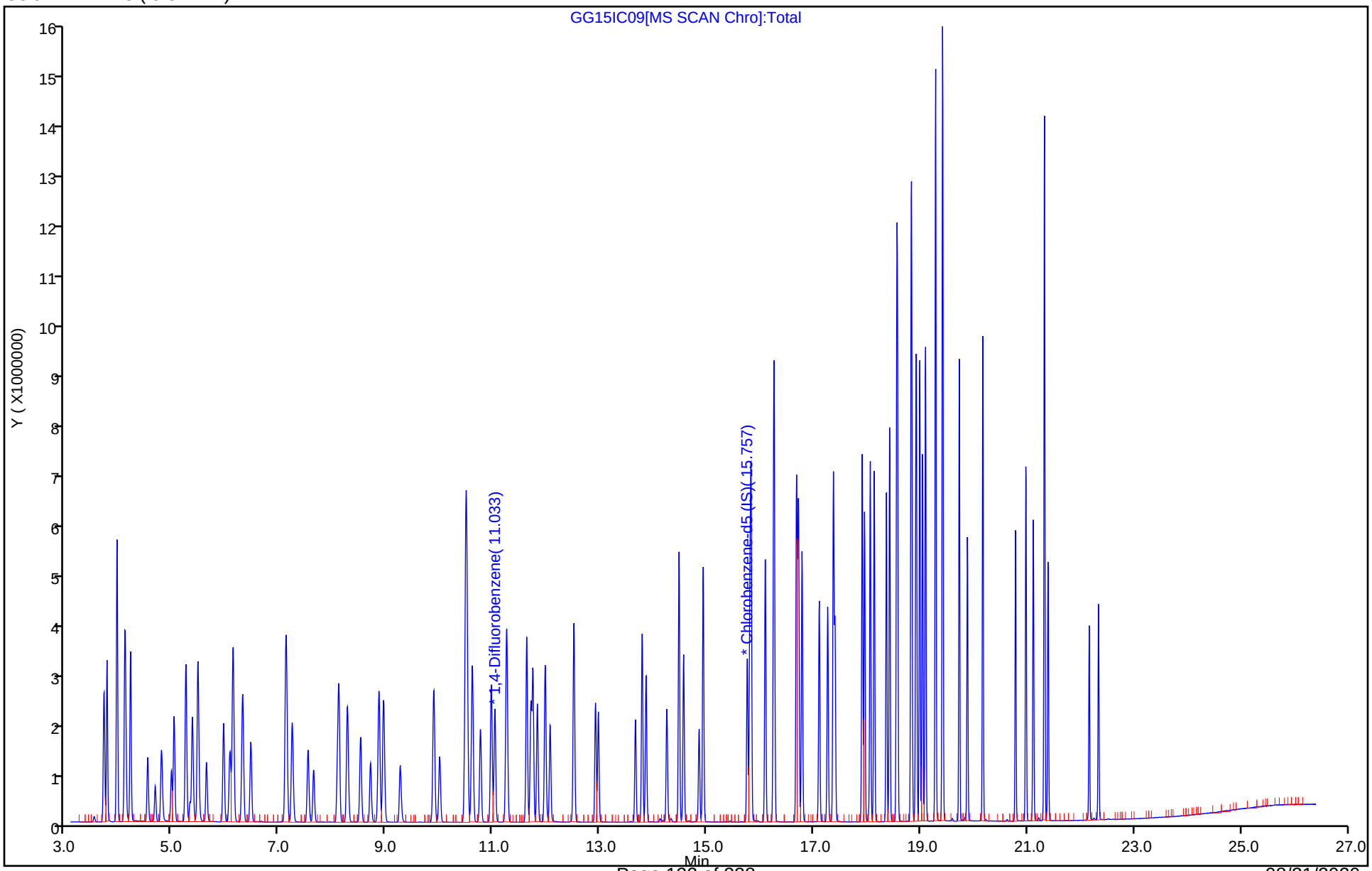
Report Date: 16-Jul-2020 15:14:38 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC09.D

Injection Date:	15-Jul-2020 14:28:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	IC L9			Worklist Smp#:	4
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

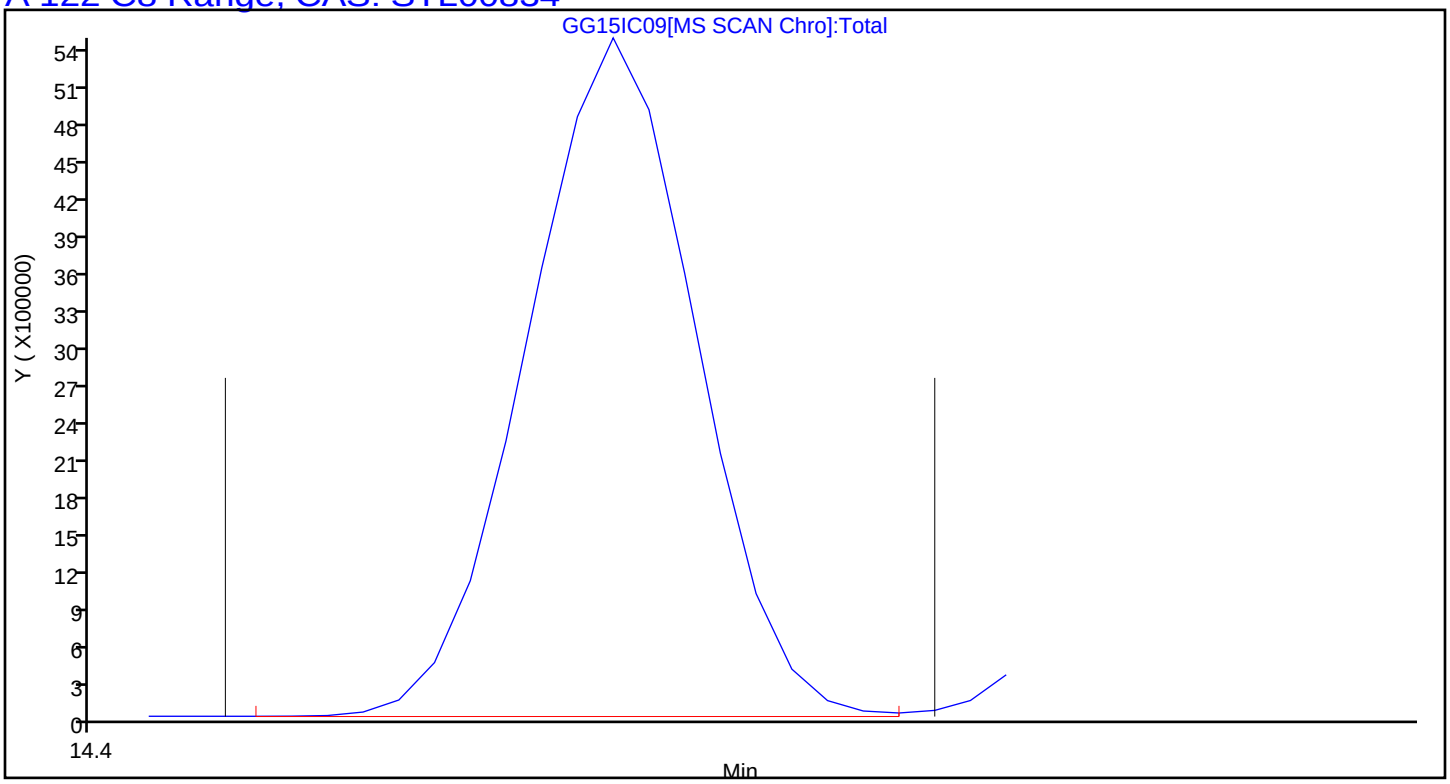


Report Date: 16-Jul-2020 15:14:38 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC09.D				
Injection Date:	15-Jul-2020 14:28:30	Instrument ID:	MG		
Lims ID:	IC L9				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	15	Worklist Smp#:	4
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 122 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC08.D
Lims ID: IC L8
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 15-Jul-2020 15:55:30 ALS Bottle#: 15 Worklist Smp#: 6
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016031-006
Misc. Info.: 306866
Operator ID: HMT Instrument ID: MG
Sublist: chrom-MG_TO15*sub17

Method: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 16-Jul-2020 15:14:46 Calib Date: 15-Jul-2020 22:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1066

First Level Reviewer: barlozhetskayaa Date: 16-Jul-2020 15:03:06

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.844	8.843	0.001	95	205620	4.00	4.00	
* 2 1,4-Difluorobenzene	114	11.028	11.026	0.002	96	1685175	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.757	15.754	0.003	91	1632924	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.396	17.397	-0.001	81	1373408	4.00	4.14	
6 Chlorodifluoromethane	51	3.705	3.708	-0.003	96	808438	4.00	3.87	
7 Propene	41	3.715	3.719	-0.004	99	513182	4.00	4.33	
8 Dichlorodifluoromethane	85	3.769	3.770	-0.001	100	1497719	4.00	3.99	
9 Chloromethane	52	3.953	3.952	0.001	98	138821	4.00	3.88	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.958	3.960	-0.002	96	775546	4.00	3.99	
11 Acetaldehyde	44	4.104	4.111	-0.007	95	787161	20.0	17.3	
12 Vinyl chloride	62	4.120	4.122	-0.002	99	549991	4.00	3.91	
13 Butane	43	4.212	4.210	0.002	86	761829	4.00	3.93	
14 Butadiene	54	4.206	4.210	-0.004	69	390687	4.00	3.94	
15 Bromomethane	94	4.530	4.531	-0.001	98	471335	4.00	4.02	
16 Chloroethane	64	4.670	4.673	-0.003	98	266623	4.00	3.95	
17 Ethanol	31	4.783	4.804	-0.021	98	807634	20.0	21.5	
18 Vinyl bromide	106	4.972	4.975	-0.003	98	419720	4.00	4.10	
19 2-Methylbutane	43	5.026	5.025	0.001	90	489230	4.00	3.91	
20 Trichlorofluoromethane	101	5.247	5.246	0.001	99	1475791	4.00	4.00	
21 Acrolein	56	5.258	5.263	-0.005	93	86031	4.00	3.62	
22 Acetonitrile	40	5.322	5.322	0.000	98	126158	4.00	3.60	
23 Acetone	58	5.366	5.385	-0.019	98	416606	12.0	9.51	
24 Pentane	72	5.468	5.467	0.001	99	92879	4.00	4.01	
25 Isopropyl alcohol	45	5.473	5.507	-0.034	96	1175696	12.0	10.9	
26 Ethyl ether	31	5.630	5.650	-0.020	91	296840	4.00	3.58	
27 1,1-Dichloroethene	96	5.948	5.951	-0.003	94	406439	4.00	4.22	
28 Acrylonitrile	53	6.056	6.061	-0.005	96	236547	4.00	3.77	
30 2-Methyl-2-propanol	59	6.077	6.136	-0.059	94	649174	4.00	3.91	
29 1,1,2-Trichloro-1,2,2-trifluoroe	101	6.131	6.129	0.002	94	902182	4.00	4.19	
31 Methylene Chloride	84	6.298	6.299	-0.001	94	476658	4.00	4.23	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.315	6.313	0.002	99	409790	4.00	4.20	
33 Carbon disulfide	76	6.460	6.462	-0.002	99	1363476	4.00	4.19	
34 trans-1,2-Dichloroethene	96	7.107	7.109	-0.002	95	444268	4.00	4.14	
35 2-Methylpentane	43	7.129	7.129	0.000	93	1045667	4.00	4.01	
36 Methyl tert-butyl ether	73	7.242	7.266	-0.024	96	1079721	4.00	3.60	
37 1,1-Dichloroethane	63	7.528	7.528	0.000	100	929825	4.00	3.92	
38 Vinyl acetate	43	7.636	7.641	-0.005	100	861733	4.00	3.70	
39 2-Butanone (MEK)	72	8.083	8.102	-0.019	98	164454	4.00	3.29	
40 Hexane	56	8.110	8.111	-0.001	93	371862	4.00	3.97	
41 Isopropyl ether	45	8.272	8.289	-0.017	96	1106058	4.00	3.45	
42 cis-1,2-Dichloroethene	96	8.515	8.514	0.001	98	452709	4.00	4.15	
43 Ethyl acetate	43	8.698	8.715	-0.017	99	663392	4.00	3.30	
44 Chloroform	83	8.860	8.857	0.003	96	1096869	4.00	4.01	
45 Tert-butyl ethyl ether	59	8.946	8.969	-0.023	95	1147203	4.00	3.53	
46 Tetrahydrofuran	42	9.259	9.287	-0.028	92	382270	4.00	3.35	
47 1,1,1-Trichloroethane	97	9.884	9.884	0.000	95	1197930	4.00	4.06	
48 1,2-Dichloroethane	62	9.992	9.992	0.000	99	753828	4.00	4.05	
51 n-Butanol	31	10.477	10.524	-0.047	67	130076	4.00	3.98	
49 Cyclohexane	69	10.488	10.488	0.000	75	263114	4.00	4.29	
50 Benzene	78	10.483	10.483	0.000	95	1440140	4.00	4.14	
52 Carbon tetrachloride	117	10.510	10.508	0.002	96	1173167	4.00	4.89	
53 2,3-Dimethylpentane	71	10.607	10.606	0.001	90	377710	4.00	4.21	
54 Thiophene	84	10.758	10.756	0.002	96	770961	4.00	4.19	
55 Isooctane	57	11.249	11.250	-0.001	98	2423728	4.00	4.12	
56 n-Heptane	71	11.626	11.624	0.002	89	551982	4.00	4.19	
57 1,2-Dichloropropane	63	11.702	11.701	0.001	89	491819	4.00	3.75	
58 Trichloroethene	130	11.739	11.739	0.000	90	502158	4.00	4.27	
59 Dibromomethane	93	11.820	11.820	0.000	86	557019	4.00	4.04	
60 Dichlorobromomethane	83	11.971	11.967	0.004	98	1102256	4.00	4.60	
61 1,4-Dioxane	88	11.987	12.018	-0.031	91	150131	4.00	3.81	
62 Methyl methacrylate	41	12.063	12.070	-0.007	96	427105	4.00	3.52	
63 Methylcyclohexane	83	12.510	12.507	0.003	96	907797	4.00	4.18	
64 4-Methyl-2-pentanone (MIBK)	43	12.915	12.933	-0.018	97	719955	4.00	3.42	
65 cis-1,3-Dichloropropene	75	12.969	12.967	0.002	93	761819	4.00	4.19	
66 trans-1,3-Dichloropropene	75	13.659	13.661	-0.002	95	677141	4.00	4.01	
67 Toluene	91	13.788	13.786	0.002	94	1338570	4.00	3.78	
68 1,1,2-Trichloroethane	83	13.859	13.859	-0.001	97	410239	4.00	3.81	
69 2-Hexanone	58	14.252	14.266	-0.014	94	379734	4.00	3.57	
70 n-Octane	85	14.479	14.479	0.000	91	537611	4.00	4.14	
71 Chlorodibromomethane	129	14.560	14.562	-0.002	97	809979	4.00	4.30	
72 Ethylene Dibromide	107	14.851	14.852	-0.001	98	656699	4.00	3.93	
73 Tetrachloroethene	129	14.932	14.929	0.003	91	474507	4.00	3.92	
75 Chlorobenzene	112	15.805	15.802	0.003	88	957998	4.00	3.75	
74 2,3-Dimethylheptane	43	15.827	15.824	0.003	93	1543376	4.00	3.79	
78 Ethylbenzene	91	16.091	16.092	-0.001	99	1775083	4.00	3.81	
79 m-Xylene & p-Xylene	91	16.253	16.254	-0.001	100	2837114	8.00	7.66	
80 n-Nonane	57	16.673	16.676	-0.003	90	972283	4.00	3.84	
81 Bromoform	173	16.700	16.700	0.000	93	717985	4.00	4.99	
82 Styrene	104	16.716	16.718	-0.002	97	929210	4.00	4.28	
83 o-Xylene	91	16.781	16.780	0.001	97	1466374	4.00	3.74	
84 1,1,2,2-Tetrachloroethane	83	17.099	17.101	-0.002	99	933008	4.00	3.58	
85 1,2,3-Trichloropropane	110	17.261	17.260	0.001	99	275495	4.00	3.60	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
86 Isopropylbenzene	105	17.369	17.367	0.002	97	1812280	4.00	3.64	
87 N-Propylbenzene	120	17.908	17.907	0.001	98	438717	4.00	3.54	
88 2-Chlorotoluene	126	17.951	17.951	0.000	96	428375	4.00	3.75	
89 4-Ethyltoluene	105	18.054	18.056	-0.002	98	1680195	4.00	3.51	
90 1,3,5-Trimethylbenzene	120	18.135	18.131	0.004	91	660577	4.00	3.54	
92 Alpha Methyl Styrene	118	18.361	18.361	0.000	84	651651	4.00	4.20	
93 n-Decane	57	18.420	18.420	0.000	92	1062382	4.00	3.57	
94 tert-Butylbenzene	119	18.555	18.554	0.001	91	1516160	4.00	3.75	
95 1,2,4-Trimethylbenzene	105	18.566	18.567	-0.001	96	1493254	4.00	3.47	
96 sec-Butylbenzene	105	18.819	18.821	-0.002	98	2150499	4.00	3.45	
97 1,3-Dichlorobenzene	146	18.836	18.836	0.000	97	901583	4.00	4.04	
98 Benzyl chloride	91	18.911	18.909	0.002	97	1367829	4.00	4.03	
99 1,4-Dichlorobenzene	146	18.922	18.922	0.000	90	884085	4.00	3.91	
100 4-Isopropyltoluene	119	18.981	18.983	-0.002	97	1665288	4.00	3.46	
101 1,2,3-Trimethylbenzene	105	19.035	19.036	-0.001	99	1495110	4.00	3.88	
102 Butylcyclohexane	83	19.089	19.091	-0.002	95	1442074	4.00	3.73	
103 2,3-Dihydroindene	117	19.278	19.279	-0.001	92	1344704	4.00	3.90	
104 1,2-Dichlorobenzene	146	19.278	19.280	-0.002	83	881407	4.00	3.87	
106 Indene	116	19.407	19.409	-0.002	90	1180841	4.00	4.01	
105 n-Butylbenzene	91	19.413	19.414	-0.001	97	1855288	4.00	3.41	
107 Undecane	57	19.725	19.726	-0.001	94	1076844	4.00	3.35	
108 1,2-Dibromo-3-Chloropropane	157	19.876	19.877	-0.001	89	435714	4.00	4.91	
109 1,2,4,5-Tetramethylbenzene	119	20.168	20.165	0.003	96	1611182	4.00	3.80	
110 Dodecane	57	20.777	20.778	-0.001	96	955266	4.00	3.46	
111 1,2,4-Trichlorobenzene	180	20.971	20.973	-0.002	93	713366	4.00	4.25	
112 Naphthalene	128	21.111	21.112	-0.001	99	1706005	4.00	3.95	
113 Hexachlorobutadiene	225	21.322	21.320	0.002	95	818788	4.00	4.15	
114 1,2,3-Trichlorobenzene	180	21.386	21.388	-0.002	94	725748	4.00	4.53	
115 2-Methylnaphthalene	142	22.157	22.158	-0.001	98	1250682	4.00	5.00	
116 1-Methylnaphthalene	142	22.330	22.333	-0.003	98	1447360	4.00	4.86	
A 122 C8 Range	1	14.473	(14.420-14.527)		0	4726851	4.00	3.93	
S 123 1,2-Dichloroethene, Total	1				0		8.00	8.29	
S 124 Xylenes, Total	100				0		12.0	11.4	

Reagents:

40L9DQP_00018	Amount Added: 100.00	Units: mL	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

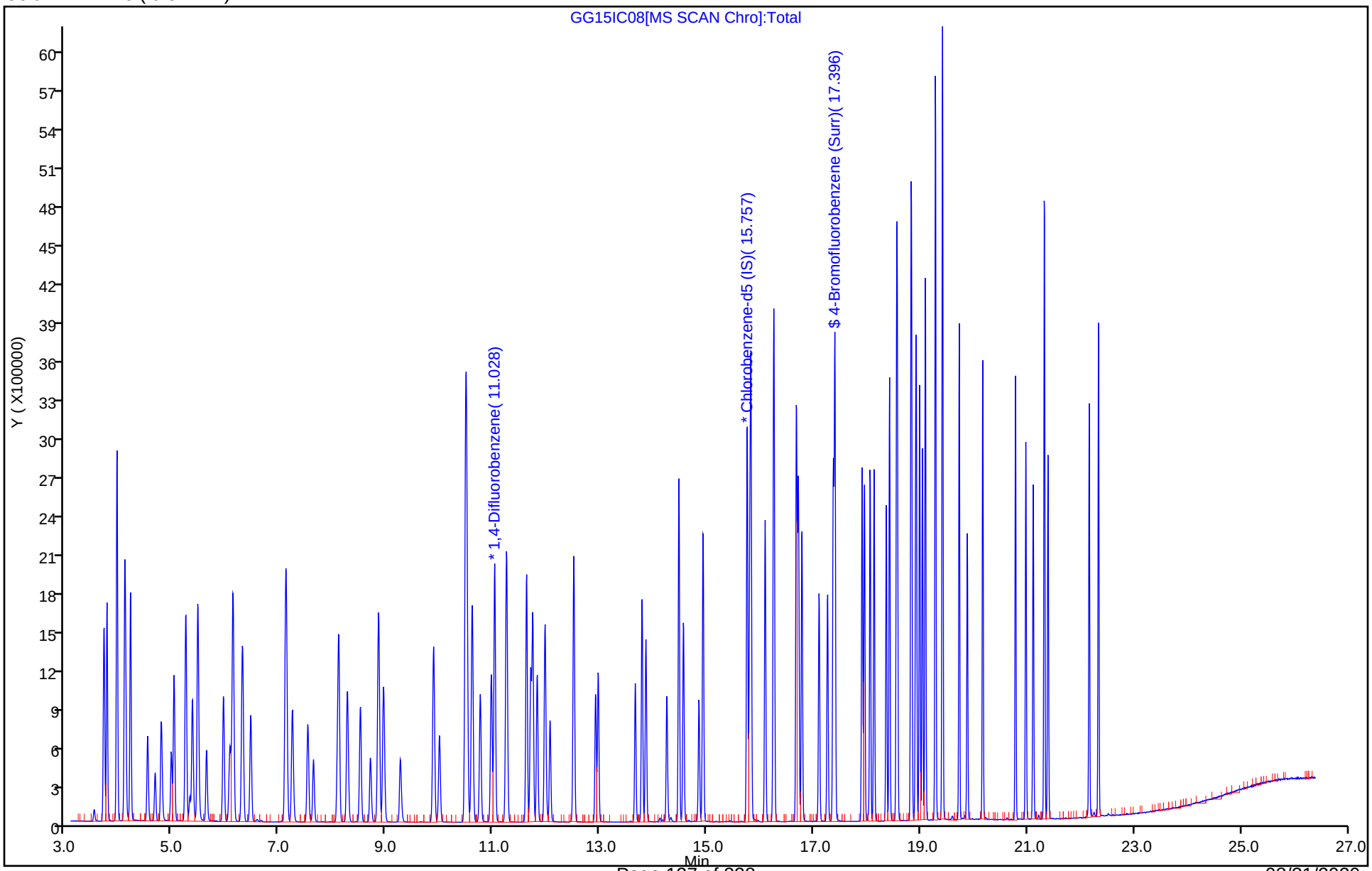
Report Date: 16-Jul-2020 15:14:48 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC08.D

Injection Date:	15-Jul-2020 15:55:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	IC L8			Worklist Smp#:	6
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

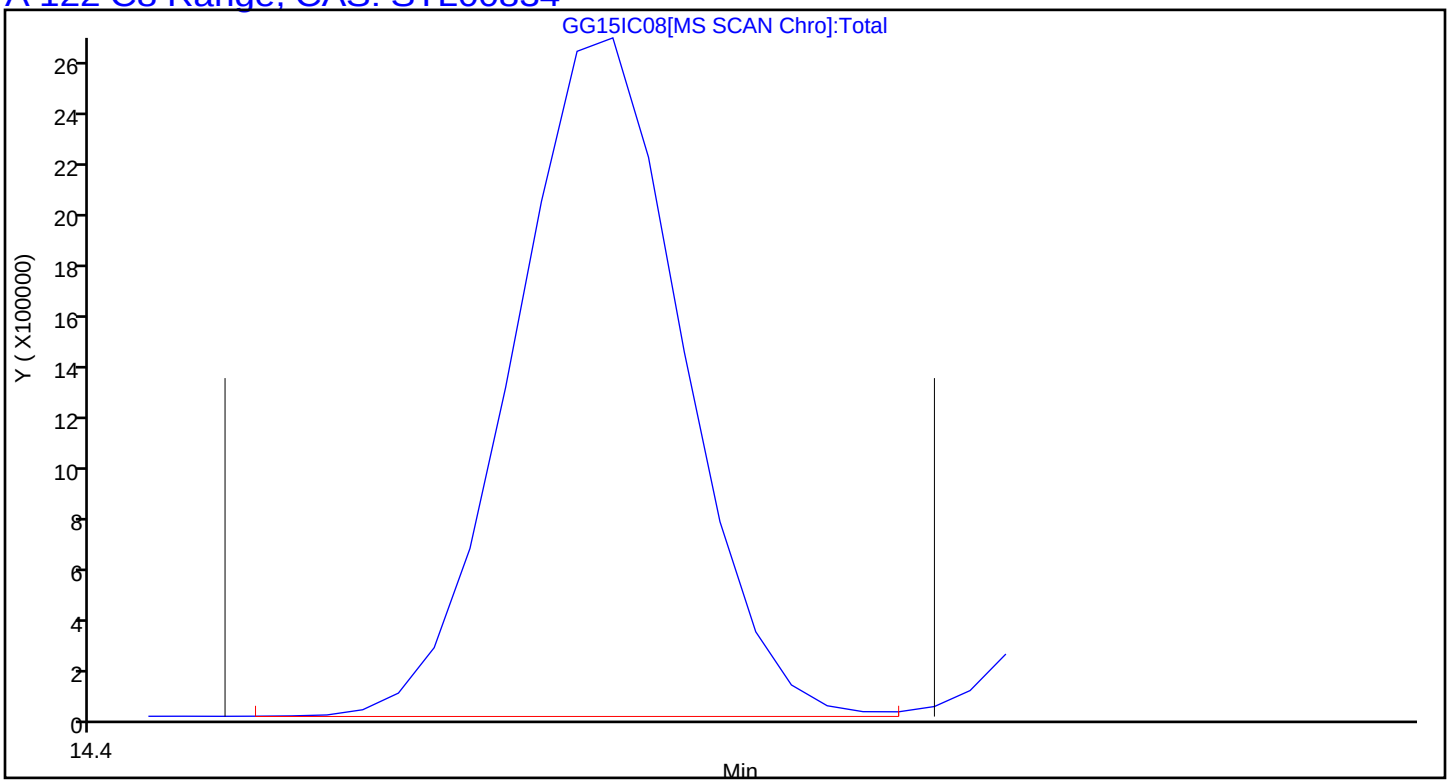


Report Date: 16-Jul-2020 15:14:48 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC08.D				
Injection Date:	15-Jul-2020 15:55:30	Instrument ID:	MG		
Lims ID:	IC L8				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	15	Worklist Smp#:	6
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 122 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC01.D
Lims ID: IC L1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 15-Jul-2020 17:25:30 ALS Bottle#: 1 Worklist Smp#: 8
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016031-008
Misc. Info.: 307387
Operator ID: HMT Instrument ID: MG
Sublist: chrom-MG_TO15*sub17

Method: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 16-Jul-2020 15:14:54 Calib Date: 15-Jul-2020 22:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1066

First Level Reviewer: tajh Date: 16-Jul-2020 09:10:43

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.838	8.843	-0.005	95	188733	4.00	4.00	
* 2 1,4-Difluorobenzene	114	11.022	11.026	-0.004	96	1683125	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.751	15.754	-0.003	92	1504972	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.396	17.397	-0.001	79	1177868	4.00	3.85	
6 Chlorodifluoromethane	51	3.710	3.708	0.002	34	5891	0.0200	0.0307	
7 Propene	41	3.721	3.719	0.002	98	87625	0.0200	-0.3824	
8 Dichlorodifluoromethane	85	3.769	3.770	-0.001	99	8239	0.0200	0.0239	
9 Chloromethane	52	3.947	3.952	-0.005	57	1539	0.0200	0.0469	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.963	3.960	0.003	95	3962	0.0200	0.0222	
11 Acetaldehyde	44	4.120	4.111	0.009	92	16708	0.1000	0.4005	
12 Vinyl chloride	62	4.120	4.122	-0.002	39	2928	0.0200	0.0227	
14 Butadiene	54	4.212	4.210	0.002	66	1993	0.0200	0.0219	
13 Butane	43	4.212	4.210	0.002	86	5332	0.0200	0.0300	
15 Bromomethane	94	4.530	4.531	-0.001	94	2608	0.0200	0.0242	
16 Chloroethane	64	4.675	4.673	0.002	94	1605	0.0200	0.0259	
17 Ethanol	31	4.821	4.804	0.017	95	5398	0.1000	0.1645	
18 Vinyl bromide	106	4.972	4.975	-0.003	96	2028	0.0200	0.0216	
19 2-Methylbutane	43	5.020	5.025	-0.005	85	4028	0.0200	0.0351	
20 Trichlorofluoromethane	101	5.247	5.246	0.001	98	7889	0.0200	0.0233	
21 Acrolein	56	5.268	5.263	0.005	39	786	0.0200	0.0360	
23 Acetone	58	5.409	5.385	0.024	96	6294	0.0600	0.1566	
24 Pentane	72	5.479	5.467	0.012	76	526	0.0200	0.0248	
25 Isopropyl alcohol	45	5.543	5.507	0.036	99	7722	0.0600	0.0780	
26 Ethyl ether	31	5.673	5.650	0.023	57	1512	0.0200	0.0199	
27 1,1-Dichloroethene	96	5.948	5.951	-0.003	92	2182	0.0200	0.0247	
28 Acrylonitrile	53	6.061	6.061	0.000	96	1359	0.0200	0.0236	
30 2-Methyl-2-propanol	59	6.201	6.136	0.065	96	4367	0.0200	0.0287	
29 1,1,2-Trichloro-1,2,2-trifluoroe	101	6.120	6.129	-0.009	91	4744	0.0200	0.0240	
31 Methylene Chloride	84	6.298	6.299	-0.001	95	78775	0.0200	0.0703	
32 3-Chloro-1-propene	39	6.309	6.313	-0.004	89	3094	0.0200	0.0346	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
33 Carbon disulfide	76	6.460	6.462	-0.002	99	7315	0.0200	0.0245	
34 trans-1,2-Dichloroethene	96	7.107	7.109	-0.002	93	2179	0.0200	0.0221	
35 2-Methylpentane	43	7.129	7.129	0.000	92	5778	0.0200	0.0242	
36 Methyl tert-butyl ether	73	7.307	7.266	0.041	94	5326	0.0200	0.0194	
37 1,1-Dichloroethane	63	7.517	7.528	-0.011	98	5107	0.0200	0.0235	
38 Vinyl acetate	43	7.652	7.641	0.011	55	3852	0.0200	0.0180	
39 2-Butanone (MEK)	72	8.132	8.102	0.030	82	1031	0.0200	0.0225	
40 Hexane	56	8.105	8.111	-0.006	80	2177	0.0200	0.0253	
41 Isopropyl ether	45	8.315	8.289	0.026	93	5704	0.0200	0.0194	
42 cis-1,2-Dichloroethene	96	8.504	8.514	-0.010	97	2382	0.0200	0.0238	
43 Ethyl acetate	43	8.741	8.715	0.026	90	3284	0.0200	0.0178	
44 Chloroform	83	8.849	8.857	-0.008	28	6171	0.0200	0.0246	
45 Tert-butyl ethyl ether	59	9.000	8.969	0.031	96	5155	0.0200	0.0173	
46 Tetrahydrofuran	42	9.329	9.287	0.042	87	2016	0.0200	0.0193	
47 1,1,1-Trichloroethane	97	9.884	9.884	0.000	94	5872	0.0200	0.0217	
48 1,2-Dichloroethane	62	9.987	9.992	-0.005	96	4278	0.0200	0.0230	
51 n-Butanol	31	10.564	10.524	0.040	73	2219	0.0200	0.0679	
50 Benzene	78	10.477	10.483	-0.006	96	9262	0.0200	0.0267	
49 Cyclohexane	69	10.488	10.488	0.000	71	1224	0.0200	0.0200	
52 Carbon tetrachloride	117	10.504	10.508	-0.004	96	4682	0.0200	0.0195	
53 2,3-Dimethylpentane	71	10.607	10.606	0.001	88	1951	0.0200	0.0217	
54 Thiophene	84	10.747	10.756	-0.009	95	4187	0.0200	0.0228	
55 Isooctane	57	11.249	11.250	-0.001	98	13544	0.0200	0.0231	
56 n-Heptane	71	11.615	11.624	-0.009	88	2858	0.0200	0.0217	
57 1,2-Dichloropropane	63	11.696	11.701	-0.005	84	3081	0.0200	0.0235	
58 Trichloroethene	130	11.734	11.739	-0.005	86	2656	0.0200	0.0226	
59 Dibromomethane	93	11.820	11.820	0.000	81	3386	0.0200	0.0246	
60 Dichlorobromomethane	83	11.955	11.967	-0.012	97	4997	0.0200	0.0209	
61 1,4-Dioxane	88	12.057	12.018	0.039	20	431	0.0200	0.0109	
62 Methyl methacrylate	41	12.074	12.070	0.004	93	1861	0.0200	0.0154	
63 Methylcyclohexane	83	12.500	12.507	-0.007	95	4357	0.0200	0.0292	
64 4-Methyl-2-pentanone (MIBK)	43	12.958	12.933	0.025	79	3453	0.0200	0.0164	
65 cis-1,3-Dichloropropene	75	12.963	12.967	-0.004	95	3968	0.0200	0.0219	
66 trans-1,3-Dichloropropene	75	13.659	13.661	-0.002	95	3349	0.0200	0.0215	
67 Toluene	91	13.783	13.786	-0.003	96	7507	0.0200	0.0230	
68 1,1,2-Trichloroethane	83	13.858	13.859	-0.001	92	2025	0.0200	0.0204	
69 2-Hexanone	58	14.279	14.266	0.013	46	1058	0.0200	0.0108	
70 n-Octane	85	14.479	14.479	0.000	89	2314	0.0200	0.0194	
71 Chlorodibromomethane	129	14.559	14.562	-0.003	95	3222	0.0200	0.0186	
72 Ethylene Dibromide	107	14.851	14.852	-0.001	95	3699	0.0200	0.0240	
73 Tetrachloroethene	129	14.932	14.929	0.003	87	2765	0.0200	0.0248	
75 Chlorobenzene	112	15.800	15.802	-0.002	92	5407	0.0200	0.0230	
74 2,3-Dimethylheptane	43	15.821	15.824	-0.003	95	8286	0.0200	0.0221	
78 Ethylbenzene	91	16.091	16.092	-0.001	97	8557	0.0200	0.0200	
79 m-Xylene & p-Xylene	91	16.253	16.254	-0.001	99	13322	0.0400	0.0390	
80 n-Nonane	57	16.679	16.676	0.003	89	4648	0.0200	0.0199	
81 Bromoform	173	16.695	16.700	-0.005	83	2163	0.0200	0.0163	
82 Styrene	104	16.722	16.718	0.004	92	3256	0.0200	0.0163	
83 o-Xylene	91	16.776	16.780	-0.004	96	7193	0.0200	0.0199	
84 1,1,2,2-Tetrachloroethane	83	17.099	17.101	-0.002	95	4182	0.0200	0.0174	
85 1,2,3-Trichloropropane	110	17.261	17.260	0.001	94	1281	0.0200	0.0182	
86 Isopropylbenzene	105	17.364	17.367	-0.003	87	9332	0.0200	0.0203	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
87 N-Propylbenzene	120	17.908	17.907	0.001	97	1805	0.0200	0.0158	
88 2-Chlorotoluene	126	17.951	17.951	0.000	95	1946	0.0200	0.0185	
89 4-Ethyltoluene	105	18.054	18.056	-0.002	97	7505	0.0200	0.0170	
90 1,3,5-Trimethylbenzene	120	18.124	18.131	-0.007	89	2414	0.0200	0.0140	
92 Alpha Methyl Styrene	118	18.361	18.361	0.000	84	2077	0.0200	0.0145	
93 n-Decane	57	18.420	18.420	0.000	92	5258	0.0200	0.0192	
94 tert-Butylbenzene	119	18.550	18.554	-0.004	85	6322	0.0200	0.0170	
95 1,2,4-Trimethylbenzene	105	18.566	18.567	-0.001	94	6457	0.0200	0.0163	
96 sec-Butylbenzene	105	18.819	18.821	-0.002	97	8893	0.0200	0.0155	
97 1,3-Dichlorobenzene	146	18.836	18.836	0.000	84	4536	0.0200	0.0220	
98 Benzyl chloride	91	18.911	18.909	0.002	86	6289	0.0200	0.0201	
99 1,4-Dichlorobenzene	146	18.922	18.922	0.000	83	4826	0.0200	0.0232	
100 4-Isopropyltoluene	119	18.976	18.983	-0.007	94	7160	0.0200	0.0161	
101 1,2,3-Trimethylbenzene	105	19.035	19.036	-0.001	97	6806	0.0200	0.0231	
102 Butylcyclohexane	83	19.089	19.091	-0.002	93	6992	0.0200	0.0196	
103 2,3-Dihydroindene	117	19.272	19.279	-0.007	90	6309	0.0200	0.0199	
104 1,2-Dichlorobenzene	146	19.278	19.280	-0.002	81	4840	0.0200	0.0231	
106 Indene	116	19.407	19.409	-0.002	87	4801	0.0200	0.0177	
105 n-Butylbenzene	91	19.413	19.414	-0.001	95	8110	0.0200	0.0162	
107 Undecane	57	19.725	19.726	-0.001	91	5434	0.0200	0.0183	
108 1,2-Dibromo-3-Chloropropane	157	19.876	19.877	-0.001	83	1591	0.0200	0.0195	
109 1,2,4,5-Tetramethylbenzene	119	20.162	20.165	-0.003	93	8252	0.0200	0.0211	
110 Dodecane	57	20.777	20.778	-0.001	92	5753	0.0200	0.0226	
111 1,2,4-Trichlorobenzene	180	20.971	20.973	-0.002	89	5309	0.0200	0.0343	
112 Naphthalene	128	21.111	21.112	-0.001	98	16183	0.0200	0.0406	
113 Hexachlorobutadiene	225	21.316	21.320	-0.004	81	3508	0.0200	0.0193	
114 1,2,3-Trichlorobenzene	180	21.386	21.388	-0.002	89	5901	0.0200	0.0399	
115 2-Methylnaphthalene	142	22.163	22.158	0.005	97	14751	0.0200	0.0640	
116 1-Methylnaphthalene	142	22.335	22.333	0.002	97	18387	0.0200	0.0670	
A 122 C8 Range	1	14.466	(14.431-14.506)		0	26981	0.0200	0.0244	
S 123 1,2-Dichloroethene, Total	1				0		0.0400	0.0459	
S 124 Xylenes, Total	100				0		0.0600	0.0590	

Reagents:

40L1-3DQP_00028	Amount Added: 50.00	Units: mL	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

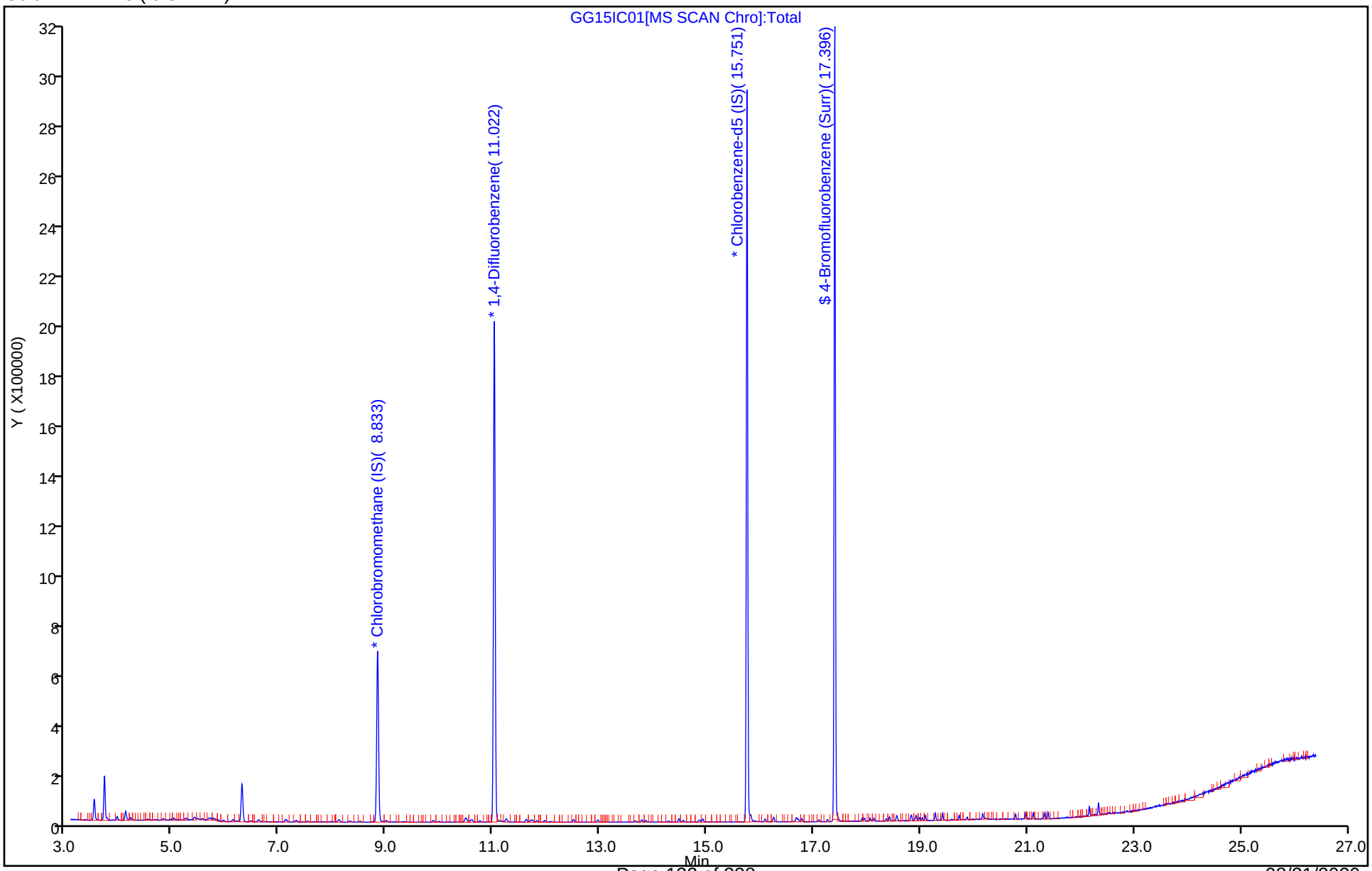
Report Date: 16-Jul-2020 15:14:55 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC01.D

Injection Date:	15-Jul-2020 17:25:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	IC L1			Worklist Smp#:	8
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

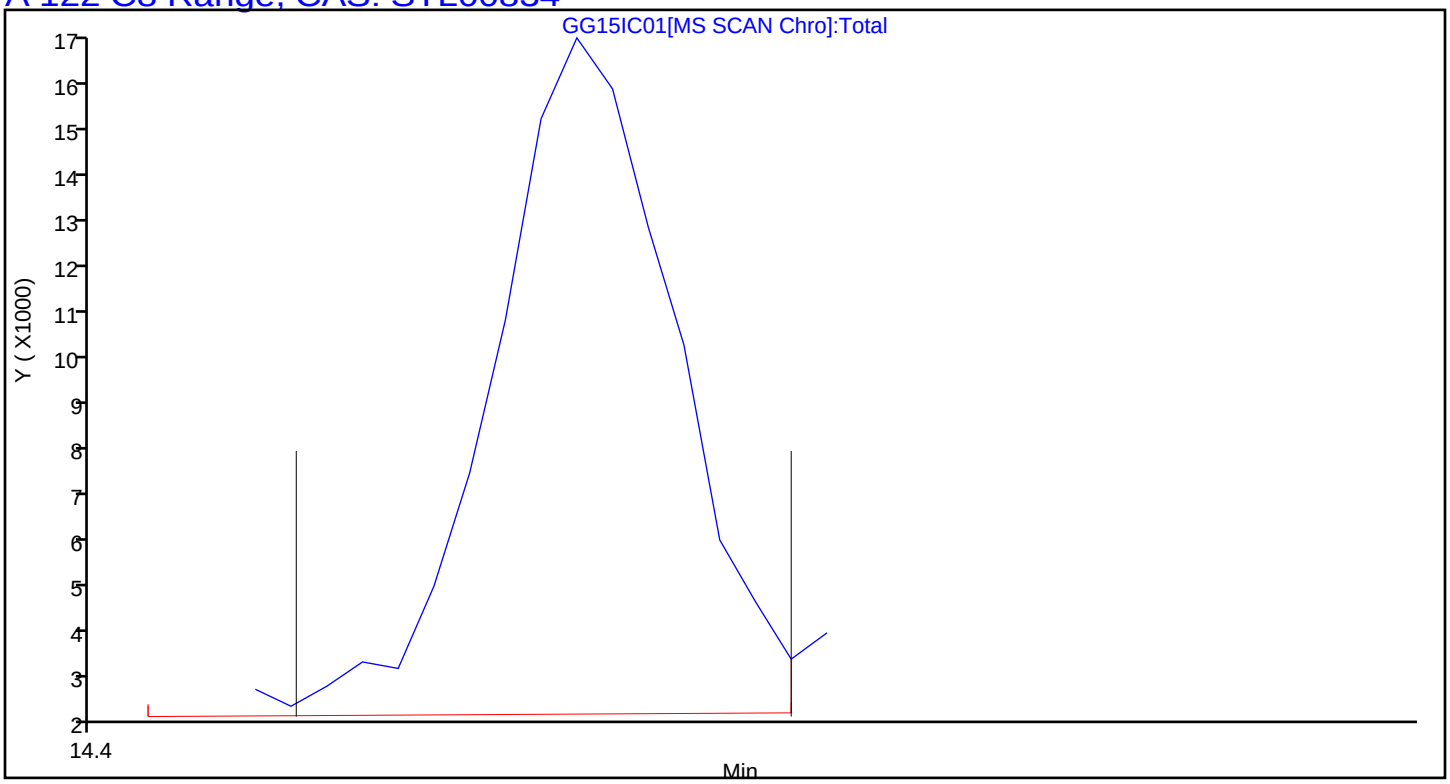


Report Date: 16-Jul-2020 15:14:55 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC01.D				
Injection Date:	15-Jul-2020 17:25:30	Instrument ID:	MG		
Lims ID:	IC L1				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	1	Worklist Smp#:	8
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 122 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC02.D
Lims ID: IC L2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 15-Jul-2020 18:11:30 ALS Bottle#: 1 Worklist Smp#: 9
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016031-009
Misc. Info.: 307387
Operator ID: HMT Instrument ID: MG
Sublist: chrom-MG_TO15*sub17

Method: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 16-Jul-2020 15:15:01 Calib Date: 15-Jul-2020 22:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1066

First Level Reviewer: tajh Date: 16-Jul-2020 09:11:43

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.855	8.843	0.011	95	186707	4.00	4.00	
* 2 1,4-Difluorobenzene	114	11.033	11.026	0.007	97	1681507	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.757	15.754	0.003	93	1489582	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.396	17.397	-0.001	77	1158753	4.00	3.83	
6 Chlorodifluoromethane	51	3.726	3.708	0.018	41	8363	0.0400	0.0441	
7 Propene	41	3.732	3.719	0.013	99	89964	0.0400	-0.3416	
8 Dichlorodifluoromethane	85	3.786	3.770	0.016	100	14062	0.0400	0.0413	
9 Chloromethane	52	3.964	3.952	0.012	52	1746	0.0400	0.0538	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.974	3.960	0.014	94	7003	0.0400	0.0397	
11 Acetaldehyde	44	4.142	4.111	0.031	96	27289	0.2000	0.6613	
12 Vinyl chloride	62	4.136	4.122	0.014	42	5029	0.0400	0.0394	
13 Butane	43	4.222	4.210	0.012	83	8820	0.0400	0.0501	
14 Butadiene	54	4.222	4.210	0.012	66	3691	0.0400	0.0410	
15 Bromomethane	94	4.546	4.531	0.015	95	4549	0.0400	0.0427	
16 Chloroethane	64	4.692	4.673	0.019	97	2683	0.0400	0.0437	
17 Ethanol	31	4.875	4.804	0.071	98	11429	0.2000	0.3518	
18 Vinyl bromide	106	4.988	4.975	0.013	97	3745	0.0400	0.0403	
19 2-Methylbutane	43	5.042	5.025	0.017	89	5834	0.0400	0.0514	
20 Trichlorofluoromethane	101	5.263	5.246	0.017	98	13686	0.0400	0.0409	
21 Acrolein	56	5.301	5.263	0.038	71	1610	0.0400	0.0745	
23 Acetone	58	5.436	5.385	0.051	95	13354	0.1200	0.3358	
24 Pentane	72	5.473	5.467	0.006	91	782	0.0400	0.0372	
25 Isopropyl alcohol	45	5.619	5.507	0.112	97	14094	0.1200	0.1439	
26 Ethyl ether	31	5.711	5.650	0.061	86	3389	0.0400	0.0450	
27 1,1-Dichloroethene	96	5.970	5.951	0.019	92	3811	0.0400	0.0436	
28 Acrylonitrile	53	6.083	6.061	0.022	94	2288	0.0400	0.0401	
29 1,1,2-Trichloro-1,2,2-trifluoroe	101	6.148	6.129	0.019	88	8002	0.0400	0.0410	
30 2-Methyl-2-propanol	59	6.304	6.136	0.168	39	7348	0.0400	0.0488	
31 Methylene Chloride	84	6.315	6.299	0.016	97	79898	0.0400	0.0933	
32 3-Chloro-1-propene	39	6.325	6.313	0.012	25	4838	0.0400	0.0546	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
33 Carbon disulfide	76	6.476	6.462	0.014	99	12522	0.0400	0.0424	
34 trans-1,2-Dichloroethene	96	7.118	7.109	0.009	95	3934	0.0400	0.0404	
35 2-Methylpentane	43	7.151	7.129	0.022	93	10514	0.0400	0.0444	
36 Methyl tert-butyl ether	73	7.345	7.266	0.079	96	10293	0.0400	0.0378	
37 1,1-Dichloroethane	63	7.539	7.528	0.011	99	9284	0.0400	0.0432	
38 Vinyl acetate	43	7.663	7.641	0.022	99	7627	0.0400	0.0361	
40 Hexane	56	8.132	8.111	0.021	86	3827	0.0400	0.0450	
39 2-Butanone (MEK)	72	8.159	8.102	0.057	99	2439	0.0400	0.0537	
41 Isopropyl ether	45	8.348	8.289	0.059	96	11349	0.0400	0.0390	
42 cis-1,2-Dichloroethene	96	8.531	8.514	0.017	97	3913	0.0400	0.0395	
43 Ethyl acetate	43	8.763	8.715	0.048	97	7211	0.0400	0.0395	
44 Chloroform	83	8.865	8.857	0.008	91	10100	0.0400	0.0407	
45 Tert-butyl ethyl ether	59	9.038	8.969	0.069	96	10991	0.0400	0.0372	
46 Tetrahydrofuran	42	9.356	9.287	0.069	93	4421	0.0400	0.0427	
47 1,1,1-Trichloroethane	97	9.890	9.884	0.006	97	10541	0.0400	0.0394	
48 1,2-Dichloroethane	62	10.003	9.992	0.011	95	6892	0.0400	0.0371	
50 Benzene	78	10.488	10.483	0.005	96	14684	0.0400	0.0423	
49 Cyclohexane	69	10.505	10.488	0.017	79	2241	0.0400	0.0366	
52 Carbon tetrachloride	117	10.515	10.508	0.007	94	8371	0.0400	0.0350	
51 n-Butanol	31	10.656	10.524	0.132	67	2440	0.0400	0.0747	
53 2,3-Dimethylpentane	71	10.612	10.606	0.006	90	3542	0.0400	0.0395	
54 Thiophene	84	10.763	10.756	0.007	98	6975	0.0400	0.0380	
55 Isooctane	57	11.260	11.250	0.010	98	22954	0.0400	0.0391	
56 n-Heptane	71	11.632	11.624	0.008	87	4854	0.0400	0.0369	
57 1,2-Dichloropropane	63	11.707	11.701	0.006	84	5158	0.0400	0.0395	
58 Trichloroethene	130	11.739	11.739	0.000	86	4307	0.0400	0.0367	
59 Dibromomethane	93	11.820	11.820	0.000	84	5214	0.0400	0.0379	
60 Dichlorobromomethane	83	11.977	11.967	0.010	95	8493	0.0400	0.0355	
61 1,4-Dioxane	88	12.090	12.018	0.072	50	1202	0.0400	0.0305	
62 Methyl methacrylate	41	12.095	12.070	0.025	93	3948	0.0400	0.0326	
63 Methylcyclohexane	83	12.511	12.507	0.004	91	7770	0.0400	0.0449	
64 4-Methyl-2-pentanone (MIBK)	43	12.980	12.933	0.047	92	6739	0.0400	0.0321	
65 cis-1,3-Dichloropropene	75	12.974	12.967	0.007	97	6149	0.0400	0.0339	
66 trans-1,3-Dichloropropene	75	13.670	13.661	0.009	95	5749	0.0400	0.0373	
67 Toluene	91	13.789	13.786	0.003	93	12112	0.0400	0.0375	
68 1,1,2-Trichloroethane	83	13.864	13.859	0.005	96	3743	0.0400	0.0381	
69 2-Hexanone	58	14.306	14.266	0.040	95	3275	0.0400	0.0338	
70 n-Octane	85	14.484	14.479	0.005	90	4243	0.0400	0.0359	
71 Chlorodibromomethane	129	14.565	14.562	0.003	94	5092	0.0400	0.0296	
72 Ethylene Dibromide	107	14.856	14.852	0.004	97	5632	0.0400	0.0370	
73 Tetrachloroethene	129	14.932	14.929	0.003	80	4072	0.0400	0.0368	
75 Chlorobenzene	112	15.805	15.802	0.003	87	8758	0.0400	0.0376	
74 2,3-Dimethylheptane	43	15.827	15.824	0.003	95	15168	0.0400	0.0409	
78 Ethylbenzene	91	16.091	16.092	-0.001	99	15154	0.0400	0.0357	
79 m-Xylene & p-Xylene	91	16.253	16.254	-0.001	98	22814	0.0800	0.0676	
80 n-Nonane	57	16.679	16.676	0.003	90	8497	0.0400	0.0368	
81 Bromoform	173	16.706	16.700	0.006	86	3360	0.0400	0.0256	
82 Styrene	104	16.717	16.718	-0.001	93	5968	0.0400	0.0301	
83 o-Xylene	91	16.781	16.780	0.001	97	12655	0.0400	0.0354	
84 1,1,2,2-Tetrachloroethane	83	17.105	17.101	0.004	97	8357	0.0400	0.0351	
85 1,2,3-Trichloropropane	110	17.256	17.260	-0.004	97	2358	0.0400	0.0338	
86 Isopropylbenzene	105	17.369	17.367	0.002	94	16547	0.0400	0.0364	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
87 N-Propylbenzene	120	17.908	17.907	0.001	98	3650	0.0400	0.0323	
88 2-Chlorotoluene	126	17.951	17.951	0.000	95	3379	0.0400	0.0324	
89 4-Ethyltoluene	105	18.059	18.056	0.003	97	14031	0.0400	0.0321	
90 1,3,5-Trimethylbenzene	120	18.135	18.131	0.004	89	5309	0.0400	0.0312	
92 Alpha Methyl Styrene	118	18.361	18.361	0.000	82	3884	0.0400	0.0274	
93 n-Decane	57	18.421	18.420	0.001	92	9346	0.0400	0.0344	
94 tert-Butylbenzene	119	18.555	18.554	0.001	85	12696	0.0400	0.0344	
95 1,2,4-Trimethylbenzene	105	18.566	18.567	-0.001	95	12361	0.0400	0.0314	
96 sec-Butylbenzene	105	18.820	18.821	-0.001	97	17709	0.0400	0.0311	
97 1,3-Dichlorobenzene	146	18.836	18.836	0.000	90	7514	0.0400	0.0369	
98 Benzyl chloride	91	18.911	18.909	0.002	96	8661	0.0400	0.0280	
99 1,4-Dichlorobenzene	146	18.922	18.922	0.000	85	7598	0.0400	0.0369	
100 4-Isopropyltoluene	119	18.987	18.983	0.004	95	13691	0.0400	0.0312	
101 1,2,3-Trimethylbenzene	105	19.035	19.036	-0.001	97	12355	0.0400	0.0424	
102 Butylcyclohexane	83	19.095	19.091	0.004	92	13075	0.0400	0.0371	
103 2,3-Dihydroindene	117	19.278	19.279	-0.001	91	10894	0.0400	0.0346	
104 1,2-Dichlorobenzene	146	19.283	19.280	0.003	79	7306	0.0400	0.0352	
106 Indene	116	19.407	19.409	-0.002	76	7735	0.0400	0.0288	
105 n-Butylbenzene	91	19.413	19.414	-0.001	96	15396	0.0400	0.0310	
107 Undecane	57	19.726	19.726	0.000	94	10848	0.0400	0.0369	
108 1,2-Dibromo-3-Chloropropane	157	19.877	19.877	-0.001	79	2387	0.0400	0.0295	
109 1,2,4,5-Tetramethylbenzene	119	20.168	20.165	0.003	93	12699	0.0400	0.0329	
110 Dodecane	57	20.782	20.778	0.004	94	9013	0.0400	0.0358	
111 1,2,4-Trichlorobenzene	180	20.977	20.973	0.004	87	6079	0.0400	0.0397	
112 Naphthalene	128	21.111	21.112	-0.001	98	17506	0.0400	0.0444	
113 Hexachlorobutadiene	225	21.316	21.320	-0.004	84	6011	0.0400	0.0334	
114 1,2,3-Trichlorobenzene	180	21.392	21.388	0.004	90	6294	0.0400	0.0430	
115 2-Methylnaphthalene	142	22.157	22.158	-0.001	96	11986	0.0400	0.0525	
116 1-Methylnaphthalene	142	22.335	22.333	0.002	96	15849	0.0400	0.0584	
A 122 C8 Range	1	14.474	(14.436-14.511)		0	42999	0.0400	0.0392	
S 123 1,2-Dichloroethene, Total	1				0		0.0800	0.0798	
S 124 Xylenes, Total	100				0		0.1200	0.1030	

Reagents:

40L1-3DQP_00028	Amount Added: 100.00	Units: mL	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

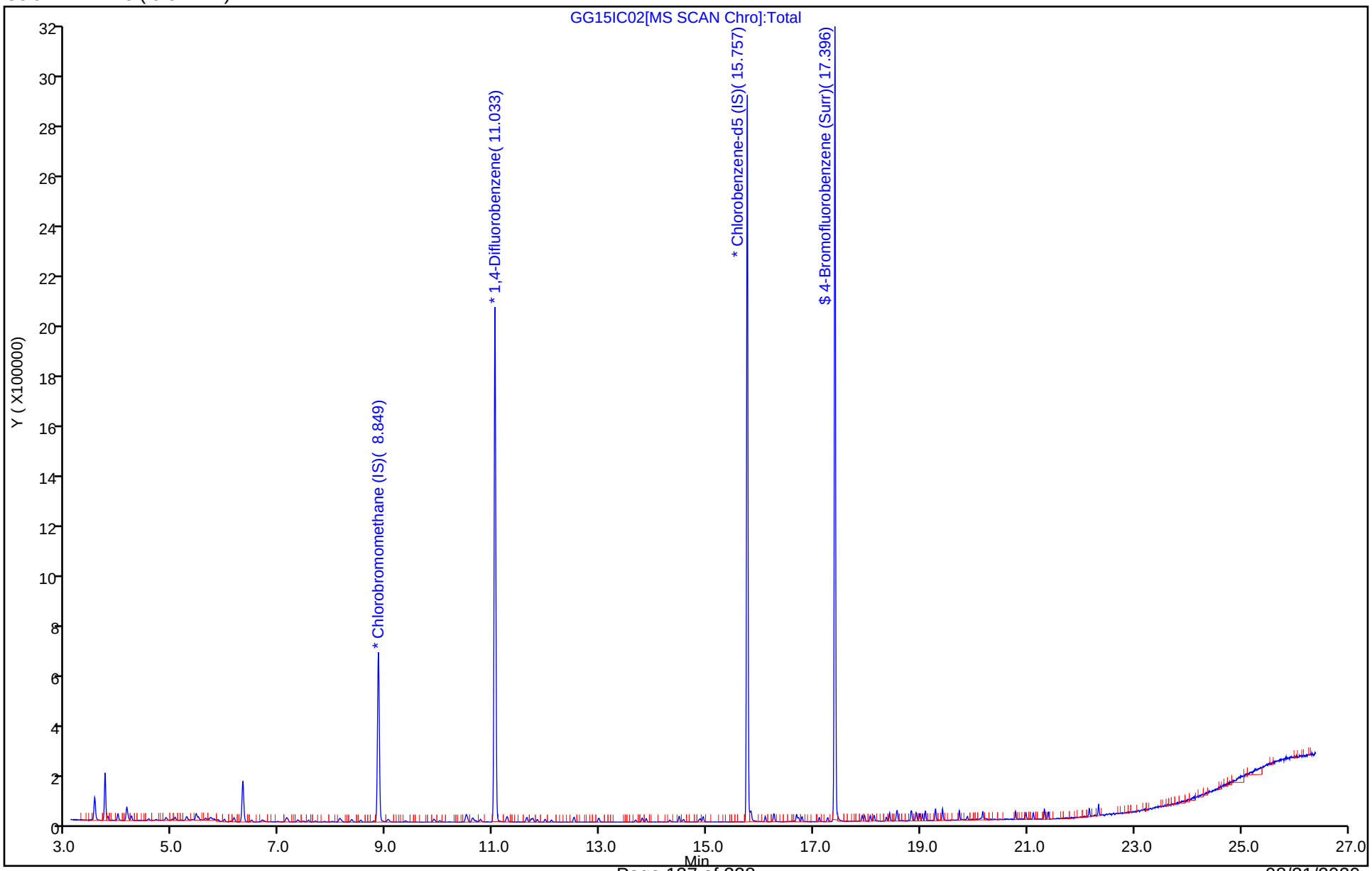
Report Date: 16-Jul-2020 15:15:02 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC02.D

Injection Date:	15-Jul-2020 18:11:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	IC L2			Worklist Smp#:	9
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

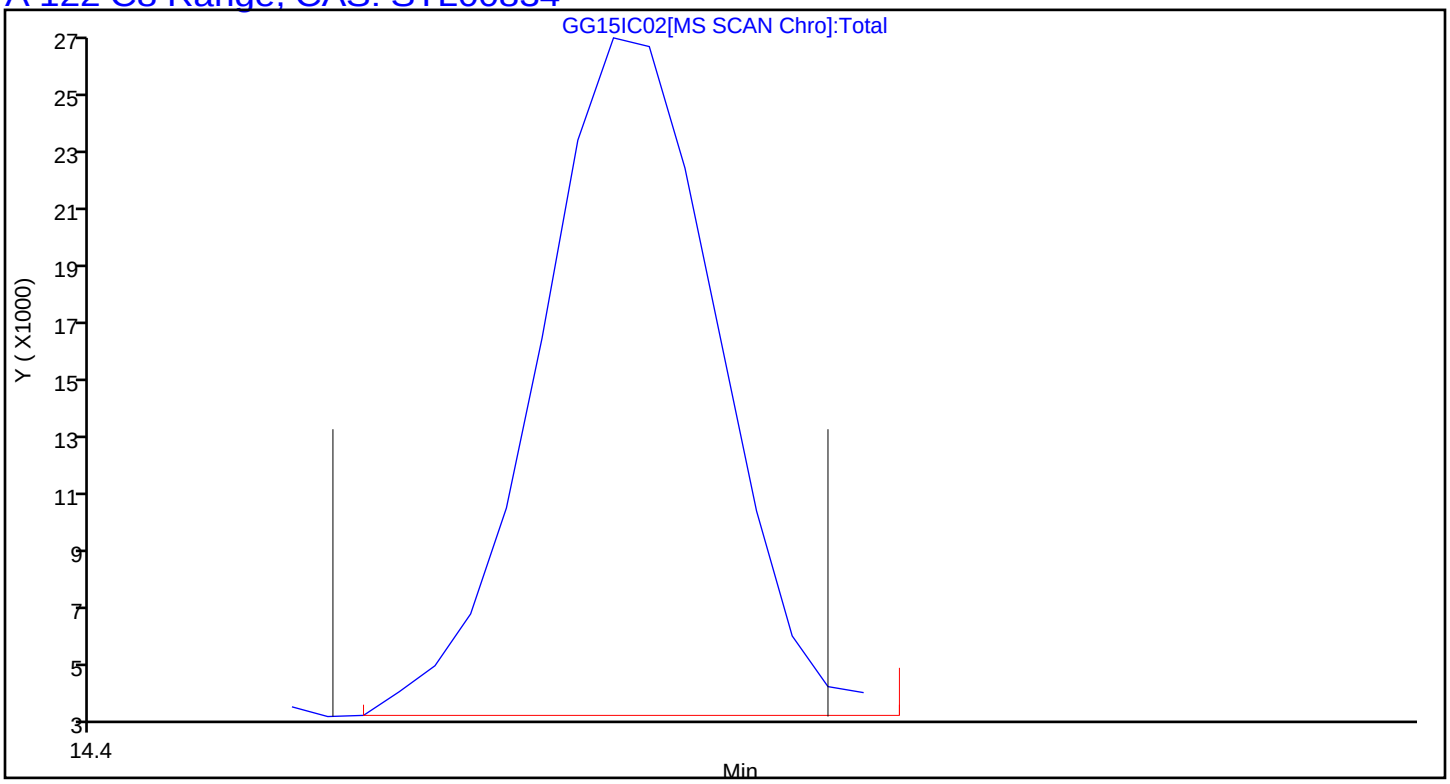


Report Date: 16-Jul-2020 15:15:02 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC02.D				
Injection Date:	15-Jul-2020 18:11:30	Instrument ID:	MG		
Lims ID:	IC L2				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	1	Worklist Smp#:	9
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 122 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC03.D
Lims ID: IC L3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 15-Jul-2020 18:58:30 ALS Bottle#: 1 Worklist Smp#: 10
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016031-010
Misc. Info.: 307387
Operator ID: HMT Instrument ID: MG
Sublist: chrom-MG_TO15*sub17

Method: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 16-Jul-2020 15:15:09 Calib Date: 15-Jul-2020 22:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1066

First Level Reviewer: tajh Date: 16-Jul-2020 09:12:15

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.838	8.843	-0.005	94	179523	4.00	4.00	
* 2 1,4-Difluorobenzene	114	11.022	11.026	-0.004	97	1461726	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.751	15.754	-0.003	93	1343515	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.396	17.397	-0.001	77	1053301	4.00	3.86	
6 Chlorodifluoromethane	51	3.710	3.708	0.002	96	15139	0.0800	0.0830	
7 Propene	41	3.715	3.719	-0.004	99	94406	0.0800	-0.2395	
8 Dichlorodifluoromethane	85	3.769	3.770	-0.001	100	27563	0.0800	0.0842	
9 Chloromethane	52	3.947	3.952	-0.005	58	3394	0.0800	0.1087	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.958	3.960	-0.002	96	14129	0.0800	0.0833	
12 Vinyl chloride	62	4.120	4.122	-0.002	39	10498	0.0800	0.0856	
11 Acetaldehyde	44	4.109	4.111	-0.002	92	50638	0.4000	1.28	
13 Butane	43	4.206	4.210	-0.004	86	16962	0.0800	0.1002	
14 Butadiene	54	4.206	4.210	-0.004	62	7467	0.0800	0.0862	
15 Bromomethane	94	4.530	4.531	-0.001	97	8885	0.0800	0.0868	
16 Chloroethane	64	4.670	4.673	-0.003	95	4976	0.0800	0.0843	
17 Ethanol	31	4.810	4.804	0.006	97	18622	0.4000	0.5959	
18 Vinyl bromide	106	4.972	4.975	-0.003	98	7364	0.0800	0.0824	
19 2-Methylbutane	43	5.020	5.025	-0.005	90	10343	0.0800	0.0948	
20 Trichlorofluoromethane	101	5.247	5.246	0.001	99	25985	0.0800	0.0808	
21 Acrolein	56	5.263	5.263	0.000	92	2655	0.0800	0.1278	
22 Acetonitrile	40	5.328	5.322	0.006	97	2743	0.0800	0.0896	
23 Acetone	58	5.392	5.385	0.007	98	23161	0.2400	0.6057	
24 Pentane	72	5.463	5.467	-0.004	97	1530	0.0800	0.0758	
25 Isopropyl alcohol	45	5.516	5.507	0.009	98	24168	0.2400	0.2566	
26 Ethyl ether	31	5.657	5.650	0.007	94	6065	0.0800	0.0838	
27 1,1-Dichloroethene	96	5.942	5.951	-0.009	93	6501	0.0800	0.0773	
28 Acrylonitrile	53	6.061	6.061	0.000	96	4538	0.0800	0.0828	
29 1,1,2-Trichloro-1,2,2-trifluoroe	101	6.120	6.129	-0.009	88	15386	0.0800	0.0819	
30 2-Methyl-2-propanol	59	6.158	6.136	0.022	94	13760	0.0800	0.0950	
31 Methylene Chloride	84	6.293	6.299	-0.006	97	78832	0.0800	0.1178	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.309	6.313	-0.004	32	7511	0.0800	0.0882	
33 Carbon disulfide	76	6.455	6.462	-0.007	99	22836	0.0800	0.0803	
34 trans-1,2-Dichloroethene	96	7.102	7.109	-0.007	95	7334	0.0800	0.0782	
35 2-Methylpentane	43	7.118	7.129	-0.011	94	19356	0.0800	0.0851	
36 Methyl tert-butyl ether	73	7.280	7.266	0.014	96	20750	0.0800	0.0793	
37 1,1-Dichloroethane	63	7.522	7.528	-0.006	99	17093	0.0800	0.0826	
38 Vinyl acetate	43	7.641	7.641	0.000	99	15629	0.0800	0.0769	
40 Hexane	56	8.110	8.111	-0.001	69	6513	0.0800	0.0797	
39 2-Butanone (MEK)	72	8.110	8.102	0.008	86	4643	0.0800	0.1064	
41 Isopropyl ether	45	8.299	8.289	0.010	94	22199	0.0800	0.0793	
42 cis-1,2-Dichloroethene	96	8.504	8.514	-0.010	98	7692	0.0800	0.0807	
43 Ethyl acetate	43	8.720	8.715	0.005	98	13833	0.0800	0.0788	
44 Chloroform	83	8.849	8.857	-0.008	93	20205	0.0800	0.0847	
45 Tert-butyl ethyl ether	59	8.978	8.969	0.009	96	22232	0.0800	0.0784	
46 Tetrahydrofuran	42	9.307	9.287	0.020	91	8395	0.0800	0.0844	
47 1,1,1-Trichloroethane	97	9.879	9.884	-0.005	94	20564	0.0800	0.0799	
48 1,2-Dichloroethane	62	9.987	9.992	-0.005	98	13192	0.0800	0.0816	
50 Benzene	78	10.477	10.483	-0.006	96	24475	0.0800	0.0812	
49 Cyclohexane	69	10.488	10.488	0.000	74	4244	0.0800	0.0797	
52 Carbon tetrachloride	117	10.504	10.508	-0.004	96	15888	0.0800	0.0764	
53 2,3-Dimethylpentane	71	10.601	10.606	-0.005	91	6414	0.0800	0.0823	
51 n-Butanol	31	10.553	10.524	0.029	56	3241	0.0800	0.1142	
54 Thiophene	84	10.747	10.756	-0.009	98	13497	0.0800	0.0845	
55 Isooctane	57	11.243	11.250	-0.007	98	42823	0.0800	0.0839	
56 n-Heptane	71	11.621	11.624	-0.003	90	9091	0.0800	0.0795	
57 1,2-Dichloropropane	63	11.696	11.701	-0.005	89	9930	0.0800	0.0874	
58 Trichloroethene	130	11.734	11.739	-0.005	86	8061	0.0800	0.0789	
59 Dibromomethane	93	11.815	11.820	-0.005	83	9330	0.0800	0.0780	
60 Dichlorobromomethane	83	11.960	11.967	-0.007	97	15895	0.0800	0.0765	
61 1,4-Dioxane	88	12.036	12.018	0.018	87	2210	0.0800	0.0646	
62 Methyl methacrylate	41	12.074	12.070	0.004	95	7521	0.0800	0.0715	
63 Methylcyclohexane	83	12.505	12.507	-0.002	94	14867	0.0800	0.0879	
65 cis-1,3-Dichloropropene	75	12.963	12.967	-0.004	97	12909	0.0800	0.0819	
64 4-Methyl-2-pentanone (MIBK)	43	12.942	12.933	0.009	98	14028	0.0800	0.0768	
66 trans-1,3-Dichloropropene	75	13.654	13.661	-0.007	97	10747	0.0800	0.0774	
67 Toluene	91	13.783	13.786	-0.003	94	23667	0.0800	0.0812	
68 1,1,2-Trichloroethane	83	13.853	13.859	-0.006	93	7133	0.0800	0.0805	
69 2-Hexanone	58	14.274	14.266	0.008	94	6772	0.0800	0.0774	
70 n-Octane	85	14.479	14.479	0.000	94	8629	0.0800	0.0809	
71 Chlorodibromomethane	129	14.559	14.562	-0.003	95	10817	0.0800	0.0698	
72 Ethylene Dibromide	107	14.851	14.852	-0.001	93	11135	0.0800	0.0810	
73 Tetrachloroethene	129	14.926	14.929	-0.003	86	7527	0.0800	0.0755	
75 Chlorobenzene	112	15.800	15.802	-0.002	92	17157	0.0800	0.0816	
74 2,3-Dimethylheptane	43	15.821	15.824	-0.003	95	28595	0.0800	0.0854	
78 Ethylbenzene	91	16.091	16.092	-0.001	99	29257	0.0800	0.0764	
79 m-Xylene & p-Xylene	91	16.253	16.254	-0.001	100	45725	0.1600	0.1501	
80 n-Nonane	57	16.673	16.676	-0.003	89	16373	0.0800	0.0787	
81 Bromoform	173	16.695	16.700	-0.005	88	7295	0.0800	0.0616	
82 Styrene	104	16.716	16.718	-0.002	95	11687	0.0800	0.0654	
83 o-Xylene	91	16.781	16.780	0.001	96	25083	0.0800	0.0778	
84 1,1,2,2-Tetrachloroethane	83	17.099	17.101	-0.002	97	17040	0.0800	0.0795	
85 1,2,3-Trichloropropane	110	17.261	17.260	0.001	98	4940	0.0800	0.0784	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
86 Isopropylbenzene	105	17.364	17.367	-0.003	98	30733	0.0800	0.0751	
87 N-Propylbenzene	120	17.908	17.907	0.001	98	7353	0.0800	0.0720	
88 2-Chlorotoluene	126	17.951	17.951	0.000	96	7282	0.0800	0.0775	
89 4-Ethyltoluene	105	18.054	18.056	-0.002	98	28757	0.0800	0.0729	
90 1,3,5-Trimethylbenzene	120	18.129	18.131	-0.002	90	10560	0.0800	0.0688	
92 Alpha Methyl Styrene	118	18.361	18.361	0.000	86	7888	0.0800	0.0618	
93 n-Decane	57	18.415	18.420	-0.005	92	19761	0.0800	0.0807	
94 tert-Butylbenzene	119	18.555	18.554	0.001	86	25204	0.0800	0.0757	
95 1,2,4-Trimethylbenzene	105	18.566	18.567	-0.001	96	24535	0.0800	0.0692	
96 sec-Butylbenzene	105	18.819	18.821	-0.002	97	35776	0.0800	0.0697	
97 1,3-Dichlorobenzene	146	18.830	18.836	-0.006	92	14955	0.0800	0.0814	
98 Benzyl chloride	91	18.906	18.909	-0.003	96	19143	0.0800	0.0686	
99 1,4-Dichlorobenzene	146	18.922	18.922	0.000	86	14629	0.0800	0.0787	
100 4-Isopropyltoluene	119	18.981	18.983	-0.002	94	26407	0.0800	0.0666	
101 1,2,3-Trimethylbenzene	105	19.035	19.036	-0.001	98	24859	0.0800	0.0943	
102 Butylcyclohexane	83	19.089	19.091	-0.002	89	24149	0.0800	0.0760	
103 2,3-Dihydroindene	117	19.278	19.279	-0.001	91	22495	0.0800	0.0793	
104 1,2-Dichlorobenzene	146	19.278	19.280	-0.002	81	14388	0.0800	0.0768	
106 Indene	116	19.407	19.409	-0.002	92	16141	0.0800	0.0666	
105 n-Butylbenzene	91	19.413	19.414	-0.001	96	30089	0.0800	0.0672	
107 Undecane	57	19.725	19.726	-0.001	95	22076	0.0800	0.0834	
108 1,2-Dibromo-3-Chloropropane	157	19.876	19.877	-0.001	80	4519	0.0800	0.0619	
109 1,2,4,5-Tetramethylbenzene	119	20.162	20.165	-0.003	95	24879	0.0800	0.0714	
110 Dodecane	57	20.777	20.778	-0.001	95	20902	0.0800	0.0921	
111 1,2,4-Trichlorobenzene	180	20.971	20.973	-0.002	89	10379	0.0800	0.0751	
112 Naphthalene	128	21.111	21.112	-0.001	98	29780	0.0800	0.0837	
113 Hexachlorobutadiene	225	21.322	21.320	0.002	85	11566	0.0800	0.0713	
114 1,2,3-Trichlorobenzene	180	21.386	21.388	-0.002	90	10782	0.0800	0.0817	
115 2-Methylnaphthalene	142	22.157	22.158	-0.001	96	19163	0.0800	0.0931	
116 1-Methylnaphthalene	142	22.335	22.333	0.002	98	22935	0.0800	0.0936	
A 122 C8 Range	1	14.463	(14.431-14.516)		0	81993	0.0800	0.0829	
S 123 1,2-Dichloroethene, Total	1				0		0.1600	0.1590	
S 124 Xylenes, Total	100				0		0.2400	0.2280	

Reagents:

40L1-3DQP_00028	Amount Added: 200.00	Units: mL	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

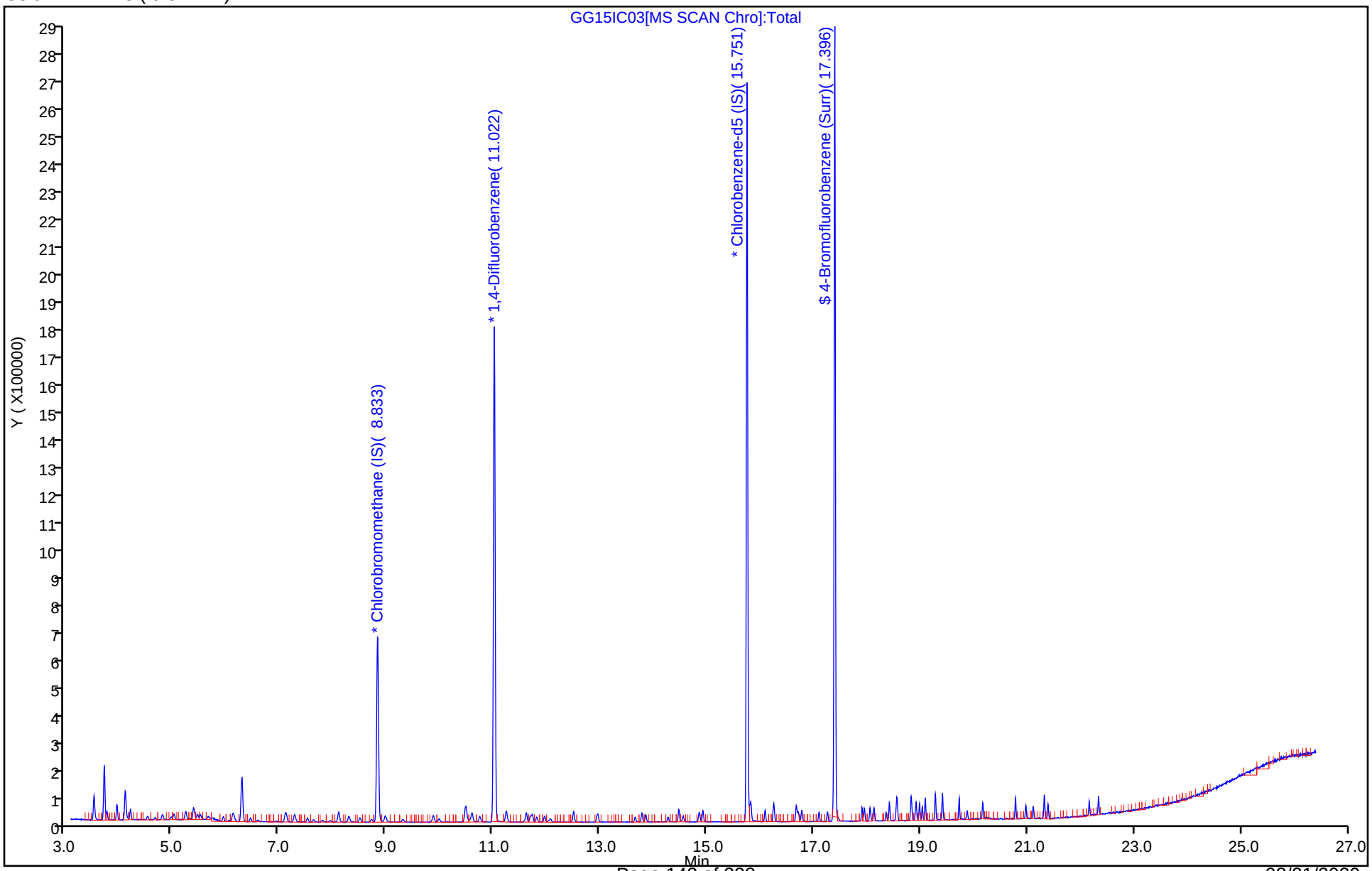
Report Date: 16-Jul-2020 15:15:10 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC03.D

Injection Date:	15-Jul-2020 18:58:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	IC L3			Worklist Smp#:	10
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

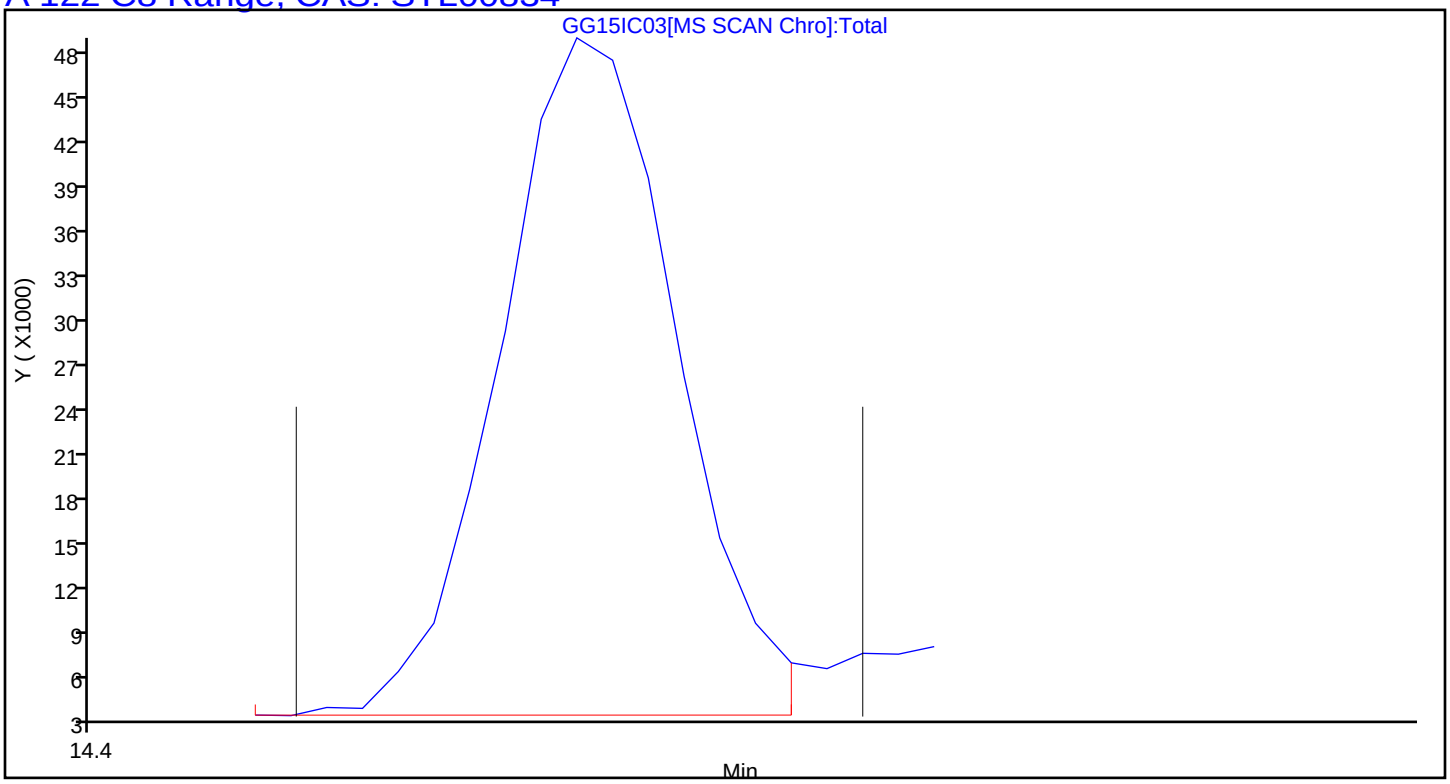


Report Date: 16-Jul-2020 15:15:10 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC03.D				
Injection Date:	15-Jul-2020 18:58:30	Instrument ID:	MG		
Lims ID:	IC L3				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	1	Worklist Smp#:	10
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 122 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC04.D
Lims ID: IC L4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 15-Jul-2020 19:47:30 ALS Bottle#: 2 Worklist Smp#: 11
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016031-011
Misc. Info.: 307382
Operator ID: HMT Instrument ID: MG
Sublist: chrom-MG_TO15*sub17

Method: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 16-Jul-2020 15:15:17 Calib Date: 15-Jul-2020 22:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1066

First Level Reviewer: tajh Date: 16-Jul-2020 08:57:35

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.833	8.843	-0.010	93	174377	4.00	4.00	
* 2 1,4-Difluorobenzene	114	11.022	11.026	-0.004	97	1480932	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.751	15.754	-0.003	93	1386442	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.396	17.397	-0.001	78	1107728	4.00	3.93	
6 Chlorodifluoromethane	51	3.710	3.708	0.002	97	30180	0.1600	0.1702	
7 Propene	41	3.721	3.719	0.002	100	99555	0.1600	-0.1349	
8 Dichlorodifluoromethane	85	3.769	3.770	-0.001	100	50823	0.1600	0.1598	
9 Chloromethane	52	3.953	3.952	0.001	61	5752	0.1600	0.1896	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.964	3.960	0.004	96	24791	0.1600	0.1505	
11 Acetaldehyde	44	4.115	4.111	0.003	91	59053	0.8000	1.53	
12 Vinyl chloride	62	4.125	4.122	0.003	99	20179	0.1600	0.1693	
13 Butane	43	4.212	4.210	0.002	86	30031	0.1600	0.1826	
14 Butadiene	54	4.212	4.210	0.002	64	14135	0.1600	0.1679	
15 Bromomethane	94	4.530	4.531	-0.001	95	16433	0.1600	0.1652	
16 Chloroethane	64	4.670	4.673	-0.003	98	9915	0.1600	0.1730	
17 Ethanol	31	4.810	4.804	0.006	98	35979	0.8000	1.18	
18 Vinyl bromide	106	4.977	4.975	0.002	95	13354	0.1600	0.1539	
19 2-Methylbutane	43	5.026	5.025	0.001	89	18904	0.1600	0.1784	
20 Trichlorofluoromethane	101	5.247	5.246	0.001	99	49263	0.1600	0.1576	
21 Acrolein	56	5.263	5.263	0.000	26	3482	0.1600	0.1725	
22 Acetonitrile	40	5.328	5.322	0.006	97	6020	0.1600	0.2024	
23 Acetone	58	5.392	5.385	0.007	99	30059	0.4800	0.8093	
24 Pentane	72	5.468	5.467	0.001	97	3150	0.1600	0.1606	
25 Isopropyl alcohol	45	5.522	5.507	0.015	98	44765	0.4800	0.4893	
26 Ethyl ether	31	5.657	5.650	0.007	94	11764	0.1600	0.1674	
27 1,1-Dichloroethene	96	5.948	5.951	-0.003	94	12765	0.1600	0.1563	
28 Acrylonitrile	53	6.061	6.061	0.000	98	7913	0.1600	0.1487	
29 1,1,2-Trichloro-1,2,2-trifluoroe	101	6.137	6.129	0.008	89	28227	0.1600	0.1547	
30 2-Methyl-2-propanol	59	6.164	6.136	0.028	96	20588	0.1600	0.1464	
31 Methylene Chloride	84	6.298	6.299	-0.001	97	82240	0.1600	0.1890	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.315	6.313	0.002	98	15294	0.1600	0.1849	
33 Carbon disulfide	76	6.466	6.462	0.004	99	43319	0.1600	0.1569	
34 trans-1,2-Dichloroethene	96	7.107	7.109	-0.002	94	14244	0.1600	0.1565	
35 2-Methylpentane	43	7.129	7.129	0.000	94	36205	0.1600	0.1638	
36 Methyl tert-butyl ether	73	7.280	7.266	0.014	96	37599	0.1600	0.1479	
37 1,1-Dichloroethane	63	7.528	7.528	0.000	100	31545	0.1600	0.1570	
38 Vinyl acetate	43	7.641	7.641	0.000	100	28407	0.1600	0.1440	
40 Hexane	56	8.110	8.111	-0.001	74	13313	0.1600	0.1677	
39 2-Butanone (MEK)	72	8.110	8.102	0.008	85	7388	0.1600	0.1743	
41 Isopropyl ether	45	8.294	8.289	0.005	97	40946	0.1600	0.1507	
42 cis-1,2-Dichloroethene	96	8.515	8.514	0.001	97	14792	0.1600	0.1598	
43 Ethyl acetate	43	8.720	8.715	0.005	98	25828	0.1600	0.1514	
44 Chloroform	83	8.854	8.857	-0.003	94	37336	0.1600	0.1611	
45 Tert-butyl ethyl ether	59	8.978	8.969	0.009	96	40688	0.1600	0.1476	
46 Tetrahydrofuran	42	9.297	9.287	0.010	93	15007	0.1600	0.1553	
47 1,1,1-Trichloroethane	97	9.884	9.884	0.000	96	38432	0.1600	0.1537	
48 1,2-Dichloroethane	62	9.987	9.992	-0.005	99	25307	0.1600	0.1546	
50 Benzene	78	10.483	10.483	0.000	96	47574	0.1600	0.1558	
49 Cyclohexane	69	10.488	10.488	0.000	72	8607	0.1600	0.1596	
52 Carbon tetrachloride	117	10.504	10.508	-0.004	96	32283	0.1600	0.1531	
51 n-Butanol	31	10.564	10.524	0.040	67	4340	0.1600	0.1509	
53 2,3-Dimethylpentane	71	10.607	10.606	0.001	92	12254	0.1600	0.1552	
54 Thiophene	84	10.753	10.756	-0.004	96	25644	0.1600	0.1585	
55 Isooctane	57	11.249	11.250	-0.001	99	82504	0.1600	0.1596	
56 n-Heptane	71	11.626	11.624	0.002	92	17773	0.1600	0.1534	
57 1,2-Dichloropropane	63	11.702	11.701	0.001	90	17668	0.1600	0.1534	
58 Trichloroethene	130	11.739	11.739	0.000	86	15315	0.1600	0.1480	
59 Dibromomethane	93	11.815	11.820	-0.005	80	17739	0.1600	0.1464	
60 Dichlorobromomethane	83	11.960	11.967	-0.007	99	31890	0.1600	0.1515	
61 1,4-Dioxane	88	12.036	12.018	0.018	82	4949	0.1600	0.1428	
62 Methyl methacrylate	41	12.074	12.070	0.004	95	14265	0.1600	0.1338	
63 Methylcyclohexane	83	12.505	12.507	-0.002	96	29969	0.1600	0.1659	
64 4-Methyl-2-pentanone (MIBK)	43	12.942	12.933	0.009	97	25328	0.1600	0.1368	
65 cis-1,3-Dichloropropene	75	12.963	12.967	-0.004	97	23842	0.1600	0.1493	
66 trans-1,3-Dichloropropene	75	13.659	13.661	-0.002	96	20954	0.1600	0.1462	
67 Toluene	91	13.783	13.786	-0.003	93	44637	0.1600	0.1484	
68 1,1,2-Trichloroethane	83	13.853	13.859	-0.006	95	14175	0.1600	0.1550	
69 2-Hexanone	58	14.274	14.266	0.008	93	11454	0.1600	0.1269	
70 n-Octane	85	14.479	14.479	0.000	93	15880	0.1600	0.1442	
71 Chlorodibromomethane	129	14.560	14.562	-0.002	94	20490	0.1600	0.1281	
72 Ethylene Dibromide	107	14.851	14.852	-0.001	96	20720	0.1600	0.1461	
73 Tetrachloroethene	129	14.926	14.929	-0.003	84	14862	0.1600	0.1444	
75 Chlorobenzene	112	15.800	15.802	-0.002	89	31726	0.1600	0.1462	
74 2,3-Dimethylheptane	43	15.821	15.824	-0.003	96	53687	0.1600	0.1554	
78 Ethylbenzene	91	16.091	16.092	-0.001	99	56644	0.1600	0.1434	
79 m-Xylene & p-Xylene	91	16.253	16.254	-0.001	99	85460	0.3200	0.2719	
80 n-Nonane	57	16.679	16.676	0.003	92	31424	0.1600	0.1463	
81 Bromoform	173	16.700	16.700	0.000	87	14728	0.1600	0.1205	
82 Styrene	104	16.716	16.718	-0.002	96	23856	0.1600	0.1293	
83 o-Xylene	91	16.781	16.780	0.001	96	45362	0.1600	0.1364	
84 1,1,2,2-Tetrachloroethane	83	17.099	17.101	-0.002	97	32079	0.1600	0.1449	
85 1,2,3-Trichloropropane	110	17.261	17.260	0.001	98	9084	0.1600	0.1397	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
86 Isopropylbenzene	105	17.369	17.367	0.002	97	56648	0.1600	0.1341	
87 N-Propylbenzene	120	17.908	17.907	0.001	97	13393	0.1600	0.1272	
88 2-Chlorotoluene	126	17.951	17.951	0.000	95	12690	0.1600	0.1309	
89 4-Ethyltoluene	105	18.054	18.056	-0.002	98	50918	0.1600	0.1251	
90 1,3,5-Trimethylbenzene	120	18.129	18.131	-0.002	90	19881	0.1600	0.1256	
92 Alpha Methyl Styrene	118	18.361	18.361	0.000	85	15069	0.1600	0.1144	
93 n-Decane	57	18.420	18.420	0.000	91	37095	0.1600	0.1468	
94 tert-Butylbenzene	119	18.555	18.554	0.001	85	45863	0.1600	0.1336	
95 1,2,4-Trimethylbenzene	105	18.566	18.567	-0.001	96	46363	0.1600	0.1267	
96 sec-Butylbenzene	105	18.819	18.821	-0.002	97	66579	0.1600	0.1257	
97 1,3-Dichlorobenzene	146	18.836	18.836	0.000	91	26425	0.1600	0.1394	
98 Benzyl chloride	91	18.906	18.909	-0.003	96	33613	0.1600	0.1168	
99 1,4-Dichlorobenzene	146	18.922	18.922	0.000	85	26600	0.1600	0.1386	
100 4-Isopropyltoluene	119	18.981	18.983	-0.002	95	51441	0.1600	0.1258	
101 1,2,3-Trimethylbenzene	105	19.035	19.036	-0.001	99	47045	0.1600	0.1723	
102 Butylcyclohexane	83	19.089	19.091	-0.002	92	46751	0.1600	0.1425	
103 2,3-Dihydroindene	117	19.278	19.279	-0.001	90	39559	0.1600	0.1351	
104 1,2-Dichlorobenzene	146	19.278	19.280	-0.002	77	26189	0.1600	0.1355	
106 Indene	116	19.407	19.409	-0.002	87	30832	0.1600	0.1233	
105 n-Butylbenzene	91	19.413	19.414	-0.001	97	58580	0.1600	0.1267	
107 Undecane	57	19.725	19.726	-0.001	95	40322	0.1600	0.1475	
108 1,2-Dibromo-3-Chloropropane	157	19.876	19.877	-0.001	80	9721	0.1600	0.1291	
109 1,2,4,5-Tetramethylbenzene	119	20.168	20.165	0.003	95	46893	0.1600	0.1304	
110 Dodecane	57	20.777	20.778	-0.001	94	34618	0.1600	0.1478	
111 1,2,4-Trichlorobenzene	180	20.971	20.973	-0.002	89	18382	0.1600	0.1289	
112 Naphthalene	128	21.111	21.112	-0.001	98	49157	0.1600	0.1340	
113 Hexachlorobutadiene	225	21.322	21.320	0.002	86	21594	0.1600	0.1289	
114 1,2,3-Trichlorobenzene	180	21.386	21.388	-0.002	91	17814	0.1600	0.1309	
115 2-Methylnaphthalene	142	22.157	22.158	-0.001	98	25651	0.1600	0.1208	
116 1-Methylnaphthalene	142	22.335	22.333	0.002	97	32157	0.1600	0.1272	
A 122 C8 Range	1	14.474	(14.431-14.516)		0	158108	0.1600	0.1549	
S 123 1,2-Dichloroethene, Total	1				0		0.3200	0.3162	
S 124 Xylenes, Total	100				0		0.4800	0.4083	

Reagents:

40L4DQP_00019	Amount Added: 200.00	Units: mL	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

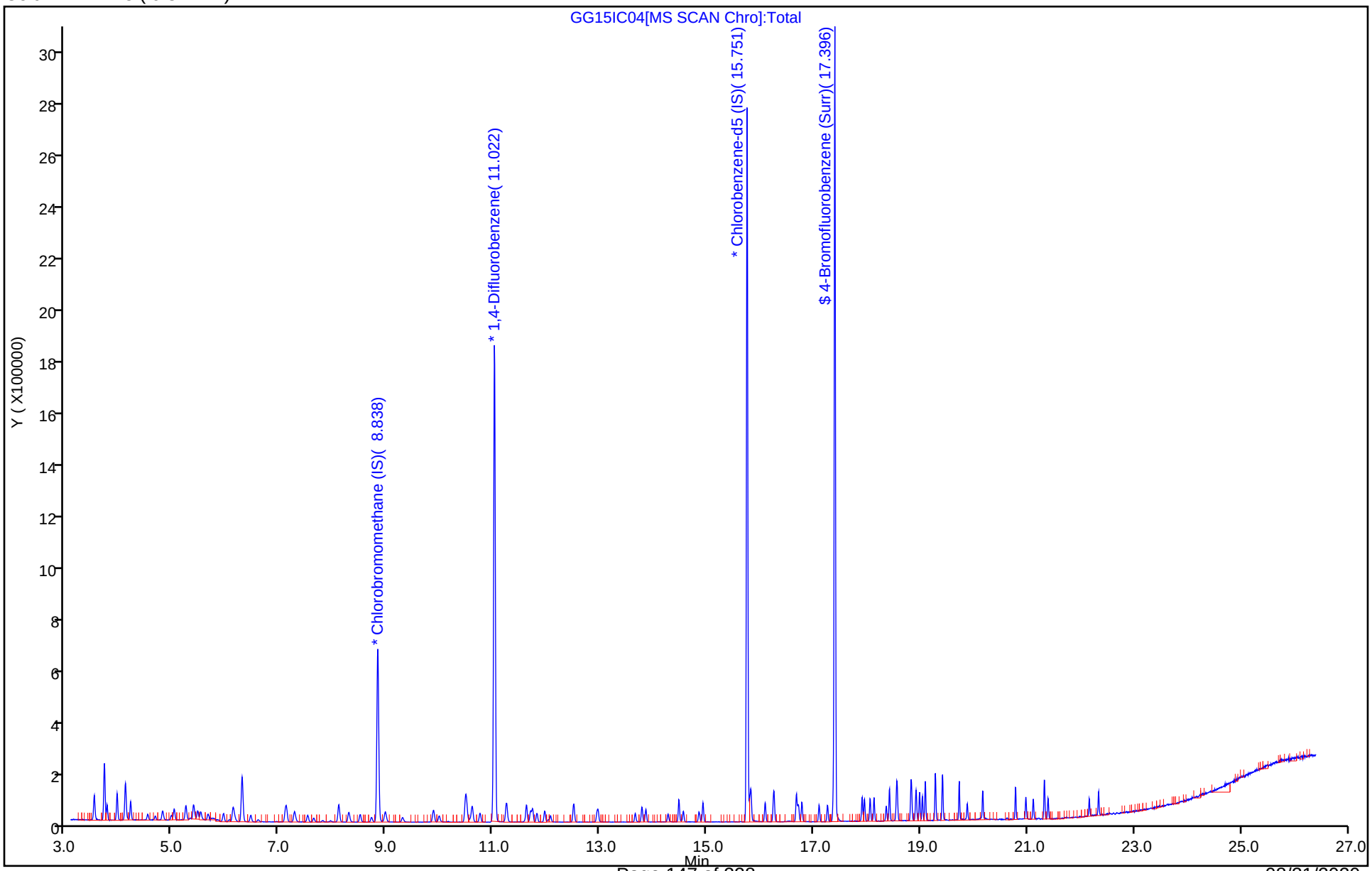
Report Date: 16-Jul-2020 15:15:18 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC04.D

Injection Date:	15-Jul-2020 19:47:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	IC L4			Worklist Smp#:	11
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

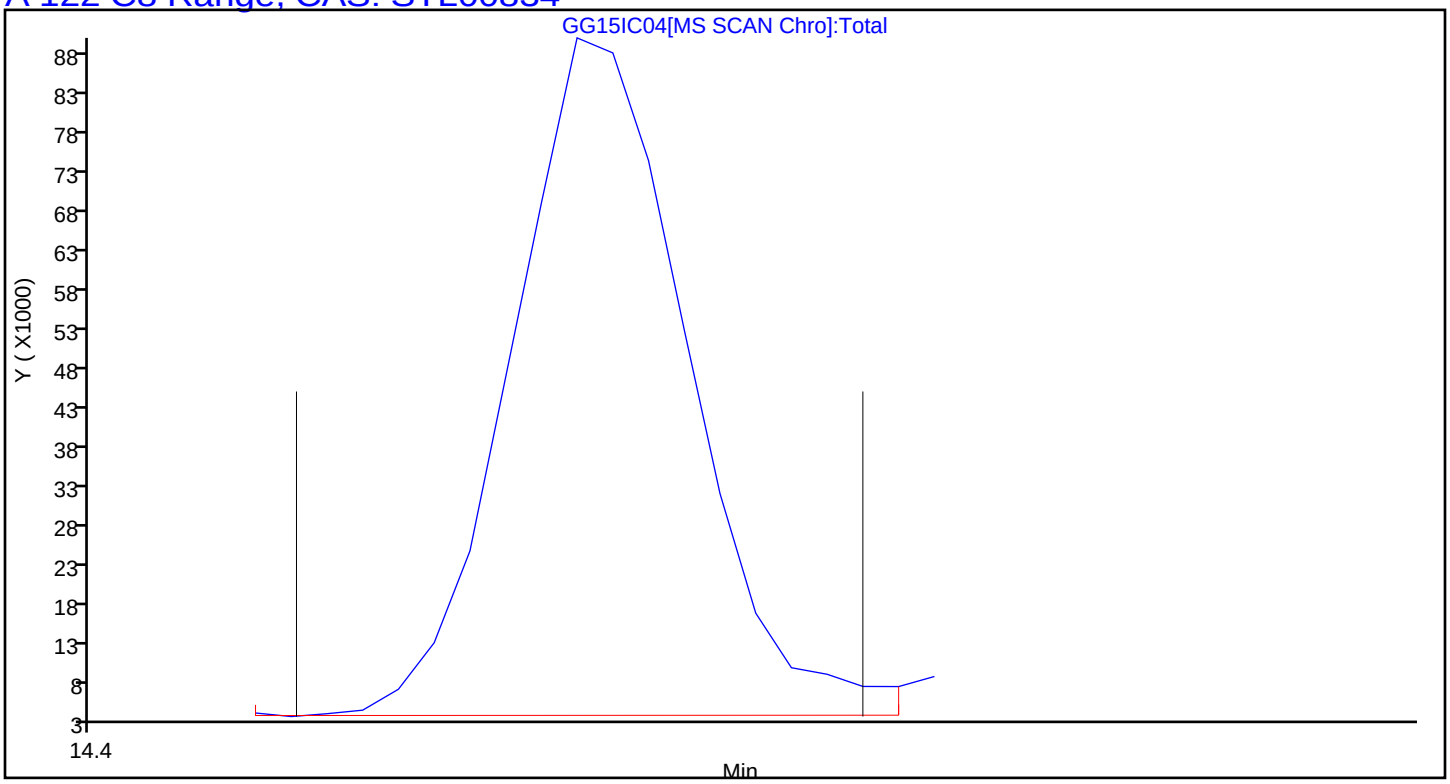


Report Date: 16-Jul-2020 15:15:18 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC04.D				
Injection Date:	15-Jul-2020 19:47:30	Instrument ID:	MG		
Lims ID:	IC L4				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	2	Worklist Smp#:	11
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 122 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC05.D
Lims ID: IC L5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 15-Jul-2020 20:32:30 ALS Bottle#: 3 Worklist Smp#: 12
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016031-012
Misc. Info.: 307381
Operator ID: HMT Instrument ID: MG
Sublist: chrom-MG_TO15*sub17

Method: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 16-Jul-2020 15:15:24 Calib Date: 15-Jul-2020 22:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1066

First Level Reviewer: tajh Date: 16-Jul-2020 07:09:28

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.838	8.843	-0.005	93	179522	4.00	4.00	
* 2 1,4-Difluorobenzene	114	11.022	11.026	-0.004	97	1596384	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.751	15.754	-0.003	93	1459263	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.396	17.397	-0.001	77	1172428	4.00	3.95	
6 Chlorodifluoromethane	51	3.705	3.708	-0.003	96	75352	0.4000	0.4129	
7 Propene	41	3.721	3.719	0.002	99	121579	0.4000	0.1118	
8 Dichlorodifluoromethane	85	3.769	3.770	-0.001	100	133157	0.4000	0.4068	
9 Chloromethane	52	3.953	3.952	0.001	98	14151	0.4000	0.4532	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.958	3.960	-0.002	96	67629	0.4000	0.3989	
11 Acetaldehyde	44	4.109	4.111	-0.002	90	113031	2.00	2.85	
12 Vinyl chloride	62	4.120	4.122	-0.002	98	51891	0.4000	0.4229	
13 Butane	43	4.212	4.210	0.002	86	77021	0.4000	0.4549	
14 Butadiene	54	4.212	4.210	0.002	64	35829	0.4000	0.4135	
15 Bromomethane	94	4.530	4.531	-0.001	98	41050	0.4000	0.4009	
16 Chloroethane	64	4.670	4.673	-0.003	97	24335	0.4000	0.4125	
17 Ethanol	31	4.794	4.804	-0.010	98	82833	2.00	2.64	
18 Vinyl bromide	106	4.977	4.975	0.002	97	34687	0.4000	0.3882	
19 2-Methylbutane	43	5.026	5.025	0.001	91	47798	0.4000	0.4380	
20 Trichlorofluoromethane	101	5.242	5.246	-0.004	99	126990	0.4000	0.3947	
21 Acrolein	56	5.258	5.263	-0.005	26	9147	0.4000	0.4403	
22 Acetonitrile	40	5.317	5.322	-0.005	97	14024	0.4000	0.4580	
23 Acetone	58	5.382	5.385	-0.003	99	57147	1.20	1.49	
24 Pentane	72	5.463	5.467	-0.004	99	8170	0.4000	0.4045	
25 Isopropyl alcohol	45	5.495	5.507	-0.012	99	115484	1.20	1.23	
26 Ethyl ether	31	5.646	5.650	-0.004	92	30519	0.4000	0.4218	
27 1,1-Dichloroethene	96	5.948	5.951	-0.003	94	33621	0.4000	0.4000	
28 Acrylonitrile	53	6.056	6.061	-0.005	94	21948	0.4000	0.4006	
29 1,1,2-Trichloro-1,2,2-trifluoroe	101	6.126	6.129	-0.003	87	73295	0.4000	0.3902	
30 2-Methyl-2-propanol	59	6.126	6.136	-0.010	91	57764	0.4000	0.3989	
31 Methylene Chloride	84	6.293	6.299	-0.006	96	102459	0.4000	0.4060	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.309	6.313	-0.004	98	26105	0.4000	0.3066	
33 Carbon disulfide	76	6.460	6.462	-0.002	99	112564	0.4000	0.3960	
34 trans-1,2-Dichloroethene	96	7.107	7.109	-0.002	95	36518	0.4000	0.3896	
35 2-Methylpentane	43	7.129	7.129	0.000	94	93993	0.4000	0.4130	
36 Methyl tert-butyl ether	73	7.253	7.266	-0.013	96	106137	0.4000	0.4055	
37 1,1-Dichloroethane	63	7.528	7.528	0.000	100	80757	0.4000	0.3904	
38 Vinyl acetate	43	7.636	7.641	-0.005	100	82582	0.4000	0.4066	
40 Hexane	56	8.110	8.111	-0.001	88	33121	0.4000	0.4053	
39 2-Butanone (MEK)	72	8.089	8.102	-0.013	96	17544	0.4000	0.4020	
41 Isopropyl ether	45	8.283	8.289	-0.006	96	119133	0.4000	0.4258	
42 cis-1,2-Dichloroethene	96	8.509	8.514	-0.005	99	37748	0.4000	0.3961	
43 Ethyl acetate	43	8.703	8.715	-0.012	99	73220	0.4000	0.4169	
44 Chloroform	83	8.849	8.857	-0.008	95	94684	0.4000	0.3968	
45 Tert-butyl ethyl ether	59	8.957	8.969	-0.012	96	115576	0.4000	0.4073	
46 Tetrahydrofuran	42	9.280	9.287	-0.007	96	41506	0.4000	0.4172	
47 1,1,1-Trichloroethane	97	9.879	9.884	-0.005	96	100286	0.4000	0.3896	
48 1,2-Dichloroethane	62	9.987	9.992	-0.005	98	66709	0.4000	0.3780	
50 Benzene	78	10.478	10.483	-0.005	96	123712	0.4000	0.3757	
49 Cyclohexane	69	10.478	10.488	-0.010	70	22047	0.4000	0.3793	
52 Carbon tetrachloride	117	10.505	10.508	-0.004	96	49334	0.4000	0.2171	
51 n-Butanol	31	10.526	10.524	0.002	66	11804	0.4000	0.3808	
53 2,3-Dimethylpentane	71	10.607	10.606	0.001	92	32408	0.4000	0.3809	
54 Thiophene	84	10.753	10.756	-0.003	97	65514	0.4000	0.3757	
55 Isooctane	57	11.249	11.250	-0.001	98	219821	0.4000	0.3945	
56 n-Heptane	71	11.621	11.624	-0.003	92	45176	0.4000	0.3617	
57 1,2-Dichloropropane	63	11.696	11.701	-0.005	89	45740	0.4000	0.3685	
58 Trichloroethene	130	11.734	11.739	-0.005	87	39945	0.4000	0.3582	
59 Dibromomethane	93	11.815	11.820	-0.005	81	47845	0.4000	0.3663	
60 Dichlorobromomethane	83	11.966	11.967	-0.001	98	84911	0.4000	0.3743	
61 1,4-Dioxane	88	12.009	12.018	-0.009	91	12691	0.4000	0.3396	
62 Methyl methacrylate	41	12.068	12.070	-0.002	93	42312	0.4000	0.3681	
63 Methylcyclohexane	83	12.505	12.507	-0.002	95	75262	0.4000	0.3744	
64 4-Methyl-2-pentanone (MIBK)	43	12.931	12.933	-0.002	97	77155	0.4000	0.3867	
65 cis-1,3-Dichloropropene	75	12.963	12.967	-0.004	95	63645	0.4000	0.3697	
66 trans-1,3-Dichloropropene	75	13.659	13.661	-0.002	96	54746	0.4000	0.3629	
67 Toluene	91	13.783	13.786	-0.003	93	119162	0.4000	0.3764	
68 1,1,2-Trichloroethane	83	13.853	13.859	-0.006	94	37510	0.4000	0.3896	
69 2-Hexanone	58	14.263	14.266	-0.003	92	35303	0.4000	0.3716	
70 n-Octane	85	14.479	14.479	0.000	93	42155	0.4000	0.3637	
71 Chlorodibromomethane	129	14.560	14.562	-0.002	95	53552	0.4000	0.3181	
72 Ethylene Dibromide	107	14.845	14.852	-0.007	98	56158	0.4000	0.3761	
73 Tetrachloroethene	129	14.926	14.929	-0.003	85	38507	0.4000	0.3556	
75 Chlorobenzene	112	15.800	15.802	-0.002	87	83702	0.4000	0.3666	
74 2,3-Dimethylheptane	43	15.821	15.824	-0.003	96	145060	0.4000	0.3990	
78 Ethylbenzene	91	16.091	16.092	-0.001	100	155214	0.4000	0.3733	
79 m-Xylene & p-Xylene	91	16.253	16.254	-0.001	100	249164	0.8000	0.7532	
80 n-Nonane	57	16.673	16.676	-0.003	92	89239	0.4000	0.3948	
81 Bromoform	173	16.700	16.700	0.000	87	35566	0.4000	0.2765	
82 Styrene	104	16.717	16.718	-0.001	97	73037	0.4000	0.3761	
83 o-Xylene	91	16.776	16.780	-0.004	97	131043	0.4000	0.3744	
84 1,1,2,2-Tetrachloroethane	83	17.099	17.101	-0.002	98	87989	0.4000	0.3777	
85 1,2,3-Trichloropropane	110	17.256	17.260	-0.004	98	25717	0.4000	0.3758	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
86 Isopropylbenzene	105	17.364	17.367	-0.003	98	160270	0.4000	0.3604	
87 N-Propylbenzene	120	17.903	17.907	-0.004	98	38488	0.4000	0.3472	
88 2-Chlorotoluene	126	17.946	17.951	-0.005	95	35289	0.4000	0.3459	
89 4-Ethyltoluene	105	18.054	18.056	-0.002	98	150122	0.4000	0.3505	
90 1,3,5-Trimethylbenzene	120	18.129	18.131	-0.002	90	57435	0.4000	0.3447	
92 Alpha Methyl Styrene	118	18.356	18.361	-0.005	85	47326	0.4000	0.3414	
93 n-Decane	57	18.421	18.420	0.000	91	105777	0.4000	0.3977	
94 tert-Butylbenzene	119	18.550	18.554	-0.004	88	132968	0.4000	0.3679	
95 1,2,4-Trimethylbenzene	105	18.566	18.567	-0.001	95	131917	0.4000	0.3425	
96 sec-Butylbenzene	105	18.820	18.821	-0.001	97	193690	0.4000	0.3475	
97 1,3-Dichlorobenzene	146	18.836	18.836	0.000	93	69225	0.4000	0.3470	
98 Benzyl chloride	91	18.906	18.909	-0.003	96	109953	0.4000	0.3629	
99 1,4-Dichlorobenzene	146	18.922	18.922	0.000	92	70751	0.4000	0.3503	
100 4-Isopropyltoluene	119	18.981	18.983	-0.002	95	147418	0.4000	0.3424	
101 1,2,3-Trimethylbenzene	105	19.035	19.036	-0.001	99	135108	0.4000	0.4629	
102 Butylcyclohexane	83	19.089	19.091	-0.002	92	127815	0.4000	0.3701	
103 2,3-Dihydroindene	117	19.278	19.279	-0.001	92	112727	0.4000	0.3658	
104 1,2-Dichlorobenzene	146	19.278	19.280	-0.002	76	69708	0.4000	0.3427	
106 Indene	116	19.407	19.409	-0.002	90	93609	0.4000	0.3557	
105 n-Butylbenzene	91	19.413	19.414	-0.001	97	173331	0.4000	0.3562	
107 Undecane	57	19.725	19.726	-0.001	96	115570	0.4000	0.4018	
108 1,2-Dibromo-3-Chloropropane	157	19.876	19.877	-0.001	82	28099	0.4000	0.3546	
109 1,2,4,5-Tetramethylbenzene	119	20.162	20.165	-0.003	95	136106	0.4000	0.3595	
110 Dodecane	57	20.777	20.778	-0.001	95	92067	0.4000	0.3733	
111 1,2,4-Trichlorobenzene	180	20.971	20.973	-0.002	90	45814	0.4000	0.3052	
112 Naphthalene	128	21.111	21.112	-0.001	98	120579	0.4000	0.3122	
113 Hexachlorobutadiene	225	21.322	21.320	0.002	89	55266	0.4000	0.3135	
114 1,2,3-Trichlorobenzene	180	21.386	21.388	-0.002	90	41759	0.4000	0.2915	
115 2-Methylnaphthalene	142	22.157	22.158	-0.001	96	56670	0.4000	0.2535	
116 1-Methylnaphthalene	142	22.335	22.333	0.002	97	65547	0.4000	0.2464	
A 122 C8 Range	1	14.473	(14.420-14.527)		0	424704	0.4000	0.3954	
S 123 1,2-Dichloroethene, Total	1				0		0.8000	0.7857	
S 124 Xylenes, Total	100				0		1.20	1.13	

Reagents:

40L5DQP_00019	Amount Added: 200.00	Units: mL	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

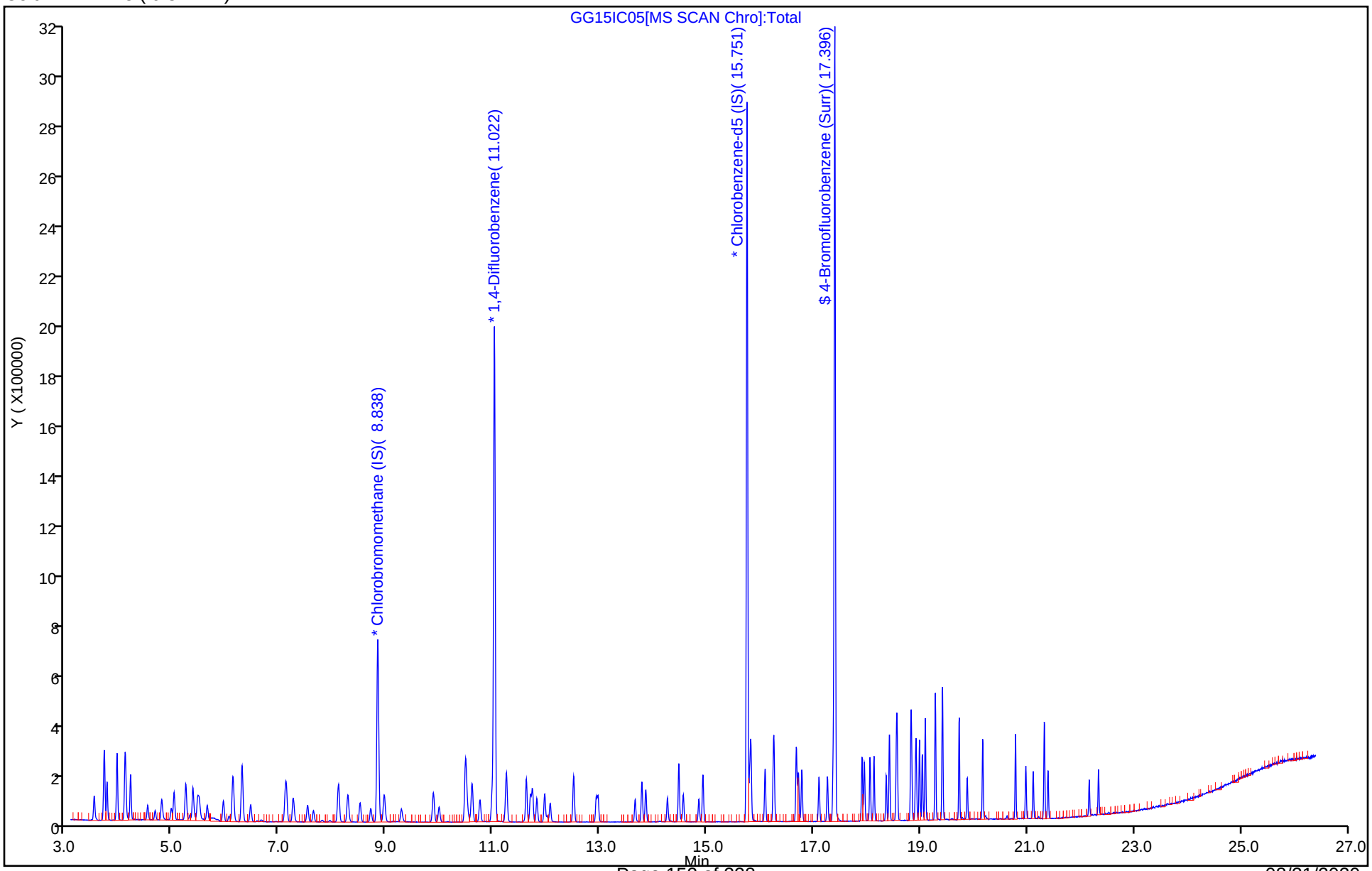
Report Date: 16-Jul-2020 15:15:25 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC05.D

Injection Date:	15-Jul-2020 20:32:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	IC L5			Worklist Smp#:	12
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

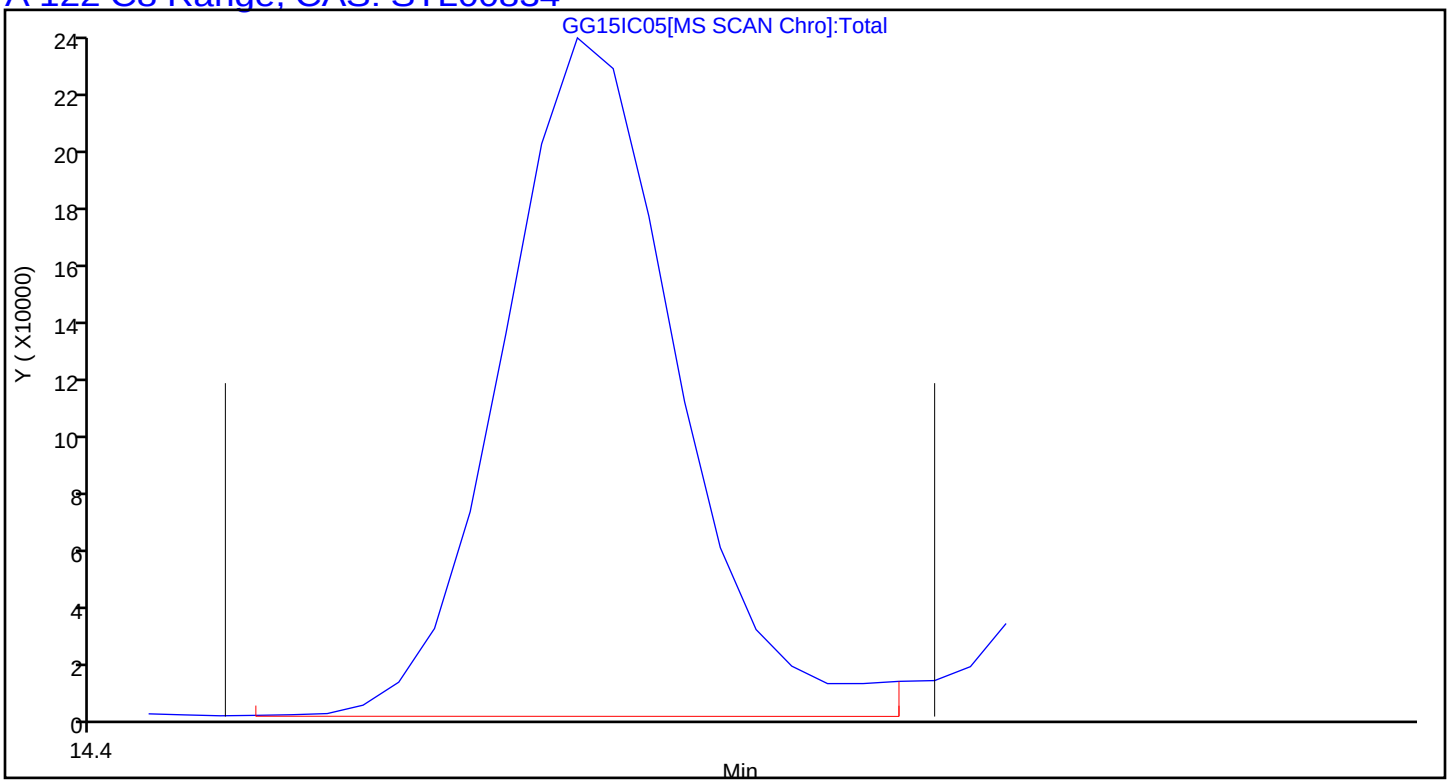


Report Date: 16-Jul-2020 15:15:25 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC05.D				
Injection Date:	15-Jul-2020 20:32:30	Instrument ID:	MG		
Lims ID:	IC L5				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	3	Worklist Smp#:	12
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 122 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC06.D
Lims ID: IC L6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 15-Jul-2020 21:18:30 ALS Bottle#: 4 Worklist Smp#: 13
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016031-013
Misc. Info.: 307380
Operator ID: HMT Instrument ID: MG
Sublist: chrom-MG_TO15*sub17

Method: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 16-Jul-2020 15:15:32 Calib Date: 15-Jul-2020 22:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1066

First Level Reviewer: barlozhetskayaa Date: 16-Jul-2020 14:19:51

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.833	8.843	-0.010	93	172600	4.00	4.00	
* 2 1,4-Difluorobenzene	114	11.022	11.026	-0.004	97	1537936	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.751	15.754	-0.003	93	1342822	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.396	17.397	-0.001	77	1084929	4.00	3.97	
6 Chlorodifluoromethane	51	3.699	3.708	-0.009	96	190134	1.00	1.08	
7 Propene	41	3.710	3.719	-0.009	99	183637	1.00	1.01	
8 Dichlorodifluoromethane	85	3.764	3.770	-0.006	100	334364	1.00	1.06	
9 Chloromethane	52	3.947	3.952	-0.005	98	30761	1.00	1.02	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.953	3.960	-0.007	96	166732	1.00	1.02	
11 Acetaldehyde	44	4.098	4.111	-0.013	92	208954	5.00	5.48	
12 Vinyl chloride	62	4.115	4.122	-0.008	98	118405	1.00	1.00	
13 Butane	43	4.206	4.210	-0.004	86	165723	1.00	1.02	
14 Butadiene	54	4.206	4.210	-0.004	66	83118	1.00	1.00	
15 Bromomethane	94	4.524	4.531	-0.007	98	97197	1.00	0.9873	
16 Chloroethane	64	4.665	4.673	-0.008	98	55110	1.00	0.9715	
17 Ethanol	31	4.778	4.804	-0.026	98	173032	5.00	5.69	
18 Vinyl bromide	106	4.967	4.975	-0.009	98	89335	1.00	1.04	
19 2-Methylbutane	43	5.020	5.025	-0.005	89	95313	1.00	0.9085	
20 Trichlorofluoromethane	101	5.236	5.246	-0.010	99	329731	1.00	1.07	
21 Acrolein	56	5.247	5.263	-0.016	26	20330	1.00	1.02	
22 Acetonitrile	40	5.312	5.322	-0.010	98	30152	1.00	1.02	
23 Acetone	58	5.366	5.385	-0.019	98	117934	3.00	3.21	
24 Pentane	72	5.457	5.467	-0.010	98	20801	1.00	1.07	
25 Isopropyl alcohol	45	5.463	5.507	-0.044	93	272032	3.00	3.00	
26 Ethyl ether	31	5.630	5.650	-0.020	88	68276	1.00	0.9814	
27 1,1-Dichloroethene	96	5.943	5.951	-0.008	92	74430	1.00	0.9210	
28 Acrylonitrile	53	6.045	6.061	-0.016	98	52944	1.00	1.00	
30 2-Methyl-2-propanol	59	6.083	6.136	-0.053	96	137641	1.00	0.9887	
29 1,1,2-Trichloro-1,2,2-trifluoroe	101	6.120	6.129	-0.009	88	168437	1.00	0.9327	
31 Methylene Chloride	84	6.293	6.299	-0.006	97	141971	1.00	0.9574	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.304	6.313	-0.009	98	81595	1.00	1.00	
33 Carbon disulfide	76	6.455	6.462	-0.007	99	263386	1.00	0.9638	
34 trans-1,2-Dichloroethene	96	7.102	7.109	-0.007	94	84905	1.00	0.9422	
35 2-Methylpentane	43	7.123	7.129	-0.006	94	218309	1.00	1.00	
36 Methyl tert-butyl ether	73	7.237	7.266	-0.029	96	264802	1.00	1.05	
37 1,1-Dichloroethane	63	7.522	7.528	-0.006	100	192246	1.00	0.9668	
38 Vinyl acetate	43	7.630	7.641	-0.011	100	206001	1.00	1.05	
39 2-Butanone (MEK)	72	8.083	8.102	-0.019	97	41854	1.00	1.00	
40 Hexane	56	8.099	8.111	-0.012	92	77435	1.00	0.9857	
41 Isopropyl ether	45	8.267	8.289	-0.022	96	291723	1.00	1.08	
42 cis-1,2-Dichloroethene	96	8.504	8.514	-0.010	97	88852	1.00	0.9698	
43 Ethyl acetate	43	8.698	8.715	-0.017	99	179990	1.00	1.07	
44 Chloroform	83	8.849	8.857	-0.008	96	228561	1.00	1.00	
45 Tert-butyl ethyl ether	59	8.946	8.969	-0.023	96	294139	1.00	1.08	
46 Tetrahydrofuran	42	9.264	9.287	-0.023	93	99920	1.00	1.04	
47 1,1,1-Trichloroethane	97	9.874	9.884	-0.010	95	241713	1.00	0.9767	
48 1,2-Dichloroethane	62	9.987	9.992	-0.005	98	157739	1.00	0.9279	
49 Cyclohexane	69	10.478	10.488	-0.010	90	51549	1.00	0.9206	
50 Benzene	78	10.478	10.483	-0.005	96	288567	1.00	0.9097	
52 Carbon tetrachloride	117	10.504	10.508	-0.004	97	214433	1.00	0.9795	
51 n-Butanol	31	10.483	10.524	-0.041	65	30009	1.00	1.01	
53 2,3-Dimethylpentane	71	10.602	10.606	-0.004	92	76259	1.00	0.9303	
54 Thiophene	84	10.753	10.756	-0.004	97	155103	1.00	0.9233	
55 Isooctane	57	11.243	11.250	-0.007	98	516981	1.00	0.9631	
56 n-Heptane	71	11.621	11.624	-0.003	91	110833	1.00	0.9210	
57 1,2-Dichloropropane	63	11.696	11.701	-0.005	89	111371	1.00	0.9313	
58 Trichloroethene	130	11.734	11.739	-0.005	88	96687	1.00	0.8999	
59 Dibromomethane	93	11.815	11.820	-0.005	82	114469	1.00	0.9096	
60 Dichlorobromomethane	83	11.966	11.967	-0.001	98	221235	1.00	1.01	
61 1,4-Dioxane	88	11.998	12.018	-0.020	94	34057	1.00	0.9460	
62 Methyl methacrylate	41	12.063	12.070	-0.007	93	113285	1.00	1.02	
63 Methylcyclohexane	83	12.505	12.507	-0.002	96	183918	1.00	0.9355	
64 4-Methyl-2-pentanone (MIBK)	43	12.915	12.933	-0.018	98	202106	1.00	1.05	
65 cis-1,3-Dichloropropene	75	12.963	12.967	-0.004	93	156457	1.00	0.9433	
66 trans-1,3-Dichloropropene	75	13.659	13.661	-0.002	95	143535	1.00	1.03	
67 Toluene	91	13.783	13.786	-0.003	93	278724	1.00	0.9567	
68 1,1,2-Trichloroethane	83	13.859	13.859	0.000	95	89505	1.00	1.01	
69 2-Hexanone	58	14.252	14.266	-0.014	93	93421	1.00	1.07	
70 n-Octane	85	14.473	14.479	-0.006	93	103853	1.00	0.9736	
71 Chlorodibromomethane	129	14.560	14.562	-0.002	96	150495	1.00	0.9714	
72 Ethylene Dibromide	107	14.851	14.852	-0.001	97	139684	1.00	1.02	
73 Tetrachloroethene	129	14.926	14.929	-0.003	86	91406	1.00	0.9172	
75 Chlorobenzene	112	15.800	15.802	-0.002	87	193814	1.00	0.9224	
74 2,3-Dimethylheptane	43	15.821	15.824	-0.003	96	348024	1.00	1.04	
78 Ethylbenzene	91	16.091	16.092	-0.001	100	380102	1.00	0.99	
79 m-Xylene & p-Xylene	91	16.253	16.254	-0.001	100	600207	2.00	1.97	
80 n-Nonane	57	16.673	16.676	-0.003	92	213591	1.00	1.03	
81 Bromoform	173	16.700	16.700	0.000	88	119045	1.00	1.01	
82 Styrene	104	16.716	16.718	-0.002	96	185604	1.00	1.04	
83 o-Xylene	91	16.776	16.780	-0.004	96	325908	1.00	1.01	
84 1,1,2,2-Tetrachloroethane	83	17.099	17.101	-0.002	98	230136	1.00	1.07	
85 1,2,3-Trichloropropane	110	17.256	17.260	-0.004	98	65266	1.00	1.04	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
86 Isopropylbenzene	105	17.364	17.367	-0.003	98	400866	1.00	0.9795	
87 N-Propylbenzene	120	17.903	17.907	-0.004	97	94843	1.00	0.9298	
88 2-Chlorotoluene	126	17.951	17.951	0.000	96	87009	1.00	0.9268	
89 4-Ethyltoluene	105	18.054	18.056	-0.002	98	371754	1.00	0.9432	
90 1,3,5-Trimethylbenzene	120	18.129	18.131	-0.002	90	146651	1.00	0.9566	
92 Alpha Methyl Styrene	118	18.356	18.361	-0.005	83	135899	1.00	1.07	
93 n-Decane	57	18.415	18.420	-0.005	91	270199	1.00	1.10	
94 tert-Butylbenzene	119	18.550	18.554	-0.004	86	343785	1.00	1.03	
95 1,2,4-Trimethylbenzene	105	18.566	18.567	-0.001	95	347304	1.00	0.9800	
96 sec-Butylbenzene	105	18.820	18.821	-0.001	97	503313	1.00	0.9812	
97 1,3-Dichlorobenzene	146	18.836	18.836	0.000	95	183120	1.00	1.00	
98 Benzyl chloride	91	18.906	18.909	-0.003	96	293789	1.00	1.05	
99 1,4-Dichlorobenzene	146	18.922	18.922	0.000	91	181563	1.00	0.9770	
100 4-Isopropyltoluene	119	18.981	18.983	-0.002	95	392070	1.00	0.9897	
101 1,2,3-Trimethylbenzene	105	19.035	19.036	-0.001	99	356442	1.00	1.27	
102 Butylcyclohexane	83	19.089	19.091	-0.002	93	329564	1.00	1.04	
103 2,3-Dihydroindene	117	19.278	19.279	-0.001	91	296113	1.00	1.04	
104 1,2-Dichlorobenzene	146	19.278	19.280	-0.002	76	185243	1.00	0.9897	
106 Indene	116	19.407	19.409	-0.002	89	250094	1.00	1.03	
105 n-Butylbenzene	91	19.413	19.414	-0.001	97	462362	1.00	1.03	
107 Undecane	57	19.725	19.726	-0.001	95	309838	1.00	1.17	
108 1,2-Dibromo-3-Chloropropane	157	19.876	19.877	-0.001	85	87769	1.00	1.20	
109 1,2,4,5-Tetramethylbenzene	119	20.162	20.165	-0.003	94	373275	1.00	1.07	
110 Dodecane	57	20.777	20.778	-0.001	95	260636	1.00	1.15	
111 1,2,4-Trichlorobenzene	180	20.971	20.973	-0.002	91	133880	1.00	0.9691	
112 Naphthalene	128	21.111	21.112	-0.001	98	354697	1.00	1.00	
113 Hexachlorobutadiene	225	21.322	21.320	0.002	89	160933	1.00	0.99	
114 1,2,3-Trichlorobenzene	180	21.386	21.388	-0.002	92	127006	1.00	0.9634	
115 2-Methylnaphthalene	142	22.157	22.158	-0.001	97	153485	1.00	0.7461	
116 1-Methylnaphthalene	142	22.330	22.333	-0.003	97	182006	1.00	0.7435	
A 122 C8 Range	1	14.476	(14.415-14.533)		0	1006020	1.00	1.02	
S 123 1,2-Dichloroethene, Total	1				0		2.00	1.91	
S 124 Xylenes, Total	100				0		3.00	2.98	

Reagents:

40L6DQP_00018	Amount Added: 200.00	Units: mL	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

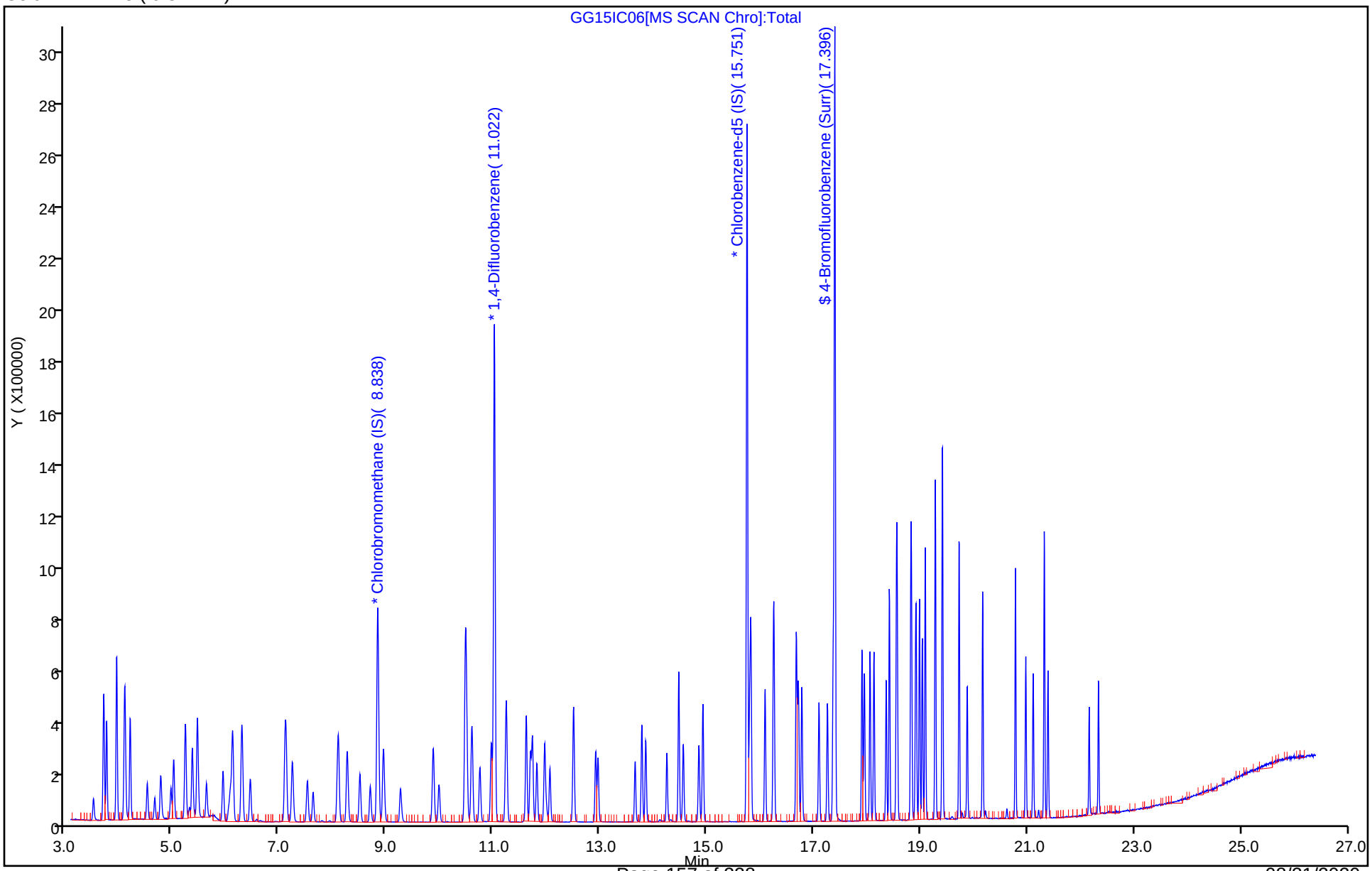
Report Date: 16-Jul-2020 15:15:33 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC06.D

Injection Date:	15-Jul-2020 21:18:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	IC L6			Worklist Smp#:	13
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

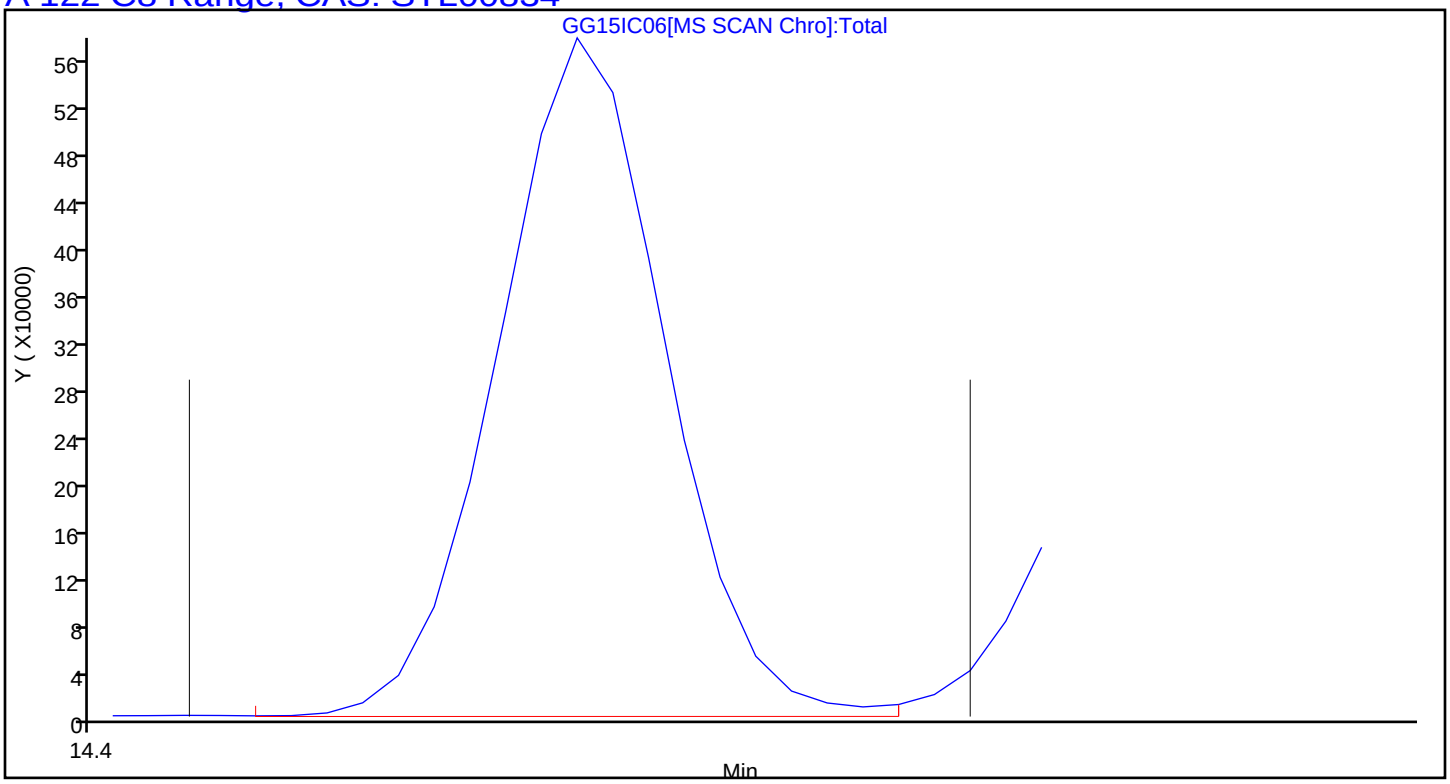


Report Date: 16-Jul-2020 15:15:33 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC06.D				
Injection Date:	15-Jul-2020 21:18:30	Instrument ID:	MG		
Lims ID:	IC L6				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	4	Worklist Smp#:	13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 122 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC07.D
Lims ID: ICIS L7
Client ID:
Sample Type: ICIS Calib Level: 7
Inject. Date: 15-Jul-2020 22:02:30 ALS Bottle#: 5 Worklist Smp#: 14
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016031-014
Misc. Info.: 306867
Operator ID: HMT Instrument ID: MG
Sublist: chrom-MG_TO15*sub17

Method: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 16-Jul-2020 15:15:40 Calib Date: 15-Jul-2020 22:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1066

First Level Reviewer: tajh Date: 16-Jul-2020 13:16:05

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.838	8.843	-0.005	93	179107	4.00	4.00	
* 2 1,4-Difluorobenzene	114	11.022	11.026	-0.004	97	1585235	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.751	15.754	-0.003	92	1411654	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.396	17.397	-0.001	79	1175087	4.00	4.10	
6 Chlorodifluoromethane	51	3.705	3.708	-0.003	96	355286	2.00	1.95	
7 Propene	41	3.715	3.719	-0.004	99	260607	2.00	1.92	
8 Dichlorodifluoromethane	85	3.769	3.770	-0.001	100	640703	2.00	1.96	
9 Chloromethane	52	3.947	3.952	-0.005	98	61480	2.00	1.97	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.958	3.960	-0.002	98	318591	2.00	1.88	
11 Acetaldehyde	44	4.104	4.111	-0.007	95	417475	10.0	10.5	
12 Vinyl chloride	62	4.120	4.122	-0.002	99	232593	2.00	1.90	
13 Butane	43	4.206	4.210	-0.004	86	327446	2.00	1.94	
14 Butadiene	54	4.206	4.210	-0.004	67	165955	2.00	1.92	
15 Bromomethane	94	4.530	4.531	-0.001	98	195553	2.00	1.91	
16 Chloroethane	64	4.670	4.673	-0.003	98	114248	2.00	1.94	
17 Ethanol	31	4.778	4.804	-0.026	99	402389	10.0	12.5	
18 Vinyl bromide	106	4.972	4.975	-0.003	97	172585	2.00	1.94	
19 2-Methylbutane	43	5.020	5.025	-0.005	89	208963	2.00	1.92	
20 Trichlorofluoromethane	101	5.241	5.246	-0.005	99	622680	2.00	1.94	
21 Acrolein	56	5.252	5.263	-0.011	94	37446	2.00	1.81	
22 Acetonitrile	40	5.317	5.322	-0.005	99	63532	2.00	2.08	
23 Acetone	58	5.365	5.385	-0.020	98	249951	6.00	6.55	
24 Pentane	72	5.468	5.467	0.001	96	38616	2.00	1.92	
25 Isopropyl alcohol	45	5.468	5.507	-0.039	93	606574	6.00	6.46	
26 Ethyl ether	31	5.635	5.650	-0.015	91	153848	2.00	2.13	
27 1,1-Dichloroethene	96	5.948	5.951	-0.003	93	161995	2.00	1.93	
28 Acrylonitrile	53	6.050	6.061	-0.011	98	115706	2.00	2.12	
30 2-Methyl-2-propanol	59	6.077	6.136	-0.059	95	310331	2.00	2.15	
29 1,1,2-Trichloro-1,2,2-trifluoroe	101	6.126	6.129	-0.003	89	363043	2.00	1.94	
31 Methylene Chloride	84	6.293	6.299	-0.006	97	231075	2.00	1.98	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.309	6.313	-0.004	97	167901	2.00	1.98	
33 Carbon disulfide	76	6.460	6.462	-0.002	99	556101	2.00	1.96	
34 trans-1,2-Dichloroethene	96	7.107	7.109	-0.002	94	177962	2.00	1.90	
35 2-Methylpentane	43	7.123	7.129	-0.006	94	446107	2.00	1.96	
36 Methyl tert-butyl ether	73	7.237	7.266	-0.029	96	573910	2.00	2.20	
37 1,1-Dichloroethane	63	7.528	7.528	0.000	100	393709	2.00	1.91	
38 Vinyl acetate	43	7.630	7.641	-0.011	100	454630	2.00	2.24	
39 2-Butanone (MEK)	72	8.078	8.102	-0.024	98	92943	2.00	2.13	
40 Hexane	56	8.105	8.111	-0.006	92	157864	2.00	1.94	
41 Isopropyl ether	45	8.267	8.289	-0.022	96	623267	2.00	2.23	
42 cis-1,2-Dichloroethene	96	8.509	8.514	-0.005	98	188361	2.00	1.98	
43 Ethyl acetate	43	8.698	8.715	-0.017	99	395242	2.00	2.26	
44 Chloroform	83	8.854	8.857	-0.003	96	466501	2.00	1.96	
45 Tert-butyl ethyl ether	59	8.946	8.969	-0.023	95	635299	2.00	2.24	
46 Tetrahydrofuran	42	9.259	9.287	-0.028	93	216098	2.00	2.18	
47 1,1,1-Trichloroethane	97	9.879	9.884	-0.005	95	508437	2.00	1.98	
48 1,2-Dichloroethane	62	9.987	9.992	-0.005	98	329677	2.00	1.88	
49 Cyclohexane	69	10.483	10.488	-0.005	92	107133	2.00	1.86	
50 Benzene	78	10.477	10.483	-0.006	96	594896	2.00	1.82	
51 n-Butanol	31	10.488	10.524	-0.036	65	58927	2.00	1.91	
52 Carbon tetrachloride	117	10.504	10.508	-0.004	97	375521	2.00	1.66	
53 2,3-Dimethylpentane	71	10.601	10.606	-0.005	91	159316	2.00	1.89	
54 Thiophene	84	10.752	10.756	-0.004	97	322722	2.00	1.86	
55 Isooctane	57	11.249	11.250	-0.001	98	1064296	2.00	1.92	
56 n-Heptane	71	11.621	11.624	-0.003	91	230866	2.00	1.86	
57 1,2-Dichloropropane	63	11.696	11.701	-0.005	89	230193	2.00	1.87	
58 Trichloroethene	130	11.739	11.739	0.000	90	196817	2.00	1.78	
59 Dibromomethane	93	11.820	11.820	0.000	83	237166	2.00	1.83	
60 Dichlorobromomethane	83	11.966	11.967	-0.001	97	455959	2.00	2.02	
61 1,4-Dioxane	88	11.987	12.018	-0.031	94	74662	2.00	2.01	
62 Methyl methacrylate	41	12.057	12.070	-0.013	95	245965	2.00	2.15	
63 Methylcyclohexane	83	12.505	12.507	-0.002	95	385717	2.00	1.89	
64 4-Methyl-2-pentanone (MIBK)	43	12.915	12.933	-0.018	97	436411	2.00	2.20	
65 cis-1,3-Dichloropropene	75	12.963	12.967	-0.004	93	321027	2.00	1.88	
66 trans-1,3-Dichloropropene	75	13.659	13.661	-0.002	95	299199	2.00	2.05	
67 Toluene	91	13.783	13.786	-0.003	94	601268	2.00	1.96	
68 1,1,2-Trichloroethane	83	13.853	13.859	-0.006	96	187522	2.00	2.01	
69 2-Hexanone	58	14.252	14.266	-0.014	94	210723	2.00	2.29	
70 n-Octane	85	14.473	14.479	-0.006	93	228134	2.00	2.03	
71 Chlorodibromomethane	129	14.559	14.562	-0.003	96	315285	2.00	1.94	
72 Ethylene Dibromide	107	14.851	14.852	-0.001	97	288099	2.00	1.99	
73 Tetrachloroethene	129	14.926	14.929	-0.003	87	193223	2.00	1.84	
75 Chlorobenzene	112	15.800	15.802	-0.002	87	413252	2.00	1.87	
74 2,3-Dimethylheptane	43	15.821	15.824	-0.003	95	730275	2.00	2.08	
78 Ethylbenzene	91	16.091	16.092	-0.001	99	838637	2.00	2.08	
79 m-Xylene & p-Xylene	91	16.253	16.254	-0.001	100	1352087	4.00	4.22	
80 n-Nonane	57	16.673	16.676	-0.003	90	467764	2.00	2.14	
81 Bromoform	173	16.700	16.700	0.000	92	262090	2.00	2.11	
82 Styrene	104	16.716	16.718	-0.002	97	430593	2.00	2.29	
83 o-Xylene	91	16.776	16.780	-0.004	97	737287	2.00	2.18	
84 1,1,2,2-Tetrachloroethane	83	17.099	17.101	-0.002	98	513238	2.00	2.28	
85 1,2,3-Trichloropropane	110	17.261	17.260	0.001	99	147848	2.00	2.23	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
86 Isopropylbenzene	105	17.364	17.367	-0.003	98	935269	2.00	2.17	
87 N-Propylbenzene	120	17.903	17.907	-0.004	98	229581	2.00	2.14	
88 2-Chlorotoluene	126	17.951	17.951	0.000	96	202724	2.00	2.05	
89 4-Ethyltoluene	105	18.054	18.056	-0.002	98	889602	2.00	2.15	
90 1,3,5-Trimethylbenzene	120	18.129	18.131	-0.002	91	350662	2.00	2.18	
92 Alpha Methyl Styrene	118	18.361	18.361	0.000	84	334215	2.00	2.49	
93 n-Decane	57	18.420	18.420	0.000	92	592142	2.00	2.30	
94 tert-Butylbenzene	119	18.550	18.554	-0.004	87	819734	2.00	2.34	
95 1,2,4-Trimethylbenzene	105	18.566	18.567	-0.001	96	822650	2.00	2.21	
96 sec-Butylbenzene	105	18.819	18.821	-0.002	97	1170579	2.00	2.17	
97 1,3-Dichlorobenzene	146	18.836	18.836	0.000	94	425697	2.00	2.21	
98 Benzyl chloride	91	18.906	18.909	-0.003	96	739302	2.00	2.52	
99 1,4-Dichlorobenzene	146	18.922	18.922	0.000	88	422766	2.00	2.16	
100 4-Isopropyltoluene	119	18.981	18.983	-0.002	96	917420	2.00	2.20	
101 1,2,3-Trimethylbenzene	105	19.035	19.036	-0.001	99	836772	2.00	2.66	
102 Butylcyclohexane	83	19.089	19.091	-0.002	94	738208	2.00	2.21	
103 2,3-Dihydroindene	117	19.278	19.279	-0.001	92	701017	2.00	2.35	
104 1,2-Dichlorobenzene	146	19.278	19.280	-0.002	77	440348	2.00	2.24	
106 Indene	116	19.407	19.409	-0.002	91	624096	2.00	2.45	
105 n-Butylbenzene	91	19.413	19.414	-0.001	97	1069578	2.00	2.27	
107 Undecane	57	19.725	19.726	-0.001	95	654717	2.00	2.35	
108 1,2-Dibromo-3-Chloropropane	157	19.876	19.877	-0.001	87	213065	2.00	2.78	
109 1,2,4,5-Tetramethylbenzene	119	20.162	20.165	-0.003	95	882392	2.00	2.41	
110 Dodecane	57	20.777	20.778	-0.001	95	560014	2.00	2.35	
111 1,2,4-Trichlorobenzene	180	20.971	20.973	-0.002	91	349392	2.00	2.41	
112 Naphthalene	128	21.111	21.112	-0.001	99	883787	2.00	2.37	
113 Hexachlorobutadiene	225	21.322	21.320	0.002	92	419604	2.00	2.46	
114 1,2,3-Trichlorobenzene	180	21.386	21.388	-0.002	93	350335	2.00	2.53	
115 2-Methylnaphthalene	142	22.157	22.158	-0.001	98	378412	2.00	1.75	
116 1-Methylnaphthalene	142	22.330	22.333	-0.003	98	452400	2.00	1.76	
A 122 C8 Range	1	14.473	(14.415-14.522)		0	2121726	2.00	2.04	
S 123 1,2-Dichloroethene, Total	1				0		4.00	3.88	
S 124 Xylenes, Total	100				0		6.00	6.40	

Reagents:

40L7DQP_00018	Amount Added: 200.00	Units: mL	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

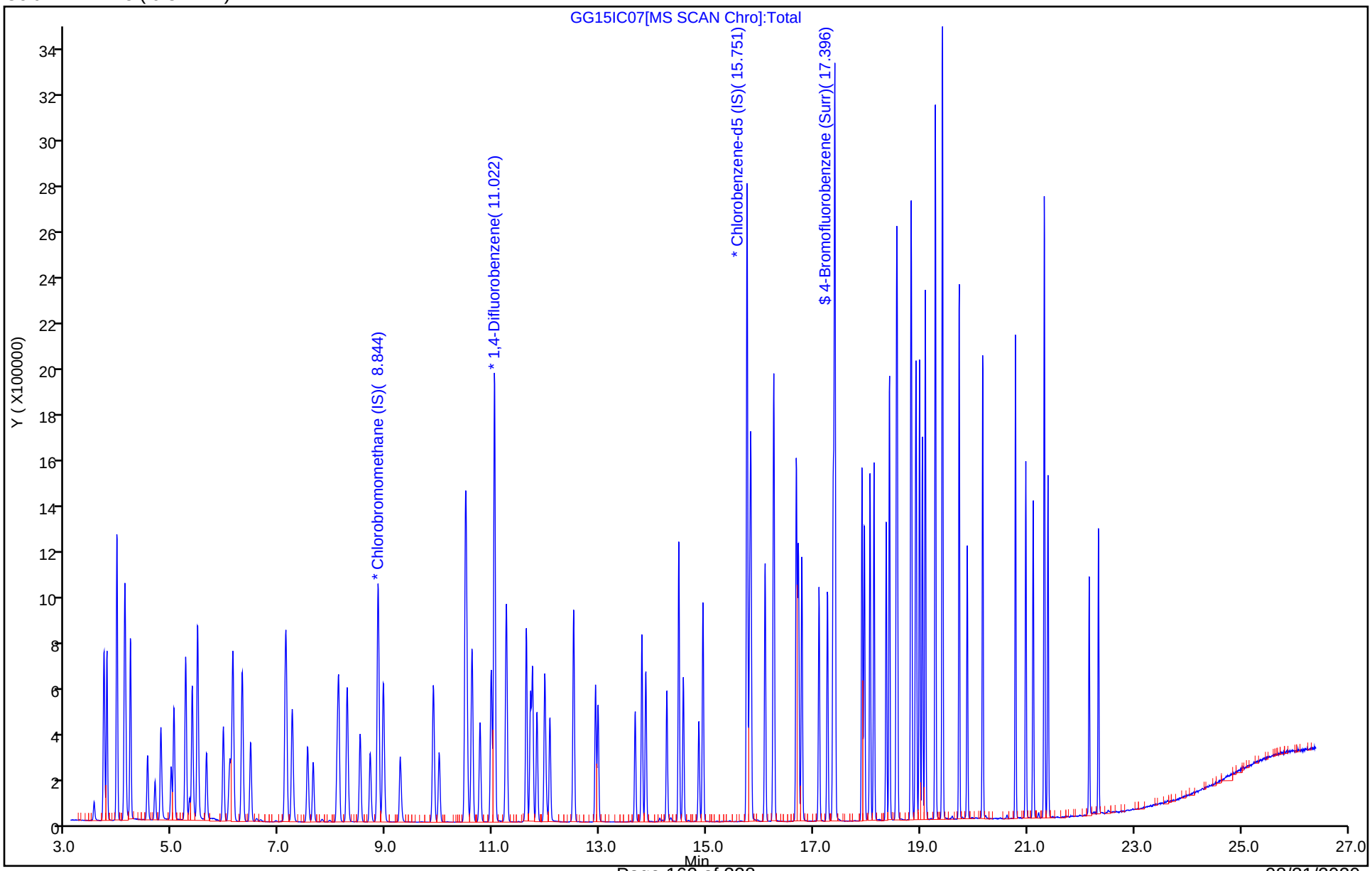
Report Date: 16-Jul-2020 15:15:41 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC07.D

Injection Date:	15-Jul-2020 22:02:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	ICIS L7			Worklist Smp#:	14
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

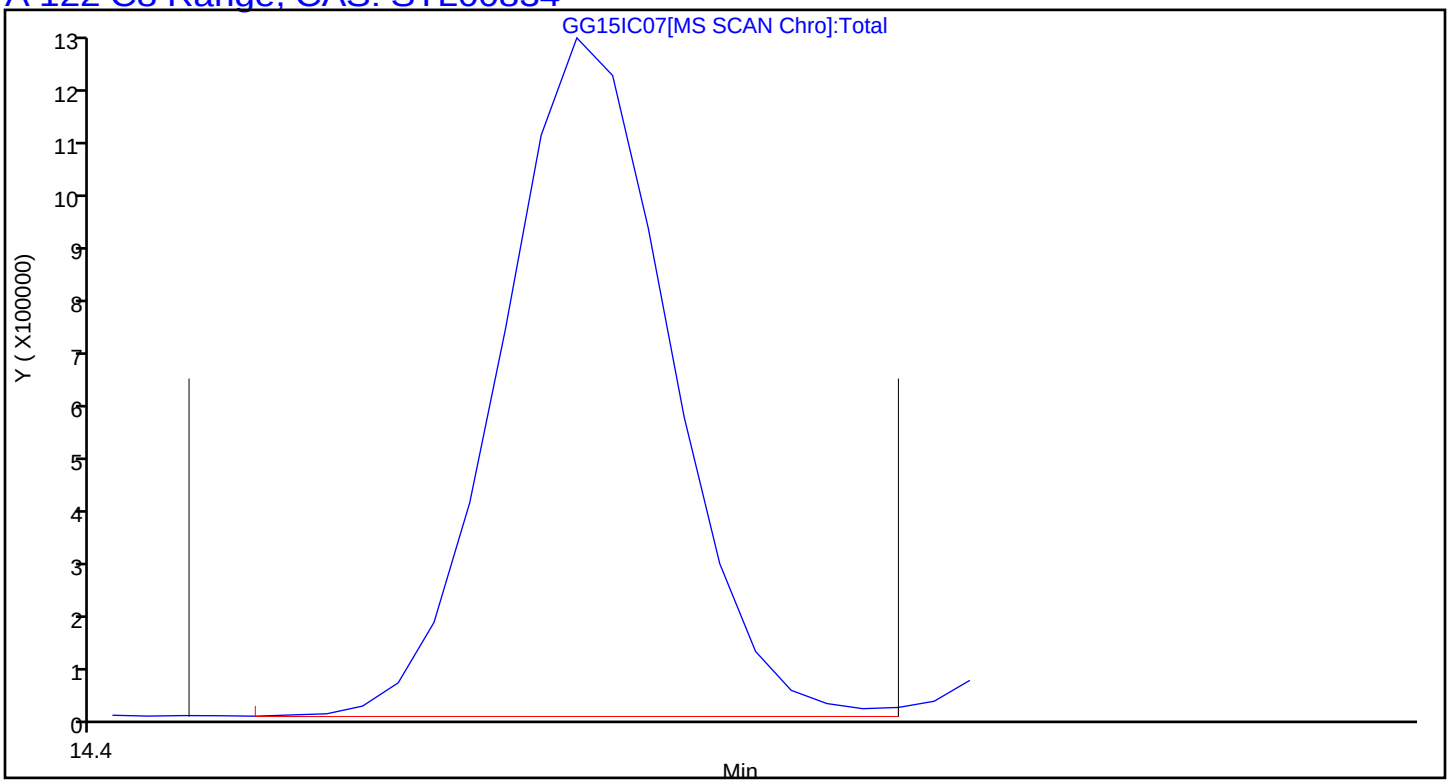


Report Date: 16-Jul-2020 15:15:41 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC07.D				
Injection Date:	15-Jul-2020 22:02:30	Instrument ID:	MG		
Lims ID:	ICIS L7				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	5	Worklist Smp#:	14
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 122 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC10.D
Lims ID: IC L10
Client ID:
Sample Type: IC Calib Level: 10
Inject. Date: 15-Jul-2020 12:53:30 ALS Bottle#: 14 Worklist Smp#: 21
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016031-002
Misc. Info.: 306865
Operator ID: HMT Instrument ID: MG
Sublist: chrom-MG_TO15*sub17

Method: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 16-Jul-2020 15:15:49 Calib Date: 15-Jul-2020 22:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1066

First Level Reviewer: barlozhetskayaa Date: 16-Jul-2020 15:05:41

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.860	8.843	0.017	95	167531	4.00	4.00	
* 2 1,4-Difluorobenzene	114	11.038	11.026	0.012	96	1176772	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.762	15.754	0.008	91	1331683	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.401	17.397	0.004	81	1193530	4.00	4.41	
6 Chlorodifluoromethane	51	3.705	3.708	-0.003	96	2523928	16.0	14.8	
7 Propene	41	3.715	3.719	-0.004	99	1310261	16.0	16.7	
8 Dichlorodifluoromethane	85	3.769	3.770	-0.001	100	4813201	16.0	15.8	
9 Chloromethane	52	3.953	3.952	0.001	100	404367	16.0	13.9	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.958	3.960	-0.002	95	2609205	16.0	16.5	
11 Acetaldehyde	44	4.109	4.111	-0.002	95	2276199	80.0	61.5	
12 Vinyl chloride	62	4.120	4.122	-0.002	99	1653274	16.0	14.4	
13 Butane	43	4.206	4.210	-0.004	85	2270081	16.0	14.4	
14 Butadiene	54	4.211	4.210	0.001	70	1182241	16.0	14.6	
15 Bromomethane	94	4.535	4.531	0.004	97	1484900	16.0	15.5	
16 Chloroethane	64	4.675	4.673	0.002	97	837824	16.0	15.2	
17 Ethanol	31	4.805	4.804	0.001	98	2796885	80.0	80.4	
18 Vinyl bromide	106	4.977	4.975	0.002	97	1359074	16.0	16.3	
19 2-Methylbutane	43	5.026	5.025	0.001	88	1517271	16.0	14.9	
20 Trichlorofluoromethane	101	5.247	5.246	0.001	99	5131943	16.0	17.1	
21 Acrolein	56	5.258	5.263	-0.005	94	349789	16.0	18.0	
22 Acetonitrile	40	5.333	5.322	0.011	99	464495	16.0	16.3	
23 Acetone	58	5.376	5.385	-0.009	97	1689823	48.0	47.4	
24 Pentane	72	5.468	5.467	0.001	98	334580	16.0	17.8	
25 Isopropyl alcohol	45	5.495	5.507	-0.012	96	4391364	48.0	50.0	
26 Ethyl ether	31	5.635	5.650	-0.015	89	1124219	16.0	16.6	
27 1,1-Dichloroethene	96	5.959	5.951	0.008	94	1320258	16.0	16.8	
28 Acrylonitrile	53	6.072	6.061	0.011	96	885078	16.0	17.3	
30 2-Methyl-2-propanol	59	6.088	6.136	-0.048	95	2388702	16.0	17.7	
29 1,1,2-Trichloro-1,2,2-trifluoroe	101	6.131	6.129	0.002	93	3113337	16.0	17.8	
31 Methylene Chloride	84	6.309	6.299	0.010	94	1331674	16.0	16.6	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.320	6.313	0.007	99	1286544	16.0	16.2	
33 Carbon disulfide	76	6.465	6.462	0.003	99	4419618	16.0	16.7	
34 trans-1,2-Dichloroethene	96	7.118	7.109	0.009	96	1523405	16.0	17.4	
35 2-Methylpentane	43	7.134	7.129	0.005	91	3233937	16.0	15.2	
36 Methyl tert-butyl ether	73	7.242	7.266	-0.024	95	4433940	16.0	18.2	
37 1,1-Dichloroethane	63	7.539	7.528	0.011	100	3066026	16.0	15.9	
38 Vinyl acetate	43	7.646	7.641	0.005	100	3571055	16.0	18.8	
39 2-Butanone (MEK)	72	8.094	8.102	-0.008	99	725294	16.0	17.8	
40 Hexane	56	8.116	8.111	0.005	92	1223253	16.0	16.0	
41 Isopropyl ether	45	8.277	8.289	-0.012	95	4526981	16.0	17.3	
42 cis-1,2-Dichloroethene	96	8.525	8.514	0.011	98	1533364	16.0	17.2	
43 Ethyl acetate	43	8.709	8.715	-0.006	99	2912424	16.0	17.8	
44 Chloroform	83	8.870	8.857	0.013	97	3755288	16.0	16.9	
45 Tert-butyl ethyl ether	59	8.951	8.969	-0.018	95	4754378	16.0	18.0	
46 Tetrahydrofuran	42	9.264	9.287	-0.023	91	1601942	16.0	17.3	
47 1,1,1-Trichloroethane	97	9.895	9.884	0.011	95	4173583	16.0	17.4	
48 1,2-Dichloroethane	62	10.008	9.992	0.016	99	2615527	16.0	20.1	
50 Benzene	78	10.499	10.483	0.016	95	4994527	16.0	20.6	
49 Cyclohexane	69	10.494	10.488	0.006	90	904459	16.0	21.1	
51 n-Butanol	31	10.472	10.524	-0.052	77	476385	16.0	20.9	
52 Carbon tetrachloride	117	10.515	10.508	0.007	97	4259967	16.0	25.4	
53 2,3-Dimethylpentane	71	10.612	10.606	0.006	92	1263926	16.0	20.2	
54 Thiophene	84	10.769	10.756	0.013	96	2651503	16.0	20.6	
55 Isooctane	57	11.259	11.250	0.009	98	7890499	16.0	19.2	
56 n-Heptane	71	11.631	11.624	0.007	87	1979515	16.0	21.5	
57 1,2-Dichloropropane	63	11.712	11.701	0.011	87	1799564	16.0	19.7	
58 Trichloroethene	130	11.750	11.739	0.011	90	1837783	16.0	22.4	
59 Dibromomethane	93	11.831	11.820	0.011	91	2034131	16.0	21.1	
60 Dichlorobromomethane	83	11.976	11.967	0.009	98	4116427	16.0	24.6	
61 1,4-Dioxane	88	11.993	12.018	-0.025	89	623125	16.0	22.6	
62 Methyl methacrylate	41	12.074	12.070	0.004	96	1951045	16.0	23.0	
63 Methylcyclohexane	83	12.516	12.507	0.009	96	3204427	16.0	21.1	
64 4-Methyl-2-pentanone (MIBK)	43	12.920	12.933	-0.013	96	3117228	16.0	21.2	
65 cis-1,3-Dichloropropene	75	12.974	12.967	0.007	93	2829914	16.0	22.3	
66 trans-1,3-Dichloropropene	75	13.670	13.661	0.009	95	2709174	16.0	19.7	
67 Toluene	91	13.794	13.786	0.008	94	5511722	16.0	19.1	
68 1,1,2-Trichloroethane	83	13.869	13.859	0.010	98	1659004	16.0	18.9	
69 2-Hexanone	58	14.257	14.266	-0.009	95	1692474	16.0	19.5	
70 n-Octane	85	14.484	14.479	0.005	87	2137497	16.0	20.2	
71 Chlorodibromomethane	129	14.570	14.562	0.008	97	3564469	16.0	23.2	
72 Ethylene Dibromide	107	14.861	14.852	0.009	98	2692950	16.0	19.8	
73 Tetrachloroethene	129	14.937	14.929	0.008	95	2084183	16.0	21.1	
75 Chlorobenzene	112	15.810	15.802	0.008	91	4423608	16.0	21.2	
74 2,3-Dimethylheptane	43	15.832	15.824	0.008	92	5100573	16.0	15.4	
78 Ethylbenzene	91	16.096	16.092	0.004	99	7999979	16.0	21.1	
79 m-Xylene & p-Xylene	91	16.263	16.254	0.009	98	13522466	32.0	44.8	
80 n-Nonane	57	16.679	16.676	0.003	83	3913851	16.0	19.0	
81 Bromoform	173	16.706	16.700	0.006	96	4903415	16.0	41.8	
82 Styrene	104	16.722	16.718	0.004	97	4827498	16.0	27.2	
83 o-Xylene	91	16.786	16.780	0.006	97	6599312	16.0	20.7	
84 1,1,2,2-Tetrachloroethane	83	17.110	17.101	0.009	99	4376816	16.0	20.6	
85 1,2,3-Trichloropropane	110	17.266	17.260	0.006	98	1363256	16.0	21.8	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
86 Isopropylbenzene	105	17.374	17.367	0.007	97	8849449	16.0	21.8	
87 N-Propylbenzene	120	17.913	17.907	0.006	99	2378468	16.0	23.5	
88 2-Chlorotoluene	126	17.957	17.951	0.006	97	2092822	16.0	22.5	
89 4-Ethyltoluene	105	18.064	18.056	0.008	98	8770407	16.0	22.4	
90 1,3,5-Trimethylbenzene	120	18.140	18.131	0.009	92	3617290	16.0	23.8	
92 Alpha Methyl Styrene	118	18.366	18.361	0.005	87	3685663	16.0	29.1	
93 n-Decane	57	18.426	18.420	0.006	93	4502247	16.0	18.5	
94 tert-Butylbenzene	119	18.561	18.554	0.007	95	8822833	16.0	26.8	
95 1,2,4-Trimethylbenzene	105	18.571	18.567	0.004	95	8326250	16.0	23.7	
96 sec-Butylbenzene	105	18.830	18.821	0.009	98	12132121	16.0	23.8	
97 1,3-Dichlorobenzene	146	18.841	18.836	0.005	98	5628707	16.0	30.9	
98 Benzyl chloride	91	18.916	18.909	0.007	98	7710627	16.0	27.9	
99 1,4-Dichlorobenzene	146	18.927	18.922	0.005	92	5186270	16.0	28.1	
100 4-Isopropyltoluene	119	18.992	18.983	0.009	96	9356856	16.0	23.8	
101 1,2,3-Trimethylbenzene	105	19.040	19.036	0.004	98	7785122	16.0	16.0	
102 Butylcyclohexane	83	19.100	19.091	0.009	96	6312775	16.0	20.0	
103 2,3-Dihydroindene	117	19.289	19.279	0.010	94	8038792	16.0	28.6	
104 1,2-Dichlorobenzene	146	19.289	19.280	0.009	85	5883538	16.0	31.7	
106 Indene	116	19.418	19.409	0.009	93	7416416	16.0	30.9	
105 n-Butylbenzene	91	19.418	19.414	0.004	98	10166628	16.0	22.9	
107 Undecane	57	19.731	19.726	0.005	89	4563495	16.0	17.4	
108 1,2-Dibromo-3-Chloropropane	157	19.882	19.877	0.005	96	2869772	16.0	39.7	
109 1,2,4,5-Tetramethylbenzene	119	20.167	20.165	0.002	97	8878341	16.0	25.7	
110 Dodecane	57	20.782	20.778	0.004	95	4001315	16.0	17.8	
111 1,2,4-Trichlorobenzene	180	20.976	20.973	0.003	94	5230048	16.0	38.2	
112 Naphthalene	128	21.117	21.112	0.005	98	9165825	16.0	26.0	
113 Hexachlorobutadiene	225	21.321	21.320	0.001	94	5966608	16.0	37.1	
114 1,2,3-Trichlorobenzene	180	21.392	21.388	0.004	95	4723177	16.0	36.1	
115 2-Methylnaphthalene	142	22.157	22.158	-0.001	99	5158127	16.0	25.3	
116 1-Methylnaphthalene	142	22.335	22.333	0.002	98	5750777	16.0	23.7	
A 122 C8 Range	1	14.469	(14.420-14.527)		0	17183525	16.0	17.5	
S 123 1,2-Dichloroethene, Total	1				0		32.0	34.7	
S 124 Xylenes, Total	100				0		48.0	65.5	

Reagents:

40L10DQP_00018	Amount Added: 200.00	Units: mL	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

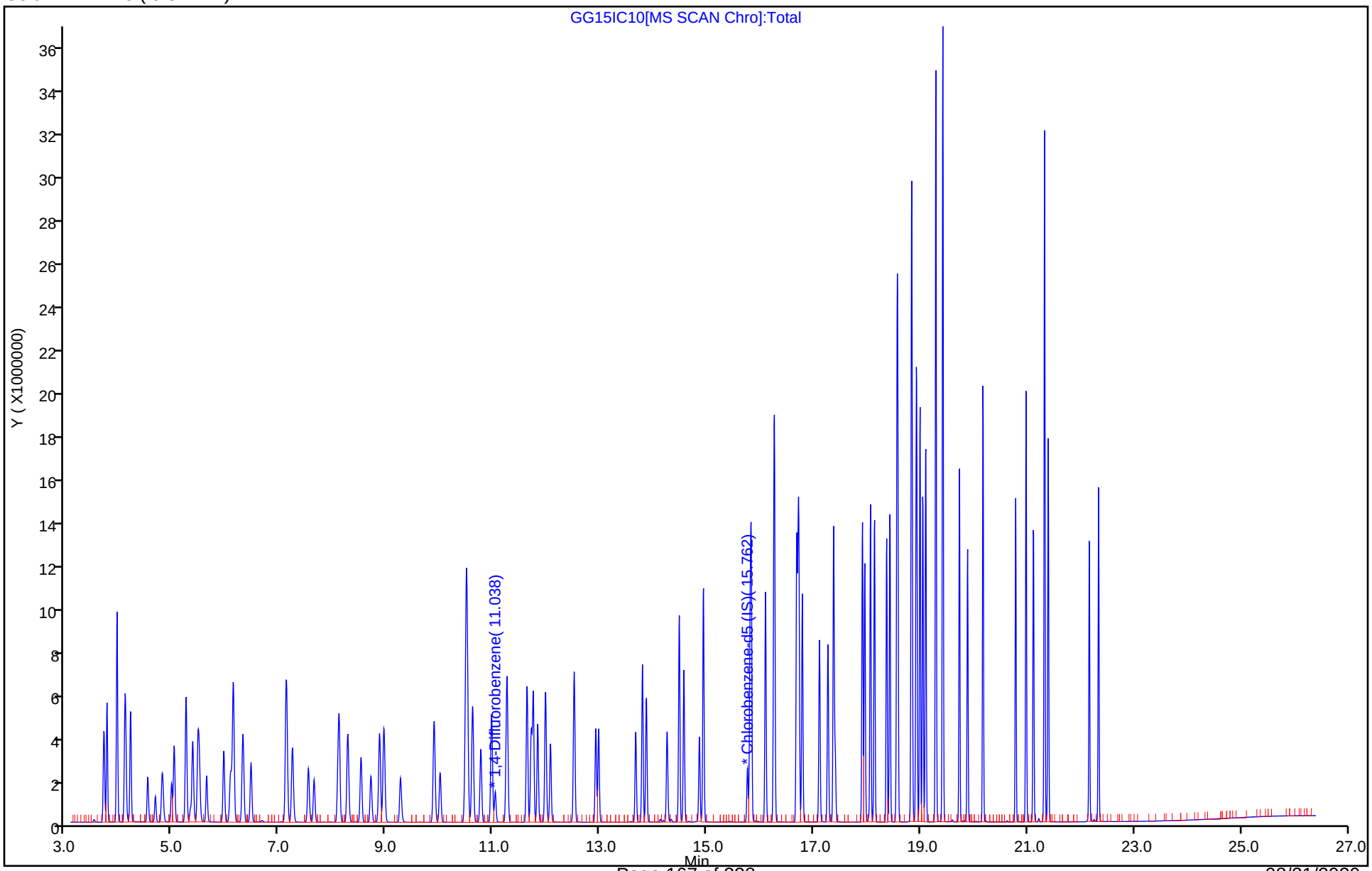
Report Date: 16-Jul-2020 15:15:50 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC10.D

Injection Date:	15-Jul-2020 12:53:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	IC L10			Worklist Smp#:	21
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

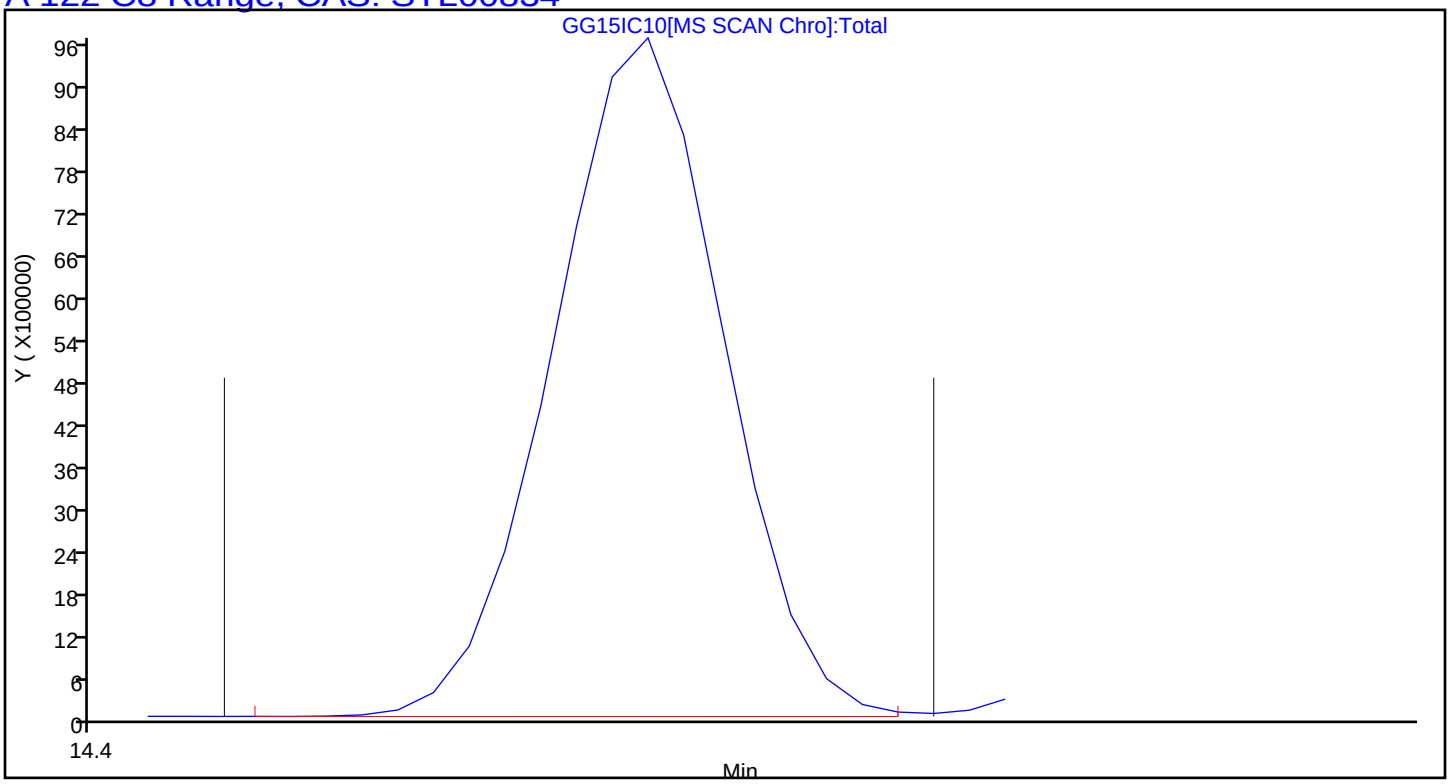


Report Date: 16-Jul-2020 15:15:50 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC10.D				
Injection Date:	15-Jul-2020 12:53:30	Instrument ID:	MG		
Lims ID:	IC L10				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	14	Worklist Smp#:	21
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 122 C8 Range, CAS: STL00834



FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20065-1 Analy Batch No.: 41306

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/27/2020 17:38 Calibration End Date: 07/28/2020 09:59 Calibration ID: 2540

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 140-41306/9	RG27IC01.D
Level 2	IC 140-41306/10	RG27IC02.D
Level 3	IC 140-41306/11	RG27IC03.D
Level 4	IC 140-41306/12	RG27IC04.D
Level 5	IC 140-41306/13	RG27IC05.D
Level 6	IC 140-41306/14	RG27IC06.D
Level 7	ICIS 140-41306/15	RG27IC07.D
Level 8	IC 140-41306/7	RG27IC08.D
Level 9	IC 140-41306/23	RG27IC09R.D
Level 10	IC 140-41306/3	RG27IC10.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Chlorodifluoromethane	+++++ 5.4890	+++++ 6.2452	6.2528 5.9844	6.2490 6.1439	5.9506 4.5184	Ave		5.8542				10.2		30.0			
Propene	+++++ 4.7245	+++++ 4.1427	+++++ 3.4919	+++++ 3.2280	4.1289 2.3551	Qua	0.4506	3.9463	-0.101079						0.9990		0.9900
Dichlorodifluoromethane	+++++ 3.6838	+++++ 4.4240	3.7366 3.9948	4.1998 4.5173	4.1241 2.9529	Ave		3.9542				12.7		30.0			
Chloromethane	+++++ 0.9643	+++++ 1.1112	+++++ 1.0271	1.1247 1.0645	1.0265 0.7608	Ave		1.0113				12.2		30.0			
1,2-Dichloro-1,1,2,2-tetrafluoroethane	+++++ 3.6281	+++++ 4.2656	3.7973 4.1382	3.9892 4.4962	3.7718 2.9027	Ave		3.8737				12.5		30.0			
Vinyl chloride	3.0535 2.6629	3.2950 3.0412	2.8559 2.9633	3.0903 3.0030	2.9731 2.1147	Ave		2.9053				11.1		30.0			
Butane	+++++ 5.1275	+++++ 5.5029	5.7968 5.3567	5.2030 5.4435	5.4459 3.9451	Ave		5.2277				10.6		30.0			
1,3-Butadiene	+++++ 2.3454	+++++ 2.6993	2.1987 2.6161	2.5537 2.6694	2.5313 1.9219	Ave		2.4420				11.0		30.0			
Bromomethane	+++++ 1.9857	+++++ 2.2311	2.1545 2.1532	2.1204 2.2995	2.1266 1.5915	Ave		2.0828				10.5		30.0			
Chloroethane	+++++ 1.2344	+++++ 1.3315	1.2939 1.2791	1.2317 1.3043	1.2730 0.9419	Ave		1.2362				10.0		30.0			
Ethanol	+++++ 1.4294	+++++ 1.7783	1.5551 1.7307	1.6373 1.6279	1.6528 1.3053	Ave		1.5896				9.8		30.0			
Vinyl bromide	+++++ 1.9171	+++++ 2.0918	1.8697 2.0517	2.0235 2.1819	2.0456 1.6050	Ave		1.9733				9.0		30.0			
2-Methylbutane	+++++ 3.7139	+++++ 3.8804	4.1190 3.7221	4.4390 3.8266	4.2314 2.9552	Ave		3.8609				11.6		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20065-1 Analy Batch No.: 41306

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/27/2020 17:38 Calibration End Date: 07/28/2020 09:59 Calibration ID: 2540

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Trichlorofluoromethane	5.5064 4.8874	5.0672 5.0081	4.5188 4.8179	4.7506 5.1685	5.1701 4.1180	Ave		4.9013				7.9		30.0			
Acrolein	+++++ 0.8207	+++++ 0.8750	+++++ 0.8661	+++++ 0.9620	0.8128 0.7942	Ave		0.8551				7.1		30.0			
Acetonitrile	+++++ 1.1670	+++++ 1.2151	+++++ 1.2383	+++++ 1.2637	1.2260 1.0637	Ave		1.1956				6.0		30.0			
Acetone	2.3102 1.3452	2.1295 1.3315	2.0090 1.2457	1.4936 1.2708	1.3963 +++++	Ave		1.6146				25.7		30.0			
Pentane	+++++ 0.3878	+++++ 0.3864	+++++ 0.3745	0.3506 0.3820	0.4709 0.3069	Ave		0.3799				13.0		30.0			
Isopropyl alcohol	+++++ 4.1341	+++++ 4.7458	+++++ 4.6081	4.5074 4.4709	4.6612 3.6440	QuaF		5.0982	-0.030102						0.9990		0.9900
Ethyl ether	+++++ 3.5525	4.0713 3.5496	3.5309 3.4912	3.6310 3.4344	3.8579 2.9600	Ave		3.5643				8.5		30.0			
1,1-Dichloroethene	2.4220 2.1047	2.3228 2.0274	2.2244 2.0747	2.2571 2.1038	2.2594 1.7859	Ave		2.1582				8.3		30.0			
Acrylonitrile	+++++ 1.7998	+++++ 1.8860	+++++ 2.0071	1.5856 2.0998	1.6112 1.8155	Ave		1.8293				10.4		30.0			
tert-Butyl alcohol	+++++ 4.7370	+++++ 5.2285	4.2292 5.1310	5.4882 5.1223	5.2338 4.2515	Ave		4.9277				9.6		30.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0889 4.4211	4.3545 4.2616	4.5429 4.2237	4.4565 4.3553	4.5951 3.6290	Ave		4.3929				8.3		30.0			
Methylene Chloride	+++++ 3.0449	+++++ 2.4474	+++++ 2.0708	+++++ 1.9275	5.2955 1.6186	Lin2	1.4498	1.6618							0.9960		0.9900
3-Chloropropene	+++++ 2.9284	+++++ 2.7145	3.1113 2.8219	2.7660 2.8206	3.1146 2.4552	Ave		2.8416				7.6		30.0			
Carbon disulfide	+++++ 5.7876	+++++ 5.7166	5.5248 5.7891	6.3218 5.6999	6.3347 4.9746	Ave		5.7687				7.5		30.0			
trans-1,2-Dichloroethene	+++++ 2.0707	+++++ 1.9861	2.1827 2.0315	2.0110 2.0568	2.1651 1.8340	Ave		2.0422				5.3		30.0			
2-Methylpentane	+++++ 7.0861	8.2395 6.8543	7.6393 6.9799	7.4718 6.9124	7.4687 5.9669	Ave		7.1799				8.8		30.0			
Methyl tert-butyl ether	+++++ 5.3409	+++++ 5.2231	5.4602 5.3063	5.5543 5.2789	5.7932 4.5810	Ave		5.3172				6.6		30.0			
1,1-Dichloroethane	5.5691 4.5484	5.6544 4.5175	4.7116 4.5358	5.0157 4.5738	4.8641 3.9293	Ave		4.7920				10.8		30.0			
Vinyl acetate	+++++ 7.8807	+++++ 8.0658	7.2630 8.5418	7.2711 8.7848	8.0334 7.8619	Ave		7.9628				6.7		30.0			
2-Butanone (MEK)	+++++ 1.0180	+++++ 0.9925	+++++ 1.0149	1.1046 1.0142	1.0341 0.9189	Ave		1.0139				5.4		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20065-1 Analy Batch No.: 41306

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/27/2020 17:38 Calibration End Date: 07/28/2020 09:59 Calibration ID: 2540

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Hexane	+++++ 2.1844	+++++ 2.1304	2.3098 2.1584	2.1544 2.1524	2.3098 1.8786	Ave		2.1598				6.2		30.0			
cis-1,2-Dichloroethene	+++++ 2.2672	2.6414 2.2134	2.3615 2.2663	2.4081 2.2196	2.3312 2.0023	Ave		2.3012				7.5		30.0			
Ethyl acetate	+++++ 7.5671	+++++ 7.3218	7.1710 7.5997	7.4729 7.5805	7.7829 6.7539	Ave		7.4062				4.4		30.0			
Chloroform	4.4477 4.3893	4.8206 4.2354	4.3915 4.3714	4.5546 4.2869	4.6239 3.7830	Ave		4.3904				6.2		30.0			
Tetrahydrofuran	+++++ 3.8588	+++++ 3.6271	3.9436 3.7023	3.9238 3.6375	4.0941 3.2703	Ave		3.7572				6.8		30.0			
1,1,1-Trichloroethane	5.2172 4.5600	5.0824 4.2140	4.7725 4.4074	4.3764 4.3674	4.6457 3.8578	Ave		4.5501				8.9		30.0			
1,2-Dichloroethane	+++++ 0.3769	0.3883 0.3827	0.3392 0.3886	0.3632 0.4075	0.3705 0.3593	Ave		0.3751				5.3		30.0			
Cyclohexane	+++++ 0.1204	+++++ 0.1158	0.1149 0.1133	0.1250 0.1163	0.1201 0.1027	Ave		0.1161				5.7		30.0			
Benzene	+++++ 0.7971	0.9200 0.7820	0.8338 0.7701	0.7922 0.7790	0.7843 0.7107	Ave		0.7966				7.1		30.0			
1-Butanol	+++++ 0.1567	+++++ 0.1893	+++++ 0.1944	0.1830 0.1899	0.1857 0.1724	Ave		0.1816				7.2		30.0			
Carbon tetrachloride	0.5497 0.5101	0.4986 0.4713	0.4698 0.5262	0.5200 0.5268	0.5151 0.4783	Ave		0.5066				5.3		30.0			
2,3-Dimethylpentane	+++++ 0.1805	0.1787 0.1716	0.1638 0.1754	0.1759 0.1762	0.1812 0.1604	Ave		0.1737				4.2		30.0			
Thiophene	+++++ 0.4387	0.4506 0.4451	0.4230 0.4530	0.4199 0.4510	0.4499 0.4207	Ave		0.4391				3.2		30.0			
2,2,4-Trimethylpentane	+++++ 1.6616	1.8054 1.6302	1.7594 1.6562	1.7120 1.7110	1.6524 1.5517	Ave		1.6822				4.4		30.0			
Heptane	+++++ 0.2740	+++++ 0.2625	0.2632 0.2685	0.2898 0.2735	0.2644 0.2520	Ave		0.2685				4.1		30.0			
1,2-Dichloropropane	+++++ 0.3583	0.3571 0.3640	0.3874 0.3672	0.3885 0.3665	0.3781 0.3390	Ave		0.3673				4.3		30.0			
Trichloroethene	0.3732 0.3407	0.3752 0.3416	0.3660 0.3416	0.3302 0.3530	0.3401 0.3293	Ave		0.3491				4.8		30.0			
Dibromomethane	0.3718 0.3166	0.3136 0.3155	0.3104 0.3161	0.2921 0.3285	0.3052 0.3093	Ave		0.3179				6.6		30.0			
Bromodichloromethane	0.5515 0.5444	0.5504 0.5423	0.5219 0.5590	0.5212 0.5666	0.5429 0.5305	Ave		0.5431				2.8		30.0			
1,4-Dioxane	+++++ 0.1114	+++++ 0.1344	+++++ 0.1350	0.1232 0.1264	0.1257 0.1178	Ave		0.1248				6.8		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20065-1 Analy Batch No.: 41306

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/27/2020 17:38 Calibration End Date: 07/28/2020 09:59 Calibration ID: 2540

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Methyl methacrylate	+++++ 0.5192	+++++ 0.5176	0.4896 0.5376	0.5149 0.5593	0.5294 0.5265	Ave		0.5242				3.8		30.0			
Methylcyclohexane	+++++ 0.4589	+++++ 0.4598	0.4642 0.4579	0.4628 0.4637	0.4725 0.4337	Ave		0.4592				2.5		30.0			
4-Methyl-2-pentanone (MIBK)	1.0514 0.9873	0.9227 0.9809	0.9100 1.0054	0.9067 1.0392	1.0010 0.9841	Ave		0.9789				5.2		30.0			
cis-1,3-Dichloropropene	0.4748 0.4284	0.3950 0.4343	0.4053 0.4519	0.4062 0.4627	0.4152 0.4401	Ave		0.4314				6.1		30.0			
trans-1,3-Dichloropropene	+++++ 0.4329	0.4478 0.4409	0.4136 0.4854	0.4031 0.4825	0.4007 0.4440	Ave		0.4390				7.0		30.0			
Toluene	1.2667 1.0772	1.1129 1.0678	1.0795 1.0866	1.1322 1.0567	1.1135 0.9761	Ave		1.0969				6.7		30.0			
1,1,2-Trichloroethane	0.3644 0.3362	0.4237 0.3476	0.3450 0.3451	0.3313 0.3314	0.3555 0.3108	Ave		0.3491				8.6		30.0			
2-Hexanone	+++++ 0.4591	+++++ 0.5024	0.4288 0.5230	0.3906 0.5160	0.4543 0.4839	Ave		0.4698				9.7		30.0			
C8 Range	+++++ 3.6081	+++++ 3.4728	3.5757 3.5761	3.7802 3.7036	3.5313 3.6053	Ave		3.6066				2.7		30.0			
Octane	+++++ 0.3468	+++++ 0.3286	0.3241 0.3392	0.3537 0.3364	0.3266 0.3207	Ave		0.3345				3.5		30.0			
Dibromochloromethane	0.6803 0.6772	0.7122 0.7005	0.6537 0.7349	0.6931 0.7228	0.6888 0.7038	Ave		0.6967				3.4		30.0			
1,2-Dibromoethane (EDB)	0.6297 0.5987	0.6045 0.6042	0.5380 0.6383	0.5875 0.6327	0.6045 0.6095	Ave		0.6048				4.7		30.0			
Tetrachloroethene	0.4188 0.3883	0.4158 0.3843	0.4253 0.3933	0.3903 0.3983	0.3716 0.3811	Ave		0.3967				4.5		30.0			
Chlorobenzene	0.9764 0.8588	0.8504 0.8825	0.8871 0.8818	0.8728 0.8720	0.8651 0.8511	Ave		0.8798				4.1		30.0			
Ethylbenzene	1.7726 1.4580	1.5982 1.4622	1.5472 1.4705	1.3948 1.4745	1.4862 1.4156	Ave		1.5080				7.3		30.0			
m-Xylene & p-Xylene	1.3334 1.0847	1.2031 1.1209	1.0695 1.1169	1.1161 1.1714	1.1092 1.1020	Ave		1.1427				6.8		30.0			
Nonane	0.9060 0.9658	1.0035 0.9720	0.9558 1.0199	0.9202 1.0585	0.9451 1.0150	Ave		0.9762				4.9		30.0			
Bromoform	0.9058 0.7547	0.7324 0.8889	0.7353 0.9760	0.7582 1.0585	0.7811 1.0450	Ave		0.8636				14.9		30.0			
Styrene	0.9019 0.8206	0.7571 0.8567	0.8080 0.8719	0.7413 0.9124	0.7944 0.8853	Ave		0.8350				7.2		30.0			
o-Xylene	+++++ 1.1708	1.3480 1.1877	1.1918 1.1989	1.1461 1.2330	1.1689 1.2105	Ave		1.2062				4.9		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20065-1 Analy Batch No.: 41306

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/27/2020 17:38 Calibration End Date: 07/28/2020 09:59 Calibration ID: 2540

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
1,1,2,2-Tetrachloroethane	0.9948 0.9619	0.9565 0.9751	0.9613 1.0082	0.9500 1.0250	0.9428 1.0127	Ave		0.9788				3.0		30.0			
1,2,3-Trichloropropane	+++++ 0.2548	+++++ 0.2610	0.2827 0.2728	0.2428 0.2818	0.2570 0.2844	Ave		0.2672				5.8		30.0			
Isopropylbenzene	1.9944 1.7203	1.8737 1.7413	1.7144 1.7684	1.7048 1.8718	1.6212 1.8077	Ave		1.7818				6.0		30.0			
Propylbenzene	0.4690 0.4709	0.4467 0.4896	0.4344 0.5001	0.4718 0.5319	0.4368 0.5320	Ave		0.4783				7.4		30.0			
2-Chlorotoluene	0.5215 0.4415	0.4794 0.4584	0.4438 0.4592	0.4564 0.4793	0.4144 0.4848	Ave		0.4639				6.3		30.0			
4-Ethyltoluene	1.5699 1.7266	1.4515 1.7216	1.4697 1.8192	1.6022 1.9629	1.6377 1.9167	Ave		1.6878				10.4		30.0			
1,3,5-Trimethylbenzene	0.7686 0.7080	0.6746 0.7394	0.6851 0.7693	0.6758 0.7850	0.7340 0.7848	Ave		0.7325				6.0		30.0			
Alpha Methyl Styrene	0.6286 0.7129	0.6419 0.7707	0.6768 0.8120	0.6252 0.8602	0.6779 0.8737	Ave		0.7280				13.0		30.0			
Decane	1.1919 1.3175	1.1694 1.3880	1.1554 1.4656	1.2317 1.5174	1.2414 1.4890	Ave		1.3167				10.5		30.0			
tert-Butylbenzene	1.3872 1.5639	1.4027 1.5993	1.6223 1.7195	1.5082 1.7840	1.4782 1.7865	Ave		1.5852				9.2		30.0			
1,2,4-Trimethylbenzene	1.3427 1.4986	1.3723 1.5498	1.3543 1.6765	1.3543 1.7274	1.3614 1.7356	Ave		1.4973				11.0		30.0			
sec-Butylbenzene	2.0707 2.3029	2.0982 2.3420	2.1356 2.5554	2.1582 2.6183	2.1565 +++++	Ave		2.2709				8.8		30.0			
1,3-Dichlorobenzene	1.0481 1.0554	1.0372 1.1314	0.9340 1.2667	0.9359 1.3528	0.9793 1.3957	Ave		1.1136				15.1		30.0			
Benzyl chloride	1.2008 1.1254	1.0573 1.3048	0.9736 1.4176	0.9263 1.5067	1.0411 1.5666	Ave		1.2120				18.7		30.0			
1,4-Dichlorobenzene	1.0220 1.0110	0.9271 1.1375	0.9105 1.2482	0.8729 1.3330	0.9263 1.3849	Ave		1.0773				17.4		30.0			
4-Isopropyltoluene	1.4990 1.8290	1.5354 1.9269	1.6010 2.0759	1.6308 2.1232	1.6605 +++++	Ave		1.7646				13.2		30.0			
1,2,3-Trimethylbenzene	1.7841 1.5545	1.4183 1.6345	1.5512 1.7470	1.4803 1.8061	1.4461 1.8025	Ave		1.6225				9.4		30.0			
Indane	1.6816 1.4464	1.3749 1.5137	1.3912 1.6864	1.2903 1.7246	1.3461 1.7773	Ave		1.5232				11.7		30.0			
1,2-Dichlorobenzene	1.2930 1.0856	0.9923 1.1585	0.9705 1.2824	0.9609 1.3530	0.9758 1.4344	Ave		1.1506				15.5		30.0			
Indene	1.1690 1.2549	1.1485 1.3519	1.1325 1.4992	1.0654 1.5439	1.1634 1.6127	Ave		1.2941				15.1		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20065-1 Analy Batch No.: 41306

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/27/2020 17:38 Calibration End Date: 07/28/2020 09:59 Calibration ID: 2540

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Butylbenzene	1.6484 1.8134	1.4327 1.9319	1.4454 2.1142	1.5180 2.1253	1.6684 +++++	Ave		1.7442				15.4		30.0			
Undecane	1.3280 1.5951	1.3771 1.7343	1.3442 1.8948	1.2179 1.9157	1.3196 +++++	Ave		1.5252				17.5		30.0			
1,2-Dibromo-3-Chloropropane	+++++ 0.6081	+++++ 0.7491	0.4885 0.8174	0.4743 0.8487	0.5603 0.8966	Ave		0.6804				24.7		30.0			
1,2,4,5-Tetramethylbenzene	+++++ 1.7961	+++++ 1.9105	1.6044 2.1036	1.2967 2.1381	1.5432 +++++	Ave		1.7704				17.4		30.0			
Dodecane	+++++ 1.4164	+++++ 1.8006	+++++ 2.0464	+++++ 2.0764	1.1311 +++++	Ave		1.6942				24.3		30.0			
1,2,4-Trichlorobenzene	+++++ 0.9947	0.9344 1.1955	0.7930 1.3350	0.5910 1.4749	0.7772 +++++	Ave		1.0119				29.9		30.0			
Naphthalene	2.0891 1.8519	1.8639 2.2466	1.7818 2.3304	0.9730 2.4046	1.5746 +++++	Ave		1.9018				23.4		30.0			
Hexachlorobutadiene	+++++ 1.0886	1.0331 1.1684	1.0697 1.2765	0.9388 1.3952	0.9275 1.4680	Ave		1.1518				16.7		30.0			
1,2,3-Trichlorobenzene	+++++ 0.9918	0.9907 1.2461	0.9066 1.3722	0.5998 1.5308	0.7984 1.5463	Ave		1.1092				29.9		30.0			
2-Methylnaphthalene	+++++ 0.5701	+++++ 1.0705	+++++ 1.3329	+++++ 1.6070	0.5351 +++++	Ave		1.0232				45.9		50.0			
1-Methylnaphthalene	+++++ 0.9278	+++++ 1.3444	+++++ 1.5484	+++++ 1.7152	0.8617 +++++	Ave		1.2795				29.4		50.0			
4-Bromofluorobenzene (Surr)	0.5582 0.6017	0.5478 0.6209	0.5669 0.6372	0.5742 0.6581	0.5736 0.7013	Ave		0.6040				8.2		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20065-1 Analy Batch No.: 41306

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/27/2020 17:38 Calibration End Date: 07/28/2020 09:59 Calibration ID: 2540

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 140-41306/9	RG27IC01.D
Level 2	IC 140-41306/10	RG27IC02.D
Level 3	IC 140-41306/11	RG27IC03.D
Level 4	IC 140-41306/12	RG27IC04.D
Level 5	IC 140-41306/13	RG27IC05.D
Level 6	IC 140-41306/14	RG27IC06.D
Level 7	ICIS 140-41306/15	RG27IC07.D
Level 8	IC 140-41306/7	RG27IC08.D
Level 9	IC 140-41306/23	RG27IC09R.D
Level 10	IC 140-41306/3	RG27IC10.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
Chlorodifluoromethane	CBM	Ave	+++++ 246131	+++++ 610022	22350 1232908	43560 2704427	97045 3835967	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Propene	CBM	Qua	+++++ 211848	+++++ 404650	+++++ 719403	+++++ 1420885	67336 1999419	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
Dichlorodifluoromethane	CBM	Ave	+++++ 165184	+++++ 432131	13356 823005	29276 1988425	67258 2506971	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Chloromethane	CBM	Ave	+++++ 43238	+++++ 108542	+++++ 211594	7840 468576	16741 645856	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,2-Dichloro-1,1,2,2-tetrafluoroethane	CBM	Ave	+++++ 162687	+++++ 416653	13573 852566	27808 1979144	61512 2464342	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Vinyl chloride	CBM	Ave	3167 119406	5853 297061	10208 610510	21542 1321837	48486 1795312	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Butane	CBM	Ave	+++++ 229919	+++++ 537514	20720 1103583	36269 2396125	88814 3349286	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,3-Butadiene	CBM	Ave	+++++ 105169	+++++ 263658	7859 538969	17801 1175020	41282 1631624	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Bromomethane	CBM	Ave	+++++ 89042	+++++ 217931	7701 443596	14781 1012173	34681 1351143	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Chloroethane	CBM	Ave	+++++ 55353	+++++ 130061	4625 263531	8586 574110	20761 799669	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Ethanol	CBM	Ave	+++++ 320471	+++++ 868482	27793 1782780	57067 3582876	134775 5540653	+++++ 5.00	+++++ 10.0	0.400 20.0	0.800 40.0	2.00 80.0
Vinyl bromide	CBM	Ave	+++++ 85965	+++++ 204321	6683 422689	14105 960416	33361 1362620	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Methylbutane	CBM	Ave	+++++ 166534	+++++ 379028	14723 766822	30943 1684402	69007 2508890	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Trichlorofluoromethane	CBM	Ave	5711 219154	9001 489182	16152 992591	33115 2275038	84317 3496099	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20065-1 Analy Batch No.: 41306

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/27/2020 17:38 Calibration End Date: 07/28/2020 09:59 Calibration ID: 2540

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
Acrolein	CBM	Ave	+++++ 36799	+++++ 85469	+++++ 178437	+++++ 423441	13255 674260	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
Acetonitrile	CBM	Ave	+++++ 52329	+++++ 118691	+++++ 255111	+++++ 556254	19994 903021	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
Acetone	CBM	Ave	7188 180954	11348 390168	21543 769898	31234 1678072	68315 +++++	0.0600 3.00	0.120 6.00	0.240 12.0	0.480 24.0	1.20 +++++
Pentane	CBM	Ave	+++++ 17390	+++++ 37740	+++++ 77148	2444 168144	7679 260521	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Isopropyl alcohol	CBM	QuaF	+++++ 556131	+++++ 1390680	+++++ 2848066	94261 5903919	228050 9280873	+++++ 3.00	+++++ 6.00	+++++ 12.0	0.480 24.0	1.20 48.0
Ethyl ether	CBM	Ave	+++++ 159295	7232 346722	12621 719254	25311 1511753	62916 2512978	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,1-Dichloroethene	CBM	Ave	2512 94377	4126 198031	7951 427440	15734 926047	36848 1516167	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Acrylonitrile	CBM	Ave	+++++ 80704	+++++ 184217	+++++ 413502	11053 924290	26276 1541328	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
tert-Butyl alcohol	CBM	Ave	+++++ 212410	+++++ 510711	15117 1057085	38257 2254744	85356 3609428	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,1,2-Trichloro-1,2,2-trifluoroetha ne	CBM	Ave	5278 198245	7735 416266	16238 870177	31065 1917116	74939 3080881	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Methylene Chloride	CBM	Lin2	+++++ 136534	+++++ 239056	+++++ 426624	+++++ 848449	86361 1374114	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
3-Chloropropene	CBM	Ave	+++++ 131311	+++++ 265148	11121 581361	19281 1241566	50795 2084374	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Carbon disulfide	CBM	Ave	+++++ 259519	+++++ 558390	19748 1192667	44068 2508957	103310 4223326	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
trans-1,2-Dichloroethene	CBM	Ave	+++++ 92853	+++++ 193997	7802 418527	14018 905380	35310 1556978	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Methylpentane	CBM	Ave	+++++ 317743	14636 669518	27306 1438011	52084 3042685	121804 5065710	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Methyl tert-butyl ether	CBM	Ave	+++++ 239488	+++++ 510185	19517 1093199	38718 2323660	94478 3889171	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,1-Dichloroethane	CBM	Ave	5776 203952	10044 441264	16841 934467	34963 2013274	79326 3335869	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Vinyl acetate	CBM	Ave	+++++ 353375	+++++ 787850	25961 1759799	50685 3866895	131013 6674553	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Butanone (MEK)	CBM	Ave	+++++ 45649	+++++ 96950	+++++ 209096	7700 446445	16864 780088	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Hexane	CBM	Ave	+++++ 97950	+++++ 208092	8256 444669	15018 947461	37669 1594913	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
cis-1,2-Dichloroethene	CBM	Ave	+++++ 101662	4692 216200	8441 466901	16786 977003	38019 1699886	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20065-1 Analy Batch No.: 41306

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/27/2020 17:38 Calibration End Date: 07/28/2020 09:59 Calibration ID: 2540

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
Ethyl acetate	CBM	Ave	+++++ 339312	+++++ 715182	25632 1565696	52092 3336777	126927 5733838	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Chloroform	CBM	Ave	4613 196820	8563 413702	15697 900593	31749 1887013	75409 3211626	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Tetrahydrofuran	CBM	Ave	+++++ 173031	+++++ 354292	14096 762749	27352 1601129	66768 2776417	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,1,1-Trichloroethane	CBM	Ave	5411 204471	9028 411611	17059 908022	30507 1922423	75765 3275184	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2-Dichloroethane	DFBZ	Ave	+++++ 144733	6253 306423	10550 672283	21685 1448028	53350 2460009	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Cyclohexane	DFBZ	Ave	+++++ 46240	+++++ 92688	3573 196062	7461 413070	17290 703270	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Benzene	DFBZ	Ave	+++++ 306125	14816 626098	25933 1332154	47298 2767807	112925 4865566	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1-Butanol	DFBZ	Ave	+++++ 60188	+++++ 151551	+++++ 336272	10929 674603	26740 1180496	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Carbon tetrachloride	DFBZ	Ave	4833 195887	8030 377305	14613 910191	31048 1871799	74165 3274105	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2,3-Dimethylpentane	DFBZ	Ave	+++++ 69317	2877 137406	5095 303336	10505 626099	26093 1097915	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Thiophene	DFBZ	Ave	+++++ 168471	7256 356353	13155 783591	25072 1602525	64778 2880352	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2,2,4-Trimethylpentane	DFBZ	Ave	+++++ 638094	29074 1305159	54721 2864948	102219 6079409	237917 10622791	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Heptane	DFBZ	Ave	+++++ 105214	+++++ 210131	8185 464455	17300 971980	38064 1725170	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2-Dichloropropane	DFBZ	Ave	+++++ 137586	5751 291387	12048 635169	23195 1302225	54434 2320849	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Trichloroethene	DFBZ	Ave	3281 130842	6043 273468	11385 590859	19716 1254193	48964 2254609	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Dibromomethane	DFBZ	Ave	3269 121569	5050 252570	9655 546757	17443 1167279	43944 2117185	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Bromodichloromethane	DFBZ	Ave	4849 209068	8864 434191	16233 967086	31116 2013292	78168 3631438	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,4-Dioxane	DFBZ	Ave	+++++ 42789	+++++ 107588	+++++ 233489	7355 449229	18102 806385	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Methyl methacrylate	DFBZ	Ave	+++++ 199371	+++++ 414367	15229 929916	30743 1987185	76225 3604061	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Methylcyclohexane	DFBZ	Ave	+++++ 176238	+++++ 368156	14439 792085	27635 1647594	68034 2969356	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
4-Methyl-2-pentanone (MIBK)	DFBZ	Ave	9244 379139	14860 785359	28304 1739238	54138 3692453	144122 6737256	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20065-1 Analy Batch No.: 41306

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/27/2020 17:38 Calibration End Date: 07/28/2020 09:59 Calibration ID: 2540

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
cis-1,3-Dichloropropene	DFBZ	Ave	4175 164512	6361 347671	12607 781659	24251 1644237	59780 3013045	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
trans-1,3-Dichloropropene	CBZd 5	Ave	+++++ 139920	5795 292083	10582 701991	19725 1507029	47513 2769568	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Toluene	CBZd 5	Ave	9082 348176	14401 707352	27621 1571492	55409 3300253	132029 6088407	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,1,2-Trichloroethane	CBZd 5	Ave	2613 108656	5483 230231	8827 499056	16211 1034912	42151 1938784	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Hexanone	CBZd 5	Ave	+++++ 148380	+++++ 332776	10972 756406	19116 1611422	53872 3018143	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
C8 Range	DFBZ	Ave	+++++ 1385610	+++++ 2780330	111213 6186213	225700 13159790	508427 24681269	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Octane	CBZd 5	Ave	+++++ 112095	+++++ 217667	8292 490607	17309 1050543	38720 2000001	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Dibromochloromethane	CBZd 5	Ave	4878 218891	9216 464052	16726 1062915	33919 2257599	81665 4389647	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2-Dibromoethane (EDB)	CBZd 5	Ave	4515 193516	7823 400269	13765 923134	28751 1975955	71680 3801697	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Tetrachloroethene	CBZd 5	Ave	3003 125507	5381 254548	10882 568875	19101 1244049	44056 2377282	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Chlorobenzene	CBZd 5	Ave	7001 277579	11005 584619	22698 1275338	42713 2723295	102575 5308785	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Ethylbenzene	CBZd 5	Ave	12710 471263	20681 968642	39590 2126782	68260 4605232	176214 8829342	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
m-Xylene & p-Xylene	CBZd 5	Ave	19121 701209	31137 1485011	54731 3230671	109239 7316737	263030 13746712	0.0400 2.00	0.0800 4.00	0.160 8.00	0.320 16.0	0.800 32.0
Nonane	CBZd 5	Ave	6496 312166	12986 643865	24458 1475086	45033 3305943	112064 6331112	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Bromoform	CBZd 5	Ave	6495 243953	9478 588832	18815 1411559	37105 3305834	92619 6517763	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Styrene	CBZd 5	Ave	6467 265242	9797 567479	20676 1261090	36278 2849656	94195 5521771	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
o-Xylene	CBZd 5	Ave	+++++ 378432	17444 786791	30495 1733927	56091 3851012	138599 7550396	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,1,2,2-Tetrachloroethane	CBZd 5	Ave	7133 310901	12378 645943	24597 1458099	46493 3201216	111782 6316679	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2,3-Trichloropropane	CBZd 5	Ave	+++++ 82364	+++++ 172869	7234 394619	11880 880055	30475 1773747	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Isopropylbenzene	CBZd 5	Ave	14300 556043	24247 1153514	43868 2557625	83433 5846094	192221 11275174	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Propylbenzene	CBZd 5	Ave	3363 152207	5780 324309	11115 723311	23090 1661180	51788 3318378	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20065-1 Analy Batch No.: 41306

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/27/2020 17:38 Calibration End Date: 07/28/2020 09:59 Calibration ID: 2540

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
2-Chlorotoluene	CBZd 5	Ave	3739 142720	6204 303657	11355 664201	22336 1496836	49136 3024156	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
4-Ethyltoluene	CBZd 5	Ave	11256 558091	18783 1140462	37607 2631086	78410 6130590	194186 11954975	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,3,5-Trimethylbenzene	CBZd 5	Ave	5511 228846	8729 489785	17530 1112576	33074 2451651	87032 4894991	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Alpha Methyl Styrene	CBZd 5	Ave	4507 230432	8307 510559	17319 1174362	30595 2686630	80373 5449340	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Decane	CBZd 5	Ave	8546 425855	15132 919474	29564 2119650	60278 4739206	147194 9287448	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
tert-Butylbenzene	CBZd 5	Ave	9946 505499	18152 1059433	41512 2486960	73807 5571641	175264 11143124	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2,4-Trimethylbenzene	CBZd 5	Ave	9627 484388	17758 1026613	34654 2424783	66278 5395091	161416 10825211	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
sec-Butylbenzene	CBZd 5	Ave	14847 744352	27152 1551449	54645 3695848	105622 8177611	255689 +++++	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
1,3-Dichlorobenzene	CBZd 5	Ave	7515 341120	13422 749501	23898 1832060	45803 4224922	116112 8705572	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Benzyl chloride	CBZd 5	Ave	8610 363757	13682 864342	24912 2050279	45333 4705628	123445 9771254	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,4-Dichlorobenzene	CBZd 5	Ave	7328 326790	11997 753519	23299 1805225	42717 4163245	109825 8637875	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
4-Isopropyltoluene	CBZd 5	Ave	10748 591170	19869 1276463	40966 3002320	79807 6631232	196886 +++++	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
1,2,3-Trimethylbenzene	CBZd 5	Ave	12792 502468	18353 1082775	39691 2526726	72444 5640889	171458 11242894	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Indane	CBZd 5	Ave	12057 467506	17792 1002703	35598 2439031	63148 5386129	159609 11085298	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2-Dichlorobenzene	CBZd 5	Ave	9271 350911	12841 767442	24834 1854706	47024 4225696	115699 8946828	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Indene	CBZd 5	Ave	8382 405611	14862 895514	28979 2168271	52137 4821815	137942 10058942	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Butylbenzene	CBZd 5	Ave	11819 586131	18540 1279727	36985 3057820	74291 6637730	197823 +++++	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
Undecane	CBZd 5	Ave	9522 515581	17820 1148890	34395 2740455	59603 5983015	156468 +++++	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
1,2-Dibromo-3-Chloropropane	CBZd 5	Ave	+++++ 196551	+++++ 496254	12500 1182195	23210 2650514	66434 5592211	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2,4,5-Tetramethylbenzene	CBZd 5	Ave	+++++ 580543	+++++ 1265555	41054 3042455	63459 6677711	182976 +++++	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
Dodecane	CBZd 5	Ave	+++++ 457806	+++++ 1192788	+++++ 2959688	+++++ 6484922	134117 +++++	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 +++++

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20065-1 Analy Batch No.: 41306

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/27/2020 17:38 Calibration End Date: 07/28/2020 09:59 Calibration ID: 2540

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
1,2,4-Trichlorobenzene	CBZd5	Ave	+++++ 321510	12091 791917	20292 1930818	28921 4606294	92149 +++++	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
Naphthalene	CBZd5	Ave	14979 598591	24120 1488208	45592 3370388	47616 7509973	186701 +++++	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
Hexachlorobutadiene	CBZd5	Ave	+++++ 351871	13369 773986	27371 1846182	45945 4357579	109969 9156281	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2,3-Trichlorobenzene	CBZd5	Ave	+++++ 320569	12820 825449	23199 1984631	29355 4781136	94670 9644459	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Methylnaphthalene	CBZd5	Ave	+++++ 184287	+++++ 709189	+++++ 1927899	+++++ 5019369	63454 +++++	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 +++++
1-Methylnaphthalene	CBZd5	Ave	+++++ 299900	+++++ 890639	+++++ 2239586	+++++ 5357267	102177 +++++	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 +++++
4-Bromofluorobenzene (Surr)	CBZd5	Ave	800496 777885	708909 822674	725248 921642	702516 1027625	680156 1093561	4.00 4.00	4.00 4.00	4.00 4.00	4.00 4.00	4.00 4.00

Curve Type Legend:

Ave = Average ISTD
Lin2 = Linear 1/conc^2 ISTD
Qua = Quadratic ISTD
QuaF = Quadratic ISTD forced zero

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20065-1 Analy Batch No.: 41306

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/27/2020 17:38 Calibration End Date: 07/28/2020 09:59 Calibration ID: 2540

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 140-41306/9	RG27IC01.D
Level 2	IC 140-41306/10	RG27IC02.D
Level 3	IC 140-41306/11	RG27IC03.D
Level 4	IC 140-41306/12	RG27IC04.D
Level 5	IC 140-41306/13	RG27IC05.D
Level 6	IC 140-41306/14	RG27IC06.D
Level 7	ICIS 140-41306/15	RG27IC07.D
Level 8	IC 140-41306/7	RG27IC08.D
Level 9	IC 140-41306/23	RG27IC09R.D
Level 10	IC 140-41306/3	RG27IC10.D

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
Chlorodifluoromethane	+++++	+++++	6.8						50			
Propene	+++++	+++++	+++++	+++++	-23.3						50	
Dichlorodifluoromethane	+++++	+++++	-5.5						50			
Chloromethane	+++++	+++++	+++++	11.2						50		
1,2-Dichloro-1,1,2,2-tetrafluoroethane	+++++	+++++	-2.0						50			
Vinyl chloride	5.1						50					
Butane	+++++	+++++	10.9						50			
1,3-Butadiene	+++++	+++++	-10.0						50			
Bromomethane	+++++	+++++	3.4						50			
Chloroethane	+++++	+++++	4.7						50			
Ethanol	+++++	+++++	-2.2						50			
Vinyl bromide	+++++	+++++	-5.2						50			
2-Methylbutane	+++++	+++++	6.7						50			
Trichlorofluoromethane	12.3						50					

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20065-1 Analy Batch No.: 41306

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/27/2020 17:38 Calibration End Date: 07/28/2020 09:59 Calibration ID: 2540

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
Acrolein	+++++	+++++	+++++	+++++	-5.0						50	
Acetonitrile	+++++	+++++	+++++	+++++	2.5						50	
Acetone	43.1			+++++			80					
Pentane	+++++	+++++	+++++	-7.7						50		
Isopropyl alcohol	+++++	+++++	+++++	-11.4						50		
Ethyl ether	+++++	14.2						50				
1,1-Dichloroethene	12.2						50					
Acrylonitrile	+++++	+++++	+++++	-13.3						50		
tert-Butyl alcohol	+++++	+++++	-14.2						50			
1,1,2-Trichloro-1,2,2-trifluoroethane	15.8						50					
Methylene Chloride	+++++	+++++	+++++	+++++	0.5						80	
3-Chloropropene	+++++	+++++	9.5						50			
Carbon disulfide	+++++	+++++	-4.2						50			
trans-1,2-Dichloroethene	+++++	+++++	6.9						50			
2-Methylpentane	+++++	14.8						50				
Methyl tert-butyl ether	+++++	+++++	2.7						50			
1,1-Dichloroethane	16.2						50					
Vinyl acetate	+++++	+++++	-8.8						50			
2-Butanone (MEK)	+++++	+++++	+++++	8.9						50		
Hexane	+++++	+++++	6.9						50			
cis-1,2-Dichloroethene	+++++	14.8						50				

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20065-1 Analy Batch No.: 41306

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/27/2020 17:38 Calibration End Date: 07/28/2020 09:59 Calibration ID: 2540

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
Ethyl acetate	+++++	+++++	-3.2						50			
Chloroform	1.3						50					
Tetrahydrofuran	+++++	+++++	5.0						50			
1,1,1-Trichloroethane	14.7						50					
1,2-Dichloroethane	+++++	3.5						50				
Cyclohexane	+++++	+++++	-1.0						50			
Benzene	+++++	15.5						50				
1-Butanol	+++++	+++++	+++++	0.8						50		
Carbon tetrachloride	8.5						50					
2,3-Dimethylpentane	+++++	2.8						50				
Thiophene	+++++	2.6						50				
2,2,4-Trimethylpentane	+++++	7.3						50				
Heptane	+++++	+++++	-2.0						50			
1,2-Dichloropropane	+++++	-2.8						50				
Trichloroethene	6.9						50					
Dibromomethane	17.0						50					
Bromodichloromethane	1.6						50					
1,4-Dioxane	+++++	+++++	+++++	-1.3						50		
Methyl methacrylate	+++++	+++++	-6.6						50			
Methylcyclohexane	+++++	+++++	1.1						50			
4-Methyl-2-pentanone (MIBK)	7.4						50					

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20065-1 Analy Batch No.: 41306

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/27/2020 17:38 Calibration End Date: 07/28/2020 09:59 Calibration ID: 2540

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
cis-1,3-Dichloropropene	10.1						50					
trans-1,3-Dichloropropene	+++++	2.0						50				
Toluene	15.5						50					
1,1,2-Trichloroethane	4.4						50					
2-Hexanone	+++++	+++++	-8.7						50			
Octane	+++++	+++++	-3.1						50			
Dibromochloromethane	-2.4						50					
1,2-Dibromoethane (EDB)	4.1						50					
Tetrachloroethene	5.6						50					
Chlorobenzene	11.0						50					
Ethylbenzene	17.6						50					
m-Xylene & p-Xylene	16.7						50					
Nonane	-7.2						50					
Bromoform	4.9						50					
Styrene	8.0						50					
o-Xylene	+++++	11.8						50				
1,1,2,2-Tetrachloroethane	1.6						50					
1,2,3-Trichloropropane	+++++	+++++	5.8						50			
Isopropylbenzene	11.9						50					
Propylbenzene	-1.9						50					
2-Chlorotoluene	12.4						50					

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20065-1 Analy Batch No.: 41306

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/27/2020 17:38 Calibration End Date: 07/28/2020 09:59 Calibration ID: 2540

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
4-Ethyltoluene	-7.0						50					
1,3,5-Trimethylbenzene	4.9						50					
Alpha Methyl Styrene	-13.7						50					
Decane	-9.5						50					
tert-Butylbenzene	-12.5						50					
1,2,4-Trimethylbenzene	-10.3						50					
sec-Butylbenzene	-8.8			+++++			50					
1,3-Dichlorobenzene	-5.9						50					
Benzyl chloride	-0.9						50					
1,4-Dichlorobenzene	-5.1						50					
4-Isopropyltoluene	-15.1			+++++			50					
1,2,3-Trimethylbenzene	10.0						50					
Indane	10.4						50					
1,2-Dichlorobenzene	12.4						50					
Indene	-9.7						50					
Butylbenzene	-5.5			+++++			50					
Undecane	-12.9			+++++			50					
1,2-Dibromo-3-Chloropropane	+++++	+++++	-28.2						50			
1,2,4,5-Tetramethylbenzene	+++++	+++++	-9.4	+++++					50			
Dodecane	+++++	+++++	+++++	+++++ +++++	-33.2						50	
1,2,4-Trichlorobenzene	+++++	-7.7		+++++				50				

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20065-1 Analy Batch No.: 41306

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/27/2020 17:38 Calibration End Date: 07/28/2020 09:59 Calibration ID: 2540

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
Naphthalene	9.9			+++++			80					
Hexachlorobutadiene	+++++	-10.3						50				
1,2,3-Trichlorobenzene	+++++	-10.7						50				
2-Methylnaphthalene	+++++	+++++	+++++	+++++ +++++	-47.7						80	
1-Methylnaphthalene	+++++	+++++	+++++	+++++ +++++	-32.7						80	

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC10.D
Lims ID: IC L10
Client ID:
Sample Type: IC Calib Level: 10
Inject. Date: 27-Jul-2020 17:38:30 ALS Bottle#: 15 Worklist Smp#: 3
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016116-003
Misc. Info.: 314600
Operator ID: HMT Instrument ID: MR
Sublist: chrom-MR_TO15*sub16

Method: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 28-Jul-2020 16:47:00 Calib Date: 28-Jul-2020 09:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC09R.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1014

First Level Reviewer: tajh Date: 28-Jul-2020 08:03:55

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.323	8.308	0.015	93	212243	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.550	10.539	0.011	96	1711456	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.381	15.375	0.006	89	1559330	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.032	17.025	0.007	95	1093561	4.00	4.64	
6 Chlorodifluoromethane	51	3.340	3.343	-0.003	96	3835967	16.0	12.3	
7 Propene	41	3.351	3.349	0.002	99	1999419	16.0	16.0	
8 Dichlorodifluoromethane	85	3.400	3.400	0.000	98	2506971	16.0	11.9	
9 Chloromethane	52	3.567	3.569	-0.002	100	645856	16.0	12.0	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.578	3.577	0.001	93	2464342	16.0	12.0	
11 Acetaldehyde	44	3.718	3.724	-0.006	98	4525315	80.0	61.6	
12 Vinyl chloride	62	3.723	3.726	-0.003	99	1795312	16.0	11.6	
13 Butane	43	3.809	3.808	0.001	86	3349286	16.0	12.1	
14 Butadiene	54	3.809	3.809	0.000	66	1631624	16.0	12.6	
15 Bromomethane	94	4.106	4.103	0.003	98	1351143	16.0	12.2	
16 Chloroethane	64	4.235	4.235	0.000	85	799669	16.0	12.2	
17 Ethanol	31	4.365	4.364	0.001	97	5540653	80.0	65.7	
18 Vinyl bromide	106	4.521	4.515	0.006	98	1362620	16.0	13.0	
19 2-Methylbutane	43	4.559	4.561	-0.002	94	2508890	16.0	12.2	
20 Trichlorofluoromethane	101	4.769	4.765	0.004	98	3496099	16.0	13.4	
21 Acrolein	56	4.791	4.779	0.012	95	674260	16.0	14.9	
22 Acetonitrile	40	4.861	4.870	-0.009	99	903021	16.0	14.2	
23 Acetone	58	4.899	4.913	-0.014	99	2645057	48.0	30.9	
24 Pentane	72	4.980	4.971	0.009	97	260521	16.0	12.9	
25 Isopropyl alcohol	45	5.012	5.027	-0.015	99	9280873	48.0	47.8	
26 Ethyl ether	31	5.147	5.168	-0.021	89	2512978	16.0	13.3	
27 1,1-Dichloroethene	96	5.454	5.444	0.010	94	1516167	16.0	13.2	
28 Acrylonitrile	53	5.573	5.572	0.001	94	1541328	16.0	15.9	
30 1,1,2-Trichloro-1,2,2-trifluoroe	101	5.627	5.622	0.005	96	3080881	16.0	13.2	
29 2-Methyl-2-propanol	59	5.584	5.629	-0.045	96	3609428	16.0	13.8	
31 Methylene Chloride	84	5.799	5.788	0.011	91	1374114	16.0	14.7	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	5.810	5.802	0.008	95	2084374	16.0	13.8	
33 Carbon disulfide	76	5.945	5.938	0.007	98	4223326	16.0	13.8	
34 trans-1,2-Dichloroethene	96	6.592	6.580	0.012	94	1556978	16.0	14.4	
35 2-Methylpentane	43	6.608	6.600	0.008	97	5065710	16.0	13.3	
36 Methyl tert-butyl ether	73	6.711	6.747	-0.036	93	3889171	16.0	13.8	
37 1,1-Dichloroethane	63	7.012	7.002	0.010	99	3335869	16.0	13.1	
38 Vinyl acetate	43	7.120	7.120	0.000	100	6674553	16.0	15.8	
40 Hexane	56	7.579	7.575	0.004	86	1594913	16.0	13.9	
39 2-Butanone (MEK)	72	7.563	7.583	-0.020	95	780088	16.0	14.5	
41 Isopropyl ether	45	7.740	7.761	-0.021	96	8213902	16.0	14.0	
42 cis-1,2-Dichloroethene	96	7.994	7.981	0.013	98	1699886	16.0	13.9	
43 Ethyl acetate	43	8.183	8.189	-0.006	97	5733838	16.0	14.6	
44 Chloroform	83	8.339	8.326	0.013	91	3211626	16.0	13.8	
45 Tert-butyl ethyl ether	59	8.420	8.448	-0.028	97	6294618	16.0	13.7	
46 Tetrahydrofuran	42	8.716	8.750	-0.034	91	2776417	16.0	13.9	
47 1,1,1-Trichloroethane	97	9.358	9.348	0.010	95	3275184	16.0	13.6	
48 1,2-Dichloroethane	62	9.471	9.461	0.010	94	2460009	16.0	15.3	
50 Cyclohexane	69	9.962	9.954	0.008	83	703270	16.0	14.2	
51 Benzene	78	9.968	9.958	0.010	96	4865566	16.0	14.3	
49 n-Butanol	31	9.935	9.970	-0.035	78	1180496	16.0	15.2	
52 Carbon tetrachloride	117	9.989	9.980	0.009	93	3274105	16.0	15.1	
53 2,3-Dimethylpentane	71	10.102	10.094	0.008	91	1097915	16.0	14.8	
54 Thiophene	84	10.253	10.245	0.008	94	2880352	16.0	15.3	
55 Isooctane	57	10.771	10.766	0.005	97	10622791	16.0	14.8	
56 n-Heptane	71	11.170	11.162	0.008	95	1725170	16.0	15.0	
57 1,2-Dichloropropane	63	11.246	11.235	0.011	88	2320849	16.0	14.8	
58 Trichloroethene	130	11.283	11.272	0.011	95	2254609	16.0	15.1	
59 Dibromomethane	93	11.370	11.357	0.013	91	2117185	16.0	15.6	
60 Dichlorobromomethane	83	11.521	11.510	0.011	96	3631438	16.0	15.6	
61 1,4-Dioxane	88	11.526	11.563	-0.037	95	806385	16.0	15.1	
62 Methyl methacrylate	41	11.628	11.632	-0.004	85	3604061	16.0	16.1	
63 Methylcyclohexane	83	12.071	12.063	0.008	85	2969356	16.0	15.1	
64 4-Methyl-2-pentanone (MIBK)	43	12.497	12.517	-0.020	97	6737256	16.0	16.1	
65 cis-1,3-Dichloropropene	75	12.556	12.548	0.008	96	3013045	16.0	16.3	
66 trans-1,3-Dichloropropene	75	13.268	13.261	0.007	90	2769568	16.0	16.2	
67 Toluene	91	13.386	13.381	0.005	92	6088407	16.0	14.2	
68 1,1,2-Trichloroethane	83	13.467	13.460	0.007	97	1938784	16.0	14.2	
69 2-Hexanone	58	13.861	13.878	-0.017	89	3018143	16.0	16.5	
70 n-Octane	85	14.098	14.096	0.002	98	2000001	16.0	15.3	
71 Chlorodibromomethane	129	14.174	14.165	0.009	96	4389647	16.0	16.2	
72 Ethylene Dibromide	107	14.470	14.462	0.008	98	3801697	16.0	16.1	
73 Tetrachloroethene	129	14.546	14.538	0.008	93	2377282	16.0	15.4	
74 Chlorobenzene	112	15.430	15.423	0.007	92	5308785	16.0	15.5	
75 2,3-Dimethylheptane	43	15.457	15.455	0.002	92	9553379	16.0	14.4	
76 Ethylbenzene	91	15.721	15.718	0.003	98	8829342	16.0	15.0	
77 m-Xylene & p-Xylene	91	15.888	15.881	0.007	95	13746712	32.0	30.9	
78 n-Nonane	57	16.314	16.314	0.000	94	6331112	16.0	16.6	
79 Bromoform	173	16.325	16.323	0.002	98	6517763	16.0	19.4	
80 Styrene	104	16.352	16.346	0.006	96	5521771	16.0	17.0	
81 o-Xylene	91	16.411	16.406	0.005	99	7550396	16.0	16.1	
82 1,1,2,2-Tetrachloroethane	83	16.735	16.734	0.001	99	6316679	16.0	16.6	
83 1,2,3-Trichloropropane	110	16.897	16.895	0.002	92	1773747	16.0	17.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	16.999	16.998	0.001	97	11275174	16.0	16.2	
85 N-Propylbenzene	120	17.549	17.547	0.002	99	3318378	16.0	17.8	
86 2-Chlorotoluene	126	17.592	17.590	0.002	97	3024156	16.0	16.7	
87 4-Ethyltoluene	105	17.706	17.704	0.002	98	11954975	16.0	18.2	
88 1,3,5-Trimethylbenzene	120	17.786	17.782	0.004	92	4894991	16.0	17.1	
89 Alpha Methyl Styrene	118	18.024	18.020	0.004	91	5449340	16.0	19.2	
90 n-Decane	57	18.094	18.089	0.005	87	9287448	16.0	18.1	
91 tert-Butylbenzene	119	18.223	18.218	0.005	92	11143124	16.0	18.0	
92 1,2,4-Trimethylbenzene	105	18.234	18.232	0.002	96	10825211	16.0	18.5	
93 sec-Butylbenzene	105	18.493	18.494	-0.001	97	14850865	16.0	16.8	e
94 1,3-Dichlorobenzene	146	18.509	18.504	0.005	96	8705572	16.0	20.1	
95 Benzyl chloride	91	18.590	18.584	0.006	98	9771254	16.0	20.7	
96 1,4-Dichlorobenzene	146	18.601	18.596	0.005	98	8637875	16.0	20.6	
97 4-Isopropyltoluene	119	18.665	18.662	0.003	96	13015365	16.0	18.9	e
98 1,2,3-Trimethylbenzene	105	18.719	18.713	0.006	99	11242894	16.0	17.8	
99 Butylcyclohexane	83	18.779	18.773	0.006	84	8507552	16.0	17.3	
100 2,3-Dihydroindene	117	18.967	18.961	0.006	93	11085298	16.0	18.7	
101 1,2-Dichlorobenzene	146	18.967	18.962	0.005	87	8946828	16.0	19.9	
102 Indene	116	19.097	19.093	0.004	94	10058942	16.0	19.9	
103 n-Butylbenzene	91	19.108	19.106	0.002	98	12961757	16.0	19.1	e
104 Undecane	57	19.431	19.431	0.000	91	11772092	16.0	19.8	e
105 1,2-Dibromo-3-Chloropropane	157	19.577	19.577	0.000	92	5592211	16.0	21.1	
106 1,2,4,5-Tetramethylbenzene	119	19.873	19.873	0.000	98	12729432	16.0	18.4	e
107 Dodecane	57	20.488	20.489	-0.001	89	12344207	16.0	18.7	e
108 1,2,4-Trichlorobenzene	180	20.677	20.672	0.005	94	9540497	16.0	24.2	
109 Naphthalene	128	20.806	20.807	-0.001	97	14240864	16.0	19.2	e
110 Hexachlorobutadiene	225	21.033	21.028	0.005	95	9156281	16.0	20.4	
111 1,2,3-Trichlorobenzene	180	21.097	21.097	0.000	94	9644459	16.0	22.3	
112 2-Methylnaphthalene	142	21.836	21.834	0.002	94	10108781	16.0	25.3	e
A 116 C8 Range	1	14.090	(14.055-14.152)		0	24681269	16.0	16.0	
S 117 Xylenes, Total	100				0		48.0	46.9	
S 118 1,2-Dichloroethene, Total	1				0		32.0	28.3	

QC Flag Legend

Processing Flags

e - Potential Peak Saturated

Reagents:

40L10DQP_00019	Amount Added: 200.00	Units: mL	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

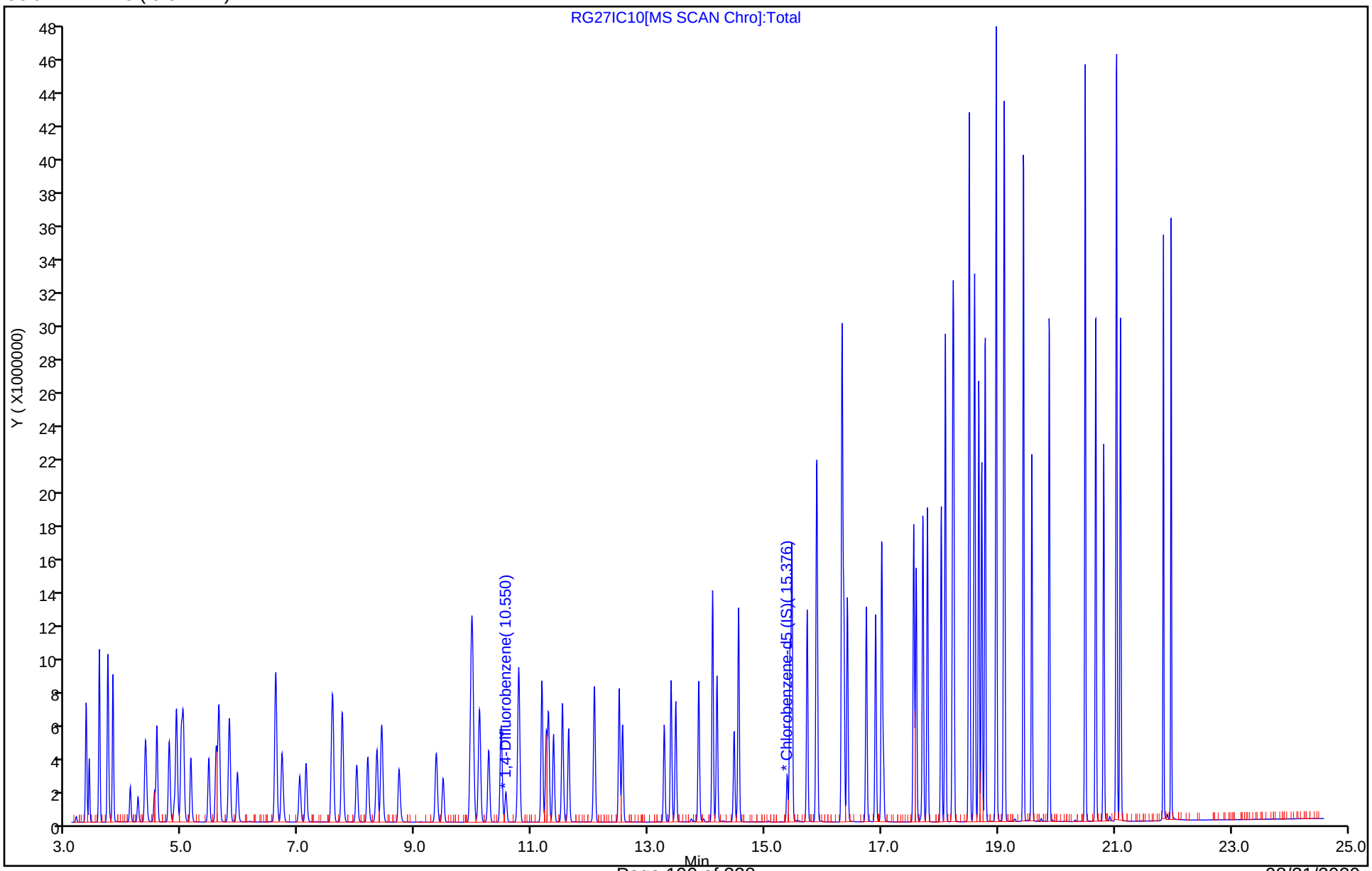
Report Date: 28-Jul-2020 16:47:01 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC10.D

Injection Date:	27-Jul-2020 17:38:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	IC L10			Worklist Smp#:	3
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

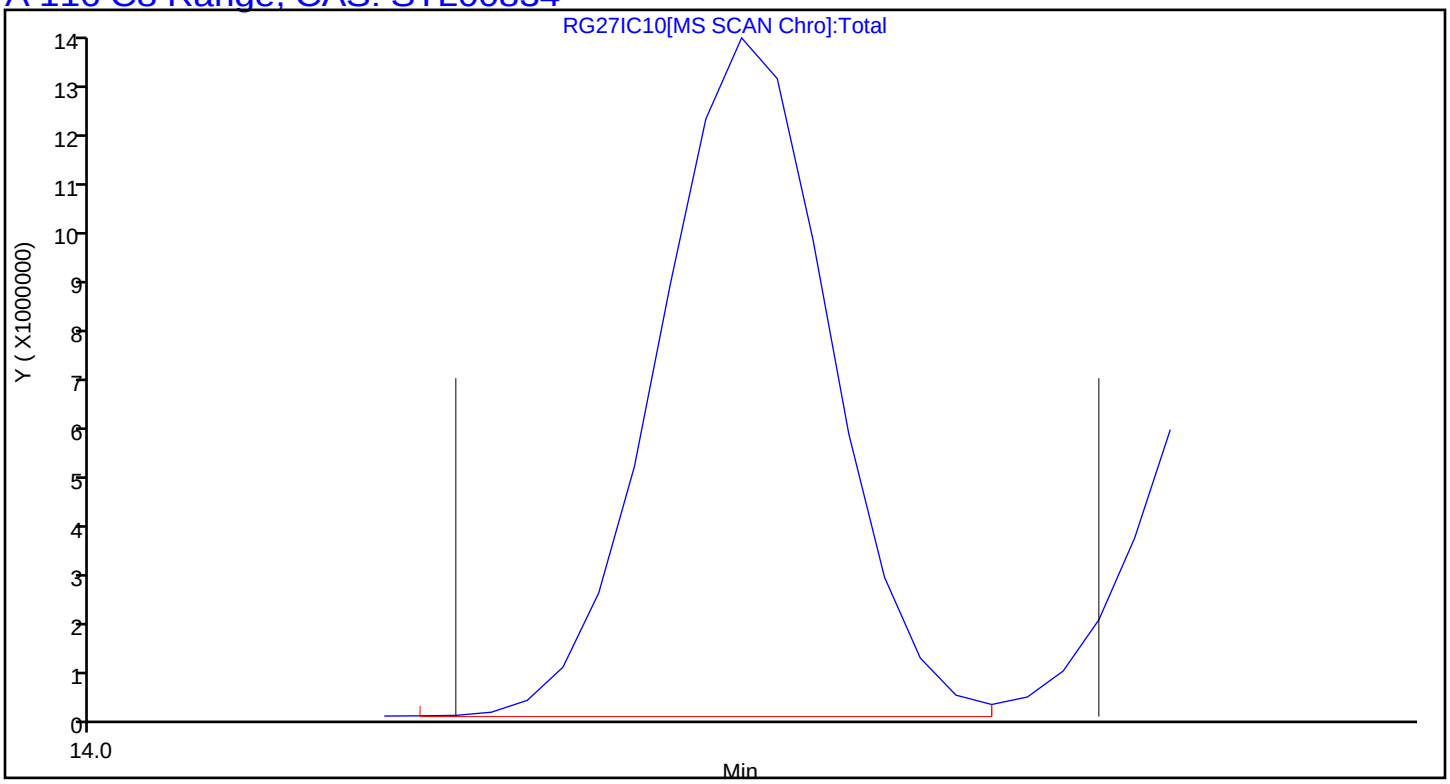


Report Date: 28-Jul-2020 16:47:01 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC10.D				
Injection Date:	27-Jul-2020 17:38:30	Instrument ID:	MR		
Lims ID:	IC L10				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	15	Worklist Smp#:	3
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 116 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC08.D
Lims ID: IC L8
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 27-Jul-2020 21:45:30 ALS Bottle#: 13 Worklist Smp#: 7
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016116-007
Misc. Info.: 314607
Operator ID: HMT Instrument ID: MR
Sublist: chrom-MR_TO15*sub16

Method: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 28-Jul-2020 16:47:09 Calib Date: 28-Jul-2020 09:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC09R.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1014

First Level Reviewer: barlozhetskayaa Date: 28-Jul-2020 16:37:44

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.307	8.308	-0.001	92	206021	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.539	10.539	0.000	96	1729884	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.376	15.375	0.001	90	1446297	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.026	17.025	0.001	95	921642	4.00	4.22	
6 Chlorodifluoromethane	51	3.335	3.343	-0.008	97	1232908	4.00	4.09	
7 Propene	41	3.340	3.349	-0.009	99	719403	4.00	3.79	
8 Dichlorodifluoromethane	85	3.389	3.400	-0.011	98	823005	4.00	4.04	
9 Chloromethane	52	3.561	3.569	-0.008	98	211594	4.00	4.06	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.567	3.577	-0.010	90	852566	4.00	4.27	
11 Acetaldehyde	44	3.707	3.724	-0.017	98	1487111	20.0	20.9	
12 Vinyl chloride	62	3.718	3.726	-0.008	98	610510	4.00	4.08	
13 Butane	43	3.799	3.808	-0.009	86	1103583	4.00	4.10	
14 Butadiene	54	3.799	3.809	-0.010	66	538969	4.00	4.29	
15 Bromomethane	94	4.095	4.103	-0.008	97	443596	4.00	4.14	
16 Chloroethane	64	4.225	4.235	-0.011	89	263531	4.00	4.14	
17 Ethanol	31	4.343	4.364	-0.021	96	1782780	20.0	21.8	
18 Vinyl bromide	106	4.505	4.515	-0.010	98	422689	4.00	4.16	
19 2-Methylbutane	43	4.553	4.561	-0.008	94	766822	4.00	3.86	
20 Trichlorofluoromethane	101	4.758	4.765	-0.007	98	992591	4.00	3.93	
21 Acrolein	56	4.775	4.779	-0.004	95	178437	4.00	4.05	
22 Acetonitrile	40	4.845	4.870	-0.025	94	255111	4.00	4.14	
23 Acetone	58	4.882	4.913	-0.031	99	769898	12.0	9.26	
24 Pentane	72	4.969	4.971	-0.002	97	77148	4.00	3.94	
25 Isopropyl alcohol	45	4.990	5.027	-0.037	96	2848066	12.0	11.6	
26 Ethyl ether	31	5.136	5.168	-0.032	90	719254	4.00	3.92	
27 1,1-Dichloroethene	96	5.438	5.444	-0.006	94	427440	4.00	3.85	
28 Acrylonitrile	53	5.556	5.572	-0.016	95	413502	4.00	4.39	
29 2-Methyl-2-propanol	59	5.567	5.629	-0.062	96	1057085	4.00	4.16	
30 1,1,2-Trichloro-1,2,2-trifluoroe	101	5.616	5.622	-0.006	97	870177	4.00	3.85	
31 Methylene Chloride	84	5.783	5.788	-0.005	90	426624	4.00	4.11	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	5.799	5.802	-0.003	95	581361	4.00	3.97	
33 Carbon disulfide	76	5.929	5.938	-0.010	98	1192667	4.00	4.01	
34 trans-1,2-Dichloroethene	96	6.581	6.580	0.001	94	418527	4.00	3.98	
35 2-Methylpentane	43	6.592	6.600	-0.008	97	1438011	4.00	3.89	
36 Methyl tert-butyl ether	73	6.705	6.747	-0.042	92	1093199	4.00	3.99	
37 1,1-Dichloroethane	63	6.996	7.002	-0.006	99	934467	4.00	3.79	
38 Vinyl acetate	43	7.109	7.120	-0.011	100	1759799	4.00	4.29	
39 2-Butanone (MEK)	72	7.552	7.583	-0.031	95	209096	4.00	4.00	
40 Hexane	56	7.573	7.575	-0.002	87	444669	4.00	4.00	
41 Isopropyl ether	45	7.735	7.761	-0.026	97	2295046	4.00	4.03	
42 cis-1,2-Dichloroethene	96	7.983	7.981	0.002	98	466901	4.00	3.94	
43 Ethyl acetate	43	8.172	8.189	-0.017	97	1565696	4.00	4.10	
44 Chloroform	83	8.328	8.326	0.002	94	900593	4.00	3.98	
45 Tert-butyl ethyl ether	59	8.414	8.448	-0.034	97	1746941	4.00	3.91	
46 Tetrahydrofuran	42	8.716	8.750	-0.034	92	762749	4.00	3.94	
47 1,1,1-Trichloroethane	97	9.347	9.348	-0.001	95	908022	4.00	3.87	
48 1,2-Dichloroethane	62	9.466	9.461	0.005	94	672283	4.00	4.14	
49 n-Butanol	31	9.940	9.970	-0.030	72	336272	4.00	4.28	
50 Cyclohexane	69	9.946	9.954	-0.008	79	196062	4.00	3.91	
51 Benzene	78	9.957	9.958	-0.001	97	1332154	4.00	3.87	
52 Carbon tetrachloride	117	9.978	9.980	-0.002	95	910191	4.00	4.15	
53 2,3-Dimethylpentane	71	10.091	10.094	-0.003	91	303336	4.00	4.04	
54 Thiophene	84	10.248	10.245	0.003	95	783591	4.00	4.13	
55 Isooctane	57	10.765	10.766	-0.001	97	2864948	4.00	3.94	
56 n-Heptane	71	11.164	11.162	0.002	95	464455	4.00	4.00	
57 1,2-Dichloropropane	63	11.235	11.235	0.000	89	635169	4.00	4.00	
58 Trichloroethene	130	11.272	11.272	0.000	95	590859	4.00	3.91	
59 Dibromomethane	93	11.359	11.357	0.002	93	546757	4.00	3.98	
60 Dichlorobromomethane	83	11.515	11.510	0.005	96	967086	4.00	4.12	
61 1,4-Dioxane	88	11.531	11.563	-0.032	94	233489	4.00	4.32	
62 Methyl methacrylate	41	11.623	11.632	-0.009	85	929916	4.00	4.10	
63 Methylcyclohexane	83	12.065	12.063	0.002	85	792085	4.00	3.99	
64 4-Methyl-2-pentanone (MIBK)	43	12.491	12.517	-0.026	97	1739238	4.00	4.11	
65 cis-1,3-Dichloropropene	75	12.545	12.548	-0.003	94	781659	4.00	4.19	
66 trans-1,3-Dichloropropene	75	13.262	13.261	0.001	91	701991	4.00	4.42	
67 Toluene	91	13.381	13.381	0.000	92	1571492	4.00	3.96	
68 1,1,2-Trichloroethane	83	13.462	13.460	0.002	97	499056	4.00	3.95	
69 2-Hexanone	58	13.861	13.878	-0.017	89	756406	4.00	4.45	
70 n-Octane	85	14.098	14.096	0.002	98	490607	4.00	4.06	
71 Chlorodibromomethane	129	14.168	14.165	0.003	96	1062915	4.00	4.22	
72 Ethylene Dibromide	107	14.459	14.462	-0.003	98	923134	4.00	4.22	
73 Tetrachloroethene	129	14.540	14.538	0.002	93	568875	4.00	3.97	
74 Chlorobenzene	112	15.424	15.423	0.001	92	1275338	4.00	4.01	
75 2,3-Dimethylheptane	43	15.457	15.455	0.002	91	2380242	4.00	3.88	
76 Ethylbenzene	91	15.716	15.718	-0.002	98	2126782	4.00	3.90	
77 m-Xylene & p-Xylene	91	15.883	15.881	0.002	96	3230671	8.00	7.82	
78 n-Nonane	57	16.314	16.314	0.000	94	1475086	4.00	4.18	
79 Bromoform	173	16.320	16.323	-0.003	97	1411559	4.00	4.52	
80 Styrene	104	16.347	16.346	0.001	96	1261090	4.00	4.18	
81 o-Xylene	91	16.406	16.406	0.000	98	1733927	4.00	3.98	
82 1,1,2,2-Tetrachloroethane	83	16.735	16.734	0.001	98	1458099	4.00	4.12	
83 1,2,3-Trichloropropane	110	16.891	16.895	-0.004	92	394619	4.00	4.09	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	16.999	16.998	0.001	97	2557625	4.00	3.97	
85 N-Propylbenzene	120	17.544	17.547	-0.003	99	723311	4.00	4.18	
86 2-Chlorotoluene	126	17.587	17.590	-0.003	98	664201	4.00	3.96	
87 4-Ethyltoluene	105	17.705	17.704	0.001	99	2631086	4.00	4.31	
88 1,3,5-Trimethylbenzene	120	17.781	17.782	-0.001	92	1112576	4.00	4.20	
89 Alpha Methyl Styrene	118	18.018	18.020	-0.002	88	1174362	4.00	4.46	
90 n-Decane	57	18.088	18.089	-0.001	86	2119650	4.00	4.45	
91 tert-Butylbenzene	119	18.218	18.218	0.000	93	2486960	4.00	4.34	
92 1,2,4-Trimethylbenzene	105	18.229	18.232	-0.004	96	2424783	4.00	4.48	
93 sec-Butylbenzene	105	18.493	18.494	-0.001	98	3695848	4.00	4.50	
94 1,3-Dichlorobenzene	146	18.504	18.504	0.000	96	1832060	4.00	4.55	
95 Benzyl chloride	91	18.584	18.584	0.000	97	2050279	4.00	4.68	
96 1,4-Dichlorobenzene	146	18.595	18.596	-0.001	95	1805225	4.00	4.63	
97 4-Isopropyltoluene	119	18.660	18.662	-0.002	97	3002320	4.00	4.71	
98 1,2,3-Trimethylbenzene	105	18.714	18.713	0.001	99	2526726	4.00	4.31	
99 Butylcyclohexane	83	18.773	18.773	0.000	85	2014573	4.00	4.41	
100 2,3-Dihydroindene	117	18.962	18.961	0.001	93	2439031	4.00	4.43	
101 1,2-Dichlorobenzene	146	18.962	18.962	0.000	84	1854706	4.00	4.46	
102 Indene	116	19.091	19.093	-0.002	89	2168271	4.00	4.63	
103 n-Butylbenzene	91	19.102	19.106	-0.004	98	3057820	4.00	4.85	
104 Undecane	57	19.431	19.431	0.000	92	2740455	4.00	4.97	
105 1,2-Dibromo-3-Chloropropane	157	19.577	19.577	0.000	92	1182195	4.00	4.81	
106 1,2,4,5-Tetramethylbenzene	119	19.873	19.873	0.000	98	3042455	4.00	4.75	
107 Dodecane	57	20.488	20.489	-0.001	90	2959688	4.00	4.83	
108 1,2,4-Trichlorobenzene	180	20.671	20.672	-0.001	94	1930818	4.00	5.28	
109 Naphthalene	128	20.806	20.807	-0.001	99	3370388	4.00	4.90	
110 Hexachlorobutadiene	225	21.027	21.028	-0.001	95	1846182	4.00	4.43	
111 1,2,3-Trichlorobenzene	180	21.097	21.097	0.000	94	1984631	4.00	4.95	
112 2-Methylnaphthalene	142	21.831	21.834	-0.003	99	1927899	4.00	5.21	
113 1-Methylnaphthalene	142	21.965	21.967	-0.002	99	2239586	4.00	4.84	
A 116 C8 Range	1	14.093	(14.049-14.146)		0	6186213	4.00	3.97	
S 117 Xylenes, Total	100				0		12.0	11.8	
S 118 1,2-Dichloroethene, Total	1				0		8.00	7.92	

Reagents:

40L8DQP_00018	Amount Added: 200.00	Units: mL	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

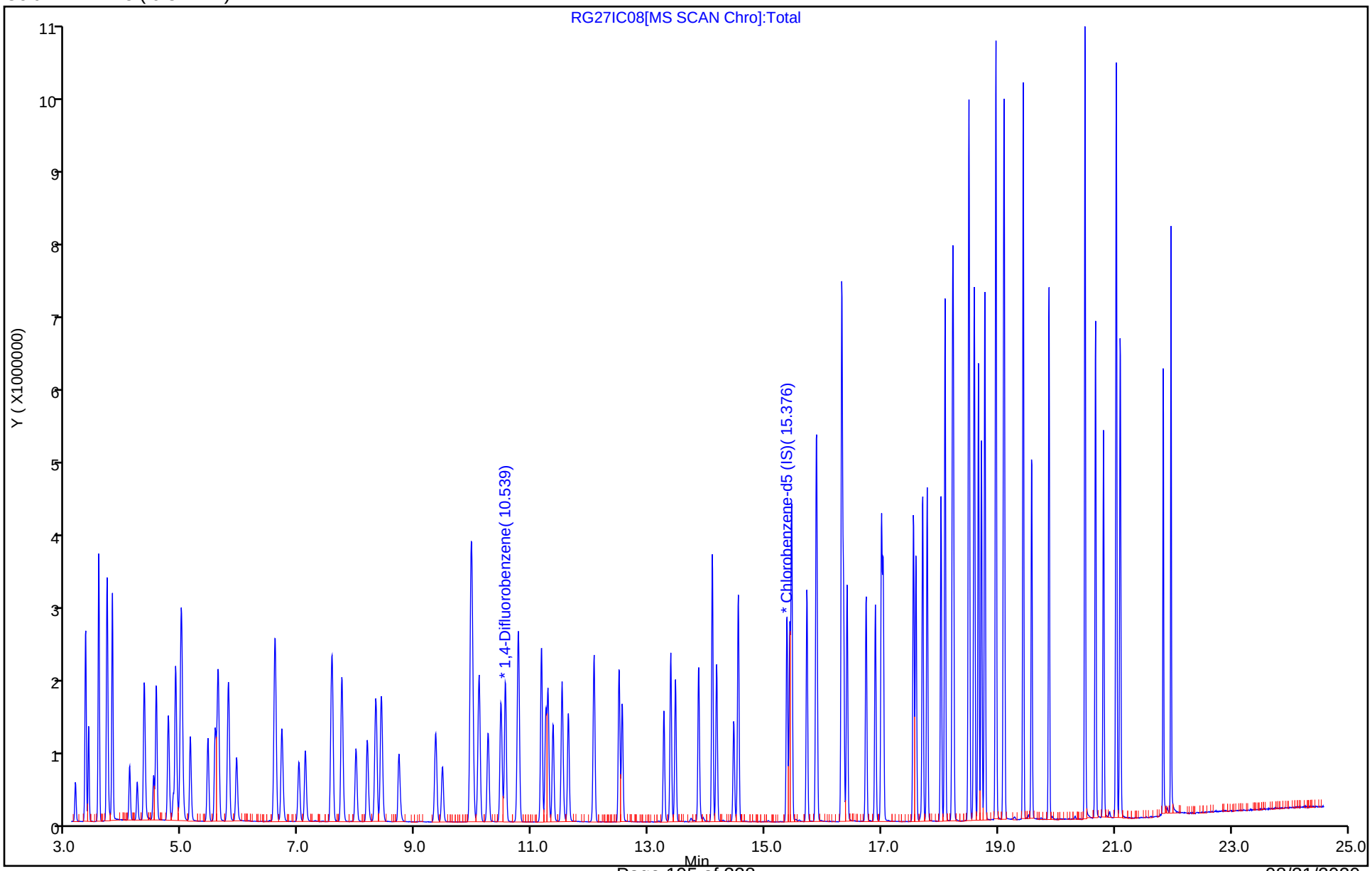
Report Date: 28-Jul-2020 16:47:11 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC08.D

Injection Date:	27-Jul-2020 21:45:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	IC L8			Worklist Smp#:	7
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

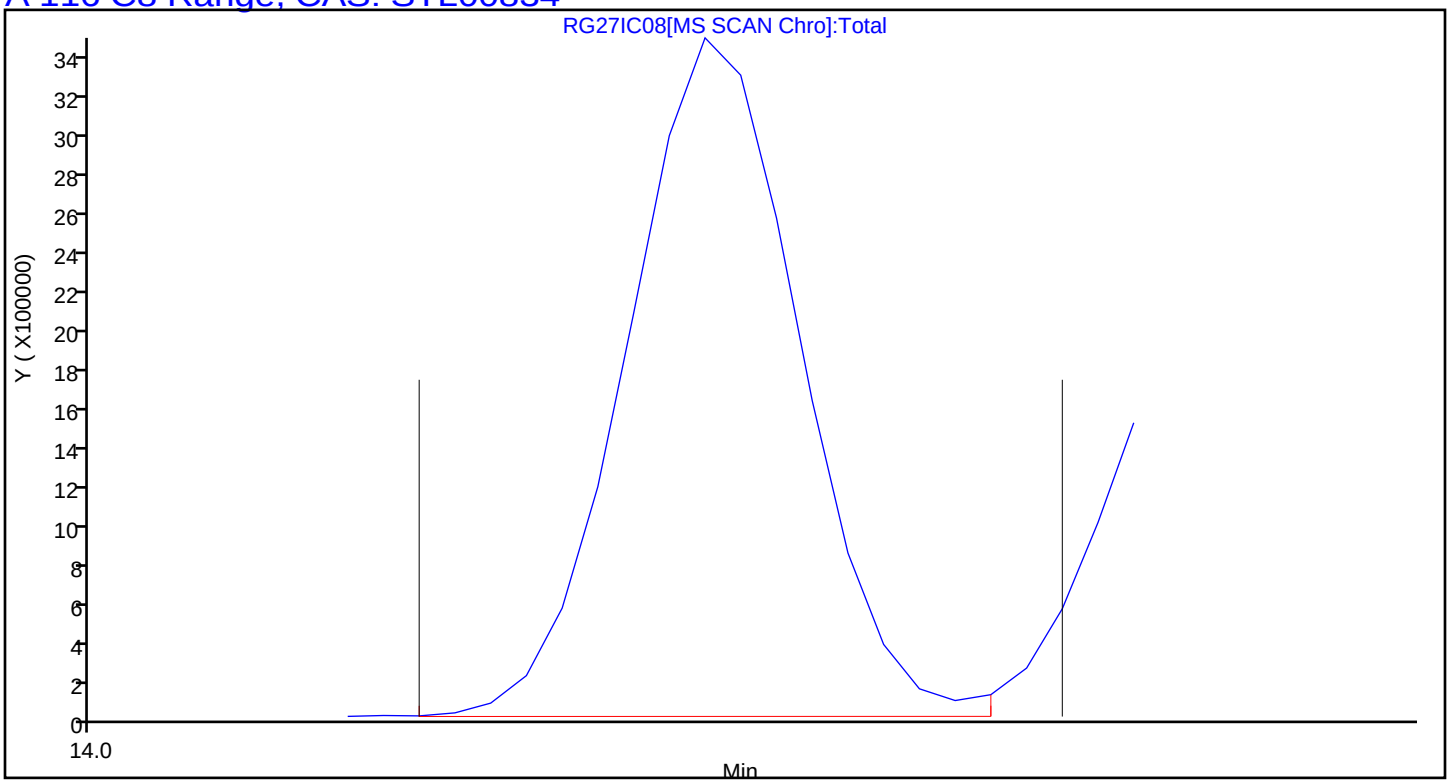


Report Date: 28-Jul-2020 16:47:11 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC08.D				
Injection Date:	27-Jul-2020 21:45:30	Instrument ID:	MR		
Lims ID:	IC L8				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	13	Worklist Smp#:	7
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 116 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC01.D
Lims ID: IC L1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 27-Jul-2020 23:58:30 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016116-009
Misc. Info.: 314720
Operator ID: HMT Instrument ID: MR
Sublist: chrom-MR_TO15*sub16

Method: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 28-Jul-2020 16:47:18 Calib Date: 28-Jul-2020 09:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC09R.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1014

First Level Reviewer: tajh Date: 28-Jul-2020 10:50:59

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.301	8.308	-0.007	94	207431	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.534	10.539	-0.005	96	1758480	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.376	15.375	0.001	90	1434015	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.026	17.025	0.001	95	800496	4.00	3.70	
6 Chlorodifluoromethane	51	3.346	3.343	0.003	37	9269	0.0200	0.0305	
7 Propene	41	3.346	3.349	-0.003	99	109408	0.0200	0.4251	
8 Dichlorodifluoromethane	85	3.399	3.400	-0.001	97	5977	0.0200	0.0291	
9 Chloromethane	52	3.572	3.569	0.003	72	1958	0.0200	0.0373	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.577	3.577	0.000	87	5541	0.0200	0.0276	
11 Acetaldehyde	44	3.734	3.724	0.010	91	14275	0.1000	0.1989	
12 Vinyl chloride	62	3.723	3.726	-0.003	41	3167	0.0200	0.0210	
13 Butane	43	3.809	3.808	0.001	88	10632	0.0200	0.0392	
14 Butadiene	54	3.815	3.809	0.006	59	2888	0.0200	0.0228	
15 Bromomethane	94	4.095	4.103	-0.008	46	3024	0.0200	0.0280	
16 Chloroethane	64	4.230	4.235	-0.005	34	1702	0.0200	0.0265	
17 Ethanol	31	4.381	4.364	0.017	99	6477	0.1000	0.0786	
18 Vinyl bromide	106	4.516	4.515	0.001	72	2257	0.0200	0.0221	
19 2-Methylbutane	43	4.553	4.561	-0.008	71	6533	0.0200	0.0326	
20 Trichlorofluoromethane	101	4.758	4.765	-0.007	96	5711	0.0200	0.0225	
21 Acrolein	56	4.726	4.779	-0.053	10	231	0.0200	0.005209	
22 Acetonitrile	40	4.963	4.870	0.093	47	2218	0.0200	0.0358	
23 Acetone	58	4.936	4.913	0.023	98	7188	0.0600	0.0858	
24 Pentane	72	4.963	4.971	-0.008	77	530	0.0200	0.0269	
25 Isopropyl alcohol	45	5.055	5.027	0.028	85	16913	0.0600	0.0640	
26 Ethyl ether	31	5.195	5.168	0.027	85	4290	0.0200	0.0232	
27 1,1-Dichloroethene	96	5.443	5.444	-0.001	44	2512	0.0200	0.0224	
28 Acrylonitrile	53	5.583	5.572	0.011	56	1652	0.0200	0.0174	
29 2-Methyl-2-propanol	59	5.680	5.629	0.051	19	5969	0.0200	0.0234	
30 1,1,2-Trichloro-1,2,2-trifluoroe	101	5.610	5.622	-0.012	64	5278	0.0200	0.0232	
31 Methylene Chloride	84	5.783	5.788	-0.005	90	66564	0.0200	-0.1000	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	5.788	5.802	-0.014	25	5751	0.0200	0.0390	
33 Carbon disulfide	76	5.934	5.938	-0.004	66	6050	0.0200	0.0202	
34 trans-1,2-Dichloroethene	96	6.576	6.580	-0.004	63	2804	0.0200	0.0265	
35 2-Methylpentane	43	6.597	6.600	-0.003	91	8726	0.0200	0.0234	
36 Methyl tert-butyl ether	73	6.807	6.747	0.060	61	7534	0.0200	0.0273	
37 1,1-Dichloroethane	63	6.996	7.002	-0.006	26	5776	0.0200	0.0232	
38 Vinyl acetate	43	7.126	7.120	0.006	64	4214	0.0200	0.0102	
39 2-Butanone (MEK)	72	7.638	7.583	0.055	1	1270	0.0200	0.0242	
40 Hexane	56	7.557	7.575	-0.018	52	2345	0.0200	0.0209	
42 cis-1,2-Dichloroethene	96	7.978	7.981	-0.003	70	2767	0.0200	0.0232	
43 Ethyl acetate	43	8.156	8.189	-0.033	1	702	0.0200	0.001828	
44 Chloroform	83	8.323	8.326	-0.003	27	4613	0.0200	0.0203	
45 Tert-butyl ethyl ether	59	8.490	8.448	0.042	60	9479	0.0200	0.0211	
46 Tetrahydrofuran	42	8.797	8.750	0.047	57	4374	0.0200	0.0224	
47 1,1,1-Trichloroethane	97	9.347	9.348	-0.001	54	5411	0.0200	0.0229	
48 1,2-Dichloroethane	62	9.455	9.461	-0.006	24	2961	0.0200	0.0180	
49 n-Butanol	31	9.886	9.970	-0.084	21	87	0.0200	0.001090	
50 Cyclohexane	69	9.951	9.954	-0.003	75	1264	0.0200	0.0248	
51 Benzene	78	9.946	9.958	-0.012	90	9765	0.0200	0.0279	
52 Carbon tetrachloride	117	9.973	9.980	-0.007	59	4833	0.0200	0.0217	
53 2,3-Dimethylpentane	71	10.108	10.094	0.014	57	1779	0.0200	0.0233	
54 Thiophene	84	10.248	10.245	0.003	39	4587	0.0200	0.0238	
55 Isooctane	57	10.760	10.766	-0.006	96	19678	0.0200	0.0266	
56 n-Heptane	71	11.154	11.162	-0.008	91	2935	0.0200	0.0249	
57 1,2-Dichloropropane	63	11.229	11.235	-0.006	50	4540	0.0200	0.0281	
58 Trichloroethene	130	11.272	11.272	0.000	51	3281	0.0200	0.0214	
59 Dibromomethane	93	11.353	11.357	-0.004	80	3269	0.0200	0.0234	
60 Dichlorobromomethane	83	11.510	11.510	0.000	91	4849	0.0200	0.0203	
61 1,4-Dioxane	88	11.607	11.563	0.044	12	883	0.0200	0.0161	
62 Methyl methacrylate	41	11.639	11.632	0.007	53	3451	0.0200	0.0150	
63 Methylcyclohexane	83	12.060	12.063	-0.003	83	4971	0.0200	0.0246	
64 4-Methyl-2-pentanone (MIBK)	43	12.545	12.517	0.028	86	9244	0.0200	0.0215	
65 cis-1,3-Dichloropropene	75	12.545	12.548	-0.003	77	4175	0.0200	0.0220	
66 trans-1,3-Dichloropropene	75	13.257	13.261	-0.004	38	3924	0.0200	0.0249	
67 Toluene	91	13.381	13.381	0.000	89	9082	0.0200	0.0231	
68 1,1,2-Trichloroethane	83	13.451	13.460	-0.009	47	2613	0.0200	0.0209	
69 2-Hexanone	58	13.920	13.878	0.042	82	3174	0.0200	0.0188	
70 n-Octane	85	14.093	14.096	-0.004	94	3097	0.0200	0.0258	
71 Chlorodibromomethane	129	14.152	14.165	-0.013	78	4878	0.0200	0.0195	
72 Ethylene Dibromide	107	14.465	14.462	0.003	91	4515	0.0200	0.0208	
73 Tetrachloroethene	129	14.535	14.538	-0.003	89	3003	0.0200	0.0211	
74 Chlorobenzene	112	15.419	15.423	-0.004	91	7001	0.0200	0.0222	
75 2,3-Dimethylheptane	43	15.451	15.455	-0.004	91	13082	0.0200	0.0215	
76 Ethylbenzene	91	15.716	15.718	-0.002	98	12710	0.0200	0.0235	
77 m-Xylene & p-Xylene	91	15.877	15.881	-0.004	97	19121	0.0400	0.0467	
78 n-Nonane	57	16.314	16.314	0.000	93	6496	0.0200	0.0186	
79 Bromoform	173	16.320	16.323	-0.003	77	6495	0.0200	0.0210	
80 Styrene	104	16.341	16.346	-0.005	94	6467	0.0200	0.0216	
81 o-Xylene	91	16.406	16.406	0.000	95	11244	0.0200	0.0260	
82 1,1,2,2-Tetrachloroethane	83	16.735	16.734	0.001	95	7133	0.0200	0.0203	
83 1,2,3-Trichloropropane	110	16.902	16.895	0.007	91	1681	0.0200	0.0176	
84 Isopropylbenzene	105	16.999	16.998	0.001	90	14300	0.0200	0.0224	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
85 N-Propylbenzene	120	17.544	17.547	-0.003	97	3363	0.0200	0.0196	
86 2-Chlorotoluene	126	17.592	17.590	0.002	92	3739	0.0200	0.0225	
87 4-Ethyltoluene	105	17.705	17.704	0.001	96	11256	0.0200	0.0186	
88 1,3,5-Trimethylbenzene	120	17.781	17.782	-0.001	92	5511	0.0200	0.0210	
89 Alpha Methyl Styrene	118	18.024	18.020	0.004	85	4507	0.0200	0.0173	
90 n-Decane	57	18.094	18.089	0.005	84	8546	0.0200	0.0181	
91 tert-Butylbenzene	119	18.223	18.218	0.005	82	9946	0.0200	0.0175	
92 1,2,4-Trimethylbenzene	105	18.234	18.232	0.002	88	9627	0.0200	0.0179	
93 sec-Butylbenzene	105	18.493	18.494	-0.001	96	14847	0.0200	0.0182	
94 1,3-Dichlorobenzene	146	18.503	18.504	-0.001	93	7515	0.0200	0.0188	
95 Benzyl chloride	91	18.579	18.584	-0.005	95	8610	0.0200	0.0198	
96 1,4-Dichlorobenzene	146	18.601	18.596	0.005	89	7328	0.0200	0.0190	
97 4-Isopropyltoluene	119	18.660	18.662	-0.002	95	10748	0.0200	0.0170	
98 1,2,3-Trimethylbenzene	105	18.714	18.713	0.001	97	12792	0.0200	0.0220	
99 Butylcyclohexane	83	18.778	18.773	0.005	87	8697	0.0200	0.0192	
100 2,3-Dihydroindene	117	18.962	18.961	0.001	92	12057	0.0200	0.0221	
101 1,2-Dichlorobenzene	146	18.962	18.962	0.000	79	9271	0.0200	0.0225	
102 Indene	116	19.097	19.093	0.004	89	8382	0.0200	0.0181	
103 n-Butylbenzene	91	19.107	19.106	0.001	93	11819	0.0200	0.0189	
104 Undecane	57	19.431	19.431	0.000	93	9522	0.0200	0.0174	
105 1,2-Dibromo-3-Chloropropane	157	19.577	19.577	0.000	86	4893	0.0200	0.0201	
106 1,2,4,5-Tetramethylbenzene	119	19.873	19.873	0.000	96	10338	0.0200	0.0163	
107 Dodecane	57	20.488	20.489	-0.001	83	7865	0.0200	0.0129	
108 1,2,4-Trichlorobenzene	180	20.677	20.672	0.005	92	8850	0.0200	0.0244	
109 Naphthalene	128	20.811	20.807	0.004	97	14979	0.0200	0.0220	
110 Hexachlorobutadiene	225	21.032	21.028	0.004	92	6607	0.0200	0.0160	
111 1,2,3-Trichlorobenzene	180	21.103	21.097	0.006	95	11613	0.0200	0.0292	
112 2-Methylnaphthalene	142	21.836	21.834	0.002	92	12732	0.0200	0.0347	
113 1-Methylnaphthalene	142	21.965	21.967	-0.002	97	20475	0.0200	0.0446	
A 116 C8 Range	1	14.093	(14.060-14.136)		0	44175	0.0200	0.0279	
S 117 Xylenes, Total	100				0		0.0600	0.0727	
S 118 1,2-Dichloroethene, Total	1				0		0.0400	0.0497	

Reagents:

40L1-3DQP_00031	Amount Added: 50.00	Units: mL	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

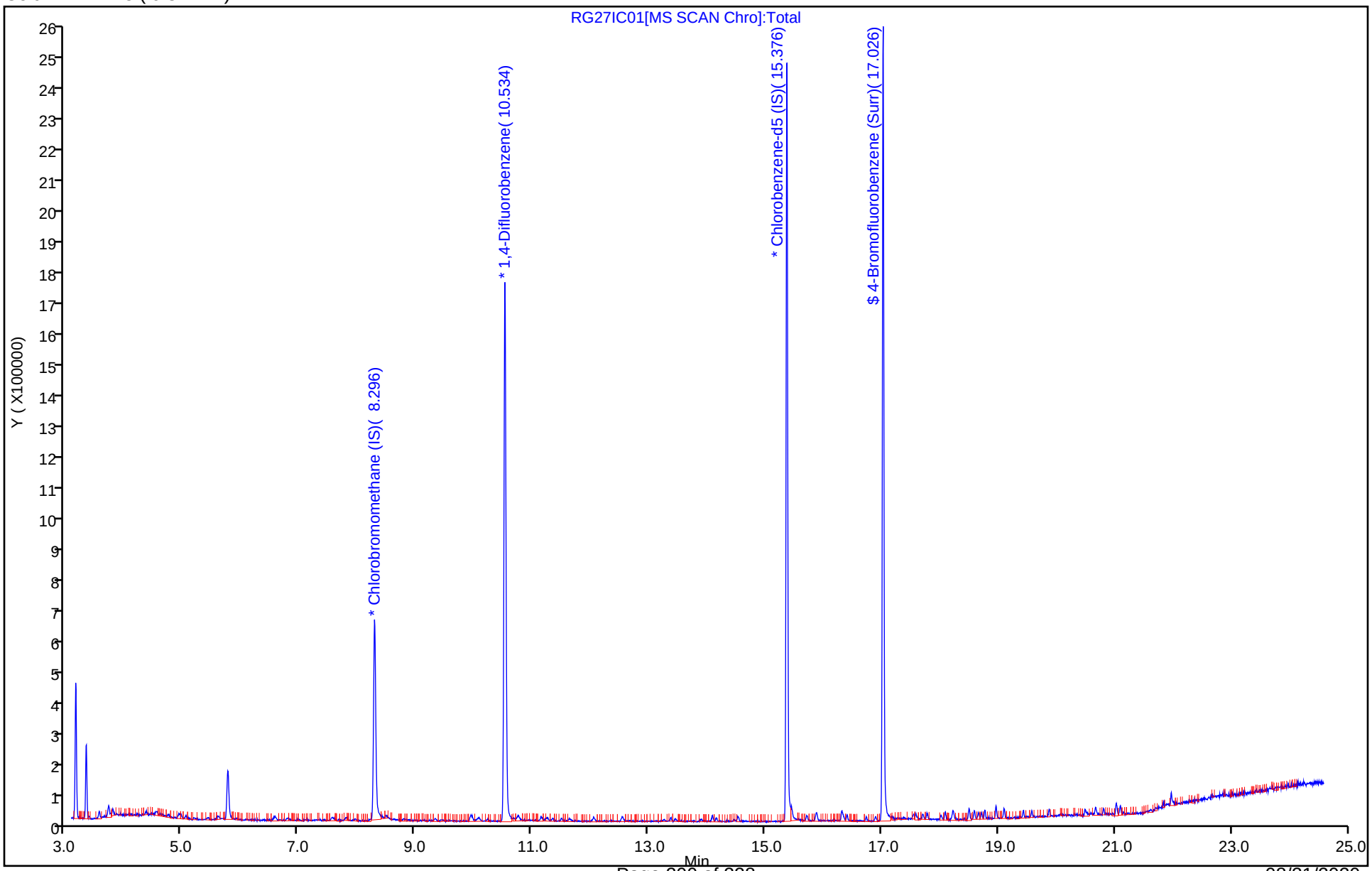
Report Date: 28-Jul-2020 16:47:19 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC01.D

Injection Date:	27-Jul-2020 23:58:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	IC L1			Worklist Smp#:	9
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

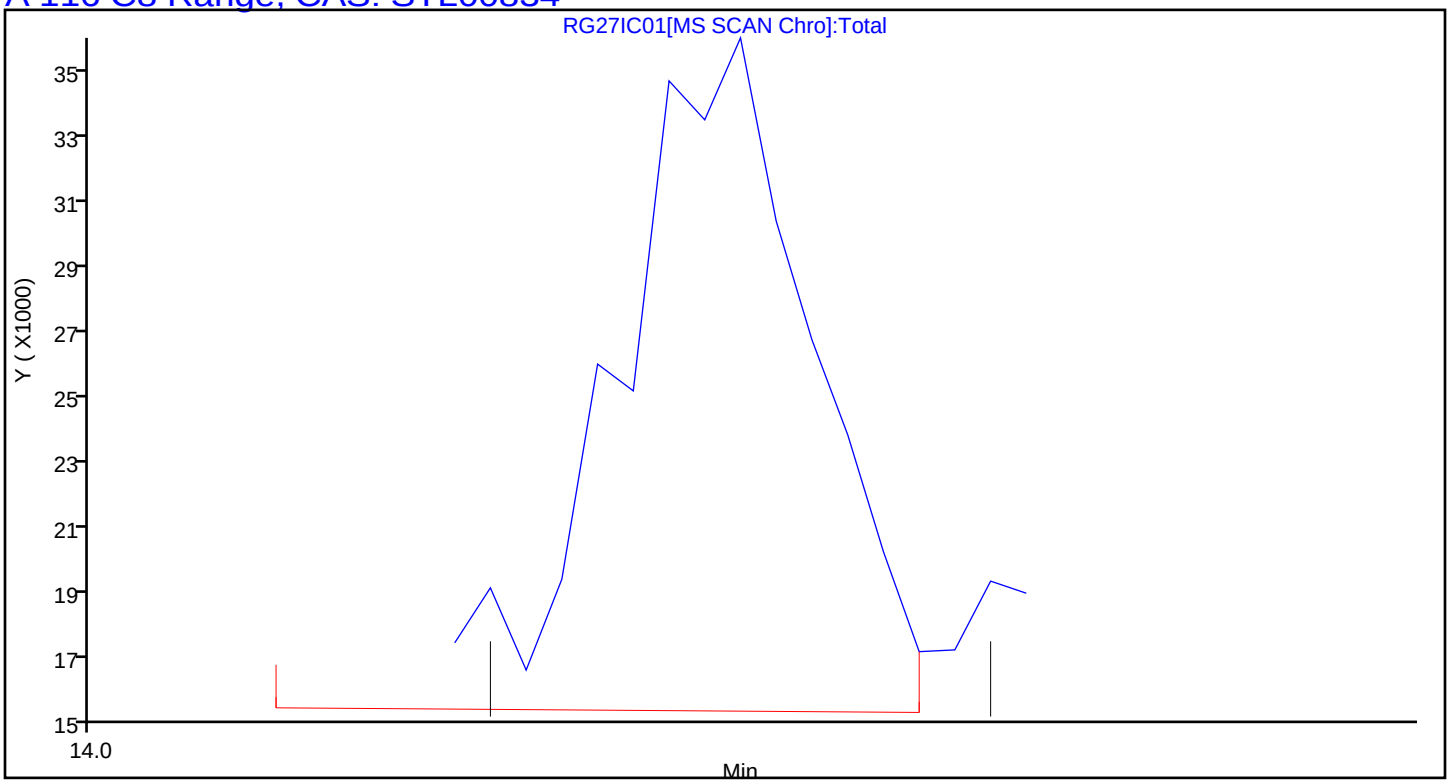


Report Date: 28-Jul-2020 16:47:20 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC01.D				
Injection Date:	27-Jul-2020 23:58:30	Instrument ID:	MR		
Lims ID:	IC L1				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 116 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC02.D
Lims ID: IC L2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 28-Jul-2020 01:02:30 ALS Bottle#: 8 Worklist Smp#: 10
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016116-010
Misc. Info.: 314720
Operator ID: HMT Instrument ID: MR
Sublist: chrom-MR_TO15*sub16

Method: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 28-Jul-2020 16:47:27 Calib Date: 28-Jul-2020 09:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC09R.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1014

First Level Reviewer: tajh Date: 28-Jul-2020 14:01:31

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.296	8.308	-0.012	93	177632	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.534	10.539	-0.005	96	1610405	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.371	15.375	-0.004	90	1294041	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.021	17.025	-0.004	94	708909	4.00	3.63	
6 Chlorodifluoromethane	51	3.346	3.343	0.003	39	13129	0.0400	0.0505	
7 Propene	41	3.351	3.349	0.002	98	94916	0.0400	0.4322	
8 Dichlorodifluoromethane	85	3.405	3.400	0.005	98	8679	0.0400	0.0494	
9 Chloromethane	52	3.567	3.569	-0.002	73	3414	0.0400	0.0760	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.578	3.577	0.001	91	7024	0.0400	0.0408	
12 Vinyl chloride	62	3.729	3.726	0.002	51	5853	0.0400	0.0454	
11 Acetaldehyde	44	3.734	3.724	0.010	98	22966	0.2000	0.3737	
13 Butane	43	3.815	3.808	0.007	80	10319	0.0400	0.0444	
14 Butadiene	54	3.809	3.809	0.000	72	5018	0.0400	0.0463	
15 Bromomethane	94	4.106	4.103	0.003	71	4311	0.0400	0.0466	
16 Chloroethane	64	4.246	4.235	0.011	45	2735	0.0400	0.0498	
17 Ethanol	31	4.376	4.364	0.012	96	12152	0.2000	0.1721	
18 Vinyl bromide	106	4.516	4.515	0.001	95	3514	0.0400	0.0401	
19 2-Methylbutane	43	4.564	4.561	0.003	87	8755	0.0400	0.0511	
21 Acrolein	56	4.812	4.779	0.033	13	2699	0.0400	0.0711	
20 Trichlorofluoromethane	101	4.764	4.765	-0.001	95	9001	0.0400	0.0414	
23 Acetone	58	4.931	4.913	0.018	97	11348	0.1200	0.1583	
22 Acetonitrile	40	4.861	4.870	-0.009	29	3126	0.0400	0.0589	
24 Pentane	72	4.942	4.971	-0.029	64	164	0.0400	0.009722	
25 Isopropyl alcohol	45	5.050	5.027	0.023	97	27246	0.1200	0.1204	
26 Ethyl ether	31	5.190	5.168	0.022	84	7232	0.0400	0.0457	
27 1,1-Dichloroethene	96	5.438	5.444	-0.006	85	4126	0.0400	0.0430	
28 Acrylonitrile	53	5.578	5.572	0.006	58	2554	0.0400	0.0314	
30 1,1,2-Trichloro-1,2,2-trifluoroe	101	5.616	5.622	-0.006	93	7735	0.0400	0.0397	
29 2-Methyl-2-propanol	59	5.670	5.629	0.041	77	9927	0.0400	0.0454	
31 Methylene Chloride	84	5.783	5.788	-0.005	93	63408	0.0400	-0.0132	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	5.799	5.802	-0.003	43	5670	0.0400	0.0449	
33 Carbon disulfide	76	5.934	5.938	-0.004	96	11559	0.0400	0.0451	
34 trans-1,2-Dichloroethene	96	6.570	6.580	-0.010	70	3573	0.0400	0.0394	
35 2-Methylpentane	43	6.603	6.600	0.003	88	14636	0.0400	0.0459	
36 Methyl tert-butyl ether	73	6.786	6.747	0.039	82	11963	0.0400	0.0507	
37 1,1-Dichloroethane	63	7.002	7.002	0.000	88	10044	0.0400	0.0472	
38 Vinyl acetate	43	7.126	7.120	0.006	96	13283	0.0400	0.0376	
40 Hexane	56	7.568	7.575	-0.007	88	4661	0.0400	0.0486	
39 2-Butanone (MEK)	72	7.616	7.583	0.033	69	2137	0.0400	0.0475	
41 Isopropyl ether	45	7.794	7.761	0.033	97	22672	0.0400	0.0462	
42 cis-1,2-Dichloroethene	96	7.972	7.981	-0.009	68	4692	0.0400	0.0459	
43 Ethyl acetate	43	8.210	8.189	0.021	77	15509	0.0400	0.0472	
44 Chloroform	83	8.317	8.326	-0.009	39	8563	0.0400	0.0439	
45 Tert-butyl ethyl ether	59	8.485	8.448	0.037	94	16915	0.0400	0.0439	
46 Tetrahydrofuran	42	8.787	8.750	0.037	78	6726	0.0400	0.0403	
47 1,1,1-Trichloroethane	97	9.337	9.348	-0.011	95	9028	0.0400	0.0447	
48 1,2-Dichloroethane	62	9.450	9.461	-0.011	57	6253	0.0400	0.0414	
49 n-Butanol	31	9.957	9.970	-0.013	41	106	0.0400	0.001450	
51 Benzene	78	9.962	9.958	0.004	93	14816	0.0400	0.0462	
50 Cyclohexane	69	9.951	9.954	-0.003	71	1861	0.0400	0.0398	
52 Carbon tetrachloride	117	9.978	9.980	-0.002	90	8030	0.0400	0.0394	
53 2,3-Dimethylpentane	71	10.081	10.094	-0.013	89	2877	0.0400	0.0411	
54 Thiophene	84	10.237	10.245	-0.008	94	7256	0.0400	0.0410	
55 Isooctane	57	10.766	10.766	0.000	97	29074	0.0400	0.0429	
56 n-Heptane	71	11.165	11.162	0.003	95	5333	0.0400	0.0493	
57 1,2-Dichloropropane	63	11.229	11.235	-0.006	63	5751	0.0400	0.0389	
58 Trichloroethene	130	11.267	11.272	-0.005	90	6043	0.0400	0.0430	
59 Dibromomethane	93	11.348	11.357	-0.009	90	5050	0.0400	0.0395	
60 Dichlorobromomethane	83	11.504	11.510	-0.006	92	8864	0.0400	0.0405	
61 1,4-Dioxane	88	11.596	11.563	0.033	11	2138	0.0400	0.0425	
62 Methyl methacrylate	41	11.634	11.632	0.002	64	9007	0.0400	0.0427	
63 Methylcyclohexane	83	12.060	12.063	-0.003	94	8768	0.0400	0.0474	
65 cis-1,3-Dichloropropene	75	12.545	12.548	-0.003	80	6361	0.0400	0.0366	
64 4-Methyl-2-pentanone (MIBK)	43	12.534	12.517	0.017	90	14860	0.0400	0.0377	
66 trans-1,3-Dichloropropene	75	13.262	13.261	0.001	73	5795	0.0400	0.0408	
67 Toluene	91	13.381	13.381	0.000	93	14401	0.0400	0.0406	
68 1,1,2-Trichloroethane	83	13.451	13.460	-0.009	90	5483	0.0400	0.0486	
69 2-Hexanone	58	13.888	13.878	0.010	92	5232	0.0400	0.0344	
70 n-Octane	85	14.093	14.096	-0.003	97	4688	0.0400	0.0433	
71 Chlorodibromomethane	129	14.163	14.165	-0.002	95	9216	0.0400	0.0409	
72 Ethylene Dibromide	107	14.454	14.462	-0.008	99	7823	0.0400	0.0400	
73 Tetrachloroethene	129	14.535	14.538	-0.003	91	5381	0.0400	0.0419	
74 Chlorobenzene	112	15.425	15.423	0.002	91	11005	0.0400	0.0387	
75 2,3-Dimethylheptane	43	15.457	15.455	0.002	92	23874	0.0400	0.0435	
76 Ethylbenzene	91	15.721	15.718	0.003	97	20681	0.0400	0.0424	
77 m-Xylene & p-Xylene	91	15.878	15.881	-0.003	96	31137	0.0800	0.0842	
78 n-Nonane	57	16.314	16.314	0.000	94	12986	0.0400	0.0411	
79 Bromoform	173	16.320	16.323	-0.003	77	9478	0.0400	0.0339	
80 Styrene	104	16.347	16.346	0.001	92	9797	0.0400	0.0363	
81 o-Xylene	91	16.401	16.406	-0.005	97	17444	0.0400	0.0447	
82 1,1,2,2-Tetrachloroethane	83	16.735	16.734	0.001	95	12378	0.0400	0.0391	
83 1,2,3-Trichloropropane	110	16.897	16.895	0.002	89	2753	0.0400	0.0319	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	16.999	16.998	0.001	93	24247	0.0400	0.0421	
85 N-Propylbenzene	120	17.549	17.547	0.002	98	5780	0.0400	0.0374	
86 2-Chlorotoluene	126	17.592	17.590	0.002	92	6204	0.0400	0.0413	
87 4-Ethyltoluene	105	17.700	17.704	-0.004	97	18783	0.0400	0.0344	
88 1,3,5-Trimethylbenzene	120	17.781	17.782	-0.001	91	8729	0.0400	0.0368	
89 Alpha Methyl Styrene	118	18.024	18.020	0.004	90	8307	0.0400	0.0353	
90 n-Decane	57	18.088	18.089	-0.001	83	15132	0.0400	0.0355	
91 tert-Butylbenzene	119	18.212	18.218	-0.006	85	18152	0.0400	0.0354	
92 1,2,4-Trimethylbenzene	105	18.234	18.232	0.002	93	17758	0.0400	0.0367	
93 sec-Butylbenzene	105	18.493	18.494	-0.001	98	27152	0.0400	0.0370	
94 1,3-Dichlorobenzene	146	18.504	18.504	0.000	92	13422	0.0400	0.0373	
95 Benzyl chloride	91	18.584	18.584	0.000	96	13682	0.0400	0.0349	
96 1,4-Dichlorobenzene	146	18.595	18.596	-0.001	89	11997	0.0400	0.0344	
97 4-Isopropyltoluene	119	18.660	18.662	-0.002	96	19869	0.0400	0.0348	
98 1,2,3-Trimethylbenzene	105	18.709	18.713	-0.004	98	18353	0.0400	0.0350	
99 Butylcyclohexane	83	18.768	18.773	-0.005	82	14609	0.0400	0.0357	
100 2,3-Dihydroindene	117	18.957	18.961	-0.004	94	17792	0.0400	0.0361	
101 1,2-Dichlorobenzene	146	18.962	18.962	0.000	89	12841	0.0400	0.0345	
102 Indene	116	19.091	19.093	-0.002	87	14862	0.0400	0.0355	
103 n-Butylbenzene	91	19.108	19.106	0.002	96	18540	0.0400	0.0329	
104 Undecane	57	19.431	19.431	0.000	88	17820	0.0400	0.0361	
105 1,2-Dibromo-3-Chloropropane	157	19.577	19.577	0.000	86	6406	0.0400	0.0291	
106 1,2,4,5-Tetramethylbenzene	119	19.873	19.873	0.000	96	17877	0.0400	0.0312	
107 Dodecane	57	20.493	20.489	0.004	83	14038	0.0400	0.0256	
108 1,2,4-Trichlorobenzene	180	20.671	20.672	-0.001	89	12091	0.0400	0.0369	
109 Naphthalene	128	20.806	20.807	-0.001	99	24120	0.0400	0.0392	
110 Hexachlorobutadiene	225	21.027	21.028	-0.001	90	13369	0.0400	0.0359	
111 1,2,3-Trichlorobenzene	180	21.092	21.097	-0.005	90	12820	0.0400	0.0357	
112 2-Methylnaphthalene	142	21.831	21.834	-0.003	94	8687	0.0400	0.0262	
113 1-Methylnaphthalene	142	21.971	21.967	0.004	94	23986	0.0400	0.0579	
A 116 C8 Range	1	14.093	(14.066-14.130)		0	58132	0.0400	0.0400	
S 117 Xylenes, Total	100				0		0.1200	0.1289	
S 118 1,2-Dichloroethene, Total	1				0		0.0800	0.0853	

Reagents:

40L1-3DQP_00031	Amount Added: 100.00	Units: mL	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

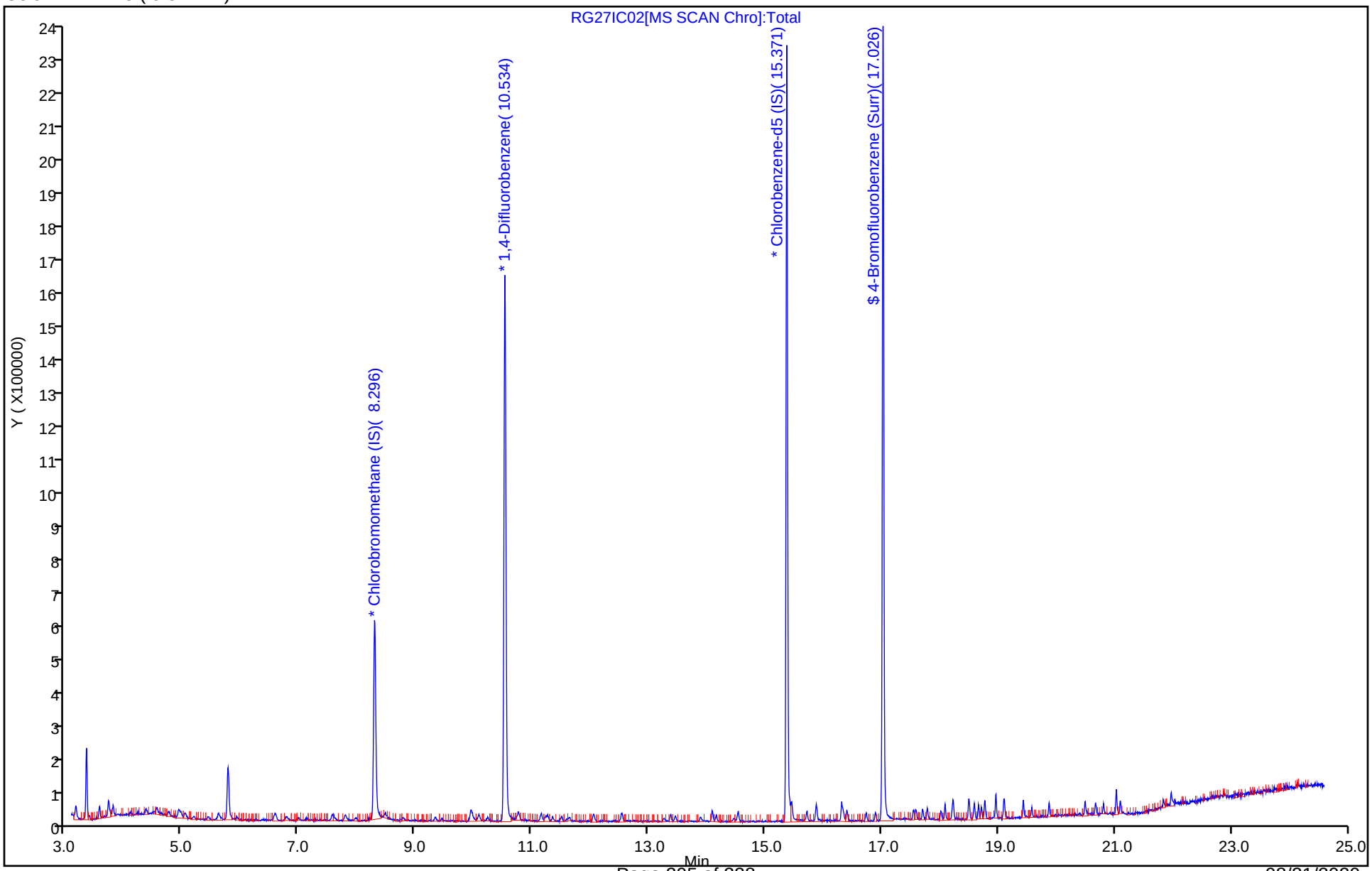
Report Date: 28-Jul-2020 16:47:28 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC02.D

Injection Date:	28-Jul-2020 01:02:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	IC L2			Worklist Smp#:	10
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

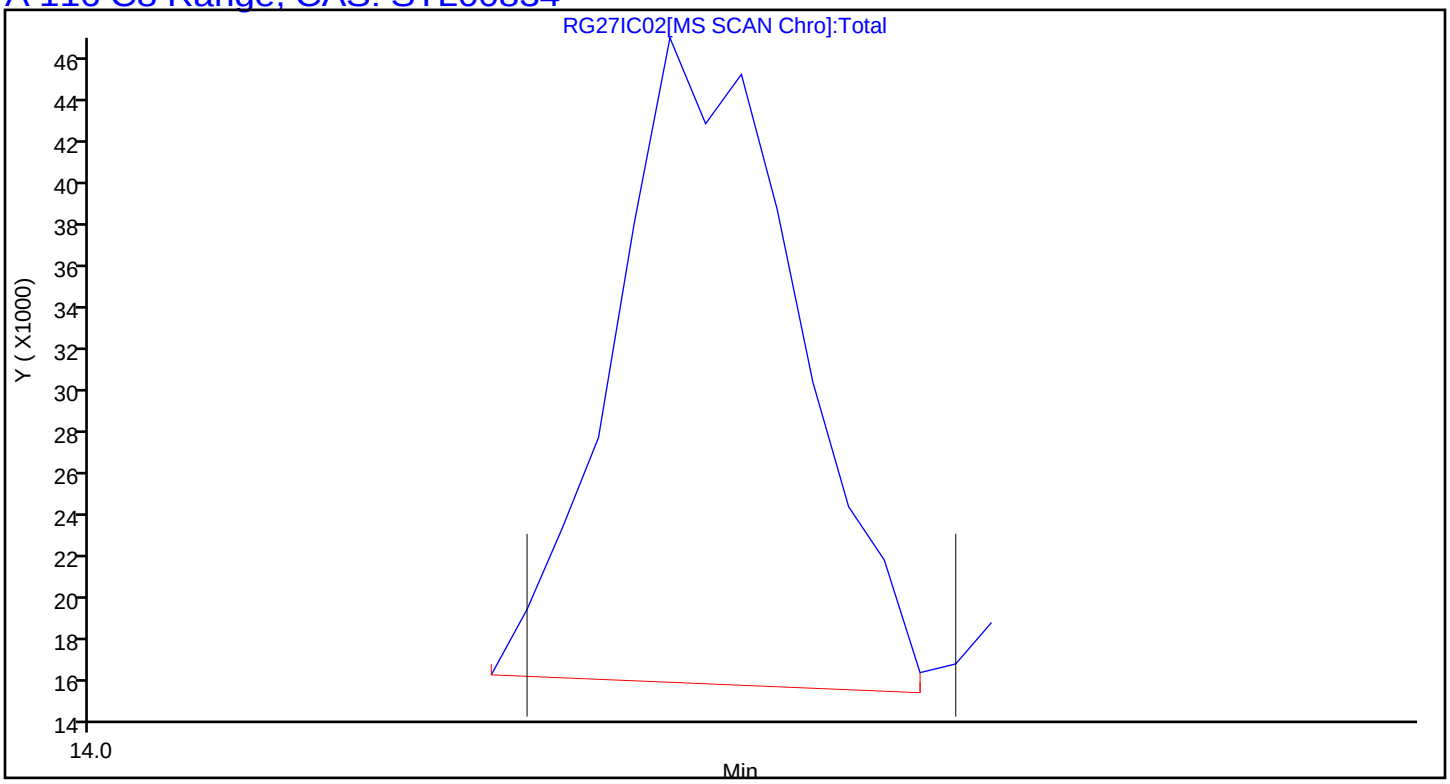


Report Date: 28-Jul-2020 16:47:28 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC02.D				
Injection Date:	28-Jul-2020 01:02:30	Instrument ID:	MR		
Lims ID:	IC L2				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	8	Worklist Smp#:	10
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 116 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC03.D
Lims ID: IC L3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 28-Jul-2020 02:07:30 ALS Bottle#: 8 Worklist Smp#: 11
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016116-011
Misc. Info.: 314720
Operator ID: HMT Instrument ID: MR
Sublist: chrom-MR_TO15*sub16

Method: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 28-Jul-2020 16:47:34 Calib Date: 28-Jul-2020 09:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC09R.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1014

First Level Reviewer: tajh Date: 28-Jul-2020 14:02:22

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.317	8.308	0.009	93	178720	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.544	10.539	0.005	96	1555116	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.376	15.375	0.001	90	1279393	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.026	17.025	0.001	95	725248	4.00	3.75	
6 Chlorodifluoromethane	51	3.362	3.343	0.019	46	22350	0.0800	0.0854	
7 Propene	41	3.362	3.349	0.013	98	95075	0.0800	0.4298	
8 Dichlorodifluoromethane	85	3.421	3.400	0.021	96	13356	0.0800	0.0756	
9 Chloromethane	52	3.588	3.569	0.019	76	5133	0.0800	0.1136	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.594	3.577	0.017	88	13573	0.0800	0.0784	
12 Vinyl chloride	62	3.750	3.726	0.024	43	10208	0.0800	0.0786	
11 Acetaldehyde	44	3.750	3.724	0.026	94	42347	0.4000	0.6849	
14 Butadiene	54	3.831	3.809	0.022	81	7859	0.0800	0.0720	
13 Butane	43	3.825	3.808	0.017	83	20720	0.0800	0.0887	
15 Bromomethane	94	4.117	4.103	0.014	93	7701	0.0800	0.0828	
16 Chloroethane	64	4.251	4.235	0.016	64	4625	0.0800	0.0837	
17 Ethanol	31	4.408	4.364	0.044	98	27793	0.4000	0.3913	
18 Vinyl bromide	106	4.532	4.515	0.017	95	6683	0.0800	0.0758	
19 2-Methylbutane	43	4.580	4.561	0.019	96	14723	0.0800	0.0853	
20 Trichlorofluoromethane	101	4.780	4.765	0.015	90	16152	0.0800	0.0738	
21 Acrolein	56	4.758	4.779	-0.021	38	237	0.0800	0.006203	
22 Acetonitrile	40	4.909	4.870	0.039	18	2319	0.0800	0.0434	
23 Acetone	58	4.963	4.913	0.050	97	21543	0.2400	0.2986	
24 Pentane	72	4.996	4.971	0.025	67	1194	0.0800	0.0704	
25 Isopropyl alcohol	45	5.098	5.027	0.071	98	49966	0.2400	0.2196	
26 Ethyl ether	31	5.233	5.168	0.065	87	12621	0.0800	0.0793	
27 1,1-Dichloroethene	96	5.454	5.444	0.010	93	7951	0.0800	0.0825	
28 Acrylonitrile	53	5.616	5.572	0.044	70	5538	0.0800	0.0678	
30 1,1,2-Trichloro-1,2,2-trifluoroe	101	5.648	5.622	0.026	92	16238	0.0800	0.0827	
29 2-Methyl-2-propanol	59	5.740	5.629	0.111	92	15117	0.0800	0.0687	
31 Methylene Chloride	84	5.810	5.788	0.022	93	65346	0.0800	0.007644	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	5.821	5.802	0.019	91	11121	0.0800	0.0876	
33 Carbon disulfide	76	5.961	5.938	0.023	94	19748	0.0800	0.0766	
34 trans-1,2-Dichloroethene	96	6.592	6.580	0.012	92	7802	0.0800	0.0855	
35 2-Methylpentane	43	6.613	6.600	0.013	97	27306	0.0800	0.0851	
36 Methyl tert-butyl ether	73	6.818	6.747	0.071	91	19517	0.0800	0.0822	
37 1,1-Dichloroethane	63	7.018	7.002	0.016	99	16841	0.0800	0.0787	
38 Vinyl acetate	43	7.153	7.120	0.033	100	25961	0.0800	0.0730	
40 Hexane	56	7.595	7.575	0.020	86	8256	0.0800	0.0856	
39 2-Butanone (MEK)	72	7.633	7.583	0.049	43	4486	0.0800	0.0990	
41 Isopropyl ether	45	7.821	7.761	0.060	96	41142	0.0800	0.0834	
42 cis-1,2-Dichloroethene	96	7.994	7.981	0.013	95	8441	0.0800	0.0821	
43 Ethyl acetate	43	8.236	8.189	0.047	87	25632	0.0800	0.0775	
44 Chloroform	83	8.339	8.326	0.013	96	15697	0.0800	0.0800	
45 Tert-butyl ethyl ether	59	8.522	8.448	0.074	97	32293	0.0800	0.0833	
46 Tetrahydrofuran	42	8.808	8.750	0.058	92	14096	0.0800	0.0840	
47 1,1,1-Trichloroethane	97	9.363	9.348	0.015	94	17059	0.0800	0.0839	
48 1,2-Dichloroethane	62	9.471	9.461	0.010	91	10550	0.0800	0.0723	
50 Cyclohexane	69	9.973	9.954	0.019	72	3573	0.0800	0.0792	
49 n-Butanol	31	10.091	9.970	0.121	73	4706	0.0800	0.0666	
51 Benzene	78	9.967	9.958	0.009	94	25933	0.0800	0.0837	
52 Carbon tetrachloride	117	9.984	9.980	0.004	91	14613	0.0800	0.0742	
53 2,3-Dimethylpentane	71	10.102	10.094	0.008	85	5095	0.0800	0.0754	
54 Thiophene	84	10.248	10.245	0.003	93	13155	0.0800	0.0771	
55 Isooctane	57	10.782	10.766	0.016	97	54721	0.0800	0.0837	
56 n-Heptane	71	11.170	11.162	0.008	93	8185	0.0800	0.0784	
57 1,2-Dichloropropane	63	11.245	11.235	0.010	89	12048	0.0800	0.0844	
58 Trichloroethene	130	11.272	11.272	0.000	95	11385	0.0800	0.0839	
59 Dibromomethane	93	11.364	11.357	0.007	90	9655	0.0800	0.0781	
60 Dichlorobromomethane	83	11.515	11.510	0.005	94	16233	0.0800	0.0769	
61 1,4-Dioxane	88	11.623	11.563	0.060	76	3948	0.0800	0.0813	
62 Methyl methacrylate	41	11.655	11.632	0.023	83	15229	0.0800	0.0747	
63 Methylcyclohexane	83	12.065	12.063	0.002	84	14439	0.0800	0.0809	
64 4-Methyl-2-pentanone (MIBK)	43	12.561	12.517	0.044	93	28304	0.0800	0.0744	
65 cis-1,3-Dichloropropene	75	12.556	12.548	0.008	80	12607	0.0800	0.0752	
66 trans-1,3-Dichloropropene	75	13.262	13.261	0.001	87	10582	0.0800	0.0754	
67 Toluene	91	13.381	13.381	0.000	94	27621	0.0800	0.0787	
68 1,1,2-Trichloroethane	83	13.462	13.460	0.002	96	8827	0.0800	0.0791	
69 2-Hexanone	58	13.909	13.878	0.031	93	10972	0.0800	0.0730	
70 n-Octane	85	14.103	14.096	0.007	97	8292	0.0800	0.0775	
71 Chlorodibromomethane	129	14.168	14.165	0.003	95	16726	0.0800	0.0751	
72 Ethylene Dibromide	107	14.470	14.462	0.008	98	13765	0.0800	0.0712	
73 Tetrachloroethene	129	14.540	14.538	0.002	91	10882	0.0800	0.0858	
74 Chlorobenzene	112	15.430	15.423	0.007	95	22698	0.0800	0.0807	
75 2,3-Dimethylheptane	43	15.457	15.455	0.002	92	44180	0.0800	0.0814	
76 Ethylbenzene	91	15.721	15.718	0.003	97	39590	0.0800	0.0821	
77 m-Xylene & p-Xylene	91	15.883	15.881	0.002	93	54731	0.1600	0.1497	
78 n-Nonane	57	16.320	16.314	0.006	94	24458	0.0800	0.0783	
79 Bromoform	173	16.330	16.323	0.007	92	18815	0.0800	0.0681	
80 Styrene	104	16.347	16.346	0.001	95	20676	0.0800	0.0774	
81 o-Xylene	91	16.411	16.406	0.005	98	30495	0.0800	0.0790	
82 1,1,2,2-Tetrachloroethane	83	16.740	16.734	0.006	96	24597	0.0800	0.0786	
83 1,2,3-Trichloropropane	110	16.902	16.895	0.007	90	7234	0.0800	0.0847	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	16.999	16.998	0.001	96	43868	0.0800	0.0770	
85 N-Propylbenzene	120	17.549	17.547	0.002	98	11115	0.0800	0.0727	
86 2-Chlorotoluene	126	17.592	17.590	0.002	98	11355	0.0800	0.0765	
87 4-Ethyltoluene	105	17.705	17.704	0.001	98	37607	0.0800	0.0697	
88 1,3,5-Trimethylbenzene	120	17.781	17.782	-0.001	92	17530	0.0800	0.0748	
89 Alpha Methyl Styrene	118	18.024	18.020	0.004	92	17319	0.0800	0.0744	
90 n-Decane	57	18.088	18.089	-0.001	87	29564	0.0800	0.0702	
91 tert-Butylbenzene	119	18.223	18.218	0.005	96	41512	0.0800	0.0819	
92 1,2,4-Trimethylbenzene	105	18.234	18.232	0.002	95	34654	0.0800	0.0724	
93 sec-Butylbenzene	105	18.498	18.494	0.004	98	54645	0.0800	0.0752	
94 1,3-Dichlorobenzene	146	18.504	18.504	0.000	72	23898	0.0800	0.0671	
95 Benzyl chloride	91	18.584	18.584	0.000	96	24912	0.0800	0.0643	
96 1,4-Dichlorobenzene	146	18.595	18.596	-0.001	93	23299	0.0800	0.0676	
97 4-Isopropyltoluene	119	18.665	18.662	0.003	96	40966	0.0800	0.0726	
98 1,2,3-Trimethylbenzene	105	18.714	18.713	0.001	97	39691	0.0800	0.0765	
99 Butylcyclohexane	83	18.773	18.773	0.000	86	29861	0.0800	0.0739	
100 2,3-Dihydroindene	117	18.956	18.961	-0.005	92	35598	0.0800	0.0731	
101 1,2-Dichlorobenzene	146	18.962	18.962	0.000	83	24834	0.0800	0.0675	
102 Indene	116	19.097	19.093	0.004	90	28979	0.0800	0.0700	
103 n-Butylbenzene	91	19.107	19.106	0.001	98	36985	0.0800	0.0663	
104 Undecane	57	19.431	19.431	0.000	91	34395	0.0800	0.0705	
105 1,2-Dibromo-3-Chloropropane	157	19.582	19.577	0.005	89	12500	0.0800	0.0574	
106 1,2,4,5-Tetramethylbenzene	119	19.873	19.873	0.000	97	41054	0.0800	0.0725	
107 Dodecane	57	20.493	20.489	0.004	87	30182	0.0800	0.0557	
108 1,2,4-Trichlorobenzene	180	20.671	20.672	-0.001	92	20292	0.0800	0.0627	
109 Naphthalene	128	20.811	20.807	0.004	98	45592	0.0800	0.0750	
110 Hexachlorobutadiene	225	21.027	21.028	-0.001	94	27371	0.0800	0.0743	
111 1,2,3-Trichlorobenzene	180	21.097	21.097	0.000	94	23199	0.0800	0.0654	
112 2-Methylnaphthalene	142	21.836	21.834	0.002	94	18034	0.0800	0.0551	
113 1-Methylnaphthalene	142	21.971	21.967	0.004	98	30945	0.0800	0.0756	
A 116 C8 Range	1	14.103	(14.060-14.136)		0	111213	0.0800	0.0793	
S 117 Xylenes, Total	100				0		0.2400	0.2288	
S 118 1,2-Dichloroethene, Total	1				0		0.1600	0.1676	

Reagents:

40L1-3DQP_00031	Amount Added: 200.00	Units: mL	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

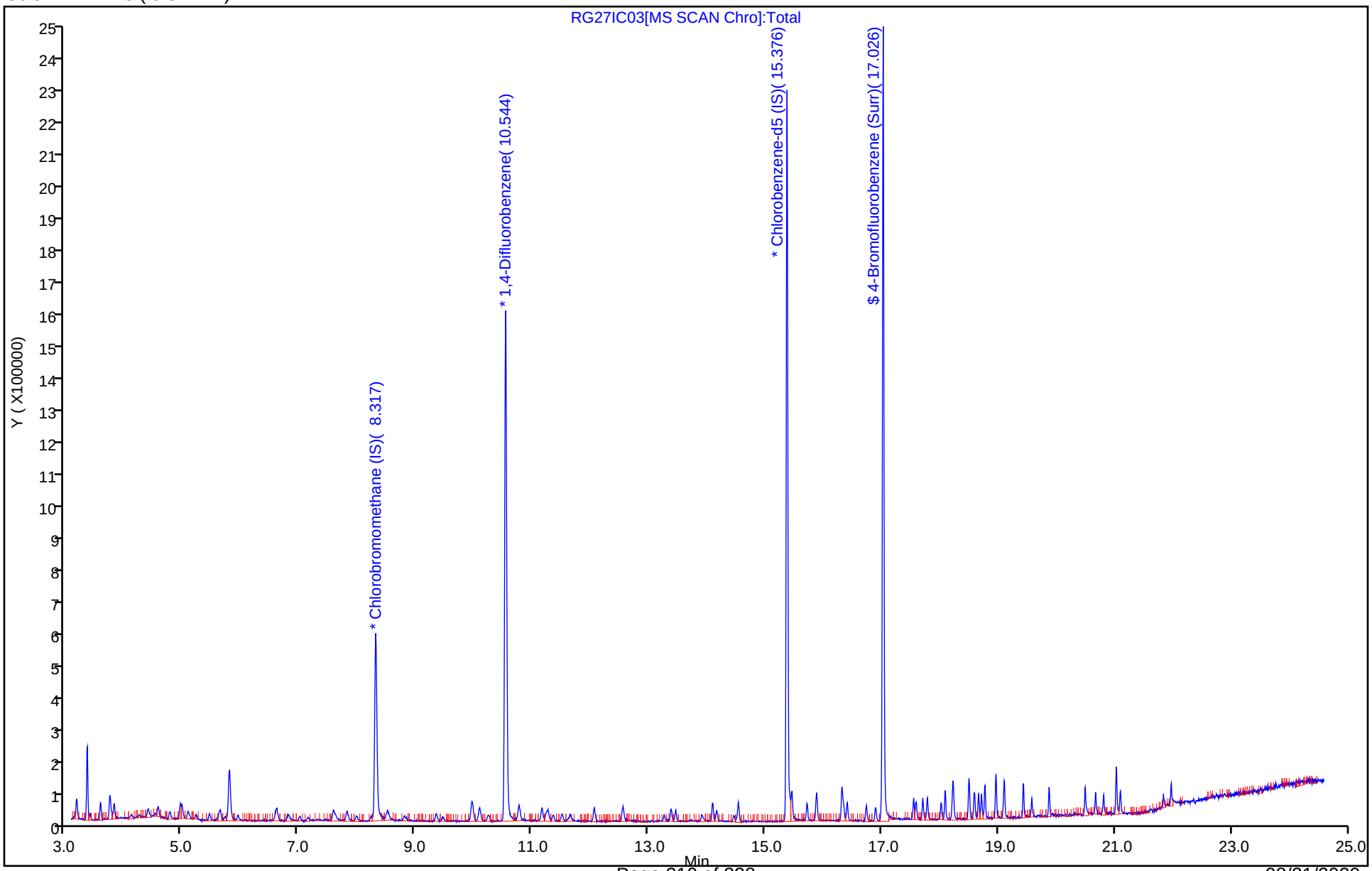
Report Date: 28-Jul-2020 16:47:35 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC03.D

Injection Date:	28-Jul-2020 02:07:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	IC L3			Worklist Smp#:	11
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

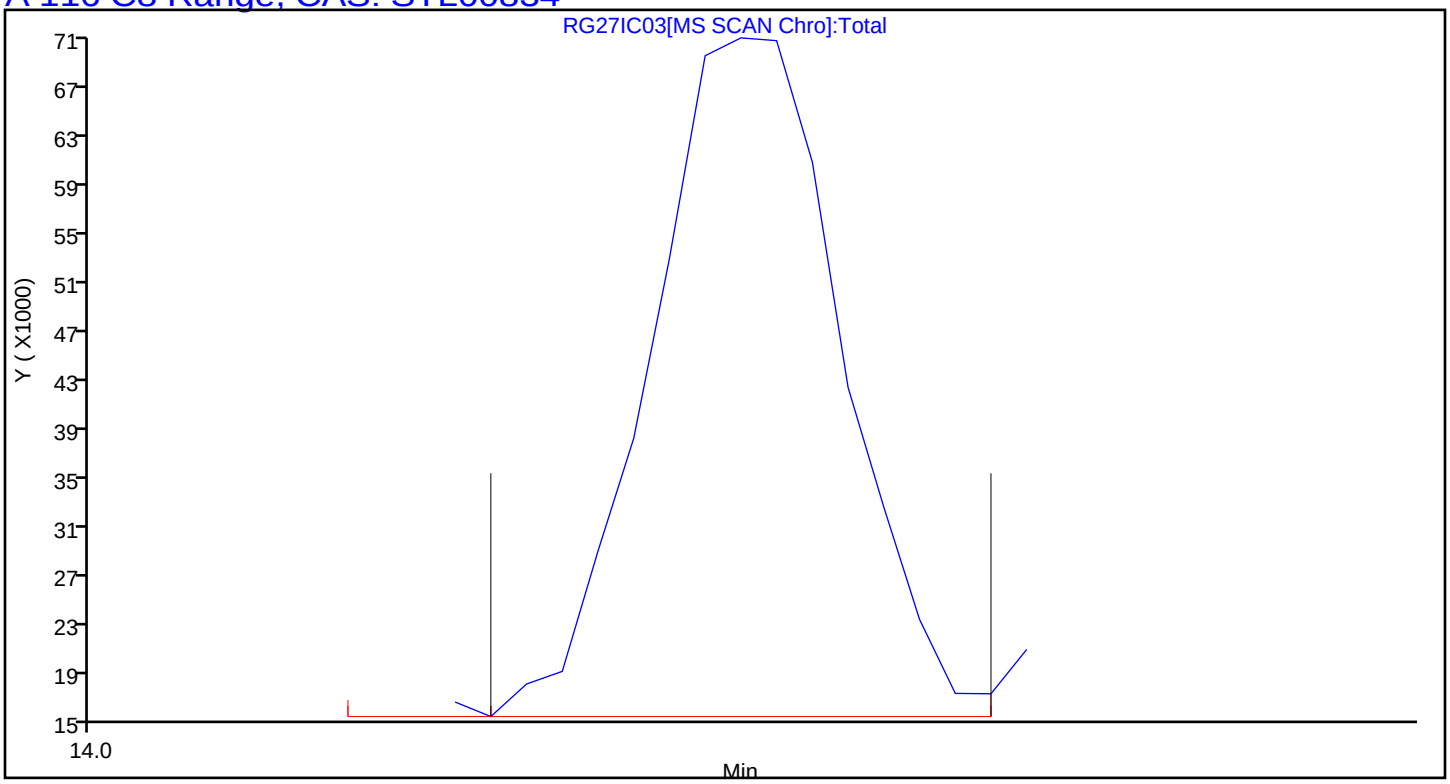


Report Date: 28-Jul-2020 16:47:35 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC03.D				
Injection Date:	28-Jul-2020 02:07:30	Instrument ID:	MR		
Lims ID:	IC L3				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	8	Worklist Smp#:	11
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 116 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC04.D
Lims ID: IC L4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 28-Jul-2020 03:11:30 ALS Bottle#: 9 Worklist Smp#: 12
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016116-012
Misc. Info.: 314718
Operator ID: HMT Instrument ID: MR
Sublist: chrom-MR_TO15*sub16

Method: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 28-Jul-2020 16:47:42 Calib Date: 28-Jul-2020 09:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC09R.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1014

First Level Reviewer: barlozhetskayaa Date: 28-Jul-2020 16:21:34

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.296	8.308	-0.012	93	174269	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.534	10.539	-0.005	96	1492660	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.376	15.375	0.001	95	1223469	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.026	17.025	0.001	95	702516	4.00	3.80	
6 Chlorodifluoromethane	51	3.340	3.343	-0.003	53	43560	0.1600	0.1708	
7 Propene	41	3.346	3.349	-0.003	97	113547	0.1600	0.5541	
8 Dichlorodifluoromethane	85	3.394	3.400	-0.006	98	29276	0.1600	0.1699	
9 Chloromethane	52	3.567	3.569	-0.002	75	7840	0.1600	0.1779	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.572	3.577	-0.005	89	27808	0.1600	0.1648	
11 Acetaldehyde	44	3.718	3.724	-0.006	95	66767	0.8000	1.11	
12 Vinyl chloride	62	3.718	3.726	-0.008	52	21542	0.1600	0.1702	
13 Butane	43	3.799	3.808	-0.010	87	36269	0.1600	0.1592	
14 Butadiene	54	3.804	3.809	-0.005	67	17801	0.1600	0.1673	
15 Bromomethane	94	4.100	4.103	-0.003	96	14781	0.1600	0.1629	
16 Chloroethane	64	4.230	4.235	-0.005	84	8586	0.1600	0.1594	
17 Ethanol	31	4.349	4.364	-0.015	97	57067	0.8000	0.8240	
18 Vinyl bromide	106	4.505	4.515	-0.010	98	14105	0.1600	0.1641	
19 2-Methylbutane	43	4.553	4.561	-0.008	94	30943	0.1600	0.1840	
21 Acrolein	56	4.780	4.779	0.001	48	5276	0.1600	0.1416	
20 Trichlorofluoromethane	101	4.758	4.765	-0.007	96	33115	0.1600	0.1551	
22 Acetonitrile	40	4.839	4.870	-0.031	64	10397	0.1600	0.1996	
23 Acetone	58	4.909	4.913	-0.004	98	31234	0.4800	0.4440	
24 Pentane	72	4.963	4.971	-0.008	95	2444	0.1600	0.1477	
25 Isopropyl alcohol	45	5.023	5.027	-0.004	98	94261	0.4800	0.4255	
26 Ethyl ether	31	5.168	5.168	0.000	88	25311	0.1600	0.1630	
27 1,1-Dichloroethene	96	5.438	5.444	-0.006	93	15734	0.1600	0.1673	
28 Acrylonitrile	53	5.556	5.572	-0.016	97	11053	0.1600	0.1387	
30 1,1,2-Trichloro-1,2,2-trifluoroe	101	5.621	5.622	-0.001	93	31065	0.1600	0.1623	
29 2-Methyl-2-propanol	59	5.637	5.629	0.008	95	38257	0.1600	0.1782	
31 Methylene Chloride	84	5.778	5.788	-0.010	93	72387	0.1600	0.1274	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	5.794	5.802	-0.008	91	19281	0.1600	0.1557	
33 Carbon disulfide	76	5.934	5.938	-0.004	99	44068	0.1600	0.1753	
34 trans-1,2-Dichloroethene	96	6.570	6.580	-0.010	93	14018	0.1600	0.1575	
35 2-Methylpentane	43	6.586	6.600	-0.014	95	52084	0.1600	0.1665	
36 Methyl tert-butyl ether	73	6.748	6.747	0.001	93	38718	0.1600	0.1671	
37 1,1-Dichloroethane	63	6.991	7.002	-0.011	98	34963	0.1600	0.1675	
38 Vinyl acetate	43	7.115	7.120	-0.005	100	50685	0.1600	0.1461	
40 Hexane	56	7.579	7.575	0.004	72	15018	0.1600	0.1596	
39 2-Butanone (MEK)	72	7.589	7.583	0.006	91	7700	0.1600	0.1743	
41 Isopropyl ether	45	7.767	7.761	0.006	95	79380	0.1600	0.1650	
42 cis-1,2-Dichloroethene	96	7.967	7.981	-0.014	93	16786	0.1600	0.1674	
43 Ethyl acetate	43	8.204	8.189	0.015	97	52092	0.1600	0.1614	
44 Chloroform	83	8.307	8.326	-0.019	30	31749	0.1600	0.1660	
45 Tert-butyl ethyl ether	59	8.452	8.448	0.004	97	63034	0.1600	0.1667	
46 Tetrahydrofuran	42	8.759	8.750	0.009	92	27352	0.1600	0.1671	
47 1,1,1-Trichloroethane	97	9.347	9.348	-0.001	96	30507	0.1600	0.1539	
48 1,2-Dichloroethane	62	9.450	9.461	-0.011	95	21685	0.1600	0.1549	
51 Benzene	78	9.951	9.958	-0.007	94	47298	0.1600	0.1591	
50 Cyclohexane	69	9.946	9.954	-0.008	69	7461	0.1600	0.1723	
52 Carbon tetrachloride	117	9.978	9.980	-0.002	93	31048	0.1600	0.1642	
49 n-Butanol	31	10.005	9.970	0.035	68	10929	0.1600	0.1612	
53 2,3-Dimethylpentane	71	10.091	10.094	-0.003	91	10505	0.1600	0.1620	
54 Thiophene	84	10.237	10.245	-0.008	94	25072	0.1600	0.1530	
55 Isooctane	57	10.765	10.766	-0.001	96	102219	0.1600	0.1628	
56 n-Heptane	71	11.154	11.162	-0.008	94	17300	0.1600	0.1727	
57 1,2-Dichloropropane	63	11.235	11.235	0.000	89	23195	0.1600	0.1692	
58 Trichloroethene	130	11.267	11.272	-0.005	93	19716	0.1600	0.1513	
59 Dibromomethane	93	11.348	11.357	-0.009	92	17443	0.1600	0.1470	
60 Dichlorobromomethane	83	11.504	11.510	-0.006	95	31116	0.1600	0.1535	
61 1,4-Dioxane	88	11.569	11.563	0.006	93	7355	0.1600	0.1579	
62 Methyl methacrylate	41	11.634	11.632	0.002	86	30743	0.1600	0.1571	
63 Methylcyclohexane	83	12.060	12.063	-0.003	85	27635	0.1600	0.1613	
65 cis-1,3-Dichloropropene	75	12.545	12.548	-0.003	91	24251	0.1600	0.1506	
64 4-Methyl-2-pentanone (MIBK)	43	12.529	12.517	0.012	95	54138	0.1600	0.1482	
66 trans-1,3-Dichloropropene	75	13.257	13.261	-0.004	88	19725	0.1600	0.1469	
67 Toluene	91	13.381	13.381	0.000	91	55409	0.1600	0.1651	
68 1,1,2-Trichloroethane	83	13.456	13.460	-0.004	89	16211	0.1600	0.1518	
69 2-Hexanone	58	13.882	13.878	0.004	87	19116	0.1600	0.1330	
70 n-Octane	85	14.093	14.096	-0.003	98	17309	0.1600	0.1692	
71 Chlorodibromomethane	129	14.163	14.165	-0.002	95	33919	0.1600	0.1592	
72 Ethylene Dibromide	107	14.459	14.462	-0.003	94	28751	0.1600	0.1554	
73 Tetrachloroethene	129	14.535	14.538	-0.003	90	19101	0.1600	0.1574	
74 Chlorobenzene	112	15.419	15.423	-0.004	96	42713	0.1600	0.1587	
75 2,3-Dimethylheptane	43	15.457	15.455	0.002	92	85415	0.1600	0.1645	
76 Ethylbenzene	91	15.716	15.718	-0.002	97	68260	0.1600	0.1480	
77 m-Xylene & p-Xylene	91	15.883	15.881	0.002	96	109239	0.3200	0.3125	
78 n-Nonane	57	16.314	16.314	0.000	92	45033	0.1600	0.1508	
79 Bromoform	173	16.325	16.323	0.002	90	37105	0.1600	0.1405	
80 Styrene	104	16.347	16.346	0.001	94	36278	0.1600	0.1420	
81 o-Xylene	91	16.406	16.406	0.000	98	56091	0.1600	0.1520	
82 1,1,2,2-Tetrachloroethane	83	16.729	16.734	-0.005	98	46493	0.1600	0.1553	
83 1,2,3-Trichloropropane	110	16.891	16.895	-0.004	91	11880	0.1600	0.1454	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	16.999	16.998	0.001	94	83433	0.1600	0.1531	
85 N-Propylbenzene	120	17.549	17.547	0.002	99	23090	0.1600	0.1578	
86 2-Chlorotoluene	126	17.592	17.590	0.002	96	22336	0.1600	0.1574	
87 4-Ethyltoluene	105	17.705	17.704	0.001	98	78410	0.1600	0.1519	
88 1,3,5-Trimethylbenzene	120	17.781	17.782	-0.001	92	33074	0.1600	0.1476	
89 Alpha Methyl Styrene	118	18.018	18.020	-0.002	89	30595	0.1600	0.1374	
90 n-Decane	57	18.088	18.089	-0.001	87	60278	0.1600	0.1497	
91 tert-Butylbenzene	119	18.212	18.218	-0.006	91	73807	0.1600	0.1522	
92 1,2,4-Trimethylbenzene	105	18.234	18.232	0.002	95	66278	0.1600	0.1447	
93 sec-Butylbenzene	105	18.493	18.494	-0.001	99	105622	0.1600	0.1521	
94 1,3-Dichlorobenzene	146	18.504	18.504	0.000	94	45803	0.1600	0.1345	
95 Benzyl chloride	91	18.584	18.584	0.000	96	45333	0.1600	0.1223	
96 1,4-Dichlorobenzene	146	18.595	18.596	-0.001	92	42717	0.1600	0.1296	
97 4-Isopropyltoluene	119	18.665	18.662	0.003	97	79807	0.1600	0.1479	
98 1,2,3-Trimethylbenzene	105	18.714	18.713	0.001	98	72444	0.1600	0.1460	
99 Butylcyclohexane	83	18.773	18.773	0.000	85	58413	0.1600	0.1512	
100 2,3-Dihydroindene	117	18.962	18.961	0.001	91	63148	0.1600	0.1355	
101 1,2-Dichlorobenzene	146	18.962	18.962	0.000	80	47024	0.1600	0.1336	
102 Indene	116	19.091	19.093	-0.002	88	52137	0.1600	0.1317	
103 n-Butylbenzene	91	19.107	19.106	0.001	97	74291	0.1600	0.1393	
104 Undecane	57	19.431	19.431	0.000	91	59603	0.1600	0.1278	
105 1,2-Dibromo-3-Chloropropane	157	19.577	19.577	0.000	85	23210	0.1600	0.1115	
106 1,2,4,5-Tetramethylbenzene	119	19.873	19.873	0.000	98	63459	0.1600	0.1172	
107 Dodecane	57	20.488	20.489	-0.001	88	40135	0.1600	0.0775	
108 1,2,4-Trichlorobenzene	180	20.671	20.672	-0.001	92	28921	0.1600	0.0934	
109 Naphthalene	128	20.806	20.807	-0.001	98	47616	0.1600	0.0819	
110 Hexachlorobutadiene	225	21.027	21.028	-0.001	94	45945	0.1600	0.1304	
111 1,2,3-Trichlorobenzene	180	21.097	21.097	0.000	95	29355	0.1600	0.0865	
112 2-Methylnaphthalene	142	21.836	21.834	0.002	88	7178	0.1600	0.0229	
113 1-Methylnaphthalene	142	21.971	21.967	0.004	98	16685	0.1600	0.0426	
A 116 C8 Range	1	14.082	(14.049-14.146)		0	225700	0.1600	0.1677	
S 117 Xylenes, Total	100				0		0.4800	0.4646	
S 118 1,2-Dichloroethene, Total	1				0		0.3200	0.3250	

Reagents:

40L4DQP_00020	Amount Added: 200.00	Units: mL	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

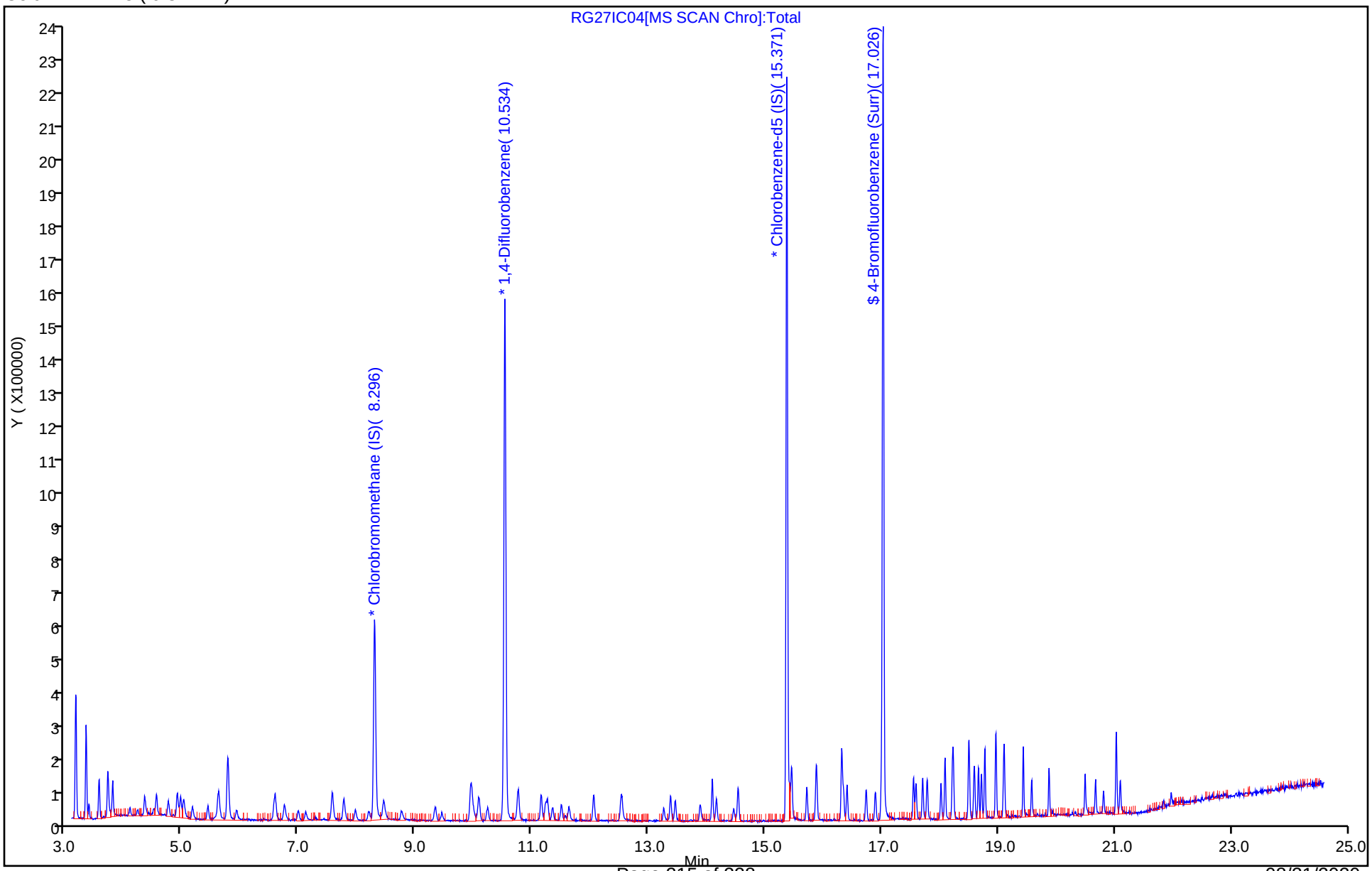
Report Date: 28-Jul-2020 16:47:43 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC04.D

Injection Date:	28-Jul-2020 03:11:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	IC L4			Worklist Smp#:	12
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

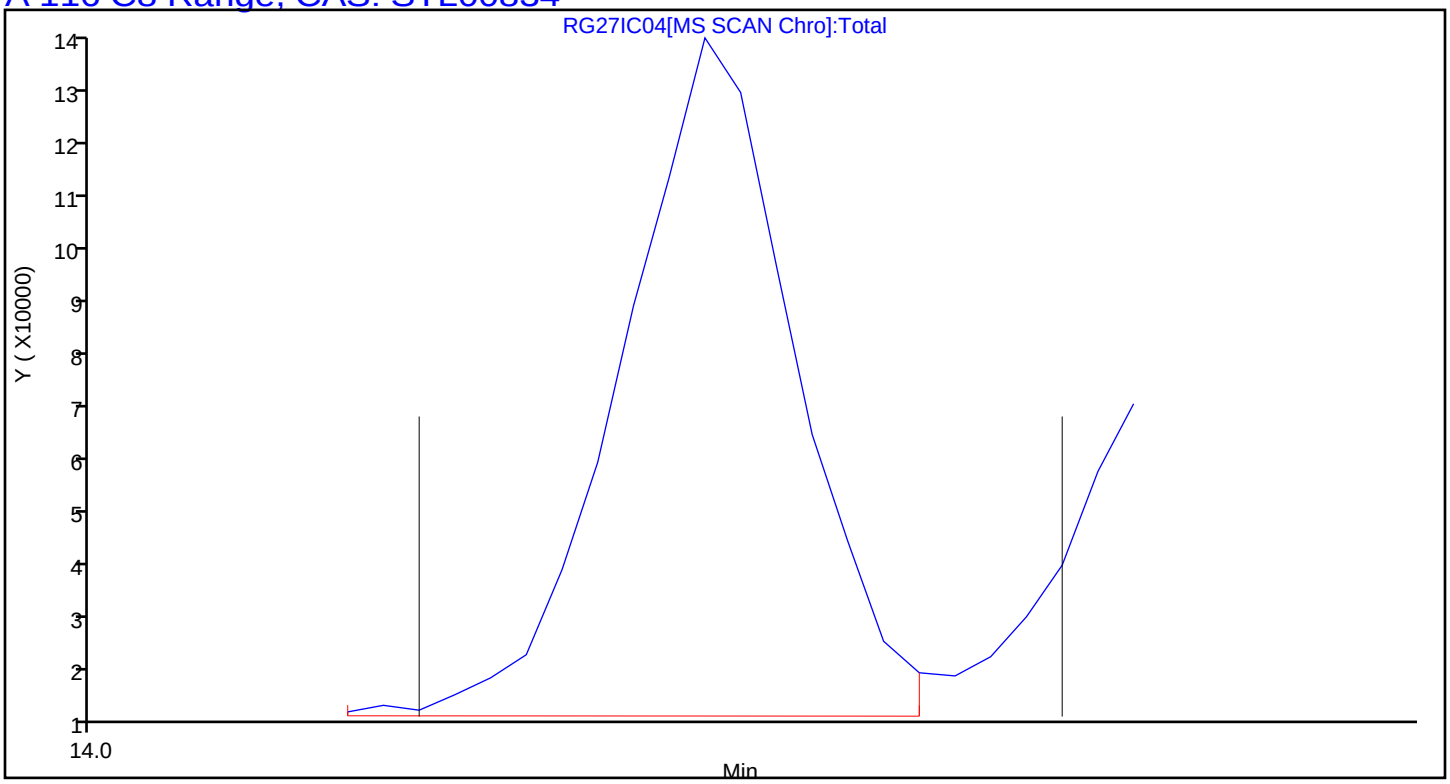
Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC04.D				
Injection Date:	28-Jul-2020 03:11:30	Instrument ID:	MR		
Lims ID:	IC L4				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	9	Worklist Smp#:	12
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 116 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC05.D
Lims ID: IC L5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 28-Jul-2020 04:17:30 ALS Bottle#: 10 Worklist Smp#: 13
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016116-013
Misc. Info.: 314717
Operator ID: HMT Instrument ID: MR
Sublist: chrom-MR_TO15*sub16

Method: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 28-Jul-2020 16:47:50 Calib Date: 28-Jul-2020 09:59:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC09R.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1014

First Level Reviewer: barlozhetskayaa Date: 28-Jul-2020 11:33:11

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.296	8.308	-0.012	92	163085	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.528	10.539	-0.011	96	1439784	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.371	15.375	-0.004	90	1185694	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.021	17.025	-0.004	94	680156	4.00	3.80	
6 Chlorodifluoromethane	51	3.329	3.343	-0.014	96	97045	0.4000	0.4066	
7 Propene	41	3.335	3.349	-0.014	62	67336	0.4000	0.3067	
8 Dichlorodifluoromethane	85	3.383	3.400	-0.017	98	67258	0.4000	0.4172	
9 Chloromethane	52	3.556	3.569	-0.013	88	16741	0.4000	0.4060	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.567	3.577	-0.010	91	61512	0.4000	0.3895	
11 Acetaldehyde	44	3.712	3.724	-0.012	97	118375	2.00	2.10	
12 Vinyl chloride	62	3.712	3.726	-0.014	53	48486	0.4000	0.4093	
13 Butane	43	3.793	3.808	-0.015	86	88814	0.4000	0.4167	
14 Butadiene	54	3.793	3.809	-0.016	64	41282	0.4000	0.4146	
15 Bromomethane	94	4.090	4.103	-0.013	97	34681	0.4000	0.4084	
16 Chloroethane	64	4.225	4.235	-0.010	88	20761	0.4000	0.4119	
17 Ethanol	31	4.338	4.364	-0.026	97	134775	2.00	2.08	
18 Vinyl bromide	106	4.505	4.515	-0.010	96	33361	0.4000	0.4147	
19 2-Methylbutane	43	4.548	4.561	-0.013	95	69007	0.4000	0.4384	
20 Trichlorofluoromethane	101	4.753	4.765	-0.012	96	84317	0.4000	0.4219	
21 Acrolein	56	4.775	4.779	-0.004	93	13255	0.4000	0.3802	
22 Acetonitrile	40	4.845	4.870	-0.025	97	19994	0.4000	0.4102	
23 Acetone	58	4.899	4.913	-0.014	99	68315	1.20	1.04	
24 Pentane	72	4.963	4.971	-0.008	95	7679	0.4000	0.4958	
25 Isopropyl alcohol	45	5.006	5.027	-0.021	96	228050	1.20	1.10	
26 Ethyl ether	31	5.152	5.168	-0.016	89	62916	0.4000	0.4329	
27 1,1-Dichloroethene	96	5.432	5.444	-0.012	95	36848	0.4000	0.4188	
28 Acrylonitrile	53	5.556	5.572	-0.016	84	26276	0.4000	0.3523	
30 1,1,2-Trichloro-1,2,2-trifluoroe	101	5.610	5.622	-0.012	95	74939	0.4000	0.4184	
29 2-Methyl-2-propanol	59	5.610	5.629	-0.019	84	85356	0.4000	0.4248	
31 Methylene Chloride	84	5.772	5.788	-0.016	92	86361	0.4000	0.4022	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	5.788	5.802	-0.014	92	50795	0.4000	0.4384	
33 Carbon disulfide	76	5.923	5.938	-0.015	98	103310	0.4000	0.4393	
34 trans-1,2-Dichloroethene	96	6.559	6.580	-0.021	96	35310	0.4000	0.4241	
35 2-Methylpentane	43	6.586	6.600	-0.014	97	121804	0.4000	0.4161	
36 Methyl tert-butyl ether	73	6.727	6.747	-0.020	92	94478	0.4000	0.4358	
37 1,1-Dichloroethane	63	6.985	7.002	-0.017	99	79326	0.4000	0.4060	
38 Vinyl acetate	43	7.104	7.120	-0.016	100	131013	0.4000	0.4035	
40 Hexane	56	7.568	7.575	-0.007	70	37669	0.4000	0.4278	
39 2-Butanone (MEK)	72	7.557	7.583	-0.026	84	16864	0.4000	0.4080	
41 Isopropyl ether	45	7.746	7.761	-0.015	96	188981	0.4000	0.4197	
42 cis-1,2-Dichloroethene	96	7.967	7.981	-0.014	97	38019	0.4000	0.4052	
43 Ethyl acetate	43	8.183	8.189	-0.006	97	126927	0.4000	0.4203	
44 Chloroform	83	8.312	8.326	-0.014	93	75409	0.4000	0.4213	
45 Tert-butyl ethyl ether	59	8.431	8.448	-0.017	98	145027	0.4000	0.4098	
46 Tetrahydrofuran	42	8.733	8.750	-0.017	92	66768	0.4000	0.4359	
47 1,1,1-Trichloroethane	97	9.337	9.348	-0.011	95	75765	0.4000	0.4084	
48 1,2-Dichloroethane	62	9.455	9.461	-0.006	93	53350	0.4000	0.3951	
50 Cyclohexane	69	9.951	9.954	-0.003	76	17290	0.4000	0.4139	
51 Benzene	78	9.940	9.958	-0.018	93	112925	0.4000	0.3938	
52 Carbon tetrachloride	117	9.967	9.980	-0.013	92	74165	0.4000	0.4067	
49 n-Butanol	31	9.978	9.970	0.008	67	26740	0.4000	0.4090	
53 2,3-Dimethylpentane	71	10.081	10.094	-0.013	93	26093	0.4000	0.4172	
54 Thiophene	84	10.232	10.245	-0.013	95	64778	0.4000	0.4099	
55 Isooctane	57	10.755	10.766	-0.011	97	237917	0.4000	0.3929	
56 n-Heptane	71	11.154	11.162	-0.008	95	38064	0.4000	0.3939	
57 1,2-Dichloropropane	63	11.229	11.235	-0.006	88	54434	0.4000	0.4117	
58 Trichloroethene	130	11.262	11.272	-0.010	95	48964	0.4000	0.3897	
59 Dibromomethane	93	11.353	11.357	-0.004	92	43944	0.4000	0.3840	
60 Dichlorobromomethane	83	11.499	11.510	-0.011	95	78168	0.4000	0.3999	
61 1,4-Dioxane	88	11.553	11.563	-0.010	94	18102	0.4000	0.4028	
62 Methyl methacrylate	41	11.623	11.632	-0.009	85	76225	0.4000	0.4039	
63 Methylcyclohexane	83	12.054	12.063	-0.009	86	68034	0.4000	0.4116	
64 4-Methyl-2-pentanone (MIBK)	43	12.507	12.517	-0.010	96	144122	0.4000	0.4090	
65 cis-1,3-Dichloropropene	75	12.545	12.548	-0.003	93	59780	0.4000	0.3850	
66 trans-1,3-Dichloropropene	75	13.257	13.261	-0.004	89	47513	0.4000	0.3651	
67 Toluene	91	13.375	13.381	-0.006	93	132029	0.4000	0.4061	
68 1,1,2-Trichloroethane	83	13.456	13.460	-0.004	97	42151	0.4000	0.4073	
69 2-Hexanone	58	13.866	13.878	-0.012	88	53872	0.4000	0.3869	
70 n-Octane	85	14.093	14.096	-0.003	99	38720	0.4000	0.3905	
71 Chlorodibromomethane	129	14.163	14.165	-0.002	96	81665	0.4000	0.3954	
72 Ethylene Dibromide	107	14.454	14.462	-0.008	95	71680	0.4000	0.3999	
73 Tetrachloroethene	129	14.535	14.538	-0.003	93	44056	0.4000	0.3746	
74 Chlorobenzene	112	15.419	15.423	-0.004	93	102575	0.4000	0.3933	
75 2,3-Dimethylheptane	43	15.451	15.455	-0.004	92	202458	0.4000	0.4024	
76 Ethylbenzene	91	15.716	15.718	-0.002	98	176214	0.4000	0.3942	
77 m-Xylene & p-Xylene	91	15.877	15.881	-0.004	96	263030	0.8000	0.7765	
78 n-Nonane	57	16.309	16.314	-0.005	94	112064	0.4000	0.3873	
79 Bromoform	173	16.320	16.323	-0.003	96	92619	0.4000	0.3618	
80 Styrene	104	16.341	16.346	-0.005	96	94195	0.4000	0.3806	
81 o-Xylene	91	16.406	16.406	0.000	98	138599	0.4000	0.3876	
82 1,1,2,2-Tetrachloroethane	83	16.729	16.734	-0.005	98	111782	0.4000	0.3853	
83 1,2,3-Trichloropropane	110	16.886	16.895	-0.009	92	30475	0.4000	0.3848	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	16.994	16.998	-0.004	96	192221	0.4000	0.3639	
85 N-Propylbenzene	120	17.544	17.547	-0.003	99	51788	0.4000	0.3653	
86 2-Chlorotoluene	126	17.587	17.590	-0.003	97	49136	0.4000	0.3573	
87 4-Ethyltoluene	105	17.706	17.704	0.002	98	194186	0.4000	0.3881	
88 1,3,5-Trimethylbenzene	120	17.781	17.782	-0.001	95	87032	0.4000	0.4009	
89 Alpha Methyl Styrene	118	18.018	18.020	-0.002	89	80373	0.4000	0.3725	
90 n-Decane	57	18.088	18.089	-0.001	85	147194	0.4000	0.3771	
91 tert-Butylbenzene	119	18.218	18.218	0.000	92	175264	0.4000	0.3730	
92 1,2,4-Trimethylbenzene	105	18.229	18.232	-0.003	96	161416	0.4000	0.3637	
93 sec-Butylbenzene	105	18.493	18.494	-0.001	99	255689	0.4000	0.3798	
94 1,3-Dichlorobenzene	146	18.504	18.504	0.000	94	116112	0.4000	0.3517	
95 Benzyl chloride	91	18.584	18.584	0.000	97	123445	0.4000	0.3436	
96 1,4-Dichlorobenzene	146	18.595	18.596	-0.001	94	109825	0.4000	0.3439	
97 4-Isopropyltoluene	119	18.660	18.662	-0.002	96	196886	0.4000	0.3764	
98 1,2,3-Trimethylbenzene	105	18.714	18.713	0.001	98	171458	0.4000	0.3565	
99 Butylcyclohexane	83	18.768	18.773	-0.005	86	141828	0.4000	0.3787	
100 2,3-Dihydroindene	117	18.962	18.961	0.001	93	159609	0.4000	0.3535	
101 1,2-Dichlorobenzene	146	18.962	18.962	0.000	82	115699	0.4000	0.3392	
102 Indene	116	19.091	19.093	-0.002	90	137942	0.4000	0.3596	
103 n-Butylbenzene	91	19.108	19.106	0.002	98	197823	0.4000	0.3826	
104 Undecane	57	19.431	19.431	0.000	90	156468	0.4000	0.3461	
105 1,2-Dibromo-3-Chloropropane	157	19.577	19.577	0.000	88	66434	0.4000	0.3294	
106 1,2,4,5-Tetramethylbenzene	119	19.873	19.873	0.000	98	182976	0.4000	0.3487	
107 Dodecane	57	20.488	20.489	-0.001	88	134117	0.4000	0.2671	
108 1,2,4-Trichlorobenzene	180	20.671	20.672	-0.001	93	92149	0.4000	0.3072	
109 Naphthalene	128	20.806	20.807	-0.001	99	186701	0.4000	0.3312	
110 Hexachlorobutadiene	225	21.027	21.028	-0.001	94	109969	0.4000	0.3221	
111 1,2,3-Trichlorobenzene	180	21.092	21.097	-0.005	94	94670	0.4000	0.2879	
112 2-Methylnaphthalene	142	21.836	21.834	0.002	98	63454	0.4000	0.2092	
113 1-Methylnaphthalene	142	21.965	21.967	-0.002	99	102177	0.4000	0.2694	
A 116 C8 Range	1	14.080	(14.044-14.130)		0	508427	0.4000	0.3916	
S 117 Xylenes, Total	100				0		1.20	1.16	
S 118 1,2-Dichloroethene, Total	1				0		0.8000	0.8293	

Reagents:

40L5DQP_00020	Amount Added: 200.00	Units: mL	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

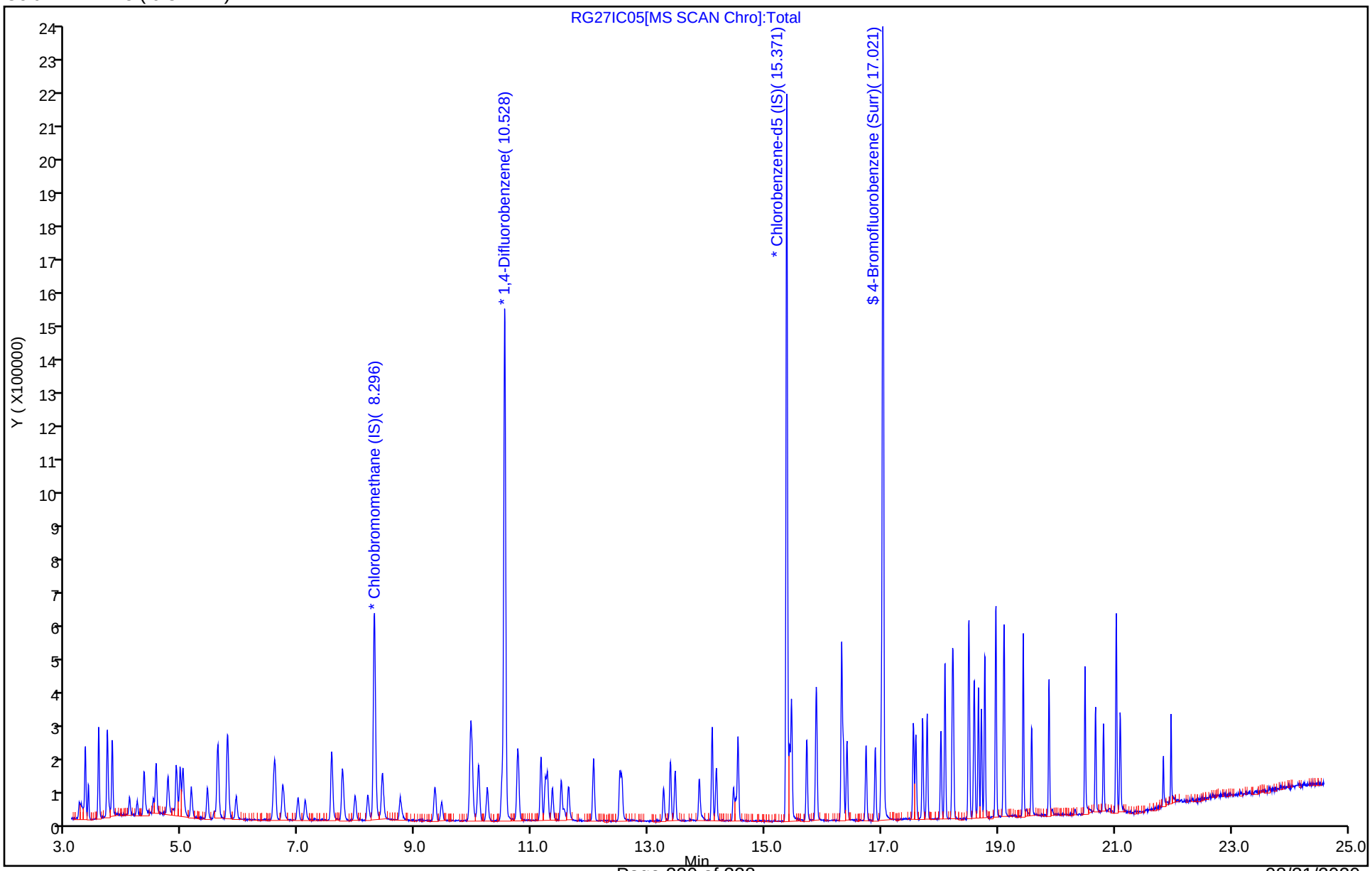
Report Date: 28-Jul-2020 16:47:51 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC05.D

Injection Date:	28-Jul-2020 04:17:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	IC L5			Worklist Smp#:	13
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

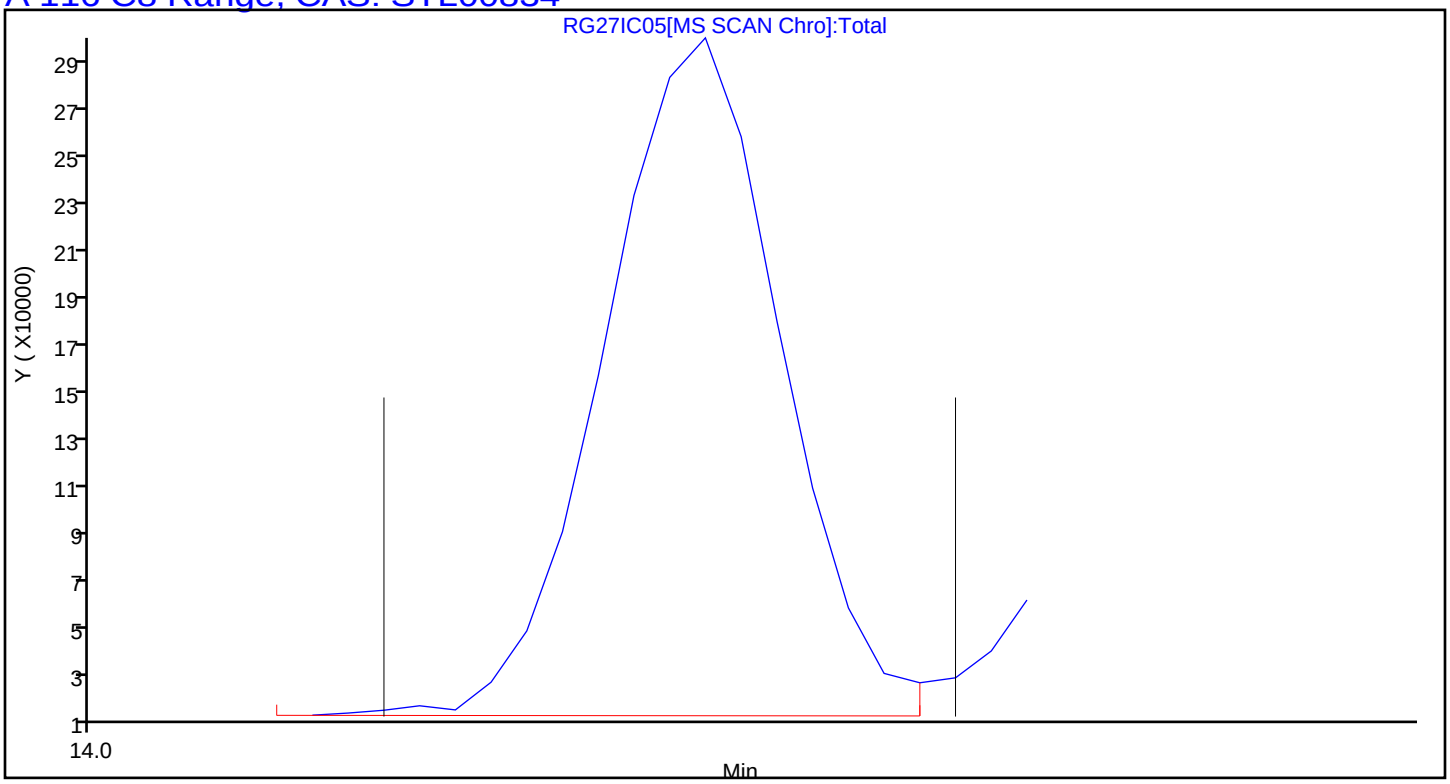
Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC05.D				
Injection Date:	28-Jul-2020 04:17:30	Instrument ID:	MR		
Lims ID:	IC L5				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	10	Worklist Smp#:	13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 116 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC06.D
Lims ID: IC L6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 28-Jul-2020 05:24:30 ALS Bottle#: 11 Worklist Smp#: 14
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016116-014
Misc. Info.: 314716
Operator ID: HMT Instrument ID: MR
Sublist: chrom-MR_TO15*sub16

Method: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 28-Jul-2020 16:47:59 Calib Date: 28-Jul-2020 09:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC09R.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1014

First Level Reviewer: tajh Date: 28-Jul-2020 14:16:49

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.323	8.308	0.015	91	179362	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.545	10.539	0.006	96	1536103	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.376	15.375	0.001	90	1292907	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.026	17.025	0.001	94	777885	4.00	3.98	
6 Chlorodifluoromethane	51	3.357	3.343	0.014	96	246131	1.00	0.9376	
7 Propene	41	3.362	3.349	0.013	97	211848	1.00	1.11	
8 Dichlorodifluoromethane	85	3.416	3.400	0.016	98	165184	1.00	0.9316	
9 Chloromethane	52	3.578	3.569	0.009	99	43238	1.00	0.9535	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.594	3.577	0.017	92	162687	1.00	0.9366	
11 Acetaldehyde	44	3.739	3.724	0.015	95	312925	5.00	5.04	
12 Vinyl chloride	62	3.739	3.726	0.013	57	119406	1.00	0.9166	
14 Butadiene	54	3.820	3.809	0.011	64	105169	1.00	0.9605	
13 Butane	43	3.820	3.808	0.012	86	229919	1.00	0.9808	
15 Bromomethane	94	4.117	4.103	0.014	96	89042	1.00	0.9534	
16 Chloroethane	64	4.252	4.235	0.017	87	55353	1.00	1.00	
17 Ethanol	31	4.381	4.364	0.017	98	320471	5.00	4.50	
18 Vinyl bromide	106	4.527	4.515	0.012	97	85965	1.00	0.9715	
19 2-Methylbutane	43	4.581	4.561	0.020	93	166534	1.00	0.9619	
20 Trichlorofluoromethane	101	4.786	4.765	0.021	97	219154	1.00	1.00	
21 Acrolein	56	4.812	4.779	0.033	92	36799	1.00	0.9597	
22 Acetonitrile	40	4.877	4.870	0.007	99	52329	1.00	0.9761	
23 Acetone	58	4.926	4.913	0.013	99	180954	3.00	2.50	
24 Pentane	72	4.990	4.971	0.019	97	17390	1.00	1.02	
25 Isopropyl alcohol	45	5.050	5.027	0.023	95	556131	3.00	2.47	
26 Ethyl ether	31	5.179	5.168	0.011	89	159295	1.00	1.00	
27 1,1-Dichloroethene	96	5.465	5.444	0.021	93	94377	1.00	0.9752	
28 Acrylonitrile	53	5.578	5.572	0.006	97	80704	1.00	0.9839	
30 1,1,2-Trichloro-1,2,2-trifluoroe	101	5.637	5.622	0.015	94	198245	1.00	1.01	
29 2-Methyl-2-propanol	59	5.654	5.629	0.025	95	212410	1.00	0.9613	
31 Methylene Chloride	84	5.805	5.788	0.017	90	136534	1.00	0.9598	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	5.821	5.802	0.019	95	131311	1.00	1.03	
33 Carbon disulfide	76	5.950	5.938	0.012	99	259519	1.00	1.00	
34 trans-1,2-Dichloroethene	96	6.597	6.580	0.017	96	92853	1.00	1.01	
35 2-Methylpentane	43	6.619	6.600	0.019	97	317743	1.00	0.9869	
36 Methyl tert-butyl ether	73	6.743	6.747	-0.004	93	239488	1.00	1.00	
37 1,1-Dichloroethane	63	7.018	7.002	0.016	98	203952	1.00	0.9492	
38 Vinyl acetate	43	7.131	7.120	0.011	100	353375	1.00	0.9897	
39 2-Butanone (MEK)	72	7.573	7.583	-0.010	88	45649	1.00	1.00	
40 Hexane	56	7.584	7.575	0.009	73	97950	1.00	1.01	
41 Isopropyl ether	45	7.767	7.761	0.006	97	506813	1.00	1.02	
42 cis-1,2-Dichloroethene	96	7.994	7.981	0.013	97	101662	1.00	0.9852	
43 Ethyl acetate	43	8.199	8.189	0.010	97	339312	1.00	1.02	
44 Chloroform	83	8.339	8.326	0.013	88	196820	1.00	1.00	
45 Tert-butyl ethyl ether	59	8.442	8.448	-0.006	98	384483	1.00	0.9879	
46 Tetrahydrofuran	42	8.749	8.750	-0.001	92	173031	1.00	1.03	
47 1,1,1-Trichloroethane	97	9.358	9.348	0.010	95	204471	1.00	1.00	
48 1,2-Dichloroethane	62	9.466	9.461	0.005	95	144733	1.00	1.00	
51 Benzene	78	9.968	9.958	0.010	95	306125	1.00	1.00	
50 Cyclohexane	69	9.962	9.954	0.008	86	46240	1.00	1.04	
52 Carbon tetrachloride	117	9.989	9.980	0.009	93	195887	1.00	1.01	
49 n-Butanol	31	10.021	9.970	0.051	76	60188	1.00	0.8629	
53 2,3-Dimethylpentane	71	10.102	10.094	0.008	95	69317	1.00	1.04	
54 Thiophene	84	10.253	10.245	0.008	95	168471	1.00	1.00	
55 Isooctane	57	10.771	10.766	0.005	97	638094	1.00	0.9877	
56 n-Heptane	71	11.170	11.162	0.008	95	105214	1.00	1.02	
57 1,2-Dichloropropane	63	11.235	11.235	0.000	88	137586	1.00	0.9754	
58 Trichloroethene	130	11.278	11.272	0.006	95	130842	1.00	0.9760	
59 Dibromomethane	93	11.359	11.357	0.002	93	121569	1.00	1.00	
60 Dichlorobromomethane	83	11.515	11.510	0.005	95	209068	1.00	1.00	
61 1,4-Dioxane	88	11.564	11.563	0.001	93	42789	1.00	0.8925	
62 Methyl methacrylate	41	11.634	11.632	0.002	85	199371	1.00	0.99	
63 Methylcyclohexane	83	12.065	12.063	0.002	88	176238	1.00	1.00	
64 4-Methyl-2-pentanone (MIBK)	43	12.518	12.517	0.001	97	379139	1.00	1.01	
65 cis-1,3-Dichloropropene	75	12.551	12.548	0.002	95	164512	1.00	0.99	
66 trans-1,3-Dichloropropene	75	13.262	13.261	0.001	92	139920	1.00	0.9861	
67 Toluene	91	13.381	13.381	0.000	93	348176	1.00	0.9820	
68 1,1,2-Trichloroethane	83	13.467	13.460	0.007	97	108656	1.00	0.9630	
69 2-Hexanone	58	13.877	13.878	-0.001	90	148380	1.00	0.9772	
70 n-Octane	85	14.098	14.096	0.002	98	112095	1.00	1.04	
71 Chlorodibromomethane	129	14.168	14.165	0.003	95	218891	1.00	0.9720	
72 Ethylene Dibromide	107	14.465	14.462	0.003	98	193516	1.00	0.9900	
73 Tetrachloroethene	129	14.540	14.538	0.002	93	125507	1.00	0.9788	
74 Chlorobenzene	112	15.425	15.423	0.002	93	277579	1.00	0.9761	
75 2,3-Dimethylheptane	43	15.457	15.455	0.002	92	533004	1.00	0.9714	
76 Ethylbenzene	91	15.716	15.718	-0.002	98	471263	1.00	0.9669	
77 m-Xylene & p-Xylene	91	15.883	15.881	0.002	95	701209	2.00	1.90	
78 n-Nonane	57	16.314	16.314	0.000	94	312166	1.00	0.9893	
79 Bromoform	173	16.325	16.323	0.002	97	243953	1.00	0.8740	
80 Styrene	104	16.347	16.346	0.001	96	265242	1.00	0.9828	
81 o-Xylene	91	16.406	16.406	0.000	98	378432	1.00	0.9706	
82 1,1,2,2-Tetrachloroethane	83	16.735	16.734	0.001	98	310901	1.00	0.9827	
83 1,2,3-Trichloropropane	110	16.897	16.895	0.002	91	82364	1.00	0.9538	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	16.999	16.998	0.001	96	556043	1.00	0.9655	
85 N-Propylbenzene	120	17.549	17.547	0.002	99	152207	1.00	0.9845	
86 2-Chlorotoluene	126	17.587	17.590	-0.003	96	142720	1.00	0.9519	
87 4-Ethyltoluene	105	17.706	17.704	0.002	98	558091	1.00	1.02	
88 1,3,5-Trimethylbenzene	120	17.781	17.782	-0.001	92	228846	1.00	0.9666	
89 Alpha Methyl Styrene	118	18.018	18.020	-0.002	89	230432	1.00	0.9793	
90 n-Decane	57	18.088	18.089	-0.001	85	425855	1.00	1.00	
91 tert-Butylbenzene	119	18.218	18.218	0.000	94	505499	1.00	0.9866	
92 1,2,4-Trimethylbenzene	105	18.229	18.232	-0.003	95	484388	1.00	1.00	
93 sec-Butylbenzene	105	18.493	18.494	-0.001	99	744352	1.00	1.01	
94 1,3-Dichlorobenzene	146	18.504	18.504	0.000	95	341120	1.00	0.9477	
95 Benzyl chloride	91	18.585	18.584	0.001	98	363757	1.00	0.9285	
96 1,4-Dichlorobenzene	146	18.595	18.596	-0.001	95	326790	1.00	0.9384	
97 4-Isopropyltoluene	119	18.660	18.662	-0.002	97	591170	1.00	1.04	
98 1,2,3-Trimethylbenzene	105	18.714	18.713	0.001	98	502468	1.00	0.9581	
99 Butylcyclohexane	83	18.773	18.773	0.000	85	413559	1.00	1.01	
100 2,3-Dihydroindene	117	18.962	18.961	0.001	94	467506	1.00	0.9495	
101 1,2-Dichlorobenzene	146	18.962	18.962	0.000	83	350911	1.00	0.9435	
102 Indene	116	19.091	19.093	-0.002	89	405611	1.00	0.9697	
103 n-Butylbenzene	91	19.108	19.106	0.002	97	586131	1.00	1.04	
104 Undecane	57	19.431	19.431	0.000	90	515581	1.00	1.05	
105 1,2-Dibromo-3-Chloropropane	157	19.577	19.577	0.000	89	196551	1.00	0.8938	
106 1,2,4,5-Tetramethylbenzene	119	19.873	19.873	0.000	98	580543	1.00	1.01	
107 Dodecane	57	20.488	20.489	-0.001	89	457806	1.00	0.8360	
108 1,2,4-Trichlorobenzene	180	20.671	20.672	-0.001	93	321510	1.00	0.9829	
109 Naphthalene	128	20.806	20.807	-0.001	99	598591	1.00	0.9738	
110 Hexachlorobutadiene	225	21.027	21.028	-0.001	88	351871	1.00	0.9452	
111 1,2,3-Trichlorobenzene	180	21.097	21.097	0.000	94	320569	1.00	0.8941	
112 2-Methylnaphthalene	142	21.836	21.834	0.002	99	184287	1.00	0.5572	
113 1-Methylnaphthalene	142	21.966	21.967	-0.001	99	299900	1.00	0.7251	
A 116 C8 Range	1	14.088	(14.050-14.147)		0	1385610	1.00	1.00	
S 117 Xylenes, Total	100				0		3.00	2.87	
S 118 1,2-Dichloroethene, Total	1				0		2.00	2.00	

Reagents:

40L6DQP_00019	Amount Added: 200.00	Units: mL	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

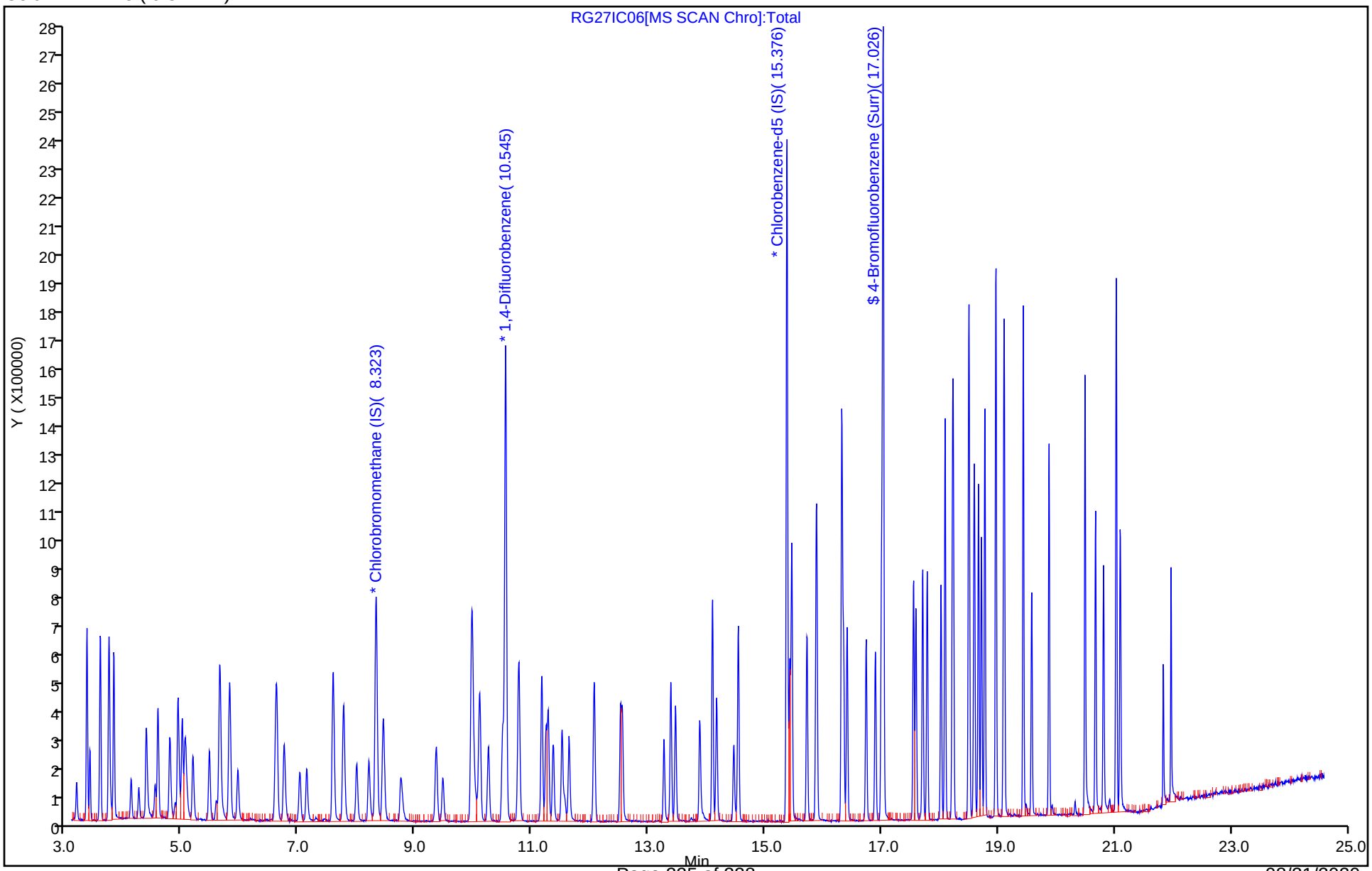
Report Date: 28-Jul-2020 16:48:00 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC06.D

Injection Date:	28-Jul-2020 05:24:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	IC L6			Worklist Smp#:	14
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

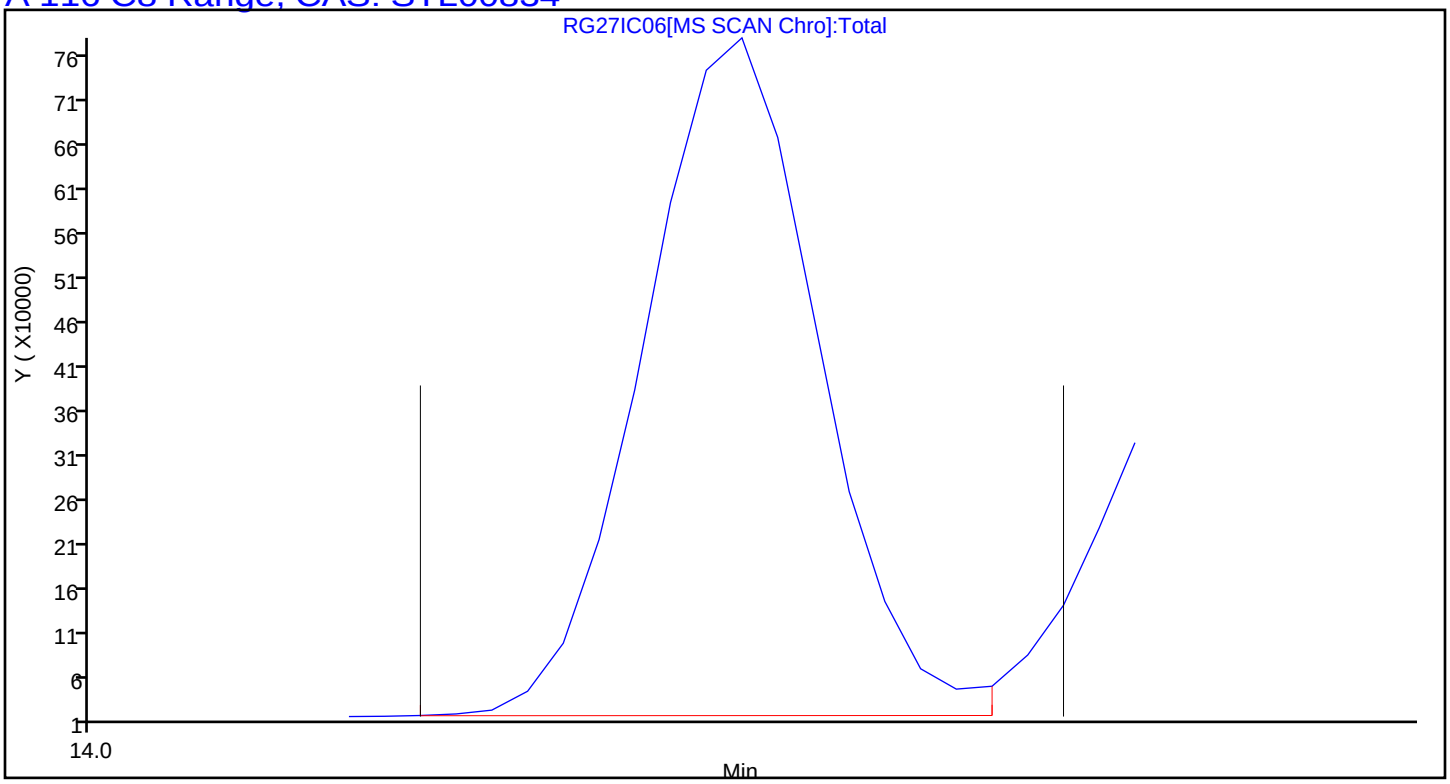


Report Date: 28-Jul-2020 16:48:00 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC06.D				
Injection Date:	28-Jul-2020 05:24:30	Instrument ID:	MR		
Lims ID:	IC L6				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	11	Worklist Smp#:	14
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 116 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC07.D
Lims ID: ICIS L7
Client ID:
Sample Type: ICIS Calib Level: 7
Inject. Date: 28-Jul-2020 06:29:30 ALS Bottle#: 12 Worklist Smp#: 15
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016116-015
Misc. Info.: 314608
Operator ID: HMT Instrument ID: MR
Sublist: chrom-MR_TO15*sub16

Method: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 28-Jul-2020 16:48:10 Calib Date: 28-Jul-2020 09:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC09R.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1014

First Level Reviewer: tajh Date: 28-Jul-2020 08:02:28

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.301	8.308	-0.007	90	195356	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.534	10.539	-0.005	96	1601225	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.371	15.375	-0.004	90	1324871	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.021	17.025	-0.004	95	822674	4.00	4.11	
6 Chlorodifluoromethane	51	3.335	3.343	-0.008	96	610022	2.00	2.13	
7 Propene	41	3.346	3.349	-0.003	99	404650	2.00	2.10	
8 Dichlorodifluoromethane	85	3.389	3.400	-0.011	99	432131	2.00	2.24	
9 Chloromethane	52	3.561	3.569	-0.008	98	108542	2.00	2.20	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.567	3.577	-0.010	89	416653	2.00	2.20	
11 Acetaldehyde	44	3.702	3.724	-0.022	97	728391	10.0	10.8	
12 Vinyl chloride	62	3.718	3.726	-0.008	99	297061	2.00	2.09	
13 Butane	43	3.799	3.808	-0.009	85	537514	2.00	2.11	
14 Butadiene	54	3.799	3.809	-0.010	66	263658	2.00	2.21	
15 Bromomethane	94	4.095	4.103	-0.008	97	217931	2.00	2.14	
16 Chloroethane	64	4.219	4.235	-0.016	89	130061	2.00	2.15	
17 Ethanol	31	4.338	4.364	-0.026	96	868482	10.0	11.2	
18 Vinyl bromide	106	4.500	4.515	-0.015	98	204321	2.00	2.12	
19 2-Methylbutane	43	4.548	4.561	-0.013	94	379028	2.00	2.01	
20 Trichlorofluoromethane	101	4.753	4.765	-0.012	98	489182	2.00	2.04	
21 Acrolein	56	4.769	4.779	-0.010	93	85469	2.00	2.05	
22 Acetonitrile	40	4.839	4.870	-0.031	95	118691	2.00	2.03	
23 Acetone	58	4.882	4.913	-0.031	99	390168	6.00	4.95	
24 Pentane	72	4.958	4.971	-0.013	94	37740	2.00	2.03	
25 Isopropyl alcohol	45	4.980	5.027	-0.047	93	1390680	6.00	5.78	
26 Ethyl ether	31	5.136	5.168	-0.032	90	346722	2.00	1.99	
27 1,1-Dichloroethene	96	5.427	5.444	-0.017	94	198031	2.00	1.88	
28 Acrylonitrile	53	5.551	5.572	-0.021	95	184217	2.00	2.06	
30 1,1,2-Trichloro-1,2,2-trifluoroe	101	5.605	5.622	-0.017	97	416266	2.00	1.94	
29 2-Methyl-2-propanol	59	5.562	5.629	-0.067	95	510711	2.00	2.12	
31 Methylene Chloride	84	5.772	5.788	-0.016	91	239056	2.00	2.07	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	5.788	5.802	-0.014	94	265148	2.00	1.91	
33 Carbon disulfide	76	5.923	5.938	-0.015	98	558390	2.00	1.98	
34 trans-1,2-Dichloroethene	96	6.570	6.580	-0.010	94	193997	2.00	1.95	
35 2-Methylpentane	43	6.586	6.600	-0.014	97	669518	2.00	1.91	
36 Methyl tert-butyl ether	73	6.705	6.747	-0.042	92	510185	2.00	1.96	
37 1,1-Dichloroethane	63	6.991	7.002	-0.011	98	441264	2.00	1.89	
38 Vinyl acetate	43	7.099	7.120	-0.021	100	787850	2.00	2.03	
39 2-Butanone (MEK)	72	7.546	7.583	-0.037	95	96950	2.00	1.96	
40 Hexane	56	7.562	7.575	-0.013	81	208092	2.00	1.97	
41 Isopropyl ether	45	7.730	7.761	-0.031	96	1053189	2.00	1.95	
42 cis-1,2-Dichloroethene	96	7.972	7.981	-0.009	98	216200	2.00	1.92	
43 Ethyl acetate	43	8.166	8.189	-0.023	98	715182	2.00	1.98	
44 Chloroform	83	8.317	8.326	-0.009	93	413702	2.00	1.93	
45 Tert-butyl ethyl ether	59	8.409	8.448	-0.039	97	802411	2.00	1.89	
46 Tetrahydrofuran	42	8.711	8.750	-0.039	92	354292	2.00	1.93	
47 1,1,1-Trichloroethane	97	9.331	9.348	-0.017	95	411611	2.00	1.85	
48 1,2-Dichloroethane	62	9.455	9.461	-0.006	94	306423	2.00	2.04	
50 Cyclohexane	69	9.941	9.954	-0.014	80	92688	2.00	2.00	
51 Benzene	78	9.951	9.958	-0.007	96	626098	2.00	1.96	
52 Carbon tetrachloride	117	9.973	9.980	-0.007	94	377305	2.00	1.86	
49 n-Butanol	31	9.946	9.970	-0.024	71	151551	2.00	2.08	
53 2,3-Dimethylpentane	71	10.081	10.094	-0.013	91	137406	2.00	1.98	
54 Thiophene	84	10.237	10.245	-0.008	95	356353	2.00	2.03	
55 Isooctane	57	10.755	10.766	-0.011	98	1305159	2.00	1.94	
56 n-Heptane	71	11.154	11.162	-0.008	95	210131	2.00	1.96	
57 1,2-Dichloropropane	63	11.229	11.235	-0.006	89	291387	2.00	1.98	
58 Trichloroethene	130	11.267	11.272	-0.005	95	273468	2.00	1.96	
59 Dibromomethane	93	11.348	11.357	-0.009	93	252570	2.00	1.98	
60 Dichlorobromomethane	83	11.504	11.510	-0.006	95	434191	2.00	2.00	
61 1,4-Dioxane	88	11.526	11.563	-0.037	92	107588	2.00	2.15	
62 Methyl methacrylate	41	11.618	11.632	-0.014	86	414367	2.00	1.97	
63 Methylcyclohexane	83	12.060	12.063	-0.003	85	368156	2.00	2.00	
64 4-Methyl-2-pentanone (MIBK)	43	12.491	12.517	-0.026	96	785359	2.00	2.00	
65 cis-1,3-Dichloropropene	75	12.540	12.548	-0.008	97	347671	2.00	2.01	
66 trans-1,3-Dichloropropene	75	13.257	13.261	-0.004	91	292083	2.00	2.01	
67 Toluene	91	13.375	13.381	-0.006	92	707352	2.00	1.95	
68 1,1,2-Trichloroethane	83	13.456	13.460	-0.004	96	230231	2.00	1.99	
69 2-Hexanone	58	13.861	13.878	-0.017	90	332776	2.00	2.14	
70 n-Octane	85	14.093	14.096	-0.003	98	217667	2.00	1.96	
71 Chlorodibromomethane	129	14.163	14.165	-0.002	96	464052	2.00	2.01	
72 Ethylene Dibromide	107	14.459	14.462	-0.003	98	400269	2.00	2.00	
73 Tetrachloroethene	129	14.535	14.538	-0.003	93	254548	2.00	1.94	
74 Chlorobenzene	112	15.419	15.423	-0.004	93	584619	2.00	2.01	
75 2,3-Dimethylheptane	43	15.452	15.455	-0.003	92	1094820	2.00	1.95	
76 Ethylbenzene	91	15.716	15.718	-0.002	98	968642	2.00	1.94	
77 m-Xylene & p-Xylene	91	15.878	15.881	-0.003	96	1485011	4.00	3.92	
78 n-Nonane	57	16.309	16.314	-0.005	95	643865	2.00	1.99	
79 Bromoform	173	16.320	16.323	-0.003	97	588832	2.00	2.06	
80 Styrene	104	16.341	16.346	-0.005	95	567479	2.00	2.05	
81 o-Xylene	91	16.406	16.406	0.000	98	786791	2.00	1.97	
82 1,1,2,2-Tetrachloroethane	83	16.730	16.734	-0.004	99	645943	2.00	1.99	
83 1,2,3-Trichloropropane	110	16.891	16.895	-0.004	92	172869	2.00	1.95	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	16.994	16.998	-0.004	97	1153514	2.00	1.95	
85 N-Propylbenzene	120	17.544	17.547	-0.003	99	324309	2.00	2.05	
86 2-Chlorotoluene	126	17.587	17.590	-0.003	97	303657	2.00	1.98	
87 4-Ethyltoluene	105	17.700	17.704	-0.004	98	1140462	2.00	2.04	
88 1,3,5-Trimethylbenzene	120	17.781	17.782	-0.001	92	489785	2.00	2.02	
89 Alpha Methyl Styrene	118	18.018	18.020	-0.002	88	510559	2.00	2.12	
90 n-Decane	57	18.088	18.089	-0.001	85	919474	2.00	2.11	
91 tert-Butylbenzene	119	18.218	18.218	0.000	94	1059433	2.00	2.02	
92 1,2,4-Trimethylbenzene	105	18.229	18.232	-0.003	96	1026613	2.00	2.07	
93 sec-Butylbenzene	105	18.493	18.494	-0.001	98	1551449	2.00	2.06	
94 1,3-Dichlorobenzene	146	18.504	18.504	0.000	96	749501	2.00	2.03	
95 Benzyl chloride	91	18.579	18.584	-0.005	97	864342	2.00	2.15	
96 1,4-Dichlorobenzene	146	18.590	18.596	-0.006	95	753519	2.00	2.11	
97 4-Isopropyltoluene	119	18.660	18.662	-0.002	97	1276463	2.00	2.18	
98 1,2,3-Trimethylbenzene	105	18.709	18.713	-0.005	98	1082775	2.00	2.01	
99 Butylcyclohexane	83	18.768	18.773	-0.005	85	871334	2.00	2.08	
100 2,3-Dihydroindene	117	18.962	18.961	0.001	95	1002703	2.00	1.99	
101 1,2-Dichlorobenzene	146	18.957	18.962	-0.005	87	767442	2.00	2.01	
102 Indene	116	19.091	19.093	-0.002	89	895514	2.00	2.09	
103 n-Butylbenzene	91	19.102	19.106	-0.004	98	1279727	2.00	2.22	
104 Undecane	57	19.431	19.431	0.000	91	1148890	2.00	2.27	
105 1,2-Dibromo-3-Chloropropane	157	19.577	19.577	0.000	91	496254	2.00	2.20	
106 1,2,4,5-Tetramethylbenzene	119	19.873	19.873	0.000	97	1265555	2.00	2.16	
107 Dodecane	57	20.488	20.489	-0.001	89	1192788	2.00	2.13	
108 1,2,4-Trichlorobenzene	180	20.671	20.672	-0.001	94	791917	2.00	2.36	
109 Naphthalene	128	20.806	20.807	-0.001	99	1488208	2.00	2.36	
110 Hexachlorobutadiene	225	21.027	21.028	-0.001	95	773986	2.00	2.03	
111 1,2,3-Trichlorobenzene	180	21.097	21.097	0.000	94	825449	2.00	2.25	
112 2-Methylnaphthalene	142	21.831	21.834	-0.003	99	709189	2.00	2.09	
113 1-Methylnaphthalene	142	21.965	21.967	-0.002	99	890639	2.00	2.10	
A 116 C8 Range	1	14.074	(14.033-14.141)		0	2780330	2.00	1.93	
S 117 Xylenes, Total	100				0		6.00	5.89	
S 118 1,2-Dichloroethene, Total	1				0		4.00	3.87	

Reagents:

40L7DQP_00019	Amount Added: 200.00	Units: mL	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

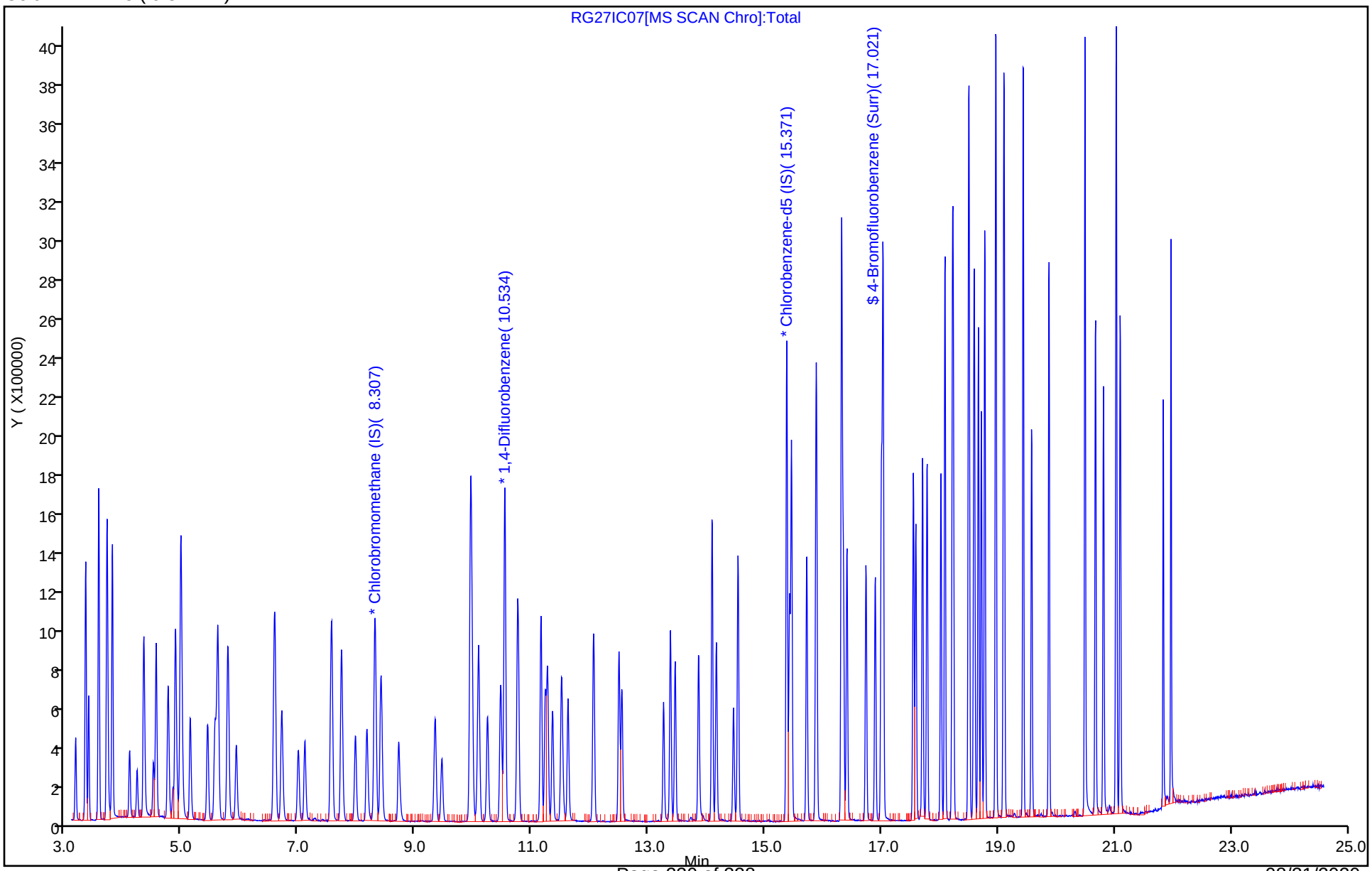
Report Date: 28-Jul-2020 16:48:11 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC07.D

Injection Date:	28-Jul-2020 06:29:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	ICIS L7			Worklist Smp#:	15
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

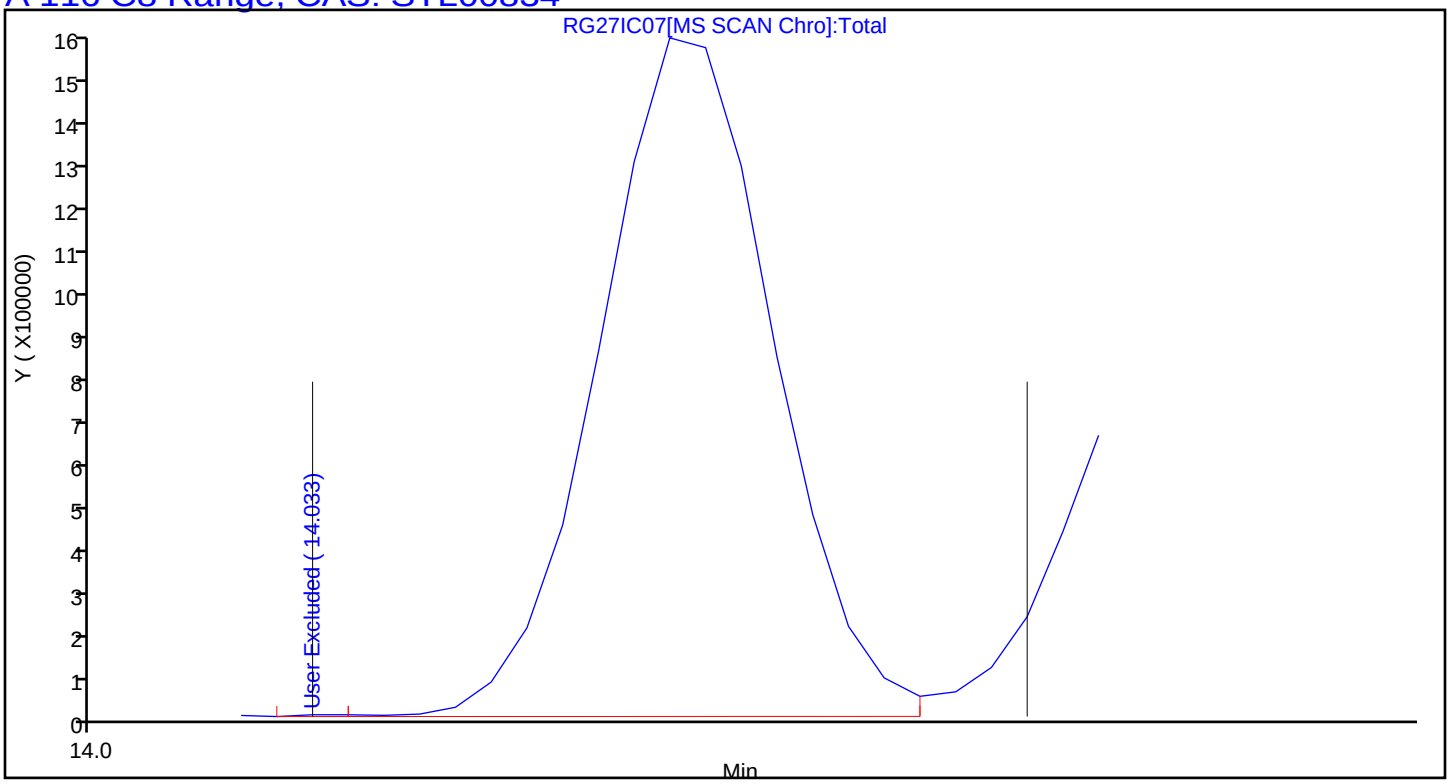


Report Date: 28-Jul-2020 16:48:11 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC07.D				
Injection Date:	28-Jul-2020 06:29:30	Instrument ID:	MR		
Lims ID:	ICIS L7				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	12	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 116 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC09R.D
Lims ID: IC L9
Client ID:
Sample Type: IC Calib Level: 9
Inject. Date: 28-Jul-2020 09:59:30 ALS Bottle#: 15 Worklist Smp#: 23
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016116-003
Misc. Info.: 314600
Operator ID: HMT Instrument ID: MR
Sublist: chrom-MR_TO15*sub16

Method: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 28-Jul-2020 16:48:23 Calib Date: 28-Jul-2020 09:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC09R.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1014

First Level Reviewer: tajh Date: 28-Jul-2020 10:39:24

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.323	8.308	0.015	89	220089	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.550	10.539	0.011	96	1776613	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.376	15.375	0.001	89	1561597	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.026	17.025	0.001	96	1027625	4.00	4.36	
6 Chlorodifluoromethane	51	3.346	3.343	0.003	96	2704427	8.00	8.40	
7 Propene	41	3.356	3.349	0.007	99	1420885	8.00	8.12	
8 Dichlorodifluoromethane	85	3.405	3.400	0.005	98	1988425	8.00	9.14	
9 Chloromethane	52	3.572	3.569	0.003	99	468576	8.00	8.42	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.577	3.577	0.000	94	1979144	8.00	9.29	
11 Acetaldehyde	44	3.723	3.724	-0.001	100	3200022	40.0	42.0	
12 Vinyl chloride	62	3.728	3.726	0.002	99	1321837	8.00	8.27	
13 Butane	43	3.809	3.808	0.001	85	2396125	8.00	8.33	
14 Butadiene	54	3.809	3.809	0.000	67	1175020	8.00	8.75	
15 Bromomethane	94	4.106	4.103	0.003	97	1012173	8.00	8.83	
16 Chloroethane	64	4.241	4.235	0.006	88	574110	8.00	8.44	
17 Ethanol	31	4.365	4.364	0.001	96	3582876	40.0	41.0	
18 Vinyl bromide	106	4.521	4.515	0.006	99	960416	8.00	8.85	
19 2-Methylbutane	43	4.564	4.561	0.003	93	1684402	8.00	7.93	
20 Trichlorofluoromethane	101	4.775	4.765	0.010	98	2275038	8.00	8.44	
21 Acrolein	56	4.791	4.779	0.012	94	423441	8.00	9.00	
22 Acetonitrile	40	4.861	4.870	-0.009	99	556254	8.00	8.46	
23 Acetone	58	4.899	4.913	-0.014	99	1678072	24.0	18.9	
24 Pentane	72	4.985	4.971	0.014	96	168144	8.00	8.04	
25 Isopropyl alcohol	45	5.006	5.027	-0.021	97	5903919	24.0	24.6	
26 Ethyl ether	31	5.147	5.168	-0.021	90	1511753	8.00	7.71	
27 1,1-Dichloroethene	96	5.454	5.444	0.010	94	926047	8.00	7.80	
28 Acrylonitrile	53	5.573	5.572	0.001	94	924290	8.00	9.18	
29 2-Methyl-2-propanol	59	5.583	5.629	-0.046	96	2254744	8.00	8.32	
30 1,1,2-Trichloro-1,2,2-trifluoroe	101	5.627	5.622	0.005	96	1917116	8.00	7.93	
31 Methylene Chloride	84	5.799	5.788	0.011	90	848449	8.00	8.41	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	5.815	5.802	0.013	95	1241566	8.00	7.94	
33 Carbon disulfide	76	5.945	5.938	0.007	98	2508957	8.00	7.90	
34 trans-1,2-Dichloroethene	96	6.597	6.580	0.017	94	905380	8.00	8.06	
35 2-Methylpentane	43	6.608	6.600	0.008	97	3042685	8.00	7.70	
36 Methyl tert-butyl ether	73	6.716	6.747	-0.031	93	2323660	8.00	7.94	
37 1,1-Dichloroethane	63	7.012	7.002	0.010	99	2013274	8.00	7.64	
38 Vinyl acetate	43	7.120	7.120	0.000	100	3866895	8.00	8.83	
39 2-Butanone (MEK)	72	7.562	7.583	-0.021	95	446445	8.00	8.00	
40 Hexane	56	7.584	7.575	0.009	85	947461	8.00	7.97	
41 Isopropyl ether	45	7.746	7.761	-0.015	96	4824702	8.00	7.94	
42 cis-1,2-Dichloroethene	96	7.988	7.981	0.007	98	977003	8.00	7.72	
43 Ethyl acetate	43	8.183	8.189	-0.006	97	3336777	8.00	8.19	
44 Chloroform	83	8.339	8.326	0.013	91	1887013	8.00	7.81	
45 Tert-butyl ethyl ether	59	8.420	8.448	-0.028	97	3734327	8.00	7.82	
46 Tetrahydrofuran	42	8.722	8.750	-0.028	91	1601129	8.00	7.75	
47 1,1,1-Trichloroethane	97	9.358	9.348	0.010	95	1922423	8.00	7.68	
48 1,2-Dichloroethane	62	9.471	9.461	0.010	94	1448028	8.00	8.69	
50 Cyclohexane	69	9.962	9.954	0.008	82	413070	8.00	8.01	
49 n-Butanol	31	9.940	9.970	-0.030	82	674603	8.00	8.36	
51 Benzene	78	9.967	9.958	0.009	96	2767807	8.00	7.82	
52 Carbon tetrachloride	117	9.989	9.980	0.009	93	1871799	8.00	8.32	
53 2,3-Dimethylpentane	71	10.102	10.094	0.008	91	626099	8.00	8.11	
54 Thiophene	84	10.259	10.245	0.014	95	1602525	8.00	8.22	
55 Isooctane	57	10.771	10.766	0.005	97	6079409	8.00	8.14	
56 n-Heptane	71	11.170	11.162	0.008	95	971980	8.00	8.15	
57 1,2-Dichloropropane	63	11.240	11.235	0.005	89	1302225	8.00	7.98	
58 Trichloroethene	130	11.283	11.272	0.011	95	1254193	8.00	8.09	
59 Dibromomethane	93	11.364	11.357	0.007	91	1167279	8.00	8.27	
60 Dichlorobromomethane	83	11.515	11.510	0.005	95	2013292	8.00	8.35	
61 1,4-Dioxane	88	11.531	11.563	-0.032	94	449229	8.00	8.10	
62 Methyl methacrylate	41	11.628	11.632	-0.004	85	1987185	8.00	8.53	
63 Methylcyclohexane	83	12.070	12.063	0.007	85	1647594	8.00	8.08	
64 4-Methyl-2-pentanone (MIBK)	43	12.496	12.517	-0.021	97	3692453	8.00	8.49	
65 cis-1,3-Dichloropropene	75	12.550	12.548	0.002	95	1644237	8.00	8.58	
66 trans-1,3-Dichloropropene	75	13.268	13.261	0.007	91	1507029	8.00	8.79	
67 Toluene	91	13.386	13.381	0.005	92	3300253	8.00	7.71	
68 1,1,2-Trichloroethane	83	13.467	13.460	0.007	97	1034912	8.00	7.59	
69 2-Hexanone	58	13.855	13.878	-0.023	89	1611422	8.00	8.79	
70 n-Octane	85	14.098	14.096	0.002	98	1050543	8.00	8.04	
71 Chlorodibromomethane	129	14.173	14.165	0.008	96	2257599	8.00	8.30	
72 Ethylene Dibromide	107	14.465	14.462	0.003	98	1975955	8.00	8.37	
73 Tetrachloroethene	129	14.540	14.538	0.002	93	1244049	8.00	8.03	
74 Chlorobenzene	112	15.425	15.423	0.002	92	2723295	8.00	7.93	
75 2,3-Dimethylheptane	43	15.457	15.455	0.002	92	5144670	8.00	7.76	
76 Ethylbenzene	91	15.721	15.718	0.003	98	4605232	8.00	7.82	
77 m-Xylene & p-Xylene	91	15.883	15.881	0.002	96	7316737	16.0	16.4	
78 n-Nonane	57	16.314	16.314	0.000	94	3305943	8.00	8.67	
79 Bromoform	173	16.325	16.323	0.002	97	3305834	8.00	9.81	
80 Styrene	104	16.347	16.346	0.001	96	2849656	8.00	8.74	
81 o-Xylene	91	16.406	16.406	0.000	99	3851012	8.00	8.18	
82 1,1,2,2-Tetrachloroethane	83	16.735	16.734	0.001	99	3201216	8.00	8.38	
83 1,2,3-Trichloropropane	110	16.897	16.895	0.002	92	880055	8.00	8.44	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	16.999	16.998	0.001	97	5846094	8.00	8.40	
85 N-Propylbenzene	120	17.549	17.547	0.002	99	1661180	8.00	8.90	
86 2-Chlorotoluene	126	17.592	17.590	0.002	98	1496836	8.00	8.27	
87 4-Ethyltoluene	105	17.706	17.704	0.002	99	6130590	8.00	9.30	
88 1,3,5-Trimethylbenzene	120	17.781	17.782	-0.001	92	2451651	8.00	8.57	
89 Alpha Methyl Styrene	118	18.018	18.020	-0.002	88	2686630	8.00	9.45	
90 n-Decane	57	18.088	18.089	-0.001	86	4739206	8.00	9.22	
91 tert-Butylbenzene	119	18.218	18.218	0.000	94	5571641	8.00	9.00	
92 1,2,4-Trimethylbenzene	105	18.234	18.232	0.002	96	5395091	8.00	9.23	
93 sec-Butylbenzene	105	18.498	18.494	0.004	99	8177611	8.00	9.22	
94 1,3-Dichlorobenzene	146	18.504	18.504	0.000	95	4224922	8.00	9.72	
95 Benzyl chloride	91	18.584	18.584	0.000	98	4705628	8.00	9.94	
96 1,4-Dichlorobenzene	146	18.595	18.596	-0.001	97	4163245	8.00	9.90	
97 4-Isopropyltoluene	119	18.665	18.662	0.003	97	6631232	8.00	9.63	
98 1,2,3-Trimethylbenzene	105	18.714	18.713	0.001	99	5640889	8.00	8.91	
99 Butylcyclohexane	83	18.773	18.773	0.000	85	4320742	8.00	8.76	
101 1,2-Dichlorobenzene	146	18.962	18.962	0.000	86	4225696	8.00	9.41	
100 2,3-Dihydroindene	117	18.962	18.961	0.001	93	5386129	8.00	9.06	
102 Indene	116	19.097	19.093	0.004	89	4821815	8.00	9.54	
103 n-Butylbenzene	91	19.108	19.106	0.002	98	6637730	8.00	9.75	
104 Undecane	57	19.431	19.431	0.000	91	5983015	8.00	10.0	
105 1,2-Dibromo-3-Chloropropane	157	19.577	19.577	0.000	92	2650514	8.00	9.98	
106 1,2,4,5-Tetramethylbenzene	119	19.873	19.873	0.000	98	6677711	8.00	9.66	
107 Dodecane	57	20.488	20.489	-0.001	89	6484922	8.00	9.80	
108 1,2,4-Trichlorobenzene	180	20.671	20.672	-0.001	94	4606294	8.00	11.7	
109 Naphthalene	128	20.806	20.807	-0.001	99	7509973	8.00	10.1	
110 Hexachlorobutadiene	225	21.027	21.028	-0.001	95	4357579	8.00	9.69	
111 1,2,3-Trichlorobenzene	180	21.097	21.097	0.000	94	4781136	8.00	11.0	
112 2-Methylnaphthalene	142	21.836	21.834	0.002	99	5019369	8.00	12.6	
113 1-Methylnaphthalene	142	21.965	21.967	-0.002	99	5357267	8.00	10.7	
A 116 C8 Range	1	14.093	(14.049-14.147)		0	13159790	8.00	8.22	
S 117 Xylenes, Total	100				0		24.0	24.6	
S 118 1,2-Dichloroethene, Total	1				0		16.0	15.8	

Reagents:

40L10DQP_00019	Amount Added: 100.00	Units: mL	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

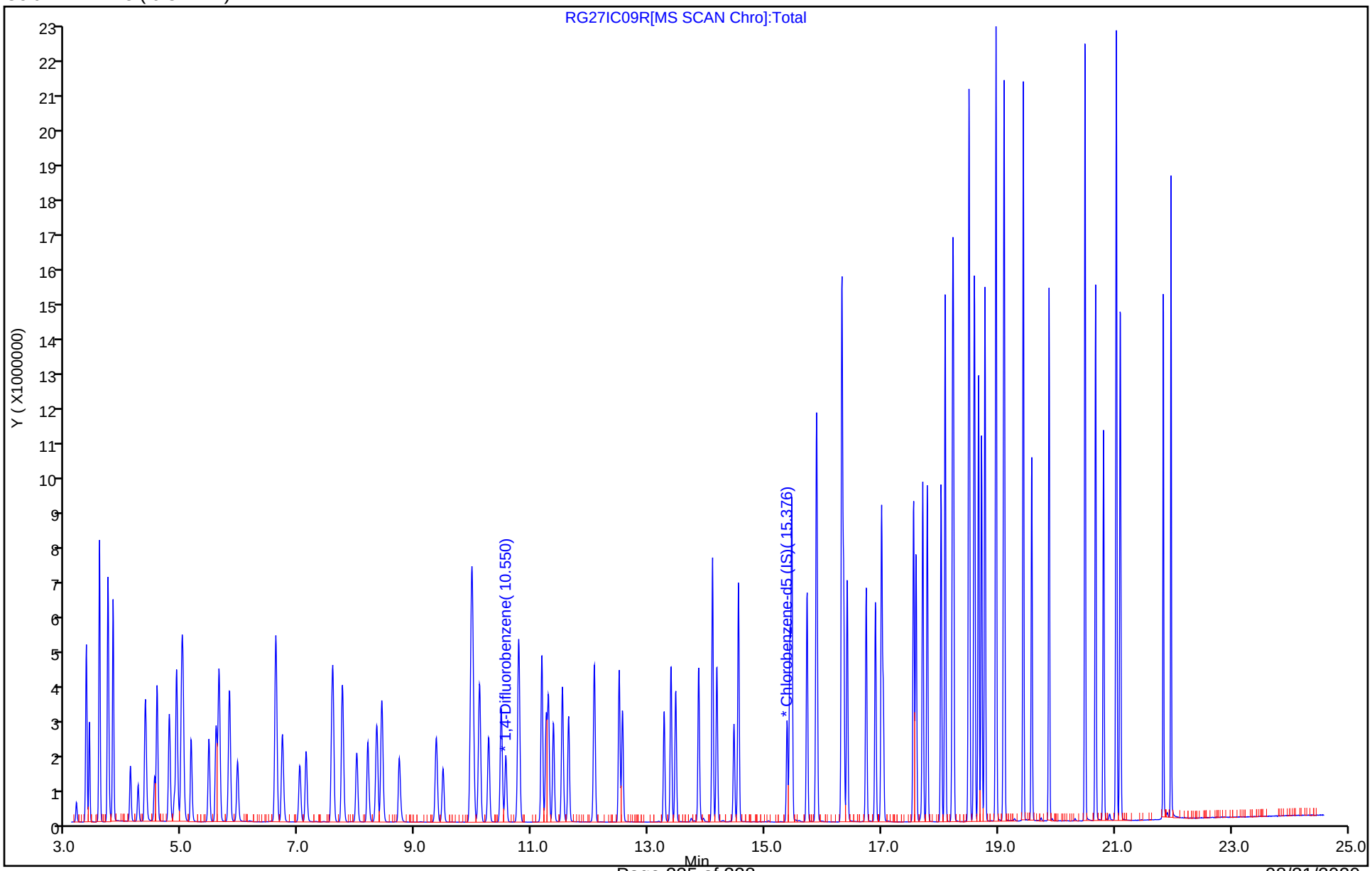
Report Date: 28-Jul-2020 16:48:24 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC09R.D

Injection Date:	28-Jul-2020 09:59:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	IC L9			Worklist Smp#:	23
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

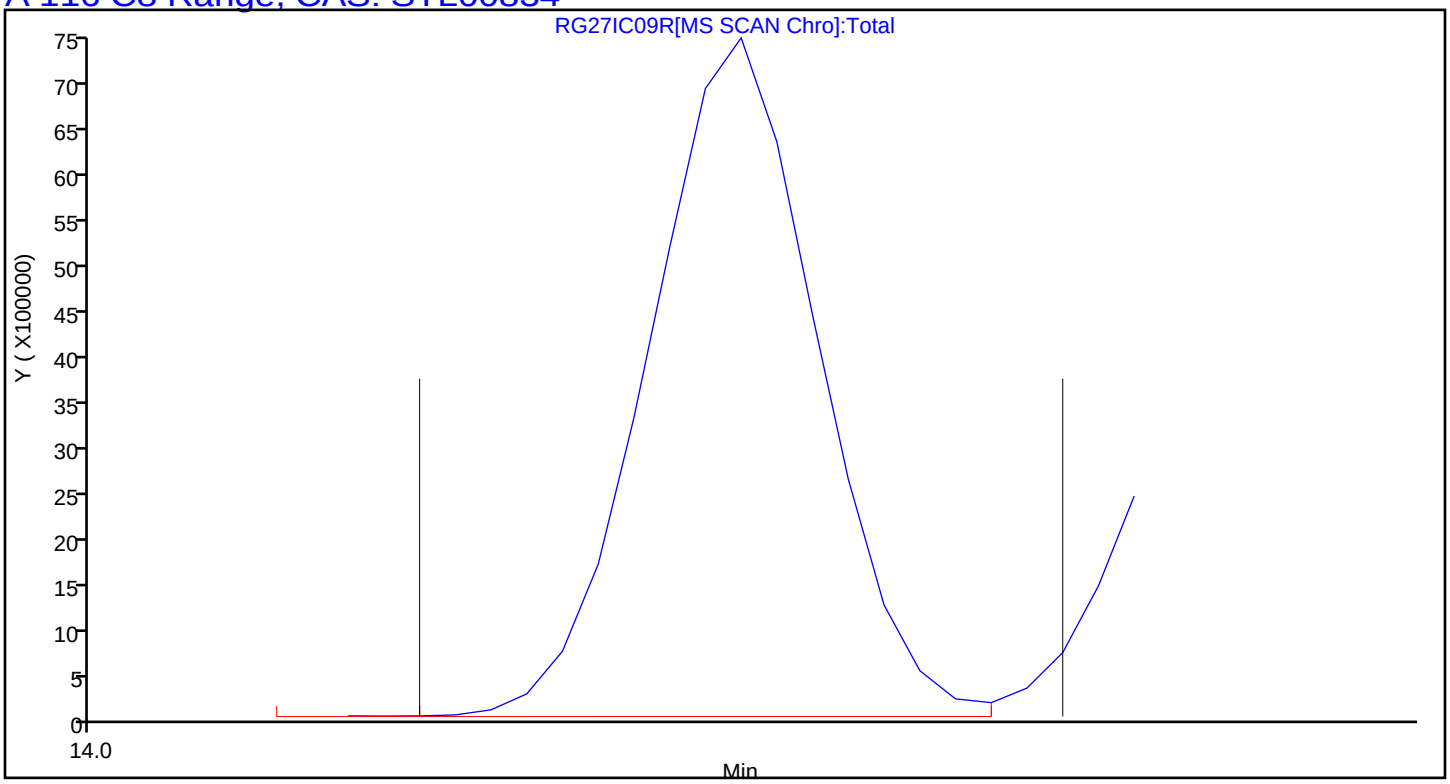


Report Date: 28-Jul-2020 16:48:24 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC09R.D				
Injection Date:	28-Jul-2020 09:59:30	Instrument ID:	MR		
Lims ID:	IC L9				
Client ID:					
Operator ID:	HMT	ALS Bottle#:	15	Worklist Smp#:	23
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 116 C8 Range, CAS: STL00834



FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20065-1

SDG No.:

Lab Sample ID: ICV 140-41058/16 Calibration Date: 07/16/2020 00:19

Instrument ID: MG Calib Start Date: 07/15/2020 12:53

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 07/15/2020 22:02

Lab File ID: GG15ICV.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorodifluoromethane	Ave	4.066	3.833		1.89	2.00	-5.7	35.0
Propene	Lin2		2.718		1.69	2.00	-15.3	35.0
Dichlorodifluoromethane	Ave	7.294	7.223		1.98	2.00	-1.0	35.0
Chloromethane	Ave	0.6957	0.6911		1.99	2.00	-0.7	35.0
1,2-Dichloro-1,1,2,2-tetrafluoroethane	Ave	3.778	3.821		2.02	2.00	1.1	35.0
Acetaldehyde	Ave	0.8841	0.5855		6.62	10.0	-33.8	35.0
Vinyl chloride	Ave	2.734	2.772		2.03	2.00	1.4	35.0
1,3-Butadiene	Ave	1.931	1.886		1.95	2.00	-2.3	35.0
Butane	Ave	3.773	3.836		2.03	2.00	1.7	35.0
Bromomethane	Ave	2.282	2.394		2.10	2.00	4.9	35.0
Chloroethane	Ave	1.315	1.363		2.07	2.00	3.7	35.0
Ethanol	QuaF		0.5205		7.35	10.0	-26.5	35.0
Vinyl bromide	Ave	1.991	2.222		2.23	2.00	11.6	35.0
2-Methylbutane	Ave	2.431	2.423		1.99	2.00	-0.3	35.0
Trichlorofluoromethane	Ave	7.169	7.372		2.06	2.00	2.8	35.0
Acrolein	Ave	0.4629	0.4401		1.90	2.00	-4.9	35.0
Acetonitrile	Ave	0.6823	0.4577		1.34	2.00	-32.9	35.0
Acetone	Ave	0.8520	0.5742		1.35	2.00	-32.6	35.0
Pentane	Ave	0.4500	0.4771		2.12	2.00	6.0	35.0
Isopropyl alcohol	Ave	2.098	1.983		1.89	2.00	-5.5	35.0
Ethyl ether	Ave	1.612	1.210		1.50	2.00	-25.0	35.0
1,1-Dichloroethene	Ave	1.873	2.040		2.18	2.00	8.9	35.0
Acrylonitrile	Ave	1.221	0.997		1.63	2.00	-18.3	35.0
tert-Butyl alcohol	Ave	3.226	2.749		1.70	2.00	-14.8	35.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	4.185	4.514		2.16	2.00	7.9	35.0
Methylene Chloride	Lin2		2.819		2.24	2.00	12.1	35.0
3-Chloropropene	Ave	1.897	2.044		2.16	2.00	7.8	35.0
Carbon disulfide	Ave	6.333	6.767		2.14	2.00	6.9	35.0
trans-1,2-Dichloroethene	Ave	2.088	2.196		2.10	2.00	5.2	35.0
2-Methylpentane	Ave	5.071	4.708		1.86	2.00	-7.2	35.0
Methyl tert-butyl ether	Ave	5.832	4.578		1.57	2.00	-21.5	35.0
1,1-Dichloroethane	Ave	4.609	4.493		1.95	2.00	-2.5	35.0
Vinyl acetate	Ave	4.525	3.605		1.59	2.00	-20.3	35.0
2-Butanone (MEK)	Ave	0.9724	0.6598		1.36	2.00	-32.1	35.0
Hexane	Ave	1.821	1.780		1.96	2.00	-2.2	35.0
Isopropyl ether	Ave	6.234	4.719		1.51	2.00	-24.3	35.0
cis-1,2-Dichloroethene	Ave	2.123	2.190		2.06	2.00	3.2	35.0
Ethyl acetate	Ave	3.913	2.552		1.30	2.00	-34.8	35.0
Chloroform	Ave	5.316	5.166		1.94	2.00	-2.8	35.0
Tert-butyl ethyl ether	Ave	6.322	4.491		1.42	2.00	-29.0	35.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20065-1

SDG No.:

Lab Sample ID: ICV 140-41058/16 Calibration Date: 07/16/2020 00:19

Instrument ID: MG Calib Start Date: 07/15/2020 12:53

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 07/15/2020 22:02

Lab File ID: GG15ICV.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Tetrahydrofuran	Ave	2.217	1.554		1.40	2.00	-29.9	35.0
1,1,1-Trichloroethane	Ave	5.735	5.801		2.02	2.00	1.1	35.0
1,2-Dichloroethane	Ave	0.4421	0.4377		1.98	2.00	-1.0	35.0
Benzene	Ave	0.8250	0.8438		2.05	2.00	2.3	35.0
Cyclohexane	Ave	0.1456	0.1646		2.26	2.00	13.0	35.0
1-Butanol	Ave	0.0777	0.0707		1.82	2.00	-8.9	35.0
Carbon tetrachloride	Ave	0.5694	0.7218		2.54	2.00	26.8	35.0
2,3-Dimethylpentane	Ave	0.2132	0.2231		2.09	2.00	4.7	35.0
Thiophene	Ave	0.4369	0.4488		2.05	2.00	2.7	35.0
2,2,4-Trimethylpentane	Ave	1.396	1.470		2.11	2.00	5.3	35.0
Heptane	Ave	0.3130	0.3265		2.09	2.00	4.3	35.0
1,2-Dichloropropane	Ave	0.3110	0.2813		1.81	2.00	-9.6	35.0
Trichloroethene	Ave	0.2794	0.3111		2.23	2.00	11.3	35.0
Dibromomethane	Ave	0.3273	0.3404		2.08	2.00	4.0	35.0
Bromodichloromethane	Ave	0.5684	0.6516		2.29	2.00	14.6	35.0
1,4-Dioxane	Ave	0.0936	0.0780		1.67	2.00	-16.7	35.0
Methyl methacrylate	Ave	0.2880	0.2077		1.44	2.00	-27.9	35.0
Methylcyclohexane	Lin1		0.6795		2.64	2.00	32.1	35.0
4-Methyl-2-pentanone (MIBK)	Ave	0.4999	0.3856		1.54	2.00	-22.9	35.0
cis-1,3-Dichloropropene	Ave	0.4314	0.4527		2.10	2.00	4.9	35.0
trans-1,3-Dichloropropene	Ave	0.4136	0.3876		1.87	2.00	-6.3	35.0
Toluene	Ave	0.8679	0.7664		1.77	2.00	-11.7	35.0
1,1,2-Trichloroethane	Ave	0.2639	0.2344		1.78	2.00	-11.2	35.0
2-Hexanone	Ave	0.2604	0.1972		1.51	2.00	-24.3	35.0
Octane	Ave	0.3177	0.3033		1.91	2.00	-4.5	35.0
Dibromochloromethane	Ave	0.4615	0.4556		1.97	2.00	-1.3	35.0
1,2-Dibromoethane (EDB)	Ave	0.4093	0.3872		1.89	2.00	-5.4	35.0
Tetrachloroethene	Ave	0.2968	0.2814		1.90	2.00	-5.2	35.0
Chlorobenzene	Ave	0.6259	0.5624		1.80	2.00	-10.2	35.0
2,3-Dimethylheptane	Ave	0.997	0.7519		1.51	2.00	-24.6	35.0
Ethylbenzene	Ave	1.140	0.9474		1.66	2.00	-16.9	35.0
m-Xylene & p-Xylene	Ave	0.9068	0.7467		3.29	4.00	-17.7	35.0
Nonane	Ave	0.6196	0.5061		1.63	2.00	-18.3	35.0
Bromoform	Ave	0.3526	0.3427		1.94	2.00	-2.8	35.0
Styrene	Ave	0.5322	0.4831		1.82	2.00	-9.2	35.0
o-Xylene	Ave	0.9594	0.7707		1.61	2.00	-19.7	35.0
1,1,2,2-Tetrachloroethane	Ave	0.6385	0.4828		1.51	2.00	-24.4	35.0
1,2,3-Trichloropropane	Ave	0.1876	0.1427		1.52	2.00	-23.9	35.0
Isopropylbenzene	Ave	1.219	0.9487		1.56	2.00	-22.2	35.0
Propylbenzene	Ave	0.3038	0.2343		1.54	2.00	-22.9	35.0
2-Chlorotoluene	Ave	0.2797	0.2331		1.67	2.00	-16.6	35.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20065-1

SDG No.:

Lab Sample ID: ICV 140-41058/16 Calibration Date: 07/16/2020 00:19

Instrument ID: MG Calib Start Date: 07/15/2020 12:53

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 07/15/2020 22:02

Lab File ID: GG15ICV.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Ethyltoluene	Ave	1.174	0.8352		1.42	2.00	-28.9	35.0
1,3,5-Trimethylbenzene	Ave	0.4567	0.3744		1.64	2.00	-18.0	35.0
Alpha Methyl Styrene	Ave	0.3800	0.3188		1.68	2.00	-16.1	35.0
Decane	Ave	0.7291	0.5523		1.52	2.00	-24.2	35.0
tert-Butylbenzene	Ave	0.9907	0.7557		1.53	2.00	-23.7	35.0
1,2,4-Trimethylbenzene	Ave	1.056	0.7573		1.43	2.00	-28.3	35.0
sec-Butylbenzene	Ave	1.528	1.077		1.41	2.00	-29.5	35.0
1,3-Dichlorobenzene	Ave	0.5469	0.4565		1.67	2.00	-16.5	35.0
Benzyl chloride	Ave	0.8304	0.6937		1.67	2.00	-16.5	35.0
1,4-Dichlorobenzene	Ave	0.5536	0.4549		1.64	2.00	-17.8	35.0
4-Isopropyltoluene	Ave	1.180	0.8315		1.41	2.00	-29.5	35.0
1,2,3-Trimethylbenzene	QuaF		0.5611		1.34	2.00	-33.0	35.0
Butylcyclohexane	Ave	0.9465	0.6987		1.48	2.00	-26.2	35.0
1,2-Dichlorobenzene	Ave	0.5575	0.4457		1.60	2.00	-20.1	35.0
Indane	Ave	0.8447	0.6550		1.55	2.00	-22.5	35.0
Indene	Ave	0.7215	0.4887		1.35	2.00	-32.3	35.0
Butylbenzene	Ave	1.334	0.9504		1.42	2.00	-28.8	35.0
Undecane	Ave	0.7884	0.5534		1.40	2.00	-29.8	35.0
1,2-Dibromo-3-Chloropropane	Ave	0.2172	0.1556		1.43	2.00	-28.4	35.0
1,2,4,5-Tetramethylbenzene	Ave	1.038	0.7377		1.42	2.00	-28.9	35.0
Dodecane	Ave	0.6760	0.4892		1.45	2.00	-27.6	35.0
1,2,4-Trichlorobenzene	Ave	0.4115	0.3560		1.73	2.00	-13.5	35.0
Naphthalene	Ave	1.059	0.8945		1.69	2.00	-15.5	35.0
Hexachlorobutadiene	Ave	0.4832	0.3430		1.42	2.00	-29.0	35.0
1,2,3-Trichlorobenzene	Ave	0.3927	0.3707		1.89	2.00	-5.6	35.0
2-Methylnaphthalene	Ave	0.6128	0.5309		1.73	2.00	-13.4	50.0
1-Methylnaphthalene	Ave	0.7292	0.5494		1.51	2.00	-24.7	50.0
4-Bromofluorobenzene (Surr)	Ave	0.8130	0.8088		3.98	4.00	-0.5	35.0

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15ICV.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 16-Jul-2020 00:19:30 ALS Bottle#: 6 Worklist Smp#: 16
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016031-016
Misc. Info.: S119
Operator ID: HMT Instrument ID: MG
Sublist:

Method: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 17-Jul-2020 11:00:37 Calib Date: 15-Jul-2020 22:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1015

First Level Reviewer: barlozhetskayaa Date: 17-Jul-2020 11:03:30

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.838	8.838	0.000	96	205175	4.00	4.00	
* 2 1,4-Difluorobenzene	114	11.022	11.022	0.000	96	1591539	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.751	15.751	0.000	91	1621760	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.396	17.396	0.000	82	1311615	4.00	3.98	
6 Chlorodifluoromethane	51	3.705	3.705	0.000	96	393192	2.00	1.89	
7 Propene	41	3.716	3.716	0.000	99	278840	2.00	1.69	
8 Dichlorodifluoromethane	85	3.764	3.764	0.000	100	741025	2.00	1.98	
9 Chloromethane	52	3.947	3.947	0.000	98	70903	2.00	1.99	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.953	3.953	0.000	96	392015	2.00	2.02	
11 Acetaldehyde	44	4.104	4.104	0.000	97	300349	10.0	6.62	
12 Vinyl chloride	62	4.120	4.120	0.000	99	284327	2.00	2.03	
13 Butane	43	4.206	4.206	0.000	86	393561	2.00	2.03	
14 Butadiene	54	4.206	4.206	0.000	65	193501	2.00	1.95	
15 Bromomethane	94	4.530	4.530	0.000	97	245564	2.00	2.10	
16 Chloroethane	64	4.670	4.670	0.000	99	139847	2.00	2.07	
17 Ethanol	31	4.772	4.778	-0.006	98	267000	10.0	7.35	
18 Vinyl bromide	106	4.967	4.972	-0.005	98	227965	2.00	2.23	
19 2-Methylbutane	43	5.021	5.020	0.001	90	248582	2.00	1.99	
20 Trichlorofluoromethane	101	5.242	5.242	0.000	99	756305	2.00	2.06	
21 Acrolein	56	5.247	5.252	-0.005	93	45150	2.00	1.90	
22 Acetonitrile	40	5.312	5.317	-0.005	98	46955	2.00	1.34	
23 Acetone	58	5.371	5.371	0.000	98	58909	2.00	1.35	
24 Pentane	72	5.463	5.463	0.000	99	48949	2.00	2.12	
25 Isopropyl alcohol	45	5.473	5.468	0.005	92	203435	2.00	1.89	
26 Ethyl ether	31	5.635	5.635	0.000	90	124095	2.00	1.50	
27 1,1-Dichloroethene	96	5.948	5.948	0.000	94	209325	2.00	2.18	
28 Acrylonitrile	53	6.045	6.050	-0.005	96	102283	2.00	1.63	
30 2-Methyl-2-propanol	59	6.077	6.077	0.000	94	282002	2.00	1.70	
29 1,1,2-Trichloro-1,2,2-trifluoroe	101	6.126	6.126	0.000	91	463111	2.00	2.16	
31 Methylene Chloride	84	6.293	6.293	0.000	94	289149	2.00	2.24	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.309	6.309	0.000	99	209740	2.00	2.16	
33 Carbon disulfide	76	6.455	6.455	0.000	98	694247	2.00	2.14	
34 trans-1,2-Dichloroethene	96	7.102	7.102	0.000	96	225320	2.00	2.10	
35 2-Methylpentane	43	7.124	7.124	0.000	93	482963	2.00	1.86	
36 Methyl tert-butyl ether	73	7.237	7.237	0.000	96	469641	2.00	1.57	
37 1,1-Dichloroethane	63	7.523	7.523	0.000	100	460904	2.00	1.95	
38 Vinyl acetate	43	7.630	7.630	0.000	100	369821	2.00	1.59	
39 2-Butanone (MEK)	72	8.078	8.078	0.000	98	67685	2.00	1.36	
40 Hexane	56	8.100	8.105	-0.005	92	182656	2.00	1.96	
41 Isopropyl ether	45	8.267	8.267	0.000	96	484158	2.00	1.51	
42 cis-1,2-Dichloroethene	96	8.504	8.509	-0.005	98	224708	2.00	2.06	
43 Ethyl acetate	43	8.698	8.698	0.000	99	261819	2.00	1.30	
44 Chloroform	83	8.849	8.854	-0.005	97	530002	2.00	1.94	
45 Tert-butyl ethyl ether	59	8.946	8.946	0.000	95	460733	2.00	1.42	
46 Tetrahydrofuran	42	9.259	9.259	0.000	91	159417	2.00	1.40	
47 1,1,1-Trichloroethane	97	9.879	9.879	0.000	95	595076	2.00	2.02	
48 1,2-Dichloroethane	62	9.987	9.987	0.000	99	348337	2.00	1.98	
51 n-Butanol	31	10.488	10.483	0.005	67	56291	2.00	1.82	
49 Cyclohexane	69	10.483	10.483	0.000	94	130986	2.00	2.26	
50 Benzene	78	10.478	10.483	-0.005	97	671505	2.00	2.05	
52 Carbon tetrachloride	117	10.505	10.505	0.000	97	574416	2.00	2.54	
53 2,3-Dimethylpentane	71	10.602	10.602	0.000	90	177573	2.00	2.09	
54 Thiophene	84	10.753	10.753	0.000	95	357103	2.00	2.05	
55 Isooctane	57	11.243	11.243	0.000	98	1169469	2.00	2.11	
56 n-Heptane	71	11.621	11.621	0.000	89	259839	2.00	2.09	
57 1,2-Dichloropropane	63	11.696	11.696	0.000	89	223821	2.00	1.81	
58 Trichloroethene	130	11.734	11.739	-0.005	92	247587	2.00	2.23	
59 Dibromomethane	93	11.815	11.820	-0.005	87	270859	2.00	2.08	
60 Dichlorobromomethane	83	11.966	11.966	0.000	98	518522	2.00	2.29	
61 1,4-Dioxane	88	11.993	11.987	0.006	92	62034	2.00	1.67	
62 Methyl methacrylate	41	12.063	12.063	0.000	96	165310	2.00	1.44	
63 Methylcyclohexane	83	12.505	12.505	0.000	96	540749	2.00	2.64	
64 4-Methyl-2-pentanone (MIBK)	43	12.915	12.915	0.000	97	306858	2.00	1.54	
65 cis-1,3-Dichloropropene	75	12.963	12.963	0.000	92	360240	2.00	2.10	
66 trans-1,3-Dichloropropene	75	13.659	13.659	0.000	95	314315	2.00	1.87	
67 Toluene	91	13.783	13.783	0.000	94	621487	2.00	1.77	
68 1,1,2-Trichloroethane	83	13.859	13.859	0.000	97	190100	2.00	1.78	
69 2-Hexanone	58	14.252	14.252	0.000	95	159893	2.00	1.51	
70 n-Octane	85	14.473	14.473	0.000	92	245930	2.00	1.91	
71 Chlorodibromomethane	129	14.560	14.560	0.000	97	369464	2.00	1.97	
72 Ethylene Dibromide	107	14.851	14.851	0.000	98	313964	2.00	1.89	
73 Tetrachloroethene	129	14.926	14.926	0.000	90	228180	2.00	1.90	
75 Chlorobenzene	112	15.800	15.800	0.000	88	456000	2.00	1.80	
74 2,3-Dimethylheptane	43	15.821	15.821	0.000	93	609720	2.00	1.51	
78 Ethylbenzene	91	16.091	16.091	0.000	99	768256	2.00	1.66	
79 m-Xylene & p-Xylene	91	16.253	16.253	0.000	100	1210911	4.00	3.29	
80 n-Nonane	57	16.673	16.673	0.000	90	410373	2.00	1.63	
81 Bromoform	173	16.700	16.700	0.000	93	277923	2.00	1.94	
82 Styrene	104	16.717	16.717	0.000	96	391769	2.00	1.82	
83 o-Xylene	91	16.776	16.776	0.000	97	624929	2.00	1.61	
84 1,1,2,2-Tetrachloroethane	83	17.099	17.099	0.000	99	391498	2.00	1.51	
85 1,2,3-Trichloropropane	110	17.256	17.261	-0.005	99	115679	2.00	1.52	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
86 Isopropylbenzene	105	17.364	17.364	0.000	98	769264	2.00	1.56	
87 N-Propylbenzene	120	17.908	17.903	0.005	98	189953	2.00	1.54	
88 2-Chlorotoluene	126	17.951	17.946	0.005	96	189028	2.00	1.67	
89 4-Ethyltoluene	105	18.054	18.054	0.000	98	677208	2.00	1.42	
90 1,3,5-Trimethylbenzene	120	18.129	18.129	0.000	91	303571	2.00	1.64	
92 Alpha Methyl Styrene	118	18.356	18.356	0.000	84	258485	2.00	1.68	
93 n-Decane	57	18.415	18.421	-0.006	92	447835	2.00	1.52	
94 tert-Butylbenzene	119	18.550	18.550	0.000	88	612808	2.00	1.53	
95 1,2,4-Trimethylbenzene	105	18.566	18.566	0.000	96	614071	2.00	1.43	
96 sec-Butylbenzene	105	18.820	18.820	0.000	98	872997	2.00	1.41	
97 1,3-Dichlorobenzene	146	18.830	18.836	-0.006	95	370134	2.00	1.67	
98 Benzyl chloride	91	18.906	18.906	0.000	97	562482	2.00	1.67	
99 1,4-Dichlorobenzene	146	18.922	18.922	0.000	89	368880	2.00	1.64	
100 4-Isopropyltoluene	119	18.981	18.981	0.000	96	674222	2.00	1.41	
101 1,2,3-Trimethylbenzene	105	19.035	19.035	0.000	99	455006	2.00	1.34	
102 Butylcyclohexane	83	19.089	19.089	0.000	94	566531	2.00	1.48	
103 2,3-Dihydroindene	117	19.278	19.278	0.000	92	531098	2.00	1.55	
104 1,2-Dichlorobenzene	146	19.278	19.278	0.000	80	361439	2.00	1.60	
106 Indene	116	19.407	19.407	0.000	89	396294	2.00	1.35	
105 n-Butylbenzene	91	19.413	19.413	0.000	97	770646	2.00	1.42	
107 Undecane	57	19.726	19.725	0.001	95	448724	2.00	1.40	
108 1,2-Dibromo-3-Chloropropane	157	19.876	19.876	0.000	88	126174	2.00	1.43	
109 1,2,4,5-Tetramethylbenzene	119	20.162	20.162	0.000	95	598182	2.00	1.42	
110 Dodecane	57	20.777	20.777	0.000	96	396706	2.00	1.45	
111 1,2,4-Trichlorobenzene	180	20.971	20.971	0.000	92	288678	2.00	1.73	
112 Naphthalene	128	21.111	21.111	0.000	99	725335	2.00	1.69	
113 Hexachlorobutadiene	225	21.322	21.322	0.000	93	278129	2.00	1.42	
114 1,2,3-Trichlorobenzene	180	21.386	21.386	0.000	94	300611	2.00	1.89	
115 2-Methylnaphthalene	142	22.157	22.157	0.000	98	430521	2.00	1.73	
116 1-Methylnaphthalene	142	22.330	22.330	0.000	98	445527	2.00	1.51	
A 122 C8 Range	1	14.469	(14.420-14.527)		0	2193416	2.00	1.84	
S 123 1,2-Dichloroethene, Total	1				0		4.00	4.17	
S 124 Xylenes, Total	100				0		6.00	4.90	
T 136 2-Methylthiophene TIC	97	13.934	13.934	0.000	97	490699	2.00	1.21	
T 137 3-Methylthiophene TIC	97	14.134	14.139	-0.005	99	476212	2.00	1.17	
T 154 2-Ethylthiophene TIC	97	16.194	16.193	0.001	72	572032	2.00	1.41	
T 160 1,2-Dimethyl-4-Ethylbenzene TIC	119	19.779	19.779	0.000	87	477403	2.00	1.18	
T 161 1,2,3,5-Tetramethylbenzene TIC	119	20.216	20.216	0.000	93	350027	2.00	0.8633	
T 162 1,2,3,4-Tetramethylbenzene TIC	119	20.621	20.615	0.006	96	477290	2.00	1.18	
T 163 Benzo(b)thiophene TIC	134	21.214	21.214	0.000	98	385203	2.00	0.9501	

Reagents:

40CV101S_00119	Amount Added: 100.00	Units: mL	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

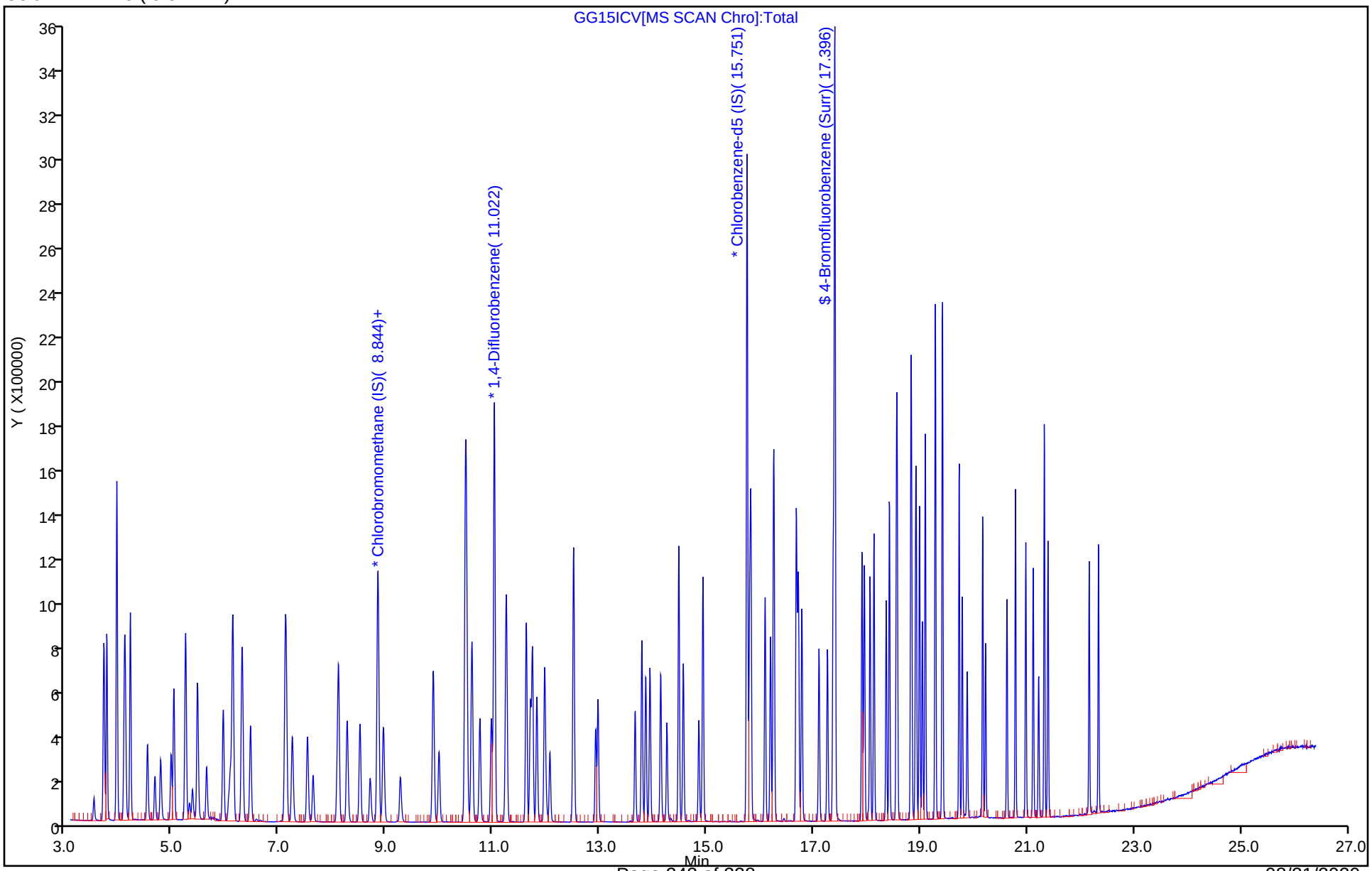
Report Date: 17-Jul-2020 11:03:31 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15ICV.D

Injection Date:	16-Jul-2020 00:19:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	ICV			Worklist Smp#:	16
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20065-1

SDG No.:

Lab Sample ID: CCVIS 140-41859/2 Calibration Date: 08/19/2020 14:03

Instrument ID: MG Calib Start Date: 07/15/2020 12:53

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 07/15/2020 22:02

Lab File ID: GCCVH19C.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorodifluoromethane	Ave	4.066	3.506		1.90	2.20	-13.8	30.0
Propene	Lin2		2.137		1.27	2.20	-42.4*	30.0
Dichlorodifluoromethane	Ave	7.294	6.332		1.91	2.20	-13.2	30.0
Chloromethane	Ave	0.6957	0.6582		2.08	2.20	-5.4	30.0
1,2-Dichloro-1,1,2,2-tetrafluoroethane	Ave	3.778	3.623		2.11	2.20	-4.1	30.0
Acetaldehyde	Ave	0.8841	0.7962		9.91	11.0	-9.9	30.0
Vinyl chloride	Ave	2.734	2.381		1.92	2.20	-12.9	30.0
1,3-Butadiene	Ave	1.931	1.856		2.12	2.20	-3.9	30.0
Butane	Ave	3.773	3.189		1.86	2.20	-15.5	30.0
Bromomethane	Ave	2.282	2.111		2.04	2.20	-7.5	30.0
Chloroethane	Ave	1.315	1.193		2.00	2.20	-9.3	30.0
Ethanol	QuaF		0.7854		12.1	11.0	9.7	30.0
Vinyl bromide	Ave	1.991	2.064		2.28	2.20	3.6	30.0
2-Methylbutane	Ave	2.431	2.436		2.20	2.20	0.2	30.0
Trichlorofluoromethane	Ave	7.169	7.528		2.31	2.20	5.0	30.0
Acrolein	Ave	0.4629	0.6149		2.92	2.20	32.8*	30.0
Acetonitrile	Ave	0.6823	0.7735		2.49	2.20	13.4	30.0
Acetone	Ave	0.8520	0.9895		7.67	6.60	16.1	30.0
Pentane	Ave	0.4500	0.4037		1.97	2.20	-10.3	30.0
Isopropyl alcohol	Ave	2.098	2.699		8.49	6.60	28.6	30.0
Ethyl ether	Ave	1.612	1.651		2.25	2.20	2.4	30.0
1,1-Dichloroethene	Ave	1.873	1.716		2.02	2.20	-8.4	30.0
Acrylonitrile	Ave	1.221	1.294		2.33	2.20	6.0	30.0
tert-Butyl alcohol	Ave	3.226	3.258		2.22	2.20	1.0	30.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	4.185	4.047		2.13	2.20	-3.3	30.0
Methylene Chloride	Lin2		2.439		2.09	2.20	-4.9	30.0
3-Chloropropene	Ave	1.897	1.446		1.68	2.20	-23.8	30.0
Carbon disulfide	Ave	6.333	5.768		2.00	2.20	-8.9	30.0
trans-1,2-Dichloroethene	Ave	2.088	1.859		1.96	2.20	-11.0	30.0
2-Methylpentane	Ave	5.071	4.615		2.00	2.20	-9.0	30.0
Methyl tert-butyl ether	Ave	5.832	5.094		1.92	2.20	-12.7	30.0
1,1-Dichloroethane	Ave	4.609	3.840		1.83	2.20	-16.7	30.0
Vinyl acetate	Ave	4.525	4.094		1.99	2.20	-9.5	30.0
2-Butanone (MEK)	Ave	0.9724	0.7797		1.76	2.20	-19.8	30.0
Hexane	Ave	1.821	1.613		1.95	2.20	-11.4	30.0
Isopropyl ether	Ave	6.234	5.736		2.02	2.20	-8.0	30.0
cis-1,2-Dichloroethene	Ave	2.123	1.857		1.92	2.20	-12.5	30.0
Ethyl acetate	Ave	3.913	3.501		1.97	2.20	-10.5	30.0
Chloroform	Ave	5.316	4.795		1.98	2.20	-9.8	30.0
Tert-butyl ethyl ether	Ave	6.322	5.783		2.01	2.20	-8.5	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20065-1

SDG No.:

Lab Sample ID: CCVIS 140-41859/2 Calibration Date: 08/19/2020 14:03

Instrument ID: MG Calib Start Date: 07/15/2020 12:53

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 07/15/2020 22:02

Lab File ID: GCCVH19C.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Tetrahydrofuran	Ave	2.217	1.909		1.89	2.20	-13.9	30.0
1,1,1-Trichloroethane	Ave	5.735	5.324		2.04	2.20	-7.2	30.0
1,2-Dichloroethane	Ave	0.4421	0.3315		1.65	2.20	-25.0	30.0
Benzene	Ave	0.8250	0.6535		1.74	2.20	-20.8	30.0
Cyclohexane	Ave	0.1456	0.1068		1.61	2.20	-26.6	30.0
1-Butanol	Ave	0.0777	0.0562		1.59	2.20	-27.6	30.0
Carbon tetrachloride	Ave	0.5694	0.5959		2.30	2.20	4.6	30.0
2,3-Dimethylpentane	Ave	0.2132	0.1637		1.69	2.20	-23.2	30.0
Thiophene	Ave	0.4369	0.3485		1.75	2.20	-20.2	30.0
2,2,4-Trimethylpentane	Ave	1.396	1.173		1.85	2.20	-16.0	30.0
Heptane	Ave	0.3130	0.2277		1.60	2.20	-27.3	30.0
1,2-Dichloropropane	Ave	0.3110	0.2472		1.75	2.20	-20.5	30.0
Trichloroethene	Ave	0.2794	0.2416		1.90	2.20	-13.5	30.0
Dibromomethane	Ave	0.3273	0.2700		1.81	2.20	-17.5	30.0
Bromodichloromethane	Ave	0.5684	0.5259		2.04	2.20	-7.5	30.0
1,4-Dioxane	Ave	0.0936	0.0989		2.32	2.20	5.6	30.0
Methyl methacrylate	Ave	0.2880	0.2240		1.71	2.20	-22.2	30.0
Methylcyclohexane	Lin1		0.4153		1.78	2.20	-19.2	30.0
4-Methyl-2-pentanone (MIBK)	Ave	0.4999	0.3969		1.75	2.20	-20.6	30.0
cis-1,3-Dichloropropene	Ave	0.4314	0.3220		1.64	2.20	-25.4	30.0
trans-1,3-Dichloropropene	Ave	0.4136	0.3103		1.65	2.20	-25.0	30.0
Toluene	Ave	0.8679	0.7018		1.78	2.20	-19.1	30.0
1,1,2-Trichloroethane	Ave	0.2639	0.2291		1.91	2.20	-13.2	30.0
2-Hexanone	Ave	0.2604	0.2091		1.77	2.20	-19.7	30.0
Octane	Ave	0.3177	0.2543		1.76	2.20	-20.0	30.0
Dibromochloromethane	Ave	0.4615	0.4638		2.21	2.20	0.5	30.0
1,2-Dibromoethane (EDB)	Ave	0.4093	0.3669		1.97	2.20	-10.4	30.0
Tetrachloroethene	Ave	0.2968	0.2722		2.02	2.20	-8.3	30.0
Chlorobenzene	Ave	0.6259	0.5551		1.95	2.20	-11.3	30.0
2,3-Dimethylheptane	Ave	0.997	0.8207		1.81	2.20	-17.7	30.0
Ethylbenzene	Ave	1.140	0.9940		1.92	2.20	-12.8	30.0
m-Xylene & p-Xylene	Ave	0.9068	0.8256		4.01	4.40	-9.0	30.0
Nonane	Ave	0.6196	0.5321		1.89	2.20	-14.1	30.0
Bromoform	Ave	0.3526	0.4841		3.02	2.20	37.3*	30.0
Styrene	Ave	0.5322	0.5766		2.38	2.20	8.3	30.0
o-Xylene	Ave	0.9594	0.8870		2.03	2.20	-7.5	30.0
1,1,2,2-Tetrachloroethane	Ave	0.6385	0.6374		2.20	2.20	-0.2	30.0
1,2,3-Trichloropropane	Ave	0.1876	0.1959		2.30	2.20	4.4	30.0
Isopropylbenzene	Ave	1.219	1.255		2.26	2.20	3.0	30.0
Propylbenzene	Ave	0.3038	0.3224		2.33	2.20	6.1	30.0
2-Chlorotoluene	Ave	0.2797	0.2949		2.32	2.20	5.5	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20065-1

SDG No.:

Lab Sample ID: CCVIS 140-41859/2 Calibration Date: 08/19/2020 14:03

Instrument ID: MG Calib Start Date: 07/15/2020 12:53

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 07/15/2020 22:02

Lab File ID: GCCVH19C.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Ethyltoluene	Ave	1.174	1.151		2.16	2.20	-2.0	30.0
1,3,5-Trimethylbenzene	Ave	0.4567	0.4946		2.38	2.20	8.3	30.0
Alpha Methyl Styrene	Ave	0.3800	0.4905		2.84	2.20	29.1	30.0
Decane	Ave	0.7291	0.7131		2.15	2.20	-2.2	30.0
tert-Butylbenzene	Ave	0.9907	1.200		2.66	2.20	21.1	30.0
1,2,4-Trimethylbenzene	Ave	1.056	1.129		2.35	2.20	6.9	30.0
sec-Butylbenzene	Ave	1.528	1.701		2.45	2.20	11.3	30.0
1,3-Dichlorobenzene	Ave	0.5469	0.7934		3.19	2.20	45.1*	30.0
Benzyl chloride	Ave	0.8304	0.9036		2.39	2.20	8.8	30.0
1,4-Dichlorobenzene	Ave	0.5536	0.7723		3.07	2.20	39.5*	30.0
4-Isopropyltoluene	Ave	1.180	1.359		2.53	2.20	15.2	30.0
1,2,3-Trimethylbenzene	QuaF		1.149		2.81	2.20	27.8	30.0
Butylcyclohexane	Ave	0.9465	0.9802		2.28	2.20	3.6	30.0
1,2-Dichlorobenzene	Ave	0.5575	0.8119		3.20	2.20	45.6*	30.0
Indane	Ave	0.8447	1.080		2.81	2.20	27.9	30.0
Indene	Ave	0.7215	0.9408		2.87	2.20	30.4*	30.0
Butylbenzene	Ave	1.334	1.393		2.30	2.20	4.4	30.0
Undecane	Ave	0.7884	0.7458		2.08	2.20	-5.4	30.0
1,2-Dibromo-3-Chloropropane	Ave	0.2172	0.3536		3.58	2.20	62.8*	30.0
1,2,4,5-Tetramethylbenzene	Ave	1.038	1.236		2.62	2.20	19.1	30.0
Dodecane	Ave	0.6760	0.3989		1.30	2.20	-41.0*	30.0
1,2,4-Trichlorobenzene	Ave	0.4115	0.5744		3.07	2.20	39.6*	30.0
Naphthalene	Ave	1.059	1.028		2.14	2.20	-2.9	30.0
Hexachlorobutadiene	Ave	0.4832	0.7908		3.60	2.20	63.6*	30.0
1,2,3-Trichlorobenzene	Ave	0.3927	0.4658		2.61	2.20	18.6	30.0
2-Methylnaphthalene	Ave	0.6128	0.3675		1.32	2.20	-40.0	50.0
1-Methylnaphthalene	Ave	0.7292	0.4083		1.23	2.20	-44.0	50.0
4-Bromofluorobenzene (Surr)	Ave	0.8130	0.8063		3.97	4.00	-0.8	30.0

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200819-16309.b\GCCVH19C.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 19-Aug-2020 14:03:30 ALS Bottle#: 7 Worklist Smp#: 2
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016320-002
Misc. Info.: P120 110ML
Operator ID: HMT Instrument ID: MG
Sublist: chrom-MG_TO15*sub17

Method: \\chromfs\Knoxville\ChromData\MG\20200819-16309.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 20-Aug-2020 10:14:50 Calib Date: 15-Jul-2020 22:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1047

First Level Reviewer: khachitpongpanits Date: 20-Aug-2020 10:14:50

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.827	8.827	0.000	94	145876	4.00	4.00	
* 2 1,4-Difluorobenzene	114	11.011	11.011	0.000	95	1304168	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.740	15.740	0.000	88	1203018	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.385	17.385	0.000	96	970000	4.00	3.97	
6 Chlorodifluoromethane	51	3.710	3.710	0.000	96	281306	2.20	1.90	
7 Propene	41	3.721	3.721	0.000	97	171438	2.20	1.27	
8 Dichlorodifluoromethane	85	3.769	3.769	0.000	100	508039	2.20	1.91	
9 Chloromethane	52	3.953	3.953	0.000	58	52811	2.20	2.08	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.958	3.958	0.000	94	290713	2.20	2.11	
11 Acetaldehyde	44	4.109	4.109	0.000	89	319389	11.0	9.91	
12 Vinyl chloride	62	4.120	4.120	0.000	98	191049	2.20	1.92	
14 Butadiene	54	4.206	4.206	0.000	69	148918	2.20	2.12	
13 Butane	43	4.211	4.211	0.000	85	255865	2.20	1.86	
15 Bromomethane	94	4.530	4.530	0.000	98	169372	2.20	2.04	
16 Chloroethane	64	4.670	4.670	0.000	95	95684	2.20	2.00	
17 Ethanol	31	4.783	4.783	0.000	90	315082	11.0	12.1	
18 Vinyl bromide	106	4.972	4.972	0.000	98	165562	2.20	2.28	
19 2-Methylbutane	43	5.020	5.020	0.000	91	195469	2.20	2.20	
20 Trichlorofluoromethane	101	5.241	5.241	0.000	98	604022	2.20	2.31	
21 Acrolein	56	5.252	5.252	0.000	89	49332	2.20	2.92	
22 Acetonitrile	40	5.317	5.317	0.000	100	62063	2.20	2.49	
23 Acetone	58	5.365	5.365	0.000	96	238169	6.60	7.67	
24 Pentane	72	5.463	5.463	0.000	96	32392	2.20	1.97	
25 Isopropyl alcohol	45	5.473	5.473	0.000	94	649551	6.60	8.49	
26 Ethyl ether	31	5.630	5.630	0.000	90	132427	2.20	2.25	
27 1,1-Dichloroethene	96	5.948	5.948	0.000	94	137698	2.20	2.02	
28 Acrylonitrile	53	6.050	6.050	0.000	96	103842	2.20	2.33	
30 2-Methyl-2-propanol	59	6.083	6.083	0.000	95	261384	2.20	2.22	
29 1,1,2-Trichloro-1,2,2-trifluoroe	101	6.120	6.120	0.000	94	324662	2.20	2.13	
31 Methylene Chloride	84	6.293	6.293	0.000	99	195646	2.20	2.09	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.304	6.304	0.000	95	115982	2.20	1.68	
33 Carbon disulfide	76	6.449	6.449	0.000	99	462737	2.20	2.00	
34 trans-1,2-Dichloroethene	96	7.096	7.096	0.000	95	149163	2.20	1.96	
35 2-Methylpentane	43	7.118	7.118	0.000	95	370306	2.20	2.00	
36 Methyl tert-butyl ether	73	7.237	7.237	0.000	96	408665	2.20	1.92	
37 1,1-Dichloroethane	63	7.517	7.517	0.000	99	308068	2.20	1.83	
38 Vinyl acetate	43	7.625	7.625	0.000	100	328435	2.20	1.99	
39 2-Butanone (MEK)	72	8.078	8.078	0.000	97	62555	2.20	1.76	
40 Hexane	56	8.099	8.099	0.000	92	129428	2.20	1.95	
41 Isopropyl ether	45	8.261	8.261	0.000	97	460204	2.20	2.02	
42 cis-1,2-Dichloroethene	96	8.498	8.498	0.000	98	149022	2.20	1.92	
43 Ethyl acetate	43	8.693	8.693	0.000	100	280895	2.20	1.97	
44 Chloroform	83	8.844	8.844	0.000	97	384704	2.20	1.98	
45 Tert-butyl ethyl ether	59	8.935	8.935	0.000	95	463941	2.20	2.01	
46 Tetrahydrofuran	42	9.253	9.253	0.000	95	153148	2.20	1.89	
47 1,1,1-Trichloroethane	97	9.868	9.868	0.000	95	427151	2.20	2.04	
48 1,2-Dichloroethane	62	9.976	9.976	0.000	98	237784	2.20	1.65	
50 Benzene	78	10.467	10.467	0.000	97	468721	2.20	1.74	
49 Cyclohexane	69	10.472	10.472	0.000	95	76632	2.20	1.61	
51 n-Butanol	31	10.494	10.494	0.000	65	40311	2.20	1.59	
52 Carbon tetrachloride	117	10.494	10.494	0.000	97	427414	2.20	2.30	
53 2,3-Dimethylpentane	71	10.596	10.596	0.000	90	117412	2.20	1.69	
54 Thiophene	84	10.742	10.742	0.000	97	249982	2.20	1.75	
55 Isooctane	57	11.238	11.238	0.000	99	841674	2.20	1.85	
56 n-Heptane	71	11.610	11.610	0.000	89	163304	2.20	1.60	
57 1,2-Dichloropropane	63	11.685	11.685	0.000	90	177323	2.20	1.75	
58 Trichloroethene	130	11.723	11.723	0.000	91	173319	2.20	1.90	
59 Dibromomethane	93	11.804	11.804	0.000	96	193670	2.20	1.81	
60 Dichlorobromomethane	83	11.955	11.955	0.000	98	377245	2.20	2.04	
61 1,4-Dioxane	88	11.982	11.982	0.000	88	70941	2.20	2.32	
62 Methyl methacrylate	41	12.052	12.052	0.000	97	160699	2.20	1.71	
63 Methylcyclohexane	83	12.494	12.494	0.000	96	297893	2.20	1.78	
64 4-Methyl-2-pentanone (MIBK)	43	12.909	12.909	0.000	96	284704	2.20	1.75	
65 cis-1,3-Dichloropropene	75	12.953	12.953	0.000	91	230974	2.20	1.64	
66 trans-1,3-Dichloropropene	75	13.648	13.648	0.000	94	205320	2.20	1.65	
67 Toluene	91	13.772	13.772	0.000	95	464361	2.20	1.78	
68 1,1,2-Trichloroethane	83	13.842	13.842	0.000	97	151599	2.20	1.91	
69 2-Hexanone	58	14.241	14.241	0.000	94	138339	2.20	1.77	
70 n-Octane	85	14.462	14.462	0.000	91	168276	2.20	1.76	
71 Chlorodibromomethane	129	14.549	14.549	0.000	97	306890	2.20	2.21	
72 Ethylene Dibromide	107	14.840	14.840	0.000	97	242763	2.20	1.97	
73 Tetrachloroethene	129	14.915	14.915	0.000	93	180095	2.20	2.02	
75 Chlorobenzene	112	15.789	15.789	0.000	91	367287	2.20	1.95	
74 2,3-Dimethylheptane	43	15.810	15.810	0.000	95	543032	2.20	1.81	
78 Ethylbenzene	91	16.080	16.080	0.000	98	657685	2.20	1.92	
79 m-Xylene & p-Xylene	91	16.242	16.242	0.000	99	1092571	4.40	4.01	
80 n-Nonane	57	16.662	16.662	0.000	90	352099	2.20	1.89	
81 Bromoform	173	16.689	16.689	0.000	96	320309	2.20	3.02	
82 Styrene	104	16.706	16.706	0.000	98	381488	2.20	2.38	
83 o-Xylene	91	16.765	16.765	0.000	98	586868	2.20	2.03	
84 1,1,2,2-Tetrachloroethane	83	17.088	17.088	0.000	99	421729	2.20	2.20	
85 1,2,3-Trichloropropane	110	17.245	17.245	0.000	98	129622	2.20	2.30	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
86 Isopropylbenzene	105	17.353	17.353	0.000	97	830455	2.20	2.26	
87 N-Propylbenzene	120	17.892	17.892	0.000	99	213288	2.20	2.33	
88 2-Chlorotoluene	126	17.940	17.940	0.000	97	195156	2.20	2.32	
89 4-Ethyltoluene	105	18.043	18.043	0.000	98	761496	2.20	2.16	
90 1,3,5-Trimethylbenzene	120	18.118	18.118	0.000	93	327279	2.20	2.38	
92 Alpha Methyl Styrene	118	18.350	18.350	0.000	90	324526	2.20	2.84	
93 n-Decane	57	18.410	18.410	0.000	90	471840	2.20	2.15	
94 tert-Butylbenzene	119	18.544	18.544	0.000	94	793967	2.20	2.66	
95 1,2,4-Trimethylbenzene	105	18.555	18.555	0.000	95	746689	2.20	2.35	
96 sec-Butylbenzene	105	18.809	18.809	0.000	98	1125247	2.20	2.45	
97 1,3-Dichlorobenzene	146	18.825	18.825	0.000	98	524970	2.20	3.19	
98 Benzyl chloride	91	18.900	18.900	0.000	98	597876	2.20	2.39	
99 1,4-Dichlorobenzene	146	18.911	18.911	0.000	95	510968	2.20	3.07	
100 4-Isopropyltoluene	119	18.970	18.970	0.000	97	899283	2.20	2.53	
101 1,2,3-Trimethylbenzene	105	19.024	19.024	0.000	98	760412	2.20	2.81	
102 Butylcyclohexane	83	19.078	19.078	0.000	96	648541	2.20	2.28	
104 1,2-Dichlorobenzene	146	19.267	19.267	0.000	85	537211	2.20	3.20	
103 2,3-Dihydroindene	117	19.267	19.267	0.000	93	714836	2.20	2.81	
106 Indene	116	19.396	19.396	0.000	97	622465	2.20	2.87	
105 n-Butylbenzene	91	19.402	19.402	0.000	98	921544	2.20	2.30	
107 Undecane	57	19.715	19.715	0.000	94	493443	2.20	2.08	
108 1,2-Dibromo-3-Chloropropane	157	19.866	19.866	0.000	98	233950	2.20	3.58	
109 1,2,4,5-Tetramethylbenzene	119	20.157	20.157	0.000	97	817528	2.20	2.62	
110 Dodecane	57	20.771	20.771	0.000	98	263905	2.20	1.30	
111 1,2,4-Trichlorobenzene	180	20.960	20.960	0.000	93	380055	2.20	3.07	
112 Naphthalene	128	21.100	21.100	0.000	99	680428	2.20	2.14	
113 Hexachlorobutadiene	225	21.311	21.311	0.000	97	523226	2.20	3.60	
114 1,2,3-Trichlorobenzene	180	21.375	21.375	0.000	95	308228	2.20	2.61	
115 2-Methylnaphthalene	142	22.147	22.147	0.000	98	243163	2.20	1.32	
116 1-Methylnaphthalene	142	22.324	22.324	0.000	99	270167	2.20	1.23	
A 122 C8 Range	1	14.457	(14.404-14.511)		0	1543901	2.20	1.74	
S 123 1,2-Dichloroethene, Total	1				0		4.40	3.88	
S 124 Xylenes, Total	100				0		6.60	6.04	

Reagents:

40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent
40CV101P_00119	Amount Added: 110.00	Units: ml	

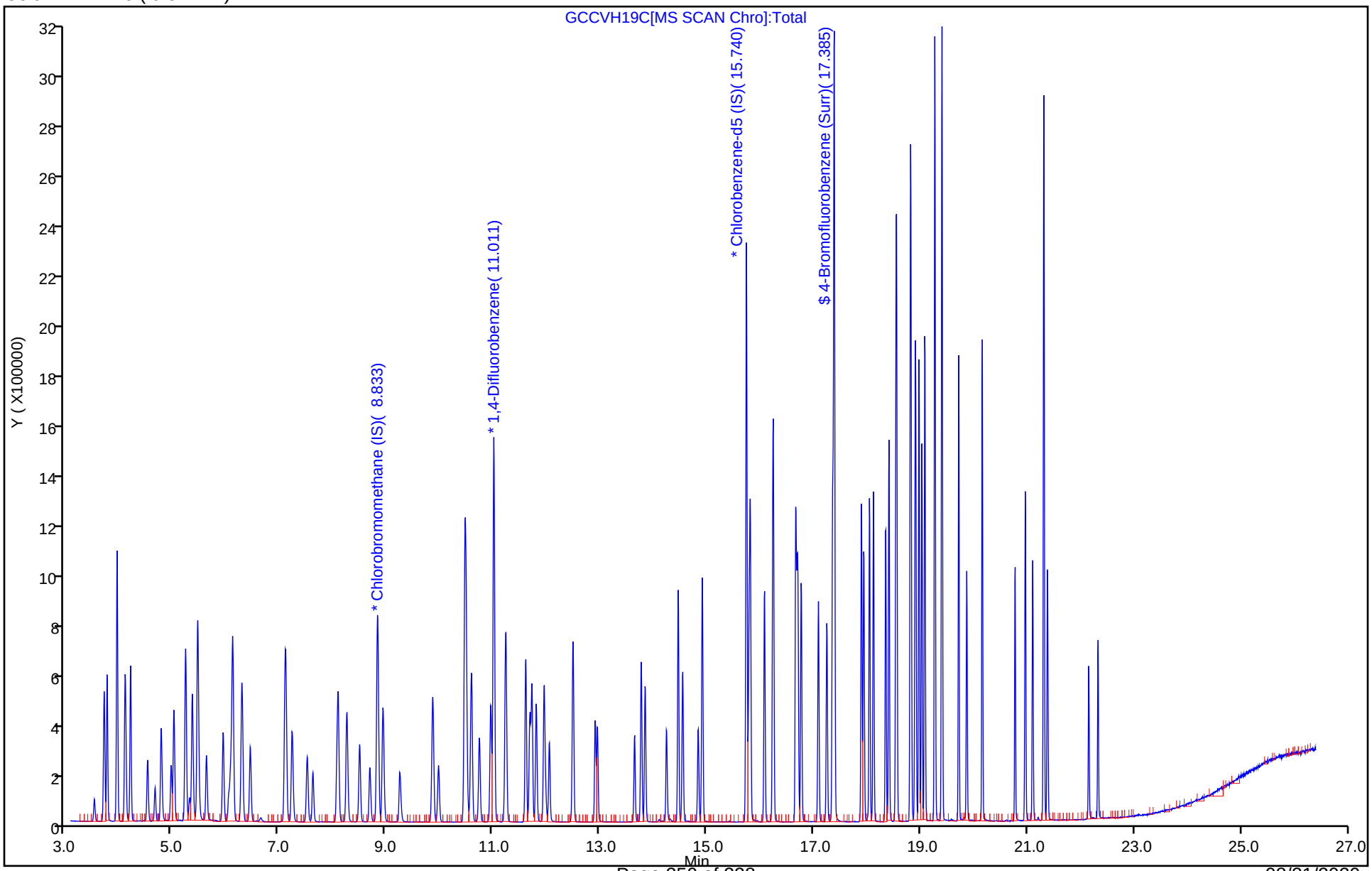
Report Date: 20-Aug-2020 10:14:51 Chrom Revision: 2.3 17-Aug-2020 20:42:08

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200819-16309.b\GCCVH19C.D

Injection Date:	19-Aug-2020 14:03:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	CCVIS			Worklist Smp#:	2
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20065-1

SDG No.:

Lab Sample ID: ICV 140-41306/18 Calibration Date: 07/28/2020 12:30

Instrument ID: MR Calib Start Date: 07/27/2020 17:38

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 07/28/2020 09:59

Lab File ID: RG27LCS.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorodifluoromethane	Ave	5.854	6.566		1.12	1.00	12.2	35.0
Propene	Qua		5.442		1.31	1.00	30.9	35.0
Dichlorodifluoromethane	Ave	3.954	5.127		1.30	1.00	29.7	35.0
Chloromethane	Ave	1.011	1.071		1.06	1.00	5.9	35.0
1,2-Dichloro-1,1,2,2-tetrafluoroethane	Ave	3.874	4.409		1.14	1.00	13.8	35.0
Acetaldehyde	Ave	1.384	1.496		5.40	5.00	8.1	35.0
Vinyl chloride	Ave	2.905	3.149		1.08	1.00	8.4	35.0
1,3-Butadiene	Ave	2.442	2.662		1.09	1.00	9.0	35.0
Butane	Ave	5.228	5.897		1.13	1.00	12.8	35.0
Bromomethane	Ave	2.083	2.197		1.05	1.00	5.5	35.0
Chloroethane	Ave	1.236	1.310		1.06	1.00	5.9	35.0
Ethanol	Ave	1.590	1.399		4.40	5.00	-12.0	35.0
Vinyl bromide	Ave	1.973	2.307		1.17	1.00	16.9	35.0
2-Methylbutane	Ave	3.861	4.281		1.11	1.00	10.9	35.0
Trichlorofluoromethane	Ave	4.901	5.507		1.12	1.00	12.4	35.0
Acrolein	Ave	0.8551	0.9705		1.13	1.00	13.5	35.0
Acetonitrile	Ave	1.196	1.386		1.16	1.00	16.0	35.0
Acetone	Ave	1.615	2.176		1.35	1.00	34.8	35.0
Pentane	Ave	0.3799	0.4315		1.14	1.00	13.6	35.0
Isopropyl alcohol	QuaF		6.543		1.29	1.00	29.3	35.0
Ethyl ether	Ave	3.564	3.920		1.10	1.00	10.0	35.0
1,1-Dichloroethene	Ave	2.158	2.431		1.13	1.00	12.6	35.0
Acrylonitrile	Ave	1.829	2.053		1.12	1.00	12.2	35.0
tert-Butyl alcohol	Ave	4.928	6.045		1.23	1.00	22.7	35.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	4.393	4.931		1.12	1.00	12.2	35.0
Methylene Chloride	Lin2		3.319		1.12	1.00	12.5	35.0
3-Chloropropene	Ave	2.842	3.256		1.15	1.00	14.6	35.0
Carbon disulfide	Ave	5.769	6.624		1.15	1.00	14.8	35.0
trans-1,2-Dichloroethene	Ave	2.042	2.294		1.12	1.00	12.3	35.0
2-Methylpentane	Ave	7.180	7.404		1.03	1.00	3.1	35.0
Methyl tert-butyl ether	Ave	5.317	5.974		1.12	1.00	12.3	35.0
1,1-Dichloroethane	Ave	4.792	5.354		1.12	1.00	11.7	35.0
Vinyl acetate	Ave	7.963	9.367		1.18	1.00	17.6	35.0
2-Butanone (MEK)	Ave	1.014	1.134		1.12	1.00	11.9	35.0
Hexane	Ave	2.160	2.476		1.15	1.00	14.6	35.0
Isopropyl ether	Ave	11.04	12.51		1.13	1.00	13.2	35.0
cis-1,2-Dichloroethene	Ave	2.301	2.612		1.14	1.00	13.5	35.0
Ethyl acetate	Ave	7.406	7.968		1.08	1.00	7.6	35.0
Chloroform	Ave	4.390	5.104		1.16	1.00	16.2	35.0
Tert-butyl ethyl ether	Ave	8.680	8.751		1.01	1.00	0.8	35.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20065-1

SDG No.:

Lab Sample ID: ICV 140-41306/18 Calibration Date: 07/28/2020 12:30

Instrument ID: MR Calib Start Date: 07/27/2020 17:38

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 07/28/2020 09:59

Lab File ID: RG27LCS.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Tetrahydrofuran	Ave	3.757	4.260		1.13	1.00	13.4	35.0
1,1,1-Trichloroethane	Ave	4.550	4.912		1.08	1.00	8.0	35.0
1,2-Dichloroethane	Ave	0.3751	0.4493		1.20	1.00	19.8	35.0
Cyclohexane	Ave	0.1161	0.1370		1.18	1.00	18.1	35.0
Benzene	Ave	0.7966	0.9374		1.18	1.00	17.7	35.0
1-Butanol	Ave	0.1816	0.2414		1.33	1.00	32.9	35.0
Carbon tetrachloride	Ave	0.5066	0.4641		0.916	1.00	-8.4	35.0
2,3-Dimethylpentane	Ave	0.1737	0.1906		1.10	1.00	9.7	35.0
Thiophene	Ave	0.4391	0.5067		1.15	1.00	15.4	35.0
2,2,4-Trimethylpentane	Ave	1.682	1.893		1.13	1.00	12.5	35.0
Heptane	Ave	0.2685	0.2944		1.10	1.00	9.6	35.0
1,2-Dichloropropane	Ave	0.3673	0.4259		1.16	1.00	15.9	35.0
Trichloroethene	Ave	0.3491	0.3963		1.14	1.00	13.5	35.0
Dibromomethane	Ave	0.3179	0.3634		1.14	1.00	14.3	35.0
Bromodichloromethane	Ave	0.5431	0.6163		1.13	1.00	13.5	35.0
1,4-Dioxane	Ave	0.1248	0.1537		1.23	1.00	23.1	35.0
Methyl methacrylate	Ave	0.5242	0.5749		1.10	1.00	9.7	35.0
Methylcyclohexane	Ave	0.4592	0.6139		1.34	1.00	33.7	35.0
4-Methyl-2-pentanone (MIBK)	Ave	0.9789	1.123		1.15	1.00	14.7	35.0
cis-1,3-Dichloropropene	Ave	0.4314	0.5192		1.20	1.00	20.4	35.0
trans-1,3-Dichloropropene	Ave	0.4390	0.5330		1.21	1.00	21.4	35.0
Toluene	Ave	1.097	1.239		1.13	1.00	12.9	35.0
1,1,2-Trichloroethane	Ave	0.3491	0.3898		1.12	1.00	11.7	35.0
2-Hexanone	Ave	0.4698	0.5488		1.17	1.00	16.8	35.0
Octane	Ave	0.3345	0.3769		1.13	1.00	12.7	35.0
Dibromochloromethane	Ave	0.6967	0.7566		1.09	1.00	8.6	35.0
1,2-Dibromoethane (EDB)	Ave	0.6048	0.7174		1.19	1.00	18.6	35.0
Tetrachloroethene	Ave	0.3967	0.4483		1.13	1.00	13.0	35.0
Chlorobenzene	Ave	0.8798	0.9937		1.13	1.00	12.9	35.0
2,3-Dimethylheptane	Ave	1.698	1.666		0.981	1.00	-1.9	35.0
Ethylbenzene	Ave	1.508	1.644		1.09	1.00	9.0	35.0
m-Xylene & p-Xylene	Ave	1.143	1.302		2.28	2.00	13.9	35.0
Nonane	Ave	0.9762	1.075		1.10	1.00	10.1	35.0
Bromoform	Ave	0.8636	0.8323		0.964	1.00	-3.6	35.0
Styrene	Ave	0.8350	0.9589		1.15	1.00	14.8	35.0
o-Xylene	Ave	1.206	1.307		1.08	1.00	8.4	35.0
1,1,2,2-Tetrachloroethane	Ave	0.9788	1.052		1.07	1.00	7.5	35.0
1,2,3-Trichloropropane	Ave	0.2672	0.2811		1.05	1.00	5.2	35.0
Isopropylbenzene	Ave	1.782	1.989		1.12	1.00	11.6	35.0
Propylbenzene	Ave	0.4783	0.5515		1.15	1.00	15.3	35.0
2-Chlorotoluene	Ave	0.4639	0.5197		1.12	1.00	12.0	35.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20065-1

SDG No.:

Lab Sample ID: ICV 140-41306/18 Calibration Date: 07/28/2020 12:30

Instrument ID: MR Calib Start Date: 07/27/2020 17:38

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 07/28/2020 09:59

Lab File ID: RG27LCS.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Ethyltoluene	Ave	1.688	1.877		1.11	1.00	11.2	35.0
1,3,5-Trimethylbenzene	Ave	0.7325	0.8825		1.20	1.00	20.5	35.0
Alpha Methyl Styrene	Ave	0.7280	0.7903		1.09	1.00	8.6	35.0
Decane	Ave	1.317	1.466		1.11	1.00	11.3	35.0
tert-Butylbenzene	Ave	1.585	1.763		1.11	1.00	11.2	35.0
1,2,4-Trimethylbenzene	Ave	1.497	1.688		1.13	1.00	12.7	35.0
sec-Butylbenzene	Ave	2.271	2.519		1.11	1.00	10.9	35.0
1,3-Dichlorobenzene	Ave	1.114	1.249		1.12	1.00	12.2	35.0
Benzyl chloride	Ave	1.212	1.370		1.13	1.00	13.0	35.0
1,4-Dichlorobenzene	Ave	1.077	1.207		1.12	1.00	12.0	35.0
4-Isopropyltoluene	Ave	1.765	2.017		1.14	1.00	14.3	35.0
1,2,3-Trimethylbenzene	Ave	1.622	1.269		0.782	1.00	-21.8	35.0
Butylcyclohexane	Ave	1.263	1.309		1.04	1.00	3.7	35.0
1,2-Dichlorobenzene	Ave	1.151	1.284		1.12	1.00	11.5	35.0
Indane	Ave	1.523	1.585		1.04	1.00	4.1	35.0
Indene	Ave	1.294	1.205		0.931	1.00	-6.9	35.0
Butylbenzene	Ave	1.744	2.079		1.19	1.00	19.2	35.0
Undecane	Ave	1.525	1.790		1.17	1.00	17.4	35.0
1,2-Dibromo-3-Chloropropane	Ave	0.6804	0.5922		0.870	1.00	-13.0	35.0
1,2,4,5-Tetramethylbenzene	Ave	1.770	1.863		1.05	1.00	5.2	35.0
Dodecane	Ave	1.694	1.869		1.10	1.00	10.3	35.0
1,2,4-Trichlorobenzene	Ave	1.012	1.335		1.32	1.00	31.9	35.0
Naphthalene	Ave	1.902	2.484		1.31	1.00	30.6	35.0
Hexachlorobutadiene	Ave	1.152	1.306		1.13	1.00	13.4	35.0
1,2,3-Trichlorobenzene	Ave	1.109	1.453		1.31	1.00	31.0	35.0
2-Methylnaphthalene	Ave	1.023	0.9021		0.882	1.00	-11.8	50.0
1-Methylnaphthalene	Ave	1.280	1.296		1.01	1.00	1.3	50.0
4-Bromofluorobenzene (Surr)	Ave	0.6040	0.5986		3.96	4.00	-0.9	35.0

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27LCS.D
Lims ID: icv
Client ID:
Sample Type: ICV
Inject. Date: 28-Jul-2020 12:30:30 ALS Bottle#: 6 Worklist Smp#: 18
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016116-018
Misc. Info.: 314621S125
Operator ID: HMT Instrument ID: MR
Sublist:

Method: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 28-Jul-2020 17:12:39 Calib Date: 28-Jul-2020 09:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC09R.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1014

First Level Reviewer: barlozhetskayaa Date: 28-Jul-2020 17:12:39

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.296	8.308	-0.012	90	178764	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.539	10.539	0.000	96	1519481	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.371	15.375	-0.004	90	1266782	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.026	17.025	0.001	94	758272	4.00	3.96	
6 Chlorodifluoromethane	51	3.335	3.343	-0.008	96	293448	1.00	1.12	
7 Propene	41	3.346	3.349	-0.003	98	243229	1.00	1.31	
8 Dichlorodifluoromethane	85	3.394	3.400	-0.006	98	229118	1.00	1.30	
9 Chloromethane	52	3.561	3.569	-0.008	75	47864	1.00	1.06	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.567	3.577	-0.010	91	197030	1.00	1.14	
11 Acetaldehyde	44	3.707	3.724	-0.017	94	334229	5.00	5.40	
12 Vinyl chloride	62	3.718	3.726	-0.008	99	140747	1.00	1.08	
13 Butane	43	3.799	3.808	-0.009	86	263533	1.00	1.13	
14 Butadiene	54	3.799	3.809	-0.010	63	118948	1.00	1.09	
15 Bromomethane	94	4.095	4.103	-0.008	98	98185	1.00	1.05	
16 Chloroethane	64	4.225	4.235	-0.010	84	58533	1.00	1.06	
17 Ethanol	31	4.338	4.364	-0.026	97	312620	5.00	4.40	
18 Vinyl bromide	106	4.505	4.515	-0.010	98	103095	1.00	1.17	
19 2-Methylbutane	43	4.548	4.561	-0.013	94	191339	1.00	1.11	
20 Trichlorofluoromethane	101	4.753	4.765	-0.012	98	246124	1.00	1.12	
21 Acrolein	56	4.780	4.779	0.001	95	43373	1.00	1.13	
22 Acetonitrile	40	4.839	4.870	-0.031	98	61964	1.00	1.16	
23 Acetone	58	4.893	4.913	-0.020	99	97237	1.00	1.35	
24 Pentane	72	4.974	4.971	0.003	96	19285	1.00	1.14	
25 Isopropyl alcohol	45	4.990	5.027	-0.037	93	292410	1.00	1.29	
26 Ethyl ether	31	5.141	5.168	-0.027	89	175207	1.00	1.10	
27 1,1-Dichloroethene	96	5.432	5.444	-0.012	95	108636	1.00	1.13	
28 Acrylonitrile	53	5.546	5.572	-0.026	97	91767	1.00	1.12	
30 1,1,2-Trichloro-1,2,2-trifluoroe	101	5.610	5.622	-0.012	96	220350	1.00	1.12	
29 2-Methyl-2-propanol	59	5.583	5.629	-0.046	96	270140	1.00	1.23	
31 Methylene Chloride	84	5.778	5.788	-0.010	91	148335	1.00	1.12	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	5.794	5.802	-0.008	94	145514	1.00	1.15	
33 Carbon disulfide	76	5.929	5.938	-0.009	98	296011	1.00	1.15	
34 trans-1,2-Dichloroethene	96	6.570	6.580	-0.010	95	102501	1.00	1.12	
35 2-Methylpentane	43	6.592	6.600	-0.008	97	330874	1.00	1.03	
36 Methyl tert-butyl ether	73	6.716	6.747	-0.031	92	266967	1.00	1.12	
37 1,1-Dichloroethane	63	6.991	7.002	-0.011	99	239266	1.00	1.12	
38 Vinyl acetate	43	7.104	7.120	-0.016	100	418633	1.00	1.18	
40 Hexane	56	7.562	7.575	-0.013	76	110634	1.00	1.15	
39 2-Butanone (MEK)	72	7.552	7.583	-0.031	94	50693	1.00	1.12	
41 Isopropyl ether	45	7.740	7.761	-0.021	96	558915	1.00	1.13	
42 cis-1,2-Dichloroethene	96	7.967	7.981	-0.014	98	116729	1.00	1.14	
43 Ethyl acetate	43	8.177	8.189	-0.012	97	356099	1.00	1.08	
44 Chloroform	83	8.317	8.326	-0.009	89	228097	1.00	1.16	
45 Tert-butyl ethyl ether	59	8.420	8.448	-0.028	97	391104	1.00	1.01	
46 Tetrahydrofuran	42	8.716	8.750	-0.034	92	190406	1.00	1.13	
47 1,1,1-Trichloroethane	97	9.342	9.348	-0.006	95	219529	1.00	1.08	
48 1,2-Dichloroethane	62	9.455	9.461	-0.006	94	170664	1.00	1.20	
50 Cyclohexane	69	9.946	9.954	-0.008	77	52043	1.00	1.18	
51 Benzene	78	9.951	9.958	-0.007	94	356089	1.00	1.18	
49 n-Butanol	31	9.957	9.970	-0.013	67	91713	1.00	1.33	
52 Carbon tetrachloride	117	9.973	9.980	-0.007	93	176290	1.00	0.9161	
53 2,3-Dimethylpentane	71	10.086	10.094	-0.008	91	72390	1.00	1.10	
54 Thiophene	84	10.237	10.245	-0.008	94	192465	1.00	1.15	
55 Isooctane	57	10.760	10.766	-0.006	98	719027	1.00	1.13	
56 n-Heptane	71	11.154	11.162	-0.008	94	111817	1.00	1.10	
57 1,2-Dichloropropane	63	11.235	11.235	0.000	88	161778	1.00	1.16	
58 Trichloroethene	130	11.267	11.272	-0.005	95	150542	1.00	1.14	
59 Dibromomethane	93	11.353	11.357	-0.004	92	138050	1.00	1.14	
60 Dichlorobromomethane	83	11.504	11.510	-0.006	96	234127	1.00	1.13	
61 1,4-Dioxane	88	11.542	11.563	-0.021	94	58383	1.00	1.23	
62 Methyl methacrylate	41	11.623	11.632	-0.009	86	218391	1.00	1.10	
63 Methylcyclohexane	83	12.054	12.063	-0.009	86	233187	1.00	1.34	
64 4-Methyl-2-pentanone (MIBK)	43	12.502	12.517	-0.015	97	426535	1.00	1.15	
65 cis-1,3-Dichloropropene	75	12.545	12.548	-0.003	97	197238	1.00	1.20	
66 trans-1,3-Dichloropropene	75	13.257	13.261	-0.004	91	168803	1.00	1.21	
67 Toluene	91	13.375	13.381	-0.006	92	392369	1.00	1.13	
68 1,1,2-Trichloroethane	83	13.456	13.460	-0.004	96	123437	1.00	1.12	
69 2-Hexanone	58	13.861	13.878	-0.017	88	173789	1.00	1.17	
70 n-Octane	85	14.093	14.096	-0.003	98	119371	1.00	1.13	
71 Chlorodibromomethane	129	14.163	14.165	-0.002	96	239608	1.00	1.09	
72 Ethylene Dibromide	107	14.459	14.462	-0.003	97	227185	1.00	1.19	
73 Tetrachloroethene	129	14.535	14.538	-0.003	92	141981	1.00	1.13	
74 Chlorobenzene	112	15.419	15.423	-0.004	93	314685	1.00	1.13	
75 2,3-Dimethylheptane	43	15.452	15.455	-0.003	92	527639	1.00	0.9815	
76 Ethylbenzene	91	15.716	15.718	-0.002	98	520628	1.00	1.09	
77 m-Xylene & p-Xylene	91	15.878	15.881	-0.003	96	824710	2.00	2.28	
78 n-Nonane	57	16.314	16.314	0.000	94	340454	1.00	1.10	
79 Bromoform	173	16.320	16.323	-0.003	97	263601	1.00	0.9638	
80 Styrene	104	16.347	16.346	0.001	95	303694	1.00	1.15	
81 o-Xylene	91	16.406	16.406	0.000	98	413977	1.00	1.08	
82 1,1,2,2-Tetrachloroethane	83	16.730	16.734	-0.004	98	333162	1.00	1.07	
83 1,2,3-Trichloropropane	110	16.891	16.895	-0.004	92	89009	1.00	1.05	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	16.994	16.998	-0.004	95	629906	1.00	1.12	
85 N-Propylbenzene	120	17.549	17.547	0.002	99	174667	1.00	1.15	
86 2-Chlorotoluene	126	17.587	17.590	-0.003	96	164574	1.00	1.12	
87 4-Ethyltoluene	105	17.700	17.704	-0.004	99	594569	1.00	1.11	
88 1,3,5-Trimethylbenzene	120	17.781	17.782	-0.001	92	279476	1.00	1.20	
89 Alpha Methyl Styrene	118	18.018	18.020	-0.002	89	250286	1.00	1.09	
90 n-Decane	57	18.088	18.089	-0.001	85	464135	1.00	1.11	
91 tert-Butylbenzene	119	18.218	18.218	0.000	93	558454	1.00	1.11	
92 1,2,4-Trimethylbenzene	105	18.229	18.232	-0.003	96	534515	1.00	1.13	
93 sec-Butylbenzene	105	18.493	18.494	-0.001	98	797670	1.00	1.11	
94 1,3-Dichlorobenzene	146	18.504	18.504	0.000	96	395655	1.00	1.12	
95 Benzyl chloride	91	18.584	18.584	0.000	97	433725	1.00	1.13	
96 1,4-Dichlorobenzene	146	18.595	18.596	-0.001	95	382210	1.00	1.12	
97 4-Isopropyltoluene	119	18.660	18.662	-0.002	97	638722	1.00	1.14	
98 1,2,3-Trimethylbenzene	105	18.714	18.713	0.001	98	401939	1.00	0.7822	
99 Butylcyclohexane	83	18.773	18.773	0.000	86	414711	1.00	1.04	
100 2,3-Dihydroindene	117	18.962	18.961	0.001	93	501942	1.00	1.04	
101 1,2-Dichlorobenzene	146	18.962	18.962	0.000	93	406489	1.00	1.12	
102 Indene	116	19.097	19.093	0.004	89	381679	1.00	0.9313	
103 n-Butylbenzene	91	19.102	19.106	-0.004	98	658552	1.00	1.19	
104 Undecane	57	19.431	19.431	0.000	91	566914	1.00	1.17	
105 1,2-Dibromo-3-Chloropropane	157	19.577	19.577	0.000	90	187543	1.00	0.8704	
106 1,2,4,5-Tetramethylbenzene	119	19.873	19.873	0.000	97	589873	1.00	1.05	
107 Dodecane	57	20.488	20.489	-0.001	88	592032	1.00	1.10	
108 1,2,4-Trichlorobenzene	180	20.671	20.672	-0.001	93	422791	1.00	1.32	
109 Naphthalene	128	20.806	20.807	-0.001	99	786626	1.00	1.31	
110 Hexachlorobutadiene	225	21.027	21.028	-0.001	88	413454	1.00	1.13	
111 1,2,3-Trichlorobenzene	180	21.092	21.097	-0.005	93	460181	1.00	1.31	
112 2-Methylnaphthalene	142	21.831	21.834	-0.003	99	285706	1.00	0.8817	
113 1-Methylnaphthalene	142	21.965	21.967	-0.002	98	410495	1.00	1.01	
A 116 C8 Range	1	14.085	(14.055-14.115)		0	1541437	1.00	1.13	
S 117 Xylenes, Total	100				0		3.00	3.36	
S 118 1,2-Dichloroethene, Total	1				0		2.00	2.26	
T 143 2-Methylthiophene TIC	97	13.532	13.532	0.000	97	333995	1.00	1.05	
T 142 3-Methylthiophene TIC	97	13.737	13.742	-0.005	98	329909	1.00	1.04	
T 150 2-Ethylthiophene TIC	97	15.818	16.734	-0.922	98	400310	1.00	1.26	
T 153 1,2-Dimethyl-4-Ethylbenzene TIC	119	19.485	19.474	0.011	89	479541	1.00	1.51	
T 155 1,2,3,5-Tetramethylbenzene TIC	119	19.927	19.927	0.000	95	357919	1.00	1.13	
T 156 1,2,3,4-Tetramethylbenzene TIC	119	20.321	20.321	0.000	97	488965	1.00	1.54	
T 157 Benzo(b)thiophene TIC	134	20.909	20.909	0.000	99	382459	1.00	1.21	

Reagents:

40CV101S_00125	Amount Added: 50.00	Units: mL	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

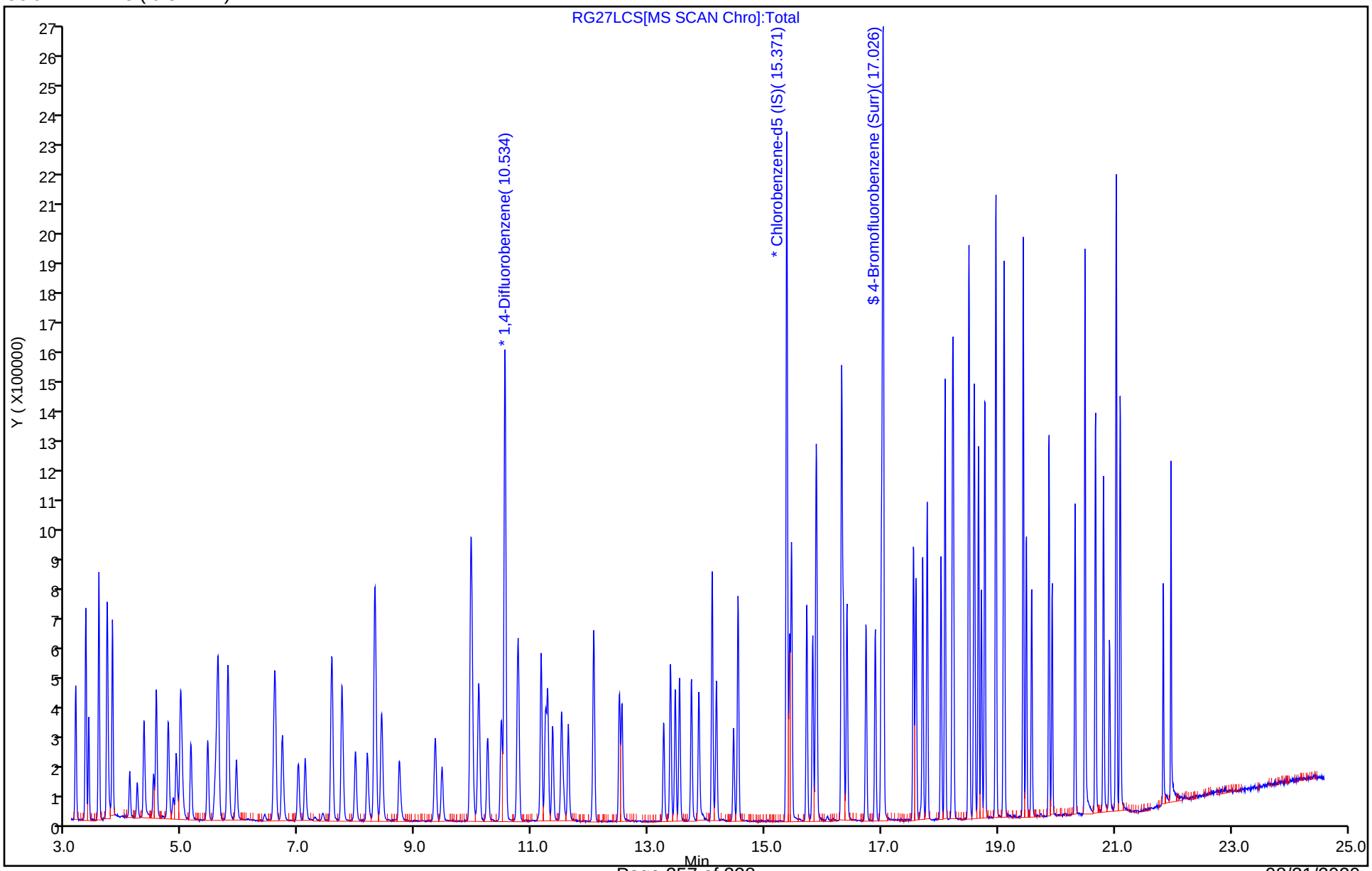
Report Date: 28-Jul-2020 17:12:41 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27LCS.D

Injection Date:	28-Jul-2020 12:30:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	icv			Worklist Smp#:	18
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20065-1

SDG No.:

Lab Sample ID: CCVIS 140-41899/2 Calibration Date: 08/20/2020 14:37

Instrument ID: MR Calib Start Date: 07/27/2020 17:38

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 07/28/2020 09:59

Lab File ID: RCCVH20B.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorodifluoromethane	Ave	5.854	4.662		1.99	2.50	-20.4	30.0
Propene	Qua		3.126		1.96	2.50	-21.4	30.0
Dichlorodifluoromethane	Ave	3.954	3.602		2.28	2.50	-8.9	30.0
Chloromethane	Ave	1.011	0.7814		1.93	2.50	-22.7	30.0
1,2-Dichloro-1,1,2,2-tetrafluoroethane	Ave	3.874	3.243		2.09	2.50	-16.3	30.0
Acetaldehyde	Ave	1.384	0.9397		8.49	12.5	-32.1*	30.0
Vinyl chloride	Ave	2.905	2.510		2.16	2.50	-13.6	30.0
1,3-Butadiene	Ave	2.442	2.020		2.07	2.50	-17.3	30.0
Butane	Ave	5.228	3.905		1.87	2.50	-25.3	30.0
Bromomethane	Ave	2.083	1.820		2.18	2.50	-12.6	30.0
Chloroethane	Ave	1.236	1.088		2.20	2.50	-12.0	30.0
Ethanol	Ave	1.590	0.9638		7.58	12.5	-39.4*	30.0
Vinyl bromide	Ave	1.973	1.713		2.17	2.50	-13.2	30.0
2-Methylbutane	Ave	3.861	2.559		1.66	2.50	-33.7*	30.0
Trichlorofluoromethane	Ave	4.901	5.259		2.68	2.50	7.3	30.0
Acrolein	Ave	0.8551	0.9445		2.76	2.50	10.5	30.0
Acetonitrile	Ave	1.196	0.9860		2.06	2.50	-17.5	30.0
Acetone	Ave	1.615	1.270		1.97	2.50	-21.3	30.0
Pentane	Ave	0.3799	0.4382		2.88	2.50	15.4	30.0
Isopropyl alcohol	QuaF		4.841		2.41	2.50	-3.7	30.0
Ethyl ether	Ave	3.564	3.453		2.42	2.50	-3.1	30.0
1,1-Dichloroethene	Ave	2.158	2.424		2.81	2.50	12.3	30.0
Acrylonitrile	Ave	1.829	1.741		2.38	2.50	-4.8	30.0
tert-Butyl alcohol	Ave	4.928	5.115		2.59	2.50	3.8	30.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	4.393	4.831		2.75	2.50	10.0	30.0
Methylene Chloride	Lin2		2.683		3.16	2.50	26.6	30.0
3-Chloropropene	Ave	2.842	2.225		1.96	2.50	-21.7	30.0
Carbon disulfide	Ave	5.769	6.964		3.02	2.50	20.7	30.0
trans-1,2-Dichloroethene	Ave	2.042	2.443		2.99	2.50	19.6	30.0
2-Methylpentane	Ave	7.180	5.677		1.98	2.50	-20.9	30.0
Methyl tert-butyl ether	Ave	5.317	6.689		3.15	2.50	25.8	30.0
1,1-Dichloroethane	Ave	4.792	4.962		2.59	2.50	3.6	30.0
Vinyl acetate	Ave	7.963	7.832		2.46	2.50	-1.6	30.0
2-Butanone (MEK)	Ave	1.014	1.286		3.17	2.50	26.9	30.0
Hexane	Ave	2.160	2.181		2.52	2.50	1.0	30.0
Isopropyl ether	Ave	11.04	10.27		2.32	2.50	-7.0	30.0
cis-1,2-Dichloroethene	Ave	2.301	2.623		2.85	2.50	14.0	30.0
Ethyl acetate	Ave	7.406	6.441		2.17	2.50	-13.0	30.0
Chloroform	Ave	4.390	5.289		3.01	2.50	20.5	30.0
Tert-butyl ethyl ether	Ave	8.680	7.911		2.28	2.50	-8.9	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20065-1

SDG No.:

Lab Sample ID: CCVIS 140-41899/2 Calibration Date: 08/20/2020 14:37

Instrument ID: MR Calib Start Date: 07/27/2020 17:38

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 07/28/2020 09:59

Lab File ID: RCCVH20B.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Tetrahydrofuran	Ave	3.757	3.478		2.31	2.50	-7.4	30.0
1,1,1-Trichloroethane	Ave	4.550	5.284		2.90	2.50	16.1	30.0
1,2-Dichloroethane	Ave	0.3751	0.3694		2.46	2.50	-1.5	30.0
Cyclohexane	Ave	0.1161	0.1331		2.87	2.50	14.7	30.0
1-Butanol	Ave	0.1816	0.1681		2.31	2.50	-7.4	30.0
Benzene	Ave	0.7966	0.8924		2.80	2.50	12.0	30.0
Carbon tetrachloride	Ave	0.5066	0.5673		2.80	2.50	12.0	30.0
2,3-Dimethylpentane	Ave	0.1737	0.1865		2.68	2.50	7.3	30.0
Thiophene	Ave	0.4391	0.4753		2.71	2.50	8.2	30.0
2,2,4-Trimethylpentane	Ave	1.682	1.472		2.19	2.50	-12.5	30.0
Heptane	Ave	0.2685	0.2885		2.69	2.50	7.5	30.0
1,2-Dichloropropane	Ave	0.3673	0.3444		2.34	2.50	-6.2	30.0
Trichloroethene	Ave	0.3491	0.3384		2.42	2.50	-3.1	30.0
Dibromomethane	Ave	0.3179	0.3292		2.59	2.50	3.5	30.0
Bromodichloromethane	Ave	0.5431	0.6125		2.82	2.50	12.8	30.0
1,4-Dioxane	Ave	0.1248	0.1385		2.77	2.50	11.0	30.0
Methyl methacrylate	Ave	0.5242	0.4255		2.03	2.50	-18.8	30.0
Methylcyclohexane	Ave	0.4592	0.6068		3.30	2.50	32.1*	30.0
4-Methyl-2-pentanone (MIBK)	Ave	0.9789	0.8002		2.04	2.50	-18.3	30.0
cis-1,3-Dichloropropene	Ave	0.4314	0.4927		2.86	2.50	14.2	30.0
trans-1,3-Dichloropropene	Ave	0.4390	0.5001		2.85	2.50	13.9	30.0
Toluene	Ave	1.097	1.120		2.55	2.50	2.1	30.0
1,1,2-Trichloroethane	Ave	0.3491	0.3621		2.59	2.50	3.7	30.0
2-Hexanone	Ave	0.4698	0.4603		2.45	2.50	-2.0	30.0
Octane	Ave	0.3345	0.3662		2.74	2.50	9.5	30.0
Dibromochloromethane	Ave	0.6967	0.7092		2.54	2.50	1.8	30.0
1,2-Dibromoethane (EDB)	Ave	0.6048	0.6293		2.60	2.50	4.1	30.0
Tetrachloroethene	Ave	0.3967	0.3822		2.41	2.50	-3.7	30.0
Chlorobenzene	Ave	0.8798	0.9483		2.69	2.50	7.8	30.0
2,3-Dimethylheptane	Ave	1.698	1.216		1.79	2.50	-28.4	30.0
Ethylbenzene	Ave	1.508	1.585		2.63	2.50	5.1	30.0
m-Xylene & p-Xylene	Ave	1.143	1.247		5.46	5.00	9.2	30.0
Nonane	Ave	0.9762	0.8399		2.15	2.50	-14.0	30.0
Bromoform	Ave	0.8636	0.6597		1.91	2.50	-23.6	30.0
Styrene	Ave	0.8350	0.9366		2.80	2.50	12.2	30.0
o-Xylene	Ave	1.206	1.266		2.62	2.50	5.0	30.0
1,1,2,2-Tetrachloroethane	Ave	0.9788	1.035		2.64	2.50	5.7	30.0
1,2,3-Trichloropropane	Ave	0.2672	0.2686		2.51	2.50	0.5	30.0
Isopropylbenzene	Ave	1.782	1.838		2.58	2.50	3.1	30.0
Propylbenzene	Ave	0.4783	0.5487		2.87	2.50	14.7	30.0
2-Chlorotoluene	Ave	0.4639	0.5064		2.73	2.50	9.2	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20065-1

SDG No.:

Lab Sample ID: CCVIS 140-41899/2 Calibration Date: 08/20/2020 14:37

Instrument ID: MR Calib Start Date: 07/27/2020 17:38

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 07/28/2020 09:59

Lab File ID: RCCVH20B.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Ethyltoluene	Ave	1.688	1.821		2.70	2.50	7.9	30.0
1,3,5-Trimethylbenzene	Ave	0.7325	0.9122		3.11	2.50	24.5	30.0
Alpha Methyl Styrene	Ave	0.7280	0.7930		2.72	2.50	8.9	30.0
Decane	Ave	1.317	1.161		2.20	2.50	-11.8	30.0
tert-Butylbenzene	Ave	1.585	1.615		2.55	2.50	1.9	30.0
1,2,4-Trimethylbenzene	Ave	1.497	1.603		2.68	2.50	7.1	30.0
sec-Butylbenzene	Ave	2.271	2.390		2.63	2.50	5.2	30.0
1,3-Dichlorobenzene	Ave	1.114	0.9750		2.19	2.50	-12.4	30.0
Benzyl chloride	Ave	1.212	1.391		2.87	2.50	14.8	30.0
1,4-Dichlorobenzene	Ave	1.077	0.9848		2.29	2.50	-8.6	30.0
4-Isopropyltoluene	Ave	1.765	1.905		2.70	2.50	8.0	30.0
1,2,3-Trimethylbenzene	Ave	1.622	1.206		1.86	2.50	-25.6	30.0
Butylcyclohexane	Ave	1.263	1.270		2.51	2.50	0.5	30.0
1,2-Dichlorobenzene	Ave	1.151	0.9736		2.12	2.50	-15.4	30.0
Indane	Ave	1.523	1.413		2.32	2.50	-7.3	30.0
Indene	Ave	1.294	1.152		2.23	2.50	-11.0	30.0
Butylbenzene	Ave	1.744	2.036		2.92	2.50	16.7	30.0
Undecane	Ave	1.525	1.407		2.31	2.50	-7.7	30.0
1,2-Dibromo-3-Chloropropane	Ave	0.6804	0.4430		1.63	2.50	-34.9*	30.0
1,2,4,5-Tetramethylbenzene	Ave	1.770	1.648		2.33	2.50	-6.9	30.0
Dodecane	Ave	1.694	1.456		2.15	2.50	-14.0	30.0
1,2,4-Trichlorobenzene	Ave	1.012	0.8429		2.08	2.50	-16.7	30.0
Naphthalene	Ave	1.902	2.222		2.92	2.50	16.8	30.0
Hexachlorobutadiene	Ave	1.152	0.5892		1.28	2.50	-48.8*	30.0
1,2,3-Trichlorobenzene	Ave	1.109	0.8529		1.92	2.50	-23.1	30.0
2-Methylnaphthalene	Ave	1.023	0.5133		1.25	2.50	-49.8	50.0
1-Methylnaphthalene	Ave	1.280	0.5254		1.03	2.50	-58.9*	50.0
4-Bromofluorobenzene (Surr)	Ave	0.6040	0.6025		3.99	4.00	-0.3	30.0

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MR\20200818-16322.b\RCCVH20B.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 20-Aug-2020 14:37:30 ALS Bottle#: 12 Worklist Smp#: 2
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016322-002
Misc. Info.: S123 110ML
Operator ID: HMT Instrument ID: MR
Sublist: chrom-MR_TO15*sub19

Method: \\chromfs\Knoxville\ChromData\MR\20200818-16322.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 21-Aug-2020 11:19:33 Calib Date: 28-Jul-2020 09:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC09R.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1057

First Level Reviewer: khachitpongpanits Date: 21-Aug-2020 11:19:33

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.312	8.312	0.000	94	178414	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.539	10.539	0.000	94	1678223	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.365	15.365	0.000	87	1444339	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.015	17.015	0.000	86	870177	4.00	3.99	
6 Chlorodifluoromethane	51	3.351	3.351	0.000	97	519816	2.50	1.99	
7 Propene	41	3.362	3.362	0.000	97	348549	2.50	1.96	
8 Dichlorodifluoromethane	85	3.410	3.410	0.000	100	401684	2.50	2.28	
9 Chloromethane	52	3.578	3.578	0.000	67	87138	2.50	1.93	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.588	3.588	0.000	94	361666	2.50	2.09	
11 Acetaldehyde	44	3.723	3.723	0.000	95	523932	12.5	8.49	
12 Vinyl chloride	62	3.734	3.734	0.000	99	279941	2.50	2.16	
14 Butadiene	54	3.815	3.815	0.000	64	225257	2.50	2.07	
13 Butane	43	3.815	3.815	0.000	88	435489	2.50	1.87	
15 Bromomethane	94	4.111	4.111	0.000	98	202970	2.50	2.18	
16 Chloroethane	64	4.241	4.241	0.000	92	121349	2.50	2.20	
17 Ethanol	31	4.360	4.360	0.000	97	537355	12.5	7.58	
18 Vinyl bromide	106	4.521	4.521	0.000	98	191013	2.50	2.17	
19 2-Methylbutane	43	4.564	4.564	0.000	94	285385	2.50	1.66	
20 Trichlorofluoromethane	101	4.769	4.769	0.000	99	586402	2.50	2.68	
21 Acrolein	56	4.791	4.791	0.000	92	105325	2.50	2.76	
22 Acetonitrile	40	4.861	4.861	0.000	99	109949	2.50	2.06	
23 Acetone	58	4.904	4.904	0.000	97	141616	2.50	1.97	
24 Pentane	72	4.980	4.980	0.000	96	48862	2.50	2.88	
25 Isopropyl alcohol	45	5.001	5.001	0.000	91	539784	2.50	2.41	
26 Ethyl ether	31	5.158	5.158	0.000	92	385019	2.50	2.42	
27 1,1-Dichloroethene	96	5.454	5.454	0.000	98	270285	2.50	2.81	
28 Acrylonitrile	53	5.562	5.562	0.000	95	194178	2.50	2.38	
29 2-Methyl-2-propanol	59	5.584	5.584	0.000	94	570344	2.50	2.59	
30 1,1,2-Trichloro-1,2,2-trifluoroe	101	5.627	5.627	0.000	92	538744	2.50	2.75	
31 Methylene Chloride	84	5.788	5.788	0.000	99	299180	2.50	3.16	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	5.799	5.799	0.000	94	248088	2.50	1.96	
33 Carbon disulfide	76	5.939	5.939	0.000	100	776576	2.50	3.02	
34 trans-1,2-Dichloroethene	96	6.581	6.581	0.000	98	272392	2.50	2.99	
35 2-Methylpentane	43	6.603	6.603	0.000	95	633090	2.50	1.98	
36 Methyl tert-butyl ether	73	6.721	6.721	0.000	98	745920	2.50	3.15	
37 1,1-Dichloroethane	63	6.996	6.996	0.000	99	553325	2.50	2.59	
38 Vinyl acetate	43	7.115	7.115	0.000	100	873296	2.50	2.46	
39 2-Butanone (MEK)	72	7.557	7.557	0.000	97	143451	2.50	3.17	
40 Hexane	56	7.579	7.579	0.000	90	243165	2.50	2.52	
41 Isopropyl ether	45	7.741	7.741	0.000	98	1144770	2.50	2.32	
42 cis-1,2-Dichloroethene	96	7.978	7.978	0.000	95	292478	2.50	2.85	
43 Ethyl acetate	43	8.177	8.177	0.000	98	718214	2.50	2.17	
44 Chloroform	83	8.323	8.323	0.000	95	589722	2.50	3.01	
45 Tert-butyl ethyl ether	59	8.425	8.425	0.000	95	882151	2.50	2.28	
46 Tetrahydrofuran	42	8.717	8.717	0.000	95	387810	2.50	2.31	
47 1,1,1-Trichloroethane	97	9.342	9.342	0.000	95	589258	2.50	2.90	
48 1,2-Dichloroethane	62	9.455	9.455	0.000	97	387494	2.50	2.46	
50 Cyclohexane	69	9.951	9.951	0.000	88	139601	2.50	2.87	
49 n-Butanol	31	9.957	9.957	0.000	66	176331	2.50	2.31	
51 Benzene	78	9.957	9.957	0.000	95	936053	2.50	2.80	
52 Carbon tetrachloride	117	9.973	9.973	0.000	94	595036	2.50	2.80	
53 2,3-Dimethylpentane	71	10.092	10.092	0.000	92	195609	2.50	2.68	
54 Thiophene	84	10.243	10.243	0.000	95	498542	2.50	2.71	
55 Isooctane	57	10.760	10.760	0.000	99	1544286	2.50	2.19	
56 n-Heptane	71	11.159	11.159	0.000	95	302614	2.50	2.69	
57 1,2-Dichloropropane	63	11.235	11.235	0.000	91	361226	2.50	2.34	
58 Trichloroethene	130	11.273	11.273	0.000	94	354925	2.50	2.42	
59 Dibromomethane	93	11.353	11.353	0.000	86	345264	2.50	2.59	
60 Dichlorobromomethane	83	11.504	11.504	0.000	97	642444	2.50	2.82	
61 1,4-Dioxane	88	11.531	11.531	0.000	93	145305	2.50	2.77	
62 Methyl methacrylate	41	11.623	11.623	0.000	93	446308	2.50	2.03	
63 Methylcyclohexane	83	12.060	12.060	0.000	94	636444	2.50	3.30	
64 4-Methyl-2-pentanone (MIBK)	43	12.491	12.491	0.000	98	839293	2.50	2.04	
65 cis-1,3-Dichloropropene	75	12.540	12.540	0.000	96	516827	2.50	2.86	
66 trans-1,3-Dichloropropene	75	13.252	13.252	0.000	98	451406	2.50	2.85	
67 Toluene	91	13.376	13.376	0.000	94	1010952	2.50	2.55	
68 1,1,2-Trichloroethane	83	13.451	13.451	0.000	97	326835	2.50	2.59	
69 2-Hexanone	58	13.855	13.855	0.000	91	415485	2.50	2.45	
70 n-Octane	85	14.087	14.087	0.000	96	330558	2.50	2.74	
71 Chlorodibromomethane	129	14.163	14.163	0.000	97	640236	2.50	2.54	
72 Ethylene Dibromide	107	14.454	14.454	0.000	98	568055	2.50	2.60	
73 Tetrachloroethene	129	14.530	14.530	0.000	91	345048	2.50	2.41	
74 Chlorobenzene	112	15.414	15.414	0.000	95	856051	2.50	2.69	
75 2,3-Dimethylheptane	43	15.446	15.446	0.000	97	1097380	2.50	1.79	
76 Ethylbenzene	91	15.710	15.710	0.000	98	1431226	2.50	2.63	
77 m-Xylene & p-Xylene	91	15.872	15.872	0.000	96	2252225	5.00	5.46	
78 n-Nonane	57	16.304	16.304	0.000	96	758172	2.50	2.15	
79 Bromoform	173	16.314	16.314	0.000	93	595529	2.50	1.91	
80 Styrene	104	16.341	16.341	0.000	98	845503	2.50	2.80	
81 o-Xylene	91	16.395	16.395	0.000	99	1142926	2.50	2.62	
82 1,1,2,2-Tetrachloroethane	83	16.724	16.724	0.000	98	933934	2.50	2.64	
83 1,2,3-Trichloropropane	110	16.886	16.886	0.000	96	242476	2.50	2.51	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	16.988	16.988	0.000	96	1658905	2.50	2.58	
85 N-Propylbenzene	120	17.538	17.538	0.000	99	495295	2.50	2.87	
86 2-Chlorotoluene	126	17.582	17.582	0.000	97	457109	2.50	2.73	
87 4-Ethyltoluene	105	17.695	17.695	0.000	99	1644212	2.50	2.70	
88 1,3,5-Trimethylbenzene	120	17.776	17.776	0.000	93	823467	2.50	3.11	
89 Alpha Methyl Styrene	118	18.013	18.013	0.000	94	715853	2.50	2.72	
90 n-Decane	57	18.083	18.083	0.000	88	1048221	2.50	2.20	
91 tert-Butylbenzene	119	18.213	18.213	0.000	94	1458293	2.50	2.55	
92 1,2,4-Trimethylbenzene	105	18.223	18.223	0.000	95	1447134	2.50	2.68	
93 sec-Butylbenzene	105	18.488	18.488	0.000	99	2157156	2.50	2.63	
94 1,3-Dichlorobenzene	146	18.498	18.498	0.000	98	880167	2.50	2.19	
95 Benzyl chloride	91	18.574	18.574	0.000	98	1256017	2.50	2.87	
96 1,4-Dichlorobenzene	146	18.585	18.585	0.000	93	888995	2.50	2.29	
97 4-Isopropyltoluene	119	18.655	18.655	0.000	97	1719762	2.50	2.70	
98 1,2,3-Trimethylbenzene	105	18.703	18.703	0.000	98	1089028	2.50	1.86	
99 Butylcyclohexane	83	18.763	18.763	0.000	94	1146405	2.50	2.51	
101 1,2-Dichlorobenzene	146	18.951	18.951	0.000	86	878860	2.50	2.12	
100 2,3-Dihydroindene	117	18.957	18.957	0.000	95	1275324	2.50	2.32	
102 Indene	116	19.086	19.086	0.000	92	1040045	2.50	2.23	
103 n-Butylbenzene	91	19.097	19.097	0.000	98	1837721	2.50	2.92	
104 Undecane	57	19.426	19.426	0.000	95	1270214	2.50	2.31	
105 1,2-Dibromo-3-Chloropropane	157	19.566	19.566	0.000	95	399938	2.50	1.63	
106 1,2,4,5-Tetramethylbenzene	119	19.868	19.868	0.000	99	1487483	2.50	2.33	
107 Dodecane	57	20.483	20.483	0.000	93	1314484	2.50	2.15	
108 1,2,4-Trichlorobenzene	180	20.661	20.661	0.000	93	760938	2.50	2.08	
109 Naphthalene	128	20.801	20.801	0.000	99	2005891	2.50	2.92	
110 Hexachlorobutadiene	225	21.017	21.017	0.000	87	531874	2.50	1.28	
111 1,2,3-Trichlorobenzene	180	21.087	21.087	0.000	95	769881	2.50	1.92	
112 2-Methylnaphthalene	142	21.825	21.825	0.000	99	463423	2.50	1.25	
113 1-Methylnaphthalene	142	21.960	21.960	0.000	98	474279	2.50	1.03	
A 116 C8 Range	1	14.082	(14.039-14.136)		0	3349662	2.50	2.21	
S 117 Xylenes, Total	100				0		7.50	8.08	
S 118 1,2-Dichloroethene, Total	1				0		5.00	5.84	
T 143 2-Methylthiophene TIC	97	13.527	13.527	0.000	96	864929	2.50	2.40	
T 142 3-Methylthiophene TIC	97	13.731	13.731	0.000	98	842531	2.50	2.33	
T 150 2-Ethylthiophene TIC	97	15.808	15.808	0.000	98	1091104	2.50	3.02	
T 153 1,2-Dimethyl-4-Ethylbenzene TIC	119	19.474	19.474	0.000	99	1262524	2.50	3.50	
T 155 1,2,3,5-Tetramethylbenzene TIC	119	19.916	19.916	0.000	97	906153	2.50	2.51	
T 156 1,2,3,4-Tetramethylbenzene TIC	119	20.310	20.310	0.000	99	1235338	2.50	3.42	a
T 157 Benzo(b)thiophene TIC	134	20.903	20.903	0.000	99	1066805	2.50	2.95	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

40CV101S_00124	Amount Added: 125.00	Units: mL	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

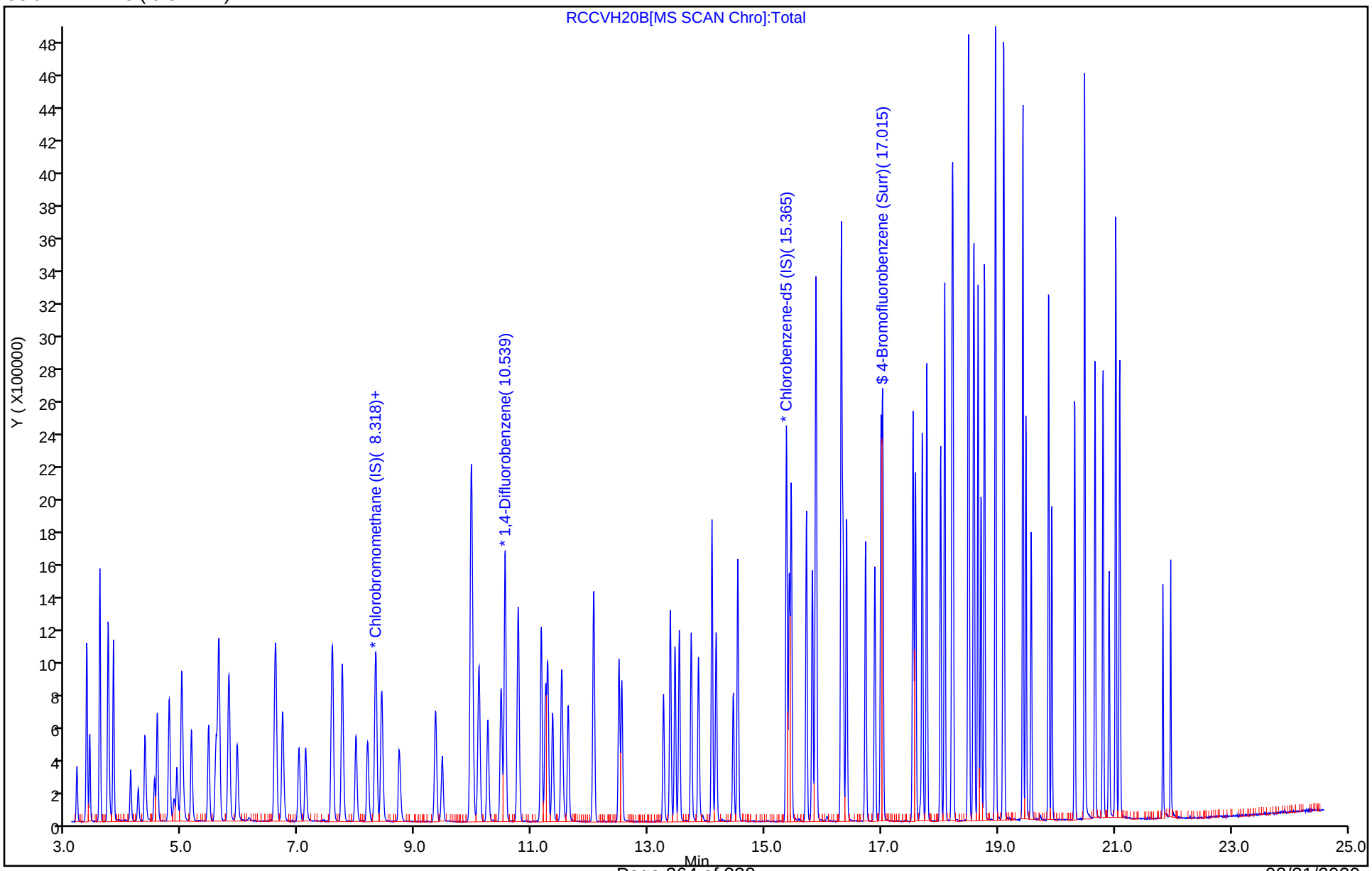
Report Date: 21-Aug-2020 11:19:34 Chrom Revision: 2.3 17-Aug-2020 20:42:08

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200818-16322.b\RCCVH20B.D

Injection Date:	20-Aug-2020 14:37:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	CCVIS			Worklist Smp#:	2
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GBFBG15IC.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	15-Jul-2020 12:19:30	ALS Bottle#:	16	Worklist Smp#:	1
Injection Vol:	500.0 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016031-001				
Misc. Info.:	BFB				
Operator ID:	HMT	Instrument ID:	MG		
Method:	\\chromfs\Knoxville\ChromData\MG\20200715-16031.b\MG_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	16-Jul-2020 13:23:07	Calib Date:	15-Jul-2020 22:02:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1024				
First Level Reviewer: tajh		Date:	16-Jul-2020 07:48:21		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
$ 5 BFB	95	5.084	5.084	0.000	0	1174424	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

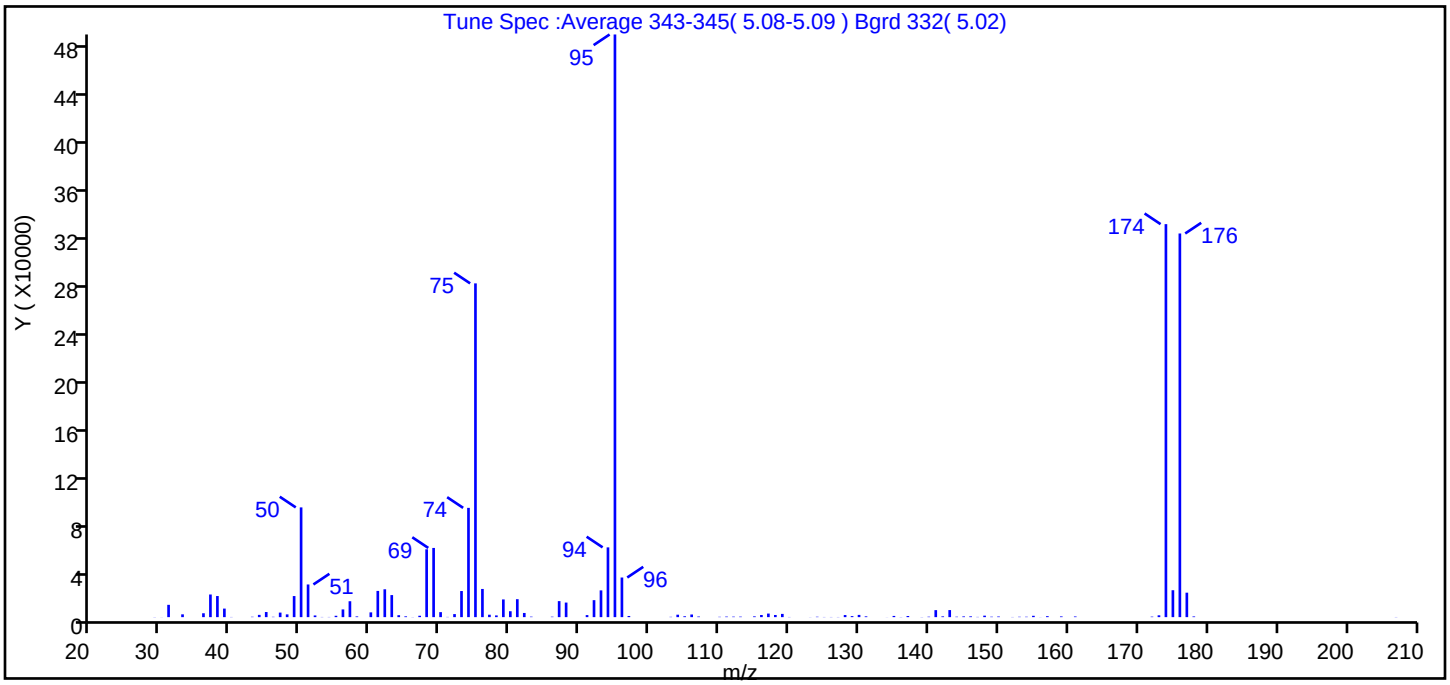
40MXSUR_00003 Amount Added: 40.00 Units: mL

MS Tune Report

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GBFBG15IC.D
Injection Date: 15-Jul-2020 12:19:30 Instrument ID: MG
Lims ID: BFB
Client ID:
Operator ID: HMT ALS Bottle#: 16 Worklist Smp#: 1
Injection Vol: 500.0 mL Dil. Factor: 1.0000
Method: MG_TO15 Limit Group: MSA TO14A_15 Routine ICAL
Tune Method: BFB Method 8260

$ 5 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	18.8
75	30 to 60% of m/z 95	57.3
96	5 to 9% of m/z 95	6.8
173	Less than 2% of m/z 174	0.3 (0.5)
174	50 to 120% of m/z 95	67.4
175	5 to 9% of m/z 174	4.6 (6.9)
176	Greater than 95% but less than 101% of m/z 174	65.8 (97.6)
177	5 to 9% of m/z 176	4.2 (6.4)

Data File: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GBFBG15IC.D\MG_TO15.rslt\spectra.d
Injection Date: 15-Jul-2020 12:19:30
Spectrum: Tune Spec :Average 343-345(5.08-5.09) Bgrd 332(5.02)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 116

m/z	Y	m/z	Y	m/z	Y	m/z	Y
29.00	110	63.00	18280	96.00	32848	137.00	935
30.00	57	64.00	1602	97.00	959	139.00	115
31.00	10204	65.00	666	103.00	250	140.00	362
33.00	2331	66.00	104	104.00	2030	141.00	5809
36.00	3219	67.00	1150	105.00	720	142.00	635
37.00	18768	68.00	56232	106.00	2198	143.00	5855
38.00	17496	69.00	57352	107.00	496	144.00	361
39.00	7089	70.00	4152	110.00	276	145.00	603
40.00	147	71.00	182	111.00	458	146.00	662
41.00	2	72.00	2529	112.00	421	147.00	189
43.00	309	73.00	21640	113.00	421	148.00	1234
44.00	1883	74.00	90568	115.00	643	149.00	366
45.00	4241	75.00	276608	116.00	1767	150.00	519
46.00	279	76.00	23360	117.00	2962	152.00	141
47.00	3766	77.00	2017	118.00	1785	153.00	316
48.00	2291	78.00	1438	119.00	2688	154.00	336
49.00	17472	79.00	14680	120.00	142	155.00	1113
50.00	90952	80.00	4899	123.00	77	156.00	66
51.00	27080	81.00	14883	124.00	332	157.00	801
52.00	1393	82.00	3464	125.00	139	159.00	599
53.00	155	83.00	406	126.00	138	161.00	556
54.00	156	86.00	373	127.00	130	172.00	418
55.00	1136	87.00	13279	128.00	1731	173.00	1519
56.00	6401	88.00	12077	129.00	843	174.00	325696
57.00	13182	91.00	1700	130.00	1860	175.00	22312
58.00	604	92.00	14074	131.00	663	176.00	317952
60.00	3952	93.00	22184	134.00	58	177.00	20272
61.00	21728	94.00	57824	135.00	1007	178.00	579
62.00	23088	95.00	482880	136.00	117	207.00	127

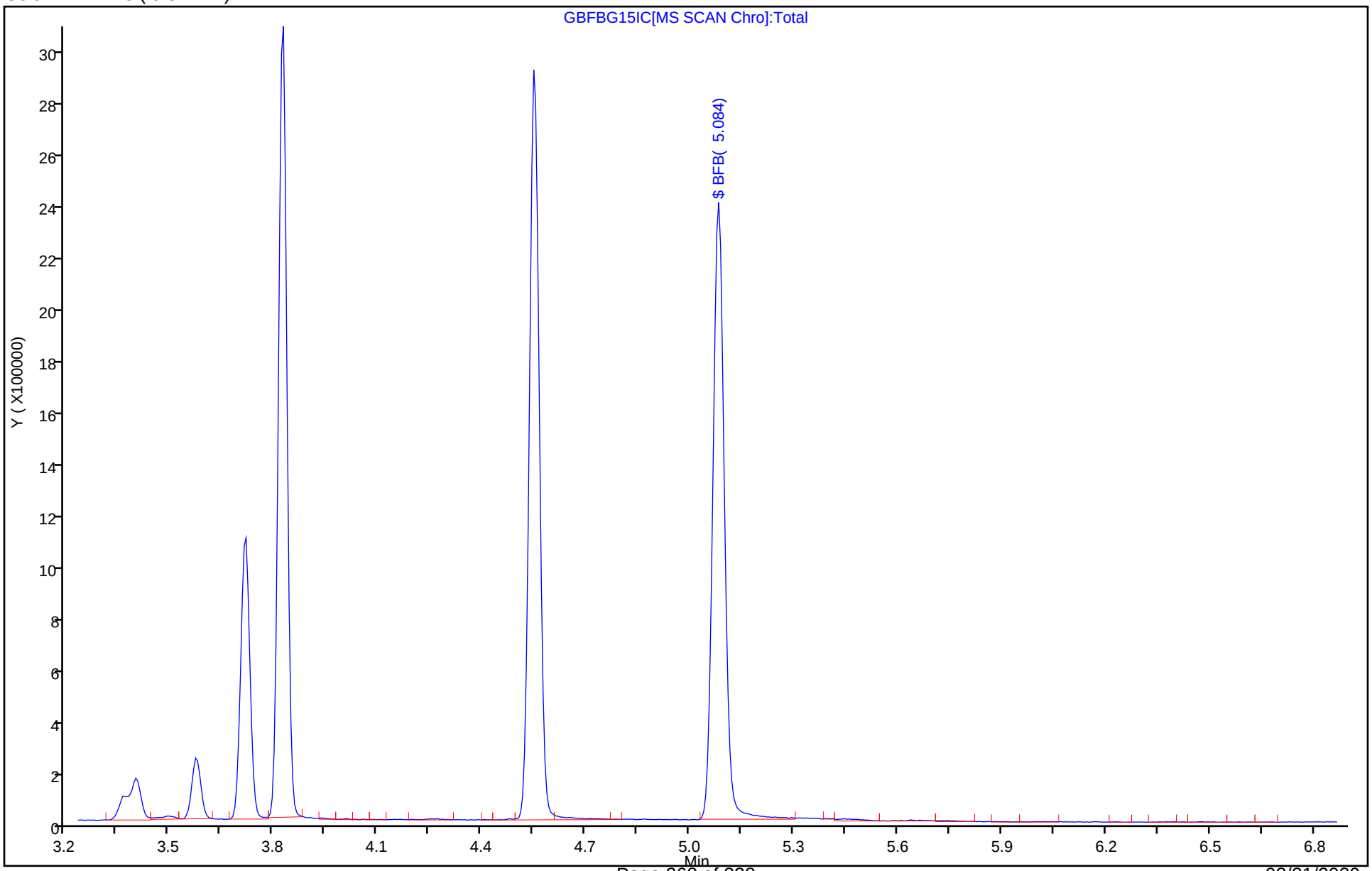
Report Date: 16-Jul-2020 13:23:07 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GBFBG15IC.D

Injection Date:	15-Jul-2020 12:19:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	500.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200819-16309.b\GBFBH19C.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 19-Aug-2020 13:27:30 ALS Bottle#: 16 Worklist Smp#: 1
Injection Vol: 500.0 mL Dil. Factor: 1.0000
Sample Info: 140-0016320-001
Misc. Info.: TUNE
Operator ID: HMT Instrument ID: MG

Method: \\chromfs\Knoxville\ChromData\MG\20200819-16309.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 20-Aug-2020 10:10:12 Calib Date: 15-Jul-2020 22:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1047

First Level Reviewer: khachitpongpanits Date: 20-Aug-2020 10:10:12

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
$ 5 BFB	95	5.106	5.106	0.000	0	831166	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

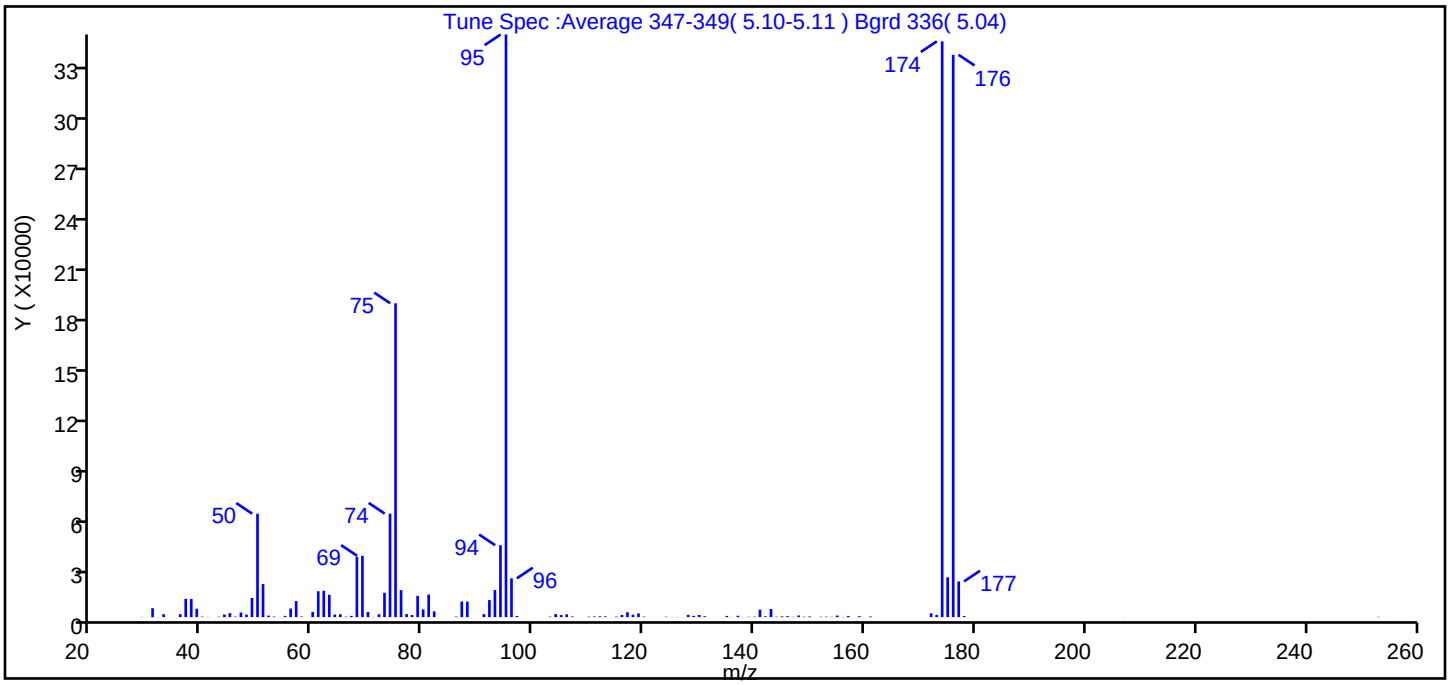
40MXSUR_00003 Amount Added: 40.00 Units: mL

MS Tune Report

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200819-16309.b\GBFBH19C.D
Injection Date: 19-Aug-2020 13:27:30 Instrument ID: MG
Lims ID: BFB
Client ID:
Operator ID: HMT ALS Bottle#: 16 Worklist Smp#: 1
Injection Vol: 500.0 mL Dil. Factor: 1.0000
Method: MG_TO15 Limit Group: MSA TO14A_15 Routine ICAL
Tune Method: BFB Method 8260

$ 5 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	17.8
75	30 to 60% of m/z 95	53.9
96	5 to 9% of m/z 95	6.7
173	Less than 2% of m/z 174	0.4 (0.4)
174	50 to 120% of m/z 95	98.8
175	5 to 9% of m/z 174	6.8 (6.9)
176	Greater than 95% but less than 101% of m/z 174	96.5 (97.7)
177	5 to 9% of m/z 176	6.1 (6.4)

Data File: \\chromfs\Knoxville\ChromData\MG\20200819-16309.b\GBFBH19C.D\MG_TO15.rslt\spectra.d
Injection Date: 19-Aug-2020 13:27:30
Spectrum: Tune Spec :Average 347-349(5.10-5.11) Bgrd 336(5.04)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 117

m/z	Y	m/z	Y	m/z	Y	m/z	Y
29.00	121	64.00	1552	103.00	290	141.00	4374
31.00	5264	65.00	1706	104.00	1773	142.00	494
32.00	101	66.00	286	105.00	1252	143.00	4795
33.00	1710	67.00	754	106.00	1665	144.00	262
36.00	1755	68.00	35544	107.00	419	145.00	463
37.00	10842	69.00	36144	110.00	316	146.00	609
38.00	10689	70.00	3033	111.00	402	147.00	175
39.00	4932	71.00	127	112.00	496	148.00	977
40.00	287	72.00	1681	113.00	474	149.00	269
41.00	118	73.00	14339	114.00	50	150.00	417
43.00	260	74.00	60984	115.00	356	152.00	243
44.00	1553	75.00	184896	116.00	1291	153.00	292
45.00	2341	76.00	15943	117.00	2867	154.00	197
46.00	316	77.00	1814	118.00	1455	155.00	939
47.00	2734	78.00	1247	119.00	2212	156.00	125
48.00	1503	79.00	12525	120.00	326	157.00	691
49.00	11324	80.00	4562	124.00	257	159.00	548
50.00	60928	81.00	13298	125.00	66	161.00	405
51.00	19488	82.00	3401	126.00	124	172.00	2259
52.00	917	83.00	45	127.00	54	173.00	1300
53.00	349	86.00	337	128.00	1357	174.00	339200
54.00	61	87.00	9250	129.00	769	175.00	23464
55.00	768	88.00	9135	130.00	1286	176.00	331264
56.00	5072	91.00	1762	131.00	525	177.00	21056
57.00	9453	92.00	10035	135.00	730	178.00	631
58.00	375	93.00	15999	136.00	63	207.00	61
60.00	3099	94.00	42384	137.00	817	253.00	194
61.00	15273	95.00	343232	138.00	80		
62.00	15548	96.00	22856	139.00	207		
63.00	13151	97.00	682	140.00	271		

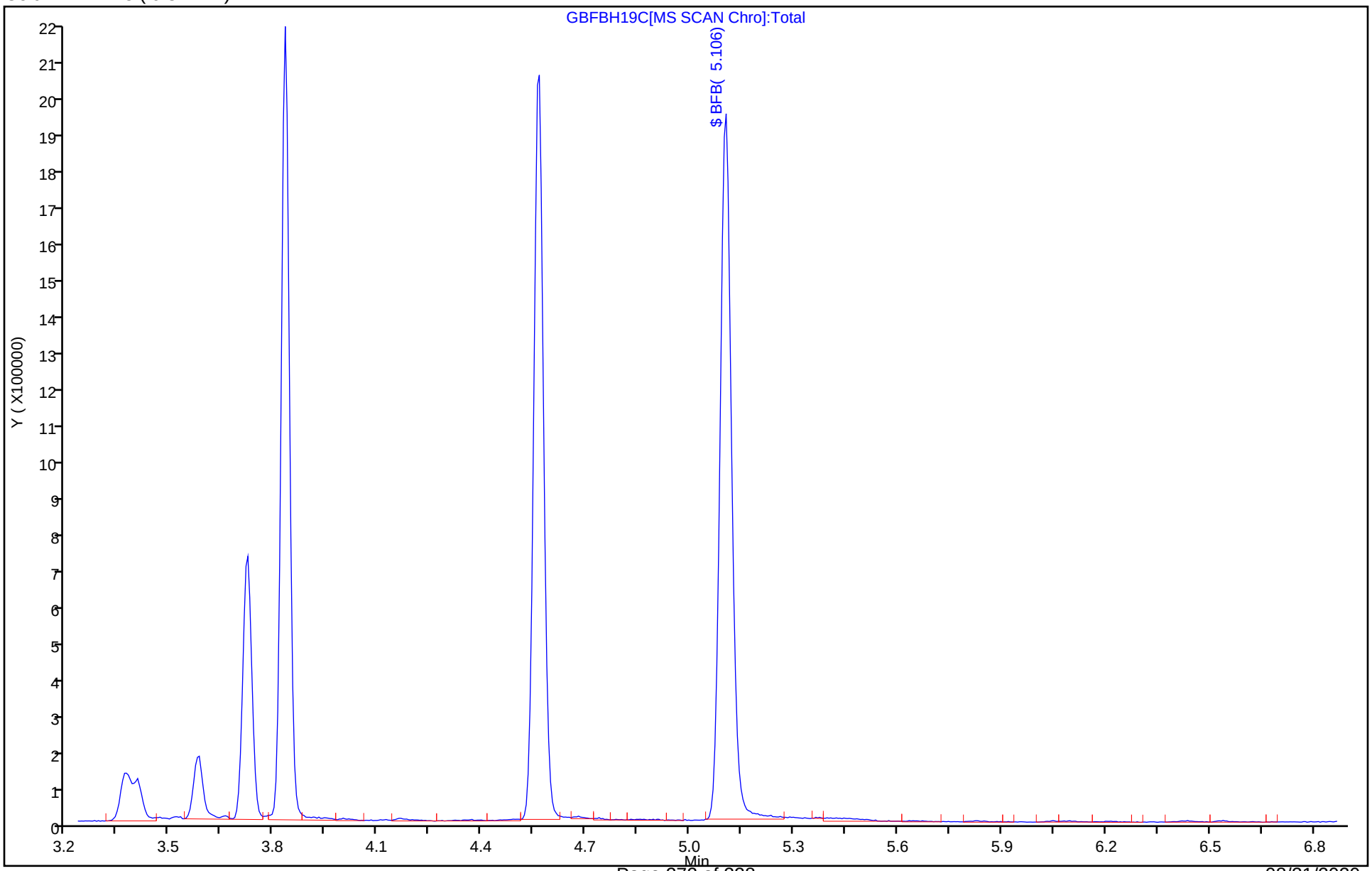
Report Date: 20-Aug-2020 10:10:12 Chrom Revision: 2.3 17-Aug-2020 20:42:08

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200819-16309.b\GBFBH19C.D

Injection Date:	19-Aug-2020 13:27:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	500.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27BLKZ.D
Lims ID: BFB to15 only
Client ID:
Sample Type: BFB
Inject. Date: 27-Jul-2020 16:54:30 ALS Bottle#: 16 Worklist Smp#: 1
Injection Vol: 500.0 mL Dil. Factor: 1.0000
Sample Info: 140-0016116-001
Misc. Info.: BFB
Operator ID: HMT Instrument ID: MR

Method: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 28-Jul-2020 16:07:04 Calib Date: 28-Jul-2020 09:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC09R.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1014

First Level Reviewer: barlozhetskayaa Date: 28-Jul-2020 16:07:04

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
$ 5 BFB	95	5.978	5.978	0.000	0	457390	NR	NR	8

QC Flag Legend

Processing Flags
NR - Missing Quant Standard
8 - Failed MS Tune Ratio Test

Reagents:

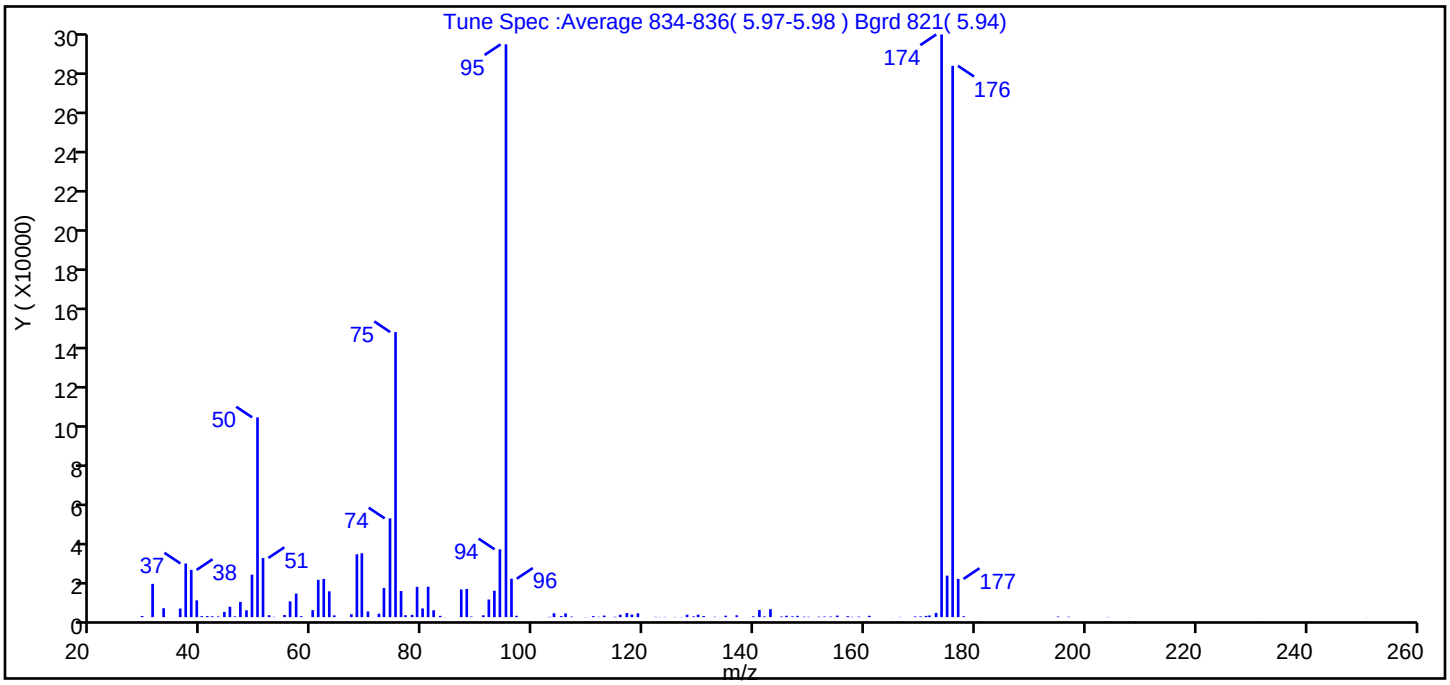
40MXSUR_00003 Amount Added: 40.00 Units: mL

MS Tune Report

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27BLKZ.D
Injection Date: 27-Jul-2020 16:54:30 Instrument ID: MR
Lims ID: BFB to15 only
Client ID:
Operator ID: HMT ALS Bottle#: 16 Worklist Smp#: 1
Injection Vol: 500.0 mL Dil. Factor: 1.0000
Method: MR_TO15 Limit Group: MSA TO14A_15 Routine ICAL
Tune Method: BFB Method 8260

$ 5 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	34.9
75	30 to 60% of m/z 95	49.8
96	5 to 9% of m/z 95	6.7
173	Less than 2% of m/z 174	0.7 (0.7)
174	50 to 120% of m/z 95	101.7
175	5 to 9% of m/z 174	7.3 (7.1)
176	Greater than 95% but less than 101% of m/z 174	96.2 (94.6)*
177	5 to 9% of m/z 176	6.7 (6.9)

Data File: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27BLKZ.D\MR_TO15.rslt\spectra.d
Injection Date: 27-Jul-2020 16:54:30
Spectrum: Tune Spec :Average 834-836(5.97-5.98) Bgrd 821(5.94)
Base Peak: 173.90
Minimum % Base Peak: 0
Number of Points: 130

m/z	Y	m/z	Y	m/z	Y	m/z	Y
29.00	584	67.00	1452	107.00	272	148.00	660
31.00	16640	68.00	31432	109.00	74	149.00	245
33.00	4449	69.00	31944	110.00	41	150.00	191
34.00	34	70.00	2827	111.00	528	152.00	54
36.00	4306	71.00	50	112.00	173	152.00	223
37.00	26840	72.00	1714	113.00	782	153.00	296
38.00	23608	73.00	14625	115.00	121	154.00	297
39.00	8420	74.00	49384	115.00	164	155.00	779
40.00	502	75.00	142528	116.00	1215	157.00	464
41.00	594	76.00	13064	117.00	2069	158.00	161
42.00	442	77.00	965	118.00	1288	159.00	286
43.00	326	78.00	1140	119.00	1914	161.00	681
44.00	2637	79.00	15125	122.00	156	165.00	40
45.00	5214	80.00	4343	123.00	85	166.00	127
46.00	377	81.00	15196	124.00	127	169.00	354
47.00	7611	82.00	3429	126.00	115	170.00	346
48.00	3434	83.00	641	127.00	89	171.00	652
49.00	21232	84.00	65	128.00	1226	172.00	837
50.00	99880	87.00	13852	129.00	389	173.00	2128
51.00	29584	88.00	14099	130.00	1242	174.00	291328
52.00	965	89.00	287	131.00	544	175.00	20768
53.00	150	91.00	919	133.00	198	176.00	275648
55.00	1078	92.00	8818	134.00	65	177.00	19112
56.00	7890	93.00	13192	135.00	738	178.00	437
57.00	11783	94.00	33920	137.00	925	181.00	44
58.00	468	95.00	286400	139.00	54	195.00	300
59.00	7	96.00	19232	140.00	394	197.00	207
60.00	3495	97.00	688	141.00	3613	204.00	119
61.00	18664	103.00	79	142.00	393	208.00	69
62.00	19104	103.00	164	143.00	3989	232.00	33
63.00	12910	104.00	1919	145.00	320	251.00	40
64.00	892	105.00	537	146.00	702		
65.00	37	106.00	1854	147.00	368		

m/z	Y	m/z	Y	m/z	Y	m/z	Y
29.00	584	67.00	1452	107.00	272	148.00	660
31.00	16640	68.00	31432	109.00	74	149.00	245
33.00	4449	69.00	31944	110.00	41	150.00	191
34.00	34	70.00	2827	111.00	528	152.00	54
36.00	4306	71.00	50	112.00	173	152.00	223
37.00	26840	72.00	1714	113.00	782	153.00	296
38.00	23608	73.00	14625	115.00	121	154.00	297
39.00	8420	74.00	49384	115.00	164	155.00	779
40.00	502	75.00	142528	116.00	1215	157.00	464
41.00	594	76.00	13064	117.00	2069	158.00	161
42.00	442	77.00	965	118.00	1288	159.00	286
43.00	326	78.00	1140	119.00	1914	161.00	681
44.00	2637	79.00	15125	122.00	156	165.00	40
45.00	5214	80.00	4343	123.00	85	166.00	127
46.00	377	81.00	15196	124.00	127	169.00	354
47.00	7611	82.00	3429	126.00	115	170.00	346
48.00	3434	83.00	641	127.00	89	171.00	652
49.00	21232	84.00	65	128.00	1226	172.00	837
50.00	99880	87.00	13852	129.00	389	173.00	2128
51.00	29584	88.00	14099	130.00	1242	174.00	291328
52.00	965	89.00	287	131.00	544	175.00	20768
53.00	150	91.00	919	133.00	198	176.00	275648
55.00	1078	92.00	8818	134.00	65	177.00	19112
56.00	7890	93.00	13192	135.00	738	178.00	437
57.00	11783	94.00	33920	137.00	925	181.00	44
58.00	468	95.00	286400	139.00	54	195.00	300
59.00	7	96.00	19232	140.00	394	197.00	207
60.00	3495	97.00	688	141.00	3613	204.00	119
61.00	18664	103.00	79	142.00	393	208.00	69
62.00	19104	103.00	164	143.00	3989	232.00	33
63.00	12910	104.00	1919	145.00	320	251.00	40
64.00	892	105.00	537	146.00	702		
65.00	37	106.00	1854	147.00	368		

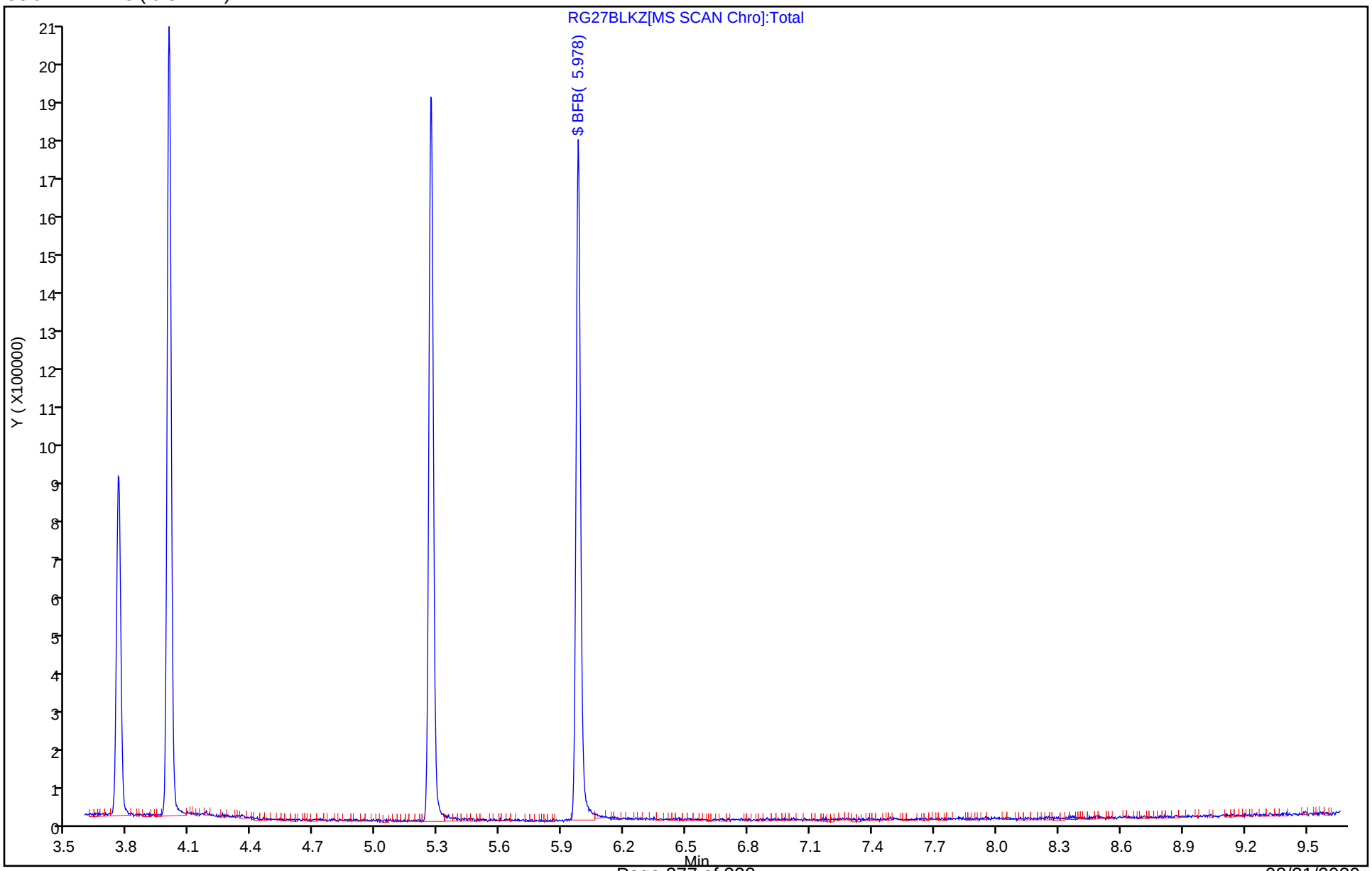
Report Date: 28-Jul-2020 16:07:04 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27BLKZ.D

Injection Date:	27-Jul-2020 16:54:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	BFB to15 only			Worklist Smp#:	1
Client ID:					
Injection Vol:	500.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MR\20200818-16322.b\RBFBH20B.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 20-Aug-2020 14:08:30 ALS Bottle#: 16 Worklist Smp#: 1
Injection Vol: 500.0 mL Dil. Factor: 1.0000
Sample Info: 140-0016322-001
Misc. Info.: BFB
Operator ID: HMT Instrument ID: MR

Method: \\chromfs\Knoxville\ChromData\MR\20200818-16322.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 21-Aug-2020 11:17:46 Calib Date: 28-Jul-2020 09:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC09R.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1057

First Level Reviewer: khachitpongpanits Date: 21-Aug-2020 11:17:46

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
$ 5 BFB	95	5.960	5.960	0.000	0	573499	NR	NR	8

QC Flag Legend

Processing Flags
NR - Missing Quant Standard
8 - Failed MS Tune Ratio Test

Reagents:

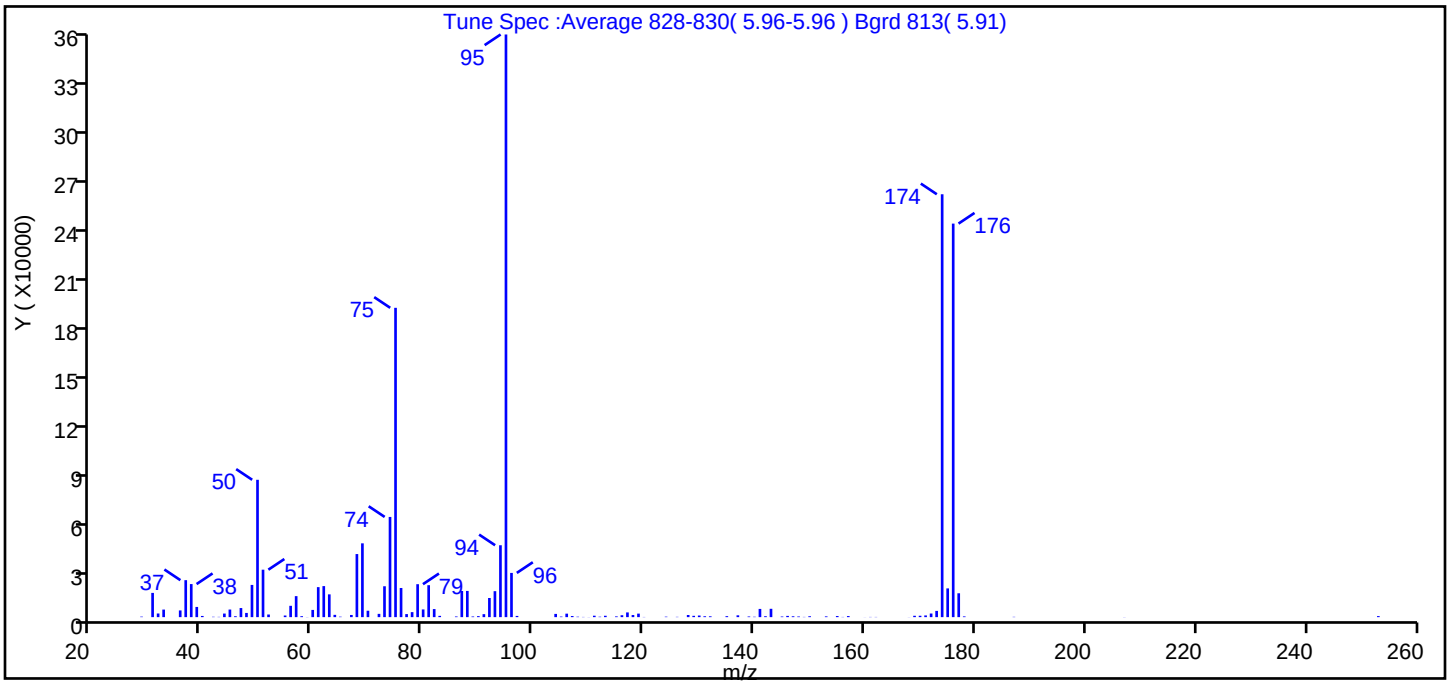
40MXSUR_00003 Amount Added: 40.00 Units: mL

MS Tune Report

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200818-16322.b\RBFBH20B.D
Injection Date: 20-Aug-2020 14:08:30 Instrument ID: MR
Lims ID: BFB
Client ID:
Operator ID: HMT ALS Bottle#: 16 Worklist Smp#: 1
Injection Vol: 500.0 mL Dil. Factor: 1.0000
Method: MR_TO15 Limit Group: MSA TO14A_15 Routine ICAL
Tune Method: BFB Method 8260

$ 5 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	23.6
75	30 to 60% of m/z 95	53.1
96	5 to 9% of m/z 95	7.6
173	Less than 2% of m/z 174	1.1 (1.5)
174	50 to 120% of m/z 95	72.6
175	5 to 9% of m/z 174	4.9 (6.8)
176	Greater than 95% but less than 101% of m/z 174	67.5 (93.1)*
177	5 to 9% of m/z 176	4.1 (6.1)

Data File: \\chromfs\Knoxville\ChromData\MR\20200818-16322.b\RBFBH20B.D\MR_TO15.rslt\spectra.d
Injection Date: 20-Aug-2020 14:08:30
Spectrum: Tune Spec :Average 828-830(5.96-5.96) Bgrd 813(5.91)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 116

m/z	Y	m/z	Y	m/z	Y	m/z	Y
29.00	309	64.00	1392	97.00	736	142.00	561
31.00	14703	65.00	275	104.00	1964	143.00	5060
32.00	2214	67.00	1319	105.00	342	145.00	379
33.00	4590	68.00	38256	106.00	2118	146.00	756
36.00	4072	69.00	44760	107.00	670	147.00	516
37.00	22424	70.00	3888	108.00	265	148.00	392
38.00	20056	72.00	1991	109.00	126	149.00	138
39.00	6187	73.00	18728	110.00	64	150.00	541
40.00	725	74.00	60768	111.00	869	153.00	461
42.00	218	75.00	187584	112.00	264	155.00	668
43.00	166	76.00	17680	113.00	838	156.00	122
44.00	2172	77.00	1857	115.00	460	157.00	644
45.00	4608	78.00	3032	116.00	1158	160.00	41
46.00	557	79.00	19984	117.00	2859	161.00	126
47.00	5516	80.00	4672	118.00	1284	162.00	122
48.00	2554	81.00	19376	119.00	2135	168.00	55
49.00	19536	82.00	4897	120.00	112	169.00	830
50.00	83296	83.00	781	124.00	292	170.00	839
51.00	28776	86.00	406	126.00	179	171.00	1034
52.00	1595	87.00	15855	128.00	1300	172.00	2203
55.00	990	88.00	15889	129.00	799	173.00	3784
56.00	6870	89.00	394	130.00	981	174.00	256448
57.00	12743	90.00	610	131.00	538	175.00	17432
58.00	567	91.00	1813	132.00	500	176.00	238656
59.00	73	92.00	11610	135.00	594	177.00	14473
60.00	4381	93.00	15746	137.00	1105	178.00	438
61.00	18200	94.00	43600	139.00	399	187.00	181
62.00	18824	95.00	353344	140.00	235	207.00	68
63.00	13815	96.00	26824	141.00	4984	253.00	629

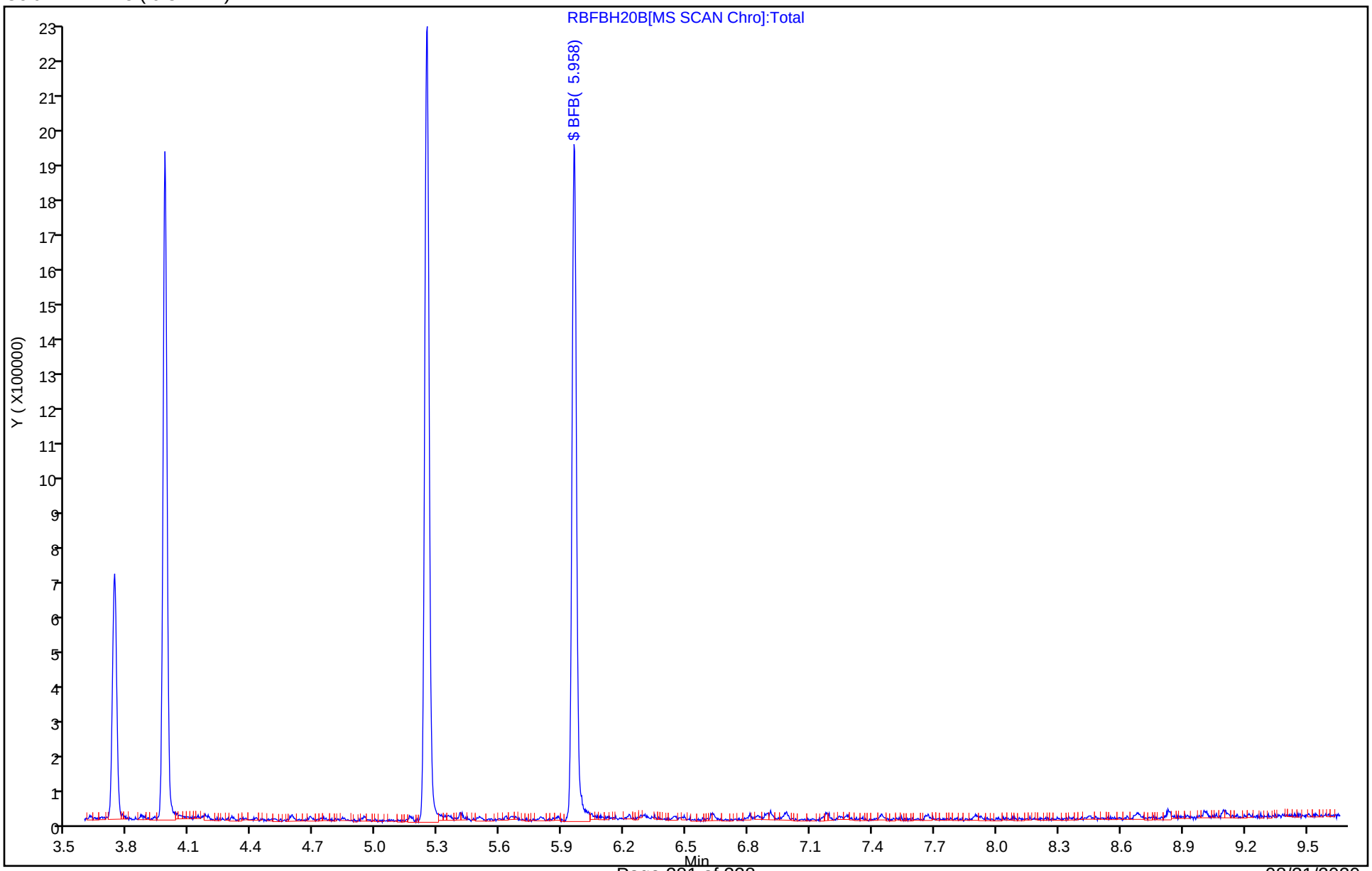
Report Date: 21-Aug-2020 11:17:46 Chrom Revision: 2.3 17-Aug-2020 20:42:08

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200818-16322.b\RBFBH20B.D

Injection Date:	20-Aug-2020 14:08:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	500.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20065-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 140-41859/4

Matrix: Air Lab File ID: G500BH19.D

Analysis Method: TO 15 LL Date Collected:

Sample wt/vol: 500(mL) Date Analyzed: 08/19/2020 16:15

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 41859 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	ND		0.080	0.0080
56-23-5	Carbon tetrachloride	153.81	ND		0.080	0.0070
75-45-6	Chlorodifluoromethane	86.47	ND		0.080	0.022
67-66-3	Chloroform	119.38	ND		0.080	0.0070
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.080	0.010
75-71-8	Dichlorodifluoromethane	120.91	ND		0.080	0.014
75-34-3	1,1-Dichloroethane	98.96	ND		0.080	0.0070
107-06-2	1,2-Dichloroethane	98.96	ND		0.080	0.010
75-35-4	1,1-Dichloroethene	96.94	ND		0.080	0.0080
100-41-4	Ethylbenzene	106.17	ND		0.080	0.013
75-09-2	Methylene Chloride	84.93	ND		0.40	0.39
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.40	0.052
91-20-3	Naphthalene	128.17	ND		0.040	0.040
127-18-4	Tetrachloroethene	165.83	ND		0.080	0.0070
108-88-3	Toluene	92.14	ND		0.12	0.078
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.080	0.0070
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.080	0.064
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.080	0.037
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.080	0.0070
79-01-6	Trichloroethene	131.39	ND		0.040	0.0060
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.080	0.036
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.080	0.020
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.080	0.022
75-01-4	Vinyl chloride	62.50	ND		0.040	0.026
1330-20-7	Xylenes, Total	106.17	ND		0.16	0.024

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	76		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20065-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 140-41859/4

Matrix: Air Lab File ID: G500BH19.D

Analysis Method: TO 15 LL Date Collected:

Sample wt/vol: 500(mL) Date Analyzed: 08/19/2020 16:15

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 41859 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	ND		0.26	0.026
56-23-5	Carbon tetrachloride	153.81	ND		0.50	0.044
75-45-6	Chlorodifluoromethane	86.47	ND		0.28	0.078
67-66-3	Chloroform	119.38	ND		0.39	0.034
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.32	0.040
75-71-8	Dichlorodifluoromethane	120.91	ND		0.40	0.069
75-34-3	1,1-Dichloroethane	98.96	ND		0.32	0.028
107-06-2	1,2-Dichloroethane	98.96	ND		0.32	0.040
75-35-4	1,1-Dichloroethene	96.94	ND		0.32	0.032
100-41-4	Ethylbenzene	106.17	ND		0.35	0.056
75-09-2	Methylene Chloride	84.93	ND		1.4	1.4
1634-04-4	Methyl tert-butyl ether	88.15	ND		1.4	0.19
91-20-3	Naphthalene	128.17	ND		0.21	0.21
127-18-4	Tetrachloroethene	165.83	ND		0.54	0.047
108-88-3	Toluene	92.14	ND		0.45	0.29
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.32	0.028
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.59	0.47
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.44	0.20
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.44	0.038
79-01-6	Trichloroethene	131.39	ND		0.21	0.032
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.39	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.39	0.098
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.39	0.11
75-01-4	Vinyl chloride	62.50	ND		0.10	0.066
1330-20-7	Xylenes, Total	106.17	ND		0.69	0.10

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	76		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200819-16309.b\G500BH19.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 19-Aug-2020 16:15:30 ALS Bottle#: 16 Worklist Smp#: 4
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016309-004
Misc. Info.: 500ML BLK
Operator ID: HMT Instrument ID: MG

Method: \\chromfs\Knoxville\ChromData\MG\20200819-16309.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 20-Aug-2020 10:15:21 Calib Date: 15-Jul-2020 22:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1047

First Level Reviewer: khachitpongpanits Date: 20-Aug-2020 10:15:21

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.822	8.827	-0.005	94	192042	4.00	4.00	
* 2 1,4-Difluorobenzene	114	11.006	11.011	-0.005	95	1644293	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.740	15.740	0.000	88	1319011	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.385	17.385	0.000	96	819464	4.00	3.06	
7 Propene	41	3.721	3.721	0.000	98	68003		-0.6380	7

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

40MXISSURP_00004 Amount Added: 40.00 Units: mL Run Reagent

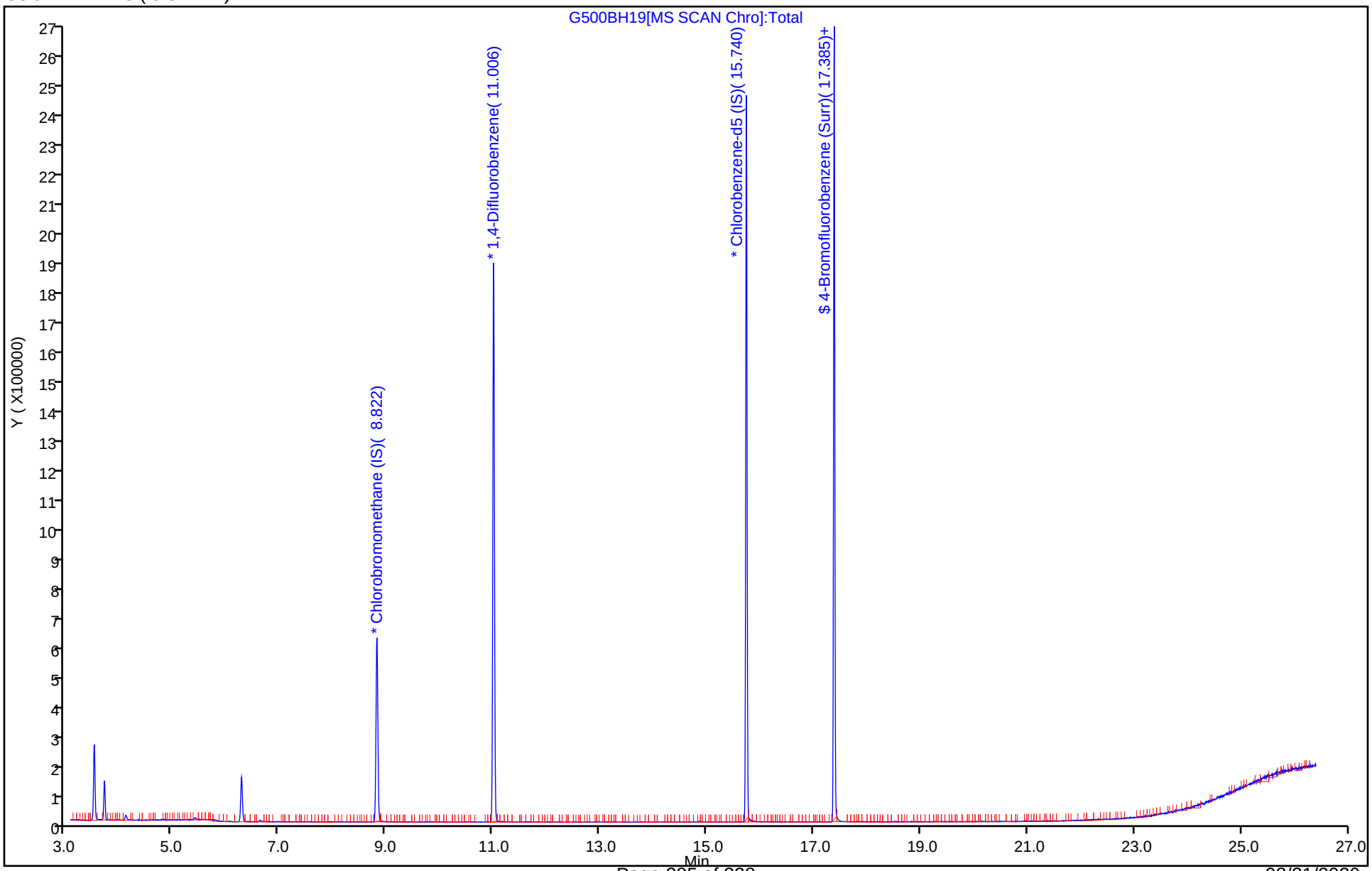
Report Date: 20-Aug-2020 10:15:21 Chrom Revision: 2.3 17-Aug-2020 20:42:08

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200819-16309.b\G500BH19.D

Injection Date:	19-Aug-2020 16:15:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	MB			Worklist Smp#:	4
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MG\20200819-16309.b\G500BH19.D				
Lims ID:	MB				
Client ID:					
Sample Type:	MB				
Inject. Date:	19-Aug-2020 16:15:30	ALS Bottle#:	16	Worklist Smp#:	4
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016309-004				
Misc. Info.:	500ML BLK				
Operator ID:	HMT	Instrument ID:	MG		
Method:	\\chromfs\Knoxville\ChromData\MG\20200819-16309.b\MG_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	20-Aug-2020 10:15:21	Calib Date:	15-Jul-2020 22:02:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1047				

First Level Reviewer: khachitpongpanits Date: 20-Aug-2020 10:15:21

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.00	3.06	76.41

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20065-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 140-41899/4

Matrix: Air Lab File ID: R500BH20.D

Analysis Method: TO 15 LL Date Collected:

Sample wt/vol: 500(mL) Date Analyzed: 08/20/2020 16:23

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 41899 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	ND		0.080	0.0080
56-23-5	Carbon tetrachloride	153.81	ND		0.080	0.0070
75-45-6	Chlorodifluoromethane	86.47	ND		0.080	0.022
67-66-3	Chloroform	119.38	ND		0.080	0.0070
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.080	0.010
75-71-8	Dichlorodifluoromethane	120.91	ND		0.080	0.014
75-34-3	1,1-Dichloroethane	98.96	ND		0.080	0.0070
107-06-2	1,2-Dichloroethane	98.96	ND		0.080	0.010
75-35-4	1,1-Dichloroethene	96.94	ND		0.080	0.0080
100-41-4	Ethylbenzene	106.17	ND		0.080	0.013
75-09-2	Methylene Chloride	84.93	ND		0.40	0.39
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.40	0.052
91-20-3	Naphthalene	128.17	ND		0.040	0.040
127-18-4	Tetrachloroethene	165.83	ND		0.080	0.0070
108-88-3	Toluene	92.14	ND		0.12	0.078
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.080	0.0070
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.080	0.064
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.080	0.037
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.080	0.0070
79-01-6	Trichloroethene	131.39	ND		0.040	0.0060
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.080	0.036
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.080	0.020
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.080	0.022
75-01-4	Vinyl chloride	62.50	ND		0.040	0.026
1330-20-7	Xylenes, Total	106.17	ND		0.16	0.024

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	88		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20065-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 140-41899/4

Matrix: Air Lab File ID: R500BH20.D

Analysis Method: TO 15 LL Date Collected:

Sample wt/vol: 500(mL) Date Analyzed: 08/20/2020 16:23

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 41899 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	ND		0.26	0.026
56-23-5	Carbon tetrachloride	153.81	ND		0.50	0.044
75-45-6	Chlorodifluoromethane	86.47	ND		0.28	0.078
67-66-3	Chloroform	119.38	ND		0.39	0.034
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.32	0.040
75-71-8	Dichlorodifluoromethane	120.91	ND		0.40	0.069
75-34-3	1,1-Dichloroethane	98.96	ND		0.32	0.028
107-06-2	1,2-Dichloroethane	98.96	ND		0.32	0.040
75-35-4	1,1-Dichloroethene	96.94	ND		0.32	0.032
100-41-4	Ethylbenzene	106.17	ND		0.35	0.056
75-09-2	Methylene Chloride	84.93	ND		1.4	1.4
1634-04-4	Methyl tert-butyl ether	88.15	ND		1.4	0.19
91-20-3	Naphthalene	128.17	ND		0.21	0.21
127-18-4	Tetrachloroethene	165.83	ND		0.54	0.047
108-88-3	Toluene	92.14	ND		0.45	0.29
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.32	0.028
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.59	0.47
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.44	0.20
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.44	0.038
79-01-6	Trichloroethene	131.39	ND		0.21	0.032
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.39	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.39	0.098
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.39	0.11
75-01-4	Vinyl chloride	62.50	ND		0.10	0.066
1330-20-7	Xylenes, Total	106.17	ND		0.69	0.10

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	88		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MR\20200818-16322.b\R500BH20.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 20-Aug-2020 16:23:30 ALS Bottle#: 16 Worklist Smp#: 4
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016322-004
Misc. Info.: 500ML BLK
Operator ID: HMT Instrument ID: MR

Method: \\chromfs\Knoxville\ChromData\MR\20200818-16322.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 21-Aug-2020 11:21:38 Calib Date: 28-Jul-2020 09:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC09R.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1057

First Level Reviewer: khachitpongpanits Date: 21-Aug-2020 11:21:38

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
*	1 Chlorobromomethane (IS)	128	8.290	8.312	-0.022	97	169218	4.00	4.00	
*	2 1,4-Difluorobenzene	114	10.523	10.539	-0.016	95	1699706	4.00	4.00	
*	3 Chlorobenzene-d5 (IS)	117	15.365	15.365	0.000	87	1374206	4.00	4.00	
$	4 4-Bromofluorobenzene (Surr)	95	17.010	17.015	-0.005	86	733691	4.00	3.54	
	7 Propene	41	3.351	3.362	-0.011	98	72658		0.3237	7
	47 1,1,1-Trichloroethane	97	9.331	9.342	-0.011	13	3100		0.0161	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

40MXISSURP_00004 Amount Added: 40.00 Units: mL Run Reagent

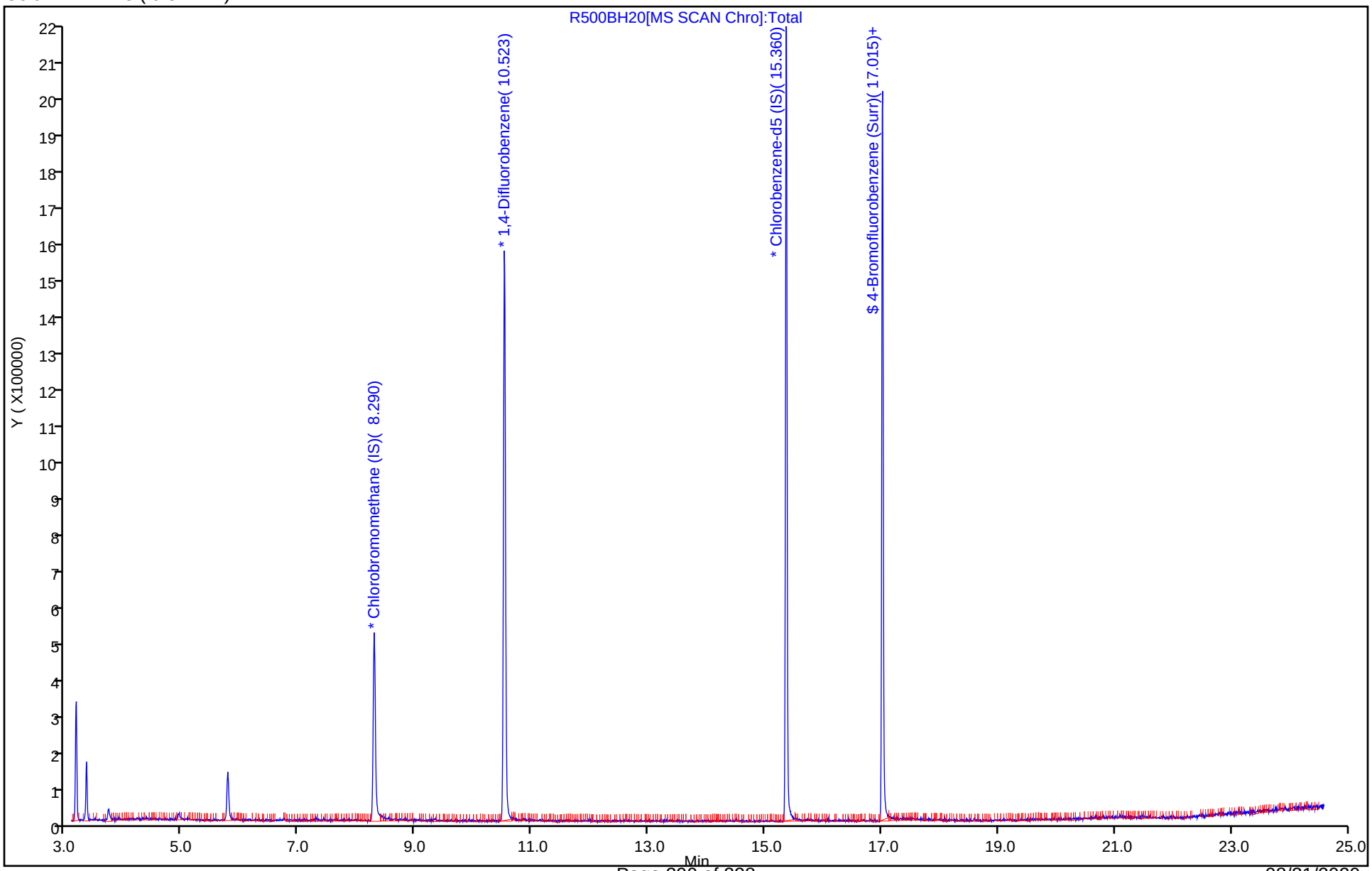
Report Date: 21-Aug-2020 11:21:38 Chrom Revision: 2.3 17-Aug-2020 20:42:08

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200818-16322.b\R500BH20.D

Injection Date:	20-Aug-2020 16:23:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	MB			Worklist Smp#:	4
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MR\20200818-16322.b\R500BH20.D				
Lims ID:	MB				
Client ID:					
Sample Type:	MB				
Inject. Date:	20-Aug-2020 16:23:30	ALS Bottle#:	16	Worklist Smp#:	4
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016322-004				
Misc. Info.:	500ML BLK				
Operator ID:	HMT	Instrument ID:	MR		
Method:	\\chromfs\Knoxville\ChromData\MR\20200818-16322.b\MR_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	21-Aug-2020 11:21:38	Calib Date:	28-Jul-2020 09:59:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC09R.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1057				

First Level Reviewer: khachitpongpanits Date: 21-Aug-2020 11:21:38

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.00	3.54	88.39

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20065-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 140-41859/1002

Matrix: Air Lab File ID: GCCVH19C-LCS.d

Analysis Method: TO 15 LL Date Collected:

Sample wt/vol: 500(mL) Date Analyzed: 08/19/2020 14:03

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 41859 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	1.74		0.080	0.0080
56-23-5	Carbon tetrachloride	153.81	2.30		0.080	0.0070
75-45-6	Chlorodifluoromethane	86.47	1.90		0.080	0.022
67-66-3	Chloroform	119.38	1.98		0.080	0.0070
156-59-2	cis-1,2-Dichloroethene	96.94	1.92		0.080	0.010
75-71-8	Dichlorodifluoromethane	120.91	1.91		0.080	0.014
75-34-3	1,1-Dichloroethane	98.96	1.83		0.080	0.0070
107-06-2	1,2-Dichloroethane	98.96	1.65		0.080	0.010
75-35-4	1,1-Dichloroethene	96.94	2.02		0.080	0.0080
100-41-4	Ethylbenzene	106.17	1.92		0.080	0.013
75-09-2	Methylene Chloride	84.93	2.09		0.40	0.39
1634-04-4	Methyl tert-butyl ether	88.15	1.92		0.40	0.052
91-20-3	Naphthalene	128.17	2.14		0.040	0.040
127-18-4	Tetrachloroethene	165.83	2.02		0.080	0.0070
108-88-3	Toluene	92.14	1.78		0.12	0.078
156-60-5	trans-1,2-Dichloroethene	96.94	1.96		0.080	0.0070
120-82-1	1,2,4-Trichlorobenzene	181.45	3.07		0.080	0.064
71-55-6	1,1,1-Trichloroethane	133.41	2.04		0.080	0.037
79-00-5	1,1,2-Trichloroethane	133.41	1.91		0.080	0.0070
79-01-6	Trichloroethene	131.39	1.90		0.040	0.0060
526-73-8	1,2,3-Trimethylbenzene	120.19	2.81		0.080	0.036
95-63-6	1,2,4-Trimethylbenzene	120.20	2.35		0.080	0.020
108-67-8	1,3,5-Trimethylbenzene	120.20	2.38		0.080	0.022
75-01-4	Vinyl chloride	62.50	1.92		0.040	0.026
1330-20-7	Xylenes, Total	106.17	6.04		0.16	0.024

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	99		60-140

Eurofins Environment Testing America
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200819-16309.b\GCCVH19C-LCS.d
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 19-Aug-2020 14:03:30 ALS Bottle#: 7 Worklist Smp#: 1002
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016320-002
Misc. Info.: P120 110ML
Operator ID: HMT Instrument ID: MG

Method: \\chromfs\Knoxville\ChromData\MG\20200819-16309.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 20-Aug-2020 10:14:50 Calib Date: 15-Jul-2020 22:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1047

First Level Reviewer: khachitpongpanits Date: 20-Aug-2020 10:14:50

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.827	8.827	0.000	94	145876	4.00	4.00	
* 2 1,4-Difluorobenzene	114	11.011	11.011	0.000	95	1304168	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.740	15.740	0.000	88	1203018	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.385	17.385	0.000	96	970000	4.00	3.97	
6 Chlorodifluoromethane	51	3.710	3.710	0.000	96	281306	2.20	1.90	
7 Propene	41	3.721	3.721	0.000	97	171438	2.20	1.27	
8 Dichlorodifluoromethane	85	3.769	3.769	0.000	100	508039	2.20	1.91	
9 Chloromethane	52	3.953	3.953	0.000	58	52811	2.20	2.08	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.958	3.958	0.000	94	290713	2.20	2.11	
11 Acetaldehyde	44	4.109	4.109	0.000	89	319389	11.0	9.91	
12 Vinyl chloride	62	4.120	4.120	0.000	98	191049	2.20	1.92	
14 Butadiene	54	4.206	4.206	0.000	69	148918	2.20	2.12	
13 Butane	43	4.211	4.211	0.000	85	255865	2.20	1.86	
15 Bromomethane	94	4.530	4.530	0.000	98	169372	2.20	2.04	
16 Chloroethane	64	4.670	4.670	0.000	95	95684	2.20	2.00	
17 Ethanol	31	4.783	4.783	0.000	90	315082	11.0	12.1	
18 Vinyl bromide	106	4.972	4.972	0.000	98	165562	2.20	2.28	
19 2-Methylbutane	43	5.020	5.020	0.000	91	195469	2.20	2.20	
20 Trichlorofluoromethane	101	5.241	5.241	0.000	98	604022	2.20	2.31	
21 Acrolein	56	5.252	5.252	0.000	89	49332	2.20	2.92	
22 Acetonitrile	40	5.317	5.317	0.000	100	62063	2.20	2.49	
23 Acetone	58	5.365	5.365	0.000	96	238169	6.60	7.67	
24 Pentane	72	5.463	5.463	0.000	96	32392	2.20	1.97	
25 Isopropyl alcohol	45	5.473	5.473	0.000	94	649551	6.60	8.49	
26 Ethyl ether	31	5.630	5.630	0.000	90	132427	2.20	2.25	
27 1,1-Dichloroethene	96	5.948	5.948	0.000	94	137698	2.20	2.02	
28 Acrylonitrile	53	6.050	6.050	0.000	96	103842	2.20	2.33	
30 2-Methyl-2-propanol	59	6.083	6.083	0.000	95	261384	2.20	2.22	
29 1,1,2-Trichloro-1,2,2-trifluoroe	101	6.120	6.120	0.000	94	324662	2.20	2.13	
31 Methylene Chloride	84	6.293	6.293	0.000	99	195646	2.20	2.09	
32 3-Chloro-1-propene	39	6.304	6.304	0.000	95	115982	2.20	1.68	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
33 Carbon disulfide	76	6.449	6.449	0.000	99	462737	2.20	2.00	
34 trans-1,2-Dichloroethene	96	7.096	7.096	0.000	95	149163	2.20	1.96	
35 2-Methylpentane	43	7.118	7.118	0.000	95	370306	2.20	2.00	
36 Methyl tert-butyl ether	73	7.237	7.237	0.000	96	408665	2.20	1.92	
37 1,1-Dichloroethane	63	7.517	7.517	0.000	99	308068	2.20	1.83	
38 Vinyl acetate	43	7.625	7.625	0.000	100	328435	2.20	1.99	
39 2-Butanone (MEK)	72	8.078	8.078	0.000	97	62555	2.20	1.76	
40 Hexane	56	8.099	8.099	0.000	92	129428	2.20	1.95	
41 Isopropyl ether	45	8.261	8.261	0.000	97	460204	2.20	2.02	
42 cis-1,2-Dichloroethene	96	8.498	8.498	0.000	98	149022	2.20	1.92	
43 Ethyl acetate	43	8.693	8.693	0.000	100	280895	2.20	1.97	
44 Chloroform	83	8.844	8.844	0.000	97	384704	2.20	1.98	
45 Tert-butyl ethyl ether	59	8.935	8.935	0.000	95	463941	2.20	2.01	
46 Tetrahydrofuran	42	9.253	9.253	0.000	95	153148	2.20	1.89	
47 1,1,1-Trichloroethane	97	9.868	9.868	0.000	95	427151	2.20	2.04	
48 1,2-Dichloroethane	62	9.976	9.976	0.000	98	237784	2.20	1.65	
50 Benzene	78	10.467	10.467	0.000	97	468721	2.20	1.74	
49 Cyclohexane	69	10.472	10.472	0.000	95	76632	2.20	1.61	
51 n-Butanol	31	10.494	10.494	0.000	65	40311	2.20	1.59	
52 Carbon tetrachloride	117	10.494	10.494	0.000	97	427414	2.20	2.30	
53 2,3-Dimethylpentane	71	10.596	10.596	0.000	90	117412	2.20	1.69	
54 Thiophene	84	10.742	10.742	0.000	97	249982	2.20	1.75	
55 Isooctane	57	11.238	11.238	0.000	99	841674	2.20	1.85	
56 n-Heptane	71	11.610	11.610	0.000	89	163304	2.20	1.60	
57 1,2-Dichloropropane	63	11.685	11.685	0.000	90	177323	2.20	1.75	
58 Trichloroethene	130	11.723	11.723	0.000	91	173319	2.20	1.90	
59 Dibromomethane	93	11.804	11.804	0.000	96	193670	2.20	1.81	
60 Dichlorobromomethane	83	11.955	11.955	0.000	98	377245	2.20	2.04	
61 1,4-Dioxane	88	11.982	11.982	0.000	88	70941	2.20	2.32	
62 Methyl methacrylate	41	12.052	12.052	0.000	97	160699	2.20	1.71	
63 Methylcyclohexane	83	12.494	12.494	0.000	96	297893	2.20	1.78	
64 4-Methyl-2-pentanone (MIBK)	43	12.909	12.909	0.000	96	284704	2.20	1.75	
65 cis-1,3-Dichloropropene	75	12.953	12.953	0.000	91	230974	2.20	1.64	
66 trans-1,3-Dichloropropene	75	13.648	13.648	0.000	94	205320	2.20	1.65	
67 Toluene	91	13.772	13.772	0.000	95	464361	2.20	1.78	
68 1,1,2-Trichloroethane	83	13.842	13.842	0.000	97	151599	2.20	1.91	
69 2-Hexanone	58	14.241	14.241	0.000	94	138339	2.20	1.77	
70 n-Octane	85	14.462	14.462	0.000	91	168276	2.20	1.76	
71 Chlorodibromomethane	129	14.549	14.549	0.000	97	306890	2.20	2.21	
72 Ethylene Dibromide	107	14.840	14.840	0.000	97	242763	2.20	1.97	
73 Tetrachloroethene	129	14.915	14.915	0.000	93	180095	2.20	2.02	
75 Chlorobenzene	112	15.789	15.789	0.000	91	367287	2.20	1.95	
74 2,3-Dimethylheptane	43	15.810	15.810	0.000	95	543032	2.20	1.81	
78 Ethylbenzene	91	16.080	16.080	0.000	98	657685	2.20	1.92	
79 m-Xylene & p-Xylene	91	16.242	16.242	0.000	99	1092571	4.40	4.01	
80 n-Nonane	57	16.662	16.662	0.000	90	352099	2.20	1.89	
81 Bromoform	173	16.689	16.689	0.000	96	320309	2.20	3.02	
82 Styrene	104	16.706	16.706	0.000	98	381488	2.20	2.38	
83 o-Xylene	91	16.765	16.765	0.000	98	586868	2.20	2.03	
84 1,1,2,2-Tetrachloroethane	83	17.088	17.088	0.000	99	421729	2.20	2.20	
85 1,2,3-Trichloropropane	110	17.245	17.245	0.000	98	129622	2.20	2.30	
86 Isopropylbenzene	105	17.353	17.353	0.000	97	830455	2.20	2.26	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
87 N-Propylbenzene	120	17.892	17.892	0.000	99	213288	2.20	2.33	
88 2-Chlorotoluene	126	17.940	17.940	0.000	97	195156	2.20	2.32	
89 4-Ethyltoluene	105	18.043	18.043	0.000	98	761496	2.20	2.16	
90 1,3,5-Trimethylbenzene	120	18.118	18.118	0.000	93	327279	2.20	2.38	
92 Alpha Methyl Styrene	118	18.350	18.350	0.000	90	324526	2.20	2.84	
93 n-Decane	57	18.410	18.410	0.000	90	471840	2.20	2.15	
94 tert-Butylbenzene	119	18.544	18.544	0.000	94	793967	2.20	2.66	
95 1,2,4-Trimethylbenzene	105	18.555	18.555	0.000	95	746689	2.20	2.35	
96 sec-Butylbenzene	105	18.809	18.809	0.000	98	1125247	2.20	2.45	
97 1,3-Dichlorobenzene	146	18.825	18.825	0.000	98	524970	2.20	3.19	
98 Benzyl chloride	91	18.900	18.900	0.000	98	597876	2.20	2.39	
99 1,4-Dichlorobenzene	146	18.911	18.911	0.000	95	510968	2.20	3.07	
100 4-Isopropyltoluene	119	18.970	18.970	0.000	97	899283	2.20	2.53	
101 1,2,3-Trimethylbenzene	105	19.024	19.024	0.000	98	760412	2.20	2.81	
102 Butylcyclohexane	83	19.078	19.078	0.000	96	648541	2.20	2.28	
104 1,2-Dichlorobenzene	146	19.267	19.267	0.000	85	537211	2.20	3.20	
103 2,3-Dihydroindene	117	19.267	19.267	0.000	93	714836	2.20	2.81	
106 Indene	116	19.396	19.396	0.000	97	622465	2.20	2.87	
105 n-Butylbenzene	91	19.402	19.402	0.000	98	921544	2.20	2.30	
107 Undecane	57	19.715	19.715	0.000	94	493443	2.20	2.08	
108 1,2-Dibromo-3-Chloropropane	157	19.866	19.866	0.000	98	233950	2.20	3.58	
109 1,2,4,5-Tetramethylbenzene	119	20.157	20.157	0.000	97	817528	2.20	2.62	
110 Dodecane	57	20.771	20.771	0.000	98	263905	2.20	1.30	
111 1,2,4-Trichlorobenzene	180	20.960	20.960	0.000	93	380055	2.20	3.07	
112 Naphthalene	128	21.100	21.100	0.000	99	680428	2.20	2.14	
113 Hexachlorobutadiene	225	21.311	21.311	0.000	97	523226	2.20	3.60	
114 1,2,3-Trichlorobenzene	180	21.375	21.375	0.000	95	308228	2.20	2.61	
115 2-Methylnaphthalene	142	22.147	22.147	0.000	98	243163	2.20	1.32	
116 1-Methylnaphthalene	142	22.324	22.324	0.000	99	270167	2.20	1.23	
A 122 C8 Range	1	14.457	(14.404-14.511)		0	1543901	2.20	1.74	
S 123 1,2-Dichloroethene, Total	1				0		4.40	3.88	
S 124 Xylenes, Total	100				0		6.60	6.04	

Reagents:

40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent
40CV101P_00119	Amount Added: 110.00	Units: ml	

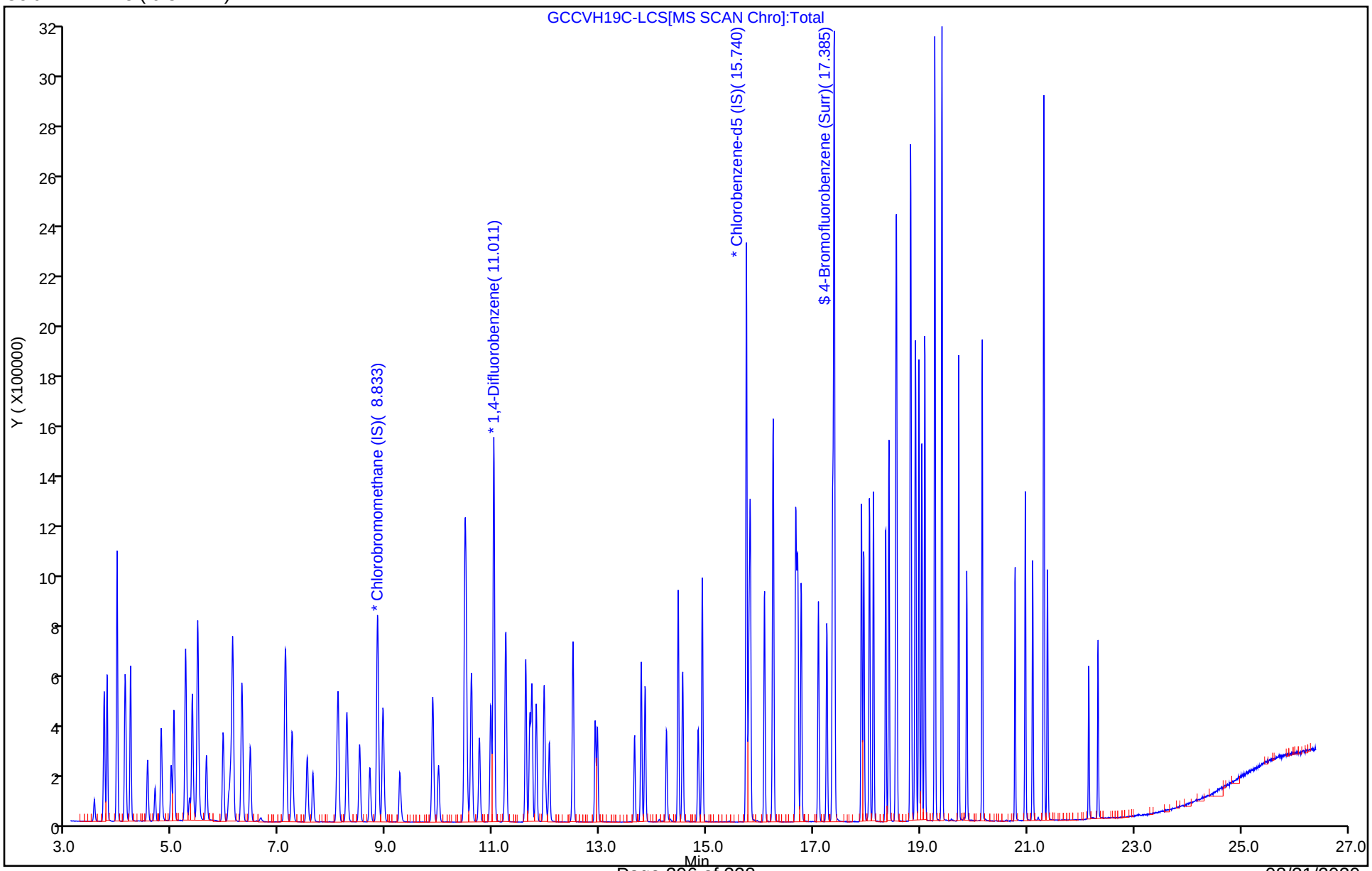
Report Date: 20-Aug-2020 10:14:53 Chrom Revision: 2.3 17-Aug-2020 20:42:08

Eurofins Environment Testing America

Data File: \\chromfs\Knoxville\ChromData\MG\20200819-16309.b\GCCVH19C-LCS.d

Injection Date:	19-Aug-2020 14:03:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	LCS			Worklist Smp#:	1002
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins Environment Testing America
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MG\20200819-16309.b\GCCVH19C-LCS.d				
Lims ID:	LCS				
Client ID:					
Sample Type:	LCS				
Inject. Date:	19-Aug-2020 14:03:30	ALS Bottle#:	7	Worklist Smp#:	1002
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016320-002				
Misc. Info.:	P120 110ML				
Operator ID:	HMT	Instrument ID:	MG		
Method:	\\chromfs\Knoxville\ChromData\MG\20200819-16309.b\MG_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	20-Aug-2020 10:14:50	Calib Date:	15-Jul-2020 22:02:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC07.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1047				

First Level Reviewer: khachitpongpanits Date: 20-Aug-2020 10:14:50

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.00	3.97	99.17

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20065-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 140-41899/1002

Matrix: Air Lab File ID: RCCVH20B-LCS.d

Analysis Method: TO 15 LL Date Collected:

Sample wt/vol: 500(mL) Date Analyzed: 08/20/2020 14:37

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 41899 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	2.80		0.080	0.0080
56-23-5	Carbon tetrachloride	153.81	2.80		0.080	0.0070
75-45-6	Chlorodifluoromethane	86.47	1.99		0.080	0.022
67-66-3	Chloroform	119.38	3.01		0.080	0.0070
156-59-2	cis-1,2-Dichloroethene	96.94	2.85		0.080	0.010
75-71-8	Dichlorodifluoromethane	120.91	2.28		0.080	0.014
75-34-3	1,1-Dichloroethane	98.96	2.59		0.080	0.0070
107-06-2	1,2-Dichloroethane	98.96	2.46		0.080	0.010
75-35-4	1,1-Dichloroethene	96.94	2.81		0.080	0.0080
100-41-4	Ethylbenzene	106.17	2.63		0.080	0.013
75-09-2	Methylene Chloride	84.93	3.16		0.40	0.39
1634-04-4	Methyl tert-butyl ether	88.15	3.15		0.40	0.052
91-20-3	Naphthalene	128.17	2.92		0.040	0.040
127-18-4	Tetrachloroethene	165.83	2.41		0.080	0.0070
108-88-3	Toluene	92.14	2.55		0.12	0.078
156-60-5	trans-1,2-Dichloroethene	96.94	2.99		0.080	0.0070
120-82-1	1,2,4-Trichlorobenzene	181.45	2.08		0.080	0.064
71-55-6	1,1,1-Trichloroethane	133.41	2.90		0.080	0.037
79-00-5	1,1,2-Trichloroethane	133.41	2.59		0.080	0.0070
79-01-6	Trichloroethene	131.39	2.42		0.040	0.0060
526-73-8	1,2,3-Trimethylbenzene	120.19	1.86		0.080	0.036
95-63-6	1,2,4-Trimethylbenzene	120.20	2.68		0.080	0.020
108-67-8	1,3,5-Trimethylbenzene	120.20	3.11		0.080	0.022
75-01-4	Vinyl chloride	62.50	2.16		0.040	0.026
1330-20-7	Xylenes, Total	106.17	8.08		0.16	0.024

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	100		60-140

Eurofins Environment Testing America
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MR\20200818-16322.b\RCCVH20B-LCS.d
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 20-Aug-2020 14:37:30 ALS Bottle#: 12 Worklist Smp#: 1002
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016322-002
Misc. Info.: S123 110ML
Operator ID: HMT Instrument ID: MR

Method: \\chromfs\Knoxville\ChromData\MR\20200818-16322.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 21-Aug-2020 11:19:33 Calib Date: 28-Jul-2020 09:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC09R.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1057

First Level Reviewer: khachitpongpanits Date: 21-Aug-2020 11:19:33

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.312	8.312	0.000	94	178414	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.539	10.539	0.000	94	1678223	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.365	15.365	0.000	87	1444339	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.015	17.015	0.000	86	870177	4.00	3.99	
6 Chlorodifluoromethane	51	3.351	3.351	0.000	97	519816	2.50	1.99	
7 Propene	41	3.362	3.362	0.000	97	348549	2.50	1.96	
8 Dichlorodifluoromethane	85	3.410	3.410	0.000	100	401684	2.50	2.28	
9 Chloromethane	52	3.578	3.578	0.000	67	87138	2.50	1.93	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.588	3.588	0.000	94	361666	2.50	2.09	
11 Acetaldehyde	44	3.723	3.723	0.000	95	523932	12.5	8.49	
12 Vinyl chloride	62	3.734	3.734	0.000	99	279941	2.50	2.16	
14 Butadiene	54	3.815	3.815	0.000	64	225257	2.50	2.07	
13 Butane	43	3.815	3.815	0.000	88	435489	2.50	1.87	
15 Bromomethane	94	4.111	4.111	0.000	98	202970	2.50	2.18	
16 Chloroethane	64	4.241	4.241	0.000	92	121349	2.50	2.20	
17 Ethanol	31	4.360	4.360	0.000	97	537355	12.5	7.58	
18 Vinyl bromide	106	4.521	4.521	0.000	98	191013	2.50	2.17	
19 2-Methylbutane	43	4.564	4.564	0.000	94	285385	2.50	1.66	
20 Trichlorofluoromethane	101	4.769	4.769	0.000	99	586402	2.50	2.68	
21 Acrolein	56	4.791	4.791	0.000	92	105325	2.50	2.76	
22 Acetonitrile	40	4.861	4.861	0.000	99	109949	2.50	2.06	
23 Acetone	58	4.904	4.904	0.000	97	141616	2.50	1.97	
24 Pentane	72	4.980	4.980	0.000	96	48862	2.50	2.88	
25 Isopropyl alcohol	45	5.001	5.001	0.000	91	539784	2.50	2.41	
26 Ethyl ether	31	5.158	5.158	0.000	92	385019	2.50	2.42	
27 1,1-Dichloroethene	96	5.454	5.454	0.000	98	270285	2.50	2.81	
28 Acrylonitrile	53	5.562	5.562	0.000	95	194178	2.50	2.38	
29 2-Methyl-2-propanol	59	5.584	5.584	0.000	94	570344	2.50	2.59	
30 1,1,2-Trichloro-1,2,2-trifluoroe	101	5.627	5.627	0.000	92	538744	2.50	2.75	
31 Methylene Chloride	84	5.788	5.788	0.000	99	299180	2.50	3.16	
32 3-Chloro-1-propene	39	5.799	5.799	0.000	94	248088	2.50	1.96	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
33 Carbon disulfide	76	5.939	5.939	0.000	100	776576	2.50	3.02	
34 trans-1,2-Dichloroethene	96	6.581	6.581	0.000	98	272392	2.50	2.99	
35 2-Methylpentane	43	6.603	6.603	0.000	95	633090	2.50	1.98	
36 Methyl tert-butyl ether	73	6.721	6.721	0.000	98	745920	2.50	3.15	
37 1,1-Dichloroethane	63	6.996	6.996	0.000	99	553325	2.50	2.59	
38 Vinyl acetate	43	7.115	7.115	0.000	100	873296	2.50	2.46	
39 2-Butanone (MEK)	72	7.557	7.557	0.000	97	143451	2.50	3.17	
40 Hexane	56	7.579	7.579	0.000	90	243165	2.50	2.52	
41 Isopropyl ether	45	7.741	7.741	0.000	98	1144770	2.50	2.32	
42 cis-1,2-Dichloroethene	96	7.978	7.978	0.000	95	292478	2.50	2.85	
43 Ethyl acetate	43	8.177	8.177	0.000	98	718214	2.50	2.17	
44 Chloroform	83	8.323	8.323	0.000	95	589722	2.50	3.01	
45 Tert-butyl ethyl ether	59	8.425	8.425	0.000	95	882151	2.50	2.28	
46 Tetrahydrofuran	42	8.717	8.717	0.000	95	387810	2.50	2.31	
47 1,1,1-Trichloroethane	97	9.342	9.342	0.000	95	589258	2.50	2.90	
48 1,2-Dichloroethane	62	9.455	9.455	0.000	97	387494	2.50	2.46	
50 Cyclohexane	69	9.951	9.951	0.000	88	139601	2.50	2.87	
49 n-Butanol	31	9.957	9.957	0.000	66	176331	2.50	2.31	
51 Benzene	78	9.957	9.957	0.000	95	936053	2.50	2.80	
52 Carbon tetrachloride	117	9.973	9.973	0.000	94	595036	2.50	2.80	
53 2,3-Dimethylpentane	71	10.092	10.092	0.000	92	195609	2.50	2.68	
54 Thiophene	84	10.243	10.243	0.000	95	498542	2.50	2.71	
55 Isooctane	57	10.760	10.760	0.000	99	1544286	2.50	2.19	
56 n-Heptane	71	11.159	11.159	0.000	95	302614	2.50	2.69	
57 1,2-Dichloropropane	63	11.235	11.235	0.000	91	361226	2.50	2.34	
58 Trichloroethene	130	11.273	11.273	0.000	94	354925	2.50	2.42	
59 Dibromomethane	93	11.353	11.353	0.000	86	345264	2.50	2.59	
60 Dichlorobromomethane	83	11.504	11.504	0.000	97	642444	2.50	2.82	
61 1,4-Dioxane	88	11.531	11.531	0.000	93	145305	2.50	2.77	
62 Methyl methacrylate	41	11.623	11.623	0.000	93	446308	2.50	2.03	
63 Methylcyclohexane	83	12.060	12.060	0.000	94	636444	2.50	3.30	
64 4-Methyl-2-pentanone (MIBK)	43	12.491	12.491	0.000	98	839293	2.50	2.04	
65 cis-1,3-Dichloropropene	75	12.540	12.540	0.000	96	516827	2.50	2.86	
66 trans-1,3-Dichloropropene	75	13.252	13.252	0.000	98	451406	2.50	2.85	
67 Toluene	91	13.376	13.376	0.000	94	1010952	2.50	2.55	
68 1,1,2-Trichloroethane	83	13.451	13.451	0.000	97	326835	2.50	2.59	
69 2-Hexanone	58	13.855	13.855	0.000	91	415485	2.50	2.45	
70 n-Octane	85	14.087	14.087	0.000	96	330558	2.50	2.74	
71 Chlorodibromomethane	129	14.163	14.163	0.000	97	640236	2.50	2.54	
72 Ethylene Dibromide	107	14.454	14.454	0.000	98	568055	2.50	2.60	
73 Tetrachloroethene	129	14.530	14.530	0.000	91	345048	2.50	2.41	
74 Chlorobenzene	112	15.414	15.414	0.000	95	856051	2.50	2.69	
75 2,3-Dimethylheptane	43	15.446	15.446	0.000	97	1097380	2.50	1.79	
76 Ethylbenzene	91	15.710	15.710	0.000	98	1431226	2.50	2.63	
77 m-Xylene & p-Xylene	91	15.872	15.872	0.000	96	2252225	5.00	5.46	
78 n-Nonane	57	16.304	16.304	0.000	96	758172	2.50	2.15	
79 Bromoform	173	16.314	16.314	0.000	93	595529	2.50	1.91	
80 Styrene	104	16.341	16.341	0.000	98	845503	2.50	2.80	
81 o-Xylene	91	16.395	16.395	0.000	99	1142926	2.50	2.62	
82 1,1,2,2-Tetrachloroethane	83	16.724	16.724	0.000	98	933934	2.50	2.64	
83 1,2,3-Trichloropropane	110	16.886	16.886	0.000	96	242476	2.50	2.51	
84 Isopropylbenzene	105	16.988	16.988	0.000	96	1658905	2.50	2.58	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
85 N-Propylbenzene	120	17.538	17.538	0.000	99	495295	2.50	2.87	
86 2-Chlorotoluene	126	17.582	17.582	0.000	97	457109	2.50	2.73	
87 4-Ethyltoluene	105	17.695	17.695	0.000	99	1644212	2.50	2.70	
88 1,3,5-Trimethylbenzene	120	17.776	17.776	0.000	93	823467	2.50	3.11	
89 Alpha Methyl Styrene	118	18.013	18.013	0.000	94	715853	2.50	2.72	
90 n-Decane	57	18.083	18.083	0.000	88	1048221	2.50	2.20	
91 tert-Butylbenzene	119	18.213	18.213	0.000	94	1458293	2.50	2.55	
92 1,2,4-Trimethylbenzene	105	18.223	18.223	0.000	95	1447134	2.50	2.68	
93 sec-Butylbenzene	105	18.488	18.488	0.000	99	2157156	2.50	2.63	
94 1,3-Dichlorobenzene	146	18.498	18.498	0.000	98	880167	2.50	2.19	
95 Benzyl chloride	91	18.574	18.574	0.000	98	1256017	2.50	2.87	
96 1,4-Dichlorobenzene	146	18.585	18.585	0.000	93	888995	2.50	2.29	
97 4-Isopropyltoluene	119	18.655	18.655	0.000	97	1719762	2.50	2.70	
98 1,2,3-Trimethylbenzene	105	18.703	18.703	0.000	98	1089028	2.50	1.86	
99 Butylcyclohexane	83	18.763	18.763	0.000	94	1146405	2.50	2.51	
101 1,2-Dichlorobenzene	146	18.951	18.951	0.000	86	878860	2.50	2.12	
100 2,3-Dihydroindene	117	18.957	18.957	0.000	95	1275324	2.50	2.32	
102 Indene	116	19.086	19.086	0.000	92	1040045	2.50	2.23	
103 n-Butylbenzene	91	19.097	19.097	0.000	98	1837721	2.50	2.92	
104 Undecane	57	19.426	19.426	0.000	95	1270214	2.50	2.31	
105 1,2-Dibromo-3-Chloropropane	157	19.566	19.566	0.000	95	399938	2.50	1.63	
106 1,2,4,5-Tetramethylbenzene	119	19.868	19.868	0.000	99	1487483	2.50	2.33	
107 Dodecane	57	20.483	20.483	0.000	93	1314484	2.50	2.15	
108 1,2,4-Trichlorobenzene	180	20.661	20.661	0.000	93	760938	2.50	2.08	
109 Naphthalene	128	20.801	20.801	0.000	99	2005891	2.50	2.92	
110 Hexachlorobutadiene	225	21.017	21.017	0.000	87	531874	2.50	1.28	
111 1,2,3-Trichlorobenzene	180	21.087	21.087	0.000	95	769881	2.50	1.92	
112 2-Methylnaphthalene	142	21.825	21.825	0.000	99	463423	2.50	1.25	
113 1-Methylnaphthalene	142	21.960	21.960	0.000	98	474279	2.50	1.03	
A 116 C8 Range	1	14.082	(14.039-14.136)		0	3349662	2.50	2.21	
S 117 Xylenes, Total	100				0		7.50	8.08	
S 118 1,2-Dichloroethene, Total	1				0		5.00	5.84	
T 143 2-Methylthiophene TIC	97	13.527	13.527	0.000	96	864929	2.50	2.40	
T 142 3-Methylthiophene TIC	97	13.731	13.731	0.000	98	842531	2.50	2.33	
T 150 2-Ethylthiophene TIC	97	15.808	15.808	0.000	98	1091104	2.50	3.02	
T 153 1,2-Dimethyl-4-Ethylbenzene TIC	119	19.474	19.474	0.000	99	1262524	2.50	3.50	
T 155 1,2,3,5-Tetramethylbenzene TIC	119	19.916	19.916	0.000	97	906153	2.50	2.51	
T 156 1,2,3,4-Tetramethylbenzene TIC	119	20.310	20.310	0.000	99	1235338	2.50	3.42	a
T 157 Benzo(b)thiophene TIC	134	20.903	20.903	0.000	99	1066805	2.50	2.95	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

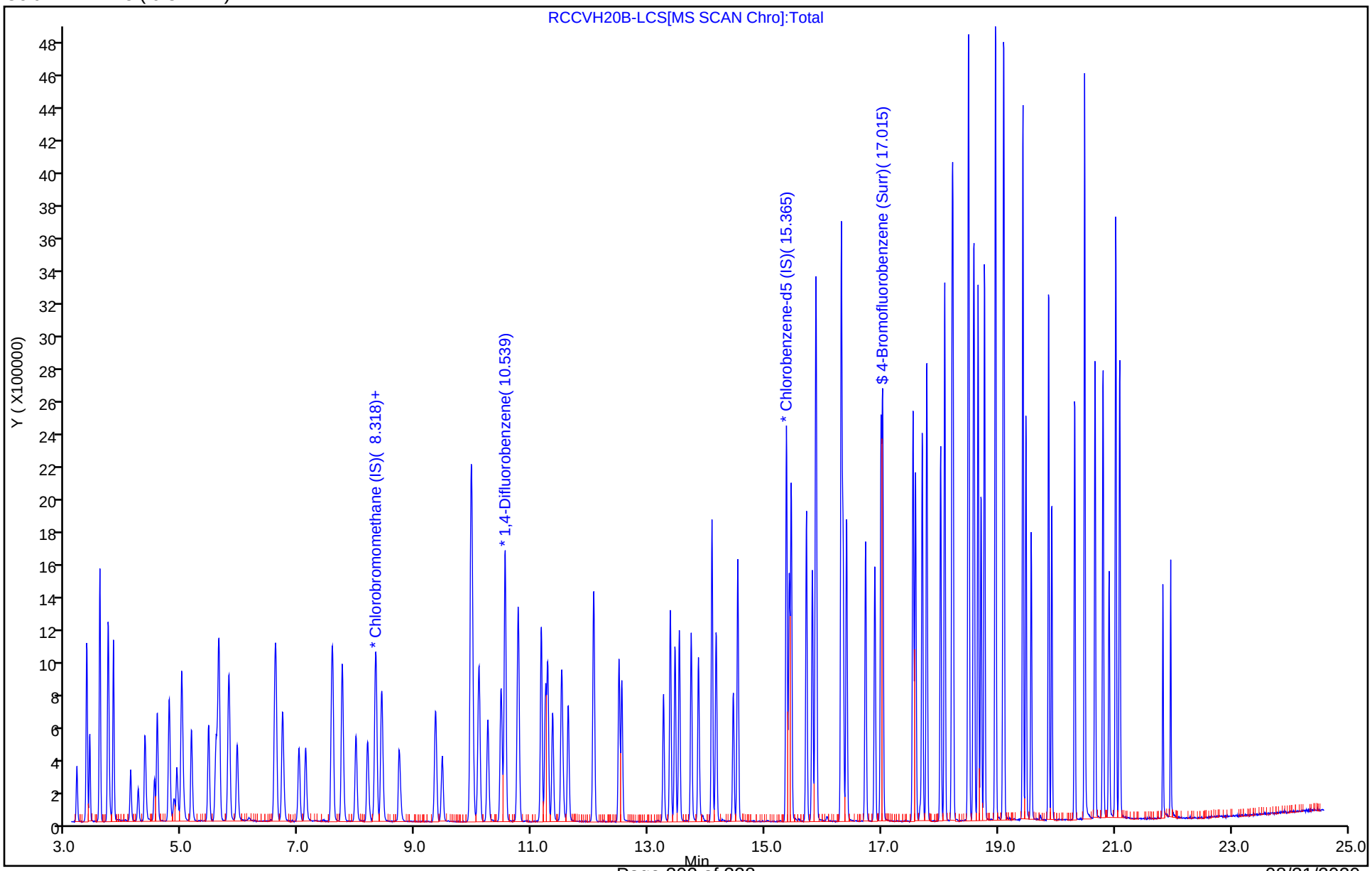
40CV101S_00124	Amount Added: 125.00	Units: mL	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

Report Date: 21-Aug-2020 11:19:36 Chrom Revision: 2.3 17-Aug-2020 20:42:08

Eurofins Environment Testing America

Data File:	\\chromfs\Knoxville\ChromData\MR\20200818-16322.b\RCCVH20B-LCS.d				
Injection Date:	20-Aug-2020 14:37:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	LCS			Worklist Smp#:	1002
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins Environment Testing America
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MR\20200818-16322.b\RCCVH20B-LCS.d				
Lims ID:	LCS				
Client ID:					
Sample Type:	LCS				
Inject. Date:	20-Aug-2020 14:37:30	ALS Bottle#:	12	Worklist Smp#:	1002
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016322-002				
Misc. Info.:	S123 110ML				
Operator ID:	HMT	Instrument ID:	MR		
Method:	\\chromfs\Knoxville\ChromData\MR\20200818-16322.b\MR_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	21-Aug-2020 11:19:33	Calib Date:	28-Jul-2020 09:59:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC09R.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1057				

First Level Reviewer: khachitpongpanits Date: 21-Aug-2020 11:19:33

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.00	3.99	99.75

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20065-1

SDG No.:

Instrument ID: MG Start Date: 07/15/2020 12:19

Analysis Batch Number: 41058 End Date: 07/16/2020 02:48

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 140-41058/1		07/15/2020 12:19	1	GBFBG15IC.D	RTX-5 0.32(mm)
IC 140-41058/21		07/15/2020 12:53	1	GG15IC10.D	RTX-5 0.32(mm)
IC 140-41058/4		07/15/2020 14:28	1	GG15IC09.D	RTX-5 0.32(mm)
IC 140-41058/6		07/15/2020 15:55	1	GG15IC08.D	RTX-5 0.32(mm)
IC 140-41058/8		07/15/2020 17:25	1	GG15IC01.D	RTX-5 0.32(mm)
IC 140-41058/9		07/15/2020 18:11	1	GG15IC02.D	RTX-5 0.32(mm)
140-19589-A-1 MDLV		07/15/2020 18:11	1		RTX-5 0.32(mm)
ZZZZZ		07/15/2020 18:11	1		RTX-5 0.32(mm)
IC 140-41058/10		07/15/2020 18:58	1	GG15IC03.D	RTX-5 0.32(mm)
140-19589-A-2 MDLV		07/15/2020 18:58	1		RTX-5 0.32(mm)
ZZZZZ		07/15/2020 18:58	1		RTX-5 0.32(mm)
IC 140-41058/11		07/15/2020 19:47	1	GG15IC04.D	RTX-5 0.32(mm)
140-19589-A-3 MDLV		07/15/2020 19:47	1		RTX-5 0.32(mm)
ZZZZZ		07/15/2020 19:47	1		RTX-5 0.32(mm)
IC 140-41058/12		07/15/2020 20:32	1	GG15IC05.D	RTX-5 0.32(mm)
140-19589-A-4 MDLV		07/15/2020 20:32	1		RTX-5 0.32(mm)
ZZZZZ		07/15/2020 20:32	1		RTX-5 0.32(mm)
IC 140-41058/13		07/15/2020 21:18	1	GG15IC06.D	RTX-5 0.32(mm)
ICIS 140-41058/14		07/15/2020 22:02	1	GG15IC07.D	RTX-5 0.32(mm)
ICV 140-41058/16		07/16/2020 00:19	1	GG15ICV.D	RTX-5 0.32(mm)
ZZZZZ		07/16/2020 02:48	1		RTX-5 0.32(mm)

Eurofins/TestAmerica Knoxville GC/MS Air - Initial Calibration Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 21 & KNOX-MS-0023, Rev 4

Analysis Date:	7/15/20	Instrument:	MG	Chrom WL #:	16031	TALS Batch & Event #	TO14/15: 2525 / 41058	DODS: 2526 / 41057 7/16
							DOD: 2528 / 41061	OHIO: ~~2527~~ 41060

Chrom/Worklist Review	1st	Comments	2nd
1. Re-read each Limit Group [method editor-limit groups]	✓	2527 7/16/20 AK	na
2. Verify LODV in Chrom [method editor -> edit -> MDL]	✓		na
3. Are the reagents and init/final volumes correct and first level "unlock/clear"? (Verify reagents & amt. injected at each level) [WL Sample Reagents Tab vs. Entech]	✓		✓
4. Files linked properly to calibration levels? [Sample List- Lab ID vs. Info]	✓		✓
5. Did BFB meet tune criteria? [F8]	✓		✓
6. Were all standards injected within 24 hr of BFB? [F7]	✓		✓
7. High point checked for saturation and point removed if so? [Chrom]	✓		✓
8. If manual integrations performed, are they properly performed, correct, baseline clearly identified, and correct reason given? [Chrom]	MG		MA
9. RT for each IS ±20 sec avg. RT? [F6 IstdRec]	✓		✓
10. Area for each IS ± 40% avg. area? [F6 IstdRec]	✓		✓
11. Each analyte ± 0.06 RRT of avg. RRT? [F6 - RRT]	✓		✓
12. Elution order checked on isomeric pairs? [Chrom]			
• dichlorodifluoromethane / 1,2-dichlorotetrafluoroethane	✓		✓
• 2-methyl butane / acrolein	✓		✓
• trichlorofluoromethane / 1,1,2-trichlorotrifluoroethane	✓		✓
• vinyl acetate / hexane	✓		✓
• cis- and trans- isomers	✓		✓
• ethyl benzene / m/p-xylene / o-xylene	✓		✓
• n-propylbenzene/4-ethyl toluene/1,3,5-trimethylbenzene/1,2,4-trimethylbenzene/ sec-butylbenzene/1,2,3-trimethylbenzene	✓		✓
• tert-butylbenzene/4-isopropyltoluene	✓		✓
• 1,3- , 1,4- , and 1,2-dichlorobenzene	✓		✓
• 1,2-dimethyl-4-ethylbenzene/1,2,4,5-, 1,2,3,5-, and 1,2,3,4-tetramethylbenzenes	MG	in ICV	✓
• 1,2,4- and 1,2,3-trichlorobenzenes	✓		✓
• 2-, and 1-methylnaphthalene	✓		✓
13. "Range" analytes & internal standard RIC ID'd correctly, inspected for interferences & proper integration?	✓		✓

MLG Review	TO	DOD	OH	Comments	TO-	DOD	OH
14. Is %RSD for all target analytes ≤ 30%? (with up to 2 compounds with RSD ≤ 40%) 1& 2 methylnaphthalene ≤ 50% propane MeCl2 40% ncm [F6 Σ]	✓	✓	✓		✓	✓	✓
15. Were at least 5 levels of each compound analyzed? [F6]	✓	✓	✓		✓	✓	✓
16. Is low level std at or <RL and are the remaining points consec.? [F6]	✓	✓	✓		✓	✓	✓
17. At least 6 consec. points used for quad curves; at least 5 consec. points for linear curves? (Note: Ohio does not allow quad) [F6]	✓	✓	✓		✓	✓	✓
18. If curves were used, is correlation coefficient ≥0.990? [F6]	✓	✓	✓		✓	✓	✓
19. Is the intercept less than the RL for each curve? [F6]	✓	✓	✓		✓	✓	✓
20. For quadratic: is a tangent's slope to the curve entirely positive or negative and continuous. [Cntrl-C, details]	✓	✓	na		✓	✓	na
21. Is low point RSE ≤ 50 %? DMA, acetone DOD, DODS [F6]	✓	✓	✓		✓	✓	✓
22. Is the second source analysis within limits? [F8 - icv]	✓	✓	✓		✓	✓	✓

Analyst/Date: 7/16/20 **2nd Level Reviewer/Date:** 7/17/20

TALS Review	TO	DOD	OH	Comments	TO	DOD	OH
23. Upload ICAL	✓				na	na	na
24. Graphics uploaded? [paperclip]	✓	✓	✓		✓	✓	✓
25. All points are in the most recent active calibration event? [Calibration Events –'Fix ICAL linkage' if needed]	✓	✓	✓		✓	✓	✓
26. Runs linked to BFB? [QC Links]	✓	✓	✓		✓	✓	✓
27. Run Checklist and acknowledge findings [F8]	✓	✓	✓		✓	✓	✓
28. If criteria not met, was a NCM generated?	✓	✓	✓		MA →		
29. After review in TALS, approve the method in TALS.	na	na	na		✓	✓	✓
30. After verifying TALS is correct, lock method in Chrom <resolve any error issues>	na	na	na		✓	✓	✓
31. Checklist & Entech report scanned, attached & assigned properly?	na	na	na		✓	✓	✓

Analyst/date: 7/16/20 **2nd Level Reviewer/date:** 7/17/20

Comments:

Comments:

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20065-1

SDG No.:

Instrument ID: MR Start Date: 07/27/2020 16:54

Analysis Batch Number: 41306 End Date: 07/28/2020 12:30

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 140-41306/1		07/27/2020 16:54	1	RG27BLKZ.D	RTX-5 0.32(mm)
IC 140-41306/3		07/27/2020 17:38	1	RG27IC10.D	RTX-5 0.32(mm)
IC 140-41306/7		07/27/2020 21:45	1	RG27IC08.D	RTX-5 0.32(mm)
IC 140-41306/9		07/27/2020 23:58	1	RG27IC01.D	RTX-5 0.32(mm)
IC 140-41306/10		07/28/2020 01:02	1	RG27IC02.D	RTX-5 0.32(mm)
IC 140-41306/11		07/28/2020 02:07	1	RG27IC03.D	RTX-5 0.32(mm)
IC 140-41306/12		07/28/2020 03:11	1	RG27IC04.D	RTX-5 0.32(mm)
IC 140-41306/13		07/28/2020 04:17	1	RG27IC05.D	RTX-5 0.32(mm)
IC 140-41306/14		07/28/2020 05:24	1	RG27IC06.D	RTX-5 0.32(mm)
ICIS 140-41306/15		07/28/2020 06:29	1	RG27IC07.D	RTX-5 0.32(mm)
IC 140-41306/23		07/28/2020 09:59	1	RG27IC09R.D	RTX-5 0.32(mm)
ICV 140-41306/18		07/28/2020 12:30	1	RG27LCS.D	RTX-5 0.32(mm)

Eurofins/TestAmerica Knoxville GC/MS Air - Initial Calibration Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 21 & KNOX-MS-0023, Rev 4

Analysis Date:	7/27/20	Instrument:	MR	Chrom WL #:	16116	TALS Batch & Event #	TO14/15: 2540 / 41036	DODS: 2541 - 41037
							DOD: 2543 / 41039	OHIO: 2542 / 41038

Chrom/Worklist Review	1st	Comments	2nd
1. Re-read each Limit Group [method editor-limit groups]	✓		na
2. Verify LODV in Chrom [method editor -> edit -> MDL]	✓		na
3. Are the reagents and init/final volumes correct and first level "unlock/clear"? (Verify reagents & amt. injected at each level) [WL Sample Reagents Tab vs. Entech]	✓		✓
4. Files linked properly to calibration levels? [Sample List- Lab ID vs. Info]	✓		✓
5. Did BFB meet tune criteria? [F8]	✓	TO15 only	✓
6. Were all standards injected within 24 hr of BFB? [F7]	✓		✓
7. High point checked for saturation and point removed if so? [Chrom]	✓		✓
8. If manual integrations performed, are they properly performed, correct, baseline clearly identified, and correct reason given? [Chrom]	✓		NA
9. RT for each IS ±20 sec avg. RT? [F6 IstdRec]	✓		✓
10. Area for each IS ± 40% avg. area? [F6 IstdRec]	✓		✓
11. Each analyte ± 0.06 RRT of avg. RRT? [F6 - RRT]	✓		✓
12. Elution order checked on isomeric pairs? [Chrom]			
• dichlorodifluoromethane / 1,2-dichlorotetrafluoroethane	✓		✓
• 2-methyl butane / acrolein	✓		✓
• trichlorofluoromethane / 1,1,2-trichlorotrifluoroethane	✓		✓
• vinyl acetate / hexane	✓		✓
• cis- and trans- isomers	✓		✓
• ethyl benzene / m/p-xylene / o-xylene	✓		✓
• n-propylbenzene/4-ethyl toluene/1,3,5-trimethylbenzene/1,2,4-trimethylbenzene/ sec-butylbenzene/1,2,3-trimethylbenzene	✓		✓
• tert-butylbenzene/4-isopropyltoluene	✓		✓
• 1,3- , 1,4- , and 1,2-dichlorobenzene	✓		✓
• 1,2-dimethyl-4-ethylbenzene/1,2,4,5-, 1,2,3,5-, and 1,2,3,4-tetramethylbenzenes	NA	in ICV	✓
• 1,2,4- and 1,2,3-trichlorobenzenes	✓		✓
• 2-, and 1-methylnaphthalene	✓		✓
13. "Range" analytes & internal standard RIC ID'd correctly, inspected for interferences & proper integration?	✓		✓

MLG Review	TO	DOD	OH	Comments	TO-	DOD	OH
14. Is %RSD for all target analytes ≤ 30%? (with up to 2 compounds with RSD ≤ 40%) 1& 2 methylnaphthalene ≤ 50% $MeCl_2$ >40% RSD NCM [F6 Σ]	✓	✓	✓		✓	✓	✓
15. Were at least 5 levels of each compound analyzed? [F6]	✓	✓	✓		✓	✓	✓
16. Is low level std at or <RL and are the remaining points consec.? [F6]	✓	✓	✓		✓	✓	✓
17. At least 6 consec. points used for quad curves; at least 5 consec. points for linear curves? (Note: Ohio does not allow quad) [F6]	✓	✓	✓		✓	✓	✓
18. If curves were used, is correlation coefficient ≥0.990? [F6]	✓	✓	✓		✓	✓	✓
19. Is the intercept less than the RL for each curve? [F6]	✓	✓	✓		✓	✓	✓
20. For quadratic: is a tangent's slope to the curve entirely positive or negative and continuous. [Cntrl-C, details]	✓	✓	na		✓	✓	na
21. Is low point RSE ≤ 50 %? [F6]	✓	✓	✓		✓	✓	✓
22. Is the second source analysis within limits? DOD ↑acetone [F8 - icv]	✓	↑ac	✓		✓	✓	✓

Analyst/Date: 7/28/20 — **2nd Level Reviewer/Date:** 7/28/20

TALS Review	TO	DOD	OH	Comments	TO	DOD	OH
23. Upload ICAL	✓				na	na	na
24. Graphics uploaded? [paperclip]	✓	✓	✓		✓	✓	✓
25. All points are in the most recent active calibration event? [Calibration Events –'Fix ICAL linkage' if needed]	✓	✓	✓		✓	✓	✓
26. Runs linked to BFB? [QC Links]	✓	✓	✓		✓	✓	✓
27. Run Checklist and acknowledge findings [F8]	✓	✓	✓		✓	✓	✓
28. If criteria not met, was a NCM generated?	✓	✓	✓		✓	✓	✓
29. After review in TALS, approve the method in TALS.	na	na	na		✓	✓	✓
30. After verifying TALS is correct, lock method in Chrom <resolve any error issues>	na	na	na		✓	✓	✓
31. Checklist & Entech report scanned, attached & assigned properly?	na	na	na		✓	✓	✓

Analyst/date: 7/28/20 — **2nd Level Reviewer/date:** 7/28/20

Comments: Acetone + IPA UR LVS

Comments:

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20065-1

SDG No.:

Instrument ID: MG Start Date: 08/19/2020 13:27

Analysis Batch Number: 41859 End Date: 08/20/2020 07:41

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 140-41859/1		08/19/2020 13:27	1	GBFBH19C.D	RTX-5 0.32(mm)
CCVIS 140-41859/2		08/19/2020 14:03	1	GCCVH19C.D	RTX-5 0.32(mm)
LCS 140-41859/1002		08/19/2020 14:03	1	GCCVH19C-LCS.d	RTX-5 0.32(mm)
MB 140-41859/4		08/19/2020 16:15	1	G500BH19.D	RTX-5 0.32(mm)
ZZZZZ		08/19/2020 17:10	1.77		RTX-5 0.32(mm)
ZZZZZ		08/19/2020 18:05	1.77		RTX-5 0.32(mm)
ZZZZZ		08/19/2020 18:58	1.38		RTX-5 0.32(mm)
ZZZZZ		08/19/2020 19:52	1.75		RTX-5 0.32(mm)
ZZZZZ		08/19/2020 20:46	1.85		RTX-5 0.32(mm)
ZZZZZ		08/19/2020 22:15	38.29		RTX-5 0.32(mm)
140-20065-1	BLDG A INFLUENT	08/19/2020 22:58	1	GH19P108.D	RTX-5 0.32(mm)
140-20065-2	BLDG A MID GAC	08/19/2020 23:41	1	GH19P109.D	RTX-5 0.32(mm)
140-20065-3	BLDG A EFFLUENT	08/20/2020 01:07	1	GH19P110.D	RTX-5 0.32(mm)
ZZZZZ		08/20/2020 01:51	1		RTX-5 0.32(mm)
ZZZZZ		08/20/2020 02:35	1		RTX-5 0.32(mm)
ZZZZZ		08/20/2020 03:21	1		RTX-5 0.32(mm)
ZZZZZ		08/20/2020 04:08	1		RTX-5 0.32(mm)
ZZZZZ		08/20/2020 04:52	1		RTX-5 0.32(mm)
ZZZZZ		08/20/2020 07:41	25.88		RTX-5 0.32(mm)

Eurofins/TestAmerica Knoxville GC/MS Air - Batch Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 21 & KNOX-MS-0023, Rev 4

Instrument/Date	MG 8/19/20		Routine	DOD	OHIO VAP
CCAL Chrom WL #	16309	CCAL Batch #	41859		
ICAL Chrom WL #	16031	ICAL Batch # / Event #	41058 / 2525	/	/

Chrom Review	1st	If No, why is data reportable?	2nd
1. Are the reagents & init/final volumes correct? (Verify reagents & amt. injected) [WL Sample Reagent Tab]	✓		na
2. Did BFB meet tune criteria? [F8]	✓	□ [Failed TO-14A, but passes TO-15]	
3. Was the CCAL compared to the most recent & correct ICAL (correct last ICal File batch #/start/end Cal date/time)? [F8]	✓	List Target analytes outside CCV limits: 1,2,4-Trichlorobenzene, 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, Acrolein, Bromoform, Hexachlorobutadiene	
4. Elution order checked on isomeric pairs? [Chrom]			
• dichlorodifluoromethane / 1,2-dichlorotetrafluoroethane	✓		
• 2-methyl butane / acrolein	✓		
• trichlorofluoromethane / 1,1,2-trichlorotrifluoroethane	✓		
• vinyl acetate / hexane	✓		
• cis- and trans- isomers	✓		
• ethyl benzene / m/p-xylene / o-xylene	✓		
• n-propylbenzene/4-ethyl toluene/1,3,5-trimethylbenzene/1,2,4-trimethylbenzene/sec-butylbenzene/1,2,3-trimethylbenzene	✓		
• tert-butylbenzene/4-isopropyltoluene	✓		
• 1,3- , 1,4- , and 1,2-dichlorobenzene	✓		
• 1,2-dimethyl-4-ethylbenzene/1,2,4,5-, 1,2,3,5-, and 1,2,3,4-tetramethylbenzenes	NA		
• 1,2,4-trichlorobenzene/1,2,3-trichlorobenzene	✓		
• 2-, and 1-methylnaphthalene	✓		
5. "Range" analytes & internal standard RIC ID'd correctly, inspected for interferences & proper integration?	NA		
6. Has the RT been updated to the method?	✓		
Analyst/date Suphawan Ku. 8/20/20		**2nd Level Reviewer/date**	

7. Has the vol injected been verified vs Entech & corrected if actual amount differs >5%? [WL Sample Info: init amt = sample amt; final amt = 500 mL]	✓		
8. Do the lab ID, Info 1 and Dilution Factor columns correlate in Chrom? [Sample List - Lab ID vs. Info 1 vs. Dilution]	✓		
9. Can dilution history verified? [Mgmt Report]	✓		
10. Are all analytes present in the system blank < RL? (<1/2 RL for DoD). *If no, list blank ID:*	✓	□ Method Blank – Report, ND (NCM#_____) □ Method Blank – Report, 10X (NCM#_____)	
11. All runs - peaks ID'd correctly and false positives removed?	✓		
12. If manual integrations performed, are they properly performed, baseline clearly identified, and correct reason given?	✓		
13. IS/Surr within limits? *List samples and reason (e.g., 1 thru 5):* [Batch Results IS & SUR Tab] Sample Reason Sample Reason _____ _____ _____ _____ _____ _____ _____ _____	✓	□ (1) Surrogate – Matrix (NCM#_____) □ (2) Surrogate – High, ND (NCM#_____) □ (3) ISTD – RA/RA Concurs (NCM#_____) □ (4) Surrogate –RX concur, Report both (NCM#_____) □ (5) ISTD – Matrix, DL required (NCM#_____)	
14. Samples outside calibration range scheduled for dilution?	✓	□ ICAL – Range Exceeded; Minimum Dilution	

Chrom Review	1st	If No, why is data reportable?	2nd
15. For first analysis that is at a dilution, is highest target analyte >20% cal range? *List samples and reason:* Sample Reason Sample Reason 140-20041-2 NT _____ _____	✓	□ (1) Reporting Limit – Dilution, Matrix (NCM#_____) ☑ (2) Reporting Limit – Dilution, Non-Target (NCM# 24698) □ (3) Issues with initial collection volume; see DRC.	
16. RIC inspected for proper integration for TPH?	NA		
17. Obvious non-TPH peaks excluded?	↓		
18. Individual TPH peak area < octane high point area?	↓		

TALS Review	1st	If No, why is data reportable?	2nd

Eurofins/TestAmerica Knoxville GC/MS Air - Batch Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 21 & KNOX-MS-0023, Rev 4

19. Graphics uploaded? [open one paperclip]	/		
20. NCM generated if BFB failed TO-14A criteria, but passes TO-15?	NA	□ [Failed TO-14A, but passes TO-15] (NCM#)	
21. Is the %D ≤ 30% for all target analytes? [≤ 50% for 1&2 methylnaphthalene] [Chrom-F8] [TALS-Sample Results Tab]	/	☑ CCV - %D - LCS criteria met (NCM# 24688) ☑ CCV - %D high - outside criteria, samples ND, Sample IDs Included (NCM# 24689)	
22. Undiluted volume analyzed meets the method requirement (200 mL vs. 500 mL)?	/		na
23. Project & sample special instructions verified?	/		
24. If samples were Tedlar bags, was the 72 hr HT met? ** Narrate transfer to can.	NA	□ Air Analysis - Air Sample Transfer to Canister (NCM#____)	
25. Sample analyses done within analytical holding time?	/	□ Holding Time – Received w/Insufficient Time (NCM#_____) □ Holding Time – Receipt (NCM#_____)	
26. Did the LCS meet criteria (70-130% with a limited # allowed 60-140% (see table) provisional analyte limit 60-140% with a limited # allowed 50-150%, and no two consecutive MEs). [Sample Results Tab] Note: No LCS required for OH VAP.	/	□ Marginal Exceedances - Within ME Limits and Random; Report (NCM# ___) ☑ LCS/LCSD - %R High (NCM# 24690)	
27. Suffixes assigned properly (DL/RE)? [Sample List Tab]	NA		
28. Each job has QC created (BFB, CCV, LCS, MB)? [Sample List Tab]	/		
29. Analytes over calibration range set to secondary [Conditions Review Tab]	/		
30. Samples not reported set to 'Acceptable' or 'Rejected'? [Sample Results Tab]	/		
31. DUP done per 20 samples and are all RPDs within limits? (for target analytes >5x RL, <25% RPD; no criteria for n-butanol) *(If DUP not reported - set to 'Acceptable' for each job)*	/		
32. Samples linked to proper blank (200 mL or 500 mL)? [QC links]	/	**500 mL blank ID:** #4 **200 mL blank ID:** NA	
33. Samples linked to job's BFB/CCV/LCS/MB? [QC Links]	/		
34. Correct ICV linked to each MB? [QC Links]	/		
35. Were all samples/QC analyzed within 24 hr of BFB? [F7]	/		
36. If criteria were not met, was a NCM generated, and assigned to proper QC & samples? [Also see Conditions Review Tab]	/		
37. Run Checklist and acknowledge findings [F8]	/		
38. Runs set to 1st level review?	/	Runs set to 2nd level review?	
39. QC checker run and items addressed?	-na-		
40. Checklist & Entech report scanned, attached & assigned properly?	-na-		

Number of target analytes in LCS	# marginal exceedances of LCS control limits allowed
>90	5
71 - 90	4
51 - 70	3
31 - 50	2
11 - 30	1
< 11	0

Analyst: Suphawan Kh	**Date:** 8/20/20	**2nd Level Reviewer :**	**Date:**
Comments:		**Comments:**	
Example Calculation: 140-20016-1 Carbon disulfide			
On-column ppbv x Final Vol (mL)/Entech Initial Vol (mL) x Canister Dilution Log DF			
$1.896385 \times \frac{500}{885} \times 1.77 \times \frac{76.14}{24.45} = 5.9$		$\mu g/m^3$	

MS017r48, 4/08/2020

Eurofins/TestAmerica Knoxville GC/MS Air - Batch Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 20 & KNOX-MS-0023, Rev 4

Instrument/Date	MG 8/19/20		Routine	DOD	OHIO VAP
CCAL Chrom WL #	16309	CCAL Batch #	41859		NA
ICAL Chrom WL #	16031	ICAL Batch # / Event #	41058/2525		41060/2527

Chrom Review	1st	If No, why is data reportable?	2nd
1. Are the reagents & init/final volumes correct? (Verify reagents & amt. injected) [WL Sample Reagent Tab]			na
2. Did BFB meet tune criteria? [F8]		□ [Failed TO-14A, but passes TO-15]	Y
3. Was the CCAL compared to the most recent & correct ICAL (correct last ICal File batch #/start/end Cal date/time)? [F8]		List Target analytes outside CCV limits: _____ _____ _____	Y
4. Elution order checked on isomeric pairs? [Chrom]			
• dichlorodifluoromethane / 1,2-dichlorotetrafluoroethane			Y
• 2-methyl butane / acrolein			Y
• trichlorofluoromethane / 1,1,2-trichlorotrifluoroethane			Y
• vinyl acetate / hexane			Y
• cis- and trans- isomers			Y
• ethyl benzene / m/p-xylene / o-xylene			Y
• n-propylbenzene/4-ethyl toluene/1,3,5-trimethylbenzene/1,2,4-trimethylbenzene/sec-butylbenzene/1,2,3-trimethylbenzene			Y
• tert-butylbenzene/4-isopropyltoluene			Y
• 1,3- , 1,4- , and 1,2-dichlorobenzene			Y
• 1,2-dimethyl-4-ethylbenzene/1,2,4,5-, 1,2,3,5-, and 1,2,3,4-tetramethylbenzenes			NA
• 1,2,4-trichlorobenzene/1,2,3-trichlorobenzene			Y
• 2-, and 1-methylnaphthalene			Y
5. "Range" analytes & internal standard RIC ID'd correctly, inspected for interferences & proper integration?			**NA**
6. Has the RT been updated to the method?			**Y**
Analyst/date		**2nd Level Reviewer/date LL 8/20/20**	

7. Has the vol injected been verified vs Entech & corrected if actual amount differs >5%? [WL Sample Info: init amt = sample amt; final amt = 500 mL]			**Y**
8. Do the lab ID, Info 1 and Dilution Factor columns correlate in Chrom? [Sample List - Lab ID vs. Info 1 vs. Dilution]			**Y**
9. Can dilution history verified? [Mgmt Report]			**Y**
10. Are all analytes present in the system blank < RL**?** (<1/2 RL for DoD). *If no, list blank ID:*		□ Method Blank – Report, ND (NCM#_____) □ Method Blank – Report, 10X (NCM#_____)	**Y**
11. All runs - peaks ID'd correctly and false positives removed?			**Y**
12. If manual integrations performed, are they properly performed, baseline clearly identified, and correct reason given?			**Y**
13. IS/Surr within limits? *List samples and reason (e.g.,* 1 thru 5*):* [Batch Results IS & SUR Tab] Sample Reason Sample Reason _____ _____ _____ _____ _____ _____ _____ _____		□ (1) Surrogate – Matrix (NCM#_____) □ (2) Surrogate – High, ND (NCM#_____) □ (3) ISTD – RA/RA Concurs (NCM#_____) □ (4) Surrogate –RX concur, Report both (NCM#_____) □ (5) ISTD – Matrix, DL required (NCM#_____)	**Y**
14. Samples outside calibration range scheduled for dilution?		□ ICAL – Range Exceeded; Minimum Dilution	**Y**
Chrom Review	**1st**	**If No, why is data reportable?**	**2nd**
15. For first analysis that is at a dilution, is highest target analyte >20% cal range? *List samples and reason:* Sample Reason Sample Reason _____ _____ _____ _____ _____ _____ _____ _____		□ (1) Reporting Limit – Dilution, Matrix (NCM#_____) □ (2) Reporting Limit – Dilution, Non-Target (NCM#_____) □ (3) Issues with initial collection volume; see DRC.	**Y**
16. RIC inspected for proper integration for TPH?			**NA**
17. Obvious non-TPH peaks excluded?			**NA**
18. Individual TPH peak area < octane high point area?			**NA**

Eurofins/TestAmerica Knoxville GC/MS Air - Batch Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 20 & KNOX-MS-0023, Rev 4

TALS Review	**1st**	**If No, why is data reportable?**	**2nd**
19. Graphics uploaded? [open one paperclip]			**Y**
20. NCM generated if BFB failed TO-14A criteria, but passes TO-15?		□ [Failed TO-14A, but passes TO-15] (NCM#_____)	**NA**
21. Is the %D ≤ 30% for all target analytes? [≤ 50% for 1&2 methylnaphthalene] [Chrom-F8] [TALS-Sample Results Tab]		□ CCV - %D - LCS criteria met (NCM#_____) □ CCV - %D high - outside criteria, samples ND, Sample IDs Included (NCM#_____)	**Y**
22. Undiluted volume analyzed meets the method requirement (200 mL vs. 500 mL)?			**na**
23. Project & sample special instructions verified?			**Y**
24. If samples were Tedlar bags, was the 72 hr HT met? ** Narrate transfer to can.		□ Air Analysis - Air Sample Transfer to Canister (NCM#____)	**NA**
25. Sample analyses done within analytical holding time?		□ Holding Time – Received w/Insufficient Time (NCM#_____) □ Holding Time – Receipt (NCM#_____)	**Y**
26. Did the LCS meet criteria (70-130% with a limited # allowed 60-140% (see table) provisional analyte limit 60-140% with a limited # allowed 50-150%, and no two consecutive MEs). [Sample Results Tab] Note: No LCS required for OH VAP.		□ Marginal Exceedances - Within ME Limits and Random; Report (NCM# ___) □ LCS/LCSD - %R High (NCM#_____)	**Y**
27. Suffixes assigned properly (DL/RE)? [Sample List Tab]			**NA**
28. Each job has QC created (BFB, CCV, LCS, MB)? [Sample List Tab]			**Y**
29. Analytes over calibration range set to secondary [Conditions Review Tab]			**Y**
30. Samples not reported set to 'Acceptable' or 'Rejected'? [Sample Results Tab]			**Y**
31. DUP done per 20 samples and are all RPDs within limits? (for target analytes >5x RL, <25% RPD; no criteria for n-butanol) *(If DUP not reported - set to 'Acceptable' for each job)*			**Y**
32. Samples linked to proper blank (200 mL or 500 mL)? [QC links]		**500 mL blank ID: 4** **200 mL blank ID: NA**	**Y**
33. Samples linked to job's BFB/CCV/LCS/MB? [QC Links]			**Y**
34. Correct ICV linked to each MB? [QC Links]			**Y**
35. Were all samples/QC analyzed within 24 hr of BFB? [F7]			**Y**
36. If criteria were not met, was a NCM generated, and assigned to proper QC & samples? [Also see Conditions Review Tab]			**Y**
37. Run Checklist and acknowledge findings [F8]			**Y**
38. Runs set to 1st level review?		Runs set to 2nd level review?	**Y**
39. QC checker run and items addressed?	**-na-**		**Y**
40. Checklist & Entech report scanned, attached & assigned properly?	**-na-**		**Y**

Number of target analytes in LCS	# marginal exceedances of LCS control limits allowed
>90	5
71 - 90	4
51 - 70	3
31 - 50	2
11 - 30	1
< 11	0

Analyst:	**Date:**	**2nd Level Reviewer : LL**	**Date: 8/20/20**
Comments:		**Comments:**	
Example Calculation:			
On-column ppbv x Final Vol (mL)/Entech Initial Vol (mL) x Canister Dilution Log DF			

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20065-1

SDG No.:

Instrument ID: MR Start Date: 08/20/2020 14:08

Analysis Batch Number: 41899 End Date: 08/21/2020 10:20

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 140-41899/1		08/20/2020 14:08	1	RBFBH20B.D	RTX-5 0.32(mm)
CCVIS 140-41899/2		08/20/2020 14:37	1	RCCVH20B.D	RTX-5 0.32(mm)
LCS 140-41899/1002		08/20/2020 14:37	1	RCCVH20B-LCS.d	RTX-5 0.32(mm)
MB 140-41899/4		08/20/2020 16:23	1	R500BH20.D	RTX-5 0.32(mm)
ZZZZZ		08/20/2020 17:13	1		RTX-5 0.32(mm)
140-20065-2 DL	BLDG A MID GAC DL	08/20/2020 18:01	1	RH20P101.D	RTX-5 0.32(mm)
ZZZZZ		08/20/2020 18:48	5.32		RTX-5 0.32(mm)
ZZZZZ		08/20/2020 19:36	1		RTX-5 0.32(mm)
ZZZZZ		08/20/2020 20:24	1		RTX-5 0.32(mm)
ZZZZZ		08/20/2020 23:34	1		RTX-5 0.32(mm)
ZZZZZ		08/21/2020 00:20	1		RTX-5 0.32(mm)
ZZZZZ		08/21/2020 01:08	1		RTX-5 0.32(mm)
ZZZZZ		08/21/2020 02:44	1		RTX-5 0.32(mm)
ZZZZZ		08/21/2020 09:29	1		RTX-5 0.32(mm)
ZZZZZ		08/21/2020 10:20	1		RTX-5 0.32(mm)

Eurofins/TestAmerica Knoxville GC/MS Air - Batch Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 21 & KNOX-MS-0023, Rev 4

Instrument/Date	MR 8/20/20		Routine	DOD	OHIO VAP
CCAL Chrom WL #	16322	CCAL Batch #	41899		
ICAL Chrom WL #	16116	ICAL Batch # / Event #	41306 / 2540	/	/

Chrom Review	1st	If No, why is data reportable?	2nd
1. Are the reagents & init/final volumes correct? (Verify reagents & amt. injected) [WL Sample Reagent Tab]	✓		na
2. Did BFB meet tune criteria? [F8]	✓	☑ [Failed TO-14A, but passes TO-15]	
3. Was the CCAL compared to the most recent & correct ICAL (correct last ICal File batch #/start/end Cal date/time)? [F8]	✓	List Target analytes outside CCV limits: Hexachlorobutadiene	
4. Elution order checked on isomeric pairs? [Chrom]			
• dichlorodifluoromethane / 1,2-dichlorotetrafluoroethane	✓		
• 2-methyl butane / acrolein	✓		
• trichlorofluoromethane / 1,1,2-trichlorotrifluoroethane	✓		
• vinyl acetate / hexane	✓		
• cis- and trans- isomers	✓		
• ethyl benzene / m/p-xylene / o-xylene	✓		
• n-propylbenzene/4-ethyl toluene/1,3,5-trimethylbenzene/1,2,4-trimethylbenzene/sec-butylbenzene/1,2,3-trimethylbenzene	✓		
• tert-butylbenzene/4-isopropyltoluene	✓		
• 1,3- , 1,4- , and 1,2-dichlorobenzene	✓		
• 1,2-dimethyl-4-ethylbenzene/1,2,4,5-, 1,2,3,5-, and 1,2,3,4-tetramethylbenzenes	NA		
• 1,2,4-trichlorobenzene/1,2,3-trichlorobenzene	✓		
• 2-, and 1-methylnaphthalene	✓		
5. "Range" analytes & internal standard RIC ID'd correctly, inspected for interferences & proper integration?	✓		
6. Has the RT been updated to the method?	✓		
Analyst/date Suphawan Ku 8/21/20		**2nd Level Reviewer/date**	

7. Has the vol injected been verified vs Entech & corrected if actual amount differs >5%? [WL Sample Info: init amt = sample amt; final amt = 500 mL]	✓		
8. Do the lab ID, Info 1 and Dilution Factor columns correlate in Chrom? [Sample List - Lab ID vs. Info 1 vs. Dilution]	✓		
9. Can dilution history verified? [Mgmt Report]	✓		
10. Are all analytes present in the system blank < RL? (<1/2 RL for DoD). *If no, list blank ID:*	✓	☐ Method Blank – Report, ND (NCM#_____) ☐ Method Blank – Report, 10X (NCM#_____)	
11. All runs - peaks ID'd correctly and false positives removed?	✓		
12. If manual integrations performed, are they properly performed, baseline clearly identified, and correct reason given?	✓		
13. IS/Surr within limits? *List samples and reason (e.g., 1 thru 5):* [Batch Results IS & SUR Tab] Sample / Reason / Sample / Reason	✓	☐ (1) Surrogate – Matrix (NCM#_____) ☐ (2) Surrogate – High, ND (NCM#_____) ☐ (3) ISTD – RA/RA Concurs (NCM#_____) ☐ (4) Surrogate –RX concur, Report both (NCM#_____) ☐ (5) ISTD – Matrix, DL required (NCM#_____)	
14. Samples outside calibration range scheduled for dilution?	NA	☐ ICAL – Range Exceeded; Minimum Dilution	

Chrom Review	1st	If No, why is data reportable?	2nd
15. For first analysis that is at a dilution, is highest target analyte >20% cal range? *List samples and reason:* Sample / Reason / Sample / Reason	✓	☐ (1) Reporting Limit – Dilution, Matrix (NCM#_____) ☐ (2) Reporting Limit – Dilution, Non-Target (NCM#_____) ☐ (3) Issues with initial collection volume; see DRC.	
16. RIC inspected for proper integration for TPH?	✓		
17. Obvious non-TPH peaks excluded?	✓		
18. Individual TPH peak area < octane high point area?	✓		

TALS Review	1st	If No, why is data reportable?	2nd

Eurofins/TestAmerica Knoxville GC/MS Air - Batch Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 21 & KNOX-MS-0023, Rev 4

19. Graphics uploaded? [open one paperclip]	✓		
20. NCM generated if BFB failed TO-14A criteria, but passes TO-15?	✓	☒ [Failed TO-14A, but passes TO-15] (NCM# 24721)	
21. Is the %D ≤ 30% for all target analytes? [≤ 50% for 1&2 methylnaphthalene] [Chrom-F8] [TALS-Sample Results Tab]	✓	☒ CCV - %D - LCS criteria met (NCM# 24722) □ CCV - %D high - outside criteria, samples ND, Sample IDs Included (NCM#_____)	
22. Undiluted volume analyzed meets the method requirement (200 mL vs. 500 mL)?	✓		na
23. Project & sample special instructions verified?	✓		
24. If samples were Tedlar bags, was the 72 hr HT met? ** Narrate transfer to can.	✓	☒ Air Analysis - Air Sample Transfer to Canister (NCM# 24717)	
25. Sample analyses done within analytical holding time?	✓	□ Holding Time – Received w/Insufficient Time (NCM#_____) □ Holding Time – Receipt (NCM#_____)	
26. Did the LCS meet criteria (70-130% with a limited # allowed 60-140% (see table) provisional analyte limit 60-140% with a limited # allowed 50-150%, and no two consecutive MEs). [Sample Results Tab] Note: No LCS required for OH VAP.	✓	☒ Marginal Exceedances - Within ME Limits and Random; Report (NCM# 24723) □ LCS/LCSD - %R High (NCM#_____)	
27. Suffixes assigned properly (DL/RE)? [Sample List Tab]	✓		
28. Each job has QC created (BFB, CCV, LCS, MB)? [Sample List Tab]	✓		
29. Analytes over calibration range set to secondary [Conditions Review Tab]	NA		
30. Samples not reported set to 'Acceptable' or 'Rejected'? [Sample Results Tab]	✓		
31. DUP done per 20 samples and are all RPDs within limits? (for target analytes >5x RL, <25% RPD; no criteria for n-butanol) *(If DUP not reported - set to 'Acceptable' for each job)*	✓		
32. Samples linked to proper blank (200 mL or 500 mL)? [QC links]	✓	**500 mL blank ID:** #4 **200 mL blank ID:** #5	
33. Samples linked to job's BFB/CCV/LCS/MB? [QC Links]	✓		
34. Correct ICV linked to each MB? [QC Links]	✓		
35. Were all samples/QC analyzed within 24 hr of BFB? [F7]	✓		
36. If criteria were not met, was a NCM generated, and assigned to proper QC & samples? [Also see Conditions Review Tab]	✓		
37. Run Checklist and acknowledge findings [F8]	✓		
38. Runs set to 1st level review?	✓	Runs set to 2nd level review?	
39. QC checker run and items addressed?	-na-		
40. Checklist & Entech report scanned, attached & assigned properly?	-na-		

Number of target analytes in LCS	# marginal exceedances of LCS control limits allowed
>90	5
71 - 90	4
51 - 70	3
31 - 50	2
11 - 30	1
< 11	0

Analyst: Suphawan Kh	**Date:** 8/21/20	**2nd Level Reviewer :**	**Date:**
Comments:		**Comments:**	
CL Acetone line 13			
Example Calculation: 140 - 20060 - 3 Acetone			
On-column ppbv x Final Vol (mL)/Entech Initial Vol (mL) x Canister Dilution Log DF			
$10.67955 \times \frac{500}{50} \times 1.0 = 107$			

Eurofins/TestAmerica Knoxville GC/MS Air - Batch Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 20 & KNOX-MS-0023, Rev 4

Instrument/Date	MR 8/20/20		Routine	DOD	OHIO VAP
CCAL Chrom WL #	16322	CCAL Batch #	41899		
ICAL Chrom WL #	16116	ICAL Batch # / Event #	41306/2540		

Chrom Review	1st	If No, why is data reportable?	2nd
1. Are the reagents & init/final volumes correct? (Verify reagents & amt. injected) [WL Sample Reagent Tab]			na
2. Did BFB meet tune criteria? [F8]		□ [Failed TO-14A, but passes TO-15]	N
3. Was the CCAL compared to the most recent & correct ICAL (correct last ICal File batch #/start/end Cal date/time)? [F8]		List Target analytes outside CCV limits: _____ _____ _____	Y
4. Elution order checked on isomeric pairs? [Chrom]			
• dichlorodifluoromethane / 1,2-dichlorotetrafluoroethane			Y
• 2-methyl butane / acrolein			Y
• trichlorofluoromethane / 1,1,2-trichlorotrifluoroethane			Y
• vinyl acetate / hexane			Y
• cis- and trans- isomers			Y
• ethyl benzene / m/p-xylene / o-xylene			Y
• n-propylbenzene/4-ethyl toluene/1,3,5-trimethylbenzene/1,2,4-trimethylbenzene/sec-butylbenzene/1,2,3-trimethylbenzene			Y
• tert-butylbenzene/4-isopropyltoluene			Y
• 1,3- , 1,4- , and 1,2-dichlorobenzene			Y
• 1,2-dimethyl-4-ethylbenzene/1,2,4,5-, 1,2,3,5-, and 1,2,3,4-tetramethylbenzenes			NA
• 1,2,4-trichlorobenzene/1,2,3-trichlorobenzene			Y
• 2-, and 1-methylnaphthalene			Y
5. "Range" analytes & internal standard RIC ID'd correctly, inspected for interferences & proper integration?			Y
6. Has the RT been updated to the method?			Y
Analyst/date		**2nd Level Reviewer/date LL 8/21/20**	

7. Has the vol injected been verified vs Entech & corrected if actual amount differs >5%? [WL Sample Info: init amt = sample amt; final amt = 500 mL]			Y
8. Do the lab ID, Info 1 and Dilution Factor columns correlate in Chrom? [Sample List - Lab ID vs. Info 1 vs. Dilution]			Y
9. Can dilution history verified? [Mgmt Report]			Y
10. Are all analytes present in the system blank < RL**?** (<1/2 RL for DoD). *If no, list blank ID:*		□ Method Blank – Report, ND (NCM#_____) □ Method Blank – Report, 10X (NCM#_____)	Y
11. All runs - peaks ID'd correctly and false positives removed?			Y
12. If manual integrations performed, are they properly performed, baseline clearly identified, and correct reason given?			Y
13. IS/Surr within limits? *List samples and reason (e.g.,* 1 thru 5*):* [Batch Results IS & SUR Tab] Sample Reason Sample Reason _____ _____ _____ _____ _____ _____ _____ _____		□ (1) Surrogate – Matrix (NCM#_____) □ (2) Surrogate – High, ND (NCM#_____) □ (3) ISTD – RA/RA Concurs (NCM#_____) □ (4) Surrogate –RX concur, Report both (NCM#_____) □ (5) ISTD – Matrix, DL required (NCM#_____)	Y
14. Samples outside calibration range scheduled for dilution?		□ ICAL – Range Exceeded; Minimum Dilution	NA
Chrom Review	**1st**	**If No, why is data reportable?**	**2nd**
15. For first analysis that is at a dilution, is highest target analyte >20% cal range? *List samples and reason:* Sample Reason Sample Reason _____ _____ _____ _____ _____ _____ _____ _____		□ (1) Reporting Limit – Dilution, Matrix (NCM#_____) □ (2) Reporting Limit – Dilution, Non-Target (NCM#_____) □ (3) Issues with initial collection volume; see DRC.	Y
16. RIC inspected for proper integration for TPH?			Y
17. Obvious non-TPH peaks excluded?			Y
18. Individual TPH peak area < octane high point area?			Y

Eurofins/TestAmerica Knoxville GC/MS Air - Batch Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 20 & KNOX-MS-0023, Rev 4

TALS Review	**1st**	**If No, why is data reportable?**	**2nd**
19. Graphics uploaded? [open one paperclip]			**Y**
20. NCM generated if BFB failed TO-14A criteria, but passes TO-15?		□ [Failed TO-14A, but passes TO-15] (NCM#_____)	**Y**
21. Is the %D ≤ 30% for all target analytes? [≤ 50% for 1&2 methylnaphthalene] [Chrom-F8] [TALS-Sample Results Tab]		□ CCV - %D - LCS criteria met (NCM#_____) □ CCV - %D high - outside criteria, samples ND, Sample IDs Included (NCM#_____)	**Y**
22. Undiluted volume analyzed meets the method requirement (200 mL vs. 500 mL)?			**na**
23. Project & sample special instructions verified?			**Y**
24. If samples were Tedlar bags, was the 72 hr HT met? ** Narrate transfer to can.		□ Air Analysis - Air Sample Transfer to Canister (NCM#____)	**NA**
25. Sample analyses done within analytical holding time?		□ Holding Time – Received w/Insufficient Time (NCM#_____) □ Holding Time – Receipt (NCM#_____)	**Y**
26. Did the LCS meet criteria (70-130% with a limited # allowed 60-140% (see table) provisional analyte limit 60-140% with a limited # allowed 50-150%, and no two consecutive MEs). [Sample Results Tab] Note: No LCS required for OH VAP.		□ Marginal Exceedances - Within ME Limits and Random; Report (NCM# ___) □ LCS/LCSD - %R High (NCM#_____)	**Y**
27. Suffixes assigned properly (DL/RE)? [Sample List Tab]			**Y**
28. Each job has QC created (BFB, CCV, LCS, MB)? [Sample List Tab]			**Y**
29. Analytes over calibration range set to secondary [Conditions Review Tab]			**NA**
30. Samples not reported set to 'Acceptable' or 'Rejected'? [Sample Results Tab]			**Y**
31. DUP done per 20 samples and are all RPDs within limits? (for target analytes >5x RL, <25% RPD; no criteria for n-butanol) *(If DUP not reported - set to 'Acceptable' for each job)*			**Y**
32. Samples linked to proper blank (200 mL or 500 mL)? [QC links]		**500 mL blank ID: ___4** **200 mL blank ID: ___5____**	**Y**
33. Samples linked to job's BFB/CCV/LCS/MB? [QC Links]			**Y**
34. Correct ICV linked to each MB? [QC Links]			**Y**
35. Were all samples/QC analyzed within 24 hr of BFB? [F7]			**Y**
36. If criteria were not met, was a NCM generated, and assigned to proper QC & samples? [Also see Conditions Review Tab]			**Y**
37. Run Checklist and acknowledge findings [F8]			**Y**
38. Runs set to 1st level review?		Runs set to 2nd level review?	**Y**
39. QC checker run and items addressed?	**-na-**		**Y**
40. Checklist & Entech report scanned, attached & assigned properly?	**-na-**		**Y**

Analyst:	**Date:**	**2nd Level Reviewer : LL**	**Date: 8/21/20**
Comments:		**Comments:**	

Example Calculation:

On-column ppbv x Final Vol (mL)/Entech Initial Vol (mL) x Canister Dilution Log DF

Number of target analytes in LCS	# marginal exceedances of LCS control limits allowed
>90	5
71 - 90	4
51 - 70	3
31 - 50	2
11 - 30	1
< 11	0

AIR - GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Knoxvill Job No.: 140-20065-1

SDG No.:

Batch Number: 41859 Batch Start Date: 08/19/20 13:27 Batch Analyst: Khachitpongpanit, Suphawa

Batch Method: TO 15 LL Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	InitialPressure	FinalPressure	40CV101P 00119	40MXISSURP 00004
BFB 140-41859/1		TO 15 LL		500 mL	500 mL	1	1		
CCVIS 140-41859/2		TO 15 LL		500 mL	500 mL	1	1	110 mL	40 mL
MB 140-41859/4		TO 15 LL		500 mL	500 mL	1	1		40 mL
140-20065-A-1	BLDG A INFLUENT	TO 15 LL	T	25 mL	500 mL	1	1		40 mL
140-20065-A-2	BLDG A MID GAC	TO 15 LL	T	100 mL	500 mL	1	1		40 mL
140-20065-A-3	BLDG A EFFLUENT	TO 15 LL	T	100 mL	500 mL	1	1		40 mL
LCS 140-41859/1002		TO 15 LL		500 mL	500 mL	1	1	110 mL	40 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	40MXSUR 00003					
BFB 140-41859/1		TO 15 LL		40 mL					
CCVIS 140-41859/2		TO 15 LL							
MB 140-41859/4		TO 15 LL							
140-20065-A-1	BLDG A INFLUENT	TO 15 LL	T						
140-20065-A-2	BLDG A MID GAC	TO 15 LL	T						
140-20065-A-3	BLDG A EFFLUENT	TO 15 LL	T						
LCS 140-41859/1002		TO 15 LL							

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

AIR - GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Knoxvill Job No.: 140-20065-1

SDG No.:

Batch Number: 41899 Batch Start Date: 08/20/20 14:08 Batch Analyst: Khachitpongpanit, Suphawa

Batch Method: TO 15 LL Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	InitialPressure	FinalPressure	40CV101S 00124	40MXISSURP 00004
BFB 140-41899/1		TO 15 LL		500 mL	500 mL	1	1		
CCVIS 140-41899/2		TO 15 LL		500 mL	500 mL	1	1	125 mL	40 mL
MB 140-41899/4		TO 15 LL		500 mL	500 mL	1	1		40 mL
140-20065-A-2	BLDG A MID GAC	TO 15 LL	T	10 mL	500 mL	1	1		40 mL
LCS 140-41899/1002		TO 15 LL		500 mL	500 mL	1	1	125 mL	40 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	40MXSUR 00003					
BFB 140-41899/1		TO 15 LL		40 mL					
CCVIS 140-41899/2		TO 15 LL							
MB 140-41899/4		TO 15 LL							
140-20065-A-2	BLDG A MID GAC	TO 15 LL	T						
LCS 140-41899/1002		TO 15 LL							

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19822-1

SDG No.:

Client Sample ID: 11830 Lab Sample ID: 140-19822-14

Matrix: Air Lab File ID: G29L19822.D

Analysis Method: TO-15 Date Collected: 07/24/2020 16:45

Sample wt/vol: 200(mL) Date Analyzed: 07/29/2020 13:04

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 41354 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	ND		0.20	
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.20	
79-00-5	1,1,2-Trichloroethane	ND		0.20	
76-13-1	1,1,2-Trichlorotrifluoroethane	ND		0.20	
75-34-3	1,1-Dichloroethane	ND		0.20	
75-35-4	1,1-Dichloroethene	ND		0.20	
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	
96-18-4	1,2,3-Trichloropropane	ND		0.50	
526-73-8	1,2,3-Trimethylbenzene	ND		0.20	
95-93-2	1,2,4,5-Tetramethylbenzene	ND		0.20	
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	
95-63-6	1,2,4-Trimethylbenzene	ND		0.20	
96-12-8	1,2-Dibromo-3-Chloropropane	ND		0.40	
106-93-4	1,2-Dibromoethane	ND		0.20	
95-50-1	1,2-Dichlorobenzene	ND		0.40	
107-06-2	1,2-Dichloroethane	ND		0.20	
78-87-5	1,2-Dichloropropane	ND		0.20	
76-14-2	1,2-Dichlorotetrafluoroethane	ND		0.20	
108-67-8	1,3,5-Trimethylbenzene	ND		0.20	
106-99-0	1,3-Butadiene	ND		0.40	
541-73-1	1,3-Dichlorobenzene	ND		0.20	
106-46-7	1,4-Dichlorobenzene	ND		0.20	
123-91-1	1,4-Dioxane	ND		0.40	
71-36-3	1-Butanol	ND		2.0	
90-12-0	1-Methylnaphthalene	ND		2.5	
540-84-1	2,2,4-Trimethylpentane	ND		0.40	
565-59-3	2,3-Dimethylpentane	ND		0.20	
78-93-3	2-Butanone	ND		1.0	
95-49-8	2-Chlorotoluene	ND		0.40	
591-78-6	2-Hexanone	ND		0.40	
78-78-4	2-Methylbutane	ND		0.50	
91-57-6	2-Methylnaphthalene	ND		2.5	
107-83-5	2-Methylpentane	ND		0.20	
107-05-1	3-Chloropropene	ND		0.20	
622-96-8	4-Ethyltoluene	ND		0.40	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		1.0	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19822-1

SDG No.:

Client Sample ID: 11830 Lab Sample ID: 140-19822-14

Matrix: Air Lab File ID: G29L19822.D

Analysis Method: TO-15 Date Collected: 07/24/2020 16:45

Sample wt/vol: 200(mL) Date Analyzed: 07/29/2020 13:04

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 41354 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
67-64-1	Acetone	ND		7.5	
75-05-8	Acetonitrile	ND		1.0	
107-02-8	Acrolein	ND		1.0	
107-13-1	Acrylonitrile	ND		2.0	
98-83-9	Alpha Methyl Styrene	ND		0.40	
71-43-2	Benzene	ND		0.20	
100-44-7	Benzyl chloride	ND		0.40	
75-27-4	Bromodichloromethane	ND		0.20	
75-25-2	Bromoform	ND		0.20	
74-83-9	Bromomethane	ND		0.20	
106-97-8	Butane	ND		1.0	
75-15-0	Carbon disulfide	ND		0.40	
56-23-5	Carbon tetrachloride	ND		0.20	
108-90-7	Chlorobenzene	ND		0.20	
75-45-6	Chlorodifluoromethane	ND		0.20	
75-00-3	Chloroethane	ND		0.20	
67-66-3	Chloroform	ND		0.20	
74-87-3	Chloromethane	ND		1.0	
156-59-2	cis-1,2-Dichloroethene	ND		0.20	
10061-01-5	cis-1,3-Dichloropropene	ND		0.40	
98-82-8	Cumene	ND		0.40	
110-82-7	Cyclohexane	ND		0.40	
124-48-1	Dibromochloromethane	ND		0.20	
74-95-3	Dibromomethane	ND		0.40	
75-71-8	Dichlorodifluoromethane	ND		0.20	
64-17-5	Ethanol	ND		5.0	
141-78-6	Ethyl acetate	ND		2.0	
60-29-7	Ethyl ether	ND		2.0	
100-41-4	Ethylbenzene	ND		0.20	
87-68-3	Hexachlorobutadiene	ND		1.0	
110-54-3	Hexane	ND		0.40	
496-11-7	Indane	ND		0.20	
95-13-6	Indene	ND		0.40	
67-63-0	Isopropyl alcohol	ND		1.2	
179601-23-1	m&p-Xylene	ND		0.20	
80-62-6	Methyl methacrylate	ND		0.40	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-19822-1

SDG No.:

Client Sample ID: 11830 Lab Sample ID: 140-19822-14

Matrix: Air Lab File ID: G29L19822.D

Analysis Method: TO-15 Date Collected: 07/24/2020 16:45

Sample wt/vol: 200(mL) Date Analyzed: 07/29/2020 13:04

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 41354 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
1634-04-4	Methyl tert-butyl ether	ND		1.0	
108-87-2	Methylcyclohexane	ND		0.20	
75-09-2	Methylene Chloride	ND		1.0	
91-20-3	Naphthalene	ND		0.40	
104-51-8	n-Butylbenzene	ND		0.40	
124-18-5	n-Decane	ND		1.0	
112-40-3	n-Dodecane	ND		1.0	
142-82-5	n-Heptane	ND		0.40	
111-84-2	n-Nonane	ND		0.40	
111-65-9	n-Octane	ND		0.40	
103-65-1	N-Propylbenzene	ND		0.40	
1120-21-4	n-Undecane	ND		1.0	
95-47-6	o-Xylene	ND		0.20	
99-87-6	p-Cymene	ND		0.20	
109-66-0	Pentane	ND		2.5	
115-07-1	Propene	ND		2.5	
135-98-8	sec-Butylbenzene	ND		0.40	
100-42-5	Styrene	ND		0.20	
75-65-0	tert-Butanol	ND		1.0	
98-06-6	tert-Butylbenzene	ND		0.40	
127-18-4	Tetrachloroethene	ND		0.20	
109-99-9	Tetrahydrofuran	ND		1.0	
110-02-1	Thiophene	ND		0.20	
108-88-3	Toluene	ND		1.0	
156-60-5	trans-1,2-Dichloroethene	ND		0.20	
10061-02-6	trans-1,3-Dichloropropene	ND		0.20	
79-01-6	Trichloroethene	ND		0.20	
75-69-4	Trichlorofluoromethane	ND		0.20	
108-05-4	Vinyl acetate	ND		1.0	
593-60-2	Vinyl bromide	ND		0.20	
75-01-4	Vinyl chloride	ND		0.40	

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MR\20200728-16133.b\G29L19822.D
Lims ID: 140-19822-A-14
Client ID: 11830
Sample Type: Client
Inject. Date: 29-Jul-2020 13:04:30 ALS Bottle#: 6 Worklist Smp#: 9
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016133-009
Misc. Info.: 11830
Operator ID: HMT Instrument ID: MR

Method: \\chromfs\Knoxville\ChromData\MR\20200728-16133.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 30-Jul-2020 10:01:05 Calib Date: 28-Jul-2020 09:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MR\20200724-16116.b\RG27IC09R.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1069

First Level Reviewer: barlozhetskayaa Date: 30-Jul-2020 10:02:07

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.301	8.312	-0.011	92	143475	4.00	
* 2 1,4-Difluorobenzene	114	10.544	10.539	0.005	96	1257432	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.376	15.371	0.006	90	1016983	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.026	17.021	0.005	94	556392	3.62	
7 Propene	41	3.351	3.356	-0.005	98	71609	0.3957	7
40 Hexane	56	7.584	7.573	0.011	21	1231	0.0159	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

40MXISSURP_00004 Amount Added: 40.00 Units: mL Run Reagent

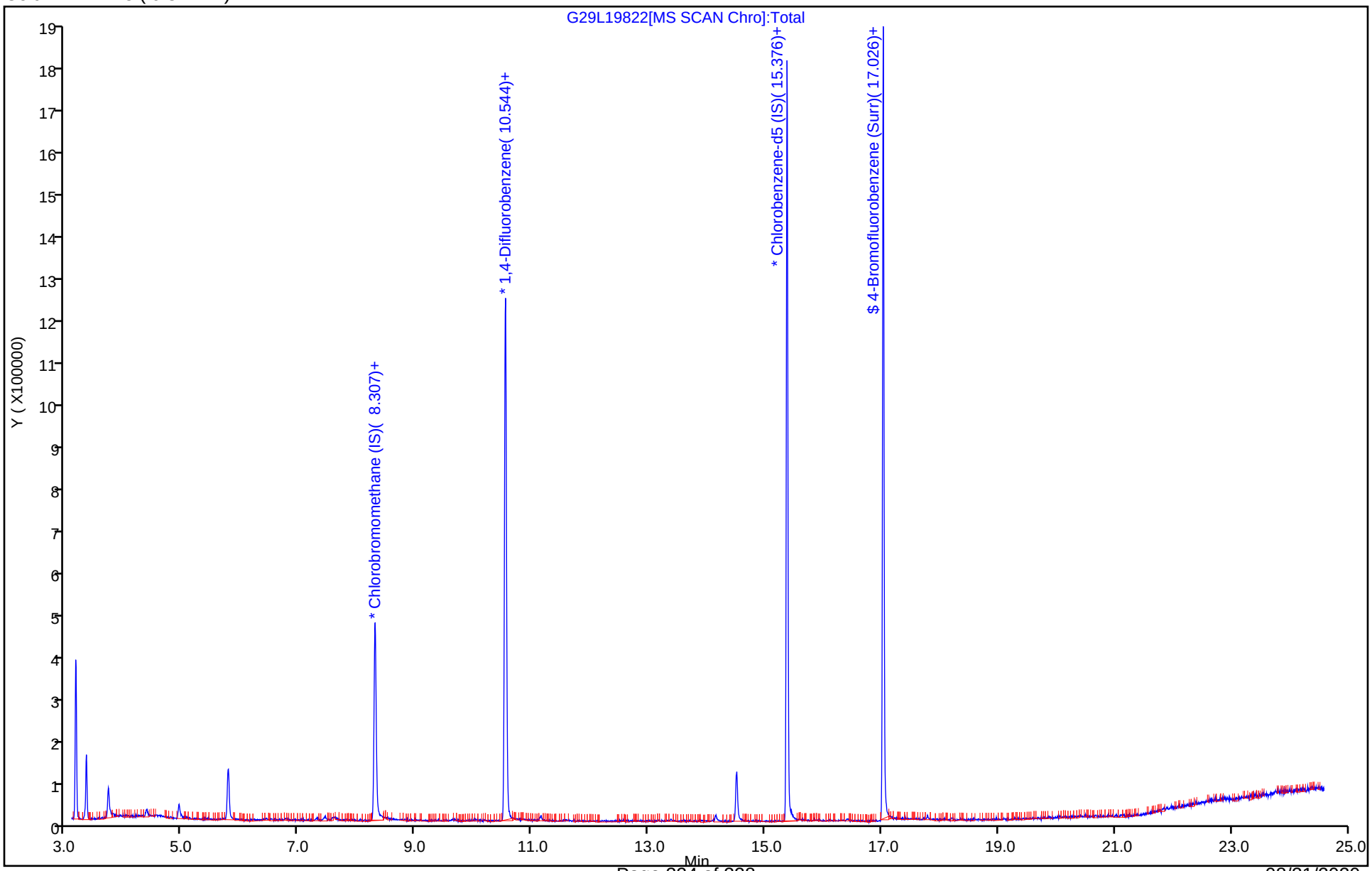
Report Date: 30-Jul-2020 10:02:07 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MR\20200728-16133.b\G29L19822.D

Injection Date:	29-Jul-2020 13:04:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	140-19822-A-14	Lab Sample ID:	140-19822-14	Worklist Smp#:	9
Client ID:	11830				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Shipping and Receiving Documents

Eurofins TestAmerica, Knoxville
5815 Middlebrook Pike
Knoxville, TN 37921-5947
phone 865.291.3000 fax 865.584.4315

Baltimore #201

Canister Samples Chain of Custody Record

TestAmerica Laboratories, Inc. assumes no liability with respect to the collection and shipment of these samples.

140-20065 Chain of Custody

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact Information	**Client Project Manager:** Peter Rich	**Samples Collected By:** Andrew Smith	COC No:
Company Name: Tetra Tech	Phone: 410-990-4607		1 of 1 COCs
Address: 980 Awald Rd Suite 302	Email:		TALS Project #:
City/State/Zip Annapolis MD 21403			**For Lab Use Only:**
Phone: 410-990-4607	Site Contact:		Walk-in Client:
FAX:	Tel/Fax		Lab Sampling:
Project Name: Lockheed LMC	**Analysis Turnaround Time**		
Site/Location: Lockheed Martin	Standard (Specific): X		Job / SDG No.:
P.O# 117-0512140	Rush (Specifiy):		(See below for Add'l Items)

Sample Identification	Sample Start Date	Time Start	Sample End Date	Time Stop	Canister Vacuum in Field, "Hg (Start)	Canister Vacuum in Field, "Hg (Stop)	Flow Controller ID	Canister ID	TO-14/15 (Standard / Low Level)	TO-15 SIM	EPA 3C	EPA 25C	ASTM D-1946	EPA 15/16	Other (Please specify in notes section)	Sample Type	Indoor Air/Ambient Air	Sub-Slab	Soil Gas	Soil Vapor Extraction (SVE)	Landfill Gas	Other (Please specify in notes section)	Sample Specific Notes:
Bldg A Influent	8/18	11:09	8/18	11:10	-29	-4	10614	10497	X														
Bldg A Mid GAC	8/18	11:05	8/18	11:06	-30	-4	10936	09802	X														
Bldg A Effluent	8/18	11:02	8/18	11:03	-30	-4	10104	11280	X														

Temperature (Fahrenheit)	Interior	Ambient
Start		
Stop	80°	

Pressure (inches of Hg)	Interior	Ambient
Start		
Stop		

Received @ ambient, 1 box, Fedex Priority
Custody seal intact
trk# 7712 9493 9521
KW 8/19/20

Special Instructions/QC Requirements & Comments:

Samples Shipped by:	**Date / Time:**	**Samples Received by:**	
Samples Relinquished by:	**Date / Time:** 8/18/20 14:50	**Received by:**	
Relinquished by:	**Date / Time:** 8/18/20 1720	**Received by:** ETA	8/19/20 1015
Lab Use Only: **Shipper Name:**	**Opened by:**	**Condition:**	3 cans, 3 KR

Form No. CA-C-WI-003, Rev. 2.23, dated 5/4/2020

Loc: 140

EUROFINS/TESTAMERICA KNOXVILLE SAMPLE RECEIPT/CONDITION UPON RECEIPT ANOMALY CHECKLIST **Log In Number:** 20065

Review Items	Yes	No	NA	If No, what was the problem?
1. Are the shipping containers intact?	/			☐ **Containers, Broken**
2. Were ambient air containers received intact?			/	☑ Checked in lab
3. The coolers/containers custody seal if present, is it intact?	/			☐ Yes ☐ NA
4. Is the cooler temperature within limits? (> freezing temp. of water to 6 °C, VOST: 10°C) Thermometer ID :_____ Correction factor: _____			/	☐ **Cooler Out of Temp, Client Contacted, Proceed/Cancel** ☐ **Cooler Out of Temp, Same Day Receipt**
5. Were all of the sample containers received intact?	/			☐ **Containers, Broken**
6. Were samples received in appropriate containers?	/			☐ **Containers, Improper; Client Contacted; Proceed/Cancel**
7. Do sample container labels match COC? (IDs, Dates, Times)	/			☐ **COC & Samples Do Not Match** ☐ **COC Incorrect/Incomplete** ☐ **COC Not Received**
8. Were all of the samples listed on the COC received?	/			☐ **Sample Received, Not on COC** ☐ **Sample on COC, Not Received**
9. Is the date/time of sample collection noted?	/			☐ **COC; No Date/Time; Client Contacted**
10. Was the sampler identified on the COC?	/			☐ **Sampler Not Listed on COC**
11. Is the client and project name/# identified?	/			☐ **COC Incorrect/Incomplete**
12. Are tests/parameters listed for each sample?	/			☐ **COC No tests on COC**
13. Is the matrix of the samples noted?	/			☐ **COC Incorrect/Incomplete**
14. Was COC relinquished? (Signed/Dated/Timed)	/			☐ **COC Incorrect/Incomplete**
15. Were samples received within holding time?	/			☐ **Holding Time - Receipt**
16. Were samples received with correct chemical preservative (excluding Encore)?			/	☐ **pH Adjusted, pH Included (See box 16A)** ☐ **Incorrect Preservative**
17. Were VOA samples received without headspace?			/	☐ **Headspace (VOA only)**
18. Did you check for residual chlorine, if necessary? (e.g. 1613B, 1668) Chlorine test strip lot number:_____			/	☐ **Residual Chlorine**
19. For 1613B water samples is pH<9?			/	☐ If no, notify lab to adjust
20. For rad samples was sample activity info. Provided?			/	☐ Project missing info

Comments/Actions Taken

Labeling Verified by: **Date:**

pH test strip lot number:

Box 16A: pH Preservation	Box 18A: Residual Chlorine
Preservative:	
Lot Number:	
Exp Date:	
Analyst:	
Date:	
Time:	

Project #: 1400292 PM Instructions: _____

Sample Receiving Associate: Ken Tilson Date: 8/19/20

QA026R32.doc, 062719

TestAmerica Knoxville - Air Canister Initial Pressure Check

Gauge ID: G5
Date: 8/19/2020

Analyst	Sample ID	Asset #	Cleaning Job	Cert	Size (L)	Pressure @ Receipt (-in Hg or +psig)	Time	Comments
BRS	140-20065-a-1	10497	19822	B	1	-2.9	14:45	
BRS	140-20065-a-2	09802	19822	B	1	0.0	14:46	
BRS	140-20065-a-3	11280	19822	B	1	-3.3	14:47	

□ Receiving –Air Can –Calve Open (NCM #_____)
□ Air - Can P -24 to -25 " - Flow Contr. Works (NCM#_____)
□ Air - Can P -24 to -25 " - Flow Contr. Faulty (NCM#_____)
□ Air - Can P Out -26" - Flow Contr. Works (NCM#_____)
□ Air - Can P Out -26" - Flow Contr. Faulty (NCM#_____)
□ Air - Can P Low -24 to -25 " - Grab Sample (NCM#_____)
□ Air - Can P Low -26 "- Grab Sample (NCM#_____)

ANALYTICAL REPORT

Job Number: 140-20507-1

Job Description: LMMRC SSDS - Middle River

For:
Tetra Tech GEO
980 Awald Road
Suite 302
Annapolis, MD 21403

Attention: Peter Rich



Approved for release.
Diana L Lange
Project Management Assistant II
10/13/2020 10:46 AM

Designee for
Jamie A McKinney, Senior Project Manager
5815 Middlebrook Pike, Knoxville, TN, 37921
(865)291-3000
Jamie.McKinney@Eurofinset.com
10/13/2020

cc: Belssi Chang
Amy Thomson

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins TestAmerica Project Manager.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Eurofins TestAmerica, Knoxville
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Qualifiers

Air - GC/MS VOA

Qualifier	Qualifier Description
E	Result exceeded calibration range.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job Narrative
140-20507-1

Comments
No additional comments.

Receipt
The samples were received on 9/29/2020 10:30 AM; the samples arrived in good condition, and where required, properly preserved and on ice.

Air - GC/MS VOA
Methods 3005A, TO 15 LL, TO-14A, TO-15: EPA methods TO-14A and TO-15 specify the use of humidified "zero air" as the blank reagent for canister cleaning, instrument calibration and sample analysis. Ultra-high purity humidified nitrogen from a cryogenic reservoir is used in place of "zero air" by TestAmerica Knoxville.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Client Sample ID: BLDG A INFLUENT
Lab Sample ID: 140-20507-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	2.1		1.6	0.16	ppb v/v	1		TO 15 LL	Total/NA
Chloroform	0.81	J	1.6	0.14	ppb v/v	1		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	8.7		1.6	0.20	ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.41	J	1.6	0.28	ppb v/v	1		TO 15 LL	Total/NA
1,1-Dichloroethane	1.7		1.6	0.14	ppb v/v	1		TO 15 LL	Total/NA
1,2-Dichloroethane	0.21	J	1.6	0.20	ppb v/v	1		TO 15 LL	Total/NA
1,1-Dichloroethene	11		1.6	0.16	ppb v/v	1		TO 15 LL	Total/NA
trans-1,2-Dichloroethene	0.30	J	1.6	0.14	ppb v/v	1		TO 15 LL	Total/NA
1,1,1-Trichloroethane	52		1.6	0.74	ppb v/v	1		TO 15 LL	Total/NA
Trichloroethene	100		0.80	0.12	ppb v/v	1		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	6.8		5.1	0.51	ug/m3	1		TO 15 LL	Total/NA
Chloroform	4.0	J	7.8	0.68	ug/m3	1		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	34		6.3	0.79	ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.0	J	7.9	1.4	ug/m3	1		TO 15 LL	Total/NA
1,1-Dichloroethane	6.9		6.5	0.57	ug/m3	1		TO 15 LL	Total/NA
1,2-Dichloroethane	0.85	J	6.5	0.81	ug/m3	1		TO 15 LL	Total/NA
1,1-Dichloroethene	45		6.3	0.63	ug/m3	1		TO 15 LL	Total/NA
trans-1,2-Dichloroethene	1.2	J	6.3	0.56	ug/m3	1		TO 15 LL	Total/NA
1,1,1-Trichloroethane	280		8.7	4.0	ug/m3	1		TO 15 LL	Total/NA
Trichloroethene	560		4.3	0.64	ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: BLDG A MIDGAC
Lab Sample ID: 140-20507-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.25	J	0.40	0.040	ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.070	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Chlorodifluoromethane	0.20	J	0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Chloroform	0.19	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	2.7		0.40	0.050	ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.34	J	0.40	0.070	ppb v/v	1		TO 15 LL	Total/NA
1,1-Dichloroethane	0.34	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
1,2-Dichloroethane	0.11	J	0.40	0.050	ppb v/v	1		TO 15 LL	Total/NA
1,1-Dichloroethene	1.6		0.40	0.040	ppb v/v	1		TO 15 LL	Total/NA
Ethylbenzene	0.067	J	0.40	0.065	ppb v/v	1		TO 15 LL	Total/NA
Toluene	0.44	J	0.60	0.39	ppb v/v	1		TO 15 LL	Total/NA
trans-1,2-Dichloroethene	0.036	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
1,1,1-Trichloroethane	20		0.40	0.19	ppb v/v	1		TO 15 LL	Total/NA
Trichloroethene	4.4		0.20	0.030	ppb v/v	1		TO 15 LL	Total/NA
Xylenes, Total	0.19	J	0.80	0.12	ppb v/v	1		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.80	J	1.3	0.13	ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.44	J	2.5	0.22	ug/m3	1		TO 15 LL	Total/NA
Chlorodifluoromethane	0.70	J	1.4	0.39	ug/m3	1		TO 15 LL	Total/NA
Chloroform	0.92	J	2.0	0.17	ug/m3	1		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	11		1.6	0.20	ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	1.7	J	2.0	0.35	ug/m3	1		TO 15 LL	Total/NA
1,1-Dichloroethane	1.4	J	1.6	0.14	ug/m3	1		TO 15 LL	Total/NA
1,2-Dichloroethane	0.45	J	1.6	0.20	ug/m3	1		TO 15 LL	Total/NA
1,1-Dichloroethene	6.2		1.6	0.16	ug/m3	1		TO 15 LL	Total/NA
Ethylbenzene	0.29	J	1.7	0.28	ug/m3	1		TO 15 LL	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: BLDG A MIDGAC (Continued) — Lab Sample ID: 140-20507-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Toluene	1.7	J	2.3	1.5	ug/m3	1		TO 15 LL	Total/NA
trans-1,2-Dichloroethene	0.14	J	1.6	0.14	ug/m3	1		TO 15 LL	Total/NA
1,1,1-Trichloroethane	110		2.2	1.0	ug/m3	1		TO 15 LL	Total/NA
Trichloroethene	24		1.1	0.16	ug/m3	1		TO 15 LL	Total/NA
Xylenes, Total	0.83	J	3.5	0.52	ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: BLDG A EFFLUENT — Lab Sample ID: 140-20507-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.14	J	0.40	0.040	ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.079	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Chlorodifluoromethane	0.26	J	0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Chloroform	1.2		0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	35		0.40	0.050	ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.36	J	0.40	0.070	ppb v/v	1		TO 15 LL	Total/NA
1,1-Dichloroethane	6.8		0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
1,1-Dichloroethene	22		0.40	0.040	ppb v/v	1		TO 15 LL	Total/NA
Ethylbenzene	0.11	J	0.40	0.065	ppb v/v	1		TO 15 LL	Total/NA
Toluene	1.9		0.60	0.39	ppb v/v	1		TO 15 LL	Total/NA
trans-1,2-Dichloroethene	0.73		0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
1,1,1-Trichloroethane	290	E	0.40	0.19	ppb v/v	1		TO 15 LL	Total/NA
Trichloroethene	4.7		0.20	0.030	ppb v/v	1		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	0.11	J	0.40	0.10	ppb v/v	1		TO 15 LL	Total/NA
Xylenes, Total	0.55	J	0.80	0.12	ppb v/v	1		TO 15 LL	Total/NA
1,1,1-Trichloroethane - DL	240		3.6	1.7	ppb v/v	1		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.46	J	1.3	0.13	ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.50	J	2.5	0.22	ug/m3	1		TO 15 LL	Total/NA
Chlorodifluoromethane	0.92	J	1.4	0.39	ug/m3	1		TO 15 LL	Total/NA
Chloroform	6.0		2.0	0.17	ug/m3	1		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	140		1.6	0.20	ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	1.8	J	2.0	0.35	ug/m3	1		TO 15 LL	Total/NA
1,1-Dichloroethane	28		1.6	0.14	ug/m3	1		TO 15 LL	Total/NA
1,1-Dichloroethene	88		1.6	0.16	ug/m3	1		TO 15 LL	Total/NA
Ethylbenzene	0.48	J	1.7	0.28	ug/m3	1		TO 15 LL	Total/NA
Toluene	7.0		2.3	1.5	ug/m3	1		TO 15 LL	Total/NA
trans-1,2-Dichloroethene	2.9		1.6	0.14	ug/m3	1		TO 15 LL	Total/NA
1,1,1-Trichloroethane	1600	E	2.2	1.0	ug/m3	1		TO 15 LL	Total/NA
Trichloroethene	25		1.1	0.16	ug/m3	1		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	0.55	J	2.0	0.49	ug/m3	1		TO 15 LL	Total/NA
Xylenes, Total	2.4	J	3.5	0.52	ug/m3	1		TO 15 LL	Total/NA
1,1,1-Trichloroethane - DL	1300		20	9.2	ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: BLDG C INFLUENT — Lab Sample ID: 140-20507-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1.7		0.40	0.040	ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.070	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Chlorodifluoromethane	0.61		0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Chloroform	0.096	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	0.28	J	0.40	0.050	ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.39	J	0.40	0.070	ppb v/v	1		TO 15 LL	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: BLDG C INFLUENT (Continued) — Lab Sample ID: 140-20507-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Ethylbenzene	0.11	J	0.40	0.065	ppb v/v	1		TO 15 LL	Total/NA
Tetrachloroethene	0.097	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Toluene	1.8		0.60	0.39	ppb v/v	1		TO 15 LL	Total/NA
trans-1,2-Dichloroethene	0.20	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Trichloroethene	3.8		0.20	0.030	ppb v/v	1		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	0.51		0.40	0.10	ppb v/v	1		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	0.24	J	0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Xylenes, Total	0.52	J	0.80	0.12	ppb v/v	1		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	5.4		1.3	0.13	ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.44	J	2.5	0.22	ug/m3	1		TO 15 LL	Total/NA
Chlorodifluoromethane	2.2		1.4	0.39	ug/m3	1		TO 15 LL	Total/NA
Chloroform	0.47	J	2.0	0.17	ug/m3	1		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	1.1	J	1.6	0.20	ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	1.9	J	2.0	0.35	ug/m3	1		TO 15 LL	Total/NA
Ethylbenzene	0.48	J	1.7	0.28	ug/m3	1		TO 15 LL	Total/NA
Tetrachloroethene	0.66	J	2.7	0.24	ug/m3	1		TO 15 LL	Total/NA
Toluene	6.7		2.3	1.5	ug/m3	1		TO 15 LL	Total/NA
trans-1,2-Dichloroethene	0.79	J	1.6	0.14	ug/m3	1		TO 15 LL	Total/NA
Trichloroethene	21		1.1	0.16	ug/m3	1		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	2.5		2.0	0.49	ug/m3	1		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	1.2	J	2.0	0.54	ug/m3	1		TO 15 LL	Total/NA
Xylenes, Total	2.3	J	3.5	0.52	ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: BLDG C MIDGAC — Lab Sample ID: 140-20507-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	2.8		0.40	0.040	ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.077	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Chlorodifluoromethane	0.78		0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Chloroform	0.11	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	0.24	J	0.40	0.050	ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.51		0.40	0.070	ppb v/v	1		TO 15 LL	Total/NA
Ethylbenzene	0.098	J	0.40	0.065	ppb v/v	1		TO 15 LL	Total/NA
Tetrachloroethene	0.093	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Toluene	1.4		0.60	0.39	ppb v/v	1		TO 15 LL	Total/NA
trans-1,2-Dichloroethene	0.15	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Trichloroethene	3.4		0.20	0.030	ppb v/v	1		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	0.12	J	0.40	0.10	ppb v/v	1		TO 15 LL	Total/NA
Xylenes, Total	0.44	J	0.80	0.12	ppb v/v	1		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	8.8		1.3	0.13	ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.49	J	2.5	0.22	ug/m3	1		TO 15 LL	Total/NA
Chlorodifluoromethane	2.7		1.4	0.39	ug/m3	1		TO 15 LL	Total/NA
Chloroform	0.53	J	2.0	0.17	ug/m3	1		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	0.96	J	1.6	0.20	ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.5		2.0	0.35	ug/m3	1		TO 15 LL	Total/NA
Ethylbenzene	0.43	J	1.7	0.28	ug/m3	1		TO 15 LL	Total/NA
Tetrachloroethene	0.63	J	2.7	0.24	ug/m3	1		TO 15 LL	Total/NA
Toluene	5.4		2.3	1.5	ug/m3	1		TO 15 LL	Total/NA
trans-1,2-Dichloroethene	0.59	J	1.6	0.14	ug/m3	1		TO 15 LL	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: BLDG C MIDGAC (Continued) — Lab Sample ID: 140-20507-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	18		1.1	0.16	ug/m3	1		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	0.57	J	2.0	0.49	ug/m3	1		TO 15 LL	Total/NA
Xylenes, Total	1.9	J	3.5	0.52	ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: BLDG C EFFLUENT — Lab Sample ID: 140-20507-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1.7		0.40	0.040	ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.073	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
Chlorodifluoromethane	0.79		0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Chloroform	0.17	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	0.51		0.40	0.050	ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.56		0.40	0.070	ppb v/v	1		TO 15 LL	Total/NA
Ethylbenzene	0.10	J	0.40	0.065	ppb v/v	1		TO 15 LL	Total/NA
Toluene	2.0		0.60	0.39	ppb v/v	1		TO 15 LL	Total/NA
trans-1,2-Dichloroethene	0.12	J	0.40	0.035	ppb v/v	1		TO 15 LL	Total/NA
1,1,1-Trichloroethane	0.88		0.40	0.19	ppb v/v	1		TO 15 LL	Total/NA
1,2,3-Trimethylbenzene	0.20	J	0.40	0.18	ppb v/v	1		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	0.73		0.40	0.10	ppb v/v	1		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	0.38	J	0.40	0.11	ppb v/v	1		TO 15 LL	Total/NA
Xylenes, Total	0.46	J	0.80	0.12	ppb v/v	1		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	5.3		1.3	0.13	ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.46	J	2.5	0.22	ug/m3	1		TO 15 LL	Total/NA
Chlorodifluoromethane	2.8		1.4	0.39	ug/m3	1		TO 15 LL	Total/NA
Chloroform	0.84	J	2.0	0.17	ug/m3	1		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	2.0		1.6	0.20	ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.8		2.0	0.35	ug/m3	1		TO 15 LL	Total/NA
Ethylbenzene	0.44	J	1.7	0.28	ug/m3	1		TO 15 LL	Total/NA
Toluene	7.5		2.3	1.5	ug/m3	1		TO 15 LL	Total/NA
trans-1,2-Dichloroethene	0.48	J	1.6	0.14	ug/m3	1		TO 15 LL	Total/NA
1,1,1-Trichloroethane	4.8		2.2	1.0	ug/m3	1		TO 15 LL	Total/NA
1,2,3-Trimethylbenzene	0.98	J	2.0	0.88	ug/m3	1		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	3.6		2.0	0.49	ug/m3	1		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	1.9	J	2.0	0.54	ug/m3	1		TO 15 LL	Total/NA
Xylenes, Total	2.0	J	3.5	0.52	ug/m3	1		TO 15 LL	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: BLDG A INFLUENT
Lab Sample ID: 140-20507-1

Date Collected: 09/28/20 11:56
Matrix: Air
Date Received: 09/29/20 10:30
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**2.1**		1.6	0.16	ppb v/v			09/30/20 12:23	1
Carbon tetrachloride	ND		1.6	0.14	ppb v/v			09/30/20 12:23	1
Chlorodifluoromethane	ND		1.6	0.44	ppb v/v			09/30/20 12:23	1
Chloroform	**0.81**	**J**	1.6	0.14	ppb v/v			09/30/20 12:23	1
cis-1,2-Dichloroethene	**8.7**		1.6	0.20	ppb v/v			09/30/20 12:23	1
Dichlorodifluoromethane	**0.41**	**J**	1.6	0.28	ppb v/v			09/30/20 12:23	1
1,1-Dichloroethane	**1.7**		1.6	0.14	ppb v/v			09/30/20 12:23	1
1,2-Dichloroethane	**0.21**	**J**	1.6	0.20	ppb v/v			09/30/20 12:23	1
1,1-Dichloroethene	**11**		1.6	0.16	ppb v/v			09/30/20 12:23	1
Ethylbenzene	ND		1.6	0.26	ppb v/v			09/30/20 12:23	1
Methylene Chloride	ND		8.0	7.8	ppb v/v			09/30/20 12:23	1
Methyl tert-butyl ether	ND		8.0	1.0	ppb v/v			09/30/20 12:23	1
Naphthalene	ND		0.80	0.80	ppb v/v			09/30/20 12:23	1
Tetrachloroethene	ND		1.6	0.14	ppb v/v			09/30/20 12:23	1
Toluene	ND		2.4	1.6	ppb v/v			09/30/20 12:23	1
trans-1,2-Dichloroethene	**0.30**	**J**	1.6	0.14	ppb v/v			09/30/20 12:23	1
1,2,4-Trichlorobenzene	ND		1.6	1.3	ppb v/v			09/30/20 12:23	1
1,1,1-Trichloroethane	**52**		1.6	0.74	ppb v/v			09/30/20 12:23	1
1,1,2-Trichloroethane	ND		1.6	0.14	ppb v/v			09/30/20 12:23	1
Trichloroethene	**100**		0.80	0.12	ppb v/v			09/30/20 12:23	1
1,2,3-Trimethylbenzene	ND		1.6	0.72	ppb v/v			09/30/20 12:23	1
1,2,4-Trimethylbenzene	ND		1.6	0.40	ppb v/v			09/30/20 12:23	1
1,3,5-Trimethylbenzene	ND		1.6	0.44	ppb v/v			09/30/20 12:23	1
Vinyl chloride	ND		0.80	0.52	ppb v/v			09/30/20 12:23	1
Xylenes, Total	ND		3.2	0.48	ppb v/v			09/30/20 12:23	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**6.8**		5.1	0.51	ug/m3			09/30/20 12:23	1
Carbon tetrachloride	ND		10	0.88	ug/m3			09/30/20 12:23	1
Chlorodifluoromethane	ND		5.7	1.6	ug/m3			09/30/20 12:23	1
Chloroform	**4.0**	**J**	7.8	0.68	ug/m3			09/30/20 12:23	1
cis-1,2-Dichloroethene	**34**		6.3	0.79	ug/m3			09/30/20 12:23	1
Dichlorodifluoromethane	**2.0**	**J**	7.9	1.4	ug/m3			09/30/20 12:23	1
1,1-Dichloroethane	**6.9**		6.5	0.57	ug/m3			09/30/20 12:23	1
1,2-Dichloroethane	**0.85**	**J**	6.5	0.81	ug/m3			09/30/20 12:23	1
1,1-Dichloroethene	**45**		6.3	0.63	ug/m3			09/30/20 12:23	1
Ethylbenzene	ND		6.9	1.1	ug/m3			09/30/20 12:23	1
Methylene Chloride	ND		28	27	ug/m3			09/30/20 12:23	1
Methyl tert-butyl ether	ND		29	3.7	ug/m3			09/30/20 12:23	1
Naphthalene	ND		4.2	4.2	ug/m3			09/30/20 12:23	1
Tetrachloroethene	ND		11	0.95	ug/m3			09/30/20 12:23	1
Toluene	ND		9.0	5.9	ug/m3			09/30/20 12:23	1
trans-1,2-Dichloroethene	**1.2**	**J**	6.3	0.56	ug/m3			09/30/20 12:23	1
1,2,4-Trichlorobenzene	ND		12	9.5	ug/m3			09/30/20 12:23	1
1,1,1-Trichloroethane	**280**		8.7	4.0	ug/m3			09/30/20 12:23	1
1,1,2-Trichloroethane	ND		8.7	0.76	ug/m3			09/30/20 12:23	1
Trichloroethene	**560**		4.3	0.64	ug/m3			09/30/20 12:23	1
1,2,3-Trimethylbenzene	ND		7.9	3.5	ug/m3			09/30/20 12:23	1
1,2,4-Trimethylbenzene	ND		7.9	2.0	ug/m3			09/30/20 12:23	1

Client: Tetra Tech GEO
Job ID: 140-20507-1
Project/Site: LMMRC SSDS - Middle River

Client Sample ID: BLDG A INFLUENT
Lab Sample ID: 140-20507-1
Date Collected: 09/28/20 11:56
Matrix: Air
Date Received: 09/29/20 10:30
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		7.9	2.2	ug/m3			09/30/20 12:23	1
Vinyl chloride	ND		2.0	1.3	ug/m3			09/30/20 12:23	1
Xylenes, Total	ND		14	2.1	ug/m3			09/30/20 12:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*60 - 140*		*09/30/20 12:23*	*1*

Client Sample ID: BLDG A MIDGAC
Lab Sample ID: 140-20507-2

Date Collected: 09/28/20 11:56
Matrix: Air
Date Received: 09/29/20 10:30
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.25**	**J**	0.40	0.040	ppb v/v			09/30/20 13:09	1
Carbon tetrachloride	**0.070**	**J**	0.40	0.035	ppb v/v			09/30/20 13:09	1
Chlorodifluoromethane	**0.20**	**J**	0.40	0.11	ppb v/v			09/30/20 13:09	1
Chloroform	**0.19**	**J**	0.40	0.035	ppb v/v			09/30/20 13:09	1
cis-1,2-Dichloroethene	**2.7**		0.40	0.050	ppb v/v			09/30/20 13:09	1
Dichlorodifluoromethane	**0.34**	**J**	0.40	0.070	ppb v/v			09/30/20 13:09	1
1,1-Dichloroethane	**0.34**	**J**	0.40	0.035	ppb v/v			09/30/20 13:09	1
1,2-Dichloroethane	**0.11**	**J**	0.40	0.050	ppb v/v			09/30/20 13:09	1
1,1-Dichloroethene	**1.6**		0.40	0.040	ppb v/v			09/30/20 13:09	1
Ethylbenzene	**0.067**	**J**	0.40	0.065	ppb v/v			09/30/20 13:09	1
Methylene Chloride	ND		2.0	2.0	ppb v/v			09/30/20 13:09	1
Methyl tert-butyl ether	ND		2.0	0.26	ppb v/v			09/30/20 13:09	1
Naphthalene	ND		0.20	0.20	ppb v/v			09/30/20 13:09	1
Tetrachloroethene	ND		0.40	0.035	ppb v/v			09/30/20 13:09	1
Toluene	**0.44**	**J**	0.60	0.39	ppb v/v			09/30/20 13:09	1
trans-1,2-Dichloroethene	**0.036**	**J**	0.40	0.035	ppb v/v			09/30/20 13:09	1
1,2,4-Trichlorobenzene	ND		0.40	0.32	ppb v/v			09/30/20 13:09	1
1,1,1-Trichloroethane	**20**		0.40	0.19	ppb v/v			09/30/20 13:09	1
1,1,2-Trichloroethane	ND		0.40	0.035	ppb v/v			09/30/20 13:09	1
Trichloroethene	**4.4**		0.20	0.030	ppb v/v			09/30/20 13:09	1
1,2,3-Trimethylbenzene	ND		0.40	0.18	ppb v/v			09/30/20 13:09	1
1,2,4-Trimethylbenzene	ND		0.40	0.10	ppb v/v			09/30/20 13:09	1
1,3,5-Trimethylbenzene	ND		0.40	0.11	ppb v/v			09/30/20 13:09	1
Vinyl chloride	ND		0.20	0.13	ppb v/v			09/30/20 13:09	1
Xylenes, Total	**0.19**	**J**	0.80	0.12	ppb v/v			09/30/20 13:09	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.80**	**J**	1.3	0.13	ug/m3			09/30/20 13:09	1
Carbon tetrachloride	**0.44**	**J**	2.5	0.22	ug/m3			09/30/20 13:09	1
Chlorodifluoromethane	**0.70**	**J**	1.4	0.39	ug/m3			09/30/20 13:09	1
Chloroform	**0.92**	**J**	2.0	0.17	ug/m3			09/30/20 13:09	1
cis-1,2-Dichloroethene	**11**		1.6	0.20	ug/m3			09/30/20 13:09	1
Dichlorodifluoromethane	**1.7**	**J**	2.0	0.35	ug/m3			09/30/20 13:09	1
1,1-Dichloroethane	**1.4**	**J**	1.6	0.14	ug/m3			09/30/20 13:09	1
1,2-Dichloroethane	**0.45**	**J**	1.6	0.20	ug/m3			09/30/20 13:09	1
1,1-Dichloroethene	**6.2**		1.6	0.16	ug/m3			09/30/20 13:09	1
Ethylbenzene	**0.29**	**J**	1.7	0.28	ug/m3			09/30/20 13:09	1
Methylene Chloride	ND		6.9	6.8	ug/m3			09/30/20 13:09	1
Methyl tert-butyl ether	ND		7.2	0.94	ug/m3			09/30/20 13:09	1
Naphthalene	ND		1.0	1.0	ug/m3			09/30/20 13:09	1
Tetrachloroethene	ND		2.7	0.24	ug/m3			09/30/20 13:09	1
Toluene	**1.7**	**J**	2.3	1.5	ug/m3			09/30/20 13:09	1
trans-1,2-Dichloroethene	**0.14**	**J**	1.6	0.14	ug/m3			09/30/20 13:09	1
1,2,4-Trichlorobenzene	ND		3.0	2.4	ug/m3			09/30/20 13:09	1
1,1,1-Trichloroethane	**110**		2.2	1.0	ug/m3			09/30/20 13:09	1
1,1,2-Trichloroethane	ND		2.2	0.19	ug/m3			09/30/20 13:09	1
Trichloroethene	**24**		1.1	0.16	ug/m3			09/30/20 13:09	1
1,2,3-Trimethylbenzene	ND		2.0	0.88	ug/m3			09/30/20 13:09	1
1,2,4-Trimethylbenzene	ND		2.0	0.49	ug/m3			09/30/20 13:09	1

Client Sample ID: BLDG A MIDGAC
Lab Sample ID: 140-20507-2

Date Collected: 09/28/20 11:56
Matrix: Air
Date Received: 09/29/20 10:30
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		2.0	0.54	ug/m3			09/30/20 13:09	1
Vinyl chloride	ND		0.51	0.33	ug/m3			09/30/20 13:09	1
Xylenes, Total	**0.83**	**J**	3.5	0.52	ug/m3			09/30/20 13:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*60 - 140*		*09/30/20 13:09*	*1*

Client Sample ID: BLDG A EFFLUENT
Lab Sample ID: 140-20507-3

Date Collected: 09/28/20 11:45
Matrix: Air
Date Received: 09/29/20 10:30
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.14**	**J**	0.40	0.040	ppb v/v			09/30/20 13:52	1
Carbon tetrachloride	**0.079**	**J**	0.40	0.035	ppb v/v			09/30/20 13:52	1
Chlorodifluoromethane	**0.26**	**J**	0.40	0.11	ppb v/v			09/30/20 13:52	1
Chloroform	**1.2**		0.40	0.035	ppb v/v			09/30/20 13:52	1
cis-1,2-Dichloroethene	**35**		0.40	0.050	ppb v/v			09/30/20 13:52	1
Dichlorodifluoromethane	**0.36**	**J**	0.40	0.070	ppb v/v			09/30/20 13:52	1
1,1-Dichloroethane	**6.8**		0.40	0.035	ppb v/v			09/30/20 13:52	1
1,2-Dichloroethane	ND		0.40	0.050	ppb v/v			09/30/20 13:52	1
1,1-Dichloroethene	**22**		0.40	0.040	ppb v/v			09/30/20 13:52	1
Ethylbenzene	**0.11**	**J**	0.40	0.065	ppb v/v			09/30/20 13:52	1
Methylene Chloride	ND		2.0	2.0	ppb v/v			09/30/20 13:52	1
Methyl tert-butyl ether	ND		2.0	0.26	ppb v/v			09/30/20 13:52	1
Naphthalene	ND		0.20	0.20	ppb v/v			09/30/20 13:52	1
Tetrachloroethene	ND		0.40	0.035	ppb v/v			09/30/20 13:52	1
Toluene	**1.9**		0.60	0.39	ppb v/v			09/30/20 13:52	1
trans-1,2-Dichloroethene	**0.73**		0.40	0.035	ppb v/v			09/30/20 13:52	1
1,2,4-Trichlorobenzene	ND		0.40	0.32	ppb v/v			09/30/20 13:52	1
1,1,1-Trichloroethane	**290**	**E**	0.40	0.19	ppb v/v			09/30/20 13:52	1
1,1,2-Trichloroethane	ND		0.40	0.035	ppb v/v			09/30/20 13:52	1
Trichloroethene	**4.7**		0.20	0.030	ppb v/v			09/30/20 13:52	1
1,2,3-Trimethylbenzene	ND		0.40	0.18	ppb v/v			09/30/20 13:52	1
1,2,4-Trimethylbenzene	**0.11**	**J**	0.40	0.10	ppb v/v			09/30/20 13:52	1
1,3,5-Trimethylbenzene	ND		0.40	0.11	ppb v/v			09/30/20 13:52	1
Vinyl chloride	ND		0.20	0.13	ppb v/v			09/30/20 13:52	1
Xylenes, Total	**0.55**	**J**	0.80	0.12	ppb v/v			09/30/20 13:52	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.46**	**J**	1.3	0.13	ug/m3			09/30/20 13:52	1
Carbon tetrachloride	**0.50**	**J**	2.5	0.22	ug/m3			09/30/20 13:52	1
Chlorodifluoromethane	**0.92**	**J**	1.4	0.39	ug/m3			09/30/20 13:52	1
Chloroform	**6.0**		2.0	0.17	ug/m3			09/30/20 13:52	1
cis-1,2-Dichloroethene	**140**		1.6	0.20	ug/m3			09/30/20 13:52	1
Dichlorodifluoromethane	**1.8**	**J**	2.0	0.35	ug/m3			09/30/20 13:52	1
1,1-Dichloroethane	**28**		1.6	0.14	ug/m3			09/30/20 13:52	1
1,2-Dichloroethane	ND		1.6	0.20	ug/m3			09/30/20 13:52	1
1,1-Dichloroethene	**88**		1.6	0.16	ug/m3			09/30/20 13:52	1
Ethylbenzene	**0.48**	**J**	1.7	0.28	ug/m3			09/30/20 13:52	1
Methylene Chloride	ND		6.9	6.8	ug/m3			09/30/20 13:52	1
Methyl tert-butyl ether	ND		7.2	0.94	ug/m3			09/30/20 13:52	1
Naphthalene	ND		1.0	1.0	ug/m3			09/30/20 13:52	1
Tetrachloroethene	ND		2.7	0.24	ug/m3			09/30/20 13:52	1
Toluene	**7.0**		2.3	1.5	ug/m3			09/30/20 13:52	1
trans-1,2-Dichloroethene	**2.9**		1.6	0.14	ug/m3			09/30/20 13:52	1
1,2,4-Trichlorobenzene	ND		3.0	2.4	ug/m3			09/30/20 13:52	1
1,1,1-Trichloroethane	**1600**	**E**	2.2	1.0	ug/m3			09/30/20 13:52	1
1,1,2-Trichloroethane	ND		2.2	0.19	ug/m3			09/30/20 13:52	1
Trichloroethene	**25**		1.1	0.16	ug/m3			09/30/20 13:52	1
1,2,3-Trimethylbenzene	ND		2.0	0.88	ug/m3			09/30/20 13:52	1
1,2,4-Trimethylbenzene	**0.55**	**J**	2.0	0.49	ug/m3			09/30/20 13:52	1

Client Sample ID: BLDG A EFFLUENT
Lab Sample ID: 140-20507-3

Date Collected: 09/28/20 11:45
Matrix: Air
Date Received: 09/29/20 10:30
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		2.0	0.54	ug/m3			09/30/20 13:52	1
Vinyl chloride	ND		0.51	0.33	ug/m3			09/30/20 13:52	1
Xylenes, Total	**2.4**	**J**	3.5	0.52	ug/m3			09/30/20 13:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*60 - 140*		*09/30/20 13:52*	*1*

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**240**		3.6	1.7	ppb v/v			10/01/20 03:00	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**1300**		20	9.2	ug/m3			10/01/20 03:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*60 - 140*		*10/01/20 03:00*	*1*

Client Sample ID: BLDG C INFLUENT
Lab Sample ID: 140-20507-4

Date Collected: 09/28/20 10:13
Matrix: Air
Date Received: 09/29/20 10:30
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**1.7**		0.40	0.040	ppb v/v			09/30/20 14:35	1
Carbon tetrachloride	**0.070**	**J**	0.40	0.035	ppb v/v			09/30/20 14:35	1
Chlorodifluoromethane	**0.61**		0.40	0.11	ppb v/v			09/30/20 14:35	1
Chloroform	**0.096**	**J**	0.40	0.035	ppb v/v			09/30/20 14:35	1
cis-1,2-Dichloroethene	**0.28**	**J**	0.40	0.050	ppb v/v			09/30/20 14:35	1
Dichlorodifluoromethane	**0.39**	**J**	0.40	0.070	ppb v/v			09/30/20 14:35	1
1,1-Dichloroethane	ND		0.40	0.035	ppb v/v			09/30/20 14:35	1
1,2-Dichloroethane	ND		0.40	0.050	ppb v/v			09/30/20 14:35	1
1,1-Dichloroethene	ND		0.40	0.040	ppb v/v			09/30/20 14:35	1
Ethylbenzene	**0.11**	**J**	0.40	0.065	ppb v/v			09/30/20 14:35	1
Methylene Chloride	ND		2.0	2.0	ppb v/v			09/30/20 14:35	1
Methyl tert-butyl ether	ND		2.0	0.26	ppb v/v			09/30/20 14:35	1
Naphthalene	ND		0.20	0.20	ppb v/v			09/30/20 14:35	1
Tetrachloroethene	**0.097**	**J**	0.40	0.035	ppb v/v			09/30/20 14:35	1
Toluene	**1.8**		0.60	0.39	ppb v/v			09/30/20 14:35	1
trans-1,2-Dichloroethene	**0.20**	**J**	0.40	0.035	ppb v/v			09/30/20 14:35	1
1,2,4-Trichlorobenzene	ND		0.40	0.32	ppb v/v			09/30/20 14:35	1
1,1,1-Trichloroethane	ND		0.40	0.19	ppb v/v			09/30/20 14:35	1
1,1,2-Trichloroethane	ND		0.40	0.035	ppb v/v			09/30/20 14:35	1
Trichloroethene	**3.8**		0.20	0.030	ppb v/v			09/30/20 14:35	1
1,2,3-Trimethylbenzene	ND		0.40	0.18	ppb v/v			09/30/20 14:35	1
1,2,4-Trimethylbenzene	**0.51**		0.40	0.10	ppb v/v			09/30/20 14:35	1
1,3,5-Trimethylbenzene	**0.24**	**J**	0.40	0.11	ppb v/v			09/30/20 14:35	1
Vinyl chloride	ND		0.20	0.13	ppb v/v			09/30/20 14:35	1
Xylenes, Total	**0.52**	**J**	0.80	0.12	ppb v/v			09/30/20 14:35	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**5.4**		1.3	0.13	ug/m3			09/30/20 14:35	1
Carbon tetrachloride	**0.44**	**J**	2.5	0.22	ug/m3			09/30/20 14:35	1
Chlorodifluoromethane	**2.2**		1.4	0.39	ug/m3			09/30/20 14:35	1
Chloroform	**0.47**	**J**	2.0	0.17	ug/m3			09/30/20 14:35	1
cis-1,2-Dichloroethene	**1.1**	**J**	1.6	0.20	ug/m3			09/30/20 14:35	1
Dichlorodifluoromethane	**1.9**	**J**	2.0	0.35	ug/m3			09/30/20 14:35	1
1,1-Dichloroethane	ND		1.6	0.14	ug/m3			09/30/20 14:35	1
1,2-Dichloroethane	ND		1.6	0.20	ug/m3			09/30/20 14:35	1
1,1-Dichloroethene	ND		1.6	0.16	ug/m3			09/30/20 14:35	1
Ethylbenzene	**0.48**	**J**	1.7	0.28	ug/m3			09/30/20 14:35	1
Methylene Chloride	ND		6.9	6.8	ug/m3			09/30/20 14:35	1
Methyl tert-butyl ether	ND		7.2	0.94	ug/m3			09/30/20 14:35	1
Naphthalene	ND		1.0	1.0	ug/m3			09/30/20 14:35	1
Tetrachloroethene	**0.66**	**J**	2.7	0.24	ug/m3			09/30/20 14:35	1
Toluene	**6.7**		2.3	1.5	ug/m3			09/30/20 14:35	1
trans-1,2-Dichloroethene	**0.79**	**J**	1.6	0.14	ug/m3			09/30/20 14:35	1
1,2,4-Trichlorobenzene	ND		3.0	2.4	ug/m3			09/30/20 14:35	1
1,1,1-Trichloroethane	ND		2.2	1.0	ug/m3			09/30/20 14:35	1
1,1,2-Trichloroethane	ND		2.2	0.19	ug/m3			09/30/20 14:35	1
Trichloroethene	**21**		1.1	0.16	ug/m3			09/30/20 14:35	1
1,2,3-Trimethylbenzene	ND		2.0	0.88	ug/m3			09/30/20 14:35	1
1,2,4-Trimethylbenzene	**2.5**		2.0	0.49	ug/m3			09/30/20 14:35	1

Client Sample ID: BLDG C INFLUENT
Lab Sample ID: 140-20507-4
Date Collected: 09/28/20 10:13
Matrix: Air
Date Received: 09/29/20 10:30
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	**1.2**	**J**	2.0	0.54	ug/m3			09/30/20 14:35	1
Vinyl chloride	ND		0.51	0.33	ug/m3			09/30/20 14:35	1
Xylenes, Total	**2.3**	**J**	3.5	0.52	ug/m3			09/30/20 14:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*60 - 140*		*09/30/20 14:35*	*1*

Client Sample ID: BLDG C MIDGAC
Lab Sample ID: 140-20507-5

Date Collected: 09/28/20 10:06
Matrix: Air
Date Received: 09/29/20 10:30
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**2.8**		0.40	0.040	ppb v/v			09/30/20 15:18	1
Carbon tetrachloride	**0.077**	**J**	0.40	0.035	ppb v/v			09/30/20 15:18	1
Chlorodifluoromethane	**0.78**		0.40	0.11	ppb v/v			09/30/20 15:18	1
Chloroform	**0.11**	**J**	0.40	0.035	ppb v/v			09/30/20 15:18	1
cis-1,2-Dichloroethene	**0.24**	**J**	0.40	0.050	ppb v/v			09/30/20 15:18	1
Dichlorodifluoromethane	**0.51**		0.40	0.070	ppb v/v			09/30/20 15:18	1
1,1-Dichloroethane	ND		0.40	0.035	ppb v/v			09/30/20 15:18	1
1,2-Dichloroethane	ND		0.40	0.050	ppb v/v			09/30/20 15:18	1
1,1-Dichloroethene	ND		0.40	0.040	ppb v/v			09/30/20 15:18	1
Ethylbenzene	**0.098**	**J**	0.40	0.065	ppb v/v			09/30/20 15:18	1
Methylene Chloride	ND		2.0	2.0	ppb v/v			09/30/20 15:18	1
Methyl tert-butyl ether	ND		2.0	0.26	ppb v/v			09/30/20 15:18	1
Naphthalene	ND		0.20	0.20	ppb v/v			09/30/20 15:18	1
Tetrachloroethene	**0.093**	**J**	0.40	0.035	ppb v/v			09/30/20 15:18	1
Toluene	**1.4**		0.60	0.39	ppb v/v			09/30/20 15:18	1
trans-1,2-Dichloroethene	**0.15**	**J**	0.40	0.035	ppb v/v			09/30/20 15:18	1
1,2,4-Trichlorobenzene	ND		0.40	0.32	ppb v/v			09/30/20 15:18	1
1,1,1-Trichloroethane	ND		0.40	0.19	ppb v/v			09/30/20 15:18	1
1,1,2-Trichloroethane	ND		0.40	0.035	ppb v/v			09/30/20 15:18	1
Trichloroethene	**3.4**		0.20	0.030	ppb v/v			09/30/20 15:18	1
1,2,3-Trimethylbenzene	ND		0.40	0.18	ppb v/v			09/30/20 15:18	1
1,2,4-Trimethylbenzene	**0.12**	**J**	0.40	0.10	ppb v/v			09/30/20 15:18	1
1,3,5-Trimethylbenzene	ND		0.40	0.11	ppb v/v			09/30/20 15:18	1
Vinyl chloride	ND		0.20	0.13	ppb v/v			09/30/20 15:18	1
Xylenes, Total	**0.44**	**J**	0.80	0.12	ppb v/v			09/30/20 15:18	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**8.8**		1.3	0.13	ug/m3			09/30/20 15:18	1
Carbon tetrachloride	**0.49**	**J**	2.5	0.22	ug/m3			09/30/20 15:18	1
Chlorodifluoromethane	**2.7**		1.4	0.39	ug/m3			09/30/20 15:18	1
Chloroform	**0.53**	**J**	2.0	0.17	ug/m3			09/30/20 15:18	1
cis-1,2-Dichloroethene	**0.96**	**J**	1.6	0.20	ug/m3			09/30/20 15:18	1
Dichlorodifluoromethane	**2.5**		2.0	0.35	ug/m3			09/30/20 15:18	1
1,1-Dichloroethane	ND		1.6	0.14	ug/m3			09/30/20 15:18	1
1,2-Dichloroethane	ND		1.6	0.20	ug/m3			09/30/20 15:18	1
1,1-Dichloroethene	ND		1.6	0.16	ug/m3			09/30/20 15:18	1
Ethylbenzene	**0.43**	**J**	1.7	0.28	ug/m3			09/30/20 15:18	1
Methylene Chloride	ND		6.9	6.8	ug/m3			09/30/20 15:18	1
Methyl tert-butyl ether	ND		7.2	0.94	ug/m3			09/30/20 15:18	1
Naphthalene	ND		1.0	1.0	ug/m3			09/30/20 15:18	1
Tetrachloroethene	**0.63**	**J**	2.7	0.24	ug/m3			09/30/20 15:18	1
Toluene	**5.4**		2.3	1.5	ug/m3			09/30/20 15:18	1
trans-1,2-Dichloroethene	**0.59**	**J**	1.6	0.14	ug/m3			09/30/20 15:18	1
1,2,4-Trichlorobenzene	ND		3.0	2.4	ug/m3			09/30/20 15:18	1
1,1,1-Trichloroethane	ND		2.2	1.0	ug/m3			09/30/20 15:18	1
1,1,2-Trichloroethane	ND		2.2	0.19	ug/m3			09/30/20 15:18	1
Trichloroethene	**18**		1.1	0.16	ug/m3			09/30/20 15:18	1
1,2,3-Trimethylbenzene	ND		2.0	0.88	ug/m3			09/30/20 15:18	1
1,2,4-Trimethylbenzene	**0.57**	**J**	2.0	0.49	ug/m3			09/30/20 15:18	1

Client Sample ID: BLDG C MIDGAC
Lab Sample ID: 140-20507-5
Date Collected: 09/28/20 10:06
Matrix: Air
Date Received: 09/29/20 10:30
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		2.0	0.54	ug/m3			09/30/20 15:18	1
Vinyl chloride	ND		0.51	0.33	ug/m3			09/30/20 15:18	1
Xylenes, Total	**1.9**	**J**	3.5	0.52	ug/m3			09/30/20 15:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*60 - 140*		*09/30/20 15:18*	*1*

Client Sample ID: BLDG C EFFLUENT
Lab Sample ID: 140-20507-6

Date Collected: 09/28/20 10:01
Matrix: Air
Date Received: 09/29/20 10:30
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**1.7**		0.40	0.040	ppb v/v			09/30/20 16:01	1
Carbon tetrachloride	**0.073**	**J**	0.40	0.035	ppb v/v			09/30/20 16:01	1
Chlorodifluoromethane	**0.79**		0.40	0.11	ppb v/v			09/30/20 16:01	1
Chloroform	**0.17**	**J**	0.40	0.035	ppb v/v			09/30/20 16:01	1
cis-1,2-Dichloroethene	**0.51**		0.40	0.050	ppb v/v			09/30/20 16:01	1
Dichlorodifluoromethane	**0.56**		0.40	0.070	ppb v/v			09/30/20 16:01	1
1,1-Dichloroethane	ND		0.40	0.035	ppb v/v			09/30/20 16:01	1
1,2-Dichloroethane	ND		0.40	0.050	ppb v/v			09/30/20 16:01	1
1,1-Dichloroethene	ND		0.40	0.040	ppb v/v			09/30/20 16:01	1
Ethylbenzene	**0.10**	**J**	0.40	0.065	ppb v/v			09/30/20 16:01	1
Methylene Chloride	ND		2.0	2.0	ppb v/v			09/30/20 16:01	1
Methyl tert-butyl ether	ND		2.0	0.26	ppb v/v			09/30/20 16:01	1
Naphthalene	ND		0.20	0.20	ppb v/v			09/30/20 16:01	1
Tetrachloroethene	ND		0.40	0.035	ppb v/v			09/30/20 16:01	1
Toluene	**2.0**		0.60	0.39	ppb v/v			09/30/20 16:01	1
trans-1,2-Dichloroethene	**0.12**	**J**	0.40	0.035	ppb v/v			09/30/20 16:01	1
1,2,4-Trichlorobenzene	ND		0.40	0.32	ppb v/v			09/30/20 16:01	1
1,1,1-Trichloroethane	**0.88**		0.40	0.19	ppb v/v			09/30/20 16:01	1
1,1,2-Trichloroethane	ND		0.40	0.035	ppb v/v			09/30/20 16:01	1
Trichloroethene	ND		0.20	0.030	ppb v/v			09/30/20 16:01	1
1,2,3-Trimethylbenzene	**0.20**	**J**	0.40	0.18	ppb v/v			09/30/20 16:01	1
1,2,4-Trimethylbenzene	**0.73**		0.40	0.10	ppb v/v			09/30/20 16:01	1
1,3,5-Trimethylbenzene	**0.38**	**J**	0.40	0.11	ppb v/v			09/30/20 16:01	1
Vinyl chloride	ND		0.20	0.13	ppb v/v			09/30/20 16:01	1
Xylenes, Total	**0.46**	**J**	0.80	0.12	ppb v/v			09/30/20 16:01	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**5.3**		1.3	0.13	ug/m3			09/30/20 16:01	1
Carbon tetrachloride	**0.46**	**J**	2.5	0.22	ug/m3			09/30/20 16:01	1
Chlorodifluoromethane	**2.8**		1.4	0.39	ug/m3			09/30/20 16:01	1
Chloroform	**0.84**	**J**	2.0	0.17	ug/m3			09/30/20 16:01	1
cis-1,2-Dichloroethene	**2.0**		1.6	0.20	ug/m3			09/30/20 16:01	1
Dichlorodifluoromethane	**2.8**		2.0	0.35	ug/m3			09/30/20 16:01	1
1,1-Dichloroethane	ND		1.6	0.14	ug/m3			09/30/20 16:01	1
1,2-Dichloroethane	ND		1.6	0.20	ug/m3			09/30/20 16:01	1
1,1-Dichloroethene	ND		1.6	0.16	ug/m3			09/30/20 16:01	1
Ethylbenzene	**0.44**	**J**	1.7	0.28	ug/m3			09/30/20 16:01	1
Methylene Chloride	ND		6.9	6.8	ug/m3			09/30/20 16:01	1
Methyl tert-butyl ether	ND		7.2	0.94	ug/m3			09/30/20 16:01	1
Naphthalene	ND		1.0	1.0	ug/m3			09/30/20 16:01	1
Tetrachloroethene	ND		2.7	0.24	ug/m3			09/30/20 16:01	1
Toluene	**7.5**		2.3	1.5	ug/m3			09/30/20 16:01	1
trans-1,2-Dichloroethene	**0.48**	**J**	1.6	0.14	ug/m3			09/30/20 16:01	1
1,2,4-Trichlorobenzene	ND		3.0	2.4	ug/m3			09/30/20 16:01	1
1,1,1-Trichloroethane	**4.8**		2.2	1.0	ug/m3			09/30/20 16:01	1
1,1,2-Trichloroethane	ND		2.2	0.19	ug/m3			09/30/20 16:01	1
Trichloroethene	ND		1.1	0.16	ug/m3			09/30/20 16:01	1
1,2,3-Trimethylbenzene	**0.98**	**J**	2.0	0.88	ug/m3			09/30/20 16:01	1
1,2,4-Trimethylbenzene	**3.6**		2.0	0.49	ug/m3			09/30/20 16:01	1

Client Sample ID: BLDG C EFFLUENT
Lab Sample ID: 140-20507-6
Date Collected: 09/28/20 10:01
Matrix: Air
Date Received: 09/29/20 10:30
Sample Container: Summa Canister 1L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	**1.9**	**J**	2.0	0.54	ug/m3			09/30/20 16:01	1
Vinyl chloride	ND		0.51	0.33	ug/m3			09/30/20 16:01	1
Xylenes, Total	**2.0**	**J**	3.5	0.52	ug/m3			09/30/20 16:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*60 - 140*		*09/30/20 16:01*	*1*

Default Detection Limits

Client: Tetra Tech GEO
Job ID: 140-20507-1
Project/Site: LMMRC SSDS - Middle River

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	RL	MDL	Units
1,1,1-Trichloroethane	0.080	0.037	ppb v/v
1,1,1-Trichloroethane	0.44	0.20	ug/m3
1,1,2-Trichloroethane	0.080	0.0070	ppb v/v
1,1,2-Trichloroethane	0.44	0.038	ug/m3
1,1-Dichloroethane	0.080	0.0070	ppb v/v
1,1-Dichloroethane	0.32	0.028	ug/m3
1,1-Dichloroethene	0.080	0.0080	ppb v/v
1,1-Dichloroethene	0.32	0.032	ug/m3
1,2,3-Trimethylbenzene	0.080	0.036	ppb v/v
1,2,3-Trimethylbenzene	0.39	0.18	ug/m3
1,2,4-Trichlorobenzene	0.080	0.064	ppb v/v
1,2,4-Trichlorobenzene	0.59	0.47	ug/m3
1,2,4-Trimethylbenzene	0.080	0.020	ppb v/v
1,2,4-Trimethylbenzene	0.39	0.098	ug/m3
1,2-Dichloroethane	0.080	0.010	ppb v/v
1,2-Dichloroethane	0.32	0.040	ug/m3
1,3,5-Trimethylbenzene	0.080	0.022	ppb v/v
1,3,5-Trimethylbenzene	0.39	0.11	ug/m3
Benzene	0.080	0.0080	ppb v/v
Benzene	0.26	0.026	ug/m3
Carbon tetrachloride	0.080	0.0070	ppb v/v
Carbon tetrachloride	0.50	0.044	ug/m3
Chlorodifluoromethane	0.080	0.022	ppb v/v
Chlorodifluoromethane	0.28	0.078	ug/m3
Chloroform	0.080	0.0070	ppb v/v
Chloroform	0.39	0.034	ug/m3
cis-1,2-Dichloroethene	0.080	0.010	ppb v/v
cis-1,2-Dichloroethene	0.32	0.040	ug/m3
Dichlorodifluoromethane	0.080	0.014	ppb v/v
Dichlorodifluoromethane	0.40	0.069	ug/m3
Ethylbenzene	0.080	0.013	ppb v/v
Ethylbenzene	0.35	0.056	ug/m3
Methyl tert-butyl ether	0.40	0.052	ppb v/v
Methyl tert-butyl ether	1.4	0.19	ug/m3
Methylene Chloride	0.40	0.39	ppb v/v
Methylene Chloride	1.4	1.4	ug/m3
Naphthalene	0.040	0.040	ppb v/v
Naphthalene	0.21	0.21	ug/m3
Tetrachloroethene	0.080	0.0070	ppb v/v
Tetrachloroethene	0.54	0.047	ug/m3
Toluene	0.12	0.078	ppb v/v
Toluene	0.45	0.29	ug/m3
trans-1,2-Dichloroethene	0.080	0.0070	ppb v/v
trans-1,2-Dichloroethene	0.32	0.028	ug/m3
Trichloroethene	0.040	0.0060	ppb v/v
Trichloroethene	0.21	0.032	ug/m3
Vinyl chloride	0.040	0.026	ppb v/v
Vinyl chloride	0.10	0.066	ug/m3
Xylenes, Total	0.16	0.024	ppb v/v
Xylenes, Total	0.69	0.10	ug/m3

Surrogate Summary

Client: Tetra Tech GEO
Job ID: 140-20507-1
Project/Site: LMMRC SSDS - Middle River

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Matrix: Air **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)								
		BFB								
Lab Sample ID	Client Sample ID	(60-140)								
140-20507-1	BLDG A INFLUENT	90								
140-20507-2	BLDG A MIDGAC	91								
140-20507-3 - DL	BLDG A EFFLUENT	89								
140-20507-3	BLDG A EFFLUENT	92								
140-20507-4	BLDG C INFLUENT	92								
140-20507-5	BLDG C MIDGAC	89								
140-20507-6	BLDG C EFFLUENT	90								
LCS 140-43140/1002	Lab Control Sample	96								
MB 140-43140/4	Method Blank	91								

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Lab Sample ID: MB 140-43140/4
Matrix: Air
Analysis Batch: 43140

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.080	0.0080	ppb v/v			09/30/20 11:40	1
Carbon tetrachloride	ND		0.080	0.0070	ppb v/v			09/30/20 11:40	1
Chlorodifluoromethane	ND		0.080	0.022	ppb v/v			09/30/20 11:40	1
Chloroform	ND		0.080	0.0070	ppb v/v			09/30/20 11:40	1
cis-1,2-Dichloroethene	ND		0.080	0.010	ppb v/v			09/30/20 11:40	1
Dichlorodifluoromethane	ND		0.080	0.014	ppb v/v			09/30/20 11:40	1
1,1-Dichloroethane	ND		0.080	0.0070	ppb v/v			09/30/20 11:40	1
1,2-Dichloroethane	ND		0.080	0.010	ppb v/v			09/30/20 11:40	1
1,1-Dichloroethene	ND		0.080	0.0080	ppb v/v			09/30/20 11:40	1
Ethylbenzene	ND		0.080	0.013	ppb v/v			09/30/20 11:40	1
Methylene Chloride	ND		0.40	0.39	ppb v/v			09/30/20 11:40	1
Methyl tert-butyl ether	ND		0.40	0.052	ppb v/v			09/30/20 11:40	1
Naphthalene	ND		0.040	0.040	ppb v/v			09/30/20 11:40	1
Tetrachloroethene	ND		0.080	0.0070	ppb v/v			09/30/20 11:40	1
Toluene	ND		0.12	0.078	ppb v/v			09/30/20 11:40	1
trans-1,2-Dichloroethene	ND		0.080	0.0070	ppb v/v			09/30/20 11:40	1
1,2,4-Trichlorobenzene	ND		0.080	0.064	ppb v/v			09/30/20 11:40	1
1,1,1-Trichloroethane	ND		0.080	0.037	ppb v/v			09/30/20 11:40	1
1,1,2-Trichloroethane	ND		0.080	0.0070	ppb v/v			09/30/20 11:40	1
Trichloroethene	ND		0.040	0.0060	ppb v/v			09/30/20 11:40	1
1,2,3-Trimethylbenzene	ND		0.080	0.036	ppb v/v			09/30/20 11:40	1
1,2,4-Trimethylbenzene	ND		0.080	0.020	ppb v/v			09/30/20 11:40	1
1,3,5-Trimethylbenzene	ND		0.080	0.022	ppb v/v			09/30/20 11:40	1
Vinyl chloride	ND		0.040	0.026	ppb v/v			09/30/20 11:40	1
Xylenes, Total	ND		0.16	0.024	ppb v/v			09/30/20 11:40	1

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.26	0.026	ug/m3			09/30/20 11:40	1
Carbon tetrachloride	ND		0.50	0.044	ug/m3			09/30/20 11:40	1
Chlorodifluoromethane	ND		0.28	0.078	ug/m3			09/30/20 11:40	1
Chloroform	ND		0.39	0.034	ug/m3			09/30/20 11:40	1
cis-1,2-Dichloroethene	ND		0.32	0.040	ug/m3			09/30/20 11:40	1
Dichlorodifluoromethane	ND		0.40	0.069	ug/m3			09/30/20 11:40	1
1,1-Dichloroethane	ND		0.32	0.028	ug/m3			09/30/20 11:40	1
1,2-Dichloroethane	ND		0.32	0.040	ug/m3			09/30/20 11:40	1
1,1-Dichloroethene	ND		0.32	0.032	ug/m3			09/30/20 11:40	1
Ethylbenzene	ND		0.35	0.056	ug/m3			09/30/20 11:40	1
Methylene Chloride	ND		1.4	1.4	ug/m3			09/30/20 11:40	1
Methyl tert-butyl ether	ND		1.4	0.19	ug/m3			09/30/20 11:40	1
Naphthalene	ND		0.21	0.21	ug/m3			09/30/20 11:40	1
Tetrachloroethene	ND		0.54	0.047	ug/m3			09/30/20 11:40	1
Toluene	ND		0.45	0.29	ug/m3			09/30/20 11:40	1
trans-1,2-Dichloroethene	ND		0.32	0.028	ug/m3			09/30/20 11:40	1
1,2,4-Trichlorobenzene	ND		0.59	0.47	ug/m3			09/30/20 11:40	1
1,1,1-Trichloroethane	ND		0.44	0.20	ug/m3			09/30/20 11:40	1
1,1,2-Trichloroethane	ND		0.44	0.038	ug/m3			09/30/20 11:40	1
Trichloroethene	ND		0.21	0.032	ug/m3			09/30/20 11:40	1
1,2,3-Trimethylbenzene	ND		0.39	0.18	ug/m3			09/30/20 11:40	1

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Lab Sample ID: MB 140-43140/4
Matrix: Air
Analysis Batch: 43140

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.39	0.098	ug/m3			09/30/20 11:40	1
1,3,5-Trimethylbenzene	ND		0.39	0.11	ug/m3			09/30/20 11:40	1
Vinyl chloride	ND		0.10	0.066	ug/m3			09/30/20 11:40	1
Xylenes, Total	ND		0.69	0.10	ug/m3			09/30/20 11:40	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*60 - 140*		*09/30/20 11:40*	*1*

Lab Sample ID: LCS 140-43140/1002
Matrix: Air
Analysis Batch: 43140

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	1.60	1.40		ppb v/v		87	70 - 130
Carbon tetrachloride	1.60	1.73		ppb v/v		108	70 - 130
Chlorodifluoromethane	1.60	1.21		ppb v/v		76	60 - 140
Chloroform	1.60	1.35		ppb v/v		85	70 - 130
cis-1,2-Dichloroethene	1.60	1.39		ppb v/v		87	70 - 130
Dichlorodifluoromethane	1.60	1.29		ppb v/v		80	60 - 140
1,1-Dichloroethane	1.60	1.35		ppb v/v		85	70 - 130
1,2-Dichloroethane	1.60	1.39		ppb v/v		87	70 - 130
1,1-Dichloroethene	1.60	1.56		ppb v/v		97	70 - 130
Ethylbenzene	1.60	1.29		ppb v/v		81	70 - 130
Methylene Chloride	1.60	1.47		ppb v/v		92	70 - 130
Methyl tert-butyl ether	1.60	1.23		ppb v/v		77	60 - 140
Naphthalene	1.60	1.15		ppb v/v		72	60 - 140
Tetrachloroethene	1.60	1.53		ppb v/v		96	70 - 130
Toluene	1.60	1.30		ppb v/v		81	70 - 130
trans-1,2-Dichloroethene	1.60	1.48		ppb v/v		93	70 - 130
1,2,4-Trichlorobenzene	1.60	1.49		ppb v/v		93	60 - 140
1,1,1-Trichloroethane	1.60	1.43		ppb v/v		90	70 - 130
1,1,2-Trichloroethane	1.60	1.34		ppb v/v		84	70 - 130
Trichloroethene	1.60	1.78		ppb v/v		111	70 - 130
1,2,3-Trimethylbenzene	1.60	1.37		ppb v/v		86	70 - 130
1,2,4-Trimethylbenzene	1.60	1.36		ppb v/v		85	70 - 130
1,3,5-Trimethylbenzene	1.60	1.38		ppb v/v		86	70 - 130
Vinyl chloride	1.60	1.24		ppb v/v		77	70 - 130
Xylenes, Total	4.80	3.84		ppb v/v		80	70 - 130

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	5.1	4.47		ug/m3		87	70 - 130
Carbon tetrachloride	10	10.9		ug/m3		108	70 - 130
Chlorodifluoromethane	5.7	4.28		ug/m3		76	60 - 140
Chloroform	7.8	6.61		ug/m3		85	70 - 130
cis-1,2-Dichloroethene	6.3	5.50		ug/m3		87	70 - 130
Dichlorodifluoromethane	7.9	6.36		ug/m3		80	60 - 140
1,1-Dichloroethane	6.5	5.47		ug/m3		85	70 - 130

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Lab Sample ID: LCS 140-43140/1002
Matrix: Air
Analysis Batch: 43140

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,2-Dichloroethane			6.5	5.63		ug/m3		87	70 - 130		
1,1-Dichloroethene			6.3	6.17		ug/m3		97	70 - 130		
Ethylbenzene			6.9	5.61		ug/m3		81	70 - 130		
Methylene Chloride			5.6	5.12		ug/m3		92	70 - 130		
Methyl tert-butyl ether			5.8	4.44		ug/m3		77	60 - 140		
Naphthalene			8.4	6.04		ug/m3		72	60 - 140		
Tetrachloroethene			11	10.4		ug/m3		96	70 - 130		
Toluene			6.0	4.91		ug/m3		81	70 - 130		
trans-1,2-Dichloroethene			6.3	5.88		ug/m3		93	70 - 130		
1,2,4-Trichlorobenzene			12	11.1		ug/m3		93	60 - 140		
1,1,1-Trichloroethane			8.7	7.82		ug/m3		90	70 - 130		
1,1,2-Trichloroethane			8.7	7.30		ug/m3		84	70 - 130		
Trichloroethene			8.6	9.56		ug/m3		111	70 - 130		
1,2,3-Trimethylbenzene			7.9	6.75		ug/m3		86	70 - 130		
1,2,4-Trimethylbenzene			7.9	6.69		ug/m3		85	70 - 130		
1,3,5-Trimethylbenzene			7.9	6.78		ug/m3		86	70 - 130		
Vinyl chloride			4.1	3.16		ug/m3		77	70 - 130		
Xylenes, Total			21	16.7		ug/m3		80	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*60 - 140*

QC Association Summary

Client: Tetra Tech GEO
Job ID: 140-20507-1
Project/Site: LMMRC SSDS - Middle River

Air - GC/MS VOA

Analysis Batch: 43140

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-20507-1	BLDG A INFLUENT	Total/NA	Air	TO 15 LL	
140-20507-2	BLDG A MIDGAC	Total/NA	Air	TO 15 LL	
140-20507-3	BLDG A EFFLUENT	Total/NA	Air	TO 15 LL	
140-20507-3 - DL	BLDG A EFFLUENT	Total/NA	Air	TO 15 LL	
140-20507-4	BLDG C INFLUENT	Total/NA	Air	TO 15 LL	
140-20507-5	BLDG C MIDGAC	Total/NA	Air	TO 15 LL	
140-20507-6	BLDG C EFFLUENT	Total/NA	Air	TO 15 LL	
MB 140-43140/4	Method Blank	Total/NA	Air	TO 15 LL	
LCS 140-43140/1002	Lab Control Sample	Total/NA	Air	TO 15 LL	

Client Sample ID: BLDG A INFLUENT
Lab Sample ID: 140-20507-1
Date Collected: 09/28/20 11:56
Matrix: Air
Date Received: 09/29/20 10:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	25 mL	500 mL	43140	09/30/20 12:23	S1K	TAL KNX
	Instrument ID: MG									

Client Sample ID: BLDG A MIDGAC
Lab Sample ID: 140-20507-2
Date Collected: 09/28/20 11:56
Matrix: Air
Date Received: 09/29/20 10:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	100 mL	500 mL	43140	09/30/20 13:09	S1K	TAL KNX
	Instrument ID: MG									

Client Sample ID: BLDG A EFFLUENT
Lab Sample ID: 140-20507-3
Date Collected: 09/28/20 11:45
Matrix: Air
Date Received: 09/29/20 10:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	100 mL	500 mL	43140	09/30/20 13:52	S1K	TAL KNX
	Instrument ID: MG									
Total/NA	Analysis	TO 15 LL	DL	1	11 mL	500 mL	43140	10/01/20 03:00	S1K	TAL KNX
	Instrument ID: MG									

Client Sample ID: BLDG C INFLUENT
Lab Sample ID: 140-20507-4
Date Collected: 09/28/20 10:13
Matrix: Air
Date Received: 09/29/20 10:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	100 mL	500 mL	43140	09/30/20 14:35	S1K	TAL KNX
	Instrument ID: MG									

Client Sample ID: BLDG C MIDGAC
Lab Sample ID: 140-20507-5
Date Collected: 09/28/20 10:06
Matrix: Air
Date Received: 09/29/20 10:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	100 mL	500 mL	43140	09/30/20 15:18	S1K	TAL KNX
	Instrument ID: MG									

Client Sample ID: BLDG C EFFLUENT
Lab Sample ID: 140-20507-6
Date Collected: 09/28/20 10:01
Matrix: Air
Date Received: 09/29/20 10:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	100 mL	500 mL	43140	09/30/20 16:01	S1K	TAL KNX
	Instrument ID: MG									

Client Sample ID: Method Blank
Lab Sample ID: MB 140-43140/4

Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	500 mL	500 mL	43140	09/30/20 11:40	S1K	TAL KNX
	Instrument ID: MG									

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 140-43140/1002

Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	500 mL	500 mL	43140	09/30/20 08:26	S1K	TAL KNX
	Instrument ID: MG									

Laboratory References:

TAL KNX = Eurofins TestAmerica, Knoxville, 5815 Middlebrook Pike, Knoxville, TN 37921, TEL (865)291-3000

Method Summary

Client: Tetra Tech GEO
Job ID: 140-20507-1
Project/Site: LMMRC SSDS - Middle River

Method	Method Description	Protocol	Laboratory
TO 15 LL	Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)	EPA	TAL KNX

Protocol References:

EPA = US Environmental Protection Agency

Laboratory References:

TAL KNX = Eurofins TestAmerica, Knoxville, 5815 Middlebrook Pike, Knoxville, TN 37921, TEL (865)291-3000

Sample Summary

Client: Tetra Tech GEO
Project/Site: LMMRC SSDS - Middle River

Job ID: 140-20507-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
140-20507-1	BLDG A INFLUENT	Air	09/28/20 11:56	09/29/20 10:30	Air Canister (1-Liter) #34000734
140-20507-2	BLDG A MIDGAC	Air	09/28/20 11:56	09/29/20 10:30	Air Canister (1-Liter) #34001974
140-20507-3	BLDG A EFFLUENT	Air	09/28/20 11:45	09/29/20 10:30	Air Canister (1-Liter) #09744
140-20507-4	BLDG C INFLUENT	Air	09/28/20 10:13	09/29/20 10:30	Air Canister (1-Liter) #11860
140-20507-5	BLDG C MIDGAC	Air	09/28/20 10:06	09/29/20 10:30	Air Canister (1-Liter) #11889
140-20507-6	BLDG C EFFLUENT	Air	09/28/20 10:01	09/29/20 10:30	Air Canister (1-Liter) #09739

Method TO15 Low Level

Volatile Organic Compounds - Low level (GC/MS) by Method TO 15

FORM II
AIR - GC/MS VOA SURROGATE RECOVERY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20507-1

SDG No.:

Matrix: Air Level: Low

GC Column (1): RTX-5 ID: 0.32(mm)

Client Sample ID	Lab Sample ID	BFB #
BLDG A INFLUENT	140-20507-1	90
BLDG A MIDGAC	140-20507-2	91
BLDG A EFFLUENT	140-20507-3	92
BLDG A EFFLUENT DL	140-20507-3 DL	89
BLDG C INFLUENT	140-20507-4	92
BLDG C MIDGAC	140-20507-5	89
BLDG C EFFLUENT	140-20507-6	90
	MB 140-43140/4	91
	LCS 140-43140/1002	96

	QC LIMITS
BFB = 4-Bromofluorobenzene (Surr)	60-140

Column to be used to flag recovery values

FORM II TO 15 LL

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20507-1

SDG No.:

Matrix: Air Level: Low Lab File ID: GCCVI30-LCS.d

Lab ID: LCS 140-43140/1002 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
Benzene	1.60	1.40	87	70-130	
Carbon tetrachloride	1.60	1.73	108	70-130	
Chlorodifluoromethane	1.60	1.21	76	60-140	
Chloroform	1.60	1.35	85	70-130	
cis-1,2-Dichloroethene	1.60	1.39	87	70-130	
Dichlorodifluoromethane	1.60	1.29	80	60-140	
1,1-Dichloroethane	1.60	1.35	85	70-130	
1,2-Dichloroethane	1.60	1.39	87	70-130	
1,1-Dichloroethene	1.60	1.56	97	70-130	
Ethylbenzene	1.60	1.29	81	70-130	
Methylene Chloride	1.60	1.47	92	70-130	
Methyl tert-butyl ether	1.60	1.23	77	60-140	
Naphthalene	1.60	1.15	72	60-140	
Tetrachloroethene	1.60	1.53	96	70-130	
Toluene	1.60	1.30	81	70-130	
trans-1,2-Dichloroethene	1.60	1.48	93	70-130	
1,2,4-Trichlorobenzene	1.60	1.49	93	60-140	
1,1,1-Trichloroethane	1.60	1.43	90	70-130	
1,1,2-Trichloroethane	1.60	1.34	84	70-130	
Trichloroethene	1.60	1.78	111	70-130	
1,2,3-Trimethylbenzene	1.60	1.37	86	70-130	
1,2,4-Trimethylbenzene	1.60	1.36	85	70-130	
1,3,5-Trimethylbenzene	1.60	1.38	86	70-130	
Vinyl chloride	1.60	1.24	77	70-130	
Xylenes, Total	4.80	3.84	80	70-130	

Column to be used to flag recovery and RPD values

FORM III TO 15 LL

FORM IV
AIR - GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20507-1

SDG No.:

Lab File ID: G500BI30.D Lab Sample ID: MB 140-43140/4

Matrix: Air Heated Purge:(Y/N) N

Instrument ID: MG Date Analyzed: 09/30/2020 11:40

GC Column: RTX-5 ID: 0.32(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 140-43140/1002	GCCVI30-LCS.d	09/30/2020 08:26
BLDG A INFLUENT	140-20507-1	GI30P101.D	09/30/2020 12:23
BLDG A MIDGAC	140-20507-2	GI30P102.D	09/30/2020 13:09
BLDG A EFFLUENT	140-20507-3	GI30P103.D	09/30/2020 13:52
BLDG C INFLUENT	140-20507-4	GI30P104.D	09/30/2020 14:35
BLDG C MIDGAC	140-20507-5	GI30P105.D	09/30/2020 15:18
BLDG C EFFLUENT	140-20507-6	GI30P106.D	09/30/2020 16:01
BLDG A EFFLUENT DL	140-20507-3 DL	GI30P103DL.D	10/01/2020 03:00

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20507-1

SDG No.:

Lab File ID: GBFBI10Z.D BFB Injection Date: 09/10/2020

Instrument ID: MG BFB Injection Time: 16:30

Analysis Batch No.: 42613

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	27.2	
75	30.0 - 60.0 % of mass 95	54.2	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.6	
173	Less than 2.0 % of mass 174	0.4	(0.5) 1
174	Greater than 50% of mass 95	80.8	
175	5.0 - 9.0 % of mass 174	5.2	(6.4) 1
176	95.0 - 101.0 % of mass 174	78.3	(96.9) 1
177	5.0 - 9.0 % of mass 176	5.2	(6.7) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 140-42613/3	GI10IC10.D	09/10/2020	18:15
	IC 140-42613/7	GI10IC08.D	09/10/2020	21:26
	IC 140-42613/9	GI10IC01.D	09/10/2020	22:58
	IC 140-42613/10	GI10IC02.D	09/10/2020	23:47
	IC 140-42613/11	GI10IC03.D	09/11/2020	0:34
	IC 140-42613/12	GI10IC04.D	09/11/2020	1:20
	IC 140-42613/13	GI10IC05.D	09/11/2020	2:08
	IC 140-42613/14	GI10IC06.D	09/11/2020	2:55
	ICIS 140-42613/15	GI10IC07.D	09/11/2020	3:42
	ICV 140-42613/17	GI10ICV.D	09/11/2020	5:15
	IC 140-42613/21	GI10IC09R.D	09/11/2020	6:50

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20507-1

SDG No.:

Lab File ID: GBFBI30.D BFB Injection Date: 09/30/2020

Instrument ID: MG BFB Injection Time: 07:53

Analysis Batch No.: 43140

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	23.9	
75	30.0 - 60.0 % of mass 95	50.3	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.2	
173	Less than 2.0 % of mass 174	0.4	(0.5) 1
174	Greater than 50% of mass 95	91.6	
175	5.0 - 9.0 % of mass 174	6.5	(7.1) 1
176	95.0 - 101.0 % of mass 174	89.1	(97.2) 1
177	5.0 - 9.0 % of mass 176	5.7	(6.4) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 140-43140/2	GCCVI30.D	09/30/2020	8:26
	LCS 140-43140/1002	GCCVI30-LCS.d	09/30/2020	8:26
	MB 140-43140/4	G500BI30.D	09/30/2020	11:40
BLDG A INFLUENT	140-20507-1	GI30P101.D	09/30/2020	12:23
BLDG A MIDGAC	140-20507-2	GI30P102.D	09/30/2020	13:09
BLDG A EFFLUENT	140-20507-3	GI30P103.D	09/30/2020	13:52
BLDG C INFLUENT	140-20507-4	GI30P104.D	09/30/2020	14:35
BLDG C MIDGAC	140-20507-5	GI30P105.D	09/30/2020	15:18
BLDG C EFFLUENT	140-20507-6	GI30P106.D	09/30/2020	16:01
BLDG A EFFLUENT DL	140-20507-3 DL	GI30P103DL.D	10/01/2020	3:00

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20507-1

SDG No.:

Sample No.: ICIS 140-42613/15 Date Analyzed: 09/11/2020 03:42

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm)

Lab File ID (Standard): GI10IC07.D Heated Purge: (Y/N) N

Calibration ID: 2612

		CBM		DFBZ		CBZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		183054	8.82	946553	11.00	975848	15.73
UPPER LIMIT		256276	9.15	1325174	11.33	1366187	16.06
LOWER LIMIT		109832	8.49	567932	10.67	585509	15.40
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 140-42613/17		188704	8.81	1009259	10.99	1050054	15.72

CBM = Chlorobromomethane (IS)
DFBZ = 1,4-Difluorobenzene
CBZd5 = Chlorobenzene-d5 (IS)

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO 15 LL

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20507-1

SDG No.:

Sample No.: CCVIS 140-43140/2 Date Analyzed: 09/30/2020 08:26

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm)

Lab File ID (Standard): GCCVI30.D Heated Purge: (Y/N) N

Calibration ID: 2612

		CBM		DFBZ		CBZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		270463	8.80	1205820	10.98	1348046	15.72
UPPER LIMIT		378648	9.13	1688148	11.31	1887264	16.05
LOWER LIMIT		162278	8.47	723492	10.65	808828	15.39
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 140-43140/1002		270463	8.80	1205820	10.98	1348046	15.72
MB 140-43140/4		305605	8.80	1543138	10.98	1498501	15.72
140-20507-1	BLDG A INFLUENT	271717	8.79	1386767	10.98	1390430	15.72
140-20507-2	BLDG A MIDGAC	272119	8.80	1381834	10.98	1380917	15.72
140-20507-3	BLDG A EFFLUENT	279633	8.80	1423184	10.98	1424049	15.72
140-20507-4	BLDG C INFLUENT	271641	8.80	1250262	10.98	1347340	15.71
140-20507-5	BLDG C MIDGAC	318383	8.80	1598692	10.98	1596302	15.71
140-20507-6	BLDG C EFFLUENT	329462	8.80	1650650	10.98	1661495	15.72
140-20507-3 DL	BLDG A EFFLUENT DL	304423	8.80	1295226	10.98	1476793	15.71

CBM = Chlorobromomethane (IS)
DFBZ = 1,4-Difluorobenzene
CBZd5 = Chlorobenzene-d5 (IS)

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO 15 LL

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20507-1

SDG No.:

Client Sample ID: BLDG A INFLUENT Lab Sample ID: 140-20507-1

Matrix: Air Lab File ID: GI30P101.D

Analysis Method: TO 15 LL Date Collected: 09/28/2020 11:56

Sample wt/vol: 25(mL) Date Analyzed: 09/30/2020 12:23

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 43140 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	2.1		1.6	0.16
56-23-5	Carbon tetrachloride	153.81	ND		1.6	0.14
75-45-6	Chlorodifluoromethane	86.47	ND		1.6	0.44
67-66-3	Chloroform	119.38	0.81	J	1.6	0.14
156-59-2	cis-1,2-Dichloroethene	96.94	8.7		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	0.41	J	1.6	0.28
75-34-3	1,1-Dichloroethane	98.96	1.7		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	0.21	J	1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	11		1.6	0.16
100-41-4	Ethylbenzene	106.17	ND		1.6	0.26
75-09-2	Methylene Chloride	84.93	ND		8.0	7.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		8.0	1.0
91-20-3	Naphthalene	128.17	ND		0.80	0.80
127-18-4	Tetrachloroethene	165.83	ND		1.6	0.14
108-88-3	Toluene	92.14	ND		2.4	1.6
156-60-5	trans-1,2-Dichloroethene	96.94	0.30	J	1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		1.6	1.3
71-55-6	1,1,1-Trichloroethane	133.41	52		1.6	0.74
79-00-5	1,1,2-Trichloroethane	133.41	ND		1.6	0.14
79-01-6	Trichloroethene	131.39	100		0.80	0.12
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		1.6	0.72
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		1.6	0.40
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		1.6	0.44
75-01-4	Vinyl chloride	62.50	ND		0.80	0.52
1330-20-7	Xylenes, Total	106.17	ND		3.2	0.48

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	90		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20507-1

SDG No.:

Client Sample ID: BLDG A INFLUENT Lab Sample ID: 140-20507-1

Matrix: Air Lab File ID: GI30P101.D

Analysis Method: TO 15 LL Date Collected: 09/28/2020 11:56

Sample wt/vol: 25(mL) Date Analyzed: 09/30/2020 12:23

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 43140 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	6.8		5.1	0.51
56-23-5	Carbon tetrachloride	153.81	ND		10	0.88
75-45-6	Chlorodifluoromethane	86.47	ND		5.7	1.6
67-66-3	Chloroform	119.38	4.0	J	7.8	0.68
156-59-2	cis-1,2-Dichloroethene	96.94	34		6.3	0.79
75-71-8	Dichlorodifluoromethane	120.91	2.0	J	7.9	1.4
75-34-3	1,1-Dichloroethane	98.96	6.9		6.5	0.57
107-06-2	1,2-Dichloroethane	98.96	0.85	J	6.5	0.81
75-35-4	1,1-Dichloroethene	96.94	45		6.3	0.63
100-41-4	Ethylbenzene	106.17	ND		6.9	1.1
75-09-2	Methylene Chloride	84.93	ND		28	27
1634-04-4	Methyl tert-butyl ether	88.15	ND		29	3.7
91-20-3	Naphthalene	128.17	ND		4.2	4.2
127-18-4	Tetrachloroethene	165.83	ND		11	0.95
108-88-3	Toluene	92.14	ND		9.0	5.9
156-60-5	trans-1,2-Dichloroethene	96.94	1.2	J	6.3	0.56
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		12	9.5
71-55-6	1,1,1-Trichloroethane	133.41	280		8.7	4.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		8.7	0.76
79-01-6	Trichloroethene	131.39	560		4.3	0.64
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		7.9	3.5
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		7.9	2.0
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		7.9	2.2
75-01-4	Vinyl chloride	62.50	ND		2.0	1.3
1330-20-7	Xylenes, Total	106.17	ND		14	2.1

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	90		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P101.D				
Lims ID:	140-20507-A-1				
Client ID:	BLDG A INFLUENT				
Sample Type:	Client				
Inject. Date:	30-Sep-2020 12:23:30	ALS Bottle#:	1	Worklist Smp#:	5
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016761-005				
Misc. Info.:	140-20507-a-1				
Operator ID:	HMT	Instrument ID:	MG		
Method:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\MG_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	01-Oct-2020 15:00:45	Calib Date:	11-Sep-2020 06:50:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MG\20200910-16561.b\GI10IC09R.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1024				
First Level Reviewer: khachitpongpanits		Date:	01-Oct-2020 15:03:57		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.790	8.795	-0.005	96	271717	4.80	
* 2 1,4-Difluorobenzene	114	10.979	10.979	0.000	95	1386767	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.719	15.719	0.000	87	1390430	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.358	17.364	-0.006	96	936116	4.20	
8 Dichlorodifluoromethane	85	3.753	3.764	-0.011	99	5259	0.0205	
27 1,1-Dichloroethene	96	5.916	5.921	-0.005	94	37073	0.5724	
34 trans-1,2-Dichloroethene	96	7.075	7.075	0.000	10	1100	0.0150	
37 1,1-Dichloroethane	63	7.485	7.485	0.000	98	14356	0.0847	
42 cis-1,2-Dichloroethene	96	8.466	8.466	0.000	97	35843	0.4328	
44 Chloroform	83	8.811	8.811	0.000	27	7195	0.0406	
47 1,1,1-Trichloroethane	97	9.830	9.836	-0.006	96	447188	2.60	
48 1,2-Dichloroethane	62	9.954	9.938	0.016	27	1314	0.0106	
50 Benzene	78	10.429	10.434	-0.005	97	28371	0.1072	
58 Trichloroethene	130	11.691	11.691	0.000	97	528081	5.16	
67 Toluene	91	13.745	13.745	0.000	96	18457	0.0653	

QC Flag Legend

Processing Flags

Reagents:

40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

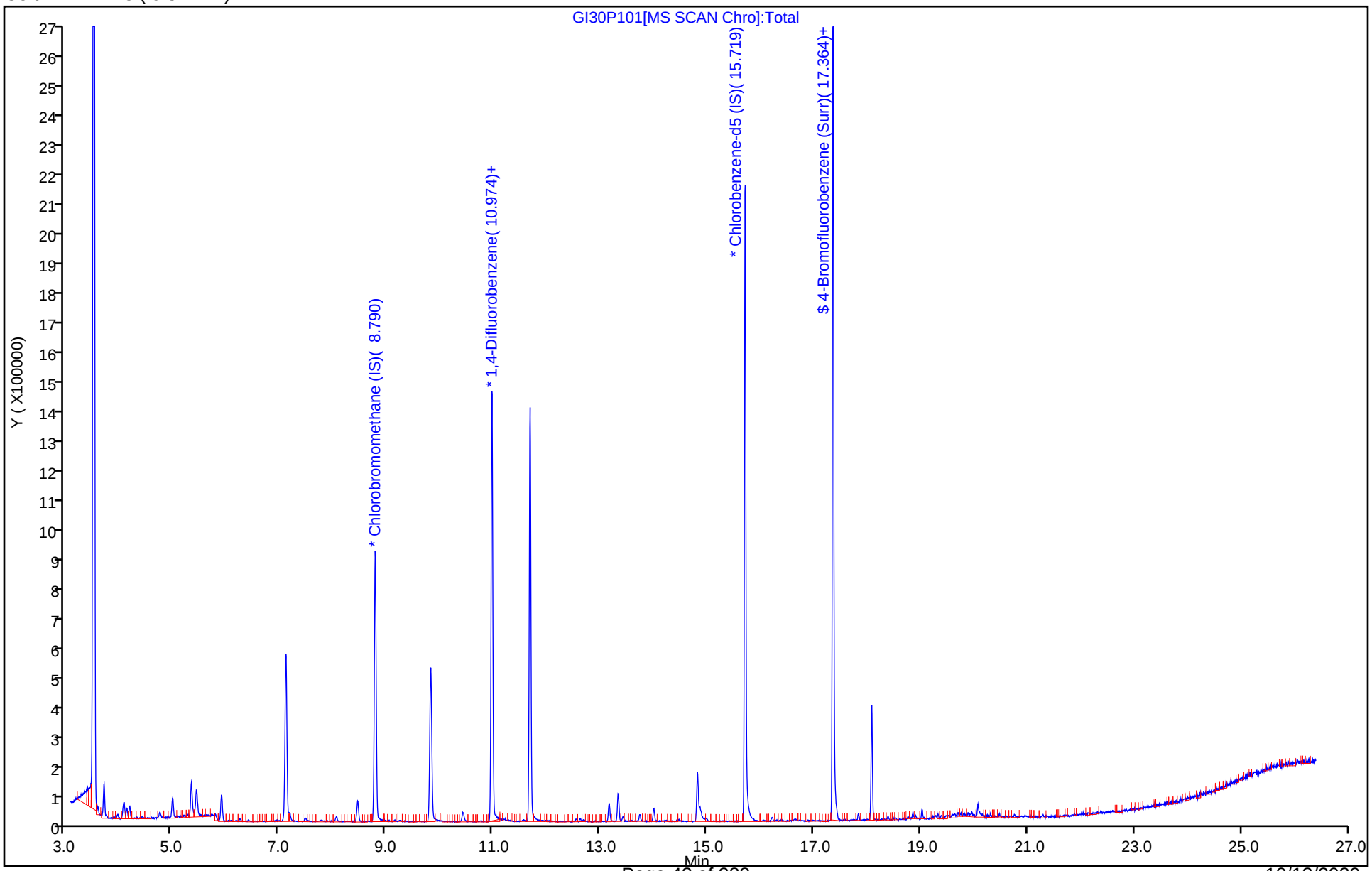
Report Date: 01-Oct-2020 15:03:57 Chrom Revision: 2.3 24-Sep-2020 19:22:38

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P101.D

Injection Date:	30-Sep-2020 12:23:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	140-20507-A-1	Lab Sample ID:	140-20507-1	Worklist Smp#:	5
Client ID:	BLDG A INFLUENT				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P101.D				
Lims ID:	140-20507-A-1				
Client ID:	BLDG A INFLUENT				
Sample Type:	Client				
Inject. Date:	30-Sep-2020 12:23:30	ALS Bottle#:	1	Worklist Smp#:	5
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016761-005				
Misc. Info.:	140-20507-a-1				
Operator ID:	HMT	Instrument ID:	MG		
Method:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\MG_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	01-Oct-2020 15:00:45	Calib Date:	11-Sep-2020 06:50:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MG\20200910-16561.b\GI10IC09R.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1024				

First Level Reviewer: khachitpongpanits Date: 01-Oct-2020 15:03:57

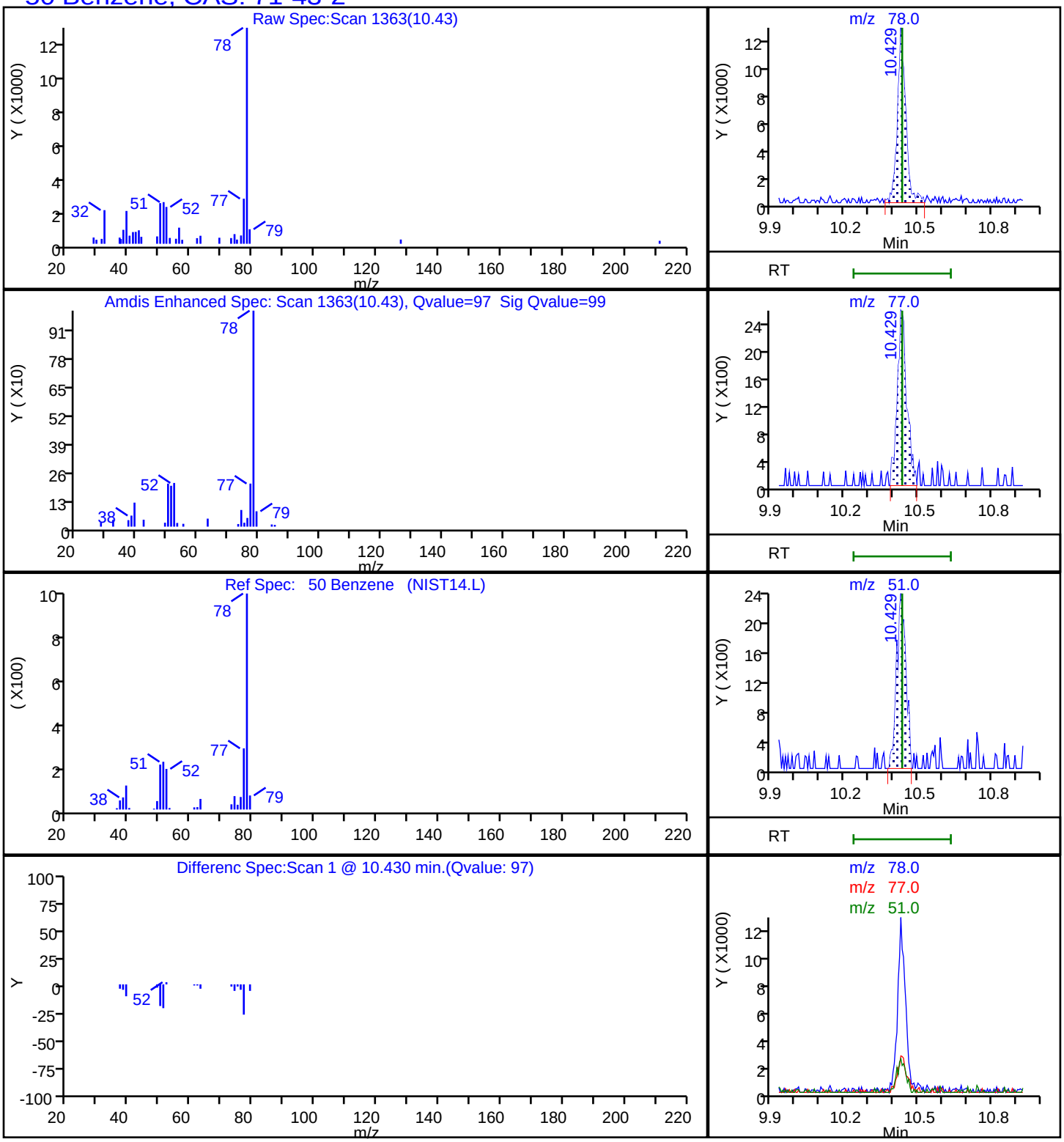
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	4.20	90.45

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P101.D

Injection Date:	30-Sep-2020 12:23:30	Instrument ID:	MG
Lims ID:	140-20507-A-1	Lab Sample ID:	140-20507-1
Client ID:	BLDG A INFLUENT		
Operator ID:	HMT	ALS Bottle#:	1 Worklist Smp#: 5
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

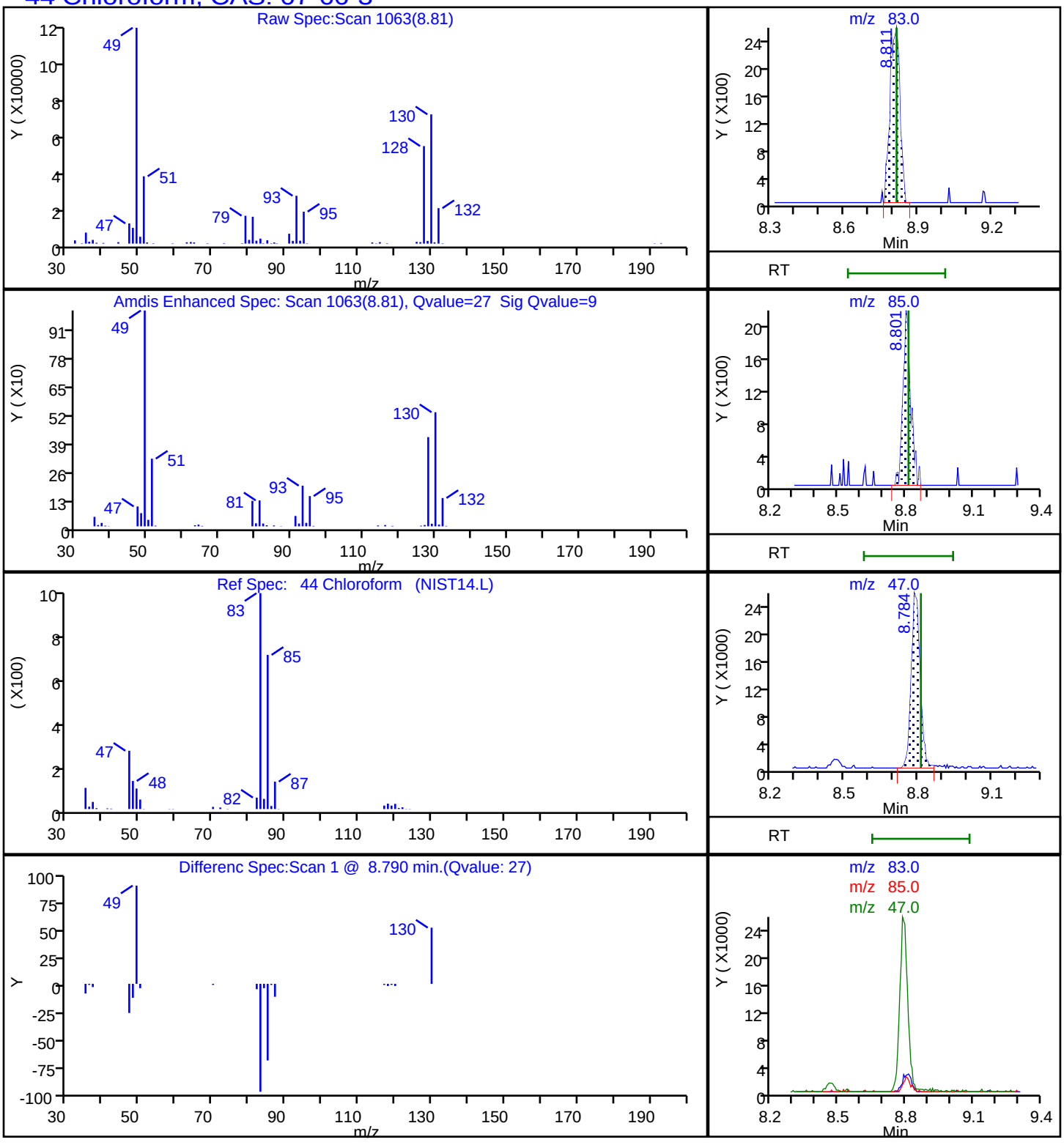
50 Benzene, CAS: 71-43-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P101.D		
Injection Date:	30-Sep-2020 12:23:30	Instrument ID:	MG
Lims ID:	140-20507-A-1	Lab Sample ID:	140-20507-1
Client ID:	BLDG A INFLUENT		
Operator ID:	HMT	ALS Bottle#:	1 Worklist Smp#: 5
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

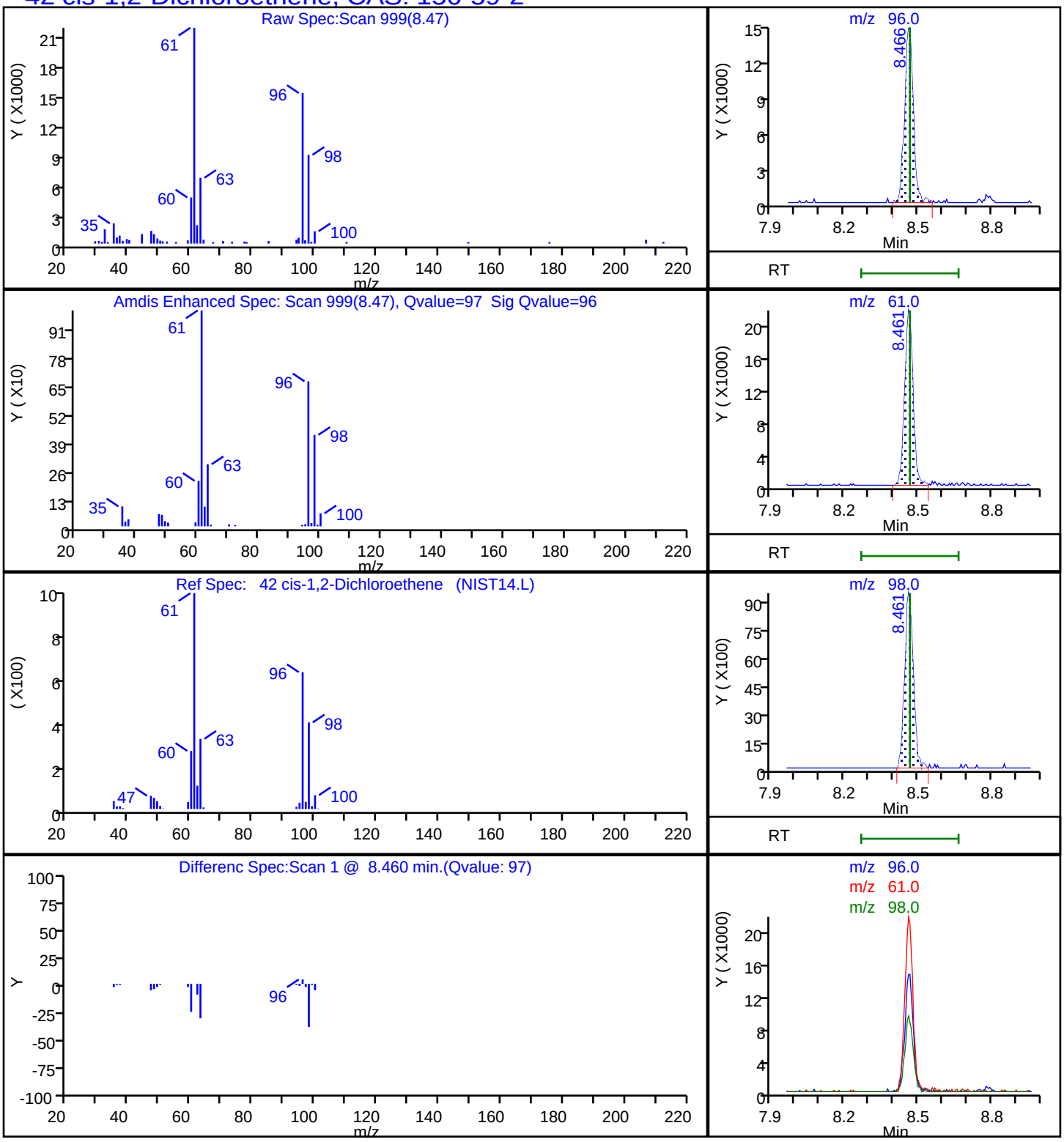
44 Chloroform, CAS: 67-66-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P101.D				
Injection Date:	30-Sep-2020 12:23:30	Instrument ID:	MG		
Lims ID:	140-20507-A-1	Lab Sample ID:	140-20507-1		
Client ID:	BLDG A INFLUENT				
Operator ID:	HMT	ALS Bottle#:	1	Worklist Smp#:	5
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

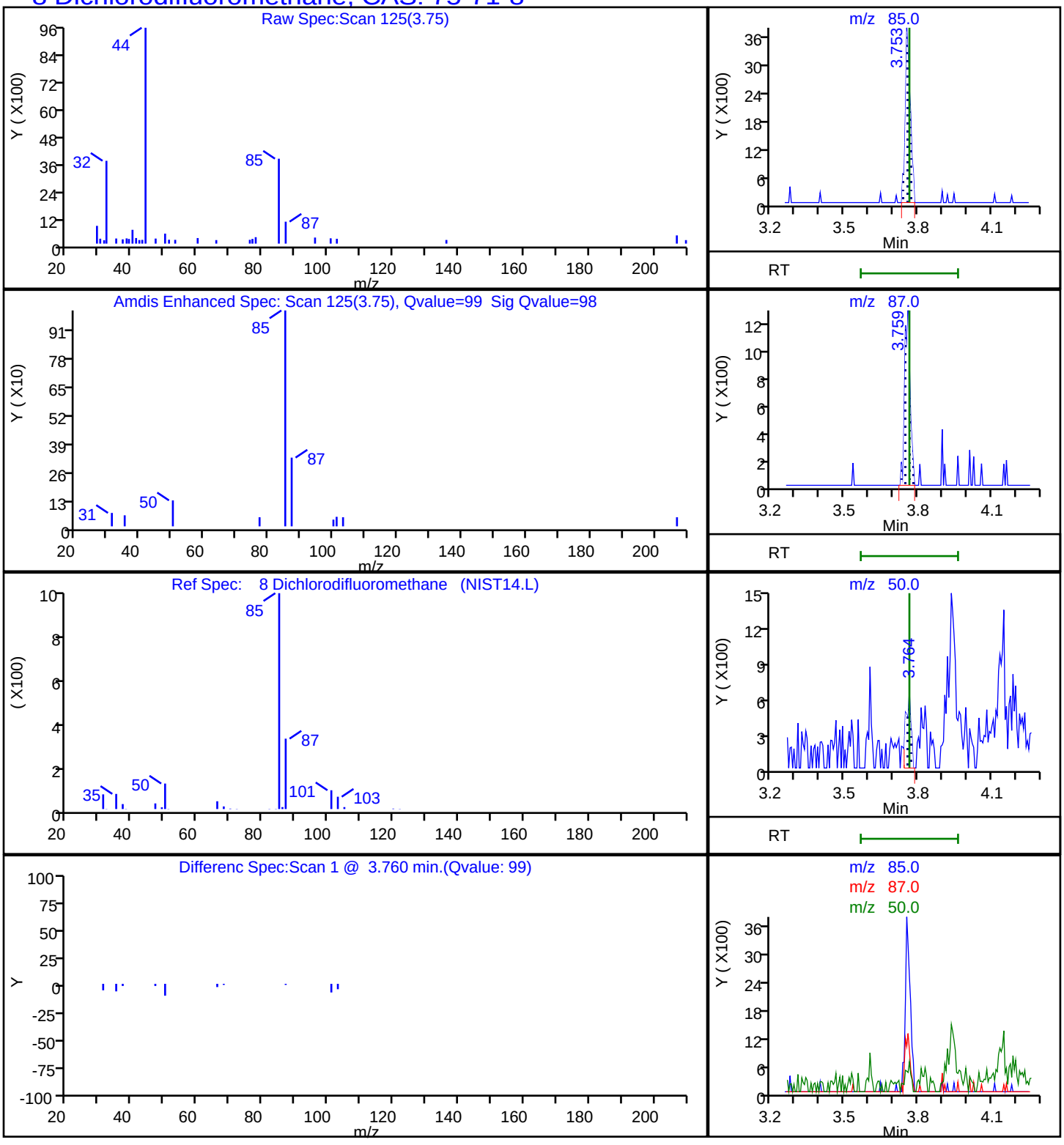
42 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P101.D		
Injection Date:	30-Sep-2020 12:23:30	Instrument ID:	MG
Lims ID:	140-20507-A-1	Lab Sample ID:	140-20507-1
Client ID:	BLDG A INFLUENT		
Operator ID:	HMT	ALS Bottle#:	1 Worklist Smp#: 5
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

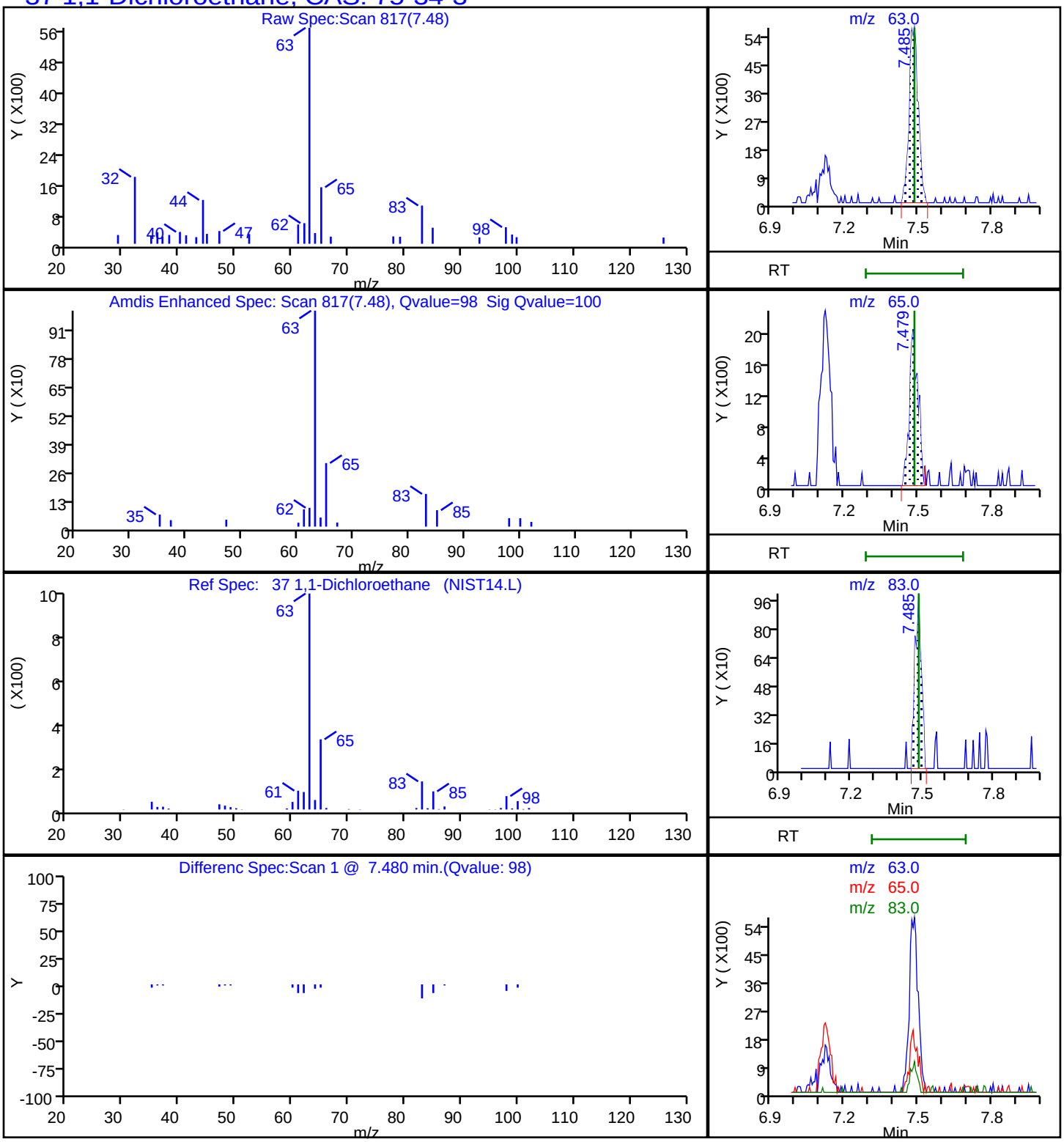
8 Dichlorodifluoromethane, CAS: 75-71-8



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P101.D		
Injection Date:	30-Sep-2020 12:23:30	Instrument ID:	MG
Lims ID:	140-20507-A-1	Lab Sample ID:	140-20507-1
Client ID:	BLDG A INFLUENT		
Operator ID:	HMT	ALS Bottle#:	1 Worklist Smp#: 5
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

37 1,1-Dichloroethane, CAS: 75-34-3



Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P101.D

Injection Date: 30-Sep-2020 12:23:30 Instrument ID: MG

Lims ID: 140-20507-A-1 Lab Sample ID: 140-20507-1

Client ID: BLDG A INFLUENT

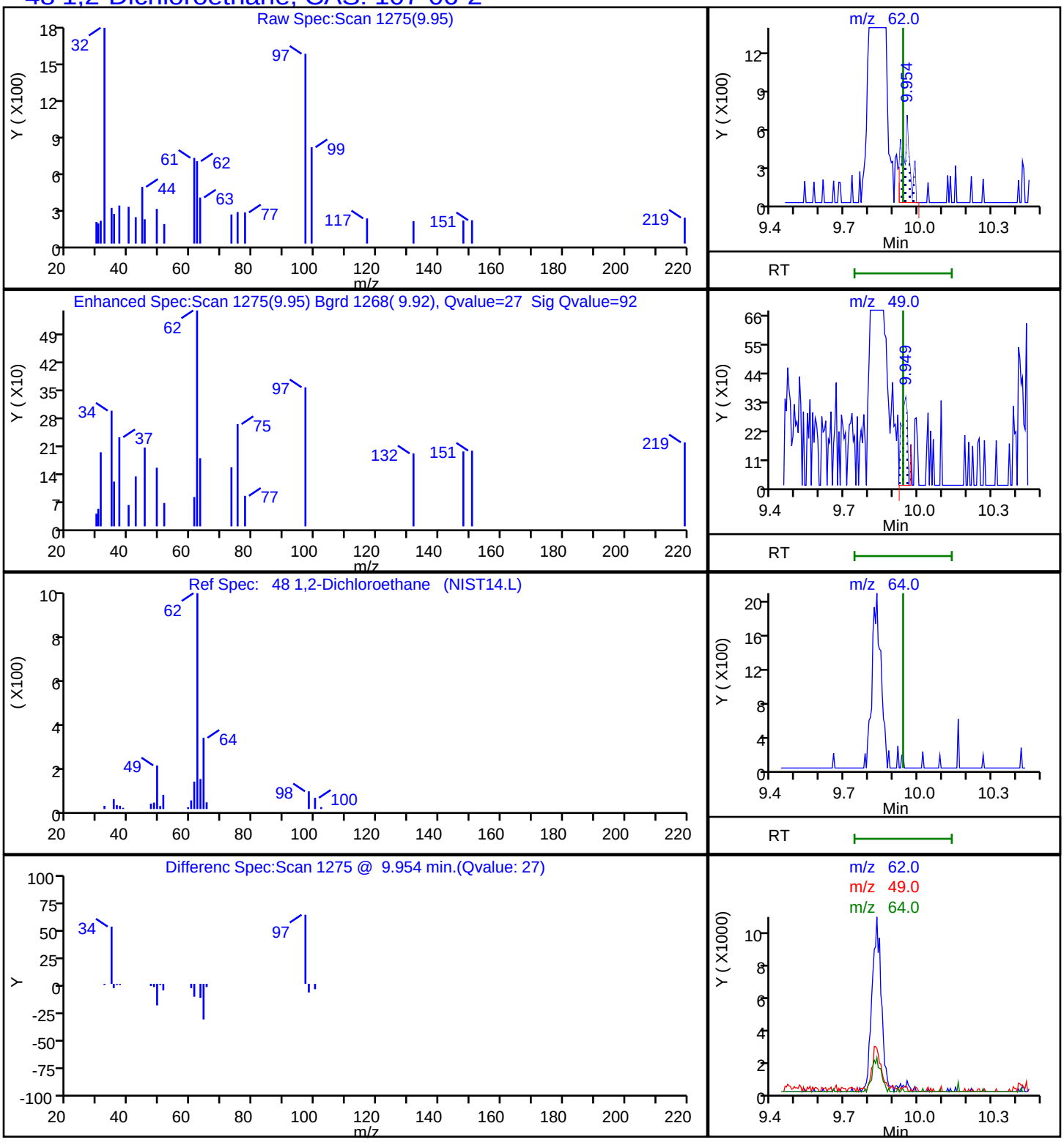
Operator ID: HMT ALS Bottle#: 1 Worklist Smp#: 5

Purge Vol: 500.000 mL Dil. Factor: 1.0000

Method: MG_TO15 Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm) Detector MS SCAN

48 1,2-Dichloroethane, CAS: 107-06-2



Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P101.D

Injection Date: 30-Sep-2020 12:23:30 Instrument ID: MG

Lims ID: 140-20507-A-1 Lab Sample ID: 140-20507-1

Client ID: BLDG A INFLUENT

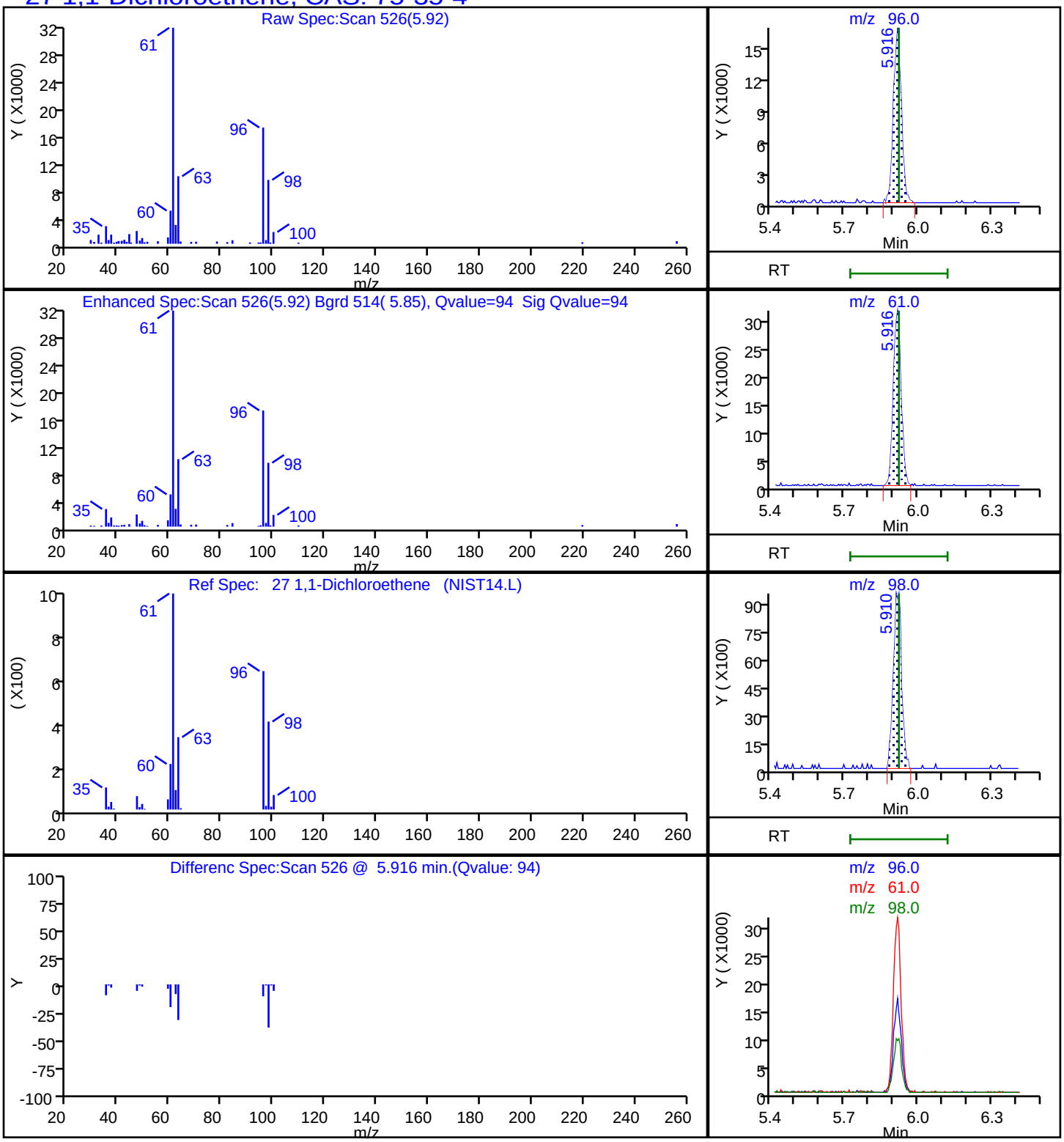
Operator ID: HMT ALS Bottle#: 1 Worklist Smp#: 5

Purge Vol: 500.000 mL Dil. Factor: 1.0000

Method: MG_TO15 Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm) Detector MS SCAN

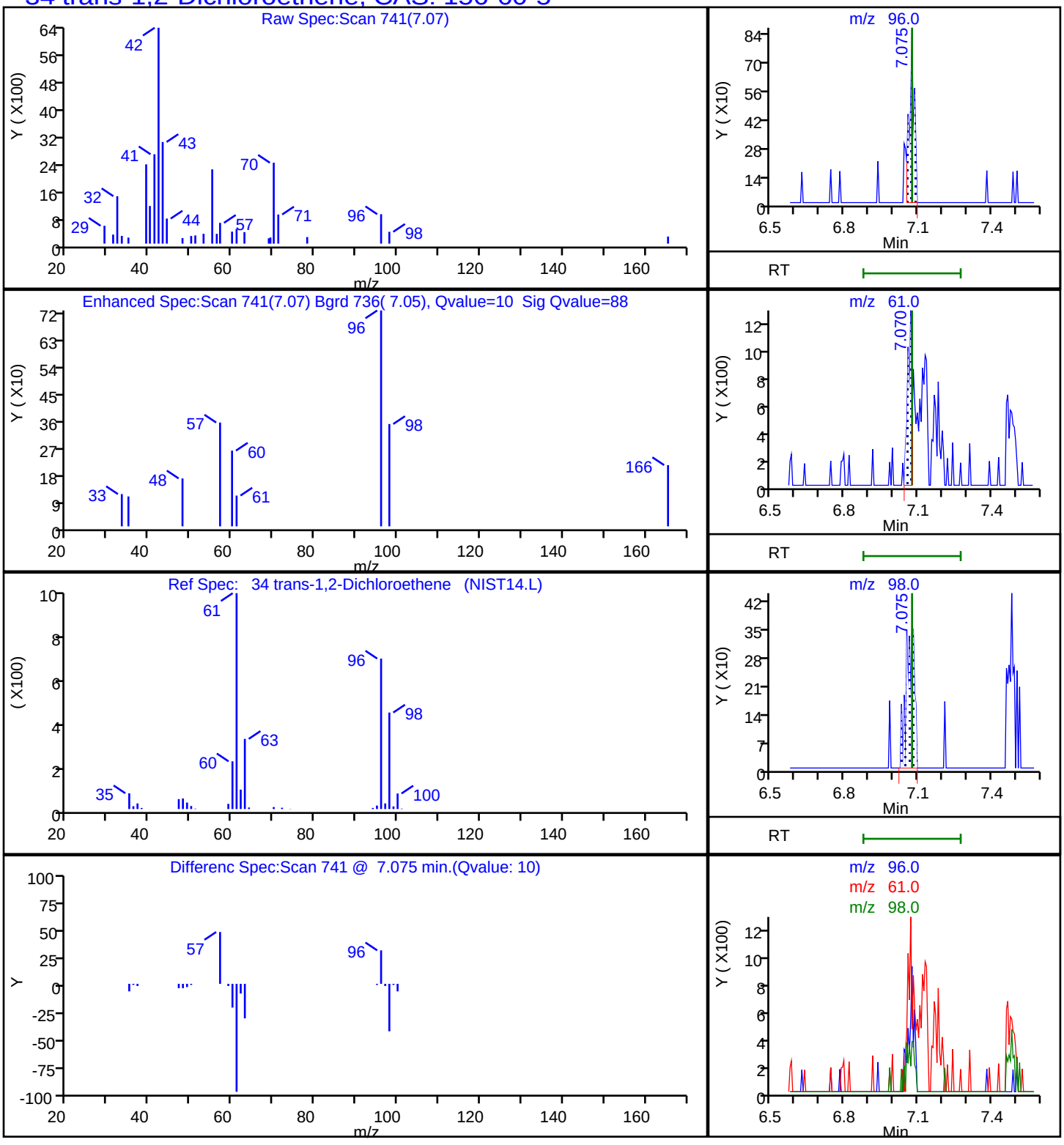
27 1,1-Dichloroethene, CAS: 75-35-4



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P101.D		
Injection Date:	30-Sep-2020 12:23:30	Instrument ID:	MG
Lims ID:	140-20507-A-1	Lab Sample ID:	140-20507-1
Client ID:	BLDG A INFLUENT		
Operator ID:	HMT	ALS Bottle#:	1 Worklist Smp#: 5
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

34 trans-1,2-Dichloroethene, CAS: 156-60-5



Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P101.D

Injection Date: 30-Sep-2020 12:23:30 Instrument ID: MG

Lims ID: 140-20507-A-1 Lab Sample ID: 140-20507-1

Client ID: BLDG A INFLUENT

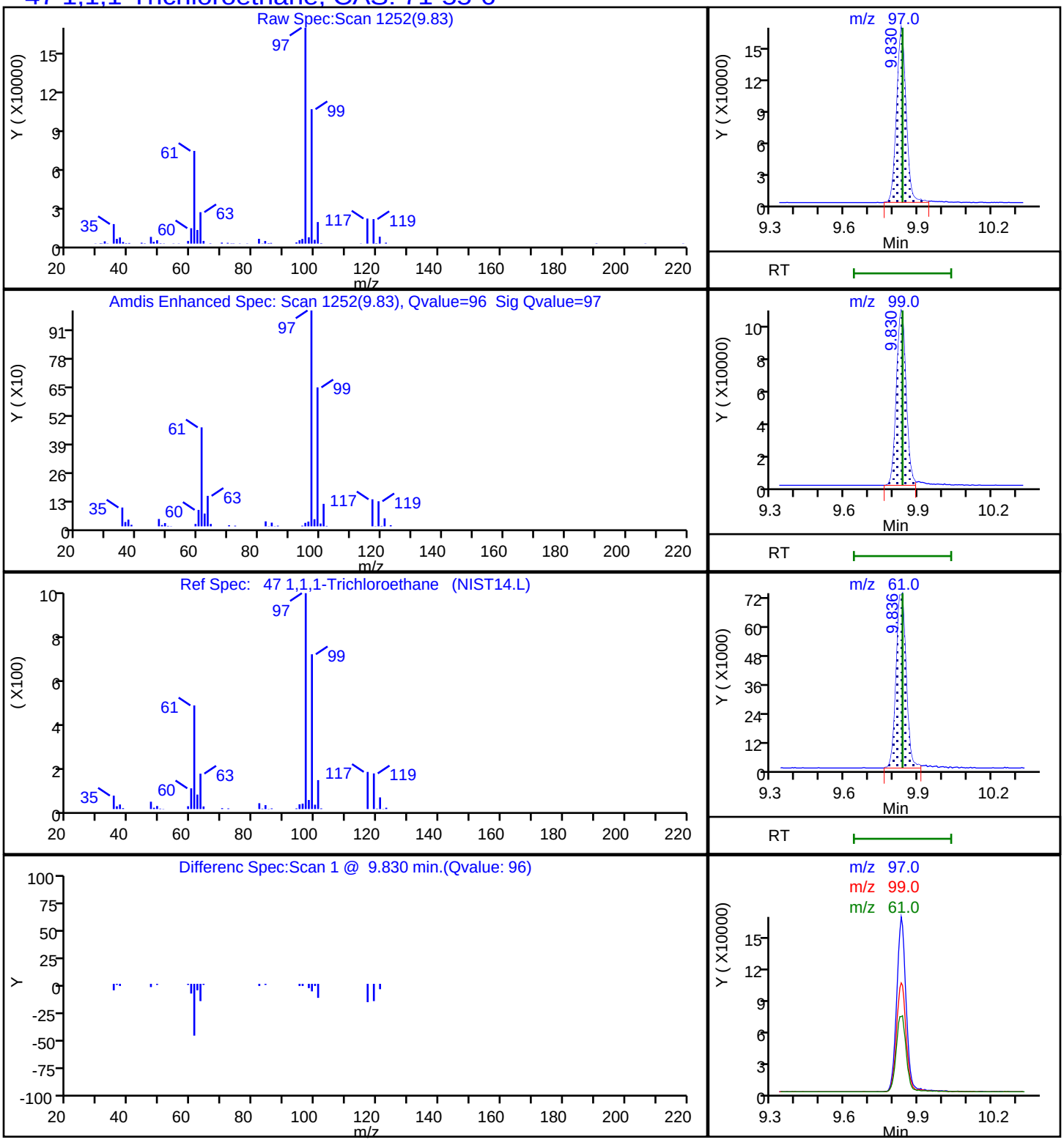
Operator ID: HMT ALS Bottle#: 1 Worklist Smp#: 5

Purge Vol: 500.000 mL Dil. Factor: 1.0000

Method: MG_TO15 Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm) Detector MS SCAN

47 1,1,1-Trichloroethane, CAS: 71-55-6



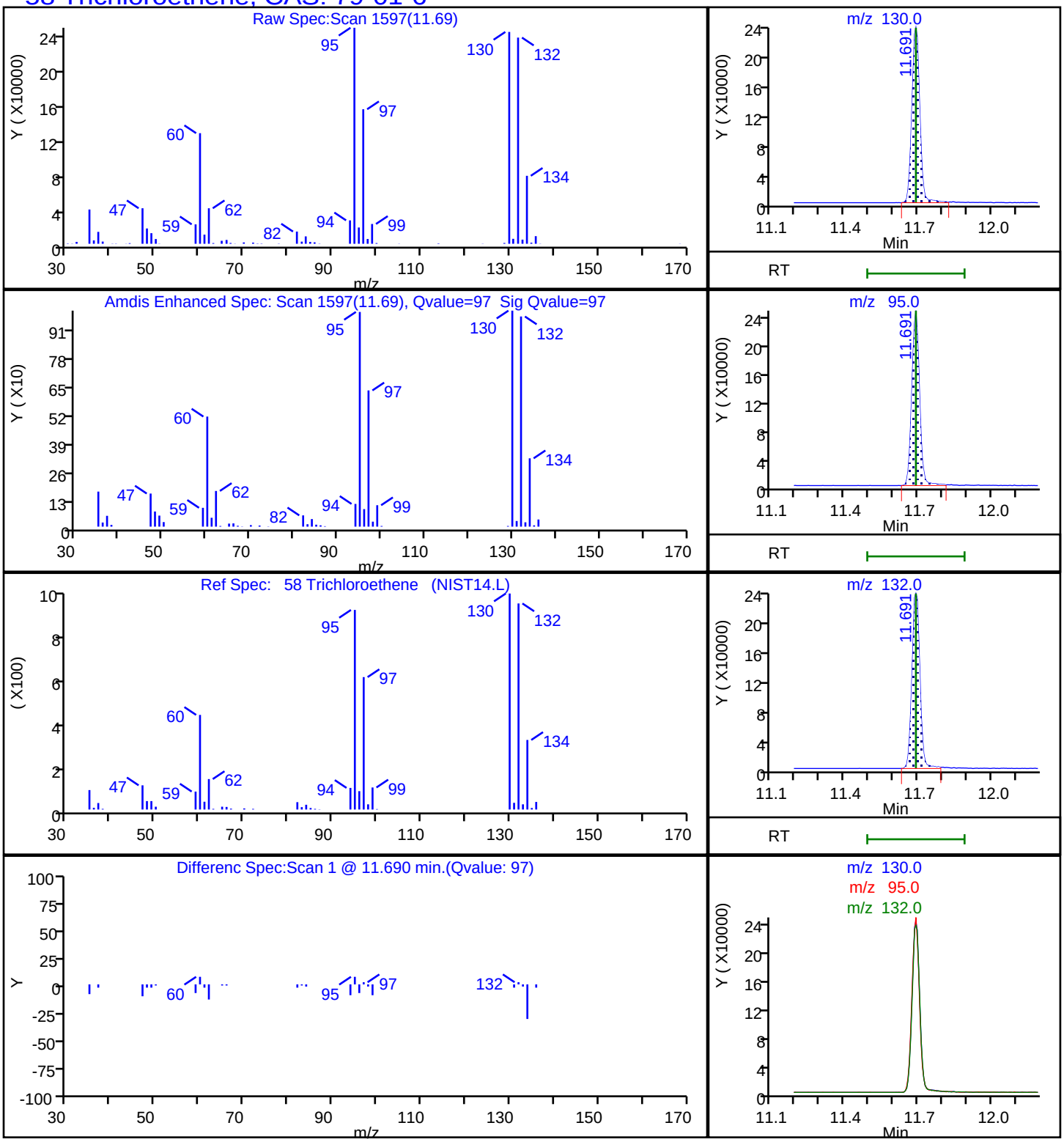
Report Date: 01-Oct-2020 15:03:57 Chrom Revision: 2.3 24-Sep-2020 19:22:38

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P101.D

Injection Date:	30-Sep-2020 12:23:30	Instrument ID:	MG
Lims ID:	140-20507-A-1	Lab Sample ID:	140-20507-1
Client ID:	BLDG A INFLUENT		
Operator ID:	HMT	ALS Bottle#:	1 Worklist Smp#: 5
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

58 Trichloroethene, CAS: 79-01-6



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20507-1

SDG No.:

Client Sample ID: BLDG A MIDGAC Lab Sample ID: 140-20507-2

Matrix: Air Lab File ID: GI30P102.D

Analysis Method: TO 15 LL Date Collected: 09/28/2020 11:56

Sample wt/vol: 100(mL) Date Analyzed: 09/30/2020 13:09

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 43140 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.25	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.070	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	0.20	J	0.40	0.11
67-66-3	Chloroform	119.38	0.19	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	2.7		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.34	J	0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	0.34	J	0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	0.11	J	0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	1.6		0.40	0.040
100-41-4	Ethylbenzene	106.17	0.067	J	0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.035
108-88-3	Toluene	92.14	0.44	J	0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	0.036	J	0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	20		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	4.4		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.19	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	91		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20507-1

SDG No.:

Client Sample ID: BLDG A MIDGAC Lab Sample ID: 140-20507-2

Matrix: Air Lab File ID: GI30P102.D

Analysis Method: TO 15 LL Date Collected: 09/28/2020 11:56

Sample wt/vol: 100(mL) Date Analyzed: 09/30/2020 13:09

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 43140 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.80	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.44	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	0.70	J	1.4	0.39
67-66-3	Chloroform	119.38	0.92	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	11		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	1.7	J	2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	1.4	J	1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	0.45	J	1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	6.2		1.6	0.16
100-41-4	Ethylbenzene	106.17	0.29	J	1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.24
108-88-3	Toluene	92.14	1.7	J	2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	0.14	J	1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	110		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	24		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	0.83	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	91		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P102.D				
Lims ID:	140-20507-A-2				
Client ID:	BLDG A MIDGAC				
Sample Type:	Client				
Inject. Date:	30-Sep-2020 13:09:30	ALS Bottle#:	2	Worklist Smp#:	6
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016761-006				
Misc. Info.:	140-20507-a-2				
Operator ID:	HMT	Instrument ID:	MG		
Method:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\MG_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	01-Oct-2020 15:00:45	Calib Date:	11-Sep-2020 06:50:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MG\20200910-16561.b\GI10IC09R.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1024				
First Level Reviewer: khachitpongpanits		Date:	01-Oct-2020 15:04:23		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.795	8.795	0.000	97	272119	4.80	
* 2 1,4-Difluorobenzene	114	10.979	10.979	0.000	95	1381834	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.719	15.719	0.000	87	1380917	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.364	17.364	0.000	96	939149	4.24	
6 Chlorodifluoromethane	51	3.699	3.699	0.000	57	7976	0.0394	
8 Dichlorodifluoromethane	85	3.764	3.764	0.000	99	17364	0.0676	
27 1,1-Dichloroethene	96	5.926	5.921	0.005	95	20299	0.3130	
34 trans-1,2-Dichloroethene	96	7.070	7.075	-0.005	1	522	0.007131	
37 1,1-Dichloroethane	63	7.490	7.485	0.005	97	11617	0.0685	
42 cis-1,2-Dichloroethene	96	8.466	8.466	0.000	96	44769	0.5397	
44 Chloroform	83	8.811	8.811	0.000	77	6728	0.0379	
47 1,1,1-Trichloroethane	97	9.836	9.836	0.000	96	682205	3.95	
48 1,2-Dichloroethane	62	9.933	9.938	-0.005	1	2790	0.0225	
50 Benzene	78	10.435	10.434	0.000	90	13274	0.0503	
52 Carbon tetrachloride	117	10.451	10.461	-0.010	39	2356	0.0141	
58 Trichloroethene	130	11.696	11.691	0.005	98	90233	0.8856	
67 Toluene	91	13.745	13.745	0.000	93	24948	0.0889	
78 Ethylbenzene	91	16.064	16.059	0.005	95	5033	0.0134	
79 m-Xylene & p-Xylene	91	16.215	16.220	-0.005	96	10885	0.0378	
S 124 Xylenes, Total	100				0		0.0378	

QC Flag Legend

Processing Flags

Reagents:

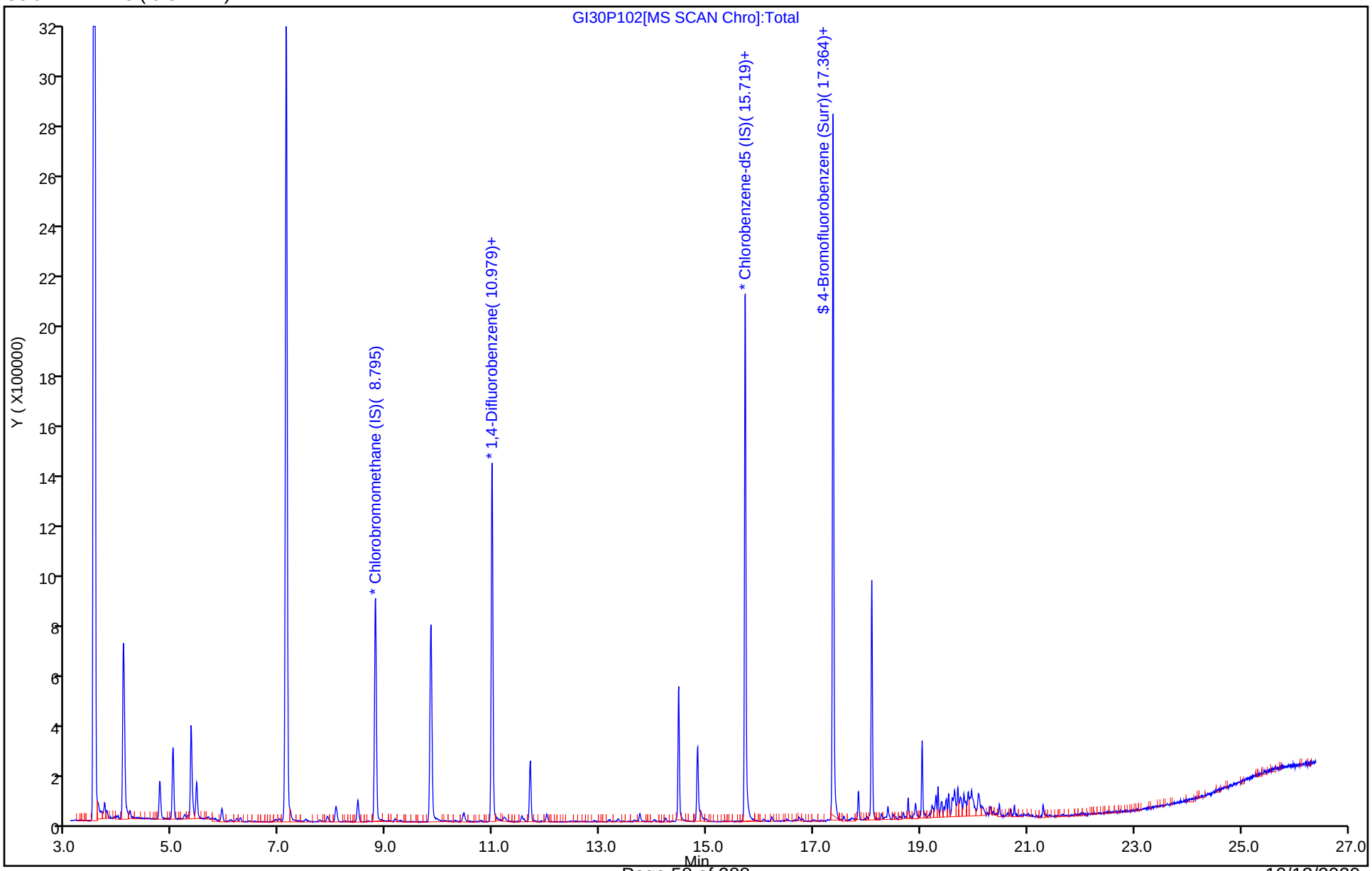
40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

Report Date: 01-Oct-2020 15:04:23 Chrom Revision: 2.3 24-Sep-2020 19:22:38

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P102.D				
Injection Date:	30-Sep-2020 13:09:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	140-20507-A-2	Lab Sample ID:	140-20507-2	Worklist Smp#:	6
Client ID:	BLDG A MIDGAC				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P102.D				
Lims ID:	140-20507-A-2				
Client ID:	BLDG A MIDGAC				
Sample Type:	Client				
Inject. Date:	30-Sep-2020 13:09:30	ALS Bottle#:	2	Worklist Smp#:	6
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016761-006				
Misc. Info.:	140-20507-a-2				
Operator ID:	HMT	Instrument ID:	MG		
Method:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\MG_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	01-Oct-2020 15:00:45	Calib Date:	11-Sep-2020 06:50:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MG\20200910-16561.b\GI10IC09R.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1024				

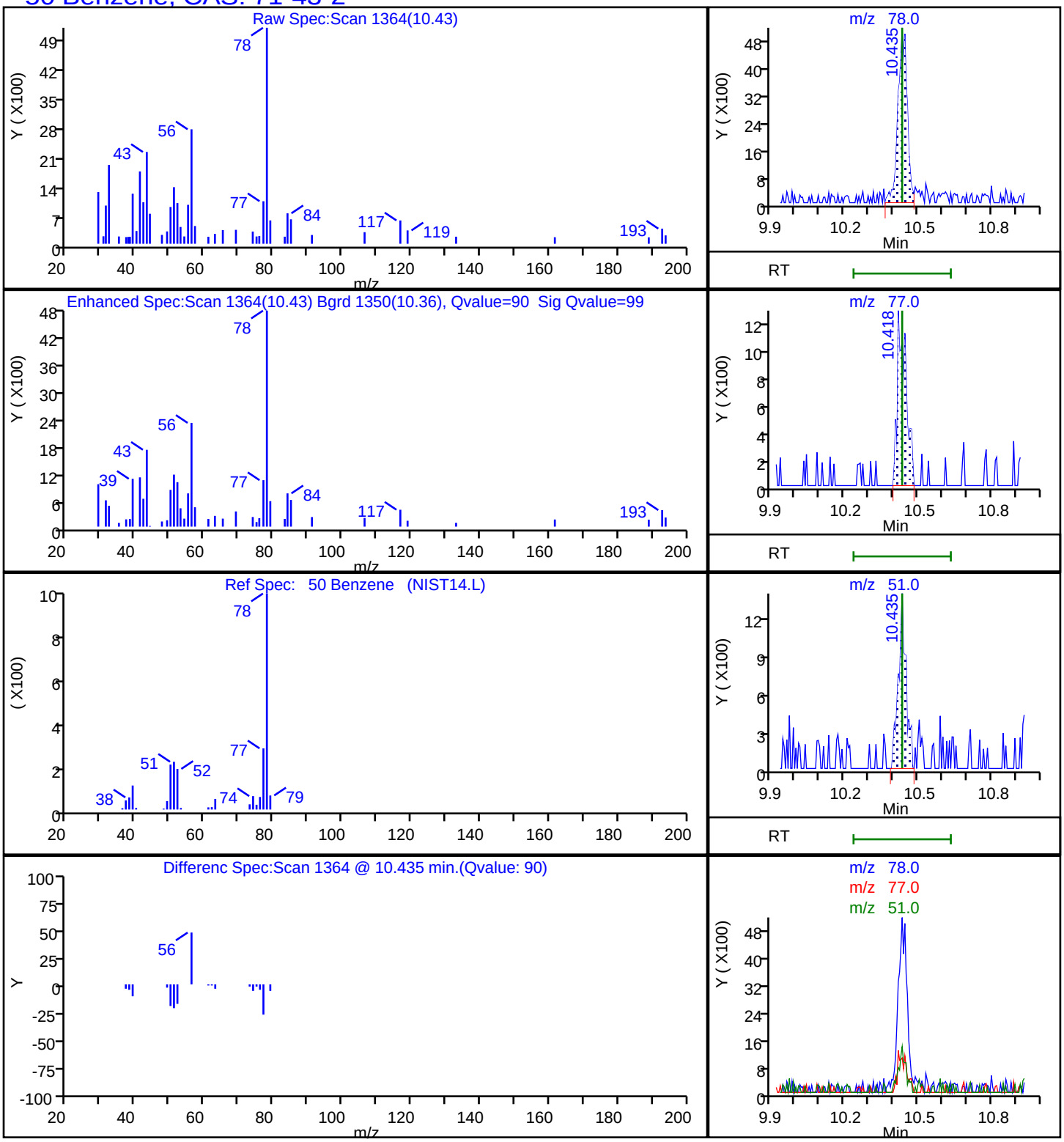
First Level Reviewer: khachitpongpanits Date: 01-Oct-2020 15:04:23

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	4.24	91.36

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P102.D		
Injection Date:	30-Sep-2020 13:09:30	Instrument ID:	MG
Lims ID:	140-20507-A-2	Lab Sample ID:	140-20507-2
Client ID:	BLDG A MIDGAC		
Operator ID:	HMT	ALS Bottle#:	2 Worklist Smp#: 6
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

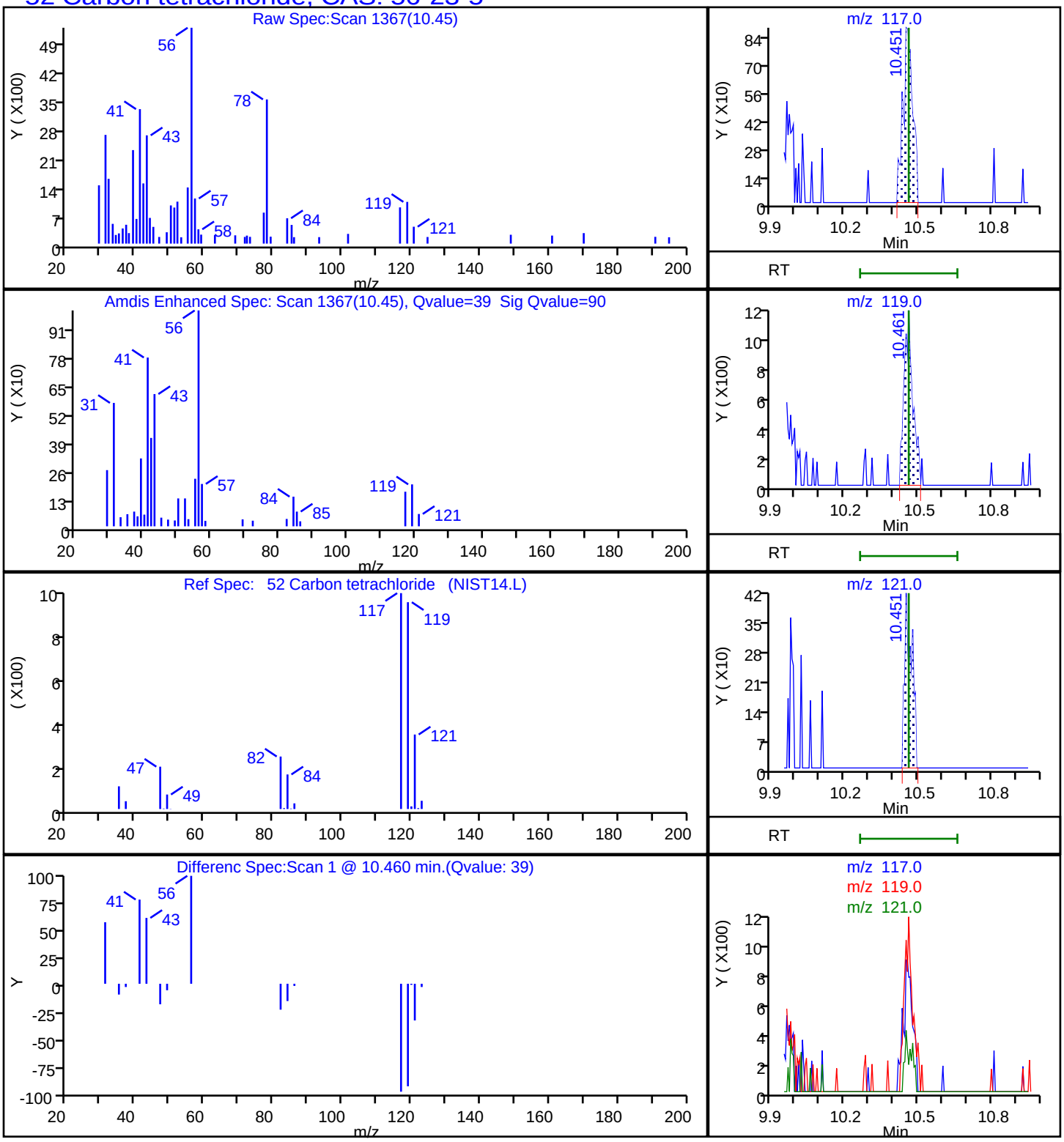
50 Benzene, CAS: 71-43-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P102.D		
Injection Date:	30-Sep-2020 13:09:30	Instrument ID:	MG
Lims ID:	140-20507-A-2	Lab Sample ID:	140-20507-2
Client ID:	BLDG A MIDGAC		
Operator ID:	HMT	ALS Bottle#:	2 Worklist Smp#: 6
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

52 Carbon tetrachloride, CAS: 56-23-5

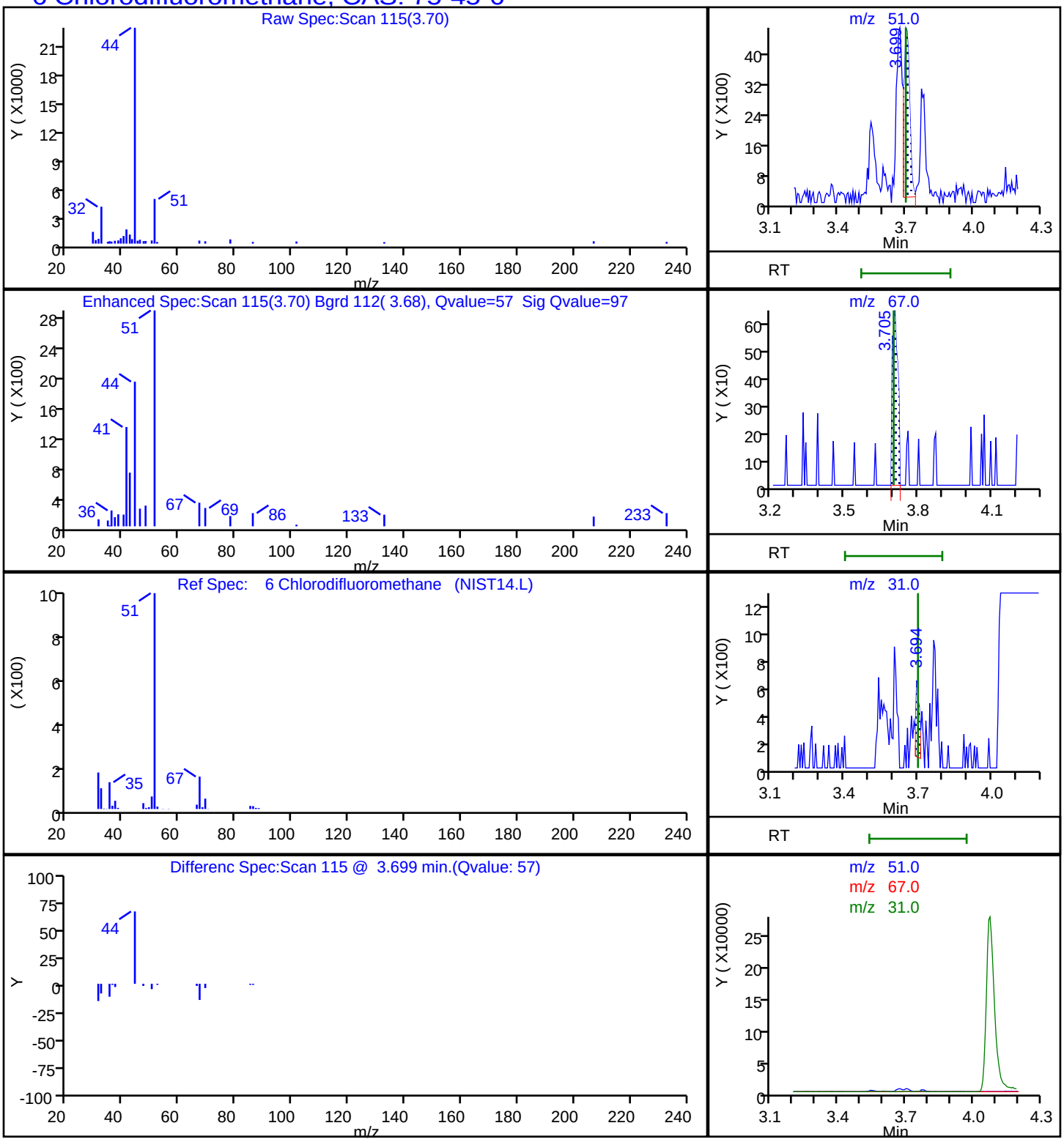


Report Date: 01-Oct-2020 15:04:23 Chrom Revision: 2.3 24-Sep-2020 19:22:38

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P102.D				
Injection Date:	30-Sep-2020 13:09:30	Instrument ID:	MG		
Lims ID:	140-20507-A-2	Lab Sample ID:	140-20507-2		
Client ID:	BLDG A MIDGAC				
Operator ID:	HMT	ALS Bottle#:	2	Worklist Smp#:	6
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

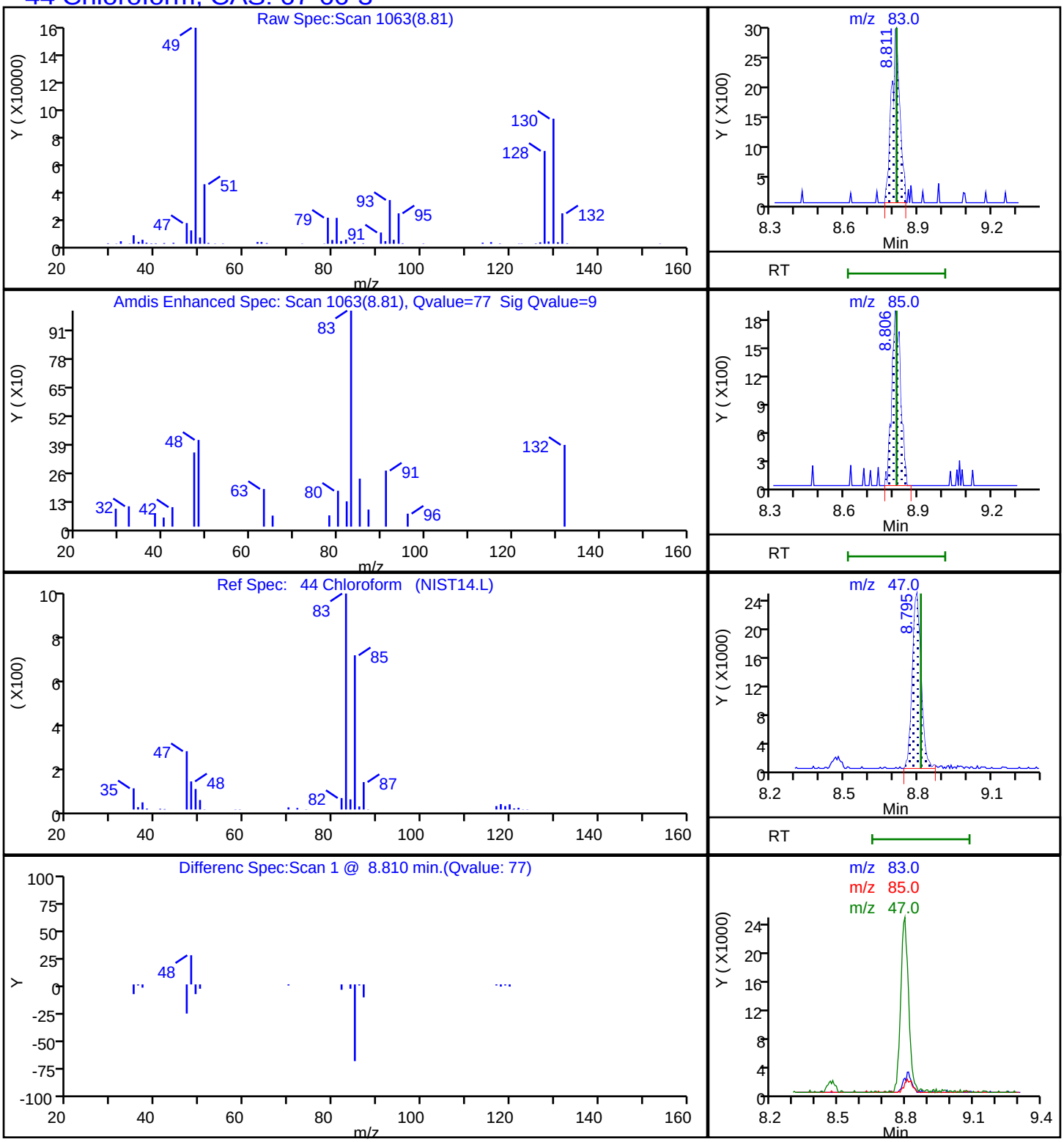
6 Chlorodifluoromethane, CAS: 75-45-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P102.D		
Injection Date:	30-Sep-2020 13:09:30	Instrument ID:	MG
Lims ID:	140-20507-A-2	Lab Sample ID:	140-20507-2
Client ID:	BLDG A MIDGAC		
Operator ID:	HMT	ALS Bottle#:	2 Worklist Smp#: 6
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

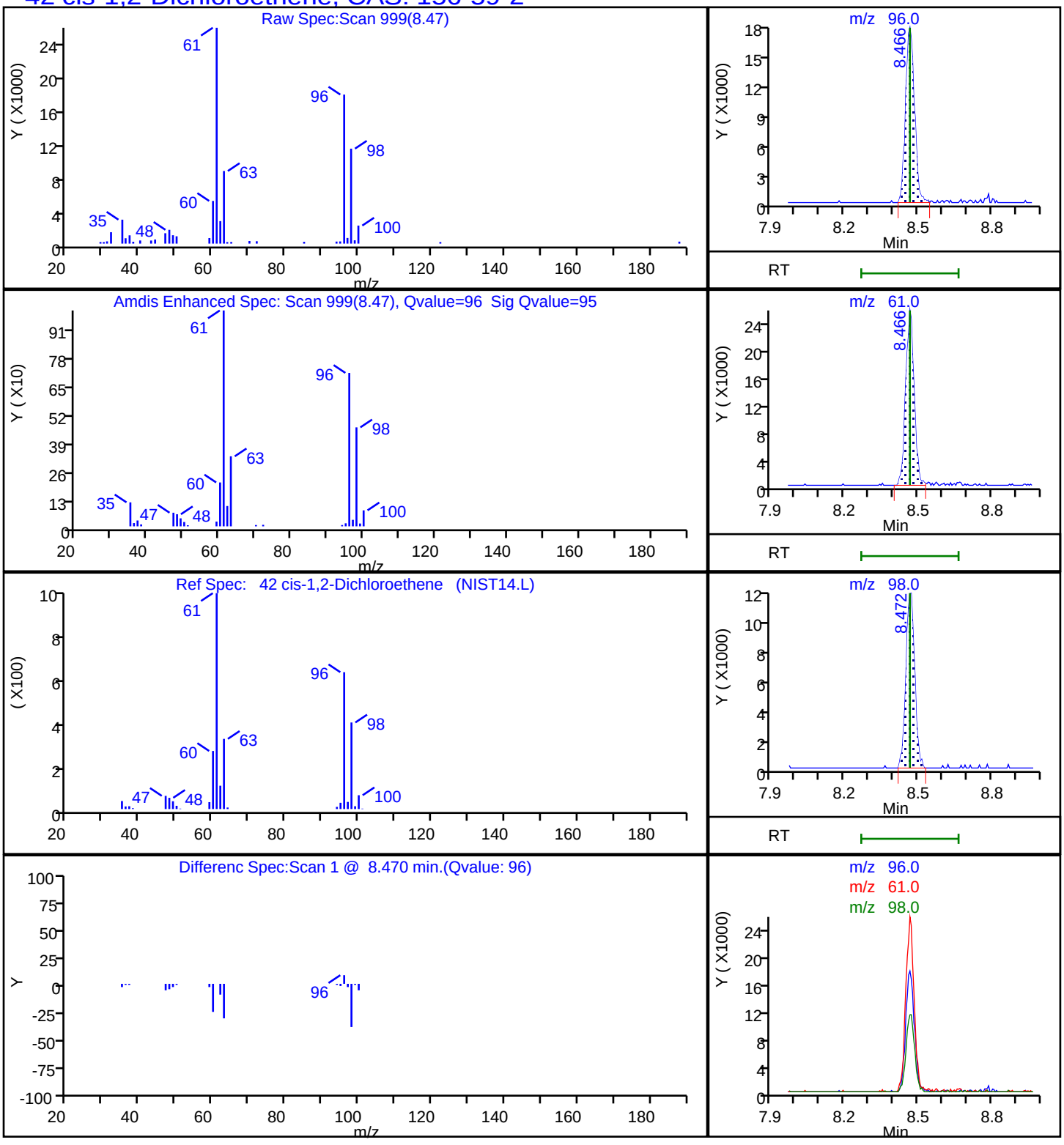
44 Chloroform, CAS: 67-66-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P102.D				
Injection Date:	30-Sep-2020 13:09:30	Instrument ID:	MG		
Lims ID:	140-20507-A-2	Lab Sample ID:	140-20507-2		
Client ID:	BLDG A MIDGAC				
Operator ID:	HMT	ALS Bottle#:	2	Worklist Smp#:	6
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

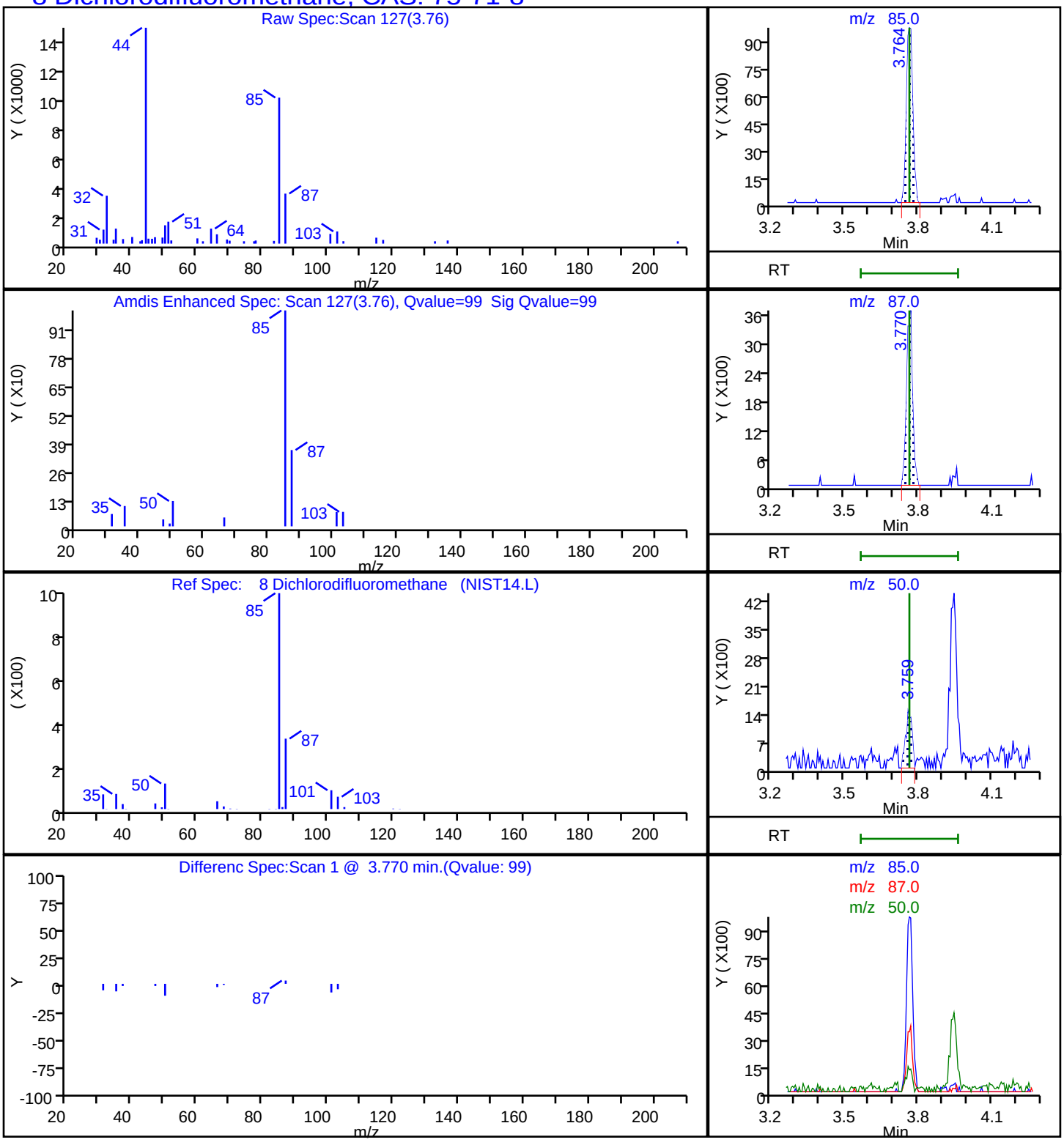
42 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P102.D				
Injection Date:	30-Sep-2020 13:09:30	Instrument ID:	MG		
Lims ID:	140-20507-A-2	Lab Sample ID:	140-20507-2		
Client ID:	BLDG A MIDGAC				
Operator ID:	HMT	ALS Bottle#:	2	Worklist Smp#:	6
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

8 Dichlorodifluoromethane, CAS: 75-71-8

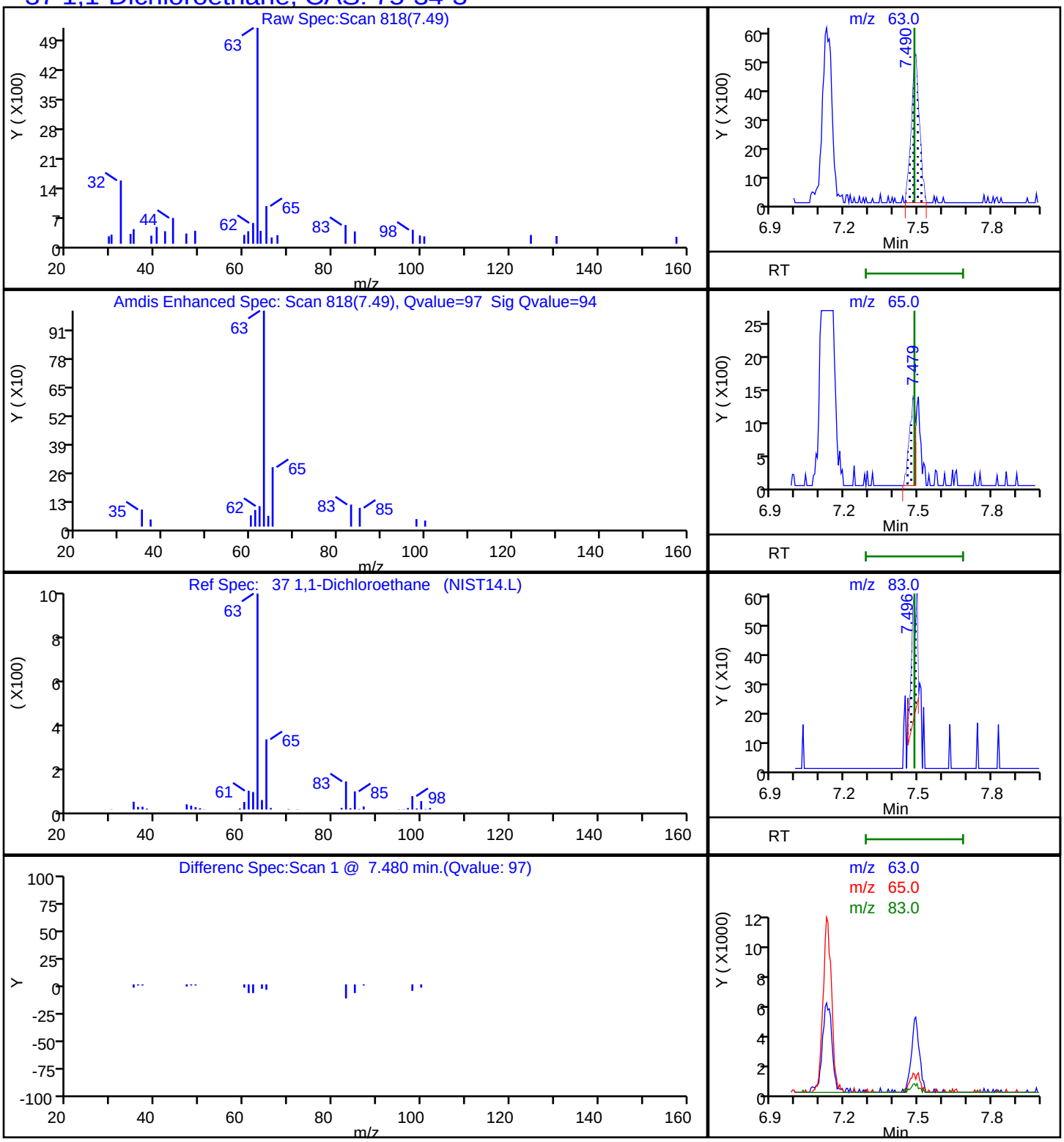


Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P102.D

Injection Date:	30-Sep-2020 13:09:30	Instrument ID:	MG
Lims ID:	140-20507-A-2	Lab Sample ID:	140-20507-2
Client ID:	BLDG A MIDGAC		
Operator ID:	HMT	ALS Bottle#:	2 Worklist Smp#: 6
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

37 1,1-Dichloroethane, CAS: 75-34-3

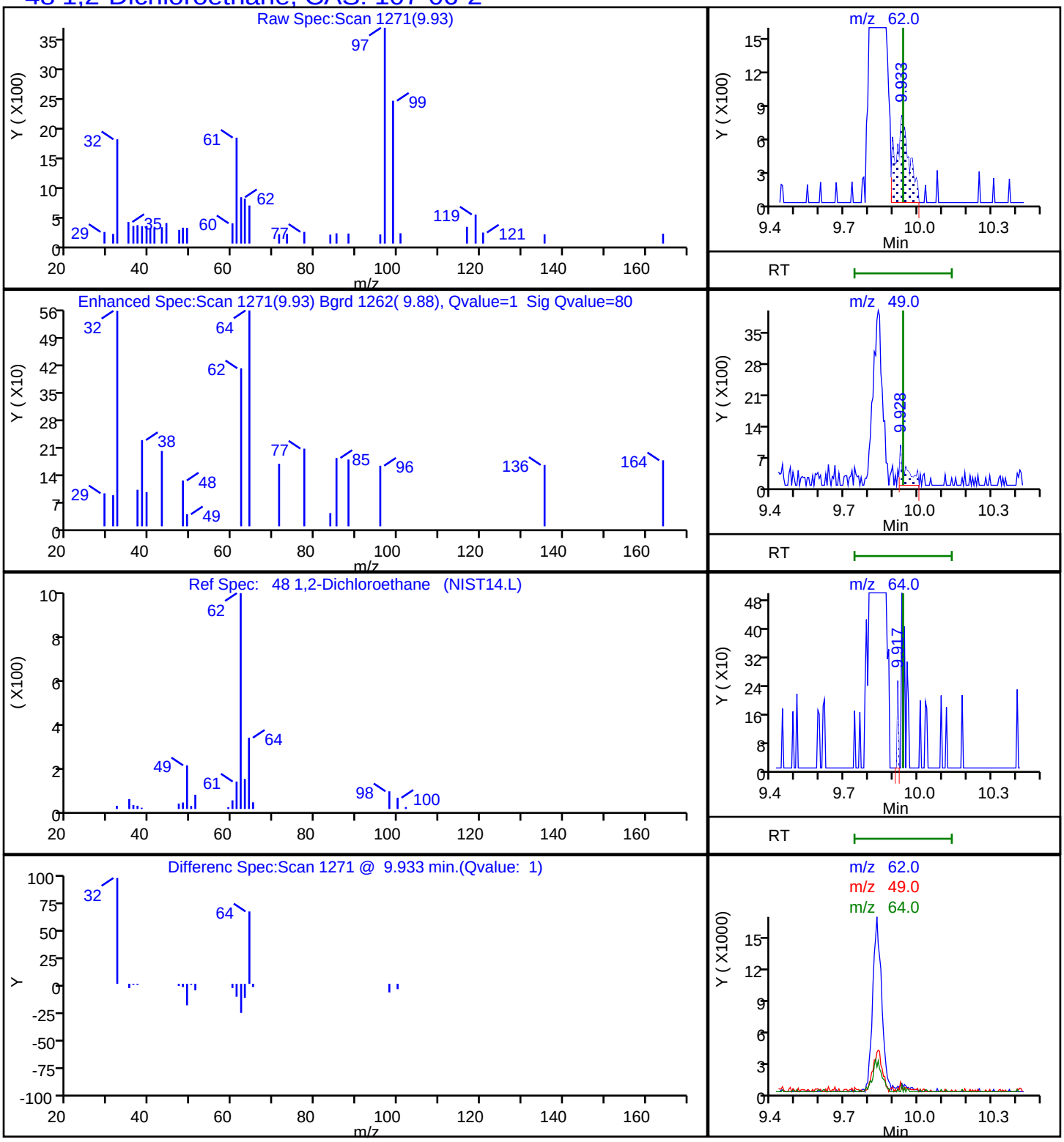


Report Date: 01-Oct-2020 15:04:24 Chrom Revision: 2.3 24-Sep-2020 19:22:38

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P102.D		
Injection Date:	30-Sep-2020 13:09:30	Instrument ID:	MG
Lims ID:	140-20507-A-2	Lab Sample ID:	140-20507-2
Client ID:	BLDG A MIDGAC		
Operator ID:	HMT	ALS Bottle#:	2 Worklist Smp#: 6
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

48 1,2-Dichloroethane, CAS: 107-06-2



Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P102.D

Injection Date: 30-Sep-2020 13:09:30 Instrument ID: MG

Lims ID: 140-20507-A-2 Lab Sample ID: 140-20507-2

Client ID: BLDG A MIDGAC

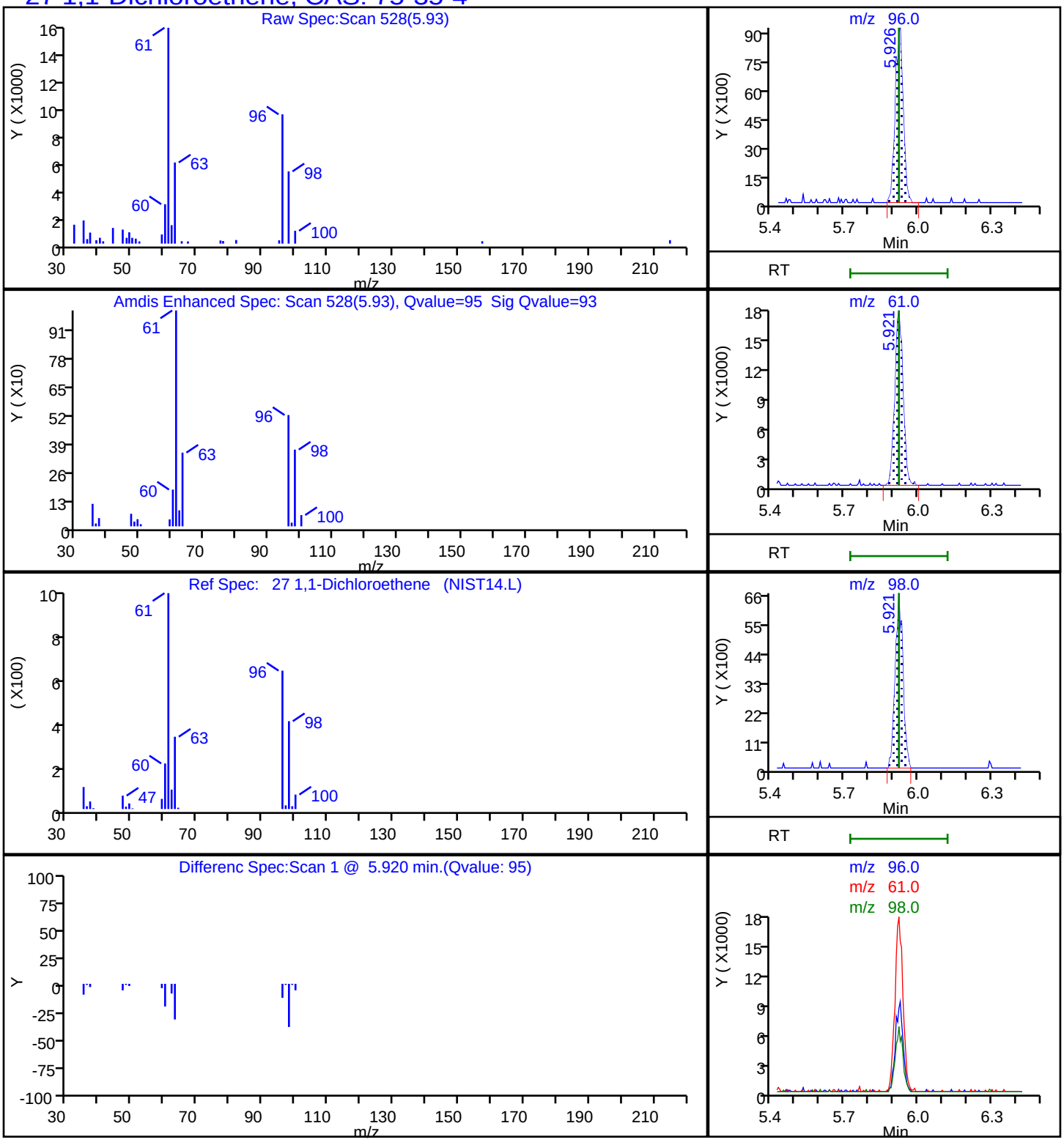
Operator ID: HMT ALS Bottle#: 2 Worklist Smp#: 6

Purge Vol: 500.000 mL Dil. Factor: 1.0000

Method: MG_TO15 Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm) Detector MS SCAN

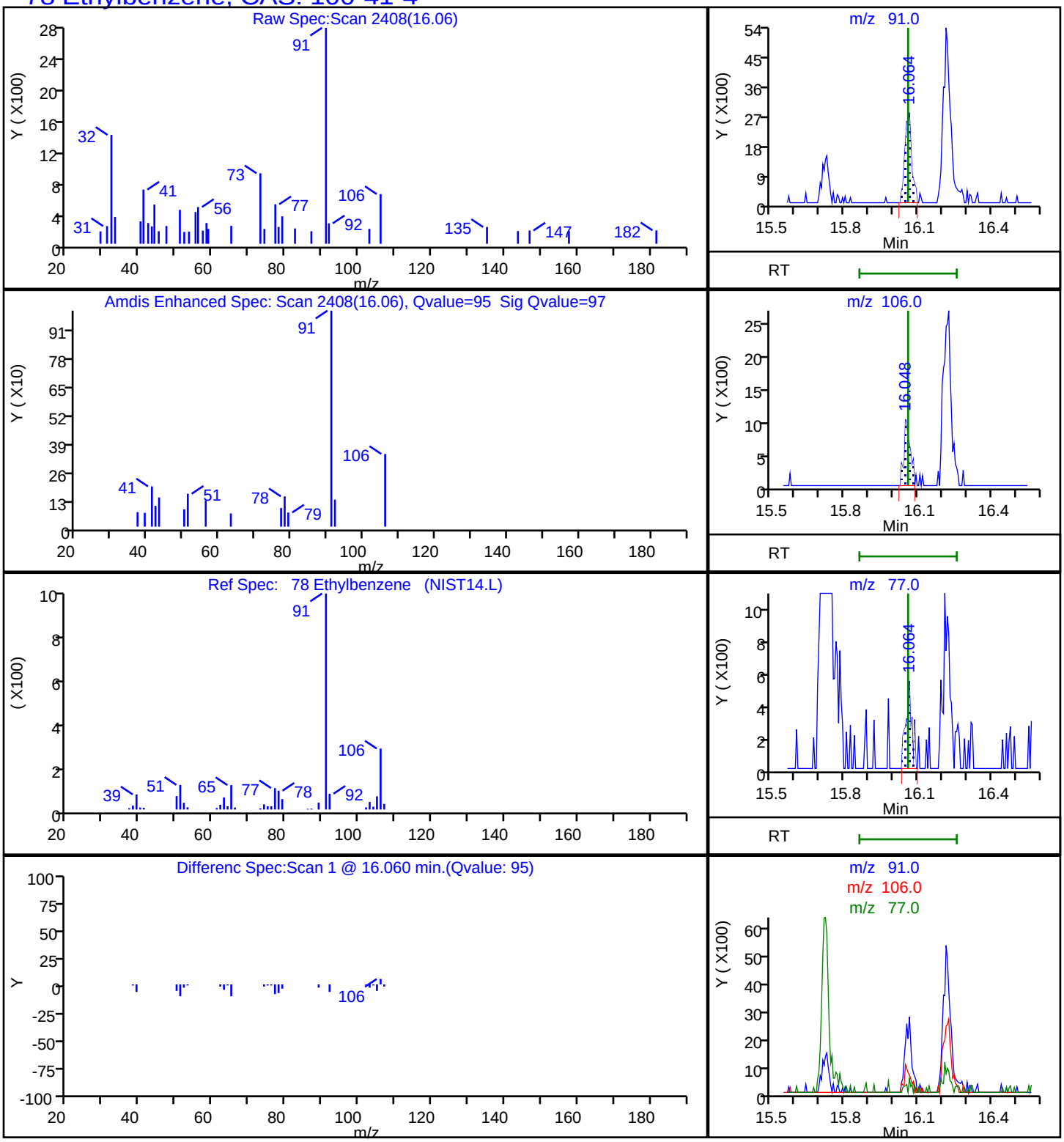
27 1,1-Dichloroethene, CAS: 75-35-4



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P102.D		
Injection Date:	30-Sep-2020 13:09:30	Instrument ID:	MG
Lims ID:	140-20507-A-2	Lab Sample ID:	140-20507-2
Client ID:	BLDG A MIDGAC		
Operator ID:	HMT	ALS Bottle#:	2 Worklist Smp#: 6
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

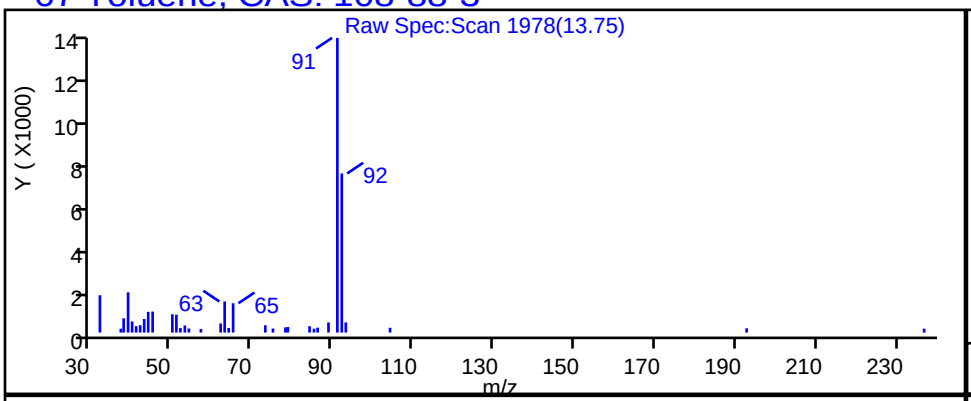
78 Ethylbenzene, CAS: 100-41-4

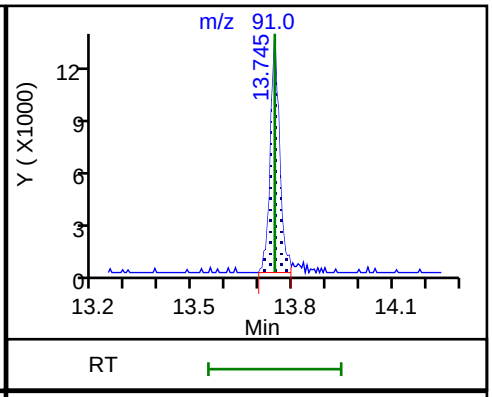


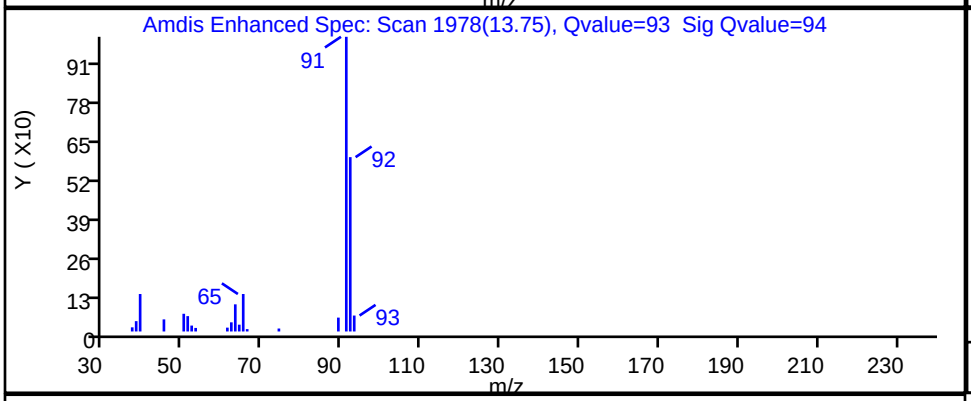
Eurofins TestAmerica, Knoxville

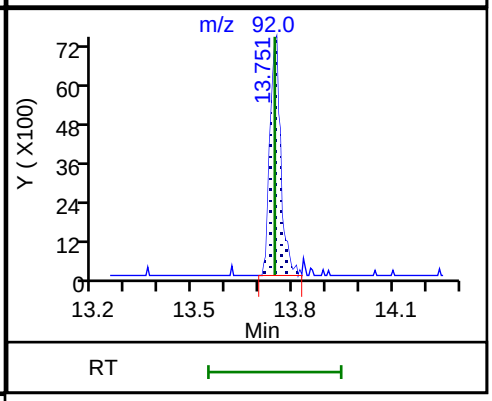
Data File:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P102.D		
Injection Date:	30-Sep-2020 13:09:30	Instrument ID:	MG
Lims ID:	140-20507-A-2	Lab Sample ID:	140-20507-2
Client ID:	BLDG A MIDGAC		
Operator ID:	HMT	ALS Bottle#:	2 Worklist Smp#: 6
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

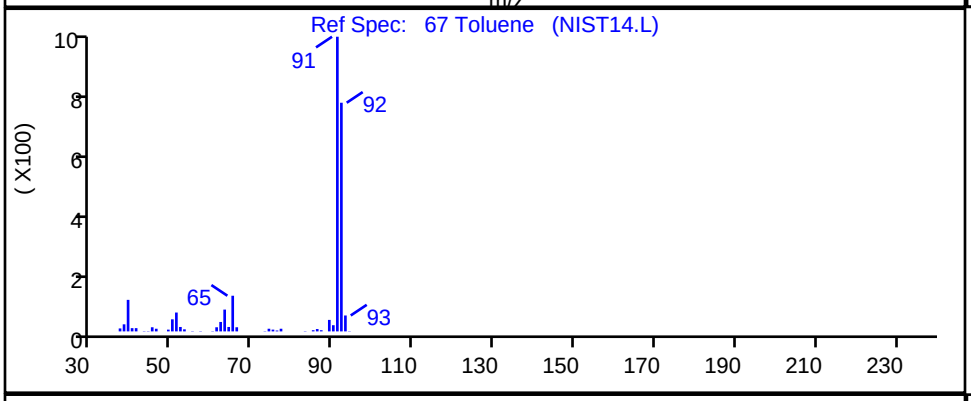
67 Toluene, CAS: 108-88-3

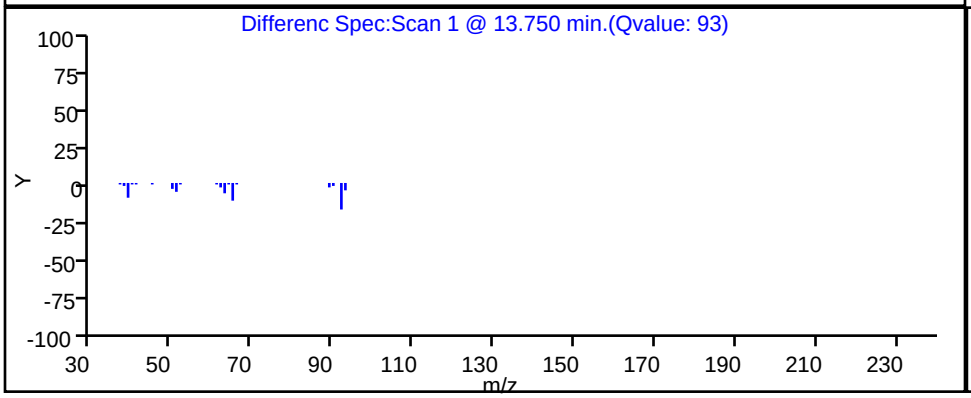


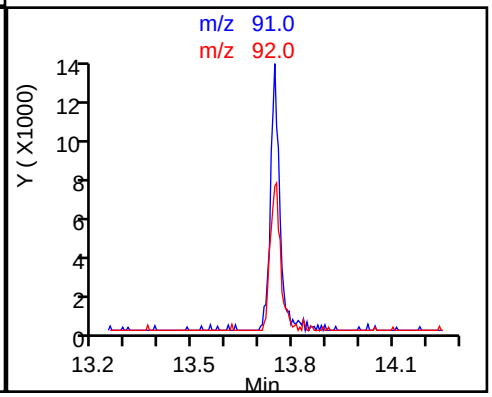










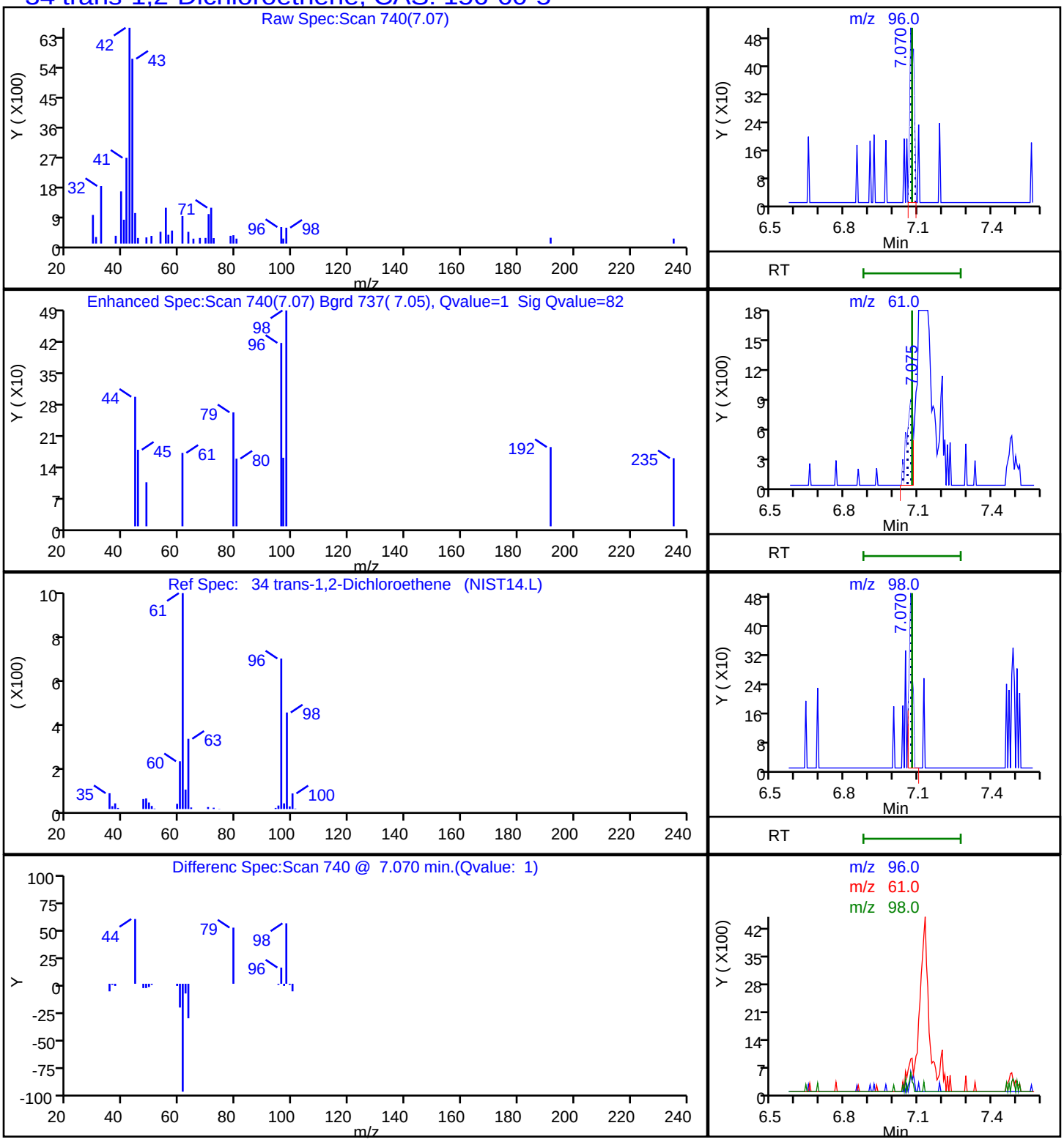


Report Date: 01-Oct-2020 15:04:23 Chrom Revision: 2.3 24-Sep-2020 19:22:38

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P102.D				
Injection Date:	30-Sep-2020 13:09:30	Instrument ID:	MG		
Lims ID:	140-20507-A-2	Lab Sample ID:	140-20507-2		
Client ID:	BLDG A MIDGAC				
Operator ID:	HMT	ALS Bottle#:	2	Worklist Smp#:	6
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

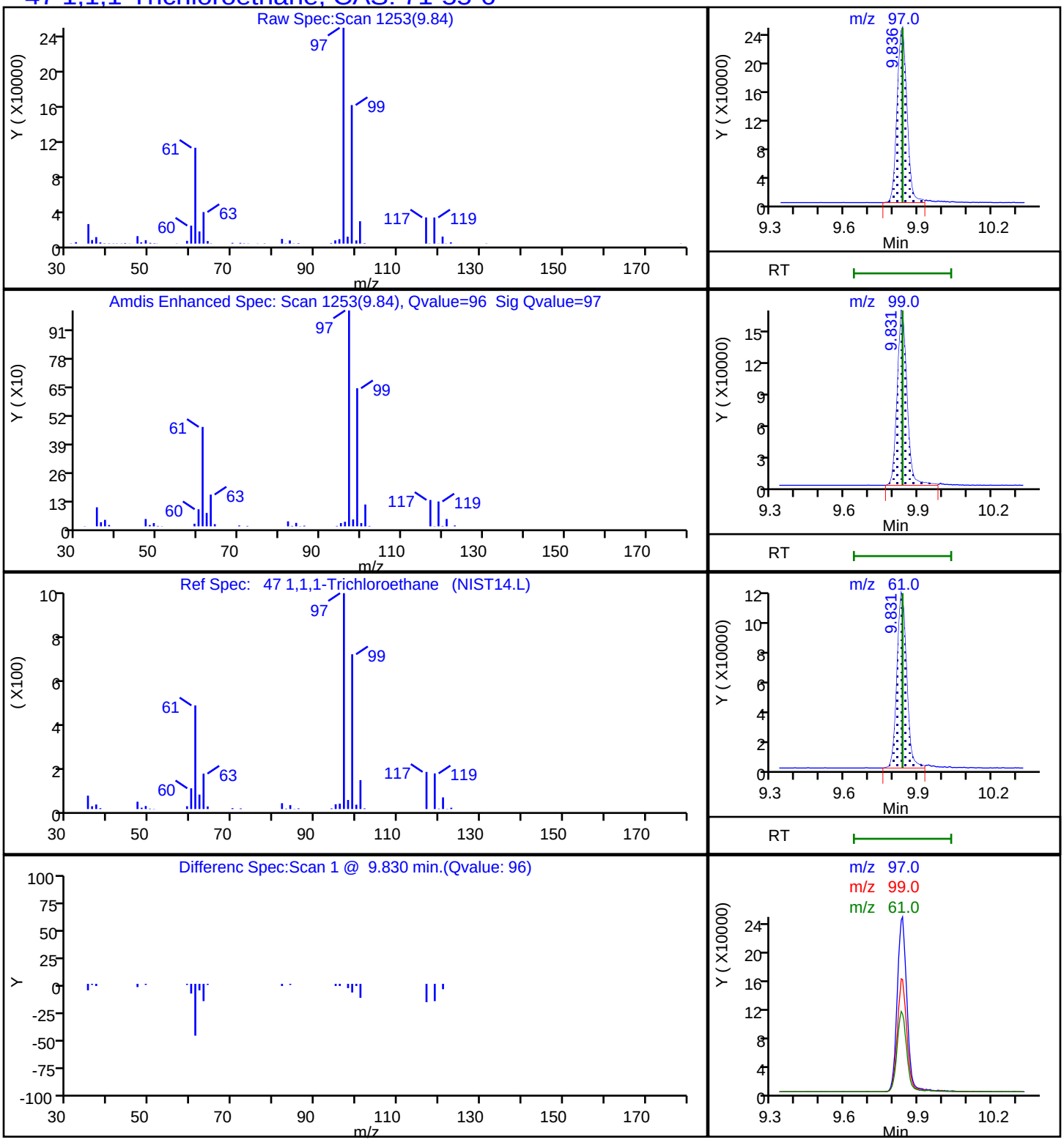
34 trans-1,2-Dichloroethene, CAS: 156-60-5



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P102.D		
Injection Date:	30-Sep-2020 13:09:30	Instrument ID:	MG
Lims ID:	140-20507-A-2	Lab Sample ID:	140-20507-2
Client ID:	BLDG A MIDGAC		
Operator ID:	HMT	ALS Bottle#:	2 Worklist Smp#: 6
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

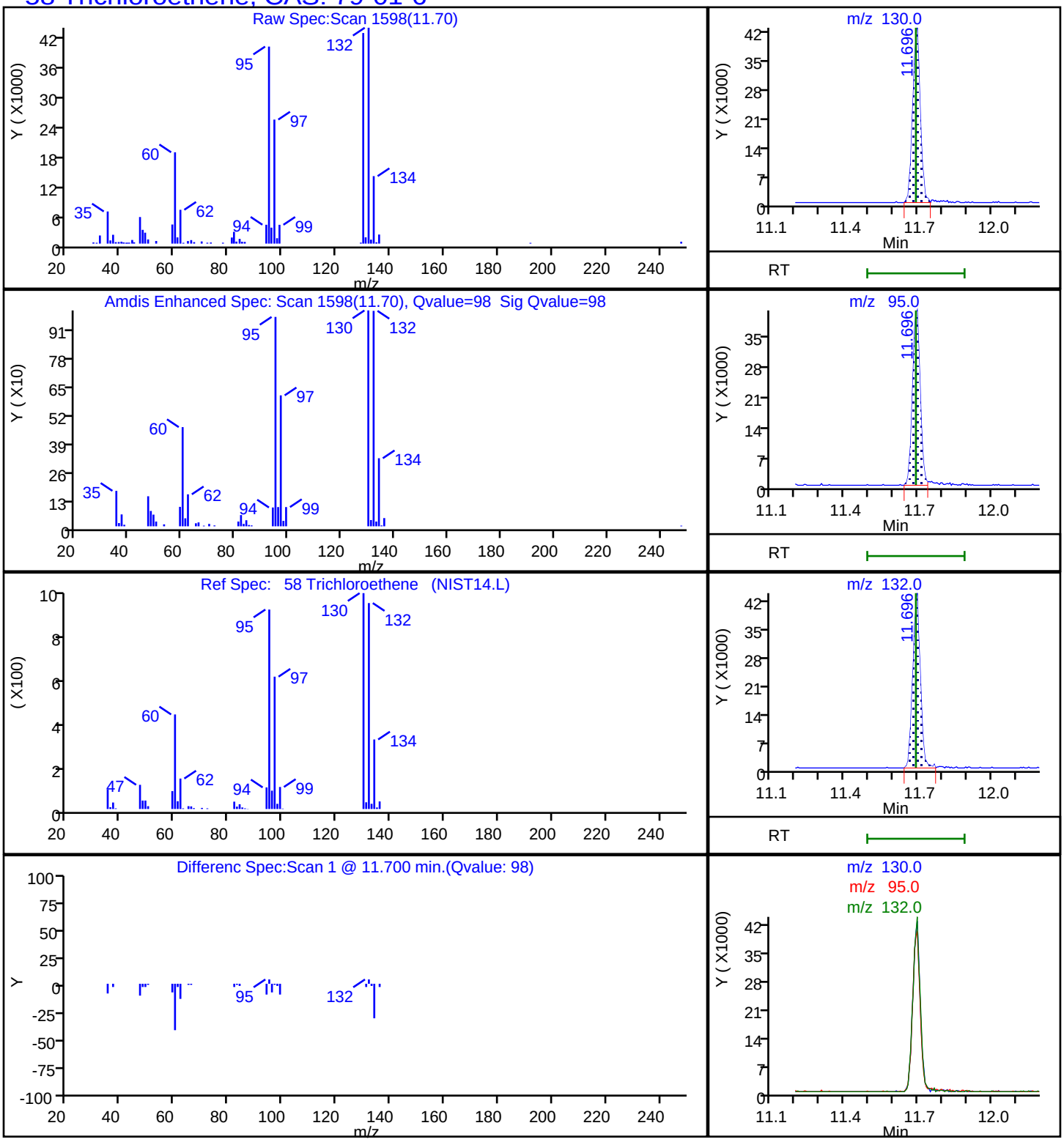
47 1,1,1-Trichloroethane, CAS: 71-55-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P102.D		
Injection Date:	30-Sep-2020 13:09:30	Instrument ID:	MG
Lims ID:	140-20507-A-2	Lab Sample ID:	140-20507-2
Client ID:	BLDG A MIDGAC		
Operator ID:	HMT	ALS Bottle#:	2 Worklist Smp#: 6
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

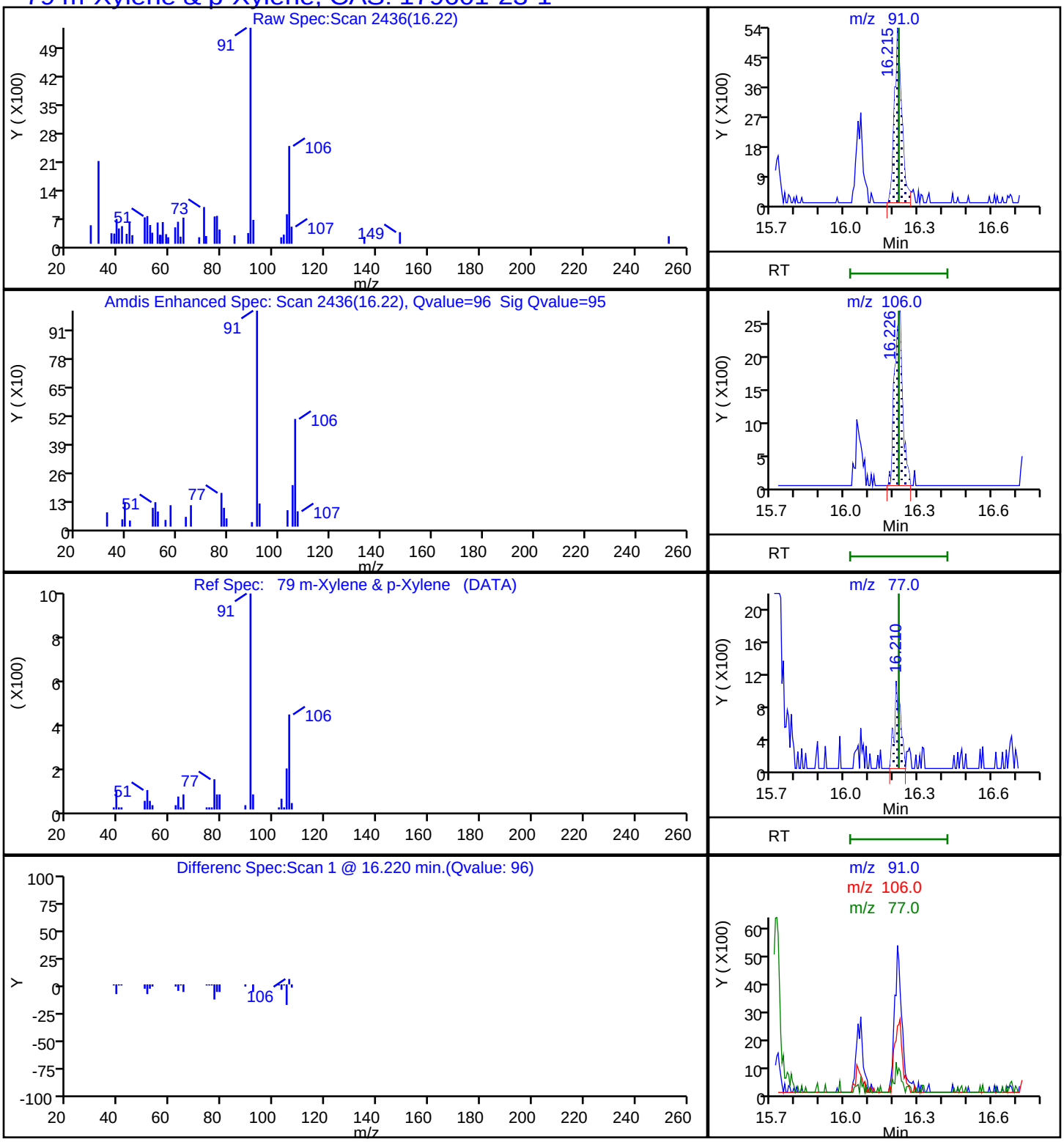
58 Trichloroethene, CAS: 79-01-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P102.D				
Injection Date:	30-Sep-2020 13:09:30	Instrument ID:	MG		
Lims ID:	140-20507-A-2	Lab Sample ID:	140-20507-2		
Client ID:	BLDG A MIDGAC				
Operator ID:	HMT	ALS Bottle#:	2	Worklist Smp#:	6
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

79 m-Xylene & p-Xylene, CAS: 179601-23-1



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20507-1

SDG No.:

Client Sample ID: BLDG A EFFLUENT Lab Sample ID: 140-20507-3

Matrix: Air Lab File ID: GI30P103.D

Analysis Method: TO 15 LL Date Collected: 09/28/2020 11:45

Sample wt/vol: 100(mL) Date Analyzed: 09/30/2020 13:52

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 43140 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.14	J	0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.079	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	0.26	J	0.40	0.11
67-66-3	Chloroform	119.38	1.2		0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	35		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.36	J	0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	6.8		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	22		0.40	0.040
100-41-4	Ethylbenzene	106.17	0.11	J	0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.035
108-88-3	Toluene	92.14	1.9		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	0.73		0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	*1,1,1-Trichloroethane*	*133.41*	*290*	*E*	*0.40*	*0.19*
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	4.7		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	0.11	J	0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.55	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	92		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20507-1

SDG No.:

Client Sample ID: BLDG A EFFLUENT Lab Sample ID: 140-20507-3

Matrix: Air Lab File ID: GI30P103.D

Analysis Method: TO 15 LL Date Collected: 09/28/2020 11:45

Sample wt/vol: 100(mL) Date Analyzed: 09/30/2020 13:52

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 43140 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	0.46	J	1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.50	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	0.92	J	1.4	0.39
67-66-3	Chloroform	119.38	6.0		2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	140		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	1.8	J	2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	28		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	88		1.6	0.16
100-41-4	Ethylbenzene	106.17	0.48	J	1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.24
108-88-3	Toluene	92.14	7.0		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	2.9		1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	*1,1,1-Trichloroethane*	*133.41*	*1600*	*E*	*2.2*	*1.0*
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	25		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	0.55	J	2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	2.4	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	92		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P103.D
Lims ID: 140-20507-A-3
Client ID: BLDG A EFFLUENT
Sample Type: Client
Inject. Date: 30-Sep-2020 13:52:30 ALS Bottle#: 3 Worklist Smp#: 7
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016761-007
Misc. Info.: 140-20507-a-3
Operator ID: HMT Instrument ID: MG

Method: \\chromfs\Knoxville\ChromData\MG\20200929-16761.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 01-Oct-2020 15:05:02 Calib Date: 11-Sep-2020 06:50:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200910-16561.b\GI10IC09R.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1024

First Level Reviewer: khachitpongpanits Date: 01-Oct-2020 15:05:02

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.795	8.795	0.000	97	279633	4.80	
* 2 1,4-Difluorobenzene	114	10.979	10.979	0.000	95	1423184	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.719	15.719	0.000	87	1424049	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.364	17.364	0.000	96	979032	4.29	
6 Chlorodifluoromethane	51	3.699	3.699	0.000	34	10771	0.0518	
8 Dichlorodifluoromethane	85	3.759	3.764	-0.005	99	18754	0.0710	
27 1,1-Dichloroethene	96	5.921	5.921	0.000	95	296612	4.45	
34 trans-1,2-Dichloroethene	96	7.070	7.075	-0.005	91	10944	0.1455	
37 1,1-Dichloroethane	63	7.490	7.485	0.005	99	238796	1.37	
42 cis-1,2-Dichloroethene	96	8.466	8.466	0.000	96	594701	6.98	
44 Chloroform	83	8.806	8.811	-0.005	29	45053	0.2468	
47 1,1,1-Trichloroethane	97	9.836	9.836	0.000	97	10320315	58.2	E
50 Benzene	78	10.429	10.434	-0.005	93	7752	0.0285	
52 Carbon tetrachloride	117	10.456	10.461	-0.005	40	2735	0.0159	
58 Trichloroethene	130	11.691	11.691	0.000	98	99445	0.9476	
67 Toluene	91	13.740	13.745	-0.005	94	108068	0.3734	
78 Ethylbenzene	91	16.059	16.059	0.000	97	8475	0.0219	
79 m-Xylene & p-Xylene	91	16.220	16.220	0.000	95	24753	0.0834	
83 o-Xylene	91	16.749	16.744	0.005	96	8343	0.0267	
95 1,2,4-Trimethylbenzene	105	18.534	18.539	-0.005	94	7865	0.0226	
S 124 Xylenes, Total	100				0		0.1101	

QC Flag Legend

Processing Flags
E - Exceeded Maximum Amount

Reagents:

40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

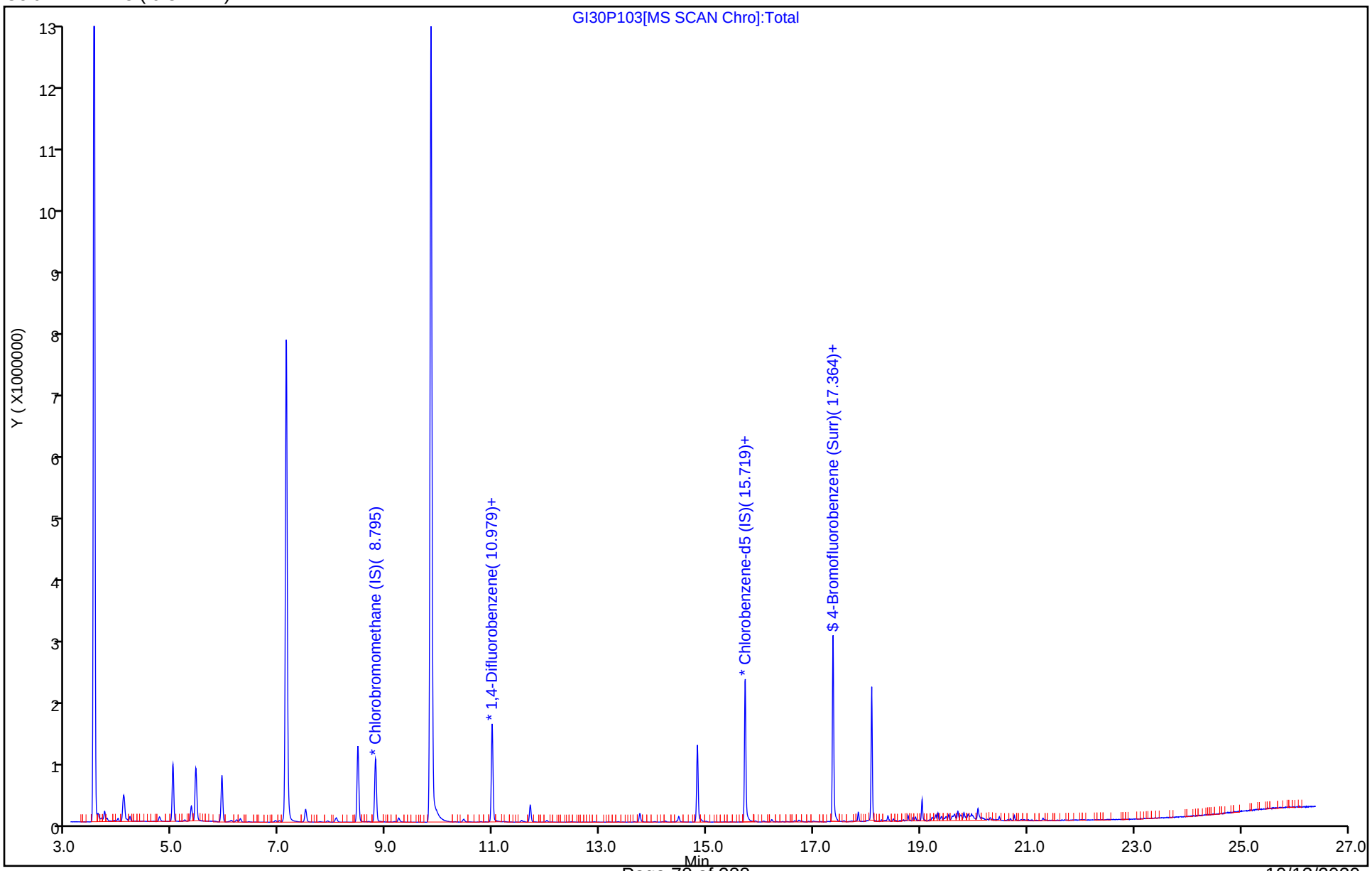
Report Date: 01-Oct-2020 15:05:02 Chrom Revision: 2.3 24-Sep-2020 19:22:38

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P103.D

Injection Date:	30-Sep-2020 13:52:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	140-20507-A-3	Lab Sample ID:	140-20507-3	Worklist Smp#:	7
Client ID:	BLDG A EFFLUENT				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P103.D				
Lims ID:	140-20507-A-3				
Client ID:	BLDG A EFFLUENT				
Sample Type:	Client				
Inject. Date:	30-Sep-2020 13:52:30	ALS Bottle#:	3	Worklist Smp#:	7
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016761-007				
Misc. Info.:	140-20507-a-3				
Operator ID:	HMT	Instrument ID:	MG		
Method:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\MG_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	01-Oct-2020 15:05:02	Calib Date:	11-Sep-2020 06:50:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MG\20200910-16561.b\GI10IC09R.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1024				

First Level Reviewer: khachitpongpanits Date: 01-Oct-2020 15:05:02

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	4.29	92.36

Report Date: 01-Oct-2020 15:05:02 Chrom Revision: 2.3 24-Sep-2020 19:22:38

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P103.D

Injection Date: 30-Sep-2020 13:52:30 Instrument ID: MG

Lims ID: 140-20507-A-3 Lab Sample ID: 140-20507-3

Client ID: BLDG A EFFLUENT

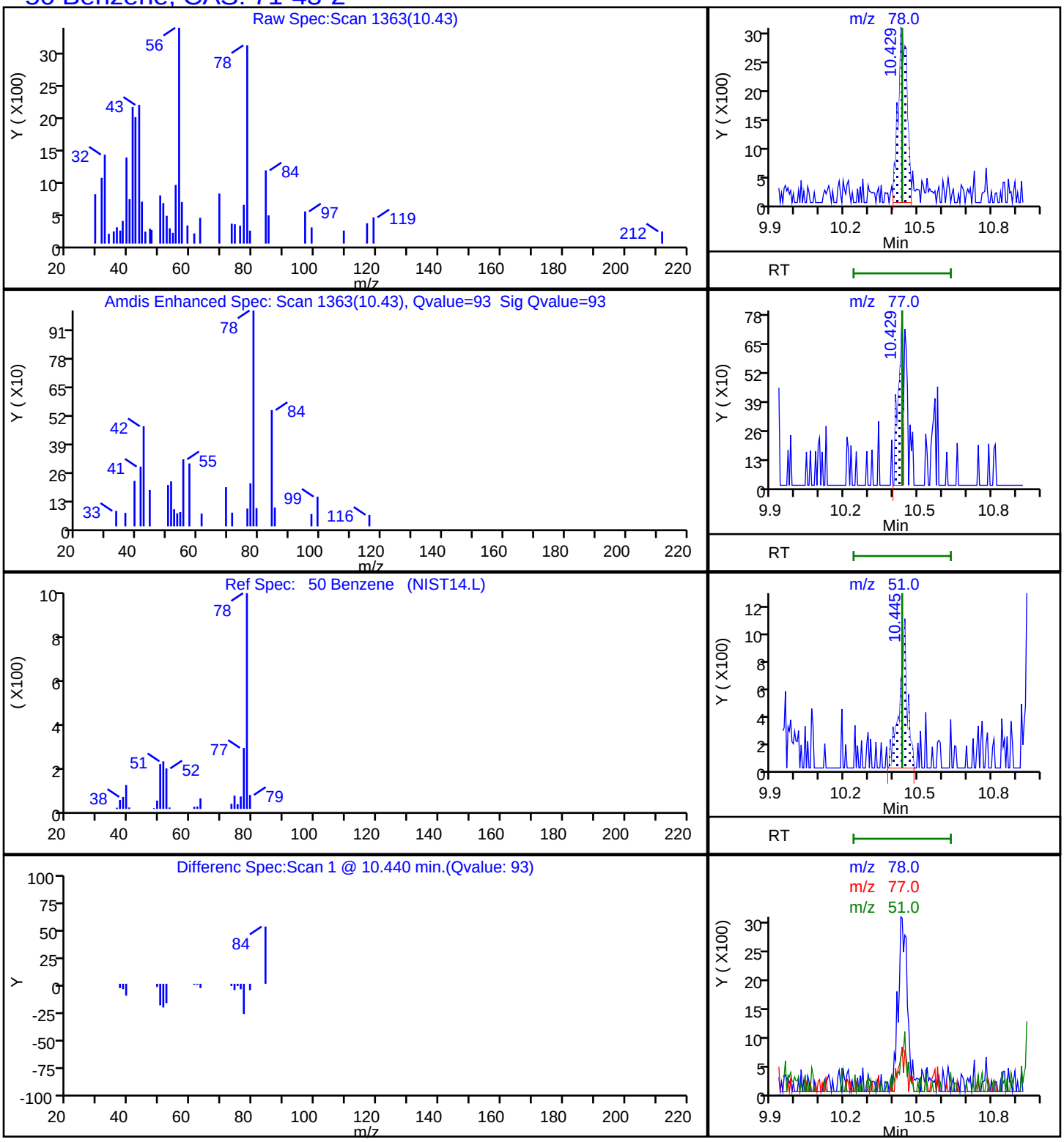
Operator ID: HMT ALS Bottle#: 3 Worklist Smp#: 7

Purge Vol: 500.000 mL Dil. Factor: 1.0000

Method: MG_TO15 Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm) Detector MS SCAN

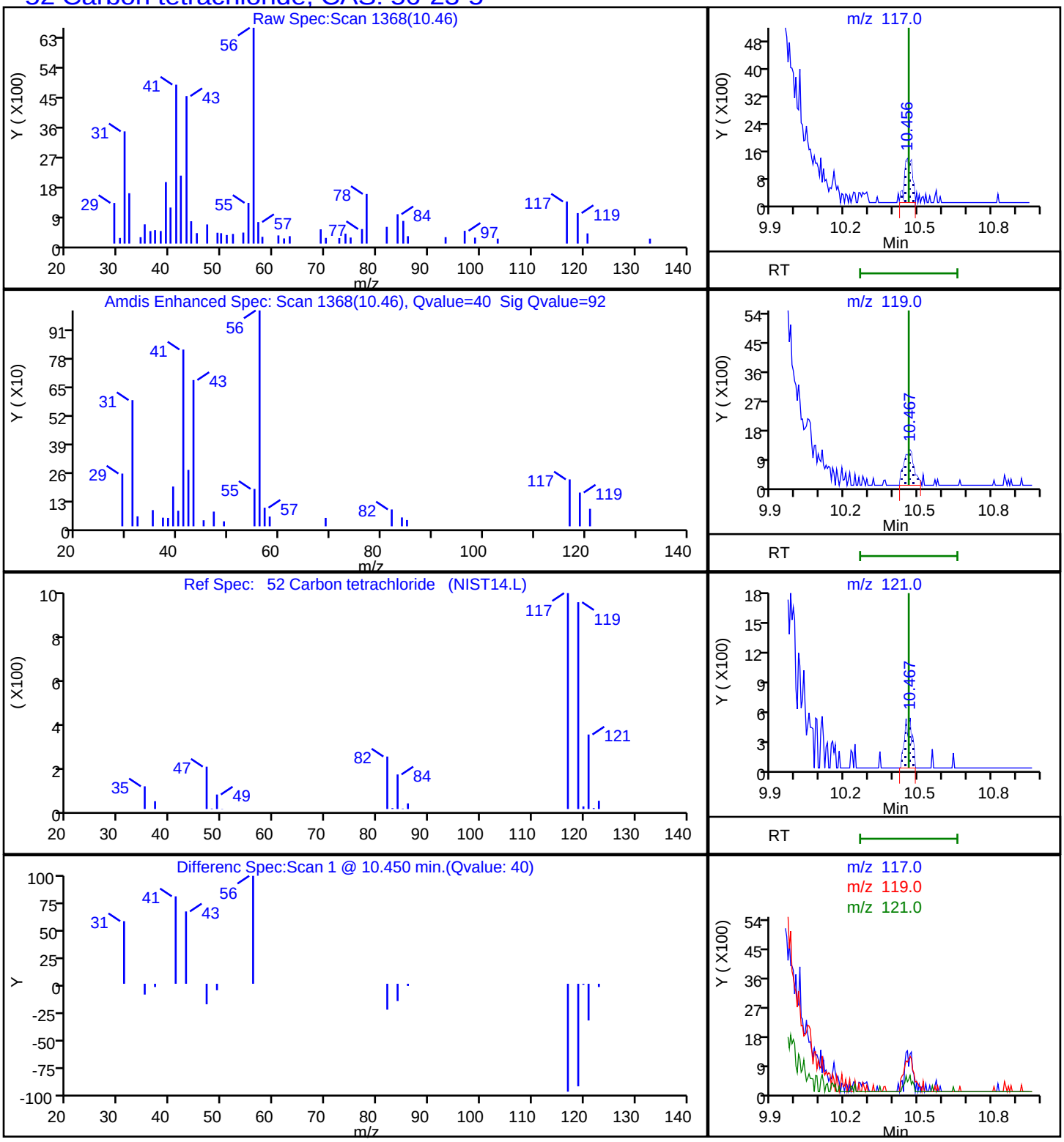
50 Benzene, CAS: 71-43-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P103.D		
Injection Date:	30-Sep-2020 13:52:30	Instrument ID:	MG
Lims ID:	140-20507-A-3	Lab Sample ID:	140-20507-3
Client ID:	BLDG A EFFLUENT		
Operator ID:	HMT	ALS Bottle#:	3 Worklist Smp#: 7
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

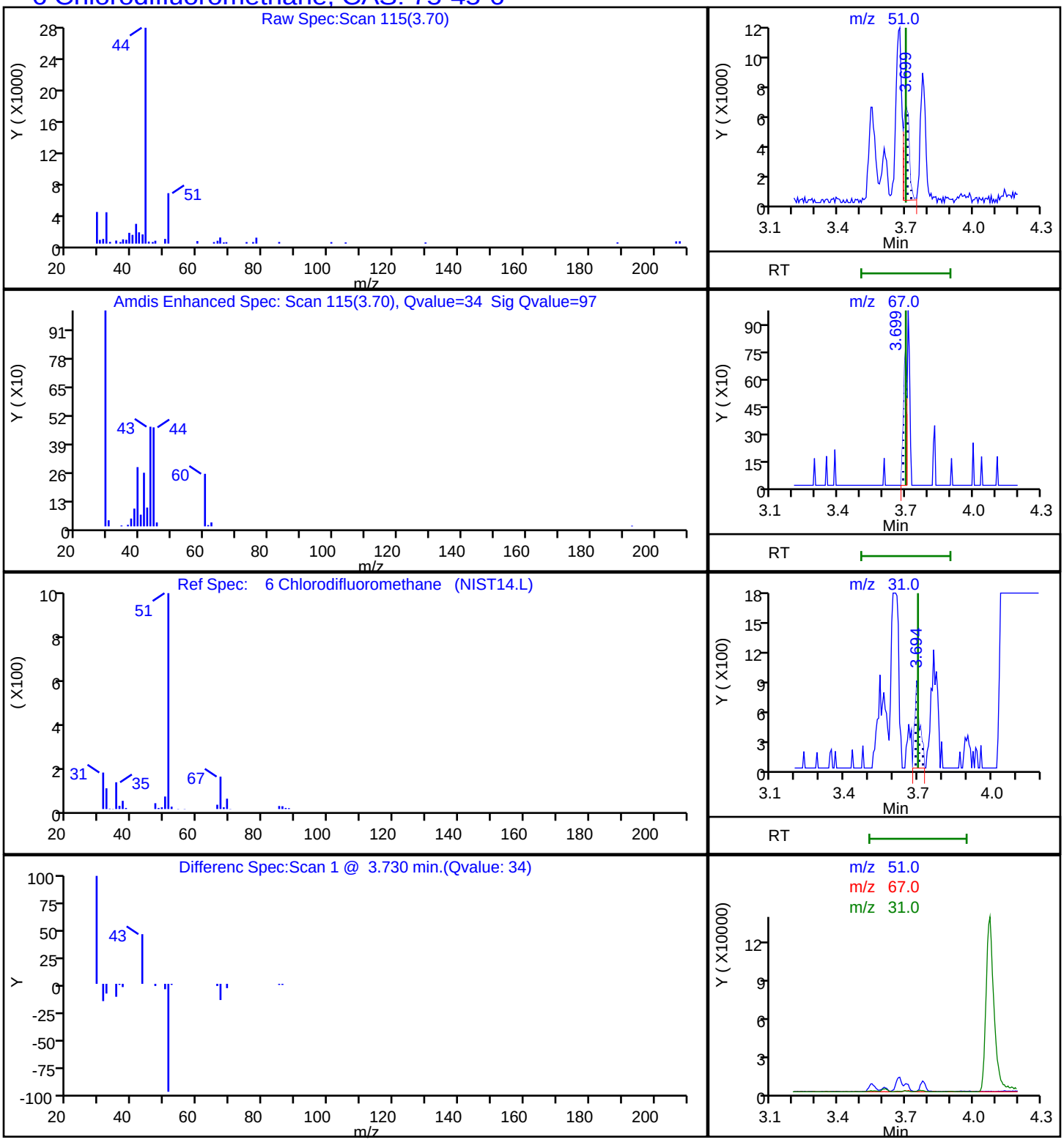
52 Carbon tetrachloride, CAS: 56-23-5



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P103.D		
Injection Date:	30-Sep-2020 13:52:30	Instrument ID:	MG
Lims ID:	140-20507-A-3	Lab Sample ID:	140-20507-3
Client ID:	BLDG A EFFLUENT		
Operator ID:	HMT	ALS Bottle#:	3 Worklist Smp#: 7
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

6 Chlorodifluoromethane, CAS: 75-45-6



Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P103.D

Injection Date: 30-Sep-2020 13:52:30 Instrument ID: MG

Lims ID: 140-20507-A-3 Lab Sample ID: 140-20507-3

Client ID: BLDG A EFFLUENT

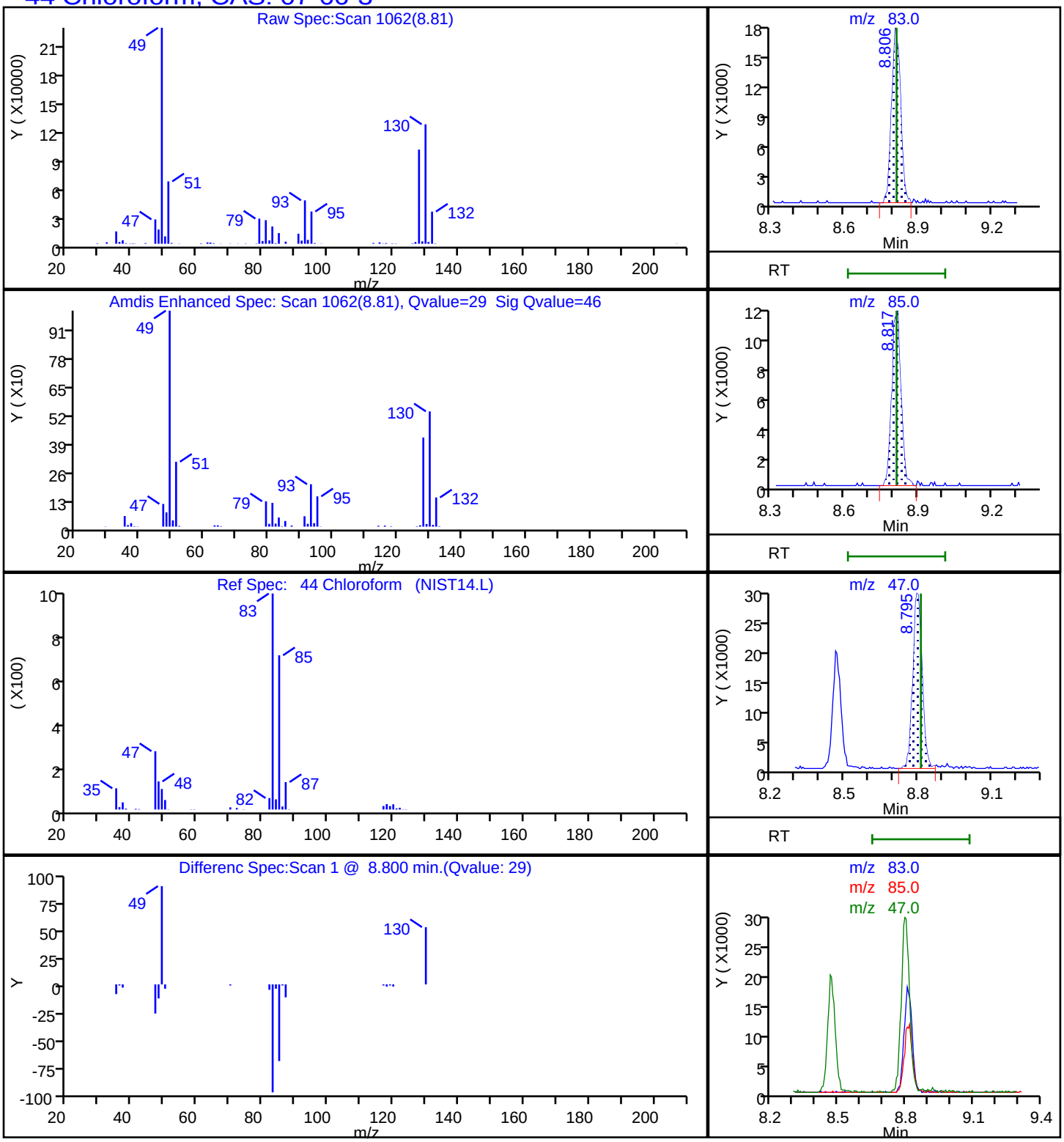
Operator ID: HMT ALS Bottle#: 3 Worklist Smp#: 7

Purge Vol: 500.000 mL Dil. Factor: 1.0000

Method: MG_TO15 Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm) Detector MS SCAN

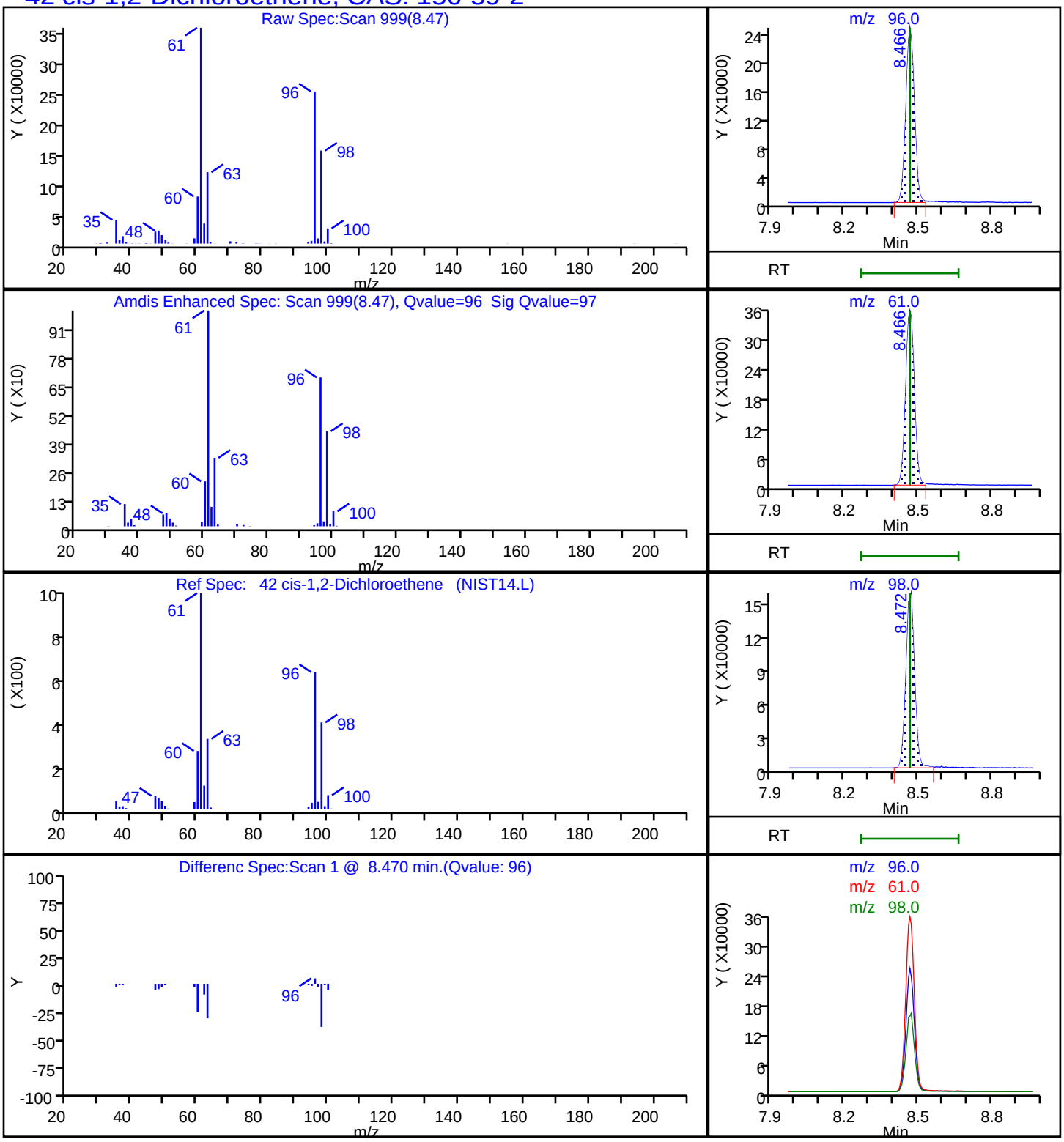
44 Chloroform, CAS: 67-66-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P103.D		
Injection Date:	30-Sep-2020 13:52:30	Instrument ID:	MG
Lims ID:	140-20507-A-3	Lab Sample ID:	140-20507-3
Client ID:	BLDG A EFFLUENT		
Operator ID:	HMT	ALS Bottle#:	3 Worklist Smp#: 7
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

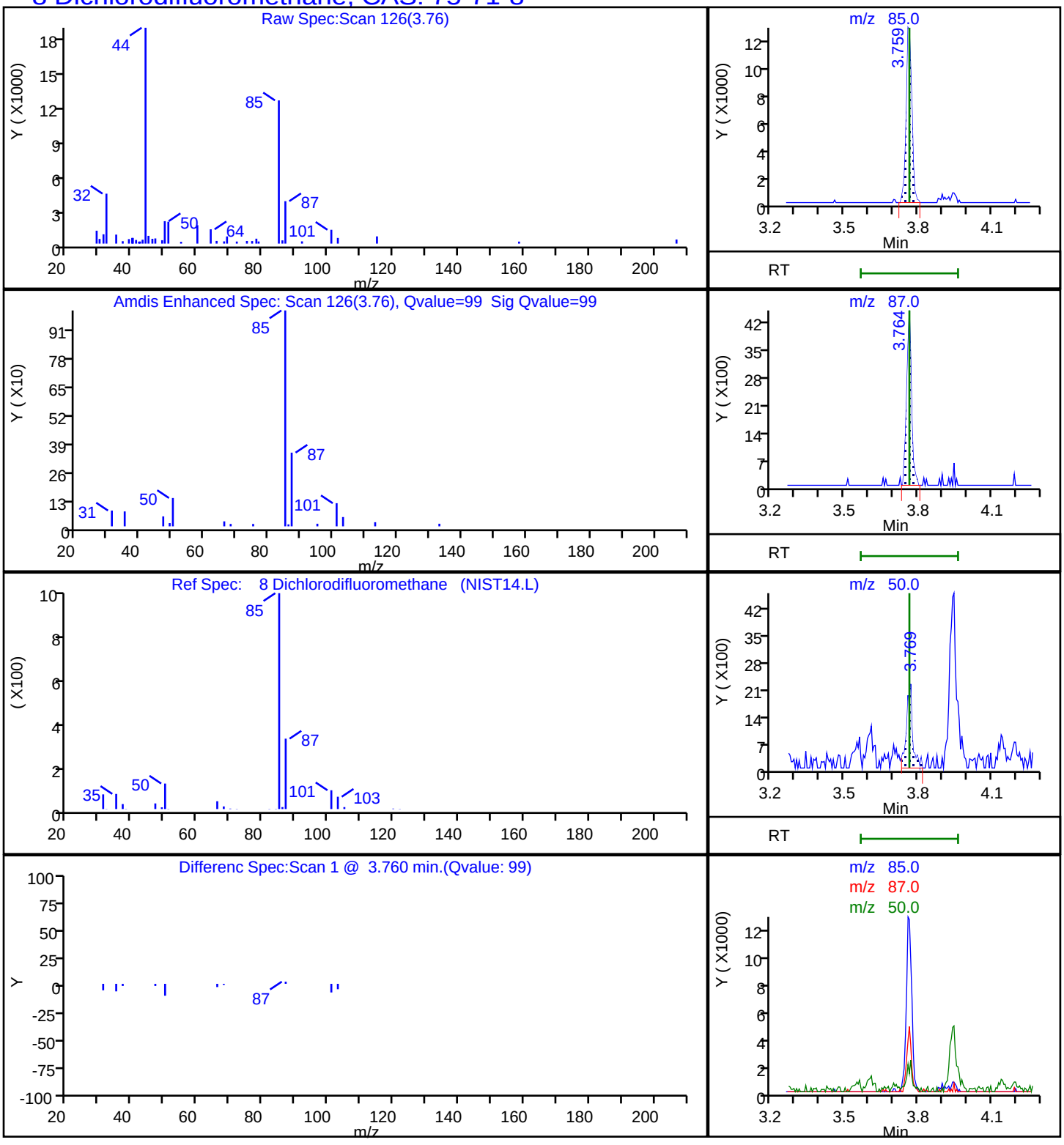
42 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P103.D		
Injection Date:	30-Sep-2020 13:52:30	Instrument ID:	MG
Lims ID:	140-20507-A-3	Lab Sample ID:	140-20507-3
Client ID:	BLDG A EFFLUENT		
Operator ID:	HMT	ALS Bottle#:	3 Worklist Smp#: 7
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

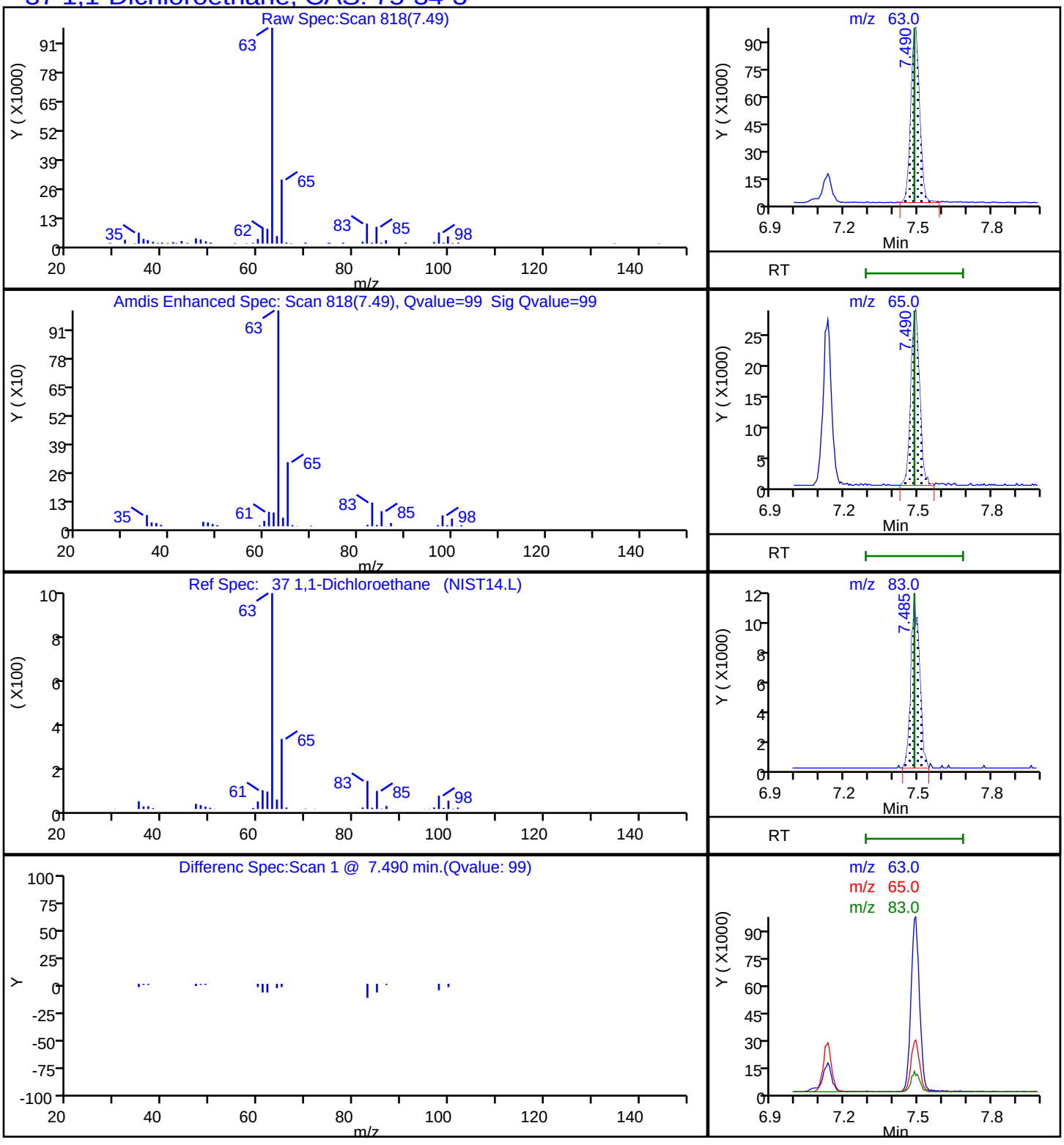
8 Dichlorodifluoromethane, CAS: 75-71-8



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P103.D		
Injection Date:	30-Sep-2020 13:52:30	Instrument ID:	MG
Lims ID:	140-20507-A-3	Lab Sample ID:	140-20507-3
Client ID:	BLDG A EFFLUENT		
Operator ID:	HMT	ALS Bottle#:	3 Worklist Smp#: 7
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

37 1,1-Dichloroethane, CAS: 75-34-3

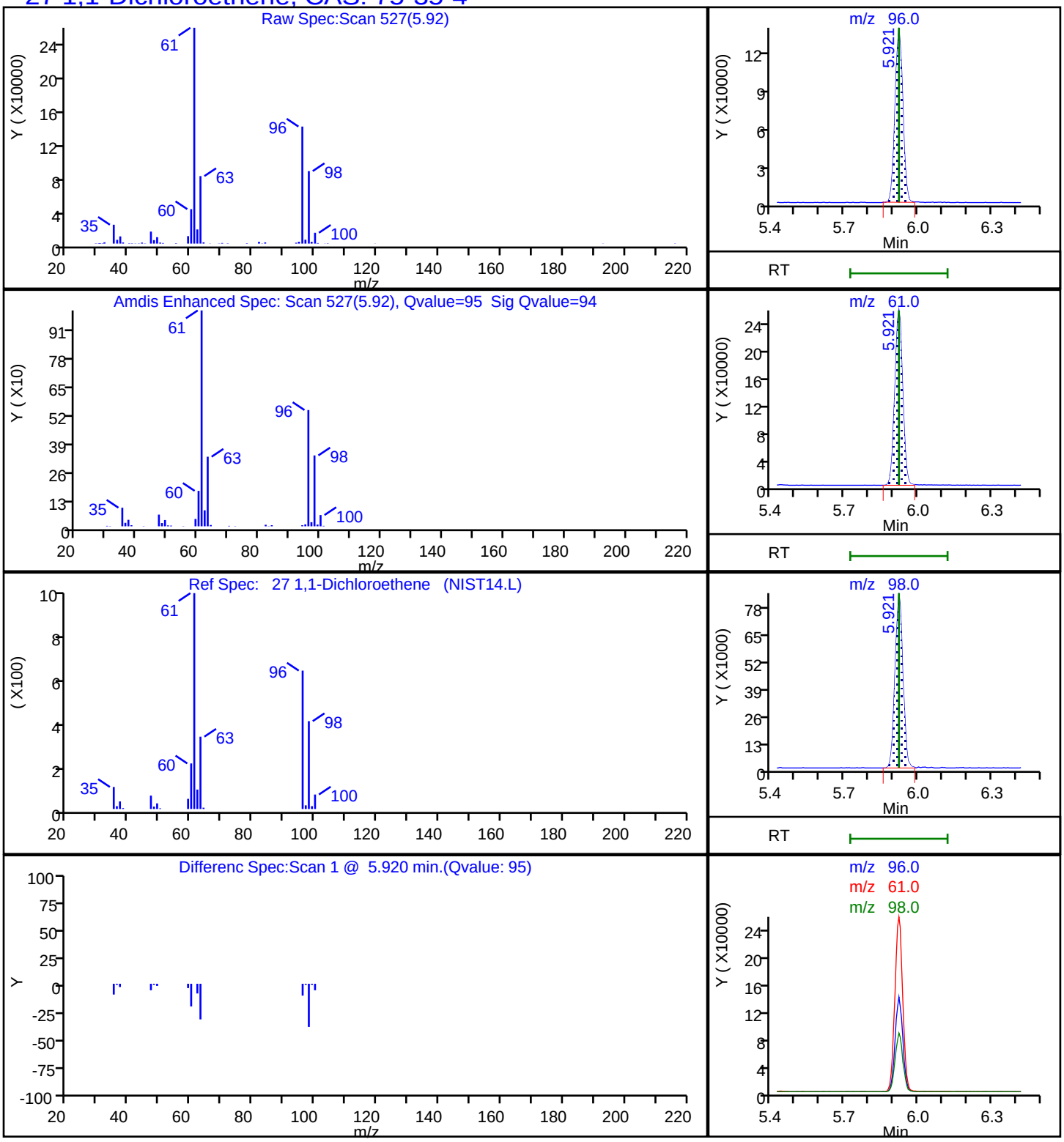


Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P103.D

Injection Date:	30-Sep-2020 13:52:30	Instrument ID:	MG
Lims ID:	140-20507-A-3	Lab Sample ID:	140-20507-3
Client ID:	BLDG A EFFLUENT		
Operator ID:	HMT	ALS Bottle#:	3 Worklist Smp#: 7
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

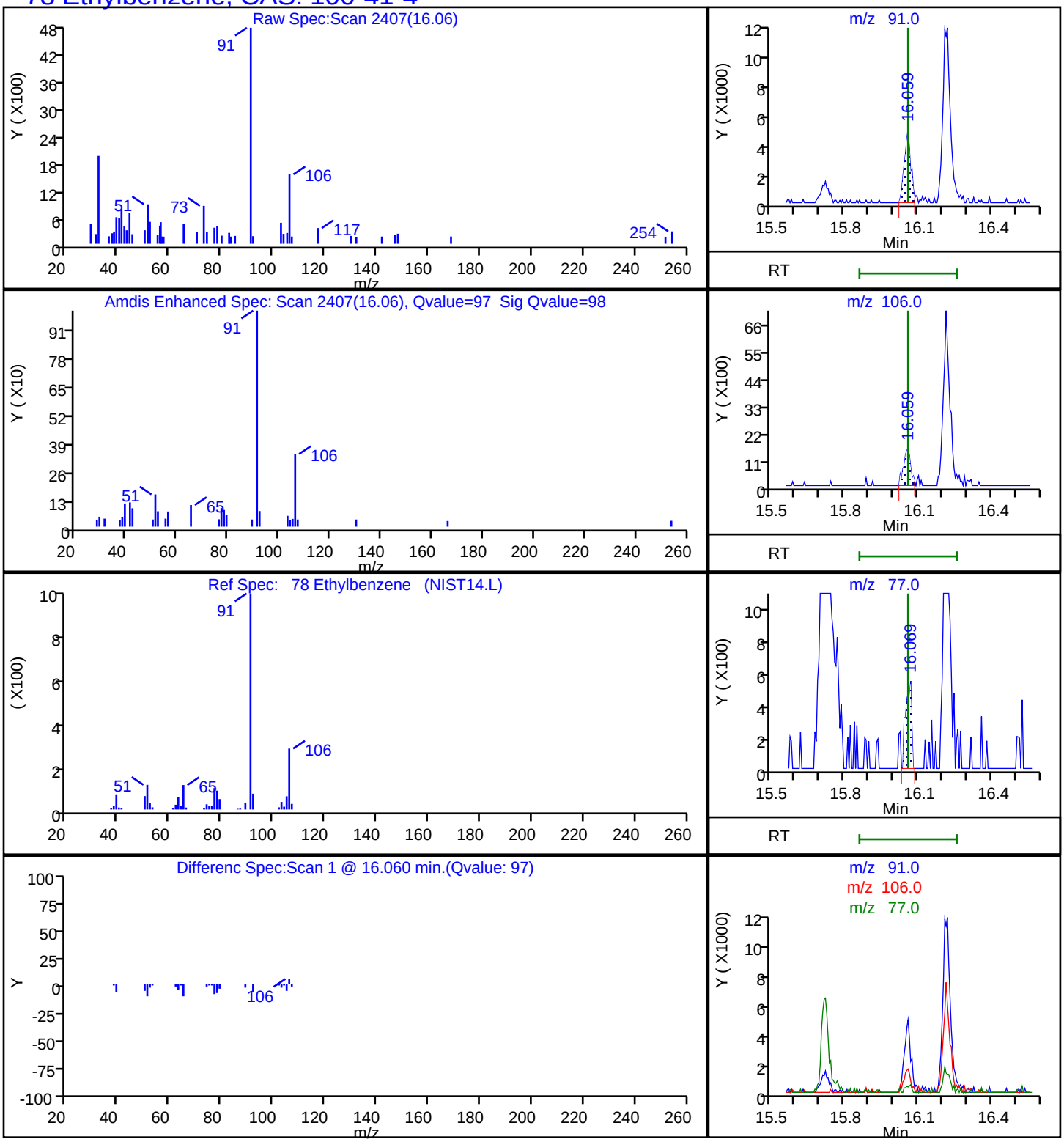
27 1,1-Dichloroethene, CAS: 75-35-4



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P103.D		
Injection Date:	30-Sep-2020 13:52:30	Instrument ID:	MG
Lims ID:	140-20507-A-3	Lab Sample ID:	140-20507-3
Client ID:	BLDG A EFFLUENT		
Operator ID:	HMT	ALS Bottle#:	3 Worklist Smp#: 7
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

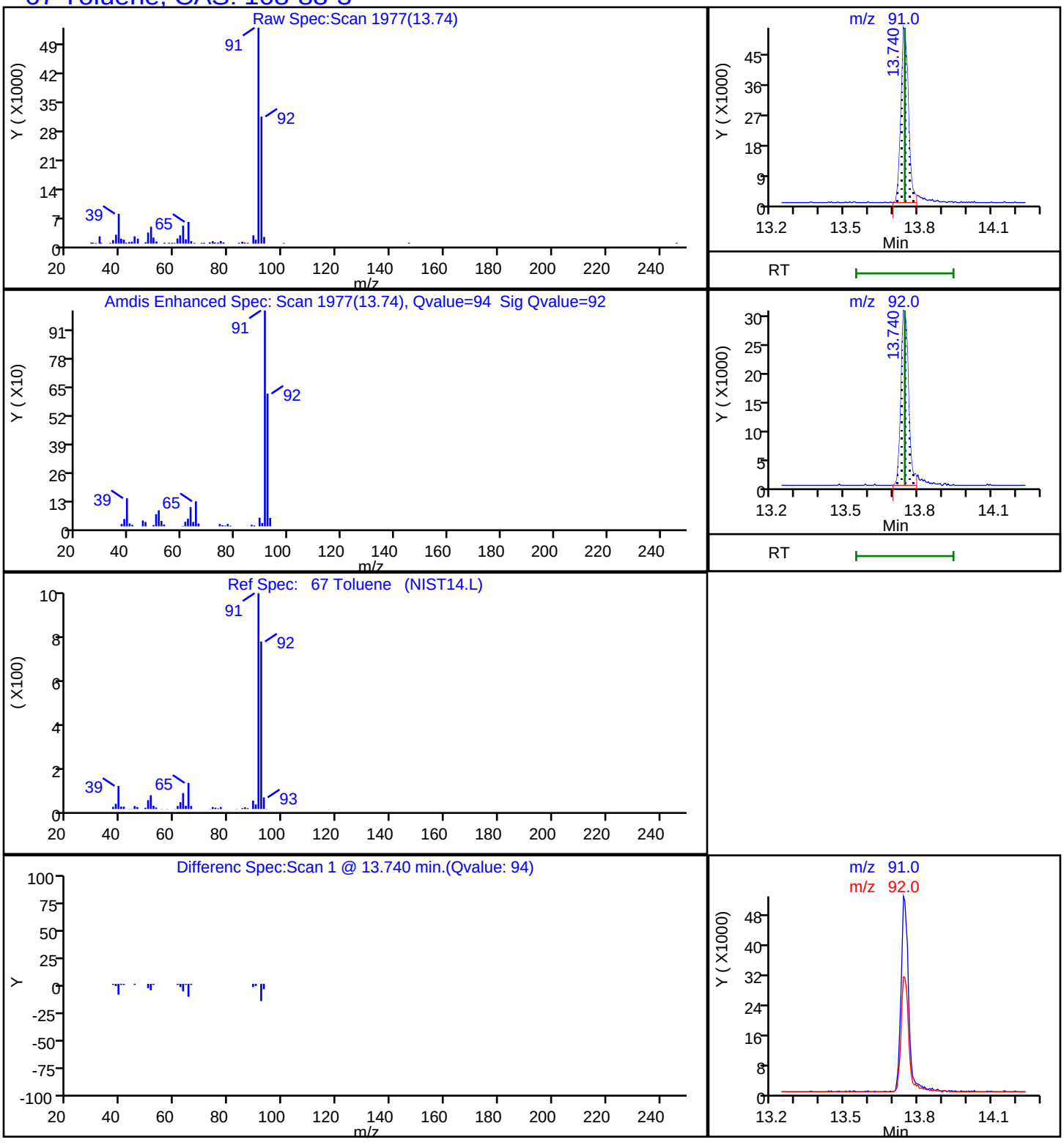
78 Ethylbenzene, CAS: 100-41-4



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P103.D		
Injection Date:	30-Sep-2020 13:52:30	Instrument ID:	MG
Lims ID:	140-20507-A-3	Lab Sample ID:	140-20507-3
Client ID:	BLDG A EFFLUENT		
Operator ID:	HMT	ALS Bottle#:	3 Worklist Smp#: 7
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

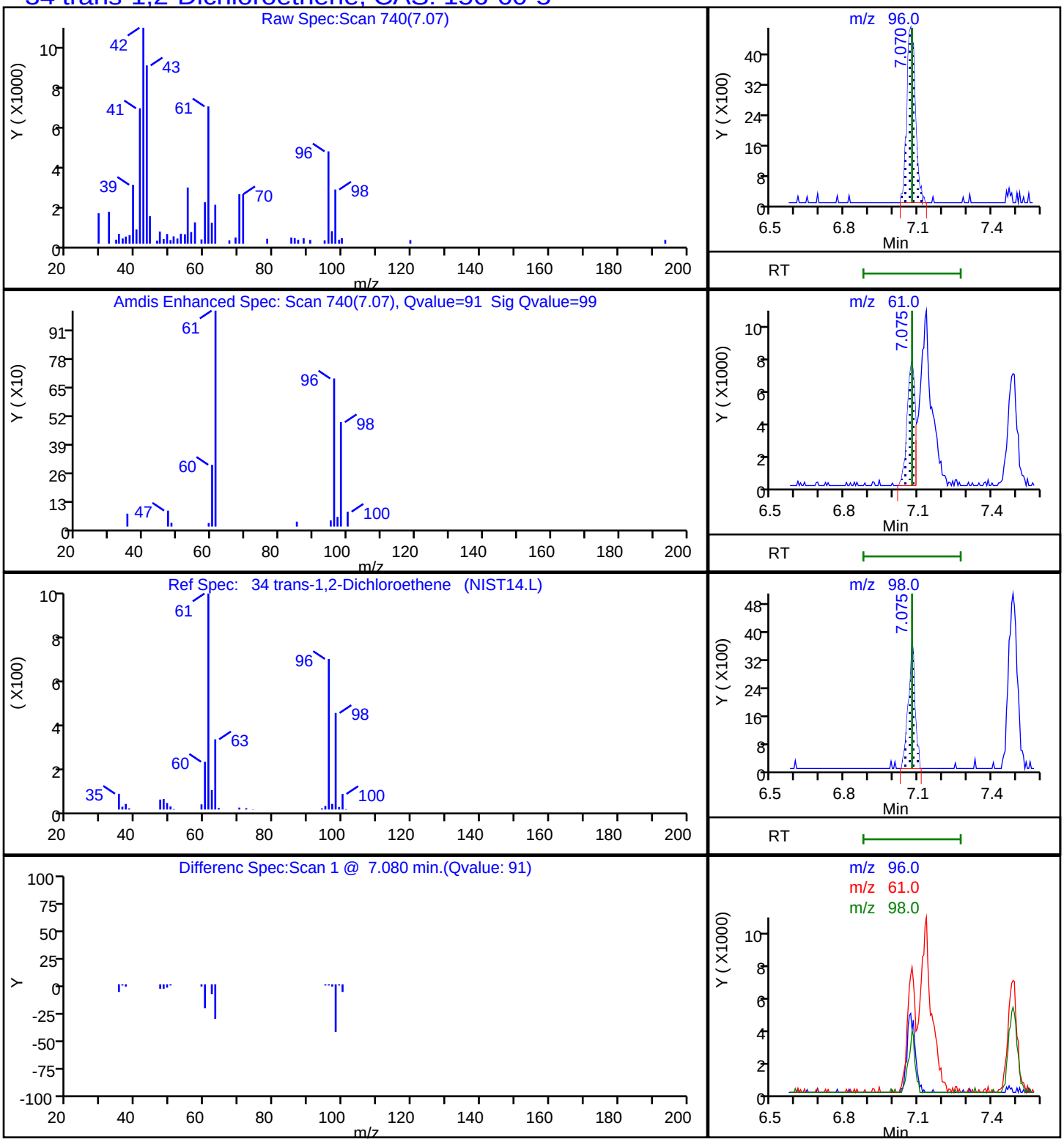
67 Toluene, CAS: 108-88-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P103.D		
Injection Date:	30-Sep-2020 13:52:30	Instrument ID:	MG
Lims ID:	140-20507-A-3	Lab Sample ID:	140-20507-3
Client ID:	BLDG A EFFLUENT		
Operator ID:	HMT	ALS Bottle#:	3 Worklist Smp#: 7
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

34 trans-1,2-Dichloroethene, CAS: 156-60-5

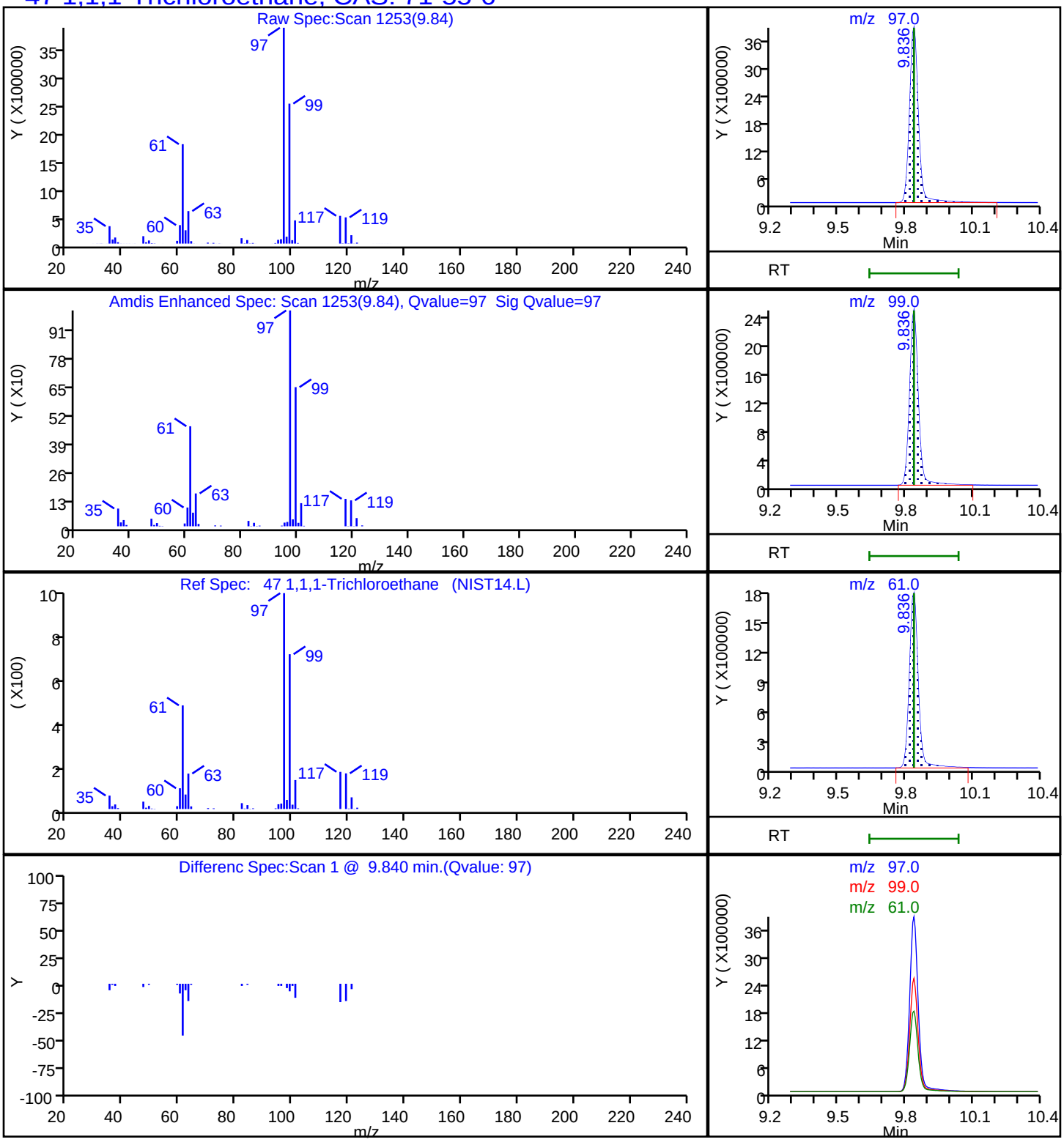


Report Date: 01-Oct-2020 15:05:02 Chrom Revision: 2.3 24-Sep-2020 19:22:38

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P103.D		
Injection Date:	30-Sep-2020 13:52:30	Instrument ID:	MG
Lims ID:	140-20507-A-3	Lab Sample ID:	140-20507-3
Client ID:	BLDG A EFFLUENT		
Operator ID:	HMT	ALS Bottle#:	3 Worklist Smp#: 7
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

47 1,1,1-Trichloroethane, CAS: 71-55-6



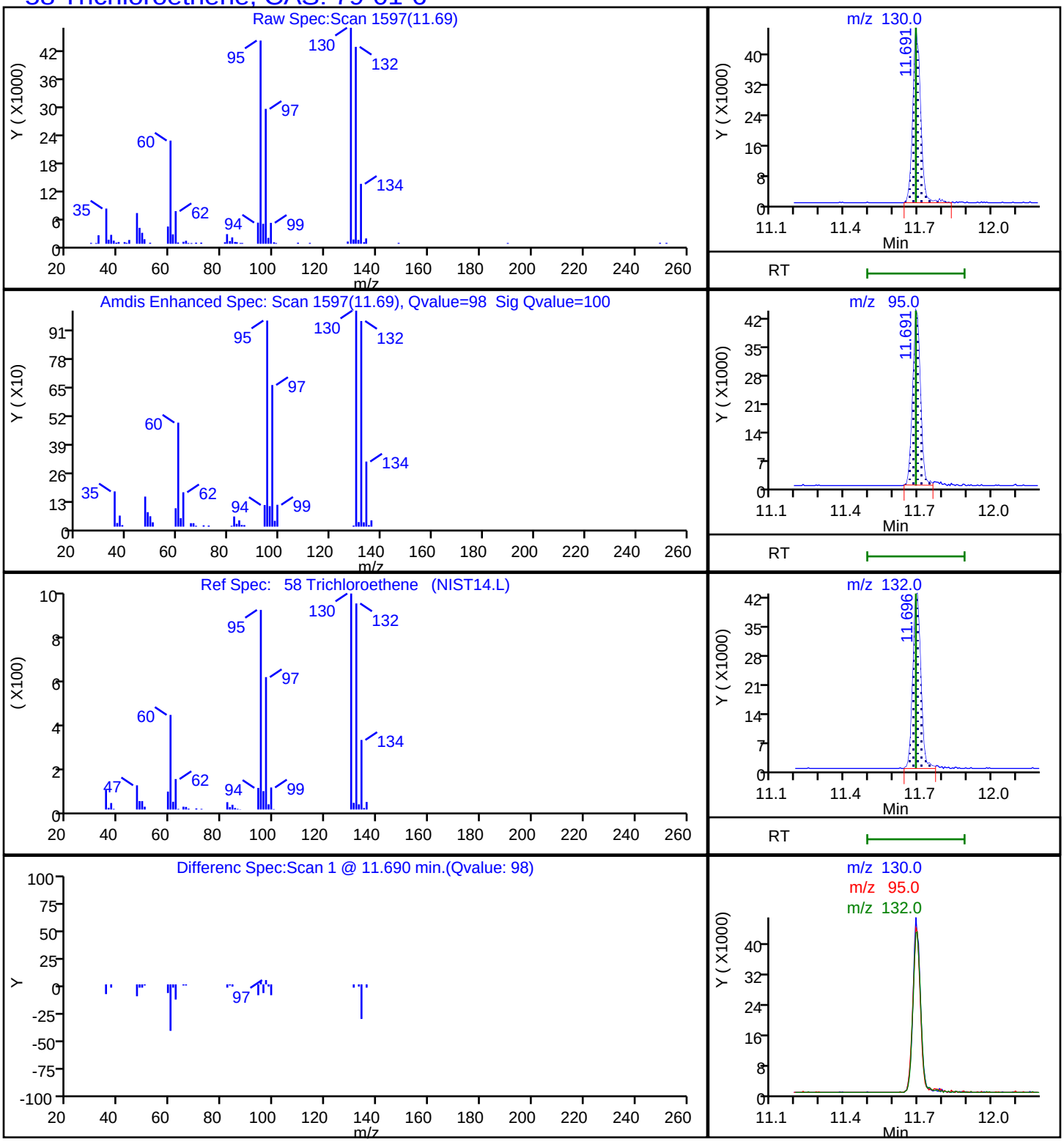
Report Date: 01-Oct-2020 15:05:02 Chrom Revision: 2.3 24-Sep-2020 19:22:38

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P103.D

Injection Date:	30-Sep-2020 13:52:30	Instrument ID:	MG
Lims ID:	140-20507-A-3	Lab Sample ID:	140-20507-3
Client ID:	BLDG A EFFLUENT		
Operator ID:	HMT	ALS Bottle#:	3 Worklist Smp#: 7
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

58 Trichloroethene, CAS: 79-01-6

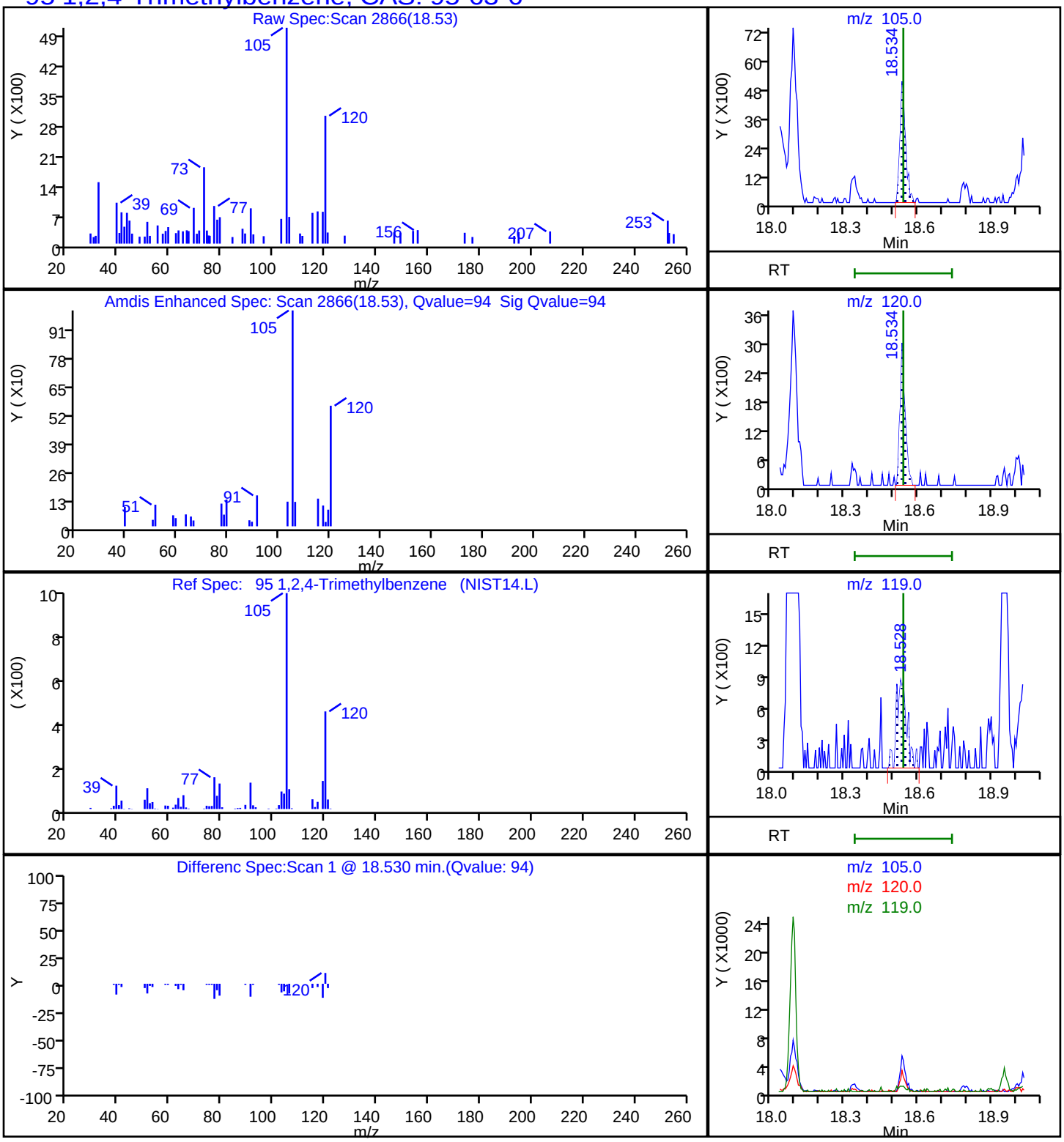


Report Date: 01-Oct-2020 15:05:03 Chrom Revision: 2.3 24-Sep-2020 19:22:38

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P103.D		
Injection Date:	30-Sep-2020 13:52:30	Instrument ID:	MG
Lims ID:	140-20507-A-3	Lab Sample ID:	140-20507-3
Client ID:	BLDG A EFFLUENT		
Operator ID:	HMT	ALS Bottle#:	3 Worklist Smp#: 7
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

95 1,2,4-Trimethylbenzene, CAS: 95-63-6

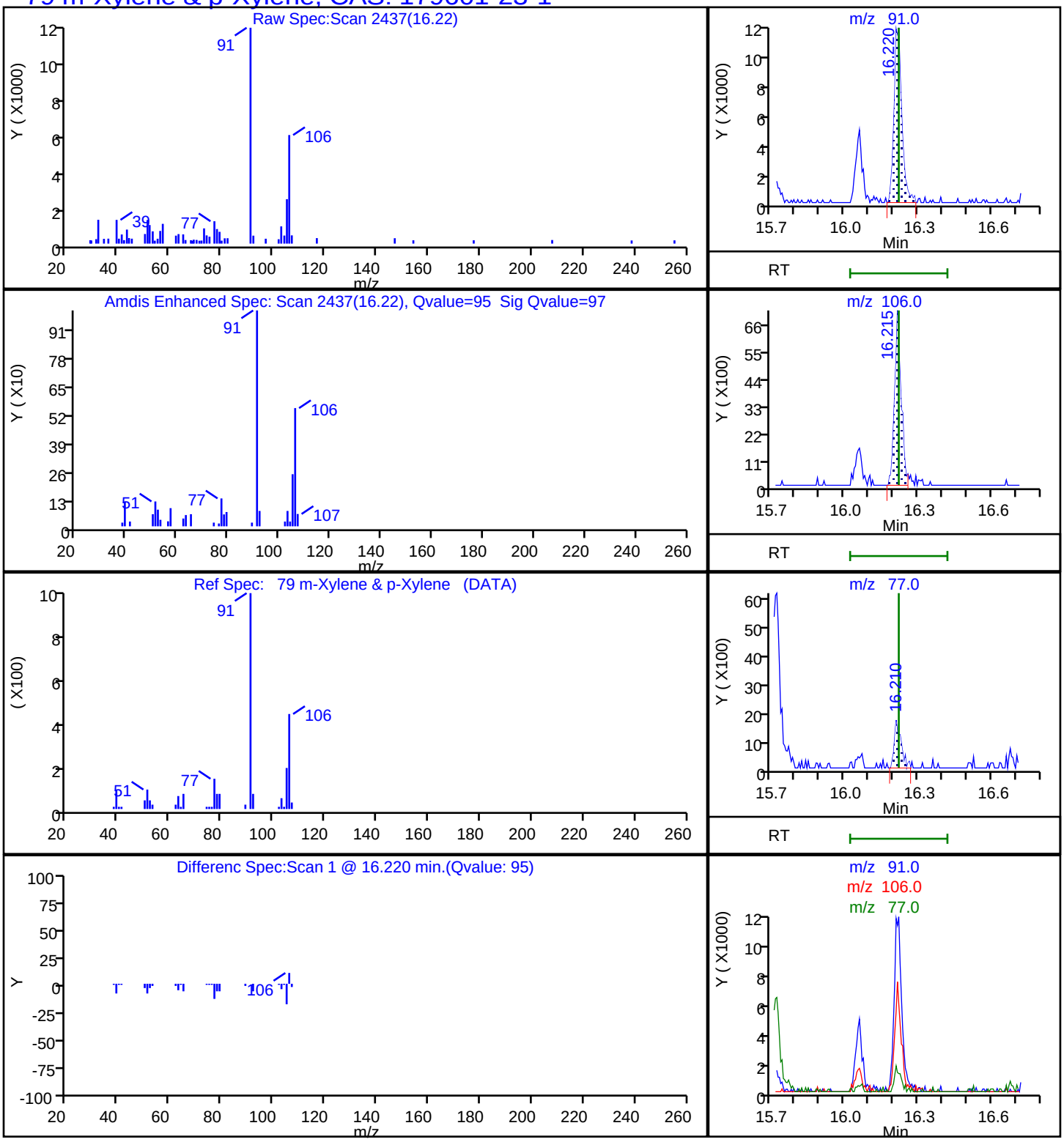


Report Date: 01-Oct-2020 15:05:02 Chrom Revision: 2.3 24-Sep-2020 19:22:38

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P103.D		
Injection Date:	30-Sep-2020 13:52:30	Instrument ID:	MG
Lims ID:	140-20507-A-3	Lab Sample ID:	140-20507-3
Client ID:	BLDG A EFFLUENT		
Operator ID:	HMT	ALS Bottle#:	3 Worklist Smp#: 7
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

79 m-Xylene & p-Xylene, CAS: 179601-23-1

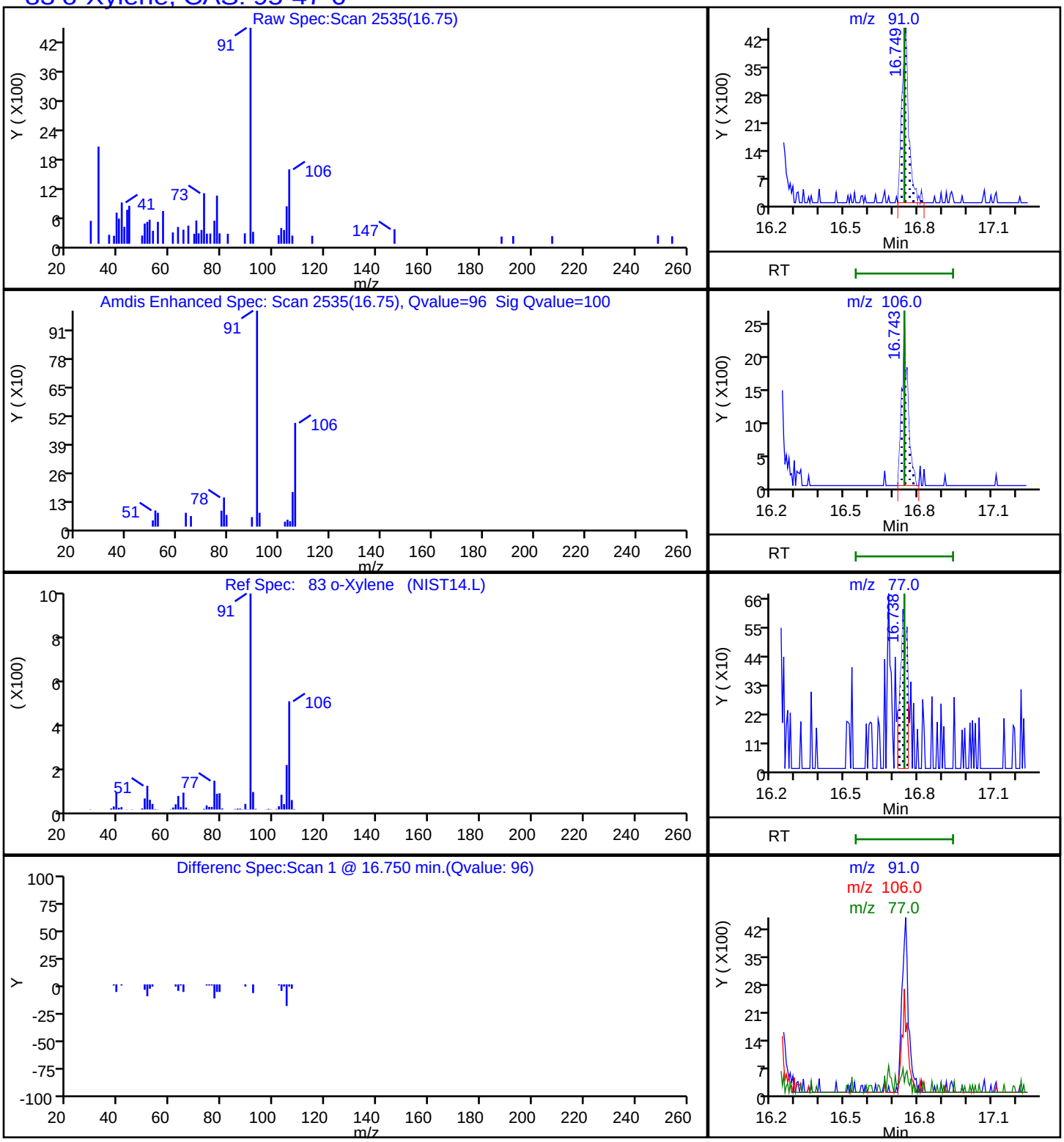


Report Date: 01-Oct-2020 15:05:02 Chrom Revision: 2.3 24-Sep-2020 19:22:38

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P103.D		
Injection Date:	30-Sep-2020 13:52:30	Instrument ID:	MG
Lims ID:	140-20507-A-3	Lab Sample ID:	140-20507-3
Client ID:	BLDG A EFFLUENT		
Operator ID:	HMT	ALS Bottle#:	3 Worklist Smp#: 7
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

83 o-Xylene, CAS: 95-47-6



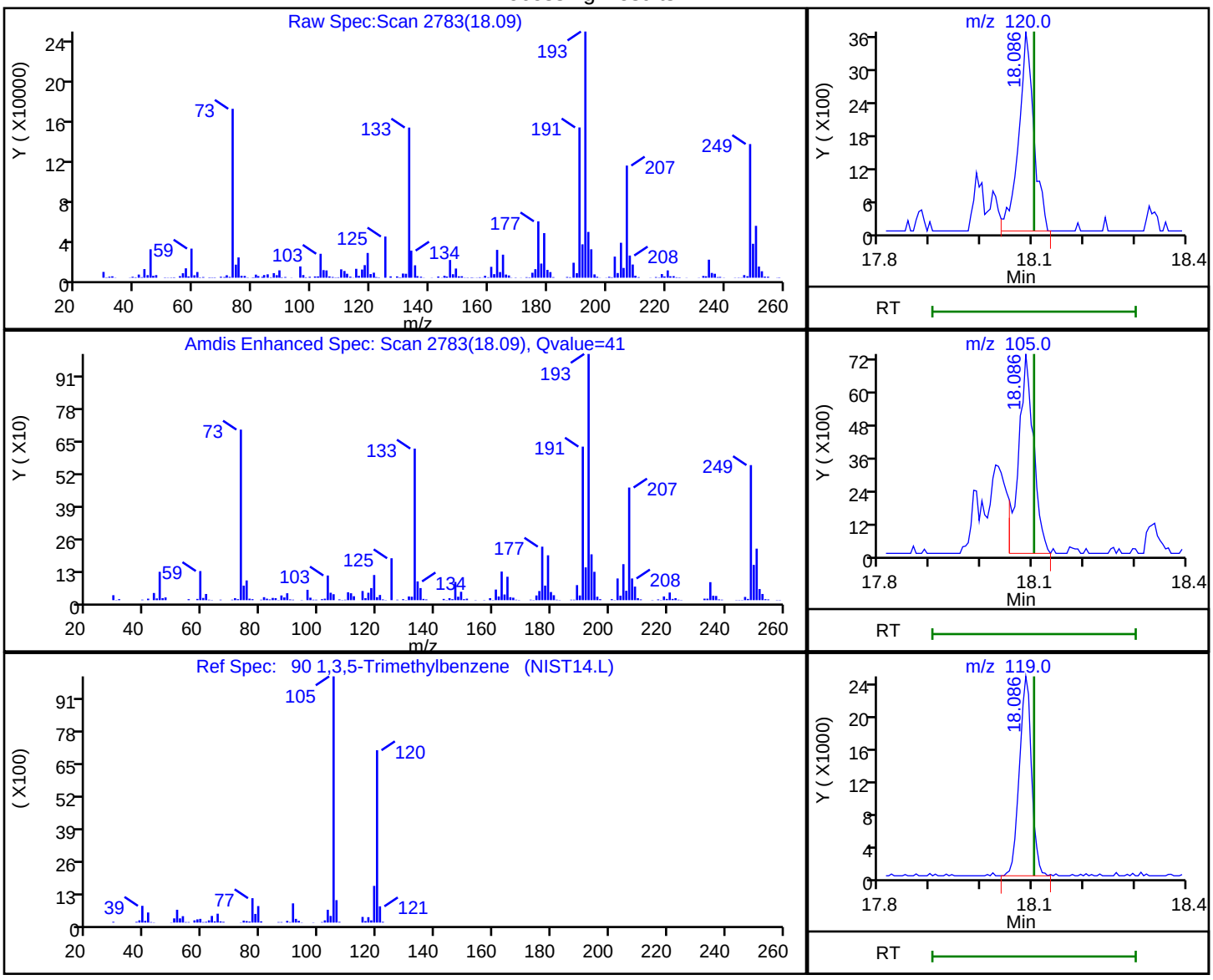
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P103.D				
Injection Date:	30-Sep-2020 13:52:30	Instrument ID:	MG		
Lims ID:	140-20507-A-3	Lab Sample ID:	140-20507-3		
Client ID:	BLDG A EFFLUENT				
Operator ID:	HMT	ALS Bottle#:	3	Worklist Smp#:	7
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

90 1,3,5-Trimethylbenzene, CAS: 108-67-8

Processing Results



RT	Mass	Response	Amount
18.09	120.00	7620	0.043176
18.09	105.00	15075	
18.09	119.00	41268	

Reviewer: khachitpongpanits, 01-Oct-2020 15:04:52

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20507-1

SDG No.:

Client Sample ID: BLDG A EFFLUENT DL Lab Sample ID: 140-20507-3 DL

Matrix: Air Lab File ID: GI30P103DL.D

Analysis Method: TO 15 LL Date Collected: 09/28/2020 11:45

Sample wt/vol: 11(mL) Date Analyzed: 10/01/2020 03:00

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 43140 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	133.41	240		3.6	1.7

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	89		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20507-1

SDG No.:

Client Sample ID: BLDG A EFFLUENT DL Lab Sample ID: 140-20507-3 DL

Matrix: Air Lab File ID: GI30P103DL.D

Analysis Method: TO 15 LL Date Collected: 09/28/2020 11:45

Sample wt/vol: 11(mL) Date Analyzed: 10/01/2020 03:00

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 43140 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	133.41	1300		20	9.2

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	89		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P103DL.D				
Lims ID:	140-20507-A-3				
Client ID:	BLDG A EFFLUENT				
Sample Type:	Client				
Inject. Date:	01-Oct-2020 03:00:30	ALS Bottle#:	3	Worklist Smp#:	27
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016761-027				
Misc. Info.:	140-20507-a-3				
Operator ID:	HMT	Instrument ID:	MG		
Method:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\MG_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	01-Oct-2020 15:33:35	Calib Date:	11-Sep-2020 06:50:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MG\20200910-16561.b\GI10IC09R.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1024				
First Level Reviewer: khachitpongpanits		Date:	01-Oct-2020 15:35:26		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.795	8.795	0.000	98	304423	4.80	
* 2 1,4-Difluorobenzene	114	10.979	10.979	0.000	95	1295226	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.713	15.719	-0.006	87	1476793	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.358	17.364	-0.006	96	982162	4.15	
27 1,1-Dichloroethene	96	5.916	5.921	-0.005	94	33695	0.4644	
34 trans-1,2-Dichloroethene	96	7.075	7.079	0.000	1	1125	0.0137	
37 1,1-Dichloroethane	63	7.485	7.485	0.000	99	21653	0.1141	
42 cis-1,2-Dichloroethene	96	8.461	8.466	-0.005	97	61175	0.6593	
44 Chloroform	83	8.800	8.817	-0.011	72	5677	0.0286	
47 1,1,1-Trichloroethane	97	9.830	9.836	-0.006	96	1030251	5.34	
58 Trichloroethene	130	11.685	11.691	-0.006	94	9802	0.1026	

QC Flag Legend

Processing Flags

Reagents:

40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

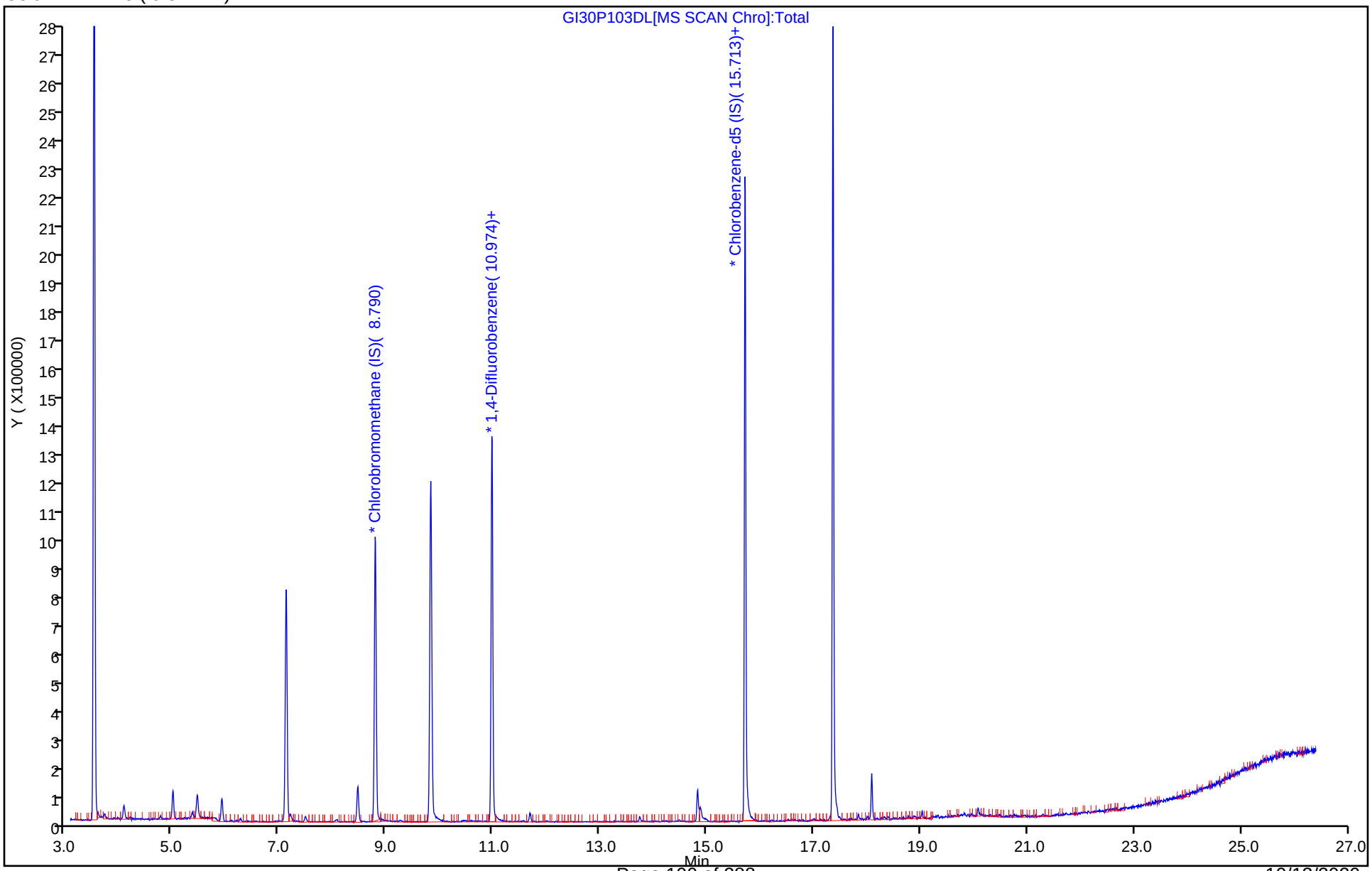
Report Date: 01-Oct-2020 15:35:26 Chrom Revision: 2.3 24-Sep-2020 19:22:38

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P103DL.D

Injection Date:	01-Oct-2020 03:00:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	140-20507-A-3	Lab Sample ID:	140-20507-3	Worklist Smp#:	27
Client ID:	BLDG A EFFLUENT				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P103DL.D				
Lims ID:	140-20507-A-3				
Client ID:	BLDG A EFFLUENT				
Sample Type:	Client				
Inject. Date:	01-Oct-2020 03:00:30	ALS Bottle#:	3	Worklist Smp#:	27
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016761-027				
Misc. Info.:	140-20507-a-3				
Operator ID:	HMT	Instrument ID:	MG		
Method:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\MG_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	01-Oct-2020 15:33:35	Calib Date:	11-Sep-2020 06:50:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MG\20200910-16561.b\GI10IC09R.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1024				

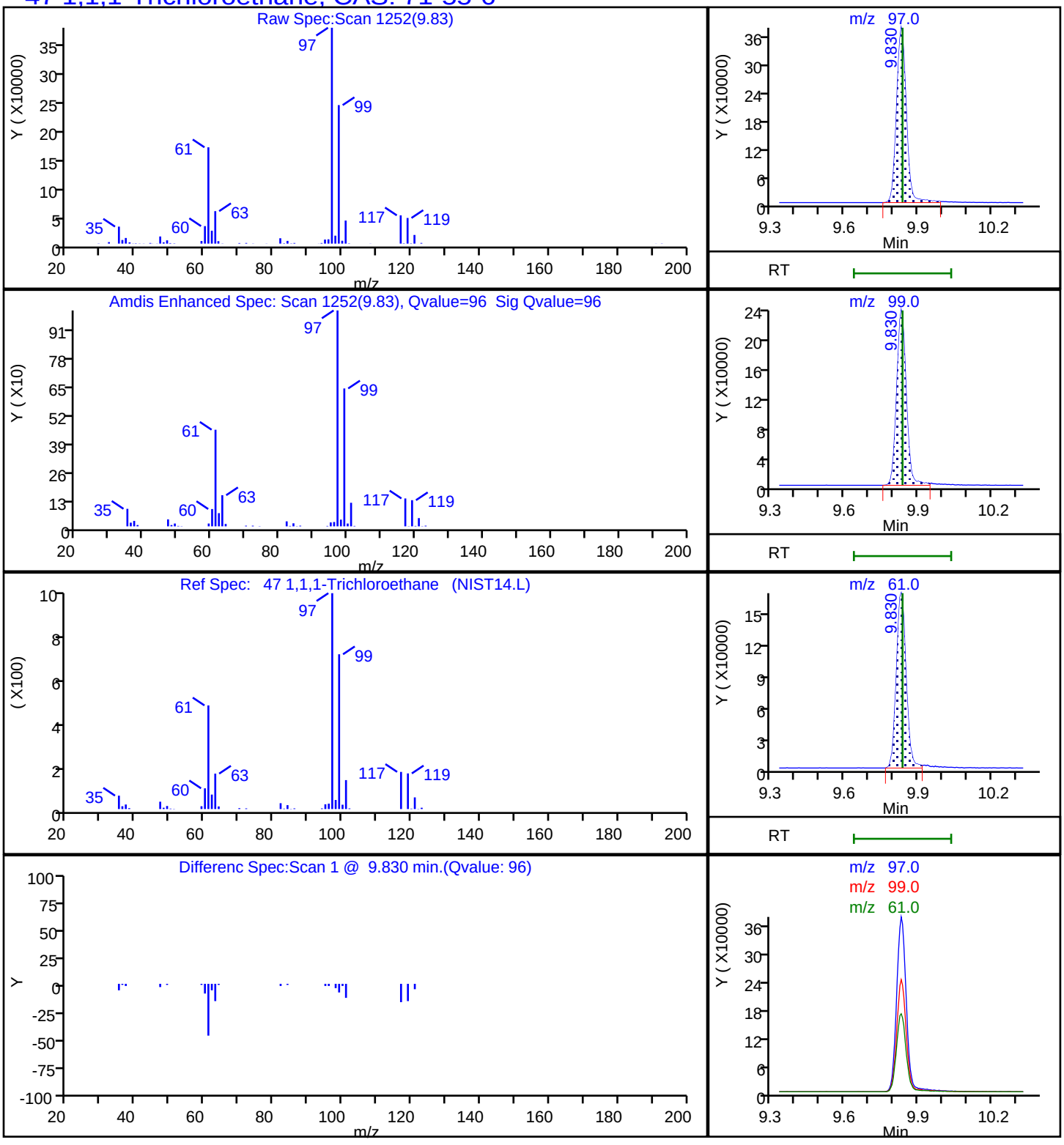
First Level Reviewer: khachitpongpanits Date: 01-Oct-2020 15:35:26

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	4.15	89.35

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P103DL.D		
Injection Date:	01-Oct-2020 03:00:30	Instrument ID:	MG
Lims ID:	140-20507-A-3	Lab Sample ID:	140-20507-3
Client ID:	BLDG A EFFLUENT		
Operator ID:	HMT	ALS Bottle#:	3 Worklist Smp#: 27
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

47 1,1,1-Trichloroethane, CAS: 71-55-6



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20507-1

SDG No.:

Client Sample ID: BLDG C INFLUENT Lab Sample ID: 140-20507-4

Matrix: Air Lab File ID: GI30P104.D

Analysis Method: TO 15 LL Date Collected: 09/28/2020 10:13

Sample wt/vol: 100(mL) Date Analyzed: 09/30/2020 14:35

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 43140 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	1.7		0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.070	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	0.61		0.40	0.11
67-66-3	Chloroform	119.38	0.096	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	0.28	J	0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.39	J	0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	0.11	J	0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	0.097	J	0.40	0.035
108-88-3	Toluene	92.14	1.8		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	0.20	J	0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	3.8		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	0.51		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	0.24	J	0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.52	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	92		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20507-1

SDG No.:

Client Sample ID: BLDG C INFLUENT Lab Sample ID: 140-20507-4

Matrix: Air Lab File ID: GI30P104.D

Analysis Method: TO 15 LL Date Collected: 09/28/2020 10:13

Sample wt/vol: 100(mL) Date Analyzed: 09/30/2020 14:35

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 43140 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	5.4		1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.44	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	2.2		1.4	0.39
67-66-3	Chloroform	119.38	0.47	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	1.1	J	1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	1.9	J	2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	0.48	J	1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	0.66	J	2.7	0.24
108-88-3	Toluene	92.14	6.7		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	0.79	J	1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	21		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	2.5		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	1.2	J	2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	2.3	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	92		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P104.D				
Lims ID:	140-20507-A-4				
Client ID:	BLDG C INFLUENT				
Sample Type:	Client				
Inject. Date:	30-Sep-2020 14:35:30	ALS Bottle#:	4	Worklist Smp#:	8
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016761-008				
Misc. Info.:	140-20507-a-4				
Operator ID:	HMT	Instrument ID:	MG		
Method:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\MG_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	01-Oct-2020 15:05:02	Calib Date:	11-Sep-2020 06:50:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MG\20200910-16561.b\GI10IC09R.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1024				
First Level Reviewer: khachitpongpanits		Date:	01-Oct-2020 15:05:30		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.795	8.795	0.000	98	271641	4.80	
* 2 1,4-Difluorobenzene	114	10.979	10.979	0.000	95	1250262	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.714	15.719	-0.005	86	1347340	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.364	17.364	0.000	96	925518	4.28	
6 Chlorodifluoromethane	51	3.699	3.699	0.000	95	24750	0.1226	
8 Dichlorodifluoromethane	85	3.764	3.764	0.000	99	20220	0.0788	
34 trans-1,2-Dichloroethene	96	7.064	7.075	-0.011	3	2913	0.0399	
42 cis-1,2-Dichloroethene	96	8.455	8.466	-0.011	94	4624	0.0558	
44 Chloroform	83	8.817	8.811	0.006	27	3400	0.0192	
50 Benzene	78	10.434	10.434	0.000	96	81344	0.3408	
52 Carbon tetrachloride	117	10.461	10.461	0.000	64	2131	0.0141	
58 Trichloroethene	130	11.691	11.691	0.000	98	70612	0.7659	
67 Toluene	91	13.740	13.745	-0.005	94	98060	0.3581	
73 Tetrachloroethene	129	14.894	14.888	0.005	90	1866	0.0194	
78 Ethylbenzene	91	16.053	16.059	-0.006	95	8079	0.0221	
79 m-Xylene & p-Xylene	91	16.215	16.220	-0.005	96	21273	0.0757	
83 o-Xylene	91	16.738	16.744	-0.006	95	8094	0.0274	
90 1,3,5-Trimethylbenzene	120	18.097	18.102	-0.005	54	8002	0.0479	
95 1,2,4-Trimethylbenzene	105	18.539	18.539	0.000	97	33882	0.1028	
S 124 Xylenes, Total	100				0		0.1031	

QC Flag Legend

Processing Flags

Reagents:

40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

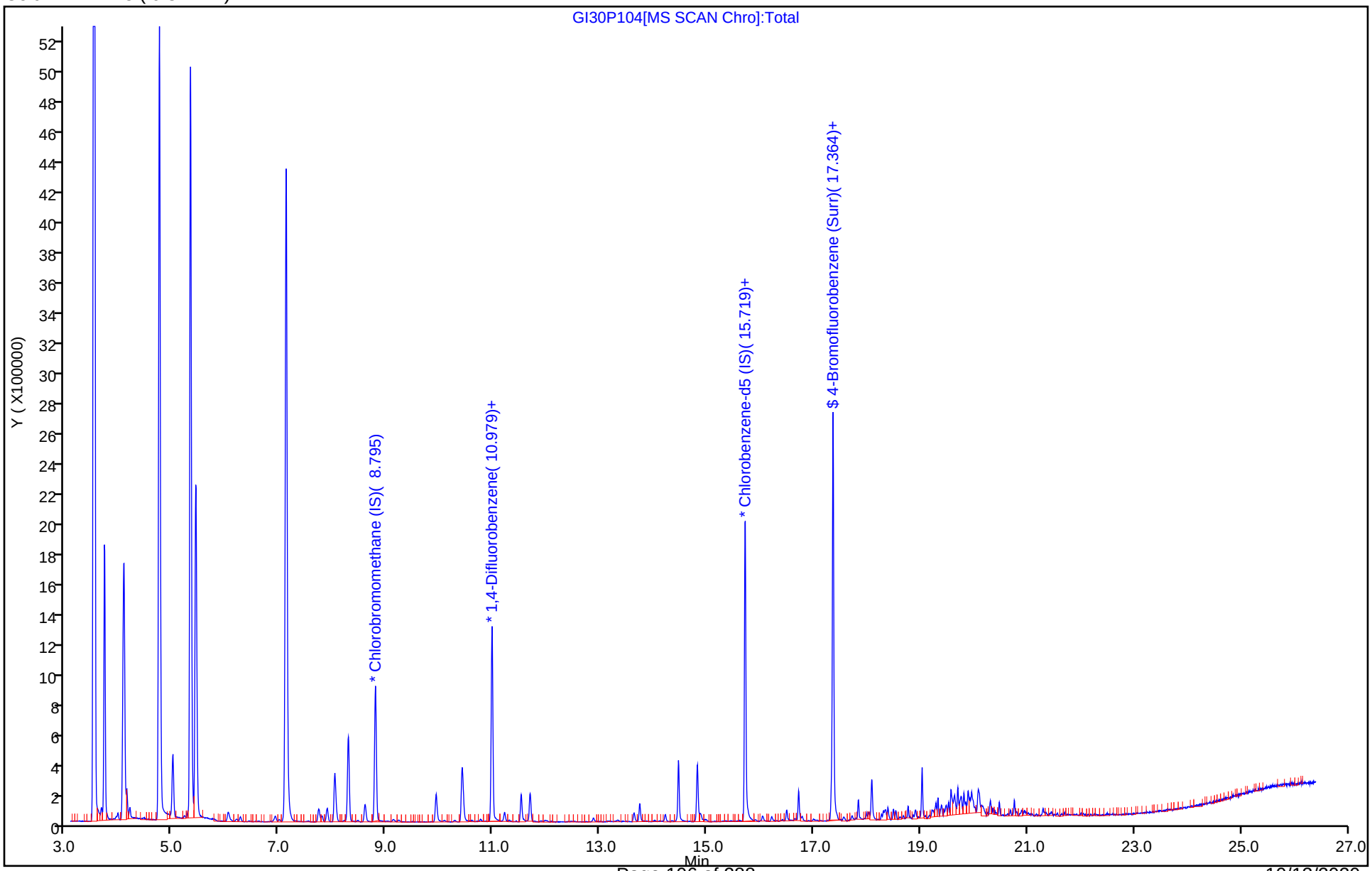
Report Date: 01-Oct-2020 15:05:30 Chrom Revision: 2.3 24-Sep-2020 19:22:38

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P104.D

Injection Date:	30-Sep-2020 14:35:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	140-20507-A-4	Lab Sample ID:	140-20507-4	Worklist Smp#:	8
Client ID:	BLDG C INFLUENT				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P104.D				
Lims ID:	140-20507-A-4				
Client ID:	BLDG C INFLUENT				
Sample Type:	Client				
Inject. Date:	30-Sep-2020 14:35:30	ALS Bottle#:	4	Worklist Smp#:	8
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016761-008				
Misc. Info.:	140-20507-a-4				
Operator ID:	HMT	Instrument ID:	MG		
Method:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\MG_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	01-Oct-2020 15:05:02	Calib Date:	11-Sep-2020 06:50:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MG\20200910-16561.b\GI10IC09R.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1024				

First Level Reviewer: khachitpongpanits Date: 01-Oct-2020 15:05:30

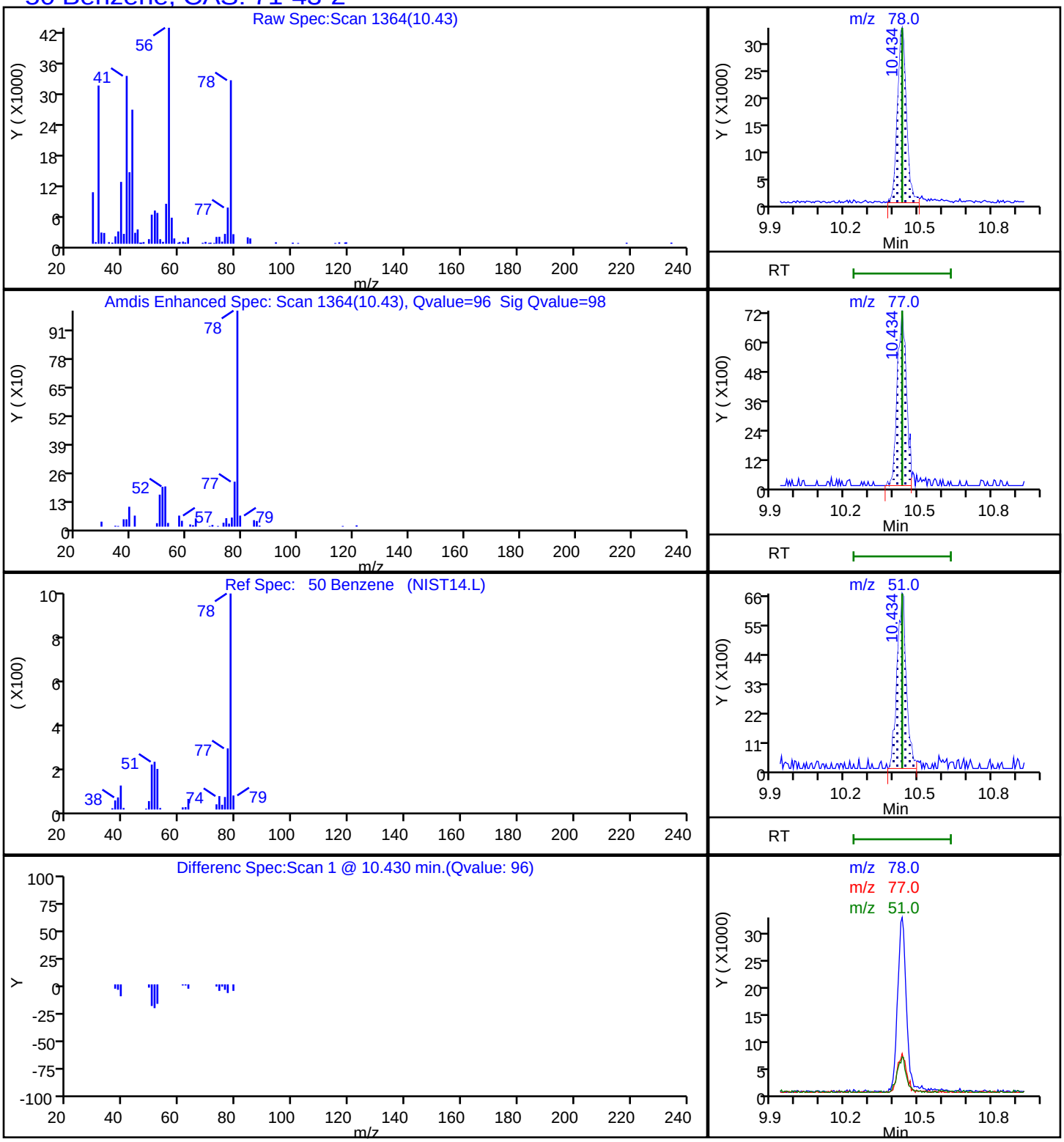
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	4.28	92.28

Report Date: 01-Oct-2020 15:05:31 Chrom Revision: 2.3 24-Sep-2020 19:22:38

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P104.D		
Injection Date:	30-Sep-2020 14:35:30	Instrument ID:	MG
Lims ID:	140-20507-A-4	Lab Sample ID:	140-20507-4
Client ID:	BLDG C INFLUENT		
Operator ID:	HMT	ALS Bottle#:	4 Worklist Smp#: 8
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

50 Benzene, CAS: 71-43-2



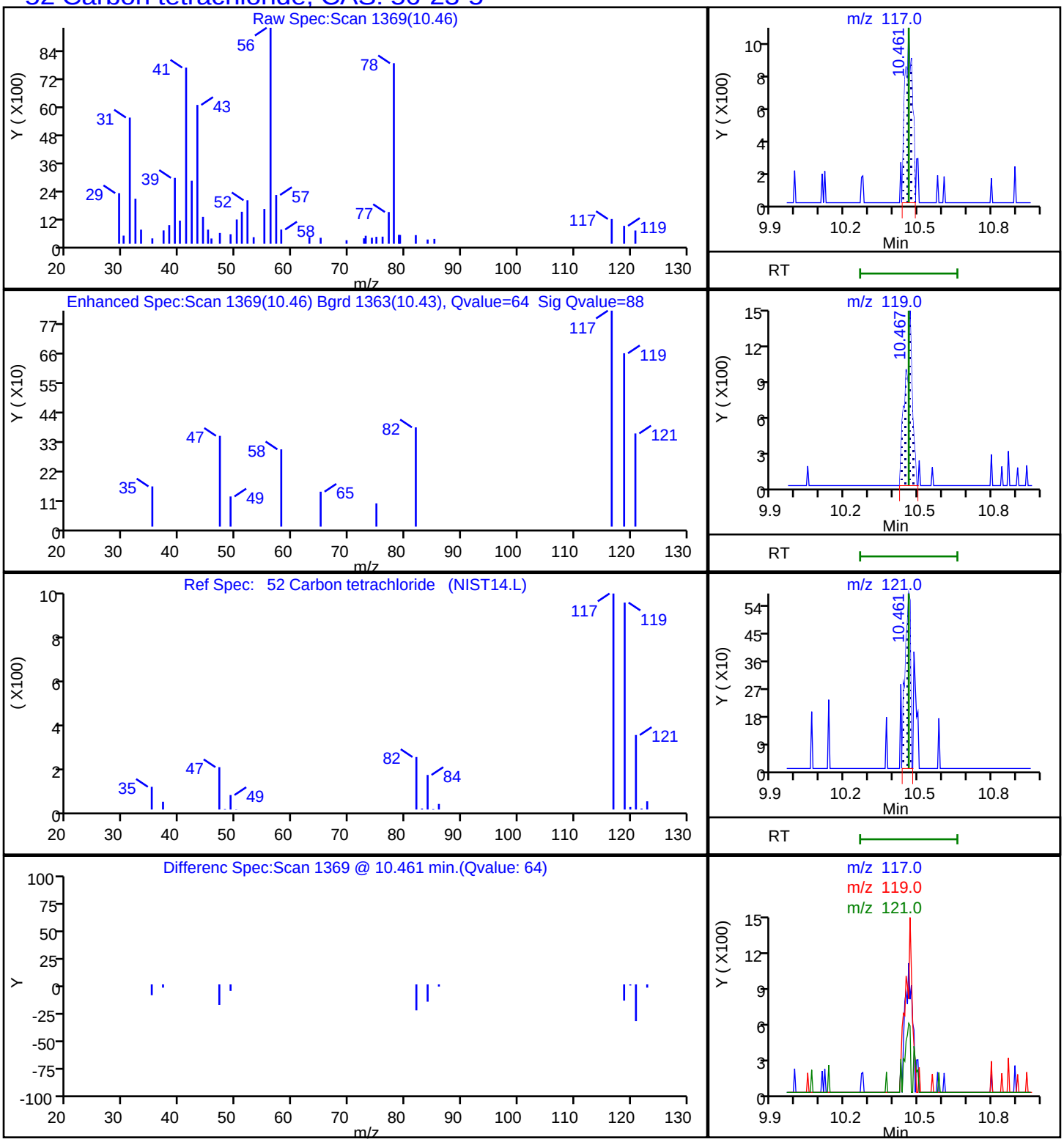
Report Date: 01-Oct-2020 15:05:31 Chrom Revision: 2.3 24-Sep-2020 19:22:38

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P104.D

Injection Date:	30-Sep-2020 14:35:30	Instrument ID:	MG		
Lims ID:	140-20507-A-4	Lab Sample ID:	140-20507-4		
Client ID:	BLDG C INFLUENT				
Operator ID:	HMT	ALS Bottle#:	4	Worklist Smp#:	8
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

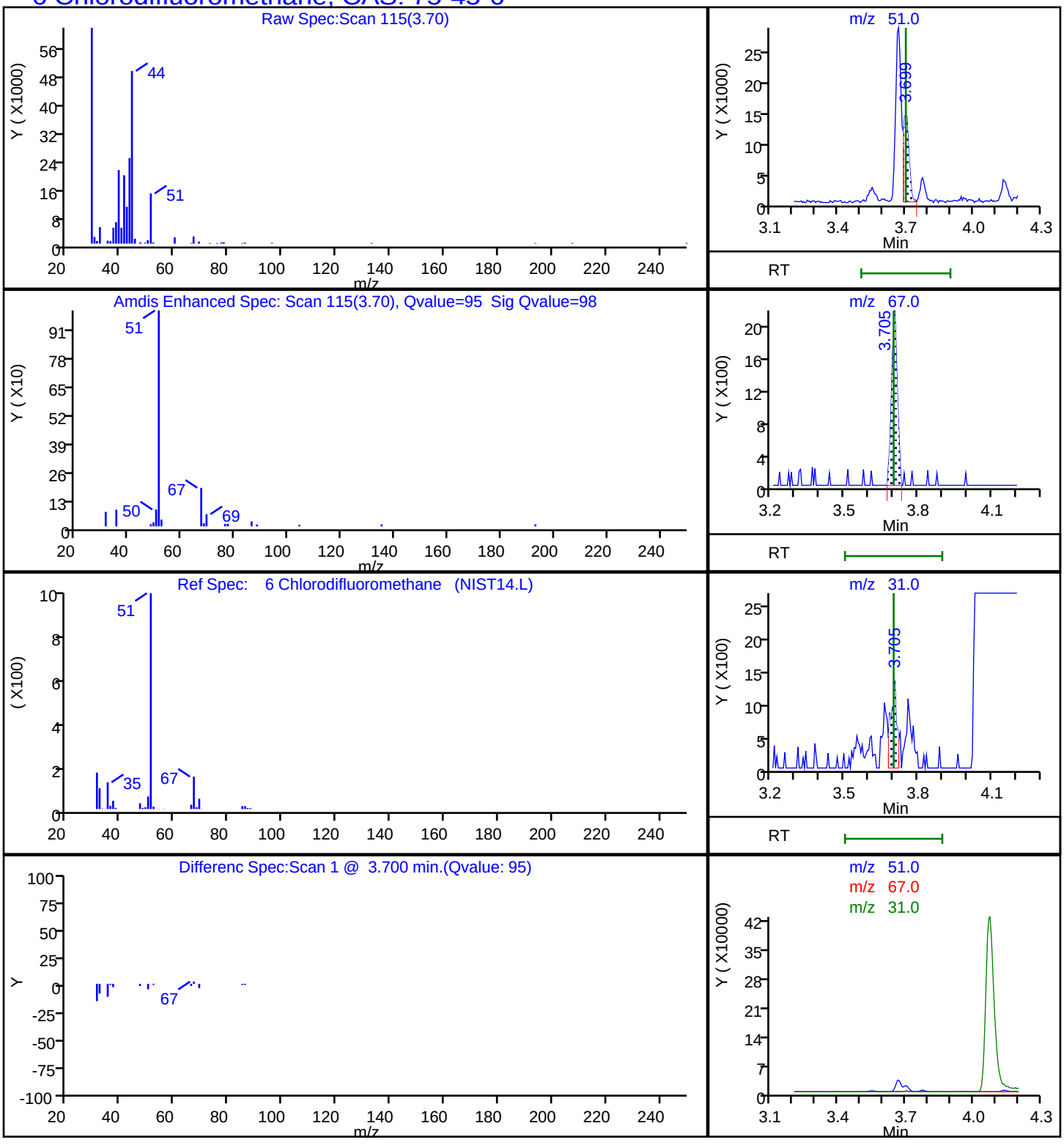
52 Carbon tetrachloride, CAS: 56-23-5



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P104.D				
Injection Date:	30-Sep-2020 14:35:30	Instrument ID:	MG		
Lims ID:	140-20507-A-4	Lab Sample ID:	140-20507-4		
Client ID:	BLDG C INFLUENT				
Operator ID:	HMT	ALS Bottle#:	4	Worklist Smp#:	8
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

6 Chlorodifluoromethane, CAS: 75-45-6



Report Date: 01-Oct-2020 15:05:31 Chrom Revision: 2.3 24-Sep-2020 19:22:38

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P104.D

Injection Date: 30-Sep-2020 14:35:30 Instrument ID: MG

Lims ID: 140-20507-A-4 Lab Sample ID: 140-20507-4

Client ID: BLDG C INFLUENT

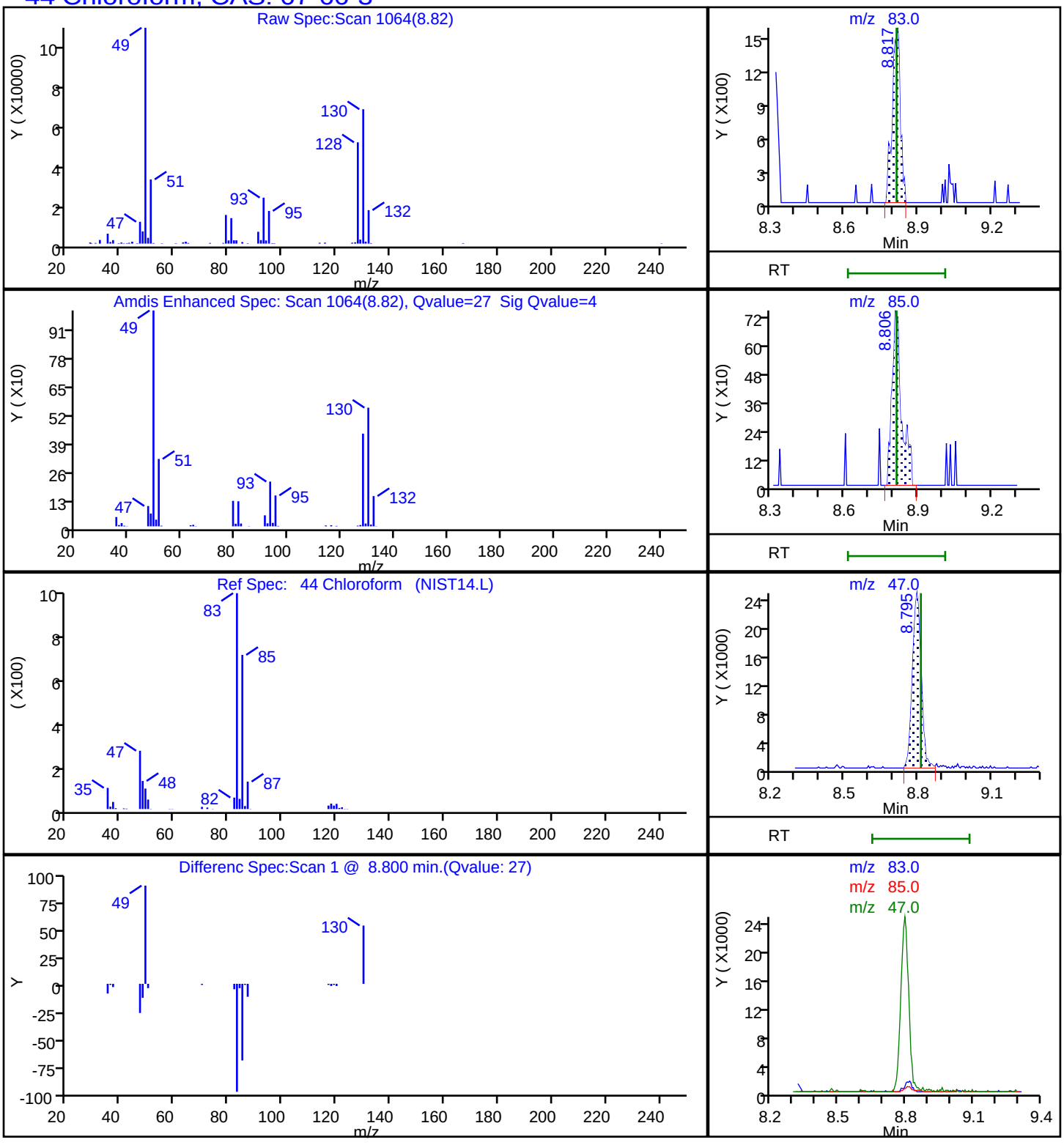
Operator ID: HMT ALS Bottle#: 4 Worklist Smp#: 8

Purge Vol: 500.000 mL Dil. Factor: 1.0000

Method: MG_TO15 Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm) Detector MS SCAN

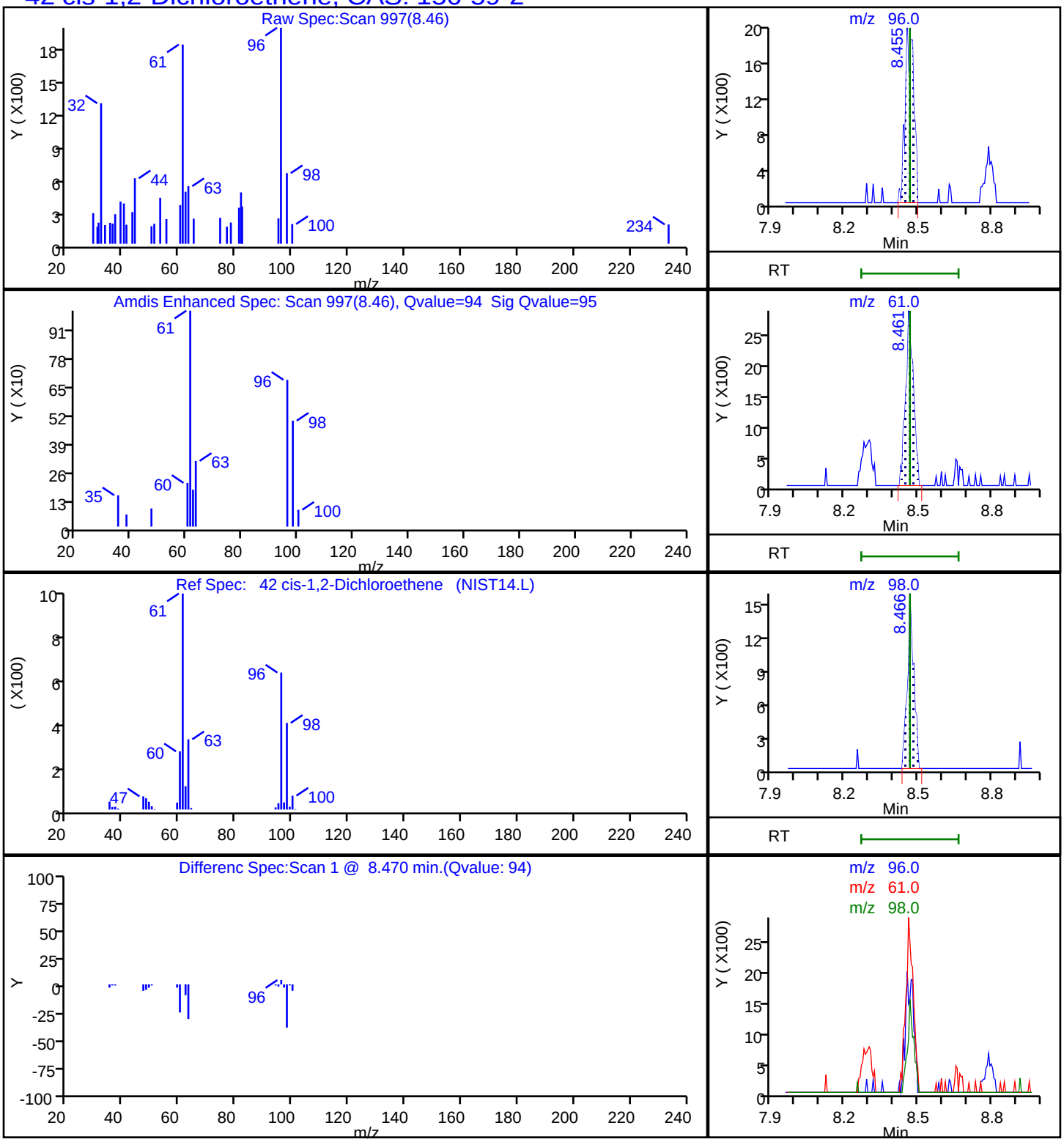
44 Chloroform, CAS: 67-66-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P104.D		
Injection Date:	30-Sep-2020 14:35:30	Instrument ID:	MG
Lims ID:	140-20507-A-4	Lab Sample ID:	140-20507-4
Client ID:	BLDG C INFLUENT		
Operator ID:	HMT	ALS Bottle#:	4 Worklist Smp#: 8
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

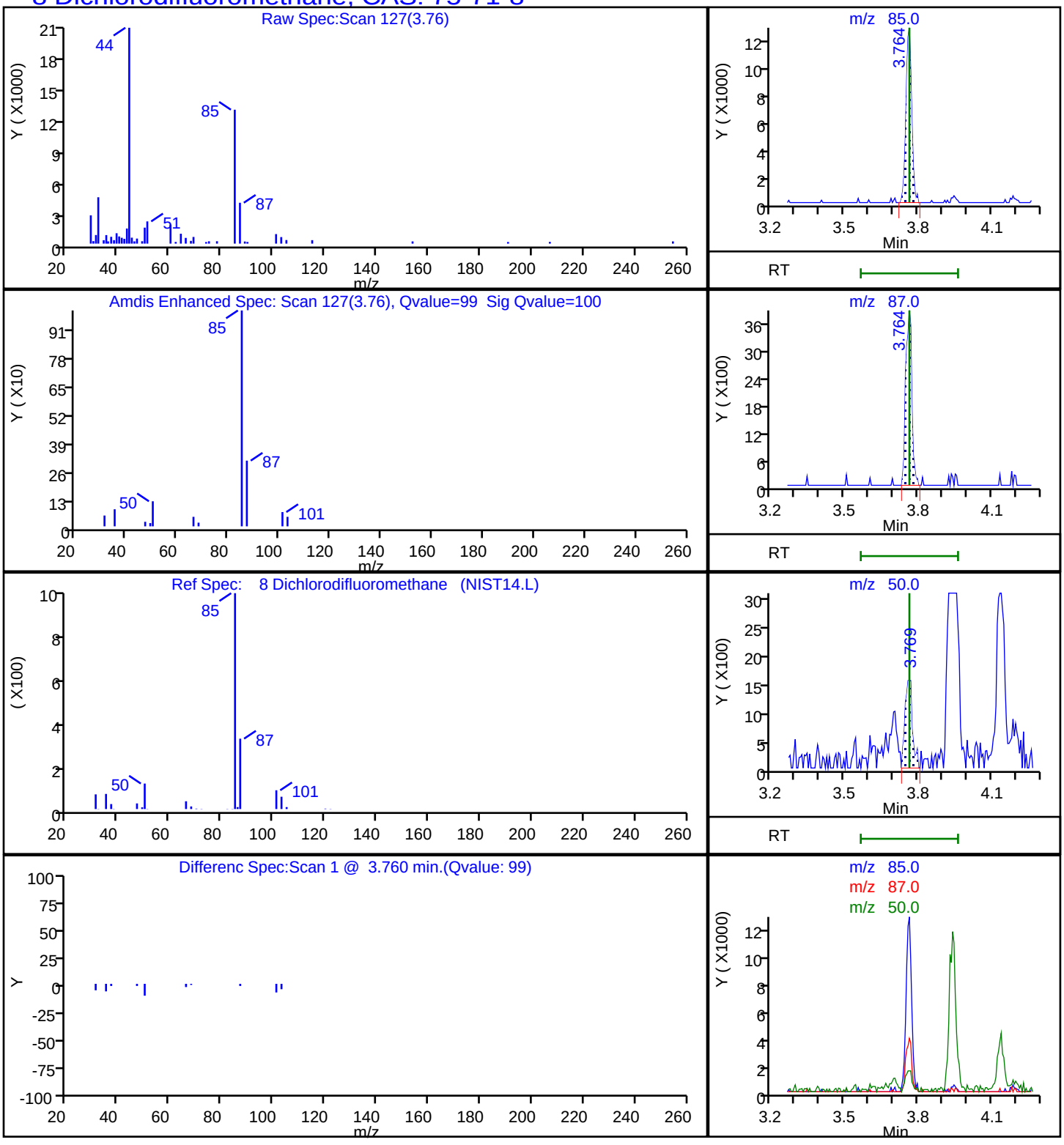
42 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P104.D		
Injection Date:	30-Sep-2020 14:35:30	Instrument ID:	MG
Lims ID:	140-20507-A-4	Lab Sample ID:	140-20507-4
Client ID:	BLDG C INFLUENT		
Operator ID:	HMT	ALS Bottle#:	4 Worklist Smp#: 8
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

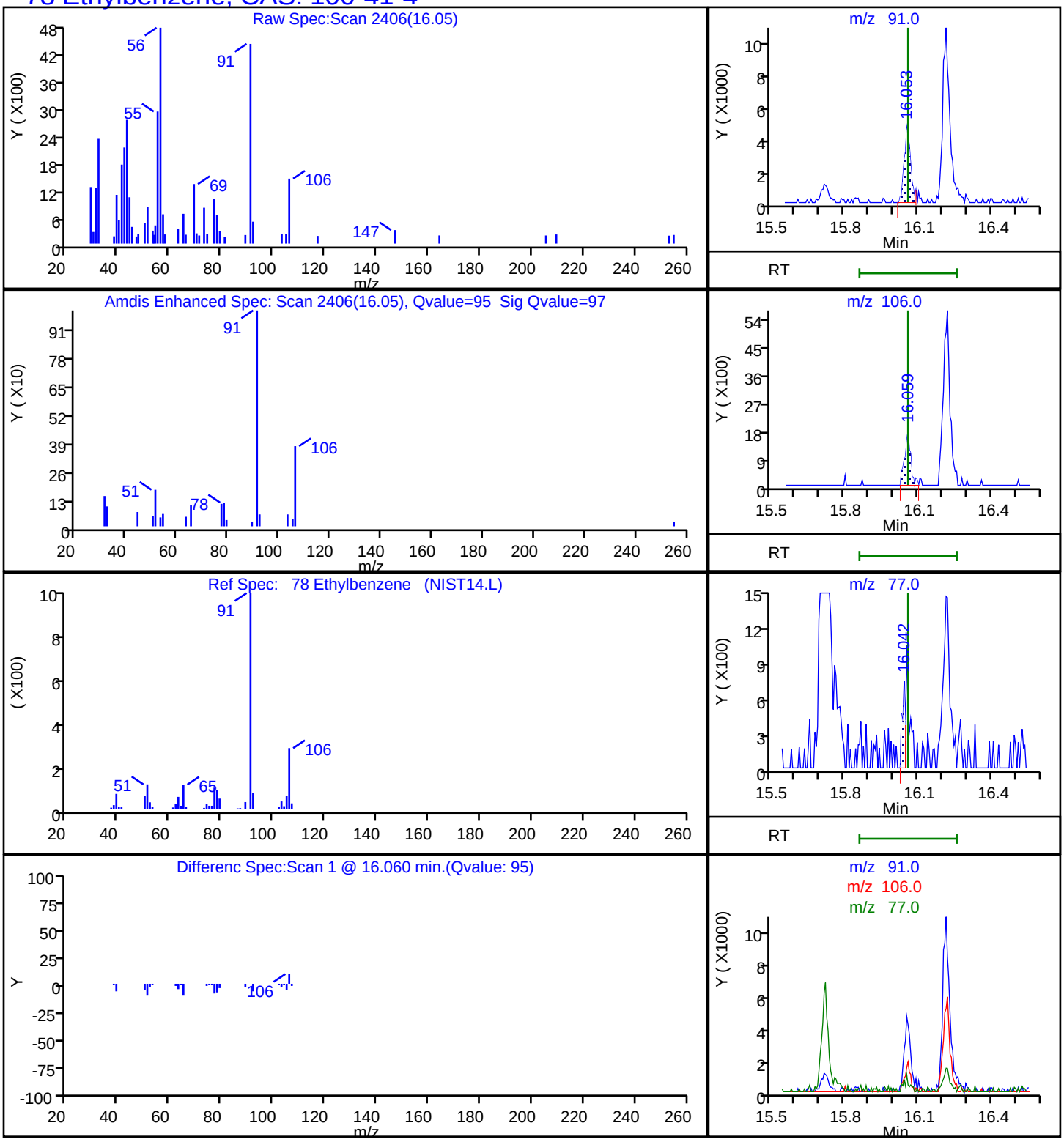
8 Dichlorodifluoromethane, CAS: 75-71-8



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P104.D		
Injection Date:	30-Sep-2020 14:35:30	Instrument ID:	MG
Lims ID:	140-20507-A-4	Lab Sample ID:	140-20507-4
Client ID:	BLDG C INFLUENT		
Operator ID:	HMT	ALS Bottle#:	4 Worklist Smp#: 8
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

78 Ethylbenzene, CAS: 100-41-4



Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P104.D

Injection Date: 30-Sep-2020 14:35:30 Instrument ID: MG

Lims ID: 140-20507-A-4 Lab Sample ID: 140-20507-4

Client ID: BLDG C INFLUENT

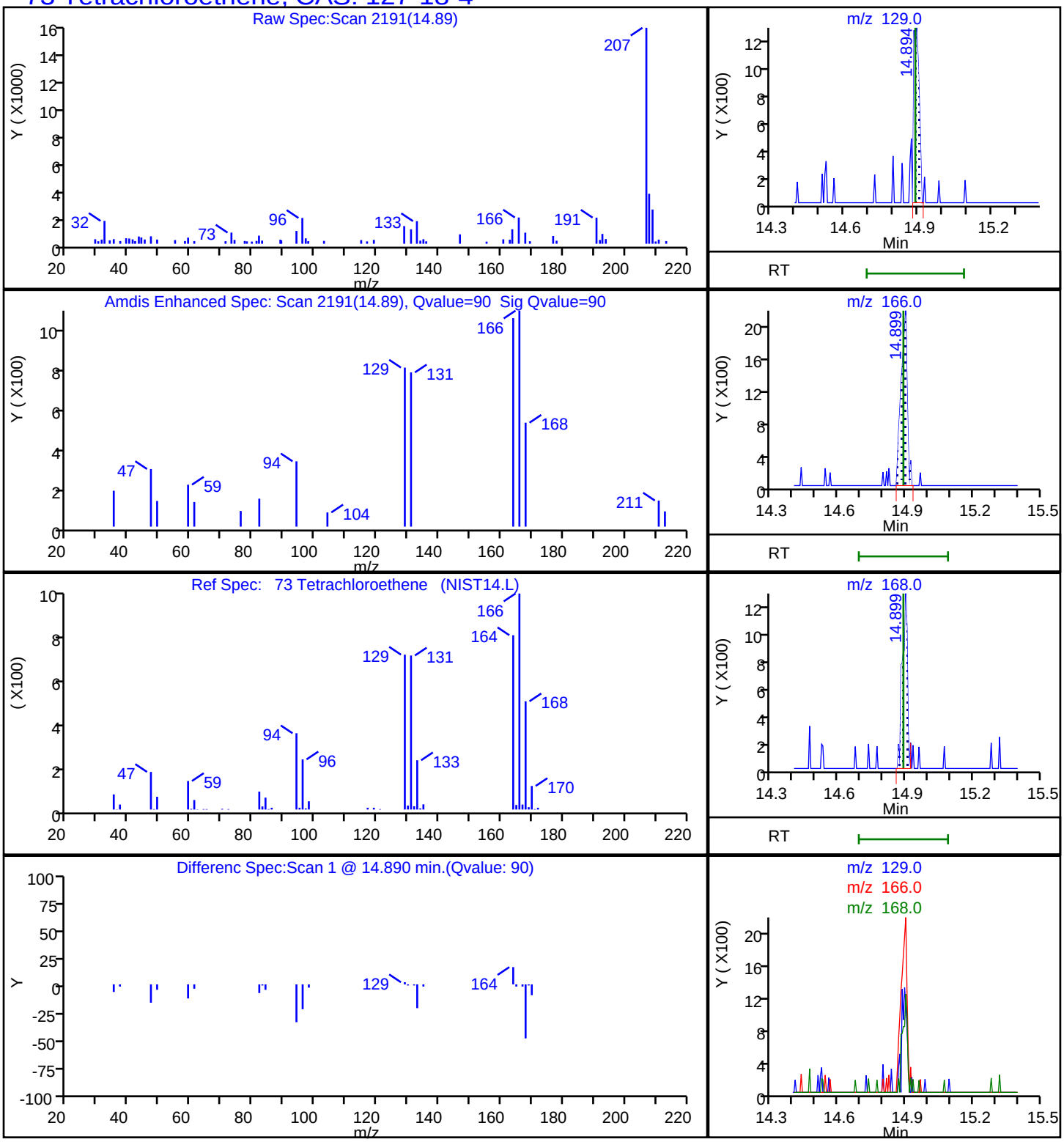
Operator ID: HMT ALS Bottle#: 4 Worklist Smp#: 8

Purge Vol: 500.000 mL Dil. Factor: 1.0000

Method: MG_TO15 Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm) Detector MS SCAN

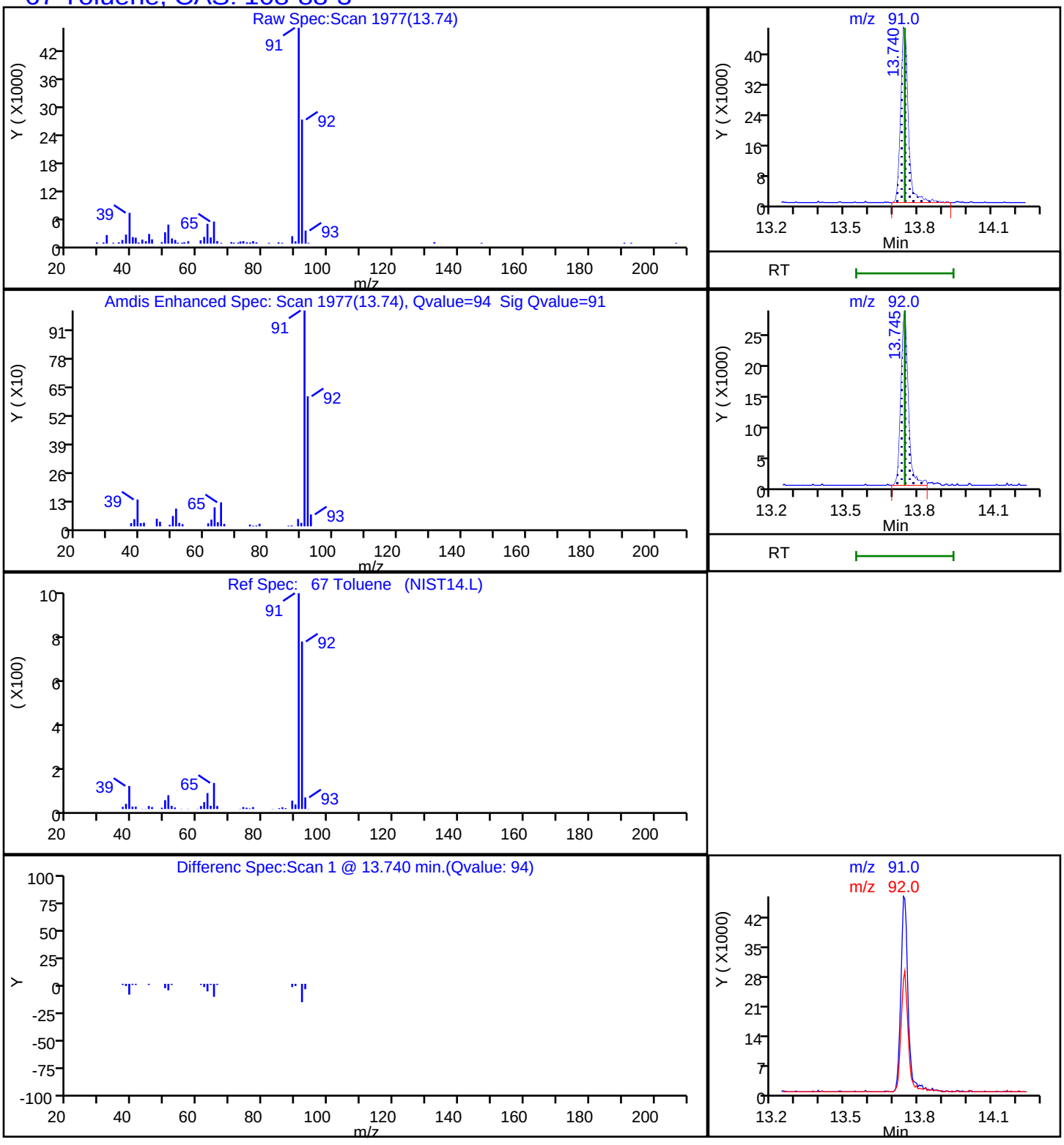
73 Tetrachloroethene, CAS: 127-18-4



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P104.D		
Injection Date:	30-Sep-2020 14:35:30	Instrument ID:	MG
Lims ID:	140-20507-A-4	Lab Sample ID:	140-20507-4
Client ID:	BLDG C INFLUENT		
Operator ID:	HMT	ALS Bottle#:	4 Worklist Smp#: 8
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

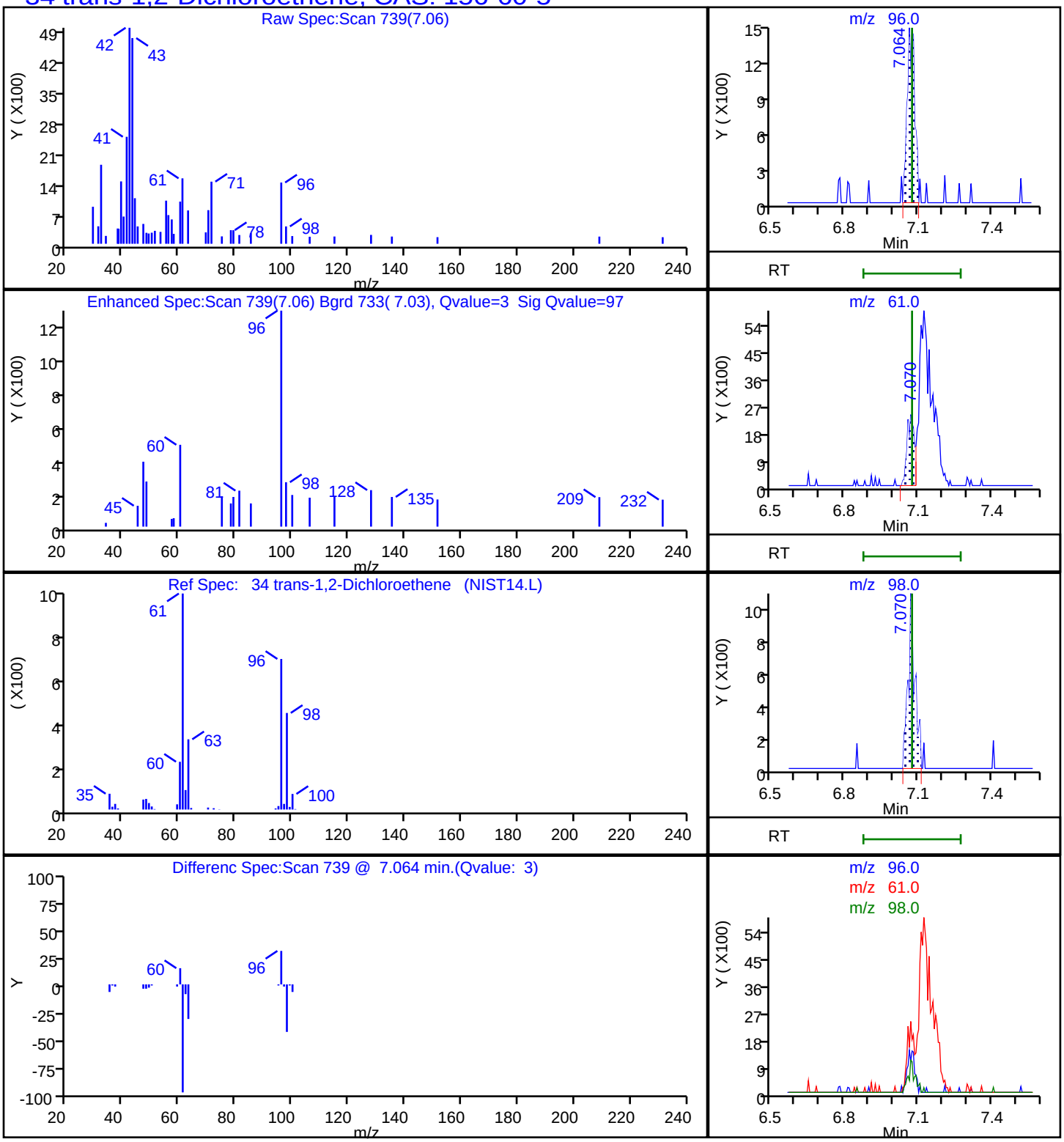
67 Toluene, CAS: 108-88-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P104.D		
Injection Date:	30-Sep-2020 14:35:30	Instrument ID:	MG
Lims ID:	140-20507-A-4	Lab Sample ID:	140-20507-4
Client ID:	BLDG C INFLUENT		
Operator ID:	HMT	ALS Bottle#:	4 Worklist Smp#: 8
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

34 trans-1,2-Dichloroethene, CAS: 156-60-5



Report Date: 01-Oct-2020 15:05:31 Chrom Revision: 2.3 24-Sep-2020 19:22:38

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P104.D

Injection Date: 30-Sep-2020 14:35:30 Instrument ID: MG

Lims ID: 140-20507-A-4 Lab Sample ID: 140-20507-4

Client ID: BLDG C INFLUENT

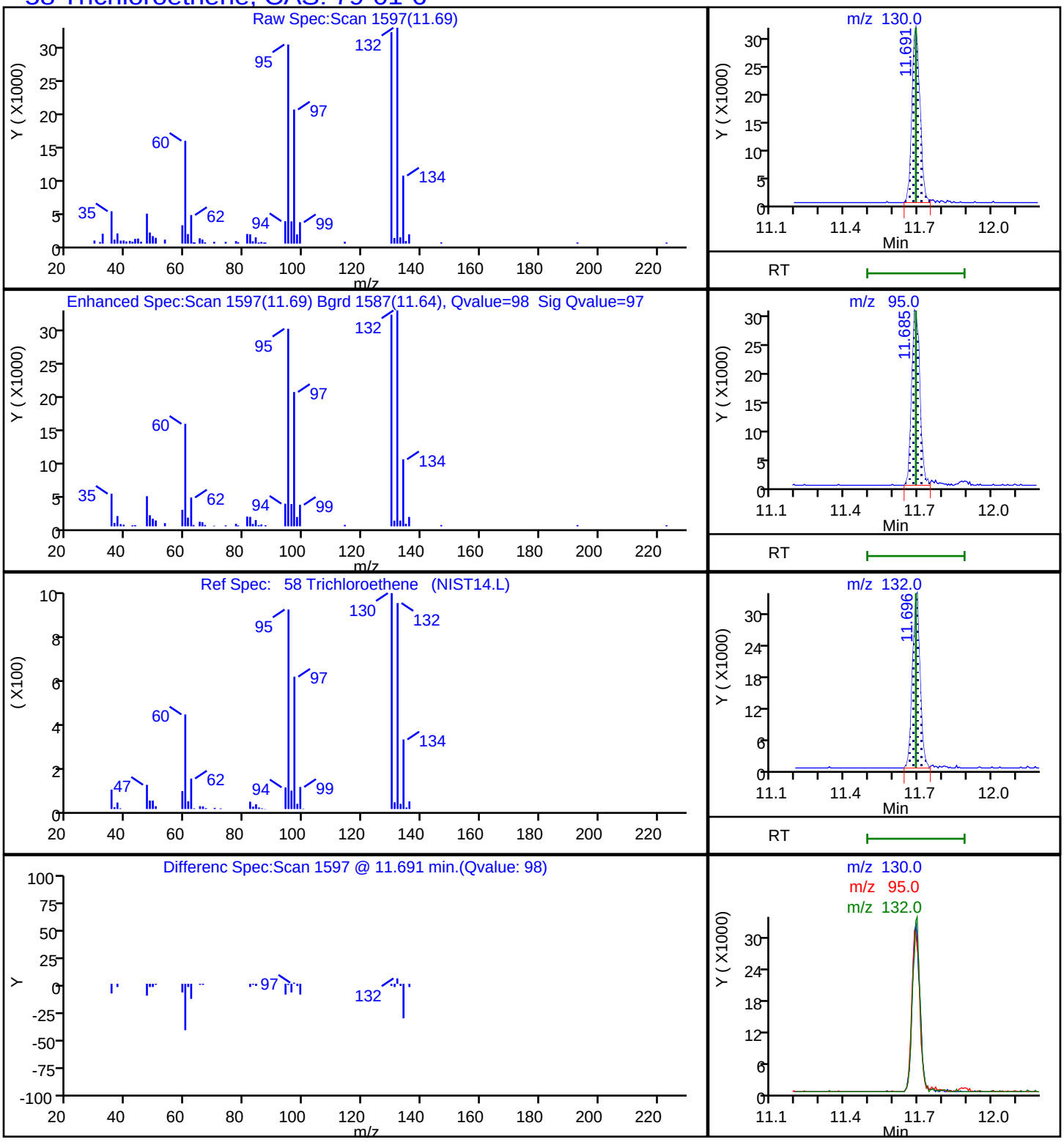
Operator ID: HMT ALS Bottle#: 4 Worklist Smp#: 8

Purge Vol: 500.000 mL Dil. Factor: 1.0000

Method: MG_TO15 Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm) Detector MS SCAN

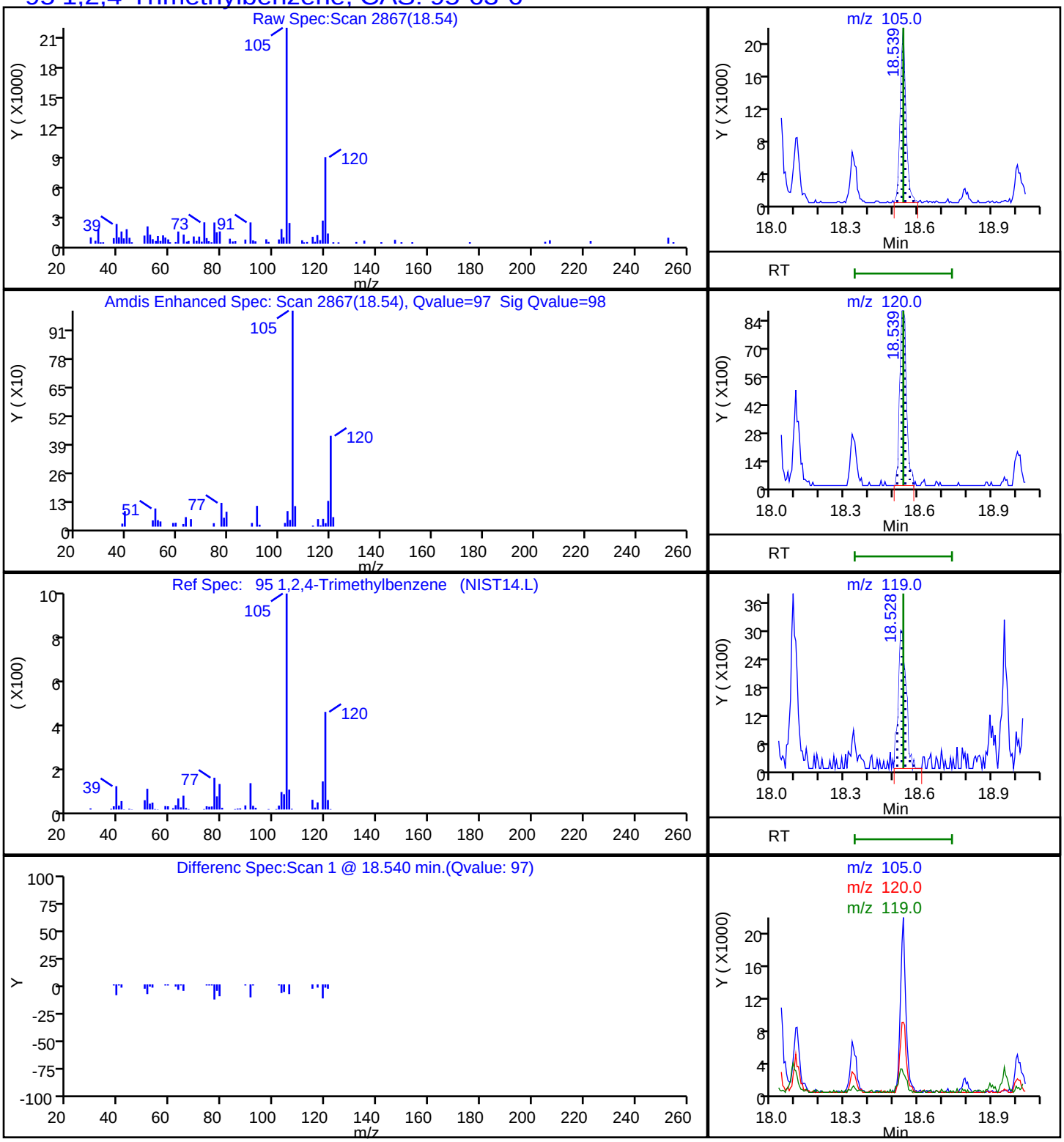
58 Trichloroethene, CAS: 79-01-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P104.D				
Injection Date:	30-Sep-2020 14:35:30	Instrument ID:	MG		
Lims ID:	140-20507-A-4	Lab Sample ID:	140-20507-4		
Client ID:	BLDG C INFLUENT				
Operator ID:	HMT	ALS Bottle#:	4	Worklist Smp#:	8
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

95 1,2,4-Trimethylbenzene, CAS: 95-63-6

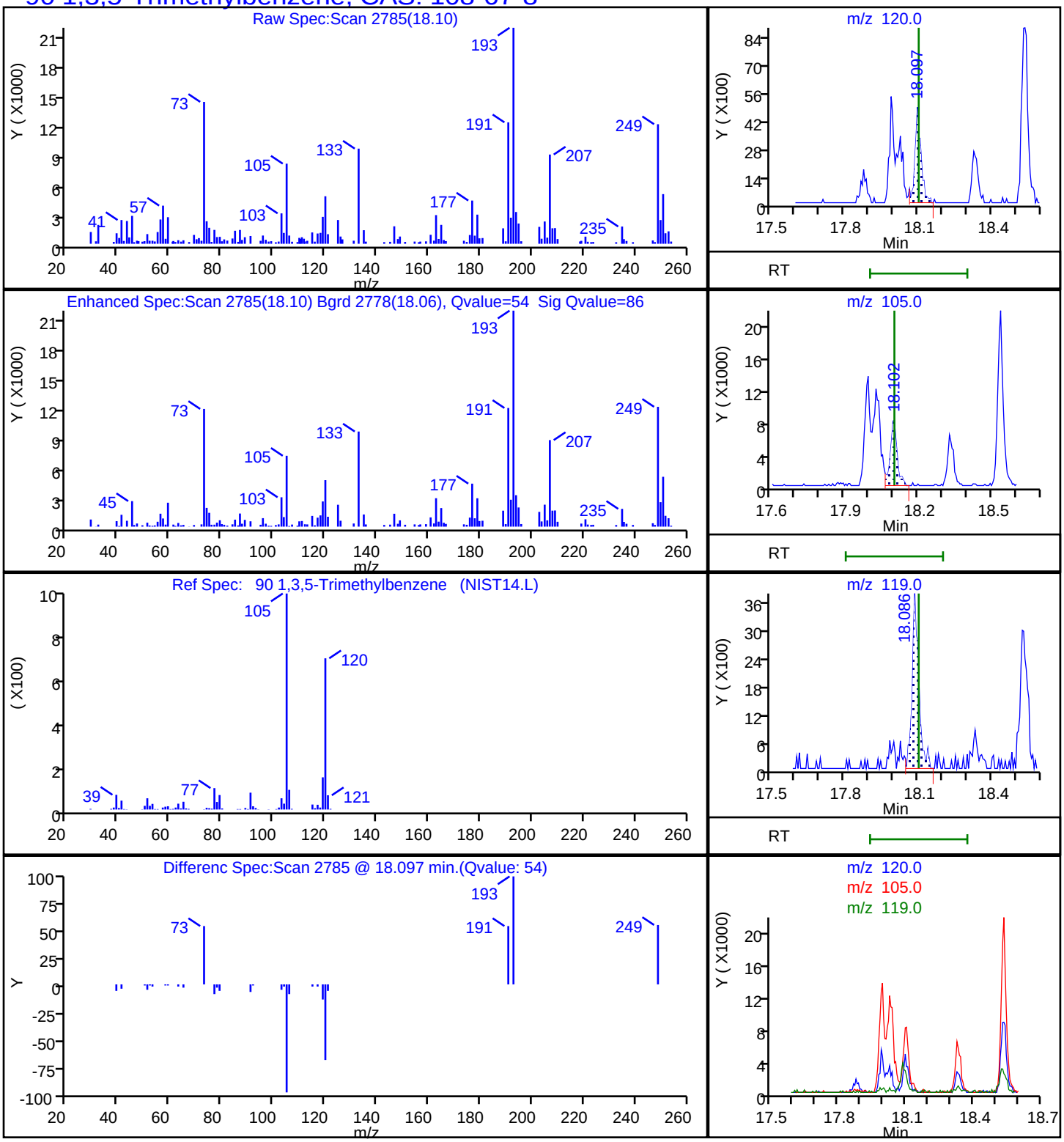


Report Date: 01-Oct-2020 15:05:31 Chrom Revision: 2.3 24-Sep-2020 19:22:38

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P104.D				
Injection Date:	30-Sep-2020 14:35:30	Instrument ID:	MG		
Lims ID:	140-20507-A-4	Lab Sample ID:	140-20507-4		
Client ID:	BLDG C INFLUENT				
Operator ID:	HMT	ALS Bottle#:	4	Worklist Smp#:	8
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

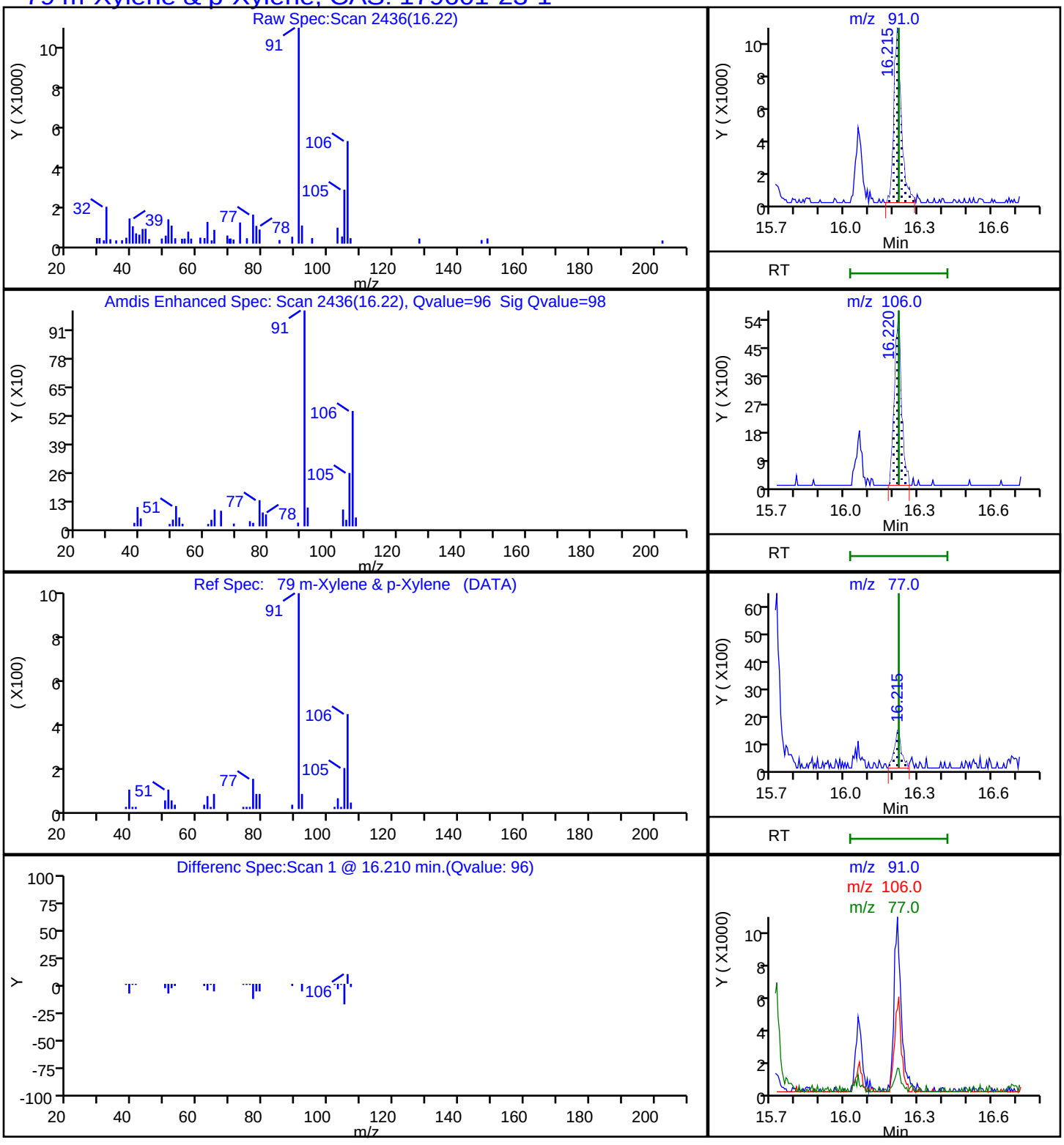
90 1,3,5-Trimethylbenzene, CAS: 108-67-8



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P104.D				
Injection Date:	30-Sep-2020 14:35:30	Instrument ID:	MG		
Lims ID:	140-20507-A-4	Lab Sample ID:	140-20507-4		
Client ID:	BLDG C INFLUENT				
Operator ID:	HMT	ALS Bottle#:	4	Worklist Smp#:	8
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

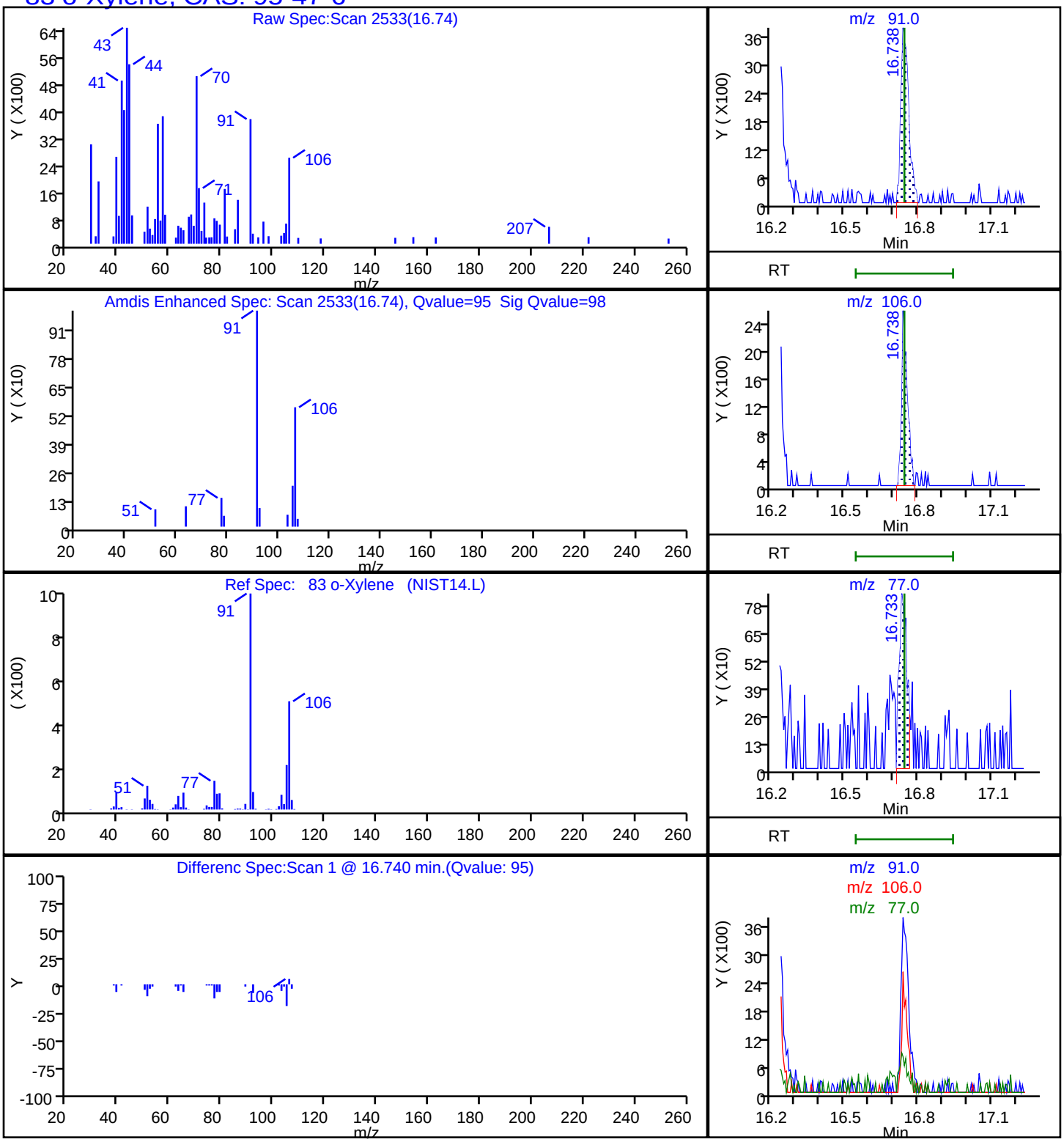
79 m-Xylene & p-Xylene, CAS: 179601-23-1



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P104.D		
Injection Date:	30-Sep-2020 14:35:30	Instrument ID:	MG
Lims ID:	140-20507-A-4	Lab Sample ID:	140-20507-4
Client ID:	BLDG C INFLUENT		
Operator ID:	HMT	ALS Bottle#:	4 Worklist Smp#: 8
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

83 o-Xylene, CAS: 95-47-6



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20507-1

SDG No.:

Client Sample ID: BLDG C MIDGAC Lab Sample ID: 140-20507-5

Matrix: Air Lab File ID: GI30P105.D

Analysis Method: TO 15 LL Date Collected: 09/28/2020 10:06

Sample wt/vol: 100(mL) Date Analyzed: 09/30/2020 15:18

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 43140 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	2.8		0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.077	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	0.78		0.40	0.11
67-66-3	Chloroform	119.38	0.11	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	0.24	J	0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.51		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	0.098	J	0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	0.093	J	0.40	0.035
108-88-3	Toluene	92.14	1.4		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	0.15	J	0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	3.4		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	0.12	J	0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.44	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	89		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20507-1

SDG No.:

Client Sample ID: BLDG C MIDGAC Lab Sample ID: 140-20507-5

Matrix: Air Lab File ID: GI30P105.D

Analysis Method: TO 15 LL Date Collected: 09/28/2020 10:06

Sample wt/vol: 100(mL) Date Analyzed: 09/30/2020 15:18

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 43140 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	8.8		1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.49	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	2.7		1.4	0.39
67-66-3	Chloroform	119.38	0.53	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	0.96	J	1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.5		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	0.43	J	1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	0.63	J	2.7	0.24
108-88-3	Toluene	92.14	5.4		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	0.59	J	1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	ND		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	18		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	0.57	J	2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	1.9	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	89		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P105.D
Lims ID: 140-20507-A-5
Client ID: BLDG C MIDGAC
Sample Type: Client
Inject. Date: 30-Sep-2020 15:18:30 ALS Bottle#: 5 Worklist Smp#: 9
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016761-009
Misc. Info.: 140-20507-a-5
Operator ID: HMT Instrument ID: MG

Method: \\chromfs\Knoxville\ChromData\MG\20200929-16761.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 01-Oct-2020 15:06:02 Calib Date: 11-Sep-2020 06:50:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200910-16561.b\GI10IC09R.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1024

First Level Reviewer: khachitpongpanits Date: 01-Oct-2020 15:06:36

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.795	8.795	0.000	98	318383	4.80	
* 2 1,4-Difluorobenzene	114	10.979	10.979	0.000	95	1598692	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.714	15.719	-0.005	86	1596302	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.358	17.364	-0.006	96	1063005	4.15	
6 Chlorodifluoromethane	51	3.694	3.694	-0.005	34	36731	0.1552	M
8 Dichlorodifluoromethane	85	3.764	3.764	0.000	99	30613	0.1018	
34 trans-1,2-Dichloroethene	96	7.075	7.075	0.000	1	2558	0.0299	
42 cis-1,2-Dichloroethene	96	8.455	8.466	-0.011	91	4681	0.0482	
44 Chloroform	83	8.811	8.811	0.000	27	4515	0.0217	
50 Benzene	78	10.434	10.434	0.000	97	168419	0.5519	
52 Carbon tetrachloride	117	10.451	10.461	-0.010	24	2997	0.0155	
58 Trichloroethene	130	11.691	11.691	0.000	98	80602	0.6838	
67 Toluene	91	13.745	13.745	0.000	94	92351	0.2846	
73 Tetrachloroethene	129	14.889	14.888	0.000	67	2133	0.0187	
78 Ethylbenzene	91	16.053	16.059	-0.006	96	8520	0.0196	
79 m-Xylene & p-Xylene	91	16.210	16.220	-0.010	95	21361	0.0642	
83 o-Xylene	91	16.744	16.744	0.000	95	8448	0.0241	
95 1,2,4-Trimethylbenzene	105	18.539	18.539	0.000	95	9053	0.0232	
S 124 Xylenes, Total	100				0		0.0883	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

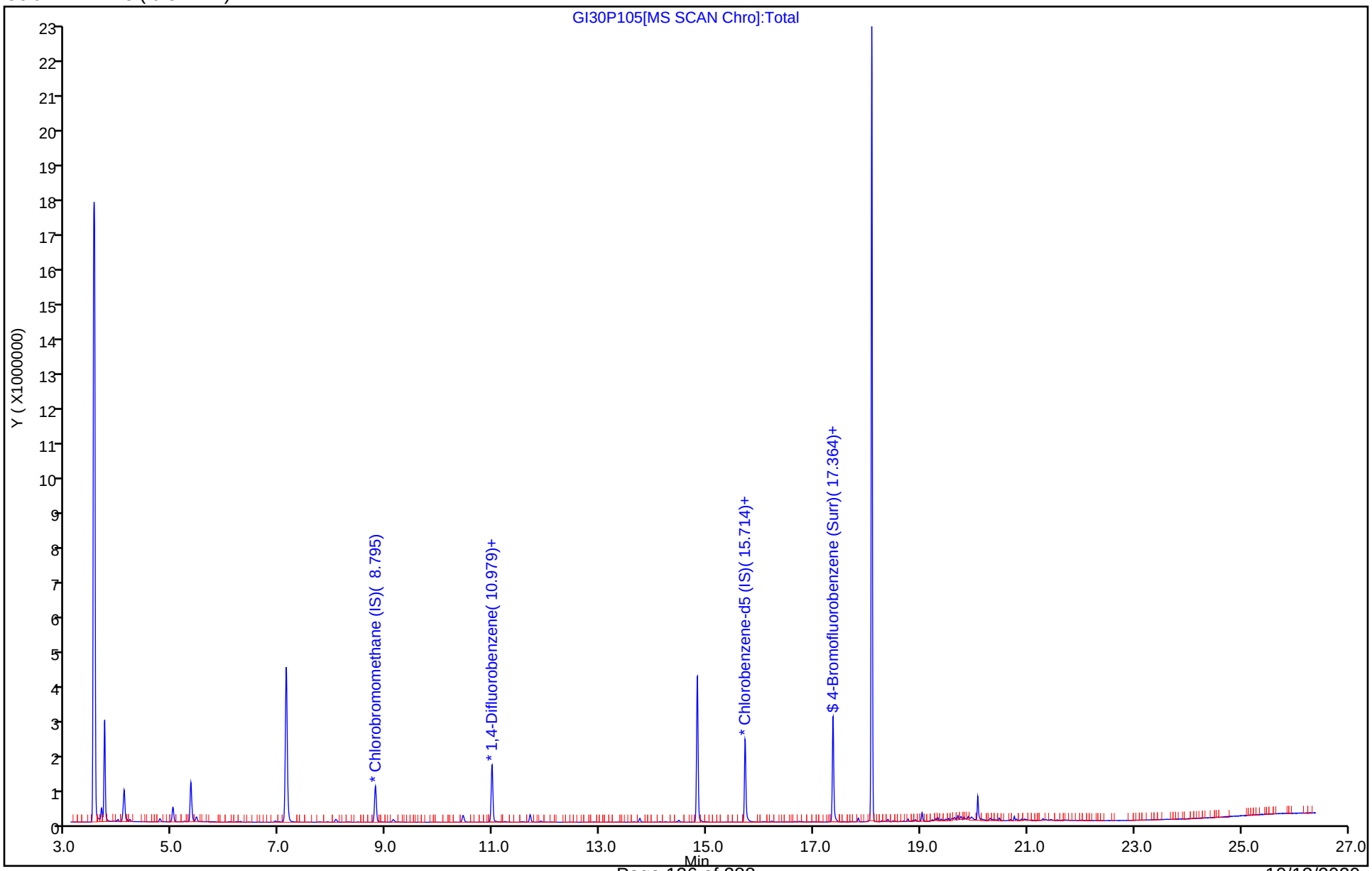
Report Date: 01-Oct-2020 15:06:37 Chrom Revision: 2.3 24-Sep-2020 19:22:38

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P105.D

Injection Date:	30-Sep-2020 15:18:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	140-20507-A-5	Lab Sample ID:	140-20507-5	Worklist Smp#:	9
Client ID:	BLDG C MIDGAC				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

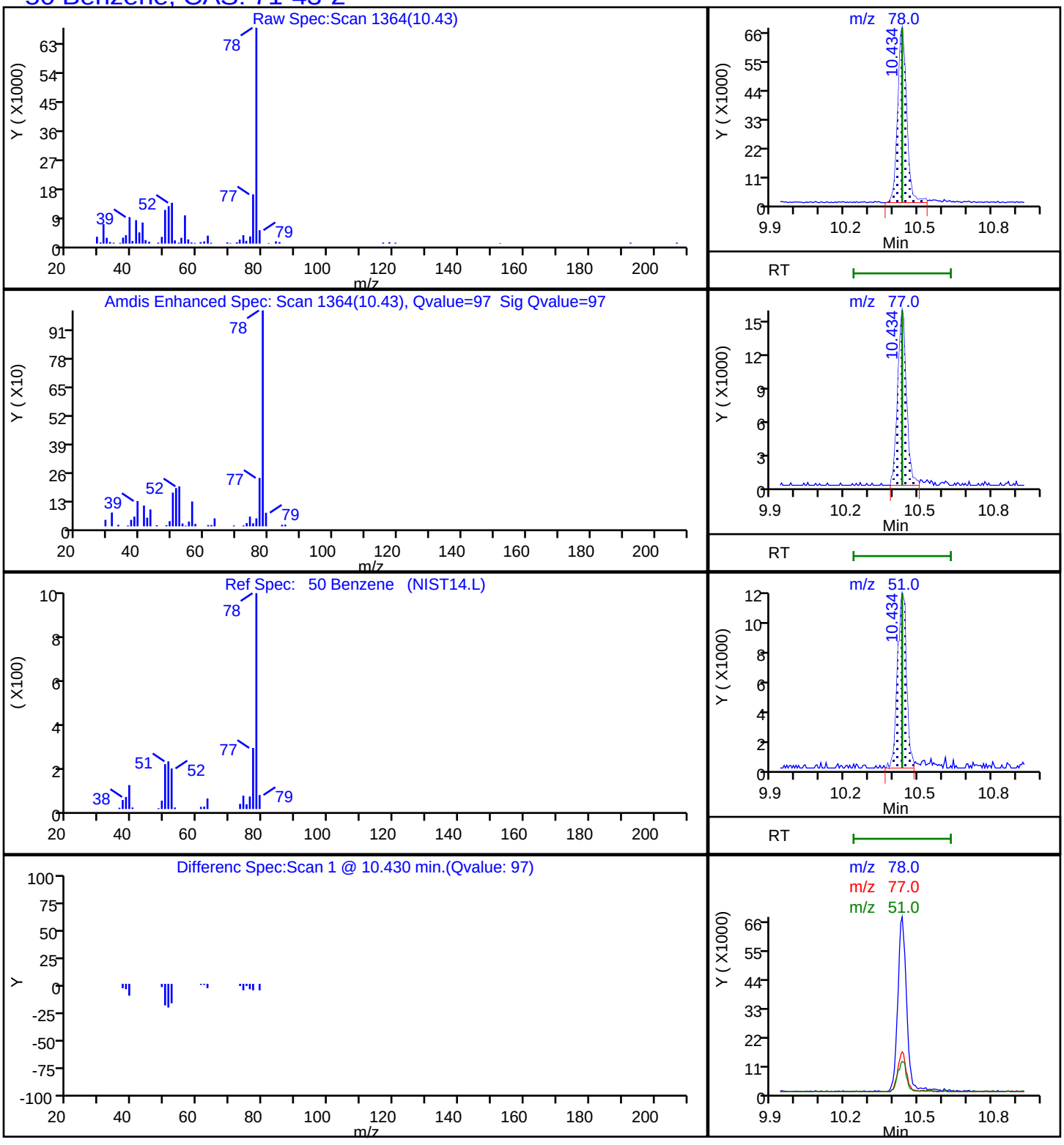
Data File:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P105.D				
Lims ID:	140-20507-A-5				
Client ID:	BLDG C MIDGAC				
Sample Type:	Client				
Inject. Date:	30-Sep-2020 15:18:30	ALS Bottle#:	5	Worklist Smp#:	9
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016761-009				
Misc. Info.:	140-20507-a-5				
Operator ID:	HMT	Instrument ID:	MG		
Method:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\MG_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	01-Oct-2020 15:06:02	Calib Date:	11-Sep-2020 06:50:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MG\20200910-16561.b\GI10IC09R.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1024				
First Level Reviewer: khachitpongpanits		Date:	01-Oct-2020 15:06:36		

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	4.15	89.46

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P105.D		
Injection Date:	30-Sep-2020 15:18:30	Instrument ID:	MG
Lims ID:	140-20507-A-5	Lab Sample ID:	140-20507-5
Client ID:	BLDG C MIDGAC		
Operator ID:	HMT	ALS Bottle#:	5 Worklist Smp#: 9
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

50 Benzene, CAS: 71-43-2

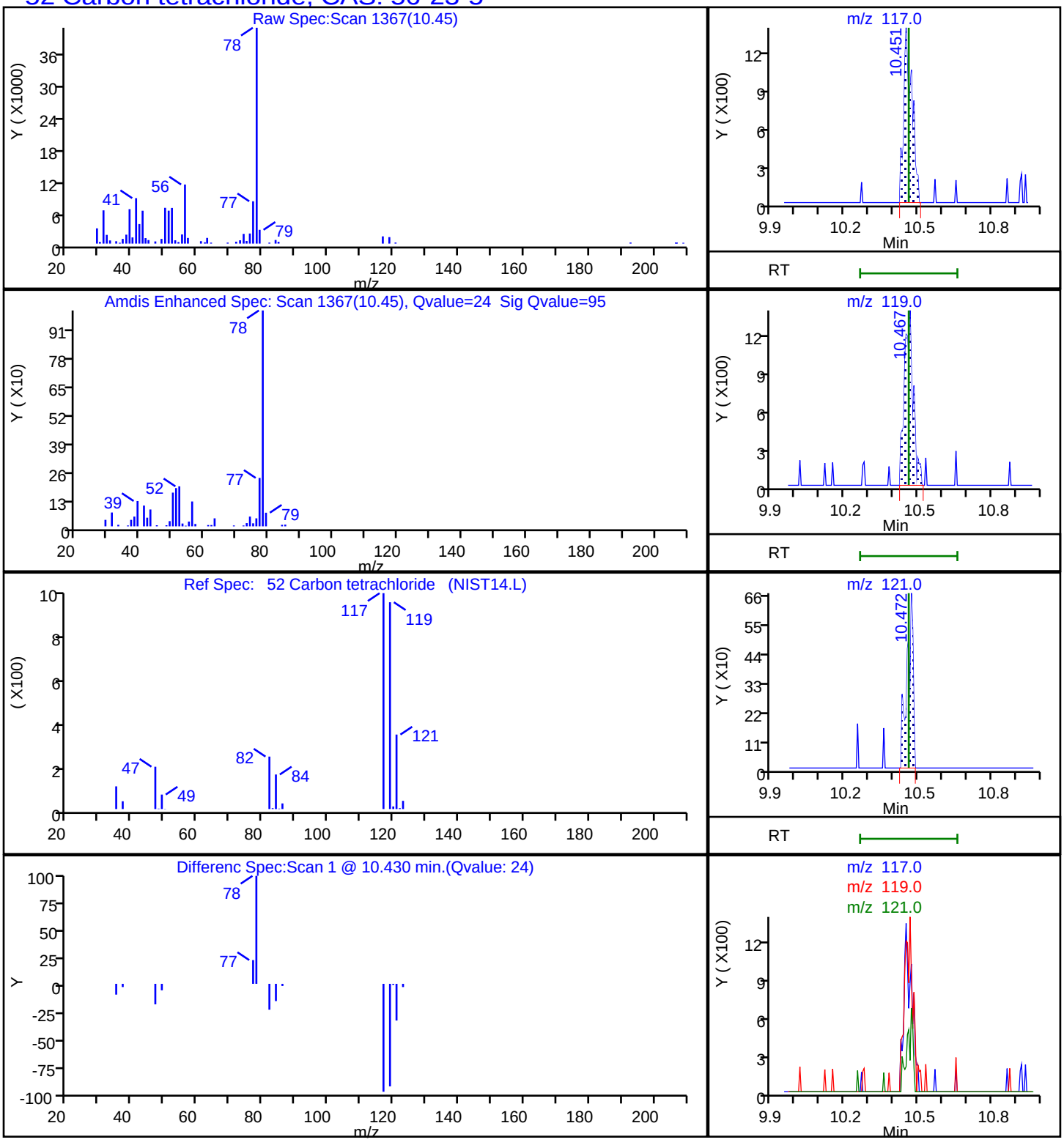


Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P105.D

Injection Date:	30-Sep-2020 15:18:30	Instrument ID:	MG
Lims ID:	140-20507-A-5	Lab Sample ID:	140-20507-5
Client ID:	BLDG C MIDGAC		
Operator ID:	HMT	ALS Bottle#:	5 Worklist Smp#: 9
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

52 Carbon tetrachloride, CAS: 56-23-5

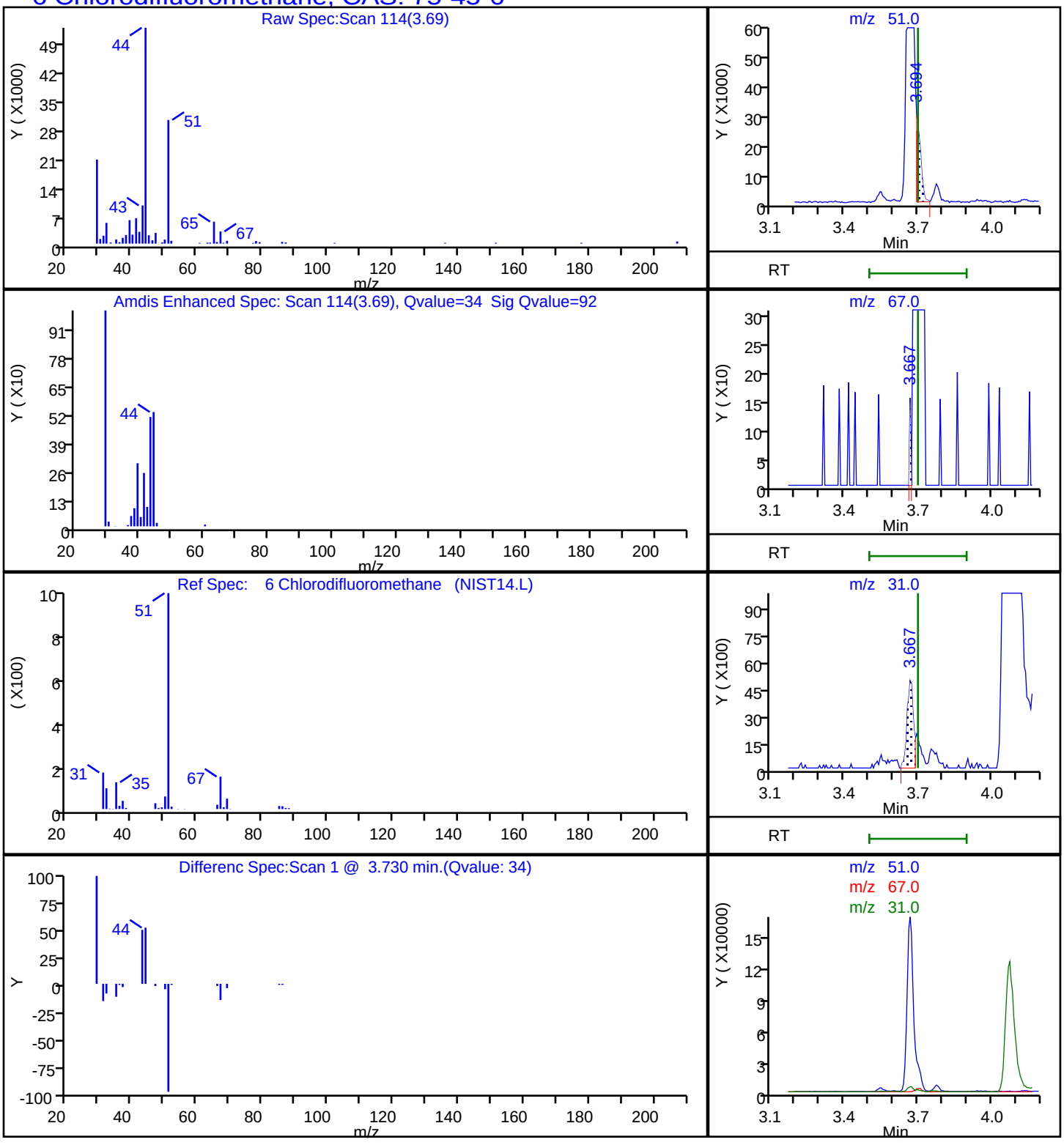


Report Date: 01-Oct-2020 15:06:37 Chrom Revision: 2.3 24-Sep-2020 19:22:38

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P105.D				
Injection Date:	30-Sep-2020 15:18:30	Instrument ID:	MG		
Lims ID:	140-20507-A-5	Lab Sample ID:	140-20507-5		
Client ID:	BLDG C MIDGAC				
Operator ID:	HMT	ALS Bottle#:	5	Worklist Smp#:	9
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

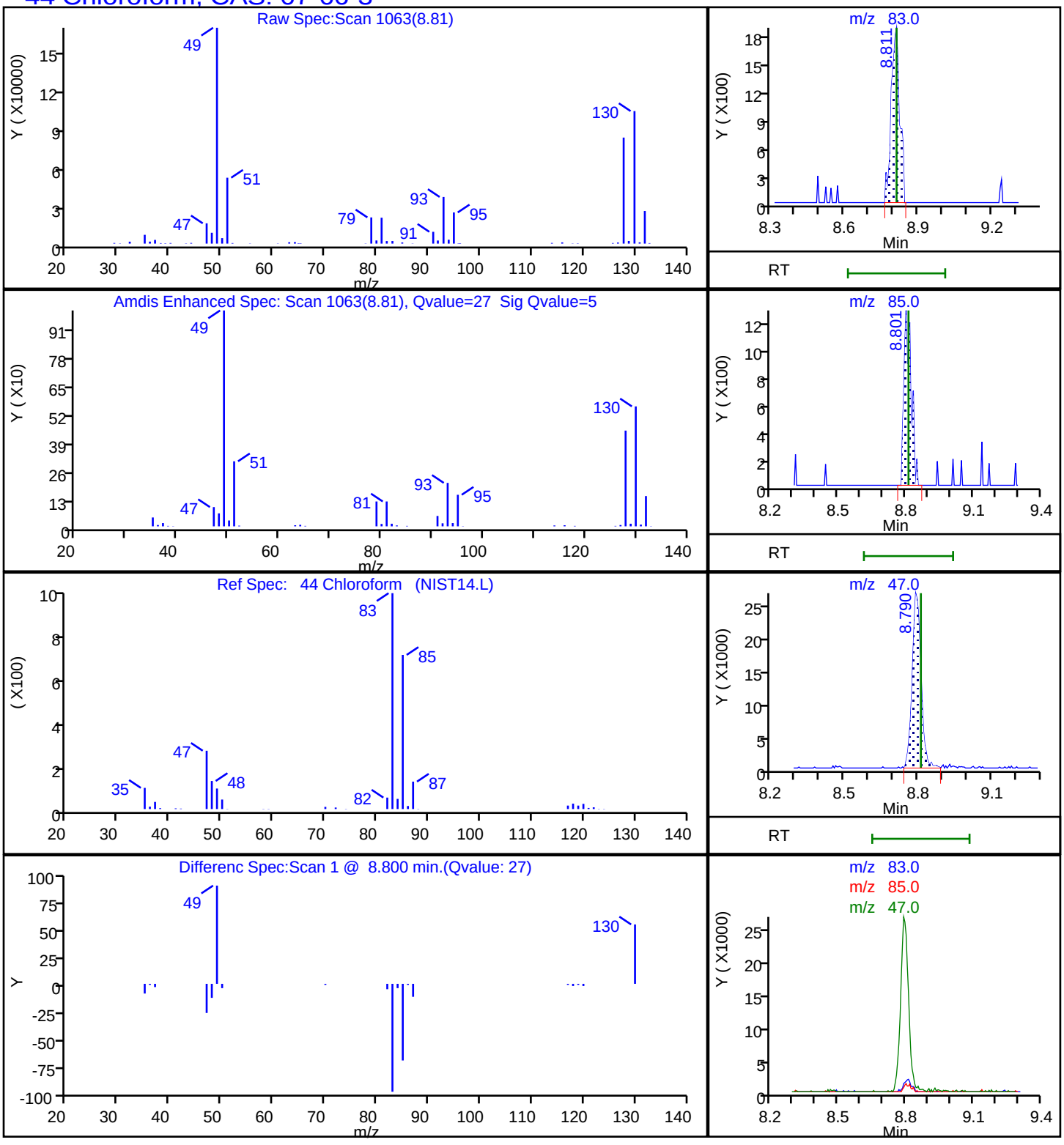
6 Chlorodifluoromethane, CAS: 75-45-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P105.D		
Injection Date:	30-Sep-2020 15:18:30	Instrument ID:	MG
Lims ID:	140-20507-A-5	Lab Sample ID:	140-20507-5
Client ID:	BLDG C MIDGAC		
Operator ID:	HMT	ALS Bottle#:	5 Worklist Smp#: 9
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

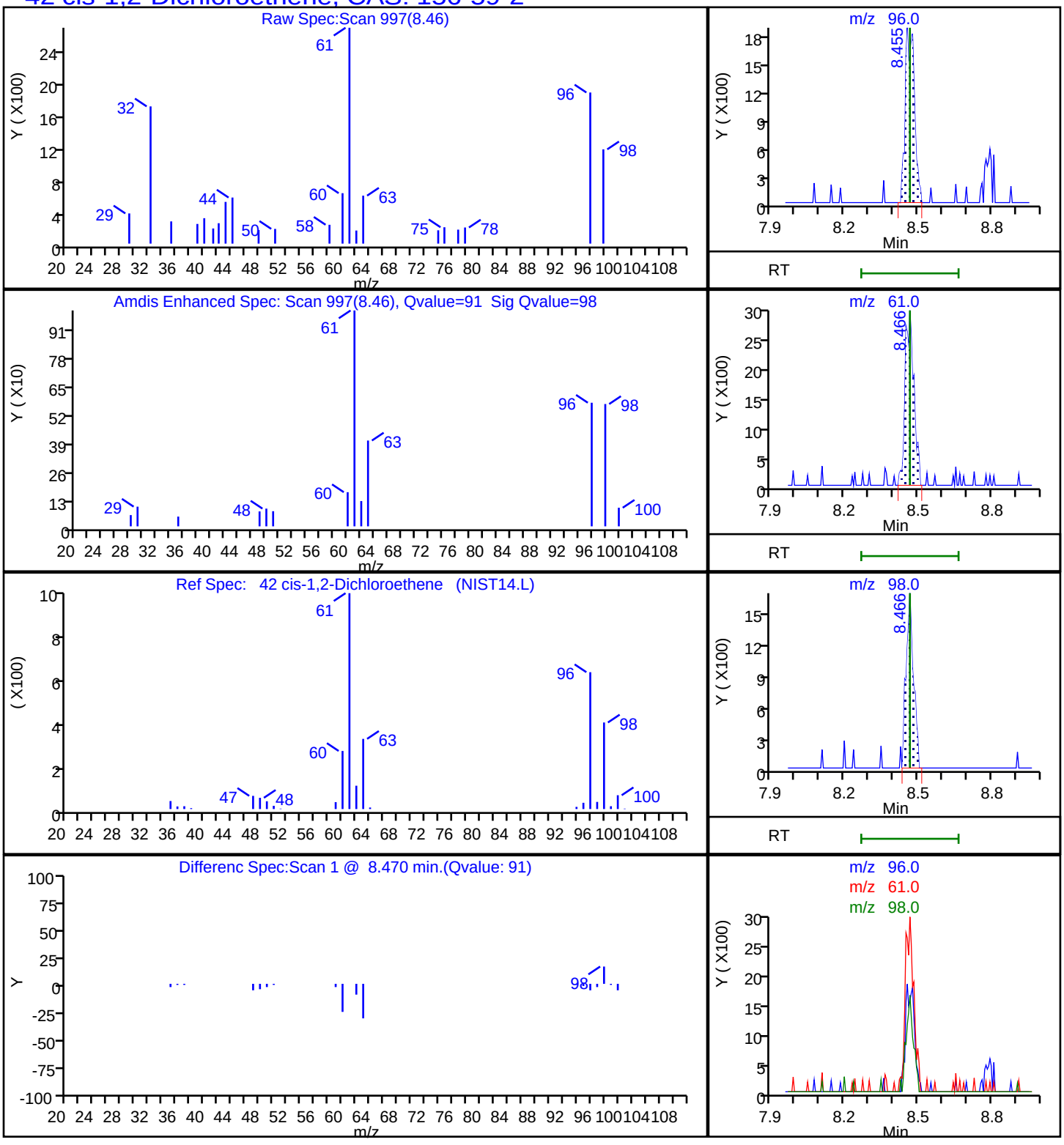
44 Chloroform, CAS: 67-66-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P105.D		
Injection Date:	30-Sep-2020 15:18:30	Instrument ID:	MG
Lims ID:	140-20507-A-5	Lab Sample ID:	140-20507-5
Client ID:	BLDG C MIDGAC		
Operator ID:	HMT	ALS Bottle#:	5 Worklist Smp#: 9
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

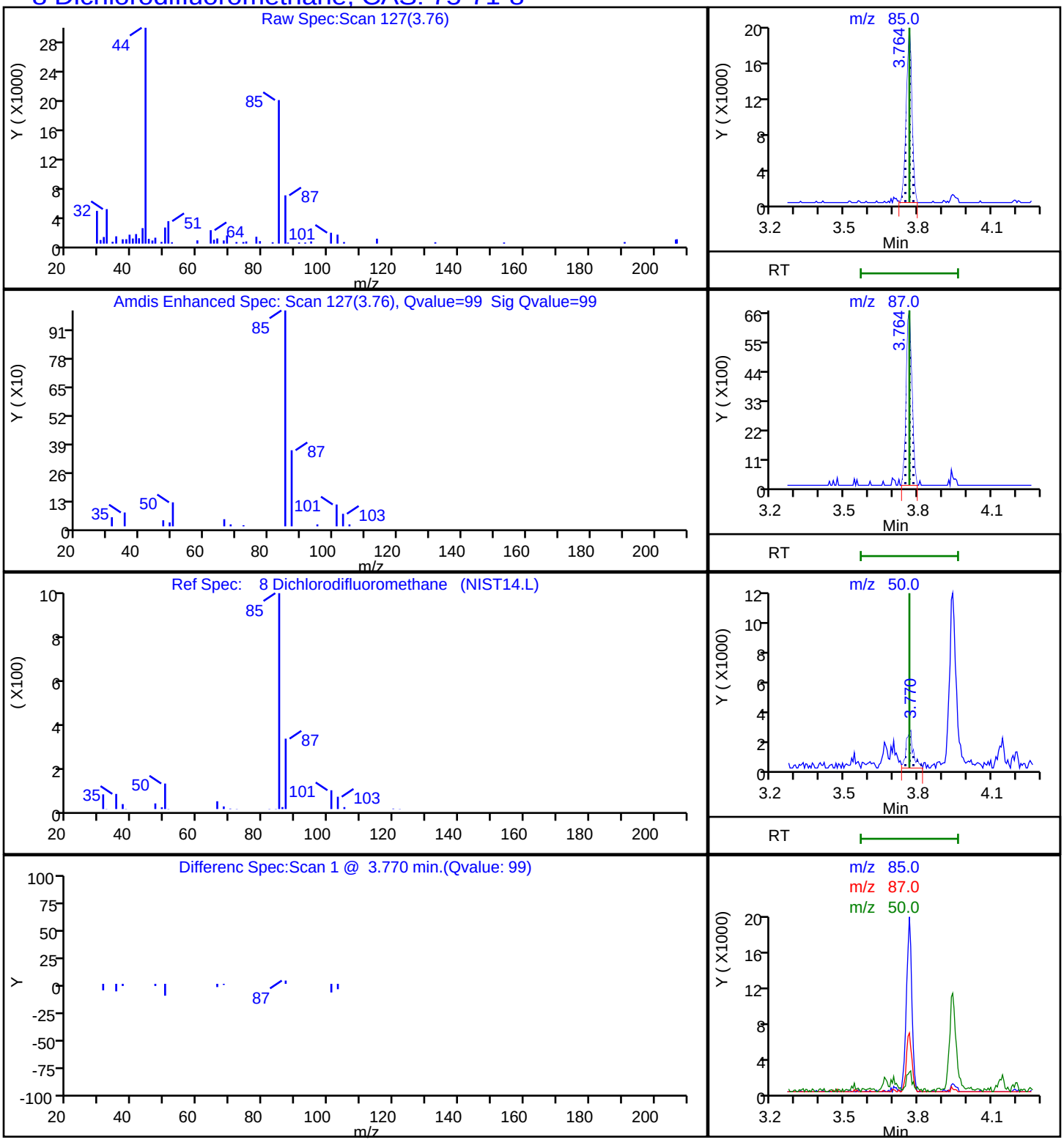
42 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P105.D				
Injection Date:	30-Sep-2020 15:18:30	Instrument ID:	MG		
Lims ID:	140-20507-A-5	Lab Sample ID:	140-20507-5		
Client ID:	BLDG C MIDGAC				
Operator ID:	HMT	ALS Bottle#:	5	Worklist Smp#:	9
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

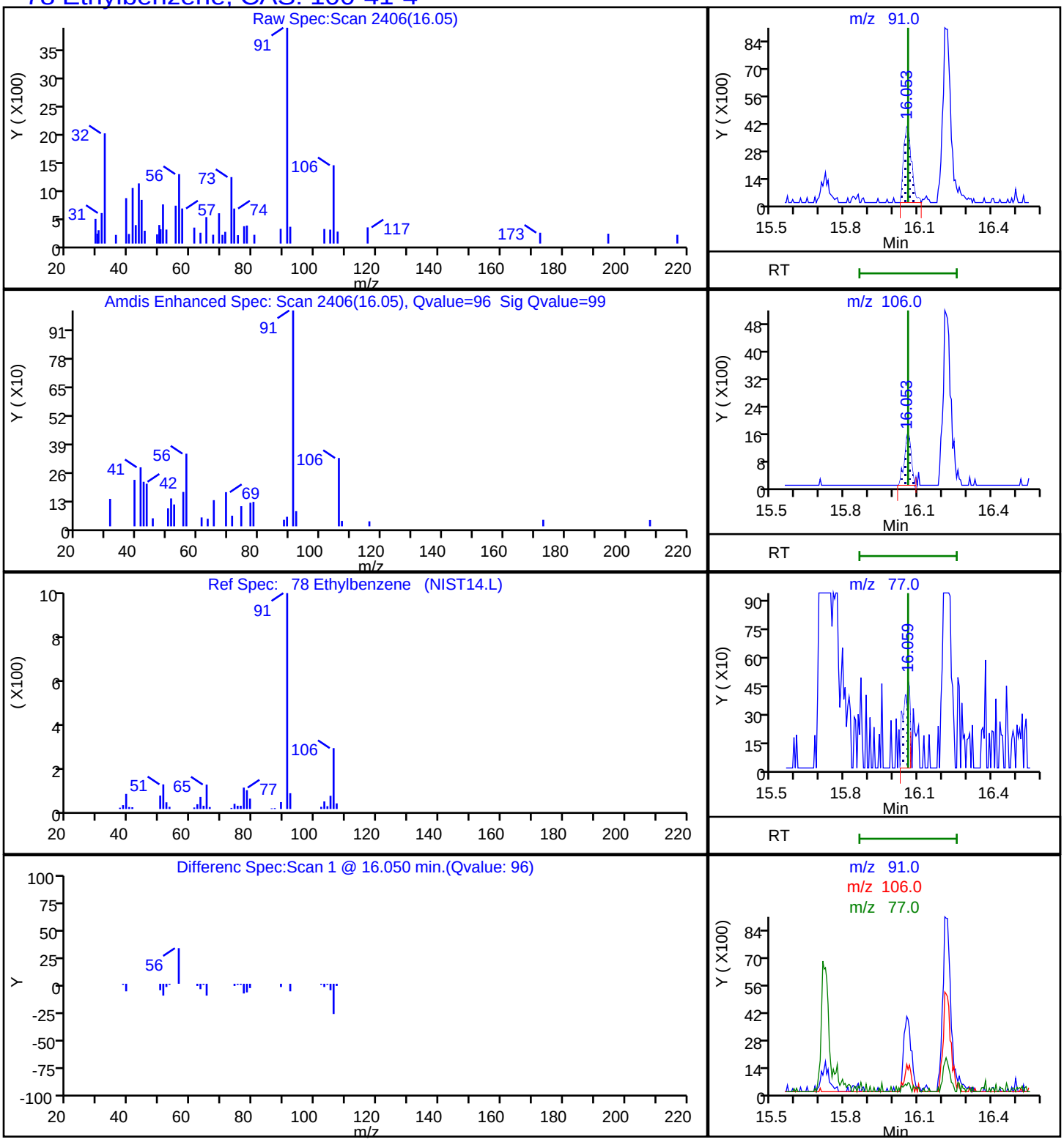
8 Dichlorodifluoromethane, CAS: 75-71-8



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P105.D		
Injection Date:	30-Sep-2020 15:18:30	Instrument ID:	MG
Lims ID:	140-20507-A-5	Lab Sample ID:	140-20507-5
Client ID:	BLDG C MIDGAC		
Operator ID:	HMT	ALS Bottle#:	5 Worklist Smp#: 9
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

78 Ethylbenzene, CAS: 100-41-4

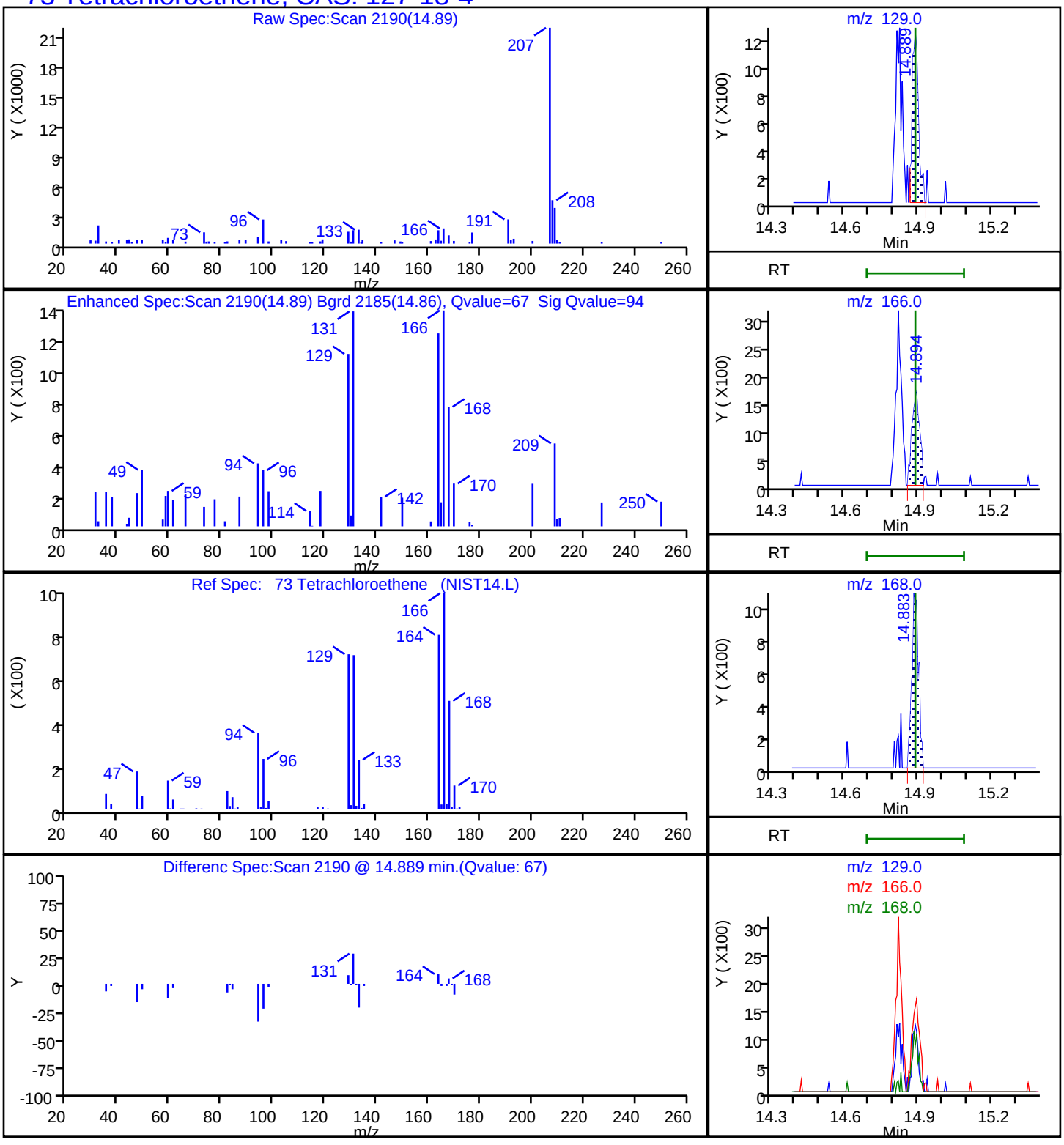


Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P105.D

Injection Date:	30-Sep-2020 15:18:30	Instrument ID:	MG
Lims ID:	140-20507-A-5	Lab Sample ID:	140-20507-5
Client ID:	BLDG C MIDGAC		
Operator ID:	HMT	ALS Bottle#:	5 Worklist Smp#: 9
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

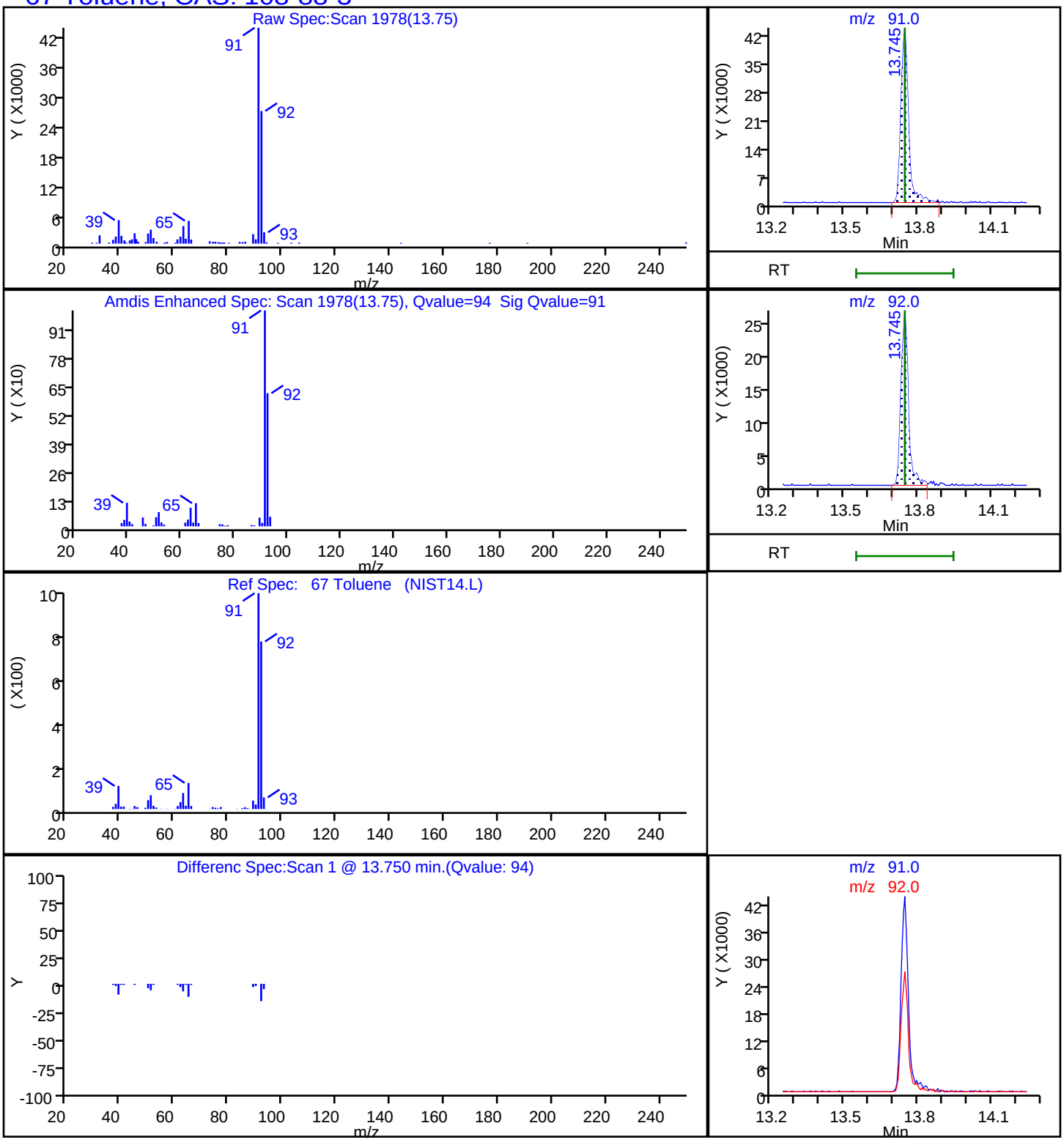
73 Tetrachloroethene, CAS: 127-18-4



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P105.D		
Injection Date:	30-Sep-2020 15:18:30	Instrument ID:	MG
Lims ID:	140-20507-A-5	Lab Sample ID:	140-20507-5
Client ID:	BLDG C MIDGAC		
Operator ID:	HMT	ALS Bottle#:	5 Worklist Smp#: 9
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

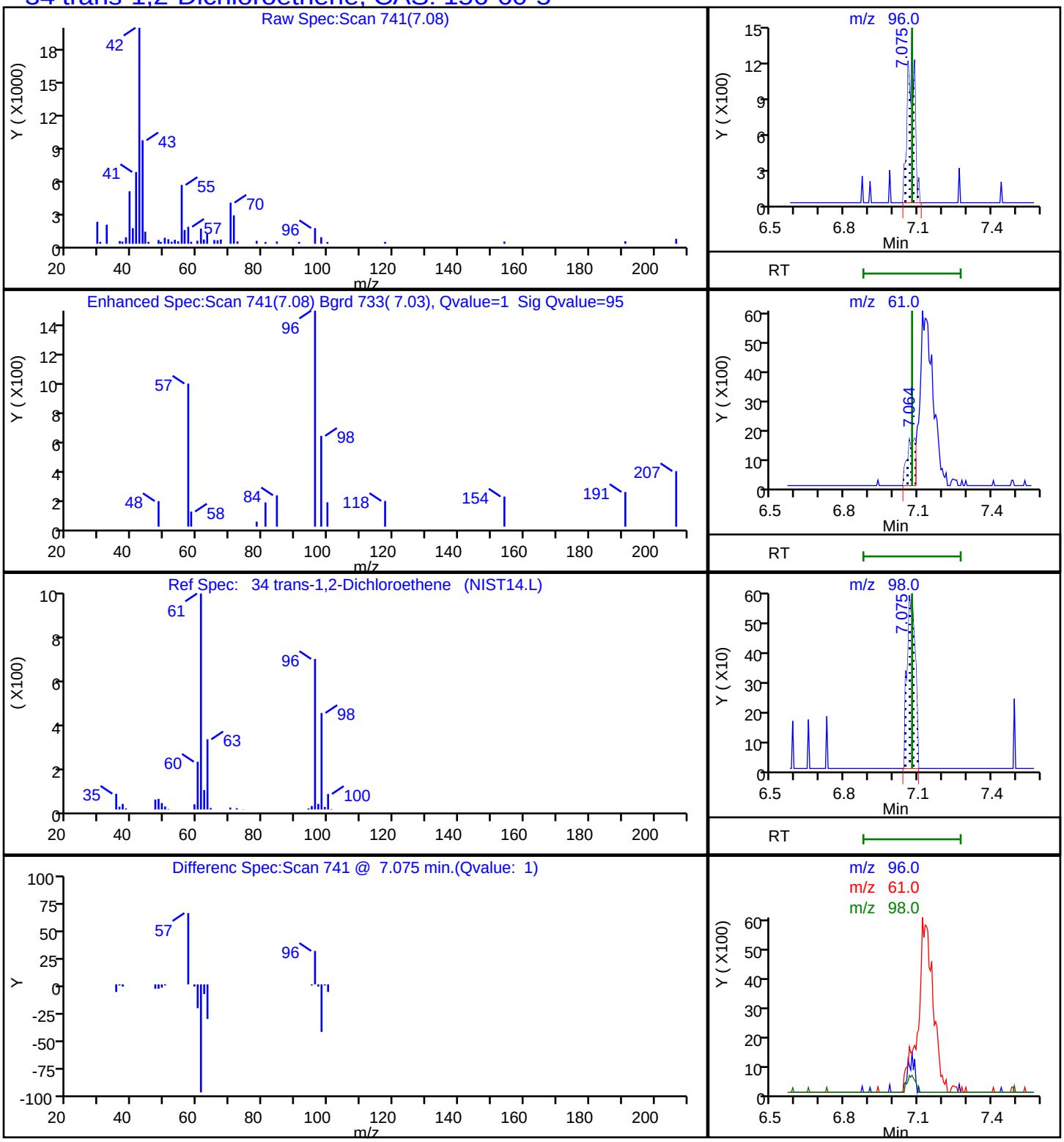
67 Toluene, CAS: 108-88-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P105.D		
Injection Date:	30-Sep-2020 15:18:30	Instrument ID:	MG
Lims ID:	140-20507-A-5	Lab Sample ID:	140-20507-5
Client ID:	BLDG C MIDGAC		
Operator ID:	HMT	ALS Bottle#:	5 Worklist Smp#: 9
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

34 trans-1,2-Dichloroethene, CAS: 156-60-5

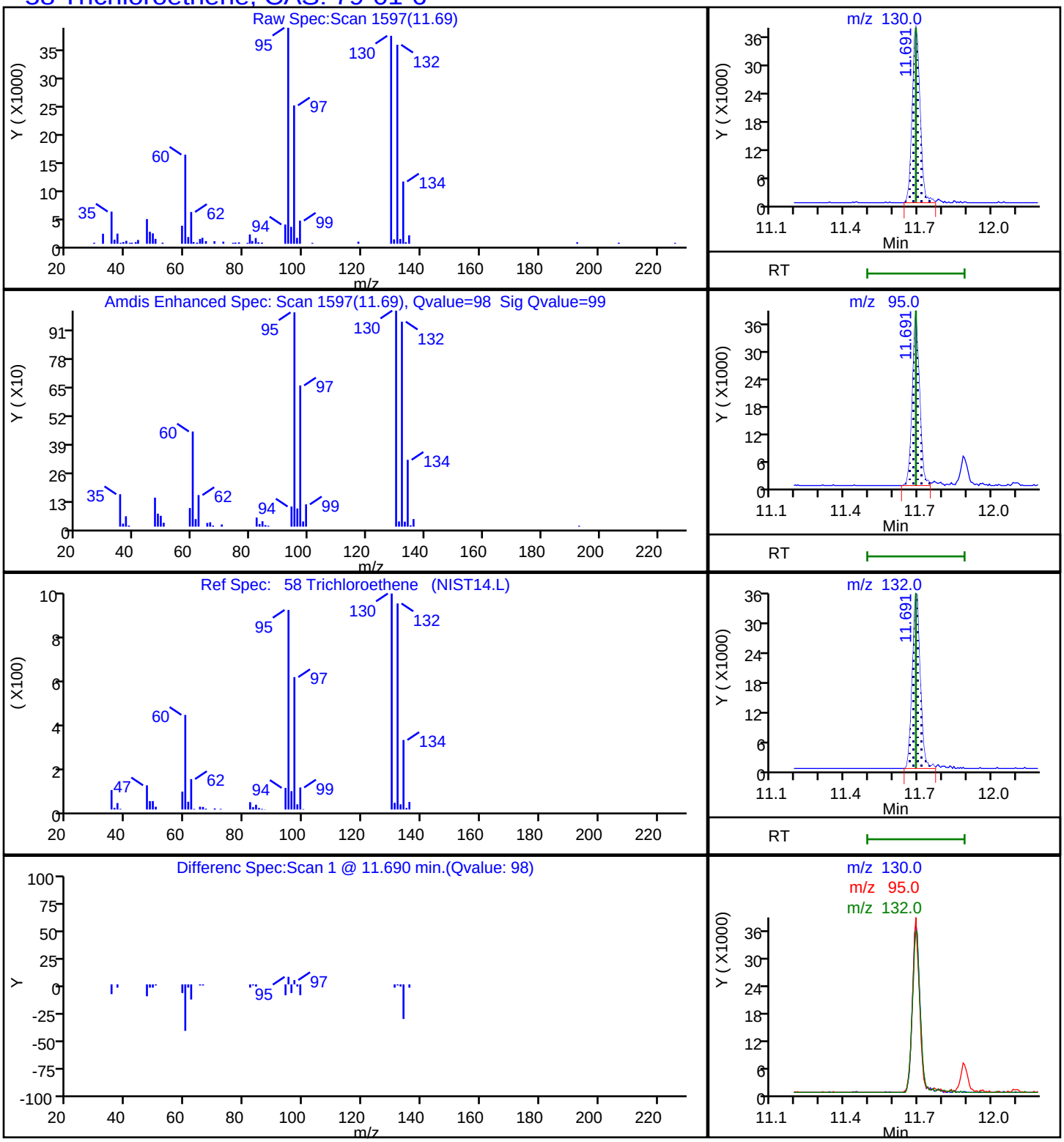


Report Date: 01-Oct-2020 15:06:37 Chrom Revision: 2.3 24-Sep-2020 19:22:38

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P105.D		
Injection Date:	30-Sep-2020 15:18:30	Instrument ID:	MG
Lims ID:	140-20507-A-5	Lab Sample ID:	140-20507-5
Client ID:	BLDG C MIDGAC		
Operator ID:	HMT	ALS Bottle#:	5 Worklist Smp#: 9
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

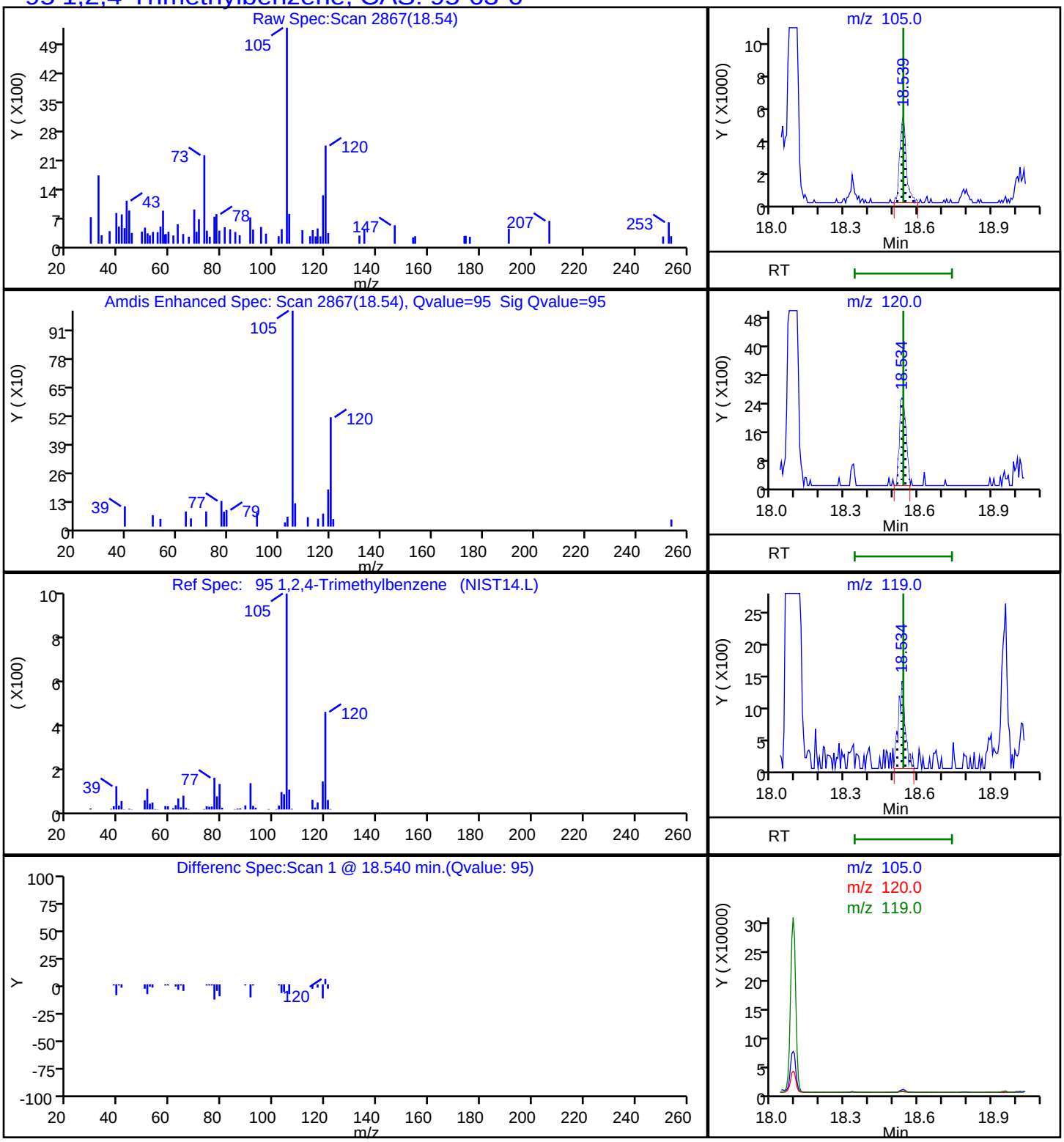
58 Trichloroethene, CAS: 79-01-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P105.D		
Injection Date:	30-Sep-2020 15:18:30	Instrument ID:	MG
Lims ID:	140-20507-A-5	Lab Sample ID:	140-20507-5
Client ID:	BLDG C MIDGAC		
Operator ID:	HMT	ALS Bottle#:	5 Worklist Smp#: 9
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

95 1,2,4-Trimethylbenzene, CAS: 95-63-6

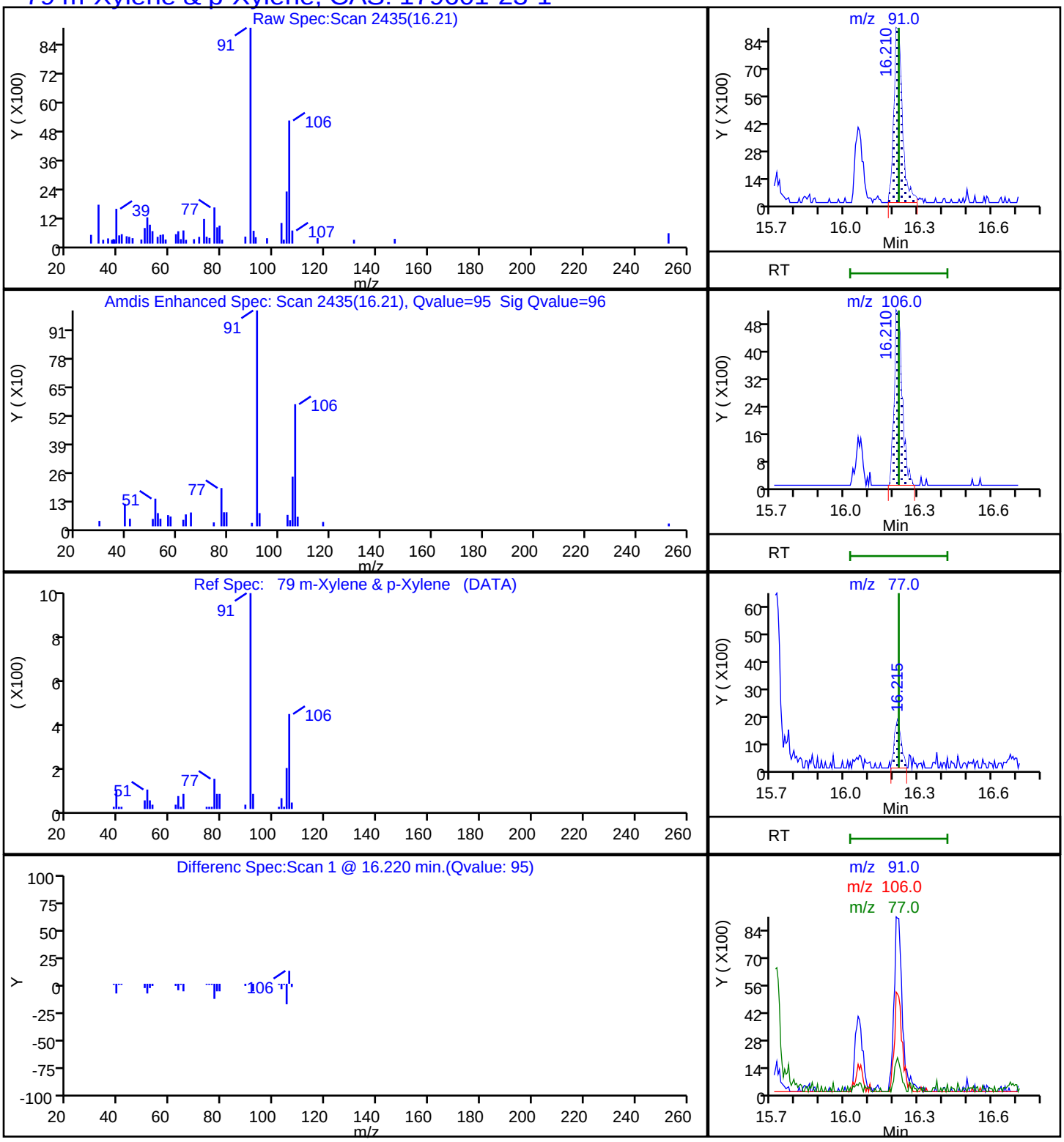


Report Date: 01-Oct-2020 15:06:37 Chrom Revision: 2.3 24-Sep-2020 19:22:38

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P105.D				
Injection Date:	30-Sep-2020 15:18:30	Instrument ID:	MG		
Lims ID:	140-20507-A-5	Lab Sample ID:	140-20507-5		
Client ID:	BLDG C MIDGAC				
Operator ID:	HMT	ALS Bottle#:	5	Worklist Smp#:	9
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

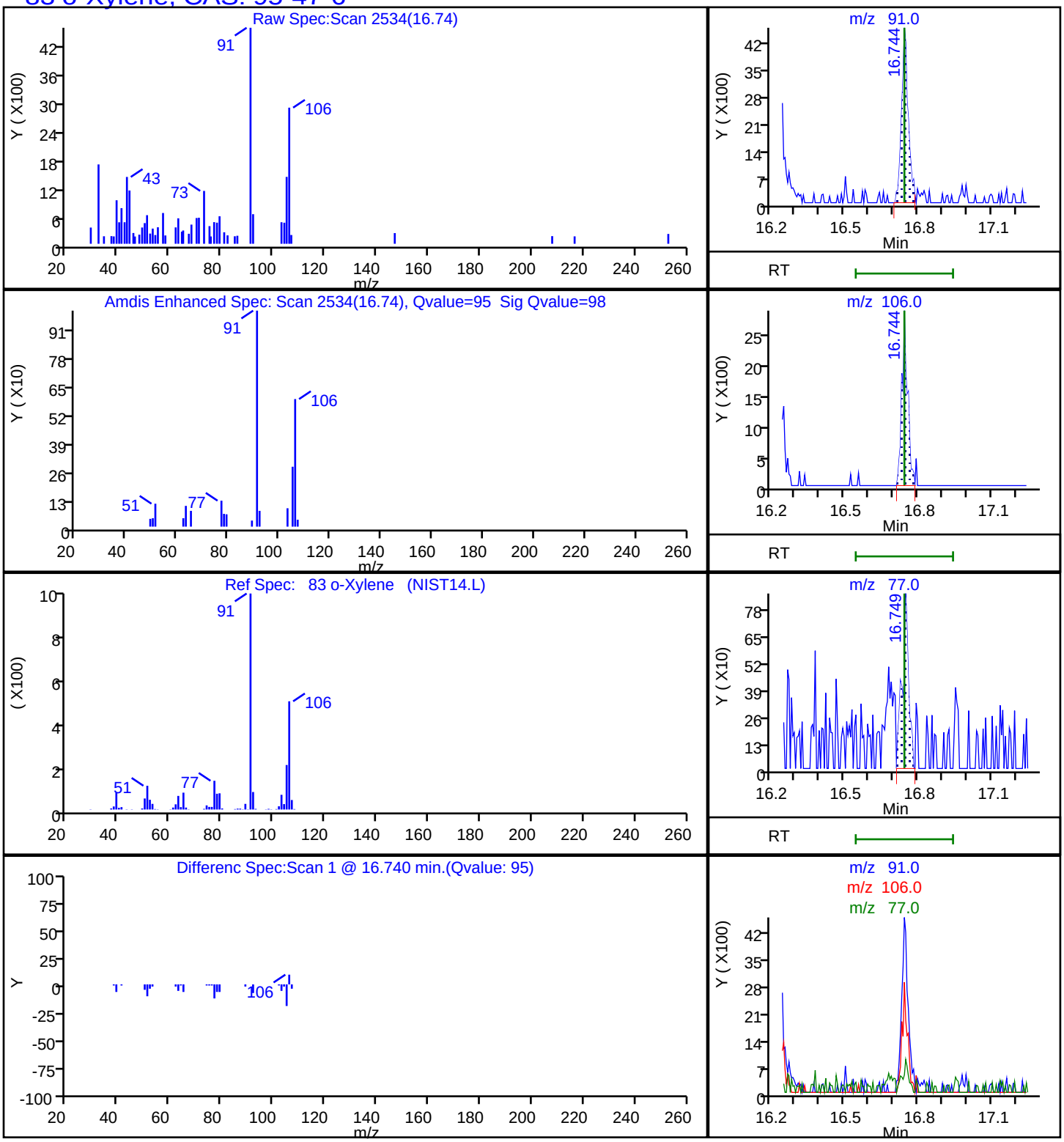
79 m-Xylene & p-Xylene, CAS: 179601-23-1



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P105.D		
Injection Date:	30-Sep-2020 15:18:30	Instrument ID:	MG
Lims ID:	140-20507-A-5	Lab Sample ID:	140-20507-5
Client ID:	BLDG C MIDGAC		
Operator ID:	HMT	ALS Bottle#:	5 Worklist Smp#: 9
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

83 o-Xylene, CAS: 95-47-6



Eurofins TestAmerica, Knoxville

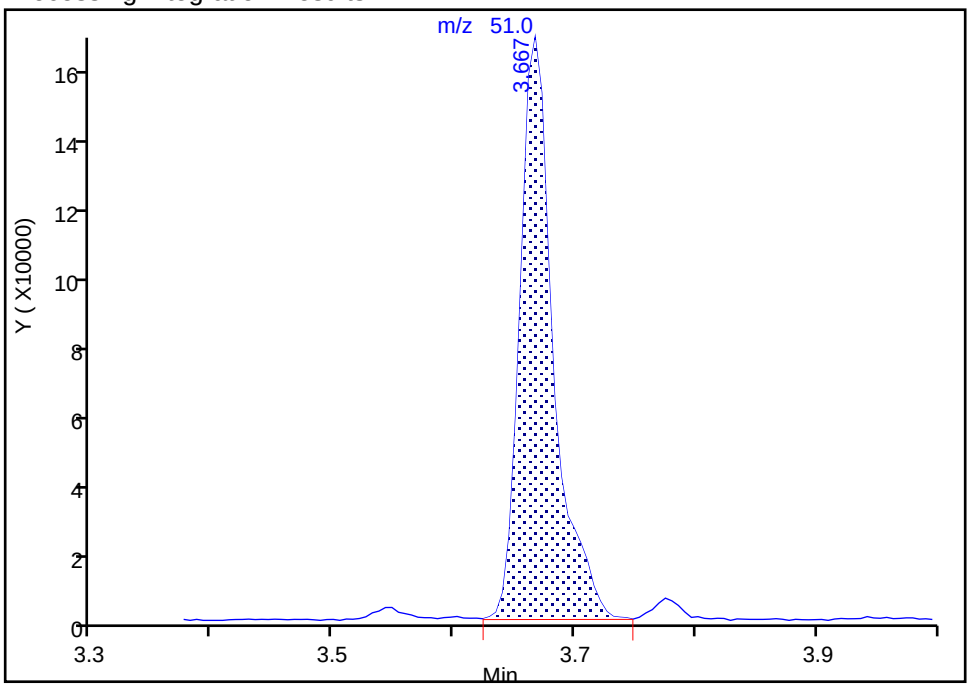
Data File:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P105.D				
Injection Date:	30-Sep-2020 15:18:30	Instrument ID:	MG		
Lims ID:	140-20507-A-5	Lab Sample ID:	140-20507-5		
Client ID:	BLDG C MIDGAC				
Operator ID:	HMT	ALS Bottle#:	5	Worklist Smp#:	9
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

6 Chlorodifluoromethane, CAS: 75-45-6

Signal: 1

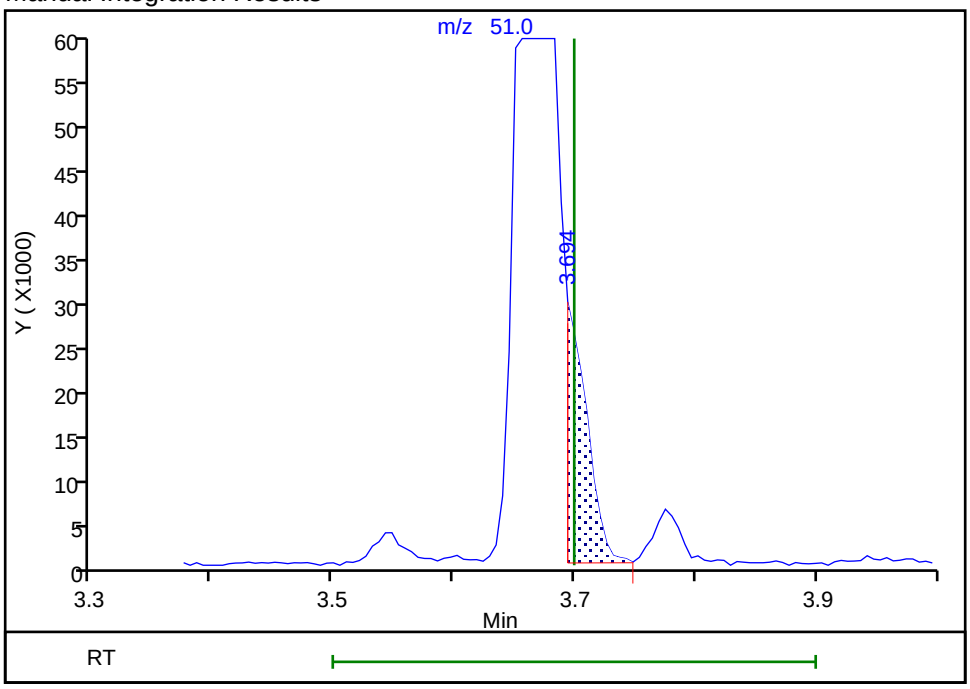
Processing Integration Results

RT: 3.67
Area: 322430
Amount: 1.362700
Amount Units: ppb v/v



Manual Integration Results

RT: 3.69
Area: 36731
Amount: 0.155238
Amount Units: ppb v/v



Reviewer: khachitpongpanits, 01-Oct-2020 15:05:52
Audit Action: Split an Integrated Peak Audit Reason: Shouldering

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20507-1

SDG No.:

Client Sample ID: BLDG C EFFLUENT Lab Sample ID: 140-20507-6

Matrix: Air Lab File ID: GI30P106.D

Analysis Method: TO 15 LL Date Collected: 09/28/2020 10:01

Sample wt/vol: 100(mL) Date Analyzed: 09/30/2020 16:01

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 43140 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	1.7		0.40	0.040
56-23-5	Carbon tetrachloride	153.81	0.073	J	0.40	0.035
75-45-6	Chlorodifluoromethane	86.47	0.79		0.40	0.11
67-66-3	Chloroform	119.38	0.17	J	0.40	0.035
156-59-2	cis-1,2-Dichloroethene	96.94	0.51		0.40	0.050
75-71-8	Dichlorodifluoromethane	120.91	0.56		0.40	0.070
75-34-3	1,1-Dichloroethane	98.96	ND		0.40	0.035
107-06-2	1,2-Dichloroethane	98.96	ND		0.40	0.050
75-35-4	1,1-Dichloroethene	96.94	ND		0.40	0.040
100-41-4	Ethylbenzene	106.17	0.10	J	0.40	0.065
75-09-2	Methylene Chloride	84.93	ND		2.0	2.0
1634-04-4	Methyl tert-butyl ether	88.15	ND		2.0	0.26
91-20-3	Naphthalene	128.17	ND		0.20	0.20
127-18-4	Tetrachloroethene	165.83	ND		0.40	0.035
108-88-3	Toluene	92.14	2.0		0.60	0.39
156-60-5	trans-1,2-Dichloroethene	96.94	0.12	J	0.40	0.035
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.40	0.32
71-55-6	1,1,1-Trichloroethane	133.41	0.88		0.40	0.19
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.40	0.035
79-01-6	Trichloroethene	131.39	ND		0.20	0.030
526-73-8	1,2,3-Trimethylbenzene	120.19	0.20	J	0.40	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	0.73		0.40	0.10
108-67-8	1,3,5-Trimethylbenzene	120.20	0.38	J	0.40	0.11
75-01-4	Vinyl chloride	62.50	ND		0.20	0.13
1330-20-7	Xylenes, Total	106.17	0.46	J	0.80	0.12

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	90		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20507-1

SDG No.:

Client Sample ID: BLDG C EFFLUENT Lab Sample ID: 140-20507-6

Matrix: Air Lab File ID: GI30P106.D

Analysis Method: TO 15 LL Date Collected: 09/28/2020 10:01

Sample wt/vol: 100(mL) Date Analyzed: 09/30/2020 16:01

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 43140 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	5.3		1.3	0.13
56-23-5	Carbon tetrachloride	153.81	0.46	J	2.5	0.22
75-45-6	Chlorodifluoromethane	86.47	2.8		1.4	0.39
67-66-3	Chloroform	119.38	0.84	J	2.0	0.17
156-59-2	cis-1,2-Dichloroethene	96.94	2.0		1.6	0.20
75-71-8	Dichlorodifluoromethane	120.91	2.8		2.0	0.35
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	0.14
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	0.20
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	0.16
100-41-4	Ethylbenzene	106.17	0.44	J	1.7	0.28
75-09-2	Methylene Chloride	84.93	ND		6.9	6.8
1634-04-4	Methyl tert-butyl ether	88.15	ND		7.2	0.94
91-20-3	Naphthalene	128.17	ND		1.0	1.0
127-18-4	Tetrachloroethene	165.83	ND		2.7	0.24
108-88-3	Toluene	92.14	7.5		2.3	1.5
156-60-5	trans-1,2-Dichloroethene	96.94	0.48	J	1.6	0.14
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		3.0	2.4
71-55-6	1,1,1-Trichloroethane	133.41	4.8		2.2	1.0
79-00-5	1,1,2-Trichloroethane	133.41	ND		2.2	0.19
79-01-6	Trichloroethene	131.39	ND		1.1	0.16
526-73-8	1,2,3-Trimethylbenzene	120.19	0.98	J	2.0	0.88
95-63-6	1,2,4-Trimethylbenzene	120.20	3.6		2.0	0.49
108-67-8	1,3,5-Trimethylbenzene	120.20	1.9	J	2.0	0.54
75-01-4	Vinyl chloride	62.50	ND		0.51	0.33
1330-20-7	Xylenes, Total	106.17	2.0	J	3.5	0.52

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	90		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P106.D				
Lims ID:	140-20507-A-6				
Client ID:	BLDG C EFFLUENT				
Sample Type:	Client				
Inject. Date:	30-Sep-2020 16:01:30	ALS Bottle#:	6	Worklist Smp#:	10
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016761-010				
Misc. Info.:	140-20507-a-6				
Operator ID:	HMT	Instrument ID:	MG		
Method:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\MG_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	01-Oct-2020 15:06:02	Calib Date:	11-Sep-2020 06:50:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MG\20200910-16561.b\GI10IC09R.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1024				
First Level Reviewer: khachitpongpanits		Date:	01-Oct-2020 15:07:02		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.795	8.795	0.000	98	329462	4.80	
* 2 1,4-Difluorobenzene	114	10.979	10.979	0.000	95	1650650	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.719	15.719	0.000	86	1661495	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.363	17.364	-0.001	96	1112229	4.17	
6 Chlorodifluoromethane	51	3.705	3.694	0.006	95	38656	0.1579	
8 Dichlorodifluoromethane	85	3.764	3.764	0.000	100	35045	0.1126	
34 trans-1,2-Dichloroethene	96	7.069	7.075	-0.006	1	2140	0.0241	
42 cis-1,2-Dichloroethene	96	8.471	8.466	0.005	93	10238	0.1019	
44 Chloroform	83	8.811	8.811	0.000	27	7426	0.0345	
47 1,1,1-Trichloroethane	97	9.836	9.836	0.000	98	36772	0.1761	
50 Benzene	78	10.434	10.434	0.000	96	104498	0.3316	
52 Carbon tetrachloride	117	10.467	10.461	0.006	61	2935	0.0147	
67 Toluene	91	13.745	13.745	0.000	95	134689	0.3988	
78 Ethylbenzene	91	16.053	16.059	-0.006	97	9220	0.0204	
79 m-Xylene & p-Xylene	91	16.209	16.220	-0.011	96	23652	0.0683	
83 o-Xylene	91	16.743	16.744	-0.001	76	8568	0.0235	
90 1,3,5-Trimethylbenzene	120	18.102	18.102	0.000	72	15842	0.0769	
95 1,2,4-Trimethylbenzene	105	18.534	18.539	-0.005	97	58962	0.1450	
101 1,2,3-Trimethylbenzene	105	19.008	19.008	0.000	89	16022	0.0398	
S 124 Xylenes, Total	100				0		0.0918	

QC Flag Legend

Processing Flags

Reagents:

40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

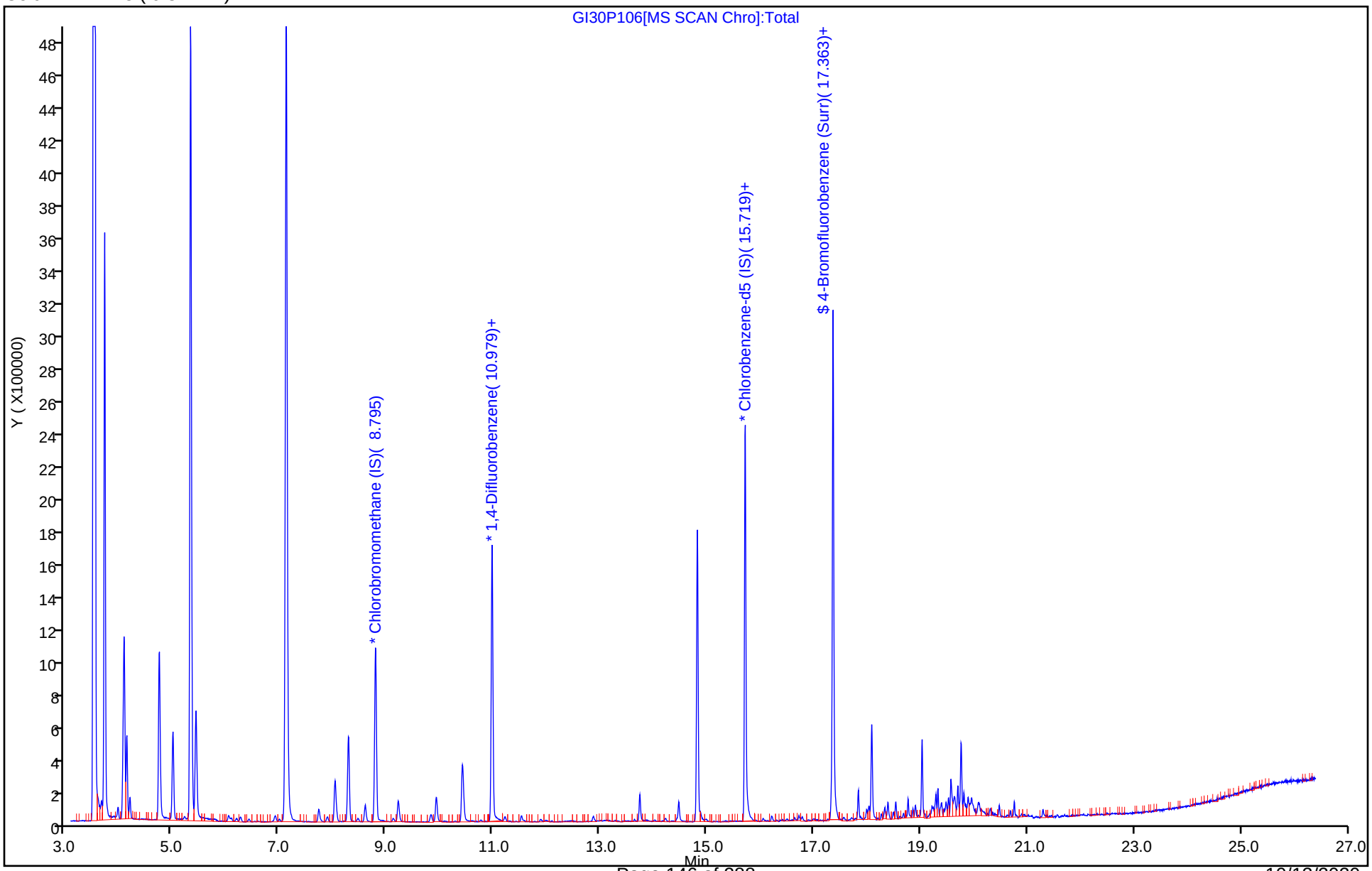
Report Date: 01-Oct-2020 15:07:02 Chrom Revision: 2.3 24-Sep-2020 19:22:38

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P106.D

Injection Date:	30-Sep-2020 16:01:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	140-20507-A-6	Lab Sample ID:	140-20507-6	Worklist Smp#:	10
Client ID:	BLDG C EFFLUENT				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P106.D				
Lims ID:	140-20507-A-6				
Client ID:	BLDG C EFFLUENT				
Sample Type:	Client				
Inject. Date:	30-Sep-2020 16:01:30	ALS Bottle#:	6	Worklist Smp#:	10
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016761-010				
Misc. Info.:	140-20507-a-6				
Operator ID:	HMT	Instrument ID:	MG		
Method:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\MG_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	01-Oct-2020 15:06:02	Calib Date:	11-Sep-2020 06:50:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MG\20200910-16561.b\GI10IC09R.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1024				

First Level Reviewer: khachitpongpanits Date: 01-Oct-2020 15:07:02

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	4.17	89.93

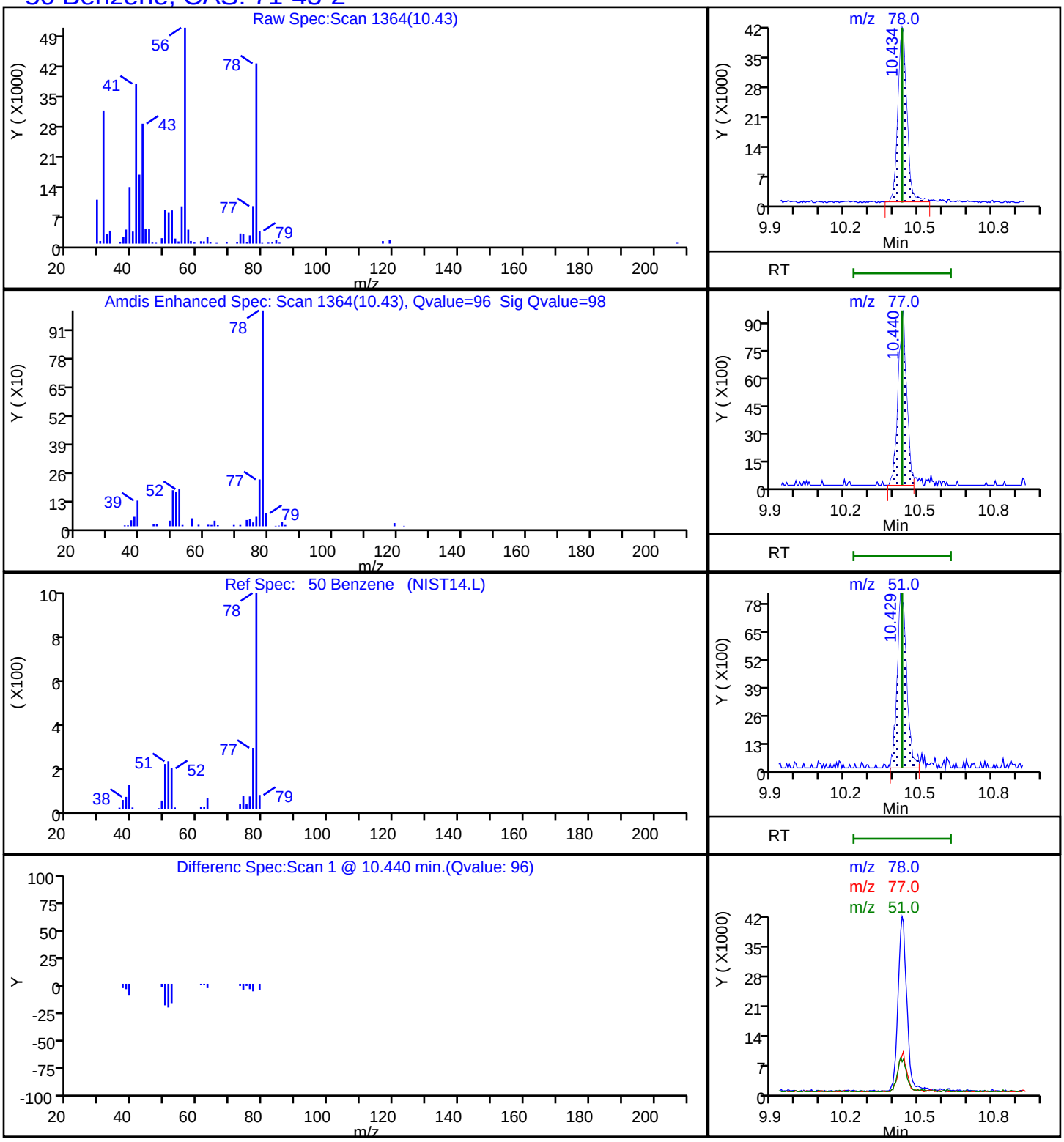
Report Date: 01-Oct-2020 15:07:03 Chrom Revision: 2.3 24-Sep-2020 19:22:38

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P106.D

Injection Date:	30-Sep-2020 16:01:30	Instrument ID:	MG		
Lims ID:	140-20507-A-6	Lab Sample ID:	140-20507-6		
Client ID:	BLDG C EFFLUENT				
Operator ID:	HMT	ALS Bottle#:	6	Worklist Smp#:	10
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

50 Benzene, CAS: 71-43-2



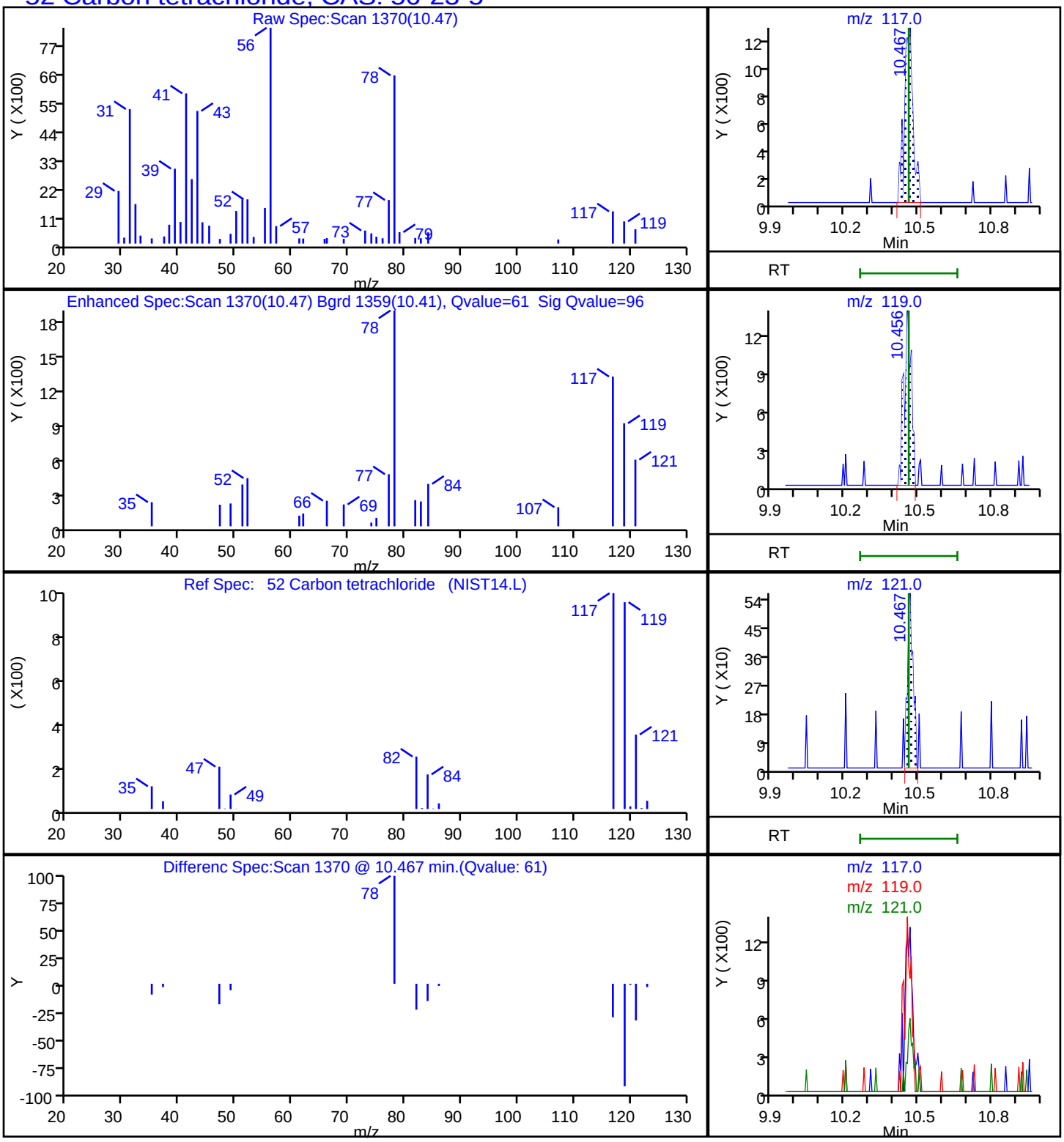
Report Date: 01-Oct-2020 15:07:03 Chrom Revision: 2.3 24-Sep-2020 19:22:38

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P106.D

Injection Date:	30-Sep-2020 16:01:30	Instrument ID:	MG		
Lims ID:	140-20507-A-6	Lab Sample ID:	140-20507-6		
Client ID:	BLDG C EFFLUENT				
Operator ID:	HMT	ALS Bottle#:	6	Worklist Smp#:	10
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

52 Carbon tetrachloride, CAS: 56-23-5



Report Date: 01-Oct-2020 15:07:02 Chrom Revision: 2.3 24-Sep-2020 19:22:38

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P106.D

Injection Date: 30-Sep-2020 16:01:30 Instrument ID: MG

Lims ID: 140-20507-A-6 Lab Sample ID: 140-20507-6

Client ID: BLDG C EFFLUENT

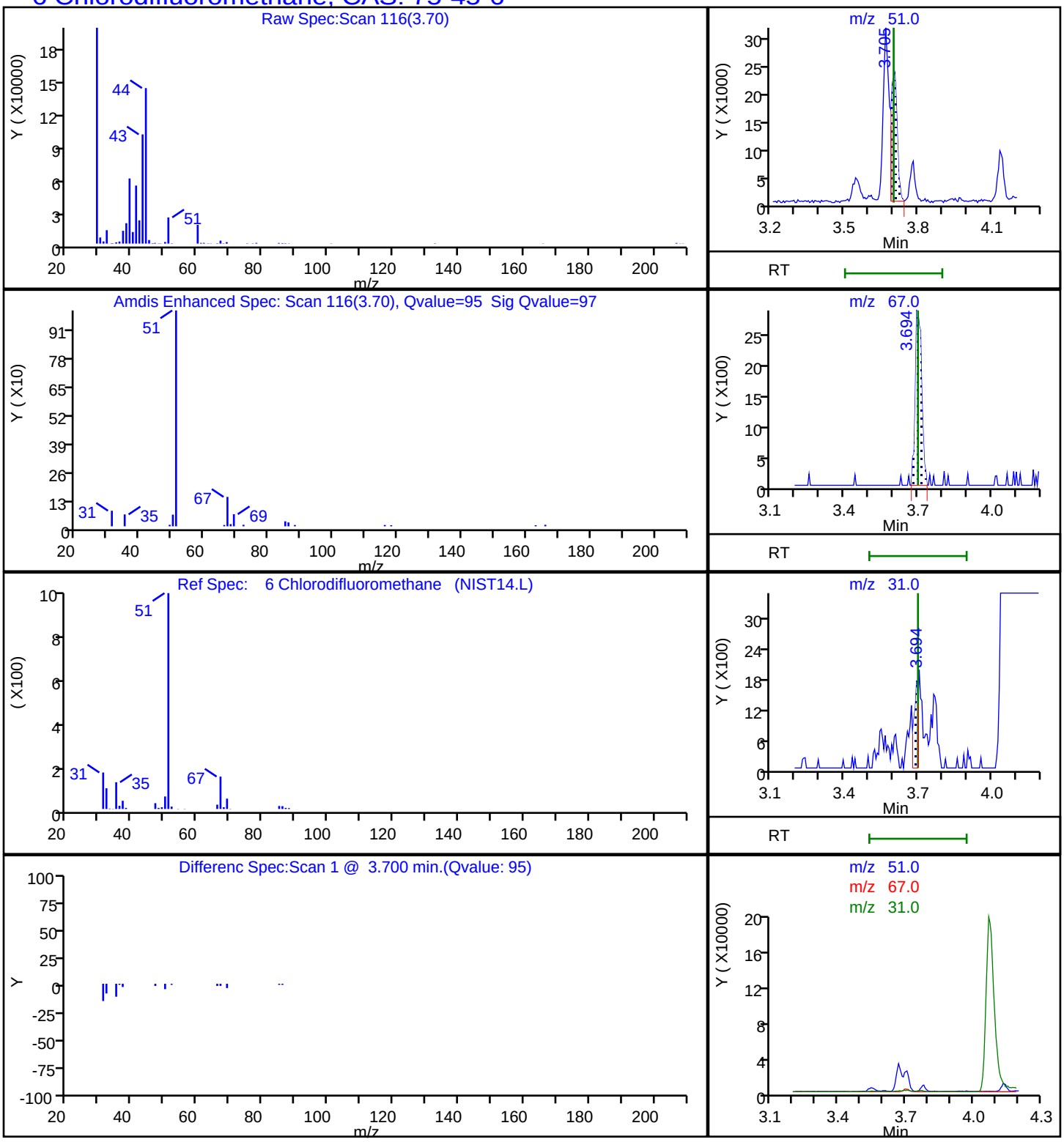
Operator ID: HMT ALS Bottle#: 6 Worklist Smp#: 10

Purge Vol: 500.000 mL Dil. Factor: 1.0000

Method: MG_TO15 Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm) Detector MS SCAN

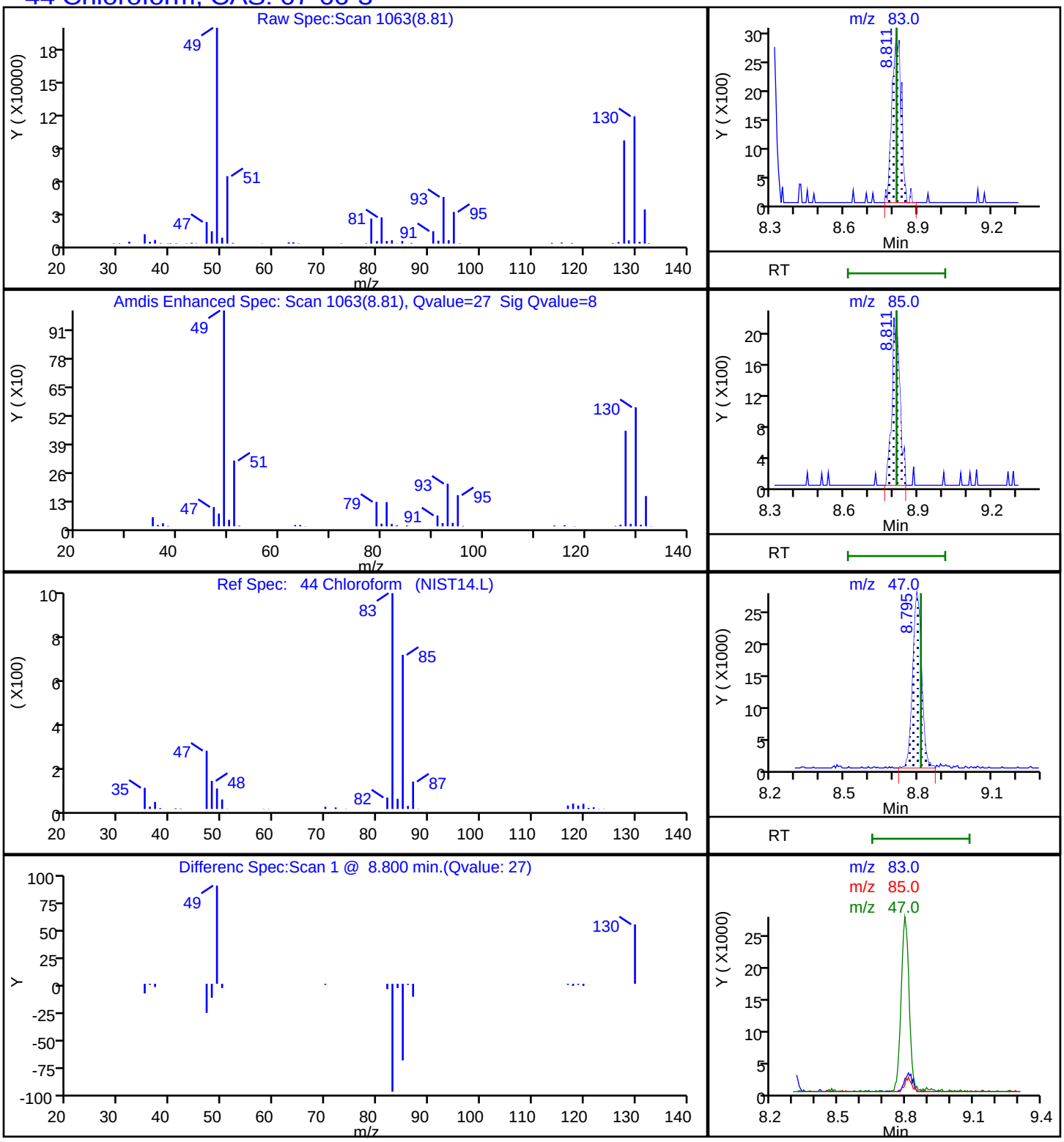
6 Chlorodifluoromethane, CAS: 75-45-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P106.D		
Injection Date:	30-Sep-2020 16:01:30	Instrument ID:	MG
Lims ID:	140-20507-A-6	Lab Sample ID:	140-20507-6
Client ID:	BLDG C EFFLUENT		
Operator ID:	HMT	ALS Bottle#:	6 Worklist Smp#: 10
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

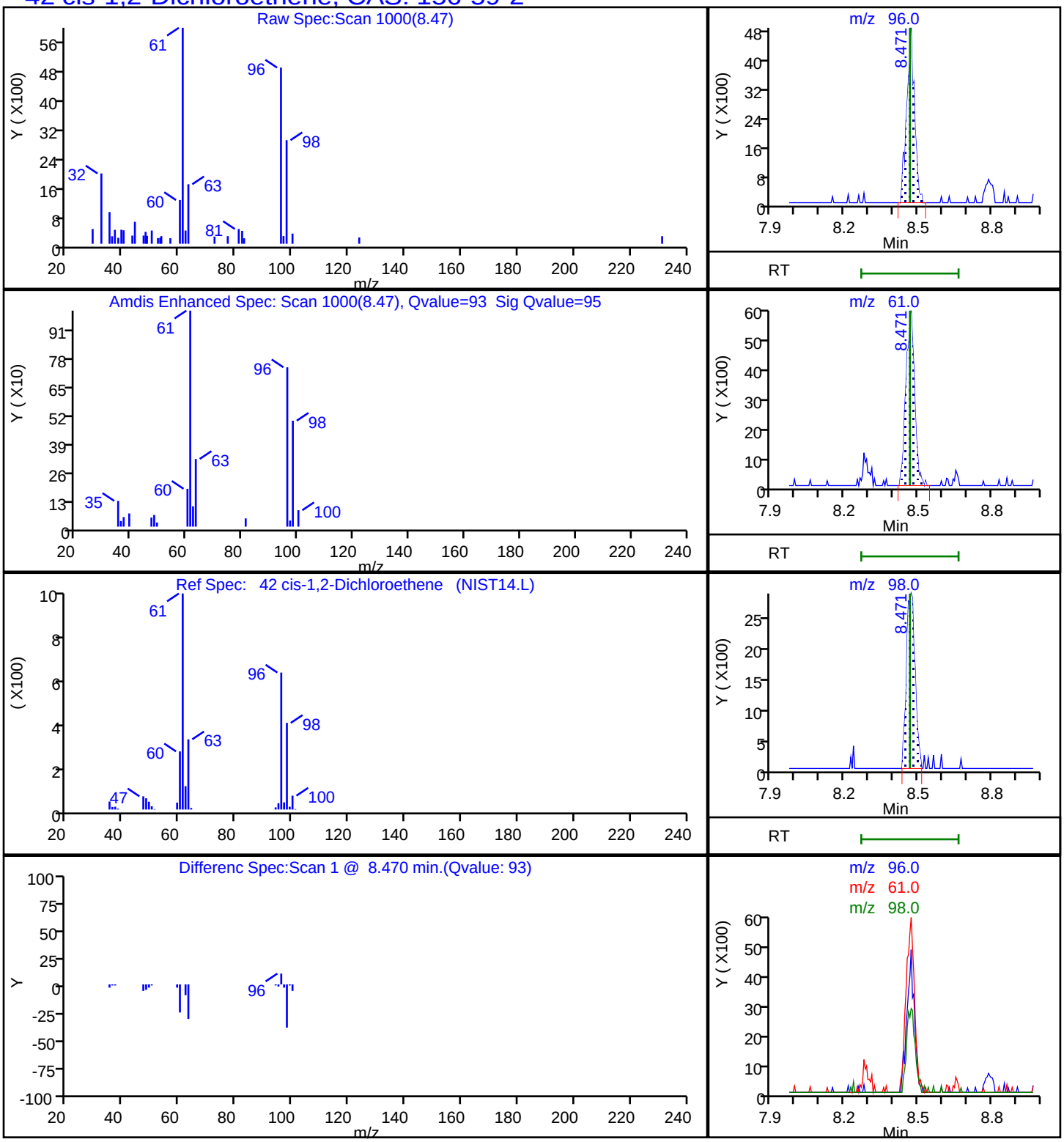
44 Chloroform, CAS: 67-66-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P106.D		
Injection Date:	30-Sep-2020 16:01:30	Instrument ID:	MG
Lims ID:	140-20507-A-6	Lab Sample ID:	140-20507-6
Client ID:	BLDG C EFFLUENT		
Operator ID:	HMT	ALS Bottle#:	6 Worklist Smp#: 10
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

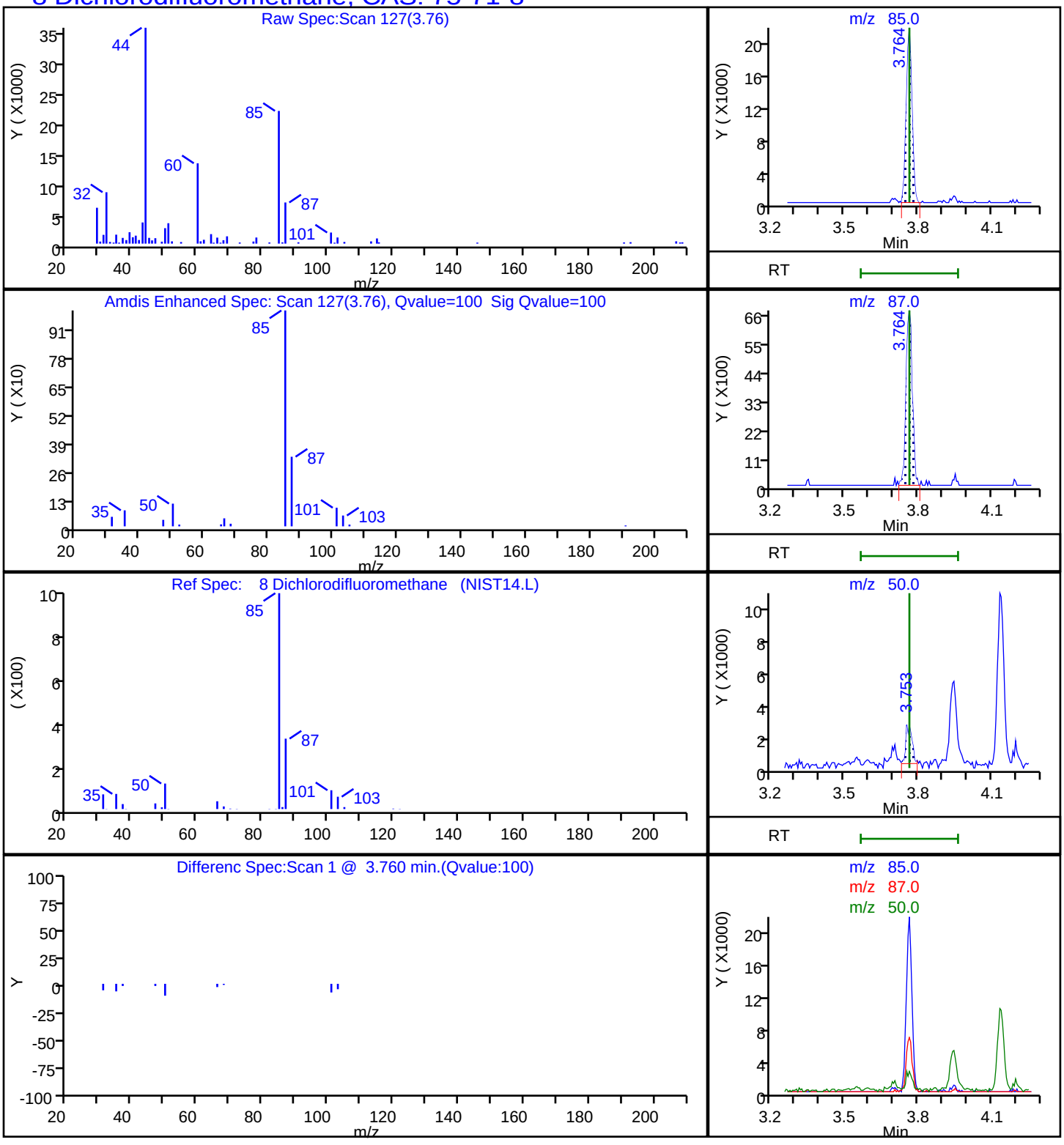
42 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P106.D				
Injection Date:	30-Sep-2020 16:01:30	Instrument ID:	MG		
Lims ID:	140-20507-A-6	Lab Sample ID:	140-20507-6		
Client ID:	BLDG C EFFLUENT				
Operator ID:	HMT	ALS Bottle#:	6	Worklist Smp#:	10
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

8 Dichlorodifluoromethane, CAS: 75-71-8

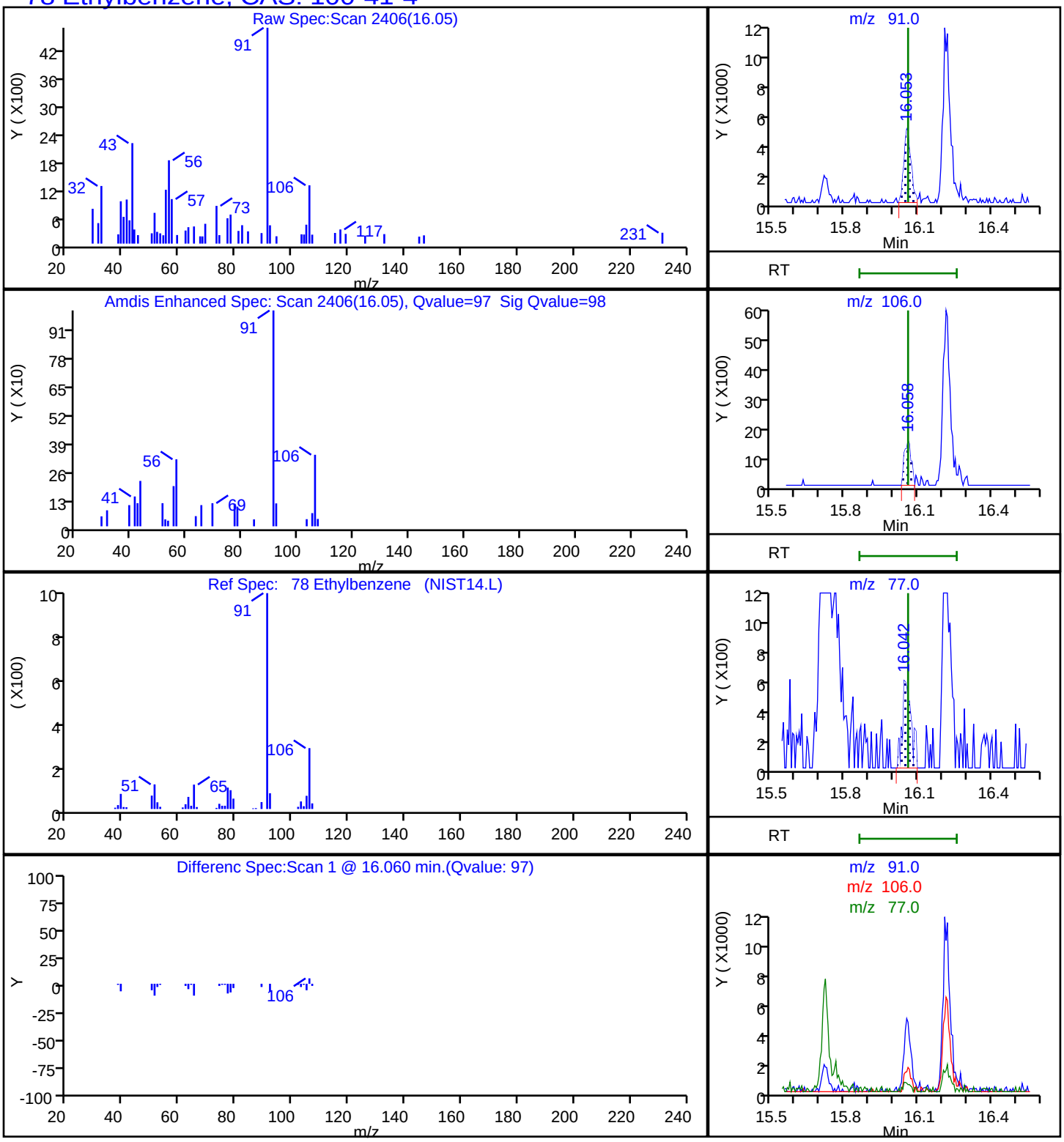


Report Date: 01-Oct-2020 15:07:03 Chrom Revision: 2.3 24-Sep-2020 19:22:38

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P106.D				
Injection Date:	30-Sep-2020 16:01:30	Instrument ID:	MG		
Lims ID:	140-20507-A-6	Lab Sample ID:	140-20507-6		
Client ID:	BLDG C EFFLUENT				
Operator ID:	HMT	ALS Bottle#:	6	Worklist Smp#:	10
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

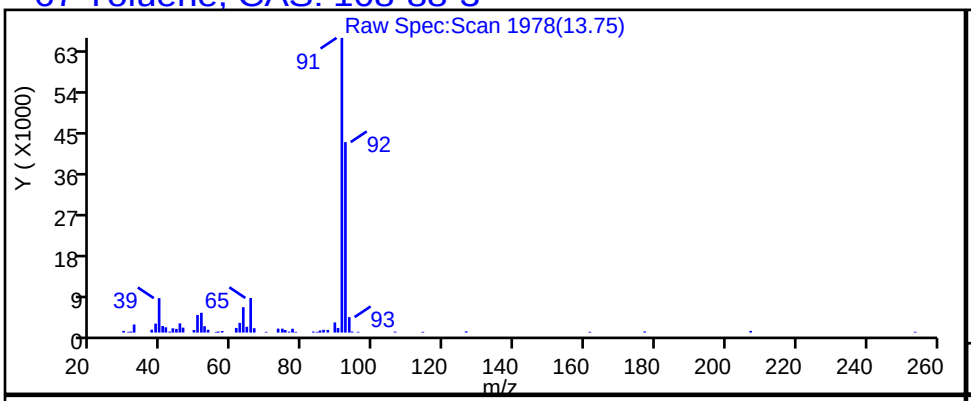
78 Ethylbenzene, CAS: 100-41-4

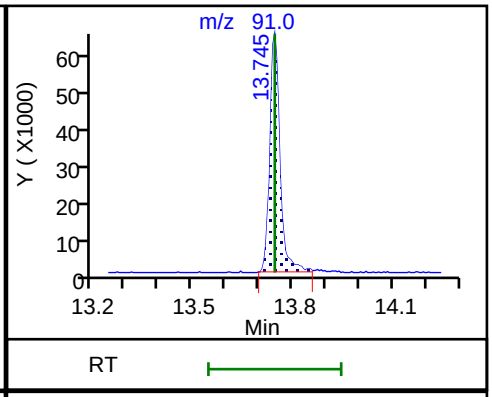


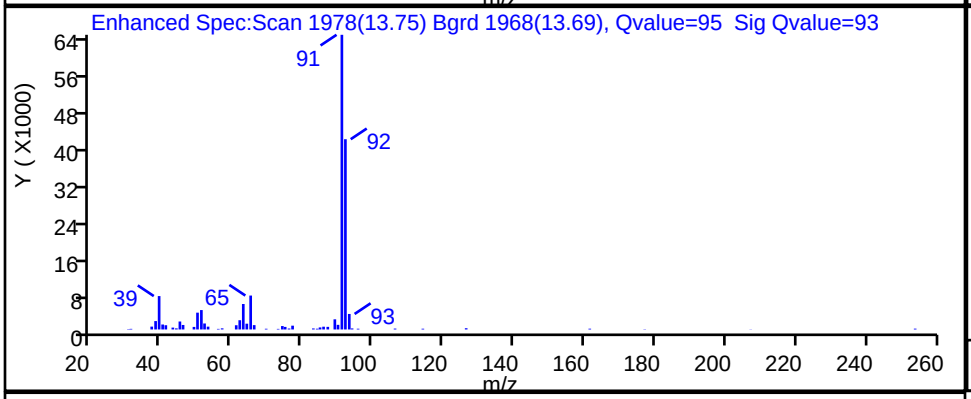
Eurofins TestAmerica, Knoxville

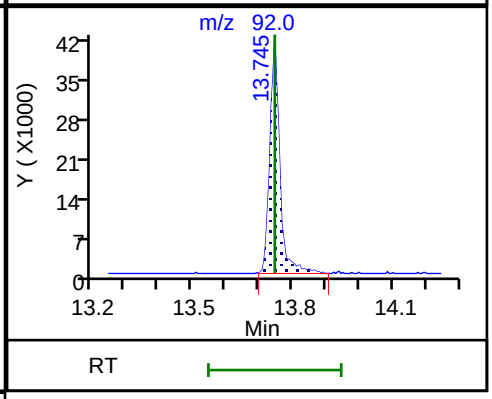
Data File: \\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P106.D
Injection Date: 30-Sep-2020 16:01:30 Instrument ID: MG
Lims ID: 140-20507-A-6 Lab Sample ID: 140-20507-6
Client ID: BLDG C EFFLUENT
Operator ID: HMT ALS Bottle#: 6 Worklist Smp#: 10
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Method: MG_TO15 Limit Group: MSA TO14A_15 Routine ICAL
Column: RTX-5 (0.32 mm) Detector MS SCAN

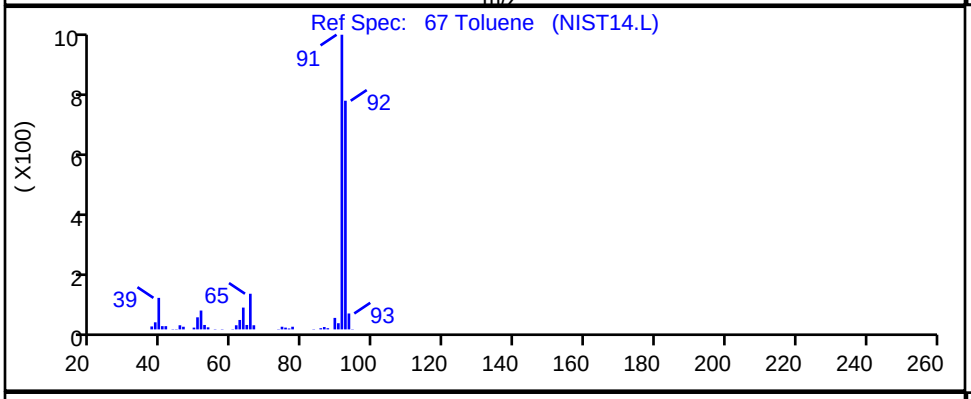
67 Toluene, CAS: 108-88-3

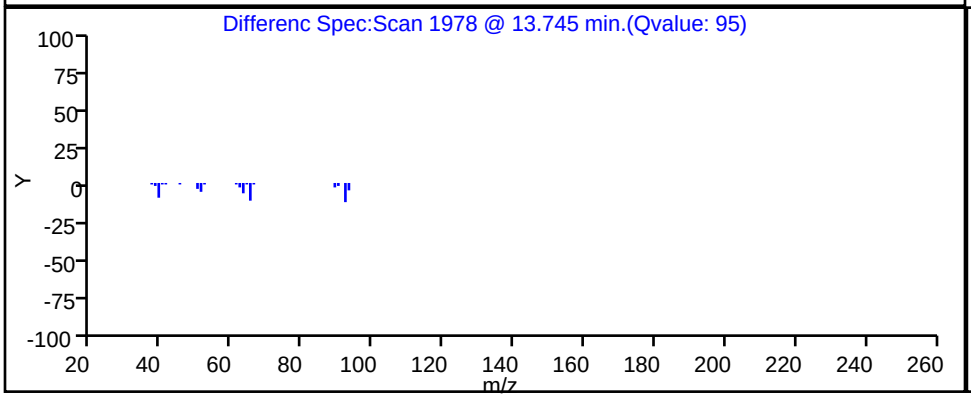


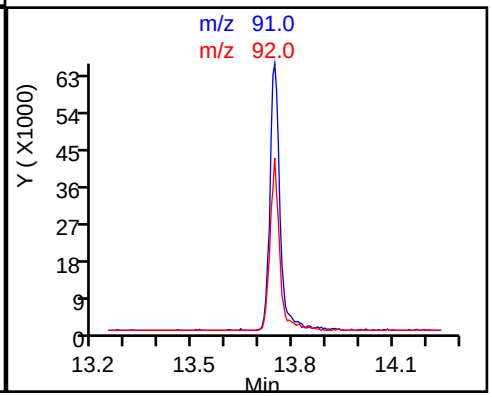








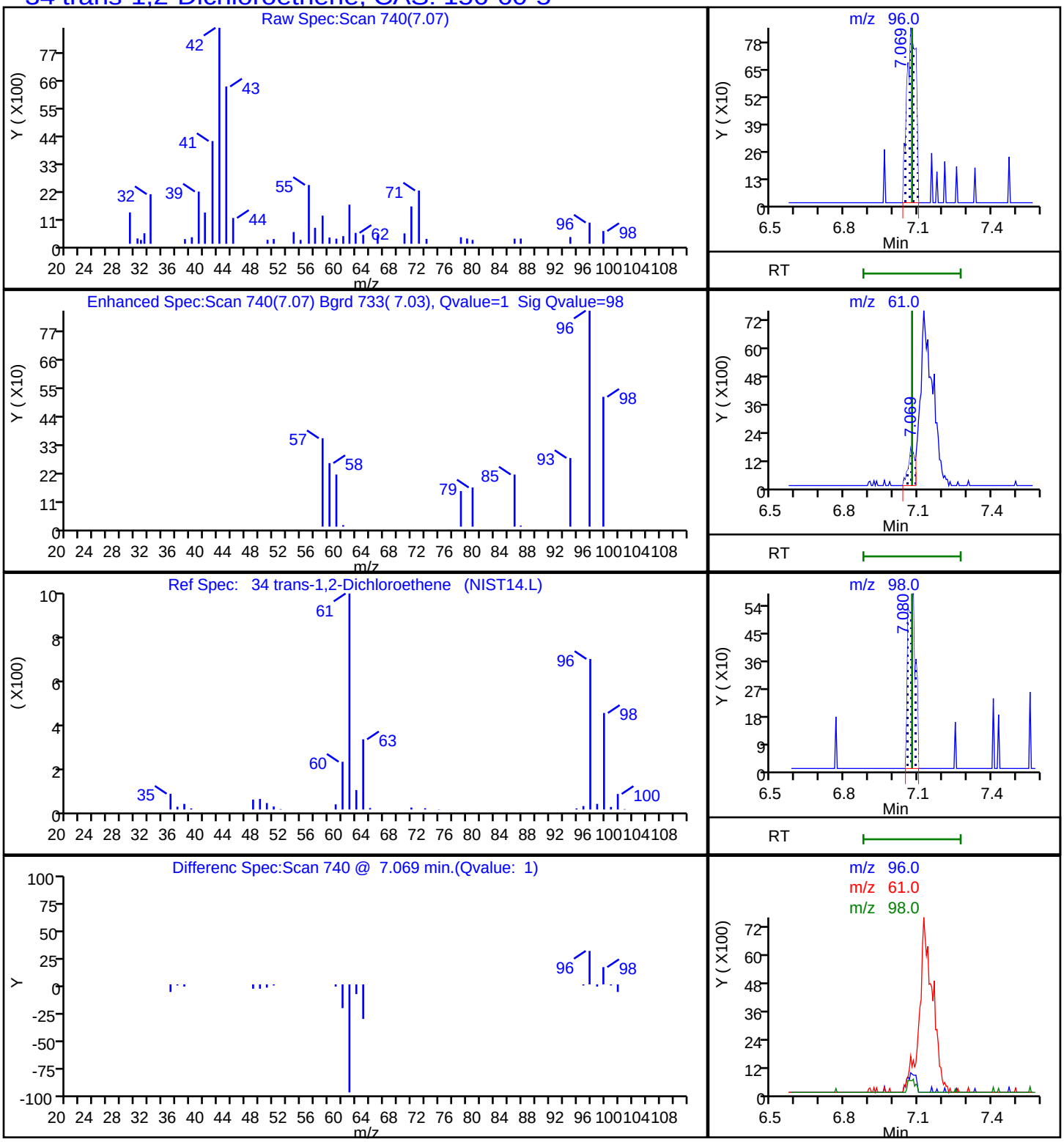




Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P106.D		
Injection Date:	30-Sep-2020 16:01:30	Instrument ID:	MG
Lims ID:	140-20507-A-6	Lab Sample ID:	140-20507-6
Client ID:	BLDG C EFFLUENT		
Operator ID:	HMT	ALS Bottle#:	6 Worklist Smp#: 10
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

34 trans-1,2-Dichloroethene, CAS: 156-60-5

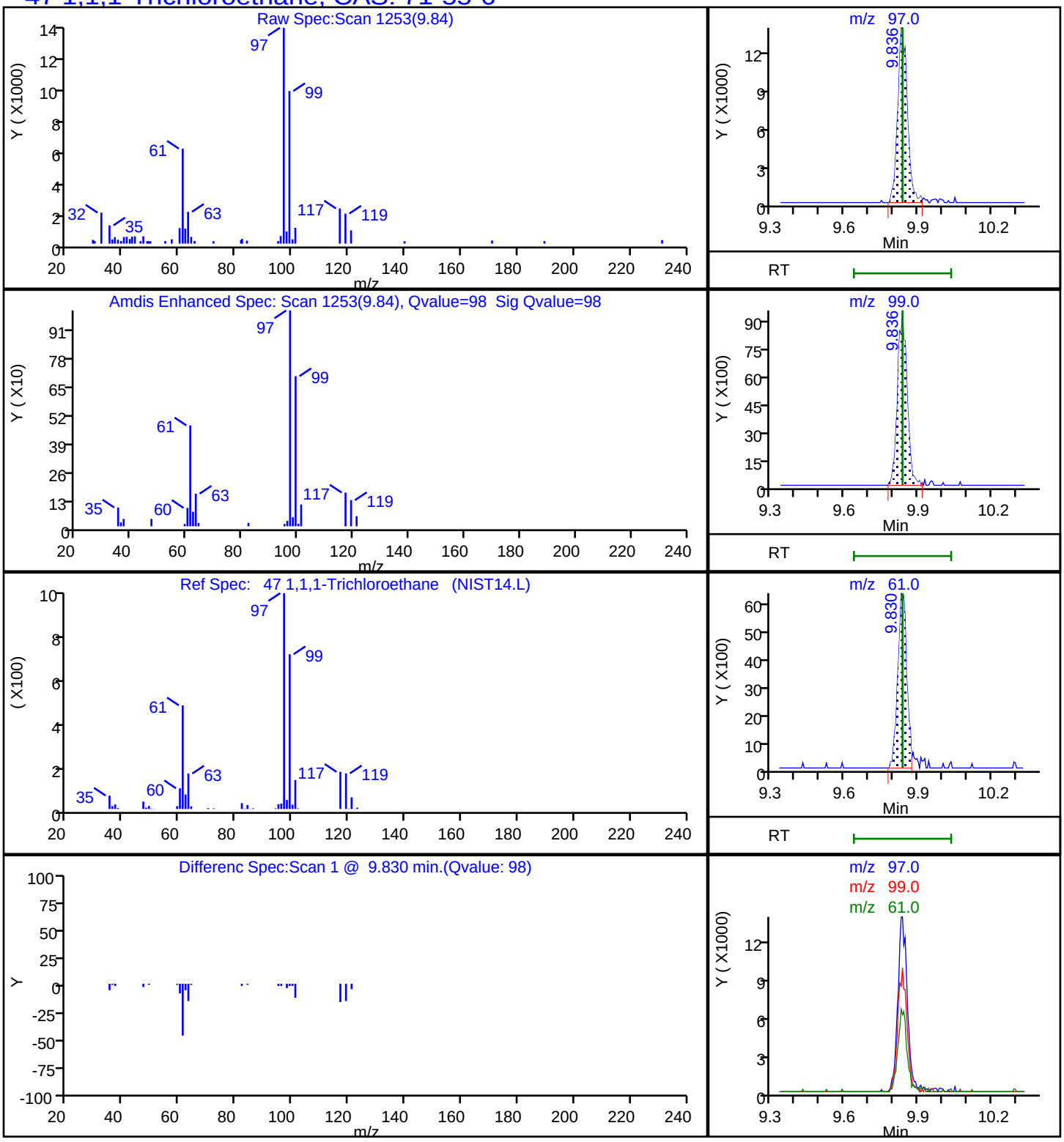


Report Date: 01-Oct-2020 15:07:02 Chrom Revision: 2.3 24-Sep-2020 19:22:38

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P106.D		
Injection Date:	30-Sep-2020 16:01:30	Instrument ID:	MG
Lims ID:	140-20507-A-6	Lab Sample ID:	140-20507-6
Client ID:	BLDG C EFFLUENT		
Operator ID:	HMT	ALS Bottle#:	6 Worklist Smp#: 10
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

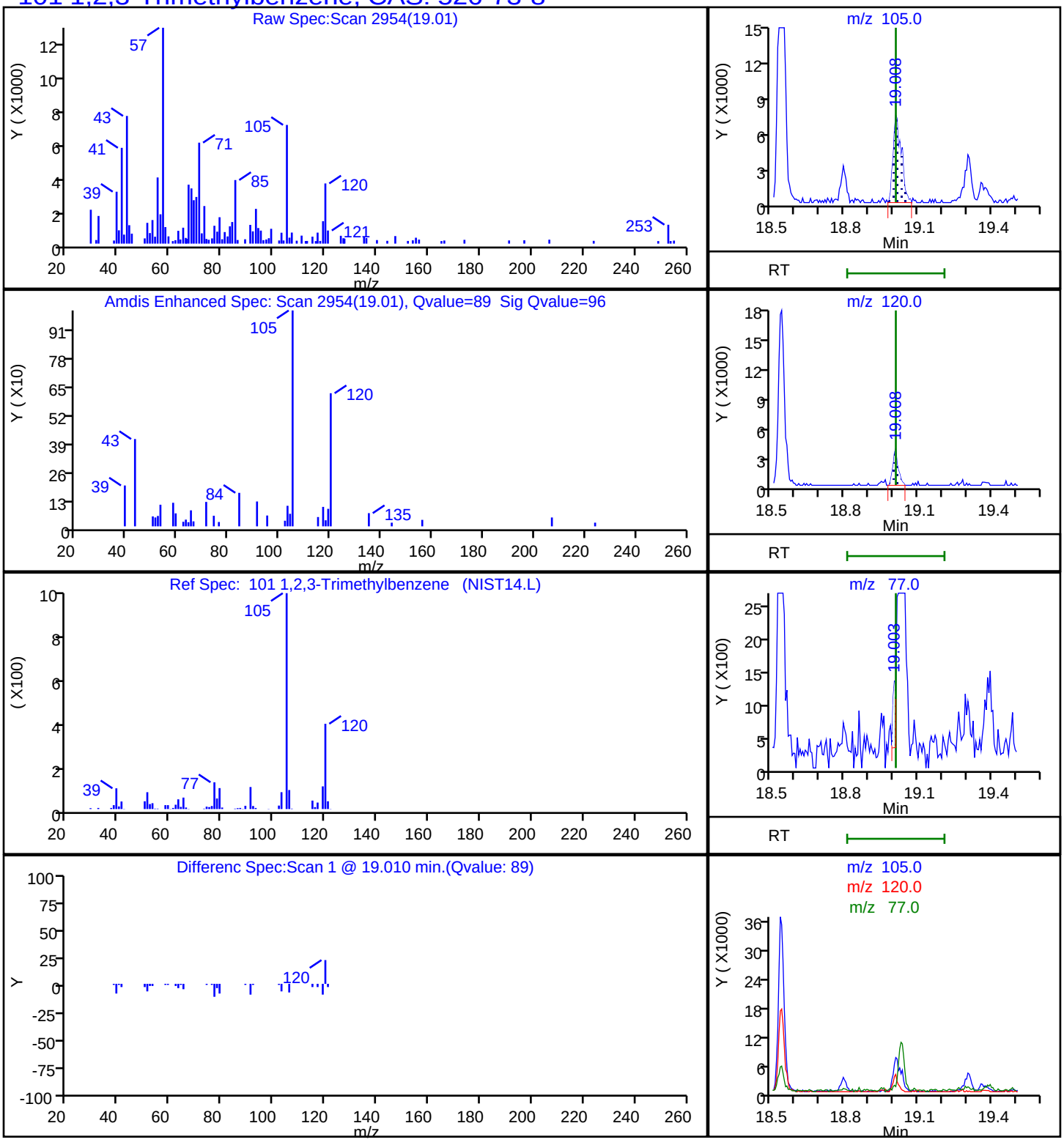
47 1,1,1-Trichloroethane, CAS: 71-55-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P106.D		
Injection Date:	30-Sep-2020 16:01:30	Instrument ID:	MG
Lims ID:	140-20507-A-6	Lab Sample ID:	140-20507-6
Client ID:	BLDG C EFFLUENT		
Operator ID:	HMT	ALS Bottle#:	6 Worklist Smp#: 10
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

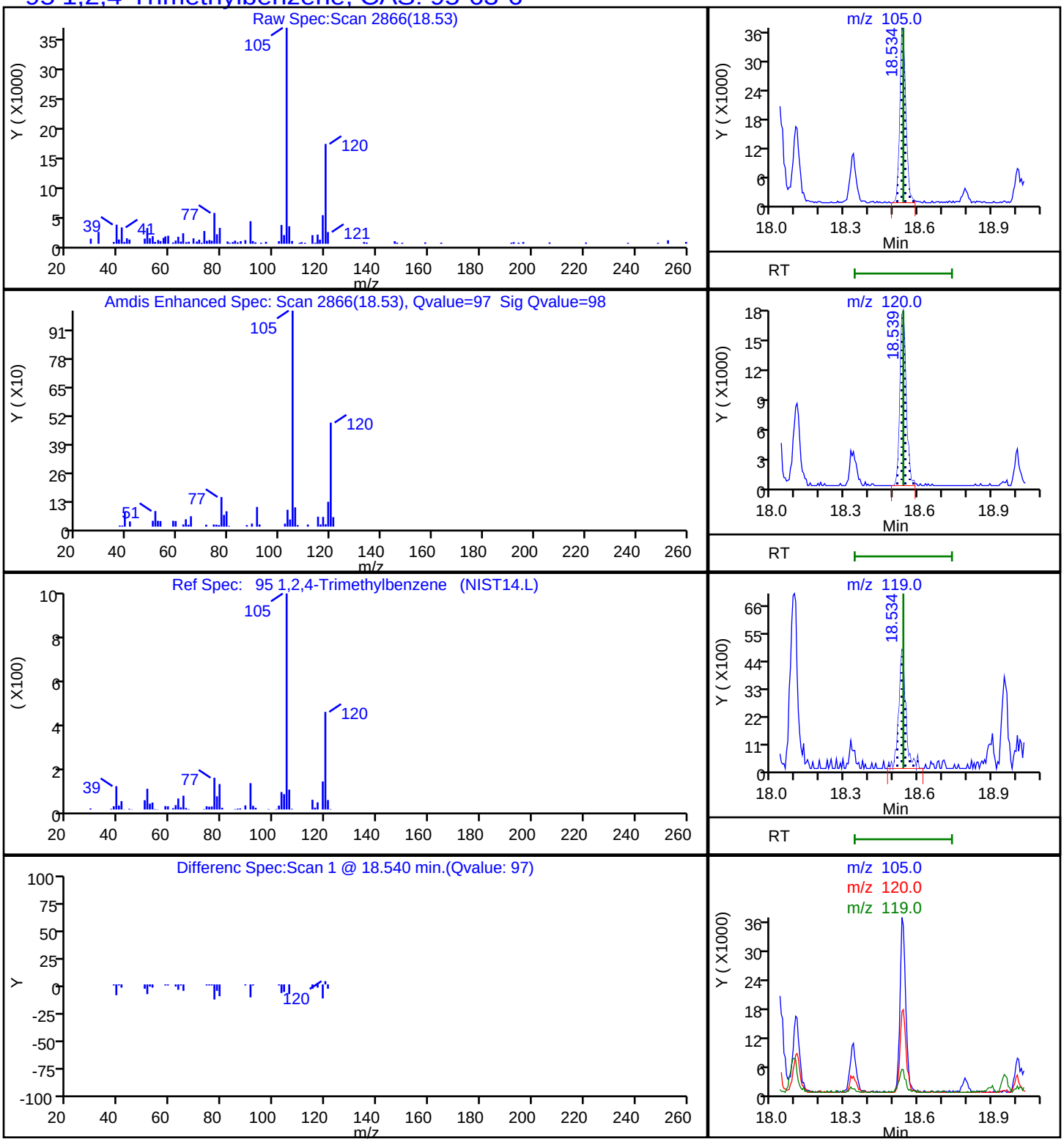
101 1,2,3-Trimethylbenzene, CAS: 526-73-8



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P106.D				
Injection Date:	30-Sep-2020 16:01:30	Instrument ID:	MG		
Lims ID:	140-20507-A-6	Lab Sample ID:	140-20507-6		
Client ID:	BLDG C EFFLUENT				
Operator ID:	HMT	ALS Bottle#:	6	Worklist Smp#:	10
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

95 1,2,4-Trimethylbenzene, CAS: 95-63-6

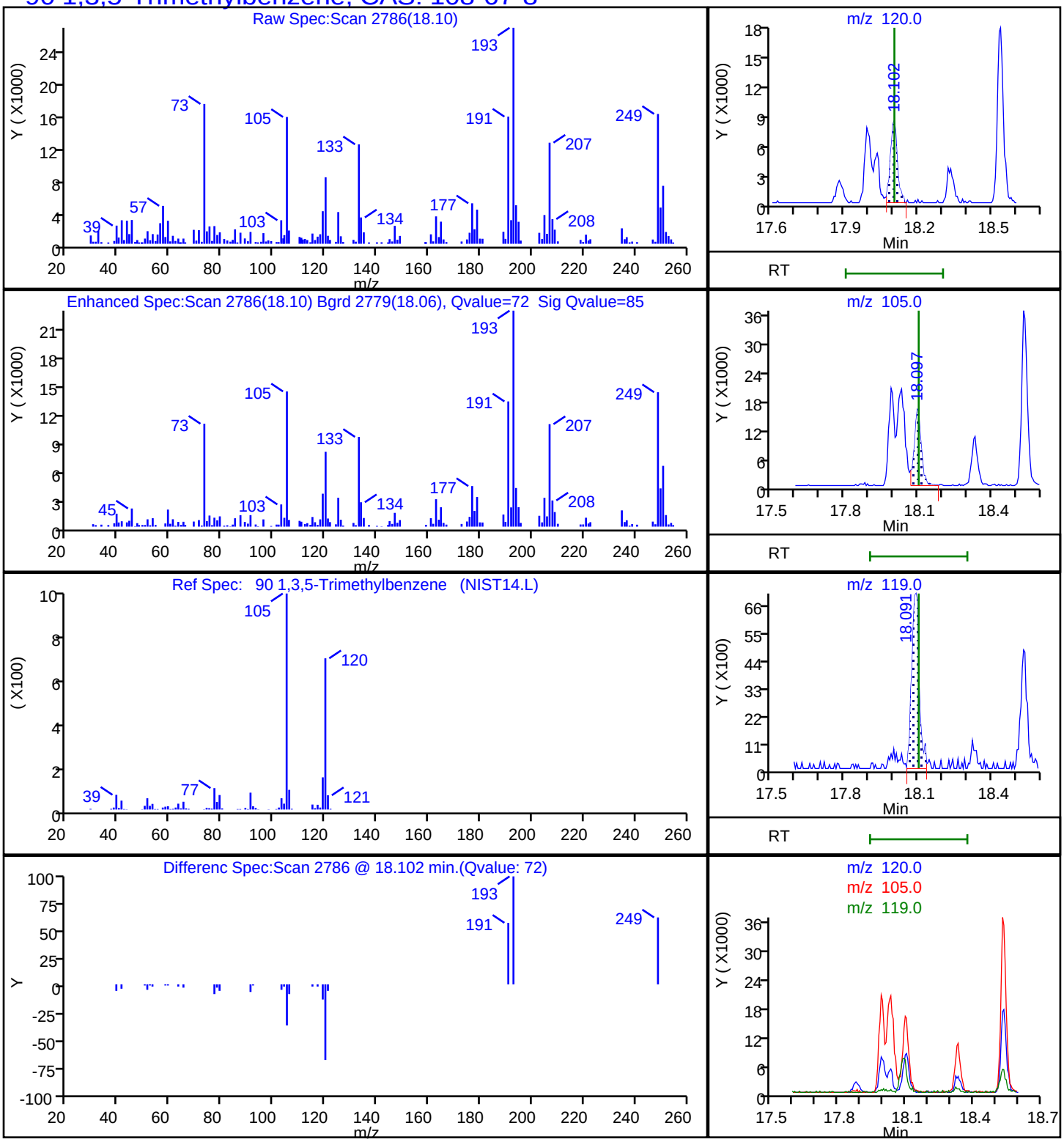


Report Date: 01-Oct-2020 15:07:03 Chrom Revision: 2.3 24-Sep-2020 19:22:38

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P106.D				
Injection Date:	30-Sep-2020 16:01:30	Instrument ID:	MG		
Lims ID:	140-20507-A-6	Lab Sample ID:	140-20507-6		
Client ID:	BLDG C EFFLUENT				
Operator ID:	HMT	ALS Bottle#:	6	Worklist Smp#:	10
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

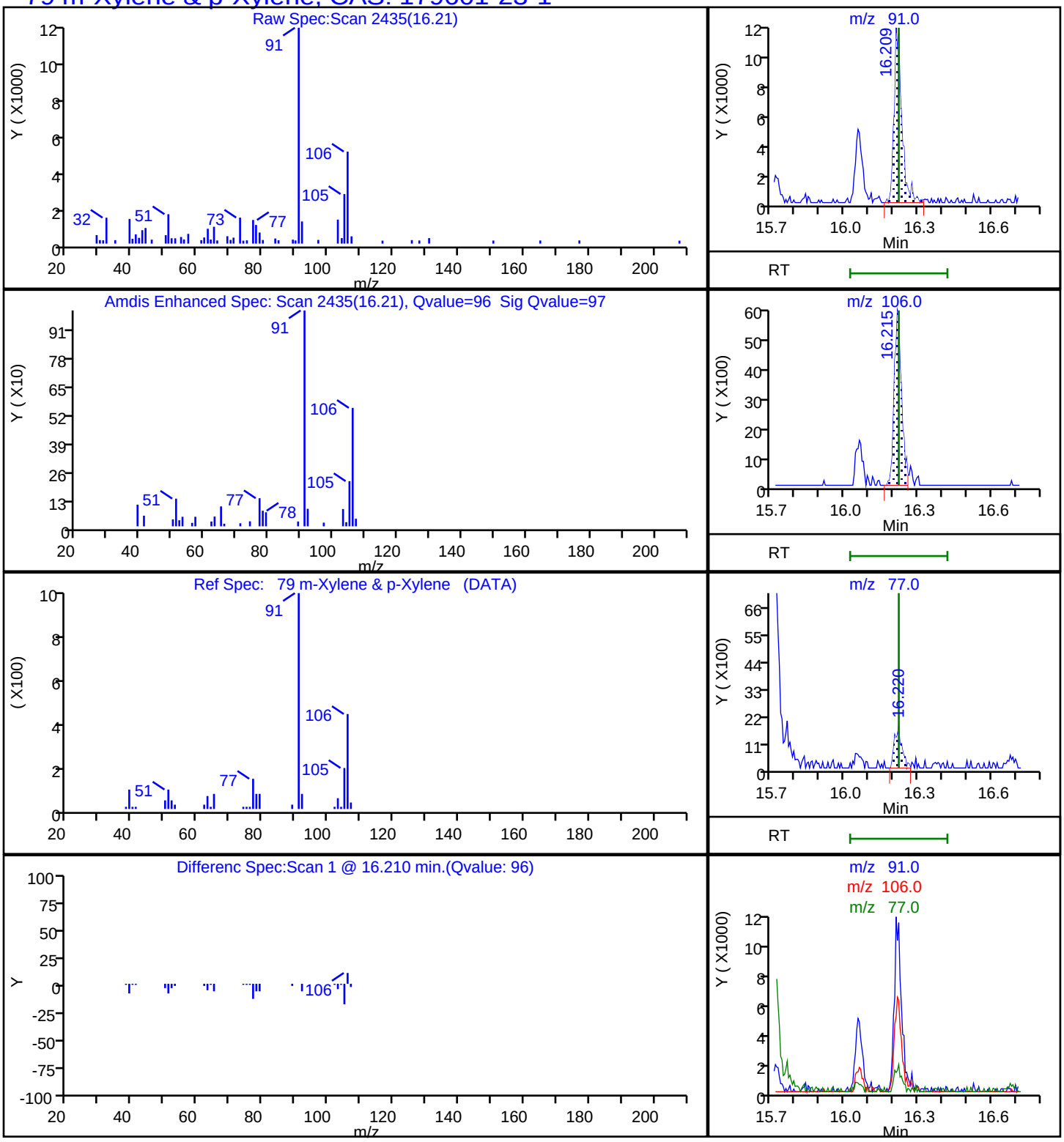
90 1,3,5-Trimethylbenzene, CAS: 108-67-8



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P106.D				
Injection Date:	30-Sep-2020 16:01:30	Instrument ID:	MG		
Lims ID:	140-20507-A-6	Lab Sample ID:	140-20507-6		
Client ID:	BLDG C EFFLUENT				
Operator ID:	HMT	ALS Bottle#:	6	Worklist Smp#:	10
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

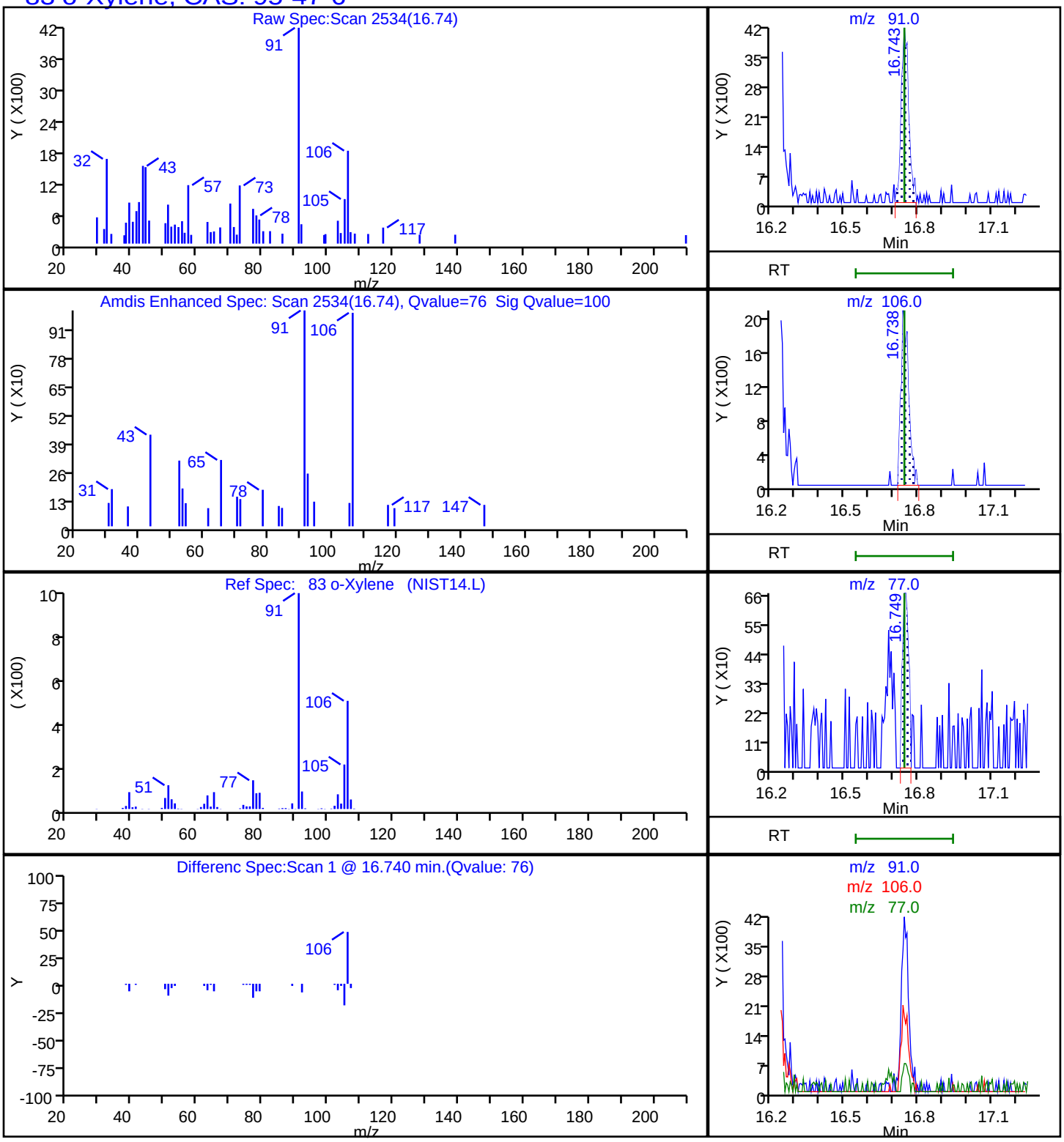
79 m-Xylene & p-Xylene, CAS: 179601-23-1



Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GI30P106.D		
Injection Date:	30-Sep-2020 16:01:30	Instrument ID:	MG
Lims ID:	140-20507-A-6	Lab Sample ID:	140-20507-6
Client ID:	BLDG C EFFLUENT		
Operator ID:	HMT	ALS Bottle#:	6 Worklist Smp#: 10
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

83 o-Xylene, CAS: 95-47-6



FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20507-1 Analy Batch No.: 42613

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/10/2020 18:15 Calibration End Date: 09/11/2020 06:50 Calibration ID: 2612

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 140-42613/9	GI10IC01.D
Level 2	IC 140-42613/10	GI10IC02.D
Level 3	IC 140-42613/11	GI10IC03.D
Level 4	IC 140-42613/12	GI10IC04.D
Level 5	IC 140-42613/13	GI10IC05.D
Level 6	IC 140-42613/14	GI10IC06.D
Level 7	ICIS 140-42613/15	GI10IC07.D
Level 8	IC 140-42613/7	GI10IC08.D
Level 9	IC 140-42613/21	GI10IC09R.D
Level 10	IC 140-42613/3	GI10IC10.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Chlorodifluoromethane	4.2249 3.5070	3.7915 3.6044	3.9835 3.0444	3.4572 3.5806	3.4661 3.0124	Ave		3.5672				10.5		30.0			
Propene	+++++ 2.1101	2.4782 2.1404	2.1535 1.7452	2.0519 0.9152	1.9539 1.5934	Ave		1.9046				23.6		30.0			
Dichlorodifluoromethane	4.4148 4.6154	4.4076 4.8749	4.6308 4.2086	4.3414 5.4993	4.5312 3.8026	Ave		4.5327				9.8		30.0			
Chloromethane	+++++ 0.7832	+++++ 0.7334	0.8870 0.6313	0.8867 0.7216	0.7911 0.6423	Ave		0.7596				12.8		30.0			
1,2-Dichloro-1,1,2,2-tetrafluoroethane	2.8352 2.5172	2.4916 2.7860	2.3375 2.5739	2.3687 +++++	2.5196 +++++	Ave		2.5537				7.0		30.0			
Vinyl chloride	2.3120 2.1641	2.2438 2.2168	2.0343 1.9264	2.0449 2.3022	2.1122 1.9211	Ave		2.1278				6.8		30.0			
1,3-Butadiene	2.0550 1.8953	1.7565 1.9240	1.9040 1.6878	1.7912 1.9992	1.8283 1.7182	Ave		1.8560				6.5		30.0			
Butane	+++++ 4.1176	+++++ 4.1322	4.2356 3.5283	3.8833 3.7870	3.8904 3.4679	Ave		3.8803				7.2		30.0			
Bromomethane	+++++ 1.4362	+++++ 1.5403	1.4325 1.3984	1.3181 1.8317	1.4481 1.3599	Ave		1.4707				10.9		30.0			
Chloroethane	1.0269 0.9099	1.0988 0.9372	0.9813 0.8697	0.8561 1.0252	0.9718 0.8733	Ave		0.9550				8.4		30.0			
Ethanol	+++++ 0.9589	+++++ 1.0344	+++++ 0.9088	1.1166 0.7200	0.9472 0.8682	Ave		0.9363				13.4		30.0			
Vinyl bromide	1.4386 1.2005	1.3691 1.2242	1.1385 1.2093	1.0956 1.5264	1.2164 1.1270	Ave		1.2546				11.4		30.0			
2-Methylbutane	+++++ 2.7581	+++++ 2.6789	3.2235 2.4718	2.5148 2.6247	2.8181 2.3905	Ave		2.6851				9.7		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20507-1 Analy Batch No.: 42613

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/10/2020 18:15 Calibration End Date: 09/11/2020 06:50 Calibration ID: 2612

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Trichlorofluoromethane	3.5278 3.7988	3.6257 3.6338	3.4360 3.4958	3.6862 4.3047	3.7899 3.4975	Ave		3.6796				6.8		30.0			
Acrolein	+++++ 0.5367	+++++ 0.5425	0.8284 0.5381	0.6766 0.5420	0.6364 0.5907	Ave		0.6115				16.7		30.0			
Acetonitrile	+++++ 0.8317	+++++ 0.8839	+++++ 0.7749	0.6649 0.7061	0.9822 0.8226	Ave		0.8095				13.2		30.0			
Acetone	+++++ 0.6892	+++++ 0.7553	+++++ 0.7051	+++++ 0.6043	0.7934 0.7382	Ave		0.7143				9.1		30.0			
Pentane	+++++ 0.2699	+++++ 0.2591	+++++ 0.2390	0.2465 0.2855	0.2689 0.2512	Ave		0.2600				6.1		30.0			
Isopropyl alcohol	+++++ 2.4551	+++++ 2.2687	+++++ 2.1594	2.5847 1.9687	2.2354 2.3296	Ave		2.2859				8.7		30.0			
Ethyl ether	+++++ 2.1014	+++++ 2.2567	+++++ 1.9356	2.5264 1.7008	2.3727 2.1320	Ave		2.1465				12.8		30.0			
1,1-Dichloroethene	+++++ 1.1387	1.2602 1.1779	1.0969 1.0639	1.0851 1.1860	1.2104 1.0778	Ave		1.1441				6.0		30.0			
Acrylonitrile	+++++ 0.9812	+++++ 1.1189	+++++ 1.0574	1.2278 0.9942	1.0793 1.1376	Ave		1.0852				7.9		30.0			
tert-Butyl alcohol	+++++ 2.3244	+++++ 2.0002	+++++ 1.9489	2.1983 1.9500	2.1082 2.1316	Ave		2.0945				6.6		30.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	2.6123 2.4734	2.7836 2.4468	2.6034 2.3712	2.2763 2.5752	2.4865 2.4442	Ave		2.5073				5.7		30.0			
Methylene Chloride	+++++ 1.1414	+++++ 1.1468	+++++ 1.0843	+++++ 1.1323	1.1996 1.1134	Ave		1.1363				3.4		30.0			
3-Chloropropene	+++++ 1.6931	+++++ 1.7424	1.8162 1.5086	1.8547 1.5562	1.5332 1.6078	Ave		1.6640				8.0		30.0			
Carbon disulfide	4.1442 3.8810	3.9158 3.8001	3.8329 3.5365	3.6644 3.7512	3.7403 3.5676	Ave		3.7834				4.7		30.0			
trans-1,2-Dichloroethene	+++++ 1.3090	1.4703 1.2861	1.2203 1.2613	1.1212 1.3635	1.3047 1.2851	Ave		1.2913				7.4		30.0			
2-Methylpentane	+++++ 4.4897	+++++ 4.4073	4.6122 3.9569	4.2201 4.2104	4.4782 4.0821	Ave		4.3071				5.2		30.0			
Methyl tert-butyl ether	+++++ 3.0340	+++++ 3.5622	+++++ 3.3968	3.7947 2.8020	3.3591 3.5245	Ave		3.3533				10.0		30.0			
1,1-Dichloroethane	+++++ 3.0130	3.3708 2.9815	3.1273 2.7754	3.0788 2.8271	3.0190 2.7489	Ave		2.9935				6.5		30.0			
Vinyl acetate	+++++ 4.3975	+++++ 5.0518	4.5676 4.6389	5.3354 4.0838	4.8090 4.9418	Ave		4.7282				8.3		30.0			
2-Butanone (MEK)	+++++ 0.5832	+++++ 0.6461	0.7492 0.6197	0.8575 0.4711	0.6221 0.6756	Ave		0.6531				17.5		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20507-1 Analy Batch No.: 42613

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/10/2020 18:15 Calibration End Date: 09/11/2020 06:50 Calibration ID: 2612

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Hexane	+++++ 1.4723	+++++ 1.4257	1.5366 1.3286	1.4035 1.3533	1.5177 1.3830	Ave		1.4276				5.3		30.0			
cis-1,2-Dichloroethene	1.6763 1.4347	1.4459 1.4438	1.5239 1.4053	1.3252 1.4568	1.5226 1.3965	Ave		1.4631				6.5		30.0			
Ethyl acetate	+++++ 3.5014	+++++ 4.2083	+++++ 3.8379	4.7778 2.8619	3.9397 4.1085	Ave		3.8908				15.4		30.0			
Chloroform	+++++ 3.1773	3.2415 3.1614	3.3476 2.9085	3.1812 2.9968	3.2382 2.9538	Ave		3.1340				4.7		30.0			
Tetrahydrofuran	+++++ 1.8978	+++++ 2.1658	2.3231 1.9580	2.4380 1.6278	2.1876 2.0533	Ave		2.0814				12.3		30.0			
1,1,1-Trichloroethane	+++++ 3.1482	2.9757 3.0792	2.9521 2.9691	3.0776 3.0568	3.2032 2.9228	Ave		3.0427				3.1		30.0			
1,2-Dichloroethane	+++++ 0.4574	0.4529 0.4298	0.4221 0.3881	0.4262 0.4248	0.4894 0.3891	Ave		0.4311				7.5		30.0			
1-Butanol	+++++ 0.1638	+++++ 0.1195	+++++ 0.1027	+++++ 0.1248	0.1390 0.1269	Ave		0.1295				15.9		30.0			
Benzene	+++++ 0.9656	+++++ 0.9360	0.8642 0.8550	0.8278 0.9549	0.9775 0.9495	Ave		0.9163				6.3		30.0			
Cyclohexane	+++++ 0.1615	+++++ 0.1515	0.1414 0.1321	0.1307 0.1502	0.1548 0.1427	Ave		0.1456				7.4		30.0			
Carbon tetrachloride	0.5804 0.6017	0.6097 0.6069	0.5567 0.5596	0.5018 0.6384	0.5377 0.6192	Ave		0.5812				7.2		30.0			
2,3-Dimethylpentane	+++++ 0.2353	+++++ 0.2269	0.2017 0.2028	0.2225 0.2242	0.2405 0.2060	Ave		0.2200				6.8		30.0			
Thiophene	+++++ 0.5214	+++++ 0.5188	0.4420 0.4543	0.4494 0.5074	0.5391 0.4680	Ave		0.4876				7.8		30.0			
2,2,4-Trimethylpentane	+++++ 1.9809	+++++ 1.8957	1.7909 1.6517	1.6574 1.8185	1.9709 1.7964	Ave		1.8203				6.9		30.0			
Heptane	+++++ 0.3577	+++++ 0.3468	0.3058 0.3111	0.3162 0.3448	0.3672 0.3322	Ave		0.3352				6.7		30.0			
1,2-Dichloropropane	+++++ 0.3966	+++++ 0.4042	0.4022 0.3499	0.3683 0.3587	0.4443 0.3827	Ave		0.3884				7.8		30.0			
Trichloroethene	0.3575 0.3624	0.3457 0.3620	0.2940 0.3397	0.3336 0.3926	0.3799 0.3719	Ave		0.3539				7.8		30.0			
Dibromomethane	+++++ 0.3830	+++++ 0.3698	0.3636 0.3308	0.3715 0.3737	0.4210 0.3660	Ave		0.3724				6.7		30.0			
Bromodichloromethane	+++++ 0.7072	+++++ 0.6706	0.6086 0.6094	0.6153 0.6807	0.6925 0.6806	Ave		0.6581				6.1		30.0			
1,4-Dioxane	+++++ 0.1011	+++++ 0.1000	0.1015 0.0974	0.1101 0.0803	0.1039 0.1234	Ave		0.1022				11.8		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20507-1 Analy Batch No.: 42613

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/10/2020 18:15 Calibration End Date: 09/11/2020 06:50 Calibration ID: 2612

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Methyl methacrylate	+++++ 0.4239	+++++ 0.5093	+++++ 0.4513	0.4766 0.3680	0.4625 0.5119	Ave		0.4576				11.0		30.0			
Methylcyclohexane	+++++ 0.5849	+++++ 0.5853	0.4943 0.5288	0.5004 0.5794	0.5895 0.5558	Ave		0.5523				7.1		30.0			
4-Methyl-2-pentanone (MIBK)	+++++ 0.8058	+++++ 0.8052	0.8323 0.7703	0.8582 0.5804	0.7319 0.8411	Ave		0.7781				11.5		30.0			
cis-1,3-Dichloropropene	+++++ 0.5509	+++++ 0.5732	0.5089 0.5084	0.4739 0.5359	0.5579 0.5457	Ave		0.5319				6.1		30.0			
trans-1,3-Dichloropropene	+++++ 0.4531	+++++ 0.4834	0.4432 0.4607	0.4548 0.4279	0.4605 0.4673	Ave		0.4564				3.6		30.0			
Toluene	+++++ 0.9485	+++++ 1.0183	0.9321 0.9881	0.9725 0.9116	1.0297 1.0040	Ave		0.9756				4.3		30.0			
1,1,2-Trichloroethane	+++++ 0.3050	+++++ 0.3178	0.3134 0.3022	0.2915 0.2839	0.3235 0.3169	Ave		0.3068				4.5		30.0			
2-Hexanone	+++++ 0.3310	+++++ 0.3083	0.3472 0.3429	0.3747 0.2558	0.2986 0.3670	Ave		0.3282				12.0		30.0			
Octane	0.3596 0.3546	0.3402 0.3550	0.3107 0.3392	0.3266 0.3391	0.3570 0.3519	Ave		0.3434				4.5		30.0			
C8 Range	+++++ 4.0998	+++++ 3.9904	+++++ 3.6076	4.0473 3.5212	4.0811 3.7298	Ave		3.8682				6.3		30.0			
Dibromochloromethane	+++++ 0.5906	+++++ 0.5995	0.5132 0.6249	0.4846 0.6396	0.5305 0.6798	Ave		0.5828				11.6		30.0			
1,2-Dibromoethane (EDB)	+++++ 0.5299	+++++ 0.5620	0.5081 0.5449	0.5056 0.5333	0.5245 0.5912	Ave		0.5374				5.3		30.0			
Tetrachloroethene	0.3765 0.3410	0.3448 0.3375	0.3154 0.3432	0.3011 0.3526	0.3415 0.3814	Ave		0.3435				7.0		30.0			
Chlorobenzene	+++++ 0.7833	+++++ 0.8151	0.7262 0.7915	0.7714 0.7676	0.7977 0.8509	Ave		0.7880				4.6		30.0			
Ethylbenzene	+++++ 1.2882	+++++ 1.3896	1.2934 1.3007	1.2935 1.1658	1.3253 1.3789	Ave		1.3044				5.3		30.0			
m-Xylene & p-Xylene	+++++ 0.9676	0.9604 1.0532	0.9795 0.9975	0.9834 0.9082	1.0141 1.1421	Ave		1.0006				6.6		30.0			
Nonane	+++++ 0.8617	+++++ 0.8880	0.7800 0.8260	0.8045 0.8001	0.8435 0.9554	Ave		0.8449				6.7		30.0			
Bromoform	+++++ 0.5252	0.4307 0.5885	0.4466 0.6417	0.4676 0.6649	0.4777 0.8685	Ave		0.5679				24.8		30.0			
Styrene	+++++ 0.7423	0.6689 0.8299	0.6305 0.8154	0.6393 0.7567	0.7623 0.9751	Ave		0.7578				14.3		30.0			
o-Xylene	+++++ 1.0083	+++++ 1.1108	1.0446 1.0434	1.0895 0.9345	1.0599 1.1352	Ave		1.0533				6.0		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20507-1 Analy Batch No.: 42613

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/10/2020 18:15 Calibration End Date: 09/11/2020 06:50 Calibration ID: 2612

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
1,1,2,2-Tetrachloroethane	+++++ 0.8112	+++++ 0.8760	0.8534 0.8298	0.8479 0.7135	0.8478 0.9116	Ave		0.8364				6.9		30.0			
1,2,3-Trichloropropane	+++++ 0.2047	+++++ 0.2278	0.2202 0.2279	0.2210 0.1979	0.2035 0.2537	Ave		0.2196				8.2		30.0			
Isopropylbenzene	1.3966 1.3487	1.3514 1.4938	1.3619 1.4649	1.4008 1.3126	1.3572 1.7457	Ave		1.4234				8.9		30.0			
Propylbenzene	+++++ 0.3475	+++++ 0.4059	0.3750 0.4171	0.3522 0.4318	0.3606 0.5534	Ave		0.4054				16.6		30.0			
2-Chlorotoluene	+++++ 0.3552	+++++ 0.3803	0.3544 0.3888	0.3675 0.4167	0.3603 0.4906	Ave		0.3892				11.8		30.0			
4-Ethyltoluene	+++++ 1.2871	+++++ 1.4957	1.3698 1.4940	1.4008 1.4133	1.3416 1.8204	Ave		1.4528				11.3		30.0			
1,3,5-Trimethylbenzene	+++++ 0.5191	0.5937 0.6037	0.5648 0.6284	0.5675 0.5791	0.5496 0.7479	Ave		0.5949				11.0		30.0			
Alpha Methyl Styrene	+++++ 0.5169	+++++ 0.6438	0.4660 0.6575	0.4996 0.5945	0.5128 0.7904	Ave		0.5852				18.5		30.0			
Decane	+++++ 1.0735	+++++ 1.1700	1.0004 1.0622	1.0447 0.9269	1.0727 1.2083	Ave		1.0698				8.3		30.0			
tert-Butylbenzene	+++++ 1.1407	+++++ 1.3419	1.1432 1.3752	1.1970 1.1560	1.1561 +++++	Ave		1.2157				8.2		30.0			
1,2,4-Trimethylbenzene	1.1228 1.1095	1.1749 1.3081	1.1421 1.3146	1.1739 1.0826	1.1409 +++++	Ave		1.1744				7.1		30.0			
sec-Butylbenzene	+++++ 1.6648	+++++ 1.9887	1.6455 1.9802	1.7602 1.6686	1.7497 +++++	Ave		1.7796				8.2		30.0			
1,3-Dichlorobenzene	1.0061 0.8022	0.8053 0.9213	0.8385 0.9594	0.7576 0.8849	0.7686 +++++	Ave		0.8604				10.2		30.0			
Benzyl chloride	+++++ 1.0252	+++++ 1.2631	1.0698 1.2620	1.0415 1.0465	1.0558 +++++	Ave		1.1091				9.5		30.0			
1,4-Dichlorobenzene	0.8871 0.8044	0.8694 0.9093	0.7847 0.9589	0.7635 0.9412	0.7883 +++++	Ave		0.8563				8.5		30.0			
4-Isopropyltoluene	+++++ 1.2892	1.4307 1.5806	1.3808 1.6161	1.3761 1.4825	1.3237 +++++	Ave		1.4350				8.2		30.0			
1,2,3-Trimethylbenzene	0.8258 1.0827	1.1847 1.3306	1.1717 1.3143	1.2021 1.2217	1.1421 +++++	Ave		1.1640				12.8		30.0			
1,2-Dichlorobenzene	+++++ 0.7739	0.8275 0.9248	0.7403 0.9410	0.7481 1.0482	0.7609 +++++	Ave		0.8456				13.4		30.0			
Indane	+++++ 1.0837	1.1261 1.3208	1.1009 1.3530	1.1135 1.4017	1.1203 +++++	Ave		1.2025				10.9		30.0			
Indene	+++++ 0.9399	0.9638 1.1835	0.8998 1.2130	0.9435 1.2012	0.9584 +++++	Ave		1.0379				13.0		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20507-1 Analy Batch No.: 42613

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/10/2020 18:15 Calibration End Date: 09/11/2020 06:50 Calibration ID: 2612

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Butylbenzene	1.4412 1.4075	1.6355 1.6954	1.4687 1.6738	1.6139 1.5009	1.5373 +++++	Ave		1.5527				6.8		30.0			
Undecane	+++++ 1.1699	+++++ 1.2978	1.2025 1.2074	1.2487 1.0856	1.2071 1.5679	Ave		1.2484				11.4		30.0			
1,2-Dibromo-3-Chloropropane	+++++ 0.3664	0.4259 0.4891	0.3321 0.5447	0.3865 0.5122	0.3509 +++++	Ave		0.4260				18.8		30.0			
1,2,4,5-Tetramethylbenzene	+++++ 1.1528	1.3458 1.5455	1.3286 1.5271	1.3529 1.3662	1.1632 +++++	Ave		1.3478				10.6		30.0			
Dodecane	+++++ 1.1396	+++++ 1.2613	1.2493 1.0823	1.2854 0.8895	1.1374 1.3366	Ave		1.1727				12.2		30.0			
1,2,4-Trichlorobenzene	0.8477 0.6456	0.7503 0.8024	0.7303 0.9005	0.6950 0.9307	0.5967 +++++	Ave		0.7666				14.8		30.0			
Naphthalene	+++++ 1.4723	2.2261 1.9172	1.9176 2.0852	1.7415 1.6684	1.4758 2.6651	Ave		1.9077				20.0		30.0			
Hexachlorobutadiene	+++++ 0.6226	0.6716 0.7846	0.6292 0.8101	0.6166 0.9161	0.5876 +++++	Ave		0.7048				16.7		30.0			
1,2,3-Trichlorobenzene	0.6978 0.6115	0.8278 0.8022	0.6702 0.8683	0.6415 0.8495	0.5838 +++++	Ave		0.7281				15.0		30.0			
2-Methylnaphthalene	+++++ 0.8878	+++++ 0.7510	0.8861 0.9370	0.5401 0.9330	0.5708 1.0080	Ave		0.8142				21.6		50.0			
1-Methylnaphthalene	+++++ 0.9995	+++++ 0.7899	0.9964 0.8891	0.6157 0.9628	0.6676 0.9175	Ave		0.8548				17.4		50.0			
4-Bromofluorobenzene (Surr)	0.7395 0.7478	0.7466 0.8072	0.7511 0.7782	0.7447 0.7798	0.7602 0.8455	Ave		0.7700				4.4		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20507-1 Analy Batch No.: 42613

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/10/2020 18:15 Calibration End Date: 09/11/2020 06:50 Calibration ID: 2612

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 140-42613/9	GI10IC01.D
Level 2	IC 140-42613/10	GI10IC02.D
Level 3	IC 140-42613/11	GI10IC03.D
Level 4	IC 140-42613/12	GI10IC04.D
Level 5	IC 140-42613/13	GI10IC05.D
Level 6	IC 140-42613/14	GI10IC06.D
Level 7	ICIS 140-42613/15	GI10IC07.D
Level 8	IC 140-42613/7	GI10IC08.D
Level 9	IC 140-42613/21	GI10IC09R.D
Level 10	IC 140-42613/3	GI10IC10.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
Chlorodifluoromethane	CBM	Ave	3715 124672	5921 274913	12166 591491	19718 1451591	49297 1940723	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Propene	CBM	Ave	+++++ 75014	3870 163252	6577 339073	11703 371016	27790 1026553	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Dichlorodifluoromethane	CBM	Ave	3882 164078	6883 371823	14143 817691	24761 2229414	64446 2449829	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Chloromethane	CBM	Ave	+++++ 27844	+++++ 55942	2709 122649	5057 292539	11251 413836	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2-Dichloro-1,1,2,2-tetrafluoroethane	CBM	Ave	2493 89485	3891 212496	7139 500071	13510 +++++	35835 +++++	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 +++++	0.400 +++++
Vinyl chloride	CBM	Ave	2033 76932	3504 169080	6213 374271	11663 933319	30042 1237648	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,3-Butadiene	CBM	Ave	1807 67379	2743 146750	5815 327928	10216 810487	26004 1106966	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Butane	CBM	Ave	+++++ 146380	+++++ 315175	12936 685508	22148 1535269	55332 2234227	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Bromomethane	CBM	Ave	+++++ 51058	+++++ 117485	4375 271700	7518 742584	20596 876121	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Chloroethane	CBM	Ave	903 32348	1716 71482	2997 168974	4883 415633	13821 562624	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Ethanol	CBM	Ave	+++++ 170437	+++++ 394473	+++++ 882826	31842 1459393	67359 2796610	+++++ 5.00	+++++ 10.0	+++++ 20.0	0.800 40.0	2.00 80.0
Vinyl bromide	CBM	Ave	1265 42679	2138 93370	3477 234945	6249 618819	17300 726065	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Methylbutane	CBM	Ave	+++++ 98049	+++++ 204327	9845 480237	14343 1064070	40081 1540082	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Trichlorofluoromethane	CBM	Ave	3102 135046	5662 277159	10494 679187	21024 1745139	53903 2253272	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20507-1 Analy Batch No.: 42613

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/10/2020 18:15 Calibration End Date: 09/11/2020 06:50 Calibration ID: 2612

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
Acrolein	CBM	Ave	+++++ 19079	+++++ 41381	2530 104556	3859 219746	9052 380589	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Acetonitrile	CBM	Ave	+++++ 29568	+++++ 67420	+++++ 150556	3792 286249	13970 529931	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Acetone	CBM	Ave	+++++ 73504	+++++ 172823	+++++ 411005	+++++ 734965	33855 1426776	+++++ 3.00	+++++ 6.00	+++++ 12.0	+++++ 24.0	1.20 48.0
Pentane	CBM	Ave	+++++ 9594	+++++ 19760	+++++ 46427	1406 115728	3825 161857	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Isopropyl alcohol	CBM	Ave	+++++ 261834	+++++ 519124	+++++ 1258613	44226 2394273	95380 4502484	+++++ 3.00	+++++ 6.00	+++++ 12.0	0.480 24.0	1.20 48.0
Ethyl ether	CBM	Ave	+++++ 74706	+++++ 172122	+++++ 376063	14409 689498	33746 1373541	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,1-Dichloroethene	CBM	Ave	+++++ 40482	1968 89845	3350 206702	6189 480796	17215 694384	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Acrylonitrile	CBM	Ave	+++++ 34882	+++++ 85340	+++++ 205437	7003 403062	15350 732910	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
tert-Butyl alcohol	CBM	Ave	+++++ 82633	+++++ 152562	+++++ 378654	12538 790534	29985 1373316	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,1,2-Trichloro-1,2,2-trifluoroetha ne	CBM	Ave	2297 87928	4347 186627	7951 460688	12983 1043989	35365 1574690	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Methylene Chloride	CBM	Ave	+++++ 40578	+++++ 87468	+++++ 210663	+++++ 459016	17062 717339	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
3-Chloropropene	CBM	Ave	+++++ 60189	+++++ 132898	5547 293106	10578 630875	21807 1035828	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Carbon disulfide	CBM	Ave	3644 137969	6115 289843	11706 687105	20900 1520728	53197 2298428	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
trans-1,2-Dichloroethene	CBM	Ave	+++++ 46535	2296 98096	3727 245059	6395 552780	18557 827956	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Methylpentane	CBM	Ave	+++++ 159607	+++++ 336153	14086 768775	24069 1706890	63693 2629891	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Methyl tert-butyl ether	CBM	Ave	+++++ 107859	+++++ 271696	+++++ 659958	21643 1135937	47775 2270684	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,1-Dichloroethane	CBM	Ave	+++++ 107110	5264 227405	9551 539235	17560 1146123	42938 1770994	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Vinyl acetate	CBM	Ave	+++++ 156331	+++++ 385311	13950 901282	30430 1655568	68397 3183748	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Butanone (MEK)	CBM	Ave	+++++ 20733	+++++ 49278	2288 120401	4891 190976	8848 435235	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Hexane	CBM	Ave	+++++ 52339	+++++ 108738	4693 258132	8005 548617	21586 890984	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
cis-1,2-Dichloroethene	CBM	Ave	1474 51002	2258 110123	4654 273035	7558 590588	21655 899683	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20507-1 Analy Batch No.: 42613

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/10/2020 18:15 Calibration End Date: 09/11/2020 06:50 Calibration ID: 2612

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
Ethyl acetate	CBM	Ave	+++++ 124474	+++++ 320976	+++++ 745666	27250 1160232	56034 2646896	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Chloroform	CBM	Ave	+++++ 112954	5062 241126	10224 565097	18144 1214901	46056 1902975	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Tetrahydrofuran	CBM	Ave	+++++ 67466	+++++ 165190	7095 380418	13905 659891	31113 1322874	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,1,1-Trichloroethane	CBM	Ave	+++++ 111918	4647 234859	9016 576859	17553 1239218	45558 1883025	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2-Dichloroethane	DFBZ	Ave	+++++ 80248	3767 169527	7085 403859	13403 851557	34620 1330963	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1-Butanol	DFBZ	Ave	+++++ 28728	+++++ 47136	+++++ 106889	+++++ 250251	9835 434146	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
Benzene	DFBZ	Ave	+++++ 169395	+++++ 369136	14504 889797	26029 1914265	69155 3247852	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Cyclohexane	DFBZ	Ave	+++++ 28328	+++++ 59734	2374 137431	4111 301079	10950 488263	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Carbon tetrachloride	DFBZ	Ave	2625 105552	5072 239352	9343 582391	15780 1279766	38042 2117839	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2,3-Dimethylpentane	DFBZ	Ave	+++++ 41278	+++++ 89495	3386 211041	6998 449426	17013 704469	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Thiophene	DFBZ	Ave	+++++ 91473	+++++ 204625	7418 472806	14132 1017182	38140 1600792	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2,2,4-Trimethylpentane	DFBZ	Ave	+++++ 347522	+++++ 747675	30058 1718867	52116 3645553	139431 6144681	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Heptane	DFBZ	Ave	+++++ 62758	+++++ 136771	5133 323765	9943 691299	25976 1136387	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2-Dichloropropane	DFBZ	Ave	+++++ 69579	+++++ 159414	6750 364146	11582 719126	31433 1309205	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Trichloroethene	DFBZ	Ave	1617 63582	2876 142773	4935 353487	10491 786963	26877 1272019	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Dibromomethane	DFBZ	Ave	+++++ 67184	+++++ 145849	6102 344239	11681 749143	29787 1251982	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Bromodichloromethane	DFBZ	Ave	+++++ 124068	+++++ 264463	10215 634134	19348 1364536	48991 2328120	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,4-Dioxane	DFBZ	Ave	+++++ 17744	+++++ 39447	1703 101363	3463 160960	7347 422165	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Methyl methacrylate	DFBZ	Ave	+++++ 74374	+++++ 200856	+++++ 469600	14986 737837	32720 1751064	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Methylcyclohexane	DFBZ	Ave	+++++ 102607	+++++ 230837	8297 550301	15736 1161571	41701 1901252	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
4-Methyl-2-pentanone (MIBK)	DFBZ	Ave	+++++ 141362	+++++ 317587	13970 801625	26985 1163480	51776 2877008	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20507-1 Analy Batch No.: 42613

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/10/2020 18:15 Calibration End Date: 09/11/2020 06:50 Calibration ID: 2612

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
cis-1,3-Dichloropropene	DFBZ	Ave	+++++ 96645	+++++ 226085	8542 529062	14903 1074353	39471 1866672	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
trans-1,3-Dichloropropene	CBZd 5	Ave	+++++ 81441	+++++ 196572	7309 480616	14027 944359	33906 1711964	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Toluene	CBZd 5	Ave	+++++ 170480	+++++ 414032	15371 1030915	29991 2011815	75808 3678468	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,1,2-Trichloroethane	CBZd 5	Ave	+++++ 54812	+++++ 129207	5168 315248	8991 626437	23816 1161058	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Hexanone	CBZd 5	Ave	+++++ 59488	+++++ 125344	5725 357716	11554 564420	21983 1344436	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Octane	CBZd 5	Ave	1596 63738	2792 144348	5123 353844	10072 748251	26287 1289173	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
C8 Range	CBZd 5	Ave	+++++ 736873	+++++ 1622501	+++++ 3763887	124813 7770738	300469 13665108	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Dibromochloromethane	CBZd 5	Ave	+++++ 106157	+++++ 243763	8463 651977	14946 1411506	39056 2490750	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2-Dibromoethane (EDB)	CBZd 5	Ave	+++++ 95247	+++++ 228525	8379 568546	15591 1176833	38618 2166108	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Tetrachloroethene	CBZd 5	Ave	1671 61283	2830 137223	5201 358050	9285 778138	25142 1397516	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Chlorobenzene	CBZd 5	Ave	+++++ 140787	+++++ 331429	11976 825775	23790 1694035	58731 3117366	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Ethylbenzene	CBZd 5	Ave	+++++ 231527	+++++ 565032	21329 1357063	39890 2572854	97571 5051965	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
m-Xylene & p-Xylene	CBZd 5	Ave	+++++ 347825	15766 856437	32306 2081341	60652 4008358	149322 8368542	+++++ 2.00	0.0800 4.00	0.160 8.00	0.320 16.0	0.800 32.0
Nonane	CBZd 5	Ave	+++++ 154878	+++++ 361083	12863 861762	24810 1765802	62102 3500268	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Bromoform	CBZd 5	Ave	+++++ 94396	3535 239277	7365 669489	14419 1467388	35169 3181949	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Styrene	CBZd 5	Ave	+++++ 133420	5490 337430	10397 850723	19716 1669894	56127 3572644	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
o-Xylene	CBZd 5	Ave	+++++ 181227	+++++ 451638	17227 1088642	33599 2062285	78035 4159259	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,1,2,2-Tetrachloroethane	CBZd 5	Ave	+++++ 145792	+++++ 356201	14073 865775	26149 1574522	62418 3339885	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2,3-Trichloropropane	CBZd 5	Ave	+++++ 36792	+++++ 92613	3632 237724	6815 436635	14983 929489	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Isopropylbenzene	CBZd 5	Ave	6198 242404	11092 607393	22460 1528330	43198 2896819	99921 6395806	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Propylbenzene	CBZd 5	Ave	+++++ 62464	+++++ 165060	6185 435143	10861 952935	26546 2027626	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20507-1 Analy Batch No.: 42613

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/10/2020 18:15 Calibration End Date: 09/11/2020 06:50 Calibration ID: 2612

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
2-Chlorotoluene	CBZd 5	Ave	+++++ 63833	+++++ 154630	5845 405695	11334 919695	26529 1797402	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
4-Ethyltoluene	CBZd 5	Ave	+++++ 231336	+++++ 608149	22589 1558776	43199 3119041	98774 6669562	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,3,5-Trimethylbenzene	CBZd 5	Ave	+++++ 93296	4873 245476	9315 655615	17502 1277927	40464 2740278	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Alpha Methyl Styrene	CBZd 5	Ave	+++++ 92905	+++++ 261751	7685 686021	15407 1312070	37757 2895880	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Decane	CBZd 5	Ave	+++++ 192951	+++++ 475731	16497 1108228	32216 2045449	78977 4426869	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
tert-Butylbenzene	CBZd 5	Ave	+++++ 205031	+++++ 545615	18853 1434766	36913 2551147	85117 +++++	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
1,2,4-Trimethylbenzene	CBZd 5	Ave	4983 199411	9643 531872	18834 1371571	36201 2389111	83996 +++++	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
sec-Butylbenzene	CBZd 5	Ave	+++++ 299213	+++++ 808599	27136 2065946	54281 3682305	128817 +++++	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
1,3-Dichlorobenzene	CBZd 5	Ave	4465 144178	6610 374600	13828 1000956	23364 1952840	56589 +++++	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
Benzyl chloride	CBZd 5	Ave	+++++ 184264	+++++ 513566	17643 1316623	32120 2309540	77732 +++++	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
1,4-Dichlorobenzene	CBZd 5	Ave	3937 144577	7136 369724	12941 1000412	23546 2077122	58036 +++++	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
4-Isopropyltoluene	CBZd 5	Ave	+++++ 231717	11743 642660	22771 1686133	42436 3271765	97459 +++++	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
1,2,3-Trimethylbenzene	CBZd 5	Ave	3665 194590	9724 541032	19323 1371279	37070 2696228	84083 +++++	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
1,2-Dichlorobenzene	CBZd 5	Ave	+++++ 139098	6792 376042	12209 981814	23071 2313251	56021 +++++	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
Indane	CBZd 5	Ave	+++++ 194777	9243 537037	18155 1411597	34339 3093298	82481 +++++	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
Indene	CBZd 5	Ave	+++++ 168932	7911 481201	14838 1265580	29096 2650811	70559 +++++	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
Butylbenzene	CBZd 5	Ave	6396 252981	13424 689343	24220 1746333	49770 3312183	113181 +++++	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
Undecane	CBZd 5	Ave	+++++ 210264	+++++ 527697	19831 1259740	38509 2395698	88874 5744340	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2-Dibromo-3-Chloropropane	CBZd 5	Ave	+++++ 65853	3496 198884	5476 568337	11918 1130413	25838 +++++	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
1,2,4,5-Tetramethylbenzene	CBZd 5	Ave	+++++ 207196	11046 628422	21910 1593245	41721 3015118	85639 +++++	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
Dodecane	CBZd 5	Ave	+++++ 204834	+++++ 512832	20603 1129182	39639 1962909	83742 4897046	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20507-1 Analy Batch No.: 42613

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/10/2020 18:15 Calibration End Date: 09/11/2020 06:50 Calibration ID: 2612

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
1,2,4-Trichlorobenzene	CBZd5	Ave	3762 116031	6158 326239	12044 939468	21432 2053998	43935 +++++	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
Naphthalene	CBZd5	Ave	+++++ 264622	18271 779525	31623 2175510	53707 3681998	108652 9764243	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Hexachlorobutadiene	CBZd5	Ave	+++++ 111897	5512 319015	10377 845214	19014 2021765	43262 +++++	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
1,2,3-Trichlorobenzene	CBZd5	Ave	3097 109903	6794 326188	11053 905955	19784 1874827	42978 +++++	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
2-Methylnaphthalene	CBZd5	Ave	+++++ 159573	+++++ 305394	14614 977677	16658 2059211	42028 3693190	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1-Methylnaphthalene	CBZd5	Ave	+++++ 179656	+++++ 321178	16432 927660	18987 2124878	49154 3361817	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
4-Bromofluorobenzene (Surr)	CBZd5	Ave	761393 623623	710833 761418	718398 941775	665983 998182	649245 898292	4.64 4.64	4.64 4.64	4.64 4.64	4.64 4.64	4.64 4.64

Curve Type Legend:
Ave = Average ISTD

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20507-1 Analy Batch No.: 42613

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/10/2020 18:15 Calibration End Date: 09/11/2020 06:50 Calibration ID: 2612

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 140-42613/9	GI10IC01.D
Level 2	IC 140-42613/10	GI10IC02.D
Level 3	IC 140-42613/11	GI10IC03.D
Level 4	IC 140-42613/12	GI10IC04.D
Level 5	IC 140-42613/13	GI10IC05.D
Level 6	IC 140-42613/14	GI10IC06.D
Level 7	ICIS 140-42613/15	GI10IC07.D
Level 8	IC 140-42613/7	GI10IC08.D
Level 9	IC 140-42613/21	GI10IC09R.D
Level 10	IC 140-42613/3	GI10IC10.D

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
Chlorodifluoromethane	18.4						50					
Propene	+++++	30.1						50				
Dichlorodifluoromethane	-2.6						50					
Chloromethane	+++++	+++++	16.8						50			
1,2-Dichloro-1,1,2,2-tetrafluoroethane	11.0		+++++	+++++			50					
Vinyl chloride	8.7						50					
1,3-Butadiene	10.7						50					
Butane	+++++	+++++	9.2						50			
Bromomethane	+++++	+++++	-2.6						50			
Chloroethane	7.5						50					
Ethanol	+++++	+++++	+++++	19.3						50		
Vinyl bromide	14.7						50					
2-Methylbutane	+++++	+++++	20.1						50			
Trichlorofluoromethane	-4.1						50					

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20507-1 Analy Batch No.: 42613

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/10/2020 18:15 Calibration End Date: 09/11/2020 06:50 Calibration ID: 2612

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
Acrolein	+++++	+++++	35.5						50			
Acetonitrile	+++++	+++++	+++++	-17.9						50		
Acetone	+++++	+++++	+++++	+++++	11.1						80	
Pentane	+++++	+++++	+++++	-5.2						50		
Isopropyl alcohol	+++++	+++++	+++++	13.1						50		
Ethyl ether	+++++	+++++	+++++	17.7						50		
1,1-Dichloroethene	+++++	10.1						50				
Acrylonitrile	+++++	+++++	+++++	13.1						50		
tert-Butyl alcohol	+++++	+++++	+++++	5.0						50		
1,1,2-Trichloro-1,2,2-trifluoroethane	4.2						50					
Methylene Chloride	+++++	+++++	+++++	+++++	5.6						80	
3-Chloropropene	+++++	+++++	9.1						50			
Carbon disulfide	9.5						50					
trans-1,2-Dichloroethene	+++++	13.9						50				
2-Methylpentane	+++++	+++++	7.1						50			
Methyl tert-butyl ether	+++++	+++++	+++++	13.2						50		
1,1-Dichloroethane	+++++	12.6						50				
Vinyl acetate	+++++	+++++	-3.4						50			
2-Butanone (MEK)	+++++	+++++	14.7						50			
Hexane	+++++	+++++	7.6						50			
cis-1,2-Dichloroethene	14.6						50					

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20507-1 Analy Batch No.: 42613

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/10/2020 18:15 Calibration End Date: 09/11/2020 06:50 Calibration ID: 2612

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
Ethyl acetate	+++++	+++++	+++++	22.8						50		
Chloroform	+++++	3.4						50				
Tetrahydrofuran	+++++	+++++	11.6						50			
1,1,1-Trichloroethane	+++++	-2.2						50				
1,2-Dichloroethane	+++++	5.0						50				
1-Butanol	+++++	+++++	+++++	+++++	7.4						50	
Benzene	+++++	+++++	-5.7						50			
Cyclohexane	+++++	+++++	-2.9						50			
Carbon tetrachloride	-0.1						50					
2,3-Dimethylpentane	+++++	+++++	-8.3						50			
Thiophene	+++++	+++++	-9.4						50			
2,2,4-Trimethylpentane	+++++	+++++	-1.6						50			
Heptane	+++++	+++++	-8.8						50			
1,2-Dichloropropane	+++++	+++++	3.6						50			
Trichloroethene	1.0						50					
Dibromomethane	+++++	+++++	-2.4						50			
Bromodichloromethane	+++++	+++++	-7.5						50			
1,4-Dioxane	+++++	+++++	-0.7						50			
Methyl methacrylate	+++++	+++++	+++++	4.1						50		
Methylcyclohexane	+++++	+++++	-10.5						50			
4-Methyl-2-pentanone (MIBK)	+++++	+++++	7.0						50			

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20507-1 Analy Batch No.: 42613

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/10/2020 18:15 Calibration End Date: 09/11/2020 06:50 Calibration ID: 2612

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
cis-1,3-Dichloropropene	+++++	+++++	-4.3						50			
trans-1,3-Dichloropropene	+++++	+++++	-2.9						50			
Toluene	+++++	+++++	-4.5						50			
1,1,2-Trichloroethane	+++++	+++++	2.2						50			
2-Hexanone	+++++	+++++	5.8						50			
Octane	4.7						50					
Dibromochloromethane	+++++	+++++	-12.0						50			
1,2-Dibromoethane (EDB)	+++++	+++++	-5.5						50			
Tetrachloroethene	9.6						50					
Chlorobenzene	+++++	+++++	-7.8						50			
Ethylbenzene	+++++	+++++	-0.8						50			
m-Xylene & p-Xylene	+++++	-4.0						50				
Nonane	+++++	+++++	-7.7						50			
Bromoform	+++++	-24.2						50				
Styrene	+++++	-11.7						50				
o-Xylene	+++++	+++++	-0.8						50			
1,1,2,2-Tetrachloroethane	+++++	+++++	2.0						50			
1,2,3-Trichloropropane	+++++	+++++	0.3						50			
Isopropylbenzene	-1.9						50					
Propylbenzene	+++++	+++++	-7.5						50			
2-Chlorotoluene	+++++	+++++	-8.9						50			

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20507-1 Analy Batch No.: 42613

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/10/2020 18:15 Calibration End Date: 09/11/2020 06:50 Calibration ID: 2612

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
4-Ethyltoluene	+++++	+++++	-5.7						50			
1,3,5-Trimethylbenzene	+++++	-0.2						50				
Alpha Methyl Styrene	+++++	+++++	-20.4						50			
Decane	+++++	+++++	-6.5						50			
tert-Butylbenzene	+++++	+++++	-6.0	+++++					50			
1,2,4-Trimethylbenzene	-4.4			+++++			50					
sec-Butylbenzene	+++++	+++++	-7.5	+++++					50			
1,3-Dichlorobenzene	16.9			+++++			50					
Benzyl chloride	+++++	+++++	-3.5	+++++					50			
1,4-Dichlorobenzene	3.6			+++++			50					
4-Isopropyltoluene	+++++	-0.3		+++++				50				
1,2,3-Trimethylbenzene	-29.1			+++++			50					
1,2-Dichlorobenzene	+++++	-2.1		+++++				50				
Indane	+++++	-6.4		+++++				50				
Indene	+++++	-7.1		+++++				50				
Butylbenzene	-7.2			+++++			50					
Undecane	+++++	+++++	-3.7						50			
1,2-Dibromo-3-Chloropropane	+++++	0.0		+++++				50				
1,2,4,5-Tetramethylbenzene	+++++	-0.1		+++++				50				
Dodecane	+++++	+++++	6.5						50			
1,2,4-Trichlorobenzene	10.6			+++++			50					

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20507-1 Analy Batch No.: 42613

SDG No.:

Instrument ID: MG GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/10/2020 18:15 Calibration End Date: 09/11/2020 06:50 Calibration ID: 2612

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
Naphthalene	+++++	16.7						80				
Hexachlorobutadiene	+++++	-4.7		+++++				50				
1,2,3-Trichlorobenzene	-4.2			+++++			50					
2-Methylnaphthalene	+++++	+++++	8.8						80			
1-Methylnaphthalene	+++++	+++++	16.6						80			

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200910-16561.b\GI10IC10.D
Lims ID: IC L10
Client ID:
Sample Type: IC Calib Level: 10
Inject. Date: 10-Sep-2020 18:15:30 ALS Bottle#: 15 Worklist Smp#: 3
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016561-003
Misc. Info.: 324143
Operator ID: AFB Instrument ID: MG
Sublist: chrom-MG_TO15*sub17

Method: \\chromfs\Knoxville\ChromData\MG\20200910-16561.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 11-Sep-2020 08:45:11 Calib Date: 11-Sep-2020 06:50:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200910-16561.b\GI10IC09R.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1067

First Level Reviewer: tajh Date: 11-Sep-2020 06:54:02

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.822	8.813	0.009	89	193276	4.80	4.80	
* 2 1,4-Difluorobenzene	114	11.000	10.994	0.006	97	1026167	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.730	15.726	0.004	89	1099128	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.374	17.368	0.006	96	898292	4.64	5.09	
6 Chlorodifluoromethane	51	3.705	3.704	0.001	98	1940723	16.0	13.5	
7 Propene	41	3.710	3.712	-0.002	99	1026553	16.0	13.4	
8 Dichlorodifluoromethane	85	3.764	3.767	-0.003	99	2449829	16.0	13.4	
9 Chloromethane	52	3.947	3.947	0.000	98	413836	16.0	13.5	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.953	3.955	-0.002	95	1511923	16.0	14.7	
11 Acetaldehyde	44	4.098	4.104	-0.006	100	2860086	80.0	75.9	
12 Vinyl chloride	62	4.114	4.118	-0.004	99	1237648	16.0	14.4	
14 Butadiene	54	4.206	4.205	0.002	65	1106966	16.0	14.8	
13 Butane	43	4.206	4.206	0.000	86	2234227	16.0	14.3	
15 Bromomethane	94	4.524	4.525	-0.001	98	876121	16.0	14.8	
16 Chloroethane	64	4.664	4.663	0.001	97	562624	16.0	14.6	
17 Ethanol	31	4.778	4.785	-0.007	96	2796610	80.0	74.2	
18 Vinyl bromide	106	4.966	4.964	0.002	97	726065	16.0	14.4	
19 2-Methylbutane	43	5.015	5.012	0.003	94	1540082	16.0	14.2	
20 Trichlorofluoromethane	101	5.231	5.231	0.000	98	2253272	16.0	15.2	
21 Acrolein	56	5.241	5.248	-0.007	95	380589	16.0	15.5	
22 Acetonitrile	40	5.311	5.326	-0.015	99	529931	16.0	16.3	
23 Acetone	58	5.355	5.370	-0.015	99	1426776	48.0	49.6	
24 Pentane	72	5.452	5.451	0.001	95	161857	16.0	15.5	
25 Isopropyl alcohol	45	5.462	5.478	-0.016	93	4502484	48.0	48.9	
26 Ethyl ether	31	5.619	5.631	-0.012	90	1373541	16.0	15.9	
27 1,1-Dichloroethene	96	5.937	5.933	0.004	94	694384	16.0	15.1	
28 Acrylonitrile	53	6.045	6.041	0.004	96	732910	16.0	16.8	
30 2-Methyl-2-propanol	59	6.056	6.091	-0.035	95	1373316	16.0	16.3	
29 1,1,2-Trichloro-1,2,2-trifluoroe	101	6.110	6.108	0.002	91	1574690	16.0	15.6	
31 Methylene Chloride	84	6.288	6.282	0.006	93	717339	16.0	15.7	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.298	6.295	0.003	95	1035828	16.0	15.5	
33 Carbon disulfide	76	6.444	6.440	0.004	99	2298428	16.0	15.1	
34 trans-1,2-Dichloroethene	96	7.091	7.086	0.005	94	827956	16.0	15.9	
35 2-Methylpentane	43	7.107	7.104	0.003	96	2629891	16.0	15.2	
36 Methyl tert-butyl ether	73	7.215	7.233	-0.018	97	2270684	16.0	16.8	
37 1,1-Dichloroethane	63	7.512	7.505	0.007	99	1770994	16.0	14.7	
38 Vinyl acetate	43	7.614	7.615	-0.001	100	3183748	16.0	16.7	
39 2-Butanone (MEK)	72	8.062	8.076	-0.014	96	435235	16.0	16.6	
40 Hexane	56	8.083	8.084	-0.001	90	890984	16.0	15.5	
41 Isopropyl ether	45	8.245	8.258	-0.013	97	3956847	16.0	16.8	
42 cis-1,2-Dichloroethene	96	8.488	8.481	0.007	98	899683	16.0	15.3	
43 Ethyl acetate	43	8.676	8.686	-0.010	98	2646896	16.0	16.9	
44 Chloroform	83	8.838	8.827	0.011	94	1902975	16.0	15.1	
45 Tert-butyl ethyl ether	59	8.924	8.939	-0.015	97	3232398	16.0	16.7	
46 Tetrahydrofuran	42	9.232	9.258	-0.026	93	1322874	16.0	15.8	
47 1,1,1-Trichloroethane	97	9.857	9.851	0.006	96	1883025	16.0	15.4	
48 1,2-Dichloroethane	62	9.970	9.959	0.011	96	1330963	16.0	14.4	
50 Benzene	78	10.461	10.452	0.009	98	3247852	16.0	16.6	
49 Cyclohexane	69	10.461	10.457	0.004	77	488263	16.0	15.7	
51 n-Butanol	31	10.429	10.459	-0.030	84	434146	16.0	15.7	
52 Carbon tetrachloride	117	10.483	10.476	0.007	94	2117839	16.0	17.0	
53 2,3-Dimethylpentane	71	10.580	10.577	0.003	91	704469	16.0	15.0	
54 Thiophene	84	10.731	10.722	0.009	96	1600792	16.0	15.4	
55 Isooctane	57	11.222	11.219	0.003	97	6144681	16.0	15.8	
56 n-Heptane	71	11.599	11.592	0.007	95	1136387	16.0	15.9	
57 1,2-Dichloropropane	63	11.674	11.669	0.005	90	1309205	16.0	15.8	
58 Trichloroethene	130	11.718	11.709	0.009	94	1272019	16.0	16.8	
59 Dibromomethane	93	11.799	11.787	0.011	94	1251982	16.0	15.7	
60 Dichlorobromomethane	83	11.944	11.936	0.008	98	2328120	16.0	16.5	
61 1,4-Dioxane	88	11.960	11.983	-0.023	98	422165	16.0	19.3	
62 Methyl methacrylate	41	12.041	12.041	0.000	89	1751064	16.0	17.9	
63 Methylcyclohexane	83	12.483	12.477	0.006	89	1901252	16.0	16.1	
64 4-Methyl-2-pentanone (MIBK)	43	12.888	12.900	-0.012	98	2877008	16.0	17.3	
65 cis-1,3-Dichloropropene	75	12.942	12.934	0.008	99	1866672	16.0	16.4	
66 trans-1,3-Dichloropropene	75	13.637	13.629	0.008	96	1711964	16.0	16.4	
67 Toluene	91	13.761	13.755	0.006	94	3678468	16.0	16.5	
68 1,1,2-Trichloroethane	83	13.837	13.829	0.008	98	1161058	16.0	16.5	
69 2-Hexanone	58	14.225	14.233	-0.008	91	1344436	16.0	17.9	
70 n-Octane	85	14.457	14.450	0.007	97	1289173	16.0	16.4	
71 Chlorodibromomethane	129	14.538	14.531	0.007	97	2490750	16.0	18.7	
72 Ethylene Dibromide	107	14.829	14.823	0.006	99	2166108	16.0	17.6	
73 Tetrachloroethene	129	14.905	14.900	0.004	95	1397516	16.0	17.8	
75 Chlorobenzene	112	15.778	15.775	0.003	92	3117366	16.0	17.3	
74 2,3-Dimethylheptane	43	15.805	15.797	0.008	95	5313769	16.0	16.1	
78 Ethylbenzene	91	16.069	16.063	0.006	98	5051965	16.0	16.9	
79 m-Xylene & p-Xylene	91	16.231	16.226	0.005	97	8368542	32.0	36.5	
80 n-Nonane	57	16.657	16.648	0.009	95	3500268	16.0	18.1	
81 Bromoform	173	16.679	16.673	0.006	96	3181949	16.0	24.5	
82 Styrene	104	16.695	16.691	0.004	98	3572644	16.0	20.6	
83 o-Xylene	91	16.759	16.754	0.005	99	4159259	16.0	17.2	
84 1,1,2,2-Tetrachloroethane	83	17.078	17.073	0.005	98	3339885	16.0	17.4	
85 1,2,3-Trichloropropane	110	17.239	17.233	0.006	95	929489	16.0	18.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
86 Isopropylbenzene	105	17.347	17.340	0.007	96	6395806	16.0	19.6	
87 N-Propylbenzene	120	17.886	17.882	0.004	99	2027626	16.0	21.8	
88 2-Chlorotoluene	126	17.930	17.923	0.007	97	1797402	16.0	20.2	
89 4-Ethyltoluene	105	18.037	18.033	0.004	98	6669562	16.0	20.0	
90 1,3,5-Trimethylbenzene	120	18.113	18.107	0.006	93	2740278	16.0	20.1	
92 Alpha Methyl Styrene	118	18.339	18.334	0.005	89	2895880	16.0	21.6	
93 n-Decane	57	18.399	18.395	0.004	89	4426869	16.0	18.1	
94 tert-Butylbenzene	119	18.534	18.529	0.005	93	6985215	16.0	25.1	
95 1,2,4-Trimethylbenzene	105	18.544	18.542	0.002	95	6516331	16.0	24.2	
96 sec-Butylbenzene	105	18.803	18.797	0.006	98	11166268	16.0	27.4	
97 1,3-Dichlorobenzene	146	18.814	18.810	0.004	97	5655771	16.0	28.7	
98 Benzyl chloride	91	18.889	18.884	0.005	99	6757602	16.0	26.6	
99 1,4-Dichlorobenzene	146	18.900	18.897	0.003	96	5482269	16.0	28.0	
100 4-Isopropyltoluene	119	18.965	18.959	0.006	97	8564706	16.0	26.1	
101 1,2,3-Trimethylbenzene	105	19.019	19.011	0.008	98	6364104	16.0	23.9	
102 Butylcyclohexane	83	19.073	19.067	0.006	93	5447367	16.0	20.3	
104 1,2-Dichlorobenzene	146	19.262	19.256	0.006	83	5698878	16.0	29.4	
103 2,3-Dihydroindene	117	19.262	19.256	0.006	94	7851363	16.0	28.5	
106 Indene	116	19.391	19.385	0.006	93	7088071	16.0	29.8	
105 n-Butylbenzene	91	19.396	19.392	0.004	98	9183292	16.0	25.8	
107 Undecane	57	19.709	19.703	0.006	96	5744340	16.0	20.1	
108 1,2-Dibromo-3-Chloropropane	157	19.855	19.854	0.001	96	3058624	16.0	31.4	
109 1,2,4,5-Tetramethylbenzene	119	20.146	20.144	0.002	98	8308397	16.0	26.9	
110 Dodecane	57	20.761	20.758	0.003	96	4897046	16.0	18.2	
111 1,2,4-Trichlorobenzene	180	20.955	20.951	0.004	94	5206436	16.0	29.7	
112 Naphthalene	128	21.090	21.089	0.001	99	9764243	16.0	22.4	
113 Hexachlorobutadiene	225	21.300	21.297	0.003	95	5603113	16.0	34.7	
114 1,2,3-Trichlorobenzene	180	21.370	21.365	0.005	95	4840438	16.0	29.0	
115 2-Methylnaphthalene	142	22.141	22.139	0.002	98	3693190	16.0	19.8	
116 1-Methylnaphthalene	142	22.314	22.313	0.001	98	3361817	16.0	17.2	
A 122 C8 Range	1	14.510	(14.398-14.603)		0	13665108	16.0	15.4	
S 123 1,2-Dichloroethene, Total	1				0		32.0	31.2	
S 124 Xylenes, Total	100				0		48.0	53.8	

Reagents:

40L10DQP_00020	Amount Added: 200.00	Units: mL	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

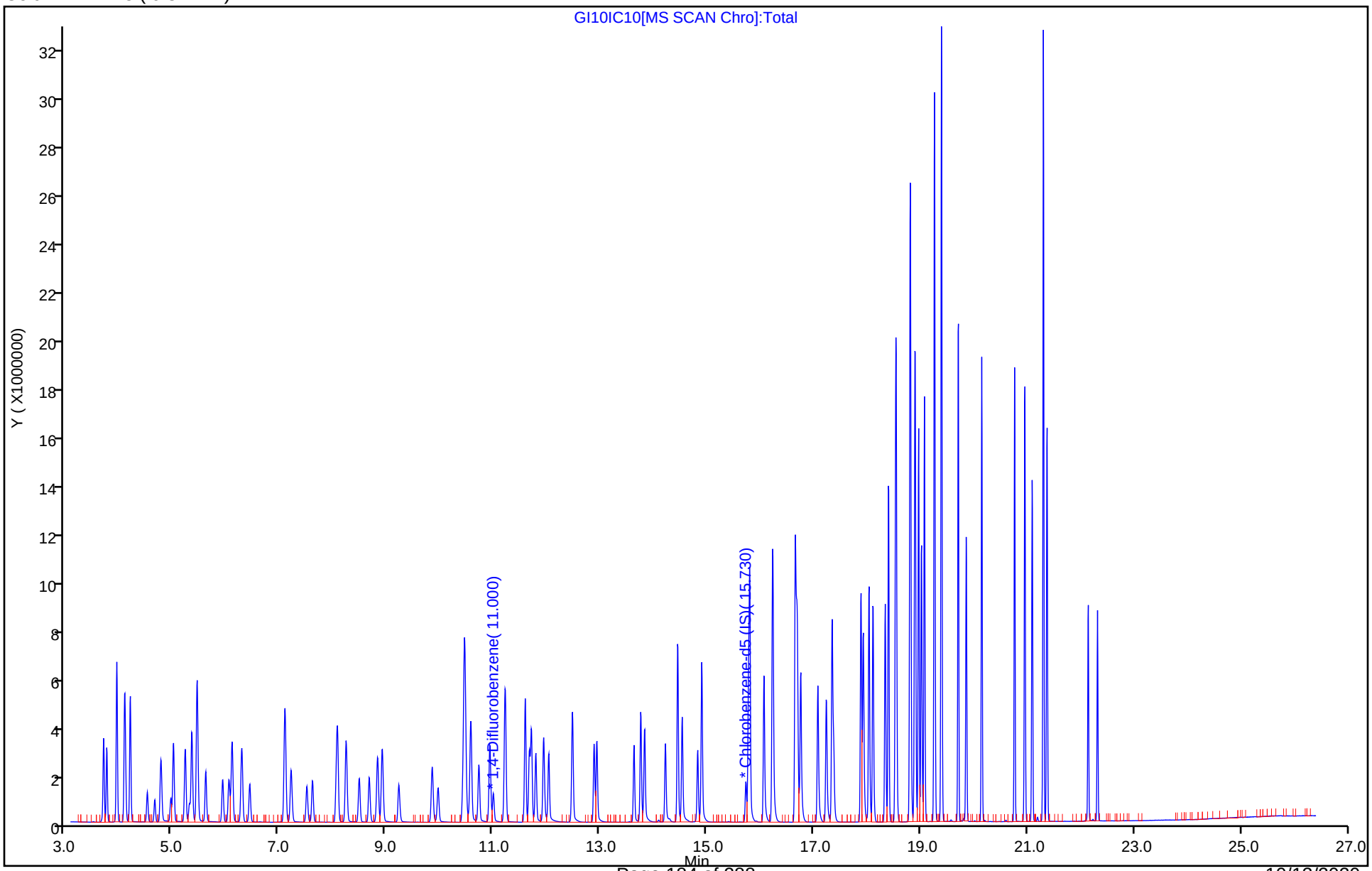
Report Date: 11-Sep-2020 08:45:12 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200910-16561.b\GI10IC10.D

Injection Date:	10-Sep-2020 18:15:30	Instrument ID:	MG	Operator ID:	AFB
Lims ID:	IC L10			Worklist Smp#:	3
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

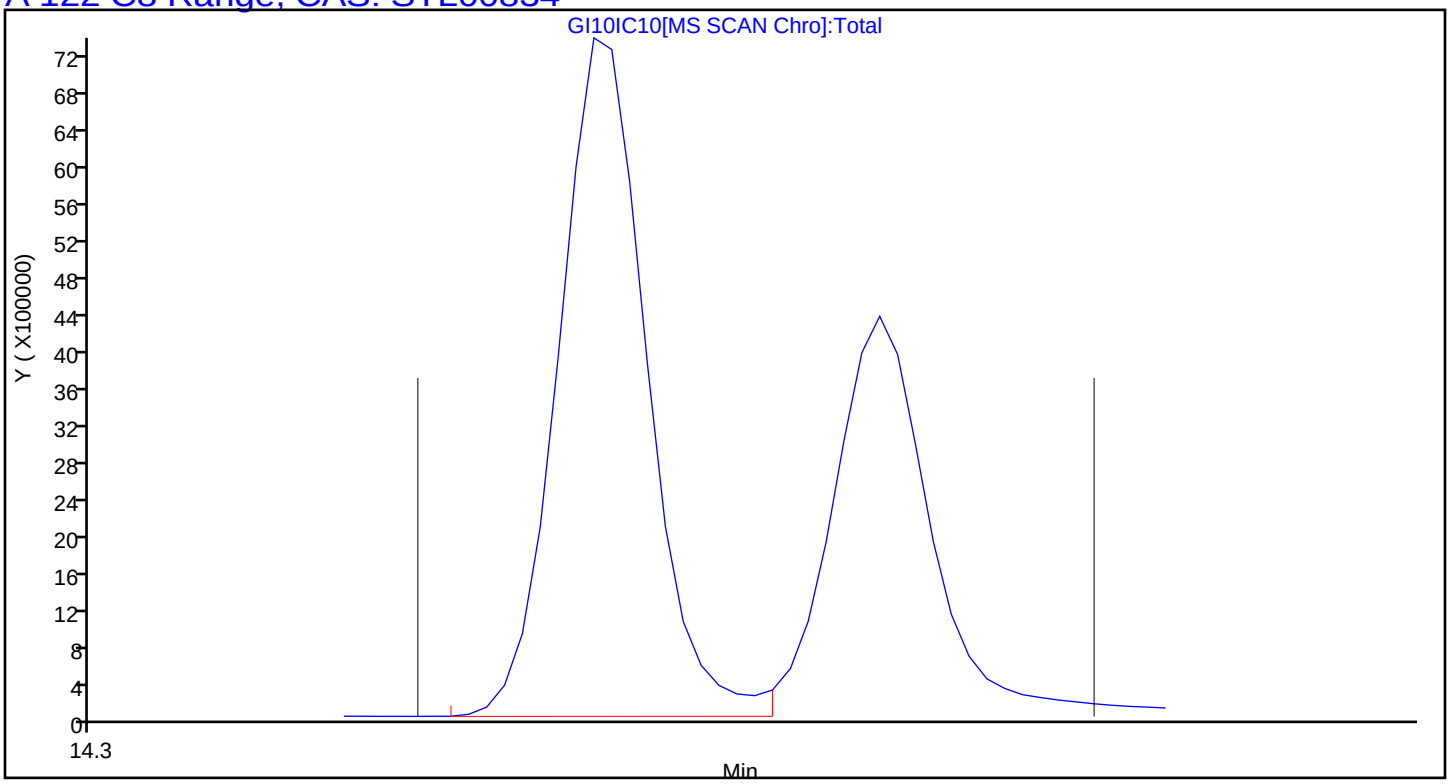


Report Date: 11-Sep-2020 08:45:12 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200910-16561.b\GI10IC10.D				
Injection Date:	10-Sep-2020 18:15:30	Instrument ID:	MG		
Lims ID:	IC L10				
Client ID:					
Operator ID:	AFB	ALS Bottle#:	15	Worklist Smp#:	3
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 122 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200910-16561.b\GI10IC08.D
Lims ID: IC L8
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 10-Sep-2020 21:26:30 ALS Bottle#: 13 Worklist Smp#: 7
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016561-007
Misc. Info.: 324144
Operator ID: AFB Instrument ID: MG
Sublist: chrom-MG_TO15*sub17

Method: \\chromfs\Knoxville\ChromData\MG\20200910-16561.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 11-Sep-2020 08:45:18 Calib Date: 11-Sep-2020 06:50:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200910-16561.b\GI10IC09R.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1067

First Level Reviewer: tajh Date: 11-Sep-2020 08:25:11

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.817	8.813	0.004	91	233146	4.80	4.80	
* 2 1,4-Difluorobenzene	114	11.001	10.994	0.007	96	1248781	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.730	15.726	0.004	89	1251988	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.369	17.368	0.001	91	941775	4.64	4.69	
6 Chlorodifluoromethane	51	3.705	3.704	0.001	97	591491	4.00	3.41	
7 Propene	41	3.710	3.712	-0.002	99	339073	4.00	3.67	
8 Dichlorodifluoromethane	85	3.769	3.767	0.002	100	817691	4.00	3.71	
9 Chloromethane	52	3.947	3.947	0.000	99	122649	4.00	3.32	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.958	3.955	0.003	95	500071	4.00	4.03	
11 Acetaldehyde	44	4.104	4.104	0.000	99	834961	20.0	18.4	
12 Vinyl chloride	62	4.120	4.118	0.002	99	374271	4.00	3.62	
14 Butadiene	54	4.206	4.205	0.002	65	327928	4.00	3.64	
13 Butane	43	4.206	4.206	0.000	86	685508	4.00	3.64	
15 Bromomethane	94	4.524	4.525	-0.001	98	271700	4.00	3.80	
16 Chloroethane	64	4.664	4.663	0.001	92	168974	4.00	3.64	
17 Ethanol	31	4.783	4.785	-0.002	96	882826	20.0	19.4	
18 Vinyl bromide	106	4.966	4.964	0.002	98	234945	4.00	3.86	
19 2-Methylbutane	43	5.015	5.012	0.003	94	480237	4.00	3.68	
20 Trichlorofluoromethane	101	5.236	5.231	0.005	99	679187	4.00	3.80	
21 Acrolein	56	5.247	5.248	-0.001	94	104556	4.00	3.52	
22 Acetonitrile	40	5.312	5.326	-0.014	99	150556	4.00	3.83	
23 Acetone	58	5.360	5.370	-0.010	99	411005	12.0	11.8	
24 Pentane	72	5.457	5.451	0.006	96	46427	4.00	3.68	
25 Isopropyl alcohol	45	5.463	5.478	-0.015	94	1258613	12.0	11.3	
26 Ethyl ether	31	5.624	5.631	-0.007	91	376063	4.00	3.61	
27 1,1-Dichloroethene	96	5.937	5.933	0.004	94	206702	4.00	3.72	
28 Acrylonitrile	53	6.045	6.041	0.004	96	205437	4.00	3.90	
30 2-Methyl-2-propanol	59	6.067	6.091	-0.025	95	378654	4.00	3.72	
29 1,1,2-Trichloro-1,2,2-trifluoroe	101	6.115	6.108	0.007	92	460688	4.00	3.78	
31 Methylene Chloride	84	6.288	6.282	0.006	94	210663	4.00	3.82	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.298	6.295	0.003	95	293106	4.00	3.63	
33 Carbon disulfide	76	6.444	6.440	0.004	99	687105	4.00	3.74	
34 trans-1,2-Dichloroethene	96	7.091	7.086	0.005	95	245059	4.00	3.91	
35 2-Methylpentane	43	7.107	7.104	0.003	97	768775	4.00	3.67	
36 Methyl tert-butyl ether	73	7.226	7.233	-0.007	97	659958	4.00	4.05	
37 1,1-Dichloroethane	63	7.506	7.505	0.001	99	539235	4.00	3.71	
38 Vinyl acetate	43	7.614	7.615	-0.001	100	901282	4.00	3.92	
39 2-Butanone (MEK)	72	8.062	8.076	-0.014	96	120401	4.00	3.80	
40 Hexane	56	8.089	8.084	0.005	90	258132	4.00	3.72	
41 Isopropyl ether	45	8.250	8.258	-0.008	97	1116739	4.00	3.92	
42 cis-1,2-Dichloroethene	96	8.488	8.481	0.007	98	273035	4.00	3.84	
43 Ethyl acetate	43	8.676	8.686	-0.010	98	745666	4.00	3.95	
44 Chloroform	83	8.833	8.827	0.006	96	565097	4.00	3.71	
45 Tert-butyl ethyl ether	59	8.924	8.939	-0.015	97	923373	4.00	3.95	
46 Tetrahydrofuran	42	9.237	9.258	-0.021	93	380418	4.00	3.76	
47 1,1,1-Trichloroethane	97	9.857	9.851	0.006	96	576859	4.00	3.90	
48 1,2-Dichloroethane	62	9.960	9.959	0.001	96	403859	4.00	3.60	
51 n-Butanol	31	10.451	10.459	-0.009	56	106889	4.00	3.17	
49 Cyclohexane	69	10.456	10.457	-0.001	79	137431	4.00	3.63	
50 Benzene	78	10.456	10.452	0.004	96	889797	4.00	3.73	
52 Carbon tetrachloride	117	10.477	10.476	0.001	94	582391	4.00	3.85	
53 2,3-Dimethylpentane	71	10.580	10.577	0.003	91	211041	4.00	3.69	
54 Thiophene	84	10.726	10.722	0.004	96	472806	4.00	3.73	
55 Isooctane	57	11.222	11.219	0.003	98	1718867	4.00	3.63	
56 n-Heptane	71	11.594	11.592	0.002	96	323765	4.00	3.71	
57 1,2-Dichloropropane	63	11.675	11.669	0.006	89	364146	4.00	3.60	
58 Trichloroethene	130	11.712	11.709	0.003	94	353487	4.00	3.84	
59 Dibromomethane	93	11.793	11.787	0.006	93	344239	4.00	3.55	
60 Dichlorobromomethane	83	11.939	11.936	0.003	97	634134	4.00	3.70	
61 1,4-Dioxane	88	11.966	11.983	-0.017	98	101363	4.00	3.81	
62 Methyl methacrylate	41	12.041	12.041	0.000	89	469600	4.00	3.94	
63 Methylcyclohexane	83	12.478	12.477	0.001	90	550301	4.00	3.83	
64 4-Methyl-2-pentanone (MIBK)	43	12.888	12.900	-0.012	97	801625	4.00	3.96	
65 cis-1,3-Dichloropropene	75	12.936	12.934	0.002	98	529062	4.00	3.82	
66 trans-1,3-Dichloropropene	75	13.632	13.629	0.003	96	480616	4.00	4.04	
67 Toluene	91	13.756	13.755	0.001	94	1030915	4.00	4.05	
68 1,1,2-Trichloroethane	83	13.832	13.829	0.003	98	315248	4.00	3.94	
69 2-Hexanone	58	14.225	14.233	-0.008	91	357716	4.00	4.18	
70 n-Octane	85	14.452	14.450	0.002	97	353844	4.00	3.95	
71 Chlorodibromomethane	129	14.533	14.531	0.002	96	651977	4.00	4.29	
72 Ethylene Dibromide	107	14.824	14.823	0.001	99	568546	4.00	4.06	
73 Tetrachloroethene	129	14.899	14.900	-0.001	94	358050	4.00	4.00	
75 Chlorobenzene	112	15.778	15.775	0.003	92	825775	4.00	4.02	
74 2,3-Dimethylheptane	43	15.800	15.797	0.003	95	1410578	4.00	3.75	
78 Ethylbenzene	91	16.064	16.063	0.001	99	1357063	4.00	3.99	
79 m-Xylene & p-Xylene	91	16.226	16.226	0.000	97	2081341	8.00	7.97	
80 n-Nonane	57	16.652	16.648	0.004	96	861762	4.00	3.91	
81 Bromoform	173	16.673	16.673	0.000	95	669489	4.00	4.52	
82 Styrene	104	16.689	16.691	-0.002	98	850723	4.00	4.30	
83 o-Xylene	91	16.754	16.754	0.000	99	1088642	4.00	3.96	
84 1,1,2,2-Tetrachloroethane	83	17.072	17.073	-0.001	98	865775	4.00	3.97	
85 1,2,3-Trichloropropane	110	17.234	17.233	0.001	95	237724	4.00	4.15	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
86 Isopropylbenzene	105	17.342	17.340	0.002	97	1528330	4.00	4.12	
87 N-Propylbenzene	120	17.881	17.882	-0.001	99	435143	4.00	4.11	
88 2-Chlorotoluene	126	17.924	17.923	0.001	97	405695	4.00	4.00	
89 4-Ethyltoluene	105	18.032	18.033	-0.001	98	1558776	4.00	4.11	
90 1,3,5-Trimethylbenzene	120	18.108	18.107	0.001	93	655615	4.00	4.23	
92 Alpha Methyl Styrene	118	18.334	18.334	0.000	88	686021	4.00	4.49	
93 n-Decane	57	18.399	18.395	0.004	88	1108228	4.00	3.97	
94 tert-Butylbenzene	119	18.528	18.529	-0.001	93	1434766	4.00	4.52	
95 1,2,4-Trimethylbenzene	105	18.544	18.542	0.002	96	1371571	4.00	4.48	
96 sec-Butylbenzene	105	18.798	18.797	0.001	98	2065946	4.00	4.45	
97 1,3-Dichlorobenzene	146	18.809	18.810	-0.001	98	1000956	4.00	4.46	
98 Benzyl chloride	91	18.884	18.884	0.000	98	1316623	4.00	4.55	
99 1,4-Dichlorobenzene	146	18.900	18.897	0.003	96	1000412	4.00	4.48	
100 4-Isopropyltoluene	119	18.960	18.959	0.001	97	1686133	4.00	4.50	
101 1,2,3-Trimethylbenzene	105	19.014	19.011	0.003	98	1371279	4.00	4.52	
102 Butylcyclohexane	83	19.068	19.067	0.001	91	1222454	4.00	4.01	
103 2,3-Dihydroindene	117	19.256	19.256	0.000	93	1411597	4.00	4.50	
104 1,2-Dichlorobenzene	146	19.256	19.256	0.000	82	981814	4.00	4.45	
106 Indene	116	19.386	19.385	0.001	91	1265580	4.00	4.68	
105 n-Butylbenzene	91	19.391	19.392	-0.001	98	1746333	4.00	4.31	
107 Undecane	57	19.704	19.703	0.001	95	1259740	4.00	3.87	
108 1,2-Dibromo-3-Chloropropane	157	19.855	19.854	0.001	96	568337	4.00	5.12	
109 1,2,4,5-Tetramethylbenzene	119	20.141	20.144	-0.003	98	1593245	4.00	4.53	
110 Dodecane	57	20.761	20.758	0.003	93	1129182	4.00	3.69	
111 1,2,4-Trichlorobenzene	180	20.949	20.951	-0.002	94	939468	4.00	4.70	
112 Naphthalene	128	21.090	21.089	0.001	99	2175510	4.00	4.37	
113 Hexachlorobutadiene	225	21.300	21.297	0.003	96	845214	4.00	4.60	
114 1,2,3-Trichlorobenzene	180	21.365	21.365	0.000	95	905955	4.00	4.77	
115 2-Methylnaphthalene	142	22.136	22.139	-0.003	99	977677	4.00	4.60	
116 1-Methylnaphthalene	142	22.314	22.313	0.001	99	927660	4.00	4.16	
A 122 C8 Range	1	14.479	(14.399-14.559)		0	3763887	4.00	3.73	
S 123 1,2-Dichloroethene, Total	1				0		8.00	7.75	
S 124 Xylenes, Total	100				0		12.0	11.9	

Reagents:

40L8DQP_00019	Amount Added: 200.00	Units: mL	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

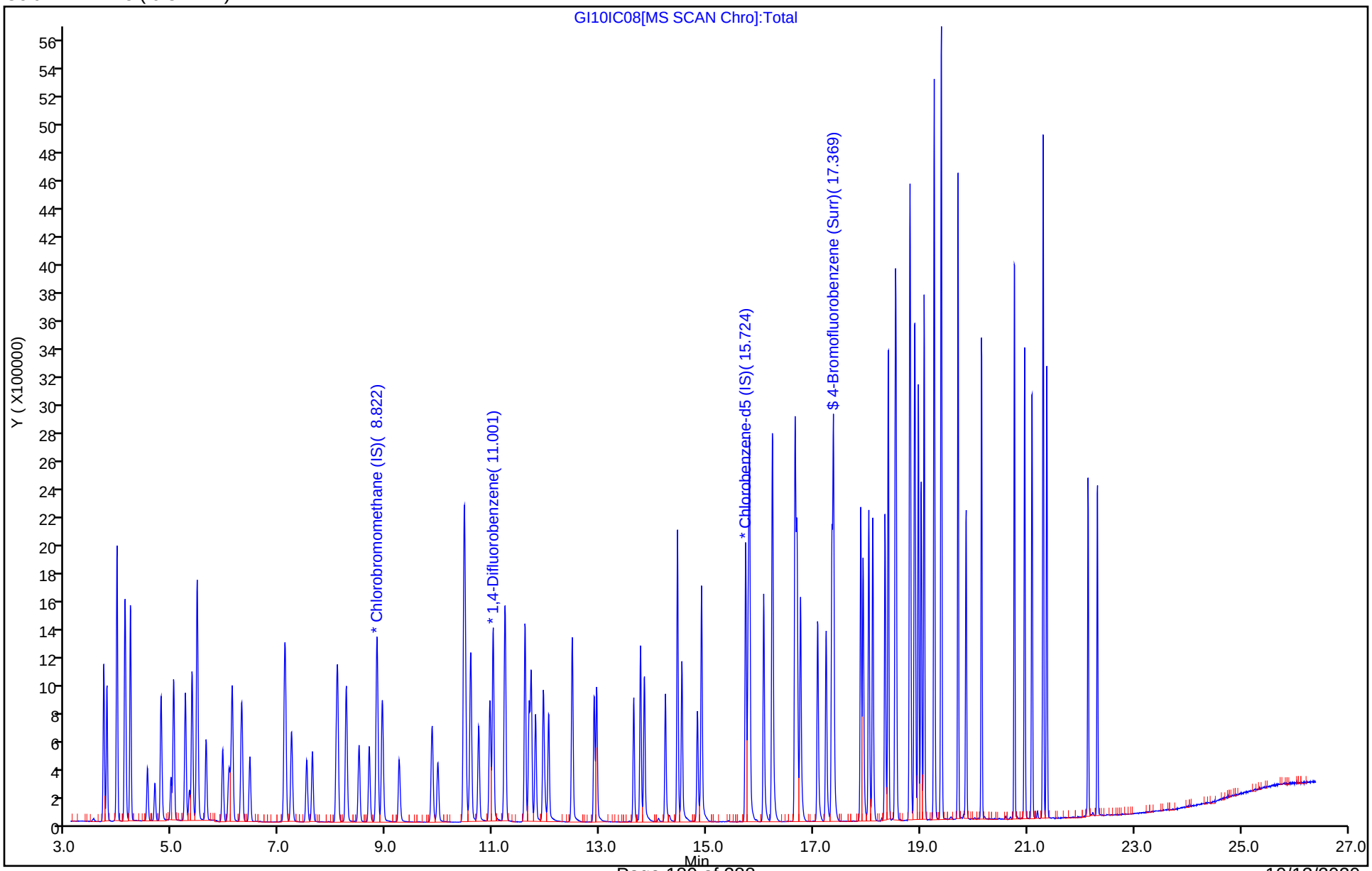
Report Date: 11-Sep-2020 08:45:19 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200910-16561.b\GI10IC08.D

Injection Date:	10-Sep-2020 21:26:30	Instrument ID:	MG	Operator ID:	AFB
Lims ID:	IC L8			Worklist Smp#:	7
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

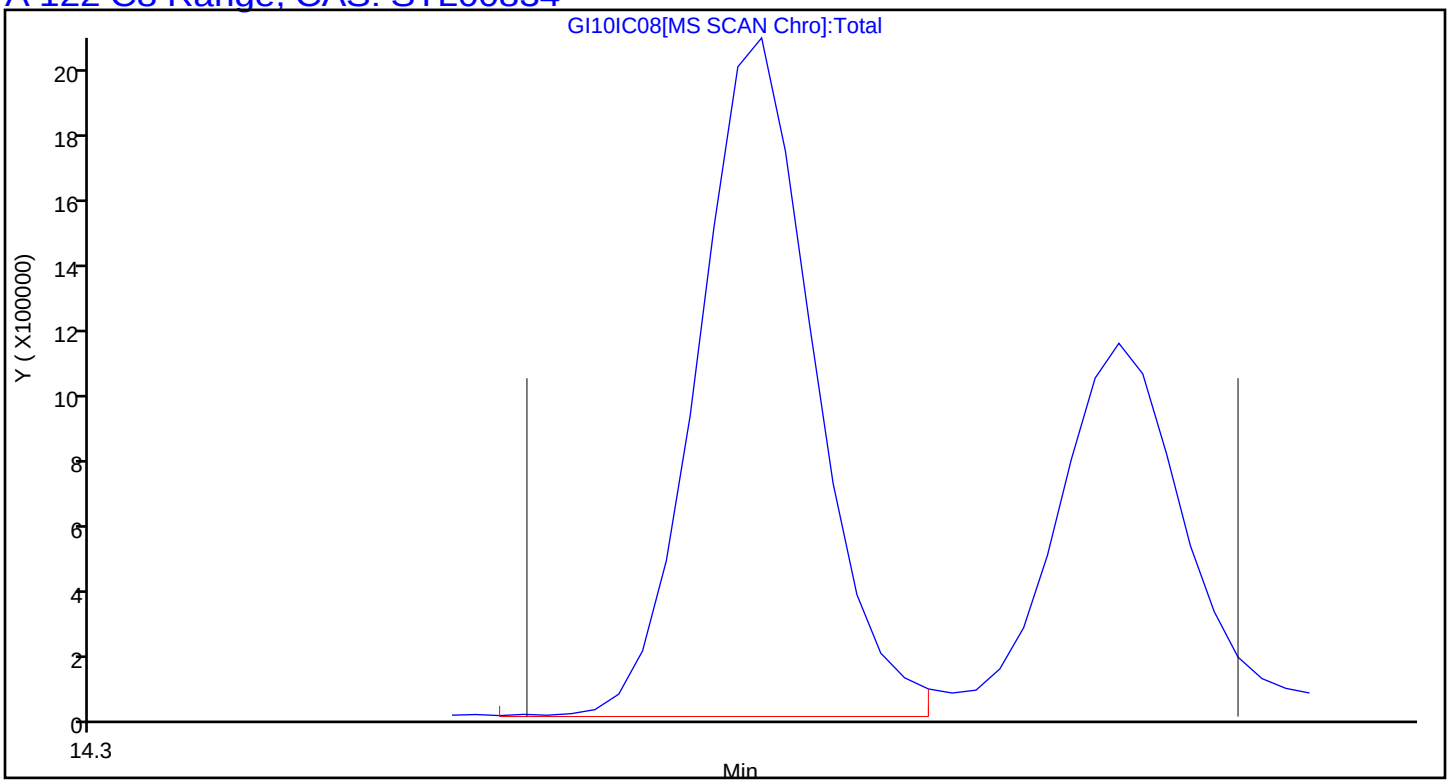


Report Date: 11-Sep-2020 08:45:19 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200910-16561.b\GI10IC08.D				
Injection Date:	10-Sep-2020 21:26:30	Instrument ID:	MG		
Lims ID:	IC L8				
Client ID:					
Operator ID:	AFB	ALS Bottle#:	13	Worklist Smp#:	7
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 122 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200910-16561.b\GI10IC01.D
Lims ID: IC L1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 10-Sep-2020 22:58:30 ALS Bottle#: 1 Worklist Smp#: 9
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016561-009
Misc. Info.: 324289
Operator ID: AFB Instrument ID: MG
Sublist: chrom-MG_TO15*sub17

Method: \\chromfs\Knoxville\ChromData\MG\20200910-16561.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 11-Sep-2020 08:45:25 Calib Date: 11-Sep-2020 06:50:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200910-16561.b\GI10IC09R.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1067

First Level Reviewer: tajh Date: 11-Sep-2020 08:28:55

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.806	8.813	-0.007	94	211034	4.80	4.80	
* 2 1,4-Difluorobenzene	114	10.990	10.994	-0.004	96	1085517	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.724	15.726	-0.002	90	1065131	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.363	17.368	-0.005	86	761393	4.64	4.46	
6 Chlorodifluoromethane	51	3.705	3.704	0.001	53	3715	0.0200	0.0237	
7 Propene	41	3.715	3.712	0.003	83	2409	0.0200	0.0288	
8 Dichlorodifluoromethane	85	3.775	3.767	0.008	96	3882	0.0200	0.0195	
9 Chloromethane	52	3.953	3.947	0.006	54	414	0.0200	0.0124	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.958	3.955	0.003	94	2493	0.0200	0.0222	
11 Acetaldehyde	44	4.098	4.104	-0.006	98	8368	0.1000	0.2034	
12 Vinyl chloride	62	4.120	4.118	0.002	93	2033	0.0200	0.0217	
14 Butadiene	54	4.201	4.205	-0.003	67	1807	0.0200	0.0221	
13 Butane	43	4.206	4.206	0.000	84	4543	0.0200	0.0266	
15 Bromomethane	94	4.524	4.525	-0.001	56	1760	0.0200	0.0272	
16 Chloroethane	64	4.659	4.663	-0.004	30	903	0.0200	0.0215	
17 Ethanol	31	4.778	4.785	-0.007	38	2917	0.1000	0.0709	
18 Vinyl bromide	106	4.956	4.964	-0.008	54	1265	0.0200	0.0229	
19 2-Methylbutane	43	4.999	5.012	-0.013	66	3867	0.0200	0.0328	
20 Trichlorofluoromethane	101	5.225	5.231	-0.006	76	3102	0.0200	0.0192	
21 Acrolein	56	5.258	5.248	0.010	1	886	0.0200	0.0330	
22 Acetonitrile	40	5.430	5.326	0.104	41	523	0.0200	0.0147	
23 Acetone	58	5.382	5.370	0.012	98	3144	0.0600	0.1001	
24 Pentane	72	5.452	5.451	0.001	69	294	0.0200	0.0257	
25 Isopropyl alcohol	45	5.484	5.478	0.006	90	4305	0.0600	0.0428	
26 Ethyl ether	31	5.635	5.631	0.004	53	2131	0.0200	0.0226	
27 1,1-Dichloroethene	96	5.926	5.933	-0.007	39	1051	0.0200	0.0209	
28 Acrylonitrile	53	6.034	6.041	-0.007	70	928	0.0200	0.0195	
30 2-Methyl-2-propanol	59	6.115	6.091	0.024	56	1385	0.0200	0.0150	
29 1,1,2-Trichloro-1,2,2-trifluoroe	101	6.099	6.108	-0.009	85	2297	0.0200	0.0208	
31 Methylene Chloride	84	6.271	6.282	-0.011	91	1846	0.0200	0.0370	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.288	6.295	-0.007	76	2657	0.0200	0.0363	
33 Carbon disulfide	76	6.433	6.440	-0.007	91	3644	0.0200	0.0219	
34 trans-1,2-Dichloroethene	96	7.075	7.086	-0.011	92	1398	0.0200	0.0246	
35 2-Methylpentane	43	7.091	7.104	-0.013	90	4084	0.0200	0.0216	
36 Methyl tert-butyl ether	73	7.199	7.233	-0.034	1	57	0.0200	0.000387	
37 1,1-Dichloroethane	63	7.501	7.505	-0.004	21	3015	0.0200	0.0229	
38 Vinyl acetate	43	7.614	7.615	-0.001	98	3645	0.0200	0.0175	
39 2-Butanone (MEK)	72	8.099	8.076	0.023	81	738	0.0200	0.0257	
40 Hexane	56	8.083	8.084	-0.001	74	1427	0.0200	0.0227	
41 Isopropyl ether	45	8.267	8.258	0.009	63	2488	0.0200	0.009649	
42 cis-1,2-Dichloroethene	96	8.466	8.481	-0.015	83	1474	0.0200	0.0229	
43 Ethyl acetate	43	8.693	8.686	0.007	63	2955	0.0200	0.0173	
44 Chloroform	83	8.817	8.827	-0.010	78	3317	0.0200	0.0241	
45 Tert-butyl ethyl ether	59	8.957	8.939	0.018	59	3130	0.0200	0.0148	
46 Tetrahydrofuran	42	9.275	9.258	0.017	69	1841	0.0200	0.0201	
47 1,1,1-Trichloroethane	97	9.852	9.851	0.001	92	2977	0.0200	0.0223	
48 1,2-Dichloroethane	62	9.954	9.959	-0.005	29	2095	0.0200	0.0215	
51 n-Butanol	31	10.386	10.459	-0.073	1	167	0.0200	0.005704	
49 Cyclohexane	69	10.477	10.457	0.020	76	157	0.0200	0.004768	
50 Benzene	78	10.450	10.452	-0.002	95	5123	0.0200	0.0247	
52 Carbon tetrachloride	117	10.467	10.476	-0.009	82	2625	0.0200	0.0200	
53 2,3-Dimethylpentane	71	10.580	10.577	0.003	91	1049	0.0200	0.0211	
54 Thiophene	84	10.715	10.722	-0.007	29	2236	0.0200	0.0203	
55 Isooctane	57	11.216	11.219	-0.003	97	8996	0.0200	0.0219	
56 n-Heptane	71	11.583	11.592	-0.009	92	1463	0.0200	0.0193	
57 1,2-Dichloropropane	63	11.664	11.669	-0.005	41	2273	0.0200	0.0259	
58 Trichloroethene	130	11.701	11.709	-0.008	84	1617	0.0200	0.0202	
59 Dibromomethane	93	11.782	11.787	-0.005	76	2378	0.0200	0.0282	
60 Dichlorobromomethane	83	11.923	11.936	-0.013	95	2933	0.0200	0.0197	
62 Methyl methacrylate	41	12.047	12.041	0.006	44	1853	0.0200	0.0179	
63 Methylcyclohexane	83	12.473	12.477	-0.004	85	2615	0.0200	0.0209	
64 4-Methyl-2-pentanone (MIBK)	43	12.915	12.900	0.015	80	2811	0.0200	0.0160	
65 cis-1,3-Dichloropropene	75	12.931	12.934	-0.003	91	2580	0.0200	0.0214	
66 trans-1,3-Dichloropropene	75	13.621	13.629	-0.008	92	1802	0.0200	0.0178	
67 Toluene	91	13.751	13.755	-0.004	97	4972	0.0200	0.0230	
68 1,1,2-Trichloroethane	83	13.826	13.829	-0.003	88	1467	0.0200	0.0216	
69 2-Hexanone	58	14.236	14.233	0.003	1	383	0.0200	0.005260	
70 n-Octane	85	14.446	14.450	-0.004	96	1596	0.0200	0.0209	
71 Chlorodibromomethane	129	14.527	14.531	-0.004	91	2308	0.0200	0.0178	
72 Ethylene Dibromide	107	14.818	14.823	-0.005	85	2558	0.0200	0.0214	
73 Tetrachloroethene	129	14.894	14.900	-0.006	31	1671	0.0200	0.0219	
75 Chlorobenzene	112	15.773	15.775	-0.002	35	3775	0.0200	0.0216	
74 2,3-Dimethylheptane	43	15.794	15.797	-0.003	91	6518	0.0200	0.0204	
78 Ethylbenzene	91	16.059	16.063	-0.004	95	5764	0.0200	0.0199	
79 m-Xylene & p-Xylene	91	16.226	16.226	0.000	97	8962	0.0400	0.0404	
80 n-Nonane	57	16.636	16.648	-0.012	88	3418	0.0200	0.0182	
81 Bromoform	173	16.673	16.673	0.000	60	1983	0.0200	0.0157	
82 Styrene	104	16.689	16.691	-0.002	57	2525	0.0200	0.0150	
83 o-Xylene	91	16.754	16.754	0.000	96	4604	0.0200	0.0197	
84 1,1,2,2-Tetrachloroethane	83	17.067	17.073	-0.006	96	3391	0.0200	0.0183	
85 1,2,3-Trichloropropane	110	17.229	17.233	-0.004	93	781	0.0200	0.0160	
86 Isopropylbenzene	105	17.337	17.340	-0.004	87	6198	0.0200	0.0196	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
87 N-Propylbenzene	120	17.876	17.882	-0.006	97	1266	0.0200	0.0141	
88 2-Chlorotoluene	126	17.919	17.923	-0.004	93	1810	0.0200	0.0210	
89 4-Ethyltoluene	105	18.038	18.033	0.005	98	5566	0.0200	0.0173	
90 1,3,5-Trimethylbenzene	120	18.102	18.107	-0.005	88	1721	0.0200	0.0130	
92 Alpha Methyl Styrene	118	18.334	18.334	0.000	73	1815	0.0200	0.0140	
93 n-Decane	57	18.393	18.395	-0.002	89	3645	0.0200	0.0154	
94 tert-Butylbenzene	119	18.534	18.529	0.005	86	4149	0.0200	0.0154	
95 1,2,4-Trimethylbenzene	105	18.539	18.542	-0.003	70	4983	0.0200	0.0191	
96 sec-Butylbenzene	105	18.798	18.797	0.001	98	6533	0.0200	0.0165	
97 1,3-Dichlorobenzene	146	18.809	18.810	-0.001	93	4465	0.0200	0.0234	
98 Benzyl chloride	91	18.884	18.884	0.000	90	4455	0.0200	0.0181	
99 1,4-Dichlorobenzene	146	18.895	18.897	-0.002	83	3937	0.0200	0.0207	
100 4-Isopropyltoluene	119	18.954	18.959	-0.005	95	5371	0.0200	0.0169	
101 1,2,3-Trimethylbenzene	105	19.008	19.011	-0.003	96	3665	0.0200	0.0142	
102 Butylcyclohexane	83	19.067	19.067	0.000	84	4499	0.0200	0.0173	
103 2,3-Dihydroindene	117	19.256	19.256	0.000	85	4506	0.0200	0.0169	
104 1,2-Dichlorobenzene	146	19.256	19.256	0.000	87	3809	0.0200	0.0203	
106 Indene	116	19.380	19.385	-0.005	77	3434	0.0200	0.0149	
105 n-Butylbenzene	91	19.391	19.392	-0.001	95	6396	0.0200	0.0186	
107 Undecane	57	19.698	19.703	-0.005	91	3923	0.0200	0.0142	
108 1,2-Dibromo-3-Chloropropane	157	19.849	19.854	-0.005	78	1492	0.0200	0.0158	
109 1,2,4,5-Tetramethylbenzene	119	20.146	20.144	0.002	97	4296	0.0200	0.0144	
110 Dodecane	57	20.755	20.758	-0.003	86	3482	0.0200	0.0134	
111 1,2,4-Trichlorobenzene	180	20.955	20.951	0.004	91	3762	0.0200	0.0221	
112 Naphthalene	128	21.090	21.089	0.001	98	9201	0.0200	0.0217	
113 Hexachlorobutadiene	225	21.295	21.297	-0.003	85	2514	0.0200	0.0161	
114 1,2,3-Trichlorobenzene	180	21.359	21.365	-0.006	89	3097	0.0200	0.0192	
115 2-Methylnaphthalene	142	22.141	22.139	0.002	96	5028	0.0200	0.0278	
116 1-Methylnaphthalene	142	22.314	22.313	0.001	92	6307	0.0200	0.0333	
A 122 C8 Range	1	14.441	(14.404-14.479)		0	24679	0.0200	0.0288	
S 123 1,2-Dichloroethene, Total	1				0		0.0400	0.0475	
S 124 Xylenes, Total	100				0		0.0600	0.0601	

Reagents:

40L1-3DQP_00032	Amount Added: 50.00	Units: mL	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

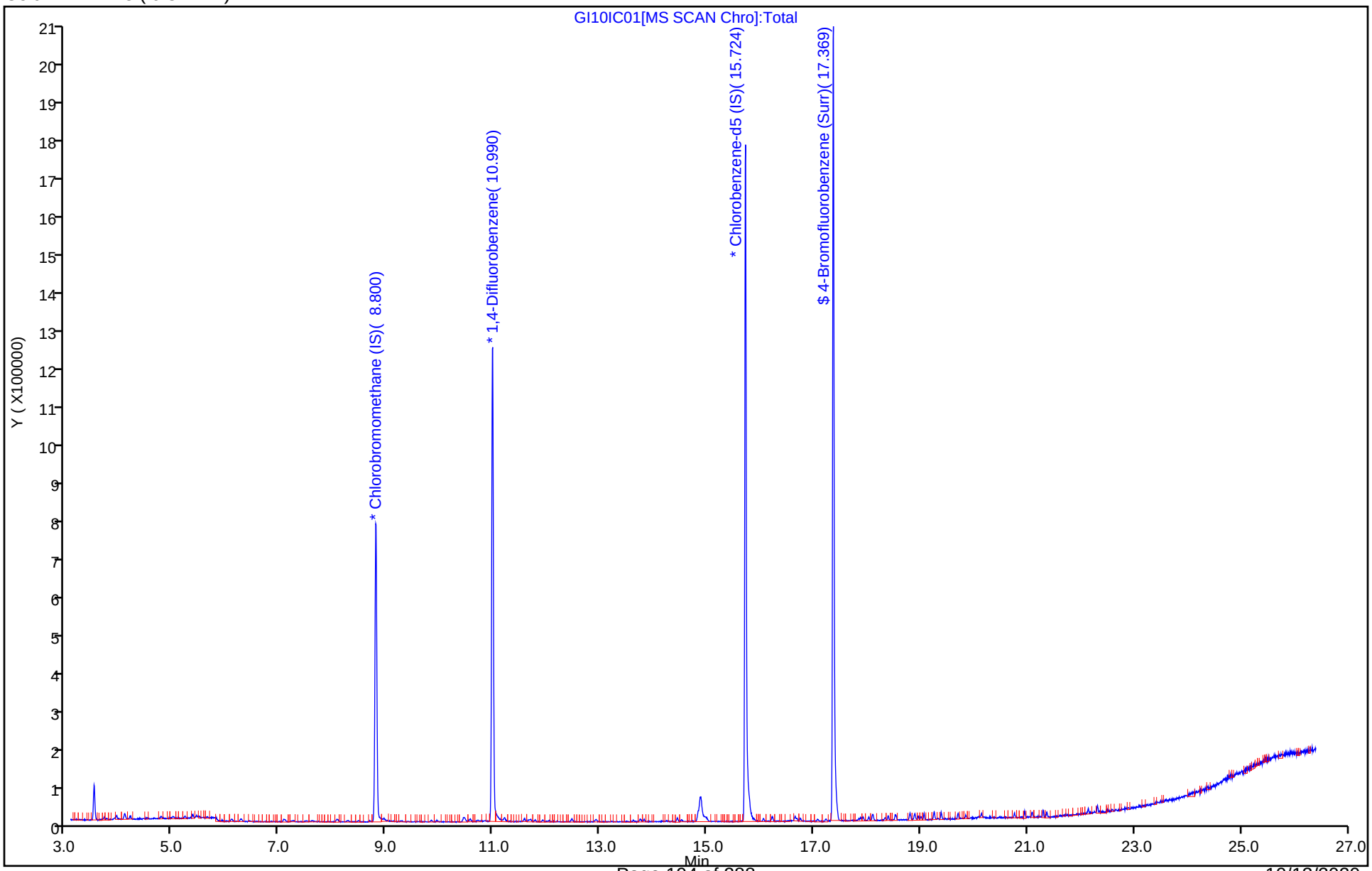
Report Date: 11-Sep-2020 08:45:26 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200910-16561.b\GI10IC01.D

Injection Date:	10-Sep-2020 22:58:30	Instrument ID:	MG	Operator ID:	AFB
Lims ID:	IC L1			Worklist Smp#:	9
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Report Date: 11-Sep-2020 08:45:26 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200910-16561.b\GI10IC01.D				
Injection Date:	10-Sep-2020 22:58:30	Instrument ID:	MG		
Lims ID:	IC L1				
Client ID:					
Operator ID:	AFB	ALS Bottle#:	1	Worklist Smp#:	9
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 122 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200910-16561.b\GI10IC02.D
Lims ID: IC L2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 10-Sep-2020 23:47:30 ALS Bottle#: 1 Worklist Smp#: 10
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016561-010
Misc. Info.: 324289
Operator ID: AFB Instrument ID: MG
Sublist: chrom-MG_TO15*sub17

Method: \\chromfs\Knoxville\ChromData\MG\20200910-16561.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 11-Sep-2020 08:45:31 Calib Date: 11-Sep-2020 06:50:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200910-16561.b\GI10IC09R.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1067

First Level Reviewer: tajh Date: 11-Sep-2020 08:29:52

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.806	8.813	-0.007	92	187396	4.80	4.80	
* 2 1,4-Difluorobenzene	114	10.990	10.994	-0.004	97	998203	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.724	15.726	-0.002	91	984926	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.369	17.368	0.001	86	710833	4.64	4.50	
6 Chlorodifluoromethane	51	3.710	3.704	0.006	96	5921	0.0400	0.0425	
7 Propene	41	3.715	3.712	0.003	89	3870	0.0400	0.0520	
8 Dichlorodifluoromethane	85	3.769	3.767	0.002	98	6883	0.0400	0.0389	
9 Chloromethane	52	3.942	3.947	-0.005	74	2292	0.0400	0.0773	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.958	3.955	0.003	94	3891	0.0400	0.0390	
11 Acetaldehyde	44	4.120	4.104	0.016	98	14558	0.2000	0.3986	
12 Vinyl chloride	62	4.125	4.118	0.007	42	3504	0.0400	0.0422	
14 Butadiene	54	4.212	4.205	0.008	62	2743	0.0400	0.0379	
13 Butane	43	4.212	4.206	0.006	86	7631	0.0400	0.0504	
15 Bromomethane	94	4.530	4.525	0.005	83	2833	0.0400	0.0493	
16 Chloroethane	64	4.670	4.663	0.007	46	1716	0.0400	0.0460	
17 Ethanol	31	4.805	4.785	0.020	96	10949	0.2000	0.2995	
18 Vinyl bromide	106	4.972	4.964	0.008	94	2138	0.0400	0.0437	
19 2-Methylbutane	43	5.020	5.012	0.008	87	4252	0.0400	0.0406	
20 Trichlorofluoromethane	101	5.231	5.231	0.000	97	5662	0.0400	0.0394	
21 Acrolein	56	5.263	5.248	0.015	56	1452	0.0400	0.0608	
23 Acetone	58	5.398	5.370	0.028	99	6065	0.1200	0.2175	
24 Pentane	72	5.446	5.451	-0.005	77	377	0.0400	0.0371	
25 Isopropyl alcohol	45	5.517	5.478	0.039	97	12233	0.1200	0.1371	
26 Ethyl ether	31	5.646	5.631	0.015	72	3594	0.0400	0.0429	
27 1,1-Dichloroethene	96	5.937	5.933	0.004	92	1968	0.0400	0.0441	
28 Acrylonitrile	53	6.056	6.041	0.015	72	2232	0.0400	0.0527	
29 1,1,2-Trichloro-1,2,2-trifluoroe	101	6.104	6.108	-0.004	88	4347	0.0400	0.0444	
30 2-Methyl-2-propanol	59	6.137	6.091	0.046	86	3788	0.0400	0.0463	
31 Methylene Chloride	84	6.288	6.282	0.006	93	2753	0.0400	0.0621	
32 3-Chloro-1-propene	39	6.304	6.295	0.009	69	3799	0.0400	0.0585	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
33 Carbon disulfide	76	6.439	6.440	-0.001	98	6115	0.0400	0.0414	
34 trans-1,2-Dichloroethene	96	7.086	7.086	0.000	65	2296	0.0400	0.0455	
35 2-Methylpentane	43	7.107	7.104	0.003	96	7279	0.0400	0.0433	
36 Methyl tert-butyl ether	73	7.269	7.233	0.036	92	5861	0.0400	0.0448	
37 1,1-Dichloroethane	63	7.512	7.505	0.007	97	5264	0.0400	0.0450	
38 Vinyl acetate	43	7.625	7.615	0.010	99	7550	0.0400	0.0409	
40 Hexane	56	8.089	8.084	0.005	71	2790	0.0400	0.0501	
39 2-Butanone (MEK)	72	8.105	8.076	0.029	91	1385	0.0400	0.0543	
41 Isopropyl ether	45	8.272	8.258	0.014	52	3830	0.0400	0.0167	a
42 cis-1,2-Dichloroethene	96	8.488	8.481	0.007	93	2258	0.0400	0.0395	
43 Ethyl acetate	43	8.703	8.686	0.017	96	7207	0.0400	0.0474	
44 Chloroform	83	8.822	8.827	-0.005	44	5062	0.0400	0.0414	
45 Tert-butyl ethyl ether	59	8.962	8.939	0.023	97	8143	0.0400	0.0434	
46 Tetrahydrofuran	42	9.302	9.258	0.044	88	3725	0.0400	0.0458	
47 1,1,1-Trichloroethane	97	9.852	9.851	0.001	95	4647	0.0400	0.0391	
48 1,2-Dichloroethane	62	9.965	9.959	0.006	93	3767	0.0400	0.0420	
51 n-Butanol	31	10.515	10.459	0.056	20	1270	0.0400	0.0472	
50 Benzene	78	10.440	10.452	-0.012	94	8563	0.0400	0.0449	
52 Carbon tetrachloride	117	10.488	10.476	0.012	82	5072	0.0400	0.0420	
49 Cyclohexane	69	10.445	10.457	-0.012	71	992	0.0400	0.0328	
53 2,3-Dimethylpentane	71	10.569	10.577	-0.008	88	1942	0.0400	0.0424	
54 Thiophene	84	10.715	10.722	-0.007	94	3631	0.0400	0.0358	
55 Isooctane	57	11.222	11.219	0.003	96	15150	0.0400	0.0400	
56 n-Heptane	71	11.594	11.592	0.002	92	2712	0.0400	0.0389	
57 1,2-Dichloropropane	63	11.664	11.669	-0.005	74	3801	0.0400	0.0471	
58 Trichloroethene	130	11.707	11.709	-0.002	89	2876	0.0400	0.0391	
59 Dibromomethane	93	11.782	11.787	-0.005	89	3342	0.0400	0.0432	
60 Dichlorobromomethane	83	11.939	11.936	0.003	94	5243	0.0400	0.0383	
61 1,4-Dioxane	88	12.020	11.983	0.037	44	877	0.0400	0.0413	
62 Methyl methacrylate	41	12.047	12.041	0.006	83	4705	0.0400	0.0494	
63 Methylcyclohexane	83	12.478	12.477	0.001	81	4179	0.0400	0.0364	
64 4-Methyl-2-pentanone (MIBK)	43	12.915	12.900	0.015	91	7122	0.0400	0.0440	
65 cis-1,3-Dichloropropene	75	12.931	12.934	-0.003	95	4690	0.0400	0.0424	
66 trans-1,3-Dichloropropene	75	13.627	13.629	-0.002	92	3546	0.0400	0.0379	
67 Toluene	91	13.751	13.755	-0.004	93	8053	0.0400	0.0402	
68 1,1,2-Trichloroethane	83	13.832	13.829	0.003	96	2370	0.0400	0.0377	
69 2-Hexanone	58	14.252	14.233	0.019	94	2752	0.0400	0.0409	
70 n-Octane	85	14.446	14.450	-0.004	96	2792	0.0400	0.0396	
71 Chlorodibromomethane	129	14.533	14.531	0.002	91	4349	0.0400	0.0364	
72 Ethylene Dibromide	107	14.818	14.823	-0.005	95	4561	0.0400	0.0414	
73 Tetrachloroethene	129	14.899	14.900	-0.001	86	2830	0.0400	0.0402	
75 Chlorobenzene	112	15.773	15.775	-0.002	95	6706	0.0400	0.0415	
74 2,3-Dimethylheptane	43	15.794	15.797	-0.003	92	12421	0.0400	0.0419	
78 Ethylbenzene	91	16.059	16.063	-0.004	98	11279	0.0400	0.0421	
79 m-Xylene & p-Xylene	91	16.226	16.226	0.000	97	15766	0.0800	0.0768	
80 n-Nonane	57	16.646	16.648	-0.002	92	6773	0.0400	0.0391	
81 Bromoform	173	16.673	16.673	0.000	88	3535	0.0400	0.0303	
82 Styrene	104	16.690	16.691	-0.001	77	5490	0.0400	0.0353	
83 o-Xylene	91	16.754	16.754	0.000	96	9624	0.0400	0.0445	
84 1,1,2,2-Tetrachloroethane	83	17.078	17.073	0.005	95	6817	0.0400	0.0397	
85 1,2,3-Trichloropropane	110	17.234	17.233	0.001	95	1769	0.0400	0.0393	
86 Isopropylbenzene	105	17.342	17.340	0.002	93	11092	0.0400	0.0380	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
87 N-Propylbenzene	120	17.881	17.882	-0.001	97	3202	0.0400	0.0385	
88 2-Chlorotoluene	126	17.924	17.923	0.001	96	3395	0.0400	0.0425	
89 4-Ethyltoluene	105	18.032	18.033	-0.001	98	11698	0.0400	0.0392	
90 1,3,5-Trimethylbenzene	120	18.108	18.107	0.001	91	4873	0.0400	0.0399	
92 Alpha Methyl Styrene	118	18.334	18.334	0.000	84	3834	0.0400	0.0319	
93 n-Decane	57	18.393	18.395	-0.002	83	8663	0.0400	0.0395	
94 tert-Butylbenzene	119	18.528	18.529	-0.001	90	10014	0.0400	0.0401	
95 1,2,4-Trimethylbenzene	105	18.544	18.542	0.002	95	9643	0.0400	0.0400	
96 sec-Butylbenzene	105	18.793	18.797	-0.004	97	14106	0.0400	0.0386	
97 1,3-Dichlorobenzene	146	18.803	18.810	-0.007	95	6610	0.0400	0.0374	
98 Benzyl chloride	91	18.879	18.884	-0.005	95	9726	0.0400	0.0427	
99 1,4-Dichlorobenzene	146	18.900	18.897	0.003	90	7136	0.0400	0.0406	
100 4-Isopropyltoluene	119	18.954	18.959	-0.005	95	11743	0.0400	0.0399	
101 1,2,3-Trimethylbenzene	105	19.008	19.011	-0.003	96	9724	0.0400	0.0407	
102 Butylcyclohexane	83	19.062	19.067	-0.005	88	9094	0.0400	0.0379	
103 2,3-Dihydroindene	117	19.256	19.256	0.000	91	9243	0.0400	0.0375	
104 1,2-Dichlorobenzene	146	19.256	19.256	0.000	81	6792	0.0400	0.0391	
106 Indene	116	19.386	19.385	0.001	70	7911	0.0400	0.0371	
105 n-Butylbenzene	91	19.391	19.392	-0.001	95	13424	0.0400	0.0421	
107 Undecane	57	19.704	19.703	0.001	89	9880	0.0400	0.0386	
108 1,2-Dibromo-3-Chloropropane	157	19.855	19.854	0.001	84	3496	0.0400	0.0400	
109 1,2,4,5-Tetramethylbenzene	119	20.146	20.144	0.002	94	11046	0.0400	0.0399	
110 Dodecane	57	20.755	20.758	-0.003	90	9985	0.0400	0.0415	
111 1,2,4-Trichlorobenzene	180	20.949	20.951	-0.002	90	6158	0.0400	0.0391	
112 Naphthalene	128	21.090	21.089	0.001	99	18271	0.0400	0.0467	
113 Hexachlorobutadiene	225	21.300	21.297	0.003	85	5512	0.0400	0.0381	
114 1,2,3-Trichlorobenzene	180	21.365	21.365	0.000	93	6794	0.0400	0.0455	
115 2-Methylnaphthalene	142	22.147	22.139	0.008	98	7436	0.0400	0.0445	
116 1-Methylnaphthalene	142	22.314	22.313	0.001	96	9548	0.0400	0.0544	
A 122 C8 Range	1	14.447	(14.415-14.479)		0	38997	0.0400	0.0491	
S 123 1,2-Dichloroethene, Total	1				0		0.0800	0.0851	
S 124 Xylenes, Total	100				0		0.1200	0.1213	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

40L1-3DQP_00032	Amount Added: 100.00	Units: mL	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

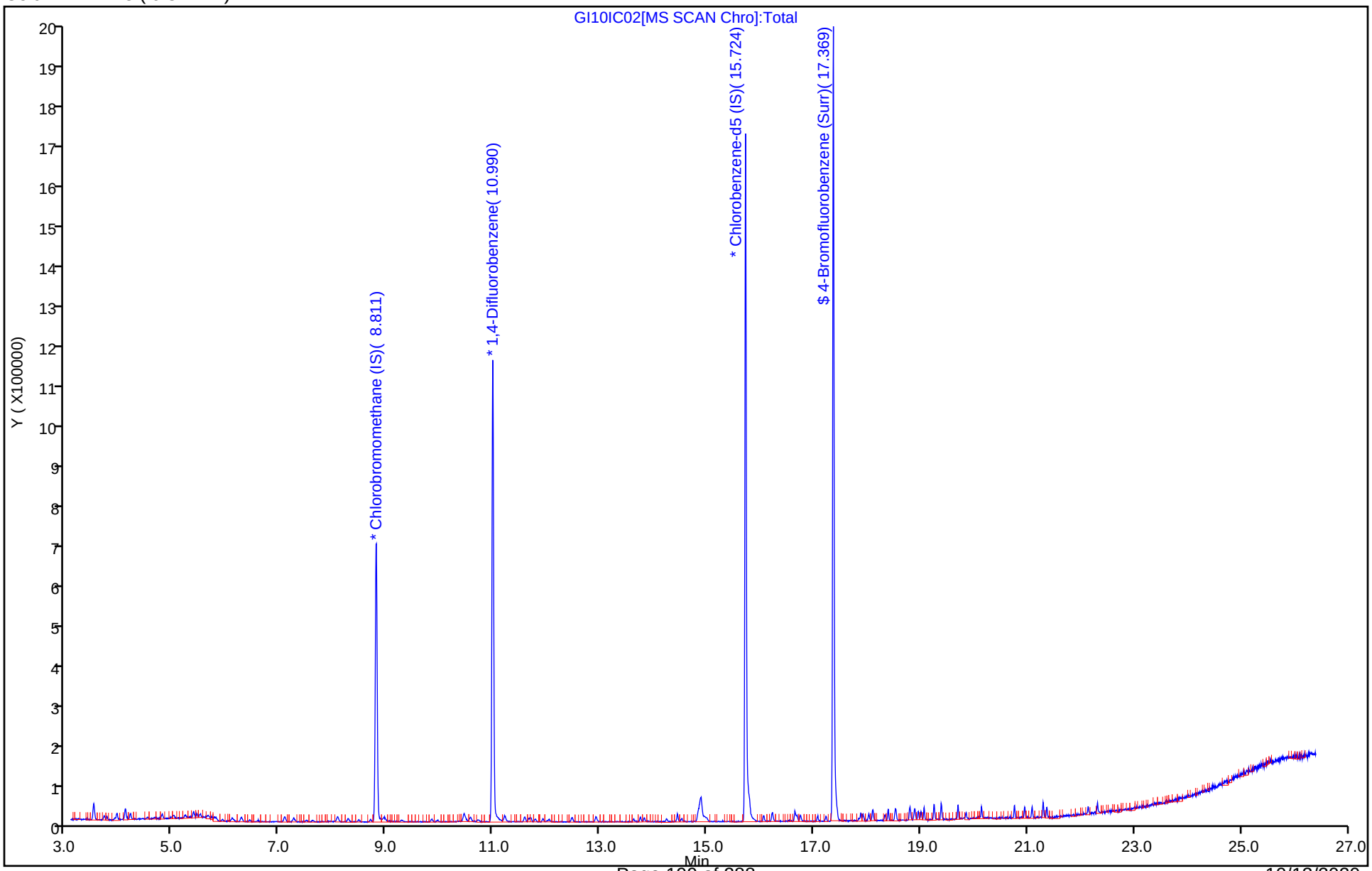
Report Date: 11-Sep-2020 08:45:32 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200910-16561.b\GI10IC02.D

Injection Date:	10-Sep-2020 23:47:30	Instrument ID:	MG	Operator ID:	AFB
Lims ID:	IC L2			Worklist Smp#:	10
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

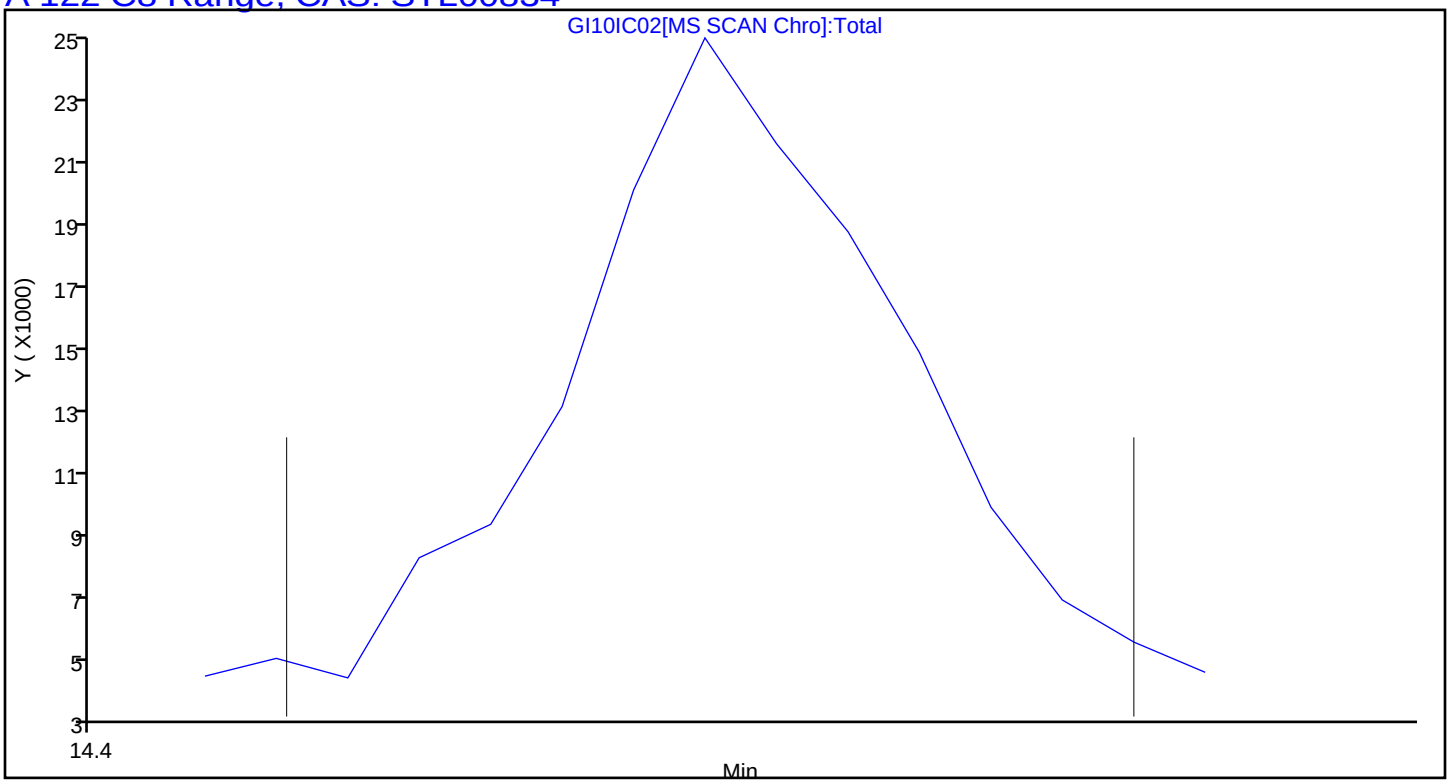


Report Date: 11-Sep-2020 08:45:32 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200910-16561.b\GI10IC02.D				
Injection Date:	10-Sep-2020 23:47:30	Instrument ID:	MG		
Lims ID:	IC L2				
Client ID:					
Operator ID:	AFB	ALS Bottle#:	1	Worklist Smp#:	10
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 122 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200910-16561.b\GI10IC03.D
Lims ID: IC L3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 11-Sep-2020 00:34:30 ALS Bottle#: 1 Worklist Smp#: 11
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016561-011
Misc. Info.: 324289
Operator ID: AFB Instrument ID: MG
Sublist: chrom-MG_TO15*sub17

Method: \\chromfs\Knoxville\ChromData\MG\20200910-16561.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 11-Sep-2020 08:45:36 Calib Date: 11-Sep-2020 06:50:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200910-16561.b\GI10IC09R.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1067

First Level Reviewer: tajh Date: 11-Sep-2020 08:30:25

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.806	8.813	-0.007	93	183246	4.80	4.80	
* 2 1,4-Difluorobenzene	114	10.990	10.994	-0.004	97	1007046	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.724	15.726	-0.002	91	989471	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.363	17.368	-0.005	85	718398	4.64	4.53	
6 Chlorodifluoromethane	51	3.699	3.704	-0.005	97	12166	0.0800	0.0893	
7 Propene	41	3.715	3.712	0.003	97	6577	0.0800	0.0905	
8 Dichlorodifluoromethane	85	3.764	3.767	-0.003	100	14143	0.0800	0.0817	
9 Chloromethane	52	3.942	3.947	-0.005	61	2709	0.0800	0.0934	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.947	3.955	-0.008	94	7139	0.0800	0.0732	
11 Acetaldehyde	44	4.098	4.104	-0.006	99	20736	0.4000	0.5805	
12 Vinyl chloride	62	4.114	4.118	-0.004	97	6213	0.0800	0.0765	
13 Butane	43	4.201	4.206	-0.005	86	12936	0.0800	0.0873	
14 Butadiene	54	4.201	4.205	-0.003	60	5815	0.0800	0.0821	
15 Bromomethane	94	4.513	4.525	-0.012	94	4375	0.0800	0.0779	
16 Chloroethane	64	4.654	4.663	-0.009	94	2997	0.0800	0.0822	
17 Ethanol	31	4.772	4.785	-0.013	97	18003	0.4000	0.5037	
18 Vinyl bromide	106	4.956	4.964	-0.008	93	3477	0.0800	0.0726	
19 2-Methylbutane	43	4.999	5.012	-0.013	96	9845	0.0800	0.0960	
20 Trichlorofluoromethane	101	5.225	5.231	-0.006	97	10494	0.0800	0.0747	
21 Acrolein	56	5.236	5.248	-0.012	58	2530	0.0800	0.1084	
22 Acetonitrile	40	5.306	5.326	-0.020	94	4679	0.0800	0.1514	
23 Acetone	58	5.365	5.370	-0.005	99	11616	0.2400	0.4260	
24 Pentane	72	5.452	5.451	0.001	94	827	0.0800	0.0833	
25 Isopropyl alcohol	45	5.468	5.478	-0.010	95	25429	0.2400	0.2914	
26 Ethyl ether	31	5.630	5.631	-0.001	89	7255	0.0800	0.0885	
27 1,1-Dichloroethene	96	5.921	5.933	-0.012	90	3350	0.0800	0.0767	
28 Acrylonitrile	53	6.018	6.041	-0.023	72	4073	0.0800	0.0983	
29 1,1,2-Trichloro-1,2,2-trifluoroe	101	6.099	6.108	-0.009	90	7951	0.0800	0.0831	
30 2-Methyl-2-propanol	59	6.088	6.091	-0.003	90	6968	0.0800	0.0871	
31 Methylene Chloride	84	6.282	6.282	0.000	90	4405	0.0800	0.1015	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.293	6.295	-0.002	81	5547	0.0800	0.0873	
33 Carbon disulfide	76	6.439	6.440	-0.001	98	11706	0.0800	0.0810	
34 trans-1,2-Dichloroethene	96	7.075	7.086	-0.011	86	3727	0.0800	0.0756	
35 2-Methylpentane	43	7.096	7.104	-0.008	96	14086	0.0800	0.0857	
36 Methyl tert-butyl ether	73	7.237	7.233	0.004	94	11171	0.0800	0.0873	
37 1,1-Dichloroethane	63	7.501	7.505	-0.004	97	9551	0.0800	0.0836	
38 Vinyl acetate	43	7.598	7.615	-0.017	99	13950	0.0800	0.0773	
40 Hexane	56	8.072	8.084	-0.012	68	4693	0.0800	0.0861	
39 2-Butanone (MEK)	72	8.067	8.076	-0.009	86	2288	0.0800	0.0918	
41 Isopropyl ether	45	8.261	8.258	0.003	97	19070	0.0800	0.0852	
42 cis-1,2-Dichloroethene	96	8.466	8.481	-0.015	96	4654	0.0800	0.0833	
43 Ethyl acetate	43	8.687	8.686	0.001	97	13915	0.0800	0.0937	
44 Chloroform	83	8.817	8.827	-0.010	87	10224	0.0800	0.0855	
45 Tert-butyl ethyl ether	59	8.946	8.939	0.007	97	14831	0.0800	0.0808	
46 Tetrahydrofuran	42	9.253	9.258	-0.005	93	7095	0.0800	0.0893	
47 1,1,1-Trichloroethane	97	9.841	9.851	-0.010	94	9016	0.0800	0.0776	
48 1,2-Dichloroethane	62	9.944	9.959	-0.015	95	7085	0.0800	0.0783	
50 Benzene	78	10.445	10.452	-0.007	96	14504	0.0800	0.0754	
49 Cyclohexane	69	10.456	10.457	-0.001	82	2374	0.0800	0.0777	
52 Carbon tetrachloride	117	10.467	10.476	-0.009	89	9343	0.0800	0.0766	
51 n-Butanol	31	10.477	10.459	0.018	55	2350	0.0800	0.0865	
53 2,3-Dimethylpentane	71	10.574	10.577	-0.003	90	3386	0.0800	0.0734	
54 Thiophene	84	10.715	10.722	-0.007	94	7418	0.0800	0.0725	
55 Isooctane	57	11.211	11.219	-0.008	97	30058	0.0800	0.0787	
56 n-Heptane	71	11.583	11.592	-0.009	93	5133	0.0800	0.0730	
57 1,2-Dichloropropane	63	11.664	11.669	-0.005	84	6750	0.0800	0.0828	
58 Trichloroethene	130	11.707	11.709	-0.002	87	4935	0.0800	0.0665	
59 Dibromomethane	93	11.777	11.787	-0.010	87	6102	0.0800	0.0781	
60 Dichlorobromomethane	83	11.928	11.936	-0.008	95	10215	0.0800	0.0740	
61 1,4-Dioxane	88	11.987	11.983	0.004	55	1703	0.0800	0.0794	
62 Methyl methacrylate	41	12.036	12.041	-0.005	87	7711	0.0800	0.0803	
63 Methylcyclohexane	83	12.473	12.477	-0.004	84	8297	0.0800	0.0716	
64 4-Methyl-2-pentanone (MIBK)	43	12.904	12.900	0.004	94	13970	0.0800	0.0856	
65 cis-1,3-Dichloropropene	75	12.931	12.934	-0.003	91	8542	0.0800	0.0766	
66 trans-1,3-Dichloropropene	75	13.621	13.629	-0.008	93	7309	0.0800	0.0777	
67 Toluene	91	13.751	13.755	-0.004	91	15371	0.0800	0.0764	
68 1,1,2-Trichloroethane	83	13.826	13.829	-0.003	94	5168	0.0800	0.0817	
69 2-Hexanone	58	14.236	14.233	0.003	92	5725	0.0800	0.0846	
70 n-Octane	85	14.446	14.450	-0.004	98	5123	0.0800	0.0724	
71 Chlorodibromomethane	129	14.527	14.531	-0.004	95	8463	0.0800	0.0704	
72 Ethylene Dibromide	107	14.818	14.823	-0.005	97	8379	0.0800	0.0756	
73 Tetrachloroethene	129	14.899	14.900	-0.001	88	5201	0.0800	0.0735	
75 Chlorobenzene	112	15.773	15.775	-0.002	88	11976	0.0800	0.0737	
74 2,3-Dimethylheptane	43	15.794	15.797	-0.003	93	22613	0.0800	0.0760	
78 Ethylbenzene	91	16.064	16.063	0.001	98	21329	0.0800	0.0793	
79 m-Xylene & p-Xylene	91	16.220	16.226	-0.006	97	32306	0.1600	0.1566	
80 n-Nonane	57	16.646	16.648	-0.002	92	12863	0.0800	0.0739	
81 Bromoform	173	16.673	16.673	0.000	91	7365	0.0800	0.0629	
82 Styrene	104	16.689	16.691	-0.002	97	10397	0.0800	0.0666	
83 o-Xylene	91	16.754	16.754	0.000	97	17227	0.0800	0.0793	
84 1,1,2,2-Tetrachloroethane	83	17.072	17.073	-0.001	97	14073	0.0800	0.0816	
85 1,2,3-Trichloropropane	110	17.229	17.233	-0.004	95	3632	0.0800	0.0802	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
86 Isopropylbenzene	105	17.337	17.340	-0.003	90	22460	0.0800	0.0765	
87 N-Propylbenzene	120	17.887	17.882	0.005	99	6185	0.0800	0.0740	
88 2-Chlorotoluene	126	17.919	17.923	-0.004	96	5845	0.0800	0.0728	
89 4-Ethyltoluene	105	18.027	18.033	-0.006	98	22589	0.0800	0.0754	
90 1,3,5-Trimethylbenzene	120	18.108	18.107	0.001	91	9315	0.0800	0.0760	
92 Alpha Methyl Styrene	118	18.329	18.334	-0.005	84	7685	0.0800	0.0637	
93 n-Decane	57	18.393	18.395	-0.002	90	16497	0.0800	0.0748	
94 tert-Butylbenzene	119	18.523	18.529	-0.006	89	18853	0.0800	0.0752	
95 1,2,4-Trimethylbenzene	105	18.539	18.542	-0.003	95	18834	0.0800	0.0778	
96 sec-Butylbenzene	105	18.792	18.797	-0.005	97	27136	0.0800	0.0740	
97 1,3-Dichlorobenzene	146	18.814	18.810	0.004	95	13828	0.0800	0.0780	
98 Benzyl chloride	91	18.884	18.884	0.000	96	17643	0.0800	0.0772	
99 1,4-Dichlorobenzene	146	18.895	18.897	-0.002	89	12941	0.0800	0.0733	
100 4-Isopropyltoluene	119	18.954	18.959	-0.005	96	22771	0.0800	0.0770	
101 1,2,3-Trimethylbenzene	105	19.008	19.011	-0.003	98	19323	0.0800	0.0805	
102 Butylcyclohexane	83	19.067	19.067	0.000	87	17475	0.0800	0.0725	
103 2,3-Dihydroindene	117	19.251	19.256	-0.005	92	18155	0.0800	0.0732	
104 1,2-Dichlorobenzene	146	19.256	19.256	0.000	78	12209	0.0800	0.0700	
106 Indene	116	19.380	19.385	-0.005	88	14838	0.0800	0.0694	
105 n-Butylbenzene	91	19.391	19.392	-0.001	95	24220	0.0800	0.0757	
107 Undecane	57	19.704	19.703	0.001	90	19831	0.0800	0.0771	
108 1,2-Dibromo-3-Chloropropane	157	19.855	19.854	0.001	83	5476	0.0800	0.0624	
109 1,2,4,5-Tetramethylbenzene	119	20.141	20.144	-0.003	97	21910	0.0800	0.0789	
110 Dodecane	57	20.755	20.758	-0.003	90	20603	0.0800	0.0852	
111 1,2,4-Trichlorobenzene	180	20.949	20.951	-0.002	93	12044	0.0800	0.0762	
112 Naphthalene	128	21.084	21.089	-0.005	99	31623	0.0800	0.0804	
113 Hexachlorobutadiene	225	21.295	21.297	-0.002	88	10377	0.0800	0.0714	
114 1,2,3-Trichlorobenzene	180	21.365	21.365	0.000	90	11053	0.0800	0.0736	
115 2-Methylnaphthalene	142	22.141	22.139	0.002	97	14614	0.0800	0.0871	
116 1-Methylnaphthalene	142	22.314	22.313	0.001	97	16432	0.0800	0.0933	
A 122 C8 Range	1	14.451	(14.404-14.489)		0	68633	0.0800	0.0861	
S 123 1,2-Dichloroethene, Total	1				0		0.1600	0.1589	
S 124 Xylenes, Total	100				0		0.2400	0.2360	

Reagents:

40L1-3DQP_00032	Amount Added: 200.00	Units: mL	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

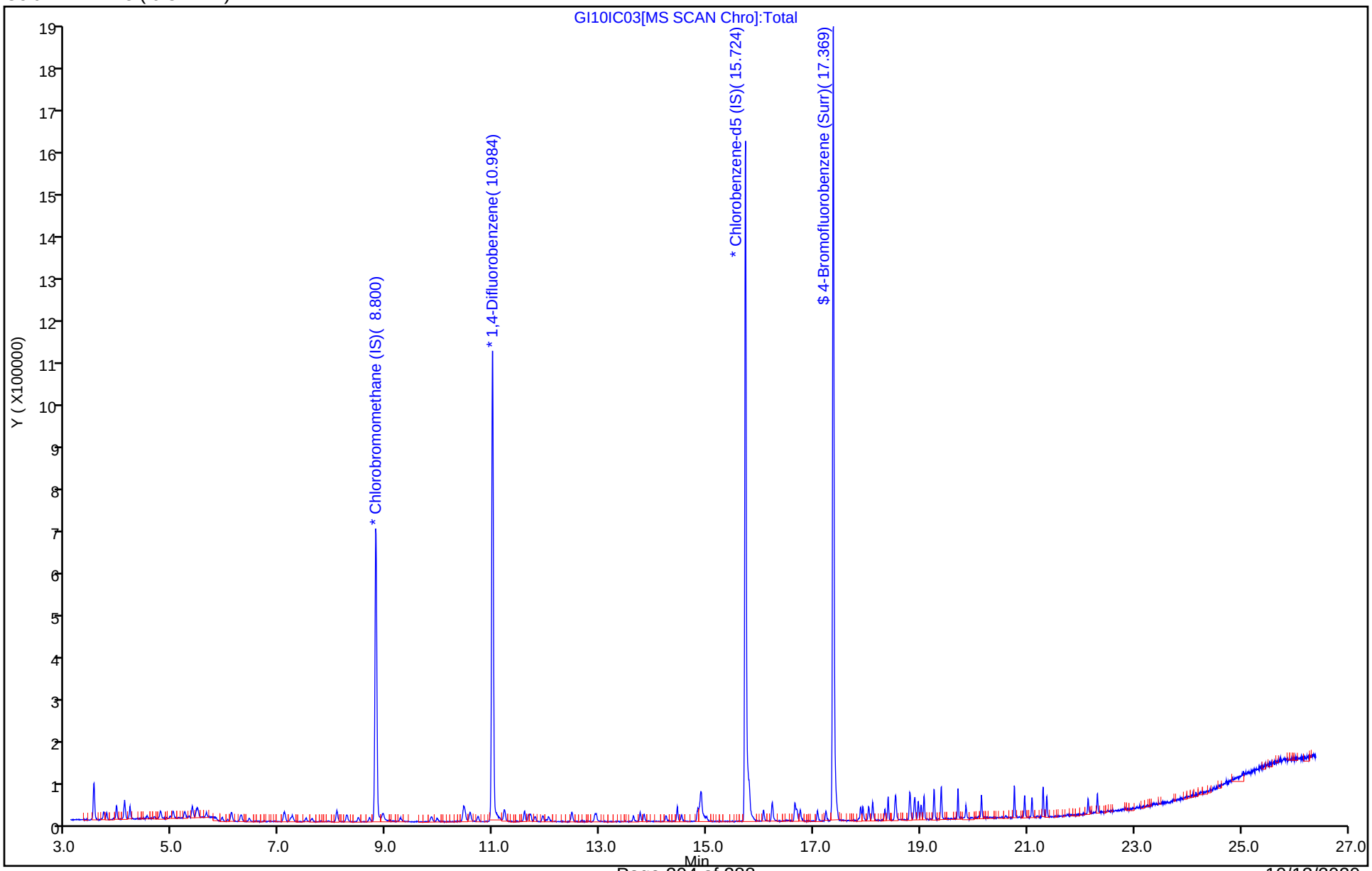
Report Date: 11-Sep-2020 08:45:37 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200910-16561.b\GI10IC03.D

Injection Date:	11-Sep-2020 00:34:30	Instrument ID:	MG	Operator ID:	AFB
Lims ID:	IC L3			Worklist Smp#:	11
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

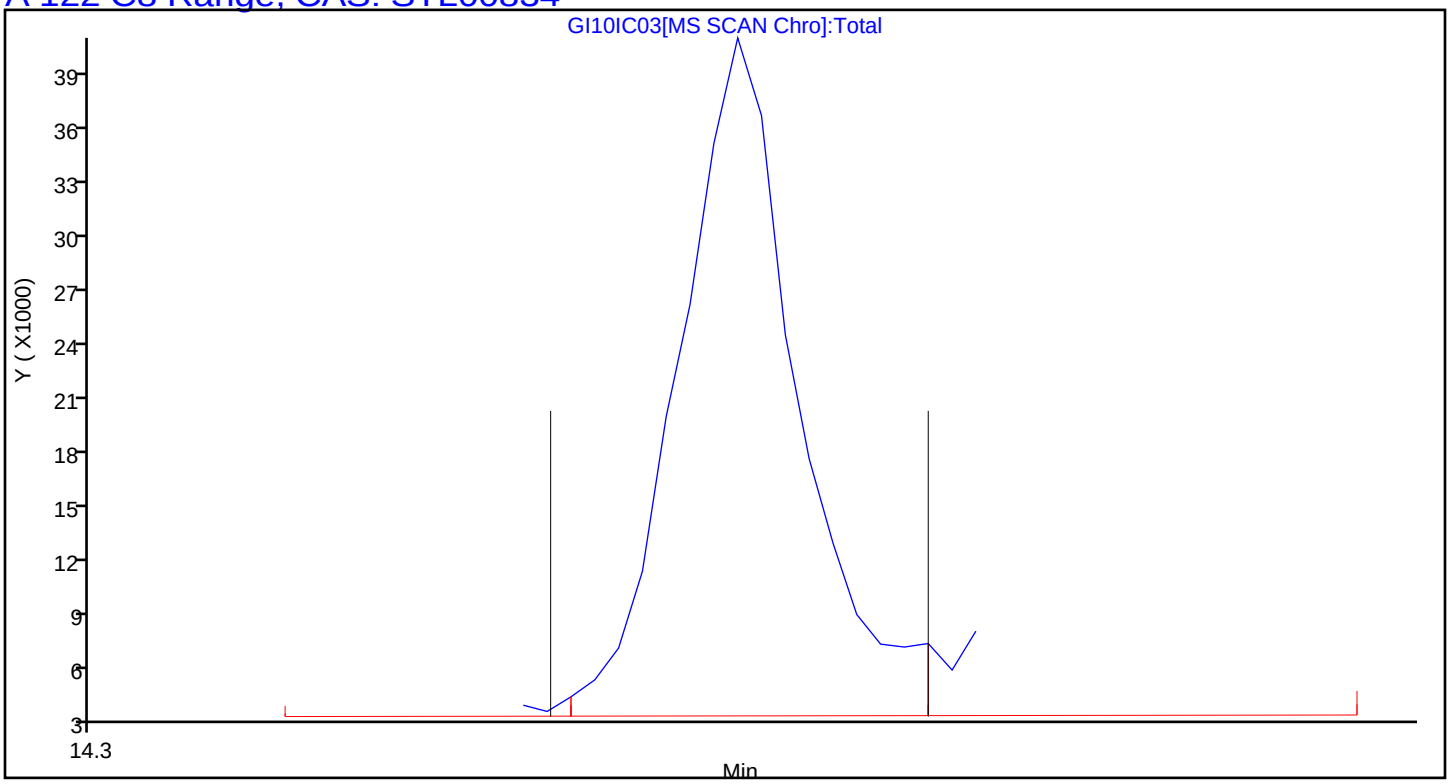


Report Date: 11-Sep-2020 08:45:37 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200910-16561.b\GI10IC03.D				
Injection Date:	11-Sep-2020 00:34:30	Instrument ID:	MG		
Lims ID:	IC L3				
Client ID:					
Operator ID:	AFB	ALS Bottle#:	1	Worklist Smp#:	11
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 122 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200910-16561.b\GI10IC04.D
Lims ID: IC L4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 11-Sep-2020 01:20:30 ALS Bottle#: 2 Worklist Smp#: 12
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016561-012
Misc. Info.: 324287
Operator ID: AFB Instrument ID: MG
Sublist: chrom-MG_TO15*sub17

Method: \\chromfs\Knoxville\ChromData\MG\20200910-16561.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 11-Sep-2020 08:45:42 Calib Date: 11-Sep-2020 06:50:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200910-16561.b\GI10IC09R.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1067

First Level Reviewer: tajh Date: 11-Sep-2020 08:30:38

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.811	8.813	-0.002	92	171104	4.80	4.80	
* 2 1,4-Difluorobenzene	114	10.990	10.994	-0.004	97	943355	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.724	15.726	-0.002	91	925165	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.369	17.368	0.001	84	665983	4.64	4.49	
6 Chlorodifluoromethane	51	3.705	3.704	0.001	98	19718	0.1600	0.1551	
7 Propene	41	3.715	3.712	0.003	94	11703	0.1600	0.1724	
8 Dichlorodifluoromethane	85	3.764	3.767	-0.003	99	24761	0.1600	0.1532	
9 Chloromethane	52	3.947	3.947	0.000	67	5057	0.1600	0.1868	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.958	3.955	0.003	95	13510	0.1600	0.1484	
11 Acetaldehyde	44	4.104	4.104	0.000	98	41171	0.8000	1.23	
12 Vinyl chloride	62	4.114	4.118	-0.004	45	11663	0.1600	0.1538	
14 Butadiene	54	4.201	4.205	-0.003	70	10216	0.1600	0.1544	
13 Butane	43	4.206	4.206	0.000	86	22148	0.1600	0.1601	
15 Bromomethane	94	4.524	4.525	-0.001	97	7518	0.1600	0.1434	
16 Chloroethane	64	4.659	4.663	-0.004	91	4883	0.1600	0.1434	
17 Ethanol	31	4.789	4.785	0.004	97	31842	0.8000	0.9541	
18 Vinyl bromide	106	4.961	4.964	-0.003	88	6249	0.1600	0.1397	
19 2-Methylbutane	43	5.010	5.012	-0.002	90	14343	0.1600	0.1499	
20 Trichlorofluoromethane	101	5.225	5.231	-0.006	98	21024	0.1600	0.1603	
21 Acrolein	56	5.252	5.248	0.004	89	3859	0.1600	0.1770	
22 Acetonitrile	40	5.317	5.326	-0.009	96	3792	0.1600	0.1314	
23 Acetone	58	5.371	5.370	0.001	100	18377	0.4800	0.7218	
24 Pentane	72	5.446	5.451	-0.005	96	1406	0.1600	0.1517	
25 Isopropyl alcohol	45	5.484	5.478	0.006	92	44226	0.4800	0.5427	
26 Ethyl ether	31	5.635	5.631	0.004	89	14409	0.1600	0.1883	
27 1,1-Dichloroethene	96	5.932	5.933	-0.001	95	6189	0.1600	0.1518	
28 Acrylonitrile	53	6.034	6.041	-0.007	97	7003	0.1600	0.1810	
30 2-Methyl-2-propanol	59	6.115	6.091	0.024	85	12538	0.1600	0.1679	
29 1,1,2-Trichloro-1,2,2-trifluoroe	101	6.104	6.108	-0.004	89	12983	0.1600	0.1453	
31 Methylene Chloride	84	6.277	6.282	-0.005	95	7410	0.1600	0.1829	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.293	6.295	-0.002	95	10578	0.1600	0.1783	
33 Carbon disulfide	76	6.433	6.440	-0.007	97	20900	0.1600	0.1550	
34 trans-1,2-Dichloroethene	96	7.086	7.086	0.000	92	6395	0.1600	0.1389	
35 2-Methylpentane	43	7.102	7.104	-0.002	96	24069	0.1600	0.1568	
36 Methyl tert-butyl ether	73	7.253	7.233	0.020	94	21643	0.1600	0.1811	
37 1,1-Dichloroethane	63	7.496	7.505	-0.009	99	17560	0.1600	0.1646	
38 Vinyl acetate	43	7.614	7.615	-0.001	100	30430	0.1600	0.1805	
39 2-Butanone (MEK)	72	8.083	8.076	0.007	87	4891	0.1600	0.2101	
40 Hexane	56	8.083	8.084	-0.001	67	8005	0.1600	0.1573	
41 Isopropyl ether	45	8.267	8.258	0.009	97	36848	0.1600	0.1763	
42 cis-1,2-Dichloroethene	96	8.472	8.481	-0.009	96	7558	0.1600	0.1449	
43 Ethyl acetate	43	8.687	8.686	0.001	97	27250	0.1600	0.1965	
44 Chloroform	83	8.822	8.827	-0.005	93	18144	0.1600	0.1624	
45 Tert-butyl ethyl ether	59	8.946	8.939	0.007	97	30956	0.1600	0.1805	
46 Tetrahydrofuran	42	9.270	9.258	0.012	93	13905	0.1600	0.1874	
47 1,1,1-Trichloroethane	97	9.847	9.851	-0.004	95	17553	0.1600	0.1618	
48 1,2-Dichloroethane	62	9.949	9.959	-0.010	95	13403	0.1600	0.1582	
50 Benzene	78	10.451	10.452	-0.001	96	26029	0.1600	0.1445	
49 Cyclohexane	69	10.456	10.457	-0.001	76	4111	0.1600	0.1437	
52 Carbon tetrachloride	117	10.467	10.476	-0.009	88	15780	0.1600	0.1381	
51 n-Butanol	31	10.483	10.459	0.024	49	4049	0.1600	0.1591	
53 2,3-Dimethylpentane	71	10.575	10.577	-0.002	90	6998	0.1600	0.1619	
54 Thiophene	84	10.715	10.722	-0.007	95	14132	0.1600	0.1475	
55 Isooctane	57	11.216	11.219	-0.003	97	52116	0.1600	0.1457	
56 n-Heptane	71	11.588	11.592	-0.004	96	9943	0.1600	0.1509	
57 1,2-Dichloropropane	63	11.664	11.669	-0.005	84	11582	0.1600	0.1517	
58 Trichloroethene	130	11.702	11.709	-0.007	93	10491	0.1600	0.1508	
59 Dibromomethane	93	11.782	11.787	-0.005	89	11681	0.1600	0.1596	
60 Dichlorobromomethane	83	11.933	11.936	-0.003	94	19348	0.1600	0.1496	
61 1,4-Dioxane	88	11.993	11.983	0.010	59	3463	0.1600	0.1724	
62 Methyl methacrylate	41	12.041	12.041	0.000	88	14986	0.1600	0.1666	
63 Methylcyclohexane	83	12.478	12.477	0.001	87	15736	0.1600	0.1450	
64 4-Methyl-2-pentanone (MIBK)	43	12.904	12.900	0.004	96	26985	0.1600	0.1765	
65 cis-1,3-Dichloropropene	75	12.931	12.934	-0.003	96	14903	0.1600	0.1426	
66 trans-1,3-Dichloropropene	75	13.627	13.629	-0.002	94	14027	0.1600	0.1595	
67 Toluene	91	13.756	13.755	0.001	93	29991	0.1600	0.1595	
68 1,1,2-Trichloroethane	83	13.826	13.829	-0.003	95	8991	0.1600	0.1521	
69 2-Hexanone	58	14.236	14.233	0.003	91	11554	0.1600	0.1827	
70 n-Octane	85	14.452	14.450	0.002	97	10072	0.1600	0.1522	
71 Chlorodibromomethane	129	14.533	14.531	0.002	94	14946	0.1600	0.1330	
72 Ethylene Dibromide	107	14.824	14.823	0.001	97	15591	0.1600	0.1505	
73 Tetrachloroethene	129	14.894	14.900	-0.006	91	9285	0.1600	0.1402	
75 Chlorobenzene	112	15.773	15.775	-0.002	95	23790	0.1600	0.1566	
74 2,3-Dimethylheptane	43	15.794	15.797	-0.003	93	42015	0.1600	0.1511	
78 Ethylbenzene	91	16.059	16.063	-0.004	98	39890	0.1600	0.1587	
79 m-Xylene & p-Xylene	91	16.226	16.226	0.000	98	60652	0.3200	0.3145	
80 n-Nonane	57	16.652	16.648	0.004	94	24810	0.1600	0.1523	
81 Bromoform	173	16.673	16.673	0.000	90	14419	0.1600	0.1317	
82 Styrene	104	16.690	16.691	-0.001	97	19716	0.1600	0.1350	
83 o-Xylene	91	16.749	16.754	-0.005	97	33599	0.1600	0.1655	
84 1,1,2,2-Tetrachloroethane	83	17.072	17.073	-0.001	97	26149	0.1600	0.1622	
85 1,2,3-Trichloropropane	110	17.229	17.233	-0.004	95	6815	0.1600	0.1610	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
86 Isopropylbenzene	105	17.342	17.340	0.002	98	43198	0.1600	0.1575	
87 N-Propylbenzene	120	17.887	17.882	0.005	97	10861	0.1600	0.1390	
88 2-Chlorotoluene	126	17.919	17.923	-0.004	98	11334	0.1600	0.1511	
89 4-Ethyltoluene	105	18.032	18.033	-0.001	98	43199	0.1600	0.1543	
90 1,3,5-Trimethylbenzene	120	18.102	18.107	-0.005	92	17502	0.1600	0.1526	
92 Alpha Methyl Styrene	118	18.334	18.334	0.000	82	15407	0.1600	0.1366	
93 n-Decane	57	18.393	18.395	-0.002	85	32216	0.1600	0.1562	
94 tert-Butylbenzene	119	18.528	18.529	-0.001	91	36913	0.1600	0.1575	
95 1,2,4-Trimethylbenzene	105	18.539	18.542	-0.003	95	36201	0.1600	0.1599	
96 sec-Butylbenzene	105	18.798	18.797	0.001	98	54281	0.1600	0.1582	
97 1,3-Dichlorobenzene	146	18.809	18.810	-0.001	92	23364	0.1600	0.1409	
98 Benzyl chloride	91	18.884	18.884	0.000	98	32120	0.1600	0.1502	
99 1,4-Dichlorobenzene	146	18.895	18.897	-0.002	87	23546	0.1600	0.1427	
100 4-Isopropyltoluene	119	18.960	18.959	0.001	95	42436	0.1600	0.1534	
101 1,2,3-Trimethylbenzene	105	19.008	19.011	-0.003	99	37070	0.1600	0.1652	
102 Butylcyclohexane	83	19.068	19.067	0.001	90	34787	0.1600	0.1543	
103 2,3-Dihydroindene	117	19.256	19.256	0.000	92	34339	0.1600	0.1482	
104 1,2-Dichlorobenzene	146	19.256	19.256	0.000	80	23071	0.1600	0.1416	
106 Indene	116	19.386	19.385	0.001	90	29096	0.1600	0.1454	
105 n-Butylbenzene	91	19.391	19.392	-0.001	97	49770	0.1600	0.1663	
107 Undecane	57	19.704	19.703	0.001	90	38509	0.1600	0.1600	
108 1,2-Dibromo-3-Chloropropane	157	19.855	19.854	0.001	84	11918	0.1600	0.1452	
109 1,2,4,5-Tetramethylbenzene	119	20.146	20.144	0.002	96	41721	0.1600	0.1606	
110 Dodecane	57	20.761	20.758	0.003	90	39639	0.1600	0.1754	
111 1,2,4-Trichlorobenzene	180	20.949	20.951	-0.002	92	21432	0.1600	0.1451	
112 Naphthalene	128	21.090	21.089	0.001	99	53707	0.1600	0.1461	
113 Hexachlorobutadiene	225	21.295	21.297	-0.002	88	19014	0.1600	0.1400	
114 1,2,3-Trichlorobenzene	180	21.365	21.365	0.000	91	19784	0.1600	0.1410	
115 2-Methylnaphthalene	142	22.136	22.139	-0.003	98	16658	0.1600	0.1061	
116 1-Methylnaphthalene	142	22.314	22.313	0.001	99	18987	0.1600	0.1152	
A 122 C8 Range	1	14.441	(14.393-14.489)		0	124813	0.1600	0.1674	
S 123 1,2-Dichloroethene, Total	1				0		0.3200	0.2838	
S 124 Xylenes, Total	100				0		0.4800	0.4800	

Reagents:

40L4DQP_00021	Amount Added: 200.00	Units: mL	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

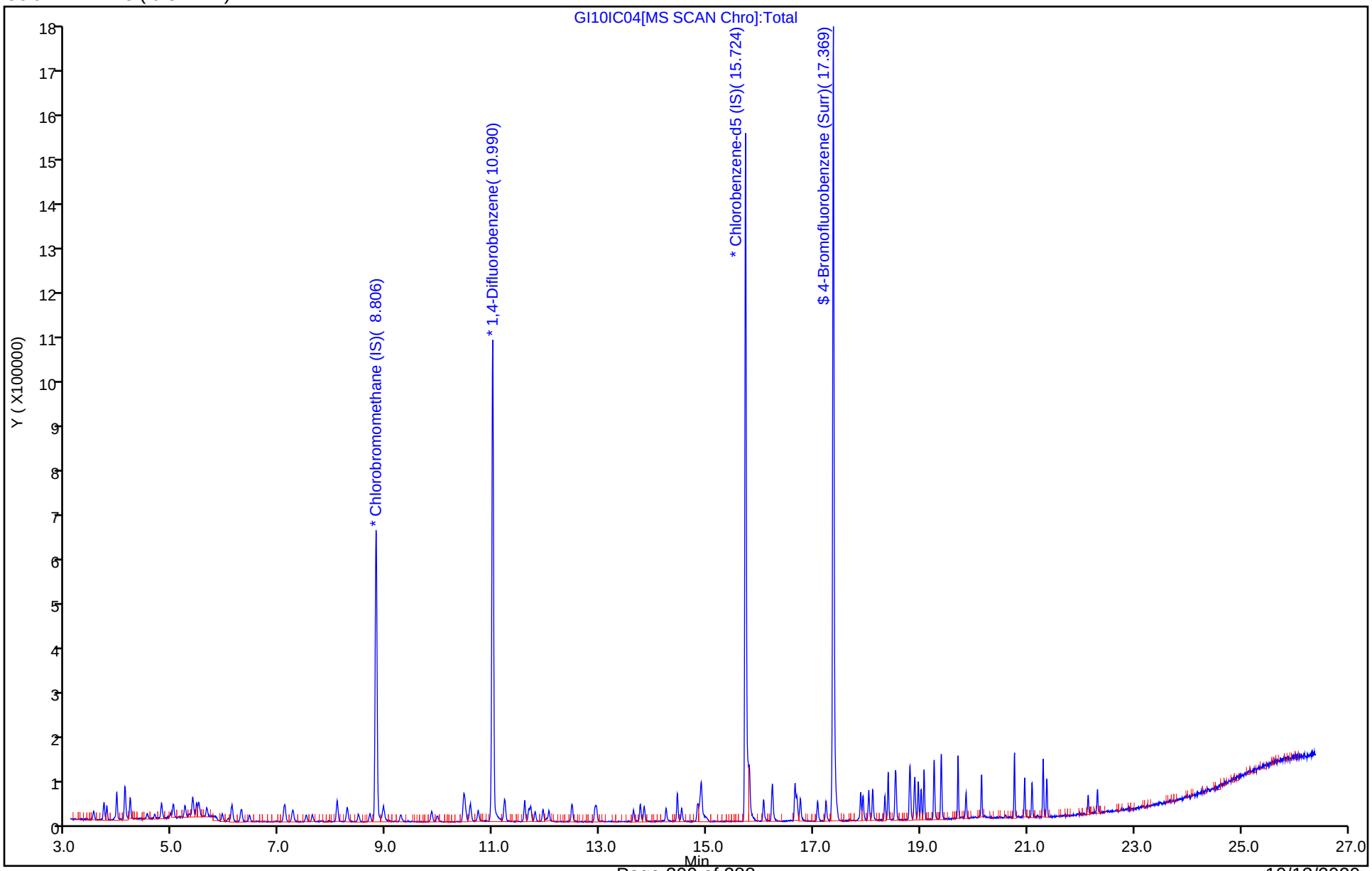
Report Date: 11-Sep-2020 08:45:43 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200910-16561.b\GI10IC04.D

Injection Date:	11-Sep-2020 01:20:30	Instrument ID:	MG	Operator ID:	AFB
Lims ID:	IC L4			Worklist Smp#:	12
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

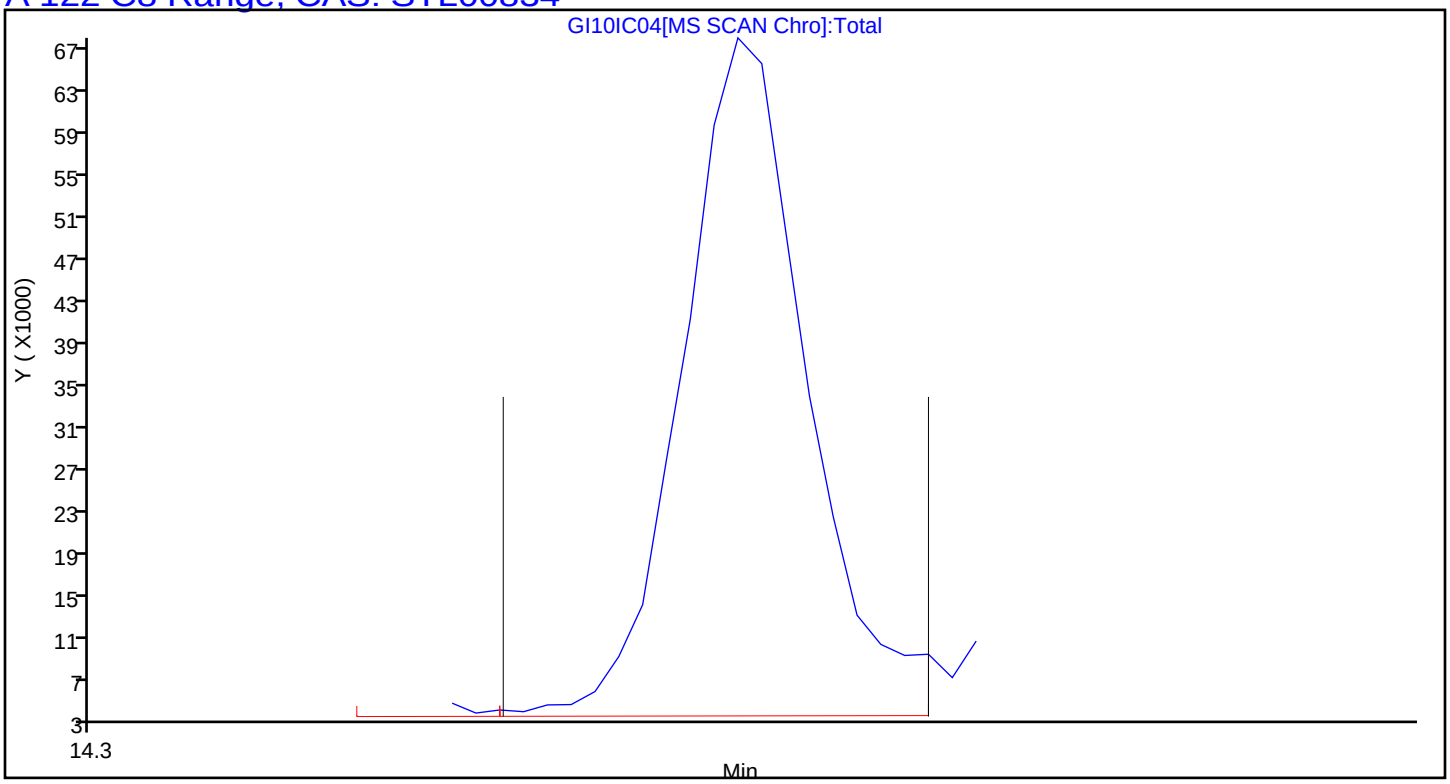


Report Date: 11-Sep-2020 08:45:43 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200910-16561.b\GI10IC04.D				
Injection Date:	11-Sep-2020 01:20:30	Instrument ID:	MG		
Lims ID:	IC L4				
Client ID:					
Operator ID:	AFB	ALS Bottle#:	2	Worklist Smp#:	12
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 122 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200910-16561.b\GI10IC05.D
Lims ID: IC L5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 11-Sep-2020 02:08:30 ALS Bottle#: 3 Worklist Smp#: 13
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016561-013
Misc. Info.: 324286
Operator ID: AFB Instrument ID: MG
Sublist: chrom-MG_TO15*sub17

Method: \\chromfs\Knoxville\ChromData\MG\20200910-16561.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 11-Sep-2020 08:45:49 Calib Date: 11-Sep-2020 06:50:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200910-16561.b\GI10IC09R.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1067

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.811	8.813	-0.002	92	170673	4.80	4.80	
* 2 1,4-Difluorobenzene	114	10.990	10.994	-0.004	97	848936	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.724	15.726	-0.002	91	883486	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.369	17.368	0.001	84	649245	4.64	4.58	
6 Chlorodifluoromethane	51	3.705	3.704	0.001	97	49297	0.4000	0.3887	
7 Propene	41	3.710	3.712	-0.002	95	27790	0.4000	0.4103	
8 Dichlorodifluoromethane	85	3.764	3.767	-0.003	98	64446	0.4000	0.3999	
9 Chloromethane	52	3.947	3.947	0.000	75	11251	0.4000	0.4166	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.953	3.955	-0.002	95	35835	0.4000	0.3947	
11 Acetaldehyde	44	4.104	4.104	0.000	98	72129	2.00	2.17	
12 Vinyl chloride	62	4.120	4.118	0.002	99	30042	0.4000	0.3971	
14 Butadiene	54	4.206	4.205	0.002	66	26004	0.4000	0.3940	
13 Butane	43	4.206	4.206	0.000	86	55332	0.4000	0.4010	
15 Bromomethane	94	4.530	4.525	0.005	97	20596	0.4000	0.3939	
16 Chloroethane	64	4.665	4.663	0.001	93	13821	0.4000	0.4070	
17 Ethanol	31	4.789	4.785	0.004	97	67359	2.00	2.02	
18 Vinyl bromide	106	4.966	4.964	0.002	97	17300	0.4000	0.3878	
19 2-Methylbutane	43	5.015	5.012	0.003	94	40081	0.4000	0.4198	
20 Trichlorofluoromethane	101	5.231	5.231	0.000	98	53903	0.4000	0.4120	
21 Acrolein	56	5.252	5.248	0.004	94	9052	0.4000	0.4164	
22 Acetonitrile	40	5.317	5.326	-0.009	100	13970	0.4000	0.4854	
23 Acetone	58	5.371	5.370	0.001	99	33855	1.20	1.33	
24 Pentane	72	5.446	5.451	-0.005	97	3825	0.4000	0.4137	
25 Isopropyl alcohol	45	5.484	5.478	0.006	97	95380	1.20	1.17	
26 Ethyl ether	31	5.641	5.631	0.010	89	33746	0.4000	0.4421	
27 1,1-Dichloroethene	96	5.932	5.933	-0.001	92	17215	0.4000	0.4232	
28 Acrylonitrile	53	6.040	6.041	-0.001	91	15350	0.4000	0.3978	
29 1,1,2-Trichloro-1,2,2-trifluoroe	101	6.110	6.108	0.002	88	35365	0.4000	0.3967	
30 2-Methyl-2-propanol	59	6.104	6.091	0.013	82	29985	0.4000	0.4026	
31 Methylene Chloride	84	6.277	6.282	-0.005	93	17062	0.4000	0.4223	
32 3-Chloro-1-propene	39	6.288	6.295	-0.007	94	21807	0.4000	0.3686	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
33 Carbon disulfide	76	6.444	6.440	0.004	98	53197	0.4000	0.3954	
34 trans-1,2-Dichloroethene	96	7.080	7.086	-0.006	94	18557	0.4000	0.4042	
35 2-Methylpentane	43	7.107	7.104	0.003	96	63693	0.4000	0.4159	
36 Methyl tert-butyl ether	73	7.247	7.233	0.014	95	47775	0.4000	0.4007	
37 1,1-Dichloroethane	63	7.506	7.505	0.001	98	42938	0.4000	0.4034	
38 Vinyl acetate	43	7.620	7.615	0.005	100	68397	0.4000	0.4068	
40 Hexane	56	8.083	8.084	-0.001	74	21586	0.4000	0.4253	
39 2-Butanone (MEK)	72	8.072	8.076	-0.004	85	8848	0.4000	0.3810	
41 Isopropyl ether	45	8.256	8.258	-0.002	96	83329	0.4000	0.3996	
42 cis-1,2-Dichloroethene	96	8.482	8.481	0.001	97	21655	0.4000	0.4163	
43 Ethyl acetate	43	8.687	8.686	0.001	97	56034	0.4000	0.4050	
44 Chloroform	83	8.827	8.827	0.000	97	46056	0.4000	0.4133	
45 Tert-butyl ethyl ether	59	8.941	8.939	0.002	97	67113	0.4000	0.3924	
46 Tetrahydrofuran	42	9.270	9.258	0.012	92	31113	0.4000	0.4204	
47 1,1,1-Trichloroethane	97	9.847	9.851	-0.004	95	45558	0.4000	0.4211	
48 1,2-Dichloroethane	62	9.954	9.959	-0.005	95	34620	0.4000	0.4541	
50 Benzene	78	10.451	10.452	-0.001	96	69155	0.4000	0.4267	
49 Cyclohexane	69	10.456	10.457	-0.001	89	10950	0.4000	0.4252	
52 Carbon tetrachloride	117	10.477	10.476	0.001	93	38042	0.4000	0.3701	
51 n-Butanol	31	10.477	10.459	0.018	63	9835	0.4000	0.4295	
53 2,3-Dimethylpentane	71	10.569	10.577	-0.008	93	17013	0.4000	0.4373	
54 Thiophene	84	10.720	10.722	-0.002	95	38140	0.4000	0.4423	
55 Isooctane	57	11.216	11.219	-0.003	97	139431	0.4000	0.4331	
56 n-Heptane	71	11.594	11.592	0.002	96	25976	0.4000	0.4381	
57 1,2-Dichloropropane	63	11.669	11.669	0.000	90	31433	0.4000	0.4576	
58 Trichloroethene	130	11.707	11.709	-0.002	90	26877	0.4000	0.4294	
59 Dibromomethane	93	11.782	11.787	-0.005	85	29787	0.4000	0.4522	
60 Dichlorobromomethane	83	11.933	11.936	-0.003	95	48991	0.4000	0.4209	
61 1,4-Dioxane	88	11.993	11.983	0.010	94	7347	0.4000	0.4064	
62 Methyl methacrylate	41	12.041	12.041	0.000	88	32720	0.4000	0.4042	
63 Methylcyclohexane	83	12.478	12.477	0.001	88	41701	0.4000	0.4269	
64 4-Methyl-2-pentanone (MIBK)	43	12.904	12.900	0.004	97	51776	0.4000	0.3762	
65 cis-1,3-Dichloropropene	75	12.931	12.934	-0.003	96	39471	0.4000	0.4196	
66 trans-1,3-Dichloropropene	75	13.627	13.629	-0.002	93	33906	0.4000	0.4036	
67 Toluene	91	13.751	13.755	-0.004	93	75808	0.4000	0.4222	
68 1,1,2-Trichloroethane	83	13.826	13.829	-0.003	96	23816	0.4000	0.4218	
69 2-Hexanone	58	14.236	14.233	0.003	90	21983	0.4000	0.3640	
70 n-Octane	85	14.446	14.450	-0.004	97	26287	0.4000	0.4159	
71 Chlorodibromomethane	129	14.527	14.531	-0.004	94	39056	0.4000	0.3641	
72 Ethylene Dibromide	107	14.824	14.823	0.001	99	38618	0.4000	0.3904	
73 Tetrachloroethene	129	14.905	14.900	0.005	89	25142	0.4000	0.3977	
75 Chlorobenzene	112	15.773	15.775	-0.002	93	58731	0.4000	0.4049	
74 2,3-Dimethylheptane	43	15.794	15.797	-0.003	93	114295	0.4000	0.4303	
78 Ethylbenzene	91	16.064	16.063	0.001	99	97571	0.4000	0.4064	
79 m-Xylene & p-Xylene	91	16.226	16.226	0.000	99	149322	0.8000	0.8107	
80 n-Nonane	57	16.646	16.648	-0.002	95	62102	0.4000	0.3993	
81 Bromoform	173	16.668	16.673	-0.005	90	35169	0.4000	0.3364	
82 Styrene	104	16.695	16.691	0.004	99	56127	0.4000	0.4024	
83 o-Xylene	91	16.754	16.754	0.000	97	78035	0.4000	0.4025	
84 1,1,2,2-Tetrachloroethane	83	17.072	17.073	-0.001	97	62418	0.4000	0.4055	
85 1,2,3-Trichloropropane	110	17.234	17.233	0.001	94	14983	0.4000	0.3707	
86 Isopropylbenzene	105	17.337	17.340	-0.003	97	99921	0.4000	0.3814	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
87 N-Propylbenzene	120	17.881	17.882	-0.001	98	26546	0.4000	0.3557	
88 2-Chlorotoluene	126	17.919	17.923	-0.004	98	26529	0.4000	0.3703	
89 4-Ethyltoluene	105	18.032	18.033	-0.001	98	98774	0.4000	0.3694	
90 1,3,5-Trimethylbenzene	120	18.108	18.107	0.001	93	40464	0.4000	0.3696	
92 Alpha Methyl Styrene	118	18.334	18.334	0.000	85	37757	0.4000	0.3505	
93 n-Decane	57	18.393	18.395	-0.002	86	78977	0.4000	0.4011	
94 tert-Butylbenzene	119	18.528	18.529	-0.001	89	85117	0.4000	0.3804	
95 1,2,4-Trimethylbenzene	105	18.544	18.542	0.002	96	83996	0.4000	0.3886	
96 sec-Butylbenzene	105	18.798	18.797	0.001	98	128817	0.4000	0.3933	
97 1,3-Dichlorobenzene	146	18.809	18.810	-0.001	95	56589	0.4000	0.3573	
98 Benzyl chloride	91	18.884	18.884	0.000	97	77732	0.4000	0.3808	
99 1,4-Dichlorobenzene	146	18.895	18.897	-0.002	89	58036	0.4000	0.3682	
100 4-Isopropyltoluene	119	18.960	18.959	0.001	97	97459	0.4000	0.3690	
101 1,2,3-Trimethylbenzene	105	19.014	19.011	0.003	99	84083	0.4000	0.3925	
102 Butylcyclohexane	83	19.068	19.067	0.001	91	85691	0.4000	0.3979	
103 2,3-Dihydroindene	117	19.256	19.256	0.000	92	82481	0.4000	0.3727	
104 1,2-Dichlorobenzene	146	19.251	19.256	-0.005	81	56021	0.4000	0.3599	
106 Indene	116	19.386	19.385	0.001	89	70559	0.4000	0.3694	
105 n-Butylbenzene	91	19.391	19.392	-0.001	97	113181	0.4000	0.3960	
107 Undecane	57	19.704	19.703	0.001	91	88874	0.4000	0.3868	
108 1,2-Dibromo-3-Chloropropane	157	19.855	19.854	0.001	86	25838	0.4000	0.3295	
109 1,2,4,5-Tetramethylbenzene	119	20.141	20.144	-0.003	96	85639	0.4000	0.3452	
110 Dodecane	57	20.755	20.758	-0.003	90	83742	0.4000	0.3880	
111 1,2,4-Trichlorobenzene	180	20.949	20.951	-0.002	93	43935	0.4000	0.3114	
112 Naphthalene	128	21.090	21.089	0.001	98	108652	0.4000	0.3094	
113 Hexachlorobutadiene	225	21.295	21.297	-0.002	91	43262	0.4000	0.3335	
114 1,2,3-Trichlorobenzene	180	21.365	21.365	0.000	93	42978	0.4000	0.3207	
115 2-Methylnaphthalene	142	22.136	22.139	-0.003	98	42028	0.4000	0.2804	
116 1-Methylnaphthalene	142	22.314	22.313	0.001	98	49154	0.4000	0.3124	
A 122 C8 Range	1	14.439	(14.393-14.522)		0	300469	0.4000	0.4220	
S 123 1,2-Dichloroethene, Total	1				0		0.8000	0.8204	
S 124 Xylenes, Total	100				0		1.20	1.21	

Reagents:

40L5DQP_00021	Amount Added: 200.00	Units: mL	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

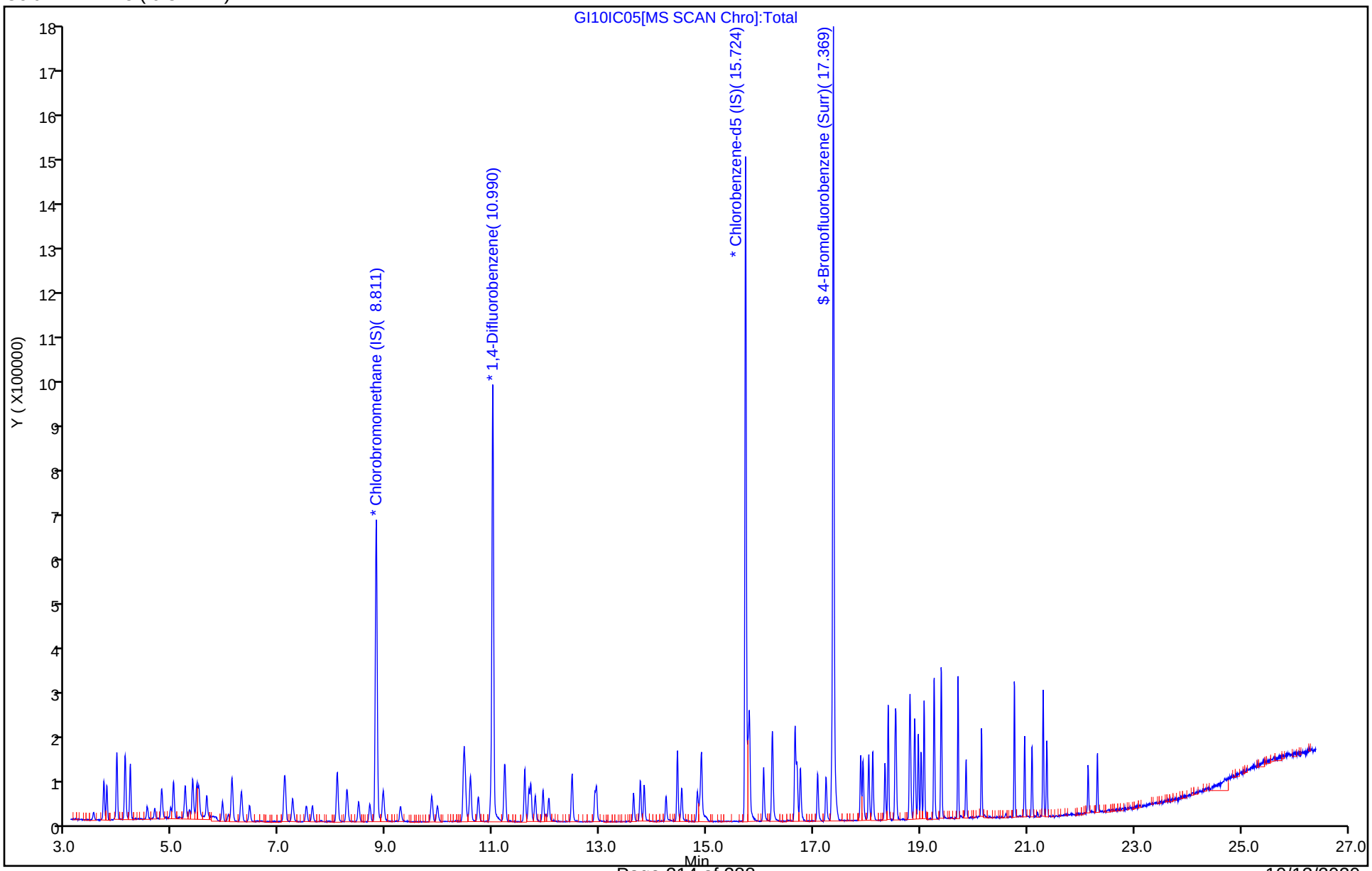
Report Date: 11-Sep-2020 08:45:50 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200910-16561.b\GI10IC05.D

Injection Date:	11-Sep-2020 02:08:30	Instrument ID:	MG	Operator ID:	AFB
Lims ID:	IC L5			Worklist Smp#:	13
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

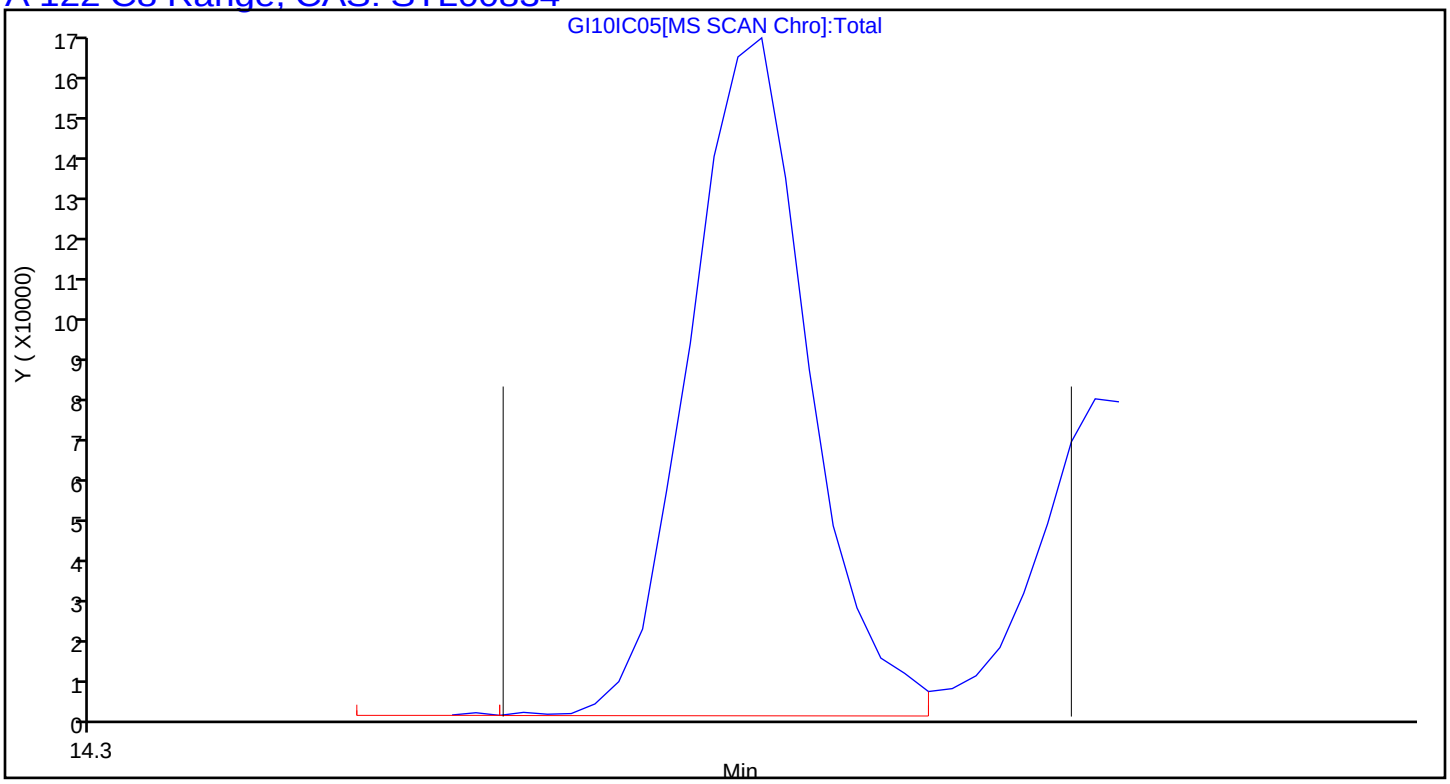


Report Date: 11-Sep-2020 08:45:50 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200910-16561.b\GI10IC05.D				
Injection Date:	11-Sep-2020 02:08:30	Instrument ID:	MG		
Lims ID:	IC L5				
Client ID:					
Operator ID:	AFB	ALS Bottle#:	3	Worklist Smp#:	13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 122 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200910-16561.b\GI10IC06.D
Lims ID: IC L6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 11-Sep-2020 02:55:30 ALS Bottle#: 4 Worklist Smp#: 14
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016561-014
Misc. Info.: 324285
Operator ID: AFB Instrument ID: MG
Sublist: chrom-MG_TO15*sub17

Method: \\chromfs\Knoxville\ChromData\MG\20200910-16561.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 11-Sep-2020 08:45:55 Calib Date: 11-Sep-2020 06:50:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200910-16561.b\GI10IC09R.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1067

First Level Reviewer: tajh Date: 11-Sep-2020 08:42:18

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.806	8.813	-0.007	91	170639	4.80	4.80	
* 2 1,4-Difluorobenzene	114	10.990	10.994	-0.004	97	842078	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.724	15.726	-0.002	91	862724	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.369	17.368	0.001	86	623623	4.64	4.51	
6 Chlorodifluoromethane	51	3.705	3.704	0.001	97	124672	1.00	0.9831	
7 Propene	41	3.710	3.712	-0.002	96	75014	1.00	1.11	
8 Dichlorodifluoromethane	85	3.764	3.767	-0.003	100	164078	1.00	1.02	
9 Chloromethane	52	3.947	3.947	0.000	98	27844	1.00	1.03	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.953	3.955	-0.002	95	89485	1.00	0.9857	
11 Acetaldehyde	44	4.104	4.104	0.000	98	168686	5.00	5.07	
12 Vinyl chloride	62	4.115	4.118	-0.003	99	76932	1.00	1.02	
14 Butadiene	54	4.201	4.205	-0.003	65	67379	1.00	1.02	
13 Butane	43	4.201	4.206	-0.005	87	146380	1.00	1.06	
15 Bromomethane	94	4.524	4.525	-0.001	98	51058	1.00	0.9766	
16 Chloroethane	64	4.659	4.663	-0.004	89	32348	1.00	0.9528	
17 Ethanol	31	4.778	4.785	-0.007	96	170437	5.00	5.12	
18 Vinyl bromide	106	4.961	4.964	-0.003	97	42679	1.00	0.9569	
19 2-Methylbutane	43	5.010	5.012	-0.002	93	98049	1.00	1.03	
20 Trichlorofluoromethane	101	5.231	5.231	0.000	97	135046	1.00	1.03	
21 Acrolein	56	5.236	5.248	-0.012	26	19079	1.00	0.8777	
22 Acetonitrile	40	5.312	5.326	-0.014	99	29568	1.00	1.03	
23 Acetone	58	5.366	5.370	-0.004	100	73504	3.00	2.89	
24 Pentane	72	5.446	5.451	-0.005	96	9594	1.00	1.04	
25 Isopropyl alcohol	45	5.468	5.478	-0.010	93	261834	3.00	3.22	
26 Ethyl ether	31	5.624	5.631	-0.007	89	74706	1.00	0.9790	
27 1,1-Dichloroethene	96	5.926	5.933	-0.007	93	40482	1.00	1.00	
28 Acrylonitrile	53	6.040	6.041	-0.001	95	34882	1.00	0.9042	
30 2-Methyl-2-propanol	59	6.077	6.091	-0.014	96	82633	1.00	1.11	
29 1,1,2-Trichloro-1,2,2-trifluoroe	101	6.110	6.108	0.002	89	87928	1.00	0.9865	
31 Methylene Chloride	84	6.277	6.282	-0.005	92	40578	1.00	1.00	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.288	6.295	-0.007	94	60189	1.00	1.02	
33 Carbon disulfide	76	6.439	6.440	-0.001	99	137969	1.00	1.03	
34 trans-1,2-Dichloroethene	96	7.086	7.086	0.000	94	46535	1.00	1.01	
35 2-Methylpentane	43	7.102	7.104	-0.002	97	159607	1.00	1.04	
36 Methyl tert-butyl ether	73	7.231	7.233	-0.002	94	107859	1.00	0.9048	
37 1,1-Dichloroethane	63	7.501	7.505	-0.004	98	107110	1.00	1.01	
38 Vinyl acetate	43	7.614	7.615	-0.001	100	156331	1.00	0.9301	
39 2-Butanone (MEK)	72	8.067	8.076	-0.009	86	20733	1.00	0.8930	
40 Hexane	56	8.083	8.084	-0.001	83	52339	1.00	1.03	
41 Isopropyl ether	45	8.250	8.258	-0.008	96	196122	1.00	0.9406	
42 cis-1,2-Dichloroethene	96	8.482	8.481	0.001	98	51002	1.00	0.9806	
43 Ethyl acetate	43	8.682	8.686	-0.004	97	124474	1.00	0.8999	
44 Chloroform	83	8.822	8.827	-0.005	95	112954	1.00	1.01	
45 Tert-butyl ethyl ether	59	8.930	8.939	-0.009	97	156295	1.00	0.9140	
46 Tetrahydrofuran	42	9.248	9.258	-0.010	93	67466	1.00	0.9118	
47 1,1,1-Trichloroethane	97	9.847	9.851	-0.004	95	111918	1.00	1.03	
48 1,2-Dichloroethane	62	9.954	9.959	-0.005	95	80248	1.00	1.06	
50 Benzene	78	10.451	10.452	-0.001	96	169395	1.00	1.05	
49 Cyclohexane	69	10.451	10.457	-0.006	83	28328	1.00	1.11	
52 Carbon tetrachloride	117	10.472	10.476	-0.004	94	105552	1.00	1.04	
51 n-Butanol	31	10.461	10.459	0.002	69	28728	1.00	1.26	
53 2,3-Dimethylpentane	71	10.575	10.577	-0.002	93	41278	1.00	1.07	
54 Thiophene	84	10.726	10.722	0.004	96	91473	1.00	1.07	
55 Isooctane	57	11.216	11.219	-0.003	97	347522	1.00	1.09	
56 n-Heptane	71	11.588	11.592	-0.004	95	62758	1.00	1.07	
57 1,2-Dichloropropane	63	11.669	11.669	0.000	89	69579	1.00	1.02	
58 Trichloroethene	130	11.707	11.709	-0.002	89	63582	1.00	1.02	
59 Dibromomethane	93	11.788	11.787	0.001	87	67184	1.00	1.03	
60 Dichlorobromomethane	83	11.933	11.936	-0.003	97	124068	1.00	1.07	
61 1,4-Dioxane	88	11.977	11.983	-0.006	95	17744	1.00	0.9895	
62 Methyl methacrylate	41	12.036	12.041	-0.005	87	74374	1.00	0.9264	
63 Methylcyclohexane	83	12.473	12.477	-0.004	87	102607	1.00	1.06	
64 4-Methyl-2-pentanone (MIBK)	43	12.899	12.900	-0.001	96	141362	1.00	1.04	
65 cis-1,3-Dichloropropene	75	12.931	12.934	-0.003	99	96645	1.00	1.04	
66 trans-1,3-Dichloropropene	75	13.627	13.629	-0.002	94	81441	1.00	0.99	
67 Toluene	91	13.756	13.755	0.001	92	170480	1.00	0.9722	
68 1,1,2-Trichloroethane	83	13.821	13.829	-0.008	96	54812	1.00	0.99	
69 2-Hexanone	58	14.225	14.233	-0.008	90	59488	1.00	1.01	
70 n-Octane	85	14.446	14.450	-0.004	98	63738	1.00	1.03	
71 Chlorodibromomethane	129	14.527	14.531	-0.004	95	106157	1.00	1.01	
72 Ethylene Dibromide	107	14.818	14.823	-0.005	98	95247	1.00	0.9860	
73 Tetrachloroethene	129	14.899	14.900	-0.001	91	61283	1.00	0.99	
75 Chlorobenzene	112	15.773	15.775	-0.002	91	140787	1.00	0.99	
74 2,3-Dimethylheptane	43	15.794	15.797	-0.003	93	275908	1.00	1.06	
78 Ethylbenzene	91	16.059	16.063	-0.004	99	231527	1.00	0.9875	
79 m-Xylene & p-Xylene	91	16.226	16.226	0.000	97	347825	2.00	1.93	
80 n-Nonane	57	16.646	16.648	-0.002	95	154878	1.00	1.02	
81 Bromoform	173	16.668	16.673	-0.005	92	94396	1.00	0.9248	
82 Styrene	104	16.690	16.691	-0.001	97	133420	1.00	0.9795	
83 o-Xylene	91	16.749	16.754	-0.005	98	181227	1.00	0.9573	
84 1,1,2,2-Tetrachloroethane	83	17.072	17.073	-0.001	98	145792	1.00	0.9698	
85 1,2,3-Trichloropropane	110	17.234	17.233	0.001	95	36792	1.00	0.9323	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
86 Isopropylbenzene	105	17.337	17.340	-0.003	97	242404	1.00	0.9475	
87 N-Propylbenzene	120	17.881	17.882	-0.001	98	62464	1.00	0.8572	
88 2-Chlorotoluene	126	17.924	17.923	0.001	99	63833	1.00	0.9124	
89 4-Ethyltoluene	105	18.032	18.033	-0.001	98	231336	1.00	0.8859	
90 1,3,5-Trimethylbenzene	120	18.102	18.107	-0.005	91	93296	1.00	0.8726	
92 Alpha Methyl Styrene	118	18.334	18.334	0.000	85	92905	1.00	0.8833	
93 n-Decane	57	18.394	18.395	-0.001	87	192951	1.00	1.00	
94 tert-Butylbenzene	119	18.528	18.529	-0.001	93	205031	1.00	0.9383	
95 1,2,4-Trimethylbenzene	105	18.539	18.542	-0.003	97	199411	1.00	0.9448	
96 sec-Butylbenzene	105	18.798	18.797	0.001	98	299213	1.00	0.9354	
97 1,3-Dichlorobenzene	146	18.809	18.810	-0.001	97	144178	1.00	0.9323	
98 Benzyl chloride	91	18.884	18.884	0.000	97	184264	1.00	0.9243	
99 1,4-Dichlorobenzene	146	18.895	18.897	-0.002	91	144577	1.00	0.9394	
100 4-Isopropyltoluene	119	18.960	18.959	0.001	96	231717	1.00	0.8984	
101 1,2,3-Trimethylbenzene	105	19.008	19.011	-0.003	98	194590	1.00	0.9301	
102 Butylcyclohexane	83	19.068	19.067	0.001	90	206754	1.00	0.9832	
104 1,2-Dichlorobenzene	146	19.251	19.256	-0.005	82	139098	1.00	0.9152	
103 2,3-Dihydroindene	117	19.256	19.256	0.000	93	194777	1.00	0.9012	
106 Indene	116	19.386	19.385	0.001	90	168932	1.00	0.9056	
105 n-Butylbenzene	91	19.391	19.392	-0.001	98	252981	1.00	0.9065	
107 Undecane	57	19.698	19.703	-0.005	92	210264	1.00	0.9371	
108 1,2-Dibromo-3-Chloropropane	157	19.855	19.854	0.001	91	65853	1.00	0.8601	
109 1,2,4,5-Tetramethylbenzene	119	20.141	20.144	-0.003	97	207196	1.00	0.8553	
110 Dodecane	57	20.755	20.758	-0.003	90	204834	1.00	0.9718	
111 1,2,4-Trichlorobenzene	180	20.950	20.951	-0.001	93	116031	1.00	0.8422	
112 Naphthalene	128	21.084	21.089	-0.005	99	264622	1.00	0.7718	
113 Hexachlorobutadiene	225	21.295	21.297	-0.002	93	111897	1.00	0.8833	
114 1,2,3-Trichlorobenzene	180	21.365	21.365	0.000	94	109903	1.00	0.8399	
115 2-Methylnaphthalene	142	22.136	22.139	-0.003	98	159573	1.00	1.09	
116 1-Methylnaphthalene	142	22.308	22.313	-0.005	99	179656	1.00	1.17	
A 122 C8 Range	1	14.436	(14.393-14.511)		0	736873	1.00	1.06	
S 123 1,2-Dichloroethene, Total	1				0		2.00	1.99	
S 124 Xylenes, Total	100				0		3.00	2.89	

Reagents:

40L6DQP_00020	Amount Added: 200.00	Units: mL	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

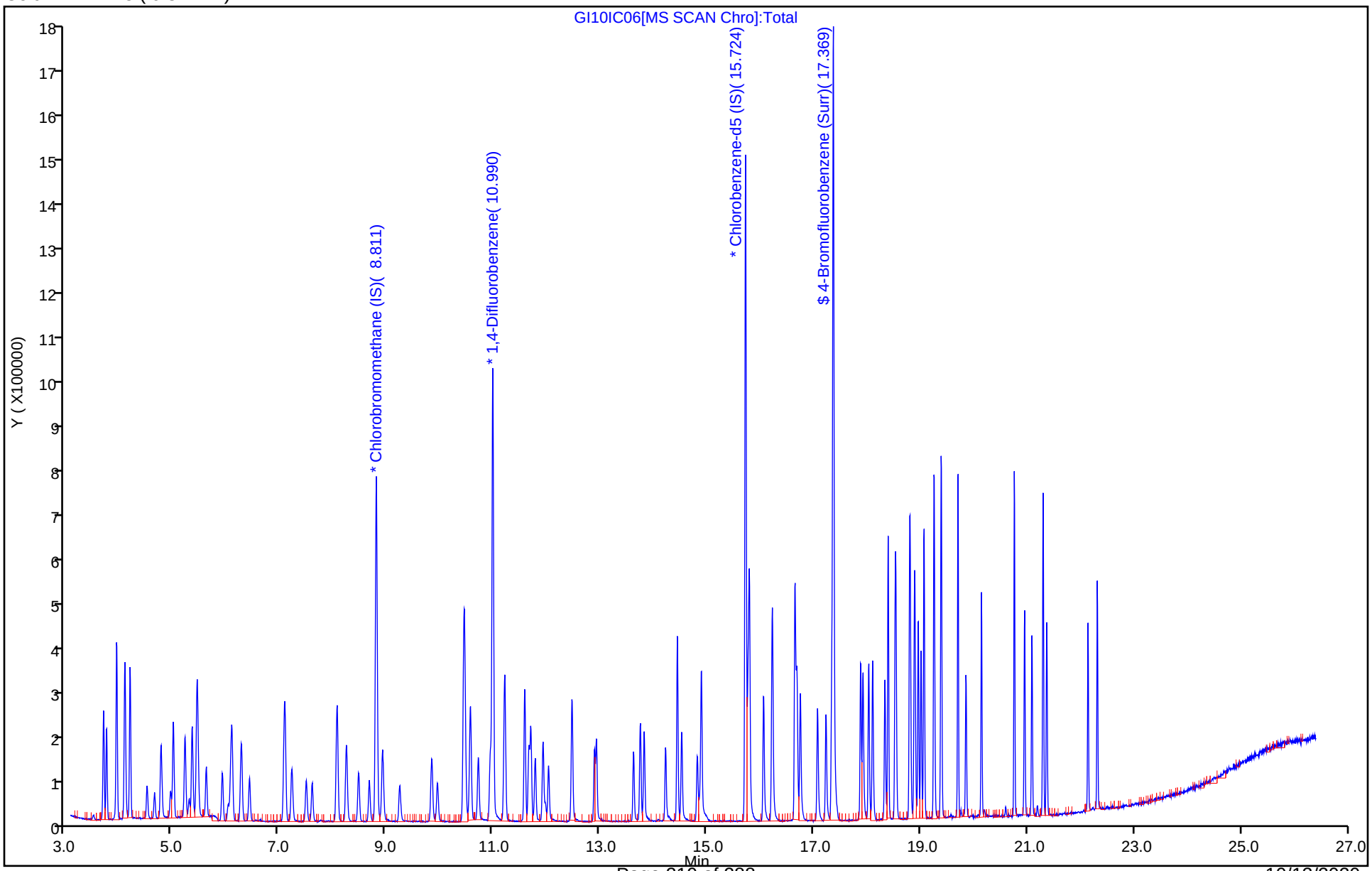
Report Date: 11-Sep-2020 08:45:56 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200910-16561.b\GI10IC06.D

Injection Date:	11-Sep-2020 02:55:30	Instrument ID:	MG	Operator ID:	AFB
Lims ID:	IC L6			Worklist Smp#:	14
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

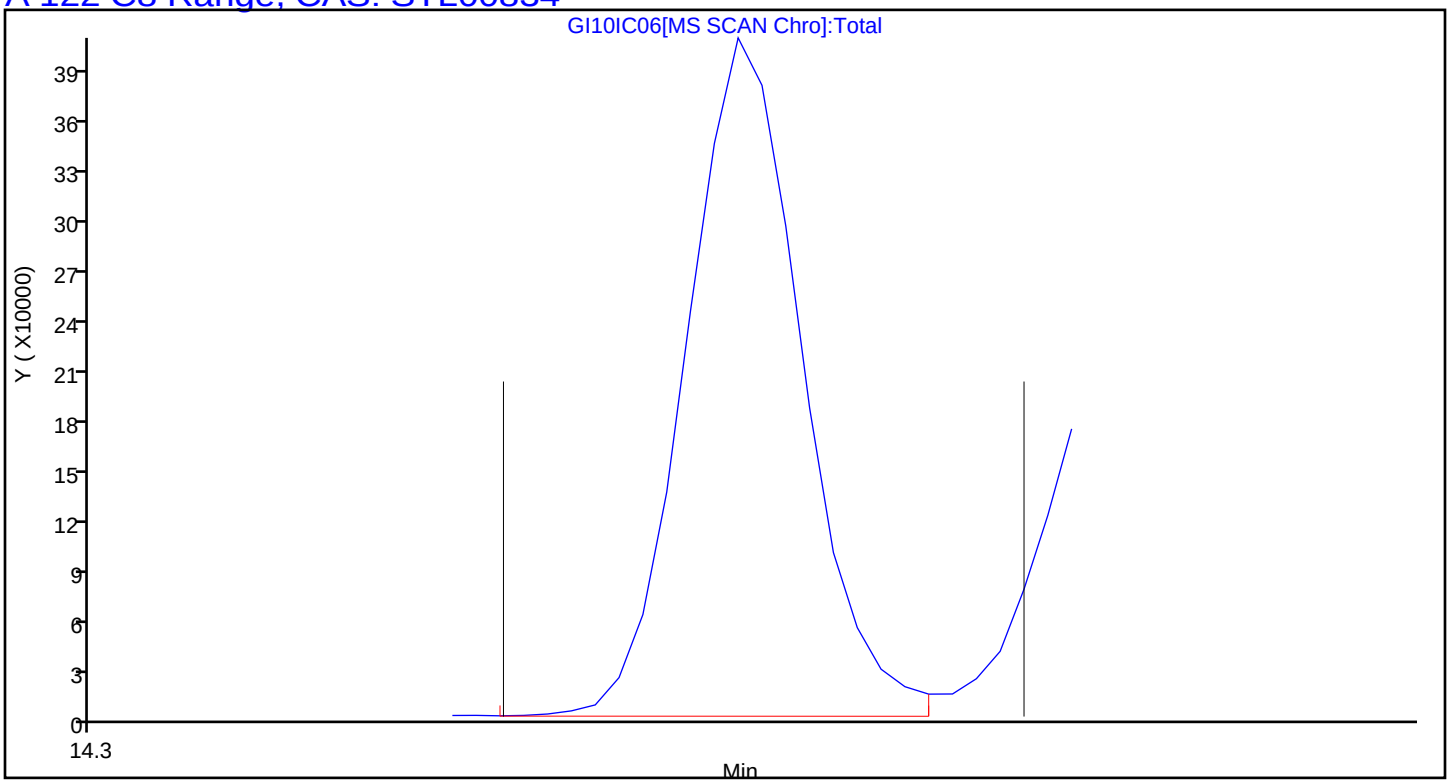


Report Date: 11-Sep-2020 08:45:56 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200910-16561.b\GI10IC06.D				
Injection Date:	11-Sep-2020 02:55:30	Instrument ID:	MG		
Lims ID:	IC L6				
Client ID:					
Operator ID:	AFB	ALS Bottle#:	4	Worklist Smp#:	14
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 122 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200910-16561.b\GI10IC07.D
Lims ID: ICIS L7
Client ID:
Sample Type: ICIS Calib Level: 7
Inject. Date: 11-Sep-2020 03:42:30 ALS Bottle#: 5 Worklist Smp#: 15
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016561-015
Misc. Info.: 324146
Operator ID: AFB Instrument ID: MG
Sublist: chrom-MG_TO15*sub17

Method: \\chromfs\Knoxville\ChromData\MG\20200910-16561.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 11-Sep-2020 08:46:02 Calib Date: 11-Sep-2020 06:50:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200910-16561.b\GI10IC09R.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1067

First Level Reviewer: tajh Date: 11-Sep-2020 06:53:31

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.817	8.813	0.004	90	183054	4.80	4.80	
* 2 1,4-Difluorobenzene	114	10.995	10.994	0.001	97	946553	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.730	15.726	0.004	91	975848	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.369	17.368	0.001	95	761418	4.64	4.86	
6 Chlorodifluoromethane	51	3.705	3.704	0.001	97	274913	2.00	2.02	
7 Propene	41	3.710	3.712	-0.002	98	163252	2.00	2.25	
8 Dichlorodifluoromethane	85	3.769	3.767	0.002	100	371823	2.00	2.15	
9 Chloromethane	52	3.947	3.947	0.000	99	55942	2.00	1.93	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.958	3.955	0.003	95	212496	2.00	2.18	
11 Acetaldehyde	44	4.104	4.104	0.000	100	392985	10.0	11.0	
12 Vinyl chloride	62	4.114	4.118	-0.004	99	169080	2.00	2.08	
14 Butadiene	54	4.206	4.205	0.002	64	146750	2.00	2.07	
13 Butane	43	4.206	4.206	0.000	86	315175	2.00	2.13	
15 Bromomethane	94	4.524	4.525	-0.001	97	117485	2.00	2.09	
16 Chloroethane	64	4.664	4.663	0.001	90	71482	2.00	1.96	
17 Ethanol	31	4.783	4.785	-0.002	96	394473	10.0	11.0	
18 Vinyl bromide	106	4.966	4.964	0.002	98	93370	2.00	1.95	
19 2-Methylbutane	43	5.015	5.012	0.003	93	204327	2.00	2.00	
20 Trichlorofluoromethane	101	5.236	5.231	0.005	99	277159	2.00	1.98	
21 Acrolein	56	5.241	5.248	-0.007	95	41381	2.00	1.77	
22 Acetonitrile	40	5.306	5.326	-0.020	99	67420	2.00	2.18	
23 Acetone	58	5.365	5.370	-0.005	99	172823	6.00	6.34	
24 Pentane	72	5.452	5.451	0.001	96	19760	2.00	1.99	
25 Isopropyl alcohol	45	5.462	5.478	-0.016	95	519124	6.00	5.95	
26 Ethyl ether	31	5.624	5.631	-0.007	89	172122	2.00	2.10	
27 1,1-Dichloroethene	96	5.937	5.933	0.004	93	89845	2.00	2.06	
28 Acrylonitrile	53	6.039	6.041	-0.002	98	85340	2.00	2.06	
30 2-Methyl-2-propanol	59	6.077	6.091	-0.014	96	152562	2.00	1.91	
29 1,1,2-Trichloro-1,2,2-trifluoroe	101	6.115	6.108	0.007	91	186627	2.00	1.95	
31 Methylene Chloride	84	6.282	6.282	0.000	93	87468	2.00	2.02	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.293	6.295	-0.002	94	132898	2.00	2.09	
33 Carbon disulfide	76	6.439	6.440	-0.002	99	289843	2.00	2.01	
34 trans-1,2-Dichloroethene	96	7.091	7.086	0.005	94	98096	2.00	1.99	
35 2-Methylpentane	43	7.107	7.104	0.003	96	336153	2.00	2.05	
36 Methyl tert-butyl ether	73	7.226	7.233	-0.007	96	271696	2.00	2.12	
37 1,1-Dichloroethane	63	7.501	7.505	-0.004	99	227405	2.00	1.99	
38 Vinyl acetate	43	7.614	7.615	-0.001	100	385311	2.00	2.14	
39 2-Butanone (MEK)	72	8.062	8.076	-0.014	95	49278	2.00	1.98	
40 Hexane	56	8.083	8.084	-0.001	88	108738	2.00	2.00	
41 Isopropyl ether	45	8.250	8.258	-0.008	96	474541	2.00	2.12	
42 cis-1,2-Dichloroethene	96	8.482	8.481	0.001	98	110123	2.00	1.97	
43 Ethyl acetate	43	8.676	8.686	-0.010	97	320976	2.00	2.16	
44 Chloroform	83	8.833	8.827	0.006	95	241126	2.00	2.02	
45 Tert-butyl ethyl ether	59	8.924	8.939	-0.015	97	386149	2.00	2.11	
46 Tetrahydrofuran	42	9.243	9.258	-0.015	93	165190	2.00	2.08	
47 1,1,1-Trichloroethane	97	9.852	9.851	0.001	95	234859	2.00	2.02	
48 1,2-Dichloroethane	62	9.965	9.959	0.006	95	169527	2.00	1.99	
49 Cyclohexane	69	10.456	10.457	-0.001	85	59734	2.00	2.08	
50 Benzene	78	10.450	10.452	-0.002	97	369136	2.00	2.04	
51 n-Butanol	31	10.461	10.459	0.002	68	47136	2.00	1.85	
52 Carbon tetrachloride	117	10.477	10.476	0.001	93	239352	2.00	2.09	
53 2,3-Dimethylpentane	71	10.580	10.577	0.003	92	89495	2.00	2.06	
54 Thiophene	84	10.725	10.722	0.003	96	204625	2.00	2.13	
55 Isooctane	57	11.222	11.219	0.003	97	747675	2.00	2.08	
56 n-Heptane	71	11.594	11.592	0.002	95	136771	2.00	2.07	
57 1,2-Dichloropropane	63	11.669	11.669	0.000	89	159414	2.00	2.08	
58 Trichloroethene	130	11.707	11.709	-0.002	93	142773	2.00	2.05	
59 Dibromomethane	93	11.788	11.787	0.001	90	145849	2.00	1.99	
60 Dichlorobromomethane	83	11.939	11.936	0.003	97	264463	2.00	2.04	
61 1,4-Dioxane	88	11.976	11.983	-0.007	97	39447	2.00	1.96	
62 Methyl methacrylate	41	12.036	12.041	-0.005	87	200856	2.00	2.23	
63 Methylcyclohexane	83	12.478	12.477	0.001	88	230837	2.00	2.12	
64 4-Methyl-2-pentanone (MIBK)	43	12.893	12.900	-0.007	98	317587	2.00	2.07	
65 cis-1,3-Dichloropropene	75	12.936	12.934	0.002	99	226085	2.00	2.16	
66 trans-1,3-Dichloropropene	75	13.632	13.629	0.003	95	196572	2.00	2.12	
67 Toluene	91	13.756	13.755	0.001	93	414032	2.00	2.09	
68 1,1,2-Trichloroethane	83	13.831	13.829	0.002	97	129207	2.00	2.07	
69 2-Hexanone	58	14.230	14.233	-0.003	90	125344	2.00	1.88	
70 n-Octane	85	14.452	14.450	0.002	98	144348	2.00	2.07	
71 Chlorodibromomethane	129	14.532	14.531	0.001	95	243763	2.00	2.06	
72 Ethylene Dibromide	107	14.824	14.823	0.001	99	228525	2.00	2.09	
73 Tetrachloroethene	129	14.899	14.900	-0.001	91	137223	2.00	1.97	
75 Chlorobenzene	112	15.778	15.775	0.003	91	331429	2.00	2.07	
74 2,3-Dimethylheptane	43	15.800	15.797	0.003	94	615203	2.00	2.10	
78 Ethylbenzene	91	16.064	16.063	0.001	99	565032	2.00	2.13	
79 m-Xylene & p-Xylene	91	16.226	16.226	0.000	98	856437	4.00	4.21	
80 n-Nonane	57	16.652	16.648	0.004	96	361083	2.00	2.10	
81 Bromoform	173	16.673	16.673	0.000	92	239277	2.00	2.07	
82 Styrene	104	16.689	16.691	-0.002	97	337430	2.00	2.19	
83 o-Xylene	91	16.754	16.754	0.000	98	451638	2.00	2.11	
84 1,1,2,2-Tetrachloroethane	83	17.072	17.073	-0.001	98	356201	2.00	2.09	
85 1,2,3-Trichloropropane	110	17.234	17.233	0.001	96	92613	2.00	2.07	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
86 Isopropylbenzene	105	17.342	17.340	0.002	97	607393	2.00	2.10	
87 N-Propylbenzene	120	17.881	17.882	-0.001	98	165060	2.00	2.00	
88 2-Chlorotoluene	126	17.924	17.923	0.001	98	154630	2.00	1.95	
89 4-Ethyltoluene	105	18.032	18.033	-0.001	98	608149	2.00	2.06	
90 1,3,5-Trimethylbenzene	120	18.108	18.107	0.001	92	245476	2.00	2.03	
92 Alpha Methyl Styrene	118	18.334	18.334	0.000	88	261751	2.00	2.20	
93 n-Decane	57	18.393	18.395	-0.002	87	475731	2.00	2.19	
94 tert-Butylbenzene	119	18.528	18.529	-0.001	91	545615	2.00	2.21	
95 1,2,4-Trimethylbenzene	105	18.544	18.542	0.002	96	531872	2.00	2.23	
96 sec-Butylbenzene	105	18.798	18.797	0.001	98	808599	2.00	2.23	
97 1,3-Dichlorobenzene	146	18.809	18.810	-0.001	97	374600	2.00	2.14	
98 Benzyl chloride	91	18.884	18.884	0.000	97	513566	2.00	2.28	
99 1,4-Dichlorobenzene	146	18.895	18.897	-0.002	93	369724	2.00	2.12	
100 4-Isopropyltoluene	119	18.960	18.959	0.001	97	642660	2.00	2.20	
101 1,2,3-Trimethylbenzene	105	19.014	19.011	0.003	99	541032	2.00	2.29	
102 Butylcyclohexane	83	19.067	19.067	0.000	90	507765	2.00	2.13	
104 1,2-Dichlorobenzene	146	19.256	19.256	0.000	82	376042	2.00	2.19	
103 2,3-Dihydroindene	117	19.256	19.256	0.000	93	537037	2.00	2.20	
106 Indene	116	19.386	19.385	0.001	91	481201	2.00	2.28	
105 n-Butylbenzene	91	19.391	19.392	-0.001	98	689343	2.00	2.18	
107 Undecane	57	19.704	19.703	0.001	93	527697	2.00	2.08	
108 1,2-Dibromo-3-Chloropropane	157	19.855	19.854	0.001	94	198884	2.00	2.30	
109 1,2,4,5-Tetramethylbenzene	119	20.146	20.144	0.002	97	628422	2.00	2.29	
110 Dodecane	57	20.761	20.758	0.003	91	512832	2.00	2.15	
111 1,2,4-Trichlorobenzene	180	20.949	20.951	-0.002	94	326239	2.00	2.09	
112 Naphthalene	128	21.090	21.089	0.001	99	779525	2.00	2.01	
113 Hexachlorobutadiene	225	21.300	21.297	0.003	94	319015	2.00	2.23	
114 1,2,3-Trichlorobenzene	180	21.365	21.365	0.000	94	326188	2.00	2.20	
115 2-Methylnaphthalene	142	22.141	22.139	0.002	99	305394	2.00	1.84	
116 1-Methylnaphthalene	142	22.314	22.313	0.001	100	321178	2.00	1.85	
A 122 C8 Range	1	14.463	(14.393-14.532)		0	1622501	2.00	2.06	
S 123 1,2-Dichloroethene, Total	1				0		4.00	3.97	
S 124 Xylenes, Total	100				0		6.00	6.32	

Reagents:

40L7DQP_00020	Amount Added: 200.00	Units: mL	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

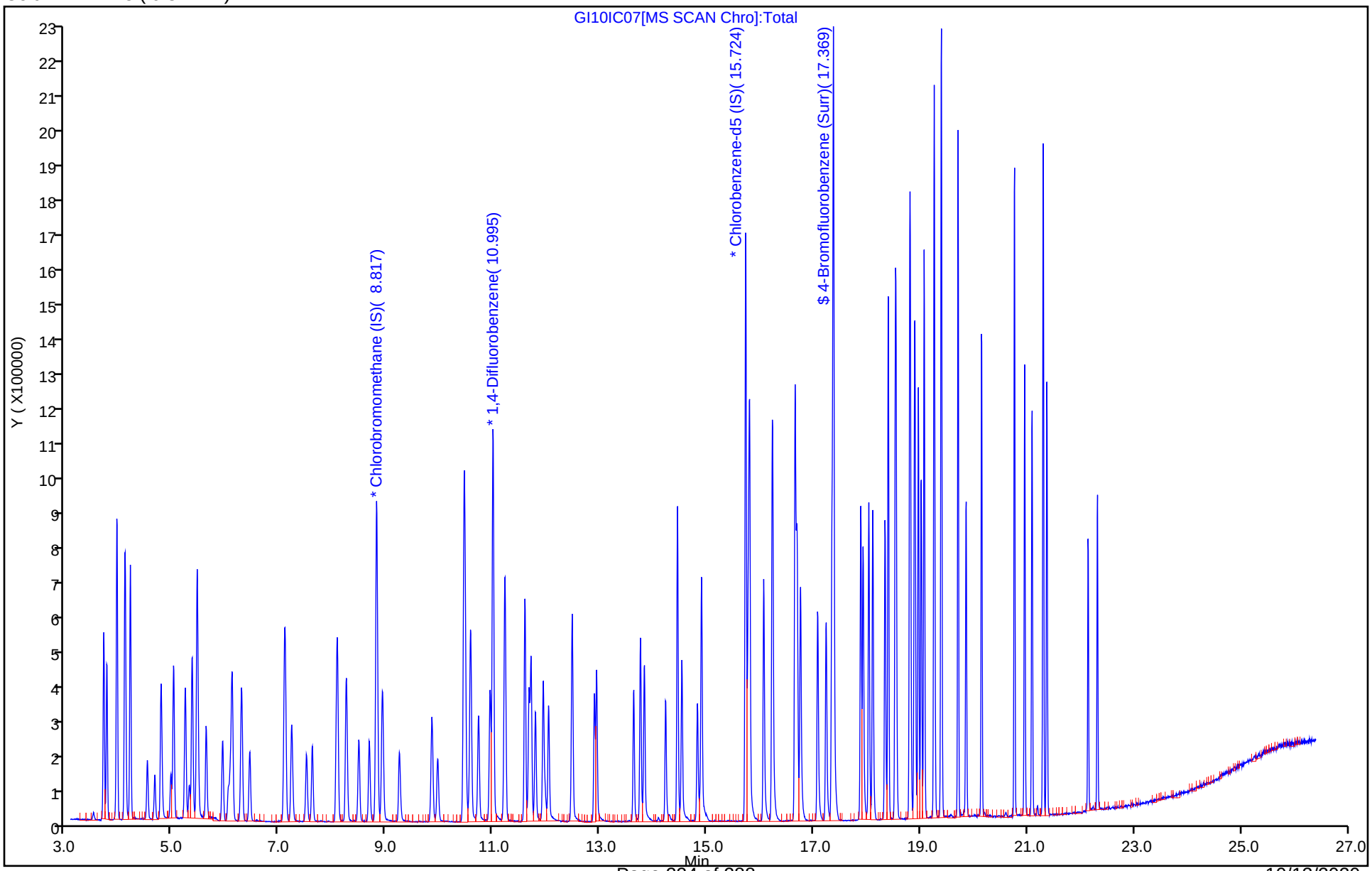
Report Date: 11-Sep-2020 08:46:03 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200910-16561.b\GI10IC07.D

Injection Date:	11-Sep-2020 03:42:30	Instrument ID:	MG	Operator ID:	AFB
Lims ID:	ICIS L7			Worklist Smp#:	15
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

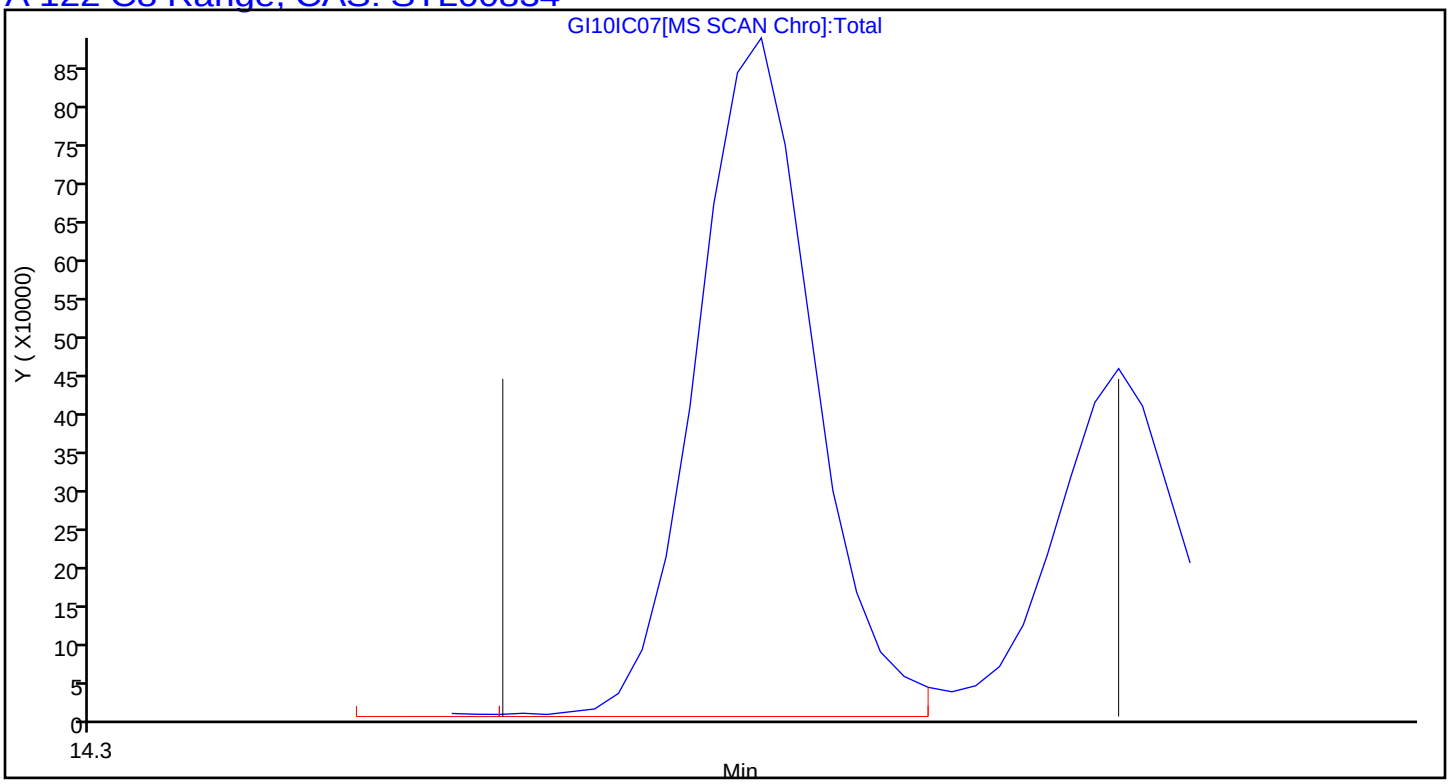


Report Date: 11-Sep-2020 08:46:03 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200910-16561.b\GI10IC07.D				
Injection Date:	11-Sep-2020 03:42:30	Instrument ID:	MG		
Lims ID:	ICIS L7				
Client ID:					
Operator ID:	AFB	ALS Bottle#:	5	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 122 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200910-16561.b\GI10IC09R.D
Lims ID: IC L9
Client ID:
Sample Type: IC Calib Level: 9
Inject. Date: 11-Sep-2020 06:50:30 ALS Bottle#: 14 Worklist Smp#: 21
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016561-021
Misc. Info.: 324143 100ML LVL10
Operator ID: AFB Instrument ID: MG
Sublist: chrom-MG_TO15*sub17

Method: \\chromfs\Knoxville\ChromData\MG\20200910-16561.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 11-Sep-2020 08:46:10 Calib Date: 11-Sep-2020 06:50:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200910-16561.b\GI10IC09R.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1067

First Level Reviewer: tajh Date: 11-Sep-2020 08:32:23

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.827	8.813	0.014	91	243240	4.80	4.80	
* 2 1,4-Difluorobenzene	114	11.006	10.994	0.012	96	1202844	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.730	15.726	0.004	89	1324122	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.369	17.368	0.001	93	998182	4.64	4.70	
6 Chlorodifluoromethane	51	3.699	3.704	-0.005	97	1451591	8.00	8.03	
7 Propene	41	3.710	3.712	-0.002	99	371016	8.00	3.84	
8 Dichlorodifluoromethane	85	3.764	3.767	-0.003	100	2229414	8.00	9.71	
9 Chloromethane	52	3.947	3.947	0.000	98	292539	8.00	7.60	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.958	3.955	0.003	92	1538107	8.00	11.9	
11 Acetaldehyde	44	4.104	4.104	0.000	97	1768640	40.0	37.3	
12 Vinyl chloride	62	4.120	4.118	0.002	99	933319	8.00	8.66	
14 Butadiene	54	4.206	4.205	0.002	66	810487	8.00	8.62	
13 Butane	43	4.206	4.206	0.000	85	1535269	8.00	7.81	
15 Bromomethane	94	4.530	4.525	0.005	98	742584	8.00	9.96	
16 Chloroethane	64	4.670	4.663	0.007	97	415633	8.00	8.59	
17 Ethanol	31	4.799	4.785	0.014	94	1459393	40.0	30.8	
18 Vinyl bromide	106	4.966	4.964	0.002	98	618819	8.00	9.73	
19 2-Methylbutane	43	5.020	5.012	0.008	93	1064070	8.00	7.82	
20 Trichlorofluoromethane	101	5.236	5.231	0.005	100	1745139	8.00	9.36	
21 Acrolein	56	5.252	5.248	0.004	94	219746	8.00	7.09	
22 Acetonitrile	40	5.322	5.326	-0.004	100	286249	8.00	6.98	
23 Acetone	58	5.371	5.370	0.001	98	734965	24.0	20.3	
24 Pentane	72	5.457	5.451	0.006	96	115728	8.00	8.78	
25 Isopropyl alcohol	45	5.484	5.478	0.006	96	2394273	24.0	20.7	
26 Ethyl ether	31	5.630	5.631	-0.001	92	689498	8.00	6.34	
27 1,1-Dichloroethene	96	5.942	5.933	0.009	94	480796	8.00	8.29	
28 Acrylonitrile	53	6.056	6.041	0.015	97	403062	8.00	7.33	
30 2-Methyl-2-propanol	59	6.077	6.091	-0.014	95	790534	8.00	7.45	
29 1,1,2-Trichloro-1,2,2-trifluoroe	101	6.115	6.108	0.007	93	1043989	8.00	8.22	
31 Methylene Chloride	84	6.293	6.282	0.011	94	459016	8.00	7.97	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.304	6.295	0.009	93	630875	8.00	7.48	
33 Carbon disulfide	76	6.449	6.440	0.009	100	1520728	8.00	7.93	
34 trans-1,2-Dichloroethene	96	7.096	7.086	0.010	96	552780	8.00	8.45	
35 2-Methylpentane	43	7.113	7.104	0.009	97	1706890	8.00	7.82	
36 Methyl tert-butyl ether	73	7.231	7.233	-0.002	97	1135937	8.00	6.68	
37 1,1-Dichloroethane	63	7.517	7.505	0.012	99	1146123	8.00	7.56	
38 Vinyl acetate	43	7.625	7.615	0.010	100	1655568	8.00	6.91	
39 2-Butanone (MEK)	72	8.078	8.076	0.002	95	190976	8.00	5.77	
40 Hexane	56	8.094	8.084	0.010	88	548617	8.00	7.58	
41 Isopropyl ether	45	8.261	8.258	0.003	97	1916626	8.00	6.45	
42 cis-1,2-Dichloroethene	96	8.498	8.481	0.017	97	590588	8.00	7.97	
43 Ethyl acetate	43	8.693	8.686	0.006	98	1160232	8.00	5.88	
44 Chloroform	83	8.843	8.827	0.016	95	1214901	8.00	7.65	
45 Tert-butyl ethyl ether	59	8.935	8.939	-0.004	97	1558159	8.00	6.39	
46 Tetrahydrofuran	42	9.248	9.258	-0.010	94	659891	8.00	6.26	
47 1,1,1-Trichloroethane	97	9.863	9.851	0.012	97	1239218	8.00	8.04	
48 1,2-Dichloroethane	62	9.976	9.959	0.017	96	851557	8.00	7.88	
50 Benzene	78	10.467	10.452	0.015	98	1914265	8.00	8.34	
49 Cyclohexane	69	10.461	10.457	0.004	86	301079	8.00	8.25	
51 n-Butanol	31	10.445	10.459	-0.014	79	250251	8.00	7.71	
52 Carbon tetrachloride	117	10.488	10.476	0.012	95	1279766	8.00	8.79	
53 2,3-Dimethylpentane	71	10.585	10.577	0.008	91	449426	8.00	8.15	
54 Thiophene	84	10.736	10.722	0.014	96	1017182	8.00	8.33	
55 Isooctane	57	11.227	11.219	0.008	98	3645553	8.00	7.99	
56 n-Heptane	71	11.604	11.592	0.012	95	691299	8.00	8.23	
57 1,2-Dichloropropane	63	11.680	11.669	0.011	90	719126	8.00	7.39	
58 Trichloroethene	130	11.718	11.709	0.009	95	786963	8.00	8.87	
59 Dibromomethane	93	11.799	11.787	0.011	96	749143	8.00	8.03	
60 Dichlorobromomethane	83	11.944	11.936	0.008	97	1364536	8.00	8.27	
61 1,4-Dioxane	88	11.971	11.983	-0.012	97	160960	8.00	6.28	
62 Methyl methacrylate	41	12.041	12.041	0.000	89	737837	8.00	6.43	
63 Methylcyclohexane	83	12.483	12.477	0.006	91	1161571	8.00	8.39	
64 4-Methyl-2-pentanone (MIBK)	43	12.893	12.900	-0.007	98	1163480	8.00	5.97	
65 cis-1,3-Dichloropropene	75	12.942	12.934	0.008	98	1074353	8.00	8.06	
66 trans-1,3-Dichloropropene	75	13.637	13.629	0.008	97	944359	8.00	7.50	
67 Toluene	91	13.761	13.755	0.006	94	2011815	8.00	7.48	
68 1,1,2-Trichloroethane	83	13.837	13.829	0.008	98	626437	8.00	7.40	
69 2-Hexanone	58	14.225	14.233	-0.008	91	564420	8.00	6.24	
70 n-Octane	85	14.457	14.450	0.007	97	748251	8.00	7.90	
71 Chlorodibromomethane	129	14.538	14.531	0.007	97	1411506	8.00	8.78	
72 Ethylene Dibromide	107	14.829	14.823	0.006	99	1176833	8.00	7.94	
73 Tetrachloroethene	129	14.905	14.900	0.005	94	778138	8.00	8.21	
75 Chlorobenzene	112	15.778	15.775	0.003	93	1694035	8.00	7.79	
74 2,3-Dimethylheptane	43	15.800	15.797	0.003	95	2896884	8.00	7.28	
78 Ethylbenzene	91	16.069	16.063	0.006	98	2572854	8.00	7.15	
79 m-Xylene & p-Xylene	91	16.231	16.226	0.005	97	4008358	16.0	14.5	
80 n-Nonane	57	16.652	16.648	0.004	96	1765802	8.00	7.58	
81 Bromoform	173	16.673	16.673	0.000	95	1467388	8.00	9.37	
82 Styrene	104	16.695	16.691	0.004	98	1669894	8.00	7.99	
83 o-Xylene	91	16.754	16.754	0.000	99	2062285	8.00	7.10	
84 1,1,2,2-Tetrachloroethane	83	17.078	17.073	0.005	98	1574522	8.00	6.82	
85 1,2,3-Trichloropropane	110	17.234	17.233	0.001	95	436635	8.00	7.21	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
86 Isopropylbenzene	105	17.342	17.340	0.002	96	2896819	8.00	7.38	
87 N-Propylbenzene	120	17.881	17.882	-0.001	100	952935	8.00	8.52	
88 2-Chlorotoluene	126	17.930	17.923	0.007	97	919695	8.00	8.57	
89 4-Ethyltoluene	105	18.032	18.033	-0.001	98	3119041	8.00	7.78	
90 1,3,5-Trimethylbenzene	120	18.108	18.107	0.001	94	1277927	8.00	7.79	
92 Alpha Methyl Styrene	118	18.334	18.334	0.000	90	1312070	8.00	8.13	
93 n-Decane	57	18.399	18.395	0.004	87	2045449	8.00	6.93	
94 tert-Butylbenzene	119	18.528	18.529	-0.001	93	2551147	8.00	7.61	
95 1,2,4-Trimethylbenzene	105	18.544	18.542	0.002	96	2389111	8.00	7.37	
96 sec-Butylbenzene	105	18.798	18.797	0.001	98	3682305	8.00	7.50	
97 1,3-Dichlorobenzene	146	18.814	18.810	0.004	98	1952840	8.00	8.23	
98 Benzyl chloride	91	18.884	18.884	0.000	98	2309540	8.00	7.55	
99 1,4-Dichlorobenzene	146	18.900	18.897	0.003	96	2077122	8.00	8.79	
100 4-Isopropyltoluene	119	18.960	18.959	0.001	97	3271765	8.00	8.27	
101 1,2,3-Trimethylbenzene	105	19.014	19.011	0.003	98	2696228	8.00	8.40	
102 Butylcyclohexane	83	19.067	19.067	0.000	92	2580697	8.00	8.00	
103 2,3-Dihydroindene	117	19.256	19.256	0.000	94	3093298	8.00	9.33	
104 1,2-Dichlorobenzene	146	19.256	19.256	0.000	95	2313251	8.00	9.92	
106 Indene	116	19.386	19.385	0.001	93	2650811	8.00	9.26	
105 n-Butylbenzene	91	19.391	19.392	-0.001	99	3312183	8.00	7.73	
107 Undecane	57	19.704	19.703	0.001	96	2395698	8.00	6.96	
108 1,2-Dibromo-3-Chloropropane	157	19.855	19.854	0.001	96	1130413	8.00	9.62	
109 1,2,4,5-Tetramethylbenzene	119	20.146	20.144	0.002	98	3015118	8.00	8.11	
110 Dodecane	57	20.761	20.758	0.003	95	1962909	8.00	6.07	
111 1,2,4-Trichlorobenzene	180	20.949	20.951	-0.002	94	2053998	8.00	9.71	
112 Naphthalene	128	21.090	21.089	0.001	99	3681998	8.00	7.00	
113 Hexachlorobutadiene	225	21.300	21.297	0.003	96	2021765	8.00	10.4	
114 1,2,3-Trichlorobenzene	180	21.365	21.365	0.000	95	1874827	8.00	9.33	
115 2-Methylnaphthalene	142	22.136	22.139	-0.003	99	2059211	8.00	9.17	
116 1-Methylnaphthalene	142	22.314	22.313	0.001	98	2124878	8.00	9.01	
A 122 C8 Range	1	14.505	(14.398-14.592)		0	7770738	8.00	7.28	
S 123 1,2-Dichloroethene, Total	1				0		16.0	16.4	
S 124 Xylenes, Total	100				0		24.0	21.6	

Reagents:

40L10DQP_00020	Amount Added: 100.00	Units: mL	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

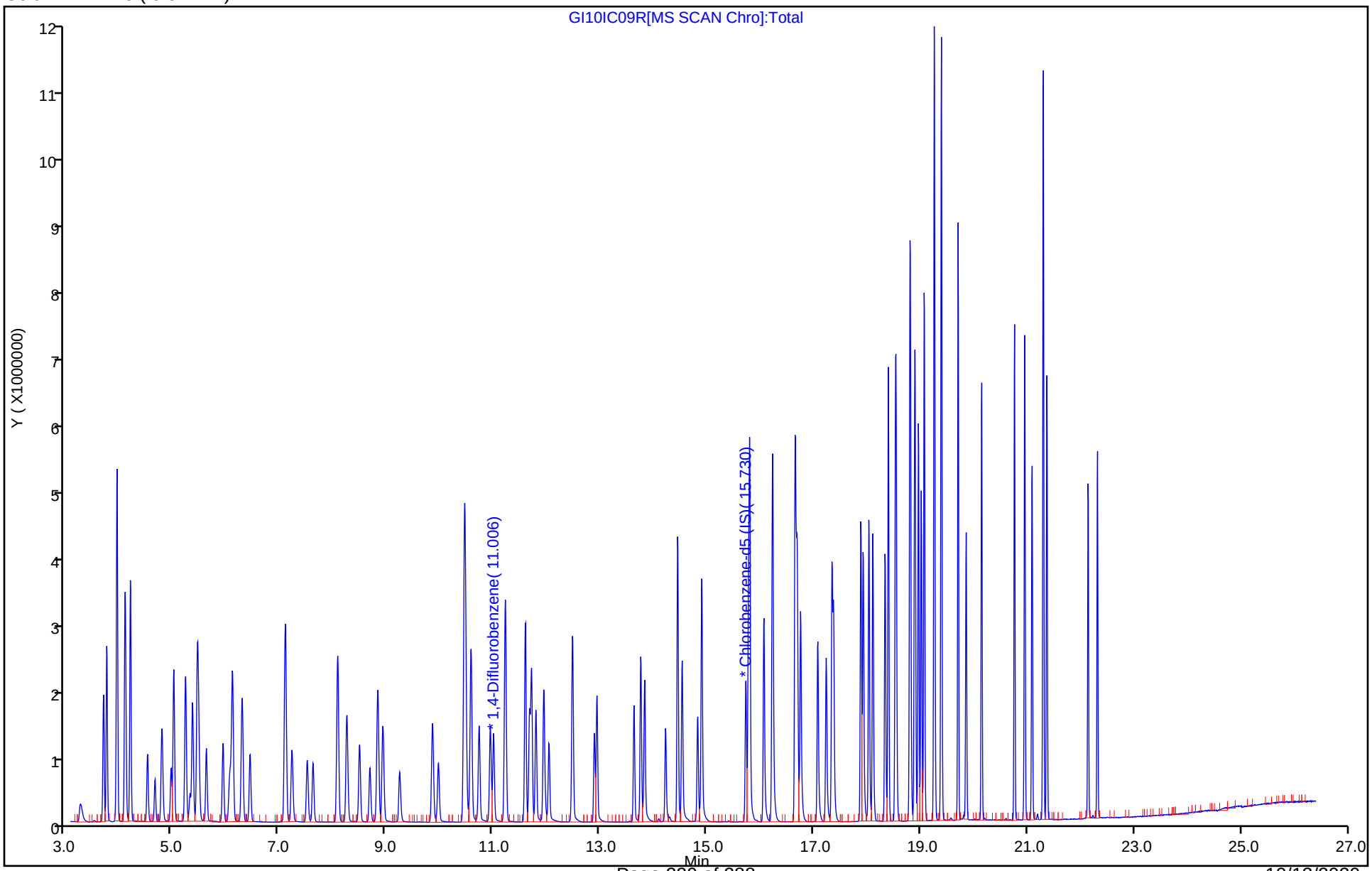
Report Date: 11-Sep-2020 08:46:11 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200910-16561.b\GI10IC09R.D

Injection Date:	11-Sep-2020 06:50:30	Instrument ID:	MG	Operator ID:	AFB
Lims ID:	IC L9			Worklist Smp#:	21
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

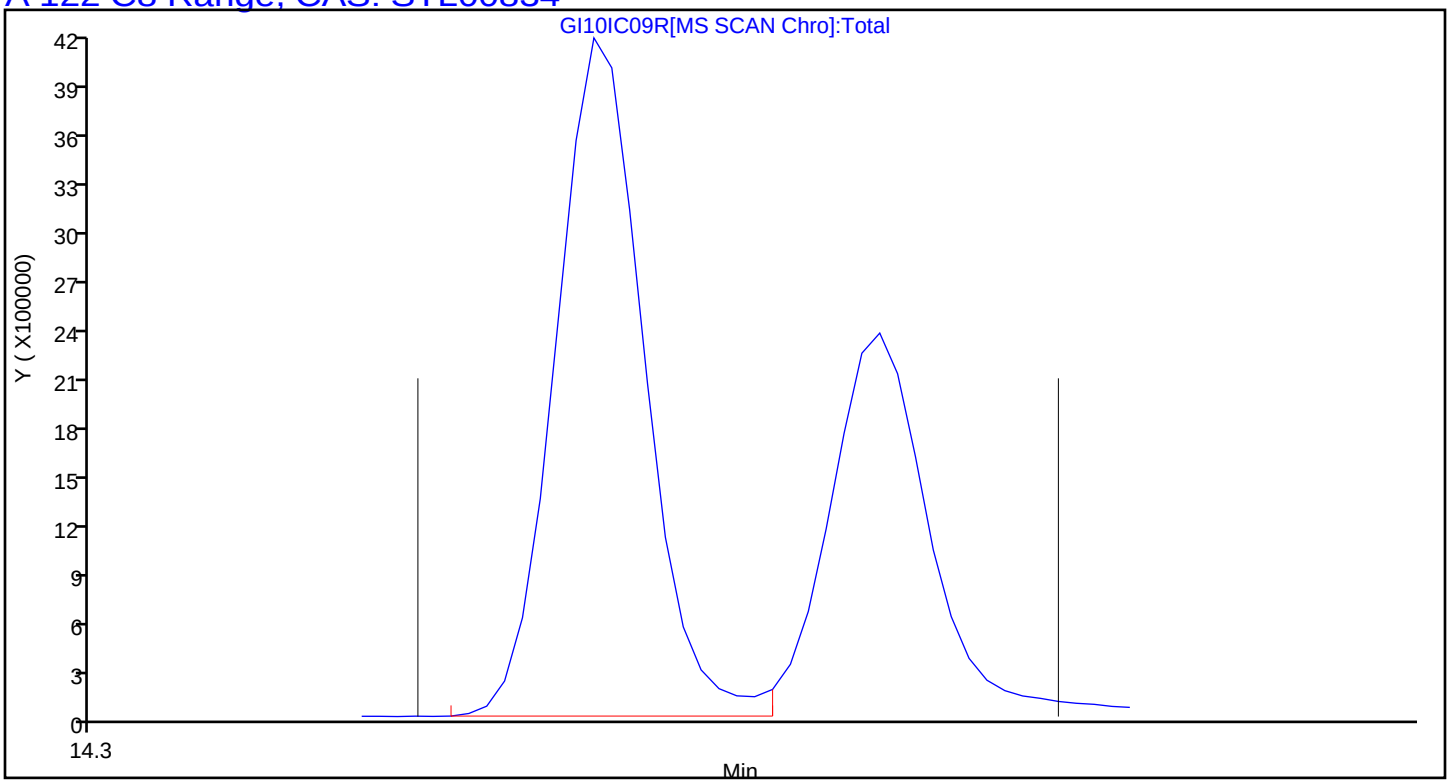


Report Date: 11-Sep-2020 08:46:11 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File:	\\chromfs\Knoxville\ChromData\MG\20200910-16561.b\GI10IC09R.D				
Injection Date:	11-Sep-2020 06:50:30	Instrument ID:	MG		
Lims ID:	IC L9				
Client ID:					
Operator ID:	AFB	ALS Bottle#:	14	Worklist Smp#:	21
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 122 C8 Range, CAS: STL00834



FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20507-1

SDG No.:

Lab Sample ID: ICV 140-42613/17 Calibration Date: 09/11/2020 05:15

Instrument ID: MG Calib Start Date: 09/10/2020 18:15

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 09/11/2020 06:50

Lab File ID: GI10ICV.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorodifluoromethane	Ave	3.567	3.549		1.99	2.00	-0.5	35.0
Propene	Ave	1.905	2.079		2.18	2.00	9.1	35.0
Dichlorodifluoromethane	Ave	4.533	4.692		2.07	2.00	3.5	35.0
1,2-Dichloro-1,1,2,2-tetrafluoroethane	Ave	2.554	2.503		1.96	2.00	-2.0	35.0
Chloromethane	Ave	0.7596	0.7159		1.88	2.00	-5.8	35.0
Acetaldehyde	Ave	0.9356	0.8737		9.34	10.0	-6.6	35.0
Vinyl chloride	Ave	2.128	2.174		2.04	2.00	2.2	35.0
1,3-Butadiene	Ave	1.856	1.855		2.00	2.00	-0.0	35.0
Butane	Ave	3.880	4.042		2.08	2.00	4.2	35.0
Bromomethane	Ave	1.471	1.464		1.99	2.00	-0.5	35.0
Chloroethane	Ave	0.9550	0.9348		1.96	2.00	-2.1	35.0
Ethanol	Ave	0.9363	0.8047		8.59	10.0	-14.1	35.0
Vinyl bromide	Ave	1.255	1.229		1.96	2.00	-2.1	35.0
2-Methylbutane	Ave	2.685	2.689		2.00	2.00	0.1	35.0
Trichlorofluoromethane	Ave	3.680	3.630		1.97	2.00	-1.3	35.0
Acrolein	Ave	0.6115	0.5566		1.82	2.00	-9.0	35.0
Acetonitrile	Ave	0.8095	0.7489		1.85	2.00	-7.5	35.0
Acetone	Ave	0.7143	0.7188		2.01	2.00	0.6	35.0
Isopropyl alcohol	Ave	2.286	2.958		2.59	2.00	29.4	35.0
Pentane	Ave	0.2600	0.2529		1.95	2.00	-2.7	35.0
Ethyl ether	Ave	2.147	2.205		2.05	2.00	2.7	35.0
1,1-Dichloroethene	Ave	1.144	1.211		2.12	2.00	5.8	35.0
Acrylonitrile	Ave	1.085	1.125		2.07	2.00	3.7	35.0
tert-Butyl alcohol	Ave	2.095	2.263		2.16	2.00	8.0	35.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	2.507	2.584		2.06	2.00	3.0	35.0
Methylene Chloride	Ave	1.136	1.143		2.01	2.00	0.6	35.0
3-Chloropropene	Ave	1.664	1.817		2.18	2.00	9.2	35.0
Carbon disulfide	Ave	3.783	3.795		2.01	2.00	0.3	35.0
trans-1,2-Dichloroethene	Ave	1.291	1.297		2.01	2.00	0.4	35.0
2-Methylpentane	Ave	4.307	4.156		1.93	2.00	-3.5	35.0
Methyl tert-butyl ether	Ave	3.353	3.362		2.01	2.00	0.3	35.0
1,1-Dichloroethane	Ave	2.994	3.091		2.07	2.00	3.3	35.0
Vinyl acetate	Ave	4.728	4.740		2.00	2.00	0.2	35.0
2-Butanone (MEK)	Ave	0.6531	0.6099		1.87	2.00	-6.6	35.0
Hexane	Ave	1.428	1.426		2.00	2.00	-0.1	35.0
Isopropyl ether	Ave	5.865	6.036		2.06	2.00	2.9	35.0
cis-1,2-Dichloroethene	Ave	1.463	1.511		2.07	2.00	3.3	35.0
Ethyl acetate	Ave	3.891	3.764		1.93	2.00	-3.3	35.0
Chloroform	Ave	3.134	3.216		2.05	2.00	2.6	35.0
Tert-butyl ethyl ether	Ave	4.810	4.475		1.86	2.00	-7.0	35.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20507-1

SDG No.:

Lab Sample ID: ICV 140-42613/17 Calibration Date: 09/11/2020 05:15

Instrument ID: MG Calib Start Date: 09/10/2020 18:15

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 09/11/2020 06:50

Lab File ID: GI10ICV.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Tetrahydrofuran	Ave	2.081	2.148		2.06	2.00	3.2	35.0
1,1,1-Trichloroethane	Ave	3.043	3.233		2.12	2.00	6.2	35.0
1,2-Dichloroethane	Ave	0.4311	0.4274		1.98	2.00	-0.9	35.0
1-Butanol	Ave	0.1295	0.1169		1.81	2.00	-9.7	35.0
Benzene	Ave	0.9163	0.9337		2.04	2.00	1.9	35.0
Cyclohexane	Ave	0.1456	0.1446		1.99	2.00	-0.7	35.0
Carbon tetrachloride	Ave	0.5812	0.6118		2.11	2.00	5.3	35.0
2,3-Dimethylpentane	Ave	0.2200	0.2147		1.95	2.00	-2.4	35.0
Thiophene	Ave	0.4876	0.4910		2.01	2.00	0.7	35.0
2,2,4-Trimethylpentane	Ave	1.820	1.901		2.09	2.00	4.5	35.0
Heptane	Ave	0.3352	0.3454		2.06	2.00	3.0	35.0
1,2-Dichloropropane	Ave	0.3884	0.3709		1.91	2.00	-4.5	35.0
Trichloroethene	Ave	0.3539	0.3602		2.04	2.00	1.8	35.0
Dibromomethane	Ave	0.3724	0.3771		2.03	2.00	1.3	35.0
Bromodichloromethane	Ave	0.6581	0.6930		2.11	2.00	5.3	35.0
1,4-Dioxane	Ave	0.1022	0.1036		2.03	2.00	1.3	35.0
Methyl methacrylate	Ave	0.4576	0.4469		1.95	2.00	-2.3	35.0
Methylcyclohexane	Ave	0.5523	0.6962		2.52	2.00	26.1	35.0
4-Methyl-2-pentanone (MIBK)	Ave	0.7781	0.7851		2.02	2.00	0.9	35.0
cis-1,3-Dichloropropene	Ave	0.5319	0.5485		2.06	2.00	3.1	35.0
trans-1,3-Dichloropropene	Ave	0.4564	0.4660		2.04	2.00	2.1	35.0
Toluene	Ave	0.9756	0.9696		1.99	2.00	-0.6	35.0
1,1,2-Trichloroethane	Ave	0.3068	0.3097		2.02	2.00	1.0	35.0
2-Hexanone	Ave	0.3282	0.3167		1.93	2.00	-3.5	35.0
Octane	Ave	0.3434	0.3593		2.09	2.00	4.6	35.0
Dibromochloromethane	Ave	0.5828	0.6091		2.09	2.00	4.5	35.0
1,2-Dibromoethane (EDB)	Ave	0.5374	0.5607		2.09	2.00	4.3	35.0
Tetrachloroethene	Ave	0.3435	0.3384		1.97	2.00	-1.5	35.0
Chlorobenzene	Ave	0.7880	0.8017		2.03	2.00	1.7	35.0
2,3-Dimethylheptane	Ave	1.443	1.331		1.84	2.00	-7.8	35.0
Ethylbenzene	Ave	1.304	1.299		1.99	2.00	-0.4	35.0
m-Xylene & p-Xylene	Ave	1.001	1.014		4.05	4.00	1.4	35.0
Nonane	Ave	0.8449	0.8750		2.07	2.00	3.6	35.0
Bromoform	Ave	0.5679	0.5948		2.09	2.00	4.7	35.0
Styrene	Ave	0.7578	0.8020		2.12	2.00	5.8	35.0
o-Xylene	Ave	1.053	1.044		1.98	2.00	-0.9	35.0
1,1,2,2-Tetrachloroethane	Ave	0.8364	0.8288		1.98	2.00	-0.9	35.0
1,2,3-Trichloropropane	Ave	0.2196	0.2179		1.98	2.00	-0.8	35.0
Isopropylbenzene	Ave	1.423	1.434		2.02	2.00	0.8	35.0
Propylbenzene	Ave	0.4054	0.3932		1.94	2.00	-3.0	35.0
2-Chlorotoluene	Ave	0.3892	0.3855		1.98	2.00	-1.0	35.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20507-1

SDG No.:

Lab Sample ID: ICV 140-42613/17 Calibration Date: 09/11/2020 05:15

Instrument ID: MG Calib Start Date: 09/10/2020 18:15

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 09/11/2020 06:50

Lab File ID: GI10ICV.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Ethyltoluene	Ave	1.453	1.331		1.83	2.00	-8.4	35.0
1,3,5-Trimethylbenzene	Ave	0.5949	0.6588		2.21	2.00	10.7	35.0
Alpha Methyl Styrene	Ave	0.5852	0.5954		2.03	2.00	1.7	35.0
Decane	Ave	1.070	1.126		2.10	2.00	5.2	35.0
tert-Butylbenzene	Ave	1.216	1.267		2.08	2.00	4.2	35.0
1,2,4-Trimethylbenzene	Ave	1.174	1.226		2.09	2.00	4.4	35.0
sec-Butylbenzene	Ave	1.780	1.855		2.08	2.00	4.2	35.0
1,3-Dichlorobenzene	Ave	0.8604	0.9102		2.12	2.00	5.8	35.0
Benzyl chloride	Ave	1.109	1.219		2.20	2.00	9.9	35.0
1,4-Dichlorobenzene	Ave	0.8563	0.9046		2.11	2.00	5.6	35.0
4-Isopropyltoluene	Ave	1.435	1.473		2.05	2.00	2.6	35.0
1,2,3-Trimethylbenzene	Ave	1.164	0.9057		1.56	2.00	-22.2	35.0
Butylcyclohexane	Ave	1.170	1.142		1.95	2.00	-2.4	35.0
1,2-Dichlorobenzene	Ave	0.8456	0.8970		2.12	2.00	6.1	35.0
Indane	Ave	1.202	1.211		2.01	2.00	0.7	35.0
Indene	Ave	1.038	0.9570		1.84	2.00	-7.8	35.0
Butylbenzene	Ave	1.553	1.623		2.09	2.00	4.6	35.0
Undecane	Ave	1.248	1.217		1.95	2.00	-2.5	35.0
1,2-Dibromo-3-Chloropropane	Ave	0.4260	0.3826		1.80	2.00	-10.2	35.0
1,2,4,5-Tetramethylbenzene	Ave	1.348	1.312		1.95	2.00	-2.7	35.0
Dodecane	Ave	1.173	1.204		2.05	2.00	2.6	35.0
1,2,4-Trichlorobenzene	Ave	0.7666	0.8420		2.20	2.00	9.8	35.0
Naphthalene	Ave	1.908	1.898		1.99	2.00	-0.5	35.0
Hexachlorobutadiene	Ave	0.7048	0.7377		2.09	2.00	4.7	35.0
1,2,3-Trichlorobenzene	Ave	0.7281	0.8368		2.30	2.00	14.9	35.0
2-Methylnaphthalene	Ave	0.8142	1.095		2.69	2.00	34.4	50.0
1-Methylnaphthalene	Ave	0.8548	1.173		2.74	2.00	37.2	50.0
4-Bromofluorobenzene (Surr)	Ave	0.7700	0.8032		4.84	4.64	4.3	35.0

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200910-16561.b\GI10ICV.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 11-Sep-2020 05:15:30 ALS Bottle#: 6 Worklist Smp#: 17
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016561-017
Misc. Info.: S127 100ML 324148
Operator ID: AFB Instrument ID: MG
Sublist:

Method: \\chromfs\Knoxville\ChromData\MG\20200910-16561.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 11-Sep-2020 08:46:10 Calib Date: 11-Sep-2020 06:50:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200910-16561.b\GI10IC09R.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1067

First Level Reviewer: tajh Date: 11-Sep-2020 08:07:36

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.806	8.827	-0.021	90	188704	4.80	4.80	
* 2 1,4-Difluorobenzene	114	10.990	11.006	-0.016	97	1009259	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.724	15.730	-0.006	90	1050054	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.363	17.369	-0.006	87	815285	4.64	4.84	
6 Chlorodifluoromethane	51	3.705	3.699	0.006	97	279042	2.00	1.99	
7 Propene	41	3.715	3.710	0.005	98	163440	2.00	2.18	
8 Dichlorodifluoromethane	85	3.764	3.764	0.000	100	368893	2.00	2.07	
9 Chloromethane	52	3.947	3.947	0.000	64	56285	2.00	1.88	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.947	3.958	-0.011	95	196826	2.00	1.96	
11 Acetaldehyde	44	4.093	4.104	-0.011	99	343482	10.0	9.34	
12 Vinyl chloride	62	4.114	4.120	-0.006	99	170962	2.00	2.04	
14 Butadiene	54	4.201	4.206	-0.005	64	145861	2.00	2.00	
13 Butane	43	4.201	4.206	-0.005	87	317844	2.00	2.08	
15 Bromomethane	94	4.519	4.530	-0.011	98	115087	2.00	1.99	
16 Chloroethane	64	4.659	4.670	-0.011	87	73503	2.00	1.96	
17 Ethanol	31	4.751	4.799	-0.048	97	316348	10.0	8.59	
18 Vinyl bromide	106	4.956	4.966	-0.010	96	96594	2.00	1.96	
19 2-Methylbutane	43	5.004	5.020	-0.016	93	211391	2.00	2.00	
20 Trichlorofluoromethane	101	5.225	5.236	-0.011	99	285442	2.00	1.97	
21 Acrolein	56	5.231	5.252	-0.021	35	43766	2.00	1.82	
22 Acetonitrile	40	5.295	5.322	-0.027	100	58881	2.00	1.85	
23 Acetone	58	5.355	5.371	-0.016	99	56518	2.00	2.01	
24 Pentane	72	5.446	5.457	-0.011	96	19887	2.00	1.95	
25 Isopropyl alcohol	45	5.441	5.484	-0.043	94	232606	2.00	2.59	
26 Ethyl ether	31	5.613	5.630	-0.017	89	173402	2.00	2.05	
27 1,1-Dichloroethene	96	5.921	5.942	-0.021	93	95219	2.00	2.12	
28 Acrylonitrile	53	6.029	6.056	-0.027	95	88443	2.00	2.07	
30 2-Methyl-2-propanol	59	6.045	6.077	-0.032	96	177941	2.00	2.16	
29 1,1,2-Trichloro-1,2,2-trifluoroe	101	6.099	6.115	-0.016	91	203151	2.00	2.06	
31 Methylene Chloride	84	6.271	6.293	-0.022	92	89902	2.00	2.01	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.288	6.304	-0.016	95	142891	2.00	2.18	
33 Carbon disulfide	76	6.433	6.449	-0.016	99	298393	2.00	2.01	
34 trans-1,2-Dichloroethene	96	7.080	7.096	-0.016	95	101955	2.00	2.01	
35 2-Methylpentane	43	7.096	7.113	-0.017	97	326757	2.00	1.93	
36 Methyl tert-butyl ether	73	7.210	7.231	-0.021	96	264353	2.00	2.01	
37 1,1-Dichloroethane	63	7.495	7.517	-0.022	98	243045	2.00	2.07	
38 Vinyl acetate	43	7.598	7.625	-0.027	100	372656	2.00	2.00	
39 2-Butanone (MEK)	72	8.051	8.078	-0.027	96	47956	2.00	1.87	
40 Hexane	56	8.072	8.094	-0.022	93	112125	2.00	2.00	
41 Isopropyl ether	45	8.234	8.261	-0.027	97	474598	2.00	2.06	
42 cis-1,2-Dichloroethene	96	8.477	8.498	-0.021	98	118800	2.00	2.07	
43 Ethyl acetate	43	8.666	8.693	-0.026	97	295954	2.00	1.93	
44 Chloroform	83	8.822	8.843	-0.021	96	252841	2.00	2.05	
45 Tert-butyl ethyl ether	59	8.914	8.935	-0.021	97	351830	2.00	1.86	
46 Tetrahydrofuran	42	9.226	9.248	-0.022	93	168871	2.00	2.06	
47 1,1,1-Trichloroethane	97	9.846	9.863	-0.017	95	254193	2.00	2.12	
48 1,2-Dichloroethane	62	9.949	9.976	-0.027	96	179722	2.00	1.98	
51 n-Butanol	31	10.440	10.445	-0.005	59	49144	2.00	1.81	
49 Cyclohexane	69	10.450	10.461	-0.011	80	60821	2.00	1.99	
50 Benzene	78	10.445	10.467	-0.022	95	392632	2.00	2.04	
52 Carbon tetrachloride	117	10.467	10.488	-0.021	95	257291	2.00	2.11	
53 2,3-Dimethylpentane	71	10.569	10.585	-0.016	91	90283	2.00	1.95	
54 Thiophene	84	10.720	10.736	-0.016	96	206478	2.00	2.01	
55 Isooctane	57	11.211	11.227	-0.016	97	799611	2.00	2.09	
56 n-Heptane	71	11.588	11.604	-0.016	96	145256	2.00	2.06	
57 1,2-Dichloropropane	63	11.664	11.680	-0.016	90	155968	2.00	1.91	
58 Trichloroethene	130	11.701	11.718	-0.017	92	151463	2.00	2.04	
59 Dibromomethane	93	11.782	11.799	-0.016	89	158587	2.00	2.03	
60 Dichlorobromomethane	83	11.928	11.944	-0.016	97	291413	2.00	2.11	
61 1,4-Dioxane	88	11.960	11.971	-0.011	96	43546	2.00	2.03	
62 Methyl methacrylate	41	12.030	12.041	-0.011	87	187932	2.00	1.95	
63 Methylcyclohexane	83	12.473	12.483	-0.010	88	292765	2.00	2.52	
64 4-Methyl-2-pentanone (MIBK)	43	12.882	12.893	-0.011	98	330154	2.00	2.02	
65 cis-1,3-Dichloropropene	75	12.931	12.942	-0.011	99	230648	2.00	2.06	
66 trans-1,3-Dichloropropene	75	13.627	13.637	-0.010	94	203903	2.00	2.04	
67 Toluene	91	13.756	13.761	-0.005	93	424200	2.00	1.99	
68 1,1,2-Trichloroethane	83	13.826	13.837	-0.011	97	135510	2.00	2.02	
69 2-Hexanone	58	14.220	14.225	-0.005	90	138563	2.00	1.93	
70 n-Octane	85	14.446	14.457	-0.011	98	157205	2.00	2.09	
71 Chlorodibromomethane	129	14.527	14.538	-0.011	96	266474	2.00	2.09	
72 Ethylene Dibromide	107	14.818	14.829	-0.011	99	245327	2.00	2.09	
73 Tetrachloroethene	129	14.899	14.905	-0.006	92	148044	2.00	1.97	
75 Chlorobenzene	112	15.773	15.778	-0.005	91	350741	2.00	2.03	
74 2,3-Dimethylheptane	43	15.794	15.800	-0.006	94	582275	2.00	1.84	
78 Ethylbenzene	91	16.064	16.069	-0.005	99	568522	2.00	1.99	
79 m-Xylene & p-Xylene	91	16.226	16.231	-0.005	98	887634	4.00	4.05	
80 n-Nonane	57	16.646	16.652	-0.006	96	382835	2.00	2.07	
81 Bromoform	173	16.668	16.673	-0.005	93	260253	2.00	2.09	
82 Styrene	104	16.689	16.695	-0.006	98	350907	2.00	2.12	
83 o-Xylene	91	16.749	16.754	-0.005	98	456775	2.00	1.98	
84 1,1,2,2-Tetrachloroethane	83	17.072	17.078	-0.006	98	362618	2.00	1.98	
85 1,2,3-Trichloropropane	110	17.229	17.234	-0.005	95	95349	2.00	1.98	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
86 Isopropylbenzene	105	17.336	17.342	-0.006	97	627601	2.00	2.02	
87 N-Propylbenzene	120	17.881	17.881	0.000	99	172015	2.00	1.94	
88 2-Chlorotoluene	126	17.919	17.930	-0.011	98	168678	2.00	1.98	
89 4-Ethyltoluene	105	18.027	18.032	-0.005	98	582368	2.00	1.83	
90 1,3,5-Trimethylbenzene	120	18.108	18.108	0.000	92	288244	2.00	2.21	
92 Alpha Methyl Styrene	118	18.334	18.334	0.000	88	260505	2.00	2.03	
93 n-Decane	57	18.393	18.399	-0.006	86	492453	2.00	2.10	
94 tert-Butylbenzene	119	18.528	18.528	0.000	91	554501	2.00	2.08	
95 1,2,4-Trimethylbenzene	105	18.539	18.544	-0.005	96	536593	2.00	2.09	
96 sec-Butylbenzene	105	18.798	18.798	0.000	98	811692	2.00	2.08	
97 1,3-Dichlorobenzene	146	18.809	18.814	-0.005	98	398241	2.00	2.12	
98 Benzyl chloride	91	18.884	18.884	0.000	97	533464	2.00	2.20	
99 1,4-Dichlorobenzene	146	18.895	18.900	-0.005	95	395781	2.00	2.11	
100 4-Isopropyltoluene	119	18.960	18.960	0.000	97	644415	2.00	2.05	
101 1,2,3-Trimethylbenzene	105	19.014	19.014	0.000	98	396246	2.00	1.56	
102 Butylcyclohexane	83	19.067	19.067	0.000	91	499543	2.00	1.95	
103 2,3-Dihydroindene	117	19.256	19.256	0.000	94	529640	2.00	2.01	
104 1,2-Dichlorobenzene	146	19.256	19.256	0.000	84	392471	2.00	2.12	
106 Indene	116	19.386	19.386	0.000	91	418722	2.00	1.84	
105 n-Butylbenzene	91	19.391	19.391	0.000	99	710248	2.00	2.09	
107 Undecane	57	19.704	19.704	0.000	94	532305	2.00	1.95	
108 1,2-Dibromo-3-Chloropropane	157	19.855	19.855	0.000	94	167409	2.00	1.80	
109 1,2,4,5-Tetramethylbenzene	119	20.141	20.146	-0.005	97	573857	2.00	1.95	
110 Dodecane	57	20.755	20.761	-0.006	92	526648	2.00	2.05	
111 1,2,4-Trichlorobenzene	180	20.949	20.949	0.000	94	368384	2.00	2.20	
112 Naphthalene	128	21.090	21.090	0.000	99	830385	2.00	1.99	
113 Hexachlorobutadiene	225	21.300	21.300	0.000	95	322767	2.00	2.09	
114 1,2,3-Trichlorobenzene	180	21.365	21.365	0.000	95	366126	2.00	2.30	
115 2-Methylnaphthalene	142	22.136	22.136	0.000	99	478899	2.00	2.69	
116 1-Methylnaphthalene	142	22.314	22.314	0.000	99	513147	2.00	2.74	
A 122 C8 Range	1	14.495	(14.398-14.592)		0	1744377	2.00	2.06	
S 123 1,2-Dichloroethene, Total	1				0		4.00	4.07	
S 124 Xylenes, Total	100				0		6.00	6.04	
T 136 2-Methylthiophene TIC	97	13.907	13.912	-0.005	95	323970	2.00	1.48	
T 137 3-Methylthiophene TIC	97	14.106	13.918	0.188	97	345554	2.00	1.58	
T 154 2-Ethylthiophene TIC	97	16.166	15.784	0.382	97	431033	2.00	1.97	
T 160 1,2-Dimethyl-4-Ethylbenzene TIC	119	19.758	19.763	-0.005	96	477969	2.00	2.18	
T 163 Benzo(b)thiophene TIC	134	21.192	21.192	0.000	94	467736	2.00	2.14	

Reagents:

40CV101S_00127	Amount Added: 100.00	Units: mL	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

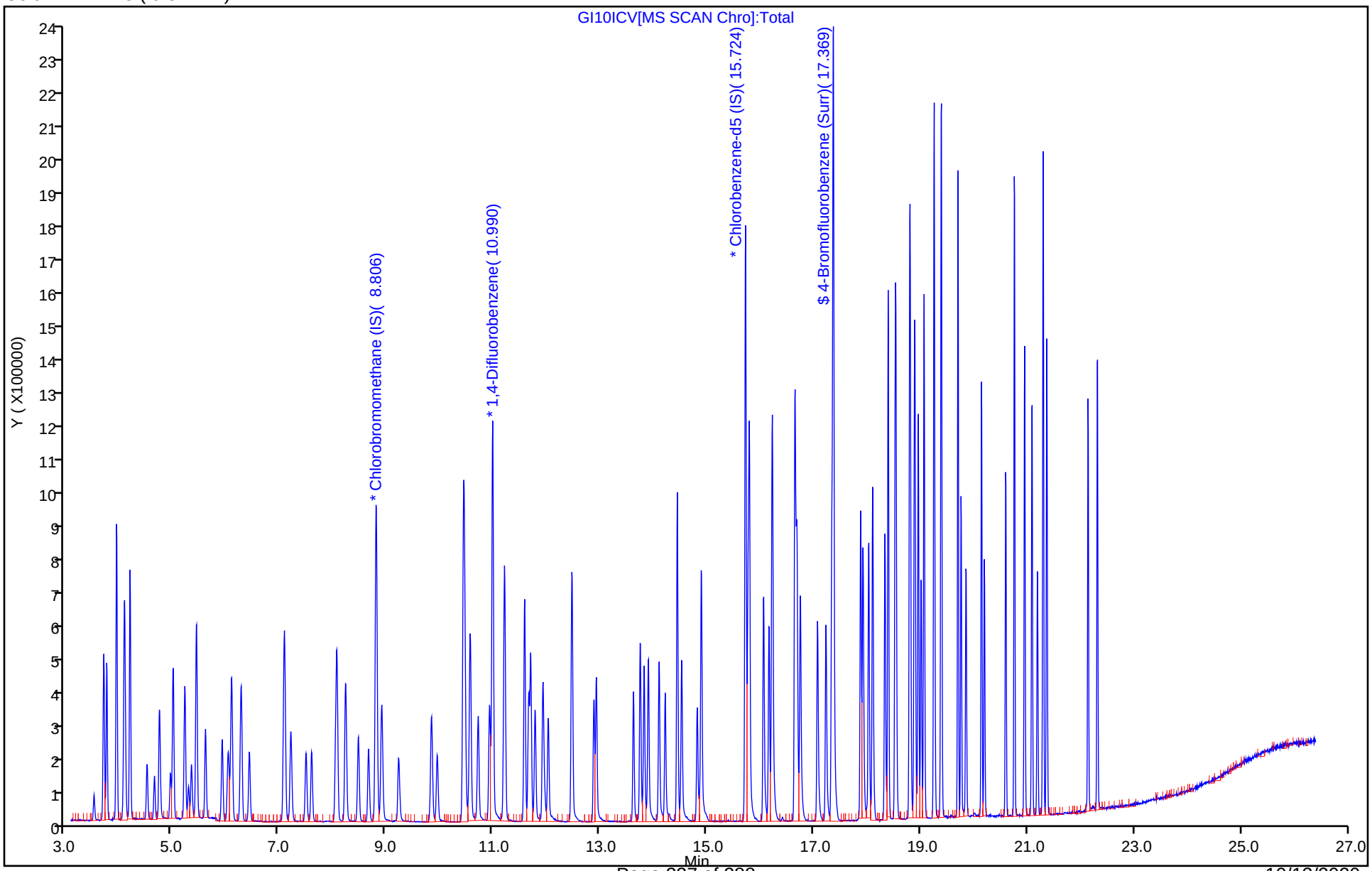
Report Date: 11-Sep-2020 08:55:03 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200910-16561.b\GI10ICV.D

Injection Date:	11-Sep-2020 05:15:30	Instrument ID:	MG	Operator ID:	AFB
Lims ID:	ICV			Worklist Smp#:	17
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20507-1

SDG No.:

Lab Sample ID: CCVIS 140-43140/2 Calibration Date: 09/30/2020 08:26

Instrument ID: MG Calib Start Date: 09/10/2020 18:15

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 09/11/2020 06:50

Lab File ID: GCCVI30.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorodifluoromethane	Ave	3.567	2.696		1.21	1.60	-24.4	30.0
Propene	Ave	1.905	1.566		1.32	1.60	-17.8	30.0
Dichlorodifluoromethane	Ave	4.533	3.642		1.29	1.60	-19.7	30.0
Chloromethane	Ave	0.7596	0.5273		1.11	1.60	-30.6*	30.0
1,2-Dichloro-1,1,2,2-tetrafluoroethane	Ave	2.554	2.209		1.38	1.60	-13.5	30.0
Acetaldehyde	Ave	0.9356	0.6803		5.82	8.00	-27.3	30.0
Vinyl chloride	Ave	2.128	1.643		1.24	1.60	-22.8	30.0
1,3-Butadiene	Ave	1.856	1.459		1.26	1.60	-21.4	30.0
Butane	Ave	3.880	2.956		1.22	1.60	-23.8	30.0
Bromomethane	Ave	1.471	1.314		1.43	1.60	-10.6	30.0
Chloroethane	Ave	0.9550	0.7666		1.28	1.60	-19.7	30.0
Ethanol	Ave	0.9363	0.6613		5.65	8.00	-29.4	30.0
Vinyl bromide	Ave	1.255	1.257		1.60	1.60	0.2	30.0
2-Methylbutane	Ave	2.685	2.154		1.28	1.60	-19.8	30.0
Trichlorofluoromethane	Ave	3.680	3.596		1.56	1.60	-2.3	30.0
Acrolein	Ave	0.6115	0.3914		1.02	1.60	-36.0*	30.0
Acetonitrile	Ave	0.8095	0.4878		0.964	1.60	-39.7*	30.0
Acetone	Ave	0.7143	0.6134		4.12	4.80	-14.1	30.0
Isopropyl alcohol	Ave	2.286	1.866		3.92	4.80	-18.4	30.0
Pentane	Ave	0.2600	0.2403		1.48	1.60	-7.6	30.0
Ethyl ether	Ave	2.147	1.392		1.04	1.60	-35.2*	30.0
1,1-Dichloroethene	Ave	1.144	1.113		1.56	1.60	-2.7	30.0
Acrylonitrile	Ave	1.085	0.8435		1.24	1.60	-22.3	30.0
tert-Butyl alcohol	Ave	2.095	2.020		1.54	1.60	-3.6	30.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	2.507	2.369		1.51	1.60	-5.5	30.0
Methylene Chloride	Ave	1.136	1.047		1.47	1.60	-7.8	30.0
3-Chloropropene	Ave	1.664	1.333		1.28	1.60	-19.9	30.0
Carbon disulfide	Ave	3.783	3.482		1.47	1.60	-8.0	30.0
trans-1,2-Dichloroethene	Ave	1.291	1.198		1.48	1.60	-7.2	30.0
2-Methylpentane	Ave	4.307	3.851		1.43	1.60	-10.6	30.0
Methyl tert-butyl ether	Ave	3.353	2.583		1.23	1.60	-23.0	30.0
1,1-Dichloroethane	Ave	2.994	2.530		1.35	1.60	-15.5	30.0
Vinyl acetate	Ave	4.728	3.308		1.12	1.60	-30.0	30.0
2-Butanone (MEK)	Ave	0.6531	0.4854		1.19	1.60	-25.7	30.0
Hexane	Ave	1.428	1.221		1.37	1.60	-14.5	30.0
Isopropyl ether	Ave	5.865	4.461		1.22	1.60	-23.9	30.0
cis-1,2-Dichloroethene	Ave	1.463	1.268		1.39	1.60	-13.3	30.0
Ethyl acetate	Ave	3.891	2.753		1.13	1.60	-29.3	30.0
Chloroform	Ave	3.134	2.653		1.35	1.60	-15.4	30.0
Tert-butyl ethyl ether	Ave	4.810	3.488		1.16	1.60	-27.5	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20507-1

SDG No.:

Lab Sample ID: CCVIS 140-43140/2 Calibration Date: 09/30/2020 08:26

Instrument ID: MG Calib Start Date: 09/10/2020 18:15

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 09/11/2020 06:50

Lab File ID: GCCVI30.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Tetrahydrofuran	Ave	2.081	1.498		1.15	1.60	-28.0	30.0
1,1,1-Trichloroethane	Ave	3.043	2.725		1.43	1.60	-10.5	30.0
1,2-Dichloroethane	Ave	0.4311	0.3745		1.39	1.60	-13.1	30.0
1-Butanol	Ave	0.1295	0.1190		1.47	1.60	-8.1	30.0
Benzene	Ave	0.9163	0.8011		1.40	1.60	-12.6	30.0
Cyclohexane	Ave	0.1456	0.1421		1.56	1.60	-2.4	30.0
Carbon tetrachloride	Ave	0.5812	0.6280		1.73	1.60	8.0	30.0
2,3-Dimethylpentane	Ave	0.2200	0.2109		1.53	1.60	-4.1	30.0
Thiophene	Ave	0.4876	0.4669		1.53	1.60	-4.2	30.0
2,2,4-Trimethylpentane	Ave	1.820	1.765		1.55	1.60	-3.1	30.0
Heptane	Ave	0.3352	0.3174		1.51	1.60	-5.3	30.0
1,2-Dichloropropane	Ave	0.3884	0.3214		1.32	1.60	-17.2	30.0
Trichloroethene	Ave	0.3539	0.3936		1.78	1.60	11.2	30.0
Dibromomethane	Ave	0.3724	0.3550		1.53	1.60	-4.7	30.0
Bromodichloromethane	Ave	0.6581	0.6465		1.57	1.60	-1.8	30.0
1,4-Dioxane	Ave	0.1022	0.0916		1.43	1.60	-10.4	30.0
Methyl methacrylate	Ave	0.4576	0.3535		1.24	1.60	-22.8	30.0
Methylcyclohexane	Ave	0.5523	0.5315		1.54	1.60	-3.8	30.0
4-Methyl-2-pentanone (MIBK)	Ave	0.7781	0.6828		1.40	1.60	-12.2	30.0
cis-1,3-Dichloropropene	Ave	0.5319	0.4667		1.40	1.60	-12.2	30.0
trans-1,3-Dichloropropene	Ave	0.4564	0.3720		1.30	1.60	-18.5	30.0
Toluene	Ave	0.9756	0.7946		1.30	1.60	-18.5	30.0
1,1,2-Trichloroethane	Ave	0.3068	0.2565		1.34	1.60	-16.4	30.0
2-Hexanone	Ave	0.3282	0.2919		1.42	1.60	-11.1	30.0
Octane	Ave	0.3434	0.3093		1.44	1.60	-9.9	30.0
Dibromochloromethane	Ave	0.5828	0.5643		1.55	1.60	-3.2	30.0
1,2-Dibromoethane (EDB)	Ave	0.5374	0.4846		1.44	1.60	-9.8	30.0
Tetrachloroethene	Ave	0.3435	0.3287		1.53	1.60	-4.3	30.0
Chlorobenzene	Ave	0.7880	0.6907		1.40	1.60	-12.3	30.0
2,3-Dimethylheptane	Ave	1.443	1.126		1.25	1.60	-22.0	30.0
Ethylbenzene	Ave	1.304	1.054		1.29	1.60	-19.2	30.0
m-Xylene & p-Xylene	Ave	1.001	0.8061		2.58	3.20	-19.4	30.0
Nonane	Ave	0.8449	0.6619		1.25	1.60	-21.7	30.0
Bromoform	Ave	0.5679	0.5990		1.69	1.60	5.5	30.0
Styrene	Ave	0.7578	0.6729		1.42	1.60	-11.2	30.0
o-Xylene	Ave	1.053	0.8310		1.26	1.60	-21.1	30.0
1,1,2,2-Tetrachloroethane	Ave	0.8364	0.6616		1.27	1.60	-20.9	30.0
1,2,3-Trichloropropane	Ave	0.2196	0.1851		1.35	1.60	-15.7	30.0
Isopropylbenzene	Ave	1.423	1.162		1.31	1.60	-18.3	30.0
Propylbenzene	Ave	0.4054	0.3394		1.34	1.60	-16.3	30.0
2-Chlorotoluene	Ave	0.3892	0.3398		1.40	1.60	-12.7	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20507-1

SDG No.:

Lab Sample ID: CCVIS 140-43140/2 Calibration Date: 09/30/2020 08:26

Instrument ID: MG Calib Start Date: 09/10/2020 18:15

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 09/11/2020 06:50

Lab File ID: GCCVI30.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Ethyltoluene	Ave	1.453	1.155		1.27	1.60	-20.5	30.0
1,3,5-Trimethylbenzene	Ave	0.5949	0.5127		1.38	1.60	-13.8	30.0
Alpha Methyl Styrene	Ave	0.5852	0.5058		1.38	1.60	-13.6	30.0
Decane	Ave	1.070	0.8191		1.23	1.60	-23.4	30.0
tert-Butylbenzene	Ave	1.216	1.074		1.41	1.60	-11.6	30.0
1,2,4-Trimethylbenzene	Ave	1.174	0.999		1.36	1.60	-14.9	30.0
sec-Butylbenzene	Ave	1.780	1.503		1.35	1.60	-15.5	30.0
1,3-Dichlorobenzene	Ave	0.8604	0.8423		1.57	1.60	-2.1	30.0
Benzyl chloride	Ave	1.109	0.9167		1.32	1.60	-17.4	30.0
1,4-Dichlorobenzene	Ave	0.8563	0.8439		1.58	1.60	-1.4	30.0
4-Isopropyltoluene	Ave	1.435	1.238		1.38	1.60	-13.7	30.0
1,2,3-Trimethylbenzene	Ave	1.164	0.999		1.37	1.60	-14.2	30.0
Butylcyclohexane	Ave	1.170	0.9116		1.25	1.60	-22.1	30.0
1,2-Dichlorobenzene	Ave	0.8456	0.8188		1.55	1.60	-3.2	30.0
Indane	Ave	1.202	1.046		1.39	1.60	-13.1	30.0
Indene	Ave	1.038	0.9392		1.45	1.60	-9.5	30.0
Butylbenzene	Ave	1.553	1.198		1.23	1.60	-22.9	30.0
Undecane	Ave	1.248	0.8991		1.15	1.60	-28.0	30.0
1,2-Dibromo-3-Chloropropane	Ave	0.4260	0.4021		1.51	1.60	-5.6	30.0
1,2,4,5-Tetramethylbenzene	Ave	1.348	1.111		1.32	1.60	-17.6	30.0
Dodecane	Ave	1.173	0.8422		1.15	1.60	-28.2	30.0
1,2,4-Trichlorobenzene	Ave	0.7666	0.7153		1.49	1.60	-6.7	30.0
Naphthalene	Ave	1.908	1.374		1.15	1.60	-28.0	30.0
Hexachlorobutadiene	Ave	0.7048	0.6796		1.54	1.60	-3.6	30.0
1,2,3-Trichlorobenzene	Ave	0.7281	0.6643		1.46	1.60	-8.8	30.0
2-Methylnaphthalene	Ave	0.8142	0.8449		1.66	1.60	3.8	50.0
1-Methylnaphthalene	Ave	0.8548	0.9349		1.75	1.60	9.4	50.0
4-Bromofluorobenzene (Surr)	Ave	0.7700	0.7368		4.44	4.64	-4.3	30.0

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GCCVI30.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 30-Sep-2020 08:26:30 ALS Bottle#: 11 Worklist Smp#: 2
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016761-002
Misc. Info.: P121 80ML
Operator ID: HMT Instrument ID: MG
Sublist: chrom-MG_TO15*sub17

Method: \\chromfs\Knoxville\ChromData\MG\20200929-16761.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 01-Oct-2020 14:55:04 Calib Date: 11-Sep-2020 06:50:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200910-16561.b\GI10IC09R.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1024

First Level Reviewer: khachitpongpanits Date: 01-Oct-2020 14:55:04

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.795	8.795	0.000	94	270463	4.80	4.80	s
* 2 1,4-Difluorobenzene	114	10.979	10.979	0.000	95	1205820	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.719	15.719	0.000	86	1348046	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.364	17.364	0.000	96	960135	4.64	4.44	
6 Chlorodifluoromethane	51	3.699	3.699	0.000	96	243024	1.60	1.21	
7 Propene	41	3.716	3.716	0.000	97	141149	1.60	1.32	
8 Dichlorodifluoromethane	85	3.764	3.764	0.000	100	328333	1.60	1.29	
9 Chloromethane	52	3.942	3.942	0.000	98	47540	1.60	1.11	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.947	3.947	0.000	94	199175	1.60	1.38	
11 Acetaldehyde	44	4.093	4.093	0.000	95	306680	8.00	5.82	
12 Vinyl chloride	62	4.109	4.109	0.000	98	148094	1.60	1.24	
13 Butane	43	4.195	4.195	0.000	86	266505	1.60	1.22	
14 Butadiene	54	4.195	4.195	0.000	64	131549	1.60	1.26	
15 Bromomethane	94	4.514	4.514	0.000	98	118480	1.60	1.43	
16 Chloroethane	64	4.654	4.654	0.000	95	69115	1.60	1.28	
17 Ethanol	31	4.745	4.745	0.000	95	298114	8.00	5.65	
18 Vinyl bromide	106	4.950	4.950	0.000	98	113361	1.60	1.60	
19 2-Methylbutane	43	5.004	5.004	0.000	92	194166	1.60	1.28	
20 Trichlorofluoromethane	101	5.220	5.220	0.000	99	324168	1.60	1.56	
21 Acrolein	56	5.225	5.225	0.000	32	35284	1.60	1.02	
22 Acetonitrile	40	5.285	5.285	0.000	100	43980	1.60	0.9642	
23 Acetone	58	5.339	5.339	0.000	99	165893	4.80	4.12	
25 Isopropyl alcohol	45	5.430	5.430	0.000	92	504641	4.80	3.92	
24 Pentane	72	5.436	5.436	0.000	93	21667	1.60	1.48	
26 Ethyl ether	31	5.608	5.608	0.000	94	125482	1.60	1.04	
27 1,1-Dichloroethene	96	5.921	5.921	0.000	95	100381	1.60	1.56	
28 Acrylonitrile	53	6.018	6.018	0.000	97	76049	1.60	1.24	
30 2-Methyl-2-propanol	59	6.040	6.040	0.000	95	182102	1.60	1.54	
29 1,1,2-Trichloro-1,2,2-trifluoroe	101	6.099	6.099	0.000	96	213559	1.60	1.51	
31 Methylene Chloride	84	6.266	6.266	0.000	94	94436	1.60	1.47	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.282	6.282	0.000	93	120216	1.60	1.28	
33 Carbon disulfide	76	6.428	6.428	0.000	100	313962	1.60	1.47	
34 trans-1,2-Dichloroethene	96	7.075	7.075	0.000	96	107978	1.60	1.48	
35 2-Methylpentane	43	7.086	7.086	0.000	97	347228	1.60	1.43	
36 Methyl tert-butyl ether	73	7.204	7.204	0.000	97	232890	1.60	1.23	
37 1,1-Dichloroethane	63	7.485	7.485	0.000	98	228066	1.60	1.35	
38 Vinyl acetate	43	7.593	7.593	0.000	100	298191	1.60	1.12	
39 2-Butanone (MEK)	72	8.046	8.046	0.000	95	43760	1.60	1.19	
40 Hexane	56	8.067	8.067	0.000	91	110095	1.60	1.37	
41 Isopropyl ether	45	8.224	8.224	0.000	98	402201	1.60	1.22	
42 cis-1,2-Dichloroethene	96	8.466	8.466	0.000	97	114304	1.60	1.39	
43 Ethyl acetate	43	8.655	8.655	0.000	98	248161	1.60	1.13	
44 Chloroform	83	8.811	8.811	0.000	96	239145	1.60	1.35	
45 Tert-butyl ethyl ether	59	8.903	8.903	0.000	96	314492	1.60	1.16	
46 Tetrahydrofuran	42	9.216	9.216	0.000	94	135044	1.60	1.15	
47 1,1,1-Trichloroethane	97	9.836	9.836	0.000	96	245647	1.60	1.43	
48 1,2-Dichloroethane	62	9.938	9.938	0.000	96	150525	1.60	1.39	
51 n-Butanol	31	10.424	10.424	0.000	63	47816	1.60	1.47	
49 Cyclohexane	69	10.434	10.434	0.000	84	57102	1.60	1.56	
50 Benzene	78	10.434	10.434	0.000	96	321997	1.60	1.40	
52 Carbon tetrachloride	117	10.461	10.461	0.000	97	252401	1.60	1.73	
53 2,3-Dimethylpentane	71	10.558	10.558	0.000	91	84774	1.60	1.53	
54 Thiophene	84	10.709	10.709	0.000	96	187665	1.60	1.53	
55 Isooctane	57	11.200	11.200	0.000	99	709291	1.60	1.55	
56 n-Heptane	71	11.578	11.578	0.000	95	127584	1.60	1.51	
57 1,2-Dichloropropane	63	11.653	11.653	0.000	92	129184	1.60	1.32	
58 Trichloroethene	130	11.691	11.691	0.000	95	158202	1.60	1.78	
59 Dibromomethane	93	11.772	11.772	0.000	97	142686	1.60	1.53	
60 Dichlorobromomethane	83	11.923	11.923	0.000	98	259863	1.60	1.57	
61 1,4-Dioxane	88	11.950	11.950	0.000	94	36825	1.60	1.43	
62 Methyl methacrylate	41	12.020	12.020	0.000	90	142071	1.60	1.24	
63 Methylcyclohexane	83	12.467	12.467	0.000	91	213627	1.60	1.54	
64 4-Methyl-2-pentanone (MIBK)	43	12.877	12.877	0.000	98	274455	1.60	1.40	
65 cis-1,3-Dichloropropene	75	12.920	12.920	0.000	96	187597	1.60	1.40	
66 trans-1,3-Dichloropropene	75	13.616	13.616	0.000	98	167171	1.60	1.30	
67 Toluene	91	13.745	13.745	0.000	95	357072	1.60	1.30	
68 1,1,2-Trichloroethane	83	13.821	13.821	0.000	98	115240	1.60	1.34	
69 2-Hexanone	58	14.214	14.214	0.000	91	131146	1.60	1.42	
70 n-Octane	85	14.441	14.441	0.000	97	138992	1.60	1.44	
71 Chlorodibromomethane	129	14.516	14.516	0.000	98	253562	1.60	1.55	
72 Ethylene Dibromide	107	14.813	14.813	0.000	99	217768	1.60	1.44	
73 Tetrachloroethene	129	14.889	14.889	0.000	93	147721	1.60	1.53	
75 Chlorobenzene	112	15.768	15.768	0.000	94	310369	1.60	1.40	
74 2,3-Dimethylheptane	43	15.789	15.789	0.000	96	505940	1.60	1.25	
78 Ethylbenzene	91	16.059	16.059	0.000	98	473464	1.60	1.29	
79 m-Xylene & p-Xylene	91	16.220	16.220	0.000	97	724422	3.20	2.58	
80 n-Nonane	57	16.646	16.646	0.000	97	297433	1.60	1.25	
81 Bromoform	173	16.663	16.663	0.000	96	269145	1.60	1.69	
82 Styrene	104	16.684	16.684	0.000	97	302351	1.60	1.42	
83 o-Xylene	91	16.744	16.744	0.000	99	373415	1.60	1.26	
84 1,1,2,2-Tetrachloroethane	83	17.067	17.067	0.000	98	297294	1.60	1.27	
85 1,2,3-Trichloropropane	110	17.229	17.229	0.000	96	83194	1.60	1.35	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
86 Isopropylbenzene	105	17.331	17.331	0.000	96	522292	1.60	1.31	
87 N-Propylbenzene	120	17.876	17.876	0.000	99	152525	1.60	1.34	
88 2-Chlorotoluene	126	17.919	17.919	0.000	97	152701	1.60	1.40	
89 4-Ethyltoluene	105	18.027	18.027	0.000	98	518796	1.60	1.27	
90 1,3,5-Trimethylbenzene	120	18.102	18.102	0.000	94	230403	1.60	1.38	
92 Alpha Methyl Styrene	118	18.329	18.329	0.000	91	227272	1.60	1.38	
93 n-Decane	57	18.394	18.394	0.000	88	368076	1.60	1.23	
94 tert-Butylbenzene	119	18.523	18.523	0.000	95	482681	1.60	1.41	
95 1,2,4-Trimethylbenzene	105	18.539	18.539	0.000	95	448882	1.60	1.36	
96 sec-Butylbenzene	105	18.793	18.793	0.000	98	675402	1.60	1.35	
97 1,3-Dichlorobenzene	146	18.809	18.809	0.000	96	378499	1.60	1.57	
98 Benzyl chloride	91	18.879	18.879	0.000	99	411896	1.60	1.32	
99 1,4-Dichlorobenzene	146	18.895	18.895	0.000	96	379219	1.60	1.58	
100 4-Isopropyltoluene	119	18.954	18.954	0.000	97	556227	1.60	1.38	
101 1,2,3-Trimethylbenzene	105	19.008	19.008	0.000	97	448733	1.60	1.37	
102 Butylcyclohexane	83	19.068	19.068	0.000	93	409621	1.60	1.25	
103 2,3-Dihydroindene	117	19.251	19.251	0.000	94	469795	1.60	1.39	
104 1,2-Dichlorobenzene	146	19.251	19.251	0.000	86	367907	1.60	1.55	
106 Indene	116	19.380	19.380	0.000	94	422043	1.60	1.45	
105 n-Butylbenzene	91	19.386	19.386	0.000	98	538145	1.60	1.23	
107 Undecane	57	19.699	19.699	0.000	96	404007	1.60	1.15	
108 1,2-Dibromo-3-Chloropropane	157	19.850	19.850	0.000	96	180676	1.60	1.51	
109 1,2,4,5-Tetramethylbenzene	119	20.141	20.141	0.000	98	499139	1.60	1.32	
110 Dodecane	57	20.755	20.755	0.000	94	378461	1.60	1.15	
111 1,2,4-Trichlorobenzene	180	20.950	20.950	0.000	93	321416	1.60	1.49	
112 Naphthalene	128	21.084	21.084	0.000	99	617286	1.60	1.15	
113 Hexachlorobutadiene	225	21.300	21.300	0.000	96	305387	1.60	1.54	
114 1,2,3-Trichlorobenzene	180	21.365	21.365	0.000	94	298496	1.60	1.46	
115 2-Methylnaphthalene	142	22.136	22.136	0.000	98	379693	1.60	1.66	
116 1-Methylnaphthalene	142	22.314	22.314	0.000	98	420137	1.60	1.75	
A 122 C8 Range	1	14.484	(14.382-14.565)		0	1430782	1.60	1.32	
S 123 1,2-Dichloroethene, Total	1				0		3.20	2.87	
S 124 Xylenes, Total	100				0		4.80	3.84	

QC Flag Legend

Processing Flags

s - Failed ISTD Recovery Test

Reagents:

40CV101P_00121	Amount Added: 80.00	Units: mL	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

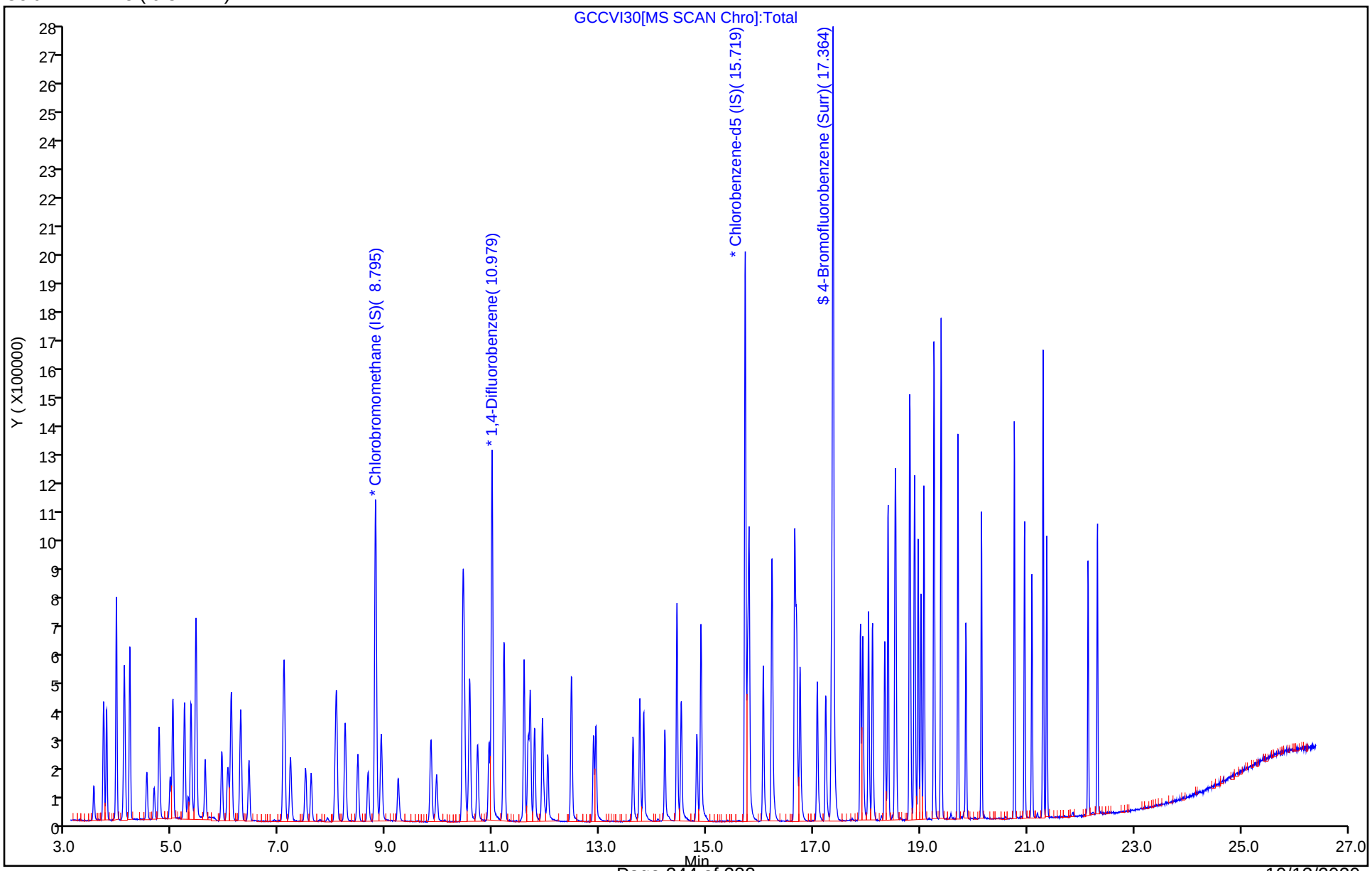
Report Date: 01-Oct-2020 14:55:05 Chrom Revision: 2.3 24-Sep-2020 19:22:38

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GCCVI30.D

Injection Date:	30-Sep-2020 08:26:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	CCVIS			Worklist Smp#:	2
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200910-16561.b\GBFBI10Z.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 10-Sep-2020 16:30:30 ALS Bottle#: 16 Worklist Smp#: 1
Injection Vol: 500.0 mL Dil. Factor: 1.0000
Sample Info: 140-0016535-007
Misc. Info.: TUNE
Operator ID: HMT Instrument ID: MG

Method: \\chromfs\Knoxville\ChromData\MG\20200910-16561.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 11-Sep-2020 08:45:09 Calib Date: 11-Sep-2020 06:50:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200910-16561.b\GI10IC09R.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1067

First Level Reviewer: barlozhetskayaa Date: 10-Sep-2020 18:16:34

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
$ 5 BFB	95	5.052	5.052	0.000	0	604068	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

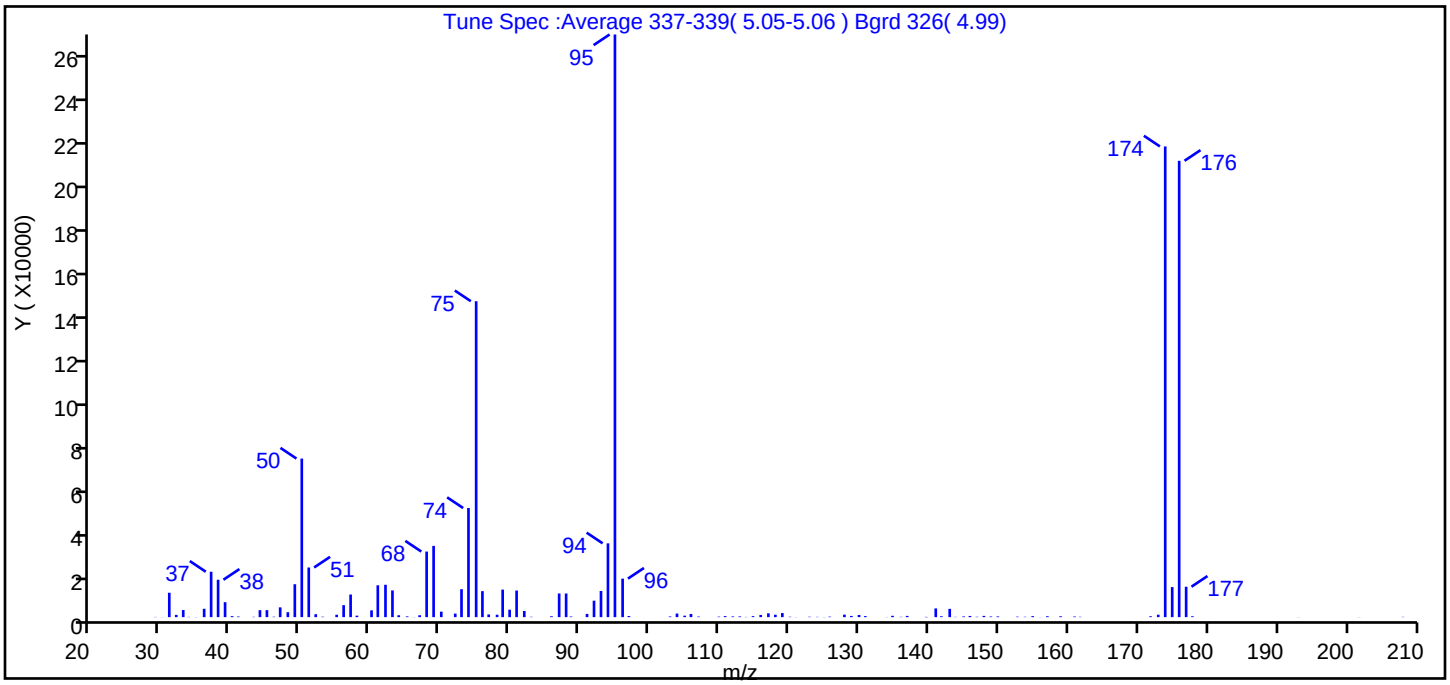
40MXBFB_00001 Amount Added: 40.00 Units: mL

MS Tune Report

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200910-16561.b\GBFBI10Z.D
Injection Date: 10-Sep-2020 16:30:30 Instrument ID: MG
Lims ID: BFB
Client ID:
Operator ID: HMT ALS Bottle#: 16 Worklist Smp#: 1
Injection Vol: 500.0 mL Dil. Factor: 1.0000
Method: MG_TO15 Limit Group: MSA TO14A_15 Routine ICAL
Tune Method: BFB Method 8260

$ 5 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	27.2
75	30 to 60% of m/z 95	54.2
96	5 to 9% of m/z 95	6.6
173	Less than 2% of m/z 174	0.4 (0.5)
174	50 to 120% of m/z 95	80.8
175	5 to 9% of m/z 174	5.2 (6.4)
176	Greater than 95% but less than 101% of m/z 174	78.3 (96.9)
177	5 to 9% of m/z 176	5.2 (6.7)

Data File: \\chromfs\Knoxville\ChromData\MG\20200910-16561.b\GBFBI10Z.D\MG_TO15.rslt\spectra.d
Injection Date: 10-Sep-2020 16:30:30
Spectrum: Tune Spec :Average 337-339(5.05-5.06) Bgrd 326(4.99)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 121

m/z	Y	m/z	Y	m/z	Y	m/z	Y
29.00	94	63.00	12019	103.00	295	141.00	3924
30.00	48	64.00	852	104.00	1620	142.00	393
31.00	10981	65.00	340	105.00	662	143.00	3724
32.00	1023	66.00	55	106.00	1431	144.00	120
33.00	3214	67.00	859	107.00	258	145.00	313
34.00	118	68.00	29504	110.00	224	146.00	536
35.00	64	69.00	32064	111.00	466	147.00	168
36.00	3763	70.00	2469	112.00	317	148.00	568
37.00	20432	72.00	1599	113.00	324	149.00	291
38.00	16832	73.00	12577	114.00	95	150.00	328
39.00	6730	74.00	49096	115.00	447	153.00	219
40.00	458	75.00	142144	116.00	977	154.00	168
41.00	277	76.00	11700	117.00	1712	155.00	460
43.00	141	77.00	1216	118.00	1082	156.00	51
44.00	3145	78.00	1087	119.00	1839	157.00	400
45.00	3157	79.00	12388	120.00	178	159.00	384
46.00	192	80.00	3349	121.00	52	161.00	281
47.00	4397	81.00	11975	123.00	184	162.00	154
48.00	2221	82.00	2756	124.00	128	172.00	388
49.00	14805	83.00	161	125.00	68	173.00	1099
50.00	71344	86.00	397	126.00	233	174.00	211776
51.00	22336	87.00	10652	128.00	1124	175.00	13532
52.00	1329	88.00	10642	129.00	547	176.00	205312
53.00	196	89.00	279	130.00	973	177.00	13692
55.00	1081	91.00	1448	131.00	474	178.00	389
56.00	5391	92.00	7403	134.00	58	193.00	56
57.00	10177	93.00	11777	135.00	606	202.00	57
58.00	673	94.00	33208	136.00	146	208.00	125
60.00	3069	95.00	262144	137.00	558		
61.00	14333	96.00	17328	140.00	122		
62.00	14562	97.00	495	140.00	69		

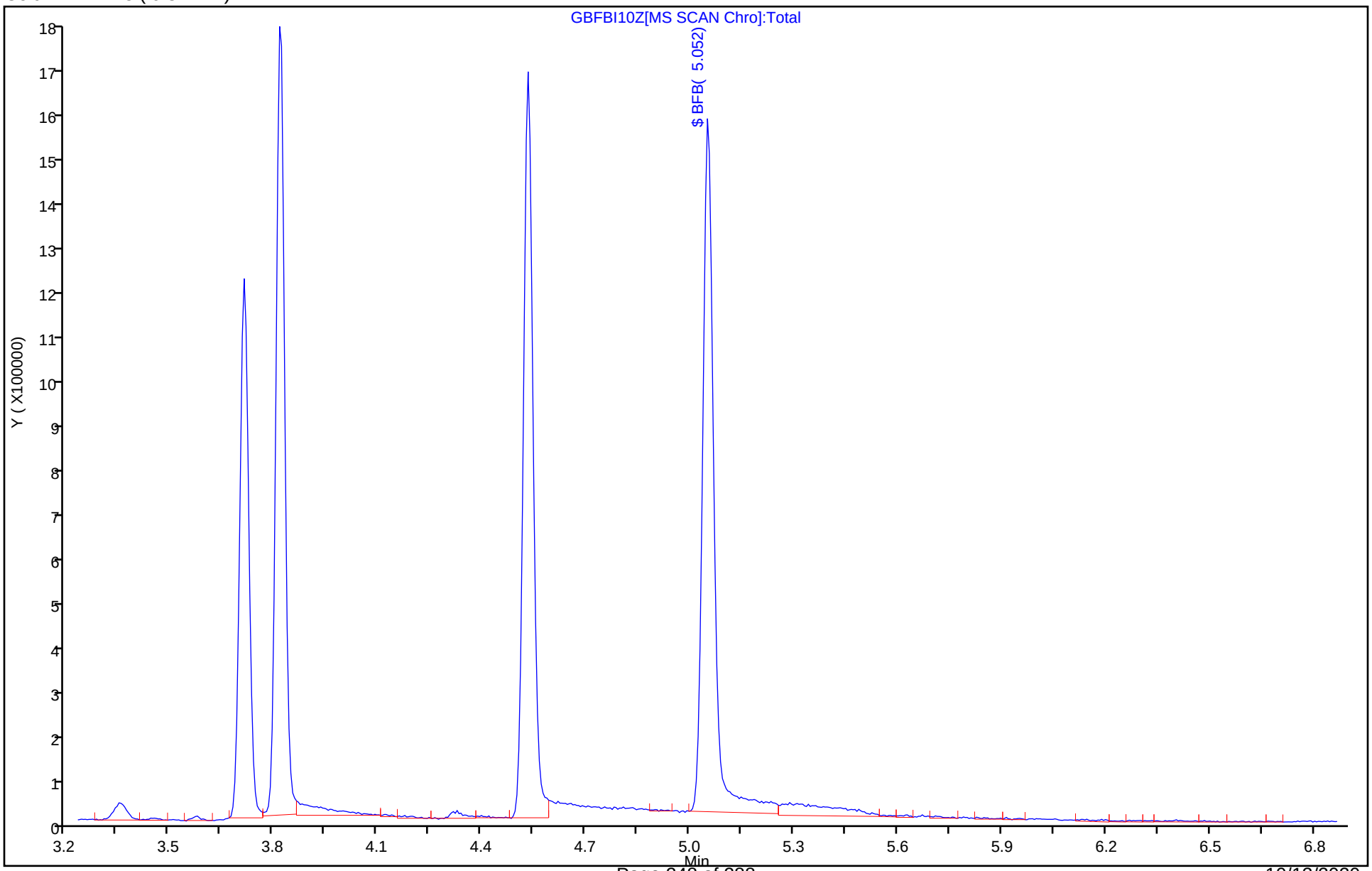
Report Date: 11-Sep-2020 08:45:09 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200910-16561.b\GBFBI10Z.D

Injection Date:	10-Sep-2020 16:30:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	500.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GBFBI30.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	30-Sep-2020 07:53:30	ALS Bottle#:	16	Worklist Smp#:	1
Injection Vol:	500.0 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016761-001				
Misc. Info.:	TUNE				
Operator ID:	HMT	Instrument ID:	MG		
Method:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\MG_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	01-Oct-2020 14:50:15	Calib Date:	11-Sep-2020 06:50:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MG\20200910-16561.b\GI10IC09R.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1024				
First Level Reviewer: khachitpongpanits		Date:	01-Oct-2020 14:50:15		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
$ 5 BFB	95	5.014	5.014	0.000	0	577661	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

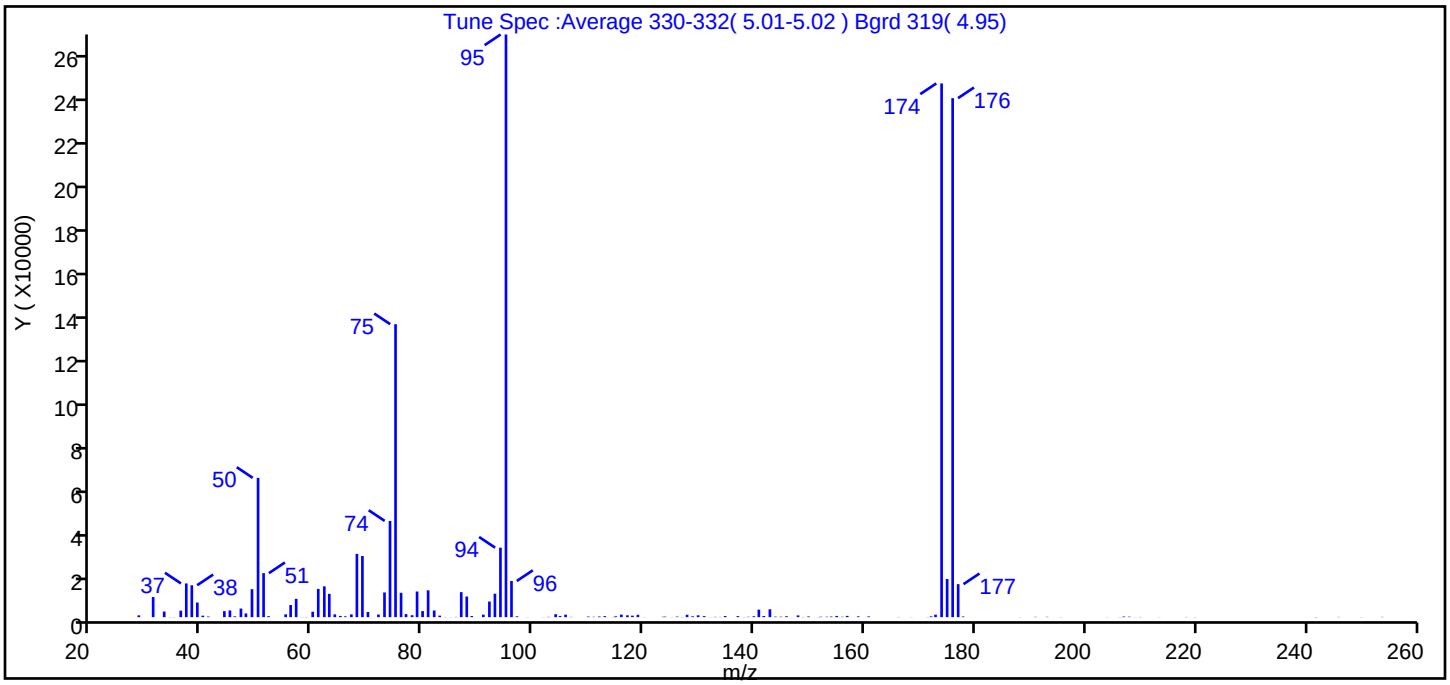
40MXBFB_00001 Amount Added: 40.00 Units: mL

MS Tune Report

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GBFBI30.D
Injection Date: 30-Sep-2020 07:53:30 Instrument ID: MG
Lims ID: BFB
Client ID:
Operator ID: HMT ALS Bottle#: 16 Worklist Smp#: 1
Injection Vol: 500.0 mL Dil. Factor: 1.0000
Method: MG_TO15 Limit Group: MSA TO14A_15 Routine ICAL
Tune Method: BFB Method 8260

$ 5 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	23.9
75	30 to 60% of m/z 95	50.3
96	5 to 9% of m/z 95	6.2
173	Less than 2% of m/z 174	0.4 (0.5)
174	50 to 120% of m/z 95	91.6
175	5 to 9% of m/z 174	6.5 (7.1)
176	Greater than 95% but less than 101% of m/z 174	89.1 (97.2)
177	5 to 9% of m/z 176	5.7 (6.4)

Data File: \\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GBFBI30.D\MG_TO15.rslt\spectra.d
Injection Date: 30-Sep-2020 07:53:30
Spectrum: Tune Spec :Average 330-332(5.01-5.02) Bgrd 319(4.95)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 144

m/z	Y	m/z	Y	m/z	Y	m/z	Y
28.00	798	72.00	1192	115.00	121	153.00	189
31.00	9096	73.00	11159	115.00	363	154.00	271
33.00	2530	74.00	43520	116.00	1143	155.00	548
34.00	65	75.00	132480	117.00	821	156.00	164
35.00	66	76.00	11012	118.00	673	157.00	570
36.00	2923	77.00	1381	119.00	1058	159.00	352
37.00	15242	78.00	871	120.00	53	161.00	323
38.00	14430	79.00	11595	123.00	143	166.00	73
39.00	6607	80.00	2750	124.00	229	168.00	53
40.00	665	81.00	12124	125.00	52	171.00	75
41.00	277	82.00	2995	126.00	252	172.00	347
44.00	2710	83.00	682	127.00	75	173.00	1112
45.00	3031	84.00	75	128.00	1077	174.00	241344
46.00	371	85.00	54	129.00	365	175.00	17232
47.00	3880	86.00	108	130.00	834	176.00	234688
48.00	1670	87.00	11309	131.00	465	177.00	14919
49.00	12642	88.00	9318	132.00	52	178.00	299
50.00	62984	89.00	496	133.00	134	188.00	50
51.00	19896	91.00	1133	134.00	98	191.00	140
52.00	434	92.00	7063	135.00	507	193.00	144
55.00	1259	93.00	10598	137.00	457	196.00	57
56.00	5475	94.00	31424	138.00	61	204.00	50
57.00	8284	95.00	263488	139.00	157	206.00	65
58.00	58	96.00	16359	140.00	391	207.00	278
59.00	80	97.00	368	141.00	3374	208.00	206
60.00	2446	99.00	57	142.00	512	209.00	43
61.00	12767	102.00	52	143.00	3555	210.00	87
62.00	13925	103.00	126	144.00	237	213.00	56
63.00	10527	104.00	1314	145.00	209	218.00	86
64.00	1256	105.00	492	146.00	405	220.00	72
65.00	546	106.00	1110	147.00	6	242.00	50
66.00	367	107.00	112	148.00	782	242.00	60
67.00	1252	110.00	269	149.00	81	246.00	100

Report Date: 01-Oct-2020 14:50:16 Chrom Revision: 2.3 24-Sep-2020 19:22:38
Data File: \\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GBFBI30.D\MG_TO15.rslt\spectra.d
Injection Date: 30-Sep-2020 07:53:30
Spectrum: Tune Spec :Average 330-332(5.01-5.02) Bgrd 319(4.95)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 144

m/z	Y	m/z	Y	m/z	Y	m/z	Y
68.00	28600	111.00	152	150.00	316	250.00	60
69.00	27664	112.00	307	152.00	69	253.00	5
70.00	2336	113.00	463	152.00	194	254.00	117

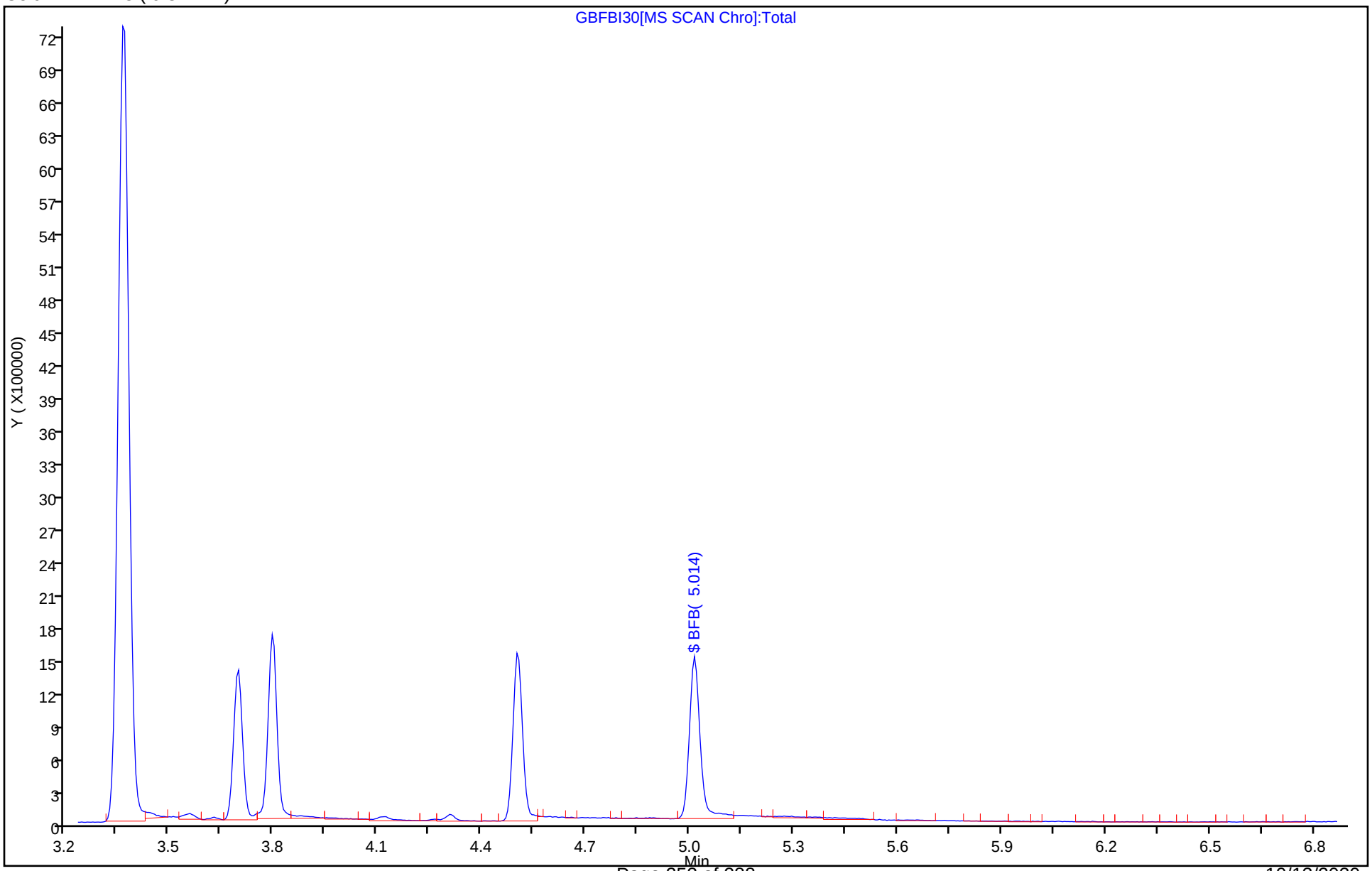
Report Date: 01-Oct-2020 14:50:16 Chrom Revision: 2.3 24-Sep-2020 19:22:38

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GBFBI30.D

Injection Date:	30-Sep-2020 07:53:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	500.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20507-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 140-43140/4

Matrix: Air Lab File ID: G500BI30.D

Analysis Method: TO 15 LL Date Collected:

Sample wt/vol: 500(mL) Date Analyzed: 09/30/2020 11:40

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 43140 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	ND		0.080	0.0080
56-23-5	Carbon tetrachloride	153.81	ND		0.080	0.0070
75-45-6	Chlorodifluoromethane	86.47	ND		0.080	0.022
67-66-3	Chloroform	119.38	ND		0.080	0.0070
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.080	0.010
75-71-8	Dichlorodifluoromethane	120.91	ND		0.080	0.014
75-34-3	1,1-Dichloroethane	98.96	ND		0.080	0.0070
107-06-2	1,2-Dichloroethane	98.96	ND		0.080	0.010
75-35-4	1,1-Dichloroethene	96.94	ND		0.080	0.0080
100-41-4	Ethylbenzene	106.17	ND		0.080	0.013
75-09-2	Methylene Chloride	84.93	ND		0.40	0.39
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.40	0.052
91-20-3	Naphthalene	128.17	ND		0.040	0.040
127-18-4	Tetrachloroethene	165.83	ND		0.080	0.0070
108-88-3	Toluene	92.14	ND		0.12	0.078
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.080	0.0070
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.080	0.064
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.080	0.037
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.080	0.0070
79-01-6	Trichloroethene	131.39	ND		0.040	0.0060
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.080	0.036
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.080	0.020
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.080	0.022
75-01-4	Vinyl chloride	62.50	ND		0.040	0.026
1330-20-7	Xylenes, Total	106.17	ND		0.16	0.024

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	91		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20507-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 140-43140/4

Matrix: Air Lab File ID: G500BI30.D

Analysis Method: TO 15 LL Date Collected:

Sample wt/vol: 500(mL) Date Analyzed: 09/30/2020 11:40

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 43140 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	ND		0.26	0.026
56-23-5	Carbon tetrachloride	153.81	ND		0.50	0.044
75-45-6	Chlorodifluoromethane	86.47	ND		0.28	0.078
67-66-3	Chloroform	119.38	ND		0.39	0.034
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.32	0.040
75-71-8	Dichlorodifluoromethane	120.91	ND		0.40	0.069
75-34-3	1,1-Dichloroethane	98.96	ND		0.32	0.028
107-06-2	1,2-Dichloroethane	98.96	ND		0.32	0.040
75-35-4	1,1-Dichloroethene	96.94	ND		0.32	0.032
100-41-4	Ethylbenzene	106.17	ND		0.35	0.056
75-09-2	Methylene Chloride	84.93	ND		1.4	1.4
1634-04-4	Methyl tert-butyl ether	88.15	ND		1.4	0.19
91-20-3	Naphthalene	128.17	ND		0.21	0.21
127-18-4	Tetrachloroethene	165.83	ND		0.54	0.047
108-88-3	Toluene	92.14	ND		0.45	0.29
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.32	0.028
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.59	0.47
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.44	0.20
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.44	0.038
79-01-6	Trichloroethene	131.39	ND		0.21	0.032
526-73-8	1,2,3-Trimethylbenzene	120.19	ND		0.39	0.18
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.39	0.098
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.39	0.11
75-01-4	Vinyl chloride	62.50	ND		0.10	0.066
1330-20-7	Xylenes, Total	106.17	ND		0.69	0.10

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	91		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\G500BI30.D				
Lims ID:	MB				
Client ID:					
Sample Type:	MB				
Inject. Date:	30-Sep-2020 11:40:30	ALS Bottle#:	16	Worklist Smp#:	4
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016761-004				
Misc. Info.:	500ML BLK				
Operator ID:	HMT	Instrument ID:	MG		
Method:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\MG_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	01-Oct-2020 15:00:45	Calib Date:	11-Sep-2020 06:50:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MG\20200910-16561.b\GI10IC09R.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1024				
First Level Reviewer: khachitpongpanits		Date:	01-Oct-2020 15:00:45		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.795	8.795	0.000	96	305605	4.80	4.80	
* 2 1,4-Difluorobenzene	114	10.979	10.979	0.000	95	1543138	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.719	15.719	0.000	87	1498501	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.364	17.364	0.000	96	1018079	4.64	4.23	
59 Dibromomethane	93	11.777	11.772	0.005	69	917		0.007659	

QC Flag Legend

Processing Flags

Reagents:

40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

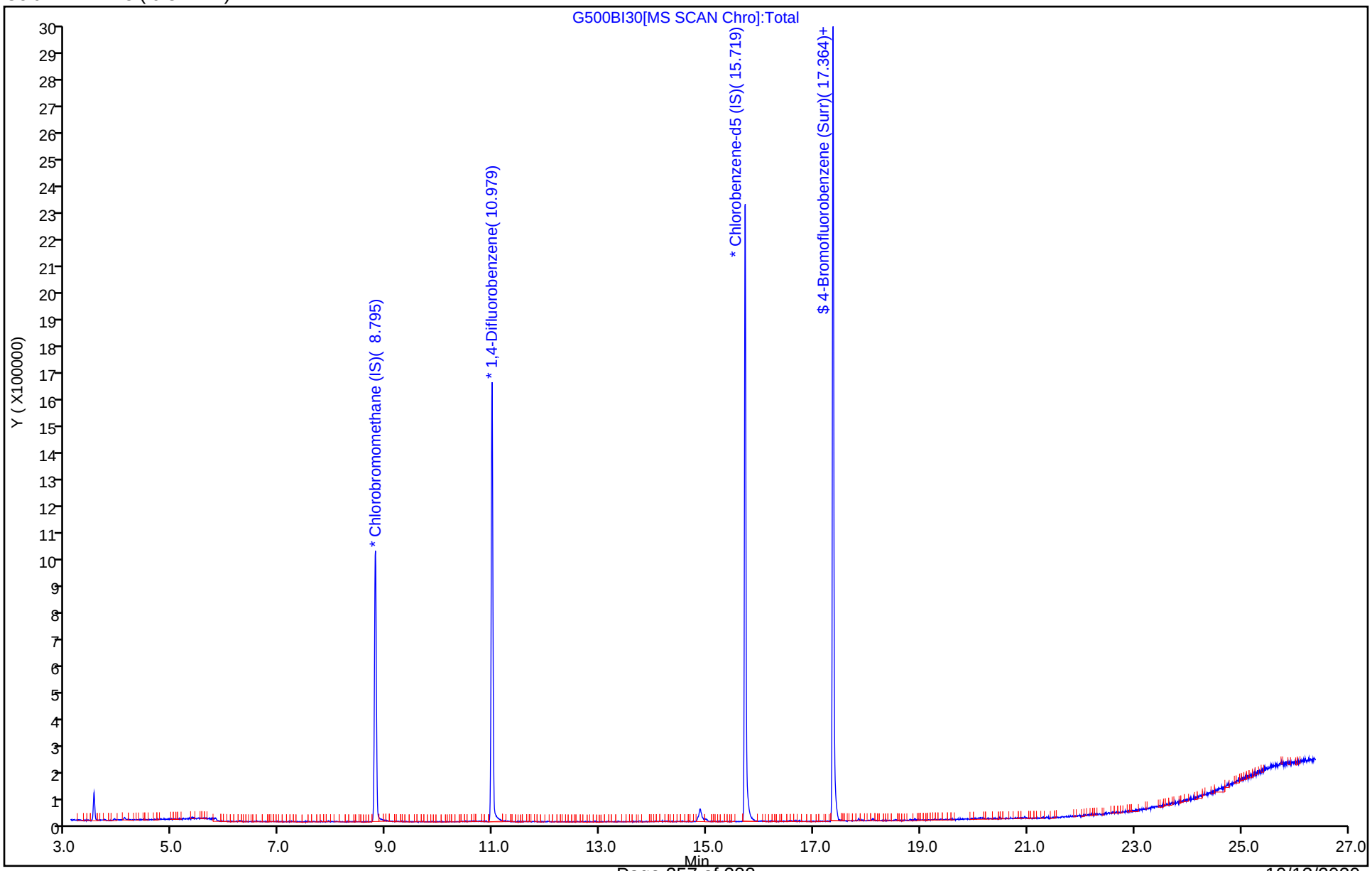
Report Date: 01-Oct-2020 15:00:45 Chrom Revision: 2.3 24-Sep-2020 19:22:38

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200929-16761.b\G500BI30.D

Injection Date:	30-Sep-2020 11:40:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	MB			Worklist Smp#:	4
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\G500BI30.D				
Lims ID:	MB				
Client ID:					
Sample Type:	MB				
Inject. Date:	30-Sep-2020 11:40:30	ALS Bottle#:	16	Worklist Smp#:	4
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016761-004				
Misc. Info.:	500ML BLK				
Operator ID:	HMT	Instrument ID:	MG		
Method:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\MG_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	01-Oct-2020 15:00:45	Calib Date:	11-Sep-2020 06:50:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MG\20200910-16561.b\GI10IC09R.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1024				

First Level Reviewer: khachitpongpanits Date: 01-Oct-2020 15:00:45

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	4.23	91.27

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20507-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 140-43140/1002

Matrix: Air Lab File ID: GCCVI30-LCS.d

Analysis Method: TO 15 LL Date Collected:

Sample wt/vol: 500(mL) Date Analyzed: 09/30/2020 08:26

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 43140 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	MDL
71-43-2	Benzene	78.11	1.40		0.080	0.0080
56-23-5	Carbon tetrachloride	153.81	1.73		0.080	0.0070
75-45-6	Chlorodifluoromethane	86.47	1.21		0.080	0.022
67-66-3	Chloroform	119.38	1.35		0.080	0.0070
156-59-2	cis-1,2-Dichloroethene	96.94	1.39		0.080	0.010
75-71-8	Dichlorodifluoromethane	120.91	1.29		0.080	0.014
75-34-3	1,1-Dichloroethane	98.96	1.35		0.080	0.0070
107-06-2	1,2-Dichloroethane	98.96	1.39		0.080	0.010
75-35-4	1,1-Dichloroethene	96.94	1.56		0.080	0.0080
100-41-4	Ethylbenzene	106.17	1.29		0.080	0.013
75-09-2	Methylene Chloride	84.93	1.47		0.40	0.39
1634-04-4	Methyl tert-butyl ether	88.15	1.23		0.40	0.052
91-20-3	Naphthalene	128.17	1.15		0.040	0.040
127-18-4	Tetrachloroethene	165.83	1.53		0.080	0.0070
108-88-3	Toluene	92.14	1.30		0.12	0.078
156-60-5	trans-1,2-Dichloroethene	96.94	1.48		0.080	0.0070
120-82-1	1,2,4-Trichlorobenzene	181.45	1.49		0.080	0.064
71-55-6	1,1,1-Trichloroethane	133.41	1.43		0.080	0.037
79-00-5	1,1,2-Trichloroethane	133.41	1.34		0.080	0.0070
79-01-6	Trichloroethene	131.39	1.78		0.040	0.0060
526-73-8	1,2,3-Trimethylbenzene	120.19	1.37		0.080	0.036
95-63-6	1,2,4-Trimethylbenzene	120.20	1.36		0.080	0.020
108-67-8	1,3,5-Trimethylbenzene	120.20	1.38		0.080	0.022
75-01-4	Vinyl chloride	62.50	1.24		0.040	0.026
1330-20-7	Xylenes, Total	106.17	3.84		0.16	0.024

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	96		60-140

Eurofins Environment Testing America
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GCCVI30-LCS.d
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 30-Sep-2020 08:26:30 ALS Bottle#: 11 Worklist Smp#: 1002
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016761-002
Misc. Info.: P121 80ML
Operator ID: HMT Instrument ID: MG

Method: \\chromfs\Knoxville\ChromData\MG\20200929-16761.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 01-Oct-2020 14:55:04 Calib Date: 11-Sep-2020 06:50:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200910-16561.b\GI10IC09R.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1024

First Level Reviewer: khachitpongpanits Date: 01-Oct-2020 14:55:04

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.795	8.795	0.000	94	270463	4.80	4.80	
* 2 1,4-Difluorobenzene	114	10.979	10.979	0.000	95	1205820	4.80	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.719	15.719	0.000	86	1348046	4.80	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.364	17.364	0.000	96	960135	4.64	4.44	
6 Chlorodifluoromethane	51	3.699	3.699	0.000	96	243024	1.60	1.21	
7 Propene	41	3.716	3.716	0.000	97	141149	1.60	1.32	
8 Dichlorodifluoromethane	85	3.764	3.764	0.000	100	328333	1.60	1.29	
9 Chloromethane	52	3.942	3.942	0.000	98	47540	1.60	1.11	
10 1,2-Dichloro-1,1,2,2-tetrafluoro	135	3.947	3.947	0.000	94	199175	1.60	1.38	
11 Acetaldehyde	44	4.093	4.093	0.000	95	306680	8.00	5.82	
12 Vinyl chloride	62	4.109	4.109	0.000	98	148094	1.60	1.24	
13 Butane	43	4.195	4.195	0.000	86	266505	1.60	1.22	
14 Butadiene	54	4.195	4.195	0.000	64	131549	1.60	1.26	
15 Bromomethane	94	4.514	4.514	0.000	98	118480	1.60	1.43	
16 Chloroethane	64	4.654	4.654	0.000	95	69115	1.60	1.28	
17 Ethanol	31	4.745	4.745	0.000	95	298114	8.00	5.65	
18 Vinyl bromide	106	4.950	4.950	0.000	98	113361	1.60	1.60	
19 2-Methylbutane	43	5.004	5.004	0.000	92	194166	1.60	1.28	
20 Trichlorofluoromethane	101	5.220	5.220	0.000	99	324168	1.60	1.56	
21 Acrolein	56	5.225	5.225	0.000	32	35284	1.60	1.02	
22 Acetonitrile	40	5.285	5.285	0.000	100	43980	1.60	0.9642	
23 Acetone	58	5.339	5.339	0.000	99	165893	4.80	4.12	
25 Isopropyl alcohol	45	5.430	5.430	0.000	92	504641	4.80	3.92	
24 Pentane	72	5.436	5.436	0.000	93	21667	1.60	1.48	
26 Ethyl ether	31	5.608	5.608	0.000	94	125482	1.60	1.04	
27 1,1-Dichloroethene	96	5.921	5.921	0.000	95	100381	1.60	1.56	
28 Acrylonitrile	53	6.018	6.018	0.000	97	76049	1.60	1.24	
30 2-Methyl-2-propanol	59	6.040	6.040	0.000	95	182102	1.60	1.54	
29 1,1,2-Trichloro-1,2,2-trifluoroe	101	6.099	6.099	0.000	96	213559	1.60	1.51	
31 Methylene Chloride	84	6.266	6.266	0.000	94	94436	1.60	1.47	
32 3-Chloro-1-propene	39	6.282	6.282	0.000	93	120216	1.60	1.28	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
33 Carbon disulfide	76	6.428	6.428	0.000	100	313962	1.60	1.47	
34 trans-1,2-Dichloroethene	96	7.075	7.075	0.000	96	107978	1.60	1.48	
35 2-Methylpentane	43	7.086	7.086	0.000	97	347228	1.60	1.43	
36 Methyl tert-butyl ether	73	7.204	7.204	0.000	97	232890	1.60	1.23	
37 1,1-Dichloroethane	63	7.485	7.485	0.000	98	228066	1.60	1.35	
38 Vinyl acetate	43	7.593	7.593	0.000	100	298191	1.60	1.12	
39 2-Butanone (MEK)	72	8.046	8.046	0.000	95	43760	1.60	1.19	
40 Hexane	56	8.067	8.067	0.000	91	110095	1.60	1.37	
41 Isopropyl ether	45	8.224	8.224	0.000	98	402201	1.60	1.22	
42 cis-1,2-Dichloroethene	96	8.466	8.466	0.000	97	114304	1.60	1.39	
43 Ethyl acetate	43	8.655	8.655	0.000	98	248161	1.60	1.13	
44 Chloroform	83	8.811	8.811	0.000	96	239145	1.60	1.35	
45 Tert-butyl ethyl ether	59	8.903	8.903	0.000	96	314492	1.60	1.16	
46 Tetrahydrofuran	42	9.216	9.216	0.000	94	135044	1.60	1.15	
47 1,1,1-Trichloroethane	97	9.836	9.836	0.000	96	245647	1.60	1.43	
48 1,2-Dichloroethane	62	9.938	9.938	0.000	96	150525	1.60	1.39	
51 n-Butanol	31	10.424	10.424	0.000	63	47816	1.60	1.47	
49 Cyclohexane	69	10.434	10.434	0.000	84	57102	1.60	1.56	
50 Benzene	78	10.434	10.434	0.000	96	321997	1.60	1.40	
52 Carbon tetrachloride	117	10.461	10.461	0.000	97	252401	1.60	1.73	
53 2,3-Dimethylpentane	71	10.558	10.558	0.000	91	84774	1.60	1.53	
54 Thiophene	84	10.709	10.709	0.000	96	187665	1.60	1.53	
55 Isooctane	57	11.200	11.200	0.000	99	709291	1.60	1.55	
56 n-Heptane	71	11.578	11.578	0.000	95	127584	1.60	1.51	
57 1,2-Dichloropropane	63	11.653	11.653	0.000	92	129184	1.60	1.32	
58 Trichloroethene	130	11.691	11.691	0.000	95	158202	1.60	1.78	
59 Dibromomethane	93	11.772	11.772	0.000	97	142686	1.60	1.53	
60 Dichlorobromomethane	83	11.923	11.923	0.000	98	259863	1.60	1.57	
61 1,4-Dioxane	88	11.950	11.950	0.000	94	36825	1.60	1.43	
62 Methyl methacrylate	41	12.020	12.020	0.000	90	142071	1.60	1.24	
63 Methylcyclohexane	83	12.467	12.467	0.000	91	213627	1.60	1.54	
64 4-Methyl-2-pentanone (MIBK)	43	12.877	12.877	0.000	98	274455	1.60	1.40	
65 cis-1,3-Dichloropropene	75	12.920	12.920	0.000	96	187597	1.60	1.40	
66 trans-1,3-Dichloropropene	75	13.616	13.616	0.000	98	167171	1.60	1.30	
67 Toluene	91	13.745	13.745	0.000	95	357072	1.60	1.30	
68 1,1,2-Trichloroethane	83	13.821	13.821	0.000	98	115240	1.60	1.34	
69 2-Hexanone	58	14.214	14.214	0.000	91	131146	1.60	1.42	
70 n-Octane	85	14.441	14.441	0.000	97	138992	1.60	1.44	
71 Chlorodibromomethane	129	14.516	14.516	0.000	98	253562	1.60	1.55	
72 Ethylene Dibromide	107	14.813	14.813	0.000	99	217768	1.60	1.44	
73 Tetrachloroethene	129	14.889	14.889	0.000	93	147721	1.60	1.53	
75 Chlorobenzene	112	15.768	15.768	0.000	94	310369	1.60	1.40	
74 2,3-Dimethylheptane	43	15.789	15.789	0.000	96	505940	1.60	1.25	
78 Ethylbenzene	91	16.059	16.059	0.000	98	473464	1.60	1.29	
79 m-Xylene & p-Xylene	91	16.220	16.220	0.000	97	724422	3.20	2.58	
80 n-Nonane	57	16.646	16.646	0.000	97	297433	1.60	1.25	
81 Bromoform	173	16.663	16.663	0.000	96	269145	1.60	1.69	
82 Styrene	104	16.684	16.684	0.000	97	302351	1.60	1.42	
83 o-Xylene	91	16.744	16.744	0.000	99	373415	1.60	1.26	
84 1,1,2,2-Tetrachloroethane	83	17.067	17.067	0.000	98	297294	1.60	1.27	
85 1,2,3-Trichloropropane	110	17.229	17.229	0.000	96	83194	1.60	1.35	
86 Isopropylbenzene	105	17.331	17.331	0.000	96	522292	1.60	1.31	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
87 N-Propylbenzene	120	17.876	17.876	0.000	99	152525	1.60	1.34	
88 2-Chlorotoluene	126	17.919	17.919	0.000	97	152701	1.60	1.40	
89 4-Ethyltoluene	105	18.027	18.027	0.000	98	518796	1.60	1.27	
90 1,3,5-Trimethylbenzene	120	18.102	18.102	0.000	94	230403	1.60	1.38	
92 Alpha Methyl Styrene	118	18.329	18.329	0.000	91	227272	1.60	1.38	
93 n-Decane	57	18.394	18.394	0.000	88	368076	1.60	1.23	
94 tert-Butylbenzene	119	18.523	18.523	0.000	95	482681	1.60	1.41	
95 1,2,4-Trimethylbenzene	105	18.539	18.539	0.000	95	448882	1.60	1.36	
96 sec-Butylbenzene	105	18.793	18.793	0.000	98	675402	1.60	1.35	
97 1,3-Dichlorobenzene	146	18.809	18.809	0.000	96	378499	1.60	1.57	
98 Benzyl chloride	91	18.879	18.879	0.000	99	411896	1.60	1.32	
99 1,4-Dichlorobenzene	146	18.895	18.895	0.000	96	379219	1.60	1.58	
100 4-Isopropyltoluene	119	18.954	18.954	0.000	97	556227	1.60	1.38	
101 1,2,3-Trimethylbenzene	105	19.008	19.008	0.000	97	448733	1.60	1.37	
102 Butylcyclohexane	83	19.068	19.068	0.000	93	409621	1.60	1.25	
103 2,3-Dihydroindene	117	19.251	19.251	0.000	94	469795	1.60	1.39	
104 1,2-Dichlorobenzene	146	19.251	19.251	0.000	86	367907	1.60	1.55	
106 Indene	116	19.380	19.380	0.000	94	422043	1.60	1.45	
105 n-Butylbenzene	91	19.386	19.386	0.000	98	538145	1.60	1.23	
107 Undecane	57	19.699	19.699	0.000	96	404007	1.60	1.15	
108 1,2-Dibromo-3-Chloropropane	157	19.850	19.850	0.000	96	180676	1.60	1.51	
109 1,2,4,5-Tetramethylbenzene	119	20.141	20.141	0.000	98	499139	1.60	1.32	
110 Dodecane	57	20.755	20.755	0.000	94	378461	1.60	1.15	
111 1,2,4-Trichlorobenzene	180	20.950	20.950	0.000	93	321416	1.60	1.49	
112 Naphthalene	128	21.084	21.084	0.000	99	617286	1.60	1.15	
113 Hexachlorobutadiene	225	21.300	21.300	0.000	96	305387	1.60	1.54	
114 1,2,3-Trichlorobenzene	180	21.365	21.365	0.000	94	298496	1.60	1.46	
115 2-Methylnaphthalene	142	22.136	22.136	0.000	98	379693	1.60	1.66	
116 1-Methylnaphthalene	142	22.314	22.314	0.000	98	420137	1.60	1.75	
A 122 C8 Range	1	14.484	(14.382-14.565)		0	1430782	1.60	1.32	
S 123 1,2-Dichloroethene, Total	1				0		3.20	2.87	
S 124 Xylenes, Total	100				0		4.80	3.84	

QC Flag Legend

Processing Flags

Reagents:

40CV101P_00121	Amount Added: 80.00	Units: mL	
40MXISSUR_00001	Amount Added: 40.00	Units: mL	Run Reagent

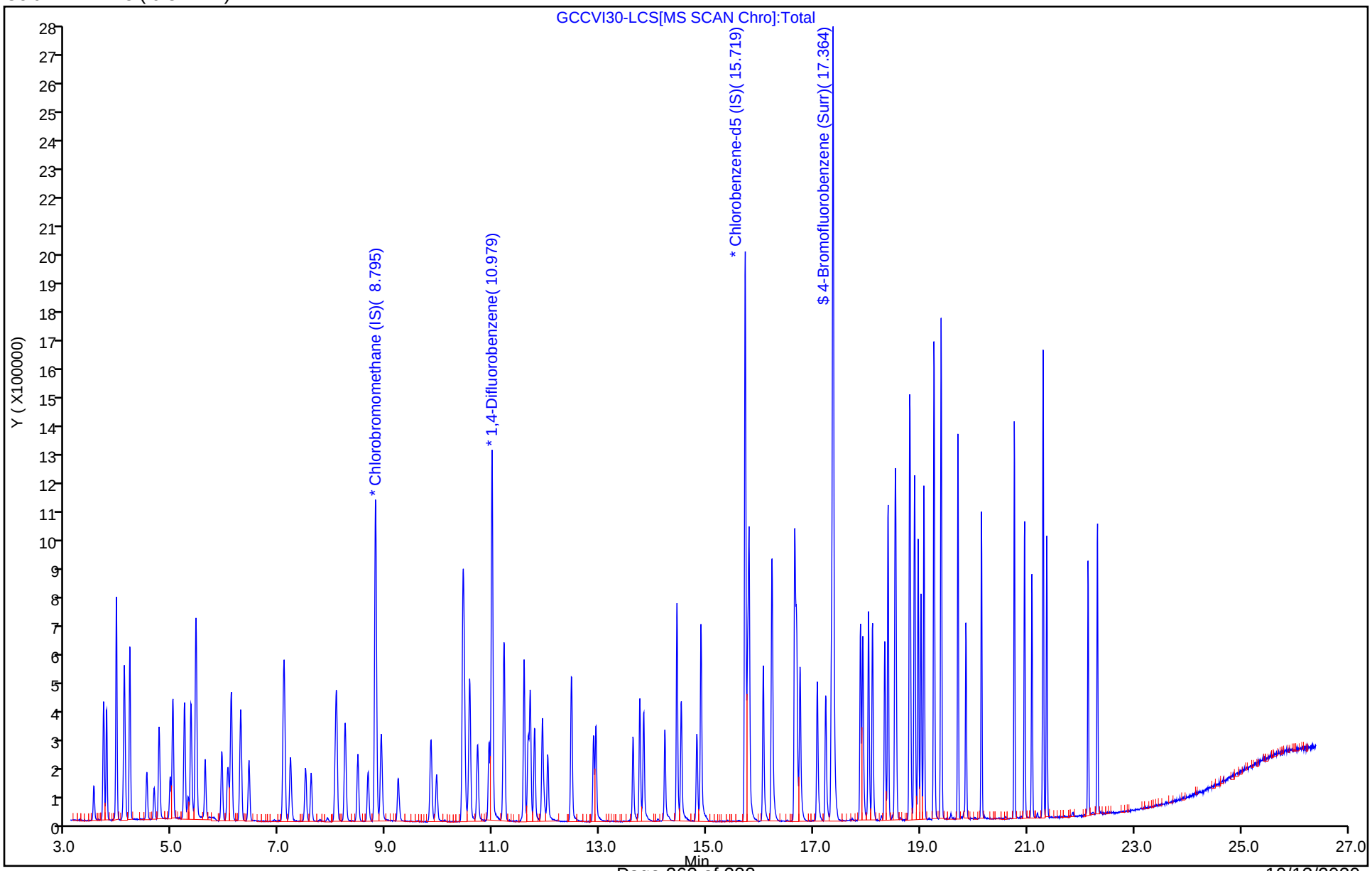
Report Date: 01-Oct-2020 14:55:08 Chrom Revision: 2.3 24-Sep-2020 19:22:38

Eurofins Environment Testing America

Data File: \\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GCCVI30-LCS.d

Injection Date:	30-Sep-2020 08:26:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	LCS			Worklist Smp#:	1002
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins Environment Testing America
Recovery Report

Data File:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\GCCVI30-LCS.d				
Lims ID:	LCS				
Client ID:					
Sample Type:	LCS				
Inject. Date:	30-Sep-2020 08:26:30	ALS Bottle#:	11	Worklist Smp#:	1002
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0016761-002				
Misc. Info.:	P121 80ML				
Operator ID:	HMT	Instrument ID:	MG		
Method:	\\chromfs\Knoxville\ChromData\MG\20200929-16761.b\MG_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	01-Oct-2020 14:55:04	Calib Date:	11-Sep-2020 06:50:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Knoxville\ChromData\MG\20200910-16561.b\GI10IC09R.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX1024				

First Level Reviewer: khachitpongpanits Date: 01-Oct-2020 14:55:04

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.64	4.44	95.68

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20507-1

SDG No.:

Instrument ID: MG Start Date: 09/10/2020 16:30

Analysis Batch Number: 42613 End Date: 09/11/2020 06:50

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 140-42613/1		09/10/2020 16:30	1	GBFBI10Z.D	RTX-5 0.32(mm)
IC 140-42613/3		09/10/2020 18:15	1	GI10IC10.D	RTX-5 0.32(mm)
IC 140-42613/7		09/10/2020 21:26	1	GI10IC08.D	RTX-5 0.32(mm)
IC 140-42613/9		09/10/2020 22:58	1	GI10IC01.D	RTX-5 0.32(mm)
IC 140-42613/10		09/10/2020 23:47	1	GI10IC02.D	RTX-5 0.32(mm)
IC 140-42613/11		09/11/2020 00:34	1	GI10IC03.D	RTX-5 0.32(mm)
IC 140-42613/12		09/11/2020 01:20	1	GI10IC04.D	RTX-5 0.32(mm)
IC 140-42613/13		09/11/2020 02:08	1	GI10IC05.D	RTX-5 0.32(mm)
IC 140-42613/14		09/11/2020 02:55	1	GI10IC06.D	RTX-5 0.32(mm)
ICIS 140-42613/15		09/11/2020 03:42	1	GI10IC07.D	RTX-5 0.32(mm)
ICV 140-42613/17		09/11/2020 05:15	1	GI10ICV.D	RTX-5 0.32(mm)
IC 140-42613/21		09/11/2020 06:50	1	GI10IC09R.D	RTX-5 0.32(mm)

Eurofins/TestAmerica Knoxville GC/MS Air - Initial Calibration Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 21 & KNOX-MS-0023, Rev 4

Analysis Date:	9/10/20	Instrument:	MG	Chrom WL #:	16561	TALS Batch & Event #	TO14/15: 2621 / 42613	DODS: 2613 / 42614
							DOD: 2615 / 42616	OHIO: 2614 / 42615

Chrom/Worklist Review	1st	Comments	2nd
1. Re-read each Limit Group [method editor-limit groups]	✓		na
2. Verify LODV in Chrom [method editor -> edit -> MDL]	✓		na
3. Are the reagents and init/final volumes correct and first level "unlock/clear"? (Verify reagents & amt. injected at each level) [WL Sample Reagents Tab vs. Entech]	✓		
4. Files linked properly to calibration levels? [Sample List- Lab ID vs. Info]	✓		
5. Did BFB meet tune criteria? [F8]	✓		
6. Were all standards injected within 24 hr of BFB? [F7]	✓		
7. High point checked for saturation and point removed if so? [Chrom]	✓		
8. If manual integrations performed, are they properly performed, correct, baseline clearly identified, and correct reason given? [Chrom]	✓		
9. RT for each IS ±20 sec avg. RT? [F6 IstdRec]	✓		
10. Area for each IS ± 40% avg. area? [F6 IstdRec]	✓		
11. Each analyte ± 0.06 RRT of avg. RRT? [F6 - RRT]	✓		
12. Elution order checked on isomeric pairs? [Chrom]			
• dichlorodifluoromethane / 1,2-dichlorotetrafluoroethane	✓		
• 2-methyl butane / acrolein	✓		
• trichlorofluoromethane / 1,1,2-trichlorotrifluoroethane	✓		
• vinyl acetate / hexane	✓		
• cis- and trans- isomers	✓		
• ethyl benzene / m/p-xylene / o-xylene	✓		
• n-propylbenzene/4-ethyl toluene/1,3,5-trimethylbenzene/1,2,4-trimethylbenzene/ sec-butylbenzene/1,2,3-trimethylbenzene	✓		
• tert-butylbenzene/4-isopropyltoluene	✓		
• 1,3- , 1,4- , and 1,2-dichlorobenzene	✓		
• 1,2-dimethyl-4-ethylbenzene/1,2,4,5-, 1,2,3,5-, and 1,2,3,4-tetramethylbenzenes	IN ICV		
• 1,2,4- and 1,2,3-trichlorobenzenes	✓		
• 2-, and 1-methylnaphthalene	✓		
13. "Range" analytes & internal standard RIC ID'd correctly, inspected for interferences & proper integration?	✓		

MLG Review	TO	DOD	OH	Comments	TO-	DOD	OH
14. Is %RSD for all target analytes ≤ 30%? (with up to 2 compounds with RSD ≤ 40%) 1& 2 methylnaphthalene ≤ 50% [F6 Σ]	✓	✓	✓				
15. Were at least 5 levels of each compound analyzed? [F6]	✓	✓	✓				
16. Is low level std at or <RL and are the remaining points consec.? [F6]	✓	✓	✓				
17. At least 6 consec. points used for quad curves; at least 5 consec. points for linear curves? (Note: Ohio does not allow quad) [F6]	✓	✓	✓				
18. If curves were used, is correlation coefficient ≥0.990? [F6]	✓	✓	✓				
19. Is the intercept less than the RL for each curve? [F6]	✓	✓	✓				
20. For quadratic: is a tangent's slope to the curve entirely positive or negative and continuous. [Cntrl-C, details]	✓	✓	na				na
21. Is low point RSE ≤ 50 %? [F6]	✓	✓	✓				
22. Is the second source analysis within limits? [F8 - icv]	✓	✓	✓				

Analyst/Date: 9/11/20 — **2nd Level Reviewer/Date:**

TALS Review	TO	DOD	OH	Comments	TO	DOD	OH
23. Upload ICAL	✓				na	na	na
24. Graphics uploaded? [paperclip]	✓	✓	✓				
25. All points are in the most recent active calibration event? [Calibration Events –'Fix ICAL linkage' if needed]	✓	✓	✓				
26. Runs linked to BFB? [QC Links]	✓	✓	✓				
27. Run Checklist and acknowledge findings [F8]	✓	✓	✓				
28. If criteria not met, was a NCM generated?	✓	✓					
29. After review in TALS, approve the method in TALS.	na	na	na				
30. After verifying TALS is correct, lock method in Chrom <resolve any error issues>	na	na	na				
31. Checklist & Entech report scanned, attached & assigned properly?	na	na	na				

Analyst/date: 9/11/20 — **2nd Level Reviewer/date:**

Comments: — **Comments:**

Eurofins/TestAmerica Knoxville GC/MS Air - Initial Calibration Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 20 & KNOX-MS-0023, Rev 4

Analysis Date:	9/10/20	Instrument:	MG	Chrom WL #:	16561	TALS Batch & Event #	TO14/15: 42613 /2612 DOD: 42616 / 2615	DOD5: 42614/2613 OHIO: 42615/2614

Chrom/Worklist Review	1st	Comments	2nd
1. Re-read each Limit Group [method editor-limit groups]			na
2. Verify LODV in Chrom [method editor -> edit -> MDL]			na
3. Are the reagents and init/final volumes correct and first level "unlock/clear"? (Verify reagents & amt. injected at each level) [WL Sample Reagents Tab vs. Entech]			Y
4. Files linked properly to calibration levels? [Sample List- Lab ID vs. Info]			Y
5. Did BFB meet tune criteria? [F8]			Y
6. Were all standards injected within 24 hr of BFB? [F7]			Y
7. High point checked for saturation and point removed if so? [Chrom]			Y
8. If manual integrations performed, are they properly performed, correct, baseline clearly identified, and correct reason given? [Chrom]			NA
9. RT for each IS ±20 sec avg. RT? [F6 IstdRec]			Y
10. Area for each IS ± 40% avg. area? [F6 IstdRec]			Y
11. Each analyte ± 0.06 RRT of avg. RRT? [F6 - RRT]			Y
12. Elution order checked on isomeric pairs? [Chrom]			
• dichlorodifluoromethane / 1,2-dichlorotetrafluoroethane			Y
• 2-methyl butane / acrolein			Y
• trichlorofluoromethane / 1,1,2-trichlorotrifluoroethane			Y
• vinyl acetate / hexane			Y
• cis- and trans- isomers			Y
• ethyl benzene / m/p-xylene / o-xylene			Y
• n-propylbenzene/4-ethyl toluene/1,3,5-trimethylbenzene/1,2,4-trimethylbenzene/ sec-butylbenzene/1,2,3-trimethylbenzene			Y
• tert-butylbenzene/4-isopropyltoluene			Y
• 1,3- , 1,4- , and 1,2-dichlorobenzene			Y
• 1,2-dimethyl-4-ethylbenzene/1,2,4,5-, 1,2,3,5-, and 1,2,3,4-tetramethylbenzenes			Y
• 1,2,4- and 1,2,3-trichlorobenzenes			Y
• 2-, and 1-methylnaphthalene			Y
13. "Range" analytes & internal standard RIC ID'd correctly, inspected for interferences & proper integration?			Y

MLG Review	TO	DOD	OH	Comments	TO-	DOD	OH
14. Is %RSD for all target analytes ≤ 30%? (with up to 2 compounds with RSD ≤ 40%) 1& 2 methylnaphthalene ≤ 50% [F6 ∑]					Y	Y	Y
15. Were at least 5 levels of each compound analyzed? [F6]					Y	Y	Y
16. Is low level std at or <RL and are the remaining points consec.? [F6]					Y	Y	Y
17. At least 6 consec. points used for quad curves; at least 5 consec. points for linear curves? (Note: Ohio does not allow quad) [F6]					Y	Y	Y
18. If curves were used, is correlation coefficient ≥0.990? [F6]					NA	NA	NA
19. Is the intercept less than the RL for each curve? [F6]					NA	NA	NA
20. For quadratic: is a tangent's slope to the curve entirely positive or negative and continuous. [Cntrl-C, details]			na		NA	NA	na
21. Is low point RSE ≤ 50 %? [F6]					Y	Y	Y
22. Is the second source analysis within limits? [F8 - icv]					Y	Y	Y

Analyst/Date:	2nd Level Reviewer/Date: LL 9/11/20

TALS Review	TO	DOD	OH	Comments	TO	DOD	OH
23. Upload ICAL					na	na	na
24. Graphics uploaded? [paperclip]					Y	Y	Y
25. All points are in the most recent active calibration event? [Calibration Events –'Fix ICAL linkage' if needed]					Y	Y	Y
26. Runs linked to BFB? [QC Links]					Y	Y	Y
27. Run Checklist and acknowledge findings [F8]					Y	Y	Y
28. If criteria not met, was a NCM generated?					NA	NA	NA
29. After review in TALS, approve the method in TALS.	na	na	na		Y	Y	Y
30. After verifying TALS is correct, lock method in Chrom <resolve any error issues>	na	na	na		Y	Y	Y
31. Checklist & Entech report scanned, attached & assigned properly?	na	na	na		Y	Y	Y

Analyst/date:	2nd Level Reviewer/date: LL 9/11/20
Comments:	Comments:

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20507-1

SDG No.:

Instrument ID: MG Start Date: 09/30/2020 07:53

Analysis Batch Number: 43140 End Date: 10/01/2020 07:20

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 140-43140/1		09/30/2020 07:53	1	GBFBI30.D	RTX-5 0.32(mm)
CCVIS 140-43140/2		09/30/2020 08:26	1	GCCVI30.D	RTX-5 0.32(mm)
LCS 140-43140/1002		09/30/2020 08:26	1	GCCVI30-LCS.d	RTX-5 0.32(mm)
MB 140-43140/4		09/30/2020 11:40	1	G500BI30.D	RTX-5 0.32(mm)
140-20507-1	BLDG A INFLUENT	09/30/2020 12:23	1	GI30P101.D	RTX-5 0.32(mm)
140-20507-2	BLDG A MIDGAC	09/30/2020 13:09	1	GI30P102.D	RTX-5 0.32(mm)
140-20507-3	BLDG A EFFLUENT	09/30/2020 13:52	1	GI30P103.D	RTX-5 0.32(mm)
140-20507-4	BLDG C INFLUENT	09/30/2020 14:35	1	GI30P104.D	RTX-5 0.32(mm)
140-20507-5	BLDG C MIDGAC	09/30/2020 15:18	1	GI30P105.D	RTX-5 0.32(mm)
140-20507-6	BLDG C EFFLUENT	09/30/2020 16:01	1	GI30P106.D	RTX-5 0.32(mm)
ZZZZZ		09/30/2020 20:22	1.52		RTX-5 0.32(mm)
ZZZZZ		09/30/2020 21:05	1		RTX-5 0.32(mm)
ZZZZZ		09/30/2020 21:49	1.5		RTX-5 0.32(mm)
ZZZZZ		09/30/2020 23:16	36.07		RTX-5 0.32(mm)
ZZZZZ		09/30/2020 23:59	1		RTX-5 0.32(mm)
140-20507-3 DL	BLDG A EFFLUENT DL	10/01/2020 03:00	1	GI30P103DL.D	RTX-5 0.32(mm)
ZZZZZ		10/01/2020 07:20	1		RTX-5 0.32(mm)

Eurofins/TestAmerica Knoxville GC/MS Air - Batch Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 21 & KNOX-MS-0023, Rev 4

Instrument/Date	MG 9/30/2020		Routine	DOD	OHIO VAP
CCAL Chrom WL #	16761	CCAL Batch #	43140		
ICAL Chrom WL #	16561	ICAL Batch # / Event #	42613 / 2612	/	/

Chrom Review	1st	If No, why is data reportable?	2nd
1. Are the reagents & init/final volumes correct? (Verify reagents & amt. injected) [WL Sample Reagent Tab]	/		na
2. Did BFB meet tune criteria? [F8]	/	□ [Failed TO-14A, but passes TO-15]	
3. Was the CCAL compared to the most recent & correct ICAL (correct last ICal File batch #/start/end Cal date/time)? [F8]	/	List Target analytes outside CCV limits: Chloromethane	
4. Elution order checked on isomeric pairs? [Chrom]			
• dichlorodifluoromethane / 1,2-dichlorotetrafluoroethane	/		
• 2-methyl butane / acrolein	/		
• trichlorofluoromethane / 1,1,2-trichlorotrifluoroethane	/		
• vinyl acetate / hexane	/		
• cis- and trans- isomers	/		
• ethyl benzene / m/p-xylene / o-xylene	/		
• n-propylbenzene/4-ethyl toluene/1,3,5-trimethylbenzene/1,2,4-trimethylbenzene/sec-butylbenzene/1,2,3-trimethylbenzene	/		
• tert-butylbenzene/4-isopropyltoluene	/		
• 1,3- , 1,4- , and 1,2-dichlorobenzene	/		
• 1,2-dimethyl-4-ethylbenzene/1,2,4,5-, 1,2,3,5-, and 1,2,3,4-tetramethylbenzenes	NA		
• 1,2,4-trichlorobenzene/1,2,3-trichlorobenzene	/		
• 2-, and 1-methylnaphthalene	/		
5. "Range" analytes & internal standard RIC ID'd correctly, inspected for interferences & proper integration?	NA		
6. Has the RT been updated to the method?	/		
Analyst/date Suphawan Kh. 10/1/2020		**2nd Level Reviewer/date**	
7. Has the vol injected been verified vs Entech & corrected if actual amount differs >5%? [WL Sample Info: init amt = sample amt; final amt = 500 mL]	/		
8. Do the lab ID, Info 1 and Dilution Factor columns correlate in Chrom? [Sample List - Lab ID vs. Info 1 vs. Dilution]	/		
9. Can dilution history verified? [Mgmt Report]	/		
10. Are all analytes present in the system blank < RL? (<1/2 RL for DoD). *If no, list blank ID:*	/	□ Method Blank – Report, ND (NCM#_____) □ Method Blank – Report, 10X (NCM#_____)	
11. All runs - peaks ID'd correctly and false positives removed?	/		
12. If manual integrations performed, are they properly performed, baseline clearly identified, and correct reason given?	/		
13. IS/Surr within limits? *List samples and reason (e.g.,* 1 thru 5*):* [Batch Results IS & SUR Tab] Sample Reason Sample Reason	/	□ (1) Surrogate – Matrix (NCM#_____) □ (2) Surrogate – High, ND (NCM#_____) □ (3) ISTD – RA/RA Concurs (NCM#_____) □ (4) Surrogate –RX concur, Report both (NCM#_____) □ (5) ISTD – Matrix, DL required (NCM#_____)	
14. Samples outside calibration range scheduled for dilution?	/	□ ICAL – Range Exceeded; Minimum Dilution	
Chrom Review	**1st**	**If No, why is data reportable?**	**2nd**
15. For first analysis that is at a dilution, is highest target analyte >20% cal range? *List samples and reason:* Sample Reason Sample Reason 140-20487-10	/	☑ (1) Reporting Limit – Dilution, Matrix (NCM#_____) ☑ (2) Reporting Limit – Dilution, Non-Target (NCM#25372 □ (3) Issues with initial collection volume; see DRC.	
16. RIC inspected for proper integration for TPH?	NA		
17. Obvious non-TPH peaks excluded?	↓		
18. Individual TPH peak area < octane high point area?	↓		
TALS Review	**1st**	**If No, why is data reportable?**	**2nd**

Eurofins/TestAmerica Knoxville GC/MS Air - Batch Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 21 & KNOX-MS-0023, Rev 4

19. Graphics uploaded? [open one paperclip]	/		
20. NCM generated if BFB failed TO-14A criteria, but passes TO-15?	NA	□ [Failed TO-14A, but passes TO-15] (NCM#)	
21. Is the %D ≤ 30% for all target analytes? [≤ 50% for 1&2 methylnaphthalene] [Chrom-F8] [TALS-Sample Results Tab]	/	☑ CCV - %D - LCS criteria met (NCM# 2537) □ CCV - %D high - outside criteria, samples ND, Sample IDs Included (NCM#)	
22. Undiluted volume analyzed meets the method requirement (200 mL vs. 500 mL)?	/		na
23. Project & sample special instructions verified?	/		
24. If samples were Tedlar bags, was the 72 hr HT met? ** Narrate transfer to can.	NA	□ Air Analysis - Air Sample Transfer to Canister (NCM#____)	
25. Sample analyses done within analytical holding time?	/	□ Holding Time – Received w/Insufficient Time (NCM#_____) □ Holding Time – Receipt (NCM#_____)	
26. Did the LCS meet criteria (70-130% with a limited # allowed 60-140% (see table) provisional analyte limit 60-140% with a limited # allowed 50-150%, and no two consecutive MEs). [Sample Results Tab] Note: No LCS required for OH VAP.	/	□ Marginal Exceedances - Within ME Limits and Random; Report (NCM# ___) □ LCS/LCSD - %R High (NCM#_____)	
27. Suffixes assigned properly (DL/RE)? [Sample List Tab]	/		
28. Each job has QC created (BFB, CCV, LCS, MB)? [Sample List Tab]	/		
29. Analytes over calibration range set to secondary [Conditions Review Tab]	/		
30. Samples not reported set to 'Acceptable' or 'Rejected'? [Sample Results Tab]	/		
31. DUP done per 20 samples and are all RPDs within limits? (for target analytes >5x RL, <25% RPD; no criteria for n-butanol) *(If DUP not reported - set to 'Acceptable' for each job)*	/		
32. Samples linked to proper blank (200 mL or 500 mL)? [QC links]	/	**500 mL blank ID:** #4 **200 mL blank ID:**	
33. Samples linked to job's BFB/CCV/LCS/MB? [QC Links]	/		
34. Correct ICV linked to each MB? [QC Links]	/		
35. Were all samples/QC analyzed within 24 hr of BFB? [F7]	/		
36. If criteria were not met, was a NCM generated, and assigned to proper QC & samples? [Also see Conditions Review Tab]	/		
37. Run Checklist and acknowledge findings [F8]	/		
38. Runs set to 1st level review?	/	Runs set to 2nd level review?	
39. QC checker run and items addressed?	-na-		
40. Checklist & Entech report scanned, attached & assigned properly?	-na-		

Number of target analytes in LCS	# marginal exceedances of LCS control limits allowed
>90	5
71 - 90	4
51 - 70	3
31 - 50	2
11 - 30	1
< 11	0

Analyst: Suphannee Ka	**Date:** 10/1/2020	**2nd Level Reviewer :**	**Date:**
Comments:		**Comments:**	

Example Calculation: 140-20482-5 PCE

On-column ppbv x Final Vol (mL)/Entech Initial Vol (mL) x Canister Dilution Log DF

7.265400 x 500/20 x 1.0 = 182

Eurofins/TestAmerica Knoxville GC/MS Air - Batch Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 20 & KNOX-MS-0023, Rev 4

Instrument/Date	MG 9/30/20		Routine	DOD	OHIO VAP
CCAL Chrom WL #	16761	CCAL Batch #	43140		
ICAL Chrom WL #	16561	ICAL Batch # / Event #	42613/2612		

Chrom Review	1st	If No, why is data reportable?	2nd
1. Are the reagents & init/final volumes correct? (Verify reagents & amt. injected) [WL Sample Reagent Tab]			na
2. Did BFB meet tune criteria? [F8]		□ [Failed TO-14A, but passes TO-15]	Y
3. Was the CCAL compared to the most recent & correct ICAL (correct last ICal File batch #/start/end Cal date/time)? [F8]		List Target analytes outside CCV limits: _____ _____ _____	Y
4. Elution order checked on isomeric pairs? [Chrom]			
• dichlorodifluoromethane / 1,2-dichlorotetrafluoroethane			Y
• 2-methyl butane / acrolein			Y
• trichlorofluoromethane / 1,1,2-trichlorotrifluoroethane			Y
• vinyl acetate / hexane			Y
• cis- and trans- isomers			Y
• ethyl benzene / m/p-xylene / o-xylene			Y
• n-propylbenzene/4-ethyl toluene/1,3,5-trimethylbenzene/1,2,4-trimethylbenzene/sec-butylbenzene/1,2,3-trimethylbenzene			Y
• tert-butylbenzene/4-isopropyltoluene			Y
• 1,3- , 1,4- , and 1,2-dichlorobenzene			Y
• 1,2-dimethyl-4-ethylbenzene/1,2,4,5-, 1,2,3,5-, and 1,2,3,4-tetramethylbenzenes			NA
• 1,2,4-trichlorobenzene/1,2,3-trichlorobenzene			Y
• 2-, and 1-methylnaphthalene			Y
5. "Range" analytes & internal standard RIC ID'd correctly, inspected for interferences & proper integration?			**NA**
6. Has the RT been updated to the method?			**Y**
Analyst/date		**2nd Level Reviewer/date LL 10/1/20**	

7. Has the vol injected been verified vs Entech & corrected if actual amount differs >5%? [WL Sample Info: init amt = sample amt; final amt = 500 mL]			**Y**
8. Do the lab ID, Info 1 and Dilution Factor columns correlate in Chrom? [Sample List - Lab ID vs. Info 1 vs. Dilution]			**Y**
9. Can dilution history verified? [Mgmt Report]			**Y**
10. Are all analytes present in the system blank < RL**?** (<1/2 RL for DoD). *If no, list blank ID:*		□ Method Blank – Report, ND (NCM#_____) □ Method Blank – Report, 10X (NCM#_____)	**Y**
11. All runs - peaks ID'd correctly and false positives removed?			**Y**
12. If manual integrations performed, are they properly performed, baseline clearly identified, and correct reason given?			**Y**
13. IS/Surr within limits? *List samples and reason (e.g.,* 1 thru 5*):* [Batch Results IS & SUR Tab] Sample Reason Sample Reason _____ _____ _____ _____ _____ _____ _____ _____		□ (1) Surrogate – Matrix (NCM#_____) □ (2) Surrogate – High, ND (NCM#_____) □ (3) ISTD – RA/RA Concurs (NCM#_____) □ (4) Surrogate –RX concur, Report both (NCM#_____) □ (5) ISTD – Matrix, DL required (NCM#_____)	**Y**
14. Samples outside calibration range scheduled for dilution?		□ ICAL – Range Exceeded; Minimum Dilution	**Y**
Chrom Review	**1st**	**If No, why is data reportable?**	**2nd**
15. For first analysis that is at a dilution, is highest target analyte >20% cal range? *List samples and reason:* Sample Reason Sample Reason _____ _____ _____ _____ _____ _____ _____ _____		□ (1) Reporting Limit – Dilution, Matrix (NCM#_____) □ (2) Reporting Limit – Dilution, Non-Target (NCM#_____) □ (3) Issues with initial collection volume; see DRC.	**Y**
16. RIC inspected for proper integration for TPH?			**NA**
17. Obvious non-TPH peaks excluded?			**NA**
18. Individual TPH peak area < octane high point area?			**NA**

Eurofins/TestAmerica Knoxville GC/MS Air - Batch Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 20 & KNOX-MS-0023, Rev 4

TALS Review	**1st**	**If No, why is data reportable?**	**2nd**
19. Graphics uploaded? [open one paperclip]			**Y**
20. NCM generated if BFB failed TO-14A criteria, but passes TO-15?		□ [Failed TO-14A, but passes TO-15] (NCM#_____)	**NA**
21. Is the %D ≤ 30% for all target analytes? [≤ 50% for 1&2 methylnaphthalene] [Chrom-F8] [TALS-Sample Results Tab]		□ CCV - %D - LCS criteria met (NCM#_____) □ CCV - %D high - outside criteria, samples ND, Sample IDs Included (NCM#_____)	**Y**
22. Undiluted volume analyzed meets the method requirement (200 mL vs. 500 mL)?			**na**
23. Project & sample special instructions verified?			**Y**
24. If samples were Tedlar bags, was the 72 hr HT met? ** Narrate transfer to can.		□ Air Analysis - Air Sample Transfer to Canister (NCM#____)	**NA**
25. Sample analyses done within analytical holding time?		□ Holding Time – Received w/Insufficient Time (NCM#_____) □ Holding Time – Receipt (NCM#_____)	**Y**
26. Did the LCS meet criteria (70-130% with a limited # allowed 60-140% (see table) provisional analyte limit 60-140% with a limited # allowed 50-150%, and no two consecutive MEs). [Sample Results Tab] Note: No LCS required for OH VAP.		□ Marginal Exceedances - Within ME Limits and Random; Report (NCM# ___) □ LCS/LCSD - %R High (NCM#_____)	**Y**
27. Suffixes assigned properly (DL/RE)? [Sample List Tab]			**Y**
28. Each job has QC created (BFB, CCV, LCS, MB)? [Sample List Tab]			**Y**
29. Analytes over calibration range set to secondary [Conditions Review Tab]			**Y**
30. Samples not reported set to 'Acceptable' or 'Rejected'? [Sample Results Tab]			**Y**
31. DUP done per 20 samples and are all RPDs within limits? (for target analytes >5x RL, <25% RPD; no criteria for n-butanol) *(If DUP not reported - set to 'Acceptable' for each job)*			**Y**
32. Samples linked to proper blank (200 mL or 500 mL)? [QC links]		**500 mL blank ID: 4** **200 mL blank ID: NA**	**Y**
33. Samples linked to job's BFB/CCV/LCS/MB? [QC Links]			**Y**
34. Correct ICV linked to each MB? [QC Links]			**Y**
35. Were all samples/QC analyzed within 24 hr of BFB? [F7]			**Y**
36. If criteria were not met, was a NCM generated, and assigned to proper QC & samples? [Also see Conditions Review Tab]			**Y**
37. Run Checklist and acknowledge findings [F8]			**Y**
38. Runs set to 1st level review?		Runs set to 2nd level review?	**Y**
39. QC checker run and items addressed?	**-na-**		**Y**
40. Checklist & Entech report scanned, attached & assigned properly?	**-na-**		**Y**

Analyst:	**Date:**	**2nd Level Reviewer : LL**	**Date: 10/1/20**
Comments:		**Comments:**	
Example Calculation:			
On-column ppbv x Final Vol (mL)/Entech Initial Vol (mL) x Canister Dilution Log DF			

AIR - GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Knoxvill Job No.: 140-20507-1

SDG No.:

Batch Number: 43140 Batch Start Date: 09/30/20 07:53 Batch Analyst: Khachitpongpanit, Suphawa

Batch Method: TO 15 LL Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	InitialPressure	FinalPressure	40CV101P 00121	40MXBFB 00001
BFB 140-43140/1		TO 15 LL		500 mL	500 mL	1	1		40 mL
CCVIS 140-43140/2		TO 15 LL		500 mL	500 mL	1	1	80 mL	
MB 140-43140/4		TO 15 LL		500 mL	500 mL	1	1		
140-20507-A-1	BLDG A INFLUENT	TO 15 LL	T	25 mL	500 mL	1	1		
140-20507-A-2	BLDG A MIDGAC	TO 15 LL	T	100 mL	500 mL	1	1		
140-20507-A-3	BLDG A EFFLUENT	TO 15 LL	T	100 mL	500 mL	1	1		
140-20507-A-4	BLDG C INFLUENT	TO 15 LL	T	100 mL	500 mL	1	1		
140-20507-A-5	BLDG C MIDGAC	TO 15 LL	T	100 mL	500 mL	1	1		
140-20507-A-6	BLDG C EFFLUENT	TO 15 LL	T	100 mL	500 mL	1	1		
140-20507-A-3	BLDG A EFFLUENT	TO 15 LL	T	11 mL	500 mL	1	1		
LCS 140-43140/1002		TO 15 LL		500 mL	500 mL	1	1	80 mL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	40MXISSUR 00001					
BFB 140-43140/1		TO 15 LL							
CCVIS 140-43140/2		TO 15 LL		40 mL					
MB 140-43140/4		TO 15 LL		40 mL					
140-20507-A-1	BLDG A INFLUENT	TO 15 LL	T	40 mL					
140-20507-A-2	BLDG A MIDGAC	TO 15 LL	T	40 mL					
140-20507-A-3	BLDG A EFFLUENT	TO 15 LL	T	40 mL					
140-20507-A-4	BLDG C INFLUENT	TO 15 LL	T	40 mL					
140-20507-A-5	BLDG C MIDGAC	TO 15 LL	T	40 mL					
140-20507-A-6	BLDG C EFFLUENT	TO 15 LL	T	40 mL					
140-20507-A-3	BLDG A EFFLUENT	TO 15 LL	T	40 mL					
LCS 140-43140/1002		TO 15 LL		40 mL					

Batch Notes	

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

AIR - GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Knoxvill Job No.: 140-20507-1

SDG No.:

Batch Number: 43140 Batch Start Date: 09/30/20 07:53 Batch Analyst: Khachitpongpanit, Suphawa

Batch Method: TO 15 LL Batch End Date:

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20109-1

SDG No.:

Client Sample ID: 34001541 Lab Sample ID: 140-20109-16

Matrix: Air Lab File ID: H24L20109.D

Analysis Method: TO-15 Date Collected: 08/21/2020 17:05

Sample wt/vol: 200(mL) Date Analyzed: 08/25/2020 07:33

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42010 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	ND		0.20	
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.20	
79-00-5	1,1,2-Trichloroethane	ND		0.20	
76-13-1	1,1,2-Trichlorotrifluoroethane	ND		0.20	
75-34-3	1,1-Dichloroethane	ND		0.20	
75-35-4	1,1-Dichloroethene	ND		0.20	
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	
96-18-4	1,2,3-Trichloropropane	ND		0.50	
526-73-8	1,2,3-Trimethylbenzene	ND		0.20	
95-93-2	1,2,4,5-Tetramethylbenzene	ND		0.20	
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	
95-63-6	1,2,4-Trimethylbenzene	ND		0.20	
96-12-8	1,2-Dibromo-3-Chloropropane	ND		0.40	
106-93-4	1,2-Dibromoethane	ND		0.20	
95-50-1	1,2-Dichlorobenzene	ND		0.40	
107-06-2	1,2-Dichloroethane	ND		0.20	
78-87-5	1,2-Dichloropropane	ND		0.20	
76-14-2	1,2-Dichlorotetrafluoroethane	ND		0.20	
108-67-8	1,3,5-Trimethylbenzene	ND		0.20	
106-99-0	1,3-Butadiene	ND		0.40	
541-73-1	1,3-Dichlorobenzene	ND		0.20	
106-46-7	1,4-Dichlorobenzene	ND		0.20	
123-91-1	1,4-Dioxane	ND		0.40	
71-36-3	1-Butanol	ND		2.0	
90-12-0	1-Methylnaphthalene	ND		2.5	
540-84-1	2,2,4-Trimethylpentane	ND		0.40	
565-59-3	2,3-Dimethylpentane	ND		0.20	
78-93-3	2-Butanone	ND		1.0	
95-49-8	2-Chlorotoluene	ND		0.40	
591-78-6	2-Hexanone	ND		0.40	
78-78-4	2-Methylbutane	ND		0.50	
91-57-6	2-Methylnaphthalene	ND		2.5	
107-83-5	2-Methylpentane	ND		0.20	
107-05-1	3-Chloropropene	ND		0.20	
622-96-8	4-Ethyltoluene	ND		0.40	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		1.0	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20109-1

SDG No.:

Client Sample ID: 34001541 Lab Sample ID: 140-20109-16

Matrix: Air Lab File ID: H24L20109.D

Analysis Method: TO-15 Date Collected: 08/21/2020 17:05

Sample wt/vol: 200(mL) Date Analyzed: 08/25/2020 07:33

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42010 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
67-64-1	Acetone	ND		7.5	
75-05-8	Acetonitrile	ND		1.0	
107-02-8	Acrolein	ND		1.0	
107-13-1	Acrylonitrile	ND		2.0	
98-83-9	Alpha Methyl Styrene	ND		0.40	
71-43-2	Benzene	ND		0.20	
100-44-7	Benzyl chloride	ND		0.40	
75-27-4	Bromodichloromethane	ND		0.20	
75-25-2	Bromoform	ND		0.20	
74-83-9	Bromomethane	ND		0.20	
106-97-8	Butane	ND		1.0	
75-15-0	Carbon disulfide	ND		0.40	
56-23-5	Carbon tetrachloride	ND		0.20	
108-90-7	Chlorobenzene	ND		0.20	
75-45-6	Chlorodifluoromethane	ND		0.20	
75-00-3	Chloroethane	ND		0.20	
67-66-3	Chloroform	ND		0.20	
74-87-3	Chloromethane	ND		1.0	
156-59-2	cis-1,2-Dichloroethene	ND		0.20	
10061-01-5	cis-1,3-Dichloropropene	ND		0.40	
98-82-8	Cumene	ND		0.40	
110-82-7	Cyclohexane	ND		0.40	
124-48-1	Dibromochloromethane	ND		0.20	
74-95-3	Dibromomethane	ND		0.40	
75-71-8	Dichlorodifluoromethane	ND		0.20	
64-17-5	Ethanol	ND		5.0	
141-78-6	Ethyl acetate	ND		2.0	
60-29-7	Ethyl ether	ND		2.0	
100-41-4	Ethylbenzene	ND		0.20	
87-68-3	Hexachlorobutadiene	ND		1.0	
110-54-3	Hexane	ND		0.40	
496-11-7	Indane	ND		0.20	
95-13-6	Indene	ND		0.40	
67-63-0	Isopropyl alcohol	ND		2.0	
179601-23-1	m&p-Xylene	ND		0.20	
80-62-6	Methyl methacrylate	ND		0.40	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20109-1

SDG No.:

Client Sample ID: 34001541 Lab Sample ID: 140-20109-16

Matrix: Air Lab File ID: H24L20109.D

Analysis Method: TO-15 Date Collected: 08/21/2020 17:05

Sample wt/vol: 200(mL) Date Analyzed: 08/25/2020 07:33

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42010 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
1634-04-4	Methyl tert-butyl ether	ND		1.0	
108-87-2	Methylcyclohexane	ND		0.20	
75-09-2	Methylene Chloride	ND		1.0	
91-20-3	Naphthalene	ND		0.40	
104-51-8	n-Butylbenzene	ND		0.40	
124-18-5	n-Decane	ND		1.0	
112-40-3	n-Dodecane	ND		1.0	
142-82-5	n-Heptane	ND		0.40	
111-84-2	n-Nonane	ND		0.40	
111-65-9	n-Octane	ND		0.40	
103-65-1	N-Propylbenzene	ND		0.40	
1120-21-4	n-Undecane	ND		1.0	
95-47-6	o-Xylene	ND		0.20	
99-87-6	p-Cymene	ND		0.20	
109-66-0	Pentane	ND		2.5	
115-07-1	Propene	ND		2.5	
135-98-8	sec-Butylbenzene	ND		0.40	
100-42-5	Styrene	ND		0.20	
75-65-0	tert-Butanol	ND		1.0	
98-06-6	tert-Butylbenzene	ND		0.40	
127-18-4	Tetrachloroethene	ND		0.20	
109-99-9	Tetrahydrofuran	ND		1.0	
110-02-1	Thiophene	ND		0.20	
108-88-3	Toluene	ND		1.0	
156-60-5	trans-1,2-Dichloroethene	ND		0.20	
10061-02-6	trans-1,3-Dichloropropene	ND		0.20	
79-01-6	Trichloroethene	ND		0.20	
75-69-4	Trichlorofluoromethane	ND		0.20	
108-05-4	Vinyl acetate	ND		1.0	
593-60-2	Vinyl bromide	ND		0.20	
75-01-4	Vinyl chloride	ND		0.40	

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200821-16357.b\H24L20109.D
Lims ID: 140-20109-A-16
Client ID: 34001541
Sample Type: Client
Inject. Date: 25-Aug-2020 07:33:30 ALS Bottle#: 2 Worklist Smp#: 26
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016357-026
Misc. Info.: 34001541
Operator ID: HMT Instrument ID: MG

Method: \\chromfs\Knoxville\ChromData\MG\20200821-16357.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 25-Aug-2020 06:07:32 Calib Date: 15-Jul-2020 22:02:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200715-16031.b\GG15IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1032

First Level Reviewer: tajh Date: 25-Aug-2020 08:11:35

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.822	8.822	0.000	94	218165	4.00	
* 2 1,4-Difluorobenzene	114	11.006	11.011	-0.005	96	1913728	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.735	15.740	-0.005	91	1644884	4.00	
$ 4 4-Bromofluorobenzene (Surr)	95	17.380	17.374	0.000	85	1153224	3.45	
7 Propene	41	3.721	3.721	0.000	97	104418	-0.3491	7
17 Ethanol	31	4.821	4.778	0.043	90	32858	0.8646	
25 Isopropyl alcohol	45	5.565	5.473	0.092	95	6718	0.0587	
31 Methylene Chloride	84	6.288	6.288	0.000	98	111045	0.2708	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

40MXISSURP_00004 Amount Added: 40.00 Units: mL Run Reagent

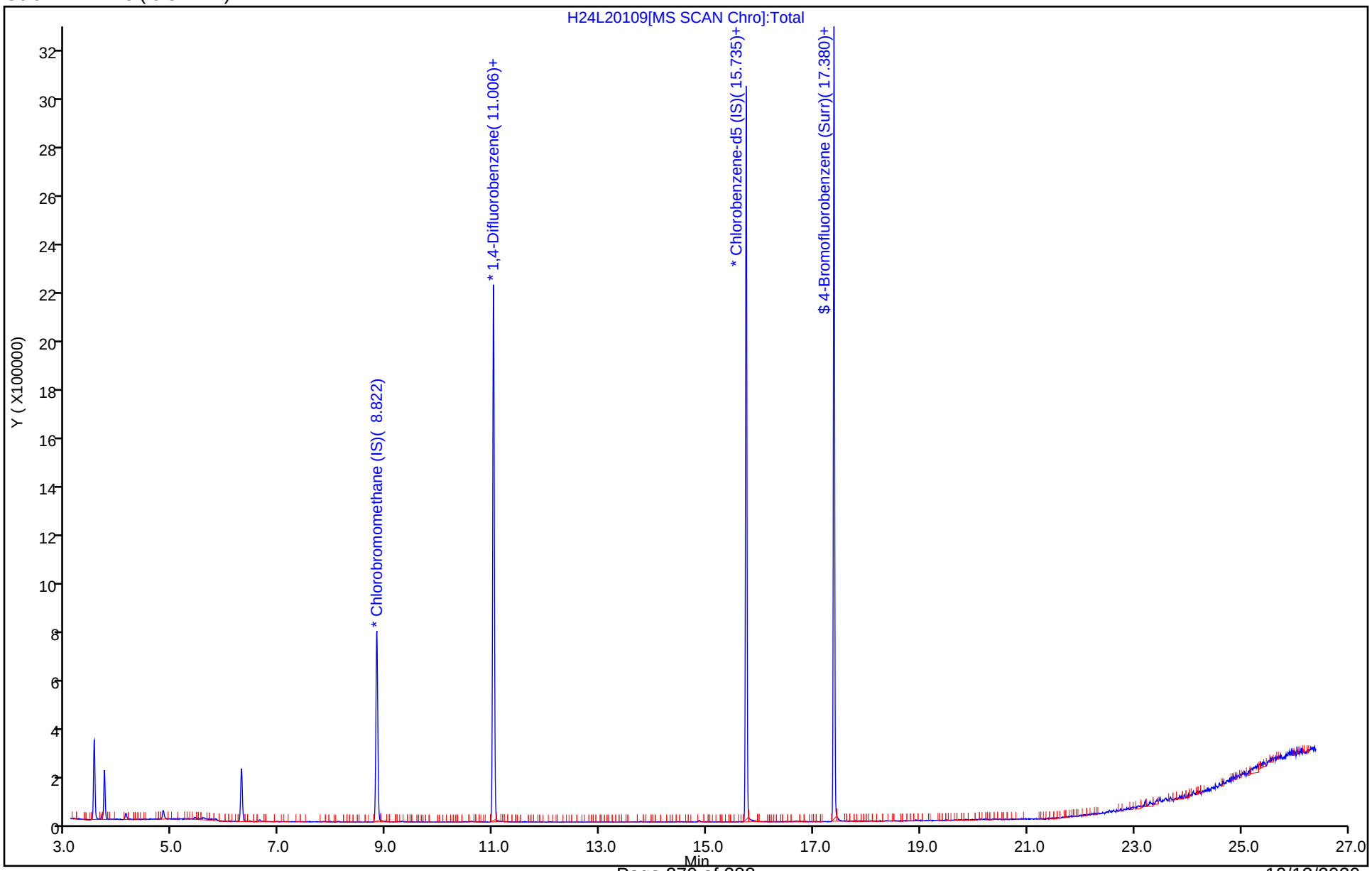
Report Date: 25-Aug-2020 08:11:35 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200821-16357.b\H24L20109.D

Injection Date:	25-Aug-2020 07:33:30	Instrument ID:	MG	Operator ID:	HMT
Lims ID:	140-20109-A-16	Lab Sample ID:	140-20109-16	Worklist Smp#:	26
Client ID:	34001541				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20219-1

SDG No.:

Client Sample ID: 10524 Lab Sample ID: 140-20219-12

Matrix: Air Lab File ID: GI01L20219.D

Analysis Method: TO-15 Date Collected: 08/31/2020 16:55

Sample wt/vol: 200(mL) Date Analyzed: 09/02/2020 08:08

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42295 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	ND		0.20	
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.20	
79-00-5	1,1,2-Trichloroethane	ND		0.20	
76-13-1	1,1,2-Trichlorotrifluoroethane	ND		0.20	
75-34-3	1,1-Dichloroethane	ND		0.20	
75-35-4	1,1-Dichloroethene	ND		0.20	
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	
96-18-4	1,2,3-Trichloropropane	ND		0.50	
526-73-8	1,2,3-Trimethylbenzene	ND		0.20	
95-93-2	1,2,4,5-Tetramethylbenzene	ND		0.20	
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	
95-63-6	1,2,4-Trimethylbenzene	ND		0.20	
96-12-8	1,2-Dibromo-3-Chloropropane	ND		0.40	
106-93-4	1,2-Dibromoethane	ND		0.20	
95-50-1	1,2-Dichlorobenzene	ND		0.40	
107-06-2	1,2-Dichloroethane	ND		0.20	
78-87-5	1,2-Dichloropropane	ND		0.20	
76-14-2	1,2-Dichlorotetrafluoroethane	ND		0.20	
108-67-8	1,3,5-Trimethylbenzene	ND		0.20	
106-99-0	1,3-Butadiene	ND		0.40	
541-73-1	1,3-Dichlorobenzene	ND		0.20	
106-46-7	1,4-Dichlorobenzene	ND		0.20	
123-91-1	1,4-Dioxane	ND		0.40	
71-36-3	1-Butanol	ND		2.0	
90-12-0	1-Methylnaphthalene	ND		2.5	
540-84-1	2,2,4-Trimethylpentane	ND		0.40	
565-59-3	2,3-Dimethylpentane	ND		0.20	
78-93-3	2-Butanone	ND		1.0	
95-49-8	2-Chlorotoluene	ND		0.40	
591-78-6	2-Hexanone	ND		0.40	
78-78-4	2-Methylbutane	ND		0.50	
91-57-6	2-Methylnaphthalene	ND		2.5	
107-83-5	2-Methylpentane	ND		0.20	
107-05-1	3-Chloropropene	ND		0.20	
622-96-8	4-Ethyltoluene	ND		0.40	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		1.0	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20219-1

SDG No.:

Client Sample ID: 10524 Lab Sample ID: 140-20219-12

Matrix: Air Lab File ID: GI01L20219.D

Analysis Method: TO-15 Date Collected: 08/31/2020 16:55

Sample wt/vol: 200(mL) Date Analyzed: 09/02/2020 08:08

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42295 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
67-64-1	Acetone	ND		7.5	
75-05-8	Acetonitrile	ND		1.0	
107-02-8	Acrolein	ND		1.0	
107-13-1	Acrylonitrile	ND		2.0	
98-83-9	Alpha Methyl Styrene	ND		0.40	
71-43-2	Benzene	ND		0.20	
100-44-7	Benzyl chloride	ND		0.40	
75-27-4	Bromodichloromethane	ND		0.20	
75-25-2	Bromoform	ND		0.20	
74-83-9	Bromomethane	ND		0.20	
106-97-8	Butane	ND		1.0	
75-15-0	Carbon disulfide	ND		0.40	
56-23-5	Carbon tetrachloride	ND		0.20	
108-90-7	Chlorobenzene	ND		0.20	
75-45-6	Chlorodifluoromethane	ND		0.20	
75-00-3	Chloroethane	ND		0.20	
67-66-3	Chloroform	ND		0.20	
74-87-3	Chloromethane	ND		1.0	
156-59-2	cis-1,2-Dichloroethene	ND		0.20	
10061-01-5	cis-1,3-Dichloropropene	ND		0.40	
98-82-8	Cumene	ND		0.40	
110-82-7	Cyclohexane	ND		0.40	
124-48-1	Dibromochloromethane	ND		0.20	
74-95-3	Dibromomethane	ND		0.40	
75-71-8	Dichlorodifluoromethane	ND		0.20	
64-17-5	Ethanol	ND		5.0	
141-78-6	Ethyl acetate	ND		2.0	
60-29-7	Ethyl ether	ND		2.0	
100-41-4	Ethylbenzene	ND		0.20	
87-68-3	Hexachlorobutadiene	ND		1.0	
110-54-3	Hexane	ND		0.40	
496-11-7	Indane	ND		0.20	
95-13-6	Indene	ND		0.40	
67-63-0	Isopropyl alcohol	ND		2.0	
179601-23-1	m&p-Xylene	ND		0.20	
80-62-6	Methyl methacrylate	ND		0.40	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-20219-1

SDG No.:

Client Sample ID: 10524 Lab Sample ID: 140-20219-12

Matrix: Air Lab File ID: GI01L20219.D

Analysis Method: TO-15 Date Collected: 08/31/2020 16:55

Sample wt/vol: 200(mL) Date Analyzed: 09/02/2020 08:08

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42295 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
1634-04-4	Methyl tert-butyl ether	ND		1.0	
108-87-2	Methylcyclohexane	ND		0.20	
75-09-2	Methylene Chloride	ND		1.0	
91-20-3	Naphthalene	ND		0.40	
104-51-8	n-Butylbenzene	ND		0.40	
124-18-5	n-Decane	ND		1.0	
112-40-3	n-Dodecane	ND		1.0	
142-82-5	n-Heptane	ND		0.40	
111-84-2	n-Nonane	ND		0.40	
111-65-9	n-Octane	ND		0.40	
103-65-1	N-Propylbenzene	ND		0.40	
1120-21-4	n-Undecane	ND		1.0	
95-47-6	o-Xylene	ND		0.20	
99-87-6	p-Cymene	ND		0.20	
109-66-0	Pentane	ND		2.5	
115-07-1	Propene	ND		2.5	
135-98-8	sec-Butylbenzene	ND		0.40	
100-42-5	Styrene	ND		0.20	
75-65-0	tert-Butanol	ND		1.0	
98-06-6	tert-Butylbenzene	ND		0.40	
127-18-4	Tetrachloroethene	ND		0.20	
109-99-9	Tetrahydrofuran	ND		1.0	
110-02-1	Thiophene	ND		0.20	
108-88-3	Toluene	ND		1.0	
156-60-5	trans-1,2-Dichloroethene	ND		0.20	
10061-02-6	trans-1,3-Dichloropropene	ND		0.20	
79-01-6	Trichloroethene	ND		0.20	
75-69-4	Trichlorofluoromethane	ND		0.20	
108-05-4	Vinyl acetate	ND		1.0	
593-60-2	Vinyl bromide	ND		0.20	
75-01-4	Vinyl chloride	ND		0.40	

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01L20219.D
Lims ID: 140-20219-A-12
Client ID: 10524
Sample Type: Client
Inject. Date: 02-Sep-2020 08:08:30 ALS Bottle#: 16 Worklist Smp#: 21
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0016453-021
Misc. Info.: 10524
Operator ID: AFB Instrument ID: MG

Method: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 03-Sep-2020 15:11:27 Calib Date: 02-Sep-2020 03:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01IC07.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX1004

First Level Reviewer: barlozhetskayaa Date: 02-Sep-2020 10:57:16

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.811	8.806	0.005	89	139813	4.80	
* 2 1,4-Difluorobenzene	114	10.990	10.995	-0.005	98	646213	4.80	
* 3 Chlorobenzene-d5 (IS)	117	15.730	15.730	0.000	93	691536	4.80	
$ 4 4-Bromofluorobenzene (Surr)	95	17.374	17.374	0.000	82	496728	4.58	
25 Isopropyl alcohol	45	5.479	5.451	0.028	71	3460	0.0497	
107 Undecane	57	19.704	19.709	-0.005	61	1650	0.007972	

Reagents:

40MXISSUR_00001 Amount Added: 40.00 Units: mL Run Reagent

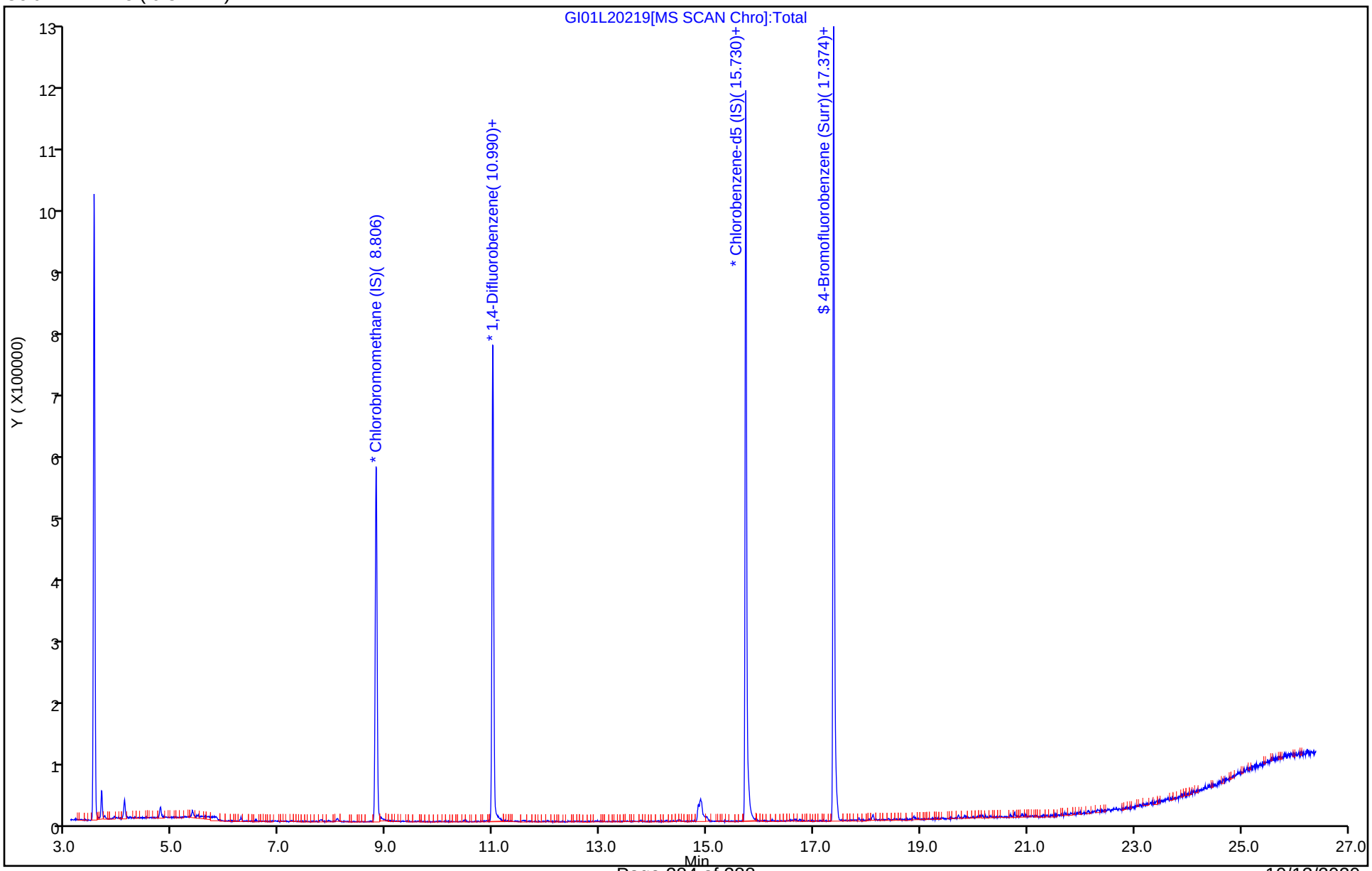
Report Date: 03-Sep-2020 15:11:40 Chrom Revision: 2.3 20-Aug-2020 13:57:12

Eurofins TestAmerica, Knoxville

Data File: \\chromfs\Knoxville\ChromData\MG\20200829-16453.b\GI01L20219.D

Injection Date:	02-Sep-2020 08:08:30	Instrument ID:	MG	Operator ID:	AFB
Lims ID:	140-20219-A-12	Lab Sample ID:	140-20219-12	Worklist Smp#:	21
Client ID:	10524				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Shipping and Receiving Documents

Baltimore #201

Canister Samples Chain of Custody Record

140-20507 Chain of Custody

Eurofins TestAmerica, Knoxville
5815 Middlebrook Pike
Knoxville, TN 37921-5947
phone 865.291.3000 fax 865.584.4315

TestAmerica Laboratories, Inc. assumes no liability with respect to the collection and shipment of these samples.

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact Information	Client Project Manager: Peter Rich	Samples Collected By: Andrew Smith	COC No: 1 of 1 COCs
Company Name: Tetra Tech	Phone:		
Address: 980 Awald Rd Suite 302	Email: Peter.Rich@tetratech.com		TALS Project #:
City/State/Zip Annapolis, MD, 21403			For Lab Use Only:
Phone:	Site Contact:		Walk-in Client:
FAX:	Tel/Fax		Lab Sampling:
Project Name: Lockheed Martin	Analysis Turnaround Time		Job / SDG No.:
Site/Location: Middle River, MD	Standard (Specific): X		(See below for Add'l Items)
PO# 117-051218C	Rush (Specifiy):		

Sample Identification	Sample Start Date	Time Start	Sample End Date	Time Stop	Canister Vacuum in Field, "Hg (Start)	Canister Vacuum in Field, "Hg (Stop)	Flow Controller ID	Canister ID	TO-14/15 (Standard / Low Level)	TO-15 SIM	EPA 3C	EPA 25C	ASTM D-1946	EPA 15/16	Other (Please specify in notes section)	Sample Type	Indoor Air/Ambient Air	Sub-Slab	Soil Gas	Soil Vapor Extraction (SVE)	Landfill Gas	Other (Please specify in notes section)	Sample Specific Notes:
Bldg A Influent	9/28	11:55	9/28	11:56	-30	-4	10164	34000734	X														
Bldg A Mid GAC	"	11:49	"	11:56	-30	-4	10936	34001974	X														
Bldg A Effluent	"	11:44	"	11:45	-28	-4	11594	09744	X														
Bldg C Influent	"	10:12	"	10:13	-29	-4	10614	11860	X														
Bldg C Mid GAC	"	10:05	"	10:06	-28	-4	09899	11889	X														
Bldg C Effluent	"	10:00	"	10:01	-30	-4	09958	09739	X														

Temperature (Fahrenheit)	Interior	Ambient
Start		
Stop		

Pressure (inches of Hg)	Interior	Ambient
Start		
Stop		

Received @ ambient, 1 box
Fedex po. Custody seal intact
tr.K# 7716 9889 6084
KW 9/29/20

Special Instructions/QC Requirements & Comments:

Samples Shipped by:	Date / Time:	Samples Received by:	
Samples Relinquished by:	Date / Time: 9/28/20 3:30	Received by: FAA Bant	
Relinquished by: FAA Bant	Date / Time: 9/28/20 1700	Received by: ETA 9/29/20 1030	6 cans, 6 KR
Lab Use Only: Shipper Name:	Opened by:	Condition:	

10/13/2020

EUROFINS/TESTAMERICA KNOXVILLE SAMPLE RECEIPT/CONDITION UPON RECEIPT ANOMALY CHECKLIST **Log In Number:** Loc: 140 **20507**

Review Items	Yes	No	NA	If No, what was the problem?
1. Are the shipping containers intact?	/			☐ **Containers, Broken**
2. Were ambient air containers received intact?			/	☑ Checked in lab
3. The coolers/containers custody seal if present, is it intact?	/			☐ Yes ☐ NA
4. Is the cooler temperature within limits? (> freezing temp. of water to 6 °C, VOST: 10°C) Thermometer ID :_____ Correction factor: _____			/	☐ **Cooler Out of Temp, Client Contacted, Proceed/Cancel** ☐ **Cooler Out of Temp, Same Day Receipt**
5. Were all of the sample containers received intact?	/			☐ **Containers, Broken**
6. Were samples received in appropriate containers?	/			☐ **Containers, Improper; Client Contacted; Proceed/Cancel**
7. Do sample container labels match COC? (IDs, Dates, Times)	/			☐ **COC & Samples Do Not Match** ☐ **COC Incorrect/Incomplete** ☐ **COC Not Received**
8. Were all of the samples listed on the COC received?	/			☐ **Sample Received, Not on COC** ☐ **Sample on COC, Not Received**
9. Is the date/time of sample collection noted?	/			☐ **COC; No Date/Time; Client Contacted**
10. Was the sampler identified on the COC?	/			☐ **Sampler Not Listed on COC**
11. Is the client and project name/# identified?	/			☐ **COC Incorrect/Incomplete**
12. Are tests/parameters listed for each sample?	/			☐ **COC No tests on COC**
13. Is the matrix of the samples noted?	/			☐ **COC Incorrect/Incomplete**
14. Was COC relinquished? (Signed/Dated/Timed)	/			☐ **COC Incorrect/Incomplete**
15. Were samples received within holding time?	/			☐ **Holding Time - Receipt**
16. Were samples received with correct chemical preservative (excluding Encore)?			/	☐ **pH Adjusted, pH Included (See box 16A)** ☐ **Incorrect Preservative**
17. Were VOA samples received without headspace?			/	☐ **Headspace (VOA only)**
18. Did you check for residual chlorine, if necessary? (e.g. 1613B, 1668) Chlorine test strip lot number:_____			/	☐ **Residual Chlorine**
19. For 1613B water samples is pH<9?			/	☐ If no, notify lab to adjust
20. For rad samples was sample activity info. Provided?			/	☐ Project missing info

Comments/Actions Taken

Labeling Verified by: **Date:**

pH test strip lot number:

	Box 16A: pH Preservation	Box 18A: Residual Chlorine
Preservative:		
Lot Number:		
Exp Date:		
Analyst:		
Date:		
Time:		

Project #: 1400 2921 PM Instructions: _____

Sample Receiving Associate: Ken Lu Date: 9/29/20

QA026R32.doc, 062719

TestAmerica Knoxville - Air Canister Initial Pressure Check

Gauge ID: G5
Date: 9/30/2020

Analyst	Sample ID	Asset #	Cleaning Job	Cert	Size (L)	Pressure @ Receipt (-in Hg or +psig)	Time	Comments
BRS	140-20507-a-1	34000734	20109	B	1	-3.8	8:47	
BRS	140-20507-a-2	34001974	20109	B	1	0.0	8:48	
BRS	140-20507-a-3	09744	20109	B	1	-3.3	8:49	
BRS	140-20507-a-4	11860	20109	B	1	-3.0	8:50	
BRS	140-20507-a-5	11889	20219	B	1	-3.4	8:51	
BRS	140-20507-a-6	09739	20109	B	1	-3.4	8:52	